

**MAKO PROPERTIES LLC - BUILDING #3
48-50 ENTER LANE
ISLANDIA, NEW YORK**

PERIODIC PROGRESS REPORT

NYSDEC Site Number: 152-20-30

**Prepared for:
Mako Properties LLC
931B Conklin Street
Farmingdale, NY 11735**

**Prepared by:
CA RICH CONSULTANTS, INC.
17 Dupont Street
Plainview, NY 11803-1614**

NOVEMBER 2019



November 6, 2019

NYSDEC – Region 1
Division of Environmental Remediation
SUNY @ Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409

Attention: Hayley Schatz, Project Manager

Re: **PERIODIC PROGRESS REPORT**
NYSDEC Site # 152230
Mako Properties LLC - Building #3
48-50 Enter Lane
Islandia, New York

Dear Ms. Schatz:

On behalf of the Mako Properties LLC, CA RICH Consultants, Inc. is pleased to submit the attached Periodic Progress Report for the above-referenced property. This Report is being submitted in accordance with the NYSDEC/NYSDOH-approved Site Management Plan (SMP) for your review and approval.

If you have any questions, comments and/or require any further information, please feel free to contact me at 516-576-8844 or email: myager@carichinc.com.

Sincerely,

CA RICH CONSULTANTS, INC.

A handwritten signature in blue ink that reads 'Michael Yager'.

Michael Yager
Project Manager

cc: Jacob Kogel, President, Mako Properties LLC
Charlotte Biblow, Esq., Farrell Fritz, P.C.

PERIODIC PROGRESS REPORT

Mako Properties Limited Partnership - Building #3 48-50 Enter Lane Islandia, NY

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1.0 Introduction

The following Periodic Progress Report has been prepared by CA RICH Consultants Inc. (CA RICH) on behalf of Mako Properties LLC (formerly known as Mako Properties Limited Partnership, hereinafter “Mako Properties”) for the Mako Building #3 property (hereinafter referred to as the “Property” or “Site”). The Site is located at 48-50 Enter Lane, in the County of Suffolk, New York (hereinafter referred to as “Site”). This document was prepared in accordance with the Site Management Plan (SMP) dated March 2018 (Ref. 1 - SMP) under an Order on Consent, with the New York State Department of Environmental Conservation (NYSDEC), Index Number A1-0649-08-10; Site #152230.

The Site is identified as Section 6, Block 01.00 and Lot 18 on the Suffolk County Tax Map. The Site is situated on an approximately 2.1-acre area bounded by commercial/industrial buildings to the north, commercial/industrial buildings to the south, Enter Lane to the east, and a parking lot to the west (see Figure 1). The parcel is improved with the Site building (Mako Building #3) and a separate, multi-tenant building located on the property at 52-68 Enter Lane (Mako Building #2). Mako Building #3 is a single-story, brick and block structure containing approximately 4,560 square feet of interior floor space. The building is serviced with an onsite sanitary waste disposal system that consists of a primary septic holding tank that connects to a single overflow leaching pool. Historical records indicate that the Site was originally developed circa 1978 with the free-standing single-story brick/block structure that presently exists. Historically Mako Building #3 has been occupied by Elmont Electric, Westbury Precision, Inc., David Cooke Plaster Company, Vanderbilt Pools/Tech Sport Racing and is currently occupied by AJL Design & Installation, Inc. – window services and (#48) and Rogue Hetman (#50) - woodworking.

2.0 Historical Background & Site Environmental History

In 1994, Mako Properties initiated a voluntary tenant inspection program at the Site, which was designed and implemented by CA RICH and still exists today. Since 1994 and up until the most recent round of testing of the drainage structures (spring of 2019), volatile organic compounds (VOCs) have not been detected during the screening (via use of a photoionization detector) of the soils in the storm water drains and VOCs have not been reported in the samples collected and laboratory analyzed from the Site's sanitary leaching pools.

Beginning in June 2003, Mako Properties voluntarily established a Ground Water Monitoring Program (GWMP), which was also designed and implemented by CA RICH, for the purpose of documenting site-specific groundwater quality conditions beneath the Site. The GWMP included the design and installation of three groundwater monitoring wells at the Site (MW-1, MW-2 and MW-3; see Figure 2).

This groundwater monitoring well network was voluntarily sampled in 2003, 2004, and 2006. All of the samples were analyzed by a New York State Accredited laboratory for VOCs and the Suffolk County Department of Health Services (SCDHS) regulatory list for metals. Subsequent groundwater testing has been performed as discussed below. The most recent sampling event occurred in July 2019 as part of the remedial system monitoring.

Overall, the uppermost groundwater quality underlying the Property remained virtually free of contaminants during each and every sampling event with the exception of low-level detections of tetrachloroethylene (aka Perchloroethylene, PCE or PERC) in the groundwater tested at Site monitoring well MW-2. The concentrations of PCE in MW-2 were reported at 16 parts per billion (ppb), 13 ppb, and 6 ppb in 2003, 2004 and 2006, respectively. In December 2008, two additional groundwater monitoring wells (MW-8 & MW-9) were installed at the Site as part of the GWMP. Subsequent testing in 2008 found a gradually diminishing and low-level detection of PCE in MW-2 at 4.2 ppb, and a low-level detection of 1.8 ppb at monitoring well MW-8. PCE was not detected in MW-9.

In October 2009, CA RICH conducted another annual round of groundwater sampling in accordance with the voluntary GWMP at the Site. Laboratory analytical data from this sampling round indicated that there were no detections of concern in groundwater beneath the Site and that PCE levels at both the MW-2 and MW-8 locations were found at only trace-level detections. However, the October 2009 groundwater sampling results revealed for the first time, the presence

of 1,1,1-Trichloroethane (aka TCA) at a concentration of 400 ppb at monitoring well location MW-2. Detections of TCA were also reported at MW-8 (1.5 ppb) and MW-9 (17 ppb). The detections of TCA at MW-2 and MW-9 exceed the TCA groundwater drinking standard of 5 ppb.

3.0 Investigative/Remedial Actions

3.1 Phase II Environmental Investigation

Based upon the October 2009 groundwater sampling results, CA RICH immediately initiated a targeted follow-up study in December 2009 around Mako Building #3 (Ref. 2 - Phase II Rept). This follow-up investigation was designed to confirm the detection of TCA in the underlying shallow groundwater at the MW-2 location and in the vicinity of wells MW-8 and MW-9. The investigation also evaluated the potential for any immediately apparent on-site conditions or historical source(s) of TCA that may have been released onto or into the ground from any existing building or Site facilities.

3.2 Environmental Site Characterization Study

As a result of the findings from this study, on March 30, 2010, CA RICH and principals of Mako Properties attended a meeting with NYSDEC representatives Mr. Jamie Ascher and Mr. Walter Parish. As follow-up to that meeting, Mako Properties executed an Order-on-Consent with NYSDEC on August 16, 2010 (Agreement Index # A1-0649-08-10) that set the framework for Site Characterization. Site characterization activities were performed and reported to the NYSDEC in November 2012 (Ref. 3 – Site Char Rept). Based upon the findings of the groundwater samples collected from this investigation, a decision was made and approved by the NYSDEC to install the proposed intermediate and deep groundwater monitoring wells limited to the area adjacent to monitoring well MW-2, which is closest to Building #3. These wells were designated MW-2I (intermediate depth of 130 feet) and MW-2D (deep depth of 186 feet). These profiling wells were installed and developed between August 18 and August 30 of 2011.

3.3 Interim Remedial Measures

Based upon the findings of the Site Characterization Investigation, CA RICH recommended that an Interim Remedial Measure (IRM) be conducted to address the soil vapor intrusion at Building #3 and address the presence of TCA found in the shallow groundwater beneath Site Building #3. An IRM Work Plan was prepared and approved by the NYSDEC in December 2013 (Ref. 4 – IRM WP). The Site is currently being remediated in accordance with the remedy approved by the NYSDEC in the IRM Work Plan dated October 2013 and the NYSDEC's approval letter dated December 31, 2013.

The recommended IRM included in-situ groundwater treatment of VOCs through chemical oxidation by injection – Air Sparging (AS). The groundwater treatment is focused in the area immediately adjacent to groundwater monitoring well location MW-2 and in the vicinity of Building

#3. The IRM also recommended including the installation of off-site groundwater monitoring wells and the installation of a sub-slab soil vapor extraction (SVE) system beneath Building #3 to remediate soil vapor containing VOCs below the building spaces of units #48 and #50.

A pilot test for design of the AS/SVE systems as constructed was performed in July of 2014. The results of the pilot testing are summarized in CA RICH's report entitled "Pilot Test & Design Report" dated July 23, 2014 (Ref. 5 – Pilot Test). Based upon the results of the pilot testing, the AS/SVE systems were designed and installed from August 2014 through May 2015 along with the off-site monitoring wells. Baseline groundwater samples were collected in June 2015. A system start-up was performed in July 2015 and included the collection of soil-vapor and SVE systems samples. Vacuum readings and PID readings were also collected at the start-up.

3.4 Construction Completion Report (CCR) and Site Management Plan (SMP)

A Construction Completion Report (CCR) and a Site Management Plan (SMP) including an environmental easement were prepared by CA RICH and submitted to NYSDEC in draft form in August 2017 and June 2017 respectively. The finalized CCR (Ref. 6 – CCR) and SMP were approved by the NYSDEC and NYSDOH in January 2019.

During the approval interim, the remediation systems were operated and maintained in accordance with the "Draft" SMP. Initially, groundwater, indoor air and systems soil vapor sampling were also performed in accordance with the "Draft" SMP from June 2015 to June 2016. As per the NYSDEC (See attached email - November 30, 2016), groundwater, soil vapor and indoor air sampling activities were suspended until the Environmental Easement and SMP were approved. Additionally, the NYSDEC requested that a minimum vacuum of 0.004 inches of water be demonstrated beneath the building slab in order to forego the indoor air sampling.

Addendum #1 to the CCR was submitted (March 2016) and approved by the NYSDEC (April 2016) in connection with the vacuum point measurement locations, installations and vacuum readings at the Site (Ref. 7 – CCR Add #1). The vacuum point installations and readings were performed as per the NYSDEC's request. The table below provides the vacuum readings to date (January 2017 to July 2019).

<u>Date: Jan. 2017</u>	<u>Mako 3 Building Corner</u>	<u>Vacuum (inches of water)</u>
	Northwest Corner	0.084
	Northeast Corner	0.005
	Southwest Corner	0.034
	Southeast Corner	0.073
<u>Date: Aug. 2017</u>	<u>Mako 3 Building Corner</u>	<u>Vacuum (inches of water)</u>
	Northwest Corner	0.181
	Northeast Corner	0.012
	Southwest Corner	0.150
	Southeast Corner	0.149
<u>Date: Jan. 2018</u>	<u>Mako 3 Building Corner</u>	<u>Vacuum (inches of water)</u>
	Northwest Corner	0.145
	Northeast Corner	0.014
	Southwest Corner	0.117
	Southeast Corner	0.120
<u>Date: June 2018</u>	<u>Mako 3 Building Corner</u>	<u>Vacuum (inches of water)</u>
	Northwest Corner	0.212
	Northeast Corner	0.017
	Southwest Corner	0.168
	Southeast Corner	0.162
<u>Date: Feb. 2019</u>	<u>Mako 3 Building Corner</u>	<u>Vacuum (inches of water)</u>
	Northwest Corner	0.179
	Northeast Corner	0.016
	Southwest Corner	0.123
	Southeast Corner	0.140

<u>Date: July 2019</u>	<u>Mako 3 Building Corner</u>	<u>Vacuum (inches of water)</u>
	Northwest Corner	0.213
	Northeast Corner	0.019
	Southwest Corner	0.176
	Southeast Corner	0.164

The induced vacuum evident beneath the four corners of the building demonstrates continuity and negative pressure across the sub-slab area of the structure (see Figure 3). Based upon the data collected, indoor air sampling and sub-slab soil gas sampling for NYSDEC Site #152-20-30 may be discontinued as long as the in-place remedial system continues to show negative pressure beneath the slab of the building.

4.0 Chronology of Site Activities

A chronology of the Site activities and reporting to date is presented in the following tabulation.

Action	Time Period
Mako Properties voluntarily established a GWMP (MW-1, MW-2 & MW-3)	2003
Low level detections of PCE in groundwater monitoring well MW-2	2003 - 2006
Additional groundwater monitoring wells installed (MW-8 & MW-9)	2008
Groundwater results revealed for the first time, the presence of TCA at a concentration above NYSDEC drinking water standards in MW-2 & MW-9	2009
Investigation initiated around Mako Building #3 to confirm TCA detections in the underlying shallow groundwater	2009
Mako Properties executed an Order-on-Consent with NYSDEC	2010
Site characterization activities performed and reported to NYSDEC	2010 – 2012
IRM Work Plan prepared and approved by NYSDEC	2013
Pilot test for design of AS/SVE systems as constructed was performed	2014
AS/SVE systems designed and installed along with off-site monitoring wells	2014 - 2015
Baseline groundwater samples collected - June	2015
Systems start-up was performed in July	2015
Baseline soil vapor samples collected - July/August	2015
Indoor air samples collected - October & December	2015
SVE Systems soil vapor sampling – December	2015
Semi-annual groundwater, indoor air and soil vapor sampling - June	2016
Draft CCR submitted to NYSDEC - August	2016
NYSDEC email correspondence – No further groundwater or indoor air sampling until an approved SMP is in-place – November	2016
NYSDEC requested sub-slab vacuum readings – December & January	2016-2017
SVE Systems semi-annual soil vapor sampling – January	2017
CCR Addendum #1 – Permanent vacuum point work plan submitted – March	2017
Environmental easement recorded – April	2017

Action (cont.)	Time Period
Draft CCR and SMP, including a copy of the environmental easement, submitted to NYSDEC - June and August	2017
Permanent sub-slab vacuum measurement points installed and vacuum recorded – August	2017
SVE Systems semi-annual soil vapor sampling – August	2017
Hole in compressor tank; Sparging system shutdown - October	2017
Sub-slab vacuum measurements recorded and SVE Systems semi-annual soil vapor sampling – January	2018
Sub-slab vacuum measurements recorded and SVE Systems semi-annual soil vapor sampling – June	2018
Finalized CCR and SMP approved by NYSDEC and NYSDOH - January	2019
Semi-annual groundwater and SVE Systems soil vapor sampling performed in accordance with NYSDEC & NYSDOH-approved SMP - February	2019
Sub-slab vacuum measurements recorded - February	2019
Semi-annual groundwater and SVE Systems soil vapor sampling performed in accordance with NYSDEC & NYSDOH-approved SMP – July	2019
Sub-slab vacuum measurements recorded - July	2019

The SVE systems have been operating from July 2015 to present. The groundwater sparge system operated from July 2015 to October 2017. The tank for the compressor of the air sparge system developed a hole and the sparge system was shut down in October 2017. CA RICH contacted the NYSDEC and requested to discontinue air sparging based upon the low levels of contaminants detected in the groundwater from June 2016.

5.0 Monitoring & Remedial Actions

5.1 Groundwater Monitoring

The results of the Mako Properties voluntary Ground Water Monitoring Program (GWMP) from June 2003, 2004 and 2006 revealed low level detections of PCE in the groundwater tested at Site monitoring well MW-2. Upgradient groundwater monitoring wells MW-8 & MW-9 were installed at the Site in December 2008. Subsequent testing in 2008 found diminishing low level detections of PCE in MW-2 at 4.2 ug/L, and a low level detection of 1.8 ug/L at monitoring well MW-8. PCE was not detected in MW-9.

The 2009 annual round of groundwater sampling only revealed “trace” levels of PCE at both the MW-2 and MW-8 locations. However, the 2009 groundwater sampling results revealed, for the first time, the presence of TCA at a concentration of 400 ug/L at monitoring well location MW-2. Detections of TCA were also reported at MW-8 (1.5 ug/L) and MW-9 (17 ug/L).

In 2010, the following Site characterization round of groundwater sampling of MW-2 only revealed detections of 1,1-Dichloroethene (1,1-DCE at 460 ug/L) and 1,1,1-Trichloroethane (TCA at 55,400 ug/L). Based upon these groundwater sampling results, monitoring wells MW-2I (Intermediate well 130 feet below land surface) and MW-2D (Deep well 186 feet below land surface) were installed in the vicinity of Site monitoring well MW-2 in August 2011.

Groundwater monitoring in 2011 including newly installed monitoring wells MW-2I and MW-2D, revealed elevated detections of 1,1-DCE (50 ug/L), PCE (17.7 ug/L) and TCA (3,800 ug/L) in monitoring well MW-2; elevated detections of 1,1-DCE (5.5 ug/L), PCE (15.8 ug/L) and TCA (490 ug/L) in monitoring well MW-8; detection of TCA (31 ug/L) in monitoring well MW-9; and a low level detection of PCE (4 ug/L) in “new” monitoring well MW-2D. There were no detections of 1,1-DCE, TCA and/or PCE in “new” monitoring well MW-2I.

The 2012 Site characterization groundwater monitoring once again identified elevated detections of 1,1-DCE (6.5 ug/L), TCA (350 ug/L) and PCE (6.8 ug/L) in monitoring well MW-2; and an elevated detection of TCA in monitoring well MW-8 (31 ug/L) and MW-9 (15 ug/L). There were no detections of 1,1-DCE, TCA and/or PCE in monitoring wells MW-2I or MW-2D. In the Fall of 2013, results of the groundwater monitoring only identified elevated levels of TCA in Site monitoring wells MW-2 (130 ug/L), MW-8 (21 ug/L) and MW-9 (25 ug/L).

In December 2013, as a result of the Site Characterization Investigation, CA RICH recommended that an IRM be performed to address the presence of TCA found in the shallow groundwater beneath Site Building #3. Site monitoring well MW-2 was sampled in 2014 and continued to show an elevated level of TCA (55 ug/L) and low levels of 1,1-DCE (1.6 ug/L) and PCE (2.9 ug/L). Figure 2A and Table 1 illustrate the historical VOC detections from 2010 to 2014. As part of the IRM, an air sparge (AS) system combined with an interior and exterior soil vapor extraction (SVE) system were designed and installed from August 2014 through May 2015. Baseline groundwater sampling was performed in June 2015 prior to the remedial AS/SVE systems start-up. The results of the sampling continued to show levels of TCA in monitoring wells MW-2 (86.5 ug/L), MW-8 (8.6 ug/L) and MW-9 (12.2 ug/L) that exceeded NYSDEC's groundwater standard of 5 ug/L. Low concentrations of 1,1-DCE and PCE were also detected in Site wells MW-2, MW-8 and MW-9. No VOCs were ever detected in on-Site groundwater monitoring wells MW-1 or MW-3.

5.2 Groundwater Remedial Actions

The SVE systems have been operating from July 2015 to present. The groundwater sparge system operated from July 2015 to October 2017. After the remedial AS/SVE systems had been in operation for five months, groundwater monitoring was performed in December of 2015. The results of this sampling event revealed very low level detections of TCA in Site monitoring wells MW-2 (4 ug/L), MW-2D (0.49 ug/L), and MW-9 (1.2 ug/L). No detections of TCA, 1,1-DCE or PCE were identified for MW-2I or MW-8.

Groundwater sampling was performed again in June of 2016 with the AS/SVE systems in full operation. The results of the sampling did not reveal any detections in MW-2, MW-2I or MW-8. There was a low level detection of PCE (0.99 ug/L) in MW-2D and a low level detection of TCA (0.38 ug/L) in MW-9. As per NYSDEC, groundwater monitoring was suspended until the recording of the Environmental Easement and the submission and approval of the Site Management Plan (SMP). The Environmental Easement was recorded in April 2017 and the SMP was approved in January 2019.

As per the NYSDEC-approved SMP, on-Site wells MW-1, MW-2, MW-2I, MW-2D, MW-3, MW-8 and MW-9 were sampled in February and July of 2019 with the AS/SVE systems in operation. The air sparging system was shutdown/discontinued in October 2017. The results of both rounds of groundwater sampling did not reveal any detections of 1,1-DCE, TCA or PCE in any of these on-Site wells (see Figure 2B and Table 1). Historical laboratory results for each of the on-Site wells from 2010 to February 2019 are illustrated on the corresponding tables attached – Table MW-2, Table

MW-2I, Table MW-2D, Table MW-8 and Table MW-9. A copy of the most recent laboratory results (February & July 2019) for the on-Site groundwater samples is included in Appendix A.

5.3 Soil Vapor Intrusion Study

A soil vapor intrusion study was conducted in May 2011 in accordance with the approved Work Plan as part of the Site Characterization Investigation. The study involved the installation of six interior sub-slab soil vapor points, two exterior soil gas points, four indoor air samples, and one outdoor ambient air sample (see Figure 4). The purpose of the soil vapor intrusion study was to collect samples of exterior soil gas and indoor/outdoor air, as well as, sub-slab soil vapor to assess the potential for soil vapor intrusion at Building #3 (unit #48 and #50) and nearby Building #2 (unit #52 and #54) at the property.

Ambient Outdoor Air – The ambient outdoor air sample designated AO-1, which was collected behind Building #3, detected TCA at 3.93 ug/m³ and PCE at 0.81 ug/m³ (see Figure 5). 1,1-DCE was not detected in the outdoor ambient air sample.

Exterior Soil Gas – The exterior soil gas samples were designated SV-01 and SV-02. The concentration of TCA at location SV-01 was reported at 191,065 ug/m³ (see Figure 5). PCE was detected at 27.14 ug/m³ and 1,1-DCE was detected at 2,302 ug/m³. The concentration of TCA at location SV-02 was reported at 114.64 ug/m ug/m³ (see Figure 5). PCE and 1,1-DCE were not detected at sample location SV-02.

Indoor Air Samples – The indoor air samples AI-01 and AI-02 collected inside Building #3 (tenant units #48 and #50) reported concentrations of TCA at 294.79 ug/m³ and 141.93 ug/m³, respectively (see Figure 5). The concentration of PCE in these samples was reported at 1.90 ug/m³ and 1.49 ug/m³. Detections of 1,1-DCE in these samples were reported at 1.43 ug/m³ and 0.67 ug/m³. The reported values for indoor air for TCA fall within the mitigate range of the then current NYSDOH guidelines in Building #3.

The indoor air sample designated AI-03 collected inside Building #2 (unit #52) did not detect TCA, PCE or DCE. The indoor air sample AI-04 collected inside Building #2 (unit #54) detected TCA at a concentration of 1.15 ug/m³ (see Figure 5). PCE and 1,1-DCE were not detected in the indoor air sample of unit #54. These values are all within the no further action limits found in the then current NYSDOH guidelines.

Sub-Slab Soil Vapor – The sub-slab soil vapor samples were designated SS-01 through SS-06. Sub-slab soil vapor samples collected inside Building #3 (Units #48 and #50) were designated SS-01 through SS-04, and samples collected inside Building #2 (Units #52 and #54) were designated SS-5 and SS-6, respectively.

- Building #3 (units #48 and #50) - Concentrations of TCA reported in the sub-slab soil vapor sampling points inside Building #3, samples SS-01 through SS-04, ranged from 256,573 ug/m³ to 3,329,990 ug/m³ (see Figure 5). The concentration of PCE ranged from 1,357 ug/m³ to 6,717 ug/m³. The concentration of 1,1-DCE ranged from 202 ug/m³ to 6,352 ug/m³. Based on these reported concentrations and comparison to the then current NYSDOH guidance values, mitigation of soil vapor intrusion for these VOCs for both units within Building #3 is warranted.
- Building #2 - Concentrations of TCA reported in the sub-slab soil vapor sampling points inside Building #2, sample SS-05 (tenant unit #52) detected TCA at 70.97 ug/m³ (see Figure 5) and PCE at 1.36 ug/m³. 1,1-DCE was not detected in the sub-slab soil vapor sample collected. Based on these reported concentrations and comparison to the then current NYSDOH guidance values, no further action is warranted regarding soil vapor intrusion for unit #52 of Building #2.

Concentrations of TCA reported in the sub-slab soil vapor sampling points inside Building #2, sample SS-06 (tenant unit #54) detected TCA at 103.72 ug/m³ (see Figure 5). PCE or DCE were not detected. Based on the reported concentration of TCA and comparison to NYSDOH guidance values, monitoring is warranted regarding soil vapor intrusion for unit #54 of Building #2.

5.4 Indoor Air & Sub-Slab Soil Vapor Remedial Actions

In December 2013, based upon the results of the soil vapor intrusion portion of the Site Characterization Investigation, CA RICH recommended that an IRM be performed to address the presence of TCA found in the indoor air and sub-slab soil vapor beneath Site Building #3. As part of the IRM, an air sparge (AS) system combined with an interior and exterior soil vapor extraction (SVE) system were designed and installed from August 2014 through May 2015.

The SVE systems have been operating from July 2015 to present. The groundwater sparge system operated from July 2015 to October 2017. After the AS/SVE systems start-up, initial soil vapor monitoring/sampling was conducted in July 2015 for the interior SVE system and in August for the exterior SVE system. The “raw” air from each of the SVE systems was collected via a 6-liter summa

can grab sample collected from a sampling port on the pressure side of each SVE system. The initial soil vapor samples were identified as “SVE-Shallow” for the interior SVE system (July 2015) and “SVE-Deep” for the exterior SVE system (August 2015). Subsequent samples for each system were labeled as “INT SVE-Raw” for the interior SVE system and “EXT SVE-Raw” for the exterior SVE system. The results of the initial/start-up sampling event (July 2015) of the interior SVE system revealed elevated levels of TCA in the soil vapor beneath the building at 18,900 micrograms per cubic meter (ug/m^3); PCE at 4,240 ug/m^3 ; and 1,1-DCE at 29 ug/m^3 (see Table 2). The results of the initial/start-up sampling event (August 2015) of the exterior SVE system also detected elevated concentrations of TCA in the soil vapor around/in close proximity to the building at 20,500 ug/m^3 ; PCE at 2,330 ug/m^3 ; and 1,1-DCE at 368 ug/m^3 (see Table 3).

The soil vapor from both SVE systems has been monitored/sampled approximately every six months since the systems start-up in accordance with the SMP. The most recent samples were collected in July 2019. The VOC detections for the soil vapor from the interior SVE system for TCA have dropped from 18,900 ug/m^3 in July 2015 to 23 ug/m^3 in July 2019; PCE dropped from 4,240 ug/m^3 to 72 ug/m^3 ; and 1,1-DCE dropped from 29 ug/m^3 to undetected during the same time span. Additionally, over the same time period (July 2015 to July 2019), the VOC detections for the soil vapor detections from the exterior SVE system for TCA have dropped from 20,500 ug/m^3 to 10 ug/m^3 ; PCE dropped from 2,330 ug/m^3 to 25 ug/m^3 ; and 1,1-DCE dropped from 368 ug/m^3 to undetected. Laboratory results for all of the soil vapor samples collected from the SVE systems start-up to date are presented on Tables 2 & 3 and the resulting data has been illustrated/plotted graphically versus time of operation on the attached graphs – “Graph A: Interior SVE System - TCA, PCE and 1,1-DCE Concentrations vs Time (July 2015 to July 2019)” and “Graph B: Exterior SVE System - TCA, PCE and 1,1-DCE Concentrations vs Time (July 2015 to July 2019)”. A copy of the most recent laboratory results (February & July 2019) for the soil vapor samples is included in Appendix B.

Comparison of the most recent laboratory results for the sub-slab soil vapor samples (July 2019) and the latest results of the indoor air samples collected in June 2016, utilizing the most recent NYSDOH Soil Vapor/Indoor Air Matrices A & B (May 2017), the detected levels of TCA, PCE and 1,1-DCE are all below the NYSDOH Guidance Levels with the SVE systems fully operating.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Air Sparge (AS) System & Groundwater Monitoring

As stated in the NYSDEC/NYSDOH-approved SMP, the AS system will be kept in operation until the concentration of the contaminants of concern or related degradation by-products meet the criteria established below:

- The AS system will operate until the on-site groundwater meets the New York State GA groundwater standards; or the NYSDEC and NYSDOH concludes that the treatment systems have eliminated potential exposures from on-site sources of contamination prior to shut-down.

Specifically, the AS system will remain in operation:

- 1) Until the groundwater samples from the compliance wells indicate that they meet the TOGS standards for the contaminants of concern; or
- 2) The on-site and down-gradient groundwater contamination is at or less than the up-gradient groundwater contamination at the time of re-evaluation and site conditions are protective for its contemplative use, or it is jointly determined that an asymptotic condition is achieved with respect to any residual contaminant concentrations in the compliance point wells.

Based upon the laboratory results for the last two rounds of groundwater sampling (February & July 2019), the termination criteria for the operation of the AS system at the Site has been achieved. Therefore, CA RICH requests/recommends no further groundwater sampling for the Site and the AS system on the Property be properly decommissioned.

6.2 Soil Vapor Extraction (SVE) Systems - Soil Vapor & Indoor Air Monitoring

Summa canister vapor samples of the raw air entering the SVE systems have been collected semi-annually since the start-up in July 2015. The following is the termination criteria set forth in the NYSDEC/NYSDOH-approved SMP with regards to the SVE systems:

- Once the levels of total VOCs in the SVE wells decrease to a near constant or asymptotic concentration (as approved by NYSDEC) and it is demonstrated that shutdown of the system will not result in the migration of unacceptable concentrations of residual vapors to the on-site and off-site structures (as approved by NYSDOH), operation of the system will be suspended.
- The soil vapor measurements must remain protective of the contemplative use of the on-site and off-site structures.
- The SVE system also serves to capture off-gassing contaminants from the AS system. Therefore, aside from the criteria described above, the SVE system will remain in operation as long as the AS system is in operation.

In addition, the SVE system will run as long as the potential for sub-slab vapor intrusion exists. Once groundwater remediation has been accomplished, the equipment used in the SVE system will be reevaluated and resized, if needed, to meet the goal of preventing vapor intrusion. The SVE system will not be shut down without permission from NYSDEC.

Based upon the laboratory results for the last two rounds of soil vapor sampling (February & July 2019), the levels of total VOCs have greatly diminished and appear to be at a near constant concentration. The next round of soil vapor sampling from the SVE systems will be performed early next year to confirm constant or asymptotic VOC levels. Moving forward, if the VOC levels continue to show the same levels detected in the 2019, CA RICH will request/recommend a sequential shutdown and re-sizing of the SVE systems to meet the goal of preventing soil vapor intrusion. Upon the approval of the NYSDEC, CA RICH will implement the following shutdown/re-sizing process:

The exterior SVE system will be shut down for a period of 30 days and indoor air sampling will be performed during the heating season to confirm that the SVE system has met the goal of preventing vapor intrusion for Mako Building 2 (Units 52 & 54) & Mako Building 3 (Units 48 & 50). Based upon the results of the indoor air sampling, the interior SVE system will be modified into an active or passive sub-slab depressurization (SSD) system to meet the goal of preventing soil vapor intrusion;

- If an active system is put in place, vacuum readings will be collected from the vacuum measurement points in the corners of the Mako 3 Building to ensure

proper sizing for the SSD system in order to achieve negative pressure and prevent soil vapor intrusion. The SSD system will remain in operation and CA RICH will provide NYSDEC and NYSDOH with a work plan including termination criteria for the SSD system.

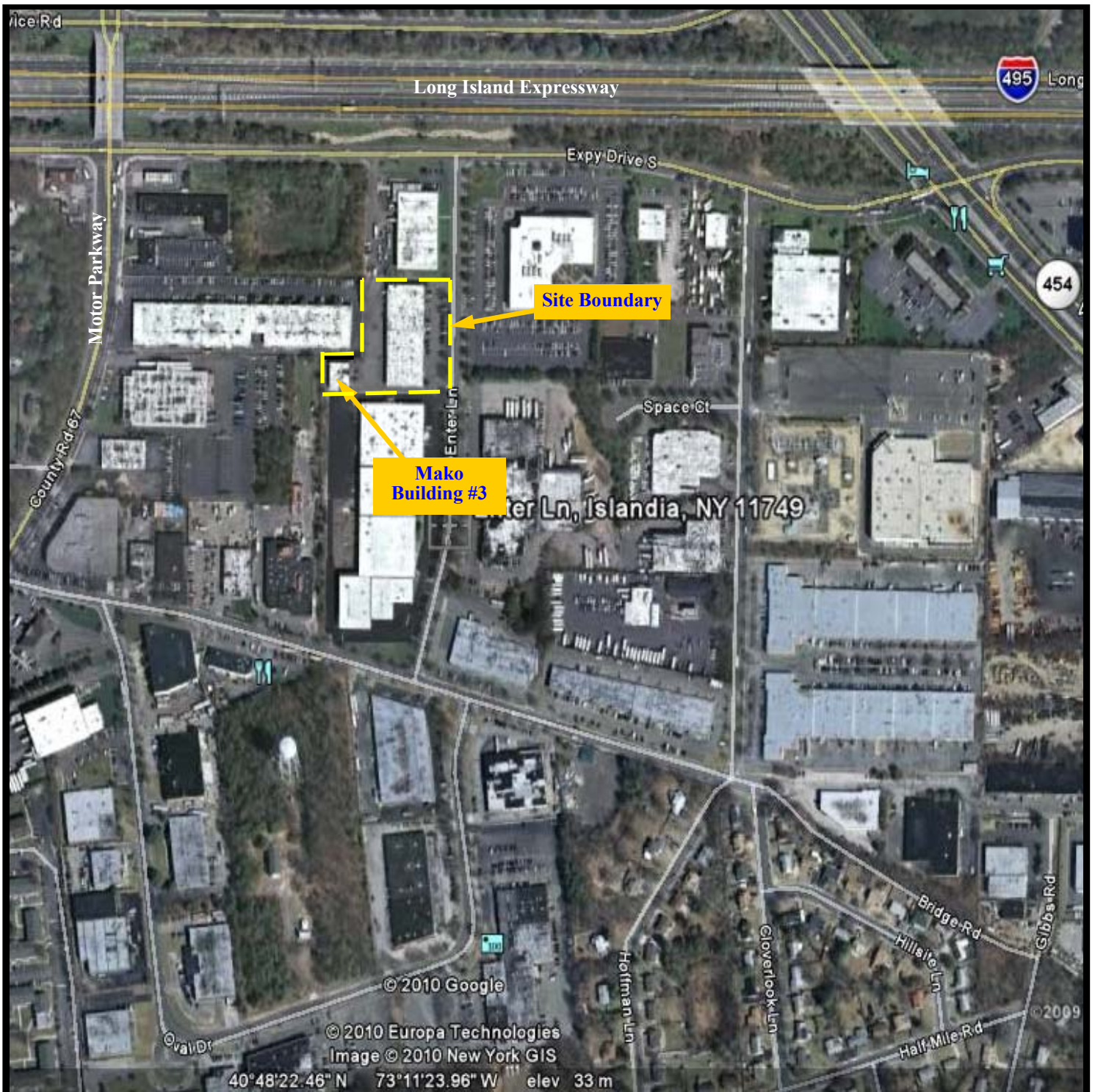
- If the results of the indoor air samples are **not** acceptable to NYSDEC, the SVE systems will be re-connected and turned on immediately. The SVE systems will be monitored, maintained and run in full operation until the following heating season. Based upon the results of the SVE systems monitoring, an NYSDEC/NYSDOH-approved evaluation will be made as to the sequential shutdown and re-sizing of the SVE systems to meet the goal of preventing soil vapor intrusion.

The overall objective of the remedial actions is to remediate environmental conditions at the Site to the satisfaction of the NYSDEC and NYSDOH for the continued restricted industrial/commercial use of the Property. Operations and maintenance activities should continue in accordance with the schedule outlined in the approved SMP and/or as approved by NYSDEC/NYSDOH. The next Periodic Review Report will be submitted to NYSDEC in May 2020.

7.0 REFERENCES

1. CA RICH Consultants, Inc. Site Management Plan. New York: Author, March 2018.
2. CA RICH Consultants, Inc. Phase II Environmental Site Investigation. New York: Author, March 2010.
3. CA RICH Consultants, Inc. Site Characterization Report. New York: Author, November 2012.
4. CA RICH Consultants, Inc. Interim Remedial Measures Work Plan. New York: Author, October 2013.
5. CA RICH Consultants, Inc. Pilot Test & Design Report. New York: Author, July 2014.
6. CA RICH Consultants, Inc. Construction Completion Report. New York: Author, March 2018.
7. CA RICH Consultants, Inc. Addendum #1: Construction Completion Report. New York: Author, March 2017.

FIGURES



APPROX. SCALE (ft.)



0

400

800



N



CA RICH CONSULTANTS, INC.
17 Dupont Street,
Plainview, NY 11803

TITLE:

PROPERTY LOCATION MAP

DATE:

10/23/19

SCALE:

AS SHOWN

FIGURE:

1

**Mako Properties LP
Mako Building # 3
48-50 Enter Lane
Islandia, New York**

DRAWING:

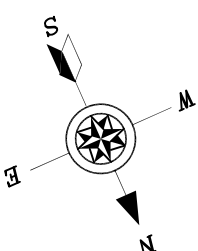
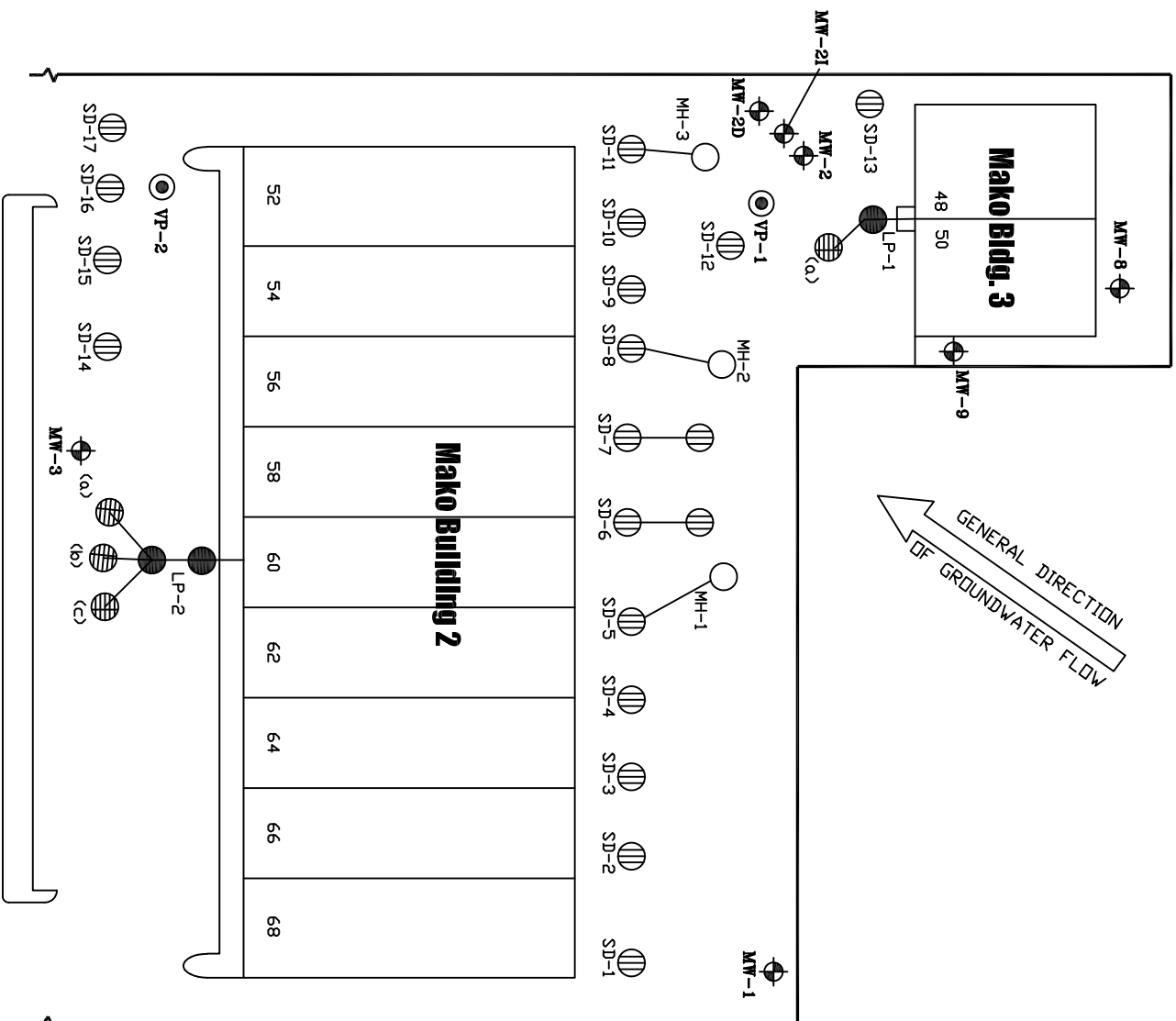
DRAWN BY:

T.R.B.

APPR. BY:

M.T.Y.

Adapted from Google Earth Aerial Image 2010.



LEGEND

- MW-2 Existing Groundwater Monitoring Well
- SD-4 Stormwater Drain
- LP-1 Septic Tank
- (a) Leaching Pool
- MH-3 Solid Cover Overflow Stormwater Drain
- VP-1 Vertical Profile Groundwater Sample



Graphic Scale in Feet

CA RICH CONSULTANTS, INC.

Certified Groundwater and Environmental Specialists
17 Dupont Street, Plainville, New York 11803

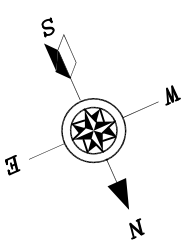
SITE PLAN AND GROUNDWATER MONITORING WELL LOCATIONS

FIGURE 2 DATE: 10/23/2019

DRAWN BY: T.R.B./J.L.T.C. SCALE: As Shown

DRAWING NO: 2019-1 MAKO PROPERTIES BLDG. #3 48-50 ENTER LANE ISLANDIA, NEW YORK APPR. BY: M.T.Y.

315.00'
Enter Lane



LEGEND

-  Upgradient Monitoring Well
-  Downgradient Monitoring Well

Sample Location ID
VOC Concentration
(ug/L or parts per billion)
NI - Well Not Yet Installed
ND - None Detected
NS - Not Sampled

Year	TCA	PCE	1,1-DCE
2010	NS	NS	NS
2011	31	ND	ND
2012	15	ND	ND
2013	25	1.1	ND
2014	NS	NS	NS

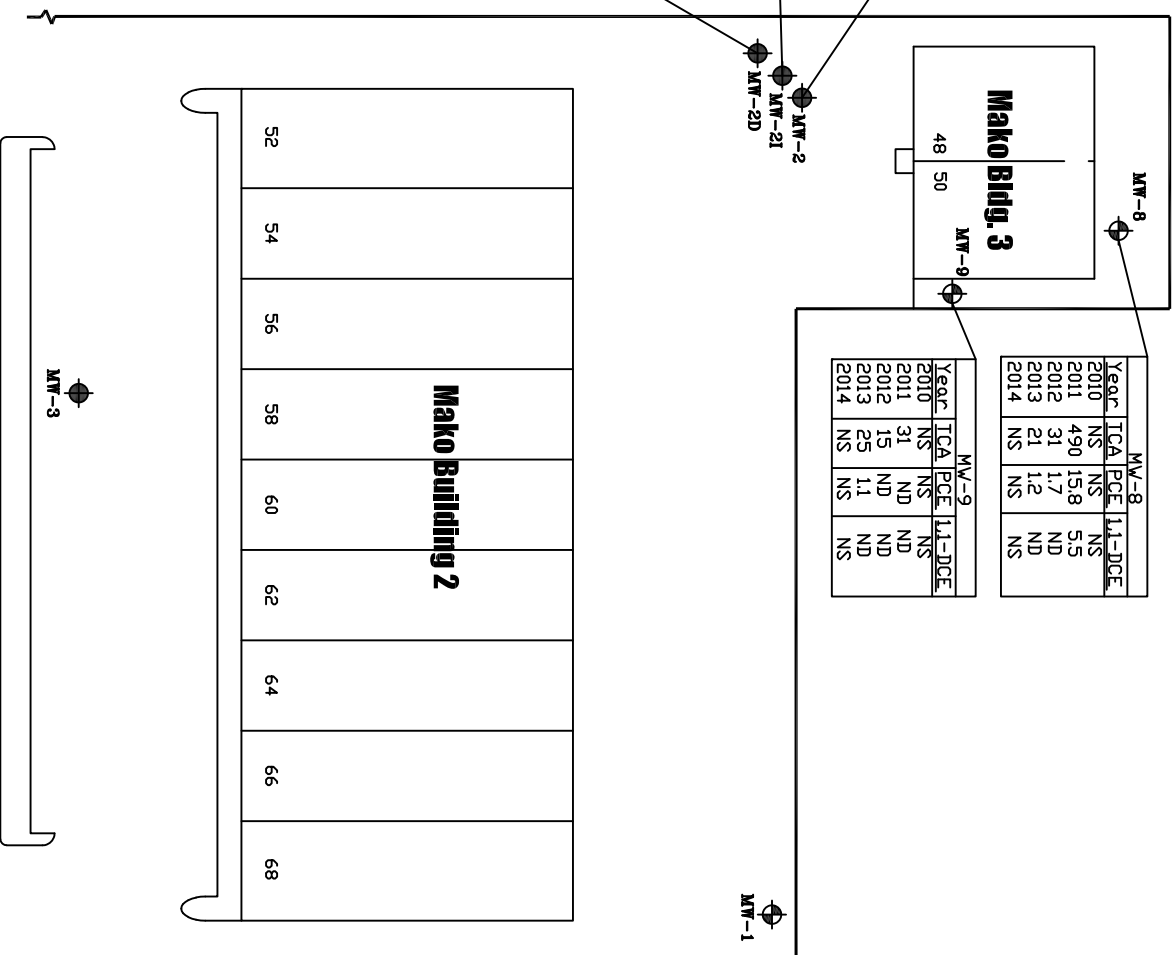
Year	TCA	PCE	1,1-DCE
2010	NS	NS	NS
2011	490	15.8	5.5
2012	31	1.7	ND
2013	21	1.2	ND
2014	NS	NS	NS

Year	TCA	PCE	1,1-DCE
2010	NS	NS	NS
2011	31	ND	ND
2012	15	ND	ND
2013	25	1.1	ND
2014	NS	NS	NS

Year	TCA	PCE	1,1-DCE
2010	55,400	ND	460
2011	3,800	17.7	50
2012	350	6.8	6.5
2013	130	3.6	2.4
2014	55	2.9	1.6

Year	TCA	PCE	1,1-DCE
2010	NI	NI	NI
2011	ND	ND	ND
2012	ND	ND	ND
2013	ND	ND	ND
2014	NS	NS	NS

Year	TCA	PCE	1,1-DCE
2010	NI	NI	NI
2011	ND	4	ND
2012	ND	ND	ND
2013	ND	ND	ND
2014	NS	NS	NS

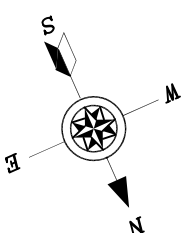


CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982
17 Dupont Street, Plainville, New York 11803

TITLE:	DATE:
Distribution of TCA, PCE, and 1,1-DCE in Groundwater from 2010-2014	10/23/2019

FIGURE:	DRAWN BY:
2A	J.T.C./T.R.B.
DRAWING NO.:	APPR. BY:
2019-5	M.T.Y.



LEGEND



Upgradient Monitoring Well



Downgradient Monitoring Well



Sample Location ID
VOC Concentration
(ug/L or parts per billion)
ND - None Detected

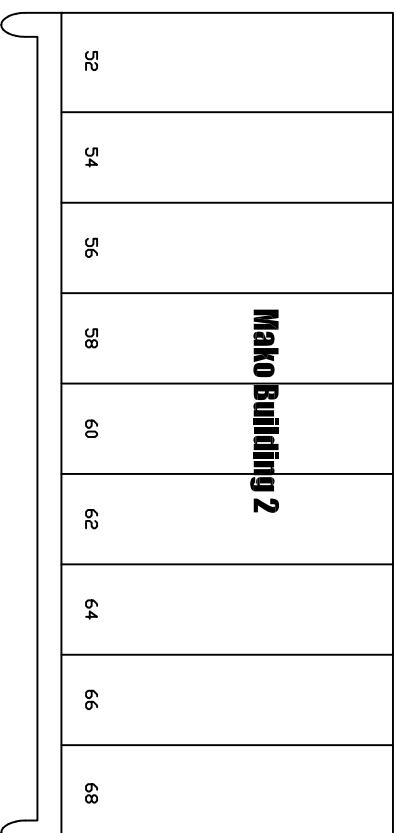
MW-2				
Date	TCA	PCE	1,1-DCE	
June-2015	86.5	6	1.8	
Dec-2015	4	ND	ND	
June-2016	ND	ND	ND	
Feb-2019	ND	ND	ND	
July-2019	ND	ND	ND	

MW-21				
Date	TCA	PCE	1,1-DCE	
June-2015	ND	ND	ND	
Dec-2015	ND	ND	ND	
June-2016	ND	ND	ND	
Feb-2019	ND	ND	ND	
July-2019	ND	ND	ND	

MW-2D				
Date	TCA	PCE	1,1-DCE	
June-2015	0.93	ND	ND	
Dec-2015	0.49	ND	ND	
June-2016	ND	0.99	ND	
Feb-2019	ND	ND	ND	
July-2019	ND	ND	ND	

MW-8				
Date	TCA	PCE	1,1-DCE	
June-2015	8.6	0.91	ND	
Dec-2015	ND	ND	ND	
June-2016	ND	ND	ND	
Feb-2019	ND	ND	ND	
July 2019	ND	ND	ND	

MW-9				
Date	TCA	PCE	1,1-DCE	
June-2015	12.2	0.8	ND	
Dec-2015	1.2	ND	ND	
June-2016	0.38	ND	ND	
Feb-2019	ND	ND	ND	
July-2019	ND	ND	ND	



315.00'

Enter Lane

CA RICH CONSULTANTS, INC.

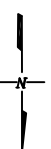
Environmental Specialists Since 1982
17 Dupont Street, Plainville, New York 11803

TITLE: Distribution of TCA, PCE, and 1,1-DCE in Groundwater from 2015-2019

DATE: 10/23/2019

FIGURE: 2B
DRAWING NO.: 2019-6
MAKO PROPERTIES LTD.
48-50 ENTER LANE
ISLANDIA, NEW YORK

DRAWN BY: J.T.C./T.R.B.
APPR. BY: M.T.Y.



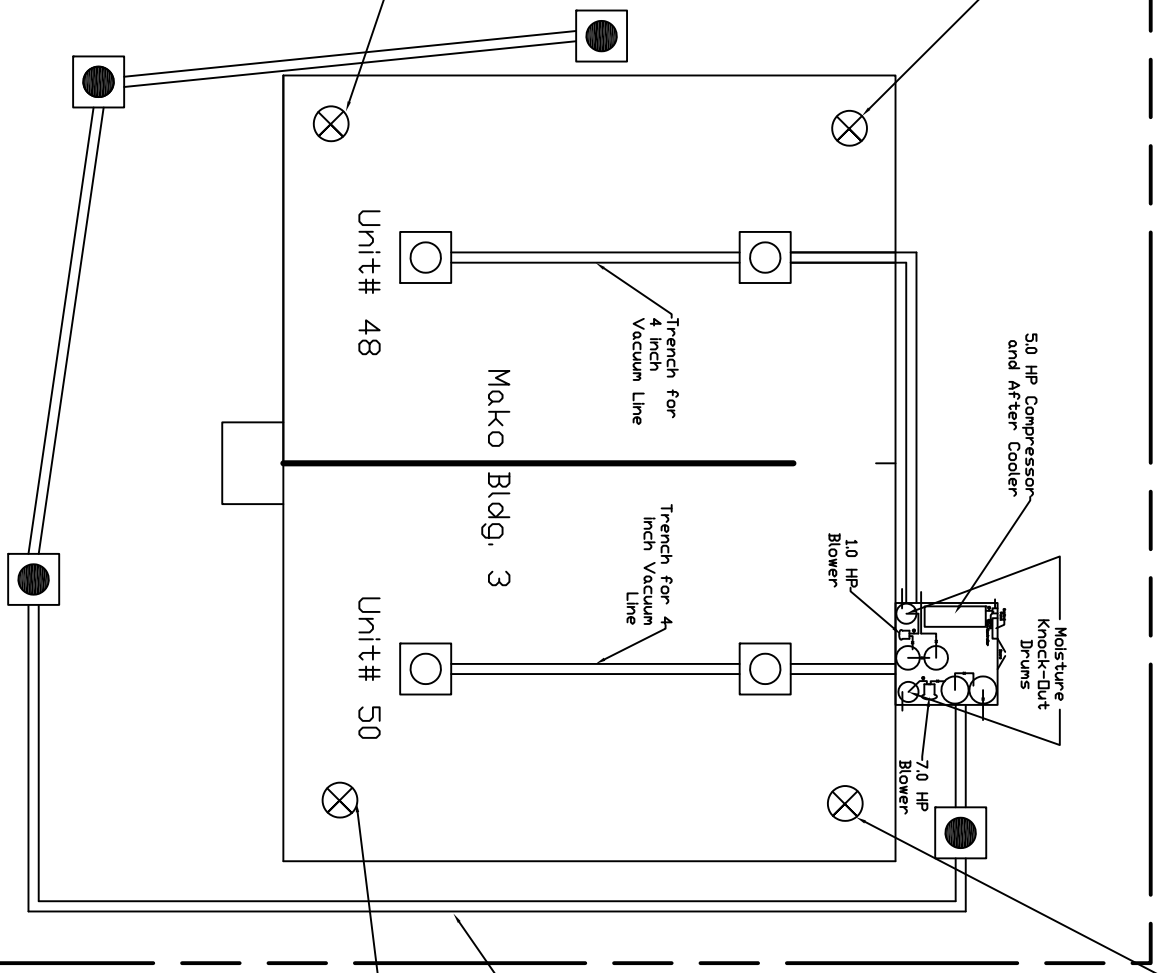
Jan. 2017 - 0.084
Aug. 2017 - 0.181
Jan. 2018 - 0.145
June 2018 - 0.212
Feb. 2019 - 0.179
July 2019 - 0.213

LEGEND

-  Sparge point & SVE vacuum Point
-  Interior SVE vacuum point with vacuum reading in inches of water
-  Temporary vacuum point location with vacuum readings in inches of water

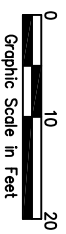
Jan. 2017 - 0.34
Aug. 2017 - 0.150
Jan. 2018 - 0.117
June 2018 - 0.168
Feb. 2019 - 0.123
July 2019 - 0.176

Jan. 2017 - 0.073
Aug. 2017 - 0.149
Jan. 2018 - 0.120
June 2018 - 0.162
Feb. 2019 - 0.140
July 2019 - 0.164

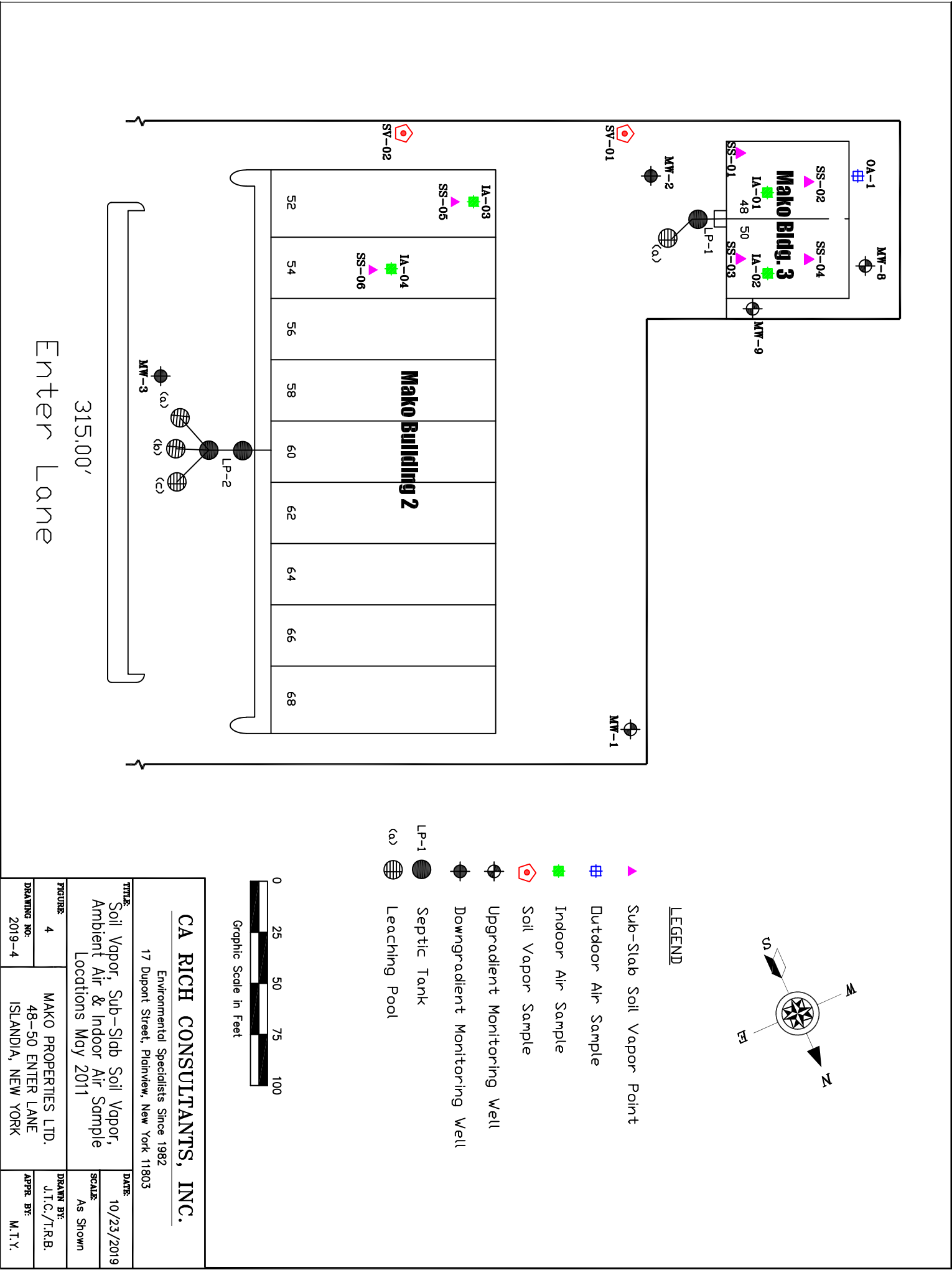


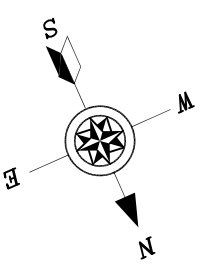
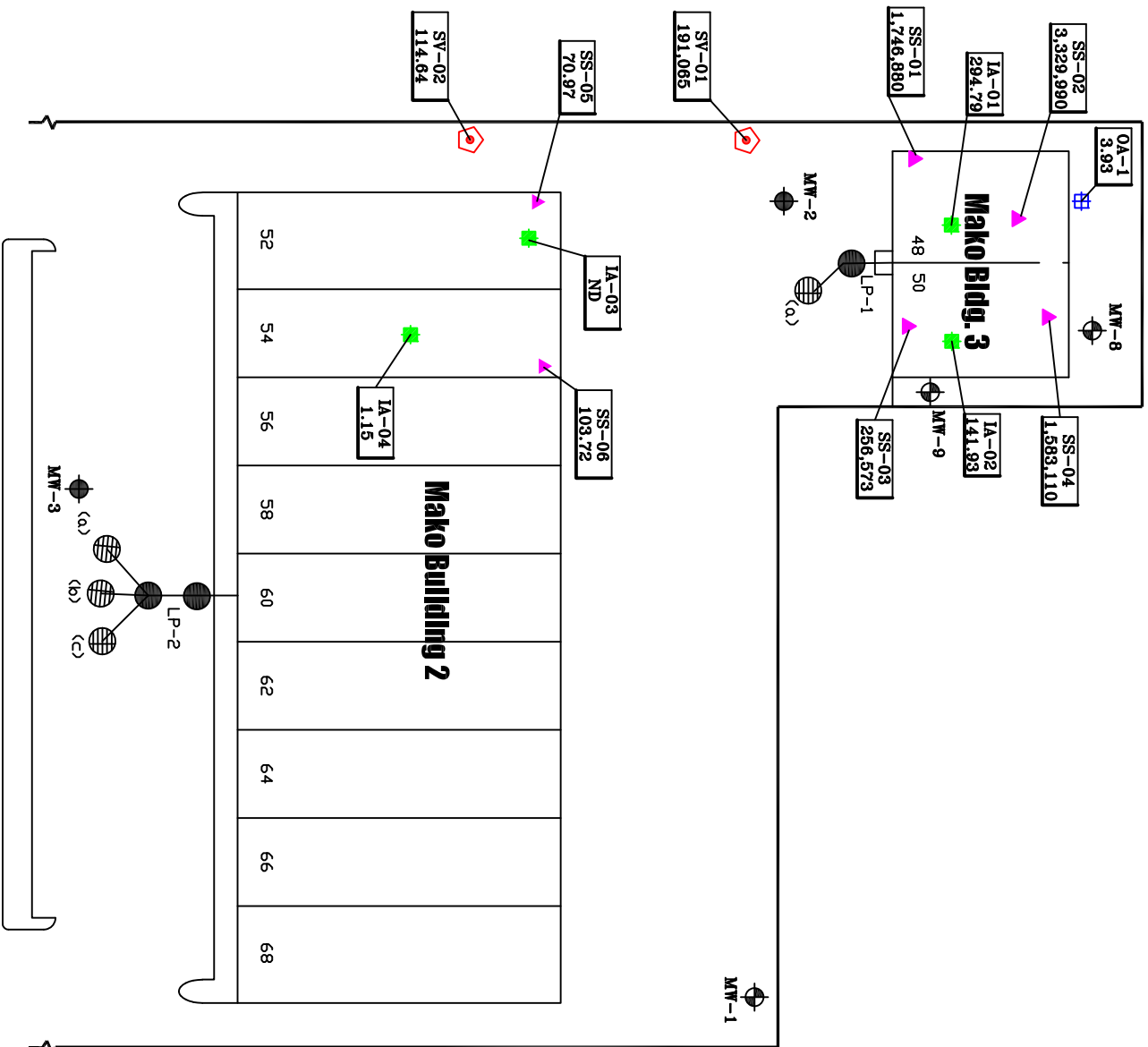
Jan. 2017 - 0.005
Aug. 2017 - 0.012
Jan. 2018 - 0.014
June 2018 - 0.017
Feb. 2019 - 0.016
July 2019 - 0.019

Trench for 2 inch Vacuum Line and 1/2 inch Air Line



CA RICH CONSULTANTS, INC.	
Environmental Specialists Since 1962	
17 Dupont Street, Plainview, New York 11803	
TITLE:	DATE:
Vacuum Point Locations and Vacuum Readings	10/23/2019
FIGURE:	DRAWN BY:
3	J.T.C./T.R.B.
DRAWING NO:	APPR. BY:
2019-2	M.T.Y.

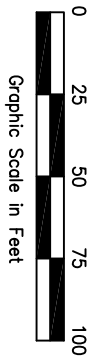




LEGEND

- Sample ID
- TCA Concentration
- Sub-Slab Soil Vapor Point
- Outdoor Air Sample
- Indoor Air Sample
- Soil Vapor Sample
- Upgradient Monitoring Well
- Downgradient Monitoring Well
- Septic Tank
- Leaching Pool

Note:
All Sample Concentrations are in ug/m³



CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803

TITLE:		DATE:
Trichloroethane Concentrations		10/23/2019

FIGURE:	MAKO PROPERTIES LTD.	DRAWN BY:
5	48-50 ENTER LANE	J.T.C./T.R.B.
DRAWING NO:	ISLANDIA, NEW YORK	APPR. BY:
2019-3		M.T.Y.

TABLES

Table 1
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

	Downgradient of Building #3				Downgradient of Building #3				Downgradient of Building #3				Upgradient of Building #3				Upgradient of Building #3			
	MW-2 2010	MW-2 2011	MW-2 2012	MW-2 2013	MW-2I 2010	MW-2I 2011	MW-2I 2012	MW-2I 2013	MW-2D 2010	MW-2D 2011	MW-2D 2012	MW-2D 2013	MW-8 2010	MW-8 2011	MW-8 2012	MW-8 2013	MW-9 2010	MW-9 2011	MW-9 2012	MW-9 2013
Organic Compounds (ug/L)																				
1,1-Dichloroethene	460	50	6.5	2.4	NI	ND	ND	ND	NI	ND	ND	ND	NS	5.5	ND	ND	NS	ND	ND	ND
1,1,1-Trichloroethane	55,400	3,800	350	130	NI	ND	ND	ND	NI	ND	ND	ND	NS	490	31	21	NS	31	15	25
Tetrachloroethene	ND	17.7	6.8	3.6	NI	ND	ND	ND	NI	4	ND	ND	NS	15.8	1.7	1.2	NS	ND	ND	1.1

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

NS - Not Sampled

NI - Not yet Installed

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



Table 1 (cont.)
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

	Downgradient of Building #3				Downgradient of Building #3				Downgradient of Building #3				Upgradient of Building #3				Upgradient of Building #3			
	MW-2	MW-2	MW-2	MW-2	MW-2I	MW-2I	MW-2I	MW-2I	MW-2D	MW-2D	MW-2D	MW-2D	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-9
	Sept.	June	Dec.	June	Sept.	June	Dec.	June	Sept.	June	Dec.	June	Sept.	June	Dec.	June	Sept.	June	Dec.	June
	2014	2015	2015	2016	2014	2015	2015	2016	2014	2015	2015	2016	2014	2015	2015	2016	2014	2015	2015	2016
Organic Compounds (ug/L)																				
1,1-Dichloroethene	1.6	1.8	ND	ND	NS	ND	ND	ND	NS	ND	ND	ND	NS	ND	ND	ND	NS	ND	ND	ND
1,1,1-Trichloroethane	55	86.5	4	ND	NS	ND	ND	ND	NS	0.93	0.49	ND	NS	8.6	ND	ND	NS	12.2	1.2	0.38
Tetrachloroethene	2.9	6	ND	ND	NS	ND	ND	ND	NS	ND	ND	0.99	NS	0.91	ND	ND	NS	0.8	ND	ND

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

NS - Not Sampled.

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



Table 1 (cont.)
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

	Downgradient of Building #3		Downgradient of Building #3		Downgradient of Building #3		Upgradient of Building #3		Upgradient of Building #3	
	<i>MW-2</i>	<i>MW-2</i>	<i>MW-2I</i>	<i>MW-2I</i>	<i>MW-2D</i>	<i>MW-2D</i>	<i>MW-8</i>	<i>MW-8</i>	<i>MW-9</i>	<i>MW-9</i>
	<i>Feb.</i>	<i>July</i>	<i>Feb.</i>	<i>July</i>	<i>Feb.</i>	<i>July</i>	<i>Feb.</i>	<i>July</i>	<i>Feb.</i>	<i>July</i>
	<i>2019</i>	<i>2019</i>	<i>2019</i>	<i>2019</i>	<i>2019</i>	<i>2019</i>	<i>2019</i>	<i>2019</i>	<i>2019</i>	<i>2019</i>
Organic Compounds (ug/L)										
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

NS - Not Sampled.

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



Table MW-2
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Groundwater Monitoring Well MW-2
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

Groundwater Monitoring Well MW-2 Downgradient of Building #3										
MW-2	2010	2011	2012	2013	Sept. 2014	June 2015	Dec. 2015	June 2016	Feb. 2019	July 2019
Organic Compounds (ug/L)										
1,1-Dichloroethene	460	50	6.5	2.4	1.6	1.8	ND	ND	ND	ND
1,1,1-Trichloroethane	55,400	3,800	350	130	55	86.5	4	ND	ND	ND
Tetrachloroethene	ND	17.7	6.8	3.6	2.9	6	ND	ND	ND	ND

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



Table MW-2I
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Groundwater Monitoring Well MW-2I
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

Groundwater Monitoring Well MW-2I Downgradient of Building #3										
MW-2I	2010	2011	2012	2013	Sept. 2014	June 2015	Dec. 2015	June 2016	Feb. 2019	July 2019
Organic Compounds (ug/L)										
1,1-Dichloroethene	NA	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	ND	ND	ND	NS	ND	ND	ND	ND	ND
Tetrachloroethene	NA	ND	ND	ND	NS	ND	ND	ND	ND	ND

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

NA - Not Analyzed.

NS - Not Sampled.

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



Table MW-2D
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Groundwater Monitoring Well MW-2D
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

Groundwater Monitoring Well MW-2D Downgradient of Building #3										
MW-2D	2010	2011	2012	2013	Sept. 2014	June 2015	Dec. 2015	June 2016	Feb. 2019	July 2019
Organic Compounds (ug/L)										
1,1-Dichloroethene	NA	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	ND	ND	ND	NS	0.93	0.49	ND	ND	ND
Tetrachloroethene	NA	4	ND	ND	NS	ND	ND	0.99	ND	ND

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

NA - Not Analyzed.

NS - Not Sampled.

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



Table MW-8
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Groundwater Monitoring Well MW-8
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

Groundwater Monitoring Well MW-8 Upgradient of Building #3										
MW-8	2010	2011	2012	2013	Sept. 2014	June 2015	Dec. 2015	June 2016	Feb. 2019	July 2019
Organic Compounds (ug/L)										
1,1-Dichloroethene	NA	5.5	ND	ND	NS	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	490	31	21	NS	8.6	ND	ND	ND	ND
Tetrachloroethene	NA	15.8	1.7	1.2	NS	0.91	ND	ND	ND	ND

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

NA - Not Analyzed.

NS - Not Sampled.

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



Table MW-9
HISTORICAL SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS
Groundwater Monitoring Well MW-9
Mako Groundwater Monitoring Program
48-50 Enter Lane, Islandia, NY

Groundwater Monitoring Well MW-9 Upgradient of Building #3										
MW-9	2010	2011	2012	2013	Sept. 2014	June 2015	Dec. 2015	June 2016	Feb. 2019	July 2019
Organic Compounds (ug/L)										
1,1-Dichloroethene	NA	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	31	15	25	NS	12.2	1.2	0.38	ND	ND
Tetrachloroethene	NA	ND	ND	1.1	NS	0.8	ND	ND	ND	ND

Notes:

ug/L - micrograms per Liter or parts per billion.

ND - Not Detected above laboratory detection limit.

NA - Not Analyzed.

NS - Not Sampled.

* - NYSDEC Division of Water Technical and Operational Guidance series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998.

Exceeds GW Standard of 5 ug/L.



TABLE 2

Summary of Interior Soil Vapor Extraction System Raw Air Samples at Start-Up - July 2015 to July 2019
48-50 Enter Lane, Hauppauge, New York

Sample ID Matrix Date Sampled	SVE-Shallow Soil Vapor 7/29/2015 (Raw Air)	INT SVE-Raw Soil Vapor 12/22/2015 (SVE-Shallow)	INT SVE-Raw Soil Vapor 6/29/2016 (SVE-Shallow)	INT SVE-Raw Soil Vapor 1/5/2017 (SVE-Shallow)	INT SVE-Raw Soil Vapor 8/10/2017 (SVE-Shallow)	INT SVE-Raw Soil Vapor 1/24/2018 (SVE-Shallow)	INT SVE-Raw Soil Vapor 6/28/2018 (SVE-Shallow)	INT SVE-Raw Soil Vapor 2/7/2019 (SVE-Shallow)	INT SVE-Raw Soil Vapor 7/10/2019 (SVE-Shallow)	*NYSDOH Soil Vapor Guideline
Volatile Organic Compounds (USEPA TO-15)										
Parameters	µg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³
Acetone	34.4	17	38	1,660	56.8	283	16	142	9.3	NV
1,3-Butadiene	ND	ND	ND	ND	0.49	ND	ND	ND	ND	NV
Benzene	ND	ND	ND	ND	0.77	ND	1.9	0.35 J	ND	NV
Benzyl Chloride	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	NV
Carbon disulfide	ND	ND	ND	ND	58.9	ND	0.59 J	ND	ND	NV
Chloroethane	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	NV
Chloroform	ND	ND	4.9	ND	6.3	ND	3	ND	2.9	NV
Chloromethane	ND	3.3	6.4	ND	8.3	ND	4.1	1.1	4.5	NV
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	0.37 J	0.49 J	6**
Cyclohexane	ND	ND	ND	ND	0.65 J	ND	7.2	3.4	0.45 J	NV
1,1-Dichloroethylene	29	ND	ND	ND	ND	ND	ND	ND	ND	6**
1,4-Dioxane	ND	231	411	111	126	9.7 J	9.7	ND	ND	NV
Dichlorodifluoromethane	ND	1.8 J	2.5 J	ND	3.4	ND	2.5	1.8	3	NV
cis-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
trans-1,2-Dichloroethylene	ND	2.3 J	2.9 J	ND	ND	ND	ND	ND	ND	NV
Ethyl alcohol (Ethanol)	ND	15	13	ND	22.6	26.9	11	15	12	NV
Ethylbenzene	ND	24	ND	ND	5.2	ND	2	0.69 J	ND	NV
Ethyl Acetate	ND	31	ND	ND	11	23	ND	3.1	ND	NV
4-Ethyltoluene	ND	ND	ND	ND	0.88 J	ND	1.1	ND	ND	NV
Heptane	ND	7	ND	ND	1.7	11 J	1.7	3.9	ND	NV
Hexane	ND	4.9	ND	ND	0.95	ND	4.6	0.42 J	ND	NV
2-Hexanone	ND	ND	ND	ND	0.65 J	ND	ND	ND	ND	NV
Isopropyl Alcohol	ND	1.7 J	6.1	ND	2.4	8.8 J	ND	2.3	0.69	NV
Methylene Chloride	ND	ND	26	3,070	14	3,390	11	117	14	100***
Methyl Ethyl Ketone	ND	3.5	4.4	13 J	10	ND	1.7	2.8	1.9	NV
Methyl Isobutyl Ketone	ND	ND	ND	ND	0.86	ND	0.94	0.94	1.1	NV
Propylene	ND	ND	ND	1,960	1.7	ND	5	ND	ND	NV
Styrene	ND	ND	ND	ND	0.72 J	ND	0.47 J	ND	6.4	NV
1,1,1-Trichloroethane	18,900	47	89.5	20 J	47	ND	21	3.2	23	100***
1,2,4-Trimethylbenzene	ND	ND	ND	ND	4.2	ND	4.7	1.1	ND	NV
1,3,5-Trimethylbenzene	ND	ND	ND	ND	0.88 J	ND	1.2	ND	ND	NV
2,2,4-Trimethylpentane	10 J	17	ND	ND	ND	ND	60.7	47.6	ND	NV
Tertiary Butyl Alcohol	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.82	NV
Tetrachloroethylene	4,240	247	136	ND	97	65	1,110	18	71.9	100***
Tetrahydrofuran	ND	1.9 J	1.3 J	ND	7.1	ND	0.91	ND	0.41 J	NV
Toluene	11 J	70.1	2.2 J	357.0	26	40.7	18.0	122	1.4	NV
Trichloroethylene	ND	1	10	11	5.4	51	3.8	0.38	4.8	6**
Trichlorofluoromethane	68.6	ND	6.2	ND	6.2	ND	4.7	1.7	5.6	NV
m + p Xylene	ND	189	2.9 J	ND	26	ND	6.9	2.8	ND	NV
o Xylene	ND	82.1	ND	ND	11	ND	3	0.91	ND	NV
Xylenes (total)	ND	271	2.9 J	ND	36	ND	10	3.7	ND	NV

Notes:

* NYSDOH Guidance for Evaluating Soil Vapor Intrusion in New York State, May 2017, Soil Vapor/Indoor Air Matrices A, B & C - Air Guidance Values.

**Matrix Table A - "No Further Action" if indoor air concentration is below 0.2 ug/m3 and sub-slab vapor concentration below 60 ug/m3; or

"No Further Action" if indoor air concentration is below 1 ug/m3 and sub-slab vapor concentration below 6 ug/m3.

***Matrix Table B - "No Further Action" if indoor air concentration is below 3 ug/m3 and sub-slab vapor concentration below 1,000 ug/m3; or

"No Further Action" if indoor air concentration is below 10 ug/m3 and sub-slab vapor concentration below 100 ug/m3.

Concentrations reported in micrograms per cubic meter (ug/M³).

ND - Indicates less than the method detection limit for specific compound (Non-detect).

J - Estimated Value.

NV - No Value.

TABLE 3

Summary of Exterior Soil Vapor Extraction System Raw Air Samples at Start-Up - August 2015 to July 2019
48-50 Enter Lane, Hauppauge, New York

Sample ID Matrix Date Sampled	SVE-Deep Soil Vapor 8/6/2015 (Raw Air)	EXT SVE-Raw Soil Vapor 12/22/2015 (SVE-Deep)	EXT SVE-Raw Soil Vapor 6/29/2016 (SVE-Deep)	EXT SVE-Raw Soil Vapor 1/5/2017 (SVE-Deep)	EXT SVE-Raw Soil Vapor 8/10/2017 (SVE-Deep)	EXT SVE-Raw Soil Vapor 1/24/2018 (SVE-Deep)	EXT SVE-Raw Soil Vapor 6/28/2018 (SVE-Deep)	EXT SVE-Raw Soil Vapor 2/7/2019 (SVE-Deep)	EXT SVE-Raw Soil Vapor 7/10/2019 (SVE-Deep)	*NYSDOH Soil Vapor Guideline
Volatile Organic Compounds (USEPA TO-15)										
Parameters	µg/M³	µg/M³	µg/M³	µg/M³	µg/M³	µg/M³	µg/M³	µg/M³	µg/M³	µg/M³
Acetone	46.6	4	5.7	3.3	26.4	10	6.2	7.6	7.1	NV
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Carbon disulfide	ND	ND	ND	ND	1.1	ND	2.1	1.4	ND	NV
Chloroform	ND	ND	2.8 J	4.9	3.6	3.8	3.5	1.4	1.6	NV
Chloromethane	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.39 J	NV
Carbon Tetrachloride	ND	ND	ND	ND	ND	0.26	ND	ND	ND	6**
Cyclohexane	83.3	ND	ND	ND	ND	ND	ND	ND	ND	NV
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	0.33 J	ND	ND	NV
1,1-Dichloroethylene	368	15	1.7 J	1.4 J	0.44 J	ND	ND	ND	ND	6**
1,4-Dioxane	ND	24	19	12	14	5	2.7	ND	ND	NV
Dichlorodifluoromethane	ND	2.5 J	2.7 J	3.2 J	3.1	2.9	2.8	2	3	NV
cis-1,2-Dichloroethylene	ND	ND	1.5 J	ND	ND	ND	ND	ND	ND	6**
trans-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Ethyl alcohol (Ethanol)	ND	ND	ND	3.2 J	6	ND	2.1	3	4.9	NV
Ethylbenzene	ND	ND	ND	ND	0.69 J	ND	0.61 J	ND	ND	NV
Ethyl Acetate	ND	ND	ND	ND	2.6	ND	ND	1.5	ND	NV
4-Ethyltoluene	ND	ND	ND	ND	0.59 J	ND	0.74	ND	ND	NV
Freon 113	ND	ND	ND	ND	1.1 J	1.1	1.0 J	0.84 J	ND	NV
Heptane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Hexane	23 J	ND	ND	ND	ND	ND	ND	ND	ND	NV
2-Hexanone	ND	ND	ND	ND	0.61 J	1.8	ND	ND	ND	NV
Isopropyl Alcohol	ND	ND	ND	ND	ND	ND	2.1	ND	1.2	NV
Methylene Chloride	ND	ND	ND	4.2	ND	1.3	ND	0.42 J	ND	100***
Methyl Ethyl Ketone	48.4	ND	2.2 J	ND	5	3.5	0.71	1.2	2	NV
Methyl Isobutyl Ketone	ND	ND	ND	ND	0.41 J	ND	ND	ND	0.53 J	NV
Methyl Tert Butyl Ether	ND	ND	ND	ND	2.5	ND	ND	ND	ND	NV
Propylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
1,1,1-Trichloroethane	20,500	715	140	81.8	37	19	13	7.1	10	100***
1,2,4-Trimethylbenzene	ND	ND	ND	ND	2.9	ND	3	ND	ND	NV
1,3,5-Trimethylbenzene	ND	ND	ND	ND	0.59 J	ND	0.59 J	ND	ND	NV
2,2,4-Trimethylpentane	ND	ND	8.4	ND	ND	3.60	61.2	24	24	NV
Tertiary Butyl Alcohol	ND	ND	ND	ND	0.45 J	ND	ND	ND	0.64	NV
Tetrachloroethylene	2,330	22	19	22	31	31	43	24	25	100***
Tetrahydrofuran	33 J	ND	2.1 J	ND	ND	ND	ND	ND	ND	NV
Toluene	ND	6	5.3	ND	1.5	0.68 J	1.5	0.41 J	ND	NV
Trichloroethylene	ND	1.5	1.3	1	1	1.1	0.97	0.7	0.96	6**
Trichlorofluoromethane	419	17	22	17	32	15	17	7.9	22	NV
Vinyl Acetate	ND	ND	ND	ND	9.1	1.3	ND	ND	ND	NV
m + p Xylene	ND	1.8 J	2.5 J	ND	3.1	0.56 J	2.6	0.52 J	ND	NV
o Xylene	ND	ND	ND	ND	1.3	ND	1.20	ND	ND	NV
Xylenes (total)	ND	1.8 J	2.5 J	ND	4.3	0.56 J	3.8	0.52 J	ND	NV

Notes:

* NYSDOH Guidance for Evaluating Soil Vapor Intrusion in New York State, May 2017, Soil Vapor/Indoor Air Matrices A, B & C - Air Guidance Values.

**Matrix Table A - "No Further Action" if indoor air concentration is below 0.2 ug/m3 and sub-slab vapor concentration below 60 ug/m3; or
"No Further Action" if indoor air concentration is below 1 ug/m3 and sub-slab vapor concentration below 6 ug/m3.

***Matrix Table B - "No Further Action" if indoor air concentration is below 3 ug/m3 and sub-slab vapor concentration below 1,000 ug/m3; or
"No Further Action" if indoor air concentration is below 10 ug/m3 and sub-slab vapor concentration below 100 ug/m3.

Concentrations reported in micrograms per cubic meter (µg/M³).

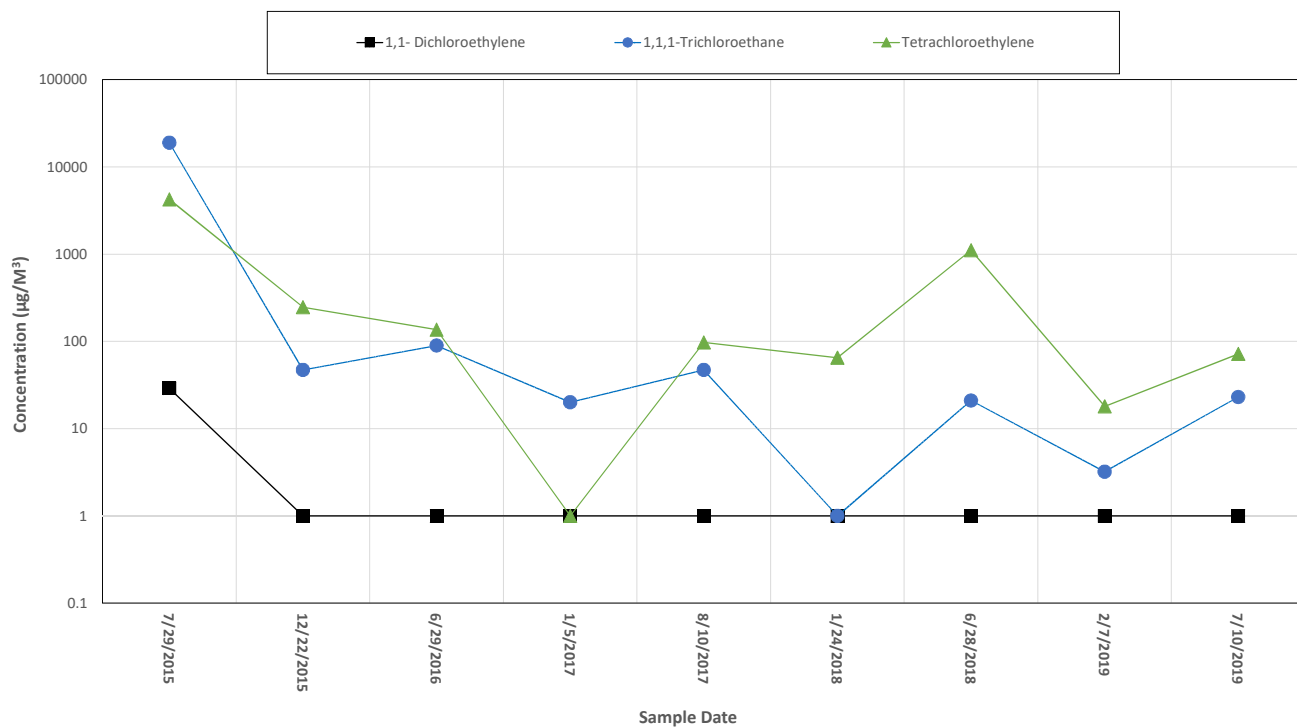
ND - Indicates less than the method detection limit for specific compound (Non-detect).

J - Estimated Value.

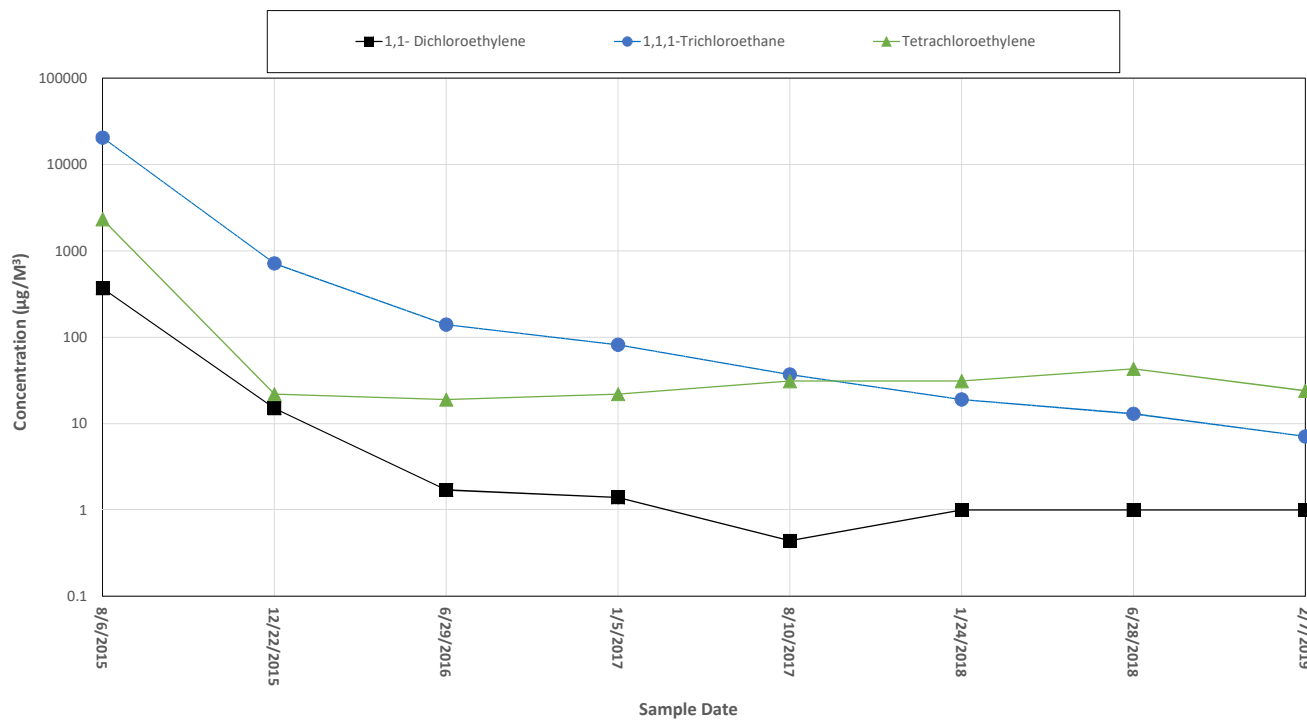
NV - No Value.

GRAPHS

GRAPH A - Interior SVE System: Concentration vs Time



GRAPH B - Exterior SVE System: Concentration vs Time



ATTACHMENTS

Mike Yager

From: Ascher, Jamie (DEC) <jamie.ascher@dec.ny.gov>
Sent: Wednesday, November 30, 2016 2:36 PM
To: Mike Yager
Cc: Rich Izzo; Charlie Rich; Biblow, Charlotte; Parish, Walter (DEC)
Subject: RE: Mako Building 3 Construction Completion Report
Attachments: SMP Template August 2015.docx

Hi Mike

Comments on the CCR are coming, I will remind DOH that I'm waiting for their input. As we discussed, for the time being let's hold off on the groundwater sampling until we have an approved site management plan. We can also forego indoor air and sub-slab soil gas sampling in Building 3 as long as you can demonstrate 0.004 inches of vacuum beneath the entire building slab. There should be permanent vacuum measurement points in each corner of the building to confirm continuity and negative pressure.

All of these sampling requirements as well as post remedial monitoring will be spelled out in the SMP. Also, before the CCR and SMP can be approved, the environmental easement must be recorded with the Suffolk County Clerk's office. If the easement package is stuck at DEC counsel's office, let me know and I'll call Brad Burns. Attached is a SMP template which should help your preparation of the SMP.

After the EE is recorded and the CCR and SMP have been approved, DEC will reclassify the site from Class P to Class C (remediation complete, OM&M required) and the release letter or CoC will be issued. If you have any questions, please feel free to contact me. Thanks, Jamie

Jamie Ascher
Engineering Geologist 2
NYSDEC- Region 1
631- 444-0246

From: Mike Yager [mailto:MYager@carichinc.com]
Sent: Wednesday, November 30, 2016 10:14 AM
To: Ascher, Jamie (DEC) <jamie.ascher@dec.ny.gov>
Cc: Rich Izzo <RIzzo@carichinc.com>; Charlie Rich <CRich@carichinc.com>; Biblow, Charlotte <CBiblow@FarrellFritz.com>
Subject: RE: Mako Building 3 Construction Completion Report

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Jamie,

Hope you had a nice Thanksgiving! I just wanted to check on the status of the CCR for the Mako 3 – 48-50 Enter Lane Site in Islandia. We are preparing to conduct the next round of groundwater and indoor air sampling for December. Please let me know if we need to do a full round of sampling or if we can cut back the scope as per our suggestions in the CCR.

Thanks,

Mike

Michael T. Yager
CA Rich Consultants, Inc.
17 Dupont Street, Plainview, NY 11803
Phone: 516-576-8844 Fax: 516-576 0093

myager@carichinc.com
www.carichinc.com

APPENDICES

APPENDIX A

Analytical Reports for on-Site Groundwater Samples February & July 2019

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

C. A. Rich Consultants

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

SGS Job Number: JC83332

Sampling Date: 02/21/19

Report to:

C. A. Rich Consultants
17 Dupont Street
Plainview, NY 11803
MYager@CarichInc.com

ATTN: Michael Yager

Total number of pages in report: 151



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.

Brian McGuire
General Manager

Client Service contact: Kristin Degraw 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

C. A. Rich Consultants

Job No: JC83332

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC83332-1	02/21/19	10:04	MY/TB02/22/19	AQ	Ground Water	MW-1
JC83332-1D	02/21/19	10:04	MY/TB02/22/19	AQ	Water Dup/MSD	MW-1 MS
JC83332-1S	02/21/19	10:04	MY/TB02/22/19	AQ	Water Matrix Spike	MW-1 MSD
JC83332-2	02/21/19	13:36	MY/TB02/22/19	AQ	Ground Water	MW-2
JC83332-3	02/21/19	14:34	MY/TB02/22/19	AQ	Ground Water	MW-2I
JC83332-4	02/21/19	15:44	MY/TB02/22/19	AQ	Ground Water	MW-2D
JC83332-5	02/21/19	16:49	MY/TB02/22/19	AQ	Ground Water	MW-3
JC83332-6	02/21/19	11:34	MY/TB02/22/19	AQ	Ground Water	MW-8
JC83332-7	02/21/19	12:34	MY/TB02/22/19	AQ	Ground Water	MW-9
JC83332-8	02/21/19	00:00	MY/TB02/22/19	AQ	Ground Water	MW-XX
JC83332-9	02/21/19	17:00	MY/TB02/22/19	AQ	Field Blank Water	FB 2/21/19
JC83332-10	02/21/19	17:00	MY/TB02/22/19	AQ	Trip Blank Water	TB 2/21/19

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: C. A. Rich Consultants

Job No JC83332

Site: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Report Date 3/7/2019 5:26:02 PM

On 02/22/2019, 8 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC83332 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V4B3742

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC83332-1MS, JC83332-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JC83332
Account: C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Collected: 02/21/19



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC83332-1 MW-1

No hits reported in this sample.

JC83332-2 MW-2

No hits reported in this sample.

JC83332-3 MW-2I

No hits reported in this sample.

JC83332-4 MW-2D

Methyl Tert Butyl Ether	0.55 J	1.0	0.51	ug/l	SW846 8260C

JC83332-5 MW-3

No hits reported in this sample.

JC83332-6 MW-8

No hits reported in this sample.

JC83332-7 MW-9

No hits reported in this sample.

JC83332-8 MW-XX

No hits reported in this sample.

JC83332-9 FB 2/21/19

No hits reported in this sample.

JC83332-10 TB 2/21/19

No hits reported in this sample.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-1	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-1	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88508.D	1	02/25/19 21:55	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-1	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	108%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-2	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-2	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88512.D	1	02/25/19 23:47	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-2	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-120%
17060-07-0	1,2-Dichloroethane-D4	110%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	108%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-21	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-3	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88513.D	1	02/26/19 00:15	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-3	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	108%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-2D	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-4	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88514.D	1	02/26/19 00:43	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2D	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-4	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.55	1.0	0.51	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-120%
17060-07-0	1,2-Dichloroethane-D4	110%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	108%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-3	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-5	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88515.D	1	02/26/19 01:11	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-5	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	107%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-8	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-6	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88516.D	1	02/26/19 01:39	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	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:	MW-8	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-6	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		80-120%
17060-07-0	1,2-Dichloroethane-D4	112%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	109%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-9	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-7	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88517.D	1	02/26/19 02:08	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-7	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	107%		80-120%

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

SGS North America Inc.

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-XX	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-8	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88518.D	1	02/26/19 02:36	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-XX	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-8	Date Received:	02/22/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		80-120%
17060-07-0	1,2-Dichloroethane-D4	114%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	107%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	FB 2/21/19	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-9	Date Received:	02/22/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88506.D	1	02/25/19 20:59	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB 2/21/19	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-9	Date Received:	02/22/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	109%		80-120%

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	TB 2/21/19	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-10	Date Received:	02/22/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B88507.D	1	02/25/19 21:27	BK	n/a	n/a	V4B3742
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB 2/21/19	Date Sampled:	02/21/19
Lab Sample ID:	JC83332-10	Date Received:	02/22/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	109%		80-120%

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

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



GW
FB
WEB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page 1 of 1

Client / Reporting Information		Project Information		Requested Analysis										Matrix Codes																			
Company Name: CA Rich Consultants, Inc.		Project Name: MAKO 3 GWS												DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WFP - Waste FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank																			
Street Address: 17 Dupont St.		Street: 48-50 Enter Lane																															
City, State, Zip: Plainville NY 11803		City, State, Zip: Islandia NY																															
Project Contact: Miki Yager myager@carichinc.com		Project #: MAKO 3 GWS																															
Phone #: 516-576-8844		Client Purchase Order #: MAKO 3 GWS																															
Sample(s) Name(s): M. Yager + T. Brown		Project Manager: Michael Yager																															
Attention:																																	
Turn Around Time (Business Days)		Collection		Number of preserved Bottles																													
SGS Sample #	Field ID / Point of Collection	MEQSDI Val #	Date	Time	Sampled by	Grav (G)	Grav (G)	Matrix	# of bottles	GC	NaOH	HNO ₃	H ₂ SO ₄	None	DI Water	MECH	ENCORE																
1	MW-1		2/21/19	1804	MY/TB	G	GW	3	3									X															
2	MW-2		2/21/19	1336	MY/TB	G	GW	3	3									X															
3	MW-2i		2/21/19	1434	MY/TB	G	GW	3	3									X															
4	MW-2b		2/21/19	1544	MY/TB	G	GW	3	3									X															
5	MW-3		2/21/19	1649	MY/TB	G	GW	4	4									X															
6	MW-8		2/21/19	1134	MY/TB	G	GW	3	3									X															
7	MW-9		2/21/19	1234	MY/TB	G	GW	3	3									X															
8	MW-XX		2/21/19	-	MY/TB	G	GW	3	3									X															
9	FB 2/21/19		2/21/19	1700	MY/TB	G	FB	2	2									X															
10	TB 2/21/19		-	-	TB	-	TB	2	2									X															
11	MW-1 MS		2/21/19	1004	MY/TB	G	GW	3	3									X															
12	MW-2 MSD		2/21/19	1004	MY/TB	G	GW	3	3									X															
Deliverable		Comments / Special Instructions																															
☒ 10 Business Days ☐ 5 Business Days ☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day ☐ Other		Approved By (SGS PM) / Date:		☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ NJ Reduced (Level 3) ☐ Full Tier 1 (Level 4) ☐ Commercial "C" ☐ NJ DKOP										☐ NYASP Category A ☒ NYASP Category B ☐ MA MCP Criteria ☐ CT RCP Criteria ☐ State Forms ☐ EDD Format										☐ DOD-QSM5									
Approval needed for 10 Business Day TAT		Approval needed for 10 Business Day TAT		Commercial "A" = Results only; Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data										http://www.sgs.com/en/terms-and-conditions																			
Relinquished by:		Date / Time:		Received By:		Date / Time:		Relinquished By:		Date / Time:		Received By:		Date / Time:		Received By:		Date / Time:															
3		2/21/19 1339		1		2/21/19 1004		2		2/21/19 1339		3		2/21/19 1004		4		2/21/19 1339															
Custody Seal #		Intact		Not Intact		Preserved when applicable		Therm ID		On Ice		Cooler Temp. °C																					
23582		Intact		Not Intact		Preserved when applicable		Therm ID		On Ice		Cooler Temp. °C																					

Initial Assessment

Label Verification

EHSA-QAC-0023-02-FORM Dayton - Standard COC.xlsx

JC83332: Chain of Custody

Page 1 of 2



SGS Sample Receipt Summary

Job Number: JC83332

Client: C. A. RICH CONSULTANTS

Project: BRENT MAKO BUILDING 3 INVESTIGATION, E

Date / Time Received: 2/22/2019 4:59:00 PM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.2);

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: ☒ ☐	IR Gun
2. Cooler temp verification: _____	
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: ☐ ☐	☒

Test Strip Lot #s: pH 1-12: 206717 pH 12+: 208717 Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JC83332: Chain of Custody

Page 2 of 2

Internal Sample Tracking Chronicle

C. A. Rich Consultants

Job No: JC83332

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC83332-1 MW-1	Collected: 21-FEB-19 10:04	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-1	SW846 8260C	25-FEB-19 21:55	BK			V8260STD
JC83332-2 MW-2	Collected: 21-FEB-19 13:36	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-2	SW846 8260C	25-FEB-19 23:47	BK			V8260STD
JC83332-3 MW-2I	Collected: 21-FEB-19 14:34	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-3	SW846 8260C	26-FEB-19 00:15	BK			V8260STD
JC83332-4 MW-2D	Collected: 21-FEB-19 15:44	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-4	SW846 8260C	26-FEB-19 00:43	BK			V8260STD
JC83332-5 MW-3	Collected: 21-FEB-19 16:49	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-5	SW846 8260C	26-FEB-19 01:11	BK			V8260STD
JC83332-6 MW-8	Collected: 21-FEB-19 11:34	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-6	SW846 8260C	26-FEB-19 01:39	BK			V8260STD
JC83332-7 MW-9	Collected: 21-FEB-19 12:34	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-7	SW846 8260C	26-FEB-19 02:08	BK			V8260STD
JC83332-8 MW-XX	Collected: 21-FEB-19 00:00	By: MY/TB	Received: 22-FEB-19	By: AS		
JC83332-8	SW846 8260C	26-FEB-19 02:36	BK			V8260STD

Internal Sample Tracking Chronicle

C. A. Rich Consultants

Job No: JC83332

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC83332-9	Collected: 21-FEB-19 17:00 By: MY/TB FB 2/21/19					Received: 22-FEB-19 By: AS
JC83332-9	SW846 8260C	25-FEB-19 20:59	BK			V8260STD
JC83332-10	Collected: 21-FEB-19 17:00 By: MY/TB TB 2/21/19					Received: 22-FEB-19 By: AS
JC83332-10	SW846 8260C	25-FEB-19 21:27	BK			V8260STD

SGS Internal Chain of Custody

Page 1 of 2

Job Number: JC83332
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Received: 02/22/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC83332-1.1	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-1.1	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-1.1	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-1.1	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-1.2	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-1.2	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-1.2	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-1.2	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-1.3	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-1.3	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-1.3	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-1.3	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-2.1	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-2.1	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-2.1	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-2.1	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-3.2	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-3.2	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-3.2	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-3.2	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-4.2	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-4.2	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-4.2	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-4.2	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-5.2	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-5.2	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-5.2	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-5.2	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-6.2	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-6.2	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-6.2	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-6.2	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-7.1	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-7.1	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-7.1	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-7.1	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage

SGS Internal Chain of Custody

Page 2 of 2

Job Number: JC83332

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Received: 02/22/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC83332-8.2	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-8.2	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-8.2	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-8.2	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-9.1	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-9.1	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-9.1	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-9.1	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage
JC83332-10.1	Secured Storage	Brittany Klimek	02/25/19 20:07	Retrieve from Storage
JC83332-10.1	Brittany Klimek	GCMS4B	02/25/19 20:07	Load on Instrument
JC83332-10.1	GCMS4B	Chelsea San Filippo	02/26/19 11:25	Unload from Instrument
JC83332-10.1	Chelsea San Filippo	Secured Storage	02/26/19 11:25	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Page 1 of 3

Job Number: JC83332

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3742-MB	4B88505.D	1	02/25/19	BK	n/a	n/a	V4B3742

The QC reported here applies to the following samples:

Method: SW846 8260C

JC83332-1, JC83332-2, JC83332-3, JC83332-4, JC83332-5, JC83332-6, JC83332-7, JC83332-8, JC83332-9, JC83332-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: JC83332**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3742-MB	4B88505.D	1	02/25/19	BK	n/a	n/a	V4B3742

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

JC83332-1, JC83332-2, JC83332-3, JC83332-4, JC83332-5, JC83332-6, JC83332-7, JC83332-8, JC83332-9, JC83332-10

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	111% 80-120%
17060-07-0	1,2-Dichloroethane-D4	108% 81-124%
2037-26-5	Toluene-D8	106% 80-120%
460-00-4	4-Bromofluorobenzene	109% 80-120%

Method Blank Summary

Job Number: JC83332
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3742-MB	4B88505.D	1	02/25/19	BK	n/a	n/a	V4B3742

The QC reported here applies to the following samples: Method:
JC83332-1, JC83332-2, JC83332-3, JC83332-4, JC83332-5, JC83332-6, JC83332-7, JC83332-8, JC83332-9, JC83332-10

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 2

Job Number: JC83332**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3742-BS	4B88503.D	1	02/25/19	BK	n/a	n/a	V4B3742

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

JC83332-1, JC83332-2, JC83332-3, JC83332-4, JC83332-5, JC83332-6, JC83332-7, JC83332-8, JC83332-9, JC83332-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	166	83	42-150
71-43-2	Benzene	50	52.0	104	80-120
108-86-1	Bromobenzene	50	55.7	111	82-118
74-97-5	Bromochloromethane	50	50.6	101	84-121
75-27-4	Bromodichloromethane	50	51.2	102	83-120
75-25-2	Bromoform	50	47.4	95	76-129
74-83-9	Bromomethane	50	45.4	91	57-138
78-93-3	2-Butanone (MEK)	200	181	91	64-137
104-51-8	n-Butylbenzene	50	52.4	105	81-123
135-98-8	sec-Butylbenzene	50	54.2	108	84-121
98-06-6	tert-Butylbenzene	50	55.7	111	83-122
56-23-5	Carbon tetrachloride	50	51.2	102	75-135
108-90-7	Chlorobenzene	50	51.3	103	84-117
75-00-3	Chloroethane	50	48.9	98	63-132
67-66-3	Chloroform	50	51.7	103	80-119
74-87-3	Chloromethane	50	47.2	94	46-136
95-49-8	o-Chlorotoluene	50	57.4	115	84-118
106-43-4	p-Chlorotoluene	50	55.6	111	83-116
96-12-8	1,2-Dibromo-3-chloropropane	50	43.2	86	72-127
124-48-1	Dibromochloromethane	50	49.9	100	80-123
106-93-4	1,2-Dibromoethane	50	51.3	103	84-117
95-50-1	1,2-Dichlorobenzene	50	51.3	103	84-119
541-73-1	1,3-Dichlorobenzene	50	52.7	105	81-117
106-46-7	1,4-Dichlorobenzene	50	52.0	104	82-117
75-71-8	Dichlorodifluoromethane	50	53.2	106	36-149
75-34-3	1,1-Dichloroethane	50	53.2	106	79-120
107-06-2	1,2-Dichloroethane	50	47.1	94	78-126
75-35-4	1,1-Dichloroethene	50	52.2	104	69-126
156-59-2	cis-1,2-Dichloroethene	50	54.2	108	80-120
156-60-5	trans-1,2-Dichloroethene	50	53.7	107	76-120
78-87-5	1,2-Dichloropropane	50	51.5	103	82-121
142-28-9	1,3-Dichloropropane	50	48.2	96	83-115
594-20-7	2,2-Dichloropropane	50	49.2	98	65-133
563-58-6	1,1-Dichloropropene	50	51.3	103	80-121
10061-01-5	cis-1,3-Dichloropropene	50	50.2	100	83-120
10061-02-6	trans-1,3-Dichloropropene	50	51.1	102	82-121

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JC83332**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3742-BS	4B88503.D	1	02/25/19	BK	n/a	n/a	V4B3742

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

JC83332-1, JC83332-2, JC83332-3, JC83332-4, JC83332-5, JC83332-6, JC83332-7, JC83332-8, JC83332-9, JC83332-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	52.9	106	80-120
87-68-3	Hexachlorobutadiene	50	48.6	97	75-129
98-82-8	Isopropylbenzene	50	53.3	107	83-120
99-87-6	p-Isopropyltoluene	50	54.0	108	83-122
1634-04-4	Methyl Tert Butyl Ether	50	46.1	92	80-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	180	90	71-131
74-95-3	Methylene bromide	50	48.3	97	85-120
75-09-2	Methylene chloride	50	51.8	104	77-120
91-20-3	Naphthalene	50	50.6	101	73-131
103-65-1	n-Propylbenzene	50	56.6	113	82-119
100-42-5	Styrene	50	54.2	108	82-122
630-20-6	1,1,1,2-Tetrachloroethane	50	54.2	108	82-121
79-34-5	1,1,2,2-Tetrachloroethane	50	48.1	96	76-119
127-18-4	Tetrachloroethene	50	52.3	105	70-131
108-88-3	Toluene	50	52.6	105	80-120
87-61-6	1,2,3-Trichlorobenzene	50	52.3	105	76-134
120-82-1	1,2,4-Trichlorobenzene	50	51.4	103	79-132
71-55-6	1,1,1-Trichloroethane	50	50.6	101	81-128
79-00-5	1,1,2-Trichloroethane	50	49.2	98	83-118
79-01-6	Trichloroethene	50	52.0	104	80-120
75-69-4	Trichlorofluoromethane	50	48.9	98	64-136
96-18-4	1,2,3-Trichloropropane	50	48.7	97	79-120
95-63-6	1,2,4-Trimethylbenzene	50	54.8	110	84-120
108-67-8	1,3,5-Trimethylbenzene	50	55.3	111	83-119
75-01-4	Vinyl chloride	50	47.1	94	51-135
	m,p-Xylene	100	106	106	80-120
95-47-6	o-Xylene	50	54.2	108	80-120
1330-20-7	Xylene (total)	150	160	107	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	81-124%
2037-26-5	Toluene-D8	104%	80-120%
460-00-4	4-Bromofluorobenzene	109%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JC83332

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC83332-1MS	4B88509.D	1	02/25/19	BK	n/a	n/a	V4B3742
JC83332-1MSD	4B88510.D	1	02/25/19	BK	n/a	n/a	V4B3742
JC83332-1	4B88508.D	1	02/25/19	BK	n/a	n/a	V4B3742

The QC reported here applies to the following samples:

Method: SW846 8260C

JC83332-1, JC83332-2, JC83332-3, JC83332-4, JC83332-5, JC83332-6, JC83332-7, JC83332-8, JC83332-9, JC83332-10

CAS No.	Compound	JC83332-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	200	177	89	200	177	89	0	34-149/17
71-43-2	Benzene	ND	50	51.7	103	50	51.0	102	1	54-136/10
108-86-1	Bromobenzene	ND	50	54.4	109	50	54.8	110	1	78-122/11
74-97-5	Bromochloromethane	ND	50	50.8	102	50	49.7	99	2	79-124/11
75-27-4	Bromodichloromethane	ND	50	50.4	101	50	49.8	100	1	79-124/11
75-25-2	Bromoform	ND	50	47.1	94	50	47.3	95	0	71-130/11
74-83-9	Bromomethane	ND	50	48.8	98	50	46.3	93	5	53-142/14
78-93-3	2-Butanone (MEK)	ND	200	197	99	200	196	98	1	54-142/15
104-51-8	n-Butylbenzene	ND	50	51.1	102	50	51.1	102	0	73-133/12
135-98-8	sec-Butylbenzene	ND	50	52.4	105	50	52.5	105	0	76-132/12
98-06-6	tert-Butylbenzene	ND	50	53.3	107	50	53.5	107	0	76-131/12
56-23-5	Carbon tetrachloride	ND	50	52.0	104	50	51.0	102	2	70-143/12
108-90-7	Chlorobenzene	ND	50	50.6	101	50	50.3	101	1	78-123/10
75-00-3	Chloroethane	ND	50	51.5	103	50	48.5	97	6	57-141/14
67-66-3	Chloroform	ND	50	50.7	101	50	50.3	101	1	76-123/11
74-87-3	Chloromethane	ND	50	50.4	101	50	48.1	96	5	43-141/16
95-49-8	o-Chlorotoluene	ND	50	55.5	111	50	56.2	112	1	78-124/11
106-43-4	p-Chlorotoluene	ND	50	54.9	110	50	55.2	110	1	77-122/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	46.3	93	50	47.3	95	2	66-130/13
124-48-1	Dibromochloromethane	ND	50	48.6	97	50	48.7	97	0	76-125/11
106-93-4	1,2-Dibromoethane	ND	50	53.4	107	50	53.5	107	0	78-119/11
95-50-1	1,2-Dichlorobenzene	ND	50	50.6	101	50	51.4	103	2	77-123/11
541-73-1	1,3-Dichlorobenzene	ND	50	51.8	104	50	52.2	104	1	76-122/11
106-46-7	1,4-Dichlorobenzene	ND	50	51.4	103	50	52.0	104	1	76-122/11
75-71-8	Dichlorodifluoromethane	ND	50	59.3	119	50	54.9	110	8	31-159/16
75-34-3	1,1-Dichloroethane	ND	50	52.1	104	50	51.2	102	2	73-126/11
107-06-2	1,2-Dichloroethane	ND	50	47.5	95	50	46.9	94	1	72-131/11
75-35-4	1,1-Dichloroethene	ND	50	50.2	100	50	48.3	97	4	63-136/14
156-59-2	cis-1,2-Dichloroethene	ND	50	53.2	106	50	52.4	105	2	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND	50	52.3	105	50	51.5	103	2	70-126/11
78-87-5	1,2-Dichloropropane	ND	50	50.7	101	50	49.9	100	2	78-124/10
142-28-9	1,3-Dichloropropane	ND	50	48.9	98	50	49.1	98	0	78-118/11
594-20-7	2,2-Dichloropropane	ND	50	49.4	99	50	48.4	97	2	59-141/14
563-58-6	1,1-Dichloropropene	ND	50	51.5	103	50	51.1	102	1	75-130/11
10061-01-5	cis-1,3-Dichloropropene	ND	50	50.8	102	50	50.8	102	0	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND	50	50.5	101	50	50.6	101	0	77-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JC83332

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC83332-1MS	4B88509.D	1	02/25/19	BK	n/a	n/a	V4B3742
JC83332-1MSD	4B88510.D	1	02/25/19	BK	n/a	n/a	V4B3742
JC83332-1	4B88508.D	1	02/25/19	BK	n/a	n/a	V4B3742

The QC reported here applies to the following samples:

Method: SW846 8260C

JC83332-1, JC83332-2, JC83332-3, JC83332-4, JC83332-5, JC83332-6, JC83332-7, JC83332-8, JC83332-9, JC83332-10

CAS No.	Compound	JC83332-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND	50	52.5	105	50	52.1	104	1	51-140/20
87-68-3	Hexachlorobutadiene	ND	50	46.1	92	50	46.9	94	2	64-141/14
98-82-8	Isopropylbenzene	ND	50	52.9	106	50	52.1	104	2	75-129/11
99-87-6	p-Isopropyltoluene	ND	50	52.3	105	50	52.2	104	0	76-131/12
1634-04-4	Methyl Tert Butyl Ether	ND	50	44.9	90	50	45.0	90	0	72-123/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	200	201	101	200	199	100	1	66-136/13
74-95-3	Methylene bromide	ND	50	49.9	100	50	48.7	97	2	81-121/11
75-09-2	Methylene chloride	ND	50	49.4	99	50	48.5	97	2	73-125/13
91-20-3	Naphthalene	ND	50	48.7	97	50	50.7	101	4	62-141/13
103-65-1	n-Propylbenzene	ND	50	56.1	112	50	56.0	112	0	68-133/11
100-42-5	Styrene	ND	50	53.4	107	50	53.2	106	0	75-129/11
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	51.6	103	50	51.6	103	0	77-124/11
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	50.4	101	50	51.0	102	1	71-122/11
127-18-4	Tetrachloroethene	ND	50	52.7	105	50	52.5	105	0	61-139/11
108-88-3	Toluene	ND	50	50.8	102	50	51.2	102	1	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND	50	48.8	98	50	49.7	99	2	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND	50	48.7	97	50	49.7	99	2	72-137/13
71-55-6	1,1,1-Trichloroethane	ND	50	50.4	101	50	49.6	99	2	74-138/12
79-00-5	1,1,2-Trichloroethane	ND	50	49.7	99	50	50.0	100	1	78-121/11
79-01-6	Trichloroethene	ND	50	51.9	104	50	51.8	104	0	62-141/10
75-69-4	Trichlorofluoromethane	ND	50	55.0	110	50	50.8	102	8	57-149/14
96-18-4	1,2,3-Trichloropropane	ND	50	50.9	102	50	51.2	102	1	74-122/11
95-63-6	1,2,4-Trimethylbenzene	ND	50	53.5	107	50	53.6	107	0	54-143/10
108-67-8	1,3,5-Trimethylbenzene	ND	50	53.9	108	50	53.6	107	1	67-133/11
75-01-4	Vinyl chloride	ND	50	51.0	102	50	48.6	97	5	43-146/15
	m,p-Xylene	ND	100	105	105	100	104	104	1	50-144/20
95-47-6	o-Xylene	ND	50	53.5	107	50	53.0	106	1	63-134/10
1330-20-7	Xylene (total)	ND	150	158	105	150	157	105	1	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC83332-1	Limits
1868-53-7	Dibromofluoromethane	107%	105%	112%	80-120%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	109%	81-124%
2037-26-5	Toluene-D8	102%	103%	104%	80-120%
460-00-4	4-Bromofluorobenzene	107%	108%	108%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC83332**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V4B3694-BFB**Injection Date:** 01/10/19**Lab File ID:** 4B87619.D**Injection Time:** 17:40**Instrument ID:** GCMS4B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	41493	19.0	Pass
75	30.0 - 60.0% of mass 95	104826	48.0	Pass
95	Base peak, 100% relative abundance	218538	100.0	Pass
96	5.0 - 9.0% of mass 95	14652	6.70	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	213482	97.7	Pass
175	5.0 - 9.0% of mass 174	16627	7.61 (7.79) ^a	Pass
176	95.0 - 101.0% of mass 174	207786	95.1 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	14164	6.48 (6.82) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4B3694-IC3694	4B87621.D	01/10/19	18:54	01:14	Initial cal 0.5
V4B3694-IC3694	4B87622.D	01/10/19	19:23	01:43	Initial cal 1
V4B3694-IC3694	4B87623.D	01/10/19	19:50	02:10	Initial cal 2
V4B3694-IC3694	4B87624.D	01/10/19	20:19	02:39	Initial cal 4
V4B3694-IC3694	4B87625.D	01/10/19	20:47	03:07	Initial cal 8
V4B3694-IC3694	4B87626.D	01/10/19	21:15	03:35	Initial cal 20
V4B3694-ICC3694	4B87627.D	01/10/19	21:43	04:03	Initial cal 50
V4B3694-IC3694	4B87628.D	01/10/19	22:11	04:31	Initial cal 100
V4B3694-IC3694	4B87629.D	01/10/19	22:40	05:00	Initial cal 200
V4B3694-ICV3694	4B87632.D	01/11/19	00:05	06:25	Initial cal verification 50
V4B3694-ICV3694	4B87633.D	01/11/19	00:33	06:53	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC83332

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample: V4B3742-BFB

Injection Date: 02/25/19

Lab File ID: 4B88502.D

Injection Time: 18:56

Instrument ID: GCMS4B

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	14214	18.3	Pass
75	30.0 - 60.0% of mass 95	36792	47.4	Pass
95	Base peak, 100% relative abundance	77653	100.0	Pass
96	5.0 - 9.0% of mass 95	5488	7.07	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	78920	101.6	Pass
175	5.0 - 9.0% of mass 174	6157	7.93 (7.80) ^a	Pass
176	95.0 - 101.0% of mass 174	77773	100.2 (98.5) ^a	Pass
177	5.0 - 9.0% of mass 176	5059	6.51 (6.50) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4B3742-CC3694	4B88502.D	02/25/19	18:56	00:00	Continuing cal 50
V4B3742-BS	4B88503.D	02/25/19	19:35	00:39	Blank Spike
V4B3742-MB	4B88505.D	02/25/19	20:31	01:35	Method Blank
JC83332-9	4B88506.D	02/25/19	20:59	02:03	FB 2/21/19
JC83332-10	4B88507.D	02/25/19	21:27	02:31	TB 2/21/19
JC83332-1	4B88508.D	02/25/19	21:55	02:59	MW-1
JC83332-1MS	4B88509.D	02/25/19	22:23	03:27	Matrix Spike
JC83332-1MSD	4B88510.D	02/25/19	22:51	03:55	Matrix Spike Duplicate
JC83332-2	4B88512.D	02/25/19	23:47	04:51	MW-2
JC83332-3	4B88513.D	02/26/19	00:15	05:19	MW-2I
JC83332-4	4B88514.D	02/26/19	00:43	05:47	MW-2D
JC83332-5	4B88515.D	02/26/19	01:11	06:15	MW-3
JC83332-6	4B88516.D	02/26/19	01:39	06:43	MW-8
JC83332-7	4B88517.D	02/26/19	02:08	07:12	MW-9
JC83332-8	4B88518.D	02/26/19	02:36	07:40	MW-XX
ZZZZZZ	4B88519.D	02/26/19	03:04	08:08	(unrelated sample)
ZZZZZZ	4B88520.D	02/26/19	03:32	08:36	(unrelated sample)
ZZZZZZ	4B88521.D	02/26/19	04:00	09:04	(unrelated sample)
ZZZZZZ	4B88522.D	02/26/19	04:29	09:33	(unrelated sample)
ZZZZZZ	4B88523.D	02/26/19	04:57	10:01	(unrelated sample)
ZZZZZZ	4B88524.D	02/26/19	05:25	10:29	(unrelated sample)

Internal Standard Area Summary

Page 1 of 1

Job Number: JC83332

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std: V4B3742-CC3694

Injection Date: 02/25/19

Lab File ID: 4B88502.D

Injection Time: 18:56

Instrument ID: GCMS4B

Method: SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	94039	6.75	233945	8.76	317987	9.63	288792	12.81	172117	15.38
Upper Limit ^a	188078	7.25	467890	9.26	635974	10.13	577584	13.31	344234	15.88
Lower Limit ^b	47020	6.25	116973	8.26	158994	9.13	144396	12.31	86059	14.88

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V4B3742-BS	93396	6.75	231576	8.76	309016	9.63	276662	12.81	165114	15.38
V4B3742-MB	121808	6.74	239580	8.76	319594	9.63	277524	12.81	168510	15.38
JC83332-9	115412	6.75	232447	8.76	310029	9.63	273776	12.81	165511	15.38
JC83332-10	115547	6.75	234258	8.76	312698	9.63	275652	12.81	166069	15.38
JC83332-1	105183	6.74	223445	8.76	298878	9.63	267250	12.81	163495	15.38
JC83332-1MS	99546	6.75	229642	8.76	305861	9.63	284055	12.81	172960	15.38
JC83332-1MSD	103769	6.75	236582	8.76	315607	9.63	289921	12.81	173422	15.38
JC83332-2	112259	6.74	227513	8.76	301440	9.63	270860	12.81	165563	15.38
JC83332-3	104637	6.74	226179	8.76	298322	9.63	270334	12.81	165324	15.38
JC83332-4	108310	6.75	225506	8.76	302163	9.63	270404	12.81	164275	15.38
JC83332-5	109243	6.74	216759	8.76	292001	9.63	264247	12.81	160565	15.38
JC83332-6	106497	6.75	216950	8.76	292141	9.63	263265	12.81	158510	15.38
JC83332-7	107993	6.75	219028	8.76	296070	9.63	263495	12.81	159896	15.38
JC83332-8	109380	6.76	216624	8.76	292223	9.63	260440	12.81	161020	15.38
ZZZZZZ	105225	6.74	212854	8.76	285153	9.63	256476	12.81	155681	15.38
ZZZZZZ	106884	6.75	214346	8.76	289796	9.63	256648	12.81	156508	15.38
ZZZZZZ	106798	6.75	208942	8.76	280411	9.63	252977	12.81	154126	15.38
ZZZZZZ	106487	6.74	210065	8.76	283244	9.63	255777	12.81	152148	15.38
ZZZZZZ	98917	6.75	202819	8.76	274195	9.63	247127	12.81	148640	15.38
ZZZZZZ	98897	6.74	204628	8.76	278767	9.63	251530	12.81	153553	15.38

IS 1 = Tert Butyl Alcohol-D9

IS 2 = Pentafluorobenzene

IS 3 = 1,4-Difluorobenzene

IS 4 = Chlorobenzene-D5

IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC83332
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Method: SW846 8260C	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC83332-1	4B88508.D	112	109	104	108
JC83332-2	4B88512.D	111	110	104	108
JC83332-3	4B88513.D	112	111	103	108
JC83332-4	4B88514.D	113	110	103	108
JC83332-5	4B88515.D	114	111	103	107
JC83332-6	4B88516.D	115	112	104	109
JC83332-7	4B88517.D	116	111	104	107
JC83332-8	4B88518.D	116	114	104	107
JC83332-9	4B88506.D	111	108	104	109
JC83332-10	4B88507.D	112	111	104	109
JC83332-1MS	4B88509.D	107	105	102	107
JC83332-1MSD	4B88510.D	105	104	103	108
V4B3742-BS	4B88503.D	106	100	104	109
V4B3742-MB	4B88505.D	111	108	106	109

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Page 1 of 5

Job Number: JC83332 **Sample:** V4B3694-ICC3694
Account: CARICH C. A. Rich Consultants **Lab FileID:** 4B87627.D
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Response Factor Report MS4B

Method : C:\MSDCHEM\1\METHODS\M4B3694.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration

Calibration Files

1 =4B87622.D 4 =4B87624.D 100 =4B87628.D 50 =4B87627.D
20 =4B87626.D 200 =4B87629.D 8 =4B87625.D 0.5 =4B87621.D
2 =4B87623.D =

Compound	1	4	100	50	20	200	8	0.5	2	Avg	%RSD
1) I tert butyl alcohol-d9 -----ISTD-----											
2) ethanol										0.000	-1.00
3) tertiary butyl alcohol											
	1.772	1.752	1.626	1.630	1.691	1.511			1.749	1.676	5.57
4) 1,4-dioxane											
	0.126	0.137	0.129	0.121	0.133	0.115			0.117	0.125	6.59
5) I pentafluorobenzene -----ISTD-----											
6) chlorodifluoromethane											
	1.140	1.230	1.240	1.217	1.178	1.180	1.128	1.015	1.292	1.180	6.80
7) dichlorodifluoromethane											
	0.991	1.014	1.189	1.191	1.100	1.139	1.105	0.852	1.125	1.078	10.10
8) chloromethane											
	1.311	1.245	1.350	1.362	1.323	1.324	1.281	1.270	1.439	1.323	4.36
9) vinyl chloride											
	1.125	1.134	1.268	1.270	1.213	1.219	1.195	1.167	1.298	1.210	5.05
10) 1,3-butadiene											
	0.834	0.887	0.881	0.861	0.836	0.824	0.782		0.896	0.850	4.53
11) bromomethane											
	0.947	0.827	0.791	0.821	0.812	0.657	0.816		0.949	0.828	11.20
12) chloroethane											
	0.567	0.556	0.576	0.595	0.586	0.534	0.558	0.534	0.624	0.570	5.11
13) trichlorofluoromethane											
	1.197	1.175	1.259	1.275	1.231	1.204	1.194	1.108	1.301	1.216	4.78
14) vinyl bromide											
	0.693	0.678	0.736	0.742	0.720	0.715	0.692	0.585	0.761	0.702	7.33
15) ethyl ether											
	0.243	0.283	0.283	0.276	0.272	0.273	0.247		0.294	0.271	6.52
16) 2-chloropropane											
	1.298	1.397	1.245	1.235	1.231	1.170	1.182		1.445	1.275	7.74
17) acrolein											
	0.080	0.107	0.101	0.097	0.106	0.091				0.097	10.52
18) freon 113											
	0.579	0.665	0.637	0.624	0.615	0.607	0.591	0.452	0.663	0.604	10.57
19) 1,1-dichloroethene											
	1.032	1.133	1.121	1.102	1.093	1.066	1.017	0.890	1.163	1.069	7.65
20) acetone											
	0.052	0.053	0.051	0.050	0.051	0.049			0.052	0.051	2.80
21) acetonitrile											
	0.096	0.113	0.098	0.096	0.098	0.096	0.095		0.120	0.101	9.38
22) iodomethane											
	1.110	1.223	1.200	1.161	1.147	1.169	1.071	0.939	1.260	1.142	8.33
23) carbon disulfide											

Initial Calibration Summary

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Job Number: JC83332

Sample: V4B3694-ICC3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87627.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

	2.234	2.407	2.295	2.255	2.250	2.196	2.131	2.031	2.511	2.257	6.27
24)	methylene chloride										
	0.702	0.762	0.691	0.674	0.678	0.667	0.653	0.632	0.775	0.693	6.87
25)	methyl acetate										
	0.472	0.456	0.442	0.453	0.445	0.420			0.478	0.452	4.29
26)	methyl tert butyl ether										
	1.466	1.634	1.602	1.549	1.515	1.547	1.462	1.327	1.684	1.532	6.94
27)	trans-1,2-dichloroethene										
	0.826	0.937	0.885	0.865	0.853	0.838	0.800	0.728	0.929	0.851	7.59
28)	hexane										
	0.414	0.463	0.473	0.449	0.437	0.441	0.403		0.435	0.439	5.32
29)	di-isopropyl ether										
	1.990	2.271	2.267	2.193	2.167	2.202	2.055	1.806	2.284	2.137	7.44
30)	2-butanone										
	0.039	0.053	0.060	0.056	0.056	0.059	0.051		0.049	0.053	12.81
31)	1,1-dichloroethane										
	0.993	1.161	1.098	1.072	1.073	1.032	1.028	0.871	1.198	1.058	9.03
32)	chloroprene										
	0.771	0.870	0.887	0.857	0.826	0.830	0.768	0.655	0.868	0.815	8.98
33)	acrylonitrile										
	0.226	0.221	0.212	0.211	0.216	0.196			0.230	0.216	5.27
34)	vinyl acetate										
	0.078	0.080	0.074	0.073	0.075	0.064				0.074	7.45
35)	ethyl tert-butyl ether										
	1.636	1.795	1.776	1.741	1.693	1.711	1.625	1.450	1.837	1.696	6.83
36)	ethyl acetate										
	0.081	0.083	0.088	0.081	0.083	0.074				0.082	5.40
37)	2,2-dichloropropane										
	0.935	1.006	0.959	0.934	0.923	0.924	0.888	0.856	1.040	0.941	5.94
38)	cis-1,2-dichloroethene										
	0.589	0.661	0.658	0.634	0.626	0.623	0.593	0.542	0.673	0.622	6.71
39)	propionitrile										
	0.075	0.090	0.088	0.084	0.084	0.085	0.079		0.090	0.084	6.24
40)	methyl acrylate										
	0.060	0.080	0.077	0.070	0.081	0.059				0.071	13.88
41)	methacrylonitrile										
	0.182	0.214	0.201	0.193	0.212	0.184			0.201	0.198	6.37
42)	bromochloromethane										
	0.292	0.344	0.325	0.313	0.311	0.313	0.293		0.364	0.319	7.68
43)	tetrahydrofuran										
	0.062	0.073	0.069	0.066	0.073	0.061				0.067	7.43
44)	chloroform										
	1.052	1.099	1.049	1.009	1.006	0.989	0.962	1.033	1.159	1.040	5.78
45)	tert-butyl formate										
	This compound does not meet initial calibration criteria										
	0.359	0.402	0.416	0.394	0.371	0.397	0.355		0.426	0.390	6.69
46)	dibromofluoromethane (s)										
	0.454	0.451	0.447	0.450	0.446	0.444	0.449	0.449	0.450	0.449	0.62
47)	1,1,1-trichloroethane										
	0.975	1.081	1.059	1.020	0.996	1.043	0.959	0.942	1.107	1.020	5.57
48)	cyclohexane										
	1.000	0.986	1.091	1.081	1.024	1.086	1.003	0.883	1.070	1.025	6.56
49)	isobutyl alcohol										
										0.000	-1.00
50)	1,1-dichloropropene										
	0.790	0.826	0.809	0.776	0.761	0.760	0.716	0.601	0.827	0.763	9.21
51)	carbon tetrachloride										
	0.837	0.967	0.946	0.910	0.896	0.921	0.860	0.719	1.014	0.897	9.52
52)	tert-amyl alcohol										
	0.032	0.036	0.033	0.032	0.038	0.029			0.033	0.033	8.74

Initial Calibration Summary

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Job Number: JC83332

Sample: V4B3694-ICC3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87627.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

53)	isopropyl acetate	0.089	0.108	0.101	0.096	0.111	0.086			0.098	10.05	
54)	I 1,4-difluorobenzene	-----ISTD-----										
55)	1,2-dichloroethane-d4 (s)	0.356	0.361	0.339	0.346	0.349	0.338	0.355	0.354	0.353	0.350	2.28
56)	n-butyl alcohol	0.011	0.010	0.010	0.010	0.011	0.010		0.010	0.010		3.16
57)	2,2,4-trimethylpentane	1.770	2.008	2.209	2.105	2.007	2.122	1.780		1.906	1.988	8.04
58)	benzene	1.597	1.744	1.680	1.633	1.621	1.608	1.559	1.412	1.781	1.626	6.61
59)	tert-amyl methyl ether	1.150	1.271	1.225	1.230	1.218	1.164	1.170	1.126	1.359	1.213	5.89
60)	heptane	0.277	0.353	0.347	0.330	0.321	0.326	0.302		0.298	0.319	8.03
61)	1,2-dichloroethane	0.584	0.603	0.548	0.541	0.537	0.520	0.532	0.592	0.628	0.565	6.64
62)	ethyl acrylate	0.381	0.451	0.420	0.399	0.458	0.369		0.374	0.407		8.92
63)	trichloroethene	0.399	0.444	0.436	0.419	0.412	0.421	0.394	0.340	0.440	0.412	7.78
64)	2-chloroethyl vinyl ether	0.161	0.188	0.230	0.208	0.204	0.242	0.185	0.126	0.196	0.193	18.02
65)	methyl methacrylate	0.076	0.095	0.087	0.080	0.097	0.071				0.084	12.48
66)	methylcyclohexane	0.798	0.908	0.940	0.910	0.883	0.909	0.823		0.875	0.881	5.47
67)	1,2-dichloropropane	0.386	0.458	0.440	0.427	0.417	0.426	0.397	0.354	0.456	0.418	8.10
68)	dibromomethane	0.222	0.267	0.259	0.252	0.252	0.253	0.242	0.243	0.284	0.253	6.82
69)	bromodichloromethane	0.571	0.579	0.581	0.560	0.547	0.570	0.515	0.458	0.574	0.551	7.32
70)	2-nitropropane										0.000	-1.00
71)	epichlorohydrin	0.039	0.041	0.038	0.037	0.042	0.034		0.036	0.038		6.86
72)	cis-1,3-dichloropropene	0.547	0.623	0.669	0.633	0.604	0.663	0.567	0.467	0.623	0.599	10.62
73)	4-methyl-2-pentanone	0.119	0.150	0.155	0.151	0.147	0.155	0.139		0.154	0.146	8.34
74)	isoamyl alcohol	0.011	0.012	0.012	0.012	0.013	0.011		0.010	0.012		7.40
75)	I chlorobenzene-d5	-----ISTD-----										
76)	toluene-d8 (s)	1.204	1.185	1.198	1.218	1.191	1.174	1.196	1.224	1.202	1.199	1.29
77)	toluene	0.997	1.069	1.071	1.032	1.001	0.998	0.954	0.889	1.120	1.014	6.77
78)	ethyl methacrylate	0.328	0.414	0.484	0.457	0.434	0.471	0.397		0.410	0.424	11.66
79)	trans-1,3-dichloropropene	0.529	0.588	0.611	0.598	0.560	0.580	0.531	0.445	0.580	0.558	9.08
80)	1,1,2-trichloroethane	0.289	0.319	0.316	0.308	0.297	0.300	0.291	0.239	0.339	0.300	9.27
81)	tetrachloroethene	0.382	0.420	0.418	0.403	0.389	0.391	0.375	0.339	0.428	0.394	7.01
82)	2-hexanone	0.101	0.138	0.143	0.138	0.133	0.139	0.123		0.129	0.131	10.23

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Initial Calibration Summary

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Job Number: JC83332

Sample: V4B3694-ICC3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87627.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

83)	1,3-dichloropropane	0.543	0.627	0.592	0.576	0.571	0.558	0.556	0.485	0.628	0.571	7.70
84)	butyl acetate	0.215	0.257	0.260	0.257	0.249	0.250	0.241		0.239	0.246	5.93
85)	dibromochloromethane	0.432	0.455	0.470	0.449	0.429	0.453	0.409	0.364	0.476	0.437	7.87
86)	1,2-dibromoethane	0.392	0.429	0.442	0.425	0.418	0.427	0.400	0.345	0.434	0.412	7.24
87)	n-butyl ether	1.584	1.799	1.940	1.872	1.820	1.864	1.663	1.478	1.782	1.756	8.58
88)	chlorobenzene	1.164	1.227	1.199	1.163	1.148	1.162	1.101	0.998	1.251	1.157	6.41
89)	1,1,1,2-tetrachloroethane	0.501	0.525	0.534	0.521	0.494	0.508	0.481	0.414	0.530	0.501	7.40
90)	ethylbenzene	1.893	2.065	2.044	1.981	1.934	1.954	1.848	1.624	2.097	1.938	7.37
91)	m,p-xylene	0.692	0.791	0.782	0.755	0.744	0.754	0.706	0.609	0.767	0.733	7.72
92)	o-xylene	1.463	1.701	1.760	1.699	1.650	1.684	1.547	1.305	1.677	1.610	9.03
93)	styrene	0.991	1.199	1.318	1.259	1.218	1.265	1.132		1.120	1.188	8.73
94)	butyl acrylate	0.578	0.724	0.786	0.745	0.731	0.771	0.675		0.692	0.713	9.24
95)	isopropylbenzene	1.943	2.198	2.341	2.257	2.183	2.270	2.029	1.709	2.192	2.125	9.32
96)	bromoform	0.292	0.337	0.348	0.326	0.316	0.341	0.298	0.259	0.350	0.319	9.59
97)	cis-1,4-dichloro-2-butene	0.165	0.183	0.172	0.164	0.178	0.148			0.160	0.167	6.91
98)	I 1,4-dichlorobenzene-d -----ISTD-----											
99)	4-bromofluorobenzene (s)	0.713	0.716	0.729	0.723	0.731	0.707	0.700	0.700	0.713	0.715	1.60
100)	1,1,2,2-tetrachloroethane	0.890	0.966	0.901	0.872	0.866	0.842	0.806	0.767	0.958	0.874	7.43
101)	trans-1,4-dichloro-2-butene	0.176	0.197	0.210	0.194	0.189	0.196	0.183		0.180	0.191	5.73
102)	1,2,3-trichloropropane	0.187	0.234	0.225	0.217	0.218	0.209	0.207		0.222	0.215	6.62
103)	bromobenzene	0.838	0.944	0.959	0.910	0.895	0.899	0.817	0.690	0.951	0.878	9.74
104)	n-propylbenzene	3.384	3.966	4.138	4.019	3.918	3.836	3.505	2.964	3.878	3.734	10.07
105)	2-chlorotoluene	0.725	0.845	0.903	0.861	0.845	0.854	0.752	0.651	0.855	0.810	10.09
106)	4-chlorotoluene	1.983	2.339	2.367	2.247	2.188	2.231	2.021	1.709	2.302	2.154	9.87
107)	1,3,5-trimethylbenzene	2.337	2.944	3.256	3.111	2.976	3.103	2.630		2.854	2.901	10.20
108)	tert-butylbenzene	1.923	2.428	3.027	2.857	2.597	2.891	2.254		2.416	2.549	14.48
109)	1,2,4-trimethylbenzene	2.368	2.959	3.210	3.061	2.975	3.060	2.652		2.844	2.891	9.27
110)	sec-butylbenzene	3.151	3.910	4.525	4.292	4.024	4.280	3.528		3.812	3.940	11.34
111)	p-isopropyltoluene	2.655	3.332	3.865	3.647	3.438	3.659	3.027		3.214	3.355	11.61
112)	1,3-dichlorobenzene	1.650	1.863	1.896	1.797	1.769	1.798	1.643	1.591	1.921	1.770	6.67

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Initial Calibration Summary

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Job Number: JC83332

Sample: V4B3694-ICC3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87627.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

113)	1,4-dichlorobenzene	1.701	1.913	1.927	1.823	1.777	1.851	1.674	1.590	1.928	1.798	6.77
114)	1,2-dichlorobenzene	1.753	1.950	1.987	1.891	1.857	1.889	1.713	1.586	2.017	1.849	7.59
115)	benzyl chloride	1.421	1.665	1.885	1.744	1.665	1.811	1.507	1.335	1.654	1.632	11.04
116)	n-butylbenzene	1.316	1.699	1.910	1.811	1.727	1.801	1.513		1.567	1.668	11.55
117)	hexachloroethane	0.625	0.849	0.762	0.671	0.829	0.576			0.633	0.706	15.13
118)	1,2-dibromo-3-chloropropane	0.208	0.242	0.288	0.267	0.239	0.273	0.214		0.238	0.246	11.38
119)	1,3,5-trichlorobenzene	1.688	1.903	2.195	2.054	1.927	2.017	1.730		1.925	1.930	8.59
120)	1,2,4-trichlorobenzene	1.398	1.613	1.973	1.846	1.698	1.776	1.490		1.579	1.671	11.37
121)	2-ethylhexyl acrylate	*This compound does not meet initial calibration criteria*										
		0.639	0.504	0.358	0.733	0.263					0.499	38.79
	----- Linear regression -----	Coefficient = 0.9957										
	Response Ratio = -0.03478 + 0.76297 *A											
122)	hexachlorobutadiene	0.864	0.984	1.068	1.008	0.949	0.959	0.855		1.019	0.963	7.67
123)	naphthalene	2.909	3.771	3.556	3.218	3.386	2.732			2.708	3.183	13.02
124)	1,2,3-trichlorobenzene	1.208	1.509	1.770	1.689	1.561	1.571	1.391		1.473	1.522	11.42
125)	2-methylnaphthalene	1.830	1.590	1.232	1.727	0.924					1.461	25.71
	----- Linear regression -----	Coefficient = 0.9973										
	Response Ratio = -0.08076 + 1.79975 *A											
126)	Bis(chloromethyl)ether										0.000	-1.00
127)	Ethylenimine										0.000	-1.00

 (#) = Out of Range ### Number of calibration levels exceeded format ###

M4B3694.M

Fri Jan 11 11:03:57 2019

GCMS4B

Initial Calibration Verification

Page 1 of 3

Job Number: JC83332

Sample: V4B3694-ICV3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87632.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V4B3694\4B87632.D Vial: 20
 Acq On : 11 Jan 2019 12:05 am Operator: deving
 Sample : ICV3694-50 Inst : MS4B
 Misc : MS31708,V4B3694,5,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4B3694.M (RTE Integrator)
 Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 Last Update : Fri Jan 11 11:02:00 2019
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	107	0.01	6.74
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.676	1.708	-1.9	112	0.00	6.85
4	1,4-dioxane	0.125	0.120	4.0	99	0.01	10.25
5 I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	8.76
6	chlorodifluoromethane	1.180	1.340	-13.6	111	0.00	3.90
7	dichlorodifluoromethane	1.078	1.282	-18.9	109	0.00	3.88
8	chloromethane	1.323	1.304	1.4	97	-0.01	4.23
9	vinyl chloride	1.210	1.249	-3.2	99	0.00	4.44
10	1,3-butadiene	0.850	1.003	-18.0	118	0.00	4.45
11	bromomethane	0.828	0.803	3.0	99	0.00	4.97
12	chloroethane	0.570	0.588	-3.2	100	0.00	5.11
13	trichlorofluoromethane	1.216	1.228	-1.0	97	-0.01	5.51
14	vinyl bromide	0.702	0.686	2.3	93	0.00	5.41
15	ethyl ether	0.271	0.279	-3.0	102	0.00	5.81
16	2-chloropropane	1.275	1.203	5.6	98	0.00	6.01
17	acrolein	0.097	0.107	-10.3	107	0.00	6.02
18	freon 113	0.604	0.692	-14.6	112	0.00	6.21
19	1,1-dichloroethene	1.069	1.014	5.1	93	0.00	6.19
20	acetone	0.051	0.052	-2.0	102	0.00	6.17
21	acetonitrile			-----NA-----			
22	iodomethane	1.142	1.281	-12.2	111	0.00	6.42
23	carbon disulfide	2.257	2.353	-4.3	105	0.00	6.56
24	methylene chloride	0.693	0.654	5.6	98	0.00	6.80
25	methyl acetate	0.452	0.427	5.5	98	0.00	6.57
26	methyl tert butyl ether	1.532	1.585	-3.5	108	0.00	7.11
27	trans-1,2-dichloroethene	0.851	0.843	0.9	98	0.00	7.14
28	hexane	0.439	0.461	-5.0	104	0.00	7.44
29	di-isopropyl ether	2.137	2.079	2.7	96	0.00	7.62
30	2-butanone	0.053	0.058	-9.4	104	0.00	8.21
31	1,1-dichloroethane	1.058	1.053	0.5	99	0.00	7.65
32	chloroprene	0.815	0.888	-9.0	105	0.00	7.74
33	acrylonitrile	0.216	0.241	-11.6	115	0.00	7.04
34	vinyl acetate	0.074	0.064	13.5	87	0.00	7.58
35	ethyl tert-butyl ether	1.696	1.672	1.4	97	0.00	8.04
36	ethyl acetate	0.082	0.078	4.9	89	0.00	8.22
37	2,2-dichloropropane	0.941	0.908	3.5	98	0.00	8.32
38	cis-1,2-dichloroethene	0.622	0.639	-2.7	102	0.00	8.29
39	propionitrile	0.084	0.087	-3.6	105	0.00	8.29
40	methyl acrylate	0.071	0.076	-7.0	100	0.00	8.30
41	methacrylonitrile	0.198	0.202	-2.0	101	0.00	8.46

Initial Calibration Verification

Page 2 of 3

Job Number: JC83332

Sample: V4B3694-ICV3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87632.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

42	bromochloromethane	0.319	0.315	1.3	101	0.00	8.56
43	tetrahydrofuran	0.067	0.071	-6.0	105	0.00	8.57
44	chloroform	1.040	1.012	2.7	101	0.00	8.63
45	tert-butyl formate	0.390	0.270	30.8#	69	0.00	8.66
46 S	dibromofluoromethane (s)	0.449	0.442	1.6	99	0.00	8.80
47	1,1,1-trichloroethane	1.020	1.004	1.6	99	0.00	8.88
48	cyclohexane	1.025	1.085	-5.9	101	0.00	8.99
49	isobutyl alcohol			-----NA-----			
50	1,1-dichloropropene	0.763	0.781	-2.4	102	0.00	9.03
51	carbon tetrachloride	0.897	0.909	-1.3	101	0.00	9.06
52	tert-amyl alcohol	0.033	0.036	-9.1	112	0.00	9.12
53	isopropyl acetate	0.098	0.098	0.0	97	0.00	9.15
54 I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00	9.63
55 S	1,2-dichloroethane-d4 (s)	0.350	0.343	2.0	100	0.00	9.19
56	n-butyl alcohol	0.010	0.010	0.0	100	0.00	9.66
57	2,2,4-trimethylpentane	1.988	2.024	-1.8	97	0.00	9.34
58	benzene	1.626	1.640	-0.9	101	0.00	9.26
59	tert-amyl methyl ether	1.213	1.162	4.2	95	0.00	9.32
60	heptane	0.319	0.355	-11.3	108	0.00	9.48
61	1,2-dichloroethane	0.565	0.536	5.1	100	0.00	9.28
62	ethyl acrylate	0.407	0.439	-7.9	105	0.00	9.90
63	trichloroethene	0.412	0.426	-3.4	102	0.00	9.93
64	2-chloroethyl vinyl ether	0.193	0.198	-2.6	95	0.00	10.68
65	methyl methacrylate	0.084	0.093	-10.7	107	0.00	10.15
66	methylcyclohexane	0.881	0.894	-1.5	99	0.00	10.22
67	1,2-dichloropropane	0.418	0.419	-0.2	99	0.00	10.21
68	dibromomethane	0.253	0.257	-1.6	102	0.00	10.32
69	bromodichloromethane	0.551	0.548	0.5	98	0.00	10.46
70	2-nitropropane			-----NA-----			
71	epichlorohydrin	0.038	0.040	-5.3	107	0.00	10.77
72	cis-1,3-dichloropropene	0.599	0.632	-5.5	100	0.00	10.91
73	4-methyl-2-pentanone	0.146	0.156	-6.8	104	0.00	11.00
74	isoamyl alcohol	0.012	0.012	0.0	100	0.00	11.00
75 I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	12.82
76 S	toluene-d8 (s)	1.199	1.210	-0.9	100	0.00	11.23
77	toluene	1.014	1.038	-2.4	101	0.00	11.30
78	ethyl methacrylate	0.424	0.449	-5.9	99	0.00	11.47
79	trans-1,3-dichloropropene	0.558	0.557	0.2	94	0.00	11.48
80	1,1,2-trichloroethane	0.300	0.306	-2.0	100	0.00	11.72
81	tetrachloroethene			-----NA-----			
82	2-hexanone	0.131	0.142	-8.4	104	0.00	11.87
83	1,3-dichloropropane	0.571	0.591	-3.5	104	0.00	11.91
84	butyl acetate	0.246	0.257	-4.5	101	0.00	11.96
85	dibromochloromethane	0.437	0.460	-5.3	103	0.00	12.17
86	1,2-dibromoethane	0.412	0.429	-4.1	102	0.00	12.33
87	n-butyl ether	1.756	1.888	-7.5	102	0.00	12.79
88	chlorobenzene	1.157	1.165	-0.7	101	0.00	12.85
89	1,1,1,2-tetrachloroethane	0.501	0.535	-6.8	104	0.00	12.92
90	ethylbenzene	1.938	2.017	-4.1	103	0.00	12.91
91	m,p-xylene	0.733	0.779	-6.3	104	0.00	13.04
92	o-xylene	1.610	1.734	-7.7	103	0.00	13.48
93	styrene	1.188	1.284	-8.1	103	0.00	13.50
94	butyl acrylate	0.713	0.786	-10.2	106	0.00	13.29
95	isopropylbenzene	2.125	2.307	-8.6	103	0.00	13.86
96	bromoform	0.319	0.351	-10.0	109	0.00	13.75
97	cis-1,4-dichloro-2-butene	0.167	0.161	3.6	95	0.00	13.90
98 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	15.38

Initial Calibration Verification

Page 3 of 3

Job Number: JC83332

Sample: V4B3694-ICV3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87632.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

99	S	4-bromofluorobenzene (s)	0.715	0.724	-1.3	101	0.00	14.09
100		1,1,2,2-tetrachloroethane	0.874	0.859	1.7	100	0.00	14.17
101		trans-1,4-dichloro-2-bute	0.191	0.223	-16.8	116	0.00	14.21
102		1,2,3-trichloropropane	0.215	0.220	-2.3	103	0.00	14.26
103		bromobenzene	0.878	0.914	-4.1	102	0.00	14.29
104		n-propylbenzene	3.734	4.038	-8.1	102	0.00	14.32
105		2-chlorotoluene	0.810	0.861	-6.3	101	0.00	14.47
106		4-chlorotoluene	2.154	2.326	-8.0	105	0.00	14.59
107		1,3,5-trimethylbenzene	2.901	3.116	-7.4	101	0.00	14.49
108		tert-butylbenzene	2.549	2.873	-12.7	102	0.00	14.87
109		1,2,4-trimethylbenzene	2.891	3.189	-10.3	106	0.00	14.93
110		sec-butylbenzene	3.940	4.334	-10.0	102	0.00	15.12
111		p-isopropyltoluene	3.355	3.730	-11.2	104	0.00	15.26
112		1,3-dichlorobenzene	1.770	1.824	-3.1	103	0.00	15.31
113		1,4-dichlorobenzene	1.798	1.853	-3.1	103	0.00	15.42
114		1,2-dichlorobenzene	1.849	1.911	-3.4	102	0.00	15.83
115		benzyl chloride	1.632	1.358	16.8	79	0.00	15.51
116		n-butylbenzene	1.668	1.821	-9.2	102	0.00	15.72
117		hexachloroethane	0.706	0.787	-11.5	105	0.00	16.16
118		1,2-dibromo-3-chloropropa	0.246	0.268	-8.9	102	0.00	16.67
119		1,3,5-trichlorobenzene	1.930	2.128	-10.3	105	0.00	16.87
120		1,2,4-trichlorobenzene	1.671	1.861	-11.4	102	0.00	17.55
			----- True	Calc.	% Drift	-----		
121		2-ethylhexyl acrylate	10.000	10.147	-1.5	121	0.00	17.56
			----- AvgRF	CCRF	% Dev	-----		
122		hexachlorobutadiene	0.963	0.987	-2.5	99	0.00	17.67
123		naphthalene	3.183	3.661	-15.0	104	0.00	17.86
124		1,2,3-trichlorobenzene	1.522	1.671	-9.8	100	0.00	18.10
			----- True	Calc.	% Drift	-----		
125		2-methylnaphthalene	25.000	24.794	0.8	103	0.00	19.15
			----- AvgRF	CCRF	% Dev	-----		
126		Bis(chloromethyl)ether		-----NA-----				
127		Ethylenimine		-----NA-----				

(#) = Out of Range
4B87627.D M4B3694.M

SPCC's out = 0 CCC's out = 0
Fri Jan 11 11:03:57 2019 GCMS4B

6.7.2
6

Initial Calibration Verification

Page 1 of 3

Job Number: JC83332

Sample: V4B3694-ICV3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87633.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V4B3694\4B87633.D Vial: 21
 Acq On : 11 Jan 2019 12:33 am Operator: deving
 Sample : ICV3694-50 Inst : MS4B
 Misc : MS31708,V4B3694,5,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4B3694.M (RTE Integrator)
 Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 Last Update : Fri Jan 11 11:02:00 2019
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	109	0.00	6.73
2	ethanol			-----NA-----			
3	tertiary butyl alcohol			-----NA-----			
4	1,4-dioxane			-----NA-----			
5 I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	8.76
6	chlorodifluoromethane			-----NA-----			
7	dichlorodifluoromethane			-----NA-----			
8	chloromethane			-----NA-----			
9	vinyl chloride			-----NA-----			
10	1,3-butadiene			-----NA-----			
11	bromomethane			-----NA-----			
12	chloroethane			-----NA-----			
13	trichlorofluoromethane			-----NA-----			
14	vinyl bromide			-----NA-----			
15	ethyl ether			-----NA-----			
16	2-chloropropane			-----NA-----			
17	acrolein			-----NA-----			
18	freon 113			-----NA-----			
19	1,1-dichloroethene			-----NA-----			
20	acetone	0.051	0.048	5.9	99	0.00	6.18
21	acetonitrile	0.101	0.102	-1.0	111	0.00	6.54
22	iodomethane			-----NA-----			
23	carbon disulfide			-----NA-----			
24	methylene chloride			-----NA-----			
25	methyl acetate			-----NA-----			
26	methyl tert butyl ether			-----NA-----			
27	trans-1,2-dichloroethene			-----NA-----			
28	hexane			-----NA-----			
29	di-isopropyl ether			-----NA-----			
30	2-butanone			-----NA-----			
31	1,1-dichloroethane			-----NA-----			
32	chloroprene			-----NA-----			
33	acrylonitrile			-----NA-----			
34	vinyl acetate			-----NA-----			
35	ethyl tert-butyl ether			-----NA-----			
36	ethyl acetate			-----NA-----			
37	2,2-dichloropropane			-----NA-----			
38	cis-1,2-dichloroethene			-----NA-----			
39	propionitrile			-----NA-----			
40	methyl acrylate			-----NA-----			
41	methacrylonitrile			-----NA-----			

Initial Calibration Verification

Page 2 of 3

Job Number: JC83332

Sample: V4B3694-ICV3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87633.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

42	bromochloromethane							
43	tetrahydrofuran							
44	chloroform							
45	tert-butyl formate							
46 S	dibromofluoromethane (s)	0.449	0.444	1.1	103	0.00	8.80	
47	1,1,1-trichloroethane							
48	cyclohexane							
49	isobutyl alcohol							
50	1,1-dichloropropene							
51	carbon tetrachloride							
52	tert-amyl alcohol							
53	isopropyl acetate							
54 I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	9.63	
55 S	1,2-dichloroethane-d4 (s)	0.350	0.352	-0.6	105	0.00	9.20	
56	n-butyl alcohol							
57	2,2,4-trimethylpentane							
58	benzene							
59	tert-amyl methyl ether							
60	heptane							
61	1,2-dichloroethane							
62	ethyl acrylate							
63	trichloroethene							
64	2-chloroethyl vinyl ether							
65	methyl methacrylate							
66	methylcyclohexane							
67	1,2-dichloropropane							
68	dibromomethane							
69	bromodichloromethane							
70	2-nitropropane							
71	epichlorohydrin							
72	cis-1,3-dichloropropene							
73	4-methyl-2-pentanone							
74	isoamyl alcohol							
75 I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	12.82	
76 S	toluene-d8 (s)	1.199	1.216	-1.4	101	0.00	11.23	
77	toluene							
78	ethyl methacrylate							
79	trans-1,3-dichloropropene							
80	1,1,2-trichloroethane							
81	tetrachloroethene	0.394	0.374	5.1	94	0.00	11.87	
82	2-hexanone							
83	1,3-dichloropropane							
84	butyl acetate							
85	dibromochloromethane							
86	1,2-dibromoethane							
87	n-butyl ether							
88	chlorobenzene							
89	1,1,1,2-tetrachloroethane							
90	ethylbenzene							
91	m,p-xylene							
92	o-xylene							
93	styrene							
94	butyl acrylate							
95	isopropylbenzene							
96	bromoform							
97	cis-1,4-dichloro-2-butene							
98 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	15.38	

Initial Calibration Verification

Page 3 of 3

Job Number: JC83332

Sample: V4B3694-ICV3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B87633.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

99	S	4-bromofluorobenzene (s)	0.715	0.727	-1.7	105	0.00	14.09
100		1,1,2,2-tetrachloroethane			-----NA-----			
101		trans-1,4-dichloro-2-bute			-----NA-----			
102		1,2,3-trichloropropane			-----NA-----			
103		bromobenzene			-----NA-----			
104		n-propylbenzene			-----NA-----			
105		2-chlorotoluene			-----NA-----			
106		4-chlorotoluene			-----NA-----			
107		1,3,5-trimethylbenzene			-----NA-----			
108		tert-butylbenzene			-----NA-----			
109		1,2,4-trimethylbenzene			-----NA-----			
110		sec-butylbenzene			-----NA-----			
111		p-isopropyltoluene			-----NA-----			
112		1,3-dichlorobenzene			-----NA-----			
113		1,4-dichlorobenzene			-----NA-----			
114		1,2-dichlorobenzene			-----NA-----			
115		benzyl chloride			-----NA-----			
116		n-butylbenzene			-----NA-----			
117		hexachloroethane			-----NA-----			
118		1,2-dibromo-3-chloropropa			-----NA-----			
119		1,3,5-trichlorobenzene			-----NA-----			
120		1,2,4-trichlorobenzene			-----NA-----			

		----- True	Calc.	% Drift	-----
121		2-ethylhexyl acrylate			-----NA-----
		----- AvgRF	CCRF	% Dev	-----
122		hexachlorobutadiene			-----NA-----
123		naphthalene			-----NA-----
124		1,2,3-trichlorobenzene			-----NA-----
		----- True	Calc.	% Drift	-----
125		2-methylnaphthalene			-----NA-----
		----- AvgRF	CCRF	% Dev	-----
126		Bis(chloromethyl)ether			-----NA-----
127		Ethylenimine			-----NA-----

(#) = Out of Range
4B87627.D M4B3694.M

SPCC's out = 0 CCC's out = 0
Fri Jan 11 11:03:58 2019 GCMS4B

6.7.3

6

Continuing Calibration Summary

Page 1 of 3

Job Number: JC83332

Sample: V4B3742-CC3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B88502.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\lo...-27\v4b3742\4b88502.d Vial: 20
 Acq On : 25 Feb 2019 6:56 pm Operator: brittank
 Sample : cc3694-50 Inst : MS4B
 Misc : MS32716,V4B3742,5,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4B3694.M (RTE Integrator)
 Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 Last Update : Fri Jan 11 11:02:00 2019
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	69	0.02	6.75
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.676	1.674	0.1	71	0.00	6.86
4	1,4-dioxane	0.125	0.128	-2.4	68	0.00	10.25
5 I	pentafluorobenzene	1.000	1.000	0.0	92	0.00	8.76
6	chlorodifluoromethane	1.180	0.984	16.6	75	0.00	3.90
7	dichlorodifluoromethane	1.078	0.995	7.7	77	0.00	3.88
8	chloromethane	1.323	1.143	13.6	77	0.00	4.24
9	vinyl chloride	1.210	1.028	15.0	75	0.00	4.44
10	1,3-butadiene	0.850	0.689	18.9	74	0.01	4.47
11	bromomethane	0.828	0.704	15.0	79	0.01	4.99
12	chloroethane	0.570	0.509	10.7	79	0.02	5.13
13	trichlorofluoromethane	1.216	1.095	10.0	79	0.00	5.52
14	vinyl bromide	0.702	0.603	14.1	75	0.01	5.43
15	ethyl ether	0.271	0.283	-4.4	95	0.01	5.82
16	2-chloropropane	1.275	1.148	10.0	86	0.01	6.02
17	acrolein	0.097	0.104	-7.2	95	0.00	6.02
18	freon 113	0.604	0.549	9.1	81	0.01	6.22
19	1,1-dichloroethene	1.069	1.043	2.4	87	0.01	6.20
20	acetone	0.051	0.045	11.8	82	0.01	6.19
21	acetonitrile	0.101	0.079	21.8#	75	0.02	6.56
22	iodomethane	1.142	1.112	2.6	88	0.02	6.45
23	carbon disulfide	2.257	1.996	11.6	82	0.03	6.59
24	methylene chloride	0.693	0.707	-2.0	97	0.01	6.81
25	methyl acetate	0.452	0.417	7.7	87	0.01	6.58
26	methyl tert butyl ether	1.532	1.412	7.8	84	0.00	7.11
27	trans-1,2-dichloroethene	0.851	0.890	-4.6	95	0.00	7.15
28	hexane	0.439	0.391	10.9	80	0.00	7.45
29	di-isopropyl ether	2.137	2.219	-3.8	93	0.00	7.63
30	2-butanone	0.053	0.052	1.9	86	0.00	8.22
31	1,1-dichloroethane	1.058	1.113	-5.2	96	0.00	7.65
32	chloroprene	0.815	0.848	-4.0	91	0.00	7.74
33	acrylonitrile	0.216	0.205	5.1	89	0.00	7.05
34	vinyl acetate	0.074	0.082	-10.8	101	0.00	7.58
35	ethyl tert-butyl ether	1.696	1.730	-2.0	92	0.00	8.04
36	ethyl acetate	0.082	0.075	8.5	79	0.00	8.22
37	2,2-dichloropropane	0.941	0.904	3.9	89	0.00	8.33
38	cis-1,2-dichloroethene	0.622	0.665	-6.9	97	0.00	8.29
39	propionitrile	0.084	0.078	7.1	86	0.00	8.29
40	methyl acrylate	0.071	0.071	0.0	85	0.00	8.30
41	methacrylonitrile	0.198	0.193	2.5	88	0.00	8.46

Continuing Calibration Summary

Page 2 of 3

Job Number: JC83332

Sample: V4B3742-CC3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B88502.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

42	bromochloromethane	0.319	0.332	-4.1	97	0.00	8.56
43	tetrahydrofuran	0.067	0.064	4.5	86	0.00	8.58
44	chloroform	1.040	1.080	-3.8	99	0.00	8.63
45	tert-butyl formate	0.390	0.441	-13.1	103	0.00	8.66
46 S	dibromofluoromethane (s)	0.449	0.481	-7.1	99	0.00	8.80
47	1,1,1-trichloroethane	1.020	0.994	2.5	90	0.00	8.88
48	cyclohexane	1.025	0.861	16.0	73	0.00	8.99
49	isobutyl alcohol			-----NA-----			
50	1,1-dichloropropene	0.763	0.766	-0.4	91	0.00	9.03
51	carbon tetrachloride	0.897	0.882	1.7	89	0.00	9.07
52	tert-amyl alcohol	0.033	0.029	12.1	80	0.00	9.12
53	isopropyl acetate	0.098	0.095	3.1	87	0.00	9.15
54 I	1,4-difluorobenzene	1.000	1.000	0.0	92	0.00	9.63
55 S	1,2-dichloroethane-d4 (s)	0.350	0.356	-1.7	95	0.00	9.20
56	n-butyl alcohol	0.010	0.008	20.0	72	0.00	9.66
57	2,2,4-trimethylpentane	1.988	1.578	20.6#	69	0.00	9.34
58	benzene	1.626	1.661	-2.2	94	0.00	9.26
59	tert-amyl methyl ether	1.213	1.216	-0.2	91	0.00	9.32
60	heptane	0.319	0.282	11.6	79	0.00	9.48
61	1,2-dichloroethane	0.565	0.551	2.5	94	0.00	9.28
62	ethyl acrylate	0.407	0.385	5.4	85	0.00	9.90
63	trichloroethene	0.412	0.423	-2.7	93	0.00	9.93
64	2-chloroethyl vinyl ether	0.193	0.217	-12.4	96	0.00	10.68
65	methyl methacrylate	0.084	0.081	3.6	86	0.00	10.15
66	methylcyclohexane	0.881	0.742	15.8	75	0.00	10.23
67	1,2-dichloropropane	0.418	0.430	-2.9	93	0.00	10.21
68	dibromomethane	0.253	0.256	-1.2	94	0.00	10.32
69	bromodichloromethane	0.551	0.577	-4.7	95	0.00	10.46
70	2-nitropropane			-----NA-----			
71	epichlorohydrin	0.038	0.033	13.2	81	0.00	10.77
72	cis-1,3-dichloropropene	0.599	0.630	-5.2	92	0.00	10.91
73	4-methyl-2-pentanone	0.146	0.141	3.4	86	0.00	11.00
74	isoamyl alcohol	0.012	0.010	16.7	74	0.00	10.99
75 I	chlorobenzene-d5	1.000	1.000	0.0	92	0.00	12.81
76 S	toluene-d8 (s)	1.199	1.241	-3.5	94	0.00	11.22
77	toluene	1.014	1.046	-3.2	93	0.00	11.30
78	ethyl methacrylate	0.424	0.445	-5.0	90	0.00	11.46
79	trans-1,3-dichloropropene	0.558	0.591	-5.9	91	0.00	11.48
80	1,1,2-trichloroethane	0.300	0.310	-3.3	93	0.00	11.71
81	tetrachloroethene	0.394	0.398	-1.0	91	0.00	11.87
82	2-hexanone	0.131	0.131	0.0	88	0.00	11.87
83	1,3-dichloropropane	0.571	0.578	-1.2	92	0.00	11.90
84	butyl acetate	0.246	0.239	2.8	86	0.00	11.96
85	dibromochloromethane	0.437	0.451	-3.2	93	0.00	12.17
86	1,2-dibromoethane	0.412	0.439	-6.6	95	0.00	12.33
87	n-butyl ether	1.756	1.862	-6.0	92	0.00	12.79
88	chlorobenzene	1.157	1.177	-1.7	93	0.00	12.85
89	1,1,1,2-tetrachloroethane	0.501	0.529	-5.6	93	0.00	12.92
90	ethylbenzene	1.938	2.009	-3.7	93	0.00	12.91
91	m,p-xylene	0.733	0.765	-4.4	93	0.00	13.04
92	o-xylene	1.610	1.717	-6.6	93	0.00	13.48
93	styrene	1.188	1.297	-9.2	95	0.00	13.49
94	butyl acrylate	0.713	0.742	-4.1	92	0.00	13.29
95	isopropylbenzene	2.125	2.179	-2.5	89	0.00	13.86
96	bromoform	0.319	0.315	1.3	89	0.00	13.75
97	cis-1,4-dichloro-2-butene	0.167	0.140	16.2	75	0.00	13.90
98 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	87	0.00	15.38

6.7.4
6

Continuing Calibration Summary

Page 3 of 3

Job Number: JC83332

Sample: V4B3742-CC3694

Account: CARICH C. A. Rich Consultants

Lab FileID: 4B88502.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

99 S	4-bromofluorobenzene (s)	0.715	0.776	-8.5	93	0.00	14.09
100	1,1,2,2-tetrachloroethane	0.874	0.889	-1.7	88	0.00	14.17
101	trans-1,4-dichloro-2-bute	0.191	0.169	11.5	75	0.00	14.20
102	1,2,3-trichloropropane	0.215	0.217	-0.9	87	0.00	14.26
103	bromobenzene	0.878	0.984	-12.1	94	0.00	14.29
104	n-propylbenzene	3.734	4.158	-11.4	90	0.00	14.32
105	2-chlorotoluene	0.810	0.919	-13.5	93	0.00	14.47
106	4-chlorotoluene	2.154	2.392	-11.0	92	0.00	14.59
107	1,3,5-trimethylbenzene	2.901	3.132	-8.0	87	0.00	14.49
108	tert-butylbenzene	2.549	2.736	-7.3	83	0.00	14.87
109	1,2,4-trimethylbenzene	2.891	3.141	-8.6	89	0.00	14.93
110	sec-butylbenzene	3.940	4.108	-4.3	83	0.00	15.12
111	p-isopropyltoluene	3.355	3.482	-3.8	83	0.00	15.26
112	1,3-dichlorobenzene	1.770	1.869	-5.6	90	0.00	15.31
113	1,4-dichlorobenzene	1.798	1.897	-5.5	90	0.00	15.41
114	1,2-dichlorobenzene	1.849	1.931	-4.4	89	0.00	15.82
115	benzyl chloride	1.632	1.860	-14.0	93	0.00	15.51
116	n-butylbenzene	1.668	1.692	-1.4	81	0.00	15.72
117	hexachloroethane	0.706	0.731	-3.5	83	0.00	16.15
118	1,2-dibromo-3-chloropropa	0.246	0.224	8.9	73	0.00	16.67
119	1,3,5-trichlorobenzene	1.930	1.874	2.9	79	0.00	16.87
120	1,2,4-trichlorobenzene	1.671	1.709	-2.3	80	0.00	17.55
		----- True	Calc.	% Drift	-----		
121	2-ethylhexyl acrylate	10.000	11.479	-14.8	121	0.00	17.55
		----- AvgRF	CCRF	% Dev	-----		
122	hexachlorobutadiene	0.963	0.902	6.3	78	0.00	17.67
123	naphthalene	3.183	3.202	-0.6	78	0.00	17.86
124	1,2,3-trichlorobenzene	1.522	1.542	-1.3	79	0.00	18.09
		----- True	Calc.	% Drift	-----		
125	2-methylnaphthalene	25.000	19.798	20.8#	69	0.00	19.14
		----- AvgRF	CCRF	% Dev	-----		
126	Bis(chloromethyl)ether			NA			
127	Ethylenimine			NA			

(#) = Out of Range
4B87627.D M4B3694.M

SPCC's out = 0 CCC's out = 0
Tue Feb 26 12:10:50 2019

6.7.4
6



MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88508.d
 Acq On : 25 Feb 2019 9:55 pm
 Operator : brittank
 Sample : jc83332-1 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 15:23:56 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.744	65	105183	500.00	ug/L	0.01
5) pentafluorobenzene	8.757	168	223445	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	298878	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	267250	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	163495	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	112200	55.91	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	111.82%
55) 1,2-dichloroethane-d4 (s)	9.197	65	114375	54.65	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	109.30%
76) toluene-d8 (s)	11.221	98	334306	52.16	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	104.32%
99) 4-bromofluorobenzene (s)	14.087	95	125875	53.86	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	107.72%

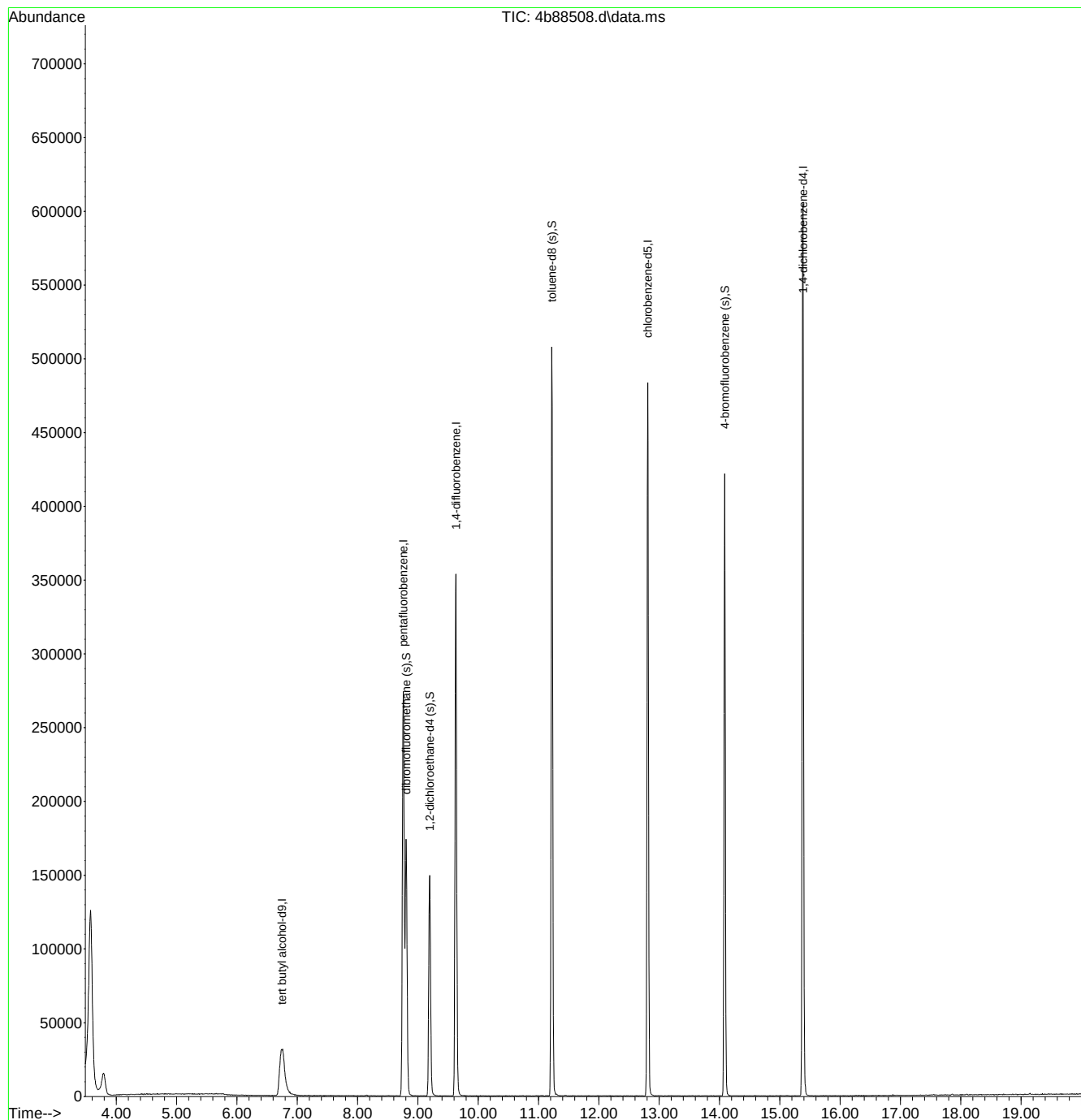
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88508.d
Acq On : 25 Feb 2019 9:55 pm
Operator : brittank
Sample : jc83332-1 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 15:23:56 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2019\dayton201902\02-27-19\lotusa\v4b3742\
 Data File : 4b88512.d
 Acq On : 25 Feb 2019 11:47 pm
 Operator : brittany
 Sample : jc83332-2 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Mar 07 16:48:17 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.743	65	112259	500.00	ug/L	0.01
5) pentafluorobenzene	8.757	168	227513	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.630	114	301440	50.00	ug/L	0.00
75) chlorobenzene-d5	12.810	117	270860	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	165563	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	113479	55.54	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	111.08%
55) 1,2-dichloroethane-d4 (s)	9.196	65	116101	55.00	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	110.00%
76) toluene-d8 (s)	11.220	98	336187	51.75	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.50%
99) 4-bromofluorobenzene (s)	14.087	95	127825	54.01	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.02%

Target Compounds Qvalue

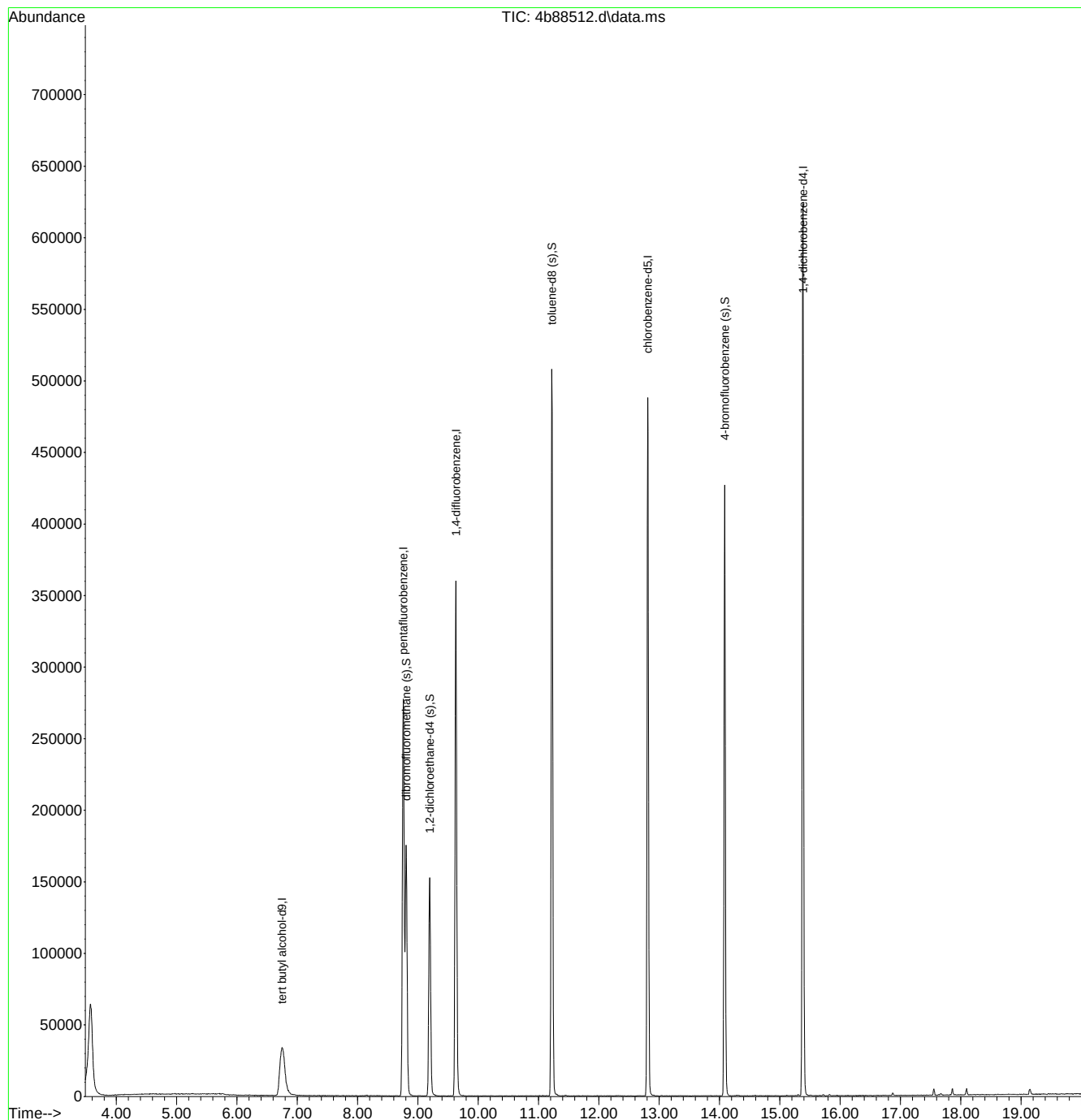
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2019\dayton201902\02-27-19\lotusa\v4b3742\
Data File : 4b88512.d
Acq On : 25 Feb 2019 11:47 pm
Operator : brittank
Sample : jc83332-2
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 30 Sample Multiplier: 1

Inst : MS4B

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Mar 07 16:48:17 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88513.d
 Acq On : 26 Feb 2019 12:15 am
 Operator : brittank
 Sample : jc83332-3 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 13:51:07 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.743	65	104637	500.00	ug/L	0.01
5) pentafluorobenzene	8.757	168	226179	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.630	114	298322	50.00	ug/L	0.00
75) chlorobenzene-d5	12.810	117	270334	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	165324	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	114032	56.14	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	112.28%
55) 1,2-dichloroethane-d4 (s)	9.196	65	115955	55.51	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	111.02%
76) toluene-d8 (s)	11.220	98	335035	51.68	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.36%
99) 4-bromofluorobenzene (s)	14.087	95	127238	53.84	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	107.68%

Target Compounds	Qvalue

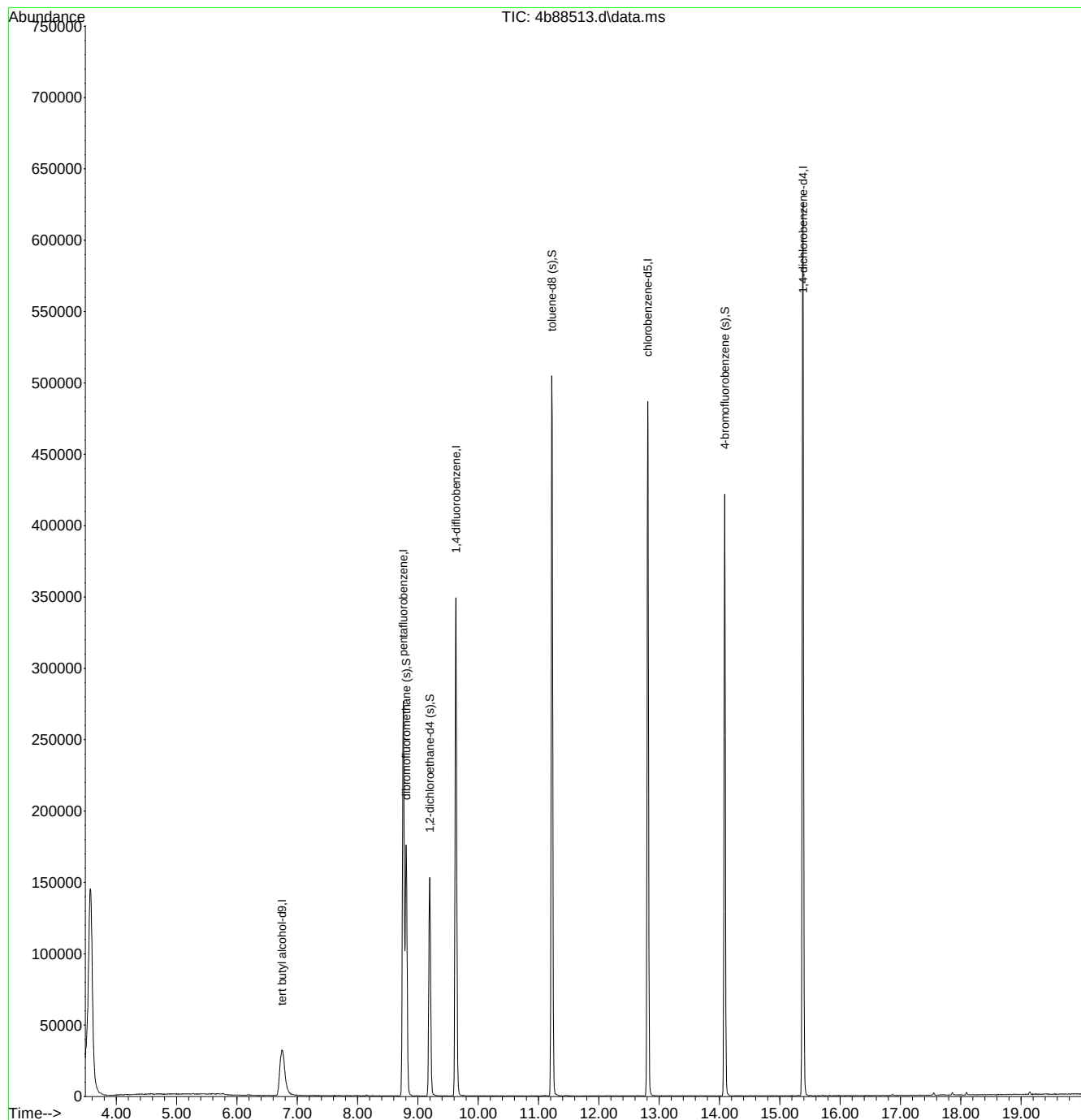
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88513.d
Acq On : 26 Feb 2019 12:15 am
Operator : brittank
Sample : jc83332-3
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 31 Sample Multiplier: 1

Inst : MS4B

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:51:07 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88514.d
 Acq On : 26 Feb 2019 12:43 am
 Operator : brittank
 Sample : jc83332-4 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 13:51:26 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

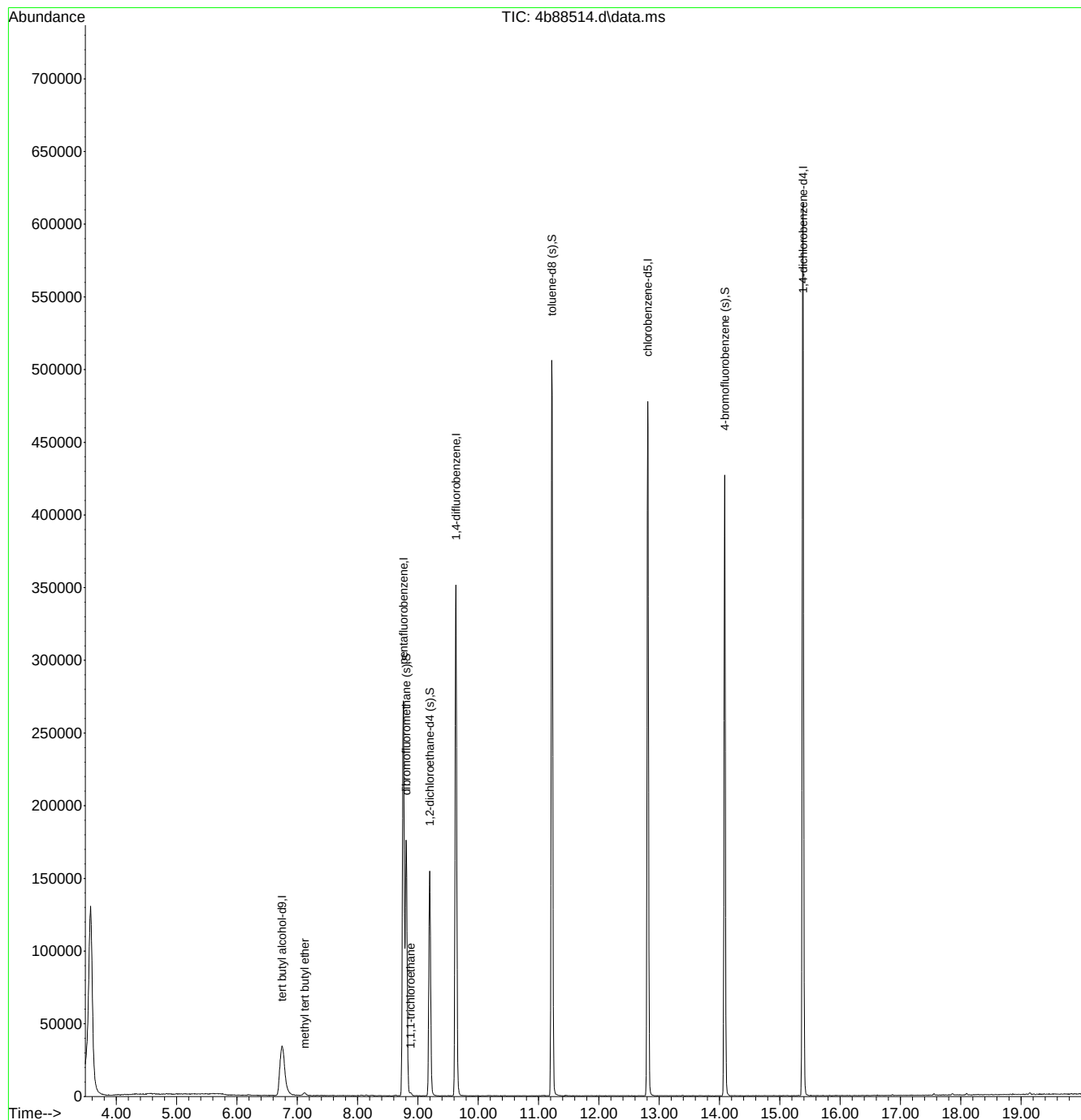
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.749	65	108310	500.00	ug/L	0.02
5) pentafluorobenzene	8.762	168	225506	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	302163	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	270404	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	164275	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	114842	56.71	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	113.42%
55) 1,2-dichloroethane-d4 (s)	9.196	65	116879	55.24	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	110.48%
76) toluene-d8 (s)	11.221	98	334296	51.55	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.10%
99) 4-bromofluorobenzene (s)	14.087	95	126814	54.01	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.02%
Target Compounds						
26) methyl tert butyl ether	7.120	73	3783	0.55	ug/L	91
47) 1,1,1-trichloroethane	8.877	97	1490	0.32	ug/L	86

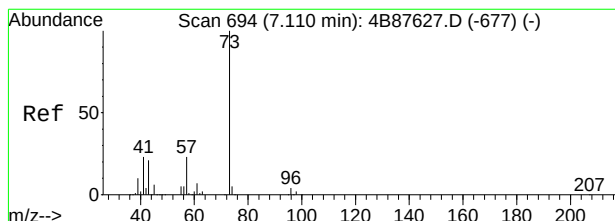
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88514.d
Acq On : 26 Feb 2019 12:43 am
Operator : brittank
Sample : jc83332-4 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 32 Sample Multiplier: 1

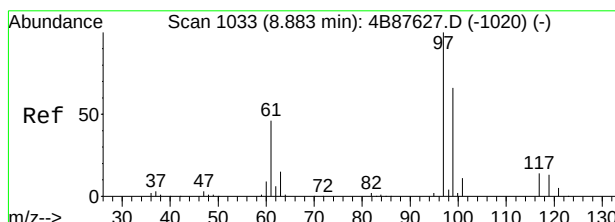
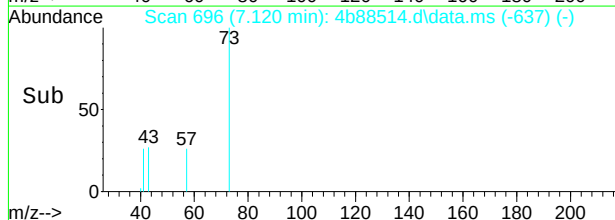
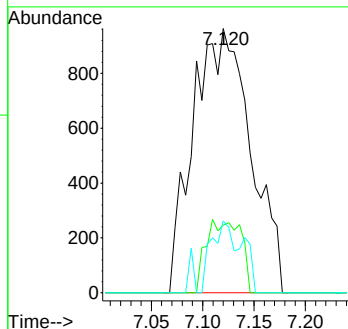
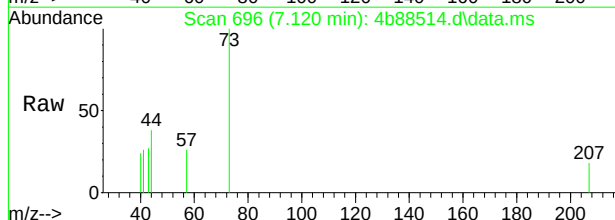
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:51:26 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration





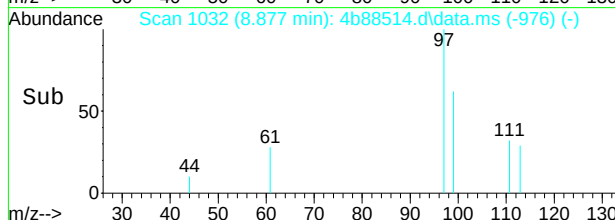
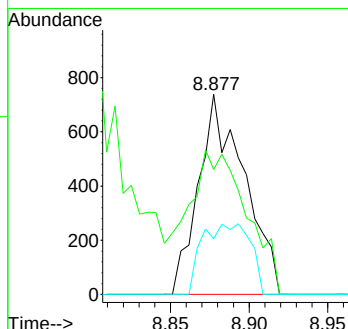
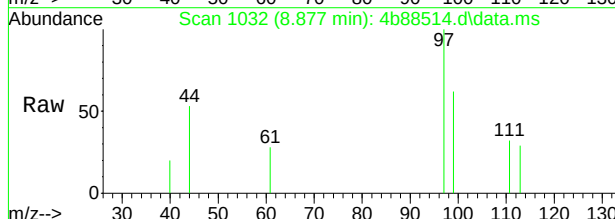
#26
methyl tert butyl ether
Concen: 0.55 ug/L
RT: 7.120 min Scan# 696
Delta R.T. 0.011 min
Lab File: 4b88514.d
Acq: 26 Feb 2019 12:43 am

Tgt Ion: 73 Resp: 3783
Ion Ratio Lower Upper
73 100
57 25.5 0.0 52.7
43 27.2 0.0 51.1



#47
1,1,1-trichloroethane
Concen: 0.32 ug/L
RT: 8.877 min Scan# 1032
Delta R.T. -0.005 min
Lab File: 4b88514.d
Acq: 26 Feb 2019 12:43 am

Tgt Ion: 97 Resp: 1490
Ion Ratio Lower Upper
97 100
99 62.4 36.5 96.5
61 27.7 15.7 75.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88515.d
Acq On : 26 Feb 2019 1:11 am
Operator : brittank
Sample : jc83332-5 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:51:46 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.744	65	109243	500.00	ug/L	0.01
5) pentafluorobenzene	8.757	168	216759	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	292001	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	264247	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	160565	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	110554	56.79	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	113.58%
55) 1,2-dichloroethane-d4 (s)	9.197	65	113339	55.43	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	110.86%
76) toluene-d8 (s)	11.221	98	326161	51.47	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.94%
99) 4-bromofluorobenzene (s)	14.087	95	122764	53.49	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	106.98%

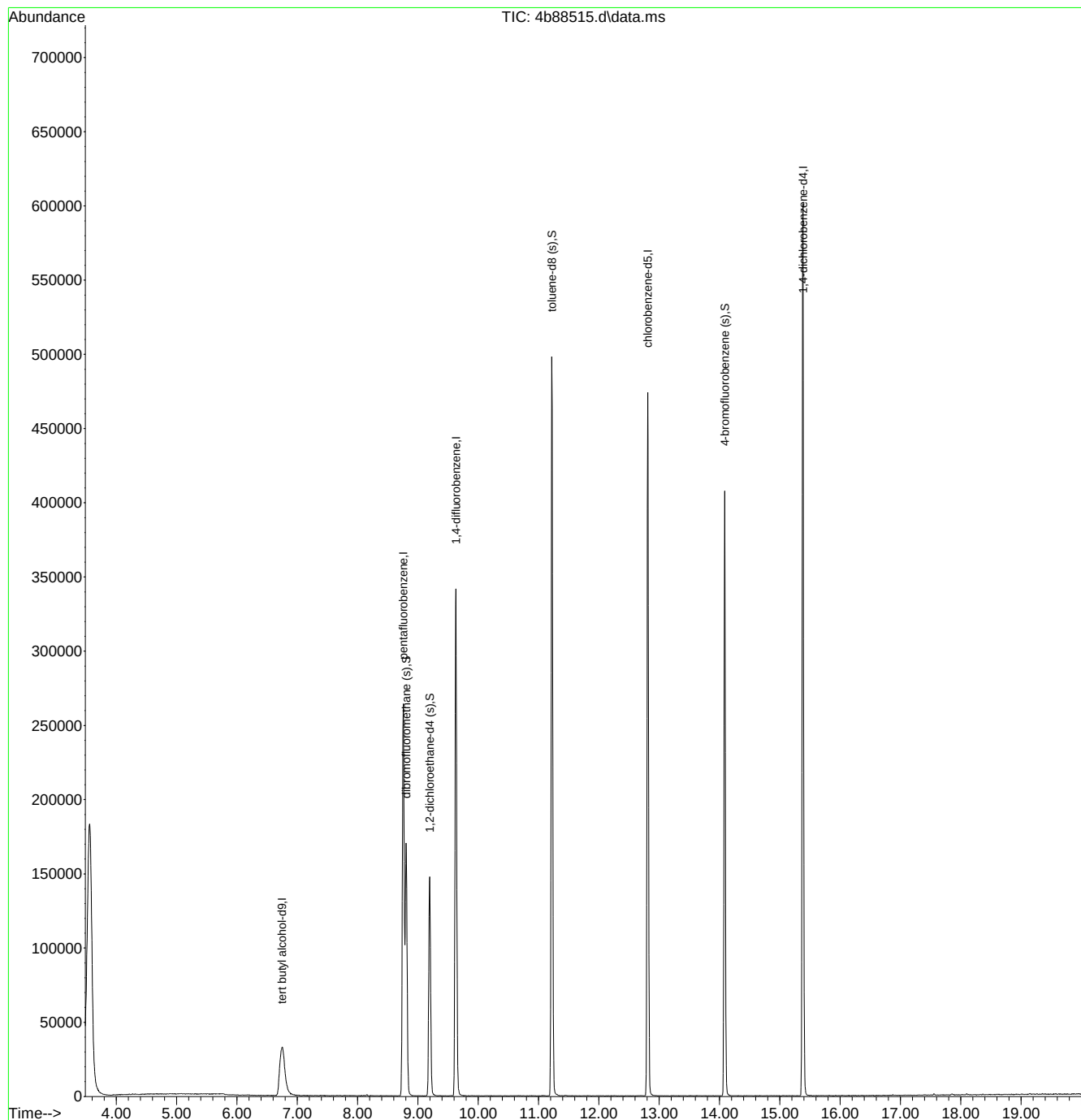
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
Data File : 4b88515.d
Acq On : 26 Feb 2019 1:11 am
Operator : brittank
Sample : jc83332-5 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:51:46 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88516.d
 Acq On : 26 Feb 2019 1:39 am
 Operator : brittank
 Sample : jc83332-6 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 13:52:25 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.749	65	106497	500.00	ug/L	0.02
5) pentafluorobenzene	8.762	168	216950	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.630	114	292141	50.00	ug/L	0.00
75) chlorobenzene-d5	12.810	117	263265	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	158510	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	111619	57.29	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	114.58%
55) 1,2-dichloroethane-d4 (s)	9.196	65	114919	56.17	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	112.34%
76) toluene-d8 (s)	11.220	98	327232	51.83	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.66%
99) 4-bromofluorobenzene (s)	14.087	95	123459	54.49	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.98%

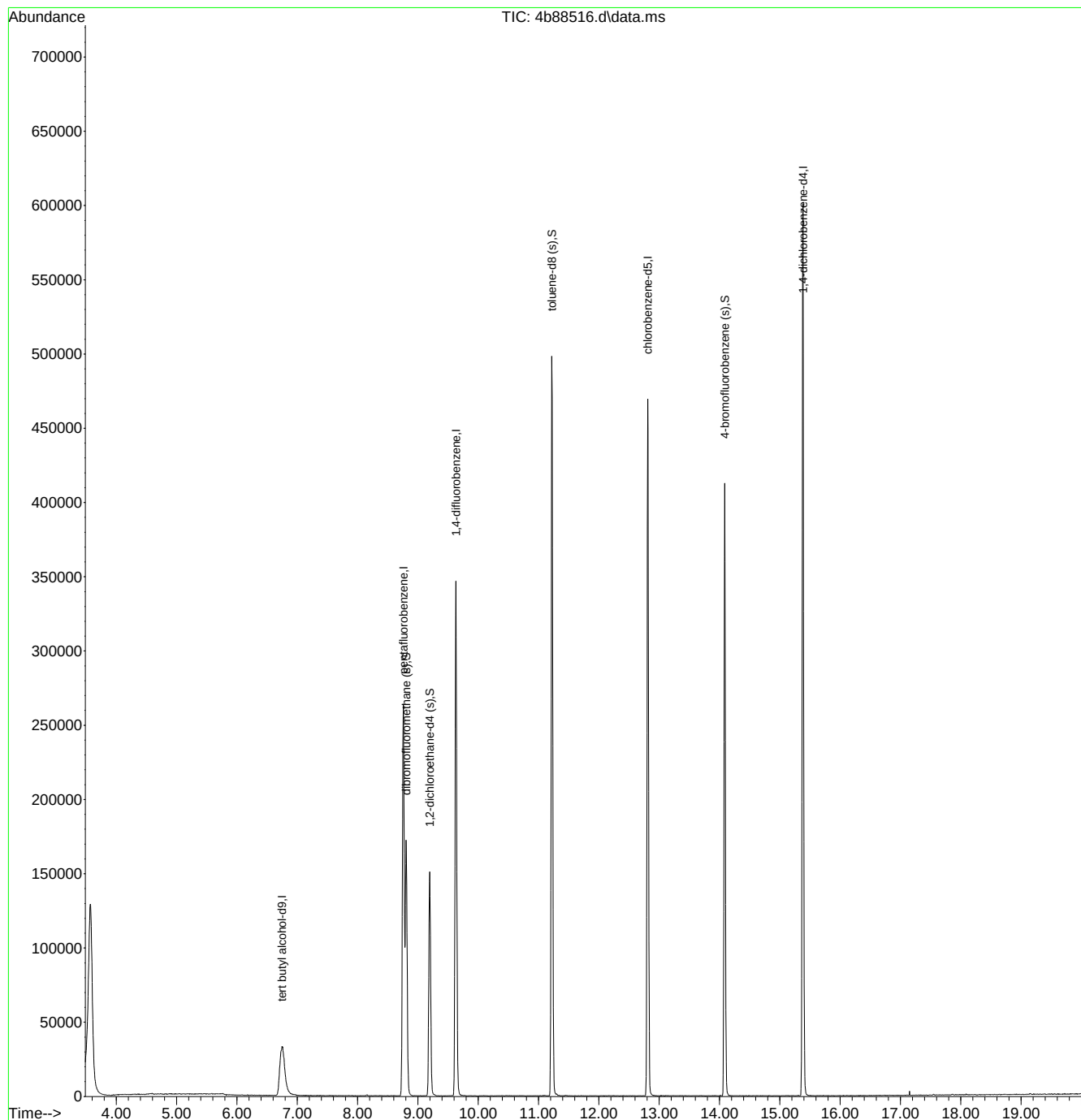
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88516.d
Acq On : 26 Feb 2019 1:39 am
Operator : brittank
Sample : jc83332-6 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:52:25 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88517.d
 Acq On : 26 Feb 2019 2:08 am
 Operator : brittank
 Sample : jc83332-7 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 13:53:56 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.749	65	107993	500.00	ug/L	0.02
5) pentafluorobenzene	8.762	168	219028	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.630	114	296070	50.00	ug/L	0.00
75) chlorobenzene-d5	12.810	117	263495	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	159896	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	113704	57.81	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	115.62%
55) 1,2-dichloroethane-d4 (s)	9.196	65	115413	55.67	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	111.34%
76) toluene-d8 (s)	11.220	98	327715	51.86	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.72%
99) 4-bromofluorobenzene (s)	14.087	95	122475	53.59	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	107.18%

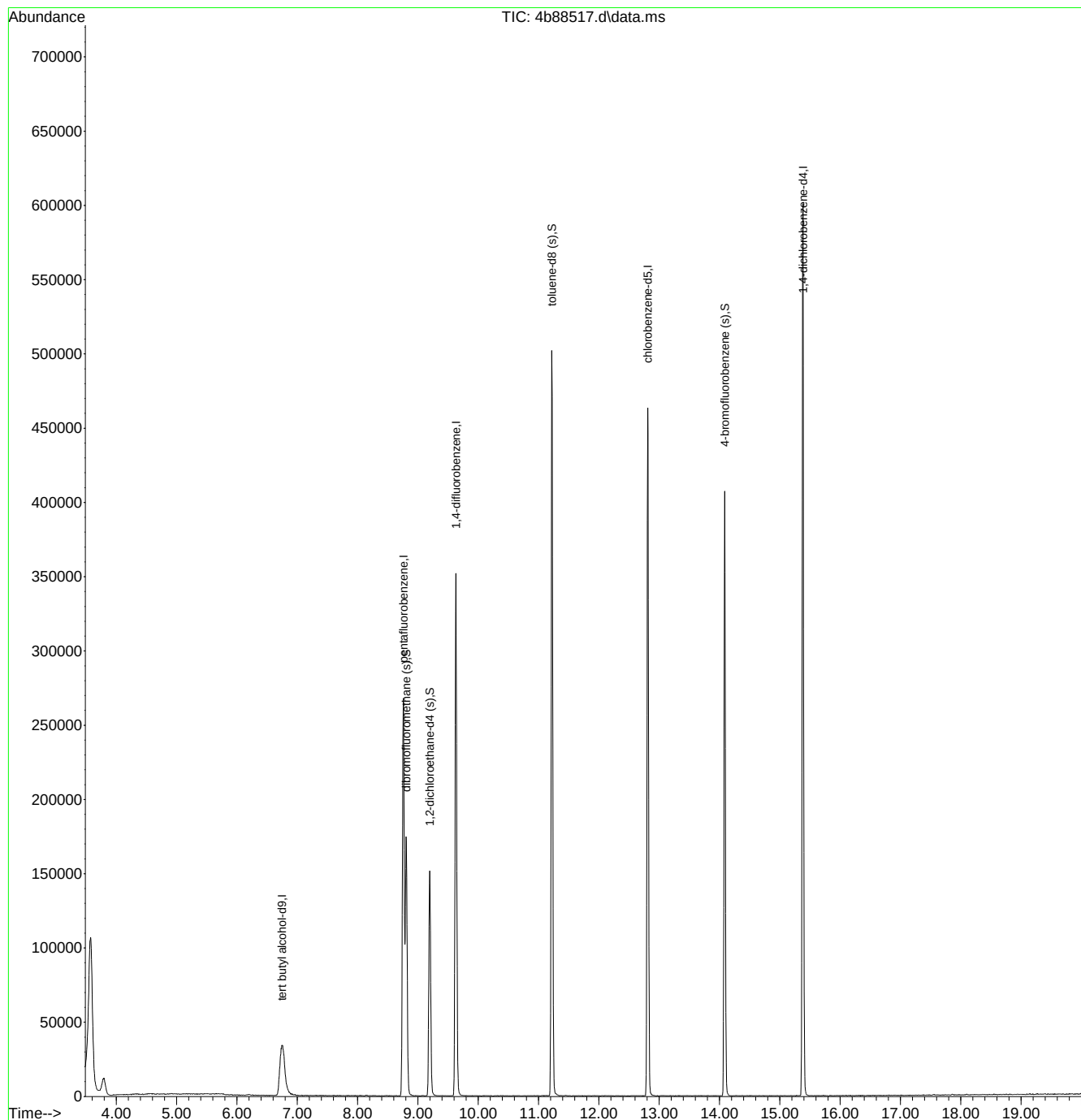
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88517.d
Acq On : 26 Feb 2019 2:08 am
Operator : brittank
Sample : jc83332-7 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:53:56 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88518.d
Acq On : 26 Feb 2019 2:36 am
Operator : brittank
Sample : jc83332-8 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:54:39 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.759	65	109380	500.00	ug/L	0.03
5) pentafluorobenzene	8.757	168	216624	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	292223	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	260440	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	161020	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	113256	58.22	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	116.44%
55) 1,2-dichloroethane-d4 (s)	9.196	65	116179	56.77	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	113.54%
76) toluene-d8 (s)	11.221	98	324641	51.98	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.96%
99) 4-bromofluorobenzene (s)	14.087	95	123376	53.60	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	107.20%

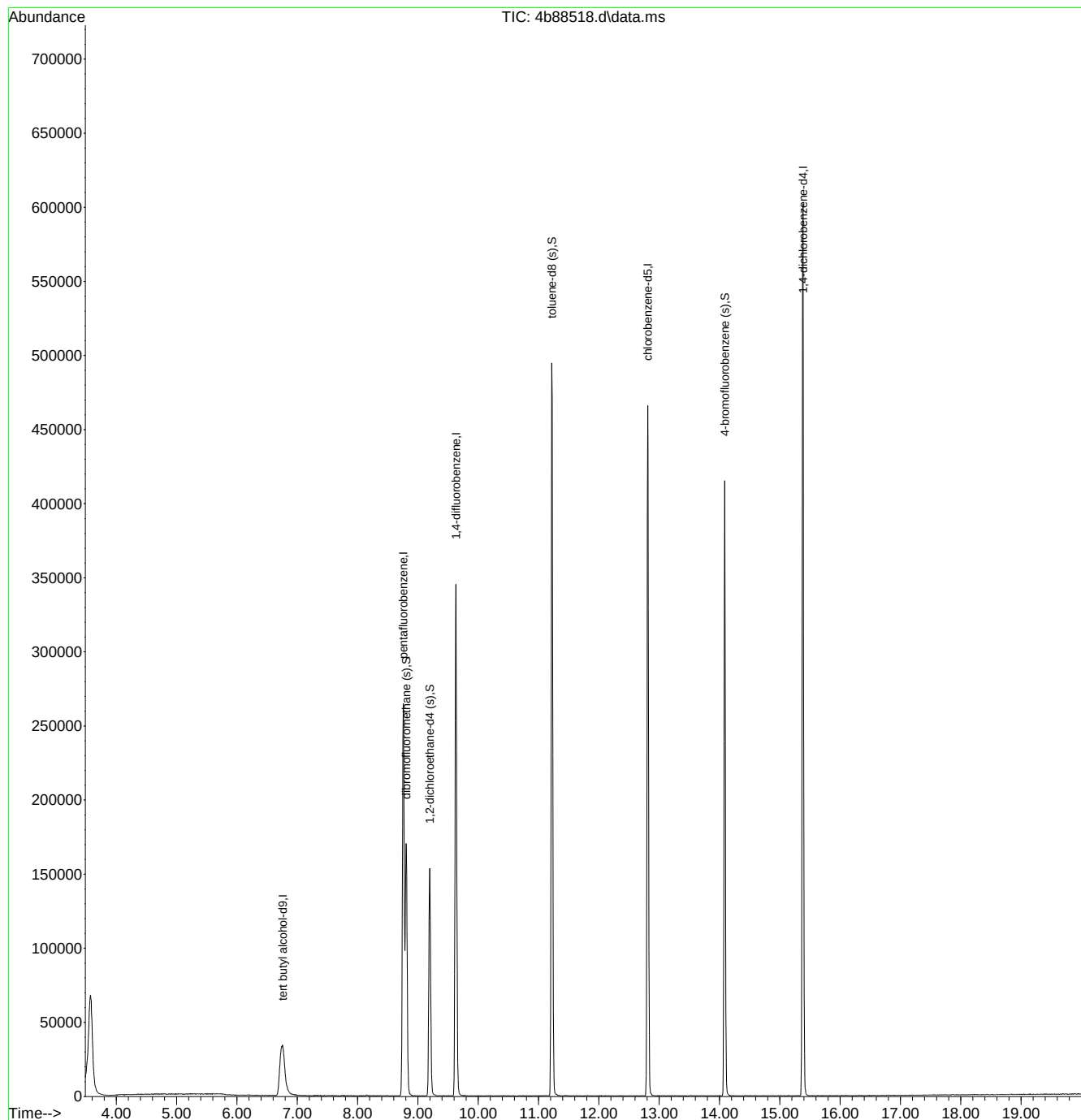
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88518.d
Acq On : 26 Feb 2019 2:36 am
Operator : brittank
Sample : jc83332-8 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:54:39 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88506.d
 Acq On : 25 Feb 2019 8:59 pm
 Operator : brittany
 Sample : jc83332-9 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 13:49:22 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.749	65	115412	500.00	ug/L	0.02
5) pentafluorobenzene	8.757	168	232447	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	310029	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	273776	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	165511	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	115503	55.33	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	110.66%
55) 1,2-dichloroethane-d4 (s)	9.197	65	117692	54.21	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	108.42%
76) toluene-d8 (s)	11.221	98	342488	52.16	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	104.32%
99) 4-bromofluorobenzene (s)	14.087	95	129026	54.54	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	109.08%

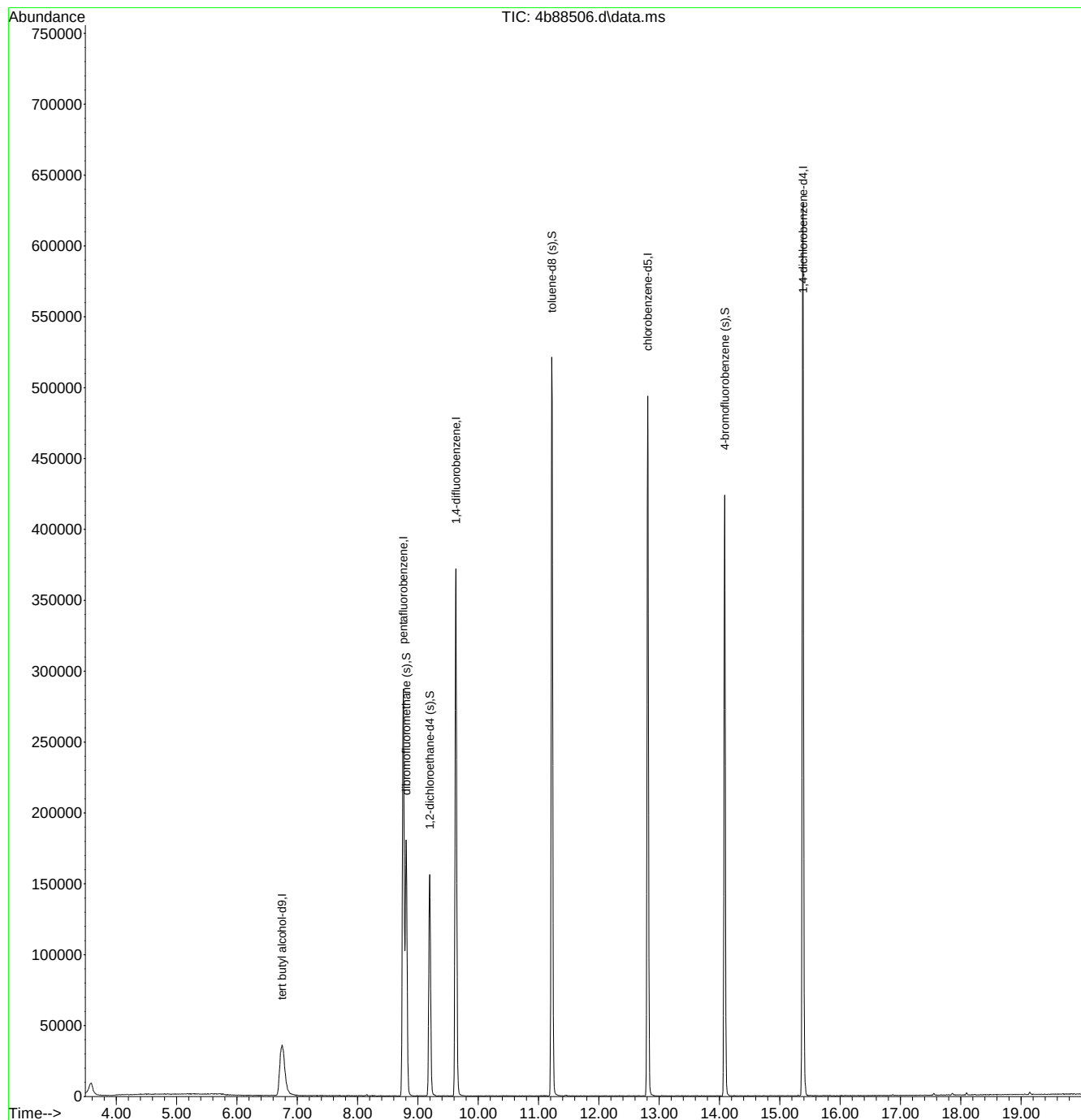
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88506.d
Acq On : 25 Feb 2019 8:59 pm
Operator : britt tank
Sample : jc83332-9 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:49:22 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88507.d
 Acq On : 25 Feb 2019 9:27 pm
 Operator : brittank
 Sample : jc83332-10 Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 13:49:39 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.754	65	115547	500.00	ug/L	0.02
5) pentafluorobenzene	8.757	168	234258	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	312698	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	275652	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	166069	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	117719	55.96	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	111.92%
55) 1,2-dichloroethane-d4 (s)	9.197	65	121315	55.40	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	110.80%
76) toluene-d8 (s)	11.221	98	345079	52.20	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	104.40%
99) 4-bromofluorobenzene (s)	14.087	95	129175	54.42	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.84%

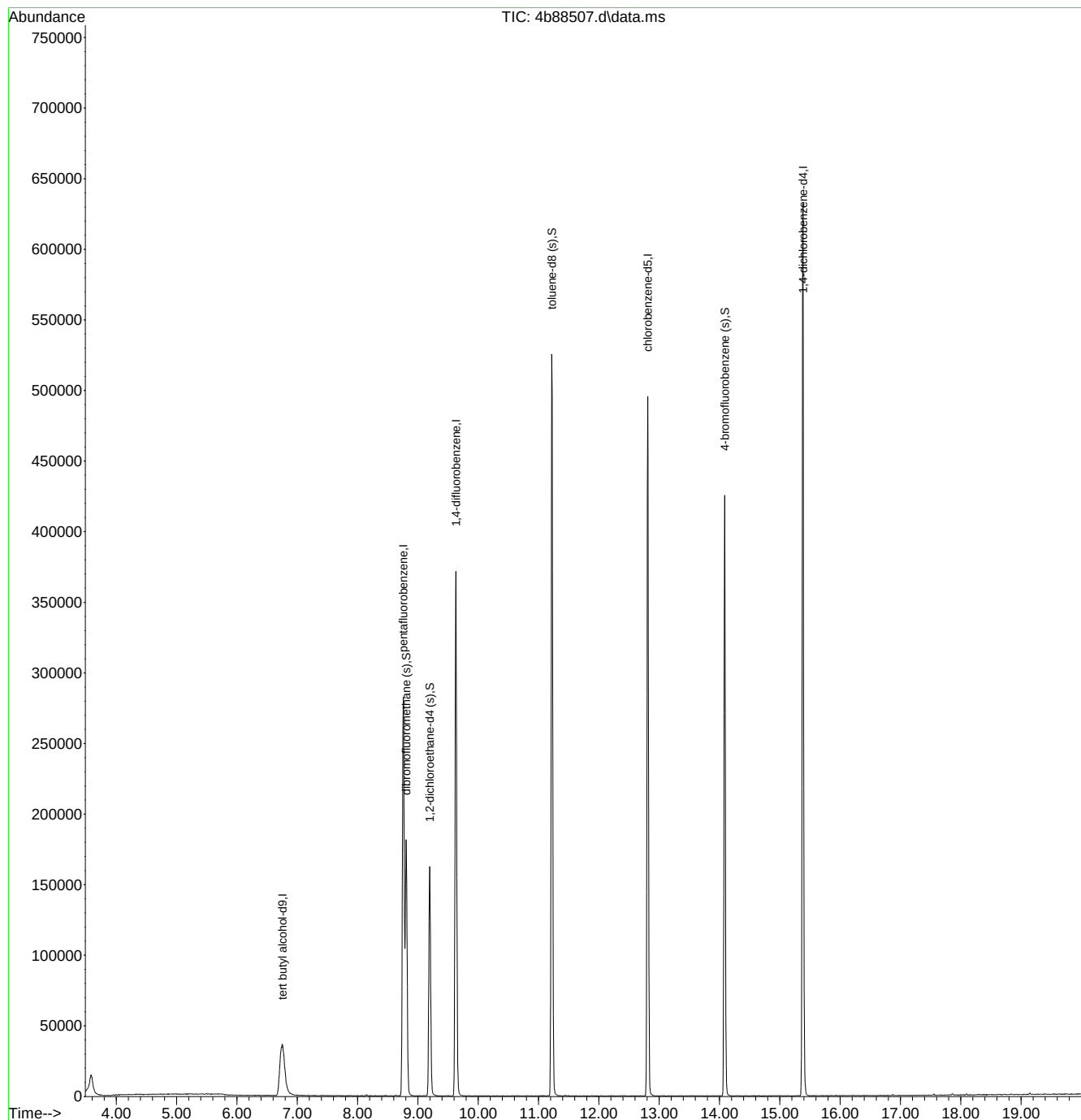
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
Data File : 4b88507.d
Acq On : 25 Feb 2019 9:27 pm
Operator : brittank
Sample : jc83332-10 Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 13:49:39 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88505.d
 Acq On : 25 Feb 2019 8:31 pm
 Operator : brittany
 Sample : mb Inst : MS4B
 Misc : MS32771,V4B3742,5,,,,,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:19:26 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.738	65	121808	500.00	ug/L	0.00
5) pentafluorobenzene	8.757	168	239580	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	319594	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	277524	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	168510	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	119082	55.35	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	110.70%
55) 1,2-dichloroethane-d4 (s)	9.197	65	121348	54.22	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	108.44%
76) toluene-d8 (s)	11.221	98	351908	52.87	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	105.74%
99) 4-bromofluorobenzene (s)	14.087	95	131258	54.49	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.98%
Target Compounds						
119) 1,3,5-trichlorobenzene	16.869	180	839	0.13	ug/L	75
120) 1,2,4-trichlorobenzene	17.549	180	1338	0.24	ug/L	94
122) hexachlorobutadiene	17.670	225	462	0.14	ug/L	86
123) naphthalene	17.858	128	3268	0.30	ug/L	99
124) 1,2,3-trichlorobenzene	18.098	180	1512	0.29	ug/L	97
125) 2-methylnaphthalene	19.139	142	2287	2.62	ug/L	85

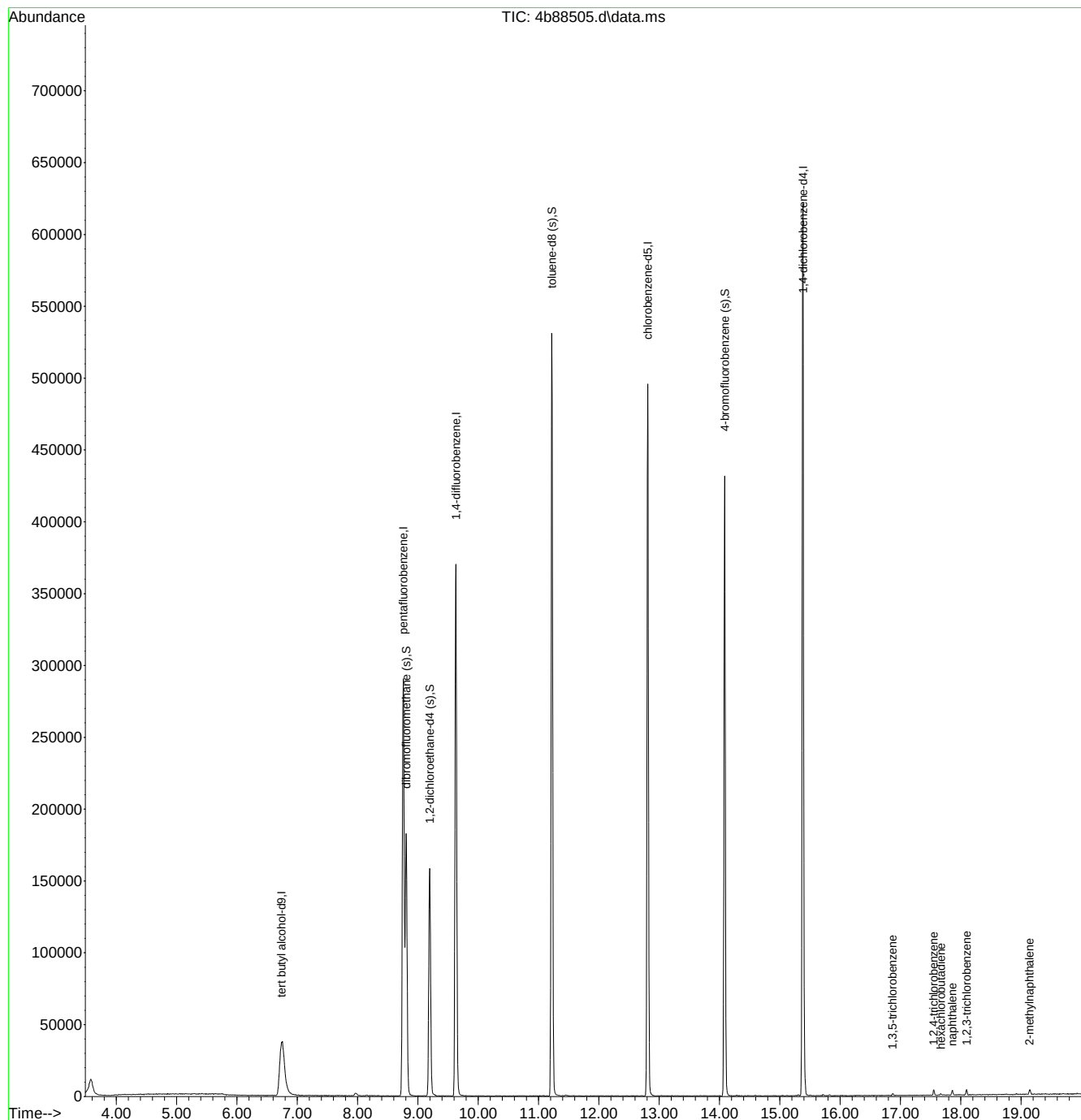
(#) = qualifier out of range (m) = manual integration (+) = signals summed

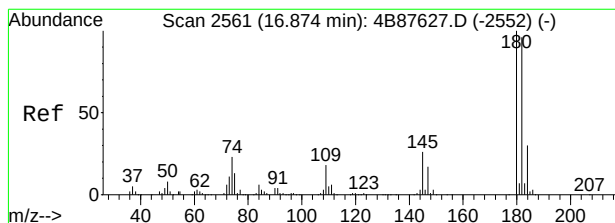
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88505.d
Acq On : 25 Feb 2019 8:31 pm
Operator : brittank
Sample : mb
Misc : MS32771,V4B3742,5,,,,,1
ALS Vial : 23 Sample Multiplier: 1

Inst : MS4B

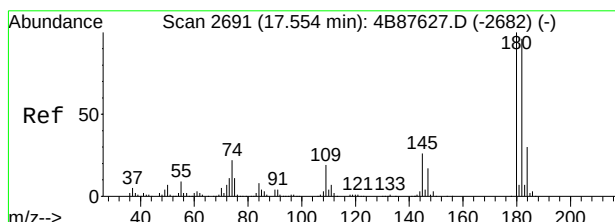
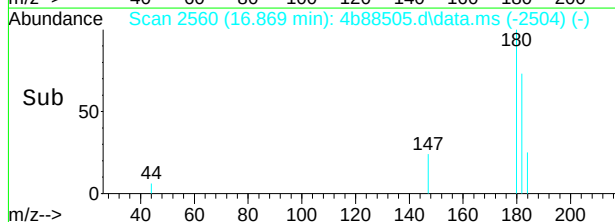
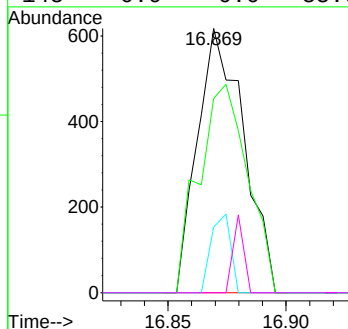
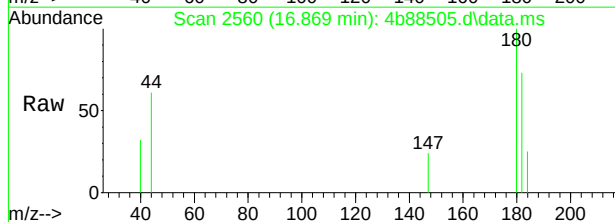
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 12:19:26 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration





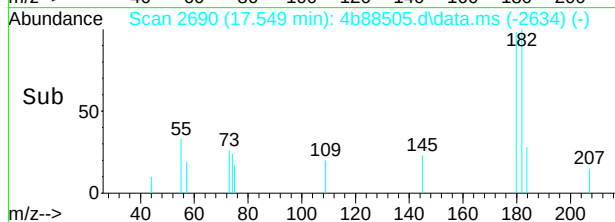
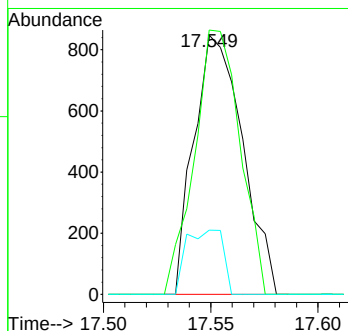
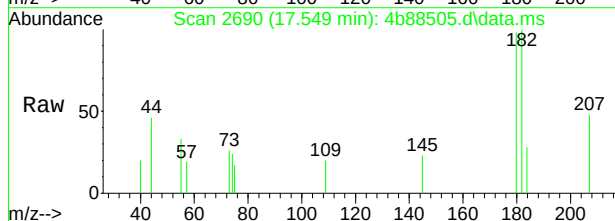
#119
1,3,5-trichlorobenzene
Concen: 0.13 ug/L
RT: 16.869 min Scan# 2560
Delta R.T. -0.005 min
Lab File: 4b88505.d
Acq: 25 Feb 2019 8:31 pm

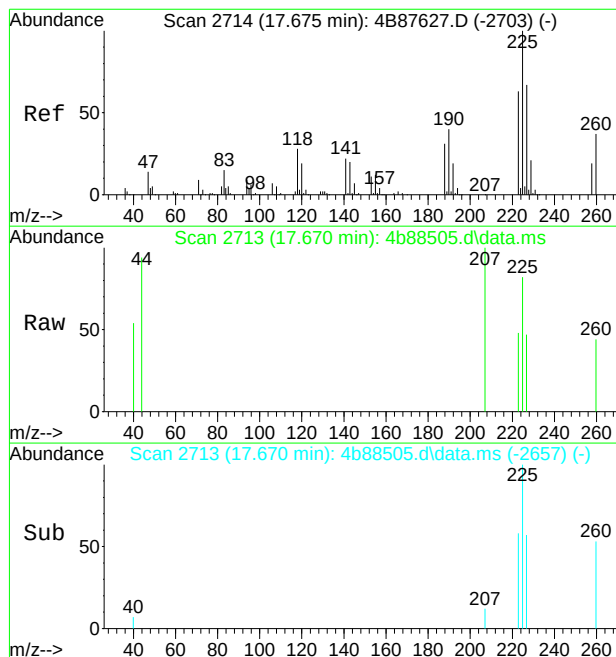
Tgt	Ion:180	Resp:	839
Ion	Ratio	Lower	Upper
180	100		
182	73.5	66.1	126.1
184	24.8	0.4	60.4
145	0.0	0.0	55.6



#120
1,2,4-trichlorobenzene
Concen: 0.24 ug/L
RT: 17.549 min Scan# 2690
Delta R.T. -0.005 min
Lab File: 4b88505.d
Acq: 25 Feb 2019 8:31 pm

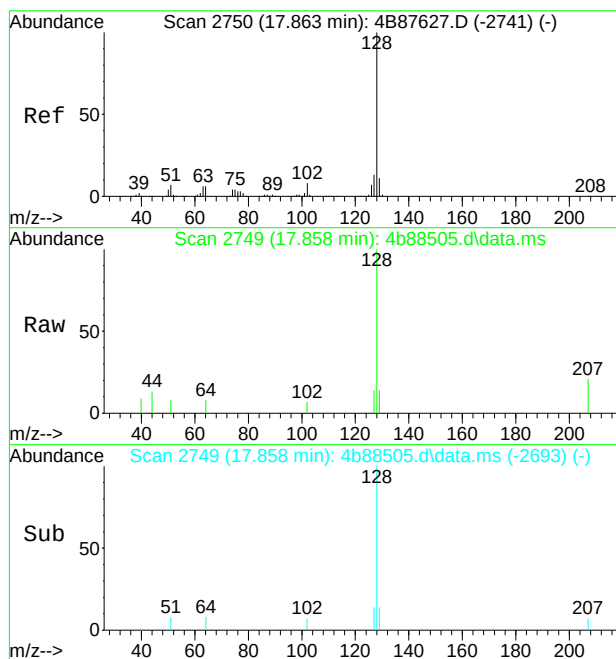
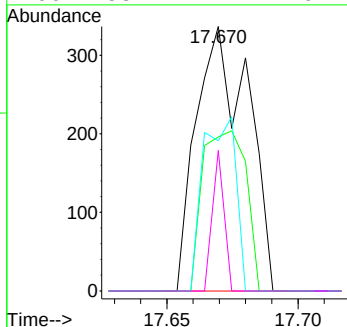
Tgt	Ion:180	Resp:	1338
Ion	Ratio	Lower	Upper
180	100		
182	102.0	66.4	126.4
74	24.8	0.0	52.1





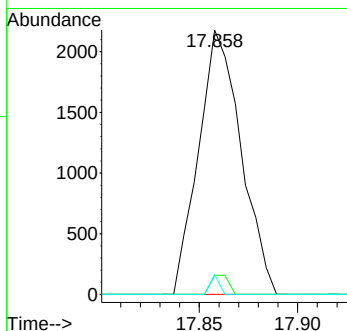
#122
hexachlorobutadiene
Concen: 0.14 ug/L
RT: 17.670 min Scan# 2713
Delta R.T. -0.005 min
Lab File: 4b88505.d
Acq: 25 Feb 2019 8:31 pm

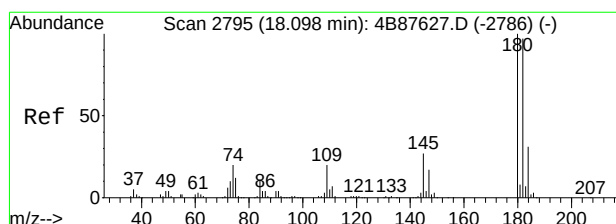
Tgt	Ion	225	Resp:	462
	Ratio	100	Lower	Upper
	225	100		
	223	58.2	33.4	93.4
	227	56.7	37.1	97.1
	260	53.1	7.4	67.4



#123
naphthalene
Concen: 0.30 ug/L
RT: 17.858 min Scan# 2749
Delta R.T. -0.005 min
Lab File: 4b88505.d
Acq: 25 Feb 2019 8:31 pm

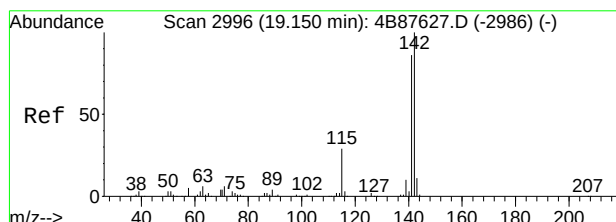
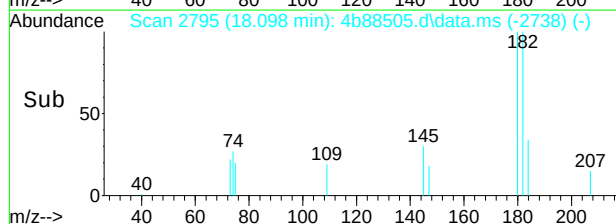
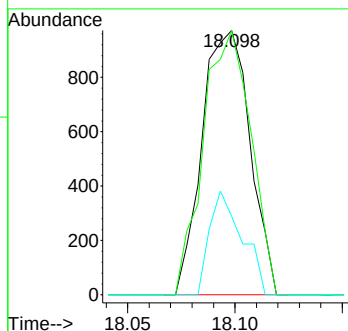
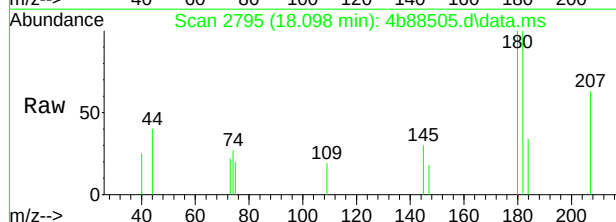
Tgt	Ion	128	Resp:	3268
	Ratio	100	Lower	Upper
	128	100		
	102	7.3	0.0	37.8
	51	7.6	0.0	37.2





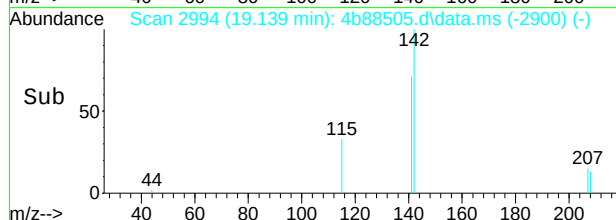
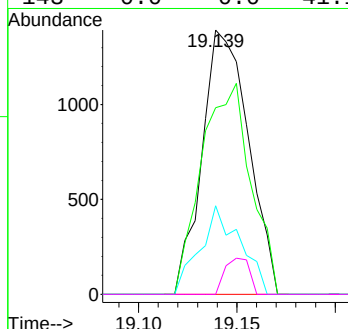
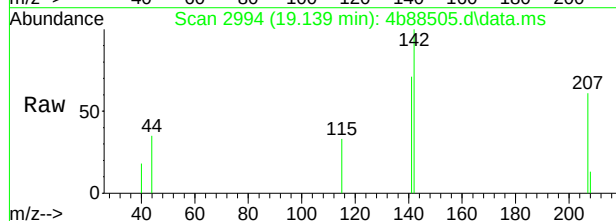
#124
1,2,3-trichlorobenzene
Concen: 0.29 ug/L
RT: 18.098 min Scan# 2795
Delta R.T. 0.000 min
Lab File: 4b88505.d
Acq: 25 Feb 2019 8:31 pm

Tgt Ion	Ratio	Resp	Lower	Upper
180	100	1512		
182	100.0	66.9	126.9	
145	29.7	0.0	57.4	



#125
2-methylnaphthalene
Concen: 2.62 ug/L
RT: 19.139 min Scan# 2994
Delta R.T. -0.010 min
Lab File: 4b88505.d
Acq: 25 Feb 2019 8:31 pm

Tgt Ion	Ratio	Resp	Lower	Upper
142	100	2287		
141	70.6	65.5	105.5	
115	33.5	0.0	59.4	
143	0.0	0.0	41.1	



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88503.d
 Acq On : 25 Feb 2019 7:35 pm
 Operator : brittank
 Sample : bs Inst : MS4B
 Misc : MS32758,V4B3742,5,,,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:15:30 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.754	65	93396	500.00	ug/L	0.02
5) pentafluorobenzene	8.757	168	231576	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	309016	50.00	ug/L	0.00
75) chlorobenzene-d5	12.810	117	276662	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	165114	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	110220	53.00	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	106.00%
55) 1,2-dichloroethane-d4 (s)	9.196	65	108166	49.99	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	99.98%
76) toluene-d8 (s)	11.221	98	345118	52.02	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	104.04%
99) 4-bromofluorobenzene (s)	14.087	95	128946	54.64	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	109.28%
Target Compounds						
3) tertiary butyl alcohol	6.864	59	76284	243.69	ug/L	98
4) 1,4-dioxane	10.242	88	32199	1373.92	ug/L	95
6) chlorodifluoromethane	3.903	51	260915	47.74	ug/L	100
7) dichlorodifluoromethane	3.882	85	265481	53.15	ug/L	98
8) chloromethane	4.238	50	289157	47.19	ug/L	99
9) vinyl chloride	4.447	62	263660	47.05	ug/L	100
10) 1,3-butadiene	4.479	54	186316	47.32	ug/L	100
11) bromomethane	4.981	94	173999	45.40	ug/L	98
12) chloroethane	5.122	64	129071	48.90	ug/L	98
13) trichlorofluoromethane	5.525	101	275577	48.93	ug/L	99
14) vinyl bromide	5.425	106	153822	47.28	ug/L	97
15) ethyl ether	5.818	74	64115	51.00	ug/L	95
16) 2-chloropropane	6.022	43	283628	48.02	ug/L	97
17) acrolein	6.016	56	22432	49.87	ug/L	99
18) freon 113	6.210	151	140102	50.11	ug/L	99
19) 1,1-dichloroethene	6.205	61	258332	52.20	ug/L	98
20) acetone	6.194	58	39289	165.75	ug/L	98
21) acetonitrile	6.555	41	180758	384.51	ug/L	99
22) iodomethane	6.451	142	273259	51.65	ug/L	99
23) carbon disulfide	6.587	76	501597	47.99	ug/L	99
24) methylene chloride	6.811	84	166321	51.84	ug/L	99
25) methyl acetate	6.581	43	90704	43.31	ug/L	100
26) methyl tert butyl ether	7.115	73	327021	46.10	ug/L	99
27) trans-1,2-dichloroethene	7.151	61	211836	53.73	ug/L	99
28) hexane	7.450	56	95866	47.12	ug/L	98
29) di-isopropyl ether	7.627	45	513233	51.85	ug/L	98
30) 2-butanone	8.218	72	44488	181.45	ug/L	97
31) 1,1-dichloroethane	7.653	63	260778	53.20	ug/L	99
32) chloroprene	7.742	53	203432	53.92	ug/L	99
33) acrylonitrile	7.047	53	44217	44.18	ug/L	93
34) vinyl acetate	7.580	86	18172	53.02	ug/L	# 81
35) ethyl tert-butyl ether	8.041	59	404100	51.44	ug/L	100
36) ethyl acetate	8.224	45	16579	43.88	ug/L	# 95
37) 2,2-dichloropropane	8.328	77	214449	49.22	ug/L	97
38) cis-1,2-dichloroethene	8.292	96	156284	54.24	ug/L	97
39) propionitrile	8.286	54	166226	426.29	ug/L	88
40) methyl acrylate	8.302	85	14831	44.99	ug/L	# 71
41) methacrylonitrile	8.464	67	41014	44.67	ug/L	98
42) bromochloromethane	8.564	128	74850	50.59	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88503.d
 Acq On : 25 Feb 2019 7:35 pm
 Operator : brittink
 Sample : bs Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:15:30 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) tetrahydrofuran	8.579	72	13711	43.95	ug/L	83
44) chloroform	8.632	83	248905	51.68	ug/L	98
45) tert-butyl formate	8.663	59	101374	56.13	ug/L	97
47) 1,1,1-trichloroethane	8.883	97	238919	50.56	ug/L	98
48) cyclohexane	8.992	84	217347	45.79	ug/L	97
50) 1,1-dichloropropene	9.029	75	181357	51.33	ug/L	100
51) carbon tetrachloride	9.066	117	212770	51.23	ug/L	98
52) tert-amyl alcohol	9.128	73	30651	198.60	ug/L	92
53) isopropyl acetate	9.149	87	20661	45.30	ug/L #	93
56) n-butyl alcohol	9.657	41	121707	1919.05	ug/L	99
57) 2,2,4-trimethylpentane	9.343	57	531905	43.28	ug/L	98
58) benzene	9.259	78	522986	52.04	ug/L	99
59) tert-amyl methyl ether	9.322	73	380441	50.76	ug/L	98
60) heptane	9.479	57	89795	45.52	ug/L	95
61) 1,2-dichloroethane	9.280	62	164571	47.13	ug/L	99
62) ethyl acrylate	9.897	55	108411	43.07	ug/L	99
63) trichloroethene	9.929	95	132346	52.02	ug/L	96
64) 2-chloroethyl vinyl ether	10.677	63	312398	261.37	ug/L	99
65) methyl methacrylate	10.154	100	22508	43.18	ug/L	96
66) methylcyclohexane	10.227	83	251502	46.21	ug/L	98
67) 1,2-dichloropropane	10.206	63	132934	51.47	ug/L	99
68) dibromomethane	10.316	93	75425	48.30	ug/L	97
69) bromodichloromethane	10.457	83	174160	51.19	ug/L	99
71) epichlorohydrin	10.765	57	45953	195.67	ug/L	100
72) cis-1,3-dichloropropene	10.907	75	185956	50.19	ug/L	99
73) 4-methyl-2-pentanone	11.001	58	163111	180.36	ug/L	96
74) isoamyl alcohol	10.996	70	59748	834.88	ug/L	94
77) toluene	11.299	92	295543	52.65	ug/L	99
78) ethyl methacrylate	11.461	69	118094	50.29	ug/L	96
79) trans-1,3-dichloropropene	11.482	75	157681	51.07	ug/L	98
80) 1,1,2-trichloroethane	11.712	83	81649	49.25	ug/L	98
81) tetrachloroethene	11.874	164	113954	52.29	ug/L	99
82) 2-hexanone	11.874	58	134192	185.73	ug/L	96
83) 1,3-dichloropropane	11.906	76	152129	48.17	ug/L	94
84) butyl acetate	11.958	56	62480	45.91	ug/L	94
85) dibromochloromethane	12.167	129	120652	49.86	ug/L	99
86) 1,2-dibromoethane	12.335	107	117099	51.32	ug/L	98
87) n-butyl ether	12.795	57	527799	54.33	ug/L	99
88) chlorobenzene	12.847	112	328733	51.35	ug/L	100
89) 1,1,1,2-tetrachloroethane	12.915	131	150099	54.17	ug/L	99
90) ethylbenzene	12.910	91	566784	52.87	ug/L	100
91) m,p-xylene	13.041	106	428139	105.50	ug/L	99
92) o-xylene	13.480	91	482679	54.20	ug/L	100
93) styrene	13.490	104	356422	54.24	ug/L	99
94) butyl acrylate	13.286	55	195870	49.67	ug/L	100
95) isopropylbenzene	13.862	105	627007	53.33	ug/L	99
96) bromoform	13.747	173	83494	47.36	ug/L	99
97) cis-1,4-dichloro-2-butene	13.898	88	35863	38.78	ug/L	99
100) 1,1,2,2-tetrachloroethane	14.165	83	138889	48.11	ug/L	100
101) trans-1,4-dichloro-2-b...	14.202	53	25928	41.18	ug/L	99
102) 1,2,3-trichloropropane	14.265	110	34546	48.71	ug/L	96
103) bromobenzene	14.291	156	161557	55.71	ug/L	97
104) n-propylbenzene	14.322	91	698112	56.61	ug/L	100
105) 2-chlorotoluene	14.468	126	153487	57.38	ug/L	95
106) 4-chlorotoluene	14.594	91	395742	55.63	ug/L	100
107) 1,3,5-trimethylbenzene	14.495	105	529984	55.32	ug/L	100
108) tert-butylbenzene	14.871	119	468636	55.67	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88503.d
 Acq On : 25 Feb 2019 7:35 pm
 Operator : brittank
 Sample : bs Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:15:30 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109)	1,2,4-trimethylbenzene	14.929	105	522834	54.76	ug/L	99
110)	sec-butylbenzene	15.117	105	704655	54.15	ug/L	100
111)	p-isopropyltoluene	15.263	119	597649	53.95	ug/L	99
112)	1,3-dichlorobenzene	15.305	146	308146	52.72	ug/L	100
113)	1,4-dichlorobenzene	15.410	146	308569	51.97	ug/L	99
114)	1,2-dichlorobenzene	15.823	146	312972	51.25	ug/L	99
115)	benzyl chloride	15.509	91	273228	50.70	ug/L	99
116)	n-butylbenzene	15.719	92	288656	52.40	ug/L	97
117)	hexachloroethane	16.153	201	124114	53.21	ug/L	99
118)	1,2-dibromo-3-chloropr...	16.665	157	35088	43.20	ug/L	92
119)	1,3,5-trichlorobenzene	16.874	180	314764	49.39	ug/L	99
120)	1,2,4-trichlorobenzene	17.554	180	283651	51.39	ug/L	99
121)	2-ethylhexyl acrylate	17.560	70	26053	12.62	ug/L	91
122)	hexachlorobutadiene	17.669	225	154500	48.56	ug/L	99
123)	naphthalene	17.858	128	532360	50.65	ug/L	99
124)	1,2,3-trichlorobenzene	18.098	180	262547	52.25	ug/L	98
125)	2-methylnaphthalene	19.144	142	123476	23.02	ug/L	98

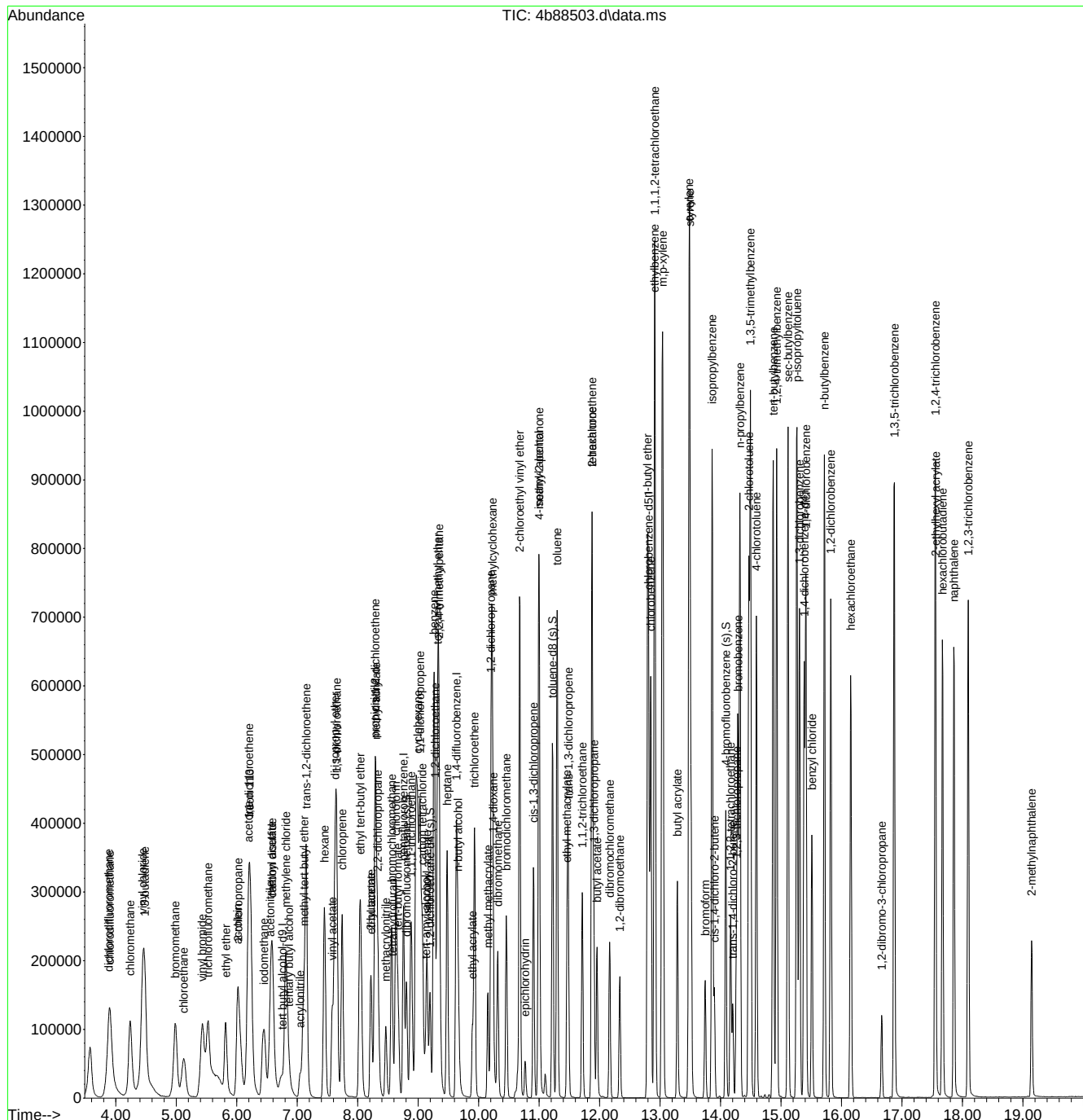
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88503.d
Acq On : 25 Feb 2019 7:35 pm
Operator : brittank
Sample : bs
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Inst : MS4B

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 12:15:30 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88509.d
 Acq On : 25 Feb 2019 10:23 pm
 Operator : brittank
 Sample : jc83332-1ms Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:23:59 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.749	65	99546	500.00	ug/L	0.02
5) pentafluorobenzene	8.757	168	229642	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.631	114	305861	50.00	ug/L	0.00
75) chlorobenzene-d5	12.811	117	284055	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	172960	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	110143	53.41	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	106.82%		
55) 1,2-dichloroethane-d4 (s)	9.196	65	112363	52.46	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery =	104.92%		
76) toluene-d8 (s)	11.221	98	348813	51.20	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	102.40%		
99) 4-bromofluorobenzene (s)	14.087	95	132058	53.42	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	106.84%		
Target Compounds						
3) tertiary butyl alcohol	6.853	59	77797	233.17	ug/L	99
4) 1,4-dioxane	10.248	88	26841	1074.54	ug/L	93
6) chlorodifluoromethane	3.903	51	210654	38.87	ug/L	99
7) dichlorodifluoromethane	3.883	85	293714	59.30	ug/L	99
8) chloromethane	4.233	50	306507	50.45	ug/L	98
9) vinyl chloride	4.442	62	283436	51.01	ug/L	99
10) 1,3-butadiene	4.468	54	166404	42.62	ug/L	100
11) bromomethane	4.981	94	185401	48.78	ug/L	98
12) chloroethane	5.117	64	134691	51.46	ug/L	98
13) trichlorofluoromethane	5.525	101	307038	54.98	ug/L	99
14) vinyl bromide	5.425	106	163816	50.78	ug/L	100
15) ethyl ether	5.813	74	61500	49.34	ug/L	96
16) 2-chloropropane	6.022	43	265276	45.29	ug/L	99
17) acrolein	6.022	56	24076	53.98	ug/L	99
18) freon 113	6.210	151	140881	50.81	ug/L	97
19) 1,1-dichloroethene	6.205	61	246550	50.23	ug/L	98
20) acetone	6.184	58	41677	177.31	ug/L	97
21) acetonitrile	6.555	41	175178	375.78	ug/L	98
22) iodomethane	6.440	142	252736	48.18	ug/L	99
23) carbon disulfide	6.571	76	439195	42.37	ug/L	99
24) methylene chloride	6.811	84	157132	49.39	ug/L	100
25) methyl acetate	6.576	43	92762	44.66	ug/L	97
26) methyl tert butyl ether	7.115	73	315674	44.87	ug/L	99
27) trans-1,2-dichloroethene	7.146	61	204303	52.25	ug/L	100
28) hexane	7.450	56	105489	52.28	ug/L	99
29) di-isopropyl ether	7.633	45	490734	49.99	ug/L	98
30) 2-butanone	8.213	72	47912	197.06	ug/L	95
31) 1,1-dichloroethane	7.654	63	253337	52.12	ug/L	99
32) chloroprene	7.742	53	201752	53.92	ug/L	100
33) acrylonitrile	7.047	53	44820	45.16	ug/L	99
34) vinyl acetate	7.586	86	17403	51.20	ug/L #	79
35) ethyl tert-butyl ether	8.041	59	384180	49.32	ug/L	99
36) ethyl acetate	8.224	45	16291	43.48	ug/L #	90
37) 2,2-dichloropropane	8.328	77	213296	49.37	ug/L	97
38) cis-1,2-dichloroethene	8.292	96	151966	53.18	ug/L	100
39) propionitrile	8.286	54	175954	455.04	ug/L	84
40) methyl acrylate	8.307	85	15881	48.58	ug/L	96
41) methacrylonitrile	8.464	67	43367	47.63	ug/L	98
42) bromochloromethane	8.558	128	74533	50.80	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88509.d
 Acq On : 25 Feb 2019 10:23 pm
 Operator : brittank
 Sample : jc83332-1ms Inst : MS4B
 Misc : MS32758,V4B3742,5,,,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:23:59 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) tetrahydrofuran	8.579	72	14328	46.32	ug/L	89
44) chloroform	8.632	83	242341	50.74	ug/L	98
45) tert-butyl formate	8.658	59	38118	21.28	ug/L	93
47) 1,1,1-trichloroethane	8.883	97	235942	50.35	ug/L	97
48) cyclohexane	8.992	84	241678	51.34	ug/L	94
50) 1,1-dichloropropene	9.029	75	180313	51.46	ug/L	100
51) carbon tetrachloride	9.066	117	214193	52.00	ug/L	100
52) tert-amyl alcohol	9.128	73	31876	208.28	ug/L	97
53) isopropyl acetate	9.144	87	21306	47.10	ug/L #	87
56) n-butyl alcohol	9.652	41	116284	1852.45	ug/L	98
57) 2,2,4-trimethylpentane	9.343	57	575479	47.31	ug/L	99
58) benzene	9.259	78	514351	51.71	ug/L	99
59) tert-amyl methyl ether	9.322	73	373861	50.40	ug/L	99
60) heptane	9.479	57	105807	54.19	ug/L	99
61) 1,2-dichloroethane	9.280	62	164266	47.53	ug/L	99
62) ethyl acrylate	9.897	55	118026	47.37	ug/L	100
63) trichloroethene	9.934	95	130632	51.87	ug/L	98
65) methyl methacrylate	10.154	100	24651	47.78	ug/L	96
66) methylcyclohexane	10.227	83	267068	49.57	ug/L	98
67) 1,2-dichloropropane	10.206	63	129644	50.71	ug/L	99
68) dibromomethane	10.316	93	77114	49.89	ug/L	99
69) bromodichloromethane	10.457	83	169614	50.37	ug/L	99
71) epichlorohydrin	10.766	57	43887	188.81	ug/L	98
72) cis-1,3-dichloropropene	10.907	75	186156	50.76	ug/L	99
73) 4-methyl-2-pentanone	11.001	58	179895	200.97	ug/L	95
74) isoamyl alcohol	10.990	70	59565	840.91	ug/L	100
77) toluene	11.299	92	292686	50.78	ug/L	99
78) ethyl methacrylate	11.461	69	124036	51.44	ug/L	98
79) trans-1,3-dichloropropene	11.482	75	160180	50.53	ug/L	99
80) 1,1,2-trichloroethane	11.712	83	84526	49.66	ug/L	100
81) tetrachloroethene	11.874	164	117897	52.69	ug/L	99
82) 2-hexanone	11.874	58	150529	202.92	ug/L	99
83) 1,3-dichloropropane	11.906	76	158405	48.85	ug/L	95
84) butyl acetate	11.958	56	67623	48.39	ug/L	100
85) dibromochloromethane	12.167	129	120837	48.63	ug/L	99
86) 1,2-dibromoethane	12.335	107	125034	53.37	ug/L	100
87) n-butyl ether	12.795	57	523512	52.48	ug/L	99
88) chlorobenzene	12.847	112	332646	50.61	ug/L	99
89) 1,1,1,2-tetrachloroethane	12.915	131	146890	51.63	ug/L	98
90) ethylbenzene	12.910	91	578302	52.54	ug/L	99
91) m,p-xylene	13.041	106	436035	104.65	ug/L	99
92) o-xylene	13.480	91	489382	53.52	ug/L	99
93) styrene	13.491	104	360325	53.40	ug/L	97
94) butyl acrylate	13.287	55	205745	50.82	ug/L	98
95) isopropylbenzene	13.862	105	638457	52.89	ug/L	100
96) bromoform	13.747	173	85262	47.11	ug/L	100
97) cis-1,4-dichloro-2-butene	13.898	88	37554	39.55	ug/L	97
100) 1,1,2,2-tetrachloroethane	14.165	83	152553	50.44	ug/L	99
101) trans-1,4-dichloro-2-b...	14.202	53	27484	41.67	ug/L	97
102) 1,2,3-trichloropropane	14.265	110	37784	50.86	ug/L	93
103) bromobenzene	14.286	156	165238	54.40	ug/L	95
104) n-propylbenzene	14.322	91	725059	56.13	ug/L	100
105) 2-chlorotoluene	14.469	126	155659	55.55	ug/L	96
106) 4-chlorotoluene	14.594	91	408750	54.86	ug/L	100
107) 1,3,5-trimethylbenzene	14.495	105	540795	53.88	ug/L	100
108) tert-butylbenzene	14.871	119	470149	53.32	ug/L	98
109) 1,2,4-trimethylbenzene	14.929	105	534956	53.49	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88509.d
Acq On : 25 Feb 2019 10:23 pm
Operator : brittank
Sample : jc83332-1ms Inst : MS4B
Misc : MS32758,V4B3742,5,,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 12:23:59 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	sec-butylbenzene	15.117	105	714747	52.44	ug/L	100
111)	p-isopropyltoluene	15.264	119	606496	52.27	ug/L	99
112)	1,3-dichlorobenzene	15.305	146	316962	51.77	ug/L	99
113)	1,4-dichlorobenzene	15.410	146	319963	51.44	ug/L	100
114)	1,2-dichlorobenzene	15.823	146	323771	50.62	ug/L	99
115)	benzyl chloride	15.509	91	312421	55.34	ug/L	100
116)	n-butylbenzene	15.719	92	294955	51.12	ug/L	99
117)	hexachloroethane	16.153	201	123237	50.44	ug/L	98
118)	1,2-dibromo-3-chloropr...	16.665	157	39385	46.29	ug/L	98
119)	1,3,5-trichlorobenzene	16.874	180	316407	47.39	ug/L	100
120)	1,2,4-trichlorobenzene	17.554	180	281720	48.72	ug/L	98
121)	2-ethylhexyl acrylate	17.560	70	21862	10.56	ug/L	93
122)	hexachlorobutadiene	17.669	225	153785	46.14	ug/L	98
123)	naphthalene	17.858	128	536354	48.72	ug/L	100
124)	1,2,3-trichlorobenzene	18.093	180	256866	48.80	ug/L	98
125)	2-methylnaphthalene	19.144	142	101356	18.52	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88510.d
 Acq On : 25 Feb 2019 10:51 pm
 Operator : brittank
 Sample : jc83332-1msd Inst : MS4B
 Misc : MS32758,V4B3742,5,,,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:37:10 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.754	65	103769	500.00	ug/L	0.02
5) pentafluorobenzene	8.757	168	236582	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.630	114	315607	50.00	ug/L	0.00
75) chlorobenzene-d5	12.810	117	289921	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	173422	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	111973	52.70	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	105.40%
55) 1,2-dichloroethane-d4 (s)	9.196	65	114994	52.03	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	104.06%
76) toluene-d8 (s)	11.220	98	357552	51.42	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.84%
99) 4-bromofluorobenzene (s)	14.087	95	134417	54.22	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.44%
Target Compounds						
3) tertiary butyl alcohol	6.843	59	82728	237.86	ug/L	97
4) 1,4-dioxane	10.248	88	31720	1218.18	ug/L	92
6) chlorodifluoromethane	3.898	51	205052	36.73	ug/L	99
7) dichlorodifluoromethane	3.888	85	279993	54.87	ug/L	98
8) chloromethane	4.238	50	300786	48.05	ug/L	99
9) vinyl chloride	4.442	62	278302	48.61	ug/L	99
10) 1,3-butadiene	4.473	54	164921	41.00	ug/L	99
11) bromomethane	4.981	94	181437	46.34	ug/L	97
12) chloroethane	5.122	64	130745	48.49	ug/L	98
13) trichlorofluoromethane	5.519	101	292229	50.79	ug/L	99
14) vinyl bromide	5.420	106	159030	47.85	ug/L	97
15) ethyl ether	5.812	74	64044	49.87	ug/L	95
16) 2-chloropropane	6.016	43	265601	44.01	ug/L	98
17) acrolein	6.022	56	24939	54.27	ug/L	99
18) freon 113	6.220	151	138822	48.60	ug/L	97
19) 1,1-dichloroethene	6.199	61	244072	48.27	ug/L	98
20) acetone	6.189	58	42878	177.07	ug/L	93
21) acetonitrile	6.550	41	181850	378.65	ug/L	96
22) iodomethane	6.435	142	254706	47.13	ug/L	100
23) carbon disulfide	6.571	76	437980	41.02	ug/L	100
24) methylene chloride	6.806	84	158844	48.46	ug/L	99
25) methyl acetate	6.581	43	95098	44.45	ug/L	98
26) methyl tert butyl ether	7.115	73	325991	44.98	ug/L	99
27) trans-1,2-dichloroethene	7.151	61	207315	51.47	ug/L	99
28) hexane	7.449	56	103798	49.93	ug/L	99
29) di-isopropyl ether	7.627	45	502551	49.69	ug/L	99
30) 2-butanone	8.218	72	48975	195.52	ug/L	92
31) 1,1-dichloroethane	7.653	63	256531	51.22	ug/L	99
32) chloroprene	7.742	53	203653	52.83	ug/L	98
33) acrylonitrile	7.047	53	47136	46.11	ug/L	100
34) vinyl acetate	7.575	86	18789	53.66	ug/L	# 83
35) ethyl tert-butyl ether	8.040	59	393454	49.03	ug/L	100
36) ethyl acetate	8.224	45	16881	43.73	ug/L	# 91
37) 2,2-dichloropropane	8.328	77	215368	48.39	ug/L	96
38) cis-1,2-dichloroethene	8.292	96	154357	52.44	ug/L	97
39) propionitrile	8.286	54	180019	451.90	ug/L	83
40) methyl acrylate	8.307	85	16884	50.13	ug/L	96
41) methacrylonitrile	8.464	67	44262	47.19	ug/L	97
42) bromochloromethane	8.558	128	75113	49.69	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88510.d
 Acq On : 25 Feb 2019 10:51 pm
 Operator : brittink
 Sample : jc83332-1msd Inst : MS4B
 Misc : MS32758,V4B3742,5,,,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:37:10 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) tetrahydrofuran	8.579	72	15253	47.86	ug/L	86
44) chloroform	8.631	83	247279	50.26	ug/L	99
45) tert-butyl formate	8.663	59	31310	16.97	ug/L	97
47) 1,1,1-trichloroethane	8.883	97	239245	49.56	ug/L	98
48) cyclohexane	8.992	84	235190	48.50	ug/L	96
50) 1,1-dichloropropene	9.029	75	184488	51.11	ug/L	99
51) carbon tetrachloride	9.066	117	216329	50.98	ug/L	100
52) tert-amyl alcohol	9.128	73	33491	212.41	ug/L	98
53) isopropyl acetate	9.144	87	22349	47.96	ug/L	98
56) n-butyl alcohol	9.651	41	124361	1919.94	ug/L	99
57) 2,2,4-trimethylpentane	9.343	57	569470	45.37	ug/L	98
58) benzene	9.259	78	523462	51.00	ug/L	99
59) tert-amyl methyl ether	9.322	73	382417	49.96	ug/L	99
60) heptane	9.479	57	103923	51.59	ug/L	96
61) 1,2-dichloroethane	9.280	62	167297	46.91	ug/L	99
62) ethyl acrylate	9.897	55	123525	48.05	ug/L	100
63) trichloroethene	9.934	95	134724	51.85	ug/L	98
65) methyl methacrylate	10.153	100	25320	47.56	ug/L	95
66) methylcyclohexane	10.227	83	266203	47.89	ug/L	96
67) 1,2-dichloropropane	10.206	63	131642	49.90	ug/L	98
68) dibromomethane	10.316	93	77719	48.73	ug/L	95
69) bromodichloromethane	10.457	83	173168	49.83	ug/L	99
71) epichlorohydrin	10.771	57	43816	182.68	ug/L	98
72) cis-1,3-dichloropropene	10.907	75	192228	50.80	ug/L	99
73) 4-methyl-2-pentanone	11.001	58	183477	198.64	ug/L	96
74) isoamyl alcohol	10.990	70	64034	876.09	ug/L	97
77) toluene	11.299	92	301309	51.22	ug/L	99
78) ethyl methacrylate	11.466	69	127853	51.95	ug/L	97
79) trans-1,3-dichloropropene	11.482	75	163609	50.57	ug/L	97
80) 1,1,2-trichloroethane	11.712	83	86900	50.02	ug/L	98
81) tetrachloroethene	11.874	164	119855	52.48	ug/L	97
82) 2-hexanone	11.874	58	154595	204.18	ug/L	98
83) 1,3-dichloropropane	11.906	76	162418	49.08	ug/L	95
84) butyl acetate	11.958	56	68312	47.90	ug/L	94
85) dibromochloromethane	12.167	129	123549	48.72	ug/L	100
86) 1,2-dibromoethane	12.335	107	128006	53.54	ug/L	100
87) n-butyl ether	12.795	57	530698	52.13	ug/L	100
88) chlorobenzene	12.847	112	337392	50.29	ug/L	100
89) 1,1,1,2-tetrachloroethane	12.915	131	149819	51.59	ug/L	100
90) ethylbenzene	12.910	91	585234	52.09	ug/L	99
91) m,p-xylene	13.041	106	443553	104.30	ug/L	98
92) o-xylene	13.480	91	494426	52.98	ug/L	100
93) styrene	13.490	104	366562	53.23	ug/L	97
94) butyl acrylate	13.286	55	211164	51.10	ug/L	99
95) isopropylbenzene	13.862	105	642211	52.13	ug/L	100
96) bromoform	13.747	173	87424	47.33	ug/L	97
97) cis-1,4-dichloro-2-butene	13.898	88	38186	39.40	ug/L	98
100) 1,1,2,2-tetrachloroethane	14.165	83	154583	50.98	ug/L	99
101) trans-1,4-dichloro-2-b...	14.202	53	28406	42.95	ug/L	96
102) 1,2,3-trichloropropane	14.264	110	38141	51.20	ug/L	99
103) bromobenzene	14.285	156	166871	54.79	ug/L	97
104) n-propylbenzene	14.322	91	725253	55.99	ug/L	99
105) 2-chlorotoluene	14.468	126	157992	56.23	ug/L	94
106) 4-chlorotoluene	14.594	91	412307	55.19	ug/L	100
107) 1,3,5-trimethylbenzene	14.495	105	539637	53.63	ug/L	99
108) tert-butylbenzene	14.871	119	473390	53.54	ug/L	100
109) 1,2,4-trimethylbenzene	14.929	105	537408	53.59	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88510.d
 Acq On : 25 Feb 2019 10:51 pm
 Operator : brittank
 Sample : jc83332-1msd Inst : MS4B
 Misc : MS32758,V4B3742,5,,,,,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:37:10 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	15.117	105	717293	52.48	ug/L	100
111) p-isopropyltoluene	15.263	119	606844	52.16	ug/L	99
112) 1,3-dichlorobenzene	15.305	146	320403	52.20	ug/L	100
113) 1,4-dichlorobenzene	15.410	146	324038	51.96	ug/L	99
114) 1,2-dichlorobenzene	15.823	146	329737	51.41	ug/L	99
115) benzyl chloride	15.509	91	315816	55.80	ug/L	100
116) n-butylbenzene	15.718	92	295809	51.13	ug/L	100
117) hexachloroethane	16.153	201	124287	50.73	ug/L	98
118) 1,2-dibromo-3-chloropr...	16.665	157	40376	47.32	ug/L	97
119) 1,3,5-trichlorobenzene	16.874	180	317650	47.45	ug/L	99
120) 1,2,4-trichlorobenzene	17.554	180	288025	49.68	ug/L	99
121) 2-ethylhexyl acrylate	17.560	70	23013	10.98	ug/L	93
122) hexachlorobutadiene	17.669	225	156731	46.90	ug/L	95
123) naphthalene	17.863	128	559597	50.69	ug/L	99
124) 1,2,3-trichlorobenzene	18.098	180	262413	49.72	ug/L	99
125) 2-methylnaphthalene	19.144	142	119606	21.40	ug/L	98

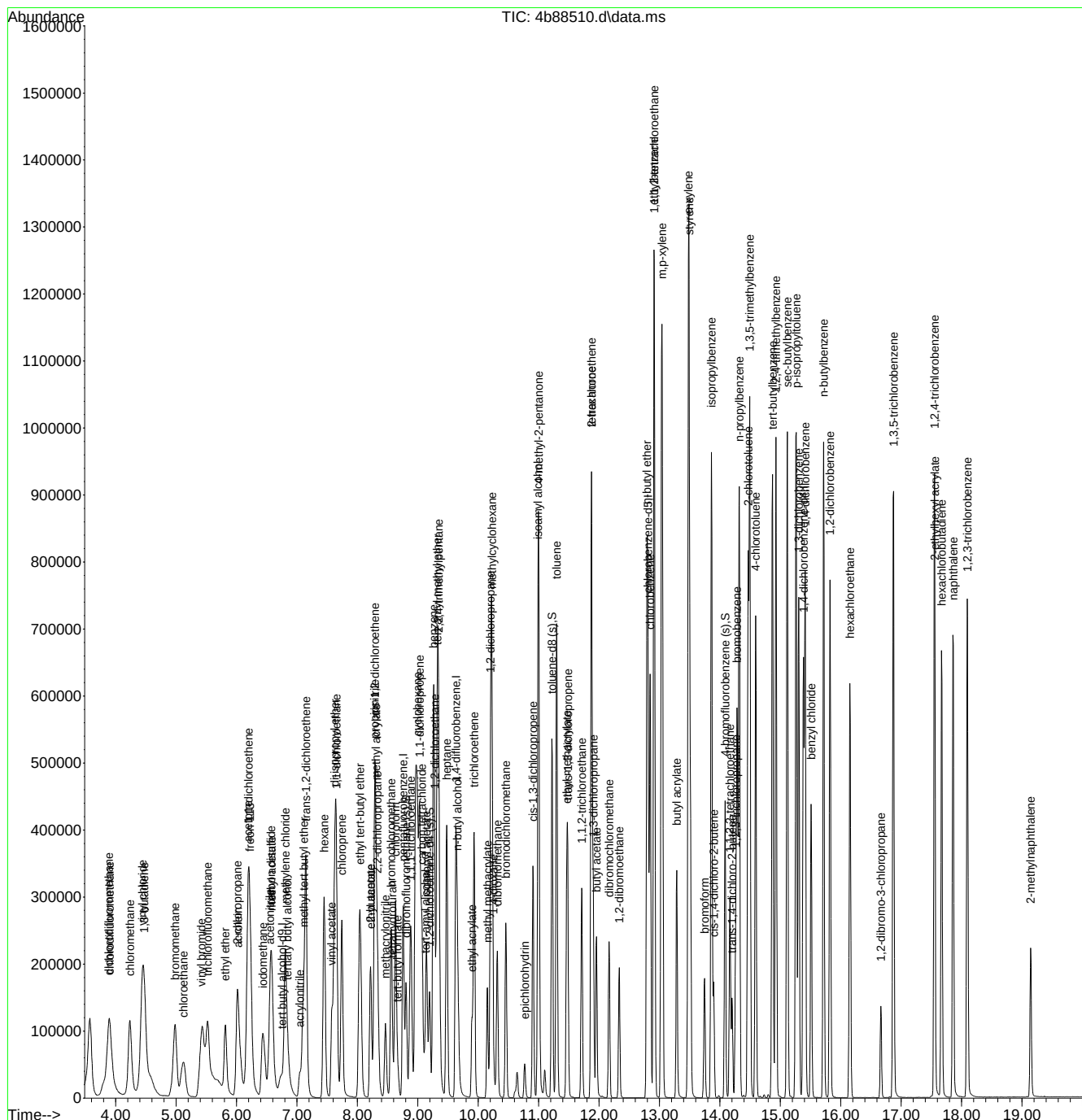
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\  
Data File : 4b88510.d  
Acq On    : 25 Feb 2019   10:51 pm  
Operator  : brittank  
Sample    : jc83332-1msd                               Inst   :  
Misc      : MS32758,V4B3742,5,,,,1  
ALS Vial  : 28      Sample Multiplier: 1
```

Inst : MS4B

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 12:37:10 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



7.4.2

SW-846 Method 8260

Data File : C:\MSDCHEM\1\DATA\V4B3694\4B87619.D

Vial: 7

Acq On : 10 Jan 2019 5:40 pm

Operator: deving

Sample : bfb

Inst : MS4B

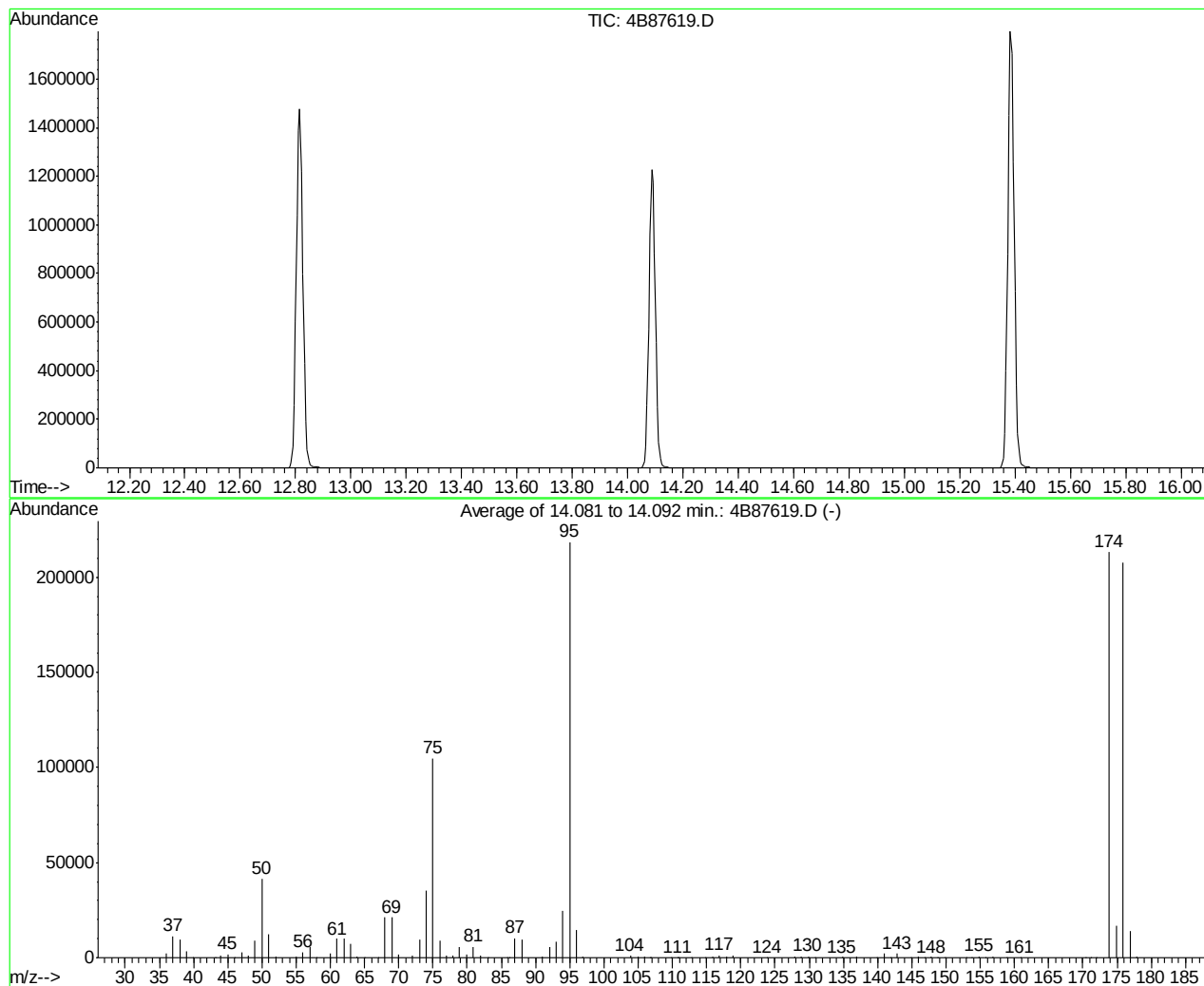
Misc : MS31708,V4B3694,5,,,1

Multiplr: 1.00

MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4B3694.M (RTE Integrator)

Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um



AutoFind: Scans 2027, 2028, 2029; Background Corrected with Scan 2018

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	41493	PASS
75	95	30	60	48.0	104826	PASS
95	95	100	100	100.0	218538	PASS
96	95	5	9	6.7	14652	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	97.7	213482	PASS
175	174	5	9	7.8	16627	PASS
176	174	95	101	97.3	207786	PASS
177	176	5	9	6.8	14164	PASS

4B87619.D M4B3694.M

Fri Jan 11 11:06:59 2019 GCMS4B

Average of 14.081 to 14.092 min.: 4B87619.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	2049	49.00	9082	63.00	7113	76.00	8914
37.00	11426	50.00	41493	63.95	685	77.00	1397
38.05	9789	51.00	12576	65.00	65	77.90	907
39.00	3586	52.05	589	67.00	230	78.90	5502
39.95	142	55.00	509	68.00	21064	79.95	1696
43.10	56	56.00	3068	69.00	21173	80.90	5766
44.00	1141	57.00	5515	70.00	1609	81.90	1132
45.00	1951	57.95	237	72.00	1150	83.10	52
46.00	129	60.00	2013	73.00	9331	85.90	96
47.00	2963	61.00	9864	74.00	35290	86.10	128
48.00	1363	62.00	9836	75.00	104826	87.00	10175

Average of 14.081 to 14.092 min.: 4B87619.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.00	9278	106.70	50	123.90	63	144.85	226
90.95	736	106.85	169	127.85	767	145.90	305
92.00	5503	109.90	52	128.90	386	146.90	112
93.00	8499	110.70	50	129.85	778	147.85	518
94.00	24909	110.90	138	130.90	279	148.80	58
95.00	218538	112.80	65	134.85	394	149.90	150
96.00	14652	114.85	277	136.85	343	152.90	125
96.95	458	115.90	719	139.90	119	153.80	59
103.90	867	116.90	1234	140.90	2124	154.85	623
104.95	337	117.90	731	141.90	293	155.80	62
105.95	861	118.90	959	142.90	2159	156.90	367

Average of 14.081 to 14.092 min.: 4B87619.D

bfb

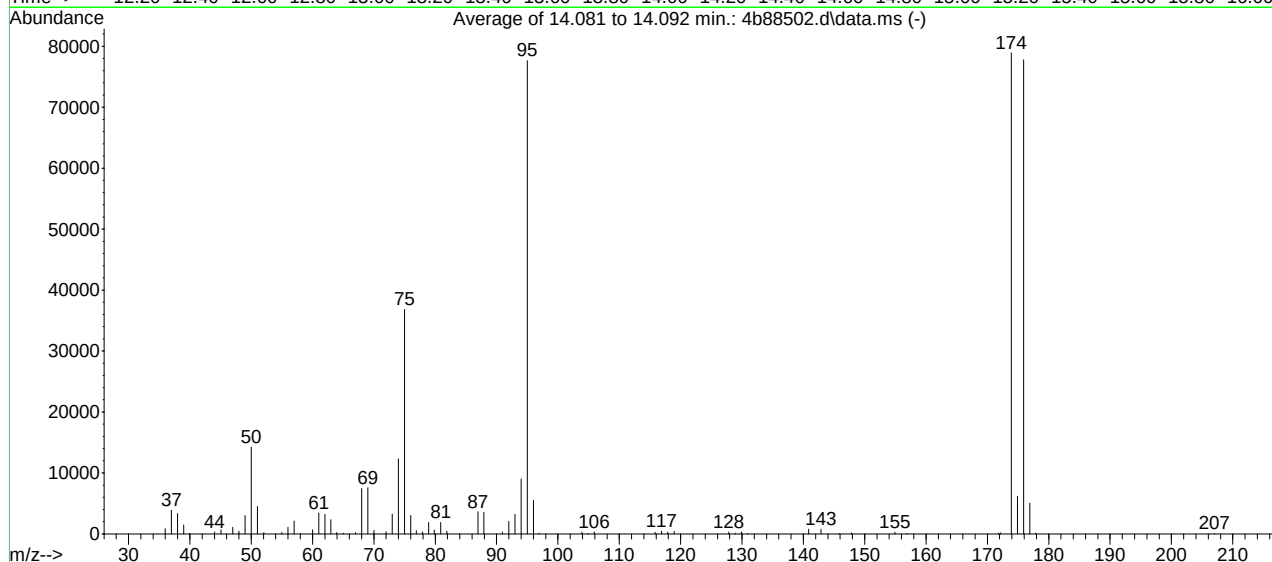
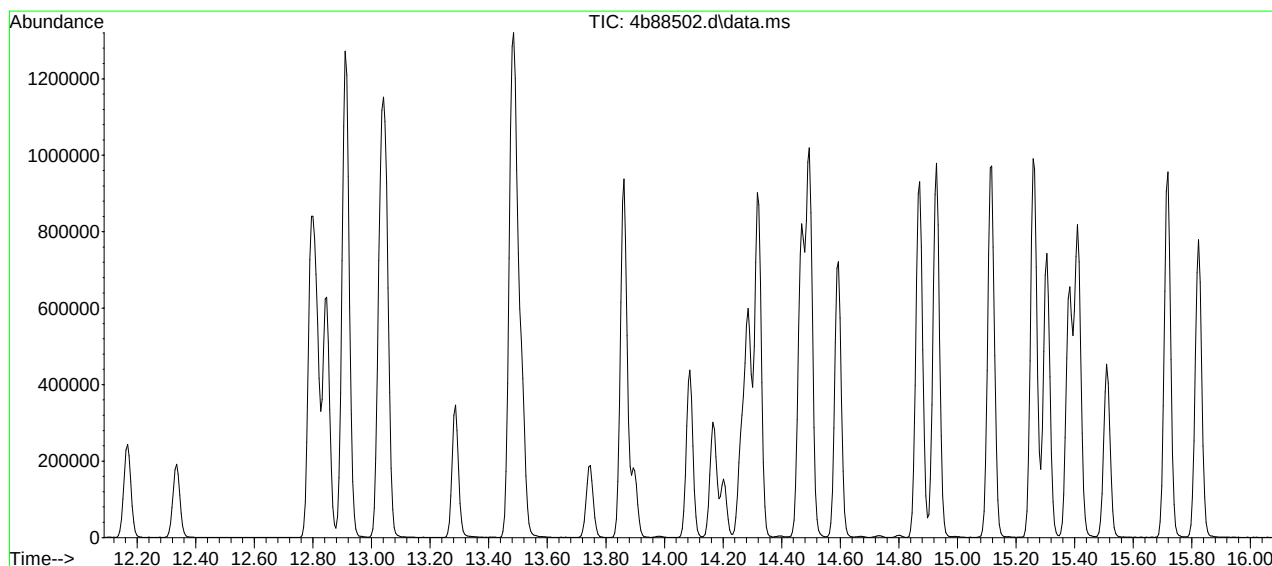
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
158.85	250						
160.85	251						
170.40	53						
171.20	67						
171.90	183						
173.90	213482						
174.90	16627						
175.90	207786						
176.90	14164						
177.85	404						

SW-846 Method 8260

Data File : C:\msdchem\1\data\lo...-27\v4b3742\4b88502.d Vial: 20
Acq On : 25 Feb 2019 6:56 pm Operator: brittank
Sample : bfb Inst : MS4B
Misc : MS32716,V4B3742,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4B3694.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um



AutoFind: Scans 2027, 2028, 2029; Background Corrected with Scan 2018

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	14214	PASS
75	95	30	60	47.4	36792	PASS
95	95	100	100	100.0	77653	PASS
96	95	5	9	7.1	5488	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	101.6	78920	PASS
175	174	5	9	7.8	6157	PASS
176	174	95	101	98.5	77773	PASS
177	176	5	9	6.5	5059	PASS

Average of 14.081 to 14.092 min.: 4b88502.d\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	858	51.00	4492	65.00	108	77.90	299
37.00	3875	52.05	204	67.00	197	78.90	1858
38.00	3329	55.00	228	68.00	7409	79.85	617
39.00	1431	56.00	1097	69.00	7574	80.90	1855
39.95	82	57.00	2077	70.00	566	81.90	454
44.00	302	58.00	50	72.00	371	86.95	3627
45.05	657	60.00	682	73.00	3266	87.90	3540
47.00	1078	61.00	3446	74.00	12324	90.95	300
48.00	461	62.00	3218	75.00	36792	92.00	2043
49.00	3030	63.00	2316	76.00	3035	93.00	3203
50.00	14214	63.95	213	76.90	516	94.00	9013

Average of 14.081 to 14.092 min.: 4b88502.d\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	77653	128.90	106	173.90	78920		
96.00	5488	129.90	294	174.90	6157		
96.90	126	130.90	63	175.90	77773		
103.90	298	140.85	752	176.90	5059		
104.90	58	142.90	754	177.85	111		
105.90	307	145.80	60	207.00	57		
115.85	251	147.80	151				
116.90	442	154.95	249				
117.90	302	156.90	65				
118.95	402	171.80	113				
127.85	296	172.15	178				

7.5.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87621.D
 Acq On : 10 Jan 2019 6:54 pm
 Operator : deving
 Sample : IC3694-0.5
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 11 10:44:34 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 07:55:58 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.74	65	143752	500.00	ug/L	0.01
5) pentafluorobenzene	8.76	168	260905	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	350985	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	308352	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	210492	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	117174	49.93	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.86%
55) 1,2-dichloroethane-d4 (s)	9.20	65	124371	51.14	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	102.28%
76) toluene-d8 (s)	11.22	98	377384	50.25	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.50%
99) 4-bromofluorobenzene (s)	14.09	95	147342	48.38	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	96.76%

Target Compounds

						Qvalue
6) chlorodifluoromethane	3.90	51	2648	0.42	ug/L	89
7) dichlorodifluoromethane	3.90	85	2223	0.36	ug/L #	49
8) chloromethane	4.23	50	3313	0.47	ug/L	89
9) vinyl chloride	4.44	62	3046	0.46	ug/L	89
12) chloroethane	5.11	64	1392	0.45	ug/L	55
13) trichlorofluoromethane	5.51	101	2892	0.43	ug/L	84
14) vinyl bromide	5.42	106	1526	0.39	ug/L	91
18) freon 113	6.20	151	1180	0.36	ug/L	85
19) 1,1-dichloroethene	6.20	61	2323	0.40	ug/L	95
22) iodomethane	6.42	142	2449	0.40	ug/L	86
23) carbon disulfide	6.56	76	5298	0.45	ug/L	77
24) methylene chloride	6.80	84	1649	0.47	ug/L	95
26) methyl tert butyl ether	7.11	73	3462	0.43	ug/L	85
27) trans-1,2-dichloroethene	7.14	61	1900	0.42	ug/L	94
29) di-isopropyl ether	7.63	45	4713	0.41	ug/L	93
31) 1,1-dichloroethane	7.65	63	2272	0.41	ug/L	93
32) chloroprene	7.74	53	1710	0.38	ug/L	89
35) ethyl tert-butyl ether	8.04	59	3784	0.42	ug/L	95
37) 2,2-dichloropropane	8.32	77	2234	0.46	ug/L	88
38) cis-1,2-dichloroethene	8.29	96	1415	0.43	ug/L	96
44) chloroform	8.63	83	2695	0.51	ug/L	89
47) 1,1,1-trichloroethane	8.88	97	2457	0.46	ug/L	90
48) cyclohexane	8.99	84	2303	0.36	ug/L	93
50) 1,1-dichloropropene	9.03	75	1568	0.39	ug/L	92
51) carbon tetrachloride	9.06	117	1877	0.40	ug/L	89
58) benzene	9.26	78	4956	0.43	ug/L	81
59) tert-amyl methyl ether	9.32	73	3953	0.46	ug/L	93
61) 1,2-dichloroethane	9.28	62	2077	0.55	ug/L	87
63) trichloroethene	9.93	95	1194	0.41	ug/L	92
64) 2-chloroethyl vinyl ether	10.69	63	2219	1.52	ug/L	89
67) 1,2-dichloropropane	10.21	63	1244	0.41	ug/L	86
68) dibromomethane	10.32	93	853	0.48	ug/L	77
69) bromodichloromethane	10.46	83	1608	0.41	ug/L	85

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87621.D
 Acq On : 10 Jan 2019 6:54 pm
 Operator : deving
 Sample : IC3694-0.5
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 11 10:44:34 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 07:55:58 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) cis-1,3-dichloropropene	10.91	75	1639	0.37	ug/L	95
77) toluene	11.30	92	2740	0.43	ug/L	95
79) trans-1,3-dichloropropene	11.49	75	1372	0.37	ug/L	75
80) 1,1,2-trichloroethane	11.72	83	736	0.39	ug/L	90
81) tetrachloroethene	11.87	164	1045	0.42	ug/L #	80
83) 1,3-dichloropropane	11.91	76	1495	0.42	ug/L	94
85) dibromochloromethane	12.17	129	1123	0.41	ug/L	69
86) 1,2-dibromoethane	12.33	107	1063	0.41	ug/L	88
87) n-butyl ether	12.79	57	4556	0.39	ug/L	78
88) chlorobenzene	12.85	112	3078	0.43	ug/L	87
89) 1,1,1,2-tetrachloroethane	12.92	131	1276	0.40	ug/L	92
90) ethylbenzene	12.91	91	5008	0.41	ug/L	97
91) m,p-xylene	13.05	106	3757	0.81	ug/L	90
92) o-xylene	13.48	91	4024	0.38	ug/L	93
95) isopropylbenzene	13.86	105	5271	0.38	ug/L	94
96) bromoform	13.75	173	799	0.40	ug/L	81
100) 1,1,2,2-tetrachloroethane	14.17	83	1614	0.44	ug/L	84
103) bromobenzene	14.29	156	1453	0.38	ug/L	82
104) n-propylbenzene	14.32	91	6239	0.37	ug/L	94
105) 2-chlorotoluene	14.47	126	1371	0.38	ug/L	90
106) 4-chlorotoluene	14.59	91	3598	0.38	ug/L	96
112) 1,3-dichlorobenzene	15.31	146	3348	0.44	ug/L	96
113) 1,4-dichlorobenzene	15.42	146	3347	0.44	ug/L	92
114) 1,2-dichlorobenzene	15.82	146	3339	0.42	ug/L	96
115) benzyl chloride	15.51	91	2810	0.38	ug/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87622.D
 Acq On : 10 Jan 2019 7:23 pm
 Operator : deving
 Sample : IC3694-1
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 11 10:46:30 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 07:55:58 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.73	65	140059	500.00	ug/L	0.00
5) pentafluorobenzene	8.76	168	257166	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	348333	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	309179	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	213372	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	116769	50.48	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.96%
55) 1,2-dichloroethane-d4 (s)	9.20	65	123901	51.33	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	102.66%
76) toluene-d8 (s)	11.23	98	372304	49.44	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.88%
99) 4-bromofluorobenzene (s)	14.09	95	152037	49.25	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.50%

Target Compounds

						Qvalue
6) chlorodifluoromethane	3.90	51	5863	0.94	ug/L	94
7) dichlorodifluoromethane	3.89	85	5099	0.83	ug/L	88
8) chloromethane	4.23	50	6744	0.96	ug/L	92
9) vinyl chloride	4.44	62	5787	0.89	ug/L	90
10) 1,3-butadiene	4.45	54	4291	0.97	ug/L #	78
11) bromomethane	4.97	94	4873	1.15	ug/L	91
12) chloroethane	5.12	64	2918	0.95	ug/L	90
13) trichlorofluoromethane	5.51	101	6158	0.94	ug/L	95
14) vinyl bromide	5.42	106	3562	0.93	ug/L #	76
15) ethyl ether	5.80	74	1250	0.88	ug/L	89
16) 2-chloropropane	6.01	43	6676	1.05	ug/L	94
18) freon 113	6.20	151	2980	0.93	ug/L	81
19) 1,1-dichloroethene	6.19	61	5306	0.94	ug/L	92
21) acetonitrile	6.54	41	4940	9.95	ug/L	93
22) iodomethane	6.43	142	5710	0.96	ug/L	94
23) carbon disulfide	6.56	76	11491	0.99	ug/L	98
24) methylene chloride	6.80	84	3609	1.04	ug/L	87
26) methyl tert butyl ether	7.11	73	7540	0.95	ug/L	92
27) trans-1,2-dichloroethene	7.14	61	4246	0.95	ug/L	93
28) hexane	7.45	56	2128	0.92	ug/L #	86
29) di-isopropyl ether	7.63	45	10235	0.91	ug/L	93
30) 2-butanone	8.24	72	806	2.78	ug/L #	1
31) 1,1-dichloroethane	7.65	63	5106	0.93	ug/L	90
32) chloroprene	7.75	53	3963	0.90	ug/L	94
35) ethyl tert-butyl ether	8.04	59	8417	0.94	ug/L	96
37) 2,2-dichloropropane	8.33	77	4810	1.00	ug/L	99
38) cis-1,2-dichloroethene	8.29	96	3029	0.93	ug/L	98
39) propionitrile	8.29	54	3843	8.91	ug/L	82
42) bromochloromethane	8.56	128	1503	0.93	ug/L	93
44) chloroform	8.63	83	5412	1.04	ug/L	98
45) tert-butyl formate	8.67	59	1845	0.91	ug/L	87
47) 1,1,1-trichloroethane	8.88	97	5013	0.96	ug/L	99
48) cyclohexane	8.99	84	5142	0.82	ug/L	85

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87622.D
 Acq On : 10 Jan 2019 7:23 pm
 Operator : deving
 Sample : IC3694-1
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 11 10:46:30 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 07:55:58 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 1,1-dichloropropene	9.03	75	4061	1.02	ug/L	92
51) carbon tetrachloride	9.06	117	4305	0.92	ug/L	94
57) 2,2,4-trimethylpentane	9.33	57	12334	0.84	ug/L	92
58) benzene	9.26	78	11129	0.98	ug/L	94
59) tert-amyl methyl ether	9.32	73	8013	0.94	ug/L	87
60) heptane	9.47	57	1931	0.84	ug/L	86
61) 1,2-dichloroethane	9.27	62	4066	1.08	ug/L	95
63) trichloroethene	9.93	95	2780	0.95	ug/L	89
64) 2-chloroethyl vinyl ether	10.68	63	5591	3.85	ug/L	93
66) methylcyclohexane	10.23	83	5558	0.88	ug/L	96
67) 1,2-dichloropropane	10.21	63	2689	0.90	ug/L	95
68) dibromomethane	10.32	93	1544	0.88	ug/L	93
69) bromodichloromethane	10.46	83	3975	1.02	ug/L	99
72) cis-1,3-dichloropropene	10.91	75	3809	0.86	ug/L	95
73) 4-methyl-2-pentanone	11.01	58	3322	3.16	ug/L	98
77) toluene	11.30	92	6167	0.97	ug/L	91
78) ethyl methacrylate	11.47	69	2031	0.72	ug/L	92
79) trans-1,3-dichloropropene	11.48	75	3274	0.89	ug/L	84
80) 1,1,2-trichloroethane	11.71	83	1790	0.94	ug/L	96
81) tetrachloroethene	11.87	164	2362	0.95	ug/L	82
82) 2-hexanone	11.88	58	2510	2.94	ug/L	95
83) 1,3-dichloropropane	11.91	76	3358	0.94	ug/L	94
84) butyl acetate	11.96	56	1328	0.84	ug/L #	77
85) dibromochloromethane	12.17	129	2670	0.96	ug/L	86
86) 1,2-dibromoethane	12.34	107	2427	0.92	ug/L	92
87) n-butyl ether	12.80	57	9795	0.84	ug/L	73
88) chlorobenzene	12.85	112	7200	1.00	ug/L	97
89) 1,1,1,2-tetrachloroethane	12.92	131	3101	0.96	ug/L	97
90) ethylbenzene	12.92	91	11706	0.96	ug/L	94
91) m,p-xylene	13.04	106	8564	1.84	ug/L	89
92) o-xylene	13.48	91	9044	0.86	ug/L	97
93) styrene	13.49	104	6130	0.79	ug/L	95
94) butyl acrylate	13.29	55	3572	0.78	ug/L	93
95) isopropylbenzene	13.86	105	12012	0.86	ug/L	98
96) bromoform	13.75	173	1807	0.90	ug/L	98
100) 1,1,2,2-tetrachloroethane	14.17	83	3799	1.02	ug/L	98
101) trans-1,4-dichloro-2-buten	14.21	53	753	0.91	ug/L #	72
102) 1,2,3-trichloropropane	14.27	110	797	0.86	ug/L #	81
103) bromobenzene	14.30	156	3575	0.92	ug/L #	74
104) n-propylbenzene	14.32	91	14443	0.84	ug/L	94
105) 2-chlorotoluene	14.47	126	3093	0.84	ug/L	89
106) 4-chlorotoluene	14.59	91	8462	0.88	ug/L	97
107) 1,3,5-trimethylbenzene	14.50	105	9971	0.75	ug/L	95
108) tert-butylbenzene	14.88	119	8208	0.67	ug/L	92
109) 1,2,4-trimethylbenzene	14.93	105	10107	0.77	ug/L	98
110) sec-butylbenzene	15.12	105	13447	0.73	ug/L	99
111) p-isopropyltoluene	15.26	119	11332	0.73	ug/L	94
112) 1,3-dichlorobenzene	15.31	146	7043	0.92	ug/L	95
113) 1,4-dichlorobenzene	15.42	146	7260	0.93	ug/L	97
114) 1,2-dichlorobenzene	15.83	146	7481	0.93	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87622.D
Acq On : 10 Jan 2019 7:23 pm
Operator : deving
Sample : IC3694-1
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 11 10:46:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 07:55:58 2019
Response via : Initial Calibration

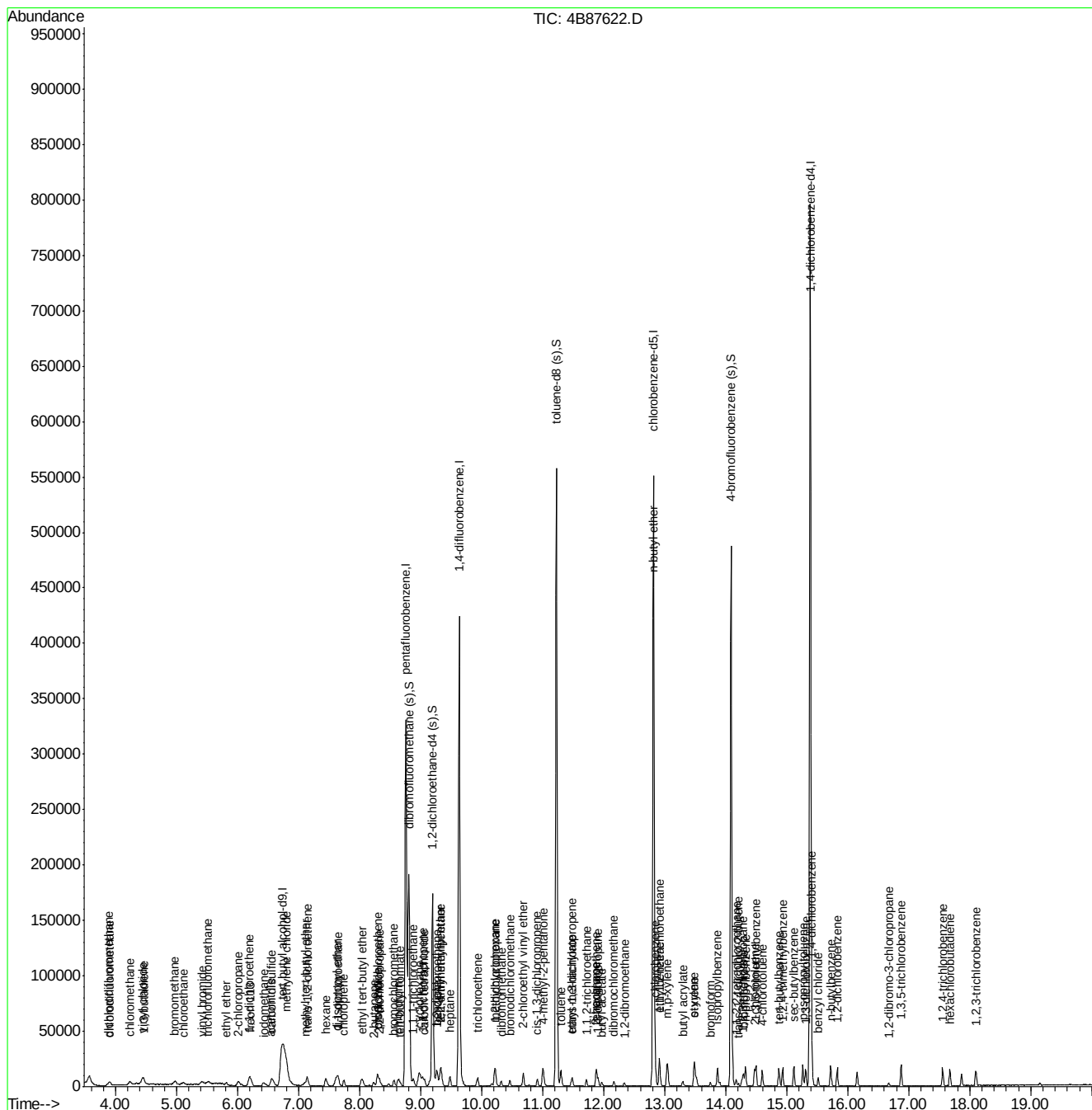
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) benzyl chloride	15.51	91	6065	0.81	ug/L	99
116) n-butylbenzene	15.72	92	5614	0.73	ug/L	98
118) 1,2-dibromo-3-chloropropan	16.67	157	888	0.78	ug/L	80
119) 1,3,5-trichlorobenzene	16.87	180	7203	0.82	ug/L	94
120) 1,2,4-trichlorobenzene	17.55	180	5964	0.76	ug/L	94
122) hexachlorobutadiene	17.67	225	3688	0.86	ug/L	94
124) 1,2,3-trichlorobenzene	18.10	180	5156	0.72	ug/L	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87622.D
Acq On : 10 Jan 2019 7:23 pm
Operator : deving
Sample : IC3694-1
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 11 10:46:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 07:55:58 2019
Response via : Initial Calibration



7.6.2

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87623.D
 Acq On : 10 Jan 2019 7:50 pm
 Operator : deving
 Sample : IC3694-2
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 11 10:52:24 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.75	65	138558	500.00	ug/L	0.02
5) pentafluorobenzene	8.76	168	253632	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	341909	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	311543	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	208300	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	114229	50.15	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.30%
55) 1,2-dichloroethane-d4 (s)	9.20	65	120841	50.47	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	100.94%
76) toluene-d8 (s)	11.23	98	374575	50.13	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.26%
99) 4-bromofluorobenzene (s)	14.09	95	148545	49.89	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.78%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.84	59	4846	10.43	ug/L	77
4) 1,4-dioxane	10.25	88	1618	46.54	ug/L	78
6) chlorodifluoromethane	3.90	51	13110	2.19	ug/L	94
7) dichlorodifluoromethane	3.88	85	11412	2.09	ug/L	98
8) chloromethane	4.23	50	14602	2.18	ug/L	92
9) vinyl chloride	4.44	62	13168	2.15	ug/L	94
10) 1,3-butadiene	4.45	54	9090	2.11	ug/L	99
11) bromomethane	4.98	94	9632	2.29	ug/L	93
12) chloroethane	5.11	64	6326	2.19	ug/L	96
13) trichlorofluoromethane	5.51	101	13198	2.14	ug/L	98
14) vinyl bromide	5.42	106	7716	2.17	ug/L	98
15) ethyl ether	5.82	74	2979	2.16	ug/L	# 72
16) 2-chloropropane	6.01	43	14658	2.27	ug/L	93
18) freon 113	6.20	151	6725	2.20	ug/L	94
19) 1,1-dichloroethene	6.19	61	11804	2.18	ug/L	93
20) acetone	6.19	58	2111	8.13	ug/L	# 76
21) acetonitrile	6.56	41	12144	23.59	ug/L	86
22) iodomethane	6.43	142	12782	2.21	ug/L	94
23) carbon disulfide	6.56	76	25479	2.23	ug/L	97
24) methylene chloride	6.81	84	7862	2.24	ug/L	93
25) methyl acetate	6.58	43	4846	2.11	ug/L	94
26) methyl tert butyl ether	7.11	73	17083	2.20	ug/L	99
27) trans-1,2-dichloroethene	7.14	61	9429	2.18	ug/L	93
28) hexane	7.45	56	4409	1.98	ug/L	89
29) di-isopropyl ether	7.63	45	23170	2.14	ug/L	90
30) 2-butanone	8.22	72	1994	7.43	ug/L	# 61
31) 1,1-dichloroethane	7.65	63	12151	2.26	ug/L	96
32) chloroprene	7.74	53	8806	2.13	ug/L	96
33) acrylonitrile	7.06	53	2336	2.13	ug/L	92
35) ethyl tert-butyl ether	8.04	59	18639	2.17	ug/L	97
37) 2,2-dichloropropane	8.32	77	10551	2.21	ug/L	95
38) cis-1,2-dichloroethene	8.29	96	6830	2.16	ug/L	98
39) propionitrile	8.29	54	9105	21.32	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87623.D
 Acq On : 10 Jan 2019 7:50 pm
 Operator : deving
 Sample : IC3694-2
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 11 10:52:24 2019

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M

Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um

QLast Update : Fri Jan 11 10:50:54 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) methacrylonitrile	8.47	67	2036	2.02	ug/L	88
42) bromochloromethane	8.56	128	3691	2.28	ug/L	91
44) chloroform	8.63	83	11763	2.23	ug/L	97
45) tert-butyl formate	8.66	59	4319	2.18	ug/L	95
47) 1,1,1-trichloroethane	8.88	97	11231	2.17	ug/L	95
48) cyclohexane	8.99	84	10852	1.92	ug/L	89
50) 1,1-dichloropropene	9.03	75	8392	2.17	ug/L	94
51) carbon tetrachloride	9.07	117	10288	2.26	ug/L	95
52) tert-amyl alcohol	9.12	73	1691	10.00	ug/L #	76
56) n-butyl alcohol	9.67	41	7079	100.88	ug/L	85
57) 2,2,4-trimethylpentane	9.34	57	26061	1.92	ug/L	98
58) benzene	9.26	78	24360	2.19	ug/L	97
59) tert-amyl methyl ether	9.32	73	18587	2.24	ug/L	99
60) heptane	9.48	57	4074	1.87	ug/L	92
61) 1,2-dichloroethane	9.28	62	8585	2.22	ug/L	96
62) ethyl acrylate	9.91	55	5109	1.83	ug/L	93
63) trichloroethene	9.93	95	6020	2.14	ug/L	92
64) 2-chloroethyl vinyl ether	10.68	63	13394	10.13	ug/L	99
66) methylcyclohexane	10.23	83	11963	1.99	ug/L	96
67) 1,2-dichloropropane	10.21	63	6239	2.18	ug/L	90
68) dibromomethane	10.32	93	3879	2.25	ug/L	94
69) bromodichloromethane	10.46	83	7856	2.09	ug/L	98
71) epichlorohydrin	10.78	57	2475	9.53	ug/L	90
72) cis-1,3-dichloropropene	10.91	75	8525	2.08	ug/L	98
73) 4-methyl-2-pentanone	11.00	58	8426	8.42	ug/L	96
74) isoamyl alcohol	11.00	70	2819	35.60	ug/L #	86
77) toluene	11.30	92	13954	2.21	ug/L	96
78) ethyl methacrylate	11.47	69	5111	1.93	ug/L	95
79) trans-1,3-dichloropropene	11.49	75	7231	2.08	ug/L	94
80) 1,1,2-trichloroethane	11.72	83	4225	2.26	ug/L	96
81) tetrachloroethene	11.87	164	5333	2.17	ug/L	98
82) 2-hexanone	11.88	58	6424	7.90	ug/L	93
83) 1,3-dichloropropane	11.91	76	7828	2.20	ug/L	99
84) butyl acetate	11.96	56	2981	1.95	ug/L	89
85) dibromochloromethane	12.17	129	5926	2.17	ug/L	97
86) 1,2-dibromoethane	12.34	107	5404	2.10	ug/L	96
87) n-butyl ether	12.80	57	22207	2.03	ug/L	92
88) chlorobenzene	12.85	112	15593	2.16	ug/L	97
89) 1,1,1,2-tetrachloroethane	12.92	131	6600	2.12	ug/L	96
90) ethylbenzene	12.92	91	26130	2.16	ug/L	98
91) m,p-xylene	13.05	106	19128	4.19	ug/L	93
92) o-xylene	13.49	91	20903	2.08	ug/L	98
93) styrene	13.50	104	13953	1.89	ug/L	99
94) butyl acrylate	13.29	55	8620	1.94	ug/L	99
95) isopropylbenzene	13.86	105	27321	2.06	ug/L	98
96) bromoform	13.75	173	4365	2.20	ug/L	87
97) cis-1,4-dichloro-2-butene	13.90	88	1990	1.91	ug/L	86
100) 1,1,2,2-tetrachloroethane	14.17	83	7981	2.19	ug/L	98
101) trans-1,4-dichloro-2-buten	14.21	53	1498	1.89	ug/L	87
102) 1,2,3-trichloropropane	14.27	110	1848	2.07	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87623.D
Acq On : 10 Jan 2019 7:50 pm
Operator : deving
Sample : IC3694-2
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 11 10:52:24 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration

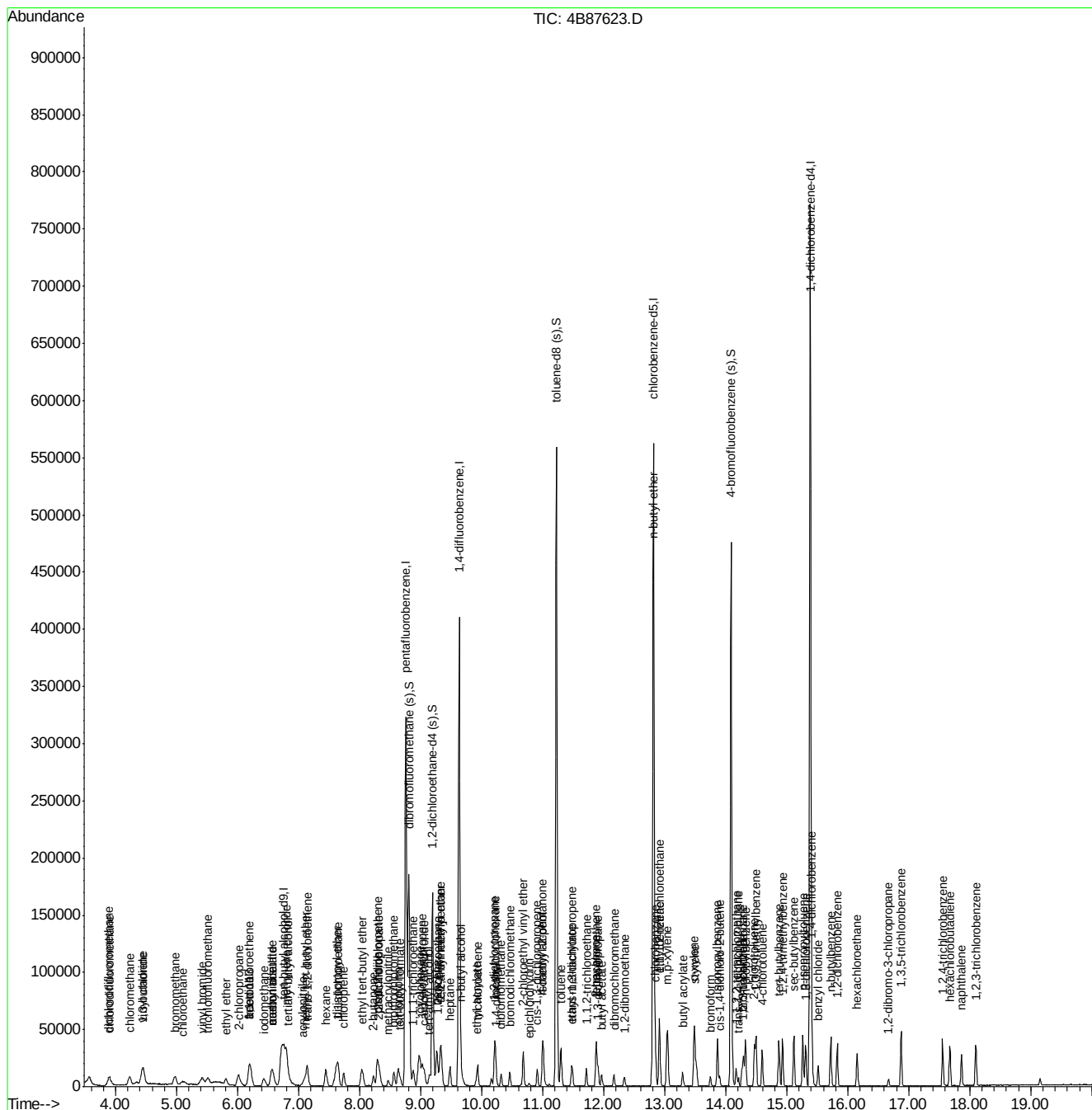
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) bromobenzene	14.29	156	7921	2.17	ug/L	91
104) n-propylbenzene	14.32	91	32313	2.08	ug/L	99
105) 2-chlorotoluene	14.47	126	7121	2.11	ug/L	95
106) 4-chlorotoluene	14.59	91	19183	2.14	ug/L	98
107) 1,3,5-trimethylbenzene	14.50	105	23781	1.97	ug/L	99
108) tert-butylbenzene	14.87	119	20128	1.90	ug/L	97
109) 1,2,4-trimethylbenzene	14.93	105	23693	1.97	ug/L	96
110) sec-butylbenzene	15.12	105	31765	1.94	ug/L	96
111) p-isopropyltoluene	15.26	119	26776	1.92	ug/L	99
112) 1,3-dichlorobenzene	15.31	146	16009	2.17	ug/L	96
113) 1,4-dichlorobenzene	15.42	146	16060	2.14	ug/L	99
114) 1,2-dichlorobenzene	15.83	146	16804	2.18	ug/L	96
115) benzyl chloride	15.51	91	13784	2.03	ug/L	97
116) n-butylbenzene	15.72	92	13056	1.88	ug/L	99
117) hexachloroethane	16.15	201	5277	1.79	ug/L	93
118) 1,2-dibromo-3-chloropropan	16.67	157	1984	1.94	ug/L	81
119) 1,3,5-trichlorobenzene	16.87	180	16042	2.05	ug/L	97
120) 1,2,4-trichlorobenzene	17.55	180	13157	1.89	ug/L	99
122) hexachlorobutadiene	17.67	225	8494	2.18	ug/L	95
123) naphthalene	17.86	128	22562	1.70	ug/L	99
124) 1,2,3-trichlorobenzene	18.10	180	12275	1.94	ug/L	95

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

Quantitation Report (QT Reviewed)

```
Data Path   : C:\MSDCHEM\1\DATA\V4B3694\
Data File   : 4B87623.D
Acq On      : 10 Jan 2019    7:50 pm
Operator    : deving
Sample      : IC3694-2
Misc        : MS31708,V4B3694,5,,,,1
ALS Vial    : 11    Sample Multiplier: 1
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Quant Time: Jan 11 10:52:24 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87624.D
 Acq On : 10 Jan 2019 8:19 pm
 Operator : deving
 Sample : IC3694-4
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 11 10:54:49 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 07:55:58 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.74	65	137849	500.00	ug/L	0.01
5) pentafluorobenzene	8.76	168	256907	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	347115	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	318020	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	210876	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	115882	50.15	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.30%
55) 1,2-dichloroethane-d4 (s)	9.20	65	125461	52.16	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	104.32%
76) toluene-d8 (s)	11.22	98	376727	48.64	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.28%
99) 4-bromofluorobenzene (s)	14.09	95	151064	49.51	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.02%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.85	59	9770	21.64	ug/L	77
4) 1,4-dioxane	10.25	88	3473	97.47	ug/L	92
6) chlorodifluoromethane	3.90	51	25270	4.04	ug/L	99
7) dichlorodifluoromethane	3.89	85	20846	3.40	ug/L	98
8) chloromethane	4.23	50	25589	3.66	ug/L	97
9) vinyl chloride	4.44	62	23303	3.57	ug/L	95
10) 1,3-butadiene	4.45	54	18225	4.12	ug/L	98
11) bromomethane	4.97	94	16991	4.03	ug/L	90
12) chloroethane	5.12	64	11424	3.74	ug/L	96
13) trichlorofluoromethane	5.52	101	24142	3.68	ug/L	98
14) vinyl bromide	5.41	106	13934	3.65	ug/L	98
15) ethyl ether	5.80	74	5826	4.11	ug/L	85
16) 2-chloropropane	6.01	43	28704	4.53	ug/L	95
17) acrolein	6.02	56	1649	3.19	ug/L	93
18) freon 113	6.20	151	13663	4.26	ug/L	97
19) 1,1-dichloroethene	6.19	61	23285	4.11	ug/L	99
20) acetone	6.18	58	4291	16.42	ug/L #	74
21) acetonitrile	6.56	41	23324	47.04	ug/L	87
22) iodomethane	6.43	142	25137	4.21	ug/L	97
23) carbon disulfide	6.56	76	49472	4.27	ug/L	99
24) methylene chloride	6.80	84	15661	4.52	ug/L	95
25) methyl acetate	6.58	43	9703	4.28	ug/L	97
26) methyl tert butyl ether	7.11	73	33577	4.22	ug/L	98
27) trans-1,2-dichloroethene	7.14	61	19264	4.33	ug/L	95
28) hexane	7.45	56	9526	4.13	ug/L	94
29) di-isopropyl ether	7.63	45	46667	4.14	ug/L	95
30) 2-butanone	8.21	72	4333	14.96	ug/L #	57
31) 1,1-dichloroethane	7.65	63	23869	4.33	ug/L	97
32) chloroprene	7.74	53	17881	4.06	ug/L	95
33) acrylonitrile	7.05	53	4651	4.27	ug/L	94
34) vinyl acetate	7.59	86	1598	4.18	ug/L #	24
35) ethyl tert-butyl ether	8.04	59	36901	4.12	ug/L	95
36) ethyl acetate	8.23	45	1656	3.68	ug/L #	37

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87624.D
 Acq On : 10 Jan 2019 8:19 pm
 Operator : deving
 Sample : IC3694-4
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 11 10:54:49 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 07:55:58 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	8.32	77	20679	4.31	ug/L	98
38) cis-1,2-dichloroethene	8.29	96	13592	4.17	ug/L	98
39) propionitrile	8.29	54	18414	42.76	ug/L	95
40) methyl acrylate	8.31	85	1236	3.14	ug/L #	45
41) methacrylonitrile	8.46	67	3746	3.62	ug/L	95
42) bromochloromethane	8.56	128	7074	4.39	ug/L	93
43) tetrahydrofuran	8.58	72	1284	3.64	ug/L #	58
44) chloroform	8.63	83	22591	4.36	ug/L	98
45) tert-butyl formate	8.66	59	8269	4.08	ug/L	93
47) 1,1,1-trichloroethane	8.88	97	22210	4.24	ug/L	96
48) cyclohexane	8.99	84	20255	3.24	ug/L	96
50) 1,1-dichloropropene	9.03	75	16974	4.26	ug/L	98
51) carbon tetrachloride	9.07	117	19881	4.25	ug/L	97
52) tert-amyl alcohol	9.12	73	3276	19.19	ug/L	94
53) isopropyl acetate	9.15	87	1836	3.53	ug/L #	72
56) n-butyl alcohol	9.67	41	14617	206.23	ug/L	91
57) 2,2,4-trimethylpentane	9.34	57	55747	3.81	ug/L	98
58) benzene	9.26	78	48443	4.27	ug/L	99
59) tert-amyl methyl ether	9.32	73	35303	4.14	ug/L	96
60) heptane	9.48	57	9807	4.28	ug/L	97
61) 1,2-dichloroethane	9.28	62	16758	4.46	ug/L	98
62) ethyl acrylate	9.90	55	10587	3.63	ug/L	98
63) trichloroethene	9.93	95	12342	4.25	ug/L	98
64) 2-chloroethyl vinyl ether	10.68	63	26127	18.07	ug/L	98
65) methyl methacrylate	10.15	100	2097	3.47	ug/L	97
66) methylcyclohexane	10.23	83	25228	4.00	ug/L	97
67) 1,2-dichloropropane	10.21	63	12708	4.28	ug/L	97
68) dibromomethane	10.32	93	7412	4.23	ug/L	95
69) bromodichloromethane	10.46	83	16076	4.14	ug/L	95
71) epichlorohydrin	10.77	57	5371	20.33	ug/L	97
72) cis-1,3-dichloropropene	10.91	75	17295	3.94	ug/L	98
73) 4-methyl-2-pentanone	11.00	58	16663	15.89	ug/L	96
74) isoamyl alcohol	11.00	70	6287	74.87	ug/L #	80
77) toluene	11.30	92	27200	4.14	ug/L	97
78) ethyl methacrylate	11.47	69	10544	3.63	ug/L	98
79) trans-1,3-dichloropropene	11.48	75	14951	3.93	ug/L	99
80) 1,1,2-trichloroethane	11.72	83	8125	4.15	ug/L	92
81) tetrachloroethene	11.88	164	10697	4.18	ug/L	97
82) 2-hexanone	11.88	58	14083	16.05	ug/L	96
83) 1,3-dichloropropane	11.91	76	15941	4.35	ug/L	99
84) butyl acetate	11.96	56	6530	4.00	ug/L	96
85) dibromochloromethane	12.17	129	11584	4.06	ug/L	97
86) 1,2-dibromoethane	12.33	107	10913	4.04	ug/L	97
87) n-butyl ether	12.79	57	45781	3.84	ug/L	97
88) chlorobenzene	12.85	112	31209	4.22	ug/L	93
89) 1,1,1,2-tetrachloroethane	12.92	131	13364	4.04	ug/L	97
90) ethylbenzene	12.92	91	52532	4.17	ug/L	99
91) m,p-xylene	13.05	106	40230	8.38	ug/L	97
92) o-xylene	13.48	91	43274	4.00	ug/L	96
93) styrene	13.50	104	30500	3.81	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87624.D
 Acq On : 10 Jan 2019 8:19 pm
 Operator : deving
 Sample : IC3694-4
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 11 10:54:49 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 07:55:58 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) butyl acrylate	13.29	55	18419	3.89	ug/L	95
95) isopropylbenzene	13.87	105	55932	3.90	ug/L	100
96) bromoform	13.75	173	8566	4.14	ug/L	97
97) cis-1,4-dichloro-2-butene	13.90	88	4199	3.83	ug/L	89
100) 1,1,2,2-tetrachloroethane	14.17	83	16301	4.43	ug/L	98
101) trans-1,4-dichloro-2-buten	14.21	53	3321	4.05	ug/L	95
102) 1,2,3-trichloropropane	14.26	110	3945	4.31	ug/L	97
103) bromobenzene	14.29	156	15920	4.15	ug/L	96
104) n-propylbenzene	14.32	91	66911	3.95	ug/L	99
105) 2-chlorotoluene	14.47	126	14249	3.92	ug/L	98
106) 4-chlorotoluene	14.59	91	39462	4.16	ug/L	99
107) 1,3,5-trimethylbenzene	14.50	105	49662	3.79	ug/L	98
108) tert-butylbenzene	14.87	119	40965	3.40	ug/L	98
109) 1,2,4-trimethylbenzene	14.93	105	49913	3.87	ug/L	99
110) sec-butylbenzene	15.12	105	65964	3.64	ug/L	100
111) p-isopropyltoluene	15.26	119	56205	3.65	ug/L	97
112) 1,3-dichlorobenzene	15.31	146	31424	4.15	ug/L	96
113) 1,4-dichlorobenzene	15.42	146	32273	4.20	ug/L	98
114) 1,2-dichlorobenzene	15.83	146	32904	4.13	ug/L	98
115) benzyl chloride	15.51	91	28093	3.82	ug/L	100
116) n-butylbenzene	15.72	92	28668	3.75	ug/L	94
117) hexachloroethane	16.15	201	10539	3.28	ug/L	93
118) 1,2-dibromo-3-chloropropan	16.67	157	4083	3.63	ug/L	93
119) 1,3,5-trichlorobenzene	16.87	180	32110	3.71	ug/L	99
120) 1,2,4-trichlorobenzene	17.55	180	27205	3.49	ug/L	99
122) hexachlorobutadiene	17.67	225	16605	3.91	ug/L	94
123) naphthalene	17.86	128	49081	3.27	ug/L	100
124) 1,2,3-trichlorobenzene	18.10	180	25456	3.57	ug/L	96

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

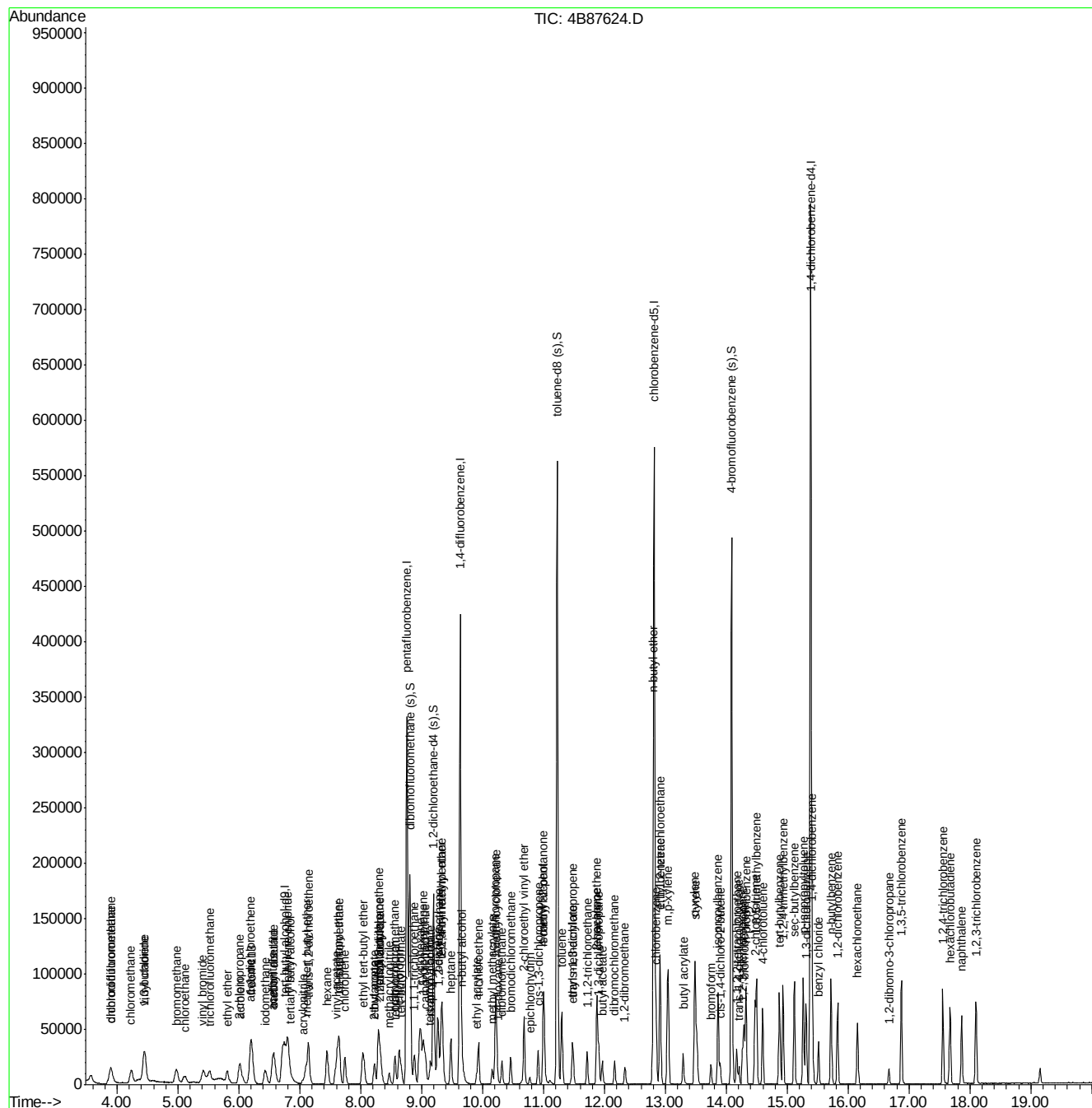
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7

Quantitation Report (QT Reviewed)

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Data Path   : C:\MSDCHEM\1\DATA\V4B3694\
Data File   : 4B87624.D
Acq On      : 10 Jan 2019    8:19 pm
Operator    : deving
Sample      : IC3694-4
Misc        : MS31708,V4B3694,5,,,,1
ALS Vial    : 12    Sample Multiplier: 1
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Quant Time: Jan 11 10:54:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 07:55:58 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87625.D
 Acq On : 10 Jan 2019 8:47 pm
 Operator : deving
 Sample : IC3694-8
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 11 10:59:56 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.74	65	135690	500.00	ug/L	0.01
5) pentafluorobenzene	8.76	168	252340	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	337925	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	306257	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	208512	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	113231	49.97	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.94%
55) 1,2-dichloroethane-d4 (s)	9.20	65	119851	50.65	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	101.30%
76) toluene-d8 (s)	11.22	98	366317	49.87	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.74%
99) 4-bromofluorobenzene (s)	14.09	95	146025	48.99	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.98%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.86	59	16405	36.07	ug/L	97
4) 1,4-dioxane	10.25	88	6248	183.50	ug/L	89
6) chlorodifluoromethane	3.91	51	45545	7.65	ug/L	97
7) dichlorodifluoromethane	3.89	85	44595	8.19	ug/L	98
8) chloromethane	4.23	50	51730	7.75	ug/L	99
9) vinyl chloride	4.44	62	48230	7.90	ug/L	97
10) 1,3-butadiene	4.46	54	31555	7.36	ug/L	99
11) bromomethane	4.98	94	32928	7.88	ug/L	97
12) chloroethane	5.11	64	22545	7.84	ug/L	99
13) trichlorofluoromethane	5.52	101	48195	7.85	ug/L	100
14) vinyl bromide	5.41	106	27934	7.88	ug/L	97
15) ethyl ether	5.81	74	9981	7.29	ug/L	97
16) 2-chloropropane	6.01	43	47726	7.41	ug/L	99
17) acrolein	6.02	56	3681	7.51	ug/L	95
18) freon 113	6.20	151	23848	7.83	ug/L	95
19) 1,1-dichloroethene	6.19	61	41055	7.61	ug/L	99
20) acetone	6.18	58	7878	30.50	ug/L #	85
21) acetonitrile	6.54	41	38172	74.52	ug/L	91
22) iodomethane	6.42	142	43223	7.50	ug/L	99
23) carbon disulfide	6.56	76	86051	7.56	ug/L	98
24) methylene chloride	6.80	84	26375	7.54	ug/L	98
25) methyl acetate	6.58	43	16961	7.43	ug/L	98
26) methyl tert butyl ether	7.11	73	59019	7.63	ug/L	97
27) trans-1,2-dichloroethene	7.14	61	32314	7.52	ug/L	99
28) hexane	7.44	56	16271	7.34	ug/L	96
29) di-isopropyl ether	7.62	45	82978	7.69	ug/L	95
30) 2-butanone	8.21	72	8195	30.67	ug/L #	90
31) 1,1-dichloroethane	7.65	63	41500	7.77	ug/L	98
32) chloroprene	7.74	53	31001	7.54	ug/L	98
33) acrylonitrile	7.04	53	7913	7.26	ug/L	91
34) vinyl acetate	7.58	86	2583	6.92	ug/L #	84
35) ethyl tert-butyl ether	8.04	59	65619	7.67	ug/L	98
36) ethyl acetate	8.23	45	2992	7.27	ug/L #	41

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87625.D
 Acq On : 10 Jan 2019 8:47 pm
 Operator : deving
 Sample : IC3694-8
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 11 10:59:56 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	8.32	77	35865	7.55	ug/L	98
38) cis-1,2-dichloroethene	8.29	96	23926	7.62	ug/L	99
39) propionitrile	8.29	54	31822	74.89	ug/L	95
40) methyl acrylate	8.31	85	2371	6.60	ug/L #	79
41) methacrylonitrile	8.46	67	7434	7.43	ug/L	97
42) bromochloromethane	8.56	128	11815	7.33	ug/L	98
43) tetrahydrofuran	8.57	72	2473	7.28	ug/L #	63
44) chloroform	8.63	83	38823	7.40	ug/L	99
45) tert-butyl formate	8.66	59	14326	7.28	ug/L	93
47) 1,1,1-trichloroethane	8.88	97	38704	7.52	ug/L	97
48) cyclohexane	8.99	84	40515	7.20	ug/L	96
50) 1,1-dichloropropene	9.03	75	28921	7.51	ug/L	94
51) carbon tetrachloride	9.06	117	34707	7.67	ug/L	99
52) tert-amyl alcohol	9.12	73	5902	35.09	ug/L	85
53) isopropyl acetate	9.15	87	3475	6.99	ug/L #	81
56) n-butyl alcohol	9.66	41	26129	376.75	ug/L	96
57) 2,2,4-trimethylpentane	9.34	57	96248	7.16	ug/L	96
58) benzene	9.26	78	84269	7.67	ug/L	99
59) tert-amyl methyl ether	9.32	73	63261	7.72	ug/L	97
60) heptane	9.48	57	16321	7.57	ug/L	95
61) 1,2-dichloroethane	9.28	62	28782	7.54	ug/L	99
62) ethyl acrylate	9.90	55	19965	7.25	ug/L	98
63) trichloroethene	9.93	95	21279	7.65	ug/L	97
64) 2-chloroethyl vinyl ether	10.68	63	50127	38.35	ug/L	98
65) methyl methacrylate	10.15	100	3842	6.74	ug/L #	91
66) methylcyclohexane	10.22	83	44472	7.47	ug/L	98
67) 1,2-dichloropropane	10.21	63	21477	7.60	ug/L	98
68) dibromomethane	10.32	93	13088	7.66	ug/L	97
69) bromodichloromethane	10.46	83	27821	7.48	ug/L	99
71) epichlorohydrin	10.77	57	9213	35.87	ug/L	95
72) cis-1,3-dichloropropene	10.91	75	30655	7.57	ug/L	99
73) 4-methyl-2-pentanone	11.00	58	30049	30.38	ug/L	96
74) isoamyl alcohol	11.00	70	11563	147.75	ug/L #	86
77) toluene	11.30	92	46766	7.53	ug/L	97
78) ethyl methacrylate	11.47	69	19437	7.48	ug/L	97
79) trans-1,3-dichloropropene	11.48	75	26032	7.62	ug/L	95
80) 1,1,2-trichloroethane	11.72	83	14236	7.76	ug/L	99
81) tetrachloroethene	11.87	164	18351	7.61	ug/L	98
82) 2-hexanone	11.88	58	24105	30.14	ug/L	92
83) 1,3-dichloropropane	11.91	76	27255	7.80	ug/L	96
84) butyl acetate	11.96	56	11817	7.84	ug/L	95
85) dibromochloromethane	12.17	129	20025	7.48	ug/L	100
86) 1,2-dibromoethane	12.33	107	19596	7.76	ug/L	94
87) n-butyl ether	12.79	57	81509	7.58	ug/L	99
88) chlorobenzene	12.85	112	53952	7.61	ug/L	97
89) 1,1,1,2-tetrachloroethane	12.92	131	23548	7.68	ug/L	96
90) ethylbenzene	12.91	91	90545	7.63	ug/L	99
91) m,p-xylene	13.04	106	69220	15.41	ug/L	94
92) o-xylene	13.48	91	75819	7.69	ug/L	100
93) styrene	13.50	104	55480	7.63	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87625.D
 Acq On : 10 Jan 2019 8:47 pm
 Operator : deving
 Sample : IC3694-8
 Misc : MS31708,V4B3694,5,,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 11 10:59:56 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

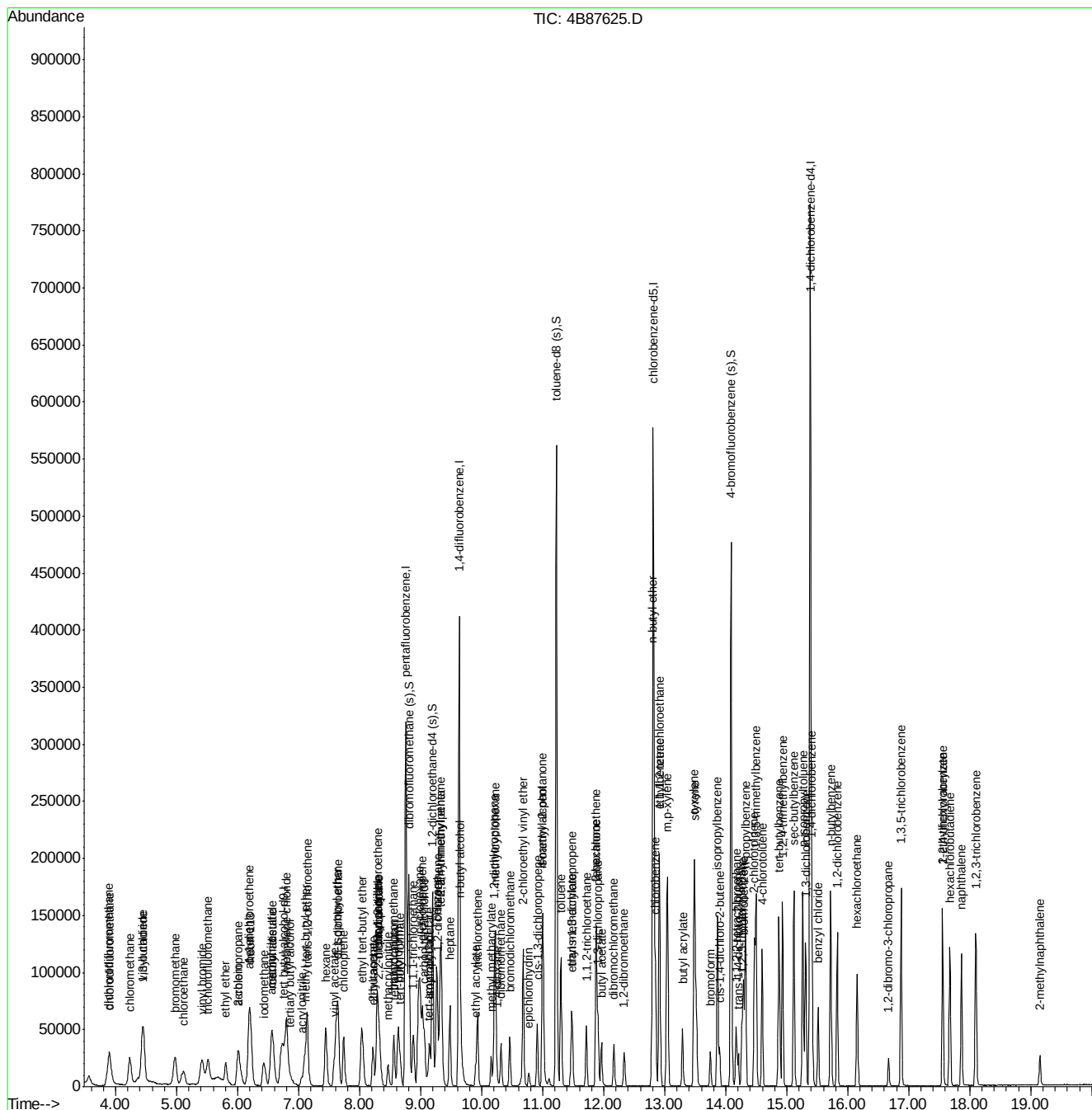
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) butyl acrylate	13.29	55	33072	7.58	ug/L	99
95) isopropylbenzene	13.86	105	99446	7.64	ug/L	97
96) bromoform	13.75	173	14578	7.47	ug/L	92
97) cis-1,4-dichloro-2-butene	13.90	88	7272	7.10	ug/L	97
100) 1,1,2,2-tetrachloroethane	14.17	83	26890	7.38	ug/L	97
101) trans-1,4-dichloro-2-buten	14.21	53	6101	7.67	ug/L #	76
102) 1,2,3-trichloropropane	14.26	110	6895	7.70	ug/L	98
103) bromobenzene	14.29	156	27265	7.45	ug/L	99
104) n-propylbenzene	14.32	91	116936	7.51	ug/L	99
105) 2-chlorotoluene	14.47	126	25096	7.43	ug/L	95
106) 4-chlorotoluene	14.59	91	67413	7.50	ug/L	98
107) 1,3,5-trimethylbenzene	14.49	105	87749	7.25	ug/L	99
108) tert-butylbenzene	14.87	119	75199	7.07	ug/L	99
109) 1,2,4-trimethylbenzene	14.93	105	88492	7.34	ug/L	99
110) sec-butylbenzene	15.12	105	117700	7.16	ug/L	99
111) p-isopropyltoluene	15.26	119	100985	7.22	ug/L	99
112) 1,3-dichlorobenzene	15.31	146	54803	7.43	ug/L	99
113) 1,4-dichlorobenzene	15.42	146	55833	7.45	ug/L	99
114) 1,2-dichlorobenzene	15.83	146	57151	7.41	ug/L	97
115) benzyl chloride	15.51	91	50262	7.39	ug/L	97
116) n-butylbenzene	15.72	92	50476	7.26	ug/L	99
117) hexachloroethane	16.16	201	19223	6.53	ug/L	97
118) 1,2-dibromo-3-chloropropan	16.67	157	7134	6.95	ug/L	96
119) 1,3,5-trichlorobenzene	16.87	180	57722	7.36	ug/L	99
120) 1,2,4-trichlorobenzene	17.55	180	49696	7.13	ug/L	99
121) 2-ethylhexyl acrylate	17.56	70	1753	2.83	ug/L	89
122) hexachlorobutadiene	17.67	225	28534	7.31	ug/L	98
123) naphthalene	17.86	128	91161	6.87	ug/L	99
124) 1,2,3-trichlorobenzene	18.10	180	46402	7.31	ug/L	99
125) 2-methylnaphthalene	19.15	142	15411	4.30	ug/L	97

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

(QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87625.D
Acq On : 10 Jan 2019 8:47 pm
Operator : deving
Sample : IC3694-8
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 11 10:59:56 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rx1624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87626.D
 Acq On : 10 Jan 2019 9:15 pm
 Operator : deving
 Sample : IC3694-20
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 11 10:56:37 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.75	65	136677	500.00	ug/L	0.02
5) pentafluorobenzene	8.76	168	254586	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	343393	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	316796	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	204275	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	113670	49.72	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.44%
55) 1,2-dichloroethane-d4 (s)	9.20	65	119736	49.79	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	99.58%
76) toluene-d8 (s)	11.22	98	377176	49.65	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.30%
99) 4-bromofluorobenzene (s)	14.09	95	149241	51.11	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.22%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.84	59	44552	97.25	ug/L	99
4) 1,4-dioxane	10.25	88	16530	481.98	ug/L	93
6) chlorodifluoromethane	3.90	51	119954	19.97	ug/L	98
7) dichlorodifluoromethane	3.88	85	111981	20.39	ug/L	98
8) chloromethane	4.24	50	134757	20.01	ug/L	99
9) vinyl chloride	4.44	62	123496	20.05	ug/L	99
10) 1,3-butadiene	4.46	54	85085	19.66	ug/L	99
11) bromomethane	4.97	94	82645	19.61	ug/L	97
12) chloroethane	5.12	64	59673	20.57	ug/L	97
13) trichlorofluoromethane	5.51	101	125332	20.24	ug/L	98
14) vinyl bromide	5.42	106	73365	20.51	ug/L	97
15) ethyl ether	5.81	74	27736	20.07	ug/L	96
16) 2-chloropropane	6.01	43	125388	19.31	ug/L	98
17) acrolein	6.02	56	9874	19.97	ug/L	94
18) freon 113	6.21	151	62585	20.36	ug/L	96
19) 1,1-dichloroethene	6.19	61	111290	20.45	ug/L	98
20) acetone	6.18	58	20375	78.19	ug/L	91
21) acetonitrile	6.53	41	99538	192.60	ug/L	96
22) iodomethane	6.43	142	116809	20.08	ug/L	99
23) carbon disulfide	6.57	76	229146	19.94	ug/L	99
24) methylene chloride	6.80	84	69087	19.59	ug/L	94
25) methyl acetate	6.57	43	46163	20.05	ug/L	97
26) methyl tert butyl ether	7.11	73	154290	19.78	ug/L	99
27) trans-1,2-dichloroethene	7.14	61	86883	20.04	ug/L	97
28) hexane	7.45	56	44471	19.88	ug/L	97
29) di-isopropyl ether	7.62	45	220705	20.28	ug/L	100
30) 2-butanone	8.21	72	22772	84.48	ug/L	93
31) 1,1-dichloroethane	7.65	63	109255	20.27	ug/L	98
32) chloroprene	7.74	53	84107	20.28	ug/L	100
33) acrylonitrile	7.04	53	21466	19.51	ug/L	99
34) vinyl acetate	7.58	86	7463	19.81	ug/L #	76
35) ethyl tert-butyl ether	8.04	59	172385	19.96	ug/L	99
36) ethyl acetate	8.22	45	8273	19.92	ug/L #	91

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87626.D
 Acq On : 10 Jan 2019 9:15 pm
 Operator : deving
 Sample : IC3694-20
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 11 10:56:37 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	8.32	77	94013	19.63	ug/L	97
38) cis-1,2-dichloroethene	8.29	96	63699	20.11	ug/L	99
39) propionitrile	8.28	54	85506	199.47	ug/L	95
40) methyl acrylate	8.31	85	7157	19.75	ug/L	100
41) methacrylonitrile	8.46	67	19622	19.44	ug/L	99
42) bromochloromethane	8.56	128	31683	19.48	ug/L	98
43) tetrahydrofuran	8.57	72	6722	19.60	ug/L	89
44) chloroform	8.63	83	102479	19.35	ug/L	96
45) tert-butyl formate	8.66	59	37749	19.01	ug/L	98
47) 1,1,1-trichloroethane	8.88	97	101475	19.53	ug/L	96
48) cyclohexane	8.99	84	104326	18.37	ug/L	98
50) 1,1-dichloropropene	9.03	75	77513	19.95	ug/L	98
51) carbon tetrachloride	9.06	117	91278	19.99	ug/L	99
52) tert-amyl alcohol	9.12	73	16201	95.49	ug/L	90
53) isopropyl acetate	9.14	87	9754	19.45	ug/L	99
56) n-butyl alcohol	9.66	41	68933	978.11	ug/L	97
57) 2,2,4-trimethylpentane	9.34	57	275650	20.19	ug/L	99
58) benzene	9.26	78	222598	19.93	ug/L	99
59) tert-amyl methyl ether	9.32	73	167338	20.09	ug/L	98
60) heptane	9.48	57	44058	20.10	ug/L	97
61) 1,2-dichloroethane	9.28	62	73786	19.02	ug/L	99
62) ethyl acrylate	9.90	55	54792	19.59	ug/L	99
63) trichloroethene	9.93	95	56602	20.02	ug/L	97
64) 2-chloroethyl vinyl ether	10.68	63	139791	105.25	ug/L	100
65) methyl methacrylate	10.15	100	11042	19.06	ug/L	96
66) methylcyclohexane	10.22	83	121278	20.05	ug/L	98
67) 1,2-dichloropropane	10.21	63	57283	19.96	ug/L	98
68) dibromomethane	10.32	93	34580	19.93	ug/L	97
69) bromodichloromethane	10.46	83	75171	19.88	ug/L	100
71) epichlorohydrin	10.77	57	25205	96.58	ug/L	96
72) cis-1,3-dichloropropene	10.91	75	82981	20.16	ug/L	97
73) 4-methyl-2-pentanone	11.00	58	80798	80.40	ug/L	94
74) isoamyl alcohol	11.00	70	32075	403.33	ug/L	88
77) toluene	11.30	92	126782	19.72	ug/L	98
78) ethyl methacrylate	11.47	69	54985	20.45	ug/L	98
79) trans-1,3-dichloropropene	11.48	75	70970	20.07	ug/L	96
80) 1,1,2-trichloroethane	11.72	83	37615	19.81	ug/L	98
81) tetrachloroethene	11.87	164	49323	19.77	ug/L	97
82) 2-hexanone	11.87	58	67569	81.67	ug/L	99
83) 1,3-dichloropropane	11.91	76	72411	20.02	ug/L	87
84) butyl acetate	11.96	56	31612	20.28	ug/L	99
85) dibromochloromethane	12.17	129	54381	19.62	ug/L	99
86) 1,2-dibromoethane	12.33	107	52917	20.25	ug/L	98
87) n-butyl ether	12.79	57	230566	20.73	ug/L	100
88) chlorobenzene	12.85	112	145498	19.85	ug/L	99
89) 1,1,1,2-tetrachloroethane	12.92	131	62555	19.71	ug/L	99
90) ethylbenzene	12.91	91	245013	19.96	ug/L	99
91) m,p-xylene	13.04	106	188434	40.55	ug/L	98
92) o-xylene	13.48	91	209123	20.51	ug/L	99
93) styrene	13.50	104	154353	20.51	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87626.D
Acq On : 10 Jan 2019 9:15 pm
Operator : deving
Sample : IC3694-20
Misc : MS31708,V4B3694,5,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 11 10:56:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) butyl acrylate	13.29	55	92671	20.52	ug/L	98
95) isopropylbenzene	13.86	105	276650	20.55	ug/L	99
96) bromoform	13.75	173	40074	19.85	ug/L	98
97) cis-1,4-dichloro-2-butene	13.90	88	20807	19.65	ug/L	94
100) 1,1,2,2-tetrachloroethane	14.17	83	70794	19.82	ug/L	97
101) trans-1,4-dichloro-2-buten	14.21	53	15422	19.80	ug/L	94
102) 1,2,3-trichloropropane	14.27	110	17781	20.26	ug/L	100
103) bromobenzene	14.29	156	73164	20.39	ug/L	99
104) n-propylbenzene	14.32	91	320169	20.99	ug/L	100
105) 2-chlorotoluene	14.47	126	69007	20.85	ug/L	97
106) 4-chlorotoluene	14.59	91	178789	20.32	ug/L	99
107) 1,3,5-trimethylbenzene	14.49	105	243131	20.51	ug/L	99
108) tert-butylbenzene	14.87	119	212162	20.37	ug/L	99
109) 1,2,4-trimethylbenzene	14.93	105	243057	20.58	ug/L	100
110) sec-butylbenzene	15.12	105	328798	20.42	ug/L	100
111) p-isopropyltoluene	15.26	119	280942	20.50	ug/L	98
112) 1,3-dichlorobenzene	15.31	146	144580	20.00	ug/L	98
113) 1,4-dichlorobenzene	15.42	146	145222	19.77	ug/L	99
114) 1,2-dichlorobenzene	15.83	146	151702	20.08	ug/L	99
115) benzyl chloride	15.51	91	136050	20.41	ug/L	99
116) n-butylbenzene	15.72	92	141118	20.71	ug/L	99
117) hexachloroethane	16.15	201	54808	18.99	ug/L	96
118) 1,2-dibromo-3-chloropropan	16.67	157	19498	19.40	ug/L	97
119) 1,3,5-trichlorobenzene	16.87	180	157477	20.48	ug/L	98
120) 1,2,4-trichlorobenzene	17.55	180	138723	20.31	ug/L	100
121) 2-ethylhexyl acrylate	17.56	70	5848	4.16	ug/L	92
122) hexachlorobutadiene	17.67	225	77553	20.27	ug/L	97
123) naphthalene	17.86	128	262909	20.22	ug/L	100
124) 1,2,3-trichlorobenzene	18.10	180	127587	20.52	ug/L	99
125) 2-methylnaphthalene	19.15	142	50345	9.09	ug/L	98

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

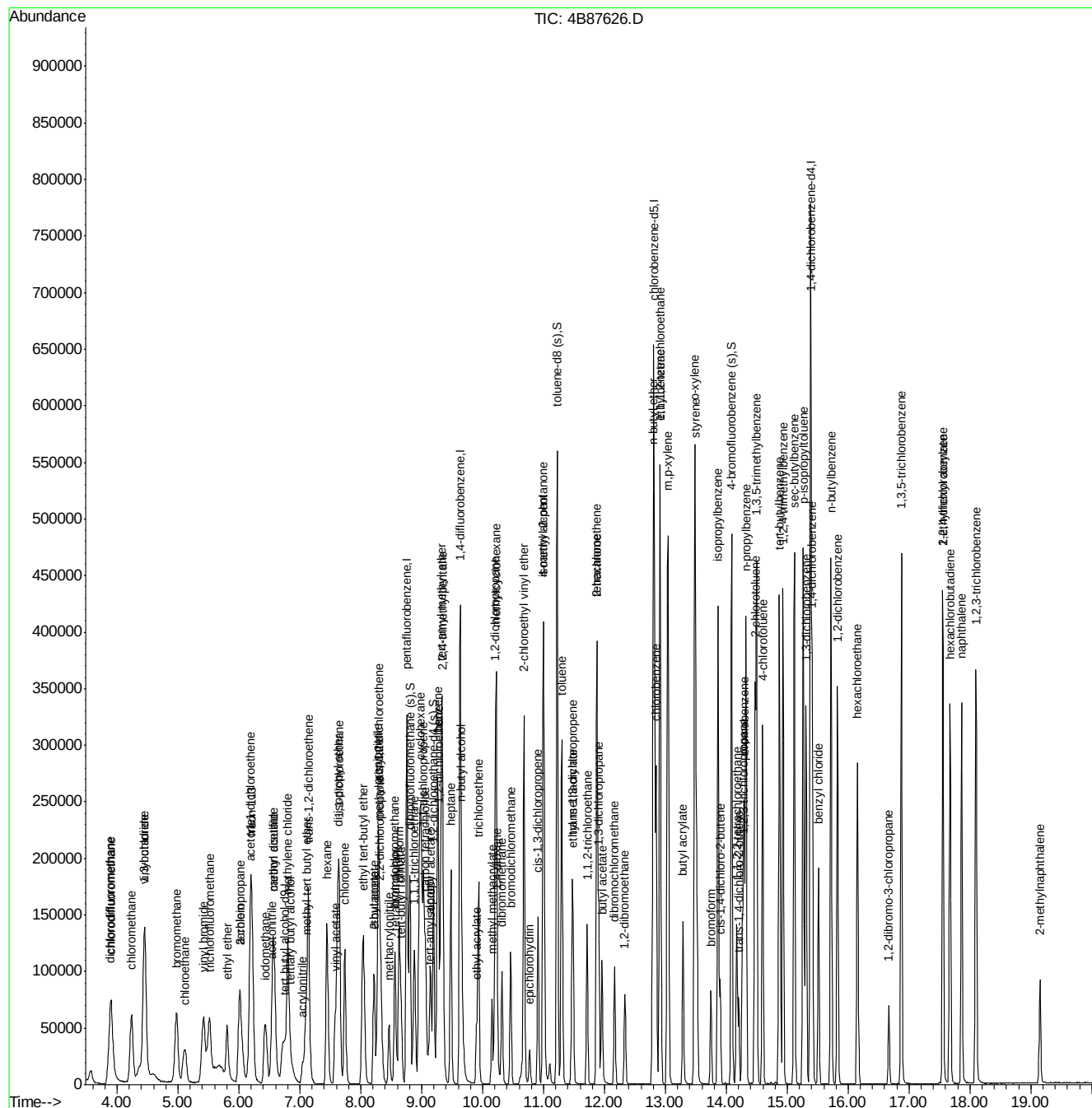
Quantitation Report (QT Reviewed)

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Data Path   : C:\MSDCHEM\1\DATA\V4B3694\
Data File   : 4B87626.D
Acq On      : 10 Jan 2019    9:15 pm
Operator    : deving
Sample      : IC3694-20
Misc        : MS31708,V4B3694,5,,,,1
ALS Vial    : 14    Sample Multiplier: 1

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Quant Time: Jan 11 10:56:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration



7.6.6



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87627.D
 Acq On : 10 Jan 2019 9:43 pm
 Operator : deving
 Sample : ICC3694-50
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 11 10:56:50 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.73	65	136229	500.00	ug/L	0.00
5) pentafluorobenzene	8.76	168	253794	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	344514	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	313804	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	198266	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	114140	50.08	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.16%
55) 1,2-dichloroethane-d4 (s)	9.20	65	119368	49.48	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	98.96%
76) toluene-d8 (s)	11.23	98	382116	50.77	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	101.54%
99) 4-bromofluorobenzene (s)	14.09	95	143426	50.61	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	101.22%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.85	59	110763	242.58	ug/L	100
4) 1,4-dioxane	10.24	88	44016	1287.62	ug/L	100
6) chlorodifluoromethane	3.90	51	308789	51.56	ug/L	100
7) dichlorodifluoromethane	3.89	85	302245	55.21	ug/L	100
8) chloromethane	4.24	50	345759	51.49	ug/L	100
9) vinyl chloride	4.44	62	322417	52.50	ug/L	100
10) 1,3-butadiene	4.46	54	218538	50.65	ug/L	100
11) bromomethane	4.98	94	208462	49.63	ug/L	100
12) chloroethane	5.12	64	150988	52.20	ug/L	100
13) trichlorofluoromethane	5.52	101	323701	52.45	ug/L	100
14) vinyl bromide	5.41	106	188333	52.82	ug/L	100
15) ethyl ether	5.81	74	69976	50.79	ug/L	100
16) 2-chloropropane	6.01	43	313462	48.42	ug/L	100
17) acrolein	6.01	56	25543	51.82	ug/L	100
18) freon 113	6.21	151	158376	51.69	ug/L	100
19) 1,1-dichloroethene	6.19	61	279682	51.56	ug/L	100
20) acetone	6.18	58	51636	198.77	ug/L	100
21) acetonitrile	6.54	41	244899	475.35	ug/L	100
22) iodomethane	6.43	142	294722	50.83	ug/L	100
23) carbon disulfide	6.56	76	572188	49.95	ug/L	100
24) methylene chloride	6.80	84	171150	48.67	ug/L	100
25) methyl acetate	6.57	43	112102	48.84	ug/L	100
26) methyl tert butyl ether	7.11	73	393195	50.57	ug/L	100
27) trans-1,2-dichloroethene	7.15	61	219529	50.80	ug/L	100
28) hexane	7.44	56	114008	51.13	ug/L	100
29) di-isopropyl ether	7.62	45	556583	51.30	ug/L	100
30) 2-butanone	8.21	72	57237	213.01	ug/L	100
31) 1,1-dichloroethane	7.65	63	272075	50.64	ug/L	100
32) chloroprene	7.74	53	217444	52.59	ug/L	100
33) acrylonitrile	7.04	53	53786	49.04	ug/L	100
34) vinyl acetate	7.58	86	18879	50.26	ug/L	100
35) ethyl tert-butyl ether	8.04	59	441917	51.33	ug/L	100
36) ethyl acetate	8.22	45	22222	53.66	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87627.D
 Acq On : 10 Jan 2019 9:43 pm
 Operator : deving
 Sample : ICC3694-50
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 11 10:56:50 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	8.32	77	237035	49.64	ug/L	100
38) cis-1,2-dichloroethene	8.29	96	160969	50.97	ug/L	100
39) propionitrile	8.28	54	212715	497.76	ug/L	100
40) methyl acrylate	8.31	85	19452	53.84	ug/L	100
41) methacrylonitrile	8.46	67	51106	50.79	ug/L	100
42) bromochloromethane	8.56	128	79548	49.06	ug/L	100
43) tetrahydrofuran	8.58	72	17418	50.95	ug/L	100
44) chloroform	8.63	83	256078	48.51	ug/L	100
45) tert-butyl formate	8.66	59	100038	50.54	ug/L	100
47) 1,1,1-trichloroethane	8.88	97	258857	49.99	ug/L	100
48) cyclohexane	8.99	84	274360	48.47	ug/L	99
50) 1,1-dichloropropene	9.03	75	197041	50.88	ug/L	100
51) carbon tetrachloride	9.07	117	231074	50.76	ug/L	100
52) tert-amyl alcohol	9.12	73	41838	247.35	ug/L	100
53) isopropyl acetate	9.14	87	25663	51.34	ug/L	100
56) n-butyl alcohol	9.66	41	175866	2487.29	ug/L	100
57) 2,2,4-trimethylpentane	9.34	57	725270	52.94	ug/L	100
58) benzene	9.26	78	562667	50.22	ug/L	100
59) tert-amyl methyl ether	9.32	73	423614	50.70	ug/L	100
60) heptane	9.48	57	113727	51.72	ug/L	100
61) 1,2-dichloroethane	9.28	62	186378	47.88	ug/L	100
62) ethyl acrylate	9.90	55	144563	51.51	ug/L	100
63) trichloroethene	9.93	95	144217	50.84	ug/L	100
64) 2-chloroethyl vinyl ether	10.68	63	358688	269.17	ug/L	100
65) methyl methacrylate	10.15	100	29954	51.55	ug/L	100
66) methylcyclohexane	10.22	83	313359	51.64	ug/L	100
67) 1,2-dichloropropane	10.21	63	147191	51.11	ug/L	100
68) dibromomethane	10.32	93	86858	49.89	ug/L	100
69) bromodichloromethane	10.46	83	192926	50.86	ug/L	100
71) epichlorohydrin	10.77	57	65565	250.42	ug/L	100
72) cis-1,3-dichloropropene	10.91	75	217954	52.77	ug/L	100
73) 4-methyl-2-pentanone	11.00	58	208104	206.40	ug/L	100
74) isoamyl alcohol	11.00	70	83345	1044.61	ug/L	100
77) toluene	11.30	92	323788	50.85	ug/L	100
78) ethyl methacrylate	11.47	69	143494	53.87	ug/L	100
79) trans-1,3-dichloropropene	11.48	75	187565	53.56	ug/L	100
80) 1,1,2-trichloroethane	11.72	83	96531	51.33	ug/L	100
81) tetrachloroethene	11.87	164	126363	51.12	ug/L	100
82) 2-hexanone	11.87	58	173199	211.34	ug/L	100
83) 1,3-dichloropropane	11.91	76	180751	50.46	ug/L	100
84) butyl acetate	11.96	56	80504	52.15	ug/L	100
85) dibromochloromethane	12.17	129	140919	51.34	ug/L	100
86) 1,2-dibromoethane	12.33	107	133219	51.48	ug/L	100
87) n-butyl ether	12.79	57	587442	53.31	ug/L	100
88) chlorobenzene	12.85	112	364858	50.24	ug/L	100
89) 1,1,1,2-tetrachloroethane	12.92	131	163395	51.99	ug/L	100
90) ethylbenzene	12.91	91	621513	51.11	ug/L	100
91) m,p-xylene	13.04	106	473572	102.89	ug/L	100
92) o-xylene	13.48	91	533145	52.78	ug/L	100
93) styrene	13.49	104	395020	52.99	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87627.D
 Acq On : 10 Jan 2019 9:43 pm
 Operator : deving
 Sample : ICC3694-50
 Misc : MS31708,V4B3694,5,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 11 10:56:50 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

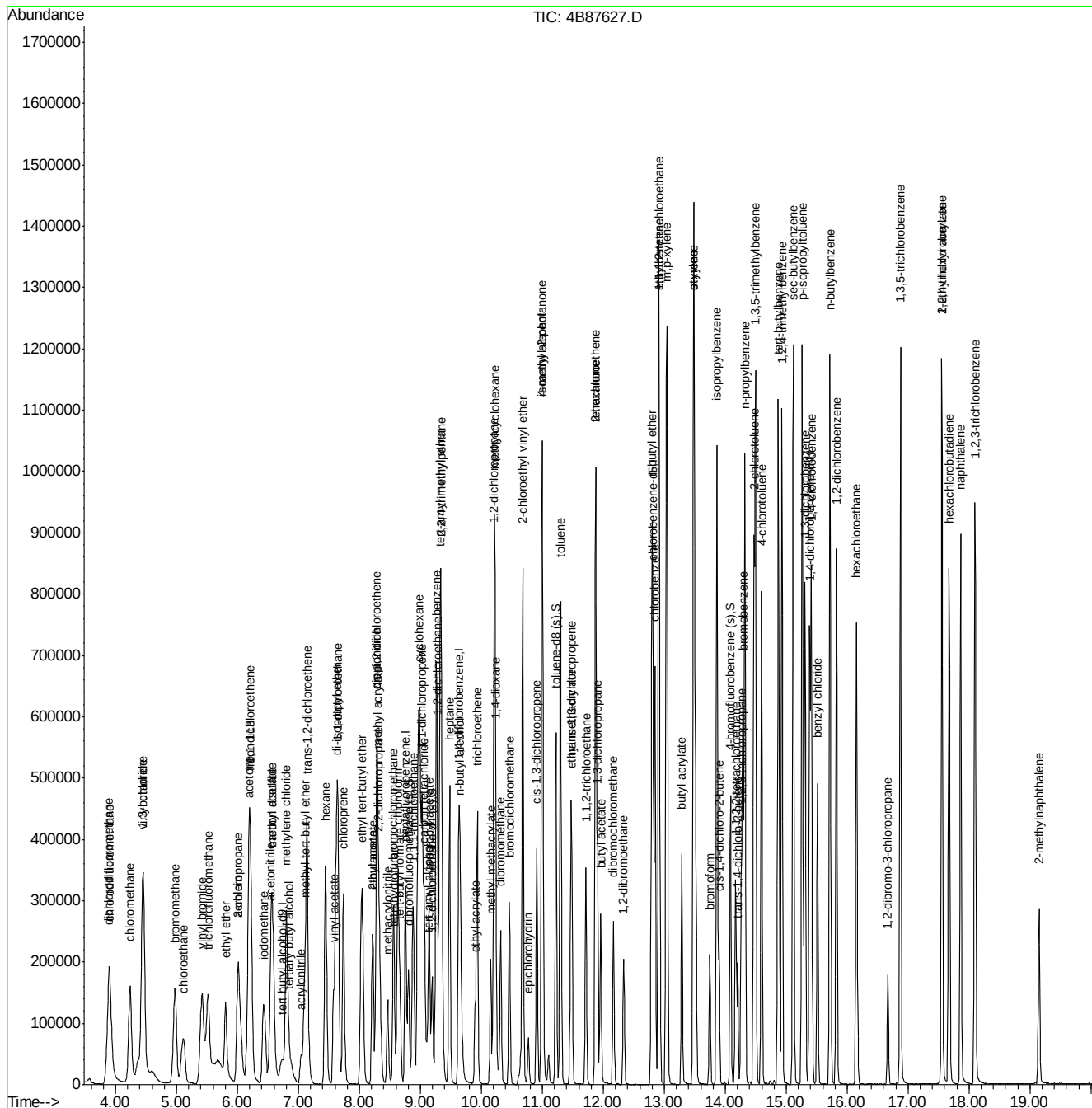
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) butyl acrylate	13.29	55	233733	52.26	ug/L	100
95) isopropylbenzene	13.86	105	708162	53.10	ug/L	100
96) bromoform	13.75	173	102164	51.10	ug/L	100
97) cis-1,4-dichloro-2-butene	13.90	88	54034	51.51	ug/L	100
100) 1,1,2,2-tetrachloroethane	14.17	83	172974	49.89	ug/L	100
101) trans-1,4-dichloro-2-buten	14.20	53	38556	51.00	ug/L	100
102) 1,2,3-trichloropropane	14.26	110	43059	50.56	ug/L	100
103) bromobenzene	14.29	156	180381	51.80	ug/L	100
104) n-propylbenzene	14.32	91	796788	53.81	ug/L	100
105) 2-chlorotoluene	14.47	126	170804	53.17	ug/L	100
106) 4-chlorotoluene	14.59	91	445442	52.15	ug/L	100
107) 1,3,5-trimethylbenzene	14.49	105	616740	53.61	ug/L	100
108) tert-butylbenzene	14.87	119	566390	56.03	ug/L	100
109) 1,2,4-trimethylbenzene	14.93	105	606813	52.93	ug/L	100
110) sec-butylbenzene	15.12	105	850954	54.46	ug/L	100
111) p-isopropyltoluene	15.26	119	723151	54.36	ug/L	100
112) 1,3-dichlorobenzene	15.31	146	356334	50.78	ug/L	100
113) 1,4-dichlorobenzene	15.42	146	361444	50.69	ug/L	100
114) 1,2-dichlorobenzene	15.83	146	374860	51.12	ug/L	100
115) benzyl chloride	15.51	91	345802	53.44	ug/L	100
116) n-butylbenzene	15.72	92	359074	54.29	ug/L	100
117) hexachloroethane	16.16	201	151026	53.92	ug/L	100
118) 1,2-dibromo-3-chloropropan	16.67	157	52875	54.21	ug/L	100
119) 1,3,5-trichlorobenzene	16.87	180	407283	54.59	ug/L	100
120) 1,2,4-trichlorobenzene	17.55	180	365966	55.22	ug/L	100
121) 2-ethylhexyl acrylate	17.56	70	19989	8.89	ug/L	100
122) hexachlorobutadiene	17.67	225	199809	53.81	ug/L	100
123) naphthalene	17.86	128	704990	55.86	ug/L	100
124) 1,2,3-trichlorobenzene	18.10	180	334845	55.50	ug/L	100
125) 2-methylnaphthalene	19.15	142	157581	24.32	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87627.D
Acq On : 10 Jan 2019 9:43 pm
Operator : deving
Sample : ICC3694-50
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 11 10:56:50 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87628.D
 Acq On : 10 Jan 2019 10:11 pm
 Operator : deving
 Sample : IC3694-100
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 11 10:57:07 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.75	65	137238	500.00	ug/L	0.02
5) pentafluorobenzene	8.76	168	255329	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	353299	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	328698	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	206123	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	114236	49.82	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.64%
55) 1,2-dichloroethane-d4 (s)	9.20	65	119637	48.36	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	96.72%
76) toluene-d8 (s)	11.23	98	393888	49.97	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.94%
99) 4-bromofluorobenzene (s)	14.09	95	150346	51.03	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.06%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.87	59	240422	522.68	ug/L	98
4) 1,4-dioxane	10.25	88	93938	2727.81	ug/L	95
6) chlorodifluoromethane	3.90	51	633163	105.08	ug/L	99
7) dichlorodifluoromethane	3.89	85	607419	110.28	ug/L	99
8) chloromethane	4.24	50	689474	102.06	ug/L	98
9) vinyl chloride	4.44	62	647482	104.79	ug/L	99
10) 1,3-butadiene	4.46	54	450019	103.67	ug/L	99
11) bromomethane	4.97	94	404174	95.64	ug/L	98
12) chloroethane	5.12	64	293916	101.00	ug/L	99
13) trichlorofluoromethane	5.52	101	642688	103.50	ug/L	99
14) vinyl bromide	5.41	106	375955	104.82	ug/L	100
15) ethyl ether	5.81	74	144670	104.38	ug/L	96
16) 2-chloropropane	6.01	43	636011	97.66	ug/L	99
17) acrolein	6.01	56	54795	110.49	ug/L	92
18) freon 113	6.20	151	325372	105.55	ug/L	98
19) 1,1-dichloroethene	6.19	61	572692	104.95	ug/L	98
20) acetone	6.17	58	108307	414.42	ug/L	100
21) acetonitrile	6.54	41	500131	964.92	ug/L	99
22) iodomethane	6.43	142	612991	105.09	ug/L	100
23) carbon disulfide	6.57	76	1172006	101.70	ug/L	100
24) methylene chloride	6.80	84	352937	99.77	ug/L	98
25) methyl acetate	6.57	43	232700	100.77	ug/L	99
26) methyl tert butyl ether	7.11	73	818033	104.58	ug/L	99
27) trans-1,2-dichloroethene	7.14	61	451796	103.93	ug/L	100
28) hexane	7.44	56	241527	107.66	ug/L	98
29) di-isopropyl ether	7.63	45	1157455	106.05	ug/L	98
30) 2-butanone	8.21	72	122597	453.50	ug/L	99
31) 1,1-dichloroethane	7.65	63	560653	103.73	ug/L	100
32) chloroprene	7.74	53	452957	108.88	ug/L	100
33) acrylonitrile	7.04	53	112882	102.31	ug/L	97
34) vinyl acetate	7.58	86	40880	108.18	ug/L #	94
35) ethyl tert-butyl ether	8.04	59	906728	104.68	ug/L	99
36) ethyl acetate	8.22	45	42420	101.82	ug/L #	82

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87628.D
 Acq On : 10 Jan 2019 10:11 pm
 Operator : deving
 Sample : IC3694-100
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 11 10:57:07 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	8.33	77	489467	101.90	ug/L	98
38) cis-1,2-dichloroethene	8.29	96	335995	105.76	ug/L	100
39) propionitrile	8.28	54	448627	1043.49	ug/L	100
40) methyl acrylate	8.31	85	40755	112.13	ug/L	98
41) methacrylonitrile	8.46	67	109433	108.10	ug/L	97
42) bromochloromethane	8.56	128	165974	101.74	ug/L	99
43) tetrahydrofuran	8.58	72	37207	108.18	ug/L	90
44) chloroform	8.63	83	535933	100.92	ug/L	99
45) tert-butyl formate	8.66	59	212373	106.65	ug/L	97
47) 1,1,1-trichloroethane	8.88	97	540996	103.84	ug/L	98
48) cyclohexane	8.99	84	557170	97.83	ug/L	96
50) 1,1-dichloropropene	9.03	75	412942	106.00	ug/L	99
51) carbon tetrachloride	9.07	117	483028	105.48	ug/L	99
52) tert-amyl alcohol	9.12	73	91633	538.50	ug/L	94
53) isopropyl acetate	9.15	87	55170	109.70	ug/L	95
56) n-butyl alcohol	9.66	41	369280	5092.89	ug/L	99
57) 2,2,4-trimethylpentane	9.34	57	1560927	111.10	ug/L	100
58) benzene	9.26	78	1186802	103.29	ug/L	100
59) tert-amyl methyl ether	9.32	73	865396	101.00	ug/L	98
60) heptane	9.48	57	245017	108.65	ug/L	97
61) 1,2-dichloroethane	9.28	62	386956	96.94	ug/L	98
62) ethyl acrylate	9.90	55	318631	110.71	ug/L	100
63) trichloroethene	9.93	95	307909	105.85	ug/L	99
64) 2-chloroethyl vinyl ether	10.68	63	812849	594.83	ug/L	99
65) methyl methacrylate	10.15	100	67017	112.46	ug/L	96
66) methylcyclohexane	10.23	83	664357	106.76	ug/L	98
67) 1,2-dichloropropane	10.21	63	310966	105.30	ug/L	96
68) dibromomethane	10.32	93	183306	102.68	ug/L	99
69) bromodichloromethane	10.46	83	410339	105.49	ug/L	99
71) epichlorohydrin	10.77	57	143987	536.27	ug/L	98
72) cis-1,3-dichloropropene	10.91	75	472498	111.55	ug/L	98
73) 4-methyl-2-pentanone	11.00	58	439083	424.65	ug/L	99
74) isoamyl alcohol	11.00	70	174743	2135.70	ug/L	99
77) toluene	11.30	92	703845	105.54	ug/L	100
78) ethyl methacrylate	11.47	69	318148	114.02	ug/L	99
79) trans-1,3-dichloropropene	11.48	75	401545	109.47	ug/L	98
80) 1,1,2-trichloroethane	11.72	83	207447	105.32	ug/L	99
81) tetrachloroethene	11.87	164	274780	106.13	ug/L	98
82) 2-hexanone	11.87	58	375942	437.95	ug/L	97
83) 1,3-dichloropropane	11.91	76	389463	103.80	ug/L	99
84) butyl acetate	11.96	56	170729	105.59	ug/L	98
85) dibromochloromethane	12.17	129	308716	107.37	ug/L	99
86) 1,2-dibromoethane	12.33	107	290852	107.30	ug/L	100
87) n-butyl ether	12.79	57	1275491	110.50	ug/L	100
88) chlorobenzene	12.85	112	788397	103.65	ug/L	98
89) 1,1,1,2-tetrachloroethane	12.92	131	350864	106.57	ug/L	99
90) ethylbenzene	12.92	91	1343608	105.48	ug/L	100
91) m,p-xylene	13.05	106	1028150	213.25	ug/L	100
92) o-xylene	13.48	91	1156768	109.32	ug/L	100
93) styrene	13.50	104	866423	110.97	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87628.D
 Acq On : 10 Jan 2019 10:11 pm
 Operator : deving
 Sample : IC3694-100
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 11 10:57:07 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

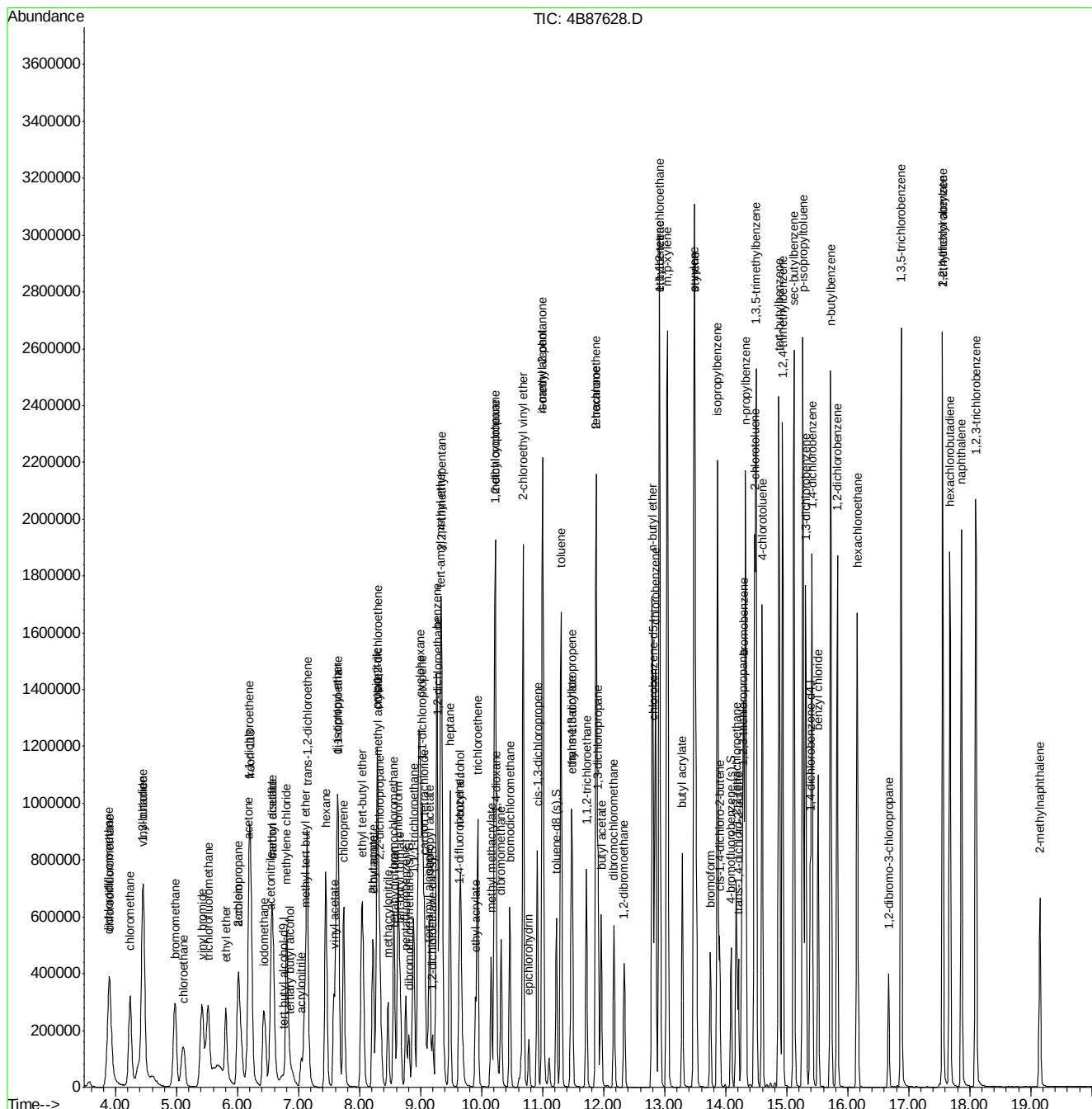
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) butyl acrylate	13.29	55	516406	110.22	ug/L	99
95) isopropylbenzene	13.87	105	1538654	110.15	ug/L	99
96) bromoform	13.75	173	228866	109.28	ug/L	99
97) cis-1,4-dichloro-2-butene	13.90	88	120130	109.33	ug/L	98
100) 1,1,2,2-tetrachloroethane	14.17	83	371409	103.05	ug/L	98
101) trans-1,4-dichloro-2-buten	14.21	53	86487	110.03	ug/L	98
102) 1,2,3-trichloropropane	14.27	110	92814	104.83	ug/L	95
103) bromobenzene	14.29	156	395535	109.27	ug/L	99
104) n-propylbenzene	14.32	91	1706006	110.82	ug/L	99
105) 2-chlorotoluene	14.47	126	372281	111.48	ug/L	93
106) 4-chlorotoluene	14.59	91	975646	109.87	ug/L	99
107) 1,3,5-trimethylbenzene	14.50	105	1342467	112.24	ug/L	99
108) tert-butylbenzene	14.88	119	1247816	118.74	ug/L	98
109) 1,2,4-trimethylbenzene	14.93	105	1323275	111.03	ug/L	99
110) sec-butylbenzene	15.12	105	1865586	114.85	ug/L	100
111) p-isopropyltoluene	15.26	119	1593269	115.21	ug/L	100
112) 1,3-dichlorobenzene	15.31	146	781609	107.13	ug/L	99
113) 1,4-dichlorobenzene	15.42	146	794237	107.14	ug/L	99
114) 1,2-dichlorobenzene	15.83	146	819018	107.44	ug/L	99
115) benzyl chloride	15.51	91	777209	115.53	ug/L	100
116) n-butylbenzene	15.72	92	787429	114.51	ug/L	98
117) hexachloroethane	16.16	201	349816	120.13	ug/L	98
118) 1,2-dibromo-3-chloropropan	16.67	157	118553	116.91	ug/L	99
119) 1,3,5-trichlorobenzene	16.87	180	904744	116.63	ug/L	99
120) 1,2,4-trichlorobenzene	17.55	180	813286	118.03	ug/L	99
121) 2-ethylhexyl acrylate	17.56	70	52684	19.03	ug/L	94
122) hexachlorobutadiene	17.67	225	440307	114.05	ug/L	98
123) naphthalene	17.86	128	1554450	118.47	ug/L	100
124) 1,2,3-trichlorobenzene	18.10	180	729509	116.30	ug/L	99
125) 2-methylnaphthalene	19.15	142	377171	53.08	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87628.D
Acq On : 10 Jan 2019 10:11 pm
Operator : deving
Sample : IC3694-100
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 11 10:57:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87629.D
 Acq On : 10 Jan 2019 10:40 pm
 Operator : deving
 Sample : IC3694-200
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 11 10:57:35 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.76	65	144050	500.00	ug/L	0.03
5) pentafluorobenzene	8.76	168	252891	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	352738	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	345309	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	224639	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	112374	49.48	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.96%
55) 1,2-dichloroethane-d4 (s)	9.20	65	119153	48.24	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	96.48%
76) toluene-d8 (s)	11.23	98	405492	48.97	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.94%
99) 4-bromofluorobenzene (s)	14.09	95	158715	49.43	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.86%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.87	59	487267	1009.22	ug/L	97
4) 1,4-dioxane	10.25	88	192037	5312.75	ug/L	91
6) chlorodifluoromethane	3.90	51	1193913	200.05	ug/L	99
7) dichlorodifluoromethane	3.88	85	1152079	211.18	ug/L	99
8) chloromethane	4.23	50	1338928	200.11	ug/L	99
9) vinyl chloride	4.44	62	1233418	201.55	ug/L	100
10) 1,3-butadiene	4.46	54	833626	193.89	ug/L	99
11) bromomethane	4.97	94	664402	158.73	ug/L	99
12) chloroethane	5.11	64	539719	187.26	ug/L	98
13) trichlorofluoromethane	5.51	101	1217850	198.02	ug/L	99
14) vinyl bromide	5.41	106	723186	203.57	ug/L	98
15) ethyl ether	5.81	74	275732	200.86	ug/L	90
16) 2-chloropropane	6.01	43	1183154	183.42	ug/L	98
17) acrolein	6.01	56	107597	219.06	ug/L	97
18) freon 113	6.21	151	614323	201.20	ug/L	98
19) 1,1-dichloroethene	6.19	61	1078247	199.50	ug/L	98
20) acetone	6.18	58	207739	802.55	ug/L	97
21) acetonitrile	6.54	41	971473	1892.37	ug/L	98
22) iodomethane	6.43	142	1182697	204.72	ug/L	99
23) carbon disulfide	6.57	76	2221246	194.61	ug/L	100
24) methylene chloride	6.80	84	674469	192.50	ug/L	99
25) methyl acetate	6.57	43	449966	196.74	ug/L	99
26) methyl tert butyl ether	7.11	73	1565185	202.03	ug/L	99
27) trans-1,2-dichloroethene	7.14	61	847641	196.86	ug/L	100
28) hexane	7.44	56	445896	200.68	ug/L	98
29) di-isopropyl ether	7.63	45	2227953	206.10	ug/L	97
30) 2-butanone	8.22	72	240519	898.28	ug/L	92
31) 1,1-dichloroethane	7.65	63	1044152	195.05	ug/L	99
32) chloroprene	7.74	53	839785	203.82	ug/L	99
33) acrylonitrile	7.04	53	218665	200.09	ug/L	95
34) vinyl acetate	7.58	86	75421	201.50	ug/L #	81
35) ethyl tert-butyl ether	8.04	59	1730733	201.74	ug/L	99
36) ethyl acetate	8.22	45	83926	203.38	ug/L #	86

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87629.D
 Acq On : 10 Jan 2019 10:40 pm
 Operator : deving
 Sample : IC3694-200
 Misc : MS31708,V4B3694,5,,,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 11 10:57:35 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	8.33	77	935087	196.54	ug/L	96
38) cis-1,2-dichloroethene	8.29	96	630221	200.29	ug/L	98
39) propionitrile	8.29	54	860018	2019.66	ug/L	87
40) methyl acrylate	8.30	85	82401	228.89	ug/L #	89
41) methacrylonitrile	8.46	67	214709	214.14	ug/L	95
42) bromochloromethane	8.56	128	316755	196.05	ug/L	98
43) tetrahydrofuran	8.57	72	73718	216.41	ug/L	89
44) chloroform	8.63	83	1000254	190.18	ug/L	98
45) tert-butyl formate	8.66	59	401940	203.79	ug/L	95
47) 1,1,1-trichloroethane	8.88	97	1055348	204.53	ug/L	98
48) cyclohexane	8.99	84	1099064	194.84	ug/L	91
50) 1,1-dichloropropene	9.03	75	768798	199.24	ug/L	99
51) carbon tetrachloride	9.07	117	931504	205.37	ug/L	100
52) tert-amyl alcohol	9.13	73	192857	1144.28	ug/L	93
53) isopropyl acetate	9.15	87	111845	224.54	ug/L	94
56) n-butyl alcohol	9.66	41	746962	10318.04	ug/L	99
57) 2,2,4-trimethylpentane	9.35	57	2994398	213.47	ug/L	98
58) benzene	9.26	78	2269371	197.81	ug/L	99
59) tert-amyl methyl ether	9.32	73	1642769	192.03	ug/L	97
60) heptane	9.48	57	459374	204.02	ug/L	98
61) 1,2-dichloroethane	9.28	62	733322	184.00	ug/L	99
62) ethyl acrylate	9.90	55	645734	224.72	ug/L	100
63) trichloroethene	9.93	95	594206	204.60	ug/L	99
64) 2-chloroethyl vinyl ether	10.68	63	1709329	1252.85	ug/L	99
65) methyl methacrylate	10.15	100	137236	230.66	ug/L	96
66) methylcyclohexane	10.23	83	1282596	206.44	ug/L	97
67) 1,2-dichloropropane	10.21	63	600410	203.64	ug/L	99
68) dibromomethane	10.32	93	357532	200.58	ug/L	98
69) bromodichloromethane	10.46	83	804138	207.06	ug/L	98
71) epichlorohydrin	10.77	57	292890	1092.58	ug/L	98
72) cis-1,3-dichloropropene	10.91	75	935403	221.18	ug/L	97
73) 4-methyl-2-pentanone	11.00	58	875042	847.63	ug/L	99
74) isoamyl alcohol	11.00	70	355556	4352.50	ug/L	96
77) toluene	11.30	92	1378910	196.81	ug/L	99
78) ethyl methacrylate	11.47	69	650037	221.76	ug/L	97
79) trans-1,3-dichloropropene	11.48	75	800744	207.79	ug/L	99
80) 1,1,2-trichloroethane	11.72	83	413756	199.95	ug/L	99
81) tetrachloroethene	11.88	164	540101	198.56	ug/L	98
82) 2-hexanone	11.87	58	766071	849.49	ug/L	96
83) 1,3-dichloropropane	11.91	76	770647	195.52	ug/L	98
84) butyl acetate	11.96	56	345610	203.46	ug/L	96
85) dibromochloromethane	12.17	129	625509	207.09	ug/L	99
86) 1,2-dibromoethane	12.33	107	589516	207.01	ug/L	100
87) n-butyl ether	12.79	57	2575255	212.37	ug/L	99
88) chlorobenzene	12.85	112	1604601	200.81	ug/L	99
89) 1,1,1,2-tetrachloroethane	12.92	131	702237	203.04	ug/L	100
90) ethylbenzene	12.92	91	2698907	201.69	ug/L	99
91) m,p-xylene	13.05	106	2083860	411.43	ug/L	99
92) o-xylene	13.48	91	2326206	209.27	ug/L	100
93) styrene	13.50	104	1746657	212.95	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87629.D
 Acq On : 10 Jan 2019 10:40 pm
 Operator : deving
 Sample : IC3694-200
 Misc : MS31708,V4B3694,5,,,,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 11 10:57:35 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 10:50:54 2019
 Response via : Initial Calibration

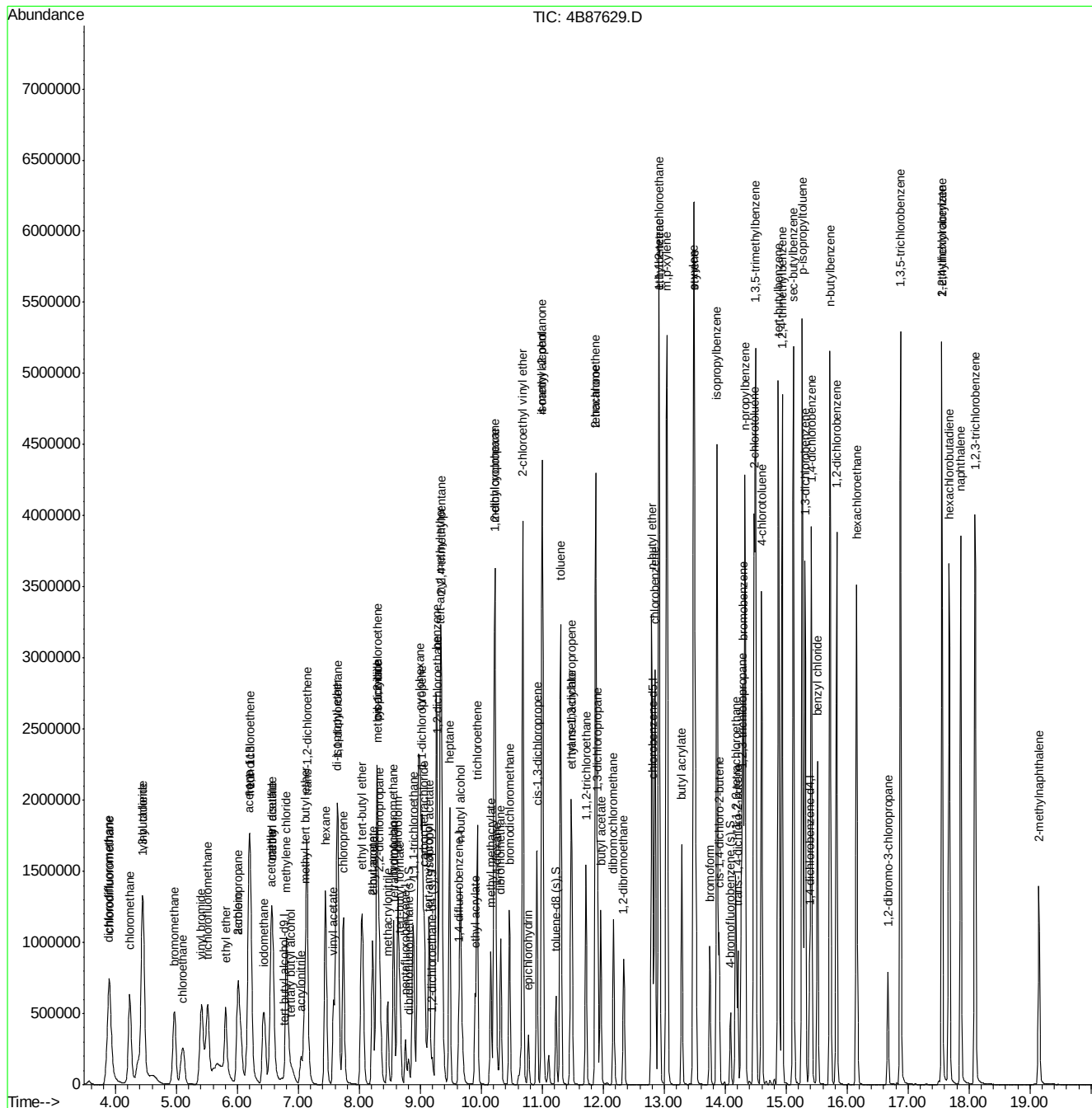
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) butyl acrylate	13.29	55	1065467	216.48	ug/L	100
95) isopropylbenzene	13.87	105	3136038	213.71	ug/L	98
96) bromoform	13.75	173	471684	214.38	ug/L	99
97) cis-1,4-dichloro-2-butene	13.90	88	245467	212.65	ug/L	99
100) 1,1,2,2-tetrachloroethane	14.17	83	756294	192.54	ug/L	99
101) trans-1,4-dichloro-2-buten	14.21	53	176441	205.97	ug/L	97
102) 1,2,3-trichloropropane	14.27	110	187968	194.80	ug/L	94
103) bromobenzene	14.29	156	807491	204.68	ug/L	99
104) n-propylbenzene	14.32	91	3446854	205.44	ug/L	99
105) 2-chlorotoluene	14.47	126	767453	210.86	ug/L	93
106) 4-chlorotoluene	14.59	91	2004477	207.12	ug/L	99
107) 1,3,5-trimethylbenzene	14.50	105	2788417	213.92	ug/L	99
108) tert-butylbenzene	14.88	119	2598142	226.86	ug/L	98
109) 1,2,4-trimethylbenzene	14.93	105	2749290	211.67	ug/L	100
110) sec-butylbenzene	15.12	105	3846115	217.25	ug/L	99
111) p-isopropyltoluene	15.26	119	3287420	218.12	ug/L	99
112) 1,3-dichlorobenzene	15.31	146	1615556	203.18	ug/L	100
113) 1,4-dichlorobenzene	15.42	146	1663225	205.88	ug/L	100
114) 1,2-dichlorobenzene	15.83	146	1696973	204.26	ug/L	99
115) benzyl chloride	15.51	91	1626899	221.89	ug/L	100
116) n-butylbenzene	15.72	92	1618646	215.99	ug/L	98
117) hexachloroethane	16.16	201	745039	234.77	ug/L	97
118) 1,2-dibromo-3-chloropropan	16.67	157	245238	221.90	ug/L	98
119) 1,3,5-trichlorobenzene	16.87	180	1812737	214.43	ug/L	99
120) 1,2,4-trichlorobenzene	17.55	180	1596182	212.56	ug/L	100
121) 2-ethylhexyl acrylate	17.56	70	131698	40.70	ug/L	87
122) hexachlorobutadiene	17.67	225	861952	204.87	ug/L	98
123) naphthalene	17.86	128	3042537	212.77	ug/L	100
124) 1,2,3-trichlorobenzene	18.10	180	1411825	206.53	ug/L	100
125) 2-methylnaphthalene	19.15	142	775958	98.21	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87629.D
Acq On : 10 Jan 2019 10:40 pm
Operator : deving
Sample : IC3694-200
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 11 10:57:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 10:50:54 2019
Response via : Initial Calibration



7.6.9

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87632.D
 Acq On : 11 Jan 2019 12:05 am
 Operator : deving
 Sample : ICV3694-50
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 11 11:02:33 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.74	65	145406	500.00	ug/L	0.01
5) pentafluorobenzene	8.76	168	256274	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	346481	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	316582	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	200797	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	113260	49.21	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.42%
55) 1,2-dichloroethane-d4 (s)	9.19	65	118967	49.03	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	98.06%
76) toluene-d8 (s)	11.23	98	383193	50.47	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.94%
99) 4-bromofluorobenzene (s)	14.09	95	145299	50.62	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	101.24%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	6.85	59	124154	254.75	ug/L	99
4) 1,4-dioxane	10.25	88	43604	1195.07	ug/L	91
6) chlorodifluoromethane	3.90	51	343509	56.80	ug/L	99
7) dichlorodifluoromethane	3.88	85	328473	59.42	ug/L	99
8) chloromethane	4.23	50	334144	49.28	ug/L	99
9) vinyl chloride	4.44	62	319980	51.60	ug/L	99
10) 1,3-butadiene	4.45	54	257087	59.01	ug/L	99
11) bromomethane	4.97	94	205728	48.50	ug/L	99
12) chloroethane	5.11	64	150637	51.57	ug/L	97
13) trichlorofluoromethane	5.51	101	314756	50.50	ug/L	98
14) vinyl bromide	5.41	106	175838	48.84	ug/L	99
15) ethyl ether	5.81	74	71433	51.35	ug/L	100
16) 2-chloropropane	6.01	43	308417	47.18	ug/L	99
17) acrolein	6.02	56	27375	55.00	ug/L	92
18) freon 113	6.21	151	177324	57.31	ug/L	96
19) 1,1-dichloroethene	6.19	61	259858	47.44	ug/L	99
20) acetone	6.17	58	52924	201.76	ug/L	92
22) iodomethane	6.42	142	328373	56.09	ug/L	99
23) carbon disulfide	6.56	76	603050	52.14	ug/L	99
24) methylene chloride	6.80	84	167660	47.22	ug/L	100
25) methyl acetate	6.57	43	109310	47.16	ug/L	100
26) methyl tert butyl ether	7.11	73	812231	103.46	ug/L	98
27) trans-1,2-dichloroethene	7.14	61	216127	49.53	ug/L	98
28) hexane	7.44	56	118221	52.50	ug/L	97
29) di-isopropyl ether	7.62	45	532721	48.63	ug/L	99
30) 2-butanone	8.21	72	59664	219.89	ug/L	97
31) 1,1-dichloroethane	7.65	63	269864	49.75	ug/L	99
32) chloroprene	7.74	53	227521	54.49	ug/L	99
33) acrylonitrile	7.04	53	61707	55.72	ug/L	95
34) vinyl acetate	7.58	86	16513	43.54	ug/L	# 93
35) ethyl tert-butyl ether	8.04	59	428405	49.28	ug/L	100
36) ethyl acetate	8.22	45	19872	47.52	ug/L	# 84
37) 2,2-dichloropropane	8.32	77	232791	48.28	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87632.D
 Acq On : 11 Jan 2019 12:05 am
 Operator : deving
 Sample : ICV3694-50
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 11 11:02:33 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) cis-1,2-dichloroethene	8.29	96	163803	51.37	ug/L	99
39) propionitrile	8.29	54	223130	517.08	ug/L	85
40) methyl acrylate	8.30	85	19450	53.32	ug/L #	86
41) methacrylonitrile	8.46	67	51844	51.02	ug/L	97
42) bromochloromethane	8.56	128	80714	49.30	ug/L	96
43) tetrahydrofuran	8.57	72	18246	52.86	ug/L	89
44) chloroform	8.63	83	259347	48.66	ug/L	98
45) tert-butyl formate	8.66	59	69144	34.59	ug/L	97
47) 1,1,1-trichloroethane	8.88	97	257424	49.23	ug/L	98
48) cyclohexane	8.99	84	278022	52.92	ug/L	99
50) 1,1-dichloropropene	9.03	75	200246	51.21	ug/L	99
51) carbon tetrachloride	9.06	117	233076	50.71	ug/L	98
52) tert-amyl alcohol	9.12	73	46729	273.60	ug/L	99
53) isopropyl acetate	9.15	87	25011	49.55	ug/L #	88
56) n-butyl alcohol	9.66	41	175754	2471.59	ug/L	99
57) 2,2,4-trimethylpentane	9.34	57	701337	50.90	ug/L	99
58) benzene	9.26	78	568309	50.43	ug/L	98
59) tert-amyl methyl ether	9.32	73	402468	47.90	ug/L	98
60) heptane	9.48	57	122907	55.57	ug/L	97
61) 1,2-dichloroethane	9.28	62	185871	47.48	ug/L	97
62) ethyl acrylate	9.90	55	151956	53.84	ug/L	99
63) trichloroethene	9.93	95	147629	51.75	ug/L	99
64) 2-chloroethyl vinyl ether	10.68	63	342181	255.33	ug/L	98
65) methyl methacrylate	10.15	100	32149	55.01	ug/L #	72
66) methylcyclohexane	10.22	83	309596	50.73	ug/L	100
67) 1,2-dichloropropane	10.21	63	145112	50.11	ug/L	99
68) dibromomethane	10.32	93	89002	50.83	ug/L	99
69) bromodichloromethane	10.46	83	189810	49.76	ug/L	98
71) epichlorohydrin	10.77	57	69887	265.41	ug/L	98
72) cis-1,3-dichloropropene	10.91	75	218919	52.70	ug/L	99
73) 4-methyl-2-pentanone	11.00	58	215799	212.81	ug/L	97
74) isoamyl alcohol	11.00	70	83516	1040.81	ug/L	91
77) toluene	11.30	92	328560	51.15	ug/L	98
78) ethyl methacrylate	11.47	69	142033	52.85	ug/L	99
79) trans-1,3-dichloropropene	11.48	75	176294	49.90	ug/L	98
80) 1,1,2-trichloroethane	11.72	83	96755	51.00	ug/L	98
82) 2-hexanone	11.87	58	179892	217.58	ug/L	97
83) 1,3-dichloropropane	11.91	76	187130	51.78	ug/L	93
84) butyl acetate	11.96	56	81276	52.19	ug/L	93
85) dibromochloromethane	12.17	129	145723	52.62	ug/L	99
86) 1,2-dibromoethane	12.33	107	135925	52.06	ug/L	99
87) n-butyl ether	12.79	57	597661	53.76	ug/L	100
88) chlorobenzene	12.85	112	368795	50.34	ug/L	99
89) 1,1,1,2-tetrachloroethane	12.92	131	169338	53.40	ug/L	98
90) ethylbenzene	12.91	91	638451	52.04	ug/L	100
91) m,p-xylene	13.04	106	492937	106.15	ug/L	99
92) o-xylene	13.48	91	548997	53.87	ug/L	99
93) styrene	13.50	104	406634	54.07	ug/L	94
94) butyl acrylate	13.29	55	248892	55.16	ug/L	99
95) isopropylbenzene	13.86	105	730500	54.30	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87632.D
 Acq On : 11 Jan 2019 12:05 am
 Operator : deving
 Sample : ICV3694-50
 Misc : MS31708,V4B3694,5,,,,,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 11 11:02:33 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) bromoform	13.75	173	111014	55.03	ug/L	99
97) cis-1,4-dichloro-2-butene	13.90	88	51098	48.28	ug/L	98
100) 1,1,2,2-tetrachloroethane	14.17	83	172544	49.14	ug/L	99
101) trans-1,4-dichloro-2-buten	14.21	53	44835	58.55	ug/L	99
102) 1,2,3-trichloropropane	14.26	110	44205	51.25	ug/L	98
103) bromobenzene	14.29	156	183596	52.06	ug/L	97
104) n-propylbenzene	14.32	91	810904	54.07	ug/L	99
105) 2-chlorotoluene	14.47	126	172838	53.13	ug/L	99
106) 4-chlorotoluene	14.59	91	466954	53.98	ug/L	99
107) 1,3,5-trimethylbenzene	14.49	105	625771	53.71	ug/L	99
108) tert-butylbenzene	14.87	119	576862	56.35	ug/L	99
109) 1,2,4-trimethylbenzene	14.93	105	640436	55.16	ug/L	99
110) sec-butylbenzene	15.12	105	870252	54.99	ug/L	100
111) p-isopropyltoluene	15.26	119	748958	55.59	ug/L	99
112) 1,3-dichlorobenzene	15.31	146	366246	51.53	ug/L	100
113) 1,4-dichlorobenzene	15.42	146	372127	51.53	ug/L	99
114) 1,2-dichlorobenzene	15.83	146	383627	51.66	ug/L	100
115) benzyl chloride	15.51	91	272633	41.60	ug/L	99
116) n-butylbenzene	15.72	92	365712	54.59	ug/L	98
117) hexachloroethane	16.16	201	158044	55.71	ug/L	99
118) 1,2-dibromo-3-chloropropan	16.67	157	53913	54.58	ug/L	98
119) 1,3,5-trichlorobenzene	16.87	180	427381	55.14	ug/L	99
120) 1,2,4-trichlorobenzene	17.55	180	373661	55.67	ug/L	99
121) 2-ethylhexyl acrylate	17.56	70	24106	10.15	ug/L	95
122) hexachlorobutadiene	17.67	225	198180	51.22	ug/L	97
123) naphthalene	17.86	128	735149	57.51	ug/L	100
124) 1,2,3-trichlorobenzene	18.10	180	335547	54.91	ug/L	99
125) 2-methylnaphthalene	19.15	142	162985	24.79	ug/L	100

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

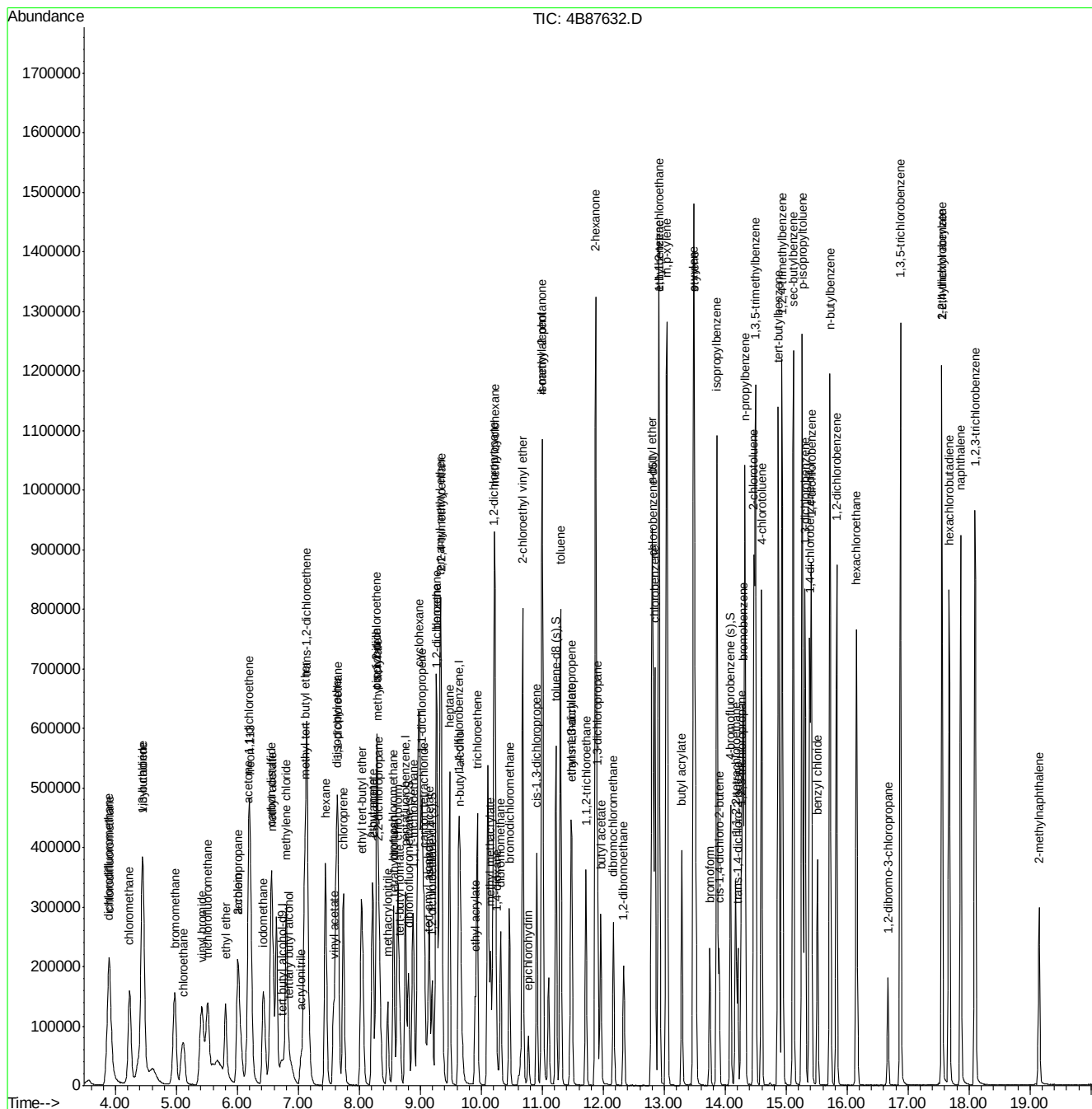
7.6.10

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87632.D
Acq On : 11 Jan 2019 12:05 am
Operator : deving
Sample : ICV3694-50
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 11 11:02:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



7.6.10

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
 Data File : 4B87633.D
 Acq On : 11 Jan 2019 12:33 am
 Operator : deving
 Sample : ICV3694-50
 Misc : MS31708,V4B3694,5,,,,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 11:03:08 2019
 Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.73	65	148787	500.00	ug/L	0.00
5) pentafluorobenzene	8.76	168	264851	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.63	114	357153	50.00	ug/L	0.00
75) chlorobenzene-d5	12.82	117	317534	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.38	152	206111	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	8.80	113	117607	49.44	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	98.88%		
55) 1,2-dichloroethane-d4 (s)	9.20	65	125579	50.21	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery =	100.42%		
76) toluene-d8 (s)	11.23	98	385989	50.69	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	101.38%		
99) 4-bromofluorobenzene (s)	14.09	95	149886	50.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	101.76%		

Target Compounds

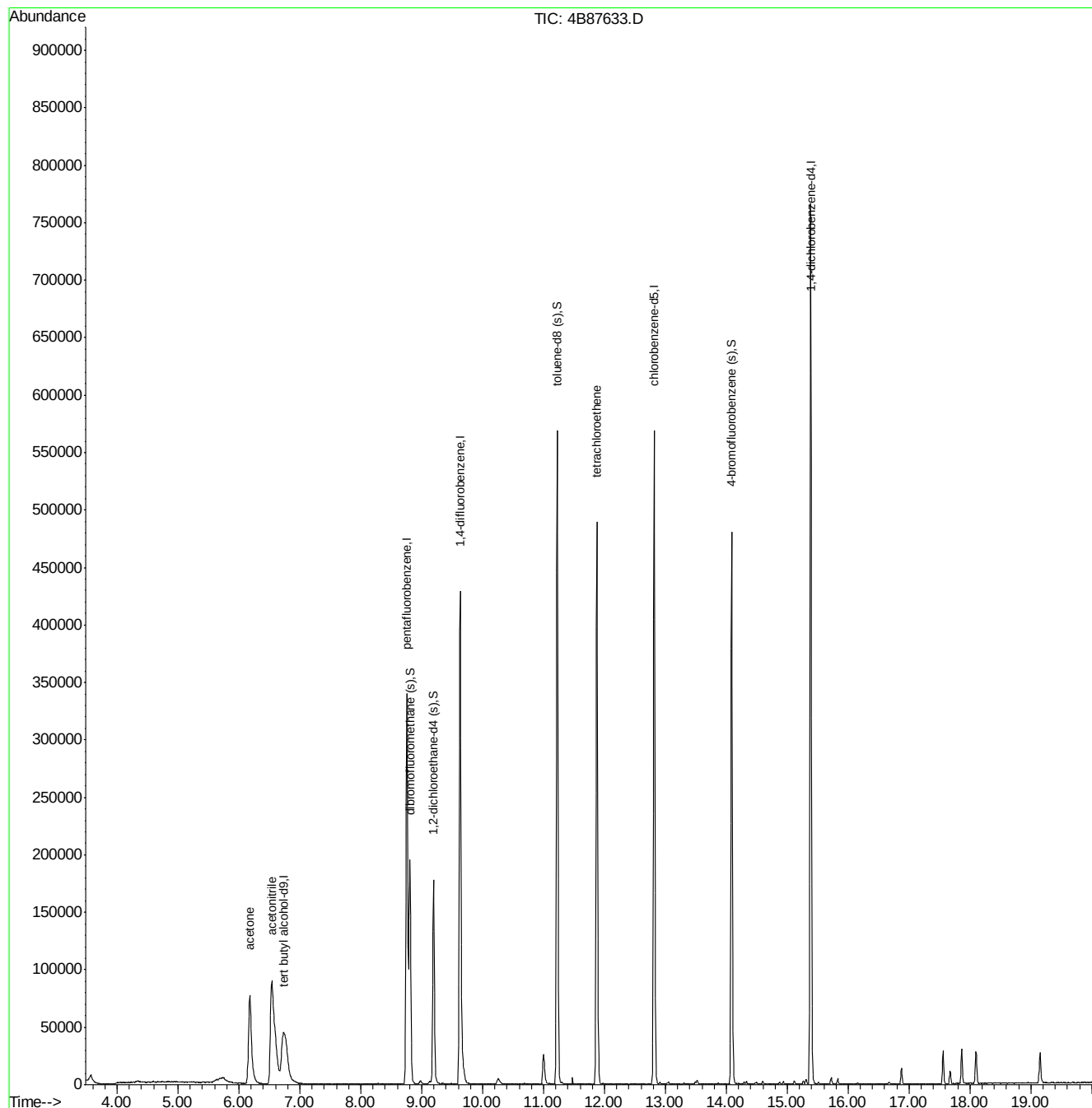
						Qvalue
20) acetone	6.18	58	51021	188.21	ug/L	99
21) acetonitrile	6.54	41	270865	503.80	ug/L	99
81) tetrachloroethene	11.87	164	118706	47.46	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V4B3694\
Data File : 4B87633.D
Acq On : 11 Jan 2019 12:33 am
Operator : deving
Sample : ICV3694-50
Misc : MS31708,V4B3694,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 11 11:03:08 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88502.d
 Acq On : 25 Feb 2019 6:56 pm
 Operator : brittink
 Sample : cc3694-50 Inst : MS4B
 Misc : MS32716,V4B3742,5,,,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:04:58 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.749	65	94039	500.00	ug/L	0.02
5) pentafluorobenzene	8.757	168	233945	50.00	ug/L	0.00
54) 1,4-difluorobenzene	9.630	114	317987	50.00	ug/L	0.00
75) chlorobenzene-d5	12.810	117	288792	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.384	152	172117	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	8.804	113	112559	53.57	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	107.14%
55) 1,2-dichloroethane-d4 (s)	9.196	65	113280	50.87	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	101.74%
76) toluene-d8 (s)	11.220	98	358405	51.75	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.50%
99) 4-bromofluorobenzene (s)	14.087	95	133557	54.29	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.58%
Target Compounds						
					Qvalue	
3) tertiary butyl alcohol	6.858	59	78716	249.74	ug/L	98
4) 1,4-dioxane	10.248	88	29977	1270.36	ug/L	97
6) chlorodifluoromethane	3.898	51	230095	41.68	ug/L	99
7) dichlorodifluoromethane	3.882	85	232799	46.14	ug/L	99
8) chloromethane	4.238	50	267505	43.22	ug/L	99
9) vinyl chloride	4.442	62	240577	42.50	ug/L	99
10) 1,3-butadiene	4.468	54	161105	40.51	ug/L	99
11) bromomethane	4.986	94	164635	42.52	ug/L	98
12) chloroethane	5.132	64	119011	44.64	ug/L	96
13) trichlorofluoromethane	5.519	101	256104	45.01	ug/L	98
14) vinyl bromide	5.425	106	141004	42.91	ug/L	98
15) ethyl ether	5.818	74	66313	52.22	ug/L	96
16) 2-chloropropane	6.022	43	268492	44.99	ug/L	98
17) acrolein	6.016	56	24329	53.54	ug/L	92
18) freon 113	6.220	151	128410	45.46	ug/L	97
19) 1,1-dichloroethene	6.205	61	243909	48.78	ug/L	98
20) acetone	6.189	58	42522	177.58	ug/L	96
21) acetonitrile	6.555	41	184701	388.92	ug/L	99
22) iodomethane	6.445	142	260236	48.69	ug/L	99
23) carbon disulfide	6.586	76	466912	44.22	ug/L	98
24) methylene chloride	6.811	84	165444	51.04	ug/L	98
25) methyl acetate	6.581	43	97554	46.11	ug/L	99
26) methyl tert butyl ether	7.115	73	330344	46.09	ug/L	100
27) trans-1,2-dichloroethene	7.146	61	208218	52.27	ug/L	99
28) hexane	7.449	56	91513	44.52	ug/L	97
29) di-isopropyl ether	7.627	45	519232	51.92	ug/L	99
30) 2-butanone	8.218	72	49058	198.06	ug/L	97
31) 1,1-dichloroethane	7.653	63	260277	52.56	ug/L	100
32) chloroprene	7.742	53	198471	52.07	ug/L	99
33) acrylonitrile	7.047	53	48031	47.51	ug/L	94
34) vinyl acetate	7.580	86	19076	55.09	ug/L	# 86
35) ethyl tert-butyl ether	8.040	59	404610	50.98	ug/L	99
36) ethyl acetate	8.224	45	17514	45.88	ug/L	# 78
37) 2,2-dichloropropane	8.328	77	211585	48.07	ug/L	96
38) cis-1,2-dichloroethene	8.292	96	155629	53.46	ug/L	99
39) propionitrile	8.286	54	181967	461.94	ug/L	85
40) methyl acrylate	8.302	85	16572	49.76	ug/L	# 84
41) methacrylonitrile	8.464	67	45116	48.64	ug/L	97
42) bromochloromethane	8.558	128	77554	51.89	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA\feb2019\2-27\v4b3742\
 Data File : 4b88502.d
 Acq On : 25 Feb 2019 6:56 pm
 Operator : brittink
 Sample : cc3694-50 Inst : MS4B
 Misc : MS32716,V4B3742,5,,,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:04:58 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) tetrahydrofuran	8.579	72	15039	47.72	ug/L	90
44) chloroform	8.631	83	252726	51.94	ug/L	98
45) tert-butyl formate	8.663	59	103227	56.58	ug/L	95
47) 1,1,1-trichloroethane	8.883	97	232520	48.71	ug/L	98
48) cyclohexane	8.992	84	201446	42.01	ug/L	97
50) 1,1-dichloropropene	9.029	75	179223	50.21	ug/L	100
51) carbon tetrachloride	9.066	117	206296	49.17	ug/L	97
52) tert-amyl alcohol	9.123	73	33499	214.86	ug/L	95
53) isopropyl acetate	9.149	87	22208	48.19	ug/L	99
56) n-butyl alcohol	9.657	41	125836	1928.18	ug/L	97
57) 2,2,4-trimethylpentane	9.343	57	501735	39.68	ug/L	98
58) benzene	9.259	78	528297	51.08	ug/L	99
59) tert-amyl methyl ether	9.322	73	386747	50.15	ug/L	99
60) heptane	9.479	57	89745	44.21	ug/L	95
61) 1,2-dichloroethane	9.280	62	175131	48.74	ug/L	99
62) ethyl acrylate	9.897	55	122513	47.30	ug/L	100
63) trichloroethene	9.929	95	134471	51.36	ug/L	96
64) 2-chloroethyl vinyl ether	10.677	63	345286	280.73	ug/L	99
65) methyl methacrylate	10.153	100	25773	48.05	ug/L	96
66) methylcyclohexane	10.227	83	235891	42.12	ug/L	99
67) 1,2-dichloropropane	10.206	63	136883	51.50	ug/L	99
68) dibromomethane	10.316	93	81380	50.65	ug/L	99
69) bromodichloromethane	10.457	83	183525	52.42	ug/L	99
71) epichlorohydrin	10.771	57	52786	218.43	ug/L	98
72) cis-1,3-dichloropropene	10.907	75	200307	52.54	ug/L	100
73) 4-methyl-2-pentanone	11.001	58	179963	193.38	ug/L	97
74) isoamyl alcohol	10.990	70	61313	832.58	ug/L	96
77) toluene	11.299	92	302099	51.56	ug/L	98
78) ethyl methacrylate	11.461	69	128653	52.48	ug/L	98
79) trans-1,3-dichloropropene	11.482	75	170543	52.92	ug/L	98
80) 1,1,2-trichloroethane	11.712	83	89523	51.73	ug/L	98
81) tetrachloroethene	11.874	164	114916	50.52	ug/L	98
82) 2-hexanone	11.874	58	151722	201.17	ug/L	98
83) 1,3-dichloropropane	11.900	76	166859	50.62	ug/L	96
84) butyl acetate	11.958	56	68878	48.48	ug/L	98
85) dibromochloromethane	12.167	129	130351	51.60	ug/L	99
86) 1,2-dibromoethane	12.335	107	126912	53.29	ug/L	100
87) n-butyl ether	12.795	57	537729	53.02	ug/L	99
88) chlorobenzene	12.847	112	339767	50.84	ug/L	100
89) 1,1,1,2-tetrachloroethane	12.915	131	152720	52.80	ug/L	99
90) ethylbenzene	12.910	91	580078	51.83	ug/L	99
91) m,p-xylene	13.041	106	441591	104.25	ug/L	99
92) o-xylene	13.480	91	495975	53.35	ug/L	100
93) styrene	13.490	104	374593	54.61	ug/L	95
94) butyl acrylate	13.286	55	214251	52.05	ug/L	98
95) isopropylbenzene	13.862	105	629412	51.29	ug/L	99
96) bromoform	13.747	173	90904	49.40	ug/L	98
97) cis-1,4-dichloro-2-butene	13.898	88	40535	41.99	ug/L	96
100) 1,1,2,2-tetrachloroethane	14.165	83	152994	50.84	ug/L	99
101) trans-1,4-dichloro-2-b...	14.202	53	29039	44.24	ug/L	95
102) 1,2,3-trichloropropane	14.264	110	37417	50.61	ug/L	98
103) bromobenzene	14.285	156	169432	56.05	ug/L	98
104) n-propylbenzene	14.317	91	715656	55.67	ug/L	99
105) 2-chlorotoluene	14.468	126	158158	56.72	ug/L	94
106) 4-chlorotoluene	14.594	91	411773	55.53	ug/L	99
107) 1,3,5-trimethylbenzene	14.495	105	539039	53.97	ug/L	99
108) tert-butylbenzene	14.871	119	470853	53.66	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
 Data File : 4b88502.d
 Acq On : 25 Feb 2019 6:56 pm
 Operator : brittank
 Sample : cc3694-50 Inst : MS4B
 Misc : MS32716,V4B3742,5,,,,,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
 Quant Results File: M4B3694.RES
 Quant Time: Feb 26 12:04:58 2019
 Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
 QLast Update : Fri Jan 11 11:02:00 2019
 Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109)	1,2,4-trimethylbenzene	14.929	105	540592	54.32	ug/L	99
110)	sec-butylbenzene	15.117	105	707069	52.13	ug/L	100
111)	p-isopropyltoluene	15.258	119	599246	51.89	ug/L	99
112)	1,3-dichlorobenzene	15.305	146	321727	52.81	ug/L	99
113)	1,4-dichlorobenzene	15.410	146	326449	52.74	ug/L	99
114)	1,2-dichlorobenzene	15.823	146	332415	52.22	ug/L	99
115)	benzyl chloride	15.509	91	320146	56.99	ug/L	99
116)	n-butylbenzene	15.718	92	291226	50.72	ug/L	99
117)	hexachloroethane	16.153	201	125903	51.78	ug/L	98
118)	1,2-dibromo-3-chloropr...	16.665	157	38518	45.49	ug/L	95
119)	1,3,5-trichlorobenzene	16.874	180	322466	48.54	ug/L	100
120)	1,2,4-trichlorobenzene	17.549	180	294139	51.12	ug/L	98
121)	2-ethylhexyl acrylate	17.554	70	24163	11.48	ug/L	93
122)	hexachlorobutadiene	17.669	225	155279	46.82	ug/L	97
123)	naphthalene	17.858	128	551111	50.30	ug/L	100
124)	1,2,3-trichlorobenzene	18.093	180	265463	50.68	ug/L	98
125)	2-methylnaphthalene	19.144	142	108753	19.80	ug/L	99

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

7.6.12

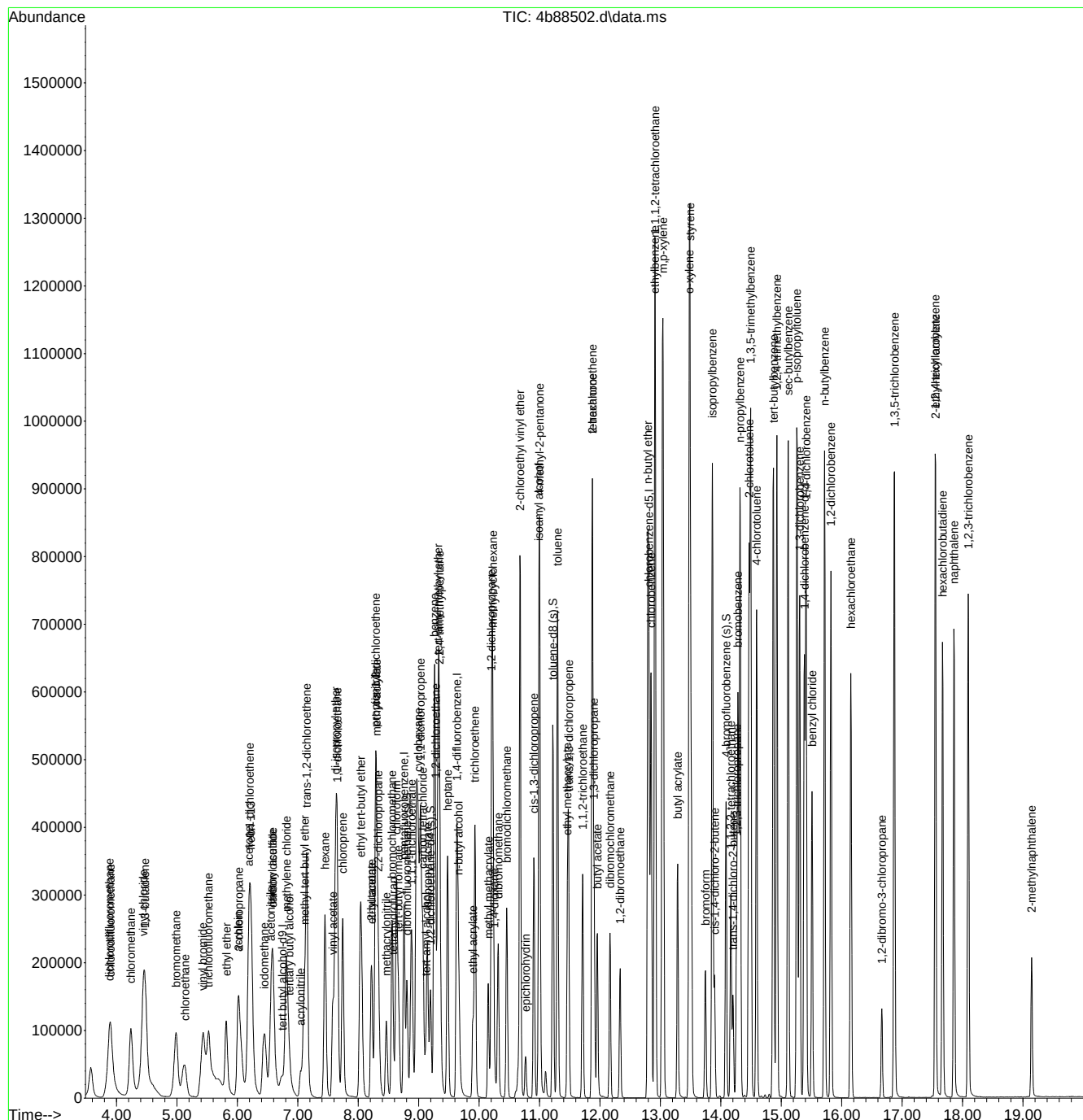
7

Quantitation Report (QT Reviewed)

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Data Path : C:\msdchem\1\data\lotusa\V0A\feb2019\2-27\v4b3742\
Data File : 4b88502.d
Acq On    : 25 Feb 2019    6:56 pm
Operator  : brittank
Sample    : cc3694-50                      Inst      :
Misc      : MS32716,V4B3742,5,,,,,1
ALS Vial  : 20      Sample Multiplier: 1
```

Inst : MS4B

Quant Method : C:\MSDCHEM\1\METHODS\M4B3694.M
Quant Results File: M4B3694.RES
Quant Time: Feb 26 12:04:58 2019
Quant Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 11 11:02:00 2019
Response via : Initial Calibration



GCMS Volatile Run Log

Standard / Reagents		Lot #			Column	
Standard	ABK V018-2645-60.20	EC V018-2645-81.1	Acrolein V018-2629-38.6		Method	ZB624(60mx0.25mmx1.4um)
Standard Concentration	100-10,000ppm	100ppm	100ppm		Init Calib Date	V8260C
Ext. Standard	ABK V018-2645-62.6	EC V018-2645-62.1	Acrolein V018-2645-37.2			1/10/2019
Ext. Standard Concentration	100-10,000ppm	100ppm	100ppm			
Ext. Standard	PA V018-2645-82.1	Acetone 3rd Source V018-2645-82.2			Analysis Date	1/10/2019
Ext. Standard Concentration	100/1,000ppm	400ppm			Sequence loaded by	Devin Gomez
Internal Surrogate	V018-2645-25				Data processed by	Robert Szot
Internal Surrogate Concentration	250/2500ppm				Batch ID	V4B3694
Initial Calibration Method	M4B3694				Matrix	AQ
pH Paper Lot#	232515				Approved By:	KANYAV
					Approved Date:	1/11/2019 6:07:13 PM

Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4B 87616	IB		NA			5			1	ok	
4B 87617	IB		NA			5			2	ok	
4B 87618	IB		NA			5			3	ok	
4B 87619	BFB		NA			5			4	ok	5:40 pm
4B 87620	IC3694-0.2		NA		V8260 Initial Calib	5			5	not used	0.2uL ABK, EC, Acrolein/100mL responses low
4B 87621	IC3694-0.5		NA		V8260 Initial Calib	5			6	ok	0.5uL ABK, EC, Acrolein/100mL
4B 87622	IC3694-1		NA		V8260 Initial Calib	5			7	ok	1uL ABK, EC, Acrolein/100mL
4B 87623	IC3694-2		NA		V8260 Initial Calib	5			8	ok	2uL ABK, EC, Acrolein/100mL
4B 87624	IC3694-4		NA		V8260 Initial Calib	5			9	ok	4uL ABK, EC, Acrolein/100mL
4B 87625	IC3694-8		NA		V8260 Initial Calib	5			10	ok	8uL ABK, EC, Acrolein/100mL
4B 87626	IC3694-20		NA		V8260 Initial Calib	5			11	ok	20uL ABK, EC, Acrolein/100mL

Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4B 87627	ICC3694-50		NA		V8260 Initial Calib	5			12	ok	50uL ABK, EC, Acrolein/100mL
4B 87628	IC3694-100		NA		V8260 Initial Calib	5			13	ok	100uL ABK, EC, Acrolein/100mL
4B 87629	IC3694-200		NA		V8260 Initial Calib	5			14	ok	200uL ABK, EC, Acrolein/100mL
4B 87630	IB		NA			5			15	ok	
4B 87631	IB		NA			5			16	ok	
4B 87632	ICV3694-50		NA		V8260 Initial Calib	5			17	ok	50uL Ext ABK, EC, Acrolein/100mL
4B 87633	ICV3694-50		NA		V8260 Initial Calib	5			18	ok	50uL Ext PA, Acetone/100mL

GCMS Volatile Run Log

Standard / Reagents		Lot #			Column
Standard	ABK v0182645-111.50	EC v0182645-136.5	Acrolein v0182629-128.8	Method	ZB624(60mx0.25mmx1.4um)
Standard Concentration	100ppm-10,000ppm	100ppm	100ppm	Init Calib Date	V8260C
					1/10/2019
Internal Surrogate	v0182645-125			Analysis Date	2/25/2019
Internal Surrogate Concentration	250/2500ppm			Sequence loaded by	Brittany Klimek
MS/MSD prepared by	Brittany Klimek			Data processed by	lotusa
				Batch ID	V4B3742
				Matrix	AQ
				Approved By:	MOHUI
pH Paper Lot#	217518		Initial Calibration Method	Approved Date:	2/26/2019 3:17:48 PM
			M4B3694		

Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4b 88501	IB		NA			5			1	OK	
4b 88502	BFB/CC3694-50		NA			5			2	OK/ok	50uL ABK, EC, Acrolein/100mL DI H2O. (02/25/19; 6:56pm).
4b 88503	BS		NA			5			3	OK	50uL ABK, EC, Acrolein/100mL DI H2O.
4b 88504	IB		NA			5			4	OK	
4b 88505	MB		NA			5			5	OK	
4b 88506	JC83332-9	1	NA	MS32758	V8260STD	5		1	6	OK	
4b 88507	JC83332-10	1	NA	MS32758	V8260STD	5		1	7	OK	
4b 88508	JC83332-1	1	NA	MS32758	V8260STD	5		1	8	OK	
4b 88509	JC83332-1MS	2	NA	MS32758	V8260STD	5		1	9	OK	20uL ABK, EC, Acrolein/40mL sample.
4b 88510	JC83332-1MSD	3	NA	MS32758	V8260STD	5		1	10	OK	20uL ABK, EC, Acrolein/40mL sample.
4b 88511	IB		NA			5			11	OK	

Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4b 88512	JC83332-2	1	NA	MS32758	V8260STD	5		1	12	OK	
4b 88513	JC83332-3	2	NA	MS32758	V8260STD	5		1	13	OK	
4b 88514	JC83332-4	2	NA	MS32758	V8260STD	5		1	14	OK	
4b 88515	JC83332-5	2	NA	MS32758	V8260STD	5		1	15	OK	
4b 88516	JC83332-6	2	NA	MS32758	V8260STD	5		1	16	OK	
4b 88517	JC83332-7	1	NA	MS32758	V8260STD	5		1	17	OK	
4b 88518	JC83332-8	2	NA	MS32758	V8260STD	5		1	18	OK	
4b 88519	JC83375-5	2	NA	MS32771	V8260BTXMT	5		1	19	OK	Do not report EPA TCL compounds as TICS.
4b 88520	JC83375-6	2	NA	MS32771	V8260BTXMT	5		1	20	OK	Do not report EPA TCL compounds as TICS.
4b 88521	JC83375-1	1	NA	MS32771	V8260BTXMT	5		1	21	OK	Do not report EPA TCL compounds as TICS.
4b 88522	JC83375-2	1	NA	MS32771	V8260BTXMT	5		1	22	OK	Do not report EPA TCL compounds as TICS.
4b 88523	JC83375-3	1	NA	MS32771	V8260BTXMT	5		1	23	OK	Do not report EPA TCL compounds as TICS.
4b 88524	JC83375-4	1	NA	MS32771	V8260BTXMT	5		1	24	OK	Do not report EPA TCL compounds as TICS. 5:25am

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

C. A. Rich Consultants

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Mako 3 GWS

SGS Job Number: JC92198

Sampling Date: 07/24/19

Report to:

C. A. Rich Consultants
17 Dupont Street
Plainview, NY 11803
MYager@CarichInc.com

ATTN: Michael Yager

Total number of pages in report: **166**



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.

A handwritten signature in black ink, appearing to read 'Mike Earp'.

Mike Earp
General Manager

Client Service contact: Kristin Degraw 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

C. A. Rich Consultants

Job No: JC92198

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Project No: Mako 3 GWS

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC92198-1	07/24/19	09:08 MY	07/25/19	AQ	Ground Water	MW-1
JC92198-1D	07/24/19	09:08 MY	07/25/19	AQ	Water Dup/MSD	MW-1 MSD
JC92198-1S	07/24/19	09:08 MY	07/25/19	AQ	Water Matrix Spike	MW-1 NMS
JC92198-2	07/24/19	10:25 MY	07/25/19	AQ	Ground Water	MW-2
JC92198-3	07/24/19	11:20 MY	07/25/19	AQ	Ground Water	MW-2I
JC92198-4	07/24/19	13:20 MY	07/25/19	AQ	Ground Water	MW-2D
JC92198-5	07/24/19	09:54 MY	07/25/19	AQ	Ground Water	MW-3
JC92198-6	07/24/19	14:35 MY	07/25/19	AQ	Ground Water	MW-8
JC92198-7	07/24/19	13:25 MY	07/25/19	AQ	Ground Water	MW-9
JC92198-8	07/24/19	00:00 MY	07/25/19	AQ	Ground Water	MW-XX
JC92198-9	07/24/19	14:55 MY	07/25/19	AQ	Field Blank Water	FB 7/24/19
JC92198-10	07/24/19	14:55 MY	07/25/19	AQ	Trip Blank Water	TB 7/24/19

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: C. A. Rich Consultants

Job No JC92198

Site: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Report Date 7/30/2019 10:25:47 A

On 07/25/2019, 8 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.3 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC92198 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: VX7847

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC92198-1MS, JC92198-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC92198-1 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-9 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-10 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-2 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-3 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-4 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-5 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-6 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-7 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC92198-8 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Tuesday, July 30, 2019

Page 1 of 1

Summary of Hits

Job Number: JC92198
Account: C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Collected: 07/24/19



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC92198-1 MW-1

No hits reported in this sample.

JC92198-2 MW-2

No hits reported in this sample.

JC92198-3 MW-2I

No hits reported in this sample.

JC92198-4 MW-2D

No hits reported in this sample.

JC92198-5 MW-3

No hits reported in this sample.

JC92198-6 MW-8

No hits reported in this sample.

JC92198-7 MW-9

No hits reported in this sample.

JC92198-8 MW-XX

No hits reported in this sample.

JC92198-9 FB 7/24/19

No hits reported in this sample.

JC92198-10 TB 7/24/19

No hits reported in this sample.



Dayton, NJ

Section 4

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Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-1						
Lab Sample ID:	JC92198-1					Date Sampled:	07/24/19
Matrix:	AQ - Ground Water					Date Received:	07/25/19
Method:	SW846 8260C					Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183275.D	1	07/29/19 11:34	JP	n/a	n/a	VX7847
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-1	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		81-124%
2037-26-5	Toluene-D8	94%		80-120%
460-00-4	4-Bromofluorobenzene	88%		80-120%

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:	MW-1	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-1	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

4.1
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SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-2	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-2	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183283.D	1	07/29/19 15:33	JP	n/a	n/a	VX7847
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-2	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	106%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

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:	MW-2	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-2	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-21	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-3	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183284.D	1	07/29/19 16:03	JP	n/a	n/a	VX7847
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-3	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

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:	MW-2I	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-3	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-2D	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-4	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183285.D	1	07/29/19 16:33	JP	n/a	n/a	VX7847
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	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:	MW-2D	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-4	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

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:	MW-2D	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-4	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-3	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-5	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183286.D	1	07/29/19 17:04	JP	n/a	n/a	VX7847
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-5	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-120%
17060-07-0	1,2-Dichloroethane-D4	106%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

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:	MW-3	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-5	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-8	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-6	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183287.D	1	07/29/19 17:34	JP	n/a	n/a	VX7847
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-6	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-120%
17060-07-0	1,2-Dichloroethane-D4	107%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

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:	MW-8	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-6	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-9	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-7	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183288.D	1	07/29/19 18:04	JP	n/a	n/a	VX7847
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-7	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

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:	MW-9	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-7	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	MW-XX	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-8	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183289.D	1	07/29/19 18:34	JP	n/a	n/a	VX7847
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-XX	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-8	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	89%		80-120%

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:	MW-XX	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-8	Date Received:	07/25/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	FB 7/24/19	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-9	Date Received:	07/25/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183281.D	1	07/29/19 14:33	JP	n/a	n/a	VX7847
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB 7/24/19	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-9	Date Received:	07/25/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	106%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

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:	FB 7/24/19	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-9	Date Received:	07/25/19
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

4.9
4

SGS North America Inc.

Report of Analysis

Page 1 of 3

Client Sample ID:	TB 7/24/19	
Lab Sample ID:	JC92198-10	Date Sampled: 07/24/19
Matrix:	AQ - Trip Blank Water	Date Received: 07/25/19
Method:	SW846 8260C	Percent Solids: n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X183282.D	1	07/29/19 15:03	JP	n/a	n/a	VX7847
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB 7/24/19	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-10	Date Received:	07/25/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-120%
17060-07-0	1,2-Dichloroethane-D4	104%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	90%		80-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB 7/24/19	Date Sampled:	07/24/19
Lab Sample ID:	JC92198-10	Date Received:	07/25/19
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits high, sample was ND.

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

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Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

SW-07219-84
JC 92198

VOCs 8260

V57/
V573

5.1

~~ALL SAMPLES RECEIVED~~
~~PP. SERVED AS APPLICABLE~~

INITIAL ASSESSMENT AC 2B
 LABEL VERIFICATION

SGS Sample Receipt Summary

Job Number: JC92198

Client: C. A. RICH CONSULTANTS

Project: BRENT MAKO BUILDING 3 INVESTIGATION, E

Date / Time Received: 7/25/2019 1:26:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.3);

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: ☒ ☐	IR Gun
2. Cooler temp verification: _____	
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: ☐ ☐ ☒	

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JC92198: Chain of Custody

Page 2 of 2

Internal Sample Tracking Chronicle

C. A. Rich Consultants

Job No: JC92198

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
 Project No: Mako 3 GWS

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC92198-1 MW-1	Collected: 24-JUL-19 09:08	By: MY	Received: 25-JUL-19	By: DG		
JC92198-1	SW846 8260C	29-JUL-19 11:34	JP			V8260STD
JC92198-2 MW-2	Collected: 24-JUL-19 10:25	By: MY	Received: 25-JUL-19	By: DG		
JC92198-2	SW846 8260C	29-JUL-19 15:33	JP			V8260STD
JC92198-3 MW-2I	Collected: 24-JUL-19 11:20	By: MY	Received: 25-JUL-19	By: DG		
JC92198-3	SW846 8260C	29-JUL-19 16:03	JP			V8260STD
JC92198-4 MW-2D	Collected: 24-JUL-19 13:20	By: MY	Received: 25-JUL-19	By: DG		
JC92198-4	SW846 8260C	29-JUL-19 16:33	JP			V8260STD
JC92198-5 MW-3	Collected: 24-JUL-19 09:54	By: MY	Received: 25-JUL-19	By: DG		
JC92198-5	SW846 8260C	29-JUL-19 17:04	JP			V8260STD
JC92198-6 MW-8	Collected: 24-JUL-19 14:35	By: MY	Received: 25-JUL-19	By: DG		
JC92198-6	SW846 8260C	29-JUL-19 17:34	JP			V8260STD
JC92198-7 MW-9	Collected: 24-JUL-19 13:25	By: MY	Received: 25-JUL-19	By: DG		
JC92198-7	SW846 8260C	29-JUL-19 18:04	JP			V8260STD
JC92198-8 MW-XX	Collected: 24-JUL-19 00:00	By: MY	Received: 25-JUL-19	By: DG		
JC92198-8	SW846 8260C	29-JUL-19 18:34	JP			V8260STD

Internal Sample Tracking Chronicle

C. A. Rich Consultants

Job No: JC92198

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Project No: Mako 3 GWS

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC92198-9	Collected: 24-JUL-19 14:55	By: MY	Received: 25-JUL-19	By: DG		
FB 7/24/19						
JC92198-9	SW846 8260C	29-JUL-19 14:33	JP			V8260STD
JC92198-10	Collected: 24-JUL-19 14:55	By: MY	Received: 25-JUL-19	By: DG		
TB 7/24/19						
JC92198-10	SW846 8260C	29-JUL-19 15:03	JP			V8260STD

SGS Internal Chain of Custody

Page 1 of 3

Job Number: JC92198
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Received: 07/25/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC92198-1.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-1.1	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-1.1	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-1.1	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-1.1	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-1.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-1.3	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-1.3	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-1.3	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-1.3	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-1.3	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-1.4	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-1.4	Secured Storage	Jessica Potts	07/29/19 11:11	Retrieve from Storage
JC92198-1.4	Jessica Potts	GCMSX	07/29/19 11:11	Load on Instrument
JC92198-1.4	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-1.4	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-1.5	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-1.6	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-1.7	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-1.8	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-2.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-2.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-2.2	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-2.2	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-2.2	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-2.2	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-3.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-3.1	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-3.1	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-3.1	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-3.1	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-3.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage

SGS Internal Chain of Custody

Job Number: JC92198
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Received: 07/25/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC92198-4.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-4.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-4.2	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-4.2	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-4.2	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-4.2	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-5.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-5.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-5.2	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-5.2	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-5.2	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-5.2	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-5.3	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-6.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-6.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-6.2	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-6.2	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-6.2	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-6.2	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-7.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-7.1	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-7.1	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-7.1	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-7.1	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-7.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-8.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-8.1	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-8.1	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-8.1	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-8.1	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-8.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-9.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-9.1	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage

SGS Internal Chain of Custody

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Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Received: 07/25/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC92198-9.1	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-9.1	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-9.1	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage
JC92198-9.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-10.1	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-10.2	Shivani Gogwekar	Secured Storage	07/25/19 14:54	Return to Storage
JC92198-10.2	Secured Storage	Jessica Potts	07/29/19 12:12	Retrieve from Storage
JC92198-10.2	Jessica Potts	GCMSX	07/29/19 12:12	Load on Instrument
JC92198-10.2	GCMSX	Jessica Potts	07/30/19 08:49	Unload from Instrument
JC92198-10.2	Jessica Potts	Secured Storage	07/30/19 08:49	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Page 1 of 3

Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX7847-MB	X183269.D	1	07/29/19	JP	n/a	n/a	VX7847

The QC reported here applies to the following samples:

Method: SW846 8260C

JC92198-1, JC92198-2, JC92198-3, JC92198-4, JC92198-5, JC92198-6, JC92198-7, JC92198-8, JC92198-9, JC92198-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: JC92198**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX7847-MB	X183269.D	1	07/29/19	JP	n/a	n/a	VX7847

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

JC92198-1, JC92198-2, JC92198-3, JC92198-4, JC92198-5, JC92198-6, JC92198-7, JC92198-8, JC92198-9, JC92198-10

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 80-120%
17060-07-0	1,2-Dichloroethane-D4	102% 81-124%
2037-26-5	Toluene-D8	94% 80-120%
460-00-4	4-Bromofluorobenzene	89% 80-120%

Method Blank Summary

Job Number: JC92198
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX7847-MB	X183269.D	1	07/29/19	JP	n/a	n/a	VX7847

The QC reported here applies to the following samples: Method:
JC92198-1, JC92198-2, JC92198-3, JC92198-4, JC92198-5, JC92198-6, JC92198-7, JC92198-8, JC92198-9, JC92198-10

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 2

Job Number: JC92198**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX7847-BS	X183267.D	1	07/29/19	JP	n/a	n/a	VX7847

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

JC92198-1, JC92198-2, JC92198-3, JC92198-4, JC92198-5, JC92198-6, JC92198-7, JC92198-8, JC92198-9, JC92198-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	164	82	42-150
71-43-2	Benzene	50	48.1	96	80-120
108-86-1	Bromobenzene	50	47.9	96	82-118
74-97-5	Bromochloromethane	50	53.6	107	84-121
75-27-4	Bromodichloromethane	50	49.4	99	83-120
75-25-2	Bromoform	50	52.8	106	76-129
74-83-9	Bromomethane	50	52.5	105	57-138
78-93-3	2-Butanone (MEK)	200	211	106	64-137
104-51-8	n-Butylbenzene	50	50.1	100	81-123
135-98-8	sec-Butylbenzene	50	49.0	98	84-121
98-06-6	tert-Butylbenzene	50	51.2	102	83-122
56-23-5	Carbon tetrachloride	50	52.2	104	75-135
108-90-7	Chlorobenzene	50	48.9	98	84-117
75-00-3	Chloroethane	50	47.4	95	63-132
67-66-3	Chloroform	50	49.9	100	80-119
74-87-3	Chloromethane	50	38.8	78	46-136
95-49-8	o-Chlorotoluene	50	48.4	97	84-118
106-43-4	p-Chlorotoluene	50	46.3	93	83-116
96-12-8	1,2-Dibromo-3-chloropropane	50	51.9	104	72-127
124-48-1	Dibromochloromethane	50	49.9	100	80-123
106-93-4	1,2-Dibromoethane	50	52.9	106	84-117
95-50-1	1,2-Dichlorobenzene	50	47.3	95	84-119
541-73-1	1,3-Dichlorobenzene	50	46.5	93	81-117
106-46-7	1,4-Dichlorobenzene	50	48.2	96	82-117
75-71-8	Dichlorodifluoromethane	50	50.0	100	36-149
75-34-3	1,1-Dichloroethane	50	48.4	97	79-120
107-06-2	1,2-Dichloroethane	50	45.4	91	78-126
75-35-4	1,1-Dichloroethene	50	51.4	103	69-126
156-59-2	cis-1,2-Dichloroethene	50	49.8	100	80-120
156-60-5	trans-1,2-Dichloroethene	50	50.0	100	76-120
78-87-5	1,2-Dichloropropane	50	48.1	96	82-121
142-28-9	1,3-Dichloropropane	50	45.1	90	83-115
594-20-7	2,2-Dichloropropane	50	52.5	105	65-133
563-58-6	1,1-Dichloropropene	50	50.8	102	80-121
10061-01-5	cis-1,3-Dichloropropene	50	51.9	104	83-120
10061-02-6	trans-1,3-Dichloropropene	50	48.3	97	82-121

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JC92198**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX7847-BS	X183267.D	1	07/29/19	JP	n/a	n/a	VX7847

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

JC92198-1, JC92198-2, JC92198-3, JC92198-4, JC92198-5, JC92198-6, JC92198-7, JC92198-8, JC92198-9, JC92198-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	45.6	91	80-120
87-68-3	Hexachlorobutadiene	50	53.3	107	75-129
98-82-8	Isopropylbenzene	50	46.2	92	83-120
99-87-6	p-Isopropyltoluene	50	47.5	95	83-122
1634-04-4	Methyl Tert Butyl Ether	50	46.4	93	80-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	198	99	71-131
74-95-3	Methylene bromide	50	50.9	102	85-120
75-09-2	Methylene chloride	50	49.8	100	77-120
91-20-3	Naphthalene	50	51.5	103	73-131
103-65-1	n-Propylbenzene	50	46.8	94	82-119
100-42-5	Styrene	50	47.0	94	82-122
630-20-6	1,1,1,2-Tetrachloroethane	50	45.9	92	82-121
79-34-5	1,1,2,2-Tetrachloroethane	50	48.4	97	76-119
127-18-4	Tetrachloroethene	50	49.9	100	70-131
108-88-3	Toluene	50	47.1	94	80-120
87-61-6	1,2,3-Trichlorobenzene	50	54.9	110	76-134
120-82-1	1,2,4-Trichlorobenzene	50	54.7	109	79-132
71-55-6	1,1,1-Trichloroethane	50	52.9	106	81-128
79-00-5	1,1,2-Trichloroethane	50	47.8	96	83-118
79-01-6	Trichloroethene	50	53.8	108	80-120
75-69-4	Trichlorofluoromethane	50	58.5	117	64-136
96-18-4	1,2,3-Trichloropropane	50	48.6	97	79-120
95-63-6	1,2,4-Trimethylbenzene	50	46.7	93	84-120
108-67-8	1,3,5-Trimethylbenzene	50	47.1	94	83-119
75-01-4	Vinyl chloride	50	42.2	84	51-135
	m,p-Xylene	100	92.4	92	80-120
95-47-6	o-Xylene	50	45.5	91	80-120
1330-20-7	Xylene (total)	150	138	92	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	81-124%
2037-26-5	Toluene-D8	92%	80-120%
460-00-4	4-Bromofluorobenzene	99%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC92198-1MS	X183277.D	1	07/29/19	JP	n/a	n/a	VX7847
JC92198-1MSD	X183278.D	1	07/29/19	JP	n/a	n/a	VX7847
JC92198-1	X183275.D	1	07/29/19	JP	n/a	n/a	VX7847

The QC reported here applies to the following samples:

Method: SW846 8260C

JC92198-1, JC92198-2, JC92198-3, JC92198-4, JC92198-5, JC92198-6, JC92198-7, JC92198-8, JC92198-9, JC92198-10

CAS No.	Compound	JC92198-1		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
67-64-1	Acetone	ND		200	151	76	200	151	76	0	34-149/17
71-43-2	Benzene	ND		50	48.8	98	50	49.2	98	1	54-136/10
108-86-1	Bromobenzene	ND		50	46.2	92	50	46.5	93	1	78-122/11
74-97-5	Bromochloromethane	ND		50	51.5	103	50	51.5	103	0	79-124/11
75-27-4	Bromodichloromethane	ND		50	49.0	98	50	48.7	97	1	79-124/11
75-25-2	Bromoform	ND		50	48.0	96	50	47.9	96	0	71-130/11
74-83-9	Bromomethane	ND		50	51.7	103	50	51.6	103	0	53-142/14
78-93-3	2-Butanone (MEK)	ND		200	186	93	200	190	95	2	54-142/15
104-51-8	n-Butylbenzene	ND		50	51.5	103	50	52.1	104	1	73-133/12
135-98-8	sec-Butylbenzene	ND		50	50.3	101	50	50.4	101	0	76-132/12
98-06-6	tert-Butylbenzene	ND		50	51.0	102	50	50.7	101	1	76-131/12
56-23-5	Carbon tetrachloride	ND		50	58.3	117	50	58.5	117	0	70-143/12
108-90-7	Chlorobenzene	ND		50	47.2	94	50	47.0	94	0	78-123/10
75-00-3	Chloroethane	ND		50	52.0	104	50	51.7	103	1	57-141/14
67-66-3	Chloroform	ND		50	50.8	102	50	51.5	103	1	76-123/11
74-87-3	Chloromethane	ND		50	37.0	74	50	38.0	76	3	43-141/16
95-49-8	o-Chlorotoluene	ND		50	47.3	95	50	47.3	95	0	78-124/11
106-43-4	p-Chlorotoluene	ND		50	45.3	91	50	45.4	91	0	77-122/11
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	46.0	92	50	46.1	92	0	66-130/13
124-48-1	Dibromochloromethane	ND		50	47.0	94	50	46.2	92	2	76-125/11
106-93-4	1,2-Dibromoethane	ND		50	48.4	97	50	48.0	96	1	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		50	45.3	91	50	45.4	91	0	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		50	44.9	90	50	44.8	90	0	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		50	46.9	94	50	46.4	93	1	76-122/11
75-71-8	Dichlorodifluoromethane	ND		50	55.5	111	50	56.0	112	1	31-159/16
75-34-3	1,1-Dichloroethane	ND		50	51.4	103	50	52.6	105	2	73-126/11
107-06-2	1,2-Dichloroethane	ND		50	45.1	90	50	45.0	90	0	72-131/11
75-35-4	1,1-Dichloroethene	ND		50	60.1	120	50	61.0	122	1	63-136/14
156-59-2	cis-1,2-Dichloroethene	ND		50	51.6	103	50	51.7	103	0	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		50	53.7	107	50	54.3	109	1	70-126/11
78-87-5	1,2-Dichloropropane	ND		50	49.4	99	50	49.3	99	0	78-124/10
142-28-9	1,3-Dichloropropane	ND		50	43.0	86	50	42.7	85	1	78-118/11
594-20-7	2,2-Dichloropropane	ND		50	60.7	121	50	60.4	121	0	59-141/14
563-58-6	1,1-Dichloropropene	ND		50	54.9	110	50	55.4	111	1	75-130/11
10061-01-5	cis-1,3-Dichloropropene	ND		50	50.4	101	50	50.2	100	0	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		50	45.8	92	50	45.5	91	1	77-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC92198-1MS	X183277.D	1	07/29/19	JP	n/a	n/a	VX7847
JC92198-1MSD	X183278.D	1	07/29/19	JP	n/a	n/a	VX7847
JC92198-1	X183275.D	1	07/29/19	JP	n/a	n/a	VX7847

The QC reported here applies to the following samples:

Method: SW846 8260C

JC92198-1, JC92198-2, JC92198-3, JC92198-4, JC92198-5, JC92198-6, JC92198-7, JC92198-8, JC92198-9, JC92198-10

CAS No.	Compound	JC92198-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND	50	45.3	91	50	45.4	91	0	51-140/20
87-68-3	Hexachlorobutadiene	ND	50	53.9	108	50	54.6	109	1	64-141/14
98-82-8	Isopropylbenzene	ND	50	47.4	95	50	47.3	95	0	75-129/11
99-87-6	p-Isopropyltoluene	ND	50	48.4	97	50	48.8	98	1	76-131/12
1634-04-4	Methyl Tert Butyl Ether	ND	50	45.6	91	50	46.7	93	2	72-123/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	200	183	92	200	185	93	1	66-136/13
74-95-3	Methylene bromide	ND	50	47.6	95	50	48.3	97	1	81-121/11
75-09-2	Methylene chloride	ND	50	53.5	107	50	54.4	109	2	73-125/13
91-20-3	Naphthalene	ND	50	46.5	93	50	45.8	92	2	62-141/13
103-65-1	n-Propylbenzene	ND	50	47.4	95	50	47.7	95	1	68-133/11
100-42-5	Styrene	ND	50	46.3	93	50	45.9	92	1	75-129/11
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	46.4	93	50	45.9	92	1	77-124/11
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	43.8	88	50	43.8	88	0	71-122/11
127-18-4	Tetrachloroethene	ND	50	50.1	100	50	49.5	99	1	61-139/11
108-88-3	Toluene	ND	50	46.6	93	50	45.9	92	2	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND	50	51.8	104	50	51.3	103	1	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND	50	52.5	105	50	51.5	103	2	72-137/13
71-55-6	1,1,1-Trichloroethane	ND	50	58.5	117	50	59.0	118	1	74-138/12
79-00-5	1,1,2-Trichloroethane	ND	50	44.7	89	50	44.6	89	0	78-121/11
79-01-6	Trichloroethene	ND	50	53.8	108	50	54.3	109	1	62-141/10
75-69-4	Trichlorofluoromethane	ND	50	67.1	134	50	67.1	134	0	57-149/14
96-18-4	1,2,3-Trichloropropane	ND	50	43.8	88	50	44.1	88	1	74-122/11
95-63-6	1,2,4-Trimethylbenzene	ND	50	46.0	92	50	46.5	93	1	54-143/10
108-67-8	1,3,5-Trimethylbenzene	ND	50	47.0	94	50	47.6	95	1	67-133/11
75-01-4	Vinyl chloride	ND	50	42.8	86	50	42.7	85	0	43-146/15
	m,p-Xylene	ND	100	92.6	93	100	92.1	92	1	50-144/20
95-47-6	o-Xylene	ND	50	45.3	91	50	45.6	91	1	63-134/10
1330-20-7	Xylene (total)	ND	150	138	92	150	138	92	0	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC92198-1	Limits
1868-53-7	Dibromofluoromethane	107%	109%	109%	80-120%
17060-07-0	1,2-Dichloroethane-D4	98%	96%	103%	81-124%
2037-26-5	Toluene-D8	95%	94%	94%	80-120%
460-00-4	4-Bromofluorobenzene	101%	100%	88%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC92198**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** VX7749-BFB**Injection Date:** 05/02/19**Lab File ID:** X181279.D**Injection Time:** 16:28**Instrument ID:** GCMSX

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	14769	17.6	Pass
75	30.0 - 60.0% of mass 95	38133	45.6	Pass
95	Base peak, 100% relative abundance	83690	100.0	Pass
96	5.0 - 9.0% of mass 95	5531	6.61	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	80445	96.1	Pass
175	5.0 - 9.0% of mass 174	6070	7.25 (7.55) ^a	Pass
176	95.0 - 101.0% of mass 174	79192	94.6 (98.4) ^a	Pass
177	5.0 - 9.0% of mass 176	5418	6.47 (6.84) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VX7749-IC7749	X181280.D	05/02/19	17:02	00:34	Initial cal 0.2
VX7749-IC7749	X181281.D	05/02/19	17:31	01:03	Initial cal 0.5
VX7749-IC7749	X181282.D	05/02/19	17:59	01:31	Initial cal 1
VX7749-IC7749	X181283.D	05/02/19	18:28	02:00	Initial cal 2
VX7749-IC7749	X181284.D	05/02/19	18:56	02:28	Initial cal 4
VX7749-IC7749	X181285.D	05/02/19	19:25	02:57	Initial cal 8
VX7749-IC7749	X181286.D	05/02/19	19:54	03:26	Initial cal 20
VX7749-ICC7749	X181287.D	05/02/19	20:22	03:54	Initial cal 50
VX7749-IC7749	X181288.D	05/02/19	20:51	04:23	Initial cal 100
VX7749-IC7749	X181289.D	05/02/19	21:19	04:51	Initial cal 200
VX7749-ICV7749	X181292.D	05/02/19	22:45	06:17	Initial cal verification 50
VX7749-ICV7749	X181293.D	05/02/19	23:14	06:46	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample: VX7847-BFB

Injection Date: 07/29/19

Lab File ID: X183266.D

Injection Time: 06:41

Instrument ID: GCMSX

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	12498	15.9	Pass
75	30.0 - 60.0% of mass 95	34554	44.0	Pass
95	Base peak, 100% relative abundance	78549	100.0	Pass
96	5.0 - 9.0% of mass 95	5182	6.60	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	74344	94.6	Pass
175	5.0 - 9.0% of mass 174	5906	7.52 (7.94) ^a	Pass
176	95.0 - 101.0% of mass 174	71949	91.6 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	5012	6.38 (6.97) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VX7847-CC7749	X183266.D	07/29/19	06:41	00:00	Continuing cal 20
VX7847-BS	X183267.D	07/29/19	07:16	00:35	Blank Spike
VX7847-MB	X183269.D	07/29/19	08:27	01:46	Method Blank
ZZZZZZ	X183270.D	07/29/19	09:07	02:26	(unrelated sample)
ZZZZZZ	X183271.D	07/29/19	09:36	02:55	(unrelated sample)
ZZZZZZ	X183272.D	07/29/19	10:05	03:24	(unrelated sample)
ZZZZZZ	X183273.D	07/29/19	10:34	03:53	(unrelated sample)
ZZZZZZ	X183274.D	07/29/19	11:04	04:23	(unrelated sample)
JC92198-1	X183275.D	07/29/19	11:34	04:53	MW-1
ZZZZZZ	X183276.D	07/29/19	12:03	05:22	(unrelated sample)
JC92198-1MS	X183277.D	07/29/19	12:33	05:52	Matrix Spike
JC92198-1MSD	X183278.D	07/29/19	13:03	06:22	Matrix Spike Duplicate
ZZZZZZ	X183280.D	07/29/19	14:03	07:22	(unrelated sample)
JC92198-9	X183281.D	07/29/19	14:33	07:52	FB 7/24/19
JC92198-10	X183282.D	07/29/19	15:03	08:22	TB 7/24/19
JC92198-2	X183283.D	07/29/19	15:33	08:52	MW-2
JC92198-3	X183284.D	07/29/19	16:03	09:22	MW-2I
JC92198-4	X183285.D	07/29/19	16:33	09:52	MW-2D
JC92198-5	X183286.D	07/29/19	17:04	10:23	MW-3
JC92198-6	X183287.D	07/29/19	17:34	10:53	MW-8
JC92198-7	X183288.D	07/29/19	18:04	11:23	MW-9
JC92198-8	X183289.D	07/29/19	18:34	11:53	MW-XX

Internal Standard Area Summary

Page 1 of 1

Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std: VX7847-CC7749

Injection Date: 07/29/19

Lab File ID: X183266.D

Injection Time: 06:41

Instrument ID: GCMSX

Method: SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	143933	7.40	209384	10.20	282021	11.39	287691	15.60	176344	18.39
Upper Limit ^a	287866	7.90	418768	10.70	564042	11.89	575382	16.10	352688	18.89
Lower Limit ^b	71967	6.90	104692	9.70	141011	10.89	143846	15.10	88172	17.89

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VX7847-BS	141936	7.40	209517	10.19	285798	11.39	300536	15.60	168914	18.39
VX7847-MB	142475	7.40	219340	10.20	291317	11.39	301980	15.60	212375	18.39
ZZZZZZ	154024	7.40	217745	10.20	292359	11.39	300263	15.60	204877	18.39
ZZZZZZ	138029	7.41	219406	10.20	295127	11.39	307330	15.60	208560	18.39
ZZZZZZ	146354	7.40	214809	10.20	292257	11.39	301670	15.60	206585	18.39
ZZZZZZ	138220	7.40	216009	10.20	292865	11.39	305652	15.60	212719	18.39
ZZZZZZ	139502	7.40	216123	10.20	293162	11.39	301783	15.60	207247	18.39
JC92198-1	141773	7.41	214906	10.20	291640	11.39	302353	15.60	209798	18.39
ZZZZZZ	135672	7.40	214021	10.20	290604	11.39	295284	15.60	193833	18.39
JC92198-1MS	126745	7.40	198392	10.20	271665	11.39	282795	15.60	161715	18.39
JC92198-1MSD	129020	7.42	199877	10.20	277505	11.39	291713	15.60	166366	18.39
ZZZZZZ	147701	7.40	215065	10.20	292252	11.39	301392	15.60	208731	18.39
JC92198-9	141229	7.41	215929	10.20	297569	11.39	305521	15.60	207499	18.40
JC92198-10	148952	7.41	215914	10.20	297454	11.39	306890	15.60	209373	18.39
JC92198-2	139545	7.41	215404	10.20	292241	11.39	300606	15.60	205678	18.40
JC92198-3	143512	7.41	214682	10.20	289217	11.39	302372	15.60	207100	18.39
JC92198-4	137839	7.41	209209	10.20	288279	11.39	300116	15.60	203331	18.39
JC92198-5	134971	7.42	211121	10.20	292391	11.39	298033	15.60	202206	18.40
JC92198-6	137906	7.41	210713	10.20	289828	11.39	297194	15.60	200990	18.40
JC92198-7	136043	7.41	211014	10.20	290086	11.39	295323	15.60	201951	18.40
JC92198-8	132124	7.41	206712	10.20	283427	11.39	294992	15.60	197945	18.40

IS 1 = Tert Butyl Alcohol-D9

IS 2 = Pentafluorobenzene

IS 3 = 1,4-Difluorobenzene

IS 4 = Chlorobenzene-D5

IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC92198
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Method: SW846 8260C	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC92198-1	X183275.D	109	103	94	88
JC92198-2	X183283.D	112	106	96	90
JC92198-3	X183284.D	113	108	95	90
JC92198-4	X183285.D	115	109	95	91
JC92198-5	X183286.D	113	106	95	90
JC92198-6	X183287.D	113	107	96	92
JC92198-7	X183288.D	115	109	96	90
JC92198-8	X183289.D	112	108	95	89
JC92198-9	X183281.D	112	106	95	91
JC92198-10	X183282.D	111	104	95	90
JC92198-1MS	X183277.D	107	98	95	101
JC92198-1MSD	X183278.D	109	96	94	100
VX7847-BS	X183267.D	100	93	92	99
VX7847-MB	X183269.D	104	102	94	89

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number:

Account:

Project:

JC92198
CARICH C. A. Rich Consultants
Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample:

Lab FileID:

VX7749-ICC7749
X181287.D

Response Factor Report ACC-VOA-M											
Method : C:\MSDCHEM\1\METHODS\MX7749.M (RTE Integrator)											
Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)											
Last Update : Fri Jul 19 11:12:55 2019											
Response via : Initial Calibration											
Calibration Files											
1	=X181282.D	2	=X181283.D	100	=X181288.D	50	=X181287.D				
20	=X181286.D	200	=X181289.D	4	=X181284.D	8	=X181285.D				
0.5	=X181281.D	0.2	=X181280.D		=		=				
Compound											
1	2	100	50	20	200	4	8	0.5	0.2	Avg	%RSD

1) I tert butyl alcohol-d9 -----ISTD-----											
2) ethanol											
										0.000	-1.00
3) tertiary butyl alcohol											
1.126 1.146 1.163 1.122 1.176 1.050 1.152										1.134	3.65
4) 1,4-dioxane											
0.099 0.101 0.096 0.101 0.075 0.090										0.093	10.89
5) I pentafluorobenzene -----ISTD-----											
6) chlorodifluoromethane											
1.656 1.625 1.511 1.546 1.520 1.326 1.466 1.533 1.566										1.528	6.23
7) dichlorodifluoromethane											
1.461 1.603 1.591 1.638 1.566 1.479 1.535 1.607 1.179										1.518	9.23
8) chloromethane											
2.149 2.094 1.838 1.922 1.905 1.573 1.940 1.988										1.926	9.10
9) vinyl chloride											
1.663 1.660 1.487 1.558 1.550 1.301 1.547 1.612 1.628 1.876										1.588	9.21
10) bromomethane											
0.899 0.847 0.764 0.817 0.764 0.639 0.782 0.812										0.790	9.61
11) chloroethane											
0.605 0.538 0.524 0.551 0.503 0.466 0.515 0.552 0.566 0.502										0.532	7.34
12) vinyl bromide											
0.584 0.636 0.628 0.645 0.570 0.578 0.552 0.598 0.565										0.595	5.67
13) trichlorofluoromethane											
0.975 1.040 0.987 1.010 0.953 0.924 0.956 1.012 0.854										0.968	5.73
14) 1,3-butadiene											
0.769 0.791 0.626 0.669 0.643 0.577 0.667 0.718 0.711 0.612										0.678	10.11
15) ethyl ether											
0.203 0.216 0.222 0.220 0.217 0.204 0.219 0.221										0.215	3.55
16) acrolein											
0.090 0.093 0.103 0.081 0.133										0.100	19.97
17) 1,1-dichloroethene											
0.373 0.392 0.351 0.352 0.354 0.316 0.362 0.380 0.364 0.362										0.361	5.63
18) freon 113											
0.541 0.657 0.558 0.592 0.570 0.555 0.545 0.622										0.580	7.10
19) acetone											
0.149 0.124 0.125 0.137 0.114 0.124 0.147										0.131	9.97
20) acetonitrile											
0.080 0.084 0.089 0.075 0.096 0.099										0.087	10.42
21) iodomethane											
0.733 0.708 0.701 0.695 0.683 0.649 0.644 0.700 0.674 0.751										0.694	4.80
22) carbon disulfide											
1.356 1.318 1.243 1.266 1.230 1.140 1.217 1.292 1.288 1.471										1.282	6.94
23) methylene chloride											

Initial Calibration Summary

Page 2 of 5

Job Number: JC92198

Sample: VX7749-ICC7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181287.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

24)	0.471 0.475 0.437 0.431 0.433 0.405 0.442 0.463 0.547	0.456	8.91
	methyl acetate		
	0.392 0.310 0.324 0.339 0.293 0.418 0.356	0.347	12.87
25)	methyl tert butyl ether		
	1.657 1.615 1.501 1.535 1.502 1.402 1.500 1.545 1.593 1.847 1.570		7.69
26)	trans-1,2-dichloroethene		
	0.437 0.413 0.372 0.375 0.384 0.329 0.378 0.406 0.403 0.399 0.390		7.52
27)	hexane		
	0.573 0.646 0.538 0.568 0.558 0.560 0.545 0.578	0.571	5.83
28)	di-isopropyl ether		
	1.915 1.904 1.617 1.703 1.699 1.519 1.746 1.770 1.977 2.160 1.801		10.48
29)	2-butanone		
	0.035 0.048 0.049 0.048 0.047 0.043 0.045	0.045	10.64
30)	1,1-dichloroethane		
	0.819 0.762 0.712 0.727 0.742 0.641 0.721 0.784 0.817 0.744 0.747		7.09
31)	chloroprene		
	0.634 0.567 0.554 0.562 0.572 0.511 0.576 0.576 0.497 0.516 0.556		7.20
32)	acrylonitrile		
	0.173 0.172 0.170 0.165 0.129 0.168	0.163	10.37
33)	vinyl acetate		
	0.079 0.078 0.078 0.077 0.070	0.076	4.95
34)	ethyl tert-butyl ether		
	1.669 1.677 1.681 1.705 1.634 1.597 1.584 1.675 1.730 1.722 1.667		2.94
35)	ethyl acetate		
	0.070 0.074 0.079 0.068 0.060 0.067	0.070	9.54
36)	2,2-dichloropropane		
	0.928 0.844 0.697 0.731 0.722 0.670 0.762 0.775	0.766	10.99
37)	cis-1,2-dichloroethene		
	0.526 0.506 0.421 0.430 0.443 0.381 0.443 0.468 0.420	0.449	10.06
38)	methyl acrylate		
	0.058 0.061 0.060 0.056 0.034 0.049	0.053	19.01
39)	propionitrile		
	0.065 0.066 0.061 0.066 0.067 0.059 0.063 0.066	0.064	4.70
40)	tert-butyl formate		
	0.445 0.439 0.403 0.427 0.418 0.378 0.441 0.442 0.377	0.419	6.48
41)	bromochloromethane		
	0.221 0.232 0.231 0.233 0.232 0.216 0.233 0.232 0.226	0.229	2.66
42)	tetrahydrofuran		
	0.054 0.058 0.061 0.053 0.048 0.053	0.055	8.48
43)	chloroform		
	0.805 0.758 0.688 0.695 0.699 0.634 0.718 0.729 0.839	0.729	8.64
44)	dibromofluoromethane (s)		
	0.402 0.401 0.420 0.402 0.400 0.412 0.401 0.413 0.404 0.413 0.407		1.73
45)	methacrylonitrile		
	0.159 0.170 0.172 0.169 0.167 0.149 0.168	0.165	4.91
46)	1,1,1-trichloroethane		
	0.817 0.746 0.773 0.774 0.724 0.770 0.709 0.727 0.785 0.664 0.749		5.90
47)	cyclohexane		
	0.872 0.802 0.853 0.890 0.847 0.855 0.760 0.779 0.768 0.850 0.828		5.60
48)	tert amyl alcohol		
	0.030 0.024 0.025 0.026 0.025 0.025 0.027	0.026	7.46
49)	1,1-dichloropropene		
	0.514 0.523 0.468 0.482 0.497 0.430 0.464 0.497 0.450	0.481	6.28
50)	isobutyl alcohol		
		0.000	-1.00
51)	carbon tetrachloride		
	0.714 0.686 0.611 0.637 0.614 0.599 0.624 0.624 0.562 0.616 0.629		6.85
52)	isopropyl acetate		
	0.074 0.091 0.094 0.092 0.091 0.079 0.084	0.086	8.53

Job Number: JC92198

Sample: VX7749-ICC7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181287.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

53)	I	1,4-difluorobenzene	-----ISTD-----										
54)		1,2-dichloroethane-d4 (s)											
		0.341	0.339	0.309	0.320	0.337	0.291	0.334	0.342	0.343	0.343	0.330	5.36
55)		iso-octane											
		0.869	0.953	0.929	0.894	0.833	1.024	0.808	0.860	0.732	0.980	0.888	9.75
56)		epichlorohydrin											
		0.034	0.036	0.034	0.035	0.035	0.033	0.037	0.038			0.035	4.32
57)		n-butyl alcohol											
		0.010	0.011	0.012	0.012	0.011	0.012	0.011	0.011			0.011	5.99
58)		benzene											
		1.295	1.219	1.063	1.116	1.136	0.995	1.147	1.152	1.319		1.160	8.96
59)		tert-amyl methyl ether											
		1.179	1.199	1.062	1.092	1.090	1.007	1.080	1.116	1.161	1.282	1.127	7.04
60)		heptane											
		0.179	0.199	0.171	0.182	0.180	0.182	0.167	0.173	0.161		0.177	6.10
61)		1,2-dichloroethane											
		0.471	0.441	0.351	0.367	0.379	0.322	0.402	0.398			0.391	12.27
62)		trichloroethene											
		0.303	0.324	0.306	0.309	0.311	0.285	0.303	0.316	0.288	0.301	0.304	3.85
63)		ethyl acrylate											
		0.323	0.389	0.389	0.404	0.413	0.377	0.365	0.397			0.382	7.35
64)		2-nitropropane											
			0.083	0.086	0.087	0.083	0.105	0.091				0.089	9.36
65)		2-chloroethyl vinyl ether											
		0.208	0.230	0.211	0.224	0.229	0.198	0.220	0.225	0.199	0.220	0.216	5.39
66)		methyl methacrylate											
			0.085	0.085	0.083	0.084	0.073	0.075				0.081	6.82
67)		1,2-dichloropropane											
		0.125	0.135	0.122	0.130	0.134	0.112	0.132	0.134			0.128	6.10
68)		dibromomethane											
		0.189	0.201	0.185	0.195	0.196	0.174	0.203	0.201	0.195		0.193	4.76
69)		methylcyclohexane											
		0.552	0.599	0.503	0.530	0.511	0.526	0.522	0.519			0.533	5.71
70)		bromodichloromethane											
		0.433	0.430	0.416	0.425	0.426	0.401	0.422	0.425	0.446	0.495	0.432	5.82
71)		cis-1,3-dichloropropene											
		0.519	0.522	0.513	0.522	0.518	0.490	0.522	0.516	0.473	0.609	0.520	6.75
72)		4-methyl-2-pentanone											
		0.125	0.146	0.129	0.141	0.140	0.131	0.138	0.138	0.104	0.119	0.131	9.50
73)		3-methyl-1-butanol											
		0.008	0.011	0.011	0.012	0.012	0.011	0.011	0.012			0.011	10.71
74)	I	chlorobenzene-d5	-----ISTD-----										
75)		toluene-d8 (s)											
		1.235	1.231	1.141	1.185	1.189	1.145	1.223	1.197	1.223	1.218	1.199	2.84
76)		toluene											
		0.810	0.767	0.679	0.727	0.733	0.647	0.734	0.734	0.740	0.861	0.743	8.12
77)		trans-1,3-dichloropropene											
		0.511	0.520	0.461	0.479	0.491	0.425	0.480	0.495	0.431	0.531	0.482	7.31
78)		ethyl methacrylate											
		0.352	0.402	0.391	0.422	0.423	0.374	0.402	0.415			0.397	6.17
79)		1,1,2-trichloroethane											
		0.256	0.274	0.234	0.252	0.254	0.221	0.259	0.256	0.266	0.254	0.252	5.99
80)		tetrachloroethene											
		0.296	0.300	0.253	0.271	0.275	0.239	0.287	0.279	0.241		0.271	8.37
81)		1,3-dichloropropane											
		0.529	0.531	0.408	0.450	0.482	0.366	0.499	0.495	0.456	0.519	0.473	11.40
82)		2-hexanone											
		0.112	0.128	0.110	0.121	0.128	0.106	0.124	0.134			0.120	8.34
83)		butyl acetate											

Initial Calibration Summary

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Job Number: JC92198

Sample: VX7749-ICC7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181287.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

	0.240	0.254	0.227	0.243	0.244	0.222	0.255	0.258		0.243	5.38
84)	dibromochloromethane										
	0.375	0.386	0.340	0.352	0.345	0.324	0.356	0.342	0.355	0.342	5.07
85)	1,2-dibromoethane										
	0.339	0.368	0.329	0.351	0.352	0.306	0.356	0.346	0.296	0.331	6.65
86)	n-butyl ether										
	1.548	1.440	1.212	1.333	1.338	1.136	1.370	1.350		1.341	9.45
87)	chlorobenzene										
	0.916	0.905	0.786	0.823	0.834	0.738	0.823	0.850	0.833	0.980	8.12
88)	1,1,1,2-tetrachloroethane										
	0.418	0.397	0.333	0.375	0.374	0.325	0.384	0.382	0.387	0.375	7.84
89)	ethylbenzene										
	1.626	1.534	1.200	1.316	1.376	1.110	1.432	1.404	1.514	1.390	11.77
90)	m,p-xylene										
	0.611	0.608	0.492	0.528	0.547	0.465	0.570	0.568	0.601	0.555	9.31
91)	o-xylene										
	1.398	1.362	1.121	1.240	1.250	1.071	1.299	1.294	1.434	1.274	9.46
92)	styrene										
	1.006	1.004	0.810	0.884	0.917	0.742	0.952	0.961	0.903	1.016	9.71
93)	butyl acrylate										
	0.863	0.812	0.710	0.739	0.754	0.683	0.766	0.755	0.754	0.914	8.99
94)	bromoform										
	0.284	0.278	0.241	0.250	0.244	0.232	0.260	0.243	0.233	0.218	8.31
95)	isopropylbenzene										
	1.844	1.723	1.460	1.634	1.592	1.426	1.639	1.605	1.779	1.633	8.35
96)	cis-1,4-dichloro-2-butene										
	0.150	0.157	0.123	0.130	0.136	0.114	0.129	0.140		0.135	10.43
97)	I 1,4-dichlorobenzene-d -----ISTD-----										
98)	4-bromofluorobenzene (s)										
	0.776	0.771	0.900	0.876	0.841	0.901	0.784	0.808	0.763	0.771	6.81
99)	bromobenzene										
	0.706	0.736	0.718	0.751	0.731	0.669	0.696	0.725	0.705	0.810	5.20
100)	1,1,2,2-tetrachloroethane										
	0.755	0.760	0.817	0.839	0.782	0.803	0.737	0.742	0.712	0.892	6.96
101)	trans-1,4-dichloro-2-butene										
	0.190	0.167	0.187	0.187	0.185	0.172	0.176	0.181	0.159	0.178	5.88
102)	1,2,3-trichloropropane										
	0.177	0.194	0.199	0.207	0.208	0.190	0.202	0.196		0.197	5.08
103)	n-propylbenzene										
	3.011	3.034	2.931	3.124	2.973	2.832	2.884	2.899	2.914	3.619	7.48
104)	2-chlorotoluene										
	0.656	0.680	0.698	0.735	0.686	0.695	0.664	0.635	0.624	0.775	6.59
105)	4-chlorotoluene										
	1.925	1.811	1.752	1.816	1.789	1.664	1.755	1.775	1.868	2.244	8.59
106)	1,3,5-trimethylbenzene										
	2.252	2.339	2.309	2.469	2.327	2.353	2.246	2.225	2.149	2.297	4.00
107)	tert-butylbenzene										
	1.933	1.980	2.285	2.336	2.106	2.286	1.884	1.940	1.937	2.179	8.31
108)	1,2,4-trimethylbenzene										
	2.427	2.432	2.334	2.505	2.386	2.314	2.318	2.355	2.491	2.396	3.01
109)	sec-butylbenzene										
	3.024	3.061	3.280	3.421	3.096	3.352	2.930	2.949	2.808	3.685	8.49
110)	1,3-dichlorobenzene										
	1.575	1.539	1.267	1.346	1.374	1.176	1.407	1.384	1.501	1.397	9.19
111)	p-isopropyltoluene										
	2.653	2.690	2.744	2.890	2.668	2.781	2.547	2.604	2.650	3.294	7.75
112)	1,4-dichlorobenzene										
	1.465	1.392	1.321	1.350	1.330	1.267	1.333	1.334	1.401	1.355	4.22
113)	1,2-dichlorobenzene										

Initial Calibration Summary

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Job Number: JC92198

Sample: VX7749-ICC7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181287.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

114)	benzyl chloride	1.599	1.635	1.457	1.556	1.544	1.394	1.541	1.554	1.601	1.542	4.86
115)	n-butylbenzene	1.661	1.636	1.503	1.569	1.540	1.422	1.526	1.534	1.634	1.558	4.88
116)	1,2-dibromo-3-chloropropane	1.327	1.304	1.323	1.410	1.307	1.310	1.216	1.245	1.233	1.444	5.53
117)	1,3,5-trichlorobenzene	0.222	0.243	0.276	0.283	0.267	0.285	0.231	0.248		0.257	9.40
118)	hexachlorobutadiene	1.554	1.518	1.542	1.642	1.592	1.531	1.508	1.556	1.452	1.578	3.33
119)	naphthalene	0.506	0.525	0.531	0.552	0.513	0.536	0.497	0.510	0.456	0.640	8.99
120)	2-ethylhexyl acrylate	3.886	4.014	3.826	3.797	2.957	3.467				3.658	10.62
	This compound does not meet initial calibration criteria											
121)	1,2,4-trichlorobenzene	0.908	0.734	0.399	1.063			0.225			0.665	52.42
122)	1,2,3-trichlorobenzene	1.194	1.280	1.622	1.700	1.628	1.593	1.339	1.510		1.483	12.61
123)	hexachloroethane	1.170	1.251	1.712	1.742	1.648	1.656	1.327	1.519		1.503	14.90
124)	2-methylnaphthalene	0.401	0.564	0.557	0.475	0.584	0.402	0.426			0.487	16.50
		2.755	2.269	1.572	2.862			0.987			2.089	38.26
	----- Linear regression ----- Coefficient = 0.9961											
	Response Ratio = -0.19403 + 2.90387 *A											
125)	bis(chloromethyl)ether										0.000	-1.00
126)	ethylenimine										0.000	-1.00
127)	pentafluorobenzene(a)	-----ISTD-----										
128)	chlorotrifluoroethene	0.376	0.460	0.436	0.440	0.455	0.414	0.433			0.430	6.61
129)	freon 123a	0.637	0.673	0.613	0.623	0.647	0.589	0.674	0.650		0.638	4.59
130)	chlorobenzene-d5(a)	-----ISTD-----										
131)	cyclohexanone	0.014	0.016	0.017	0.017	0.016	0.019	0.015	0.015		0.016	9.78
132)	pentafluorobenzene(b)	-----ISTD-----										
133)	freon 142b	1.411	1.274	1.584	1.588	1.573	1.494	1.646	1.567		1.517	7.98

(#) = Out of Range ### Number of calibration levels exceeded format ###

MX7749.M

Fri Jul 19 15:39:10 2019

GCMSX

Initial Calibration Verification

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Job Number: JC92198

Sample: VX7749-ICV7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181292.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX7749\X181292.D

Vial: 14

Acq On : 2 May 2019 10:45 pm

Operator: juntaep

Sample : icv7749-50

Inst : ACC-VOA-M

Misc : MS34046,VX7749,5,,,,,1

Multiplr: 1.00

MS Integration Params: ACETONE.P

Method : C:\MSDCHEM\1\METHODS\MX7749.M (RTE Integrator)

Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)

Last Update : Thu May 09 14:26:25 2019

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	95	0.00	7.40
2	ethanol			NA			
3	tertiary butyl alcohol	1.134	1.252	-10.4	102	0.00	7.54
4	1,4-dioxane	0.093	0.104	-11.8	98	0.00	12.24
5 I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	10.20
6	chlorodifluoromethane	1.528	1.758	-15.1	115	0.00	3.89
7	dichlorodifluoromethane	1.518	1.677	-10.5	103	0.00	3.88
8	chloromethane	1.926	1.970	-2.3	103	0.00	4.27
9	vinyl chloride	1.588	1.552	2.3	100	-0.01	4.50
10	bromomethane	0.790	0.810	-2.5	100	0.00	5.12
11	chloroethane	0.532	0.548	-3.0	100	-0.01	5.30
12	vinyl bromide	0.595	0.607	-2.0	95	0.00	5.66
13	trichlorofluoromethane	0.968	0.992	-2.5	99	-0.02	5.80
14	1,3-butadiene	0.678	0.789	-16.4	119	-0.01	4.52
15	ethyl ether	0.215	0.233	-8.4	107	0.00	6.21
16	acrolein	0.100	0.097	3.0	105	0.00	6.44
17	1,1-dichloroethene	0.361	0.346	4.2	99	0.00	6.66
18	freon 113	0.580	0.673	-16.0	115	0.00	6.70
19	acetone	0.131	0.139	-6.1	112	0.00	6.66
20	acetonitrile	0.087	0.077	11.5	92	0.00	7.10
21	iodomethane	0.694	0.792	-14.1	115	0.00	6.93
22	carbon disulfide	1.282	1.397	-9.0	111	0.00	7.10
23	methylene chloride	0.456	0.434	4.8	102	0.00	7.46
24	methyl acetate	0.347	0.332	4.3	103	0.00	7.18
25	methyl tert butyl ether	1.570	1.498	4.6	99	0.00	7.88
26	trans-1,2-dichloroethene	0.390	0.364	6.7	98	0.00	7.92
27	hexane	0.571	0.612	-7.2	109	0.00	8.36
28	di-isopropyl ether	1.801	1.640	8.9	97	0.00	8.61
29	2-butanone	0.045	0.050	-11.1	102	0.00	9.39
30	1,1-dichloroethane	0.747	0.758	-1.5	105	0.00	8.60
31	chloroprene	0.556	0.604	-8.6	108	0.00	8.73
32	acrylonitrile	0.163	0.200	-22.7	117	0.00	7.78
33	vinyl acetate	0.076	0.079	-3.9	103	0.00	8.53
34	ethyl tert-butyl ether	1.667	1.668	-0.1	99	0.00	9.18
35	ethyl acetate	0.070	0.076	-8.6	103	0.00	9.43
36	2,2-dichloropropane	0.766	0.682	11.0	94	0.00	9.52
37	cis-1,2-dichloroethene	0.449	0.427	4.9	100	0.00	9.48
38	methyl acrylate	0.053	0.062	-17.0	103	0.00	9.54
39	propionitrile	0.064	0.070	-9.4	106	0.00	9.47
40	tert-butyl formate	0.419	0.390	6.9	92	0.00	10.02
41	bromochloromethane	0.229	0.246	-7.4	106	0.00	9.85

Initial Calibration Verification

Page 2 of 3

Job Number: JC92198

Sample: VX7749-ICV7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181292.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

42	tetrahydrofuran	0.055	0.061	-10.9	106	-0.01	9.88
43	chloroform	0.729	0.718	1.5	104	0.00	9.97
44 S	dibromofluoromethane (s)	0.407	0.409	-0.5	103	0.00	10.21
45	methacrylonitrile	0.165	0.182	-10.3	107	0.00	9.73
46	1,1,1-trichloroethane	0.749	0.776	-3.6	101	0.00	10.30
47	cyclohexane	0.828	0.888	-7.2	101	0.00	10.45
48 m	tert amyl alcohol	0.026	0.027	-3.8	107	0.00	10.69
49	1,1-dichloropropene	0.481	0.494	-2.7	104	0.00	10.52
50	isobutyl alcohol			-----NA-----			
51	carbon tetrachloride	0.629	0.650	-3.3	103	0.00	10.56
52	isopropyl acetate	0.086	0.095	-10.5	102	0.00	10.75
53 I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00	11.39
54 S	1,2-dichloroethane-d4 (s)	0.330	0.318	3.6	101	0.00	10.75
55	iso-octane	0.888	0.919	-3.5	104	0.00	10.98
56	epichlorohydrin	0.035	0.037	-5.7	107	0.00	12.96
57	n-butyl alcohol	0.011	0.012	-9.1	102	0.00	11.47
58	benzene	1.160	1.157	0.3	105	0.00	10.83
59	tert-amyl methyl ether	1.127	1.065	5.5	99	0.00	10.97
60	heptane	0.177	0.227	-28.2	126	0.00	11.21
61	1,2-dichloroethane	0.391	0.373	4.6	103	0.00	10.86
62	trichloroethene	0.304	0.325	-6.9	106	0.00	11.79
63 m	ethyl acrylate	0.382	0.435	-13.9	109	0.00	11.80
64	2-nitropropane	0.089	0.094	-5.6	110	0.00	12.79
65	2-chloroethyl vinyl ether	0.216	0.243	-12.5	110	0.00	12.87
66	methyl methacrylate	0.081	0.084	-3.7	100	0.00	12.15
67	1,2-dichloropropane	0.128	0.124	3.1	97	0.00	12.17
68	dibromomethane	0.193	0.190	1.6	98	0.00	12.31
69	methylcyclohexane	0.533	0.538	-0.9	103	0.00	12.19
70	bromodichloromethane	0.432	0.425	1.6	101	0.00	12.53
71	cis-1,3-dichloropropene	0.520	0.537	-3.3	104	0.00	13.16
72	4-methyl-2-pentanone	0.131	0.146	-11.5	105	0.00	13.30
73	3-methyl-1-butanol	0.011	0.012	-9.1	104	0.00	13.32
74 I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	15.60
75 S	toluene-d8 (s)	1.199	1.169	2.5	100	0.00	13.57
76	toluene	0.743	0.748	-0.7	104	0.00	13.67
77	trans-1,3-dichloropropene	0.482	0.502	-4.1	106	0.00	13.93
78	ethyl methacrylate	0.397	0.444	-11.8	107	0.00	13.95
79	1,1,2-trichloroethane	0.252	0.261	-3.6	105	0.00	14.22
80	tetrachloroethene	0.271	0.288	-6.3	107	0.00	14.42
81	1,3-dichloropropane	0.473	0.465	1.7	105	0.00	14.46
82	2-hexanone	0.120	0.123	-2.5	103	0.00	14.46
83	butyl acetate	0.243	0.245	-0.8	102	0.00	14.60
84	dibromochloromethane	0.352	0.377	-7.1	108	0.00	14.79
85	1,2-dibromoethane	0.337	0.358	-6.2	103	0.00	14.99
86 m	n-butyl ether	1.341	1.432	-6.8	109	0.00	15.66
87	chlorobenzene	0.849	0.864	-1.8	106	0.00	15.64
88	1,1,1,2-tetrachloroethane	0.375	0.379	-1.1	103	0.00	15.74
89	ethylbenzene	1.390	1.355	2.5	104	0.00	15.74
90	m,p-xylene	0.555	0.548	1.3	105	0.00	15.91
91	o-xylene	1.274	1.266	0.6	103	0.00	16.43
92	styrene	0.920	0.907	1.4	104	0.00	16.45
93	butyl acrylate	0.775	0.755	2.6	103	0.00	16.25
94	bromoform	0.248	0.272	-9.7	110	0.00	16.72
95	isopropylbenzene	1.633	1.666	-2.0	103	0.00	16.88
96	cis-1,4-dichloro-2-butene	0.135	0.134	0.7	104	0.00	16.92
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	18.39
98 S	4-bromofluorobenzene (s)	0.819	0.886	-8.2	101	0.00	17.11

Initial Calibration Verification

Page 3 of 3

Job Number: JC92198

Sample: VX7749-ICV7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181292.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

99	bromobenzene	0.725	0.762	-5.1	101	0.00	17.31
100	1,1,2,2-tetrachloroethane	0.784	0.874	-11.5	104	0.00	17.21
101	trans-1,4-dichloro-2-bute	0.178	0.217	-21.9	116	0.00	17.25
102	1,2,3-trichloropropane	0.197	0.214	-8.6	103	0.00	17.30
103	n-propylbenzene	3.022	3.256	-7.7	104	0.00	17.37
104	2-chlorotoluene	0.685	0.743	-8.5	101	0.00	17.51
105	4-chlorotoluene	1.840	1.931	-4.9	106	0.00	17.63
106	1,3,5-trimethylbenzene	2.297	2.566	-11.7	103	0.00	17.56
107	tert-butylbenzene	2.087	2.455	-17.6	105	0.00	17.92
108	1,2,4-trimethylbenzene	2.396	2.555	-6.6	102	0.00	17.98
109	sec-butylbenzene	3.161	3.551	-12.3	103	0.00	18.16
110	1,3-dichlorobenzene	1.397	1.398	-0.1	103	0.00	18.32
111	p-isopropyltoluene	2.752	3.033	-10.2	104	0.00	18.30
112	1,4-dichlorobenzene	1.355	1.411	-4.1	104	0.00	18.42
113	1,2-dichlorobenzene	1.542	1.621	-5.1	104	0.00	18.78
114	benzyl chloride	1.558	1.918	-23.1	122	0.00	18.51
115	n-butylbenzene	1.312	1.445	-10.1	102	0.00	18.71
116	1,2-dibromo-3-chloropropa	0.257	0.285	-10.9	100	0.00	19.51
117	1,3,5-trichlorobenzene	1.547	1.690	-9.2	102	0.00	19.69
118	hexachlorobutadiene	0.527	0.554	-5.1	100	0.00	20.38
119	naphthalene	3.658	4.190	-14.5	104	0.00	20.54
120	2-ethylhexyl acrylate	0.665	0.799	-20.2	108	0.00	20.28
121	1,2,4-trichlorobenzene	1.483	1.748	-17.9	102	0.00	20.28
122 m	1,2,3-trichlorobenzene	1.503	1.797	-19.6	103	0.00	20.74
123	hexachloroethane	0.487	0.590	-21.1	106	0.00	19.07

		True	Calc.	% Drift			
124	2-methylnaphthalene	25.000	23.436	6.3	102	0.00	21.61

		AvgRF	CCRF	% Dev			
125	bis(chloromethyl)ether			NA			
126	ethylenimine			NA			

(#) = Out of Range
X181287.D MX7749.M

SPCC's out = 0 CCC's out = 0
Thu May 09 14:52:52 2019 GCMSX

Initial Calibration Verification

Page 1 of 3

Job Number: JC92198

Sample: VX7749-ICV7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181293.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX7749\X181293.D

Vial: 15

Acq On : 2 May 2019 11:14 pm

Operator: juntaep

Sample : icv7749-50

Inst : ACC-VOA-M

Misc : MS34046,VX7749,5,,,,,1

Multiplr: 1.00

MS Integration Params: ACETONE.P

Method : C:\MSDCHEM\1\METHODS\MX7749.M (RTE Integrator)

Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)

Last Update : Thu May 09 14:26:25 2019

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	107	-0.01	7.39
2	ethanol			-----NA-----			
3	tertiary butyl alcohol			-----NA-----			
4	1,4-dioxane			-----NA-----			
5 I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	10.20
6	chlorodifluoromethane			-----NA-----			
7	dichlorodifluoromethane			-----NA-----			
8	chloromethane			-----NA-----			
9	vinyl chloride			-----NA-----			
10	bromomethane			-----NA-----			
11	chloroethane			-----NA-----			
12	vinyl bromide			-----NA-----			
13	trichlorofluoromethane			-----NA-----			
14	1,3-butadiene			-----NA-----			
15	ethyl ether			-----NA-----			
16	acrolein			-----NA-----			
17	1,1-dichloroethene			-----NA-----			
18	freon 113			-----NA-----			
19	acetone			-----NA-----			
20	acetonitrile	0.087	0.092	-5.7	117	0.00	7.10
21	iodomethane			-----NA-----			
22	carbon disulfide			-----NA-----			
23	methylene chloride			-----NA-----			
24	methyl acetate			-----NA-----			
25	methyl tert butyl ether			-----NA-----			
26	trans-1,2-dichloroethene			-----NA-----			
27	hexane			-----NA-----			
28	di-isopropyl ether			-----NA-----			
29	2-butanone			-----NA-----			
30	1,1-dichloroethane			-----NA-----			
31	chloroprene			-----NA-----			
32	acrylonitrile	0.163	0.165	-1.2	103	0.00	7.78
33	vinyl acetate			-----NA-----			
34	ethyl tert-butyl ether			-----NA-----			
35	ethyl acetate			-----NA-----			
36	2,2-dichloropropane			-----NA-----			
37	cis-1,2-dichloroethene			-----NA-----			
38	methyl acrylate			-----NA-----			
39	propionitrile			-----NA-----			
40	tert-butyl formate			-----NA-----			
41	bromochloromethane			-----NA-----			

Initial Calibration Verification

Page 2 of 3

Job Number: JC92198

Sample: VX7749-ICV7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181293.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

42	tetrahydrofuran			-----NA-----				
43	chloroform			-----NA-----				
44 S	dibromofluoromethane (s)	0.407	0.415	-2.0 110	0.00	10.21		
45	methacrylonitrile			-----NA-----				
46	1,1,1-trichloroethane			-----NA-----				
47	cyclohexane			-----NA-----				
48 m	tert amyl alcohol			-----NA-----				
49	1,1-dichloropropene			-----NA-----				
50	isobutyl alcohol			-----NA-----				
51	carbon tetrachloride			-----NA-----				
52	isopropyl acetate			-----NA-----				
53 I	1,4-difluorobenzene	1.000	1.000	0.0 105	0.00	11.39		
54 S	1,2-dichloroethane-d4 (s)	0.330	0.343	-3.9 113	0.00	10.75		
55	iso-octane			-----NA-----				
56	epichlorohydrin			-----NA-----				
57	n-butyl alcohol			-----NA-----				
58	benzene			-----NA-----				
59	tert-amyl methyl ether			-----NA-----				
60	heptane			-----NA-----				
61	1,2-dichloroethane			-----NA-----				
62	trichloroethene			-----NA-----				
63 m	ethyl acrylate			-----NA-----				
64	2-nitropropane			-----NA-----				
65	2-chloroethyl vinyl ether			-----NA-----				
66	methyl methacrylate			-----NA-----				
67	1,2-dichloropropane			-----NA-----				
68	dibromomethane			-----NA-----				
69	methylcyclohexane			-----NA-----				
70	bromodichloromethane			-----NA-----				
71	cis-1,3-dichloropropene			-----NA-----				
72	4-methyl-2-pentanone			-----NA-----				
73	3-methyl-1-butanol			-----NA-----				
74 I	chlorobenzene-d5	1.000	1.000	0.0 101	0.00	15.60		
75 S	toluene-d8 (s)	1.199	1.234	-2.9 105	0.00	13.57		
76	toluene			-----NA-----				
77	trans-1,3-dichloropropene			-----NA-----				
78	ethyl methacrylate			-----NA-----				
79	1,1,2-trichloroethane			-----NA-----				
80	tetrachloroethene	0.271	0.284	-4.8 106	0.00	14.42		
81	1,3-dichloropropane			-----NA-----				
82	2-hexanone			-----NA-----				
83	butyl acetate			-----NA-----				
84	dibromochloromethane			-----NA-----				
85	1,2-dibromoethane			-----NA-----				
86 m	n-butyl ether			-----NA-----				
87	chlorobenzene			-----NA-----				
88	1,1,1,2-tetrachloroethane			-----NA-----				
89	ethylbenzene			-----NA-----				
90	m,p-xylene			-----NA-----				
91	o-xylene			-----NA-----				
92	styrene			-----NA-----				
93	butyl acrylate			-----NA-----				
94	bromoform			-----NA-----				
95	isopropylbenzene			-----NA-----				
96	cis-1,4-dichloro-2-butene			-----NA-----				
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0 129	0.00	18.39		
98 S	4-bromofluorobenzene (s)	0.819	0.769	6.1 113	0.00	17.11		

Initial Calibration Verification

Page 3 of 3

Job Number: JC92198

Sample: VX7749-ICV7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X181293.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

99	bromobenzene	-----NA-----
100	1,1,2,2-tetrachloroethane	-----NA-----
101	trans-1,4-dichloro-2-bute	-----NA-----
102	1,2,3-trichloropropane	-----NA-----
103	n-propylbenzene	-----NA-----
104	2-chlorotoluene	-----NA-----
105	4-chlorotoluene	-----NA-----
106	1,3,5-trimethylbenzene	-----NA-----
107	tert-butylbenzene	-----NA-----
108	1,2,4-trimethylbenzene	-----NA-----
109	sec-butylbenzene	-----NA-----
110	1,3-dichlorobenzene	-----NA-----
111	p-isopropyltoluene	-----NA-----
112	1,4-dichlorobenzene	-----NA-----
113	1,2-dichlorobenzene	-----NA-----
114	benzyl chloride	-----NA-----
115	n-butylbenzene	-----NA-----
116	1,2-dibromo-3-chloropropa	-----NA-----
117	1,3,5-trichlorobenzene	-----NA-----
118	hexachlorobutadiene	-----NA-----
119	naphthalene	-----NA-----
120	2-ethylhexyl acrylate	-----NA-----
121	1,2,4-trichlorobenzene	-----NA-----
122 m	1,2,3-trichlorobenzene	-----NA-----
123	hexachloroethane	-----NA-----
----- True Calc. % Drift -----		
124	2-methylnaphthalene	-----NA-----
----- AvgRF CCRF % Dev -----		
125	bis(chloromethyl)ether	-----NA-----
126	ethylenimine	-----NA-----

(#) = Out of Range
X181287.D MX7749.M

SPCC's out = 0 CCC's out = 0
Thu May 09 14:52:53 2019 GCMSX

6.7.3

6

Continuing Calibration Summary

Page 1 of 3

Job Number: JC92198

Sample: VX7847-CC7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X183266.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX7847\X183266.D

Vial: 2

Acq On : 29 Jul 2019 6:41 am

Operator: jessicap

Sample : cc7749-20

Inst : ACC-VOA-M

Misc : MS36371,VX7847,5,,,,,1

Multiplr: 1.00

MS Integration Params: ACETONE.P

Method : C:\MSDCHEM\1\METHODS\MX7749.M (RTE Integrator)

Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)

Last Update : Fri Jul 19 11:12:55 2019

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	95	0.00	7.40
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.134	1.101	2.9	93	0.00	7.54
4	1,4-dioxane	0.093	0.100	-7.5	98	0.00	12.24
5 I	pentafluorobenzene	1.000	1.000	0.0	97	0.00	10.20
6	chlorodifluoromethane	1.528	1.498	2.0	95	0.02	3.92
7	dichlorodifluoromethane	1.518	1.425	6.1	88	0.02	3.89
8	chloromethane	1.926	1.542	19.9	78	0.02	4.29
9	vinyl chloride	1.588	1.420	10.6	88	0.03	4.54
10	bromomethane	0.790	0.911	-15.3	115	0.03	5.17
11	chloroethane	0.532	0.563	-5.8	108	0.02	5.33
12	vinyl bromide	0.595	0.734	-23.4#	124	0.02	5.68
13	trichlorofluoromethane	0.968	1.214	-25.4#	123	0.03	5.84
14	1,3-butadiene	0.678	0.870	-28.3#	131	0.02	4.55
15	ethyl ether	0.215	0.210	2.3	93	0.00	6.22
16	acrolein	0.100	0.069	31.0#	65	0.00	6.44
17	1,1-dichloroethene	0.361	0.414	-14.7	113	0.00	6.67
18	freon 113	0.580	0.669	-15.3	113	0.02	6.71
19	acetone	0.131	0.116	11.5	82	0.01	6.66
20	acetonitrile	0.087	0.082	5.7	89	0.00	7.10
21	iodomethane	0.694	0.841	-21.2#	119	0.01	6.94
22	carbon disulfide	1.282	1.558	-21.5#	122	0.00	7.10
23	methylene chloride	0.456	0.494	-8.3	110	0.00	7.46
24	methyl acetate	0.347	0.297	14.4	85	0.01	7.19
25	methyl tert butyl ether	1.570	1.552	1.1	100	0.00	7.89
26	trans-1,2-dichloroethene	0.390	0.431	-10.5	109	0.00	7.92
27	hexane	0.571	0.563	1.4	97	0.01	8.37
28	di-isopropyl ether	1.801	1.586	11.9	90	0.01	8.62
29	2-butanone	0.045	0.048	-6.7	96	0.00	9.40
30	1,1-dichloroethane	0.747	0.782	-4.7	102	0.00	8.60
31	chloroprene	0.556	0.553	0.5	93	0.00	8.73
32	acrylonitrile	0.163	0.165	-1.2	94	0.00	7.78
33	vinyl acetate	0.076	0.077	-1.3	96	0.01	8.54
34	ethyl tert-butyl ether	1.667	1.615	3.1	95	0.00	9.19
35	ethyl acetate	0.070	0.056	20.0#	69	0.02	9.45
36	2,2-dichloropropane	0.766	0.904	-18.0	121	0.00	9.53
37	cis-1,2-dichloroethene	0.449	0.489	-8.9	107	0.00	9.49
38	methyl acrylate	0.053	0.054	-1.9	87	0.00	9.54
39	propionitrile	0.064	0.066	-3.1	94	0.00	9.47
40	tert-butyl formate	0.419	0.402	4.1	93	0.00	10.02
41	bromochloromethane	0.229	0.252	-10.0	105	0.00	9.85

Continuing Calibration Summary

Page 2 of 3

Job Number: JC92198

Sample: VX7847-CC7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X183266.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

42	tetrahydrofuran	0.055	0.046	16.4	73	0.00	9.88
43	chloroform	0.729	0.759	-4.1	105	0.00	9.97
44 S	dibromofluoromethane (s)	0.407	0.421	-3.4	102	0.00	10.21
45	methacrylonitrile	0.165	0.163	1.2	93	0.00	9.74
46	1,1,1-trichloroethane	0.749	0.809	-8.0	108	0.00	10.30
47	cyclohexane	0.828	0.859	-3.7	98	0.00	10.45
48 m	tert amyl alcohol	0.026	0.025	3.8	92	0.01	10.71
49	1,1-dichloropropene	0.481	0.520	-8.1	101	0.00	10.52
50	isobutyl alcohol			-----NA-----			
51	carbon tetrachloride	0.629	0.711	-13.0	112	0.00	10.56
52	isopropyl acetate	0.086	0.082	4.7	86	0.00	10.75
53 I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	11.39
54 S	1,2-dichloroethane-d4 (s)	0.330	0.320	3.0	92	0.00	10.74
55	iso-octane	0.888	0.935	-5.3	109	0.00	10.99
56	epichlorohydrin	0.035	0.032	8.6	89	0.00	12.96
57	n-butyl alcohol	0.011	0.011	0.0	96	0.00	11.47
58	benzene	1.160	1.179	-1.6	101	0.00	10.83
59	tert-amyl methyl ether	1.127	1.111	1.4	99	0.00	10.97
60	heptane	0.177	0.188	-6.2	102	0.01	11.22
61	1,2-dichloroethane	0.391	0.385	1.5	99	0.00	10.86
62	trichloroethene	0.304	0.331	-8.9	103	0.00	11.80
63 m	ethyl acrylate	0.382	0.348	8.9	82	0.00	11.80
64	2-nitropropane	0.089	0.073	18.0	81	0.00	12.79
65	2-chloroethyl vinyl ether	0.216	0.204	5.6	87	0.00	12.87
66	methyl methacrylate	0.081	0.077	4.9	90	0.00	12.16
67	1,2-dichloropropane	0.128	0.131	-2.3	95	0.00	12.17
68	dibromomethane	0.193	0.212	-9.8	105	0.00	12.31
69	methylcyclohexane	0.533	0.597	-12.0	114	0.00	12.20
70	bromodichloromethane	0.432	0.436	-0.9	99	0.00	12.53
71	cis-1,3-dichloropropene	0.520	0.539	-3.7	101	0.00	13.15
72	4-methyl-2-pentanone	0.131	0.131	0.0	91	0.00	13.30
73	3-methyl-1-butanol	0.011	0.012	-9.1	96	0.00	13.32
74 I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	15.60
75 S	toluene-d8 (s)	1.199	1.146	4.4	99	0.00	13.57
76	toluene	0.743	0.716	3.6	100	0.00	13.67
77	trans-1,3-dichloropropene	0.482	0.486	-0.8	101	0.00	13.93
78	ethyl methacrylate	0.397	0.374	5.8	90	0.00	13.95
79	1,1,2-trichloroethane	0.252	0.246	2.4	99	0.00	14.22
80	tetrachloroethene	0.271	0.285	-5.2	106	0.00	14.43
81	1,3-dichloropropane	0.473	0.456	3.6	97	0.00	14.46
82	2-hexanone	0.120	0.115	4.2	92	0.00	14.46
83	butyl acetate	0.243	0.221	9.1	93	0.00	14.60
84	dibromochloromethane	0.352	0.361	-2.6	107	0.00	14.79
85	1,2-dibromoethane	0.337	0.352	-4.5	102	0.00	14.99
86 m	n-butyl ether	1.341	1.246	7.1	95	0.00	15.66
87	chlorobenzene	0.849	0.861	-1.4	106	0.00	15.64
88	1,1,1,2-tetrachloroethane	0.375	0.369	1.6	101	0.00	15.74
89	ethylbenzene	1.390	1.379	0.8	103	0.00	15.74
90	m,p-xylene	0.555	0.554	0.2	104	0.00	15.91
91	o-xylene	1.274	1.256	1.4	103	0.00	16.43
92	styrene	0.920	0.931	-1.2	104	0.00	16.45
93	butyl acrylate	0.775	0.665	14.2	90	0.00	16.25
94	bromoform	0.248	0.260	-4.8	109	0.00	16.71
95	isopropylbenzene	1.633	1.617	1.0	104	0.00	16.88
96	cis-1,4-dichloro-2-butene	0.135	0.078	42.2#	59	0.00	16.92
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	18.39
98 S	4-bromofluorobenzene (s)	0.819	0.785	4.2	106	0.00	17.11

Continuing Calibration Summary

Page 3 of 3

Job Number: JC92198

Sample: VX7847-CC7749

Account: CARICH C. A. Rich Consultants

Lab FileID: X183266.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

99	bromobenzene	0.725	0.703	3.0	109	0.00	17.31
100	1,1,2,2-tetrachloroethane	0.784	0.730	6.9	106	0.00	17.21
101	trans-1,4-dichloro-2-bute	0.178	0.092	48.3#	56	0.00	17.25
102	1,2,3-trichloropropane	0.197	0.187	5.1	102	0.00	17.29
103	n-propylbenzene	3.022	2.830	6.4	108	0.00	17.37
104	2-chlorotoluene	0.685	0.656	4.2	108	0.00	17.51
105	4-chlorotoluene	1.840	1.730	6.0	109	0.00	17.63
106	1,3,5-trimethylbenzene	2.297	2.175	5.3	106	0.00	17.56
107	tert-butylbenzene	2.087	1.999	4.2	107	0.00	17.92
108	1,2,4-trimethylbenzene	2.396	2.258	5.8	107	0.00	17.98
109	sec-butylbenzene	3.161	2.979	5.8	109	0.00	18.16
110	1,3-dichlorobenzene	1.397	1.346	3.7	111	0.00	18.32
111	p-isopropyltoluene	2.752	2.609	5.2	111	0.00	18.30
112	1,4-dichlorobenzene	1.355	1.330	1.8	113	0.00	18.42
113	1,2-dichlorobenzene	1.542	1.506	2.3	110	0.00	18.78
114	benzyl chloride	1.558	1.594	-2.3	117	0.00	18.51
115	n-butylbenzene	1.312	1.287	1.9	111	0.00	18.71
116	1,2-dibromo-3-chloropropa	0.257	0.242	5.8	102	0.00	19.51
117	1,3,5-trichlorobenzene	1.547	1.566	-1.2	111	0.00	19.69
118	hexachlorobutadiene	0.527	0.573	-8.7	126	0.00	20.38
119	naphthalene	3.658	3.569	2.4	106	0.00	20.54
120	2-ethylhexyl acrylate	0.665	0.398	40.2#	113	0.00	20.28
121	1,2,4-trichlorobenzene	1.483	1.608	-8.4	112	0.00	20.28
122 m	1,2,3-trichlorobenzene	1.503	1.616	-7.5	111	0.00	20.74
123	hexachloroethane	0.487	0.486	0.2	116	0.00	19.07

	----- True	Calc.	% Drift	-----
124	2-methylnaphthalene	10.000	8.203	18.0 102 0.00 21.61

	----- AvgRF	CCRF	% Dev	-----
125	bis(chloromethyl)ether	-----NA-----		
126	ethylenimine	-----NA-----		

127	pentafluorobenzene(a)	1.000	1.000	0.0	90	0.00	10.20
128	chlorotrifluoroethene	-----NA-----					
129	freon 123a	-----NA-----					

130	chlorobenzene-d5(a)	1.000	1.000	0.0	106	0.00	15.60
131	cyclohexanone	-----NA-----					

132	pentafluorobenzene(b)	1.000	1.000	0.0	120	-0.01	10.20
133	freon 142b	-----NA-----					

(#) = Out of Range
X181286.D MX7749.M

SPCC's out = 0 CCC's out = 0
Mon Jul 29 14:10:11 2019 GCMSX

6.7.4
6

Run Sequence Report

Page 1 of 1

Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Run ID: VX7749	Method: SW846 8260C	Instrument ID: GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VX7749-BFB	X181279.D	05/02/19 16:28	n/a	BFB Tune
VX7749-IC7749	X181280.D	05/02/19 17:02	n/a	Initial cal 0.2
VX7749-IC7749	X181281.D	05/02/19 17:31	n/a	Initial cal 0.5
VX7749-IC7749	X181282.D	05/02/19 17:59	n/a	Initial cal 1
VX7749-IC7749	X181283.D	05/02/19 18:28	n/a	Initial cal 2
VX7749-IC7749	X181284.D	05/02/19 18:56	n/a	Initial cal 4
VX7749-IC7749	X181285.D	05/02/19 19:25	n/a	Initial cal 8
VX7749-IC7749	X181286.D	05/02/19 19:54	n/a	Initial cal 20
VX7749-ICC7749	X181287.D	05/02/19 20:22	n/a	Initial cal 50
VX7749-IC7749	X181288.D	05/02/19 20:51	n/a	Initial cal 100
VX7749-IC7749	X181289.D	05/02/19 21:19	n/a	Initial cal 200
VX7749-ICV7749	X181292.D	05/02/19 22:45	n/a	Initial cal verification 50
VX7749-ICV7749	X181293.D	05/02/19 23:14	n/a	Initial cal verification 50

6.8.1

6

Run Sequence Report

Page 1 of 1

Job Number: JC92198

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Run ID: VX7847	Method: SW846 8260C	Instrument ID: GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VX7847-BFB	X183266.D	07/29/19 06:41	n/a	BFB Tune
VX7847-CC7749	X183266.D	07/29/19 06:41	n/a	Continuing cal 20
VX7847-BS	X183267.D	07/29/19 07:16	n/a	Blank Spike
VX7847-MB	X183269.D	07/29/19 08:27	n/a	Method Blank
ZZZZZZ	X183270.D	07/29/19 09:07	n/a	(unrelated sample)
ZZZZZZ	X183271.D	07/29/19 09:36	n/a	(unrelated sample)
ZZZZZZ	X183272.D	07/29/19 10:05	n/a	(unrelated sample)
ZZZZZZ	X183273.D	07/29/19 10:34	n/a	(unrelated sample)
ZZZZZZ	X183274.D	07/29/19 11:04	n/a	(unrelated sample)
JC92198-1	X183275.D	07/29/19 11:34	n/a	MW-1
ZZZZZZ	X183276.D	07/29/19 12:03	n/a	(unrelated sample)
JC92198-1MS	X183277.D	07/29/19 12:33	n/a	Matrix Spike
JC92198-1MSD	X183278.D	07/29/19 13:03	n/a	Matrix Spike Duplicate
ZZZZZZ	X183280.D	07/29/19 14:03	n/a	(unrelated sample)
JC92198-9	X183281.D	07/29/19 14:33	n/a	FB 7/24/19
JC92198-10	X183282.D	07/29/19 15:03	n/a	TB 7/24/19
JC92198-2	X183283.D	07/29/19 15:33	n/a	MW-2
JC92198-3	X183284.D	07/29/19 16:03	n/a	MW-2I
JC92198-4	X183285.D	07/29/19 16:33	n/a	MW-2D
JC92198-5	X183286.D	07/29/19 17:04	n/a	MW-3
JC92198-6	X183287.D	07/29/19 17:34	n/a	MW-8
JC92198-7	X183288.D	07/29/19 18:04	n/a	MW-9
JC92198-8	X183289.D	07/29/19 18:34	n/a	MW-XX

6.8.2

6



MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183275.d
 Acq On : 29 Jul 2019 11:34 am
 Operator : jessicap
 Sample : JC92198-1 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:23:35 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.409	65	141773	500.00	ug/L	0.00
5) pentafluorobenzene	10.197	168	214906	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.389	114	291640	50.00	ug/L	0.00
74) chlorobenzene-d5	15.600	117	302353	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.392	152	209798	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.197	168	214906	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.600	117	302353	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.197	168	214906	50.00	ug/L	-0.01

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.207	113	95374	54.54	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	109.08%
54) 1,2-dichloroethane-d4 (s)	10.746	65	99419	51.68	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	103.36%
75) toluene-d8 (s)	13.570	98	342432	47.24	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	94.48%
98) 4-bromofluorobenzene (s)	17.106	95	151496	44.08	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	88.16%

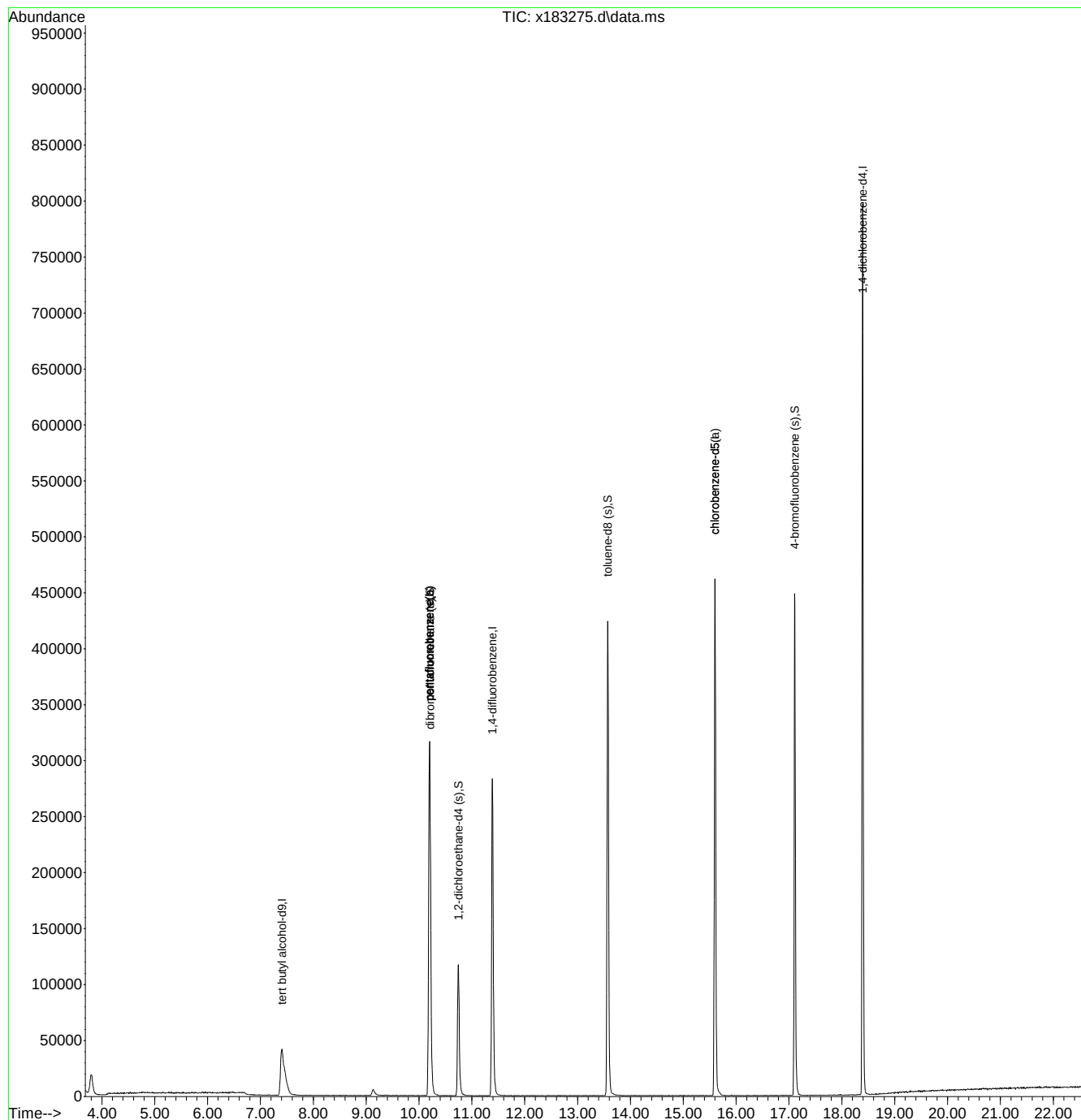
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183275.d
Acq On : 29 Jul 2019 11:34 am
Operator : jessicap
Sample : JC92198-1
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 11 Sample Multiplier: 1
Inst : ACC-VOA-MSX

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:23:35 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183283.d
 Acq On : 29 Jul 2019 3:33 pm
 Operator : jessicap
 Sample : JC92198-2 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:29:06 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.414	65	139545	500.00	ug/L	0.01
5) pentafluorobenzene	10.202	168	215404	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.394	114	292241	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	300606	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.398	152	205678	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.202	168	215747	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	300606	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.202	168	215747	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.212	113	97712	55.75	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	111.50%
54) 1,2-dichloroethane-d4 (s)	10.746	65	102249	53.04	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	106.08%
75) toluene-d8 (s)	13.576	98	344369	47.79	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.58%
98) 4-bromofluorobenzene (s)	17.111	95	152408	45.23	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	90.46%

Target Compounds	Qvalue

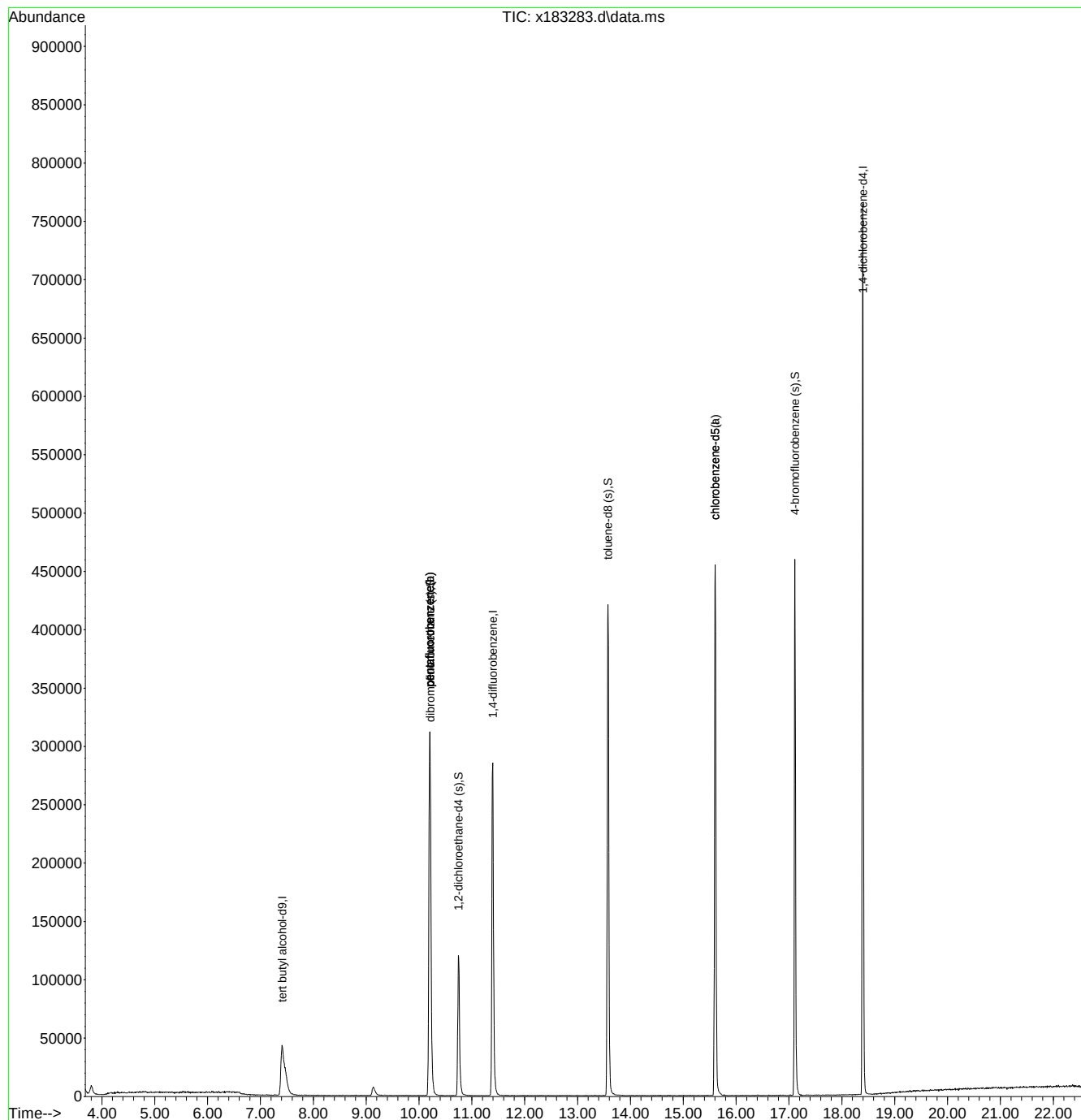
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183283.d
Acq On : 29 Jul 2019 3:33 pm
Operator : jessicap
Sample : JC92198-2
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 18 Sample Multiplier: 1

Inst : ACC-VOA-MSX

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:29:06 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183284.d
 Acq On : 29 Jul 2019 4:03 pm
 Operator : jessicap
 Sample : JC92198-3 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:29:37 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.409	65	143512	500.00	ug/L	0.00
5) pentafluorobenzene	10.197	168	214682	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.394	114	289217	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	302372	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.393	152	207100	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.197	168	214982	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	302372	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.197	168	214982	50.00	ug/L	-0.01

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.212	113	99085	56.72	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	113.44%
54) 1,2-dichloroethane-d4 (s)	10.746	65	103051	54.02	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	108.04%
75) toluene-d8 (s)	13.575	98	345117	47.61	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.22%
98) 4-bromofluorobenzene (s)	17.111	95	152947	45.08	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	90.16%

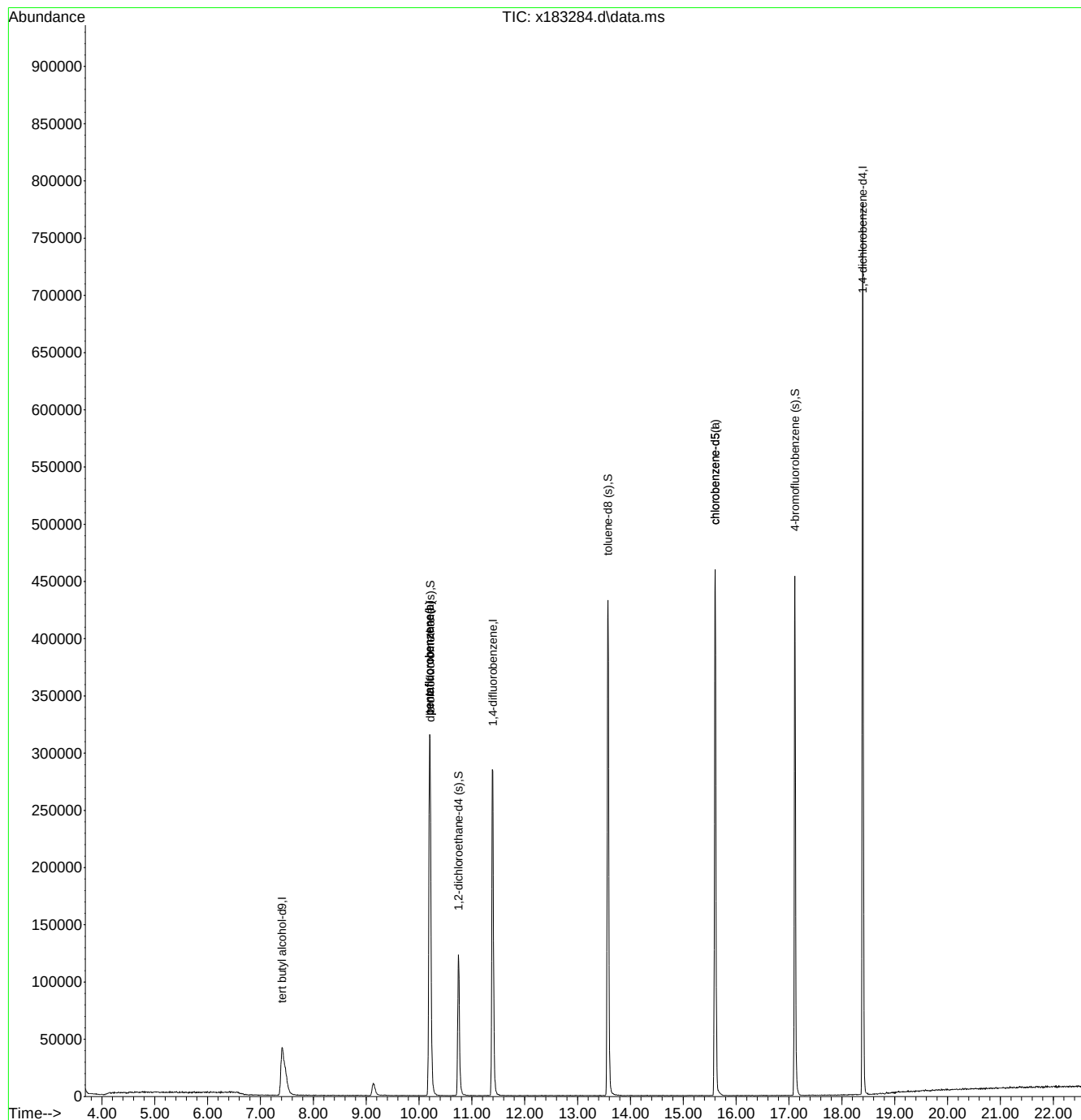
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183284.d
Acq On : 29 Jul 2019 4:03 pm
Operator : jessicap
Sample : JC92198-3 Inst : ACC-VOA-MSX
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:29:37 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183285.d
 Acq On : 29 Jul 2019 4:33 pm
 Operator : jessicap
 Sample : JC92198-4 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:30:11 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

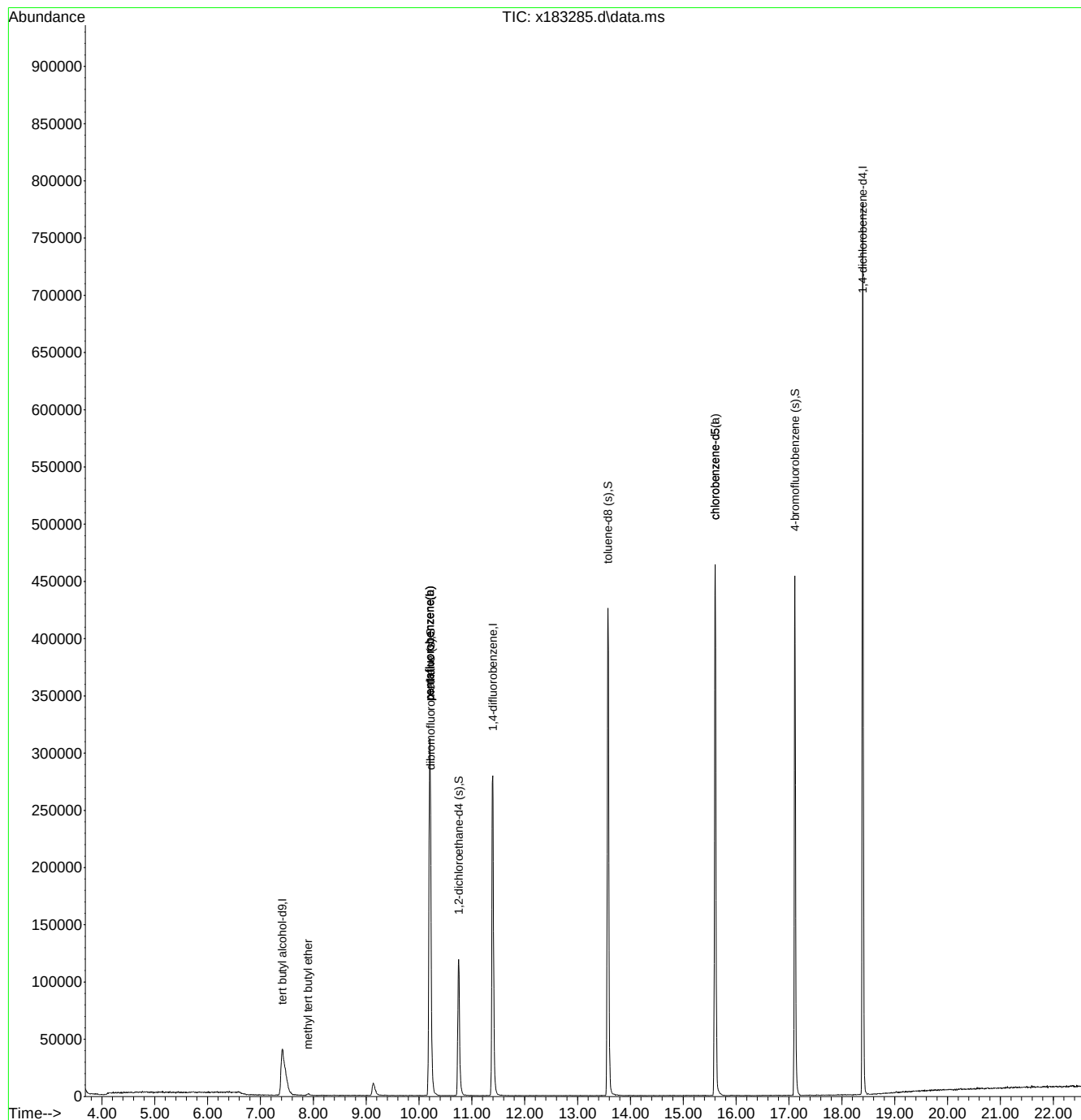
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.414	65	137839	500.00	ug/L	0.01
5) pentafluorobenzene	10.202	168	209209	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.395	114	288279	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	300116	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.393	152	203331	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.202	168	209573	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	300116	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.202	168	209573	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.218	113	98304	57.75	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	115.50%
54) 1,2-dichloroethane-d4 (s)	10.751	65	103186	54.26	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	108.52%
75) toluene-d8 (s)	13.576	98	340858	47.38	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	94.76%
98) 4-bromofluorobenzene (s)	17.111	95	151389	45.45	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	90.90%
Target Compounds						
25) methyl tert butyl ether	7.901	73	2655	0.40	ug/L	Qvalue 95

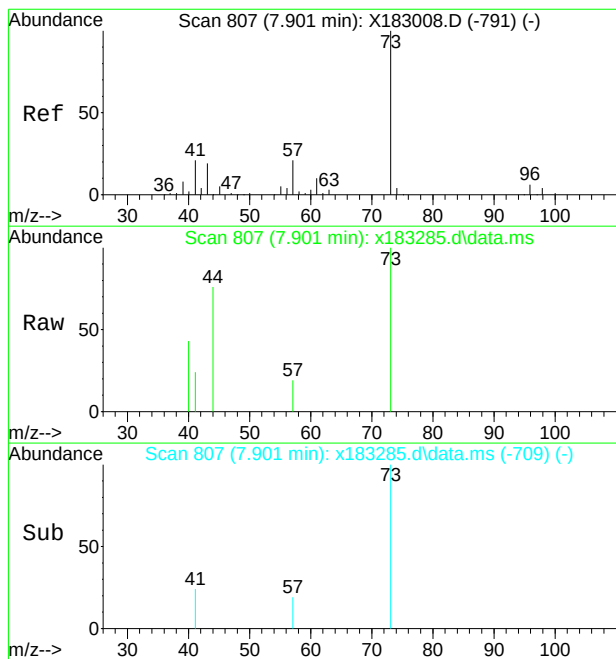
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183285.d
Acq On : 29 Jul 2019 4:33 pm
Operator : jessicap
Sample : JC92198-4 Inst : ACC-VOA-MSX
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 20 Sample Multiplier: 1

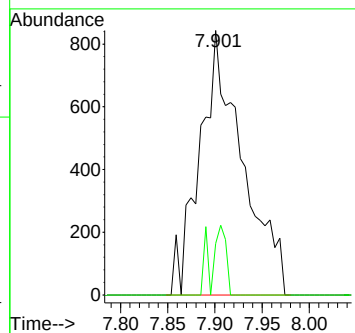
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:30:11 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration





#25
methyl tert butyl ether
Concen: 0.40 ug/L
RT: 7.901 min Scan# 807
Delta R.T. 0.010 min
Lab File: x183285.d
Acq: 29 Jul 2019 4:33 pm

Tgt Ion	Ratio	Lower	Upper
73	100		
57	19.4	0.0	51.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183286.d
 Acq On : 29 Jul 2019 5:04 pm
 Operator : jessicap
 Sample : JC92198-5 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:30:40 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.419	65	134971	500.00	ug/L	0.02
5) pentafluorobenzene	10.202	168	211121	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.394	114	292391	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	298033	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.398	152	202206	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.202	168	211121	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	298033	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.202	168	211121	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.217	113	96690	56.29	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	112.58%
54) 1,2-dichloroethane-d4 (s)	10.751	65	102333	53.06	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	106.12%
75) toluene-d8 (s)	13.575	98	340298	47.63	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.26%
98) 4-bromofluorobenzene (s)	17.111	95	149475	45.12	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	90.24%

Target Compounds Qvalue

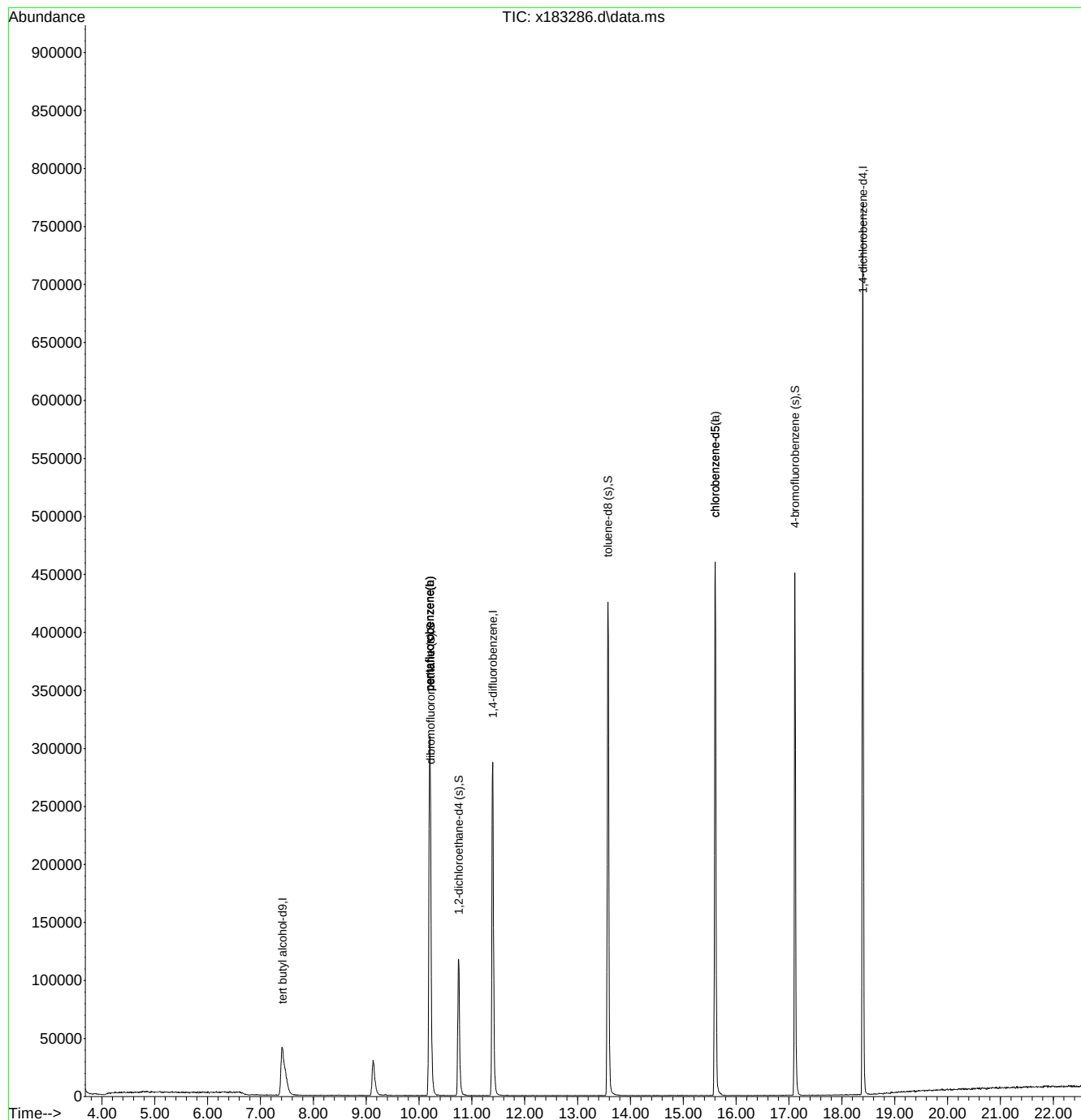
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183286.d
Acq On : 29 Jul 2019 5:04 pm
Operator : jessicap
Sample : JC92198-5
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Inst : ACC-VOA-MSX

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:30:40 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183287.d
 Acq On : 29 Jul 2019 5:34 pm
 Operator : jessicap
 Sample : JC92198-6 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:31:08 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.414	65	137906	500.00	ug/L	0.01
5) pentafluorobenzene	10.202	168	210713	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.395	114	289828	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	297194	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.398	152	200990	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.202	168	210713	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	297194	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.202	168	210713	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.218	113	97213	56.70	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	113.40%
54) 1,2-dichloroethane-d4 (s)	10.751	65	102217	53.47	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	106.94%
75) toluene-d8 (s)	13.576	98	340705	47.82	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.64%
98) 4-bromofluorobenzene (s)	17.111	95	150850	45.81	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	91.62%

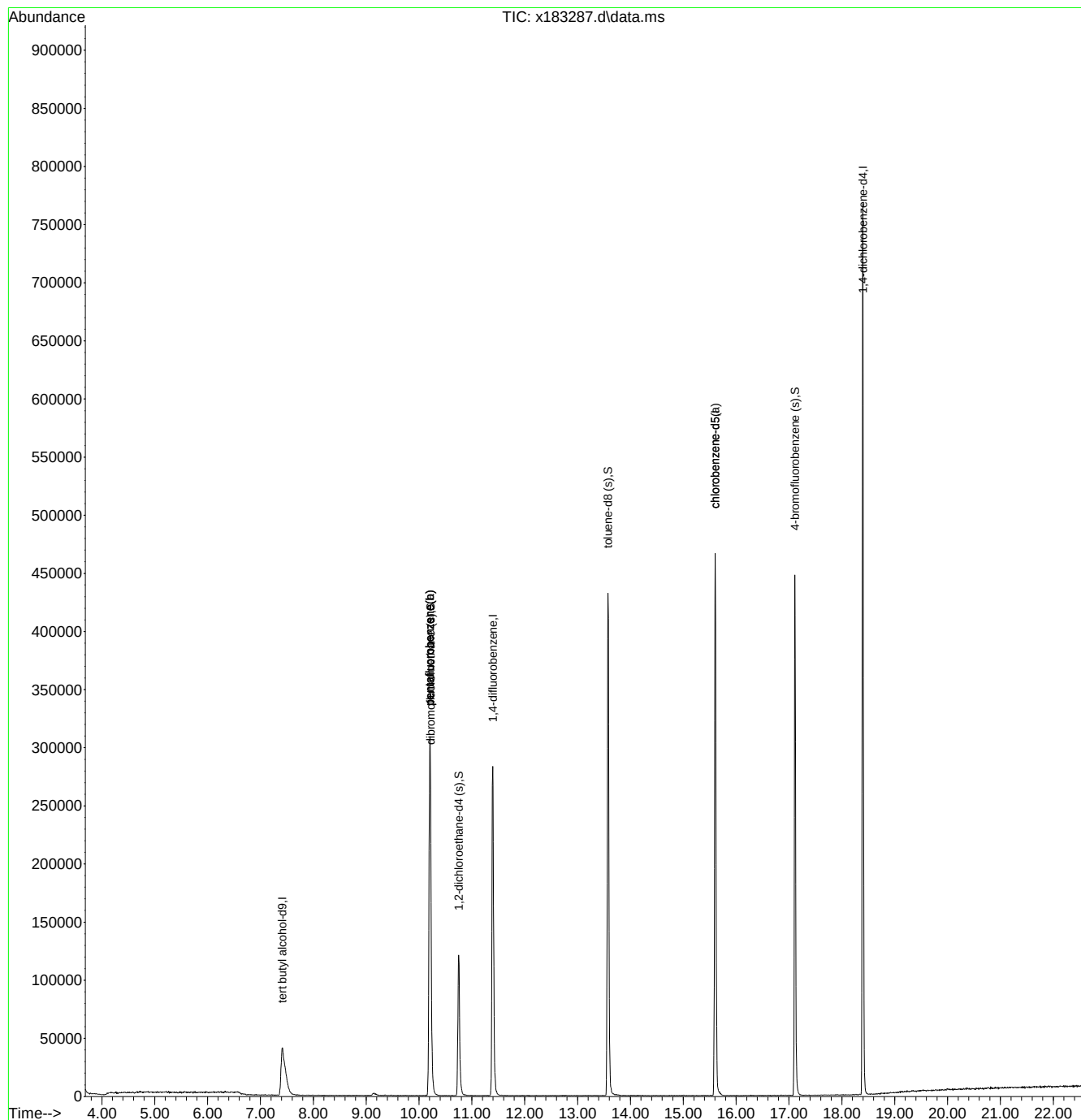
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183287.d
Acq On : 29 Jul 2019 5:34 pm
Operator : jessicap
Sample : JC92198-6 Inst : ACC-VOA-MSX
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:31:08 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183288.d
 Acq On : 29 Jul 2019 6:04 pm
 Operator : jessicap
 Sample : JC92198-7 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:31:36 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.409	65	136043	500.00	ug/L	0.00
5) pentafluorobenzene	10.202	168	211014	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.395	114	290086	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	295323	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.398	152	201951	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.202	168	211014	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	295323	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.202	168	211014	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.218	113	98758	57.52	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	115.04%
54) 1,2-dichloroethane-d4 (s)	10.751	65	103937	54.32	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	108.64%
75) toluene-d8 (s)	13.576	98	338265	47.78	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.56%
98) 4-bromofluorobenzene (s)	17.111	95	148275	44.82	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	89.64%

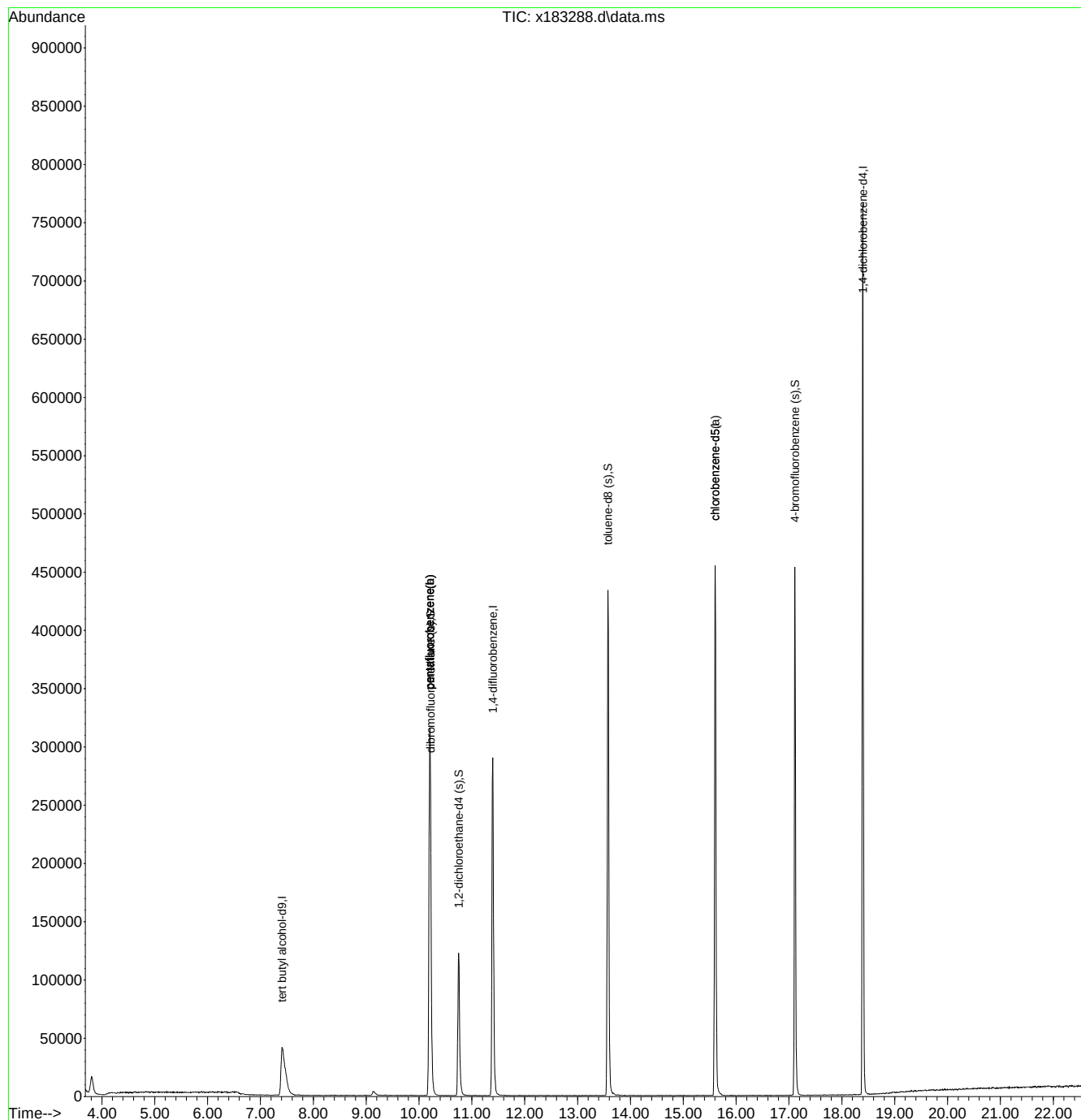
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183288.d
Acq On : 29 Jul 2019 6:04 pm
Operator : jessicap
Sample : JC92198-7
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 23 Sample Multiplier: 1
Inst : ACC-VOA-MSX

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:31:36 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183289.d
 Acq On : 29 Jul 2019 6:34 pm
 Operator : jessicap
 Sample : JC92198-8 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:32:05 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.414	65	132124	500.00	ug/L	0.01
5) pentafluorobenzene	10.202	168	206712	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.395	114	283427	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	294992	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.398	152	197945	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.202	168	206712	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	294992	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.202	168	206712	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.218	113	93797	55.77	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	111.54%
54) 1,2-dichloroethane-d4 (s)	10.751	65	101205	54.13	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	108.26%
75) toluene-d8 (s)	13.576	98	334975	47.37	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	94.74%
98) 4-bromofluorobenzene (s)	17.111	95	145105	44.75	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	89.50%

Target Compounds	Qvalue

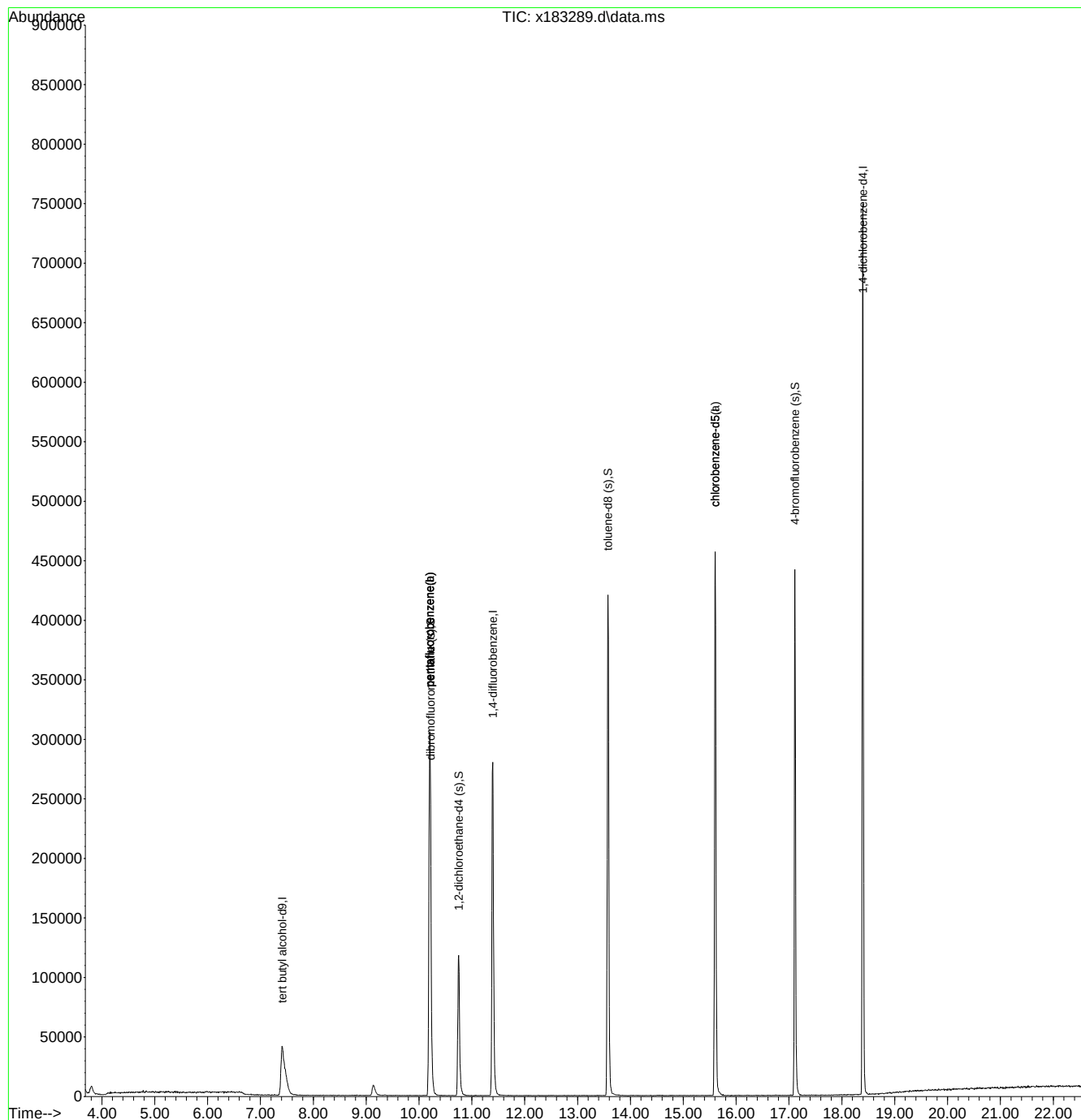
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183289.d
Acq On : 29 Jul 2019 6:34 pm
Operator : jessicap
Sample : JC92198-8
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 24 Sample Multiplier: 1

Inst : ACC-V0A-MSX

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:32:05 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183281.d
 Acq On : 29 Jul 2019 2:33 pm
 Operator : jessicap
 Sample : JC92198-9 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:27:59 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.409	65	141229	500.00	ug/L	0.00
5) pentafluorobenzene	10.197	168	215929	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.394	114	297569	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	305521	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.398	152	207499	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.197	168	215929	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	305521	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.197	168	215929	50.00	ug/L	-0.01

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.212	113	98280	55.94	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	111.88%
54) 1,2-dichloroethane-d4 (s)	10.746	65	103656	52.81	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	105.62%
75) toluene-d8 (s)	13.570	98	349609	47.73	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.46%
98) 4-bromofluorobenzene (s)	17.111	95	154967	45.59	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	91.18%

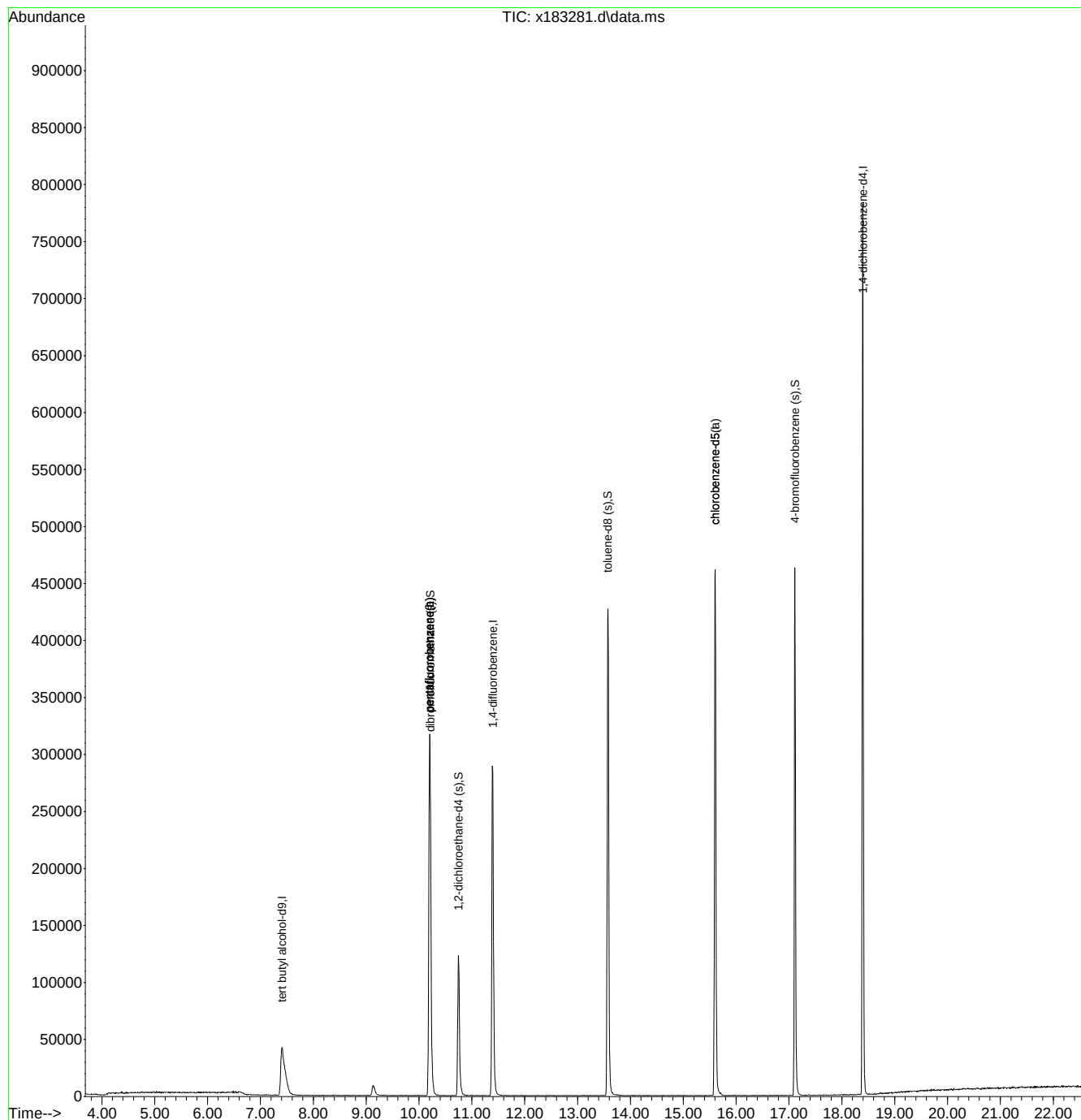
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183281.d
Acq On : 29 Jul 2019 2:33 pm
Operator : jessicap
Sample : JC92198-9 Inst : ACC-VOA-MSX
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:27:59 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183282.d
 Acq On : 29 Jul 2019 3:03 pm
 Operator : jessicap
 Sample : JC92198-10 Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:28:32 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.409	65	148952	500.00	ug/L	0.00
5) pentafluorobenzene	10.202	168	215914	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.394	114	297454	50.00	ug/L	0.00
74) chlorobenzene-d5	15.605	117	306890	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.392	152	209373	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.202	168	215914	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.605	117	306890	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.202	168	215914	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.218	113	97522	55.51	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	111.02%
54) 1,2-dichloroethane-d4 (s)	10.751	65	101988	51.98	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	103.96%
75) toluene-d8 (s)	13.575	98	350276	47.61	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.22%
98) 4-bromofluorobenzene (s)	17.111	95	154819	45.14	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	90.28%

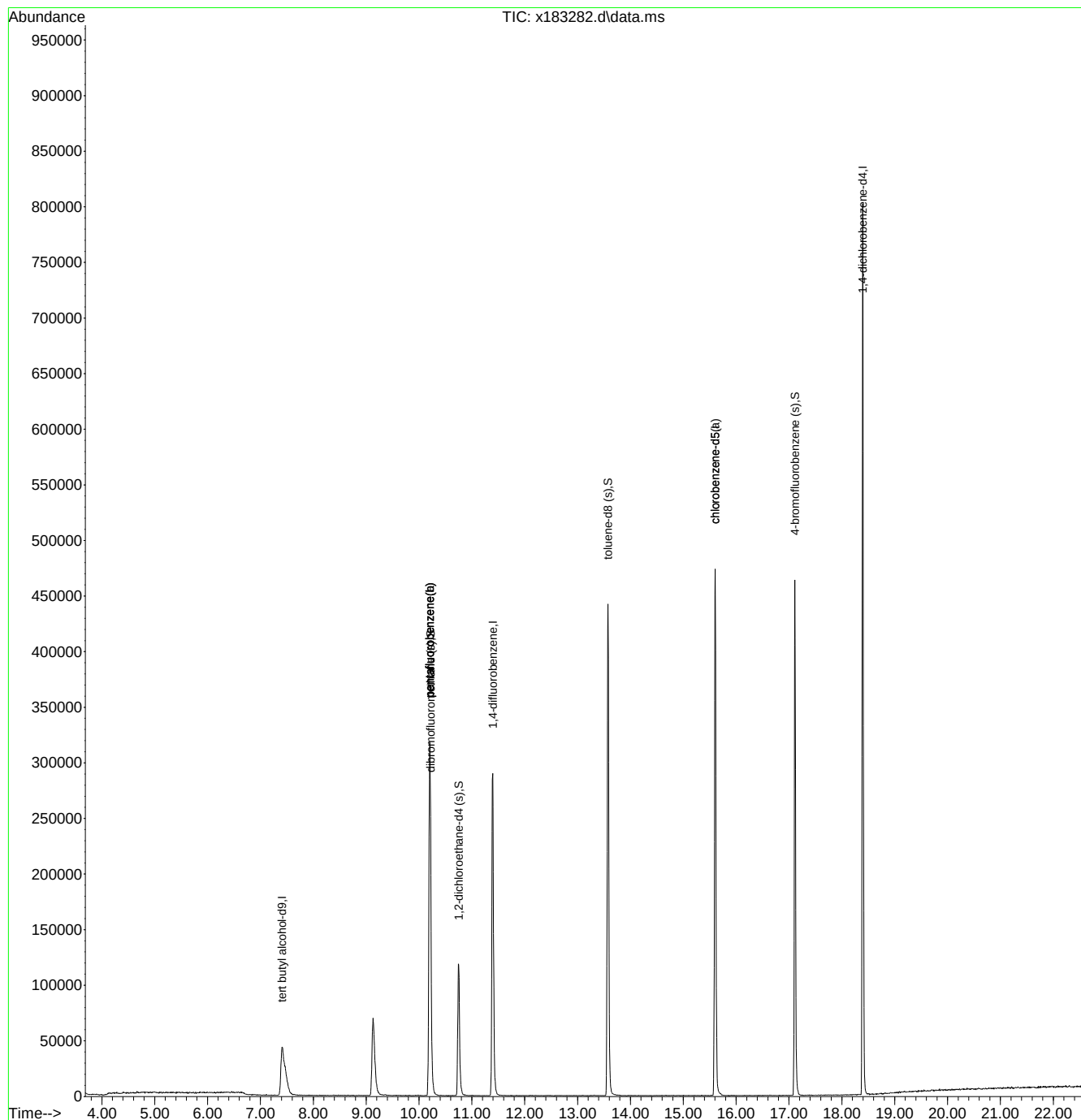
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183282.d
Acq On : 29 Jul 2019 3:03 pm
Operator : jessicap
Sample : JC92198-10 Inst : ACC-VOA-MSX
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:28:32 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
 Data File : X183269.D
 Acq On : 29 Jul 2019 8:27 am
 Operator : jessicap
 Sample : mb
 Misc : MS36371,VX7847,5,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 29 14:13:10 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	142475	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	219340	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	291317	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	301980	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	212375	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.20	168	219340	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.60	117	301980	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.20	168	219340	50.00	ug/L	-0.01

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	93075	52.15	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	104.30%
54) 1,2-dichloroethane-d4 (s)	10.75	65	97791	50.89	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	101.78%
75) toluene-d8 (s)	13.57	98	339632	46.92	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	93.84%
98) 4-bromofluorobenzene (s)	17.11	95	154355	44.36	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	88.72%

Target Compounds

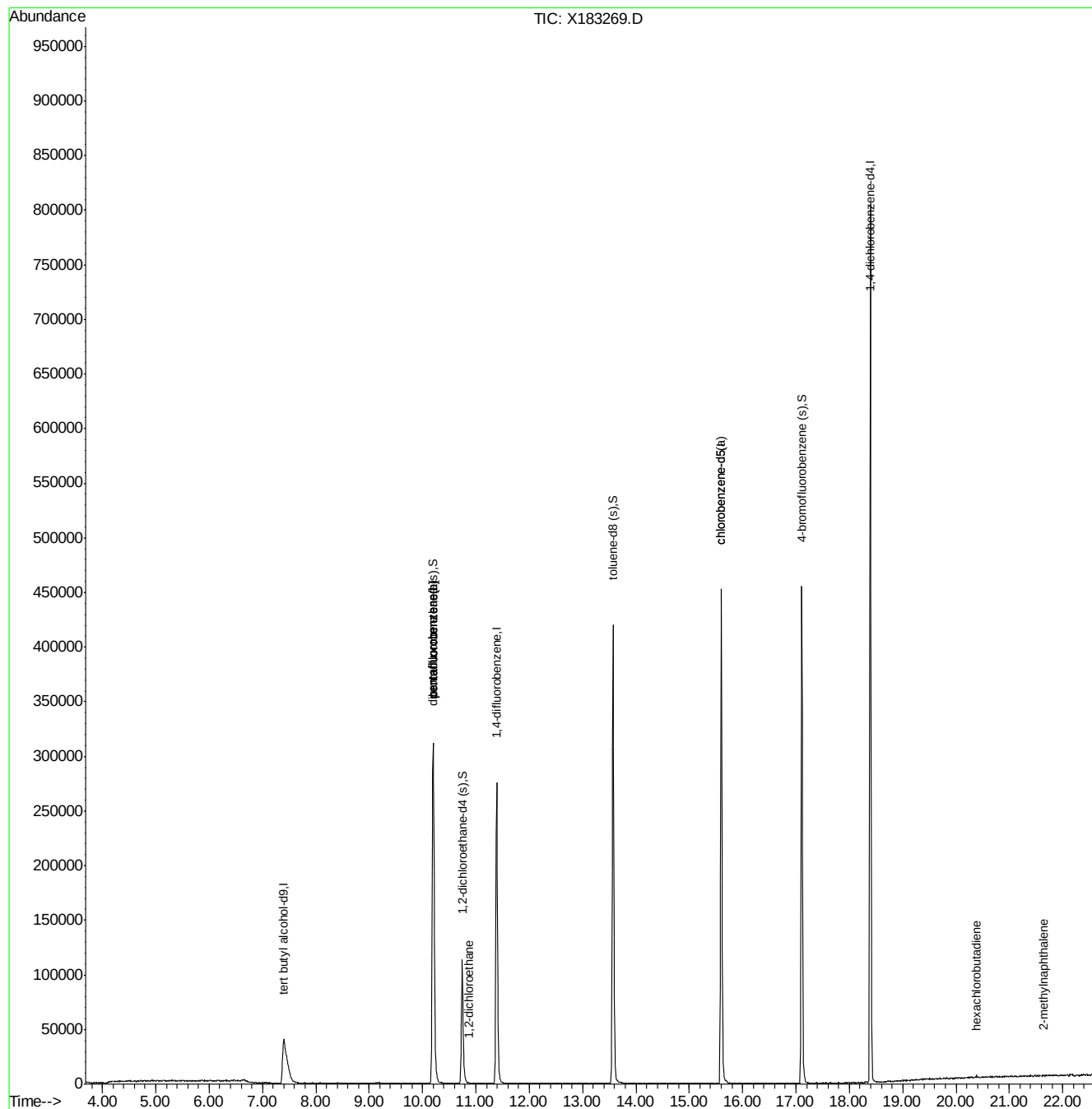
						Qvalue
61) 1,2-dichloroethane	10.87	62	257	0.11	ug/L #	49
118) hexachlorobutadiene	20.39	225	450	0.20	ug/L	69
124) 2-methylnaphthalene	21.64	142	196	3.36	ug/L #	16

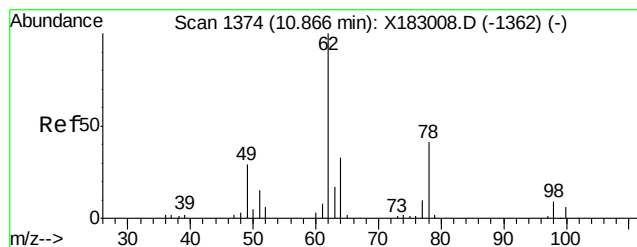
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
Data File : X183269.D
Acq On : 29 Jul 2019 8:27 am
Operator : jessicap
Sample : mb
Misc : MS36371,VX7847,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

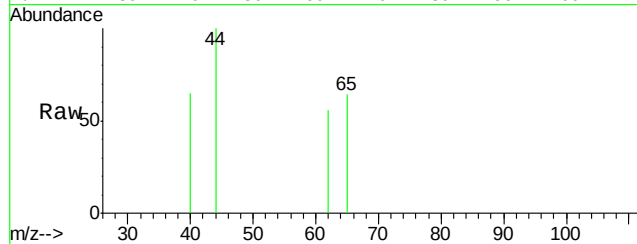
Quant Time: Jul 29 14:13:10 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration





#61
1,2-dichloroethane
Concen: 0.11 ug/L
RT: 10.87 min Scan# 1375
Delta R.T. 0.00 min
Lab File: X183269.D
Acq: 29 Jul 2019 8:27 am

Tgt Ion	Ratio	Lower	Upper
62	100		
64	0.0	2.6	62.6#
98	0.0	0.0	39.1

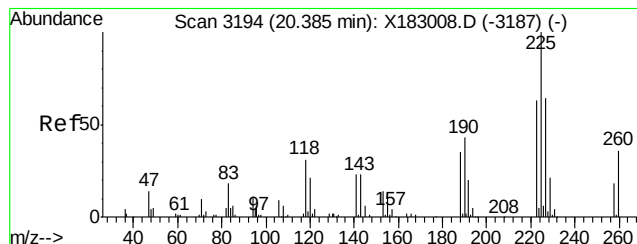
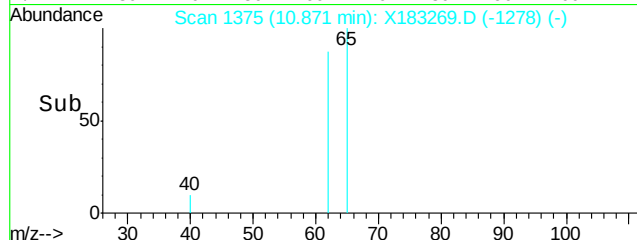
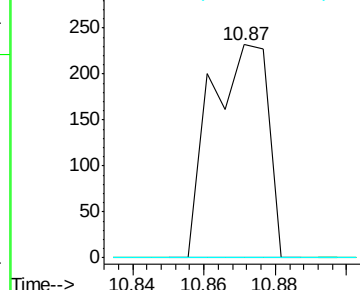


Abundance

Ion 62.00 (61.70 to 62.70): X18

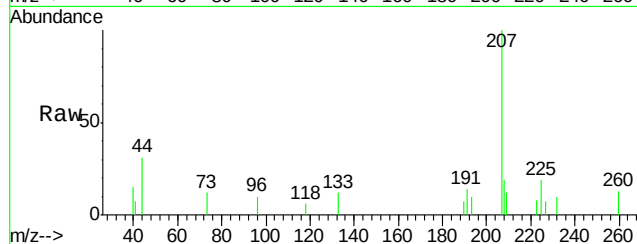
Ion 64.00 (63.70 to 64.70): X18

Ion 98.00 (97.70 to 98.70): X18



#118
hexachlorobutadiene
Concen: 0.20 ug/L
RT: 20.39 min Scan# 3194
Delta R.T. 0.00 min
Lab File: X183269.D
Acq: 29 Jul 2019 8:27 am

Tgt Ion	Ratio	Lower	Upper
225	100		
223	42.3	33.3	93.3
227	36.4	33.1	93.1

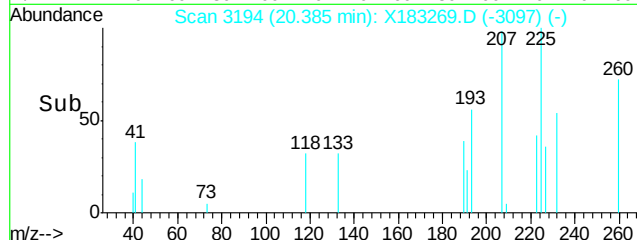
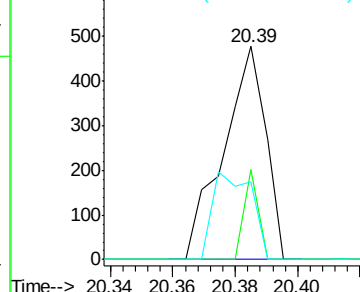


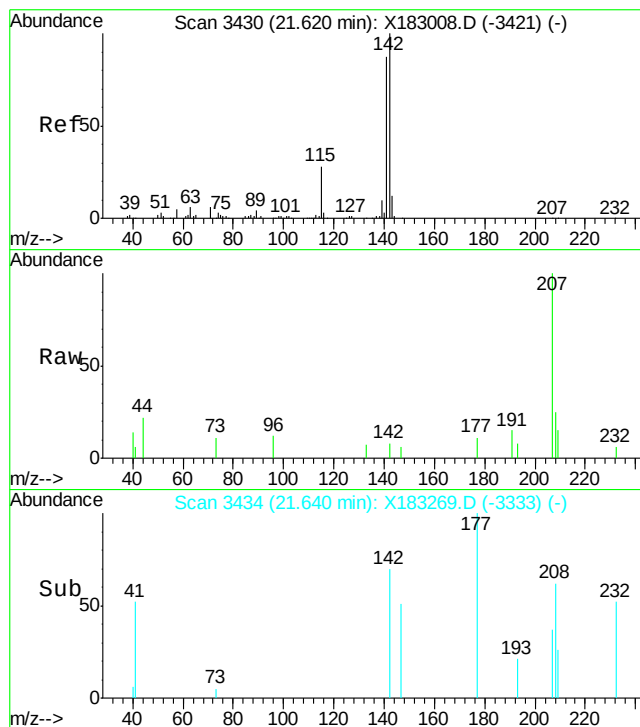
Abundance

Ion 225.00 (224.70 to 225.70): X

Ion 223.00 (222.70 to 223.70): X

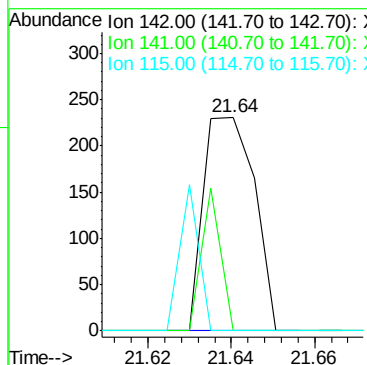
Ion 227.00 (226.70 to 227.70): X





#124
2-methylnaphthalene
Concen: 3.36 ug/L
RT: 21.64 min Scan# 3434
Delta R.T. 0.03 min
Lab File: X183269.D
Acq: 29 Jul 2019 8:27 am

Tgt Ion:	142	Resp:	196
Ion Ratio	Lower	Upper	
142	100		
141	0.0	65.5	105.5#
115	0.0	10.3	50.3#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
 Data File : X183267.D
 Acq On : 29 Jul 2019 7:16 am
 Operator : jessicap
 Sample : bs
 Misc : MS36371,VX7847,5,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 29 14:10:34 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	141936	500.00	ug/L	0.00
5) pentafluorobenzene	10.19	168	209517	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	285798	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	300536	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	168914	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.19	168	209517	50.00	ug/L	-0.01
130) chlorobenzene-d5(a)	15.60	117	300536	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.19	168	209517	50.00	ug/L	-0.02

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	85641	50.24	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.48%
54) 1,2-dichloroethane-d4 (s)	10.74	65	87639	46.49	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	92.98%
75) toluene-d8 (s)	13.57	98	331714	46.04	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	92.08%
98) 4-bromofluorobenzene (s)	17.11	95	137304	49.62	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.24%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.53	59	79503	247.06	ug/L	95
4) 1,4-dioxane	12.24	88	34769	1310.43	ug/L	94
6) chlorodifluoromethane	3.91	51	277733	43.39	ug/L	97
7) dichlorodifluoromethane	3.88	85	318015	50.00	ug/L	100
8) chloromethane	4.29	50	312997	38.78	ug/L	98
9) vinyl chloride	4.52	62	281070	42.23	ug/L	99
10) bromomethane	5.16	96	173973	52.52	ug/L	99
11) chloroethane	5.33	64	105728	47.40	ug/L	98
12) vinyl bromide	5.68	106	165722	66.49	ug/L	95
13) trichlorofluoromethane	5.83	101	237430	58.54	ug/L	99
14) 1,3-butadiene	4.54	54	140550	49.44	ug/L	96
15) ethyl ether	6.22	74	41249	45.72	ug/L	92
16) acrolein	6.44	56	13162	31.35	ug/L	96
17) 1,1-dichloroethene	6.67	96	77702	51.43	ug/L	92
18) freon 113	6.71	101	131820	54.23	ug/L	98
19) acetone	6.66	43	90382	164.04	ug/L	96
20) acetonitrile	7.10	41	151638	415.33	ug/L	97
21) iodomethane	6.94	142	146962	50.54	ug/L	99
22) carbon disulfide	7.10	76	272316	50.69	ug/L	97
23) methylene chloride	7.46	84	95201	49.84	ug/L	90
24) methyl acetate	7.18	43	60283	41.40	ug/L	91
25) methyl tert butyl ether	7.89	73	305338	46.42	ug/L	99
26) trans-1,2-dichloroethene	7.92	96	81627	50.01	ug/L	96
27) hexane	8.36	57	117152	48.97	ug/L	94
28) di-isopropyl ether	8.62	45	309296	40.98	ug/L	96
29) 2-butanone	9.40	72	39902	211.44	ug/L #	88
30) 1,1-dichloroethane	8.60	63	151530	48.42	ug/L	98
31) chloroprene	8.73	53	111713	47.91	ug/L	93
32) acrylonitrile	7.78	53	34370	50.43	ug/L	95
33) vinyl acetate	8.54	86	16143	50.50	ug/L #	70

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
 Data File : X183267.D
 Acq On : 29 Jul 2019 7:16 am
 Operator : jessicap
 Sample : bs
 Misc : MS36371,VX7847,5,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 29 14:10:34 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) ethyl tert-butyl ether	9.18	59	324901	46.50	ug/L	99
35) ethyl acetate	9.44	45	12308	42.24	ug/L	73
36) 2,2-dichloropropane	9.53	77	168516	52.48	ug/L	94
37) cis-1,2-dichloroethene	9.48	96	93608	49.80	ug/L	94
38) methyl acrylate	9.54	85	12027	54.18	ug/L #	69
39) propionitrile	9.46	54	129681	482.42	ug/L	97
40) tert-butyl formate	10.01	59	79632	45.37	ug/L	98
41) bromochloromethane	9.85	128	51337	53.61	ug/L	94
42) tetrahydrofuran	9.88	72	11209	48.98	ug/L	92
43) chloroform	9.97	83	152661	49.94	ug/L	99
45) methacrylonitrile	9.73	67	34619	50.10	ug/L	93
46) 1,1,1-trichloroethane	10.30	97	165966	52.89	ug/L	99
47) cyclohexane	10.45	84	184753	53.28	ug/L	88
48) tert amyl alcohol	10.70	55	26349	241.61	ug/L	89
49) 1,1-dichloropropene	10.52	75	102283	50.79	ug/L	95
51) carbon tetrachloride	10.55	117	137460	52.16	ug/L	99
52) isopropyl acetate	10.75	87	18674	51.54	ug/L #	67
55) iso-octane	10.99	57	263300	51.86	ug/L	97
56) epichlorohydrin	12.96	57	45205	223.97	ug/L	95
57) n-butyl alcohol	11.46	56	161219	2473.28	ug/L	93
58) benzene	10.83	78	319073	48.11	ug/L	98
59) tert-amyl methyl ether	10.97	73	300279	46.62	ug/L	99
60) heptane	11.21	57	55066	54.45	ug/L	93
61) 1,2-dichloroethane	10.86	62	101512	45.38	ug/L	100
62) trichloroethene	11.79	130	93541	53.75	ug/L	99
63) ethyl acrylate	11.80	55	104685	47.94	ug/L	98
64) 2-nitropropane	12.79	41	20681	40.57	ug/L	98
65) 2-chloroethyl vinyl ether	12.87	63	294955	238.44	ug/L	98
66) methyl methacrylate	12.16	100	23059	49.94	ug/L	92
67) 1,2-dichloropropane	12.17	76	35172	48.09	ug/L	97
68) dibromomethane	12.30	93	56261	50.91	ug/L	93
69) methylcyclohexane	12.20	83	167449	55.01	ug/L	97
70) bromodichloromethane	12.53	83	121861	49.36	ug/L	96
71) cis-1,3-dichloropropene	13.15	75	154286	51.87	ug/L	94
72) 4-methyl-2-pentanone	13.30	58	148333	197.94	ug/L	92
73) 3-methyl-1-butanol	13.32	70	65253	1059.22	ug/L	91
76) toluene	13.67	92	210192	47.06	ug/L	98
77) trans-1,3-dichloropropene	13.93	75	140166	48.34	ug/L	99
78) ethyl methacrylate	13.95	69	110743	46.35	ug/L	90
79) 1,1,2-trichloroethane	14.22	83	72587	47.84	ug/L	96
80) tetrachloroethene	14.43	164	81404	49.94	ug/L	95
81) 1,3-dichloropropane	14.46	76	128375	45.11	ug/L	95
82) 2-hexanone	14.46	58	134934	186.76	ug/L	94
83) butyl acetate	14.60	56	63444	43.49	ug/L	93
84) dibromochloromethane	14.79	129	105620	49.95	ug/L	100
85) 1,2-dibromoethane	14.98	107	107156	52.87	ug/L	99
86) n-butyl ether	15.66	57	355009	44.05	ug/L	99
87) chlorobenzene	15.64	112	249513	48.91	ug/L	99
88) 1,1,1,2-tetrachloroethane	15.74	131	103446	45.91	ug/L	99
89) ethylbenzene	15.74	91	381101	45.61	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
 Data File : X183267.D
 Acq On : 29 Jul 2019 7:16 am
 Operator : jessicap
 Sample : bs
 Misc : MS36371,VX7847,5,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 29 14:10:34 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

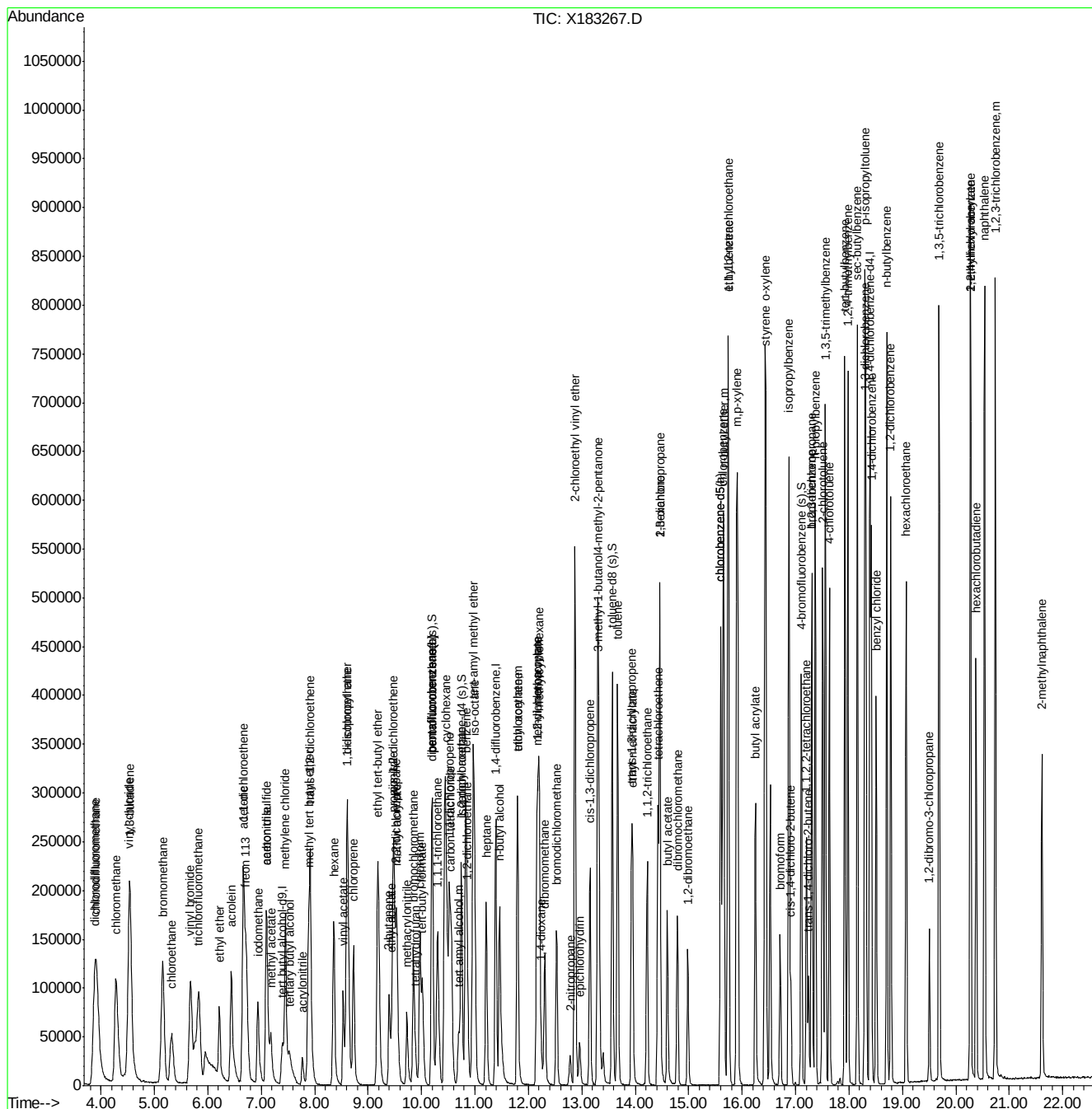
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) m,p-xylene	15.91	106	308192	92.44	ug/L	99
91) o-xylene	16.43	91	348605	45.52	ug/L	100
92) styrene	16.45	104	259690	46.99	ug/L	95
93) butyl acrylate	16.25	55	204293	43.85	ug/L	97
94) bromoform	16.71	173	78725	52.76	ug/L	99
95) isopropylbenzene	16.88	105	454058	46.25	ug/L	99
96) cis-1,4-dichloro-2-butene	16.91	88	29480	36.35	ug/L	95
99) bromobenzene	17.31	156	117166	47.87	ug/L	95
100) 1,1,2,2-tetrachloroethane	17.21	83	128266	48.44	ug/L	99
101) trans-1,4-dichloro-2-buten	17.25	53	21334	35.48	ug/L	85
102) 1,2,3-trichloropropane	17.30	110	32314	48.63	ug/L #	86
103) n-propylbenzene	17.37	91	477285	46.75	ug/L	99
104) 2-chlorotoluene	17.51	126	111873	48.36	ug/L	96
105) 4-chlorotoluene	17.63	91	288013	46.34	ug/L	98
106) 1,3,5-trimethylbenzene	17.56	105	365529	47.11	ug/L	99
107) tert-butylbenzene	17.92	119	360849	51.19	ug/L	98
108) 1,2,4-trimethylbenzene	17.98	105	377813	46.68	ug/L	98
109) sec-butylbenzene	18.16	105	523446	49.02	ug/L	100
110) 1,3-dichlorobenzene	18.32	146	219398	46.50	ug/L	99
111) p-isopropyltoluene	18.30	119	441490	47.48	ug/L	98
112) 1,4-dichlorobenzene	18.42	146	220544	48.18	ug/L	99
113) 1,2-dichlorobenzene	18.78	146	246540	47.32	ug/L	98
114) benzyl chloride	18.51	91	266756	50.67	ug/L	99
115) n-butylbenzene	18.71	92	221871	50.06	ug/L	97
116) 1,2-dibromo-3-chloropropan	19.51	157	44985	51.87	ug/L	95
117) 1,3,5-trichlorobenzene	19.69	180	258922	49.54	ug/L	99
118) hexachlorobutadiene	20.38	225	94821	53.29	ug/L	99
119) naphthalene	20.54	128	636725	51.53	ug/L	100
120) 2-ethylhexyl acrylate	20.28	70	21097	9.38	ug/L	96
121) 1,2,4-trichlorobenzene	20.28	180	274086	54.70	ug/L	97
122) 1,2,3-trichlorobenzene	20.74	180	278597	54.86	ug/L	99
123) hexachloroethane	19.07	201	91860	55.84	ug/L	98
124) 2-methylnaphthalene	21.61	142	178119	21.50	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
Data File : X183267.D
Acq On : 29 Jul 2019 7:16 am
Operator : jessicap
Sample : bs
Misc : MS36371,VX7847,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 29 14:10:34 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



7.3.1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183277.d
 Acq On : 29 Jul 2019 12:33 pm
 Operator : jessicap
 Sample : JC92198-1ms Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:25:08 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.404	65	126745	500.00	ug/L	0.00
5) pentafluorobenzene	10.197	168	198392	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.389	114	271665	50.00	ug/L	0.00
74) chlorobenzene-d5	15.600	117	282795	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.392	152	161715	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.197	168	198392	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.600	117	282795	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.197	168	198392	50.00	ug/L	-0.01

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.207	113	86618	53.66	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	107.32%
54) 1,2-dichloroethane-d4 (s)	10.746	65	87877	49.04	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	98.08%
75) toluene-d8 (s)	13.570	98	320718	47.31	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	94.62%
98) 4-bromofluorobenzene (s)	17.111	95	133973	50.57	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	101.14%

Target Compounds						Qvalue
3) tertiary butyl alcohol	7.545	59	65406	227.62	ug/L	87
4) 1,4-dioxane	12.242	88	27005	1139.80	ug/L	97
6) chlorodifluoromethane	3.920	51	298145	49.19	ug/L	93
7) dichlorodifluoromethane	3.915	85	334395	55.52	ug/L	98
8) chloromethane	4.297	50	282577	36.97	ug/L	98
9) vinyl chloride	4.543	62	269897	42.83	ug/L	99
10) bromomethane	5.176	96	162009	51.66	ug/L	100
11) chloroethane	5.333	64	109824	52.00	ug/L	98
12) vinyl bromide	5.688	106	177665	75.28	ug/L	96
13) trichlorofluoromethane	5.840	101	257877	67.15	ug/L	96
14) 1,3-butadiene	4.559	54	174599	64.86	ug/L	96
15) ethyl ether	6.222	74	38405	44.95	ug/L	84
16) acrolein	6.441	56	13227	33.27	ug/L	87
17) 1,1-dichloroethene	6.672	96	85983	60.11	ug/L	99
18) freon 113	6.719	101	150845	65.54	ug/L	98
19) acetone	6.661	43	78675	150.80	ug/L	92
20) acetonitrile	7.106	41	142589	412.45	ug/L	99
21) iodomethane	6.944	142	171349	62.24	ug/L	99
22) carbon disulfide	7.111	76	328795	64.64	ug/L	97
23) methylene chloride	7.456	84	96726	53.48	ug/L	90
24) methyl acetate	7.189	43	51913	37.65	ug/L	94
25) methyl tert butyl ether	7.890	73	283906	45.59	ug/L	98
26) trans-1,2-dichloroethene	7.922	96	82943	53.66	ug/L	98
27) hexane	8.361	57	124636	55.02	ug/L	95
28) di-isopropyl ether	8.617	45	307686	43.06	ug/L	98
29) 2-butanone	9.396	72	33250	186.07	ug/L	93
30) 1,1-dichloroethane	8.601	63	152443	51.44	ug/L	99
31) chloroprene	8.732	53	115892	52.49	ug/L	94
32) acrylonitrile	7.775	53	30355	47.03	ug/L	96
33) vinyl acetate	8.544	86	13790	45.56	ug/L #	58
34) ethyl tert-butyl ether	9.187	59	312766	47.27	ug/L	98
35) ethyl acetate	9.444	45	10339	37.47	ug/L	92
36) 2,2-dichloropropane	9.527	77	184521	60.69	ug/L	97
37) cis-1,2-dichloroethene	9.485	96	91792	51.57	ug/L	97
38) methyl acrylate	9.543	85	10250	48.76	ug/L #	87
39) propionitrile	9.470	54	113201	444.73	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183277.d
 Acq On : 29 Jul 2019 12:33 pm
 Operator : jessicap
 Sample : JC92198-1ms Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:25:08 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) tert-butyl formate	10.019	59	59216	35.63	ug/L	96
41) bromochloromethane	9.852	128	46711	51.52	ug/L	95
42) tetrahydrofuran	9.888	72	9695	44.74	ug/L	86
43) chloroform	9.972	83	147111	50.82	ug/L	96
45) methacrylonitrile	9.731	67	29454	45.01	ug/L	97
46) 1,1,1-trichloroethane	10.301	97	173890	58.52	ug/L	96
47) cyclohexane	10.458	84	183655	55.93	ug/L	81
48) tert amyl alcohol	10.694	55	22747	220.28	ug/L #	79
49) 1,1-dichloropropene	10.521	75	104675	54.90	ug/L	98
51) carbon tetrachloride	10.558	117	145434	58.29	ug/L	96
52) isopropyl acetate	10.751	87	14995	43.70	ug/L #	84
55) iso-octane	10.997	57	301117	62.40	ug/L	96
56) epichlorohydrin	12.964	57	37863	197.35	ug/L	100
57) n-butyl alcohol	11.468	56	132082	2131.70	ug/L	95
58) benzene	10.830	78	307623	48.80	ug/L	97
59) tert-amyl methyl ether	10.966	73	278593	45.50	ug/L	99
60) heptane	11.217	57	58781	61.15	ug/L	94
61) 1,2-dichloroethane	10.861	62	95985	45.15	ug/L	98
62) trichloroethene	11.797	130	88998	53.80	ug/L	98
63) ethyl acrylate	11.802	55	88098	42.44	ug/L	99
64) 2-nitropropane	12.786	41	16510	34.07	ug/L	93
66) methyl methacrylate	12.158	100	19021	43.34	ug/L #	89
67) 1,2-dichloropropane	12.169	76	34372	49.45	ug/L	93
68) dibromomethane	12.310	93	49976	47.58	ug/L	95
69) methylcyclohexane	12.200	83	182133	62.94	ug/L	98
70) bromodichloromethane	12.529	83	115095	49.05	ug/L	98
71) cis-1,3-dichloropropene	13.152	75	142412	50.37	ug/L	95
72) 4-methyl-2-pentanone	13.298	58	130644	183.41	ug/L	94
73) 3-methyl-1-butanol	13.319	70	55134	941.52	ug/L	95
76) toluene	13.670	92	195707	46.57	ug/L	100
77) trans-1,3-dichloropropene	13.931	75	125084	45.85	ug/L	100
78) ethyl methacrylate	13.952	69	96529	42.94	ug/L	90
79) 1,1,2-trichloroethane	14.219	83	63847	44.72	ug/L	96
80) tetrachloroethene	14.428	164	76857	50.11	ug/L	98
81) 1,3-dichloropropane	14.459	76	115232	43.03	ug/L	89
82) 2-hexanone	14.459	58	113824	167.43	ug/L	93
83) butyl acetate	14.601	56	56299	41.01	ug/L	91
84) dibromochloromethane	14.789	129	93588	47.04	ug/L	100
85) 1,2-dibromoethane	14.982	107	92260	48.38	ug/L	98
86) n-butyl ether	15.657	57	340581	44.92	ug/L	99
87) chlorobenzene	15.641	112	226656	47.21	ug/L	99
88) 1,1,1,2-tetrachloroethane	15.736	131	98315	46.38	ug/L	98
89) ethylbenzene	15.741	91	356217	45.31	ug/L	100
90) m,p-xylene	15.908	106	290343	92.55	ug/L	97
91) o-xylene	16.431	91	326418	45.29	ug/L	98
92) styrene	16.447	104	240980	46.34	ug/L	96
93) butyl acrylate	16.248	55	183816	41.93	ug/L	98
94) bromoform	16.714	173	67403	48.01	ug/L	100
95) isopropylbenzene	16.876	105	437681	47.38	ug/L	99
96) cis-1,4-dichloro-2-butene	16.912	88	23045	30.19	ug/L	95
99) bromobenzene	17.310	156	108253	46.19	ug/L	91
100) 1,1,2,2-tetrachloroethane	17.205	83	110998	43.78	ug/L	97
101) trans-1,4-dichloro-2-b...	17.247	53	17305	30.06	ug/L	83
102) 1,2,3-trichloropropane	17.294	110	27843	43.76	ug/L #	61
103) n-propylbenzene	17.373	91	463681	47.44	ug/L	99
104) 2-chlorotoluene	17.509	126	104672	47.26	ug/L	94
105) 4-chlorotoluene	17.634	91	269527	45.29	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
Data File : x183277.d
Acq On : 29 Jul 2019 12:33 pm
Operator : jessicap
Sample : JC92198-1ms Inst : ACC-VOA-MSX
Misc : MS36467,VX7847,5,,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:25:08 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106)	1,3,5-trimethylbenzene	17.556	105	349325	47.03	ug/L	100
107)	tert-butylbenzene	17.922	119	343935	50.96	ug/L	98
108)	1,2,4-trimethylbenzene	17.979	105	356091	45.95	ug/L	98
109)	sec-butylbenzene	18.157	105	514198	50.30	ug/L	99
110)	1,3-dichlorobenzene	18.319	146	202999	44.94	ug/L	98
111)	p-isopropyltoluene	18.298	119	430571	48.37	ug/L	98
112)	1,4-dichlorobenzene	18.419	146	205511	46.90	ug/L	99
113)	1,2-dichlorobenzene	18.785	146	226032	45.31	ug/L	98
114)	benzyl chloride	18.508	91	239515	47.52	ug/L	98
115)	n-butylbenzene	18.706	92	218509	51.50	ug/L	97
116)	1,2-dibromo-3-chloropr...	19.507	157	38203	46.01	ug/L	96
117)	1,3,5-trichlorobenzene	19.690	180	247002	49.36	ug/L	97
118)	hexachlorobutadiene	20.380	225	91886	53.94	ug/L	98
119)	naphthalene	20.537	128	549698	46.46	ug/L	99
120)	2-ethylhexyl acrylate	20.275	70	21370	9.93	ug/L	95
121)	1,2,4-trichlorobenzene	20.275	180	251808	52.49	ug/L	98
122)	1,2,3-trichlorobenzene	20.741	180	251724	51.77	ug/L	99
123)	hexachloroethane	19.072	201	87076	55.29	ug/L	98
124)	2-methylnaphthalene	21.614	142	146882	18.98	ug/L	98

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

7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183278.d
 Acq On : 29 Jul 2019 1:03 pm
 Operator : jessicap
 Sample : JC92198-1msd Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:26:30 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.419	65	129020	500.00	ug/L	0.02
5) pentafluorobenzene	10.197	168	199877	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.394	114	277505	50.00	ug/L	0.00
74) chlorobenzene-d5	15.600	117	291713	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.392	152	166366	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.197	168	199877	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.600	117	291713	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.197	168	199877	50.00	ug/L	-0.01

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.212	113	88672	54.52	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	109.04%
54) 1,2-dichloroethane-d4 (s)	10.746	65	87530	47.82	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	95.64%
75) toluene-d8 (s)	13.570	98	327850	46.88	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	93.76%
98) 4-bromofluorobenzene (s)	17.106	95	136723	50.16	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.32%

Target Compounds						Qvalue
3) tertiary butyl alcohol	7.540	59	68909	235.58	ug/L	94
4) 1,4-dioxane	12.242	88	28427	1178.66	ug/L	94
6) chlorodifluoromethane	3.926	51	312414	51.16	ug/L	93
7) dichlorodifluoromethane	3.910	85	339724	55.99	ug/L	98
8) chloromethane	4.307	50	292373	37.97	ug/L	99
9) vinyl chloride	4.548	62	270903	42.67	ug/L	98
10) bromomethane	5.176	96	162927	51.56	ug/L	99
11) chloroethane	5.338	64	110042	51.71	ug/L	98
12) vinyl bromide	5.693	106	178350	75.01	ug/L	94
13) trichlorofluoromethane	5.850	101	259488	67.07	ug/L	98
14) 1,3-butadiene	4.564	54	179726	66.27	ug/L	97
15) ethyl ether	6.227	74	38791	45.07	ug/L	90
16) acrolein	6.447	56	14164	35.37	ug/L	97
17) 1,1-dichloroethene	6.677	96	87907	60.99	ug/L	98
18) freon 113	6.729	101	153739	66.30	ug/L	96
19) acetone	6.661	43	79571	151.38	ug/L	96
20) acetonitrile	7.111	41	145182	416.83	ug/L	98
21) iodomethane	6.949	142	175799	63.38	ug/L	95
22) carbon disulfide	7.111	76	338119	65.97	ug/L	97
23) methylene chloride	7.461	84	99197	54.43	ug/L	96
24) methyl acetate	7.189	43	52361	37.69	ug/L	95
25) methyl tert butyl ether	7.895	73	292720	46.65	ug/L	99
26) trans-1,2-dichloroethene	7.927	96	84599	54.33	ug/L	98
27) hexane	8.366	57	124103	54.38	ug/L	92
28) di-isopropyl ether	8.622	45	317241	44.06	ug/L	97
29) 2-butanone	9.396	72	34240	190.19	ug/L	92
30) 1,1-dichloroethane	8.607	63	156923	52.56	ug/L	99
31) chloroprene	8.732	53	118094	53.09	ug/L	97
32) acrylonitrile	7.780	53	30874	47.48	ug/L	96
33) vinyl acetate	8.544	86	14037	46.03	ug/L #	71
34) ethyl tert-butyl ether	9.192	59	317730	47.67	ug/L	98
35) ethyl acetate	9.449	45	11396	40.99	ug/L	87
36) 2,2-dichloropropane	9.532	77	185082	60.42	ug/L	96
37) cis-1,2-dichloroethene	9.485	96	92730	51.71	ug/L	97
38) methyl acrylate	9.548	85	10418	49.19	ug/L #	73
39) propionitrile	9.470	54	115824	451.66	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183278.d
 Acq On : 29 Jul 2019 1:03 pm
 Operator : jessicap
 Sample : JC92198-1msd Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:26:30 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) tert-butyl formate	10.029	59	42880	25.61	ug/L	95
41) bromochloromethane	9.851	128	47027	51.48	ug/L	96
42) tetrahydrofuran	9.888	72	8917	40.84	ug/L	95
43) chloroform	9.977	83	150318	51.55	ug/L	96
45) methacrylonitrile	9.731	67	30326	46.00	ug/L	98
46) 1,1,1-trichloroethane	10.307	97	176587	58.99	ug/L	98
47) cyclohexane	10.458	84	184970	55.92	ug/L	91
48) tert amyl alcohol	10.704	55	23037	221.43	ug/L	84
49) 1,1-dichloropropene	10.526	75	106504	55.44	ug/L	98
51) carbon tetrachloride	10.563	117	147095	58.51	ug/L	98
52) isopropyl acetate	10.756	87	15799	45.71	ug/L #	62
55) iso-octane	10.997	57	293230	59.49	ug/L	96
56) epichlorohydrin	12.963	57	37249	190.07	ug/L	95
57) n-butyl alcohol	11.468	56	135162	2135.50	ug/L	95
58) benzene	10.835	78	316893	49.21	ug/L	99
59) tert-amyl methyl ether	10.971	73	283279	45.30	ug/L	97
60) heptane	11.211	57	57032	58.08	ug/L	97
61) 1,2-dichloroethane	10.861	62	97640	44.96	ug/L	99
62) trichloroethene	11.797	130	91690	54.27	ug/L	99
63) ethyl acrylate	11.802	55	90580	42.72	ug/L	97
64) 2-nitropropane	12.786	41	17569	35.50	ug/L	96
66) methyl methacrylate	12.158	100	19478	43.44	ug/L	92
67) 1,2-dichloropropane	12.174	76	34979	49.26	ug/L	95
68) dibromomethane	12.310	93	51872	48.34	ug/L	96
69) methylcyclohexane	12.205	83	184809	62.52	ug/L	97
70) bromodichloromethane	12.529	83	116787	48.72	ug/L	99
71) cis-1,3-dichloropropene	13.157	75	144976	50.20	ug/L	96
72) 4-methyl-2-pentanone	13.298	58	134766	185.21	ug/L	89
73) 3-methyl-1-butanol	13.324	70	56459	943.86	ug/L	96
76) toluene	13.675	92	198889	45.88	ug/L	98
77) trans-1,3-dichloropropene	13.931	75	128136	45.53	ug/L	99
78) ethyl methacrylate	13.952	69	99265	42.81	ug/L	95
79) 1,1,2-trichloroethane	14.224	83	65728	44.63	ug/L	96
80) tetrachloroethene	14.423	164	78332	49.51	ug/L	99
81) 1,3-dichloropropane	14.465	76	117913	42.69	ug/L	93
82) 2-hexanone	14.465	58	116421	166.01	ug/L	91
83) butyl acetate	14.601	56	57051	40.29	ug/L	93
84) dibromochloromethane	14.789	129	94833	46.20	ug/L	99
85) 1,2-dibromoethane	14.988	107	94452	48.01	ug/L	99
86) n-butyl ether	15.662	57	353575	45.20	ug/L	98
87) chlorobenzene	15.641	112	232954	47.04	ug/L	97
88) 1,1,1,2-tetrachloroethane	15.741	131	100346	45.89	ug/L	100
89) ethylbenzene	15.741	91	367955	45.37	ug/L	100
90) m,p-xylene	15.908	106	297993	92.09	ug/L	98
91) o-xylene	16.426	91	338962	45.60	ug/L	98
92) styrene	16.447	104	246371	45.92	ug/L	97
93) butyl acrylate	16.248	55	187305	41.42	ug/L	100
94) bromoform	16.714	173	69333	47.88	ug/L	98
95) isopropylbenzene	16.876	105	450950	47.32	ug/L	99
96) cis-1,4-dichloro-2-butene	16.912	88	24280	30.84	ug/L	95
99) bromobenzene	17.310	156	112047	46.48	ug/L	94
100) 1,1,2,2-tetrachloroethane	17.205	83	114356	43.85	ug/L	97
101) trans-1,4-dichloro-2-b...	17.247	53	18483	31.21	ug/L	86
102) 1,2,3-trichloropropane	17.299	110	28840	44.06	ug/L #	86
103) n-propylbenzene	17.373	91	479654	47.70	ug/L	100
104) 2-chlorotoluene	17.509	126	107859	47.34	ug/L	96
105) 4-chlorotoluene	17.634	91	277824	45.38	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\
 Data File : x183278.d
 Acq On : 29 Jul 2019 1:03 pm
 Operator : jessicap
 Sample : JC92198-1msd Inst : ACC-VOA-MSX
 Misc : MS36467,VX7847,5,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Results File: MX7749.RES
 Quant Time: Jul 30 04:26:30 2019
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,3,5-trimethylbenzene	17.556	105	364076	47.64	ug/L	100
107) tert-butylbenzene	17.922	119	351707	50.66	ug/L	100
108) 1,2,4-trimethylbenzene	17.979	105	370396	46.46	ug/L	99
109) sec-butylbenzene	18.157	105	530079	50.41	ug/L	100
110) 1,3-dichlorobenzene	18.319	146	208208	44.80	ug/L	98
111) p-isopropyltoluene	18.298	119	447278	48.84	ug/L	99
112) 1,4-dichlorobenzene	18.419	146	209152	46.39	ug/L	99
113) 1,2-dichlorobenzene	18.785	146	233208	45.44	ug/L	99
114) benzyl chloride	18.508	91	241973	46.67	ug/L	99
115) n-butylbenzene	18.712	92	227241	52.06	ug/L	100
116) 1,2-dibromo-3-chloropr...	19.507	157	39344	46.06	ug/L	98
117) 1,3,5-trichlorobenzene	19.690	180	252343	49.02	ug/L	98
118) hexachlorobutadiene	20.380	225	95610	54.56	ug/L	98
119) naphthalene	20.537	128	557175	45.78	ug/L	100
120) 2-ethylhexyl acrylate	20.275	70	20443	9.23	ug/L	97
121) 1,2,4-trichlorobenzene	20.275	180	254014	51.47	ug/L	98
122) 1,2,3-trichlorobenzene	20.741	180	256371	51.25	ug/L	98
123) hexachloroethane	19.072	201	87470	53.99	ug/L	100
124) 2-methylnaphthalene	21.614	142	150559	18.92	ug/L	96

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

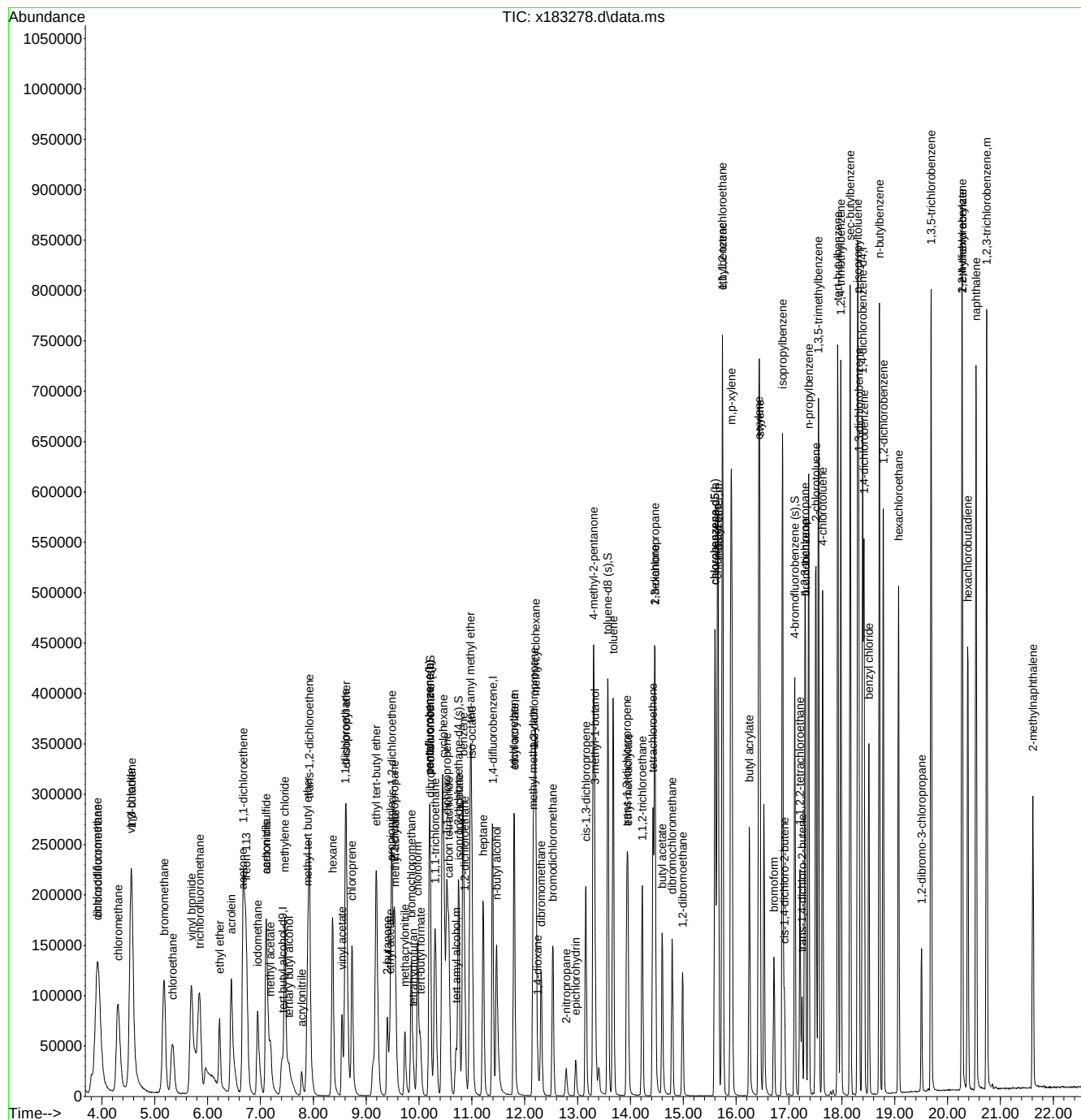
7.4.2

7

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\nizele\7_july\7-30-19\vx7847\  
Data File : x183278.d  
Acq On    : 29 Jul 2019    1:03 pm  
Operator  : jessicap  
Sample    : JC92198-1msd                      Inst      : ACC-VOA-MSX  
Misc      : MS36467,VX7847,5,,,,,1  
ALS Vial  : 14      Sample Multiplier: 1
```

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Results File: MX7749.RES
Quant Time: Jul 30 04:26:30 2019
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration

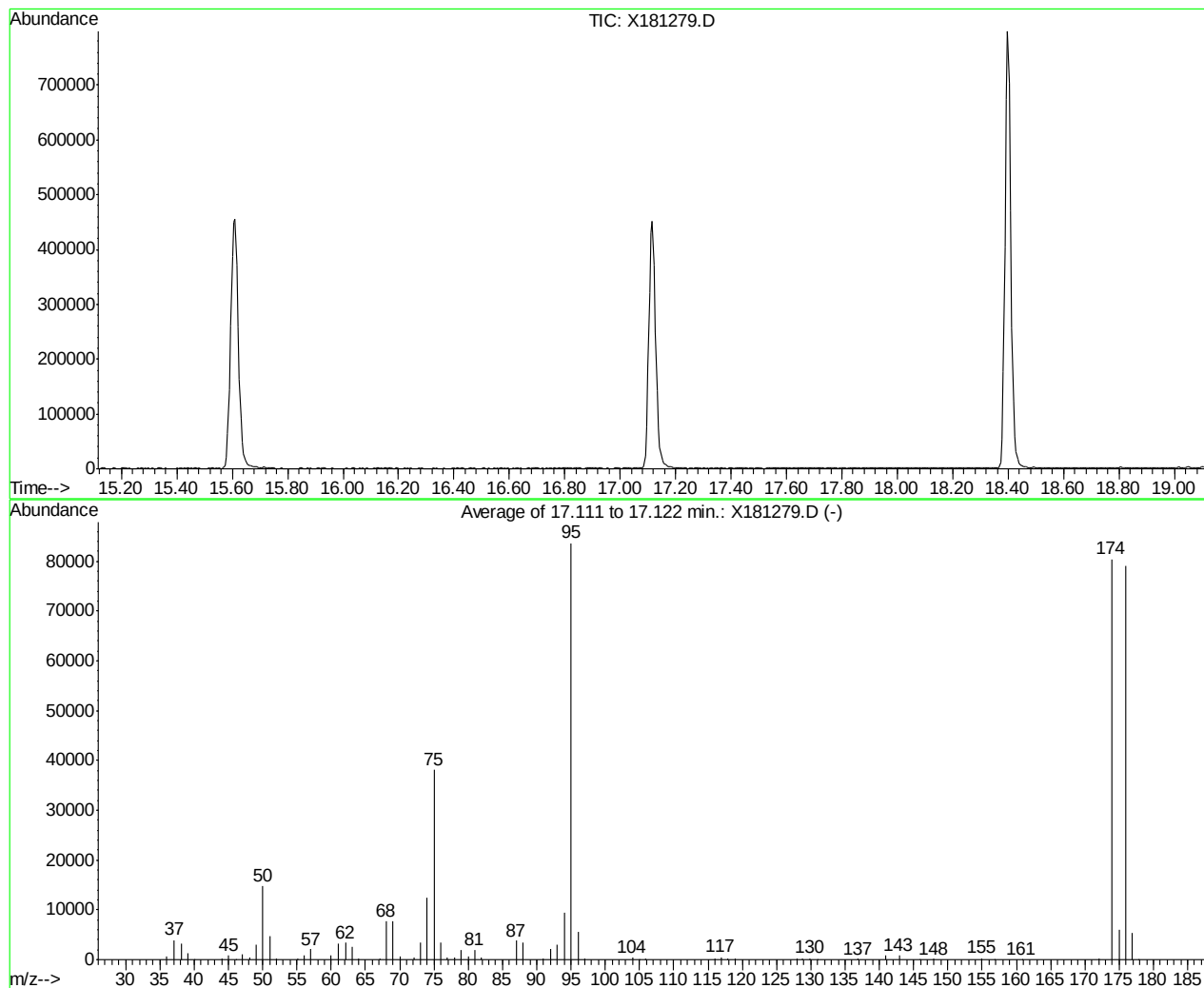


BFB

Data File : C:\msdchem\1\data\VX7749\X181279.D
Acq On : 2 May 2019 4:28 pm
Sample : bfb
Misc : MS34046,VX7749,5,,,,,1
MS Integration Params: ACETONE.P

Vial: 1
Operator: juntaep
Inst : ACC-VOA-M
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MX7749.M (RTE Integrator)
Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)



AutoFind: Scans 2568, 2569, 2570; Background Corrected with Scan 2559

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	17.6	14769	PASS
75	95	30	60	45.6	38133	PASS
95	95	100	100	100.0	83690	PASS
96	95	5	9	6.6	5531	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	96.1	80445	PASS
175	174	5	9	7.5	6070	PASS
176	174	95	101	98.4	79192	PASS
177	176	5	9	6.8	5418	PASS

Average of 17.111 to 17.122 min.: X181279.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	700	50.05	14769	67.05	176	78.95	1869
37.10	3885	51.05	4651	68.00	7681	80.00	553
38.10	3296	52.05	142	69.00	7640	80.90	1971
39.10	1282	55.05	303	70.00	664	81.95	424
39.95	40	56.10	918	72.05	460	87.00	3794
44.00	275	57.05	2119	73.00	3444	88.00	3484
45.05	769	60.00	761	74.00	12373	90.95	273
46.10	52	61.00	3260	75.00	38133	92.00	2062
47.05	1053	62.05	3428	76.00	3411	93.00	3068
48.10	449	63.05	2500	76.95	411	94.00	9437
49.05	3104	64.00	270	77.95	429	95.00	83690

Average of 17.111 to 17.122 min.: X181279.D

bfb

Modified:subtracted

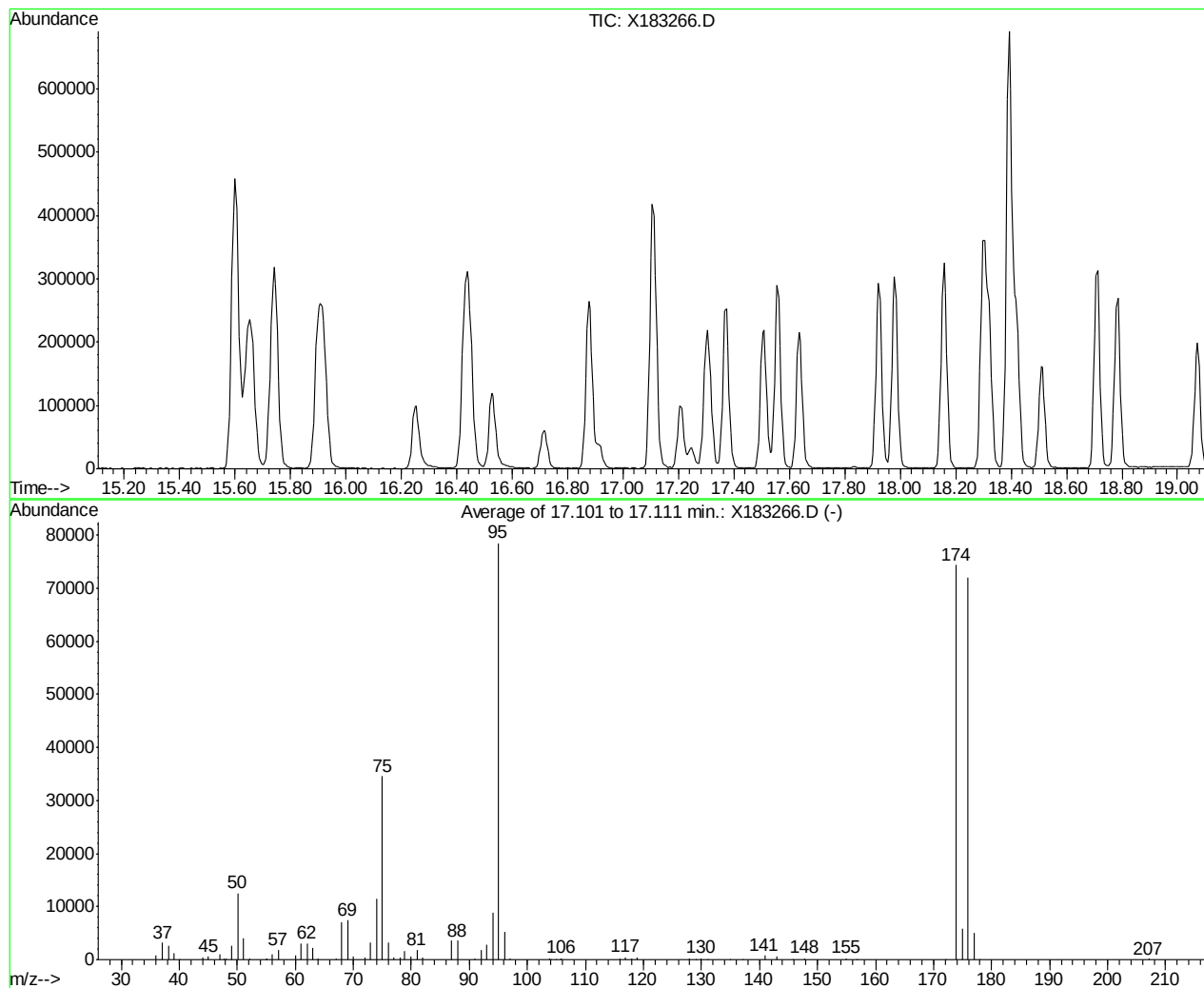
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	5531	129.90	311	173.90	80445		
97.00	210	130.90	54	174.95	6070		
103.95	381	136.95	183	175.90	79192		
104.90	105	140.90	806	176.95	5418		
105.95	325	142.95	858	177.80	101		
115.95	293	145.90	64				
116.90	536	147.95	116				
117.95	328	154.95	245				
118.90	320	156.80	69				
127.95	274	160.80	50				
128.85	190	172.10	120				

BFB

Data File : C:\MSDCHEM\1\DATA\VX7847\X183266.D
 Acq On : 29 Jul 2019 6:41 am
 Sample : bfb
 Misc : MS36371,VX7847,5,,,1
 MS Integration Params: ACETONE.P

Vial: 2
 Operator: jessicap
 Inst : ACC-VOA-M
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MX7749.M (RTE Integrator)
 Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)



AutoFind: Scans 2566, 2567, 2568; Background Corrected with Scan 2558

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.9	12498	PASS
75	95	30	60	44.0	34554	PASS
95	95	100	100	100.0	78549	PASS
96	95	5	9	6.6	5182	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	94.6	74344	PASS
175	174	5	9	7.9	5906	PASS
176	174	95	101	96.8	71949	PASS
177	176	5	9	7.0	5012	PASS

Average of 17.101 to 17.111 min.: X183266.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	745	50.10	12498	64.00	256	78.05	346
37.10	3158	51.10	4084	67.05	168	78.90	1617
38.10	2597	52.10	214	68.00	7135	80.00	555
39.10	1193	54.90	67	69.00	7399	80.95	1832
40.10	54	55.05	142	70.00	570	81.95	510
44.00	406	56.00	991	71.95	396	87.00	3552
45.05	587	57.05	1869	73.00	3316	88.00	3567
47.05	1068	60.05	750	74.05	11490	90.95	309
47.70	161	61.05	3074	75.00	34554	92.00	1778
48.05	282	62.05	3088	76.05	3144	93.00	2881
49.05	2710	63.05	2301	77.05	388	94.05	8886

Average of 17.101 to 17.111 min.: X183266.D

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	78549	118.95	332	154.95	294		
96.05	5182	127.90	275	156.70	54		
97.05	170	129.00	71	172.10	87		
103.80	213	129.95	308	173.90	74344		
104.00	96	131.00	106	175.00	5906		
104.90	78	134.90	57	175.90	71949		
105.70	104	137.10	55	176.95	5012		
105.90	291	140.95	752	178.00	65		
115.90	218	142.95	658	207.10	124		
116.95	418	145.80	63				
117.90	276	147.85	219				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181280.D
 Acq On : 2 May 2019 5:02 pm
 Operator : juntaep
 Sample : ic7749-0.2
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:45:19 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 11:50:12 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	176670	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	236470	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	310824	50.00	ug/L	0.00
74) chlorobenzene-d5	15.61	117	298750	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.40	152	193893	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.22	113	97731	51.44	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.88%
54) 1,2-dichloroethane-d4 (s)	10.76	65	106663	53.60	ug/L	0.01
Spiked Amount	50.000	Range	81 - 124	Recovery	=	107.20%
75) toluene-d8 (s)	13.58	98	363790	51.39	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.78%
98) 4-bromofluorobenzene (s)	17.12	95	149482	44.02	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	88.04%

Target Compounds

						Qvalue
9) vinyl chloride	4.51	62	1774	0.24	ug/L	# 50
11) chloroethane	5.30	64	475	0.18	ug/L	# 45
14) 1,3-butadiene	4.52	54	579	0.18	ug/L	# 75
17) 1,1-dichloroethene	6.67	96	342	0.21	ug/L	88
21) iodomethane	6.94	142	710	0.22	ug/L	90
22) carbon disulfide	7.11	76	1391	0.23	ug/L	86
25) methyl tert butyl ether	7.90	73	1747	0.24	ug/L	78
26) trans-1,2-dichloroethene	7.94	96	377	0.21	ug/L	# 43
28) di-isopropyl ether	8.63	45	2043	0.25	ug/L	55
30) 1,1-dichloroethane	8.61	63	704	0.20	ug/L	# 49
31) chloroprene	8.74	53	488	0.18	ug/L	# 36
34) ethyl tert-butyl ether	9.18	59	1629	0.20	ug/L	94
46) 1,1,1-trichloroethane	10.31	97	628	0.17	ug/L	# 64
47) cyclohexane	10.46	84	804	0.19	ug/L	# 65
51) carbon tetrachloride	10.55	117	583	0.19	ug/L	# 53
55) iso-octane	10.99	57	1218	0.22	ug/L	79
59) tert-amyl methyl ether	10.97	73	1594	0.23	ug/L	71
62) trichloroethene	11.81	130	374	0.19	ug/L	92
65) 2-chloroethyl vinyl ether	12.90	63	1370	0.98	ug/L	77
70) bromodichloromethane	12.53	83	616	0.23	ug/L	# 26
71) cis-1,3-dichloropropene	13.17	75	757	0.23	ug/L	85
72) 4-methyl-2-pentanone	13.32	58	593	0.68	ug/L	# 32
76) toluene	13.68	92	1029	0.24	ug/L	94
77) trans-1,3-dichloropropene	13.95	75	634	0.22	ug/L	# 36
79) 1,1,2-trichloroethane	14.24	83	304	0.20	ug/L	# 52
81) 1,3-dichloropropane	14.48	76	620	0.23	ug/L	# 27
84) dibromochloromethane	14.81	129	409	0.19	ug/L	73
85) 1,2-dibromoethane	15.00	107	395	0.19	ug/L	81
87) chlorobenzene	15.65	112	1171	0.24	ug/L	89
92) styrene	16.46	104	1214	0.23	ug/L	96
93) butyl acrylate	16.30	55	1092	0.25	ug/L	# 70
94) bromoform	16.72	173	260	0.17	ug/L	67
99) bromobenzene	17.32	156	628	0.22	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181280.D
Acq On : 2 May 2019 5:02 pm
Operator : juntaep
Sample : ic7749-0.2
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:45:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 11:50:12 2019
Response via : Initial Calibration

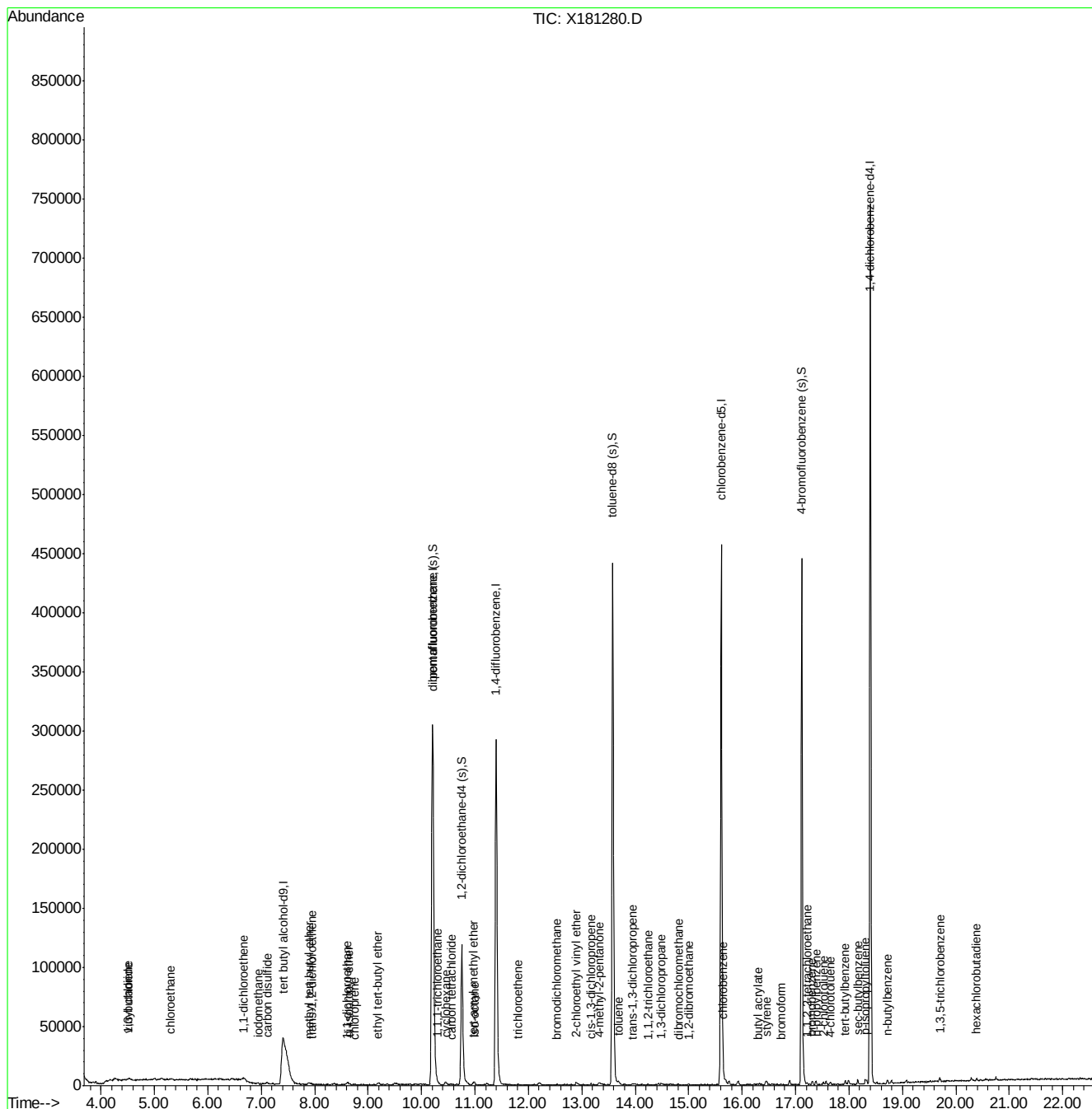
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) 1,1,2,2-tetrachloroethane	17.22	83	692	0.21	ug/L	89
103) n-propylbenzene	17.38	91	2807	0.23	ug/L	96
104) 2-chlorotoluene	17.51	126	601	0.21	ug/L #	68
105) 4-chlorotoluene	17.65	91	1740	0.25	ug/L	93
107) tert-butylbenzene	17.93	119	1690	0.19	ug/L	90
109) sec-butylbenzene	18.17	105	2858	0.22	ug/L	95
111) p-isopropyltoluene	18.31	119	2555	0.23	ug/L	96
115) n-butylbenzene	18.72	92	1120	0.20	ug/L	94
117) 1,3,5-trichlorobenzene	19.69	180	1224	0.19	ug/L	87
118) hexachlorobutadiene	20.39	225	496	0.23	ug/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181280.D
Acq On : 2 May 2019 5:02 pm
Operator : juntaep
Sample : ic7749-0.2
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:45:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 11:50:12 2019
Response via : Initial Calibration



7.6.1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181281.D
 Acq On : 2 May 2019 5:31 pm
 Operator : juntaep
 Sample : ic7749-0.5
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 14:47:32 2019

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M

Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)

QLast Update : Thu May 09 11:50:12 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.41	65	161729	500.00	ug/L	0.01
5) pentafluorobenzene	10.20	168	233433	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	308156	50.00	ug/L	0.00
74) chlorobenzene-d5	15.61	117	294648	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.40	152	195360	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.22	113	94356	50.31	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.62%
54) 1,2-dichloroethane-d4 (s)	10.75	65	105639	53.54	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	107.08%
75) toluene-d8 (s)	13.58	98	360262	51.61	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.22%
98) 4-bromofluorobenzene (s)	17.12	95	149058	43.57	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	87.14%

Target Compounds

						Qvalue
6) chlorodifluoromethane	3.90	51	3655	0.51	ug/L	72
7) dichlorodifluoromethane	3.88	85	2753	0.36	ug/L	83
9) vinyl chloride	4.52	62	3801	0.52	ug/L	91
11) chloroethane	5.31	64	1321	0.51	ug/L #	46
12) vinyl bromide	5.66	106	1318	0.44	ug/L	74
13) trichlorofluoromethane	5.80	101	1993	0.42	ug/L	87
14) 1,3-butadiene	4.54	54	1660	0.53	ug/L	80
17) 1,1-dichloroethene	6.67	96	849	0.52	ug/L #	72
21) iodomethane	6.94	142	1574	0.49	ug/L	82
22) carbon disulfide	7.11	76	3007	0.51	ug/L	89
23) methylene chloride	7.47	84	1276	0.63	ug/L #	60
25) methyl tert butyl ether	7.89	73	3719	0.52	ug/L	96
26) trans-1,2-dichloroethene	7.93	96	941	0.54	ug/L	77
28) di-isopropyl ether	8.62	45	4614	0.58	ug/L	81
30) 1,1-dichloroethane	8.60	63	1907	0.56	ug/L	87
31) chloroprene	8.74	53	1159	0.44	ug/L	63
34) ethyl tert-butyl ether	9.19	59	4038	0.51	ug/L	88
37) cis-1,2-dichloroethene	9.50	96	980	0.49	ug/L #	85
40) tert-butyl formate	10.03	59	881	0.44	ug/L #	59
41) bromochloromethane	9.87	128	527	0.48	ug/L #	64
43) chloroform	9.98	83	1959	0.60	ug/L	99
46) 1,1,1-trichloroethane	10.32	97	1832	0.51	ug/L	84
47) cyclohexane	10.46	84	1793	0.43	ug/L #	66
49) 1,1-dichloropropene	10.53	75	1051	0.47	ug/L	74
51) carbon tetrachloride	10.56	117	1313	0.44	ug/L #	56
55) iso-octane	10.98	57	2257	0.41	ug/L	80
58) benzene	10.83	78	4064	0.59	ug/L	99
59) tert-amyl methyl ether	10.97	73	3579	0.53	ug/L	99
60) heptane	11.23	57	496	0.44	ug/L #	67
62) trichloroethene	11.80	130	887	0.47	ug/L	90
65) 2-chloroethyl vinyl ether	12.90	63	3073	2.23	ug/L	91
68) dibromomethane	12.31	93	601	0.50	ug/L	89
70) bromodichloromethane	12.54	83	1375	0.53	ug/L	86

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181281.D
 Acq On : 2 May 2019 5:31 pm
 Operator : juntaep
 Sample : ic7749-0.5
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 14:47:32 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 11:50:12 2019
 Response via : Initial Calibration

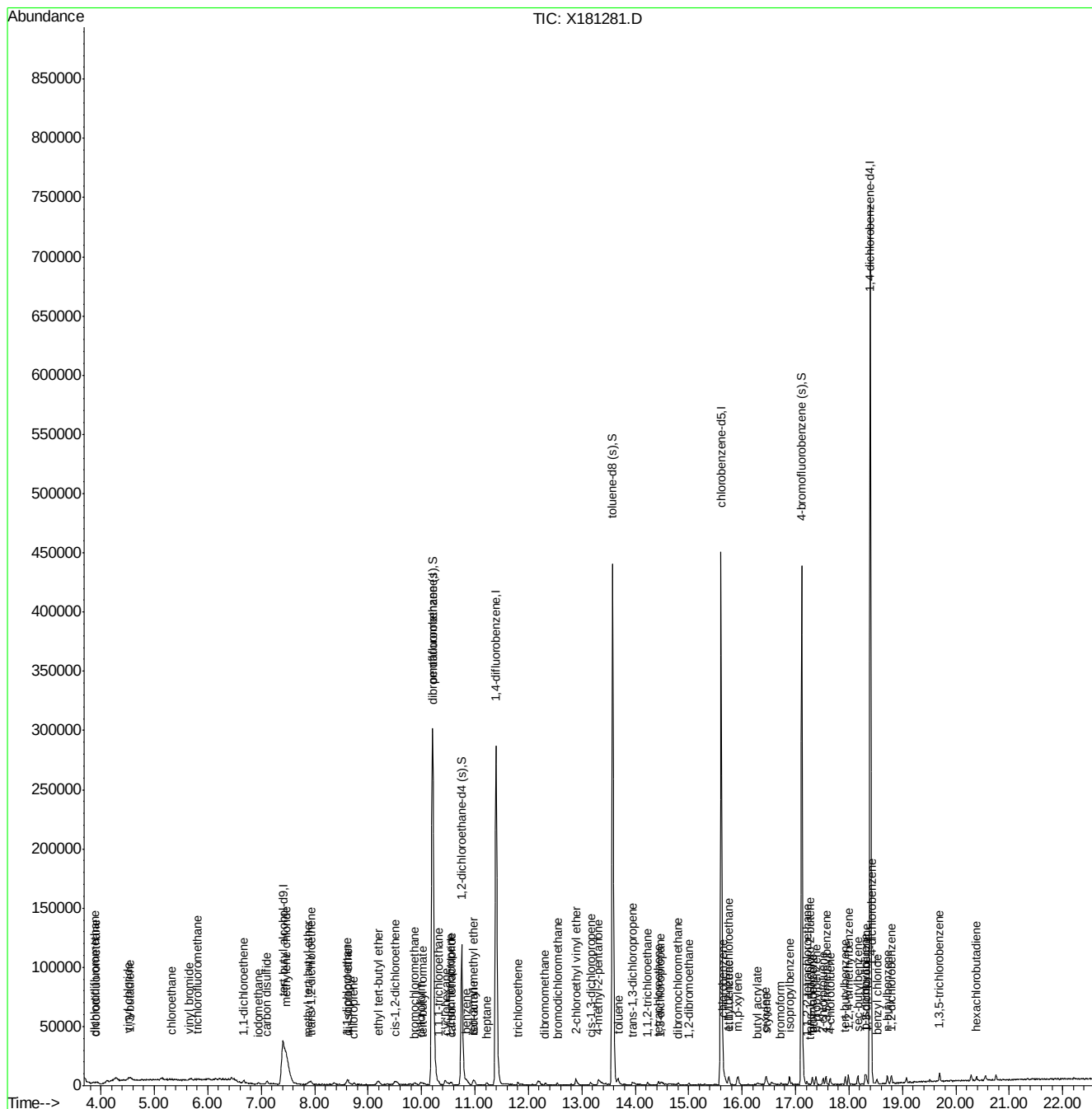
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
71) cis-1,3-dichloropropene	13.17	75	1457	0.45	ug/L	72
72) 4-methyl-2-pentanone	13.32	58	1285	1.48	ug/L #	63
76) toluene	13.67	92	2179	0.51	ug/L	98
77) trans-1,3-dichloropropene	13.95	75	1271	0.45	ug/L #	78
79) 1,1,2-trichloroethane	14.23	83	785	0.53	ug/L #	70
80) tetrachloroethene	14.43	164	709	0.44	ug/L	85
81) 1,3-dichloropropane	14.47	76	1343	0.51	ug/L	75
84) dibromochloromethane	14.80	129	1046	0.50	ug/L	87
85) 1,2-dibromoethane	14.99	107	871	0.42	ug/L	92
87) chlorobenzene	15.65	112	2455	0.51	ug/L	90
88) 1,1,1,2-tetrachloroethane	15.75	131	1139	0.52	ug/L	94
89) ethylbenzene	15.75	91	4461	0.58	ug/L	95
90) m,p-xylene	15.92	106	3544	1.14	ug/L	87
91) o-xylene	16.44	91	4226	0.58	ug/L	92
92) styrene	16.46	104	2662	0.51	ug/L	91
93) butyl acrylate	16.29	55	2221	0.51	ug/L	91
94) bromoform	16.72	173	688	0.47	ug/L	74
95) isopropylbenzene	16.89	105	5241	0.54	ug/L	93
99) bromobenzene	17.32	156	1377	0.47	ug/L	91
100) 1,1,2,2-tetrachloroethane	17.22	83	1391	0.42	ug/L	90
101) trans-1,4-dichloro-2-buten	17.27	53	310	0.42	ug/L #	70
103) n-propylbenzene	17.38	91	5692	0.47	ug/L	93
104) 2-chlorotoluene	17.52	126	1219	0.42	ug/L	88
105) 4-chlorotoluene	17.65	91	3649	0.51	ug/L	97
106) 1,3,5-trimethylbenzene	17.57	105	4198	0.44	ug/L	97
107) tert-butylbenzene	17.93	119	3784	0.41	ug/L	86
108) 1,2,4-trimethylbenzene	17.99	105	4867	0.50	ug/L	98
109) sec-butylbenzene	18.17	105	5485	0.41	ug/L	93
110) 1,3-dichlorobenzene	18.33	146	2932	0.56	ug/L	95
111) p-isopropyltoluene	18.30	119	5178	0.46	ug/L	96
112) 1,4-dichlorobenzene	18.43	146	2737	0.52	ug/L	93
113) 1,2-dichlorobenzene	18.80	146	3128	0.51	ug/L	92
114) benzyl chloride	18.52	91	3193	0.52	ug/L	95
115) n-butylbenzene	18.72	92	2409	0.44	ug/L	94
117) 1,3,5-trichlorobenzene	19.70	180	2836	0.44	ug/L	87
118) hexachlorobutadiene	20.39	225	891	0.41	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181281.D
Acq On : 2 May 2019 5:31 pm
Operator : juntaep
Sample : ic7749-0.5
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 14:47:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 11:50:12 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181282.D
 Acq On : 2 May 2019 5:59 pm
 Operator : juntaep
 Sample : ic7749-1
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 09 14:48:08 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 11:50:12 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	163083	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	233883	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	307668	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	292122	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.40	152	190756	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.22	113	94094	50.08	ug/L	0.01
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.16%
54) 1,2-dichloroethane-d4 (s)	10.75	65	104858	53.23	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	106.46%
75) toluene-d8 (s)	13.58	98	360740	52.12	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	104.24%
98) 4-bromofluorobenzene (s)	17.11	95	147976	44.29	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	88.58%

Target Compounds

						Qvalue
6) chlorodifluoromethane	3.92	51	7744	1.07	ug/L	93
7) dichlorodifluoromethane	3.88	85	6835	0.89	ug/L	79
8) chloromethane	4.28	50	10050	1.12	ug/L	94
9) vinyl chloride	4.52	62	7778	1.07	ug/L	93
10) bromomethane	5.13	96	4204	1.10	ug/L	86
11) chloroethane	5.32	64	2830	1.10	ug/L	91
12) vinyl bromide	5.68	106	2731	0.91	ug/L	78
13) trichlorofluoromethane	5.81	101	4561	0.97	ug/L	81
14) 1,3-butadiene	4.55	54	3599	1.15	ug/L	84
15) ethyl ether	6.23	74	948	0.92	ug/L #	84
17) 1,1-dichloroethene	6.67	96	1744	1.06	ug/L #	72
18) freon 113	6.71	101	2530	0.91	ug/L #	81
21) iodomethane	6.94	142	3428	1.06	ug/L	85
22) carbon disulfide	7.11	76	6341	1.07	ug/L	97
23) methylene chloride	7.47	84	2204	1.09	ug/L #	72
25) methyl tert butyl ether	7.89	73	7749	1.08	ug/L	89
26) trans-1,2-dichloroethene	7.93	96	2044	1.17	ug/L	95
27) hexane	8.36	57	2682	1.01	ug/L	85
28) di-isopropyl ether	8.62	45	8956	1.12	ug/L	87
30) 1,1-dichloroethane	8.61	63	3829	1.13	ug/L	92
31) chloroprene	8.74	53	2965	1.13	ug/L	93
34) ethyl tert-butyl ether	9.20	59	7807	0.98	ug/L	89
36) 2,2-dichloropropane	9.54	77	4342	1.27	ug/L	92
37) cis-1,2-dichloroethene	9.50	96	2462	1.23	ug/L	90
39) propionitrile	9.51	54	3061	9.85	ug/L	72
40) tert-butyl formate	10.03	59	2083	1.04	ug/L	90
41) bromochloromethane	9.87	128	1036	0.95	ug/L #	78
43) chloroform	9.98	83	3767	1.16	ug/L	95
46) 1,1,1-trichloroethane	10.31	97	3822	1.06	ug/L	90
47) cyclohexane	10.46	84	4078	0.98	ug/L	97
49) 1,1-dichloropropene	10.53	75	2402	1.07	ug/L	85
51) carbon tetrachloride	10.56	117	3341	1.12	ug/L #	82
55) iso-octane	10.99	57	5347	0.97	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181282.D
 Acq On : 2 May 2019 5:59 pm
 Operator : juntaep
 Sample : ic7749-1
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 09 14:48:08 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 11:50:12 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) epichlorohydrin	12.98	57	1059	4.89	ug/L	55
57) n-butyl alcohol	11.54	56	3217	43.30	ug/L	90
58) benzene	10.83	78	7971	1.16	ug/L	90
59) tert-amyl methyl ether	10.98	73	7257	1.08	ug/L	94
60) heptane	11.21	57	1101	0.98	ug/L #	81
61) 1,2-dichloroethane	10.88	62	2898	1.28	ug/L	91
62) trichloroethene	11.80	130	1865	0.98	ug/L	79
63) ethyl acrylate	11.85	55	1989	0.80	ug/L	59
65) 2-chloroethyl vinyl ether	12.89	63	6410	4.65	ug/L	97
67) 1,2-dichloropropane	12.18	76	769	0.96	ug/L	95
68) dibromomethane	12.32	93	1166	0.97	ug/L	87
69) methylcyclohexane	12.21	83	3397	1.04	ug/L	93
70) bromodichloromethane	12.55	83	2662	1.02	ug/L	90
71) cis-1,3-dichloropropene	13.17	75	3191	0.99	ug/L	92
72) 4-methyl-2-pentanone	13.32	58	3072	3.55	ug/L	88
73) 3-methyl-1-butanol	13.35	70	1007	14.11	ug/L #	75
76) toluene	13.68	92	4730	1.11	ug/L	98
77) trans-1,3-dichloropropene	13.95	75	2984	1.07	ug/L	84
78) ethyl methacrylate	13.98	69	2057	0.83	ug/L	79
79) 1,1,2-trichloroethane	14.25	83	1493	1.02	ug/L #	80
80) tetrachloroethene	14.43	164	1731	1.09	ug/L	92
81) 1,3-dichloropropane	14.48	76	3089	1.17	ug/L	87
82) 2-hexanone	14.49	58	2615	3.69	ug/L #	65
83) butyl acetate	14.64	56	1401	0.99	ug/L #	48
84) dibromochloromethane	14.80	129	2190	1.06	ug/L	95
85) 1,2-dibromoethane	14.99	107	1979	0.97	ug/L	81
86) n-butyl ether	15.67	57	9042	1.16	ug/L	97
87) chlorobenzene	15.65	112	5350	1.11	ug/L	93
88) 1,1,1,2-tetrachloroethane	15.75	131	2440	1.11	ug/L	97
89) ethylbenzene	15.75	91	9499	1.24	ug/L	97
90) m,p-xylene	15.92	106	7145	2.32	ug/L	99
91) o-xylene	16.44	91	8167	1.13	ug/L	87
92) styrene	16.46	104	5880	1.14	ug/L	94
93) butyl acrylate	16.28	55	5041	1.17	ug/L	91
94) bromoform	16.72	173	1659	1.14	ug/L	81
95) isopropylbenzene	16.88	105	10772	1.13	ug/L	98
96) cis-1,4-dichloro-2-butene	16.92	88	874	1.15	ug/L	92
99) bromobenzene	17.32	156	2694	0.94	ug/L	83
100) 1,1,2,2-tetrachloroethane	17.22	83	2882	0.90	ug/L	89
101) trans-1,4-dichloro-2-buten	17.26	53	723	1.01	ug/L #	79
102) 1,2,3-trichloropropane	17.30	110	676	0.86	ug/L #	43
103) n-propylbenzene	17.38	91	11486	0.96	ug/L	99
104) 2-chlorotoluene	17.51	126	2504	0.89	ug/L	95
105) 4-chlorotoluene	17.64	91	7343	1.06	ug/L	98
106) 1,3,5-trimethylbenzene	17.57	105	8590	0.91	ug/L	94
107) tert-butylbenzene	17.93	119	7374	0.83	ug/L	93
108) 1,2,4-trimethylbenzene	17.98	105	9261	0.97	ug/L	99
109) sec-butylbenzene	18.16	105	11536	0.88	ug/L	95
110) 1,3-dichlorobenzene	18.33	146	6009	1.17	ug/L	86
111) p-isopropyltoluene	18.31	119	10122	0.92	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181282.D
Acq On : 2 May 2019 5:59 pm
Operator : juntaep
Sample : ic7749-1
Misc : MS34046,VX7749,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 09 14:48:08 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 11:50:12 2019
Response via : Initial Calibration

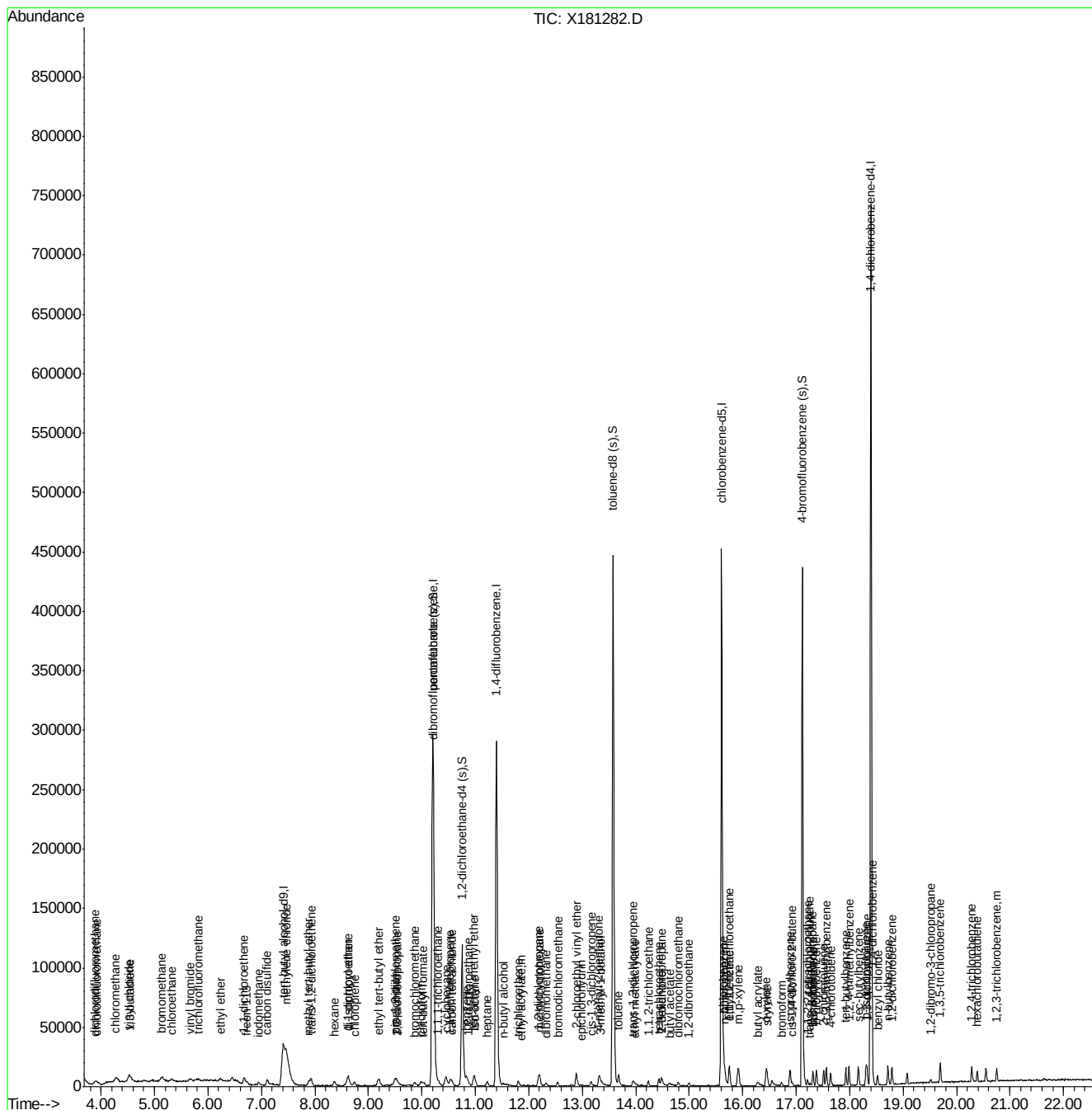
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) 1,4-dichlorobenzene	18.43	146	5590	1.09	ug/L	93
113) 1,2-dichlorobenzene	18.79	146	6099	1.03	ug/L	94
114) benzyl chloride	18.52	91	6338	1.06	ug/L	95
115) n-butylbenzene	18.72	92	5063	0.94	ug/L	88
116) 1,2-dibromo-3-chloropropan	19.52	157	846	0.78	ug/L	90
117) 1,3,5-trichlorobenzene	19.69	180	5929	0.95	ug/L	95
118) hexachlorobutadiene	20.39	225	1932	0.92	ug/L	93
121) 1,2,4-trichlorobenzene	20.28	180	4557	0.70	ug/L	100
122) 1,2,3-trichlorobenzene	20.75	180	4462	0.67	ug/L	80

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

Quantitation Report (QT Reviewed)

```
Data Path   : C:\MSDCHEM\1\DATA\VX7749\
Data File  : X181282.D
Acq On     : 2 May 2019    5:59 pm
Operator   : juntaep
Sample     : ic7749-1
Misc       : MS34046,VX7749,5,,,,,1
ALS Vial   : 4    Sample Multiplier: 1
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Quant Time: May 09 14:48:08 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 11:50:12 2019
Response via : Initial Calibration



MX7749.M Fri May 10 08:36:15 2019 GCMSX

Page: 4

7.6.3

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181283.D
 Acq On : 2 May 2019 6:28 pm
 Operator : juntaep
 Sample : ic7749-2
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 14:49:34 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.41	65	164004	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	231037	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	305595	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	290219	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.40	152	185321	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.22	113	92565	49.24	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.48%
54) 1,2-dichloroethane-d4 (s)	10.75	65	103538	51.36	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	102.72%
75) toluene-d8 (s)	13.58	98	357282	51.35	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.70%
98) 4-bromofluorobenzene (s)	17.12	95	142961	47.09	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	94.18%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.54	59	3694	10.34	ug/L	48
6) chlorodifluoromethane	3.91	51	15013	2.13	ug/L	93
7) dichlorodifluoromethane	3.88	85	14818	2.11	ug/L	95
8) chloromethane	4.27	50	19355	2.11	ug/L	91
9) vinyl chloride	4.51	62	15344	2.09	ug/L	90
10) bromomethane	5.14	96	7826	1.98	ug/L	96
11) chloroethane	5.32	64	4975	2.02	ug/L	97
12) vinyl bromide	5.67	106	5876	2.14	ug/L	85
13) trichlorofluoromethane	5.80	101	9611	2.15	ug/L	85
14) 1,3-butadiene	4.52	54	7307	2.33	ug/L	92
15) ethyl ether	6.22	74	1998	2.01	ug/L	# 83
17) 1,1-dichloroethene	6.67	96	3625	2.18	ug/L	86
18) freon 113	6.70	101	6076	2.27	ug/L	# 79
19) acetone	6.67	43	5491	7.39	ug/L	81
21) iodomethane	6.94	142	6541	2.04	ug/L	99
22) carbon disulfide	7.10	76	12180	2.06	ug/L	97
23) methylene chloride	7.46	84	4387	1.98	ug/L	84
24) methyl acetate	7.19	43	3625	2.26	ug/L	89
25) methyl tert butyl ether	7.90	73	14927	2.06	ug/L	96
26) trans-1,2-dichloroethene	7.93	96	3819	2.12	ug/L	92
27) hexane	8.36	57	5972	2.34	ug/L	95
28) di-isopropyl ether	8.62	45	17597	2.11	ug/L	98
29) 2-butanone	9.42	72	1309	6.29	ug/L	# 35
30) 1,1-dichloroethane	8.61	63	7040	2.04	ug/L	96
31) chloroprene	8.74	53	5241	2.04	ug/L	97
34) ethyl tert-butyl ether	9.18	59	15498	2.01	ug/L	93
36) 2,2-dichloropropane	9.53	77	7801	2.09	ug/L	95
37) cis-1,2-dichloroethene	9.50	96	4672	2.30	ug/L	97
39) propionitrile	9.49	54	6065	20.46	ug/L	83
40) tert-butyl formate	10.03	59	4059	2.10	ug/L	94
41) bromochloromethane	9.86	128	2148	2.03	ug/L	86
43) chloroform	9.99	83	7008	2.00	ug/L	93
45) methacrylonitrile	9.76	67	1473	1.93	ug/L	83

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181283.D
 Acq On : 2 May 2019 6:28 pm
 Operator : juntaep
 Sample : ic7749-2
 Misc : MS34046,VX7749,5,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 14:49:34 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) 1,1,1-trichloroethane	10.31	97	6897	1.99	ug/L	95
47) cyclohexane	10.45	84	7410	1.94	ug/L	89
48) tert amyl alcohol	10.71	55	1389	11.55	ug/L #	20
49) 1,1-dichloropropene	10.53	75	4833	2.18	ug/L	97
51) carbon tetrachloride	10.56	117	6343	2.18	ug/L	96
52) isopropyl acetate	10.76	87	687	1.72	ug/L #	1
55) iso-octane	10.99	57	11644	2.15	ug/L	91
56) epichlorohydrin	12.98	57	2174	10.07	ug/L	93
57) n-butyl alcohol	11.51	56	6711	96.28	ug/L	95
58) benzene	10.84	78	14904	2.04	ug/L	97
59) tert-amyl methyl ether	10.97	73	14652	2.13	ug/L	95
60) heptane	11.22	57	2429	2.25	ug/L	93
61) 1,2-dichloroethane	10.87	62	5391	2.25	ug/L	90
62) trichloroethene	11.80	130	3959	2.13	ug/L	91
63) ethyl acrylate	11.82	55	4758	2.04	ug/L	86
65) 2-chloroethyl vinyl ether	12.89	63	14033	10.61	ug/L	96
67) 1,2-dichloropropane	12.18	76	1654	2.12	ug/L #	74
68) dibromomethane	12.32	93	2459	2.08	ug/L	93
69) methylcyclohexane	12.20	83	7320	2.33	ug/L	90
70) bromodichloromethane	12.54	83	5254	1.99	ug/L	99
71) cis-1,3-dichloropropene	13.17	75	6378	2.01	ug/L	86
72) 4-methyl-2-pentanone	13.31	58	7149	8.92	ug/L	91
73) 3-methyl-1-butanol	13.34	70	2571	5.38	ug/L #	62
76) toluene	13.68	92	8904	2.06	ug/L	99
77) trans-1,3-dichloropropene	13.94	75	6039	2.16	ug/L	95
78) ethyl methacrylate	13.96	69	4668	2.10	ug/L	86
79) 1,1,2-trichloroethane	14.24	83	3178	2.17	ug/L	93
80) tetrachloroethene	14.43	164	3485	2.21	ug/L	89
81) 1,3-dichloropropane	14.47	76	6161	2.24	ug/L	90
82) 2-hexanone	14.49	58	5927	8.92	ug/L	99
83) butyl acetate	14.62	56	2950	2.09	ug/L #	71
84) dibromochloromethane	14.79	129	4482	2.19	ug/L	88
85) 1,2-dibromoethane	15.00	107	4267	2.18	ug/L	95
86) n-butyl ether	15.67	57	16715	2.06	ug/L	99
87) chlorobenzene	15.65	112	10504	2.13	ug/L	95
88) 1,1,1,2-tetrachloroethane	15.75	131	4613	2.06	ug/L	90
89) ethylbenzene	15.75	91	17806	2.13	ug/L	99
90) m,p-xylene	15.91	106	14109	4.26	ug/L	98
91) o-xylene	16.44	91	15809	2.06	ug/L	100
92) styrene	16.46	104	11652	2.18	ug/L	94
93) butyl acrylate	16.27	55	9431	2.10	ug/L	96
94) bromoform	16.72	173	3226	2.24	ug/L	92
95) isopropylbenzene	16.89	105	20000	2.04	ug/L	97
96) cis-1,4-dichloro-2-butene	16.92	88	1827	2.45	ug/L	93
99) bromobenzene	17.32	156	5453	2.03	ug/L #	82
100) 1,1,2,2-tetrachloroethane	17.22	83	5632	1.94	ug/L	96
101) trans-1,4-dichloro-2-buten	17.26	53	1237	1.88	ug/L	90
102) 1,2,3-trichloropropane	17.30	110	1438	2.04	ug/L #	78
103) n-propylbenzene	17.38	91	22490	2.01	ug/L	98
104) 2-chlorotoluene	17.51	126	5039	1.99	ug/L	87

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181283.D
Acq On : 2 May 2019 6:28 pm
Operator : juntaep
Sample : ic7749-2
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 14:49:34 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration

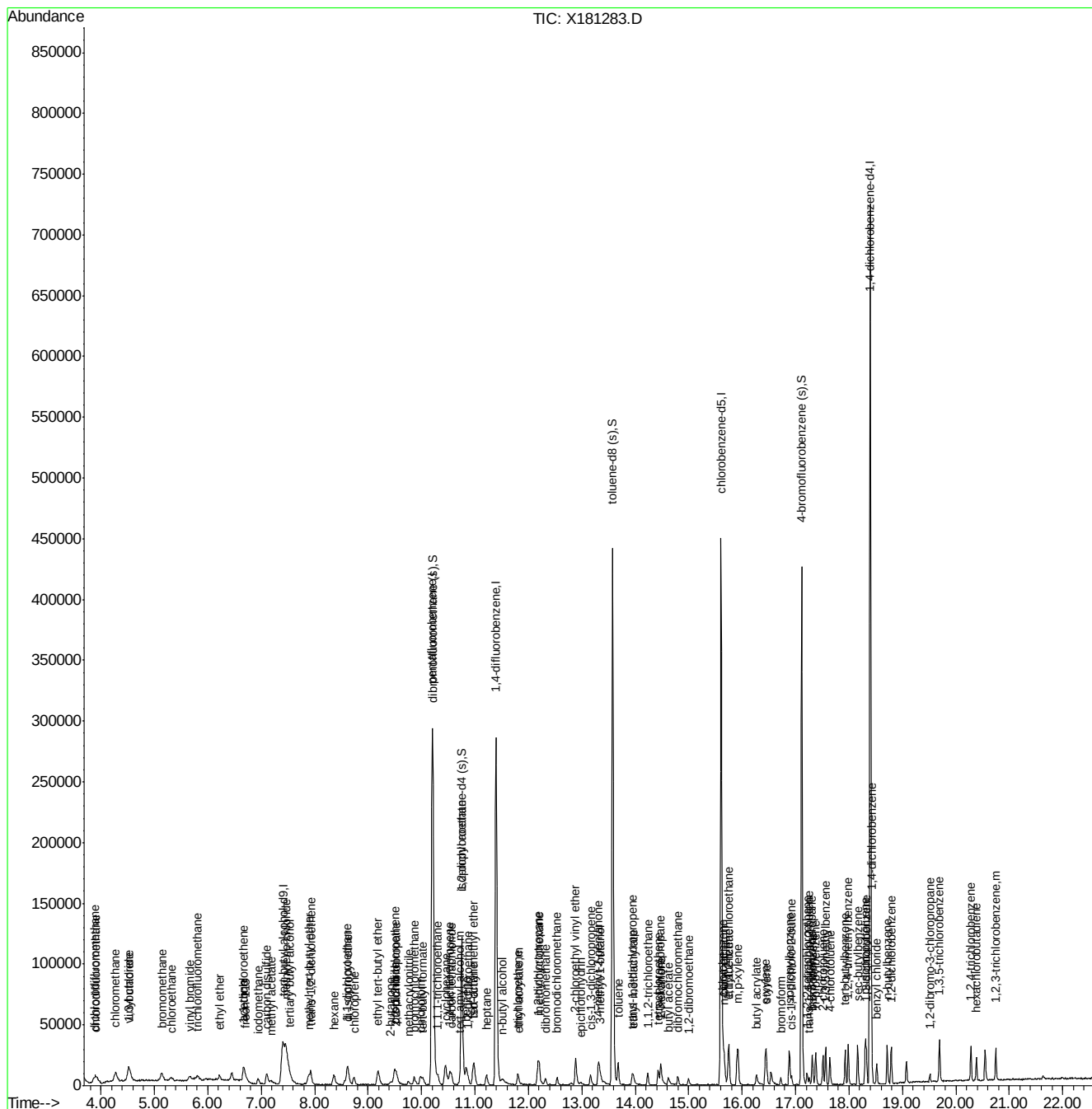
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 4-chlorotoluene	17.64	91	13424	1.97	ug/L	91
106) 1,3,5-trimethylbenzene	17.56	105	17338	1.99	ug/L	97
107) tert-butylbenzene	17.93	119	14677	1.90	ug/L	96
108) 1,2,4-trimethylbenzene	17.99	105	18028	1.96	ug/L	94
109) sec-butylbenzene	18.16	105	22689	1.94	ug/L	99
110) 1,3-dichlorobenzene	18.32	146	11412	2.20	ug/L	96
111) p-isopropyltoluene	18.30	119	19944	1.96	ug/L	96
112) 1,4-dichlorobenzene	18.42	146	10321	2.00	ug/L	91
113) 1,2-dichlorobenzene	18.79	146	12123	2.06	ug/L	98
114) benzyl chloride	18.52	91	12124	2.03	ug/L	90
115) n-butylbenzene	18.72	92	9667	1.99	ug/L	96
116) 1,2-dibromo-3-chloropropan	19.51	157	1798	1.96	ug/L	88
117) 1,3,5-trichlorobenzene	19.69	180	11252	1.96	ug/L	98
118) hexachlorobutadiene	20.39	225	3895	2.00	ug/L	92
121) 1,2,4-trichlorobenzene	20.29	180	9492	1.80	ug/L	90
122) 1,2,3-trichlorobenzene	20.75	180	9274	1.73	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181283.D
Acq On : 2 May 2019 6:28 pm
Operator : juntaep
Sample : ic7749-2
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 14:49:34 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181284.D
 Acq On : 2 May 2019 6:56 pm
 Operator : juntaep
 Sample : ic7749-4
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 09 14:50:22 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	158441	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	231866	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	308785	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	292169	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.40	152	180377	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.22	113	92953	49.27	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.54%
54) 1,2-dichloroethane-d4 (s)	10.75	65	103008	50.57	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	101.14%
75) toluene-d8 (s)	13.58	98	357402	51.03	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.06%
98) 4-bromofluorobenzene (s)	17.11	95	141365	47.84	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.68%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.55	59	6656	19.29	ug/L	82
4) 1,4-dioxane	12.26	88	2361	92.03	ug/L #	83
6) chlorodifluoromethane	3.90	51	27201	3.84	ug/L	97
7) dichlorodifluoromethane	3.91	85	28482	4.05	ug/L	91
8) chloromethane	4.27	50	35984	3.91	ug/L	98
9) vinyl chloride	4.50	62	28691	3.90	ug/L	92
10) bromomethane	5.13	96	14500	3.65	ug/L	96
11) chloroethane	5.31	64	9560	3.87	ug/L	94
12) vinyl bromide	5.67	106	10233	3.71	ug/L	94
13) trichlorofluoromethane	5.81	101	17726	3.95	ug/L	97
14) 1,3-butadiene	4.54	54	12364	3.93	ug/L	91
15) ethyl ether	6.22	74	4067	4.07	ug/L #	72
17) 1,1-dichloroethene	6.67	96	6708	4.01	ug/L	97
18) freon 113	6.70	101	10108	3.76	ug/L	94
19) acetone	6.66	43	9173	12.30	ug/L	99
20) acetonitrile	7.11	41	17728	41.04	ug/L	89
21) iodomethane	6.94	142	11954	3.72	ug/L	94
22) carbon disulfide	7.10	76	22571	3.80	ug/L	95
23) methylene chloride	7.46	84	8194	3.69	ug/L	97
24) methyl acetate	7.19	43	7748	4.81	ug/L	95
25) methyl tert butyl ether	7.90	73	27819	3.82	ug/L	91
26) trans-1,2-dichloroethene	7.93	96	7015	3.88	ug/L	96
27) hexane	8.36	57	10111	3.94	ug/L	94
28) di-isopropyl ether	8.62	45	32396	3.88	ug/L	99
29) 2-butanone	9.42	72	3154	15.10	ug/L #	83
30) 1,1-dichloroethane	8.61	63	13378	3.86	ug/L	96
31) chloroprene	8.73	53	10686	4.14	ug/L	96
32) acrylonitrile	7.79	53	2388	3.30	ug/L	98
34) ethyl tert-butyl ether	9.18	59	29379	3.80	ug/L	95
35) ethyl acetate	9.46	45	1107	3.90	ug/L	85
36) 2,2-dichloropropane	9.52	77	14143	3.78	ug/L	94
37) cis-1,2-dichloroethene	9.49	96	8223	4.04	ug/L	99
38) methyl acrylate	9.57	85	632	2.57	ug/L #	22

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181284.D
 Acq On : 2 May 2019 6:56 pm
 Operator : juntaep
 Sample : ic7749-4
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 09 14:50:22 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) propionitrile	9.50	54	11601	39.00	ug/L	95
40) tert-butyl formate	10.02	59	8188	4.22	ug/L	91
41) bromochloromethane	9.86	128	4322	4.08	ug/L	94
42) tetrahydrofuran	9.90	72	891	3.67	ug/L #	79
43) chloroform	9.98	83	13320	3.79	ug/L	98
45) methacrylonitrile	9.74	67	2764	3.61	ug/L	85
46) 1,1,1-trichloroethane	10.30	97	13143	3.78	ug/L	94
47) cyclohexane	10.46	84	14089	3.67	ug/L	97
48) tert amyl alcohol	10.71	55	2350	19.47	ug/L #	55
49) 1,1-dichloropropene	10.52	75	8614	3.87	ug/L	94
51) carbon tetrachloride	10.56	117	11581	3.97	ug/L	98
52) isopropyl acetate	10.77	87	1468	3.66	ug/L #	30
55) iso-octane	10.99	57	19948	3.64	ug/L	97
56) epichlorohydrin	12.97	57	4594	21.07	ug/L	97
57) n-butyl alcohol	11.49	56	13385	190.05	ug/L	97
58) benzene	10.83	78	28342	3.84	ug/L	97
59) tert-amyl methyl ether	10.97	73	26686	3.83	ug/L	97
60) heptane	11.21	57	4129	3.78	ug/L	93
61) 1,2-dichloroethane	10.87	62	9927	4.11	ug/L	96
62) trichloroethene	11.80	130	7475	3.98	ug/L	86
63) ethyl acrylate	11.81	55	9009	3.82	ug/L	88
64) 2-nitropropane	12.79	41	2597	4.47	ug/L	81
65) 2-chloroethyl vinyl ether	12.89	63	27117	20.29	ug/L	98
66) methyl methacrylate	12.16	100	1791	3.76	ug/L	94
67) 1,2-dichloropropane	12.18	76	3262	4.13	ug/L	91
68) dibromomethane	12.32	93	5017	4.20	ug/L	98
69) methylcyclohexane	12.20	83	12887	4.07	ug/L	97
70) bromodichloromethane	12.54	83	10433	3.91	ug/L	95
71) cis-1,3-dichloropropene	13.16	75	12892	4.01	ug/L	93
72) 4-methyl-2-pentanone	13.31	58	13621	16.82	ug/L	94
73) 3-methyl-1-butanol	13.35	70	5192	10.76	ug/L #	72
76) toluene	13.68	92	17157	3.95	ug/L	97
77) trans-1,3-dichloropropene	13.94	75	11229	3.98	ug/L	95
78) ethyl methacrylate	13.97	69	9385	4.20	ug/L	86
79) 1,1,2-trichloroethane	14.23	83	6048	4.10	ug/L	93
80) tetrachloroethene	14.43	164	6700	4.23	ug/L	91
81) 1,3-dichloropropane	14.48	76	11657	4.21	ug/L	94
82) 2-hexanone	14.48	58	11620	17.37	ug/L	97
83) butyl acetate	14.62	56	5954	4.20	ug/L	87
84) dibromochloromethane	14.80	129	8321	4.05	ug/L	98
85) 1,2-dibromoethane	14.99	107	8312	4.22	ug/L	97
86) n-butyl ether	15.67	57	32022	3.92	ug/L	100
87) chlorobenzene	15.65	112	19240	3.88	ug/L	94
88) 1,1,1,2-tetrachloroethane	15.75	131	8977	3.98	ug/L	95
89) ethylbenzene	15.75	91	33460	3.98	ug/L	100
90) m,p-xylene	15.92	106	26666	8.00	ug/L	95
91) o-xylene	16.44	91	30354	3.93	ug/L	95
92) styrene	16.45	104	22243	4.14	ug/L	98
93) butyl acrylate	16.26	55	17898	3.95	ug/L	97
94) bromoform	16.72	173	6081	4.19	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181284.D
 Acq On : 2 May 2019 6:56 pm
 Operator : juntaep
 Sample : ic7749-4
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 09 14:50:22 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

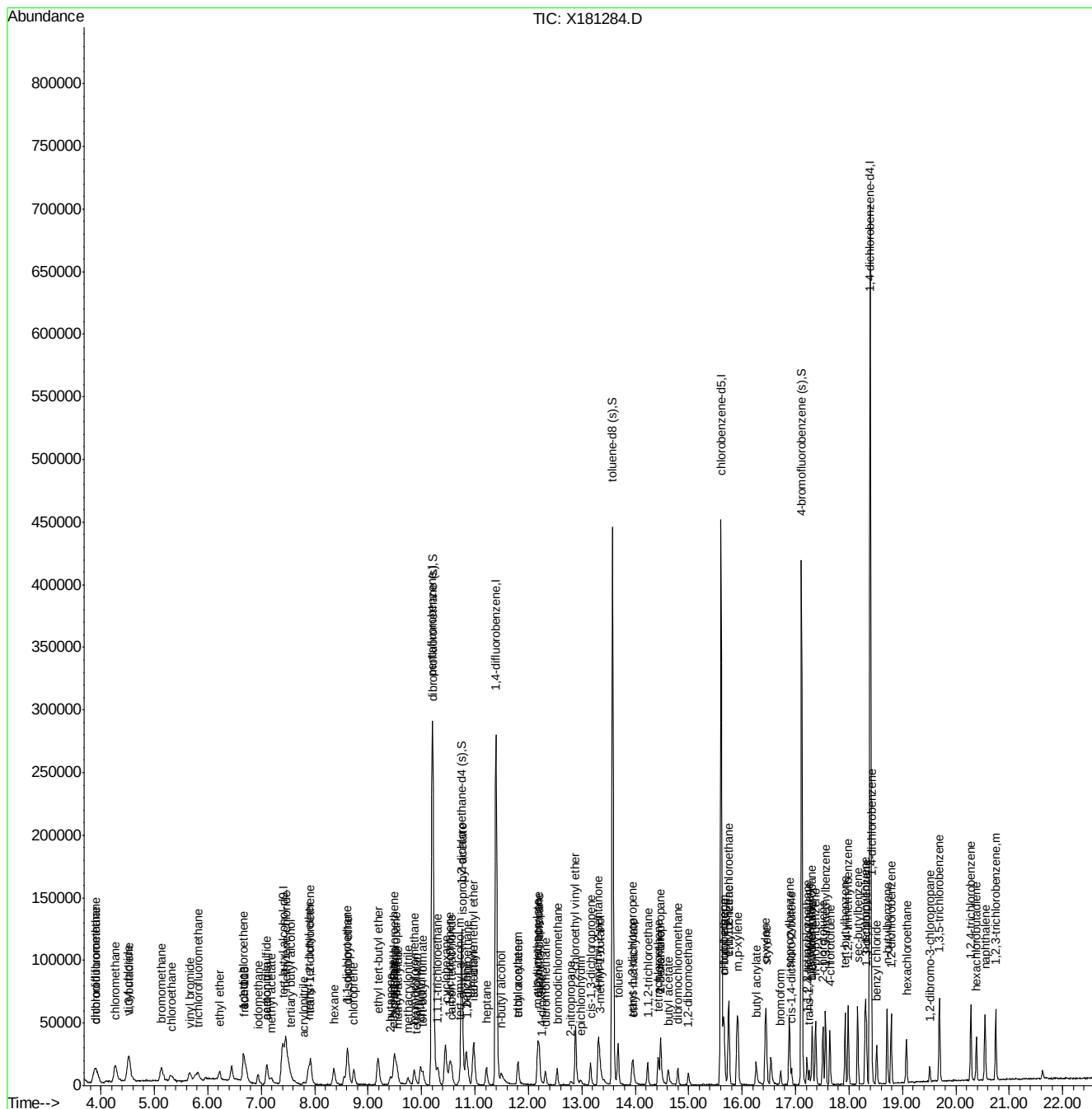
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) isopropylbenzene	16.88	105	38312	3.88	ug/L	99
96) cis-1,4-dichloro-2-butene	16.92	88	3024	4.02	ug/L	87
99) bromobenzene	17.32	156	10049	3.84	ug/L	98
100) 1,1,2,2-tetrachloroethane	17.22	83	10631	3.76	ug/L	97
101) trans-1,4-dichloro-2-buten	17.26	53	2534	3.95	ug/L	90
102) 1,2,3-trichloropropane	17.30	110	2919	4.26	ug/L #	67
103) n-propylbenzene	17.38	91	41611	3.82	ug/L	99
104) 2-chlorotoluene	17.51	126	9584	3.88	ug/L	90
105) 4-chlorotoluene	17.64	91	25320	3.81	ug/L	99
106) 1,3,5-trimethylbenzene	17.56	105	32410	3.82	ug/L	97
107) tert-butylbenzene	17.93	119	27183	3.61	ug/L	98
108) 1,2,4-trimethylbenzene	17.98	105	33451	3.74	ug/L	99
109) sec-butylbenzene	18.16	105	42285	3.71	ug/L	97
110) 1,3-dichlorobenzene	18.32	146	20297	4.03	ug/L	99
111) p-isopropyltoluene	18.30	119	36754	3.70	ug/L	99
112) 1,4-dichlorobenzene	18.42	146	19234	3.82	ug/L	100
113) 1,2-dichlorobenzene	18.79	146	22234	3.89	ug/L	99
114) benzyl chloride	18.52	91	22022	3.80	ug/L	96
115) n-butylbenzene	18.72	92	17543	3.71	ug/L	97
116) 1,2-dibromo-3-chloropropan	19.51	157	3339	3.75	ug/L	94
117) 1,3,5-trichlorobenzene	19.69	180	21756	3.90	ug/L	97
118) hexachlorobutadiene	20.39	225	7174	3.78	ug/L	98
119) naphthalene	20.55	128	42667	3.64	ug/L	98
121) 1,2,4-trichlorobenzene	20.28	180	19326	3.77	ug/L	98
122) 1,2,3-trichlorobenzene	20.75	180	19156	3.68	ug/L	99
123) hexachloroethane	19.08	201	5806	3.50	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181284.D
Acq On : 2 May 2019 6:56 pm
Operator : juntaep
Sample : ic7749-4
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 09 14:50:22 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181285.D
 Acq On : 2 May 2019 7:25 pm
 Operator : juntaep
 Sample : ic7749-8
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 09 12:16:32 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	149671	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	216474	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	291131	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	279242	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.40	152	167114	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.22	113	89476	50.80	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	101.60%
54) 1,2-dichloroethane-d4 (s)	10.75	65	99684	51.91	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	103.82%
75) toluene-d8 (s)	13.58	98	334375	49.95	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.90%
98) 4-bromofluorobenzene (s)	17.11	95	135055	49.33	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.66%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.55	59	13791	42.31	ug/L	81
4) 1,4-dioxane	12.25	88	5362	221.26	ug/L	94
6) chlorodifluoromethane	3.89	51	53111	8.03	ug/L	97
7) dichlorodifluoromethane	3.87	85	55644	8.47	ug/L	94
8) chloromethane	4.27	50	68867	8.02	ug/L	98
9) vinyl chloride	4.51	62	55846	8.12	ug/L	99
10) bromomethane	5.13	96	28138	7.59	ug/L	97
11) chloroethane	5.31	64	19135	8.30	ug/L	93
12) vinyl bromide	5.66	106	20701	8.04	ug/L	96
13) trichlorofluoromethane	5.81	101	35041	8.36	ug/L	99
14) 1,3-butadiene	4.53	54	24884	8.47	ug/L	98
15) ethyl ether	6.22	74	7665	8.22	ug/L	# 82
16) acrolein	6.45	56	4614	9.20	ug/L	73
17) 1,1-dichloroethene	6.66	96	13160	8.43	ug/L	92
18) freon 113	6.71	101	21540	8.58	ug/L	91
19) acetone	6.66	43	20411	29.32	ug/L	97
20) acetonitrile	7.11	41	34261	84.95	ug/L	94
21) iodomethane	6.94	142	24256	8.07	ug/L	98
22) carbon disulfide	7.10	76	44733	8.06	ug/L	99
23) methylene chloride	7.46	84	16045	7.74	ug/L	99
24) methyl acetate	7.19	43	12339	8.20	ug/L	95
25) methyl tert butyl ether	7.88	73	53499	7.87	ug/L	99
26) trans-1,2-dichloroethene	7.92	96	14071	8.34	ug/L	93
27) hexane	8.36	57	20033	8.36	ug/L	94
28) di-isopropyl ether	8.62	45	61310	7.86	ug/L	99
29) 2-butanone	9.41	72	6228	31.94	ug/L	88
30) 1,1-dichloroethane	8.61	63	27164	8.40	ug/L	99
31) chloroprene	8.73	53	19952	8.28	ug/L	99
32) acrylonitrile	7.79	53	5812	8.61	ug/L	95
33) vinyl acetate	8.54	86	2417	7.73	ug/L	# 63
34) ethyl tert-butyl ether	9.18	59	58017	8.04	ug/L	98
35) ethyl acetate	9.45	45	2314	8.73	ug/L	88
36) 2,2-dichloropropane	9.53	77	26858	7.68	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181285.D
 Acq On : 2 May 2019 7:25 pm
 Operator : juntaep
 Sample : ic7749-8
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 09 12:16:32 2019

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M

Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)

QLast Update : Thu May 09 12:15:45 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	9.49	96	16211	8.52	ug/L	99
38) methyl acrylate	9.56	85	1714	7.47	ug/L #	37
39) propionitrile	9.49	54	22942	82.60	ug/L	89
40) tert-butyl formate	10.02	59	15301	8.44	ug/L	90
41) bromochloromethane	9.86	128	8021	8.11	ug/L	95
42) tetrahydrofuran	9.89	72	1825	8.06	ug/L #	82
43) chloroform	9.97	83	25254	7.71	ug/L	99
45) methacrylonitrile	9.75	67	5819	8.15	ug/L	96
46) 1,1,1-trichloroethane	10.31	97	25174	7.76	ug/L	98
47) cyclohexane	10.45	84	26974	7.53	ug/L	98
48) tert amyl alcohol	10.70	55	4629	41.08	ug/L	87
49) 1,1-dichloropropene	10.53	75	17229	8.28	ug/L	95
51) carbon tetrachloride	10.55	117	21617	7.94	ug/L	97
52) isopropyl acetate	10.76	87	2923	7.81	ug/L #	63
55) iso-octane	10.99	57	40079	7.75	ug/L	99
56) epichlorohydrin	12.97	57	8787	42.74	ug/L	94
57) n-butyl alcohol	11.48	56	25706	387.13	ug/L	95
58) benzene	10.83	78	53643	7.72	ug/L	98
59) tert-amyl methyl ether	10.97	73	51969	7.92	ug/L	98
60) heptane	11.22	57	8063	7.83	ug/L	97
61) 1,2-dichloroethane	10.87	62	18526	8.13	ug/L	94
62) trichloroethene	11.80	130	14698	8.29	ug/L	95
63) ethyl acrylate	11.81	55	18475	8.31	ug/L	96
64) 2-nitropropane	12.79	41	4221	7.70	ug/L	98
65) 2-chloroethyl vinyl ether	12.88	63	52415	41.60	ug/L	99
66) methyl methacrylate	12.17	100	3498	7.79	ug/L #	75
67) 1,2-dichloropropane	12.18	76	6224	8.35	ug/L	91
68) dibromomethane	12.32	93	9345	8.30	ug/L	93
69) methylcyclohexane	12.19	83	24155	8.09	ug/L	98
70) bromodichloromethane	12.53	83	19774	7.86	ug/L	99
71) cis-1,3-dichloropropene	13.16	75	24026	7.93	ug/L	97
72) 4-methyl-2-pentanone	13.31	58	25693	33.66	ug/L	99
73) 3-methyl-1-butanol	13.33	70	10850	23.84	ug/L	93
76) toluene	13.67	92	32778	7.90	ug/L	93
77) trans-1,3-dichloropropene	13.94	75	22134	8.22	ug/L	93
78) ethyl methacrylate	13.96	69	18520	8.67	ug/L	95
79) 1,1,2-trichloroethane	14.23	83	11420	8.10	ug/L	94
80) tetrachloroethene	14.43	164	12485	8.24	ug/L	98
81) 1,3-dichloropropane	14.47	76	22111	8.36	ug/L	99
82) 2-hexanone	14.47	58	23898	37.39	ug/L	99
83) butyl acetate	14.61	56	11508	8.49	ug/L	95
84) dibromochloromethane	14.80	129	15267	7.77	ug/L	93
85) 1,2-dibromoethane	14.99	107	15469	8.21	ug/L	98
86) n-butyl ether	15.66	57	60295	7.72	ug/L	99
87) chlorobenzene	15.65	112	37956	8.01	ug/L	94
88) 1,1,1,2-tetrachloroethane	15.74	131	17074	7.92	ug/L	95
89) ethylbenzene	15.75	91	62748	7.81	ug/L	97
90) m,p-xylene	15.91	106	50787	15.94	ug/L	98
91) o-xylene	16.44	91	57810	7.83	ug/L	96
92) styrene	16.45	104	42953	8.36	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181285.D
 Acq On : 2 May 2019 7:25 pm
 Operator : juntaep
 Sample : ic7749-8
 Misc : MS34046,VX7749,5,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 09 12:16:32 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

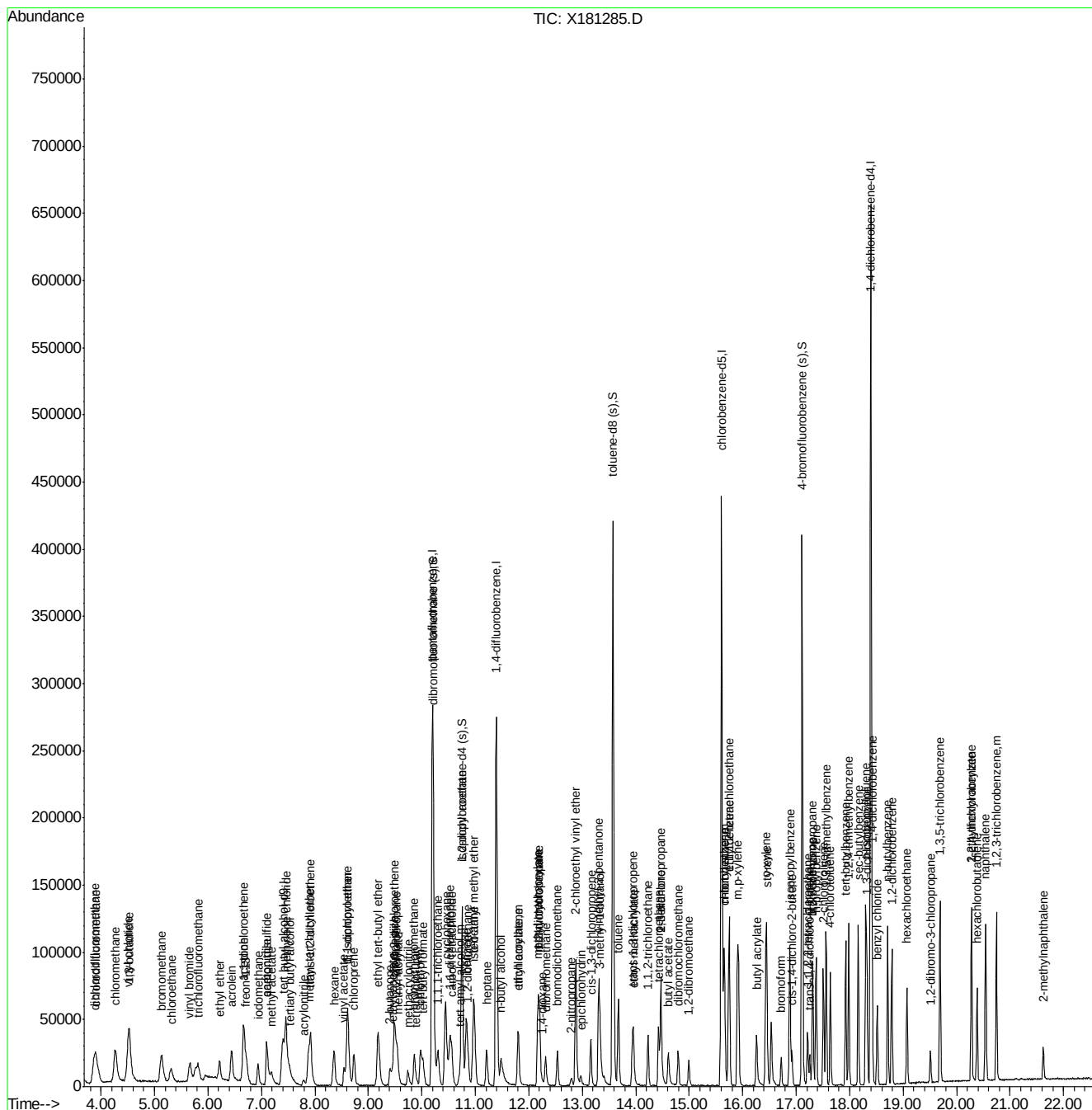
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) butyl acrylate	16.26	55	33740	7.79	ug/L	98
94) bromoform	16.72	173	10847	7.82	ug/L	95
95) isopropylbenzene	16.88	105	71703	7.60	ug/L	99
96) cis-1,4-dichloro-2-butene	16.92	88	6274	8.73	ug/L	96
99) bromobenzene	17.32	156	19384	8.00	ug/L	94
100) 1,1,2,2-tetrachloroethane	17.22	83	19828	7.57	ug/L	96
101) trans-1,4-dichloro-2-buten	17.25	53	4828	8.12	ug/L	88
102) 1,2,3-trichloropropane	17.30	110	5235	8.25	ug/L #	75
103) n-propylbenzene	17.37	91	77509	7.67	ug/L	100
104) 2-chlorotoluene	17.51	126	16984	7.42	ug/L	89
105) 4-chlorotoluene	17.64	91	47467	7.72	ug/L	99
106) 1,3,5-trimethylbenzene	17.56	105	59504	7.58	ug/L	99
107) tert-butylbenzene	17.93	119	51877	7.44	ug/L	97
108) 1,2,4-trimethylbenzene	17.98	105	62960	7.61	ug/L	98
109) sec-butylbenzene	18.16	105	78856	7.46	ug/L	98
110) 1,3-dichlorobenzene	18.32	146	37003	7.93	ug/L	100
111) p-isopropyltoluene	18.30	119	69618	7.57	ug/L	99
112) 1,4-dichlorobenzene	18.42	146	35679	7.65	ug/L	97
113) 1,2-dichlorobenzene	18.79	146	41561	7.84	ug/L	99
114) benzyl chloride	18.52	91	41014	7.63	ug/L	100
115) n-butylbenzene	18.71	92	33288	7.59	ug/L	98
116) 1,2-dibromo-3-chloropropan	19.51	157	6620	8.02	ug/L	96
117) 1,3,5-trichlorobenzene	19.69	180	41600	8.04	ug/L	98
118) hexachlorobutadiene	20.39	225	13649	7.75	ug/L	95
119) naphthalene	20.54	128	92691	8.53	ug/L	99
120) 2-ethylhexyl acrylate	20.29	70	1201	0.64	ug/L	84
121) 1,2,4-trichlorobenzene	20.28	180	40371	8.49	ug/L	98
122) 1,2,3-trichlorobenzene	20.75	180	40622	8.42	ug/L	97
123) hexachloroethane	19.07	201	11384	7.40	ug/L	95
124) 2-methylnaphthalene	21.62	142	13193	2.39	ug/L	92

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

Quantitation Report (QT Reviewed)

```
Data Path   : C:\MSDCHEM\1\DATA\VX7749\
Data File   : X181285.D
Acq On      : 2 May 2019    7:25 pm
Operator    : juntaep
Sample      : ic7749-8
Misc        : MS34046,VX7749,5,,,,,1
ALS Vial    : 7    Sample Multiplier: 1
```

Quant Time: May 09 12:16:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration



MX7749.M Fri May 10 08:36:27 2019 GCMSX

Page: 4

7.6.6

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181286.D
 Acq On : 2 May 2019 7:54 pm
 Operator : juntaep
 Sample : ic7749-20
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 09 12:16:50 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	152100	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	216897	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	290117	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	281247	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.40	152	155830	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	86852	49.21	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.42%
54) 1,2-dichloroethane-d4 (s)	10.75	65	97657	51.03	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	102.06%
75) toluene-d8 (s)	13.58	98	334406	49.60	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.20%
98) 4-bromofluorobenzene (s)	17.11	95	131100	51.35	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.70%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.53	59	34135	103.04	ug/L	91
4) 1,4-dioxane	12.25	88	14671	595.74	ug/L	95
6) chlorodifluoromethane	3.89	51	131883	19.90	ug/L	96
7) dichlorodifluoromethane	3.86	85	135884	20.64	ug/L	98
8) chloromethane	4.26	50	165293	19.22	ug/L	98
9) vinyl chloride	4.50	62	134510	19.52	ug/L	99
10) bromomethane	5.13	96	66288	17.84	ug/L	98
11) chloroethane	5.31	64	43633	18.90	ug/L	97
12) vinyl bromide	5.65	106	49415	19.15	ug/L	97
13) trichlorofluoromethane	5.81	101	82688	19.69	ug/L	95
14) 1,3-butadiene	4.53	54	55743	18.94	ug/L	95
15) ethyl ether	6.22	74	18853	20.18	ug/L	94
16) acrolein	6.45	56	8940	17.78	ug/L	97
17) 1,1-dichloroethene	6.67	96	30704	19.63	ug/L	99
18) freon 113	6.70	101	49440	19.65	ug/L	97
19) acetone	6.66	43	47590	68.22	ug/L	97
20) acetonitrile	7.11	41	77275	191.23	ug/L	98
21) iodomethane	6.94	142	59277	19.69	ug/L	99
22) carbon disulfide	7.10	76	106687	19.18	ug/L	100
23) methylene chloride	7.46	84	37538	18.07	ug/L	99
24) methyl acetate	7.19	43	29411	19.51	ug/L	91
25) methyl tert butyl ether	7.89	73	130277	19.13	ug/L	99
26) trans-1,2-dichloroethene	7.92	96	33274	19.69	ug/L	96
27) hexane	8.36	57	48415	20.17	ug/L	99
28) di-isopropyl ether	8.61	45	147390	18.87	ug/L	100
29) 2-butanone	9.40	72	16644	85.20	ug/L	100
30) 1,1-dichloroethane	8.60	63	64371	19.87	ug/L	97
31) chloroprene	8.73	53	49613	20.55	ug/L	96
32) acrylonitrile	7.79	53	14731	21.78	ug/L	97
33) vinyl acetate	8.54	86	6730	21.48	ug/L	# 88
34) ethyl tert-butyl ether	9.18	59	141784	19.60	ug/L	97
35) ethyl acetate	9.44	45	6846	25.79	ug/L	80
36) 2,2-dichloropropane	9.52	77	62599	17.87	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181286.D
 Acq On : 2 May 2019 7:54 pm
 Operator : juntaep
 Sample : ic7749-20
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 09 12:16:50 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	9.49	96	38434	20.17	ug/L	97
38) methyl acrylate	9.55	85	5184	22.56	ug/L #	68
39) propionitrile	9.48	54	58250	209.32	ug/L	99
40) tert-butyl formate	10.02	59	36256	19.95	ug/L	98
41) bromochloromethane	9.85	128	20131	20.31	ug/L	93
42) tetrahydrofuran	9.89	72	5315	23.43	ug/L	94
43) chloroform	9.98	83	60671	18.48	ug/L	98
45) methacrylonitrile	9.74	67	14704	20.55	ug/L	98
46) 1,1,1-trichloroethane	10.30	97	62783	19.33	ug/L	97
47) cyclohexane	10.45	84	73501	20.48	ug/L	86
48) tert amyl alcohol	10.70	55	11184	99.06	ug/L	91
49) 1,1-dichloropropene	10.52	75	43086	20.67	ug/L	99
51) carbon tetrachloride	10.56	117	53274	19.53	ug/L	93
52) isopropyl acetate	10.75	87	7963	21.23	ug/L	95
55) iso-octane	10.98	57	96701	18.76	ug/L	96
56) epichlorohydrin	12.97	57	20419	99.66	ug/L	95
57) n-butyl alcohol	11.47	56	66679	1007.70	ug/L	98
58) benzene	10.83	78	131803	19.02	ug/L	98
59) tert-amyl methyl ether	10.97	73	126433	19.34	ug/L	98
60) heptane	11.21	57	20840	20.30	ug/L	94
61) 1,2-dichloroethane	10.87	62	43979	19.37	ug/L	99
62) trichloroethene	11.80	130	36084	20.43	ug/L	98
63) ethyl acrylate	11.80	55	47908	21.61	ug/L	95
64) 2-nitropropane	12.80	41	10134	18.54	ug/L	93
65) 2-chloroethyl vinyl ether	12.87	63	132938	105.87	ug/L	99
66) methyl methacrylate	12.16	100	9650	21.57	ug/L #	80
67) 1,2-dichloropropane	12.17	76	15506	20.89	ug/L	98
68) dibromomethane	12.32	93	22797	20.32	ug/L	94
69) methylcyclohexane	12.20	83	59311	19.92	ug/L	100
70) bromodichloromethane	12.53	83	49460	19.74	ug/L	98
71) cis-1,3-dichloropropene	13.16	75	60106	19.91	ug/L	99
72) 4-methyl-2-pentanone	13.30	58	65089	85.57	ug/L	95
73) 3-methyl-1-butanol	13.33	70	27187	59.95	ug/L	97
76) toluene	13.67	92	82426	19.72	ug/L	99
77) trans-1,3-dichloropropene	13.94	75	55183	20.34	ug/L	96
78) ethyl methacrylate	13.96	69	47558	22.10	ug/L	96
79) 1,1,2-trichloroethane	14.22	83	28535	20.10	ug/L	93
80) tetrachloroethene	14.43	164	30917	20.27	ug/L	94
81) 1,3-dichloropropane	14.47	76	54274	20.38	ug/L	97
82) 2-hexanone	14.46	58	57434	89.21	ug/L	98
83) butyl acetate	14.61	56	27442	20.10	ug/L	90
84) dibromochloromethane	14.79	129	38840	19.63	ug/L	98
85) 1,2-dibromoethane	14.99	107	39545	20.85	ug/L	95
86) n-butyl ether	15.66	57	150518	19.14	ug/L	99
87) chlorobenzene	15.65	112	93850	19.66	ug/L	98
88) 1,1,1,2-tetrachloroethane	15.74	131	42025	19.34	ug/L	99
89) ethylbenzene	15.75	91	154754	19.12	ug/L	100
90) m,p-xylene	15.91	106	123160	38.38	ug/L	96
91) o-xylene	16.43	91	140636	18.91	ug/L	98
92) styrene	16.45	104	103147	19.94	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181286.D
 Acq On : 2 May 2019 7:54 pm
 Operator : juntaep
 Sample : ic7749-20
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 09 12:16:50 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) butyl acrylate	16.25	55	84855	19.46	ug/L	97
94) bromoform	16.72	173	27501	19.70	ug/L	98
95) isopropylbenzene	16.88	105	179084	18.84	ug/L	99
96) cis-1,4-dichloro-2-butene	16.92	88	15267	21.10	ug/L	97
99) bromobenzene	17.32	156	45538	20.17	ug/L	95
100) 1,1,2,2-tetrachloroethane	17.22	83	48735	19.95	ug/L	95
101) trans-1,4-dichloro-2-buten	17.25	53	11504	20.74	ug/L	90
102) 1,2,3-trichloropropane	17.30	110	12954	21.89	ug/L #	78
103) n-propylbenzene	17.37	91	185284	19.67	ug/L	98
104) 2-chlorotoluene	17.51	126	42762	20.04	ug/L	99
105) 4-chlorotoluene	17.64	91	111510	19.45	ug/L	100
106) 1,3,5-trimethylbenzene	17.56	105	145074	19.81	ug/L	100
107) tert-butylbenzene	17.93	119	131279	20.19	ug/L	98
108) 1,2,4-trimethylbenzene	17.98	105	148751	19.28	ug/L	99
109) sec-butylbenzene	18.16	105	193001	19.59	ug/L	99
110) 1,3-dichlorobenzene	18.32	146	85670	19.68	ug/L	98
111) p-isopropyltoluene	18.30	119	166302	19.39	ug/L	99
112) 1,4-dichlorobenzene	18.42	146	82911	19.06	ug/L	98
113) 1,2-dichlorobenzene	18.78	146	96223	19.48	ug/L	98
114) benzyl chloride	18.51	91	95969	19.15	ug/L	99
115) n-butylbenzene	18.71	92	81465	19.93	ug/L	98
116) 1,2-dibromo-3-chloropropan	19.51	157	16657	21.63	ug/L	94
117) 1,3,5-trichlorobenzene	19.69	180	99249	20.58	ug/L	99
118) hexachlorobutadiene	20.39	225	31982	19.48	ug/L	98
119) naphthalene	20.54	128	238493	23.54	ug/L	99
120) 2-ethylhexyl acrylate	20.28	70	4968	2.82	ug/L	96
121) 1,2,4-trichlorobenzene	20.28	180	101465	22.89	ug/L	98
122) 1,2,3-trichlorobenzene	20.75	180	102731	22.85	ug/L	98
123) hexachloroethane	19.07	201	29579	20.62	ug/L	94
124) 2-methylnaphthalene	21.62	142	48993	9.51	ug/L	99

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

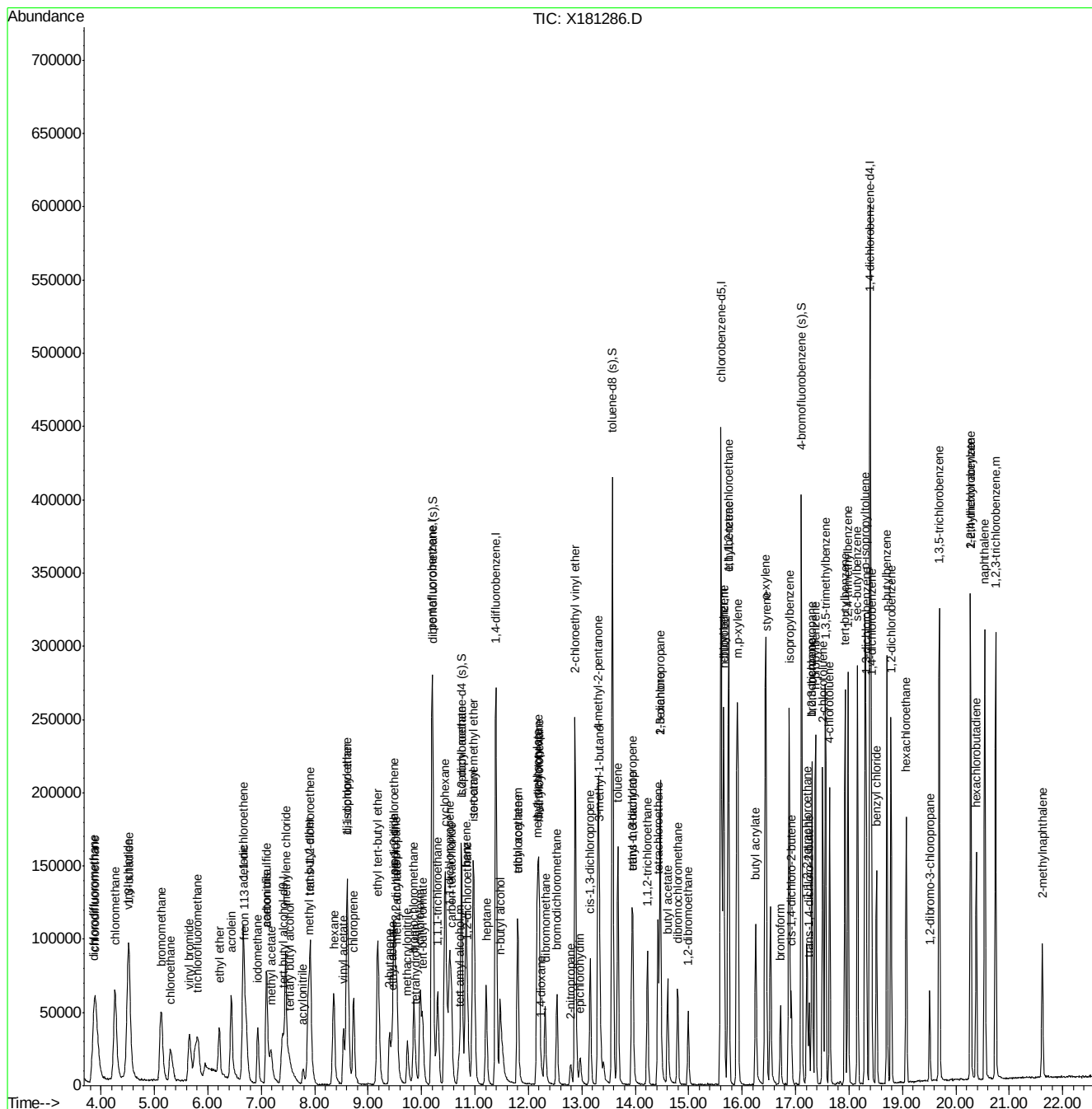
Quantitation Report (QT Reviewed)

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Data Path   : C:\MSDCHEM\1\DATA\VX7749\
Data File   : X181286.D
Acq On      : 2 May 2019    7:54 pm
Operator    : juntaep
Sample      : ic7749-20
Misc        : MS34046,VX7749,5,,,,,1
ALS Vial    : 8      Sample Multiplier: 1

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Quant Time: May 09 12:16:50 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration



MX7749.M Fri May 10 08:36:33 2019 GCMSX

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181287.D
 Acq On : 2 May 2019 8:22 pm
 Operator : juntaep
 Sample : icc7749-50
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 12:17:04 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	145338	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	208943	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	284098	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	281371	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	146102	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	83930	49.37	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.74%
54) 1,2-dichloroethane-d4 (s)	10.75	65	90949	48.53	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	97.06%
75) toluene-d8 (s)	13.58	98	333328	49.42	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	98.84%
98) 4-bromofluorobenzene (s)	17.11	95	127939	53.45	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	106.90%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.55	59	84484	266.89	ug/L	100
4) 1,4-dioxane	12.24	88	36555	1553.43	ug/L	100
6) chlorodifluoromethane	3.90	51	322939	50.59	ug/L	100
7) dichlorodifluoromethane	3.88	85	342295	53.96	ug/L	100
8) chloromethane	4.27	50	401685	48.49	ug/L	100
9) vinyl chloride	4.51	62	325523	49.05	ug/L	100
10) bromomethane	5.13	96	170625	47.68	ug/L	100
11) chloroethane	5.31	64	115151	51.76	ug/L	100
12) vinyl bromide	5.66	106	134744	54.21	ug/L	100
13) trichlorofluoromethane	5.81	101	211086	52.19	ug/L	100
14) 1,3-butadiene	4.53	54	139870	49.34	ug/L	100
15) ethyl ether	6.22	74	46034	51.16	ug/L	100
16) acrolein	6.44	56	19411	40.08	ug/L	100
17) 1,1-dichloroethene	6.67	96	73482	48.77	ug/L	100
18) freon 113	6.70	101	123725	51.04	ug/L	100
19) acetone	6.65	43	104860	156.05	ug/L	99
20) acetonitrile	7.11	41	174586	448.48	ug/L	100
21) iodomethane	6.93	142	145135	50.05	ug/L	100
22) carbon disulfide	7.10	76	264625	49.39	ug/L	100
23) methylene chloride	7.46	84	89971	44.95	ug/L	100
24) methyl acetate	7.18	43	67760	46.66	ug/L	100
25) methyl tert butyl ether	7.89	73	320792	48.91	ug/L	100
26) trans-1,2-dichloroethene	7.92	96	78298	48.10	ug/L	100
27) hexane	8.36	57	118622	51.31	ug/L	100
28) di-isopropyl ether	8.61	45	355783	47.27	ug/L	100
29) 2-butanone	9.40	72	40992	217.81	ug/L	100
30) 1,1-dichloroethane	8.60	63	151937	48.68	ug/L	100
31) chloroprene	8.73	53	117437	50.50	ug/L	100
32) acrylonitrile	7.78	53	35901	55.10	ug/L	100
33) vinyl acetate	8.53	86	16321	54.07	ug/L	100
34) ethyl tert-butyl ether	9.18	59	356179	51.12	ug/L	100
35) ethyl acetate	9.43	45	15562	60.85	ug/L	100
36) 2,2-dichloropropane	9.53	77	152682	45.25	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181287.D
 Acq On : 2 May 2019 8:22 pm
 Operator : juntaep
 Sample : icc7749-50
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 12:17:04 2019

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M

Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)

QLast Update : Thu May 09 12:15:45 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	9.49	96	89745	48.88	ug/L	100
38) methyl acrylate	9.54	85	12651	57.14	ug/L	100
39) propionitrile	9.48	54	138742	517.55	ug/L	100
40) tert-butyl formate	10.02	59	89118	50.92	ug/L	100
41) bromochloromethane	9.86	128	48719	51.02	ug/L	100
42) tetrahydrofuran	9.89	72	12188	55.78	ug/L	100
43) chloroform	9.97	83	145147	45.89	ug/L	100
45) methacrylonitrile	9.73	67	36008	52.25	ug/L	100
46) 1,1,1-trichloroethane	10.30	97	161653	51.66	ug/L	100
47) cyclohexane	10.45	84	185862	53.75	ug/L	100
48) tert amyl alcohol	10.70	55	26431	243.03	ug/L	100
49) 1,1-dichloropropene	10.52	75	100608	50.10	ug/L	100
51) carbon tetrachloride	10.56	117	133037	50.62	ug/L	100
52) isopropyl acetate	10.75	87	19575	54.17	ug/L	100
55) iso-octane	10.99	57	254028	50.34	ug/L	100
56) epichlorohydrin	12.97	57	49960	249.01	ug/L	100
57) n-butyl alcohol	11.47	56	171520	2647.05	ug/L	100
58) benzene	10.83	78	317096	46.74	ug/L	100
59) tert-amyl methyl ether	10.97	73	310360	48.47	ug/L	100
60) heptane	11.21	57	51617	51.34	ug/L	100
61) 1,2-dichloroethane	10.87	62	104191	46.86	ug/L	100
62) trichloroethene	11.80	130	87744	50.72	ug/L	100
63) ethyl acrylate	11.80	55	114701	52.84	ug/L	100
64) 2-nitropropane	12.79	41	24514	45.81	ug/L	100
65) 2-chloroethyl vinyl ether	12.87	63	318055	258.66	ug/L	100
66) methyl methacrylate	12.15	100	24130	55.07	ug/L	100
67) 1,2-dichloropropane	12.17	76	36833	50.67	ug/L	100
68) dibromomethane	12.31	93	55365	50.40	ug/L	100
69) methylcyclohexane	12.20	83	150445	51.60	ug/L	100
70) bromodichloromethane	12.53	83	120661	49.17	ug/L	100
71) cis-1,3-dichloropropene	13.16	75	148426	50.20	ug/L	100
72) 4-methyl-2-pentanone	13.30	58	159680	214.36	ug/L	100
73) 3-methyl-1-butanol	13.33	70	65895	148.38	ug/L	100
76) toluene	13.67	92	204440	48.89	ug/L	100
77) trans-1,3-dichloropropene	13.94	75	134822	49.66	ug/L	100
78) ethyl methacrylate	13.95	69	118709	55.14	ug/L	100
79) 1,1,2-trichloroethane	14.23	83	70774	49.82	ug/L	100
80) tetrachloroethene	14.42	164	76269	49.98	ug/L	100
81) 1,3-dichloropropane	14.46	76	126617	47.52	ug/L	100
82) 2-hexanone	14.46	58	136351	211.70	ug/L	100
83) butyl acetate	14.60	56	68357	50.05	ug/L	100
84) dibromochloromethane	14.79	129	99183	50.10	ug/L	100
85) 1,2-dibromoethane	14.99	107	98642	51.99	ug/L	100
86) n-butyl ether	15.66	57	375030	47.68	ug/L	100
87) chlorobenzene	15.65	112	231474	48.46	ug/L	100
88) 1,1,1,2-tetrachloroethane	15.74	131	105455	48.52	ug/L	100
89) ethylbenzene	15.74	91	370373	45.74	ug/L	100
90) m,p-xylene	15.91	106	297252	92.60	ug/L	100
91) o-xylene	16.43	91	348814	46.89	ug/L	100
92) styrene	16.45	104	248617	48.05	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181287.D
 Acq On : 2 May 2019 8:22 pm
 Operator : juntaep
 Sample : icc7749-50
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 12:17:04 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

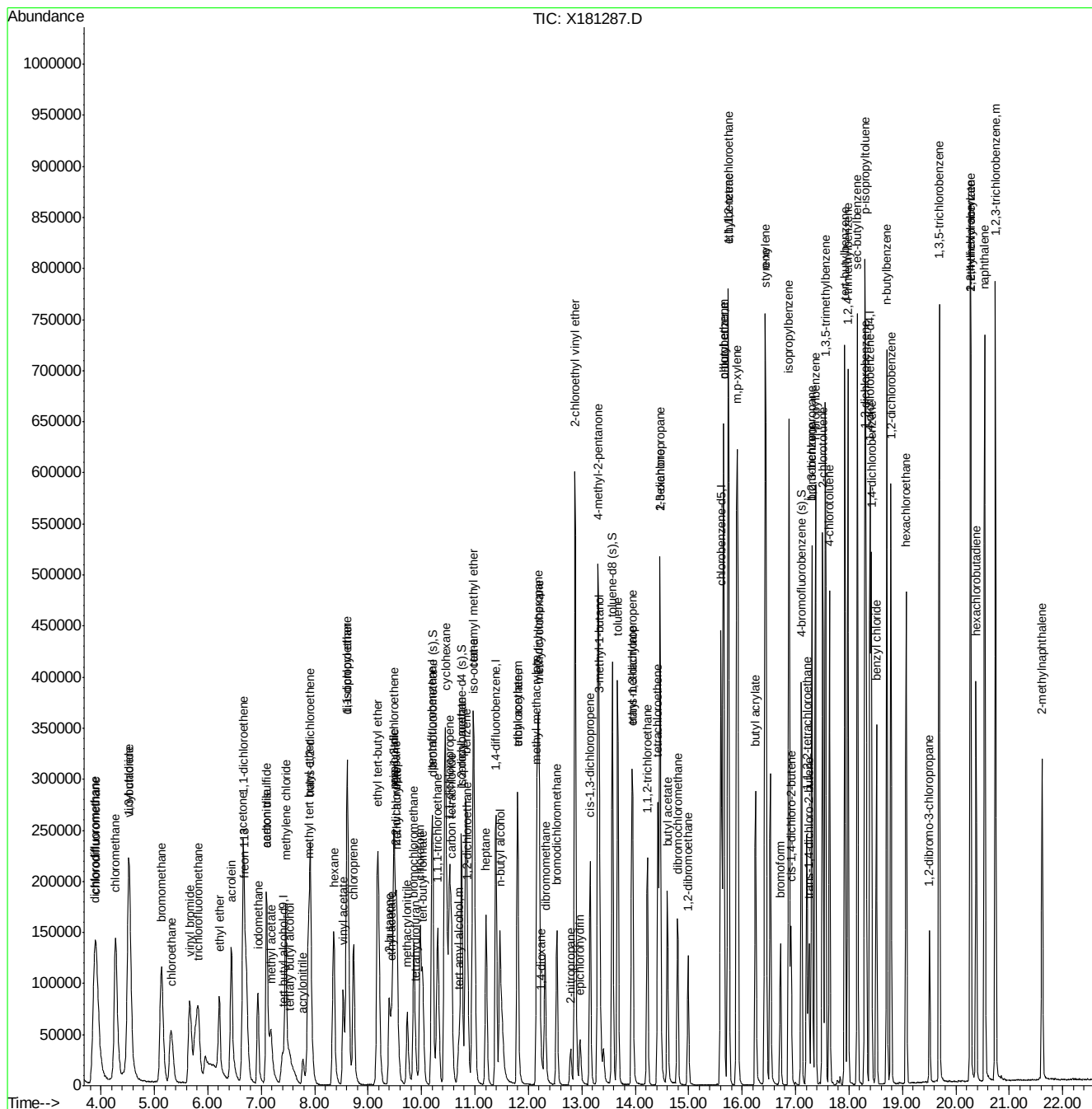
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) butyl acrylate	16.25	55	207991	47.69	ug/L	100
94) bromoform	16.72	173	70219	50.27	ug/L	100
95) isopropylbenzene	16.88	105	459654	48.34	ug/L	100
96) cis-1,4-dichloro-2-butene	16.92	88	36670	50.65	ug/L	100
99) bromobenzene	17.31	156	109689	51.81	ug/L	100
100) 1,1,2,2-tetrachloroethane	17.21	83	122507	53.49	ug/L	100
101) trans-1,4-dichloro-2-buten	17.25	53	27294	52.48	ug/L	100
102) 1,2,3-trichloropropane	17.30	110	30265	54.55	ug/L	100
103) n-propylbenzene	17.37	91	456470	51.69	ug/L	100
104) 2-chlorotoluene	17.51	126	107346	53.64	ug/L	100
105) 4-chlorotoluene	17.63	91	265371	49.36	ug/L	100
106) 1,3,5-trimethylbenzene	17.56	105	360771	52.55	ug/L	100
107) tert-butylbenzene	17.92	119	341343	55.98	ug/L	100
108) 1,2,4-trimethylbenzene	17.98	105	365961	50.58	ug/L	100
109) sec-butylbenzene	18.16	105	499786	54.12	ug/L	100
110) 1,3-dichlorobenzene	18.32	146	196651	48.19	ug/L	100
111) p-isopropyltoluene	18.30	119	422297	52.51	ug/L	100
112) 1,4-dichlorobenzene	18.42	146	197283	48.38	ug/L	100
113) 1,2-dichlorobenzene	18.78	146	227388	49.09	ug/L	100
114) benzyl chloride	18.51	91	229226	48.80	ug/L	100
115) n-butylbenzene	18.71	92	205949	53.73	ug/L	100
116) 1,2-dibromo-3-chloropropan	19.51	157	41289	57.19	ug/L	100
117) 1,3,5-trichlorobenzene	19.69	180	239887	53.06	ug/L	100
118) hexachlorobutadiene	20.38	225	80586	52.36	ug/L	100
119) naphthalene	20.54	128	586488	61.74	ug/L	100
120) 2-ethylhexyl acrylate	20.28	70	21439	12.97	ug/L	100
121) 1,2,4-trichlorobenzene	20.28	180	248362	59.76	ug/L	100
122) 1,2,3-trichlorobenzene	20.74	180	254569	60.39	ug/L	100
123) hexachloroethane	19.07	201	81327	60.46	ug/L	100
124) 2-methylnaphthalene	21.61	142	165754	34.32	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181287.D
Acq On : 2 May 2019 8:22 pm
Operator : juntaep
Sample : icc7749-50
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 12:17:04 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181288.D
 Acq On : 2 May 2019 8:51 pm
 Operator : juntaep
 Sample : ic7749-100
 Misc : MS34046,VX7749,5,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 12:17:21 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	136709	500.00	ug/L	0.00
5) pentafluorobenzene	10.19	168	195312	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	268801	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	274931	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	137319	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	81987	51.59	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.18%
54) 1,2-dichloroethane-d4 (s)	10.75	65	83104	46.87	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	93.74%
75) toluene-d8 (s)	13.57	98	313590	47.58	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.16%
98) 4-bromofluorobenzene (s)	17.11	95	123655	54.97	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	109.94%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.54	59	156671	526.18	ug/L	98
4) 1,4-dioxane	12.24	88	67566	3052.49	ug/L	96
6) chlorodifluoromethane	3.89	51	590274	98.92	ug/L	99
7) dichlorodifluoromethane	3.86	85	621630	104.84	ug/L	99
8) chloromethane	4.26	50	717941	92.72	ug/L	100
9) vinyl chloride	4.50	62	580982	93.65	ug/L	99
10) bromomethane	5.12	96	298438	89.21	ug/L	99
11) chloroethane	5.30	64	204730	98.46	ug/L	99
12) vinyl bromide	5.65	106	245149	105.51	ug/L	98
13) trichlorofluoromethane	5.81	101	385496	101.96	ug/L	100
14) 1,3-butadiene	4.53	54	244666	92.33	ug/L	98
15) ethyl ether	6.21	74	86556	102.91	ug/L	96
16) acrolein	6.44	56	35300	77.97	ug/L	95
17) 1,1-dichloroethene	6.66	96	137257	97.46	ug/L	99
18) freon 113	6.69	101	218136	96.27	ug/L	97
19) acetone	6.65	43	194510	309.66	ug/L	97
20) acetonitrile	7.10	41	313853	862.50	ug/L	97
21) iodomethane	6.93	142	274020	101.10	ug/L	99
22) carbon disulfide	7.10	76	485653	96.98	ug/L	99
23) methylene chloride	7.45	84	170666	91.21	ug/L	99
24) methyl acetate	7.18	43	121043	89.18	ug/L	99
25) methyl tert butyl ether	7.88	73	586357	95.63	ug/L	99
26) trans-1,2-dichloroethene	7.92	96	145279	95.47	ug/L	99
27) hexane	8.35	57	210253	97.29	ug/L	99
28) di-isopropyl ether	8.61	45	631714	89.79	ug/L	97
29) 2-butanone	9.40	72	74828	425.35	ug/L	98
30) 1,1-dichloroethane	8.60	63	278015	95.29	ug/L	98
31) chloroprene	8.73	53	216516	99.60	ug/L	96
32) acrylonitrile	7.78	53	67555	110.91	ug/L	97
33) vinyl acetate	8.53	86	31011	109.90	ug/L	98
34) ethyl tert-butyl ether	9.18	59	656499	100.79	ug/L	99
35) ethyl acetate	9.44	45	27201	113.78	ug/L	88
36) 2,2-dichloropropane	9.52	77	272367	86.35	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181288.D
 Acq On : 2 May 2019 8:51 pm
 Operator : juntaep
 Sample : ic7749-100
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 12:17:21 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	9.48	96	164293	95.74	ug/L	98
38) methyl acrylate	9.54	85	22640	109.40	ug/L #	87
39) propionitrile	9.47	54	238764	952.82	ug/L	99
40) tert-butyl formate	10.02	59	157236	96.10	ug/L	98
41) bromochloromethane	9.85	128	90239	101.09	ug/L	97
42) tetrahydrofuran	9.88	72	21195	103.77	ug/L	88
43) chloroform	9.97	83	268717	90.89	ug/L	97
45) methacrylonitrile	9.73	67	66228	102.81	ug/L	95
46) 1,1,1-trichloroethane	10.30	97	302136	103.29	ug/L	99
47) cyclohexane	10.45	84	333188	103.08	ug/L	95
48) tert amyl alcohol	10.70	55	47704	469.24	ug/L	94
49) 1,1-dichloropropene	10.52	75	182898	97.43	ug/L	98
51) carbon tetrachloride	10.55	117	238524	97.10	ug/L	98
52) isopropyl acetate	10.75	87	35507	105.12	ug/L	96
55) iso-octane	10.99	57	499343	104.58	ug/L	99
56) epichlorohydrin	12.97	57	91234	480.60	ug/L	97
57) n-butyl alcohol	11.47	56	322086	5253.60	ug/L	100
58) benzene	10.83	78	571552	89.04	ug/L	99
59) tert-amyl methyl ether	10.97	73	570742	94.22	ug/L	99
60) heptane	11.21	57	91791	96.50	ug/L	97
61) 1,2-dichloroethane	10.86	62	188732	89.72	ug/L	100
62) trichloroethene	11.79	130	164434	100.47	ug/L	99
63) ethyl acrylate	11.80	55	209279	101.90	ug/L	99
64) 2-nitropropane	12.79	41	44732	88.35	ug/L	96
65) 2-chloroethyl vinyl ether	12.87	63	567489	487.77	ug/L	99
66) methyl methacrylate	12.15	100	45574	109.92	ug/L	95
67) 1,2-dichloropropane	12.17	76	65579	95.34	ug/L	98
68) dibromomethane	12.31	93	99544	95.78	ug/L	95
69) methylcyclohexane	12.19	83	270321	98.00	ug/L	99
70) bromodichloromethane	12.53	83	223803	96.39	ug/L	99
71) cis-1,3-dichloropropene	13.16	75	276013	98.67	ug/L	99
72) 4-methyl-2-pentanone	13.30	58	278419	395.03	ug/L	99
73) 3-methyl-1-butanol	13.32	70	117595	279.86	ug/L	97
76) toluene	13.67	92	373408	91.39	ug/L	99
77) trans-1,3-dichloropropene	13.93	75	253457	95.55	ug/L	98
78) ethyl methacrylate	13.95	69	214733	102.08	ug/L	97
79) 1,1,2-trichloroethane	14.22	83	128574	92.63	ug/L	97
80) tetrachloroethene	14.42	164	139033	93.24	ug/L	99
81) 1,3-dichloropropane	14.46	76	224536	86.25	ug/L	100
82) 2-hexanone	14.46	58	241141	383.17	ug/L	97
83) butyl acetate	14.60	56	124788	93.50	ug/L	99
84) dibromochloromethane	14.79	129	186907	96.62	ug/L	99
85) 1,2-dibromoethane	14.99	107	180980	97.62	ug/L	98
86) n-butyl ether	15.66	57	666346	86.69	ug/L	99
87) chlorobenzene	15.64	112	432461	92.66	ug/L	98
88) 1,1,1,2-tetrachloroethane	15.74	131	182841	86.10	ug/L	99
89) ethylbenzene	15.74	91	659914	83.41	ug/L	99
90) m,p-xylene	15.91	106	540549	172.33	ug/L	98
91) o-xylene	16.43	91	616312	84.79	ug/L	99
92) styrene	16.45	104	445657	88.14	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181288.D
 Acq On : 2 May 2019 8:51 pm
 Operator : juntaep
 Sample : ic7749-100
 Misc : MS34046,VX7749,5,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 12:17:21 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) butyl acrylate	16.25	55	390335	91.59	ug/L	99
94) bromoform	16.72	173	132298	96.93	ug/L	97
95) isopropylbenzene	16.88	105	802704	86.39	ug/L	99
96) cis-1,4-dichloro-2-butene	16.92	88	67459	95.35	ug/L	97
99) bromobenzene	17.31	156	197171	99.08	ug/L	98
100) 1,1,2,2-tetrachloroethane	17.21	83	224380	104.23	ug/L	99
101) trans-1,4-dichloro-2-buten	17.25	53	51371	105.09	ug/L	99
102) 1,2,3-trichloropropane	17.30	110	54697	104.89	ug/L #	76
103) n-propylbenzene	17.37	91	805070	97.00	ug/L	100
104) 2-chlorotoluene	17.51	126	191754	101.96	ug/L	96
105) 4-chlorotoluene	17.63	91	481252	95.24	ug/L	99
106) 1,3,5-trimethylbenzene	17.56	105	634067	98.26	ug/L	99
107) tert-butylbenzene	17.92	119	627540	109.51	ug/L	99
108) 1,2,4-trimethylbenzene	17.98	105	640979	94.26	ug/L	98
109) sec-butylbenzene	18.16	105	900858	103.78	ug/L	99
110) 1,3-dichlorobenzene	18.32	146	348072	90.74	ug/L	99
111) p-isopropyltoluene	18.30	119	753610	99.70	ug/L	100
112) 1,4-dichlorobenzene	18.42	146	362886	94.69	ug/L	99
113) 1,2-dichlorobenzene	18.78	146	400055	91.89	ug/L	99
114) benzyl chloride	18.51	91	412790	93.50	ug/L	100
115) n-butylbenzene	18.71	92	363436	100.87	ug/L	96
116) 1,2-dibromo-3-chloropropan	19.51	157	75771	111.67	ug/L	97
117) 1,3,5-trichlorobenzene	19.69	180	423390	99.64	ug/L	99
118) hexachlorobutadiene	20.38	225	145862	100.84	ug/L	98
119) naphthalene	20.54	128	1067113	119.53	ug/L	100
120) 2-ethylhexyl acrylate	20.28	70	49872	32.10	ug/L	94
121) 1,2,4-trichlorobenzene	20.28	180	445443	114.03	ug/L	99
122) 1,2,3-trichlorobenzene	20.74	180	470276	118.70	ug/L	99
123) hexachloroethane	19.07	201	154811	122.46	ug/L	99
124) 2-methylnaphthalene	21.61	142	378317	83.35	ug/L	98

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

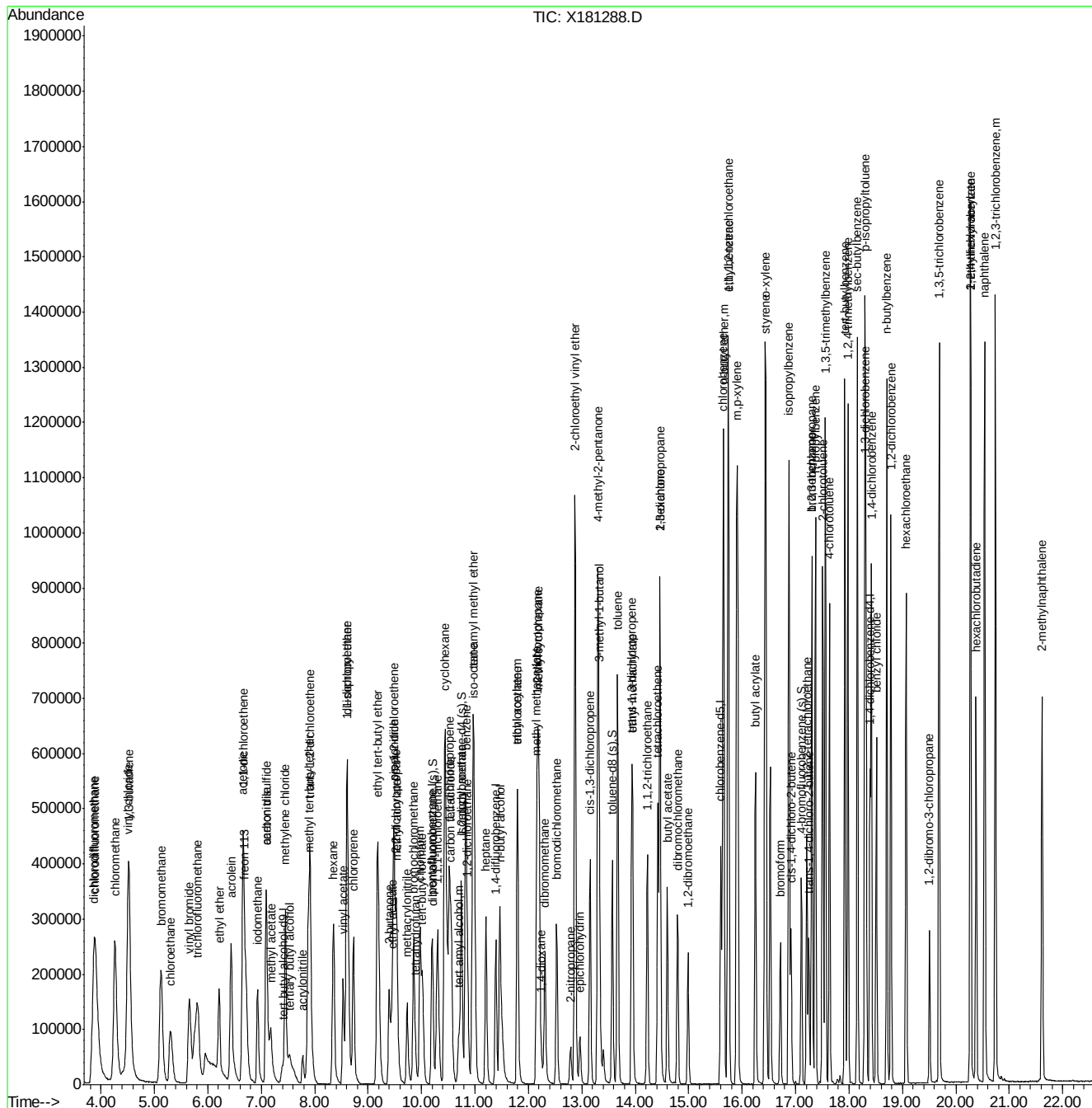
Quantitation Report (QT Reviewed)

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Data Path   : C:\MSDCHEM\1\DATA\VX7749\
Data File   : X181288.D
Acq On      : 2 May 2019    8:51 pm
Operator    : juntaep
Sample      : ic7749-100
Misc        : MS34046,VX7749,5,,,,,1
ALS Vial    : 10    Sample Multiplier: 1

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Quant Time: May 09 12:17:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration



MX7749.M Fri May 10 08:36:39 2019 GCMSX

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181289.D
 Acq On : 2 May 2019 9:19 pm
 Operator : juntaep
 Sample : ic7749-200
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 12:17:37 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.41	65	138754	500.00	ug/L	0.01
5) pentafluorobenzene	10.20	168	202245	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	280314	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	294390	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	142923	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.22	113	83278	50.61	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	101.22%
54) 1,2-dichloroethane-d4 (s)	10.75	65	81494	44.07	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	88.14%
75) toluene-d8 (s)	13.58	98	337045	47.76	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.52%
98) 4-bromofluorobenzene (s)	17.11	95	128739	54.98	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	109.96%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.55	59	326388	1080.02	ug/L	98
4) 1,4-dioxane	12.25	88	139889	6226.75	ug/L	97
6) chlorodifluoromethane	3.89	51	1072416	173.56	ug/L	99
7) dichlorodifluoromethane	3.87	85	1196685	194.91	ug/L	99
8) chloromethane	4.27	50	1272189	158.67	ug/L	99
9) vinyl chloride	4.51	62	1052113	163.77	ug/L	98
10) bromomethane	5.12	96	517131	149.29	ug/L	99
11) chloroethane	5.31	64	376826	175.01	ug/L	98
12) vinyl bromide	5.66	106	467337	194.24	ug/L	96
13) trichlorofluoromethane	5.81	101	747873	191.03	ug/L	99
14) 1,3-butadiene	4.53	54	467095	170.22	ug/L	98
15) ethyl ether	6.22	74	165005	189.45	ug/L	100
16) acrolein	6.44	56	65849	140.47	ug/L	97
17) 1,1-dichloroethene	6.66	96	255954	175.51	ug/L	98
18) freon 113	6.70	101	448740	191.26	ug/L	98
19) acetone	6.66	43	368384	566.36	ug/L	97
20) acetonitrile	7.11	41	609284	1616.98	ug/L	99
21) iodomethane	6.93	142	525182	187.12	ug/L	98
22) carbon disulfide	7.10	76	922457	177.88	ug/L	99
23) methylene chloride	7.46	84	327740	169.16	ug/L	94
24) methyl acetate	7.18	43	237044	168.65	ug/L	98
25) methyl tert butyl ether	7.89	73	1134114	178.63	ug/L	99
26) trans-1,2-dichloroethene	7.92	96	266133	168.90	ug/L	100
27) hexane	8.36	57	453193	202.53	ug/L	98
28) di-isopropyl ether	8.62	45	1229084	168.72	ug/L	97
29) 2-butanone	9.40	72	153638	843.40	ug/L	99
30) 1,1-dichloroethane	8.60	63	518341	171.58	ug/L	99
31) chloroprene	8.73	53	413531	183.71	ug/L	96
32) acrylonitrile	7.78	53	133360	211.44	ug/L	98
33) vinyl acetate	8.53	86	61950	212.03	ug/L	# 91
34) ethyl tert-butyl ether	9.18	59	1292322	191.61	ug/L	99
35) ethyl acetate	9.44	45	54801	221.38	ug/L	89
36) 2,2-dichloropropane	9.53	77	542154	165.98	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181289.D
 Acq On : 2 May 2019 9:19 pm
 Operator : juntaep
 Sample : ic7749-200
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 12:17:37 2019

Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M

Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)

QLast Update : Thu May 09 12:15:45 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	9.49	96	308098	173.38	ug/L	98
38) methyl acrylate	9.54	85	45350	211.62	ug/L #	88
39) propionitrile	9.48	54	474798	1829.79	ug/L	98
40) tert-butyl formate	10.02	59	305421	180.28	ug/L	99
41) bromochloromethane	9.85	128	174882	189.20	ug/L	95
42) tetrahydrofuran	9.88	72	42972	203.19	ug/L #	81
43) chloroform	9.98	83	512504	167.40	ug/L	97
45) methacrylonitrile	9.73	67	134811	202.10	ug/L	94
46) 1,1,1-trichloroethane	10.30	97	623067	205.70	ug/L	98
47) cyclohexane	10.45	84	691924	206.72	ug/L	93
48) tert amyl alcohol	10.70	55	99282	943.11	ug/L	92
49) 1,1-dichloropropene	10.52	75	348020	179.04	ug/L	98
51) carbon tetrachloride	10.56	117	484841	190.61	ug/L	98
52) isopropyl acetate	10.75	87	73665	210.61	ug/L	99
55) iso-octane	10.99	57	1147878	230.53	ug/L	98
56) epichlorohydrin	12.96	57	186542	942.30	ug/L	99
57) n-butyl alcohol	11.47	56	693628	10849.20	ug/L	97
58) benzene	10.83	78	1115293	166.61	ug/L	99
59) tert-amyl methyl ether	10.97	73	1129159	178.74	ug/L	99
60) heptane	11.21	57	203524	205.18	ug/L	97
61) 1,2-dichloroethane	10.87	62	361185	164.64	ug/L	98
62) trichloroethene	11.79	130	319537	187.22	ug/L	99
63) ethyl acrylate	11.80	55	422354	197.19	ug/L	100
64) 2-nitropropane	12.79	41	92509	175.21	ug/L	96
65) 2-chloroethyl vinyl ether	12.87	63	1107932	913.18	ug/L	98
66) methyl methacrylate	12.15	100	94451	218.46	ug/L #	87
67) 1,2-dichloropropane	12.17	76	125960	175.61	ug/L	96
68) dibromomethane	12.31	93	195185	180.08	ug/L	97
69) methylcyclohexane	12.20	83	589738	205.02	ug/L	96
70) bromodichloromethane	12.53	83	449468	185.63	ug/L	96
71) cis-1,3-dichloropropene	13.16	75	549293	188.30	ug/L	98
72) 4-methyl-2-pentanone	13.30	58	585498	796.61	ug/L	95
73) 3-methyl-1-butanol	13.33	70	249344	569.03	ug/L	96
76) toluene	13.67	92	762292	174.24	ug/L	96
77) trans-1,3-dichloropropene	13.93	75	500078	176.07	ug/L	98
78) ethyl methacrylate	13.95	69	440882	195.73	ug/L	97
79) 1,1,2-trichloroethane	14.22	83	260084	174.99	ug/L	96
80) tetrachloroethene	14.42	164	281069	176.04	ug/L	98
81) 1,3-dichloropropane	14.46	76	431024	154.62	ug/L	99
82) 2-hexanone	14.46	58	497604	738.42	ug/L	93
83) butyl acetate	14.60	56	261087	182.70	ug/L	100
84) dibromochloromethane	14.79	129	382004	184.43	ug/L	99
85) 1,2-dibromoethane	14.99	107	360612	181.65	ug/L	98
86) n-butyl ether	15.66	57	1337269	162.48	ug/L	99
87) chlorobenzene	15.64	112	869149	173.92	ug/L	98
88) 1,1,1,2-tetrachloroethane	15.74	131	382478	168.20	ug/L	98
89) ethylbenzene	15.74	91	1306504	154.22	ug/L	99
90) m,p-xylene	15.91	106	1096220	326.38	ug/L	95
91) o-xylene	16.43	91	1260665	161.98	ug/L	96
92) styrene	16.45	104	873628	161.36	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181289.D
 Acq On : 2 May 2019 9:19 pm
 Operator : juntaep
 Sample : ic7749-200
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 12:17:37 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 12:15:45 2019
 Response via : Initial Calibration

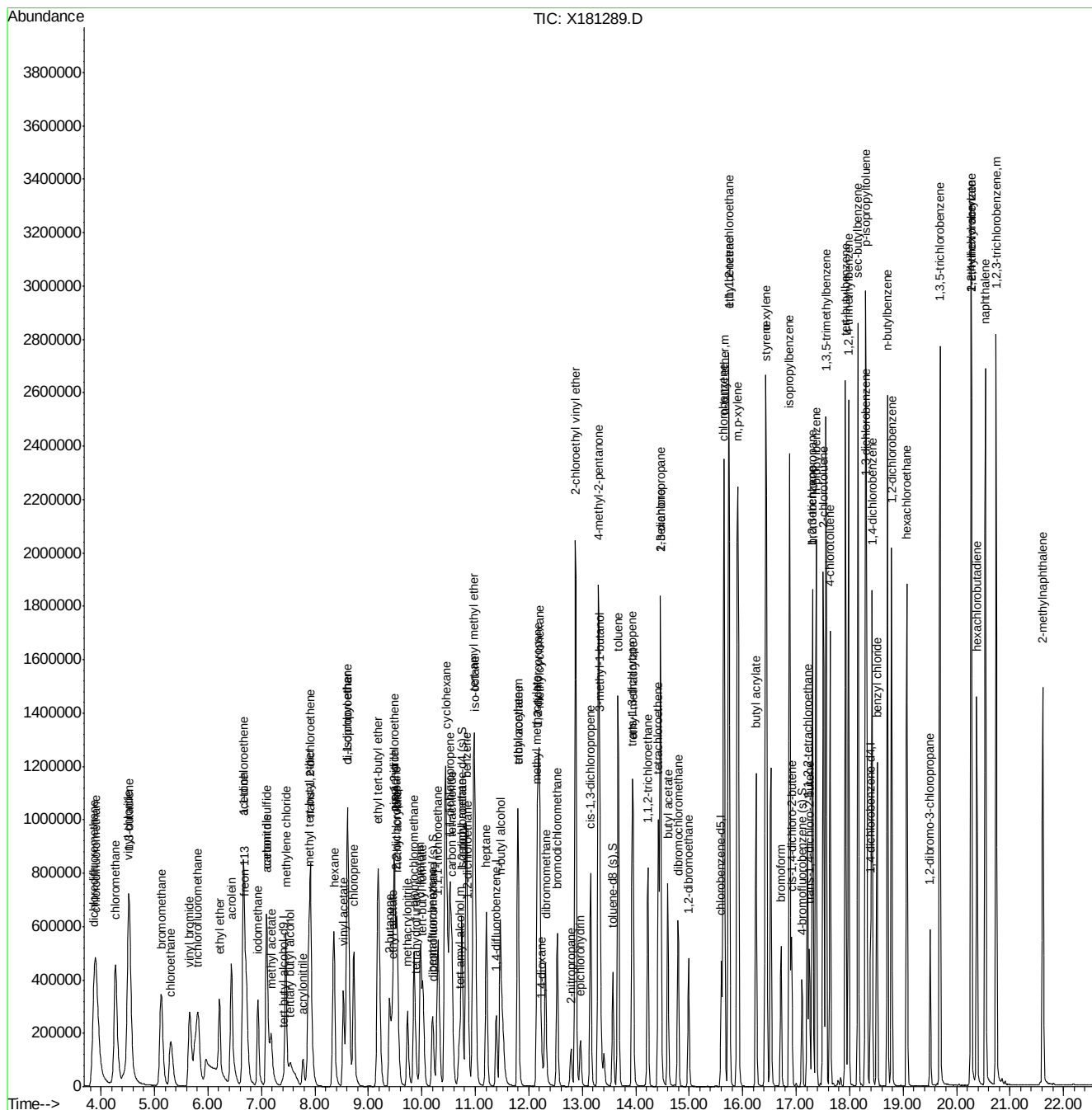
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) butyl acrylate	16.25	55	804692	176.34	ug/L	99
94) bromoform	16.72	173	272906	186.73	ug/L	97
95) isopropylbenzene	16.88	105	1679531	168.82	ug/L	99
96) cis-1,4-dichloro-2-butene	16.92	88	134299	177.29	ug/L	96
99) bromobenzene	17.31	156	382293	184.58	ug/L	99
100) 1,1,2,2-tetrachloroethane	17.21	83	459187	204.94	ug/L	99
101) trans-1,4-dichloro-2-buten	17.25	53	98489	193.58	ug/L	93
102) 1,2,3-trichloropropane	17.30	110	108803	200.47	ug/L #	73
103) n-propylbenzene	17.37	91	1618820	187.40	ug/L	99
104) 2-chlorotoluene	17.51	126	397202	202.91	ug/L	95
105) 4-chlorotoluene	17.63	91	951516	180.92	ug/L	99
106) 1,3,5-trimethylbenzene	17.56	105	1345377	200.32	ug/L	98
107) tert-butylbenzene	17.92	119	1306810	219.10	ug/L	97
108) 1,2,4-trimethylbenzene	17.98	105	1322793	186.89	ug/L	96
109) sec-butylbenzene	18.16	105	1916287	212.11	ug/L	99
110) 1,3-dichlorobenzene	18.32	146	672448	168.44	ug/L	99
111) p-isopropyltoluene	18.30	119	1589623	202.06	ug/L	99
112) 1,4-dichlorobenzene	18.42	146	724070	181.53	ug/L	99
113) 1,2-dichlorobenzene	18.78	146	796942	175.87	ug/L	99
114) benzyl chloride	18.51	91	812691	176.86	ug/L	99
115) n-butylbenzene	18.71	92	748730	199.67	ug/L	96
116) 1,2-dibromo-3-chloropropan	19.51	157	162718	230.41	ug/L	97
117) 1,3,5-trichlorobenzene	19.69	180	875431	197.94	ug/L	100
118) hexachlorobutadiene	20.38	225	306392	203.52	ug/L	98
119) naphthalene	20.54	128	2170954	233.63	ug/L	99
120) 2-ethylhexyl acrylate	20.28	70	121485	75.12	ug/L	88
121) 1,2,4-trichlorobenzene	20.28	180	910624	223.98	ug/L	98
122) 1,2,3-trichlorobenzene	20.74	180	946779	229.60	ug/L	100
123) hexachloroethane	19.07	201	334125	253.93	ug/L	96
124) 2-methylnaphthalene	21.61	142	818033	173.16	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181289.D
Acq On : 2 May 2019 9:19 pm
Operator : juntaep
Sample : ic7749-200
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 12:17:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 12:15:45 2019
Response via : Initial Calibration



MX7749.M Fri May 10 08:36:42 2019 GCMSX

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7.6.10



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181292.D
 Acq On : 2 May 2019 10:45 pm
 Operator : juntaep
 Sample : icv7749-50
 Misc : MS34046,VX7749,5,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 09 14:51:21 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 14:26:25 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	138261	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	210810	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	287197	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	284940	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	145478	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	86219	50.26	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.52%
54) 1,2-dichloroethane-d4 (s)	10.75	65	91451	48.27	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	96.54%
75) toluene-d8 (s)	13.57	98	333168	48.77	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.54%
98) 4-bromofluorobenzene (s)	17.11	95	128905	54.09	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	108.18%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.54	59	86527	276.04	ug/L	97
4) 1,4-dioxane	12.24	88	35824	1386.08	ug/L #	1
6) chlorodifluoromethane	3.89	51	370674	57.55	ug/L	98
7) dichlorodifluoromethane	3.88	85	353426	55.22	ug/L	99
8) chloromethane	4.27	50	415232	51.13	ug/L	99
9) vinyl chloride	4.50	62	327103	48.85	ug/L	99
10) bromomethane	5.12	96	170834	51.26	ug/L	99
11) chloroethane	5.30	64	115486	51.46	ug/L	99
12) vinyl bromide	5.66	106	127929	51.01	ug/L	95
13) trichlorofluoromethane	5.80	101	209095	51.24	ug/L	99
14) 1,3-butadiene	4.52	54	166406	58.18	ug/L	97
15) ethyl ether	6.21	74	49109	54.09	ug/L	92
16) acrolein	6.44	56	20377	48.24	ug/L	96
17) 1,1-dichloroethene	6.66	96	73026	48.04	ug/L	98
18) freon 113	6.70	101	141867	58.01	ug/L	96
19) acetone	6.66	43	117335	211.65	ug/L	99
20) acetonitrile	7.10	41	161402	439.36	ug/L	98
21) iodomethane	6.93	142	166998	57.08	ug/L	99
22) carbon disulfide	7.10	76	294464	54.48	ug/L	99
23) methylene chloride	7.46	84	91450	47.58	ug/L	97
24) methyl acetate	7.18	43	69941	47.74	ug/L	96
25) methyl tert butyl ether	7.88	73	631590	95.44	ug/L	98
26) trans-1,2-dichloroethene	7.92	96	76762	46.74	ug/L	99
27) hexane	8.36	57	129109	53.64	ug/L	97
28) di-isopropyl ether	8.61	45	345733	45.53	ug/L	99
29) 2-butanone	9.39	72	41949	220.92	ug/L	97
30) 1,1-dichloroethane	8.60	63	159711	50.72	ug/L	98
31) chloroprene	8.73	53	127278	54.25	ug/L	99
32) acrylonitrile	7.78	53	42096	61.38	ug/L	94
33) vinyl acetate	8.53	86	16731	52.02	ug/L	95
34) ethyl tert-butyl ether	9.18	59	351684	50.03	ug/L	98
35) ethyl acetate	9.43	45	15969	54.46	ug/L	89
36) 2,2-dichloropropane	9.52	77	143742	44.49	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181292.D
 Acq On : 2 May 2019 10:45 pm
 Operator : juntaep
 Sample : icv7749-50
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 09 14:51:21 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 14:26:25 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	9.48	96	90091	47.64	ug/L	97
38) methyl acrylate	9.54	85	13006	58.23	ug/L #	84
39) propionitrile	9.47	54	147269	544.49	ug/L	99
40) tert-butyl formate	10.02	59	82299	46.60	ug/L	99
41) bromochloromethane	9.85	128	51876	53.84	ug/L	94
42) tetrahydrofuran	9.88	72	12926	56.13	ug/L	89
43) chloroform	9.97	83	151391	49.22	ug/L	99
45) methacrylonitrile	9.73	67	38418	55.25	ug/L	95
46) 1,1,1-trichloroethane	10.30	97	163625	51.82	ug/L	99
47) cyclohexane	10.45	84	187097	53.63	ug/L	95
48) tert amyl alcohol	10.69	55	28265	257.59	ug/L	95
49) 1,1-dichloropropene	10.52	75	104236	51.45	ug/L	98
51) carbon tetrachloride	10.56	117	136974	51.66	ug/L	99
52) isopropyl acetate	10.75	87	20016	54.90	ug/L #	92
55) iso-octane	10.98	57	263999	51.75	ug/L	98
56) epichlorohydrin	12.96	57	53513	263.84	ug/L	99
57) n-butyl alcohol	11.47	56	174805	2668.64	ug/L	98
58) benzene	10.83	78	332170	49.84	ug/L	99
59) tert-amyl methyl ether	10.97	73	305838	47.25	ug/L	99
60) heptane	11.21	57	65218	64.17	ug/L	98
61) 1,2-dichloroethane	10.86	62	107006	47.61	ug/L	99
62) trichloroethene	11.79	130	93354	53.39	ug/L	97
63) ethyl acrylate	11.80	55	124827	56.88	ug/L	99
64) 2-nitropropane	12.79	41	27009	52.73	ug/L	96
65) 2-chloroethyl vinyl ether	12.87	63	349043	280.79	ug/L	99
66) methyl methacrylate	12.15	100	24191	52.13	ug/L #	82
67) 1,2-dichloropropane	12.17	76	35720	48.61	ug/L	96
68) dibromomethane	12.31	93	54491	49.07	ug/L	92
69) methylcyclohexane	12.19	83	154383	50.47	ug/L	96
70) bromodichloromethane	12.53	83	122004	49.18	ug/L	97
71) cis-1,3-dichloropropene	13.16	75	154248	51.61	ug/L	99
72) 4-methyl-2-pentanone	13.30	58	168034	223.14	ug/L	100
73) 3-methyl-1-butanol	13.32	70	68470	1106.03	ug/L	97
76) toluene	13.67	92	213135	50.33	ug/L	97
77) trans-1,3-dichloropropene	13.93	75	143011	52.02	ug/L	98
78) ethyl methacrylate	13.95	69	126465	55.83	ug/L	99
79) 1,1,2-trichloroethane	14.22	83	74318	51.66	ug/L	98
80) tetrachloroethene	14.42	164	81985	53.05	ug/L	97
81) 1,3-dichloropropane	14.46	76	132578	49.14	ug/L	99
82) 2-hexanone	14.46	58	140377	204.93	ug/L	98
83) butyl acetate	14.60	56	69936	50.56	ug/L	97
84) dibromochloromethane	14.79	129	107287	53.51	ug/L	99
85) 1,2-dibromoethane	14.99	107	101932	53.05	ug/L	99
86) n-butyl ether	15.66	57	408043	53.41	ug/L	100
87) chlorobenzene	15.64	112	246318	50.92	ug/L	97
88) 1,1,1,2-tetrachloroethane	15.74	131	108121	50.62	ug/L	97
89) ethylbenzene	15.74	91	385958	48.72	ug/L	99
90) m,p-xylene	15.91	106	312083	98.73	ug/L	99
91) o-xylene	16.43	91	360686	49.67	ug/L	99
92) styrene	16.45	104	258530	49.34	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181292.D
 Acq On : 2 May 2019 10:45 pm
 Operator : juntaep
 Sample : icv7749-50
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 09 14:51:21 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 14:26:25 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) butyl acrylate	16.25	55	215202	48.72	ug/L	99
94) bromoform	16.72	173	77450	54.75	ug/L	98
95) isopropylbenzene	16.88	105	474596	50.98	ug/L	99
96) cis-1,4-dichloro-2-butene	16.92	88	38155	49.62	ug/L	99
99) bromobenzene	17.31	156	110872	52.59	ug/L	98
100) 1,1,2,2-tetrachloroethane	17.21	83	127139	55.75	ug/L	99
101) trans-1,4-dichloro-2-buten	17.25	53	31532	60.89	ug/L	97
102) 1,2,3-trichloropropane	17.30	110	31149	54.42	ug/L #	77
103) n-propylbenzene	17.37	91	473683	53.87	ug/L	99
104) 2-chlorotoluene	17.51	126	108082	54.24	ug/L	96
105) 4-chlorotoluene	17.63	91	280924	52.48	ug/L	99
106) 1,3,5-trimethylbenzene	17.56	105	373269	55.86	ug/L	100
107) tert-butylbenzene	17.92	119	357114	58.82	ug/L	99
108) 1,2,4-trimethylbenzene	17.98	105	371713	53.32	ug/L	99
109) sec-butylbenzene	18.16	105	516529	56.17	ug/L	99
110) 1,3-dichlorobenzene	18.32	146	203401	50.05	ug/L	99
111) p-isopropyltoluene	18.30	119	441256	55.10	ug/L	99
112) 1,4-dichlorobenzene	18.42	146	205310	52.08	ug/L	99
113) 1,2-dichlorobenzene	18.78	146	235841	52.55	ug/L	99
114) benzyl chloride	18.51	91	278978	61.53	ug/L	99
115) n-butylbenzene	18.71	92	210164	55.06	ug/L	97
116) 1,2-dibromo-3-chloropropan	19.51	157	41471	55.52	ug/L	98
117) 1,3,5-trichlorobenzene	19.69	180	245884	54.62	ug/L	98
118) hexachlorobutadiene	20.38	225	80620	52.61	ug/L	99
119) naphthalene	20.54	128	609521	57.27	ug/L	99
120) 2-ethylhexyl acrylate	20.28	70	23238	12.00	ug/L	95
121) 1,2,4-trichlorobenzene	20.28	180	254332	58.93	ug/L	100
122) 1,2,3-trichlorobenzene	20.74	180	261474	59.78	ug/L	98
123) hexachloroethane	19.07	201	85864	60.61	ug/L	99
124) 2-methylnaphthalene	21.61	142	169781	23.44	ug/L	99

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

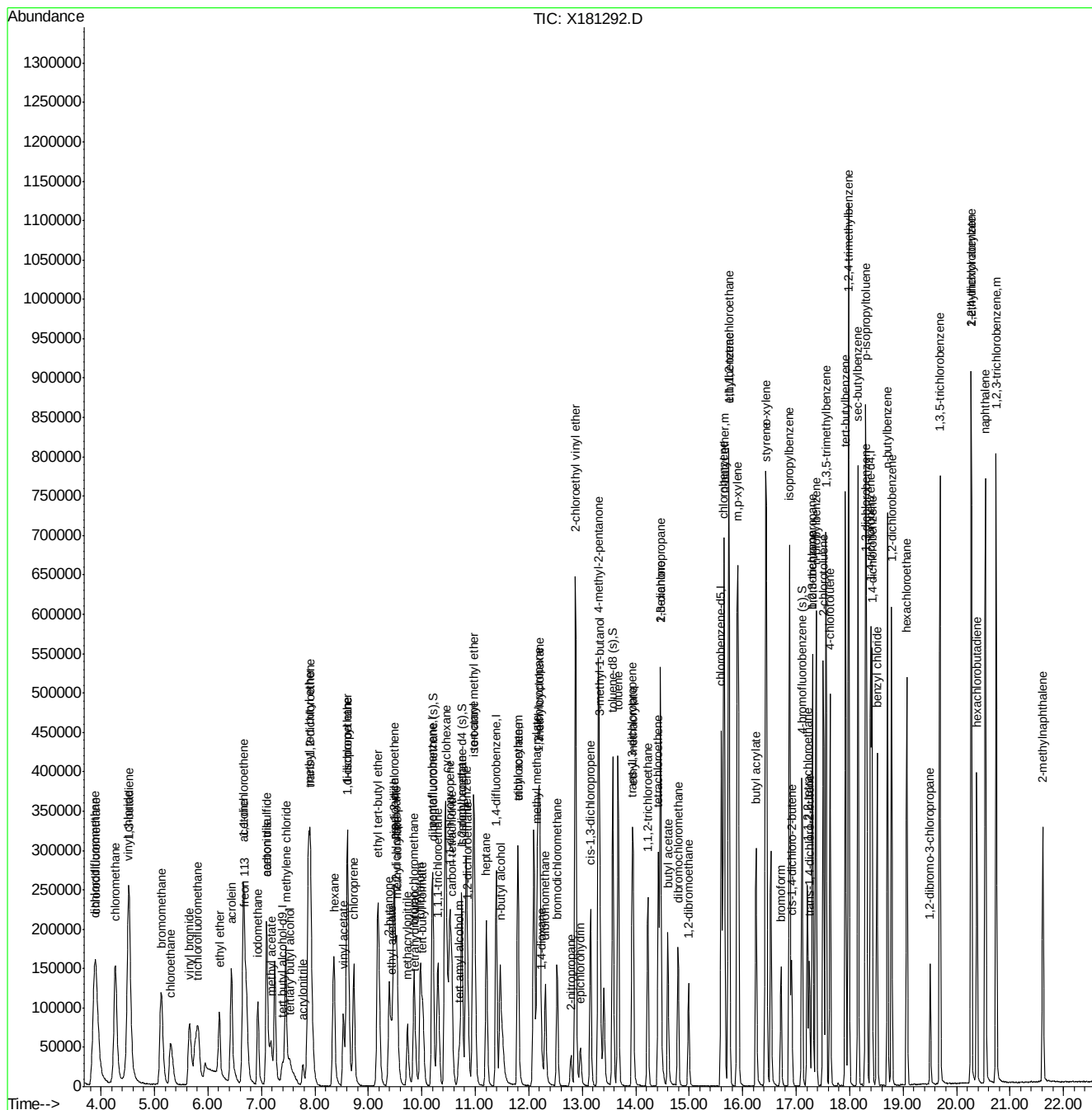
7.6.11

7

Quantitation Report (QT Reviewed)

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Data Path   : C:\MSDCHEM\1\DATA\VX7749\
Data File   : X181292.D
Acq On      : 2 May 2019 10:45 pm
Operator    : juntaep
Sample      : icv7749-50
Misc        : MS34046,VX7749,5,,,,,1
ALS Vial    : 14 Sample Multiplier: 1
```

Quant Time: May 09 14:51:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 14:26:25 2019
Response via : Initial Calibration



7.6.11

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
 Data File : X181293.D
 Acq On : 2 May 2019 11:14 pm
 Operator : juntaep
 Sample : icv7749-50
 Misc : MS34046,VX7749,5,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 09 14:52:12 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Thu May 09 14:26:25 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.39	65	155140	500.00	ug/L	-0.01
5) pentafluorobenzene	10.20	168	222936	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	299119	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	283770	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	188775	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	92472	50.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	101.96%		
54) 1,2-dichloroethane-d4 (s)	10.75	65	102538	51.97	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery =	103.94%		
75) toluene-d8 (s)	13.57	98	350104	51.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	102.94%		
98) 4-bromofluorobenzene (s)	17.11	95	145205	46.95	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery =	93.90%		

Target Compounds

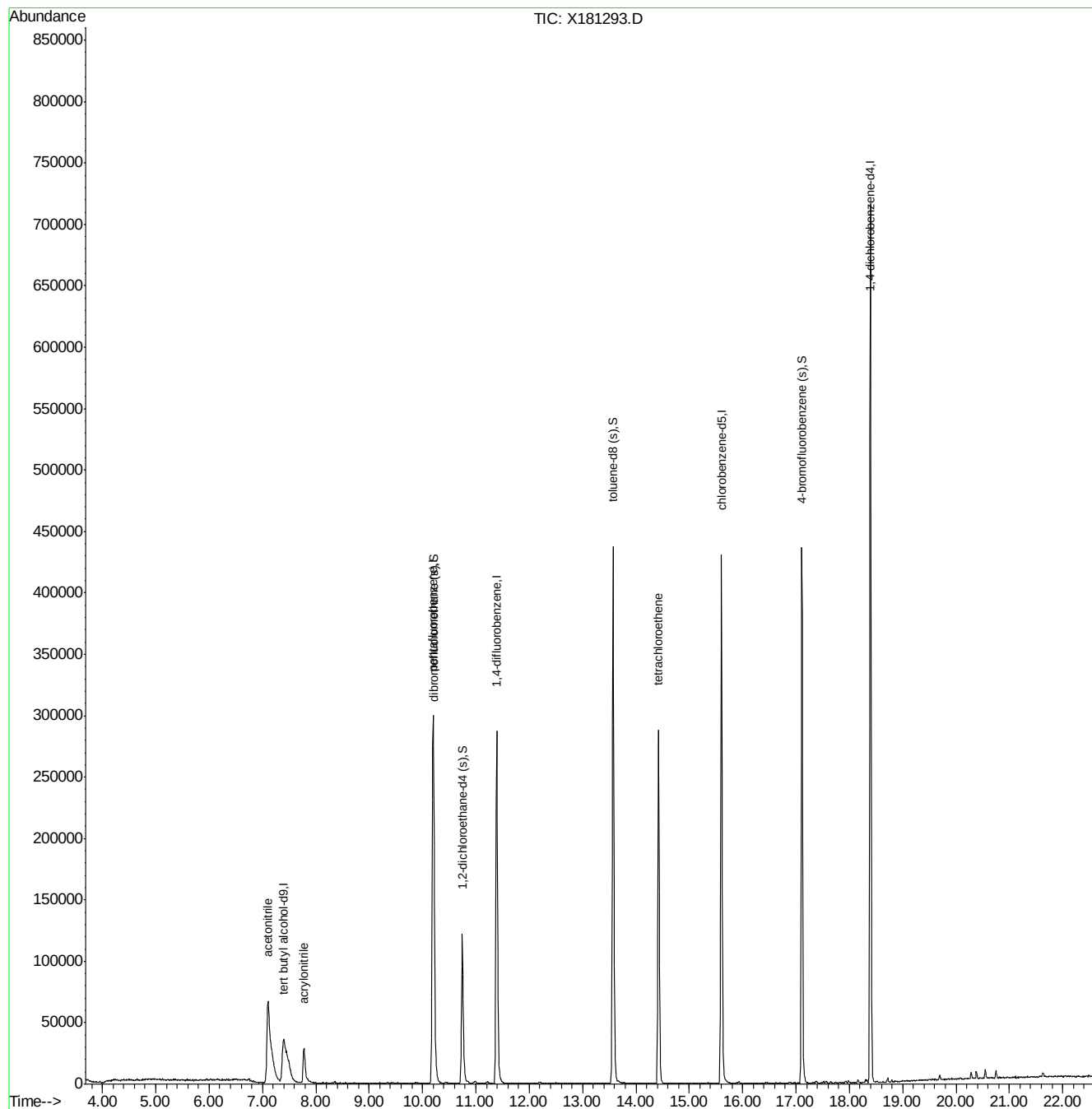
						Qvalue
20) acetonitrile	7.10	41	204930	527.51	ug/L	98
32) acrylonitrile	7.78	53	36860	50.82	ug/L	94
80) tetrachloroethene	14.42	164	80720	52.45	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7749\
Data File : X181293.D
Acq On : 2 May 2019 11:14 pm
Operator : juntaep
Sample : icv7749-50
Misc : MS34046,VX7749,5,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 09 14:52:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Thu May 09 14:26:25 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
 Data File : X183266.D
 Acq On : 29 Jul 2019 6:41 am
 Operator : jessicap
 Sample : cc7749-20
 Misc : MS36371,VX7847,5,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 29 14:09:54 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	7.40	65	143933	500.00	ug/L	0.00
5) pentafluorobenzene	10.20	168	209384	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.39	114	282021	50.00	ug/L	0.00
74) chlorobenzene-d5	15.60	117	287691	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	18.39	152	176344	50.00	ug/L	0.00
127) pentafluorobenzene(a)	10.20	168	209384	50.00	ug/L	0.00
130) chlorobenzene-d5(a)	15.60	117	287691	50.00	ug/L	0.00
132) pentafluorobenzene(b)	10.20	168	209384	50.00	ug/L	-0.01

System Monitoring Compounds

44) dibromofluoromethane (s)	10.21	113	88199	51.77	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.54%
54) 1,2-dichloroethane-d4 (s)	10.74	65	90281	48.53	ug/L	0.00
Spiked Amount	50.000	Range	81 - 124	Recovery	=	97.06%
75) toluene-d8 (s)	13.57	98	329615	47.79	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.58%
98) 4-bromofluorobenzene (s)	17.11	95	138452	47.92	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	95.84%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.54	59	31704	97.16	ug/L	95
4) 1,4-dioxane	12.24	88	14406	535.42	ug/L	91
6) chlorodifluoromethane	3.92	51	125489	19.62	ug/L	98
7) dichlorodifluoromethane	3.89	85	119342	18.77	ug/L	98
8) chloromethane	4.29	50	129119	16.01	ug/L	98
9) vinyl chloride	4.54	62	118919	17.88	ug/L	99
10) bromomethane	5.17	96	76259	23.04	ug/L	99
11) chloroethane	5.33	64	47124	21.14	ug/L	99
12) vinyl bromide	5.68	106	61448	24.67	ug/L	95
13) trichlorofluoromethane	5.84	101	101640	25.08	ug/L	98
14) 1,3-butadiene	4.55	54	72852	25.64	ug/L	99
15) ethyl ether	6.22	74	17583	19.50	ug/L	88
16) acrolein	6.44	56	5790	13.80	ug/L	97
17) 1,1-dichloroethene	6.67	96	34651	22.95	ug/L	92
18) freon 113	6.71	101	56024	23.06	ug/L	96
19) acetone	6.66	43	38842	70.54	ug/L	95
20) acetonitrile	7.10	41	68449	187.60	ug/L	93
21) iodomethane	6.94	142	70468	24.25	ug/L	95
22) carbon disulfide	7.10	76	130475	24.30	ug/L	97
23) methylene chloride	7.46	84	41399	21.69	ug/L	92
24) methyl acetate	7.19	43	24909	17.12	ug/L	98
25) methyl tert butyl ether	7.89	73	129953	19.77	ug/L	97
26) trans-1,2-dichloroethene	7.92	96	36129	22.15	ug/L	95
27) hexane	8.37	57	47120	19.71	ug/L	93
28) di-isopropyl ether	8.62	45	132812	17.61	ug/L	96
29) 2-butanone	9.40	72	15958	84.62	ug/L #	81
30) 1,1-dichloroethane	8.60	63	65478	20.94	ug/L	97
31) chloroprene	8.73	53	46311	19.87	ug/L	93
32) acrylonitrile	7.78	53	13843	20.32	ug/L	94
33) vinyl acetate	8.54	86	6435	20.14	ug/L #	56

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
 Data File : X183266.D
 Acq On : 29 Jul 2019 6:41 am
 Operator : jessicap
 Sample : cc7749-20
 Misc : MS36371,VX7847,5,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 29 14:09:54 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) ethyl tert-butyl ether	9.19	59	135287	19.38	ug/L	99
35) ethyl acetate	9.45	45	4725	16.22	ug/L	87
36) 2,2-dichloropropane	9.53	77	75731	23.60	ug/L	95
37) cis-1,2-dichloroethene	9.49	96	40984	21.82	ug/L	93
38) methyl acrylate	9.54	85	4489	20.23	ug/L #	52
39) propionitrile	9.47	54	54867	204.24	ug/L	99
40) tert-butyl formate	10.02	59	33649	19.18	ug/L	94
41) bromochloromethane	9.85	128	21128	22.08	ug/L	97
42) tetrahydrofuran	9.88	72	3883	16.98	ug/L	94
43) chloroform	9.97	83	63560	20.81	ug/L	98
45) methacrylonitrile	9.74	67	13660	19.78	ug/L	86
46) 1,1,1-trichloroethane	10.30	97	67791	21.62	ug/L	99
47) cyclohexane	10.45	84	71966	20.77	ug/L	86
48) tert amyl alcohol	10.71	55	10327	94.75	ug/L	90
49) 1,1-dichloropropene	10.52	75	43532	21.63	ug/L	96
51) carbon tetrachloride	10.56	117	59521	22.60	ug/L	91
52) isopropyl acetate	10.75	87	6876	18.99	ug/L #	64
55) iso-octane	10.99	57	105513	21.06	ug/L	99
56) epichlorohydrin	12.96	57	18179	91.27	ug/L	94
57) n-butyl alcohol	11.47	56	63705	990.39	ug/L	94
58) benzene	10.83	78	132946	20.31	ug/L	100
59) tert-amyl methyl ether	10.97	73	125376	19.73	ug/L	99
60) heptane	11.22	57	21213	21.26	ug/L	90
61) 1,2-dichloroethane	10.86	62	43420	19.67	ug/L	96
62) trichloroethene	11.80	130	37325	21.74	ug/L	98
63) ethyl acrylate	11.80	55	39283	18.23	ug/L	96
64) 2-nitropropane	12.79	41	8227	16.36	ug/L	85
65) 2-chloroethyl vinyl ether	12.87	63	115082	94.28	ug/L	100
66) methyl methacrylate	12.16	100	8717	19.13	ug/L #	80
67) 1,2-dichloropropane	12.17	76	14755	20.45	ug/L	91
68) dibromomethane	12.31	93	23944	21.96	ug/L	95
69) methylcyclohexane	12.20	83	67355	22.42	ug/L	97
70) bromodichloromethane	12.53	83	49212	20.20	ug/L	95
71) cis-1,3-dichloropropene	13.15	75	60846	20.73	ug/L	93
72) 4-methyl-2-pentanone	13.30	58	58943	79.71	ug/L	90
73) 3-methyl-1-butanol	13.32	70	26059	428.67	ug/L	96
76) toluene	13.67	92	82419	19.28	ug/L	96
77) trans-1,3-dichloropropene	13.93	75	55957	20.16	ug/L	97
78) ethyl methacrylate	13.95	69	42998	18.80	ug/L	95
79) 1,1,2-trichloroethane	14.22	83	28341	19.51	ug/L	94
80) tetrachloroethene	14.43	164	32851	21.05	ug/L	96
81) 1,3-dichloropropane	14.46	76	52424	19.24	ug/L	88
82) 2-hexanone	14.46	58	53092	76.77	ug/L	96
83) butyl acetate	14.60	56	25437	18.21	ug/L	99
84) dibromochloromethane	14.79	129	41571	20.54	ug/L	99
85) 1,2-dibromoethane	14.99	107	40483	20.87	ug/L	96
86) n-butyl ether	15.66	57	143365	18.59	ug/L	96
87) chlorobenzene	15.64	112	99044	20.28	ug/L	98
88) 1,1,1,2-tetrachloroethane	15.74	131	42429	19.67	ug/L	99
89) ethylbenzene	15.74	91	158718	19.84	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX7847\
 Data File : X183266.D
 Acq On : 29 Jul 2019 6:41 am
 Operator : jessicap
 Sample : cc7749-20
 Misc : MS36371,VX7847,5,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 29 14:09:54 2019
 Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
 Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
 QLast Update : Fri Jul 19 11:12:55 2019
 Response via : Initial Calibration

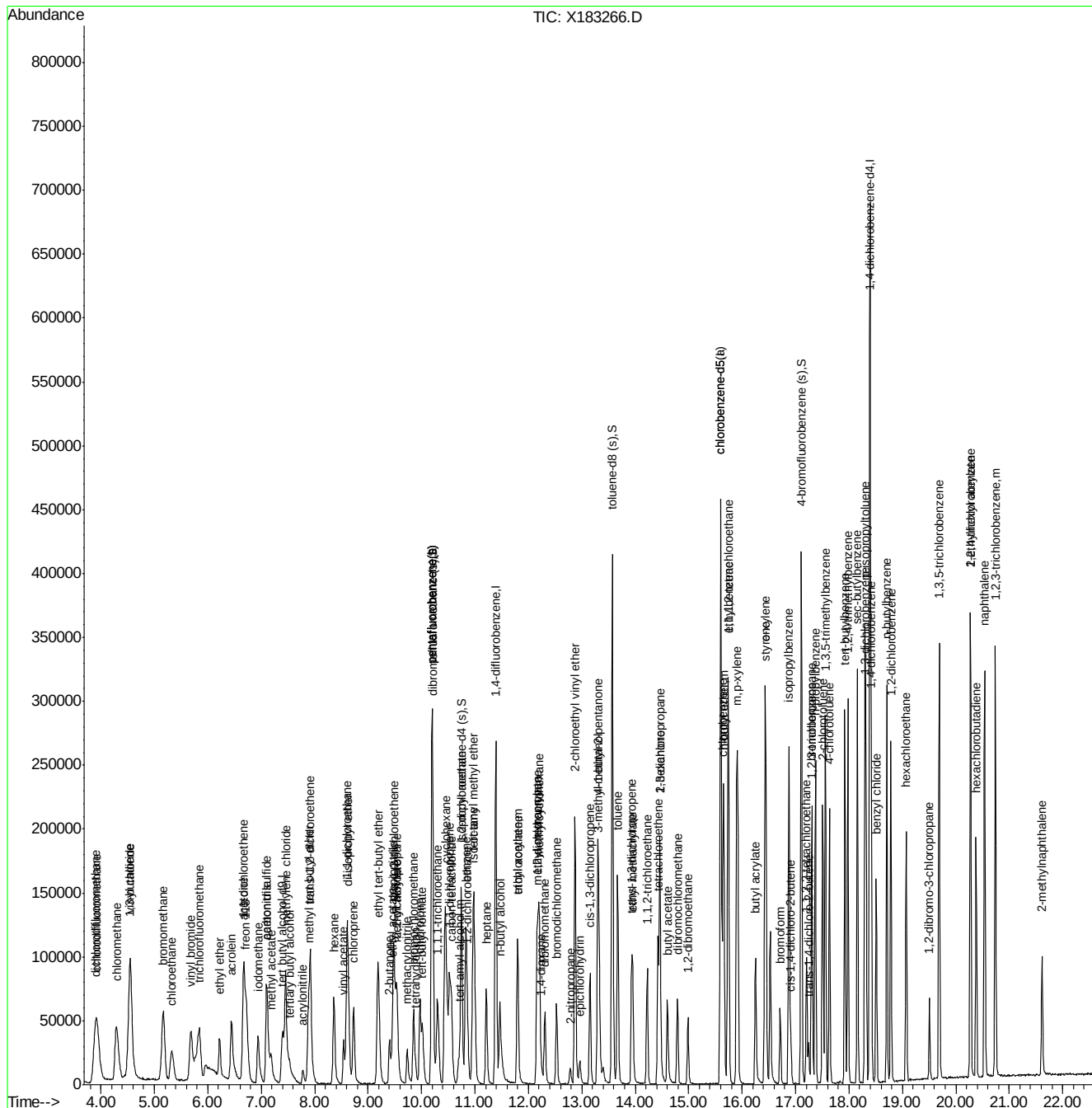
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) m,p-xylene	15.91	106	127535	39.96	ug/L	94
91) o-xylene	16.43	91	144482	19.71	ug/L	98
92) styrene	16.45	104	107164	20.25	ug/L	97
93) butyl acrylate	16.25	55	76526	17.16	ug/L	99
94) bromoform	16.71	173	29871	20.91	ug/L	95
95) isopropylbenzene	16.88	105	186079	19.80	ug/L	98
96) cis-1,4-dichloro-2-butene	16.92	88	8940	11.51	ug/L	95
99) bromobenzene	17.31	156	49587	19.40	ug/L	92
100) 1,1,2,2-tetrachloroethane	17.21	83	51486	18.62	ug/L	99
101) trans-1,4-dichloro-2-buten	17.25	53	6455	10.28	ug/L	88
102) 1,2,3-trichloropropane	17.29	110	13188	19.01	ug/L #	51
103) n-propylbenzene	17.37	91	199636	18.73	ug/L	97
104) 2-chlorotoluene	17.51	126	46254	19.15	ug/L	94
105) 4-chlorotoluene	17.63	91	122057	18.81	ug/L	98
106) 1,3,5-trimethylbenzene	17.56	105	153449	18.94	ug/L	98
107) tert-butylbenzene	17.92	119	140995	19.16	ug/L	98
108) 1,2,4-trimethylbenzene	17.98	105	159303	18.85	ug/L	99
109) sec-butylbenzene	18.16	105	210144	18.85	ug/L	99
110) 1,3-dichlorobenzene	18.32	146	94962	19.28	ug/L	99
111) p-isopropyltoluene	18.30	119	184059	18.96	ug/L	98
112) 1,4-dichlorobenzene	18.42	146	93823	19.63	ug/L	99
113) 1,2-dichlorobenzene	18.78	146	106221	19.53	ug/L	98
114) benzyl chloride	18.51	91	112471	20.46	ug/L	99
115) n-butylbenzene	18.71	92	90805	19.63	ug/L	97
116) 1,2-dibromo-3-chloropropan	19.51	157	17072	18.86	ug/L	92
117) 1,3,5-trichlorobenzene	19.69	180	110477	20.25	ug/L	98
118) hexachlorobutadiene	20.38	225	40403	21.75	ug/L	97
119) naphthalene	20.54	128	251717	19.51	ug/L	99
120) 2-ethylhexyl acrylate	20.28	70	5611	2.39	ug/L #	84
121) 1,2,4-trichlorobenzene	20.28	180	113423	21.68	ug/L	98
122) 1,2,3-trichlorobenzene	20.74	180	114003	21.50	ug/L	98
123) hexachloroethane	19.07	201	34282	19.96	ug/L	97
124) 2-methylnaphthalene	21.61	142	49797	8.20	ug/L	97

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

Quantitation Report (QT Reviewed)

```
Data Path   : C:\MSDCHEM\1\DATA\VX7847\
Data File   : X183266.D
Acq On      : 29 Jul 2019    6:41 am
Operator    : jessicap
Sample      : cc7749-20
Misc        : MS36371,VX7847,5,,,,,1
ALS Vial    : 2    Sample Multiplier: 1
```

Quant Time: Jul 29 14:09:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\MX7749.M
Quant Title : Method 8260C, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Fri Jul 19 11:12:55 2019
Response via : Initial Calibration



7.6.13



GCMS Volatile Run Log

Standard / Reagents		Lot #		Column	
Standards	ABK: V019-2648-72.49	EC: V019-2648-92.2	Acrolein: V019-2648-88.2	Method	Rxi-624(60mx0.25mmx1.4um)
Standard Concentration	100-10,000ppm	100ppm		Init Calib Date	V8260C
Internal Surrogate	V019-2648-63				5/2/19
Internal Surrogate Concentration	250/2,500ppm			Prepared by	Robert Szot
Standards	Ext ABK v019-2648-94.3	Ext C v019-2648-90.4	Ext Acro v018-2648-86.6	Analysis Date	5/2/2019
Standard Concentration	100-10,000ppm	100ppm	100 ppm	Sequence loaded by	Bridget Kelly
				Data processed by	Bridget Kelly
				Batch ID	VX7749
				Matrix	AQ
Initial Calibration Method	MX7749			Approved By:	KANYAV
pH Paper Lot#	204518			Approved Date:	5/14/2019 5:35:34 PM

Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X 181279	BFB		NA			5			1	ok	4:28 pm
X 181280	IC7749-0.2		NA		V8260 initial cal.	5			2	ok	1 uL ABK EC Acro / 500 mL
X 181281	IC7749-0.5		NA		V8260 initial cal.	5			3	ok	1 uL ABK EC Acro / 200 mL
X 181282	IC7749-1		NA		V8260 initial cal.	5			4	ok	1 uL ABK EC Acro / 100 mL
X 181283	IC7749-2		NA		V8260 initial cal.	5			6	ok	2 uL ABK EC Acro / 100 mL
X 181284	IC7749-4		NA		V8260 initial cal.	5			5	ok	4 uL ABK EC Acro / 100 mL
X 181285	IC7749-8		NA		V8260 initial cal.	5			8	ok	8 uL ABK EC Acro / 100 mL
X 181286	IC7749-20		NA		V8260 initial cal.	5			7	ok	20 uL ABK EC Acro / 100 mL
X 181287	ICC7749-50		NA		V8260 initial cal.	5			9	ok	50 uL ABK EC Acro / 100 mL
X 181288	IC7749-100		NA		V8260 initial cal.	5			10	ok	100 uL ABK EC Acro / 100 mL
X 181289	IC7749-200		NA		V8260 initial cal.	5			11	ok	200 uL ABK EC Acro / 100 mL

OR048-01

Rev Date: 12/18/2017

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Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X 181290	IB		NA			5			12	ok	
X 181291	IB		NA			5			13	ok	
X 181292	ICV7749-50		NA		V8260 initial cal.	5			14	ok	50 uL EXT ABK EC Acro / 100 mL
X 181293	ICV7749-50		NA		V8260 initial cal.	5			15	ok	50 uL EXT PA / 100 mL

GCMS Volatile Run Log

Standard / Reagents		Lot #			Column	
Standards	ABK: V019-2659-45.32	EC: V019-2659-84.2	Acrolein: V019-2659-67.		Method	Rxi-624(30mx0.25mmx1.4um) V8260C
Standard Concentration	100-10,000ppm	100ppm	100ppm		Init Calib Date	5/22/2019
Internal Surrogate	V019-2659-61					
Internal Surrogate Concentration	50/500ppm					
					Analysis Date	7/29/2019
					Sequence loaded by	Jessica Potts
					Data processed by	nizele
					Batch ID	VX7847
					Matrix	AQ
Rough Review Completed	Jessica Potts 7/30/19				Approved By:	MOHUI
Initial Calibration Method	MX7749				Approved Date:	7/30/2019 8:46:07 AM
pH Paper Lot#	204518					

Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X 183265	IB		NA			5			1	ok	
X 183266	BFB/CC7749-20		NA			5			2	ok/ok	20uL ABK, EC, Acrolein/100mL (6.41 am) # 13, 22 high
X 183267	BS		NA			5			3	ok	50uL ABK, EC, Acrolein/100mL
X 183268	IB		NA			5			4	ok	
X 183269	MB		NA			5			5	ok	
X 183270	JC91959-16	2	NA	MS36371	V8260MASTD	5		1	6	ok	
X 183271	JC91959-8	2	NA	MS36371	V8260MASTD	5		1	7	ok	
X 183272	JC91959-13	2	NA	MS36371	V8260MASTD	5		1	8	ok	
X 183273	JC91959-7	2	10X	MS36371	V8260MASTD	5/50		1	9	ok	+X183198
X 183274	JC91959-12	2	10X	MS36371	V8260MASTD	5/50		1	10	ok	+X183203
X 183275	JC92198-1	4	NA	MS36467	V8260STD	5		1	11	ok	

OR048-01

Rev Date: 12/18/2017

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Data File	Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X 183276	JC91939-2	5	NA	MS36389	V8260BENZ, VLS	5		1	12	ok	
X 183277	JC92198-1MS	1	NA	MS36467	V8260STD	5		1	13	ok	20uL ABK, EC, Acrolein/40mL
X 183278	JC92198-1MSD	3	NA	MS36467	V8260STD	5		1	14	ok	20uL ABK, EC, Acrolein/40mL
X 183279	IB		NA			5			15	ok	
X 183280	JC92168-4	2	NA	MS36480	V8260TCL20	5		1	16	ok	
X 183281	JC92198-9	1	NA	MS36467	V8260STD	5		1	17	ok	
X 183282	JC92198-10	2	NA	MS36467	V8260STD	5		1	18	ok	
X 183283	JC92198-2	2	NA	MS36467	V8260STD	5		1	19	ok	
X 183284	JC92198-3	1	NA	MS36467	V8260STD	5		1	20	ok	
X 183285	JC92198-4	2	NA	MS36467	V8260STD	5		1	21	ok	
X 183286	JC92198-5	2	NA	MS36467	V8260STD	5		1	22	ok	
X 183287	JC92198-6	2	NA	MS36467	V8260STD	5		1	23	ok	
X 183288	JC92198-7	1	NA	MS36467	V8260STD	5		1	24	ok	
X 183289	JC92198-8	1	NA	MS36467	V8260STD	5		1	25	ok	6:34 pm

APPENDIX B

Analytical Reports for SVE System Samples February & July 2019

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

C. A. Rich Consultants

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

AIG-Mako3-SVE

SGS Job Number: JC82624

Sampling Date: 02/07/19

Report to:

C. A. Rich Consultants
17 Dupont Street
Plainview, NY 11803
MYager@CarichInc.com

ATTN: Michael Yager

Total number of pages in report: **396**



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.

Brian McGuire
General Manager

Client Service contact: Kristin Degraw 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

C. A. Rich Consultants

Job No: JC82624

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Project No: AIG-Mako3-SVE

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC82624-1	02/07/19	10:08 MY	02/08/19	AIR	Soil Vapor Comp.	EXSVE-EX
JC82624-2	02/07/19	10:10 MY	02/08/19	AIR	Soil Vapor Comp.	EXSVE-MID
JC82624-3	02/07/19	10:15 MY	02/08/19	AIR	Soil Vapor Comp.	EXSVE-RAW
JC82624-4	02/07/19	10:20 MY	02/08/19	AIR	Soil Vapor Comp.	INTSVE-EX
JC82624-5	02/07/19	10:22 MY	02/08/19	AIR	Soil Vapor Comp.	INTSVE-MID
JC82624-6	02/07/19	10:26 MY	02/08/19	AIR	Soil Vapor Comp.	INTSVE-RAW

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: C. A. Rich Consultants

Job No JC82624

Site: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Report Date 2/26/2019 1:08:27 PM

On 02/08/2019, 6 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. A SGS North America Inc. Job Number of JC82624 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method TO-15

Matrix: AIR

Batch ID: V6W424

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC82623-1DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Vinyl Acetate are outside control limits for sample JC82623-1DUP. RPD acceptable due to low DUP and sample concentrations.
- V6W424-BS for Benzyl Chloride: High percent recoveries and no associated positive reported in the QC batch.
- V6W424-BS for Bromoform: High percent recoveries and no associated positive reported in the QC batch.
- JC82624-2 for Benzyl Chloride: Associated CCV outside of control limits high, sample was ND.
- JC82624-6 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC82624-1 for Benzyl Chloride: Associated CCV outside of control limits high, sample was ND.
- JC82624-2 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC82624-3 for Benzyl Chloride: Associated CCV outside of control limits high, sample was ND.
- JC82624-3 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC82624-4 for Benzyl Chloride: Associated CCV outside of control limits high, sample was ND.
- JC82624-4 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC82624-5 for Benzyl Chloride: Associated CCV outside of control limits high, sample was ND.
- JC82624-5 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC82624-6 for Benzyl Chloride: Associated CCV outside of control limits high, sample was ND.
- JC82624-1 for Bromoform: Associated CCV outside of control limits high, sample was ND.

Matrix: AIR

Batch ID: V6W425

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC82613-7DUP were used as the QC samples indicated.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Tuesday, February 26, 2019

Page 1 of 1

Summary of Hits

Job Number: JC82624

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 02/07/19



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC82624-1 EXSVE-EX

Acetone	5.8	0.20	0.11	ppbv	TO-15
Chloroform	0.17 J	0.20	0.020	ppbv	TO-15
Chloromethane	0.65	0.20	0.015	ppbv	TO-15
1,4-Dioxane	0.43	0.20	0.052	ppbv	TO-15
Dichlorodifluoromethane	0.37	0.20	0.017	ppbv	TO-15
Ethanol	2.0	0.50	0.22	ppbv	TO-15
Isopropyl Alcohol	0.76	0.20	0.065	ppbv	TO-15
Methyl ethyl ketone	0.44	0.20	0.042	ppbv	TO-15
1,1,1-Trichloroethane	0.54	0.20	0.033	ppbv	TO-15
Tertiary Butyl Alcohol	0.23	0.20	0.014	ppbv	TO-15
Tetrachloroethylene	0.069	0.040	0.031	ppbv	TO-15
Trichlorofluoromethane	1.7	0.20	0.028	ppbv	TO-15
Acetone	14	0.48	0.26	ug/m3	TO-15
Chloroform	0.83 J	0.98	0.098	ug/m3	TO-15
Chloromethane	1.3	0.41	0.031	ug/m3	TO-15
1,4-Dioxane	1.5	0.72	0.19	ug/m3	TO-15
Dichlorodifluoromethane	1.8	0.99	0.084	ug/m3	TO-15
Ethanol	3.8	0.94	0.41	ug/m3	TO-15
Isopropyl Alcohol	1.9	0.49	0.16	ug/m3	TO-15
Methyl ethyl ketone	1.3	0.59	0.12	ug/m3	TO-15
1,1,1-Trichloroethane	2.9	1.1	0.18	ug/m3	TO-15
Tertiary Butyl Alcohol	0.70	0.61	0.042	ug/m3	TO-15
Tetrachloroethylene	0.47	0.27	0.21	ug/m3	TO-15
Trichlorofluoromethane	9.6	1.1	0.16	ug/m3	TO-15

JC82624-2 EXSVE-MID

Acetone	1.2	0.20	0.11	ppbv	TO-15
Chloroform	0.27	0.20	0.020	ppbv	TO-15
Chloromethane	0.58	0.20	0.015	ppbv	TO-15
Dichlorodifluoromethane	0.40	0.20	0.017	ppbv	TO-15
Ethanol	2.3	0.50	0.22	ppbv	TO-15
Freon 113	0.098 J	0.20	0.017	ppbv	TO-15
Isopropyl Alcohol	0.54	0.20	0.065	ppbv	TO-15
1,1,1-Trichloroethane	1.5	0.20	0.033	ppbv	TO-15
Trichloroethylene	0.057	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane	1.6	0.20	0.028	ppbv	TO-15
Acetone	2.9	0.48	0.26	ug/m3	TO-15
Chloroform	1.3	0.98	0.098	ug/m3	TO-15
Chloromethane	1.2	0.41	0.031	ug/m3	TO-15
Dichlorodifluoromethane	2.0	0.99	0.084	ug/m3	TO-15
Ethanol	4.3	0.94	0.41	ug/m3	TO-15
Freon 113	0.75 J	1.5	0.13	ug/m3	TO-15

Summary of Hits

Job Number: JC82624

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 02/07/19



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

Isopropyl Alcohol		1.3	0.49	0.16	ug/m3	TO-15
1,1,1-Trichloroethane		8.2	1.1	0.18	ug/m3	TO-15
Trichloroethylene		0.31	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		9.0	1.1	0.16	ug/m3	TO-15

JC82624-3 EXSVE-RAW

Acetone		3.2	0.20	0.11	ppbv	TO-15
Carbon disulfide		0.45	0.20	0.024	ppbv	TO-15
Chloroform		0.28	0.20	0.020	ppbv	TO-15
Chloromethane		0.11 J	0.20	0.015	ppbv	TO-15
Dichlorodifluoromethane		0.40	0.20	0.017	ppbv	TO-15
Ethanol		1.6	0.50	0.22	ppbv	TO-15
Ethyl Acetate		0.43	0.20	0.038	ppbv	TO-15
Freon 113		0.11 J	0.20	0.017	ppbv	TO-15
Isopropyl Alcohol		0.85	0.20	0.065	ppbv	TO-15
Methylene chloride		0.12 J	0.20	0.015	ppbv	TO-15
Methyl ethyl ketone		0.41	0.20	0.042	ppbv	TO-15
1,1,1-Trichloroethane		1.3	0.20	0.033	ppbv	TO-15
2,2,4-Trimethylpentane		13.1	0.20	0.022	ppbv	TO-15
Tetrachloroethylene		3.5	0.040	0.031	ppbv	TO-15
Toluene		0.11 J	0.20	0.014	ppbv	TO-15
Trichloroethylene		0.13	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane		1.4	0.20	0.028	ppbv	TO-15
m,p-Xylene		0.12 J	0.20	0.034	ppbv	TO-15
Xylenes (total)		0.12 J	0.20	0.017	ppbv	TO-15
Acetone		7.6	0.48	0.26	ug/m3	TO-15
Carbon disulfide		1.4	0.62	0.075	ug/m3	TO-15
Chloroform		1.4	0.98	0.098	ug/m3	TO-15
Chloromethane		0.23 J	0.41	0.031	ug/m3	TO-15
Dichlorodifluoromethane		2.0	0.99	0.084	ug/m3	TO-15
Ethanol		3.0	0.94	0.41	ug/m3	TO-15
Ethyl Acetate		1.5	0.72	0.14	ug/m3	TO-15
Freon 113		0.84 J	1.5	0.13	ug/m3	TO-15
Isopropyl Alcohol		2.1	0.49	0.16	ug/m3	TO-15
Methylene chloride		0.42 J	0.69	0.052	ug/m3	TO-15
Methyl ethyl ketone		1.2	0.59	0.12	ug/m3	TO-15
1,1,1-Trichloroethane		7.1	1.1	0.18	ug/m3	TO-15
2,2,4-Trimethylpentane		61.2	0.93	0.10	ug/m3	TO-15
Tetrachloroethylene		24	0.27	0.21	ug/m3	TO-15
Toluene		0.41 J	0.75	0.053	ug/m3	TO-15
Trichloroethylene		0.70	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		7.9	1.1	0.16	ug/m3	TO-15
m,p-Xylene		0.52 J	0.87	0.15	ug/m3	TO-15
Xylenes (total)		0.52 J	0.87	0.074	ug/m3	TO-15

Summary of Hits

Job Number: JC82624**Account:** C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Collected:** 02/07/19

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

JC82624-4 INTSVE-EX

No hits reported in this sample.

JC82624-5 INTSVE-MID

Acetone	24.1	0.20	0.11	ppbv	TO-15
Chloromethane	0.61	0.20	0.015	ppbv	TO-15
Cyclohexane	3.5	0.20	0.022	ppbv	TO-15
1,4-Dioxane	5.8	0.20	0.052	ppbv	TO-15
Dichlorodifluoromethane	0.35	0.20	0.017	ppbv	TO-15
Ethanol	8.8	0.50	0.22	ppbv	TO-15
Ethyl Acetate	0.44	0.20	0.038	ppbv	TO-15
Isopropyl Alcohol	1.0	0.20	0.065	ppbv	TO-15
Methylene chloride	147	1.0	0.073	ppbv	TO-15
Methyl ethyl ketone	0.19 J	0.20	0.042	ppbv	TO-15
1,1,1-Trichloroethane	1.7	0.20	0.033	ppbv	TO-15
Trichlorofluoromethane	0.31	0.20	0.028	ppbv	TO-15
Vinyl Acetate	0.12 J	0.20	0.034	ppbv	TO-15
Acetone	57.2	0.48	0.26	ug/m3	TO-15
Chloromethane	1.3	0.41	0.031	ug/m3	TO-15
Cyclohexane	12	0.69	0.076	ug/m3	TO-15
1,4-Dioxane	21	0.72	0.19	ug/m3	TO-15
Dichlorodifluoromethane	1.7	0.99	0.084	ug/m3	TO-15
Ethanol	17	0.94	0.41	ug/m3	TO-15
Ethyl Acetate	1.6	0.72	0.14	ug/m3	TO-15
Isopropyl Alcohol	2.5	0.49	0.16	ug/m3	TO-15
Methylene chloride	511	3.5	0.25	ug/m3	TO-15
Methyl ethyl ketone	0.56 J	0.59	0.12	ug/m3	TO-15
1,1,1-Trichloroethane	9.3	1.1	0.18	ug/m3	TO-15
Trichlorofluoromethane	1.7	1.1	0.16	ug/m3	TO-15
Vinyl Acetate	0.42 J	0.70	0.12	ug/m3	TO-15

JC82624-6 INTSVE-RAW

Acetone	59.8	0.80	0.45	ppbv	TO-15
Benzene	0.11 J	0.20	0.012	ppbv	TO-15
Chloromethane	0.55	0.20	0.015	ppbv	TO-15
Carbon tetrachloride	0.059 J	0.20	0.024	ppbv	TO-15
Cyclohexane	0.98	0.20	0.022	ppbv	TO-15
Dichlorodifluoromethane	0.37	0.20	0.017	ppbv	TO-15
Ethanol	8.1	0.50	0.22	ppbv	TO-15
Ethylbenzene	0.16 J	0.20	0.015	ppbv	TO-15
Ethyl Acetate	0.87	0.20	0.038	ppbv	TO-15

Summary of Hits

Job Number: JC82624

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 02/07/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Heptane		0.96	0.20	0.018	ppbv	TO-15
Hexane		0.12 J	0.20	0.011	ppbv	TO-15
Isopropyl Alcohol		0.93	0.20	0.065	ppbv	TO-15
Methylene chloride		33.6	0.20	0.015	ppbv	TO-15
Methyl ethyl ketone		0.94	0.20	0.042	ppbv	TO-15
Methyl Isobutyl Ketone		0.23	0.20	0.036	ppbv	TO-15
1,1,1-Trichloroethane		0.59	0.20	0.033	ppbv	TO-15
1,2,4-Trimethylbenzene		0.23	0.20	0.033	ppbv	TO-15
2,2,4-Trimethylpentane		10.2	0.20	0.022	ppbv	TO-15
Tertiary Butyl Alcohol		0.12 J	0.20	0.014	ppbv	TO-15
Tetrachloroethylene		2.7	0.040	0.031	ppbv	TO-15
Toluene		32.3	0.20	0.014	ppbv	TO-15
Trichloroethylene		0.070	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane		0.30	0.20	0.028	ppbv	TO-15
m,p-Xylene		0.64	0.20	0.034	ppbv	TO-15
o-Xylene		0.21	0.20	0.017	ppbv	TO-15
Xylenes (total)		0.86	0.20	0.017	ppbv	TO-15
Acetone		142	1.9	1.1	ug/m3	TO-15
Benzene		0.35 J	0.64	0.038	ug/m3	TO-15
Chloromethane		1.1	0.41	0.031	ug/m3	TO-15
Carbon tetrachloride		0.37 J	1.3	0.15	ug/m3	TO-15
Cyclohexane		3.4	0.69	0.076	ug/m3	TO-15
Dichlorodifluoromethane		1.8	0.99	0.084	ug/m3	TO-15
Ethanol		15	0.94	0.41	ug/m3	TO-15
Ethylbenzene		0.69 J	0.87	0.065	ug/m3	TO-15
Ethyl Acetate		3.1	0.72	0.14	ug/m3	TO-15
Heptane		3.9	0.82	0.074	ug/m3	TO-15
Hexane		0.42 J	0.70	0.039	ug/m3	TO-15
Isopropyl Alcohol		2.3	0.49	0.16	ug/m3	TO-15
Methylene chloride		117	0.69	0.052	ug/m3	TO-15
Methyl ethyl ketone		2.8	0.59	0.12	ug/m3	TO-15
Methyl Isobutyl Ketone		0.94	0.82	0.15	ug/m3	TO-15
1,1,1-Trichloroethane		3.2	1.1	0.18	ug/m3	TO-15
1,2,4-Trimethylbenzene		1.1	0.98	0.16	ug/m3	TO-15
2,2,4-Trimethylpentane		47.6	0.93	0.10	ug/m3	TO-15
Tertiary Butyl Alcohol		0.36 J	0.61	0.042	ug/m3	TO-15
Tetrachloroethylene		18	0.27	0.21	ug/m3	TO-15
Toluene		122	0.75	0.053	ug/m3	TO-15
Trichloroethylene		0.38	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		1.7	1.1	0.16	ug/m3	TO-15
m,p-Xylene		2.8	0.87	0.15	ug/m3	TO-15
o-Xylene		0.91	0.87	0.074	ug/m3	TO-15
Xylenes (total)		3.7	0.87	0.074	ug/m3	TO-15

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 3

Client Sample ID:	EXSVE-EX		
Lab Sample ID:	JC82624-1	Date Sampled:	02/07/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID: A1036	Date Received: 02/08/19
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W10655.D	1	02/19/19 23:41	TCH	n/a	n/a	V6W424
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	5.8	0.20	0.11	ppbv		14	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform ^a	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride ^a	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.17	0.20	0.020	ppbv	J	0.83	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.65	0.20	0.015	ppbv		1.3	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	0.43	0.20	0.052	ppbv		1.5	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.37	0.20	0.017	ppbv		1.8	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	EXSVE-EX		
Lab Sample ID:	JC82624-1	Date Sampled:	02/07/19
Matrix:	AIR - Soil Vapor Comp.	Date Received:	02/08/19
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	2.0	0.50	0.22	ppbv		3.8	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.76	0.20	0.065	ppbv		1.9	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.44	0.20	0.042	ppbv		1.3	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.54	0.20	0.033	ppbv		2.9	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.23	0.20	0.014	ppbv		0.70	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.069	0.040	0.031	ppbv		0.47	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	ND	0.20	0.014	ppbv		ND	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.7	0.20	0.028	ppbv		9.6	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

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

Page 3 of 3

Client Sample ID: EXSVE-EX

Lab Sample ID: JC82624-1

Matrix: AIR - Soil Vapor Comp. Summa ID: A1036

Method: TO-15

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Date Sampled: 02/07/19

Date Received: 02/08/19

Percent Solids: n/a

VOA T015 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

SGS North America Inc.

Report of Analysis

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Client Sample ID:	EXSVE-MID		
Lab Sample ID:	JC82624-2	Date Sampled:	02/07/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID: A1167	Date Received: 02/08/19
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W10656.D	1	02/20/19 00:33	TCH	n/a	n/a	V6W424
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	1.2	0.20	0.11	ppbv		2.9	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform ^a	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride ^a	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.27	0.20	0.020	ppbv		1.3	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.58	0.20	0.015	ppbv		1.2	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.40	0.20	0.017	ppbv		2.0	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	EXSVE-MID			Date Sampled:	02/07/19
Lab Sample ID:	JC82624-2			Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	A1167	Percent Solids:	n/a
Method:	TO-15				
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	2.3	0.50	0.22	ppbv		4.3	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	0.098	0.20	0.017	ppbv	J	0.75	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.54	0.20	0.065	ppbv		1.3	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	1.5	0.20	0.033	ppbv		8.2	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	ND	0.20	0.014	ppbv		ND	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.057	0.040	0.019	ppbv		0.31	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.6	0.20	0.028	ppbv		9.0	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		65-128%

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:	EXSVE-MID	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-2	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	A1167
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

4.2
4

SGS North America Inc.

Report of Analysis

Page 1 of 3

Client Sample ID:	EXSVE-RAW	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-3	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A859	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W10657.D	1	02/20/19 01:25	TCH	n/a	n/a	V6W424
Run #2							

Run #	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	3.2	0.20	0.11	ppbv		7.6	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform ^a	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride ^a	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	0.45	0.20	0.024	ppbv		1.4	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.28	0.20	0.020	ppbv		1.4	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.11	0.20	0.015	ppbv	J	0.23	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.40	0.20	0.017	ppbv		2.0	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	EXSVE-RAW		
Lab Sample ID:	JC82624-3	Date Sampled:	02/07/19
Matrix:	AIR - Soil Vapor Comp.	Date Received:	02/08/19
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	1.6	0.50	0.22	ppbv		3.0	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	0.43	0.20	0.038	ppbv		1.5	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	0.11	0.20	0.017	ppbv	J	0.84	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.85	0.20	0.065	ppbv		2.1	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.12	0.20	0.015	ppbv	J	0.42	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.41	0.20	0.042	ppbv		1.2	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	1.3	0.20	0.033	ppbv		7.1	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	13.1	0.20	0.022	ppbv		61.2	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	3.5	0.040	0.031	ppbv		24	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.11	0.20	0.014	ppbv	J	0.41	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.13	0.040	0.019	ppbv		0.70	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.4	0.20	0.028	ppbv		7.9	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	0.12	0.20	0.034	ppbv	J	0.52	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	0.12	0.20	0.017	ppbv	J	0.52	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		65-128%

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:	EXSVE-RAW	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-3	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	A859
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	INTSVE-EX		
Lab Sample ID:	JC82624-4	Date Sampled:	02/07/19
Matrix:	AIR - Soil Vapor Comp.	Date Received:	02/08/19
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W10658.D	1	02/20/19 02:18	TCH	n/a	n/a	V6W424
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	ND	0.20	0.11	ppbv		ND	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform ^a	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride ^a	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	INTSVE-EX			Date Sampled:	02/07/19
Lab Sample ID:	JC82624-4			Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: M406			Percent Solids:	n/a
Method:	TO-15				
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	ND	0.20	0.014	ppbv		ND	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		65-128%

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:	INTSVE-EX				
Lab Sample ID:	JC82624-4			Date Sampled:	02/07/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: M406			Date Received:	02/08/19
Method:	TO-15			Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

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Report of Analysis

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Client Sample ID:	INTSVE-MID	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-5	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A244	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W10659.D	1	02/20/19 03:11	TCH	n/a	n/a	V6W424
Run #2	6W10671.D	1	02/20/19 16:30	TCH	n/a	n/a	V6W425

	Initial Volume
Run #1	400 ml
Run #2	80.0 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	24.1	0.20	0.11	ppbv		57.2	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform ^a	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride ^a	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.61	0.20	0.015	ppbv		1.3	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	3.5	0.20	0.022	ppbv		12	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	5.8	0.20	0.052	ppbv		21	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.35	0.20	0.017	ppbv		1.7	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	INTSVE-MID	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-5	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A244	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	8.8	0.50	0.22	ppbv		17	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	0.44	0.20	0.038	ppbv		1.6	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1.0	0.20	0.065	ppbv		2.5	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	147 ^b	1.0	0.073	ppbv		511 ^b	3.5	0.25	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.19	0.20	0.042	ppbv	J	0.56	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	1.7	0.20	0.033	ppbv		9.3	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	ND	0.20	0.014	ppbv		ND	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.31	0.20	0.028	ppbv		1.7	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	0.12	0.20	0.034	ppbv	J	0.42	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%	100%	65-128%

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:	INTSVE-MID				
Lab Sample ID:	JC82624-5			Date Sampled:	02/07/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A244			Date Received:	02/08/19
Method:	TO-15			Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

- (a) Associated CCV outside of control limits high, sample was ND.
(b) Result is from Run# 2

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

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SGS North America Inc.

Report of Analysis

Page 1 of 3

Client Sample ID:	INTSVE-RAW	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-6	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp.	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W10660.D	1	02/20/19 04:04	TCH	n/a	n/a	V6W424
Run #2	6W10672.D	1	02/20/19 17:17	TCH	n/a	n/a	V6W425

	Initial Volume
Run #1	400 ml
Run #2	100 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	59.8 ^a	0.80	0.45	ppbv		142 ^a	1.9	1.1	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	0.11	0.20	0.012	ppbv	J	0.35	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform ^b	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride ^b	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.55	0.20	0.015	ppbv		1.1	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.059	0.20	0.024	ppbv	J	0.37	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	0.98	0.20	0.022	ppbv		3.4	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.37	0.20	0.017	ppbv		1.8	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	INTSVE-RAW	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-6	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp.	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	8.1	0.50	0.22	ppbv		15	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	0.16	0.20	0.015	ppbv	J	0.69	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	0.87	0.20	0.038	ppbv		3.1	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	0.96	0.20	0.018	ppbv		3.9	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	0.12	0.20	0.011	ppbv	J	0.42	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.93	0.20	0.065	ppbv		2.3	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	33.6	0.20	0.015	ppbv		117	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.94	0.20	0.042	ppbv		2.8	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.23	0.20	0.036	ppbv		0.94	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.59	0.20	0.033	ppbv		3.2	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.23	0.20	0.033	ppbv		1.1	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	10.2	0.20	0.022	ppbv		47.6	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.12	0.20	0.014	ppbv	J	0.36	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	2.7	0.040	0.031	ppbv		18	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	32.3	0.20	0.014	ppbv		122	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.070	0.040	0.019	ppbv		0.38	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.30	0.20	0.028	ppbv		1.7	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	0.64	0.20	0.034	ppbv		2.8	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	0.21	0.20	0.017	ppbv		0.91	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	0.86	0.20	0.017	ppbv		3.7	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%	102%	65-128%

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:	INTSVE-RAW	Date Sampled:	02/07/19
Lab Sample ID:	JC82624-6	Date Received:	02/08/19
Matrix:	AIR - Soil Vapor Comp.	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

- (a) Result is from Run# 2
(b) Associated CCV outside of control limits high, sample was ND.

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

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Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log
- Sample Tracking Chronicle
- Internal Chain of Custody
- 2018 MDL Study - Method: TO-15

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #	Order Control #
SGS Quote #	SGS Job #
	5C82624

Client / Reporting Information				Project Information				Weather Parameters				Requested Analysis					
Company Name: Carich Consultants, Inc.				Project Name: MAKO 3				Temperature (Fahrenheit)									
Address: 17 Dupont Street				Street: Enter Lane				Start: Maximum:									
City: Plainville NY State: NY Zip: 11803				City: Islandia NY State: NY				Stop: Minimum:									
Project Contact: Michael Yager E-mail: myager@carichinc.com				Project #: AIG-MAKO3-SVE				Atmospheric Pressure (inches of Hg)									
Phone #: 516 576 8844 Fax #: 516 576 0093				Client Purchase Order #				Start: Maximum:									
Sample(s) Name(s): Michael Yager								Stop: Minimum:				Other weather comment:					
Lab Sample #	Field ID / Point of Collection	Air Type	Sampling Equipment Info			Start Sampling Information					Stop Sampling Information						
			Indoor (I) Soil Vap (SV) Ambient (A)	Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	
1	EXSVE-EX	SV	A1036	6L	NA	2/7/19	1008				2/7/19	1008					
2	EXSVE-Mid	SV	A1167	6L	NA	2/7/19	1010				2/7/19	1010					
3	EXSVE-RAW	SV	A889	6L	NA	2/7/19	1015				2/7/19	1015					
4	INTSVE-EX	SV	M406	6L	NA	2/7/19	1020				2/7/19	1020					
5	INTSVE-Mid	SV	A244	6L	NA	2/7/19	1022				2/7/19	1022					
6	INTSVE-RAW	SV	A892	6L	NA	2/7/19	1026				2/7/19	1026					
Summ																	
Turnaround Time (Business days)						Data Deliverable Information						Comments / Remarks					
☒ Standard - 15 Days ☐ 10 Day ☐ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day ☐ Other						Approved By: <u>4A</u> INITIAL ASSESSMENT LABEL VERIFICATION						All NJDEP TO-15 is mandatory Full T1 Comm A Comm B Reduced T2 Full T1 Other: DKQP reporting					
*AIG Pricing Per Todd Beasley -NYASP Deliverables-Category B -NYSDOH AirGuide 1 Min. detection Limits Seal # 26352 + 26354 Sample inventory is verified upon receipt in the Laboratory																	
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished By Laboratory:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:					
3 Michael Yager		2/7/19 15:45		Chris Lant		2/8/19 11:15		Chris Lant		2/8/19 11:15		A					
Relinquished by:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:					
5				5				4				4					

SGS Sample Receipt Summary

Job Number: JC82624

Client: C. A. RICH CONSULTANTS

Project: BRENT MAKO BUILDING 3 INVESTIGATION, E

Date / Time Received: 2/8/2019 5:15:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security

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. Cooler temp verification: _____	N/A
3. Cooler media: _____	N/A
4. No. Coolers: _____	N/A

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: ☐ ☐ ☒	

Test Strip Lot #s: pH 1-12: 206717 pH 12+: 208717 Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JC82624: Chain of Custody

Page 2 of 2

Summa Canister and Flow Controller Log

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Received: 02/08/19

SUMMA CANISTERS													
Shipping							Receiving						
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact
A1036	6	29.4	02/01/19	JT	CP10192 6W10378.D		JC82624-1	02/16/19	GP		.6		1
A1167	6	29.4	02/01/19	JT	CP10192 6W10378.D		JC82624-2	02/16/19	GP		1		1
A859	6	29.4	02/01/19	JT	CP10192 6W10378.D		JC82624-3	02/16/19	GP		.6		1
M406	6	29.4	02/01/19	JT	CP10192 6W10378.D		JC82624-4	02/16/19	GP		4.2		1
A244	6	29.4	02/01/19	JT	CP10198 5W34909.D		JC82624-5	02/18/19	TCH	0			1

SGS Bottle Order(s):
KD1-012419-193

Prep Date Room Temp(F) Bar Pres "Hg
02/01/19 70 29.92

Internal Sample Tracking Chronicle

C. A. Rich Consultants

Job No: JC82624

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Project No: AIG-Mako3-SVE

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC82624-1	Collected: 07-FEB-19 10:08	By: MY	Received: 08-FEB-19	By: AS		
EXSVE-EX						
JC82624-1	TO-15	19-FEB-19 23:41	TCH			VTO15NYSVLL
JC82624-2	Collected: 07-FEB-19 10:10	By: MY	Received: 08-FEB-19	By: AS		
EXSVE-MID						
JC82624-2	TO-15	20-FEB-19 00:33	TCH			VTO15NYSVLL
JC82624-3	Collected: 07-FEB-19 10:15	By: MY	Received: 08-FEB-19	By: AS		
EXSVE-RAW						
JC82624-3	TO-15	20-FEB-19 01:25	TCH			VTO15NYSVLL
JC82624-4	Collected: 07-FEB-19 10:20	By: MY	Received: 08-FEB-19	By: AS		
INTSVE-EX						
JC82624-4	TO-15	20-FEB-19 02:18	TCH			VTO15NYSVLL
JC82624-5	Collected: 07-FEB-19 10:22	By: MY	Received: 08-FEB-19	By: AS		
INTSVE-MID						
JC82624-5	TO-15	20-FEB-19 03:11	TCH			VTO15NYSVLL
JC82624-5	TO-15	20-FEB-19 16:30	TCH			VTO15NYSVLL
JC82624-6	Collected: 07-FEB-19 10:26	By: MY	Received: 08-FEB-19	By: AS		
INTSVE-RAW						
JC82624-6	TO-15	20-FEB-19 04:04	TCH			VTO15NYSVLL
JC82624-6	TO-15	20-FEB-19 17:17	TCH			VTO15NYSVLL

SGS Internal Chain of Custody

Page 1 of 1

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Received: 02/08/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC82624-1.1	Andrew Siu	Air Storage	02/09/19 09:56	Return to Storage
JC82624-1.1	Air Storage	Thomas Hilbig	02/19/19 16:08	Retrieve from Storage
JC82624-1.1	Thomas Hilbig	GCMS6W	02/19/19 16:08	Load on Instrument
JC82624-2.1	Andrew Siu	Air Storage	02/09/19 09:56	Return to Storage
JC82624-2.1	Air Storage	Thomas Hilbig	02/19/19 16:08	Retrieve from Storage
JC82624-2.1	Thomas Hilbig	GCMS6W	02/19/19 16:08	Load on Instrument
JC82624-3.1	Andrew Siu	Air Storage	02/09/19 09:56	Return to Storage
JC82624-3.1	Air Storage	Thomas Hilbig	02/19/19 16:08	Retrieve from Storage
JC82624-3.1	Thomas Hilbig	GCMS6W	02/19/19 16:08	Load on Instrument
JC82624-4.1	Andrew Siu	Air Storage	02/09/19 09:56	Return to Storage
JC82624-4.1	Air Storage	Thomas Hilbig	02/19/19 16:08	Retrieve from Storage
JC82624-4.1	Thomas Hilbig	GCMS6W	02/19/19 16:08	Load on Instrument
JC82624-5.1	Andrew Siu	Air Storage	02/09/19 09:56	Return to Storage
JC82624-5.1	Air Storage	Thomas Hilbig	02/19/19 16:08	Retrieve from Storage
JC82624-5.1	Thomas Hilbig	GCMS6W	02/19/19 16:08	Load on Instrument
JC82624-6.1	Andrew Siu	Air Storage	02/09/19 09:56	Return to Storage
JC82624-6.1	Air Storage	Thomas Hilbig	02/19/19 16:08	Retrieve from Storage
JC82624-6.1	Thomas Hilbig	GCMS6W	02/19/19 16:08	Load on Instrument

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Accutest Laboratories Annual Method Detection Limit Determination
Dayton, NJ Facility

Method:
Instrument(s):
Analyst:

TO-15 (VTO14/15)
GCMS3W, GCMS5W, GCMS6W
Pooled

Matrix: AIR
Quant Factor: 1.00
Study Period: July, 2018

Cmpd./Element/Param. Name	Analysis Date	Spike ppbv	Replicate Spikes							X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv	MDL	Spike/MDL Ratio
			R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv					
Acetone	4-Apr-18	0.1	0.15	0.17	0.14	0.17	0.17	0.09	0.09	0.14	139.43	0.04	0.11	0.89
Acrylonitrile	6-Mar-18	0.1	0.11	0.13	0.13	0.10	0.11	0.09	0.10	0.11	110.28	0.02	0.05	1.97
Acetonitrile	4-Apr-18	0.1	0.17	0.13	0.16	0.15	0.21	0.09	0.07	0.14	140.53	0.05	0.15	0.67
1,3-Butadiene	4-Apr-18	0.1	0.10	0.11	0.10	0.10	0.10	0.07	0.07	0.09	93.21	0.01	0.05	2.16
Benzene	6-Mar-18	0.1	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.10	96.63	0.00	0.01	8.40
Bromobenzene	4-Apr-18	0.04	0.05	0.04	0.05	0.04	0.05	0.03	0.03	0.04	103.07	0.01	0.02	1.79
Bromodichloromethane	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.05	120.64	0.01	0.03	1.49
Bromoform	4-Apr-18	0.04	0.06	0.06	0.06	0.05	0.06	0.03	0.03	0.05	127.36	0.01	0.04	1.07
Bromomethane	4-Apr-18	0.04	0.06	0.05	0.05	0.06	0.06	0.04	0.04	0.05	128.54	0.01	0.02	1.82
Bromoethene	4-Apr-18	0.04	0.04	0.05	0.05	0.04	0.04	0.03	0.03	0.04	103.18	0.01	0.02	1.82
n-Butane	9-Jul-18	0.2	0.20	0.18	0.20	0.18	0.12	0.20	0.15	0.18	88.23	0.03	0.10	2.10
Benzyl Chloride	4-Apr-18	0.1	0.10	0.09	0.09	0.08	0.08	0.05	0.05	0.08	77.01	0.02	0.06	1.77
n-Butylbenzene	6-Mar-18	0.1	0.07	0.07	0.07	0.09	0.07	0.05	0.06	0.07	69.64	0.01	0.04	2.69
sec-Butylbenzene	6-Mar-18	0.1	0.09	0.10	0.09	0.11	0.10	0.07	0.08	0.09	91.41	0.01	0.04	2.26
tert-Butylbenzene	6-Mar-18	0.1	0.09	0.10	0.10	0.11	0.10	0.07	0.09	0.09	93.20	0.01	0.04	2.71
Carbon disulfide	16-Mar-18	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.03	84.90	0.01	0.02	1.69
Chlorobenzene	4-Apr-18	0.04	0.06	0.05	0.05	0.05	0.05	0.03	0.04	0.05	121.74	0.01	0.03	1.53
Chlorodifluoromethane	4-Apr-18	0.1	0.11	0.12	0.12	0.12	0.11	0.07	0.03	0.10	97.42	0.03	0.10	0.96
Chloroethane	4-Apr-18	0.1	0.11	0.10	0.10	0.10	0.11	0.08	0.08	0.10	98.82	0.02	0.05	2.07
Chlorotrifluoroethene	16-Mar-18	0.04	0.04	0.03	0.03	0.04	0.04	0.05	0.04	0.04	96.91	0.00	0.01	2.74
Chloroform	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.04	109.12	0.01	0.02	2.01
Chloromethane	4-Apr-18	0.1	0.09	0.10	0.09	0.10	0.10	0.08	0.09	0.09	92.74	0.00	0.02	6.54
3-Chloropropene	16-Mar-18	0.1	0.08	0.08	0.07	0.05	0.06	0.08	0.07	0.07	70.88	0.01	0.04	2.52
2-Chlorotoluene	4-Apr-18	0.1	0.09	0.09	0.08	0.08	0.08	0.08	0.07	0.08	82.41	0.01	0.03	4.00
Carbon tetrachloride	4-Apr-18	0.04	0.04	0.04	0.05	0.05	0.05	0.03	0.03	0.04	105.24	0.01	0.02	1.70
Cyclohexane	4-Apr-18	0.1	0.06	0.07	0.06	0.06	0.06	0.08	0.08	0.07	66.65	0.01	0.02	4.55
1,1-Dichloroethane	4-Apr-18	0.1	0.09	0.10	0.10	0.10	0.10	0.09	0.09	0.10	95.35	0.00	0.01	8.62
1,1-Dichloroethylene	6-Mar-18	0.04	0.06	0.05	0.05	0.05	0.04	0.05	0.05	0.05	122.85	0.01	0.02	2.40
1,2-Dibromoethane	4-Apr-18	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04	92.37	0.01	0.02	2.25
1,2-Dichloroethane	4-Apr-18	0.04	0.04	0.05	0.04	0.05	0.05	0.03	0.03	0.04	102.51	0.01	0.02	1.92
1,2-Dichloropropane	6-Mar-18	0.04	0.05	0.05	0.05	0.04	0.04	0.05	0.06	0.05	123.28	0.01	0.02	2.09
1,3-Dichloropropane	6-Mar-18	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.02	0.03	79.01	0.01	0.02	2.54
1,4-Dioxane	16-Mar-18	0.1	0.10	0.09	0.07	0.09	0.09	0.06	0.05	0.08	77.81	0.02	0.05	1.93
Dichlorodifluoromethane	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.05	113.93	0.01	0.02	2.43

Dichlorofluoromethane	4-Apr-18	0.04	0.05	0.06	0.06	0.05	0.05	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.04	0.05	0.05	121.63	0.01	0.03	1.44
Dibromochloromethane	4-Apr-18	0.04	0.06	0.06	0.06	0.05	0.05	0.03	0.03	0.05	0.03	0.03	0.05	0.05	0.03	0.05	0.05	119.40	0.01	0.03	1.20
Dibromomethane	4-Apr-18	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.04	0.06	0.04	0.04	0.05	0.06	0.04	0.05	0.05	129.43	0.01	0.02	1.61
trans-1,2-Dichloroethylene	16-Mar-18	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	78.89	0.00	0.01	5.45
cis-1,2-Dichloroethylene	16-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.03	84.39	0.00	0.01	3.43
cis-1,3-Dichloropropene	6-Mar-18	0.1	0.10	0.10	0.10	0.08	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	91.08	0.01	0.02	5.13
m-Dichlorobenzene	4-Apr-18	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	87.14	0.01	0.02	2.12
o-Dichlorobenzene	6-Mar-18	0.1	0.08	0.08	0.09	0.08	0.08	0.08	0.07	0.08	0.07	0.07	0.08	0.08	0.07	0.08	0.08	79.00	0.01	0.02	4.58
p-Dichlorobenzene	4-Apr-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	84.30	0.01	0.02	2.29
trans-1,3-Dichloropropene	4-Apr-18	0.1	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.08	0.07	0.07	0.07	0.08	0.07	0.07	0.07	74.34	0.01	0.02	5.13
Di-Isopropyl ether	6-Mar-18	0.2	0.21	0.22	0.22	0.22	0.22	0.21	0.20	0.22	0.20	0.21	0.21	0.22	0.20	0.21	0.21	106.79	0.01	0.03	6.78
2,3-Dimethylpentane	4-Apr-18	0.1	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.08	0.07	0.07	0.08	0.08	0.07	0.08	0.08	76.36	0.01	0.02	5.07
2,4-Dimethylpentane	4-Apr-18	0.1	0.07	0.07	0.07	0.06	0.07	0.06	0.08	0.07	0.08	0.08	0.07	0.07	0.08	0.07	0.07	69.67	0.01	0.02	5.70
Ethanol	4-Apr-18	0.1	0.20	0.20	0.20	0.22	0.21	0.21	0.10	0.21	0.09	0.11	0.09	0.09	0.10	0.10	0.17	168.18	0.07	0.22	0.46
Ethylbenzene	6-Mar-18	0.1	0.09	0.10	0.10	0.10	0.09	0.10	0.09	0.09	0.11	0.09	0.10	0.09	0.10	0.09	0.00	96.79	0.00	0.02	6.61
Ethyl Acetate	6-Mar-18	0.1	0.08	0.08	0.08	0.10	0.09	0.10	0.06	0.09	0.06	0.06	0.08	0.09	0.06	0.08	0.01	79.31	0.01	0.04	2.66
Ethyl Acrylate	6-Mar-18	0.1	0.08	0.09	0.09	0.10	0.08	0.10	0.06	0.09	0.06	0.06	0.08	0.08	0.06	0.08	0.01	76.98	0.01	0.05	2.16
4-Ethyltoluene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.09	0.09	0.07	0.09	0.07	0.07	0.08	0.09	0.07	0.08	0.01	82.05	0.01	0.03	3.38
Freon 113	4-Apr-18	0.04	0.05	0.04	0.04	0.05	0.04	0.05	0.03	0.04	0.03	0.03	0.04	0.04	0.03	0.04	0.01	103.42	0.01	0.02	2.34
Freon 114	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.04	0.04	0.05	0.05	0.04	0.05	0.01	115.71	0.01	0.02	2.09
Freon 115	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	99.91	0.00	0.01	5.22
Freon 123	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.04	0.03	0.05	0.04	0.03	0.05	0.01	107.96	0.01	0.02	2.05
Freon 123A	16-Mar-18	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.08	0.08	0.05	0.05	0.08	0.05	0.02	131.10	0.02	0.06	0.63
Freon 141B	4-Apr-18	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.04	0.06	0.04	0.04	0.05	0.06	0.04	0.05	0.01	132.21	0.01	0.03	1.30
Freon 142B	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.04	0.03	0.05	0.05	0.04	0.05	0.01	120.27	0.01	0.03	1.46
Freon 143a	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.04	0.04	0.05	0.05	0.04	0.05	0.01	119.26	0.01	0.02	1.96
Freon 152A	4-Apr-18	0.1	0.09	0.10	0.10	0.10	0.10	0.10	0.08	0.10	0.08	0.08	0.09	0.09	0.10	0.09	0.01	93.15	0.01	0.03	3.93
Heptane	16-Mar-18	0.04	0.03	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.01	51.50	0.01	0.02	2.29
Hexachlorobutadiene	4-Apr-18	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.04	0.07	0.04	0.04	0.06	0.06	0.04	0.06	0.01	141.60	0.01	0.05	0.88
Hexachloroethane	4-Apr-18	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.04	0.07	0.04	0.03	0.06	0.07	0.04	0.06	0.02	148.40	0.02	0.05	0.75
Hexane	6-Mar-18	0.04	0.04	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	101.95	0.00	0.01	3.79
2-Hexanone	6-Mar-18	0.1	0.07	0.08	0.08	0.08	0.08	0.08	0.05	0.07	0.05	0.06	0.07	0.07	0.05	0.07	0.01	68.64	0.01	0.04	2.76
Iodomethane	6-Mar-18	0.1	0.10	0.10	0.10	0.10	0.09	0.10	0.10	0.09	0.10	0.09	0.10	0.09	0.10	0.10	0.00	96.55	0.00	0.01	8.77
Isopropylbenzene	6-Mar-18	0.1	0.10	0.10	0.10	0.11	0.10	0.11	0.09	0.11	0.09	0.08	0.10	0.10	0.09	0.10	0.01	95.35	0.01	0.03	3.65
Isopropyl Alcohol	9-Jul-18	0.2	0.32	0.32	0.32	0.31	0.32	0.32	0.29	0.32	0.27	0.33	0.31	0.29	0.27	0.33	0.02	154.14	0.02	0.06	3.09
p-Isopropyltoluene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.09	0.07	0.07	0.09	0.10	0.07	0.09	0.01	85.96	0.01	0.04	2.82
Methylene chloride	6-Mar-18	0.1	0.13	0.14	0.14	0.13	0.12	0.12	0.13	0.12	0.12	0.13	0.13	0.13	0.12	0.13	0.00	130.26	0.00	0.01	6.92
Methyl ethyl ketone	6-Mar-18	0.1	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.09	0.06	0.06	0.08	0.09	0.06	0.08	0.01	80.25	0.01	0.04	2.38
Methyl Isobutyl Ketone	6-Mar-18	0.1	0.08	0.09	0.09	0.10	0.09	0.09	0.09	0.09	0.06	0.06	0.08	0.09	0.06	0.08	0.01	82.66	0.01	0.04	2.78
Methyl Tert Butyl Ether	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.03	0.04	0.04	0.03	0.04	0.01	95.74	0.01	0.02	2.09
Methylmethacrylate	6-Mar-18	0.1	0.08	0.08	0.08	0.09	0.08	0.09	0.06	0.09	0.06	0.07	0.08	0.09	0.06	0.07	0.01	79.33	0.01	0.03	3.07
Naphthalene	16-Mar-18	0.2	0.08	0.07	0.07	0.07	0.06	0.06	0.05	0.07	0.01	0.01	0.05	0.05	0.01	0.05	0.03	25.45	0.03	0.09	2.20
Nonane	16-Mar-18	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.00	69.05	0.00	0.01	2.98
Octane	4-Apr-18	0.1	0.06	0.05	0.05	0.05	0.05	0.05	0.07	0.05	0.07	0.07	0.06	0.05	0.07	0.06	0.01	57.51	0.01	0.03	3.20
Pentane	16-Mar-18	0.2	0.20	0.20	0.20	0.18	0.20	0.20	0.17	0.20	0.17	0.16	0.18	0.17	0.17	0.16	0.02	91.02	0.02	0.06	3.63

n-Propylbenzene	6-Mar-18	0.1	0.08	0.09	0.08	0.09	0.05	0.08	0.09	0.05	0.09	0.07	0.07	0.08	81.29	0.01	0.03	3.80
Propylene	16-Mar-18	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.05	115.79	0.01	0.02	2.51
Styrene	4-Apr-18	0.1	0.07	0.07	0.07	0.06	0.06	0.07	0.06	0.06	0.06	0.07	0.07	0.06	64.67	0.01	0.02	5.30
1,1,1-Trichloroethane	4-Apr-18	0.04	0.05	0.06	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.03	0.03	0.05	120.15	0.01	0.03	1.20
1,1,1,2-Tetrachloroethane	4-Apr-18	0.04	0.05	0.06	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.03	0.05	123.96	0.01	0.04	1.10
1,1,2,2-Tetrachloroethane	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.05	113.92	0.01	0.03	1.47
1,1,2-Trichloroethane	4-Apr-18	0.04	0.04	0.04	0.05	0.05	0.05	0.02	0.04	0.04	0.04	0.02	0.03	0.04	95.93	0.01	0.03	1.31
1,2,4-Trichlorobenzene	6-Mar-18	0.2	0.12	0.16	0.11	0.11	0.11	0.08	0.08	0.11	0.10	0.08	0.08	0.11	54.59	0.03	0.09	2.26
1,2,3-Trichloropropane	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.03	0.04	0.03	0.02	0.06	0.04	94.35	0.01	0.04	1.12
1,2,4-Trimethylbenzene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.09	0.07	0.09	0.08	0.09	0.07	0.07	0.08	84.25	0.01	0.03	3.03
1,3,5-Trimethylbenzene	6-Mar-18	0.1	0.09	0.09	0.09	0.09	0.10	0.08	0.10	0.09	0.10	0.08	0.08	0.09	89.95	0.01	0.03	2.98
2,2,4-Trimethylpentane	6-Mar-18	0.1	0.11	0.11	0.11	0.09	0.09	0.10	0.09	0.10	0.10	0.10	0.10	0.10	100.21	0.01	0.02	4.59
Tertiary Butyl Alcohol	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	97.25	0.00	0.01	2.90
Tetrachloroethylene	6-Mar-18	0.2	0.20	0.22	0.21	0.23	0.21	0.21	0.23	0.21	0.21	0.21	0.22	0.21	106.97	0.01	0.03	6.49
Tetrahydrofuran	16-Mar-18	0.1	0.07	0.05	0.05	0.08	0.05	0.03	0.06	0.06	0.06	0.03	0.04	0.05	54.16	0.02	0.05	1.99
Toluene	6-Mar-18	0.1	0.09	0.09	0.10	0.09	0.10	0.09	0.09	0.10	0.09	0.09	0.09	0.09	92.31	0.00	0.01	6.94
Trichloroethylene	4-Apr-18	0.04	0.04	0.05	0.04	0.04	0.04	0.03	0.04	0.05	0.05	0.03	0.03	0.04	101.18	0.01	0.02	2.10
Trichlorofluoromethane	4-Apr-18	0.04	0.06	0.06	0.05	0.06	0.05	0.04	0.06	0.06	0.06	0.04	0.04	0.05	129.81	0.01	0.03	1.42
Vinyl chloride	4-Apr-18	0.1	0.10	0.11	0.10	0.10	0.10	0.09	0.10	0.10	0.10	0.09	0.09	0.10	97.80	0.01	0.02	4.49
Vinyl Acetate	6-Mar-18	0.1	0.06	0.04	0.04	0.06	0.04	0.04	0.06	0.06	0.06	0.04	0.04	0.05	50.75	0.01	0.03	2.93
m,p-Xylene	6-Mar-18	0.2	0.17	0.18	0.18	0.18	0.18	0.19	0.18	0.19	0.19	0.19	0.16	0.18	89.18	0.01	0.03	5.86
o-Xylene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.08	0.08	0.09	87.80	0.01	0.02	5.90
TVHC As Equiv Pentane	16-Mar-18	0.1	0.14	0.14	0.14	0.14	0.15	0.11	0.13	0.14	0.14	0.11	0.12	0.13	133.35	0.01	0.04	2.64

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Initial Calibration RT/ISTD Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W424-MB	6W10644.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples:

Method: TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Method Blank Summary

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Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W424-MB	6W10644.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples:**Method:** TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W424-MB	6W10644.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples: Method: TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	92% 65-128%

6.1.1
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Method Blank Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W425-MB	6W10669.D	1	02/20/19	TCH	n/a	n/a	V6W425

The QC reported here applies to the following samples: Method: TO-15

JC82624-5, JC82624-6

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	91% 65-128%

Method Blank Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-MB	6W10363.D	1	01/29/19	TCH	n/a	n/a	V6W409

The QC reported here applies to the following samples:

Method: TO-15

V6W409-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Method Blank Summary

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Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-MB	6W10363.D	1	01/29/19	TCH	n/a	n/a	V6W409

The QC reported here applies to the following samples:**Method:** TO-15

V6W409-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-MB	6W10363.D	1	01/29/19	TCH	n/a	n/a	V6W409

The QC reported here applies to the following samples: Method: TO-15

V6W409-SCC

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	89% 65-128%

Method Blank Summary

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-MB	5W34907.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here applies to the following samples:

Method: TO-15

V5W1417-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Method Blank Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-MB	5W34907.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here applies to the following samples:

Method: TO-15

V5W1417-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-MB	5W34907.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here applies to the following samples: Method: TO-15

V5W1417-SCC

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	67% 65-128%

6.1.4
6

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W424-BS	6W10641.D	1	02/19/19	TCH	n/a	n/a	V6W424
V6W424-BSD	6W10642.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples:

Method: TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.1	101	10.3	103	2	70-130/30
106-99-0	1,3-Butadiene	10	8.6	86	8.7	87	1	70-130/30
71-43-2	Benzene	10	9.6	96	9.9	99	3	70-130/30
75-27-4	Bromodichloromethane	10	8.9	89	9.1	91	2	70-130/30
75-25-2	Bromoform	10	13.4	134* a	13.6	136* a	1	70-130/30
74-83-9	Bromomethane	10	8.8	88	8.9	89	1	70-130/30
593-60-2	Bromoethene	10	9.6	96	9.8	98	2	70-130/30
100-44-7	Benzyl Chloride	10	16.1	161* a	16.4	164* a	2	70-130/30
75-15-0	Carbon disulfide	10	9.9	99	10.1	101	2	70-130/30
108-90-7	Chlorobenzene	10	10.2	102	10.3	103	1	70-130/30
75-00-3	Chloroethane	10	8.8	88	8.9	89	1	70-130/30
67-66-3	Chloroform	10	8.3	83	8.4	84	1	70-130/30
74-87-3	Chloromethane	10	8.1	81	8.3	83	2	70-130/30
107-05-1	3-Chloropropene	10	10.6	106	10.8	108	2	70-130/30
95-49-8	2-Chlorotoluene	10	11.0	110	11.0	110	0	70-130/30
56-23-5	Carbon tetrachloride	10	8.3	83	8.4	84	1	70-130/30
110-82-7	Cyclohexane	10	10.2	102	10.4	104	2	70-130/30
75-34-3	1,1-Dichloroethane	10	9.2	92	9.3	93	1	70-130/30
75-35-4	1,1-Dichloroethylene	10	8.7	87	8.9	89	2	70-130/30
106-93-4	1,2-Dibromoethane	10	10.1	101	10.3	103	2	70-130/30
107-06-2	1,2-Dichloroethane	10	7.4	74	7.4	74	0	70-130/30
78-87-5	1,2-Dichloropropane	10	10.6	106	10.6	106	0	70-130/30
123-91-1	1,4-Dioxane	10	10.6	106	10.9	109	3	70-130/30
75-71-8	Dichlorodifluoromethane	10	7.4	74	7.5	75	1	70-130/30
124-48-1	Dibromochloromethane	10	10.4	104	10.6	106	2	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	9.2	92	9.4	94	2	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	9.3	93	9.4	94	1	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10.3	103	10.4	104	1	70-130/30
541-73-1	m-Dichlorobenzene	10	11.9	119	12.1	121	2	70-130/30
95-50-1	o-Dichlorobenzene	10	11.6	116	11.8	118	2	70-130/30
106-46-7	p-Dichlorobenzene	10	12.2	122	12.5	125	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.3	103	10.5	105	2	70-130/30
64-17-5	Ethanol	10	8.4	84	8.5	85	1	70-130/30
100-41-4	Ethylbenzene	10	10.0	100	10.2	102	2	70-130/30
141-78-6	Ethyl Acetate	10	11.5	115	11.7	117	2	70-130/30
622-96-8	4-Ethyltoluene	10	10.7	107	10.9	109	2	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W424-BS	6W10641.D	1	02/19/19	TCH	n/a	n/a	V6W424
V6W424-BSD	6W10642.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples:

Method: TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	8.9	89	9.0	90	1	70-130/30
76-14-2	Freon 114	10	7.7	77	7.8	78	1	70-130/30
142-82-5	Heptane	10	10.4	104	10.6	106	2	70-130/30
87-68-3	Hexachlorobutadiene	10	8.5	85	8.6	86	1	70-130/30
110-54-3	Hexane	10	10.4	104	10.5	105	1	70-130/30
591-78-6	2-Hexanone	10	11.7	117	11.8	118	1	70-130/30
67-63-0	Isopropyl Alcohol	10	9.8	98	9.9	99	1	70-130/30
75-09-2	Methylene chloride	10	8.7	87	8.9	89	2	70-130/30
78-93-3	Methyl ethyl ketone	10	11.5	115	11.7	117	2	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	11.2	112	11.3	113	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	8.8	88	9.0	90	2	70-130/30
80-62-6	Methylmethacrylate	10	11.0	110	11.3	113	3	70-130/30
115-07-1	Propylene	10	10.2	102	10.3	103	1	70-130/30
100-42-5	Styrene	10	11.6	116	11.7	117	1	70-130/30
71-55-6	1,1,1-Trichloroethane	10	7.9	79	8.0	80	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	11.9	119	12.1	121	2	70-130/30
79-00-5	1,1,2-Trichloroethane	10	9.9	99	10.0	100	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	11.3	113	11.4	114	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.6	106	10.8	108	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	10.2	102	10.4	104	2	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	10.3	103	10.4	104	1	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	9.7	97	9.9	99	2	70-130/30
127-18-4	Tetrachloroethylene	10	9.1	91	9.2	92	1	70-130/30
109-99-9	Tetrahydrofuran	10	11.0	110	11.2	112	2	70-130/30
108-88-3	Toluene	10	9.5	95	9.6	96	1	70-130/30
79-01-6	Trichloroethylene	10	9.0	90	9.2	92	2	70-130/30
75-69-4	Trichlorofluoromethane	10	7.3	73	7.4	74	1	70-130/30
75-01-4	Vinyl chloride	10	8.6	86	8.6	86	0	70-130/30
108-05-4	Vinyl Acetate	10	10.8	108	10.9	109	1	70-130/30
	m,p-Xylene	20	19.4	97	19.8	99	2	70-130/30
95-47-6	o-Xylene	10	9.9	99	10.0	100	1	70-130/30
1330-20-7	Xylenes (total)	30	29.3	98	29.8	99	2	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W424-BS	6W10641.D	1	02/19/19	TCH	n/a	n/a	V6W424
V6W424-BSD	6W10642.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples: Method: TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	106%	105%	65-128%

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W425-BS	6W10665.D	1	02/20/19	TCH	n/a	n/a	V6W425
V6W425-BSD	6W10667.D	1	02/20/19	TCH	n/a	n/a	V6W425

The QC reported here applies to the following samples: Method: TO-15

JC82624-5, JC82624-6

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.0	100	10.1	101	1	70-130/30
75-09-2	Methylene chloride	10	8.8	88	9.0	90	2	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	106%	106%	65-128%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-BS	6W10360.D	1	01/29/19	TCH	n/a	n/a	V6W409
V6W409-BSD	6W10361.D	1	01/29/19	TCH	n/a	n/a	V6W409

The QC reported here applies to the following samples:

Method: TO-15

V6W409-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	11.0	110	10.6	106	4	70-130/30
106-99-0	1,3-Butadiene	10	10.1	101	9.7	97	4	70-130/30
71-43-2	Benzene	10	10.8	108	10.5	105	3	70-130/30
75-27-4	Bromodichloromethane	10	9.8	98	9.5	95	3	70-130/30
75-25-2	Bromoform	10	14.4	144* a	13.6	136* a	6	70-130/30
74-83-9	Bromomethane	10	9.6	96	9.3	93	3	70-130/30
593-60-2	Bromoethene	10	10	100	9.8	98	2	70-130/30
100-44-7	Benzyl Chloride	10	17.3	173* a	16.2	162* a	7	70-130/30
75-15-0	Carbon disulfide	10	11.0	110	10.8	108	2	70-130/30
108-90-7	Chlorobenzene	10	11.3	113	10.7	107	5	70-130/30
75-00-3	Chloroethane	10	10.1	101	10	100	1	70-130/30
67-66-3	Chloroform	10	9.2	92	9.0	90	2	70-130/30
74-87-3	Chloromethane	10	10.1	101	9.7	97	4	70-130/30
107-05-1	3-Chloropropene	10	11.7	117	11.5	115	2	70-130/30
95-49-8	2-Chlorotoluene	10	12.1	121	11.5	115	5	70-130/30
56-23-5	Carbon tetrachloride	10	9.2	92	8.9	89	3	70-130/30
110-82-7	Cyclohexane	10	11.5	115	11.2	112	3	70-130/30
75-34-3	1,1-Dichloroethane	10	10.4	104	10.0	100	4	70-130/30
75-35-4	1,1-Dichloroethylene	10	9.8	98	9.5	95	3	70-130/30
106-93-4	1,2-Dibromoethane	10	10.3	103	10.1	101	2	70-130/30
107-06-2	1,2-Dichloroethane	10	8.3	83	8.1	81	2	70-130/30
78-87-5	1,2-Dichloropropane	10	11.5	115	11.1	111	4	70-130/30
123-91-1	1,4-Dioxane	10	11.5	115	11.2	112	3	70-130/30
75-71-8	Dichlorodifluoromethane	10	8.4	84	8.1	81	4	70-130/30
124-48-1	Dibromochloromethane	10	10.9	109	10.6	106	3	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.5	105	10.1	101	4	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.3	103	10.1	101	2	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	11.0	110	10.6	106	4	70-130/30
541-73-1	m-Dichlorobenzene	10	12.7	127	12.1	121	5	70-130/30
95-50-1	o-Dichlorobenzene	10	12.9	129	12.1	121	6	70-130/30
106-46-7	p-Dichlorobenzene	10	12.8	128	12.2	122	5	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.7	107	10.3	103	4	70-130/30
64-17-5	Ethanol	10	10.4	104	10.2	102	2	70-130/30
100-41-4	Ethylbenzene	10	11.5	115	10.8	108	6	70-130/30
141-78-6	Ethyl Acetate	10	12.8	128	12.4	124	3	70-130/30
622-96-8	4-Ethyltoluene	10	12.0	120	11.3	113	6	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-BS	6W10360.D	1	01/29/19	TCH	n/a	n/a	V6W409
V6W409-BSD	6W10361.D	1	01/29/19	TCH	n/a	n/a	V6W409

The QC reported here applies to the following samples:

Method: TO-15

V6W409-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	9.6	96	9.4	94	2	70-130/30
76-14-2	Freon 114	10	8.8	88	8.5	85	3	70-130/30
142-82-5	Heptane	10	11.4	114	11.0	110	4	70-130/30
87-68-3	Hexachlorobutadiene	10	11.2	112	10.6	106	6	70-130/30
110-54-3	Hexane	10	11.6	116	11.2	112	4	70-130/30
591-78-6	2-Hexanone	10	12.7	127	12.2	122	4	70-130/30
67-63-0	Isopropyl Alcohol	10	10.7	107	10.4	104	3	70-130/30
75-09-2	Methylene chloride	10	9.7	97	9.5	95	2	70-130/30
78-93-3	Methyl ethyl ketone	10	12.7	127	12.4	124	2	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	12.2	122	11.9	119	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	10.0	100	9.8	98	2	70-130/30
80-62-6	Methylmethacrylate	10	12.0	120	11.7	117	3	70-130/30
115-07-1	Propylene	10	11.5	115	11.0	110	4	70-130/30
100-42-5	Styrene	10	12.8	128	12.0	120	6	70-130/30
71-55-6	1,1,1-Trichloroethane	10	8.8	88	8.5	85	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	13.6	136* a	12.8	128	6	70-130/30
79-00-5	1,1,2-Trichloroethane	10	10.7	107	10.3	103	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	12.0	120	11.3	113	6	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	12.0	120	11.3	113	6	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	11.5	115	10.9	109	5	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	11.4	114	11.0	110	4	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	11.0	110	10.8	108	2	70-130/30
127-18-4	Tetrachloroethylene	10	9.5	95	9.3	93	2	70-130/30
109-99-9	Tetrahydrofuran	10	12.3	123	11.9	119	3	70-130/30
108-88-3	Toluene	10	10.3	103	10.0	100	3	70-130/30
79-01-6	Trichloroethylene	10	9.7	97	9.5	95	2	70-130/30
75-69-4	Trichlorofluoromethane	10	8.0	80	7.8	78	3	70-130/30
75-01-4	Vinyl chloride	10	10.0	100	9.7	97	3	70-130/30
108-05-4	Vinyl Acetate	10	11.8	118	11.4	114	3	70-130/30
	m,p-Xylene	20	22.1	111	20.9	105	6	70-130/30
95-47-6	o-Xylene	10	11.2	112	10.6	106	6	70-130/30
1330-20-7	Xylenes (total)	30	33.4	111	31.6	105	6	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-BS	6W10360.D	1	01/29/19	TCH	n/a	n/a	V6W409
V6W409-BSD	6W10361.D	1	01/29/19	TCH	n/a	n/a	V6W409

The QC reported here applies to the following samples: Method: TO-15

V6W409-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	106%	107%	65-128%

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-BS	5W34904.D	1	01/31/19	GP	n/a	n/a	V5W1417
V5W1417-BSD	5W34905.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here applies to the following samples:

Method: TO-15

V5W1417-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	10.2	102	10.1	101	1	70-130/30
106-99-0	1,3-Butadiene	10	10.7	107	10.3	103	4	70-130/30
71-43-2	Benzene	10	9.6	96	9.8	98	2	70-130/30
75-27-4	Bromodichloromethane	10	9.4	94	9.5	95	1	70-130/30
75-25-2	Bromoform	10	10.7	107	10.4	104	3	70-130/30
74-83-9	Bromomethane	10	9.9	99	9.5	95	4	70-130/30
593-60-2	Bromoethene	10	10.2	102	10.1	101	1	70-130/30
100-44-7	Benzyl Chloride	10	14.1	141* a	13.6	136* a	4	70-130/30
75-15-0	Carbon disulfide	10	10.3	103	10.4	104	1	70-130/30
108-90-7	Chlorobenzene	10	8.8	88	8.7	87	1	70-130/30
75-00-3	Chloroethane	10	10.6	106	10.4	104	2	70-130/30
67-66-3	Chloroform	10	9.5	95	9.6	96	1	70-130/30
74-87-3	Chloromethane	10	9.5	95	9.3	93	2	70-130/30
107-05-1	3-Chloropropene	10	10.2	102	10.3	103	1	70-130/30
95-49-8	2-Chlorotoluene	10	10.4	104	9.9	99	5	70-130/30
56-23-5	Carbon tetrachloride	10	10	100	10.1	101	1	70-130/30
110-82-7	Cyclohexane	10	10.7	107	10.9	109	2	70-130/30
75-34-3	1,1-Dichloroethane	10	10.3	103	10.2	102	1	70-130/30
75-35-4	1,1-Dichloroethylene	10	10.1	101	10.1	101	0	70-130/30
106-93-4	1,2-Dibromoethane	10	9.5	95	9.7	97	2	70-130/30
107-06-2	1,2-Dichloroethane	10	9.6	96	9.6	96	0	70-130/30
78-87-5	1,2-Dichloropropane	10	10.4	104	10.3	103	1	70-130/30
123-91-1	1,4-Dioxane	10	9.1	91	9.1	91	0	70-130/30
75-71-8	Dichlorodifluoromethane	10	10.3	103	10.1	101	2	70-130/30
124-48-1	Dibromochloromethane	10	9.4	94	9.6	96	2	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.2	102	10.3	103	1	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.2	102	10.1	101	1	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	10	100	10.1	101	1	70-130/30
541-73-1	m-Dichlorobenzene	10	9.9	99	9.6	96	3	70-130/30
95-50-1	o-Dichlorobenzene	10	9.9	99	9.6	96	3	70-130/30
106-46-7	p-Dichlorobenzene	10	9.7	97	9.4	94	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	10.8	108	10.8	108	0	70-130/30
64-17-5	Ethanol	10	8.4	84	8.2	82	2	70-130/30
100-41-4	Ethylbenzene	10	9.9	99	9.6	96	3	70-130/30
141-78-6	Ethyl Acetate	10	12.2	122	12.1	121	1	70-130/30
622-96-8	4-Ethyltoluene	10	10.3	103	9.7	97	6	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-BS	5W34904.D	1	01/31/19	GP	n/a	n/a	V5W1417
V5W1417-BSD	5W34905.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here applies to the following samples:

Method: TO-15

V5W1417-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	9.3	93	9.5	95	2	70-130/30
76-14-2	Freon 114	10	10	100	9.6	96	4	70-130/30
142-82-5	Heptane	10	10.4	104	10.4	104	0	70-130/30
87-68-3	Hexachlorobutadiene	10	11.1	111	10.7	107	4	70-130/30
110-54-3	Hexane	10	11.0	110	10.9	109	1	70-130/30
591-78-6	2-Hexanone	10	10.7	107	10.7	107	0	70-130/30
67-63-0	Isopropyl Alcohol	10	8.0	80	8.0	80	0	70-130/30
75-09-2	Methylene chloride	10	8.7	87	8.7	87	0	70-130/30
78-93-3	Methyl ethyl ketone	10	10.3	103	10.3	103	0	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	11.8	118	11.9	119	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	9.6	96	9.8	98	2	70-130/30
80-62-6	Methylmethacrylate	10	10.5	105	10.7	107	2	70-130/30
115-07-1	Propylene	10	12.2	122	11.9	119	2	70-130/30
100-42-5	Styrene	10	10.1	101	9.8	98	3	70-130/30
71-55-6	1,1,1-Trichloroethane	10	9.6	96	9.6	96	0	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.2	102	9.9	99	3	70-130/30
79-00-5	1,1,2-Trichloroethane	10	9.7	97	9.8	98	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	15.8	158* a	15.1	151* a	5	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.5	105	10	100	5	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	9.8	98	9.5	95	3	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	11.1	111	11.1	111	0	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	10.0	100	10.2	102	2	70-130/30
127-18-4	Tetrachloroethylene	10	8.4	84	8.4	84	0	70-130/30
109-99-9	Tetrahydrofuran	10	10.7	107	10.9	109	2	70-130/30
108-88-3	Toluene	10	9.4	94	9.5	95	1	70-130/30
79-01-6	Trichloroethylene	10	9.2	92	9.2	92	0	70-130/30
75-69-4	Trichlorofluoromethane	10	9.8	98	8.5	85	14	70-130/30
75-01-4	Vinyl chloride	10	10.6	106	10.2	102	4	70-130/30
108-05-4	Vinyl Acetate	10	11.1	111	11.2	112	1	70-130/30
	m,p-Xylene	20	19.1	96	18.5	93	3	70-130/30
95-47-6	o-Xylene	10	9.9	99	9.7	97	2	70-130/30
1330-20-7	Xylenes (total)	30	29.0	97	28.2	94	3	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-BS	5W34904.D	1	01/31/19	GP	n/a	n/a	V5W1417
V5W1417-BSD	5W34905.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here applies to the following samples: Method: TO-15

V5W1417-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	104%	101%	65-128%

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 3

Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC82623-1DUP	6W10649.D	1	02/19/19	TCH	n/a	n/a	V6W424
JC82623-1	6W10648.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples:**Method:** TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Compound	JC82623-1 ppbv	DUP Q	ppbv	Q	RPD	Limits
67-64-1	Acetone	24.1		22.1		9	25
106-99-0	1,3-Butadiene	0.12	J	0.11	J	9	25
71-43-2	Benzene	0.46		0.43		7	25
75-27-4	Bromodichloromethane	ND		ND		nc	25
75-25-2	Bromoform	ND		ND		nc	25
74-83-9	Bromomethane	ND		ND		nc	25
593-60-2	Bromoethene	ND		ND		nc	25
100-44-7	Benzyl Chloride	ND		ND		nc	25
75-15-0	Carbon disulfide	ND		ND		nc	25
108-90-7	Chlorobenzene	ND		ND		nc	25
75-00-3	Chloroethane	ND		ND		nc	25
67-66-3	Chloroform	ND		ND		nc	25
74-87-3	Chloromethane	0.58		0.53		9	25
107-05-1	3-Chloropropene	ND		ND		nc	25
95-49-8	2-Chlorotoluene	ND		ND		nc	25
56-23-5	Carbon tetrachloride	ND		ND		nc	25
110-82-7	Cyclohexane	0.11	J	0.097	J	13	25
75-34-3	1,1-Dichloroethane	ND		ND		nc	25
75-35-4	1,1-Dichloroethylene	ND		ND		nc	25
106-93-4	1,2-Dibromoethane	ND		ND		nc	25
107-06-2	1,2-Dichloroethane	0.32		0.30		6	25
78-87-5	1,2-Dichloropropane	ND		ND		nc	25
123-91-1	1,4-Dioxane	ND		ND		nc	25
75-71-8	Dichlorodifluoromethane	0.40		0.37		8	25
124-48-1	Dibromochloromethane	ND		ND		nc	25
156-60-5	trans-1,2-Dichloroethylene	ND		ND		nc	25
156-59-2	cis-1,2-Dichloroethylene	ND		ND		nc	25
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	25
541-73-1	m-Dichlorobenzene	ND		ND		nc	25
95-50-1	o-Dichlorobenzene	ND		ND		nc	25
106-46-7	p-Dichlorobenzene	ND		ND		nc	25
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	25
64-17-5	Ethanol	60.4	E	55.4	E	9	25
100-41-4	Ethylbenzene	0.39		0.36		8	25
141-78-6	Ethyl Acetate	0.78		0.71		9	25
622-96-8	4-Ethyltoluene	0.11	J	0.10	J	10	25

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC82623-1DUP	6W10649.D	1	02/19/19	TCH	n/a	n/a	V6W424
JC82623-1	6W10648.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples:

Method: TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Compound	JC82623-1 ppbv	DUP Q	ppbv	Q	RPD	Limits
76-13-1	Freon 113	ND		ND		nc	25
76-14-2	Freon 114	ND		ND		nc	25
142-82-5	Heptane	0.30		0.28		7	25
87-68-3	Hexachlorobutadiene	ND		ND		nc	25
110-54-3	Hexane	0.45		0.41		9	25
591-78-6	2-Hexanone	ND		ND		nc	25
67-63-0	Isopropyl Alcohol	3.2		2.9		10	25
75-09-2	Methylene chloride	0.76		0.71		7	25
78-93-3	Methyl ethyl ketone	1.7		1.5		13	25
108-10-1	Methyl Isobutyl Ketone	ND		ND		nc	25
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	25
80-62-6	Methylmethacrylate	ND		ND		nc	25
115-07-1	Propylene	4.8		4.4		9	25
100-42-5	Styrene	0.51		0.49		4	25
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	25
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	25
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	25
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	25
95-63-6	1,2,4-Trimethylbenzene	0.47		0.44		7	25
108-67-8	1,3,5-Trimethylbenzene	0.11	J	0.11	J	0	25
540-84-1	2,2,4-Trimethylpentane	0.18	J	0.17	J	6	25
75-65-0	Tertiary Butyl Alcohol	0.12	J	0.11	J	9	25
127-18-4	Tetrachloroethylene	0.089		0.082		8	25
109-99-9	Tetrahydrofuran	ND		ND		nc	25
108-88-3	Toluene	2.4		2.2		9	25
79-01-6	Trichloroethylene	0.54		0.48		12	25
75-69-4	Trichlorofluoromethane	0.25		0.23		8	25
75-01-4	Vinyl chloride	ND		ND		nc	25
108-05-4	Vinyl Acetate	ND		0.46		200* a	25
	m,p-Xylene	0.98		0.91		7	25
95-47-6	o-Xylene	0.38		0.36		5	25
1330-20-7	Xylenes (total)	1.4		1.3		7	25

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC82623-1DUP	6W10649.D	1	02/19/19	TCH	n/a	n/a	V6W424
JC82623-1	6W10648.D	1	02/19/19	TCH	n/a	n/a	V6W424

The QC reported here applies to the following samples: Method: TO-15

JC82624-1, JC82624-2, JC82624-3, JC82624-4, JC82624-5, JC82624-6

CAS No.	Surrogate Recoveries	DUP	JC82623-1	Limits
460-00-4	4-Bromofluorobenzene	103%	106%	65-128%

(a) RPD acceptable due to low DUP and sample concentrations.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC82613-7DUP	6W10675.D	1.55	02/20/19	TCH	n/a	n/a	V6W425
JC82613-7	6W10674.D	1.55	02/20/19	TCH	n/a	n/a	V6W425

The QC reported here applies to the following samples: Method: TO-15

JC82624-5, JC82624-6

CAS No.	Compound	JC82613-7 ppbv	DUP Q	ppbv	Q	RPD	Limits
67-64-1	Acetone	4.0		3.9		3	25
75-09-2	Methylene chloride	0.26		0.26		0	25

CAS No.	Surrogate Recoveries	DUP	JC82613-7	Limits
460-00-4	4-Bromofluorobenzene	101%	103%	65-128%

* = Outside of Control Limits.

Summa Cleaning Certification

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-SCC	6W10378.D	1	01/30/19	TCH	n/a	n/a	V6W409

The QC reported here (Summa M012) applies to the following samples:

Method: TO-15

Batch CP10192 cleaned 01/25/19: JC82624-1(A1036), JC82624-2(A1167), JC82624-3(A859), JC82624-4(M406)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

Page 2 of 3

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-SCC	6W10378.D	1	01/30/19	TCH	n/a	n/a	V6W409

The QC reported here (Summa M012) applies to the following samples:

Method: TO-15

Batch CP10192 cleaned 01/25/19: JC82624-1(A1036), JC82624-2(A1167), JC82624-3(A859), JC82624-4(M406)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W409-SCC	6W10378.D	1	01/30/19	TCH	n/a	n/a	V6W409

The QC reported here (Summa M012) applies to the following samples: Method: TO-15

Batch CP10192 cleaned 01/25/19: JC82624-1(A1036), JC82624-2(A1167), JC82624-3(A859), JC82624-4(M406)

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	88% 65-128%

Summa Cleaning Certification

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-SCC	5W34909.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here (Summa A882) applies to the following samples:

Method: TO-15

Batch CP10198 cleaned 01/28/19: JC82624-5(A244)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

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Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-SCC	5W34909.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here (Summa A882) applies to the following samples:**Method:** TO-15

Batch CP10198 cleaned 01/28/19: JC82624-5(A244)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W1417-SCC	5W34909.D	1	01/31/19	GP	n/a	n/a	V5W1417

The QC reported here (Summa A882) applies to the following samples: Method: TO-15

Batch CP10198 cleaned 01/28/19: JC82624-5(A244)

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	71% 65-128%

6.4.2
6

Instrument Performance Check (BFB)

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Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V5W1390-BFB**Injection Date:** 12/26/18**Lab File ID:** 5W34372.D**Injection Time:** 17:47**Instrument ID:** GCMS5W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	41643	20.2	Pass
75	30.0 - 66.0% of mass 95	102549	49.7	Pass
95	Base peak, 100% relative abundance	206357	100.0	Pass
96	5.0 - 9.0% of mass 95	13978	6.77	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	179755	87.1	Pass
175	4.0 - 9.0% of mass 174	13970	6.77 (7.77) ^a	Pass
176	93.0 - 101.0% of mass 174	174549	84.6 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	11582	5.61 (6.64) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5W1390-IC1390	5W34378.D	12/26/18	22:25	04:38	Initial cal 5
V5W1390-ICC1390	5W34379.D	12/26/18	23:10	05:23	Initial cal 10
V5W1390-IC1390	5W34381.D	12/27/18	00:42	06:55	Initial cal 20
V5W1390-IC1390	5W34383.D	12/27/18	02:23	08:36	Initial cal 40
V5W1390-IC1390	5W34388.D	12/27/18	12:14	18:27	Initial cal 0.04
V5W1390-IC1390	5W34389.D	12/27/18	13:00	19:13	Initial cal 0.1
V5W1390-IC1390	5W34390.D	12/27/18	13:46	19:59	Initial cal 0.2
V5W1390-IC1390	5W34391.D	12/27/18	14:38	20:51	Initial cal 0.5
V5W1390-ICV1390	5W34392.D	12/27/18	16:26	22:39	Initial cal verification 10

Instrument Performance Check (BFB)

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample: V5W1417-BFB

Injection Date: 01/31/19

Lab File ID: 5W34902.D

Injection Time: 10:45

Instrument ID: GCMS5W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	42515	21.3	Pass
75	30.0 - 66.0% of mass 95	100456	50.3	Pass
95	Base peak, 100% relative abundance	199829	100.0	Pass
96	5.0 - 9.0% of mass 95	13225	6.62	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	161899	81.0	Pass
175	4.0 - 9.0% of mass 174	12593	6.30 (7.78) ^a	Pass
176	93.0 - 101.0% of mass 174	155693	77.9 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	10460	5.23 (6.72) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5W1417-CC1390	5W34903.D	01/31/19	11:30	00:45	Continuing cal 10
V5W1417-BS	5W34904.D	01/31/19	12:15	01:30	Blank Spike
V5W1417-BSD	5W34905.D	01/31/19	13:02	02:17	Blank Spike Duplicate
V5W1417-MB	5W34907.D	01/31/19	14:40	03:55	Method Blank
V5W1417-SCC	5W34908.D	01/31/19	15:57	05:12	Summa Cleaning Certification
V5W1417-SCC	5W34909.D	01/31/19	16:49	06:04	Summa Cleaning Certification
ZZZZZZ	5W34910.D	01/31/19	17:35	06:50	(unrelated sample)
JC81982-2	5W34911.D	01/31/19	18:21	07:36	(used for QC only; not part of job JC82624)
JC81982-2DUP	5W34912.D	01/31/19	19:06	08:21	Duplicate
ZZZZZZ	5W34913.D	01/31/19	19:52	09:07	(unrelated sample)
ZZZZZZ	5W34914.D	01/31/19	20:37	09:52	(unrelated sample)
ZZZZZZ	5W34915.D	01/31/19	21:23	10:38	(unrelated sample)
ZZZZZZ	5W34916.D	01/31/19	22:09	11:24	(unrelated sample)
ZZZZZZ	5W34917.D	01/31/19	22:54	12:09	(unrelated sample)
ZZZZZZ	5W34918.D	01/31/19	23:40	12:55	(unrelated sample)
ZZZZZZ	5W34919.D	02/01/19	00:26	13:41	(unrelated sample)
ZZZZZZ	5W34920.D	02/01/19	01:12	14:27	(unrelated sample)
ZZZZZZ	5W34921.D	02/01/19	01:58	15:13	(unrelated sample)
ZZZZZZ	5W34922.D	02/01/19	02:43	15:58	(unrelated sample)
ZZZZZZ	5W34923.D	02/01/19	03:29	16:44	(unrelated sample)
ZZZZZZ	5W34924.D	02/01/19	04:15	17:30	(unrelated sample)

Instrument Performance Check (BFB)

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Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V6W335-BFB**Injection Date:** 10/22/18**Lab File ID:** 6W08748.D**Injection Time:** 12:00**Instrument ID:** GCMS6W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	34776	17.6	Pass
75	30.0 - 66.0% of mass 95	93560	47.5	Pass
95	Base peak, 100% relative abundance	197120	100.0	Pass
96	5.0 - 9.0% of mass 95	13073	6.63	Pass
173	Less than 2.0% of mass 174	1546	0.78 (0.81) ^a	Pass
174	50.0 - 120.0% of mass 95	190869	96.8	Pass
175	4.0 - 9.0% of mass 174	13968	7.09 (7.32) ^a	Pass
176	93.0 - 101.0% of mass 174	187051	94.9 (98.0) ^a	Pass
177	5.0 - 9.0% of mass 176	12105	6.14 (6.47) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W335-IC335	6W08749.D	10/22/18	12:49	00:49	Initial cal 0.04
V6W335-IC335	6W08750.D	10/22/18	13:48	01:48	Initial cal 0.1
V6W335-IC335	6W08751.D	10/22/18	14:40	02:40	Initial cal 0.2
V6W335-IC335	6W08752.D	10/22/18	15:33	03:33	Initial cal 0.5
V6W335-IC335	6W08753.D	10/22/18	16:23	04:23	Initial cal 5
V6W335-ICC335	6W08754.D	10/22/18	17:14	05:14	Initial cal 10
V6W335-IC335	6W08755.D	10/22/18	18:07	06:07	Initial cal 20
V6W335-IC335	6W08756.D	10/22/18	19:04	07:04	Initial cal 40
V6W335-ICV335	6W08758.D	10/22/18	20:45	08:45	Initial cal verification 10

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V6W409-BFB**Injection Date:** 01/29/19**Lab File ID:** 6W10358.D**Injection Time:** 08:53**Instrument ID:** GCMS6W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	24899	14.6	Pass
75	30.0 - 66.0% of mass 95	70912	41.5	Pass
95	Base peak, 100% relative abundance	170795	100.0	Pass
96	5.0 - 9.0% of mass 95	11355	6.65	Pass
173	Less than 2.0% of mass 174	1374	0.80 (0.82) ^a	Pass
174	50.0 - 120.0% of mass 95	167040	97.8	Pass
175	4.0 - 9.0% of mass 174	12258	7.18 (7.34) ^a	Pass
176	93.0 - 101.0% of mass 174	164373	96.2 (98.4) ^a	Pass
177	5.0 - 9.0% of mass 176	10773	6.31 (6.55) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W409-CC335	6W10359.D	01/29/19	09:42	00:49	Continuing cal 10
V6W409-BS	6W10360.D	01/29/19	10:31	01:38	Blank Spike
V6W409-BSD	6W10361.D	01/29/19	11:19	02:26	Blank Spike Duplicate
V6W409-MB	6W10363.D	01/29/19	13:09	04:16	Method Blank
ZZZZZZ	6W10366.D	01/29/19	16:29	07:36	(unrelated sample)
JC81790-3	6W10367.D	01/29/19	17:22	08:29	(used for QC only; not part of job JC82624)
JC81790-3DUP	6W10368.D	01/29/19	18:15	09:22	Duplicate
ZZZZZZ	6W10369.D	01/29/19	19:08	10:15	(unrelated sample)
ZZZZZZ	6W10370.D	01/29/19	19:56	11:03	(unrelated sample)
ZZZZZZ	6W10371.D	01/29/19	20:44	11:51	(unrelated sample)
ZZZZZZ	6W10372.D	01/29/19	21:32	12:39	(unrelated sample)
ZZZZZZ	6W10373.D	01/29/19	22:20	13:27	(unrelated sample)
ZZZZZZ	6W10374.D	01/29/19	23:08	14:15	(unrelated sample)
ZZZZZZ	6W10375.D	01/29/19	23:56	15:03	(unrelated sample)
ZZZZZZ	6W10376.D	01/30/19	00:56	16:03	(unrelated sample)
V6W409-SCC	6W10378.D	01/30/19	02:42	17:49	Summa Cleaning Certification
V6W409-SCC	6W10379.D	01/30/19	03:35	18:42	Summa Cleaning Certification

Instrument Performance Check (BFB)

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Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V6W424-BFB**Injection Date:** 02/19/19**Lab File ID:** 6W10639.D**Injection Time:** 08:50**Instrument ID:** GCMS6W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	21216	14.2	Pass
75	30.0 - 66.0% of mass 95	61443	41.1	Pass
95	Base peak, 100% relative abundance	149419	100.0	Pass
96	5.0 - 9.0% of mass 95	9880	6.61	Pass
173	Less than 2.0% of mass 174	1137	0.76 (0.74) ^a	Pass
174	50.0 - 120.0% of mass 95	153344	102.6	Pass
175	4.0 - 9.0% of mass 174	11050	7.40 (7.21) ^a	Pass
176	93.0 - 101.0% of mass 174	149248	99.9 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	9868	6.60 (6.61) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W424-CC335	6W10640.D	02/19/19	09:37	00:47	Continuing cal 10
V6W424-BS	6W10641.D	02/19/19	10:25	01:35	Blank Spike
V6W424-BSD	6W10642.D	02/19/19	11:12	02:22	Blank Spike Duplicate
V6W424-MB	6W10644.D	02/19/19	12:53	04:03	Method Blank
ZZZZZZ	6W10646.D	02/19/19	15:57	07:07	(unrelated sample)
ZZZZZZ	6W10647.D	02/19/19	16:52	08:02	(unrelated sample)
JC82623-1	6W10648.D	02/19/19	17:45	08:55	(used for QC only; not part of job JC82624)
JC82623-1DUP	6W10649.D	02/19/19	18:39	09:49	Duplicate
ZZZZZZ	6W10650.D	02/19/19	19:31	10:41	(unrelated sample)
ZZZZZZ	6W10651.D	02/19/19	20:26	11:36	(unrelated sample)
ZZZZZZ	6W10652.D	02/19/19	21:13	12:23	(unrelated sample)
ZZZZZZ	6W10653.D	02/19/19	22:01	13:11	(unrelated sample)
ZZZZZZ	6W10654.D	02/19/19	22:48	13:58	(unrelated sample)
JC82624-1	6W10655.D	02/19/19	23:41	14:51	EXSVE-EX
JC82624-2	6W10656.D	02/20/19	00:33	15:43	EXSVE-MID
JC82624-3	6W10657.D	02/20/19	01:25	16:35	EXSVE-RAW
JC82624-4	6W10658.D	02/20/19	02:18	17:28	INTSVE-EX
JC82624-5	6W10659.D	02/20/19	03:11	18:21	INTSVE-MID
JC82624-6	6W10660.D	02/20/19	04:04	19:14	INTSVE-RAW
V6W424-SCC	6W10661.D	02/20/19	04:57	20:07	Summa Cleaning Certification
V6W424-SCC	6W10662.D	02/20/19	05:50	21:00	Summa Cleaning Certification

Instrument Performance Check (BFB)

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Job Number: JC82624**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V6W425-BFB**Injection Date:** 02/20/19**Lab File ID:** 6W10663.D**Injection Time:** 08:56**Instrument ID:** GCMS6W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	19971	14.1	Pass
75	30.0 - 66.0% of mass 95	57163	40.3	Pass
95	Base peak, 100% relative abundance	142016	100.0	Pass
96	5.0 - 9.0% of mass 95	9406	6.62	Pass
173	Less than 2.0% of mass 174	1228	0.86 (0.84) ^a	Pass
174	50.0 - 120.0% of mass 95	146539	103.2	Pass
175	4.0 - 9.0% of mass 174	10751	7.57 (7.34) ^a	Pass
176	93.0 - 101.0% of mass 174	141405	99.6 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	9332	6.57 (6.60) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W425-CC335	6W10664.D	02/20/19	09:44	00:48	Continuing cal 10
V6W425-BS	6W10665.D	02/20/19	10:36	01:40	Blank Spike
V6W425-BSD	6W10667.D	02/20/19	12:54	03:58	Blank Spike Duplicate
V6W425-MB	6W10669.D	02/20/19	14:41	05:45	Method Blank
ZZZZZZ	6W10670.D	02/20/19	15:43	06:47	(unrelated sample)
JC82624-5	6W10671.D	02/20/19	16:30	07:34	INTSVE-MID
JC82624-6	6W10672.D	02/20/19	17:17	08:21	INTSVE-RAW
ZZZZZZ	6W10673.D	02/20/19	18:11	09:15	(unrelated sample)
JC82613-7	6W10674.D	02/20/19	19:08	10:12	(used for QC only; not part of job JC82624)
JC82613-7DUP	6W10675.D	02/20/19	20:05	11:09	Duplicate
V6W425-SCC	6W10676.D	02/20/19	20:58	12:02	Summa Cleaning Certification
ZZZZZZ	6W10677.D	02/20/19	21:53	12:57	(unrelated sample)
ZZZZZZ	6W10678.D	02/20/19	22:46	13:50	(unrelated sample)
ZZZZZZ	6W10679.D	02/20/19	23:34	14:38	(unrelated sample)
ZZZZZZ	6W10680.D	02/21/19	00:22	15:26	(unrelated sample)
ZZZZZZ	6W10681.D	02/21/19	01:09	16:13	(unrelated sample)
ZZZZZZ	6W10682.D	02/21/19	01:57	17:01	(unrelated sample)
ZZZZZZ	6W10683.D	02/21/19	02:46	17:50	(unrelated sample)

Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std: V5W1417-CC1390	Injection Date: 01/31/19
Lab File ID: 5W34903.D	Injection Time: 11:30
Instrument ID: GCMS5W	Method: TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	237256	8.12	842956	10.23	432434	15.70
Upper Limit ^a	332158	8.45	1180138	10.56	605408	16.03
Lower Limit ^b	142354	7.79	505774	9.90	259460	15.37

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V5W1417-BS	255611	8.11	898903	10.22	450853	15.69
V5W1417-BSD	260027	8.12	922734	10.23	475482	15.70
V5W1417-MB	252583	8.11	893518	10.22	395515	15.69
V5W1417-SCC	231885	8.10	820800	10.21	348174	15.69
V5W1417-SCC	240633	8.11	856958	10.22	363872	15.69
ZZZZZZ	238237	8.12	842816	10.22	396357	15.69
JC81982-2	257278	8.12	919576	10.23	411759	15.69
JC81982-2DUP	245316	8.11	880287	10.23	398813	15.70
ZZZZZZ	229435	8.10	822858	10.22	450049	15.69
ZZZZZZ	294567	8.11	1044996	10.22	459238	15.69
ZZZZZZ	289928	8.12	1026857	10.22	446574	15.69
ZZZZZZ	250738	8.11	900328	10.23	403776	15.69
ZZZZZZ	245495	8.12	849530	10.23	363610	15.69
ZZZZZZ	232630	8.13	830616	10.24	378325	15.70
ZZZZZZ	224179	8.10	786893	10.22	366760	15.69
ZZZZZZ	219209	8.10	769042	10.21	362073	15.69
ZZZZZZ	229912	8.11	810993	10.22	374109	15.69
ZZZZZZ	241361	8.12	860272	10.23	408824	15.69
ZZZZZZ	241364	8.12	862248	10.23	398056	15.69
ZZZZZZ	233523	8.12	823926	10.22	378143	15.69

IS 1 = Bromochloromethane

IS 2 = 1,4-Difluorobenzene

IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.

(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

Internal Standard Area Summary

Page 1 of 1

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std:	V6W409-CC335	Injection Date:	01/29/19
Lab File ID:	6W10359.D	Injection Time:	09:42
Instrument ID:	GCMS6W	Method:	TO-15

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	210652	8.16	759118	10.37	314153	15.91
Upper Limit ^a	294913	8.49	1062765	10.70	439814	16.24
Lower Limit ^b	126391	7.83	455471	10.04	188492	15.58

Lab Sample ID	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
V6W409-BS	213062	8.17	772198	10.37	312079	15.91
V6W409-BSD	218120	8.17	790359	10.37	330008	15.91
V6W409-MB	236400	8.17	868821	10.37	345227	15.91
ZZZZZZ	221308	8.17	809264	10.37	325558	15.91
JC81790-3	221290	8.17	810602	10.37	335370	15.91
JC81790-3DUP	214985	8.17	769541	10.37	326296	15.91
ZZZZZZ	215833	8.17	784504	10.37	318288	15.91
ZZZZZZ	215688	8.18	781570	10.37	326012	15.91
ZZZZZZ	212038	8.17	777421	10.37	321271	15.91
ZZZZZZ	212452	8.17	769447	10.37	321039	15.91
ZZZZZZ	211439	8.17	762512	10.37	308403	15.91
ZZZZZZ	210008	8.17	767723	10.37	313572	15.91
ZZZZZZ	209229	8.17	761962	10.37	307641	15.91
ZZZZZZ	216161	8.17	774071	10.37	312727	15.91
V6W409-SCC	217896	8.16	799433	10.37	322288	15.91
V6W409-SCC	216123	8.16	792992	10.37	321054	15.91

IS 1 = Bromochloromethane

IS 2 = 1,4-Difluorobenzene

IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.

(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

Internal Standard Area Summary

Page 1 of 1

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std: V6W424-CC335	Injection Date: 02/19/19
Lab File ID: 6W10640.D	Injection Time: 09:37
Instrument ID: GCMS6W	Method: TO-15

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	203823	8.17	730124	10.37	313126	15.91
Upper Limit ^a	285352	8.50	1022174	10.70	438376	16.24
Lower Limit ^b	122294	7.84	438074	10.04	187876	15.58

Lab Sample ID	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
V6W424-BS	216467	8.17	775426	10.37	329931	15.91
V6W424-BSD	215514	8.16	772785	10.37	327386	15.91
V6W424-MB	214853	8.17	770486	10.37	300572	15.90
ZZZZZZ	199743	8.16	712137	10.37	281987	15.90
ZZZZZZ	201408	8.16	703092	10.37	288483	15.91
JC82623-1	189547	8.17	678866	10.37	282340	15.91
JC82623-1DUP	207004	8.17	748718	10.37	301569	15.91
ZZZZZZ	204718	8.17	732644	10.37	281026	15.90
ZZZZZZ	205220	8.17	731263	10.37	288601	15.91
ZZZZZZ	210180	8.18	744138	10.37	292379	15.91
ZZZZZZ	205114	8.17	732003	10.37	289759	15.91
ZZZZZZ	196074	8.18	690706	10.37	291466	15.91
JC82624-1	207864	8.18	741068	10.37	292437	15.91
JC82624-2	203108	8.18	727139	10.37	288300	15.91
JC82624-3	202125	8.18	717568	10.37	278073	15.91
JC82624-4	203603	8.17	728911	10.37	284507	15.90
JC82624-5	197403	8.17	704016	10.37	275261	15.90
JC82624-6	193785	8.17	690329	10.37	270201	15.90
V6W424-SCC	203595	8.16	729035	10.37	283794	15.91
V6W424-SCC	202296	8.16	718648	10.37	280629	15.90

IS 1 = Bromochloromethane

IS 2 = 1,4-Difluorobenzene

IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.

(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

Internal Standard Area Summary

Page 1 of 1

Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std: V6W425-CC335	Injection Date: 02/20/19
Lab File ID: 6W10664.D	Injection Time: 09:44
Instrument ID: GCMS6W	Method: TO-15

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	201903	8.16	725631	10.37	306766	15.91
Upper Limit ^a	282664	8.49	1015883	10.70	429472	16.24
Lower Limit ^b	121142	7.83	435379	10.04	184060	15.58

Lab Sample ID	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
V6W425-BS	210594	8.17	750865	10.37	318515	15.91
V6W425-BSD	211470	8.16	758776	10.37	318206	15.91
V6W425-MB	208702	8.17	748319	10.37	290824	15.90
ZZZZZZ	200159	8.17	712286	10.37	275258	15.91
JC82624-5	195910	8.16	686971	10.37	280829	15.91
JC82624-6	196361	8.17	693086	10.37	260371	15.91
ZZZZZZ	203621	8.16	723826	10.37	294654	15.91
JC82613-7	199900	8.17	699526	10.37	271349	15.90
JC82613-7DUP	204029	8.16	722908	10.37	285741	15.90
V6W425-SCC	201470	8.16	717822	10.37	277024	15.91
ZZZZZZ	191595	8.16	675951	10.37	260778	15.90
ZZZZZZ	199700	8.17	712656	10.37	277910	15.91
ZZZZZZ	195216	8.17	678491	10.37	282735	15.91
ZZZZZZ	190946	8.18	642959	10.38	267458	15.91
ZZZZZZ	194716	8.17	688799	10.37	270658	15.91
ZZZZZZ	198333	8.17	693734	10.37	271712	15.91
ZZZZZZ	192702	8.17	670437	10.37	273090	15.91

IS 1 = Bromochloromethane

IS 2 = 1,4-Difluorobenzene

IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.

(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15	Reporting this level
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15	
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15	
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15	
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15	
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15	
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15	
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.32	8.12	0.655 ok	0.657	0.597-0.717
Acrolein	5.21	8.12	0.642 ok	0.643	0.583-0.703
Acrylonitrile	5.70	8.12	0.702 ok	0.704	0.644-0.764
Acetonitrile	5.12	8.12	0.631 ok	0.631	0.571-0.691
1,3-Butadiene	4.49	8.12	0.553 ok	0.553	0.493-0.613
Benzene	9.81	8.12	1.208 ok	1.208	1.148-1.268
Bromobenzene	18.26	15.70	1.163 ok	1.163	1.103-1.223
Bromodichloromethane	11.00	10.23	1.075 ok	1.075	1.015-1.135
Bromoform	16.65	15.70	1.061 ok	1.060	1.000-1.120
Bromomethane	4.70	8.12	0.579 ok	0.579	0.519-0.639
Bromoethene	5.10	8.12	0.628 ok	0.629	0.569-0.689
n-Butane	4.52	8.12	0.557 ok	0.558	0.498-0.618
Benzyl Chloride	20.10	15.70	1.280 ok	1.280	1.220-1.340
n-Butylbenzene	21.11	15.70	1.345 ok	1.345	1.285-1.405
sec-Butylbenzene	20.29	15.70	1.292 ok	1.292	1.232-1.352
tert-Butylbenzene	19.90	15.70	1.268 ok	1.267	1.207-1.327
Carbon disulfide	6.33	8.12	0.780 ok	0.781	0.721-0.841
Chlorobenzene	15.76	15.70	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.02	8.12	0.495 ok	0.496	0.436-0.556
Chloroethane	4.83	8.12	0.595 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.05	8.12	0.499 ok	0.499	0.439-0.559
Chloroform	8.25	8.12	1.016 ok	1.016	0.956-1.076
Chloromethane	4.22	8.12	0.520 ok	0.521	0.461-0.581
3-Chloropropene	6.17	8.12	0.760 ok	0.761	0.701-0.821
2-Chlorotoluene	18.88	15.70	1.203 ok	1.203	1.143-1.263
Carbon tetrachloride	9.97	8.12	1.228 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.12	1.244 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.11	8.12	0.876 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.97	8.12	0.735 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.19	10.23	1.387 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.03	8.12	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.75	10.23	1.051 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.37	10.23	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.09	10.23	1.084 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.09	8.12	0.504 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.90	8.12	0.603 ok	0.604	0.544-0.664
Dibromochloromethane	13.88	10.23	1.357 ok	1.357	1.297-1.417
Dibromomethane	10.73	10.23	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.91	8.12	0.851 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.95	8.12	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15	Reporting this level
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15	
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15	
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15	
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15	
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15	
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15	
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+/- .06)
cis-1,3-Dichloropropene	12.10	10.23	1.183	ok 1.183	1.123-1.243
m-Dichlorobenzene	20.10	15.70	1.280	ok 1.281	1.221-1.341
o-Dichlorobenzene	20.68	15.70	1.317	ok 1.317	1.257-1.377
p-Dichlorobenzene	20.21	15.70	1.287	ok 1.287	1.227-1.347
trans-1,3-Dichloropropene	12.78	10.23	1.249	ok 1.249	1.189-1.309
Di-Isopropyl ether	8.15	8.12	1.004	ok 1.005	0.945-1.065
2,3-Dimethylpentane	10.38	8.12	1.278	ok 1.278	1.218-1.338
2,4-Dimethylpentane	9.06	8.12	1.116	ok 1.116	1.056-1.176
Ethanol	4.94	8.12	0.608	ok 0.610	0.550-0.670
Ethylbenzene	16.31	15.70	1.039	ok 1.039	0.979-1.099
Ethyl Acetate	8.21	8.12	1.011	ok 1.012	0.952-1.072
Ethyl Acrylate	10.81	10.23	1.057	ok 1.058	0.998-1.118
4-Ethyltoluene	19.19	15.70	1.222	ok 1.222	1.162-1.282
Freon 113	6.29	8.12	0.775	ok 0.775	0.715-0.835
Freon 114	4.29	8.12	0.528	ok 0.529	0.469-0.589
Freon 123	5.22	8.12	0.643	ok 0.644	0.584-0.704
Freon 123A	5.26	8.12	0.648	ok 0.649	0.589-0.709
Freon 142B	4.20	8.12	0.517	ok 0.518	0.458-0.578
Freon 152A	3.98	8.12	0.490	ok 0.491	0.431-0.551
Heptane	11.39	10.23	1.113	ok 1.113	1.053-1.173
Hexachlorobutadiene	23.51	15.70	1.497	ok 1.497	1.437-1.557
Hexachloroethane	21.58	15.70	1.375	ok 1.374	1.314-1.434
Hexane	8.13	8.12	1.001	ok 1.001	0.941-1.061
2-Hexanone	13.72	10.23	1.341	ok 1.342	1.282-1.402
Iodomethane	5.91	8.12	0.728	ok 0.728	0.668-0.788
Isopropylbenzene	18.15	15.70	1.156	ok 1.156	1.096-1.216
Isopropyl Alcohol	5.53	8.12	0.681	ok 0.683	0.623-0.743
p-Isopropyltoluene	20.53	15.70	1.308	ok 1.308	1.248-1.368
Methylene chloride	6.08	8.12	0.749	ok 0.749	0.689-0.809
Methyl ethyl ketone	7.53	8.12	0.927	ok 0.930	0.870-0.990
Methyl Isobutyl Ketone	12.16	10.23	1.189	ok 1.191	1.131-1.251
Methyl Tert Butyl Ether	7.18	8.12	0.884	ok 0.887	0.827-0.947
Methylmethacrylate	11.33	10.23	1.108	ok 1.108	1.048-1.168
Naphthalene	23.06	15.70	1.469	ok 1.469	1.409-1.529
Nonane	17.63	15.70	1.123	ok 1.123	1.063-1.183
Octane	14.66	10.23	1.433	ok 1.433	1.373-1.493
Pentane	5.71	8.12	0.703	ok 0.704	0.644-0.764
n-Propylbenzene	18.96	15.70	1.208	ok 1.208	1.148-1.268
Propylene	4.04	8.12	0.498	ok 0.498	0.438-0.558
Styrene	17.09	15.70	1.089	ok 1.089	1.029-1.149

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15	Reporting this level
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15	
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15	
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15	
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15	
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15	
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15	
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.29	8.12	1.144 ok	1.144	1.084-1.204
1,1,1,2-Tetrachloroethane	15.74	10.23	1.539 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.25	15.70	1.099 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	12.98	10.23	1.269 ok	1.269	1.209-1.329
1,2,4-Trichlorobenzene	22.93	15.70	1.461 ok	1.461	1.401-1.521
1,2,3-Trichloropropane	17.44	15.70	1.111 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.91	15.70	1.268 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.70	1.231 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.05	10.23	1.080 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.03	8.12	0.743 ok	0.746	0.686-0.806
Tetrachloroethylene	14.82	10.23	1.449 ok	1.449	1.389-1.509
Tetrahydrofuran	8.71	8.12	1.073 ok	1.075	1.015-1.135
Toluene	13.33	10.23	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.04	10.23	1.079 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.43	8.12	0.669 ok	0.669	0.609-0.729
Vinyl chloride	4.39	8.12	0.541 ok	0.541	0.481-0.601
Vinyl Acetate	7.27	8.12	0.895 ok	0.896	0.836-0.956
m,p-Xylene	16.57	15.70	1.055 ok	1.055	0.995-1.115
o-Xylene	17.25	15.70	1.099 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.71	15.70	0.364 ok	0.364	0.304-0.424

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.12 ok	8.12	7.79-8.45	249551 ok	246982	148189-345775
1,4-Difluorobenzene	10.23 ok	10.23	9.90-10.56	887076 ok	865852	519511-1212193
Chlorobenzene-D5	15.70 ok	15.70	15.37-16.03	441249 ok	413539	248123-578955

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15 Reporting this level
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.33	8.13	0.656 ok	0.657	0.597-0.717
Acrolein	5.22	8.13	0.642 ok	0.643	0.583-0.703
Acrylonitrile	5.72	8.13	0.704 ok	0.704	0.644-0.764
Acetonitrile	5.13	8.13	0.631 ok	0.631	0.571-0.691
1,3-Butadiene	4.50	8.13	0.554 ok	0.553	0.493-0.613
Benzene	9.81	8.13	1.207 ok	1.208	1.148-1.268
Bromobenzene	18.26	15.71	1.162 ok	1.163	1.103-1.223
Bromodichloromethane	11.00	10.24	1.074 ok	1.075	1.015-1.135
Bromoform	16.65	15.71	1.060 ok	1.060	1.000-1.120
Bromomethane	4.71	8.13	0.579 ok	0.579	0.519-0.639
Bromoethene	5.11	8.13	0.629 ok	0.629	0.569-0.689
n-Butane	4.54	8.13	0.558 ok	0.558	0.498-0.618
Benzyl Chloride	20.10	15.71	1.279 ok	1.280	1.220-1.340
n-Butylbenzene	21.11	15.71	1.344 ok	1.345	1.285-1.405
sec-Butylbenzene	20.29	15.71	1.292 ok	1.292	1.232-1.352
tert-Butylbenzene	19.90	15.71	1.267 ok	1.267	1.207-1.327
Carbon disulfide	6.35	8.13	0.781 ok	0.781	0.721-0.841
Chlorobenzene	15.76	15.71	1.003 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.03	8.13	0.496 ok	0.496	0.436-0.556
Chloroethane	4.84	8.13	0.595 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.06	8.13	0.499 ok	0.499	0.439-0.559
Chloroform	8.26	8.13	1.016 ok	1.016	0.956-1.076
Chloromethane	4.24	8.13	0.522 ok	0.521	0.461-0.581
3-Chloropropene	6.19	8.13	0.761 ok	0.761	0.701-0.821
2-Chlorotoluene	18.88	15.71	1.202 ok	1.203	1.143-1.263
Carbon tetrachloride	9.98	8.13	1.228 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.13	1.242 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.12	8.13	0.876 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.98	8.13	0.736 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.19	10.24	1.386 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.04	8.13	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.76	10.24	1.051 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.38	10.24	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.09	10.24	1.083 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.11	8.13	0.506 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.91	8.13	0.604 ok	0.604	0.544-0.664
Dibromochloromethane	13.88	10.24	1.355 ok	1.357	1.297-1.417
Dibromomethane	10.74	10.24	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.93	8.13	0.852 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.95	8.13	0.978 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+/- .06)
cis-1,3-Dichloropropene	12.11	10.24	1.183	ok 1.183	1.123-1.243
m-Dichlorobenzene	20.10	15.71	1.279	ok 1.281	1.221-1.341
o-Dichlorobenzene	20.68	15.71	1.316	ok 1.317	1.257-1.377
p-Dichlorobenzene	20.21	15.71	1.286	ok 1.287	1.227-1.347
trans-1,3-Dichloropropene	12.78	10.24	1.248	ok 1.249	1.189-1.309
Di-Isopropyl ether	8.16	8.13	1.004	ok 1.005	0.945-1.065
2,3-Dimethylpentane	10.38	8.13	1.277	ok 1.278	1.218-1.338
2,4-Dimethylpentane	9.07	8.13	1.116	ok 1.116	1.056-1.176
Ethanol	4.96	8.13	0.610	ok 0.610	0.550-0.670
Ethylbenzene	16.31	15.71	1.038	ok 1.039	0.979-1.099
Ethyl Acetate	8.21	8.13	1.010	ok 1.012	0.952-1.072
Ethyl Acrylate	10.81	10.24	1.056	ok 1.058	0.998-1.118
4-Ethyltoluene	19.19	15.71	1.222	ok 1.222	1.162-1.282
Freon 113	6.30	8.13	0.775	ok 0.775	0.715-0.835
Freon 114	4.31	8.13	0.530	ok 0.529	0.469-0.589
Freon 123	5.23	8.13	0.643	ok 0.644	0.584-0.704
Freon 123A	5.28	8.13	0.649	ok 0.649	0.589-0.709
Freon 142B	4.22	8.13	0.519	ok 0.518	0.458-0.578
Freon 152A	4.00	8.13	0.492	ok 0.491	0.431-0.551
Heptane	11.39	10.24	1.112	ok 1.113	1.053-1.173
Hexachlorobutadiene	23.51	15.71	1.496	ok 1.497	1.437-1.557
Hexachloroethane	21.59	15.71	1.374	ok 1.374	1.314-1.434
Hexane	8.13	8.13	1.000	ok 1.001	0.941-1.061
2-Hexanone	13.72	10.24	1.340	ok 1.342	1.282-1.402
Iodomethane	5.92	8.13	0.728	ok 0.728	0.668-0.788
Isopropylbenzene	18.15	15.71	1.155	ok 1.156	1.096-1.216
Isopropyl Alcohol	5.54	8.13	0.681	ok 0.683	0.623-0.743
p-Isopropyltoluene	20.53	15.71	1.307	ok 1.308	1.248-1.368
Methylene chloride	6.09	8.13	0.749	ok 0.749	0.689-0.809
Methyl ethyl ketone	7.53	8.13	0.926	ok 0.930	0.870-0.990
Methyl Isobutyl Ketone	12.16	10.24	1.188	ok 1.191	1.131-1.251
Methyl Tert Butyl Ether	7.19	8.13	0.884	ok 0.887	0.827-0.947
Methylmethacrylate	11.33	10.24	1.106	ok 1.108	1.048-1.168
Naphthalene	23.06	15.71	1.468	ok 1.469	1.409-1.529
Nonane	17.63	15.71	1.122	ok 1.123	1.063-1.183
Octane	14.67	10.24	1.433	ok 1.433	1.373-1.493
Pentane	5.72	8.13	0.704	ok 0.704	0.644-0.764
n-Propylbenzene	18.96	15.71	1.207	ok 1.208	1.148-1.268
Propylene	4.05	8.13	0.498	ok 0.498	0.438-0.558
Styrene	17.10	15.71	1.088	ok 1.089	1.029-1.149

6.7.1
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Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.30	8.13	1.144 ok	1.144	1.084-1.204
1,1,1,2-Tetrachloroethane	15.74	10.24	1.537 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.25	15.71	1.098 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	12.98	10.24	1.268 ok	1.269	1.209-1.329
1,2,4-Trichlorobenzene	22.93	15.71	1.460 ok	1.461	1.401-1.521
1,2,3-Trichloropropane	17.44	15.71	1.110 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.92	15.71	1.268 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.71	1.230 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.06	10.24	1.080 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.05	8.13	0.744 ok	0.746	0.686-0.806
Tetrachloroethylene	14.83	10.24	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.71	8.13	1.071 ok	1.075	1.015-1.135
Toluene	13.33	10.24	1.302 ok	1.303	1.243-1.363
Trichloroethylene	11.04	10.24	1.078 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.44	8.13	0.669 ok	0.669	0.609-0.729
Vinyl chloride	4.40	8.13	0.541 ok	0.541	0.481-0.601
Vinyl Acetate	7.28	8.13	0.895 ok	0.896	0.836-0.956
m,p-Xylene	16.58	15.71	1.055 ok	1.055	0.995-1.115
o-Xylene	17.25	15.71	1.098 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.72	15.71	0.364 ok	0.364	0.304-0.424

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.13 ok	8.12	7.79-8.45	258184	ok 246982	148189-345775
1,4-Difluorobenzene	10.24 ok	10.23	9.90-10.56	883067	ok 865852	519511-1212193
Chlorobenzene-D5	15.71 ok	15.70	15.37-16.03	449047	ok 413539	248123-578955

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Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.32	8.12	0.655 ok	0.657	0.597-0.717
Acrolein	5.21	8.12	0.642 ok	0.643	0.583-0.703
Acrylonitrile	5.70	8.12	0.702 ok	0.704	0.644-0.764
Acetonitrile	5.12	8.12	0.631 ok	0.631	0.571-0.691
1,3-Butadiene	4.49	8.12	0.553 ok	0.553	0.493-0.613
Benzene	9.81	8.12	1.208 ok	1.208	1.148-1.268
Bromobenzene	18.26	15.71	1.162 ok	1.163	1.103-1.223
Bromodichloromethane	11.00	10.24	1.074 ok	1.075	1.015-1.135
Bromoform	16.65	15.71	1.060 ok	1.060	1.000-1.120
Bromomethane	4.69	8.12	0.578 ok	0.579	0.519-0.639
Bromoethene	5.10	8.12	0.628 ok	0.629	0.569-0.689
n-Butane	4.52	8.12	0.557 ok	0.558	0.498-0.618
Benzyl Chloride	20.10	15.71	1.279 ok	1.280	1.220-1.340
n-Butylbenzene	21.11	15.71	1.344 ok	1.345	1.285-1.405
sec-Butylbenzene	20.30	15.71	1.292 ok	1.292	1.232-1.352
tert-Butylbenzene	19.90	15.71	1.267 ok	1.267	1.207-1.327
Carbon disulfide	6.33	8.12	0.780 ok	0.781	0.721-0.841
Chlorobenzene	15.77	15.71	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.01	8.12	0.494 ok	0.496	0.436-0.556
Chloroethane	4.83	8.12	0.595 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.05	8.12	0.499 ok	0.499	0.439-0.559
Chloroform	8.26	8.12	1.017 ok	1.016	0.956-1.076
Chloromethane	4.22	8.12	0.520 ok	0.521	0.461-0.581
3-Chloropropene	6.17	8.12	0.760 ok	0.761	0.701-0.821
2-Chlorotoluene	18.89	15.71	1.202 ok	1.203	1.143-1.263
Carbon tetrachloride	9.97	8.12	1.228 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.12	1.244 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.12	8.12	0.877 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.97	8.12	0.735 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.19	10.24	1.386 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.03	8.12	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.75	10.24	1.050 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.38	10.24	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.08	10.24	1.082 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.09	8.12	0.504 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.90	8.12	0.603 ok	0.604	0.544-0.664
Dibromochloromethane	13.88	10.24	1.355 ok	1.357	1.297-1.417
Dibromomethane	10.74	10.24	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.92	8.12	0.852 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.95	8.12	0.979 ok	0.979	0.919-1.039

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Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15 Reporting this level
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.11	10.24	1.183	ok 1.183	1.123-1.243
m-Dichlorobenzene	20.11	15.71	1.280	ok 1.281	1.221-1.341
o-Dichlorobenzene	20.68	15.71	1.316	ok 1.317	1.257-1.377
p-Dichlorobenzene	20.21	15.71	1.286	ok 1.287	1.227-1.347
trans-1,3-Dichloropropene	12.78	10.24	1.248	ok 1.249	1.189-1.309
Di-Isopropyl ether	8.16	8.12	1.005	ok 1.005	0.945-1.065
2,3-Dimethylpentane	10.38	8.12	1.278	ok 1.278	1.218-1.338
2,4-Dimethylpentane	9.07	8.12	1.117	ok 1.116	1.056-1.176
Ethanol	4.95	8.12	0.610	ok 0.610	0.550-0.670
Ethylbenzene	16.31	15.71	1.038	ok 1.039	0.979-1.099
Ethyl Acetate	8.21	8.12	1.011	ok 1.012	0.952-1.072
Ethyl Acrylate	10.81	10.24	1.056	ok 1.058	0.998-1.118
4-Ethyltoluene	19.19	15.71	1.222	ok 1.222	1.162-1.282
Freon 113	6.29	8.12	0.775	ok 0.775	0.715-0.835
Freon 114	4.29	8.12	0.528	ok 0.529	0.469-0.589
Freon 123	5.22	8.12	0.643	ok 0.644	0.584-0.704
Freon 123A	5.26	8.12	0.648	ok 0.649	0.589-0.709
Freon 142B	4.20	8.12	0.517	ok 0.518	0.458-0.578
Freon 152A	3.98	8.12	0.490	ok 0.491	0.431-0.551
Heptane	11.39	10.24	1.112	ok 1.113	1.053-1.173
Hexachlorobutadiene	23.51	15.71	1.496	ok 1.497	1.437-1.557
Hexachloroethane	21.59	15.71	1.374	ok 1.374	1.314-1.434
Hexane	8.13	8.12	1.001	ok 1.001	0.941-1.061
2-Hexanone	13.72	10.24	1.340	ok 1.342	1.282-1.402
Iodomethane	5.91	8.12	0.728	ok 0.728	0.668-0.788
Isopropylbenzene	18.16	15.71	1.156	ok 1.156	1.096-1.216
Isopropyl Alcohol	5.54	8.12	0.682	ok 0.683	0.623-0.743
p-Isopropyltoluene	20.54	15.71	1.307	ok 1.308	1.248-1.368
Methylene chloride	6.08	8.12	0.749	ok 0.749	0.689-0.809
Methyl ethyl ketone	7.53	8.12	0.927	ok 0.930	0.870-0.990
Methyl Isobutyl Ketone	12.17	10.24	1.188	ok 1.191	1.131-1.251
Methyl Tert Butyl Ether	7.18	8.12	0.884	ok 0.887	0.827-0.947
Methylmethacrylate	11.33	10.24	1.106	ok 1.108	1.048-1.168
Naphthalene	23.06	15.71	1.468	ok 1.469	1.409-1.529
Nonane	17.63	15.71	1.122	ok 1.123	1.063-1.183
Octane	14.67	10.24	1.433	ok 1.433	1.373-1.493
Pentane	5.71	8.12	0.703	ok 0.704	0.644-0.764
n-Propylbenzene	18.96	15.71	1.207	ok 1.208	1.148-1.268
Propylene	4.03	8.12	0.496	ok 0.498	0.438-0.558
Styrene	17.10	15.71	1.088	ok 1.089	1.029-1.149

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.29	8.12	1.144 ok	1.144	1.084-1.204
1,1,1,2-Tetrachloroethane	15.75	10.24	1.538 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.25	15.71	1.098 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	12.98	10.24	1.268 ok	1.269	1.209-1.329
1,2,4-Trichlorobenzene	22.93	15.71	1.460 ok	1.461	1.401-1.521
1,2,3-Trichloropropane	17.44	15.71	1.110 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.91	15.71	1.267 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.71	1.230 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.06	10.24	1.080 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.04	8.12	0.744 ok	0.746	0.686-0.806
Tetrachloroethylene	14.82	10.24	1.447 ok	1.449	1.389-1.509
Tetrahydrofuran	8.70	8.12	1.071 ok	1.075	1.015-1.135
Toluene	13.33	10.24	1.302 ok	1.303	1.243-1.363
Trichloroethylene	11.04	10.24	1.078 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.43	8.12	0.669 ok	0.669	0.609-0.729
Vinyl chloride	4.38	8.12	0.539 ok	0.541	0.481-0.601
Vinyl Acetate	7.28	8.12	0.897 ok	0.896	0.836-0.956
m,p-Xylene	16.58	15.71	1.055 ok	1.055	0.995-1.115
o-Xylene	17.25	15.71	1.098 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.71	15.71	0.363 ok	0.364	0.304-0.424

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.12 ok	8.12	7.79-8.45	249465	ok 246982	148189-345775
1,4-Difluorobenzene	10.24 ok	10.23	9.90-10.56	852969	ok 865852	519511-1212193
Chlorobenzene-D5	15.71 ok	15.70	15.37-16.03	421193	ok 413539	248123-578955

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15 Reporting this level
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.33	8.13	0.656 ok	0.657	0.597-0.717
Acrolein	5.21	8.13	0.641 ok	0.643	0.583-0.703
Acrylonitrile	5.72	8.13	0.704 ok	0.704	0.644-0.764
Acetonitrile	5.13	8.13	0.631 ok	0.631	0.571-0.691
1,3-Butadiene	4.50	8.13	0.554 ok	0.553	0.493-0.613
Benzene	9.82	8.13	1.208 ok	1.208	1.148-1.268
Bromobenzene	18.27	15.71	1.163 ok	1.163	1.103-1.223
Bromodichloromethane	11.01	10.24	1.075 ok	1.075	1.015-1.135
Bromoform	16.66	15.71	1.060 ok	1.060	1.000-1.120
Bromomethane	4.71	8.13	0.579 ok	0.579	0.519-0.639
Bromoethene	5.11	8.13	0.629 ok	0.629	0.569-0.689
n-Butane	4.54	8.13	0.558 ok	0.558	0.498-0.618
Benzyl Chloride	20.11	15.71	1.280 ok	1.280	1.220-1.340
n-Butylbenzene	21.12	15.71	1.344 ok	1.345	1.285-1.405
sec-Butylbenzene	20.30	15.71	1.292 ok	1.292	1.232-1.352
tert-Butylbenzene	19.91	15.71	1.267 ok	1.267	1.207-1.327
Carbon disulfide	6.34	8.13	0.780 ok	0.781	0.721-0.841
Chlorobenzene	15.77	15.71	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.03	8.13	0.496 ok	0.496	0.436-0.556
Chloroethane	4.83	8.13	0.594 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.06	8.13	0.499 ok	0.499	0.439-0.559
Chloroform	8.27	8.13	1.017 ok	1.016	0.956-1.076
Chloromethane	4.23	8.13	0.520 ok	0.521	0.461-0.581
3-Chloropropene	6.19	8.13	0.761 ok	0.761	0.701-0.821
2-Chlorotoluene	18.89	15.71	1.202 ok	1.203	1.143-1.263
Carbon tetrachloride	9.99	8.13	1.229 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.13	1.242 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.12	8.13	0.876 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.97	8.13	0.734 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.20	10.24	1.387 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.04	8.13	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.76	10.24	1.051 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.38	10.24	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.09	10.24	1.083 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.11	8.13	0.506 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.91	8.13	0.604 ok	0.604	0.544-0.664
Dibromochloromethane	13.89	10.24	1.356 ok	1.357	1.297-1.417
Dibromomethane	10.74	10.24	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.93	8.13	0.852 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.96	8.13	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.11	10.24	1.183	ok 1.183	1.123-1.243
m-Dichlorobenzene	20.12	15.71	1.281	ok 1.281	1.221-1.341
o-Dichlorobenzene	20.69	15.71	1.317	ok 1.317	1.257-1.377
p-Dichlorobenzene	20.21	15.71	1.286	ok 1.287	1.227-1.347
trans-1,3-Dichloropropene	12.78	10.24	1.248	ok 1.249	1.189-1.309
Di-Isopropyl ether	8.16	8.13	1.004	ok 1.005	0.945-1.065
2,3-Dimethylpentane	10.39	8.13	1.278	ok 1.278	1.218-1.338
2,4-Dimethylpentane	9.07	8.13	1.116	ok 1.116	1.056-1.176
Ethanol	4.96	8.13	0.610	ok 0.610	0.550-0.670
Ethylbenzene	16.31	15.71	1.038	ok 1.039	0.979-1.099
Ethyl Acetate	8.22	8.13	1.011	ok 1.012	0.952-1.072
Ethyl Acrylate	10.82	10.24	1.057	ok 1.058	0.998-1.118
4-Ethyltoluene	19.20	15.71	1.222	ok 1.222	1.162-1.282
Freon 113	6.30	8.13	0.775	ok 0.775	0.715-0.835
Freon 114	4.30	8.13	0.529	ok 0.529	0.469-0.589
Freon 123	5.23	8.13	0.643	ok 0.644	0.584-0.704
Freon 123A	5.28	8.13	0.649	ok 0.649	0.589-0.709
Freon 142B	4.22	8.13	0.519	ok 0.518	0.458-0.578
Freon 152A	4.00	8.13	0.492	ok 0.491	0.431-0.551
Heptane	11.41	10.24	1.114	ok 1.113	1.053-1.173
Hexachlorobutadiene	23.51	15.71	1.496	ok 1.497	1.437-1.557
Hexachloroethane	21.59	15.71	1.374	ok 1.374	1.314-1.434
Hexane	8.14	8.13	1.001	ok 1.001	0.941-1.061
2-Hexanone	13.73	10.24	1.341	ok 1.342	1.282-1.402
Iodomethane	5.92	8.13	0.728	ok 0.728	0.668-0.788
Isopropylbenzene	18.16	15.71	1.156	ok 1.156	1.096-1.216
Isopropyl Alcohol	5.55	8.13	0.683	ok 0.683	0.623-0.743
p-Isopropyltoluene	20.54	15.71	1.307	ok 1.308	1.248-1.368
Methylene chloride	6.09	8.13	0.749	ok 0.749	0.689-0.809
Methyl ethyl ketone	7.54	8.13	0.927	ok 0.930	0.870-0.990
Methyl Isobutyl Ketone	12.18	10.24	1.189	ok 1.191	1.131-1.251
Methyl Tert Butyl Ether	7.19	8.13	0.884	ok 0.887	0.827-0.947
Methylmethacrylate	11.34	10.24	1.107	ok 1.108	1.048-1.168
Nonane	17.64	15.71	1.123	ok 1.123	1.063-1.183
Octane	14.67	10.24	1.433	ok 1.433	1.373-1.493
Pentane	5.72	8.13	0.704	ok 0.704	0.644-0.764
n-Propylbenzene	18.97	15.71	1.208	ok 1.208	1.148-1.268
Propylene	4.05	8.13	0.498	ok 0.498	0.438-0.558
Styrene	17.11	15.71	1.089	ok 1.089	1.029-1.149
1,1,1-Trichloroethane	9.30	8.13	1.144	ok 1.144	1.084-1.204

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.75	10.24	1.538 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.26	15.71	1.099 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	12.99	10.24	1.269 ok	1.269	1.209-1.329
1,2,4-Trichlorobenzene	22.93	15.71	1.460 ok	1.461	1.401-1.521
1,2,3-Trichloropropane	17.45	15.71	1.111 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.93	15.71	1.269 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.71	1.230 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.06	10.24	1.080 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.06	8.13	0.745 ok	0.746	0.686-0.806
Tetrachloroethylene	14.83	10.24	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.71	8.13	1.071 ok	1.075	1.015-1.135
Toluene	13.33	10.24	1.302 ok	1.303	1.243-1.363
Trichloroethylene	11.05	10.24	1.079 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.44	8.13	0.669 ok	0.669	0.609-0.729
Vinyl chloride	4.39	8.13	0.540 ok	0.541	0.481-0.601
Vinyl Acetate	7.28	8.13	0.895 ok	0.896	0.836-0.956
m,p-Xylene	16.59	15.71	1.056 ok	1.055	0.995-1.115
o-Xylene	17.25	15.71	1.098 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.72	15.71	0.364 ok	0.364	0.304-0.424

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.13 ok	8.12	7.79-8.45	267925	ok 246982	148189-345775
1,4-Difluorobenzene	10.24 ok	10.23	9.90-10.56	877198	ok 865852	519511-1212193
Chlorobenzene-D5	15.71 ok	15.70	15.37-16.03	436251	ok 413539	248123-578955

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15	
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15	
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15	
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15	
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15	Reporting this level
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15	
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15	
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acrylonitrile	5.72	8.12	0.704 ok	0.704	0.644-0.764
1,3-Butadiene	4.49	8.12	0.553 ok	0.553	0.493-0.613
Benzene	9.81	8.12	1.208 ok	1.208	1.148-1.268
Bromobenzene	18.26	15.70	1.163 ok	1.163	1.103-1.223
Bromodichloromethane	11.00	10.23	1.075 ok	1.075	1.015-1.135
Bromoform	16.66	15.70	1.061 ok	1.060	1.000-1.120
Bromoethene	5.11	8.12	0.629 ok	0.629	0.569-0.689
n-Butane	4.53	8.12	0.558 ok	0.558	0.498-0.618
Benzyl Chloride	20.12	15.70	1.282 ok	1.280	1.220-1.340
n-Butylbenzene	21.13	15.70	1.346 ok	1.345	1.285-1.405
sec-Butylbenzene	20.30	15.70	1.293 ok	1.292	1.232-1.352
tert-Butylbenzene	19.90	15.70	1.268 ok	1.267	1.207-1.327
Carbon disulfide	6.34	8.12	0.781 ok	0.781	0.721-0.841
Chlorobenzene	15.77	15.70	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.03	8.12	0.496 ok	0.496	0.436-0.556
Chloroethane	4.82	8.12	0.594 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.05	8.12	0.499 ok	0.499	0.439-0.559
Chloroform	8.25	8.12	1.016 ok	1.016	0.956-1.076
Chloromethane	4.23	8.12	0.521 ok	0.521	0.461-0.581
3-Chloropropene	6.18	8.12	0.761 ok	0.761	0.701-0.821
2-Chlorotoluene	18.89	15.70	1.203 ok	1.203	1.143-1.263
Carbon tetrachloride	9.97	8.12	1.228 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.12	1.244 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.11	8.12	0.876 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.97	8.12	0.735 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.20	10.23	1.388 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.03	8.12	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.76	10.23	1.052 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.39	10.23	1.309 ok	1.308	1.248-1.368
1,4-Dioxane	11.15	10.23	1.090 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.10	8.12	0.505 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.91	8.12	0.605 ok	0.604	0.544-0.664
Dibromochloromethane	13.88	10.23	1.357 ok	1.357	1.297-1.417
Dibromomethane	10.73	10.23	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.92	8.12	0.852 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.95	8.12	0.979 ok	0.979	0.919-1.039
cis-1,3-Dichloropropene	12.12	10.23	1.185 ok	1.183	1.123-1.243
m-Dichlorobenzene	20.12	15.70	1.282 ok	1.281	1.221-1.341
o-Dichlorobenzene	20.69	15.70	1.318 ok	1.317	1.257-1.377
p-Dichlorobenzene	20.22	15.70	1.288 ok	1.287	1.227-1.347

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15 Reporting this level
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.80	10.23	1.251 ok	1.249	1.189-1.309
Di-Isopropyl ether	8.17	8.12	1.006 ok	1.005	0.945-1.065
2,3-Dimethylpentane	10.38	8.12	1.278 ok	1.278	1.218-1.338
2,4-Dimethylpentane	9.07	8.12	1.117 ok	1.116	1.056-1.176
Ethylbenzene	16.31	15.70	1.039 ok	1.039	0.979-1.099
Ethyl Acrylate	10.85	10.23	1.061 ok	1.058	0.998-1.118
4-Ethyltoluene	19.20	15.70	1.223 ok	1.222	1.162-1.282
Freon 113	6.30	8.12	0.776 ok	0.775	0.715-0.835
Freon 114	4.30	8.12	0.530 ok	0.529	0.469-0.589
Freon 123	5.23	8.12	0.644 ok	0.644	0.584-0.704
Freon 123A	5.27	8.12	0.649 ok	0.649	0.589-0.709
Freon 142B	4.21	8.12	0.518 ok	0.518	0.458-0.578
Freon 152A	3.98	8.12	0.490 ok	0.491	0.431-0.551
Heptane	11.39	10.23	1.113 ok	1.113	1.053-1.173
Hexachloroethane	21.58	15.70	1.375 ok	1.374	1.314-1.434
Hexane	8.13	8.12	1.001 ok	1.001	0.941-1.061
Iodomethane	5.91	8.12	0.728 ok	0.728	0.668-0.788
Isopropylbenzene	18.15	15.70	1.156 ok	1.156	1.096-1.216
p-Isopropyltoluene	20.54	15.70	1.308 ok	1.308	1.248-1.368
Methyl ethyl ketone	7.58	8.12	0.933 ok	0.930	0.870-0.990
Methyl Isobutyl Ketone	12.22	10.23	1.195 ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.24	8.12	0.892 ok	0.887	0.827-0.947
Methylmethacrylate	11.36	10.23	1.110 ok	1.108	1.048-1.168
Nonane	17.63	15.70	1.123 ok	1.123	1.063-1.183
Octane	14.67	10.23	1.434 ok	1.433	1.373-1.493
Pentane	5.72	8.12	0.704 ok	0.704	0.644-0.764
n-Propylbenzene	18.97	15.70	1.208 ok	1.208	1.148-1.268
Propylene	4.05	8.12	0.499 ok	0.498	0.438-0.558
Styrene	17.12	15.70	1.090 ok	1.089	1.029-1.149
1,1,1-Trichloroethane	9.29	8.12	1.144 ok	1.144	1.084-1.204
1,1,1,2-Tetrachloroethane	15.74	10.23	1.539 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.27	15.70	1.100 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	13.00	10.23	1.271 ok	1.269	1.209-1.329
1,2,3-Trichloropropane	17.46	15.70	1.112 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.92	15.70	1.269 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.70	1.231 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.04	10.23	1.079 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.09	8.12	0.750 ok	0.746	0.686-0.806
Tetrachloroethylene	14.82	10.23	1.449 ok	1.449	1.389-1.509
Tetrahydrofuran	8.77	8.12	1.080 ok	1.075	1.015-1.135

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Toluene	13.33	10.23	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.04	10.23	1.079 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.43	8.12	0.669 ok	0.669	0.609-0.729
Vinyl chloride	4.39	8.12	0.541 ok	0.541	0.481-0.601
Vinyl Acetate	7.29	8.12	0.898 ok	0.896	0.836-0.956
m,p-Xylene	16.56	15.70	1.055 ok	1.055	0.995-1.115
o-Xylene	17.25	15.70	1.099 ok	1.098	1.038-1.158

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.12 ok	8.12	7.79-8.45	246360	ok 246982	148189-345775
1,4-Difluorobenzene	10.23 ok	10.23	9.90-10.56	892317	ok 865852	519511-1212193
Chlorobenzene-D5	15.70 ok	15.70	15.37-16.03	399951	ok 413539	248123-578955

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.36	8.12	0.660 ok	0.657	0.597-0.717
Acrolein	5.24	8.12	0.645 ok	0.643	0.583-0.703
Acrylonitrile	5.73	8.12	0.706 ok	0.704	0.644-0.764
Acetonitrile	5.14	8.12	0.633 ok	0.631	0.571-0.691
1,3-Butadiene	4.49	8.12	0.553 ok	0.553	0.493-0.613
Benzene	9.81	8.12	1.208 ok	1.208	1.148-1.268
Bromobenzene	18.27	15.70	1.164 ok	1.163	1.103-1.223
Bromodichloromethane	11.00	10.23	1.075 ok	1.075	1.015-1.135
Bromoform	16.66	15.70	1.061 ok	1.060	1.000-1.120
Bromomethane	4.71	8.12	0.580 ok	0.579	0.519-0.639
Bromoethene	5.12	8.12	0.631 ok	0.629	0.569-0.689
n-Butane	4.53	8.12	0.558 ok	0.558	0.498-0.618
Benzyl Chloride	20.11	15.70	1.281 ok	1.280	1.220-1.340
n-Butylbenzene	21.12	15.70	1.345 ok	1.345	1.285-1.405
sec-Butylbenzene	20.30	15.70	1.293 ok	1.292	1.232-1.352
tert-Butylbenzene	19.90	15.70	1.268 ok	1.267	1.207-1.327
Carbon disulfide	6.35	8.12	0.782 ok	0.781	0.721-0.841
Chlorobenzene	15.76	15.70	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.03	8.12	0.496 ok	0.496	0.436-0.556
Chloroethane	4.84	8.12	0.596 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.05	8.12	0.499 ok	0.499	0.439-0.559
Chloroform	8.25	8.12	1.016 ok	1.016	0.956-1.076
Chloromethane	4.24	8.12	0.522 ok	0.521	0.461-0.581
3-Chloropropene	6.19	8.12	0.762 ok	0.761	0.701-0.821
2-Chlorotoluene	18.89	15.70	1.203 ok	1.203	1.143-1.263
Carbon tetrachloride	9.98	8.12	1.229 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.12	1.244 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.12	8.12	0.877 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.97	8.12	0.735 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.19	10.23	1.387 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.03	8.12	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.76	10.23	1.052 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.39	10.23	1.309 ok	1.308	1.248-1.368
1,4-Dioxane	11.15	10.23	1.090 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.11	8.12	0.506 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.91	8.12	0.605 ok	0.604	0.544-0.664
Dibromochloromethane	13.89	10.23	1.358 ok	1.357	1.297-1.417
Dibromomethane	10.74	10.23	1.050 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.93	8.12	0.853 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.95	8.12	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.12	10.23	1.185	ok	1.183	1.123-1.243
m-Dichlorobenzene	20.12	15.70	1.282	ok	1.281	1.221-1.341
o-Dichlorobenzene	20.69	15.70	1.318	ok	1.317	1.257-1.377
p-Dichlorobenzene	20.21	15.70	1.287	ok	1.287	1.227-1.347
trans-1,3-Dichloropropene	12.79	10.23	1.250	ok	1.249	1.189-1.309
Di-Isopropyl ether	8.18	8.12	1.007	ok	1.005	0.945-1.065
2,3-Dimethylpentane	10.38	8.12	1.278	ok	1.278	1.218-1.338
2,4-Dimethylpentane	9.07	8.12	1.117	ok	1.116	1.056-1.176
Ethylbenzene	16.32	15.70	1.039	ok	1.039	0.979-1.099
Ethyl Acetate	8.24	8.12	1.015	ok	1.012	0.952-1.072
Ethyl Acrylate	10.84	10.23	1.060	ok	1.058	0.998-1.118
4-Ethyltoluene	19.20	15.70	1.223	ok	1.222	1.162-1.282
Freon 113	6.30	8.12	0.776	ok	0.775	0.715-0.835
Freon 114	4.30	8.12	0.530	ok	0.529	0.469-0.589
Freon 123	5.23	8.12	0.644	ok	0.644	0.584-0.704
Freon 123A	5.28	8.12	0.650	ok	0.649	0.589-0.709
Freon 142B	4.21	8.12	0.518	ok	0.518	0.458-0.578
Freon 152A	3.99	8.12	0.491	ok	0.491	0.431-0.551
Heptane	11.39	10.23	1.113	ok	1.113	1.053-1.173
Hexachlorobutadiene	23.51	15.70	1.497	ok	1.497	1.437-1.557
Hexachloroethane	21.58	15.70	1.375	ok	1.374	1.314-1.434
Hexane	8.13	8.12	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.77	10.23	1.346	ok	1.342	1.282-1.402
Iodomethane	5.91	8.12	0.728	ok	0.728	0.668-0.788
Isopropylbenzene	18.16	15.70	1.157	ok	1.156	1.096-1.216
Isopropyl Alcohol	5.56	8.12	0.685	ok	0.683	0.623-0.743
p-Isopropyltoluene	20.54	15.70	1.308	ok	1.308	1.248-1.368
Methylene chloride	6.09	8.12	0.750	ok	0.749	0.689-0.809
Methyl ethyl ketone	7.58	8.12	0.933	ok	0.930	0.870-0.990
Methyl Isobutyl Ketone	12.21	10.23	1.194	ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.22	8.12	0.889	ok	0.887	0.827-0.947
Methylmethacrylate	11.35	10.23	1.109	ok	1.108	1.048-1.168
Naphthalene	23.09	15.70	1.471	ok	1.469	1.409-1.529
Nonane	17.63	15.70	1.123	ok	1.123	1.063-1.183
Octane	14.67	10.23	1.434	ok	1.433	1.373-1.493
Pentane	5.72	8.12	0.704	ok	0.704	0.644-0.764
n-Propylbenzene	18.97	15.70	1.208	ok	1.208	1.148-1.268
Propylene	4.05	8.12	0.499	ok	0.498	0.438-0.558
Styrene	17.11	15.70	1.090	ok	1.089	1.029-1.149
1,1,1-Trichloroethane	9.29	8.12	1.144	ok	1.144	1.084-1.204

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.75	10.23	1.540 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.26	15.70	1.099 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	13.00	10.23	1.271 ok	1.269	1.209-1.329
1,2,4-Trichlorobenzene	22.96	15.70	1.462 ok	1.461	1.401-1.521
1,2,3-Trichloropropane	17.45	15.70	1.111 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.92	15.70	1.269 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.70	1.231 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.05	10.23	1.080 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.09	8.12	0.750 ok	0.746	0.686-0.806
Tetrachloroethylene	14.83	10.23	1.450 ok	1.449	1.389-1.509
Tetrahydrofuran	8.77	8.12	1.080 ok	1.075	1.015-1.135
Toluene	13.33	10.23	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.04	10.23	1.079 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.44	8.12	0.670 ok	0.669	0.609-0.729
Vinyl chloride	4.40	8.12	0.542 ok	0.541	0.481-0.601
Vinyl Acetate	7.29	8.12	0.898 ok	0.896	0.836-0.956
m,p-Xylene	16.56	15.70	1.055 ok	1.055	0.995-1.115
o-Xylene	17.25	15.70	1.099 ok	1.098	1.038-1.158

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.12 ok	8.12	7.79-8.45	235183	ok 246982	148189-345775
1,4-Difluorobenzene	10.23 ok	10.23	9.90-10.56	852655	ok 865852	519511-1212193
Chlorobenzene-D5	15.70 ok	15.70	15.37-16.03	387396	ok 413539	248123-578955

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.35	8.12	0.659 ok	0.657	0.597-0.717
Acrolein	5.23	8.12	0.644 ok	0.643	0.583-0.703
Acrylonitrile	5.72	8.12	0.704 ok	0.704	0.644-0.764
Acetonitrile	5.13	8.12	0.632 ok	0.631	0.571-0.691
1,3-Butadiene	4.49	8.12	0.553 ok	0.553	0.493-0.613
Benzene	9.81	8.12	1.208 ok	1.208	1.148-1.268
Bromobenzene	18.26	15.70	1.163 ok	1.163	1.103-1.223
Bromodichloromethane	11.00	10.23	1.075 ok	1.075	1.015-1.135
Bromoform	16.65	15.70	1.061 ok	1.060	1.000-1.120
Bromomethane	4.71	8.12	0.580 ok	0.579	0.519-0.639
Bromoethene	5.10	8.12	0.628 ok	0.629	0.569-0.689
n-Butane	4.53	8.12	0.558 ok	0.558	0.498-0.618
Benzyl Chloride	20.10	15.70	1.280 ok	1.280	1.220-1.340
n-Butylbenzene	21.12	15.70	1.345 ok	1.345	1.285-1.405
sec-Butylbenzene	20.30	15.70	1.293 ok	1.292	1.232-1.352
tert-Butylbenzene	19.90	15.70	1.268 ok	1.267	1.207-1.327
Carbon disulfide	6.34	8.12	0.781 ok	0.781	0.721-0.841
Chlorobenzene	15.76	15.70	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.03	8.12	0.496 ok	0.496	0.436-0.556
Chloroethane	4.83	8.12	0.595 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.05	8.12	0.499 ok	0.499	0.439-0.559
Chloroform	8.25	8.12	1.016 ok	1.016	0.956-1.076
Chloromethane	4.23	8.12	0.521 ok	0.521	0.461-0.581
3-Chloropropene	6.19	8.12	0.762 ok	0.761	0.701-0.821
2-Chlorotoluene	18.89	15.70	1.203 ok	1.203	1.143-1.263
Carbon tetrachloride	9.97	8.12	1.228 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.12	1.244 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.12	8.12	0.877 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.97	8.12	0.735 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.19	10.23	1.387 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.03	8.12	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.76	10.23	1.052 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.38	10.23	1.308 ok	1.308	1.248-1.368
1,4-Dioxane	11.13	10.23	1.088 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.10	8.12	0.505 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.90	8.12	0.603 ok	0.604	0.544-0.664
Dibromochloromethane	13.88	10.23	1.357 ok	1.357	1.297-1.417
Dibromomethane	10.73	10.23	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.92	8.12	0.852 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.95	8.12	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.11	10.23	1.184	ok	1.183	1.123-1.243
m-Dichlorobenzene	20.12	15.70	1.282	ok	1.281	1.221-1.341
o-Dichlorobenzene	20.69	15.70	1.318	ok	1.317	1.257-1.377
p-Dichlorobenzene	20.21	15.70	1.287	ok	1.287	1.227-1.347
trans-1,3-Dichloropropene	12.79	10.23	1.250	ok	1.249	1.189-1.309
Di-Isopropyl ether	8.17	8.12	1.006	ok	1.005	0.945-1.065
2,3-Dimethylpentane	10.38	8.12	1.278	ok	1.278	1.218-1.338
2,4-Dimethylpentane	9.07	8.12	1.117	ok	1.116	1.056-1.176
Ethanol	4.96	8.12	0.611	ok	0.610	0.550-0.670
Ethylbenzene	16.31	15.70	1.039	ok	1.039	0.979-1.099
Ethyl Acetate	8.24	8.12	1.015	ok	1.012	0.952-1.072
Ethyl Acrylate	10.83	10.23	1.059	ok	1.058	0.998-1.118
4-Ethyltoluene	19.19	15.70	1.222	ok	1.222	1.162-1.282
Freon 113	6.30	8.12	0.776	ok	0.775	0.715-0.835
Freon 114	4.30	8.12	0.530	ok	0.529	0.469-0.589
Freon 123	5.23	8.12	0.644	ok	0.644	0.584-0.704
Freon 123A	5.27	8.12	0.649	ok	0.649	0.589-0.709
Freon 142B	4.21	8.12	0.518	ok	0.518	0.458-0.578
Freon 152A	3.98	8.12	0.490	ok	0.491	0.431-0.551
Heptane	11.39	10.23	1.113	ok	1.113	1.053-1.173
Hexachlorobutadiene	23.51	15.70	1.497	ok	1.497	1.437-1.557
Hexachloroethane	21.58	15.70	1.375	ok	1.374	1.314-1.434
Hexane	8.13	8.12	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.75	10.23	1.344	ok	1.342	1.282-1.402
Iodomethane	5.91	8.12	0.728	ok	0.728	0.668-0.788
Isopropylbenzene	18.15	15.70	1.156	ok	1.156	1.096-1.216
Isopropyl Alcohol	5.56	8.12	0.685	ok	0.683	0.623-0.743
p-Isopropyltoluene	20.54	15.70	1.308	ok	1.308	1.248-1.368
Methylene chloride	6.09	8.12	0.750	ok	0.749	0.689-0.809
Methyl ethyl ketone	7.57	8.12	0.932	ok	0.930	0.870-0.990
Methyl Isobutyl Ketone	12.20	10.23	1.193	ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.21	8.12	0.888	ok	0.887	0.827-0.947
Methylmethacrylate	11.35	10.23	1.109	ok	1.108	1.048-1.168
Naphthalene	23.09	15.70	1.471	ok	1.469	1.409-1.529
Nonane	17.63	15.70	1.123	ok	1.123	1.063-1.183
Octane	14.67	10.23	1.434	ok	1.433	1.373-1.493
Pentane	5.72	8.12	0.704	ok	0.704	0.644-0.764
n-Propylbenzene	18.97	15.70	1.208	ok	1.208	1.148-1.268
Propylene	4.04	8.12	0.498	ok	0.498	0.438-0.558
Styrene	17.11	15.70	1.090	ok	1.089	1.029-1.149

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.29	8.12	1.144 ok	1.144	1.084-1.204
1,1,1,2-Tetrachloroethane	15.74	10.23	1.539 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.26	15.70	1.099 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	12.98	10.23	1.269 ok	1.269	1.209-1.329
1,2,4-Trichlorobenzene	22.96	15.70	1.462 ok	1.461	1.401-1.521
1,2,3-Trichloropropane	17.45	15.70	1.111 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.92	15.70	1.269 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.70	1.231 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.05	10.23	1.080 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.06	8.12	0.746 ok	0.746	0.686-0.806
Tetrachloroethylene	14.82	10.23	1.449 ok	1.449	1.389-1.509
Tetrahydrofuran	8.76	8.12	1.079 ok	1.075	1.015-1.135
Toluene	13.33	10.23	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.04	10.23	1.079 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.43	8.12	0.669 ok	0.669	0.609-0.729
Vinyl chloride	4.39	8.12	0.541 ok	0.541	0.481-0.601
Vinyl Acetate	7.28	8.12	0.897 ok	0.896	0.836-0.956
m,p-Xylene	16.56	15.70	1.055 ok	1.055	0.995-1.115
o-Xylene	17.25	15.70	1.099 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.72	15.70	0.364 ok	0.364	0.304-0.424

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.12 ok	8.12	7.79-8.45	236867	ok 246982	148189-345775
1,4-Difluorobenzene	10.23 ok	10.23	9.90-10.56	846079	ok 865852	519511-1212193
Chlorobenzene-D5	15.70 ok	15.70	15.37-16.03	386534	ok 413539	248123-578955

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.34	8.12	0.658 ok	0.657	0.597-0.717
Acrolein	5.23	8.12	0.644 ok	0.643	0.583-0.703
Acrylonitrile	5.72	8.12	0.704 ok	0.704	0.644-0.764
Acetonitrile	5.13	8.12	0.632 ok	0.631	0.571-0.691
1,3-Butadiene	4.50	8.12	0.554 ok	0.553	0.493-0.613
Benzene	9.81	8.12	1.208 ok	1.208	1.148-1.268
Bromobenzene	18.26	15.70	1.163 ok	1.163	1.103-1.223
Bromodichloromethane	11.00	10.23	1.075 ok	1.075	1.015-1.135
Bromoform	16.65	15.70	1.061 ok	1.060	1.000-1.120
Bromomethane	4.71	8.12	0.580 ok	0.579	0.519-0.639
Bromoethene	5.11	8.12	0.629 ok	0.629	0.569-0.689
n-Butane	4.53	8.12	0.558 ok	0.558	0.498-0.618
Benzyl Chloride	20.10	15.70	1.280 ok	1.280	1.220-1.340
n-Butylbenzene	21.12	15.70	1.345 ok	1.345	1.285-1.405
sec-Butylbenzene	20.29	15.70	1.292 ok	1.292	1.232-1.352
tert-Butylbenzene	19.90	15.70	1.268 ok	1.267	1.207-1.327
Carbon disulfide	6.34	8.12	0.781 ok	0.781	0.721-0.841
Chlorobenzene	15.76	15.70	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	4.03	8.12	0.496 ok	0.496	0.436-0.556
Chloroethane	4.83	8.12	0.595 ok	0.595	0.535-0.655
Chlorotrifluoroethene	4.06	8.12	0.500 ok	0.499	0.439-0.559
Chloroform	8.25	8.12	1.016 ok	1.016	0.956-1.076
Chloromethane	4.23	8.12	0.521 ok	0.521	0.461-0.581
3-Chloropropene	6.18	8.12	0.761 ok	0.761	0.701-0.821
2-Chlorotoluene	18.89	15.70	1.203 ok	1.203	1.143-1.263
Carbon tetrachloride	9.97	8.12	1.228 ok	1.228	1.168-1.288
Cyclohexane	10.10	8.12	1.244 ok	1.243	1.183-1.303
1,1-Dichloroethane	7.12	8.12	0.877 ok	0.876	0.816-0.936
1,1-Dichloroethylene	5.97	8.12	0.735 ok	0.735	0.675-0.795
1,2-Dibromoethane	14.19	10.23	1.387 ok	1.387	1.327-1.447
1,2-Dichloroethane	9.03	8.12	1.112 ok	1.112	1.052-1.172
1,2-Dichloropropane	10.75	10.23	1.051 ok	1.051	0.991-1.111
1,3-Dichloropropane	13.38	10.23	1.308 ok	1.308	1.248-1.368
1,4-Dioxane	11.12	10.23	1.087 ok	1.086	1.026-1.146
Dichlorodifluoromethane	4.11	8.12	0.506 ok	0.505	0.445-0.565
Dichlorofluoromethane	4.91	8.12	0.605 ok	0.604	0.544-0.664
Dibromochloromethane	13.88	10.23	1.357 ok	1.357	1.297-1.417
Dibromomethane	10.74	10.23	1.050 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.93	8.12	0.853 ok	0.852	0.792-0.912
cis-1,2-Dichloroethylene	7.95	8.12	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.11	10.23	1.184	ok	1.183	1.123-1.243
m-Dichlorobenzene	20.11	15.70	1.281	ok	1.281	1.221-1.341
o-Dichlorobenzene	20.69	15.70	1.318	ok	1.317	1.257-1.377
p-Dichlorobenzene	20.21	15.70	1.287	ok	1.287	1.227-1.347
trans-1,3-Dichloropropene	12.78	10.23	1.249	ok	1.249	1.189-1.309
Di-Isopropyl ether	8.16	8.12	1.005	ok	1.005	0.945-1.065
2,3-Dimethylpentane	10.38	8.12	1.278	ok	1.278	1.218-1.338
2,4-Dimethylpentane	9.07	8.12	1.117	ok	1.116	1.056-1.176
Ethanol	4.96	8.12	0.611	ok	0.610	0.550-0.670
Ethylbenzene	16.31	15.70	1.039	ok	1.039	0.979-1.099
Ethyl Acetate	8.22	8.12	1.012	ok	1.012	0.952-1.072
Ethyl Acrylate	10.82	10.23	1.058	ok	1.058	0.998-1.118
4-Ethyltoluene	19.19	15.70	1.222	ok	1.222	1.162-1.282
Freon 113	6.30	8.12	0.776	ok	0.775	0.715-0.835
Freon 114	4.30	8.12	0.530	ok	0.529	0.469-0.589
Freon 123	5.23	8.12	0.644	ok	0.644	0.584-0.704
Freon 123A	5.27	8.12	0.649	ok	0.649	0.589-0.709
Freon 142B	4.22	8.12	0.520	ok	0.518	0.458-0.578
Freon 152A	3.99	8.12	0.491	ok	0.491	0.431-0.551
Heptane	11.39	10.23	1.113	ok	1.113	1.053-1.173
Hexachlorobutadiene	23.51	15.70	1.497	ok	1.497	1.437-1.557
Hexachloroethane	21.58	15.70	1.375	ok	1.374	1.314-1.434
Hexane	8.13	8.12	1.001	ok	1.001	0.941-1.061
2-Hexanone	13.74	10.23	1.343	ok	1.342	1.282-1.402
Iodomethane	5.91	8.12	0.728	ok	0.728	0.668-0.788
Isopropylbenzene	18.15	15.70	1.156	ok	1.156	1.096-1.216
Isopropyl Alcohol	5.55	8.12	0.683	ok	0.683	0.623-0.743
p-Isopropyltoluene	20.53	15.70	1.308	ok	1.308	1.248-1.368
Methylene chloride	6.09	8.12	0.750	ok	0.749	0.689-0.809
Methyl ethyl ketone	7.56	8.12	0.931	ok	0.930	0.870-0.990
Methyl Isobutyl Ketone	12.18	10.23	1.191	ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.21	8.12	0.888	ok	0.887	0.827-0.947
Methylmethacrylate	11.34	10.23	1.109	ok	1.108	1.048-1.168
Naphthalene	23.07	15.70	1.469	ok	1.469	1.409-1.529
Nonane	17.63	15.70	1.123	ok	1.123	1.063-1.183
Octane	14.67	10.23	1.434	ok	1.433	1.373-1.493
Pentane	5.72	8.12	0.704	ok	0.704	0.644-0.764
n-Propylbenzene	18.96	15.70	1.208	ok	1.208	1.148-1.268
Propylene	4.05	8.12	0.499	ok	0.498	0.438-0.558
Styrene	17.10	15.70	1.089	ok	1.089	1.029-1.149

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V5W1390-IC1390	5W34378.D	12/26/18 22:25	GP	5	GCMS5W	TO-15
V5W1390-ICC1390	5W34379.D	12/26/18 23:10	GP	10	GCMS5W	TO-15
V5W1390-IC1390	5W34381.D	12/27/18 00:42	GP	20	GCMS5W	TO-15
V5W1390-IC1390	5W34383.D	12/27/18 02:23	GP	40	GCMS5W	TO-15
V5W1390-IC1390	5W34388.D	12/27/18 12:14	GP	0.04	GCMS5W	TO-15
V5W1390-IC1390	5W34389.D	12/27/18 13:00	GP	0.1	GCMS5W	TO-15
V5W1390-IC1390	5W34390.D	12/27/18 13:46	GP	0.2	GCMS5W	TO-15
V5W1390-IC1390	5W34391.D	12/27/18 14:38	GP	0.5	GCMS5W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.29	8.12	1.144 ok	1.144	1.084-1.204
1,1,1,2-Tetrachloroethane	15.74	10.23	1.539 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.25	15.70	1.099 ok	1.099	1.039-1.159
1,1,2-Trichloroethane	12.98	10.23	1.269 ok	1.269	1.209-1.329
1,2,4-Trichlorobenzene	22.94	15.70	1.461 ok	1.461	1.401-1.521
1,2,3-Trichloropropane	17.45	15.70	1.111 ok	1.111	1.051-1.171
1,2,4-Trimethylbenzene	19.91	15.70	1.268 ok	1.268	1.208-1.328
1,3,5-Trimethylbenzene	19.32	15.70	1.231 ok	1.230	1.170-1.290
2,2,4-Trimethylpentane	11.05	10.23	1.080 ok	1.080	1.020-1.140
Tertiary Butyl Alcohol	6.06	8.12	0.746 ok	0.746	0.686-0.806
Tetrachloroethylene	14.82	10.23	1.449 ok	1.449	1.389-1.509
Tetrahydrofuran	8.75	8.12	1.078 ok	1.075	1.015-1.135
Toluene	13.33	10.23	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.04	10.23	1.079 ok	1.079	1.019-1.139
Trichlorofluoromethane	5.44	8.12	0.670 ok	0.669	0.609-0.729
Vinyl chloride	4.40	8.12	0.542 ok	0.541	0.481-0.601
Vinyl Acetate	7.28	8.12	0.897 ok	0.896	0.836-0.956
m,p-Xylene	16.56	15.70	1.055 ok	1.055	0.995-1.115
o-Xylene	17.25	15.70	1.099 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.72	15.70	0.364 ok	0.364	0.304-0.424

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.12 ok	8.12	7.79-8.45	232317	ok 246982	148189-345775
1,4-Difluorobenzene	10.23 ok	10.23	9.90-10.56	835457	ok 865852	519511-1212193
Chlorobenzene-D5	15.70 ok	15.70	15.37-16.03	386693	ok 413539	248123-578955

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15	Reporting this level
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15	
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15	
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15	
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15	
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15	
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15	
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetonitrile	4.93	8.18	0.603 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.94	8.18	1.215 ok	1.215	1.155-1.275
Bromobenzene	18.49	15.92	1.161 ok	1.161	1.101-1.221
Bromodichloromethane	11.16	10.38	1.075 ok	1.076	1.016-1.136
Bromoform	16.87	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.50	8.18	0.550 ok	0.550	0.490-0.610
Bromoethene	4.94	8.18	0.604 ok	0.603	0.543-0.663
Benzyl Chloride	20.28	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.08	15.92	1.261 ok	1.262	1.202-1.322
Carbon disulfide	6.28	8.18	0.768 ok	0.767	0.707-0.827
Chlorobenzene	15.98	15.92	1.004 ok	1.004	0.944-1.064
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.32	8.18	1.017 ok	1.017	0.957-1.077
Chloromethane	3.99	8.18	0.488 ok	0.487	0.427-0.547
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.26	8.18	1.254 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.12	8.18	0.870 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.88	8.18	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.40	10.38	1.387 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.14	8.18	1.117 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.91	10.38	1.051 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.58	10.38	1.308 ok	1.308	1.248-1.368
Dichlorodifluoromethane	3.86	8.18	0.472 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.09	10.38	1.357 ok	1.357	1.297-1.417
Dibromomethane	10.89	10.38	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.91	8.18	0.845 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	8.00	8.18	0.978 ok	0.978	0.918-1.038
cis-1,3-Dichloropropene	12.29	10.38	1.184 ok	1.184	1.124-1.244
m-Dichlorobenzene	20.29	15.92	1.274 ok	1.275	1.215-1.335
o-Dichlorobenzene	20.85	15.92	1.310 ok	1.310	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281 ok	1.281	1.221-1.341
trans-1,3-Dichloropropene	12.97	10.38	1.250 ok	1.250	1.190-1.310
Di-Isopropyl ether	8.22	8.18	1.005 ok	1.003	0.943-1.063
2,3-Dimethylpentane	10.55	8.18	1.290 ok	1.289	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123 ok	1.123	1.063-1.183

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15	Reporting this level
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15	
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15	
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15	
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15	
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15	
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15	
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Ethylbenzene	16.52	15.92	1.038 ok	1.038	0.978-1.098
4-Ethyltoluene	19.40	15.92	1.219 ok	1.219	1.159-1.279
Freon 113	6.24	8.18	0.763 ok	0.762	0.702-0.822
Freon 114	4.07	8.18	0.498 ok	0.497	0.437-0.557
Freon 123	5.07	8.18	0.620 ok	0.619	0.559-0.679
Freon 123A	5.12	8.18	0.626 ok	0.625	0.565-0.685
Freon 142B	3.97	8.18	0.485 ok	0.485	0.425-0.545
Freon 152A	3.74	8.18	0.457 ok	0.456	0.396-0.516
Heptane	11.58	10.38	1.116 ok	1.116	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484 ok	1.484	1.424-1.544
Hexachloroethane	21.73	15.92	1.365 ok	1.365	1.305-1.425
Hexane	8.21	8.18	1.004 ok	1.004	0.944-1.064
Iodomethane	5.81	8.18	0.710 ok	0.710	0.650-0.770
Isopropylbenzene	18.38	15.92	1.155 ok	1.154	1.094-1.214
p-Isopropyltoluene	20.70	15.92	1.300 ok	1.300	1.240-1.360
Methyl Tert Butyl Ether	7.19	8.18	0.879 ok	0.876	0.816-0.936
Naphthalene	23.18	15.92	1.456 ok	1.455	1.395-1.515
Nonane	17.85	15.92	1.121 ok	1.121	1.061-1.181
Octane	14.88	10.38	1.434 ok	1.434	1.374-1.494
n-Propylbenzene	19.18	15.92	1.205 ok	1.204	1.144-1.264
Propylene	3.80	8.18	0.465 ok	0.463	0.403-0.523
Styrene	17.32	15.92	1.088 ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.42	8.18	1.152 ok	1.151	1.091-1.211
1,1,1,2-Tetrachloroethane	15.96	10.38	1.538 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.19	10.38	1.271 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.10	15.92	1.263 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.52	15.92	1.226 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.38	1.083 ok	1.083	1.023-1.143
Tetrachloroethylene	15.03	10.38	1.448 ok	1.449	1.389-1.509
Toluene	13.53	10.38	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.21	10.38	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.18	0.648 ok	0.648	0.588-0.708
Vinyl chloride	4.17	8.18	0.510 ok	0.509	0.449-0.569
m,p-Xylene	16.80	15.92	1.055 ok	1.055	0.995-1.115
o-Xylene	17.47	15.92	1.097 ok	1.097	1.037-1.157

Initial Calibration Retention Time/Internal Standard Area Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15	Reporting this level
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15	
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15	
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15	
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15	
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15	
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15	
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15	

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	246056 ok	249531	149719-349343
1,4-Difluorobenzene	10.38 ok	10.38	10.05-10.71	891369 ok	900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	378089 ok	409848	245909-573787

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15 Reporting this level
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.16	8.18	0.631 ok	0.629	0.569-0.689
Acrolein	5.04	8.18	0.616 ok	0.615	0.555-0.675
Acrylonitrile	5.58	8.18	0.682 ok	0.680	0.620-0.740
Acetonitrile	4.93	8.18	0.603 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.94	8.18	1.215 ok	1.215	1.155-1.275
Bromobenzene	18.49	15.92	1.161 ok	1.161	1.101-1.221
Bromodichloromethane	11.16	10.37	1.076 ok	1.076	1.016-1.136
Bromoform	16.87	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.50	8.18	0.550 ok	0.550	0.490-0.610
Bromoethene	4.94	8.18	0.604 ok	0.603	0.543-0.663
n-Butane	4.32	8.18	0.528 ok	0.527	0.467-0.587
Benzyl Chloride	20.28	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.08	15.92	1.261 ok	1.262	1.202-1.322
Carbon disulfide	6.28	8.18	0.768 ok	0.767	0.707-0.827
Chlorobenzene	15.98	15.92	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.18	0.461 ok	0.460	0.400-0.520
Chloroethane	4.63	8.18	0.566 ok	0.566	0.506-0.626
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.32	8.18	1.017 ok	1.017	0.957-1.077
Chloromethane	3.99	8.18	0.488 ok	0.487	0.427-0.547
3-Chloropropene	6.10	8.18	0.746 ok	0.746	0.686-0.806
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.26	8.18	1.254 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.11	8.18	0.869 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.88	8.18	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.40	10.37	1.389 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.14	8.18	1.117 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.92	10.37	1.053 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.58	10.37	1.310 ok	1.308	1.248-1.368
1,4-Dioxane	11.25	10.37	1.085 ok	1.081	1.021-1.141
Dichlorodifluoromethane	3.86	8.18	0.472 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.08	10.37	1.358 ok	1.357	1.297-1.417
Dibromomethane	10.89	10.37	1.050 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.91	8.18	0.845 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	8.00	8.18	0.978 ok	0.978	0.918-1.038

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15 Reporting this level
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.29	10.37	1.185 ok	1.184	1.124-1.244
m-Dichlorobenzene	20.29	15.92	1.274 ok	1.275	1.215-1.335
o-Dichlorobenzene	20.85	15.92	1.310 ok	1.310	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281 ok	1.281	1.221-1.341
trans-1,3-Dichloropropene	12.97	10.37	1.251 ok	1.250	1.190-1.310
Di-Isopropyl ether	8.22	8.18	1.005 ok	1.003	0.943-1.063
2,3-Dimethylpentane	10.55	8.18	1.290 ok	1.289	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123 ok	1.123	1.063-1.183
Ethanol	4.74	8.18	0.579 ok	0.578	0.518-0.638
Ethylbenzene	16.52	15.92	1.038 ok	1.038	0.978-1.098
Ethyl Acrylate	10.97	10.37	1.058 ok	1.055	0.995-1.115
4-Ethyltoluene	19.40	15.92	1.219 ok	1.219	1.159-1.279
Freon 113	6.24	8.18	0.763 ok	0.762	0.702-0.822
Freon 114	4.07	8.18	0.498 ok	0.497	0.437-0.557
Freon 123	5.06	8.18	0.619 ok	0.619	0.559-0.679
Freon 123A	5.11	8.18	0.625 ok	0.625	0.565-0.685
Freon 142B	3.97	8.18	0.485 ok	0.485	0.425-0.545
Freon 152A	3.74	8.18	0.457 ok	0.456	0.396-0.516
Heptane	11.58	10.37	1.117 ok	1.116	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484 ok	1.484	1.424-1.544
Hexachloroethane	21.73	15.92	1.365 ok	1.365	1.305-1.425
Hexane	8.21	8.18	1.004 ok	1.004	0.944-1.064
2-Hexanone	13.93	10.37	1.343 ok	1.340	1.280-1.400
Iodomethane	5.81	8.18	0.710 ok	0.710	0.650-0.770
Isopropylbenzene	18.38	15.92	1.155 ok	1.154	1.094-1.214
Isopropyl Alcohol	5.39	8.18	0.659 ok	0.655	0.595-0.715
p-Isopropyltoluene	20.70	15.92	1.300 ok	1.300	1.240-1.360
Methylene chloride	6.00	8.18	0.733 ok	0.733	0.673-0.793
Methyl ethyl ketone	7.56	8.18	0.924 ok	0.921	0.861-0.981
Methyl Isobutyl Ketone	12.36	10.37	1.192 ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.19	8.18	0.879 ok	0.876	0.816-0.936
Methylmethacrylate	11.49	10.37	1.108 ok	1.106	1.046-1.166
Naphthalene	23.17	15.92	1.455 ok	1.455	1.395-1.515
Nonane	17.85	15.92	1.121 ok	1.121	1.061-1.181
Octane	14.88	10.37	1.435 ok	1.434	1.374-1.494
Pentane	5.61	8.18	0.686 ok	0.686	0.626-0.746
n-Propylbenzene	19.17	15.92	1.204 ok	1.204	1.144-1.264
Propylene	3.80	8.18	0.465 ok	0.463	0.403-0.523
Styrene	17.32	15.92	1.088 ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.41	8.18	1.150 ok	1.151	1.091-1.211

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15 Reporting this level
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.96	10.37	1.539 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.18	10.37	1.271 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.92	1.262 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.52	15.92	1.226 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.37	1.084 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.96	8.18	0.729 ok	0.723	0.663-0.783
Tetrachloroethylene	15.04	10.37	1.450 ok	1.449	1.389-1.509
Tetrahydrofuran	8.81	8.18	1.077 ok	1.071	1.011-1.131
Toluene	13.52	10.37	1.304 ok	1.303	1.243-1.363
Trichloroethylene	11.21	10.37	1.081 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.18	0.648 ok	0.648	0.588-0.708
Vinyl chloride	4.16	8.18	0.509 ok	0.509	0.449-0.569
Vinyl Acetate	7.28	8.18	0.890 ok	0.889	0.829-0.949
m,p-Xylene	16.78	15.92	1.054 ok	1.055	0.995-1.115
o-Xylene	17.47	15.92	1.097 ok	1.097	1.037-1.157

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	245093 ok	249531	149719-349343
1,4-Difluorobenzene	10.37 ok	10.38	10.05-10.71	884874 ok	900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	373986 ok	409848	245909-573787

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15 Reporting this level
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.15	8.18	0.630 ok	0.629	0.569-0.689
Acrolein	5.03	8.18	0.615 ok	0.615	0.555-0.675
Acrylonitrile	5.57	8.18	0.681 ok	0.680	0.620-0.740
Acetonitrile	4.92	8.18	0.601 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.94	8.18	1.215 ok	1.215	1.155-1.275
Bromobenzene	18.49	15.92	1.161 ok	1.161	1.101-1.221
Bromodichloromethane	11.16	10.37	1.076 ok	1.076	1.016-1.136
Bromoform	16.87	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.18	0.549 ok	0.550	0.490-0.610
Bromoethene	4.93	8.18	0.603 ok	0.603	0.543-0.663
n-Butane	4.31	8.18	0.527 ok	0.527	0.467-0.587
Benzyl Chloride	20.28	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.09	15.92	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.28	8.18	0.768 ok	0.767	0.707-0.827
Chlorobenzene	15.98	15.92	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.18	0.461 ok	0.460	0.400-0.520
Chloroethane	4.63	8.18	0.566 ok	0.566	0.506-0.626
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.32	8.18	1.017 ok	1.017	0.957-1.077
Chloromethane	3.99	8.18	0.488 ok	0.487	0.427-0.547
3-Chloropropene	6.10	8.18	0.746 ok	0.746	0.686-0.806
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.25	8.18	1.253 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.11	8.18	0.869 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.88	8.18	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.40	10.37	1.389 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.14	8.18	1.117 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.92	10.37	1.053 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.57	10.37	1.309 ok	1.308	1.248-1.368
1,4-Dioxane	11.25	10.37	1.085 ok	1.081	1.021-1.141
Dichlorodifluoromethane	3.85	8.18	0.471 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.09	10.37	1.359 ok	1.357	1.297-1.417
Dibromomethane	10.89	10.37	1.050 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.91	8.18	0.845 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	8.00	8.18	0.978 ok	0.978	0.918-1.038

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15 Reporting this level
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.29	10.37	1.185 ok	1.184	1.124-1.244
m-Dichlorobenzene	20.29	15.92	1.274 ok	1.275	1.215-1.335
o-Dichlorobenzene	20.85	15.92	1.310 ok	1.310	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281 ok	1.281	1.221-1.341
trans-1,3-Dichloropropene	12.97	10.37	1.251 ok	1.250	1.190-1.310
Di-Isopropyl ether	8.21	8.18	1.004 ok	1.003	0.943-1.063
2,3-Dimethylpentane	10.54	8.18	1.289 ok	1.289	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123 ok	1.123	1.063-1.183
Ethanol	4.73	8.18	0.578 ok	0.578	0.518-0.638
Ethylbenzene	16.52	15.92	1.038 ok	1.038	0.978-1.098
Ethyl Acetate	8.26	8.18	1.010 ok	1.007	0.947-1.067
Ethyl Acrylate	10.96	10.37	1.057 ok	1.055	0.995-1.115
4-Ethyltoluene	19.40	15.92	1.219 ok	1.219	1.159-1.279
Freon 113	6.24	8.18	0.763 ok	0.762	0.702-0.822
Freon 114	4.06	8.18	0.496 ok	0.497	0.437-0.557
Freon 123	5.06	8.18	0.619 ok	0.619	0.559-0.679
Freon 123A	5.11	8.18	0.625 ok	0.625	0.565-0.685
Freon 142B	3.96	8.18	0.484 ok	0.485	0.425-0.545
Freon 152A	3.73	8.18	0.456 ok	0.456	0.396-0.516
Heptane	11.58	10.37	1.117 ok	1.116	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484 ok	1.484	1.424-1.544
Hexachloroethane	21.73	15.92	1.365 ok	1.365	1.305-1.425
Hexane	8.21	8.18	1.004 ok	1.004	0.944-1.064
2-Hexanone	13.92	10.37	1.342 ok	1.340	1.280-1.400
Iodomethane	5.81	8.18	0.710 ok	0.710	0.650-0.770
Isopropylbenzene	18.37	15.92	1.154 ok	1.154	1.094-1.214
Isopropyl Alcohol	5.37	8.18	0.656 ok	0.655	0.595-0.715
p-Isopropyltoluene	20.70	15.92	1.300 ok	1.300	1.240-1.360
Methylene chloride	6.00	8.18	0.733 ok	0.733	0.673-0.793
Methyl ethyl ketone	7.55	8.18	0.923 ok	0.921	0.861-0.981
Methyl Isobutyl Ketone	12.35	10.37	1.191 ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.18	8.18	0.878 ok	0.876	0.816-0.936
Methylmethacrylate	11.49	10.37	1.108 ok	1.106	1.046-1.166
Naphthalene	23.17	15.92	1.455 ok	1.455	1.395-1.515
Nonane	17.85	15.92	1.121 ok	1.121	1.061-1.181
Octane	14.88	10.37	1.435 ok	1.434	1.374-1.494
Pentane	5.61	8.18	0.686 ok	0.686	0.626-0.746
n-Propylbenzene	19.17	15.92	1.204 ok	1.204	1.144-1.264
Propylene	3.80	8.18	0.465 ok	0.463	0.403-0.523
Styrene	17.32	15.92	1.088 ok	1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-IC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.41	8.18	1.150 ok	1.151	1.091-1.211
1,1,1,2-Tetrachloroethane	15.96	10.37	1.539 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.18	10.37	1.271 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.92	1.262 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.51	15.92	1.226 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.37	1.084 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.94	8.18	0.726 ok	0.723	0.663-0.783
Tetrachloroethylene	15.03	10.37	1.449 ok	1.449	1.389-1.509
Tetrahydrofuran	8.79	8.18	1.075 ok	1.071	1.011-1.131
Toluene	13.52	10.37	1.304 ok	1.303	1.243-1.363
Trichloroethylene	11.21	10.37	1.081 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.18	0.648 ok	0.648	0.588-0.708
Vinyl chloride	4.16	8.18	0.509 ok	0.509	0.449-0.569
Vinyl Acetate	7.28	8.18	0.890 ok	0.889	0.829-0.949
m,p-Xylene	16.80	15.92	1.055 ok	1.055	0.995-1.115
o-Xylene	17.47	15.92	1.097 ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.61	15.92	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	244439	ok 249531	149719-349343
1,4-Difluorobenzene	10.37 ok	10.38	10.05-10.71	886331	ok 900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	376518	ok 409848	245909-573787

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15 Reporting this level
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.15	8.18	0.630 ok	0.629	0.569-0.689
Acrolein	5.03	8.18	0.615 ok	0.615	0.555-0.675
Acrylonitrile	5.56	8.18	0.680 ok	0.680	0.620-0.740
Acetonitrile	4.92	8.18	0.601 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.94	8.18	1.215 ok	1.215	1.155-1.275
Bromobenzene	18.49	15.92	1.161 ok	1.161	1.101-1.221
Bromodichloromethane	11.16	10.38	1.075 ok	1.076	1.016-1.136
Bromoform	16.87	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.50	8.18	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.18	0.603 ok	0.603	0.543-0.663
n-Butane	4.32	8.18	0.528 ok	0.527	0.467-0.587
Benzyl Chloride	20.28	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.08	15.92	1.261 ok	1.262	1.202-1.322
Carbon disulfide	6.28	8.18	0.768 ok	0.767	0.707-0.827
Chlorobenzene	15.98	15.92	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.18	0.461 ok	0.460	0.400-0.520
Chloroethane	4.64	8.18	0.567 ok	0.566	0.506-0.626
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.32	8.18	1.017 ok	1.017	0.957-1.077
Chloromethane	3.99	8.18	0.488 ok	0.487	0.427-0.547
3-Chloropropene	6.10	8.18	0.746 ok	0.746	0.686-0.806
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.26	8.18	1.254 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.12	8.18	0.870 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.88	8.18	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.40	10.38	1.387 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.14	8.18	1.117 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.92	10.38	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.57	10.38	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.24	10.38	1.083 ok	1.081	1.021-1.141
Dichlorodifluoromethane	3.85	8.18	0.471 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.08	10.38	1.356 ok	1.357	1.297-1.417
Dibromomethane	10.89	10.38	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.91	8.18	0.845 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	8.00	8.18	0.978 ok	0.978	0.918-1.038

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15 Reporting this level
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-IC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.29	10.38	1.184	ok	1.124-1.244
m-Dichlorobenzene	20.29	15.92	1.274	ok	1.215-1.335
o-Dichlorobenzene	20.85	15.92	1.310	ok	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281	ok	1.221-1.341
trans-1,3-Dichloropropene	12.97	10.38	1.250	ok	1.190-1.310
Di-Isopropyl ether	8.21	8.18	1.004	ok	0.943-1.063
2,3-Dimethylpentane	10.54	8.18	1.289	ok	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123	ok	1.063-1.183
Ethanol	4.73	8.18	0.578	ok	0.518-0.638
Ethylbenzene	16.52	15.92	1.038	ok	0.978-1.098
Ethyl Acetate	8.25	8.18	1.009	ok	0.947-1.067
Ethyl Acrylate	10.95	10.38	1.055	ok	0.995-1.115
4-Ethyltoluene	19.40	15.92	1.219	ok	1.159-1.279
Freon 113	6.24	8.18	0.763	ok	0.702-0.822
Freon 114	4.07	8.18	0.498	ok	0.437-0.557
Freon 123	5.06	8.18	0.619	ok	0.559-0.679
Freon 123A	5.11	8.18	0.625	ok	0.565-0.685
Freon 142B	3.97	8.18	0.485	ok	0.425-0.545
Freon 152A	3.74	8.18	0.457	ok	0.396-0.516
Heptane	11.58	10.38	1.116	ok	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484	ok	1.424-1.544
Hexachloroethane	21.73	15.92	1.365	ok	1.305-1.425
Hexane	8.21	8.18	1.004	ok	0.944-1.064
2-Hexanone	13.91	10.38	1.340	ok	1.280-1.400
Iodomethane	5.81	8.18	0.710	ok	0.650-0.770
Isopropylbenzene	18.37	15.92	1.154	ok	1.094-1.214
Isopropyl Alcohol	5.37	8.18	0.656	ok	0.595-0.715
p-Isopropyltoluene	20.70	15.92	1.300	ok	1.240-1.360
Methylene chloride	5.99	8.18	0.732	ok	0.673-0.793
Methyl ethyl ketone	7.54	8.18	0.922	ok	0.861-0.981
Methyl Isobutyl Ketone	12.34	10.38	1.189	ok	1.128-1.248
Methyl Tert Butyl Ether	7.17	8.18	0.877	ok	0.816-0.936
Methylmethacrylate	11.48	10.38	1.106	ok	1.046-1.166
Naphthalene	23.17	15.92	1.455	ok	1.395-1.515
Nonane	17.85	15.92	1.121	ok	1.061-1.181
Octane	14.88	10.38	1.434	ok	1.374-1.494
Pentane	5.61	8.18	0.686	ok	0.626-0.746
n-Propylbenzene	19.17	15.92	1.204	ok	1.144-1.264
Propylene	3.80	8.18	0.465	ok	0.403-0.523
Styrene	17.32	15.92	1.088	ok	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-IC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.41	8.18	1.150 ok	1.151	1.091-1.211
1,1,1,2-Tetrachloroethane	15.96	10.38	1.538 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.18	10.38	1.270 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.92	1.262 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.51	15.92	1.226 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.38	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.93	8.18	0.725 ok	0.723	0.663-0.783
Tetrachloroethylene	15.03	10.38	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.78	8.18	1.073 ok	1.071	1.011-1.131
Toluene	13.52	10.38	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.21	10.38	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.18	0.648 ok	0.648	0.588-0.708
Vinyl chloride	4.16	8.18	0.509 ok	0.509	0.449-0.569
Vinyl Acetate	7.27	8.18	0.889 ok	0.889	0.829-0.949
m,p-Xylene	16.80	15.92	1.055 ok	1.055	0.995-1.115
o-Xylene	17.47	15.92	1.097 ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.61	15.92	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	244906	ok 249531	149719-349343
1,4-Difluorobenzene	10.38 ok	10.38	10.05-10.71	884173	ok 900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	378452	ok 409848	245909-573787

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15 Reporting this level
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.14	8.18	0.628 ok	0.629	0.569-0.689
Acrolein	5.03	8.18	0.615 ok	0.615	0.555-0.675
Acrylonitrile	5.56	8.18	0.680 ok	0.680	0.620-0.740
Acetonitrile	4.92	8.18	0.601 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.94	8.18	1.215 ok	1.215	1.155-1.275
Bromobenzene	18.48	15.92	1.161 ok	1.161	1.101-1.221
Bromodichloromethane	11.16	10.38	1.075 ok	1.076	1.016-1.136
Bromoform	16.87	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.18	0.549 ok	0.550	0.490-0.610
Bromoethene	4.93	8.18	0.603 ok	0.603	0.543-0.663
n-Butane	4.31	8.18	0.527 ok	0.527	0.467-0.587
Benzyl Chloride	20.28	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.08	15.92	1.261 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.18	0.767 ok	0.767	0.707-0.827
Chlorobenzene	15.98	15.92	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.76	8.18	0.460 ok	0.460	0.400-0.520
Chloroethane	4.63	8.18	0.566 ok	0.566	0.506-0.626
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.32	8.18	1.017 ok	1.017	0.957-1.077
Chloromethane	3.98	8.18	0.487 ok	0.487	0.427-0.547
3-Chloropropene	6.10	8.18	0.746 ok	0.746	0.686-0.806
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.25	8.18	1.253 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.11	8.18	0.869 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.88	8.18	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.40	10.38	1.387 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.13	8.18	1.116 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.92	10.38	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.57	10.38	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.20	10.38	1.079 ok	1.081	1.021-1.141
Dichlorodifluoromethane	3.85	8.18	0.471 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.08	10.38	1.356 ok	1.357	1.297-1.417
Dibromomethane	10.89	10.38	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.90	8.18	0.844 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	7.99	8.18	0.977 ok	0.978	0.918-1.038

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15 Reporting this level
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.29	10.38	1.184	ok	1.124-1.244
m-Dichlorobenzene	20.29	15.92	1.274	ok	1.215-1.335
o-Dichlorobenzene	20.85	15.92	1.310	ok	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281	ok	1.221-1.341
trans-1,3-Dichloropropene	12.96	10.38	1.249	ok	1.190-1.310
Di-Isopropyl ether	8.19	8.18	1.001	ok	0.943-1.063
2,3-Dimethylpentane	10.54	8.18	1.289	ok	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123	ok	1.063-1.183
Ethanol	4.72	8.18	0.577	ok	0.518-0.638
Ethylbenzene	16.52	15.92	1.038	ok	0.978-1.098
Ethyl Acetate	8.23	8.18	1.006	ok	0.947-1.067
Ethyl Acrylate	10.94	10.38	1.054	ok	0.995-1.115
4-Ethyltoluene	19.40	15.92	1.219	ok	1.159-1.279
Freon 113	6.23	8.18	0.762	ok	0.702-0.822
Freon 114	4.06	8.18	0.496	ok	0.437-0.557
Freon 123	5.06	8.18	0.619	ok	0.559-0.679
Freon 123A	5.11	8.18	0.625	ok	0.565-0.685
Freon 142B	3.96	8.18	0.484	ok	0.425-0.545
Freon 152A	3.72	8.18	0.455	ok	0.396-0.516
Heptane	11.58	10.38	1.116	ok	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484	ok	1.424-1.544
Hexachloroethane	21.73	15.92	1.365	ok	1.305-1.425
Hexane	8.21	8.18	1.004	ok	0.944-1.064
2-Hexanone	13.89	10.38	1.338	ok	1.280-1.400
Iodomethane	5.80	8.18	0.709	ok	0.650-0.770
Isopropylbenzene	18.37	15.92	1.154	ok	1.094-1.214
Isopropyl Alcohol	5.35	8.18	0.654	ok	0.595-0.715
p-Isopropyltoluene	20.70	15.92	1.300	ok	1.240-1.360
Methylene chloride	5.99	8.18	0.732	ok	0.673-0.793
Methyl ethyl ketone	7.52	8.18	0.919	ok	0.861-0.981
Methyl Isobutyl Ketone	12.32	10.38	1.187	ok	1.128-1.248
Methyl Tert Butyl Ether	7.15	8.18	0.874	ok	0.816-0.936
Methylmethacrylate	11.47	10.38	1.105	ok	1.046-1.166
Naphthalene	23.17	15.92	1.455	ok	1.395-1.515
Nonane	17.85	15.92	1.121	ok	1.061-1.181
Octane	14.88	10.38	1.434	ok	1.374-1.494
Pentane	5.61	8.18	0.686	ok	0.626-0.746
n-Propylbenzene	19.17	15.92	1.204	ok	1.144-1.264
Propylene	3.78	8.18	0.462	ok	0.403-0.523
Styrene	17.32	15.92	1.088	ok	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15 Reporting this level
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.41	8.18	1.150 ok	1.151	1.091-1.211
1,1,1,2-Tetrachloroethane	15.96	10.38	1.538 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.17	10.38	1.269 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.10	15.92	1.263 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.51	15.92	1.226 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.38	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.90	8.18	0.721 ok	0.723	0.663-0.783
Tetrachloroethylene	15.03	10.38	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.75	8.18	1.070 ok	1.071	1.011-1.131
Toluene	13.52	10.38	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.20	10.38	1.079 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.18	0.648 ok	0.648	0.588-0.708
Vinyl chloride	4.16	8.18	0.509 ok	0.509	0.449-0.569
Vinyl Acetate	7.26	8.18	0.888 ok	0.889	0.829-0.949
m,p-Xylene	16.77	15.92	1.053 ok	1.055	0.995-1.115
o-Xylene	17.47	15.92	1.097 ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.61	15.92	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	247839	ok 249531	149719-349343
1,4-Difluorobenzene	10.38 ok	10.38	10.05-10.71	893861	ok 900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	390899	ok 409848	245909-573787

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.13	8.18	0.627 ok	0.629	0.569-0.689
Acrolein	5.03	8.18	0.615 ok	0.615	0.555-0.675
Acrylonitrile	5.55	8.18	0.678 ok	0.680	0.620-0.740
Acetonitrile	4.91	8.18	0.600 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.94	8.18	1.215 ok	1.215	1.155-1.275
Bromobenzene	18.49	15.92	1.161 ok	1.161	1.101-1.221
Bromodichloromethane	11.16	10.38	1.075 ok	1.076	1.016-1.136
Bromoform	16.87	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.18	0.549 ok	0.550	0.490-0.610
Bromoethene	4.93	8.18	0.603 ok	0.603	0.543-0.663
n-Butane	4.31	8.18	0.527 ok	0.527	0.467-0.587
Benzyl Chloride	20.28	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.09	15.92	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.18	0.767 ok	0.767	0.707-0.827
Chlorobenzene	15.98	15.92	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.76	8.18	0.460 ok	0.460	0.400-0.520
Chloroethane	4.63	8.18	0.566 ok	0.566	0.506-0.626
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.32	8.18	1.017 ok	1.017	0.957-1.077
Chloromethane	3.98	8.18	0.487 ok	0.487	0.427-0.547
3-Chloropropene	6.10	8.18	0.746 ok	0.746	0.686-0.806
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.25	8.18	1.253 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.11	8.18	0.869 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.87	8.18	0.718 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.40	10.38	1.387 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.13	8.18	1.116 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.92	10.38	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.57	10.38	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.20	10.38	1.079 ok	1.081	1.021-1.141
Dichlorodifluoromethane	3.85	8.18	0.471 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.09	10.38	1.357 ok	1.357	1.297-1.417
Dibromomethane	10.89	10.38	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.90	8.18	0.844 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	7.99	8.18	0.977 ok	0.978	0.918-1.038

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.29	10.38	1.184	ok	1.124-1.244
m-Dichlorobenzene	20.29	15.92	1.274	ok	1.215-1.335
o-Dichlorobenzene	20.85	15.92	1.310	ok	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281	ok	1.221-1.341
trans-1,3-Dichloropropene	12.97	10.38	1.250	ok	1.190-1.310
Di-Isopropyl ether	8.20	8.18	1.002	ok	0.943-1.063
2,3-Dimethylpentane	10.54	8.18	1.289	ok	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123	ok	1.063-1.183
Ethanol	4.71	8.18	0.576	ok	0.518-0.638
Ethylbenzene	16.52	15.92	1.038	ok	0.978-1.098
Ethyl Acetate	8.23	8.18	1.006	ok	0.947-1.067
Ethyl Acrylate	10.94	10.38	1.054	ok	0.995-1.115
4-Ethyltoluene	19.40	15.92	1.219	ok	1.159-1.279
Freon 113	6.23	8.18	0.762	ok	0.702-0.822
Freon 114	4.06	8.18	0.496	ok	0.437-0.557
Freon 123	5.06	8.18	0.619	ok	0.559-0.679
Freon 123A	5.11	8.18	0.625	ok	0.565-0.685
Freon 142B	3.96	8.18	0.484	ok	0.425-0.545
Freon 152A	3.72	8.18	0.455	ok	0.396-0.516
Heptane	11.58	10.38	1.116	ok	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484	ok	1.424-1.544
Hexachloroethane	21.73	15.92	1.365	ok	1.305-1.425
Hexane	8.21	8.18	1.004	ok	0.944-1.064
2-Hexanone	13.89	10.38	1.338	ok	1.280-1.400
Iodomethane	5.80	8.18	0.709	ok	0.650-0.770
Isopropylbenzene	18.37	15.92	1.154	ok	1.094-1.214
Isopropyl Alcohol	5.34	8.18	0.653	ok	0.595-0.715
p-Isopropyltoluene	20.70	15.92	1.300	ok	1.240-1.360
Methylene chloride	5.99	8.18	0.732	ok	0.673-0.793
Methyl ethyl ketone	7.51	8.18	0.918	ok	0.861-0.981
Methyl Isobutyl Ketone	12.32	10.38	1.187	ok	1.128-1.248
Methyl Tert Butyl Ether	7.15	8.18	0.874	ok	0.816-0.936
Methylmethacrylate	11.47	10.38	1.105	ok	1.046-1.166
Naphthalene	23.17	15.92	1.455	ok	1.395-1.515
Nonane	17.85	15.92	1.121	ok	1.061-1.181
Octane	14.88	10.38	1.434	ok	1.374-1.494
Pentane	5.60	8.18	0.685	ok	0.626-0.746
n-Propylbenzene	19.17	15.92	1.204	ok	1.144-1.264
Propylene	3.78	8.18	0.462	ok	0.403-0.523
Styrene	17.32	15.92	1.088	ok	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.41	8.18	1.150 ok	1.151	1.091-1.211
1,1,1,2-Tetrachloroethane	15.96	10.38	1.538 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.17	10.38	1.269 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.10	15.92	1.263 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.52	15.92	1.226 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.38	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.89	8.18	0.720 ok	0.723	0.663-0.783
Tetrachloroethylene	15.03	10.38	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.74	8.18	1.068 ok	1.071	1.011-1.131
Toluene	13.52	10.38	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.20	10.38	1.079 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.29	8.18	0.647 ok	0.648	0.588-0.708
Vinyl chloride	4.16	8.18	0.509 ok	0.509	0.449-0.569
Vinyl Acetate	7.26	8.18	0.888 ok	0.889	0.829-0.949
m,p-Xylene	16.80	15.92	1.055 ok	1.055	0.995-1.115
o-Xylene	17.47	15.92	1.097 ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.60	15.92	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	252414	ok 249531	149719-349343
1,4-Difluorobenzene	10.38 ok	10.38	10.05-10.71	912222	ok 900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	421846	ok 409848	245909-573787

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.13	8.18	0.627 ok	0.629	0.569-0.689
Acrolein	5.03	8.18	0.615 ok	0.615	0.555-0.675
Acrylonitrile	5.56	8.18	0.680 ok	0.680	0.620-0.740
Acetonitrile	4.92	8.18	0.601 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.94	8.18	1.215 ok	1.215	1.155-1.275
Bromobenzene	18.49	15.92	1.161 ok	1.161	1.101-1.221
Bromodichloromethane	11.17	10.38	1.076 ok	1.076	1.016-1.136
Bromoform	16.88	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.18	0.549 ok	0.550	0.490-0.610
Bromoethene	4.93	8.18	0.603 ok	0.603	0.543-0.663
n-Butane	4.31	8.18	0.527 ok	0.527	0.467-0.587
Benzyl Chloride	20.28	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.09	15.92	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.18	0.767 ok	0.767	0.707-0.827
Chlorobenzene	15.98	15.92	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.76	8.18	0.460 ok	0.460	0.400-0.520
Chloroethane	4.63	8.18	0.566 ok	0.566	0.506-0.626
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.32	8.18	1.017 ok	1.017	0.957-1.077
Chloromethane	3.98	8.18	0.487 ok	0.487	0.427-0.547
3-Chloropropene	6.10	8.18	0.746 ok	0.746	0.686-0.806
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.25	8.18	1.253 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.11	8.18	0.869 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.88	8.18	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.40	10.38	1.387 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.14	8.18	1.117 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.92	10.38	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.57	10.38	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.20	10.38	1.079 ok	1.081	1.021-1.141
Dichlorodifluoromethane	3.85	8.18	0.471 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.09	10.38	1.357 ok	1.357	1.297-1.417
Dibromomethane	10.89	10.38	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.90	8.18	0.844 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	8.00	8.18	0.978 ok	0.978	0.918-1.038

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.29	10.38	1.184	ok	1.124-1.244
m-Dichlorobenzene	20.30	15.92	1.275	ok	1.215-1.335
o-Dichlorobenzene	20.85	15.92	1.310	ok	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281	ok	1.221-1.341
trans-1,3-Dichloropropene	12.97	10.38	1.250	ok	1.190-1.310
Di-Isopropyl ether	8.20	8.18	1.002	ok	0.943-1.063
2,3-Dimethylpentane	10.54	8.18	1.289	ok	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123	ok	1.063-1.183
Ethanol	4.72	8.18	0.577	ok	0.518-0.638
Ethylbenzene	16.53	15.92	1.038	ok	0.978-1.098
Ethyl Acetate	8.23	8.18	1.006	ok	0.947-1.067
Ethyl Acrylate	10.94	10.38	1.054	ok	0.995-1.115
4-Ethyltoluene	19.40	15.92	1.219	ok	1.159-1.279
Freon 113	6.23	8.18	0.762	ok	0.702-0.822
Freon 114	4.06	8.18	0.496	ok	0.437-0.557
Freon 123	5.06	8.18	0.619	ok	0.559-0.679
Freon 123A	5.11	8.18	0.625	ok	0.565-0.685
Freon 142B	3.96	8.18	0.484	ok	0.425-0.545
Freon 152A	3.73	8.18	0.456	ok	0.396-0.516
Heptane	11.58	10.38	1.116	ok	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484	ok	1.424-1.544
Hexachloroethane	21.73	15.92	1.365	ok	1.305-1.425
Hexane	8.21	8.18	1.004	ok	0.944-1.064
2-Hexanone	13.89	10.38	1.338	ok	1.280-1.400
Iodomethane	5.81	8.18	0.710	ok	0.650-0.770
Isopropylbenzene	18.38	15.92	1.155	ok	1.094-1.214
Isopropyl Alcohol	5.34	8.18	0.653	ok	0.595-0.715
p-Isopropyltoluene	20.71	15.92	1.301	ok	1.240-1.360
Methylene chloride	5.99	8.18	0.732	ok	0.673-0.793
Methyl ethyl ketone	7.51	8.18	0.918	ok	0.861-0.981
Methyl Isobutyl Ketone	12.32	10.38	1.187	ok	1.128-1.248
Methyl Tert Butyl Ether	7.15	8.18	0.874	ok	0.816-0.936
Methylmethacrylate	11.47	10.38	1.105	ok	1.046-1.166
Naphthalene	23.17	15.92	1.455	ok	1.395-1.515
Nonane	17.85	15.92	1.121	ok	1.061-1.181
Octane	14.88	10.38	1.434	ok	1.374-1.494
Pentane	5.61	8.18	0.686	ok	0.626-0.746
n-Propylbenzene	19.18	15.92	1.205	ok	1.144-1.264
Propylene	3.78	8.18	0.462	ok	0.403-0.523
Styrene	17.32	15.92	1.088	ok	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-IC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.41	8.18	1.150 ok	1.151	1.091-1.211
1,1,1,2-Tetrachloroethane	15.96	10.38	1.538 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.18	10.38	1.270 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.10	15.92	1.263 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.52	15.92	1.226 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.38	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.89	8.18	0.720 ok	0.723	0.663-0.783
Tetrachloroethylene	15.04	10.38	1.449 ok	1.449	1.389-1.509
Tetrahydrofuran	8.73	8.18	1.067 ok	1.071	1.011-1.131
Toluene	13.53	10.38	1.303 ok	1.303	1.243-1.363
Trichloroethylene	11.21	10.38	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.18	0.648 ok	0.648	0.588-0.708
Vinyl chloride	4.16	8.18	0.509 ok	0.509	0.449-0.569
Vinyl Acetate	7.26	8.18	0.888 ok	0.889	0.829-0.949
m,p-Xylene	16.80	15.92	1.055 ok	1.055	0.995-1.115
o-Xylene	17.47	15.92	1.097 ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.61	15.92	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	255343	ok 249531	149719-349343
1,4-Difluorobenzene	10.38 ok	10.38	10.05-10.71	913274	ok 900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	451610	ok 409848	245909-573787

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-IC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.14	8.18	0.628 ok	0.629	0.569-0.689
Acrolein	5.03	8.18	0.615 ok	0.615	0.555-0.675
Acrylonitrile	5.56	8.18	0.680 ok	0.680	0.620-0.740
Acetonitrile	4.92	8.18	0.601 ok	0.602	0.542-0.662
1,3-Butadiene	4.27	8.18	0.522 ok	0.522	0.462-0.582
Benzene	9.95	8.18	1.216 ok	1.215	1.155-1.275
Bromobenzene	18.50	15.92	1.162 ok	1.161	1.101-1.221
Bromodichloromethane	11.17	10.39	1.075 ok	1.076	1.016-1.136
Bromoform	16.88	15.92	1.060 ok	1.060	1.000-1.120
Bromomethane	4.50	8.18	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.18	0.603 ok	0.603	0.543-0.663
n-Butane	4.32	8.18	0.528 ok	0.527	0.467-0.587
Benzyl Chloride	20.29	15.92	1.274 ok	1.274	1.214-1.334
n-Butylbenzene	21.27	15.92	1.336 ok	1.336	1.276-1.396
sec-Butylbenzene	20.47	15.92	1.286 ok	1.286	1.226-1.346
tert-Butylbenzene	20.09	15.92	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.18	0.767 ok	0.767	0.707-0.827
Chlorobenzene	15.99	15.92	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.18	0.461 ok	0.460	0.400-0.520
Chloroethane	4.63	8.18	0.566 ok	0.566	0.506-0.626
Chlorotrifluoroethene	3.80	8.18	0.465 ok	0.465	0.405-0.525
Chloroform	8.33	8.18	1.018 ok	1.017	0.957-1.077
Chloromethane	3.99	8.18	0.488 ok	0.487	0.427-0.547
3-Chloropropene	6.10	8.18	0.746 ok	0.746	0.686-0.806
2-Chlorotoluene	19.10	15.92	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.12	8.18	1.237 ok	1.237	1.177-1.297
Cyclohexane	10.26	8.18	1.254 ok	1.254	1.194-1.314
1,1-Dichloroethane	7.12	8.18	0.870 ok	0.870	0.810-0.930
1,1-Dichloroethylene	5.88	8.18	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.41	10.39	1.387 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.14	8.18	1.117 ok	1.117	1.057-1.177
1,2-Dichloropropane	10.92	10.39	1.051 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.58	10.39	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.21	10.39	1.079 ok	1.081	1.021-1.141
Dichlorodifluoromethane	3.85	8.18	0.471 ok	0.471	0.411-0.531
Dichlorofluoromethane	4.71	8.18	0.576 ok	0.576	0.516-0.636
Dibromochloromethane	14.09	10.39	1.356 ok	1.357	1.297-1.417
Dibromomethane	10.90	10.39	1.049 ok	1.049	0.989-1.109
trans-1,2-Dichloroethylene	6.91	8.18	0.845 ok	0.844	0.784-0.904
cis-1,2-Dichloroethylene	8.00	8.18	0.978 ok	0.978	0.918-1.038

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.29	10.39	1.183	ok	1.184	1.124-1.244
m-Dichlorobenzene	20.30	15.92	1.275	ok	1.275	1.215-1.335
o-Dichlorobenzene	20.86	15.92	1.310	ok	1.310	1.250-1.370
p-Dichlorobenzene	20.39	15.92	1.281	ok	1.281	1.221-1.341
trans-1,3-Dichloropropene	12.97	10.39	1.248	ok	1.250	1.190-1.310
Di-Isopropyl ether	8.20	8.18	1.002	ok	1.003	0.943-1.063
2,3-Dimethylpentane	10.55	8.18	1.290	ok	1.289	1.229-1.349
2,4-Dimethylpentane	9.19	8.18	1.123	ok	1.123	1.063-1.183
Ethanol	4.73	8.18	0.578	ok	0.578	0.518-0.638
Ethylbenzene	16.53	15.92	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.24	8.18	1.007	ok	1.007	0.947-1.067
Ethyl Acrylate	10.94	10.39	1.053	ok	1.055	0.995-1.115
4-Ethyltoluene	19.40	15.92	1.219	ok	1.219	1.159-1.279
Freon 113	6.24	8.18	0.763	ok	0.762	0.702-0.822
Freon 114	4.06	8.18	0.496	ok	0.497	0.437-0.557
Freon 123	5.06	8.18	0.619	ok	0.619	0.559-0.679
Freon 123A	5.11	8.18	0.625	ok	0.625	0.565-0.685
Freon 142B	3.96	8.18	0.484	ok	0.485	0.425-0.545
Freon 152A	3.73	8.18	0.456	ok	0.456	0.396-0.516
Heptane	11.58	10.39	1.115	ok	1.116	1.056-1.176
Hexachlorobutadiene	23.62	15.92	1.484	ok	1.484	1.424-1.544
Hexachloroethane	21.73	15.92	1.365	ok	1.365	1.305-1.425
Hexane	8.21	8.18	1.004	ok	1.004	0.944-1.064
2-Hexanone	13.90	10.39	1.338	ok	1.340	1.280-1.400
Iodomethane	5.81	8.18	0.710	ok	0.710	0.650-0.770
Isopropylbenzene	18.39	15.92	1.155	ok	1.154	1.094-1.214
Isopropyl Alcohol	5.35	8.18	0.654	ok	0.655	0.595-0.715
p-Isopropyltoluene	20.71	15.92	1.301	ok	1.300	1.240-1.360
Methylene chloride	5.99	8.18	0.732	ok	0.733	0.673-0.793
Methyl ethyl ketone	7.52	8.18	0.919	ok	0.921	0.861-0.981
Methyl Isobutyl Ketone	12.33	10.39	1.187	ok	1.188	1.128-1.248
Methyl Tert Butyl Ether	7.16	8.18	0.875	ok	0.876	0.816-0.936
Methylmethacrylate	11.47	10.39	1.104	ok	1.106	1.046-1.166
Naphthalene	23.17	15.92	1.455	ok	1.455	1.395-1.515
Nonane	17.86	15.92	1.122	ok	1.121	1.061-1.181
Octane	14.88	10.39	1.432	ok	1.434	1.374-1.494
Pentane	5.61	8.18	0.686	ok	0.686	0.626-0.746
n-Propylbenzene	19.18	15.92	1.205	ok	1.204	1.144-1.264
Propylene	3.79	8.18	0.463	ok	0.463	0.403-0.523
Styrene	17.32	15.92	1.088	ok	1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC82624

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W335-IC335	6W08749.D	10/22/18 12:49	PC	0.04	GCMS6W	TO-15
V6W335-IC335	6W08750.D	10/22/18 13:48	PC	0.1	GCMS6W	TO-15
V6W335-IC335	6W08751.D	10/22/18 14:40	PC	0.2	GCMS6W	TO-15
V6W335-IC335	6W08752.D	10/22/18 15:33	PC	0.5	GCMS6W	TO-15
V6W335-IC335	6W08753.D	10/22/18 16:23	PC	5	GCMS6W	TO-15
V6W335-ICC335	6W08754.D	10/22/18 17:14	PC	10	GCMS6W	TO-15
V6W335-IC335	6W08755.D	10/22/18 18:07	PC	20	GCMS6W	TO-15
V6W335-IC335	6W08756.D	10/22/18 19:04	PC	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.42	8.18	1.152 ok	1.151	1.091-1.211
1,1,1,2-Tetrachloroethane	15.96	10.39	1.536 ok	1.538	1.478-1.598
1,1,2,2-Tetrachloroethane	17.48	15.92	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.18	10.39	1.269 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.05	15.92	1.448 ok	1.448	1.388-1.508
1,2,3-Trichloropropane	17.67	15.92	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.11	15.92	1.263 ok	1.262	1.202-1.322
1,3,5-Trimethylbenzene	19.53	15.92	1.227 ok	1.226	1.166-1.286
2,2,4-Trimethylpentane	11.24	10.39	1.082 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.90	8.18	0.721 ok	0.723	0.663-0.783
Tetrachloroethylene	15.04	10.39	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.73	8.18	1.067 ok	1.071	1.011-1.131
Toluene	13.53	10.39	1.302 ok	1.303	1.243-1.363
Trichloroethylene	11.22	10.39	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.18	0.648 ok	0.648	0.588-0.708
Vinyl chloride	4.16	8.18	0.509 ok	0.509	0.449-0.569
Vinyl Acetate	7.27	8.18	0.889 ok	0.889	0.829-0.949
m,p-Xylene	16.81	15.92	1.056 ok	1.055	0.995-1.115
o-Xylene	17.48	15.92	1.098 ok	1.097	1.037-1.157
TVHC As Equiv Pentane	5.61	15.92	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.18 ok	8.18	7.85-8.51	260159	ok 249531	149719-349343
1,4-Difluorobenzene	10.39 ok	10.38	10.05-10.71	940320	ok 900803	540482-1261124
Chlorobenzene-D5	15.92 ok	15.92	15.59-16.25	507385	ok 409848	245909-573787

Surrogate Recovery Summary

Job Number: JC82624
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Method: TO-15	Matrix: AIR

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JC82624-1	6W10655.D	101
JC82624-2	6W10656.D	100
JC82624-3	6W10657.D	101
JC82624-4	6W10658.D	94
JC82624-5	6W10671.D	100
JC82624-5	6W10659.D	101
JC82624-6	6W10672.D	102
JC82624-6	6W10660.D	103
JC82613-7DUP	6W10675.D	101
JC82623-1DUP	6W10649.D	103
V5W1417-SCC	5W34909.D	71
V6W409-SCC	6W10378.D	88
V6W424-BS	6W10641.D	106
V6W424-BSD	6W10642.D	105
V6W424-MB	6W10644.D	92
V6W425-BS	6W10665.D	106
V6W425-BSD	6W10667.D	106
V6W425-MB	6W10669.D	91
V5W1417-BS	5W34904.D	104
V5W1417-BSD	5W34905.D	101
V5W1417-MB	5W34907.D	67
V6W409-BS	6W10360.D	106
V6W409-BSD	6W10361.D	107
V6W409-MB	6W10363.D	89
Surrogate Compounds	Recovery Limits	
S1 = 4-Bromofluorobenzene	65-128%	

Initial Calibration Summary

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Job Number: JC82624

Sample: V5W1390-ICC1390

Account: CARICH C. A. Rich Consultants

Lab FileID: 5W34379.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Response Factor Report Air5w

Method : C:\msdchem\1\methods\m5w1390.M (RTE Integrator)
 Title : T0-15 Full Scan Mode
 Last Update : Thu Jan 24 09:50:52 2019
 Response via : Initial Calibration

Calibration Files

20 =5w34381.D 0.5 =5w34391.D 0.2 =5w34390.D 0.1 =5w34389.D
 0.04=5w34388.D 10 =5w34379.D 5 =5w34378.D 40 =5w34383.D
 = =

Compound	20	0.5	0.2	0.1	0.04	10	5	40	Avg	%RSD
1) I Bromochloromethane	-----ISTD-----									
2) 1,1,1-Trifluoroethane									0.000	-1.00
3) Freon 152A										
	0.559	0.559	0.583	0.577	0.608	0.574	0.600	0.545	0.576	3.70
4) Chlorodifluoromethane										
	0.283	0.269	0.256	0.271	0.226	0.288	0.299	0.286	0.272	8.37
5) Propene										
	0.640	0.620	0.610	0.675	0.795	0.634	0.667	0.653	0.662	8.76
6) Chlorotrifluoroethene										
	1.352	1.268	1.301	1.282	1.376	1.358	1.434	1.351	1.340	4.06
7) Dichlorodifluoromethane										
	2.642	2.598	2.663	2.725	3.155	2.751	2.849	2.591	2.747	6.77
8) 1-Chloro-1,1-difluoroethane										
	2.527	2.603	2.620	2.746	3.177	2.626	2.737	2.393	2.679	8.62
9) Chloromethane										
	0.982	1.072	1.057	1.255	1.492	1.022	1.082	0.938	1.112	16.14
10) Dichlorotetrafluoroethane										
	2.998	3.266	3.239	3.379	3.532	3.071	3.365	2.693	3.193	8.28
11) Vinyl Chloride										
	1.063	1.131	1.107	1.115	1.272	1.088	1.188	1.001	1.120	7.26
12) 1,3-Butadiene										
	0.705	0.738	0.777	0.845	0.894	0.725	0.781	0.647	0.764	10.32
13) n-Butane										
	0.152	0.171	0.171	0.154	0.126	0.158	0.174	0.139	0.156	10.91
14) Bromomethane										
	1.062	1.236	1.308	1.562		1.110	1.217	0.988	1.212	15.61
15) Chloroethane										
	0.475	0.539	0.527	0.566	0.597	0.499	0.543	0.449	0.524	9.19
16) Dichlorofluoromethane										
	2.452	2.786	2.796	2.936	3.165	2.579	2.826	2.262	2.725	10.44
17) Acetonitrile										
	0.768	0.971	0.941	0.912		0.795	0.868	0.701	0.851	11.63
18) Freon 123										
	2.413	2.820	2.758	2.987	3.116	2.568	2.824	2.117	2.701	11.95
19) Freon 123A										
	1.342	1.508	1.426	1.512	1.596	1.412	1.547	1.219	1.445	8.46
20) Bromoethene										
	1.025	1.088	1.060	1.162	1.212	1.061	1.146	0.943	1.087	7.82
21) Acrolein										
	0.408	0.495	0.544	0.563		0.436	0.466	0.354	0.467	15.94
22) Trichlorofluoromethane										
	2.801	3.155	3.156	3.224	3.500	2.985	3.258	2.533	3.076	9.72
23) Acetone										

Initial Calibration Summary

Page 2 of 5

Job Number: JC82624

Sample:

V5W1390-ICC1390

Account: CARICH C. A. Rich Consultants

Lab FileID:

5W34379.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

		0.430	0.538	0.567	0.658		0.441	0.485	0.404		0.503	17.90
24)	Pentane											
		0.239	0.219	0.222	0.215	0.132	0.241	0.254	0.239		0.220	17.27
25)	1,1-Dichloro-1-fluoroethane											
											0.000	-1.00
26)	Iodomethane											
		2.825	2.713	2.684	2.824	3.092	2.863	3.014	2.750		2.846	5.02
27)	Isopropyl Alcohol											
		0.360	0.504	0.541	0.669		0.371	0.402	0.343		0.456	26.42
28)	1,1-Dichloroethene											
		1.599	1.516	1.506	1.519	1.715	1.609	1.685	1.586		1.592	4.90
29)	Freon 113											
		2.181	2.127	2.129	2.228	2.287	2.177	2.327	2.165		2.203	3.30
30)	Methylene Chloride											
		0.856	0.976	1.111	1.410		0.868	0.927	0.842		0.999	20.43
31)	Carbon Disulfide											
		2.683	2.650	2.562	2.717	2.964	2.710	2.870	2.607		2.720	4.94
32)	Ethanol											
		0.421	0.515	0.806			0.440	0.478	0.390		0.508	29.93
33)	Acrylonitrile											
		0.765	0.758	0.633	0.690	0.861	0.768	0.805	0.760		0.755	9.08
34)	3-Chloropropene											
		0.421	0.396	0.396	0.402	0.354	0.425	0.449	0.418		0.408	6.88
35)	trans-1,2-Dichloroethene											
		1.408	1.306	1.268	1.390	1.436	1.417	1.480	1.408		1.389	4.97
36)	tert-Butyl Alcohol											
		1.948	1.728	1.667	1.745	1.935	1.924	1.960	1.962		1.859	6.62
37)	Methyl tert-Butyl Ether											
		2.667	2.400	2.313	2.382	2.589	2.696	2.803	2.671		2.565	6.92
38)	Vinyl Acetate											
		2.577	2.378	2.300	2.385	2.837	2.516	2.559	2.627		2.522	6.76
39)	1,1-Dichloroethane											
		1.771	1.805	1.774	1.830	1.991	1.797	1.929	1.743		1.830	4.70
40)	2-Butanone											
		0.452	0.428	0.413	0.388	0.418	0.458	0.480	0.449		0.436	6.74
41)	Hexane											
		1.469	1.303	1.253	1.367	1.414	1.478	1.518	1.494		1.412	6.81
42)	cis-1,2-Dichloroethene											
		1.395	1.296	1.326	1.360	1.561	1.407	1.474	1.388		1.401	6.00
43)	Di-isopropyl Ether											
		0.819	0.712	0.723	0.734	0.689	0.824	0.842	0.825		0.771	8.06
44)	Ethyl Acetate											
		0.328	0.284	0.279	0.233	0.137	0.324	0.332	0.328		0.281	24.08
45)	Methyl Acrylate											
		1.798	1.549	1.443	1.478	1.770	1.779	1.819	1.784		1.677	9.46
46)	Chloroform											
		2.300	2.328	2.289	2.462	2.562	2.309	2.456	2.260		2.371	4.57
47)	2,4-Dimethylpentane											
		1.702	1.524	1.472	1.485	1.657	1.704	1.784	1.733		1.633	7.42
48)	Tetrahydrofuran											
		0.425	0.371	0.388	0.333	0.256	0.432	0.445	0.420		0.384	16.54
49)	1,1,1-Trichloroethane											
		2.213	2.132	2.084	2.233	2.367	2.196	2.329	2.231		2.223	4.19
50)	1,2-Dichloroethane											
		1.480	1.447	1.423	1.487	1.620	1.480	1.557	1.501		1.499	4.16
51)	Benzene											
		2.944	2.876	2.869	3.081	3.454	2.948	3.182	2.865		3.027	6.80
52)	Carbon Tetrachloride											
		2.113	1.818	1.794	1.878	2.077	2.053	2.117	2.179		2.004	7.49
53)	Cyclohexane											

6.9.1
6

Initial Calibration Summary

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Job Number: JC82624

Sample:

V5W1390-ICC1390

Account: CARICH C. A. Rich Consultants

Lab FileID:

5W34379.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

		1.429	1.254	1.231	1.292	1.529	1.429	1.509	1.420	1.386	8.22
54)	2,3-Dimethylpentane	0.635	0.590	0.545	0.598	0.575	0.635	0.670	0.636	0.611	6.61
55)	I 1,4-Difluorobenzene	-----ISTD-----									
56)	2,2,4-Trimethylpentane	1.464	1.222	1.133	1.156	1.217	1.440	1.445	1.532	1.326	12.01
57)	Heptane	0.290	0.241	0.227	0.230	0.244	0.290	0.289	0.303	0.264	11.90
58)	Trichloroethene	0.457	0.406	0.390	0.436	0.479	0.445	0.453	0.467	0.442	6.85
59)	1,2-Dichloropropane	0.340	0.325	0.321	0.332	0.346	0.336	0.352	0.352	0.338	3.41
60)	Dibromomethane	0.396	0.383	0.386	0.410	0.514	0.395	0.409	0.399	0.411	10.29
61)	Ethyl Acrylate	0.716	0.538	0.507	0.481	0.523	0.703	0.679	0.740	0.611	17.69
62)	Methyl Methacrylate	0.332	0.274	0.246	0.239	0.243	0.330	0.321	0.334	0.290	15.01
63)	1,4-Dioxane	0.213	0.185	0.175	0.178	0.183	0.211	0.210	0.202	0.195	8.16
64)	Bromodichloromethane	0.719	0.674	0.690	0.718	0.800	0.702	0.727	0.743	0.722	5.31
65)	cis-1,3-Dichloropropene	0.510	0.462	0.440	0.436	0.469	0.513	0.530	0.516	0.485	7.61
66)	4-Methyl-2-pentanone	0.281	0.222	0.185	0.162	0.164	0.278	0.272	0.295	0.232	24.10
67)	trans-1,3-Dichloropropene	0.453	0.396	0.365	0.359	0.407	0.472	0.478	0.442	0.421	10.98
68)	Toluene	0.992	0.955	0.916	0.945	1.118	1.035	1.095	0.984	1.005	7.19
69)	1,1,2-Trichloroethane	0.353	0.372	0.357	0.373	0.386	0.370	0.386	0.343	0.368	4.21
70)	1,3-Dichloropropane	0.476	0.483	0.464	0.468	0.533	0.506	0.525	0.460	0.489	5.81
71)	2-Hexanone	0.392	0.274	0.221	0.190		0.384	0.367	0.420	0.321	28.51
72)	Ethyl Methacrylate	0.575	0.408	0.360	0.344	0.373	0.562	0.541	0.610	0.472	23.40
73)	Dibromochloromethane	0.627	0.632	0.626	0.654	0.706	0.674	0.718	0.601	0.655	6.33
74)	Tetrachloroethene	0.527	0.531	0.547	0.560	0.667	0.541	0.579	0.532	0.561	8.26
75)	1,2-Dibromoethane	0.554	0.575	0.563	0.593	0.688	0.599	0.627	0.515	0.589	8.83
76)	Octane	0.682	0.509	0.484	0.501	0.536	0.689	0.661	0.703	0.596	16.12
77)	1,1,1,2-Tetrachloroethane	0.428	0.443	0.432	0.428	0.467	0.477	0.487	0.390	0.444	7.14
78)	I Chlorobenzene-d5	-----ISTD-----									
79)	Chlorobenzene	1.546	1.771	1.811	1.981	2.442	1.691	1.761	1.352	1.794	17.91
80)	Ethylbenzene	2.575	2.523	2.448	2.590	3.244	2.719	2.735	2.212	2.631	11.32
81)	m,p-Xylene	2.120	2.072	1.994	2.080	2.658	2.144	2.118	1.812	2.125	11.32
82)	Styrene	1.584	1.247	1.148	1.222	1.629	1.503	1.445	1.459	1.405	12.65
83)	Nonane										

Initial Calibration Summary

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Job Number: JC82624

Sample:

V5W1390-ICC1390

Account: CARICH C. A. Rich Consultants

Lab FileID:

5W34379.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

	1.364	1.057	1.027	1.107	1.270	1.270	1.192	1.398	1.211	11.44
84)	o-Xylene									
	2.146	1.961	1.886	2.001	2.567	2.172	2.153	1.783	2.084	11.49
85)	Bromoform									
	1.205	1.152	1.072	1.119	1.417	1.264	1.264	0.992	1.186	11.14
86)	1,1,2,2-Tetrachloroethane									
	1.457	1.603	1.628	1.656	2.097	1.403	1.412	1.449	1.588	14.41
87)	1,2,3-Trichloropropane									
	1.079	1.156	1.143	1.222	1.501	1.042	1.049	1.037	1.154	13.43
88)	Isopropylbenzene									
	2.875	2.639	2.605	2.715	3.387	2.785	2.756	2.583	2.793	9.28
89)	Bromobenzene									
	0.883	0.847	0.832	0.921	1.306	0.876	0.876	0.737	0.910	18.58
90)	2-Chlorotoluene									
	0.670	0.598	0.597	0.590	0.679	0.651	0.646	0.588	0.627	6.07
91)	n-Propylbenzene									
	0.737	0.645	0.615	0.624	0.721	0.695	0.683	0.720	0.680	6.88
92)	4-Bromofluorobenzene									
	1.344	1.204	1.196	1.207	1.206	1.295	1.242	1.084	1.222	6.28
93)	4-Ethyltoluene									
	2.670	2.268	2.152	2.197	2.818	2.494	2.443	2.646	2.461	9.82
94)	1,3,5-Trimethylbenzene									
	2.233	2.016	1.929	2.043	2.528	2.086	2.054	2.321	2.151	9.14
95)	alpha-Methylstyrene									
	1.034	0.818	0.781	0.823	1.150	0.963	0.929	1.102	0.950	14.50
96)	tert-Butylbenzene									
	0.462	0.441	0.417	0.455	0.491	0.431	0.434	0.481	0.452	5.67
97)	1,2,4-Trimethylbenzene									
	2.183	1.899	1.785	1.766	2.303	2.031	1.968	2.223	2.020	9.99
98)	1,3-Dichlorobenzene									
	1.302	1.168	1.140	1.266	1.970	1.203	1.175	1.356	1.322	20.56
99)	Benzyl Chloride									
	1.421	0.796	0.734	0.748	1.058	1.201	1.049	1.576	1.073	29.23
100)	1,4-Dichlorobenzene									
	1.215	1.104	1.131	1.258	2.051	1.124	1.090	1.301	1.284	24.85
101)	sec-Butylbenzene									
	0.543	0.515	0.487	0.495	0.595	0.509	0.514	0.587	0.530	7.71
102)	p-Isopropyltoluene									
	0.596	0.570	0.529	0.526	0.625	0.554	0.552	0.632	0.573	7.11
103)	1,2-Dichlorobenzene									
	1.092	1.076	1.070	1.160	1.848	1.025	1.003	1.173	1.181	23.37
104)	n-Butylbenzene									
	0.445	0.385	0.337	0.366	0.489	0.416	0.413	0.486	0.417	13.07
105)	Hexachloroethane									
	0.676	0.663	0.656	0.672	0.753	0.619	0.590	0.700	0.666	7.40
106)	1,2,4-Trichlorobenzene									
	0.283	0.164	0.107	0.126		0.229	0.171	0.318	0.200	39.78
107)	Naphthalene									
	0.480	0.207	0.125	0.217		0.369	0.217		0.269	48.31
108)	Hexachlorobutadiene									
	0.379	0.482	0.476	0.525		0.351	0.329	0.401	0.421	17.67
109)	I Bromochloromethane (A -----ISTD-----)									
110)	TVHC as equiv Pentane									
	6.306	5.732	5.737			6.369	6.542	6.261	6.158	5.55
111)	Decafluoropentane									
	4.169	4.555	4.508	4.696	5.573	4.290	4.752	3.618	4.520	12.36

(#) = Out of Range ### Number of calibration levels exceeded format ###

Initial Calibration Summary

Job Number:
Account:
Project:

JC82624
CARICH C. A. Rich Consultants
Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample:
Lab FileID:

V5W1390-ICC1390
5W34379.D

m5w1390.M

Thu Jan 24 09:56:11 2019

Initial Calibration Verification

Page 1 of 3

Job Number: JC82624

Sample: V5W1390-ICV1390

Account: CARICH C. A. Rich Consultants

Lab FileID: 5W34392.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\
 Data File : 5w34392.D
 Acq On : 27 Dec 2018 4:26 pm
 Operator : gabriep
 Sample : icv1390-10
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 02 16:06:00 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I Bromochloromethane	1.000	1.000	0.0	95	0.00
2	1,1,1-Trifluoroethane	0.000	0.000	0.0	0#	-3.91#
3	Freon 152A	0.576	0.558	3.1	93	0.00
4	Chlorodifluoromethane	0.272	0.276	-1.5	91	0.00
5	Propene	0.662	0.640	3.3	96	0.00
6	Chlorotrifluoroethene	1.340	1.329	0.8	93	-0.01
7	Dichlorodifluoromethane	2.747	2.698	1.8	93	-0.01
8	1-Chloro-1,1-difluoroethane	2.679	0.000	100.0#	0#	-4.22#
9	Chloromethane	1.112	0.992	10.8	92	0.00
10	Dichlorotetrafluoroethane	3.193	3.115	2.4	96	-0.01
11	Vinyl Chloride	1.120	1.110	0.9	97	0.00
12	1,3-Butadiene	0.764	0.743	2.7	97	0.00
13	n-Butane	0.156	0.163	-4.5	98	0.00
14	Bromomethane	1.212	1.131	6.7	97	0.00
15	Chloroethane	0.524	0.508	3.1	97	0.00
16	Dichlorofluoromethane	2.725	2.530	7.2	93	0.00
17	Acetonitrile	0.851	0.817	4.0	98	0.00
18	Freon 123	2.701	2.622	2.9	97	0.00
19	Freon 123A	1.445	1.636	-13.2	110	0.00
20	Bromoethene	1.087	1.039	4.4	93	0.00
21	Acrolein	0.467	0.418	10.5	91	0.00
22	Trichlorofluoromethane	3.076	3.051	0.8	97	0.00
23	Acetone	0.503	0.425	15.5	92	0.00
24	Pentane	0.220	0.228	-3.6	90	0.00
25	1,1-Dichloro-1-fluoroethane	0.000	0.000	0.0	0#	-5.27#
26	Iodomethane	2.846	2.739	3.8	91	0.00
27	Isopropyl Alcohol	0.456	0.363	20.4	93	-0.01
28	1,1-Dichloroethene	1.592	1.629	-2.3	96	0.00
29	Freon 113	2.203	2.196	0.3	96	0.00
30	Methylene Chloride	0.999	0.870	12.9	95	0.00
31	Carbon Disulfide	2.720	2.120	22.1	74	0.00
32	Ethanol	0.508	0.440	13.4	95	0.00
33	Acrylonitrile	0.755	0.733	2.9	91	0.00
34	3-Chloropropene	0.408	0.404	1.0	90	0.00
35	trans-1,2-Dichloroethene	1.389	1.259	9.4	84	0.00
36	tert-Butyl Alcohol	1.859	1.491	19.8	74	0.00
37	Methyl tert-Butyl Ether	2.565	2.519	1.8	89	0.00
38	Vinyl Acetate	2.522	2.386	5.4	90	0.00

Initial Calibration Verification

Page 2 of 3

Job Number: JC82624

Sample: V5W1390-ICV1390

Account: CARICH C. A. Rich Consultants

Lab FileID: 5W34392.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

39	1,1-Dichloroethane	1.830	1.758	3.9	93	0.00
40	2-Butanone	0.436	0.450	-3.2	93	0.00
41	Hexane	1.412	1.362	3.5	88	0.00
42	cis-1,2-Dichloroethene	1.401	1.337	4.6	90	0.00
43	Di-isopropyl Ether	0.771	0.794	-3.0	92	0.00
44	Ethyl Acetate	0.281	0.323	-14.9	95	0.00
45	Methyl Acrylate	1.677	1.736	-3.5	93	0.00
46	Chloroform	2.371	2.261	4.6	93	0.00
47	2,4-Dimethylpentane	1.633	1.684	-3.1	94	0.00
48	Tetrahydrofuran	0.384	0.446	-16.1	98	0.00
49	1,1,1-Trichloroethane	2.223	2.127	4.3	92	0.00
50	1,2-Dichloroethane	1.499	1.422	5.1	91	0.00
51	Benzene	3.027	2.859	5.6	92	0.00
52	Carbon Tetrachloride	2.004	1.989	0.7	92	0.00
53	Cyclohexane	1.386	1.358	2.0	90	0.00
54	2,3-Dimethylpentane	0.611	0.619	-1.3	93	0.00
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00
56	2,2,4-Trimethylpentane	1.326	1.438	-8.4	95	0.00
57	Heptane	0.264	0.280	-6.1	92	0.00
58	Trichloroethene	0.442	0.427	3.4	91	0.00
59	1,2-Dichloropropane	0.338	0.323	4.4	91	0.00
60	Dibromomethane	0.411	0.385	6.3	93	0.00
61	Ethyl Acrylate	0.611	0.648	-6.1	88	0.00
62	Methyl Methacrylate	0.290	0.321	-10.7	93	0.00
63	1,4-Dioxane	0.195	0.210	-7.7	95	0.00
64	Bromodichloromethane	0.722	0.710	1.7	96	0.00
65	cis-1,3-Dichloropropene	0.485	0.501	-3.3	93	0.00
66	4-Methyl-2-pentanone	0.232	0.279	-20.3	95	0.00
67	trans-1,3-Dichloropropene	0.421	0.460	-9.3	93	0.00
68	Toluene	1.005	0.987	1.8	91	0.00
69	1,1,2-Trichloroethane	0.368	0.365	0.8	94	0.00
70	1,3-Dichloropropane	0.489	0.500	-2.2	94	0.00
71	2-Hexanone	0.321	0.390	-21.5	97	0.00
72	Ethyl Methacrylate	0.472	0.552	-16.9	93	0.00
73	Dibromochloromethane	0.655	0.714	-9.0	101	0.00
74	Tetrachloroethene	0.561	0.525	6.4	92	0.00
75	1,2-Dibromoethane	0.589	0.595	-1.0	94	0.00
76	Octane	0.596	0.700	-17.4	96	0.00
77	1,1,1,2-Tetrachloroethane	0.444	0.501	-12.8	100	0.00
78 I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00
79	Chlorobenzene	1.794	1.704	5.0	95	0.00
80	Ethylbenzene	2.631	2.721	-3.4	94	0.00
81	m,p-Xylene	2.125	2.148	-1.1	95	0.00
82	Styrene	1.405	1.522	-8.3	96	0.00
83	Nonane	1.211	1.312	-8.3	97	0.00
84	o-Xylene	2.084	2.201	-5.6	96	0.00
85	Bromoform	1.186	1.469	-23.9	110	0.00
86	1,1,2,2-Tetrachloroethane	1.588	1.681	-5.9	113	0.00
87	1,2,3-Trichloropropane	1.154	1.223	-6.0	111	0.00
88	Isopropylbenzene	2.793	3.007	-7.7	102	0.00
89	Bromobenzene	0.910	0.957	-5.2	103	0.00
90	2-Chlorotoluene	0.627	0.719	-14.7	104	0.00
91	n-Propylbenzene	0.680	0.742	-9.1	101	0.00
92 S	4-Bromofluorobenzene	1.222	1.307	-7.0	95	0.00
93	4-Ethyltoluene	2.461	2.792	-13.4	106	0.00
94	1,3,5-Trimethylbenzene	2.151	2.226	-3.5	101	0.00
95	alpha-Methylstyrene	0.950	1.068	-12.4	105	0.00
96	tert-Butylbenzene	0.452	0.471	-4.2	103	0.00

Initial Calibration Verification

Page 3 of 3

Job Number: JC82624**Sample:** V5W1390-ICV1390**Account:** CARICH C. A. Rich Consultants**Lab FileID:** 5W34392.D**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

97	1,2,4-Trimethylbenzene	2.020	2.231	-10.4	104	0.00
98	1,3-Dichlorobenzene	1.322	1.389	-5.1	109	0.00
99	Benzyl Chloride	1.073	1.565	-45.9#	123	0.00
100	1,4-Dichlorobenzene	1.284	1.295	-0.9	109	0.00
101	sec-Butylbenzene	0.530	0.560	-5.7	104	0.00
102	p-Isopropyltoluene	0.573	0.626	-9.2	107	0.00
103	1,2-Dichlorobenzene	1.181	1.223	-3.6	113	0.00
104	n-Butylbenzene	0.417	0.481	-15.3	109	0.00
105	Hexachloroethane	0.666	0.717	-7.7	109	0.00
106	1,2,4-Trichlorobenzene	0.200	0.342	-71.0#	141#	0.00
107	Naphthalene	0.269	0.637	-136.8#	163#	0.00
108	Hexachlorobutadiene	0.421	0.422	-0.2	113	0.00

109 I	Bromochloromethane (A)	1.000	1.000	0.0	95	0.00
110	TVHC as equiv Pentane	6.158	5.939	3.6	89	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

m5w1390.M Wed Jan 02 16:10:14 2019

Continuing Calibration Summary

Page 1 of 3

Job Number: JC82624

Sample: V5W1417-CC1390

Account: CARICH C. A. Rich Consultants

Lab FileID: 5W34903.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\5w34903.D

Vial: 2

Acq On : 31 Jan 2019 11:30 am

Operator: gabriep

Sample : cc1390-10

Inst : Air5w

Misc : ms32097,v5w1417,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\m5w1390.M (RTE Integrator)

Title : TO-15 Full Scan Mode

Last Update : Thu Jan 24 09:50:52 2019

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	92	0.00	8.12
2	1,1,1-Trifluoroethane			-----NA-----			
3	Freon 152A	0.576	0.644	-11.8	103	0.00	3.99
4	Chlorodifluoromethane	0.272	0.289	-6.2	92	0.00	4.03
5	Propene	0.662	0.804	-21.5	116	0.00	4.05
6	Chlorotrifluoroethene	1.340	1.290	3.7	87	-0.01	4.05
7	Dichlorodifluoromethane	2.747	2.736	0.4	91	-0.01	4.10
8	1-Chloro-1,1-difluoroetha	2.679	2.318	13.5	81	0.00	4.21
9	Chloromethane	1.112	1.095	1.5	98	0.00	4.23
10	Dichlorotetrafluoroethane	3.193	3.217	-0.8	96	0.00	4.30
11	Vinyl Chloride	1.120	1.237	-10.4	105	0.00	4.39
12	1,3-Butadiene	0.764	0.871	-14.0	110	0.00	4.49
13	n-Butane	0.156	0.198	-26.9	115	0.00	4.53
14	Bromomethane	1.212	1.239	-2.2	103	0.00	4.71
15	Chloroethane	0.524	0.598	-14.1	110	-0.01	4.83
16	Dichlorofluoromethane	2.725	3.089	-13.4	110	0.00	4.90
17	Acetonitrile	0.851	0.956	-12.3	111	0.00	5.12
18	Freon 123	2.701	3.096	-14.6	111	0.00	5.23
19	Freon 123A	1.445	1.539	-6.5	100	0.00	5.27
20	Bromoethene	1.087	1.146	-5.4	99	0.00	5.10
21	Acrolein	0.467	0.513	-9.9	108	0.00	5.21
22	Trichlorofluoromethane	3.076	2.771	9.9	85	0.00	5.43
23	Acetone	0.503	0.545	-8.3	113	0.00	5.32
24	Pentane	0.220	0.256	-16.4	98	0.00	5.72
25	1,1-Dichloro-1-fluoroetha			-----NA-----			
26	Iodomethane	2.846	2.467	13.3	79	0.00	5.91
27	Isopropyl Alcohol	0.456	0.392	14.0	97	-0.01	5.53
28	1,1-Dichloroethene	1.592	1.637	-2.8	93	-0.01	5.97
29	Freon 113	2.203	2.111	4.2	89	0.00	6.30
30	Methylene Chloride	0.999	0.877	12.2	93	0.00	6.08
31	Carbon Disulfide	2.720	2.855	-5.0	97	-0.01	6.33
32	Ethanol	0.508	0.459	9.6	96	0.00	4.95
33	Acrylonitrile	0.755	0.836	-10.7	100	-0.01	5.70
34	3-Chloropropene	0.408	0.416	-2.0	90	0.00	6.18
35	trans-1,2-Dichloroethene	1.389	1.433	-3.2	93	0.00	6.92
36	tert-Butyl Alcohol	1.859	1.851	0.4	88	-0.01	6.03
37	Methyl tert-Butyl Ether	2.565	2.487	3.0	85	0.00	7.18
38	Vinyl Acetate	2.522	2.822	-11.9	103	-0.01	7.27
39	1,1-Dichloroethane	1.830	1.940	-6.0	99	0.00	7.12
40	2-Butanone	0.436	0.443	-1.6	89	0.00	7.53
41	Hexane	1.412	1.576	-11.6	98	0.00	8.13
42	cis-1,2-Dichloroethene	1.401	1.416	-1.1	93	0.00	7.95

Continuing Calibration Summary

Page 2 of 3

Job Number: JC82624

Sample: V5W1417-CC1390

Account: CARICH C. A. Rich Consultants

Lab FileID: 5W34903.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.771	0.755	2.1	84	0.00	8.15
44	Ethyl Acetate	0.281	0.350	-24.6	99	0.00	8.20
45	Methyl Acrylate	1.677	1.940	-15.7	100	0.00	8.19
46	Chloroform	2.371	2.342	1.2	93	0.00	8.25
47	2,4-Dimethylpentane	1.633	1.827	-11.9	99	0.00	9.06
48	Tetrahydrofuran	0.384	0.409	-6.5	87	0.00	8.70
49	1,1,1-Trichloroethane	2.223	2.178	2.0	91	-0.01	9.29
50	1,2-Dichloroethane	1.499	1.491	0.5	93	-0.01	9.03
51	Benzene	3.027	2.946	2.7	92	0.00	9.81
52	Carbon Tetrachloride	2.004	2.037	-1.6	91	0.00	9.97
53	Cyclohexane	1.386	1.536	-10.8	99	-0.01	10.09
54	2,3-Dimethylpentane	0.611	0.645	-5.6	93	0.00	10.38
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00	10.23
56	2,2,4-Trimethylpentane	1.326	1.499	-13.0	99	-0.01	11.04
57	Heptane	0.264	0.279	-5.7	92	0.00	11.39
58	Trichloroethene	0.442	0.411	7.0	88	-0.01	11.03
59	1,2-Dichloropropane	0.338	0.358	-5.9	102	-0.01	10.74
60	Dibromomethane	0.411	0.348	15.3	84	0.00	10.73
61	Ethyl Acrylate	0.611	0.695	-13.7	94	-0.01	10.80
62	Methyl Methacrylate	0.290	0.310	-6.9	90	0.00	11.32
63	1,4-Dioxane	0.195	0.177	9.2	80	0.00	11.08
64	Bromodichloromethane	0.722	0.697	3.5	95	0.00	11.00
65	cis-1,3-Dichloropropene	0.485	0.487	-0.4	91	-0.01	12.10
66	4-Methyl-2-pentanone	0.232	0.276	-19.0	95	0.00	12.16
67	trans-1,3-Dichloropropene	0.421	0.454	-7.8	92	0.00	12.77
68	Toluene	1.005	0.956	4.9	88	0.00	13.32
69	1,1,2-Trichloroethane	0.368	0.362	1.6	93	0.00	12.98
70	1,3-Dichloropropane	0.489	0.506	-3.5	95	-0.01	13.36
71	2-Hexanone	0.321	0.347	-8.1	86	0.00	13.71
72	Ethyl Methacrylate	0.472	0.531	-12.5	90	0.00	13.74
73	Dibromochloromethane	0.655	0.633	3.4	90	0.00	13.88
74	Tetrachloroethene	0.561	0.478	14.8	84	0.00	14.82
75	1,2-Dibromoethane	0.589	0.567	3.7	90	0.00	14.18
76	Octane	0.596	0.752	-26.2	104	0.00	14.66
77	1,1,1,2-Tetrachloroethane	0.444	0.458	-3.2	92	0.00	15.74
78 I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00	15.70
79	Chlorobenzene	1.794	1.578	12.0	90	0.00	15.75
80	Ethylbenzene	2.631	2.566	2.5	91	0.00	16.30
81	m,p-Xylene	2.125	2.032	4.4	91	0.00	16.57
82	Styrene	1.405	1.391	1.0	89	0.00	17.09
83	Nonane	1.211	1.403	-15.9	106	0.00	17.63
84	o-Xylene	2.084	2.073	0.5	92	0.00	17.24
85	Bromoform	1.186	1.264	-6.6	96	0.00	16.64
86	1,1,2,2-Tetrachloroethane	1.588	1.634	-2.9	112	0.00	17.25
87	1,2,3-Trichloropropane	1.154	1.156	-0.2	107	0.00	17.44
88	Isopropylbenzene	2.793	2.721	2.6	94	0.00	18.15
89	Bromobenzene	0.910	0.872	4.2	96	0.00	18.25
90	2-Chlorotoluene	0.627	0.647	-3.2	96	0.00	18.88
91	n-Propylbenzene	0.680	0.697	-2.5	96	0.00	18.95
92 S	4-Bromofluorobenzene	1.222	1.278	-4.6	95	0.00	17.93
93	4-Ethyltoluene	2.461	2.518	-2.3	97	0.00	19.19
94	1,3,5-Trimethylbenzene	2.151	2.144	0.3	99	0.00	19.32
95	alpha-Methylstyrene	0.950	0.982	-3.4	98	0.00	19.55
96	tert-Butylbenzene	0.452	0.436	3.5	97	0.00	19.90
97	1,2,4-Trimethylbenzene	2.020	2.152	-6.5	102	0.00	19.91
98	1,3-Dichlorobenzene	1.322	1.334	-0.9	107	0.00	20.10
99	Benzyl Chloride	1.073	1.546	-44.1#	124	0.00	20.10
100	1,4-Dichlorobenzene	1.284	1.255	2.3	108	0.00	20.20

Continuing Calibration Summary

Page 3 of 3

Job Number: JC82624**Sample:** V5W1417-CC1390**Account:** CARICH C. A. Rich Consultants**Lab FileID:** 5W34903.D**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.530	0.535	-0.9	101	0.00	20.29
102	p-Isopropyltoluene	0.573	0.607	-5.9	106	0.00	20.53
103	1,2-Dichlorobenzene	1.181	1.170	0.9	110	0.00	20.68
104	n-Butylbenzene	0.417	0.469	-12.5	109	0.00	21.11
105	Hexachloroethane	0.666	0.745	-11.9	116	0.00	21.58
106	1,2,4-Trichlorobenzene	0.200	0.305	-52.5#	128	0.00	22.93
107	Naphthalene	0.269	0.531	-97.4#	139	0.00	23.05
108	Hexachlorobutadiene	0.421	0.482	-14.5	132	0.00	23.51
109 I	Bromochloromethane (A)	1.000	1.000	0.0	92	0.00	8.12
110	TVHC as equiv Pentane	6.158	7.015	-13.9	101	0.00	5.71
111	Decafluoropentane	4.520	5.104	-12.9	109	0.00	4.31

(#) = Out of Range

5W34379.D m5W1390.M

SPCC's out = 0 CCC's out = 0

Thu Jan 31 13:24:55 2019

Initial Calibration Summary

Page 1 of 4

Job Number: JC82624

Sample: V6W335-ICC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W08754.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Response Factor Report GCMS6W

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)
 Title : T0-15 Full Scan Mode
 Last Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Calibration Files

20 =6W08755.D 0.5 =6W08752.D 0.2 =6W08751.D 0.1 =6W08750.D
 0.04=6W08749.D 10 =6W08754.D 5 =6W08753.D 40 =6W08756.D
 = =

Compound	20	0.5	0.2	0.1	0.04	10	5	40	Avg	%RSD
1) I Bromochloromethane	-----ISTD-----									
2) 1,1,1-Trifluoroethane									0.000	-1.00
3) Freon 152A										
	0.504	0.505	0.507	0.552	0.507	0.517	0.533	0.499	0.515	3.48
4) Chlorodifluoromethane										
	0.256	0.250	0.237	0.240		0.258	0.268	0.249	0.251	4.26
5) Propene										
	0.555	0.553	0.576	0.602	0.674	0.570	0.592	0.549	0.584	7.01
6) Chlorotrifluoroethene										
	1.390	1.424	1.511	1.614	1.645	1.434	1.505	1.355	1.485	6.98
7) Dichlorodifluoromethane										
	2.460	2.570	2.681	2.905	2.875	2.534	2.663	2.362	2.631	7.22
8) 1-Chloro-1,1-difluoroethane										
	1.920	2.003	2.105	2.280	2.352	1.986	2.091	1.823	2.070	8.58
9) Chloromethane										
	0.699	0.730	0.765	0.816	0.769	0.727	0.766	0.683	0.744	5.79
10) Dichlorotetrafluoroethane										
	2.474	2.663	2.788	2.989	3.364	2.603	2.788	2.294	2.745	11.93
11) Vinyl Chloride										
	0.858	0.872	0.928	0.979	0.936	0.891	0.937	0.836	0.905	5.31
12) 1,3-Butadiene										
	0.610	0.624	0.648	0.732	0.542	0.629	0.667	0.605	0.632	8.65
13) n-Butane										
	0.159	0.161	0.154	0.109		0.164	0.174	0.158	0.154	13.46
14) Bromomethane										
	0.894	0.965	1.023	1.087	1.057	0.935	1.000	0.858	0.977	8.11
15) Acrolein										
	0.370	0.343	0.361	0.382		0.374	0.386	0.366	0.369	3.92
16) Chloroethane										
	0.453	0.472	0.445	0.483		0.467	0.495	0.444	0.466	4.14
17) Dichlorofluoromethane										
	2.092	2.192	2.335	2.507	2.447	2.176	2.314	2.007	2.259	7.64
18) Acetonitrile										
	0.653	0.652	0.687	0.740	0.702	0.668	0.691	0.653	0.681	4.54
19) Freon 123										
	2.171	2.236	2.400	2.525	2.662	2.249	2.365	2.084	2.336	8.17
20) Freon 123A										
	1.359	1.414	1.466	1.514	1.642	1.410	1.482	1.305	1.449	7.11
21) Bromoethene										
	0.952	0.978	1.033	1.102	0.957	0.988	1.034	0.919	0.995	5.86
22) Trichlorofluoromethane										
	2.484	2.593	2.753	2.962	3.041	2.561	2.709	2.428	2.691	8.18
23) Acetone										

Initial Calibration Summary

Page 2 of 4

Job Number: JC82624

Sample:

V6W335-ICC335

Account: CARICH C. A. Rich Consultants

Lab FileID:

6W08754.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

		0.388	0.411	0.419	0.503		0.395	0.420	0.381		0.417	9.80
24)	Pentane											
		0.223	0.209	0.209	0.163		0.225	0.237	0.223		0.213	11.22
25)	1,1-Dichloro-1-fluoroethane											
											0.000	-1.00
26)	Iodomethane											
		2.757	2.818	2.974	3.228	3.269	2.867	3.018	2.650		2.947	7.42
27)	Isopropyl Alcohol											
		1.505	1.379	1.592	1.728		1.528	1.570	1.490		1.542	6.94
28)	1,1-Dichloroethene											
		1.380	1.341	1.382	1.514	1.637	1.411	1.465	1.357		1.436	6.92
29)	Freon 113											
		1.974	2.025	2.149	2.262	2.341	2.036	2.146	1.931		2.108	6.76
30)	Methylene Chloride											
		0.817	0.889	1.036	1.304		0.836	0.877	0.810		0.939	19.02
31)	Carbon Disulfide											
		2.483	2.447	2.568	2.859	2.986	2.554	2.649	2.440		2.623	7.63
32)	Ethanol											
		0.328	0.354	0.366	0.406		0.334	0.351	0.326		0.352	7.90
33)	Acrylonitrile											
		0.681	0.610	0.648	0.614		0.691	0.704	0.679		0.661	5.66
34)	3-Chloropropene											
		0.450	0.414	0.396	0.401		0.454	0.465	0.446		0.432	6.43
35)	trans-1,2-Dichloroethene											
		1.280	1.239	1.279	1.346	1.348	1.306	1.343	1.271		1.302	3.15
36)	tert-Butyl Alcohol											
		1.889	1.621	1.648	1.696		1.894	1.912	1.882		1.792	7.26
37)	Methyl tert-Butyl Ether											
		2.687	2.565	2.626	2.867	2.869	2.738	2.818	2.670		2.730	4.14
38)	Vinyl Acetate											
		2.425	1.989	2.001	1.980		2.407	2.433	2.438		2.239	10.42
39)	1,1-Dichloroethane											
		1.583	1.562	1.653	1.803	2.029	1.624	1.685	1.567		1.688	9.40
40)	2-Butanone											
		0.466	0.385	0.345	0.276		0.470	0.478	0.470		0.413	19.22
41)	Hexane											
		1.366	1.304	1.353	1.410	1.310	1.387	1.451	1.347		1.366	3.64
42)	cis-1,2-Dichloroethene											
		1.261	1.210	1.264	1.328	1.315	1.289	1.332	1.262		1.282	3.25
43)	Di-isopropyl Ether											
		0.877	0.830	0.811	0.849	0.706	0.892	0.924	0.863		0.844	7.82
44)	Ethyl Acetate											
		0.288	0.243	0.205			0.291	0.299	0.288		0.269	13.82
45)	Methyl Acrylate											
		1.672	1.434	1.331	1.283		1.696	1.740	1.665		1.546	12.33
46)	Chloroform											
		2.065	2.071	2.194	2.394	2.628	2.119	2.223	2.033		2.216	9.17
47)	2,4-Dimethylpentane											
		1.598	1.519	1.558	1.672	1.541	1.626	1.697	1.587		1.600	3.90
48)	Tetrahydrofuran											
		0.437	0.375	0.356	0.307		0.437	0.451	0.438		0.400	13.71
49)	1,1,1-Trichloroethane											
		2.168	2.119	2.196	2.401	2.364	2.200	2.283	2.159		2.236	4.56
50)	1,2-Dichloroethane											
		1.328	1.301	1.376	1.398	1.371	1.361	1.422	1.327		1.360	2.96
51)	Benzene											
		2.945	2.860	2.961	3.266	3.239	3.008	3.134	2.897		3.039	5.11
52)	Carbon Tetrachloride											
		2.279	2.094	2.207	2.423	2.292	2.294	2.344	2.266		2.275	4.23
53)	Cyclohexane											

6.9.4

6

Initial Calibration Summary

Page 3 of 4

Job Number: JC82624

Sample: V6W335-ICC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W08754.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

		1.374	1.323	1.382	1.525	1.404	1.405	1.452	1.377		1.405	4.31
54)	2,3-Dimethylpentane	0.652	0.615	0.653	0.672	0.488	0.661	0.690	0.648		0.635	9.95
55)	I 1,4-Difluorobenzene	-----ISTD-----										
56)	2,2,4-Trimethylpentane	1.237	1.191	1.234	1.316	1.315	1.255	1.320	1.176		1.255	4.53
57)	Heptane	0.287	0.265	0.271	0.275	0.263	0.288	0.298	0.279		0.278	4.43
58)	Trichloroethene	0.397	0.381	0.397	0.429	0.430	0.400	0.418	0.381		0.404	4.85
59)	1,2-Dichloropropane	0.293	0.283	0.290	0.308	0.302	0.295	0.307	0.281		0.295	3.42
60)	Dibromomethane	0.413	0.410	0.424	0.489	0.522	0.421	0.441	0.393		0.439	10.03
61)	Ethyl Acrylate	0.606	0.462	0.429	0.425		0.596	0.601	0.594		0.530	16.39
62)	Methyl Methacrylate	0.307	0.249	0.234	0.236		0.303	0.313	0.305		0.278	13.11
63)	1,4-Dioxane	0.200	0.174	0.166	0.172		0.197	0.205	0.194		0.187	8.35
64)	Bromodichloromethane	0.641	0.591	0.590	0.642	0.620	0.640	0.661	0.629		0.627	4.05
65)	cis-1,3-Dichloropropene	0.485	0.409	0.413	0.425	0.418	0.480	0.486	0.483		0.450	8.08
66)	4-Methyl-2-pentanone	0.244	0.208	0.191	0.201		0.240	0.247	0.240		0.225	10.43
67)	trans-1,3-Dichloropropene	0.434	0.333	0.324	0.339	0.290	0.424	0.420	0.436		0.375	15.74
68)	Toluene	1.035	0.980	1.001	1.080	1.202	1.048	1.082	0.990		1.052	6.83
69)	1,1,2-Trichloroethane	0.349	0.334	0.336	0.349	0.349	0.352	0.364	0.342		0.347	2.80
70)	1,3-Dichloropropane	0.468	0.440	0.444	0.485	0.486	0.471	0.482	0.453		0.466	3.96
71)	2-Hexanone	0.328	0.245	0.219	0.210		0.322	0.321	0.329		0.282	19.39
72)	Ethyl Methacrylate	0.520	0.404	0.382	0.388		0.511	0.518	0.518		0.463	14.58
73)	Dibromochloromethane	0.668	0.559	0.553	0.598	0.578	0.664	0.665	0.639		0.615	7.98
74)	Tetrachloroethene	0.581	0.598	0.630	0.706	0.790	0.598	0.624	0.542		0.633	12.44
75)	1,2-Dibromoethane	0.549	0.483	0.489	0.500	0.503	0.550	0.554	0.532		0.520	5.67
76)	Octane	0.576	0.536	0.545	0.584	0.592	0.582	0.601	0.564		0.572	3.94
77)	1,1,1,2-Tetrachloroethane	0.451	0.415	0.423	0.451	0.421	0.454	0.467	0.422		0.438	4.53
78)	I Chlorobenzene-d5	-----ISTD-----										
79)	Chlorobenzene	1.641	1.857	1.943	2.132	2.148	1.783	1.919	1.406		1.854	13.32
80)	Ethylbenzene	2.624	2.907	3.003	3.196	3.245	2.826	3.082	2.308		2.899	10.77
81)	m,p-Xylene	2.028	2.369	2.395	2.540	2.461	2.188	2.391	1.783		2.269	11.20
82)	Styrene	1.517	1.416	1.332	1.421	1.383	1.590	1.702	1.352		1.464	8.80
83)	Nonane											

Initial Calibration Summary

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Job Number: JC82624

Sample:

V6W335-ICC335

Account: CARICH C. A. Rich Consultants

Lab FileID:

6W08754.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

	1.160	1.328	1.322	1.396	1.289	1.249	1.365	1.039	1.269	9.28
84) o-Xylene	2.014	2.294	2.317	2.435	2.595	2.187	2.398	1.747	2.248	11.81
85) Bromoform	1.206	1.013	0.985	1.054	0.953	1.240	1.281	1.074	1.101	11.32
86) 1,1,2,2-Tetrachloroethane	1.148	1.281	1.299	1.428	1.512	1.240	1.361	1.000	1.284	12.49
87) 1,2,3-Trichloropropane	0.913	0.984	1.016	1.113	1.128	0.972	1.053	0.818	1.000	10.28
88) Isopropylbenzene	2.785	3.303	3.317	3.646	3.682	3.030	3.358	2.411	3.191	13.52
89) Bromobenzene	0.883	0.926	0.918	0.975	0.953	0.928	1.006	0.779	0.921	7.43
90) 2-Chlorotoluene	0.665	0.742	0.725	0.787	0.715	0.713	0.777	0.585	0.714	9.04
91) n-Propylbenzene	0.757	0.822	0.799	0.865	0.743	0.812	0.892	0.665	0.794	9.05
92) 4-Bromofluorobenzene	1.215	1.264	1.237	1.225	1.209	1.236	1.258	1.122	1.221	3.62
93) 4-Ethyltoluene	2.534	2.828	2.688	2.916	2.919	2.720	2.978	2.203	2.723	9.40
94) 1,3,5-Trimethylbenzene	2.185	2.523	2.497	2.627	2.799	2.338	2.613	1.902	2.436	11.69
95) alpha-Methylstyrene	1.037	0.938	0.893	0.948	1.026	1.092	1.179	0.918	1.004	9.76
96) tert-Butylbenzene	0.520	0.646	0.644	0.681	0.622	0.574	0.640	0.428	0.594	14.09
97) 1,2,4-Trimethylbenzene	2.056	2.339	2.306	2.442	2.435	2.242	2.447	1.720	2.248	11.15
98) 1,3-Dichlorobenzene	1.229	1.165	1.166	1.280	1.486	1.293	1.376	1.063	1.257	10.58
99) Benzyl Chloride	1.204	0.590	0.570	0.619	0.735	1.159	1.087	1.151	0.889	32.02
100) 1,4-Dichlorobenzene	1.143	0.992	0.967	1.050	1.288	1.175	1.228	1.019	1.108	10.63
101) sec-Butylbenzene	0.633	0.754	0.751	0.803	0.725	0.686	0.761	0.542	0.707	11.91
102) p-Isopropyltoluene	0.646	0.796	0.783	0.774	0.753	0.714	0.790	0.531	0.723	12.78
103) 1,2-Dichlorobenzene	1.103	1.146	1.176	1.287	1.428	1.170	1.261	0.971	1.193	11.38
104) n-Butylbenzene	0.547	0.566	0.547	0.532	0.516	0.583	0.624	0.484	0.550	7.77
105) Hexachloroethane	0.708	0.685	0.673	0.712	0.575	0.732	0.755	0.620	0.683	8.72
106) 1,2,4-Trichlorobenzene	0.332	0.268	0.273	0.310	0.503	0.325	0.307	0.330	0.331	22.23
107) Naphthalene	0.635	0.626	0.610	0.690	1.071	0.630	0.591	0.617	0.684	23.28
108) Hexachlorobutadiene	0.535	0.814	0.857	0.958	1.136	0.569	0.626	0.481	0.747	30.97
109) I Bromochloromethane (A -----ISTD-----										
110) TVHC as equiv Pentane	3.941	4.541	4.120			3.977	4.271	3.779	4.105	6.60

(#) = Out of Range ### Number of calibration levels exceeded format ###

6W335.M

Tue Oct 23 17:34:18 2018

Initial Calibration Verification

Page 1 of 3

Job Number: JC82624

Sample: V6W335-ICV335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W08758.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\6W08758.D

Vial: 5

Acq On : 22 Oct 2018 8:45 pm

Operator: paulcw

Sample : icv335-10

Inst : GCMS6W

Misc : MS30116,V6W335,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)

Title : T0-15 Full Scan Mode

Last Update : Tue Oct 23 09:39:19 2018

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	103	0.00	8.18
2	1,1,1-Trifluoroethane			-----NA-----			
3	Freon 152A	0.515	0.515	0.0	102	0.00	3.73
4	Chlorodifluoromethane	0.251	0.258	-2.8	102	0.00	3.77
5	Propene	0.584	0.583	0.2	105	0.00	3.79
6	Chlorotrifluoroethene	1.485	1.427	3.9	102	0.00	3.80
7	Dichlorodifluoromethane	2.631	2.562	2.6	104	0.00	3.85
8	1-Chloro-1,1-difluoroetha	2.070	1.849	10.7	96	0.00	3.96
9	Chloromethane	0.744	0.729	2.0	103	0.00	3.99
10	Dichlorotetrafluoroethane	2.745	2.615	4.7	103	0.00	4.06
11	Vinyl Chloride	0.905	0.897	0.9	103	0.00	4.16
12	1,3-Butadiene	0.632	0.637	-0.8	104	0.00	4.27
13	n-Butane	0.154	0.167	-8.4	104	0.00	4.31
14	Bromomethane	0.977	0.931	4.7	102	0.00	4.49
15	Acrolein	0.369	0.356	3.5	98	0.00	5.03
16	Chloroethane	0.466	0.471	-1.1	103	0.00	4.63
17	Dichlorofluoromethane	2.259	2.099	7.1	99	0.00	4.71
18	Acetonitrile	0.681	0.667	2.1	102	0.00	4.92
19	Freon 123	2.336	2.252	3.6	103	0.00	5.06
20	Freon 123A	1.449	1.604	-10.7	117	0.00	5.11
21	Bromoethene	0.995	0.945	5.0	98	0.00	4.93
22	Trichlorofluoromethane	2.691	2.590	3.8	104	0.00	5.30
23	Acetone	0.417	0.371	11.0	96	0.00	5.14
24	Pentane	0.213	0.221	-3.8	101	0.00	5.61
25	1,1-Dichloro-1-fluoroetha			-----NA-----			
26	Iodomethane	2.947	2.822	4.2	101	0.00	5.81
27	Isopropyl Alcohol	1.542	1.567	-1.6	105	0.00	5.34
28	1,1-Dichloroethene	1.436	1.476	-2.8	107	0.00	5.88
29	Freon 113	2.108	2.092	0.8	105	0.00	6.24
30	Methylene Chloride	0.939	0.855	8.9	105	0.00	5.99
31	Carbon Disulfide	2.623	2.049	21.9	82	0.00	6.27
32	Ethanol	0.352	0.327	7.1	100	0.00	4.72
33	Acrylonitrile	0.661	0.684	-3.5	102	0.00	5.56
34	3-Chloropropene	0.432	0.445	-3.0	101	0.00	6.10
35	trans-1,2-Dichloroethene	1.302	1.218	6.5	96	0.00	6.90
36	tert-Butyl Alcohol	1.792	1.625	9.3	88	0.00	5.89
37	Methyl tert-Butyl Ether	2.730	2.696	1.2	101	0.00	7.16
38	Vinyl Acetate	2.239	2.464	-10.0	105	0.00	7.27
39	1,1-Dichloroethane	1.688	1.633	3.3	103	0.00	7.11
40	2-Butanone	0.413	0.485	-17.4	106	0.00	7.51
41	Hexane	1.366	1.336	2.2	99	0.00	8.21
42	cis-1,2-Dichloroethene	1.282	1.280	0.2	102	0.00	8.00

Initial Calibration Verification

Page 2 of 3

Job Number: JC82624

Sample: V6W335-ICV335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W08758.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.844	0.898	-6.4	103	0.00	8.20
44	Ethyl Acetate	0.269	0.298	-10.8	105	0.00	8.23
45	Methyl Acrylate	1.546	1.743	-12.7	105	0.00	8.22
46	Chloroform	2.216	2.127	4.0	103	0.00	8.32
47	2,4-Dimethylpentane	1.600	1.666	-4.1	105	0.00	9.19
48	Tetrahydrofuran	0.400	0.472	-18.0	111	0.00	8.74
49	1,1,1-Trichloroethane	2.236	2.227	0.4	104	0.00	9.41
50	1,2-Dichloroethane	1.360	1.368	-0.6	103	0.00	9.13
51	Benzene	3.039	2.999	1.3	102	0.00	9.94
52	Carbon Tetrachloride	2.275	2.307	-1.4	103	0.00	10.12
53	Cyclohexane	1.405	1.396	0.6	102	0.00	10.25
54	2,3-Dimethylpentane	0.635	0.669	-5.4	104	0.00	10.54
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00	10.38
56	2,2,4-Trimethylpentane	1.255	1.306	-4.1	106	0.00	11.24
57	Heptane	0.278	0.293	-5.4	104	0.00	11.58
58	Trichloroethene	0.404	0.401	0.7	102	0.00	11.21
59	1,2-Dichloropropane	0.295	0.294	0.3	102	0.00	10.92
60	Dibromomethane	0.439	0.427	2.7	104	0.00	10.89
61	Ethyl Acrylate	0.530	0.595	-12.3	102	0.00	10.94
62	Methyl Methacrylate	0.278	0.316	-13.7	107	0.00	11.47
63	1,4-Dioxane	0.187	0.214	-14.4	111	0.00	11.20
64	Bromodichloromethane	0.627	0.672	-7.2	107	0.00	11.16
65	cis-1,3-Dichloropropene	0.450	0.494	-9.8	105	0.00	12.29
66	4-Methyl-2-pentanone	0.225	0.258	-14.7	109	0.00	12.32
67	trans-1,3-Dichloropropene	0.375	0.446	-18.9	107	0.00	12.97
68	Toluene	1.052	1.051	0.1	102	0.00	13.52
69	1,1,2-Trichloroethane	0.347	0.355	-2.3	103	0.00	13.17
70	1,3-Dichloropropane	0.466	0.482	-3.4	105	0.00	13.57
71	2-Hexanone	0.282	0.351	-24.5	111	0.00	13.89
72	Ethyl Methacrylate	0.463	0.527	-13.8	105	0.00	13.93
73	Dibromochloromethane	0.615	0.714	-16.1	110	0.00	14.09
74	Tetrachloroethene	0.633	0.590	6.8	101	0.00	15.03
75	1,2-Dibromoethane	0.520	0.567	-9.0	105	0.00	14.40
76	Octane	0.572	0.610	-6.6	107	0.00	14.88
77	1,1,1,2-Tetrachloroethane	0.438	0.479	-9.4	108	0.00	15.96
78 I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00	15.92
79	Chlorobenzene	1.854	1.774	4.3	103	0.00	15.98
80	Ethylbenzene	2.899	2.815	2.9	103	0.00	16.52
81	m,p-Xylene	2.269	2.170	4.4	103	0.00	16.80
82	Styrene	1.464	1.592	-8.7	104	0.00	17.32
83	Nonane	1.269	1.281	-0.9	106	0.00	17.85
84	o-Xylene	2.248	2.167	3.6	103	0.00	17.47
85	Bromoform	1.101	1.332	-21.0	112	0.00	16.87
86	1,1,2,2-Tetrachloroethane	1.284	1.317	-2.6	110	0.00	17.48
87	1,2,3-Trichloropropane	1.000	1.051	-5.1	112	0.00	17.67
88	Isopropylbenzene	3.191	3.167	0.8	108	0.00	18.37
89	Bromobenzene	0.921	0.966	-4.9	108	0.00	18.49
90	2-Chlorotoluene	0.714	0.751	-5.2	109	0.00	19.10
91	n-Propylbenzene	0.794	0.842	-6.0	108	0.00	19.17
92 S	4-Bromofluorobenzene	1.221	1.228	-0.6	103	0.00	18.16
93	4-Ethyltoluene	2.723	2.979	-9.4	114	0.00	19.40
94	1,3,5-Trimethylbenzene	2.436	2.416	0.8	107	0.00	19.52
95	alpha-Methylstyrene	1.004	1.160	-15.5	110	0.00	19.75
96	tert-Butylbenzene	0.594	0.601	-1.2	109	0.00	20.09
97	1,2,4-Trimethylbenzene	2.248	2.337	-4.0	108	0.00	20.10
98	1,3-Dichlorobenzene	1.257	1.396	-11.1	112	0.00	20.29
99	Benzyl Chloride	0.889	1.401	-57.6#	126	0.00	20.28
100	1,4-Dichlorobenzene	1.108	1.295	-16.9	114	0.00	20.39

6.9.5

6

Initial Calibration Verification

Page 3 of 3

Job Number: JC82624

Sample: V6W335-ICV335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W08758.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.707	0.725	-2.5	110	0.00	20.47
102	p-Isopropyltoluene	0.723	0.766	-5.9	111	0.00	20.70
103	1,2-Dichlorobenzene	1.193	1.271	-6.5	113	0.00	20.85
104	n-Butylbenzene	0.550	0.646	-17.5	115	0.00	21.27
105	Hexachloroethane	0.683	0.817	-19.6	116	0.00	21.73
106	1,2,4-Trichlorobenzene	0.331	0.419	-26.6	134	0.00	23.05
107	Naphthalene	0.684	0.881	-28.8	145#	0.00	23.17
108	Hexachlorobutadiene	0.747	0.632	15.4	115	0.00	23.62
109 I	Bromochloromethane (A)	1.000	1.000	0.0	103	0.00	8.18
110	TVHC as equiv Pentane	4.105	4.011	2.3	103	0.00	5.61

(#) = Out of Range
6W08754.D 6W335.M

SPCC's out = 0 CCC's out = 0
Tue Oct 23 17:33:57 2018

Continuing Calibration Summary

Page 1 of 3

Job Number: JC82624

Sample: V6W409-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10359.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\6W10359.D

Vial: 3

Acq On : 29 Jan 2019 9:42 am

Operator: thomash

Sample : cc335-10

Inst : GCMS6W

Misc : MS32203,V6W409,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)

Title : TO-15 Full Scan Mode

Last Update : Tue Oct 23 09:39:19 2018

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	83	-0.01	8.16
2	1,1,1-Trifluoroethane			NA			
3	Freon 152A	0.515	0.593	-15.1	96	0.00	3.72
4	Chlorodifluoromethane	0.251	0.207	17.5	67	0.00	3.76
5	Propene	0.584	0.692	-18.5	101	0.00	3.79
6	Chlorotrifluoroethene	1.485	1.445	2.7	84	0.00	3.80
7	Dichlorodifluoromethane	2.631	2.195	16.6	72	0.00	3.85
8	1-Chloro-1,1-difluoroethane	2.070	1.482	28.4	62	0.00	3.96
9	Chloromethane	0.744	0.756	-1.6	87	0.00	3.98
10	Dichlorotetrafluoroethane	2.745	2.417	11.9	77	0.00	4.05
11	Vinyl Chloride	0.905	0.911	-0.7	85	0.00	4.16
12	1,3-Butadiene	0.632	0.643	-1.7	85	0.00	4.27
13	n-Butane	0.154	0.170	-10.4	86	0.00	4.31
14	Bromomethane	0.977	0.929	4.9	83	0.00	4.49
15	Acrolein	0.369	0.386	-4.6	86	0.00	5.02
16	Chloroethane	0.466	0.476	-2.1	85	0.00	4.63
17	Dichlorofluoromethane	2.259	1.999	11.5	77	0.00	4.71
18	Acetonitrile	0.681	0.743	-9.1	93	0.00	4.91
19	Freon 123	2.336	2.297	1.7	85	0.00	5.06
20	Freon 123A	1.449	1.358	6.3	80	0.00	5.10
21	Bromoethene	0.995	0.979	1.6	83	0.00	4.93
22	Trichlorofluoromethane	2.691	2.167	19.5	71	0.00	5.29
23	Acetone	0.417	0.460	-10.3	97	0.00	5.13
24	Pentane	0.213	0.269	-26.3	100	0.00	5.60
25	1,1-Dichloro-1-fluoroethane			NA			
26	Iodomethane	2.947	2.904	1.5	85	0.00	5.80
27	Isopropyl Alcohol	1.542	1.664	-7.9	91	0.00	5.34
28	1,1-Dichloroethene	1.436	1.423	0.9	84	0.00	5.87
29	Freon 113	2.108	2.025	3.9	83	0.00	6.23
30	Methylene Chloride	0.939	0.917	2.3	92	0.00	5.99
31	Carbon Disulfide	2.623	2.905	-10.8	95	0.00	6.27
32	Ethanol	0.352	0.367	-4.3	92	0.00	4.71
33	Acrylonitrile	0.661	0.845	-27.8	102	0.00	5.55
34	3-Chloropropene	0.432	0.505	-16.9	93	0.00	6.09
35	trans-1,2-Dichloroethene	1.302	1.368	-5.1	87	0.00	6.90
36	tert-Butyl Alcohol	1.792	1.981	-10.5	87	0.00	5.89
37	Methyl tert-Butyl Ether	2.730	2.717	0.5	83	0.00	7.16
38	Vinyl Acetate	2.239	2.642	-18.0	92	0.00	7.26
39	1,1-Dichloroethane	1.688	1.753	-3.9	90	0.00	7.11
40	2-Butanone	0.413	0.525	-27.1	93	0.00	7.51
41	Hexane	1.366	1.599	-17.1	96	-0.01	8.20
42	cis-1,2-Dichloroethene	1.282	1.339	-4.4	87	0.00	7.99

Continuing Calibration Summary

Page 2 of 3

Job Number: JC82624

Sample: V6W409-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10359.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.844	0.923	-9.4	86	0.00	8.20
44	Ethyl Acetate	0.269	0.348	-29.4	100	0.00	8.23
45	Methyl Acrylate	1.546	1.880	-21.6	93	0.00	8.22
46	Chloroform	2.216	2.056	7.2	81	0.00	8.31
47	2,4-Dimethylpentane	1.600	1.879	-17.4	96	0.00	9.18
48	Tetrahydrofuran	0.400	0.484	-21.0	93	0.00	8.75
49	1,1,1-Trichloroethane	2.236	1.968	12.0	75	-0.01	9.40
50	1,2-Dichloroethane	1.360	1.144	15.9	70	0.00	9.12
51	Benzene	3.039	3.271	-7.6	91	-0.01	9.93
52	Carbon Tetrachloride	2.275	2.091	8.1	76	0.00	10.11
53	Cyclohexane	1.405	1.622	-15.4	96	0.00	10.24
54	2,3-Dimethylpentane	0.635	0.736	-15.9	93	0.00	10.54
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	83	0.00	10.37
56	2,2,4-Trimethylpentane	1.255	1.450	-15.5	96	0.00	11.23
57	Heptane	0.278	0.318	-14.4	92	-0.01	11.57
58	Trichloroethene	0.404	0.396	2.0	82	0.00	11.20
59	1,2-Dichloropropane	0.295	0.343	-16.3	97	-0.01	10.91
60	Dibromomethane	0.439	0.414	5.7	82	-0.01	10.88
61	Ethyl Acrylate	0.530	0.655	-23.6	91	0.00	10.94
62	Methyl Methacrylate	0.278	0.335	-20.5	92	0.00	11.47
63	1,4-Dioxane	0.187	0.216	-15.5	91	0.00	11.20
64	Bromodichloromethane	0.627	0.621	1.0	81	0.00	11.16
65	cis-1,3-Dichloropropene	0.450	0.500	-11.1	87	0.00	12.28
66	4-Methyl-2-pentanone	0.225	0.277	-23.1	96	0.00	12.32
67	trans-1,3-Dichloropropene	0.375	0.412	-9.9	81	-0.01	12.95
68	Toluene	1.052	1.082	-2.9	86	0.00	13.52
69	1,1,2-Trichloroethane	0.347	0.371	-6.9	88	0.00	13.17
70	1,3-Dichloropropane	0.466	0.504	-8.2	89	-0.01	13.56
71	2-Hexanone	0.282	0.358	-27.0	93	0.00	13.89
72	Ethyl Methacrylate	0.463	0.547	-18.1	89	0.00	13.92
73	Dibromochloromethane	0.615	0.677	-10.1	85	-0.01	14.07
74	Tetrachloroethene	0.633	0.605	4.4	84	0.00	15.03
75	1,2-Dibromoethane	0.520	0.548	-5.4	83	0.00	14.39
76	Octane	0.572	0.666	-16.4	95	-0.01	14.86
77	1,1,1,2-Tetrachloroethane	0.438	0.464	-5.9	85	0.00	15.95
78 I	Chlorobenzene-d5	1.000	1.000	0.0	74	0.00	15.91
79	Chlorobenzene	1.854	2.060	-11.1	86	-0.01	15.97
80	Ethylbenzene	2.899	3.266	-12.7	86	0.00	16.52
81	m,p-Xylene	2.269	2.466	-8.7	84	0.00	16.79
82	Styrene	1.464	1.829	-24.9	86	0.00	17.31
83	Nonane	1.269	1.609	-26.8	96	-0.01	17.84
84	o-Xylene	2.248	2.492	-10.9	85	0.00	17.46
85	Bromoform	1.101	1.558	-41.5#	94	0.00	16.86
86	1,1,2,2-Tetrachloroethane	1.284	1.722	-34.1#	103	0.00	17.47
87	1,2,3-Trichloropropane	1.000	1.243	-24.3	95	0.00	17.66
88	Isopropylbenzene	3.191	3.521	-10.3	87	0.00	18.37
89	Bromobenzene	0.921	1.083	-17.6	87	0.00	18.48
90	2-Chlorotoluene	0.714	0.852	-19.3	89	0.00	19.09
91	n-Propylbenzene	0.794	0.959	-20.8	88	0.00	19.16
92 S	4-Bromofluorobenzene	1.221	1.300	-6.5	78	0.00	18.15
93	4-Ethyltoluene	2.723	3.212	-18.0	88	0.00	19.39
94	1,3,5-Trimethylbenzene	2.436	2.760	-13.3	88	0.00	19.51
95	alpha-Methylstyrene	1.004	1.296	-29.1	88	0.00	19.74
96	tert-Butylbenzene	0.594	0.679	-14.3	88	0.00	20.08
97	1,2,4-Trimethylbenzene	2.248	2.645	-17.7	88	0.00	20.09
98	1,3-Dichlorobenzene	1.257	1.579	-25.6	91	0.00	20.28
99	Benzyl Chloride	0.889	1.517	-70.6#	98	0.00	20.27
100	1,4-Dichlorobenzene	1.108	1.400	-26.4	89	0.00	20.38

Continuing Calibration Summary

Page 3 of 3

Job Number: JC82624

Sample: V6W409-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10359.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.707	0.823	-16.4	89	0.00	20.46
102	p-Isopropyltoluene	0.723	0.871	-20.5	91	0.00	20.69
103	1,2-Dichlorobenzene	1.193	1.512	-26.7	96	0.00	20.85
104	n-Butylbenzene	0.550	0.702	-27.6	90	0.00	21.26
105	Hexachloroethane	0.683	1.003	-46.9#	102	0.00	21.73
106	1,2,4-Trichlorobenzene	0.331	0.393	-18.7	90	0.00	23.04
107	Naphthalene	0.684	0.764	-11.7	90	0.00	23.17
108	Hexachlorobutadiene	0.747	0.749	-0.3	98	0.00	23.61
109 I	Bromochloromethane (A)	1.000	1.000	0.0	83	-0.01	8.16
110	TVHC as equiv Pentane	4.105	4.638	-13.0	97	0.00	5.60

(#) = Out of Range
6W08754.D 6W335.M

SPCC's out = 0 CCC's out = 0
Wed Jan 30 10:42:07 2019

Continuing Calibration Summary

Page 1 of 3

Job Number: JC82624

Sample: V6W424-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10640.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\6W10640.D

Vial: 3

Acq On : 19 Feb 2019 9:37 am

Operator: thomash

Sample : cc335-10

Inst : GCMS6W

Misc : MS32415,V6W424,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)

Title : T0-15 Full Scan Mode

Last Update : Tue Oct 23 09:39:19 2018

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I Bromochloromethane	1.000	1.000	0.0	81	0.00	8.17
2	1,1,1-Trifluoroethane			NA			
3	Freon 152A	0.515	0.536	-4.1	84	0.00	3.73
4	Chlorodifluoromethane	0.251	0.185	26.3	58#	0.00	3.77
5	Propene	0.584	0.620	-6.2	88	0.00	3.79
6	Chlorotrifluoroethene	1.485	1.383	6.9	78	0.00	3.80
7	Dichlorodifluoromethane	2.631	1.925	26.8	61	0.00	3.85
8	1-Chloro-1,1-difluoroetha	2.070	1.227	40.7#	50#	0.00	3.96
9	Chloromethane	0.744	0.625	16.0	69	0.00	3.98
10	Dichlorotetrafluoroethane	2.745	2.179	20.6	68	0.00	4.06
11	Vinyl Chloride	0.905	0.798	11.8	72	0.00	4.16
12	1,3-Butadiene	0.632	0.559	11.6	72	0.00	4.27
13	n-Butane	0.154	0.151	1.9	74	0.00	4.31
14	Bromomethane	0.977	0.892	8.7	77	0.00	4.49
15	Acrolein	0.369	0.402	-8.9	87	0.00	5.03
16	Chloroethane	0.466	0.422	9.4	73	0.00	4.63
17	Dichlorofluoromethane	2.259	1.785	21.0	66	0.00	4.71
18	Acetonitrile	0.681	0.768	-12.8	93	0.00	4.92
19	Freon 123	2.336	2.234	4.4	80	0.00	5.06
20	Freon 123A	1.449	1.329	8.3	76	0.00	5.11
21	Bromoethene	0.995	0.985	1.0	80	0.00	4.93
22	Trichlorofluoromethane	2.691	2.026	24.7	64	0.00	5.29
23	Acetone	0.417	0.432	-3.6	88	0.00	5.14
24	Pentane	0.213	0.243	-14.1	87	0.00	5.60
25	1,1-Dichloro-1-fluoroetha			NA			
26	Iodomethane	2.947	2.840	3.6	80	0.00	5.80
27	Isopropyl Alcohol	1.542	1.547	-0.3	82	0.00	5.35
28	1,1-Dichloroethene	1.436	1.280	10.9	73	0.00	5.87
29	Freon 113	2.108	1.926	8.6	76	0.00	6.23
30	Methylene Chloride	0.939	0.849	9.6	82	0.00	5.99
31	Carbon Disulfide	2.623	2.667	-1.7	84	0.00	6.27
32	Ethanol	0.352	0.304	13.6	74	0.00	4.72
33	Acrylonitrile	0.661	0.749	-13.3	88	0.00	5.56
34	3-Chloropropene	0.432	0.472	-9.3	84	0.00	6.10
35	trans-1,2-Dichloroethene	1.302	1.238	4.9	77	0.00	6.90
36	tert-Butyl Alcohol	1.792	1.775	0.9	76	0.00	5.90
37	Methyl tert-Butyl Ether	2.730	2.460	9.9	73	0.00	7.16
38	Vinyl Acetate	2.239	2.475	-10.5	83	0.00	7.26
39	1,1-Dichloroethane	1.688	1.598	5.3	79	0.00	7.11
40	2-Butanone	0.413	0.482	-16.7	83	0.00	7.52
41	Hexane	1.366	1.465	-7.2	85	-0.01	8.20
42	cis-1,2-Dichloroethene	1.282	1.217	5.1	76	0.00	7.99

Continuing Calibration Summary

Page 2 of 3

Job Number: JC82624

Sample: V6W424-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10640.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.844	0.865	-2.5	78	0.00	8.20
44	Ethyl Acetate	0.269	0.320	-19.0	89	0.00	8.23
45	Methyl Acrylate	1.546	1.754	-13.5	84	0.00	8.22
46	Chloroform	2.216	1.904	14.1	73	0.00	8.31
47	2,4-Dimethylpentane	1.600	1.720	-7.5	85	0.00	9.18
48	Tetrahydrofuran	0.400	0.451	-12.7	83	0.00	8.75
49	1,1,1-Trichloroethane	2.236	1.817	18.7	67	-0.01	9.40
50	1,2-Dichloroethane	1.360	1.030	24.3	61	0.00	9.12
51	Benzene	3.039	3.019	0.7	81	-0.01	9.93
52	Carbon Tetrachloride	2.275	1.966	13.6	69	-0.01	10.10
53	Cyclohexane	1.405	1.487	-5.8	85	-0.01	10.24
54	2,3-Dimethylpentane	0.635	0.685	-7.9	84	0.00	10.54
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	80	-0.01	10.37
56	2,2,4-Trimethylpentane	1.255	1.351	-7.6	86	-0.01	11.22
57	Heptane	0.278	0.300	-7.9	83	-0.01	11.57
58	Trichloroethene	0.404	0.377	6.7	76	0.00	11.20
59	1,2-Dichloropropane	0.295	0.320	-8.5	87	-0.01	10.91
60	Dibromomethane	0.439	0.421	4.1	80	-0.01	10.88
61	Ethyl Acrylate	0.530	0.616	-16.2	83	0.00	10.94
62	Methyl Methacrylate	0.278	0.316	-13.7	83	0.00	11.47
63	1,4-Dioxane	0.187	0.204	-9.1	83	0.00	11.20
64	Bromodichloromethane	0.627	0.581	7.3	73	0.00	11.16
65	cis-1,3-Dichloropropene	0.450	0.476	-5.8	79	-0.01	12.28
66	4-Methyl-2-pentanone	0.225	0.260	-15.6	87	0.00	12.32
67	trans-1,3-Dichloropropene	0.375	0.403	-7.5	76	-0.01	12.95
68	Toluene	1.052	1.029	2.2	79	0.00	13.52
69	1,1,2-Trichloroethane	0.347	0.355	-2.3	81	0.00	13.17
70	1,3-Dichloropropane	0.466	0.477	-2.4	81	-0.01	13.56
71	2-Hexanone	0.282	0.340	-20.6	85	0.00	13.89
72	Ethyl Methacrylate	0.463	0.519	-12.1	81	0.00	13.92
73	Dibromochloromethane	0.615	0.666	-8.3	80	-0.01	14.07
74	Tetrachloroethene	0.633	0.592	6.5	79	0.00	15.03
75	1,2-Dibromoethane	0.520	0.543	-4.4	79	0.00	14.39
76	Octane	0.572	0.625	-9.3	86	-0.01	14.86
77	1,1,1,2-Tetrachloroethane	0.438	0.452	-3.2	80	0.00	15.95
78 I	Chlorobenzene-d5	1.000	1.000	0.0	74	0.00	15.91
79	Chlorobenzene	1.854	1.940	-4.6	81	-0.01	15.97
80	Ethylbenzene	2.899	2.969	-2.4	78	0.00	16.52
81	m,p-Xylene	2.269	2.255	0.6	77	0.00	16.79
82	Styrene	1.464	1.728	-18.0	81	-0.01	17.30
83	Nonane	1.269	1.467	-15.6	87	-0.01	17.84
84	o-Xylene	2.248	2.288	-1.8	78	-0.01	17.46
85	Bromoform	1.101	1.502	-36.4#	90	0.00	16.86
86	1,1,2,2-Tetrachloroethane	1.284	1.568	-22.1	94	-0.01	17.46
87	1,2,3-Trichloropropane	1.000	1.115	-11.5	85	0.00	17.66
88	Isopropylbenzene	3.191	3.262	-2.2	80	0.00	18.37
89	Bromobenzene	0.921	1.053	-14.3	84	0.00	18.48
90	2-Chlorotoluene	0.714	0.805	-12.7	84	0.00	19.09
91	n-Propylbenzene	0.794	0.908	-14.4	83	0.00	19.16
92 S	4-Bromofluorobenzene	1.221	1.307	-7.0	78	0.00	18.15
93	4-Ethyltoluene	2.723	2.988	-9.7	82	-0.01	19.38
94	1,3,5-Trimethylbenzene	2.436	2.552	-4.8	81	-0.01	19.51
95	alpha-Methylstyrene	1.004	1.236	-23.1	84	0.00	19.74
96	tert-Butylbenzene	0.594	0.657	-10.6	85	-0.01	20.08
97	1,2,4-Trimethylbenzene	2.248	2.460	-9.4	81	0.00	20.09
98	1,3-Dichlorobenzene	1.257	1.541	-22.6	89	0.00	20.28
99	Benzyl Chloride	0.889	1.451	-63.2#	93	0.00	20.27
100	1,4-Dichlorobenzene	1.108	1.391	-25.5	88	0.00	20.38

Continuing Calibration Summary

Page 3 of 3

Job Number: JC82624

Sample: V6W424-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10640.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.707	0.791	-11.9	86	0.00	20.46
102	p-Isopropyltoluene	0.723	0.829	-14.7	86	0.00	20.69
103	1,2-Dichlorobenzene	1.193	1.411	-18.3	89	0.00	20.85
104	n-Butylbenzene	0.550	0.660	-20.0	84	0.00	21.26
105	Hexachloroethane	0.683	1.003	-46.9#	102	0.00	21.73
106	1,2,4-Trichlorobenzene	0.331	0.377	-13.9	86	0.00	23.04
107	Naphthalene	0.684	0.779	-13.9	92	0.00	23.17
108	Hexachlorobutadiene	0.747	0.615	17.7	80	0.00	23.61
109 I	Bromochloromethane (A)	1.000	1.000	0.0	81	0.00	8.17
110	TVHC as equiv Pentane	4.105	4.018	2.1	82	0.00	5.60

(#) = Out of Range
6W08754.D 6W335.M

SPCC's out = 0 CCC's out = 0
Wed Feb 20 16:32:04 2019

Continuing Calibration Summary

Page 1 of 3

Job Number: JC82624

Sample: V6W425-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10664.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\gc6w\6W10664.D

Vial: 3

Acq On : 20 Feb 2019 9:44 am

Operator: thomash

Sample : CC335-10

Inst : GCMS6W

Misc : MS32480,V6W425,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)

Title : TO-15 Full Scan Mode

Last Update : Tue Oct 23 09:39:19 2018

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	80	-0.01	8.16
2	1,1,1-Trifluoroethane			-----NA-----			
3	Freon 152A	0.515	0.521	-1.2	81	0.00	3.73
4	Chlorodifluoromethane	0.251	0.180	28.3	56#	0.00	3.77
5	Propene	0.584	0.595	-1.9	84	0.00	3.79
6	Chlorotrifluoroethene	1.485	1.369	7.8	76	0.00	3.80
7	Dichlorodifluoromethane	2.631	1.903	27.7	60	0.00	3.85
8	1-Chloro-1,1-difluoroetha	2.070	1.209	41.6#	49#	0.00	3.96
9	Chloromethane	0.744	0.620	16.7	68	0.00	3.98
10	Dichlorotetrafluoroethane	2.745	2.148	21.7	66	0.00	4.06
11	Vinyl Chloride	0.905	0.783	13.5	70	0.00	4.16
12	1,3-Butadiene	0.632	0.543	14.1	69	0.00	4.27
13	n-Butane	0.154	0.145	5.8	71	0.00	4.31
14	Bromomethane	0.977	0.872	10.7	75	0.00	4.49
15	Acrolein	0.369	0.393	-6.5	84	0.00	5.03
16	Chloroethane	0.466	0.414	11.2	71	0.00	4.63
17	Dichlorofluoromethane	2.259	1.750	22.5	64	0.00	4.71
18	Acetonitrile	0.681	0.747	-9.7	89	0.00	4.92
19	Freon 123	2.336	2.197	6.0	78	0.00	5.06
20	Freon 123A	1.449	1.310	9.6	74	0.00	5.11
21	Bromoethene	0.995	0.978	1.7	79	0.00	4.93
22	Trichlorofluoromethane	2.691	1.998	25.8	62	0.00	5.29
23	Acetone	0.417	0.425	-1.9	86	0.00	5.14
24	Pentane	0.213	0.236	-10.8	84	0.00	5.60
25	1,1-Dichloro-1-fluoroetha			-----NA-----			
26	Iodomethane	2.947	2.831	3.9	79	0.00	5.80
27	Isopropyl Alcohol	1.542	1.504	2.5	79	0.00	5.35
28	1,1-Dichloroethene	1.436	1.256	12.5	71	0.00	5.87
29	Freon 113	2.108	1.900	9.9	75	0.00	6.23
30	Methylene Chloride	0.939	0.835	11.1	80	0.00	5.99
31	Carbon Disulfide	2.623	2.622	0.0	82	0.00	6.27
32	Ethanol	0.352	0.300	14.8	72	0.00	4.72
33	Acrylonitrile	0.661	0.734	-11.0	85	0.00	5.56
34	3-Chloropropene	0.432	0.463	-7.2	82	0.00	6.10
35	trans-1,2-Dichloroethene	1.302	1.214	6.8	74	0.00	6.90
36	tert-Butyl Alcohol	1.792	1.730	3.5	73	0.00	5.90
37	Methyl tert-Butyl Ether	2.730	2.412	11.6	70	0.00	7.16
38	Vinyl Acetate	2.239	2.414	-7.8	80	0.00	7.26
39	1,1-Dichloroethane	1.688	1.568	7.1	77	0.00	7.11
40	2-Butanone	0.413	0.472	-14.3	80	0.00	7.52
41	Hexane	1.366	1.430	-4.7	82	-0.01	8.20
42	cis-1,2-Dichloroethene	1.282	1.189	7.3	74	0.00	7.99

Continuing Calibration Summary

Page 2 of 3

Job Number: JC82624

Sample: V6W425-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10664.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.844	0.853	-1.1	76	0.00	8.20
44	Ethyl Acetate	0.269	0.311	-15.6	85	0.00	8.23
45	Methyl Acrylate	1.546	1.705	-10.3	80	0.00	8.22
46	Chloroform	2.216	1.871	15.6	71	0.00	8.31
47	2,4-Dimethylpentane	1.600	1.673	-4.6	82	0.00	9.18
48	Tetrahydrofuran	0.400	0.440	-10.0	81	0.00	8.75
49	1,1,1-Trichloroethane	2.236	1.793	19.8	65	-0.01	9.40
50	1,2-Dichloroethane	1.360	1.012	25.6	59#	0.00	9.13
51	Benzene	3.039	2.960	2.6	79	-0.01	9.93
52	Carbon Tetrachloride	2.275	1.937	14.9	68	-0.01	10.10
53	Cyclohexane	1.405	1.456	-3.6	83	0.00	10.24
54	2,3-Dimethylpentane	0.635	0.674	-6.1	82	-0.01	10.53
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	80	-0.01	10.37
56	2,2,4-Trimethylpentane	1.255	1.310	-4.4	83	-0.01	11.22
57	Heptane	0.278	0.292	-5.0	81	-0.01	11.57
58	Trichloroethene	0.404	0.370	8.4	74	0.00	11.20
59	1,2-Dichloropropane	0.295	0.313	-6.1	84	-0.01	10.91
60	Dibromomethane	0.439	0.416	5.2	79	-0.01	10.88
61	Ethyl Acrylate	0.530	0.599	-13.0	80	0.00	10.94
62	Methyl Methacrylate	0.278	0.309	-11.2	81	0.00	11.47
63	1,4-Dioxane	0.187	0.200	-7.0	81	0.00	11.21
64	Bromodichloromethane	0.627	0.569	9.3	71	0.00	11.16
65	cis-1,3-Dichloropropene	0.450	0.465	-3.3	77	-0.01	12.28
66	4-Methyl-2-pentanone	0.225	0.251	-11.6	83	0.00	12.32
67	trans-1,3-Dichloropropene	0.375	0.391	-4.3	73	-0.01	12.95
68	Toluene	1.052	1.011	3.9	77	0.00	13.52
69	1,1,2-Trichloroethane	0.347	0.348	-0.3	79	0.00	13.17
70	1,3-Dichloropropane	0.466	0.466	0.0	79	-0.01	13.56
71	2-Hexanone	0.282	0.331	-17.4	82	0.00	13.89
72	Ethyl Methacrylate	0.463	0.505	-9.1	79	0.00	13.92
73	Dibromochloromethane	0.615	0.655	-6.5	78	-0.01	14.07
74	Tetrachloroethene	0.633	0.591	6.6	79	0.00	15.03
75	1,2-Dibromoethane	0.520	0.532	-2.3	77	0.00	14.39
76	Octane	0.572	0.605	-5.8	83	-0.01	14.86
77	1,1,1,2-Tetrachloroethane	0.438	0.449	-2.5	79	0.00	15.95
78 I	Chlorobenzene-d5	1.000	1.000	0.0	73	0.00	15.91
79	Chlorobenzene	1.854	1.935	-4.4	79	-0.01	15.97
80	Ethylbenzene	2.899	2.962	-2.2	76	0.00	16.52
81	m,p-Xylene	2.269	2.243	1.1	75	0.00	16.79
82	Styrene	1.464	1.726	-17.9	79	-0.01	17.30
83	Nonane	1.269	1.449	-14.2	84	-0.01	17.84
84	o-Xylene	2.248	2.278	-1.3	76	-0.01	17.46
85	Bromoform	1.101	1.508	-37.0#	88	0.00	16.86
86	1,1,2,2-Tetrachloroethane	1.284	1.558	-21.3	91	-0.01	17.46
87	1,2,3-Trichloropropane	1.000	1.109	-10.9	83	0.00	17.66
88	Isopropylbenzene	3.191	3.247	-1.8	78	0.00	18.37
89	Bromobenzene	0.921	1.062	-15.3	83	0.00	18.48
90	2-Chlorotoluene	0.714	0.800	-12.0	82	0.00	19.09
91	n-Propylbenzene	0.794	0.912	-14.9	82	0.00	19.16
92 S	4-Bromofluorobenzene	1.221	1.303	-6.7	77	0.00	18.15
93	4-Ethyltoluene	2.723	2.989	-9.8	80	-0.01	19.38
94	1,3,5-Trimethylbenzene	2.436	2.550	-4.7	79	-0.01	19.51
95	alpha-Methylstyrene	1.004	1.245	-24.0	83	0.00	19.74
96	tert-Butylbenzene	0.594	0.657	-10.6	83	-0.01	20.08
97	1,2,4-Trimethylbenzene	2.248	2.457	-9.3	80	-0.01	20.09
98	1,3-Dichlorobenzene	1.257	1.553	-23.5	87	0.00	20.28
99	Benzyl Chloride	0.889	1.468	-65.1#	92	0.00	20.27
100	1,4-Dichlorobenzene	1.108	1.411	-27.3	87	0.00	20.38

Continuing Calibration Summary

Page 3 of 3

Job Number: JC82624

Sample: V6W425-CC335

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W10664.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.707	0.799	-13.0	85	0.00	20.46
102	p-Isopropyltoluene	0.723	0.832	-15.1	85	0.00	20.69
103	1,2-Dichlorobenzene	1.193	1.436	-20.4	89	0.00	20.85
104	n-Butylbenzene	0.550	0.661	-20.2	82	0.00	21.26
105	Hexachloroethane	0.683	1.010	-47.9#	100	0.00	21.73
106	1,2,4-Trichlorobenzene	0.331	0.377	-13.9	84	0.00	23.04
107	Naphthalene	0.684	0.773	-13.0	89	0.00	23.17
108	Hexachlorobutadiene	0.747	0.597	20.1	76	0.00	23.61
109 I	Bromochloromethane (A)	1.000	1.000	0.0	80	-0.01	8.16
110	TVHC as equiv Pentane	4.105	3.910	4.8	79	0.00	5.60

(#) = Out of Range
6W08754.D 6W335.M

SPCC's out = 0 CCC's out = 0
Fri Feb 22 16:06:45 2019



MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10655.D
 Acq On : 19 Feb 2019 11:41 pm
 Operator : thomash
 Sample : jc82624-1
 Misc : MS32480,V6W424,400,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

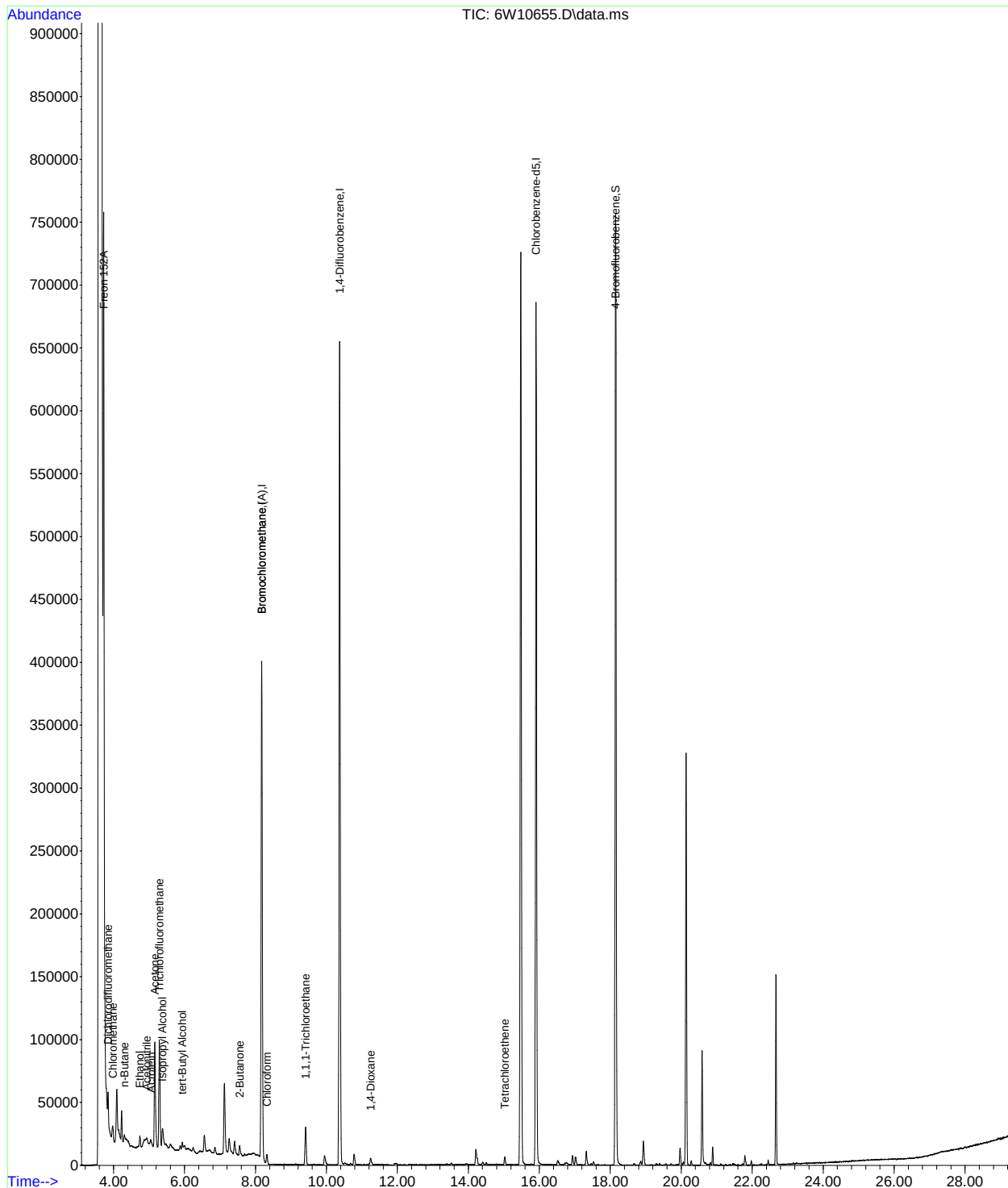
Quant Time: Feb 20 12:41:55 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : TO-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

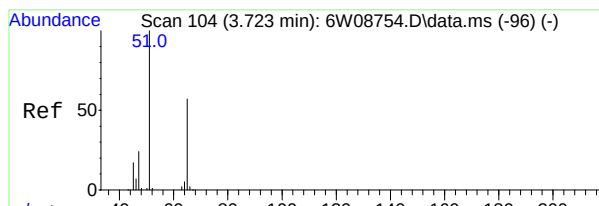
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.177	130	207864	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	741068	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.910	82	292437	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	207864	10.00	ppb(v	0.00
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	359993	10.08	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.80%
Target Compounds						
					Qvalue	
3) Freon 152A	3.723	65	304024	28.38	ppb(v	84
7) Dichlorodifluoromethane	3.846	85	19996	0.37	ppb(v	97
9) Chloromethane	3.974	50	10107	0.65	ppb(v	98
13) n-Butane	4.304	58	468	0.15	ppb(v#	1
15) Acrolein	5.051	56	3018	0.39	ppb(v#	84
18) Acetonitrile	4.934	41	2232	0.16	ppb(v	96
22) Trichlorofluoromethane	5.289	101	94241	1.68	ppb(v	99
23) Acetone	5.161	58	50111	5.78	ppb(v	70
27) Isopropyl Alcohol	5.375	45	24403	0.76	ppb(v	99
32) Ethanol	4.739	45	14523	1.98	ppb(v	92
36) tert-Butyl Alcohol	5.938	59	8506	0.23	ppb(v	95
40) 2-Butanone	7.553	72	3750	0.44	ppb(v	98
46) Chloroform	8.324	83	7923	0.17	ppb(v	96
49) 1,1,1-Trichloroethane	9.413	97	25164	0.54	ppb(v	98
63) 1,4-Dioxane	11.242	88	5939	0.43	ppb(v#	81
74) Tetrachloroethene	15.029	166	3224	0.07	ppb(v	95

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

Data Path : C:\msdchem\1\data\
Data File : 6W10655.D
Acq On : 19 Feb 2019 11:41 pm
Operator : thomash
Sample : jc82624-1
Misc : MS32480,V6W424,400,,,,,1
ALS Vial : 14 Sample Multiplier: 1

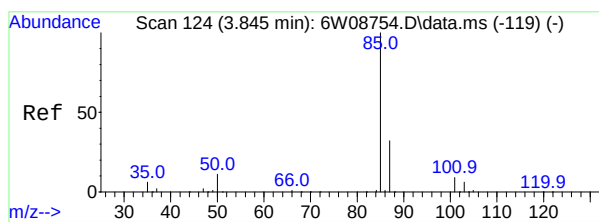
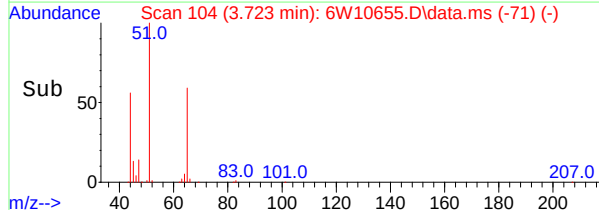
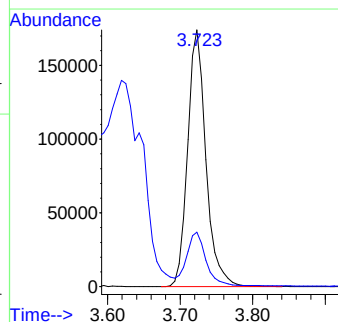
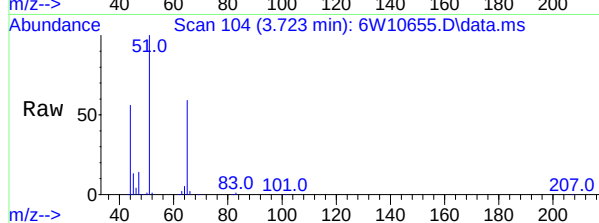
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Response via : Initial Calibration





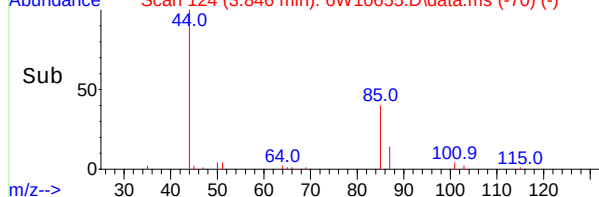
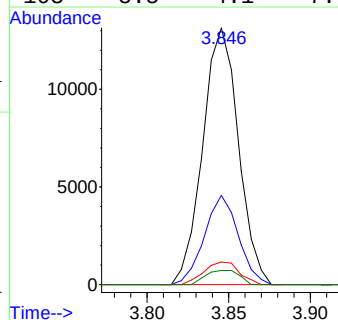
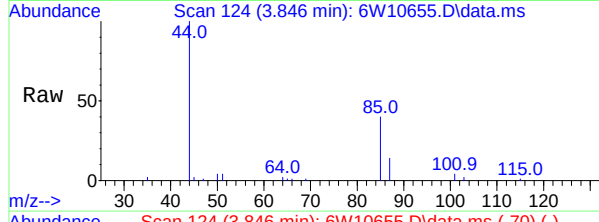
#3
 Freon 152A
 Concen: 28.38 ppb(v)
 RT: 3.723 min Scan# 104
 Delta R.T. 0.000 min
 Lab File: 6W10655.D
 Acq: 19 Feb 2019 11:41 pm

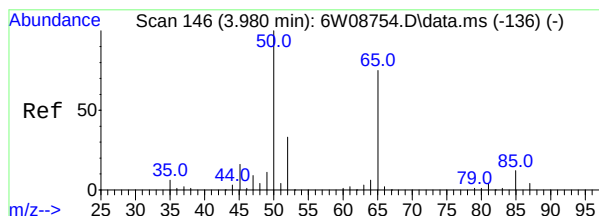
Tgt Ion: 65 Resp: 304024
 Ion Ratio Lower Upper
 65 100
 45 21.2 20.9 38.9



#7
 Dichlorodifluoromethane
 Concen: 0.37 ppb(v)
 RT: 3.846 min Scan# 124
 Delta R.T. 0.000 min
 Lab File: 6W10655.D
 Acq: 19 Feb 2019 11:41 pm

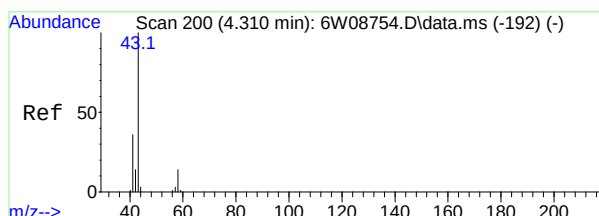
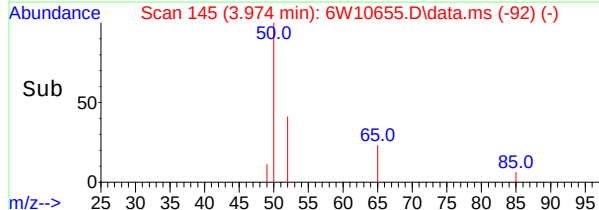
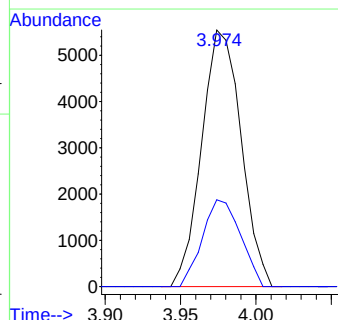
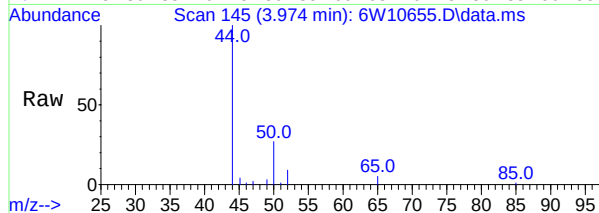
Tgt Ion: 85 Resp: 19996
 Ion Ratio Lower Upper
 85 100
 87 34.8 22.7 42.1
 101 8.8 6.3 11.7
 103 5.5 4.1 7.7





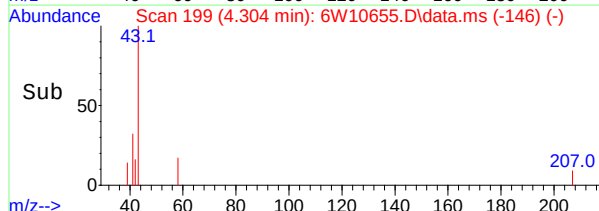
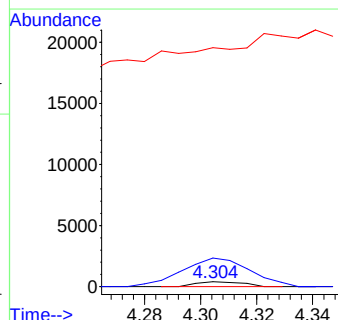
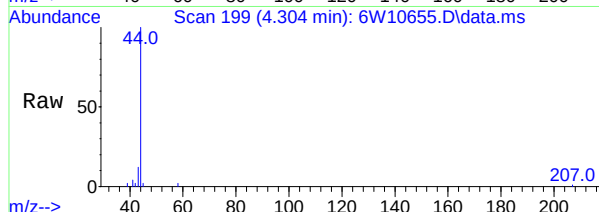
#9
Chloromethane
Concen: 0.65 ppb(v)
RT: 3.974 min Scan# 145
Delta R.T. -0.006 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

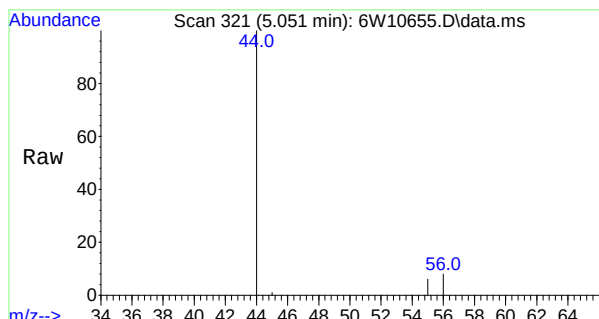
Tgt Ion: 50 Resp: 10107
Ion Ratio Lower Upper
50 100
52 33.9 22.8 42.4



#13
n-Butane
Concen: 0.15 ppb(v)
RT: 4.304 min Scan# 199
Delta R.T. -0.006 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

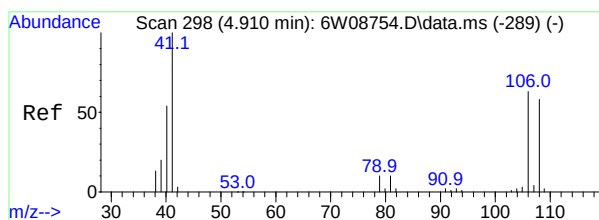
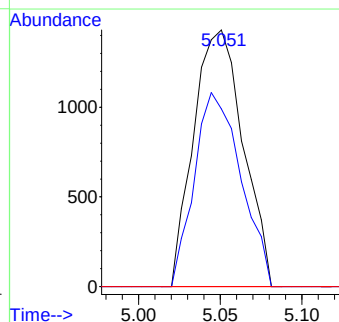
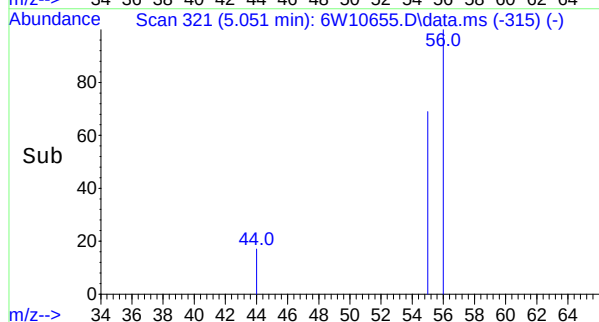
Tgt Ion: 58 Resp: 468
Ion Ratio Lower Upper
58 100
43 577.8 485.0 900.6
44 4817.7 19.2 35.6#





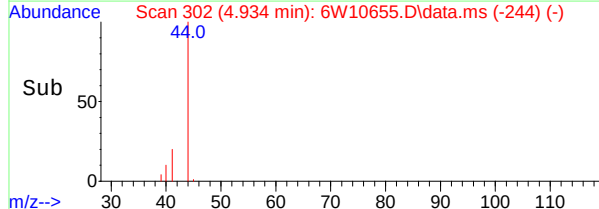
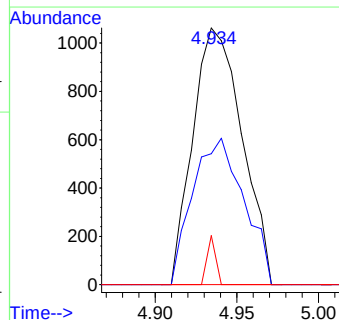
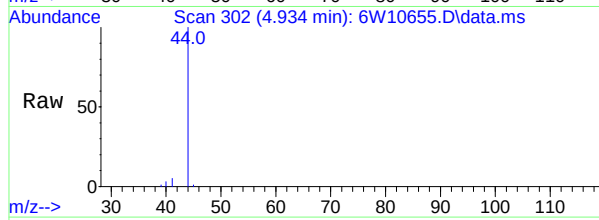
#15
Acrolein
Concen: 0.39 ppb(v)
RT: 5.051 min Scan# 321
Delta R.T. 0.025 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

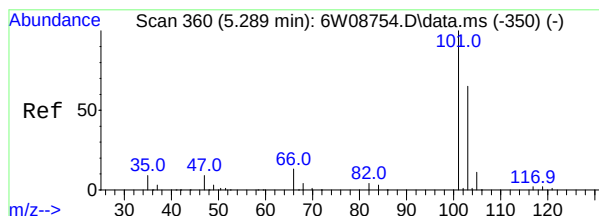
Tgt Ion: 56 Resp: 3018
Ion Ratio Lower Upper
56 100
55 71.1 56.8 85.2
37 0.0 23.8 35.8#



#18
Acetonitrile
Concen: 0.16 ppb(v)
RT: 4.934 min Scan# 302
Delta R.T. 0.025 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

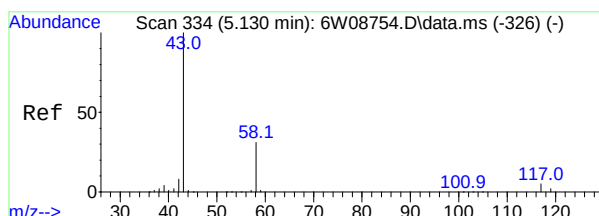
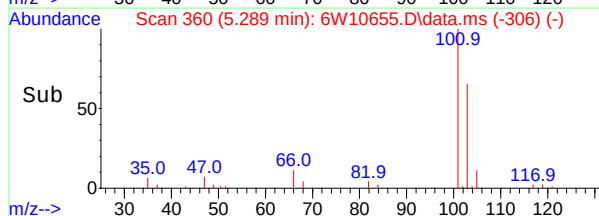
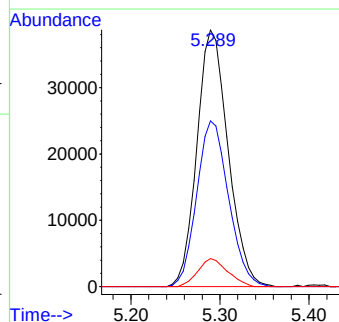
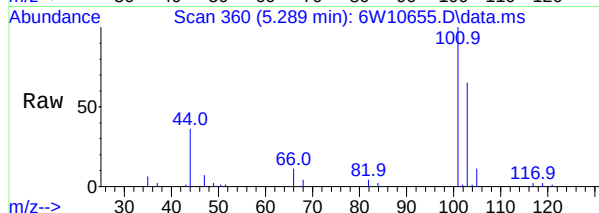
Tgt Ion: 41 Resp: 2232
Ion Ratio Lower Upper
41 100
40 51.0 37.9 70.5
39 19.1 14.0 26.0





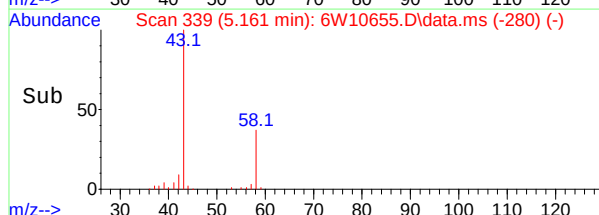
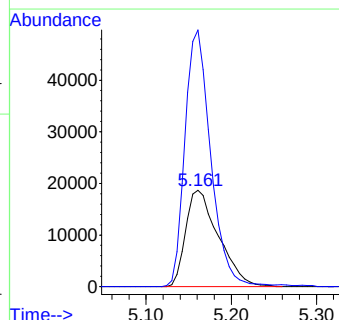
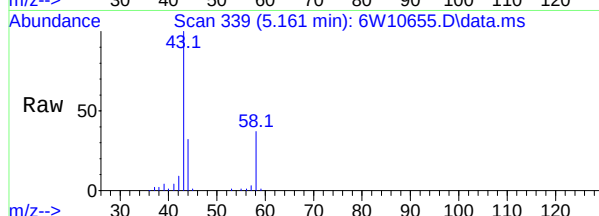
#22
 Trichlorofluoromethane
 Concen: 1.68 ppb(v)
 RT: 5.289 min Scan# 360
 Delta R.T. 0.000 min
 Lab File: 6W10655.D
 Acq: 19 Feb 2019 11:41 pm

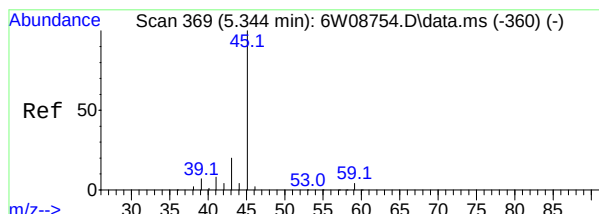
Tgt Ion: 101 Resp: 94241
 Ion Ratio Lower Upper
 101 100
 103 64.6 45.4 84.4
 105 11.0 7.3 13.7



#23
 Acetone
 Concen: 5.78 ppb(v)
 RT: 5.161 min Scan# 339
 Delta R.T. 0.031 min
 Lab File: 6W10655.D
 Acq: 19 Feb 2019 11:41 pm

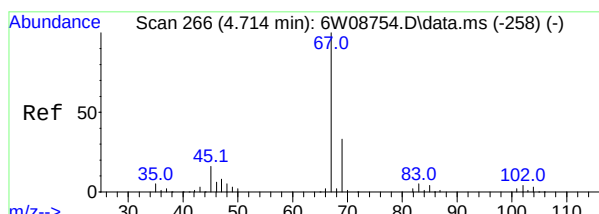
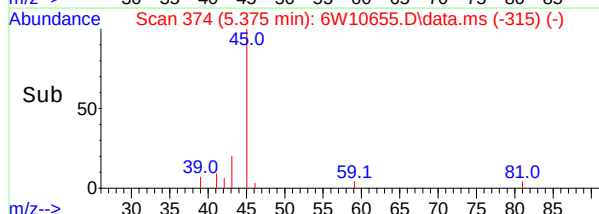
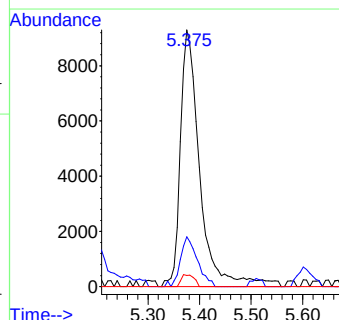
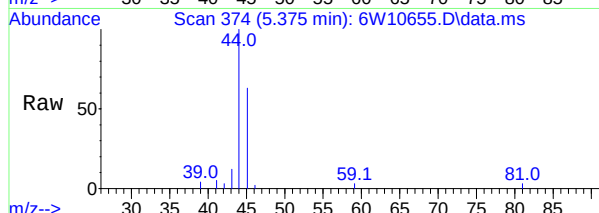
Tgt Ion: 58 Resp: 50111
 Ion Ratio Lower Upper
 58 100
 43 266.7 230.1 427.3





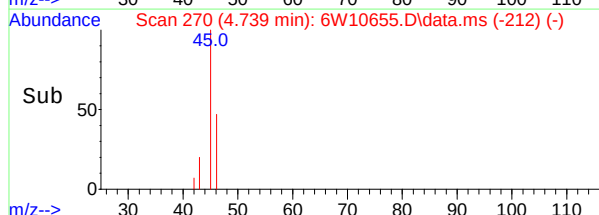
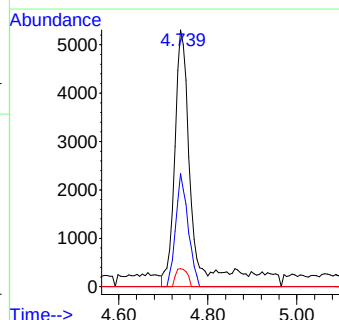
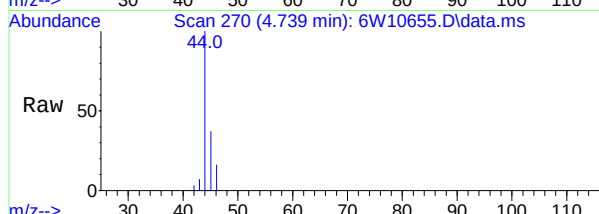
#27
Isopropyl Alcohol
Concen: 0.76 ppb(v)
RT: 5.375 min Scan# 374
Delta R.T. 0.031 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

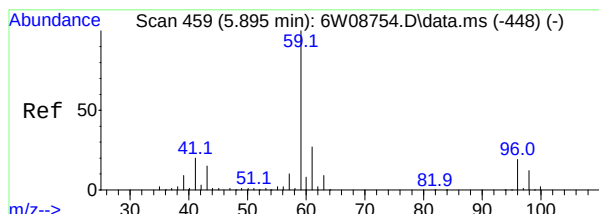
Tgt Ion: 45 Resp: 24403
Ion Ratio Lower Upper
45 100
43 19.4 14.1 26.1
59 4.4 2.8 5.2



#32
Ethanol
Concen: 1.98 ppb(v)
RT: 4.739 min Scan# 270
Delta R.T. 0.025 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

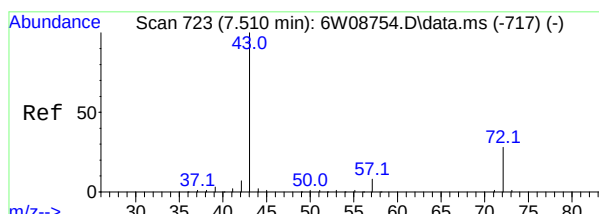
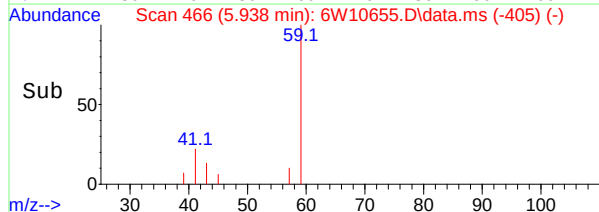
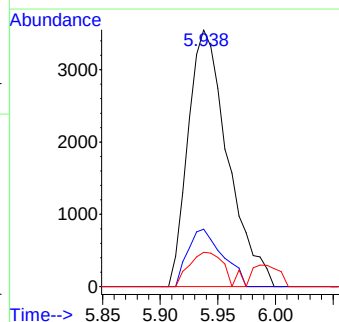
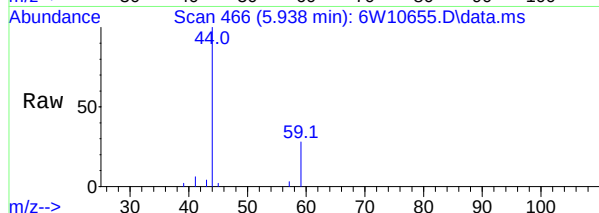
Tgt Ion: 45 Resp: 14523
Ion Ratio Lower Upper
45 100
46 44.0 26.9 49.9
42 7.0 6.0 11.2





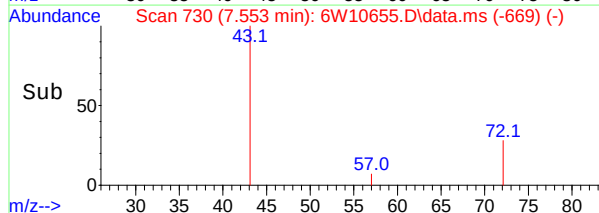
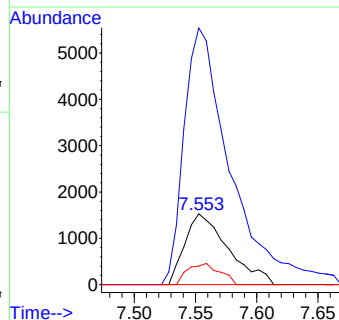
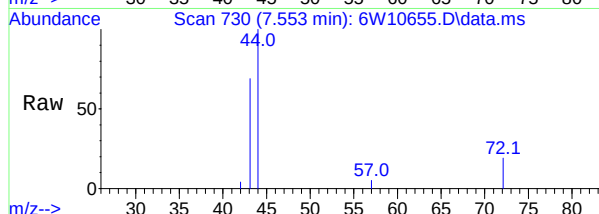
#36
tert-Butyl Alcohol
Concen: 0.23 ppb(v)
RT: 5.938 min Scan# 466
Delta R.T. 0.043 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

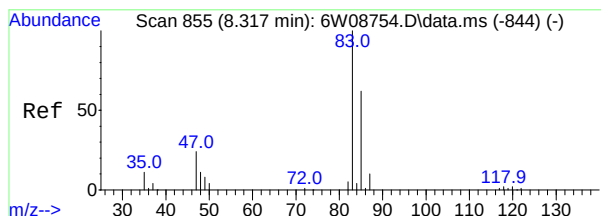
Tgt Ion: 59 Resp: 8506
Ion Ratio Lower Upper
59 100
41 22.4 13.9 25.7
43 13.3 10.5 19.5



#40
2-Butanone
Concen: 0.44 ppb(v)
RT: 7.553 min Scan# 730
Delta R.T. 0.043 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

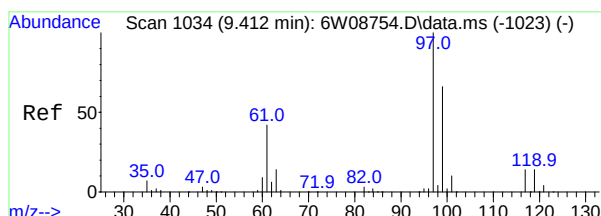
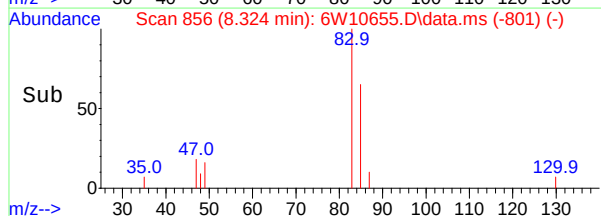
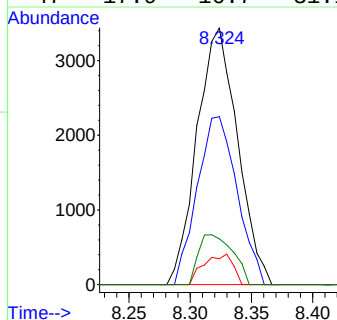
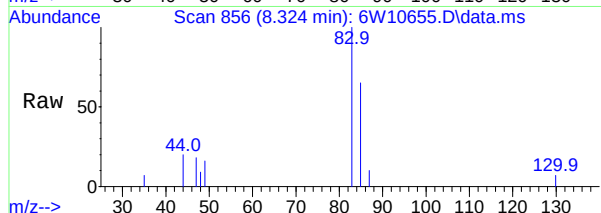
Tgt Ion: 72 Resp: 3750
Ion Ratio Lower Upper
72 100
43 362.1 255.4 474.4
57 26.1 20.7 38.5





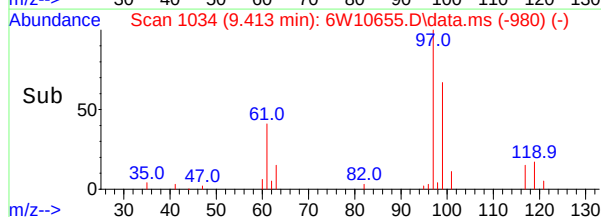
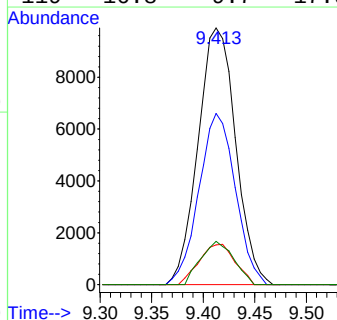
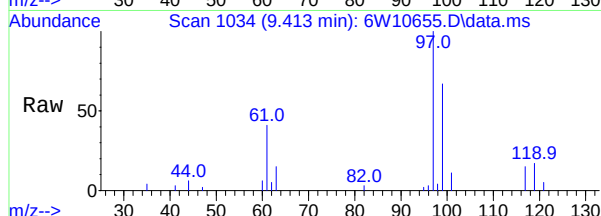
#46
Chloroform
Concen: 0.17 ppb(v)
RT: 8.324 min Scan# 856
Delta R.T. 0.006 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

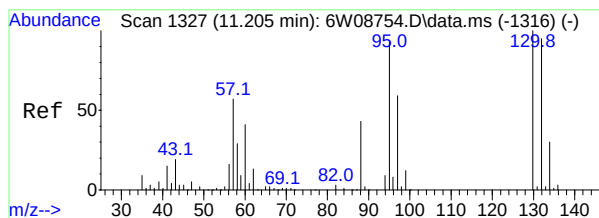
Tgt Ion:	83	Resp:	7923
Ion Ratio	Lower	Upper	
83	100		
85	65.4	45.1	83.9
87	10.1	7.3	13.5
47	17.9	16.7	31.1



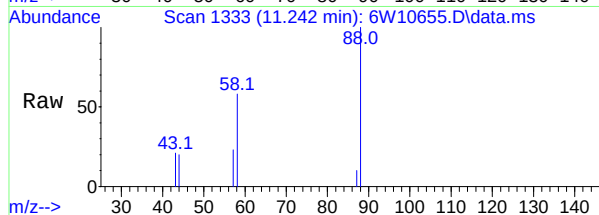
#49
1,1,1-Trichloroethane
Concen: 0.54 ppb(v)
RT: 9.413 min Scan# 1034
Delta R.T. 0.000 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm

Tgt Ion:	97	Resp:	25164
Ion Ratio	Lower	Upper	
97	100		
99	66.7	46.1	85.5
117	15.5	9.8	18.2
119	16.8	9.7	17.9

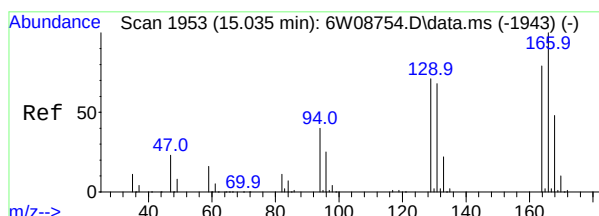
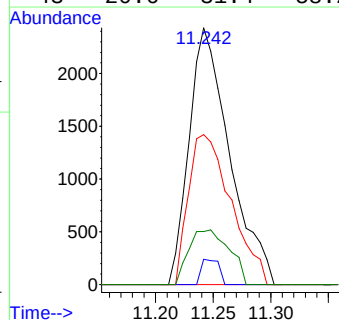
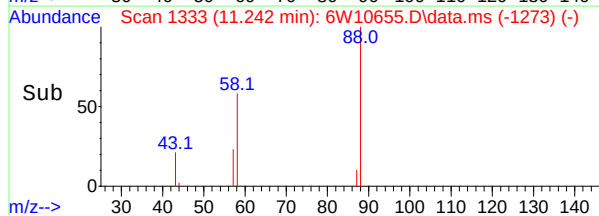




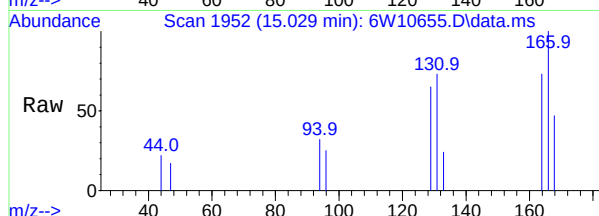
#63
1,4-Dioxane
Concen: 0.43 ppb(v)
RT: 11.242 min Scan# 1333
Delta R.T. 0.037 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm



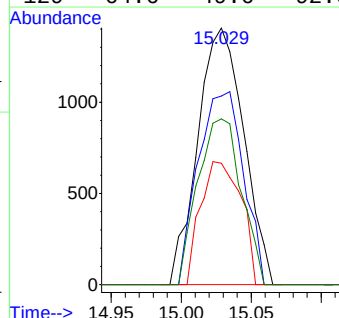
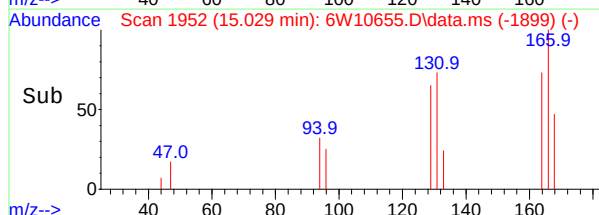
Tgt Ion: 88 Resp: 5939
Ion Ratio Lower Upper
88 100
87 9.9 7.1 13.3
58 58.4 46.7 86.7
43 20.6 31.4 58.2#



#74
Tetrachloroethene
Concen: 0.07 ppb(v)
RT: 15.029 min Scan# 1952
Delta R.T. -0.006 min
Lab File: 6W10655.D
Acq: 19 Feb 2019 11:41 pm



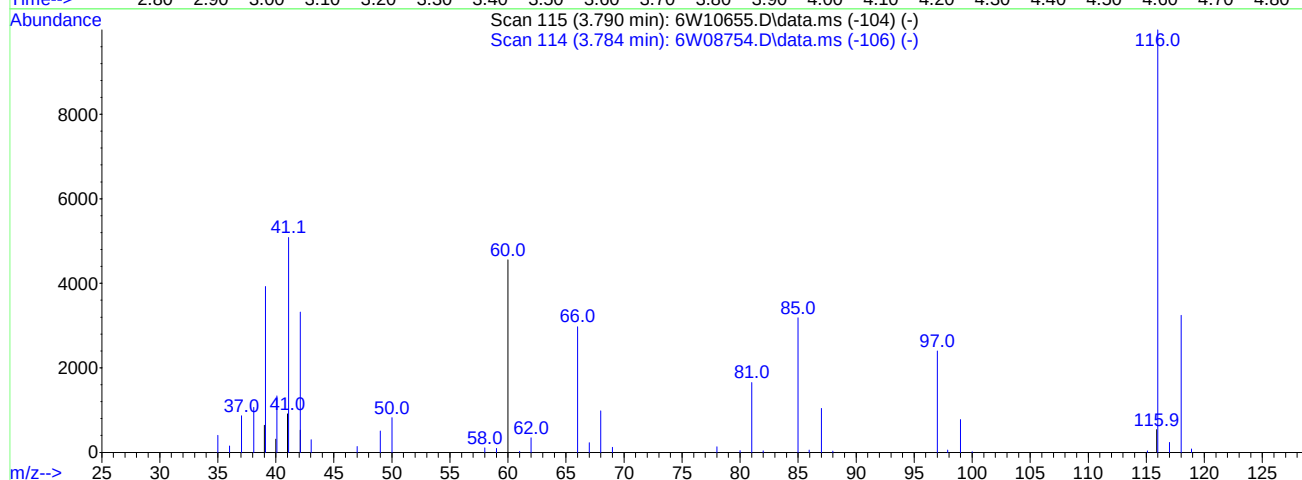
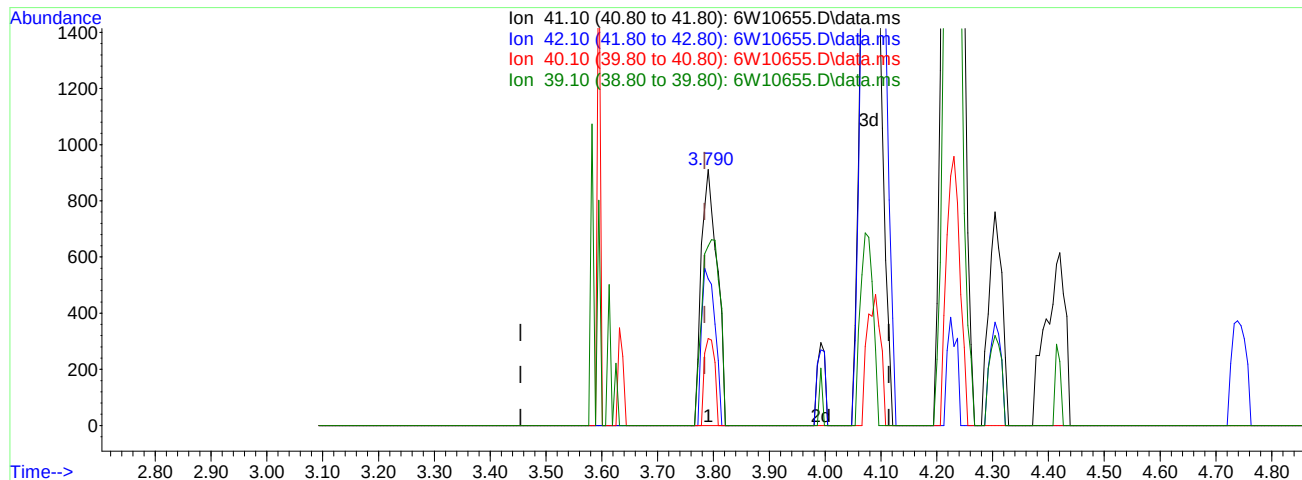
Tgt Ion: 166 Resp: 3224
Ion Ratio Lower Upper
166 100
164 73.4 55.1 102.3
168 47.3 33.6 62.4
129 64.6 49.6 92.0



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6W10655.D
Acq On : 19 Feb 2019 11:41 pm
Operator : thomash
Sample : jc82624-1
Misc : MS32480,V6W424,400,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 09:57:54 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



TIC: 6W10655.D\data.ms

(5) Propene

3.790min (+0.006) 0.15ppb(v)

response 1803

Ion	Exp%	Act%
41.10	100	100
42.10	65.30	57.24
40.10	26.30	33.99
39.10	77.30	70.07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10656.D
 Acq On : 20 Feb 2019 12:33 am
 Operator : thomash
 Sample : jc82624-2
 Misc : MS32480,V6W424,400,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 12:48:51 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.177	130	203108	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	727139	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.910	82	288300	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	203108	10.00	ppb(v	0.00
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	353560	10.05	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.50%
Target Compounds						
					Qvalue	
3) Freon 152A	3.723	65	299960	28.66	ppb(v	85
7) Dichlorodifluoromethane	3.845	85	21286	0.40	ppb(v	99
9) Chloromethane	3.974	50	8764	0.58	ppb(v	100
22) Trichlorofluoromethane	5.295	101	89303	1.63	ppb(v	99
23) Acetone	5.167	58	10248	1.21	ppb(v#	1
24) Pentane	5.613	57	1270	0.29	ppb(v	87
27) Isopropyl Alcohol	5.381	45	16959	0.54	ppb(v	95
29) Freon 113	6.244	101	4213	0.10	ppb(v	98
32) Ethanol	4.739	45	16500	2.31	ppb(v	98
46) Chloroform	8.317	83	12161	0.27	ppb(v	95
49) 1,1,1-Trichloroethane	9.413	97	66362	1.46	ppb(v	98
58) Trichloroethene	11.205	95	1678	0.06	ppb(v	95

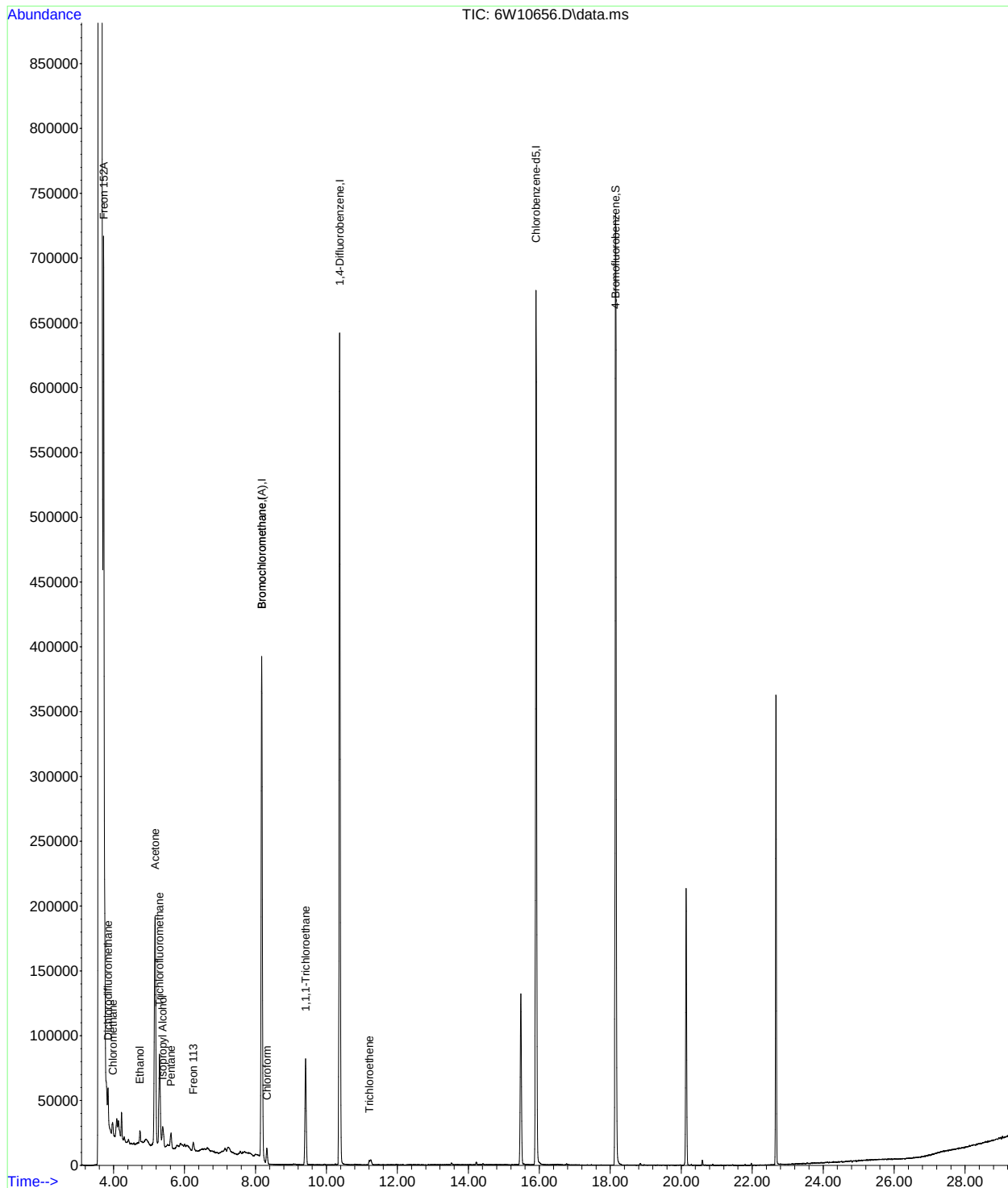
(#) = qualifier out of range (m) = manual integration (+) = signals summed

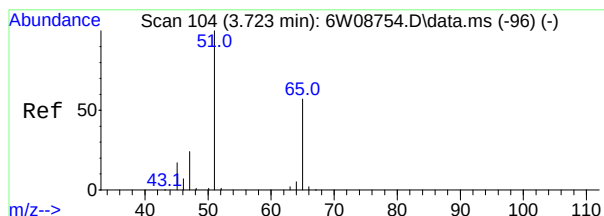
7.1.2

7

Data Path : C:\msdchem\1\data\
Data File : 6W10656.D
Acq On : 20 Feb 2019 12:33 am
Operator : thomash
Sample : jc82624-2
Misc : MS32480,V6W424,400,,,,,1
ALS Vial : 15 Sample Multiplier: 1

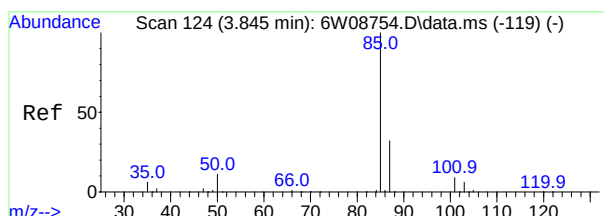
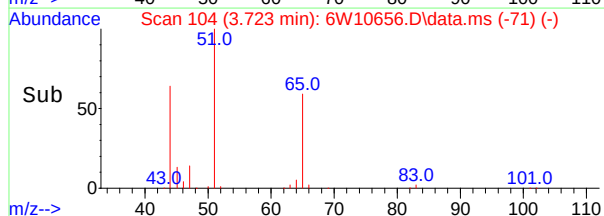
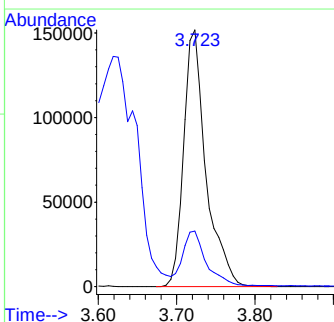
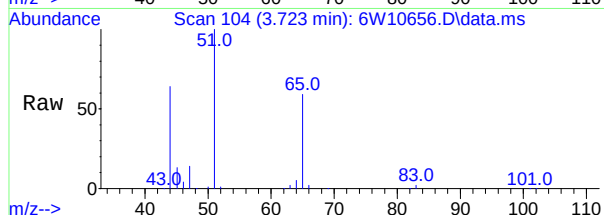
Quant Time: Feb 20 12:48:51 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





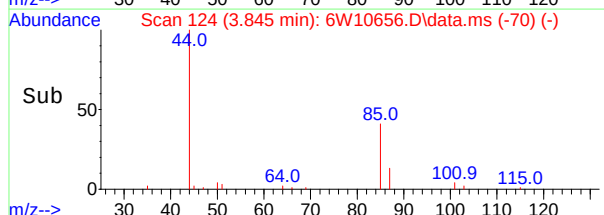
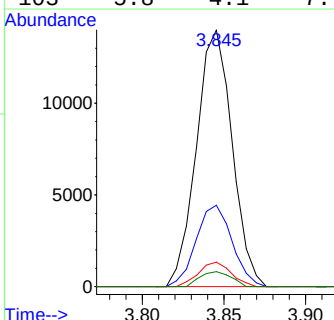
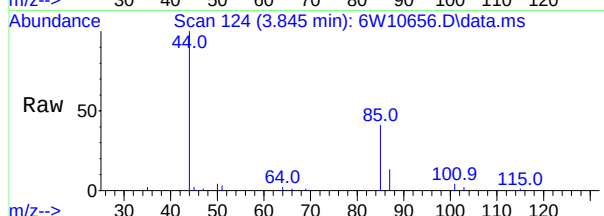
#3
 Freon 152A
 Concen: 28.66 ppb(v)
 RT: 3.723 min Scan# 104
 Delta R.T. 0.000 min
 Lab File: 6W10656.D
 Acq: 20 Feb 2019 12:33 am

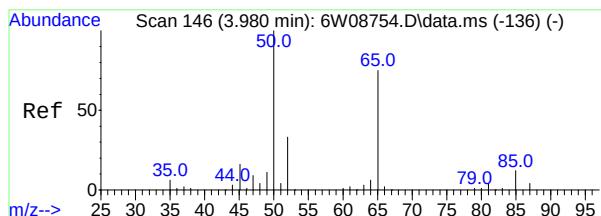
Tgt Ion: 65 Resp: 299960
 Ion Ratio Lower Upper
 65 100
 45 21.6 20.9 38.9



#7
 Dichlorodifluoromethane
 Concen: 0.40 ppb(v)
 RT: 3.845 min Scan# 124
 Delta R.T. 0.000 min
 Lab File: 6W10656.D
 Acq: 20 Feb 2019 12:33 am

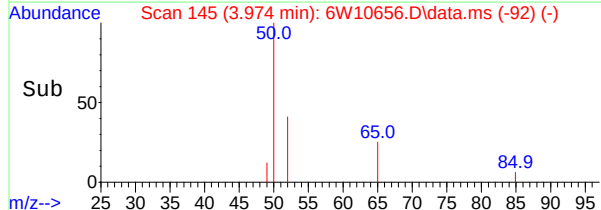
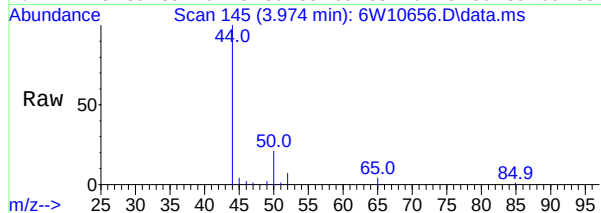
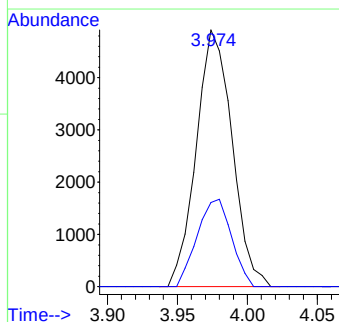
Tgt Ion: 85 Resp: 21286
 Ion Ratio Lower Upper
 85 100
 87 31.7 22.7 42.1
 101 9.6 6.3 11.7
 103 5.8 4.1 7.7





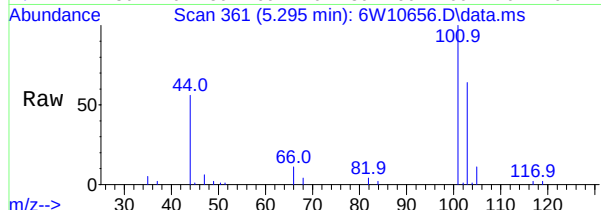
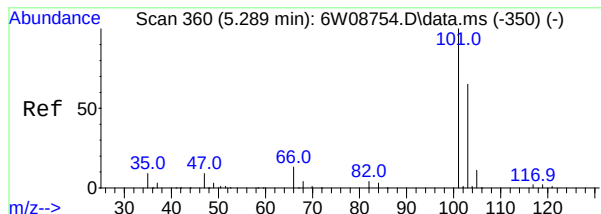
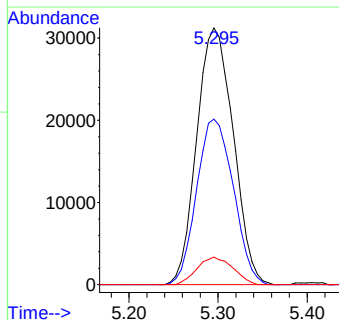
#9
Chloromethane
Concen: 0.58 ppb(v)
RT: 3.974 min Scan# 145
Delta R.T. -0.006 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

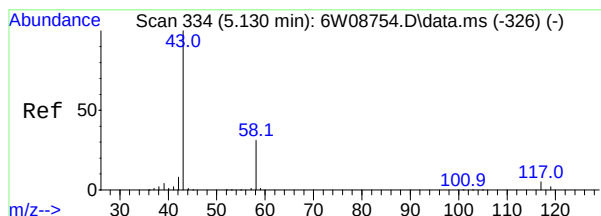
Tgt Ion: 50 Resp: 8764
Ion Ratio Lower Upper
50 100
52 32.8 22.8 42.4



#22
Trichlorofluoromethane
Concen: 1.63 ppb(v)
RT: 5.295 min Scan# 361
Delta R.T. 0.006 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

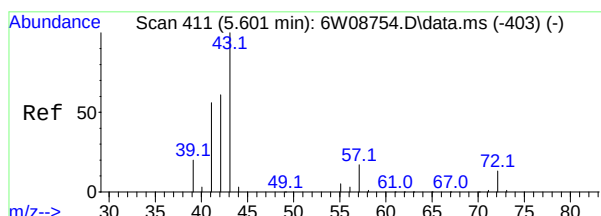
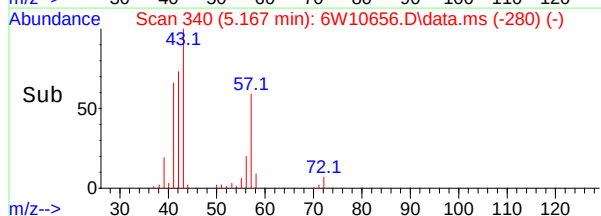
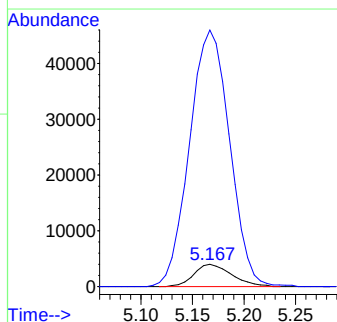
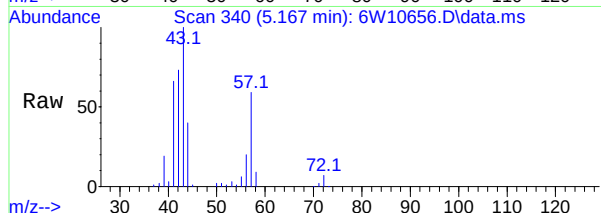
Tgt Ion: 101 Resp: 89303
Ion Ratio Lower Upper
101 100
103 64.5 45.4 84.4
105 10.7 7.3 13.7





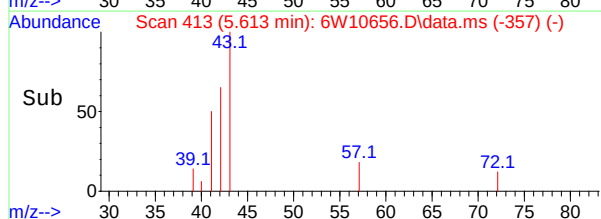
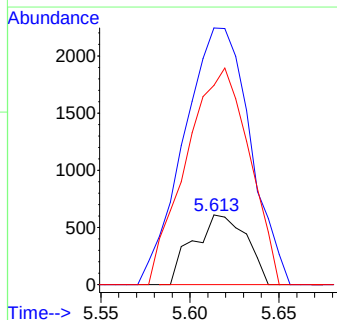
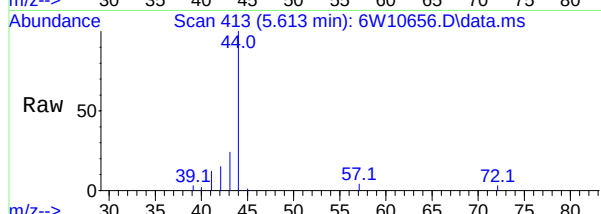
#23
Acetone
Concen: 1.21 ppb(v)
RT: 5.167 min Scan# 340
Delta R.T. 0.037 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

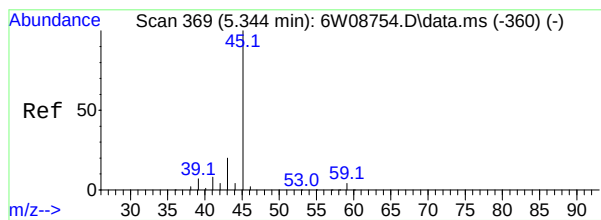
Tgt Ion: 58 Resp: 10248
Ion Ratio Lower Upper
58 100
43 1146.5 230.1 427.3#



#24
Pentane
Concen: 0.29 ppb(v)
RT: 5.613 min Scan# 413
Delta R.T. 0.012 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

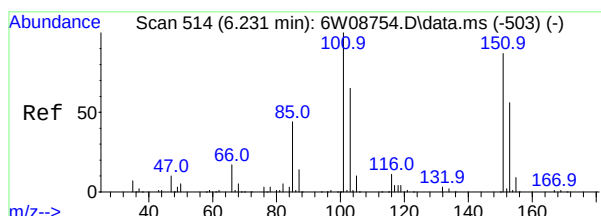
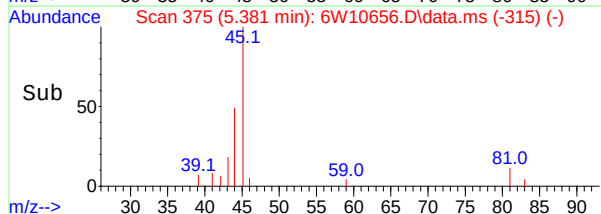
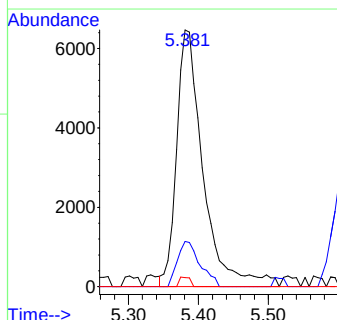
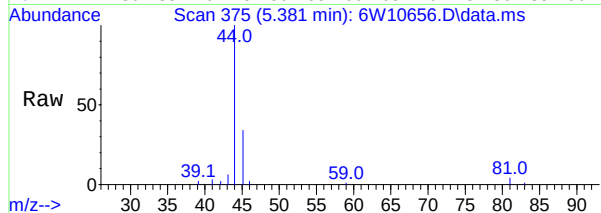
Tgt Ion: 57 Resp: 1270
Ion Ratio Lower Upper
57 100
42 368.0 250.8 465.8
41 285.4 232.7 432.1





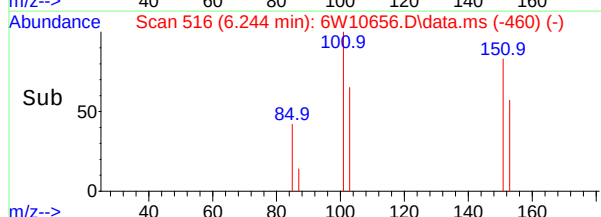
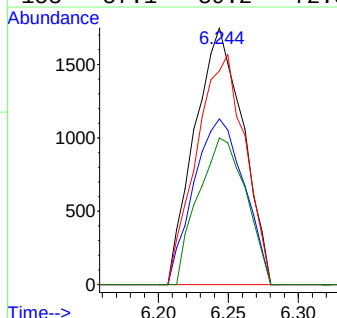
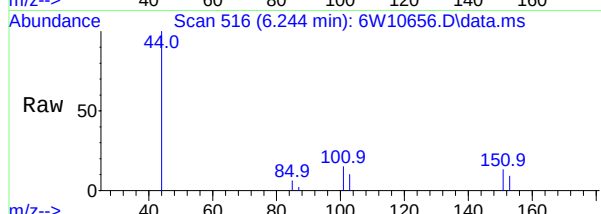
#27
Isopropyl Alcohol
Concen: 0.54 ppb(v)
RT: 5.381 min Scan# 375
Delta R.T. 0.037 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

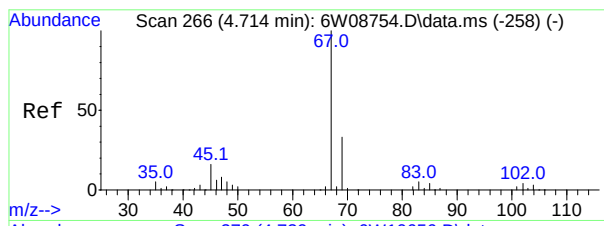
Tgt Ion: 45 Resp: 16959
Ion Ratio Lower Upper
45 100
43 17.7 14.1 26.1
59 3.5 2.8 5.2



#29
Freon 113
Concen: 0.10 ppb(v)
RT: 6.244 min Scan# 516
Delta R.T. 0.012 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

Tgt Ion: 101 Resp: 4213
Ion Ratio Lower Upper
101 100
103 64.6 45.2 84.0
151 83.2 60.6 112.6
153 57.1 39.2 72.8

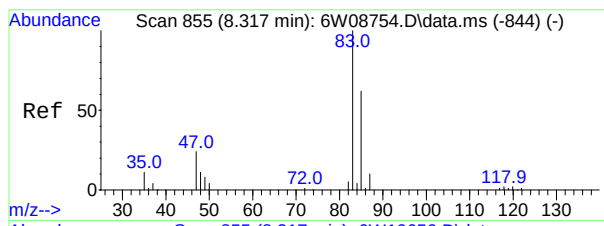
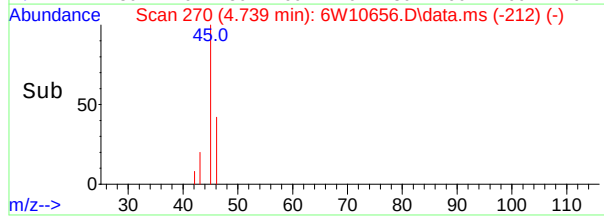
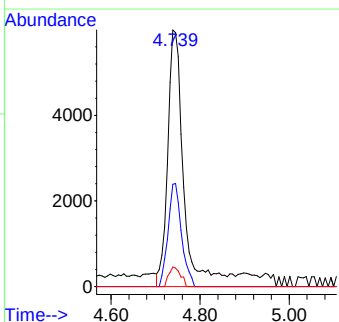
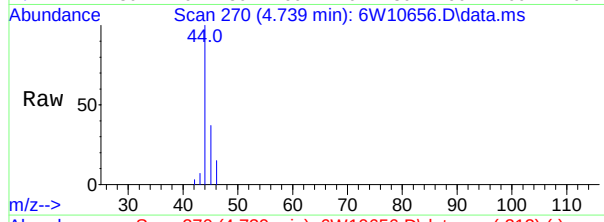




#32
Ethanol
Concen: 2.31 ppb(v)
RT: 4.739 min Scan# 270
Delta R.T. 0.025 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

Tgt Ion: 45 Resp: 16500

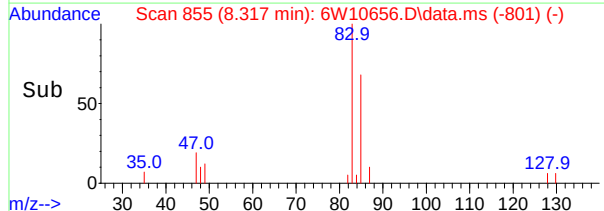
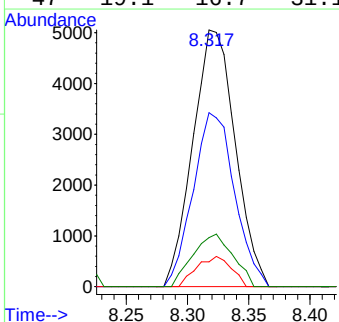
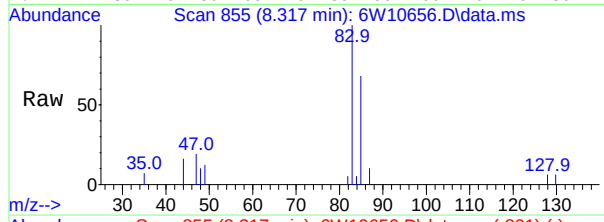
Ion	Ratio	Lower	Upper
45	100		
46	39.9	26.9	49.9
42	7.6	6.0	11.2

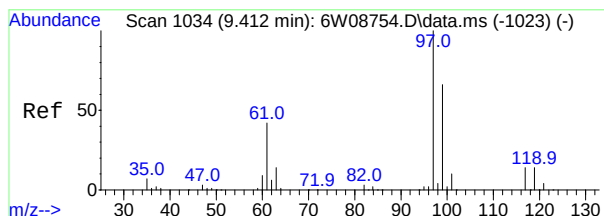


#46
Chloroform
Concen: 0.27 ppb(v)
RT: 8.317 min Scan# 855
Delta R.T. 0.000 min
Lab File: 6W10656.D
Acq: 20 Feb 2019 12:33 am

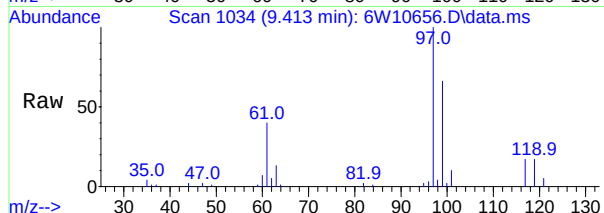
Tgt Ion: 83 Resp: 12161

Ion	Ratio	Lower	Upper
83	100		
85	67.8	45.1	83.9
87	9.7	7.3	13.5
47	19.1	16.7	31.1

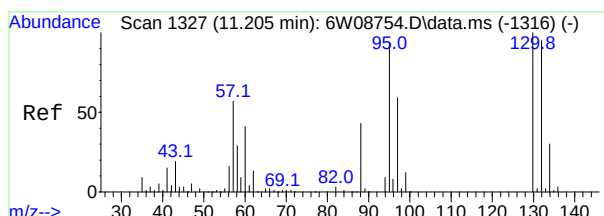
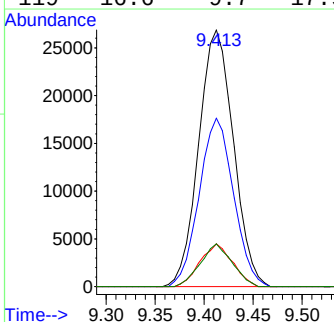
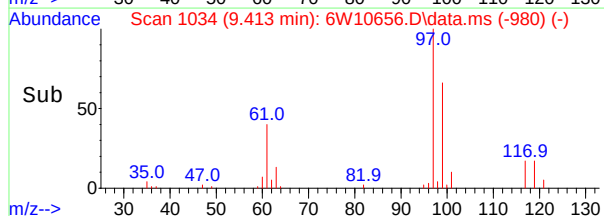




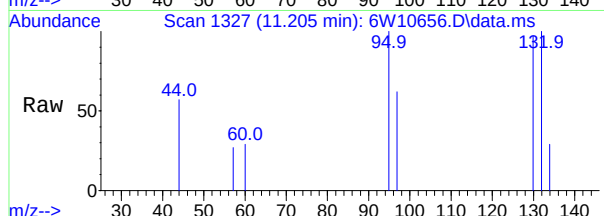
#49
 1,1,1-Trichloroethane
 Concen: 1.46 ppb(v)
 RT: 9.413 min Scan# 1034
 Delta R.T. 0.000 min
 Lab File: 6W10656.D
 Acq: 20 Feb 2019 12:33 am



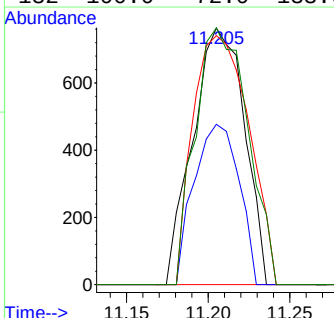
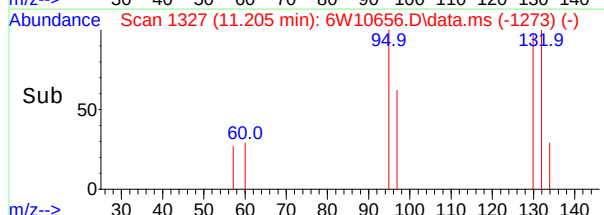
Tgt Ion: 97 Resp: 66362
 Ion Ratio Lower Upper
 97 100
 99 65.7 46.1 85.5
 117 16.6 9.8 18.2
 119 16.6 9.7 17.9



#58
 Trichloroethene
 Concen: 0.06 ppb(v)
 RT: 11.205 min Scan# 1327
 Delta R.T. 0.000 min
 Lab File: 6W10656.D
 Acq: 20 Feb 2019 12:33 am



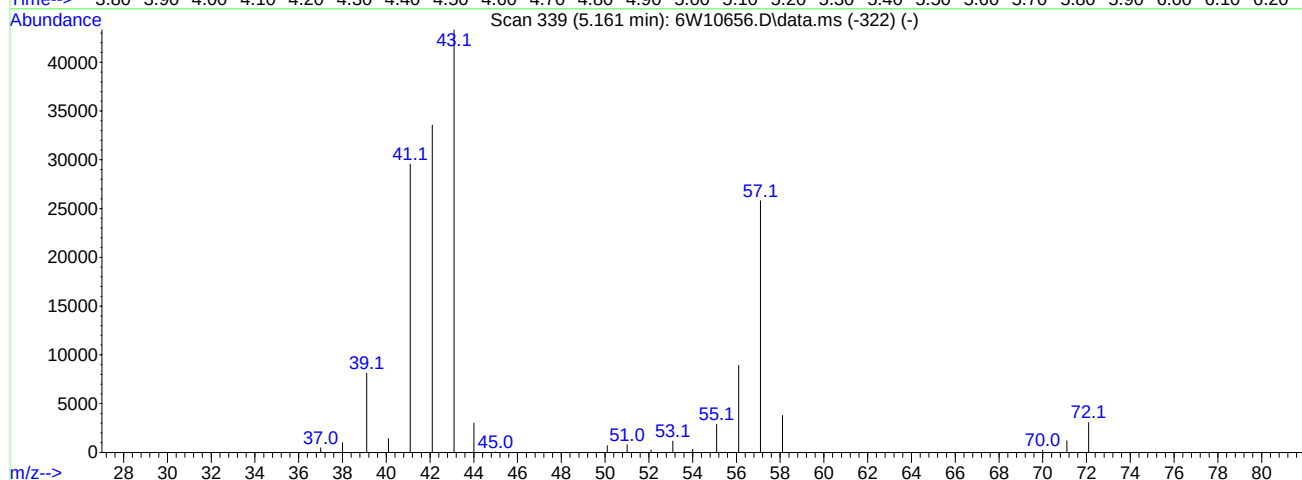
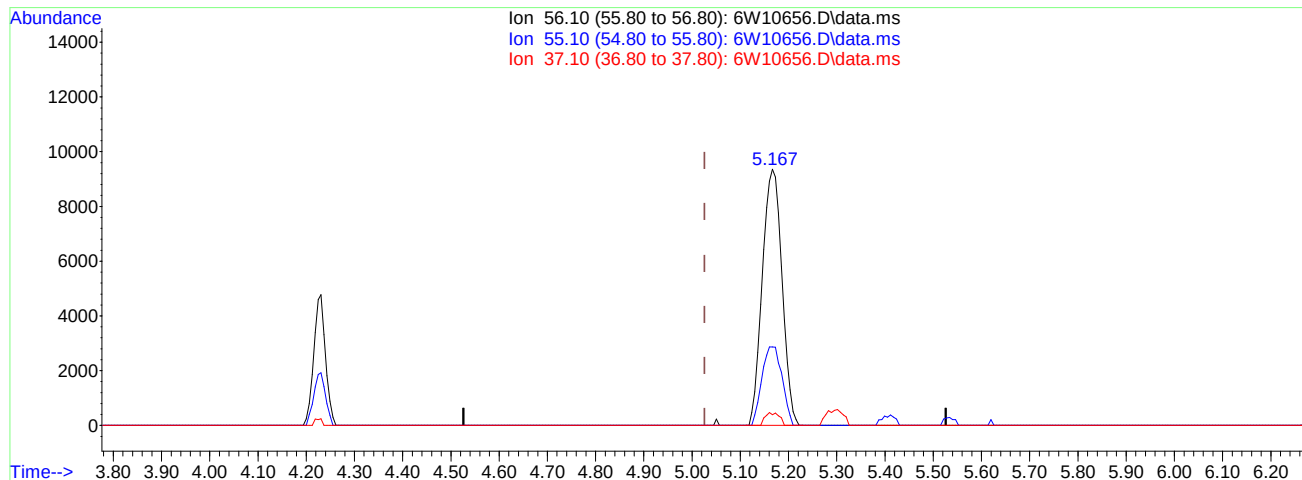
Tgt Ion: 95 Resp: 1678
 Ion Ratio Lower Upper
 95 100
 97 62.4 44.3 82.3
 130 97.0 75.7 140.5
 132 100.0 72.0 133.6



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
 Data File : 6W10656.D
 Acq On : 20 Feb 2019 12:33 am
 Operator : thomash
 Sample : jc82624-2
 Misc : MS32480,V6W424,400,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 09:57:58 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration



TIC: 6W10656.D\data.ms

(15) Acrolein

5.167min (+0.141) 3.54ppb(v)

response 26511

Ion	Exp%	Act%
56.10	100	100
55.10	71.00	31.38#
37.10	29.80	3.58#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10657.D
 Acq On : 20 Feb 2019 1:25 am
 Operator : thomash
 Sample : jc82624-3
 Misc : MS32480,V6W424,400,,,1
 ALS Vial : 16 Sample Multiplier: 1

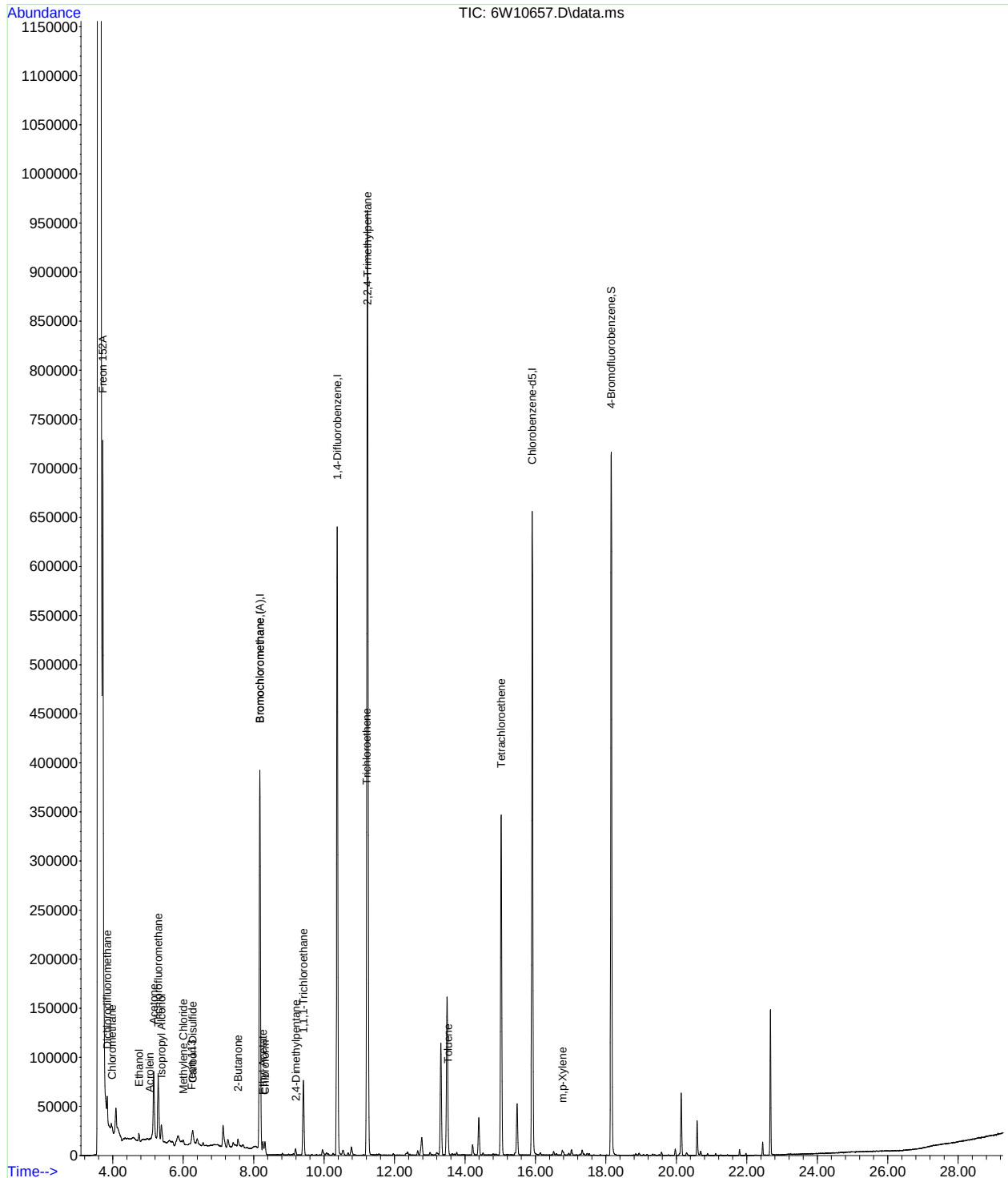
Quant Time: Feb 20 12:54:37 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

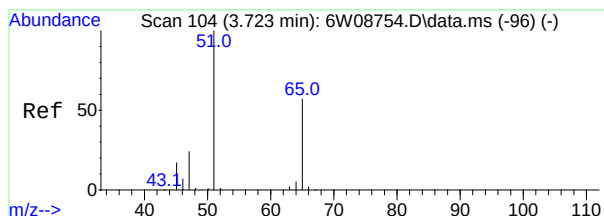
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.177	130	202125	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	717568	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.910	82	278073	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	202125	10.00	ppb(v	0.00
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	344256	10.14	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	101.40%
Target Compounds						
					Qvalue	
3) Freon 152A	3.717	65	291585	27.99	ppb(v	86
7) Dichlorodifluoromethane	3.845	85	21214	0.40	ppb(v	99
9) Chloromethane	3.980	50	1621	0.11	ppb(v	93
15) Acrolein	5.045	56	874	0.12	ppb(v#	83
22) Trichlorofluoromethane	5.289	101	78207	1.44	ppb(v	100
23) Acetone	5.161	58	27337	3.24	ppb(v	84
27) Isopropyl Alcohol	5.381	45	26484	0.85	ppb(v	99
29) Freon 113	6.237	101	4496	0.11	ppb(v	96
30) Methylene Chloride	6.005	84	2297	0.12	ppb(v	84
31) Carbon Disulfide	6.268	76	23624	0.45	ppb(v	99
32) Ethanol	4.745	45	11635	1.64	ppb(v	99
40) 2-Butanone	7.553	72	3448	0.41	ppb(v	97
44) Ethyl Acetate	8.262	61	2345	0.43	ppb(v	74
46) Chloroform	8.317	83	12620	0.28	ppb(v	96
47) 2,4-Dimethylpentane	9.192	57	3610	0.11	ppb(v	93
49) 1,1,1-Trichloroethane	9.413	97	59703	1.32	ppb(v	98
56) 2,2,4-Trimethylpentane	11.230	57	1184540	13.15	ppb(v	94
58) Trichloroethene	11.205	95	3667	0.13	ppb(v	90
68) Toluene	13.518	91	8430	0.11	ppb(v	98
74) Tetrachloroethene	15.029	166	159057	3.50	ppb(v	97
81) m,p-Xylene	16.766	91	7405	0.12	ppb(v	96

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

Data Path : C:\msdchem\1\data\
Data File : 6W10657.D
Acq On : 20 Feb 2019 1:25 am
Operator : thomash
Sample : jc82624-3
Misc : MS32480,V6W424,400,,,,,1
ALS Vial : 16 Sample Multiplier: 1

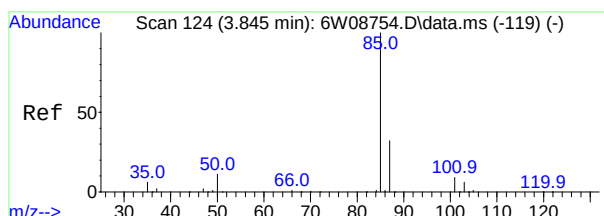
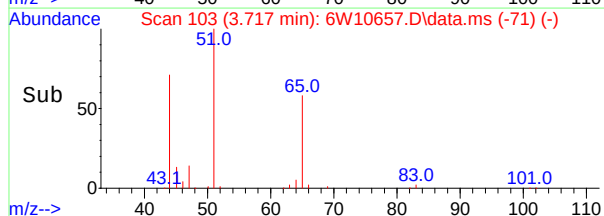
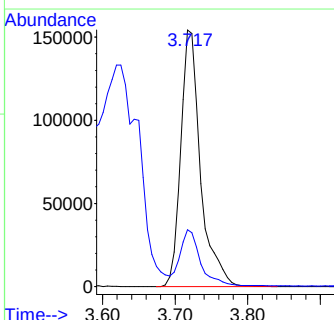
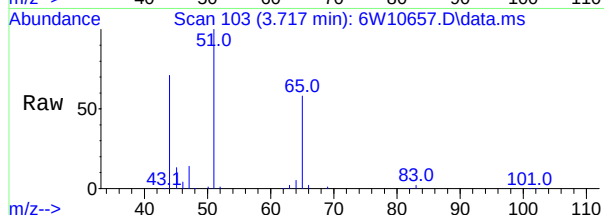
Quant Time: Feb 20 12:54:37 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





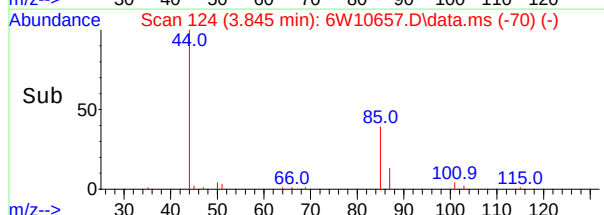
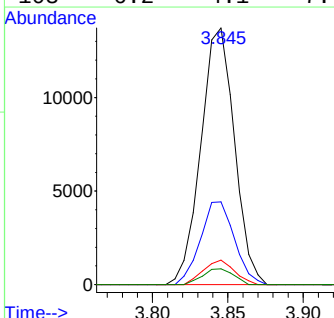
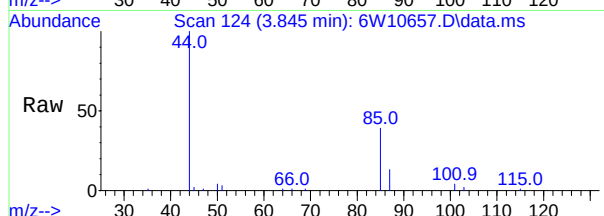
#3
 Freon 152A
 Concen: 27.99 ppb(v)
 RT: 3.717 min Scan# 103
 Delta R.T. -0.006 min
 Lab File: 6W10657.D
 Acq: 20 Feb 2019 1:25 am

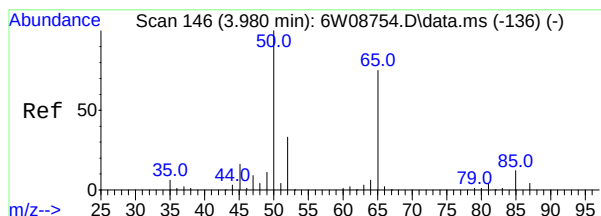
Tgt Ion: 65 Resp: 291585
 Ion Ratio Lower Upper
 65 100
 45 22.1 20.9 38.9



#7
 Dichlorodifluoromethane
 Concen: 0.40 ppb(v)
 RT: 3.845 min Scan# 124
 Delta R.T. 0.000 min
 Lab File: 6W10657.D
 Acq: 20 Feb 2019 1:25 am

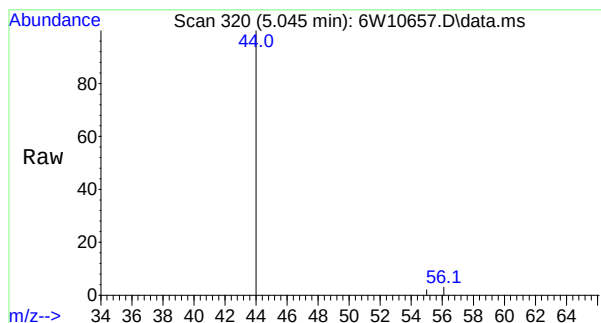
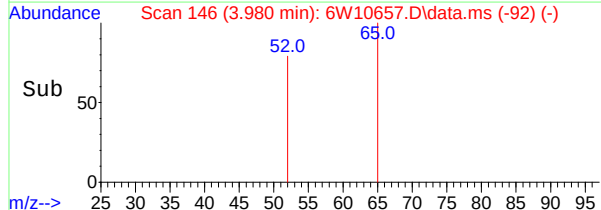
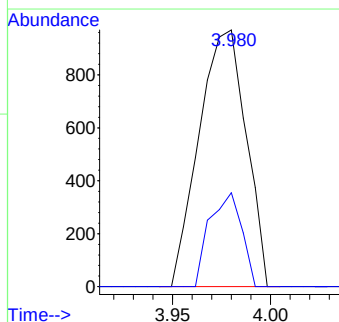
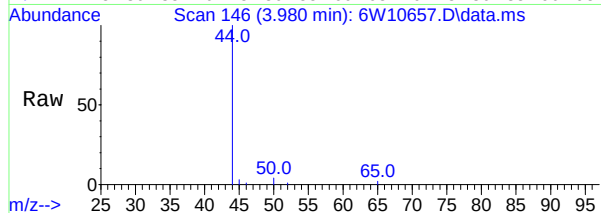
Tgt Ion: 85 Resp: 21214
 Ion Ratio Lower Upper
 85 100
 87 32.3 22.7 42.1
 101 9.6 6.3 11.7
 103 6.2 4.1 7.7





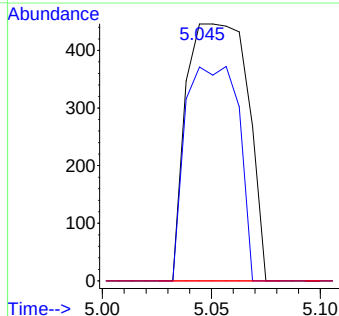
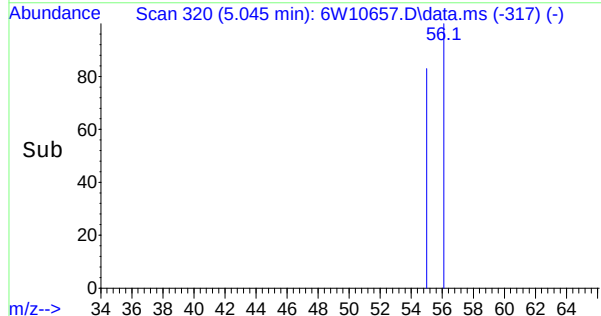
#9
Chloromethane
Concen: 0.11 ppb(v)
RT: 3.980 min Scan# 146
Delta R.T. 0.000 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

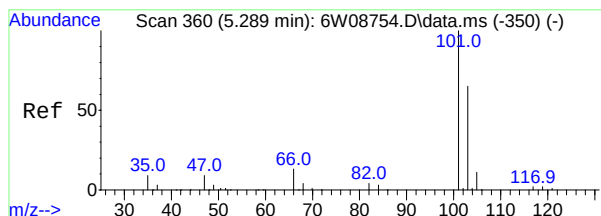
Tgt Ion: 50 Resp: 1621
Ion Ratio Lower Upper
50 100
52 36.6 22.8 42.4



#15
Acrolein
Concen: 0.12 ppb(v)
RT: 5.045 min Scan# 320
Delta R.T. 0.018 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

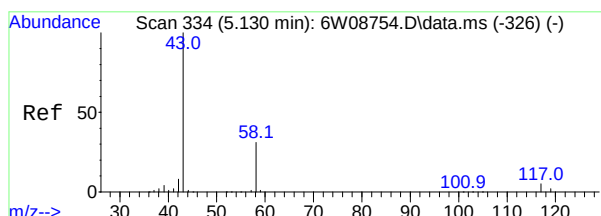
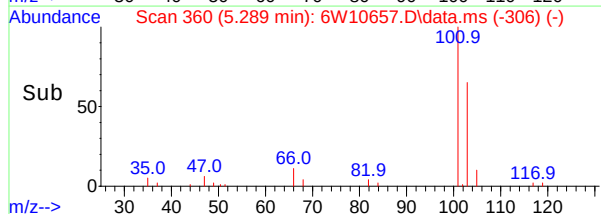
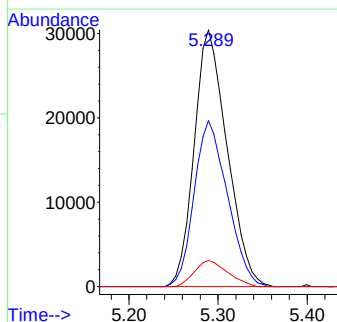
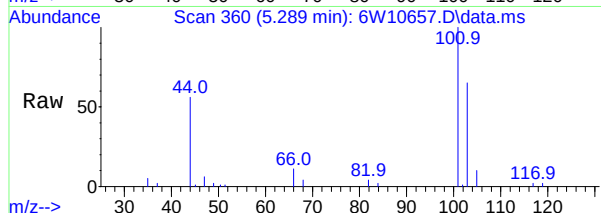
Tgt Ion: 56 Resp: 874
Ion Ratio Lower Upper
56 100
55 72.2 56.8 85.2
37 0.0 23.8 35.8#





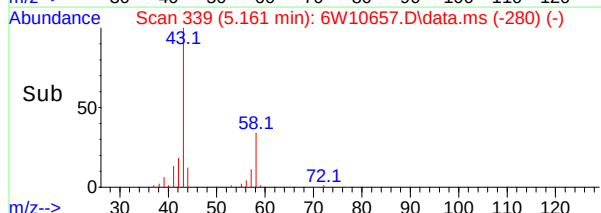
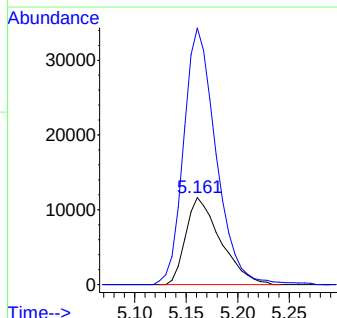
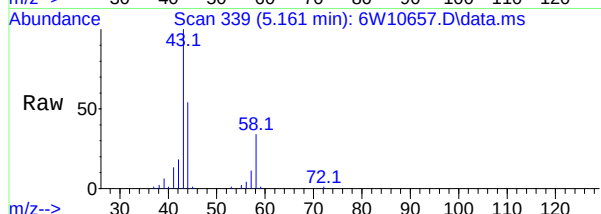
#22
 Trichlorofluoromethane
 Concen: 1.44 ppb(v)
 RT: 5.289 min Scan# 360
 Delta R.T. 0.000 min
 Lab File: 6W10657.D
 Acq: 20 Feb 2019 1:25 am

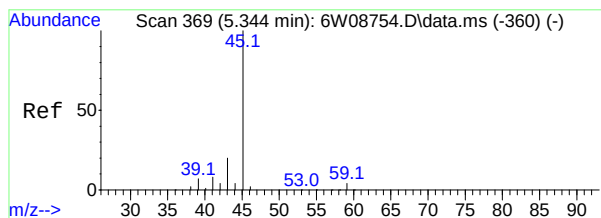
Tgt Ion:	101	Resp:	78207
Ion Ratio	Lower	Upper	
101	100		
103	64.7	45.4	84.4
105	10.2	7.3	13.7



#23
 Acetone
 Concen: 3.24 ppb(v)
 RT: 5.161 min Scan# 339
 Delta R.T. 0.031 min
 Lab File: 6W10657.D
 Acq: 20 Feb 2019 1:25 am

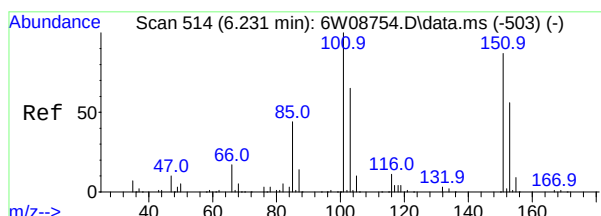
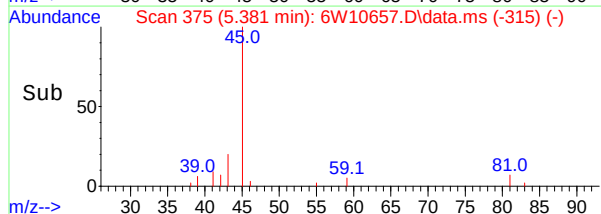
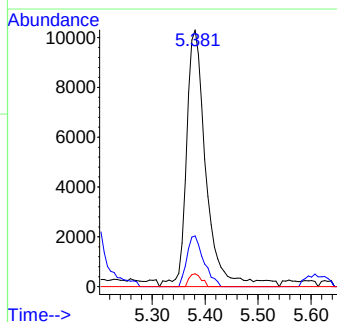
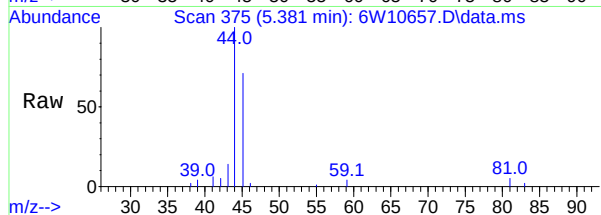
Tgt Ion:	58	Resp:	27337
Ion Ratio	Lower	Upper	
58	100		
43	294.8	230.1	427.3





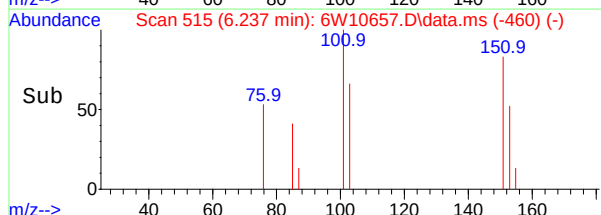
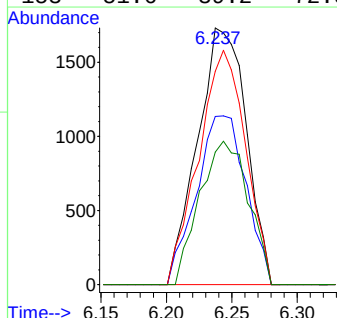
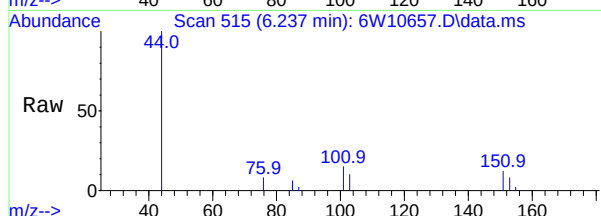
#27
Isopropyl Alcohol
Concen: 0.85 ppb(v)
RT: 5.381 min Scan# 375
Delta R.T. 0.037 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

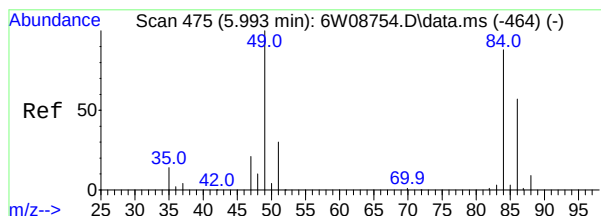
Tgt Ion: 45 Resp: 26484
Ion Ratio Lower Upper
45 100
43 19.7 14.1 26.1
59 5.0 2.8 5.2



#29
Freon 113
Concen: 0.11 ppb(v)
RT: 6.237 min Scan# 515
Delta R.T. 0.006 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

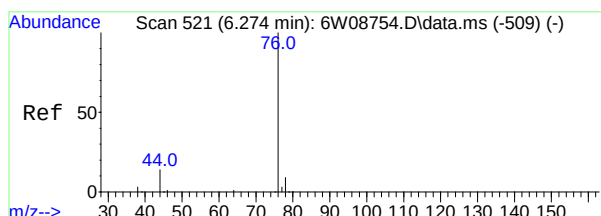
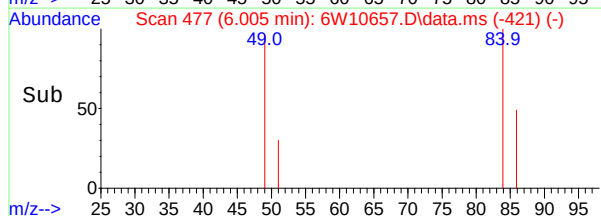
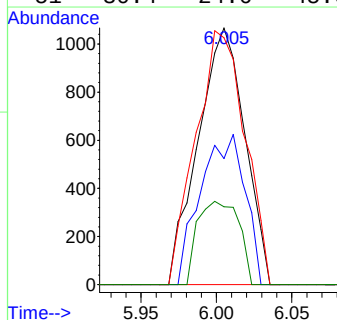
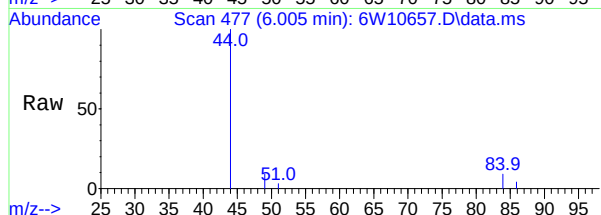
Tgt Ion: 101 Resp: 4496
Ion Ratio Lower Upper
101 100
103 65.5 45.2 84.0
151 83.1 60.6 112.6
153 51.6 39.2 72.8





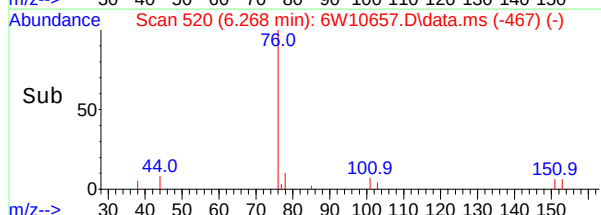
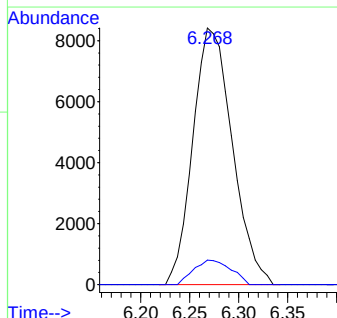
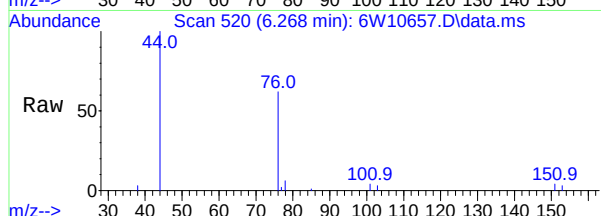
#30
Methylene Chloride
Concen: 0.12 ppb(v)
RT: 6.005 min Scan# 477
Delta R.T. 0.012 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

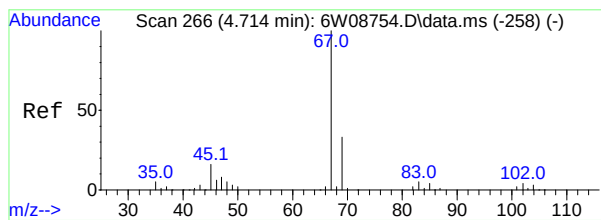
Tgt Ion: 84 Resp: 2297
Ion Ratio Lower Upper
84 100
86 49.1 45.5 84.5
49 96.2 79.5 147.7
51 30.4 24.6 45.6



#31
Carbon Disulfide
Concen: 0.45 ppb(v)
RT: 6.268 min Scan# 520
Delta R.T. -0.006 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

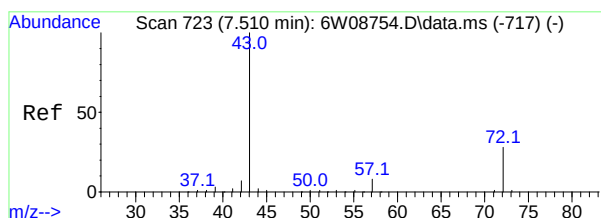
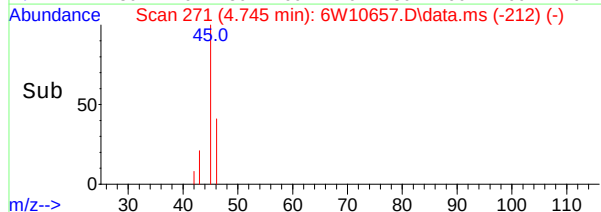
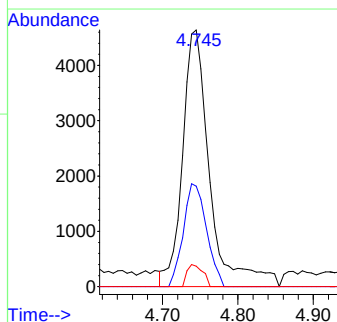
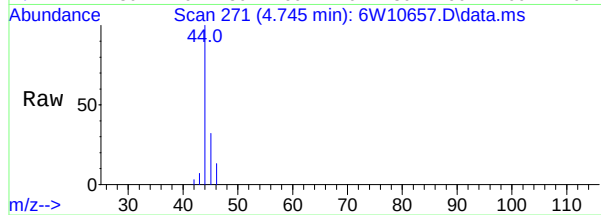
Tgt Ion: 76 Resp: 23624
Ion Ratio Lower Upper
76 100
78 9.5 6.5 12.1





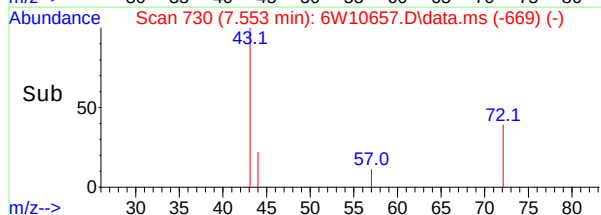
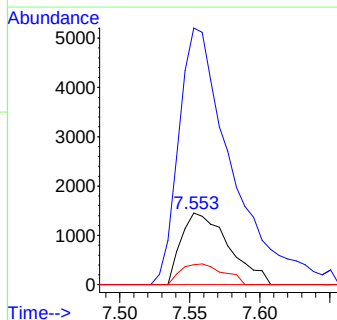
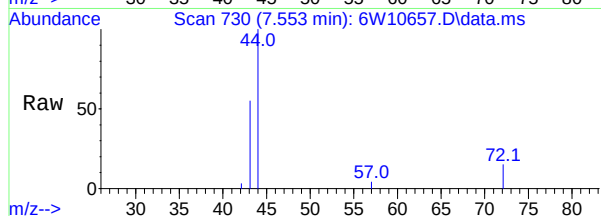
#32
Ethanol
Concen: 1.64 ppb(v)
RT: 4.745 min Scan# 271
Delta R.T. 0.031 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

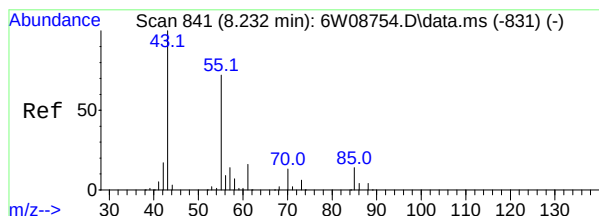
Tgt Ion: 45 Resp: 11635
Ion Ratio Lower Upper
45 100
46 39.2 26.9 49.9
42 7.9 6.0 11.2



#40
2-Butanone
Concen: 0.41 ppb(v)
RT: 7.553 min Scan# 730
Delta R.T. 0.043 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

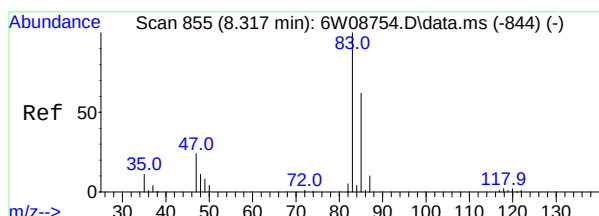
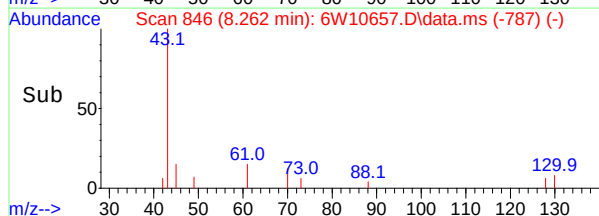
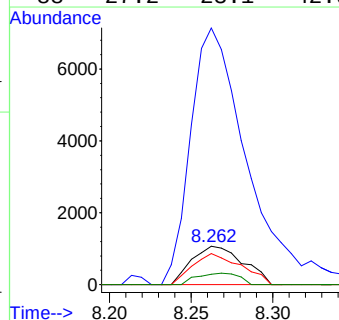
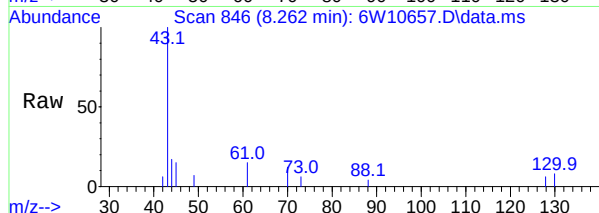
Tgt Ion: 72 Resp: 3448
Ion Ratio Lower Upper
72 100
43 358.2 255.4 474.4
57 27.9 20.7 38.5





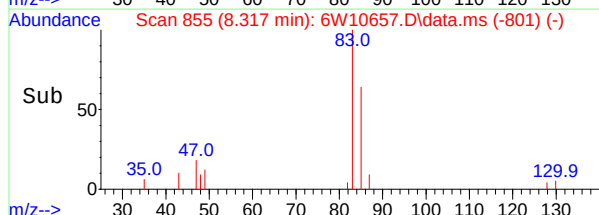
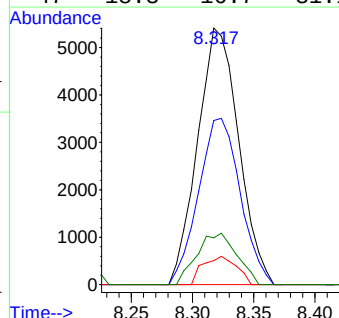
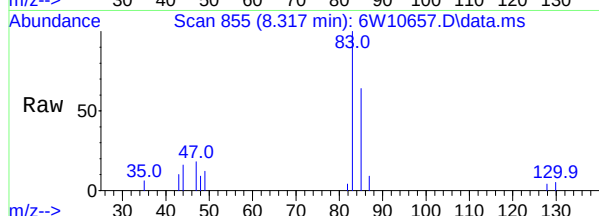
#44
Ethyl Acetate
Concen: 0.43 ppb(v)
RT: 8.262 min Scan# 846
Delta R.T. 0.031 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

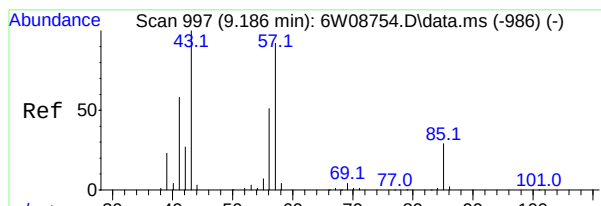
Tgt Ion: 61 Resp: 2345
Ion Ratio Lower Upper
61 100
43 669.0 546.6 1015.0
70 81.1 57.2 106.2
88 27.2 23.1 42.9



#46
Chloroform
Concen: 0.28 ppb(v)
RT: 8.317 min Scan# 855
Delta R.T. 0.000 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

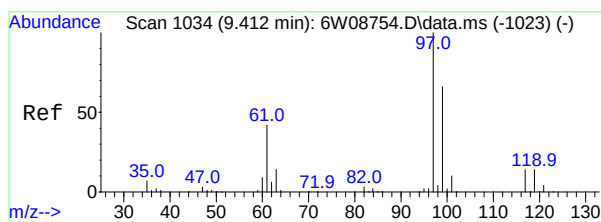
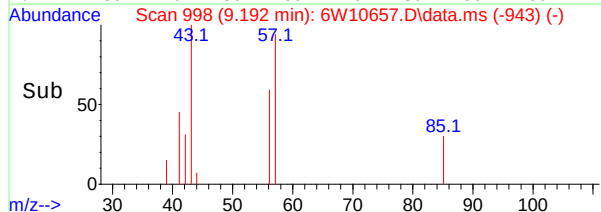
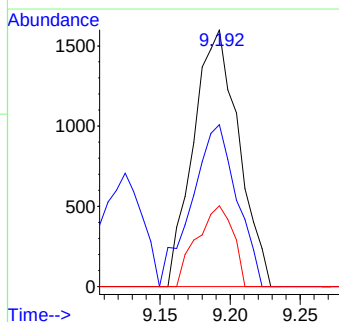
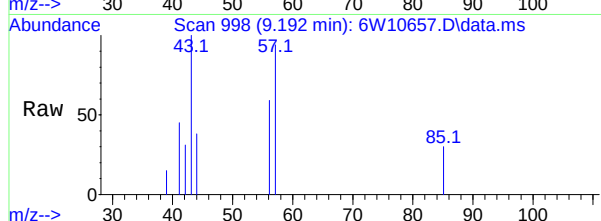
Tgt Ion: 83 Resp: 12620
Ion Ratio Lower Upper
83 100
85 63.9 45.1 83.9
87 9.4 7.3 13.5
47 18.3 16.7 31.1





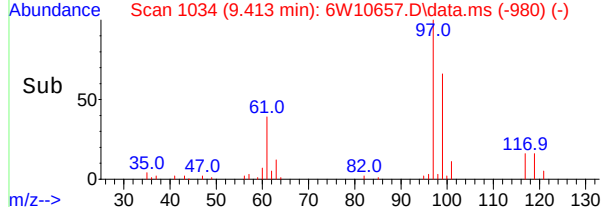
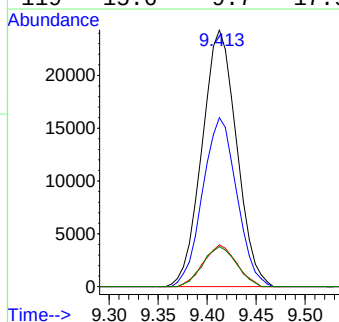
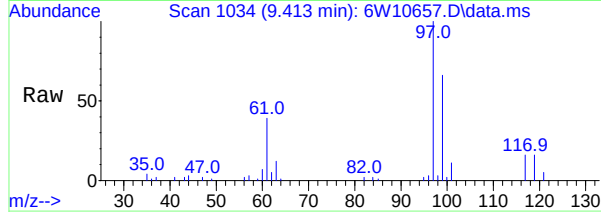
#47
2,4-Dimethylpentane
Concen: 0.11 ppb(v)
RT: 9.192 min Scan# 998
Delta R.T. 0.006 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

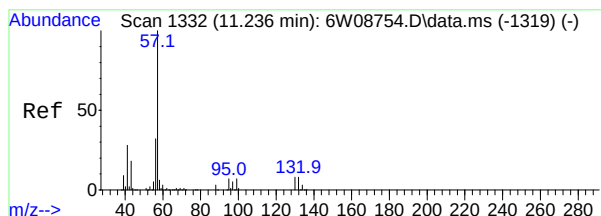
Tgt Ion: 57 Resp: 3610
Ion Ratio Lower Upper
57 100
56 63.1 39.0 72.4
85 31.5 22.3 41.5



#49
1,1,1-Trichloroethane
Concen: 1.32 ppb(v)
RT: 9.413 min Scan# 1034
Delta R.T. 0.000 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

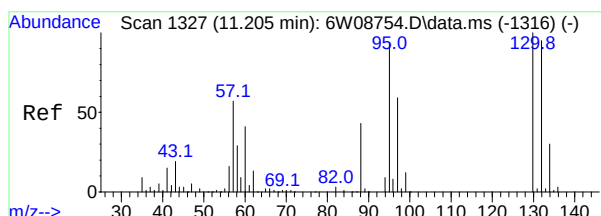
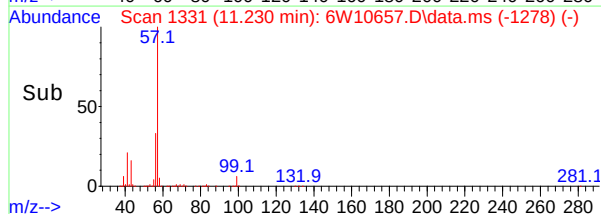
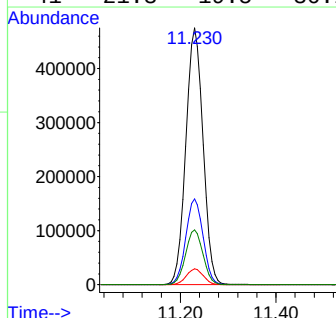
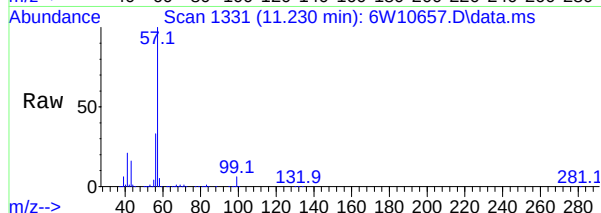
Tgt Ion: 97 Resp: 59703
Ion Ratio Lower Upper
97 100
99 65.8 46.1 85.5
117 16.2 9.8 18.2
119 15.6 9.7 17.9





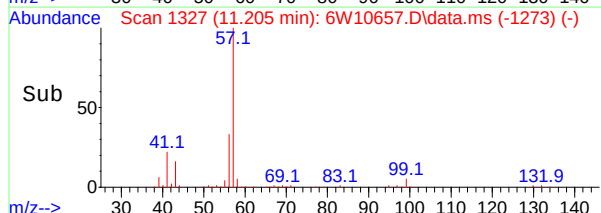
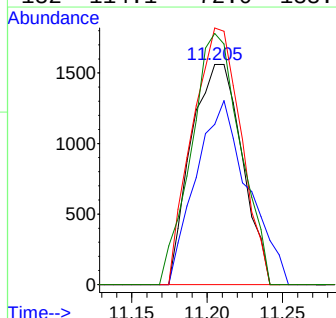
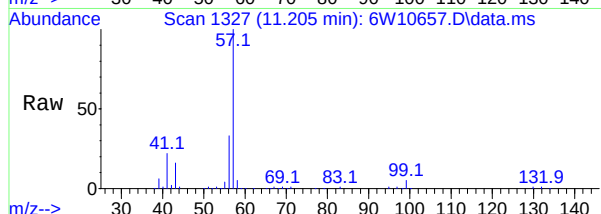
#56
2,2,4-Trimethylpentane
Concen: 13.15 ppb(v)
RT: 11.230 min Scan# 1331
Delta R.T. -0.006 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

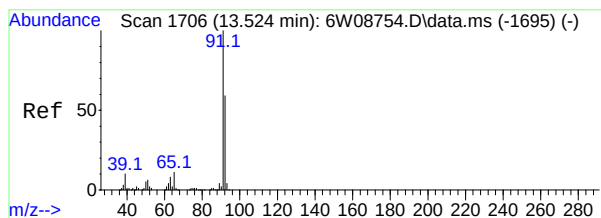
Tgt Ion: 57 Resp: 1184540
Ion Ratio Lower Upper
57 100
56 33.4 22.6 42.0
99 6.1 5.2 9.6
41 21.3 19.5 36.1



#58
Trichloroethene
Concen: 0.13 ppb(v)
RT: 11.205 min Scan# 1327
Delta R.T. 0.000 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

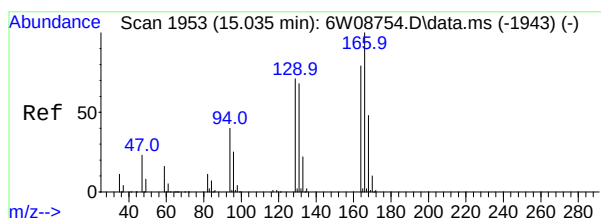
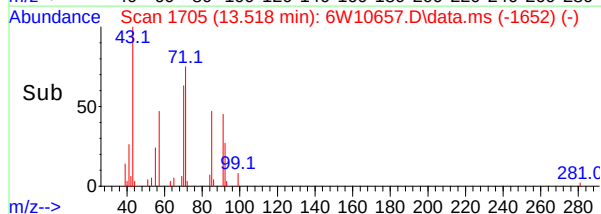
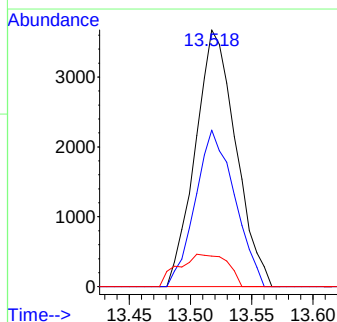
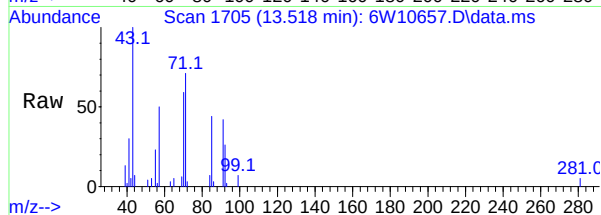
Tgt Ion: 95 Resp: 3667
Ion Ratio Lower Upper
95 100
97 72.8 44.3 82.3
130 116.6 75.7 140.5
132 114.1 72.0 133.6





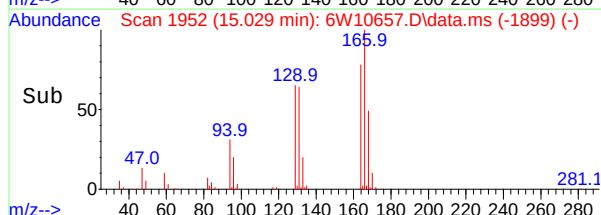
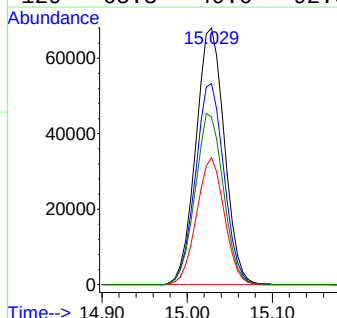
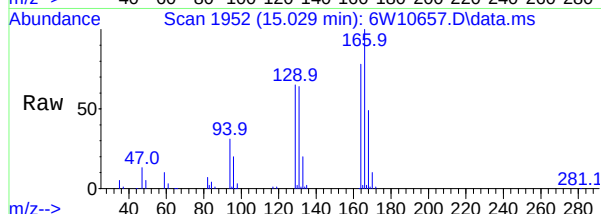
#68
Toluene
Concen: 0.11 ppb(v)
RT: 13.518 min Scan# 1705
Delta R.T. -0.006 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

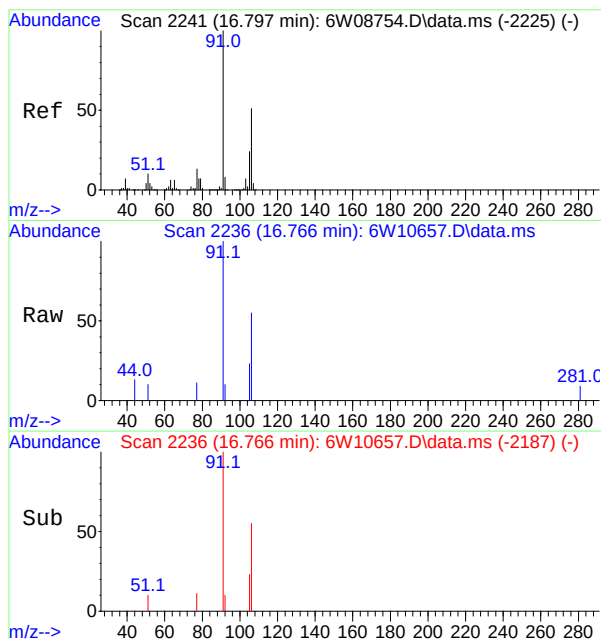
Tgt Ion: 91 Resp: 8430
Ion Ratio Lower Upper
91 100
92 61.0 41.4 77.0
65 11.9 7.9 14.7



#74
Tetrachloroethene
Concen: 3.50 ppb(v)
RT: 15.029 min Scan# 1952
Delta R.T. -0.006 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

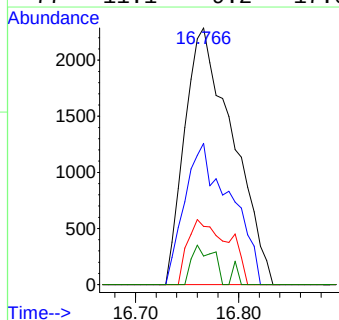
Tgt Ion: 166 Resp: 159057
Ion Ratio Lower Upper
166 100
164 78.3 55.1 102.3
168 49.5 33.6 62.4
129 65.3 49.6 92.0





#81
m,p-Xylene
Concen: 0.12 ppb(v)
RT: 16.766 min Scan# 2236
Delta R.T. -0.031 min
Lab File: 6W10657.D
Acq: 20 Feb 2019 1:25 am

Tgt Ion:	91	Resp:	7405
Ion Ratio	Lower	Upper	
91	100		
106	55.0	35.9	66.7
105	22.7	16.7	31.1
77	11.1	9.2	17.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10658.D
Acq On : 20 Feb 2019 2:18 am
Operator : thomash
Sample : jc82624-4
Misc : MS32480,V6W424,400,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 20 12:55:52 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration

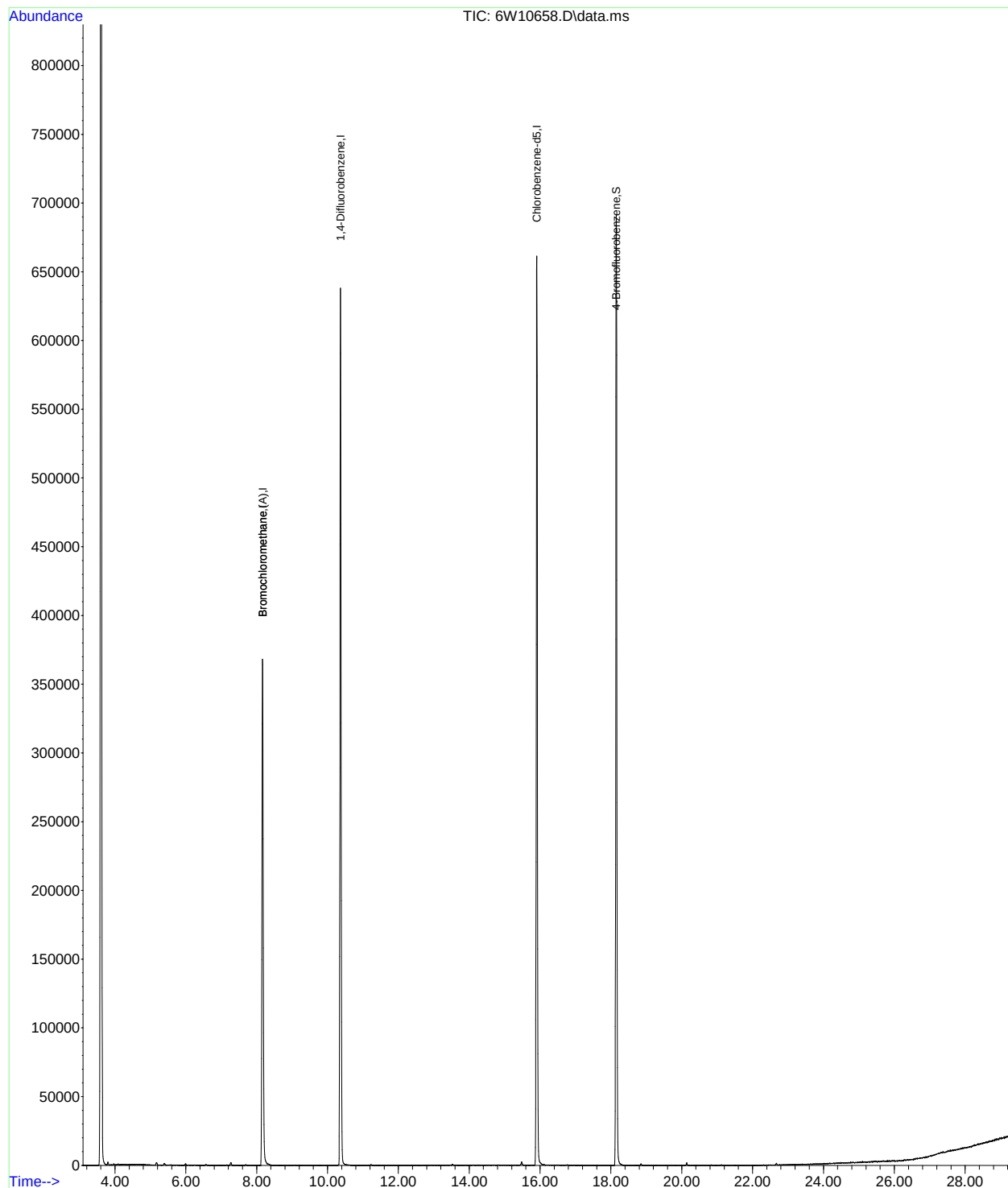
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.171	130	203603	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	728911	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.903	82	284507	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.171	130	203603	10.00	ppb(v	0.00
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	326214	9.39	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	93.90%
Target Compounds						Qvalue

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



Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10658.D
Acq On : 20 Feb 2019 2:18 am
Operator : thomash
Sample : jc82624-4
Misc : MS32480,V6W424,400,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 20 12:55:52 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10659.D
Acq On : 20 Feb 2019 3:11 am
Operator : thomash
Sample : jc82624-5
Misc : MS32480,V6W424,400,,,1
ALS Vial : 2 Sample Multiplier: 1

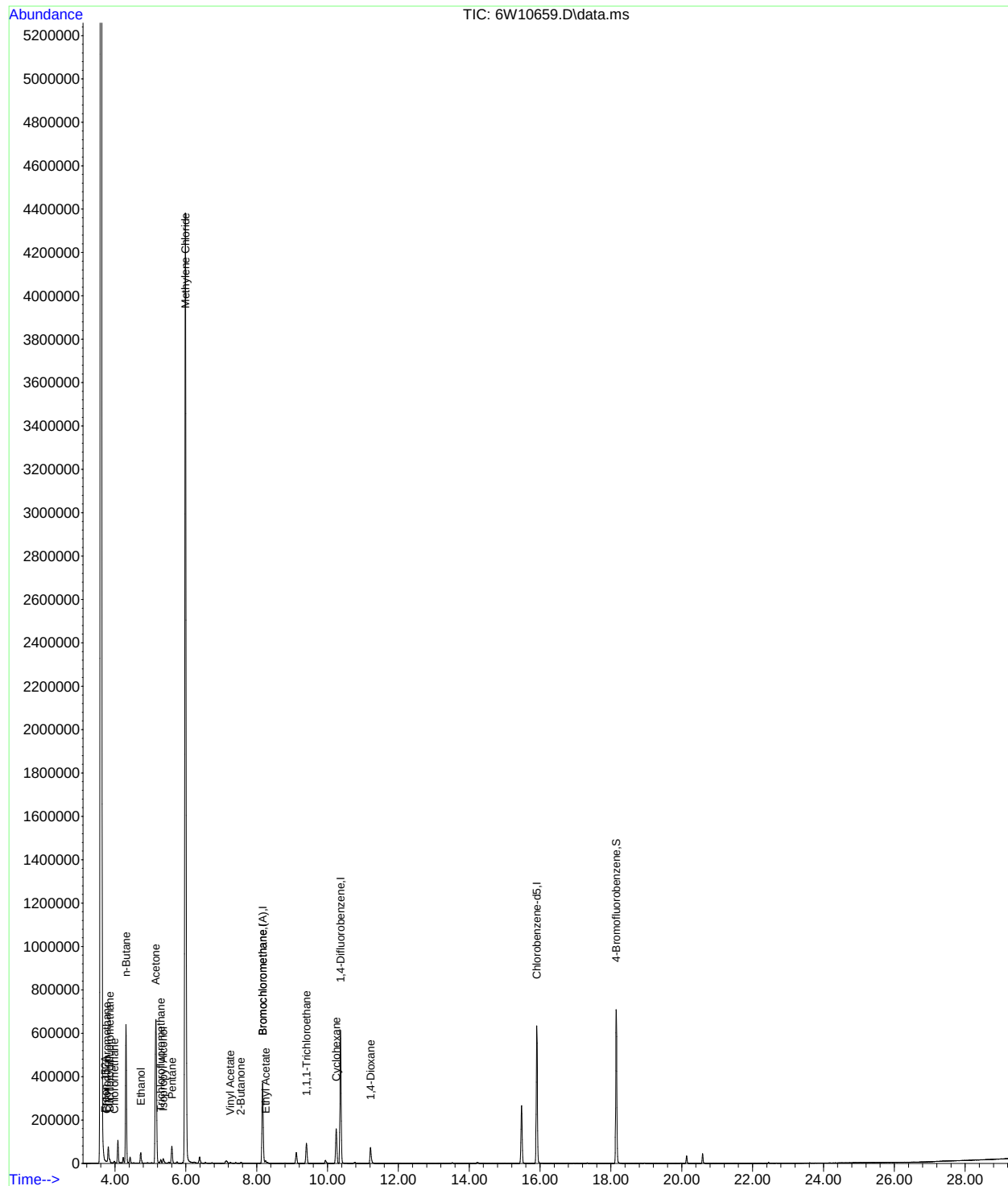
Quant Time: Feb 22 12:29:22 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration

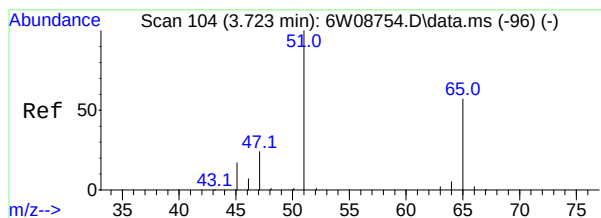
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.171	130	197403	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	704016	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.903	82	275261	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.171	130	197403	10.00	ppb(v	0.00
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	340256	10.13	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	101.30%
Target Compounds						
					Qvalue	
3) Freon 152A	3.723	65	1234	0.12	ppb(v#	75
4) Chlorodifluoromethane	3.766	67	801	0.16	ppb(v#	42
7) Dichlorodifluoromethane	3.852	85	17974	0.35	ppb(v	98
9) Chloromethane	3.980	50	8922	0.61	ppb(v	99
13) n-Butane	4.310	58	95164	31.23	ppb(v	92
22) Trichlorofluoromethane	5.289	101	16662	0.31	ppb(v	97
23) Acetone	5.142	58	198630	24.14	ppb(v	99
24) Pentane	5.607	57	9952	2.37	ppb(v	88
27) Isopropyl Alcohol	5.363	45	31937	1.05	ppb(v	98
30) Methylene Chloride	5.987	84	2795833	150.91	ppb(v	94
32) Ethanol	4.726	45	61298	8.82	ppb(v	98
38) Vinyl Acetate	7.253	43	5131	0.12	ppb(v#	85
40) 2-Butanone	7.547	72	1533	0.19	ppb(v#	76
44) Ethyl Acetate	8.250	61	2316	0.44	ppb(v	52
49) 1,1,1-Trichloroethane	9.406	97	76169	1.73	ppb(v	97
53) Cyclohexane	10.245	56	96286	3.47	ppb(v	95
63) 1,4-Dioxane	11.211	88	76702	5.83	ppb(v#	84

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

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10659.D
Acq On : 20 Feb 2019 3:11 am
Operator : thomash
Sample : jc82624-5
Misc : MS32480,V6W424,400,,,,,1
ALS Vial : 2 Sample Multiplier: 1

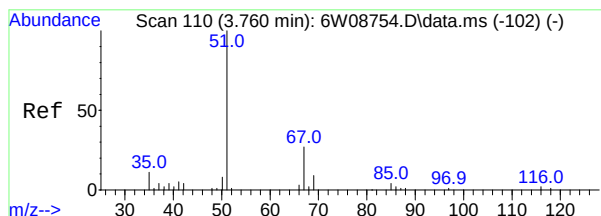
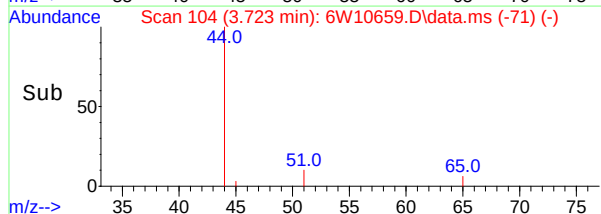
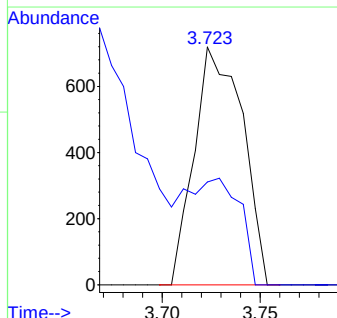
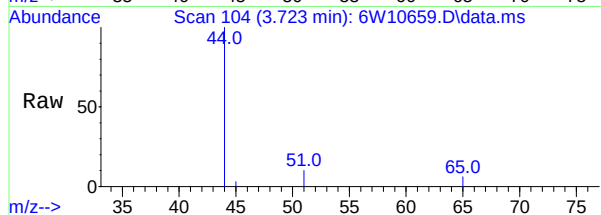
Quant Time: Feb 22 12:29:22 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





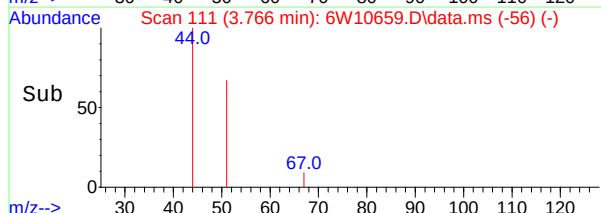
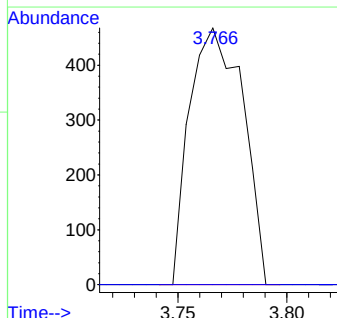
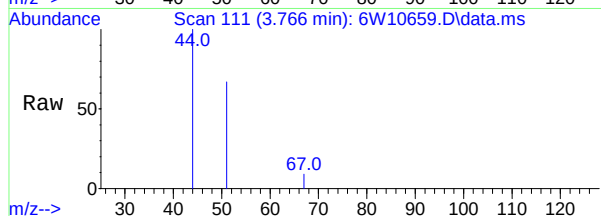
#3
Freon 152A
Concen: 0.12 ppb(v)
RT: 3.723 min Scan# 104
Delta R.T. 0.000 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

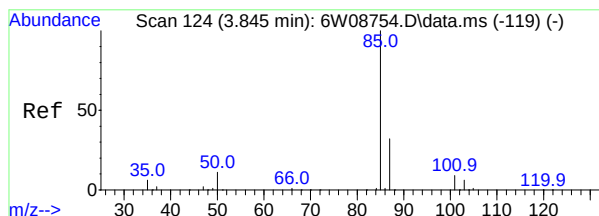
Tgt Ion: 65 Resp: 1234
Ion Ratio Lower Upper
65 100
45 43.3 20.9 38.9#



#4
Chlorodifluoromethane
Concen: 0.16 ppb(v)
RT: 3.766 min Scan# 111
Delta R.T. 0.006 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

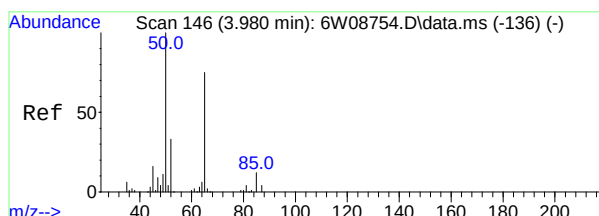
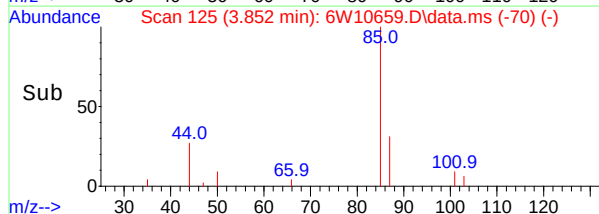
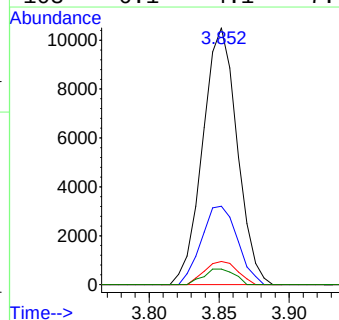
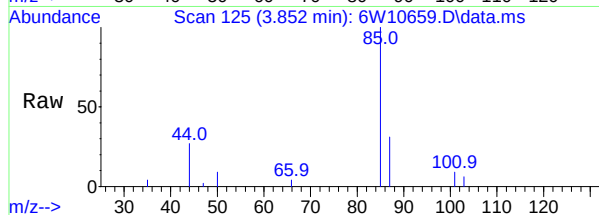
Tgt Ion: 67 Resp: 801
Ion Ratio Lower Upper
67 100
69 0.0 23.0 42.6#





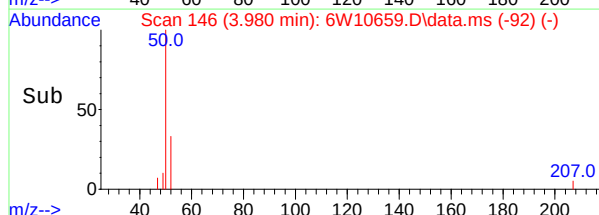
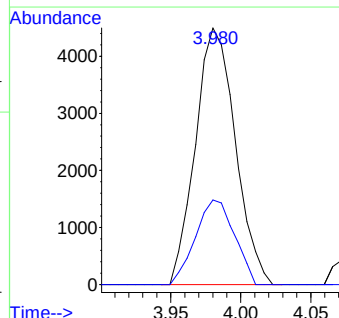
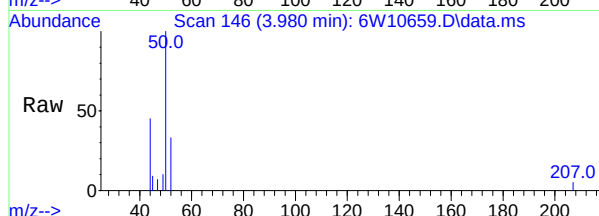
#7
 Dichlorodifluoromethane
 Concen: 0.35 ppb(v)
 RT: 3.852 min Scan# 125
 Delta R.T. 0.006 min
 Lab File: 6W10659.D
 Acq: 20 Feb 2019 3:11 am

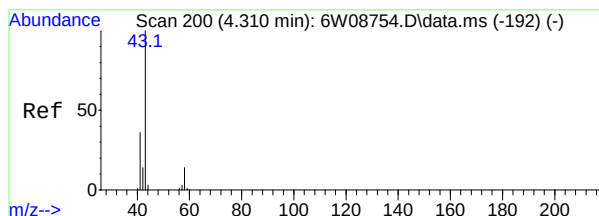
Tgt Ion:	85	Resp:	17974
Ion Ratio	100	Lower	Upper
85	100		
87	30.5	22.7	42.1
101	9.0	6.3	11.7
103	6.1	4.1	7.7



#9
 Chloromethane
 Concen: 0.61 ppb(v)
 RT: 3.980 min Scan# 146
 Delta R.T. 0.000 min
 Lab File: 6W10659.D
 Acq: 20 Feb 2019 3:11 am

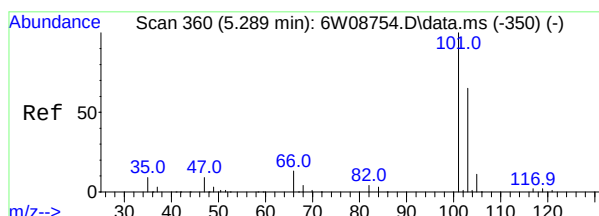
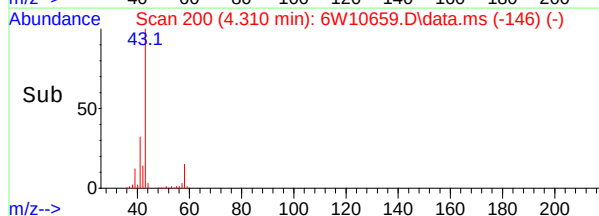
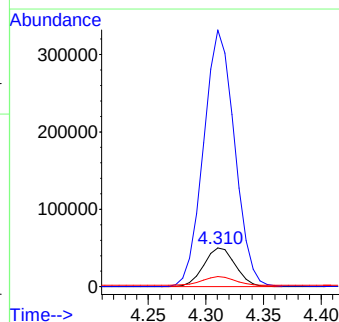
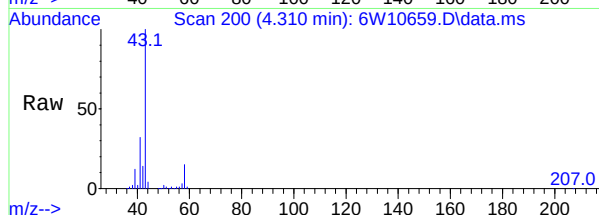
Tgt Ion:	50	Resp:	8922
Ion Ratio	100	Lower	Upper
50	100		
52	33.0	22.8	42.4





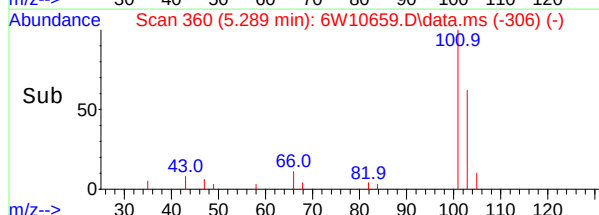
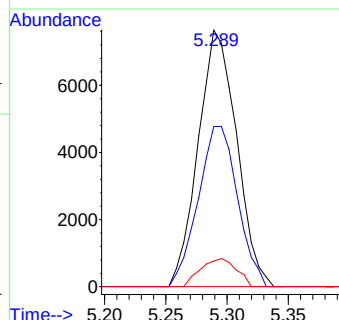
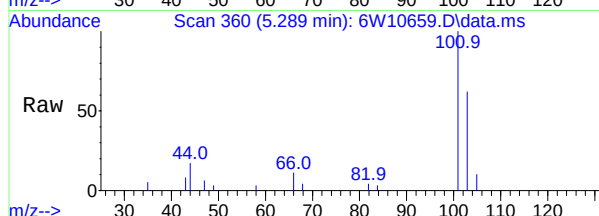
#13
n-Butane
Concen: 31.23 ppb(v)
RT: 4.310 min Scan# 200
Delta R.T. 0.000 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

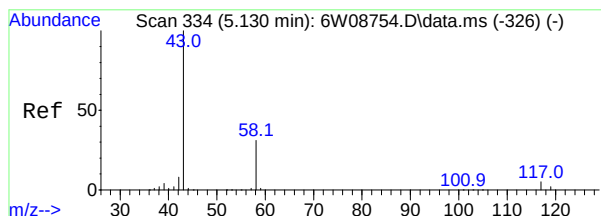
Tgt Ion: 58 Resp: 95164
Ion Ratio Lower Upper
58 100
43 665.0 485.0 900.6
44 26.3 19.2 35.6



#22
Trichlorofluoromethane
Concen: 0.31 ppb(v)
RT: 5.289 min Scan# 360
Delta R.T. 0.000 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

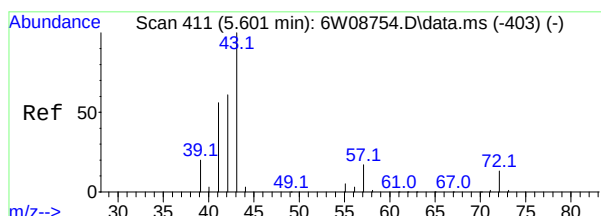
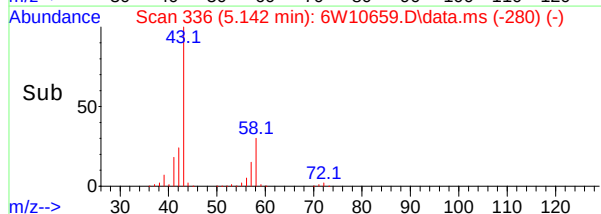
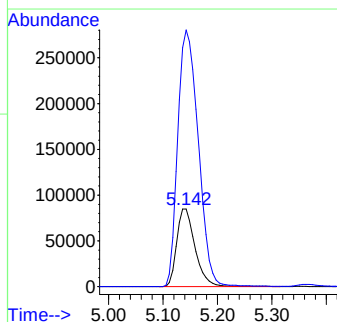
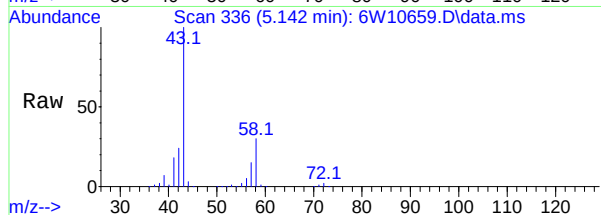
Tgt Ion: 101 Resp: 16662
Ion Ratio Lower Upper
101 100
103 62.3 45.4 84.4
105 10.0 7.3 13.7





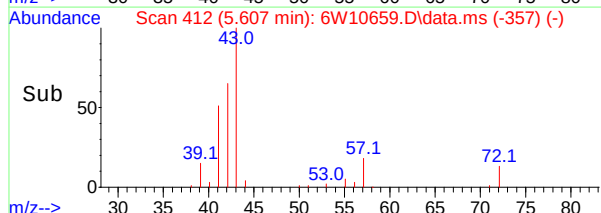
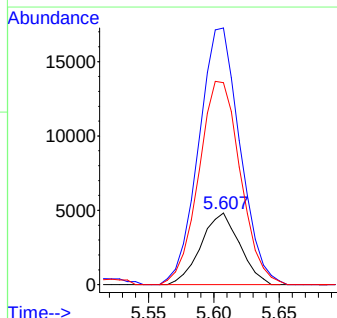
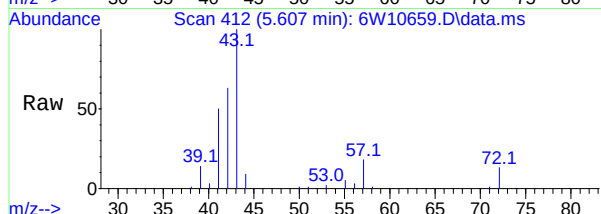
#23
Acetone
Concen: 24.14 ppb(v)
RT: 5.142 min Scan# 336
Delta R.T. 0.012 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

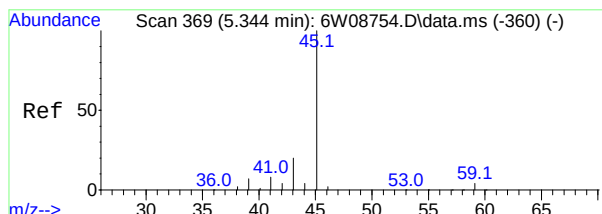
Tgt Ion: 58 Resp: 198630
Ion Ratio Lower Upper
58 100
43 330.6 230.1 427.3



#24
Pentane
Concen: 2.37 ppb(v)
RT: 5.607 min Scan# 412
Delta R.T. 0.006 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

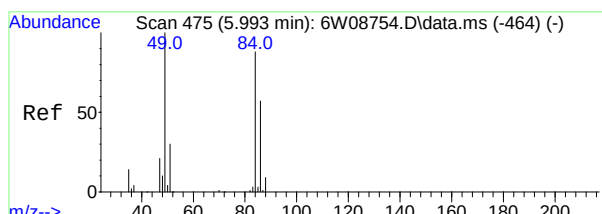
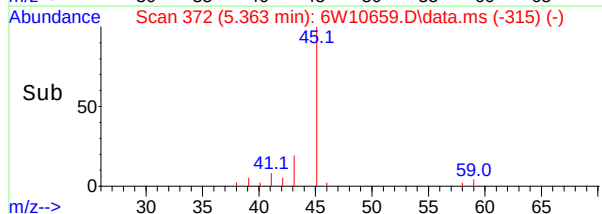
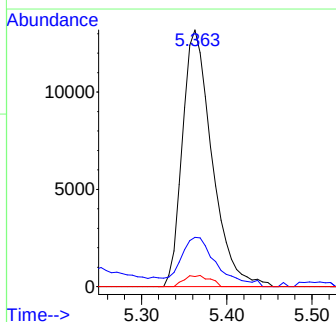
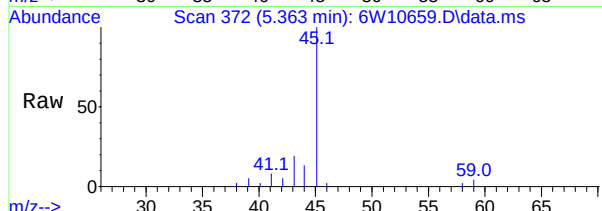
Tgt Ion: 57 Resp: 9952
Ion Ratio Lower Upper
57 100
42 359.2 250.8 465.8
41 282.4 232.7 432.1





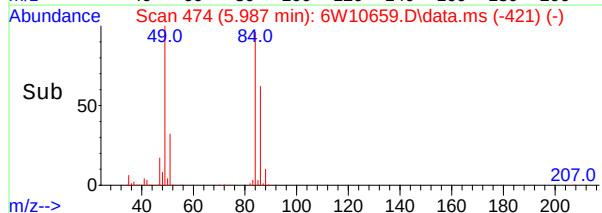
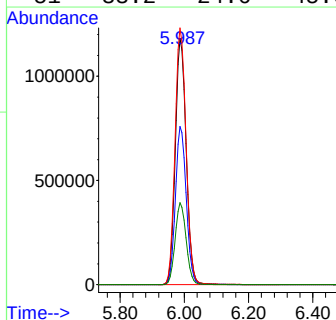
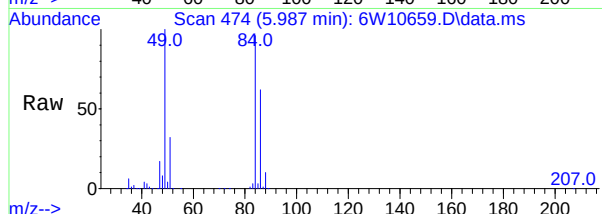
#27
Isopropyl Alcohol
Concen: 1.05 ppb(v)
RT: 5.363 min Scan# 372
Delta R.T. 0.018 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

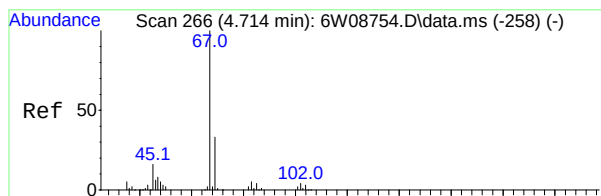
Tgt Ion: 45 Resp: 31937
Ion Ratio Lower Upper
45 100
43 19.2 14.1 26.1
59 3.9 2.8 5.2



#30
Methylene Chloride
Concen: 150.91 ppb(v)
RT: 5.987 min Scan# 474
Delta R.T. -0.006 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

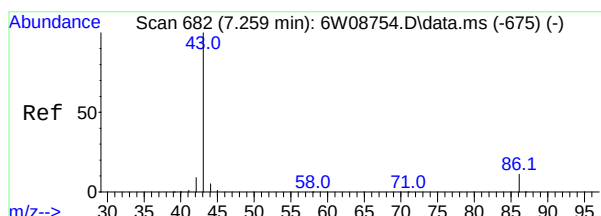
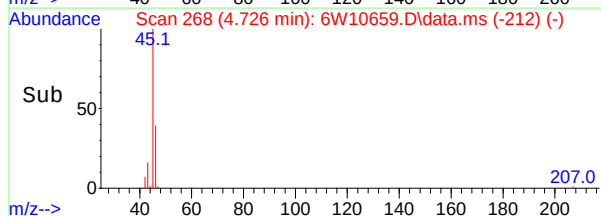
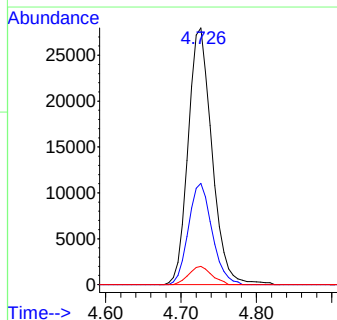
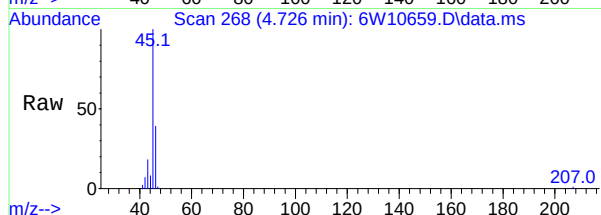
Tgt Ion: 84 Resp: 2795833
Ion Ratio Lower Upper
84 100
86 64.1 45.5 84.5
49 104.2 79.5 147.7
51 33.2 24.6 45.6





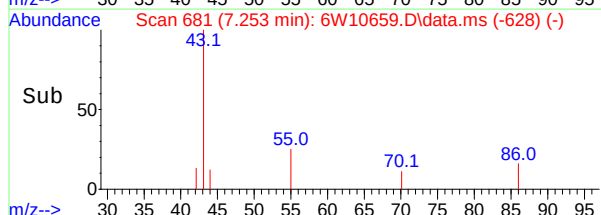
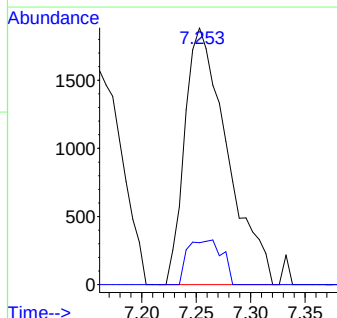
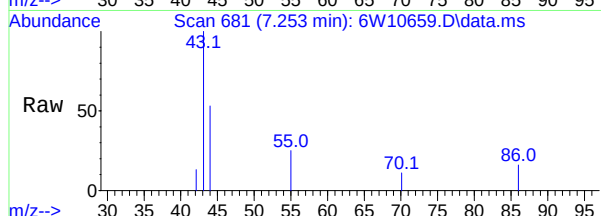
#32
Ethanol
Concen: 8.82 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.012 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

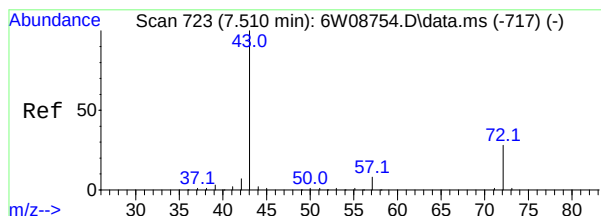
Tgt Ion: 45 Resp: 61298
Ion Ratio Lower Upper
45 100
46 39.5 26.9 49.9
42 7.1 6.0 11.2



#38
Vinyl Acetate
Concen: 0.12 ppb(v)
RT: 7.253 min Scan# 681
Delta R.T. -0.006 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

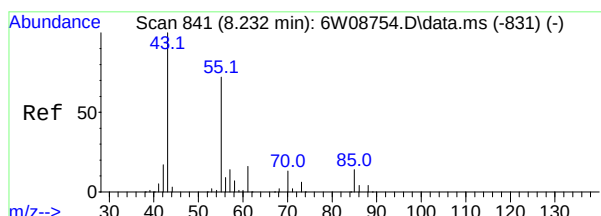
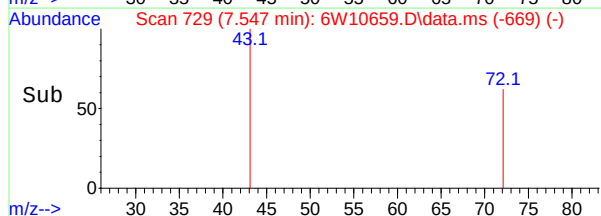
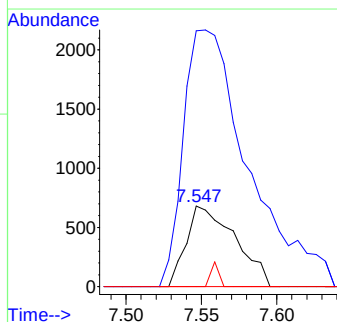
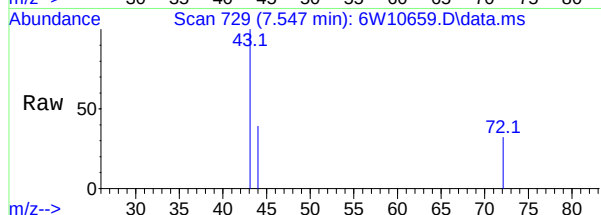
Tgt Ion: 43 Resp: 5131
Ion Ratio Lower Upper
43 100
86 16.3 7.6 14.0#





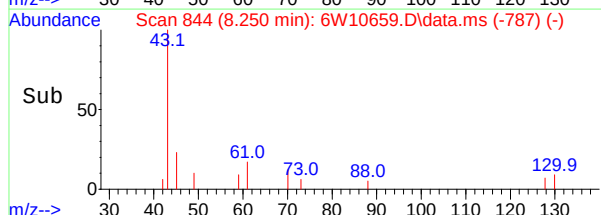
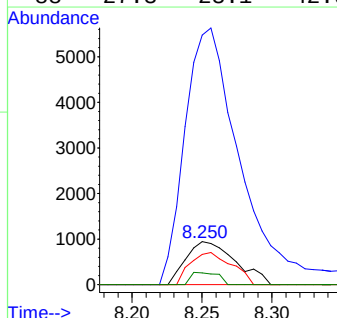
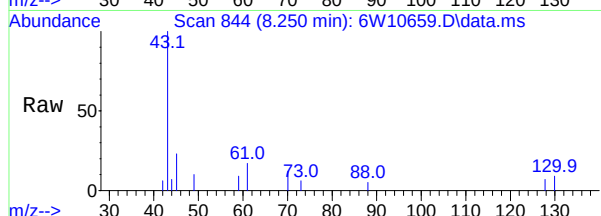
#40
2-Butanone
Concen: 0.19 ppb(v)
RT: 7.547 min Scan# 729
Delta R.T. 0.037 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

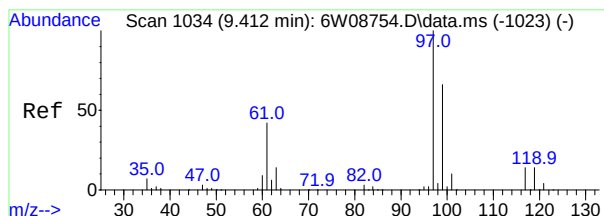
Tgt Ion: 72 Resp: 1533
Ion Ratio Lower Upper
72 100
43 317.2 255.4 474.4
57 0.0 20.7 38.5#



#44
Ethyl Acetate
Concen: 0.44 ppb(v)
RT: 8.250 min Scan# 844
Delta R.T. 0.018 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

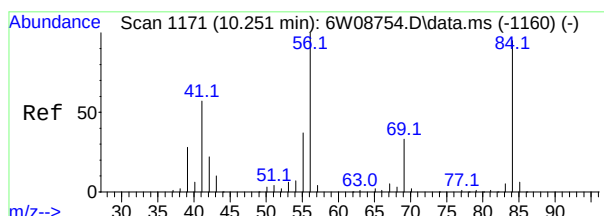
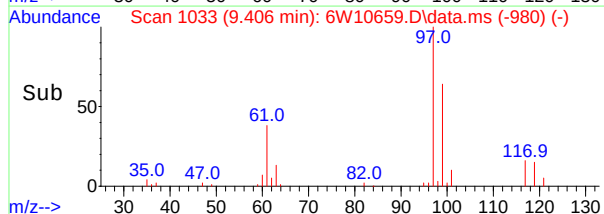
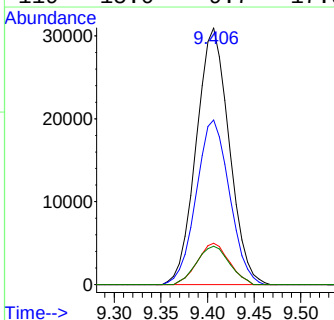
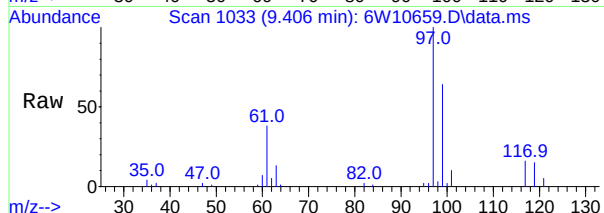
Tgt Ion: 61 Resp: 2316
Ion Ratio Lower Upper
61 100
43 579.8 546.6 1015.0
70 70.6 57.2 106.2
88 27.3 23.1 42.9





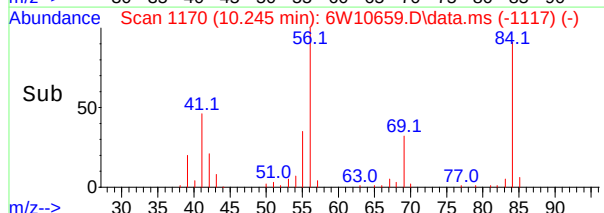
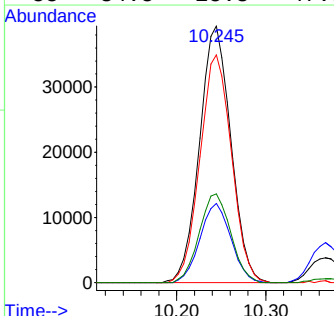
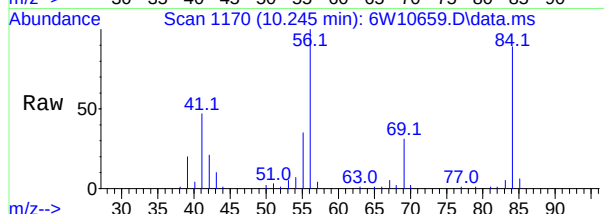
#49
1,1,1-Trichloroethane
Concen: 1.73 ppb(v)
RT: 9.406 min Scan# 1033
Delta R.T. -0.006 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

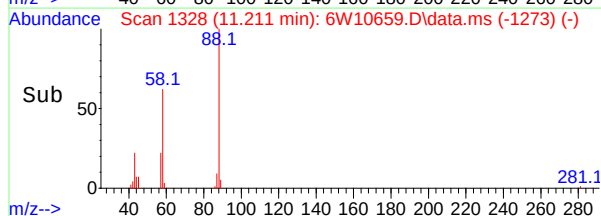
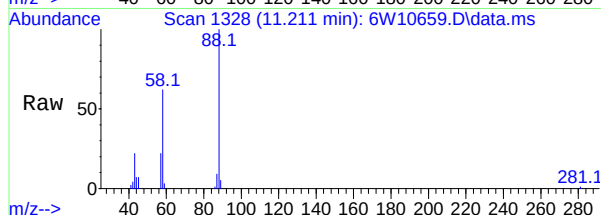
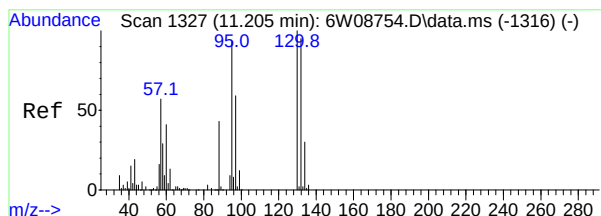
Tgt Ion	Resp	Lower	Upper
97	100		
99	64.2	46.1	85.5
117	16.1	9.8	18.2
119	15.0	9.7	17.9



#53
Cyclohexane
Concen: 3.47 ppb(v)
RT: 10.245 min Scan# 1170
Delta R.T. -0.006 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

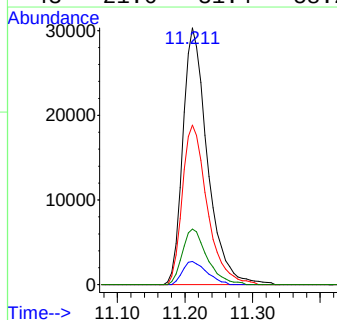
Tgt Ion	Resp	Lower	Upper
56	100		
69	30.9	23.2	43.2
84	88.7	66.2	123.0
55	34.5	25.8	47.8





#63
1,4-Dioxane
Concen: 5.83 ppb(v)
RT: 11.211 min Scan# 1328
Delta R.T. 0.006 min
Lab File: 6W10659.D
Acq: 20 Feb 2019 3:11 am

Tgt Ion: 88 Resp: 76702
Ion Ratio Lower Upper
88 100
87 9.0 7.1 13.3
58 62.1 46.7 86.7
43 21.6 31.4 58.2#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10671.D
 Acq On : 20 Feb 2019 4:30 pm
 Operator : thomash
 Sample : JC82624-5
 Misc : MS32480,V6W425,80,,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 22 17:09:29 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

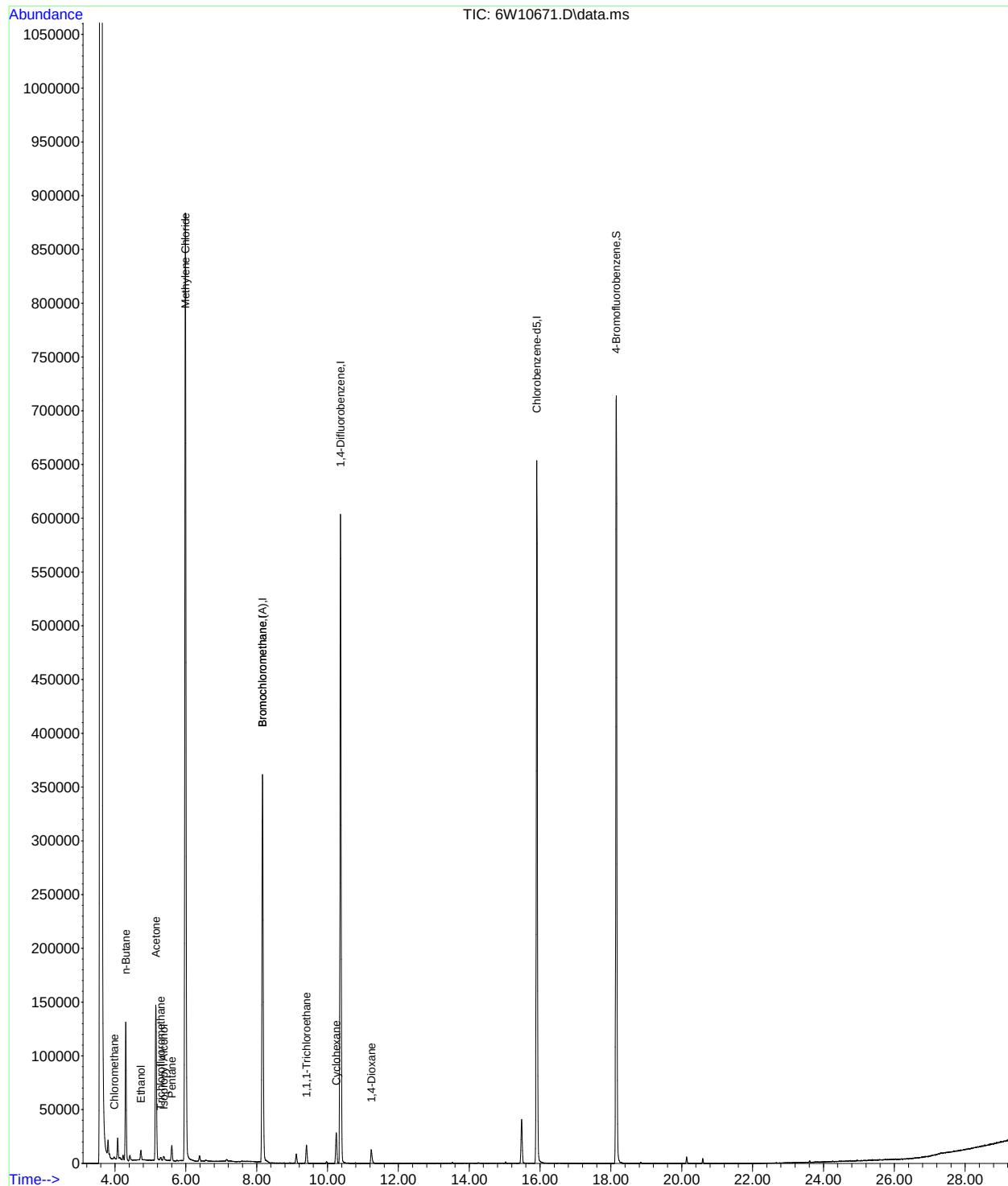
Internal Standards						
1) Bromochloromethane	8.164	130	195910	10.00	ppb(v	-0.01
55) 1,4-Difluorobenzene	10.367	114	686971	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.909	82	280829	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.164	130	195910	10.00	ppb(v	-0.01
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	342183	9.98	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	99.80%
Target Compounds						
					Qvalue	
9) Chloromethane	3.974	50	1789	0.12	ppb(v	88
13) n-Butane	4.304	58	19233	6.36	ppb(v#	78
22) Trichlorofluoromethane	5.289	101	3099	0.06	ppb(v#	94
23) Acetone	5.148	58	37228	4.56	ppb(v	84
24) Pentane	5.601	57	1752	0.42	ppb(v	92
27) Isopropyl Alcohol	5.375	45	6074	0.20	ppb(v#	95
30) Methylene Chloride	5.987	84	541914	29.47	ppb(v	98
32) Ethanol	4.726	45	11962	1.73	ppb(v	96
49) 1,1,1-Trichloroethane	9.406	97	14382	0.33	ppb(v	98
53) Cyclohexane	10.244	56	17338	0.63	ppb(v	95
63) 1,4-Dioxane	11.236	88	13743	1.07	ppb(v#	83

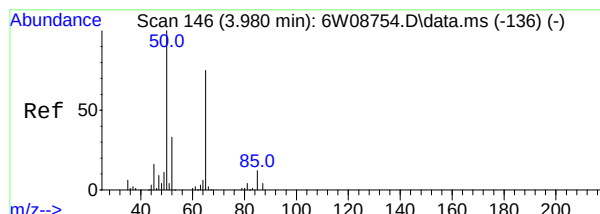
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W10671.D
Acq On : 20 Feb 2019 4:30 pm
Operator : thomash
Sample : JC82624-5
Misc : MS32480,V6W425,80,,,,,1
ALS Vial : 6 Sample Multiplier: 1

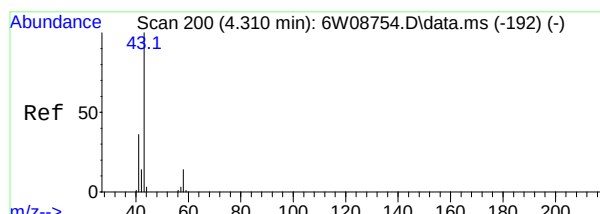
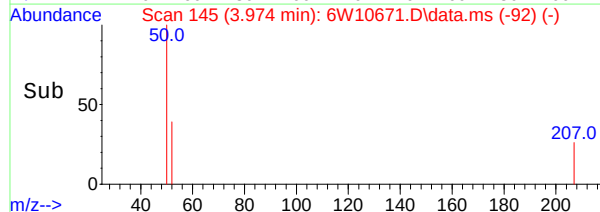
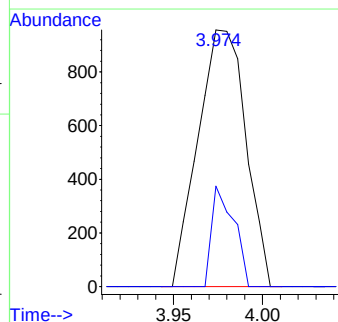
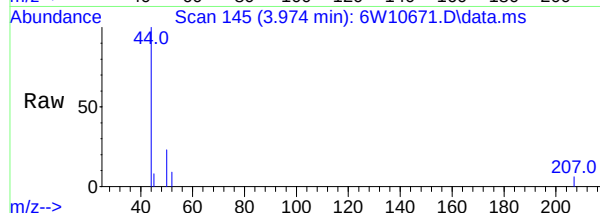
Quant Time: Feb 22 17:09:29 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





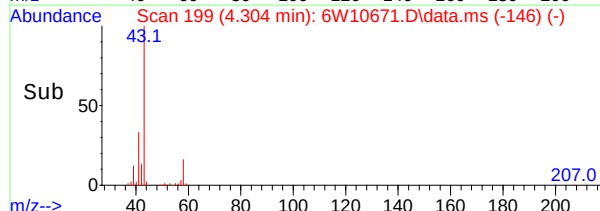
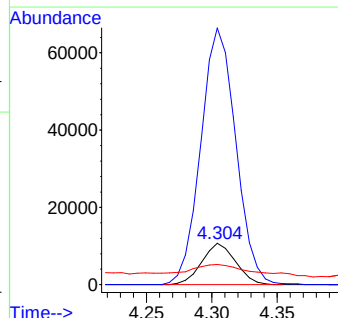
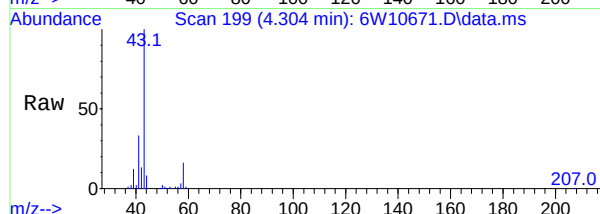
#9
Chloromethane
Concen: 0.12 ppb(v)
RT: 3.974 min Scan# 145
Delta R.T. -0.006 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

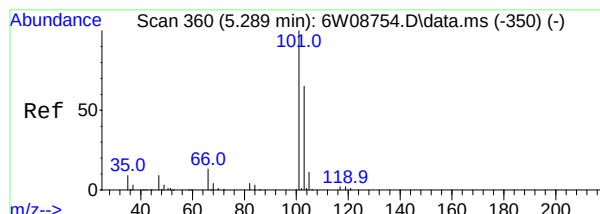
Tgt Ion: 50 Resp: 1789
Ion Ratio Lower Upper
50 100
52 39.1 22.8 42.4



#13
n-Butane
Concen: 6.36 ppb(v)
RT: 4.304 min Scan# 199
Delta R.T. -0.006 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

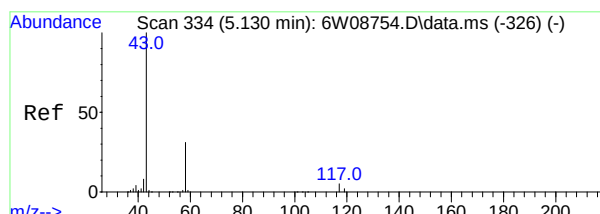
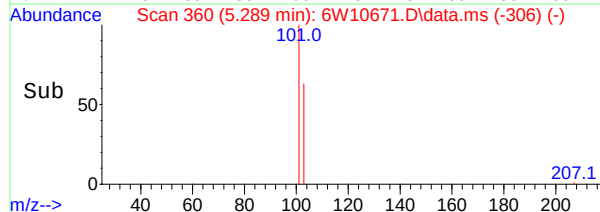
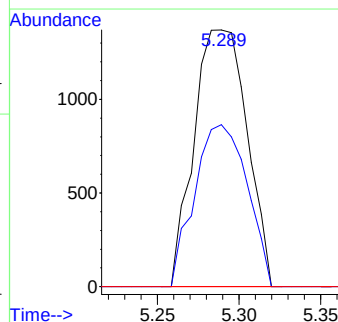
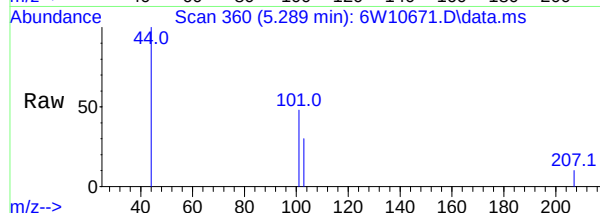
Tgt Ion: 58 Resp: 19233
Ion Ratio Lower Upper
58 100
43 621.2 485.0 900.6
44 48.6 19.2 35.6#





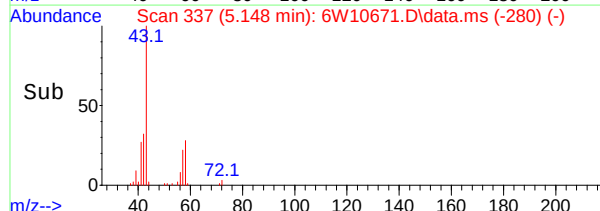
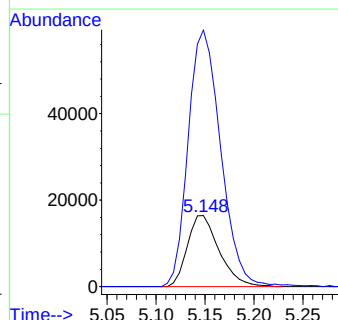
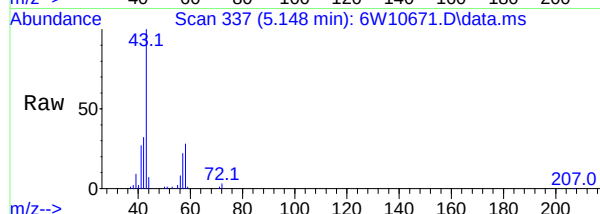
#22
Trichlorofluoromethane
Concen: 0.06 ppb(v)
RT: 5.289 min Scan# 360
Delta R.T. -0.000 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

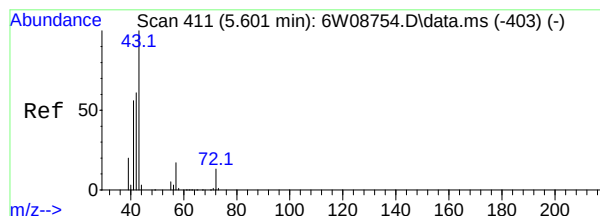
Tgt Ion: 101 Resp: 3099
Ion Ratio Lower Upper
101 100
103 63.1 45.4 84.4
105 0.0 7.3 13.7#



#23
Acetone
Concen: 4.56 ppb(v)
RT: 5.148 min Scan# 337
Delta R.T. 0.018 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

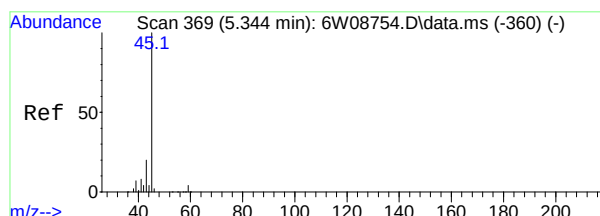
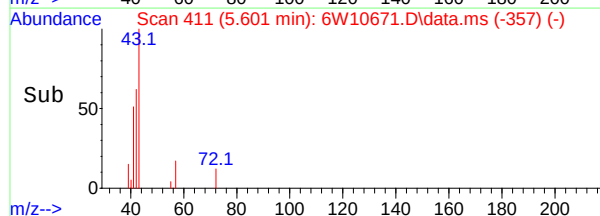
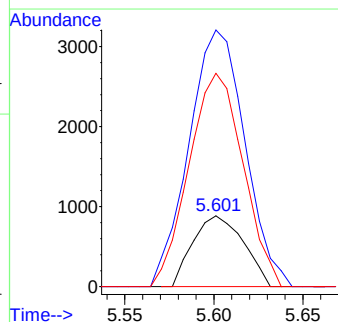
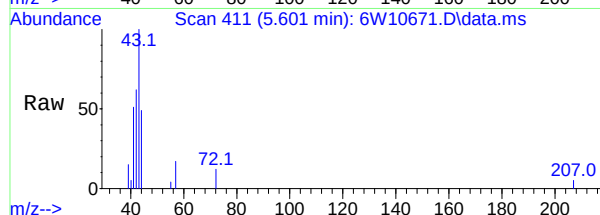
Tgt Ion: 58 Resp: 37228
Ion Ratio Lower Upper
58 100
43 361.1 230.1 427.3





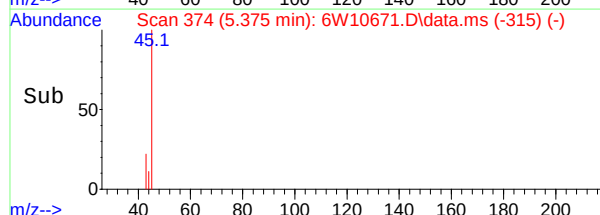
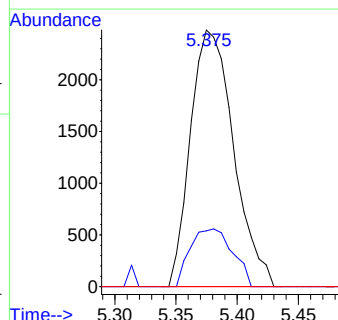
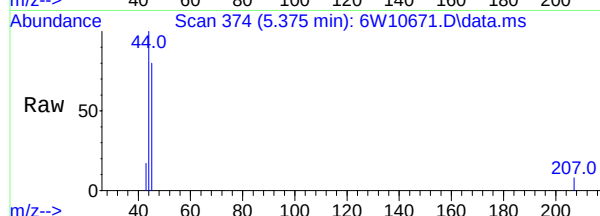
#24
Pentane
Concen: 0.42 ppb(v)
RT: 5.601 min Scan# 411
Delta R.T. -0.000 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

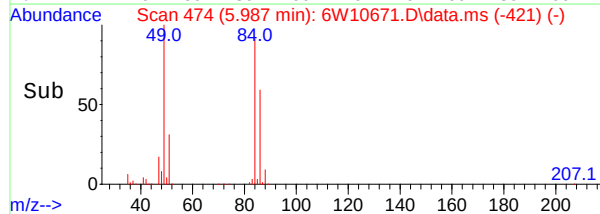
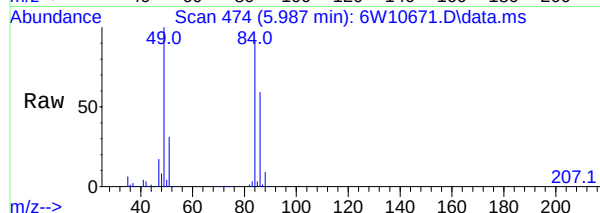
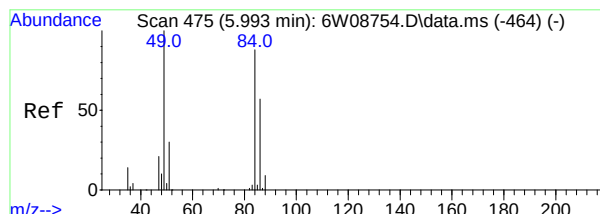
Tgt Ion: 57 Resp: 1752
Ion Ratio Lower Upper
57 100
42 361.9 250.8 465.8
41 300.7 232.7 432.1



#27
Isopropyl Alcohol
Concen: 0.20 ppb(v)
RT: 5.375 min Scan# 374
Delta R.T. 0.031 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

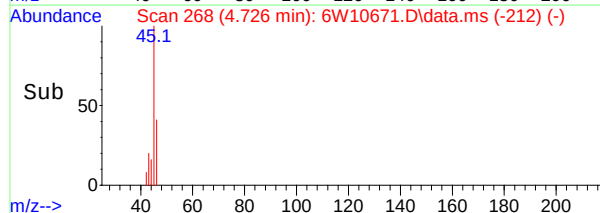
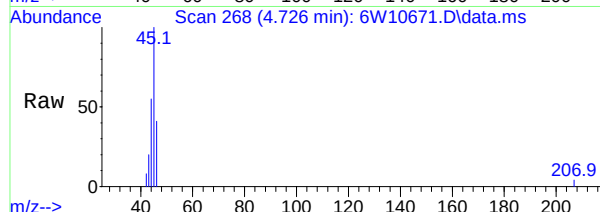
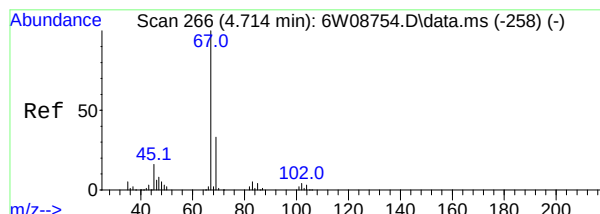
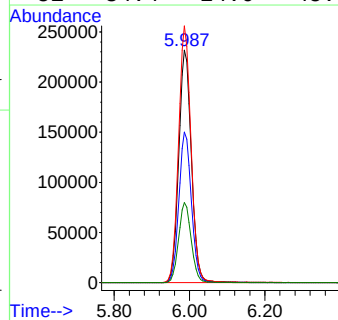
Tgt Ion: 45 Resp: 6074
Ion Ratio Lower Upper
45 100
43 21.7 14.1 26.1
59 0.0 2.8 5.2#





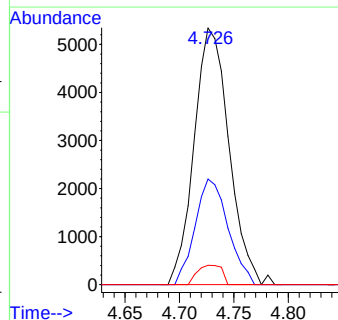
#30
Methylene Chloride
Concen: 29.47 ppb(v)
RT: 5.987 min Scan# 474
Delta R.T. -0.006 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

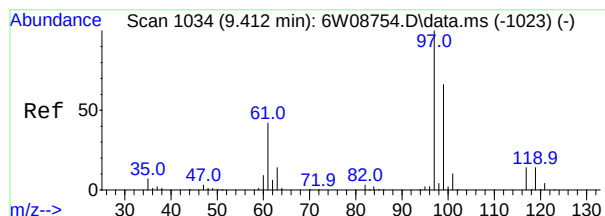
Tgt Ion: 84 Resp: 541914
Ion Ratio Lower Upper
84 100
86 64.8 45.5 84.5
49 110.5 79.5 147.7
51 34.4 24.6 45.6



#32
Ethanol
Concen: 1.73 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.012 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

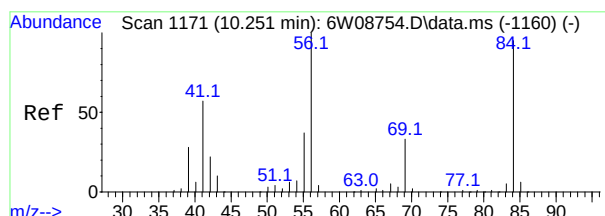
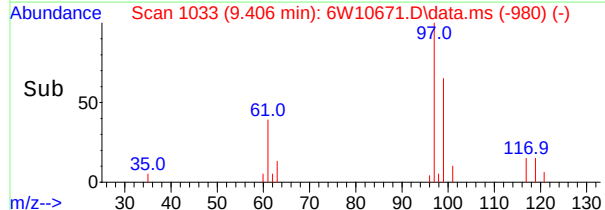
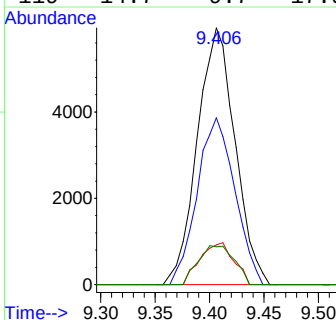
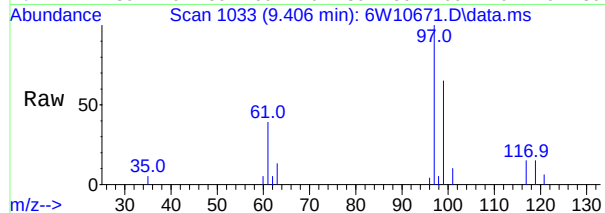
Tgt Ion: 45 Resp: 11962
Ion Ratio Lower Upper
45 100
46 41.1 26.9 49.9
42 7.6 6.0 11.2





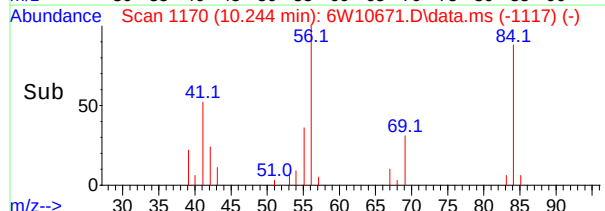
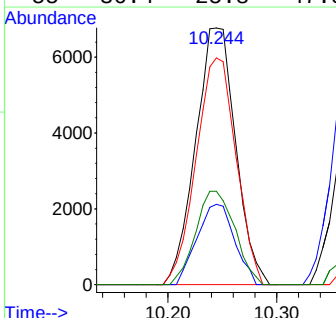
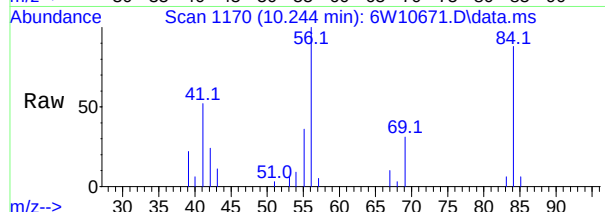
#49
1,1,1-Trichloroethane
Concen: 0.33 ppb(v)
RT: 9.406 min Scan# 1033
Delta R.T. -0.006 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

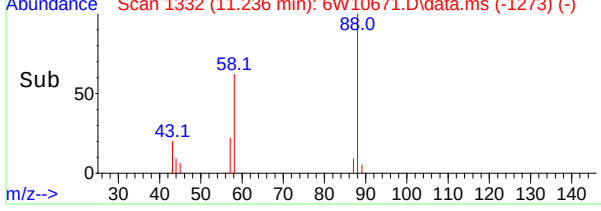
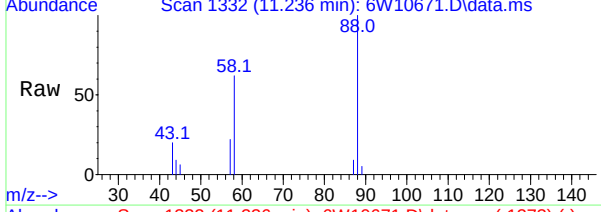
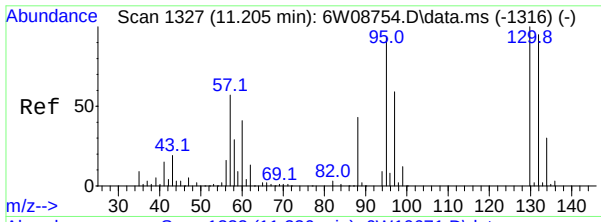
Tgt Ion	Resp	Lower	Upper
97	14382		
97	100		
99	65.0	46.1	85.5
117	15.5	9.8	18.2
119	14.7	9.7	17.9



#53
Cyclohexane
Concen: 0.63 ppb(v)
RT: 10.244 min Scan# 1170
Delta R.T. -0.006 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

Tgt Ion	Resp	Lower	Upper
56	17338		
56	100		
69	31.3	23.2	43.2
84	88.2	66.2	123.0
55	36.4	25.8	47.8

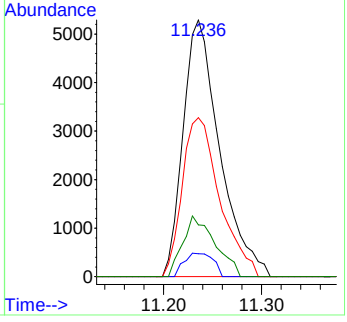




#63
1,4-Dioxane
Concen: 1.07 ppb(v)
RT: 11.236 min Scan# 1332
Delta R.T. 0.031 min
Lab File: 6W10671.D
Acq: 20 Feb 2019 4:30 pm

Tgt Ion: 88 Resp: 13743

Ion	Ratio	Lower	Upper
88	100		
87	8.9	7.1	13.3
58	61.9	46.7	86.7
43	20.2	31.4	58.2#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10660.D
 Acq On : 20 Feb 2019 4:04 am
 Operator : thomash
 Sample : jc82624-6
 Misc : MS32480,V6W424,400,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 12:39:32 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.171	130	193785	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	690329	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.903	82	270201	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.171	130	193785	10.00	ppb(v	0.00

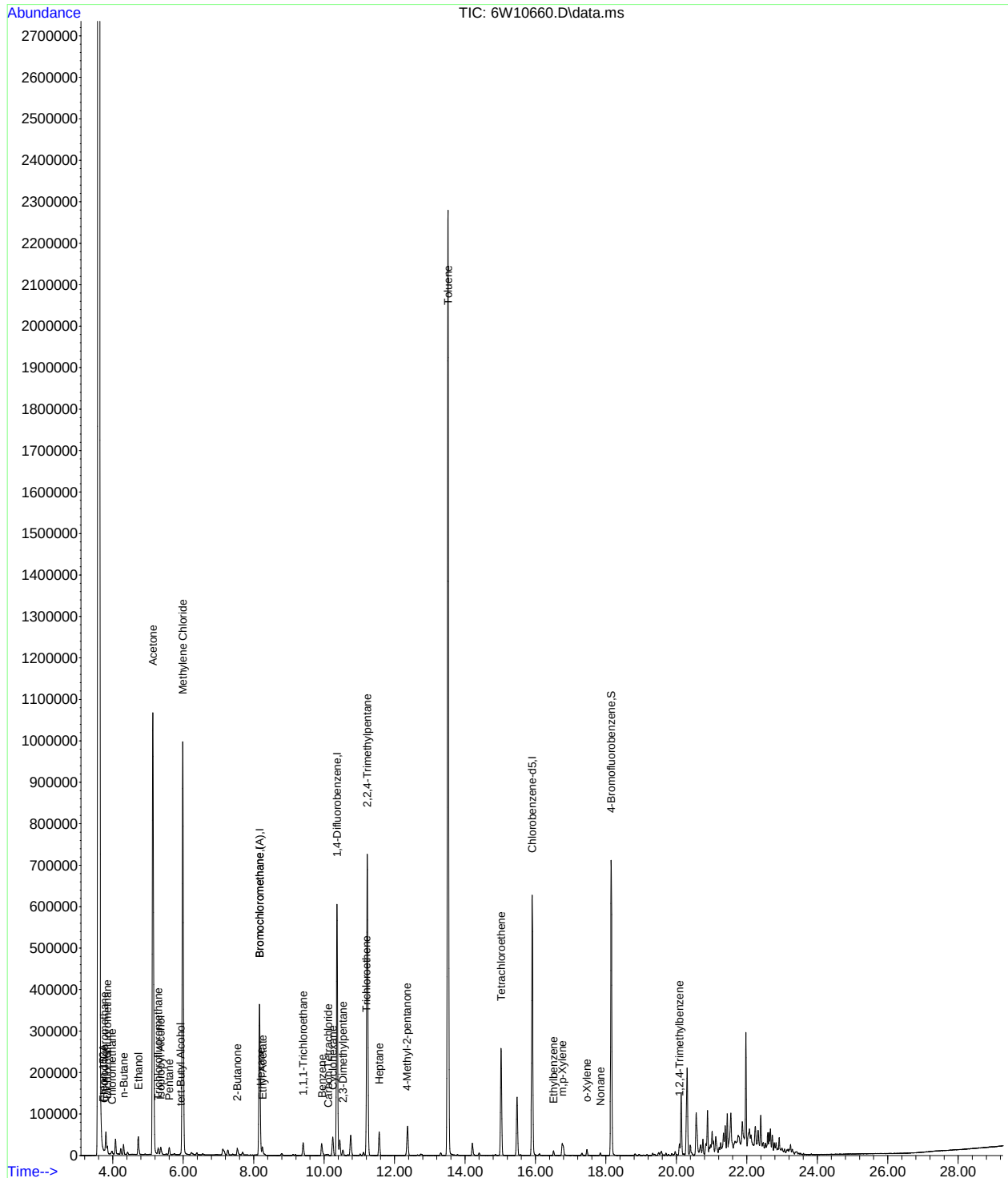
System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.149 95 339272 10.28 ppb(v -0.01
 Spiked Amount 10.000 Range 65 - 128 Recovery = 102.80%

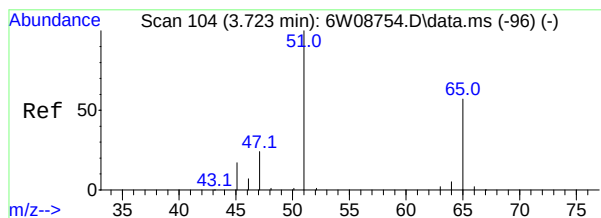
Target Compounds					Qvalue	
3) Freon 152A	3.729	65	1596	0.16	ppb(v	85
4) Chlorodifluoromethane	3.760	67	950	0.20	ppb(v	96
7) Dichlorodifluoromethane	3.845	85	19013	0.37	ppb(v	100
9) Chloromethane	3.980	50	7972	0.55	ppb(v	99
13) n-Butane	4.310	58	3566	1.19	ppb(v#	62
22) Trichlorofluoromethane	5.289	101	15574	0.30	ppb(v	99
23) Acetone	5.136	58	523743	64.84	ppb(v	73
24) Pentane	5.601	57	2088	0.51	ppb(v	88
27) Isopropyl Alcohol	5.363	45	27667	0.93	ppb(v	90
30) Methylene Chloride	5.987	84	610474	33.57	ppb(v	98
32) Ethanol	4.726	45	55489	8.13	ppb(v	96
36) tert-Butyl Alcohol	5.932	59	4243	0.12	ppb(v	91
40) 2-Butanone	7.534	72	7543	0.94	ppb(v	99
41) Hexane	8.201	57	3076	0.12	ppb(v#	44
44) Ethyl Acetate	8.250	61	4531	0.87	ppb(v	64
49) 1,1,1-Trichloroethane	9.406	97	25770	0.59	ppb(v	96
51) Benzene	9.939	78	6415	0.11	ppb(v	98
52) Carbon Tetrachloride	10.116	117	2610	0.06	ppb(v#	76
53) Cyclohexane	10.245	56	26626	0.98	ppb(v	96
54) 2,3-Dimethylpentane	10.532	71	2938	0.24	ppb(v	90
56) 2,2,4-Trimethylpentane	11.223	57	882748	10.19	ppb(v	93
57) Heptane	11.566	71	18482	0.96	ppb(v	96
58) Trichloroethene	11.199	95	1946	0.07	ppb(v	95
66) 4-Methyl-2-pentanone	12.349	58	3523	0.23	ppb(v	90
68) Toluene	13.518	91	2342987	32.25	ppb(v	99
74) Tetrachloroethene	15.023	166	117557	2.69	ppb(v	97
80) Ethylbenzene	16.515	91	12536	0.16	ppb(v	98
81) m,p-Xylene	16.760	91	39510	0.64	ppb(v	99
83) Nonane	17.843	43	3294	0.10	ppb(v#	91
84) o-Xylene	17.457	91	12913	0.21	ppb(v	98
97) 1,2,4-Trimethylbenzene	20.088	105	13896	0.23	ppb(v#	70

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

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10660.D
Acq On : 20 Feb 2019 4:04 am
Operator : thomash
Sample : jc82624-6
Misc : MS32480,V6W424,400,,,,,1
ALS Vial : 3 Sample Multiplier: 1

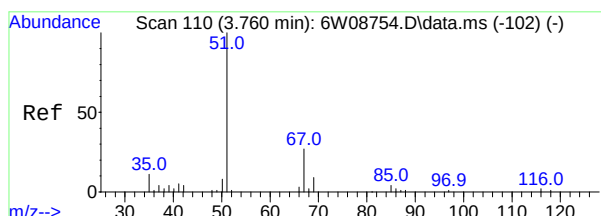
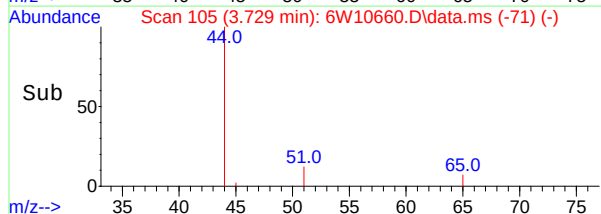
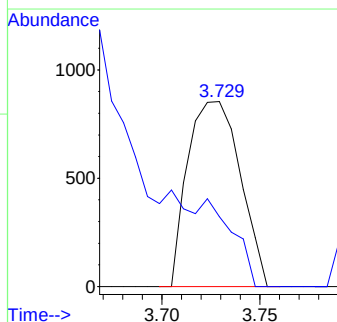
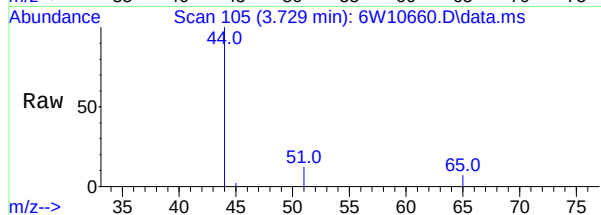
Quant Time: Feb 22 12:39:32 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





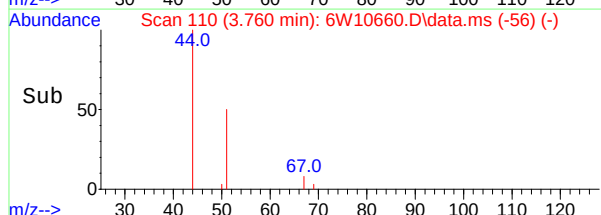
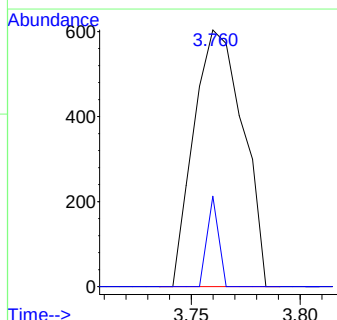
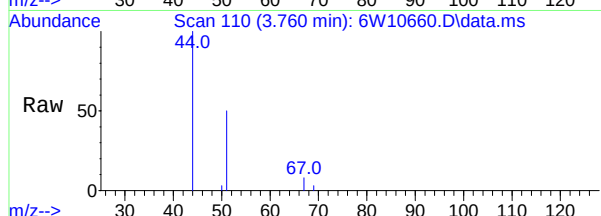
#3
 Freon 152A
 Concen: 0.16 ppb(v)
 RT: 3.729 min Scan# 105
 Delta R.T. 0.006 min
 Lab File: 6W10660.D
 Acq: 20 Feb 2019 4:04 am

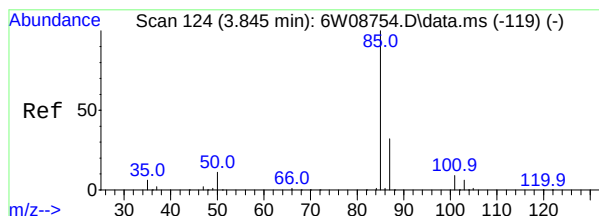
Tgt Ion: 65 Resp: 1596
 Ion Ratio Lower Upper
 65 100
 45 37.8 20.9 38.9



#4
 Chlorodifluoromethane
 Concen: 0.20 ppb(v)
 RT: 3.760 min Scan# 110
 Delta R.T. 0.000 min
 Lab File: 6W10660.D
 Acq: 20 Feb 2019 4:04 am

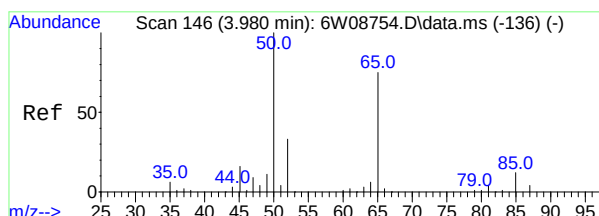
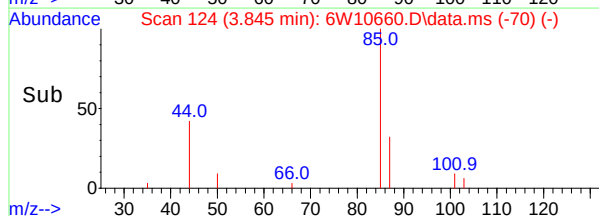
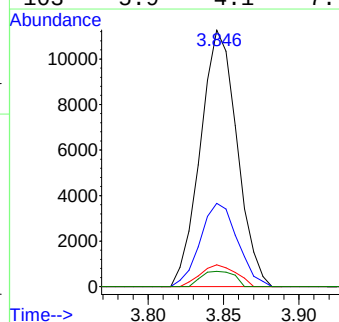
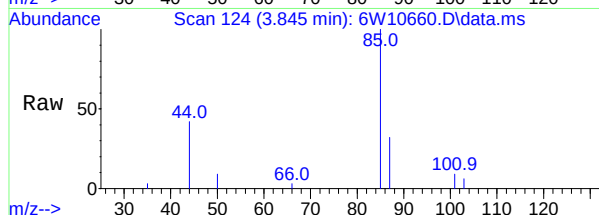
Tgt Ion: 67 Resp: 950
 Ion Ratio Lower Upper
 67 100
 69 35.3 23.0 42.6





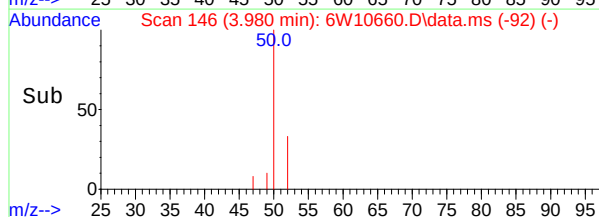
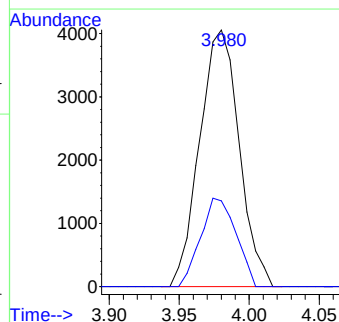
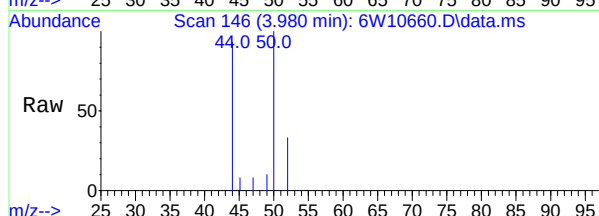
#7
 Dichlorodifluoromethane
 Concen: 0.37 ppb(v)
 RT: 3.845 min Scan# 124
 Delta R.T. 0.000 min
 Lab File: 6W10660.D
 Acq: 20 Feb 2019 4:04 am

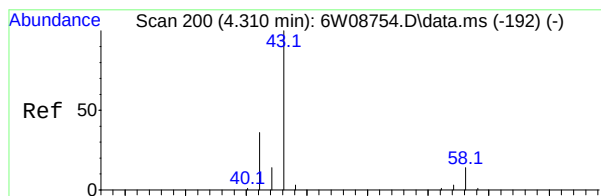
Tgt Ion: 85 Resp: 19013
 Ion Ratio Lower Upper
 85 100
 87 32.5 22.7 42.1
 101 8.5 6.3 11.7
 103 5.9 4.1 7.7



#9
 Chloromethane
 Concen: 0.55 ppb(v)
 RT: 3.980 min Scan# 146
 Delta R.T. 0.000 min
 Lab File: 6W10660.D
 Acq: 20 Feb 2019 4:04 am

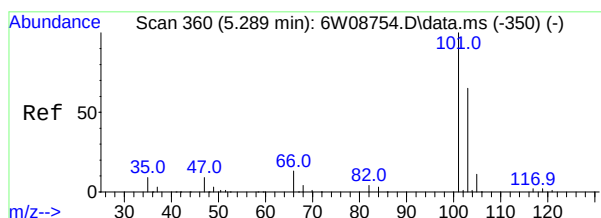
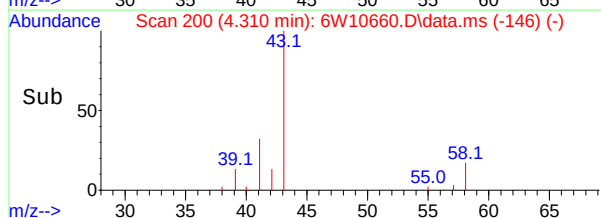
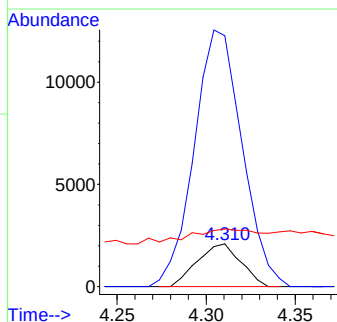
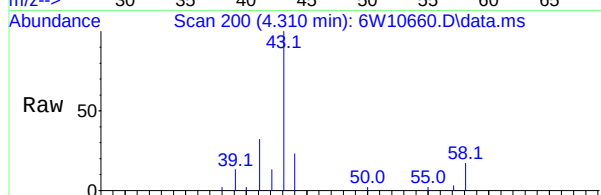
Tgt Ion: 50 Resp: 7972
 Ion Ratio Lower Upper
 50 100
 52 33.4 22.8 42.4





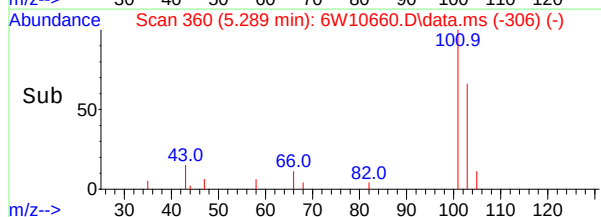
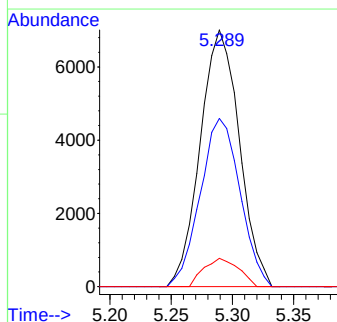
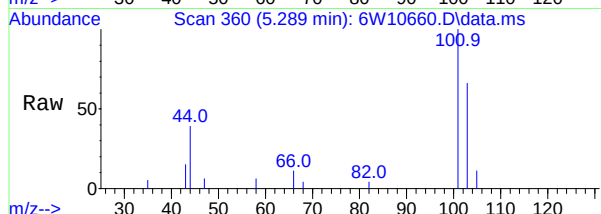
#13
n-Butane
Concen: 1.19 ppb(v)
RT: 4.310 min Scan# 200
Delta R.T. 0.000 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

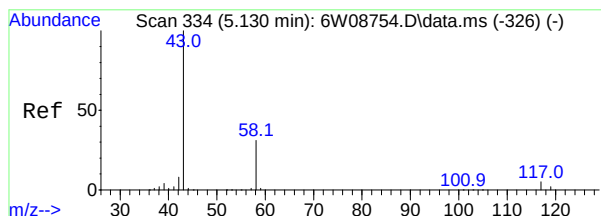
Tgt Ion: 58 Resp: 3566
Ion Ratio Lower Upper
58 100
43 585.2 485.0 900.6
44 134.4 19.2 35.6#



#22
Trichlorofluoromethane
Concen: 0.30 ppb(v)
RT: 5.289 min Scan# 360
Delta R.T. 0.000 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

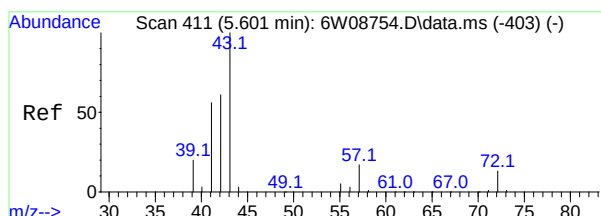
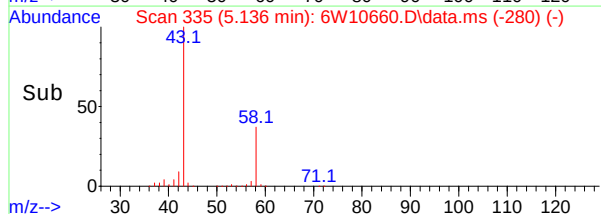
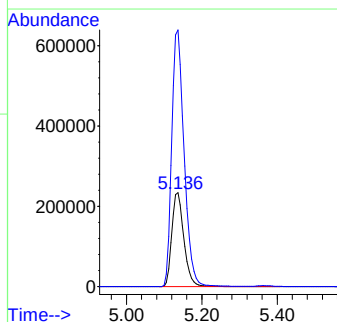
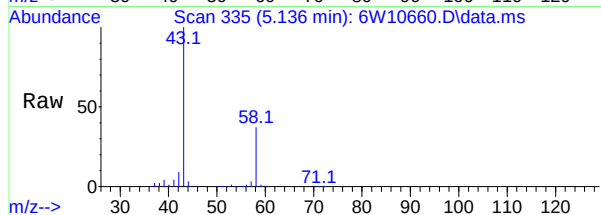
Tgt Ion: 101 Resp: 15574
Ion Ratio Lower Upper
101 100
103 65.5 45.4 84.4
105 11.0 7.3 13.7





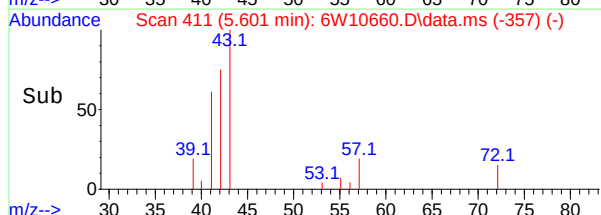
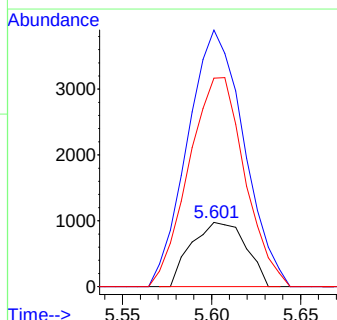
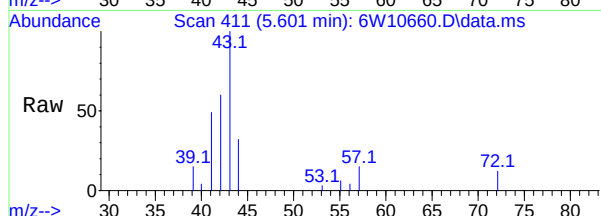
#23
Acetone
Concen: 64.84 ppb(v)
RT: 5.136 min Scan# 335
Delta R.T. 0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

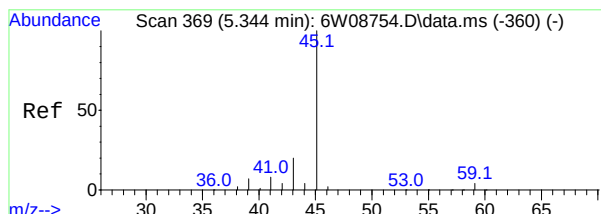
Tgt Ion: 58 Resp: 523743
Ion Ratio Lower Upper
58 100
43 273.0 230.1 427.3



#24
Pentane
Concen: 0.51 ppb(v)
RT: 5.601 min Scan# 411
Delta R.T. 0.000 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

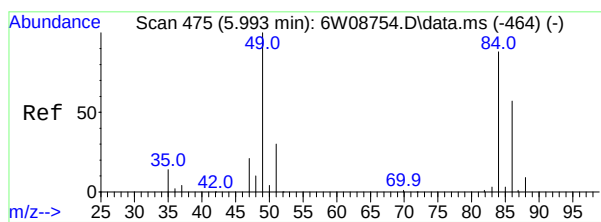
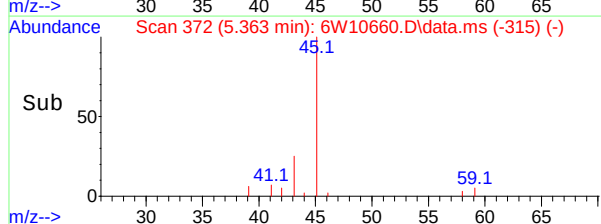
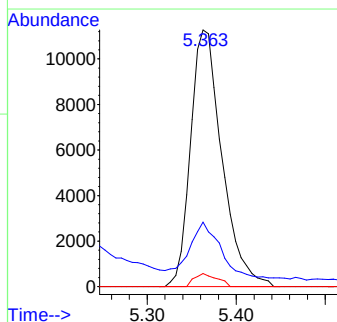
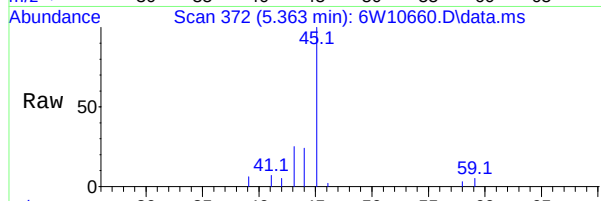
Tgt Ion: 57 Resp: 2088
Ion Ratio Lower Upper
57 100
42 399.6 250.8 465.8
41 324.6 232.7 432.1





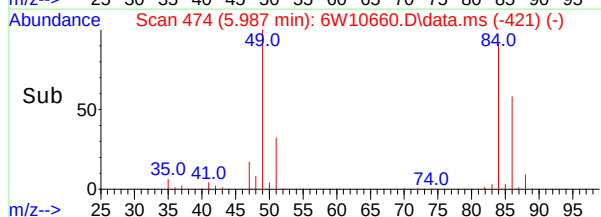
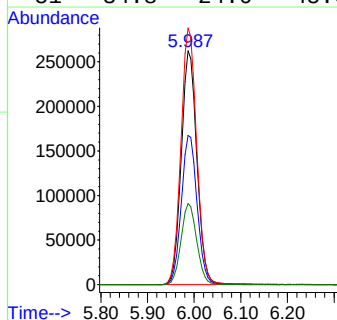
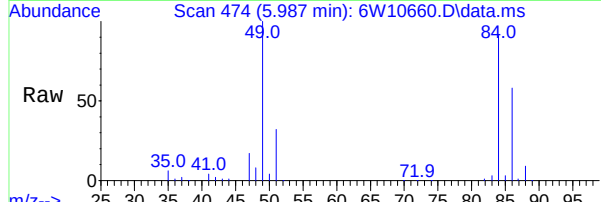
#27
Isopropyl Alcohol
Concen: 0.93 ppb(v)
RT: 5.363 min Scan# 372
Delta R.T. 0.019 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

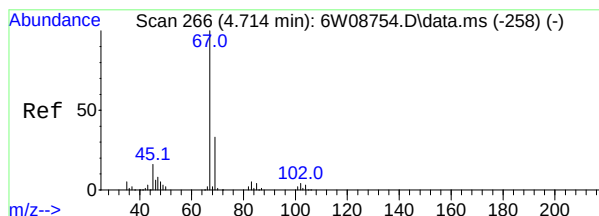
Tgt Ion: 45 Resp: 27667
Ion Ratio Lower Upper
45 100
43 25.1 14.1 26.1
59 5.1 2.8 5.2



#30
Methylene Chloride
Concen: 33.57 ppb(v)
RT: 5.987 min Scan# 474
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

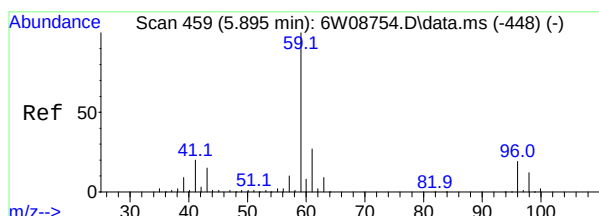
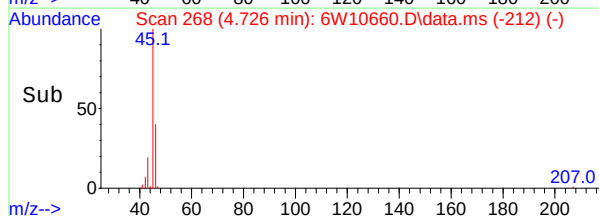
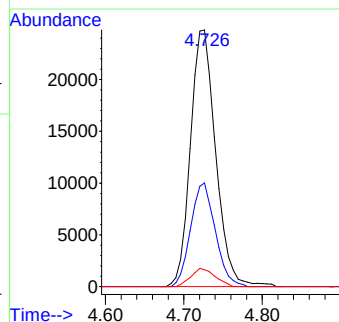
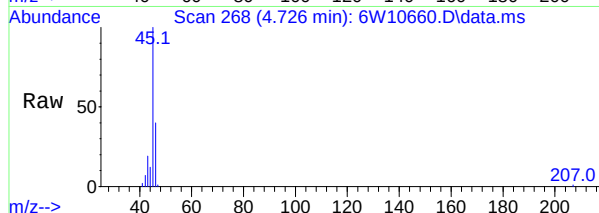
Tgt Ion: 84 Resp: 610474
Ion Ratio Lower Upper
84 100
86 63.9 45.5 84.5
49 109.9 79.5 147.7
51 34.8 24.6 45.6





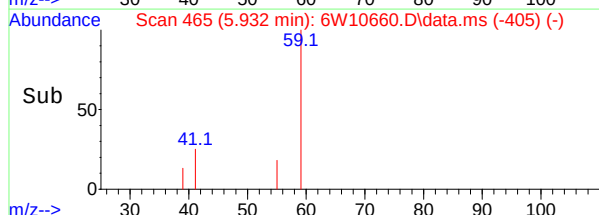
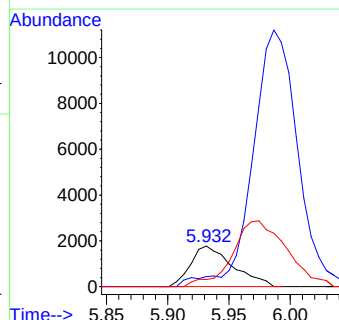
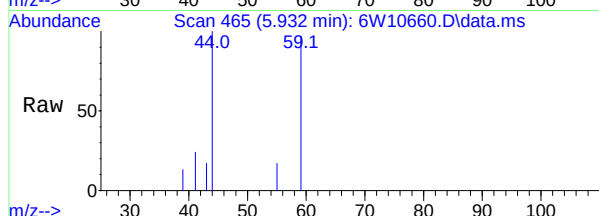
#32
Ethanol
Concen: 8.13 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

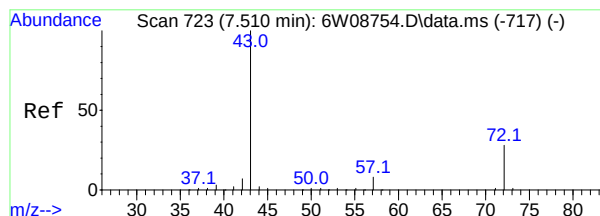
Tgt Ion: 45 Resp: 55489
Ion Ratio Lower Upper
45 100
46 40.4 26.9 49.9
42 6.6 6.0 11.2



#36
tert-Butyl Alcohol
Concen: 0.12 ppb(v)
RT: 5.932 min Scan# 465
Delta R.T. 0.037 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

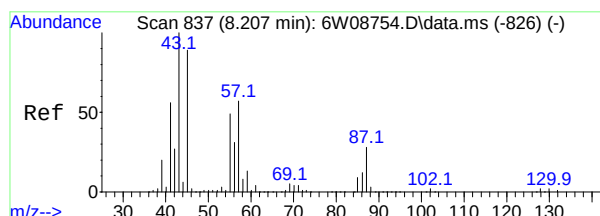
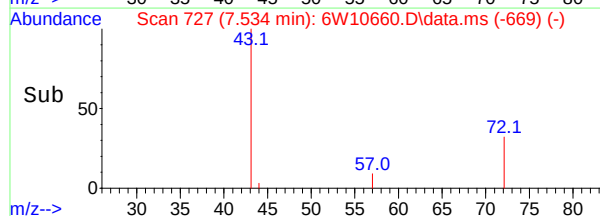
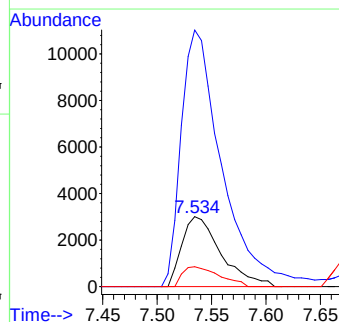
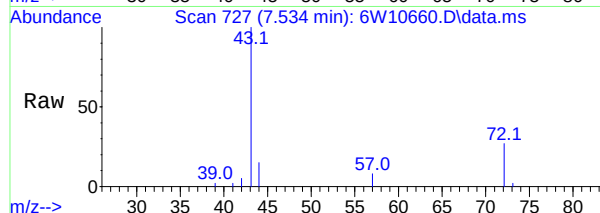
Tgt Ion: 59 Resp: 4243
Ion Ratio Lower Upper
59 100
41 24.7 13.9 25.7
43 17.6 10.5 19.5





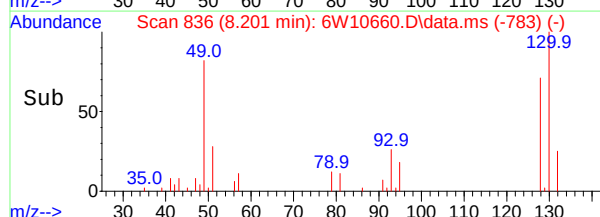
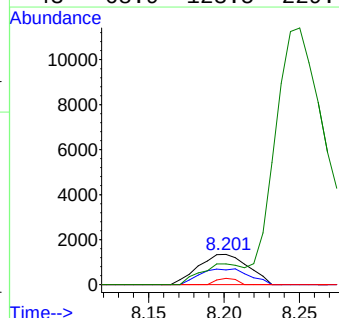
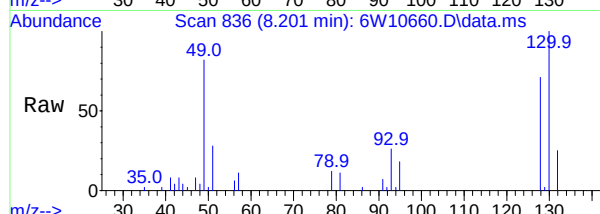
#40
2-Butanone
Concen: 0.94 ppb(v)
RT: 7.534 min Scan# 727
Delta R.T. 0.025 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

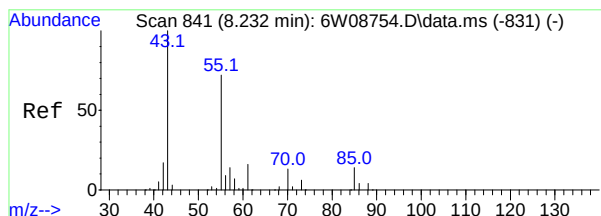
Tgt Ion: 72 Resp: 7543
Ion Ratio Lower Upper
72 100
43 366.4 255.4 474.4
57 28.4 20.7 38.5



#41
Hexane
Concen: 0.12 ppb(v)
RT: 8.201 min Scan# 836
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

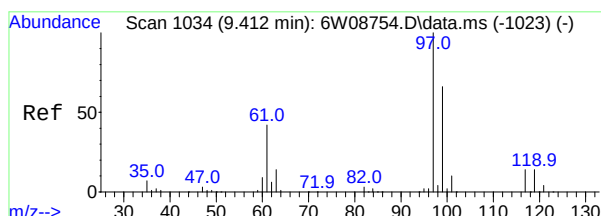
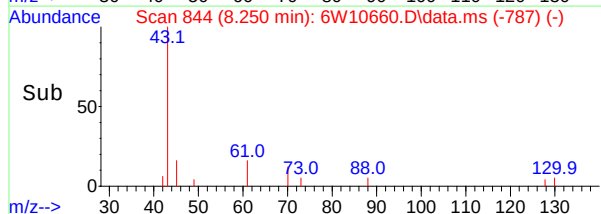
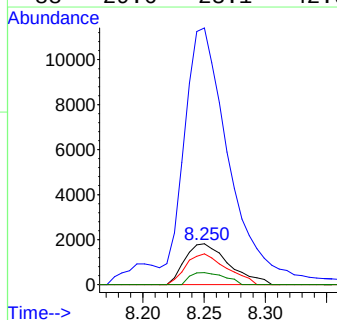
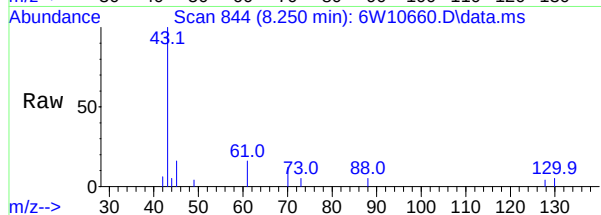
Tgt Ion: 57 Resp: 3076
Ion Ratio Lower Upper
57 100
56 49.2 37.7 70.1
86 21.2 14.4 26.8
43 68.9 123.5 229.4#





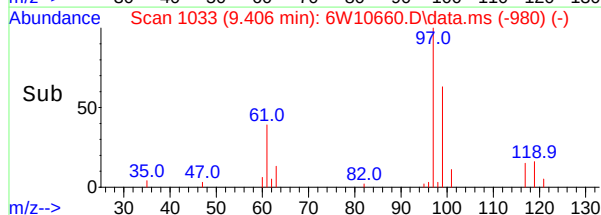
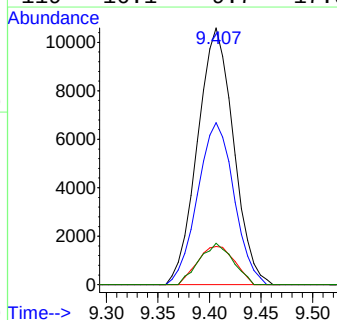
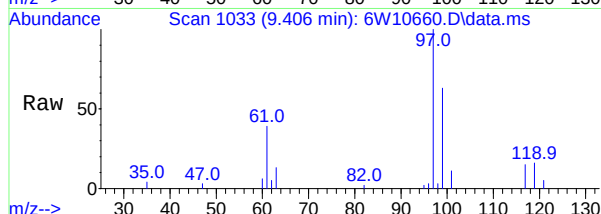
#44
Ethyl Acetate
Concen: 0.87 ppb(v)
RT: 8.250 min Scan# 844
Delta R.T. 0.018 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

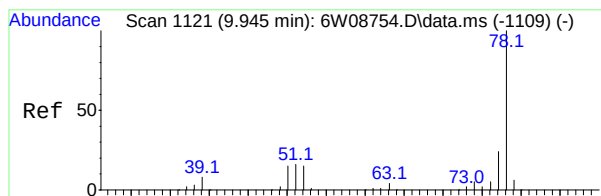
Tgt Ion: 61 Resp: 4531
Ion Ratio Lower Upper
61 100
43 629.9 546.6 1015.0
70 75.3 57.2 106.2
88 29.6 23.1 42.9



#49
1,1,1-Trichloroethane
Concen: 0.59 ppb(v)
RT: 9.406 min Scan# 1033
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

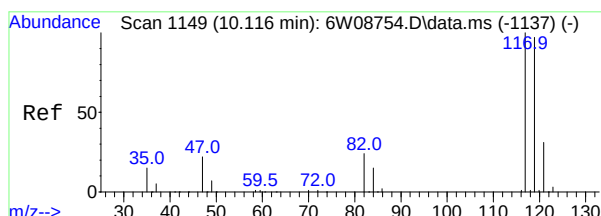
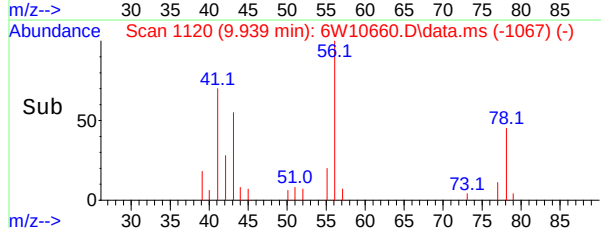
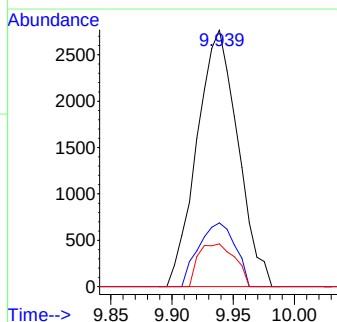
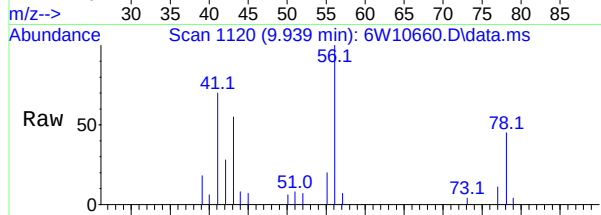
Tgt Ion: 97 Resp: 25770
Ion Ratio Lower Upper
97 100
99 63.0 46.1 85.5
117 14.8 9.8 18.2
119 16.1 9.7 17.9





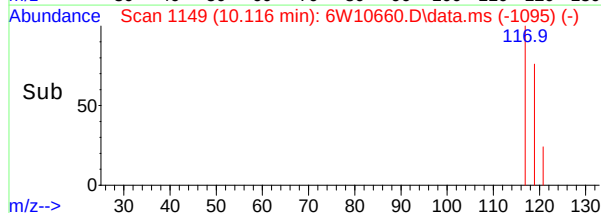
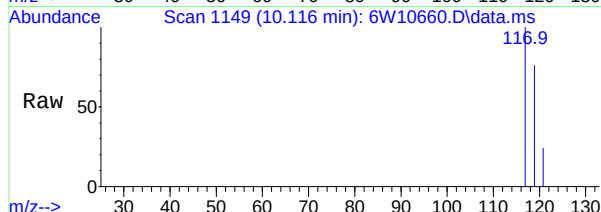
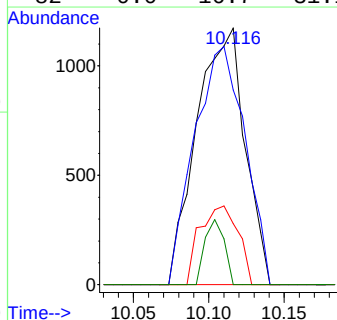
#51
Benzene
Concen: 0.11 ppb(v)
RT: 9.939 min Scan# 1120
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

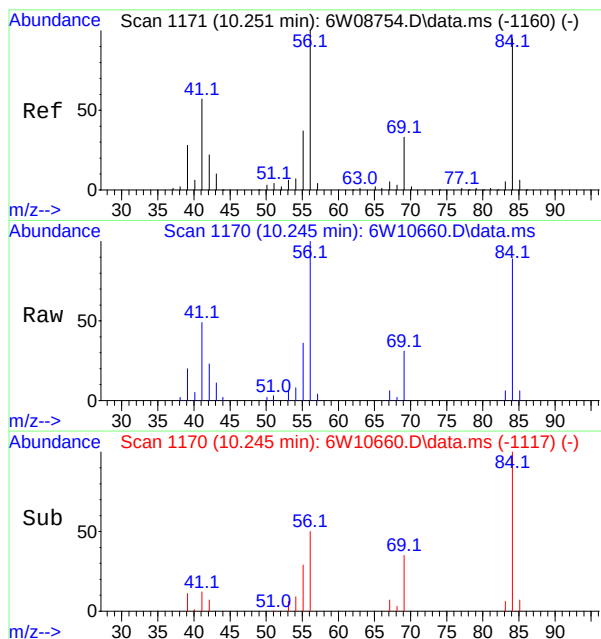
Tgt Ion: 78 Resp: 6415
Ion Ratio Lower Upper
78 100
77 24.8 16.7 30.9
51 16.6 11.3 21.1



#52
Carbon Tetrachloride
Concen: 0.06 ppb(v)
RT: 10.116 min Scan# 1149
Delta R.T. 0.000 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

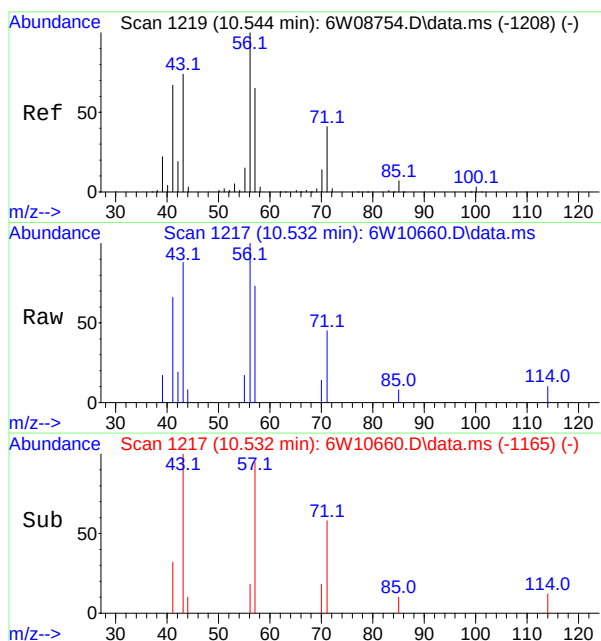
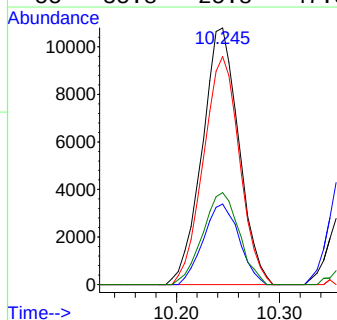
Tgt Ion: 117 Resp: 2610
Ion Ratio Lower Upper
117 100
119 75.8 67.8 125.8
121 23.8 21.6 40.2
82 0.0 16.7 31.1#





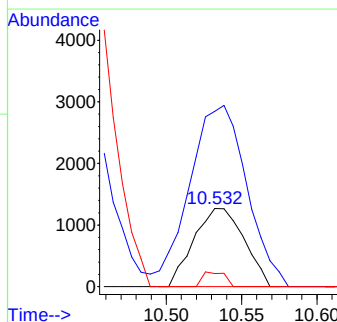
#53
Cyclohexane
Concen: 0.98 ppb(v)
RT: 10.245 min Scan# 1170
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

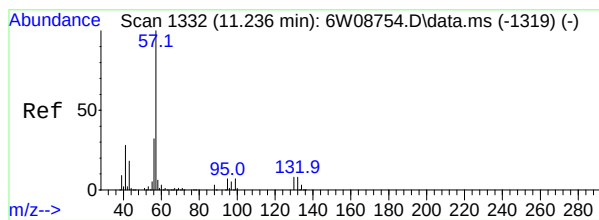
Tgt Ion: 56 Resp: 26626
Ion Ratio Lower Upper
56 100
69 31.4 23.2 43.2
84 88.8 66.2 123.0
55 35.8 25.8 47.8



#54
2,3-Dimethylpentane
Concen: 0.24 ppb(v)
RT: 10.532 min Scan# 1217
Delta R.T. -0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

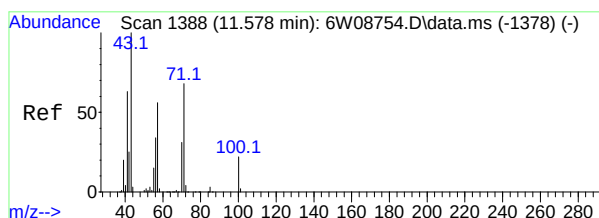
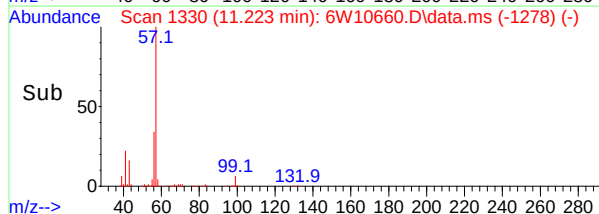
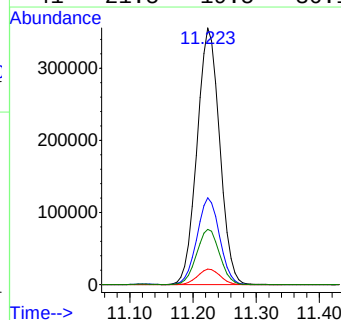
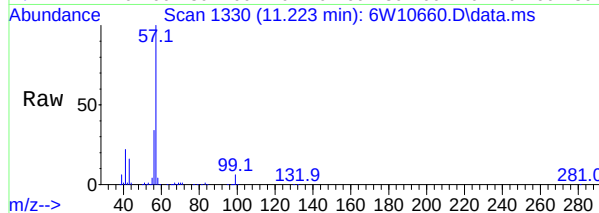
Tgt Ion: 71 Resp: 2938
Ion Ratio Lower Upper
71 100
56 224.2 169.5 314.9
85 16.9 12.1 22.5





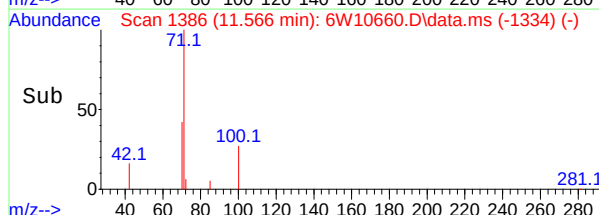
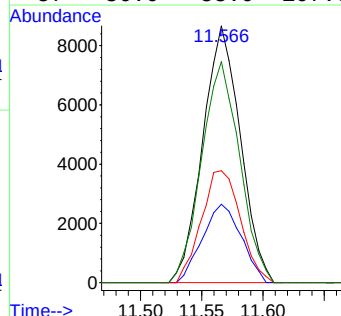
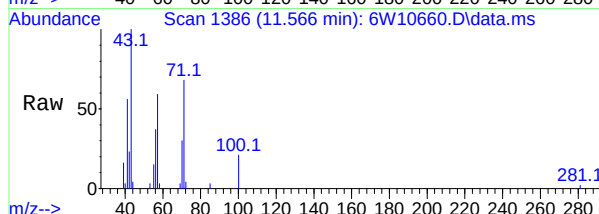
#56
2,2,4-Trimethylpentane
Concen: 10.19 ppb(v)
RT: 11.223 min Scan# 1330
Delta R.T. -0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

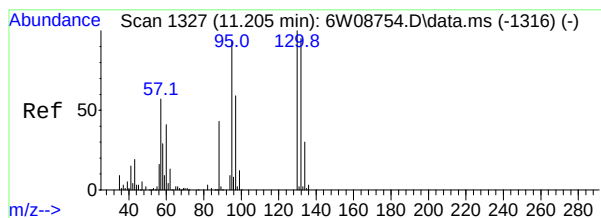
Tgt Ion:	57	Resp:	882748
Ion Ratio	Lower	Upper	
57	100		
56	33.8	22.6	42.0
99	6.1	5.2	9.6
41	21.5	19.5	36.1



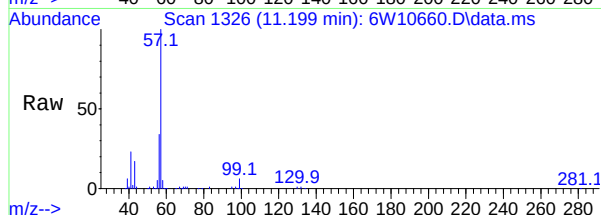
#57
Heptane
Concen: 0.96 ppb(v)
RT: 11.566 min Scan# 1386
Delta R.T. -0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

Tgt Ion:	71	Resp:	18482
Ion Ratio	Lower	Upper	
71	100		
100	30.5	23.2	43.2
70	43.6	32.1	59.7
57	86.0	58.0	107.6

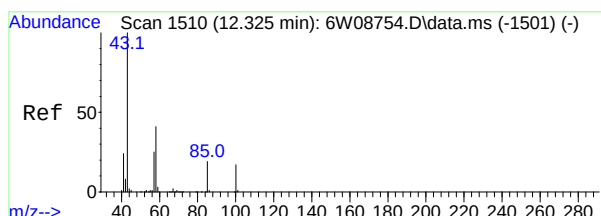
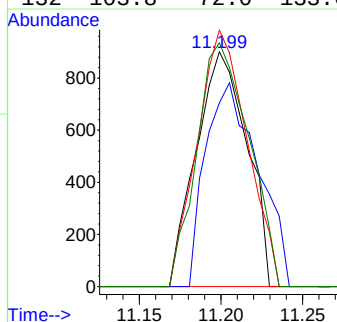
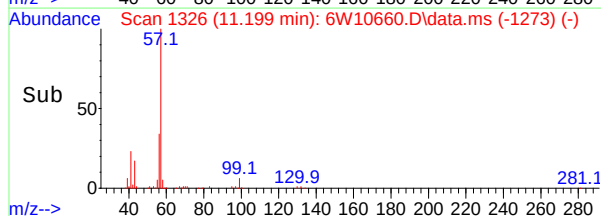




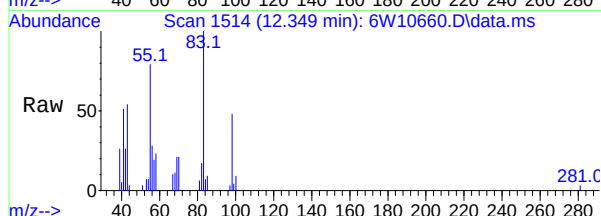
#58
Trichloroethene
Concen: 0.07 ppb(v)
RT: 11.199 min Scan# 1326
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am



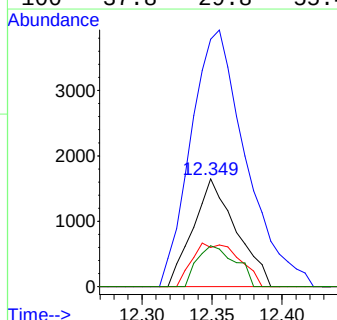
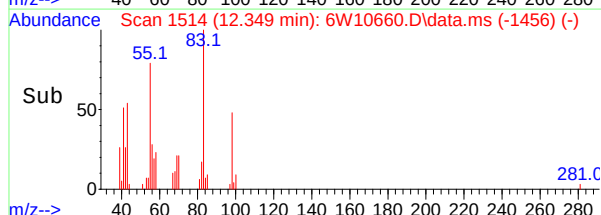
Tgt Ion: 95 Resp: 1946
Ion Ratio Lower Upper
95 100
97 78.2 44.3 82.3
130 109.3 75.7 140.5
132 103.8 72.0 133.6

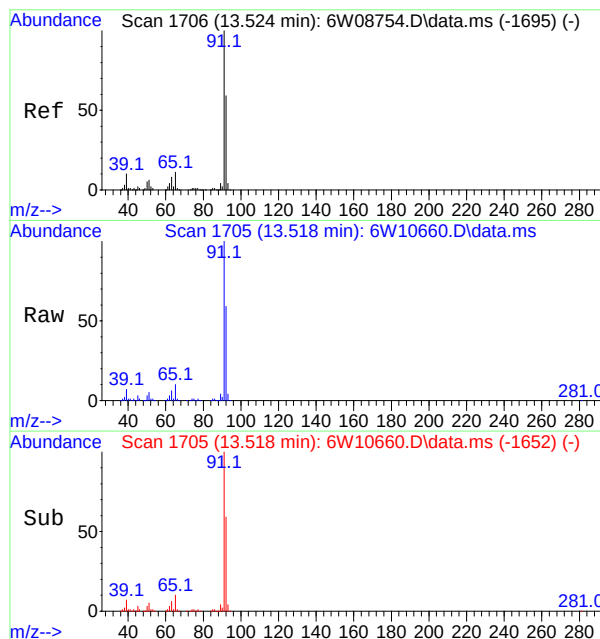


#66
4-Methyl-2-pentanone
Concen: 0.23 ppb(v)
RT: 12.349 min Scan# 1514
Delta R.T. 0.025 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am



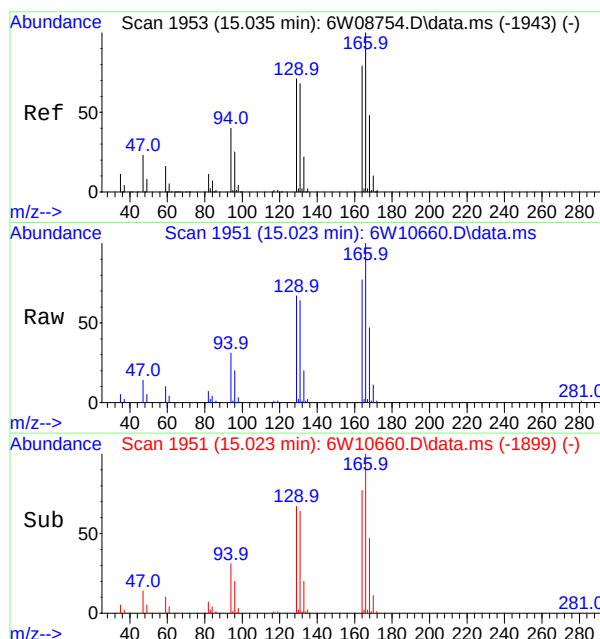
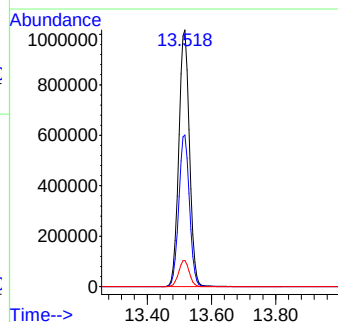
Tgt Ion: 58 Resp: 3523
Ion Ratio Lower Upper
58 100
43 229.3 171.4 318.4
85 36.4 34.3 63.7
100 37.8 29.8 55.4





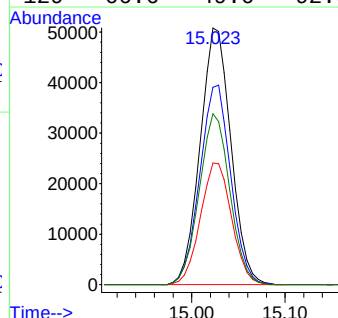
#68
Toluene
Concen: 32.25 ppb(v)
RT: 13.518 min Scan# 1705
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

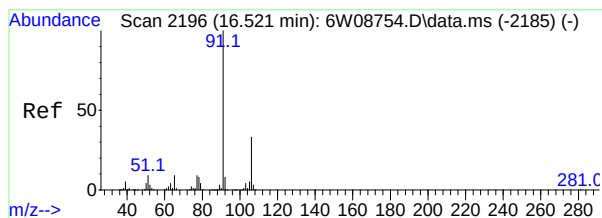
Tgt Ion: 91 Resp: 2342987
Ion Ratio Lower Upper
91 100
92 59.0 41.4 77.0
65 10.2 7.9 14.7



#74
Tetrachloroethene
Concen: 2.69 ppb(v)
RT: 15.023 min Scan# 1951
Delta R.T. -0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

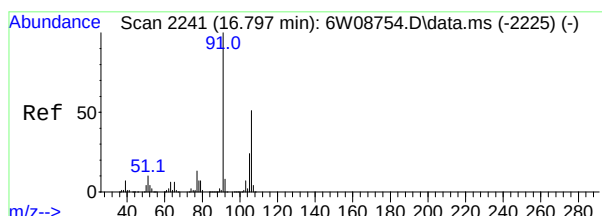
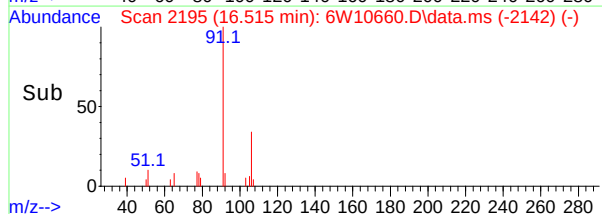
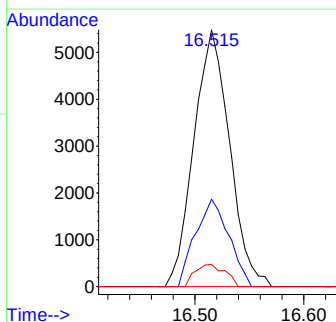
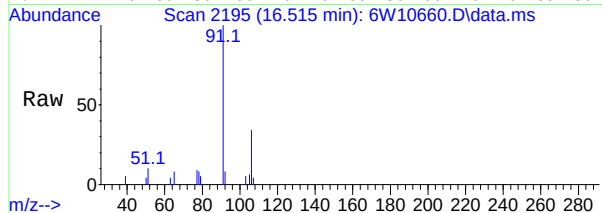
Tgt Ion: 166 Resp: 117557
Ion Ratio Lower Upper
166 100
164 76.9 55.1 102.3
168 47.4 33.6 62.4
129 66.6 49.6 92.0





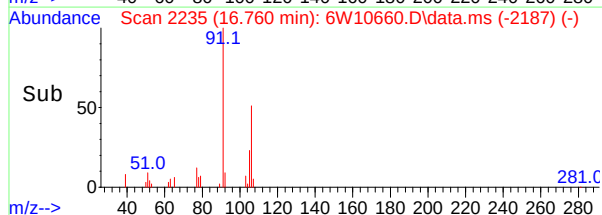
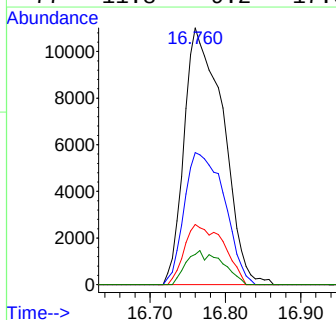
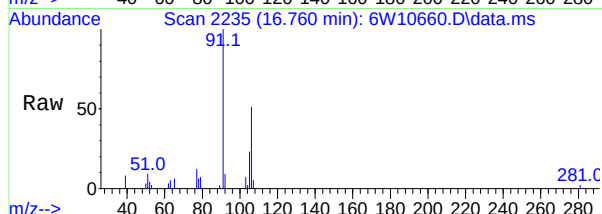
#80
Ethylbenzene
Concen: 0.16 ppb(v)
RT: 16.515 min Scan# 2195
Delta R.T. -0.006 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

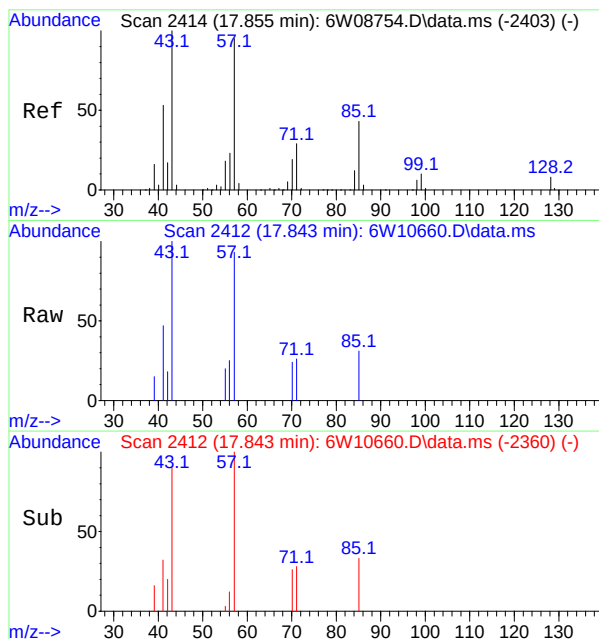
Tgt Ion:	91	Resp:	12536
Ion Ratio	Lower	Upper	
91	100		
106	34.0	23.0	42.6
77	8.8	6.1	11.3



#81
m,p-Xylene
Concen: 0.64 ppb(v)
RT: 16.760 min Scan# 2235
Delta R.T. -0.037 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

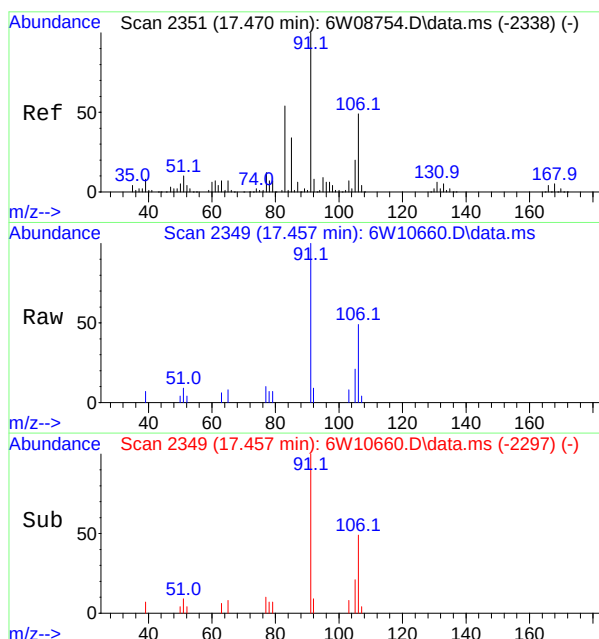
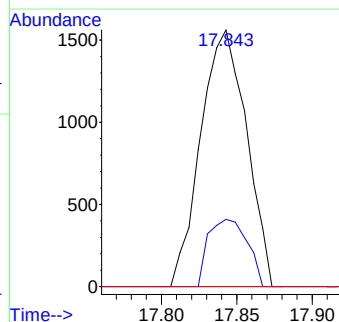
Tgt Ion:	91	Resp:	39510
Ion Ratio	Lower	Upper	
91	100		
106	51.4	35.9	66.7
105	23.4	16.7	31.1
77	11.8	9.2	17.0





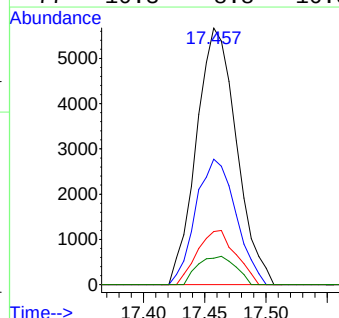
#83
Nonane
Concen: 0.10 ppb(v)
RT: 17.843 min Scan# 2412
Delta R.T. -0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

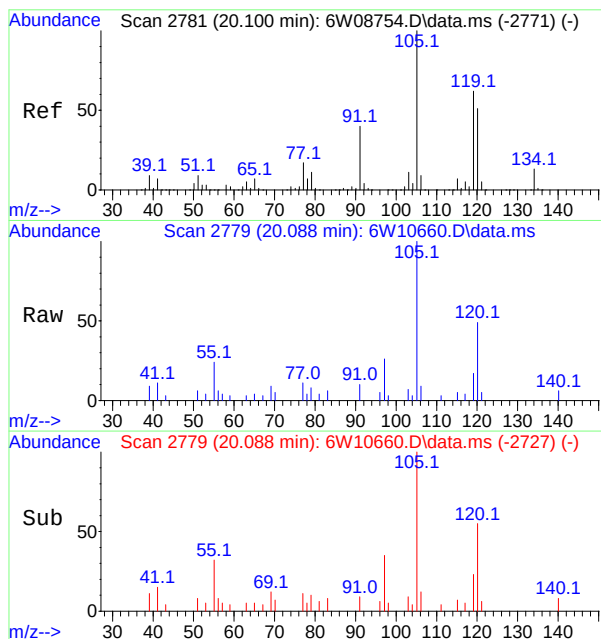
Tgt Ion: 43 Resp: 3294
Ion Ratio Lower Upper
43 100
71 26.2 20.2 37.6
128 0.0 5.9 10.9#



#84
o-Xylene
Concen: 0.21 ppb(v)
RT: 17.457 min Scan# 2349
Delta R.T. -0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

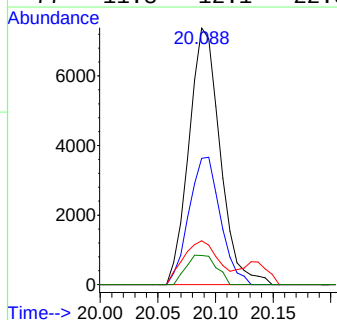
Tgt Ion: 91 Resp: 12913
Ion Ratio Lower Upper
91 100
106 48.9 34.5 64.1
105 20.7 14.0 26.0
77 10.3 8.8 16.3





#97
1,2,4-Trimethylbenzene
Concen: 0.23 ppb(v)
RT: 20.088 min Scan# 2779
Delta R.T. -0.012 min
Lab File: 6W10660.D
Acq: 20 Feb 2019 4:04 am

Tgt Ion:	105	Resp:	13896
Ion Ratio	Lower	Upper	
105	100		
120	49.2	35.8	66.6
119	17.1	43.2	80.2#
77	11.3	12.1	22.5#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10672.D
 Acq On : 20 Feb 2019 5:17 pm
 Operator : thomash
 Sample : JC82624-6
 Misc : MS32480,V6W425,100,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:57:18 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

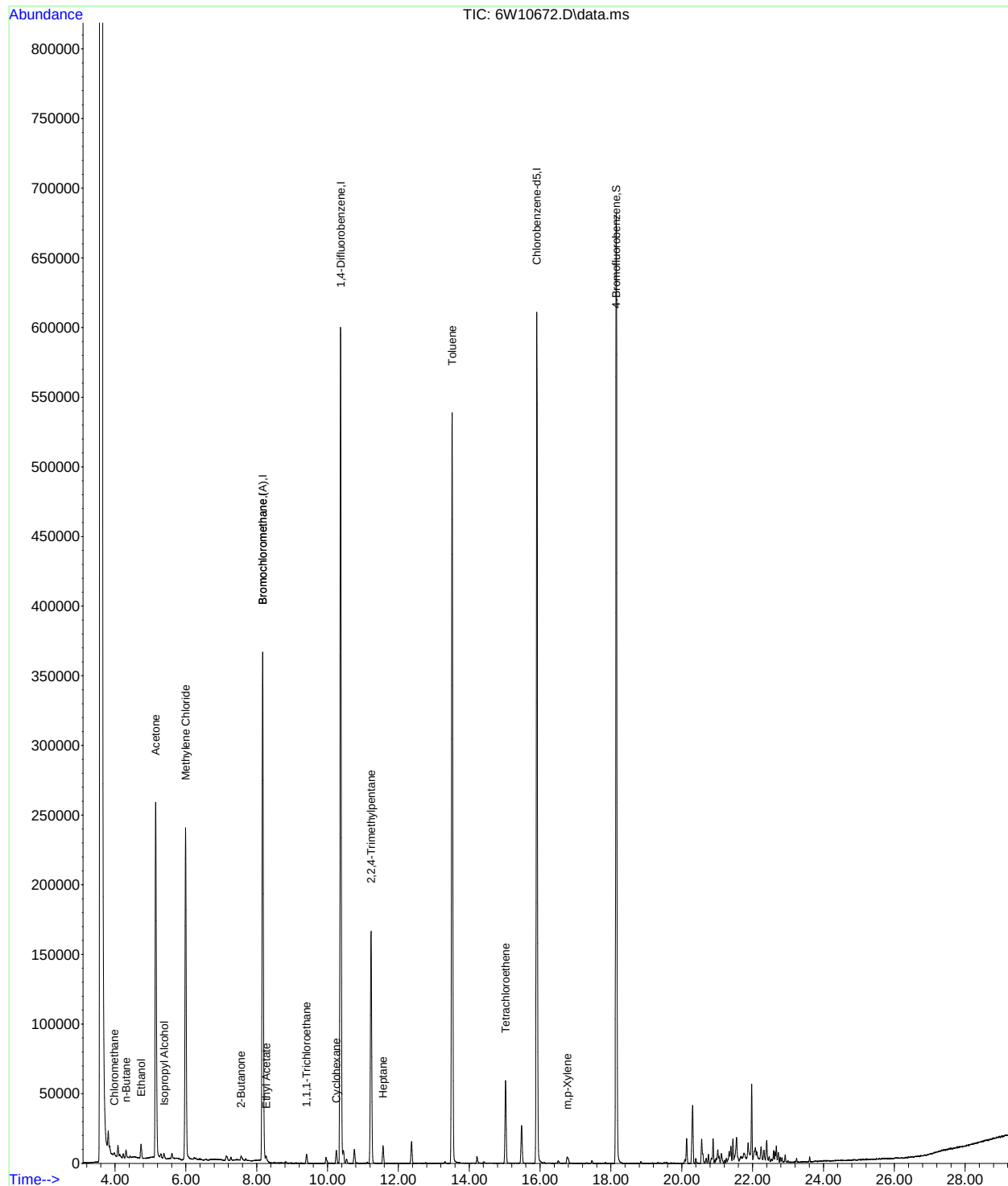
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.171	130	196361	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	693086	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.910	82	260371	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.171	130	196361	10.00	ppb(v	0.00
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	323760	10.19	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	101.90%
Target Compounds						
					Qvalue	
9) Chloromethane	3.980	50	1808	0.12	ppb(v	96
13) n-Butane	4.310	58	816	0.27	ppb(v#	20
23) Acetone	5.142	58	122380	14.95	ppb(v	77
27) Isopropyl Alcohol	5.387	45	6873	0.23	ppb(v#	88
30) Methylene Chloride	5.993	84	146318	7.94	ppb(v	98
32) Ethanol	4.732	45	13445	1.95	ppb(v	98
40) 2-Butanone	7.559	72	1377	0.17	ppb(v#	85
44) Ethyl Acetate	8.268	61	633	0.12	ppb(v#	51
49) 1,1,1-Trichloroethane	9.406	97	6121	0.14	ppb(v	92
53) Cyclohexane	10.245	56	5851	0.21	ppb(v	96
56) 2,2,4-Trimethylpentane	11.229	57	205135	2.36	ppb(v	92
57) Heptane	11.566	71	4104	0.21	ppb(v	96
68) Toluene	13.517	91	553406	7.59	ppb(v	99
74) Tetrachloroethene	15.029	166	28339	0.65	ppb(v	93
81) m,p-Xylene	16.766	91	8189	0.14	ppb(v	94

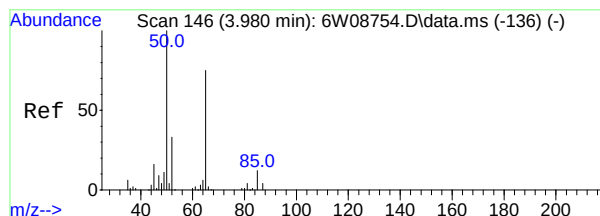
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10672.D
Acq On : 20 Feb 2019 5:17 pm
Operator : thomash
Sample : JC82624-6
Misc : MS32480,V6W425,100,,,1
ALS Vial : 7 Sample Multiplier: 1

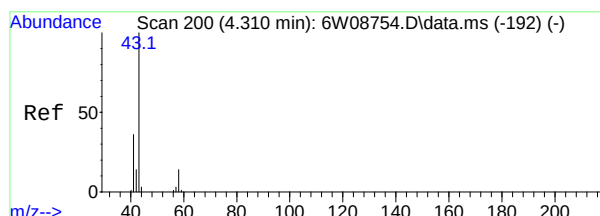
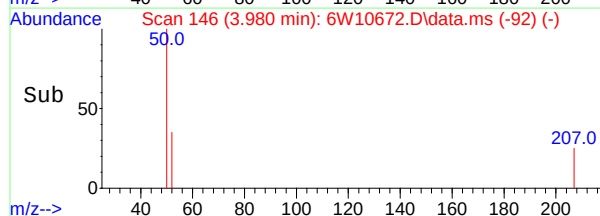
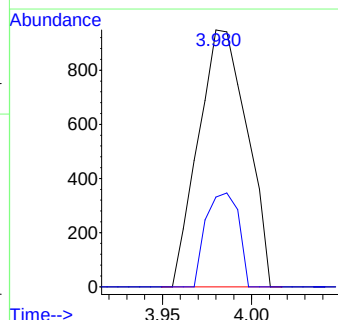
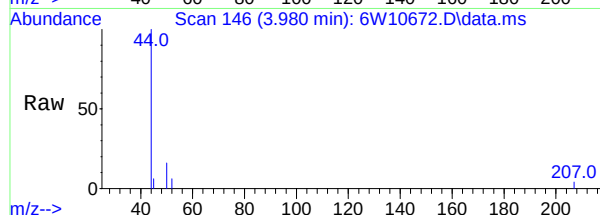
Quant Time: Feb 22 12:57:18 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





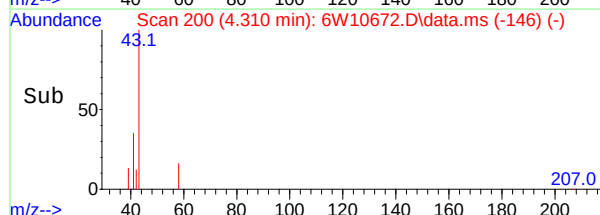
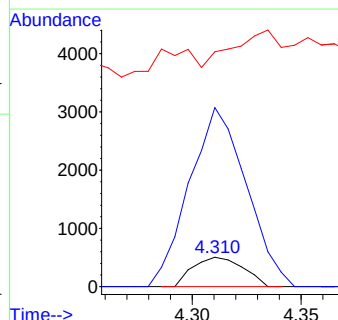
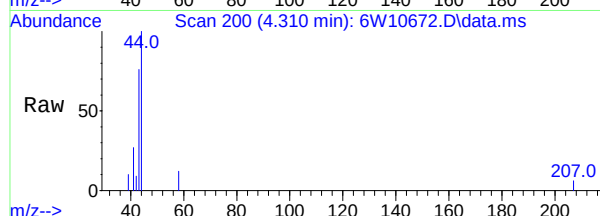
#9
Chloromethane
Concen: 0.12 ppb(v)
RT: 3.980 min Scan# 146
Delta R.T. 0.000 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

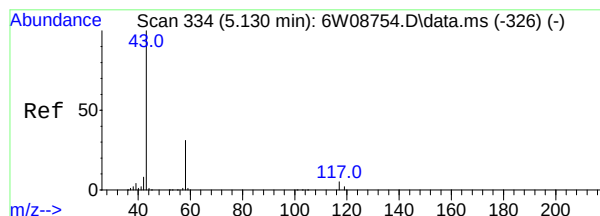
Tgt Ion: 50 Resp: 1808
Ion Ratio Lower Upper
50 100
52 34.9 22.8 42.4



#13
n-Butane
Concen: 0.27 ppb(v)
RT: 4.310 min Scan# 200
Delta R.T. 0.000 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

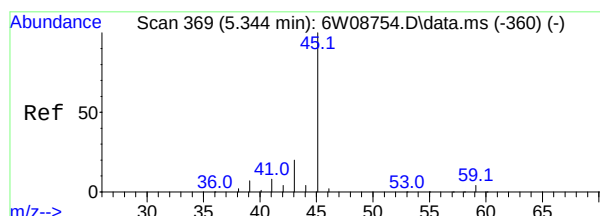
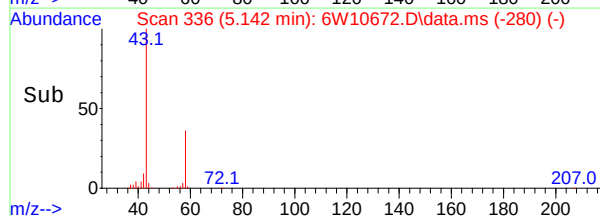
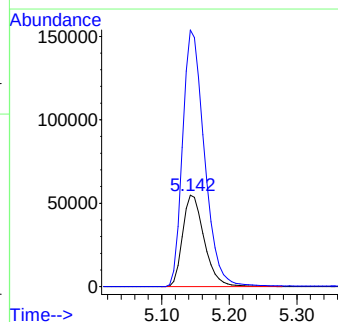
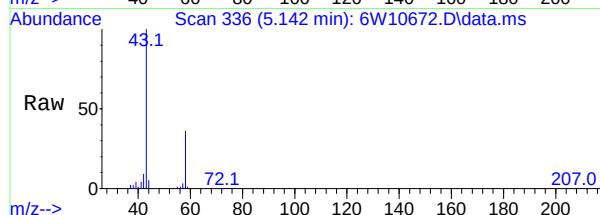
Tgt Ion: 58 Resp: 816
Ion Ratio Lower Upper
58 100
43 609.9 485.0 900.6
44 800.4 19.2 35.6#





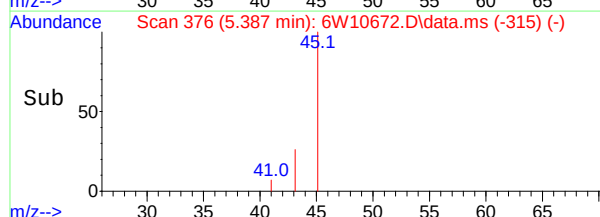
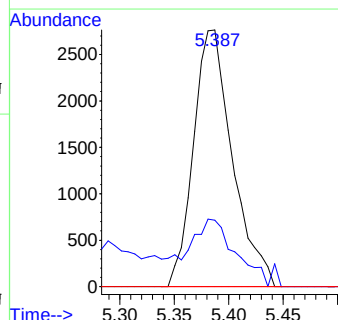
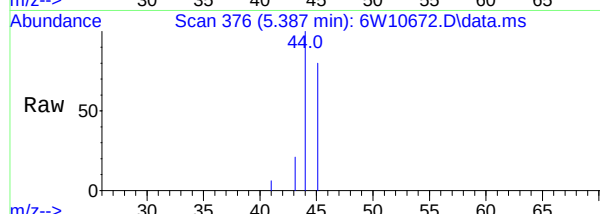
#23
Acetone
Concen: 14.95 ppb(v)
RT: 5.142 min Scan# 336
Delta R.T. 0.012 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

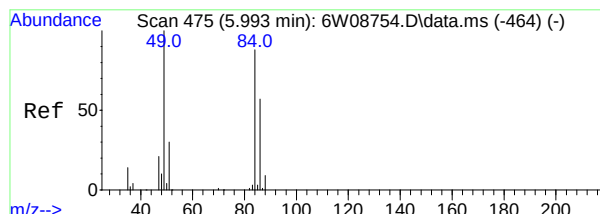
Tgt Ion: 58 Resp: 122380
Ion Ratio Lower Upper
58 100
43 280.7 230.1 427.3



#27
Isopropyl Alcohol
Concen: 0.23 ppb(v)
RT: 5.387 min Scan# 376
Delta R.T. 0.043 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

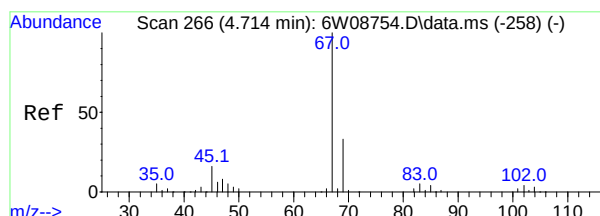
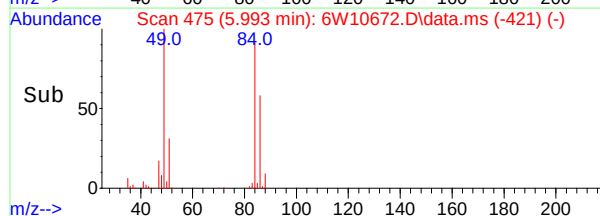
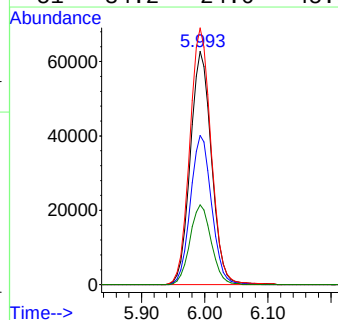
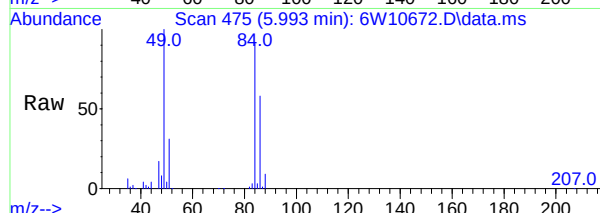
Tgt Ion: 45 Resp: 6873
Ion Ratio Lower Upper
45 100
43 25.9 14.1 26.1
59 0.0 2.8 5.2#





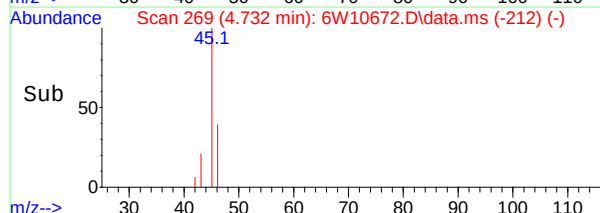
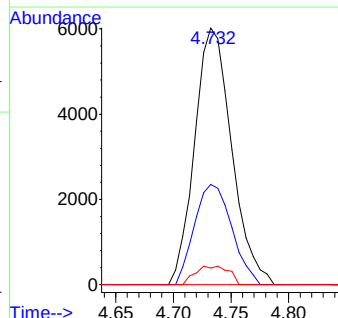
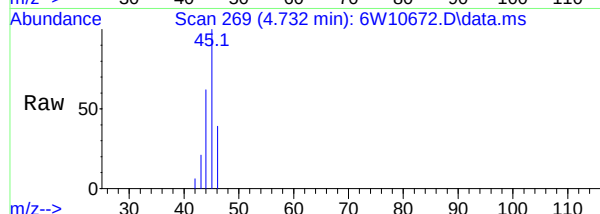
#30
Methylene Chloride
Concen: 7.94 ppb(v)
RT: 5.993 min Scan# 475
Delta R.T. 0.000 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

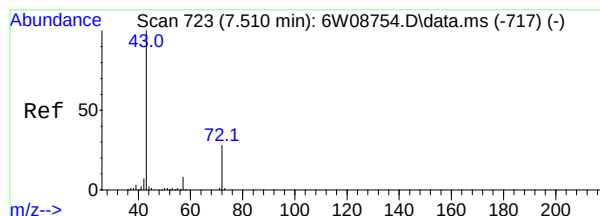
Tgt Ion: 84 Resp: 146318
Ion Ratio Lower Upper
84 100
86 64.0 45.5 84.5
49 110.1 79.5 147.7
51 34.2 24.6 45.6



#32
Ethanol
Concen: 1.95 ppb(v)
RT: 4.732 min Scan# 269
Delta R.T. 0.018 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

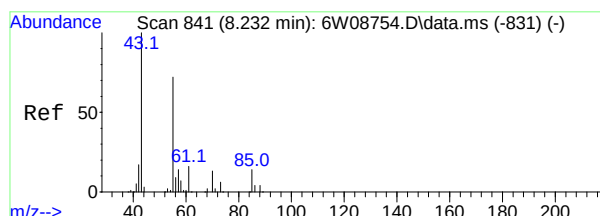
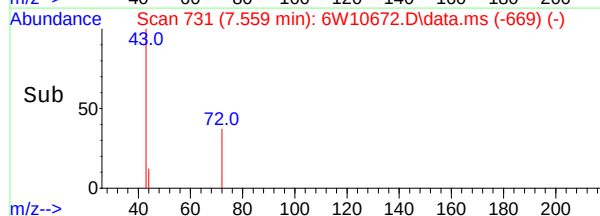
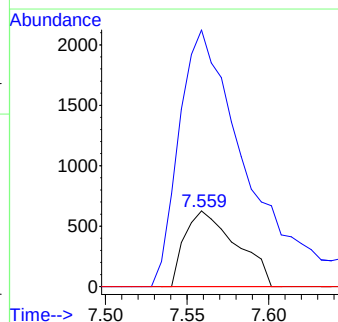
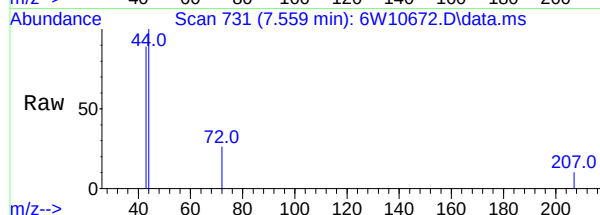
Tgt Ion: 45 Resp: 13445
Ion Ratio Lower Upper
45 100
46 39.0 26.9 49.9
42 6.4 6.0 11.2





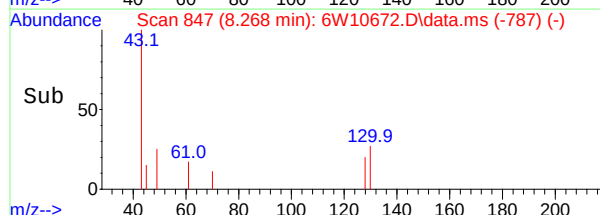
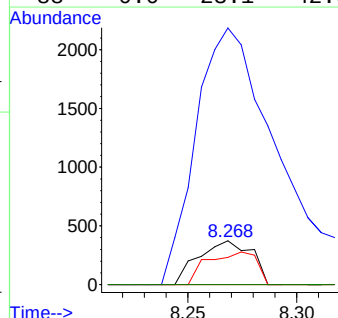
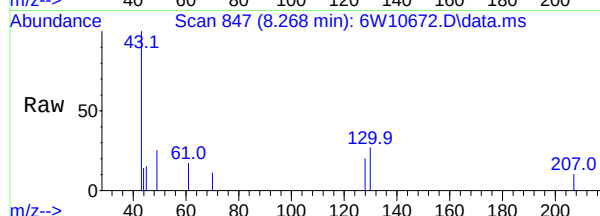
#40
2-Butanone
Concen: 0.17 ppb(v)
RT: 7.559 min Scan# 731
Delta R.T. 0.049 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

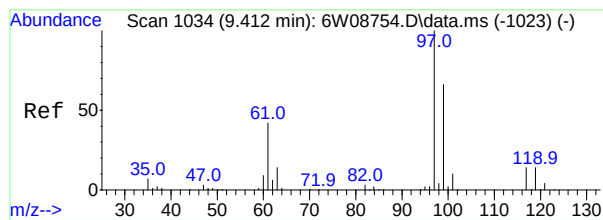
Tgt Ion: 72 Resp: 1377
Ion Ratio Lower Upper
72 100
43 338.8 255.4 474.4
57 0.0 20.7 38.5#



#44
Ethyl Acetate
Concen: 0.12 ppb(v)
RT: 8.268 min Scan# 847
Delta R.T. 0.037 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

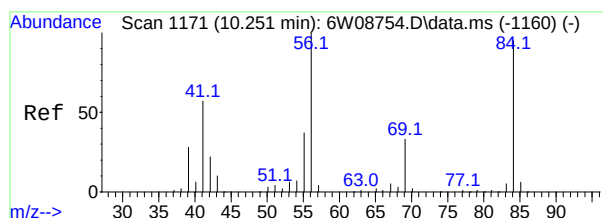
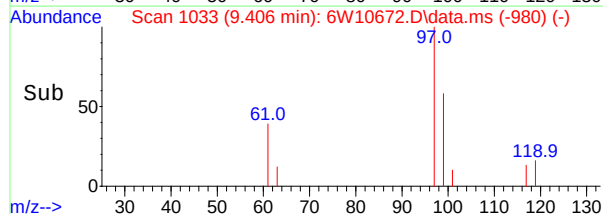
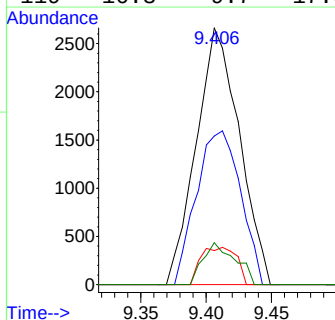
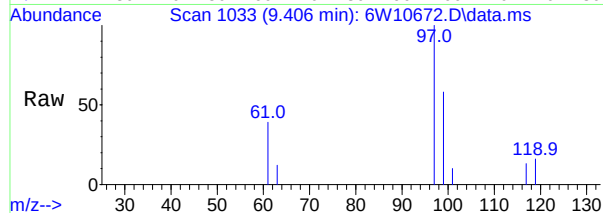
Tgt Ion: 61 Resp: 633
Ion Ratio Lower Upper
61 100
43 587.6 546.6 1015.0
70 62.1 57.2 106.2
88 0.0 23.1 42.9#





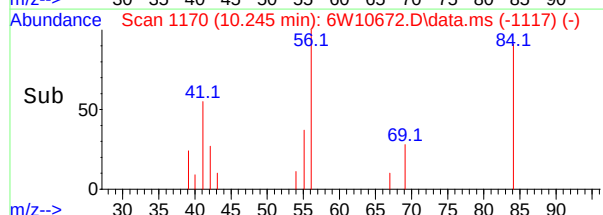
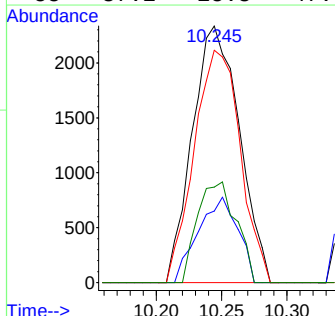
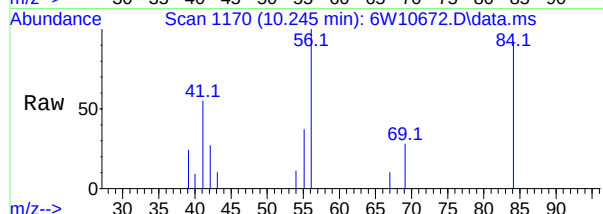
#49
1,1,1-Trichloroethane
Concen: 0.14 ppb(v)
RT: 9.406 min Scan# 1033
Delta R.T. -0.006 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

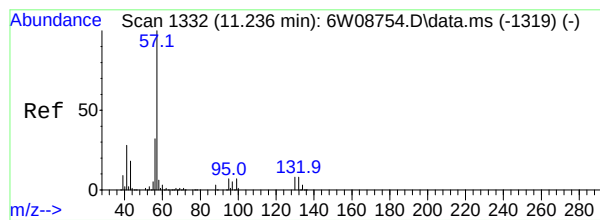
Tgt Ion: 97 Resp: 6121
Ion Ratio Lower Upper
97 100
99 57.9 46.1 85.5
117 13.3 9.8 18.2
119 16.3 9.7 17.9



#53
Cyclohexane
Concen: 0.21 ppb(v)
RT: 10.245 min Scan# 1170
Delta R.T. -0.006 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

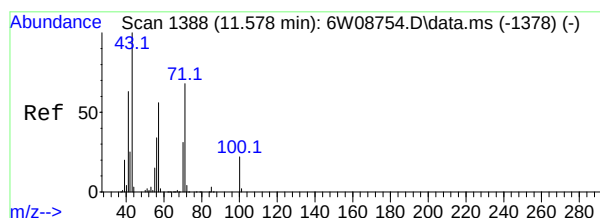
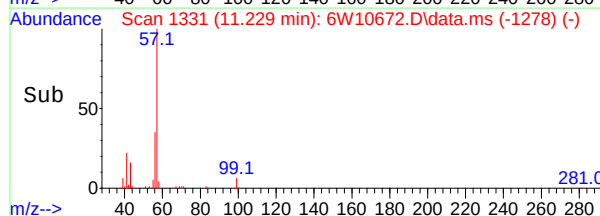
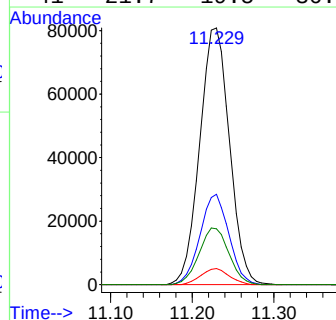
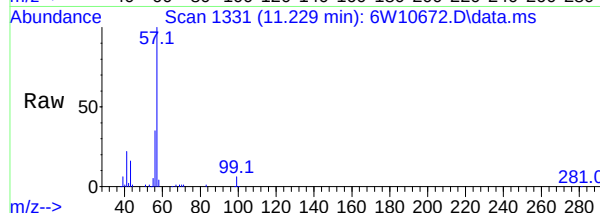
Tgt Ion: 56 Resp: 5851
Ion Ratio Lower Upper
56 100
69 27.9 23.2 43.2
84 90.5 66.2 123.0
55 37.2 25.8 47.8





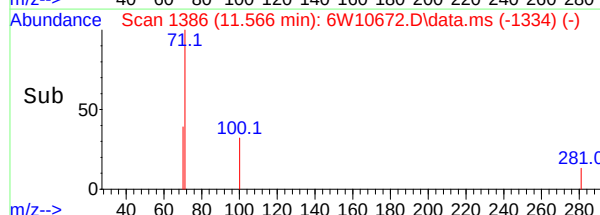
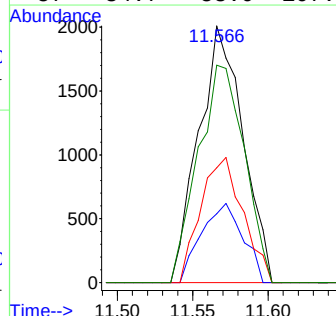
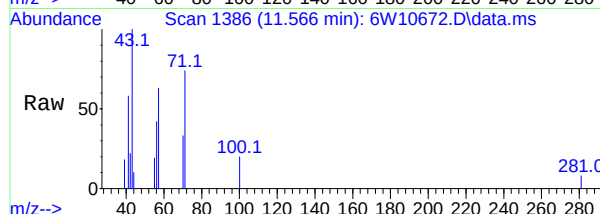
#56
2,2,4-Trimethylpentane
Concen: 2.36 ppb(v)
RT: 11.229 min Scan# 1331
Delta R.T. -0.006 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

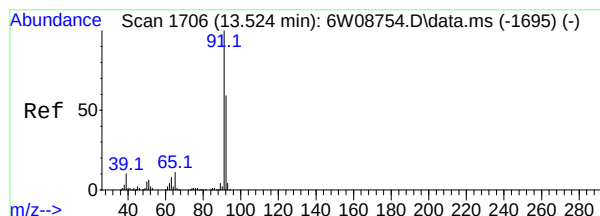
Tgt Ion: 57 Resp: 205135
Ion Ratio Lower Upper
57 100
56 35.2 22.6 42.0
99 6.3 5.2 9.6
41 21.7 19.5 36.1



#57
Heptane
Concen: 0.21 ppb(v)
RT: 11.566 min Scan# 1386
Delta R.T. -0.012 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

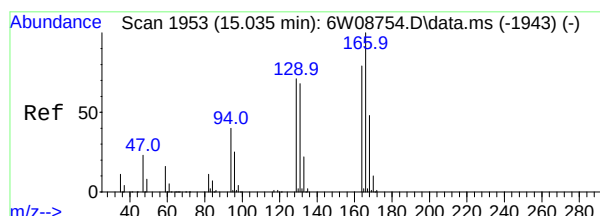
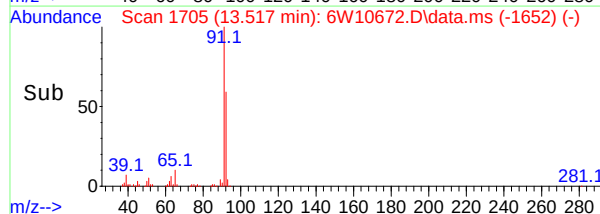
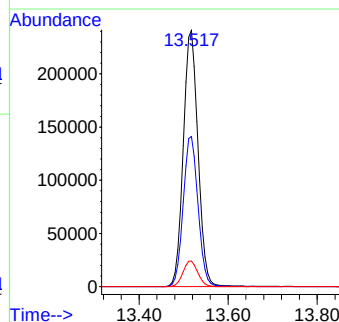
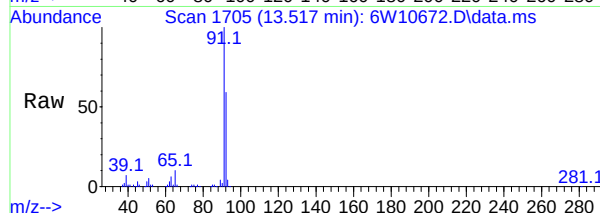
Tgt Ion: 71 Resp: 4104
Ion Ratio Lower Upper
71 100
100 26.9 23.2 43.2
70 44.8 32.1 59.7
57 84.7 58.0 107.6





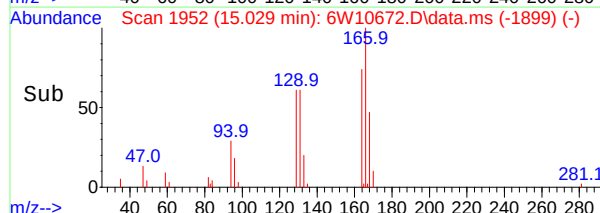
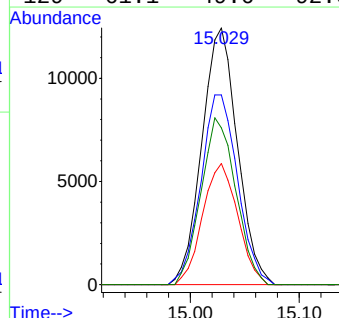
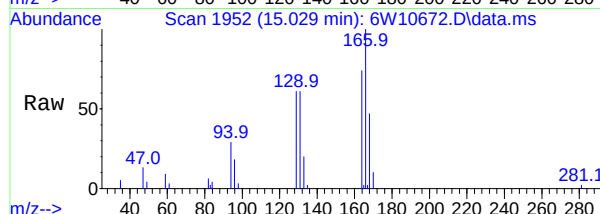
#68
Toluene
Concen: 7.59 ppb(v)
RT: 13.517 min Scan# 1705
Delta R.T. -0.006 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

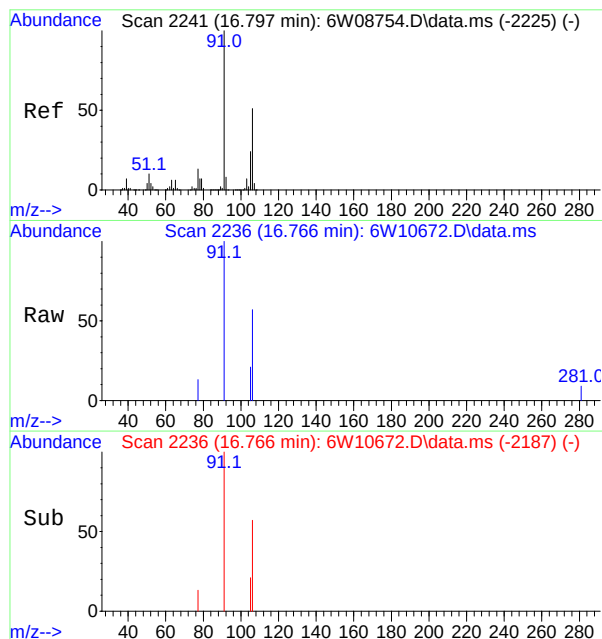
Tgt Ion: 91 Resp: 553406
Ion Ratio Lower Upper
91 100
92 58.6 41.4 77.0
65 10.0 7.9 14.7



#74
Tetrachloroethene
Concen: 0.65 ppb(v)
RT: 15.029 min Scan# 1952
Delta R.T. -0.006 min
Lab File: 6W10672.D
Acq: 20 Feb 2019 5:17 pm

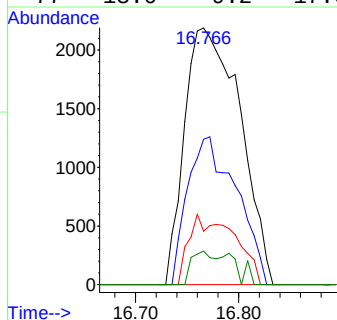
Tgt Ion: 166 Resp: 28339
Ion Ratio Lower Upper
166 100
164 73.9 55.1 102.3
168 47.2 33.6 62.4
129 61.1 49.6 92.0





#81
 m,p-Xylene
 Concen: 0.14 ppb(v)
 RT: 16.766 min Scan# 2236
 Delta R.T. -0.031 min
 Lab File: 6W10672.D
 Acq: 20 Feb 2019 5:17 pm

Tgt Ion: 91	Resp: 8189
Ion Ratio	Lower Upper
91	100
106	56.6 35.9 66.7
105	20.8 16.7 31.1
77	13.0 9.2 17.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W10644.D
Acq On : 19 Feb 2019 12:53 pm
Operator : thomash
Sample : mb
Misc : MS32415,V6W424,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 10:48:10 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.171	130	214853	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	770486	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.903	82	300572	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.171	130	214853	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.148	95	339191	9.24	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	92.40%

Target Compounds	Qvalue

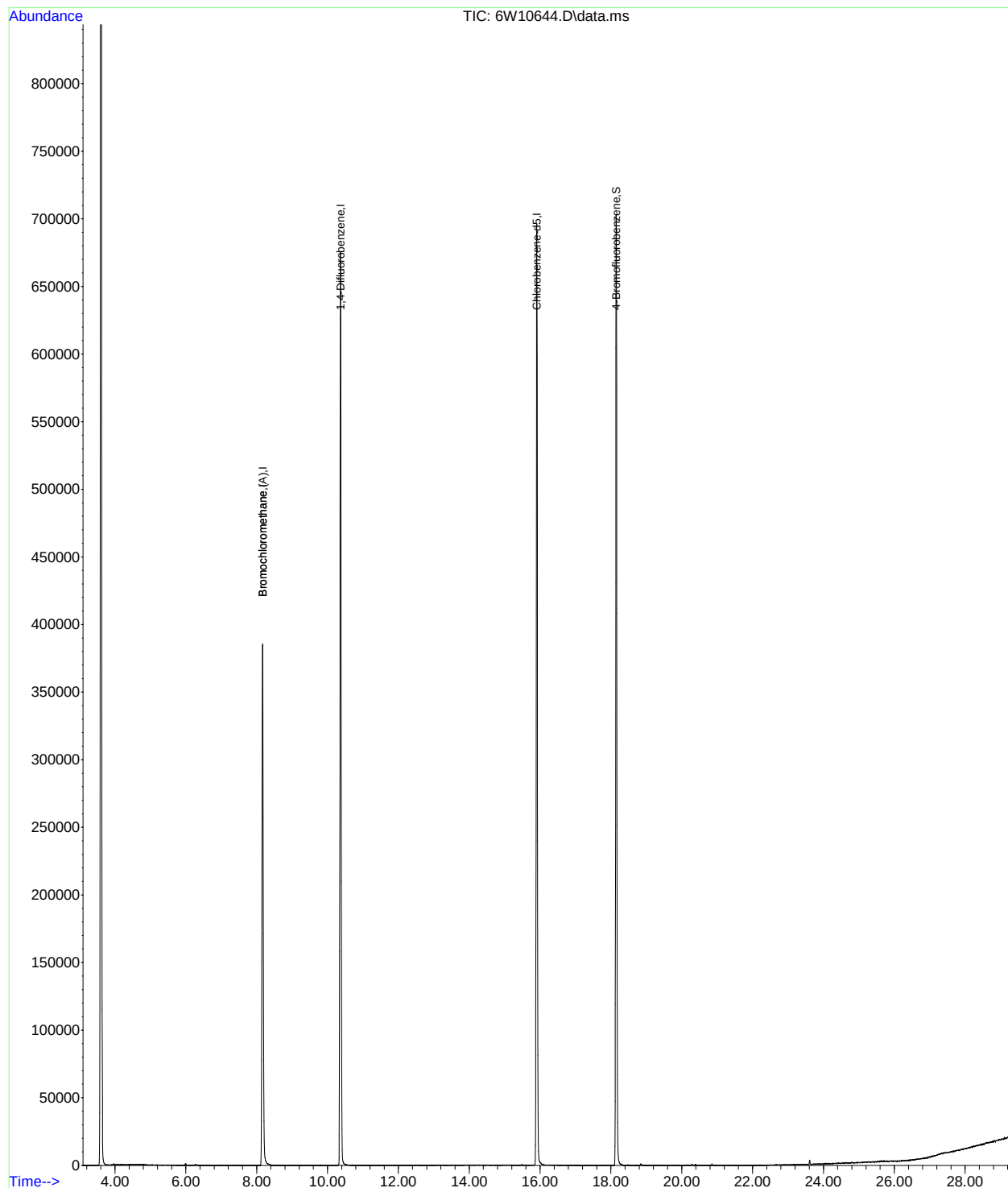
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.1

7

Data Path : C:\msdchem\1\data\
Data File : 6W10644.D
Acq On : 19 Feb 2019 12:53 pm
Operator : thomash
Sample : mb
Misc : MS32415,V6W424,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 10:48:10 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10669.D
Acq On : 20 Feb 2019 2:41 pm
Operator : thomash
Sample : MB
Misc : MS32480,V6W425,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 21 15:37:50 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.171	130	208702	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	748319	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.904	82	290824	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.171	130	208702	10.00	ppb(v	0.00

System Monitoring Compounds
92) 4-Bromofluorobenzene 18.149 95 323647 9.12 ppb(v -0.01
Spiked Amount 10.000 Range 65 - 128 Recovery = 91.20%

Target Compounds	Qvalue

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

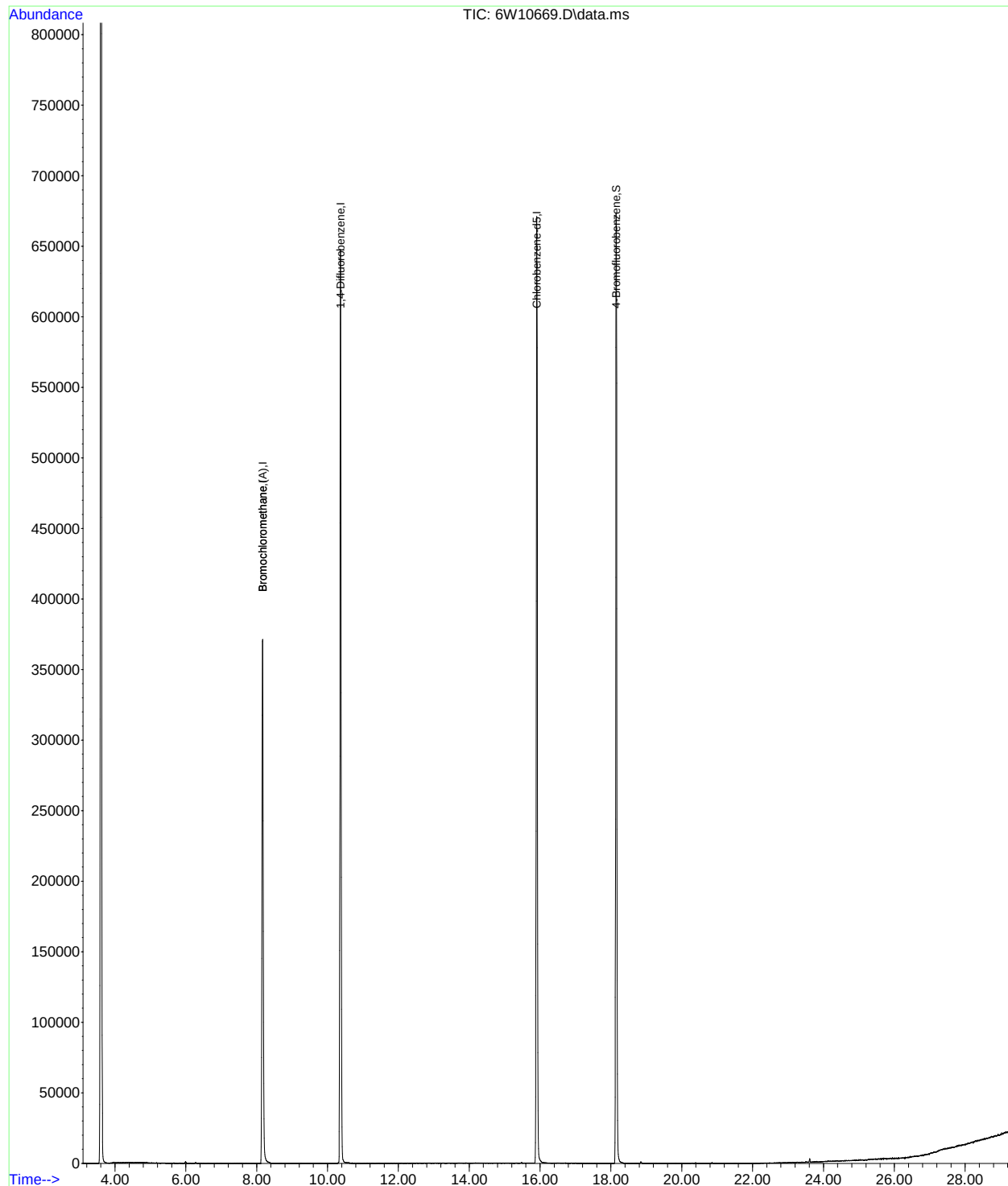
7.2.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10669.D
Acq On : 20 Feb 2019 2:41 pm
Operator : thomash
Sample : MB
Misc : MS32480,V6W425,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 21 15:37:50 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W10363.D
Acq On : 29 Jan 2019 1:09 pm
Operator : thomash
Sample : mb
Misc : MS32203,V6W409,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 30 10:37:40 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.171	130	236400	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.367	114	868821	10.00	ppb(v)	-0.01
78) Chlorobenzene-d5	15.910	82	345227	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.171	130	236400	10.00	ppb(v)	0.00

System Monitoring Compounds

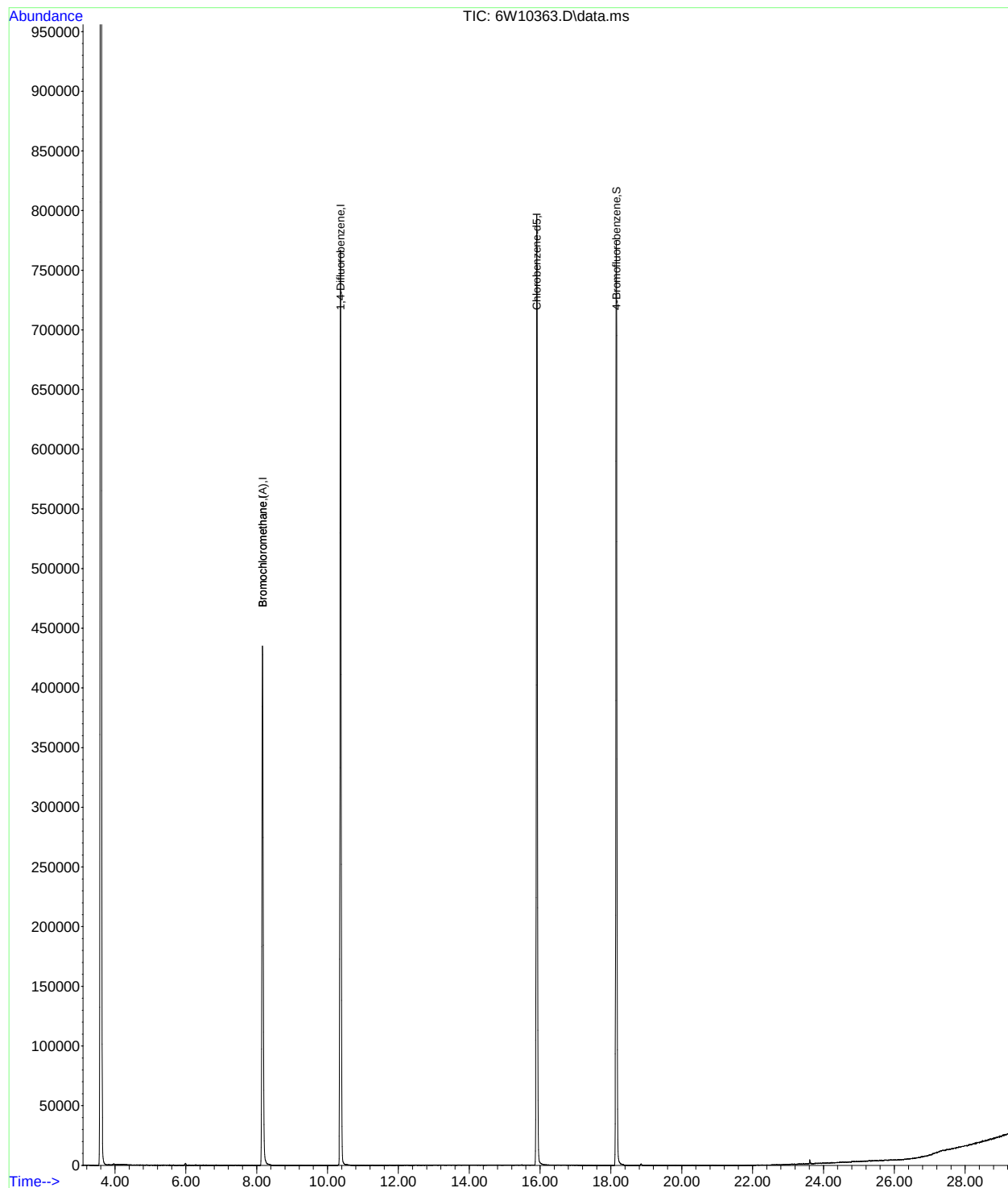
92) 4-Bromofluorobenzene	18.155	95	375379	8.91	ppb(v)	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	89.10%

Target Compounds	Qvalue

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

Data Path : C:\msdchem\1\data\
Data File : 6W10363.D
Acq On : 29 Jan 2019 1:09 pm
Operator : thomash
Sample : mb
Misc : MS32203,V6W409,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 30 10:37:40 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 5w34907.D
Acq On : 31 Jan 2019 2:40 pm
Operator : gabriep
Sample : mb
Misc : ms32097,v5w1417,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 15:18:49 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu Jan 24 09:50:52 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.114	130	252583	10.00	ppb(v	#-0.01
55) 1,4-Difluorobenzene	10.225	114	893518	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.694	82	395515	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.114	130	252827	10.00	ppb(v	#-0.01

System Monitoring Compounds

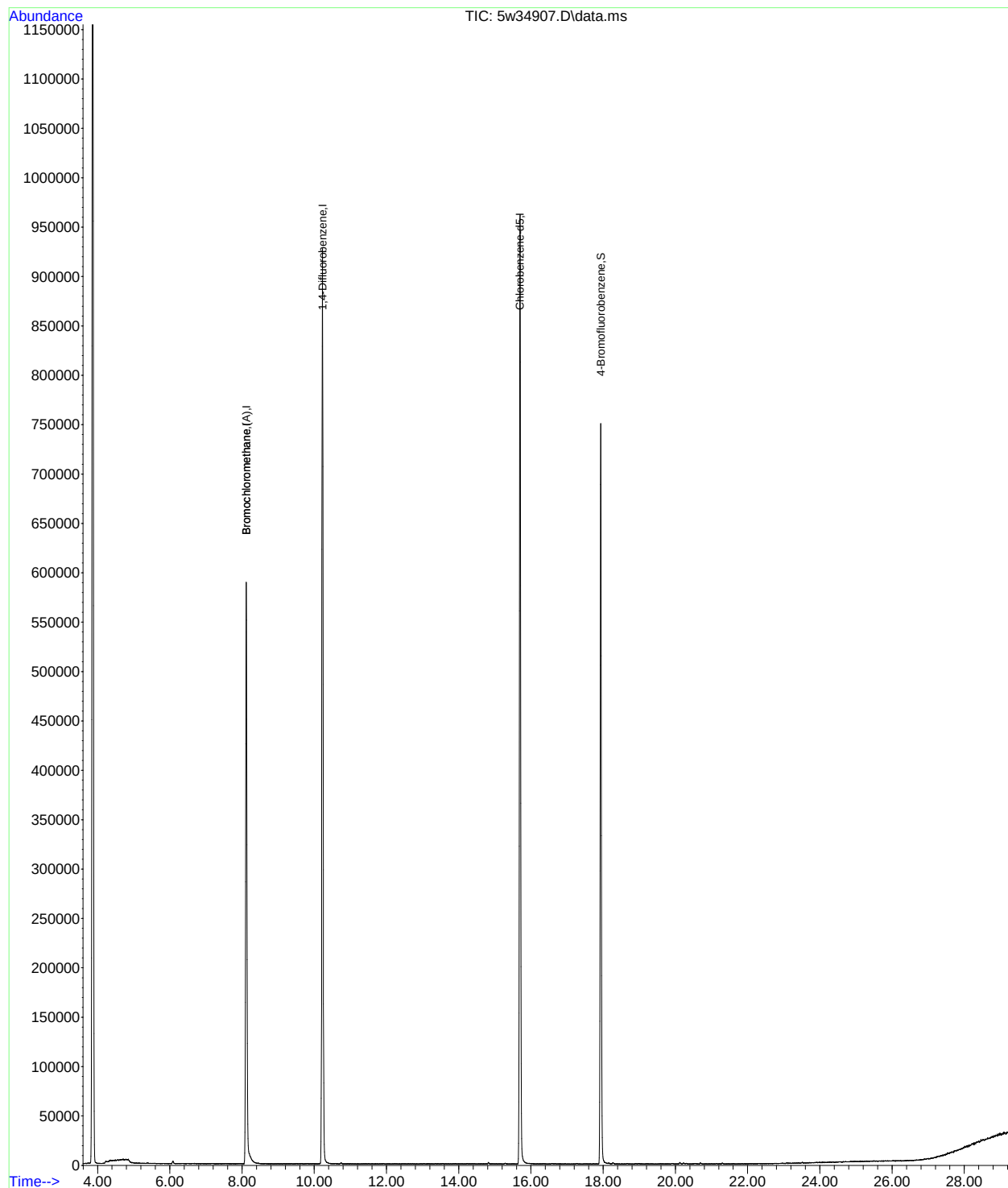
92) 4-Bromofluorobenzene	17.933	95	322191	6.67	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	66.70%

Target Compounds	Qvalue

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

Data Path : C:\msdchem\1\data\
Data File : 5w34907.D
Acq On : 31 Jan 2019 2:40 pm
Operator : gabriep
Sample : mb
Misc : ms32097,v5w1417,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 15:18:49 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu Jan 24 09:50:52 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10641.D
 Acq On : 19 Feb 2019 10:25 am
 Operator : thomash
 Sample : bs
 Misc : MS32415,V6W424,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 10:41:25 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.171	130	216467	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	775426	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.910	82	329931	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.171	130	216467	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.155	95	426454	10.59	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	105.90%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	113216	10.15	ppb(v#	83
4) Chlorodifluoromethane	3.766	67	37773	6.95	ppb(v	98
5) Propene	3.790	41	128523	10.17	ppb(v	94
6) Chlorotrifluoroethene	3.796	116	289824	9.02	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	420376	7.38	ppb(v	99
8) 1-Chloro-1,1-difluoro...	3.962	65	256379	5.72	ppb(v#	95
9) Chloromethane	3.980	50	131308	8.15	ppb(v	100
10) Dichlorotetrafluoroethane	4.060	85	456139	7.68	ppb(v	94
11) Vinyl Chloride	4.157	62	168004	8.58	ppb(v#	98
12) 1,3-Butadiene	4.268	54	118271	8.64	ppb(v	95
13) n-Butane	4.310	58	31238	9.35	ppb(v	90
14) Bromomethane	4.494	94	186367	8.81	ppb(v	99
15) Acrolein	5.026	56	84826	10.63	ppb(v#	92
16) Chloroethane	4.628	64	88962	8.83	ppb(v	97
17) Dichlorofluoromethane	4.708	67	373055	7.63	ppb(v	99
18) Acetonitrile	4.916	41	160355	10.88	ppb(v	97
19) Freon 123	5.057	83	468776	9.27	ppb(v	99
20) Freon 123A	5.106	117	277249	8.84	ppb(v	95
21) Bromoethene	4.928	106	207494	9.63	ppb(v#	96
22) Trichlorofluoromethane	5.289	101	423675	7.27	ppb(v	100
23) Acetone	5.136	58	90705	10.05	ppb(v	71
24) Pentane	5.601	57	50325	10.93	ppb(v	89
26) Iodomethane	5.803	142	601582	9.43	ppb(v	88
27) Isopropyl Alcohol	5.350	45	326838	9.79	ppb(v	93
28) 1,1-Dichloroethene	5.870	61	270319	8.70	ppb(v	95
29) Freon 113	6.231	101	407540	8.93	ppb(v	99
30) Methylene Chloride	5.987	84	177762	8.75	ppb(v	99
31) Carbon Disulfide	6.268	76	563015	9.91	ppb(v	100
32) Ethanol	4.720	45	63773	8.37	ppb(v	98
33) Acrylonitrile	5.558	53	157785	11.03	ppb(v	96
34) 3-Chloropropene	6.097	76	99367	10.62	ppb(v	85
35) trans-1,2-Dichloroethene	6.898	61	260617	9.25	ppb(v	98
36) tert-Butyl Alcohol	5.901	59	378085	9.75	ppb(v	94
37) Methyl tert-Butyl Ether	7.155	73	521077	8.82	ppb(v	97
38) Vinyl Acetate	7.259	43	521349	10.76	ppb(v	100
39) 1,1-Dichloroethane	7.106	63	337185	9.23	ppb(v	100
40) 2-Butanone	7.516	72	102472	11.47	ppb(v	99
41) Hexane	8.201	57	308248	10.43	ppb(v	88
42) cis-1,2-Dichloroethene	7.987	61	257906	9.29	ppb(v	98
43) Di-isopropyl Ether	8.195	87	181479	9.93	ppb(v	89
44) Ethyl Acetate	8.232	61	66883	11.49	ppb(v	81
45) Methyl Acrylate	8.220	55	366036	10.94	ppb(v	98
46) Chloroform	8.311	83	397231	8.28	ppb(v	98
47) 2,4-Dimethylpentane	9.180	57	361258	10.43	ppb(v	98
48) Tetrahydrofuran	8.746	72	95505	11.03	ppb(v	93
49) 1,1,1-Trichloroethane	9.406	97	382363	7.90	ppb(v	99
50) 1,2-Dichloroethane	9.125	62	217170	7.37	ppb(v#	96
51) Benzene	9.933	78	634147	9.64	ppb(v	97
52) Carbon Tetrachloride	10.104	117	408337	8.29	ppb(v	99
53) Cyclohexane	10.245	56	311370	10.24	ppb(v	96
54) 2,3-Dimethylpentane	10.538	71	143409	10.44	ppb(v	99
56) 2,2,4-Trimethylpentane	11.223	57	1004688	10.32	ppb(v	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10641.D
 Acq On : 19 Feb 2019 10:25 am
 Operator : thomash
 Sample : bs
 Misc : MS32415,V6W424,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 10:41:25 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

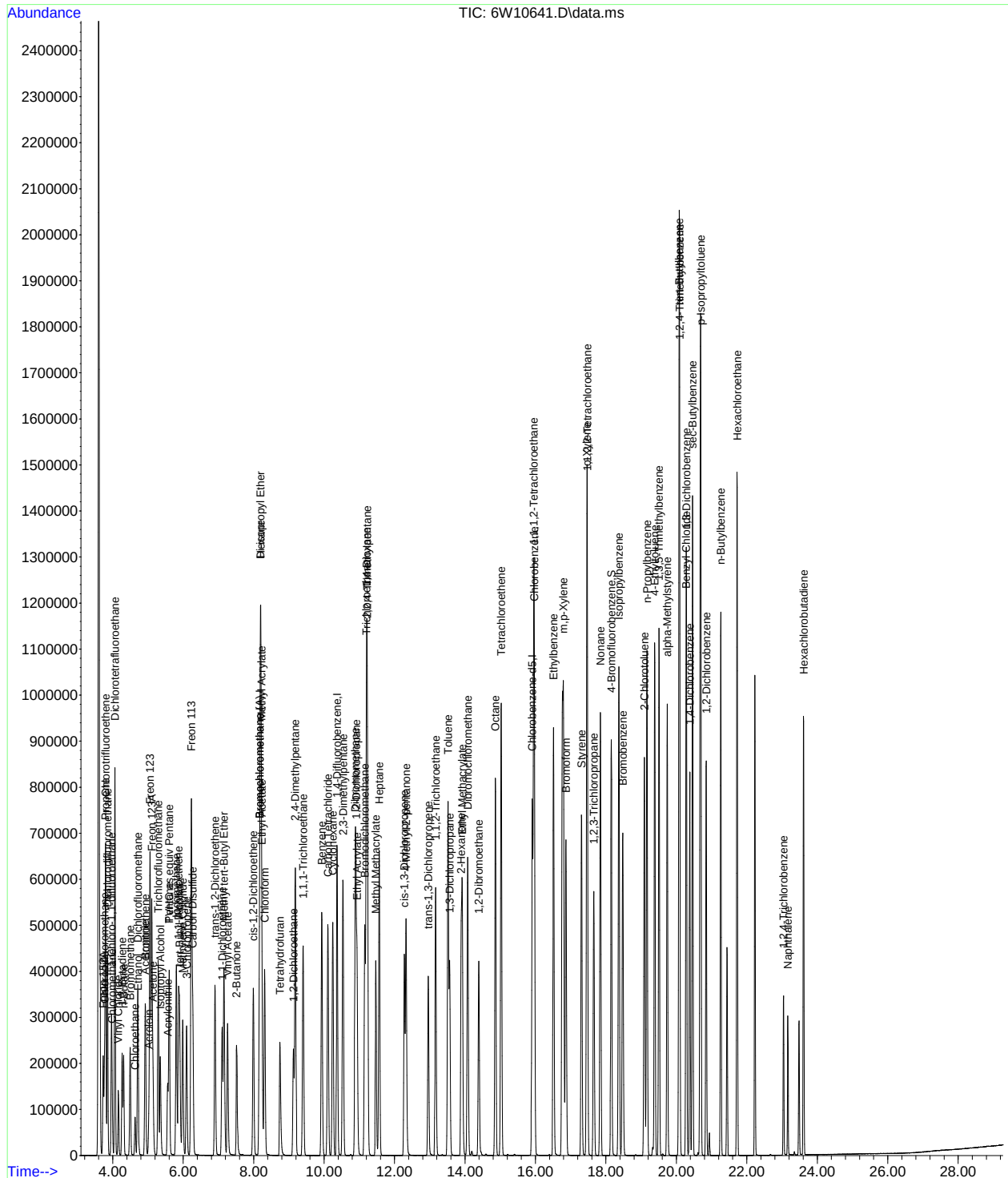
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	224827	10.42	ppb(v	97
58) Trichloroethene	11.199	95	283156	9.04	ppb(v	94
59) 1,2-Dichloropropane	10.905	63	241294	10.56	ppb(v	90
60) Dibromomethane	10.881	174	315500	9.27	ppb(v	98
61) Ethyl Acrylate	10.936	55	461918	11.23	ppb(v	98
62) Methyl Methacrylate	11.468	69	238066	11.04	ppb(v	92
63) 1,4-Dioxane	11.205	88	153704	10.61	ppb(v#	81
64) Bromodichloromethane	11.156	83	432603	8.90	ppb(v	99
65) cis-1,3-Dichloropropene	12.276	75	357900	10.26	ppb(v	99
66) 4-Methyl-2-pentanone	12.325	58	194242	11.15	ppb(v	93
67) trans-1,3-Dichloropropene	12.955	75	300031	10.32	ppb(v	98
68) Toluene	13.518	91	776139	9.51	ppb(v	99
69) 1,1,2-Trichloroethane	13.169	97	266445	9.91	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	358152	9.91	ppb(v	93
71) 2-Hexanone	13.891	58	256497	11.73	ppb(v	93
72) Ethyl Methacrylate	13.921	69	391556	10.91	ppb(v	98
73) Dibromochloromethane	14.074	129	497123	10.42	ppb(v	99
74) Tetrachloroethene	15.029	166	448357	9.13	ppb(v	97
75) 1,2-Dibromoethane	14.392	107	405789	10.06	ppb(v	99
76) Octane	14.863	43	466421	10.51	ppb(v	96
77) 1,1,1,2-Tetrachloroethane	15.952	131	340112	10.02	ppb(v	99
79) Chlorobenzene	15.971	112	624753	10.21	ppb(v	98
80) Ethylbenzene	16.515	91	961102	10.05	ppb(v	99
81) m,p-Xylene	16.790	91	1453474	19.41	ppb(v	97
82) Styrene	17.304	104	558370	11.56	ppb(v	97
83) Nonane	17.843	43	467898	11.18	ppb(v	98
84) o-Xylene	17.457	91	736658	9.93	ppb(v	99
85) Bromoform	16.864	173	485318	13.36	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.470	83	502199	11.86	ppb(v	99
87) 1,2,3-Trichloropropane	17.659	75	360346	10.93	ppb(v	98
88) Isopropylbenzene	18.369	105	1050907	9.98	ppb(v	98
89) Bromobenzene	18.479	156	340656	11.21	ppb(v	95
90) 2-Chlorotoluene	19.091	126	258025	10.96	ppb(v	90
91) n-Propylbenzene	19.164	120	290225	11.07	ppb(v	97
93) 4-Ethyltoluene	19.384	105	963420	10.72	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.507	105	818012	10.18	ppb(v	97
95) alpha-Methylstyrene	19.739	118	398291	12.03	ppb(v	98
96) tert-Butylbenzene	20.082	134	210913	10.76	ppb(v	89
97) 1,2,4-Trimethylbenzene	20.094	105	788598	10.63	ppb(v	95
98) 1,3-Dichlorobenzene	20.284	146	493780	11.90	ppb(v	97
99) Benzyl Chloride	20.271	91	472012	16.09	ppb(v	97
100) 1,4-Dichlorobenzene	20.382	146	446597	12.22	ppb(v	96
101) sec-Butylbenzene	20.461	134	254075	10.89	ppb(v	92
102) p-Isopropyltoluene	20.694	134	265458	11.12	ppb(v	93
103) 1,2-Dichlorobenzene	20.847	146	455216	11.57	ppb(v	96
104) n-Butylbenzene	21.263	134	211601	11.66	ppb(v	98
105) Hexachloroethane	21.727	201	322880	14.34	ppb(v	92
106) 1,2,4-Trichlorobenzene	23.043	180	122839	11.25	ppb(v	99
107) Naphthalene	23.165	128	252640	11.20	ppb(v	100
108) Hexachlorobutadiene	23.612	225	208293	8.45	ppb(v	99
110) TVHC as equiv Pentane	5.601	TIC	846579	9.53	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W10641.D
Acq On : 19 Feb 2019 10:25 am
Operator : thomash
Sample : bs
Misc : MS32415,V6W424,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 10:41:25 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10642.D
 Acq On : 19 Feb 2019 11:12 am
 Operator : thomash
 Sample : bsd
 Misc : MS32415,V6W424,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 10:43:44 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.165	130	215514	10.00	ppb(v	-0.01
55) 1,4-Difluorobenzene	10.367	114	772785	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.910	82	327386	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.165	130	215514	10.00	ppb(v	-0.01

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.155	95	421465	10.54	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	105.40%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	112927	10.17	ppb(v	84
4) Chlorodifluoromethane	3.766	67	38337	7.09	ppb(v	97
5) Propene	3.791	41	129803	10.32	ppb(v	95
6) Chlorotrifluoroethene	3.797	116	294626	9.21	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	427531	7.54	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.962	65	257226	5.77	ppb(v#	95
9) Chloromethane	3.980	50	133184	8.30	ppb(v	100
10) Dichlorotetrafluoroethane	4.060	85	463042	7.83	ppb(v	93
11) Vinyl Chloride	4.158	62	167133	8.57	ppb(v#	99
12) 1,3-Butadiene	4.268	54	118124	8.67	ppb(v	93
13) n-Butane	4.311	58	31669	9.52	ppb(v	95
14) Bromomethane	4.494	94	186642	8.86	ppb(v	97
15) Acrolein	5.026	56	85539	10.77	ppb(v#	91
16) Chloroethane	4.629	64	89332	8.90	ppb(v	97
17) Dichlorofluoromethane	4.708	67	375118	7.71	ppb(v	99
18) Acetonitrile	4.916	41	160726	10.96	ppb(v	97
19) Freon 123	5.057	83	476918	9.47	ppb(v	98
20) Freon 123A	5.106	117	281844	9.02	ppb(v	96
21) Bromoethene	4.928	106	210716	9.82	ppb(v#	96
22) Trichlorofluoromethane	5.289	101	426751	7.36	ppb(v	99
23) Acetone	5.136	58	92391	10.28	ppb(v	72
24) Pentane	5.601	57	51519	11.24	ppb(v	89
26) Iodomethane	5.803	142	609046	9.59	ppb(v	88
27) Isopropyl Alcohol	5.351	45	329416	9.91	ppb(v	93
28) 1,1-Dichloroethene	5.871	61	274347	8.86	ppb(v	95
29) Freon 113	6.225	101	410616	9.04	ppb(v	98
30) Methylene Chloride	5.987	84	180753	8.94	ppb(v	99
31) Carbon Disulfide	6.268	76	573698	10.15	ppb(v	99
32) Ethanol	4.720	45	64432	8.49	ppb(v	98
33) Acrylonitrile	5.559	53	159392	11.19	ppb(v	96
34) 3-Chloropropene	6.097	76	100929	10.83	ppb(v	85
35) trans-1,2-Dichloroethene	6.898	61	264907	9.44	ppb(v	97
36) tert-Butyl Alcohol	5.901	59	381163	9.87	ppb(v	93
37) Methyl tert-Butyl Ether	7.155	73	528984	8.99	ppb(v	97
38) Vinyl Acetate	7.259	43	524981	10.88	ppb(v	99
39) 1,1-Dichloroethane	7.106	63	339483	9.33	ppb(v	99
40) 2-Butanone	7.516	72	103754	11.66	ppb(v	97
41) Hexane	8.201	57	309402	10.51	ppb(v	86
42) cis-1,2-Dichloroethene	7.987	61	259780	9.40	ppb(v	98
43) Di-isopropyl Ether	8.195	87	183664	10.10	ppb(v	90
44) Ethyl Acetate	8.232	61	67696	11.68	ppb(v	81
45) Methyl Acrylate	8.220	55	370171	11.11	ppb(v	98
46) Chloroform	8.311	83	401108	8.40	ppb(v	97
47) 2,4-Dimethylpentane	9.180	57	362024	10.50	ppb(v	99
48) Tetrahydrofuran	8.746	72	96634	11.21	ppb(v	93
49) 1,1,1-Trichloroethane	9.407	97	386242	8.01	ppb(v	97
50) 1,2-Dichloroethane	9.125	62	216681	7.39	ppb(v#	96
51) Benzene	9.933	78	645361	9.86	ppb(v	97
52) Carbon Tetrachloride	10.104	117	412016	8.40	ppb(v	99
53) Cyclohexane	10.245	56	315139	10.41	ppb(v	96
54) 2,3-Dimethylpentane	10.532	71	144297	10.55	ppb(v	100
56) 2,2,4-Trimethylpentane	11.224	57	1011110	10.42	ppb(v	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10642.D
 Acq On : 19 Feb 2019 11:12 am
 Operator : thomash
 Sample : bsd
 Misc : MS32415,V6W424,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 10:43:44 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

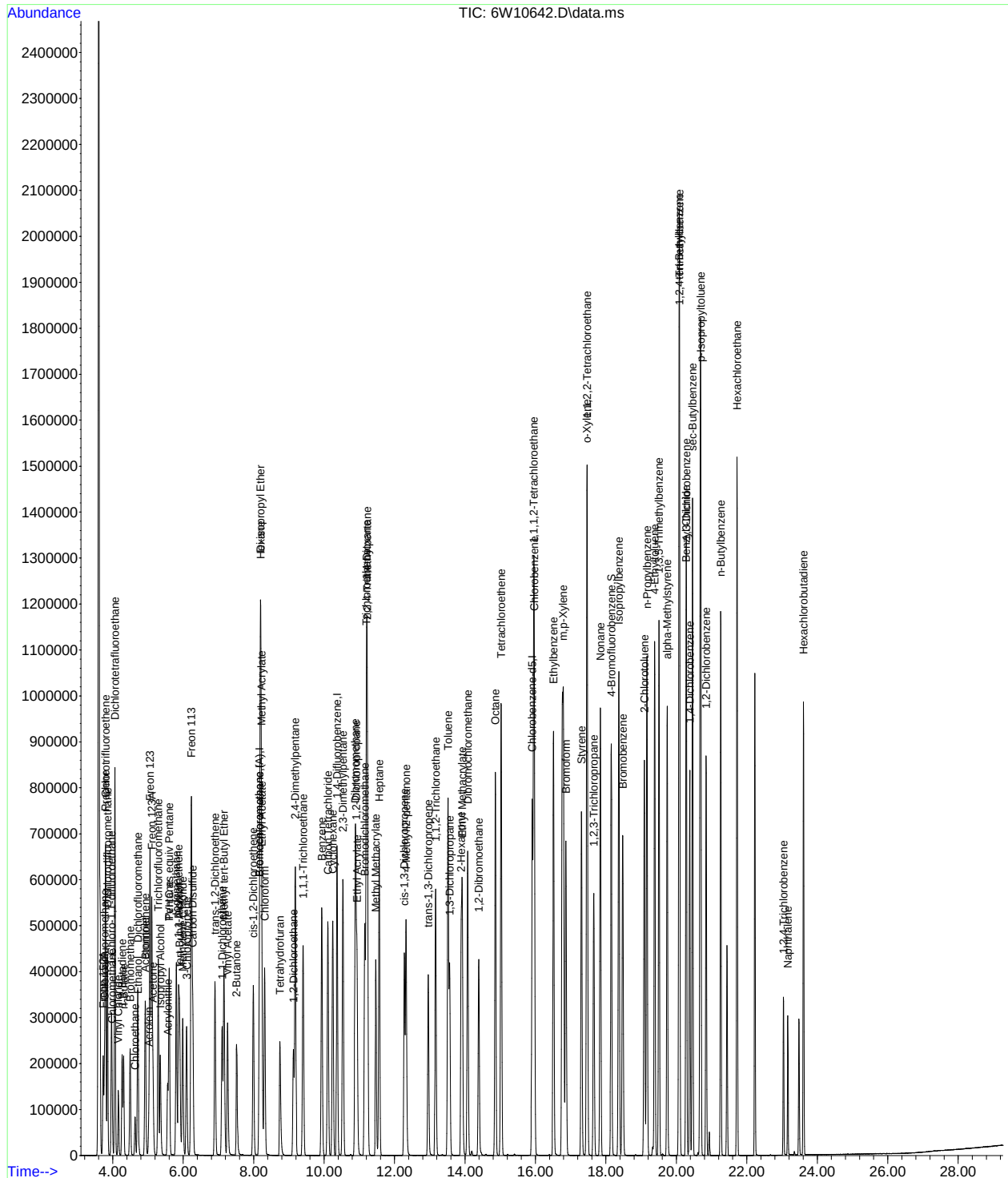
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	226962	10.56	ppb(v	97
58) Trichloroethene	11.199	95	286567	9.18	ppb(v	95
59) 1,2-Dichloropropane	10.905	63	241675	10.61	ppb(v	90
60) Dibromomethane	10.881	174	321181	9.46	ppb(v	97
61) Ethyl Acrylate	10.936	55	466215	11.38	ppb(v	98
62) Methyl Methacrylate	11.468	69	242078	11.26	ppb(v	92
63) 1,4-Dioxane	11.205	88	156784	10.86	ppb(v#	80
64) Bromodichloromethane	11.156	83	438378	9.05	ppb(v	98
65) cis-1,3-Dichloropropene	12.276	75	361017	10.38	ppb(v	100
66) 4-Methyl-2-pentanone	12.325	58	196501	11.32	ppb(v	92
67) trans-1,3-Dichloropropene	12.955	75	303932	10.49	ppb(v	99
68) Toluene	13.518	91	783310	9.63	ppb(v	99
69) 1,1,2-Trichloroethane	13.169	97	269264	10.05	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	359125	9.97	ppb(v	93
71) 2-Hexanone	13.891	58	257780	11.83	ppb(v	92
72) Ethyl Methacrylate	13.921	69	393773	11.01	ppb(v	98
73) Dibromochloromethane	14.074	129	501768	10.55	ppb(v	100
74) Tetrachloroethene	15.029	166	451298	9.22	ppb(v	97
75) 1,2-Dibromoethane	14.392	107	412213	10.26	ppb(v	98
76) Octane	14.864	43	467483	10.57	ppb(v	96
77) 1,1,1,2-Tetrachloroethane	15.952	131	342380	10.12	ppb(v	99
79) Chlorobenzene	15.971	112	626202	10.32	ppb(v	98
80) Ethylbenzene	16.515	91	970533	10.23	ppb(v	99
81) m,p-Xylene	16.785	91	1468485	19.77	ppb(v	98
82) Styrene	17.305	104	562309	11.73	ppb(v	97
83) Nonane	17.843	43	467344	11.25	ppb(v	98
84) o-Xylene	17.457	91	738364	10.03	ppb(v	98
85) Bromoform	16.864	173	489675	13.59	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.464	83	506808	12.06	ppb(v	99
87) 1,2,3-Trichloropropane	17.659	75	359049	10.97	ppb(v	98
88) Isopropylbenzene	18.369	105	1052136	10.07	ppb(v	98
89) Bromobenzene	18.479	156	342560	11.36	ppb(v	96
90) 2-Chlorotoluene	19.091	126	258134	11.05	ppb(v	91
91) n-Propylbenzene	19.164	120	293139	11.27	ppb(v	95
93) 4-Ethyltoluene	19.385	105	969795	10.88	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.507	105	825303	10.35	ppb(v	98
95) alpha-Methylstyrene	19.739	118	400852	12.20	ppb(v	99
96) tert-Butylbenzene	20.076	134	210206	10.81	ppb(v	90
97) 1,2,4-Trimethylbenzene	20.088	105	794548	10.80	ppb(v#	85
98) 1,3-Dichlorobenzene	20.284	146	498978	12.12	ppb(v	96
99) Benzyl Chloride	20.272	91	476855	16.38	ppb(v	97
100) 1,4-Dichlorobenzene	20.382	146	455110	12.55	ppb(v	96
101) sec-Butylbenzene	20.461	134	255544	11.04	ppb(v	92
102) p-Isopropyltoluene	20.694	134	265484	11.21	ppb(v	89
103) 1,2-Dichlorobenzene	20.841	146	460147	11.78	ppb(v	97
104) n-Butylbenzene	21.263	134	213010	11.83	ppb(v	96
105) Hexachloroethane	21.721	201	325989	14.59	ppb(v	99
106) 1,2,4-Trichlorobenzene	23.043	180	123282	11.38	ppb(v	99
107) Naphthalene	23.165	128	257131	11.49	ppb(v	100
108) Hexachlorobutadiene	23.606	225	210779	8.62	ppb(v	100
110) TVHC as equiv Pentane	5.601	TIC	852346	9.63	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10642.D
 Acq On : 19 Feb 2019 11:12 am
 Operator : thomash
 Sample : bsd
 Misc : MS32415,V6W424,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 10:43:44 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10665.D
 Acq On : 20 Feb 2019 10:36 am
 Operator : thomash
 Sample : bs
 Misc : MS32480,V6W425,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 15:34:20 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.171	130	210594	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	750865	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.910	82	318515	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.171	130	210594	10.00	ppb(v	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.155 95 412954 10.62 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 106.20%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	108402	9.99	ppb(v	86
4) Chlorodifluoromethane	3.766	67	37157	7.03	ppb(v	100
5) Propene	3.790	41	123761	10.07	ppb(v	94
6) Chlorotrifluoroethene	3.797	116	284070	9.08	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	412248	7.44	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.962	65	248518	5.70	ppb(v#	95
9) Chloromethane	3.980	50	128655	8.21	ppb(v	99
10) Dichlorotetrafluoroethane	4.060	85	448481	7.76	ppb(v	95
11) Vinyl Chloride	4.157	62	161798	8.49	ppb(v#	98
12) 1,3-Butadiene	4.268	54	114261	8.58	ppb(v	94
13) n-Butane	4.310	58	30391	9.35	ppb(v	90
14) Bromomethane	4.494	94	180408	8.77	ppb(v	98
15) Acrolein	5.026	56	82134	10.58	ppb(v#	91
16) Chloroethane	4.635	64	86806	8.85	ppb(v	97
17) Dichlorofluoromethane	4.708	67	362714	7.63	ppb(v	99
18) Acetonitrile	4.916	41	154116	10.75	ppb(v	97
19) Freon 123	5.057	83	459473	9.34	ppb(v	99
20) Freon 123A	5.106	117	272435	8.93	ppb(v	95
21) Bromoethene	4.928	106	203768	9.72	ppb(v#	96
22) Trichlorofluoromethane	5.289	101	411802	7.27	ppb(v	99
23) Acetone	5.136	58	88215	10.05	ppb(v	71
24) Pentane	5.601	57	49581	11.07	ppb(v	90
26) Iodomethane	5.803	142	593131	9.56	ppb(v	87
27) Isopropyl Alcohol	5.350	45	315372	9.71	ppb(v	93
28) 1,1-Dichloroethene	5.870	61	263246	8.70	ppb(v	95
29) Freon 113	6.231	101	396472	8.93	ppb(v	98
30) Methylene Chloride	5.987	84	174304	8.82	ppb(v	98
31) Carbon Disulfide	6.268	76	549688	9.95	ppb(v	100
32) Ethanol	4.720	45	62824	8.47	ppb(v	97
33) Acrylonitrile	5.558	53	153006	10.99	ppb(v	97
34) 3-Chloropropene	6.097	76	96437	10.59	ppb(v	84
35) trans-1,2-Dichloroethene	6.898	61	253373	9.24	ppb(v	97
36) tert-Butyl Alcohol	5.901	59	365209	9.68	ppb(v	95
37) Methyl tert-Butyl Ether	7.155	73	509136	8.86	ppb(v	97
38) Vinyl Acetate	7.259	43	501904	10.64	ppb(v	99
39) 1,1-Dichloroethane	7.106	63	326581	9.18	ppb(v	100
40) 2-Butanone	7.516	72	99062	11.40	ppb(v	100
41) Hexane	8.201	57	298170	10.37	ppb(v	86
42) cis-1,2-Dichloroethene	7.987	61	248895	9.22	ppb(v	96
43) Di-isopropyl Ether	8.195	87	177042	9.96	ppb(v	90
44) Ethyl Acetate	8.232	61	64379	11.37	ppb(v	81
45) Methyl Acrylate	8.220	55	354488	10.89	ppb(v	98
46) Chloroform	8.311	83	387078	8.29	ppb(v	97
47) 2,4-Dimethylpentane	9.180	57	350034	10.39	ppb(v	98
48) Tetrahydrofuran	8.746	72	92507	10.98	ppb(v	93
49) 1,1,1-Trichloroethane	9.400	97	372304	7.91	ppb(v	97
50) 1,2-Dichloroethane	9.125	62	208420	7.28	ppb(v#	97
51) Benzene	9.933	78	618975	9.67	ppb(v	97
52) Carbon Tetrachloride	10.104	117	399043	8.33	ppb(v	99
53) Cyclohexane	10.245	56	301743	10.20	ppb(v	95
54) 2,3-Dimethylpentane	10.532	71	138722	10.38	ppb(v	100
56) 2,2,4-Trimethylpentane	11.223	57	970948	10.30	ppb(v	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10665.D
 Acq On : 20 Feb 2019 10:36 am
 Operator : thomash
 Sample : bs
 Misc : MS32480,V6W425,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

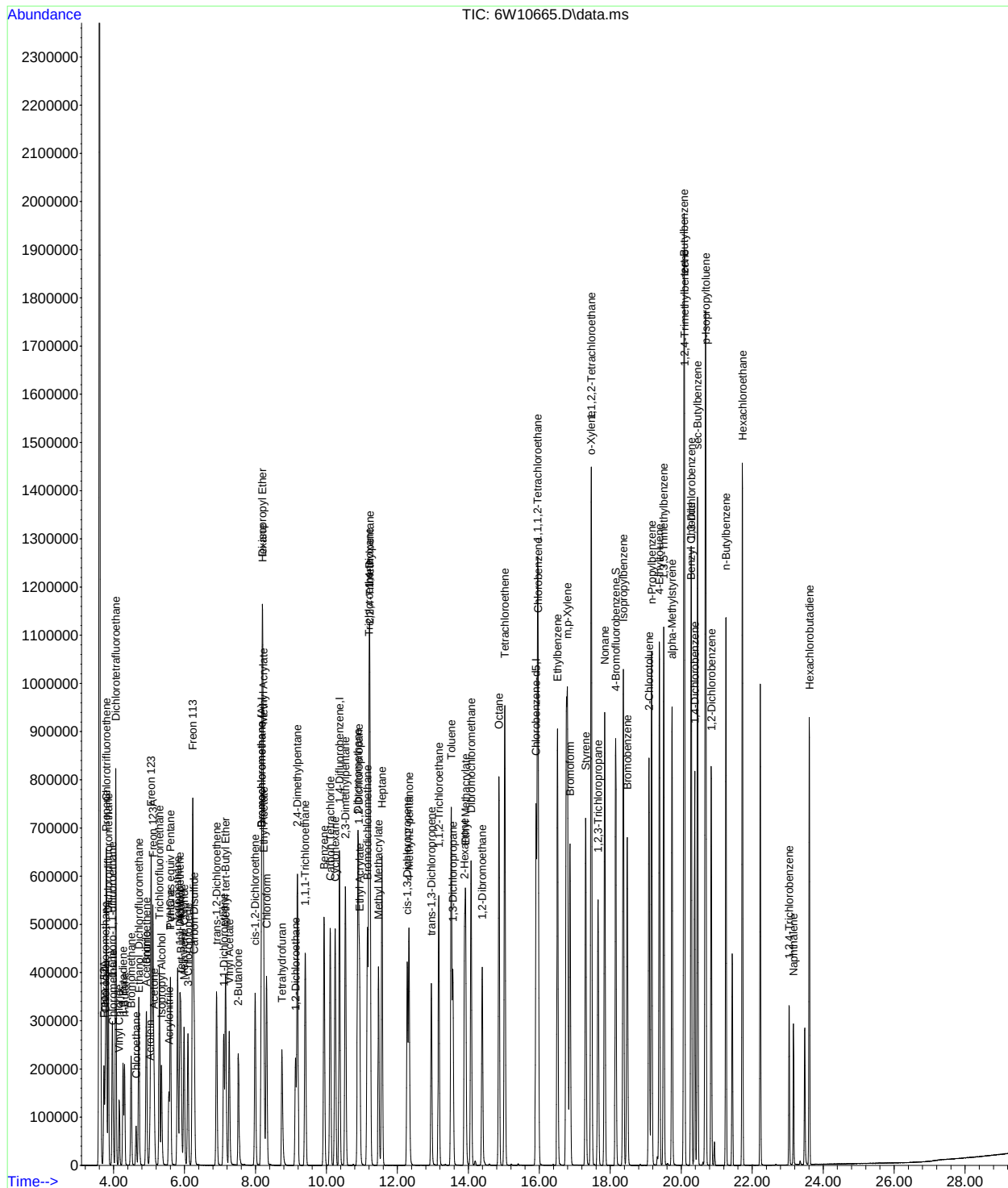
Quant Time: Feb 21 15:34:20 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	217654	10.42	ppb(v	97
58) Trichloroethene	11.199	95	275242	9.07	ppb(v	94
59) 1,2-Dichloropropane	10.905	63	231617	10.46	ppb(v	90
60) Dibromomethane	10.881	174	312690	9.48	ppb(v	96
61) Ethyl Acrylate	10.936	55	444740	11.17	ppb(v	98
62) Methyl Methacrylate	11.468	69	230502	11.03	ppb(v	93
63) 1,4-Dioxane	11.205	88	149169	10.64	ppb(v#	81
64) Bromodichloromethane	11.156	83	421736	8.96	ppb(v	98
65) cis-1,3-Dichloropropene	12.276	75	347280	10.28	ppb(v	99
66) 4-Methyl-2-pentanone	12.325	58	187014	11.09	ppb(v	95
67) trans-1,3-Dichloropropene	12.955	75	290344	10.31	ppb(v	98
68) Toluene	13.518	91	757325	9.58	ppb(v	99
69) 1,1,2-Trichloroethane	13.169	97	259181	9.95	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	347859	9.94	ppb(v	92
71) 2-Hexanone	13.891	58	246564	11.64	ppb(v	91
72) Ethyl Methacrylate	13.921	69	379148	10.91	ppb(v	97
73) Dibromochloromethane	14.074	129	484425	10.48	ppb(v	100
74) Tetrachloroethene	15.029	166	440378	9.26	ppb(v	97
75) 1,2-Dibromoethane	14.392	107	394681	10.11	ppb(v	99
76) Octane	14.863	43	447029	10.40	ppb(v	96
77) 1,1,1,2-Tetrachloroethane	15.952	131	333019	10.13	ppb(v	100
79) Chlorobenzene	15.971	112	608103	10.30	ppb(v	97
80) Ethylbenzene	16.515	91	936730	10.15	ppb(v	99
81) m,p-Xylene	16.791	91	1415315	19.58	ppb(v	97
82) Styrene	17.304	104	543433	11.65	ppb(v	97
83) Nonane	17.843	43	450526	11.15	ppb(v	99
84) o-Xylene	17.457	91	718569	10.03	ppb(v	98
85) Bromoform	16.864	173	476171	13.58	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.463	83	487760	11.93	ppb(v	100
87) 1,2,3-Trichloropropane	17.659	75	348296	10.94	ppb(v	98
88) Isopropylbenzene	18.369	105	1026073	10.09	ppb(v	97
89) Bromobenzene	18.479	156	334035	11.39	ppb(v	94
90) 2-Chlorotoluene	19.091	126	251932	11.08	ppb(v	90
91) n-Propylbenzene	19.164	120	285431	11.28	ppb(v	95
93) 4-Ethyltoluene	19.384	105	943132	10.87	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.507	105	797814	10.28	ppb(v	97
95) alpha-Methylstyrene	19.739	118	390501	12.21	ppb(v	97
96) tert-Butylbenzene	20.076	134	205952	10.88	ppb(v	86
97) 1,2,4-Trimethylbenzene	20.094	105	767328	10.72	ppb(v	94
98) 1,3-Dichlorobenzene	20.284	146	484766	12.11	ppb(v	96
99) Benzyl Chloride	20.272	91	455448	16.08	ppb(v	97
100) 1,4-Dichlorobenzene	20.382	146	440051	12.47	ppb(v	97
101) sec-Butylbenzene	20.461	134	249061	11.06	ppb(v	94
102) p-Isopropyltoluene	20.694	134	258684	11.23	ppb(v	92
103) 1,2-Dichlorobenzene	20.847	146	443258	11.67	ppb(v	96
104) n-Butylbenzene	21.263	134	205320	11.72	ppb(v	96
105) Hexachloroethane	21.728	201	318924	14.67	ppb(v	91
106) 1,2,4-Trichlorobenzene	23.043	180	120846	11.47	ppb(v	98
107) Naphthalene	23.165	128	247464	11.36	ppb(v	100
108) Hexachlorobutadiene	23.612	225	199501	8.38	ppb(v	99
110) TVHC as equiv Pentane	5.601	TIC	829312	9.59	ppb(v	100

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

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10665.D
Acq On : 20 Feb 2019 10:36 am
Operator : thomash
Sample : bs
Misc : MS32480,V6W425,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 15:34:20 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10667.D
 Acq On : 20 Feb 2019 12:54 pm
 Operator : thomash
 Sample : bsd
 Misc : MS32480,V6W425,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 13:24:46 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.164	130	211470	10.00	ppb(v	-0.01
55) 1,4-Difluorobenzene	10.367	114	758776	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.909	82	318206	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.164	130	211470	10.00	ppb(v	-0.01

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.155 95 412762 10.63 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 106.30%

Target Compounds					Qvalue
3) Freon 152A	3.723	65	109823	10.08	ppb(v# 83
4) Chlorodifluoromethane	3.760	67	37012	6.97	ppb(v 99
5) Propene	3.790	41	123455	10.00	ppb(v 94
6) Chlorotrifluoroethene	3.790	116	286964	9.14	ppb(v 98
7) Dichlorodifluoromethane	3.845	85	417974	7.51	ppb(v 99
8) 1-Chloro-1,1-difluoro...	3.955	65	248742	5.68	ppb(v# 95
9) Chloromethane	3.980	50	127955	8.13	ppb(v 99
10) Dichlorotetrafluoroethane	4.053	85	451401	7.78	ppb(v 95
11) Vinyl Chloride	4.157	62	162420	8.49	ppb(v# 99
12) 1,3-Butadiene	4.261	54	112672	8.43	ppb(v 93
13) n-Butane	4.304	58	30194	9.25	ppb(v 87
14) Bromomethane	4.488	94	181922	8.80	ppb(v 98
15) Acrolein	5.020	56	83424	10.70	ppb(v# 90
16) Chloroethane	4.628	64	86989	8.84	ppb(v 97
17) Dichlorofluoromethane	4.702	67	361913	7.58	ppb(v 99
18) Acetonitrile	4.910	41	155171	10.78	ppb(v 97
19) Freon 123	5.051	83	463761	9.39	ppb(v 98
20) Freon 123A	5.099	117	277411	9.05	ppb(v 96
21) Bromoethene	4.922	106	206971	9.83	ppb(v# 96
22) Trichlorofluoromethane	5.283	101	414750	7.29	ppb(v 99
23) Acetone	5.136	58	88845	10.08	ppb(v 69
24) Pentane	5.595	57	50138	11.15	ppb(v 88
26) Iodomethane	5.797	142	607299	9.74	ppb(v 87
27) Isopropyl Alcohol	5.344	45	319111	9.79	ppb(v 93
28) 1,1-Dichloroethene	5.864	61	266589	8.78	ppb(v 93
29) Freon 113	6.225	101	403251	9.05	ppb(v 99
30) Methylene Chloride	5.987	84	178795	9.01	ppb(v 97
31) Carbon Disulfide	6.268	76	560857	10.11	ppb(v 99
32) Ethanol	4.720	45	61715	8.29	ppb(v 97
33) Acrylonitrile	5.552	53	154869	11.08	ppb(v 96
34) 3-Chloropropene	6.090	76	99662	10.90	ppb(v 83
35) trans-1,2-Dichloroethene	6.892	61	259050	9.41	ppb(v 98
36) tert-Butyl Alcohol	5.895	59	371586	9.81	ppb(v 93
37) Methyl tert-Butyl Ether	7.155	73	516150	8.94	ppb(v 97
38) Vinyl Acetate	7.253	43	510469	10.78	ppb(v 100
39) 1,1-Dichloroethane	7.100	63	331780	9.29	ppb(v 99
40) 2-Butanone	7.510	72	101875	11.67	ppb(v 100
41) Hexane	8.195	57	301134	10.43	ppb(v 85
42) cis-1,2-Dichloroethene	7.987	61	252857	9.32	ppb(v 96
43) Di-isopropyl Ether	8.195	87	180957	10.14	ppb(v 96
44) Ethyl Acetate	8.232	61	65925	11.59	ppb(v 70
45) Methyl Acrylate	8.219	55	360109	11.02	ppb(v 97
46) Chloroform	8.305	83	392348	8.37	ppb(v 98
47) 2,4-Dimethylpentane	9.174	57	355127	10.50	ppb(v 99
48) Tetrahydrofuran	8.746	72	95726	11.32	ppb(v 95
49) 1,1,1-Trichloroethane	9.400	97	376835	7.97	ppb(v 97
50) 1,2-Dichloroethane	9.119	62	211267	7.34	ppb(v# 97
51) Benzene	9.932	78	630451	9.81	ppb(v 97
52) Carbon Tetrachloride	10.104	117	404364	8.41	ppb(v 98
53) Cyclohexane	10.238	56	307905	10.36	ppb(v 96
54) 2,3-Dimethylpentane	10.532	71	142800	10.64	ppb(v 99
56) 2,2,4-Trimethylpentane	11.223	57	987591	10.37	ppb(v 94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10667.D
 Acq On : 20 Feb 2019 12:54 pm
 Operator : thomash
 Sample : bsd
 Misc : MS32480,V6W425,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 13:24:46 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

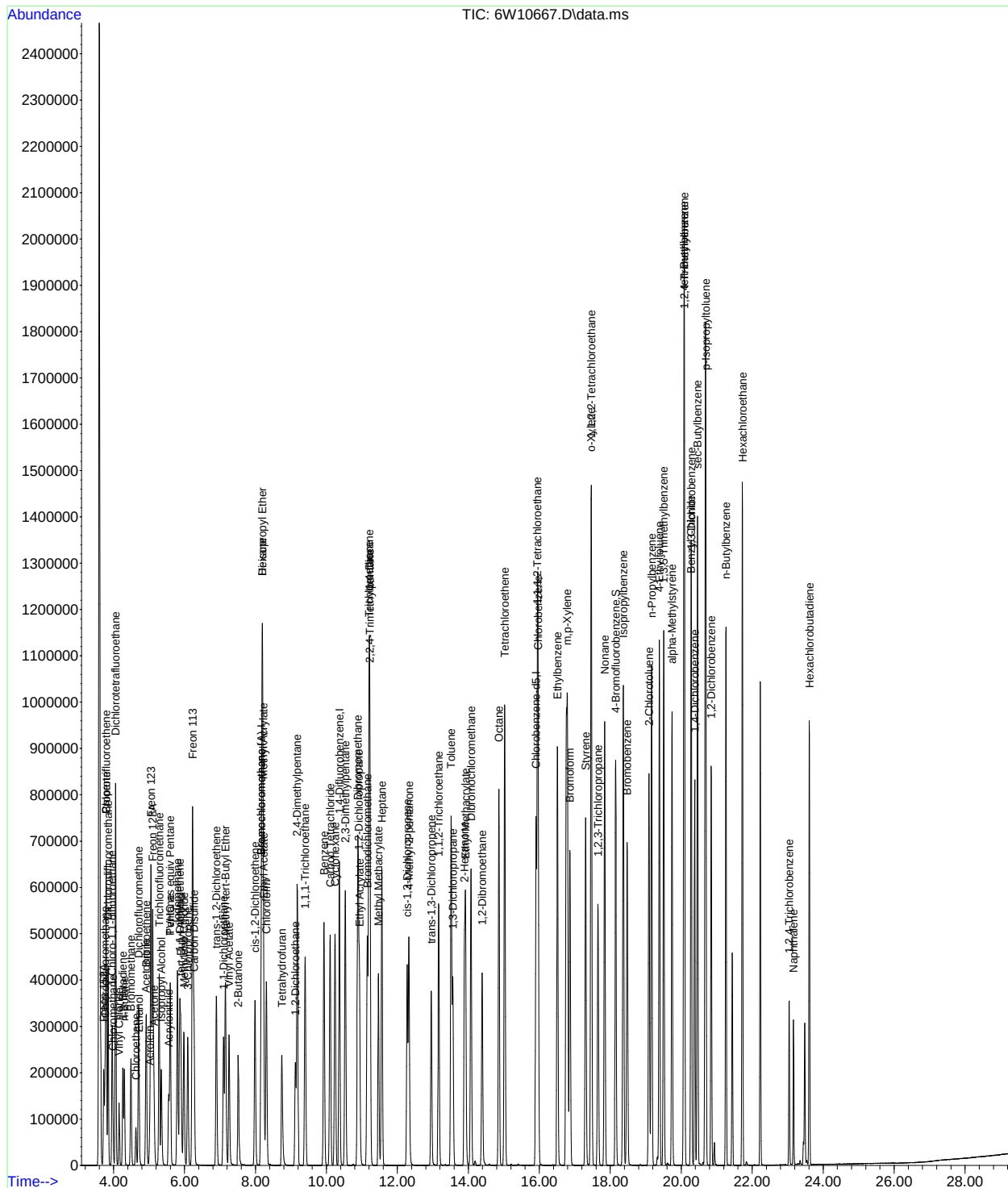
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	222429	10.54	ppb(v	98
58) Trichloroethene	11.199	95	282707	9.22	ppb(v	93
59) 1,2-Dichloropropane	10.905	63	235191	10.51	ppb(v	90
60) Dibromomethane	10.881	174	322718	9.69	ppb(v	94
61) Ethyl Acrylate	10.936	55	452903	11.26	ppb(v	99
62) Methyl Methacrylate	11.468	69	236456	11.20	ppb(v	91
63) 1,4-Dioxane	11.205	88	153111	10.80	ppb(v#	73
64) Bromodichloromethane	11.150	83	429548	9.03	ppb(v	99
65) cis-1,3-Dichloropropene	12.275	75	355572	10.41	ppb(v	99
66) 4-Methyl-2-pentanone	12.324	58	191241	11.22	ppb(v	93
67) trans-1,3-Dichloropropene	12.955	75	298491	10.49	ppb(v	97
68) Toluene	13.511	91	772765	9.68	ppb(v	99
69) 1,1,2-Trichloroethane	13.163	97	265150	10.08	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	353907	10.01	ppb(v	92
71) 2-Hexanone	13.891	58	252103	11.78	ppb(v	91
72) Ethyl Methacrylate	13.921	69	385113	10.96	ppb(v	98
73) Dibromochloromethane	14.074	129	496215	10.63	ppb(v	100
74) Tetrachloroethene	15.022	166	453278	9.43	ppb(v	97
75) 1,2-Dibromoethane	14.392	107	406958	10.31	ppb(v	100
76) Octane	14.863	43	452469	10.42	ppb(v	97
77) 1,1,1,2-Tetrachloroethane	15.946	131	339251	10.21	ppb(v	97
79) Chlorobenzene	15.971	112	623635	10.57	ppb(v	97
80) Ethylbenzene	16.509	91	955340	10.36	ppb(v	99
81) m,p-Xylene	16.784	91	1450318	20.08	ppb(v	98
82) Styrene	17.304	104	560035	12.02	ppb(v	97
83) Nonane	17.843	43	453980	11.25	ppb(v	100
84) o-Xylene	17.457	91	727173	10.16	ppb(v	97
85) Bromoform	16.858	173	486385	13.89	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.463	83	499295	12.22	ppb(v	100
87) 1,2,3-Trichloropropane	17.653	75	354937	11.16	ppb(v	98
88) Isopropylbenzene	18.369	105	1047873	10.32	ppb(v	97
89) Bromobenzene	18.473	156	343298	11.71	ppb(v	96
90) 2-Chlorotoluene	19.091	126	258928	11.40	ppb(v	90
91) n-Propylbenzene	19.164	120	291298	11.52	ppb(v	97
93) 4-Ethyltoluene	19.384	105	958786	11.06	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.507	105	817215	10.54	ppb(v	97
95) alpha-Methylstyrene	19.739	118	398518	12.48	ppb(v	97
96) tert-Butylbenzene	20.076	134	211546	11.19	ppb(v	83
97) 1,2,4-Trimethylbenzene	20.088	105	785151	10.98	ppb(v#	85
98) 1,3-Dichlorobenzene	20.284	146	501736	12.54	ppb(v	96
99) Benzyl Chloride	20.271	91	475582	16.81	ppb(v	96
100) 1,4-Dichlorobenzene	20.381	146	455375	12.92	ppb(v	96
101) sec-Butylbenzene	20.461	134	254689	11.32	ppb(v	92
102) p-Isopropyltoluene	20.693	134	265106	11.52	ppb(v	91
103) 1,2-Dichlorobenzene	20.840	146	459943	12.12	ppb(v	97
104) n-Butylbenzene	21.262	134	213809	12.22	ppb(v	96
105) Hexachloroethane	21.727	201	324520	14.94	ppb(v	90
106) 1,2,4-Trichlorobenzene	23.043	180	130295	12.37	ppb(v	99
107) Naphthalene	23.165	128	263764	12.12	ppb(v	100
108) Hexachlorobutadiene	23.612	225	211578	8.90	ppb(v	99
110) TVHC as equiv Pentane	5.595	TIC	844374	9.73	ppb(v	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10667.D
Acq On : 20 Feb 2019 12:54 pm
Operator : thomash
Sample : bsd
Misc : MS32480,V6W425,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 13:24:46 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



7.3.4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10360.D
 Acq On : 29 Jan 2019 10:31 am
 Operator : thomash
 Sample : bs
 Misc : MS32203,V6W409,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 10:35:15 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.171	130	213062	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	772198	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.910	82	312079	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.171	130	213062	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.155	95	405241	10.64	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	106.40%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	125295	11.41	ppb(v	86
4) Chlorodifluoromethane	3.766	67	43682	8.17	ppb(v	98
5) Propene	3.790	41	143136	11.51	ppb(v	94
6) Chlorotrifluoroethene	3.797	116	308632	9.76	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	469490	8.37	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.962	65	311653	7.07	ppb(v#	96
9) Chloromethane	3.986	50	159734	10.07	ppb(v	99
10) Dichlorotetrafluoroethane	4.060	85	515325	8.81	ppb(v	99
11) Vinyl Chloride	4.164	62	193212	10.02	ppb(v#	99
12) 1,3-Butadiene	4.268	54	135519	10.06	ppb(v	97
13) n-Butane	4.310	58	36641	11.14	ppb(v	91
14) Bromomethane	4.494	94	198970	9.56	ppb(v	99
15) Acrolein	5.026	56	81847	10.42	ppb(v#	92
16) Chloroethane	4.635	64	100600	10.14	ppb(v	98
17) Dichlorofluoromethane	4.708	67	427272	8.88	ppb(v	99
18) Acetonitrile	4.916	41	161584	11.14	ppb(v	97
19) Freon 123	5.057	83	489280	9.83	ppb(v	98
20) Freon 123A	5.106	117	285857	9.26	ppb(v	93
21) Bromoethene	4.928	106	212065	10.00	ppb(v#	96
22) Trichlorofluoromethane	5.295	101	457225	7.97	ppb(v	99
23) Acetone	5.136	58	97287	10.95	ppb(v	73
24) Pentane	5.607	57	56054	12.37	ppb(v	90
26) Iodomethane	5.803	142	619500	9.86	ppb(v	90
27) Isopropyl Alcohol	5.350	45	352319	10.72	ppb(v	94
28) 1,1-Dichloroethene	5.870	61	300469	9.82	ppb(v	96
29) Freon 113	6.231	101	431682	9.61	ppb(v	99
30) Methylene Chloride	5.987	84	194375	9.72	ppb(v	98
31) Carbon Disulfide	6.274	76	616772	11.04	ppb(v	100
32) Ethanol	4.720	45	78332	10.44	ppb(v	97
33) Acrylonitrile	5.558	53	177307	12.59	ppb(v	98
34) 3-Chloropropene	6.097	76	107878	11.71	ppb(v	85
35) trans-1,2-Dichloroethene	6.904	61	290575	10.48	ppb(v	99
36) tert-Butyl Alcohol	5.901	59	421140	11.03	ppb(v	94
37) Methyl tert-Butyl Ether	7.155	73	581747	10.00	ppb(v	97
38) Vinyl Acetate	7.259	43	561164	11.76	ppb(v	99
39) 1,1-Dichloroethane	7.106	63	372607	10.36	ppb(v	99
40) 2-Butanone	7.516	72	112055	12.74	ppb(v	98
41) Hexane	8.201	57	338801	11.64	ppb(v	87
42) cis-1,2-Dichloroethene	7.987	61	282006	10.32	ppb(v	99
43) Di-isopropyl Ether	8.201	87	196753	10.94	ppb(v	90
44) Ethyl Acetate	8.232	61	73398	12.81	ppb(v	83
45) Methyl Acrylate	8.220	55	399531	12.13	ppb(v	97
46) Chloroform	8.311	83	435267	9.22	ppb(v	98
47) 2,4-Dimethylpentane	9.186	57	396752	11.64	ppb(v	99
48) Tetrahydrofuran	8.746	72	104603	12.27	ppb(v	94
49) 1,1,1-Trichloroethane	9.406	97	420904	8.83	ppb(v	97
50) 1,2-Dichloroethane	9.131	62	241071	8.32	ppb(v	98
51) Benzene	9.939	78	697986	10.78	ppb(v	98
52) Carbon Tetrachloride	10.110	117	445043	9.18	ppb(v	98
53) Cyclohexane	10.245	56	345540	11.54	ppb(v	95
54) 2,3-Dimethylpentane	10.538	71	156756	11.59	ppb(v	98
56) 2,2,4-Trimethylpentane	11.230	57	1100886	11.36	ppb(v	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10360.D
 Acq On : 29 Jan 2019 10:31 am
 Operator : thomash
 Sample : bs
 Misc : MS32203,V6W409,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

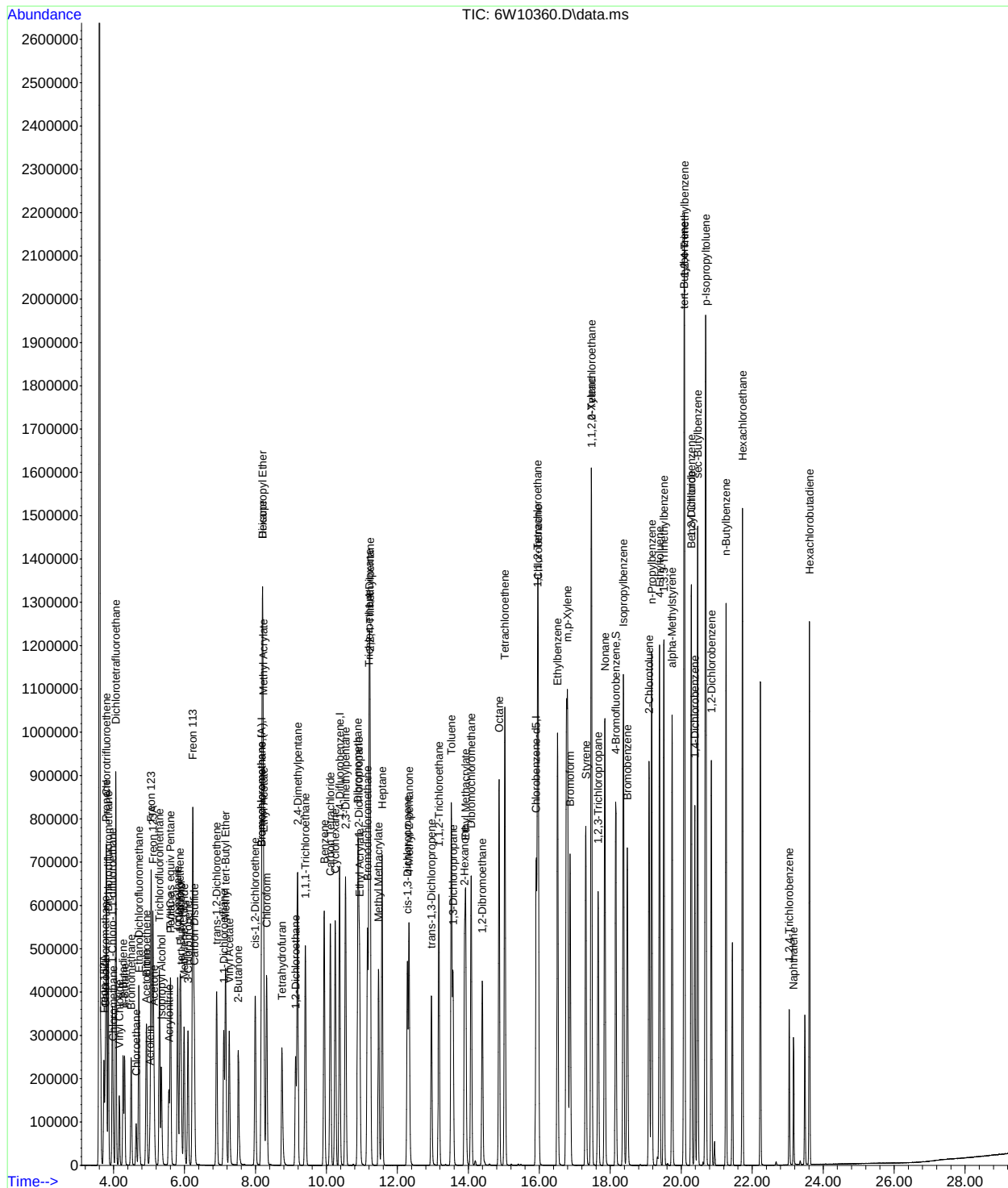
Quant Time: Jan 30 10:35:15 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.572	71	244590	11.39	ppb(v	98
58) Trichloroethene	11.199	95	303053	9.71	ppb(v	98
59) 1,2-Dichloropropane	10.911	63	262150	11.52	ppb(v	91
60) Dibromomethane	10.887	174	316618	9.34	ppb(v	99
61) Ethyl Acrylate	10.936	55	500705	12.23	ppb(v	98
62) Methyl Methacrylate	11.468	69	258496	12.03	ppb(v	92
63) 1,4-Dioxane	11.205	88	166560	11.55	ppb(v#	85
64) Bromodichloromethane	11.156	83	473714	9.79	ppb(v	99
65) cis-1,3-Dichloropropene	12.282	75	380729	10.96	ppb(v	99
66) 4-Methyl-2-pentanone	12.325	58	212273	12.24	ppb(v	95
67) trans-1,3-Dichloropropene	12.955	75	309944	10.70	ppb(v	99
68) Toluene	13.518	91	836130	10.29	ppb(v	99
69) 1,1,2-Trichloroethane	13.169	97	285262	10.65	ppb(v	99
70) 1,3-Dichloropropane	13.567	76	384246	10.68	ppb(v	94
71) 2-Hexanone	13.891	58	275965	12.67	ppb(v	92
72) Ethyl Methacrylate	13.921	69	417281	11.67	ppb(v	97
73) Dibromochloromethane	14.080	129	518900	10.92	ppb(v	100
74) Tetrachloroethene	15.029	166	465961	9.53	ppb(v	99
75) 1,2-Dibromoethane	14.392	107	414987	10.34	ppb(v	99
76) Octane	14.870	43	503846	11.40	ppb(v	96
77) 1,1,1,2-Tetrachloroethane	15.952	131	355930	10.53	ppb(v	98
79) Chlorobenzene	15.971	112	654551	11.31	ppb(v	99
80) Ethylbenzene	16.515	91	1037742	11.47	ppb(v	99
81) m,p-Xylene	16.791	91	1566570	22.12	ppb(v	99
82) Styrene	17.311	104	584463	12.79	ppb(v	98
83) Nonane	17.849	43	502642	12.70	ppb(v	99
84) o-Xylene	17.463	91	788949	11.24	ppb(v	99
85) Bromoform	16.864	173	495734	14.43	ppb(v	100
86) 1,1,2,2-Tetrachloroethane	17.470	83	544722	13.60	ppb(v	99
87) 1,2,3-Trichloropropane	17.659	75	393782	12.62	ppb(v	97
88) Isopropylbenzene	18.369	105	1114351	11.19	ppb(v	99
89) Bromobenzene	18.479	156	344170	11.97	ppb(v	99
90) 2-Chlorotoluene	19.091	126	269701	12.11	ppb(v	97
91) n-Propylbenzene	19.164	120	304732	12.29	ppb(v	98
93) 4-Ethyltoluene	19.391	105	1023945	12.05	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.513	105	874660	11.51	ppb(v	98
95) alpha-Methylstyrene	19.739	118	412371	13.16	ppb(v	99
96) tert-Butylbenzene	20.082	134	215865	11.64	ppb(v	94
97) 1,2,4-Trimethylbenzene	20.094	105	841754	12.00	ppb(v	96
98) 1,3-Dichlorobenzene	20.284	146	499701	12.74	ppb(v	98
99) Benzyl Chloride	20.278	91	479030	17.26	ppb(v	98
100) 1,4-Dichlorobenzene	20.382	146	444104	12.84	ppb(v	98
101) sec-Butylbenzene	20.467	134	261843	11.87	ppb(v	93
102) p-Isopropyltoluene	20.694	134	276758	12.26	ppb(v	96
103) 1,2-Dichlorobenzene	20.847	146	478611	12.86	ppb(v	98
104) n-Butylbenzene	21.263	134	224031	13.06	ppb(v	95
105) Hexachloroethane	21.728	201	316308	14.85	ppb(v	100
106) 1,2,4-Trichlorobenzene	23.043	180	124326	12.04	ppb(v	99
107) Naphthalene	23.165	128	238427	11.17	ppb(v	100
108) Hexachlorobutadiene	23.612	225	261601	11.22	ppb(v	99
110) TVHC as equiv Pentane	5.601	TIC	953191	10.90	ppb(v	100

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

Data Path : C:\msdchem\1\data\
Data File : 6W10360.D
Acq On : 29 Jan 2019 10:31 am
Operator : thomash
Sample : bs
Misc : MS32203,V6W409,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 10:35:15 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10361.D
 Acq On : 29 Jan 2019 11:19 am
 Operator : thomash
 Sample : bsd
 Misc : MS32203,V6W409,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 10:35:50 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.171	130	218120	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	790359	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.910	82	330008	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.171	130	218120	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.155	95	431091	10.70	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	107.00%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	124830	11.10	ppb(v	86
4) Chlorodifluoromethane	3.766	67	42679	7.79	ppb(v	97
5) Propene	3.797	41	140428	11.03	ppb(v	95
6) Chlorotrifluoroethene	3.803	116	308090	9.51	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	465790	8.12	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.968	65	306117	6.78	ppb(v#	96
9) Chloromethane	3.986	50	157490	9.70	ppb(v	100
10) Dichlorotetrafluoroethane	4.060	85	510149	8.52	ppb(v	99
11) Vinyl Chloride	4.164	62	191884	9.72	ppb(v#	99
12) 1,3-Butadiene	4.274	54	134160	9.73	ppb(v	97
13) n-Butane	4.317	58	35852	10.65	ppb(v	89
14) Bromomethane	4.500	94	197754	9.28	ppb(v	99
15) Acrolein	5.026	56	82015	10.20	ppb(v#	92
16) Chloroethane	4.635	64	101086	9.95	ppb(v	98
17) Dichlorofluoromethane	4.708	67	424397	8.61	ppb(v	99
18) Acetonitrile	4.916	41	161822	10.90	ppb(v	97
19) Freon 123	5.063	83	488486	9.59	ppb(v	99
20) Freon 123A	5.112	117	287201	9.09	ppb(v	97
21) Bromoethene	4.934	106	212003	9.76	ppb(v#	97
22) Trichlorofluoromethane	5.295	101	456540	7.78	ppb(v	99
23) Acetone	5.136	58	96200	10.58	ppb(v	71
24) Pentane	5.607	57	56154	12.11	ppb(v	90
26) Iodomethane	5.803	142	621946	9.67	ppb(v	91
27) Isopropyl Alcohol	5.350	45	350094	10.41	ppb(v	94
28) 1,1-Dichloroethene	5.877	61	299042	9.55	ppb(v	96
29) Freon 113	6.231	101	432342	9.40	ppb(v	98
30) Methylene Chloride	5.993	84	194539	9.50	ppb(v	99
31) Carbon Disulfide	6.274	76	617945	10.80	ppb(v	99
32) Ethanol	4.720	45	78263	10.19	ppb(v	99
33) Acrylonitrile	5.558	53	175987	12.21	ppb(v	97
34) 3-Chloropropene	6.097	76	108170	11.47	ppb(v	85
35) trans-1,2-Dichloroethene	6.904	61	287411	10.12	ppb(v	100
36) tert-Butyl Alcohol	5.901	59	420700	10.76	ppb(v	94
37) Methyl tert-Butyl Ether	7.161	73	582578	9.78	ppb(v	97
38) Vinyl Acetate	7.259	43	555645	11.38	ppb(v	99
39) 1,1-Dichloroethane	7.106	63	368608	10.01	ppb(v	99
40) 2-Butanone	7.516	72	111422	12.38	ppb(v	99
41) Hexane	8.201	57	333606	11.20	ppb(v	85
42) cis-1,2-Dichloroethene	7.993	61	283129	10.12	ppb(v	99
43) Di-isopropyl Ether	8.201	87	196181	10.66	ppb(v	90
44) Ethyl Acetate	8.232	61	72633	12.38	ppb(v	88
45) Methyl Acrylate	8.220	55	395265	11.72	ppb(v	98
46) Chloroform	8.311	83	434153	8.98	ppb(v	98
47) 2,4-Dimethylpentane	9.186	57	394226	11.30	ppb(v	99
48) Tetrahydrofuran	8.746	72	103927	11.91	ppb(v	93
49) 1,1,1-Trichloroethane	9.406	97	416800	8.54	ppb(v	98
50) 1,2-Dichloroethane	9.131	62	240458	8.10	ppb(v	97
51) Benzene	9.939	78	693738	10.47	ppb(v	98
52) Carbon Tetrachloride	10.110	117	443828	8.94	ppb(v	98
53) Cyclohexane	10.245	56	341963	11.16	ppb(v	94
54) 2,3-Dimethylpentane	10.538	71	155383	11.22	ppb(v	99
56) 2,2,4-Trimethylpentane	11.230	57	1086967	10.96	ppb(v	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10361.D
 Acq On : 29 Jan 2019 11:19 am
 Operator : thomash
 Sample : bsd
 Misc : MS32203,V6W409,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 10:35:50 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

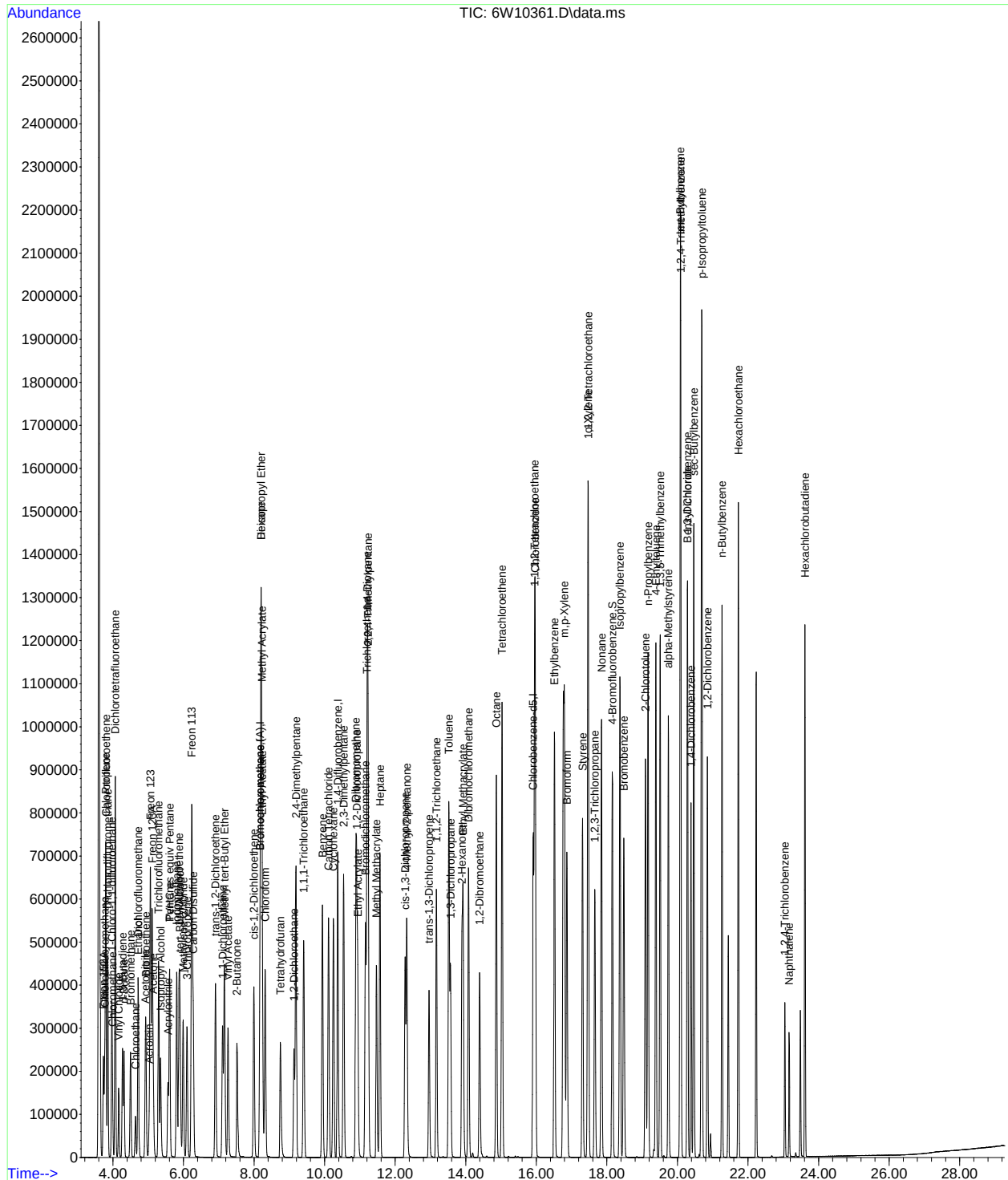
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.572	71	242087	11.01	ppb(v)	97
58) Trichloroethene	11.199	95	302945	9.48	ppb(v)	99
59) 1,2-Dichloropropane	10.911	63	257691	11.06	ppb(v)	91
60) Dibromomethane	10.887	174	316400	9.12	ppb(v)	100
61) Ethyl Acrylate	10.942	55	493596	11.78	ppb(v)	98
62) Methyl Methacrylate	11.468	69	257196	11.70	ppb(v)	91
63) 1,4-Dioxane	11.205	88	165527	11.21	ppb(v)	88
64) Bromodichloromethane	11.156	83	470239	9.49	ppb(v)	98
65) cis-1,3-Dichloropropene	12.282	75	378389	10.64	ppb(v)	99
66) 4-Methyl-2-pentanone	12.325	58	210592	11.86	ppb(v)	92
67) trans-1,3-Dichloropropene	12.955	75	306705	10.35	ppb(v)	99
68) Toluene	13.518	91	832870	10.01	ppb(v)	99
69) 1,1,2-Trichloroethane	13.169	97	282615	10.31	ppb(v)	99
70) 1,3-Dichloropropane	13.567	76	383336	10.41	ppb(v)	93
71) 2-Hexanone	13.891	58	272394	12.22	ppb(v)	91
72) Ethyl Methacrylate	13.921	69	415163	11.35	ppb(v)	97
73) Dibromochloromethane	14.080	129	516791	10.62	ppb(v)	100
74) Tetrachloroethene	15.029	166	466410	9.32	ppb(v)	98
75) 1,2-Dibromoethane	14.392	107	413740	10.07	ppb(v)	100
76) Octane	14.870	43	495082	10.94	ppb(v)	96
77) 1,1,1,2-Tetrachloroethane	15.952	131	353962	10.23	ppb(v)	98
79) Chlorobenzene	15.971	112	653876	10.69	ppb(v)	100
80) Ethylbenzene	16.515	91	1030695	10.77	ppb(v)	99
81) m,p-Xylene	16.791	91	1567331	20.93	ppb(v)	99
82) Styrene	17.311	104	581548	12.04	ppb(v)	97
83) Nonane	17.849	43	499242	11.93	ppb(v)	99
84) o-Xylene	17.463	91	788078	10.62	ppb(v)	99
85) Bromoform	16.864	173	494977	13.63	ppb(v)	100
86) 1,1,2,2-Tetrachloroethane	17.470	83	540372	12.76	ppb(v)	99
87) 1,2,3-Trichloropropane	17.659	75	391803	11.88	ppb(v)	97
88) Isopropylbenzene	18.369	105	1111883	10.56	ppb(v)	99
89) Bromobenzene	18.479	156	346961	11.41	ppb(v)	99
90) 2-Chlorotoluene	19.091	126	270631	11.49	ppb(v)	96
91) n-Propylbenzene	19.164	120	303546	11.58	ppb(v)	97
93) 4-Ethyltoluene	19.391	105	1019591	11.35	ppb(v)	99
94) 1,3,5-Trimethylbenzene	19.513	105	876494	10.90	ppb(v)	98
95) alpha-Methylstyrene	19.739	118	412430	12.45	ppb(v)	99
96) tert-Butylbenzene	20.082	134	215028	10.97	ppb(v)	92
97) 1,2,4-Trimethylbenzene	20.094	105	838276	11.30	ppb(v)	94
98) 1,3-Dichlorobenzene	20.284	146	500933	12.07	ppb(v)	98
99) Benzyl Chloride	20.278	91	476681	16.24	ppb(v)	97
100) 1,4-Dichlorobenzene	20.388	146	445241	12.18	ppb(v)	97
101) sec-Butylbenzene	20.467	134	262707	11.26	ppb(v)	93
102) p-Isopropyltoluene	20.694	134	275010	11.52	ppb(v)	95
103) 1,2-Dichlorobenzene	20.847	146	477961	12.14	ppb(v)	98
104) n-Butylbenzene	21.263	134	223507	12.32	ppb(v)	96
105) Hexachloroethane	21.728	201	320287	14.22	ppb(v)	98
106) 1,2,4-Trichlorobenzene	23.043	180	123100	11.27	ppb(v)	99
107) Naphthalene	23.165	128	235253	10.43	ppb(v)	100
108) Hexachlorobutadiene	23.612	225	261649	10.61	ppb(v)	99
110) TVHC as equiv Pentane	5.607	TIC	964551	10.77	ppb(v)	100

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

Quantitation Report (QT Reviewed)

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Data Path : C:\msdchem\1\data\  
Data File : 6W10361.D  
Acq On : 29 Jan 2019 11:19 am  
Operator : thomash  
Sample : bsd  
Misc : MS32203,V6W409,,,,,1  
ALS Vial : 3 Sample Multiplier: 1
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Quant Time: Jan 30 10:35:50 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34904.D
 Acq On : 31 Jan 2019 12:15 pm
 Operator : gabriep
 Sample : bs
 Misc : ms32097,v5w1417,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 13:23:10 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu Jan 24 09:50:52 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.114	130	255611	10.00	ppb(v	#-0.01
55) 1,4-Difluorobenzene	10.224	114	898903	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.694	82	450853	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.114	130	255611	10.00	ppb(v	#-0.01

System Monitoring Compounds						
92) 4-Bromofluorobenzene	17.933	95	572873	10.40	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	104.00%

Target Compounds						Qvalue
3) Freon 152A	3.978	65	168507	11.45	ppb(v	95
4) Chlorodifluoromethane	4.015	67	75503	10.85	ppb(v	99
5) Propene	4.033	41	206336	12.20	ppb(v	97
6) Chlorotrifluoroethene	4.039	116	345493	10.09	ppb(v	98
7) Dichlorodifluoromethane	4.094	85	721195	10.27	ppb(v	99
8) 1-Chloro-1,1-difluoro...	4.198	65	593967	8.68	ppb(v	99
9) Chloromethane	4.217	50	270201	9.50	ppb(v	99
10) Dichlorotetrafluoroethane	4.290	85	816159	10.00	ppb(v	96
11) Vinyl Chloride	4.382	62	302642	10.57	ppb(v	99
12) 1,3-Butadiene	4.480	54	209481	10.73	ppb(v	98
13) n-Butane	4.517	58	46152	11.60	ppb(v	95
14) Bromomethane	4.694	94	306949	9.91	ppb(v	99
15) Chloroethane	4.822	64	141812	10.58	ppb(v	99
16) Dichlorofluoromethane	4.896	67	731874	10.51	ppb(v	99
17) Acetonitrile	5.116	41	223099	10.26	ppb(v	99
18) Freon 123	5.214	83	737254	10.68	ppb(v	99
19) Freon 123A	5.257	117	372628	10.09	ppb(v	88
20) Bromoethene	5.098	106	284200	10.23	ppb(v	99
21) Acrolein	5.208	56	125211	10.50	ppb(v	99
22) Trichlorofluoromethane	5.422	101	772560	9.82	ppb(v	99
23) Acetone	5.318	58	130919	10.18	ppb(v	96
24) Pentane	5.703	57	64178	11.41	ppb(v	88
26) Iodomethane	5.899	142	643788	8.85	ppb(v	98
27) Isopropyl Alcohol	5.526	43	93794	8.05	ppb(v	86
28) 1,1-Dichloroethene	5.960	61	412277	10.13	ppb(v	95
29) Freon 113	6.291	101	525208	9.33	ppb(v	99
30) Methylene Chloride	6.077	84	221056	8.66	ppb(v	94
31) Carbon Disulfide	6.327	76	716230	10.30	ppb(v	100
32) Ethanol	4.945	45	108483	8.35	ppb(v	99
33) Acrylonitrile	5.697	53	210991	10.93	ppb(v	98
34) 3-Chloropropene	6.174	76	105974	10.17	ppb(v	88
35) trans-1,2-Dichloroethene	6.915	61	362993	10.22	ppb(v	95
36) tert-Butyl Alcohol	6.028	59	476311	10.03	ppb(v	97
37) Methyl tert-Butyl Ether	7.178	73	631909	9.64	ppb(v	94
38) Vinyl Acetate	7.263	43	712812	11.06	ppb(v	96
39) 1,1-Dichloroethane	7.110	63	481619	10.30	ppb(v	99
40) 2-Butanone	7.520	72	114377	10.27	ppb(v	82
41) Hexane	8.120	57	396192	10.98	ppb(v	96
42) cis-1,2-Dichloroethene	7.942	61	364725	10.19	ppb(v	96
43) Di-isopropyl Ether	8.144	87	192631	9.77	ppb(v	67
44) Ethyl Acetate	8.199	61	87521	12.21	ppb(v	98
45) Methyl Acrylate	8.181	55	484452	11.30	ppb(v	97
46) Chloroform	8.248	83	577372	9.53	ppb(v	99
47) 2,4-Dimethylpentane	9.056	57	456966	10.95	ppb(v	97
48) Tetrahydrofuran	8.701	72	104980	10.71	ppb(v	89
49) 1,1,1-Trichloroethane	9.288	97	545195	9.59	ppb(v	99
50) 1,2-Dichloroethane	9.025	62	367785	9.60	ppb(v	99
51) Benzene	9.802	78	746394	9.65	ppb(v	99
52) Carbon Tetrachloride	9.967	117	510075	9.96	ppb(v	99
53) Cyclohexane	10.090	56	379701	10.71	ppb(v	93
54) 2,3-Dimethylpentane	10.371	71	161011	10.32	ppb(v	94
56) 2,2,4-Trimethylpentane	11.044	57	1317483	11.05	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34904.D
 Acq On : 31 Jan 2019 12:15 pm
 Operator : gabriep
 Sample : bs
 Misc : ms32097,v5w1417,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 13:23:10 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu Jan 24 09:50:52 2019
 Response via : Initial Calibration

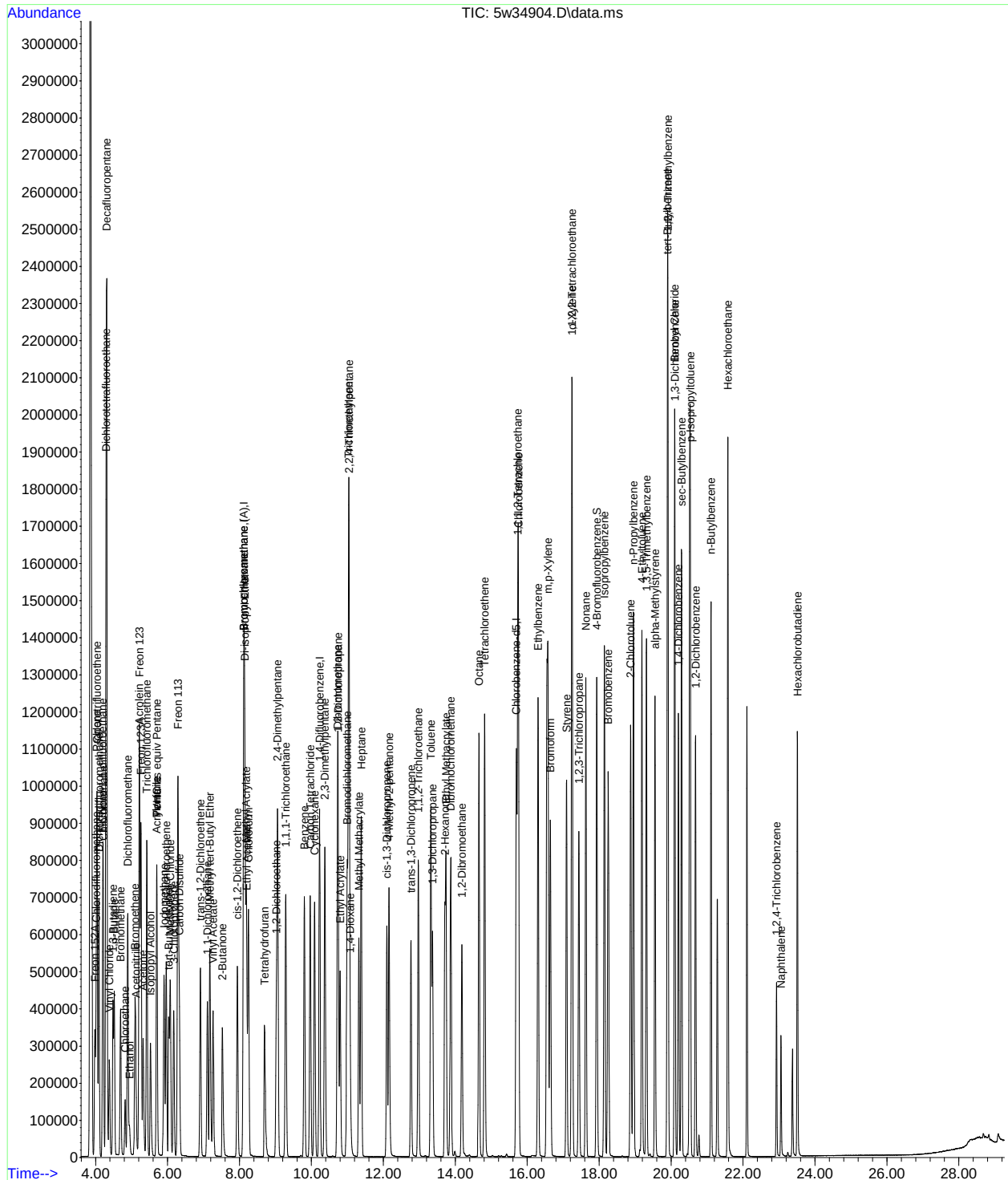
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.387	71	247370	10.41	ppb(v	96
58) Trichloroethene	11.032	95	364780	9.19	ppb(v	97
59) 1,2-Dichloropropane	10.744	63	316981	10.43	ppb(v	97
60) Dibromomethane	10.726	174	307921	8.33	ppb(v	89
61) Ethyl Acrylate	10.799	55	626847	11.41	ppb(v	98
62) Methyl Methacrylate	11.319	69	274553	10.53	ppb(v	93
63) 1,4-Dioxane	11.075	88	159591	9.12	ppb(v	86
64) Bromodichloromethane	10.989	83	610634	9.41	ppb(v	99
65) cis-1,3-Dichloropropene	12.096	75	435057	9.99	ppb(v	98
66) 4-Methyl-2-pentanone	12.158	58	245430	11.75	ppb(v	92
67) trans-1,3-Dichloropropene	12.769	75	408801	10.79	ppb(v	98
68) Toluene	13.320	91	851030	9.42	ppb(v	99
69) 1,1,2-Trichloroethane	12.971	97	321250	9.72	ppb(v	97
70) 1,3-Dichloropropane	13.363	76	443173	10.08	ppb(v	98
71) 2-Hexanone	13.711	58	309000	10.71	ppb(v	96
72) Ethyl Methacrylate	13.742	69	469663	11.08	ppb(v	97
73) Dibromochloromethane	13.871	129	555679	9.44	ppb(v	98
74) Tetrachloroethene	14.813	166	421578	8.37	ppb(v	97
75) 1,2-Dibromoethane	14.183	107	505883	9.55	ppb(v	99
76) Octane	14.654	43	658874	12.30	ppb(v	91
77) 1,1,1,2-Tetrachloroethane	15.736	131	399143	10.00	ppb(v	100
79) Chlorobenzene	15.755	112	712871	8.81	ppb(v	98
80) Ethylbenzene	16.299	91	1169662	9.86	ppb(v	100
81) m,p-Xylene	16.575	91	1830624	19.11	ppb(v	99
82) Styrene	17.095	104	642487	10.15	ppb(v	99
83) Nonane	17.627	43	632297	11.59	ppb(v	96
84) o-Xylene	17.241	91	926537	9.86	ppb(v	99
85) Bromoform	16.642	173	570216	10.67	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.248	83	726848	10.15	ppb(v	99
87) 1,2,3-Trichloropropane	17.437	75	516043	9.92	ppb(v	98
88) Isopropylbenzene	18.147	105	1215953	9.66	ppb(v	100
89) Bromobenzene	18.251	156	394456	9.62	ppb(v	94
90) 2-Chlorotoluene	18.875	126	292880	10.35	ppb(v	99
91) n-Propylbenzene	18.954	120	316814	10.33	ppb(v	91
93) 4-Ethyltoluene	19.187	105	1143446	10.30	ppb(v	100
94) 1,3,5-Trimethylbenzene	19.315	105	953911	9.83	ppb(v	99
95) alpha-Methylstyrene	19.554	118	442469	10.33	ppb(v	99
96) tert-Butylbenzene	19.896	134	197600	9.70	ppb(v	98
97) 1,2,4-Trimethylbenzene	19.909	105	955981	10.50	ppb(v	94
98) 1,3-Dichlorobenzene	20.104	146	591644	9.92	ppb(v	100
99) Benzyl Chloride	20.098	91	683692	14.14	ppb(v	99
100) 1,4-Dichlorobenzene	20.202	146	559310	9.66	ppb(v	98
101) sec-Butylbenzene	20.294	134	237741	9.94	ppb(v	97
102) p-Isopropyltoluene	20.533	134	267348	10.35	ppb(v	97
103) 1,2-Dichlorobenzene	20.680	146	526120	9.88	ppb(v	99
104) n-Butylbenzene	21.114	134	205544	10.93	ppb(v	94
105) Hexachloroethane	21.579	201	329473	10.97	ppb(v	84
106) 1,2,4-Trichlorobenzene	22.931	180	142645	15.84	ppb(v	99
107) Naphthalene	23.053	128	250413	20.63	ppb(v	99
108) Hexachlorobutadiene	23.512	225	209687	11.06	ppb(v	98
110) TVHC as equiv Pentane	5.703	TIC	1768652	11.24	ppb(v	100
111) Decafluoropentane	4.309	69	1244480	10.77	ppb(v#	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 5w34904.D
Acq On : 31 Jan 2019 12:15 pm
Operator : gabriep
Sample : bs
Misc : ms32097,v5w1417,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 13:23:10 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu Jan 24 09:50:52 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34905.D
 Acq On : 31 Jan 2019 1:02 pm
 Operator : gabriel
 Sample : bsd
 Misc : ms32097,v5w1417,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 15:19:22 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu Jan 24 09:50:52 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.120	130	260027	10.00	ppb(v #	0.00
55) 1,4-Difluorobenzene	10.231	114	922734	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	475482	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	260027	10.00	ppb(v #	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	17.933	95	586180	10.09	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.90%

Target Compounds						Qvalue
3) Freon 152A	3.991	65	167646	11.20	ppb(v	94
4) Chlorodifluoromethane	4.027	67	74267	10.49	ppb(v	100
5) Propene	4.046	41	205054	11.92	ppb(v	97
6) Chlorotrifluoroethene	4.052	116	346955	9.96	ppb(v	98
7) Dichlorodifluoromethane	4.101	85	718661	10.06	ppb(v	100
8) 1-Chloro-1,1-difluoro...	4.211	65	587389	8.43	ppb(v	99
9) Chloromethane	4.229	50	268330	9.28	ppb(v	100
10) Dichlorotetrafluoroethane	4.296	85	796850	9.60	ppb(v	93
11) Vinyl Chloride	4.394	62	296414	10.17	ppb(v	100
12) 1,3-Butadiene	4.492	54	204385	10.29	ppb(v	99
13) n-Butane	4.529	58	44882	11.09	ppb(v	91
14) Bromomethane	4.706	94	300579	9.54	ppb(v	99
15) Chloroethane	4.835	64	141288	10.36	ppb(v	99
16) Dichlorofluoromethane	4.902	67	728407	10.28	ppb(v	99
17) Acetonitrile	5.122	41	218788	9.89	ppb(v	99
18) Freon 123	5.226	83	737397	10.50	ppb(v	100
19) Freon 123A	5.269	117	373217	9.93	ppb(v	87
20) Bromoethene	5.104	106	285521	10.10	ppb(v	99
21) Acrolein	5.214	56	123858	10.21	ppb(v	96
22) Trichlorofluoromethane	5.434	101	683103	8.54	ppb(v	99
23) Acetone	5.324	58	131527	10.05	ppb(v	99
24) Pentane	5.716	57	65656	11.47	ppb(v	91
26) Iodomethane	5.912	142	663549	8.97	ppb(v	99
27) Isopropyl Alcohol	5.532	43	95111	8.02	ppb(v	86
28) 1,1-Dichloroethene	5.973	61	419632	10.14	ppb(v	97
29) Freon 113	6.297	101	541995	9.46	ppb(v	97
30) Methylene Chloride	6.083	84	225162	8.67	ppb(v	92
31) Carbon Disulfide	6.340	76	733182	10.37	ppb(v	100
32) Ethanol	4.951	45	107995	8.17	ppb(v	97
33) Acrylonitrile	5.710	53	215365	10.97	ppb(v	99
34) 3-Chloropropene	6.181	76	109013	10.28	ppb(v	90
35) trans-1,2-Dichloroethene	6.921	61	371912	10.30	ppb(v	95
36) tert-Butyl Alcohol	6.040	59	492148	10.18	ppb(v	97
37) Methyl tert-Butyl Ether	7.184	73	655502	9.83	ppb(v	97
38) Vinyl Acetate	7.270	43	735551	11.21	ppb(v	97
39) 1,1-Dichloroethane	7.117	63	487676	10.25	ppb(v	99
40) 2-Butanone	7.527	72	116675	10.30	ppb(v	77
41) Hexane	8.126	57	400790	10.92	ppb(v	97
42) cis-1,2-Dichloroethene	7.949	61	367972	10.10	ppb(v	96
43) Di-isopropyl Ether	8.151	87	196367	9.80	ppb(v	64
44) Ethyl Acetate	8.200	61	88433	12.12	ppb(v	93
45) Methyl Acrylate	8.187	55	494951	11.35	ppb(v	97
46) Chloroform	8.255	83	592981	9.62	ppb(v	99
47) 2,4-Dimethylpentane	9.062	57	470051	11.07	ppb(v	98
48) Tetrahydrofuran	8.701	72	108922	10.92	ppb(v	88
49) 1,1,1-Trichloroethane	9.295	97	555956	9.62	ppb(v	99
50) 1,2-Dichloroethane	9.032	62	375785	9.64	ppb(v	99
51) Benzene	9.809	78	768995	9.77	ppb(v	99
52) Carbon Tetrachloride	9.974	117	524534	10.07	ppb(v	99
53) Cyclohexane	10.096	56	393795	10.92	ppb(v	94
54) 2,3-Dimethylpentane	10.377	71	166619	10.49	ppb(v	90
56) 2,2,4-Trimethylpentane	11.050	57	1355277	11.08	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34905.D
 Acq On : 31 Jan 2019 1:02 pm
 Operator : gabriep
 Sample : bsd
 Misc : ms32097,v5w1417,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 15:19:22 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu Jan 24 09:50:52 2019
 Response via : Initial Calibration

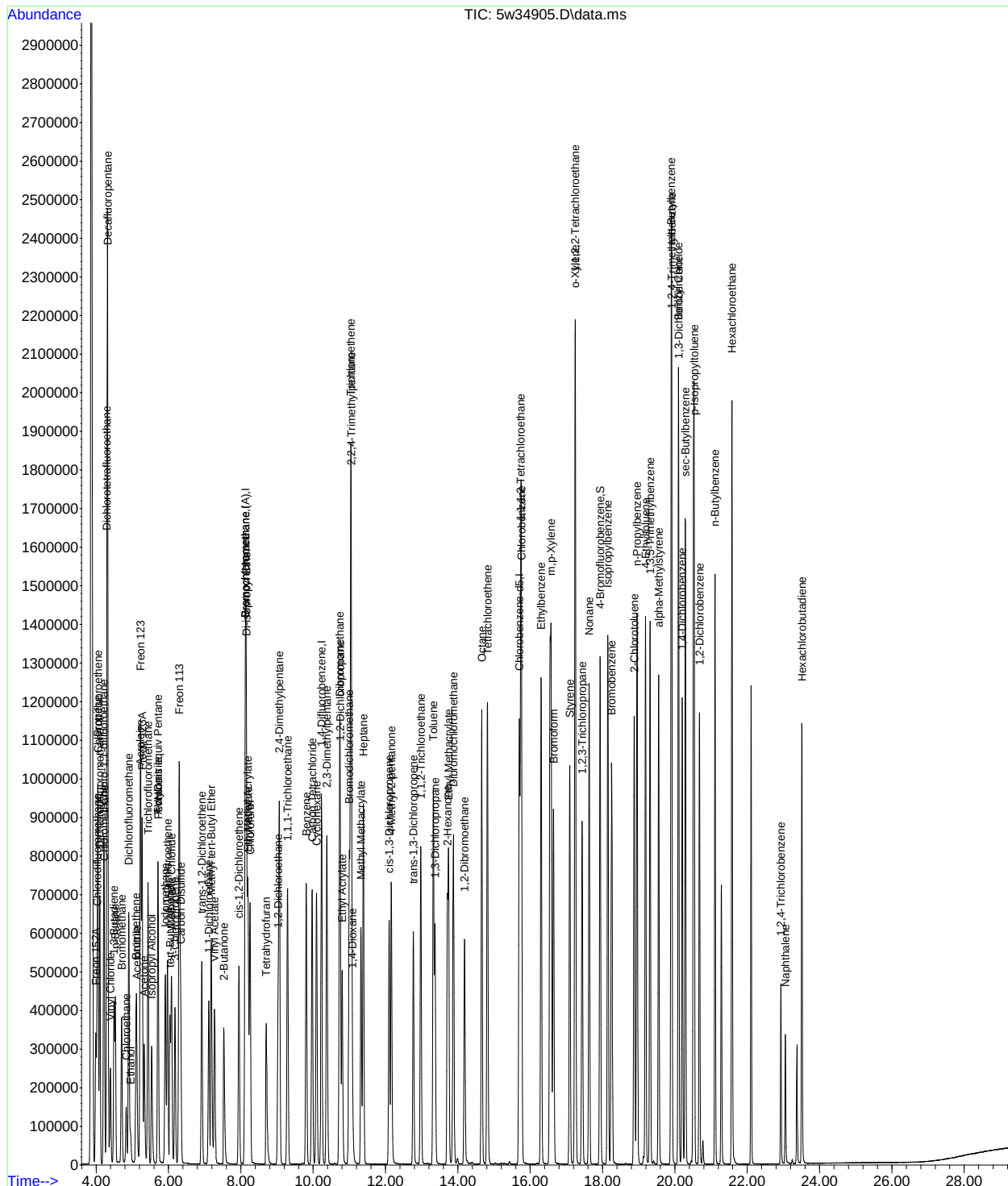
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.387	71	254135	10.42	ppb(v	96
58) Trichloroethene	11.038	95	375785	9.22	ppb(v	97
59) 1,2-Dichloropropane	10.751	63	320983	10.29	ppb(v	97
60) Dibromomethane	10.732	174	317534	8.36	ppb(v	91
61) Ethyl Acrylate	10.806	55	643932	11.42	ppb(v	98
62) Methyl Methacrylate	11.320	69	285872	10.68	ppb(v	94
63) 1,4-Dioxane	11.081	88	163540	9.10	ppb(v	90
64) Bromodichloromethane	10.995	83	630619	9.47	ppb(v	100
65) cis-1,3-Dichloropropene	12.103	75	452803	10.13	ppb(v	98
66) 4-Methyl-2-pentanone	12.158	58	254117	11.86	ppb(v	95
67) trans-1,3-Dichloropropene	12.769	75	418273	10.76	ppb(v	99
68) Toluene	13.320	91	880926	9.50	ppb(v	99
69) 1,1,2-Trichloroethane	12.977	97	330939	9.75	ppb(v	98
70) 1,3-Dichloropropane	13.369	76	458137	10.15	ppb(v	99
71) 2-Hexanone	13.712	58	317274	10.71	ppb(v	97
72) Ethyl Methacrylate	13.742	69	476449	10.95	ppb(v	96
73) Dibromochloromethane	13.877	129	582400	9.64	ppb(v	98
74) Tetrachloroethene	14.819	166	434417	8.40	ppb(v	97
75) 1,2-Dibromoethane	14.183	107	528235	9.71	ppb(v	100
76) Octane	14.660	43	666237	12.12	ppb(v	93
77) 1,1,1,2-Tetrachloroethane	15.737	131	418521	10.22	ppb(v	99
79) Chlorobenzene	15.761	112	741929	8.70	ppb(v	99
80) Ethylbenzene	16.299	91	1198051	9.58	ppb(v	98
81) m,p-Xylene	16.575	91	1871621	18.53	ppb(v	100
82) Styrene	17.095	104	652661	9.77	ppb(v	99
83) Nonane	17.627	43	621979	10.81	ppb(v	97
84) o-Xylene	17.242	91	963035	9.72	ppb(v	100
85) Bromoform	16.648	173	585832	10.39	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.248	83	745958	9.88	ppb(v	99
87) 1,2,3-Trichloropropane	17.437	75	527988	9.62	ppb(v	97
88) Isopropylbenzene	18.147	105	1236221	9.31	ppb(v	100
89) Bromobenzene	18.251	156	397521	9.19	ppb(v	96
90) 2-Chlorotoluene	18.881	126	296034	9.92	ppb(v	99
91) n-Propylbenzene	18.954	120	315744	9.77	ppb(v	93
93) 4-Ethyltoluene	19.187	105	1131297	9.67	ppb(v	100
94) 1,3,5-Trimethylbenzene	19.315	105	969247	9.48	ppb(v	99
95) alpha-Methylstyrene	19.554	118	449342	9.95	ppb(v	99
96) tert-Butylbenzene	19.897	134	194529	9.06	ppb(v	99
97) 1,2,4-Trimethylbenzene	19.909	105	955961	9.95	ppb(v	91
98) 1,3-Dichlorobenzene	20.105	146	604429	9.61	ppb(v	99
99) Benzyl Chloride	20.098	91	695931	13.64	ppb(v	99
100) 1,4-Dichlorobenzene	20.202	146	572074	9.37	ppb(v	98
101) sec-Butylbenzene	20.294	134	240723	9.54	ppb(v	99
102) p-Isopropyltoluene	20.533	134	266218	9.77	ppb(v	99
103) 1,2-Dichlorobenzene	20.680	146	537099	9.57	ppb(v	99
104) n-Butylbenzene	21.114	134	208790	10.53	ppb(v	94
105) Hexachloroethane	21.579	201	332526	10.50	ppb(v	83
106) 1,2,4-Trichlorobenzene	22.931	180	143603	15.12	ppb(v	99
107) Naphthalene	23.053	128	263131	20.56	ppb(v	100
108) Hexachlorobutadiene	23.512	225	214171	10.71	ppb(v	99
110) TVHC as equiv Pentane	5.710	TIC	1779935	11.12	ppb(v	100
111) Decafluoropentane	4.321	69	1227741	10.45	ppb(v#	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 5w34905.D
Acq On : 31 Jan 2019 1:02 pm
Operator : gabriel
Sample : bsd
Misc : ms32097,v5w1417,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 15:19:22 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu Jan 24 09:50:52 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10649.D
 Acq On : 19 Feb 2019 6:39 pm
 Operator : thomash
 Sample : jc82623-1dup
 Misc : MS32455,V6W424,400,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 21 10:44:56 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.171	130	207004	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	748718	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.910	82	301569	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.171	130	207004	10.00	ppb(v	0.00

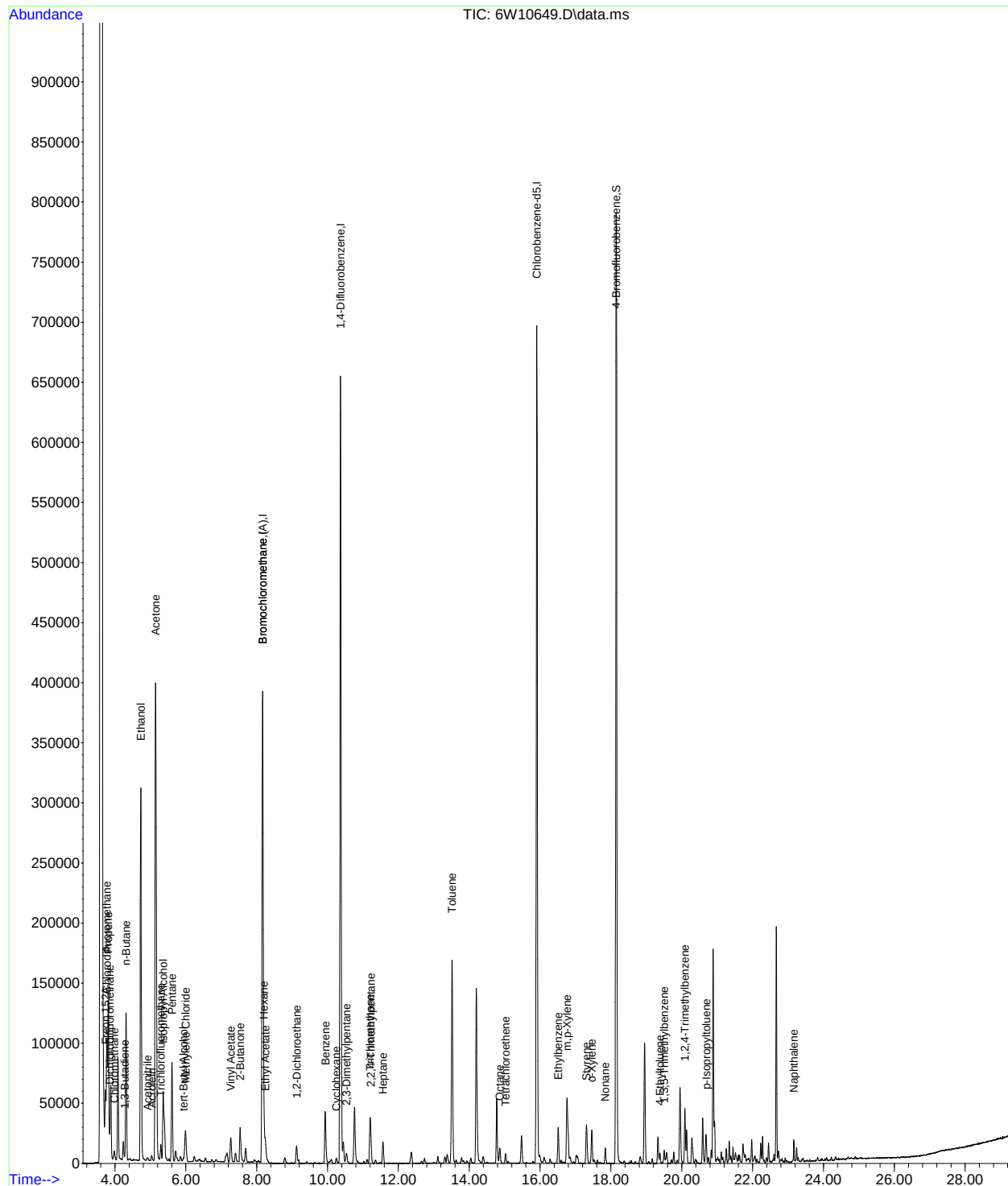
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.149	95	377728	10.26	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	102.60%

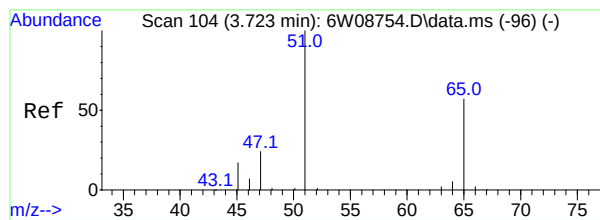
Target Compounds						Qvalue
3) Freon 152A	3.735	65	25659	2.41	ppb(v	86
4) Chlorodifluoromethane	3.766	67	17590	3.38	ppb(v	99
5) Propene	3.809	41	53202	4.40	ppb(v	77
7) Dichlorodifluoromethane	3.852	85	20061	0.37	ppb(v#	96
9) Chloromethane	3.980	50	8113	0.53	ppb(v	99
12) 1,3-Butadiene	4.274	54	1500	0.11	ppb(v	93
13) n-Butane	4.311	58	18426	5.77	ppb(v#	88
15) Acrolein	5.039	56	5151	0.68	ppb(v#	83
18) Acetonitrile	4.922	41	2233	0.16	ppb(v	89
22) Trichlorofluoromethane	5.295	101	12629	0.23	ppb(v	97
23) Acetone	5.143	58	190602	22.09	ppb(v	77
24) Pentane	5.607	57	10605	2.41	ppb(v	89
27) Isopropyl Alcohol	5.363	45	94137	2.95	ppb(v	95
30) Methylene Chloride	5.993	84	13730	0.71	ppb(v	96
32) Ethanol	4.726	45	403466	55.37	ppb(v	98
36) tert-Butyl Alcohol	5.938	59	4168	0.11	ppb(v#	83
38) Vinyl Acetate	7.265	43	21543	0.46	ppb(v	92
40) 2-Butanone	7.535	72	13159	1.54	ppb(v	98
41) Hexane	8.201	57	11673	0.41	ppb(v#	44
44) Ethyl Acetate	8.244	61	3970	0.71	ppb(v#	34
50) 1,2-Dichloroethane	9.125	62	8428	0.30	ppb(v#	95
51) Benzene	9.939	78	26838	0.43	ppb(v	99
53) Cyclohexane	10.245	56	2824	0.10	ppb(v	99
54) 2,3-Dimethylpentane	10.532	71	1784	0.14	ppb(v#	93
56) 2,2,4-Trimethylpentane	11.224	57	15594	0.17	ppb(v#	88
57) Heptane	11.566	71	5793	0.28	ppb(v	96
58) Trichloroethene	11.199	95	14634	0.48	ppb(v	91
68) Toluene	13.512	91	172437	2.19	ppb(v	99
74) Tetrachloroethene	15.029	166	3895	0.08	ppb(v	95
76) Octane	14.864	43	7270	0.17	ppb(v	88
80) Ethylbenzene	16.515	91	31611	0.36	ppb(v	99
81) m,p-Xylene	16.760	91	62575	0.91	ppb(v	96
82) Styrene	17.305	104	21772	0.49	ppb(v	93
83) Nonane	17.837	43	6590	0.17	ppb(v	89
84) o-Xylene	17.457	91	24568	0.36	ppb(v	100
93) 4-Ethyltoluene	19.385	105	8181m	0.10	ppb(v	
94) 1,3,5-Trimethylbenzene	19.507	105	7921	0.11	ppb(v	99
97) 1,2,4-Trimethylbenzene	20.088	105	30128	0.44	ppb(v#	67
102) p-Isopropyltoluene	20.694	134	3028	0.14	ppb(v	93
107) Naphthalene	23.165	128	15984	0.78	ppb(v	99

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

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10649.D
Acq On : 19 Feb 2019 6:39 pm
Operator : thomash
Sample : jc82623-1dup
Misc : MS32455,V6W424,400,,,,,1
ALS Vial : 8 Sample Multiplier: 1

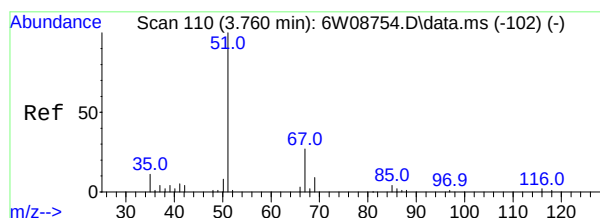
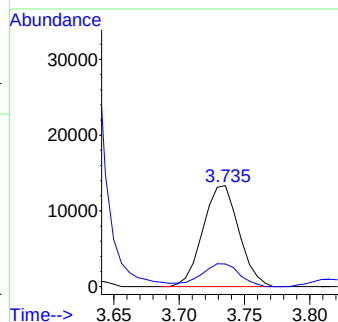
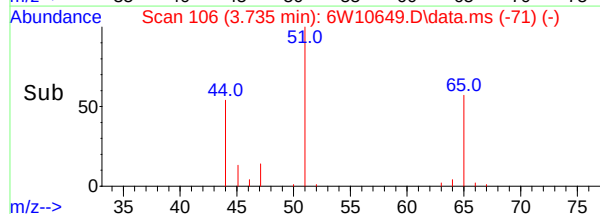
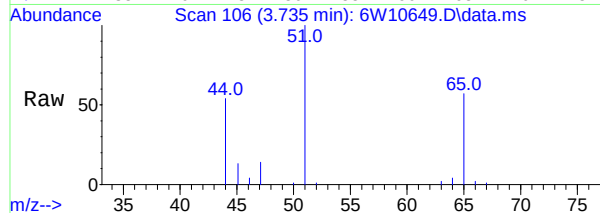
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QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





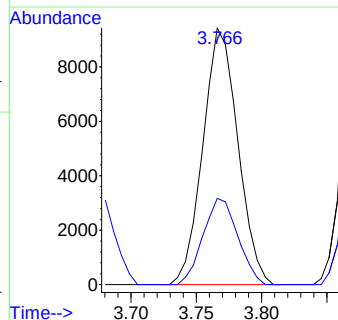
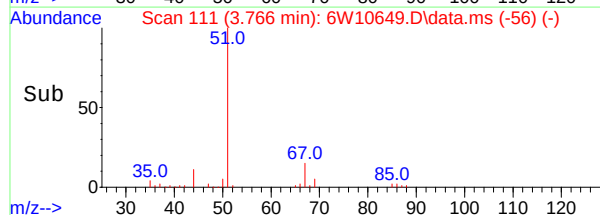
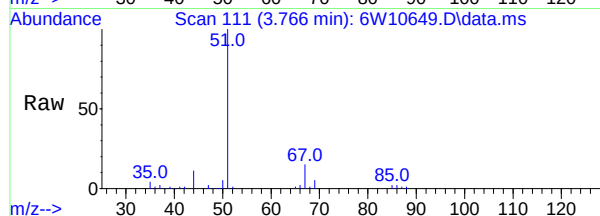
#3
Freon 152A
Concen: 2.41 ppb(v)
RT: 3.735 min Scan# 106
Delta R.T. 0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

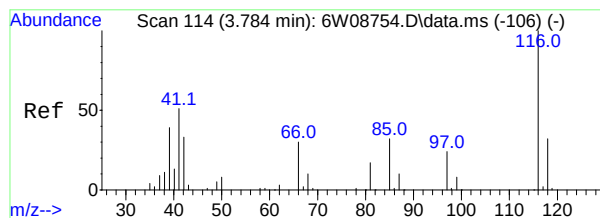
Tgt Ion: 65 Resp: 25659
Ion Ratio Lower Upper
65 100
45 22.4 20.9 38.9



#4
Chlorodifluoromethane
Concen: 3.38 ppb(v)
RT: 3.766 min Scan# 111
Delta R.T. 0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

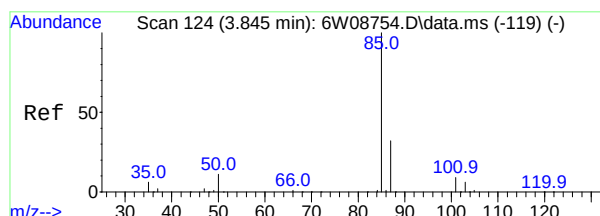
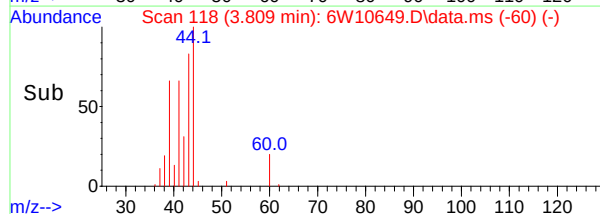
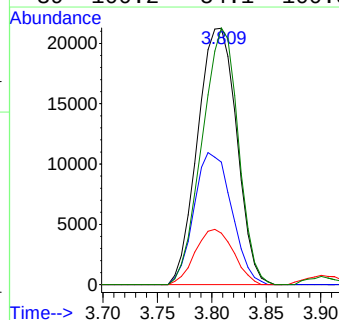
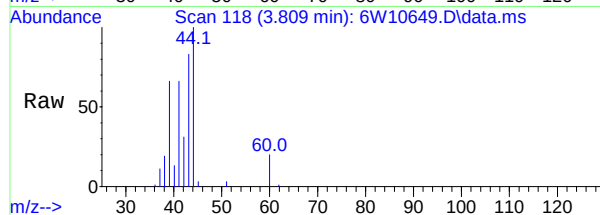
Tgt Ion: 67 Resp: 17590
Ion Ratio Lower Upper
67 100
69 33.6 23.0 42.6





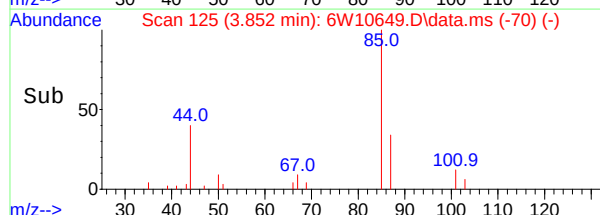
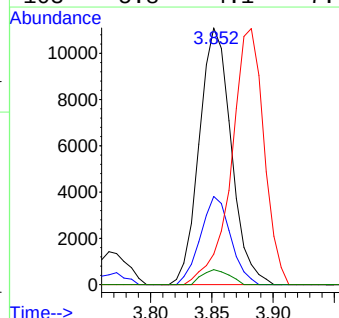
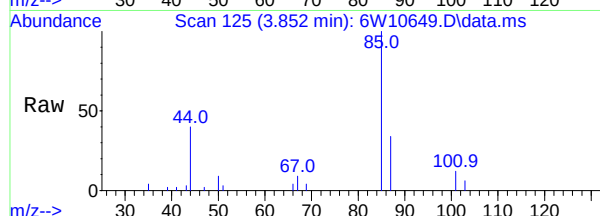
#5
Propene
Concen: 4.40 ppb(v)
RT: 3.809 min Scan# 118
Delta R.T. 0.025 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

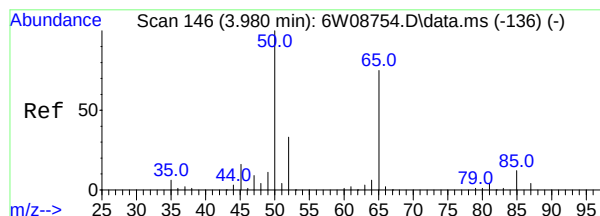
Tgt Ion: 41 Resp: 53202
Ion Ratio Lower Upper
41 100
42 47.8 45.7 84.9
40 20.1 18.4 34.2
39 100.2 54.1 100.5



#7
Dichlorodifluoromethane
Concen: 0.37 ppb(v)
RT: 3.852 min Scan# 125
Delta R.T. 0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

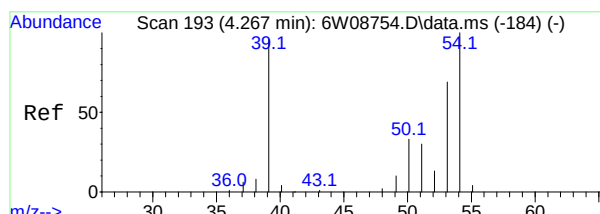
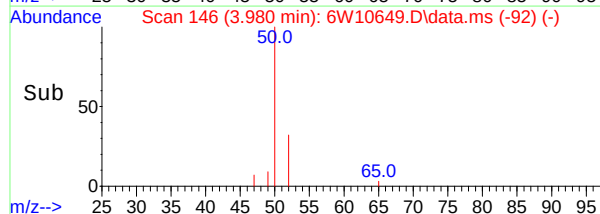
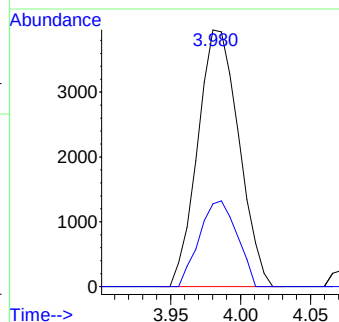
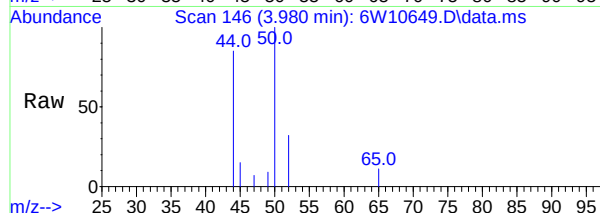
Tgt Ion: 85 Resp: 20061
Ion Ratio Lower Upper
85 100
87 34.3 22.7 42.1
101 11.9 6.3 11.7#
103 5.8 4.1 7.7





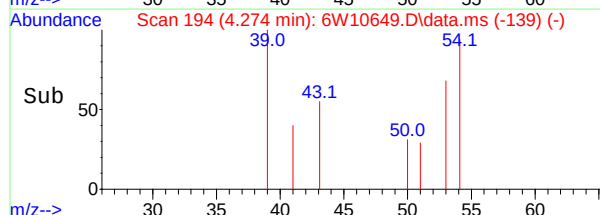
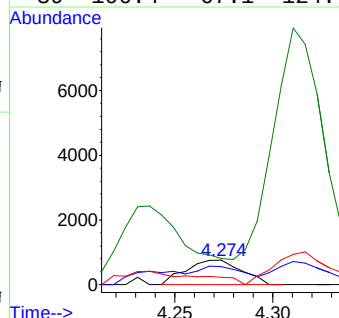
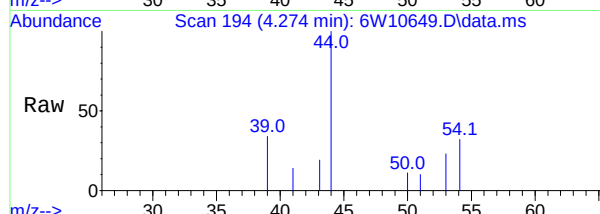
#9
Chloromethane
Concen: 0.53 ppb(v)
RT: 3.980 min Scan# 146
Delta R.T. 0.000 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

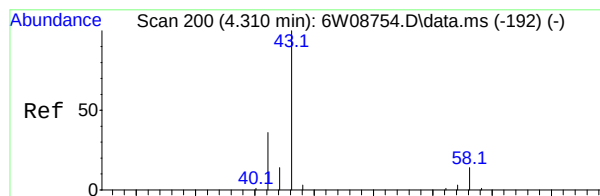
Tgt Ion: 50 Resp: 8113
Ion Ratio Lower Upper
50 100
52 32.2 22.8 42.4



#12
1,3-Butadiene
Concen: 0.11 ppb(v)
RT: 4.274 min Scan# 194
Delta R.T. 0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

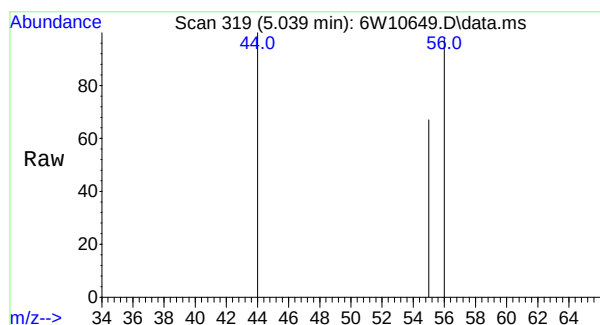
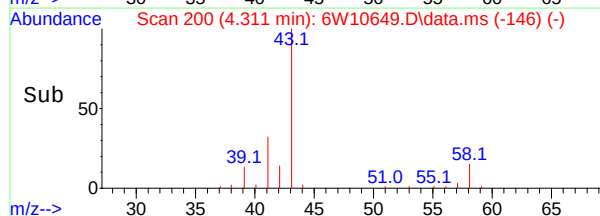
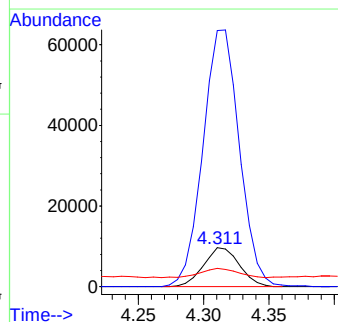
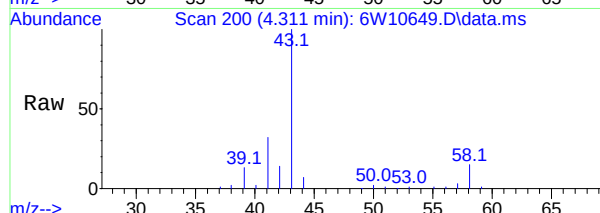
Tgt Ion: 54 Resp: 1500
Ion Ratio Lower Upper
54 100
53 72.8 48.2 89.6
51 30.4 20.6 38.4
39 106.4 67.1 124.7





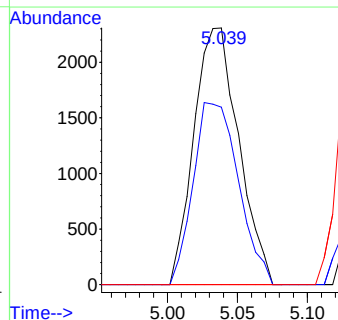
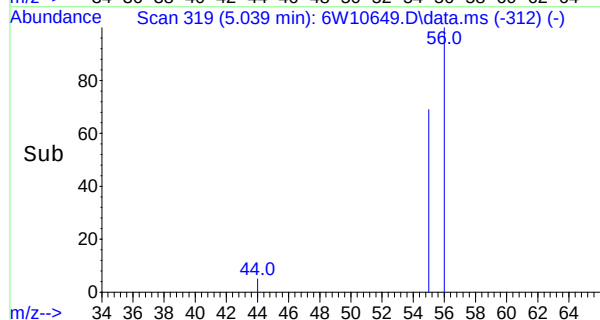
#13
n-Butane
Concen: 5.77 ppb(v)
RT: 4.311 min Scan# 200
Delta R.T. 0.000 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

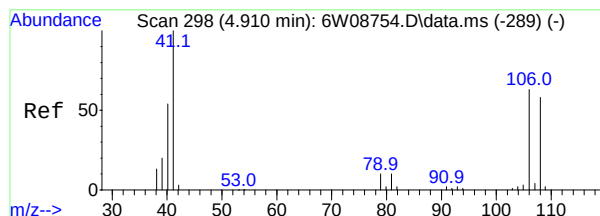
Tgt Ion: 58 Resp: 18426
Ion Ratio Lower Upper
58 100
43 655.8 485.0 900.6
44 46.6 19.2 35.6#



#15
Acrolein
Concen: 0.68 ppb(v)
RT: 5.039 min Scan# 319
Delta R.T. 0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

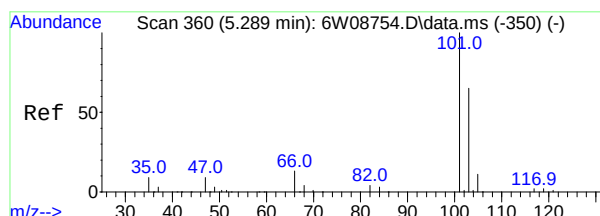
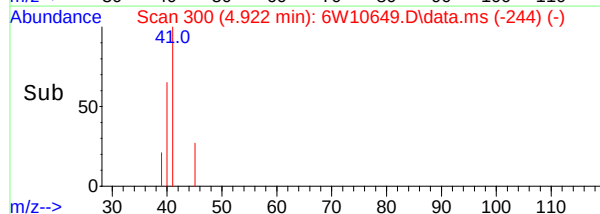
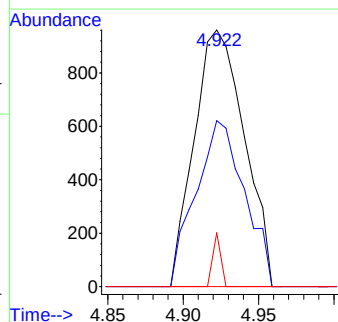
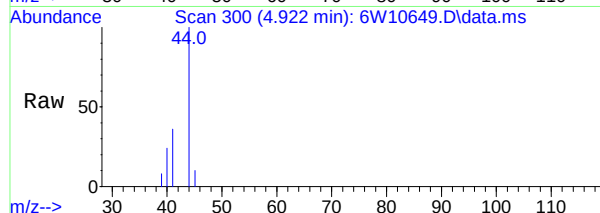
Tgt Ion: 56 Resp: 5151
Ion Ratio Lower Upper
56 100
55 71.6 56.8 85.2
37 0.0 23.8 35.8#





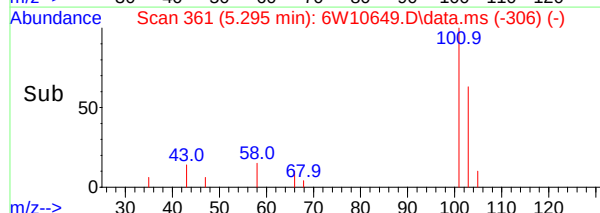
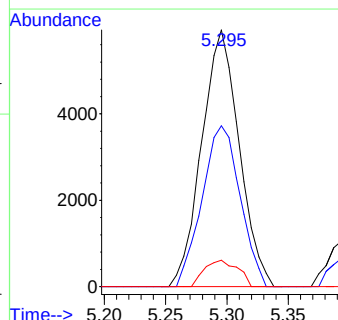
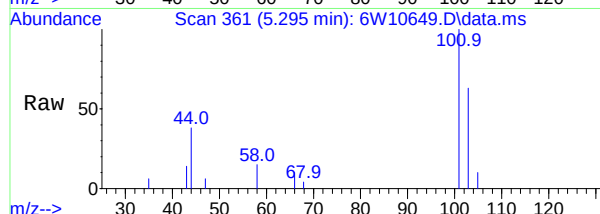
#18
Acetonitrile
Concen: 0.16 ppb(v)
RT: 4.922 min Scan# 300
Delta R.T. 0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

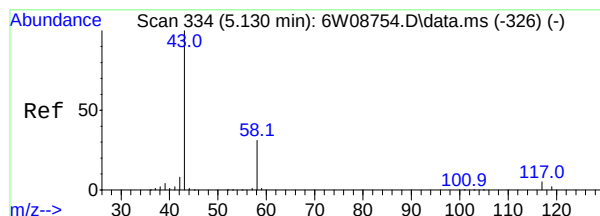
Tgt Ion: 41 Resp: 2233
Ion Ratio Lower Upper
41 100
40 64.6 37.9 70.5
39 21.0 14.0 26.0



#22
Trichlorofluoromethane
Concen: 0.23 ppb(v)
RT: 5.295 min Scan# 361
Delta R.T. 0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

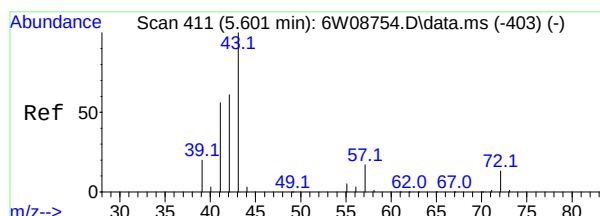
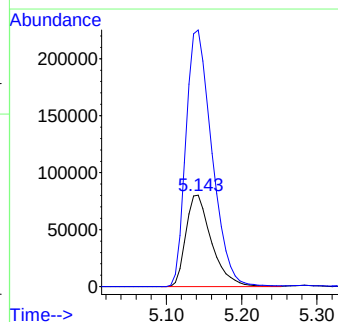
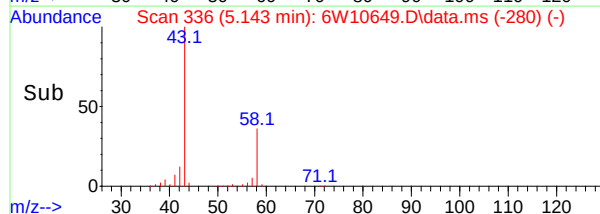
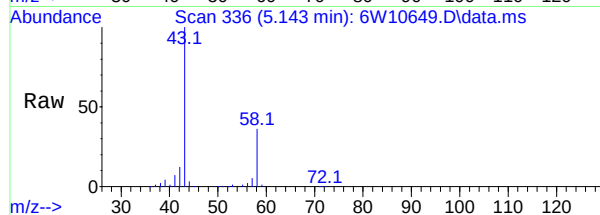
Tgt Ion: 101 Resp: 12629
Ion Ratio Lower Upper
101 100
103 62.6 45.4 84.4
105 10.3 7.3 13.7





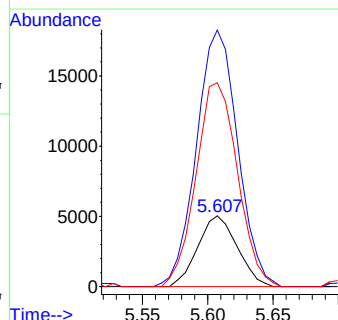
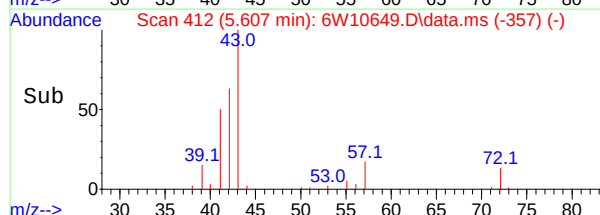
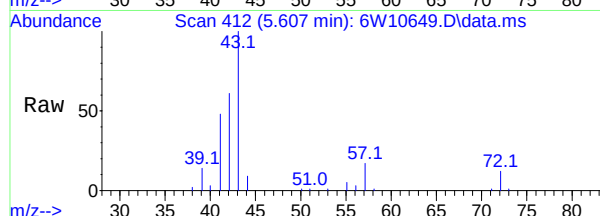
#23
Acetone
Concen: 22.09 ppb(v)
RT: 5.143 min Scan# 336
Delta R.T. 0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

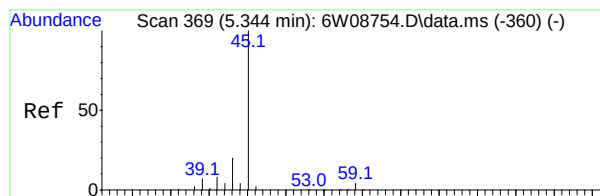
Tgt Ion: 58 Resp: 190602
Ion Ratio Lower Upper
58 100
43 280.5 230.1 427.3



#24
Pentane
Concen: 2.41 ppb(v)
RT: 5.607 min Scan# 412
Delta R.T. 0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

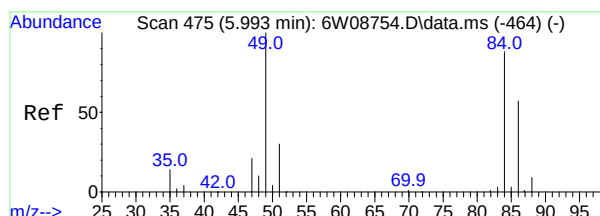
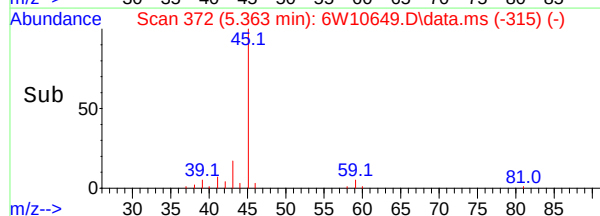
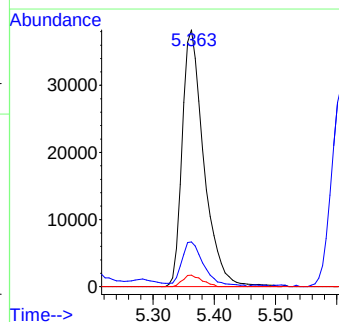
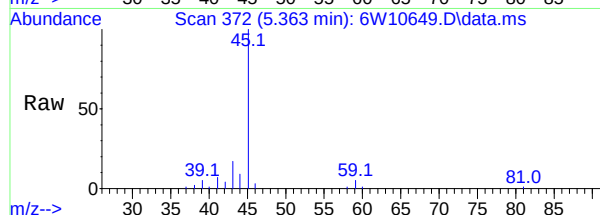
Tgt Ion: 57 Resp: 10605
Ion Ratio Lower Upper
57 100
42 362.0 250.8 465.8
41 287.3 232.7 432.1





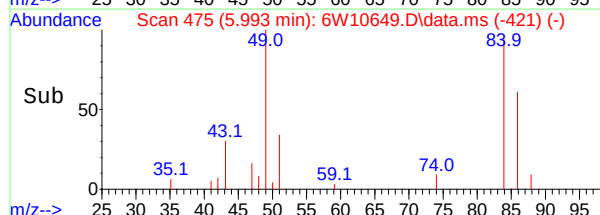
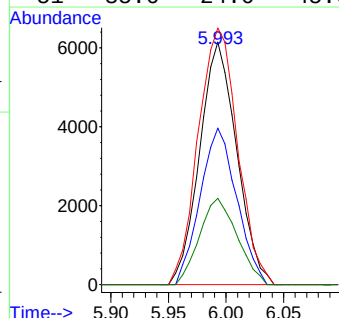
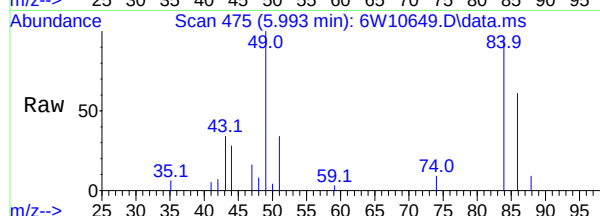
#27
Isopropyl Alcohol
Concen: 2.95 ppb(v)
RT: 5.363 min Scan# 372
Delta R.T. 0.019 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

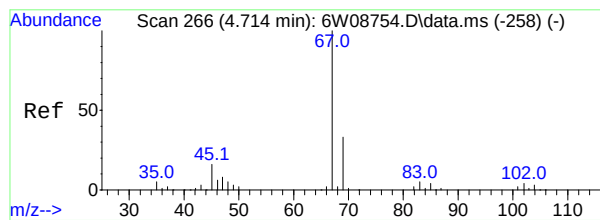
Tgt Ion: 45 Resp: 94137
Ion Ratio Lower Upper
45 100
43 17.4 14.1 26.1
59 4.5 2.8 5.2



#30
Methylene Chloride
Concen: 0.71 ppb(v)
RT: 5.993 min Scan# 475
Delta R.T. 0.000 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

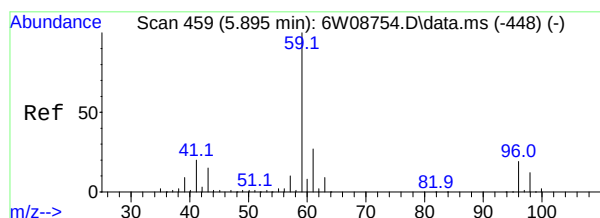
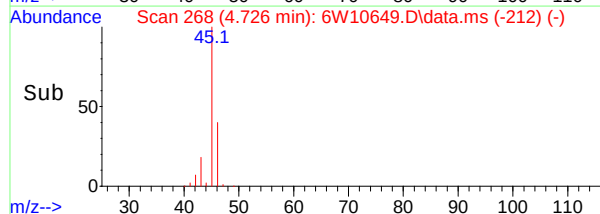
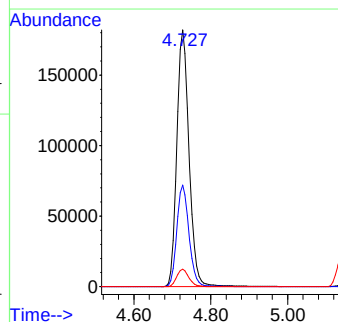
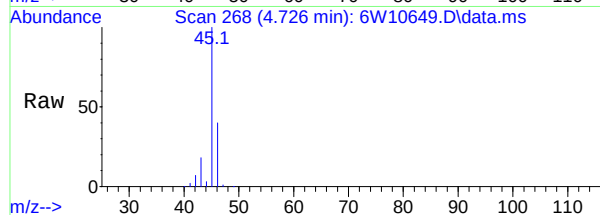
Tgt Ion: 84 Resp: 13730
Ion Ratio Lower Upper
84 100
86 64.6 45.5 84.5
49 105.9 79.5 147.7
51 35.6 24.6 45.6





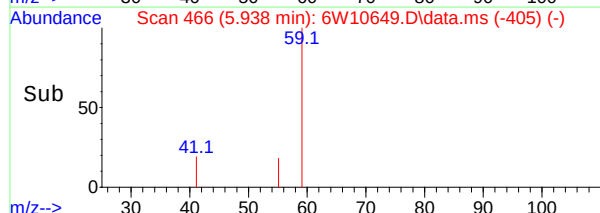
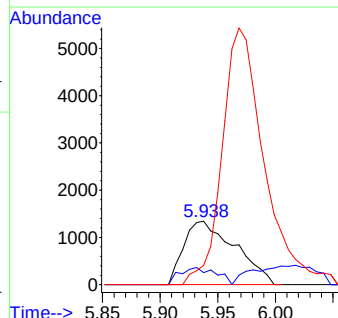
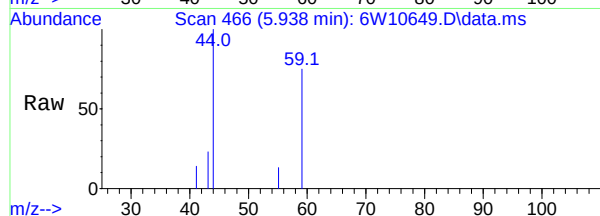
#32
Ethanol
Concen: 55.37 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

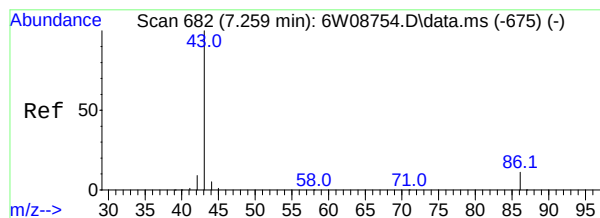
Tgt Ion: 45 Resp: 403466
Ion Ratio Lower Upper
45 100
46 39.6 26.9 49.9
42 6.8 6.0 11.2



#36
tert-Butyl Alcohol
Concen: 0.11 ppb(v)
RT: 5.938 min Scan# 466
Delta R.T. 0.043 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

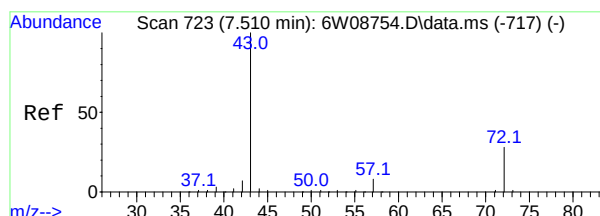
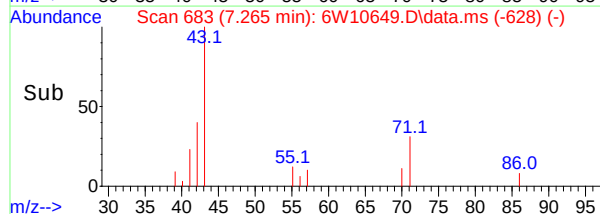
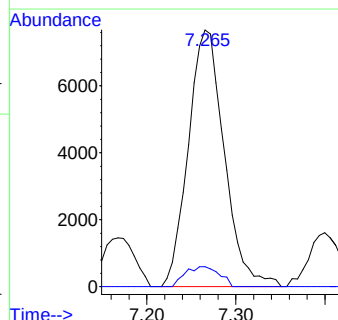
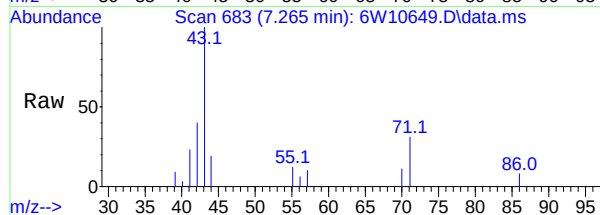
Tgt Ion: 59 Resp: 4168
Ion Ratio Lower Upper
59 100
41 18.9 13.9 25.7
43 30.8 10.5 19.5#





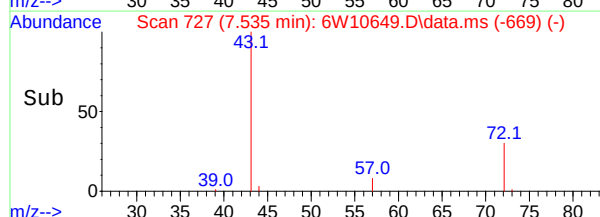
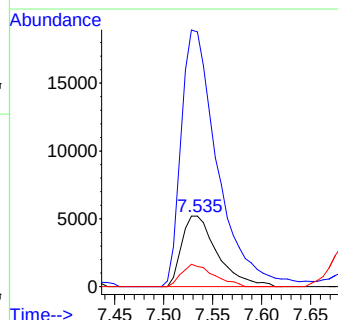
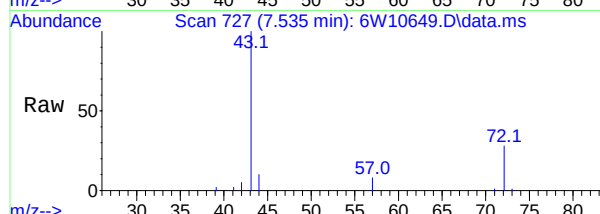
#38
 Vinyl Acetate
 Concen: 0.46 ppb(v)
 RT: 7.265 min Scan# 683
 Delta R.T. 0.006 min
 Lab File: 6W10649.D
 Acq: 19 Feb 2019 6:39 pm

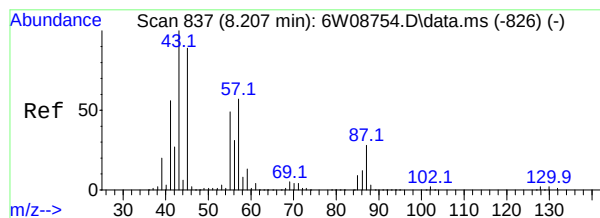
Tgt Ion: 43 Resp: 21543
 Ion Ratio Lower Upper
 43 100
 86 7.8 7.6 14.0



#40
 2-Butanone
 Concen: 1.54 ppb(v)
 RT: 7.535 min Scan# 727
 Delta R.T. 0.025 min
 Lab File: 6W10649.D
 Acq: 19 Feb 2019 6:39 pm

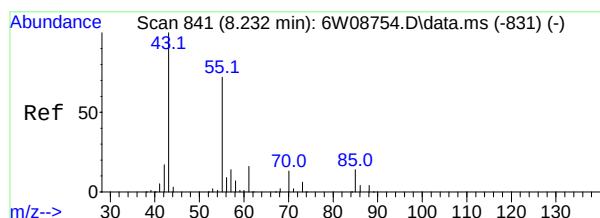
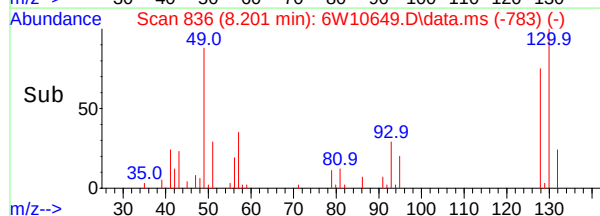
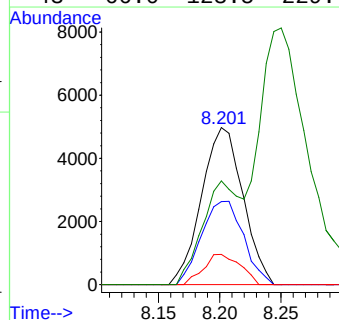
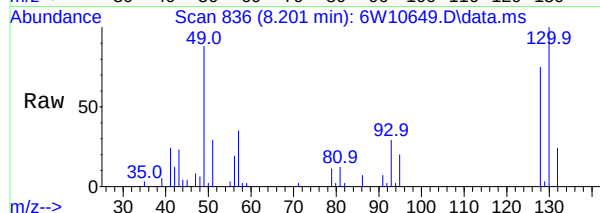
Tgt Ion: 72 Resp: 13159
 Ion Ratio Lower Upper
 72 100
 43 361.2 255.4 474.4
 57 28.6 20.7 38.5





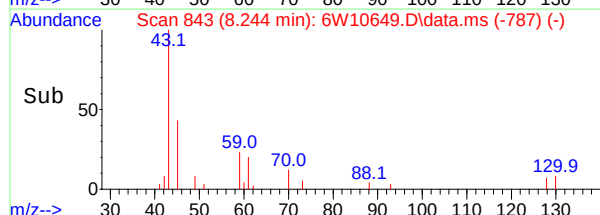
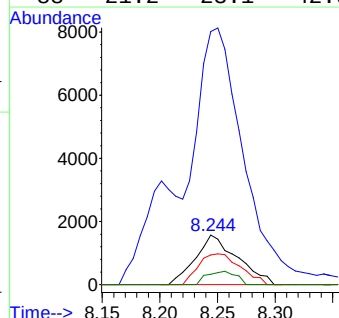
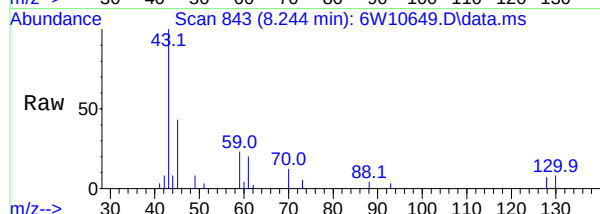
#41
Hexane
Concen: 0.41 ppb(v)
RT: 8.201 min Scan# 836
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

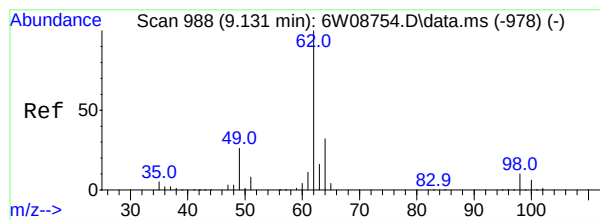
Tgt Ion: 57 Resp: 11673
Ion Ratio Lower Upper
57 100
56 52.9 37.7 70.1
86 19.3 14.4 26.8
43 66.0 123.5 229.4#



#44
Ethyl Acetate
Concen: 0.71 ppb(v)
RT: 8.244 min Scan# 843
Delta R.T. 0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

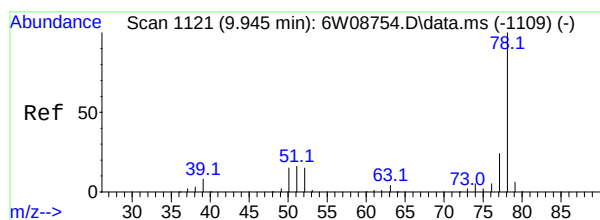
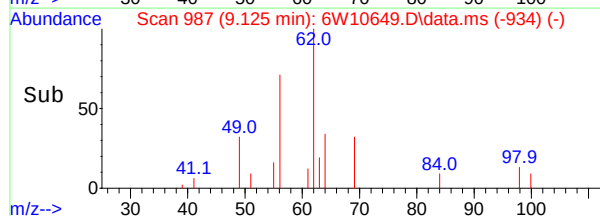
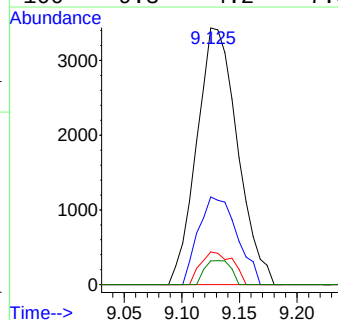
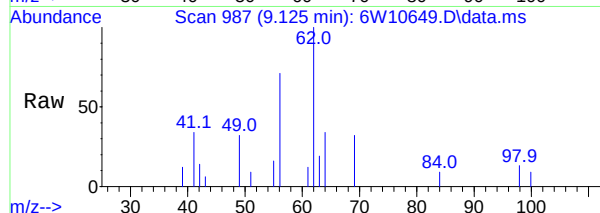
Tgt Ion: 61 Resp: 3970
Ion Ratio Lower Upper
61 100
43 510.4 546.6 1015.0#
70 60.1 57.2 106.2
88 21.2 23.1 42.9#





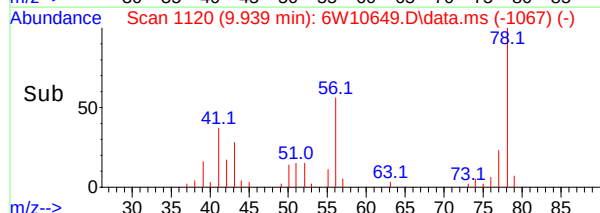
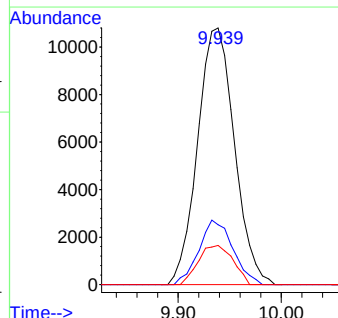
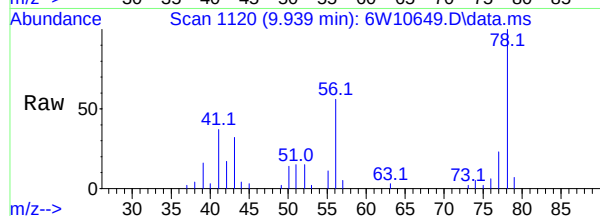
#50
1,2-Dichloroethane
Concen: 0.30 ppb(v)
RT: 9.125 min Scan# 987
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

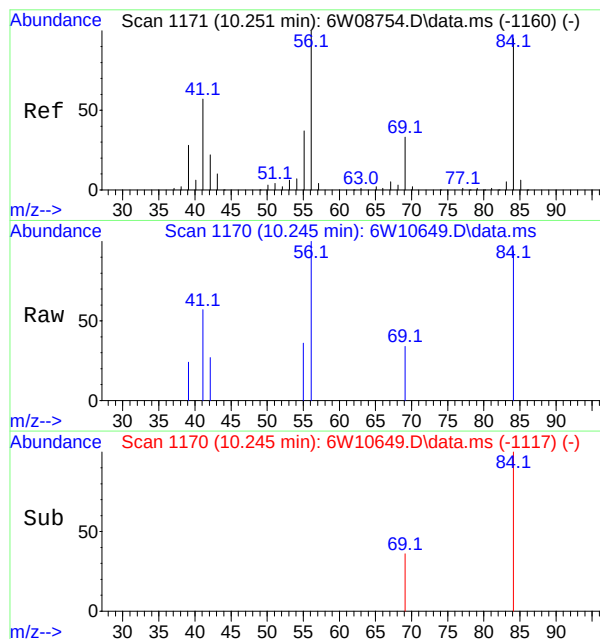
Tgt Ion: 62 Resp: 8428
Ion Ratio Lower Upper
62 100
64 34.1 22.5 41.7
98 12.7 6.6 12.4#
100 9.3 4.2 7.8#



#51
Benzene
Concen: 0.43 ppb(v)
RT: 9.939 min Scan# 1120
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

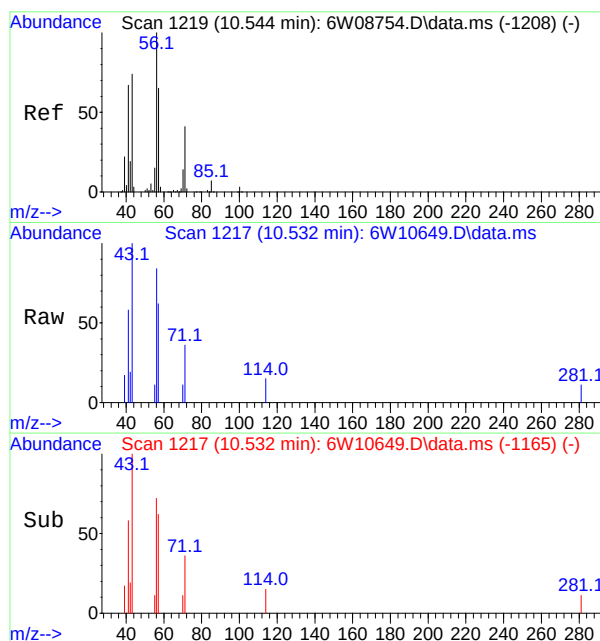
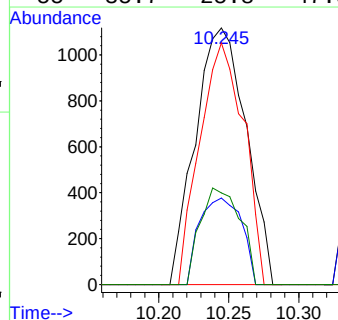
Tgt Ion: 78 Resp: 26838
Ion Ratio Lower Upper
78 100
77 23.4 16.7 30.9
51 15.3 11.3 21.1





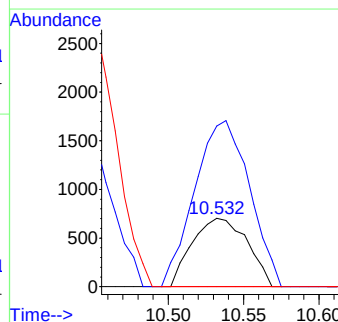
#53
Cyclohexane
Concen: 0.10 ppb(v)
RT: 10.245 min Scan# 1170
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

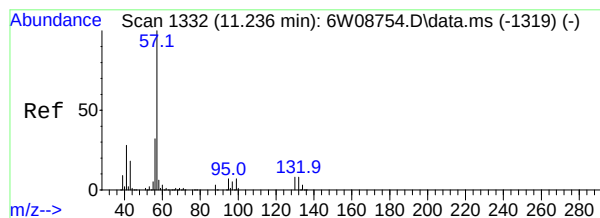
Tgt Ion: 56 Resp: 2824
Ion Ratio Lower Upper
56 100
69 33.7 23.2 43.2
84 94.1 66.2 123.0
55 35.7 25.8 47.8



#54
2,3-Dimethylpentane
Concen: 0.14 ppb(v)
RT: 10.532 min Scan# 1217
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

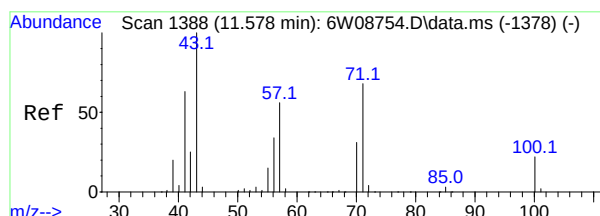
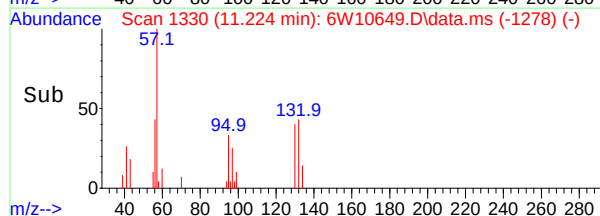
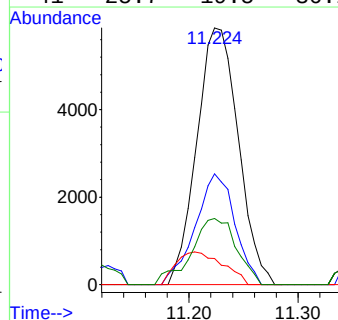
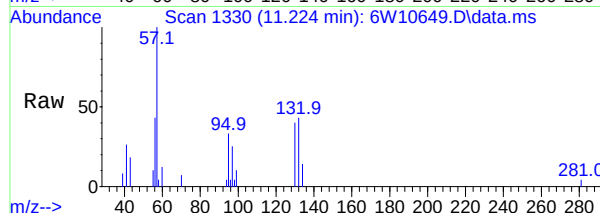
Tgt Ion: 71 Resp: 1784
Ion Ratio Lower Upper
71 100
56 234.5 169.5 314.9
85 0.0 12.1 22.5#





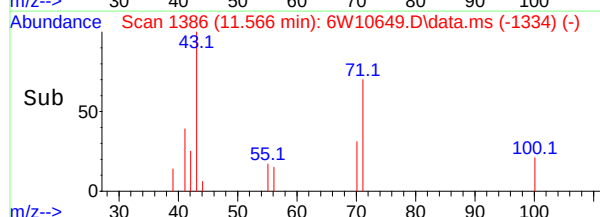
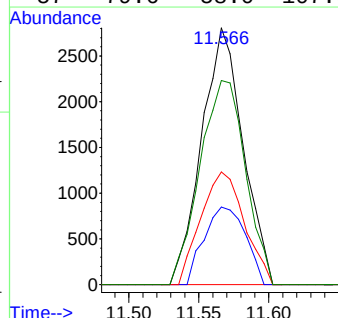
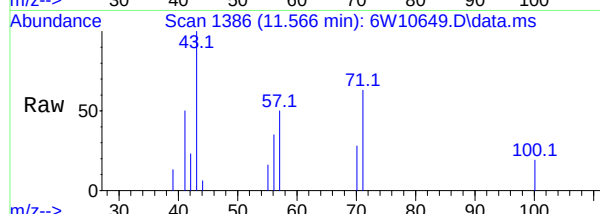
#56
2,2,4-Trimethylpentane
Concen: 0.17 ppb(v)
RT: 11.224 min Scan# 1330
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

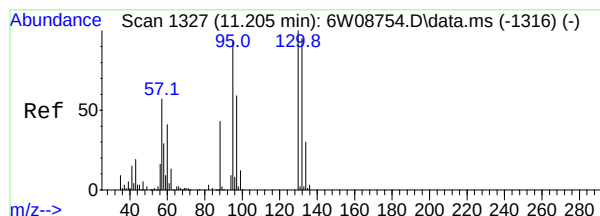
Tgt Ion: 57 Resp: 15594
Ion Ratio Lower Upper
57 100
56 43.1 22.6 42.0#
99 10.2 5.2 9.6#
41 25.7 19.5 36.1



#57
Heptane
Concen: 0.28 ppb(v)
RT: 11.566 min Scan# 1386
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

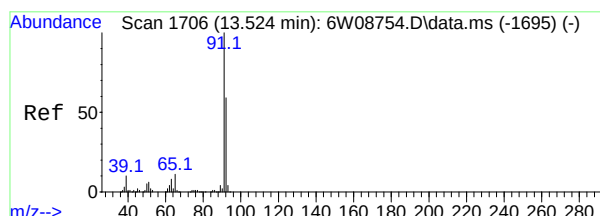
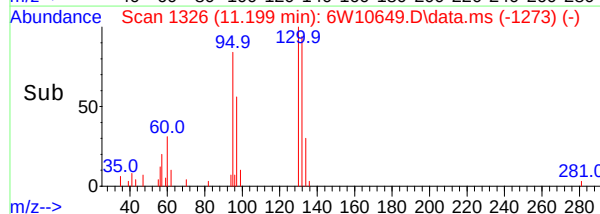
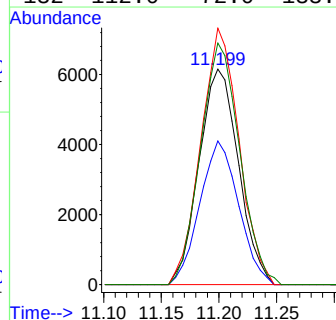
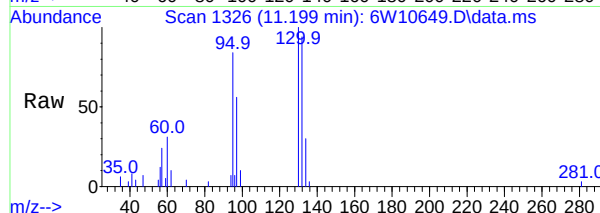
Tgt Ion: 71 Resp: 5793
Ion Ratio Lower Upper
71 100
100 30.2 23.2 43.2
70 43.9 32.1 59.7
57 79.6 58.0 107.6





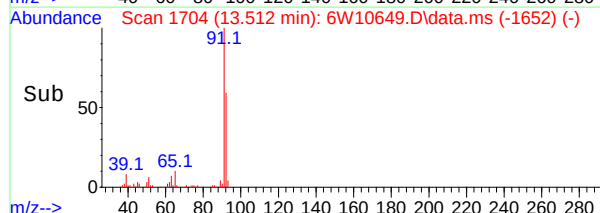
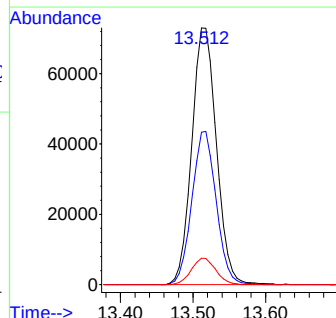
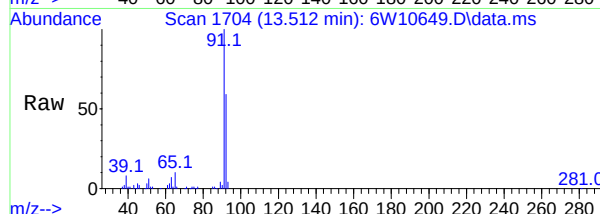
#58
Trichloroethene
Concen: 0.48 ppb(v)
RT: 11.199 min Scan# 1326
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

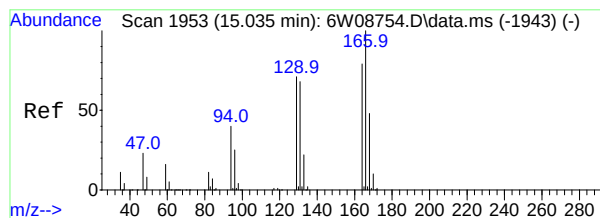
Tgt Ion: 95 Resp: 14634
Ion Ratio Lower Upper
95 100
97 66.7 44.3 82.3
130 119.1 75.7 140.5
132 112.0 72.0 133.6



#68
Toluene
Concen: 2.19 ppb(v)
RT: 13.512 min Scan# 1704
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

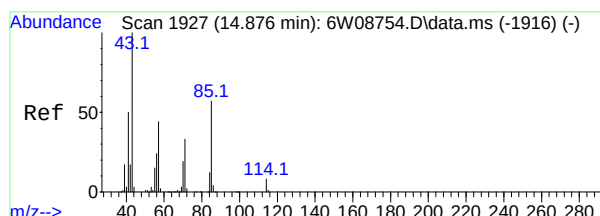
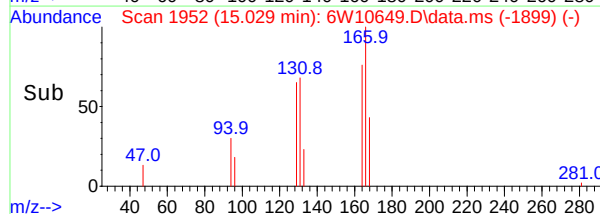
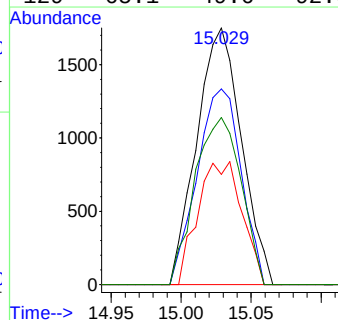
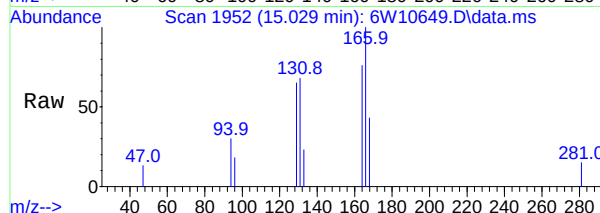
Tgt Ion: 91 Resp: 172437
Ion Ratio Lower Upper
91 100
92 59.4 41.4 77.0
65 10.3 7.9 14.7





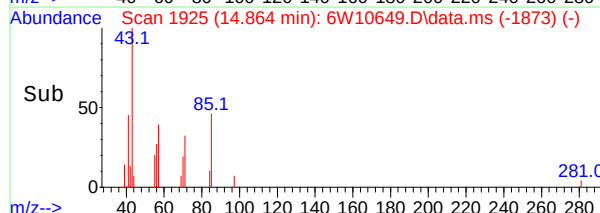
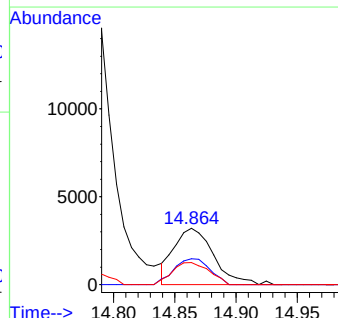
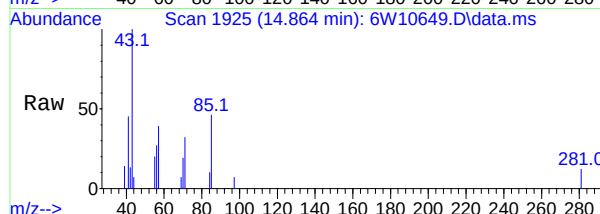
#74
Tetrachloroethene
Concen: 0.08 ppb(v)
RT: 15.029 min Scan# 1952
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

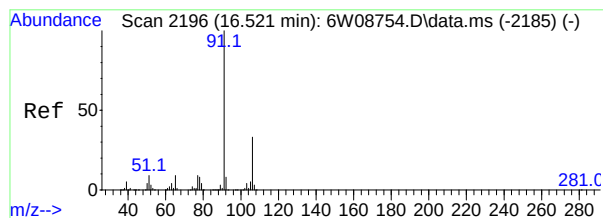
Tgt Ion: 166 Resp: 3895
Ion Ratio Lower Upper
166 100
164 76.2 55.1 102.3
168 42.9 33.6 62.4
129 65.1 49.6 92.0



#76
Octane
Concen: 0.17 ppb(v)
RT: 14.864 min Scan# 1925
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

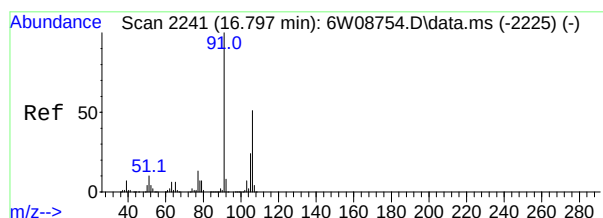
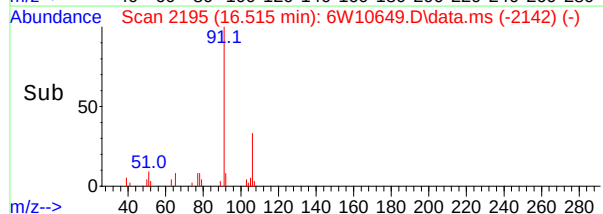
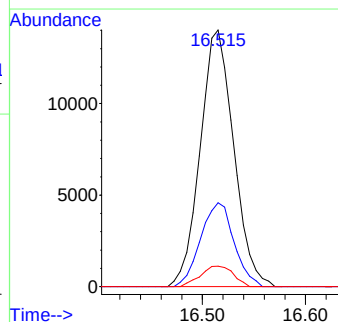
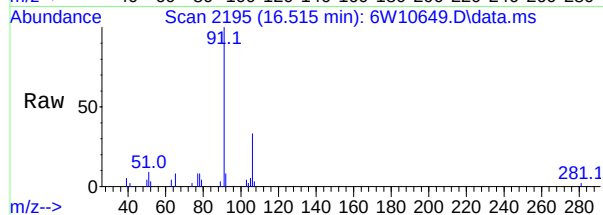
Tgt Ion: 43 Resp: 7270
Ion Ratio Lower Upper
43 100
85 45.9 40.1 74.5
57 39.4 30.7 57.1





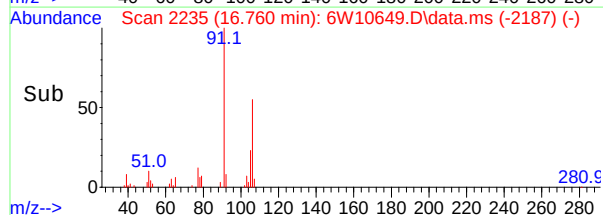
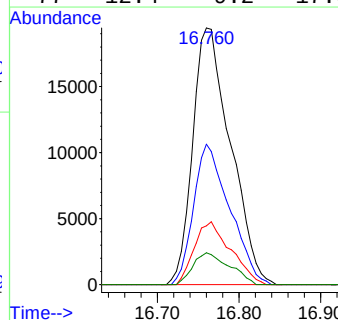
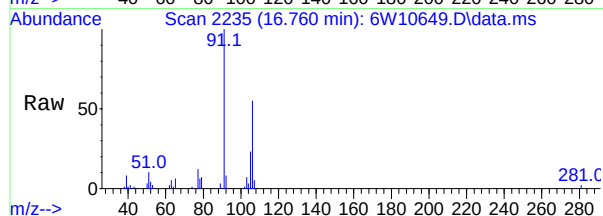
#80
Ethylbenzene
Concen: 0.36 ppb(v)
RT: 16.515 min Scan# 2195
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

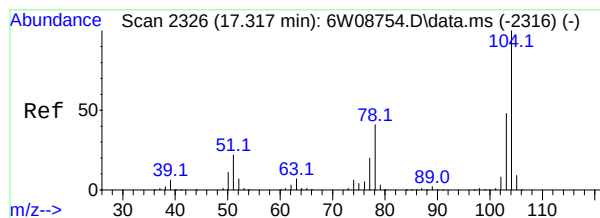
Tgt Ion: 91 Resp: 31611
Ion Ratio Lower Upper
91 100
106 32.6 23.0 42.6
77 8.0 6.1 11.3



#81
m,p-Xylene
Concen: 0.91 ppb(v)
RT: 16.760 min Scan# 2235
Delta R.T. -0.037 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

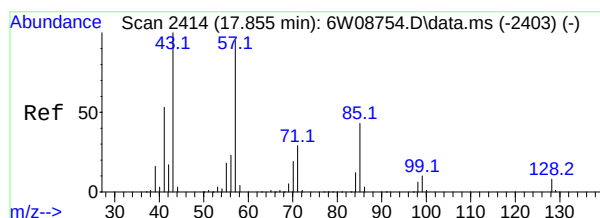
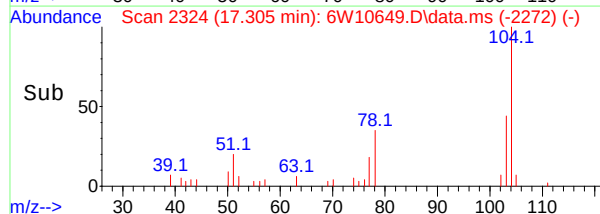
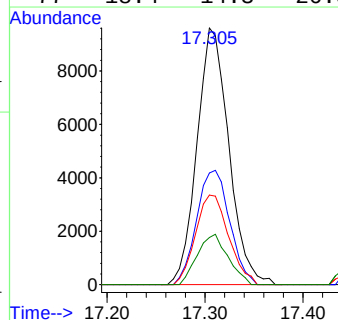
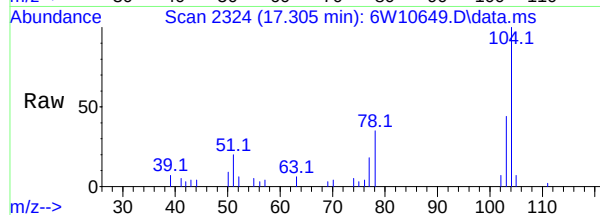
Tgt Ion: 91 Resp: 62575
Ion Ratio Lower Upper
91 100
106 54.7 35.9 66.7
105 22.9 16.7 31.1
77 12.4 9.2 17.0





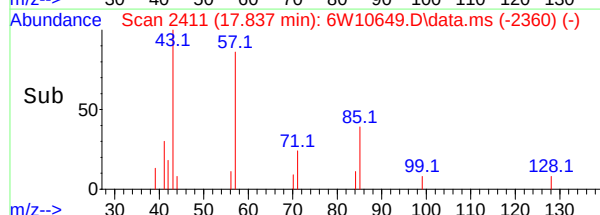
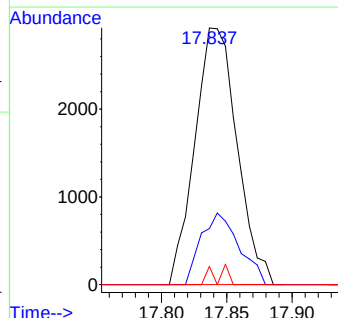
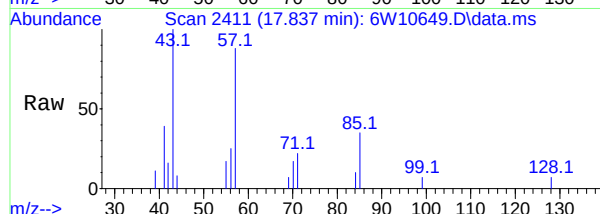
#82
Styrene
Concen: 0.49 ppb(v)
RT: 17.305 min Scan# 2324
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

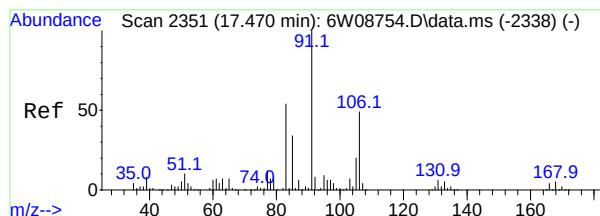
Tgt Ion: 104 Resp: 21772
Ion Ratio Lower Upper
104 100
103 43.5 33.5 62.1
78 34.9 28.8 53.6
77 18.4 14.3 26.5



#83
Nonane
Concen: 0.17 ppb(v)
RT: 17.837 min Scan# 2411
Delta R.T. -0.018 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

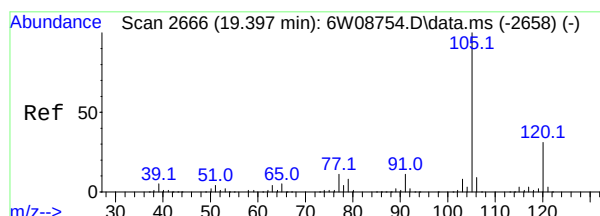
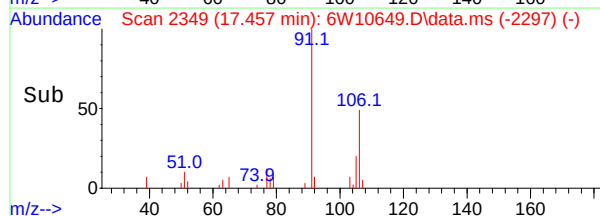
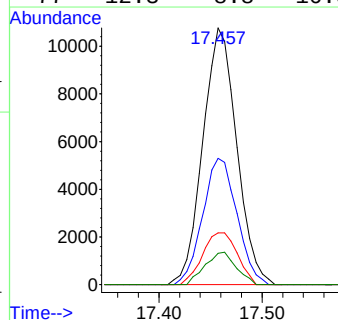
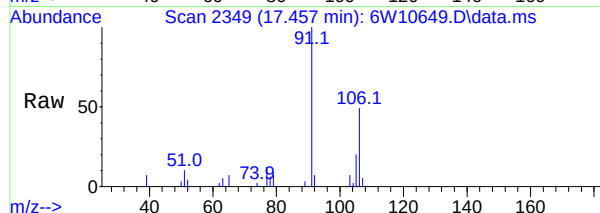
Tgt Ion: 43 Resp: 6590
Ion Ratio Lower Upper
43 100
71 21.9 20.2 37.6
128 7.1 5.9 10.9





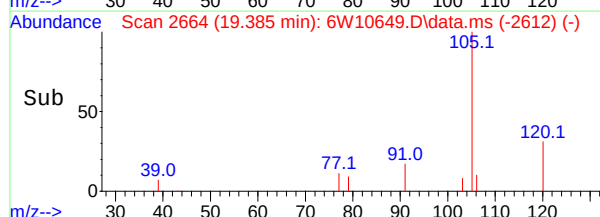
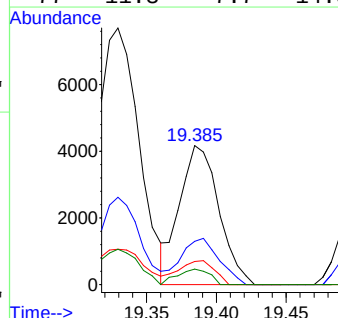
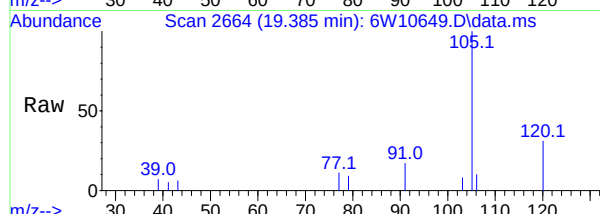
#84
o-Xylene
Concen: 0.36 ppb(v)
RT: 17.457 min Scan# 2349
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

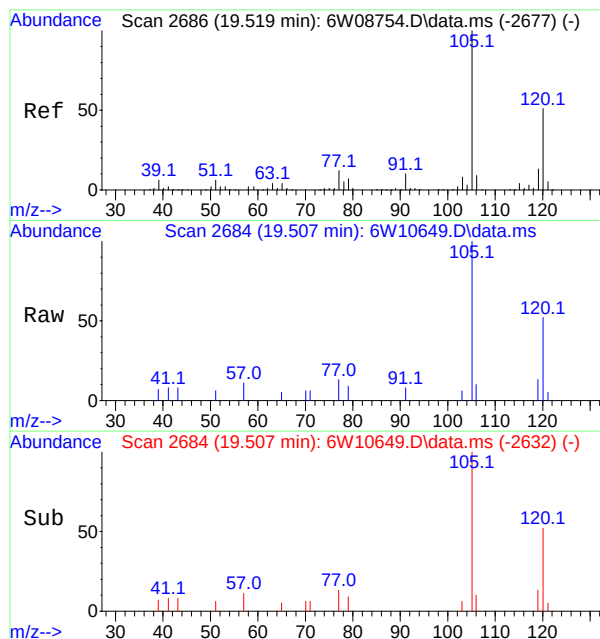
Tgt Ion: 91 Resp: 24568
Ion Ratio Lower Upper
91 100
106 49.2 34.5 64.1
105 20.1 14.0 26.0
77 12.3 8.8 16.3



#93
4-Ethyltoluene
Concen: 0.10 ppb(v) m
RT: 19.385 min Scan# 2664
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

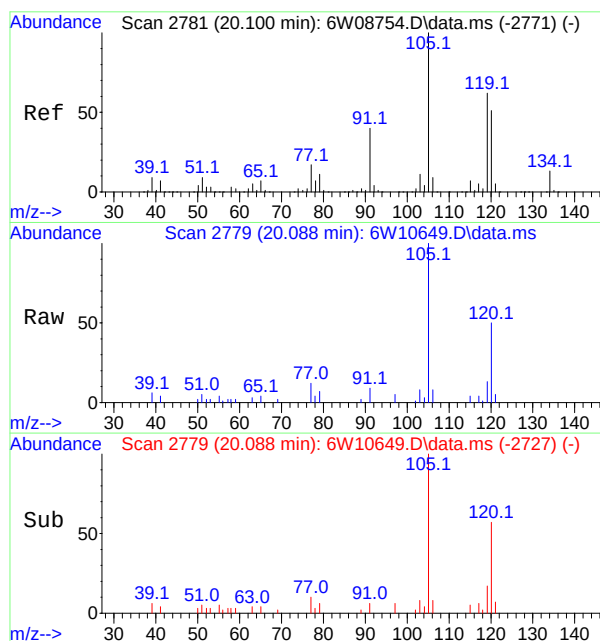
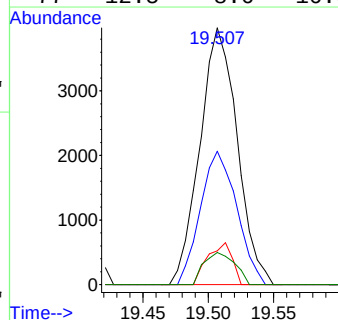
Tgt Ion: 105 Resp: 8181
Ion Ratio Lower Upper
105 100
120 31.1 21.5 39.9
91 16.6 7.6 14.0#
77 11.3 7.7 14.3





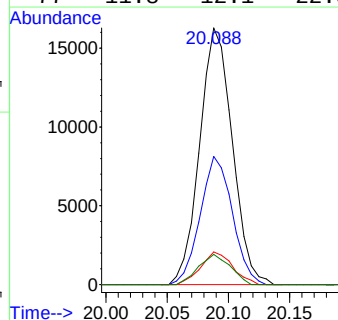
#94
1,3,5-Trimethylbenzene
Concen: 0.11 ppb(v)
RT: 19.507 min Scan# 2684
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

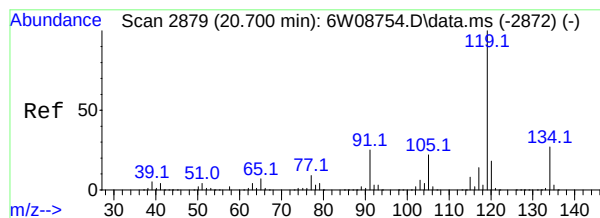
Tgt Ion	105	120	119	77
Ion	105	120	119	77
Ratio	100	51.9	13.2	12.5
Lower		35.5	9.0	8.6
Upper		65.9	16.8	16.0



#97
1,2,4-Trimethylbenzene
Concen: 0.44 ppb(v)
RT: 20.088 min Scan# 2779
Delta R.T. -0.012 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

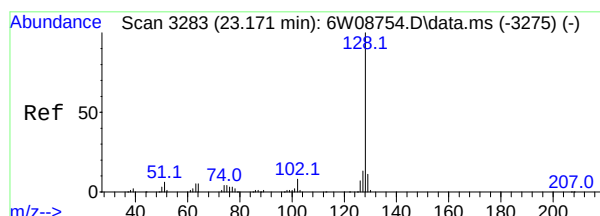
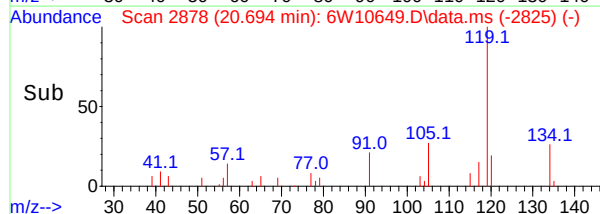
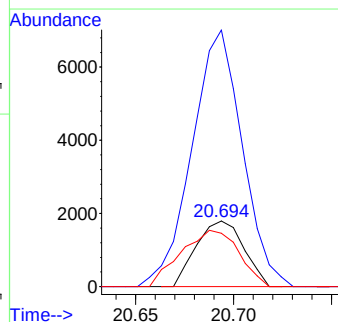
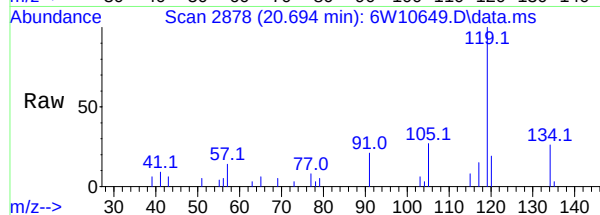
Tgt Ion	105	120	119	77
Ion	105	120	119	77
Ratio	100	49.9	12.8	11.8
Lower		35.8	43.2	12.1
Upper		66.6	80.2#	22.5#





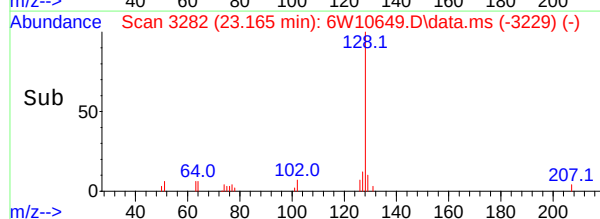
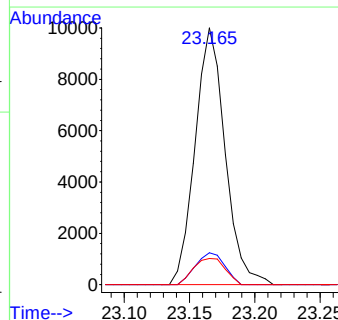
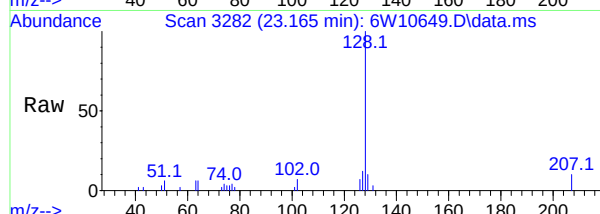
#102
p-Isopropyltoluene
Concen: 0.14 ppb(v)
RT: 20.694 min Scan# 2878
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

Tgt Ion:134 Resp: 3028
Ion Ratio Lower Upper
134 100
119 390.5 265.6 493.4
91 81.1 66.7 123.9



#107
Naphthalene
Concen: 0.78 ppb(v)
RT: 23.165 min Scan# 3282
Delta R.T. -0.006 min
Lab File: 6W10649.D
Acq: 19 Feb 2019 6:39 pm

Tgt Ion:128 Resp: 15984
Ion Ratio Lower Upper
128 100
127 12.4 8.8 16.4
129 10.1 7.6 14.2



Manual Integration Approval Summary

Sample Number:

JC82623-1DUP

Method:

TO-15

Lab FileID:

6W10649.D

Analyst approved:

02/21/19 10:50 Thomas Hilbig

Injection Time:

02/19/19 18:39

Supervisor approved:

02/22/19 16:56 Kanya Veerawat

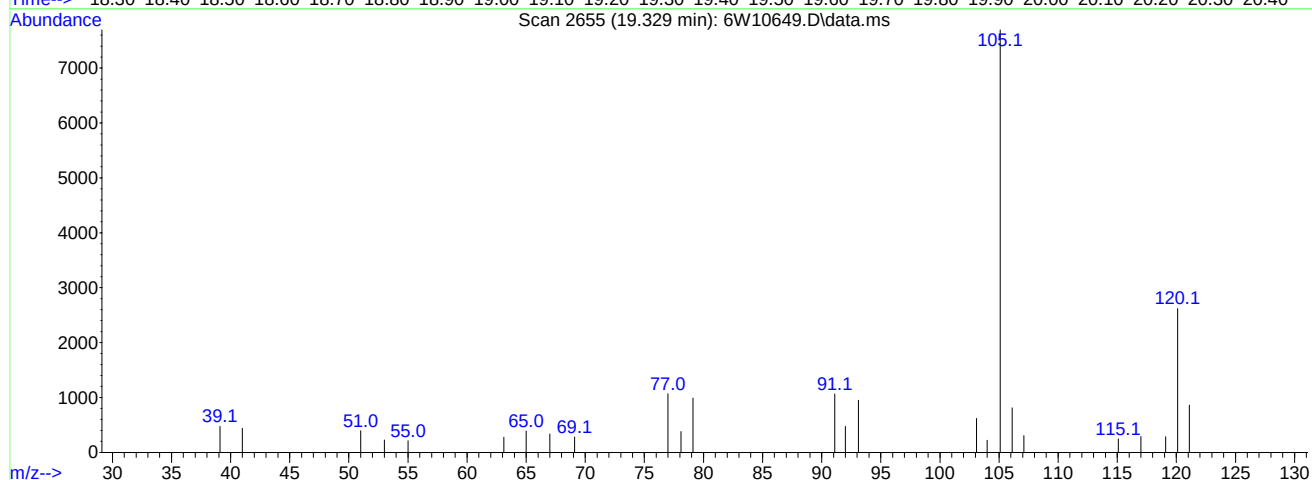
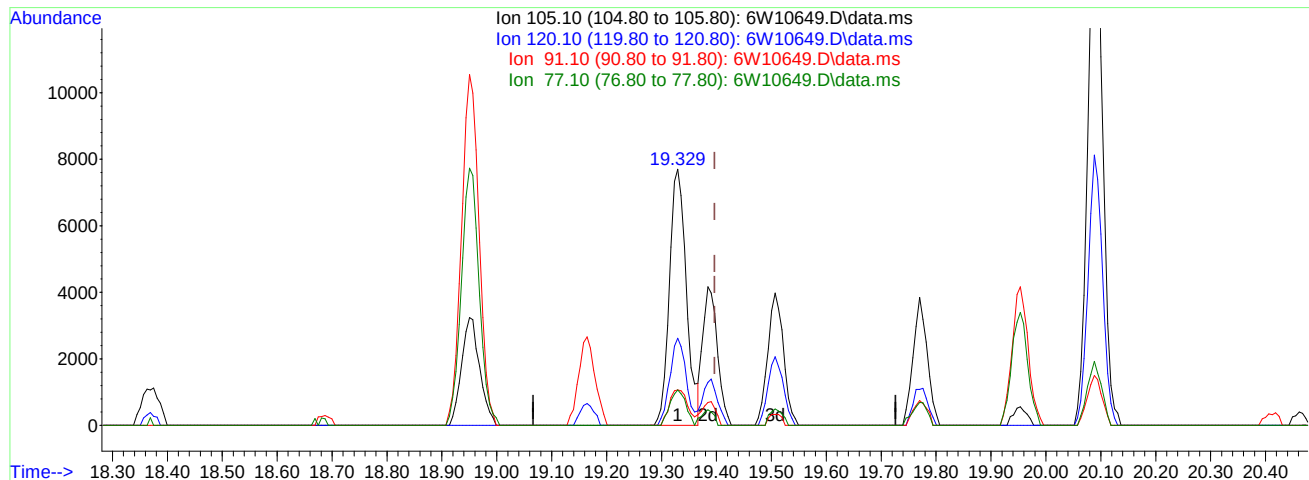
Parameter	CAS	Sig#	R.T. (min.)	Reason

4-Ethyltoluene	622-96-8		19.38	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\RAWDATA\
Data File : 6W10649.D
Acq On : 19 Feb 2019 6:39 pm
Operator : thomash
Sample : jc82623-1dup
Misc : MS32455,V6W424,400,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 16:03:16 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:37:42 2018
Response via : Initial Calibration



TIC: 6W10649.D\data.ms

(93) 4-Ethyltoluene

19.329min (-0.067) 0.20ppb(v)

response 16599

Ion	Exp%	Act%
105.10	100	100
120.10	30.70	34.06
91.10	10.80	13.81
77.10	11.00	13.85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10675.D
 Acq On : 20 Feb 2019 8:05 pm
 Operator : thomash
 Sample : JC82613-7DUP
 Misc : MS32427,V6W425,620,,,1.55
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 15:34:24 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.165	130	204029	10.00	ppb(v	-0.01
55) 1,4-Difluorobenzene	10.367	114	722908	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.903	82	285741	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.165	130	204029	10.00	ppb(v	-0.01

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.149 95 352062 10.09 ppb(v -0.01
 Spiked Amount 10.000 Range 65 - 128 Recovery = 100.90%

Target Compounds					Qvalue
3) Freon 152A	3.723	65	3096	0.29	ppb(v 100
4) Chlorodifluoromethane	3.760	67	1293	0.25	ppb(v 100
7) Dichlorodifluoromethane	3.845	85	18412	0.34	ppb(v 99
9) Chloromethane	3.980	50	6901	0.45	ppb(v 99
13) n-Butane	4.310	58	10822	3.44	ppb(v# 85
15) Acrolein	5.026	56	564	0.07	ppb(v# 67
18) Acetonitrile	4.922	41	3980	0.29	ppb(v 97
22) Trichlorofluoromethane	5.289	101	9292	0.17	ppb(v 97
23) Acetone	5.142	58	32745	3.85	ppb(v 93
24) Pentane	5.601	57	3419	0.79	ppb(v 91
27) Isopropyl Alcohol	5.363	45	37185	1.18	ppb(v 96
30) Methylene Chloride	5.987	84	5035	0.26	ppb(v 96
32) Ethanol	4.726	45	33902	4.72	ppb(v 98
40) 2-Butanone	7.547	72	3339	0.40	ppb(v 98
41) Hexane	8.195	57	7726	0.28	ppb(v# 39
44) Ethyl Acetate	8.256	61	664	0.12	ppb(v# 43
48) Tetrahydrofuran	8.807	72	929	0.11	ppb(v# 82
51) Benzene	9.933	78	23241	0.37	ppb(v 96
56) 2,2,4-Trimethylpentane	11.223	57	18498	0.20	ppb(v 89
57) Heptane	11.566	71	2218	0.11	ppb(v 97
68) Toluene	13.518	91	46374	0.61	ppb(v 97
81) m,p-Xylene	16.766	91	18109	0.28	ppb(v 97
84) o-Xylene	17.457	91	7060	0.11	ppb(v 99

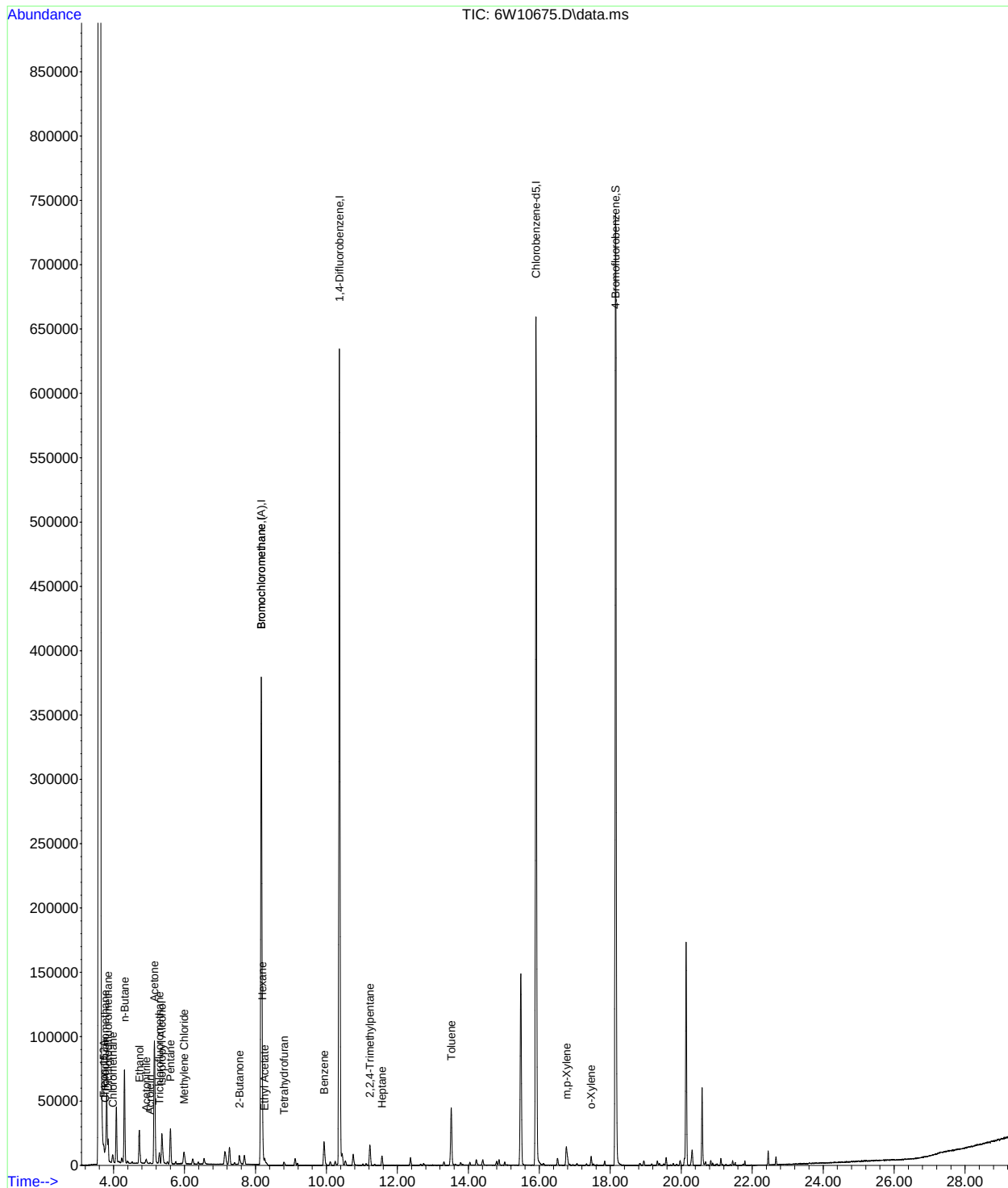
(#) = qualifier out of range (m) = manual integration (+) = signals summed

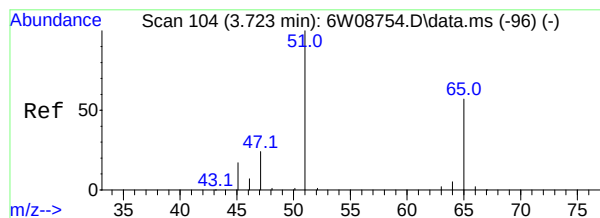
7.4.2

7

Data Path : C:\msdchem\1\data\gc6w\
Data File : 6W10675.D
Acq On : 20 Feb 2019 8:05 pm
Operator : thomash
Sample : JC82613-7DUP
Misc : MS32427,V6W425,620,,,,,1.55
ALS Vial : 9 Sample Multiplier: 1

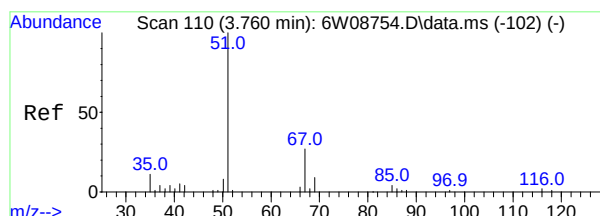
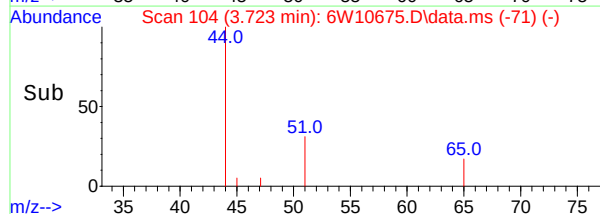
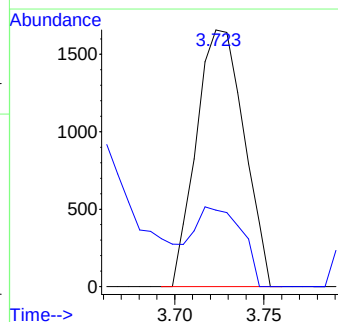
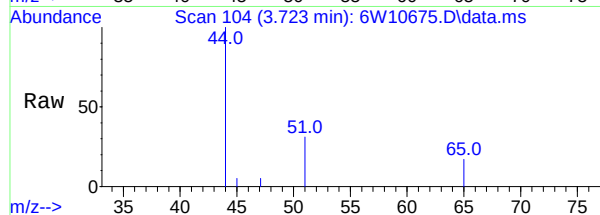
Quant Time: Feb 22 15:34:24 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration





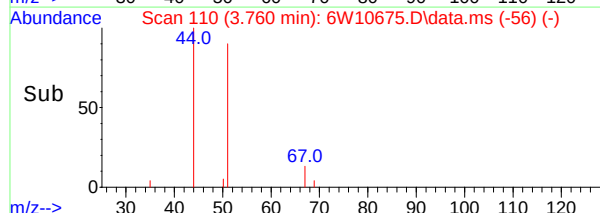
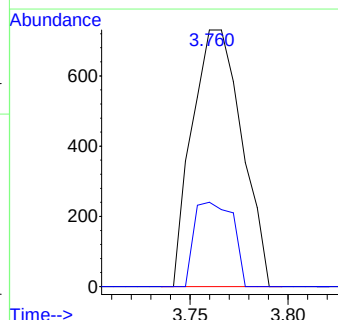
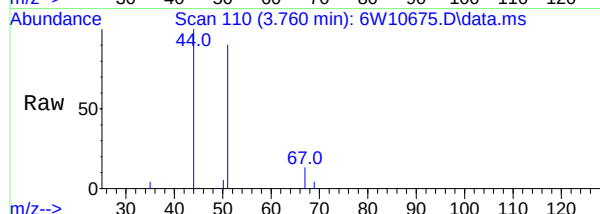
#3
Freon 152A
Concen: 0.29 ppb(v)
RT: 3.723 min Scan# 104
Delta R.T. 0.000 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

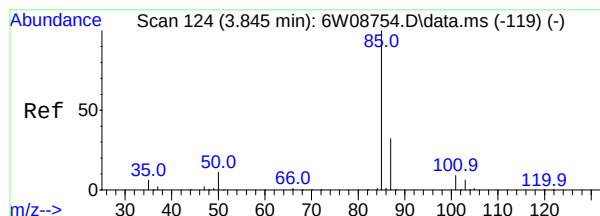
Tgt Ion: 65 Resp: 3096
Ion Ratio Lower Upper
65 100
45 29.8 20.9 38.9



#4
Chlorodifluoromethane
Concen: 0.25 ppb(v)
RT: 3.760 min Scan# 110
Delta R.T. 0.000 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

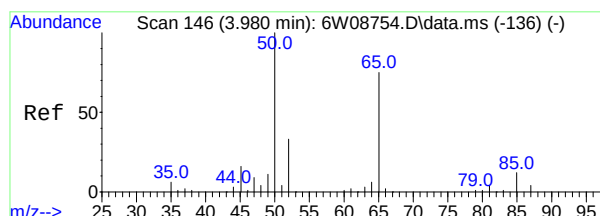
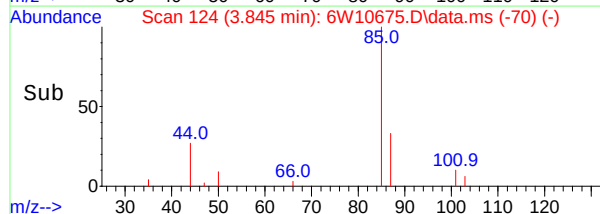
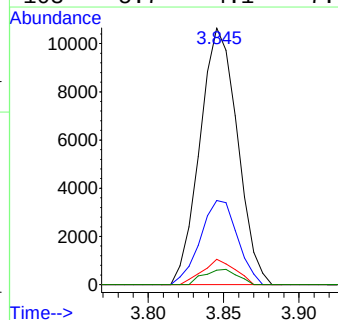
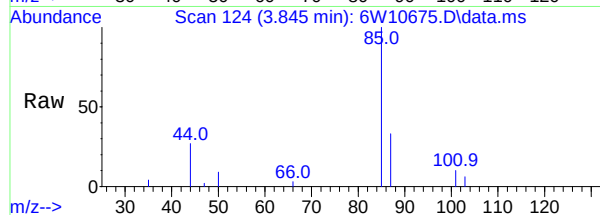
Tgt Ion: 67 Resp: 1293
Ion Ratio Lower Upper
67 100
69 32.8 23.0 42.6





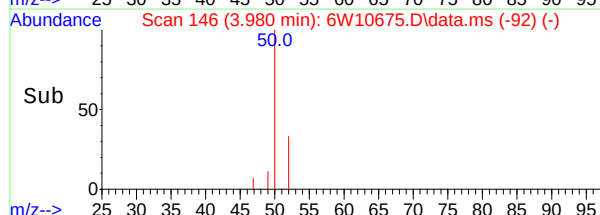
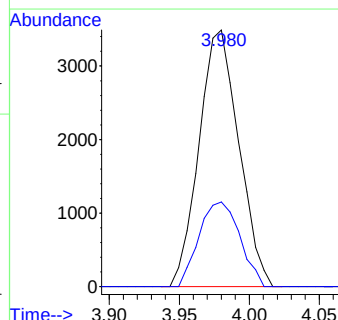
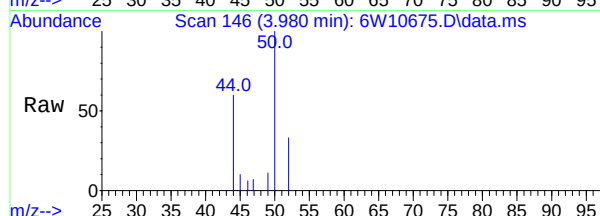
#7
 Dichlorodifluoromethane
 Concen: 0.34 ppb(v)
 RT: 3.845 min Scan# 124
 Delta R.T. 0.000 min
 Lab File: 6W10675.D
 Acq: 20 Feb 2019 8:05 pm

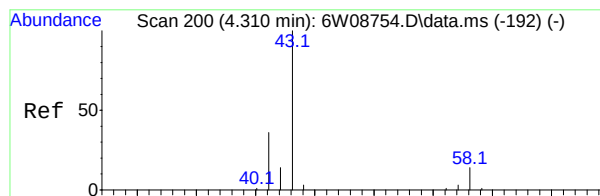
Tgt Ion: 85 Resp: 18412
 Ion Ratio Lower Upper
 85 100
 87 32.7 22.7 42.1
 101 9.9 6.3 11.7
 103 5.7 4.1 7.7



#9
 Chloromethane
 Concen: 0.45 ppb(v)
 RT: 3.980 min Scan# 146
 Delta R.T. 0.000 min
 Lab File: 6W10675.D
 Acq: 20 Feb 2019 8:05 pm

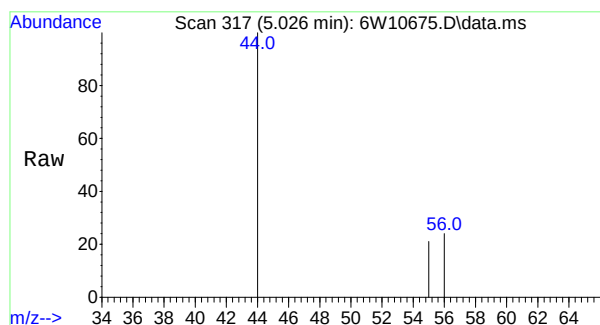
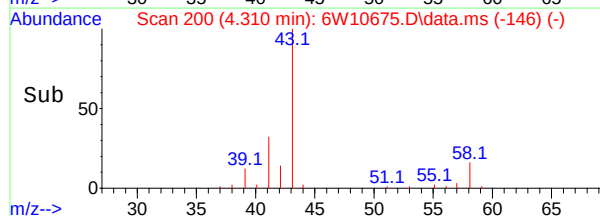
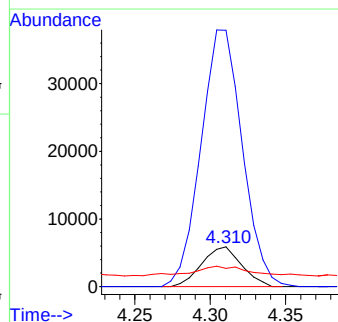
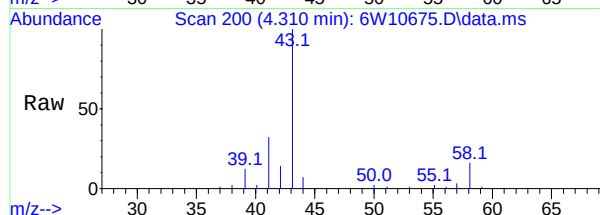
Tgt Ion: 50 Resp: 6901
 Ion Ratio Lower Upper
 50 100
 52 33.0 22.8 42.4





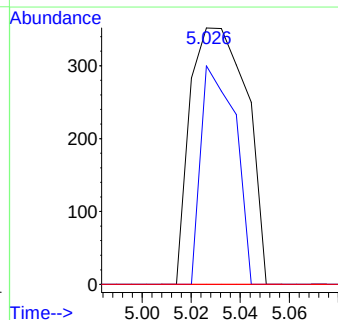
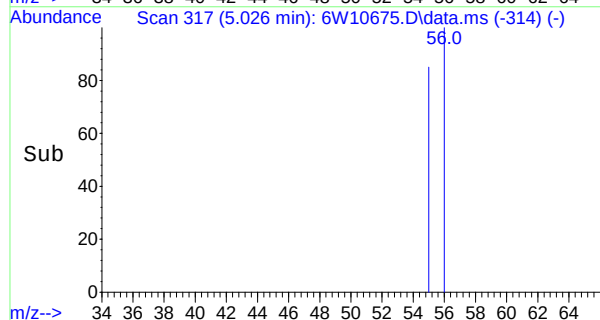
#13
n-Butane
Concen: 3.44 ppb(v)
RT: 4.310 min Scan# 200
Delta R.T. 0.000 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

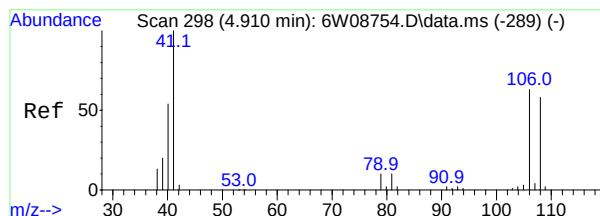
Tgt Ion: 58 Resp: 10822
Ion Ratio Lower Upper
58 100
43 643.0 485.0 900.6
44 46.1 19.2 35.6#



#15
Acrolein
Concen: 0.07 ppb(v)
RT: 5.026 min Scan# 317
Delta R.T. 0.000 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

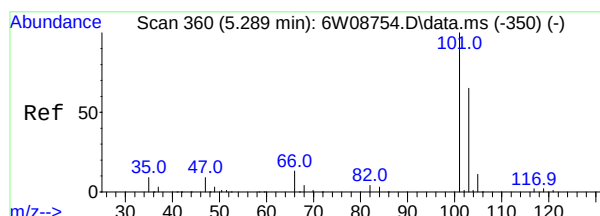
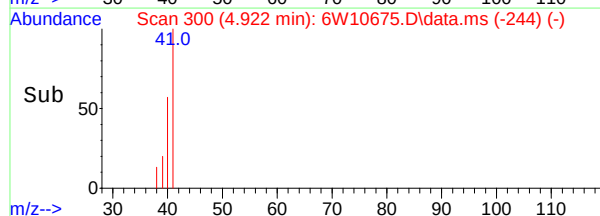
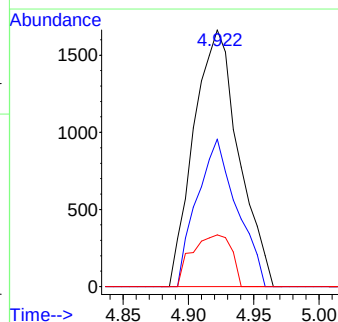
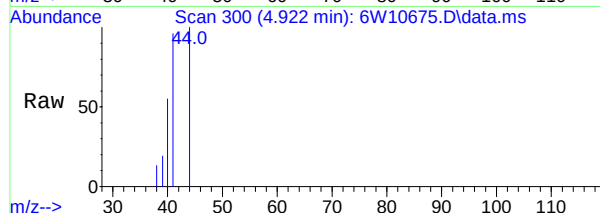
Tgt Ion: 56 Resp: 564
Ion Ratio Lower Upper
56 100
55 52.0 56.8 85.2#
37 0.0 23.8 35.8#





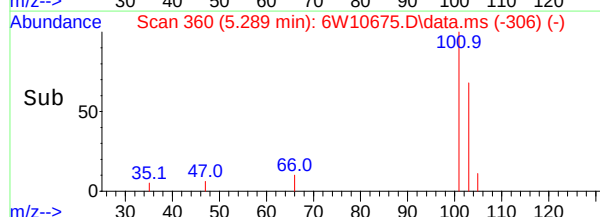
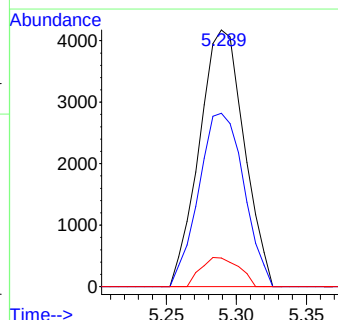
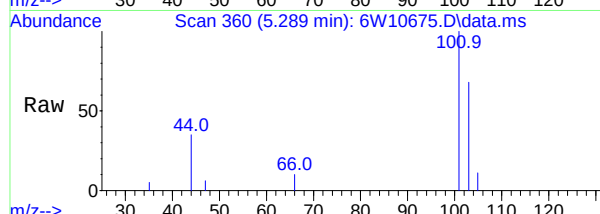
#18
Acetonitrile
Concen: 0.29 ppb(v)
RT: 4.922 min Scan# 300
Delta R.T. 0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

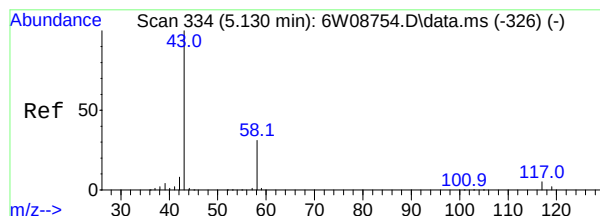
Tgt Ion: 41 Resp: 3980
Ion Ratio Lower Upper
41 100
40 57.5 37.9 70.5
39 20.2 14.0 26.0



#22
Trichlorofluoromethane
Concen: 0.17 ppb(v)
RT: 5.289 min Scan# 360
Delta R.T. 0.000 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

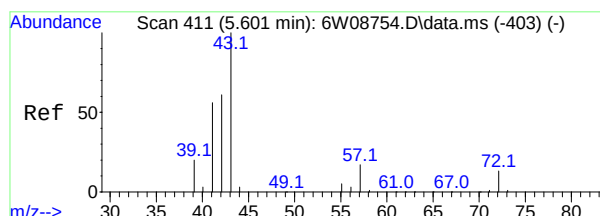
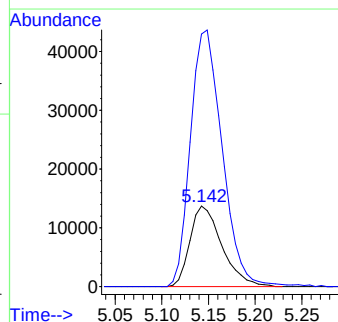
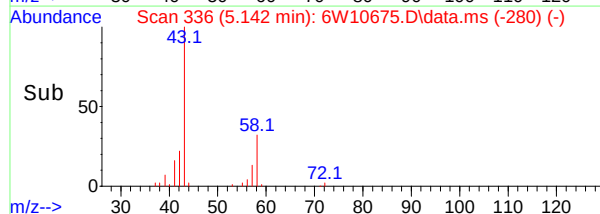
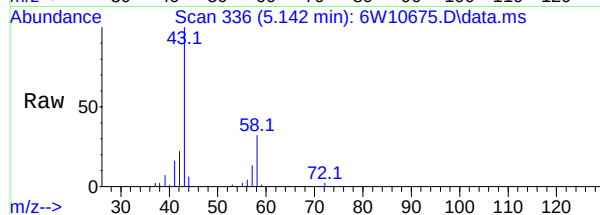
Tgt Ion: 101 Resp: 9292
Ion Ratio Lower Upper
101 100
103 67.6 45.4 84.4
105 11.2 7.3 13.7





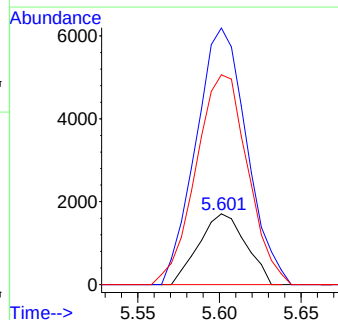
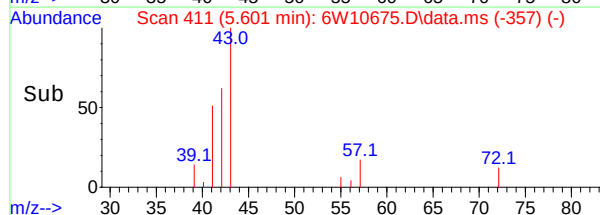
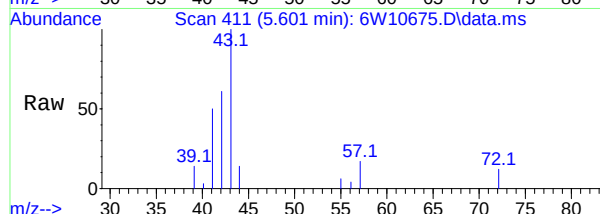
#23
Acetone
Concen: 3.85 ppb(v)
RT: 5.142 min Scan# 336
Delta R.T. 0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

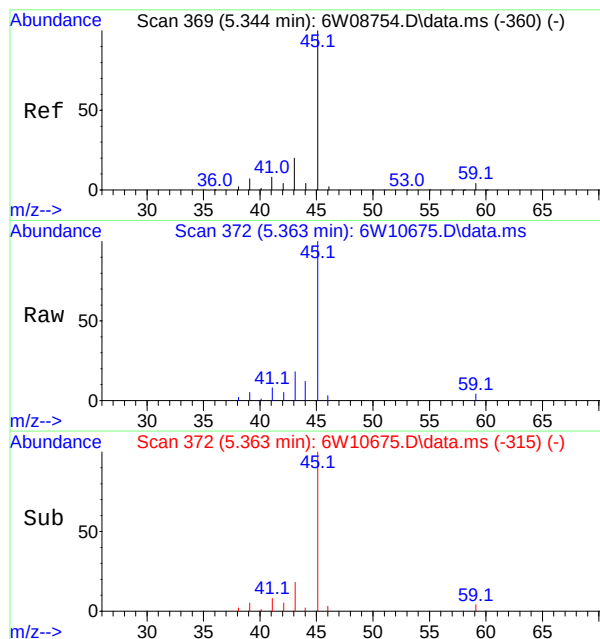
Tgt Ion: 58 Resp: 32745
Ion Ratio Lower Upper
58 100
43 313.1 230.1 427.3



#24
Pentane
Concen: 0.79 ppb(v)
RT: 5.601 min Scan# 411
Delta R.T. 0.000 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

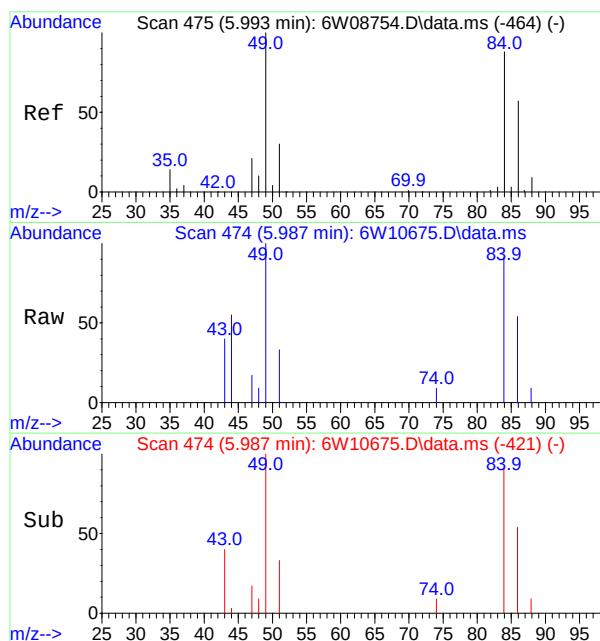
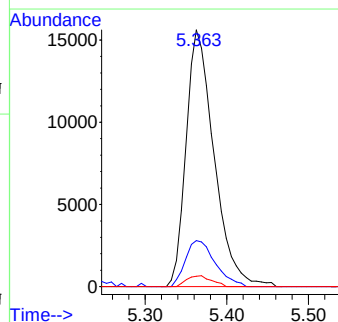
Tgt Ion: 57 Resp: 3419
Ion Ratio Lower Upper
57 100
42 363.2 250.8 465.8
41 296.8 232.7 432.1





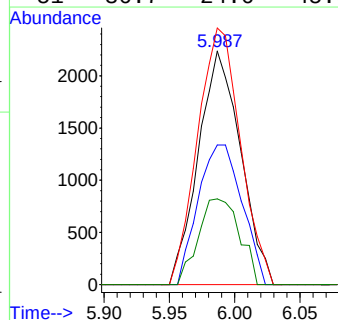
#27
Isopropyl Alcohol
Concen: 1.18 ppb(v)
RT: 5.363 min Scan# 372
Delta R.T. 0.018 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

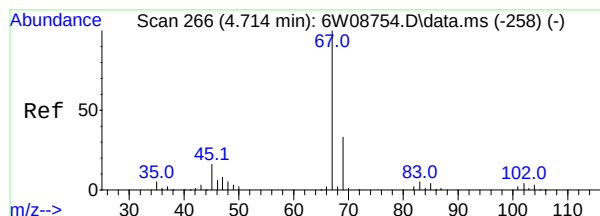
Tgt Ion: 45 Resp: 37185
Ion Ratio Lower Upper
45 100
43 17.9 14.1 26.1
59 4.1 2.8 5.2



#30
Methylene Chloride
Concen: 0.26 ppb(v)
RT: 5.987 min Scan# 474
Delta R.T. -0.006 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

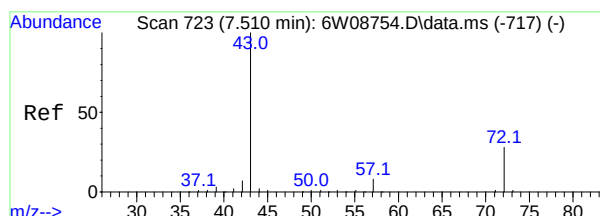
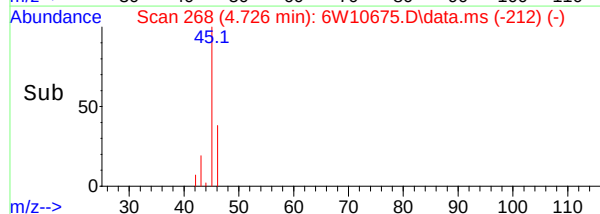
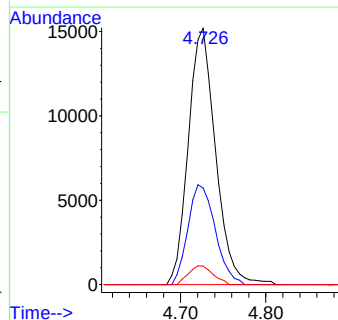
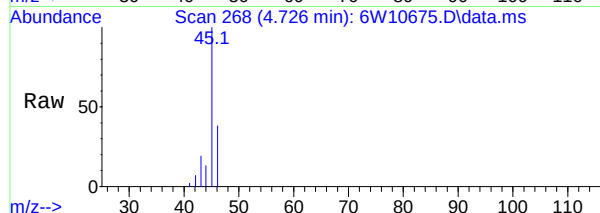
Tgt Ion: 84 Resp: 5035
Ion Ratio Lower Upper
84 100
86 59.7 45.5 84.5
49 109.9 79.5 147.7
51 36.7 24.6 45.6





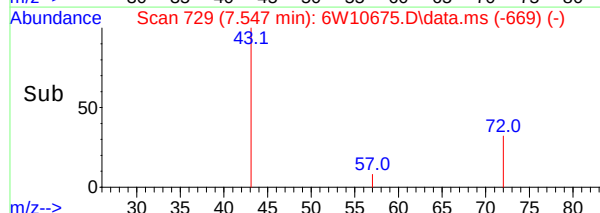
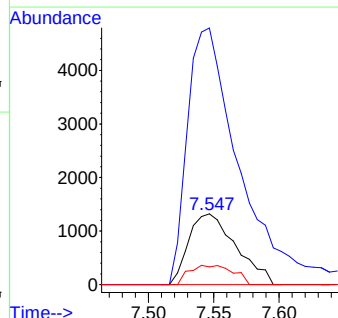
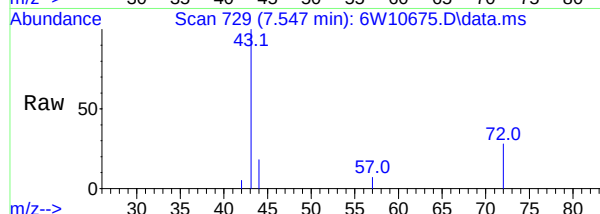
#32
Ethanol
Concen: 4.72 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

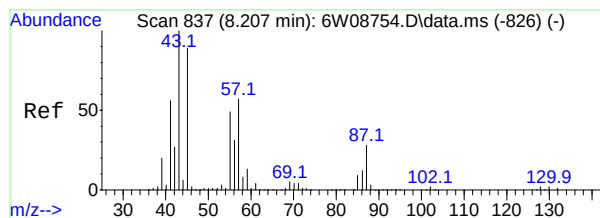
Tgt Ion: 45 Resp: 33902
Ion Ratio Lower Upper
45 100
46 37.7 26.9 49.9
42 7.3 6.0 11.2



#40
2-Butanone
Concen: 0.40 ppb(v)
RT: 7.547 min Scan# 729
Delta R.T. 0.037 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

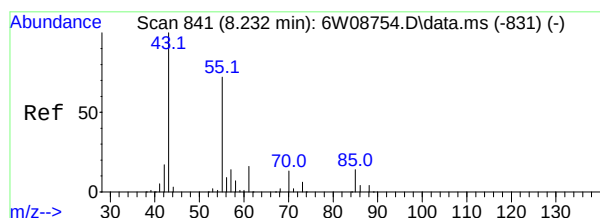
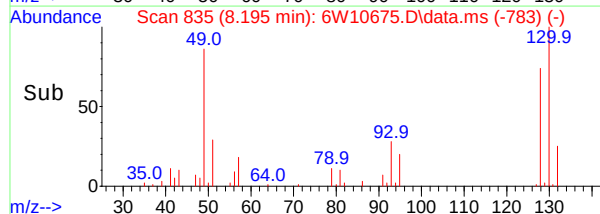
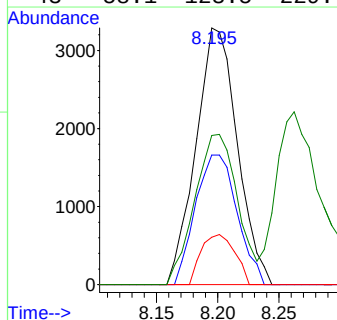
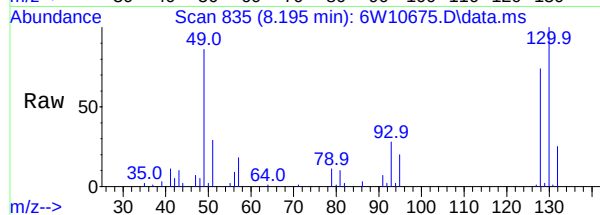
Tgt Ion: 72 Resp: 3339
Ion Ratio Lower Upper
72 100
43 362.0 255.4 474.4
57 25.2 20.7 38.5





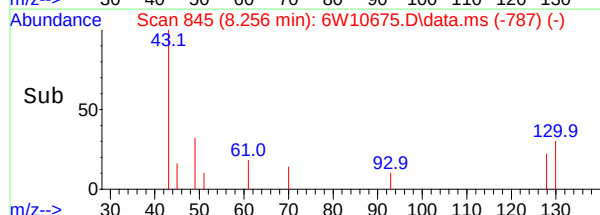
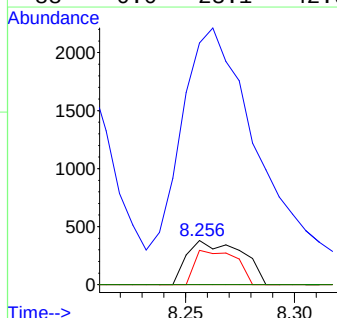
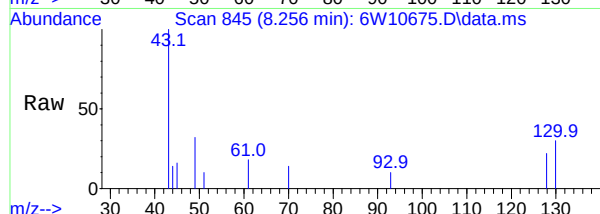
#41
Hexane
Concen: 0.28 ppb(v)
RT: 8.195 min Scan# 835
Delta R.T. -0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

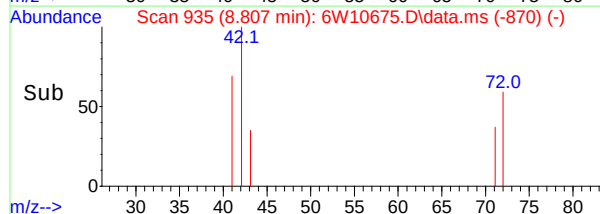
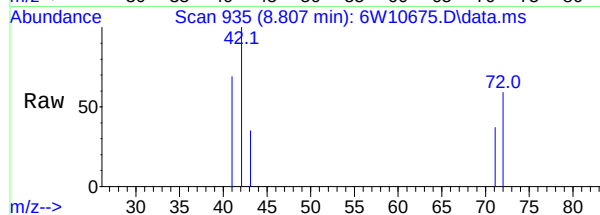
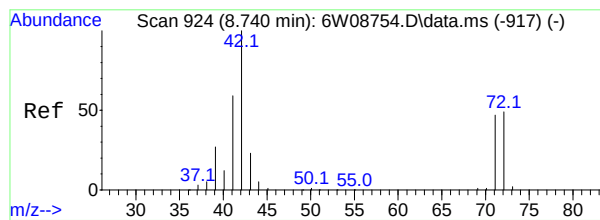
Tgt Ion: 57 Resp: 7726
Ion Ratio Lower Upper
57 100
56 50.4 37.7 70.1
86 18.4 14.4 26.8
43 58.1 123.5 229.4#



#44
Ethyl Acetate
Concen: 0.12 ppb(v)
RT: 8.256 min Scan# 845
Delta R.T. 0.025 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

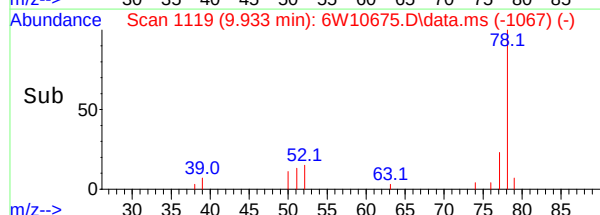
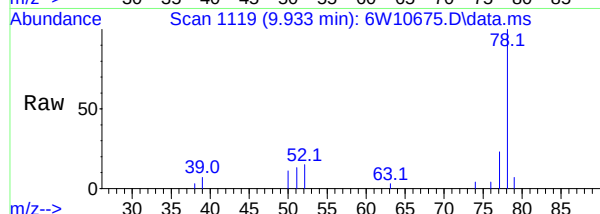
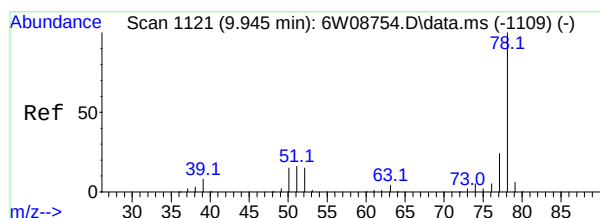
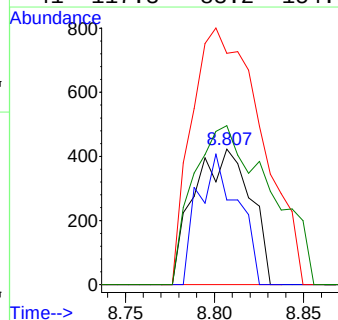
Tgt Ion: 61 Resp: 664
Ion Ratio Lower Upper
61 100
43 548.4 546.6 1015.0
70 77.9 57.2 106.2
88 0.0 23.1 42.9#





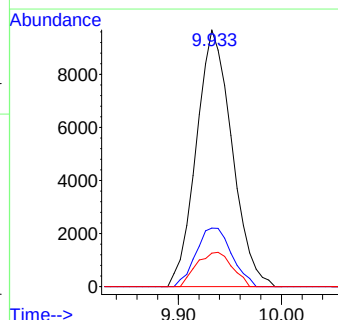
#48
Tetrahydrofuran
Concen: 0.11 ppb(v)
RT: 8.807 min Scan# 935
Delta R.T. 0.067 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

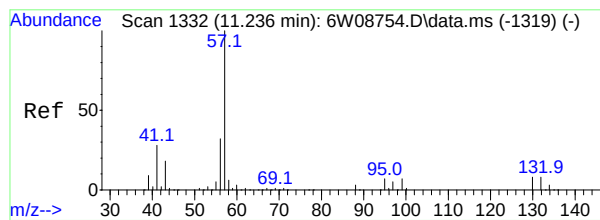
Tgt Ion: 72 Resp: 929
Ion Ratio Lower Upper
72 100
71 62.4 66.6 123.8#
42 170.7 141.5 262.9
41 117.3 83.2 154.6



#51
Benzene
Concen: 0.37 ppb(v)
RT: 9.933 min Scan# 1119
Delta R.T. -0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

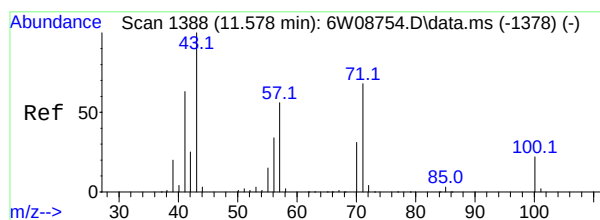
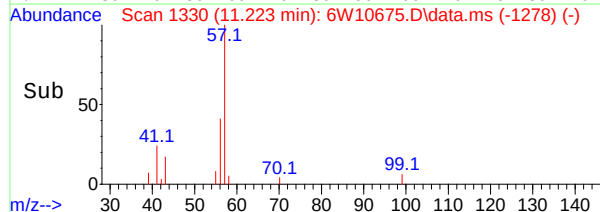
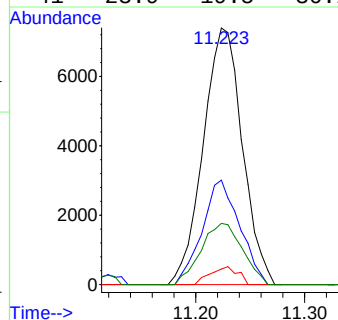
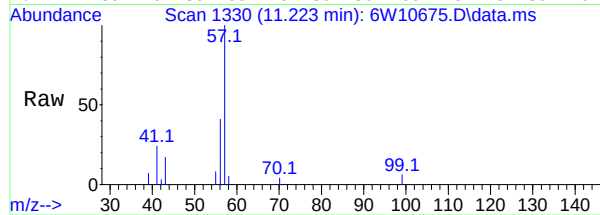
Tgt Ion: 78 Resp: 23241
Ion Ratio Lower Upper
78 100
77 22.8 16.7 30.9
51 13.1 11.3 21.1





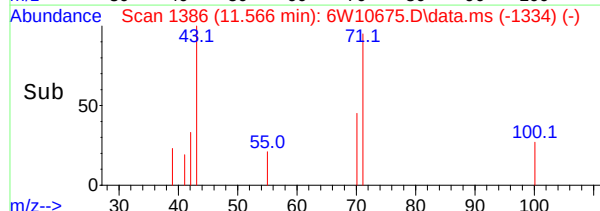
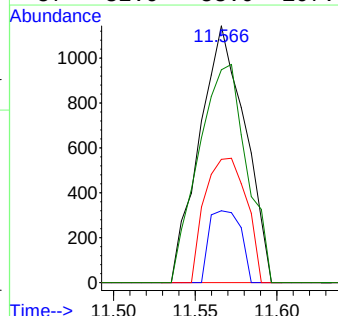
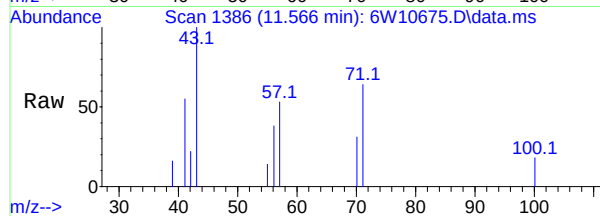
#56
2,2,4-Trimethylpentane
Concen: 0.20 ppb(v)
RT: 11.223 min Scan# 1330
Delta R.T. -0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

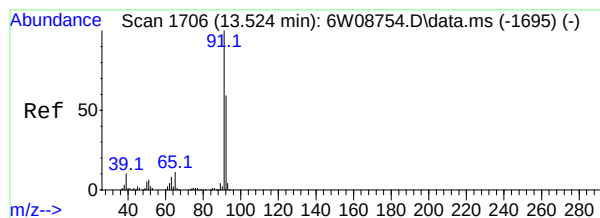
Tgt Ion: 57 Resp: 18498
Ion Ratio Lower Upper
57 100
56 40.7 22.6 42.0
99 6.1 5.2 9.6
41 23.9 19.5 36.1



#57
Heptane
Concen: 0.11 ppb(v)
RT: 11.566 min Scan# 1386
Delta R.T. -0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

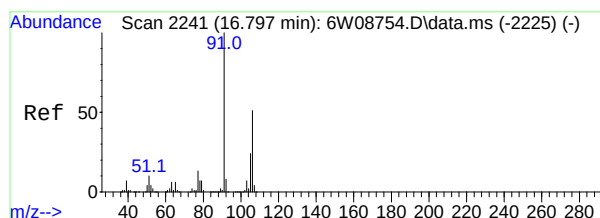
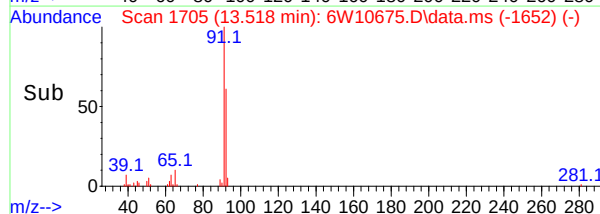
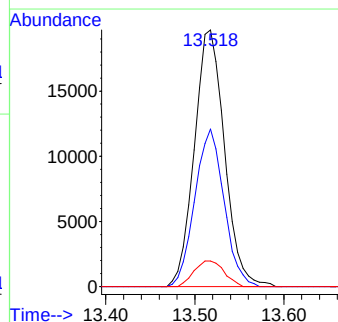
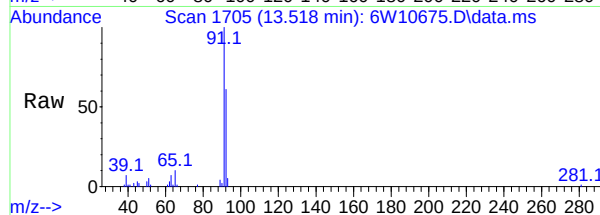
Tgt Ion: 71 Resp: 2218
Ion Ratio Lower Upper
71 100
100 28.0 23.2 43.2
70 48.0 32.1 59.7
57 82.9 58.0 107.6





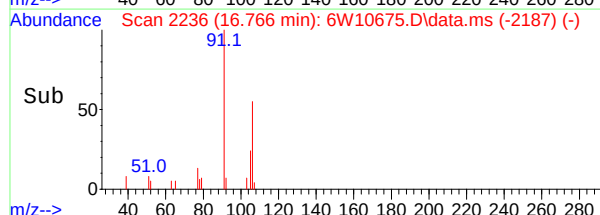
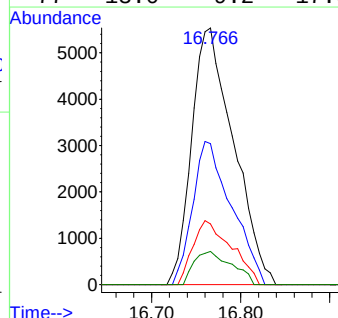
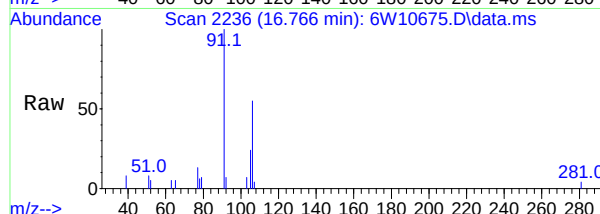
#68
Toluene
Concen: 0.61 ppb(v)
RT: 13.518 min Scan# 1705
Delta R.T. -0.006 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

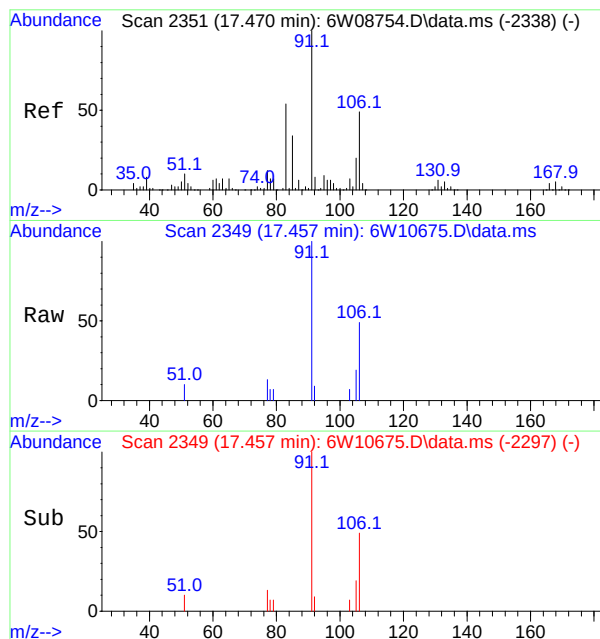
Tgt Ion: 91 Resp: 46374
Ion Ratio Lower Upper
91 100
92 61.3 41.4 77.0
65 10.0 7.9 14.7



#81
m,p-Xylene
Concen: 0.28 ppb(v)
RT: 16.766 min Scan# 2236
Delta R.T. -0.030 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

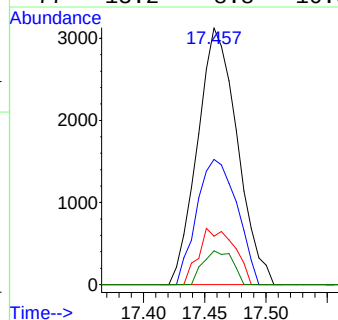
Tgt Ion: 91 Resp: 18109
Ion Ratio Lower Upper
91 100
106 55.0 35.9 66.7
105 23.7 16.7 31.1
77 13.0 9.2 17.0





#84
o-Xylene
Concen: 0.11 ppb(v)
RT: 17.457 min Scan# 2349
Delta R.T. -0.012 min
Lab File: 6W10675.D
Acq: 20 Feb 2019 8:05 pm

Tgt Ion: 91 Resp: 7060
Ion Ratio Lower Upper
91 100
106 48.8 34.5 64.1
105 18.8 14.0 26.0
77 13.2 8.8 16.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W10378.D
Acq On : 30 Jan 2019 2:42 am
Operator : thomash
Sample : scc(m012),cp10192
Misc : MS32170,V6W409,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 11:03:10 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.164	130	217896	10.00	ppb(v)	-0.01
55) 1,4-Difluorobenzene	10.367	114	799433	10.00	ppb(v)	-0.01
78) Chlorobenzene-d5	15.909	82	322288	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.164	130	217896	10.00	ppb(v)	-0.01

System Monitoring Compounds
92) 4-Bromofluorobenzene 18.155 95 345864 8.79 ppb(v) 0.00
Spiked Amount 10.000 Range 65 - 128 Recovery = 87.90%

Target Compounds	Qvalue

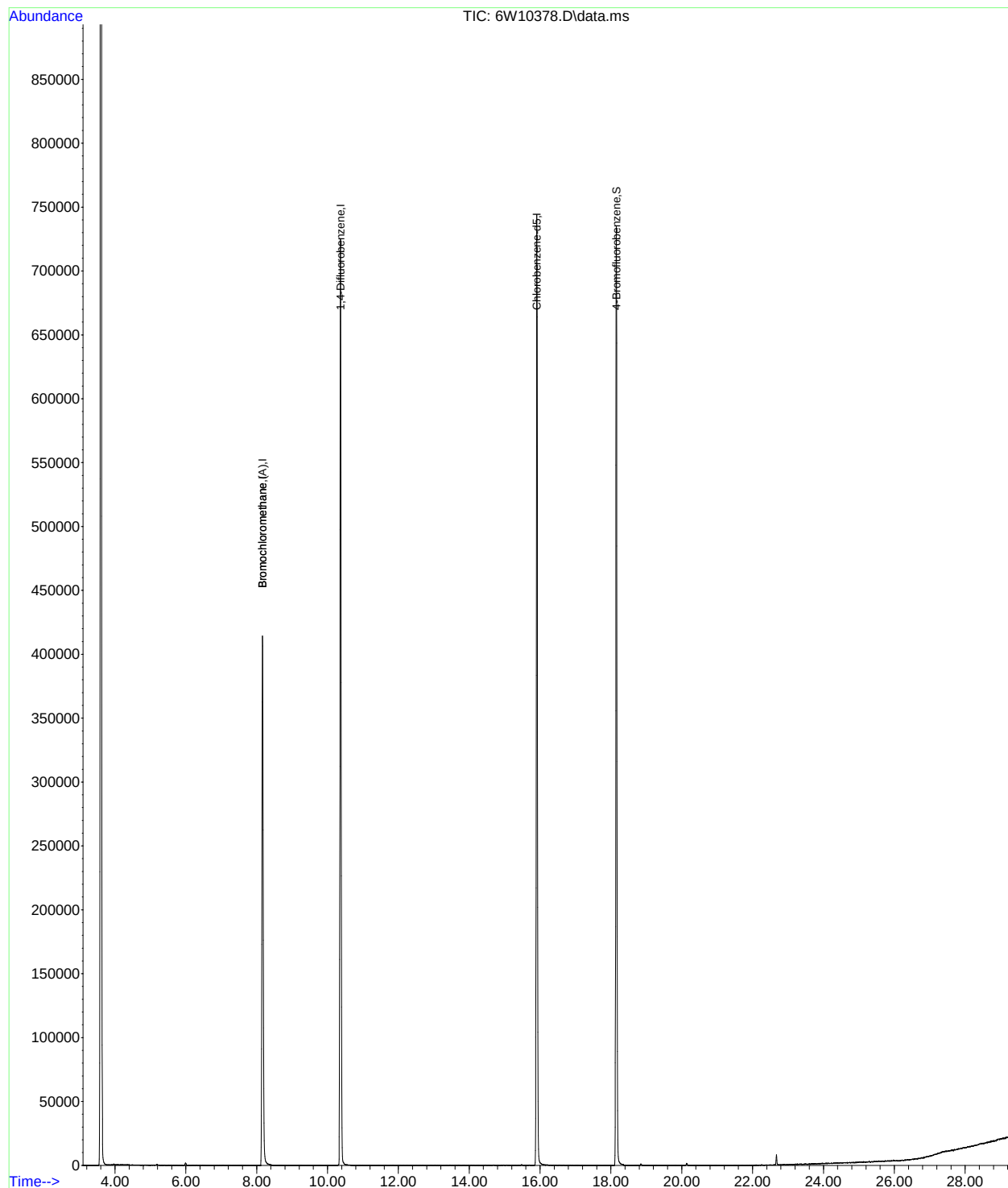
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.5.1

7

Data Path : C:\msdchem\1\data\
Data File : 6W10378.D
Acq On : 30 Jan 2019 2:42 am
Operator : thomash
Sample : scc(m012),cp10192
Misc : MS32170,V6W409,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 30 11:03:10 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 5w34909.D
Acq On : 31 Jan 2019 4:49 pm
Operator : gabriep
Sample : scc(a882)CP10198
Misc : ms32097,v5w1417,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:19:32 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Thu Jan 24 09:50:52 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.114	130	240633	10.00	ppb(v	#-0.01
55) 1,4-Difluorobenzene	10.224	114	856958	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.694	82	363872	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.114	130	240680	10.00	ppb(v	#-0.01

System Monitoring Compounds
92) 4-Bromofluorobenzene 17.933 95 316602 7.12 ppb(v 0.00
Spiked Amount 10.000 Range 65 - 128 Recovery = 71.20%

Target Compounds	Qvalue

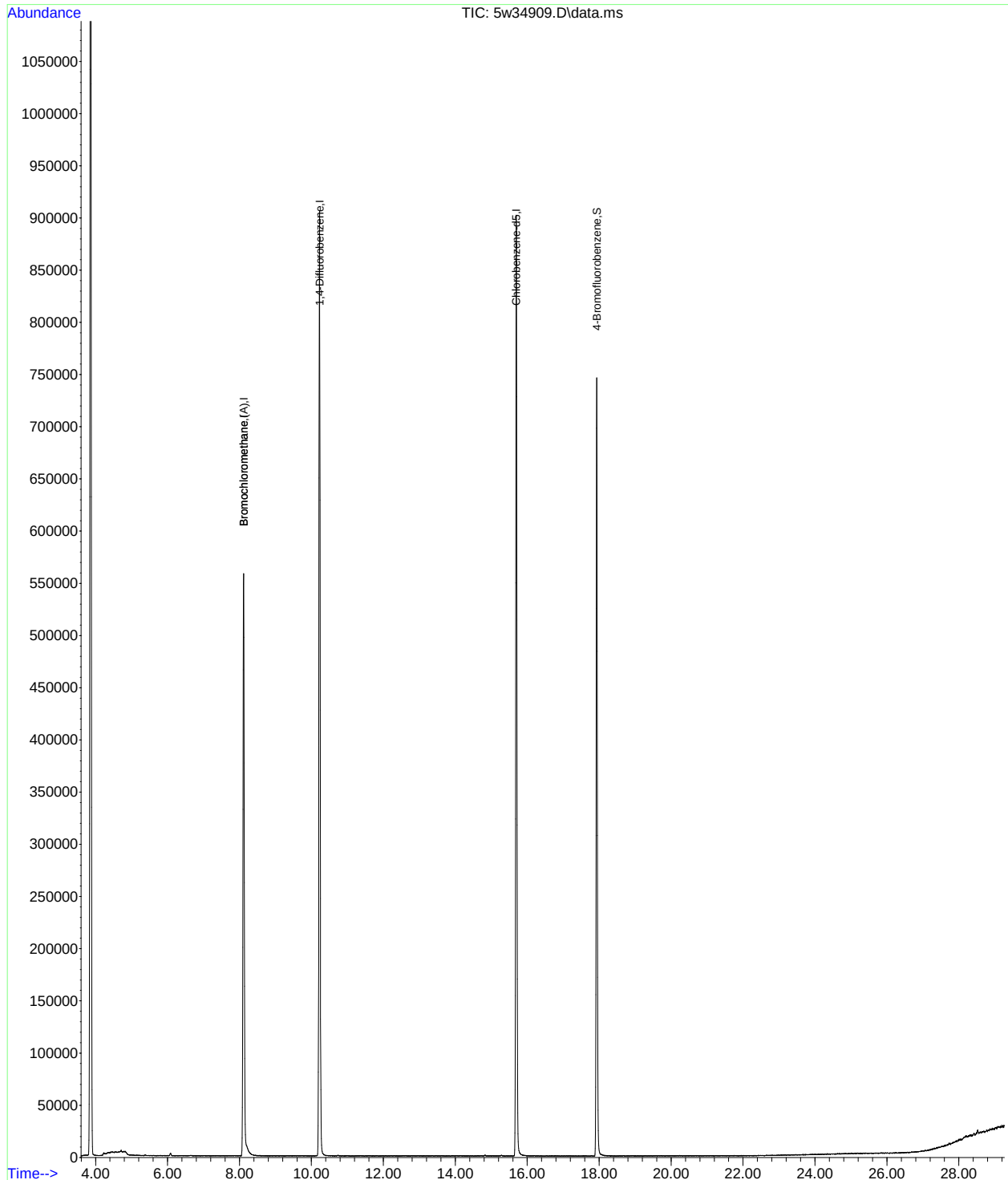
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.5.2

7

Data Path : C:\msdchem\1\data\
Data File : 5w34909.D
Acq On : 31 Jan 2019 4:49 pm
Operator : gabriep
Sample : scc(a882)CP10198
Misc : ms32097,v5w1417,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 08:19:32 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu Jan 24 09:50:52 2019
Response via : Initial Calibration

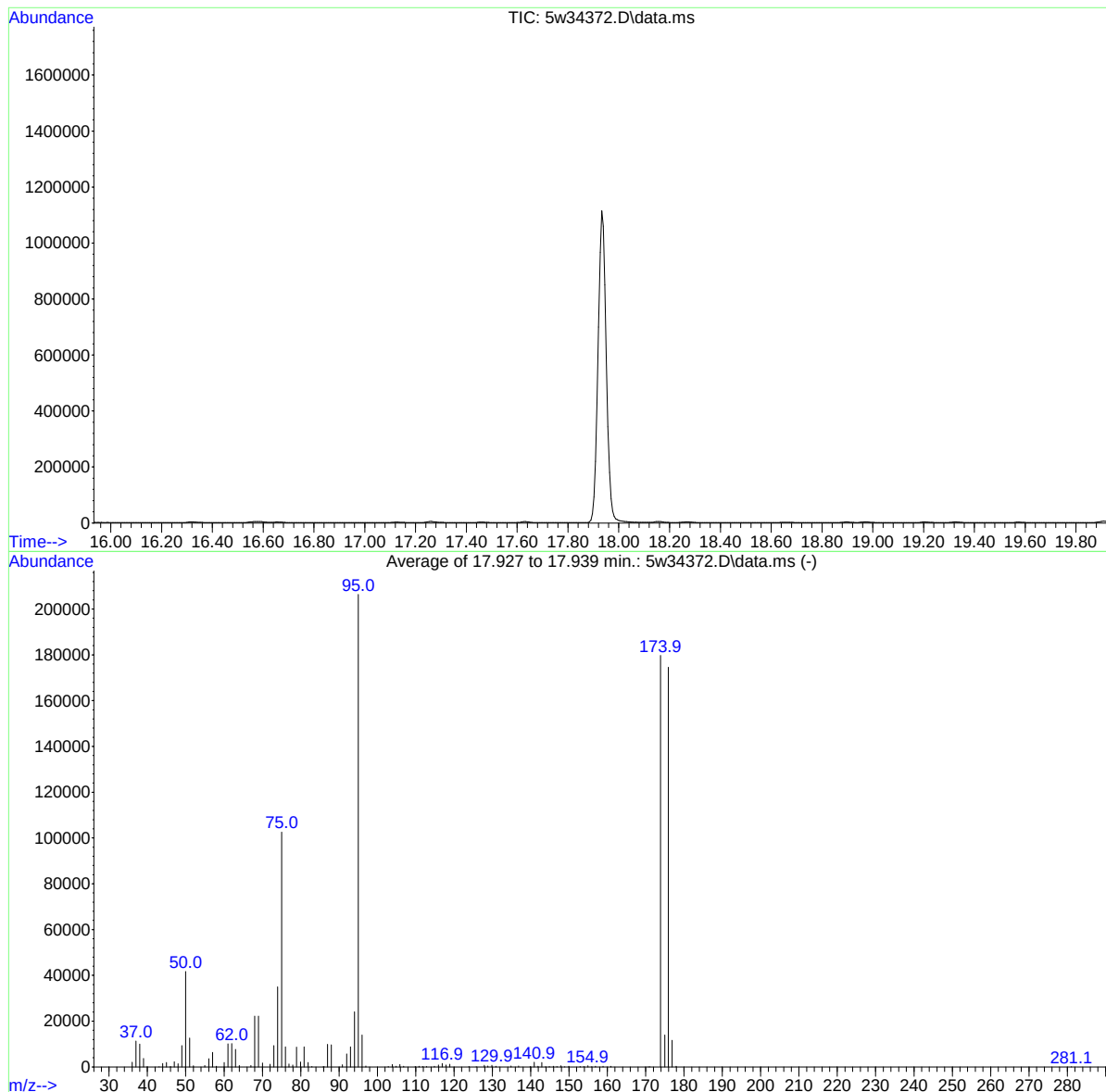


BFB

Data File : C:\msdchem\1\data\5w34372.D
Acq On : 26 Dec 2018 5:47 pm
Sample : bfb
Misc : ms31422,v5w1390,,,,,1
MS Integration Params: Rteint.p

Vial: 1
Operator: gabriep
Inst : Air5w
Multiplr: 1.00

Method : C:\msdchem\1\methods\m5w1390.M (RTE Integrator)
Title : T0-15 Full Scan Mode



Spectrum Information: Average of 17.927 to 17.939 min.

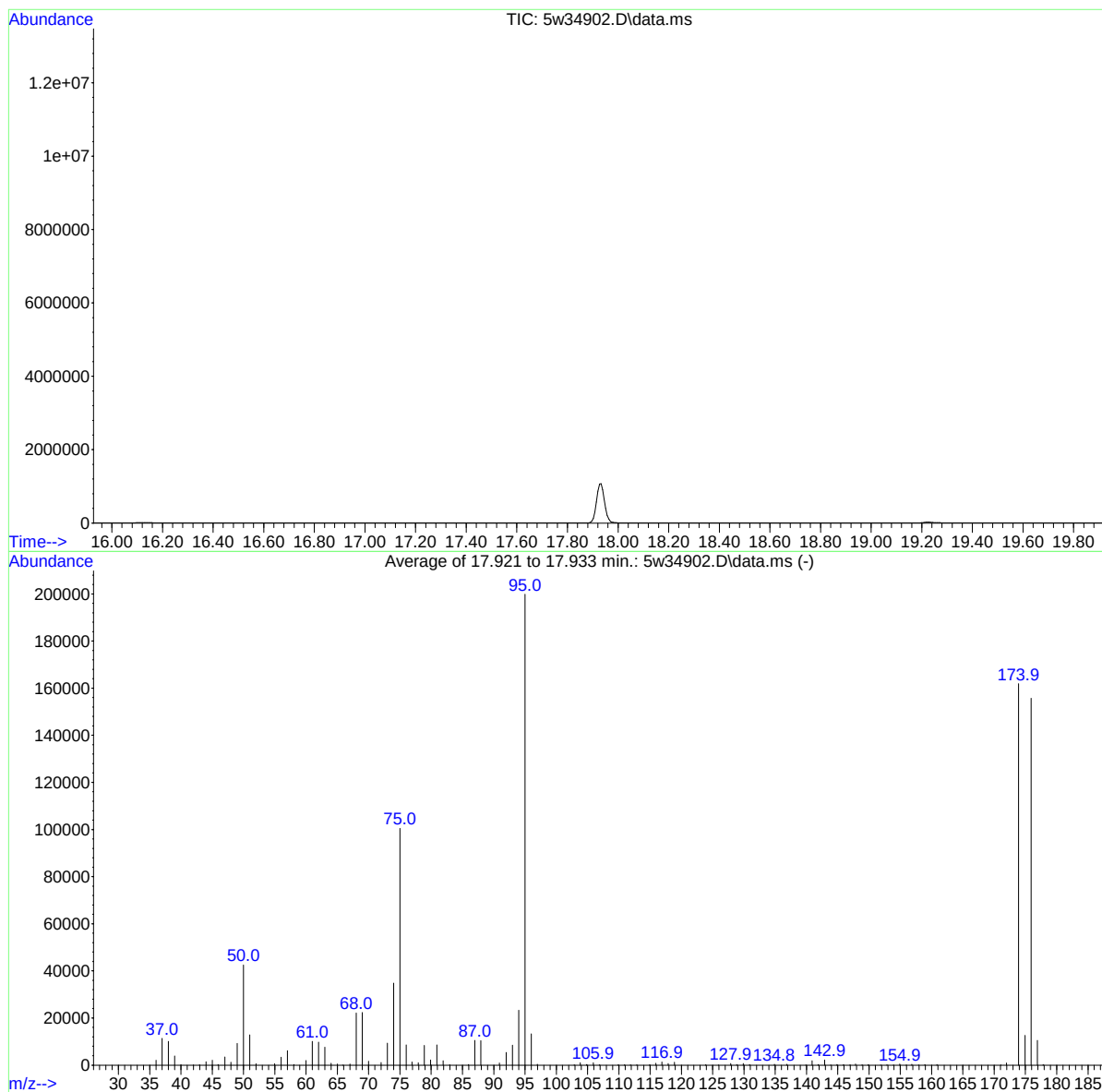
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.2	41643	PASS
75	95	30	66	49.7	102549	PASS
95	95	100	100	100.0	206357	PASS
96	95	5	9	6.8	13978	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	87.1	179755	PASS
175	174	4	9	7.8	13970	PASS
176	174	93	101	97.1	174549	PASS
177	176	5	9	6.6	11582	PASS

BFB

Data File : C:\msdchem\1\data\5w34902.D
Acq On : 31 Jan 2019 10:45 am
Sample : bfb
Misc : ms32097,v5w1417,,,,,1
MS Integration Params: Rteint.p

Vial: 1
Operator: gabriep
Inst : Air5w
Multiplr: 1.00

Method : C:\msdchem\1\methods\m5w1390.M (RTE Integrator)
Title : T0-15 Full Scan Mode



Spectrum Information: Average of 17.921 to 17.933 min.

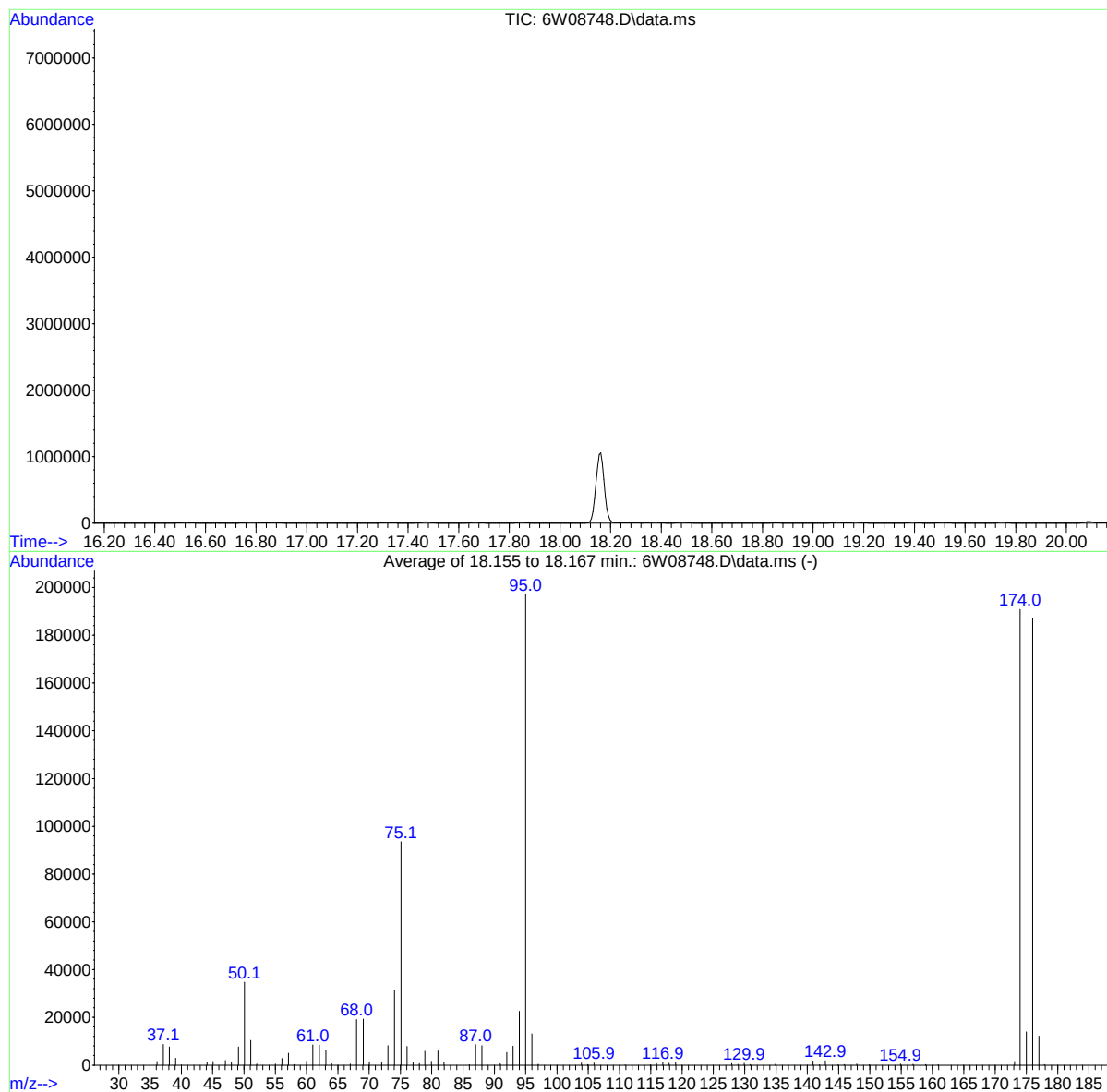
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.3	42515	PASS
75	95	30	66	50.3	100456	PASS
95	95	100	100	100.0	199829	PASS
96	95	5	9	6.6	13225	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	81.0	161899	PASS
175	174	4	9	7.8	12593	PASS
176	174	93	101	96.2	155693	PASS
177	176	5	9	6.7	10460	PASS

BFB

Data File : C:\msdchem\1\data\6W08748.D
Acq On : 22 Oct 2018 12:00 pm
Sample : BFB
Misc : MS30116,V6W335,,,,,1
MS Integration Params: Rteint.p

Vial: 2
Operator: paulcw
Inst : GCMS6W
Multiplr: 1.00

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)
Title : T0-15 Full Scan Mode



AutoFind: Scans 2463, 2464, 2465; Background Corrected with Scan 2452

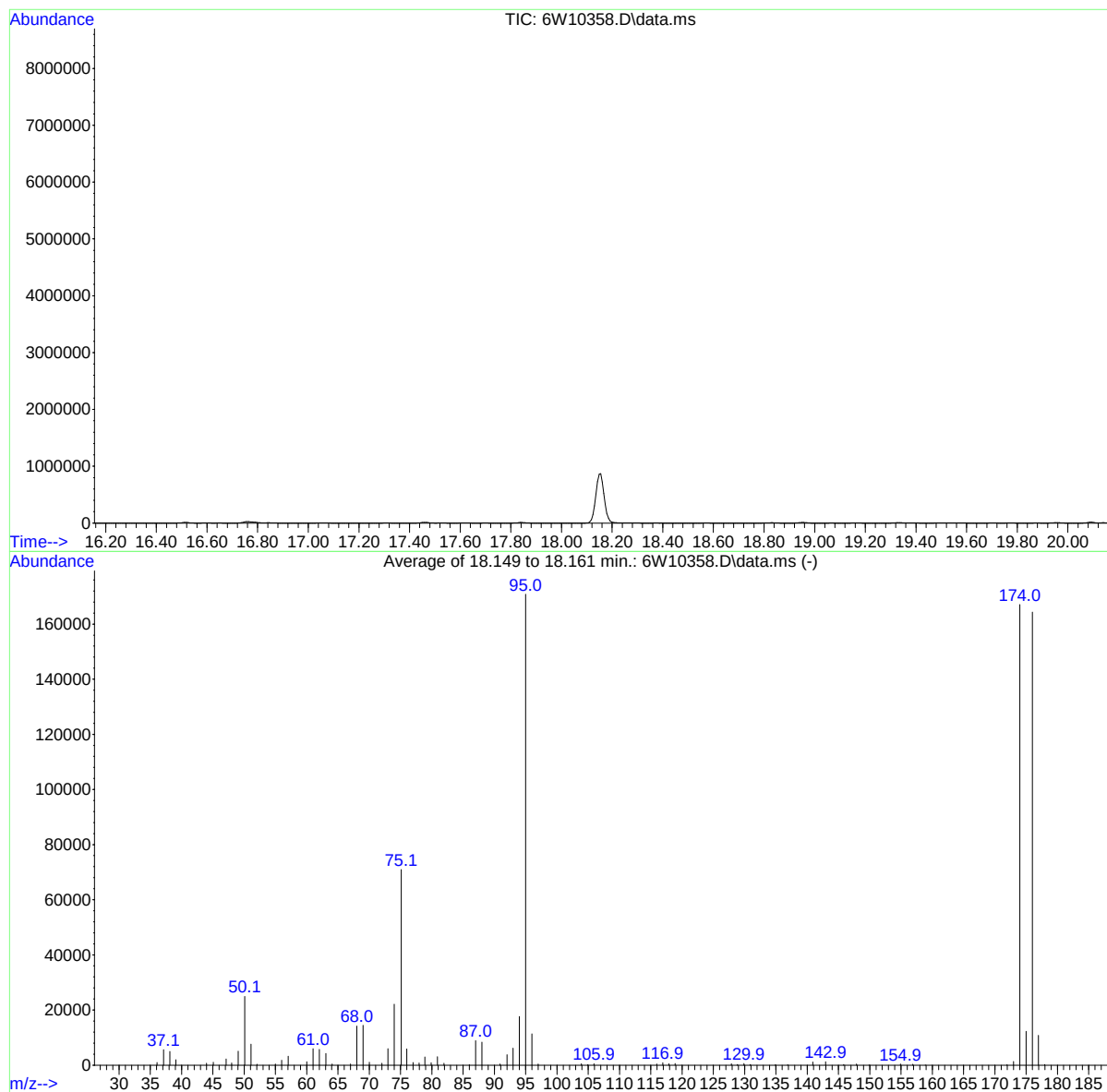
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.6	34776	PASS
75	95	30	66	47.5	93560	PASS
95	95	100	100	100.0	197120	PASS
96	95	5	9	6.6	13073	PASS
173	174	0.00	2	0.8	1546	PASS
174	95	50	120	96.8	190869	PASS
175	174	4	9	7.3	13968	PASS
176	174	93	101	98.0	187051	PASS
177	176	5	9	6.5	12105	PASS

BFB

Data File : C:\msdchem\1\data\6W10358.D
Acq On : 29 Jan 2019 8:53 am
Sample : bfb
Misc : MS32203,V6W409,,,,,1
MS Integration Params: Rteint.p

Vial: 2
Operator: thomash
Inst : GCMS6W
Multiplr: 1.00

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)
Title : T0-15 Full Scan Mode



AutoFind: Scans 2462, 2463, 2464; Background Corrected with Scan 2451

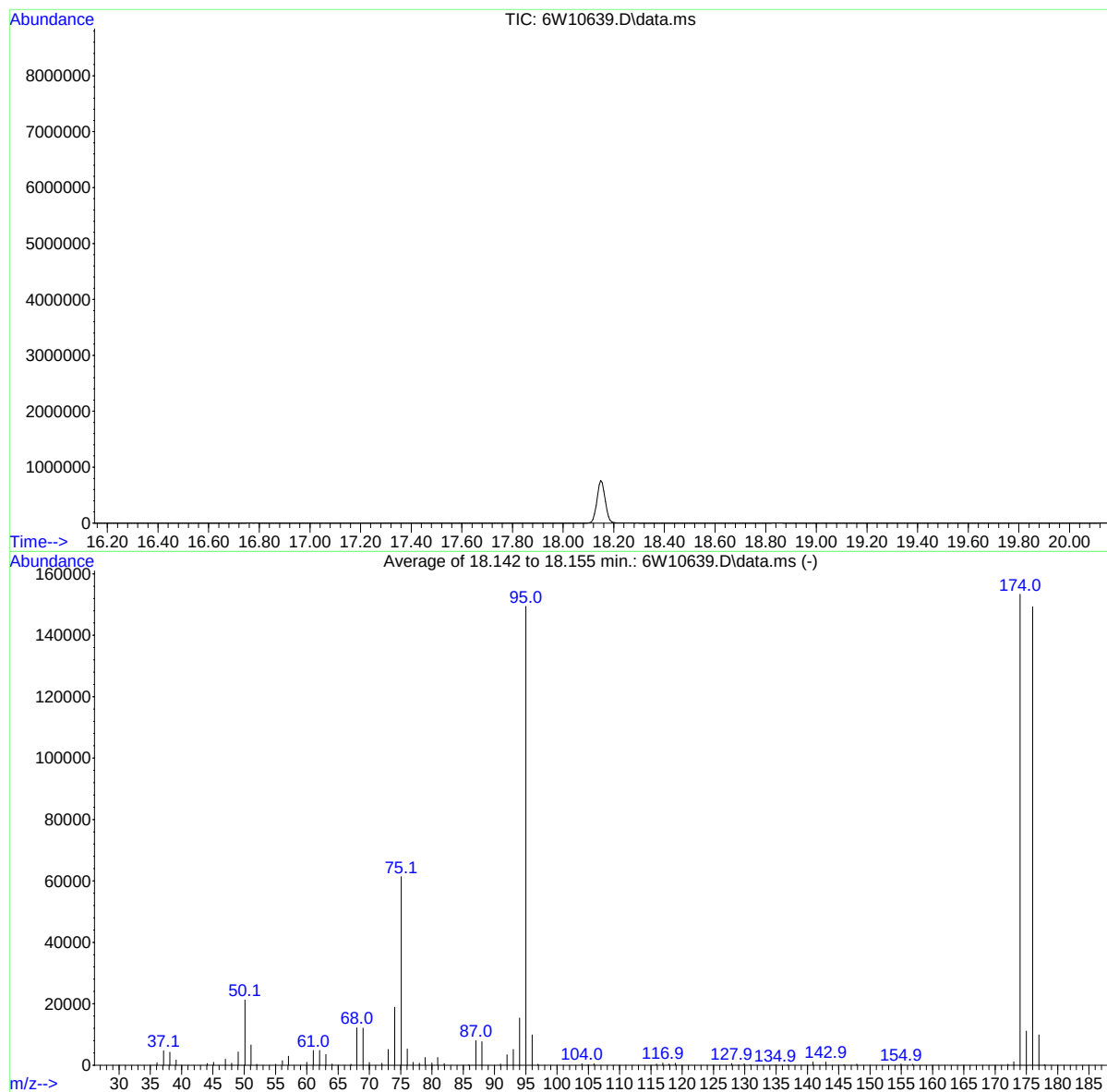
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.6	24899	PASS
75	95	30	66	41.5	70912	PASS
95	95	100	100	100.0	170795	PASS
96	95	5	9	6.6	11355	PASS
173	174	0.00	2	0.8	1374	PASS
174	95	50	120	97.8	167040	PASS
175	174	4	9	7.3	12258	PASS
176	174	93	101	98.4	164373	PASS
177	176	5	9	6.6	10773	PASS

BFB

Data File : C:\msdchem\1\data\6W10639.D
Acq On : 19 Feb 2019 8:50 am
Sample : bfb
Misc : MS32415,V6W424,,,,,1
MS Integration Params: Rteint.p

Vial: 2
Operator: thomash
Inst : GCMS6W
Multiplr: 1.00

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)
Title : T0-15 Full Scan Mode



Spectrum Information: Average of 18.142 to 18.155 min.

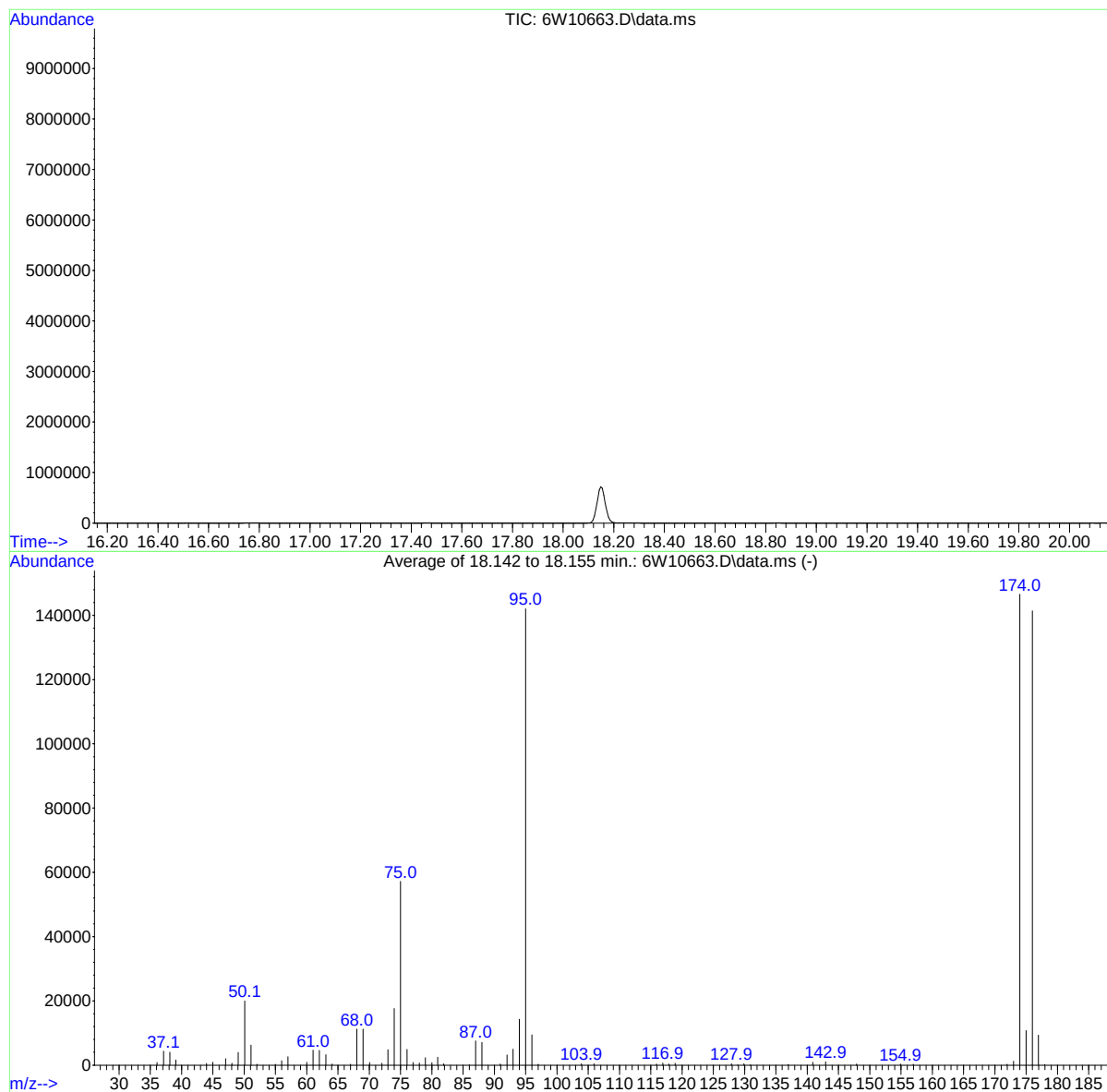
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.2	21216	PASS
75	95	30	66	41.1	61443	PASS
95	95	100	100	100.0	149419	PASS
96	95	5	9	6.6	9880	PASS
173	174	0.00	2	0.7	1137	PASS
174	95	50	120	102.6	153344	PASS
175	174	4	9	7.2	11050	PASS
176	174	93	101	97.3	149248	PASS
177	176	5	9	6.6	9868	PASS

BFB

Data File : C:\msdchem\1\data\gc6w\6W10663.D
Acq On : 20 Feb 2019 8:56 am
Sample : BFB
Misc : MS32480,V6W425,,,,,1
MS Integration Params: Rteint.p

Vial: 2
Operator: thomash
Inst : GCMS6W
Multiplr: 1.00

Method : C:\msdchem\1\methods\6w335.M (RTE Integrator)
Title : T0-15 Full Scan Mode



AutoFind: Scans 2461, 2462, 2463; Background Corrected with Scan 2451

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.1	19971	PASS
75	95	30	66	40.3	57163	PASS
95	95	100	100	100.0	142016	PASS
96	95	5	9	6.6	9406	PASS
173	174	0.00	2	0.8	1228	PASS
174	95	50	120	103.2	146539	PASS
175	174	4	9	7.3	10751	PASS
176	174	93	101	96.5	141405	PASS
177	176	5	9	6.6	9332	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34378.D
 Acq On : 26 Dec 2018 10:25 pm
 Operator : gabriel
 Sample : ic1390-5
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:02:35 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.120	130	249551	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.231	114	887076	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	441249	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	249551	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	17.939	95	547823	9.58	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	95.80%

Target Compounds						Qvalue
3) Freon 152A	3.984	65	74899	5.23	ppb(v	99
4) Chlorodifluoromethane	4.021	67	37288	5.20	ppb(v	99
5) Propene	4.039	41	83224	5.26	ppb(v	99
6) Chlorotrifluoroethene	4.046	116	178925	5.28	ppb(v#	89
7) Dichlorodifluoromethane	4.095	85	355521	5.18	ppb(v	99
8) 1-Chloro-1,1-difluoro...	4.205	65	341491	5.21	ppb(v	99
9) Chloromethane	4.223	50	135038	5.29	ppb(v	99
10) Dichlorotetrafluoroethane	4.290	85	419873	5.48	ppb(v	96
11) Vinyl Chloride	4.388	62	148177	5.46	ppb(v	100
12) 1,3-Butadiene	4.486	54	97464	5.39	ppb(v	99
13) n-Butane	4.523	58	21685	5.50	ppb(v	97
14) Bromomethane	4.700	94	151854	5.48	ppb(v	98
15) Chloroethane	4.829	64	67808	5.44	ppb(v	99
16) Dichlorofluoromethane	4.896	67	352558	5.48	ppb(v	99
17) Acetonitrile	5.122	41	108260	5.46	ppb(v	100
18) Freon 123	5.220	83	352420	5.50	ppb(v	99
19) Freon 123A	5.263	117	193024	5.48	ppb(v	99
20) Bromoethene	5.104	106	142984	5.40	ppb(v	98
21) Acrolein	5.208	56	58119	5.34	ppb(v	98
22) Trichlorofluoromethane	5.428	101	406490	5.46	ppb(v	100
23) Acetone	5.324	58	60490	5.49	ppb(v	100
24) Pentane	5.710	57	31685	5.27	ppb(v	100
26) Iodomethane	5.905	142	376064	5.26	ppb(v	99
27) Isopropyl Alcohol	5.532	43	50199	5.42	ppb(v	97
28) 1,1-Dichloroethene	5.967	61	210253	5.24	ppb(v	99
29) Freon 113	6.291	101	290359	5.34	ppb(v	99
30) Methylene Chloride	6.077	84	115694	5.34	ppb(v	99
31) Carbon Disulfide	6.334	76	358095	5.30	ppb(v	99
32) Ethanol	4.945	45	59648	5.43	ppb(v	99
33) Acrylonitrile	5.703	53	100437	5.24	ppb(v	99
34) 3-Chloropropene	6.175	76	56061	5.28	ppb(v	98
35) trans-1,2-Dichloroethene	6.915	61	184694	5.22	ppb(v	100
36) tert-Butyl Alcohol	6.034	59	244610	5.09	ppb(v	98
37) Methyl tert-Butyl Ether	7.184	73	349786	5.20	ppb(v	100
38) Vinyl Acetate	7.270	43	319279	5.09	ppb(v	99
39) 1,1-Dichloroethane	7.111	63	240744	5.37	ppb(v	98
40) 2-Butanone	7.533	72	59835	5.23	ppb(v	96
41) Hexane	8.126	57	189372	5.13	ppb(v	99
42) cis-1,2-Dichloroethene	7.949	61	183936	5.24	ppb(v	98
43) Di-isopropyl Ether	8.151	87	105045	5.11	ppb(v	96
44) Ethyl Acetate	8.206	61	41418	5.12	ppb(v	99
45) Methyl Acrylate	8.187	55	226996	5.11	ppb(v	100
46) Chloroform	8.248	83	306503	5.32	ppb(v	99
47) 2,4-Dimethylpentane	9.062	57	222634	5.24	ppb(v	100
48) Tetrahydrofuran	8.707	72	55528	5.16	ppb(v	98
49) 1,1,1-Trichloroethane	9.295	97	290600	5.30	ppb(v	99
50) 1,2-Dichloroethane	9.025	62	194241	5.26	ppb(v	99
51) Benzene	9.808	78	396999	5.40	ppb(v	99
52) Carbon Tetrachloride	9.974	117	264204	5.16	ppb(v	99
53) Cyclohexane	10.096	56	188276	5.28	ppb(v	99
54) 2,3-Dimethylpentane	10.377	71	83549	5.27	ppb(v	98
56) 2,2,4-Trimethylpentane	11.050	57	640940	5.02	ppb(v	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34378.D
 Acq On : 26 Dec 2018 10:25 pm
 Operator : gabriep
 Sample : ic1390-5
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

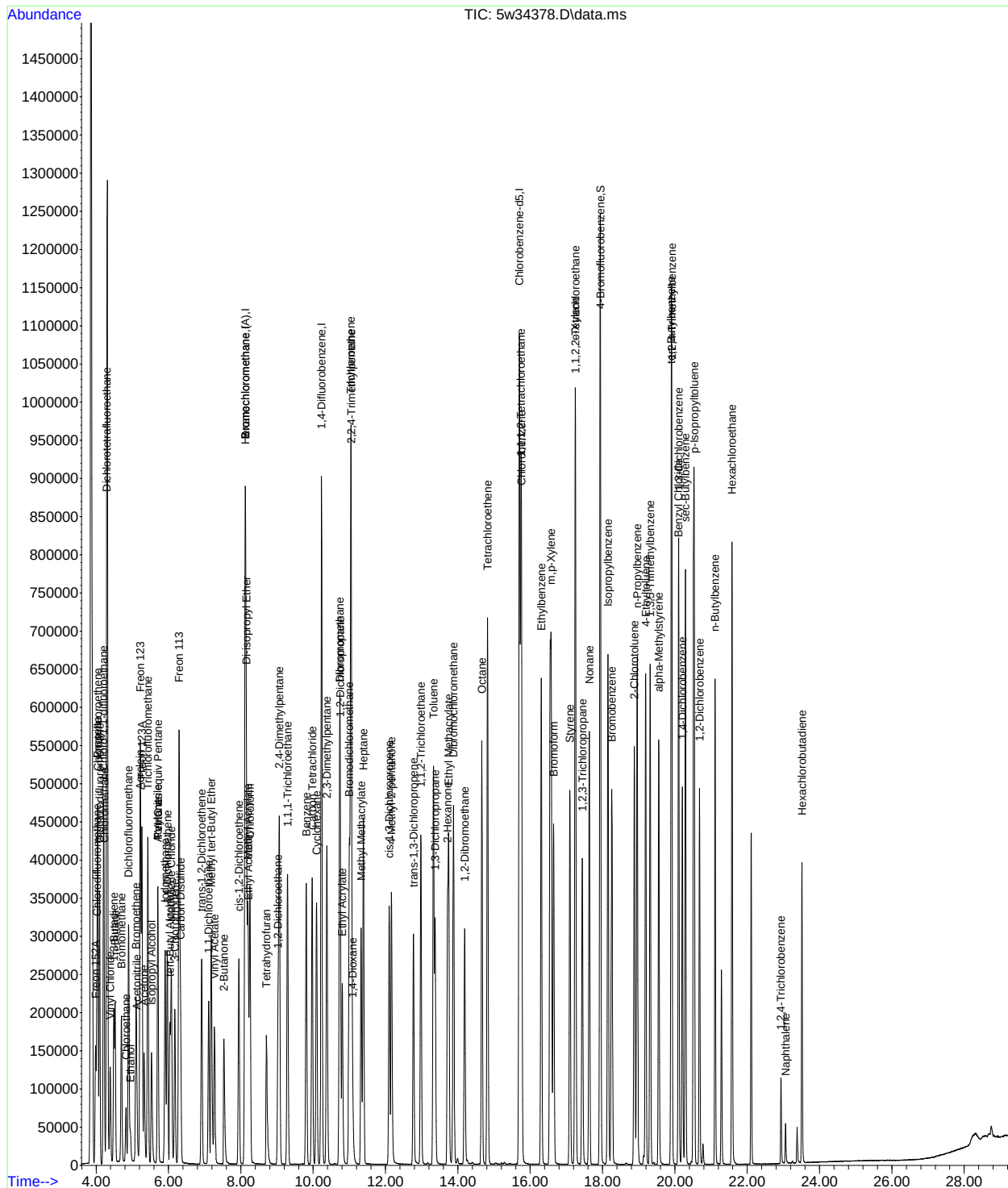
Quant Time: Jan 02 16:02:35 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.387	71	128314	4.99	ppb(v)	99
58) Trichloroethene	11.038	95	200905	5.09	ppb(v)	99
59) 1,2-Dichloropropane	10.751	63	155997	5.23	ppb(v)	99
60) Dibromomethane	10.732	174	181431	5.18	ppb(v)	100
61) Ethyl Acrylate	10.806	55	301184	4.83	ppb(v)	100
62) Methyl Methacrylate	11.326	69	142521	4.87	ppb(v)	99
63) 1,4-Dioxane	11.087	88	92988	4.97	ppb(v)	95
64) Bromodichloromethane	10.995	83	322586	5.18	ppb(v)	100
65) cis-1,3-Dichloropropene	12.103	75	234860	5.16	ppb(v)	99
66) 4-Methyl-2-pentanone	12.164	58	120526	4.89	ppb(v)	99
67) trans-1,3-Dichloropropene	12.776	75	211823	5.06	ppb(v)	99
68) Toluene	13.326	91	485523	5.29	ppb(v)	100
69) 1,1,2-Trichloroethane	12.977	97	171400	5.22	ppb(v)	100
70) 1,3-Dichloropropane	13.369	76	232961	5.19	ppb(v)	100
71) 2-Hexanone	13.718	58	162575	4.78	ppb(v)	99
72) Ethyl Methacrylate	13.748	69	240115	4.81	ppb(v)	99
73) Dibromochloromethane	13.877	129	318429	5.33	ppb(v)	99
74) Tetrachloroethene	14.819	166	256779	5.35	ppb(v)	99
75) 1,2-Dibromoethane	14.189	107	278290	5.23	ppb(v)	98
76) Octane	14.660	43	293166	4.79	ppb(v)	100
77) 1,1,1,2-Tetrachloroethane	15.743	131	215979	5.10	ppb(v)	98
79) Chlorobenzene	15.761	112	388576	5.21	ppb(v)	99
80) Ethylbenzene	16.305	91	603402	5.03	ppb(v)	99
81) m,p-Xylene	16.575	91	934511	9.88	ppb(v)	99
82) Styrene	17.095	104	318706	4.81	ppb(v)	99
83) Nonane	17.633	43	262887	4.69	ppb(v)	100
84) o-Xylene	17.248	91	475058	4.96	ppb(v)	99
85) Bromoform	16.648	173	278909	5.00	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.254	83	311476	5.03	ppb(v)	100
87) 1,2,3-Trichloropropane	17.443	75	231428	5.03	ppb(v)	99
88) Isopropylbenzene	18.153	105	607956	4.95	ppb(v)	100
89) Bromobenzene	18.257	156	193227	5.00	ppb(v)	97
90) 2-Chlorotoluene	18.881	126	142631	4.97	ppb(v)	94
91) n-Propylbenzene	18.961	120	150673	4.91	ppb(v)	100
93) 4-Ethyltoluene	19.193	105	538886	4.90	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.315	105	453266	4.92	ppb(v)	100
95) alpha-Methylstyrene	19.554	118	204904	4.82	ppb(v)	99
96) tert-Butylbenzene	19.897	134	95665	5.03	ppb(v)	91
97) 1,2,4-Trimethylbenzene	19.915	105	434214	4.85	ppb(v)	97
98) 1,3-Dichlorobenzene	20.105	146	259146	4.88	ppb(v)	99
99) Benzyl Chloride	20.098	91	231477	4.37	ppb(v)	99
100) 1,4-Dichlorobenzene	20.209	146	240421	4.85	ppb(v)	99
101) sec-Butylbenzene	20.294	134	113301	5.05	ppb(v)	98
102) p-Isopropyltoluene	20.533	134	121871	4.99	ppb(v)	99
103) 1,2-Dichlorobenzene	20.680	146	221273	4.89	ppb(v)	99
104) n-Butylbenzene	21.114	134	91147	4.97	ppb(v)	97
105) Hexachloroethane	21.579	201	130231	4.77	ppb(v)	95
106) 1,2,4-Trichlorobenzene	22.931	180	37701	3.73	ppb(v)	97
107) Naphthalene	23.059	128	47884	2.94	ppb(v)	98
108) Hexachlorobutadiene	23.512	225	72555	4.68	ppb(v)	99
110) TVHC as equiv Pentane	5.710	TIC	816283	5.14	ppb(v)	100

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

Data Path : C:\msdchem\1\data\
Data File : 5w34378.D
Acq On : 26 Dec 2018 10:25 pm
Operator : gabriep
Sample : ic1390-5
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:02:35 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34379.D
 Acq On : 26 Dec 2018 11:10 pm
 Operator : gabriel
 Sample : icc1390-10
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 15:48:33 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 11:05:23 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.126	130	258184	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.237	114	883067	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.706	82	449047	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.126	130	258184	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	17.939	95	581680	10.60	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	106.00%

Target Compounds						Qvalue
3) Freon 152A	3.997	65	148080	9.96	ppb(v	100
4) Chlorodifluoromethane	4.034	67	74235	10.57	ppb(v	100
5) Propene	4.052	41	163779	9.58	ppb(v	100
6) Chlorotrifluoroethene	4.064	116	350708	10.14	ppb(v	100
7) Dichlorodifluoromethane	4.113	85	710263	10.02	ppb(v	100
8) 1-Chloro-1,1-difluoro...	4.217	65	677866	9.80	ppb(v	100
9) Chloromethane	4.235	50	263918	9.19	ppb(v	100
10) Dichlorotetrafluoroethane	4.309	85	792956	9.62	ppb(v	100
11) Vinyl Chloride	4.401	62	280874	9.71	ppb(v	100
12) 1,3-Butadiene	4.498	54	187070	9.48	ppb(v	100
13) n-Butane	4.535	58	40791	10.15	ppb(v	100
14) Bromomethane	4.713	94	286676	9.16	ppb(v	100
15) Chloroethane	4.841	64	128911	9.52	ppb(v	100
16) Dichlorofluoromethane	4.908	67	665932	9.46	ppb(v	100
17) Acetonitrile	5.129	41	205285	9.70	ppb(v	100
18) Freon 123	5.233	83	663126	9.51	ppb(v	100
19) Freon 123A	5.275	117	364643	9.77	ppb(v	100
20) Bromoethene	5.110	106	273810	9.76	ppb(v	100
21) Acrolein	5.220	56	112647	9.35	ppb(v	100
22) Trichlorofluoromethane	5.441	101	770701	9.70	ppb(v	100
23) Acetone	5.330	58	113907	8.77	ppb(v	100
24) Pentane	5.722	57	62218	10.95	ppb(v	100
26) Iodomethane	5.918	142	739151	10.06	ppb(v	100
27) Isopropyl Alcohol	5.545	43	95788	8.14	ppb(v	100
28) 1,1-Dichloroethene	5.979	61	415384	10.11	ppb(v	100
29) Freon 113	6.303	101	562106	9.88	ppb(v	100
30) Methylene Chloride	6.089	84	224116	8.69	ppb(v	100
31) Carbon Disulfide	6.346	76	699606	9.96	ppb(v	100
32) Ethanol	4.957	45	113602	8.52	ppb(v	100
33) Acrylonitrile	5.716	53	198371	10.18	ppb(v	100
34) 3-Chloropropene	6.187	76	109788	10.43	ppb(v	100
35) trans-1,2-Dichloroethene	6.927	61	365749	10.20	ppb(v	100
36) tert-Butyl Alcohol	6.046	59	496751	10.35	ppb(v	100
37) Methyl tert-Butyl Ether	7.190	73	696022	10.51	ppb(v	100
38) Vinyl Acetate	7.282	43	649581	9.97	ppb(v	100
39) 1,1-Dichloroethane	7.123	63	463888	9.82	ppb(v	100
40) 2-Butanone	7.533	72	118318	10.52	ppb(v	100
41) Hexane	8.132	57	381607	10.47	ppb(v	100
42) cis-1,2-Dichloroethene	7.955	61	363228	10.04	ppb(v	100
43) Di-isopropyl Ether	8.157	87	212675	10.68	ppb(v	100
44) Ethyl Acetate	8.206	61	83615	11.54	ppb(v	100
45) Methyl Acrylate	8.194	55	459390	10.61	ppb(v	100
46) Chloroform	8.261	83	596099	9.74	ppb(v	100
47) 2,4-Dimethylpentane	9.068	57	439843	10.43	ppb(v	100
48) Tetrahydrofuran	8.707	72	111421	11.25	ppb(v	100
49) 1,1,1-Trichloroethane	9.301	97	566986	9.88	ppb(v	100
50) 1,2-Dichloroethane	9.038	62	382092	9.87	ppb(v	100
51) Benzene	9.815	78	761001	9.74	ppb(v	100
52) Carbon Tetrachloride	9.980	117	530083	10.25	ppb(v	100
53) Cyclohexane	10.102	56	368827	10.30	ppb(v	100
54) 2,3-Dimethylpentane	10.384	71	163931	10.40	ppb(v	100
56) 2,2,4-Trimethylpentane	11.057	57	1271947	10.86	ppb(v	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34379.D
 Acq On : 26 Dec 2018 11:10 pm
 Operator : gabriel
 Sample : icc1390-10
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 15:48:33 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 11:05:23 2019
 Response via : Initial Calibration

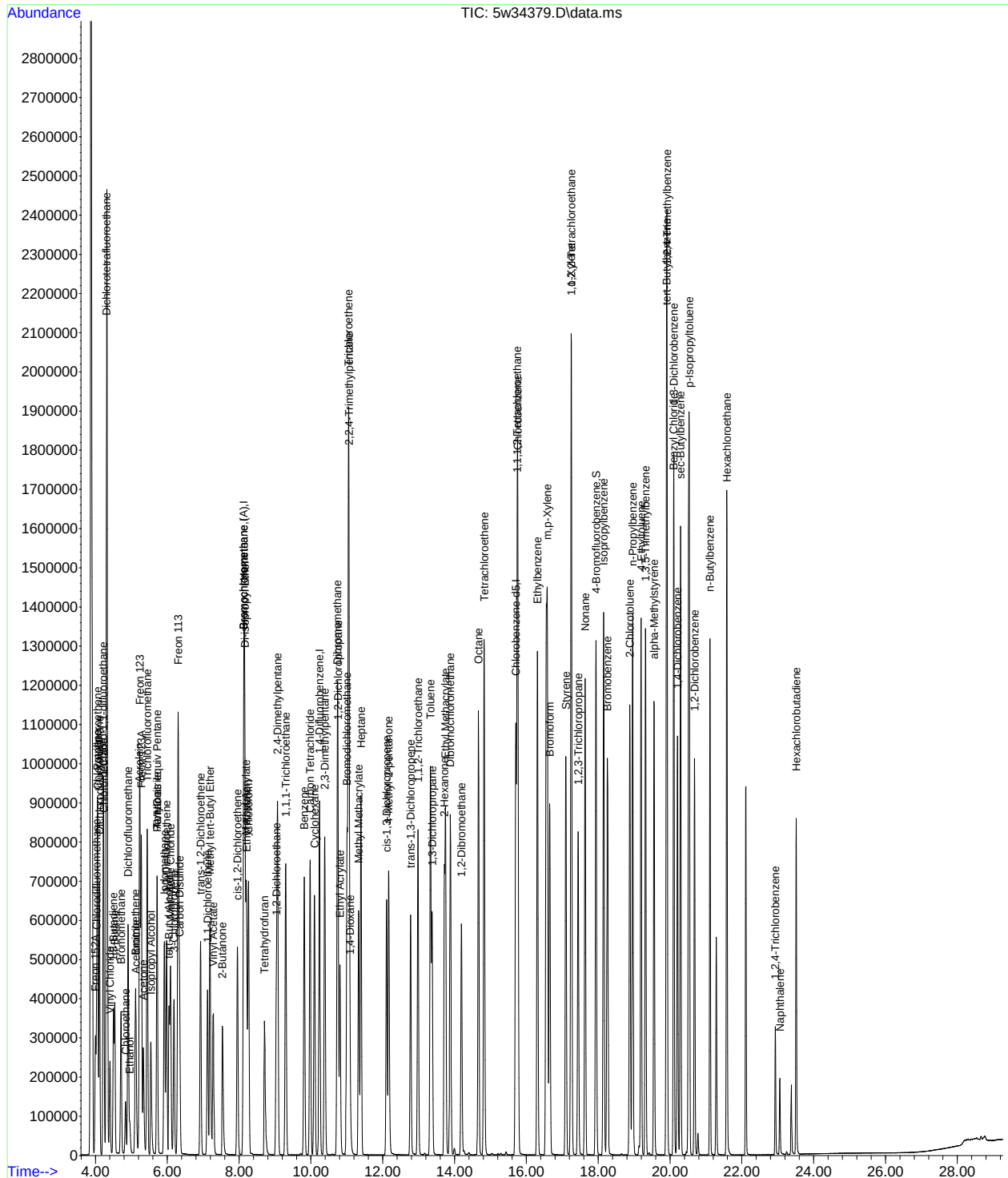
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.393	71	255772	10.96	ppb(v)	100
58) Trichloroethene	11.044	95	393010	10.08	ppb(v)	100
59) 1,2-Dichloropropane	10.757	63	296990	9.95	ppb(v)	100
60) Dibromomethane	10.739	174	348849	9.60	ppb(v)	100
61) Ethyl Acrylate	10.812	55	621113	11.51	ppb(v)	100
62) Methyl Methacrylate	11.326	69	291493	11.38	ppb(v)	100
63) 1,4-Dioxane	11.087	88	186100	10.83	ppb(v)	100
64) Bromodichloromethane	11.002	83	619652	9.73	ppb(v)	100
65) cis-1,3-Dichloropropene	12.109	75	453386	10.60	ppb(v)	100
66) 4-Methyl-2-pentanone	12.164	58	245578	11.97	ppb(v)	100
67) trans-1,3-Dichloropropene	12.776	75	416528	11.19	ppb(v)	100
68) Toluene	13.326	91	913993	10.30	ppb(v)	100
69) 1,1,2-Trichloroethane	12.984	97	326968	10.07	ppb(v)	100
70) 1,3-Dichloropropane	13.375	76	446827	10.34	ppb(v)	100
71) 2-Hexanone	13.718	58	338824	11.95	ppb(v)	100
72) Ethyl Methacrylate	13.748	69	496643	11.92	ppb(v)	100
73) Dibromochloromethane	13.883	129	595006	10.29	ppb(v)	100
74) Tetrachloroethene	14.825	166	477759	9.65	ppb(v)	100
75) 1,2-Dibromoethane	14.189	107	529370	10.17	ppb(v)	100
76) Octane	14.666	43	608746	11.57	ppb(v)	100
77) 1,1,1,2-Tetrachloroethane	15.743	131	421411	10.75	ppb(v)	100
79) Chlorobenzene	15.761	112	759365	9.42	ppb(v)	100
80) Ethylbenzene	16.306	91	1221000	10.34	ppb(v)	100
81) m,p-Xylene	16.581	91	1925397	20.18	ppb(v)	100
82) Styrene	17.101	104	674823	10.70	ppb(v)	100
83) Nonane	17.633	43	570452	10.49	ppb(v)	100
84) o-Xylene	17.248	91	975240	10.42	ppb(v)	100
85) Bromoform	16.648	173	567725	10.66	ppb(v)	100
86) 1,1,2,2-Tetrachloroethane	17.254	83	630142	8.84	ppb(v)	100
87) 1,2,3-Trichloropropane	17.444	75	468071	9.03	ppb(v)	100
88) Isopropylbenzene	18.153	105	1250547	9.97	ppb(v)	100
89) Bromobenzene	18.257	156	393374	9.63	ppb(v)	100
90) 2-Chlorotoluene	18.881	126	292301	10.38	ppb(v)	100
91) n-Propylbenzene	18.961	120	312281	10.23	ppb(v)	100
93) 4-Ethyltoluene	19.193	105	1120034	10.13	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.316	105	936869	9.70	ppb(v)	100
95) alpha-Methylstyrene	19.560	118	432319	10.14	ppb(v)	100
96) tert-Butylbenzene	19.903	134	193639	9.55	ppb(v)	100
97) 1,2,4-Trimethylbenzene	19.915	105	911899	10.05	ppb(v)	100
98) 1,3-Dichlorobenzene	20.105	146	540393	9.10	ppb(v)	100
99) Benzyl Chloride	20.099	91	539248	11.19	ppb(v)	100
100) 1,4-Dichlorobenzene	20.209	146	504685	8.75	ppb(v)	100
101) sec-Butylbenzene	20.294	134	228379	9.59	ppb(v)	100
102) p-Isopropyltoluene	20.533	134	248618	9.66	ppb(v)	100
103) 1,2-Dichlorobenzene	20.680	146	460130	8.68	ppb(v)	100
104) n-Butylbenzene	21.114	134	186601	9.96	ppb(v)	100
105) Hexachloroethane	21.585	201	277813	9.29	ppb(v)	100
106) 1,2,4-Trichlorobenzene	22.931	180	102980	11.48	ppb(v)	100
107) Naphthalene	23.060	128	165611	13.70	ppb(v)	100
108) Hexachlorobutadiene	23.512	225	157732	8.35	ppb(v)	100
110) TVHC as equiv Pentane	5.716	TIC	1644495	10.27	ppb(v)	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34379.D
 Acq On : 26 Dec 2018 11:10 pm
 Operator : gabriel
 Sample : icc1390-10
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 15:48:33 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 11:05:23 2019
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34381.D
 Acq On : 27 Dec 2018 12:42 am
 Operator : gabriel
 Sample : ic1390-20
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:02:04 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.120	130	249465	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.237	114	852969	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.706	82	421193	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.120	130	249465	10.00	ppb(v)	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 17.939 95 566083 10.38 ppb(v) 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 103.80%

Target Compounds					Qvalue
3) Freon 152A	3.984	65	279016	19.50	ppb(v) 99
4) Chlorodifluoromethane	4.015	67	141235	19.69	ppb(v) 99
5) Propene	4.033	41	319186	20.17	ppb(v) 99
6) Chlorotrifluoroethene	4.046	116	674418	19.90	ppb(v) 98
7) Dichlorodifluoromethane	4.095	85	1318261	19.21	ppb(v) 100
8) 1-Chloro-1,1-difluoroethane	4.205	65	1260597	19.25	ppb(v) 100
9) Chloromethane	4.217	50	489763	19.21	ppb(v) 100
10) Dichlorotetrafluoroethane	4.290	85	1495744	19.52	ppb(v) 97
11) Vinyl Chloride	4.382	62	530571	19.55	ppb(v) 100
12) 1,3-Butadiene	4.486	54	351766	19.46	ppb(v) 99
13) n-Butane	4.523	58	75940	19.27	ppb(v) 91
14) Bromomethane	4.694	94	530089	19.14	ppb(v) 99
15) Chloroethane	4.829	64	237159	19.04	ppb(v) 99
16) Dichlorofluoromethane	4.896	67	1223422	19.01	ppb(v) 99
17) Acetonitrile	5.122	41	383284	19.32	ppb(v) 99
18) Freon 123	5.220	83	1203874	18.79	ppb(v) 100
19) Freon 123A	5.263	117	669521	19.00	ppb(v) 100
20) Bromoethene	5.098	106	511420	19.33	ppb(v) 99
21) Acrolein	5.208	56	203464	18.69	ppb(v) 99
22) Trichlorofluoromethane	5.428	101	1397472	18.77	ppb(v) 100
23) Acetone	5.318	58	214420	19.48	ppb(v) 100
24) Pentane	5.710	57	119057	19.80	ppb(v) 100
26) Iodomethane	5.905	142	1409317	19.73	ppb(v) 99
27) Isopropyl Alcohol	5.538	43	179686	19.41	ppb(v) 93
28) 1,1-Dichloroethene	5.967	61	797711	19.88	ppb(v) 99
29) Freon 113	6.291	101	1088295	20.04	ppb(v) 99
30) Methylene Chloride	6.083	84	427210	19.73	ppb(v) 99
31) Carbon Disulfide	6.334	76	1338414	19.80	ppb(v) 100
32) Ethanol	4.951	45	209982	19.13	ppb(v) 99
33) Acrylonitrile	5.703	53	381478	19.90	ppb(v) 99
34) 3-Chloropropene	6.175	76	210006	19.80	ppb(v) 98
35) trans-1,2-Dichloroethene	6.921	61	702284	19.87	ppb(v) 100
36) tert-Butyl Alcohol	6.040	59	971686	20.24	ppb(v) 100
37) Methyl tert-Butyl Ether	7.184	73	1330473	19.78	ppb(v) 99
38) Vinyl Acetate	7.276	43	1285619	20.48	ppb(v) 100
39) 1,1-Dichloroethane	7.117	63	883393	19.71	ppb(v) 99
40) 2-Butanone	7.527	72	225464	19.72	ppb(v) 97
41) Hexane	8.126	57	732823	19.87	ppb(v) 98
42) cis-1,2-Dichloroethene	7.949	61	696251	19.84	ppb(v) 99
43) Di-isopropyl Ether	8.157	87	408767	19.89	ppb(v) 99
44) Ethyl Acetate	8.206	61	163883	20.28	ppb(v) 96
45) Methyl Acrylate	8.193	55	896838	20.20	ppb(v) 100
46) Chloroform	8.261	83	1147509	19.92	ppb(v) 100
47) 2,4-Dimethylpentane	9.068	57	849017	19.98	ppb(v) 100
48) Tetrahydrofuran	8.701	72	211928	19.69	ppb(v) 98
49) 1,1,1-Trichloroethane	9.295	97	1104239	20.16	ppb(v) 100
50) 1,2-Dichloroethane	9.032	62	738561	20.00	ppb(v) 99
51) Benzene	9.815	78	1468872	19.98	ppb(v) 100
52) Carbon Tetrachloride	9.974	117	1054224	20.58	ppb(v) 99
53) Cyclohexane	10.096	56	713054	20.01	ppb(v) 99
54) 2,3-Dimethylpentane	10.384	71	317007	20.01	ppb(v) 98
56) 2,2,4-Trimethylpentane	11.056	57	2496835	20.32	ppb(v) 100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34381.D
 Acq On : 27 Dec 2018 12:42 am
 Operator : gabriel
 Sample : ic1390-20
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:02:04 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

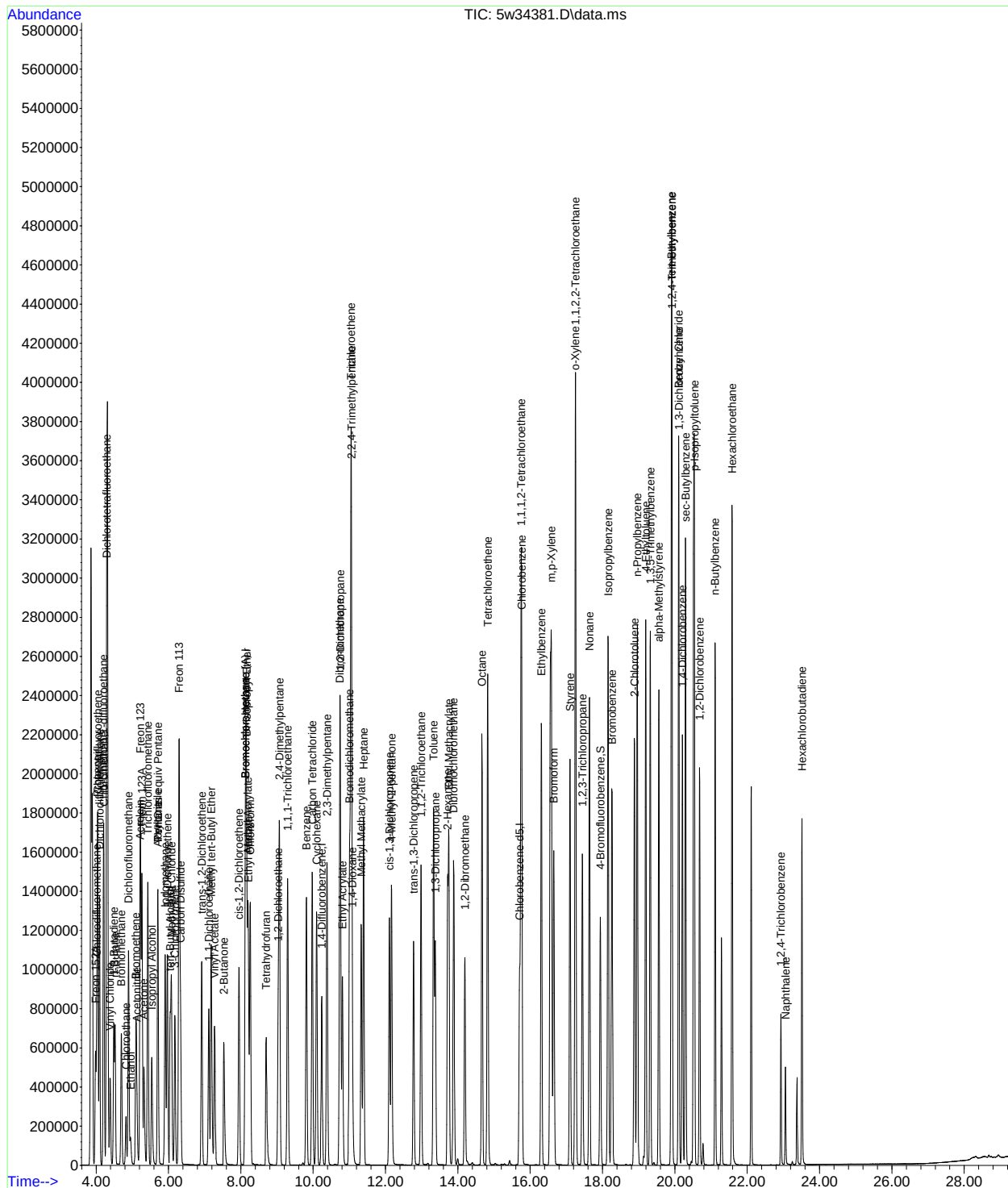
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.393	71	494193	20.00	ppb(v)	100
58) Trichloroethene	11.044	95	779941	20.55	ppb(v)	99
59) 1,2-Dichloropropane	10.751	63	579737	20.21	ppb(v)	99
60) Dibromomethane	10.738	174	674817	20.03	ppb(v)	98
61) Ethyl Acrylate	10.812	55	1222299	20.37	ppb(v)	100
62) Methyl Methacrylate	11.326	69	566331	20.11	ppb(v)	98
63) 1,4-Dioxane	11.081	88	364175	20.26	ppb(v)	90
64) Bromodichloromethane	11.001	83	1225818	20.48	ppb(v)	99
65) cis-1,3-Dichloropropene	12.109	75	870167	19.87	ppb(v)	99
66) 4-Methyl-2-pentanone	12.170	58	479334	20.21	ppb(v)	98
67) trans-1,3-Dichloropropene	12.776	75	772722	19.21	ppb(v)	100
68) Toluene	13.326	91	1693127	19.18	ppb(v)	100
69) 1,1,2-Trichloroethane	12.984	97	601854	19.06	ppb(v)	100
70) 1,3-Dichloropropane	13.375	76	811258	18.80	ppb(v)	100
71) 2-Hexanone	13.718	58	668679	20.43	ppb(v)	99
72) Ethyl Methacrylate	13.754	69	980479	20.44	ppb(v)	99
73) Dibromochloromethane	13.883	129	1069110	18.60	ppb(v)	99
74) Tetrachloroethene	14.825	166	899499	19.49	ppb(v)	99
75) 1,2-Dibromoethane	14.195	107	945677	18.49	ppb(v)	99
76) Octane	14.666	43	1164022	19.80	ppb(v)	99
77) 1,1,1,2-Tetrachloroethane	15.749	131	730654	17.95	ppb(v)	97
79) Chlorobenzene	15.767	112	1302487	18.29	ppb(v)	99
80) Ethylbenzene	16.305	91	2169447	18.94	ppb(v)	100
81) m,p-Xylene	16.581	91	3571160	39.55	ppb(v)	99
82) Styrene	17.101	104	1334188	21.08	ppb(v)	99
83) Nonane	17.633	43	1149210	21.48	ppb(v)	98
84) o-Xylene	17.248	91	1807752	19.76	ppb(v)	99
85) Bromoform	16.654	173	1015296	19.07	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.254	83	1227534	20.77	ppb(v)	100
87) 1,2,3-Trichloropropane	17.443	75	909073	20.71	ppb(v)	99
88) Isopropylbenzene	18.159	105	2422125	20.65	ppb(v)	99
89) Bromobenzene	18.263	156	743914	20.16	ppb(v)	98
90) 2-Chlorotoluene	18.887	126	564559	20.59	ppb(v)	96
91) n-Propylbenzene	18.961	120	620679	21.19	ppb(v)	99
93) 4-Ethyltoluene	19.193	105	2249560	21.41	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.322	105	1881123	21.41	ppb(v)	100
95) alpha-Methylstyrene	19.560	118	871021	21.48	ppb(v)	100
96) tert-Butylbenzene	19.903	134	389121	21.42	ppb(v)	97
97) 1,2,4-Trimethylbenzene	19.915	105	1838517	21.49	ppb(v)	92
98) 1,3-Dichlorobenzene	20.111	146	1096649	21.64	ppb(v)	99
99) Benzyl Chloride	20.105	91	1196746	23.66	ppb(v)	99
100) 1,4-Dichlorobenzene	20.209	146	1023415	21.62	ppb(v)	99
101) sec-Butylbenzene	20.300	134	457597	21.36	ppb(v)	95
102) p-Isopropyltoluene	20.539	134	501883	21.52	ppb(v)	96
103) 1,2-Dichlorobenzene	20.680	146	920189	21.32	ppb(v)	99
104) n-Butylbenzene	21.114	134	374902	21.42	ppb(v)	97
105) Hexachloroethane	21.585	201	569569	21.86	ppb(v)	97
106) 1,2,4-Trichlorobenzene	22.931	180	238385	24.68	ppb(v)	100
107) Naphthalene	23.059	128	404662	26.05	ppb(v)	99
108) Hexachlorobutadiene	23.512	225	319493	21.59	ppb(v)	100
110) TVHC as equiv Pentane	5.710	TIC	3146126	19.80	ppb(v)	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 5w34381.D
Acq On : 27 Dec 2018 12:42 am
Operator : gabriel
Sample : ic1390-20
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:02:04 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34383.D
 Acq On : 27 Dec 2018 2:23 am
 Operator : gabriel
 Sample : ic1390-40
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:01:40 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.132	130	267925	10.00	ppb(v #	0.00
55) 1,4-Difluorobenzene	10.243	114	877198	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.706	82	436251	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.132	130	267925	10.00	ppb(v #	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 17.945 95 472771 8.37 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 83.70%

Target Compounds					Qvalue
3) Freon 152A	3.997	65	584311	38.02	ppb(v 100
4) Chlorodifluoromethane	4.027	67	306103	39.74	ppb(v 98
5) Propene	4.046	41	700350	41.21	ppb(v 99
6) Chlorotrifluoroethene	4.058	116	1447499	39.77	ppb(v 98
7) Dichlorodifluoromethane	4.107	85	2777069	37.68	ppb(v 100
8) 1-Chloro-1,1-difluoro...	4.217	65	2564930	36.46	ppb(v 99
9) Chloromethane	4.229	50	1005022	36.70	ppb(v 100
10) Dichlorotetrafluoroethane	4.303	85	2886430	35.08	ppb(v 99
11) Vinyl Chloride	4.394	62	1072546	36.80	ppb(v 100
12) 1,3-Butadiene	4.498	54	692871	35.69	ppb(v 100
13) n-Butane	4.535	58	148544	35.09	ppb(v 95
14) Bromomethane	4.706	94	1059263	35.61	ppb(v 98
15) Chloroethane	4.835	64	481426	35.99	ppb(v 99
16) Dichlorofluoromethane	4.908	67	2424619	35.09	ppb(v 100
17) Acetonitrile	5.135	41	751770	35.29	ppb(v 98
18) Freon 123	5.232	83	2268874	32.97	ppb(v 100
19) Freon 123A	5.275	117	1306921	34.54	ppb(v 97
20) Bromoethene	5.110	106	1010950	35.58	ppb(v 99
21) Acrolein	5.214	56	379071	32.43	ppb(v 97
22) Trichlorofluoromethane	5.440	101	2714191	33.94	ppb(v 99
23) Acetone	5.330	58	432720	36.61	ppb(v 97
24) Pentane	5.716	57	256652	39.75	ppb(v 98
26) Iodomethane	5.918	142	2946673	38.42	ppb(v 96
27) Isopropyl Alcohol	5.551	43	367963	37.02	ppb(v 90
28) 1,1-Dichloroethene	5.973	61	1699845	39.43	ppb(v 98
29) Freon 113	6.303	101	2319770	39.77	ppb(v 100
30) Methylene Chloride	6.089	84	901988	38.78	ppb(v 99
31) Carbon Disulfide	6.340	76	2793773	38.48	ppb(v 100
32) Ethanol	4.963	45	418090	35.46	ppb(v 99
33) Acrylonitrile	5.716	53	814234	39.55	ppb(v 99
34) 3-Chloropropene	6.187	76	448173	39.34	ppb(v 97
35) trans-1,2-Dichloroethene	6.927	61	1508948	39.76	ppb(v 98
36) tert-Butyl Alcohol	6.058	59	2102901	40.79	ppb(v 99
37) Methyl tert-Butyl Ether	7.190	73	2862482	39.63	ppb(v 100
38) Vinyl Acetate	7.282	43	2814835	41.76	ppb(v 100
39) 1,1-Dichloroethane	7.123	63	1867798	38.80	ppb(v 100
40) 2-Butanone	7.539	72	480697	39.15	ppb(v 97
41) Hexane	8.138	57	1600939	40.43	ppb(v 95
42) cis-1,2-Dichloroethene	7.961	61	1487508	39.46	ppb(v 99
43) Di-isopropyl Ether	8.163	87	884443	40.07	ppb(v 96
44) Ethyl Acetate	8.218	61	351031	40.46	ppb(v 97
45) Methyl Acrylate	8.200	55	1911695	40.10	ppb(v 99
46) Chloroform	8.273	83	2422285	39.16	ppb(v 99
47) 2,4-Dimethylpentane	9.074	57	1857691	40.70	ppb(v 100
48) Tetrahydrofuran	8.707	72	450135	38.93	ppb(v 99
49) 1,1,1-Trichloroethane	9.301	97	2391467	40.65	ppb(v 99
50) 1,2-Dichloroethane	9.044	62	1609062	40.58	ppb(v 99
51) Benzene	9.821	78	3070064	38.88	ppb(v 99
52) Carbon Tetrachloride	9.986	117	2335656	42.46	ppb(v 100
53) Cyclohexane	10.102	56	1521581	39.75	ppb(v 99
54) 2,3-Dimethylpentane	10.390	71	681070	40.04	ppb(v 100
56) 2,2,4-Trimethylpentane	11.063	57	5376065	42.55	ppb(v 99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34383.D
 Acq On : 27 Dec 2018 2:23 am
 Operator : gabriel
 Sample : ic1390-40
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:01:40 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

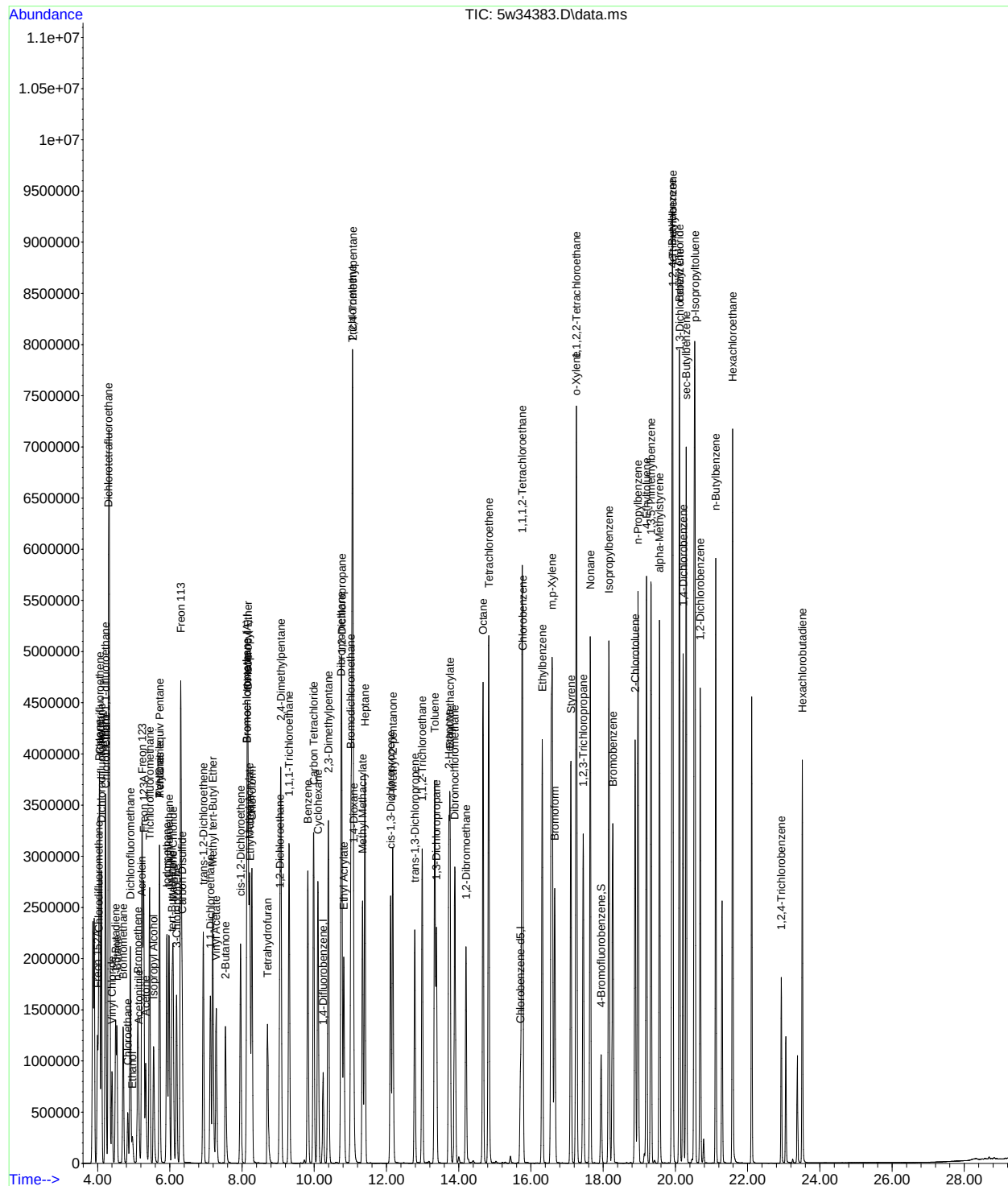
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.405	71	1063598	41.86	ppb(v	100
58) Trichloroethene	11.050	95	1637876	41.95	ppb(v	98
59) 1,2-Dichloropropane	10.763	63	1233637	41.82	ppb(v	97
60) Dibromomethane	10.744	174	1398320	40.35	ppb(v	95
61) Ethyl Acrylate	10.818	55	2597573	42.10	ppb(v	100
62) Methyl Methacrylate	11.338	69	1172626	40.50	ppb(v	98
63) 1,4-Dioxane	11.087	88	708468	38.32	ppb(v#	81
64) Bromodichloromethane	11.014	83	2608636	42.38	ppb(v	100
65) cis-1,3-Dichloropropene	12.115	75	1810480	40.20	ppb(v	99
66) 4-Methyl-2-pentanone	12.176	58	1034333	42.40	ppb(v	99
67) trans-1,3-Dichloropropene	12.782	75	1550979	37.49	ppb(v	100
68) Toluene	13.332	91	3451505	38.02	ppb(v	100
69) 1,1,2-Trichloroethane	12.990	97	1204248	37.08	ppb(v	99
70) 1,3-Dichloropropane	13.381	76	1614999	36.39	ppb(v	99
71) 2-Hexanone	13.730	58	1473700	43.79	ppb(v	99
72) Ethyl Methacrylate	13.761	69	2139412	43.37	ppb(v	99
73) Dibromochloromethane	13.889	129	2107765	35.66	ppb(v	99
74) Tetrachloroethene	14.831	166	1868044	39.36	ppb(v	99
75) 1,2-Dibromoethane	14.201	107	1808366	34.39	ppb(v	100
76) Octane	14.672	43	2467401	40.80	ppb(v	99
77) 1,1,1,2-Tetrachloroethane	15.755	131	1368685	32.70	ppb(v	96
79) Chlorobenzene	15.773	112	2359660	31.99	ppb(v	100
80) Ethylbenzene	16.312	91	3859153	32.53	ppb(v	100
81) m,p-Xylene	16.587	91	6323842	67.62	ppb(v	99
82) Styrene	17.107	104	2546169	38.84	ppb(v	99
83) Nonane	17.639	43	2439459	44.02	ppb(v	98
84) o-Xylene	17.254	91	3110967	32.84	ppb(v	100
85) Bromoform	16.660	173	1730920	31.38	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.260	83	2527967	41.29	ppb(v	99
87) 1,2,3-Trichloropropane	17.449	75	1810336	39.81	ppb(v	99
88) Isopropylbenzene	18.159	105	4506959	37.10	ppb(v	99
89) Bromobenzene	18.269	156	1285596	33.64	ppb(v	98
90) 2-Chlorotoluene	18.887	126	1025410	36.11	ppb(v	99
91) n-Propylbenzene	18.967	120	1256624	41.42	ppb(v	97
93) 4-Ethyltoluene	19.199	105	4616567	42.43	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.322	105	4049656	44.49	ppb(v	100
95) alpha-Methylstyrene	19.560	118	1922344	45.77	ppb(v	98
96) tert-Butylbenzene	19.909	134	839797	44.64	ppb(v	96
97) 1,2,4-Trimethylbenzene	19.927	105	3878822	43.78	ppb(v	91
98) 1,3-Dichlorobenzene	20.117	146	2365753	45.06	ppb(v	99
99) Benzyl Chloride	20.111	91	2750174	52.50	ppb(v	98
100) 1,4-Dichlorobenzene	20.215	146	2270521	46.31	ppb(v	98
101) sec-Butylbenzene	20.300	134	1023867	46.15	ppb(v	93
102) p-Isopropyltoluene	20.539	134	1102527	45.65	ppb(v	96
103) 1,2-Dichlorobenzene	20.686	146	2046106	45.77	ppb(v	99
104) n-Butylbenzene	21.120	134	847680	46.76	ppb(v	96
105) Hexachloroethane	21.585	201	1222220	45.28	ppb(v	94
106) 1,2,4-Trichlorobenzene	22.931	180	554874	55.46	ppb(v	98
108) Hexachlorobutadiene	23.512	225	699887	45.67	ppb(v	99
110) TVHC as equiv Pentane	5.716	TIC	6710109	39.32	ppb(v	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 5w34383.D
Acq On : 27 Dec 2018 2:23 am
Operator : gabriep
Sample : ic1390-40
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 02 16:01:40 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34388.D
 Acq On : 27 Dec 2018 12:14 pm
 Operator : gabriel
 Sample : ic1390-0.04
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 02 15:57:31 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.120	130	246360	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.231	114	892317	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	399951	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	246403	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	17.933	95	482200	9.31	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	93.10%

Target Compounds						Qvalue
3) Freon 152A	3.984	65	599	0.04	ppb(v	99
4) Chlorodifluoromethane	4.027	67	223	0.03	ppb(v#	41
5) Propene	4.052	41	783	0.05	ppb(v#	35
6) Chlorotrifluoroethene	4.046	116	1356	0.04	ppb(v#	86
7) Dichlorodifluoromethane	4.101	85	3109	0.05	ppb(v#	96
8) 1-Chloro-1,1-difluoro...	4.211	65	3131	0.05	ppb(v#	66
9) Chloromethane	4.229	50	1470	0.06	ppb(v	89
10) Dichlorotetrafluoroethane	4.296	85	3481	0.05	ppb(v	99
11) Vinyl Chloride	4.394	62	1253	0.05	ppb(v#	96
12) 1,3-Butadiene	4.486	54	881	0.05	ppb(v	94
13) n-Butane	4.535	58	124	0.03	ppb(v#	1
15) Chloroethane	4.822	64	588	0.05	ppb(v#	48
16) Dichlorofluoromethane	4.908	67	3119	0.05	ppb(v	93
18) Freon 123	5.226	83	3071	0.05	ppb(v	93
19) Freon 123A	5.269	117	1573	0.05	ppb(v	87
20) Bromoethene	5.110	106	1194	0.05	ppb(v#	76
22) Trichlorofluoromethane	5.434	101	3449	0.05	ppb(v	97
24) Pentane	5.716	57	130	0.02	ppb(v	73
26) Iodomethane	5.911	142	3047	0.04	ppb(v	90
28) 1,1-Dichloroethene	5.973	61	1690	0.04	ppb(v	90
29) Freon 113	6.297	101	2254	0.04	ppb(v	94
31) Carbon Disulfide	6.340	76	2921	0.04	ppb(v#	87
33) Acrylonitrile	5.716	53	848	0.04	ppb(v#	76
34) 3-Chloropropene	6.181	76	349	0.03	ppb(v#	79
35) trans-1,2-Dichloroethene	6.921	61	1415	0.04	ppb(v	92
36) tert-Butyl Alcohol	6.089	59	1907	0.04	ppb(v#	63
37) Methyl tert-Butyl Ether	7.239	73	2551	0.04	ppb(v	95
38) Vinyl Acetate	7.288	43	2796	0.05	ppb(v#	78
39) 1,1-Dichloroethane	7.111	63	1962	0.04	ppb(v#	96
40) 2-Butanone	7.582	72	412	0.04	ppb(v#	84
41) Hexane	8.126	57	1393	0.04	ppb(v#	82
42) cis-1,2-Dichloroethene	7.949	61	1538	0.04	ppb(v	95
43) Di-isopropyl Ether	8.175	87	679	0.03	ppb(v	96
45) Methyl Acrylate	8.212	55	1744	0.04	ppb(v#	81
46) Chloroform	8.248	83	2525	0.04	ppb(v	96
47) 2,4-Dimethylpentane	9.068	57	1633	0.04	ppb(v	96
48) Tetrahydrofuran	8.775	72	252	0.02	ppb(v#	80
49) 1,1,1-Trichloroethane	9.295	97	2333	0.04	ppb(v	97
50) 1,2-Dichloroethane	9.025	62	1596	0.04	ppb(v#	92
51) Benzene	9.808	78	3404	0.05	ppb(v	97
52) Carbon Tetrachloride	9.974	117	2047	0.04	ppb(v	83
53) Cyclohexane	10.096	56	1507	0.04	ppb(v#	79
54) 2,3-Dimethylpentane	10.377	71	567	0.04	ppb(v#	79
56) 2,2,4-Trimethylpentane	11.044	57	4345	0.03	ppb(v	95
57) Heptane	11.387	71	872	0.03	ppb(v	94
58) Trichloroethene	11.038	95	1710	0.04	ppb(v	90
59) 1,2-Dichloropropane	10.757	63	1236	0.04	ppb(v	85
60) Dibromomethane	10.732	174	1833	0.05	ppb(v	92
61) Ethyl Acrylate	10.848	55	1867	0.03	ppb(v#	78
62) Methyl Methacrylate	11.356	69	869	0.03	ppb(v	81
63) 1,4-Dioxane	11.154	88	652	0.03	ppb(v#	71
64) Bromodichloromethane	10.995	83	2854	0.05	ppb(v#	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34388.D
 Acq On : 27 Dec 2018 12:14 pm
 Operator : gabriel
 Sample : ic1390-0.04
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

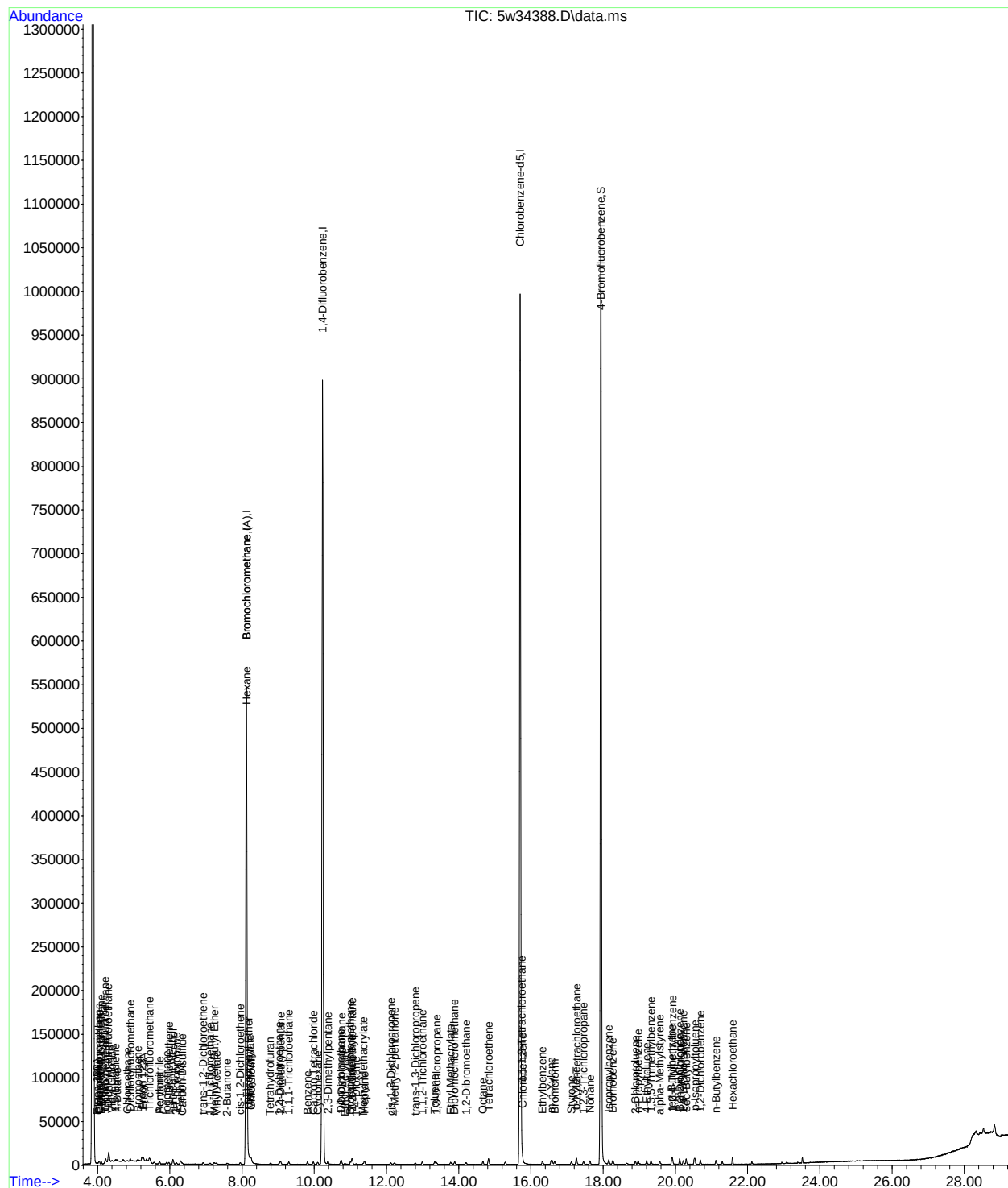
Quant Time: Jan 02 15:57:31 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) cis-1,3-Dichloropropene	12.121	75	1673	0.04	ppb(v#	89
66) 4-Methyl-2-pentanone	12.219	58	585	0.02	ppb(v#	89
67) trans-1,3-Dichloropropene	12.800	75	1451	0.03	ppb(v#	82
68) Toluene	13.332	91	3992	0.04	ppb(v	97
69) 1,1,2-Trichloroethane	12.996	97	1378	0.04	ppb(v	92
70) 1,3-Dichloropropane	13.387	76	1902	0.04	ppb(v#	93
72) Ethyl Methacrylate	13.773	69	1331	0.03	ppb(v#	80
73) Dibromochloromethane	13.883	129	2520	0.04	ppb(v#	89
74) Tetrachloroethene	14.825	166	2381	0.05	ppb(v	91
75) 1,2-Dibromoethane	14.201	107	2456	0.05	ppb(v#	93
76) Octane	14.666	43	1912	0.03	ppb(v	94
77) 1,1,1,2-Tetrachloroethane	15.743	131	1666	0.04	ppb(v#	1
79) Chlorobenzene	15.767	112	3906	0.06	ppb(v	98
80) Ethylbenzene	16.312	91	5190	0.05	ppb(v#	93
81) m,p-Xylene	16.562	91	8506	0.10	ppb(v	98
82) Styrene	17.119	104	2606	0.04	ppb(v	96
83) Nonane	17.633	43	2031	0.04	ppb(v#	94
84) o-Xylene	17.254	91	4106	0.05	ppb(v	93
85) Bromoform	16.660	173	2267	0.04	ppb(v#	97
86) 1,1,2,2-Tetrachloroethane	17.266	83	3354	0.06	ppb(v#	96
87) 1,2,3-Trichloropropane	17.456	75	2402	0.06	ppb(v	91
88) Isopropylbenzene	18.153	105	5419	0.05	ppb(v	95
89) Bromobenzene	18.263	156	2089	0.06	ppb(v	79
90) 2-Chlorotoluene	18.893	126	1086	0.04	ppb(v	89
91) n-Propylbenzene	18.973	120	1153	0.04	ppb(v	86
93) 4-Ethyltoluene	19.199	105	4509	0.05	ppb(v	94
94) 1,3,5-Trimethylbenzene	19.321	105	4045	0.05	ppb(v#	95
95) alpha-Methylstyrene	19.566	118	1840	0.05	ppb(v	82
96) tert-Butylbenzene	19.897	134	786	0.05	ppb(v	92
97) 1,2,4-Trimethylbenzene	19.921	105	3685	0.05	ppb(v	93
98) 1,3-Dichlorobenzene	20.123	146	3152	0.07	ppb(v	97
99) Benzyl Chloride	20.117	91	1692	0.04	ppb(v#	94
100) 1,4-Dichlorobenzene	20.221	146	3281	0.07	ppb(v	93
101) sec-Butylbenzene	20.300	134	952	0.05	ppb(v	77
102) p-Isopropyltoluene	20.539	134	1000	0.05	ppb(v	94
103) 1,2-Dichlorobenzene	20.692	146	2957	0.07	ppb(v	97
104) n-Butylbenzene	21.126	134	783	0.05	ppb(v	79
105) Hexachloroethane	21.585	201	1205	0.05	ppb(v	93

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

(QT Reviewed)

Quant Time: Jan 02 15:57:31 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration



7.7.5

Quantitation Report (QT Reviewed)

Manual Integrations
APPROVED
(compounds with "m" flag)

Dana Tryon
01/03/19 14:02

Data Path : C:\msdchem\1\data\
Data File : 5w34389.D
Acq On : 27 Dec 2018 1:00 pm
Operator : gabriel
Sample : ic1390-0.1
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 02 15:59:52 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.120	130	235183	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.231	114	852655	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	387396	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	235522	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	17.933	95	467623	9.32	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	93.20%

Target Compounds				Qvalue		
3) Freon 152A	3.991	65	1357	0.10	ppb(v	99
4) Chlorodifluoromethane	4.027	67	637	0.09	ppb(v	90
5) Propene	4.046	41	1588	0.11	ppb(v#	68
6) Chlorotrifluoroethene	4.052	116	3016	0.09	ppb(v#	88
7) Dichlorodifluoromethane	4.107	85	6408	0.10	ppb(v	96
8) 1-Chloro-1,1-difluoro...	4.211	65	6457	0.10	ppb(v#	66
9) Chloromethane	4.235	50	2951	0.12	ppb(v	94
10) Dichlorotetrafluoroethane	4.296	85	7947	0.11	ppb(v	95
11) Vinyl Chloride	4.400	62	2622	0.10	ppb(v#	95
12) 1,3-Butadiene	4.492	54	1988	0.12	ppb(v	96
13) n-Butane	4.529	58	362	0.10	ppb(v#	13
14) Bromomethane	4.712	94	3673	0.14	ppb(v	95
15) Chloroethane	4.841	64	1332	0.11	ppb(v#	89
16) Dichlorofluoromethane	4.908	67	6904	0.11	ppb(v	97
17) Acetonitrile	5.141	41	2146m	0.11	ppb(v	
18) Freon 123	5.226	83	7025	0.12	ppb(v	95
19) Freon 123A	5.275	117	3556	0.11	ppb(v	91
20) Bromoethene	5.116	106	2733	0.11	ppb(v#	87
21) Acrolein	5.239	56	1324	0.13	ppb(v#	4
22) Trichlorofluoromethane	5.440	101	7582	0.11	ppb(v	99
23) Acetone	5.361	58	1547	0.15	ppb(v	81
24) Pentane	5.722	57	505	0.09	ppb(v	93
26) Iodomethane	5.912	142	6641	0.10	ppb(v	99
27) Isopropyl Alcohol	5.563	43	1574	0.18	ppb(v#	64
28) 1,1-Dichloroethene	5.973	61	3573	0.09	ppb(v	93
29) Freon 113	6.303	101	5239	0.10	ppb(v	97
30) Methylene Chloride	6.089	84	3317	0.16	ppb(v	94
31) Carbon Disulfide	6.346	76	6391	0.10	ppb(v	93
33) Acrylonitrile	5.734	53	1623	0.09	ppb(v	97
34) 3-Chloropropene	6.187	76	946	0.09	ppb(v	96
35) trans-1,2-Dichloroethene	6.927	61	3268	0.10	ppb(v	94
36) tert-Butyl Alcohol	6.089	59	4103	0.09	ppb(v#	82
37) Methyl tert-Butyl Ether	7.221	73	5603	0.09	ppb(v	96
38) Vinyl Acetate	7.288	43	5609	0.09	ppb(v	99
39) 1,1-Dichloroethane	7.123	63	4303	0.10	ppb(v#	96
40) 2-Butanone	7.582	72	912	0.08	ppb(v	91
41) Hexane	8.132	57	3214	0.09	ppb(v#	81
42) cis-1,2-Dichloroethene	7.955	61	3198	0.10	ppb(v	93
43) Di-isopropyl Ether	8.175	87	1726	0.09	ppb(v	81
44) Ethyl Acetate	8.236	61	547	0.07	ppb(v#	37
45) Methyl Acrylate	8.218	55	3475	0.08	ppb(v	95
46) Chloroform	8.255	83	5791	0.11	ppb(v	94
47) 2,4-Dimethylpentane	9.068	57	3493	0.09	ppb(v	94
48) Tetrahydrofuran	8.775	72	783	0.08	ppb(v	86
49) 1,1,1-Trichloroethane	9.295	97	5252	0.10	ppb(v	97
50) 1,2-Dichloroethane	9.032	62	3496	0.10	ppb(v#	94
51) Benzene	9.809	78	7246	0.10	ppb(v	98
52) Carbon Tetrachloride	9.980	117	4416	0.09	ppb(v	87
53) Cyclohexane	10.096	56	3038	0.09	ppb(v	98
54) 2,3-Dimethylpentane	10.377	71	1407	0.09	ppb(v	79
56) 2,2,4-Trimethylpentane	11.050	57	9857	0.08	ppb(v	97
57) Heptane	11.393	71	1963	0.08	ppb(v	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34389.D
 Acq On : 27 Dec 2018 1:00 pm
 Operator : gabriel
 Sample : ic1390-0.1
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

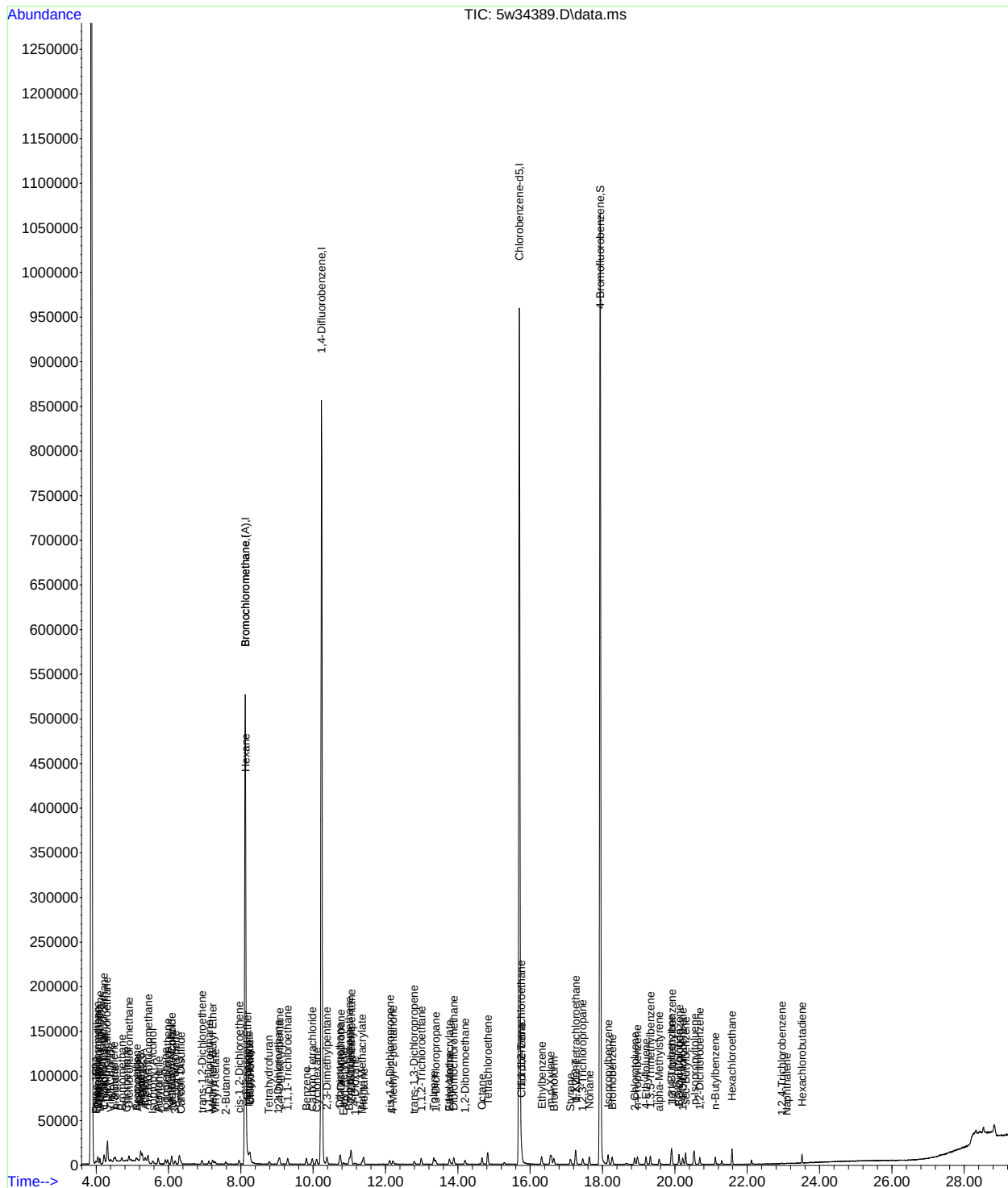
Quant Time: Jan 02 15:59:52 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) Trichloroethene	11.038	95	3718	0.10	ppb(v	89
59) 1,2-Dichloropropane	10.763	63	2830	0.10	ppb(v	97
60) Dibromomethane	10.738	174	3499	0.10	ppb(v	96
61) Ethyl Acrylate	10.842	55	4103	0.07	ppb(v#	86
62) Methyl Methacrylate	11.350	69	2037	0.07	ppb(v	90
63) 1,4-Dioxane	11.154	88	1521	0.08	ppb(v#	87
64) Bromodichloromethane	10.995	83	6120	0.10	ppb(v	98
65) cis-1,3-Dichloropropene	12.121	75	3721	0.08	ppb(v	93
66) 4-Methyl-2-pentanone	12.207	58	1378	0.06	ppb(v	80
67) trans-1,3-Dichloropropene	12.788	75	3064	0.08	ppb(v	98
68) Toluene	13.332	91	8058	0.09	ppb(v	94
69) 1,1,2-Trichloroethane	12.996	97	3181	0.10	ppb(v	92
70) 1,3-Dichloropropane	13.387	76	3988	0.09	ppb(v	97
71) 2-Hexanone	13.767	58	1619	0.05	ppb(v#	88
72) Ethyl Methacrylate	13.767	69	2935	0.06	ppb(v#	95
73) Dibromochloromethane	13.889	129	5576	0.10	ppb(v	97
74) Tetrachloroethene	14.825	166	4773	0.10	ppb(v	97
75) 1,2-Dibromoethane	14.195	107	5056	0.10	ppb(v#	84
76) Octane	14.666	43	4275	0.07	ppb(v	98
77) 1,1,1,2-Tetrachloroethane	15.749	131	3649	0.09	ppb(v#	1
79) Chlorobenzene	15.761	112	7674	0.12	ppb(v	93
80) Ethylbenzene	16.318	91	10032	0.10	ppb(v	99
81) m,p-Xylene	16.562	91	16116	0.19	ppb(v	99
82) Styrene	17.107	104	4735	0.08	ppb(v	95
83) Nonane	17.633	43	4288	0.09	ppb(v#	92
84) o-Xylene	17.254	91	7752	0.09	ppb(v	98
85) Bromoform	16.660	173	4336	0.09	ppb(v	92
86) 1,1,2,2-Tetrachloroethane	17.260	83	6415	0.12	ppb(v#	91
87) 1,2,3-Trichloropropane	17.450	75	4734	0.12	ppb(v	89
88) Isopropylbenzene	18.159	105	10519	0.10	ppb(v	98
89) Bromobenzene	18.269	156	3566	0.11	ppb(v	91
90) 2-Chlorotoluene	18.893	126	2285	0.09	ppb(v	86
91) n-Propylbenzene	18.967	120	2417	0.09	ppb(v	95
93) 4-Ethyltoluene	19.199	105	8512	0.09	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.322	105	7915	0.10	ppb(v	94
95) alpha-Methylstyrene	19.566	118	3189	0.09	ppb(v	94
96) tert-Butylbenzene	19.903	134	1763	0.11	ppb(v	76
97) 1,2,4-Trimethylbenzene	19.921	105	6843	0.09	ppb(v	89
98) 1,3-Dichlorobenzene	20.117	146	4906	0.11	ppb(v	95
99) Benzyl Chloride	20.111	91	2899	0.06	ppb(v#	96
100) 1,4-Dichlorobenzene	20.215	146	4875	0.11	ppb(v	97
101) sec-Butylbenzene	20.300	134	1916	0.10	ppb(v	88
102) p-Isopropyltoluene	20.539	134	2038	0.10	ppb(v	94
103) 1,2-Dichlorobenzene	20.686	146	4493	0.11	ppb(v	93
104) n-Butylbenzene	21.120	134	1418	0.09	ppb(v	93
105) Hexachloroethane	21.579	201	2603	0.11	ppb(v	94
106) 1,2,4-Trichlorobenzene	22.955	180	487	0.05	ppb(v#	78
107) Naphthalene	23.090	128	840	0.06	ppb(v#	69
108) Hexachlorobutadiene	23.512	225	2035	0.15	ppb(v	98

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

```
Data Path : C:\msdchem\1\data\  
Data File : 5w34389.D  
Acq On : 27 Dec 2018    1:00 pm  
Operator : gabriep  
Sample : ic1390-0.1  
Misc : ms31422,v5w1390,,,,,1  
ALS Vial : 1    Sample Multiplier: 1
```

Quant Time: Jan 02 15:59:52 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration



7.7.6

Manual Integration Approval Summary

Sample Number:

V5W1390-IC1390

Method:

TO-15

Lab FileID:

5W34389.D

Analyst approved:

01/02/19 16:19 Gabriella Pericone

Injection Time:

12/27/18 13:00

Supervisor approved:

01/03/19 14:02 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetonitrile	75-05-8		5.14	Poor instrument integration

Quantitation Report (QT Reviewed)

Manual Integrations
APPROVED
(compounds with "m" flag)

Dana Tryon
01/03/19 14:02

Data Path : C:\msdchem\1\data\
Data File : 5w34390.D
Acq On : 27 Dec 2018 1:46 pm
Operator : gabriel
Sample : ic1390-0.2
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 02 16:05:15 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.120	130	236867	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.231	114	846079	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	386534	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	237025	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	17.933	95	462369	9.23	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	92.30%

Target Compounds						Qvalue
3) Freon 152A	3.985	65	2763	0.20	ppb(v	93
4) Chlorodifluoromethane	4.027	67	1212	0.18	ppb(v	91
5) Propene	4.040	41	2890	0.19	ppb(v#	79
6) Chlorotrifluoroethene	4.052	116	6162	0.19	ppb(v#	96
7) Dichlorodifluoromethane	4.101	85	12616	0.19	ppb(v	98
8) 1-Chloro-1,1-difluoro...	4.211	65	12412	0.20	ppb(v#	84
9) Chloromethane	4.229	50	5005	0.21	ppb(v	100
10) Dichlorotetrafluoroethane	4.297	85	15346	0.21	ppb(v	96
11) Vinyl Chloride	4.394	62	5242	0.20	ppb(v#	98
12) 1,3-Butadiene	4.492	54	3683	0.21	ppb(v	96
13) n-Butane	4.529	58	812	0.22	ppb(v#	56
14) Bromomethane	4.706	94	6196	0.24	ppb(v	98
15) Chloroethane	4.835	64	2496	0.21	ppb(v#	93
16) Dichlorofluoromethane	4.902	67	13247	0.22	ppb(v	95
17) Acetonitrile	5.135	41	4457	0.24	ppb(v#	58
18) Freon 123	5.226	83	13064	0.21	ppb(v	95
19) Freon 123A	5.269	117	6754	0.20	ppb(v	90
20) Bromoethene	5.104	106	5020	0.20	ppb(v#	95
21) Acrolein	5.226	56	2576	0.25	ppb(v#	52
22) Trichlorofluoromethane	5.434	101	14949	0.21	ppb(v	98
23) Acetone	5.349	58	2686	0.26	ppb(v	99
24) Pentane	5.716	57	1052	0.18	ppb(v	95
26) Iodomethane	5.912	142	12717	0.19	ppb(v	97
27) Isopropyl Alcohol	5.557	43	2563	0.29	ppb(v	79
28) 1,1-Dichloroethene	5.973	61	7134	0.19	ppb(v	98
29) Freon 113	6.297	101	10086	0.20	ppb(v	98
30) Methylene Chloride	6.089	84	5265	0.26	ppb(v	95
31) Carbon Disulfide	6.340	76	12136	0.19	ppb(v	100
32) Ethanol	4.963	45	3817	0.37	ppb(v#	93
33) Acrylonitrile	5.716	53	3001	0.16	ppb(v	90
34) 3-Chloropropene	6.187	76	1874	0.19	ppb(v	91
35) trans-1,2-Dichloroethene	6.921	61	6009	0.18	ppb(v	96
36) tert-Butyl Alcohol	6.065	59	7897	0.17	ppb(v	95
37) Methyl tert-Butyl Ether	7.215	73	10956	0.17	ppb(v	97
38) Vinyl Acetate	7.282	43	10896	0.18	ppb(v	97
39) 1,1-Dichloroethane	7.117	63	8404	0.20	ppb(v	100
40) 2-Butanone	7.569	72	1957	0.18	ppb(v	96
41) Hexane	8.126	57	5935	0.17	ppb(v	89
42) cis-1,2-Dichloroethene	7.955	61	6281	0.19	ppb(v	95
43) Di-isopropyl Ether	8.169	87	3424	0.18	ppb(v	92
44) Ethyl Acetate	8.236	61	1321	0.17	ppb(v	60
45) Methyl Acrylate	8.212	55	6837	0.16	ppb(v	94
46) Chloroform	8.249	83	10843	0.20	ppb(v	93
47) 2,4-Dimethylpentane	9.068	57	6974	0.17	ppb(v	95
48) Tetrahydrofuran	8.762	72	1838	0.18	ppb(v	79
49) 1,1,1-Trichloroethane	9.289	97	9872	0.19	ppb(v	96
50) 1,2-Dichloroethane	9.032	62	6739	0.19	ppb(v	98
51) Benzene	9.809	78	13591	0.19	ppb(v	98
52) Carbon Tetrachloride	9.974	117	8499	0.17	ppb(v	99
53) Cyclohexane	10.096	56	5830	0.17	ppb(v	97
54) 2,3-Dimethylpentane	10.384	71	2582	0.17	ppb(v	98
56) 2,2,4-Trimethylpentane	11.050	57	19172	0.16	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34390.D
 Acq On : 27 Dec 2018 1:46 pm
 Operator : gabriel
 Sample : ic1390-0.2
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 02 16:05:15 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

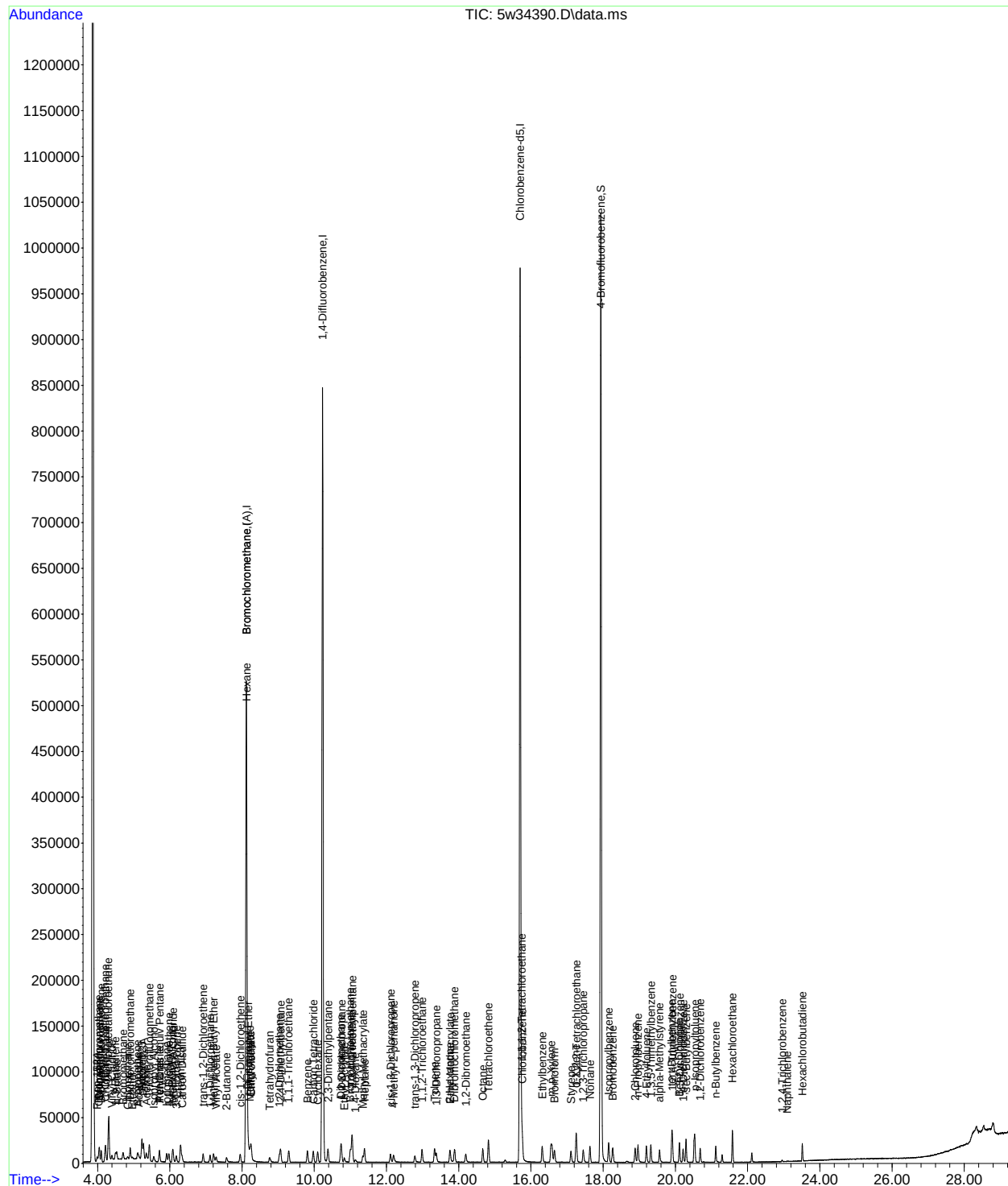
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.393	71	3839	0.16	ppb(v	97
58) Trichloroethene	11.038	95	6597	0.18	ppb(v	97
59) 1,2-Dichloropropane	10.757	63	5437	0.19	ppb(v	99
60) Dibromomethane	10.732	174	6531	0.20	ppb(v	100
61) Ethyl Acrylate	10.830	55	8577	0.14	ppb(v#	96
62) Methyl Methacrylate	11.350	69	4165	0.15	ppb(v	90
63) 1,4-Dioxane	11.130	88	2963	0.17	ppb(v#	88
64) Bromodichloromethane	10.995	83	11672	0.20	ppb(v	99
65) cis-1,3-Dichloropropene	12.115	75	7452	0.17	ppb(v	96
66) 4-Methyl-2-pentanone	12.201	58	3132	0.13	ppb(v	90
67) trans-1,3-Dichloropropene	12.788	75	6177	0.15	ppb(v	96
68) Toluene	13.332	91	15493	0.18	ppb(v	98
69) 1,1,2-Trichloroethane	12.984	97	6046	0.19	ppb(v	89
70) 1,3-Dichloropropane	13.381	76	7847	0.18	ppb(v	99
71) 2-Hexanone	13.754	58	3737	0.12	ppb(v	88
72) Ethyl Methacrylate	13.767	69	6089	0.13	ppb(v#	97
73) Dibromochloromethane	13.883	129	10595	0.19	ppb(v	99
74) Tetrachloroethene	14.819	166	9249	0.20	ppb(v	98
75) 1,2-Dibromoethane	14.195	107	9519	0.19	ppb(v	97
76) Octane	14.666	43	8194	0.14	ppb(v	99
77) 1,1,1,2-Tetrachloroethane	15.743	131	7307	0.18	ppb(v#	1
79) Chlorobenzene	15.761	112	13998	0.21	ppb(v	96
80) Ethylbenzene	16.312	91	18926	0.18	ppb(v	98
81) m,p-Xylene	16.563	91	30823	0.37	ppb(v	96
82) Styrene	17.107	104	8872	0.15	ppb(v	97
83) Nonane	17.633	43	7941	0.16	ppb(v	97
84) o-Xylene	17.248	91	14580	0.17	ppb(v	97
85) Bromoform	16.654	173	8291	0.17	ppb(v	98
86) 1,1,2,2-Tetrachloroethane	17.260	83	12582	0.23	ppb(v	99
87) 1,2,3-Trichloropropane	17.450	75	8836	0.22	ppb(v	96
88) Isopropylbenzene	18.153	105	20142	0.19	ppb(v	98
89) Bromobenzene	18.263	156	6433	0.19	ppb(v	99
90) 2-Chlorotoluene	18.887	126	4615	0.18	ppb(v	90
91) n-Propylbenzene	18.967	120	4756	0.18	ppb(v	94
93) 4-Ethyltoluene	19.193	105	16640	0.17	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.322	105	14914	0.18	ppb(v	95
95) alpha-Methylstyrene	19.560	118	6036	0.16	ppb(v	93
96) tert-Butylbenzene	19.897	134	3227	0.19	ppb(v	88
97) 1,2,4-Trimethylbenzene	19.921	105	13796	0.18	ppb(v	88
98) 1,3-Dichlorobenzene	20.117	146	8810	0.19	ppb(v	96
99) Benzyl Chloride	20.105	91	5673	0.12	ppb(v	98
100) 1,4-Dichlorobenzene	20.215	146	8743	0.20	ppb(v	96
101) sec-Butylbenzene	20.300	134	3764	0.19	ppb(v	94
102) p-Isopropyltoluene	20.539	134	4091	0.19	ppb(v	95
103) 1,2-Dichlorobenzene	20.686	146	8274	0.21	ppb(v	97
104) n-Butylbenzene	21.120	134	2605	0.16	ppb(v	83
105) Hexachloroethane	21.579	201	5073	0.21	ppb(v	92
106) 1,2,4-Trichlorobenzene	22.956	180	831	0.09	ppb(v	93
107) Naphthalene	23.090	128	969	0.07	ppb(v#	69
108) Hexachlorobutadiene	23.512	225	3676	0.27	ppb(v	93
110) TVHC as equiv Pentane	5.716	TIC	27198m	0.18	ppb(v	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 5w34390.D
Acq On : 27 Dec 2018 1:46 pm
Operator : gabriep
Sample : ic1390-0.2
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 02 16:05:15 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:

V5W1390-IC1390

Method:

TO-15

Lab FileID:

5W34390.D

Analyst approved:

01/02/19 16:19 Gabriella Pericone

Injection Time:

12/27/18 13:46

Supervisor approved:

01/03/19 14:02 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.72	Missed peak

7.7.7.1
7

Quantitation Report (QT Reviewed)

Manual Integrations
APPROVED
(compounds with "m" flag)

Dana Tryon
01/03/19 14:02

Data Path : C:\msdchem\1\data\
Data File : 5w34391.D
Acq On : 27 Dec 2018 2:38 pm
Operator : gabriel
Sample : ic1390-0.5
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 02 16:04:10 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 16:00:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.120	130	232317	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.231	114	835457	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	386693	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	232401	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	17.933	95	465478	9.82	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	98.20%

Target Compounds						Qvalue
3) Freon 152A	3.990	65	6492	0.48	ppb(v	92
4) Chlorodifluoromethane	4.033	67	3126	0.52	ppb(v	96
5) Propene	4.052	41	7204	0.46	ppb(v#	87
6) Chlorotrifluoroethene	4.058	116	14728	0.48	ppb(v	97
7) Dichlorodifluoromethane	4.107	85	30180	0.46	ppb(v	99
8) 1-Chloro-1,1-difluoro...	4.217	65	30235	0.47	ppb(v#	92
9) Chloromethane	4.229	50	12448	0.44	ppb(v	98
10) Dichlorotetrafluoroethane	4.302	85	37933	0.49	ppb(v	97
11) Vinyl Chloride	4.400	62	13135	0.49	ppb(v#	97
12) 1,3-Butadiene	4.498	54	8567	0.46	ppb(v	98
13) n-Butane	4.535	58	1988	0.56	ppb(v#	82
14) Bromomethane	4.706	94	14361	0.47	ppb(v	95
15) Chloroethane	4.835	64	6257	0.49	ppb(v	96
16) Dichlorofluoromethane	4.908	67	32360	0.49	ppb(v	100
17) Acetonitrile	5.135	41	11275	0.55	ppb(v#	80
18) Freon 123	5.226	83	32760	0.49	ppb(v	99
19) Freon 123A	5.269	117	17517	0.51	ppb(v	90
20) Bromoethene	5.110	106	12637	0.48	ppb(v	97
21) Acrolein	5.226	56	5755	0.48	ppb(v#	72
22) Trichlorofluoromethane	5.440	101	36646	0.49	ppb(v	100
23) Acetone	5.343	58	6254	0.48	ppb(v	93
24) Pentane	5.716	57	2543	0.54	ppb(v	96
26) Iodomethane	5.911	142	31517	0.47	ppb(v	97
27) Isopropyl Alcohol	5.551	43	5857	0.48	ppb(v	76
28) 1,1-Dichloroethene	5.973	61	17607	0.48	ppb(v	99
29) Freon 113	6.297	101	24704	0.48	ppb(v	96
30) Methylene Chloride	6.089	84	11339	0.43	ppb(v	95
31) Carbon Disulfide	6.340	76	30777	0.48	ppb(v	100
32) Ethanol	4.963	45	5978	0.41	ppb(v#	95
33) Acrylonitrile	5.716	53	8802	0.51	ppb(v	95
34) 3-Chloropropene	6.181	76	4599	0.50	ppb(v	99
35) trans-1,2-Dichloroethene	6.927	61	15176	0.47	ppb(v	100
36) tert-Butyl Alcohol	6.058	59	20074	0.48	ppb(v	94
37) Methyl tert-Butyl Ether	7.208	73	27878	0.48	ppb(v	97
38) Vinyl Acetate	7.282	43	27628	0.47	ppb(v	97
39) 1,1-Dichloroethane	7.117	63	20965	0.49	ppb(v	99
40) 2-Butanone	7.563	72	4967	0.51	ppb(v	100
41) Hexane	8.132	57	15139	0.47	ppb(v	89
42) cis-1,2-Dichloroethene	7.949	61	15056	0.46	ppb(v	93
43) Di-isopropyl Ether	8.163	87	8269	0.48	ppb(v	97
44) Ethyl Acetate	8.224	61	3299	0.58	ppb(v	87
45) Methyl Acrylate	8.199	55	17991	0.48	ppb(v	99
46) Chloroform	8.255	83	27036	0.48	ppb(v	98
47) 2,4-Dimethylpentane	9.068	57	17705	0.48	ppb(v	93
48) Tetrahydrofuran	8.750	72	4308	0.53	ppb(v	91
49) 1,1,1-Trichloroethane	9.295	97	24761	0.48	ppb(v	99
50) 1,2-Dichloroethane	9.031	62	16812	0.48	ppb(v	99
51) Benzene	9.808	78	33412	0.47	ppb(v	98
52) Carbon Tetrachloride	9.974	117	21123	0.47	ppb(v	98
53) Cyclohexane	10.102	56	14562	0.46	ppb(v	98
54) 2,3-Dimethylpentane	10.383	71	6858	0.50	ppb(v	98
56) 2,2,4-Trimethylpentane	11.050	57	51027	0.49	ppb(v	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34391.D
 Acq On : 27 Dec 2018 2:38 pm
 Operator : gabriel
 Sample : ic1390-0.5
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

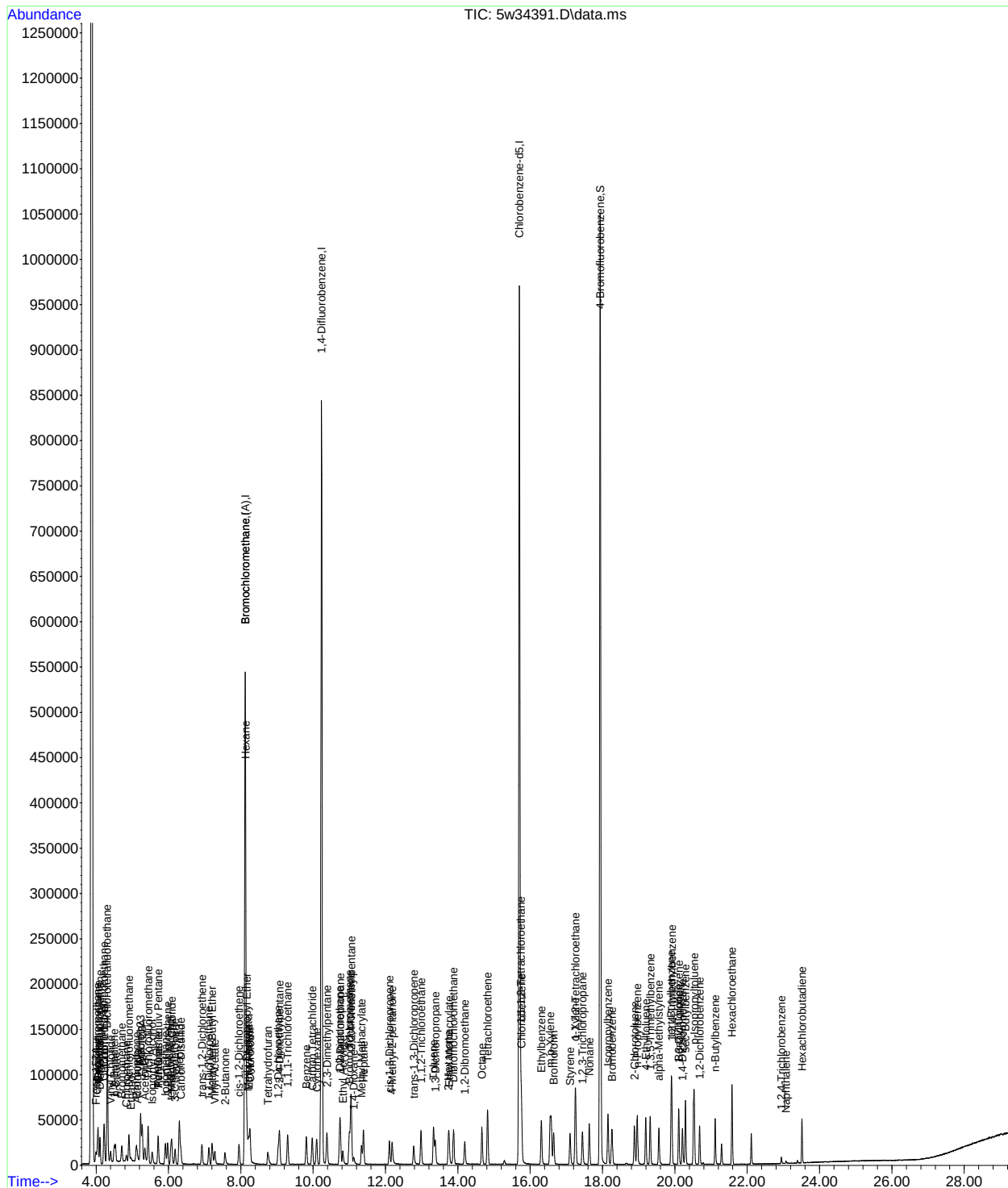
Quant Time: Jan 02 16:04:10 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 16:00:57 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.393	71	10072	0.49	ppb(v	98
58) Trichloroethene	11.038	95	16956	0.46	ppb(v	98
59) 1,2-Dichloropropane	10.751	63	13582	0.49	ppb(v	97
60) Dibromomethane	10.738	174	16018	0.45	ppb(v	93
61) Ethyl Acrylate	10.824	55	22473	0.49	ppb(v	99
62) Methyl Methacrylate	11.338	69	11449	0.52	ppb(v	96
63) 1,4-Dioxane	11.118	88	7747	0.50	ppb(v#	89
64) Bromodichloromethane	11.001	83	28162	0.46	ppb(v	99
65) cis-1,3-Dichloropropene	12.109	75	19306	0.50	ppb(v	98
66) 4-Methyl-2-pentanone	12.182	58	9283	0.56	ppb(v	96
67) trans-1,3-Dichloropropene	12.782	75	16559	0.49	ppb(v	97
68) Toluene	13.326	91	39882	0.48	ppb(v	98
69) 1,1,2-Trichloroethane	12.984	97	15558	0.50	ppb(v	99
70) 1,3-Dichloropropane	13.375	76	20178	0.49	ppb(v	99
71) 2-Hexanone	13.736	58	11452	0.52	ppb(v	99
72) Ethyl Methacrylate	13.760	69	17052	0.50	ppb(v	99
73) Dibromochloromethane	13.877	129	26409	0.48	ppb(v	100
74) Tetrachloroethene	14.819	166	22192	0.46	ppb(v	99
75) 1,2-Dibromoethane	14.189	107	24004	0.47	ppb(v	98
76) Octane	14.666	43	21264	0.46	ppb(v	98
77) 1,1,1,2-Tetrachloroethane	15.743	131	18490	0.49	ppb(v#	42
79) Chlorobenzene	15.761	112	34251	0.45	ppb(v	97
80) Ethylbenzene	16.305	91	48773	0.46	ppb(v	98
81) m,p-Xylene	16.556	91	80123	0.93	ppb(v	99
82) Styrene	17.101	104	24109	0.45	ppb(v	99
83) Nonane	17.633	43	20433	0.45	ppb(v	99
84) o-Xylene	17.248	91	37913	0.45	ppb(v	99
85) Bromoform	16.648	173	22278	0.47	ppb(v	96
86) 1,1,2,2-Tetrachloroethane	17.254	83	31001	0.47	ppb(v	100
87) 1,2,3-Trichloropropane	17.449	75	22357	0.47	ppb(v	96
88) Isopropylbenzene	18.153	105	51023	0.46	ppb(v	99
89) Bromobenzene	18.263	156	16376	0.43	ppb(v	95
90) 2-Chlorotoluene	18.887	126	11566	0.48	ppb(v	89
91) n-Propylbenzene	18.961	120	12468	0.49	ppb(v	100
93) 4-Ethyltoluene	19.193	105	43855	0.47	ppb(v	100
94) 1,3,5-Trimethylbenzene	19.321	105	38975	0.47	ppb(v	98
95) alpha-Methylstyrene	19.560	118	15815	0.44	ppb(v	97
96) tert-Butylbenzene	19.897	134	8530	0.49	ppb(v	95
97) 1,2,4-Trimethylbenzene	19.915	105	36718	0.48	ppb(v	98
98) 1,3-Dichlorobenzene	20.111	146	22581	0.42	ppb(v	95
99) Benzyl Chloride	20.105	91	15389	0.43	ppb(v	99
100) 1,4-Dichlorobenzene	20.209	146	21351	0.40	ppb(v	98
101) sec-Butylbenzene	20.294	134	9956	0.49	ppb(v	97
102) p-Isopropyltoluene	20.533	134	11014	0.51	ppb(v	98
103) 1,2-Dichlorobenzene	20.686	146	20809	0.42	ppb(v	96
104) n-Butylbenzene	21.120	134	7447	0.48	ppb(v	94
105) Hexachloroethane	21.579	201	12813	0.49	ppb(v	85
106) 1,2,4-Trichlorobenzene	22.943	180	3169	0.53	ppb(v	96
107) Naphthalene	23.072	128	3999	0.44	ppb(v	98
108) Hexachlorobutadiene	23.512	225	9328	0.54	ppb(v	95
110) TVHC as equiv Pentane	5.716	TIC	66607m	0.45	ppb(v	

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

Data Path : C:\msdchem\1\data\
Data File : 5w34391.D
Acq On : 27 Dec 2018 2:38 pm
Operator : gabriep
Sample : ic1390-0.5
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 02 16:04:10 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 16:00:57 2019
Response via : Initial Calibration



7.7.8

Manual Integration Approval Summary

Sample Number:

V5W1390-IC1390

Method:

TO-15

Lab FileID:

5W34391.D

Analyst approved:

01/02/19 16:19 Gabriella Pericone

Injection Time:

12/27/18 14:38

Supervisor approved:

01/03/19 14:02 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.72	Missed peak

7.7.8.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34392.D
 Acq On : 27 Dec 2018 4:26 pm
 Operator : gabriel
 Sample : icv1390-10
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 02 16:06:00 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : TO-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.120	130	245392	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.237	114	839050	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	423666	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	245392	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	17.939	95	553938	10.09	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.90%

Target Compounds					Qvalue	
3) Freon 152A	3.991	65	136974	9.73	ppb(v	99
4) Chlorodifluoromethane	4.027	67	67641	9.59	ppb(v	99
5) Propene	4.046	41	156987	10.08	ppb(v	99
6) Chlorotrifluoroethene	4.052	116	326233	9.79	ppb(v#	90
7) Dichlorodifluoromethane	4.101	85	662147	9.81	ppb(v	99
9) Chloromethane	4.229	50	243376	9.70	ppb(v	99
10) Dichlorotetrafluoroethane	4.296	85	764325	10.14	ppb(v	97
11) Vinyl Chloride	4.394	62	272327	10.20	ppb(v	100
12) 1,3-Butadiene	4.492	54	182216	10.25	ppb(v	99
13) n-Butane	4.529	58	40084	10.34	ppb(v	96
14) Bromomethane	4.706	94	277567	10.19	ppb(v	98
15) Chloroethane	4.835	64	124721	10.18	ppb(v	100
16) Dichlorofluoromethane	4.902	67	620880	9.81	ppb(v	99
17) Acetonitrile	5.128	41	200578	10.28	ppb(v	98
18) Freon 123	5.226	83	643517	10.21	ppb(v	99
19) Freon 123A	5.269	117	401533	11.59	ppb(v	98
20) Bromoethene	5.104	106	254912	9.80	ppb(v	99
21) Acrolein	5.214	56	102650	9.59	ppb(v	98
22) Trichlorofluoromethane	5.434	101	748620	10.22	ppb(v	99
23) Acetone	5.324	58	104338	9.64	ppb(v	99
24) Pentane	5.716	57	55997	9.47	ppb(v	99
26) Iodomethane	5.911	142	672060	9.57	ppb(v	99
27) Isopropyl Alcohol	5.532	43	88980	9.77	ppb(v	97
28) 1,1-Dichloroethene	5.973	61	399625	10.12	ppb(v	99
29) Freon 113	6.297	101	538972	10.09	ppb(v	99
30) Methylene Chloride	6.089	84	213481	10.02	ppb(v	98
31) Carbon Disulfide	6.340	76	520127	7.82	ppb(v	100
32) Ethanol	4.951	45	108091	10.01	ppb(v	99
33) Acrylonitrile	5.710	53	179881	9.54	ppb(v	99
34) 3-Chloropropene	6.181	76	99087	9.50	ppb(v	99
35) trans-1,2-Dichloroethene	6.921	61	308998	8.89	ppb(v	99
36) tert-Butyl Alcohol	6.040	59	365835	7.75	ppb(v	99
37) Methyl tert-Butyl Ether	7.184	73	618051	9.34	ppb(v	100
38) Vinyl Acetate	7.276	43	585489	9.48	ppb(v	100
39) 1,1-Dichloroethane	7.117	63	431347	9.78	ppb(v	100
40) 2-Butanone	7.533	72	110546	9.83	ppb(v	99
41) Hexane	8.132	57	334185	9.21	ppb(v	92
42) cis-1,2-Dichloroethene	7.955	61	328042	9.50	ppb(v	98
43) Di-isopropyl Ether	8.157	87	194724	9.63	ppb(v	98
44) Ethyl Acetate	8.206	61	79162	9.96	ppb(v	92
45) Methyl Acrylate	8.193	55	425910	9.75	ppb(v	99
46) Chloroform	8.255	83	554876	9.79	ppb(v	99
47) 2,4-Dimethylpentane	9.068	57	413228	9.88	ppb(v	100
48) Tetrahydrofuran	8.701	72	109485	10.34	ppb(v	98
49) 1,1,1-Trichloroethane	9.295	97	522032	9.69	ppb(v	99
50) 1,2-Dichloroethane	9.032	62	348953	9.61	ppb(v	99
51) Benzene	9.815	78	701572	9.70	ppb(v	99
52) Carbon Tetrachloride	9.974	117	488172	9.69	ppb(v	99
53) Cyclohexane	10.096	56	333347	9.51	ppb(v	99
54) 2,3-Dimethylpentane	10.377	71	152013	9.76	ppb(v	97
56) 2,2,4-Trimethylpentane	11.050	57	1206564	9.98	ppb(v	100
57) Heptane	11.393	71	234704	9.66	ppb(v	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5W34392.D
 Acq On : 27 Dec 2018 4:26 pm
 Operator : gabriel
 Sample : icv1390-10
 Misc : ms31422,v5w1390,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 02 16:06:00 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Wed Jan 02 15:49:36 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) Trichloroethene	11.038	95	358133	9.59	ppb(v)	99
59) 1,2-Dichloropropane	10.751	63	271353	9.62	ppb(v)	100
60) Dibromomethane	10.732	174	323027	9.75	ppb(v)	97
61) Ethyl Acrylate	10.806	55	543972	9.22	ppb(v)	99
62) Methyl Methacrylate	11.326	69	269748	9.74	ppb(v)	99
63) 1,4-Dioxane	11.081	88	176220	9.97	ppb(v)	93
64) Bromodichloromethane	11.001	83	595934	10.12	ppb(v)	99
65) cis-1,3-Dichloropropene	12.103	75	420267	9.76	ppb(v)	99
66) 4-Methyl-2-pentanone	12.164	58	234173	10.04	ppb(v)	99
67) trans-1,3-Dichloropropene	12.776	75	386331	9.76	ppb(v)	100
68) Toluene	13.326	91	828346	9.54	ppb(v)	100
69) 1,1,2-Trichloroethane	12.984	97	305890	9.85	ppb(v)	99
70) 1,3-Dichloropropane	13.369	76	419658	9.88	ppb(v)	99
71) 2-Hexanone	13.718	58	327087	10.16	ppb(v)	98
72) Ethyl Methacrylate	13.748	69	462939	9.81	ppb(v)	99
73) Dibromochloromethane	13.883	129	598986	10.60	ppb(v)	98
74) Tetrachloroethene	14.825	166	440325	9.70	ppb(v)	99
75) 1,2-Dibromoethane	14.189	107	498969	9.92	ppb(v)	99
76) Octane	14.660	43	587093	10.15	ppb(v)	99
77) 1,1,1,2-Tetrachloroethane	15.743	131	420001	10.49	ppb(v)	99
79) Chlorobenzene	15.761	112	722048	10.08	ppb(v)	100
80) Ethylbenzene	16.305	91	1152946	10.01	ppb(v)	100
81) m,p-Xylene	16.581	91	1820307	20.04	ppb(v)	99
82) Styrene	17.101	104	644637	10.12	ppb(v)	99
83) Nonane	17.633	43	556003	10.33	ppb(v)	99
84) o-Xylene	17.248	91	932459	10.13	ppb(v)	100
85) Bromoform	16.648	173	622185	11.62	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.254	83	712171	11.98	ppb(v)	100
87) 1,2,3-Trichloropropane	17.443	75	518352	11.74	ppb(v)	99
88) Isopropylbenzene	18.153	105	1274087	10.80	ppb(v)	100
89) Bromobenzene	18.257	156	405623	10.93	ppb(v)	98
90) 2-Chlorotoluene	18.881	126	304729	11.05	ppb(v)	96
91) n-Propylbenzene	18.961	120	314159	10.66	ppb(v)	99
93) 4-Ethyltoluene	19.193	105	1182775	11.19	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.315	105	943208	10.67	ppb(v)	100
95) alpha-Methylstyrene	19.554	118	452446	11.09	ppb(v)	99
96) tert-Butylbenzene	19.903	134	199423	10.92	ppb(v)	99
97) 1,2,4-Trimethylbenzene	19.915	105	945250	10.99	ppb(v)	98
98) 1,3-Dichlorobenzene	20.105	146	588591	11.54	ppb(v)	99
99) Benzyl Chloride	20.098	91	663037	13.03	ppb(v)	100
100) 1,4-Dichlorobenzene	20.209	146	548641	11.52	ppb(v)	99
101) sec-Butylbenzene	20.294	134	237055	11.00	ppb(v)	99
102) p-Isopropyltoluene	20.533	134	265220	11.31	ppb(v)	99
103) 1,2-Dichlorobenzene	20.680	146	517952	11.93	ppb(v)	100
104) n-Butylbenzene	21.114	134	203682	11.57	ppb(v)	98
105) Hexachloroethane	21.585	201	303694	11.59	ppb(v)	99
106) 1,2,4-Trichlorobenzene	22.931	180	144889	14.91	ppb(v)	99
107) Naphthalene	23.059	128	269741	17.26	ppb(v)	99
108) Hexachlorobutadiene	23.512	225	178897	12.02	ppb(v)	99
110) TVHC as equiv Pentane	5.716	TIC	1457494	9.32	ppb(v)	100

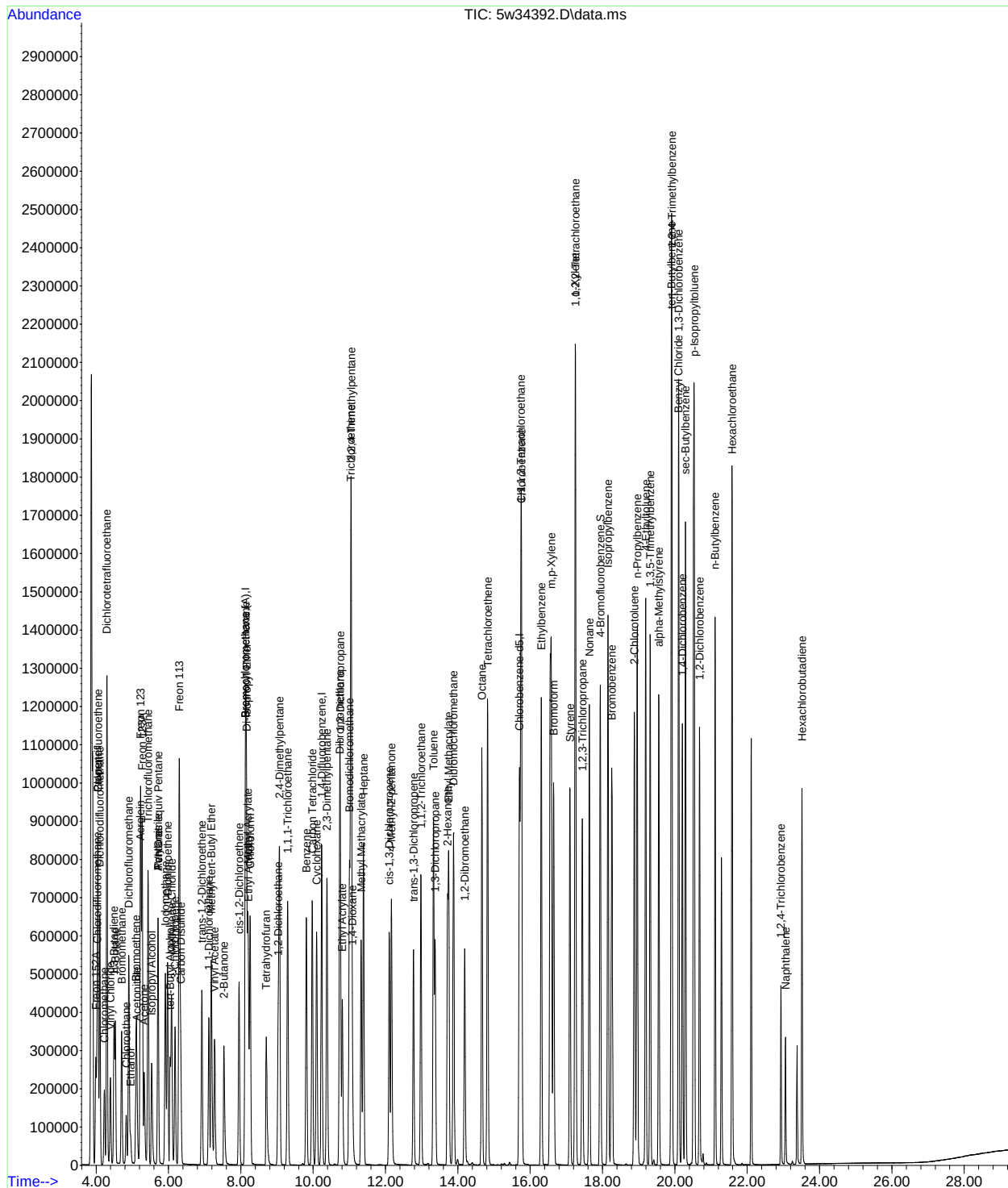
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.9

7

Data Path : C:\msdchem\1\data\
Data File : 5w34392.D
Acq On : 27 Dec 2018 4:26 pm
Operator : gabriep
Sample : icv1390-10
Misc : ms31422,v5w1390,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 02 16:06:00 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Wed Jan 02 15:49:36 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34903.D
 Acq On : 31 Jan 2019 11:30 am
 Operator : gabriel
 Sample : cc1390-10
 Misc : ms32097,v5w1417,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 13:23:20 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu Jan 24 09:50:52 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.120	130	237256	10.00	ppb(v #	0.00
55) 1,4-Difluorobenzene	10.231	114	842956	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.700	82	432434	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.120	130	237256	10.00	ppb(v #	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 17.933 95 552829 10.46 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 104.60%

Target Compounds					Qvalue
3) Freon 152A	3.991	65	152867	11.19	ppb(v 97
4) Chlorodifluoromethane	4.027	67	68573	10.62	ppb(v 99
5) Propene	4.046	41	190724	12.15	ppb(v 97
6) Chlorotrifluoroethene	4.052	116	306001	9.62	ppb(v 98
7) Dichlorodifluoromethane	4.101	85	649229	9.96	ppb(v 99
8) 1-Chloro-1,1-difluoro...	4.211	65	549959	8.65	ppb(v 99
9) Chloromethane	4.229	50	259900	9.85	ppb(v 100
10) Dichlorotetrafluoroethane	4.303	85	763199	10.07	ppb(v 95
11) Vinyl Chloride	4.394	62	293567	11.04	ppb(v 100
12) 1,3-Butadiene	4.492	54	206696	11.40	ppb(v 97
13) n-Butane	4.529	58	47032	12.74	ppb(v 96
14) Bromomethane	4.706	94	293973	10.22	ppb(v 98
15) Chloroethane	4.829	64	141783	11.39	ppb(v 99
16) Dichlorofluoromethane	4.902	67	733002	11.34	ppb(v 99
17) Acetonitrile	5.122	41	226923	11.24	ppb(v 99
18) Freon 123	5.226	83	734633	11.47	ppb(v 99
19) Freon 123A	5.269	117	365047	10.65	ppb(v 87
20) Bromoethene	5.104	106	271838	10.54	ppb(v 99
21) Acrolein	5.214	56	121624	10.99	ppb(v 94
22) Trichlorofluoromethane	5.434	101	657451	9.01	ppb(v 100
23) Acetone	5.324	58	129189	10.82	ppb(v 97
24) Pentane	5.716	57	60704	11.63	ppb(v 89
26) Iodomethane	5.912	142	585396	8.67	ppb(v 97
27) Isopropyl Alcohol	5.532	43	93047	8.60	ppb(v 95
28) 1,1-Dichloroethene	5.967	61	388371	10.28	ppb(v 95
29) Freon 113	6.297	101	500824	9.58	ppb(v 98
30) Methylene Chloride	6.083	84	208043	8.78	ppb(v 91
31) Carbon Disulfide	6.334	76	677389	10.50	ppb(v 99
32) Ethanol	4.951	45	108789	9.02	ppb(v 98
33) Acrylonitrile	5.704	53	198291	11.07	ppb(v 98
34) 3-Chloropropene	6.181	76	98786	10.21	ppb(v 88
35) trans-1,2-Dichloroethene	6.921	61	339899	10.31	ppb(v 94
36) tert-Butyl Alcohol	6.034	59	439059	9.96	ppb(v 96
37) Methyl tert-Butyl Ether	7.184	73	590164	9.70	ppb(v 93
38) Vinyl Acetate	7.270	43	669424	11.19	ppb(v 96
39) 1,1-Dichloroethane	7.117	63	460380	10.60	ppb(v 99
40) 2-Butanone	7.527	72	105014	10.16	ppb(v 76
41) Hexane	8.126	57	373819	11.16	ppb(v 93
42) cis-1,2-Dichloroethene	7.949	61	336039	10.11	ppb(v 95
43) Di-isopropyl Ether	8.151	87	179090	9.79	ppb(v 61
44) Ethyl Acetate	8.200	61	82978	12.47	ppb(v 93
45) Methyl Acrylate	8.187	55	460301	11.57	ppb(v 97
46) Chloroform	8.255	83	555696	9.88	ppb(v 98
47) 2,4-Dimethylpentane	9.062	57	433432	11.19	ppb(v 96
48) Tetrahydrofuran	8.701	72	97049	10.66	ppb(v 86
49) 1,1,1-Trichloroethane	9.289	97	516728	9.80	ppb(v 98
50) 1,2-Dichloroethane	9.026	62	353762	9.95	ppb(v 99
51) Benzene	9.809	78	699001	9.73	ppb(v 99
52) Carbon Tetrachloride	9.974	117	483281	10.17	ppb(v 99
53) Cyclohexane	10.090	56	364388	11.08	ppb(v 92
54) 2,3-Dimethylpentane	10.378	71	153067	10.57	ppb(v 89
56) 2,2,4-Trimethylpentane	11.044	57	1263877	11.31	ppb(v 98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 5w34903.D
 Acq On : 31 Jan 2019 11:30 am
 Operator : gabriep
 Sample : cc1390-10
 Misc : ms32097,v5w1417,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 13:23:20 2019
 Quant Method : C:\msdchem\1\methods\m5w1390.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu Jan 24 09:50:52 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.387	71	235242	10.56	ppb(v)	95
58) Trichloroethene	11.032	95	346739	9.31	ppb(v)	95
59) 1,2-Dichloropropane	10.745	63	301638	10.59	ppb(v)	96
60) Dibromomethane	10.732	174	293660	8.47	ppb(v)	92
61) Ethyl Acrylate	10.800	55	586135	11.38	ppb(v)	98
62) Methyl Methacrylate	11.320	69	261255	10.69	ppb(v)	93
63) 1,4-Dioxane	11.081	88	148971	9.08	ppb(v)	91
64) Bromodichloromethane	10.995	83	587359	9.66	ppb(v)	99
65) cis-1,3-Dichloropropene	12.097	75	410681	10.05	ppb(v)	98
66) 4-Methyl-2-pentanone	12.158	58	232647	11.88	ppb(v)	92
67) trans-1,3-Dichloropropene	12.770	75	382869	10.78	ppb(v)	99
68) Toluene	13.320	91	805989	9.51	ppb(v)	99
69) 1,1,2-Trichloroethane	12.978	97	305479	9.86	ppb(v)	97
70) 1,3-Dichloropropane	13.363	76	426359	10.34	ppb(v)	98
71) 2-Hexanone	13.712	58	292336	10.80	ppb(v)	94
72) Ethyl Methacrylate	13.742	69	447862	11.26	ppb(v)	96
73) Dibromochloromethane	13.877	129	533268	9.66	ppb(v)	98
74) Tetrachloroethene	14.819	166	403294	8.54	ppb(v)	98
75) 1,2-Dibromoethane	14.183	107	478068	9.62	ppb(v)	100
76) Octane	14.660	43	633572	12.62	ppb(v)	91
77) 1,1,1,2-Tetrachloroethane	15.737	131	385752	10.31	ppb(v)	99
79) Chlorobenzene	15.755	112	682380	8.79	ppb(v)	98
80) Ethylbenzene	16.299	91	1109757	9.76	ppb(v)	98
81) m,p-Xylene	16.575	91	1757043	19.12	ppb(v)	99
82) Styrene	17.095	104	601572	9.90	ppb(v)	99
83) Nonane	17.627	43	606718	11.59	ppb(v)	95
84) o-Xylene	17.242	91	896317	9.95	ppb(v)	100
85) Bromoform	16.642	173	546385	10.66	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.248	83	706788	10.29	ppb(v)	99
87) 1,2,3-Trichloropropane	17.437	75	499776	10.02	ppb(v)	97
88) Isopropylbenzene	18.147	105	1176798	9.74	ppb(v)	100
89) Bromobenzene	18.251	156	377276	9.59	ppb(v)	95
90) 2-Chlorotoluene	18.875	126	279595	10.31	ppb(v)	97
91) n-Propylbenzene	18.955	120	301346	10.25	ppb(v)	90
93) 4-Ethyltoluene	19.187	105	1088803	10.23	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.316	105	927056	9.96	ppb(v)	99
95) alpha-Methylstyrene	19.554	118	424825	10.34	ppb(v)	98
96) tert-Butylbenzene	19.897	134	188736	9.66	ppb(v)	99
97) 1,2,4-Trimethylbenzene	19.909	105	930756	10.66	ppb(v)	95
98) 1,3-Dichlorobenzene	20.105	146	577042	10.09	ppb(v)	99
99) Benzyl Chloride	20.099	91	668485	14.41	ppb(v)	99
100) 1,4-Dichlorobenzene	20.203	146	542880	9.78	ppb(v)	98
101) sec-Butylbenzene	20.288	134	231510	10.09	ppb(v)	92
102) p-Isopropyltoluene	20.533	134	262495	10.59	ppb(v)	98
103) 1,2-Dichlorobenzene	20.680	146	505978	9.91	ppb(v)	99
104) n-Butylbenzene	21.114	134	202974	11.25	ppb(v)	94
105) Hexachloroethane	21.579	201	322316	11.19	ppb(v)	88
106) 1,2,4-Trichlorobenzene	22.931	180	131897	15.27	ppb(v)	99
107) Naphthalene	23.053	128	229438	19.71	ppb(v)	98
108) Hexachlorobutadiene	23.512	225	208298	11.45	ppb(v)	99
110) TVHC as equiv Pentane	5.710	TIC	1664235	11.39	ppb(v)	100
111) Decafluoropentane	4.315	69	1211007	11.29	ppb(v#)	100

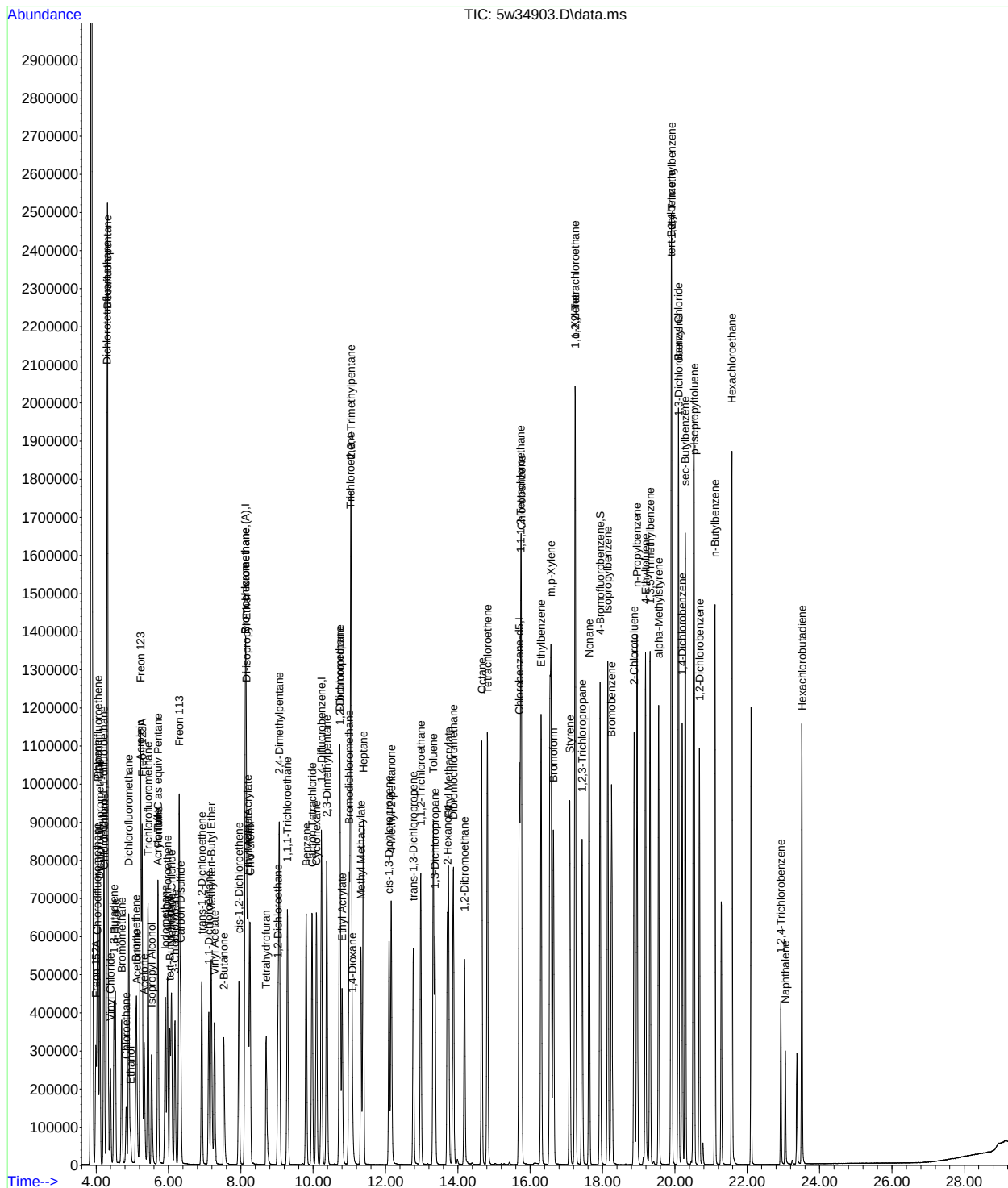
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.10

7

Data Path : C:\msdchem\1\data\
Data File : 5w34903.D
Acq On : 31 Jan 2019 11:30 am
Operator : gabriep
Sample : cc1390-10
Misc : ms32097,v5w1417,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 31 13:23:20 2019
Quant Method : C:\msdchem\1\methods\m5w1390.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu Jan 24 09:50:52 2019
Response via : Initial Calibration



7.7.10

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08749.D
 Acq On : 22 Oct 2018 12:49 pm
 Operator : paulcw
 Sample : ic335-0.04
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 23 09:36:59 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:34:38 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.177	130	246056	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.379	114	891369	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.916	82	378089	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	246056	10.00	ppb(v	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.161 95 457071 9.89 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 98.90%

Target Compounds					Qvalue	
3) Freon 152A	3.735	65	499	0.04	ppb(v#	45
5) Propene	3.803	41	663	0.05	ppb(v#	89
6) Chlorotrifluoroethene	3.803	116	1619	0.05	ppb(v#	76
7) Dichlorodifluoromethane	3.858	85	2830	0.04	ppb(v#	89
8) 1-Chloro-1,1-difluoro...	3.968	65	2315	0.05	ppb(v#	1
9) Chloromethane	3.986	50	757	0.04	ppb(v#	42
10) Dichlorotetrafluoroethane	4.066	85	3311	0.05	ppb(v	94
11) Vinyl Chloride	4.170	62	921	0.04	ppb(v#	49
12) 1,3-Butadiene	4.274	54	533	0.03	ppb(v#	81
14) Bromomethane	4.500	94	1040	0.04	ppb(v#	88
17) Dichlorofluoromethane	4.714	67	2408	0.04	ppb(v#	95
18) Acetonitrile	4.934	41	691	0.04	ppb(v#	72
19) Freon 123	5.069	83	2620	0.05	ppb(v	92
20) Freon 123A	5.118	117	1616	0.05	ppb(v	96
21) Bromoethene	4.941	106	942	0.04	ppb(v#	82
22) Trichlorofluoromethane	5.295	101	2993	0.05	ppb(v#	91
26) Iodomethane	5.809	142	3217	0.05	ppb(v	96
28) 1,1-Dichloroethene	5.883	61	1611	0.05	ppb(v	99
29) Freon 113	6.244	101	2304	0.05	ppb(v	93
31) Carbon Disulfide	6.280	76	2939	0.05	ppb(v#	74
35) trans-1,2-Dichloroethene	6.910	61	1327	0.04	ppb(v#	81
37) Methyl tert-Butyl Ether	7.192	73	2824	0.04	ppb(v	98
39) 1,1-Dichloroethane	7.118	63	1997	0.05	ppb(v#	90
41) Hexane	8.214	57	1289	0.04	ppb(v#	77
42) cis-1,2-Dichloroethene	7.999	61	1294	0.04	ppb(v#	85
43) Di-isopropyl Ether	8.220	87	695	0.03	ppb(v#	87
46) Chloroform	8.318	83	2587	0.05	ppb(v#	94
47) 2,4-Dimethylpentane	9.192	57	1517	0.04	ppb(v	91
49) 1,1,1-Trichloroethane	9.419	97	2327	0.04	ppb(v#	86
50) 1,2-Dichloroethane	9.137	62	1349	0.04	ppb(v#	54
51) Benzene	9.945	78	3188	0.04	ppb(v	95
52) Carbon Tetrachloride	10.116	117	2256	0.04	ppb(v	98
53) Cyclohexane	10.257	56	1382	0.04	ppb(v	94
54) 2,3-Dimethylpentane	10.551	71	480	0.03	ppb(v#	91
56) 2,2,4-Trimethylpentane	11.236	57	4690	0.04	ppb(v#	95
57) Heptane	11.578	71	936	0.04	ppb(v#	79
58) Trichloroethene	11.205	95	1534	0.04	ppb(v	97
59) 1,2-Dichloropropane	10.911	63	1075	0.04	ppb(v#	40
60) Dibromomethane	10.893	174	1860	0.05	ppb(v	94
64) Bromodichloromethane	11.162	83	2211	0.04	ppb(v#	90
65) cis-1,3-Dichloropropene	12.288	75	1489	0.04	ppb(v#	71
67) trans-1,3-Dichloropropene	12.967	75	1035	0.03	ppb(v#	48
68) Toluene	13.530	91	4286	0.05	ppb(v	94
69) 1,1,2-Trichloroethane	13.187	97	1244	0.04	ppb(v	87
70) 1,3-Dichloropropane	13.579	76	1733	0.04	ppb(v#	82
73) Dibromochloromethane	14.087	129	2060	0.04	ppb(v#	94
74) Tetrachloroethene	15.035	166	2816	0.05	ppb(v	96
75) 1,2-Dibromoethane	14.405	107	1792	0.04	ppb(v#	97
76) Octane	14.876	43	2109	0.04	ppb(v	98
77) 1,1,1,2-Tetrachloroethane	15.965	131	1501	0.04	ppb(v#	1
79) Chlorobenzene	15.983	112	3248	0.05	ppb(v	94
80) Ethylbenzene	16.521	91	4907	0.05	ppb(v#	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08749.D
 Acq On : 22 Oct 2018 12:49 pm
 Operator : paulcw
 Sample : ic335-0.04
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 23 09:36:59 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : TO-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:34:38 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
81) m, p-Xylene	16.803	91	7444	0.09	ppb(v	97
82) Styrene	17.323	104	2091	0.04	ppb(v#	91
83) Nonane	17.849	43	1950	0.04	ppb(v#	92
84) o-Xylene	17.470	91	3924	0.05	ppb(v	94
85) Bromoform	16.870	173	1441	0.03	ppb(v#	94
86) 1,1,2,2-Tetrachloroethane	17.482	83	2287	0.05	ppb(v#	92
87) 1,2,3-Trichloropropane	17.672	75	1706	0.05	ppb(v	99
88) Isopropylbenzene	18.381	105	5569	0.05	ppb(v	94
89) Bromobenzene	18.491	156	1442	0.04	ppb(v	96
90) 2-Chlorotoluene	19.103	126	1082	0.04	ppb(v	95
91) n-Propylbenzene	19.176	120	1123	0.04	ppb(v	94
93) 4-Ethyltoluene	19.397	105	4414	0.04	ppb(v	96
94) 1,3,5-Trimethylbenzene	19.519	105	4233	0.05	ppb(v	97
95) alpha-Methylstyrene	19.745	118	1552	0.04	ppb(v	95
96) tert-Butylbenzene	20.082	134	940	0.04	ppb(v	82
97) 1,2,4-Trimethylbenzene	20.100	105	3682	0.04	ppb(v	96
98) 1,3-Dichlorobenzene	20.290	146	2248	0.05	ppb(v	98
99) Benzyl Chloride	20.284	91	1112	0.03	ppb(v#	63
100) 1,4-Dichlorobenzene	20.388	146	1948	0.05	ppb(v	98
101) sec-Butylbenzene	20.473	134	1097	0.04	ppb(v	92
102) p-Isopropyltoluene	20.700	134	1139	0.04	ppb(v	95
103) 1,2-Dichlorobenzene	20.853	146	2159	0.05	ppb(v	96
104) n-Butylbenzene	21.269	134	780	0.04	ppb(v	95
105) Hexachloroethane	21.734	201	870	0.03	ppb(v	92
106) 1,2,4-Trichlorobenzene	23.049	180	760	0.07	ppb(v#	75
107) Naphthalene	23.177	128	1620	0.07	ppb(v#	69
108) Hexachlorobutadiene	23.618	225	1718	0.07	ppb(v	93

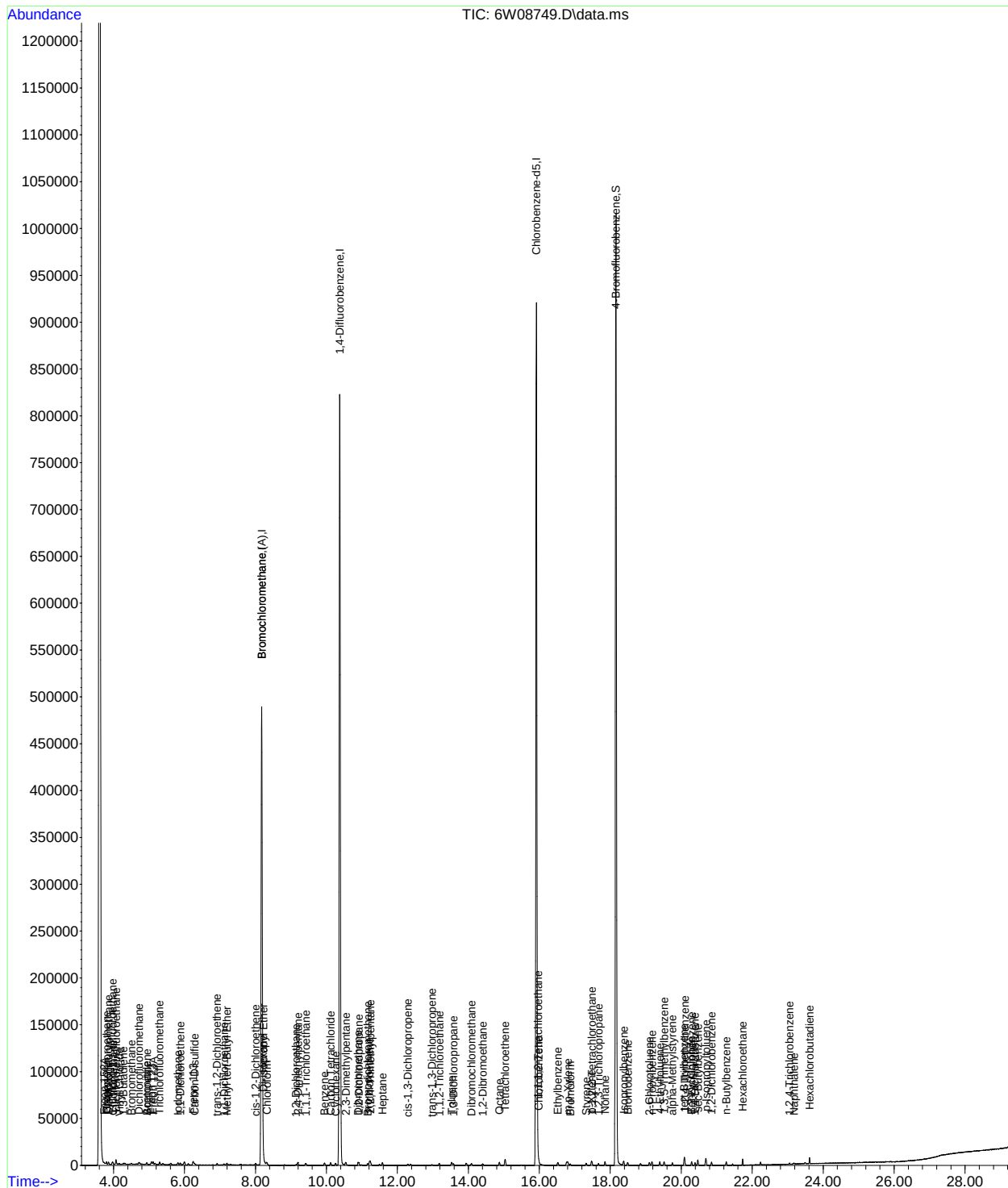
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.11

7

Data Path : C:\msdchem\1\data\
Data File : 6W08749.D
Acq On : 22 Oct 2018 12:49 pm
Operator : paulcw
Sample : ic335-0.04
Misc : MS30116,V6W335,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 23 09:36:59 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:34:38 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08750.D
 Acq On : 22 Oct 2018 1:48 pm
 Operator : paulcw
 Sample : ic335-0.1
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 23 09:33:49 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:31:59 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.177	130	245093	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	884874	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.916	82	373986	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	245093	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.161	95	458264	10.03	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.30%

Target Compounds						Qvalue
3) Freon 152A	3.735	65	1352	0.11	ppb(v#	77
4) Chlorodifluoromethane	3.772	67	588	0.09	ppb(v#	42
5) Propene	3.803	41	1475	0.11	ppb(v#	91
6) Chlorotrifluoroethene	3.803	116	3955	0.11	ppb(v	94
7) Dichlorodifluoromethane	3.858	85	7119	0.11	ppb(v	96
8) 1-Chloro-1,1-difluoro...	3.968	65	5588	0.11	ppb(v#	70
9) Chloromethane	3.986	50	2001	0.11	ppb(v	99
10) Dichlorotetrafluoroethane	4.066	85	7326	0.11	ppb(v	96
11) Vinyl Chloride	4.164	62	2399	0.11	ppb(v#	97
12) 1,3-Butadiene	4.274	54	1794	0.12	ppb(v	93
13) n-Butane	4.317	58	268	0.07	ppb(v#	65
14) Bromomethane	4.500	94	2663	0.11	ppb(v#	96
15) Acrolein	5.038	56	937	0.10	ppb(v#	77
16) Chloroethane	4.635	64	1184	0.10	ppb(v#	72
17) Dichlorofluoromethane	4.714	67	6145	0.11	ppb(v	99
18) Acetonitrile	4.928	41	1814	0.11	ppb(v#	77
19) Freon 123	5.063	83	6188	0.11	ppb(v	97
20) Freon 123A	5.112	117	3711	0.11	ppb(v	93
21) Bromoethene	4.941	106	2701	0.11	ppb(v	94
22) Trichlorofluoromethane	5.295	101	7260	0.11	ppb(v	97
23) Acetone	5.161	58	1233	0.12	ppb(v	91
24) Pentane	5.614	57	400	0.07	ppb(v	96
26) Iodomethane	5.809	142	7911	0.11	ppb(v	98
27) Isopropyl Alcohol	5.387	45	4236	0.11	ppb(v#	96
28) 1,1-Dichloroethene	5.883	61	3711	0.11	ppb(v	96
29) Freon 113	6.244	101	5543	0.11	ppb(v	97
30) Methylene Chloride	5.999	84	3196	0.15	ppb(v	92
31) Carbon Disulfide	6.280	76	7008	0.11	ppb(v	99
32) Ethanol	4.739	45	994	0.12	ppb(v#	88
33) Acrylonitrile	5.577	53	1504	0.09	ppb(v	97
34) 3-Chloropropene	6.103	76	984	0.09	ppb(v#	87
35) trans-1,2-Dichloroethene	6.910	61	3300	0.10	ppb(v	98
36) tert-Butyl Alcohol	5.956	59	4158	0.09	ppb(v#	89
37) Methyl tert-Butyl Ether	7.186	73	7028	0.11	ppb(v	97
38) Vinyl Acetate	7.284	43	4852	0.09	ppb(v#	71
39) 1,1-Dichloroethane	7.112	63	4419	0.11	ppb(v#	92
40) 2-Butanone	7.559	72	676	0.06	ppb(v#	94
41) Hexane	8.214	57	3457	0.10	ppb(v	91
42) cis-1,2-Dichloroethene	7.999	61	3254	0.10	ppb(v	97
43) Di-isopropyl Ether	8.220	87	2081	0.10	ppb(v	94
45) Methyl Acrylate	8.256	55	3144	0.08	ppb(v#	86
46) Chloroform	8.318	83	5868	0.11	ppb(v	99
47) 2,4-Dimethylpentane	9.192	57	4098	0.10	ppb(v	99
48) Tetrahydrofuran	8.807	72	752	0.07	ppb(v	86
49) 1,1,1-Trichloroethane	9.413	97	5884	0.11	ppb(v	96
50) 1,2-Dichloroethane	9.137	62	3427	0.10	ppb(v#	91
51) Benzene	9.945	78	8004	0.11	ppb(v	97
52) Carbon Tetrachloride	10.116	117	5939	0.11	ppb(v	97
53) Cyclohexane	10.257	56	3738	0.11	ppb(v	97
54) 2,3-Dimethylpentane	10.550	71	1648	0.10	ppb(v#	92
56) 2,2,4-Trimethylpentane	11.236	57	11641	0.11	ppb(v	97
57) Heptane	11.578	71	2429	0.10	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08750.D
 Acq On : 22 Oct 2018 1:48 pm
 Operator : paulcw
 Sample : ic335-0.1
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 23 09:33:49 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:31:59 2018
 Response via : Initial Calibration

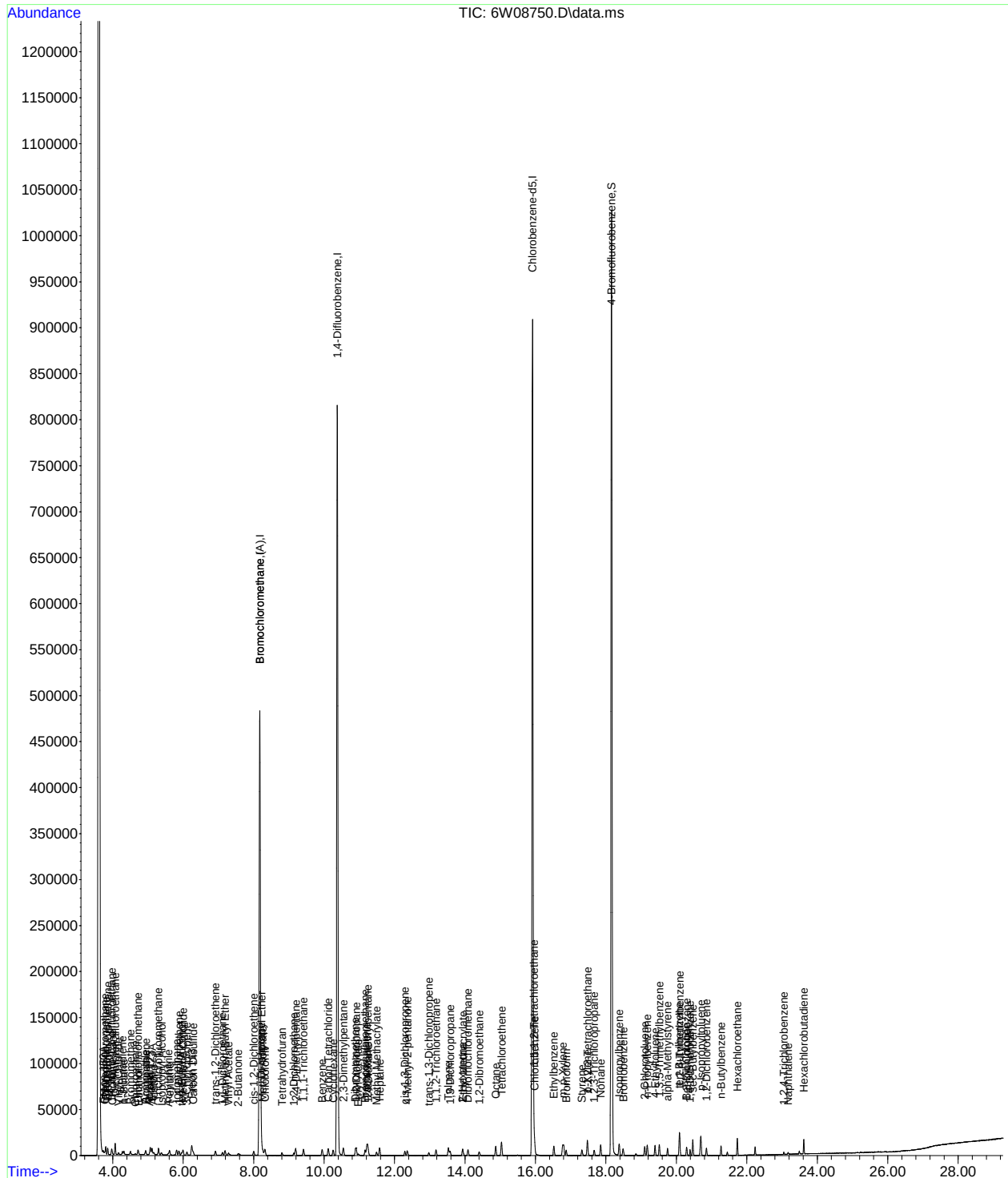
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) Trichloroethene	11.205	95	3796	0.11	ppb(v	96
59) 1,2-Dichloropropane	10.918	63	2722	0.11	ppb(v#	90
60) Dibromomethane	10.887	174	4331	0.12	ppb(v	98
61) Ethyl Acrylate	10.967	55	3758	0.08	ppb(v#	75
62) Methyl Methacrylate	11.493	69	2092	0.08	ppb(v	96
63) 1,4-Dioxane	11.254	88	1522	0.09	ppb(v#	61
64) Bromodichloromethane	11.162	83	5682	0.10	ppb(v	98
65) cis-1,3-Dichloropropene	12.288	75	3765	0.09	ppb(v	98
66) 4-Methyl-2-pentanone	12.361	58	1781	0.09	ppb(v	90
67) trans-1,3-Dichloropropene	12.967	75	3003	0.09	ppb(v#	87
68) Toluene	13.524	91	9559	0.11	ppb(v	96
69) 1,1,2-Trichloroethane	13.181	97	3092	0.10	ppb(v	96
70) 1,3-Dichloropropane	13.579	76	4288	0.11	ppb(v	95
71) 2-Hexanone	13.927	58	1859	0.07	ppb(v#	95
72) Ethyl Methacrylate	13.940	69	3429	0.08	ppb(v#	96
73) Dibromochloromethane	14.080	129	5288	0.10	ppb(v#	98
74) Tetrachloroethene	15.041	166	6247	0.12	ppb(v	95
75) 1,2-Dibromoethane	14.405	107	4427	0.10	ppb(v#	97
76) Octane	14.876	43	5166	0.10	ppb(v	96
77) 1,1,1,2-Tetrachloroethane	15.959	131	3990	0.10	ppb(v#	1
79) Chlorobenzene	15.977	112	7975	0.12	ppb(v	96
80) Ethylbenzene	16.521	91	11952	0.11	ppb(v	97
81) m,p-Xylene	16.778	91	18999	0.23	ppb(v	99
82) Styrene	17.317	104	5313	0.10	ppb(v	96
83) Nonane	17.849	43	5219	0.11	ppb(v#	90
84) o-Xylene	17.470	91	9108	0.11	ppb(v	96
85) Bromoform	16.870	173	3942	0.09	ppb(v#	95
86) 1,1,2,2-Tetrachloroethane	17.476	83	5342	0.12	ppb(v#	97
87) 1,2,3-Trichloropropane	17.665	75	4161	0.12	ppb(v	95
88) Isopropylbenzene	18.375	105	13635	0.12	ppb(v	98
89) Bromobenzene	18.491	156	3647	0.11	ppb(v	93
90) 2-Chlorotoluene	19.097	126	2943	0.11	ppb(v	91
91) n-Propylbenzene	19.170	120	3235	0.11	ppb(v	92
93) 4-Ethyltoluene	19.397	105	10905	0.11	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.519	105	9823	0.11	ppb(v	98
95) alpha-Methylstyrene	19.745	118	3547	0.09	ppb(v	96
96) tert-Butylbenzene	20.082	134	2545	0.12	ppb(v	93
97) 1,2,4-Trimethylbenzene	20.094	105	9133	0.11	ppb(v#	80
98) 1,3-Dichlorobenzene	20.290	146	4787	0.11	ppb(v	94
99) Benzyl Chloride	20.284	91	2315	0.06	ppb(v#	84
100) 1,4-Dichlorobenzene	20.388	146	3927	0.10	ppb(v	97
101) sec-Butylbenzene	20.467	134	3003	0.12	ppb(v	93
102) p-Isopropyltoluene	20.700	134	2894	0.11	ppb(v	92
103) 1,2-Dichlorobenzene	20.853	146	4815	0.11	ppb(v	98
104) n-Butylbenzene	21.269	134	1988	0.10	ppb(v	90
105) Hexachloroethane	21.734	201	2662	0.10	ppb(v	96
106) 1,2,4-Trichlorobenzene	23.049	180	1161	0.10	ppb(v	95
107) Naphthalene	23.171	128	2582	0.11	ppb(v#	85
108) Hexachlorobutadiene	23.618	225	3584	0.15	ppb(v	99

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

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\  
Data File : 6W08750.D  
Acq On : 22 Oct 2018 1:48 pm  
Operator : paulcw  
Sample : ic335-0.1  
Misc : MS30116,V6W335,,,,,1  
ALS Vial : 3 Sample Multiplier: 1
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Quant Time: Oct 23 09:33:49 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Tue Oct 23 09:31:59 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Manual Integrations
APPROVED
(compounds with "m" flag)

Dana Tryon
10/23/18 17:38

Data Path : C:\msdchem\1\data\
Data File : 6W08751.D
Acq On : 22 Oct 2018 2:40 pm
Operator : paulcw
Sample : ic335-0.2
Misc : MS30116,V6W335,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 23 09:31:52 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:30:12 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.177	130	244439	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.373	114	886331	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.916	82	376518	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	244439	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.161	95	465894	10.15	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	101.50%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	2480	0.20	ppb(v	95
4) Chlorodifluoromethane	3.766	67	1157	0.18	ppb(v	99
5) Propene	3.796	41	2818	0.20	ppb(v	98
6) Chlorotrifluoroethene	3.796	116	7386	0.21	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	13107	0.21	ppb(v	99
8) 1-Chloro-1,1-difluoro...	3.962	65	10290	0.21	ppb(v#	71
9) Chloromethane	3.986	50	3739	0.21	ppb(v	98
10) Dichlorotetrafluoroethane	4.060	85	13631	0.22	ppb(v	99
11) Vinyl Chloride	4.164	62	4539	0.21	ppb(v#	98
12) 1,3-Butadiene	4.274	54	3169	0.21	ppb(v	99
13) n-Butane	4.310	58	755	0.19	ppb(v#	74
14) Bromomethane	4.494	94	5003	0.22	ppb(v	97
15) Acrolein	5.032	56	1763	0.20	ppb(v#	77
16) Chloroethane	4.635	64	2175	0.19	ppb(v#	95
17) Dichlorofluoromethane	4.714	67	11415	0.22	ppb(v	99
18) Acetonitrile	4.922	41	3358	0.21	ppb(v	91
19) Freon 123	5.063	83	11731	0.22	ppb(v	98
20) Freon 123A	5.112	117	7169	0.21	ppb(v	99
21) Bromoethene	4.934	106	5048	0.21	ppb(v	97
22) Trichlorofluoromethane	5.295	101	13459	0.22	ppb(v	98
23) Acetone	5.155	58	2049	0.21	ppb(v	97
24) Pentane	5.613	57	1022	0.19	ppb(v	91
26) Iodomethane	5.809	142	14537	0.21	ppb(v	99
27) Isopropyl Alcohol	5.375	45	7781	0.21	ppb(v#	92
28) 1,1-Dichloroethene	5.876	61	6758	0.20	ppb(v	97
29) Freon 113	6.237	101	10507	0.21	ppb(v	98
30) Methylene Chloride	5.999	84	5067	0.25	ppb(v	98
31) Carbon Disulfide	6.280	76	12556	0.20	ppb(v	98
32) Ethanol	4.732	45	1788	0.22	ppb(v#	92
33) Acrylonitrile	5.571	53	3168	0.19	ppb(v	97
34) 3-Chloropropene	6.103	76	1938	0.18	ppb(v	97
35) trans-1,2-Dichloroethene	6.910	61	6253	0.20	ppb(v	97
36) tert-Butyl Alcohol	5.944	59	8056	0.18	ppb(v	98
37) Methyl tert-Butyl Ether	7.180	73	12838	0.19	ppb(v	97
38) Vinyl Acetate	7.277	43	9782	0.17	ppb(v	97
39) 1,1-Dichloroethane	7.112	63	8080	0.21	ppb(v#	95
40) 2-Butanone	7.553	72	1686	0.15	ppb(v#	92
41) Hexane	8.207	57	6613	0.20	ppb(v	91
42) cis-1,2-Dichloroethene	7.999	61	6179	0.20	ppb(v	98
43) Di-isopropyl Ether	8.213	87	3966	0.18	ppb(v	95
44) Ethyl Acetate	8.256	61	1001	0.15	ppb(v#	83
45) Methyl Acrylate	8.244	55	6509	0.16	ppb(v	97
46) Chloroform	8.317	83	10725	0.21	ppb(v	99
47) 2,4-Dimethylpentane	9.186	57	7618	0.19	ppb(v	96
48) Tetrahydrofuran	8.789	72	1738	0.17	ppb(v	98
49) 1,1,1-Trichloroethane	9.413	97	10738	0.20	ppb(v	99
50) 1,2-Dichloroethane	9.137	62	6726	0.20	ppb(v#	95
51) Benzene	9.945	78	14474	0.20	ppb(v	99
52) Carbon Tetrachloride	10.116	117	10791	0.20	ppb(v	98
53) Cyclohexane	10.251	56	6755	0.20	ppb(v	99
54) 2,3-Dimethylpentane	10.544	71	3191	0.20	ppb(v	93
56) 2,2,4-Trimethylpentane	11.236	57	21883	0.20	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08751.D
 Acq On : 22 Oct 2018 2:40 pm
 Operator : paulcw
 Sample : ic335-0.2
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 23 09:31:52 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:30:12 2018
 Response via : Initial Calibration

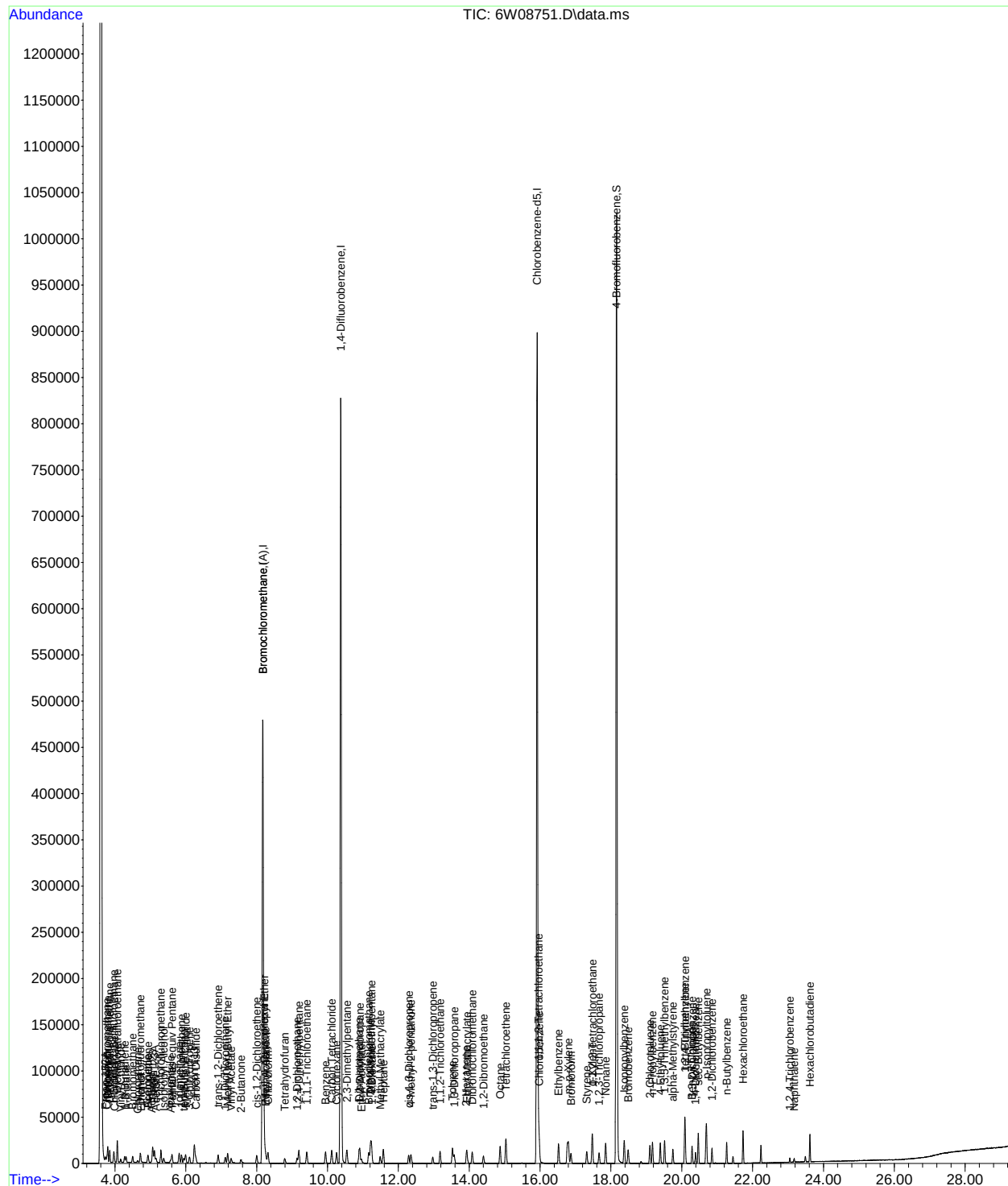
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.578	71	4798	0.19	ppb(v	96
58) Trichloroethene	11.211	95	7035	0.20	ppb(v	95
59) 1,2-Dichloropropane	10.917	63	5143	0.20	ppb(v	97
60) Dibromomethane	10.893	174	7515	0.20	ppb(v	98
61) Ethyl Acrylate	10.960	55	7598	0.15	ppb(v	97
62) Methyl Methacrylate	11.486	69	4148	0.16	ppb(v	94
63) 1,4-Dioxane	11.254	88	2937	0.17	ppb(v#	68
64) Bromodichloromethane	11.162	83	10452	0.19	ppb(v	99
65) cis-1,3-Dichloropropene	12.294	75	7325	0.18	ppb(v	95
66) 4-Methyl-2-pentanone	12.349	58	3386	0.16	ppb(v	91
67) trans-1,3-Dichloropropene	12.973	75	5740	0.16	ppb(v	98
68) Toluene	13.524	91	17745	0.19	ppb(v	97
69) 1,1,2-Trichloroethane	13.181	97	5948	0.19	ppb(v	98
70) 1,3-Dichloropropane	13.573	76	7862	0.19	ppb(v	99
71) 2-Hexanone	13.915	58	3880	0.14	ppb(v	93
72) Ethyl Methacrylate	13.934	69	6770	0.15	ppb(v#	97
73) Dibromochloromethane	14.086	129	9806	0.17	ppb(v	99
74) Tetrachloroethene	15.035	166	11163	0.21	ppb(v	98
75) 1,2-Dibromoethane	14.405	107	8671	0.18	ppb(v#	98
76) Octane	14.876	43	9666	0.19	ppb(v	97
77) 1,1,1,2-Tetrachloroethane	15.958	131	7492	0.19	ppb(v#	1
79) Chlorobenzene	15.977	112	14635	0.23	ppb(v	99
80) Ethylbenzene	16.521	91	22615	0.22	ppb(v	98
81) m,p-Xylene	16.797	91	36063	0.45	ppb(v	100
82) Styrene	17.317	104	10031	0.18	ppb(v	96
83) Nonane	17.849	43	9956	0.22	ppb(v	99
84) o-Xylene	17.470	91	17447	0.22	ppb(v	98
85) Bromoform	16.870	173	7417	0.17	ppb(v	98
86) 1,1,2,2-Tetrachloroethane	17.476	83	9780	0.22	ppb(v#	98
87) 1,2,3-Trichloropropane	17.665	75	7652	0.21	ppb(v	97
88) Isopropylbenzene	18.375	105	24977	0.22	ppb(v	99
89) Bromobenzene	18.485	156	6911	0.20	ppb(v	95
90) 2-Chlorotoluene	19.097	126	5458	0.21	ppb(v	95
91) n-Propylbenzene	19.170	120	6016	0.20	ppb(v	99
93) 4-Ethyltoluene	19.397	105	20243	0.20	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.513	105	18802	0.22	ppb(v	98
95) alpha-Methylstyrene	19.745	118	6721	0.17	ppb(v	99
96) tert-Butylbenzene	20.088	134	4848	0.23	ppb(v	91
97) 1,2,4-Trimethylbenzene	20.094	105	17363	0.21	ppb(v#	78
98) 1,3-Dichlorobenzene	20.290	146	8783	0.19	ppb(v	99
99) Benzyl Chloride	20.284	91	4294	0.11	ppb(v#	95
100) 1,4-Dichlorobenzene	20.388	146	7285	0.17	ppb(v	98
101) sec-Butylbenzene	20.467	134	5653	0.22	ppb(v	94
102) p-Isopropyltoluene	20.700	134	5894	0.23	ppb(v	99
103) 1,2-Dichlorobenzene	20.853	146	8857	0.21	ppb(v	99
104) n-Butylbenzene	21.269	134	4119	0.20	ppb(v	96
105) Hexachloroethane	21.734	201	5070	0.19	ppb(v	96
106) 1,2,4-Trichlorobenzene	23.049	180	2054	0.17	ppb(v	97
107) Naphthalene	23.171	128	4590	0.20	ppb(v	100
108) Hexachlorobutadiene	23.618	225	6453	0.28	ppb(v	99
110) TVHC as equiv Pentane	5.607	TIC	20144m	0.20	ppb(v	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W08751.D
Acq On : 22 Oct 2018 2:40 pm
Operator : paulcw
Sample : ic335-0.2
Misc : MS30116,V6W335,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 23 09:31:52 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:30:12 2018
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V6W335-IC335

Method: TO-15

Lab FileID: 6W08751.D

Analyst approved: 10/23/18 09:46 Dana Tryon

Injection Time: 10/22/18 14:40

Supervisor approved: 10/23/18 17:38 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.61	Missed peak

7.7.13.1
7

Quantitation Report (QT Reviewed)

Manual Integrations
APPROVED
(compounds with "m" flag)

Dana Tryon
10/23/18 17:38

Data Path : C:\msdchem\1\data\
Data File : 6W08752.D
Acq On : 22 Oct 2018 3:33 pm
Operator : paulcw
Sample : ic335-0.5
Misc : MS30116,V6W335,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 23 09:29:55 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:27:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.177	130	244906	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.379	114	884173	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.916	82	378452	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	244906	10.00	ppb(v	0.00

System Monitoring Compounds
92) 4-Bromofluorobenzene 18.161 95 478197 10.46 ppb(v 0.00
Spiked Amount 10.000 Range 65 - 128 Recovery = 104.60%

Target Compounds					Qvalue
3) Freon 152A	3.735	65	6183	0.49	ppb(v 96
4) Chlorodifluoromethane	3.772	67	3066	0.49	ppb(v 100
5) Propene	3.797	41	6767	0.49	ppb(v 97
6) Chlorotrifluoroethene	3.803	116	17442	0.50	ppb(v 98
7) Dichlorodifluoromethane	3.852	85	31465	0.51	ppb(v 100
8) 1-Chloro-1,1-difluoro...	3.968	65	24527	0.51	ppb(v 95
9) Chloromethane	3.986	50	8944	0.51	ppb(v 97
10) Dichlorotetrafluoroethane	4.066	85	32607	0.52	ppb(v 98
11) Vinyl Chloride	4.164	62	10679	0.50	ppb(v# 98
12) 1,3-Butadiene	4.274	54	7635	0.50	ppb(v 95
13) n-Butane	4.316	58	1974	0.49	ppb(v# 87
14) Bromomethane	4.500	94	11811	0.52	ppb(v 99
15) Acrolein	5.032	56	4195	0.46	ppb(v# 90
16) Chloroethane	4.641	64	5779	0.51	ppb(v 99
17) Dichlorofluoromethane	4.714	67	26843	0.51	ppb(v 99
18) Acetonitrile	4.922	41	7982	0.49	ppb(v 99
19) Freon 123	5.063	83	27383	0.50	ppb(v 99
20) Freon 123A	5.112	117	17320	0.51	ppb(v 99
21) Bromoethene	4.934	106	11979	0.50	ppb(v 95
22) Trichlorofluoromethane	5.301	101	31754	0.51	ppb(v 97
23) Acetone	5.149	58	5031	0.52	ppb(v 93
24) Pentane	5.607	57	2559	0.46	ppb(v 97
26) Iodomethane	5.809	142	34509	0.50	ppb(v 99
27) Isopropyl Alcohol	5.369	45	16887	0.45	ppb(v 97
28) 1,1-Dichloroethene	5.877	61	16421	0.48	ppb(v 99
29) Freon 113	6.237	101	24800	0.50	ppb(v 99
30) Methylene Chloride	5.993	84	10888	0.53	ppb(v 97
31) Carbon Disulfide	6.280	76	29960	0.48	ppb(v 100
32) Ethanol	4.732	45	4332	0.53	ppb(v# 95
33) Acrylonitrile	5.565	53	7474	0.44	ppb(v 98
34) 3-Chloropropene	6.103	76	5065	0.46	ppb(v 97
35) trans-1,2-Dichloroethene	6.910	61	15166	0.48	ppb(v 99
36) tert-Butyl Alcohol	5.925	59	19847	0.43	ppb(v 98
37) Methyl tert-Butyl Ether	7.173	73	31412	0.47	ppb(v 98
38) Vinyl Acetate	7.271	43	24358	0.41	ppb(v 98
39) 1,1-Dichloroethane	7.118	63	19128	0.48	ppb(v 99
40) 2-Butanone	7.541	72	4713	0.41	ppb(v 94
41) Hexane	8.207	57	15965	0.47	ppb(v 92
42) cis-1,2-Dichloroethene	7.999	61	14811	0.47	ppb(v 97
43) Di-isopropyl Ether	8.213	87	10161	0.47	ppb(v 92
44) Ethyl Acetate	8.250	61	2974	0.42	ppb(v 94
45) Methyl Acrylate	8.238	55	17562	0.42	ppb(v 97
46) Chloroform	8.317	83	25356	0.49	ppb(v 97
47) 2,4-Dimethylpentane	9.192	57	18596	0.47	ppb(v 98
48) Tetrahydrofuran	8.776	72	4591	0.43	ppb(v 90
49) 1,1,1-Trichloroethane	9.413	97	25948	0.48	ppb(v 98
50) 1,2-Dichloroethane	9.137	62	15929	0.48	ppb(v 99
51) Benzene	9.945	78	35016	0.48	ppb(v 99
52) Carbon Tetrachloride	10.116	117	25644	0.46	ppb(v 99
53) Cyclohexane	10.257	56	16201	0.47	ppb(v 97
54) 2,3-Dimethylpentane	10.544	71	7529	0.46	ppb(v 96
56) 2,2,4-Trimethylpentane	11.236	57	52644	0.48	ppb(v 98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08752.D
 Acq On : 22 Oct 2018 3:33 pm
 Operator : paulcw
 Sample : ic335-0.5
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 23 09:29:55 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:27:35 2018
 Response via : Initial Calibration

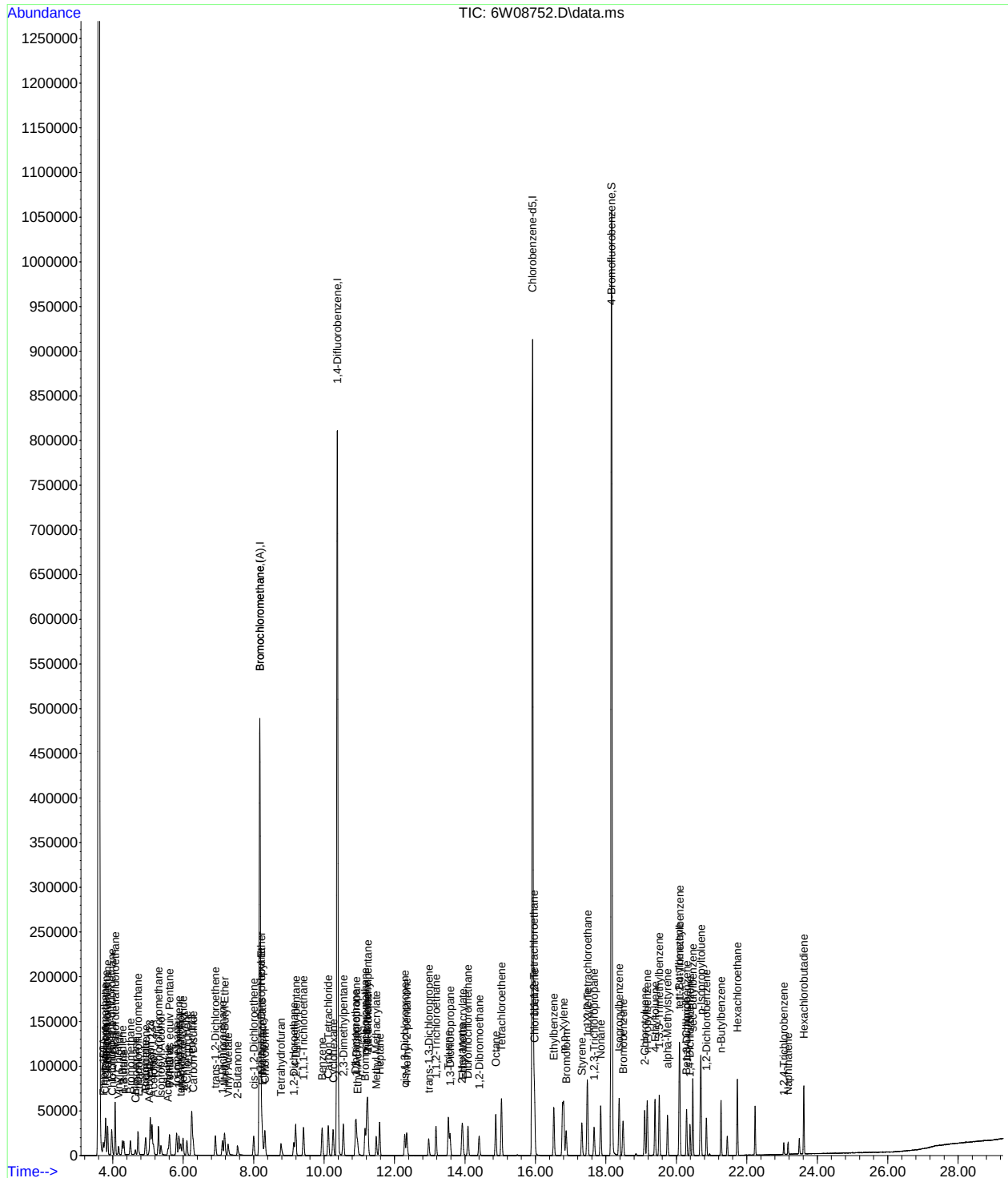
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.578	71	11729	0.46	ppb(v	97
58) Trichloroethene	11.211	95	16831	0.48	ppb(v	98
59) 1,2-Dichloropropane	10.918	63	12502	0.48	ppb(v	98
60) Dibromomethane	10.893	174	18124	0.49	ppb(v	97
61) Ethyl Acrylate	10.954	55	20406	0.39	ppb(v	99
62) Methyl Methacrylate	11.480	69	10989	0.40	ppb(v	95
63) 1,4-Dioxane	11.236	88	7714	0.44	ppb(v#	26
64) Bromodichloromethane	11.162	83	26123	0.46	ppb(v	99
65) cis-1,3-Dichloropropene	12.288	75	18068	0.42	ppb(v	98
66) 4-Methyl-2-pentanone	12.343	58	9215	0.43	ppb(v	98
67) trans-1,3-Dichloropropene	12.973	75	14739	0.39	ppb(v	97
68) Toluene	13.524	91	43303	0.47	ppb(v	99
69) 1,1,2-Trichloroethane	13.181	97	14744	0.47	ppb(v	98
70) 1,3-Dichloropropane	13.573	76	19431	0.47	ppb(v	99
71) 2-Hexanone	13.909	58	10840	0.38	ppb(v	98
72) Ethyl Methacrylate	13.934	69	17860	0.39	ppb(v	99
73) Dibromochloromethane	14.080	129	24718	0.42	ppb(v	98
74) Tetrachloroethene	15.035	166	26423	0.51	ppb(v	98
75) 1,2-Dibromoethane	14.405	107	21335	0.44	ppb(v	100
76) Octane	14.876	43	23677	0.46	ppb(v	98
77) 1,1,1,2-Tetrachloroethane	15.959	131	18340	0.46	ppb(v#	33
79) Chlorobenzene	15.977	112	35144	0.55	ppb(v	99
80) Ethylbenzene	16.521	91	55002	0.54	ppb(v	99
81) m,p-Xylene	16.797	91	89663	1.13	ppb(v	100
82) Styrene	17.317	104	26789	0.46	ppb(v	99
83) Nonane	17.849	43	25134	0.55	ppb(v	100
84) o-Xylene	17.470	91	43400	0.55	ppb(v	99
85) Bromoform	16.870	173	19178	0.42	ppb(v	98
86) 1,1,2,2-Tetrachloroethane	17.476	83	24232	0.54	ppb(v	100
87) 1,2,3-Trichloropropane	17.665	75	18613	0.52	ppb(v	98
88) Isopropylbenzene	18.375	105	62494	0.57	ppb(v	99
89) Bromobenzene	18.485	156	17515	0.51	ppb(v	95
90) 2-Chlorotoluene	19.103	126	14036	0.54	ppb(v	87
91) n-Propylbenzene	19.170	120	15556	0.53	ppb(v	97
93) 4-Ethyltoluene	19.397	105	53507	0.54	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.513	105	47750	0.56	ppb(v	99
95) alpha-Methylstyrene	19.745	118	17750	0.44	ppb(v	99
96) tert-Butylbenzene	20.082	134	12220	0.60	ppb(v	94
97) 1,2,4-Trimethylbenzene	20.094	105	44252	0.55	ppb(v#	78
98) 1,3-Dichlorobenzene	20.290	146	22041	0.47	ppb(v	99
99) Benzyl Chloride	20.278	91	11156	0.26	ppb(v	99
100) 1,4-Dichlorobenzene	20.388	146	18774	0.43	ppb(v	98
101) sec-Butylbenzene	20.467	134	14261	0.57	ppb(v	96
102) p-Isopropyltoluene	20.700	134	15059	0.59	ppb(v	99
103) 1,2-Dichlorobenzene	20.853	146	21692	0.51	ppb(v	99
104) n-Butylbenzene	21.269	134	10711	0.51	ppb(v	95
105) Hexachloroethane	21.734	201	12964	0.49	ppb(v	94
106) 1,2,4-Trichlorobenzene	23.049	180	5066	0.41	ppb(v	93
107) Naphthalene	23.171	128	11851	0.51	ppb(v	98
108) Hexachlorobutadiene	23.618	225	15404	0.74	ppb(v	97
110) TVHC as equiv Pentane	5.607	TIC	55606m	0.57	ppb(v	

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

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\  
Data File : 6W08752.D  
Acq On : 22 Oct 2018 3:33 pm  
Operator : paulcw  
Sample : ic335-0.5  
Misc : MS30116,V6W335,,,,,1  
ALS Vial : 3 Sample Multiplier: 1
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Quant Time: Oct 23 09:29:55 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:27:35 2018
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V6W335-IC335

Method: TO-15

Lab FileID: 6W08752.D

Analyst approved: 10/23/18 09:46 Dana Tryon

Injection Time: 10/22/18 15:33

Supervisor approved: 10/23/18 17:38 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.61	Missed peak

7.7.14.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08753.D
 Acq On : 22 Oct 2018 4:23 pm
 Operator : paulcw
 Sample : ic335-5
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:26:41 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:26:16 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.177	130	247839	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.379	114	893861	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.916	82	390899	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.177	130	247839	10.00	ppb(v)	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.161	95	491903	10.57	ppb(v)	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	105.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Freon 152A	3.723	65	65995	5.26	ppb(v)	96
4) Chlorodifluoromethane	3.760	67	33164	5.26	ppb(v)	99
5) Propene	3.784	41	73364	5.31	ppb(v)	99
6) Chlorotrifluoroethene	3.796	116	186519	5.40	ppb(v)	99
7) Dichlorodifluoromethane	3.845	85	330056	5.43	ppb(v)	100
8) 1-Chloro-1,1-difluoroethane	3.962	65	259133	5.48	ppb(v)	100
9) Chloromethane	3.980	50	94875	5.45	ppb(v)	100
10) Dichlorotetrafluoroethane	4.059	85	345461	5.67	ppb(v)	99
11) Vinyl Chloride	4.157	62	116155	5.44	ppb(v)	100
12) 1,3-Butadiene	4.267	54	82644	5.42	ppb(v)	99
13) n-Butane	4.310	58	21544	5.41	ppb(v)	98
14) Bromomethane	4.494	94	123859	5.58	ppb(v)	99
15) Acrolein	5.026	56	47789	5.22	ppb(v)	99
16) Chloroethane	4.634	64	61291	5.44	ppb(v)	99
17) Dichlorofluoromethane	4.708	67	286737	5.53	ppb(v)	99
18) Acetonitrile	4.916	41	85619	5.25	ppb(v)	100
19) Freon 123	5.057	83	293071	5.45	ppb(v)	99
20) Freon 123A	5.106	117	183591	5.45	ppb(v)	99
21) Bromoethene	4.928	106	128193	5.43	ppb(v)	99
22) Trichlorofluoromethane	5.295	101	335725	5.44	ppb(v)	99
23) Acetone	5.136	58	52017	5.40	ppb(v)	97
24) Pentane	5.607	57	29361	5.30	ppb(v)	98
26) Iodomethane	5.803	142	373972	5.47	ppb(v)	99
27) Isopropyl Alcohol	5.350	45	194568	5.21	ppb(v)	99
28) 1,1-Dichloroethene	5.876	61	181596	5.30	ppb(v)	99
29) Freon 113	6.231	101	265982	5.42	ppb(v)	99
30) Methylene Chloride	5.993	84	108661	5.34	ppb(v)	100
31) Carbon Disulfide	6.274	76	328253	5.31	ppb(v)	100
32) Ethanol	4.720	45	43489	5.33	ppb(v)	100
33) Acrylonitrile	5.558	53	87181	5.15	ppb(v)	100
34) 3-Chloropropene	6.103	76	57642	5.17	ppb(v)	97
35) trans-1,2-Dichloroethene	6.904	61	166411	5.22	ppb(v)	99
36) tert-Butyl Alcohol	5.901	59	236934	5.06	ppb(v)	99
37) Methyl tert-Butyl Ether	7.155	73	349156	5.22	ppb(v)	99
38) Vinyl Acetate	7.259	43	301482	5.02	ppb(v)	100
39) 1,1-Dichloroethane	7.112	63	208857	5.29	ppb(v)	99
40) 2-Butanone	7.516	72	59209	5.10	ppb(v)	97
41) Hexane	8.207	57	179839	5.31	ppb(v)	95
42) cis-1,2-Dichloroethene	7.993	61	165043	5.24	ppb(v)	99
43) Di-isopropyl Ether	8.195	87	114530	5.27	ppb(v)	98
44) Ethyl Acetate	8.232	61	37022	5.17	ppb(v)	89
45) Methyl Acrylate	8.219	55	215638	5.19	ppb(v)	99
46) Chloroform	8.317	83	275427	5.36	ppb(v)	98
47) 2,4-Dimethylpentane	9.186	57	210316	5.29	ppb(v)	99
48) Tetrahydrofuran	8.746	72	55938	5.16	ppb(v)	99
49) 1,1,1-Trichloroethane	9.412	97	282887	5.25	ppb(v)	98
50) 1,2-Dichloroethane	9.131	62	176222	5.31	ppb(v)	100
51) Benzene	9.945	78	388391	5.31	ppb(v)	100
52) Carbon Tetrachloride	10.116	117	290485	5.14	ppb(v)	100
53) Cyclohexane	10.251	56	179929	5.24	ppb(v)	99
54) 2,3-Dimethylpentane	10.544	71	85443	5.28	ppb(v)	99
56) 2,2,4-Trimethylpentane	11.235	57	589738	5.40	ppb(v)	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08753.D
 Acq On : 22 Oct 2018 4:23 pm
 Operator : paulcw
 Sample : ic335-5
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:26:41 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:26:16 2018
 Response via : Initial Calibration

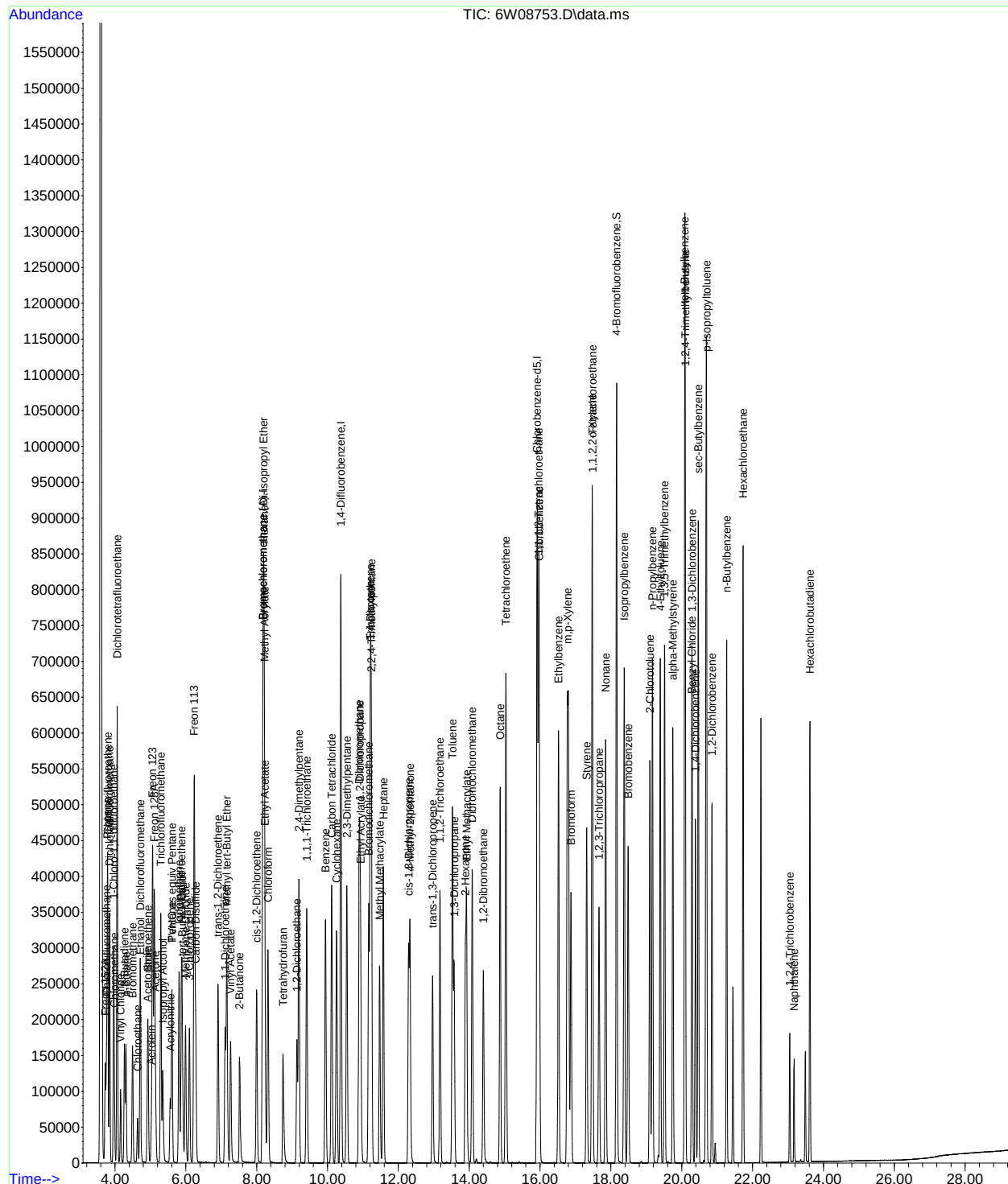
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.578	71	133318	5.24	ppb(v)	100
58) Trichloroethene	11.205	95	186935	5.33	ppb(v)	99
59) 1,2-Dichloropropane	10.917	63	137326	5.30	ppb(v)	99
60) Dibromomethane	10.893	174	197254	5.40	ppb(v)	99
61) Ethyl Acrylate	10.936	55	268715	5.02	ppb(v)	100
62) Methyl Methacrylate	11.474	69	140016	5.13	ppb(v)	97
63) 1,4-Dioxane	11.205	88	91527	5.20	ppb(v)	98
64) Bromodichloromethane	11.162	83	295423	5.19	ppb(v)	99
65) cis-1,3-Dichloropropene	12.288	75	217386	5.04	ppb(v)	100
66) 4-Methyl-2-pentanone	12.324	58	110375	5.11	ppb(v)	98
67) trans-1,3-Dichloropropene	12.961	75	187746	4.87	ppb(v)	99
68) Toluene	13.524	91	483606	5.28	ppb(v)	100
69) 1,1,2-Trichloroethane	13.175	97	162575	5.23	ppb(v)	99
70) 1,3-Dichloropropane	13.572	76	215284	5.19	ppb(v)	100
71) 2-Hexanone	13.891	58	143677	4.93	ppb(v)	98
72) Ethyl Methacrylate	13.927	69	231579	5.02	ppb(v)	99
73) Dibromochloromethane	14.080	129	297101	5.06	ppb(v)	100
74) Tetrachloroethene	15.035	166	278798	5.44	ppb(v)	99
75) 1,2-Dibromoethane	14.398	107	247401	5.09	ppb(v)	99
76) Octane	14.876	43	268473	5.23	ppb(v)	99
77) 1,1,1,2-Tetrachloroethane	15.958	131	208572	5.28	ppb(v)	98
79) Chlorobenzene	15.977	112	375039	5.96	ppb(v)	99
80) Ethylbenzene	16.521	91	602433	5.96	ppb(v)	99
81) m,p-Xylene	16.772	91	934559	11.96	ppb(v)	99
82) Styrene	17.316	104	332702	5.73	ppb(v)	99
83) Nonane	17.849	43	266739	5.94	ppb(v)	99
84) o-Xylene	17.469	91	468706	6.05	ppb(v)	99
85) Bromoform	16.870	173	250324	5.46	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.476	83	265999	6.02	ppb(v)	98
87) 1,2,3-Trichloropropane	17.665	75	205855	5.85	ppb(v)	100
88) Isopropylbenzene	18.375	105	656306	6.12	ppb(v)	99
89) Bromobenzene	18.485	156	196613	5.82	ppb(v)	98
90) 2-Chlorotoluene	19.097	126	151907	5.94	ppb(v)	99
91) n-Propylbenzene	19.170	120	174268	5.98	ppb(v)	98
93) 4-Ethyltoluene	19.397	105	582079	5.99	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.513	105	510683	6.10	ppb(v)	99
95) alpha-Methylstyrene	19.745	118	230404	5.80	ppb(v)	99
96) tert-Butylbenzene	20.082	134	125039	6.31	ppb(v)	95
97) 1,2,4-Trimethylbenzene	20.100	105	478241	6.10	ppb(v)	98
98) 1,3-Dichlorobenzene	20.290	146	269000	5.76	ppb(v)	100
99) Benzyl Chloride	20.277	91	212390	4.64	ppb(v)	99
100) 1,4-Dichlorobenzene	20.388	146	240083	5.52	ppb(v)	99
101) sec-Butylbenzene	20.467	134	148765	6.13	ppb(v)	97
102) p-Isopropyltoluene	20.700	134	154405	6.27	ppb(v)	99
103) 1,2-Dichlorobenzene	20.852	146	246451	5.83	ppb(v)	99
104) n-Butylbenzene	21.269	134	122024	5.80	ppb(v)	99
105) Hexachloroethane	21.733	201	147638	5.50	ppb(v)	98
106) 1,2,4-Trichlorobenzene	23.049	180	59976	4.66	ppb(v)	100
107) Naphthalene	23.171	128	115440	4.71	ppb(v)	99
108) Hexachlorobutadiene	23.618	225	122376	5.93	ppb(v)	99
110) TVHC as equiv Pentane	5.607	TIC	529231	5.48	ppb(v)	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08753.D
 Acq On : 22 Oct 2018 4:23 pm
 Operator : paulcw
 Sample : ic335-5
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:26:41 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:26:16 2018
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08754.D
 Acq On : 22 Oct 2018 5:14 pm
 Operator : paulcw
 Sample : icc335-10
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:23:06 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Mon Oct 22 10:32:40 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.177	130	252414	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.379	114	912222	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.916	82	421846	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.177	130	252414	10.00	ppb(v)	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.161	95	521581	10.00	ppb(v)	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.00%

Target Compounds			Qvalue			
3) Freon 152A	3.723	65	130415	10.31	ppb(v)	99
4) Chlorodifluoromethane	3.760	67	65225	10.42	ppb(v)	98
5) Propene	3.784	41	143765	10.21	ppb(v)	100
6) Chlorotrifluoroethene	3.796	116	361968	10.46	ppb(v)	100
7) Dichlorodifluoromethane	3.845	85	639631	10.47	ppb(v)	100
8) 1-Chloro-1,1-difluoro...	3.962	65	501257	10.49	ppb(v)	100
9) Chloromethane	3.980	50	183487	10.27	ppb(v)	99
10) Dichlorotetrafluoroethane	4.059	85	656921	10.53	ppb(v)	96
11) Vinyl Chloride	4.157	62	224958	10.28	ppb(v)	99
12) 1,3-Butadiene	4.267	54	158889	10.21	ppb(v)	99
13) n-Butane	4.310	58	41491	10.14	ppb(v)	99
14) Bromomethane	4.494	94	235930	10.40	ppb(v)	100
15) Acrolein	5.026	56	94278	10.27	ppb(v)	100
16) Chloroethane	4.635	64	117936	10.19	ppb(v)	99
17) Dichlorofluoromethane	4.708	67	549377	10.42	ppb(v)	99
18) Acetonitrile	4.910	41	168606	9.91	ppb(v)	99
19) Freon 123	5.057	83	567711	10.52	ppb(v)	100
20) Freon 123A	5.106	117	355927	10.59	ppb(v)	99
21) Bromoethene	4.928	106	249378	10.46	ppb(v)	99
22) Trichlorofluoromethane	5.289	101	646397	10.60	ppb(v)	100
23) Acetone	5.130	58	99765	10.20	ppb(v)	97
24) Pentane	5.601	57	56733	9.99	ppb(v)	99
26) Iodomethane	5.803	142	723565	10.60	ppb(v)	100
27) Isopropyl Alcohol	5.344	45	385787	10.29	ppb(v)	99
28) 1,1-Dichloroethene	5.870	61	356196	10.31	ppb(v)	99
29) Freon 113	6.231	101	513951	10.41	ppb(v)	99
30) Methylene Chloride	5.993	84	211022	10.32	ppb(v)	99
31) Carbon Disulfide	6.274	76	644763	10.35	ppb(v)	100
32) Ethanol	4.714	45	84334	9.79	ppb(v)	99
33) Acrylonitrile	5.552	53	174323	10.07	ppb(v)	100
34) 3-Chloropropene	6.097	76	114557	10.28	ppb(v)	99
35) trans-1,2-Dichloroethene	6.904	61	329756	10.29	ppb(v)	100
36) tert-Butyl Alcohol	5.895	59	478077	10.12	ppb(v)	100
37) Methyl tert-Butyl Ether	7.149	73	691174	10.32	ppb(v)	98
38) Vinyl Acetate	7.259	43	607530	10.13	ppb(v)	100
39) 1,1-Dichloroethane	7.112	63	410022	10.29	ppb(v)	100
40) 2-Butanone	7.510	72	118531	10.12	ppb(v)	97
41) Hexane	8.207	57	350086	10.16	ppb(v)	99
42) cis-1,2-Dichloroethene	7.993	61	325344	10.27	ppb(v)	99
43) Di-isopropyl Ether	8.195	87	225125	10.26	ppb(v)	98
44) Ethyl Acetate	8.232	61	73486	10.12	ppb(v)	85
45) Methyl Acrylate	8.220	55	428000	10.11	ppb(v)	99
46) Chloroform	8.317	83	534939	10.42	ppb(v)	99
47) 2,4-Dimethylpentane	9.186	57	410352	10.20	ppb(v)	99
48) Tetrahydrofuran	8.740	72	110266	10.15	ppb(v)	99
49) 1,1,1-Trichloroethane	9.412	97	555229	10.43	ppb(v)	98
50) 1,2-Dichloroethane	9.131	62	343416	10.33	ppb(v)	99
51) Benzene	9.945	78	759230	10.28	ppb(v)	100
52) Carbon Tetrachloride	10.116	117	579079	10.60	ppb(v)	100
53) Cyclohexane	10.251	56	354680	10.20	ppb(v)	100
54) 2,3-Dimethylpentane	10.544	71	166726	10.17	ppb(v)	99
56) 2,2,4-Trimethylpentane	11.236	57	1144908	10.30	ppb(v)	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08754.D
 Acq On : 22 Oct 2018 5:14 pm
 Operator : paulcw
 Sample : icc335-10
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:23:06 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Mon Oct 22 10:32:40 2018
 Response via : Initial Calibration

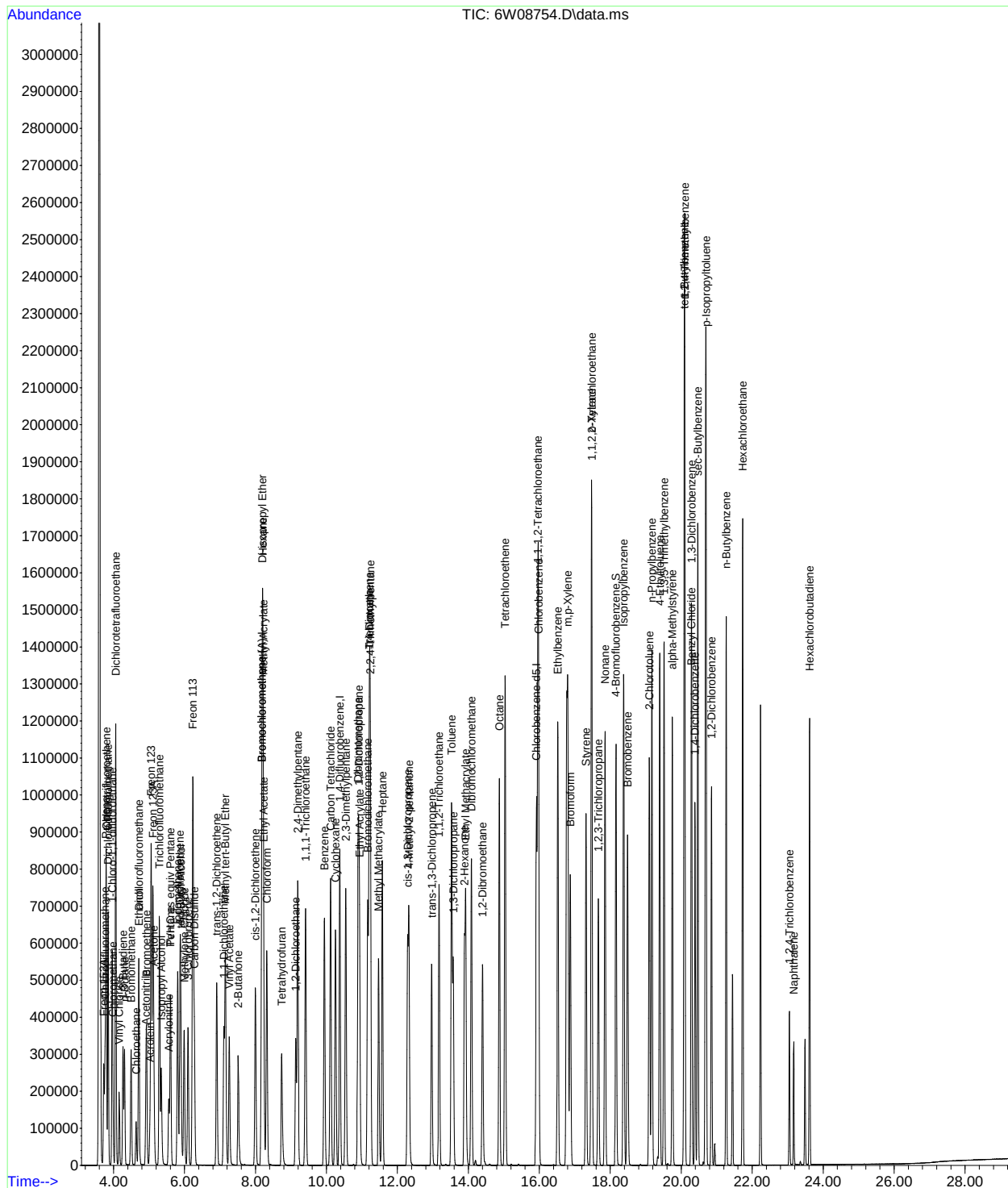
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.578	71	262876	10.22	ppb(v)	99
58) Trichloroethene	11.205	95	364729	10.42	ppb(v)	99
59) 1,2-Dichloropropane	10.917	63	269258	10.28	ppb(v)	98
60) Dibromomethane	10.893	174	383907	10.64	ppb(v)	96
61) Ethyl Acrylate	10.936	55	543387	10.10	ppb(v)	100
62) Methyl Methacrylate	11.468	69	276491	10.08	ppb(v)	100
63) 1,4-Dioxane	11.205	88	179942	9.97	ppb(v)	96
64) Bromodichloromethane	11.162	83	583830	10.48	ppb(v)	99
65) cis-1,3-Dichloropropene	12.288	75	438224	10.23	ppb(v)	99
66) 4-Methyl-2-pentanone	12.325	58	219200	10.05	ppb(v)	98
67) trans-1,3-Dichloropropene	12.967	75	386591	10.05	ppb(v)	99
68) Toluene	13.524	91	956215	10.43	ppb(v)	99
69) 1,1,2-Trichloroethane	13.175	97	321270	10.41	ppb(v)	98
70) 1,3-Dichloropropane	13.573	76	429935	10.30	ppb(v)	100
71) 2-Hexanone	13.891	58	293512	10.00	ppb(v)	100
72) Ethyl Methacrylate	13.921	69	465924	10.19	ppb(v)	100
73) Dibromochloromethane	14.086	129	605698	10.75	ppb(v)	100
74) Tetrachloroethene	15.035	166	545144	10.77	ppb(v)	99
75) 1,2-Dibromoethane	14.398	107	501712	10.40	ppb(v)	99
76) Octane	14.876	43	530486	10.26	ppb(v)	99
77) 1,1,1,2-Tetrachloroethane	15.958	131	414243	10.71	ppb(v)	97
79) Chlorobenzene	15.983	112	752307	11.04	ppb(v)	98
80) Ethylbenzene	16.521	91	1192014	10.91	ppb(v)	99
81) m,p-Xylene	16.797	91	1846274	21.89	ppb(v)	100
82) Styrene	17.317	104	670852	10.67	ppb(v)	100
83) Nonane	17.855	43	526969	10.86	ppb(v)	99
84) o-Xylene	17.470	91	922383	11.06	ppb(v)	99
85) Bromoform	16.870	173	523183	11.35	ppb(v)	100
86) 1,1,2,2-Tetrachloroethane	17.476	83	523228	11.00	ppb(v)	99
87) 1,2,3-Trichloropropane	17.665	75	409946	10.81	ppb(v)	100
88) Isopropylbenzene	18.375	105	1278312	11.08	ppb(v)	100
89) Bromobenzene	18.485	156	391547	10.84	ppb(v)	99
90) 2-Chlorotoluene	19.097	126	300636	11.05	ppb(v)	98
91) n-Propylbenzene	19.170	120	342534	11.09	ppb(v)	98
93) 4-Ethyltoluene	19.397	105	1147539	11.13	ppb(v)	99
94) 1,3,5-Trimethylbenzene	19.519	105	986325	11.14	ppb(v)	100
95) alpha-Methylstyrene	19.745	118	460574	11.03	ppb(v)	100
96) tert-Butylbenzene	20.088	134	241959	11.52	ppb(v)	99
97) 1,2,4-Trimethylbenzene	20.100	105	945807	11.44	ppb(v)	96
98) 1,3-Dichlorobenzene	20.290	146	545349	11.17	ppb(v)	99
99) Benzyl Chloride	20.278	91	488723	10.91	ppb(v)	99
100) 1,4-Dichlorobenzene	20.388	146	495744	10.95	ppb(v)	99
101) sec-Butylbenzene	20.467	134	289538	11.39	ppb(v)	96
102) p-Isopropyltoluene	20.700	134	301112	11.67	ppb(v)	98
103) 1,2-Dichlorobenzene	20.853	146	493717	11.30	ppb(v)	99
104) n-Butylbenzene	21.269	134	246000	11.47	ppb(v)	99
105) Hexachloroethane	21.734	201	308799	12.01	ppb(v)	96
106) 1,2,4-Trichlorobenzene	23.049	180	137000	10.50	ppb(v)	99
107) Naphthalene	23.171	128	265773	10.39	ppb(v)	99
108) Hexachlorobutadiene	23.618	225	239846	11.56	ppb(v)	99
110) TVHC as equiv Pentane	5.601	TIC	1003809	10.12	ppb(v)	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W08754.D
Acq On : 22 Oct 2018 5:14 pm
Operator : paulcw
Sample : icc335-10
Misc : MS30116,V6W335,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:23:06 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Mon Oct 22 10:32:40 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08755.D
 Acq On : 22 Oct 2018 6:07 pm
 Operator : paulcw
 Sample : ic335-20
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:23:49 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:23:18 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.177	130	255343	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.379	114	913274	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.922	82	451610	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.177	130	255343	10.00	ppb(v)	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.161	95	548513	9.82	ppb(v)	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	98.20%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	257637	19.53	ppb(v)	99
4) Chlorodifluoromethane	3.760	67	130529	19.78	ppb(v)	100
5) Propene	3.784	41	283519	19.49	ppb(v)	99
6) Chlorotrifluoroethene	3.796	116	710056	19.39	ppb(v)	100
7) Dichlorodifluoromethane	3.845	85	1256424	19.42	ppb(v)	99
8) 1-Chloro-1,1-difluoroethane	3.962	65	980335	19.33	ppb(v)	100
9) Chloromethane	3.980	50	357184	19.24	ppb(v)	100
10) Dichlorotetrafluoroethane	4.059	85	1263184	19.01	ppb(v)	99
11) Vinyl Chloride	4.157	62	438208	19.26	ppb(v)	100
12) 1,3-Butadiene	4.267	54	311656	19.39	ppb(v)	99
13) n-Butane	4.310	58	81306	19.37	ppb(v)	97
14) Bromomethane	4.494	94	456300	19.12	ppb(v)	100
15) Acrolein	5.026	56	188737	19.79	ppb(v)	99
16) Chloroethane	4.634	64	231536	19.41	ppb(v)	99
17) Dichlorofluoromethane	4.708	67	1068216	19.22	ppb(v)	100
18) Acetonitrile	4.916	41	333433	19.55	ppb(v)	100
19) Freon 123	5.063	83	1108567	19.30	ppb(v)	100
20) Freon 123A	5.106	117	694271	19.28	ppb(v)	97
21) Bromoethene	4.928	106	485980	19.26	ppb(v)	100
22) Trichlorofluoromethane	5.295	101	1268466	19.40	ppb(v)	100
23) Acetone	5.130	58	198335	19.65	ppb(v)	99
24) Pentane	5.607	57	113828	19.83	ppb(v)	97
26) Iodomethane	5.809	142	1408033	19.24	ppb(v)	98
27) Isopropyl Alcohol	5.344	45	768779	19.70	ppb(v)	99
28) 1,1-Dichloroethene	5.876	61	704707	19.56	ppb(v)	98
29) Freon 113	6.231	101	1008073	19.39	ppb(v)	99
30) Methylene Chloride	5.993	84	417387	19.55	ppb(v)	100
31) Carbon Disulfide	6.274	76	1267857	19.44	ppb(v)	99
32) Ethanol	4.720	45	167499	19.63	ppb(v)	98
33) Acrylonitrile	5.558	53	347651	19.71	ppb(v)	99
34) 3-Chloropropene	6.103	76	229755	19.83	ppb(v)	97
35) trans-1,2-Dichloroethene	6.904	61	653795	19.60	ppb(v)	99
36) tert-Butyl Alcohol	5.895	59	964638	19.95	ppb(v)	99
37) Methyl tert-Butyl Ether	7.155	73	1372281	19.63	ppb(v)	99
38) Vinyl Acetate	7.259	43	1238595	20.15	ppb(v)	100
39) 1,1-Dichloroethane	7.112	63	808671	19.50	ppb(v)	100
40) 2-Butanone	7.510	72	237988	19.85	ppb(v)	99
41) Hexane	8.207	57	697366	19.69	ppb(v)	99
42) cis-1,2-Dichloroethene	7.999	61	643729	19.56	ppb(v)	99
43) Di-isopropyl Ether	8.195	87	447777	19.66	ppb(v)	99
44) Ethyl Acetate	8.232	61	147105	19.79	ppb(v)	95
45) Methyl Acrylate	8.219	55	854039	19.73	ppb(v)	99
46) Chloroform	8.323	83	1054738	19.49	ppb(v)	99
47) 2,4-Dimethylpentane	9.192	57	815897	19.65	ppb(v)	99
48) Tetrahydrofuran	8.733	72	222965	19.99	ppb(v)	99
49) 1,1,1-Trichloroethane	9.412	97	1107102	19.71	ppb(v)	99
50) 1,2-Dichloroethane	9.137	62	678037	19.52	ppb(v)	99
51) Benzene	9.945	78	1503728	19.58	ppb(v)	100
52) Carbon Tetrachloride	10.116	117	1163661	19.86	ppb(v)	99
53) Cyclohexane	10.251	56	701669	19.56	ppb(v)	99
54) 2,3-Dimethylpentane	10.544	71	333066	19.75	ppb(v)	100
56) 2,2,4-Trimethylpentane	11.242	57	2259017	19.71	ppb(v)	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08755.D
 Acq On : 22 Oct 2018 6:07 pm
 Operator : paulcw
 Sample : ic335-20
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:23:49 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:23:18 2018
 Response via : Initial Calibration

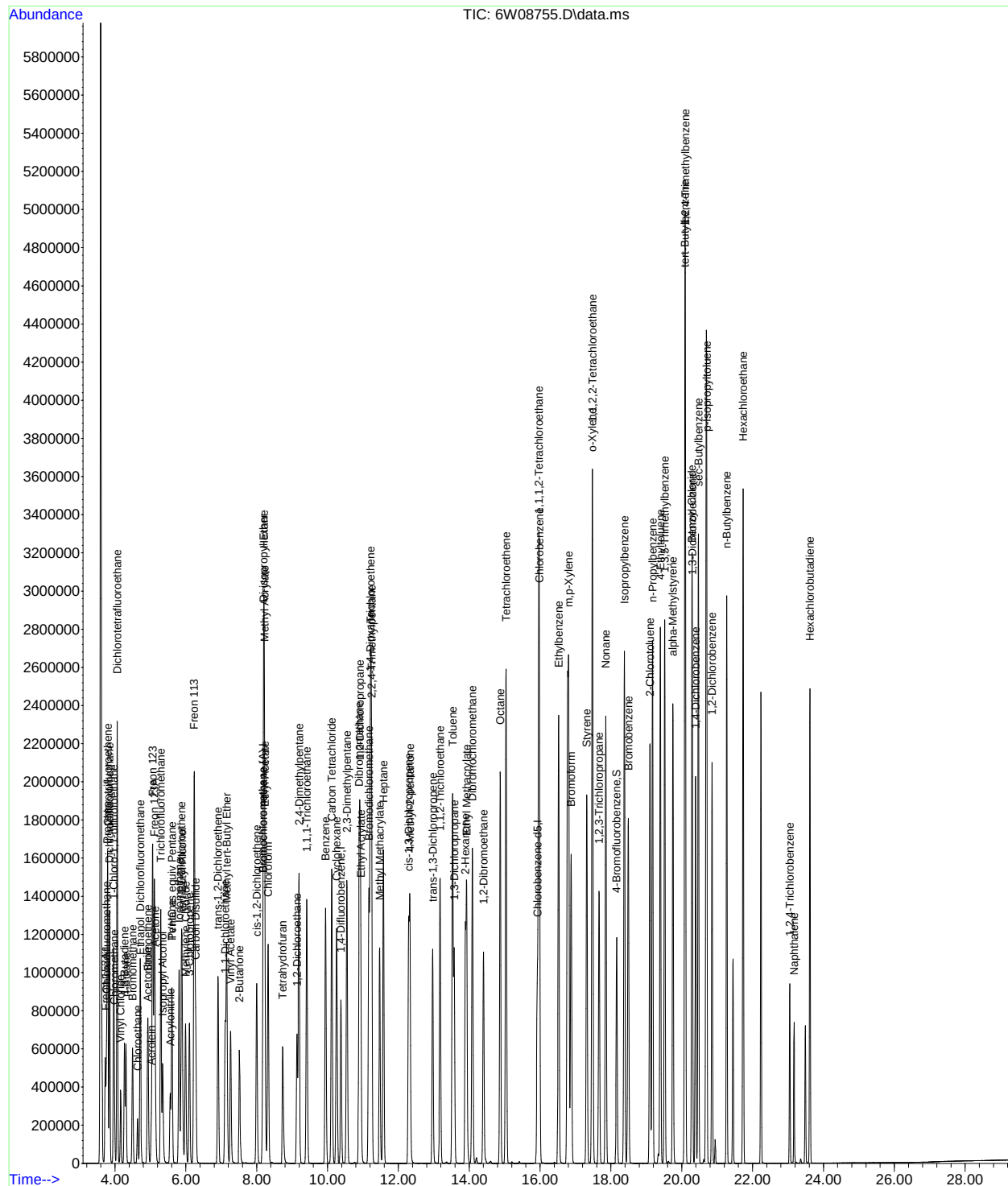
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.578	71	524161	19.92	ppb(v)	99
58) Trichloroethene	11.211	95	725144	19.86	ppb(v)	100
59) 1,2-Dichloropropane	10.917	63	534303	19.82	ppb(v)	99
60) Dibromomethane	10.893	174	754258	19.62	ppb(v)	97
61) Ethyl Acrylate	10.942	55	1107741	20.36	ppb(v)	100
62) Methyl Methacrylate	11.474	69	561611	20.29	ppb(v)	98
63) 1,4-Dioxane	11.205	88	364555	20.24	ppb(v)	94
64) Bromodichloromethane	11.168	83	1171618	20.04	ppb(v)	99
65) cis-1,3-Dichloropropene	12.288	75	886451	20.20	ppb(v)	100
66) 4-Methyl-2-pentanone	12.324	58	445210	20.29	ppb(v)	99
67) trans-1,3-Dichloropropene	12.967	75	791874	20.46	ppb(v)	99
68) Toluene	13.530	91	1890932	19.75	ppb(v)	100
69) 1,1,2-Trichloroethane	13.181	97	637533	19.82	ppb(v)	99
70) 1,3-Dichloropropane	13.572	76	854630	19.86	ppb(v)	100
71) 2-Hexanone	13.891	58	598632	20.37	ppb(v)	99
72) Ethyl Methacrylate	13.927	69	949648	20.36	ppb(v)	99
73) Dibromochloromethane	14.086	129	1219679	20.11	ppb(v)	99
74) Tetrachloroethene	15.041	166	1061572	19.45	ppb(v)	100
75) 1,2-Dibromoethane	14.404	107	1003498	19.98	ppb(v)	99
76) Octane	14.876	43	1052774	19.82	ppb(v)	99
77) 1,1,1,2-Tetrachloroethane	15.964	131	823840	19.86	ppb(v)	97
79) Chlorobenzene	15.983	112	1482081	18.40	ppb(v)	98
80) Ethylbenzene	16.527	91	2370445	18.58	ppb(v)	99
81) m,p-Xylene	16.803	91	3663482	37.07	ppb(v)	100
82) Styrene	17.317	104	1370262	19.08	ppb(v)	100
83) Nonane	17.855	43	1047698	18.57	ppb(v)	99
84) o-Xylene	17.469	91	1819192	18.42	ppb(v)	98
85) Bromoform	16.876	173	1088871	19.44	ppb(v)	100
86) 1,1,2,2-Tetrachloroethane	17.476	83	1037291	18.52	ppb(v)	99
87) 1,2,3-Trichloropropane	17.665	75	824549	18.79	ppb(v)	99
88) Isopropylbenzene	18.381	105	2515673	18.38	ppb(v)	99
89) Bromobenzene	18.491	156	797767	19.03	ppb(v)	99
90) 2-Chlorotoluene	19.103	126	600819	18.67	ppb(v)	100
91) n-Propylbenzene	19.176	120	684171	18.66	ppb(v)	96
93) 4-Ethyltoluene	19.397	105	2288403	18.63	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.519	105	1973850	18.69	ppb(v)	100
95) alpha-Methylstyrene	19.745	118	936884	19.00	ppb(v)	100
96) tert-Butylbenzene	20.088	134	469777	18.14	ppb(v)	97
97) 1,2,4-Trimethylbenzene	20.100	105	1856603	18.34	ppb(v)	91
98) 1,3-Dichlorobenzene	20.296	146	1109676	19.01	ppb(v)	99
99) Benzyl Chloride	20.284	91	1087178	20.78	ppb(v)	99
100) 1,4-Dichlorobenzene	20.394	146	1032244	19.45	ppb(v)	99
101) sec-Butylbenzene	20.473	134	571288	18.43	ppb(v)	91
102) p-Isopropyltoluene	20.706	134	583172	18.09	ppb(v)	94
103) 1,2-Dichlorobenzene	20.853	146	996142	18.85	ppb(v)	98
104) n-Butylbenzene	21.269	134	493825	18.75	ppb(v)	98
105) Hexachloroethane	21.733	201	639854	19.36	ppb(v)	98
106) 1,2,4-Trichlorobenzene	23.049	180	299892	20.45	ppb(v)	99
107) Naphthalene	23.171	128	573375	20.15	ppb(v)	99
108) Hexachlorobutadiene	23.618	225	483312	18.82	ppb(v)	100
110) TVHC as equiv Pentane	5.607	TIC	2012804	19.82	ppb(v)	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W08755.D
Acq On : 22 Oct 2018 6:07 pm
Operator : paulcw
Sample : ic335-20
Misc : MS30116,V6W335,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:23:49 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:23:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08756.D
 Acq On : 22 Oct 2018 7:04 pm
 Operator : paulcw
 Sample : ic335-40
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:25:19 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:24:53 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.183	130	260159	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.385	114	940320	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.922	82	507385	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.183	130	260159	10.00	ppb(v)	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.167 95 569375 9.16 ppb(v) 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 91.60%

Target Compounds					Qvalue
3) Freon 152A	3.729	65	518794	39.06	ppb(v) 99
4) Chlorodifluoromethane	3.766	67	258842	38.71	ppb(v) 100
5) Propene	3.790	41	571271	39.05	ppb(v) 100
6) Chlorotrifluoroethene	3.797	116	1410227	38.38	ppb(v) 99
7) Dichlorodifluoromethane	3.852	85	2457727	37.83	ppb(v) 99
8) 1-Chloro-1,1-difluoroethane	3.962	65	1896724	37.34	ppb(v) 100
9) Chloromethane	3.986	50	710447	38.29	ppb(v) 100
10) Dichlorotetrafluoroethane	4.060	85	2387407	36.16	ppb(v) 95
11) Vinyl Chloride	4.164	62	870267	38.25	ppb(v) 100
12) 1,3-Butadiene	4.274	54	629633	39.04	ppb(v) 99
13) n-Butane	4.317	58	164486	39.08	ppb(v) 97
14) Bromomethane	4.500	94	893177	37.56	ppb(v) 99
15) Acrolein	5.026	56	380850	39.40	ppb(v) 99
16) Chloroethane	4.635	64	462036	38.58	ppb(v) 99
17) Dichlorofluoromethane	4.714	67	2088052	37.61	ppb(v) 100
18) Acetonitrile	4.916	41	679102	39.52	ppb(v) 99
19) Freon 123	5.063	83	2168639	37.72	ppb(v) 99
20) Freon 123A	5.112	117	1357654	37.68	ppb(v) 99
21) Bromoethene	4.934	106	956762	37.92	ppb(v) 99
22) Trichlorofluoromethane	5.295	101	2526316	38.50	ppb(v) 100
23) Acetone	5.136	58	396970	38.94	ppb(v) 97
24) Pentane	5.607	57	231961	39.83	ppb(v) 97
26) Iodomethane	5.809	142	2758069	37.70	ppb(v) 97
27) Isopropyl Alcohol	5.351	45	1550612	39.29	ppb(v) 99
28) 1,1-Dichloroethene	5.877	61	1412273	38.90	ppb(v) 100
29) Freon 113	6.238	101	2009443	38.52	ppb(v) 99
30) Methylene Chloride	5.993	84	842784	39.19	ppb(v) 99
31) Carbon Disulfide	6.274	76	2538976	38.75	ppb(v) 100
32) Ethanol	4.726	45	339173	39.38	ppb(v) 99
33) Acrylonitrile	5.559	53	706800	39.62	ppb(v) 99
34) 3-Chloropropene	6.103	76	464392	39.50	ppb(v) 97
35) trans-1,2-Dichloroethene	6.911	61	1323040	39.32	ppb(v) 99
36) tert-Butyl Alcohol	5.901	59	1958252	39.80	ppb(v) 99
37) Methyl tert-Butyl Ether	7.155	73	2778272	39.37	ppb(v) 99
38) Vinyl Acetate	7.265	43	2537251	40.37	ppb(v) 99
39) 1,1-Dichloroethane	7.119	63	1630612	39.08	ppb(v) 99
40) 2-Butanone	7.516	72	489584	40.23	ppb(v) 97
41) Hexane	8.207	57	1401815	39.15	ppb(v) 96
42) cis-1,2-Dichloroethene	7.999	61	1313305	39.60	ppb(v) 99
43) Di-isopropyl Ether	8.201	87	897564	39.01	ppb(v) 99
44) Ethyl Acetate	8.238	61	299459	39.75	ppb(v) 93
45) Methyl Acrylate	8.226	55	1732563	39.55	ppb(v) 99
46) Chloroform	8.330	83	2115754	38.87	ppb(v) 99
47) 2,4-Dimethylpentane	9.192	57	1651006	39.38	ppb(v) 99
48) Tetrahydrofuran	8.734	72	455429	40.08	ppb(v) 100
49) 1,1,1-Trichloroethane	9.419	97	2246928	39.55	ppb(v) 99
50) 1,2-Dichloroethane	9.137	62	1380853	39.49	ppb(v) 99
51) Benzene	9.951	78	3014270	38.93	ppb(v) 100
52) Carbon Tetrachloride	10.122	117	2358197	39.65	ppb(v) 99
53) Cyclohexane	10.257	56	1432791	39.63	ppb(v) 99
54) 2,3-Dimethylpentane	10.551	71	673866	39.46	ppb(v) 99
56) 2,2,4-Trimethylpentane	11.242	57	4421458	37.74	ppb(v) 99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08756.D
 Acq On : 22 Oct 2018 7:04 pm
 Operator : paulcw
 Sample : ic335-40
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 23 09:25:19 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:24:53 2018
 Response via : Initial Calibration

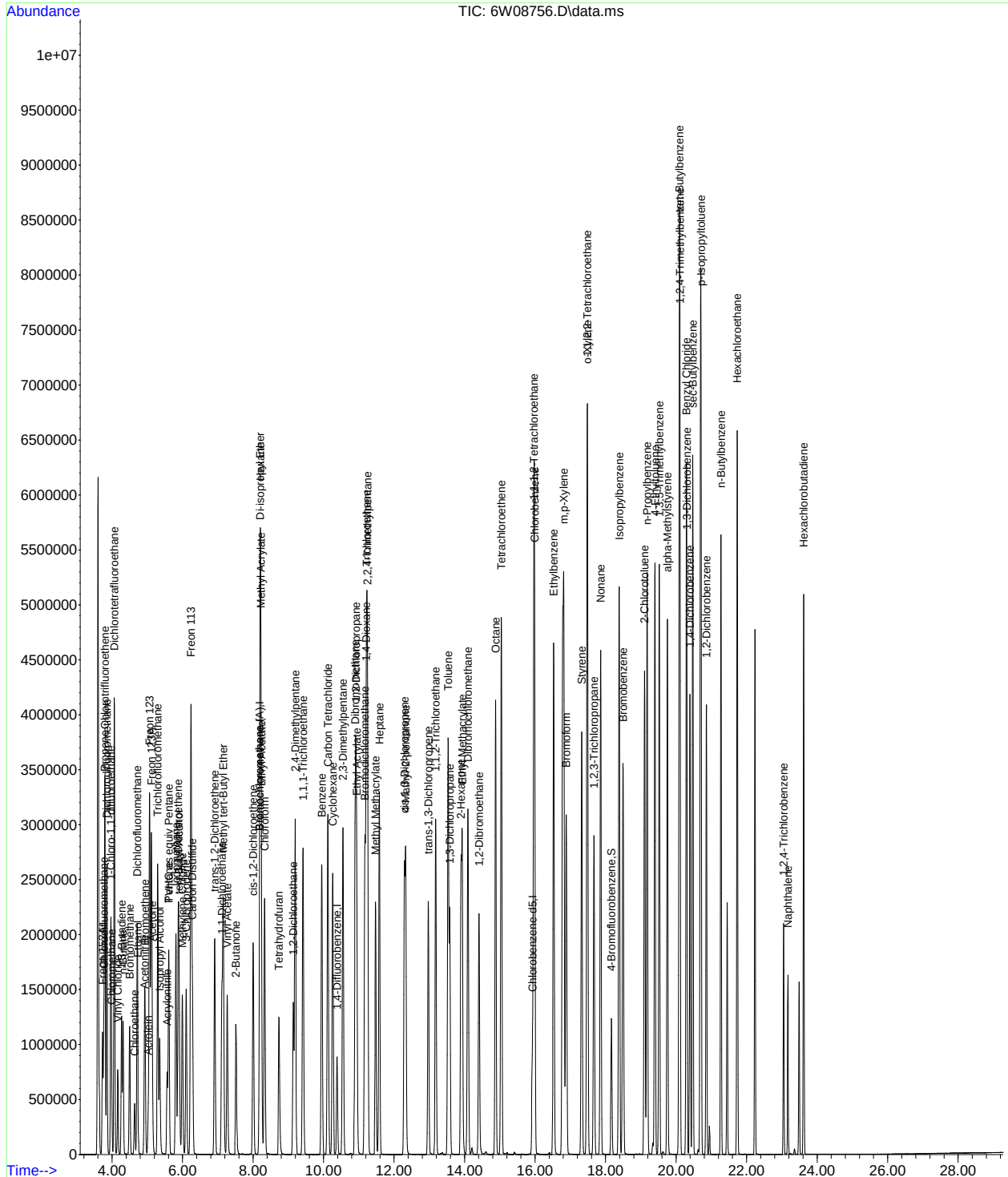
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.584	71	1049573	38.81	ppb(v	99
58) Trichloroethene	11.217	95	1434120	38.28	ppb(v	98
59) 1,2-Dichloropropane	10.924	63	1058796	38.32	ppb(v	100
60) Dibromomethane	10.899	174	1477805	37.70	ppb(v	95
61) Ethyl Acrylate	10.942	55	2232713	39.50	ppb(v	100
62) Methyl Methacrylate	11.474	69	1145803	39.91	ppb(v	99
63) 1,4-Dioxane	11.205	88	728339	39.04	ppb(v#	89
64) Bromodichloromethane	11.168	83	2364202	39.24	ppb(v	100
65) cis-1,3-Dichloropropene	12.294	75	1815038	39.98	ppb(v	100
66) 4-Methyl-2-pentanone	12.331	58	903944	39.72	ppb(v	100
67) trans-1,3-Dichloropropene	12.967	75	1641217	40.72	ppb(v	99
68) Toluene	13.530	91	3723876	38.02	ppb(v	99
69) 1,1,2-Trichloroethane	13.181	97	1285654	39.00	ppb(v	99
70) 1,3-Dichloropropane	13.579	76	1705598	38.63	ppb(v	100
71) 2-Hexanone	13.897	58	1236749	40.50	ppb(v	100
72) Ethyl Methacrylate	13.934	69	1948395	40.21	ppb(v	99
73) Dibromochloromethane	14.093	129	2404427	38.40	ppb(v	99
74) Tetrachloroethene	15.041	166	2038642	36.78	ppb(v	98
75) 1,2-Dibromoethane	14.411	107	2002128	38.73	ppb(v	99
76) Octane	14.882	43	2122513	38.99	ppb(v	99
77) 1,1,1,2-Tetrachloroethane	15.965	131	1585439	37.26	ppb(v	98
79) Chlorobenzene	15.989	112	2853684	32.85	ppb(v	95
80) Ethylbenzene	16.528	91	4684604	33.88	ppb(v	99
81) m,p-Xylene	16.809	91	7235915	67.65	ppb(v	99
82) Styrene	17.323	104	2744291	34.81	ppb(v	98
83) Nonane	17.861	43	2109138	34.51	ppb(v	99
84) o-Xylene	17.476	91	3545925	33.27	ppb(v	98
85) Bromoform	16.882	173	2180043	35.14	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.482	83	2029698	33.49	ppb(v	100
87) 1,2,3-Trichloropropane	17.672	75	1660129	34.72	ppb(v	99
88) Isopropylbenzene	18.387	105	4892207	33.16	ppb(v	99
89) Bromobenzene	18.497	156	1581888	34.42	ppb(v	98
90) 2-Chlorotoluene	19.103	126	1188153	33.99	ppb(v	98
91) n-Propylbenzene	19.177	120	1350556	33.92	ppb(v	95
93) 4-Ethyltoluene	19.403	105	4470984	33.54	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.525	105	3861008	33.65	ppb(v	99
95) alpha-Methylstyrene	19.752	118	1862951	34.49	ppb(v	98
96) tert-Butylbenzene	20.094	134	868008	31.28	ppb(v	93
97) 1,2,4-Trimethylbenzene	20.106	105	3490047	32.01	ppb(v	96
98) 1,3-Dichlorobenzene	20.302	146	2157216	33.73	ppb(v	98
99) Benzyl Chloride	20.290	91	2336945	39.00	ppb(v	100
100) 1,4-Dichlorobenzene	20.394	146	2068801	35.18	ppb(v	98
101) sec-Butylbenzene	20.473	134	1100737	32.90	ppb(v	90
102) p-Isopropyltoluene	20.706	134	1077434	31.24	ppb(v	94
103) 1,2-Dichlorobenzene	20.859	146	1970239	34.16	ppb(v	98
104) n-Butylbenzene	21.275	134	982135	34.26	ppb(v	97
105) Hexachloroethane	21.734	201	1257873	34.42	ppb(v	93
106) 1,2,4-Trichlorobenzene	23.049	180	669782	40.20	ppb(v	98
107) Naphthalene	23.171	128	1252063	39.02	ppb(v	99
108) Hexachlorobutadiene	23.618	225	976395	34.87	ppb(v	100
110) TVHC as equiv Pentane	5.607	TIC	3932403	38.18	ppb(v	100

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

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\  
Data File : 6W08756.D  
Acq On : 22 Oct 2018 7:04 pm  
Operator : paulcw  
Sample : ic335-40  
Misc : MS30116,V6W335,,,,,1  
ALS Vial : 4 Sample Multiplier: 1
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Quant Time: Oct 23 09:25:19 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:24:53 2018
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\
 Data File : 6W08758.D
 Acq On : 22 Oct 2018 8:45 pm
 Operator : paulcw
 Sample : icv335-10
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:33:37 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.177	130	259004	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.379	114	931380	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.922	82	437945	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.177	130	259004	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.161	95	537827	10.06	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.60%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	133447	10.00	ppb(v	97
4) Chlorodifluoromethane	3.766	67	66775	10.27	ppb(v	99
5) Propene	3.790	41	150905	9.98	ppb(v	99
6) Chlorotrifluoroethene	3.796	116	369606	9.61	ppb(v	100
7) Dichlorodifluoromethane	3.852	85	663523	9.74	ppb(v	99
8) 1-Chloro-1,1-difluoro...	3.962	65	478982	8.93	ppb(v	100
9) Chloromethane	3.986	50	188833	9.79	ppb(v	100
10) Dichlorotetrafluoroethane	4.059	85	677424	9.53	ppb(v	97
11) Vinyl Chloride	4.164	62	232307	9.91	ppb(v	99
12) 1,3-Butadiene	4.268	54	165076	10.08	ppb(v	99
13) n-Butane	4.310	58	43174	10.80	ppb(v	97
14) Bromomethane	4.494	94	241014	9.52	ppb(v	99
15) Acrolein	5.026	56	92159	9.65	ppb(v#	94
16) Chloroethane	4.635	64	121866	10.11	ppb(v	100
17) Dichlorofluoromethane	4.714	67	543587	9.29	ppb(v	100
18) Acetonitrile	4.916	41	172717	9.80	ppb(v	100
19) Freon 123	5.063	83	583196	9.64	ppb(v	99
20) Freon 123A	5.112	117	415347	11.07	ppb(v	100
21) Bromoethene	4.934	106	244792	9.49	ppb(v	100
22) Trichlorofluoromethane	5.295	101	670726	9.62	ppb(v	100
23) Acetone	5.136	58	96005	8.89	ppb(v	98
24) Pentane	5.607	57	57157	10.38	ppb(v	96
26) Iodomethane	5.809	142	730986	9.58	ppb(v	99
27) Isopropyl Alcohol	5.344	45	405862m	10.16	ppb(v	
28) 1,1-Dichloroethene	5.876	61	382174	10.28	ppb(v	99
29) Freon 113	6.237	101	541771	9.92	ppb(v	100
30) Methylene Chloride	5.993	84	221404	9.11	ppb(v	99
31) Carbon Disulfide	6.274	76	530730	7.81	ppb(v	100
32) Ethanol	4.720	45	84653	9.29	ppb(v	98
33) Acrylonitrile	5.558	53	177051	10.34	ppb(v	99
34) 3-Chloropropene	6.103	76	115216	10.29	ppb(v	98
35) trans-1,2-Dichloroethene	6.904	61	315476	9.36	ppb(v	99
36) tert-Butyl Alcohol	5.895	59	420753	9.07	ppb(v	100
37) Methyl tert-Butyl Ether	7.155	73	698258	9.87	ppb(v	100
38) Vinyl Acetate	7.265	43	638276	11.01	ppb(v	100
39) 1,1-Dichloroethane	7.112	63	422876	9.67	ppb(v	100
40) 2-Butanone	7.510	72	125557	11.74	ppb(v	98
41) Hexane	8.207	57	346015	9.78	ppb(v	96
42) cis-1,2-Dichloroethene	7.999	61	331590	9.98	ppb(v	99
43) Di-isopropyl Ether	8.195	87	232508	10.64	ppb(v	97
44) Ethyl Acetate	8.232	61	77219	11.09	ppb(v	93
45) Methyl Acrylate	8.220	55	451354	11.27	ppb(v	99
46) Chloroform	8.317	83	550959	9.60	ppb(v	100
47) 2,4-Dimethylpentane	9.192	57	431439	10.41	ppb(v	99
48) Tetrahydrofuran	8.740	72	122342	11.81	ppb(v	100
49) 1,1,1-Trichloroethane	9.412	97	576772	9.96	ppb(v	99
50) 1,2-Dichloroethane	9.131	62	354414	10.06	ppb(v	99
51) Benzene	9.945	78	776880	9.87	ppb(v	100
52) Carbon Tetrachloride	10.116	117	597587	10.14	ppb(v	100
53) Cyclohexane	10.251	56	361671	9.94	ppb(v	99
54) 2,3-Dimethylpentane	10.544	71	173290	10.54	ppb(v	100
56) 2,2,4-Trimethylpentane	11.236	57	1216832	10.41	ppb(v	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W08758.D
 Acq On : 22 Oct 2018 8:45 pm
 Operator : paulcw
 Sample : icv335-10
 Misc : MS30116,V6W335,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

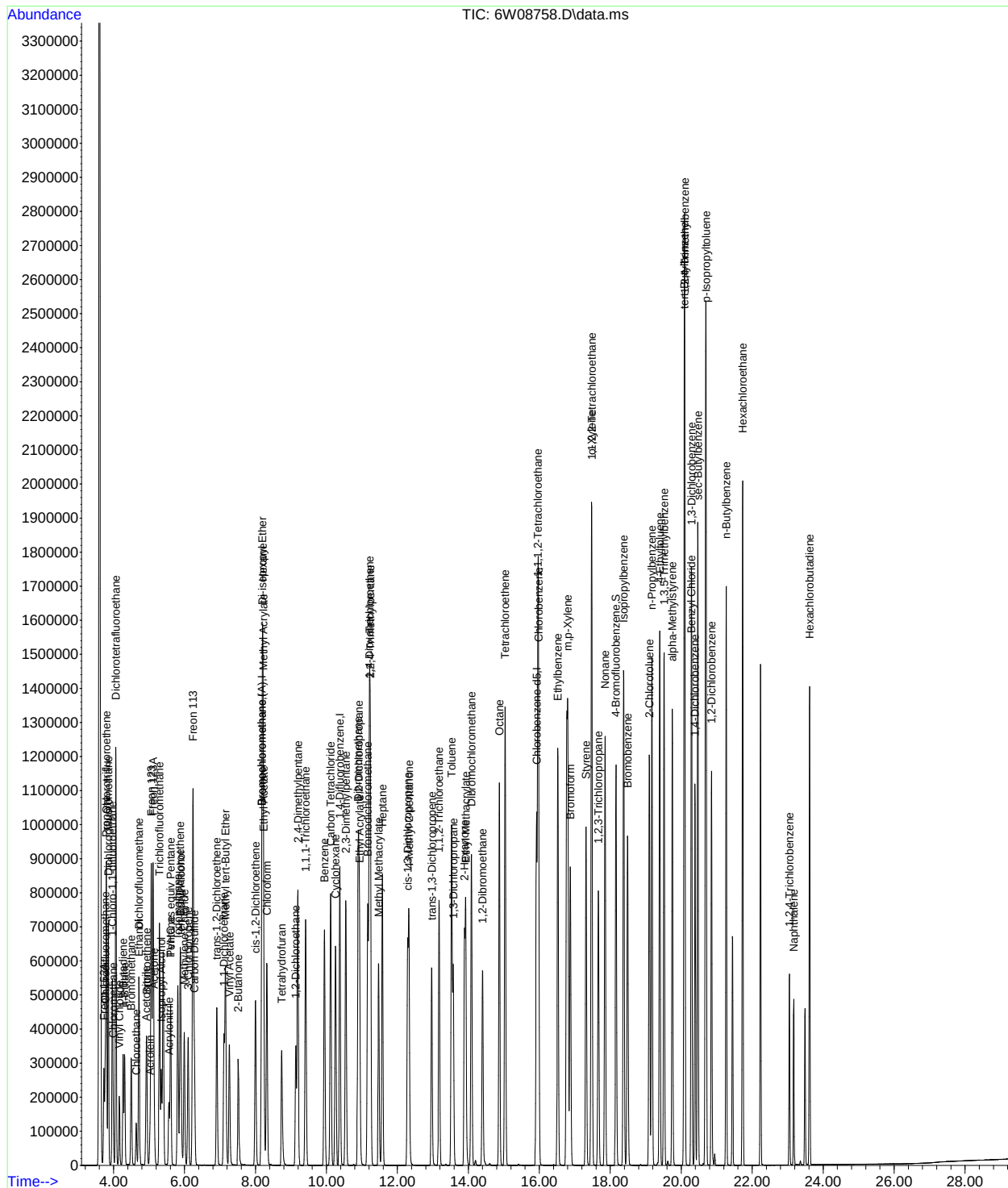
Quant Time: Oct 23 17:33:37 2018
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.578	71	273044	10.54	ppb(v)	99
58) Trichloroethene	11.211	95	373668	9.93	ppb(v)	98
59) 1,2-Dichloropropane	10.917	63	274004	9.98	ppb(v)	100
60) Dibromomethane	10.893	174	397496	9.72	ppb(v)	97
61) Ethyl Acrylate	10.936	55	554070	11.22	ppb(v)	100
62) Methyl Methacrylate	11.474	69	294726	11.37	ppb(v)	99
63) 1,4-Dioxane	11.205	88	199730	11.48	ppb(v)	98
64) Bromodichloromethane	11.162	83	626211	10.73	ppb(v)	100
65) cis-1,3-Dichloropropene	12.288	75	460515	10.99	ppb(v)	99
66) 4-Methyl-2-pentanone	12.325	58	239851	11.47	ppb(v)	99
67) trans-1,3-Dichloropropene	12.967	75	415552	11.90	ppb(v)	99
68) Toluene	13.524	91	978810	9.99	ppb(v)	99
69) 1,1,2-Trichloroethane	13.175	97	330366	10.23	ppb(v)	98
70) 1,3-Dichloropropane	13.573	76	449333	10.35	ppb(v)	100
71) 2-Hexanone	13.891	58	327210	12.46	ppb(v)	99
72) Ethyl Methacrylate	13.927	69	491278	11.40	ppb(v)	100
73) Dibromochloromethane	14.086	129	664701	11.60	ppb(v)	100
74) Tetrachloroethene	15.035	166	549823	9.32	ppb(v)	100
75) 1,2-Dibromoethane	14.398	107	528086	10.90	ppb(v)	99
76) Octane	14.876	43	568598	10.67	ppb(v)	99
77) 1,1,1,2-Tetrachloroethane	15.958	131	446116	10.94	ppb(v)	100
79) Chlorobenzene	15.983	112	777097	9.57	ppb(v)	99
80) Ethylbenzene	16.521	91	1232861	9.71	ppb(v)	99
81) m,p-Xylene	16.797	91	1901070	19.13	ppb(v)	99
82) Styrene	17.317	104	697089	10.87	ppb(v)	100
83) Nonane	17.855	43	560870	10.10	ppb(v)	99
84) o-Xylene	17.470	91	949017	9.64	ppb(v)	99
85) Bromoform	16.870	173	583512	12.10	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.476	83	576569	10.26	ppb(v)	100
87) 1,2,3-Trichloropropane	17.665	75	460499	10.52	ppb(v)	99
88) Isopropylbenzene	18.375	105	1386798	9.92	ppb(v)	100
89) Bromobenzene	18.485	156	423019	10.49	ppb(v)	99
90) 2-Chlorotoluene	19.103	126	328906	10.52	ppb(v)	97
91) n-Propylbenzene	19.170	120	368672	10.60	ppb(v)	99
93) 4-Ethyltoluene	19.397	105	1304465	10.94	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.519	105	1057906	9.92	ppb(v)	100
95) alpha-Methylstyrene	19.745	118	508209	11.56	ppb(v)	99
96) tert-Butylbenzene	20.088	134	263029	10.11	ppb(v)	99
97) 1,2,4-Trimethylbenzene	20.100	105	1023437	10.39	ppb(v)	99
98) 1,3-Dichlorobenzene	20.290	146	611323	11.10	ppb(v)	99
99) Benzyl Chloride	20.278	91	613671	15.76	ppb(v)	100
100) 1,4-Dichlorobenzene	20.388	146	567186	11.69	ppb(v)	100
101) sec-Butylbenzene	20.473	134	317476	10.26	ppb(v)	92
102) p-Isopropyltoluene	20.700	134	335601	10.60	ppb(v)	100
103) 1,2-Dichlorobenzene	20.853	146	556611	10.66	ppb(v)	99
104) n-Butylbenzene	21.269	134	282840	11.75	ppb(v)	98
105) Hexachloroethane	21.734	201	357978	11.97	ppb(v)	99
106) 1,2,4-Trichlorobenzene	23.049	180	183299	12.65	ppb(v)	100
107) Naphthalene	23.171	128	386044	12.89	ppb(v)	99
108) Hexachlorobutadiene	23.618	225	276887	8.46	ppb(v)	100
110) TVHC as equiv Pentane	5.607	TIC	1038786	9.77	ppb(v)	100

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

Data Path : C:\msdchem\1\data\
Data File : 6W08758.D
Acq On : 22 Oct 2018 8:45 pm
Operator : paulcw
Sample : icv335-10
Misc : MS30116,V6W335,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:33:37 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V6W335-ICV335

Method: TO-15

Lab FileID: 6W08758.D

Analyst approved: 10/23/18 17:35 Dana Tryon

Injection Time: 10/22/18 20:45

Supervisor approved: 10/23/18 17:38 Dana Tryon

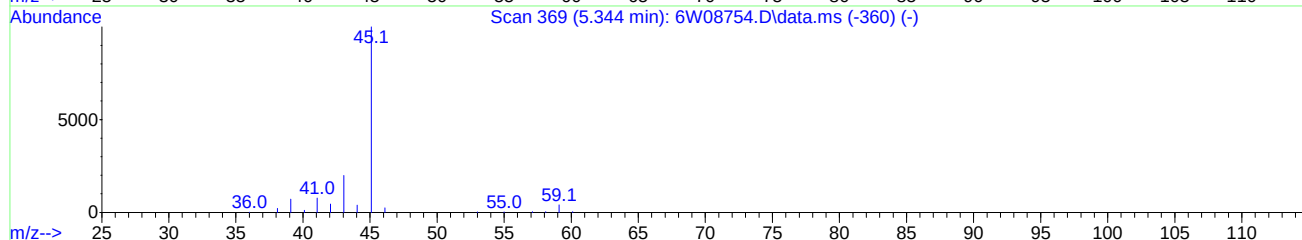
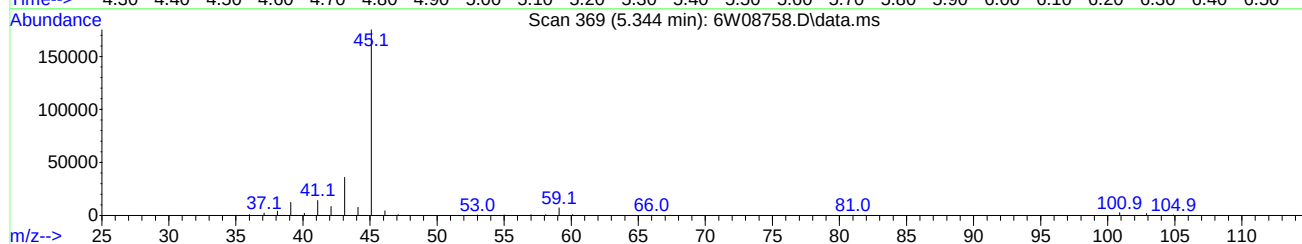
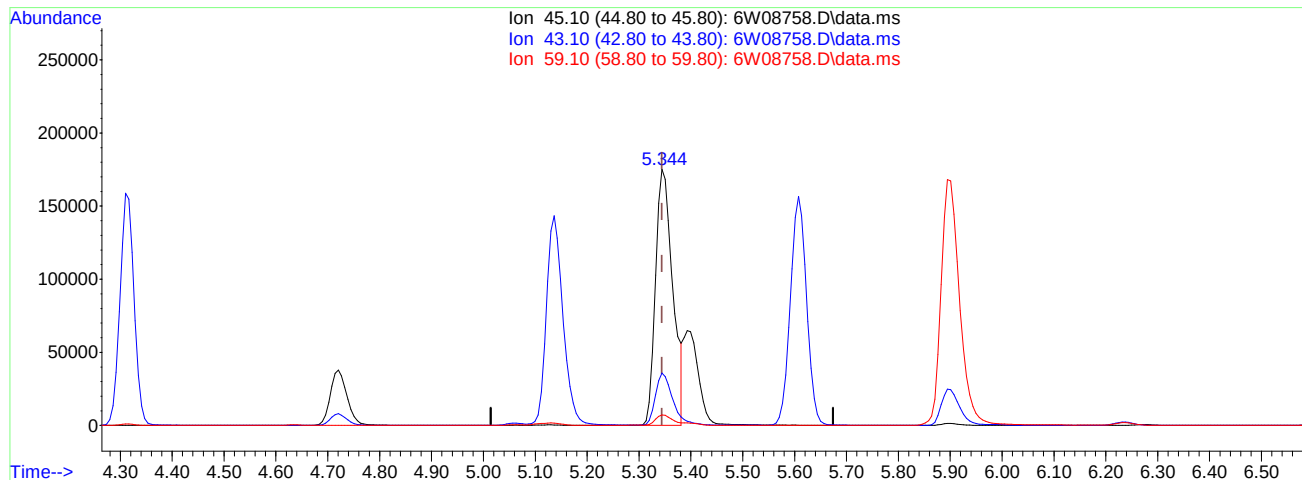
Parameter	CAS	Sig#	R.T. (min.)	Reason

Isopropyl Alcohol	67-63-0		5.34	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6W08758.D
Acq On : 22 Oct 2018 8:45 pm
Operator : paulcw
Sample : icv335-10
Misc : MS30116,V6W335,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 09:38:57 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:38:51 2018
Response via : Initial Calibration



TIC: 6W08758.D\data.ms

(27) Isopropyl Alcohol

5.344min (+0.000) 10.16ppb(v) m

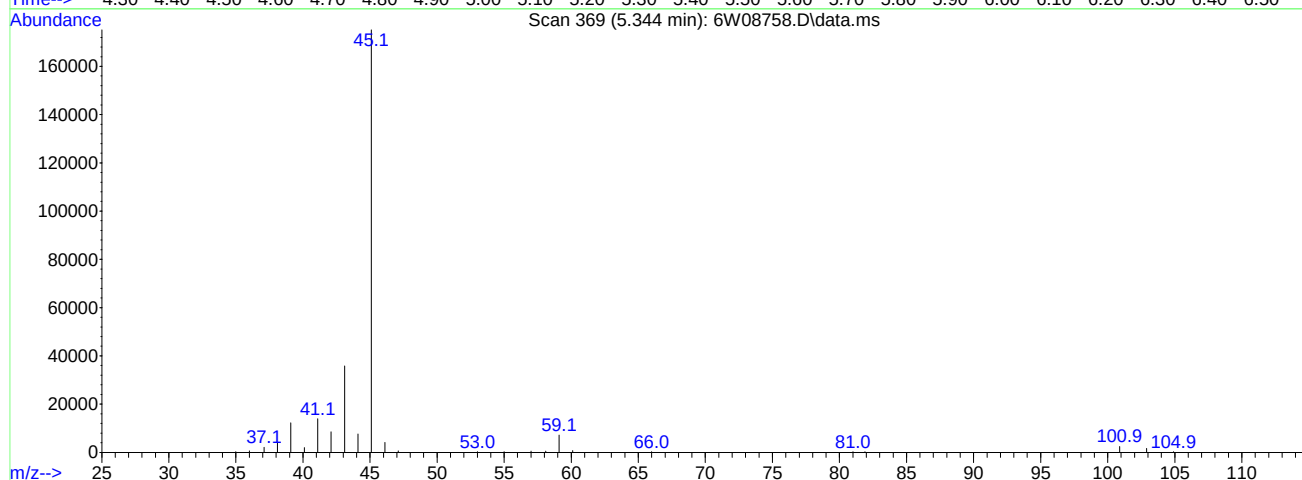
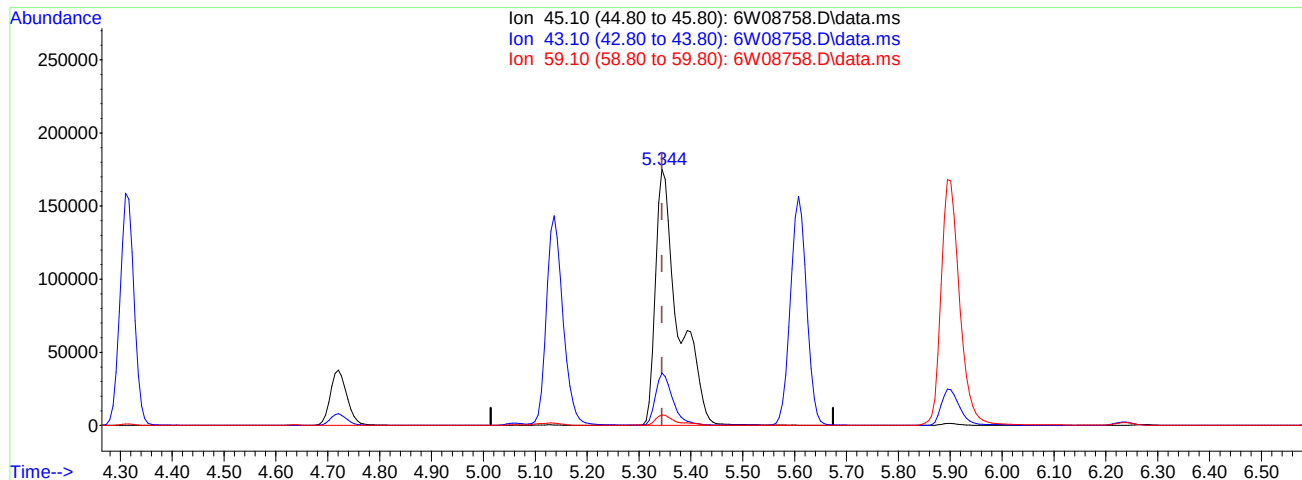
response 405862

Ion	Exp%	Act%
45.10	100	100
43.10	20.10	20.46
59.10	4.00	4.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6W08758.D
Acq On : 22 Oct 2018 8:45 pm
Operator : paulcw
Sample : icv335-10
Misc : MS30116,V6W335,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:33:17 2018
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



TIC: 6W08758.D\data.ms

(27) Isopropyl Alcohol

5.344min (+0.000) 13.48ppb(v)

response 538310

Ion	Exp%	Act%
45.10	100	100
43.10	20.10	20.46
59.10	4.00	4.10
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10359.D
 Acq On : 29 Jan 2019 9:42 am
 Operator : thomash
 Sample : cc335-10
 Misc : MS32203,V6W409,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 10:34:51 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.164	130	210652	10.00	ppb(v	-0.01
55) 1,4-Difluorobenzene	10.373	114	759118	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.909	82	314153	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.164	130	210652	10.00	ppb(v	-0.01

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.155 95 408484 10.65 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 106.50%

Target Compounds						Qvalue
3) Freon 152A	3.723	65	124834	11.50	ppb(v	87
4) Chlorodifluoromethane	3.760	67	43690	8.26	ppb(v	100
5) Propene	3.790	41	145790	11.86	ppb(v	95
6) Chlorotrifluoroethene	3.796	116	304440	9.73	ppb(v	98
7) Dichlorodifluoromethane	3.845	85	462283	8.34	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.962	65	312187	7.16	ppb(v#	97
9) Chloromethane	3.980	50	159291	10.16	ppb(v	99
10) Dichlorotetrafluoroethane	4.053	85	509107	8.80	ppb(v	98
11) Vinyl Chloride	4.157	62	191814	10.06	ppb(v#	99
12) 1,3-Butadiene	4.267	54	135357	10.17	ppb(v	97
13) n-Butane	4.310	58	35787	11.01	ppb(v	96
14) Bromomethane	4.494	94	195674	9.51	ppb(v	98
15) Acrolein	5.020	56	81318	10.47	ppb(v#	92
16) Chloroethane	4.628	64	100325	10.23	ppb(v	99
17) Dichlorofluoromethane	4.708	67	421044	8.85	ppb(v	99
18) Acetonitrile	4.910	41	156541	10.92	ppb(v	97
19) Freon 123	5.057	83	483913	9.83	ppb(v	99
20) Freon 123A	5.099	117	286065	9.37	ppb(v	92
21) Bromoethene	4.928	106	206330	9.84	ppb(v#	96
22) Trichlorofluoromethane	5.289	101	456526	8.05	ppb(v	100
23) Acetone	5.130	58	96816	11.03	ppb(v	72
24) Pentane	5.601	57	56711	12.66	ppb(v	89
26) Iodomethane	5.797	142	611792	9.85	ppb(v	90
27) Isopropyl Alcohol	5.344	45	350625	10.80	ppb(v	94
28) 1,1-Dichloroethene	5.870	61	299741	9.91	ppb(v	96
29) Freon 113	6.225	101	426544	9.61	ppb(v	98
30) Methylene Chloride	5.987	84	193088	9.77	ppb(v	99
31) Carbon Disulfide	6.268	76	612001	11.07	ppb(v	99
32) Ethanol	4.714	45	77302	10.43	ppb(v	99
33) Acrylonitrile	5.552	53	177966	12.78	ppb(v	96
34) 3-Chloropropene	6.091	76	106410	11.68	ppb(v	85
35) trans-1,2-Dichloroethene	6.898	61	288262	10.51	ppb(v	98
36) tert-Butyl Alcohol	5.895	59	417335	11.06	ppb(v	95
37) Methyl tert-Butyl Ether	7.155	73	572420	9.95	ppb(v	97
38) Vinyl Acetate	7.259	43	556442	11.80	ppb(v	99
39) 1,1-Dichloroethane	7.106	63	369278	10.38	ppb(v	100
40) 2-Butanone	7.510	72	110494	12.71	ppb(v	97
41) Hexane	8.195	57	336796	11.71	ppb(v	87
42) cis-1,2-Dichloroethene	7.987	61	282095	10.44	ppb(v	99
43) Di-isopropyl Ether	8.195	87	194383	10.93	ppb(v	87
44) Ethyl Acetate	8.232	61	73287	12.94	ppb(v	77
45) Methyl Acrylate	8.220	55	396052	12.16	ppb(v	97
46) Chloroform	8.311	83	433116	9.28	ppb(v	97
47) 2,4-Dimethylpentane	9.180	57	395733	11.74	ppb(v	98
48) Tetrahydrofuran	8.746	72	102000	12.11	ppb(v	95
49) 1,1,1-Trichloroethane	9.400	97	414611	8.80	ppb(v	98
50) 1,2-Dichloroethane	9.125	62	240919	8.41	ppb(v	98
51) Benzene	9.932	78	689129	10.77	ppb(v	98
52) Carbon Tetrachloride	10.110	117	440489	9.19	ppb(v	99
53) Cyclohexane	10.244	56	341763	11.55	ppb(v	95
54) 2,3-Dimethylpentane	10.538	71	155126	11.60	ppb(v	99
56) 2,2,4-Trimethylpentane	11.229	57	1100561	11.55	ppb(v	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10359.D
 Acq On : 29 Jan 2019 9:42 am
 Operator : thomash
 Sample : cc335-10
 Misc : MS32203,V6W409,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

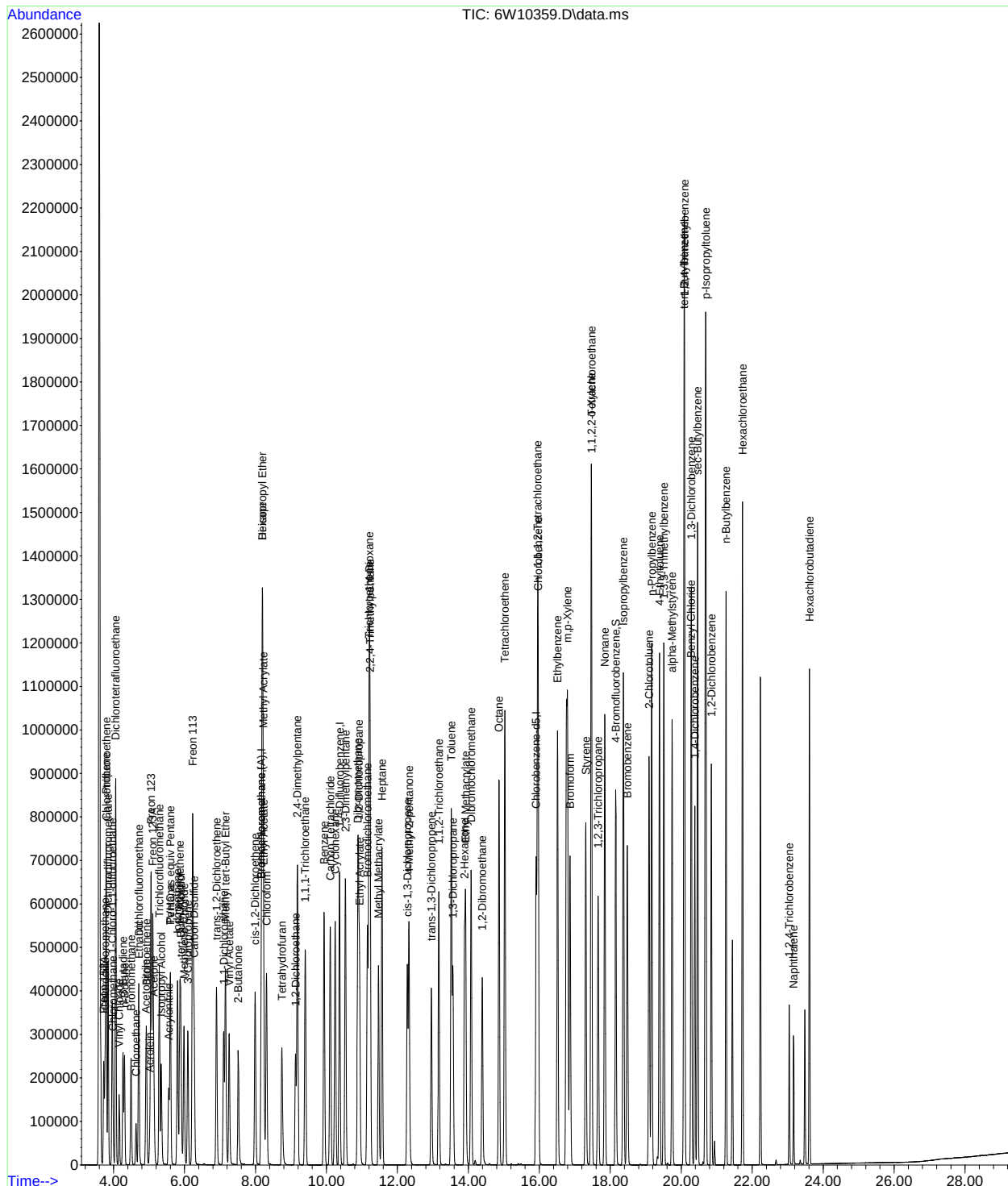
Quant Time: Jan 30 10:34:51 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	241281	11.43	ppb(v	97
58) Trichloroethene	11.199	95	300765	9.80	ppb(v	97
59) 1,2-Dichloropropane	10.905	63	260298	11.63	ppb(v	90
60) Dibromomethane	10.881	174	314130	9.42	ppb(v	96
61) Ethyl Acrylate	10.936	55	496906	12.34	ppb(v	98
62) Methyl Methacrylate	11.468	69	254499	12.05	ppb(v	94
63) 1,4-Dioxane	11.205	88	164191	11.58	ppb(v#	78
64) Bromodichloromethane	11.156	83	471105	9.90	ppb(v	99
65) cis-1,3-Dichloropropene	12.282	75	379503	11.11	ppb(v	99
66) 4-Methyl-2-pentanone	12.324	58	210515	12.35	ppb(v	95
67) trans-1,3-Dichloropropene	12.955	75	312872	10.99	ppb(v	100
68) Toluene	13.517	91	821110	10.28	ppb(v	99
69) 1,1,2-Trichloroethane	13.169	97	281914	10.71	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	382814	10.82	ppb(v	94
71) 2-Hexanone	13.891	58	271745	12.69	ppb(v	93
72) Ethyl Methacrylate	13.921	69	414888	11.81	ppb(v	97
73) Dibromochloromethane	14.074	129	513895	11.00	ppb(v	100
74) Tetrachloroethene	15.029	166	459026	9.55	ppb(v	97
75) 1,2-Dibromoethane	14.392	107	416190	10.54	ppb(v	100
76) Octane	14.863	43	505313	11.63	ppb(v	94
77) 1,1,1,2-Tetrachloroethane	15.952	131	351949	10.59	ppb(v	99
79) Chlorobenzene	15.971	112	647305	11.12	ppb(v	99
80) Ethylbenzene	16.515	91	1025980	11.27	ppb(v	100
81) m,p-Xylene	16.790	91	1549211	21.73	ppb(v	98
82) Styrene	17.310	104	574445	12.49	ppb(v	98
83) Nonane	17.843	43	505471	12.68	ppb(v	97
84) o-Xylene	17.463	91	782841	11.08	ppb(v	99
85) Bromoform	16.864	173	489316	14.15	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.469	83	540847	13.41	ppb(v	99
87) 1,2,3-Trichloropropane	17.659	75	390466	12.43	ppb(v	97
88) Isopropylbenzene	18.369	105	1106166	11.03	ppb(v	99
89) Bromobenzene	18.479	156	340218	11.76	ppb(v	98
90) 2-Chlorotoluene	19.091	126	267635	11.94	ppb(v	98
91) n-Propylbenzene	19.164	120	301423	12.08	ppb(v	98
93) 4-Ethyltoluene	19.390	105	1008966	11.79	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.513	105	866969	11.33	ppb(v	98
95) alpha-Methylstyrene	19.739	118	407042	12.91	ppb(v	99
96) tert-Butylbenzene	20.082	134	213231	11.42	ppb(v	94
97) 1,2,4-Trimethylbenzene	20.094	105	830830	11.76	ppb(v	98
98) 1,3-Dichlorobenzene	20.284	146	496108	12.56	ppb(v	98
99) Benzyl Chloride	20.271	91	476714	17.06	ppb(v	98
100) 1,4-Dichlorobenzene	20.381	146	439783	12.64	ppb(v	98
101) sec-Butylbenzene	20.461	134	258690	11.65	ppb(v	99
102) p-Isopropyltoluene	20.694	134	273603	12.04	ppb(v	97
103) 1,2-Dichlorobenzene	20.846	146	474948	12.67	ppb(v	98
104) n-Butylbenzene	21.262	134	220458	12.76	ppb(v	95
105) Hexachloroethane	21.727	201	315190	14.70	ppb(v	98
106) 1,2,4-Trichlorobenzene	23.043	180	123348	11.87	ppb(v	99
107) Naphthalene	23.165	128	239953	11.17	ppb(v	100
108) Hexachlorobutadiene	23.612	225	235321	10.03	ppb(v	99
110) TVHC as equiv Pentane	5.601	TIC	976980	11.30	ppb(v	100

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

Data Path : C:\msdchem\1\data\
Data File : 6W10359.D
Acq On : 29 Jan 2019 9:42 am
Operator : thomash
Sample : cc335-10
Misc : MS32203,V6W409,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 10:34:51 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10640.D
 Acq On : 19 Feb 2019 9:37 am
 Operator : thomash
 Sample : cc335-10
 Misc : MS32415,V6W424,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 10:40:24 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.171	130	203823	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	730124	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.909	82	313126	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.171	130	203823	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.155	95	409157	10.70	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	107.00%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	109280	10.40	ppb(v	85
4) Chlorodifluoromethane	3.766	67	37754	7.38	ppb(v	99
5) Propene	3.790	41	126288	10.61	ppb(v	94
6) Chlorotrifluoroethene	3.796	116	281862	9.31	ppb(v	98
7) Dichlorodifluoromethane	3.851	85	392448	7.32	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.962	65	250178	5.93	ppb(v#	95
9) Chloromethane	3.980	50	127472	8.40	ppb(v	99
10) Dichlorotetrafluoroethane	4.059	85	444179	7.94	ppb(v	93
11) Vinyl Chloride	4.157	62	162649	8.82	ppb(v#	99
12) 1,3-Butadiene	4.267	54	113973	8.85	ppb(v	94
13) n-Butane	4.310	58	30805	9.79	ppb(v	85
14) Bromomethane	4.494	94	181732	9.12	ppb(v	99
15) Acrolein	5.026	56	82023	10.92	ppb(v#	92
16) Chloroethane	4.628	64	86102	9.07	ppb(v	97
17) Dichlorofluoromethane	4.708	67	363765	7.90	ppb(v	99
18) Acetonitrile	4.916	41	156516	11.28	ppb(v	97
19) Freon 123	5.057	83	455296	9.56	ppb(v	99
20) Freon 123A	5.106	117	270923	9.17	ppb(v	95
21) Bromoethene	4.928	106	200670	9.89	ppb(v#	96
22) Trichlorofluoromethane	5.289	101	413033	7.53	ppb(v	99
23) Acetone	5.136	58	88054	10.36	ppb(v	74
24) Pentane	5.601	57	49457	11.41	ppb(v	90
26) Iodomethane	5.803	142	578869	9.64	ppb(v	88
27) Isopropyl Alcohol	5.350	45	315304	10.03	ppb(v	94
28) 1,1-Dichloroethene	5.870	61	260920	8.91	ppb(v	94
29) Freon 113	6.231	101	392633	9.14	ppb(v	98
30) Methylene Chloride	5.987	84	173136	9.05	ppb(v	99
31) Carbon Disulfide	6.268	76	543554	10.17	ppb(v	99
32) Ethanol	4.720	45	62055	8.65	ppb(v	97
33) Acrylonitrile	5.558	53	152712	11.34	ppb(v	96
34) 3-Chloropropene	6.097	76	96144	10.91	ppb(v	84
35) trans-1,2-Dichloroethene	6.898	61	252411	9.51	ppb(v	98
36) tert-Butyl Alcohol	5.901	59	361759	9.91	ppb(v	95
37) Methyl tert-Butyl Ether	7.155	73	501450	9.01	ppb(v	97
38) Vinyl Acetate	7.259	43	504462	11.05	ppb(v	100
39) 1,1-Dichloroethane	7.106	63	325774	9.47	ppb(v	100
40) 2-Butanone	7.516	72	98252	11.68	ppb(v	99
41) Hexane	8.195	57	298569	10.72	ppb(v	85
42) cis-1,2-Dichloroethene	7.987	61	248063	9.49	ppb(v	97
43) Di-isopropyl Ether	8.195	87	176222	10.24	ppb(v	88
44) Ethyl Acetate	8.232	61	65289	11.91	ppb(v	79
45) Methyl Acrylate	8.220	55	357545	11.35	ppb(v	97
46) Chloroform	8.311	83	388053	8.59	ppb(v	98
47) 2,4-Dimethylpentane	9.180	57	350642	10.75	ppb(v	99
48) Tetrahydrofuran	8.746	72	91902	11.27	ppb(v	93
49) 1,1,1-Trichloroethane	9.400	97	370447	8.13	ppb(v	98
50) 1,2-Dichloroethane	9.125	62	209904	7.57	ppb(v#	97
51) Benzene	9.932	78	615308	9.94	ppb(v	98
52) Carbon Tetrachloride	10.104	117	400753	8.64	ppb(v	99
53) Cyclohexane	10.238	56	303087	10.58	ppb(v	94
54) 2,3-Dimethylpentane	10.538	71	139709	10.80	ppb(v	99
56) 2,2,4-Trimethylpentane	11.223	57	986533	10.76	ppb(v	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W10640.D
 Acq On : 19 Feb 2019 9:37 am
 Operator : thomash
 Sample : cc335-10
 Misc : MS32415,V6W424,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

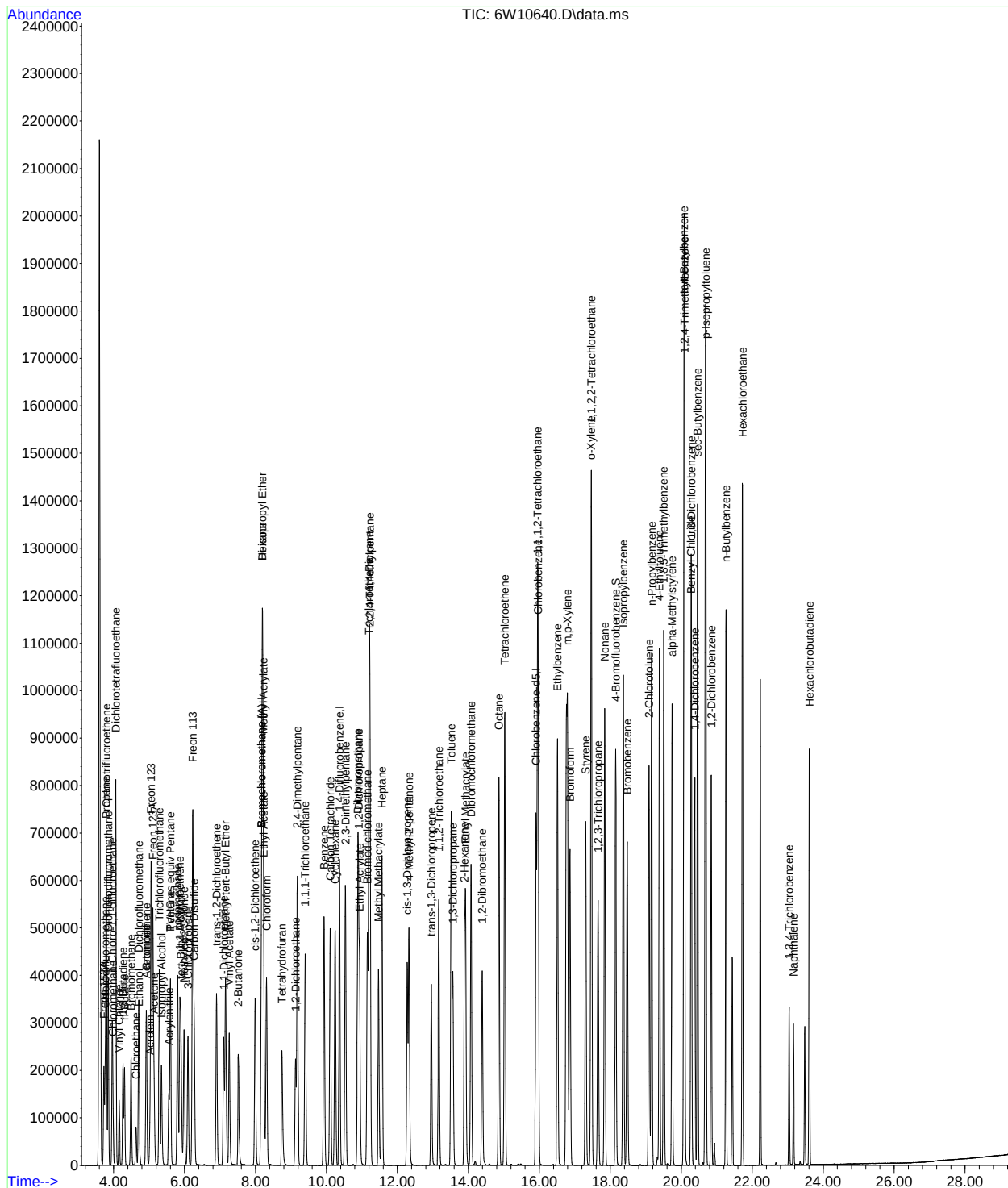
Quant Time: Feb 20 10:40:24 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	218790	10.77	ppb(v	98
58) Trichloroethene	11.199	95	275433	9.33	ppb(v	93
59) 1,2-Dichloropropane	10.905	63	233937	10.87	ppb(v	91
60) Dibromomethane	10.881	174	307155	9.58	ppb(v	98
61) Ethyl Acrylate	10.936	55	449643	11.61	ppb(v	98
62) Methyl Methacrylate	11.468	69	230687	11.36	ppb(v	91
63) 1,4-Dioxane	11.205	88	148631	10.90	ppb(v#	78
64) Bromodichloromethane	11.156	83	424283	9.27	ppb(v	99
65) cis-1,3-Dichloropropene	12.276	75	347364	10.57	ppb(v	100
66) 4-Methyl-2-pentanone	12.324	58	189803	11.58	ppb(v	94
67) trans-1,3-Dichloropropene	12.955	75	293887	10.73	ppb(v	99
68) Toluene	13.517	91	751302	9.78	ppb(v	99
69) 1,1,2-Trichloroethane	13.169	97	259025	10.23	ppb(v	98
70) 1,3-Dichloropropane	13.560	76	348495	10.24	ppb(v	94
71) 2-Hexanone	13.891	58	248463	12.07	ppb(v	92
72) Ethyl Methacrylate	13.921	69	378715	11.21	ppb(v	98
73) Dibromochloromethane	14.074	129	485913	10.81	ppb(v	99
74) Tetrachloroethene	15.028	166	432409	9.35	ppb(v	97
75) 1,2-Dibromoethane	14.392	107	396395	10.44	ppb(v	100
76) Octane	14.863	43	456497	10.92	ppb(v	95
77) 1,1,1,2-Tetrachloroethane	15.952	131	330250	10.33	ppb(v	99
79) Chlorobenzene	15.971	112	607351	10.46	ppb(v	98
80) Ethylbenzene	16.515	91	929788	10.24	ppb(v	99
81) m,p-Xylene	16.790	91	1412487	19.88	ppb(v	97
82) Styrene	17.304	104	541119	11.80	ppb(v	96
83) Nonane	17.843	43	459257	11.56	ppb(v	99
84) o-Xylene	17.457	91	716535	10.18	ppb(v	98
85) Bromoform	16.864	173	470354	13.65	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.463	83	491035	12.22	ppb(v	99
87) 1,2,3-Trichloropropane	17.659	75	349025	11.15	ppb(v	99
88) Isopropylbenzene	18.369	105	1021476	10.22	ppb(v	98
89) Bromobenzene	18.479	156	329747	11.43	ppb(v	96
90) 2-Chlorotoluene	19.091	126	251947	11.27	ppb(v	91
91) n-Propylbenzene	19.164	120	284344	11.43	ppb(v	96
93) 4-Ethyltoluene	19.384	105	935682	10.97	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.507	105	799225	10.48	ppb(v	98
95) alpha-Methylstyrene	19.739	118	387096	12.31	ppb(v	98
96) tert-Butylbenzene	20.076	134	205723	11.06	ppb(v	85
97) 1,2,4-Trimethylbenzene	20.094	105	770410	10.94	ppb(v	95
98) 1,3-Dichlorobenzene	20.284	146	482654	12.26	ppb(v	97
99) Benzyl Chloride	20.271	91	454277	16.31	ppb(v	96
100) 1,4-Dichlorobenzene	20.381	146	435565	12.56	ppb(v	97
101) sec-Butylbenzene	20.461	134	247616	11.19	ppb(v	94
102) p-Isopropyltoluene	20.694	134	259622	11.46	ppb(v	93
103) 1,2-Dichlorobenzene	20.846	146	441705	11.83	ppb(v	97
104) n-Butylbenzene	21.262	134	206521	12.00	ppb(v	98
105) Hexachloroethane	21.727	201	314158	14.70	ppb(v	93
106) 1,2,4-Trichlorobenzene	23.043	180	117953	11.38	ppb(v	98
107) Naphthalene	23.165	128	243912	11.39	ppb(v	99
108) Hexachlorobutadiene	23.612	225	192656	8.24	ppb(v	99
110) TVHC as equiv Pentane	5.601	TIC	819004	9.79	ppb(v	100

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


```
Data Path : C:\msdchem\1\data\  
Data File : 6W10640.D  
Acq On : 19 Feb 2019 9:37 am  
Operator : thomash  
Sample : cc335-10  
Misc : MS32415,V6W424,,,,,1  
ALS Vial : 3 Sample Multiplier: 1
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Quant Time: Feb 20 10:40:24 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10664.D
 Acq On : 20 Feb 2019 9:44 am
 Operator : thomash
 Sample : CC335-10
 Misc : MS32480,V6W425,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 21 15:33:32 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.165	130	201903	10.00	ppb(v	-0.01
55) 1,4-Difluorobenzene	10.367	114	725631	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.910	82	306766	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.165	130	201903	10.00	ppb(v	-0.01

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.155 95 399799 10.68 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 106.80%

Target Compounds					Qvalue
3) Freon 152A	3.729	65	105221	10.11	ppb(v 84
4) Chlorodifluoromethane	3.766	67	36294	7.16	ppb(v 100
5) Propene	3.790	41	120125	10.19	ppb(v 95
6) Chlorotrifluoroethene	3.797	116	276324	9.22	ppb(v 98
7) Dichlorodifluoromethane	3.852	85	384318	7.23	ppb(v 100
8) 1-Chloro-1,1-difluoro...	3.962	65	244001	5.84	ppb(v# 95
9) Chloromethane	3.980	50	125164	8.33	ppb(v 99
10) Dichlorotetrafluoroethane	4.060	85	433691	7.82	ppb(v 93
11) Vinyl Chloride	4.158	62	158105	8.66	ppb(v# 99
12) 1,3-Butadiene	4.268	54	109639	8.59	ppb(v 94
13) n-Butane	4.310	58	29337	9.41	ppb(v 88
14) Bromomethane	4.488	94	175998	8.92	ppb(v 99
15) Acrolein	5.026	56	79372	10.67	ppb(v# 89
16) Chloroethane	4.629	64	83663	8.90	ppb(v 97
17) Dichlorofluoromethane	4.708	67	353233	7.75	ppb(v 99
18) Acetonitrile	4.916	41	150895	10.98	ppb(v 97
19) Freon 123	5.057	83	443527	9.40	ppb(v 99
20) Freon 123A	5.106	117	264498	9.04	ppb(v 97
21) Bromoethene	4.928	106	197417	9.82	ppb(v# 96
22) Trichlorofluoromethane	5.289	101	403498	7.43	ppb(v 100
23) Acetone	5.136	58	85905	10.21	ppb(v 68
24) Pentane	5.601	57	47730	11.12	ppb(v 90
26) Iodomethane	5.803	142	571506	9.60	ppb(v 88
27) Isopropyl Alcohol	5.350	45	303717	9.76	ppb(v 94
28) 1,1-Dichloroethene	5.870	61	253508	8.74	ppb(v 93
29) Freon 113	6.225	101	383538	9.01	ppb(v 99
30) Methylene Chloride	5.987	84	168547	8.89	ppb(v 97
31) Carbon Disulfide	6.268	76	529469	10.00	ppb(v 100
32) Ethanol	4.720	45	60501	8.51	ppb(v 96
33) Acrylonitrile	5.558	53	148222	11.11	ppb(v 96
34) 3-Chloropropene	6.097	76	93388	10.70	ppb(v 83
35) trans-1,2-Dichloroethene	6.898	61	245196	9.33	ppb(v 97
36) tert-Butyl Alcohol	5.901	59	349321	9.66	ppb(v 95
37) Methyl tert-Butyl Ether	7.155	73	487042	8.84	ppb(v 97
38) Vinyl Acetate	7.259	43	487480	10.78	ppb(v 99
39) 1,1-Dichloroethane	7.106	63	316610	9.29	ppb(v 100
40) 2-Butanone	7.516	72	95311	11.44	ppb(v 98
41) Hexane	8.195	57	288650	10.47	ppb(v 85
42) cis-1,2-Dichloroethene	7.987	61	240057	9.27	ppb(v 97
43) Di-isopropyl Ether	8.195	87	172195	10.11	ppb(v 88
44) Ethyl Acetate	8.232	61	62810	11.57	ppb(v 82
45) Methyl Acrylate	8.220	55	344147	11.03	ppb(v 98
46) Chloroform	8.311	83	377686	8.44	ppb(v 98
47) 2,4-Dimethylpentane	9.180	57	337781	10.46	ppb(v 98
48) Tetrahydrofuran	8.746	72	88789	11.00	ppb(v 93
49) 1,1,1-Trichloroethane	9.400	97	362071	8.02	ppb(v 98
50) 1,2-Dichloroethane	9.125	62	204293	7.44	ppb(v# 96
51) Benzene	9.933	78	597612	9.74	ppb(v 97
52) Carbon Tetrachloride	10.104	117	391065	8.51	ppb(v 99
53) Cyclohexane	10.245	56	293918	10.36	ppb(v 96
54) 2,3-Dimethylpentane	10.532	71	136162	10.63	ppb(v 99
56) 2,2,4-Trimethylpentane	11.223	57	950768	10.44	ppb(v 94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\gc6w\
 Data File : 6W10664.D
 Acq On : 20 Feb 2019 9:44 am
 Operator : thomash
 Sample : CC335-10
 Misc : MS32480,V6W425,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

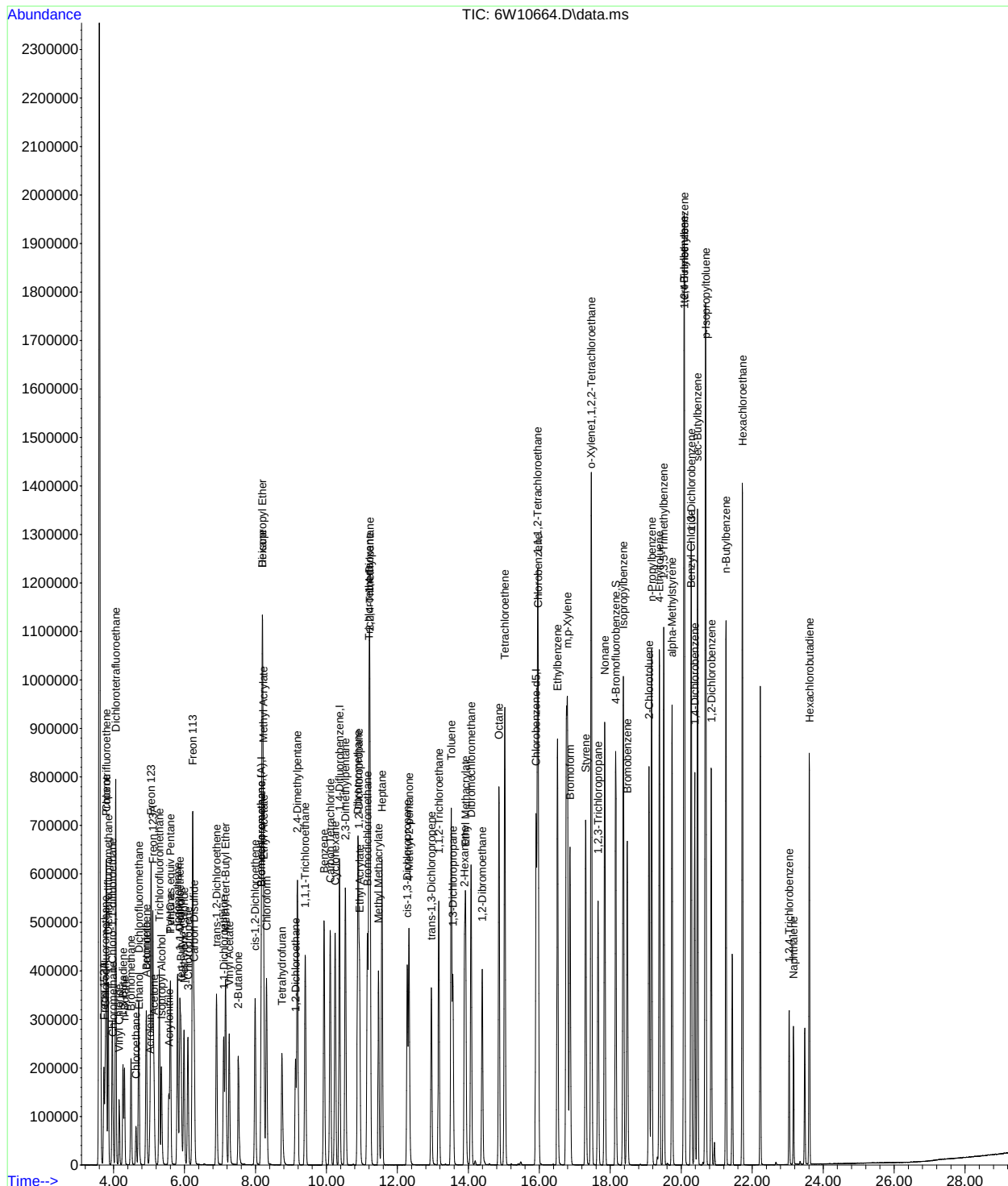
Quant Time: Feb 21 15:33:32 2019
 Quant Method : C:\msdchem\1\methods\6w335.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Tue Oct 23 09:39:19 2018
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	211821	10.49	ppb(v	98
58) Trichloroethene	11.199	95	268578	9.16	ppb(v	93
59) 1,2-Dichloropropane	10.905	63	227226	10.62	ppb(v	90
60) Dibromomethane	10.881	174	301952	9.48	ppb(v	98
61) Ethyl Acrylate	10.936	55	434856	11.30	ppb(v	99
62) Methyl Methacrylate	11.468	69	224009	11.10	ppb(v	93
63) 1,4-Dioxane	11.205	88	144878	10.69	ppb(v#	77
64) Bromodichloromethane	11.156	83	412974	9.08	ppb(v	99
65) cis-1,3-Dichloropropene	12.276	75	337349	10.33	ppb(v	99
66) 4-Methyl-2-pentanone	12.325	58	182406	11.19	ppb(v	94
67) trans-1,3-Dichloropropene	12.955	75	283797	10.43	ppb(v	98
68) Toluene	13.518	91	733748	9.61	ppb(v	99
69) 1,1,2-Trichloroethane	13.169	97	252648	10.04	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	338298	10.00	ppb(v	93
71) 2-Hexanone	13.891	58	239958	11.73	ppb(v	93
72) Ethyl Methacrylate	13.921	69	366617	10.91	ppb(v	98
73) Dibromochloromethane	14.074	129	475407	10.65	ppb(v	99
74) Tetrachloroethene	15.029	166	428788	9.33	ppb(v	96
75) 1,2-Dibromoethane	14.392	107	386135	10.23	ppb(v	98
76) Octane	14.864	43	439318	10.58	ppb(v	95
77) 1,1,1,2-Tetrachloroethane	15.952	131	325634	10.25	ppb(v	99
79) Chlorobenzene	15.971	112	593640	10.44	ppb(v	98
80) Ethylbenzene	16.515	91	908627	10.22	ppb(v	99
81) m,p-Xylene	16.791	91	1376223	19.77	ppb(v	97
82) Styrene	17.304	104	529602	11.79	ppb(v	97
83) Nonane	17.843	43	444497	11.42	ppb(v	98
84) o-Xylene	17.457	91	698671	10.13	ppb(v	98
85) Bromoform	16.864	173	462624	13.70	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.464	83	477951	12.14	ppb(v	99
87) 1,2,3-Trichloropropane	17.659	75	340240	11.10	ppb(v	99
88) Isopropylbenzene	18.369	105	996186	10.18	ppb(v	97
89) Bromobenzene	18.479	156	325788	11.53	ppb(v	95
90) 2-Chlorotoluene	19.091	126	245430	11.21	ppb(v	91
91) n-Propylbenzene	19.164	120	279825	11.48	ppb(v	96
93) 4-Ethyltoluene	19.384	105	917004	10.98	ppb(v	98
94) 1,3,5-Trimethylbenzene	19.507	105	782375	10.47	ppb(v	97
95) alpha-Methylstyrene	19.739	118	381883	12.40	ppb(v	98
96) tert-Butylbenzene	20.076	134	201494	11.06	ppb(v	87
97) 1,2,4-Trimethylbenzene	20.088	105	753614	10.93	ppb(v#	82
98) 1,3-Dichlorobenzene	20.284	146	476549	12.36	ppb(v	96
99) Benzyl Chloride	20.272	91	450203	16.50	ppb(v	97
100) 1,4-Dichlorobenzene	20.382	146	432768	12.73	ppb(v	96
101) sec-Butylbenzene	20.461	134	245133	11.30	ppb(v	91
102) p-Isopropyltoluene	20.694	134	255217	11.50	ppb(v	90
103) 1,2-Dichlorobenzene	20.847	146	440433	12.04	ppb(v	96
104) n-Butylbenzene	21.263	134	202651	12.02	ppb(v	97
105) Hexachloroethane	21.728	201	309987	14.80	ppb(v	91
106) 1,2,4-Trichlorobenzene	23.043	180	115654	11.39	ppb(v	99
107) Naphthalene	23.165	128	237266	11.31	ppb(v	100
108) Hexachlorobutadiene	23.612	225	183229	8.00	ppb(v	98
110) TVHC as equiv Pentane	5.601	TIC	789364	9.52	ppb(v	100

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

```
Data Path : C:\msdchem\1\data\gc6w\  
Data File : 6W10664.D  
Acq On : 20 Feb 2019 9:44 am  
Operator : thomash  
Sample : CC335-10  
Misc : MS32480,V6W425,,,,,1  
ALS Vial : 3 Sample Multiplier: 1
```

Quant Time: Feb 21 15:33:32 2019
Quant Method : C:\msdchem\1\methods\6w335.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Tue Oct 23 09:39:19 2018
Response via : Initial Calibration



Date: 12/26/18

Analyst Signature: [Signature]

Columns: 2x 100mm x 0.32mm i.d.

Method: SWTO15

Seq. File: 181276.S

Initial Cal. Method: V5W1390.M

AS Data

Method: SWTO15

Standard Data

Lot #	Description	Conc.
AS3012	TO15 STD (A967)	140ppm
AS3016	TO15 CCS	40ppm

Standard Data

Lot #	Description	Conc.
AS3052	Int / Std	100ppm
AS3091	TO15 STD (A971)	1.00ppm
AS3098	TO15 STD (A969)	40ppm
AS310	TO15 STD (A967)	0.4ppm

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature: [Signature]

Date: 1/3/19

AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
4	5W34367	1B		A959	100						
4	5W34368	1B		A959	100						
4	5W34369	1B		A959	100						
4	5W34370	1B		A959	400						
4	5W34371	1B		A959	400						
1	5W34372	BFB		A967	40						
1	5W34373	IC1390-0.04		A967	40					OK	time 5:47pm
2	5W34374	IC1390-0.1		A971	40					Not used	
2	5W34375	IC1390-0.2		A971	80						
2	5W34376	IC1390-0.5		A971	200						
4	5W34377	1B		A959	400						
3	5W34378	IC1390-5		A969	60						
3	5W34379	IC1390-10		A969	100					OK	
34	5W34380	1B		A959	100						
3	5W34381	IC1390-20		A969	200						
4	5W34382	1B		A959	400					OK	
3	5W34383	IC1390-40		A969	400						
4	5W34384	1B		A959	400					OK	
5	5W34385	IC1390-10		A976	100						
4	5W34386	1B		A959	400					Not used	
6	5W34387	IC1390-1B		4003	100						
1	5W34388	IC1390-0.04		A967	40						
1	5W34389	IC1390-0.1		A967	100					OK	
1	5W34390	IC1390-0.2		A967	200					OK	
5	5W34391	IC1390-0.5		A967	500					OK	
5	5W34392	IC1390-10		A976	100					OK	

All strikeouts must be initial and dated. Comment is required for anything other than a transcription error.

Date: 11/3/19

Analyst Signature:

Columns: RT-11-(60m) x 0.32mm x 10m

Method: CONTU/S

Seq. File: 190131.5

Initial Cal. Method: MSW1390.M

AS Data

Method: TOK, GTD3

Standard Data

<u>Secondary Data</u>		
Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
PP8082	Insuln	100ppbv
PP8353	TU15 STD	1ppbv

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature:

Date: 2/4/19

[illegible]

All strikeouts must be initial and dated. Comment is require for anything other than a transcription error.

Date:

Analyst Signature:

Columns: RX1-60m x 0.32mm x 1.0

Method: 6/27/15

Seq. File: 6W 20171022-5

Initial Cal. Method: M61d335

AS Data

Method: Tok. CTDS

Standard Data

<u>General Data</u>		
Lot #	Description	Conc.
A3072	Int/Surr	100 gpb

Standard Data

Lot #	Description	Conc.
A58260	T015 S4 (A970)	40 ppb
A58261	T015 S4 (A974)	160 ppb
A58262	T015 S4 (A967)	0.4 ppb
A58258	T015 W (A965)	40 ppb

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 10/23/18

Supervisor Signature: 										Date: 10/23/18	
AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments
2	6W08748	BE8		A967	40					OK	
2	6W08749	IC335-0.04		A967	40			✓	✓	OK	Time 12:00
23	6W08750	IC335-0.1		A974	40			✓	✓	OK	
27	6W08751	IC335-0.2		A974	80			✓	✓	OK	
23	6W08752	IC335-0.5		A974	200			✓	✓	OK	
34	6W08753	IC335-2.5		A970	50			✓	✓	OK	
34	6W08754	IC335-10		A970	100			✓	✓	OK	
34	6W08755	IC335-20		A970	200			✓	✓	OK	
34	6W08756	IC335-40		A970	400			✓	✓	OK	
1	6W08757	IB		A963	100			✓	✓	OK	
5	6W08758	IC335-1		A965	100			✓	✓	OK	
1	6W08759	IB		A963	100						
 10/23/18											

All strikeouts must be initial and dated. Comment is required for each strikeout.

All strikeouts must be initial and dated. Comment is require for anything other than a transcription error.

Form: AT008-05

Rev. Date: 10/20/09

127

Batch ID: V6W909

Date: 1/29/19

Analyst Signature: RH

Columns: RTX-1 $60\text{ cm} \times 6.32\text{ mm i.d.} \times 0.25\text{ }\mu\text{m}$

Method: 6W7015

Seq. File: CW20190129.S

Initial Cal. Method: M60V335.M

AS Data

Method: T215, cTDS

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS2082	Int/Sur.	100ppm
AS2274	1/20/11 ²	
AS2332	7015 STD (A770)	400ppm

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature:

Date: 7/1/19

[illegible]

All strikeouts must be initial and dated. Comment is require for anything other than a transcription error.

Batch ID: V6w 424

Date: 2/17/19

Analyst Signature: [Signature]

AS Data

Method: 1015, GPD3

Columns: RTX-1 60m x 0.32mm i.d. um

Method: GWZ/902/3th

Seq. File: 6W2e17e219. s

Initial Cal. Method: *1/kw35*

Standard Data

<u>Standard Data</u>		
Lot #	Description	Conc.

Standard Data

Concord Data		
Lot #	Description	Conc.
ASE082	Int / Soil	160ppbw
ASE367	TOIS STD (A976)	40ppbw

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature:

Date: 2/22/19

[illegible]

All strikeouts must be initial and dated. Comment is require for anything other than a transcription error.

Batch ID: V6W425

Date: 2/26/19

Analyst Signature:

Columns: B+YI-60mm x 0.32mm x 1.0um

Method: 64-1015

Seq. File: Cw20190220.S

Initial Cal. Method: MGW335.M

AS Data

Method: TVIS.CTD3

Standard Data

<u>Standard Data</u>		
Lot #	Description	Conc.

Standard Data

Standard Data		
Lot #	Description	Conc.
AK5052	Int'l surr	100 ppmol
AK5067	TD15 STD (A976)	40 ppmol

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature:

Date: 2/22/19

Supervisor Signature: <i>[Signature]</i>											Date: 2/22/19	
AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comments	
2	6w10663	PED		open position	400					OK		
3	6w10664	CC 835-10		A976	100			✓	✓	OK		
3	6w10665	PS		A976	100			✓	✓	OK		
3	6w10666	PED		A976	100			✓	✓	OK		
3	6w10667	PED		A976	100			✓	✓	OK	see mclchlorobenf	
4	6w10668	10		A976	100			✓	✓	OK		
1	6w10669	m0		A976	400					—		
5	6w10670	PC82624-1	u2 MS324115	A1037	40	1		✓	✓	OK		
6	6w10671	PC82624-5	u116 MS324480	A244	80	1		✓	✓	OK/DC		
7	6w10672	PC82624-6	✓	A892	100	1		✓	✓	OK/DC		
8	6w10673	PC82613-5	u2 MS32421	a224	400	1		✓	✓	OK/DC		
9	6w10674	PC82613-7	✓	A1185	620	1.55		✓	✓	OK		
9	6w10675	PC82613-700	✓	A1185	620	1.55		✓	✓	OK		
10	6w10676	see CP10221		A236	400	1		✓	✓	OK		
11	6w10677	PC83124-1	u2 MS32441	A319	400	1		✓	✓	OK		
12	6w10678	PC83124-2	✓	M253	400	1		✓	✓	OK		
13	6w10679	PC82671-2	u2 MS324115	A366	100	1		✓	✓	OK		
14	6w10680	PC82671-3	✓	4081	100	1		✓	✓	OK		
15	6w10681	PC82671-4	✓	M026	100	1		✓	✓	OK		
1	6w10682	PC83032-1	u2 MS324115	A482	100	1		✓	✓	OK		
2	6w10683	PC83032-2	MS32511	A245	100	1		✓	✓	OK		
											TH 2/21/19	
All strikeouts must be initial and dated. Comment is required for anything other than a transcription error.												

All strikeouts must be initial and dated. Comment is require for anything other than a transcription error.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

C. A. Rich Consultants

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

AIG-Mako3-SVE

SGS Job Number: JC91420

Sampling Date: 07/10/19

Report to:

C. A. Rich Consultants
17 Dupont Street
Plainview, NY 11803
MYager@CarichInc.com

ATTN: Michael Yager

Total number of pages in report: **256**



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.

Mike Earp
General Manager

Client Service contact: Kristin Degraw 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

C. A. Rich Consultants

Job No: JC91420

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Project No: AIG-Mako3-SVE

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC91420-1	07/10/19	09:32 MY	07/10/19	AIR	Soil Vapor Comp.	EXSVE-EX
JC91420-2	07/10/19	09:36 MY	07/10/19	AIR	Soil Vapor Comp.	EXSVE-MID
JC91420-3	07/10/19	09:42 MY	07/10/19	AIR	Soil Vapor Comp.	EXSVE-RAW
JC91420-4	07/10/19	09:45 MY	07/10/19	AIR	Soil Vapor Comp.	INTSVE-EX
JC91420-5	07/10/19	09:50 MY	07/10/19	AIR	Soil Vapor Comp.	INTSVE-MID
JC91420-6	07/10/19	10:00 MY	07/10/19	AIR	Soil Vapor Comp.	INTSVE-RAW

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: C. A. Rich Consultants

Job No JC91420

Site: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Report Date 7/24/2019 3:01:22 PM

On 07/10/2019, 6 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. A SGS North America Inc. Job Number of JC91420 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method TO-15

Matrix: AIR

Batch ID: V6W538

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC91516-1DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC91420-1 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC91420-1 for Vinyl Acetate: Associated CCV outside of control limits high, sample was ND.
- JC91420-2 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC91420-2 for Vinyl Acetate: Associated CCV outside of control limits high, sample was ND.
- JC91420-3 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC91420-3 for Vinyl Acetate: Associated CCV outside of control limits high, sample was ND.
- JC91420-4 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC91420-4 for Vinyl Acetate: Associated CCV outside of control limits high, sample was ND.
- JC91420-5 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC91420-5 for Vinyl Acetate: Associated CCV outside of control limits high, sample was ND.
- JC91420-6 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC91420-6 for Vinyl Acetate: Associated CCV outside of control limits high, sample was ND.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Wednesday, July 24, 2019

Page 1 of 1

Summary of Hits

Job Number: JC91420

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 07/10/19



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC91420-1 EXSVE-EX

Acetone	3.3	0.20	0.11	ppbv	TO-15
Carbon disulfide	0.29	0.20	0.024	ppbv	TO-15
Chloroethane	0.26	0.20	0.048	ppbv	TO-15
Chloroform	0.30	0.20	0.020	ppbv	TO-15
Chloromethane	2.2	0.20	0.015	ppbv	TO-15
1,1-Dichloroethylene	0.71	0.20	0.017	ppbv	TO-15
1,4-Dioxane	0.80	0.20	0.052	ppbv	TO-15
Dichlorodifluoromethane	0.52	0.20	0.017	ppbv	TO-15
cis-1,2-Dichloroethylene	0.59	0.20	0.012	ppbv	TO-15
Ethanol	3.2	0.50	0.22	ppbv	TO-15
Freon 113	0.22	0.20	0.017	ppbv	TO-15
Isopropyl Alcohol	0.27	0.20	0.065	ppbv	TO-15
Methyl ethyl ketone	0.77	0.20	0.042	ppbv	TO-15
Methyl Isobutyl Ketone	0.17 J	0.20	0.036	ppbv	TO-15
1,1,1-Trichloroethane	5.4	0.20	0.033	ppbv	TO-15
Tertiary Butyl Alcohol	0.22	0.20	0.014	ppbv	TO-15
Tetrachloroethylene	0.042	0.040	0.031	ppbv	TO-15
Toluene	0.59	0.20	0.014	ppbv	TO-15
Trichloroethylene	0.089	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane	2.9	0.20	0.028	ppbv	TO-15
Vinyl chloride	0.16 J	0.20	0.022	ppbv	TO-15
Acetone	7.8	0.48	0.26	ug/m3	TO-15
Carbon disulfide	0.90	0.62	0.075	ug/m3	TO-15
Chloroethane	0.69	0.53	0.13	ug/m3	TO-15
Chloroform	1.5	0.98	0.098	ug/m3	TO-15
Chloromethane	4.5	0.41	0.031	ug/m3	TO-15
1,1-Dichloroethylene	2.8	0.79	0.067	ug/m3	TO-15
1,4-Dioxane	2.9	0.72	0.19	ug/m3	TO-15
Dichlorodifluoromethane	2.6	0.99	0.084	ug/m3	TO-15
cis-1,2-Dichloroethylene	2.3	0.79	0.048	ug/m3	TO-15
Ethanol	6.0	0.94	0.41	ug/m3	TO-15
Freon 113	1.7	1.5	0.13	ug/m3	TO-15
Isopropyl Alcohol	0.66	0.49	0.16	ug/m3	TO-15
Methyl ethyl ketone	2.3	0.59	0.12	ug/m3	TO-15
Methyl Isobutyl Ketone	0.70 J	0.82	0.15	ug/m3	TO-15
1,1,1-Trichloroethane	29	1.1	0.18	ug/m3	TO-15
Tertiary Butyl Alcohol	0.67	0.61	0.042	ug/m3	TO-15
Tetrachloroethylene	0.28	0.27	0.21	ug/m3	TO-15
Toluene	2.2	0.75	0.053	ug/m3	TO-15
Trichloroethylene	0.48	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane	16	1.1	0.16	ug/m3	TO-15
Vinyl chloride	0.41 J	0.51	0.056	ug/m3	TO-15

Summary of Hits

Job Number: JC91420

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 07/10/19



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

JC91420-2 EXSVE-MID

Acetone	1.7	0.20	0.11	ppbv	TO-15
Carbon disulfide	0.12 J	0.20	0.024	ppbv	TO-15
Chloroform	0.25	0.20	0.020	ppbv	TO-15
Chloromethane	2.1	0.20	0.015	ppbv	TO-15
1,1-Dichloroethylene	0.25	0.20	0.017	ppbv	TO-15
1,4-Dioxane	0.24	0.20	0.052	ppbv	TO-15
Dichlorodifluoromethane	0.53	0.20	0.017	ppbv	TO-15
Ethanol	7.0	0.50	0.22	ppbv	TO-15
Freon 113	0.11 J	0.20	0.017	ppbv	TO-15
Isopropyl Alcohol	0.25	0.20	0.065	ppbv	TO-15
Methylene chloride	0.24	0.20	0.015	ppbv	TO-15
Methyl ethyl ketone	0.14 J	0.20	0.042	ppbv	TO-15
1,1,1-Trichloroethane	2.0	0.20	0.033	ppbv	TO-15
1,2,4-Trimethylbenzene	0.15 J	0.20	0.033	ppbv	TO-15
Tetrachloroethylene	0.21	0.040	0.031	ppbv	TO-15
Toluene	0.13 J	0.20	0.014	ppbv	TO-15
Trichloroethylene	0.36	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane	3.1	0.20	0.028	ppbv	TO-15
Acetone	4.0	0.48	0.26	ug/m3	TO-15
Carbon disulfide	0.37 J	0.62	0.075	ug/m3	TO-15
Chloroform	1.2	0.98	0.098	ug/m3	TO-15
Chloromethane	4.3	0.41	0.031	ug/m3	TO-15
1,1-Dichloroethylene	0.99	0.79	0.067	ug/m3	TO-15
1,4-Dioxane	0.86	0.72	0.19	ug/m3	TO-15
Dichlorodifluoromethane	2.6	0.99	0.084	ug/m3	TO-15
Ethanol	13	0.94	0.41	ug/m3	TO-15
Freon 113	0.84 J	1.5	0.13	ug/m3	TO-15
Isopropyl Alcohol	0.61	0.49	0.16	ug/m3	TO-15
Methylene chloride	0.83	0.69	0.052	ug/m3	TO-15
Methyl ethyl ketone	0.41 J	0.59	0.12	ug/m3	TO-15
1,1,1-Trichloroethane	11	1.1	0.18	ug/m3	TO-15
1,2,4-Trimethylbenzene	0.74 J	0.98	0.16	ug/m3	TO-15
Tetrachloroethylene	1.4	0.27	0.21	ug/m3	TO-15
Toluene	0.49 J	0.75	0.053	ug/m3	TO-15
Trichloroethylene	1.9	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane	17	1.1	0.16	ug/m3	TO-15

JC91420-3 EXSVE-RAW

Acetone	3.0	0.20	0.11	ppbv	TO-15
Chloroform	0.33	0.20	0.020	ppbv	TO-15
Chloromethane	0.19 J	0.20	0.015	ppbv	TO-15
Dichlorodifluoromethane	0.60	0.20	0.017	ppbv	TO-15

Summary of Hits

Job Number: JC91420

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 07/10/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Ethanol		2.6	0.50	0.22	ppbv	TO-15
Isopropyl Alcohol		0.50	0.20	0.065	ppbv	TO-15
Methyl ethyl ketone		0.68	0.20	0.042	ppbv	TO-15
Methyl Isobutyl Ketone		0.13 J	0.20	0.036	ppbv	TO-15
1,1,1-Trichloroethane		1.9	0.20	0.033	ppbv	TO-15
2,2,4-Trimethylpentane		5.1	0.20	0.022	ppbv	TO-15
Tertiary Butyl Alcohol		0.21	0.20	0.014	ppbv	TO-15
Tetrachloroethylene		3.7	0.040	0.031	ppbv	TO-15
Trichloroethylene		0.16	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane		3.9	0.20	0.028	ppbv	TO-15
Acetone		7.1	0.48	0.26	ug/m3	TO-15
Chloroform		1.6	0.98	0.098	ug/m3	TO-15
Chloromethane		0.39 J	0.41	0.031	ug/m3	TO-15
Dichlorodifluoromethane		3.0	0.99	0.084	ug/m3	TO-15
Ethanol		4.9	0.94	0.41	ug/m3	TO-15
Isopropyl Alcohol		1.2	0.49	0.16	ug/m3	TO-15
Methyl ethyl ketone		2.0	0.59	0.12	ug/m3	TO-15
Methyl Isobutyl Ketone		0.53 J	0.82	0.15	ug/m3	TO-15
1,1,1-Trichloroethane		10	1.1	0.18	ug/m3	TO-15
2,2,4-Trimethylpentane		24	0.93	0.10	ug/m3	TO-15
Tertiary Butyl Alcohol		0.64	0.61	0.042	ug/m3	TO-15
Tetrachloroethylene		25	0.27	0.21	ug/m3	TO-15
Trichloroethylene		0.86	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		22	1.1	0.16	ug/m3	TO-15

JC91420-4 INTSVE-EX

Acetone	11.0	0.20	0.11	ppbv	TO-15
Chloroform	0.23	0.20	0.020	ppbv	TO-15
Chloromethane	1.2	0.20	0.015	ppbv	TO-15
Dichlorodifluoromethane	0.49	0.20	0.017	ppbv	TO-15
Ethanol	6.4	0.50	0.22	ppbv	TO-15
Isopropyl Alcohol	3.2	0.20	0.065	ppbv	TO-15
Methylene chloride	8.3	0.20	0.015	ppbv	TO-15
Methyl ethyl ketone	0.65	0.20	0.042	ppbv	TO-15
1,1,1-Trichloroethane	3.5	0.20	0.033	ppbv	TO-15
1,2,4-Trimethylbenzene	0.18 J	0.20	0.033	ppbv	TO-15
Toluene	0.18 J	0.20	0.014	ppbv	TO-15
Trichlorofluoromethane	1.0	0.20	0.028	ppbv	TO-15
m,p-Xylene	0.16 J	0.20	0.034	ppbv	TO-15
Xylenes (total)	0.16 J	0.20	0.017	ppbv	TO-15
Acetone	26.1	0.48	0.26	ug/m3	TO-15
Chloroform	1.1	0.98	0.098	ug/m3	TO-15
Chloromethane	2.5	0.41	0.031	ug/m3	TO-15
Dichlorodifluoromethane	2.4	0.99	0.084	ug/m3	TO-15

Summary of Hits

Job Number: JC91420

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 07/10/19



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Ethanol		12	0.94	0.41	ug/m3	TO-15
Isopropyl Alcohol		7.9	0.49	0.16	ug/m3	TO-15
Methylene chloride		29	0.69	0.052	ug/m3	TO-15
Methyl ethyl ketone		1.9	0.59	0.12	ug/m3	TO-15
1,1,1-Trichloroethane		19	1.1	0.18	ug/m3	TO-15
1,2,4-Trimethylbenzene		0.88 J	0.98	0.16	ug/m3	TO-15
Toluene		0.68 J	0.75	0.053	ug/m3	TO-15
Trichlorofluoromethane		5.6	1.1	0.16	ug/m3	TO-15
m,p-Xylene		0.69 J	0.87	0.15	ug/m3	TO-15
Xylenes (total)		0.69 J	0.87	0.074	ug/m3	TO-15

JC91420-5 INTSVE-MID

Acetone	5.9	0.20	0.11	ppbv	TO-15
Chloroform	0.48	0.20	0.020	ppbv	TO-15
Chloromethane	2.4	0.20	0.015	ppbv	TO-15
Carbon tetrachloride	0.078 J	0.20	0.024	ppbv	TO-15
Cyclohexane	9.8	0.20	0.022	ppbv	TO-15
1,4-Dioxane	5.4	0.20	0.052	ppbv	TO-15
Dichlorodifluoromethane	0.59	0.20	0.017	ppbv	TO-15
Ethanol	11.6	0.50	0.22	ppbv	TO-15
Ethyl Acetate	2.4	0.20	0.038	ppbv	TO-15
Methylene chloride	4.6	0.20	0.015	ppbv	TO-15
Methyl ethyl ketone	0.40	0.20	0.042	ppbv	TO-15
1,1,1-Trichloroethane	4.2	0.20	0.033	ppbv	TO-15
1,2,4-Trimethylbenzene	0.16 J	0.20	0.033	ppbv	TO-15
Tertiary Butyl Alcohol	0.94	0.20	0.014	ppbv	TO-15
Tetrahydrofuran	0.17 J	0.20	0.050	ppbv	TO-15
Toluene	0.14 J	0.20	0.014	ppbv	TO-15
Trichloroethylene	0.48	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane	1.1	0.20	0.028	ppbv	TO-15
m,p-Xylene	0.14 J	0.20	0.034	ppbv	TO-15
Xylenes (total)	0.14 J	0.20	0.017	ppbv	TO-15
Acetone	14	0.48	0.26	ug/m3	TO-15
Chloroform	2.3	0.98	0.098	ug/m3	TO-15
Chloromethane	5.0	0.41	0.031	ug/m3	TO-15
Carbon tetrachloride	0.49 J	1.3	0.15	ug/m3	TO-15
Cyclohexane	34	0.69	0.076	ug/m3	TO-15
1,4-Dioxane	19	0.72	0.19	ug/m3	TO-15
Dichlorodifluoromethane	2.9	0.99	0.084	ug/m3	TO-15
Ethanol	21.9	0.94	0.41	ug/m3	TO-15
Ethyl Acetate	8.6	0.72	0.14	ug/m3	TO-15
Methylene chloride	16	0.69	0.052	ug/m3	TO-15
Methyl ethyl ketone	1.2	0.59	0.12	ug/m3	TO-15
1,1,1-Trichloroethane	23	1.1	0.18	ug/m3	TO-15

Summary of Hits

Job Number: JC91420

Account: C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Collected: 07/10/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,2,4-Trimethylbenzene		0.79 J	0.98	0.16	ug/m3	TO-15
Tertiary Butyl Alcohol		2.8	0.61	0.042	ug/m3	TO-15
Tetrahydrofuran		0.50 J	0.59	0.15	ug/m3	TO-15
Toluene		0.53 J	0.75	0.053	ug/m3	TO-15
Trichloroethylene		2.6	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		6.2	1.1	0.16	ug/m3	TO-15
m,p-Xylene		0.61 J	0.87	0.15	ug/m3	TO-15
Xylenes (total)		0.61 J	0.87	0.074	ug/m3	TO-15

JC91420-6 INTSVE-RAW

Acetone	3.9	0.20	0.11	ppbv	TO-15
Chloroform	0.59	0.20	0.020	ppbv	TO-15
Chloromethane	2.2	0.20	0.015	ppbv	TO-15
Carbon tetrachloride	0.078 J	0.20	0.024	ppbv	TO-15
Cyclohexane	0.13 J	0.20	0.022	ppbv	TO-15
Dichlorodifluoromethane	0.61	0.20	0.017	ppbv	TO-15
Ethanol	6.6	0.50	0.22	ppbv	TO-15
Isopropyl Alcohol	0.28	0.20	0.065	ppbv	TO-15
Methylene chloride	4.1	0.20	0.015	ppbv	TO-15
Methyl ethyl ketone	0.66	0.20	0.042	ppbv	TO-15
Methyl Isobutyl Ketone	0.28	0.20	0.036	ppbv	TO-15
Styrene	1.5	0.20	0.019	ppbv	TO-15
1,1,1-Trichloroethane	4.3	0.20	0.033	ppbv	TO-15
Tertiary Butyl Alcohol	0.27	0.20	0.014	ppbv	TO-15
Tetrachloroethylene	10.6	0.040	0.031	ppbv	TO-15
Tetrahydrofuran	0.14 J	0.20	0.050	ppbv	TO-15
Toluene	0.37	0.20	0.014	ppbv	TO-15
Trichloroethylene	0.89	0.040	0.019	ppbv	TO-15
Trichlorofluoromethane	1.0	0.20	0.028	ppbv	TO-15
Acetone	9.3	0.48	0.26	ug/m3	TO-15
Chloroform	2.9	0.98	0.098	ug/m3	TO-15
Chloromethane	4.5	0.41	0.031	ug/m3	TO-15
Carbon tetrachloride	0.49 J	1.3	0.15	ug/m3	TO-15
Cyclohexane	0.45 J	0.69	0.076	ug/m3	TO-15
Dichlorodifluoromethane	3.0	0.99	0.084	ug/m3	TO-15
Ethanol	12	0.94	0.41	ug/m3	TO-15
Isopropyl Alcohol	0.69	0.49	0.16	ug/m3	TO-15
Methylene chloride	14	0.69	0.052	ug/m3	TO-15
Methyl ethyl ketone	1.9	0.59	0.12	ug/m3	TO-15
Methyl Isobutyl Ketone	1.1	0.82	0.15	ug/m3	TO-15
Styrene	6.4	0.85	0.081	ug/m3	TO-15
1,1,1-Trichloroethane	23	1.1	0.18	ug/m3	TO-15
Tertiary Butyl Alcohol	0.82	0.61	0.042	ug/m3	TO-15
Tetrachloroethylene	71.9	0.27	0.21	ug/m3	TO-15

Summary of Hits

Job Number: JC91420
Account: C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Collected: 07/10/19



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						
Tetrahydrofuran		0.41 J	0.59	0.15	ug/m3	TO-15
Toluene		1.4	0.75	0.053	ug/m3	TO-15
Trichloroethylene		4.8	0.21	0.10	ug/m3	TO-15
Trichlorofluoromethane		5.6	1.1	0.16	ug/m3	TO-15



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 3

Client Sample ID:	EXSVE-EX						
Lab Sample ID:	JC91420-1					Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	M314			Date Received:	07/10/19
Method:	TO-15					Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W13183.D	1	07/23/19 17:00	TCH	n/a	n/a	V6W538
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	3.3	0.20	0.11	ppbv		7.8	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	0.29	0.20	0.024	ppbv		0.90	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	0.26	0.20	0.048	ppbv		0.69	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.30	0.20	0.020	ppbv		1.5	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	2.2	0.20	0.015	ppbv		4.5	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	0.71	0.20	0.017	ppbv		2.8	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane ^a	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	0.80	0.20	0.052	ppbv		2.9	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.52	0.20	0.017	ppbv		2.6	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	0.59	0.20	0.012	ppbv		2.3	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	EXSVE-EX		
Lab Sample ID:	JC91420-1	Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Date Received:	07/10/19
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	3.2	0.50	0.22	ppbv		6.0	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	0.22	0.20	0.017	ppbv		1.7	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.27	0.20	0.065	ppbv		0.66	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.77	0.20	0.042	ppbv		2.3	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.17	0.20	0.036	ppbv	J	0.70	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	5.4	0.20	0.033	ppbv		29	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.22	0.20	0.014	ppbv		0.67	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.042	0.040	0.031	ppbv		0.28	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.59	0.20	0.014	ppbv		2.2	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.089	0.040	0.019	ppbv		0.48	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	2.9	0.20	0.028	ppbv		16	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	0.16	0.20	0.022	ppbv	J	0.41	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate ^a	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		65-128%

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:	EXSVE-EX	Date Sampled:	07/10/19
Lab Sample ID:	JC91420-1	Date Received:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	M314
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	EXSVE-MID		
Lab Sample ID:	JC91420-2	Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Date Received:	07/10/19
Method:	TO-15	Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W13184.D	1	07/23/19 17:59	TCH	n/a	n/a	V6W538
Run #2							

Run #	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	1.7	0.20	0.11	ppbv		4.0	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	0.12	0.20	0.024	ppbv	J	0.37	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.25	0.20	0.020	ppbv		1.2	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	2.1	0.20	0.015	ppbv		4.3	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	0.25	0.20	0.017	ppbv		0.99	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane ^a	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	0.24	0.20	0.052	ppbv		0.86	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.53	0.20	0.017	ppbv		2.6	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	EXSVE-MID		
Lab Sample ID:	JC91420-2		
Matrix:	AIR - Soil Vapor Comp.	Summa ID: A765	Date Sampled: 07/10/19
Method:	TO-15		Date Received: 07/10/19
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	7.0	0.50	0.22	ppbv		13	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	0.11	0.20	0.017	ppbv	J	0.84	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.25	0.20	0.065	ppbv		0.61	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.24	0.20	0.015	ppbv		0.83	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.14	0.20	0.042	ppbv	J	0.41	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	2.0	0.20	0.033	ppbv		11	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.15	0.20	0.033	ppbv	J	0.74	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.21	0.040	0.031	ppbv		1.4	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.13	0.20	0.014	ppbv	J	0.49	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.36	0.040	0.019	ppbv		1.9	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	3.1	0.20	0.028	ppbv		17	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate ^a	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

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:	EXSVE-MID	Date Sampled:	07/10/19
Lab Sample ID:	JC91420-2	Date Received:	07/10/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A765	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	EXSVE-RAW						
Lab Sample ID:	JC91420-3					Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	A474			Date Received:	07/10/19
Method:	TO-15					Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W13185.D	1	07/23/19 18:55	TCH	n/a	n/a	V6W538
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	3.0	0.20	0.11	ppbv		7.1	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.33	0.20	0.020	ppbv		1.6	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.19	0.20	0.015	ppbv	J	0.39	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane ^a	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.60	0.20	0.017	ppbv		3.0	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	EXSVE-RAW			Date Sampled:	07/10/19
Lab Sample ID:	JC91420-3			Date Received:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	A474	Percent Solids:	n/a
Method:	TO-15				
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	2.6	0.50	0.22	ppbv		4.9	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.50	0.20	0.065	ppbv		1.2	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.68	0.20	0.042	ppbv		2.0	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.13	0.20	0.036	ppbv	J	0.53	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	1.9	0.20	0.033	ppbv		10	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	5.1	0.20	0.022	ppbv		24	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.21	0.20	0.014	ppbv		0.64	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	3.7	0.040	0.031	ppbv		25	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	ND	0.20	0.014	ppbv		ND	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.16	0.040	0.019	ppbv		0.86	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	3.9	0.20	0.028	ppbv		22	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate ^a	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		65-128%

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:	EXSVE-RAW	Date Sampled:	07/10/19
Lab Sample ID:	JC91420-3	Date Received:	07/10/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A474	Percent Solids:	n/a
Method:	TO-15		
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	INTSVE-EX				
Lab Sample ID:	JC91420-4			Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A996			Date Received:	07/10/19
Method:	TO-15			Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W13186.D	1	07/23/19 19:53	TCH	n/a	n/a	V6W538
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	11.0	0.20	0.11	ppbv		26.1	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.23	0.20	0.020	ppbv		1.1	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	1.2	0.20	0.015	ppbv		2.5	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane ^a	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.49	0.20	0.017	ppbv		2.4	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	INTSVE-EX		
Lab Sample ID:	JC91420-4		
Matrix:	AIR - Soil Vapor Comp.	Summa ID: A996	Date Sampled: 07/10/19
Method:	TO-15		Date Received: 07/10/19
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY		Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	6.4	0.50	0.22	ppbv		12	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	3.2	0.20	0.065	ppbv		7.9	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	8.3	0.20	0.015	ppbv		29	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.65	0.20	0.042	ppbv		1.9	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	3.5	0.20	0.033	ppbv		19	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.18	0.20	0.033	ppbv	J	0.88	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.18	0.20	0.014	ppbv	J	0.68	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.0	0.20	0.028	ppbv		5.6	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate ^a	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	0.16	0.20	0.034	ppbv	J	0.69	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	0.16	0.20	0.017	ppbv	J	0.69	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

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:	INTSVE-EX				
Lab Sample ID:	JC91420-4			Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A996			Date Received:	07/10/19
Method:	TO-15			Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	INTSVE-MID						
Lab Sample ID:	JC91420-5					Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	M162			Date Received:	07/10/19
Method:	TO-15					Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W13187.D	1	07/23/19 20:53	TCH	n/a	n/a	V6W538
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	5.9	0.20	0.11	ppbv		14	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.48	0.20	0.020	ppbv		2.3	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	2.4	0.20	0.015	ppbv		5.0	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.078	0.20	0.024	ppbv	J	0.49	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	9.8	0.20	0.022	ppbv		34	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane ^a	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	5.4	0.20	0.052	ppbv		19	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.59	0.20	0.017	ppbv		2.9	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	INTSVE-MID			Date Sampled:	07/10/19
Lab Sample ID:	JC91420-5			Date Received:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	M162	Percent Solids:	n/a
Method:	TO-15				
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	11.6	0.50	0.22	ppbv		21.9	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	2.4	0.20	0.038	ppbv		8.6	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	4.6	0.20	0.015	ppbv		16	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.40	0.20	0.042	ppbv		1.2	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.019	ppbv		ND	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	4.2	0.20	0.033	ppbv		23	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.16	0.20	0.033	ppbv	J	0.79	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.94	0.20	0.014	ppbv		2.8	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.17	0.20	0.050	ppbv	J	0.50	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.14	0.20	0.014	ppbv	J	0.53	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.48	0.040	0.019	ppbv		2.6	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.1	0.20	0.028	ppbv		6.2	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate ^a	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	0.14	0.20	0.034	ppbv	J	0.61	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	0.14	0.20	0.017	ppbv	J	0.61	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

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:	INTSVE-MID				
Lab Sample ID:	JC91420-5			Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: M162			Date Received:	07/10/19
Method:	TO-15			Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

SGS North America Inc.

Report of Analysis

Page 1 of 3

Client Sample ID:	INTSVE-RAW				
Lab Sample ID:	JC91420-6			Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1037			Date Received:	07/10/19
Method:	TO-15			Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6W13188.D	1	07/23/19 21:54	TCH	n/a	n/a	V6W538
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	3.9	0.20	0.11	ppbv		9.3	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.59	0.20	0.020	ppbv		2.9	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	2.2	0.20	0.015	ppbv		4.5	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.078	0.20	0.024	ppbv	J	0.49	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	0.13	0.20	0.022	ppbv	J	0.45	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane ^a	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.61	0.20	0.017	ppbv		3.0	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3

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:	INTSVE-RAW			Date Sampled:	07/10/19
Lab Sample ID:	JC91420-6			Date Received:	07/10/19
Matrix:	AIR - Soil Vapor Comp.	Summa ID:	A1037	Percent Solids:	n/a
Method:	TO-15				
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	6.6	0.50	0.22	ppbv		12	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	ND	0.20	0.011	ppbv		ND	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.28	0.20	0.065	ppbv		0.69	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	4.1	0.20	0.015	ppbv		14	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.66	0.20	0.042	ppbv		1.9	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.28	0.20	0.036	ppbv		1.1	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	1.5	0.20	0.019	ppbv		6.4	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	4.3	0.20	0.033	ppbv		23	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.27	0.20	0.014	ppbv		0.82	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	10.6	0.040	0.031	ppbv		71.9	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.14	0.20	0.050	ppbv	J	0.41	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.37	0.20	0.014	ppbv		1.4	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.89	0.040	0.019	ppbv		4.8	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	1.0	0.20	0.028	ppbv		5.6	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate ^a	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		65-128%

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:	INTSVE-RAW				
Lab Sample ID:	JC91420-6			Date Sampled:	07/10/19
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1037			Date Received:	07/10/19
Method:	TO-15			Percent Solids:	n/a
Project:	Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY				

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

(a) Associated CCV outside of control limits high, sample was ND.

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

4.6
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log
- Sample Tracking Chronicle
- Internal Chain of Custody
- 2018 MDL Study - Method: TO-15



PAGE OF

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job #

SW-07219-16
JC 21420

Client / Reporting Information				Project Information				Weather Parameters				Requested Analysis				
Company Name CA Rich Consultants, Inc.				Project Name MAKO 3				Temperature (Fahrenheit)								
Address 17 Dupont Street				Street Enter Lane				Start _____ Maximum _____								
City Plainville NY State 283				City Islandia NY State _____				Stop _____ Minimum _____								
Project Contact Michael Yager E-mail myager@carichinc.com				Project # AIG-MAKO 3-SVE				Atmospheric Pressure (inches of Hg)								
Phone # 516 576 8844 Fax 516 576 0093				Client Purchase Order #				Start _____ Maximum _____								
Sampler(s) Name(s)								Stop _____ Minimum _____								
								Other weather comment:								
Lab Sample #	Field ID / Point of Collection	Air Type	Sampling Equipment Info			Start Sampling Information					Stop Sampling Information					
		Indoor (I) Soli Vap (SV) Ambient (A)	Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Date	Time (24hr clock)	Canister Pressure (°Hg)	Interior Temp (°F)	Sampler Init.	Date	Time (24hr clock)	Canister Pressure (°Hg)	Interior Temp (°F)	Sampler Init.	
1	EXSVE - EX	SV	A724	6L	NA	7/10/19					7/10/19	0932				X
2	EXSVE - Mid	SV	A765	6L	NA	7/10/19					7/10/19	0936				X
3	EXSVE - RAW	SV	A474	6L	NA	7/10/19					7/10/19	0942				X
4	INTSVE - EX	SV	A996	6L	NA	7/10/19					7/10/19	0945				X
5	INTSVE - Mid	SV	M162	6L	NA	7/10/19					7/10/19	0950				X
6	INTSVE - RAW	SV	A1037	6L	NA	7/10/19					7/10/19	1000				X
Turnaround Time (Business days)																
☒ Standard - 15 Days						Data Deliverable Information						Comments / Remarks				
☐ 10 Day ☐ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day ☐ Other						All NJDEP TO-15 is mandatory Full T1 Comm A _____ Comm B _____ Reduced T2 _____ Full T1 _____ Other: _____ DKQP reporting _____						*AIG Pricing per Todd Beasley -NYSP Deliverables - Category B -NYSDOH Air Guide 1 Min. Detection Limits Seal 03602 + 03604 Sample Inventory is verified upon receipt in the Laboratory				
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished by Laboratory		Date/Time	Received By:		Date/Time		Relinquished by:		Date/Time	Received By:		Date/Time		Received By:		
1 R. D. ...		7/10/19 11:15	1		Chris Land		2		7/10/19 11:25	4		DL				
Relinquished by:		Date/Time	Received By:		Date/Time		Relinquished by:		Date/Time	Received By:		Date/Time		Received By:		
3 Michael Yager		7/10/19 11:25	3				4									
Relinquished by:		Date/Time	Received By:		Date/Time		Custody Seal #									
5			5													

Form:SM088-03D (revised 2-12-18)

<http://www.sqs.com/en/terms-and-conditions>

JC91420: Chain of Custody

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SGS

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JC91420

SGS Sample Receipt Summary

Job Number: JC91420

Client: _____

Project: _____

Date / Time Received: 7/10/2019 5:25:00 PM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security

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. Cooler temp verification:	N/A	
3. Cooler media:	N/A	
4. No. Coolers:	N/A	

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:	☐	☐	☒

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify) _____

Comments

SM089-03
Rev. Date 12/7/17

JC91420: Chain of Custody

Page 2 of 2

Summa Canister and Flow Controller Log

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Received: 07/10/19

SUMMA CANISTERS													
Shipping							Receiving						
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact
M314	6	29.4	07/05/19	JT	CP104046W12879.D		JC91420-1	07/17/19	JT	1			1
A765	6	29.4	07/05/19	JT	CP104046W12879.D		JC91420-2	07/17/19	JT	1			1
A474	6	29.4	07/05/19	JT	CP104046W12879.D		JC91420-3	07/17/19	JT		1		1
A996	6	29.4	07/05/19	JT	CP104046W12879.D		JC91420-4	07/17/19	JT	2			1
M162	6	29.4	07/05/19	JT	CP104046W12879.D		JC91420-5	07/17/19	JT	1.5			1
A1037	6	29.4	07/05/19	JT	CP104046W12879.D		JC91420-6	07/17/19	JT	1.5			1

SGS Bottle Order(s):
SW-07219-86

Prep Date Room Temp(F) Bar Pres "Hg
07/05/19 70 29.92

Internal Sample Tracking Chronicle

C. A. Rich Consultants

Job No: JC91420

Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY
Project No: AIG-Mako3-SVE

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC91420-1	Collected: 10-JUL-19 09:32	By: MY	Received: 10-JUL-19	By: JK		
EXSVE-EX						
JC91420-1	TO-15	23-JUL-19 17:00	TCH			VTO15NYSVLL
JC91420-2	Collected: 10-JUL-19 09:36	By: MY	Received: 10-JUL-19	By: JK		
EXSVE-MID						
JC91420-2	TO-15	23-JUL-19 17:59	TCH			VTO15NYSVLL
JC91420-3	Collected: 10-JUL-19 09:42	By: MY	Received: 10-JUL-19	By: JK		
EXSVE-RAW						
JC91420-3	TO-15	23-JUL-19 18:55	TCH			VTO15NYSVLL
JC91420-4	Collected: 10-JUL-19 09:45	By: MY	Received: 10-JUL-19	By: JK		
INTSVE-EX						
JC91420-4	TO-15	23-JUL-19 19:53	TCH			VTO15NYSVLL
JC91420-5	Collected: 10-JUL-19 09:50	By: MY	Received: 10-JUL-19	By: JK		
INTSVE-MID						
JC91420-5	TO-15	23-JUL-19 20:53	TCH			VTO15NYSVLL
JC91420-6	Collected: 10-JUL-19 10:00	By: MY	Received: 10-JUL-19	By: JK		
INTSVE-RAW						
JC91420-6	TO-15	23-JUL-19 21:54	TCH			VTO15NYSVLL

SGS Internal Chain of Custody

Page 1 of 1

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Received: 07/10/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC91420-1.1	Derek Chan	Air Storage	07/11/19 13:09	Return to Storage
JC91420-1.1	Air Storage	Thomas Hilbig	07/23/19 16:50	Retrieve from Storage
JC91420-1.1	Thomas Hilbig	GCMS6W	07/23/19 16:50	Load on Instrument
JC91420-2.1	Derek Chan	Air Storage	07/11/19 13:09	Return to Storage
JC91420-2.1	Air Storage	Thomas Hilbig	07/23/19 16:50	Retrieve from Storage
JC91420-2.1	Thomas Hilbig	GCMS6W	07/23/19 16:50	Load on Instrument
JC91420-3.1	Derek Chan	Air Storage	07/11/19 13:09	Return to Storage
JC91420-3.1	Air Storage	Thomas Hilbig	07/23/19 16:50	Retrieve from Storage
JC91420-3.1	Thomas Hilbig	GCMS6W	07/23/19 16:50	Load on Instrument
JC91420-4.1	Derek Chan	Air Storage	07/11/19 13:09	Return to Storage
JC91420-4.1	Air Storage	Thomas Hilbig	07/23/19 16:50	Retrieve from Storage
JC91420-4.1	Thomas Hilbig	GCMS6W	07/23/19 16:50	Load on Instrument
JC91420-5.1	Derek Chan	Air Storage	07/11/19 13:09	Return to Storage
JC91420-5.1	Air Storage	Thomas Hilbig	07/23/19 16:50	Retrieve from Storage
JC91420-5.1	Thomas Hilbig	GCMS6W	07/23/19 16:50	Load on Instrument
JC91420-6.1	Derek Chan	Air Storage	07/11/19 13:09	Return to Storage
JC91420-6.1	Air Storage	Thomas Hilbig	07/23/19 16:50	Retrieve from Storage
JC91420-6.1	Thomas Hilbig	GCMS6W	07/23/19 16:50	Load on Instrument

Accutest Laboratories Annual Method Detection Limit Determination
Dayton, NJ Facility

Method: TO-15 (VTO14/15)
Instrument(s): GCMS3W, GCMS5W, GCMS6W
Analyst: Pooled

Matrix: AIR
Quant Factor: 1.00
Study Period: July, 2018

Cmpd./Element/Param. Name	Analysis Date	Spike ppbv	Replicate Spikes							X-Bar ppbv	X-Bar %Recov.	STD.Dev. ppbv	MDL	Spike/MDL Ratio
			R1 ppbv	R2 ppbv	R3 ppbv	R4 ppbv	R5 ppbv	R6 ppbv	R7 ppbv					
Acetone	4-Apr-18	0.1	0.15	0.17	0.14	0.17	0.17	0.09	0.09	0.14	139.43	0.04	0.11	0.89
Acrylonitrile	6-Mar-18	0.1	0.11	0.13	0.13	0.10	0.11	0.09	0.10	0.11	110.28	0.02	0.05	1.97
Acetonitrile	4-Apr-18	0.1	0.17	0.13	0.16	0.15	0.21	0.09	0.07	0.14	140.53	0.05	0.15	0.67
1,3-Butadiene	4-Apr-18	0.1	0.10	0.11	0.10	0.10	0.10	0.07	0.07	0.09	93.21	0.01	0.05	2.16
Benzene	6-Mar-18	0.1	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.10	96.63	0.00	0.01	8.40
Bromobenzene	4-Apr-18	0.04	0.05	0.04	0.05	0.04	0.05	0.03	0.03	0.04	103.07	0.01	0.02	1.79
Bromodichloromethane	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.05	120.64	0.01	0.03	1.49
Bromoform	4-Apr-18	0.04	0.06	0.06	0.06	0.05	0.06	0.03	0.03	0.05	127.36	0.01	0.04	1.07
Bromomethane	4-Apr-18	0.04	0.06	0.05	0.05	0.06	0.06	0.04	0.04	0.05	128.54	0.01	0.02	1.82
Bromoethene	4-Apr-18	0.04	0.04	0.05	0.05	0.04	0.04	0.03	0.03	0.04	103.18	0.01	0.02	1.82
n-Butane	9-Jul-18	0.2	0.20	0.18	0.20	0.18	0.12	0.20	0.15	0.18	88.23	0.03	0.10	2.10
Benzyl Chloride	4-Apr-18	0.1	0.10	0.09	0.09	0.08	0.08	0.05	0.05	0.08	77.01	0.02	0.06	1.77
n-Butylbenzene	6-Mar-18	0.1	0.07	0.07	0.07	0.09	0.07	0.05	0.06	0.07	69.64	0.01	0.04	2.69
sec-Butylbenzene	6-Mar-18	0.1	0.09	0.10	0.09	0.11	0.10	0.07	0.08	0.09	91.41	0.01	0.04	2.26
tert-Butylbenzene	6-Mar-18	0.1	0.09	0.10	0.10	0.11	0.10	0.07	0.09	0.09	93.20	0.01	0.04	2.71
Carbon disulfide	16-Mar-18	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.03	84.90	0.01	0.02	1.69
Chlorobenzene	4-Apr-18	0.04	0.06	0.05	0.05	0.05	0.05	0.03	0.04	0.05	121.74	0.01	0.03	1.53
Chlorodifluoromethane	4-Apr-18	0.1	0.11	0.12	0.12	0.12	0.11	0.07	0.03	0.10	97.42	0.03	0.10	0.96
Chloroethane	4-Apr-18	0.1	0.11	0.10	0.10	0.10	0.11	0.08	0.08	0.10	98.82	0.02	0.05	2.07
Chlorotrifluoroethene	16-Mar-18	0.04	0.04	0.03	0.03	0.04	0.04	0.05	0.04	0.04	96.91	0.00	0.01	2.74
Chloroform	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.04	109.12	0.01	0.02	2.01
Chloromethane	4-Apr-18	0.1	0.09	0.10	0.09	0.10	0.10	0.08	0.09	0.09	92.74	0.00	0.02	6.54
3-Chloropropene	16-Mar-18	0.1	0.08	0.08	0.07	0.05	0.06	0.08	0.07	0.07	70.88	0.01	0.04	2.52
2-Chlorotoluene	4-Apr-18	0.1	0.09	0.09	0.08	0.08	0.08	0.08	0.07	0.08	82.41	0.01	0.03	4.00
Carbon tetrachloride	4-Apr-18	0.04	0.04	0.04	0.05	0.05	0.05	0.03	0.03	0.04	105.24	0.01	0.02	1.70
Cyclohexane	4-Apr-18	0.1	0.06	0.07	0.06	0.06	0.06	0.08	0.08	0.07	66.65	0.01	0.02	4.55
1,1-Dichloroethane	4-Apr-18	0.1	0.09	0.10	0.10	0.10	0.10	0.09	0.09	0.10	95.35	0.00	0.01	8.62
1,1-Dichloroethylene	6-Mar-18	0.04	0.06	0.05	0.05	0.05	0.04	0.05	0.05	0.05	122.85	0.01	0.02	2.40
1,2-Dibromoethane	4-Apr-18	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04	92.37	0.01	0.02	2.25
1,2-Dichloroethane	4-Apr-18	0.04	0.04	0.05	0.04	0.05	0.05	0.03	0.03	0.04	102.51	0.01	0.02	1.92
1,2-Dichloropropane	6-Mar-18	0.04	0.05	0.05	0.05	0.04	0.04	0.05	0.06	0.05	123.28	0.01	0.02	2.09
1,3-Dichloropropane	6-Mar-18	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.02	0.03	79.01	0.01	0.02	2.54
1,4-Dioxane	16-Mar-18	0.1	0.10	0.09	0.07	0.09	0.09	0.06	0.05	0.08	77.81	0.02	0.05	1.93
Dichlorodifluoromethane	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.05	113.93	0.01	0.02	2.43

Dichlorofluoromethane	4-Apr-18	0.04	0.05	0.06	0.05	0.06	0.05	0.05	0.04	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.04	0.05	121.63	0.01	0.03	1.44
Dibromochloromethane	4-Apr-18	0.04	0.06	0.06	0.06	0.06	0.05	0.05	0.03	0.03	0.05	0.05	0.03	0.03	0.05	0.05	0.03	0.05	119.40	0.01	0.03	1.20
Dibromomethane	4-Apr-18	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.04	0.04	0.06	0.06	0.04	0.04	0.05	0.05	0.02	0.02	129.43	0.01	0.02	1.61
trans-1,2-Dichloroethylene	16-Mar-18	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.01	78.89	0.00	0.01	5.45
cis-1,2-Dichloroethylene	16-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.01	84.39	0.00	0.01	3.43
cis-1,3-Dichloropropene	6-Mar-18	0.1	0.10	0.10	0.10	0.10	0.08	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.01	0.02	91.08	0.01	0.02	5.13
m-Dichlorobenzene	4-Apr-18	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.02	87.14	0.01	0.02	2.12
o-Dichlorobenzene	6-Mar-18	0.1	0.08	0.08	0.09	0.09	0.08	0.08	0.07	0.07	0.08	0.08	0.07	0.07	0.08	0.08	0.01	0.02	79.00	0.01	0.02	4.58
p-Dichlorobenzene	4-Apr-18	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.02	84.30	0.01	0.02	2.29
trans-1,3-Dichloropropene	4-Apr-18	0.1	0.08	0.08	0.08	0.08	0.07	0.08	0.07	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.01	0.02	74.34	0.01	0.02	5.13
Di-Isopropyl ether	6-Mar-18	0.2	0.21	0.22	0.22	0.22	0.21	0.22	0.20	0.20	0.21	0.22	0.20	0.21	0.21	0.21	0.01	0.03	106.79	0.01	0.03	6.78
2,3-Dimethylpentane	4-Apr-18	0.1	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.08	0.08	0.07	0.07	0.08	0.08	0.01	0.02	76.36	0.01	0.02	5.07
2,4-Dimethylpentane	4-Apr-18	0.1	0.07	0.07	0.07	0.06	0.06	0.07	0.08	0.08	0.08	0.07	0.08	0.08	0.07	0.07	0.01	0.02	69.67	0.01	0.02	5.70
Ethanol	4-Apr-18	0.1	0.20	0.20	0.20	0.22	0.21	0.21	0.09	0.10	0.09	0.09	0.11	0.09	0.10	0.09	0.00	0.02	168.18	0.07	0.02	0.46
Ethylbenzene	6-Mar-18	0.1	0.09	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.06	0.06	0.08	0.08	0.01	0.02	96.79	0.00	0.02	6.61
Ethyl Acetate	6-Mar-18	0.1	0.08	0.08	0.08	0.10	0.09	0.09	0.06	0.06	0.06	0.06	0.06	0.06	0.08	0.08	0.01	0.04	79.31	0.01	0.04	2.66
Ethyl Acrylate	6-Mar-18	0.1	0.08	0.09	0.09	0.10	0.08	0.08	0.06	0.06	0.06	0.08	0.06	0.06	0.08	0.08	0.01	0.05	76.98	0.01	0.05	2.16
4-Ethyltoluene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.09	0.09	0.07	0.07	0.07	0.09	0.07	0.07	0.08	0.08	0.01	0.03	82.05	0.01	0.03	3.38
Freon 113	4-Apr-18	0.04	0.05	0.04	0.05	0.04	0.05	0.04	0.04	0.03	0.03	0.04	0.03	0.03	0.04	0.04	0.01	0.02	103.42	0.01	0.02	2.34
Freon 114	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.01	0.02	115.71	0.01	0.02	2.09
Freon 115	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.01	99.91	0.00	0.01	5.22
Freon 123	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.05	0.04	0.03	0.05	0.05	0.01	0.02	107.96	0.01	0.02	2.05
Freon 123A	16-Mar-18	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.08	0.08	0.08	0.05	0.08	0.08	0.05	0.05	0.02	0.06	131.10	0.02	0.06	0.63
Freon 141B	4-Apr-18	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.04	0.04	0.04	0.06	0.04	0.04	0.05	0.05	0.01	0.03	132.21	0.01	0.03	1.30
Freon 142B	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.03	0.05	0.04	0.03	0.05	0.05	0.01	0.03	120.27	0.01	0.03	1.46
Freon 143a	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.01	0.02	119.26	0.01	0.02	1.96
Freon 152A	4-Apr-18	0.1	0.09	0.10	0.10	0.10	0.10	0.10	0.08	0.08	0.08	0.09	0.08	0.08	0.09	0.09	0.01	0.03	93.15	0.01	0.03	3.93
Heptane	16-Mar-18	0.04	0.03	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.02	51.50	0.01	0.02	2.29
Hexachlorobutadiene	4-Apr-18	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.04	0.04	0.04	0.06	0.04	0.04	0.06	0.06	0.01	0.05	141.60	0.01	0.05	0.88
Hexachloroethane	4-Apr-18	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.04	0.04	0.03	0.07	0.04	0.03	0.06	0.06	0.02	0.05	148.40	0.02	0.05	0.75
Hexane	6-Mar-18	0.04	0.04	0.05	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.01	101.95	0.00	0.01	3.79
2-Hexanone	6-Mar-18	0.1	0.07	0.08	0.08	0.08	0.08	0.07	0.05	0.05	0.06	0.07	0.05	0.06	0.07	0.07	0.01	0.04	68.64	0.01	0.04	2.76
Iodomethane	6-Mar-18	0.1	0.10	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.09	0.09	0.10	0.09	0.10	0.10	0.00	0.01	96.55	0.00	0.01	8.77
Isopropylbenzene	6-Mar-18	0.1	0.10	0.10	0.10	0.10	0.11	0.10	0.09	0.09	0.08	0.10	0.09	0.08	0.10	0.10	0.01	0.03	95.35	0.01	0.03	3.65
Isopropyl Alcohol	9-Jul-18	0.2	0.32	0.32	0.32	0.31	0.32	0.29	0.27	0.27	0.33	0.31	0.27	0.33	0.31	0.31	0.02	0.06	154.14	0.02	0.06	3.09
p-Isopropyltoluene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.10	0.10	0.07	0.07	0.07	0.09	0.07	0.07	0.09	0.09	0.01	0.04	85.96	0.01	0.04	2.82
Methylene chloride	6-Mar-18	0.1	0.13	0.14	0.13	0.14	0.12	0.13	0.12	0.12	0.13	0.13	0.12	0.13	0.13	0.13	0.00	0.01	130.26	0.00	0.01	6.92
Methyl ethyl ketone	6-Mar-18	0.1	0.08	0.08	0.08	0.08	0.09	0.09	0.06	0.06	0.06	0.10	0.06	0.06	0.08	0.08	0.01	0.04	80.25	0.01	0.04	2.38
Methyl Isobutyl Ketone	6-Mar-18	0.1	0.08	0.09	0.09	0.10	0.09	0.09	0.06	0.06	0.08	0.09	0.06	0.08	0.08	0.08	0.01	0.04	82.66	0.01	0.04	2.78
Methyl Tert Butyl Ether	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.04	0.04	0.01	0.02	95.74	0.01	0.02	2.09
Methylmethacrylate	6-Mar-18	0.1	0.08	0.08	0.08	0.09	0.08	0.09	0.06	0.06	0.07	0.08	0.06	0.07	0.08	0.08	0.01	0.03	79.33	0.01	0.03	3.07
Naphthalene	16-Mar-18	0.2	0.08	0.07	0.07	0.07	0.06	0.05	0.01	0.01	0.01	0.05	0.01	0.01	0.05	0.05	0.03	0.09	25.45	0.03	0.09	2.20
Nonane	16-Mar-18	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.00	0.01	69.05	0.00	0.01	2.98
Octane	4-Apr-18	0.1	0.06	0.05	0.05	0.05	0.05	0.05	0.07	0.07	0.07	0.06	0.07	0.07	0.06	0.06	0.01	0.03	57.51	0.01	0.03	3.20
Pentane	16-Mar-18	0.2	0.20	0.20	0.20	0.18	0.20	0.17	0.17	0.17	0.16	0.18	0.17	0.16	0.18	0.18	0.02	0.06	91.02	0.02	0.06	3.63

n-Propylbenzene	6-Mar-18	0.1	0.08	0.09	0.08	0.09	0.05	0.08	0.09	0.05	0.09	0.07	0.07	0.08	81.29	0.01	0.03	3.80
Propylene	16-Mar-18	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.05	115.79	0.01	0.02	2.51
Styrene	4-Apr-18	0.1	0.07	0.07	0.07	0.06	0.06	0.07	0.06	0.06	0.06	0.07	0.07	0.06	64.67	0.01	0.02	5.30
1,1,1-Trichloroethane	4-Apr-18	0.04	0.05	0.06	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.03	0.03	0.05	120.15	0.01	0.03	1.20
1,1,1,2-Tetrachloroethane	4-Apr-18	0.04	0.05	0.06	0.05	0.06	0.05	0.06	0.06	0.05	0.05	0.04	0.03	0.05	123.96	0.01	0.04	1.10
1,1,2,2-Tetrachloroethane	4-Apr-18	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.05	113.92	0.01	0.03	1.47
1,1,2-Trichloroethane	4-Apr-18	0.04	0.04	0.04	0.05	0.05	0.05	0.02	0.04	0.02	0.04	0.02	0.03	0.04	95.93	0.01	0.03	1.31
1,2,4-Trichlorobenzene	6-Mar-18	0.2	0.12	0.16	0.11	0.11	0.11	0.08	0.08	0.08	0.11	0.08	0.08	0.11	54.59	0.03	0.09	2.26
1,2,3-Trichloropropane	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.03	0.03	0.04	0.02	0.06	0.04	94.35	0.01	0.04	1.12
1,2,4-Trimethylbenzene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.09	0.07	0.09	0.07	0.08	0.07	0.07	0.08	84.25	0.01	0.03	3.03
1,3,5-Trimethylbenzene	6-Mar-18	0.1	0.09	0.09	0.09	0.09	0.10	0.08	0.10	0.08	0.09	0.08	0.08	0.09	89.95	0.01	0.03	2.98
2,2,4-Trimethylpentane	6-Mar-18	0.1	0.11	0.11	0.11	0.09	0.09	0.10	0.09	0.10	0.10	0.10	0.10	0.10	100.21	0.01	0.02	4.59
Tertiary Butyl Alcohol	6-Mar-18	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.03	0.04	0.04	97.25	0.00	0.01	2.90
Tetrachloroethylene	6-Mar-18	0.2	0.20	0.22	0.21	0.23	0.21	0.21	0.23	0.21	0.22	0.21	0.22	0.21	106.97	0.01	0.03	6.49
Tetrahydrofuran	16-Mar-18	0.1	0.07	0.05	0.05	0.08	0.05	0.03	0.06	0.06	0.06	0.03	0.04	0.05	54.16	0.02	0.05	1.99
Toluene	6-Mar-18	0.1	0.09	0.09	0.10	0.09	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	92.31	0.00	0.01	6.94
Trichloroethylene	4-Apr-18	0.04	0.04	0.05	0.04	0.04	0.04	0.03	0.04	0.05	0.04	0.03	0.03	0.04	101.18	0.01	0.02	2.10
Trichlorofluoromethane	4-Apr-18	0.04	0.06	0.06	0.05	0.06	0.05	0.04	0.06	0.06	0.05	0.04	0.04	0.05	129.81	0.01	0.03	1.42
Vinyl chloride	4-Apr-18	0.1	0.10	0.11	0.10	0.10	0.10	0.09	0.10	0.10	0.10	0.09	0.09	0.10	97.80	0.01	0.02	4.49
Vinyl Acetate	6-Mar-18	0.1	0.06	0.04	0.04	0.06	0.04	0.04	0.06	0.06	0.05	0.04	0.04	0.05	50.75	0.01	0.03	2.93
m,p-Xylene	6-Mar-18	0.2	0.17	0.18	0.18	0.18	0.18	0.19	0.18	0.19	0.18	0.19	0.16	0.18	89.18	0.01	0.03	5.86
o-Xylene	6-Mar-18	0.1	0.08	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.08	0.08	0.09	87.80	0.01	0.02	5.90
TVHC As Equiv Pentane	16-Mar-18	0.1	0.14	0.14	0.14	0.14	0.15	0.11	0.13	0.14	0.13	0.11	0.12	0.13	133.35	0.01	0.04	2.64

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Initial Calibration RT/ISTD Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary**Job Number:** JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W538-MB	6W13182.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples:**Method:** TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Method Blank Summary

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Job Number: JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W538-MB	6W13182.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples:**Method:** TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W538-MB	6W13182.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples: Method: TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	96% 65-128%

Method Blank Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-MB	6W12875.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here applies to the following samples:

Method: TO-15

V6W525-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Method Blank Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-MB	6W12875.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here applies to the following samples:

Method: TO-15

V6W525-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Method Blank Summary

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-MB	6W12875.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here applies to the following samples: Method: TO-15

V6W525-SCC

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	95% 65-128%

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W538-BS	6W13179.D	1	07/23/19	TCH	n/a	n/a	V6W538
V6W538-BSD	6W13180.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples:

Method: TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	8.7	87	8.8	88	1	70-130/30
106-99-0	1,3-Butadiene	10	10.9	109	11.2	112	3	70-130/30
71-43-2	Benzene	10	9.2	92	9.2	92	0	70-130/30
75-27-4	Bromodichloromethane	10	10.8	108	10.7	107	1	70-130/30
75-25-2	Bromoform	10	10.2	102	10.3	103	1	70-130/30
74-83-9	Bromomethane	10	9.6	96	9.9	99	3	70-130/30
593-60-2	Bromoethene	10	9.3	93	9.6	96	3	70-130/30
100-44-7	Benzyl Chloride	10	12.2	122	12.1	121	1	70-130/30
75-15-0	Carbon disulfide	10	9.3	93	9.2	92	1	70-130/30
108-90-7	Chlorobenzene	10	8.3	83	8.4	84	1	70-130/30
75-00-3	Chloroethane	10	10.5	105	10.6	106	1	70-130/30
67-66-3	Chloroform	10	10.6	106	10.5	105	1	70-130/30
74-87-3	Chloromethane	10	10.7	107	10.5	105	2	70-130/30
107-05-1	3-Chloropropene	10	10.7	107	10.7	107	0	70-130/30
95-49-8	2-Chlorotoluene	10	10.1	101	10.2	102	1	70-130/30
56-23-5	Carbon tetrachloride	10	12.0	120	11.8	118	2	70-130/30
110-82-7	Cyclohexane	10	10.5	105	10.3	103	2	70-130/30
75-34-3	1,1-Dichloroethane	10	9.7	97	9.4	94	3	70-130/30
75-35-4	1,1-Dichloroethylene	10	11.2	112	10.8	108	4	70-130/30
106-93-4	1,2-Dibromoethane	10	10.5	105	10.4	104	1	70-130/30
107-06-2	1,2-Dichloroethane	10	12.8	128	12.3	123	4	70-130/30
78-87-5	1,2-Dichloropropane	10	9.1	91	8.9	89	2	70-130/30
123-91-1	1,4-Dioxane	10	8.1	81	8.0	80	1	70-130/30
75-71-8	Dichlorodifluoromethane	10	12.0	120	11.8	118	2	70-130/30
124-48-1	Dibromochloromethane	10	11.0	110	10.9	109	1	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	10.4	104	10.1	101	3	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	10.6	106	10.3	103	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	11.0	110	10.8	108	2	70-130/30
541-73-1	m-Dichlorobenzene	10	10.5	105	10.5	105	0	70-130/30
95-50-1	o-Dichlorobenzene	10	10.2	102	10.3	103	1	70-130/30
106-46-7	p-Dichlorobenzene	10	10.6	106	10.8	108	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	12.5	125	12.1	121	3	70-130/30
64-17-5	Ethanol	10	9.1	91	9.1	91	0	70-130/30
100-41-4	Ethylbenzene	10	8.7	87	8.7	87	0	70-130/30
141-78-6	Ethyl Acetate	10	10.8	108	10.6	106	2	70-130/30
622-96-8	4-Ethyltoluene	10	11.0	110	11.1	111	1	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W538-BS	6W13179.D	1	07/23/19	TCH	n/a	n/a	V6W538
V6W538-BSD	6W13180.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples:

Method: TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	9.5	95	9.6	96	1	70-130/30
76-14-2	Freon 114	10	10.7	107	10.9	109	2	70-130/30
142-82-5	Heptane	10	10.5	105	10.3	103	2	70-130/30
87-68-3	Hexachlorobutadiene	10	8.9	89	9.0	90	1	70-130/30
110-54-3	Hexane	10	10.3	103	10.0	100	3	70-130/30
591-78-6	2-Hexanone	10	10.8	108	10.5	105	3	70-130/30
67-63-0	Isopropyl Alcohol	10	9.2	92	9.3	93	1	70-130/30
75-09-2	Methylene chloride	10	8.7	87	8.8	88	1	70-130/30
78-93-3	Methyl ethyl ketone	10	10.2	102	10.0	100	2	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	11.5	115	11.3	113	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	11.3	113	11.1	111	2	70-130/30
80-62-6	Methylmethacrylate	10	11.5	115	11.3	113	2	70-130/30
115-07-1	Propylene	10	10.8	108	10.3	103	5	70-130/30
100-42-5	Styrene	10	10.7	107	10.9	109	2	70-130/30
71-55-6	1,1,1-Trichloroethane	10	11.7	117	11.5	115	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	9.1	91	9.2	92	1	70-130/30
79-00-5	1,1,2-Trichloroethane	10	9.4	94	9.4	94	0	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	8.7	87	8.9	89	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	11.6	116	11.6	116	0	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	11.1	111	11.2	112	1	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	10.0	100	9.8	98	2	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	11.3	113	11.3	113	0	70-130/30
127-18-4	Tetrachloroethylene	10	9.8	98	9.8	98	0	70-130/30
109-99-9	Tetrahydrofuran	10	10.4	104	10.3	103	1	70-130/30
108-88-3	Toluene	10	9.5	95	9.4	94	1	70-130/30
79-01-6	Trichloroethylene	10	10.0	100	9.9	99	1	70-130/30
75-69-4	Trichlorofluoromethane	10	11.6	116	11.7	117	1	70-130/30
75-01-4	Vinyl chloride	10	10.4	104	10.5	105	1	70-130/30
108-05-4	Vinyl Acetate	10	12.2	122	11.7	117	4	70-130/30
	m,p-Xylene	20	18.6	93	18.7	94	1	70-130/30
95-47-6	o-Xylene	10	9.1	91	9.1	91	0	70-130/30
1330-20-7	Xylenes (total)	30	27.7	92	27.8	93	0	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W538-BS	6W13179.D	1	07/23/19	TCH	n/a	n/a	V6W538
V6W538-BSD	6W13180.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples: Method: TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	108%	110%	65-128%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-BS	6W12872.D	1	07/03/19	DFT	n/a	n/a	V6W525
V6W525-BSD	6W12873.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here applies to the following samples:

Method: TO-15

V6W525-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10	9.2	92	8.9	89	3	70-130/30
106-99-0	1,3-Butadiene	10	12.5	125	12.0	120	4	70-130/30
71-43-2	Benzene	10	10.0	100	9.9	99	1	70-130/30
75-27-4	Bromodichloromethane	10	11.0	110	10.8	108	2	70-130/30
75-25-2	Bromoform	10	10.5	105	10.6	106	1	70-130/30
74-83-9	Bromomethane	10	10.5	105	10.3	103	2	70-130/30
593-60-2	Bromoethene	10	10.0	100	10	100	0	70-130/30
100-44-7	Benzyl Chloride	10	12.1	121	12.3	123	2	70-130/30
75-15-0	Carbon disulfide	10	10.0	100	9.9	99	1	70-130/30
108-90-7	Chlorobenzene	10	8.7	87	8.7	87	0	70-130/30
75-00-3	Chloroethane	10	11.7	117	11.4	114	3	70-130/30
67-66-3	Chloroform	10	10.9	109	10.6	106	3	70-130/30
74-87-3	Chloromethane	10	12.1	121	11.6	116	4	70-130/30
107-05-1	3-Chloropropene	10	11.5	115	11.5	115	0	70-130/30
95-49-8	2-Chlorotoluene	10	10.8	108	10.9	109	1	70-130/30
56-23-5	Carbon tetrachloride	10	11.8	118	11.5	115	3	70-130/30
110-82-7	Cyclohexane	10	11.8	118	11.5	115	3	70-130/30
75-34-3	1,1-Dichloroethane	10	10.5	105	10.2	102	3	70-130/30
75-35-4	1,1-Dichloroethylene	10	11.2	112	11.2	112	0	70-130/30
106-93-4	1,2-Dibromoethane	10	10.3	103	10.1	101	2	70-130/30
107-06-2	1,2-Dichloroethane	10	12.4	124	11.9	119	4	70-130/30
78-87-5	1,2-Dichloropropane	10	10.1	101	9.9	99	2	70-130/30
123-91-1	1,4-Dioxane	10	8.3	83	8.2	82	1	70-130/30
75-71-8	Dichlorodifluoromethane	10	12.4	124	12.0	120	3	70-130/30
124-48-1	Dibromochloromethane	10	11.2	112	11.0	110	2	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	11.0	110	10.7	107	3	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	11.1	111	10.8	108	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	11.3	113	11.0	110	3	70-130/30
541-73-1	m-Dichlorobenzene	10	10.3	103	10.3	103	0	70-130/30
95-50-1	o-Dichlorobenzene	10	10.5	105	10.7	107	2	70-130/30
106-46-7	p-Dichlorobenzene	10	10	100	10.1	101	1	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	11.6	116	11.2	112	4	70-130/30
64-17-5	Ethanol	10	9.4	94	9.0	90	4	70-130/30
100-41-4	Ethylbenzene	10	9.3	93	9.3	93	0	70-130/30
141-78-6	Ethyl Acetate	10	11.5	115	11.4	114	1	70-130/30
622-96-8	4-Ethyltoluene	10	11.7	117	11.7	117	0	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-BS	6W12872.D	1	07/03/19	DFT	n/a	n/a	V6W525
V6W525-BSD	6W12873.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here applies to the following samples:

Method: TO-15

V6W525-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10	100	10	100	0	70-130/30
76-14-2	Freon 114	10	11.5	115	11.1	111	4	70-130/30
142-82-5	Heptane	10	11.5	115	11.4	114	1	70-130/30
87-68-3	Hexachlorobutadiene	10	10.0	100	10	100	0	70-130/30
110-54-3	Hexane	10	11.4	114	11.1	111	3	70-130/30
591-78-6	2-Hexanone	10	10.9	109	10.6	106	3	70-130/30
67-63-0	Isopropyl Alcohol	10	9.5	95	9.2	92	3	70-130/30
75-09-2	Methylene chloride	10	9.3	93	9.3	93	0	70-130/30
78-93-3	Methyl ethyl ketone	10	10.7	107	10.4	104	3	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	12.4	124	12.1	121	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	11.7	117	11.5	115	2	70-130/30
80-62-6	Methylmethacrylate	10	12.1	121	11.9	119	2	70-130/30
115-07-1	Propylene	10	12.5	125	11.8	118	6	70-130/30
100-42-5	Styrene	10	11.0	110	11.1	111	1	70-130/30
71-55-6	1,1,1-Trichloroethane	10	11.5	115	11.2	112	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.1	101	10.1	101	0	70-130/30
79-00-5	1,1,2-Trichloroethane	10	10	100	10	100	0	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	9.7	97	9.4	94	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	12.2	122	12.2	122	0	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	11.9	119	11.9	119	0	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	11.1	111	10.8	108	3	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	11.3	113	11.2	112	1	70-130/30
127-18-4	Tetrachloroethylene	10	10.0	100	10.1	101	1	70-130/30
109-99-9	Tetrahydrofuran	10	11.2	112	11.0	110	2	70-130/30
108-88-3	Toluene	10	10.1	101	10.0	100	1	70-130/30
79-01-6	Trichloroethylene	10	10.3	103	10.3	103	0	70-130/30
75-69-4	Trichlorofluoromethane	10	11.5	115	11.2	112	3	70-130/30
75-01-4	Vinyl chloride	10	11.7	117	11.4	114	3	70-130/30
108-05-4	Vinyl Acetate	10	12.9	129	12.4	124	4	70-130/30
	m,p-Xylene	20	19.5	98	19.5	98	0	70-130/30
95-47-6	o-Xylene	10	9.6	96	9.6	96	0	70-130/30
1330-20-7	Xylenes (total)	30	29.1	97	29.1	97	0	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-BS	6W12872.D	1	07/03/19	DFT	n/a	n/a	V6W525
V6W525-BSD	6W12873.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here applies to the following samples: Method: TO-15

V6W525-SCC

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	108%	107%	65-128%

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 3

Job Number: JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC91516-1DUP	6W13190.D	1	07/23/19	TCH	n/a	n/a	V6W538
JC91516-1	6W13189.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples:**Method:** TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Compound	JC91516-1 ppbv	DUP Q	ppbv	Q	RPD	Limits
67-64-1	Acetone	2.1		2.2		5	25
106-99-0	1,3-Butadiene	ND		ND		nc	25
71-43-2	Benzene	ND		ND		nc	25
75-27-4	Bromodichloromethane	ND		ND		nc	25
75-25-2	Bromoform	ND		ND		nc	25
74-83-9	Bromomethane	ND		ND		nc	25
593-60-2	Bromoethene	ND		ND		nc	25
100-44-7	Benzyl Chloride	ND		ND		nc	25
75-15-0	Carbon disulfide	ND		ND		nc	25
108-90-7	Chlorobenzene	ND		ND		nc	25
75-00-3	Chloroethane	ND		ND		nc	25
67-66-3	Chloroform	ND		ND		nc	25
74-87-3	Chloromethane	0.58	J	0.61	J	5	25
107-05-1	3-Chloropropene	ND		ND		nc	25
95-49-8	2-Chlorotoluene	ND		ND		nc	25
56-23-5	Carbon tetrachloride	ND		ND		nc	25
110-82-7	Cyclohexane	ND		ND		nc	25
75-34-3	1,1-Dichloroethane	ND		ND		nc	25
75-35-4	1,1-Dichloroethylene	2.2		2.4		9	25
106-93-4	1,2-Dibromoethane	ND		ND		nc	25
107-06-2	1,2-Dichloroethane	ND		ND		nc	25
78-87-5	1,2-Dichloropropane	ND		ND		nc	25
123-91-1	1,4-Dioxane	ND		ND		nc	25
75-71-8	Dichlorodifluoromethane	0.60	J	0.60	J	0	25
124-48-1	Dibromochloromethane	ND		ND		nc	25
156-60-5	trans-1,2-Dichloroethylene	ND		ND		nc	25
156-59-2	cis-1,2-Dichloroethylene	ND		ND		nc	25
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	25
541-73-1	m-Dichlorobenzene	ND		ND		nc	25
95-50-1	o-Dichlorobenzene	ND		ND		nc	25
106-46-7	p-Dichlorobenzene	ND		ND		nc	25
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	25
64-17-5	Ethanol	2.4		2.5		4	25
100-41-4	Ethylbenzene	ND		ND		nc	25
141-78-6	Ethyl Acetate	ND		ND		nc	25
622-96-8	4-Ethyltoluene	ND		ND		nc	25

* = Outside of Control Limits.

Duplicate Summary

Page 2 of 3

Job Number: JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC91516-1DUP	6W13190.D	1	07/23/19	TCH	n/a	n/a	V6W538
JC91516-1	6W13189.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples:**Method:** TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Compound	JC91516-1 ppbv	DUP Q	ppbv	Q	RPD	Limits
76-13-1	Freon 113	ND		ND		nc	25
76-14-2	Freon 114	ND		ND		nc	25
142-82-5	Heptane	ND		ND		nc	25
87-68-3	Hexachlorobutadiene	ND		ND		nc	25
110-54-3	Hexane	2.0		2.0		0	25
591-78-6	2-Hexanone	ND		ND		nc	25
67-63-0	Isopropyl Alcohol	ND		ND		nc	25
75-09-2	Methylene chloride	1.6		1.7		6	25
78-93-3	Methyl ethyl ketone	5.0		5.1		2	25
108-10-1	Methyl Isobutyl Ketone	0.91		0.91		0	25
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	25
80-62-6	Methylmethacrylate	ND		ND		nc	25
115-07-1	Propylene	ND		ND		nc	25
100-42-5	Styrene	ND		ND		nc	25
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	25
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	25
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	25
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	25
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	25
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	25
540-84-1	2,2,4-Trimethylpentane	ND		ND		nc	25
75-65-0	Tertiary Butyl Alcohol	ND		ND		nc	25
127-18-4	Tetrachloroethylene	ND		ND		nc	25
109-99-9	Tetrahydrofuran	ND		ND		nc	25
108-88-3	Toluene	10.9		11.6		6	25
79-01-6	Trichloroethylene	ND		ND		nc	25
75-69-4	Trichlorofluoromethane	0.94		0.94		0	25
75-01-4	Vinyl chloride	ND		ND		nc	25
108-05-4	Vinyl Acetate	ND		ND		nc	25
	m,p-Xylene	ND		ND		nc	25
95-47-6	o-Xylene	ND		ND		nc	25
1330-20-7	Xylenes (total)	ND		ND		nc	25

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC91516-1DUP	6W13190.D	1	07/23/19	TCH	n/a	n/a	V6W538
JC91516-1	6W13189.D	1	07/23/19	TCH	n/a	n/a	V6W538

The QC reported here applies to the following samples: Method: TO-15

JC91420-1, JC91420-2, JC91420-3, JC91420-4, JC91420-5, JC91420-6

CAS No.	Surrogate Recoveries	DUP	JC91516-1	Limits
460-00-4	4-Bromofluorobenzene	100%	101%	65-128%

* = Outside of Control Limits.

Summa Cleaning Certification

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-SCC	6W12879.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here (Summa A990) applies to the following samples:

Method: TO-15

Batch CP10404 cleaned 06/10/19: JC91420-1(M314), JC91420-2(A765), JC91420-3(A474), JC91420-4(A996), JC91420-5(M162), JC91420-6(A1037)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-64-1	Acetone	ND	0.20	0.11	ppbv		ND	0.48	ug/m3
106-99-0	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	ug/m3
71-43-2	Benzene	ND	0.20	0.012	ppbv		ND	0.64	ug/m3
75-27-4	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	ug/m3
75-25-2	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	ug/m3
74-83-9	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	ug/m3
593-60-2	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	ug/m3
100-44-7	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	ug/m3
75-15-0	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	ug/m3
108-90-7	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	ug/m3
75-00-3	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	ug/m3
67-66-3	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	ug/m3
74-87-3	Chloromethane	ND	0.20	0.015	ppbv		ND	0.41	ug/m3
107-05-1	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	ug/m3
95-49-8	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.024	ppbv		ND	1.3	ug/m3
110-82-7	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	ug/m3
75-34-3	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	ug/m3
75-35-4	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	ug/m3
106-93-4	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	ug/m3
78-87-5	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	ug/m3
123-91-1	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	ug/m3
75-71-8	Dichlorodifluoromethane	ND	0.20	0.017	ppbv		ND	0.99	ug/m3
124-48-1	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	ug/m3
156-60-5	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	ug/m3
156-59-2	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	ug/m3
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
541-73-1	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	ug/m3
95-50-1	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	ug/m3
106-46-7	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	ug/m3
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	ug/m3
64-17-5	Ethanol	ND	0.50	0.22	ppbv		ND	0.94	ug/m3
100-41-4	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	ug/m3
141-78-6	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	ug/m3
622-96-8	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	ug/m3

Summa Cleaning Certification

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Job Number: JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-SCC	6W12879.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here (Summa A990) applies to the following samples:**Method:** TO-15

Batch CP10404 cleaned 06/10/19: JC91420-1(M314), JC91420-2(A765), JC91420-3(A474), JC91420-4(A996), JC91420-5(M162), JC91420-6(A1037)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
76-13-1	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	ug/m3
76-14-2	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	ug/m3
142-82-5	Heptane	ND	0.20	0.018	ppbv		ND	0.82	ug/m3
87-68-3	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	ug/m3
110-54-3	Hexane	ND	0.20	0.011	ppbv		ND	0.70	ug/m3
591-78-6	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
67-63-0	Isopropyl Alcohol	ND	0.20	0.065	ppbv		ND	0.49	ug/m3
75-09-2	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	ug/m3
78-93-3	Methyl ethyl ketone	ND	0.20	0.042	ppbv		ND	0.59	ug/m3
108-10-1	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	ug/m3
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	ug/m3
80-62-6	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	ug/m3
115-07-1	Propylene	ND	0.50	0.016	ppbv		ND	0.86	ug/m3
100-42-5	Styrene	ND	0.20	0.019	ppbv		ND	0.85	ug/m3
71-55-6	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	ug/m3
79-00-5	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	ug/m3
95-63-6	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	ug/m3
108-67-8	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	ug/m3
540-84-1	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	ug/m3
75-65-0	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	ug/m3
127-18-4	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	ug/m3
109-99-9	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	ug/m3
108-88-3	Toluene	ND	0.20	0.014	ppbv		ND	0.75	ug/m3
79-01-6	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	ug/m3
75-69-4	Trichlorofluoromethane	ND	0.20	0.028	ppbv		ND	1.1	ug/m3
75-01-4	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	ug/m3
108-05-4	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	ug/m3
	m,p-Xylene	ND	0.20	0.034	ppbv		ND	0.87	ug/m3
95-47-6	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	ug/m3
1330-20-7	Xylenes (total)	ND	0.20	0.017	ppbv		ND	0.87	ug/m3

Summa Cleaning Certification

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6W525-SCC	6W12879.D	1	07/03/19	DFT	n/a	n/a	V6W525

The QC reported here (Summa A990) applies to the following samples: Method: TO-15

Batch CP10404 cleaned 06/10/19: JC91420-1(M314), JC91420-2(A765), JC91420-3(A474), JC91420-4(A996), JC91420-5(M162), JC91420-6(A1037)

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	97% 65-128%

Instrument Performance Check (BFB)

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Job Number: JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V6W487-BFB**Injection Date:** 05/16/19**Lab File ID:** 6W12037.D**Injection Time:** 15:34**Instrument ID:** GCMS6W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	36707	14.7	Pass
75	30.0 - 66.0% of mass 95	107667	43.1	Pass
95	Base peak, 100% relative abundance	249621	100.0	Pass
96	5.0 - 9.0% of mass 95	16626	6.66	Pass
173	Less than 2.0% of mass 174	1695	0.68 (0.68) ^a	Pass
174	50.0 - 120.0% of mass 95	248683	99.6	Pass
175	4.0 - 9.0% of mass 174	17899	7.17 (7.20) ^a	Pass
176	93.0 - 101.0% of mass 174	242347	97.1 (97.5) ^a	Pass
177	5.0 - 9.0% of mass 176	15807	6.33 (6.52) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W487-IC487	6W12038.D	05/16/19	16:21	00:47	Initial cal 0.04
V6W487-IC487	6W12039.D	05/16/19	17:08	01:34	Initial cal 0.1
V6W487-IC487	6W12040.D	05/16/19	17:56	02:22	Initial cal 0.2
V6W487-IC487	6W12041.D	05/16/19	18:45	03:11	Initial cal 0.5
V6W487-IC487	6W12042.D	05/16/19	19:31	03:57	Initial cal 5
V6W487-ICC487	6W12043.D	05/16/19	20:18	04:44	Initial cal 10
V6W487-IC487	6W12044.D	05/16/19	21:06	05:32	Initial cal 20
V6W487-IC487	6W12046.D	05/16/19	22:46	07:12	Initial cal 40
V6W487-ICV487	6W12052.D	05/17/19	11:28	19:54	Initial cal verification 10

Instrument Performance Check (BFB)**Job Number:** JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V6W525-BFB**Injection Date:** 07/03/19**Lab File ID:** 6W12870.D**Injection Time:** 05:34**Instrument ID:** GCMS6W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	34808	17.5	Pass
75	30.0 - 66.0% of mass 95	96451	48.4	Pass
95	Base peak, 100% relative abundance	199104	100.0	Pass
96	5.0 - 9.0% of mass 95	13226	6.64	Pass
173	Less than 2.0% of mass 174	1545	0.78 (0.84) ^a	Pass
174	50.0 - 120.0% of mass 95	183381	92.1	Pass
175	4.0 - 9.0% of mass 174	13211	6.64 (7.20) ^a	Pass
176	93.0 - 101.0% of mass 174	178560	89.7 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	11796	5.92 (6.61) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W525-CC487	6W12871.D	07/03/19	06:21	00:47	Continuing cal 10
V6W525-BS	6W12872.D	07/03/19	07:16	01:42	Blank Spike
V6W525-BSD	6W12873.D	07/03/19	08:04	02:30	Blank Spike Duplicate
V6W525-MB	6W12875.D	07/03/19	09:50	04:16	Method Blank
JC90949-1	6W12876.D	07/03/19	10:51	05:17	(used for QC only; not part of job JC91420)
JC90949-1DUP	6W12877.D	07/03/19	11:52	06:18	Duplicate
JC90949-1	6W12878.D	07/03/19	12:39	07:05	(used for QC only; not part of job JC91420)
V6W525-SCC	6W12879.D	07/03/19	13:32	07:58	Summa Cleaning Certification
ZZZZZZ	6W12880.D	07/03/19	14:40	09:06	(unrelated sample)
ZZZZZZ	6W12881.D	07/03/19	15:29	09:55	(unrelated sample)
ZZZZZZ	6W12882.D	07/03/19	16:19	10:45	(unrelated sample)
ZZZZZZ	6W12883.D	07/03/19	17:41	12:07	(unrelated sample)
ZZZZZZ	6W12884.D	07/03/19	18:29	12:55	(unrelated sample)
ZZZZZZ	6W12885.D	07/03/19	19:29	13:55	(unrelated sample)
ZZZZZZ	6W12886.D	07/03/19	20:18	14:44	(unrelated sample)
ZZZZZZ	6W12887.D	07/03/19	21:23	15:49	(unrelated sample)
ZZZZZZ	6W12888.D	07/03/19	22:11	16:37	(unrelated sample)
ZZZZZZ	6W12889.D	07/03/19	23:03	17:29	(unrelated sample)
ZZZZZZ	6W12890.D	07/03/19	23:51	18:17	(unrelated sample)
ZZZZZZ	6W12891.D	07/04/19	00:41	19:07	(unrelated sample)
ZZZZZZ	6W12892.D	07/04/19	01:29	19:55	(unrelated sample)
ZZZZZZ	6W12893.D	07/04/19	02:32	20:58	(unrelated sample)
ZZZZZZ	6W12894.D	07/04/19	03:32	21:58	(unrelated sample)

Instrument Performance Check (BFB)**Job Number:** JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Sample:** V6W538-BFB**Injection Date:** 07/23/19**Lab File ID:** 6W13176.D**Injection Time:** 09:07**Instrument ID:** GCMS6W

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	83307	19.2	Pass
75	30.0 - 66.0% of mass 95	228181	52.6	Pass
95	Base peak, 100% relative abundance	433600	100.0	Pass
96	5.0 - 9.0% of mass 95	28187	6.50	Pass
173	Less than 2.0% of mass 174	3603	0.83 (0.92) ^a	Pass
174	50.0 - 120.0% of mass 95	390187	90.0	Pass
175	4.0 - 9.0% of mass 174	28675	6.61 (7.35) ^a	Pass
176	93.0 - 101.0% of mass 174	381909	88.1 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	24587	5.67 (6.44) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V6W538-CC487	6W13178.D	07/23/19	10:45	01:38	Continuing cal 10
V6W538-BS	6W13179.D	07/23/19	11:34	02:27	Blank Spike
V6W538-BSD	6W13180.D	07/23/19	12:22	03:15	Blank Spike Duplicate
V6W538-MB	6W13182.D	07/23/19	14:08	05:01	Method Blank
JC91420-1	6W13183.D	07/23/19	17:00	07:53	EXSVE-EX
JC91420-2	6W13184.D	07/23/19	17:59	08:52	EXSVE-MID
JC91420-3	6W13185.D	07/23/19	18:55	09:48	EXSVE-RAW
JC91420-4	6W13186.D	07/23/19	19:53	10:46	INTSVE-EX
JC91420-5	6W13187.D	07/23/19	20:53	11:46	INTSVE-MID
JC91420-6	6W13188.D	07/23/19	21:54	12:47	INTSVE-RAW
JC91516-1	6W13189.D	07/23/19	22:43	13:36	(used for QC only; not part of job JC91420)
JC91516-1DUP	6W13190.D	07/23/19	23:32	14:25	Duplicate
ZZZZZZ	6W13191.D	07/24/19	00:21	15:14	(unrelated sample)
ZZZZZZ	6W13192.D	07/24/19	01:09	16:02	(unrelated sample)
ZZZZZZ	6W13193.D	07/24/19	02:12	17:05	(unrelated sample)
ZZZZZZ	6W13194.D	07/24/19	03:03	17:56	(unrelated sample)
V6W538-SCC	6W13195.D	07/24/19	03:56	18:49	Summa Cleaning Certification
V6W538-SCC	6W13196.D	07/24/19	04:49	19:42	Summa Cleaning Certification
V6W538-SCC	6W13197.D	07/24/19	05:42	20:35	Summa Cleaning Certification
V6W538-SCC	6W13198.D	07/24/19	06:35	21:28	Summa Cleaning Certification
V6W538-SCC	6W13199.D	07/24/19	07:28	22:21	Summa Cleaning Certification

Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std: V6W525-CC487	Injection Date: 07/03/19
Lab File ID: 6W12871.D	Injection Time: 06:21
Instrument ID: GCMS6W	Method: TO-15

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	229078	8.16	856288	10.36	453620	15.90
Upper Limit ^a	320709	8.49	1198803	10.69	635068	16.23
Lower Limit ^b	137447	7.83	513773	10.03	272172	15.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V6W525-BS	245890	8.16	921220	10.36	473749	15.90
V6W525-BSD	256667	8.16	959476	10.36	483015	15.90
V6W525-MB	235876	8.16	878005	10.36	398767	15.90
JC90949-1	237487	8.16	872638	10.36	406099	15.90
JC90949-1DUP	242002	8.16	890158	10.36	414559	15.90
JC90949-1	232680	8.16	854431	10.36	382354	15.90
V6W525-SCC	236037	8.16	880131	10.35	402538	15.90
ZZZZZZ	235182	8.16	880458	10.36	414026	15.90
ZZZZZZ	238912	8.16	888606	10.36	415378	15.90
ZZZZZZ	237283	8.16	876884	10.36	413395	15.90
ZZZZZZ	242713	8.20	885664	10.38	424493	15.90
ZZZZZZ	237934	8.16	877778	10.36	401450	15.90
ZZZZZZ	244584	8.18	892621	10.37	421283	15.90
ZZZZZZ	232439	8.16	852638	10.36	380947	15.90
ZZZZZZ	237188	8.16	871830	10.36	413617	15.90
ZZZZZZ	229835	8.16	851148	10.35	385739	15.90
ZZZZZZ	237871	8.16	872526	10.36	418653	15.90
ZZZZZZ	226960	8.16	832308	10.35	383757	15.90
ZZZZZZ	229225	8.16	849027	10.36	401074	15.90
ZZZZZZ	221237	8.16	809457	10.36	381834	15.90
ZZZZZZ	231215	8.16	851441	10.36	422526	15.89
ZZZZZZ	227022	8.16	839429	10.35	402089	15.89

IS 1 = Bromochloromethane

IS 2 = 1,4-Difluorobenzene

IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.

(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

Internal Standard Area Summary

Page 1 of 1

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Check Std: V6W538-CC487	Injection Date: 07/23/19
Lab File ID: 6W13178.D	Injection Time: 10:45
Instrument ID: GCMS6W	Method: TO-15

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	251061	8.16	933035	10.36	502910	15.90
Upper Limit ^a	351485	8.49	1306249	10.69	704074	16.23
Lower Limit ^b	150637	7.83	559821	10.03	301746	15.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V6W538-BS	259783	8.16	969423	10.36	504813	15.90
V6W538-BSD	264863	8.16	997506	10.36	510561	15.90
V6W538-MB	253255	8.16	935529	10.35	434557	15.89
JC91420-1	252394	8.16	926165	10.36	450305	15.89
JC91420-2	247762	8.16	911373	10.36	451943	15.89
JC91420-3	250935	8.16	927971	10.36	446654	15.89
JC91420-4	249246	8.16	920829	10.36	453105	15.89
JC91420-5	246760	8.16	945773	10.36	448847	15.89
JC91420-6	253753	8.16	939677	10.35	451020	15.89
JC91516-1	246894	8.16	924225	10.35	406056	15.89
JC91516-1DUP	250051	8.16	909473	10.35	434684	15.89
ZZZZZZ	248251	8.16	912178	10.35	445963	15.89
ZZZZZZ	231997	8.16	854770	10.35	412024	15.89
ZZZZZZ	243646	8.16	917458	10.36	500162	15.90
ZZZZZZ	271933	8.16	1000595	10.35	528999	15.90
V6W538-SCC	252956	8.16	930869	10.35	420986	15.89
V6W538-SCC	251654	8.16	934752	10.35	440660	15.89
V6W538-SCC	243517	8.16	886652	10.35	427563	15.89
V6W538-SCC	237779	8.16	873516	10.35	420270	15.89
V6W538-SCC	229885	8.15	841102	10.35	406461	15.89

IS 1 = Bromochloromethane

IS 2 = 1,4-Difluorobenzene

IS 3 = Chlorobenzene-D5

(a) Upper Limit = + 40% of check standard area; Retention time + 0.33 minutes.

(b) Lower Limit = -40% of check standard area; Retention time -0.33 minutes.

Initial Calibration Retention Time/Internal Standard Area Summary

Page 1 of 24

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15	Reporting this level
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15	
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15	
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15	
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15	
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15	
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15	
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acrylonitrile	5.57	8.16	0.683 ok	0.681	0.621-0.741
Acetonitrile	4.93	8.16	0.604 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.48	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.15	10.36	1.076 ok	1.076	1.016-1.136
Bromoform	16.86	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.16	0.604 ok	0.604	0.544-0.664
Benzyl Chloride	20.28	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.46	15.90	1.287 ok	1.287	1.227-1.347
tert-Butylbenzene	20.08	15.90	1.263 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.96	15.90	1.004 ok	1.004	0.944-1.064
Chloroethane	4.64	8.16	0.569 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.99	8.16	0.489 ok	0.488	0.428-0.548
3-Chloropropene	6.09	8.16	0.746 ok	0.747	0.687-0.807
2-Chlorotoluene	19.09	15.90	1.201 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.23	8.16	1.254 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.10	8.16	0.870 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.87	8.16	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.36	1.389 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.13	8.16	1.119 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.90	10.36	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.56	10.36	1.309 ok	1.308	1.248-1.368
1,4-Dioxane	11.28	10.36	1.089 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.71	8.16	0.577 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.36	1.358 ok	1.358	1.298-1.418
Dibromomethane	10.89	10.36	1.051 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.90	8.16	0.846 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.98	8.16	0.978 ok	0.979	0.919-1.039
cis-1,3-Dichloropropene	12.29	10.36	1.186 ok	1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275 ok	1.275	1.215-1.335
o-Dichlorobenzene	20.84	15.90	1.311 ok	1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282 ok	1.282	1.222-1.342

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15	Reporting this level
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15	
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15	
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15	
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15	
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15	
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15	
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
trans-1,3-Dichloropropene	12.97	10.36	1.252 ok	1.250	1.190-1.310
Di-Isopropyl ether	8.23	8.16	1.009 ok	1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290 ok	1.290	1.230-1.350
2,4-Dimethylpentane	9.18	8.16	1.125 ok	1.125	1.065-1.185
Ethylbenzene	16.51	15.90	1.038 ok	1.038	0.978-1.098
Ethyl Acrylate	10.98	10.36	1.060 ok	1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219 ok	1.219	1.159-1.279
Freon 113	6.23	8.16	0.763 ok	0.763	0.703-0.823
Freon 114	4.06	8.16	0.498 ok	0.498	0.438-0.558
Freon 123	5.06	8.16	0.620 ok	0.620	0.560-0.680
Freon 123A	5.11	8.16	0.626 ok	0.626	0.566-0.686
Freon 142B	3.97	8.16	0.487 ok	0.486	0.426-0.546
Freon 152A	3.74	8.16	0.458 ok	0.457	0.397-0.517
Heptane	11.56	10.36	1.116 ok	1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485 ok	1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366 ok	1.366	1.306-1.426
Hexane	8.20	8.16	1.005 ok	1.005	0.945-1.065
2-Hexanone	13.95	10.36	1.347 ok	1.342	1.282-1.402
Iodomethane	5.80	8.16	0.711 ok	0.711	0.651-0.771
Isopropylbenzene	18.36	15.90	1.155 ok	1.155	1.095-1.215
p-Isopropyltoluene	20.69	15.90	1.301 ok	1.301	1.241-1.361
Methyl Isobutyl Ketone	12.39	10.36	1.196 ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.20	8.16	0.882 ok	0.879	0.819-0.939
Methylmethacrylate	11.50	10.36	1.110 ok	1.108	1.048-1.168
Naphthalene	23.17	15.90	1.457 ok	1.457	1.397-1.517
Nonane	17.83	15.90	1.121 ok	1.122	1.062-1.182
Octane	14.86	10.36	1.434 ok	1.434	1.374-1.494
n-Propylbenzene	19.16	15.90	1.205 ok	1.205	1.145-1.265
Propylene	3.80	8.16	0.466 ok	0.465	0.405-0.525
Styrene	17.31	15.90	1.089 ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.41	8.16	1.153 ok	1.152	1.092-1.212
1,1,1,2-Tetrachloroethane	15.95	10.36	1.540 ok	1.539	1.479-1.599
1,1,2,2-Tetrachloroethane	17.46	15.90	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.17	10.36	1.271 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.66	15.90	1.111 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.90	1.264 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.51	15.90	1.227 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.22	10.36	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.96	8.16	0.730 ok	0.726	0.666-0.786

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method	
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15	Reporting this level
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15	
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15	
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15	
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15	
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15	
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15	
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15	

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Tetrachloroethylene	15.02	10.36	1.450 ok	1.449	1.389-1.509
Toluene	13.51	10.36	1.304 ok	1.304	1.244-1.364
Trichloroethylene	11.19	10.36	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.16	0.650 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.28	8.16	0.892 ok	0.891	0.831-0.951
m,p-Xylene	16.77	15.90	1.055 ok	1.055	0.995-1.115
o-Xylene	17.46	15.90	1.098 ok	1.098	1.038-1.158

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	297901	ok 304927	182956-426898
1,4-Difluorobenzene	10.36 ok	10.36	10.03-10.69	1071090	ok 1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	456333	ok 510652	306391-714913

6.7.1
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Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.17	8.16	0.634 ok	0.631	0.571-0.691
Acrolein	5.04	8.16	0.618 ok	0.616	0.556-0.676
Acrylonitrile	5.57	8.16	0.683 ok	0.681	0.621-0.741
Acetonitrile	4.93	8.16	0.604 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.47	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.15	10.36	1.076 ok	1.076	1.016-1.136
Bromoform	16.86	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.16	0.604 ok	0.604	0.544-0.664
n-Butane	4.32	8.16	0.529 ok	0.529	0.469-0.589
Benzyl Chloride	20.27	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.45	15.90	1.286 ok	1.287	1.227-1.347
tert-Butylbenzene	20.07	15.90	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.96	15.90	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.16	0.462 ok	0.462	0.402-0.522
Chloroethane	4.63	8.16	0.567 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.99	8.16	0.489 ok	0.488	0.428-0.548
3-Chloropropene	6.10	8.16	0.748 ok	0.747	0.687-0.807
2-Chlorotoluene	19.08	15.90	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.24	8.16	1.255 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.11	8.16	0.871 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.87	8.16	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.36	1.389 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.13	8.16	1.119 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.91	10.36	1.053 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.56	10.36	1.309 ok	1.308	1.248-1.368
1,4-Dioxane	11.27	10.36	1.088 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.71	8.16	0.577 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.36	1.358 ok	1.358	1.298-1.418
Dibromomethane	10.88	10.36	1.050 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.90	8.16	0.846 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.99	8.16	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+/- .06)
cis-1,3-Dichloropropene	12.28	10.36	1.185 ok	1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275 ok	1.275	1.215-1.335
o-Dichlorobenzene	20.84	15.90	1.311 ok	1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282 ok	1.282	1.222-1.342
trans-1,3-Dichloropropene	12.96	10.36	1.251 ok	1.250	1.190-1.310
Di-Isopropyl ether	8.23	8.16	1.009 ok	1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290 ok	1.290	1.230-1.350
2,4-Dimethylpentane	9.18	8.16	1.125 ok	1.125	1.065-1.185
Ethylbenzene	16.51	15.90	1.038 ok	1.038	0.978-1.098
Ethyl Acetate	8.27	8.16	1.013 ok	1.010	0.950-1.070
Ethyl Acrylate	10.97	10.36	1.059 ok	1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219 ok	1.219	1.159-1.279
Freon 113	6.23	8.16	0.763 ok	0.763	0.703-0.823
Freon 114	4.07	8.16	0.499 ok	0.498	0.438-0.558
Freon 123	5.06	8.16	0.620 ok	0.620	0.560-0.680
Freon 123A	5.11	8.16	0.626 ok	0.626	0.566-0.686
Freon 142B	3.97	8.16	0.487 ok	0.486	0.426-0.546
Freon 152A	3.74	8.16	0.458 ok	0.457	0.397-0.517
Heptane	11.56	10.36	1.116 ok	1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485 ok	1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366 ok	1.366	1.306-1.426
Hexane	8.20	8.16	1.005 ok	1.005	0.945-1.065
2-Hexanone	13.93	10.36	1.345 ok	1.342	1.282-1.402
Iodomethane	5.81	8.16	0.712 ok	0.711	0.651-0.771
Isopropylbenzene	18.36	15.90	1.155 ok	1.155	1.095-1.215
p-Isopropyltoluene	20.69	15.90	1.301 ok	1.301	1.241-1.361
Methylene chloride	5.99	8.16	0.734 ok	0.734	0.674-0.794
Methyl ethyl ketone	7.56	8.16	0.926 ok	0.923	0.863-0.983
Methyl Isobutyl Ketone	12.37	10.36	1.194 ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.19	8.16	0.881 ok	0.879	0.819-0.939
Methylmethacrylate	11.49	10.36	1.109 ok	1.108	1.048-1.168
Naphthalene	23.17	15.90	1.457 ok	1.457	1.397-1.517
Nonane	17.84	15.90	1.122 ok	1.122	1.062-1.182
Octane	14.86	10.36	1.434 ok	1.434	1.374-1.494
Pentane	5.61	8.16	0.688 ok	0.686	0.626-0.746
n-Propylbenzene	19.16	15.90	1.205 ok	1.205	1.145-1.265
Propylene	3.80	8.16	0.466 ok	0.465	0.405-0.525
Styrene	17.31	15.90	1.089 ok	1.088	1.028-1.148
1,1,1-Trichloroethane	9.40	8.16	1.152 ok	1.152	1.092-1.212
1,1,1,2-Tetrachloroethane	15.95	10.36	1.540 ok	1.539	1.479-1.599

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,2,2-Tetrachloroethane	17.46	15.90	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.16	10.36	1.270 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.66	15.90	1.111 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.90	1.264 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.51	15.90	1.227 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.22	10.36	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.96	8.16	0.730 ok	0.726	0.666-0.786
Tetrachloroethylene	15.02	10.36	1.450 ok	1.449	1.389-1.509
Tetrahydrofuran	8.82	8.16	1.081 ok	1.075	1.015-1.135
Toluene	13.51	10.36	1.304 ok	1.304	1.244-1.364
Trichloroethylene	11.19	10.36	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.30	8.16	0.650 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.28	8.16	0.892 ok	0.891	0.831-0.951
m,p-Xylene	16.78	15.90	1.055 ok	1.055	0.995-1.115
o-Xylene	17.46	15.90	1.098 ok	1.098	1.038-1.158

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	296925 ok	304927	182956-426898
1,4-Difluorobenzene	10.36 ok	10.36	10.03-10.69	1071007 ok	1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	452246 ok	510652	306391-714913

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.16	8.16	0.632 ok	0.631	0.571-0.691
Acrolein	5.03	8.16	0.616 ok	0.616	0.556-0.676
Acrylonitrile	5.56	8.16	0.681 ok	0.681	0.621-0.741
Acetonitrile	4.93	8.16	0.604 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.47	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.15	10.36	1.076 ok	1.076	1.016-1.136
Bromoform	16.86	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.16	0.604 ok	0.604	0.544-0.664
n-Butane	4.31	8.16	0.528 ok	0.529	0.469-0.589
Benzyl Chloride	20.27	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.46	15.90	1.287 ok	1.287	1.227-1.347
tert-Butylbenzene	20.07	15.90	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.96	15.90	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.16	0.462 ok	0.462	0.402-0.522
Chloroethane	4.63	8.16	0.567 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.98	8.16	0.488 ok	0.488	0.428-0.548
3-Chloropropene	6.10	8.16	0.748 ok	0.747	0.687-0.807
2-Chlorotoluene	19.08	15.90	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.23	8.16	1.254 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.10	8.16	0.870 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.86	8.16	0.718 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.36	1.389 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.13	8.16	1.119 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.90	10.36	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.56	10.36	1.309 ok	1.308	1.248-1.368
1,4-Dioxane	11.25	10.36	1.086 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.71	8.16	0.577 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.36	1.358 ok	1.358	1.298-1.418
Dibromomethane	10.87	10.36	1.049 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.90	8.16	0.846 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.99	8.16	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+/- .06)
cis-1,3-Dichloropropene	12.28	10.36	1.185	ok 1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275	ok 1.275	1.215-1.335
o-Dichlorobenzene	20.84	15.90	1.311	ok 1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282	ok 1.282	1.222-1.342
trans-1,3-Dichloropropene	12.96	10.36	1.251	ok 1.250	1.190-1.310
Di-Isopropyl ether	8.21	8.16	1.006	ok 1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290	ok 1.290	1.230-1.350
2,4-Dimethylpentane	9.18	8.16	1.125	ok 1.125	1.065-1.185
Ethylbenzene	16.51	15.90	1.038	ok 1.038	0.978-1.098
Ethyl Acetate	8.26	8.16	1.012	ok 1.010	0.950-1.070
Ethyl Acrylate	10.96	10.36	1.058	ok 1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219	ok 1.219	1.159-1.279
Freon 113	6.23	8.16	0.763	ok 0.763	0.703-0.823
Freon 114	4.06	8.16	0.498	ok 0.498	0.438-0.558
Freon 123	5.06	8.16	0.620	ok 0.620	0.560-0.680
Freon 123A	5.11	8.16	0.626	ok 0.626	0.566-0.686
Freon 142B	3.96	8.16	0.485	ok 0.486	0.426-0.546
Freon 152A	3.73	8.16	0.457	ok 0.457	0.397-0.517
Heptane	11.56	10.36	1.116	ok 1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485	ok 1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366	ok 1.366	1.306-1.426
Hexane	8.20	8.16	1.005	ok 1.005	0.945-1.065
2-Hexanone	13.92	10.36	1.344	ok 1.342	1.282-1.402
Iodomethane	5.80	8.16	0.711	ok 0.711	0.651-0.771
Isopropylbenzene	18.36	15.90	1.155	ok 1.155	1.095-1.215
Isopropyl Alcohol	5.37	8.16	0.658	ok 0.656	0.596-0.716
p-Isopropyltoluene	20.69	15.90	1.301	ok 1.301	1.241-1.361
Methylene chloride	5.99	8.16	0.734	ok 0.734	0.674-0.794
Methyl ethyl ketone	7.55	8.16	0.925	ok 0.923	0.863-0.983
Methyl Isobutyl Ketone	12.35	10.36	1.192	ok 1.191	1.131-1.251
Methyl Tert Butyl Ether	7.19	8.16	0.881	ok 0.879	0.819-0.939
Methylmethacrylate	11.49	10.36	1.109	ok 1.108	1.048-1.168
Naphthalene	23.17	15.90	1.457	ok 1.457	1.397-1.517
Nonane	17.84	15.90	1.122	ok 1.122	1.062-1.182
Octane	14.86	10.36	1.434	ok 1.434	1.374-1.494
Pentane	5.60	8.16	0.686	ok 0.686	0.626-0.746
n-Propylbenzene	19.16	15.90	1.205	ok 1.205	1.145-1.265
Propylene	3.80	8.16	0.466	ok 0.465	0.405-0.525
Styrene	17.30	15.90	1.088	ok 1.088	1.028-1.148
1,1,1-Trichloroethane	9.40	8.16	1.152	ok 1.152	1.092-1.212

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1,2-Tetrachloroethane	15.95	10.36	1.540 ok	1.539	1.479-1.599
1,1,2,2-Tetrachloroethane	17.46	15.90	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.16	10.36	1.270 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.65	15.90	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.08	15.90	1.263 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.50	15.90	1.226 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.22	10.36	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.94	8.16	0.728 ok	0.726	0.666-0.786
Tetrachloroethylene	15.02	10.36	1.450 ok	1.449	1.389-1.509
Tetrahydrofuran	8.80	8.16	1.078 ok	1.075	1.015-1.135
Toluene	13.51	10.36	1.304 ok	1.304	1.244-1.364
Trichloroethylene	11.19	10.36	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.29	8.16	0.648 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.28	8.16	0.892 ok	0.891	0.831-0.951
m,p-Xylene	16.78	15.90	1.055 ok	1.055	0.995-1.115
o-Xylene	17.45	15.90	1.097 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.60	15.90	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	293278 ok	304927	182956-426898
1,4-Difluorobenzene	10.36 ok	10.36	10.03-10.69	1058523 ok	1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	454229 ok	510652	306391-714913

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.15	8.16	0.631 ok	0.631	0.571-0.691
Acrolein	5.03	8.16	0.616 ok	0.616	0.556-0.676
Acrylonitrile	5.56	8.16	0.681 ok	0.681	0.621-0.741
Acetonitrile	4.92	8.16	0.603 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.47	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.14	10.36	1.075 ok	1.076	1.016-1.136
Bromoform	16.85	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.92	8.16	0.603 ok	0.604	0.544-0.664
n-Butane	4.30	8.16	0.527 ok	0.529	0.469-0.589
Benzyl Chloride	20.27	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.46	15.90	1.287 ok	1.287	1.227-1.347
tert-Butylbenzene	20.07	15.90	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.96	15.90	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.16	0.462 ok	0.462	0.402-0.522
Chloroethane	4.63	8.16	0.567 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.98	8.16	0.488 ok	0.488	0.428-0.548
3-Chloropropene	6.10	8.16	0.748 ok	0.747	0.687-0.807
2-Chlorotoluene	19.08	15.90	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.24	8.16	1.255 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.10	8.16	0.870 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.86	8.16	0.718 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.36	1.389 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.12	8.16	1.118 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.90	10.36	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.56	10.36	1.309 ok	1.308	1.248-1.368
1,4-Dioxane	11.24	10.36	1.085 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.71	8.16	0.577 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.36	1.358 ok	1.358	1.298-1.418
Dibromomethane	10.87	10.36	1.049 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.90	8.16	0.846 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.99	8.16	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+/- .06)
cis-1,3-Dichloropropene	12.28	10.36	1.185	ok 1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275	ok 1.275	1.215-1.335
o-Dichlorobenzene	20.83	15.90	1.310	ok 1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282	ok 1.282	1.222-1.342
trans-1,3-Dichloropropene	12.95	10.36	1.250	ok 1.250	1.190-1.310
Di-Isopropyl ether	8.21	8.16	1.006	ok 1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290	ok 1.290	1.230-1.350
2,4-Dimethylpentane	9.17	8.16	1.124	ok 1.125	1.065-1.185
Ethanol	4.73	8.16	0.580	ok 0.579	0.519-0.639
Ethylbenzene	16.51	15.90	1.038	ok 1.038	0.978-1.098
Ethyl Acetate	8.25	8.16	1.011	ok 1.010	0.950-1.070
Ethyl Acrylate	10.95	10.36	1.057	ok 1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219	ok 1.219	1.159-1.279
Freon 113	6.23	8.16	0.763	ok 0.763	0.703-0.823
Freon 114	4.06	8.16	0.498	ok 0.498	0.438-0.558
Freon 123	5.05	8.16	0.619	ok 0.620	0.560-0.680
Freon 123A	5.10	8.16	0.625	ok 0.626	0.566-0.686
Freon 142B	3.96	8.16	0.485	ok 0.486	0.426-0.546
Freon 152A	3.72	8.16	0.456	ok 0.457	0.397-0.517
Heptane	11.56	10.36	1.116	ok 1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485	ok 1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366	ok 1.366	1.306-1.426
Hexane	8.20	8.16	1.005	ok 1.005	0.945-1.065
2-Hexanone	13.91	10.36	1.343	ok 1.342	1.282-1.402
Iodomethane	5.80	8.16	0.711	ok 0.711	0.651-0.771
Isopropylbenzene	18.36	15.90	1.155	ok 1.155	1.095-1.215
Isopropyl Alcohol	5.36	8.16	0.657	ok 0.656	0.596-0.716
p-Isopropyltoluene	20.69	15.90	1.301	ok 1.301	1.241-1.361
Methylene chloride	5.98	8.16	0.733	ok 0.734	0.674-0.794
Methyl ethyl ketone	7.54	8.16	0.924	ok 0.923	0.863-0.983
Methyl Isobutyl Ketone	12.34	10.36	1.191	ok 1.191	1.131-1.251
Methyl Tert Butyl Ether	7.17	8.16	0.879	ok 0.879	0.819-0.939
Methylmethacrylate	11.47	10.36	1.107	ok 1.108	1.048-1.168
Naphthalene	23.16	15.90	1.457	ok 1.457	1.397-1.517
Nonane	17.84	15.90	1.122	ok 1.122	1.062-1.182
Octane	14.86	10.36	1.434	ok 1.434	1.374-1.494
Pentane	5.60	8.16	0.686	ok 0.686	0.626-0.746
n-Propylbenzene	19.16	15.90	1.205	ok 1.205	1.145-1.265
Propylene	3.79	8.16	0.464	ok 0.465	0.405-0.525
Styrene	17.30	15.90	1.088	ok 1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.40	8.16	1.152 ok	1.152	1.092-1.212
1,1,1,2-Tetrachloroethane	15.94	10.36	1.539 ok	1.539	1.479-1.599
1,1,2,2-Tetrachloroethane	17.46	15.90	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.16	10.36	1.270 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.65	15.90	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.08	15.90	1.263 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.50	15.90	1.226 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.22	10.36	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.93	8.16	0.727 ok	0.726	0.666-0.786
Tetrachloroethylene	15.02	10.36	1.450 ok	1.449	1.389-1.509
Tetrahydrofuran	8.79	8.16	1.077 ok	1.075	1.015-1.135
Toluene	13.51	10.36	1.304 ok	1.304	1.244-1.364
Trichloroethylene	11.19	10.36	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.29	8.16	0.648 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.27	8.16	0.891 ok	0.891	0.831-0.951
m,p-Xylene	16.78	15.90	1.055 ok	1.055	0.995-1.115
o-Xylene	17.45	15.90	1.097 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.60	15.90	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	291279 ok	304927	182956-426898
1,4-Difluorobenzene	10.36 ok	10.36	10.03-10.69	1046375 ok	1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	451532 ok	510652	306391-714913

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15 Reporting this level
V6W487-ICC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.14	8.16	0.630 ok	0.631	0.571-0.691
Acrolein	5.03	8.16	0.616 ok	0.616	0.556-0.676
Acrylonitrile	5.55	8.16	0.680 ok	0.681	0.621-0.741
Acetonitrile	4.92	8.16	0.603 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.47	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.15	10.36	1.076 ok	1.076	1.016-1.136
Bromoform	16.85	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.16	0.604 ok	0.604	0.544-0.664
n-Butane	4.31	8.16	0.528 ok	0.529	0.469-0.589
Benzyl Chloride	20.27	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.45	15.90	1.286 ok	1.287	1.227-1.347
tert-Butylbenzene	20.07	15.90	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.96	15.90	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.16	0.462 ok	0.462	0.402-0.522
Chloroethane	4.63	8.16	0.567 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.98	8.16	0.488 ok	0.488	0.428-0.548
3-Chloropropene	6.09	8.16	0.746 ok	0.747	0.687-0.807
2-Chlorotoluene	19.08	15.90	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.24	8.16	1.255 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.10	8.16	0.870 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.86	8.16	0.718 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.36	1.389 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.12	8.16	1.118 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.90	10.36	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.55	10.36	1.308 ok	1.308	1.248-1.368
1,4-Dioxane	11.21	10.36	1.082 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.71	8.16	0.577 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.36	1.358 ok	1.358	1.298-1.418
Dibromomethane	10.87	10.36	1.049 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.89	8.16	0.844 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.98	8.16	0.978 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15 Reporting this level
V6W487-ICC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.27	10.36	1.184 ok	1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275 ok	1.275	1.215-1.335
o-Dichlorobenzene	20.83	15.90	1.310 ok	1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282 ok	1.282	1.222-1.342
trans-1,3-Dichloropropene	12.95	10.36	1.250 ok	1.250	1.190-1.310
Di-Isopropyl ether	8.20	8.16	1.005 ok	1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290 ok	1.290	1.230-1.350
2,4-Dimethylpentane	9.17	8.16	1.124 ok	1.125	1.065-1.185
Ethanol	4.72	8.16	0.578 ok	0.579	0.519-0.639
Ethylbenzene	16.51	15.90	1.038 ok	1.038	0.978-1.098
Ethyl Acetate	8.23	8.16	1.009 ok	1.010	0.950-1.070
Ethyl Acrylate	10.94	10.36	1.056 ok	1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219 ok	1.219	1.159-1.279
Freon 113	6.23	8.16	0.763 ok	0.763	0.703-0.823
Freon 114	4.06	8.16	0.498 ok	0.498	0.438-0.558
Freon 123	5.06	8.16	0.620 ok	0.620	0.560-0.680
Freon 123A	5.10	8.16	0.625 ok	0.626	0.566-0.686
Freon 142B	3.96	8.16	0.485 ok	0.486	0.426-0.546
Freon 152A	3.73	8.16	0.457 ok	0.457	0.397-0.517
Heptane	11.56	10.36	1.116 ok	1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485 ok	1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366 ok	1.366	1.306-1.426
Hexane	8.20	8.16	1.005 ok	1.005	0.945-1.065
2-Hexanone	13.89	10.36	1.341 ok	1.342	1.282-1.402
Iodomethane	5.80	8.16	0.711 ok	0.711	0.651-0.771
Isopropylbenzene	18.36	15.90	1.155 ok	1.155	1.095-1.215
Isopropyl Alcohol	5.34	8.16	0.654 ok	0.656	0.596-0.716
p-Isopropyltoluene	20.69	15.90	1.301 ok	1.301	1.241-1.361
Methylene chloride	5.99	8.16	0.734 ok	0.734	0.674-0.794
Methyl ethyl ketone	7.52	8.16	0.922 ok	0.923	0.863-0.983
Methyl Isobutyl Ketone	12.32	10.36	1.189 ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.16	8.16	0.877 ok	0.879	0.819-0.939
Methylmethacrylate	11.47	10.36	1.107 ok	1.108	1.048-1.168
Naphthalene	23.16	15.90	1.457 ok	1.457	1.397-1.517
Nonane	17.84	15.90	1.122 ok	1.122	1.062-1.182
Octane	14.86	10.36	1.434 ok	1.434	1.374-1.494
Pentane	5.60	8.16	0.686 ok	0.686	0.626-0.746
n-Propylbenzene	19.16	15.90	1.205 ok	1.205	1.145-1.265
Propylene	3.79	8.16	0.464 ok	0.465	0.405-0.525
Styrene	17.30	15.90	1.088 ok	1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15 Reporting this level
V6W487-ICC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.40	8.16	1.152 ok	1.152	1.092-1.212
1,1,1,2-Tetrachloroethane	15.95	10.36	1.540 ok	1.539	1.479-1.599
1,1,2,2-Tetrachloroethane	17.46	15.90	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.16	10.36	1.270 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.65	15.90	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.08	15.90	1.263 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.50	15.90	1.226 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.22	10.36	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.90	8.16	0.723 ok	0.726	0.666-0.786
Tetrachloroethylene	15.02	10.36	1.450 ok	1.449	1.389-1.509
Tetrahydrofuran	8.75	8.16	1.072 ok	1.075	1.015-1.135
Toluene	13.51	10.36	1.304 ok	1.304	1.244-1.364
Trichloroethylene	11.19	10.36	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.29	8.16	0.648 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.26	8.16	0.890 ok	0.891	0.831-0.951
m,p-Xylene	16.78	15.90	1.055 ok	1.055	0.995-1.115
o-Xylene	17.45	15.90	1.097 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.60	15.90	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	298852 ok	304927	182956-426898
1,4-Difluorobenzene	10.36 ok	10.36	10.03-10.69	1084169 ok	1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	492115 ok	510652	306391-714913

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-ICC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.14	8.16	0.630 ok	0.631	0.571-0.691
Acrolein	5.03	8.16	0.616 ok	0.616	0.556-0.676
Acrylonitrile	5.56	8.16	0.681 ok	0.681	0.621-0.741
Acetonitrile	4.92	8.16	0.603 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.47	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.15	10.37	1.075 ok	1.076	1.016-1.136
Bromoform	16.86	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.16	0.604 ok	0.604	0.544-0.664
n-Butane	4.32	8.16	0.529 ok	0.529	0.469-0.589
Benzyl Chloride	20.27	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.46	15.90	1.287 ok	1.287	1.227-1.347
tert-Butylbenzene	20.07	15.90	1.262 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.96	15.90	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.16	0.462 ok	0.462	0.402-0.522
Chloroethane	4.63	8.16	0.567 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.99	8.16	0.489 ok	0.488	0.428-0.548
3-Chloropropene	6.10	8.16	0.748 ok	0.747	0.687-0.807
2-Chlorotoluene	19.08	15.90	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.24	8.16	1.255 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.11	8.16	0.871 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.87	8.16	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.37	1.388 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.13	8.16	1.119 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.91	10.37	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.55	10.37	1.307 ok	1.308	1.248-1.368
1,4-Dioxane	11.21	10.37	1.081 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.71	8.16	0.577 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.37	1.357 ok	1.358	1.298-1.418
Dibromomethane	10.88	10.37	1.049 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.90	8.16	0.846 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.99	8.16	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-ICC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.28	10.37	1.184	ok	1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275	ok	1.275	1.215-1.335
o-Dichlorobenzene	20.84	15.90	1.311	ok	1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282	ok	1.282	1.222-1.342
trans-1,3-Dichloropropene	12.95	10.37	1.249	ok	1.250	1.190-1.310
Di-Isopropyl ether	8.20	8.16	1.005	ok	1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290	ok	1.290	1.230-1.350
2,4-Dimethylpentane	9.18	8.16	1.125	ok	1.125	1.065-1.185
Ethanol	4.72	8.16	0.578	ok	0.579	0.519-0.639
Ethylbenzene	16.51	15.90	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.23	8.16	1.009	ok	1.010	0.950-1.070
Ethyl Acrylate	10.94	10.37	1.055	ok	1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219	ok	1.219	1.159-1.279
Freon 113	6.23	8.16	0.763	ok	0.763	0.703-0.823
Freon 114	4.06	8.16	0.498	ok	0.498	0.438-0.558
Freon 123	5.06	8.16	0.620	ok	0.620	0.560-0.680
Freon 123A	5.11	8.16	0.626	ok	0.626	0.566-0.686
Freon 142B	3.97	8.16	0.487	ok	0.486	0.426-0.546
Freon 152A	3.73	8.16	0.457	ok	0.457	0.397-0.517
Heptane	11.56	10.37	1.115	ok	1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485	ok	1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366	ok	1.366	1.306-1.426
Hexane	8.20	8.16	1.005	ok	1.005	0.945-1.065
2-Hexanone	13.89	10.37	1.339	ok	1.342	1.282-1.402
Iodomethane	5.80	8.16	0.711	ok	0.711	0.651-0.771
Isopropylbenzene	18.36	15.90	1.155	ok	1.155	1.095-1.215
Isopropyl Alcohol	5.35	8.16	0.656	ok	0.656	0.596-0.716
p-Isopropyltoluene	20.69	15.90	1.301	ok	1.301	1.241-1.361
Methylene chloride	5.99	8.16	0.734	ok	0.734	0.674-0.794
Methyl ethyl ketone	7.52	8.16	0.922	ok	0.923	0.863-0.983
Methyl Isobutyl Ketone	12.32	10.37	1.188	ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.16	8.16	0.877	ok	0.879	0.819-0.939
Methylmethacrylate	11.47	10.37	1.106	ok	1.108	1.048-1.168
Naphthalene	23.16	15.90	1.457	ok	1.457	1.397-1.517
Nonane	17.84	15.90	1.122	ok	1.122	1.062-1.182
Octane	14.86	10.37	1.433	ok	1.434	1.374-1.494
Pentane	5.60	8.16	0.686	ok	0.686	0.626-0.746
n-Propylbenzene	19.16	15.90	1.205	ok	1.205	1.145-1.265
Propylene	3.80	8.16	0.466	ok	0.465	0.405-0.525
Styrene	17.30	15.90	1.088	ok	1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-ICC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15 Reporting this level
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.40	8.16	1.152 ok	1.152	1.092-1.212
1,1,1,2-Tetrachloroethane	15.95	10.37	1.538 ok	1.539	1.479-1.599
1,1,2,2-Tetrachloroethane	17.46	15.90	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.16	10.37	1.269 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.65	15.90	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.90	1.264 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.50	15.90	1.226 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.22	10.37	1.082 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.90	8.16	0.723 ok	0.726	0.666-0.786
Tetrachloroethylene	15.02	10.37	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.75	8.16	1.072 ok	1.075	1.015-1.135
Toluene	13.51	10.37	1.303 ok	1.304	1.244-1.364
Trichloroethylene	11.19	10.37	1.079 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.29	8.16	0.648 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.26	8.16	0.890 ok	0.891	0.831-0.951
m,p-Xylene	16.78	15.90	1.055 ok	1.055	0.995-1.115
o-Xylene	17.45	15.90	1.097 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.60	15.90	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	310356 ok	304927	182956-426898
1,4-Difluorobenzene	10.37 ok	10.36	10.03-10.69	1130166 ok	1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	530428 ok	510652	306391-714913

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.14	8.16	0.630 ok	0.631	0.571-0.691
Acrolein	5.03	8.16	0.616 ok	0.616	0.556-0.676
Acrylonitrile	5.56	8.16	0.681 ok	0.681	0.621-0.741
Acetonitrile	4.92	8.16	0.603 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.47	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.15	10.37	1.075 ok	1.076	1.016-1.136
Bromoform	16.86	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.16	0.604 ok	0.604	0.544-0.664
n-Butane	4.32	8.16	0.529 ok	0.529	0.469-0.589
Benzyl Chloride	20.27	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.46	15.90	1.287 ok	1.287	1.227-1.347
tert-Butylbenzene	20.08	15.90	1.263 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.96	15.90	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.16	0.462 ok	0.462	0.402-0.522
Chloroethane	4.63	8.16	0.567 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.99	8.16	0.489 ok	0.488	0.428-0.548
3-Chloropropene	6.10	8.16	0.748 ok	0.747	0.687-0.807
2-Chlorotoluene	19.08	15.90	1.200 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.24	8.16	1.255 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.11	8.16	0.871 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.87	8.16	0.719 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.37	1.388 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.13	8.16	1.119 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.91	10.37	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.56	10.37	1.308 ok	1.308	1.248-1.368
1,4-Dioxane	11.21	10.37	1.081 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.71	8.16	0.577 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.37	1.357 ok	1.358	1.298-1.418
Dibromomethane	10.88	10.37	1.049 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.90	8.16	0.846 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.99	8.16	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.28	10.37	1.184	ok	1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275	ok	1.275	1.215-1.335
o-Dichlorobenzene	20.84	15.90	1.311	ok	1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282	ok	1.282	1.222-1.342
trans-1,3-Dichloropropene	12.95	10.37	1.249	ok	1.250	1.190-1.310
Di-Isopropyl ether	8.20	8.16	1.005	ok	1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290	ok	1.290	1.230-1.350
2,4-Dimethylpentane	9.18	8.16	1.125	ok	1.125	1.065-1.185
Ethanol	4.72	8.16	0.578	ok	0.579	0.519-0.639
Ethylbenzene	16.51	15.90	1.038	ok	1.038	0.978-1.098
Ethyl Acetate	8.23	8.16	1.009	ok	1.010	0.950-1.070
Ethyl Acrylate	10.94	10.37	1.055	ok	1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219	ok	1.219	1.159-1.279
Freon 113	6.23	8.16	0.763	ok	0.763	0.703-0.823
Freon 114	4.06	8.16	0.498	ok	0.498	0.438-0.558
Freon 123	5.06	8.16	0.620	ok	0.620	0.560-0.680
Freon 123A	5.11	8.16	0.626	ok	0.626	0.566-0.686
Freon 142B	3.96	8.16	0.485	ok	0.486	0.426-0.546
Freon 152A	3.73	8.16	0.457	ok	0.457	0.397-0.517
Heptane	11.57	10.37	1.116	ok	1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485	ok	1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366	ok	1.366	1.306-1.426
Hexane	8.20	8.16	1.005	ok	1.005	0.945-1.065
2-Hexanone	13.89	10.37	1.339	ok	1.342	1.282-1.402
Iodomethane	5.80	8.16	0.711	ok	0.711	0.651-0.771
Isopropylbenzene	18.36	15.90	1.155	ok	1.155	1.095-1.215
Isopropyl Alcohol	5.35	8.16	0.656	ok	0.656	0.596-0.716
p-Isopropyltoluene	20.69	15.90	1.301	ok	1.301	1.241-1.361
Methylene chloride	5.99	8.16	0.734	ok	0.734	0.674-0.794
Methyl ethyl ketone	7.52	8.16	0.922	ok	0.923	0.863-0.983
Methyl Isobutyl Ketone	12.32	10.37	1.188	ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.16	8.16	0.877	ok	0.879	0.819-0.939
Methylmethacrylate	11.47	10.37	1.106	ok	1.108	1.048-1.168
Naphthalene	23.16	15.90	1.457	ok	1.457	1.397-1.517
Nonane	17.84	15.90	1.122	ok	1.122	1.062-1.182
Octane	14.86	10.37	1.433	ok	1.434	1.374-1.494
Pentane	5.60	8.16	0.686	ok	0.686	0.626-0.746
n-Propylbenzene	19.16	15.90	1.205	ok	1.205	1.145-1.265
Propylene	3.80	8.16	0.466	ok	0.465	0.405-0.525
Styrene	17.30	15.90	1.088	ok	1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.40	8.16	1.152 ok	1.152	1.092-1.212
1,1,1,2-Tetrachloroethane	15.95	10.37	1.538 ok	1.539	1.479-1.599
1,1,2,2-Tetrachloroethane	17.46	15.90	1.098 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.16	10.37	1.269 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.65	15.90	1.110 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.90	1.264 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.51	15.90	1.227 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.22	10.37	1.082 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.90	8.16	0.723 ok	0.726	0.666-0.786
Tetrachloroethylene	15.02	10.37	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.75	8.16	1.072 ok	1.075	1.015-1.135
Toluene	13.51	10.37	1.303 ok	1.304	1.244-1.364
Trichloroethylene	11.19	10.37	1.079 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.29	8.16	0.648 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.26	8.16	0.890 ok	0.891	0.831-0.951
m,p-Xylene	16.78	15.90	1.055 ok	1.055	0.995-1.115
o-Xylene	17.46	15.90	1.098 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.60	15.90	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	325007 ok	304927	182956-426898
1,4-Difluorobenzene	10.37 ok	10.36	10.03-10.69	1198074 ok	1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	589466 ok	510652	306391-714913

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
Acetone	5.13	8.16	0.629 ok	0.631	0.571-0.691
Acrolein	5.02	8.16	0.615 ok	0.616	0.556-0.676
Acrylonitrile	5.55	8.16	0.680 ok	0.681	0.621-0.741
Acetonitrile	4.91	8.16	0.602 ok	0.603	0.543-0.663
1,3-Butadiene	4.27	8.16	0.523 ok	0.523	0.463-0.583
Benzene	9.93	8.16	1.217 ok	1.217	1.157-1.277
Bromobenzene	18.48	15.90	1.162 ok	1.162	1.102-1.222
Bromodichloromethane	11.16	10.37	1.076 ok	1.076	1.016-1.136
Bromoform	16.86	15.90	1.060 ok	1.060	1.000-1.120
Bromomethane	4.49	8.16	0.550 ok	0.550	0.490-0.610
Bromoethene	4.93	8.16	0.604 ok	0.604	0.544-0.664
n-Butane	4.31	8.16	0.528 ok	0.529	0.469-0.589
Benzyl Chloride	20.28	15.90	1.275 ok	1.275	1.215-1.335
n-Butylbenzene	21.26	15.90	1.337 ok	1.337	1.277-1.397
sec-Butylbenzene	20.46	15.90	1.287 ok	1.287	1.227-1.347
tert-Butylbenzene	20.08	15.90	1.263 ok	1.262	1.202-1.322
Carbon disulfide	6.27	8.16	0.768 ok	0.768	0.708-0.828
Chlorobenzene	15.97	15.90	1.004 ok	1.004	0.944-1.064
Chlorodifluoromethane	3.77	8.16	0.462 ok	0.462	0.402-0.522
Chloroethane	4.63	8.16	0.567 ok	0.568	0.508-0.628
Chlorotrifluoroethene	3.80	8.16	0.466 ok	0.466	0.406-0.526
Chloroform	8.31	8.16	1.018 ok	1.018	0.958-1.078
Chloromethane	3.98	8.16	0.488 ok	0.488	0.428-0.548
3-Chloropropene	6.09	8.16	0.746 ok	0.747	0.687-0.807
2-Chlorotoluene	19.09	15.90	1.201 ok	1.200	1.140-1.260
Carbon tetrachloride	10.10	8.16	1.238 ok	1.238	1.178-1.298
Cyclohexane	10.24	8.16	1.255 ok	1.255	1.195-1.315
1,1-Dichloroethane	7.10	8.16	0.870 ok	0.871	0.811-0.931
1,1-Dichloroethylene	5.86	8.16	0.718 ok	0.719	0.659-0.779
1,2-Dibromoethane	14.39	10.37	1.388 ok	1.388	1.328-1.448
1,2-Dichloroethane	9.12	8.16	1.118 ok	1.118	1.058-1.178
1,2-Dichloropropane	10.91	10.37	1.052 ok	1.052	0.992-1.112
1,3-Dichloropropane	13.56	10.37	1.308 ok	1.308	1.248-1.368
1,4-Dioxane	11.20	10.37	1.080 ok	1.084	1.024-1.144
Dichlorodifluoromethane	3.85	8.16	0.472 ok	0.472	0.412-0.532
Dichlorofluoromethane	4.70	8.16	0.576 ok	0.577	0.517-0.637
Dibromochloromethane	14.07	10.37	1.357 ok	1.358	1.298-1.418
Dibromomethane	10.88	10.37	1.049 ok	1.050	0.990-1.110
trans-1,2-Dichloroethylene	6.89	8.16	0.844 ok	0.845	0.785-0.905
cis-1,2-Dichloroethylene	7.99	8.16	0.979 ok	0.979	0.919-1.039

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-IC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT		Mean Rel RT	Rel RT Range (+ /- .06)
cis-1,3-Dichloropropene	12.28	10.37	1.184	ok	1.185	1.125-1.245
m-Dichlorobenzene	20.28	15.90	1.275	ok	1.275	1.215-1.335
o-Dichlorobenzene	20.85	15.90	1.311	ok	1.311	1.251-1.371
p-Dichlorobenzene	20.38	15.90	1.282	ok	1.282	1.222-1.342
trans-1,3-Dichloropropene	12.95	10.37	1.249	ok	1.250	1.190-1.310
Di-Isopropyl ether	8.20	8.16	1.005	ok	1.006	0.946-1.066
2,3-Dimethylpentane	10.53	8.16	1.290	ok	1.290	1.230-1.350
2,4-Dimethylpentane	9.18	8.16	1.125	ok	1.125	1.065-1.185
Ethanol	4.72	8.16	0.578	ok	0.579	0.519-0.639
Ethylbenzene	16.52	15.90	1.039	ok	1.038	0.978-1.098
Ethyl Acetate	8.24	8.16	1.010	ok	1.010	0.950-1.070
Ethyl Acrylate	10.94	10.37	1.055	ok	1.057	0.997-1.117
4-Ethyltoluene	19.38	15.90	1.219	ok	1.219	1.159-1.279
Freon 113	6.23	8.16	0.763	ok	0.763	0.703-0.823
Freon 114	4.06	8.16	0.498	ok	0.498	0.438-0.558
Freon 123	5.06	8.16	0.620	ok	0.620	0.560-0.680
Freon 123A	5.10	8.16	0.625	ok	0.626	0.566-0.686
Freon 142B	3.96	8.16	0.485	ok	0.486	0.426-0.546
Freon 152A	3.73	8.16	0.457	ok	0.457	0.397-0.517
Heptane	11.57	10.37	1.116	ok	1.116	1.056-1.176
Hexachlorobutadiene	23.61	15.90	1.485	ok	1.485	1.425-1.545
Hexachloroethane	21.72	15.90	1.366	ok	1.366	1.306-1.426
Hexane	8.20	8.16	1.005	ok	1.005	0.945-1.065
2-Hexanone	13.90	10.37	1.340	ok	1.342	1.282-1.402
Iodomethane	5.80	8.16	0.711	ok	0.711	0.651-0.771
Isopropylbenzene	18.37	15.90	1.155	ok	1.155	1.095-1.215
Isopropyl Alcohol	5.35	8.16	0.656	ok	0.656	0.596-0.716
p-Isopropyltoluene	20.69	15.90	1.301	ok	1.301	1.241-1.361
Methylene chloride	5.99	8.16	0.734	ok	0.734	0.674-0.794
Methyl ethyl ketone	7.52	8.16	0.922	ok	0.923	0.863-0.983
Methyl Isobutyl Ketone	12.32	10.37	1.188	ok	1.191	1.131-1.251
Methyl Tert Butyl Ether	7.15	8.16	0.876	ok	0.879	0.819-0.939
Methylmethacrylate	11.47	10.37	1.106	ok	1.108	1.048-1.168
Naphthalene	23.17	15.90	1.457	ok	1.457	1.397-1.517
Nonane	17.84	15.90	1.122	ok	1.122	1.062-1.182
Octane	14.86	10.37	1.433	ok	1.434	1.374-1.494
Pentane	5.59	8.16	0.685	ok	0.686	0.626-0.746
n-Propylbenzene	19.16	15.90	1.205	ok	1.205	1.145-1.265
Propylene	3.79	8.16	0.464	ok	0.465	0.405-0.525
Styrene	17.30	15.90	1.088	ok	1.088	1.028-1.148

Initial Calibration Retention Time/Internal Standard Area Summary

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Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Sample Number	Lab File ID	Injected	By	Level	Inst ID	Method
V6W487-IC487	6W12038.D	05/16/19 16:21	TCH	0.04	GCMS6W	TO-15
V6W487-IC487	6W12039.D	05/16/19 17:08	TCH	0.1	GCMS6W	TO-15
V6W487-IC487	6W12040.D	05/16/19 17:56	TCH	0.2	GCMS6W	TO-15
V6W487-IC487	6W12041.D	05/16/19 18:45	TCH	0.5	GCMS6W	TO-15
V6W487-IC487	6W12042.D	05/16/19 19:31	TCH	5	GCMS6W	TO-15
V6W487-ICC487	6W12043.D	05/16/19 20:18	TCH	10	GCMS6W	TO-15
V6W487-IC487	6W12044.D	05/16/19 21:06	TCH	20	GCMS6W	TO-15
V6W487-IC487	6W12046.D	05/16/19 22:46	TCH	40	GCMS6W	TO-15

Reporting this level

Target Compound	RT (min.)	Istd RT (min.)	Rel RT	Mean Rel RT	Rel RT Range (+ /- .06)
1,1,1-Trichloroethane	9.40	8.16	1.152 ok	1.152	1.092-1.212
1,1,1,2-Tetrachloroethane	15.95	10.37	1.538 ok	1.539	1.479-1.599
1,1,2,2-Tetrachloroethane	17.47	15.90	1.099 ok	1.098	1.038-1.158
1,1,2-Trichloroethane	13.17	10.37	1.270 ok	1.270	1.210-1.330
1,2,4-Trichlorobenzene	23.04	15.90	1.449 ok	1.449	1.389-1.509
1,2,3-Trichloropropane	17.66	15.90	1.111 ok	1.110	1.050-1.170
1,2,4-Trimethylbenzene	20.09	15.90	1.264 ok	1.263	1.203-1.323
1,3,5-Trimethylbenzene	19.51	15.90	1.227 ok	1.227	1.167-1.287
2,2,4-Trimethylpentane	11.23	10.37	1.083 ok	1.083	1.023-1.143
Tertiary Butyl Alcohol	5.90	8.16	0.723 ok	0.726	0.666-0.786
Tetrachloroethylene	15.02	10.37	1.448 ok	1.449	1.389-1.509
Tetrahydrofuran	8.74	8.16	1.071 ok	1.075	1.015-1.135
Toluene	13.52	10.37	1.304 ok	1.304	1.244-1.364
Trichloroethylene	11.20	10.37	1.080 ok	1.080	1.020-1.140
Trichlorofluoromethane	5.29	8.16	0.648 ok	0.649	0.589-0.709
Vinyl chloride	4.16	8.16	0.510 ok	0.510	0.450-0.570
Vinyl Acetate	7.26	8.16	0.890 ok	0.891	0.831-0.951
m,p-Xylene	16.79	15.90	1.056 ok	1.055	0.995-1.115
o-Xylene	17.46	15.90	1.098 ok	1.098	1.038-1.158
TVHC As Equiv Pentane	5.59	15.90	0.352 ok	0.352	0.292-0.412

Internal Standard	RT (min.)	Mean RT(min.)	RT Range (+ /- 0.33)	Area	Mean Area	Area Range (+ /- 40 %)
Bromochloromethane	8.16 ok	8.16	7.83-8.49	325818 ok	304927	182956-426898
1,4-Difluorobenzene	10.37 ok	10.36	10.03-10.69	1194690 ok	1106762	664057-1549467
Chlorobenzene-D5	15.90 ok	15.90	15.57-16.23	658869 ok	510652	306391-714913

Surrogate Recovery Summary

Job Number: JC91420
Account: CARICH C. A. Rich Consultants
Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Method: TO-15	Matrix: AIR

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JC91420-1	6W13183.D	98
JC91420-2	6W13184.D	99
JC91420-3	6W13185.D	102
JC91420-4	6W13186.D	99
JC91420-5	6W13187.D	99
JC91420-6	6W13188.D	103
JC91516-1DUP	6W13190.D	100
V6W525-SCC	6W12879.D	97
V6W538-BS	6W13179.D	108
V6W538-BSD	6W13180.D	110
V6W538-MB	6W13182.D	96
V6W525-BS	6W12872.D	108
V6W525-BSD	6W12873.D	107
V6W525-MB	6W12875.D	95

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	65-128%

Initial Calibration Summary

Page 1 of 4

Job Number: JC91420**Sample:** V6W487-ICC487**Account:** CARICH C. A. Rich Consultants**Lab FileID:** 6W12043.D**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY**Response Factor Report GCMS6W**

Method : C:\msdchem\1\methods\m6w487.M (RTE Integrator)
 Title : T0-15 Full Scan Mode
 Last Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Calibration Files

20 =6W12044.D 0.5 =6W12041.D 0.2 =6W12040.D 0.1 =6W12039.D
 0.04=6W12038.D 10 =6W12043.D 5 =6W12042.D 40 =6W12046.D
 = =

Compound	20	0.5	0.2	0.1	0.04	10	5	40	Avg	%RSD
1) I Bromochloromethane	-----ISTD-----									
2) 1,1,1-Trifluoroethane									0.000	-1.00
3) Freon 152A										
	0.588	0.599	0.606	0.592	0.615	0.606	0.599	0.553	0.595	3.18
4) Chlorodifluoromethane										
	0.230	0.235	0.225	0.190		0.238	0.240	0.217	0.225	7.74
5) Propene										
	0.602	0.605	0.637	0.609	0.677	0.631	0.634	0.554	0.619	5.76
6) Chlorotrifluoroethene										
	1.570	1.488	1.535	1.532	1.675	1.608	1.570	1.480	1.557	4.12
7) Dichlorodifluoromethane										
	2.476	2.497	2.539	2.488	2.664	2.523	2.506	2.267	2.495	4.38
8) 1-Chloro-1,1-difluoroethane										
	1.690	1.708	1.795	1.749	1.912	1.747	1.739	1.557	1.737	5.74
9) Chloromethane										
	0.726	0.740	0.750	0.688	0.723	0.750	0.737	0.642	0.720	5.14
10) Dichlorotetrafluoroethane										
	2.573	2.522	2.595	2.492	2.821	2.650	2.593	2.303	2.569	5.70
11) Vinyl Chloride										
	0.911	0.885	0.870	0.826	0.859	0.921	0.888	0.822	0.873	4.12
12) 1,3-Butadiene										
	0.625	0.567	0.567	0.507	0.602	0.632	0.614	0.568	0.585	7.10
13) n-Butane										
	0.168	0.152	0.149	0.081		0.170	0.162	0.149	0.147	20.68
14) Bromomethane										
	0.950	0.922	0.918	0.916	1.031	0.947	0.949	0.865	0.937	5.01
15) Acrolein										
	0.392	0.403	0.416	0.319		0.388	0.391	0.368	0.382	8.24
16) Chloroethane										
	0.463	0.454	0.449	0.439	0.251	0.464	0.474	0.419	0.426	17.10
17) Dichlorofluoromethane										
	2.009	2.050	2.132	2.101	2.216	2.032	2.094	1.846	2.060	5.24
18) Acetonitrile										
	0.652	0.920	0.977	0.966	0.996	0.659	0.693	0.594	0.807	21.30
19) Freon 123										
	2.227	2.237	2.349	2.324	2.335	2.229	2.301	2.077	2.260	3.93
20) Freon 123A										
	1.375	1.376	1.437	1.379	1.239	1.379	1.420	1.307	1.364	4.65
21) Bromoethene										
	1.005	0.958	1.002	0.898	0.948	0.986	0.995	0.939	0.966	3.87
22) Trichlorofluoromethane										
	2.303	2.394	2.480	2.356	2.492	2.340	2.444	2.198	2.376	4.14
23) Acetone										

Initial Calibration Summary

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Job Number: JC91420

Sample: V6W487-ICC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12043.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

		0.411	0.496	0.572	0.525		0.411	0.427	0.392		0.462	14.95
24)	Pentane											
		0.227	0.209	0.201	0.130		0.228	0.236	0.217		0.207	17.46
25)	1,1-Dichloro-1-fluoroethane											
											0.000	-1.00
26)	Iodomethane											
		2.866	2.891	2.943	2.845	2.946	2.899	2.950	2.761		2.888	2.22
27)	Isopropyl Alcohol											
		1.430	2.165	2.293			1.444	1.506	1.356		1.699	24.45
28)	1,1-Dichloroethene											
		1.286	1.310	1.329	1.290	1.363	1.355	1.368	1.248		1.318	3.23
29)	Freon 113											
		1.988	2.073	2.121	2.111	2.086	2.047	2.108	1.876		2.051	4.04
30)	Methylene Chloride											
		0.851	0.890	0.995	1.058		0.873	0.892	0.805		0.909	9.60
31)	Carbon Disulfide											
		2.652	2.659	2.699	2.719	2.831	2.711	2.781	2.547		2.700	3.19
32)	Ethanol											
		0.306	0.585				0.308	0.317	0.277		0.359	35.50
33)	Acrylonitrile											
		0.712	0.778	0.784	0.684	0.578	0.718	0.742	0.701		0.712	9.08
34)	3-Chloropropene											
		0.478	0.441	0.444	0.388	0.195	0.482	0.477	0.450		0.419	22.84
35)	trans-1,2-Dichloroethene											
		1.272	1.254	1.295	1.206	1.240	1.298	1.303	1.247		1.265	2.67
36)	tert-Butyl Alcohol											
		1.840	1.973	2.044	1.741	1.863	1.916	1.907	1.780		1.883	5.27
37)	Methyl tert-Butyl Ether											
		2.659	2.394	2.410	2.343	2.653	2.698	2.280	2.652		2.511	6.77
38)	Vinyl Acetate											
		2.380	2.201	2.124	1.715	1.709	2.411	2.273	2.414		2.153	13.51
39)	1,1-Dichloroethane											
		1.612	1.696	1.757	1.685	1.790	1.661	1.677	1.589		1.683	3.98
40)	2-Butanone											
		0.493	0.549	0.522	0.343		0.488	0.424	0.496		0.474	14.58
41)	Hexane											
		1.394	1.330	1.336	1.254	1.307	1.459	1.524	1.350		1.369	6.33
42)	cis-1,2-Dichloroethene											
		1.259	1.241	1.247	1.168	1.202	1.278	1.311	1.251		1.245	3.52
43)	Di-isopropyl Ether											
		0.890	0.828	0.798	0.724	0.616	0.912	0.937	0.873		0.822	13.11
44)	Ethyl Acetate											
		0.309	0.314	0.265	0.163		0.317	0.322	0.307		0.285	20.07
45)	Methyl Acrylate											
		1.701	1.865	1.808			1.755	1.819	1.677		1.771	4.11
46)	Chloroform											
		2.048	2.126	2.186	2.077	2.307	2.093	2.181	2.046		2.133	4.16
47)	2,4-Dimethylpentane											
		1.686	1.515	1.491	1.365	1.378	1.712	1.754	1.671		1.571	9.79
48)	Tetrahydrofuran											
		0.461	0.414	0.398	0.281		0.455	0.465	0.464		0.420	15.91
49)	1,1,1-Trichloroethane											
		2.080	2.097	2.131	2.081	2.212	2.120	2.212	2.087		2.128	2.59
50)	1,2-Dichloroethane											
		1.178	1.260	1.250	1.126	1.074	1.199	1.265	1.178		1.191	5.68
51)	Benzene											
		3.137	3.047	3.101	3.175	3.513	3.154	3.243	3.138		3.189	4.47
52)	Carbon Tetrachloride											
		2.270	2.262	2.310	2.156	2.323	2.304	2.383	2.275		2.285	2.84
53)	Cyclohexane											

6.9.1
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Initial Calibration Summary

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Job Number: JC91420

Sample: V6W487-ICC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12043.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

		1.469	1.250	1.245	1.185	1.184	1.484	1.514	1.462	1.349	10.75
54)	2,3-Dimethylpentane	0.695	0.656	0.634	0.591	0.531	0.700	0.721	0.690	0.652	9.87
55)	I 1,4-Difluorobenzene	-----ISTD-----									
56)	2,2,4-Trimethylpentane	1.272	1.280	1.232	1.148	1.226	1.336	1.404	1.236	1.267	6.08
57)	Heptane	0.300	0.271	0.256	0.230	0.200	0.307	0.312	0.306	0.273	15.10
58)	Trichloroethene	0.395	0.392	0.403	0.370	0.353	0.404	0.417	0.397	0.391	5.21
59)	1,2-Dichloropropane	0.304	0.319	0.316	0.321	0.317	0.318	0.330	0.301	0.316	2.93
60)	Dibromomethane	0.437	0.454	0.471	0.441	0.535	0.439	0.454	0.441	0.459	7.15
61)	Ethyl Acrylate	0.604	0.589	0.528	0.399	0.284	0.616	0.617	0.613	0.531	23.43
62)	Methyl Methacrylate	0.324	0.305	0.262	0.195	0.158	0.326	0.323	0.326	0.277	24.02
63)	1,4-Dioxane	0.208	0.336	0.323	0.229	0.226	0.211	0.212	0.207	0.244	21.92
64)	Bromodichloromethane	0.626	0.633	0.626	0.590	0.609	0.644	0.662	0.634	0.628	3.42
65)	cis-1,3-Dichloropropene	0.502	0.457	0.445	0.373	0.373	0.505	0.509	0.520	0.461	13.02
66)	4-Methyl-2-pentanone	0.259	0.241	0.211	0.156	0.120	0.265	0.269	0.264	0.223	25.30
67)	trans-1,3-Dichloropropene	0.449	0.427	0.402	0.307	0.297	0.439	0.438	0.471	0.404	16.34
68)	Toluene	1.098	1.013	1.013	0.973	1.229	1.106	1.124	1.112	1.083	7.52
69)	1,1,2-Trichloroethane	0.378	0.376	0.371	0.345	0.349	0.382	0.390	0.386	0.372	4.45
70)	1,3-Dichloropropane	0.500	0.504	0.487	0.438	0.430	0.507	0.526	0.507	0.487	7.13
71)	2-Hexanone	0.350	0.478	0.396	0.236	0.149	0.350	0.343	0.360	0.333	29.95
72)	Ethyl Methacrylate	0.548	0.495	0.422	0.318	0.258	0.556	0.551	0.562	0.464	25.67
73)	Dibromochloromethane	0.742	0.688	0.674	0.610	0.654	0.750	0.751	0.757	0.703	7.81
74)	Tetrachloroethene	0.637	0.629	0.635	0.601	0.636	0.644	0.642	0.643	0.633	2.22
75)	1,2-Dibromoethane	0.592	0.602	0.586	0.481	0.484	0.586	0.584	0.617	0.567	9.35
76)	Octane	0.583	0.516	0.460	0.421	0.463	0.609	0.625	0.584	0.533	14.58
77)	1,1,1,2-Tetrachloroethane	0.508	0.493	0.515	0.466	0.479	0.516	0.523	0.505	0.501	3.94
78)	I Chlorobenzene-d5	-----ISTD-----									
79)	Chlorobenzene	1.843	2.241	2.300	2.046	2.156	1.963	2.048	1.644	2.030	10.57
80)	Ethylbenzene	2.878	3.044	3.049	3.127	4.045	3.051	3.175	2.628	3.125	13.11
81)	m,p-Xylene	2.192	2.594	2.491	2.280	2.613	2.360	2.489	2.012	2.379	8.79
82)	Styrene	1.758	1.709	1.430	1.074	1.030	1.807	1.825	1.635	1.533	20.99
83)	Nonane										

Initial Calibration Summary

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Job Number: JC91420

Sample:

V6W487-ICC487

Account: CARICH C. A. Rich Consultants

Lab FileID:

6W12043.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

	1.233	1.323	1.157	0.925	0.940	1.363	1.460	1.088	1.186	16.45
84) o-Xylene	2.251	2.550	2.546	2.583	3.423	2.441	2.557	2.012	2.546	15.96
85) Bromoform	1.527	1.554	1.476	1.300	1.296	1.591	1.613	1.400	1.470	8.51
86) 1,1,2,2-Tetrachloroethane	1.569	1.882	1.830	1.676	1.698	1.703	1.780	1.394	1.692	9.13
87) 1,2,3-Trichloropropane	1.140	1.396	1.398	1.177	1.209	1.227	1.284	1.044	1.234	9.90
88) Isopropylbenzene	3.241	3.605	3.358	2.971	3.021	3.473	3.619	2.958	3.281	8.40
89) Bromobenzene	1.075	1.368	1.289	1.014	0.998	1.135	1.156	0.996	1.129	12.26
90) 2-Chlorotoluene	0.802	0.869	0.799	0.610	0.541	0.857	0.881	0.745	0.763	16.42
91) n-Propylbenzene	0.909	1.003	0.839	0.633	0.567	0.967	1.001	0.838	0.845	19.54
92) 4-Bromofluorobenzene	1.281	1.288	1.255	1.235	1.213	1.300	1.331	1.212	1.264	3.40
93) 4-Ethyltoluene	3.087	3.365	2.814	2.041	2.081	3.270	3.383	2.793	2.854	18.87
94) 1,3,5-Trimethylbenzene	2.643	2.976	2.589	1.978	1.808	2.839	2.968	2.381	2.523	17.40
95) alpha-Methylstyrene	1.329	1.319	1.047	0.717	0.610	1.386	1.388	1.236	1.129	27.32
96) tert-Butylbenzene	0.660	0.744	0.652	0.467	0.403	0.724	0.750	0.584	0.623	20.78
97) 1,2,4-Trimethylbenzene	2.571	3.094	2.612	1.844	1.798	2.793	2.906	2.262	2.485	19.23
98) 1,3-Dichlorobenzene	1.688	2.261	1.944	1.399	1.395	1.783	1.813	1.532	1.727	16.95
99) Benzyl Chloride	1.803	1.934	1.628	1.085	1.017	1.808	1.731	1.717	1.590	21.69
100) 1,4-Dichlorobenzene	1.591	2.237	1.826	1.215	1.263	1.669	1.671	1.499	1.621	19.97
101) sec-Butylbenzene	0.815	0.947	0.839	0.612	0.507	0.891	0.919	0.738	0.783	19.79
102) p-Isopropyltoluene	0.865	1.053	0.921	0.622	0.546	0.943	0.978	0.754	0.835	21.40
103) 1,2-Dichlorobenzene	1.574	2.092	1.895	1.434	1.535	1.674	1.702	1.460	1.671	13.53
104) n-Butylbenzene	0.753	0.846	0.696	0.471	0.369	0.788	0.780	0.700	0.675	24.73
105) Hexachloroethane	1.117	1.357	1.189	0.854	0.846	1.186	1.227	0.995	1.096	16.67
106) 1,2,4-Trichlorobenzene	0.681	0.949	0.731	0.446	0.570	0.610	0.548	0.706	0.655	23.05
107) Naphthalene	1.489	2.531	1.847	1.119	1.304	1.357	1.268	1.511	1.553	28.99
108) Hexachlorobutadiene	1.023	1.376	1.315	1.164	1.590	1.048	1.001	0.911	1.178	19.55
109) I Bromochloromethane (A -----ISTD-----										
110) TVHC as equiv Pentane	3.645	5.629	5.441			3.790	4.150	3.283	4.323	22.69

(#) = Out of Range ### Number of calibration levels exceeded format ###

m6w487.M

Mon May 20 09:50:38 2019

Initial Calibration Verification

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Job Number: JC91420

Sample: V6W487-ICV487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12052.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\6W12052.D

Vial: 4

Acq On : 17 May 2019 11:28 am

Operator: thomash

Sample : icv487-10

Inst : GCMS6W

Misc : MS33831,V6W487,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\m6w487.M (RTE Integrator)

Title : TO-15 Full Scan Mode

Last Update : Fri May 17 14:09:49 2019

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	109	0.00	8.16
2	1,1,1-Trifluoroethane			NA			
3	Freon 152A	0.595	0.612	-2.9	110	0.00	3.73
4	Chlorodifluoromethane	0.225	0.239	-6.2	110	0.00	3.77
5	Propene	0.619	0.631	-1.9	109	0.00	3.79
6	Chlorotrifluoroethene	1.557	1.679	-7.8	114	0.00	3.80
7	Dichlorodifluoromethane	2.495	2.560	-2.6	111	0.00	3.85
8	1-Chloro-1,1-difluoroetha	1.737	1.799	-3.6	112	0.00	3.96
9	Chloromethane	0.720	0.752	-4.4	109	0.00	3.98
10	Dichlorotetrafluoroethane	2.569	2.641	-2.8	109	0.00	4.06
11	Vinyl Chloride	0.873	0.930	-6.5	110	0.00	4.16
12	1,3-Butadiene	0.585	0.636	-8.7	110	0.00	4.27
13	n-Butane	0.147	0.170	-15.6	109	0.00	4.31
14	Bromomethane	0.937	0.967	-3.2	112	0.00	4.49
15	Acrolein	0.382	0.385	-0.8	108	0.00	5.02
16	Chloroethane	0.426	0.480	-12.7	113	0.00	4.63
17	Dichlorofluoromethane	2.060	1.921	6.7	103	0.00	4.71
18	Acetonitrile	0.807	0.628	22.2	104	0.00	4.92
19	Freon 123	2.260	2.343	-3.7	115	0.00	5.05
20	Freon 123A	1.364	1.556	-14.1	123	0.00	5.10
21	Bromoethene	0.966	1.010	-4.6	112	0.00	4.93
22	Trichlorofluoromethane	2.376	2.336	1.7	109	0.00	5.29
23	Acetone	0.462	0.423	8.4	112	0.00	5.14
24	Pentane	0.207	0.229	-10.6	109	0.00	5.60
25	1,1-Dichloro-1-fluoroetha			NA			
26	Iodomethane	2.888	3.017	-4.5	114	0.00	5.80
27	Isopropyl Alcohol	1.699	1.472	13.4	111	0.00	5.34
28	1,1-Dichloroethene	1.318	1.447	-9.8	117	0.00	5.86
29	Freon 113	2.051	2.156	-5.1	115	0.00	6.23
30	Methylene Chloride	0.909	0.903	0.7	113	0.00	5.98
31	Carbon Disulfide	2.700	2.872	-6.4	116	0.00	6.26
32	Ethanol	0.359	0.308	14.2	109	0.00	4.72
33	Acrylonitrile	0.712	0.701	1.5	107	0.00	5.55
34	3-Chloropropene	0.419	0.489	-16.7	111	0.00	6.09
35	trans-1,2-Dichloroethene	1.265	1.327	-4.9	112	0.00	6.89
36	tert-Butyl Alcohol	1.883	1.721	8.6	98	0.00	5.89
37	Methyl tert-Butyl Ether	2.511	2.675	-6.5	108	0.00	7.16
38	Vinyl Acetate	2.153	2.330	-8.2	105	0.00	7.25
39	1,1-Dichloroethane	1.683	1.629	3.2	107	0.00	7.10
40	2-Butanone	0.474	0.495	-4.4	111	0.00	7.51
41	Hexane	1.369	1.447	-5.7	108	0.00	8.19
42	cis-1,2-Dichloroethene	1.245	1.256	-0.9	107	0.00	7.98

Initial Calibration Verification

Page 2 of 3

Job Number: JC91420

Sample: V6W487-ICV487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12052.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.822	0.904	-10.0	108	0.00	8.20
44	Ethyl Acetate	0.285	0.322	-13.0	111	0.00	8.23
45	Methyl Acrylate	1.771	1.744	1.5	108	0.00	8.21
46	Chloroform	2.133	2.045	4.1	107	0.00	8.31
47	2,4-Dimethylpentane	1.571	1.696	-8.0	108	0.00	9.17
48	Tetrahydrofuran	0.420	0.453	-7.9	109	0.00	8.75
49	1,1,1-Trichloroethane	2.128	2.085	2.0	107	0.00	9.39
50	1,2-Dichloroethane	1.191	1.173	1.5	107	0.00	9.12
51	Benzene	3.189	3.125	2.0	108	0.00	9.93
52	Carbon Tetrachloride	2.285	2.276	0.4	108	0.00	10.10
53	Cyclohexane	1.349	1.452	-7.6	107	0.00	10.23
54	2,3-Dimethylpentane	0.652	0.708	-8.6	110	0.00	10.53
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	110	0.00	10.36
56	2,2,4-Trimethylpentane	1.267	1.307	-3.2	107	0.00	11.22
57	Heptane	0.273	0.307	-12.5	110	0.00	11.56
58	Trichloroethene	0.391	0.393	-0.5	107	0.00	11.19
59	1,2-Dichloropropane	0.316	0.307	2.8	106	0.00	10.90
60	Dibromomethane	0.459	0.444	3.3	111	0.00	10.87
61	Ethyl Acrylate	0.531	0.594	-11.9	106	0.00	10.93
62	Methyl Methacrylate	0.277	0.321	-15.9	108	0.00	11.46
63	1,4-Dioxane	0.244	0.200	18.0	104	0.00	11.21
64	Bromodichloromethane	0.628	0.629	-0.2	107	0.00	11.14
65	cis-1,3-Dichloropropene	0.461	0.528	-14.5	115	0.00	12.27
66	4-Methyl-2-pentanone	0.223	0.254	-13.9	105	0.00	12.32
67	trans-1,3-Dichloropropene	0.404	0.437	-8.2	109	0.00	12.95
68	Toluene	1.083	1.080	0.3	107	0.00	13.51
69	1,1,2-Trichloroethane	0.372	0.373	-0.3	107	0.00	13.16
70	1,3-Dichloropropane	0.487	0.504	-3.5	109	0.00	13.55
71	2-Hexanone	0.333	0.346	-3.9	109	0.00	13.88
72	Ethyl Methacrylate	0.464	0.541	-16.6	107	0.00	13.92
73	Dibromochloromethane	0.703	0.733	-4.3	107	0.00	14.07
74	Tetrachloroethene	0.633	0.625	1.3	106	0.00	15.02
75	1,2-Dibromoethane	0.567	0.576	-1.6	108	0.00	14.38
76	Octane	0.533	0.592	-11.1	107	0.00	14.86
77	1,1,1,2-Tetrachloroethane	0.501	0.511	-2.0	109	0.00	15.94
78 I	Chlorobenzene-d5	1.000	1.000	0.0	109	0.00	15.90
79	Chlorobenzene	2.030	1.900	6.4	106	0.00	15.96
80	Ethylbenzene	3.125	2.993	4.2	107	0.00	16.50
81	m,p-Xylene	2.379	2.256	5.2	104	0.00	16.78
82	Styrene	1.533	1.783	-16.3	108	0.00	17.30
83	Nonane	1.186	1.323	-11.6	106	0.00	17.84
84	o-Xylene	2.546	2.332	8.4	104	0.00	17.45
85	Bromoform	1.470	1.595	-8.5	109	0.00	16.85
86	1,1,2,2-Tetrachloroethane	1.692	1.670	1.3	107	0.00	17.46
87	1,2,3-Trichloropropane	1.234	1.207	2.2	107	0.00	17.65
88	Isopropylbenzene	3.281	3.469	-5.7	109	0.00	18.36
89	Bromobenzene	1.129	1.111	1.6	107	0.00	18.47
90	2-Chlorotoluene	0.763	0.858	-12.5	109	0.00	19.08
91	n-Propylbenzene	0.845	0.960	-13.6	108	0.00	19.15
92 S	4-Bromofluorobenzene	1.264	1.353	-7.0	114	0.00	18.14
93	4-Ethyltoluene	2.854	3.204	-12.3	107	0.00	19.38
94	1,3,5-Trimethylbenzene	2.523	2.720	-7.8	105	0.00	19.50
95	alpha-Methylstyrene	1.129	1.369	-21.3	108	0.00	19.73
96	tert-Butylbenzene	0.623	0.704	-13.0	106	0.00	20.07
97	1,2,4-Trimethylbenzene	2.485	2.680	-7.8	105	0.00	20.08
98	1,3-Dichlorobenzene	1.727	1.730	-0.2	106	0.00	20.28
99	Benzyl Chloride	1.590	1.841	-15.8	111	0.00	20.27
100	1,4-Dichlorobenzene	1.621	1.634	-0.8	107	0.00	20.38

Initial Calibration Verification

Page 3 of 3

Job Number: JC91420

Sample: V6W487-ICV487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12052.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.783	0.870	-11.1	107	0.00	20.46
102	p-Isopropyltoluene	0.835	0.928	-11.1	107	0.00	20.69
103	1,2-Dichlorobenzene	1.671	1.645	1.6	107	0.00	20.83
104	n-Butylbenzene	0.675	0.801	-18.7	111	0.00	21.26
105	Hexachloroethane	1.096	1.200	-9.5	111	0.00	21.72
106	1,2,4-Trichlorobenzene	0.655	0.669	-2.1	120	0.00	23.04
107	Naphthalene	1.553	1.491	4.0	120	0.00	23.16
108	Hexachlorobutadiene	1.178	1.050	10.9	109	0.00	23.61
109 I	Bromochloromethane (A)	1.000	1.000	0.0	109	0.00	8.16
110	TVHC as equiv Pentane	4.323	3.781	12.5	109	0.00	5.60

(#) = Out of Range
6W12043.D m6w487.M

SPCC's out = 0 CCC's out = 0
Mon May 20 09:50:20 2019

Continuing Calibration Summary

Page 1 of 3

Job Number: JC91420

Sample: V6W525-CC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12871.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\6W12871.D

Vial: 2

Acq On : 3 Jul 2019 6:21 am

Operator: danat

Sample : CC487-10

Inst : GCMS6W

Misc : MS35902,V6W525,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\m6w487.M (RTE Integrator)

Title : TO-15 Full Scan Mode

Last Update : Fri May 17 14:09:49 2019

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	74	0.00	8.16
2	1,1,1-Trifluoroethane			-----NA-----			
3	Freon 152A	0.595	0.613	-3.0	75	0.00	3.72
4	Chlorodifluoromethane	0.225	0.292	-29.8	91	-0.01	3.76
5	Propene	0.619	0.727	-17.4	85	-0.01	3.78
6	Chlorotrifluoroethene	1.557	1.545	0.8	71	-0.01	3.79
7	Dichlorodifluoromethane	2.495	2.815	-12.8	82	-0.01	3.84
8	1-Chloro-1,1-difluoroetha	1.737	2.203	-26.8	93	-0.01	3.96
9	Chloromethane	0.720	0.755	-4.9	74	-0.01	3.97
10	Dichlorotetrafluoroethane	2.569	2.584	-0.6	72	0.00	4.05
11	Vinyl Chloride	0.873	0.880	-0.8	71	-0.01	4.15
12	1,3-Butadiene	0.585	0.634	-8.4	74	-0.01	4.26
13	n-Butane	0.147	0.164	-11.6	71	-0.01	4.30
14	Bromomethane	0.937	0.866	7.6	68	0.00	4.49
15	Acrolein	0.382	0.373	2.4	71	-0.01	5.01
16	Chloroethane	0.426	0.448	-5.2	71	-0.01	4.62
17	Dichlorofluoromethane	2.060	2.231	-8.3	81	0.00	4.70
18	Acetonitrile	0.807	0.673	16.6	75	0.00	4.91
19	Freon 123	2.260	2.168	4.1	72	-0.01	5.04
20	Freon 123A	1.364	1.351	1.0	72	-0.01	5.09
21	Bromoethene	0.966	0.913	5.5	68	-0.01	4.92
22	Trichlorofluoromethane	2.376	2.783	-17.1	88	0.00	5.28
23	Acetone	0.462	0.418	9.5	75	0.00	5.13
24	Pentane	0.207	0.241	-16.4	78	0.00	5.60
25	1,1-Dichloro-1-fluoroetha			-----NA-----			
26	Iodomethane	2.888	2.686	7.0	68	-0.01	5.79
27	Isopropyl Alcohol	1.699	1.626	4.3	83	-0.01	5.34
28	1,1-Dichloroethene	1.318	1.486	-12.7	81	-0.01	5.86
29	Freon 113	2.051	2.082	-1.5	75	-0.01	6.22
30	Methylene Chloride	0.909	0.804	11.6	68	-0.01	5.97
31	Carbon Disulfide	2.700	2.740	-1.5	75	-0.01	6.26
32	Ethanol	0.359	0.317	11.7	76	0.00	4.71
33	Acrylonitrile	0.712	0.709	0.4	73	-0.01	5.55
34	3-Chloropropene	0.419	0.489	-16.7	75	-0.01	6.08
35	trans-1,2-Dichloroethene	1.265	1.429	-13.0	81	-0.01	6.89
36	tert-Butyl Alcohol	1.883	2.092	-11.1	81	0.00	5.89
37	Methyl tert-Butyl Ether	2.511	3.009	-19.8	82	-0.01	7.15
38	Vinyl Acetate	2.153	2.905	-34.9#	89	-0.01	7.25
39	1,1-Dichloroethane	1.683	1.824	-8.4	81	-0.01	7.09
40	2-Butanone	0.474	0.506	-6.8	77	0.00	7.51
41	Hexane	1.369	1.604	-17.2	81	0.00	8.19
42	cis-1,2-Dichloroethene	1.245	1.421	-14.1	82	-0.01	7.97

Continuing Calibration Summary

Page 2 of 3

Job Number: JC91420

Sample: V6W525-CC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12871.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.822	0.936	-13.9	76	0.00	8.19
44	Ethyl Acetate	0.285	0.339	-18.9	79	0.00	8.23
45	Methyl Acrylate	1.771	1.994	-12.6	84	0.00	8.21
46	Chloroform	2.133	2.399	-12.5	85	-0.01	8.30
47	2,4-Dimethylpentane	1.571	1.879	-19.6	81	-0.01	9.17
48	Tetrahydrofuran	0.420	0.474	-12.9	77	0.00	8.75
49	1,1,1-Trichloroethane	2.128	2.538	-19.3	88	0.00	9.39
50	1,2-Dichloroethane	1.191	1.547	-29.9	95	-0.01	9.11
51	Benzene	3.189	3.275	-2.7	77	-0.01	9.92
52	Carbon Tetrachloride	2.285	2.803	-22.7	90	-0.01	10.09
53	Cyclohexane	1.349	1.631	-20.9	81	0.00	10.23
54	2,3-Dimethylpentane	0.652	0.737	-13.0	78	0.00	10.53
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	76	0.00	10.36
56	2,2,4-Trimethylpentane	1.267	1.477	-16.6	84	-0.01	11.21
57	Heptane	0.273	0.323	-18.3	80	0.00	11.55
58	Trichloroethene	0.391	0.418	-6.9	78	0.00	11.19
59	1,2-Dichloropropane	0.316	0.331	-4.7	79	-0.01	10.89
60	Dibromomethane	0.459	0.418	8.9	72	-0.01	10.87
61	Ethyl Acrylate	0.531	0.683	-28.6	84	0.00	10.93
62	Methyl Methacrylate	0.277	0.344	-24.2	80	0.00	11.46
63	1,4-Dioxane	0.244	0.208	14.8	75	0.00	11.21
64	Bromodichloromethane	0.628	0.723	-15.1	85	0.00	11.14
65	cis-1,3-Dichloropropene	0.461	0.533	-15.6	80	0.00	12.27
66	4-Methyl-2-pentanone	0.223	0.288	-29.1	82	0.00	12.32
67	trans-1,3-Dichloropropene	0.404	0.482	-19.3	83	0.00	12.94
68	Toluene	1.083	1.132	-4.5	78	0.00	13.51
69	1,1,2-Trichloroethane	0.372	0.382	-2.7	76	0.00	13.16
70	1,3-Dichloropropane	0.487	0.555	-14.0	83	0.00	13.55
71	2-Hexanone	0.333	0.377	-13.2	82	0.00	13.88
72	Ethyl Methacrylate	0.464	0.609	-31.2#	83	0.00	13.92
73	Dibromochloromethane	0.703	0.812	-15.5	82	0.00	14.06
74	Tetrachloroethene	0.633	0.653	-3.2	77	0.00	15.02
75	1,2-Dibromoethane	0.567	0.603	-6.3	78	0.00	14.38
76	Octane	0.533	0.749	-40.5#	93	0.00	14.85
77	1,1,1,2-Tetrachloroethane	0.501	0.561	-12.0	82	0.00	15.94
78 I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00	15.90
79	Chlorobenzene	2.030	1.763	13.2	77	0.00	15.96
80	Ethylbenzene	3.125	2.935	6.1	82	0.00	16.50
81	m,p-Xylene	2.379	2.350	1.2	85	0.00	16.78
82	Styrene	1.533	1.682	-9.7	80	0.00	17.29
83	Nonane	1.186	1.583	-33.5#	99	0.00	17.83
84	o-Xylene	2.546	2.477	2.7	87	0.00	17.45
85	Bromoform	1.470	1.563	-6.3	84	0.00	16.85
86	1,1,2,2-Tetrachloroethane	1.692	1.753	-3.6	88	0.00	17.45
87	1,2,3-Trichloropropane	1.234	1.309	-6.1	91	0.00	17.65
88	Isopropylbenzene	3.281	3.543	-8.0	87	0.00	18.36
89	Bromobenzene	1.129	1.064	5.8	80	0.00	18.47
90	2-Chlorotoluene	0.763	0.838	-9.8	84	0.00	19.08
91	n-Propylbenzene	0.845	0.961	-13.7	85	0.00	19.15
92 S	4-Bromofluorobenzene	1.264	1.374	-8.7	90	0.00	18.14
93	4-Ethyltoluene	2.854	3.403	-19.2	89	0.00	19.38
94	1,3,5-Trimethylbenzene	2.523	3.065	-21.5	92	0.00	19.49
95	alpha-Methylstyrene	1.129	1.428	-26.5	88	0.00	19.73
96	tert-Butylbenzene	0.623	0.750	-20.4	89	0.00	20.07
97	1,2,4-Trimethylbenzene	2.485	3.116	-25.4	95	0.00	20.08
98	1,3-Dichlorobenzene	1.727	1.815	-5.1	87	0.00	20.27
99	Benzyl Chloride	1.590	2.005	-26.1	95	0.00	20.27
100	1,4-Dichlorobenzene	1.621	1.663	-2.6	85	0.00	20.37

Continuing Calibration Summary

Page 3 of 3

Job Number: JC91420

Sample: V6W525-CC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W12871.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.783	0.941	-20.2	90	0.00	20.46
102	p-Isopropyltoluene	0.835	1.028	-23.1	93	0.00	20.68
103	1,2-Dichlorobenzene	1.671	1.804	-8.0	92	0.00	20.83
104	n-Butylbenzene	0.675	0.862	-27.7	94	0.00	21.25
105	Hexachloroethane	1.096	1.301	-18.7	94	0.00	21.72
106	1,2,4-Trichlorobenzene	0.655	0.612	6.6	86	0.00	23.03
107	Naphthalene	1.553	1.257	19.1	79	0.00	23.15
108	Hexachlorobutadiene	1.178	1.160	1.5	95	0.00	23.60
109 I	Bromochloromethane (A)	1.000	1.000	0.0	74	0.00	8.16
110	TVHC as equiv Pentane	4.323	5.966	-38.0#	116	-0.01	5.59

(#) = Out of Range

6W12043.D m6w487.M

SPCC's out = 0 CCC's out = 0

Wed Jul 03 13:54:10 2019

Continuing Calibration Summary

Page 1 of 3

Job Number: JC91420

Sample: V6W538-CC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W13178.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\6W13178.D

Vial: 2

Acq On : 23 Jul 2019 10:45 am

Operator: thomash

Sample : cc487-10

Inst : GCMS6W

Misc : MS36116,V6W538,,,,,1

Multiplr: 1.00

MS Integration Params: Rteint.p

Method : C:\msdchem\1\methods\m6w487.M (RTE Integrator)

Title : T0-15 Full Scan Mode

Last Update : Fri May 17 14:09:49 2019

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	81	0.00	8.16
2	1,1,1-Trifluoroethane			-----NA-----			
3	Freon 152A	0.595	0.646	-8.6	86	0.00	3.73
4	Chlorodifluoromethane	0.225	0.321	-42.7#	109	0.00	3.77
5	Propene	0.619	0.733	-18.4	94	0.00	3.79
6	Chlorotrifluoroethene	1.557	1.670	-7.3	84	0.00	3.80
7	Dichlorodifluoromethane	2.495	3.187	-27.7	102	0.00	3.85
8	1-Chloro-1,1-difluoroetha	1.737	2.495	-43.6#	116	0.00	3.96
9	Chloromethane	0.720	0.814	-13.1	88	0.00	3.98
10	Dichlorotetrafluoroethane	2.569	2.858	-11.2	87	0.00	4.06
11	Vinyl Chloride	0.873	0.953	-9.2	84	0.00	4.16
12	1,3-Butadiene	0.585	0.674	-15.2	86	0.00	4.27
13	n-Butane	0.147	0.174	-18.4	83	0.00	4.31
14	Bromomethane	0.937	0.929	0.9	79	0.00	4.49
15	Acrolein	0.382	0.350	8.4	73	0.00	5.02
16	Chloroethane	0.426	0.460	-8.0	80	0.00	4.63
17	Dichlorofluoromethane	2.060	2.318	-12.5	92	0.00	4.70
18	Acetonitrile	0.807	0.679	15.9	83	0.00	4.91
19	Freon 123	2.260	2.133	5.6	77	0.00	5.05
20	Freon 123A	1.364	1.355	0.7	79	0.00	5.10
21	Bromoethene	0.966	0.918	5.0	75	-0.01	4.92
22	Trichlorofluoromethane	2.376	2.858	-20.3	99	0.00	5.28
23	Acetone	0.462	0.415	10.2	82	0.00	5.14
24	Pentane	0.207	0.217	-4.8	77	0.00	5.60
25	1,1-Dichloro-1-fluoroetha			-----NA-----			
26	Iodomethane	2.888	2.546	11.8	71	0.00	5.80
27	Isopropyl Alcohol	1.699	1.655	2.6	93	0.00	5.34
28	1,1-Dichloroethene	1.318	1.502	-14.0	90	0.00	5.86
29	Freon 113	2.051	1.974	3.8	78	-0.01	6.22
30	Methylene Chloride	0.909	0.805	11.4	75	0.00	5.98
31	Carbon Disulfide	2.700	2.544	5.8	76	0.00	6.26
32	Ethanol	0.359	0.343	4.5	90	0.00	4.72
33	Acrylonitrile	0.712	0.709	0.4	80	0.00	5.55
34	3-Chloropropene	0.419	0.451	-7.6	76	0.00	6.09
35	trans-1,2-Dichloroethene	1.265	1.368	-8.1	85	0.00	6.89
36	tert-Butyl Alcohol	1.883	2.178	-15.7	92	0.00	5.89
37	Methyl tert-Butyl Ether	2.511	2.901	-15.5	87	0.00	7.16
38	Vinyl Acetate	2.153	2.806	-30.3#	94	0.00	7.25
39	1,1-Dichloroethane	1.683	1.716	-2.0	84	-0.01	7.09
40	2-Butanone	0.474	0.490	-3.4	81	0.00	7.51
41	Hexane	1.369	1.467	-7.2	81	0.00	8.19
42	cis-1,2-Dichloroethene	1.245	1.368	-9.9	87	0.00	7.98

Continuing Calibration Summary

Page 2 of 3

Job Number: JC91420

Sample: V6W538-CC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W13178.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

43	Di-isopropyl Ether	0.822	0.873	-6.2	77	0.00	8.19
44	Ethyl Acetate	0.285	0.325	-14.0	83	0.00	8.23
45	Methyl Acrylate	1.771	1.984	-12.0	91	0.00	8.21
46	Chloroform	2.133	2.346	-10.0	91	-0.01	8.30
47	2,4-Dimethylpentane	1.571	1.723	-9.7	81	-0.01	9.17
48	Tetrahydrofuran	0.420	0.443	-5.5	79	0.00	8.75
49	1,1,1-Trichloroethane	2.128	2.555	-20.1	98	0.00	9.39
50	1,2-Dichloroethane	1.191	1.615	-35.6#	109	0.00	9.12
51	Benzene	3.189	3.008	5.7	77	0.00	9.93
52	Carbon Tetrachloride	2.285	2.811	-23.0	99	0.00	10.10
53	Cyclohexane	1.349	1.480	-9.7	81	0.00	10.23
54	2,3-Dimethylpentane	0.652	0.664	-1.8	77	0.00	10.53
55 I	1,4-Difluorobenzene	1.000	1.000	0.0	83	0.00	10.36
56	2,2,4-Trimethylpentane	1.267	1.346	-6.2	83	-0.01	11.21
57	Heptane	0.273	0.296	-8.4	80	0.00	11.55
58	Trichloroethene	0.391	0.401	-2.6	82	0.00	11.19
59	1,2-Dichloropropane	0.316	0.303	4.1	79	-0.01	10.89
60	Dibromomethane	0.459	0.414	9.8	78	-0.01	10.87
61	Ethyl Acrylate	0.531	0.679	-27.9	91	0.00	10.93
62	Methyl Methacrylate	0.277	0.331	-19.5	84	0.00	11.46
63	1,4-Dioxane	0.244	0.203	16.8	80	0.00	11.20
64	Bromodichloromethane	0.628	0.713	-13.5	92	0.00	11.14
65	cis-1,3-Dichloropropene	0.461	0.517	-12.1	84	0.00	12.27
66	4-Methyl-2-pentanone	0.223	0.271	-21.5	84	0.00	12.32
67	trans-1,3-Dichloropropene	0.404	0.518	-28.2	97	0.00	12.94
68	Toluene	1.083	1.054	2.7	79	0.00	13.51
69	1,1,2-Trichloroethane	0.372	0.361	3.0	78	0.00	13.16
70	1,3-Dichloropropane	0.487	0.526	-8.0	86	0.00	13.55
71	2-Hexanone	0.333	0.377	-13.2	89	0.00	13.88
72	Ethyl Methacrylate	0.464	0.590	-27.2	88	0.00	13.92
73	Dibromochloromethane	0.703	0.794	-12.9	87	0.00	14.06
74	Tetrachloroethene	0.633	0.619	2.2	79	0.00	15.02
75	1,2-Dibromoethane	0.567	0.606	-6.9	85	0.00	14.38
76	Octane	0.533	0.685	-28.5	93	0.00	14.85
77	1,1,1,2-Tetrachloroethane	0.501	0.535	-6.8	86	-0.01	15.93
78 I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00	15.90
79	Chlorobenzene	2.030	1.658	18.3	80	-0.01	15.95
80	Ethylbenzene	3.125	2.720	13.0	85	0.00	16.50
81	m,p-Xylene	2.379	2.215	6.9	89	-0.01	16.77
82	Styrene	1.533	1.619	-5.6	85	0.00	17.29
83	Nonane	1.186	1.419	-19.6	99	0.00	17.83
84	o-Xylene	2.546	2.296	9.8	89	0.00	17.45
85	Bromoform	1.470	1.453	1.2	87	-0.01	16.85
86	1,1,2,2-Tetrachloroethane	1.692	1.550	8.4	86	0.00	17.45
87	1,2,3-Trichloropropane	1.234	1.206	2.3	93	-0.01	17.64
88	Isopropylbenzene	3.281	3.223	1.8	88	0.00	18.36
89	Bromobenzene	1.129	1.036	8.2	87	-0.01	18.46
90	2-Chlorotoluene	0.763	0.753	1.3	83	0.00	19.08
91	n-Propylbenzene	0.845	0.882	-4.4	86	0.00	19.15
92 S	4-Bromofluorobenzene	1.264	1.357	-7.4	99	0.00	18.14
93	4-Ethyltoluene	2.854	3.127	-9.6	91	0.00	19.37
94	1,3,5-Trimethylbenzene	2.523	2.776	-10.0	93	0.00	19.49
95	alpha-Methylstyrene	1.129	1.307	-15.8	89	0.00	19.73
96	tert-Butylbenzene	0.623	0.663	-6.4	87	0.00	20.06
97	1,2,4-Trimethylbenzene	2.485	2.842	-14.4	96	0.00	20.08
98	1,3-Dichlorobenzene	1.727	1.769	-2.4	94	0.00	20.27
99	Benzyl Chloride	1.590	1.919	-20.7	101	0.00	20.26
100	1,4-Dichlorobenzene	1.621	1.666	-2.8	95	0.00	20.37

Continuing Calibration Summary

Page 3 of 3

Job Number: JC91420

Sample: V6W538-CC487

Account: CARICH C. A. Rich Consultants

Lab FileID: 6W13178.D

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

101	sec-Butylbenzene	0.783	0.843	-7.7	90	0.00	20.45
102	p-Isopropyltoluene	0.835	0.916	-9.7	92	0.00	20.68
103	1,2-Dichlorobenzene	1.671	1.652	1.1	94	0.00	20.83
104	n-Butylbenzene	0.675	0.785	-16.3	94	0.00	21.25
105	Hexachloroethane	1.096	1.158	-5.7	93	0.00	21.72
106	1,2,4-Trichlorobenzene	0.655	0.561	14.4	87	0.00	23.03
107	Naphthalene	1.553	1.081	30.4#	76	0.00	23.15
108	Hexachlorobutadiene	1.178	1.043	11.5	94	0.00	23.60

109 I	Bromochloromethane (A)	1.000	1.000	0.0	81	0.00	8.16
110	TVHC as equiv Pentane	4.323	4.017	7.1	86	0.00	5.60

(#) = Out of Range
6W12043.D m6w487.M

SPCC's out = 0 CCC's out = 0
Wed Jul 24 13:35:34 2019

6.9.4
6

Run Sequence Report

Page 1 of 1

Job Number: JC91420**Account:** CARICH C. A. Rich Consultants**Project:** Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Run ID: V6W487	Method: TO-15	Instrument ID: GCMS6W

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V6W487-BFB	6W12037.D	05/16/19 15:34	n/a	BFB Tune
V6W487-IC487	6W12038.D	05/16/19 16:21	n/a	Initial cal 0.04
V6W487-IC487	6W12039.D	05/16/19 17:08	n/a	Initial cal 0.1
V6W487-IC487	6W12040.D	05/16/19 17:56	n/a	Initial cal 0.2
V6W487-IC487	6W12041.D	05/16/19 18:45	n/a	Initial cal 0.5
V6W487-IC487	6W12042.D	05/16/19 19:31	n/a	Initial cal 5
V6W487-ICC487	6W12043.D	05/16/19 20:18	n/a	Initial cal 10
V6W487-IC487	6W12044.D	05/16/19 21:06	n/a	Initial cal 20
V6W487-IC487	6W12046.D	05/16/19 22:46	n/a	Initial cal 40
V6W487-ICV487	6W12052.D	05/17/19 11:28	n/a	Initial cal verification 10

6.10.1

6

Run Sequence Report

Page 1 of 1

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Run ID: V6W525	Method: TO-15	Instrument ID: GCMS6W

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V6W525-BFB	6W12870.D	07/03/19 05:34	n/a	BFB Tune
V6W525-CC487	6W12871.D	07/03/19 06:21	n/a	Continuing cal 10
V6W525-BS	6W12872.D	07/03/19 07:16	n/a	Blank Spike
V6W525-BSD	6W12873.D	07/03/19 08:04	n/a	Blank Spike Duplicate
V6W525-MB	6W12875.D	07/03/19 09:50	n/a	Method Blank
JC90949-1	6W12876.D	07/03/19 10:51	n/a	(used for QC only; not part of job JC91420)
JC90949-1DUP	6W12877.D	07/03/19 11:52	n/a	Duplicate
JC90949-1	6W12878.D	07/03/19 12:39	n/a	(used for QC only; not part of job JC91420)
V6W525-SCC	6W12879.D	07/03/19 13:32	n/a	Summa Cleaning Certification
ZZZZZZ	6W12880.D	07/03/19 14:40	n/a	(unrelated sample)
ZZZZZZ	6W12881.D	07/03/19 15:29	n/a	(unrelated sample)
ZZZZZZ	6W12882.D	07/03/19 16:19	n/a	(unrelated sample)
ZZZZZZ	6W12883.D	07/03/19 17:41	n/a	(unrelated sample)
ZZZZZZ	6W12884.D	07/03/19 18:29	n/a	(unrelated sample)
ZZZZZZ	6W12885.D	07/03/19 19:29	n/a	(unrelated sample)
ZZZZZZ	6W12886.D	07/03/19 20:18	n/a	(unrelated sample)
ZZZZZZ	6W12887.D	07/03/19 21:23	n/a	(unrelated sample)
ZZZZZZ	6W12888.D	07/03/19 22:11	n/a	(unrelated sample)
ZZZZZZ	6W12889.D	07/03/19 23:03	n/a	(unrelated sample)
ZZZZZZ	6W12890.D	07/03/19 23:51	n/a	(unrelated sample)
ZZZZZZ	6W12891.D	07/04/19 00:41	n/a	(unrelated sample)
ZZZZZZ	6W12892.D	07/04/19 01:29	n/a	(unrelated sample)
ZZZZZZ	6W12893.D	07/04/19 02:32	n/a	(unrelated sample)
ZZZZZZ	6W12894.D	07/04/19 03:32	n/a	(unrelated sample)

6.10.2

6

Run Sequence Report

Page 1 of 1

Job Number: JC91420

Account: CARICH C. A. Rich Consultants

Project: Brent Mako Building 3 Investigation, Enter Lane, Islandia, NY

Run ID: V6W538		Method: TO-15		Instrument ID: GCMS6W	
Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID	
V6W538-BFB	6W13176.D	07/23/19 09:07	n/a	BFB Tune	
V6W538-CC487	6W13178.D	07/23/19 10:45	n/a	Continuing cal 10	
V6W538-BS	6W13179.D	07/23/19 11:34	n/a	Blank Spike	
V6W538-BSD	6W13180.D	07/23/19 12:22	n/a	Blank Spike Duplicate	
V6W538-MB	6W13182.D	07/23/19 14:08	n/a	Method Blank	
JC91420-1	6W13183.D	07/23/19 17:00	n/a	EXSVE-EX	
JC91420-2	6W13184.D	07/23/19 17:59	n/a	EXSVE-MID	
JC91420-3	6W13185.D	07/23/19 18:55	n/a	EXSVE-RAW	
JC91420-4	6W13186.D	07/23/19 19:53	n/a	INTSVE-EX	
JC91420-5	6W13187.D	07/23/19 20:53	n/a	INTSVE-MID	
JC91420-6	6W13188.D	07/23/19 21:54	n/a	INTSVE-RAW	
JC91516-1	6W13189.D	07/23/19 22:43	n/a	(used for QC only; not part of job JC91420)	
JC91516-1DUP	6W13190.D	07/23/19 23:32	n/a	Duplicate	
ZZZZZZ	6W13191.D	07/24/19 00:21	n/a	(unrelated sample)	
ZZZZZZ	6W13192.D	07/24/19 01:09	n/a	(unrelated sample)	
ZZZZZZ	6W13193.D	07/24/19 02:12	n/a	(unrelated sample)	
ZZZZZZ	6W13194.D	07/24/19 03:03	n/a	(unrelated sample)	
V6W538-SCC	6W13195.D	07/24/19 03:56	n/a	Summa Cleaning Certification	
V6W538-SCC	6W13196.D	07/24/19 04:49	n/a	Summa Cleaning Certification	
V6W538-SCC	6W13197.D	07/24/19 05:42	n/a	Summa Cleaning Certification	
V6W538-SCC	6W13198.D	07/24/19 06:35	n/a	Summa Cleaning Certification	
V6W538-SCC	6W13199.D	07/24/19 07:28	n/a	Summa Cleaning Certification	

6.10.3

6



MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13183.D
 Acq On : 23 Jul 2019 5:00 pm
 Operator : thomash
 Sample : jc91420-1
 Misc : MS36156,V6W538,400,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 24 13:54:40 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.165	130	252394	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	926165	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.891	82	450305	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.165	130	252394	10.00	ppb(v	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.136 95 558942 9.82 ppb(v -0.01
 Spiked Amount 10.000 Range 65 - 128 Recovery = 98.20%

Target Compounds					Qvalue	
3) Freon 152A	3.717	65	335751	22.37	ppb(v#	81
4) Chlorodifluoromethane	3.760	67	2301	0.41	ppb(v	88
7) Dichlorodifluoromethane	3.839	85	32511	0.52	ppb(v	97
8) 1-Chloro-1,1-difluoro...	3.956	65	17411	0.40	ppb(v#	71
9) Chloromethane	3.974	50	40316	2.22	ppb(v	94
11) Vinyl Chloride	4.151	62	3541	0.16	ppb(v#	99
13) n-Butane	4.298	58	1772	0.48	ppb(v#	1
15) Acrolein	5.038	56	3293	0.34	ppb(v#	93
16) Chloroethane	4.629	64	2748	0.26	ppb(v#	79
19) Freon 123	5.069	83	6380	0.11	ppb(v#	90
22) Trichlorofluoromethane	5.283	101	175304	2.92	ppb(v	98
23) Acetone	5.155	58	37968	3.26	ppb(v#	46
24) Pentane	5.595	57	2822	0.54	ppb(v	95
27) Isopropyl Alcohol	5.375	45	11733	0.27	ppb(v#	93
28) 1,1-Dichloroethene	5.864	61	23545	0.71	ppb(v#	83
29) Freon 113	6.231	101	11384	0.22	ppb(v	93
31) Carbon Disulfide	6.262	76	19752	0.29	ppb(v	98
32) Ethanol	4.733	45	29167	3.22	ppb(v#	96
36) tert-Butyl Alcohol	5.932	59	10503	0.22	ppb(v#	90
40) 2-Butanone	7.541	72	9220	0.77	ppb(v	83
42) cis-1,2-Dichloroethene	7.987	61	18453	0.59	ppb(v	87
46) Chloroform	8.305	83	16394	0.30	ppb(v	91
49) 1,1,1-Trichloroethane	9.394	97	288270	5.37	ppb(v	98
58) Trichloroethene	11.187	95	3235	0.09	ppb(v	86
63) 1,4-Dioxane	11.230	88	18087	0.80	ppb(v#	62
66) 4-Methyl-2-pentanone	12.337	58	3597	0.17	ppb(v#	92
68) Toluene	13.505	91	59285	0.59	ppb(v	98
74) Tetrachloroethene	15.010	166	2461	0.04	ppb(v	86

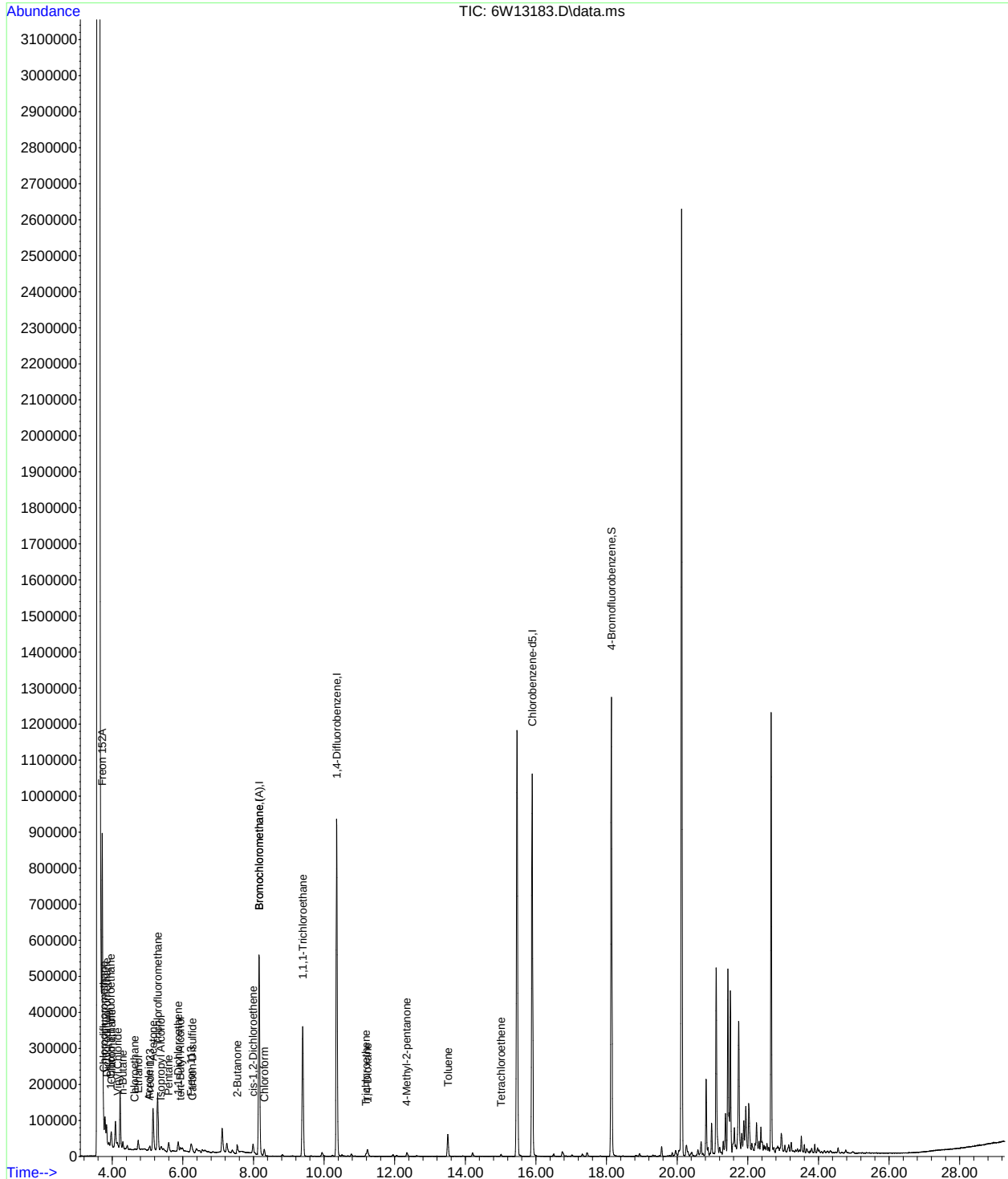
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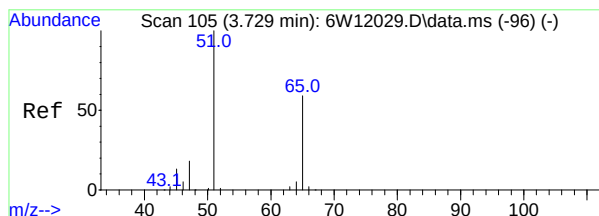
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Data File : 6WJ3183.D
Acq On    : 23 Jul 2019    5:00 pm
Operator  : thomash
Sample    : jc91420-1
Misc      : MS36156,V6W538,400,,,,,1
ALS Vial  : 4    Sample Multiplier: 1

```

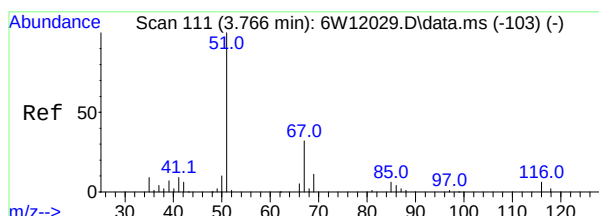
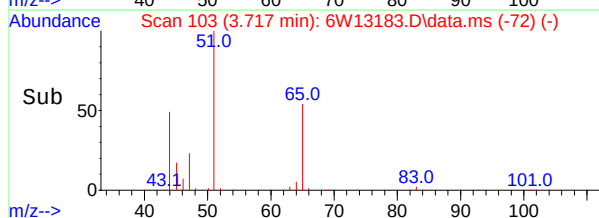
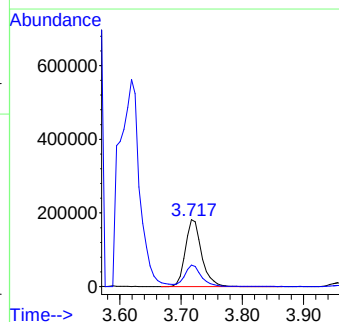
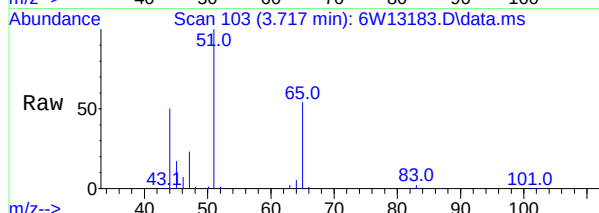
Quant Time: Jul 24 13:54:40 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration





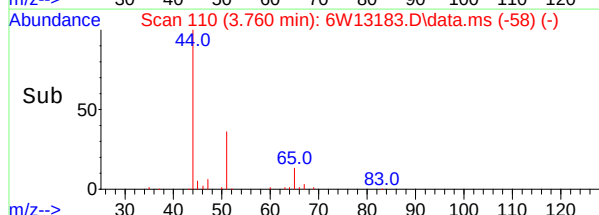
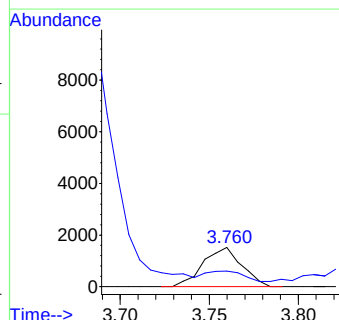
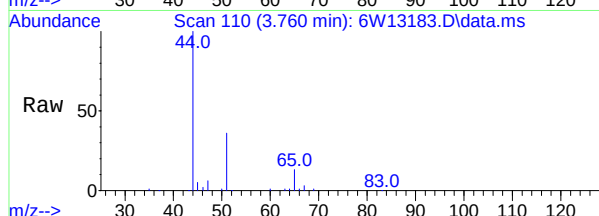
#3
Freon 152A
Concen: 22.37 ppb(v)
RT: 3.717 min Scan# 103
Delta R.T. -0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

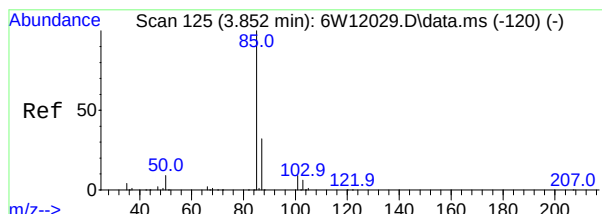
Tgt Ion: 65 Resp: 335751
Ion Ratio Lower Upper
65 100
45 32.3 16.0 29.8#



#4
Chlorodifluoromethane
Concen: 0.41 ppb(v)
RT: 3.760 min Scan# 110
Delta R.T. -0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

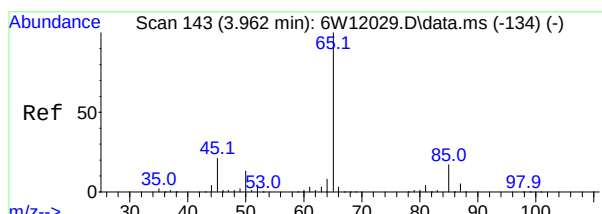
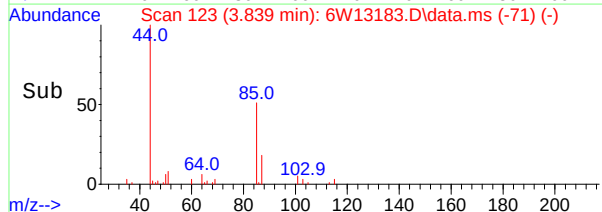
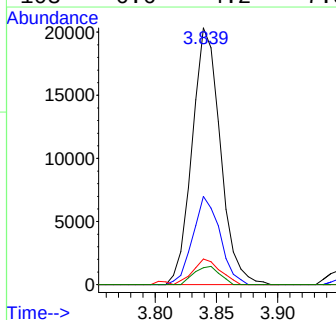
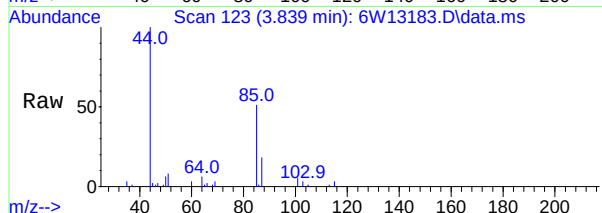
Tgt Ion: 67 Resp: 2301
Ion Ratio Lower Upper
67 100
69 39.8 23.2 43.0





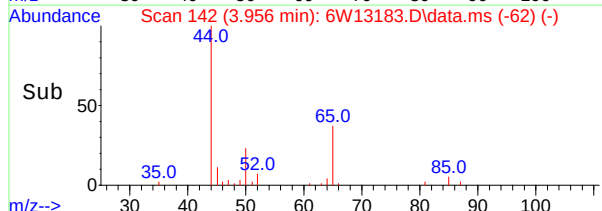
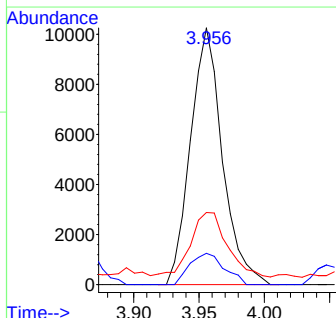
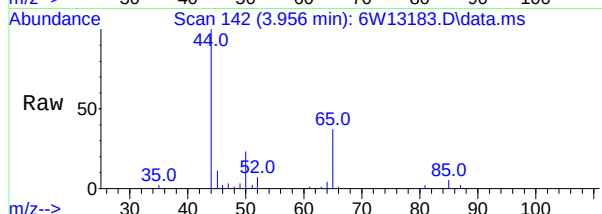
#7
Dichlorodifluoromethane
Concen: 0.52 ppb(v)
RT: 3.839 min Scan# 123
Delta R.T. -0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

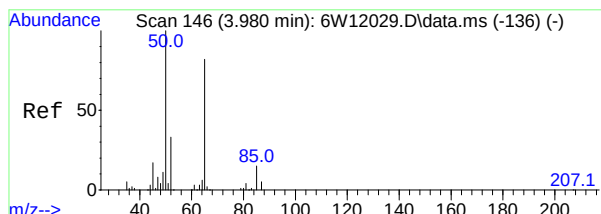
Tgt Ion: 85 Resp: 32511
Ion Ratio Lower Upper
85 100
87 34.4 22.7 42.1
101 10.0 6.3 11.7
103 6.6 4.2 7.8



#8
1-Chloro-1,1-difluoroethane
Concen: 0.40 ppb(v)
RT: 3.956 min Scan# 142
Delta R.T. -0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

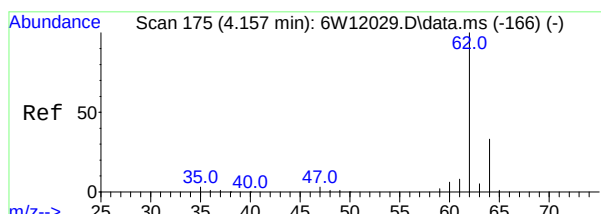
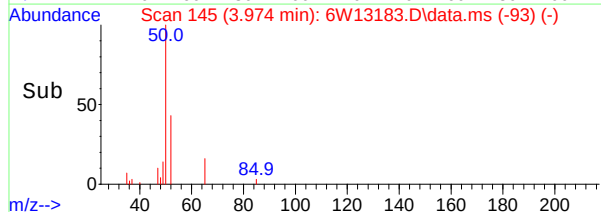
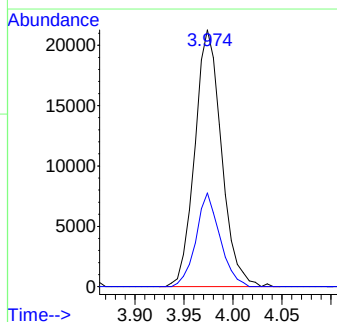
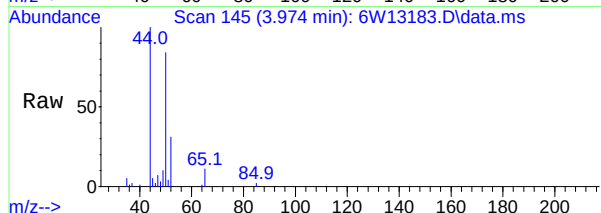
Tgt Ion: 65 Resp: 17411
Ion Ratio Lower Upper
65 100
85 13.3 14.1 21.1#
45 0.0 17.2 25.8#





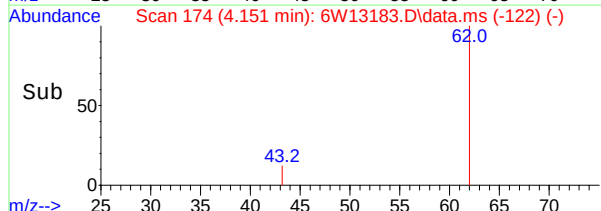
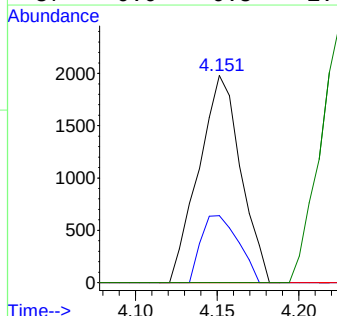
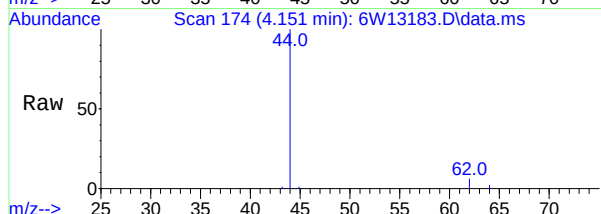
#9
Chloromethane
Concen: 2.22 ppb(v)
RT: 3.974 min Scan# 145
Delta R.T. -0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

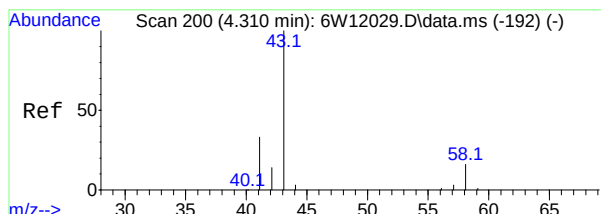
Tgt Ion: 50 Resp: 40316
Ion Ratio Lower Upper
50 100
52 36.5 23.0 42.8



#11
Vinyl Chloride
Concen: 0.16 ppb(v)
RT: 4.151 min Scan# 174
Delta R.T. -0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

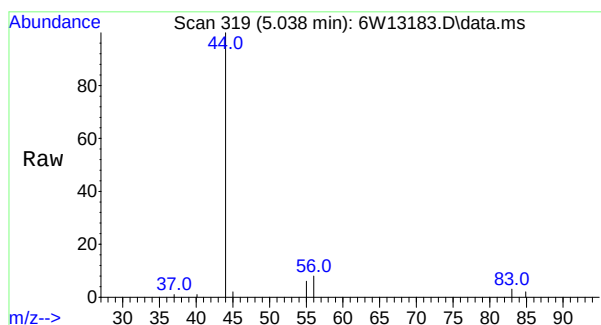
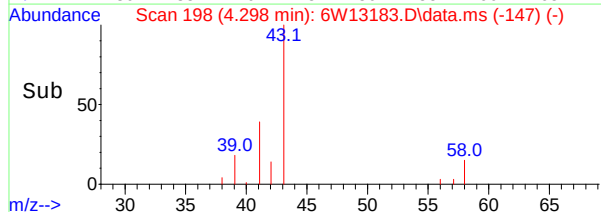
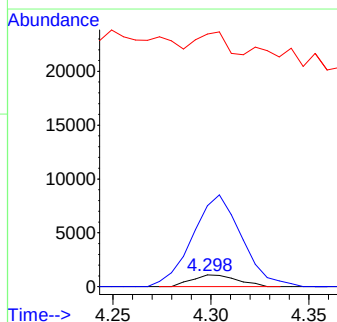
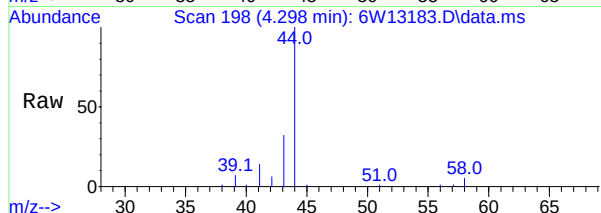
Tgt Ion: 62 Resp: 3541
Ion Ratio Lower Upper
62 100
64 32.3 22.8 42.4
35 0.0 2.3 4.3#
37 0.0 0.8 1.4#





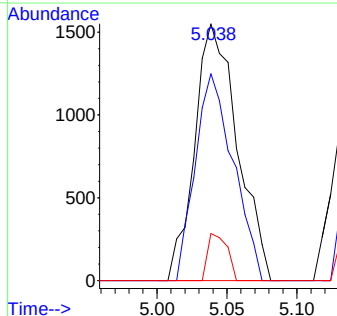
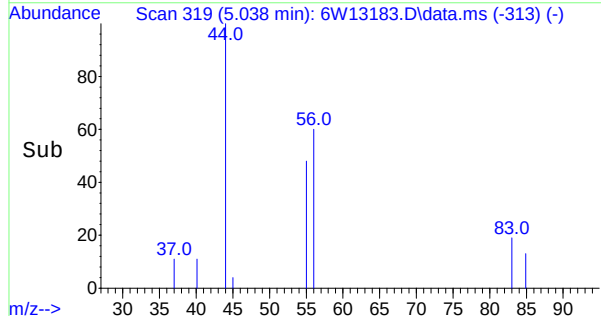
#13
n-Butane
Concen: 0.48 ppb(v)
RT: 4.298 min Scan# 198
Delta R.T. -0.018 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

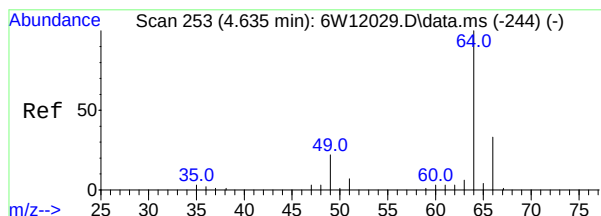
Tgt Ion: 58 Resp: 1772
Ion Ratio Lower Upper
58 100
43 688.8 451.4 838.4
44 2150.7 17.1 31.7#



#15
Acrolein
Concen: 0.34 ppb(v)
RT: 5.038 min Scan# 319
Delta R.T. 0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

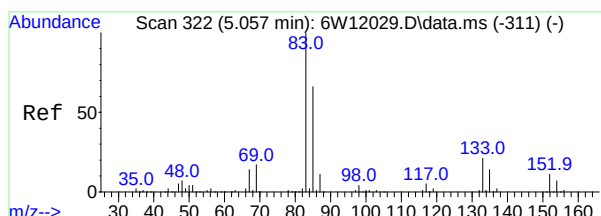
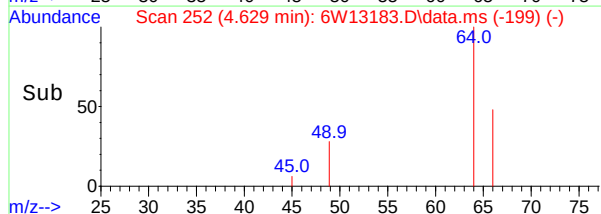
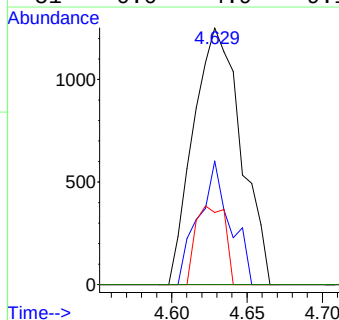
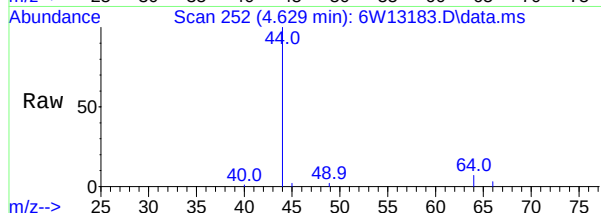
Tgt Ion: 56 Resp: 3293
Ion Ratio Lower Upper
56 100
55 71.7 56.5 84.7
37 8.3 16.2 24.4#





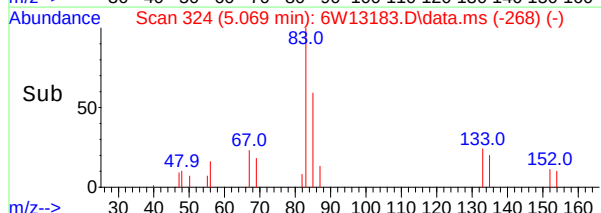
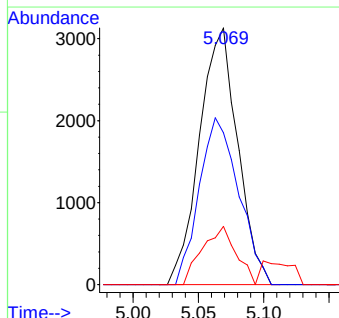
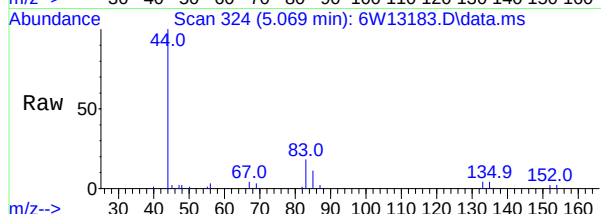
#16
Chloroethane
Concen: 0.26 ppb(v)
RT: 4.629 min Scan# 252
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

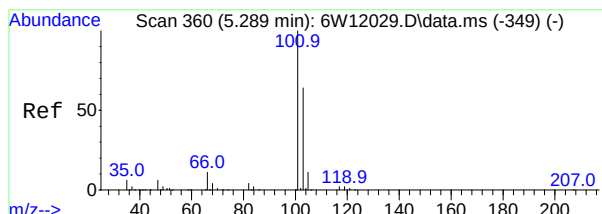
Tgt Ion: 64 Resp: 2748
Ion Ratio Lower Upper
64 100
66 48.1 22.9 42.5#
49 28.1 15.4 28.6
51 0.0 4.9 9.1#



#19
Freon 123
Concen: 0.11 ppb(v)
RT: 5.069 min Scan# 324
Delta R.T. 0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

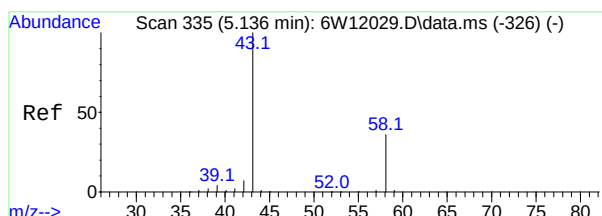
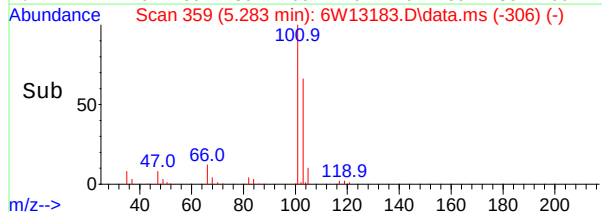
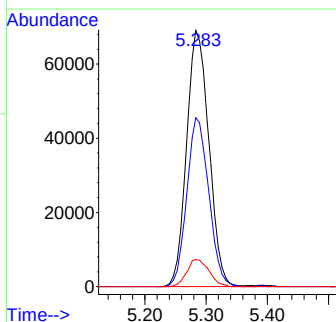
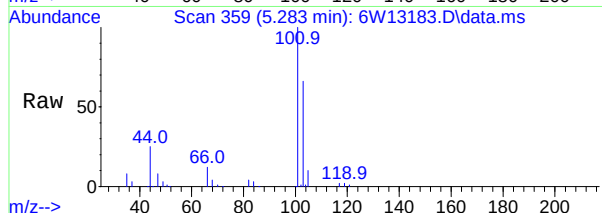
Tgt Ion: 83 Resp: 6380
Ion Ratio Lower Upper
83 100
85 59.1 45.9 85.3
67 22.7 9.9 18.5#





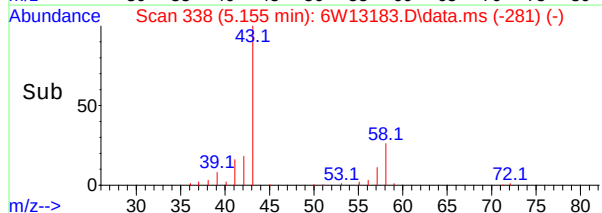
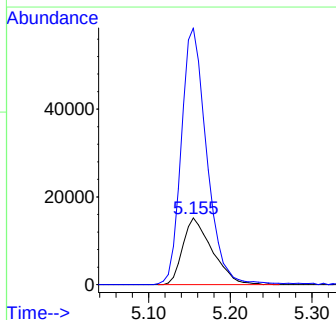
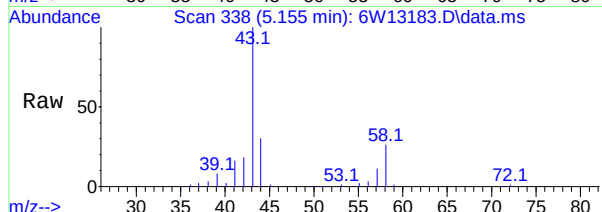
#22
 Trichlorofluoromethane
 Concen: 2.92 ppb(v)
 RT: 5.283 min Scan# 359
 Delta R.T. -0.006 min
 Lab File: 6W13183.D
 Acq: 23 Jul 2019 5:00 pm

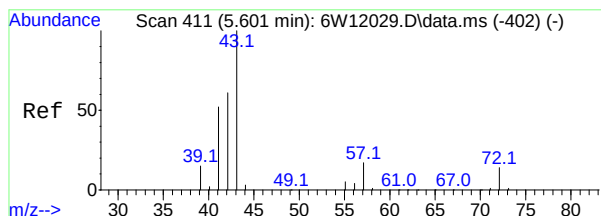
Tgt Ion: 101 Resp: 175304
 Ion Ratio Lower Upper
 101 100
 103 65.8 45.1 83.7
 105 10.5 7.5 13.9



#23
 Acetone
 Concen: 3.26 ppb(v)
 RT: 5.155 min Scan# 338
 Delta R.T. 0.018 min
 Lab File: 6W13183.D
 Acq: 23 Jul 2019 5:00 pm

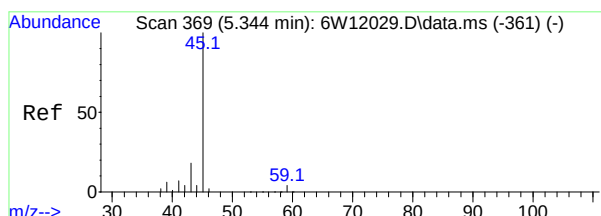
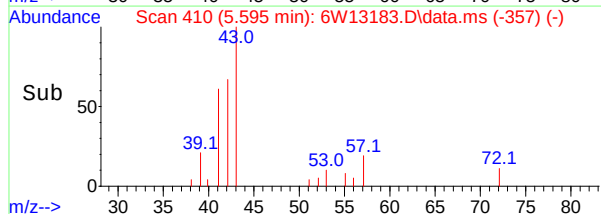
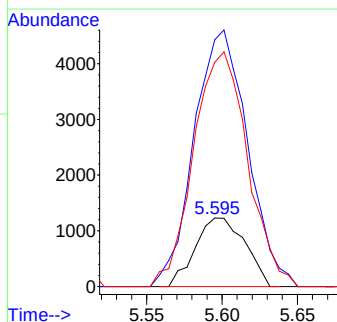
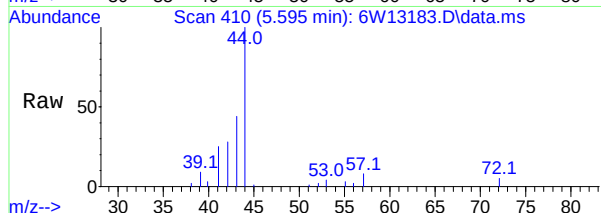
Tgt Ion: 58 Resp: 37968
 Ion Ratio Lower Upper
 58 100
 43 385.5 197.9 367.5#





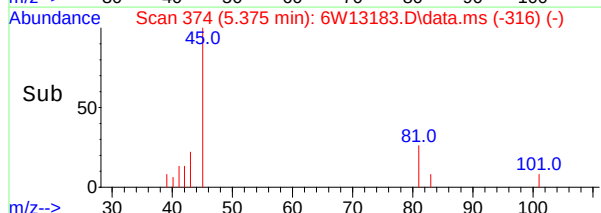
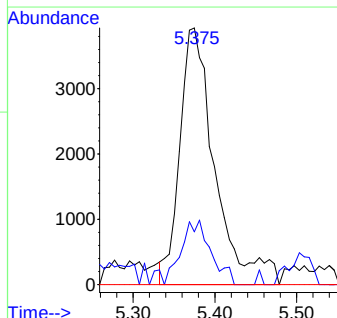
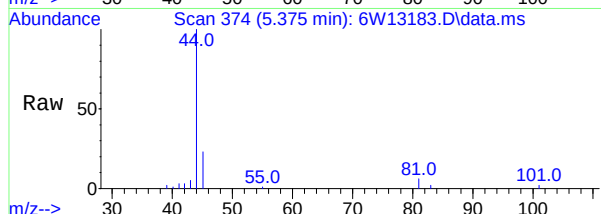
#24
Pentane
Concen: 0.54 ppb(v)
RT: 5.595 min Scan# 410
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

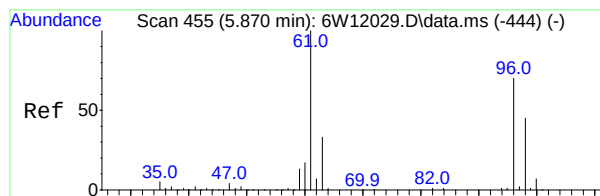
Tgt Ion: 57 Resp: 2822
Ion Ratio Lower Upper
57 100
42 359.0 250.3 464.9
41 326.3 214.8 399.0



#27
Isopropyl Alcohol
Concen: 0.27 ppb(v)
RT: 5.375 min Scan# 374
Delta R.T. 0.025 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

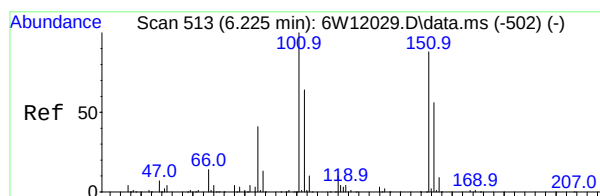
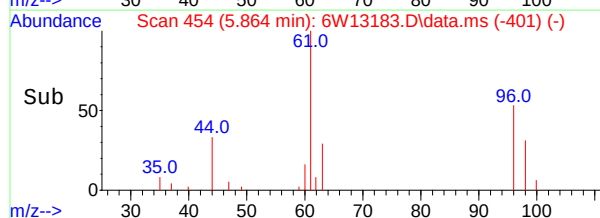
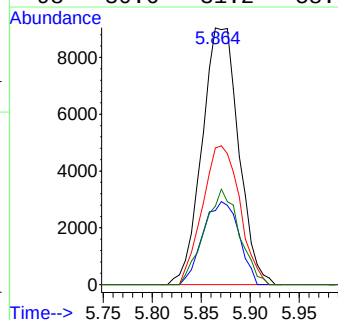
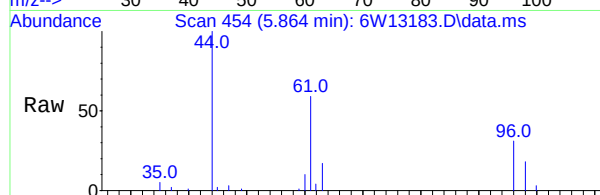
Tgt Ion: 45 Resp: 11733
Ion Ratio Lower Upper
45 100
43 20.5 12.6 23.4
59 0.0 3.1 5.8#





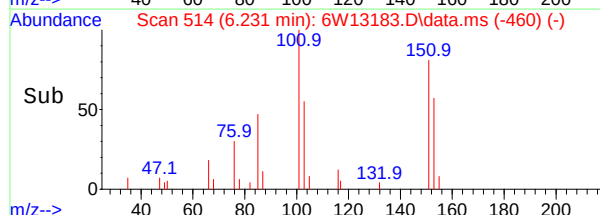
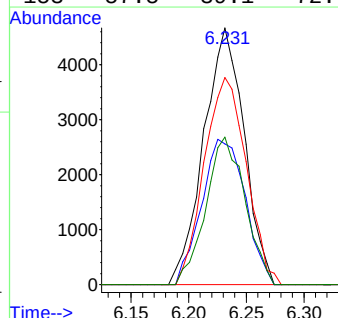
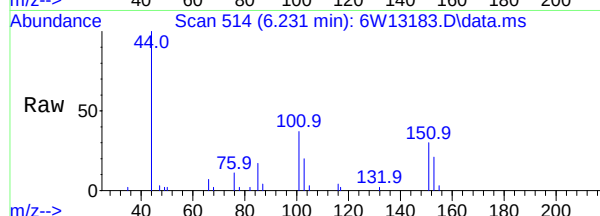
#28
1,1-Dichloroethene
Concen: 0.71 ppb(v)
RT: 5.864 min Scan# 454
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

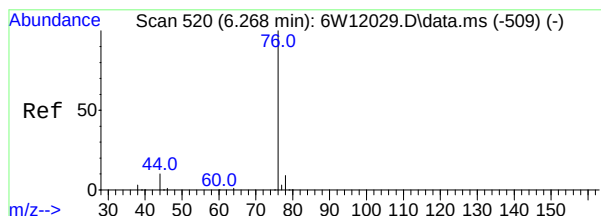
Tgt Ion: 61 Resp: 23545
Ion Ratio Lower Upper
61 100
63 28.8 22.7 42.3
96 53.2 48.6 90.3
98 30.6 31.2 58.0#



#29
Freon 113
Concen: 0.22 ppb(v)
RT: 6.231 min Scan# 514
Delta R.T. 0.000 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

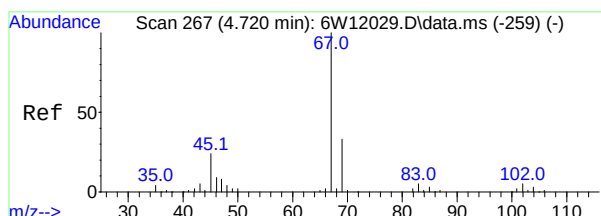
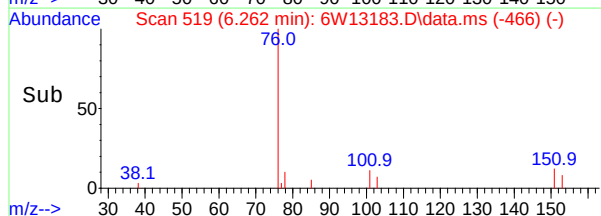
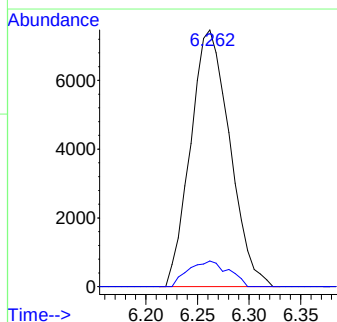
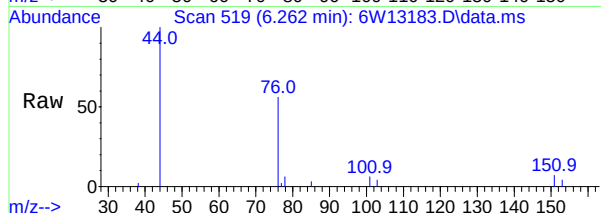
Tgt Ion: 101 Resp: 11384
Ion Ratio Lower Upper
101 100
103 54.8 44.9 83.3
151 80.7 61.4 114.0
153 57.5 39.1 72.7





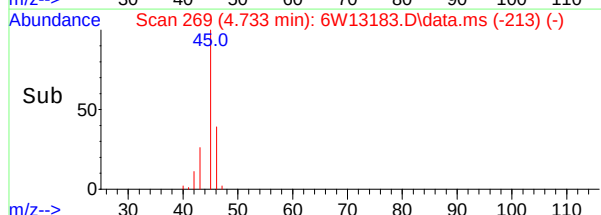
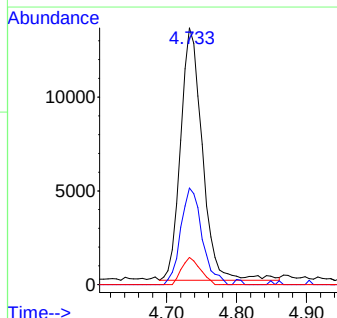
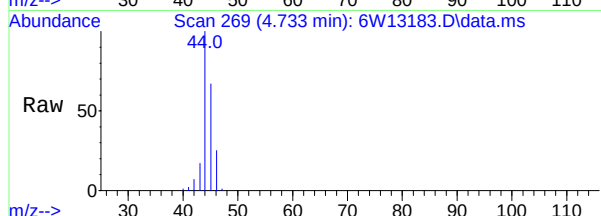
#31
Carbon Disulfide
Concen: 0.29 ppb(v)
RT: 6.262 min Scan# 519
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

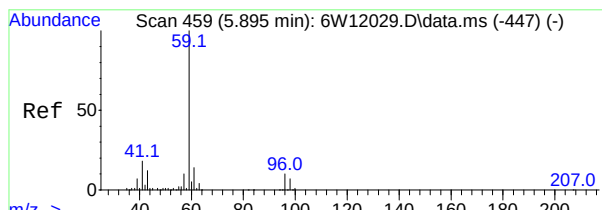
Tgt Ion: 76 Resp: 19752
Ion Ratio Lower Upper
76 100
78 10.0 6.4 12.0



#32
Ethanol
Concen: 3.22 ppb(v)
RT: 4.733 min Scan# 269
Delta R.T. 0.013 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

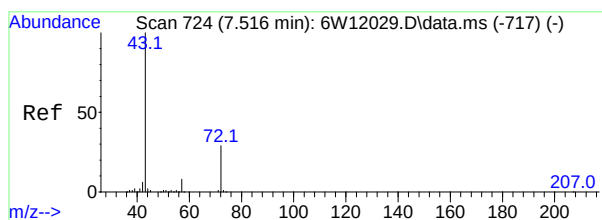
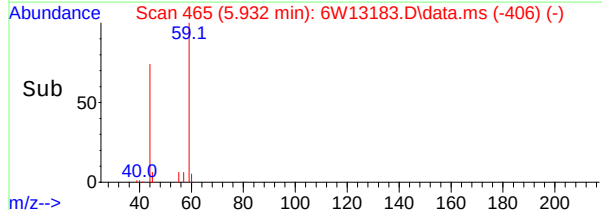
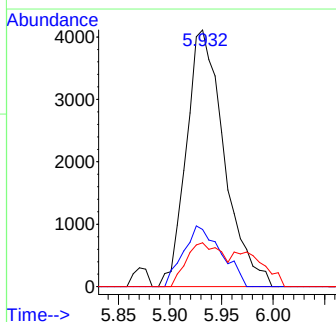
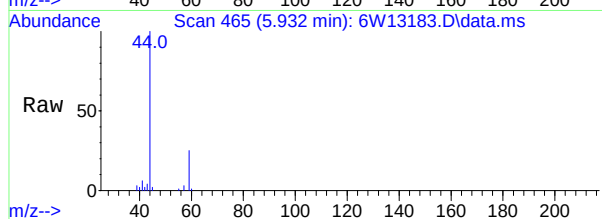
Tgt Ion: 45 Resp: 29167
Ion Ratio Lower Upper
45 100
46 37.7 27.7 51.5
42 10.7 5.5 10.1#





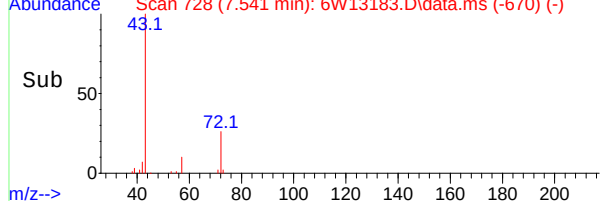
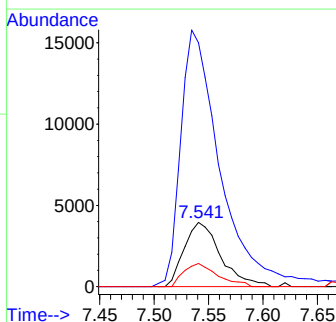
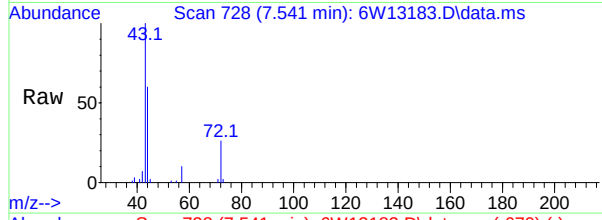
#36
tert-Butyl Alcohol
Concen: 0.22 ppb(v)
RT: 5.932 min Scan# 465
Delta R.T. 0.031 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

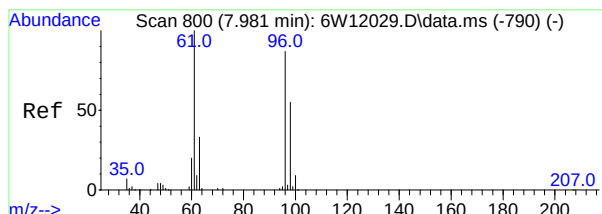
Tgt Ion: 59 Resp: 10503
Ion Ratio Lower Upper
59 100
41 22.2 12.8 23.8
43 17.1 8.6 16.0#



#40
2-Butanone
Concen: 0.77 ppb(v)
RT: 7.541 min Scan# 728
Delta R.T. 0.024 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

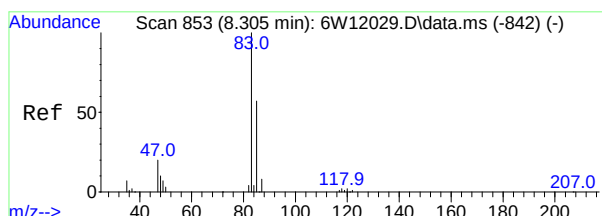
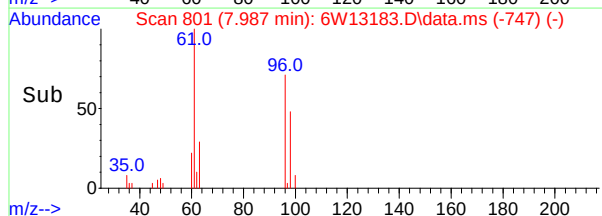
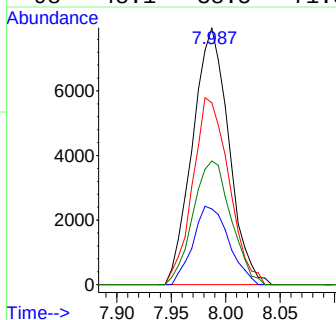
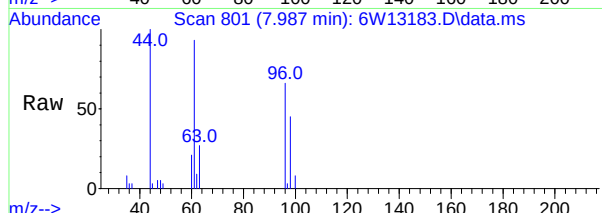
Tgt Ion: 72 Resp: 9220
Ion Ratio Lower Upper
72 100
43 379.2 240.3 446.3
57 36.0 20.1 37.3





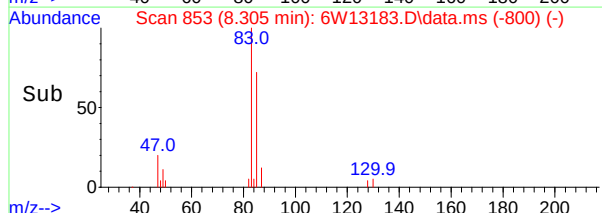
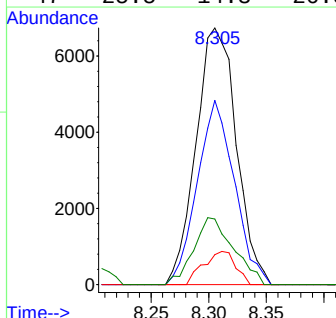
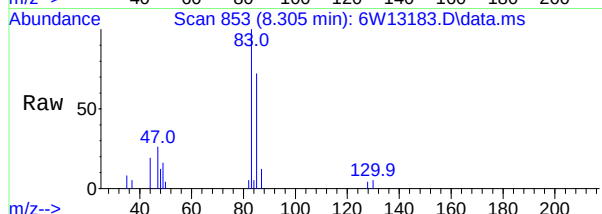
#42
cis-1,2-Dichloroethene
Concen: 0.59 ppb(v)
RT: 7.987 min Scan# 801
Delta R.T. 0.000 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

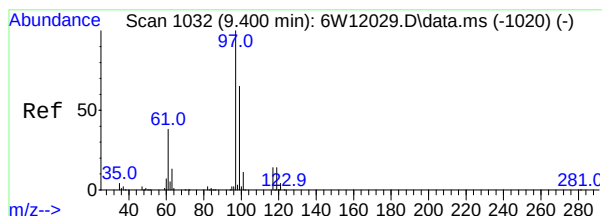
Tgt Ion: 61 Resp: 18453
Ion Ratio Lower Upper
61 100
63 29.5 23.3 43.3
96 70.8 60.6 112.6
98 48.1 38.5 71.5



#46
Chloroform
Concen: 0.30 ppb(v)
RT: 8.305 min Scan# 853
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

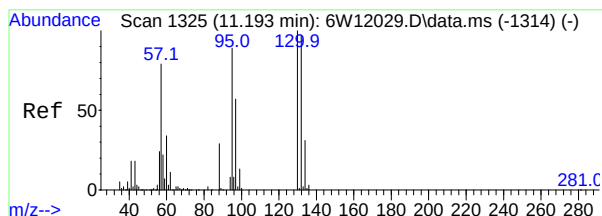
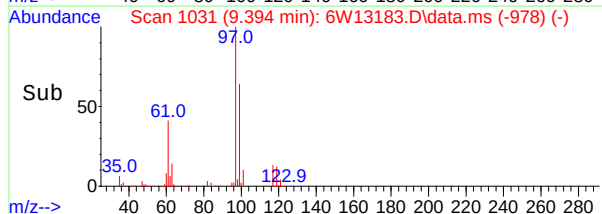
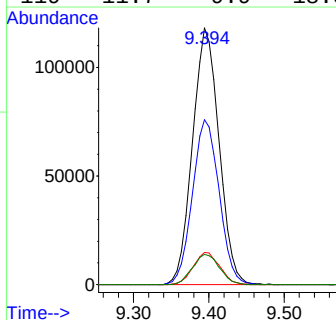
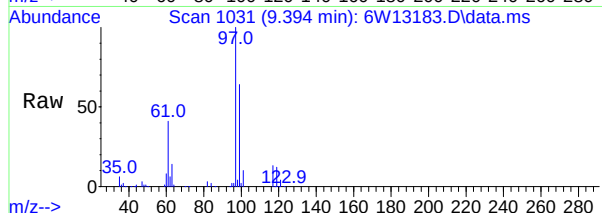
Tgt Ion: 83 Resp: 16394
Ion Ratio Lower Upper
83 100
85 71.7 45.2 84.0
87 11.7 7.3 13.5
47 25.5 14.3 26.5





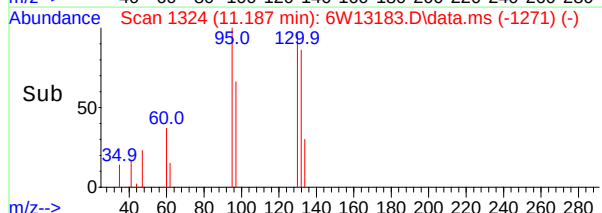
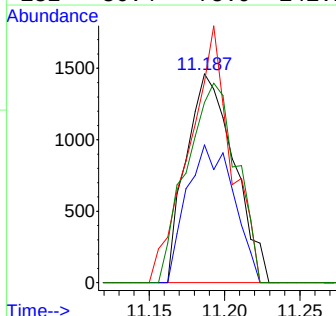
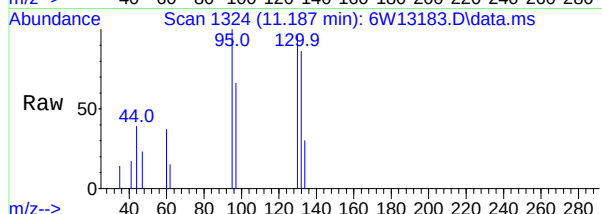
#49
1,1,1-Trichloroethane
Concen: 5.37 ppb(v)
RT: 9.394 min Scan# 1031
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

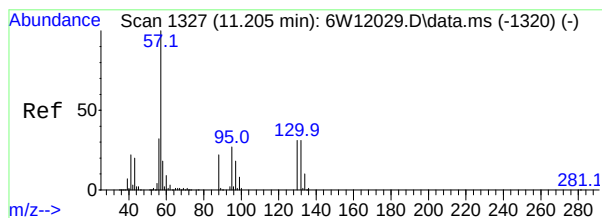
Tgt Ion: 97 Resp: 288270
Ion Ratio Lower Upper
97 100
99 64.3 45.4 84.4
117 12.5 10.1 18.7
119 11.7 9.9 18.3



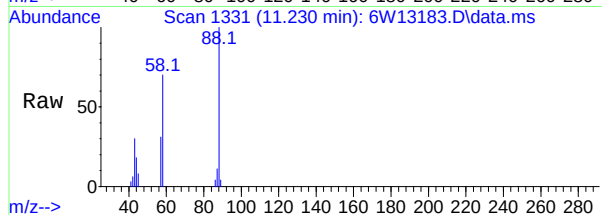
#58
Trichloroethene
Concen: 0.09 ppb(v)
RT: 11.187 min Scan# 1324
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

Tgt Ion: 95 Resp: 3235
Ion Ratio Lower Upper
95 100
97 66.0 45.1 83.7
130 96.2 78.6 146.0
132 86.4 75.9 141.1

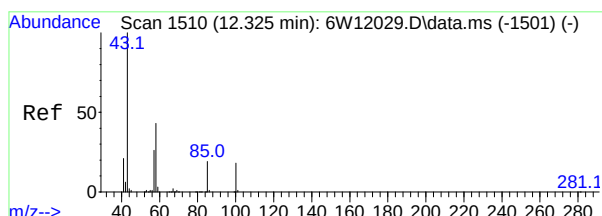
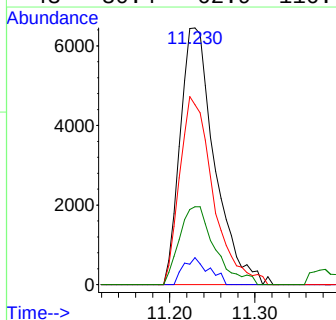
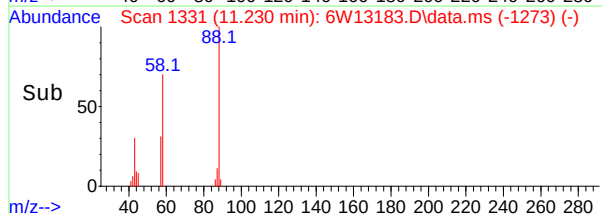




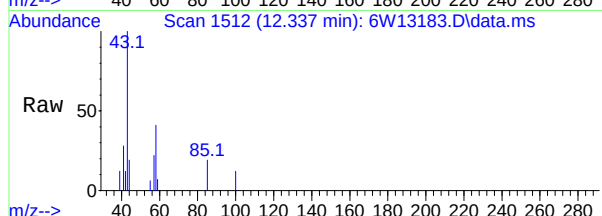
#63
1,4-Dioxane
Concen: 0.80 ppb(v)
RT: 11.230 min Scan# 1331
Delta R.T. 0.025 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm



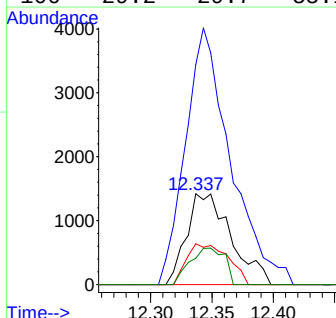
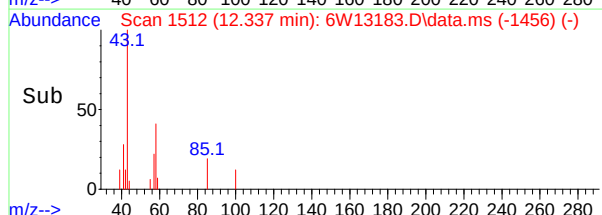
Tgt Ion: 88 Resp: 18087
Ion Ratio Lower Upper
88 100
87 10.6 6.3 11.7
58 70.0 57.7 107.3
43 30.4 62.9 116.7#

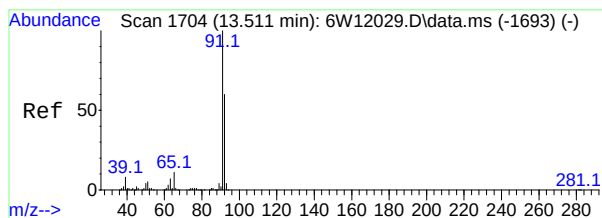


#66
4-Methyl-2-pentanone
Concen: 0.17 ppb(v)
RT: 12.337 min Scan# 1512
Delta R.T. 0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm



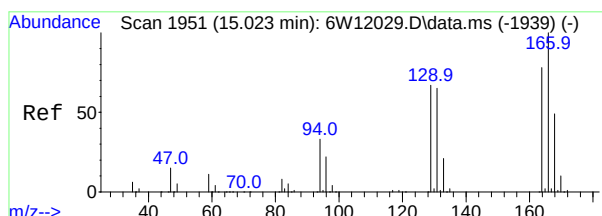
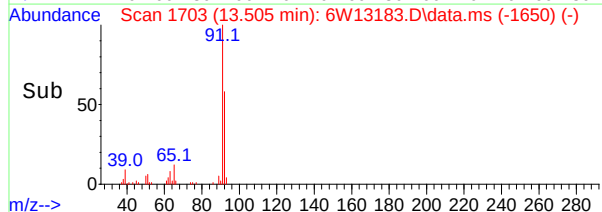
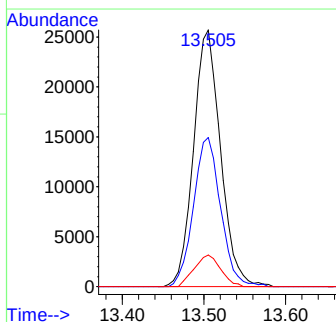
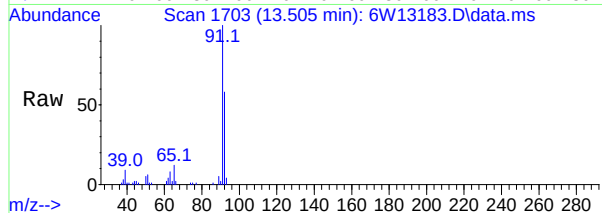
Tgt Ion: 58 Resp: 3597
Ion Ratio Lower Upper
58 100
43 242.1 162.5 301.7
85 45.0 33.0 61.4
100 29.2 29.7 55.1#





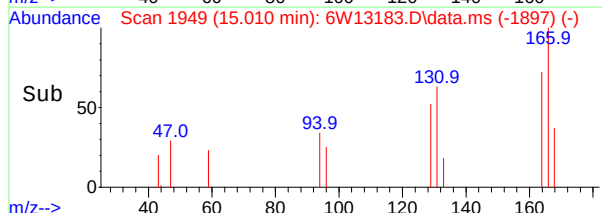
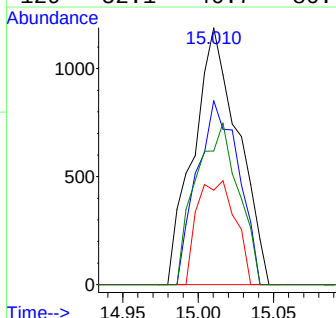
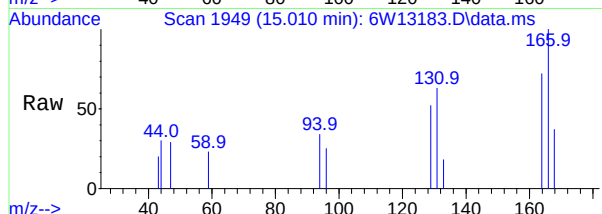
#68
Toluene
Concen: 0.59 ppb(v)
RT: 13.505 min Scan# 1703
Delta R.T. -0.006 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

Tgt Ion: 91 Resp: 59285
Ion Ratio Lower Upper
91 100
92 58.0 41.7 77.5
65 12.4 7.4 13.8



#74
Tetrachloroethene
Concen: 0.04 ppb(v)
RT: 15.010 min Scan# 1949
Delta R.T. -0.012 min
Lab File: 6W13183.D
Acq: 23 Jul 2019 5:00 pm

Tgt Ion: 166 Resp: 2461
Ion Ratio Lower Upper
166 100
164 71.7 54.4 101.0
168 36.8 34.0 63.2
129 52.1 46.7 86.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13184.D
 Acq On : 23 Jul 2019 5:59 pm
 Operator : thomash
 Sample : jc91420-2
 Misc : MS36156,V6W538,400,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 24 13:56:40 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.165	130	247762	10.00	ppb(v # 0.00	
55) 1,4-Difluorobenzene	10.361	114	911373	10.00	ppb(v 0.00	
78) Chlorobenzene-d5	15.891	82	451943	10.00	ppb(v -0.01	
109) Bromochloromethane (A)	8.165	130	247762	10.00	ppb(v # 0.00	

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.136	95	566550	9.91	ppb(v -0.01	
Spiked Amount	10.000	Range	65 - 128	Recovery	=	99.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Freon 152A	3.723	65	366253	24.86	ppb(v#	84
4) Chlorodifluoromethane	3.760	67	2607	0.47	ppb(v	99
7) Dichlorodifluoromethane	3.845	85	32797	0.53	ppb(v	99
8) 1-Chloro-1,1-difluoroethane	3.956	65	18646	0.43	ppb(v#	70
9) Chloromethane	3.974	50	37546	2.11	ppb(v	99
13) n-Butane	4.304	58	2987	0.82	ppb(v#	11
22) Trichlorofluoromethane	5.289	101	181625	3.09	ppb(v	100
23) Acetone	5.155	58	19677	1.72	ppb(v	57
27) Isopropyl Alcohol	5.375	45	10340	0.25	ppb(v#	94
28) 1,1-Dichloroethene	5.864	61	8133	0.25	ppb(v	88
29) Freon 113	6.231	101	5554	0.11	ppb(v	97
30) Methylene Chloride	5.993	84	5456	0.24	ppb(v	91
31) Carbon Disulfide	6.268	76	7914	0.12	ppb(v	97
32) Ethanol	4.732	45	62366	7.02	ppb(v	99
40) 2-Butanone	7.553	72	1630	0.14	ppb(v	92
46) Chloroform	8.305	83	13340	0.25	ppb(v#	96
49) 1,1,1-Trichloroethane	9.400	97	104556	1.98	ppb(v	98
58) Trichloroethene	11.193	95	12802	0.36	ppb(v	90
63) 1,4-Dioxane	11.248	88	5255	0.24	ppb(v#	71
68) Toluene	13.511	91	13287	0.13	ppb(v	99
74) Tetrachloroethene	15.016	166	12026	0.21	ppb(v	97
97) 1,2,4-Trimethylbenzene	20.082	105	17029	0.15	ppb(v#	67

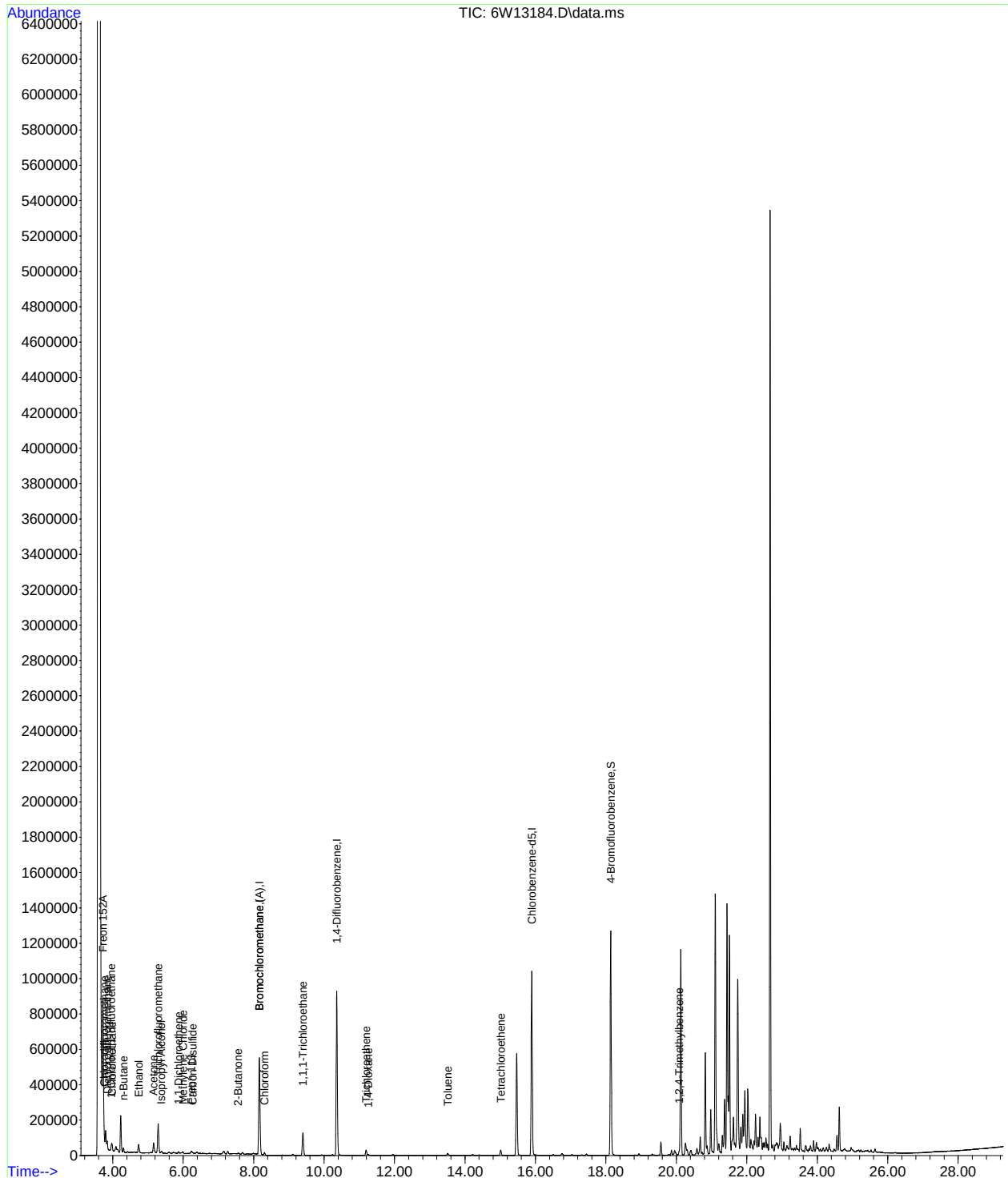
(#) = qualifier out of range (m) = manual integration (+) = signals summed

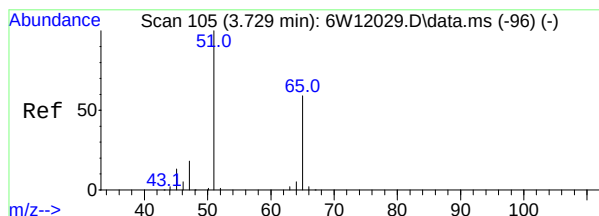
7.1.2

7

Data Path : C:\msdchem\1\data\
Data File : 6W13184.D
Acq On : 23 Jul 2019 5:59 pm
Operator : thomash
Sample : jc91420-2
Misc : MS36156,V6W538,400,,,,,1
ALS Vial : 5 Sample Multiplier: 1

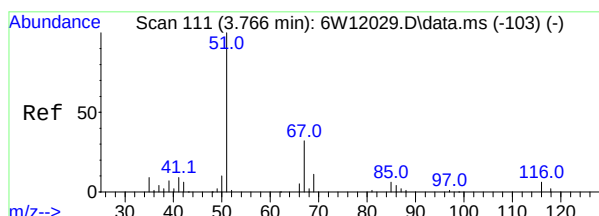
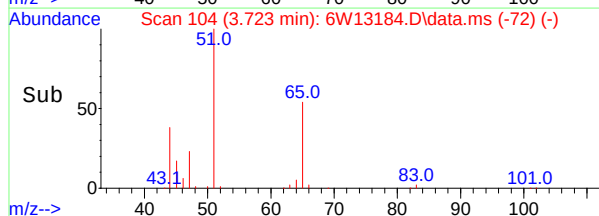
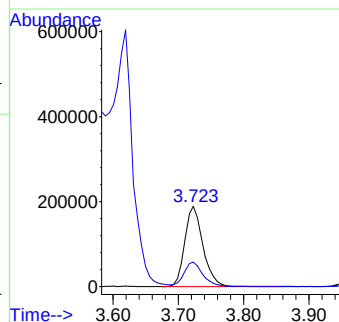
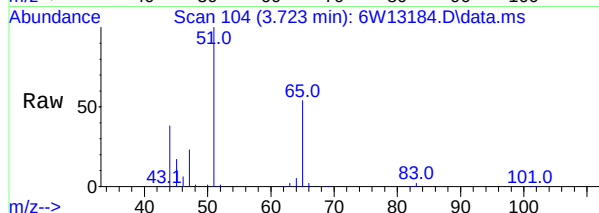
Quant Time: Jul 24 13:56:40 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration





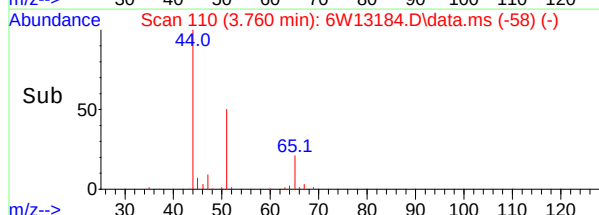
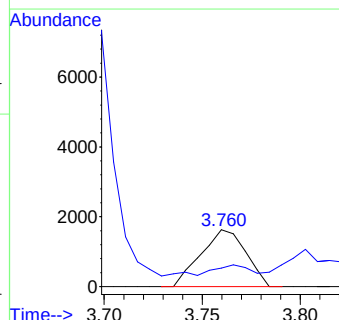
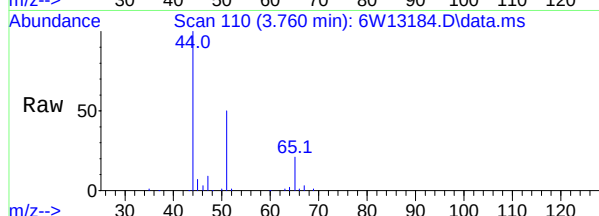
#3
Freon 152A
Concen: 24.86 ppb(v)
RT: 3.723 min Scan# 104
Delta R.T. -0.006 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

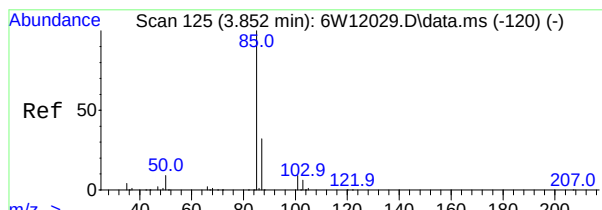
Tgt Ion: 65 Resp: 366253
Ion Ratio Lower Upper
65 100
45 30.6 16.0 29.8#



#4
Chlorodifluoromethane
Concen: 0.47 ppb(v)
RT: 3.760 min Scan# 110
Delta R.T. -0.012 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

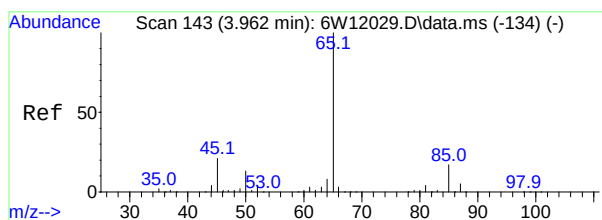
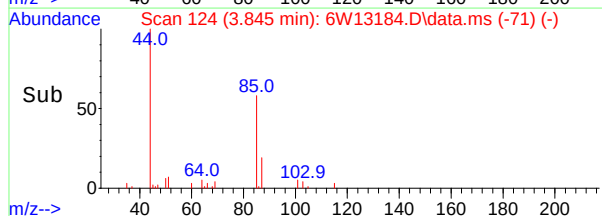
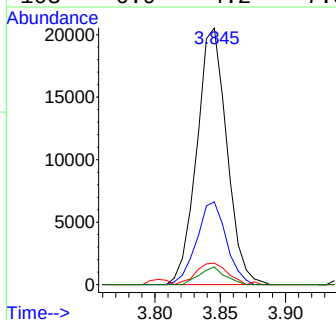
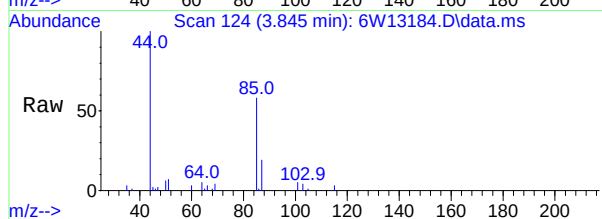
Tgt Ion: 67 Resp: 2607
Ion Ratio Lower Upper
67 100
69 32.6 23.2 43.0





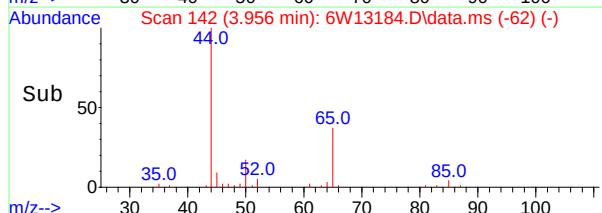
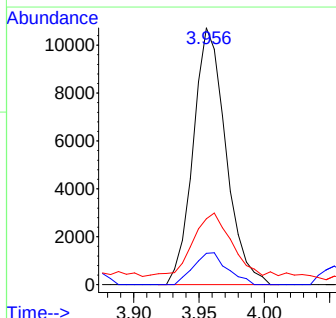
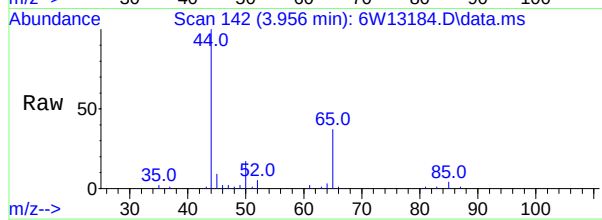
#7
 Dichlorodifluoromethane
 Concen: 0.53 ppb(v)
 RT: 3.845 min Scan# 124
 Delta R.T. -0.006 min
 Lab File: 6W13184.D
 Acq: 23 Jul 2019 5:59 pm

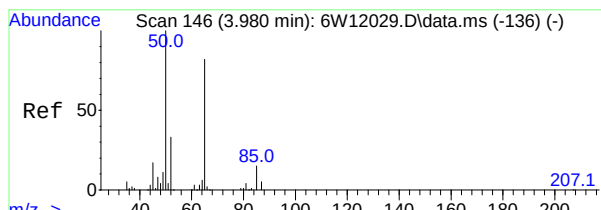
Tgt Ion: 85 Resp: 32797
 Ion Ratio Lower Upper
 85 100
 87 32.2 22.7 42.1
 101 8.4 6.3 11.7
 103 6.9 4.2 7.8



#8
 1-Chloro-1,1-difluoroethane
 Concen: 0.43 ppb(v)
 RT: 3.956 min Scan# 142
 Delta R.T. -0.012 min
 Lab File: 6W13184.D
 Acq: 23 Jul 2019 5:59 pm

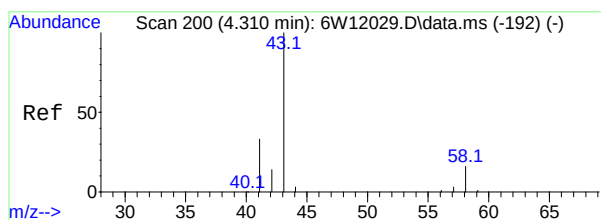
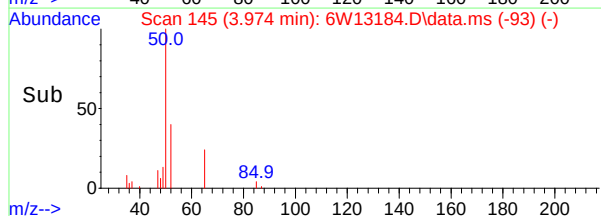
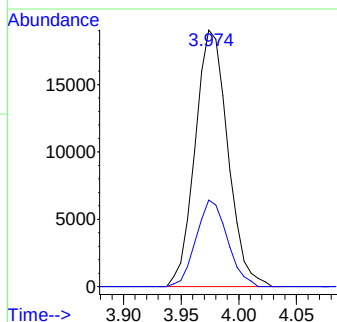
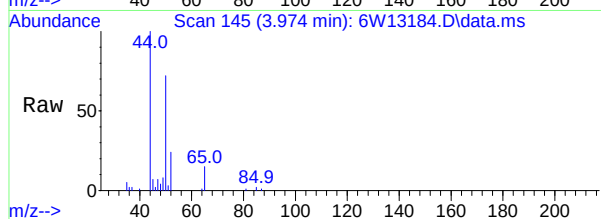
Tgt Ion: 65 Resp: 18646
 Ion Ratio Lower Upper
 65 100
 85 12.8 14.1 21.1#
 45 0.0 17.2 25.8#





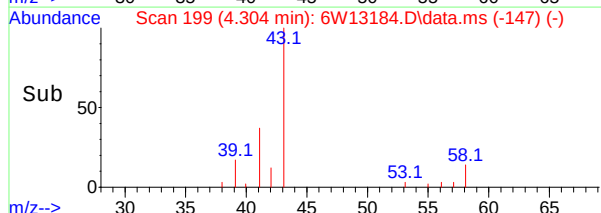
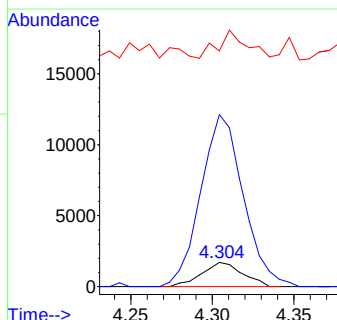
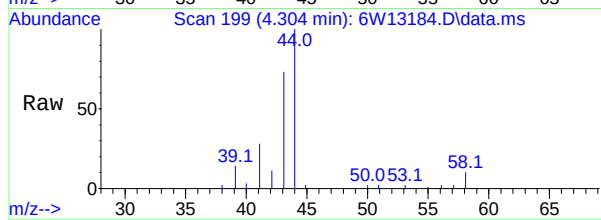
#9
Chloromethane
Concen: 2.11 ppb(v)
RT: 3.974 min Scan# 145
Delta R.T. -0.012 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

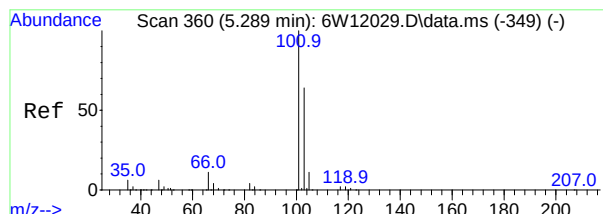
Tgt Ion: 50 Resp: 37546
Ion Ratio Lower Upper
50 100
52 33.7 23.0 42.8



#13
n-Butane
Concen: 0.82 ppb(v)
RT: 4.304 min Scan# 199
Delta R.T. -0.012 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

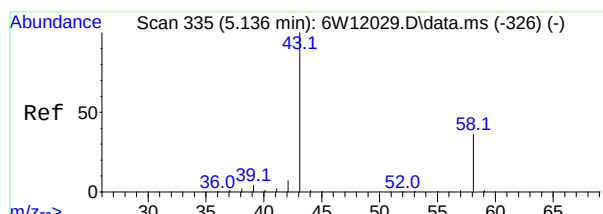
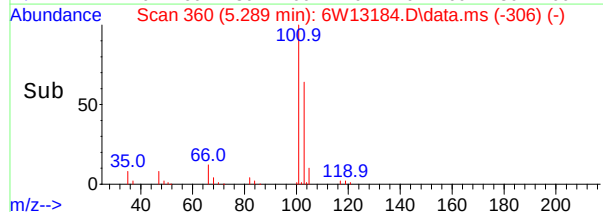
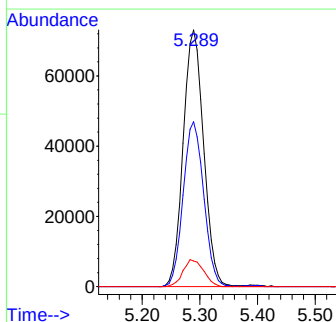
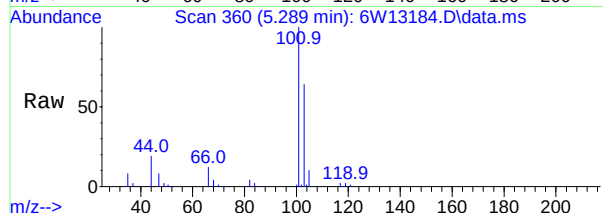
Tgt Ion: 58 Resp: 2987
Ion Ratio Lower Upper
58 100
43 710.1 451.4 838.4
44 972.8 17.1 31.7#





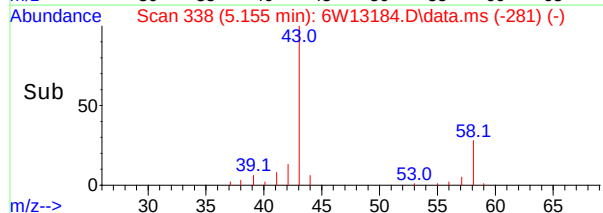
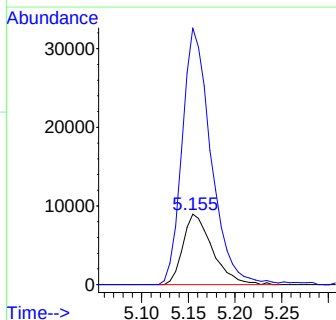
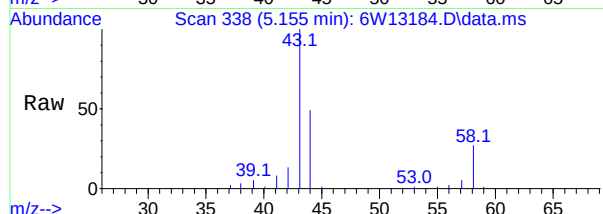
#22
Trichlorofluoromethane
Concen: 3.09 ppb(v)
RT: 5.289 min Scan# 360
Delta R.T. -0.000 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

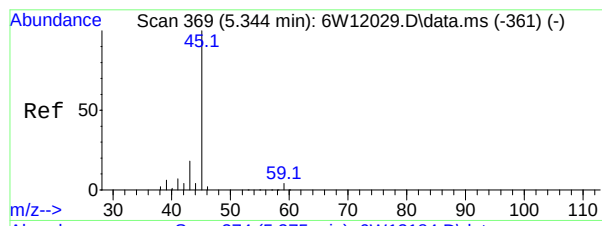
Tgt Ion: 101 Resp: 181625
Ion Ratio Lower Upper
101 100
103 64.3 45.1 83.7
105 10.0 7.5 13.9



#23
Acetone
Concen: 1.72 ppb(v)
RT: 5.155 min Scan# 338
Delta R.T. 0.018 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

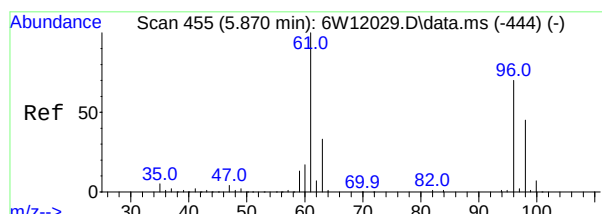
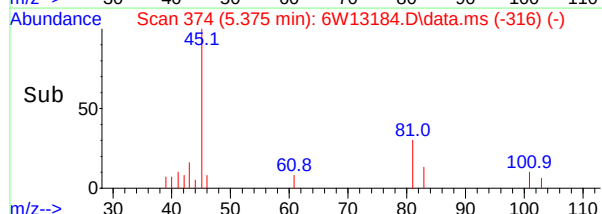
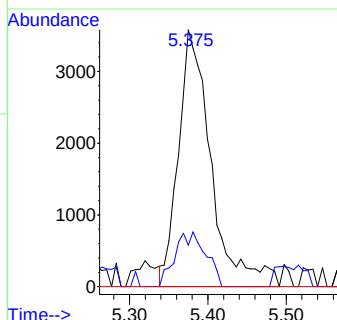
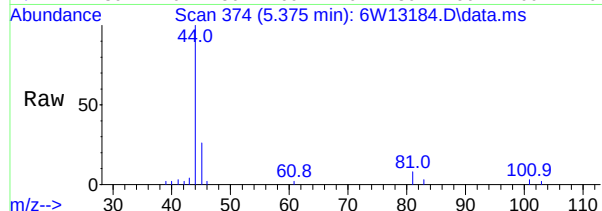
Tgt Ion: 58 Resp: 19677
Ion Ratio Lower Upper
58 100
43 363.8 197.9 367.5





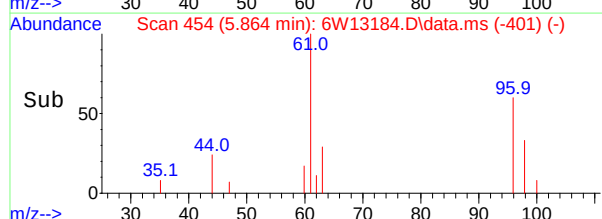
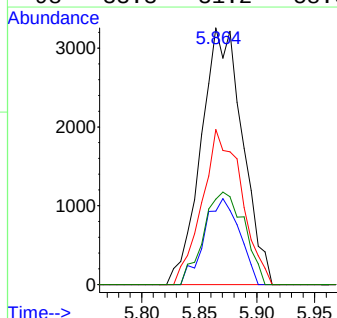
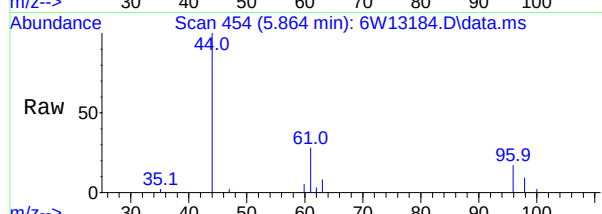
#27
Isopropyl Alcohol
Concen: 0.25 ppb(v)
RT: 5.375 min Scan# 374
Delta R.T. 0.025 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

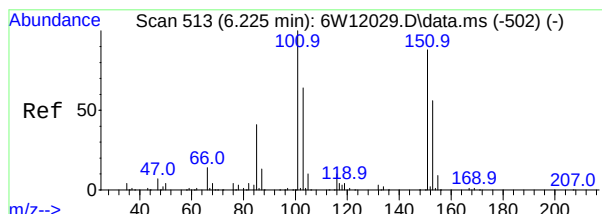
Tgt Ion: 45 Resp: 10340
Ion Ratio Lower Upper
45 100
43 16.1 12.6 23.4
59 0.0 3.1 5.8#



#28
1,1-Dichloroethene
Concen: 0.25 ppb(v)
RT: 5.864 min Scan# 454
Delta R.T. -0.006 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

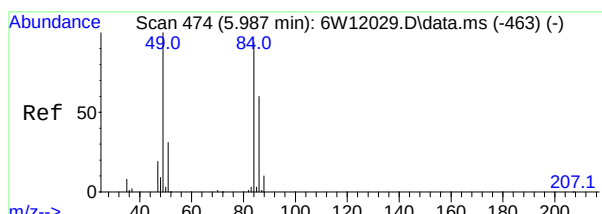
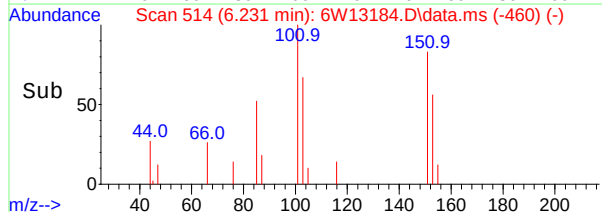
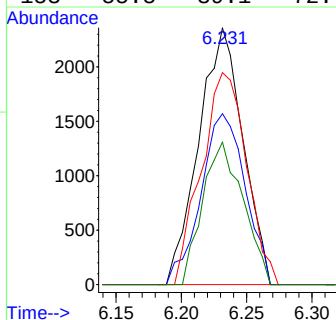
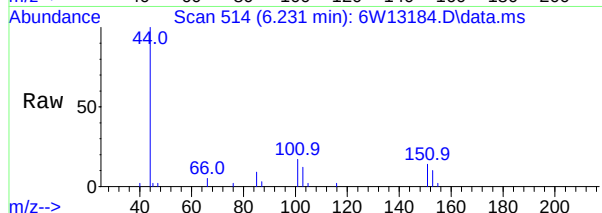
Tgt Ion: 61 Resp: 8133
Ion Ratio Lower Upper
61 100
63 28.6 22.7 42.3
96 60.4 48.6 90.3
98 33.3 31.2 58.0





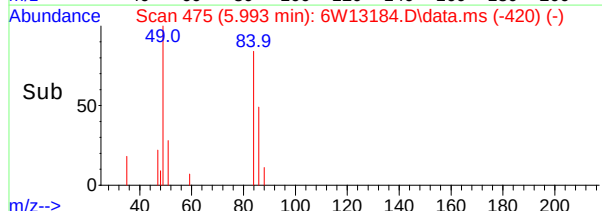
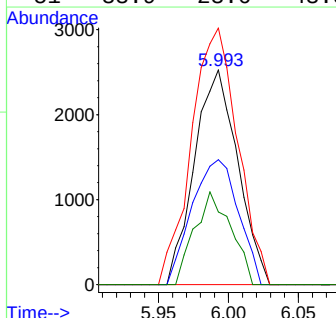
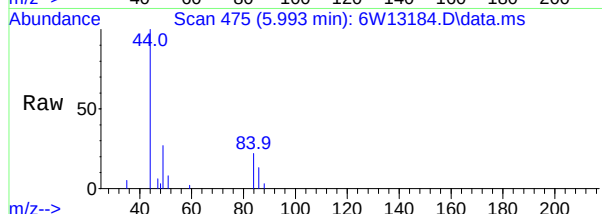
#29
Freon 113
Concen: 0.11 ppb(v)
RT: 6.231 min Scan# 514
Delta R.T. -0.000 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

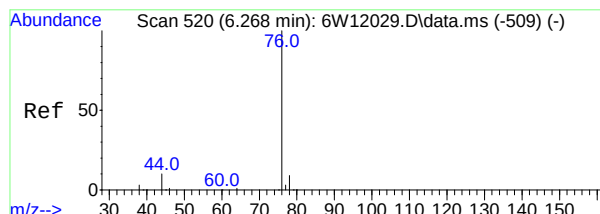
Tgt Ion: 101 Resp: 5554
Ion Ratio Lower Upper
101 100
103 66.6 44.9 83.3
151 82.5 61.4 114.0
153 55.5 39.1 72.7



#30
Methylene Chloride
Concen: 0.24 ppb(v)
RT: 5.993 min Scan# 475
Delta R.T. 0.006 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

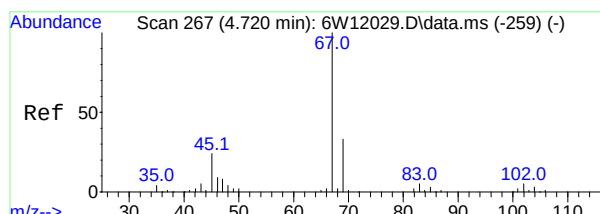
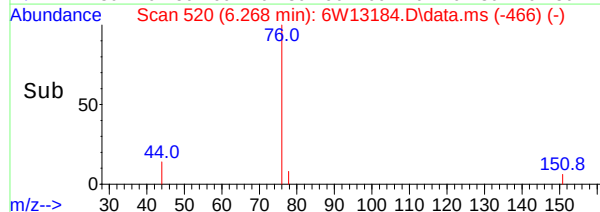
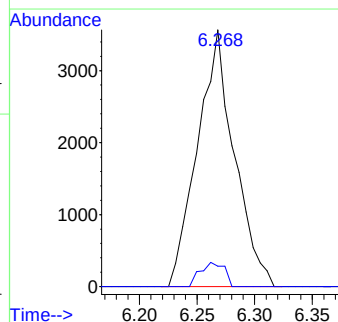
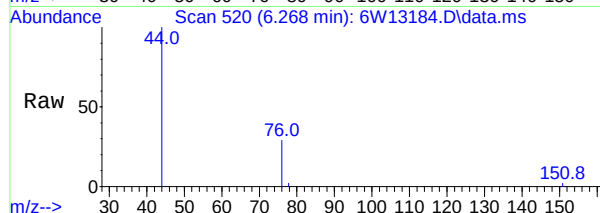
Tgt Ion: 84 Resp: 5456
Ion Ratio Lower Upper
84 100
86 58.2 45.1 83.7
49 119.6 74.7 138.7
51 33.9 23.6 43.8





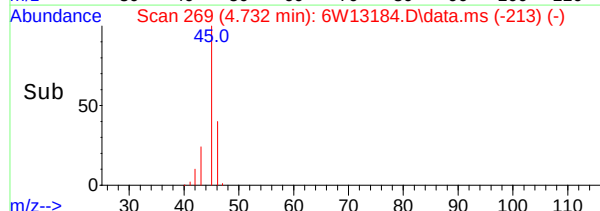
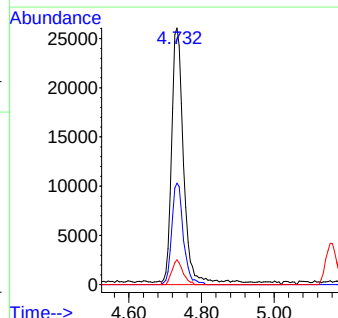
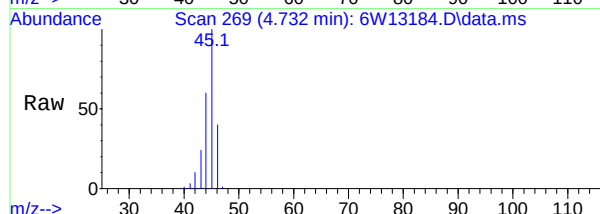
#31
Carbon Disulfide
Concen: 0.12 ppb(v)
RT: 6.268 min Scan# 520
Delta R.T. -0.000 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

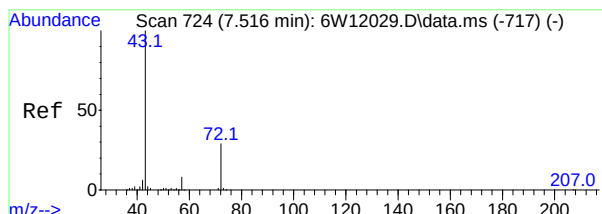
Tgt Ion: 76 Resp: 7914
Ion Ratio Lower Upper
76 100
78 8.0 6.4 12.0



#32
Ethanol
Concen: 7.02 ppb(v)
RT: 4.732 min Scan# 269
Delta R.T. 0.013 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

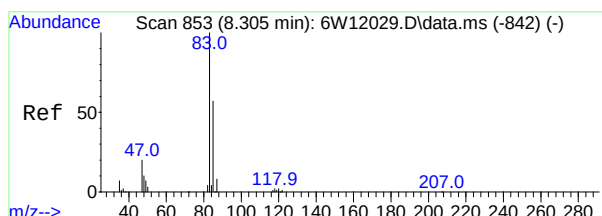
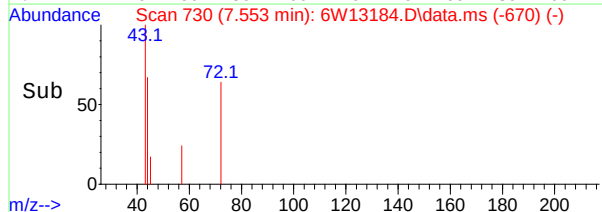
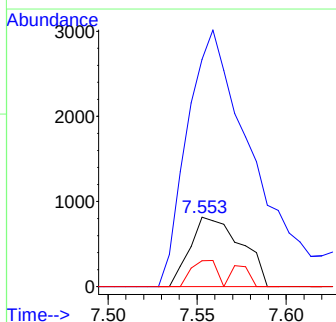
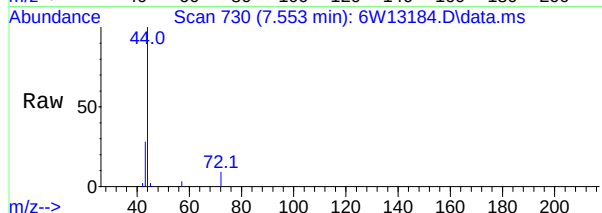
Tgt Ion: 45 Resp: 62366
Ion Ratio Lower Upper
45 100
46 39.6 27.7 51.5
42 9.7 5.5 10.1





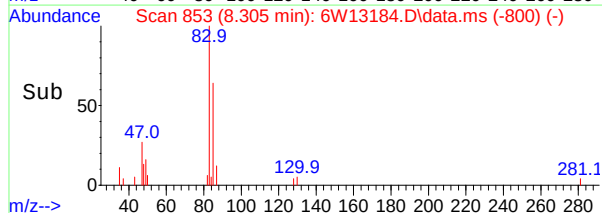
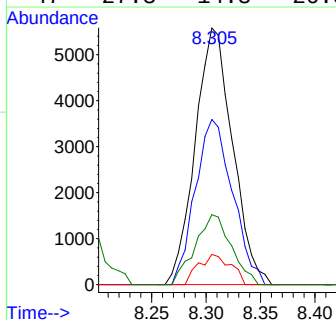
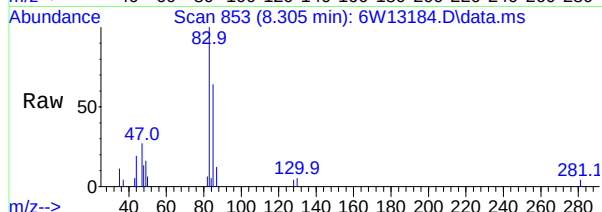
#40
2-Butanone
Concen: 0.14 ppb(v)
RT: 7.553 min Scan# 730
Delta R.T. 0.037 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

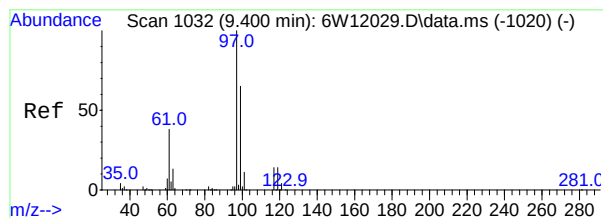
Tgt Ion: 72 Resp: 1630
Ion Ratio Lower Upper
72 100
43 326.8 240.3 446.3
57 37.2 20.1 37.3



#46
Chloroform
Concen: 0.25 ppb(v)
RT: 8.305 min Scan# 853
Delta R.T. -0.006 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

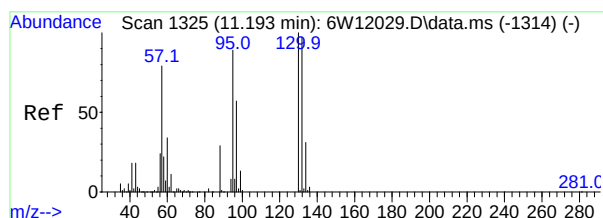
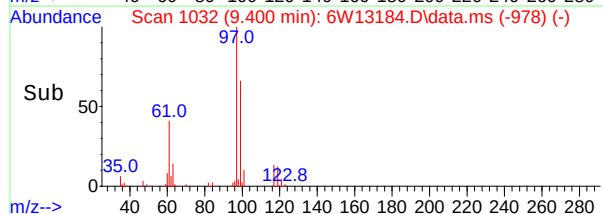
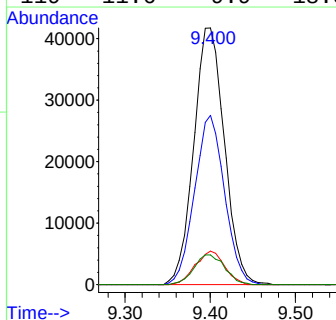
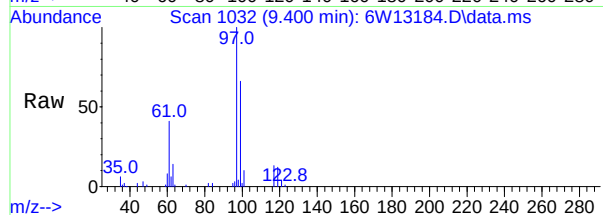
Tgt Ion: 83 Resp: 13340
Ion Ratio Lower Upper
83 100
85 64.3 45.2 84.0
87 11.8 7.3 13.5
47 27.3 14.3 26.5#





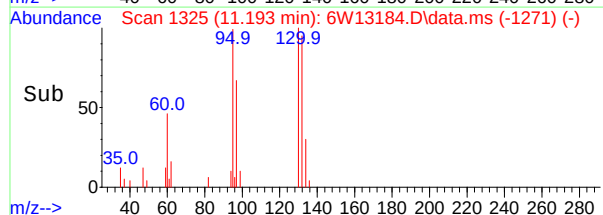
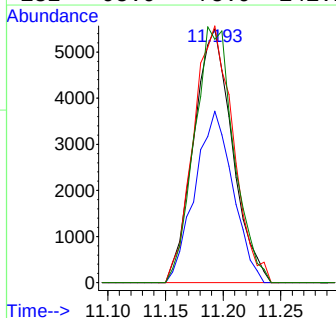
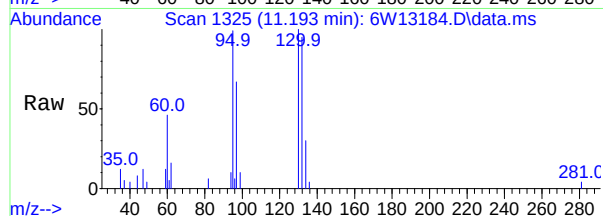
#49
1,1,1-Trichloroethane
Concen: 1.98 ppb(v)
RT: 9.400 min Scan# 1032
Delta R.T. -0.000 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

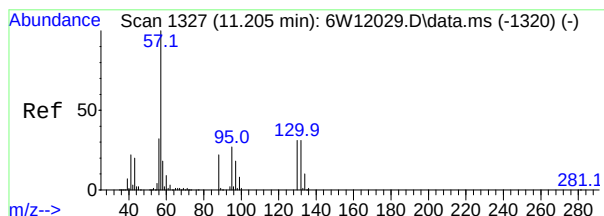
Tgt Ion: 97 Resp: 104556
Ion Ratio Lower Upper
97 100
99 65.9 45.4 84.4
117 13.0 10.1 18.7
119 11.6 9.9 18.3



#58
Trichloroethene
Concen: 0.36 ppb(v)
RT: 11.193 min Scan# 1325
Delta R.T. -0.000 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

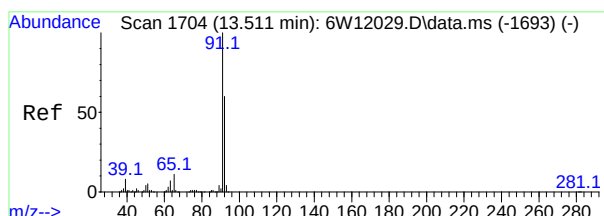
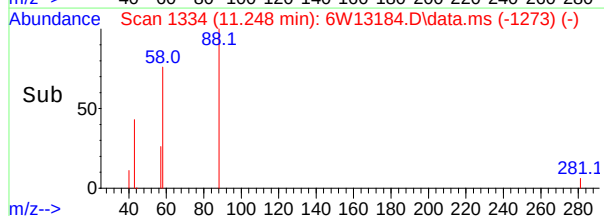
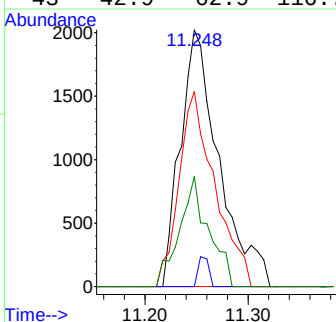
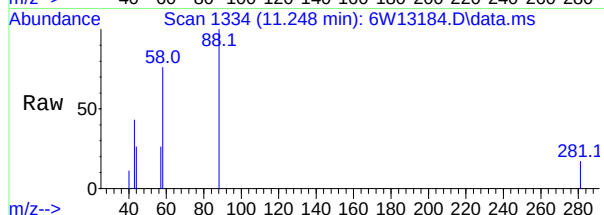
Tgt Ion: 95 Resp: 12802
Ion Ratio Lower Upper
95 100
97 67.6 45.1 83.7
130 101.2 78.6 146.0
132 95.9 75.9 141.1





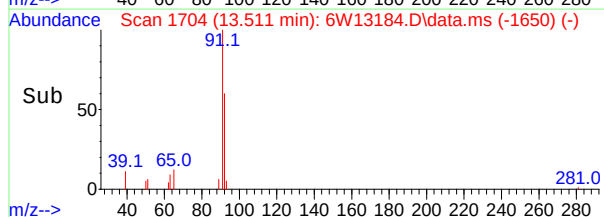
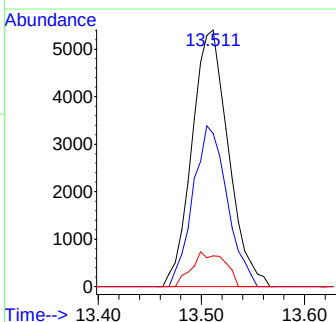
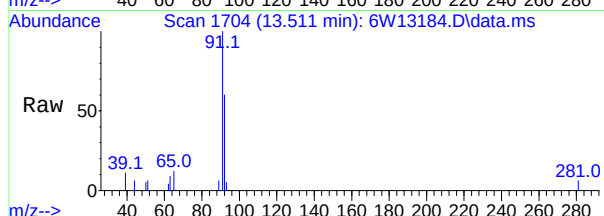
#63
1,4-Dioxane
Concen: 0.24 ppb(v)
RT: 11.248 min Scan# 1334
Delta R.T. 0.043 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

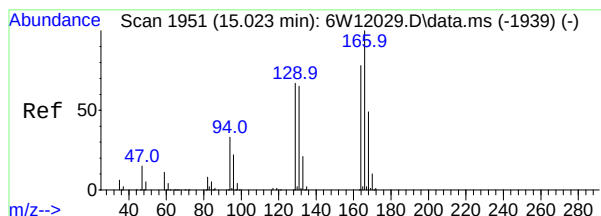
Tgt Ion: 88 Resp: 5255
Ion Ratio Lower Upper
88 100
87 0.0 6.3 11.7#
58 76.0 57.7 107.3
43 42.9 62.9 116.7#



#68
Toluene
Concen: 0.13 ppb(v)
RT: 13.511 min Scan# 1704
Delta R.T. -0.000 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

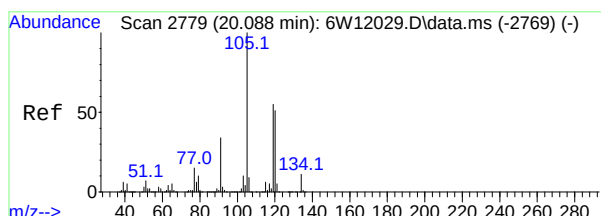
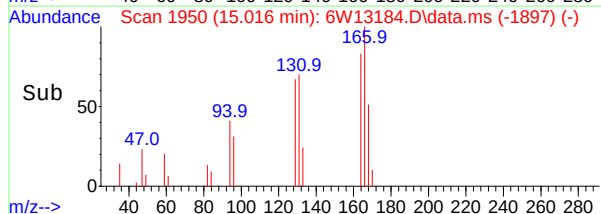
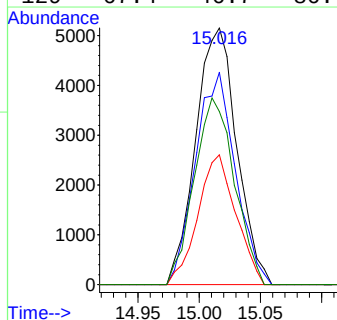
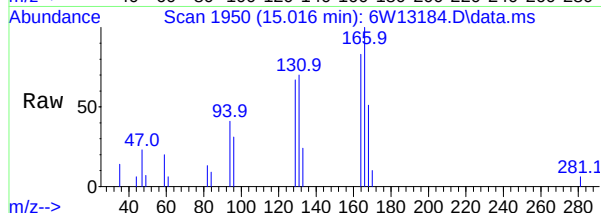
Tgt Ion: 91 Resp: 13287
Ion Ratio Lower Upper
91 100
92 59.7 41.7 77.5
65 12.0 7.4 13.8





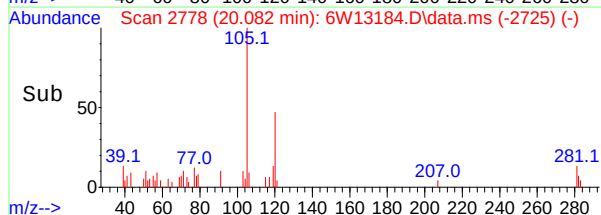
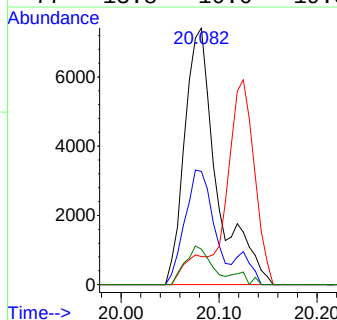
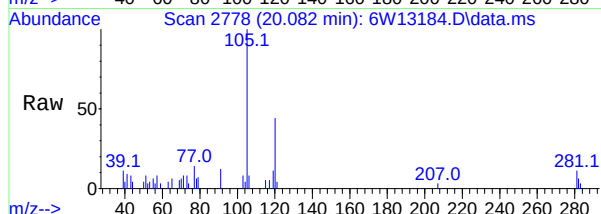
#74
Tetrachloroethene
Concen: 0.21 ppb(v)
RT: 15.016 min Scan# 1950
Delta R.T. -0.006 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

Tgt Ion:166	Resp:	12026
Ion Ratio	Lower	Upper
166	100	
164	82.7	54.4 101.0
168	50.6	34.0 63.2
129	67.4	46.7 86.7



#97
1,2,4-Trimethylbenzene
Concen: 0.15 ppb(v)
RT: 20.082 min Scan# 2778
Delta R.T. -0.006 min
Lab File: 6W13184.D
Acq: 23 Jul 2019 5:59 pm

Tgt Ion:105	Resp:	17029
Ion Ratio	Lower	Upper
105	100	
120	44.2	36.0 67.0
119	10.9	38.7 71.9#
77	13.8	10.6 19.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13185.D
 Acq On : 23 Jul 2019 6:55 pm
 Operator : thomash
 Sample : jc91420-3
 Misc : MS36156,V6W538,400,,,1
 ALS Vial : 6 Sample Multiplier: 1

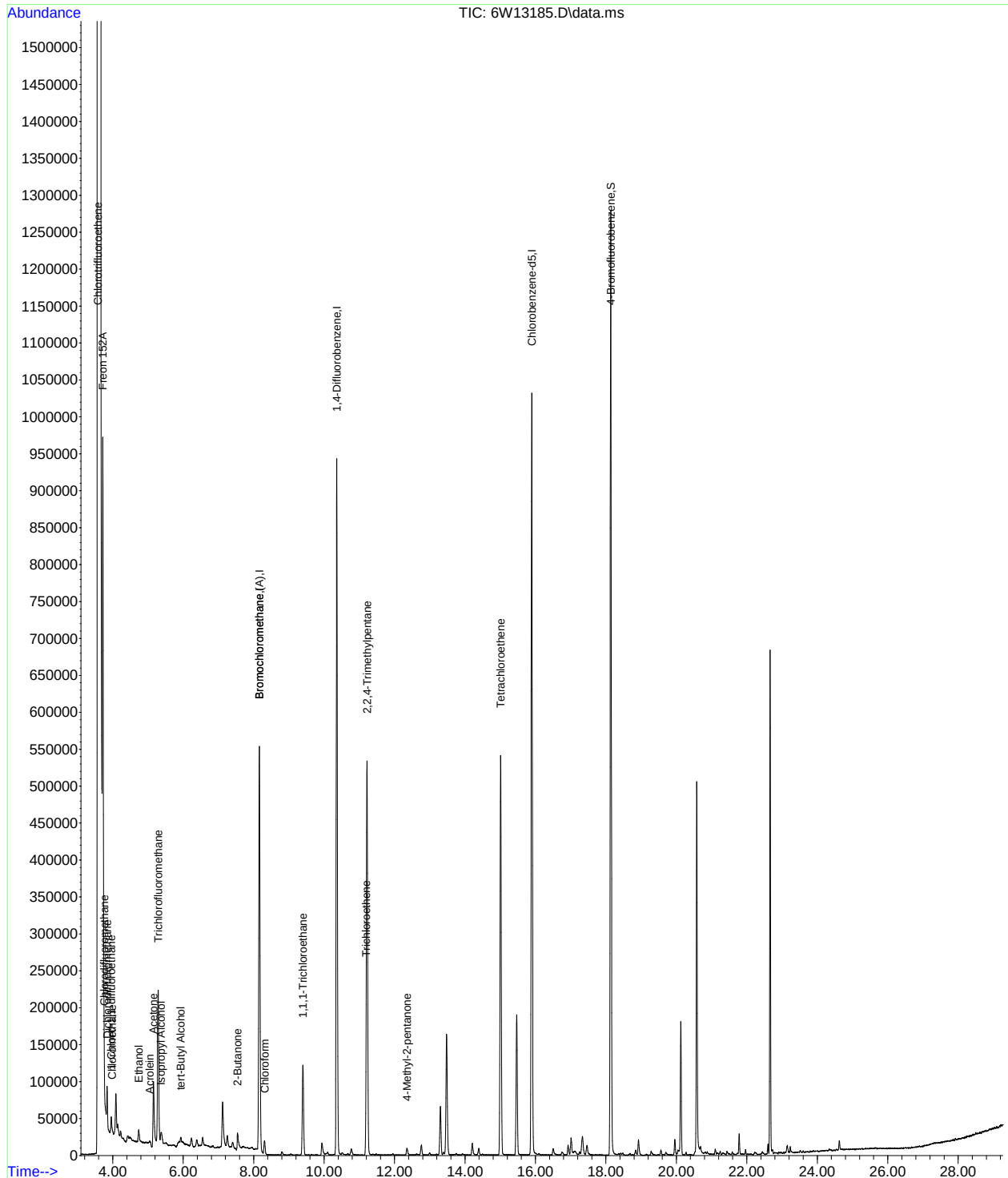
Quant Time: Jul 24 14:01:28 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

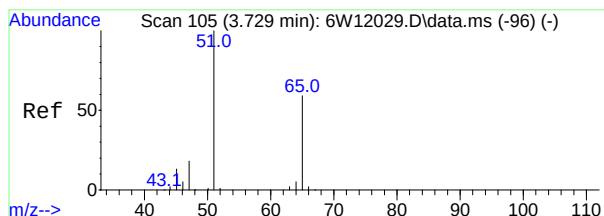
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.165	130	250935	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	927971	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.891	82	446654	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.165	130	250935	10.00	ppb(v	0.00
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.136	95	573252	10.15	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	101.50%
Target Compounds						
					Qvalue	
3) Freon 152A	3.717	65	399171	26.75	ppb(v	89
4) Chlorodifluoromethane	3.760	67	2566	0.45	ppb(v	92
6) Chlorotrifluoroethene	3.582	116	2507	0.06	ppb(v#	5
7) Dichlorodifluoromethane	3.839	85	37711	0.60	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.956	65	21320	0.49	ppb(v#	71
9) Chloromethane	3.974	50	3519	0.19	ppb(v	90
15) Acrolein	5.045	56	3096	0.32	ppb(v#	87
22) Trichlorofluoromethane	5.289	101	231409	3.88	ppb(v	100
23) Acetone	5.155	58	35083	3.03	ppb(v	73
27) Isopropyl Alcohol	5.369	45	21529	0.50	ppb(v	94
32) Ethanol	4.733	45	23640	2.63	ppb(v	95
36) tert-Butyl Alcohol	5.932	59	10024	0.21	ppb(v#	83
40) 2-Butanone	7.541	72	8052	0.68	ppb(v#	69
46) Chloroform	8.311	83	17437	0.33	ppb(v#	94
49) 1,1,1-Trichloroethane	9.400	97	99200	1.86	ppb(v	98
56) 2,2,4-Trimethylpentane	11.217	57	595083	5.06	ppb(v	96
58) Trichloroethene	11.193	95	5806	0.16	ppb(v	91
66) 4-Methyl-2-pentanone	12.349	58	2767	0.13	ppb(v	75
74) Tetrachloroethene	15.010	166	216128	3.68	ppb(v	97

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

Data Path : C:\msdchem\1\data\
Data File : 6W13185.D
Acq On : 23 Jul 2019 6:55 pm
Operator : thomash
Sample : jc91420-3
Misc : MS36156,V6W538,400,,,1
ALS Vial : 6 Sample Multiplier: 1

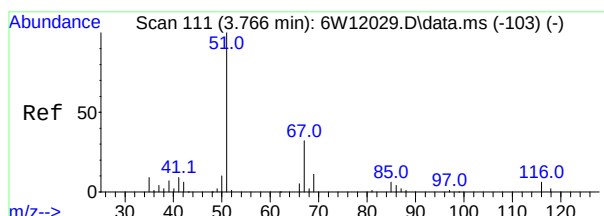
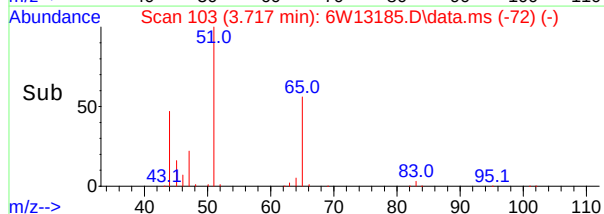
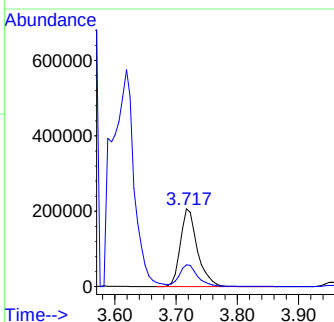
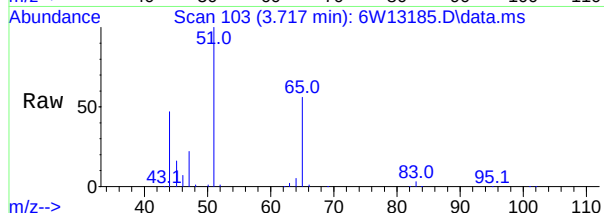
Quant Time: Jul 24 14:01:28 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration





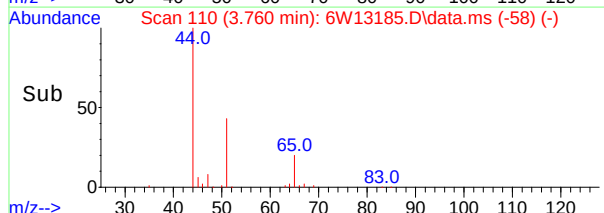
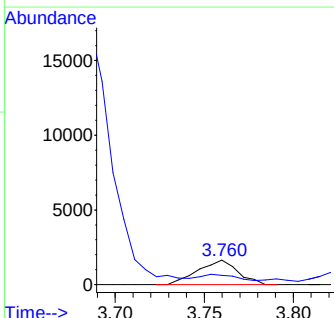
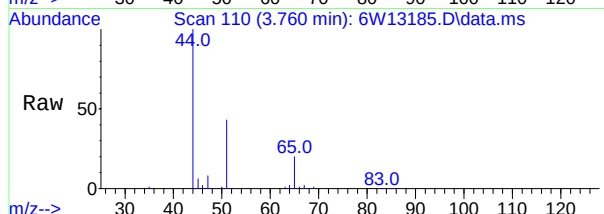
#3
Freon 152A
Concen: 26.75 ppb(v)
RT: 3.717 min Scan# 103
Delta R.T. -0.012 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

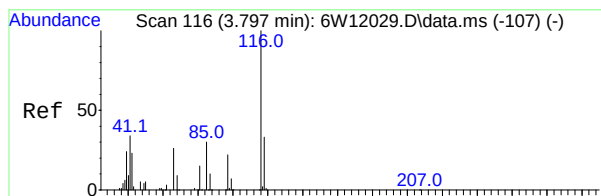
Tgt Ion: 65 Resp: 399171
Ion Ratio Lower Upper
65 100
45 28.2 16.0 29.8



#4
Chlorodifluoromethane
Concen: 0.45 ppb(v)
RT: 3.760 min Scan# 110
Delta R.T. -0.012 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

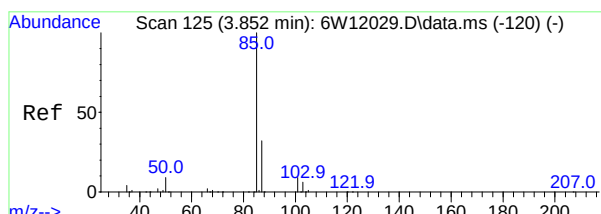
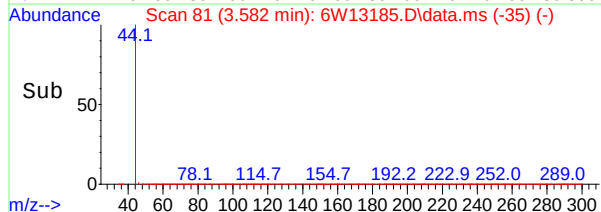
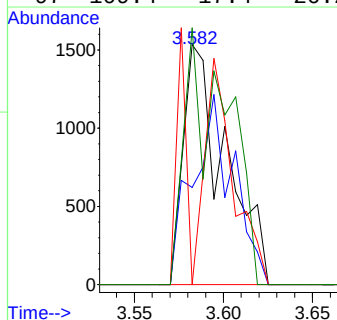
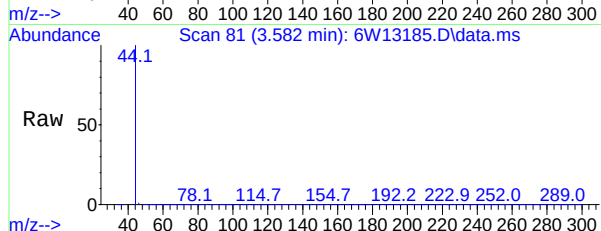
Tgt Ion: 67 Resp: 2566
Ion Ratio Lower Upper
67 100
69 37.7 23.2 43.0





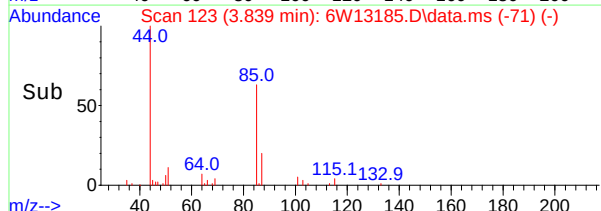
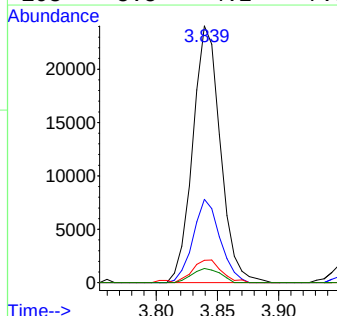
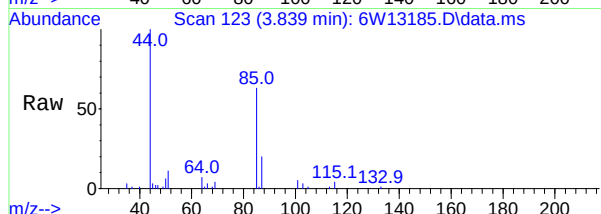
#6
Chlorotrifluoroethene
Concen: 0.06 ppb(v)
RT: 3.582 min Scan# 81
Delta R.T. -0.220 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

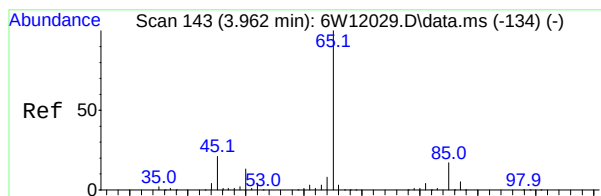
Tgt Ion:	116	Resp:	2507
Ion Ratio	100	Lower	Upper
116	100		
118	76.3	26.0	39.0#
85	64.1	27.0	40.4#
97	109.4	17.4	26.2#



#7
Dichlorodifluoromethane
Concen: 0.60 ppb(v)
RT: 3.839 min Scan# 123
Delta R.T. -0.012 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

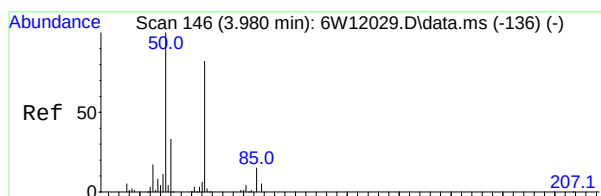
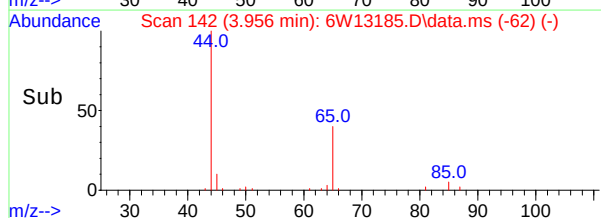
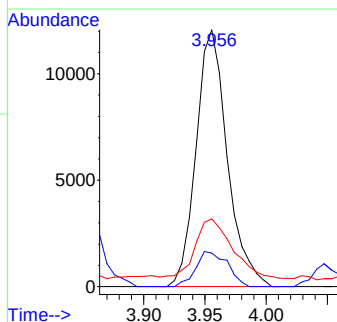
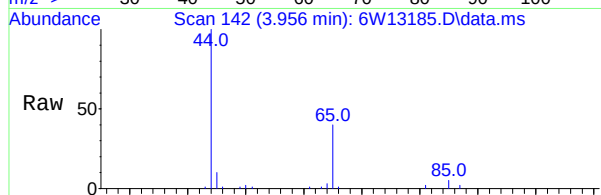
Tgt Ion:	85	Resp:	37711
Ion Ratio	100	Lower	Upper
85	100		
87	32.4	22.7	42.1
101	8.7	6.3	11.7
103	5.5	4.2	7.8





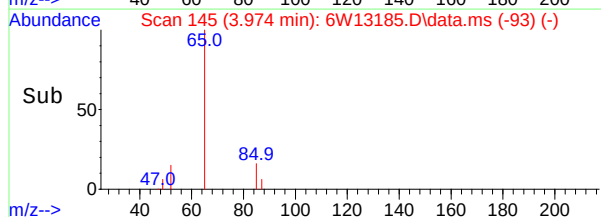
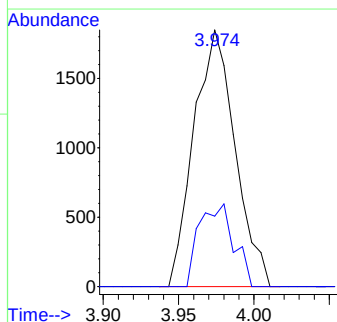
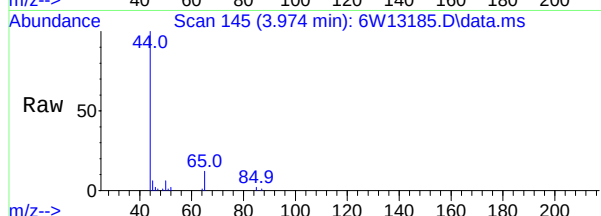
#8
1-Chloro-1,1-difluoroethane
Concen: 0.49 ppb(v)
RT: 3.956 min Scan# 142
Delta R.T. -0.012 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

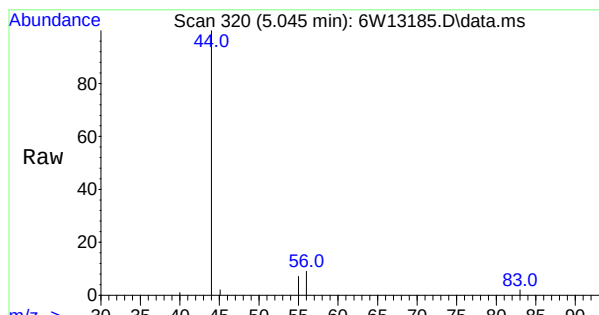
Tgt Ion: 65 Resp: 21320
Ion Ratio Lower Upper
65 100
85 13.9 14.1 21.1#
45 0.0 17.2 25.8#



#9
Chloromethane
Concen: 0.19 ppb(v)
RT: 3.974 min Scan# 145
Delta R.T. -0.012 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

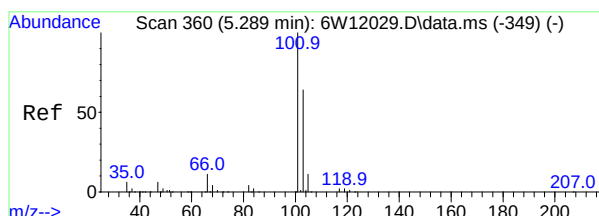
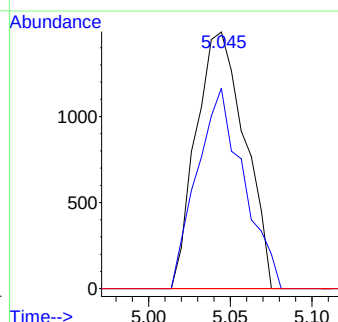
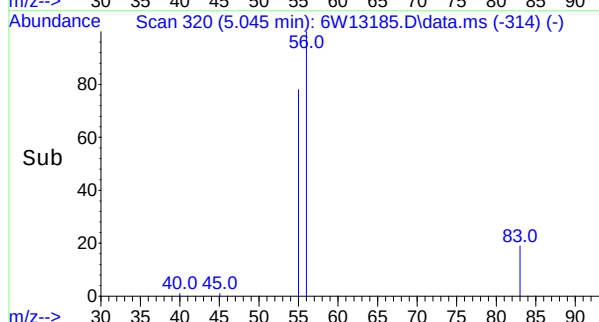
Tgt Ion: 50 Resp: 3519
Ion Ratio Lower Upper
50 100
52 27.4 23.0 42.8





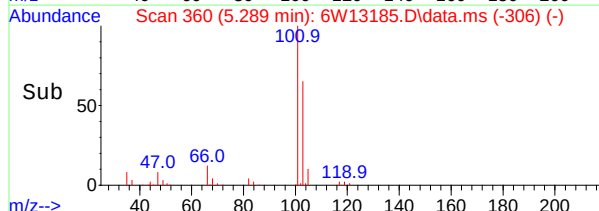
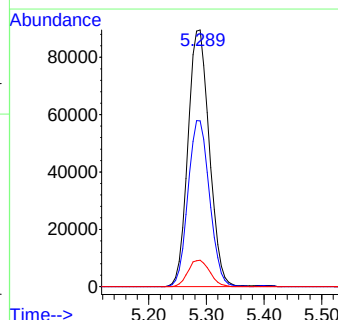
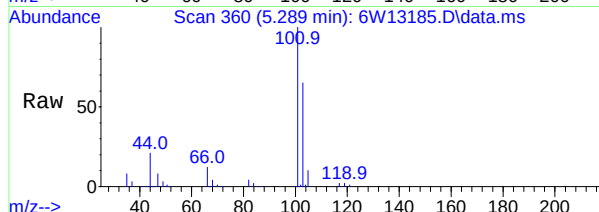
#15
Acrolein
Concen: 0.32 ppb(v)
RT: 5.045 min Scan# 320
Delta R.T. 0.018 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

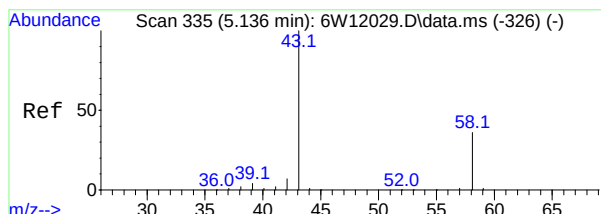
Tgt Ion: 56 Resp: 3096
Ion Ratio Lower Upper
56 100
55 74.4 56.5 84.7
37 0.0 16.2 24.4#



#22
Trichlorofluoromethane
Concen: 3.88 ppb(v)
RT: 5.289 min Scan# 360
Delta R.T. 0.000 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

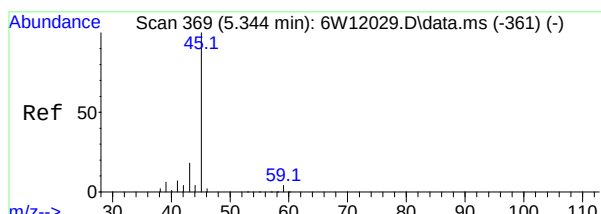
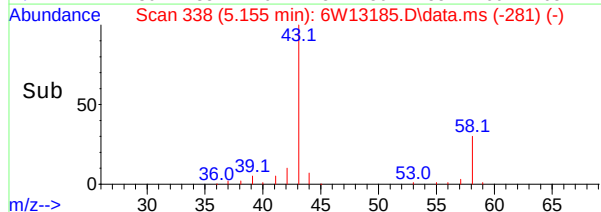
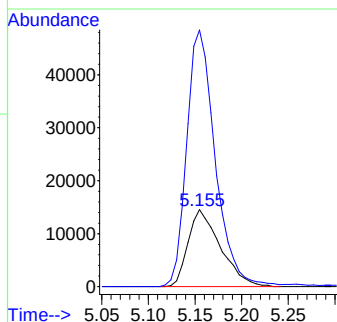
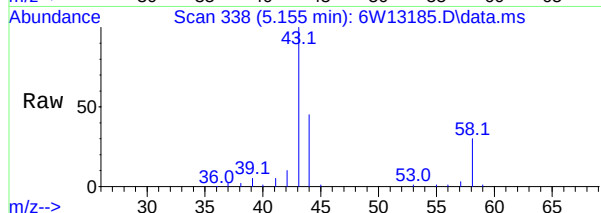
Tgt Ion: 101 Resp: 231409
Ion Ratio Lower Upper
101 100
103 64.6 45.1 83.7
105 10.3 7.5 13.9





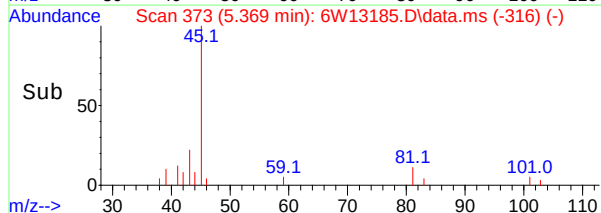
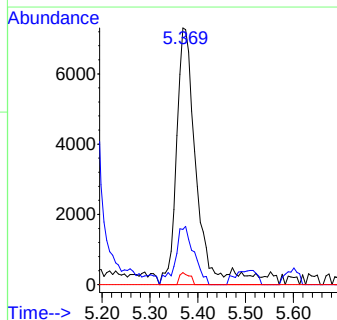
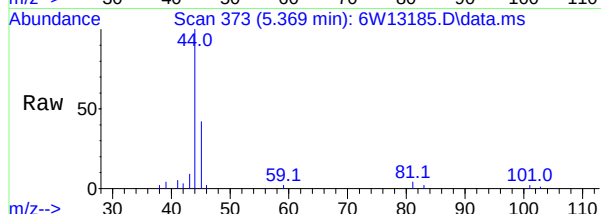
#23
Acetone
Concen: 3.03 ppb(v)
RT: 5.155 min Scan# 338
Delta R.T. 0.018 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

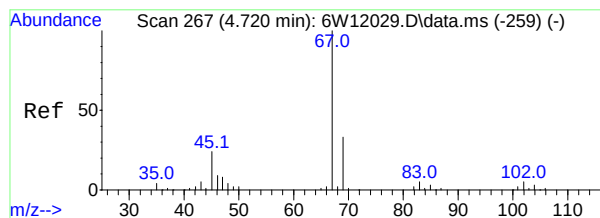
Tgt Ion: 58 Resp: 35083
Ion Ratio Lower Upper
58 100
43 333.2 197.9 367.5



#27
Isopropyl Alcohol
Concen: 0.50 ppb(v)
RT: 5.369 min Scan# 373
Delta R.T. 0.019 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

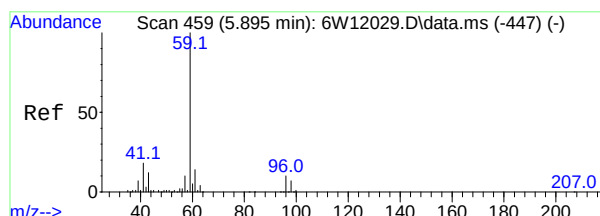
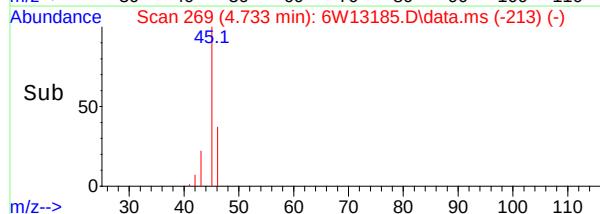
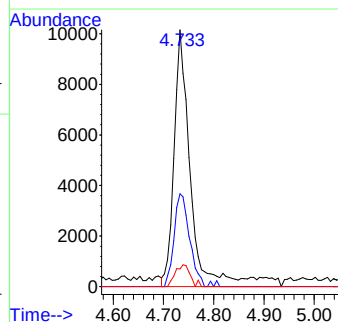
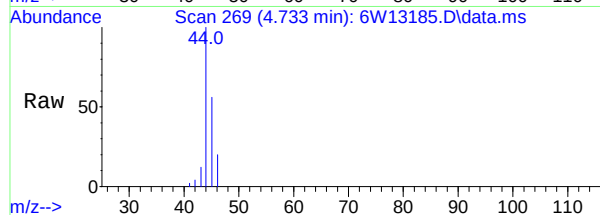
Tgt Ion: 45 Resp: 21529
Ion Ratio Lower Upper
45 100
43 21.5 12.6 23.4
59 4.7 3.1 5.8





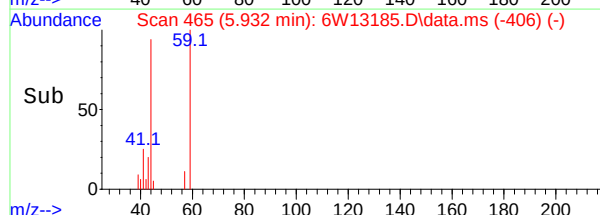
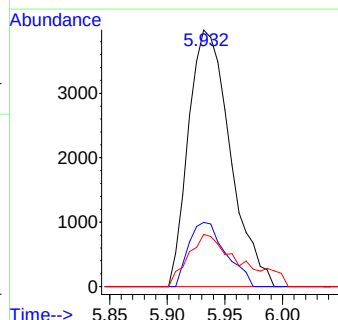
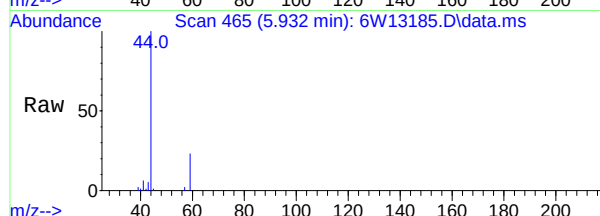
#32
Ethanol
Concen: 2.63 ppb(v)
RT: 4.733 min Scan# 269
Delta R.T. 0.013 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

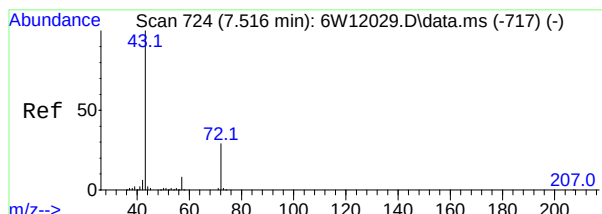
Tgt Ion: 45 Resp: 23640
Ion Ratio Lower Upper
45 100
46 36.1 27.7 51.5
42 6.9 5.5 10.1



#36
tert-Butyl Alcohol
Concen: 0.21 ppb(v)
RT: 5.932 min Scan# 465
Delta R.T. 0.031 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

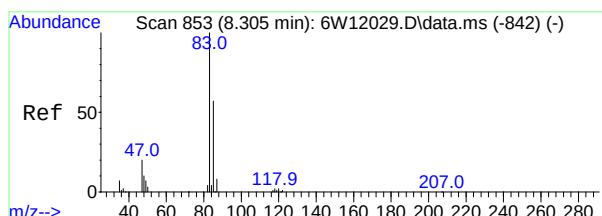
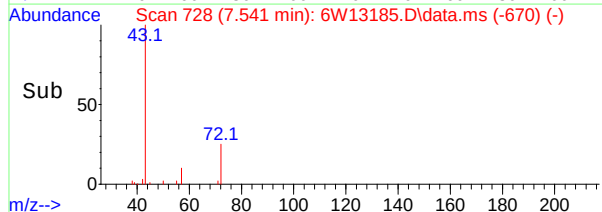
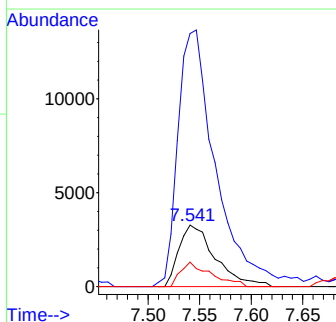
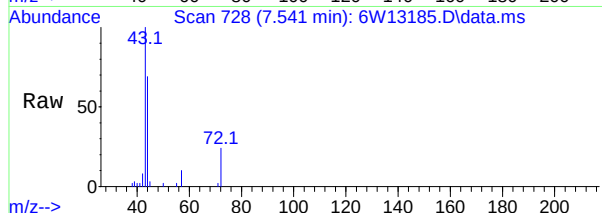
Tgt Ion: 59 Resp: 10024
Ion Ratio Lower Upper
59 100
41 25.1 12.8 23.8#
43 20.4 8.6 16.0#





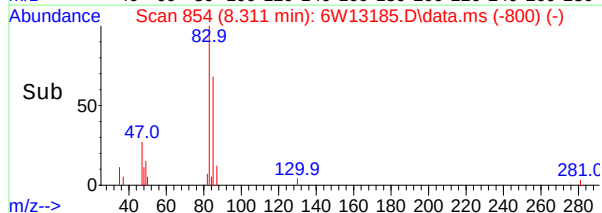
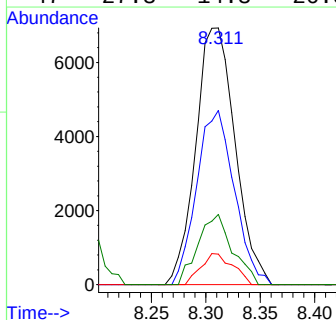
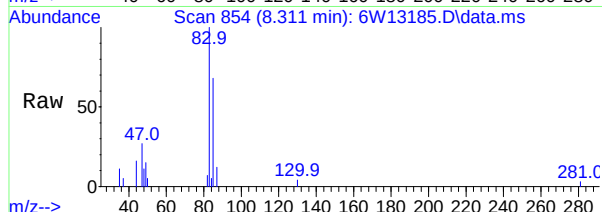
#40
2-Butanone
Concen: 0.68 ppb(v)
RT: 7.541 min Scan# 728
Delta R.T. 0.024 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

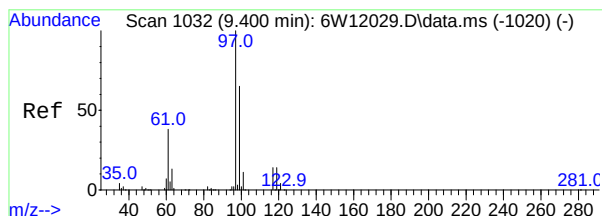
Tgt Ion: 72 Resp: 8052
Ion Ratio Lower Upper
72 100
43 411.3 240.3 446.3
57 39.8 20.1 37.3#



#46
Chloroform
Concen: 0.33 ppb(v)
RT: 8.311 min Scan# 854
Delta R.T. 0.000 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

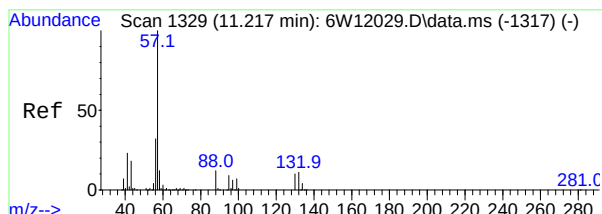
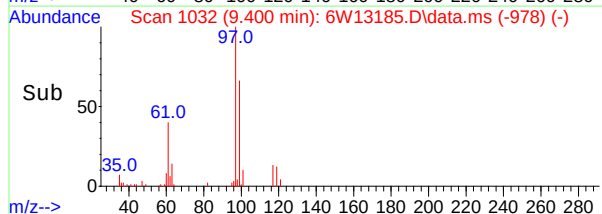
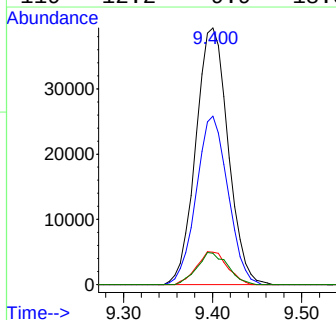
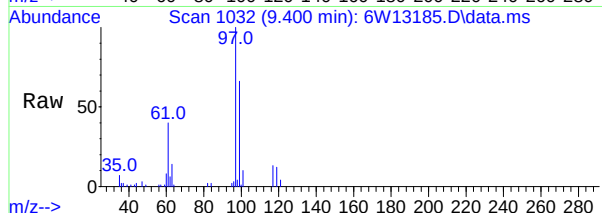
Tgt Ion: 83 Resp: 17437
Ion Ratio Lower Upper
83 100
85 67.9 45.2 84.0
87 11.9 7.3 13.5
47 27.3 14.3 26.5#





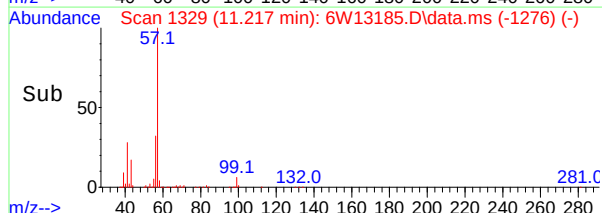
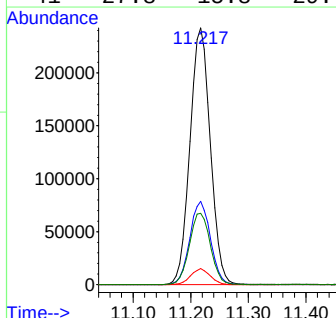
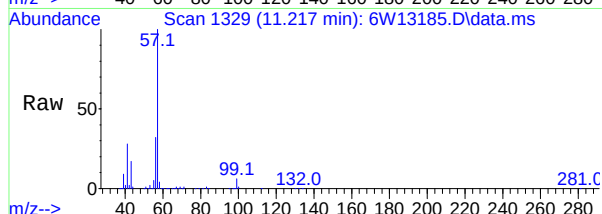
#49
1,1,1-Trichloroethane
Concen: 1.86 ppb(v)
RT: 9.400 min Scan# 1032
Delta R.T. 0.000 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

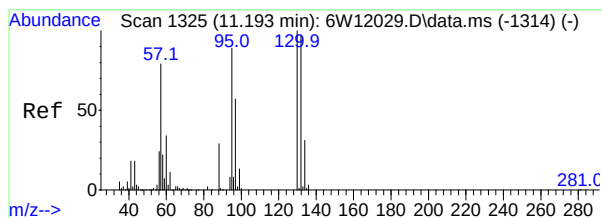
Tgt Ion:	97	Resp:	99200
Ion Ratio	Lower	Upper	
97	100		
99	65.6	45.4	84.4
117	12.7	10.1	18.7
119	12.2	9.9	18.3



#56
2,2,4-Trimethylpentane
Concen: 5.06 ppb(v)
RT: 11.217 min Scan# 1329
Delta R.T. -0.006 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

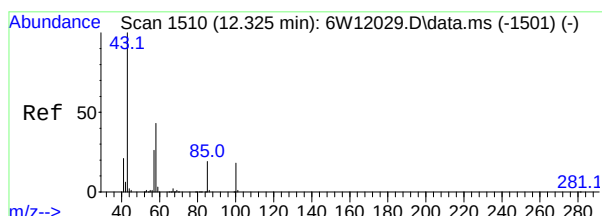
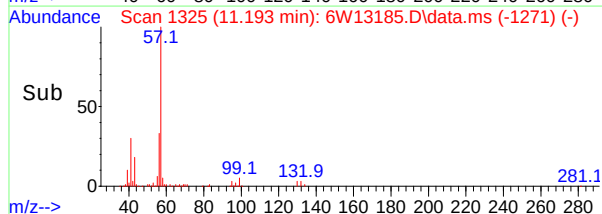
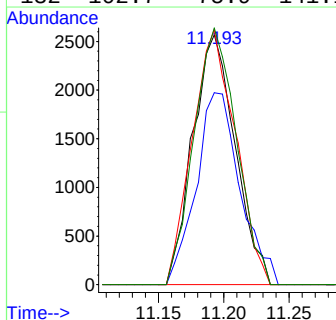
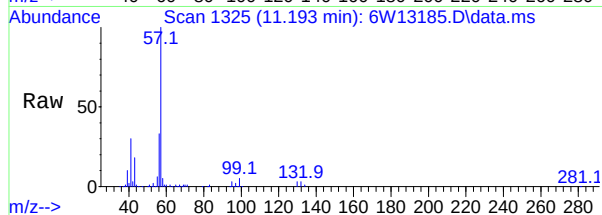
Tgt Ion:	57	Resp:	595083
Ion Ratio	Lower	Upper	
57	100		
56	32.5	22.5	41.9
99	6.3	5.0	9.2
41	27.8	15.8	29.4





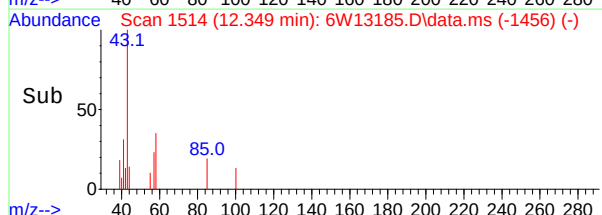
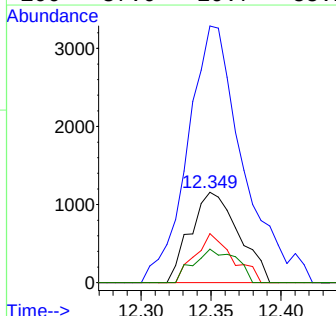
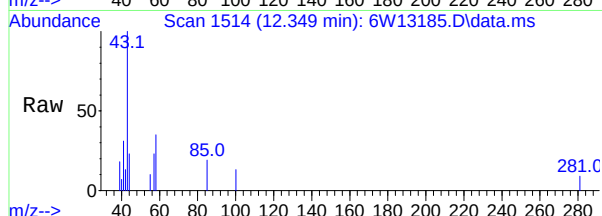
#58
Trichloroethene
Concen: 0.16 ppb(v)
RT: 11.193 min Scan# 1325
Delta R.T. 0.000 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

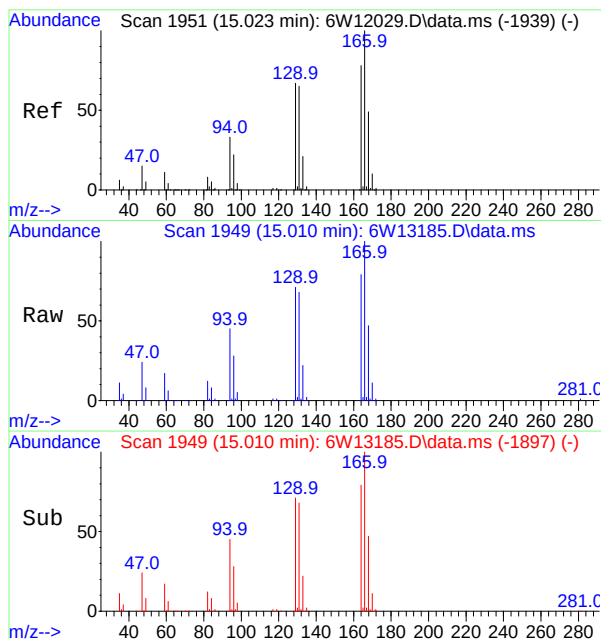
Tgt Ion: 95 Resp: 5806
Ion Ratio Lower Upper
95 100
97 76.8 45.1 83.7
130 102.0 78.6 146.0
132 102.7 75.9 141.1



#66
4-Methyl-2-pentanone
Concen: 0.13 ppb(v)
RT: 12.349 min Scan# 1514
Delta R.T. 0.025 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

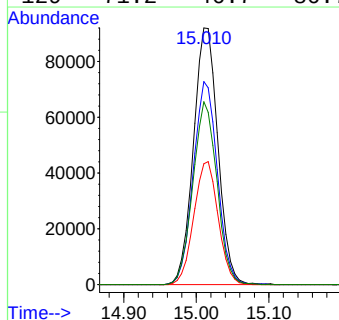
Tgt Ion: 58 Resp: 2767
Ion Ratio Lower Upper
58 100
43 283.9 162.5 301.7
85 54.3 33.0 61.4
100 37.0 29.7 55.1





#74
Tetrachloroethene
Concen: 3.68 ppb(v)
RT: 15.010 min Scan# 1949
Delta R.T. -0.012 min
Lab File: 6W13185.D
Acq: 23 Jul 2019 6:55 pm

Tgt Ion:166 Resp: 216128
Ion Ratio Lower Upper
166 100
164 79.1 54.4 101.0
168 47.1 34.0 63.2
129 71.2 46.7 86.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13186.D
 Acq On : 23 Jul 2019 7:53 pm
 Operator : thomash
 Sample : jc91420-4
 Misc : MS36156,V6W538,400,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 24 14:03:50 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.159	130	249246	10.00	ppb(v # 0.00	
55) 1,4-Difluorobenzene	10.361	114	920829	10.00	ppb(v 0.00	
78) Chlorobenzene-d5	15.891	82	453105	10.00	ppb(v -0.01	
109) Bromochloromethane (A)	8.159	130	249246	10.00	ppb(v # 0.00	
System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.136	95	564376	9.85	ppb(v -0.01	
Spiked Amount	10.000	Range	65 - 128	Recovery	=	98.50%
Target Compounds						
					Qvalue	
3) Freon 152A	3.723	65	5080	0.34	ppb(v# 41	
4) Chlorodifluoromethane	3.772	67	2225	0.40	ppb(v 92	
7) Dichlorodifluoromethane	3.846	85	30306	0.49	ppb(v 99	
9) Chloromethane	3.980	50	21883	1.22	ppb(v 100	
13) n-Butane	4.310	58	21538	5.86	ppb(v# 75	
19) Freon 123	5.063	83	49957	0.89	ppb(v 98	
22) Trichlorofluoromethane	5.289	101	61614	1.04	ppb(v 100	
23) Acetone	5.142	58	127219	11.05	ppb(v# 1	
24) Pentane	5.601	57	105165	20.40	ppb(v 84	
27) Isopropyl Alcohol	5.357	45	134046	3.17	ppb(v 93	
30) Methylene Chloride	5.987	84	188507	8.32	ppb(v 86	
32) Ethanol	4.726	45	57078	6.38	ppb(v 98	
40) 2-Butanone	7.535	72	7711	0.65	ppb(v 87	
46) Chloroform	8.299	83	12260	0.23	ppb(v 98	
49) 1,1,1-Trichloroethane	9.394	97	185738	3.50	ppb(v 98	
68) Toluene	13.505	91	18360	0.18	ppb(v 98	
81) m,p-Xylene	16.742	91	16963	0.16	ppb(v 92	
97) 1,2,4-Trimethylbenzene	20.076	105	20077	0.18	ppb(v# 69	

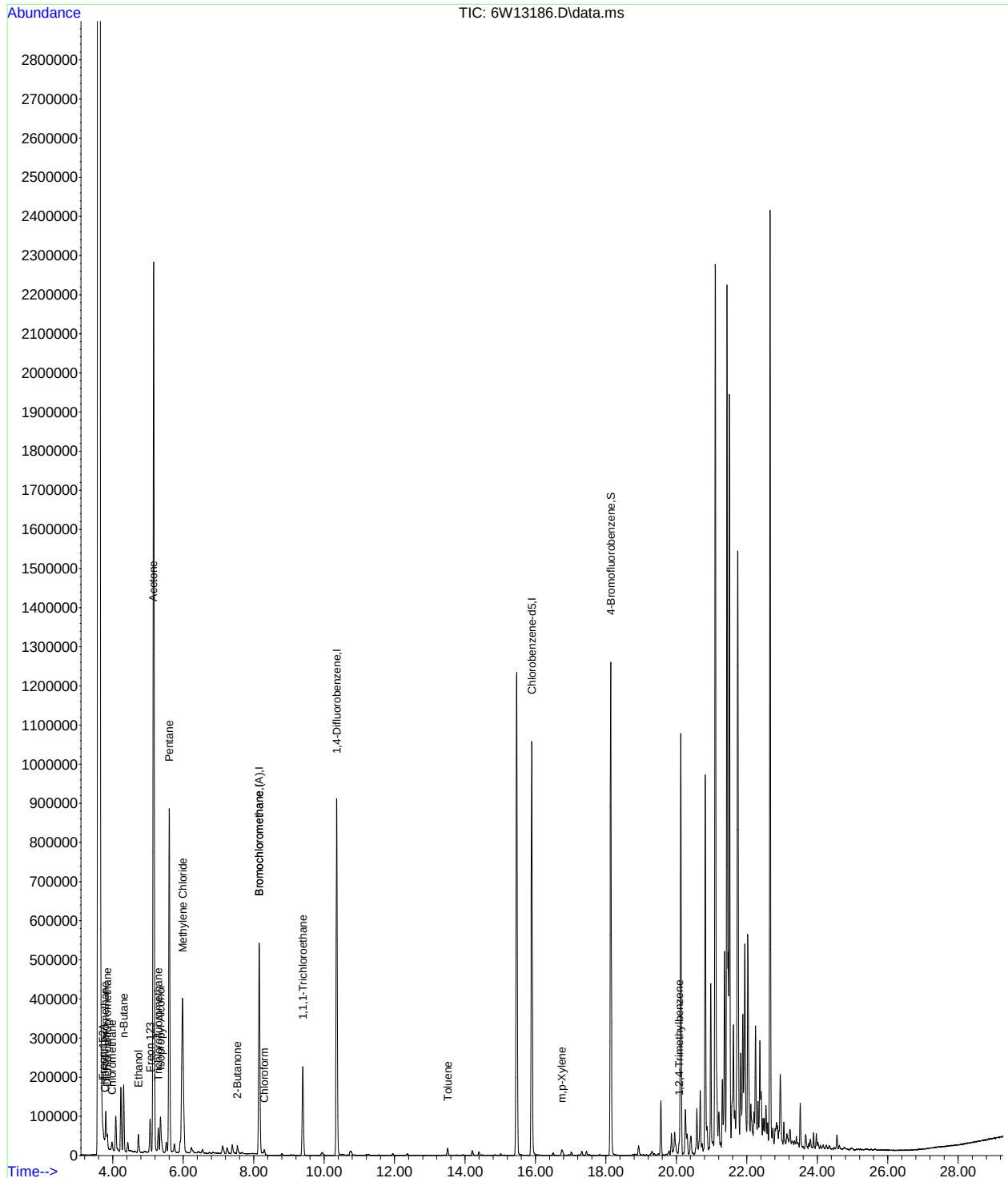
(#) = qualifier out of range (m) = manual integration (+) = signals summed

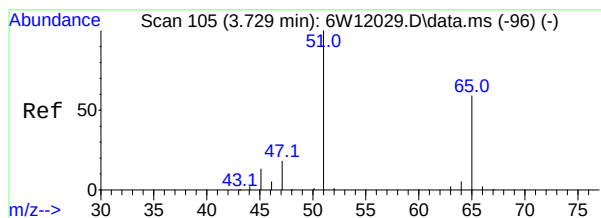
7.1.4

7

Data Path : C:\msdchem\1\data\
Data File : 6W13186.D
Acq On : 23 Jul 2019 7:53 pm
Operator : thomash
Sample : jc91420-4
Misc : MS36156,V6W538,400,,,1
ALS Vial : 7 Sample Multiplier: 1

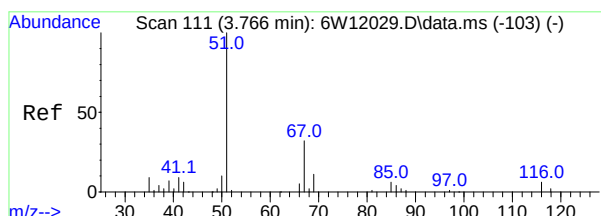
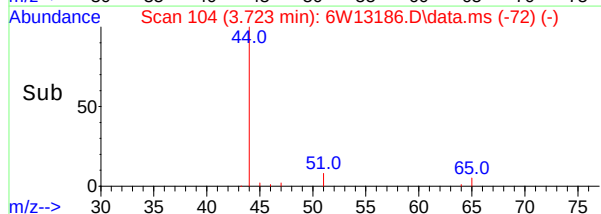
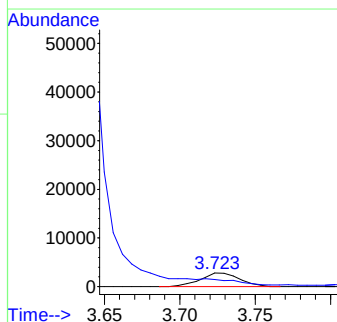
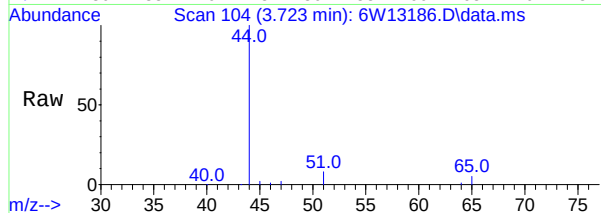
Quant Time: Jul 24 14:03:50 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration





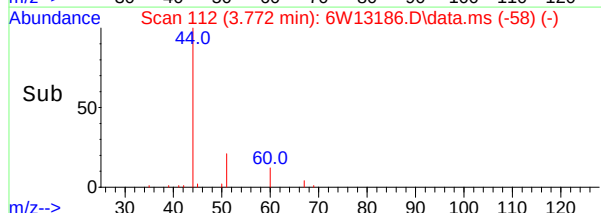
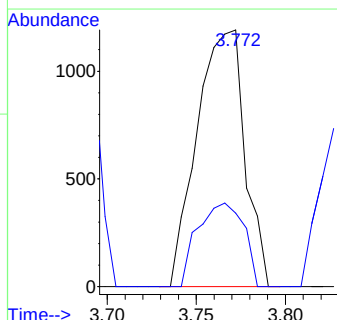
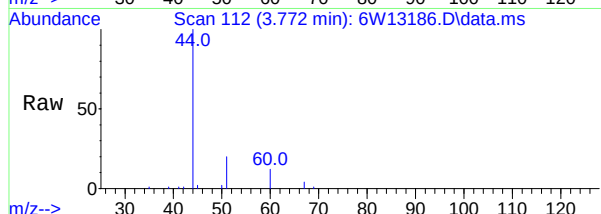
#3
 Freon 152A
 Concen: 0.34 ppb(v)
 RT: 3.723 min Scan# 104
 Delta R.T. -0.006 min
 Lab File: 6W13186.D
 Acq: 23 Jul 2019 7:53 pm

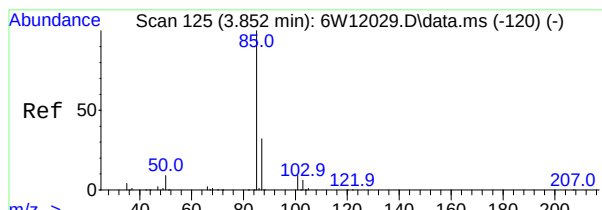
Tgt Ion: 65 Resp: 5080
 Ion Ratio Lower Upper
 65 100
 45 51.7 16.0 29.8#



#4
 Chlorodifluoromethane
 Concen: 0.40 ppb(v)
 RT: 3.772 min Scan# 112
 Delta R.T. 0.000 min
 Lab File: 6W13186.D
 Acq: 23 Jul 2019 7:53 pm

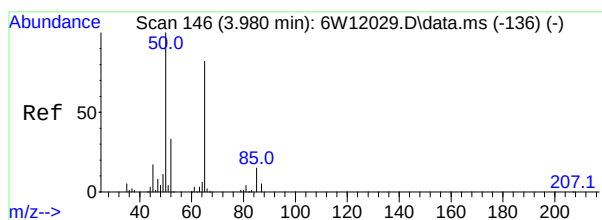
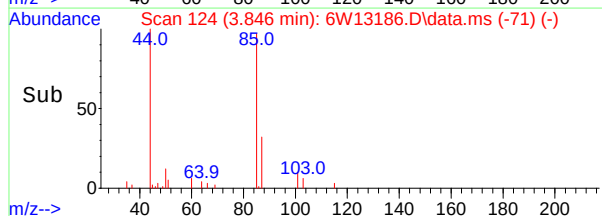
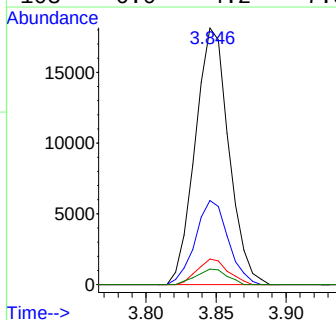
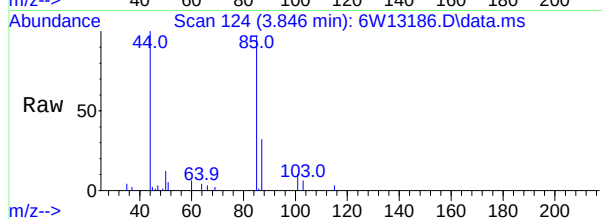
Tgt Ion: 67 Resp: 2225
 Ion Ratio Lower Upper
 67 100
 69 28.6 23.2 43.0





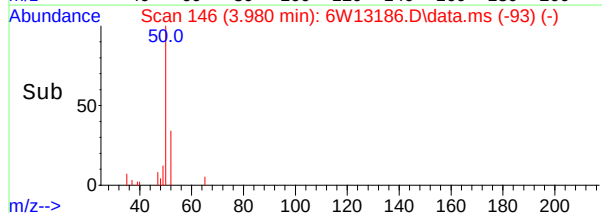
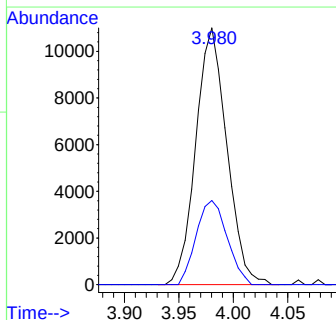
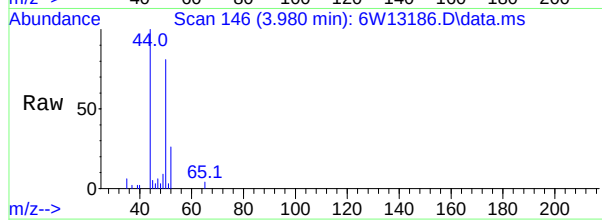
#7
Dichlorodifluoromethane
Concen: 0.49 ppb(v)
RT: 3.846 min Scan# 124
Delta R.T. -0.006 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

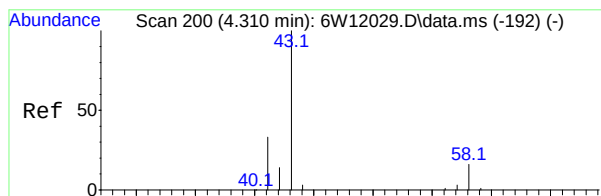
Tgt Ion: 85 Resp: 30306
Ion Ratio Lower Upper
85 100
87 32.7 22.7 42.1
101 10.0 6.3 11.7
103 6.0 4.2 7.8



#9
Chloromethane
Concen: 1.22 ppb(v)
RT: 3.980 min Scan# 146
Delta R.T. -0.006 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

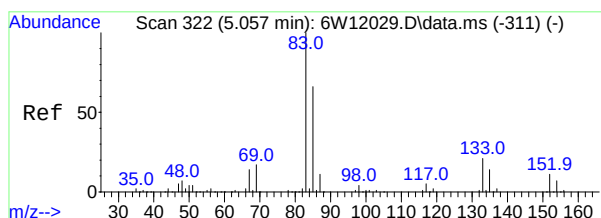
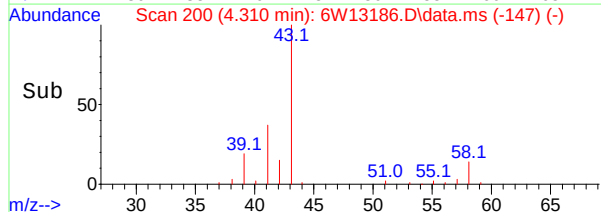
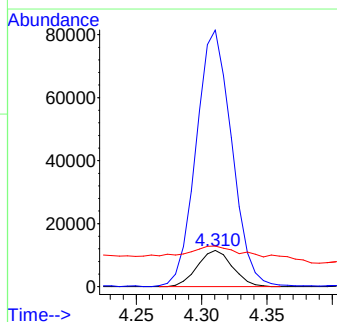
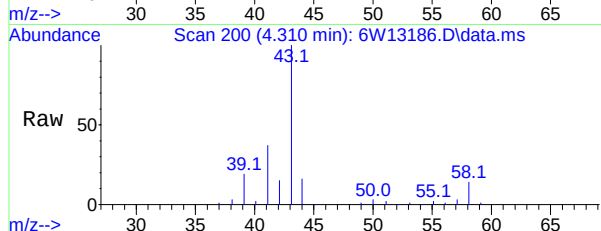
Tgt Ion: 50 Resp: 21883
Ion Ratio Lower Upper
50 100
52 32.8 23.0 42.8





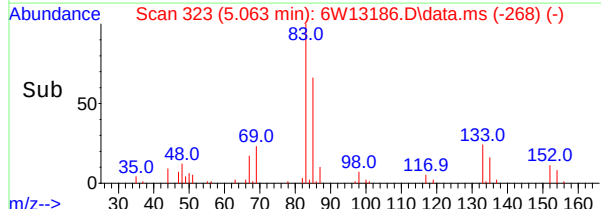
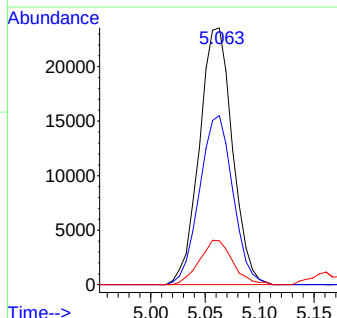
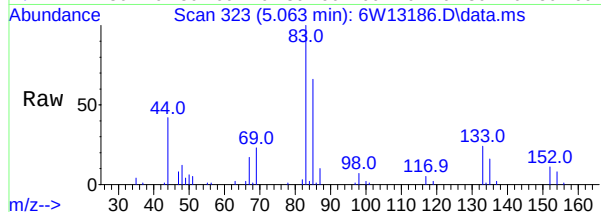
#13
n-Butane
Concen: 5.86 ppb(v)
RT: 4.310 min Scan# 200
Delta R.T. -0.006 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

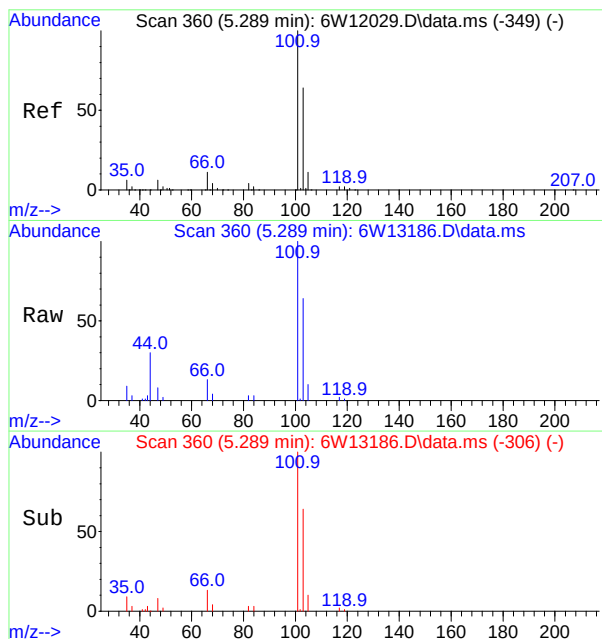
Tgt Ion: 58 Resp: 21538
Ion Ratio Lower Upper
58 100
43 706.9 451.4 838.4
44 111.6 17.1 31.7#



#19
Freon 123
Concen: 0.89 ppb(v)
RT: 5.063 min Scan# 323
Delta R.T. 0.006 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

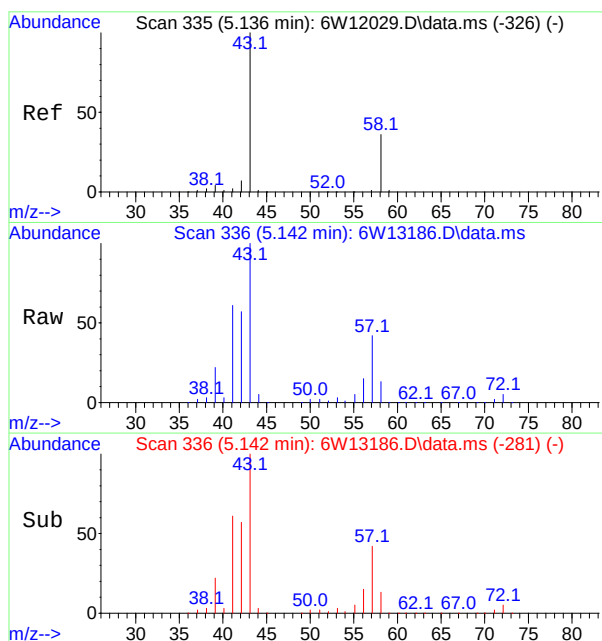
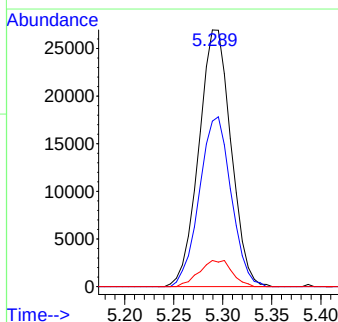
Tgt Ion: 83 Resp: 49957
Ion Ratio Lower Upper
83 100
85 65.8 45.9 85.3
67 17.1 9.9 18.5





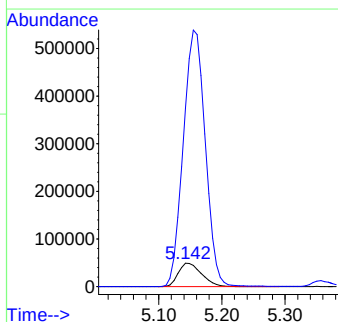
#22
 Trichlorofluoromethane
 Concen: 1.04 ppb(v)
 RT: 5.289 min Scan# 360
 Delta R.T. 0.000 min
 Lab File: 6W13186.D
 Acq: 23 Jul 2019 7:53 pm

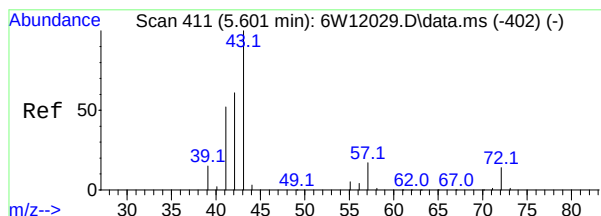
Tgt Ion	Ratio	Lower	Upper
101	100		
103	64.5	45.1	83.7
105	10.2	7.5	13.9



#23
 Acetone
 Concen: 11.05 ppb(v)
 RT: 5.142 min Scan# 336
 Delta R.T. 0.006 min
 Lab File: 6W13186.D
 Acq: 23 Jul 2019 7:53 pm

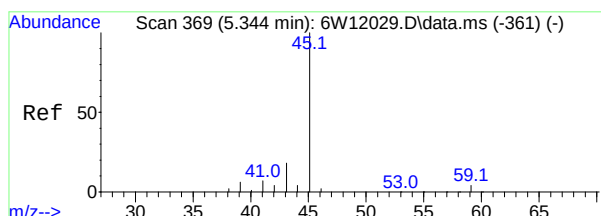
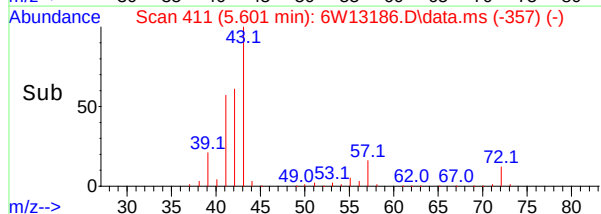
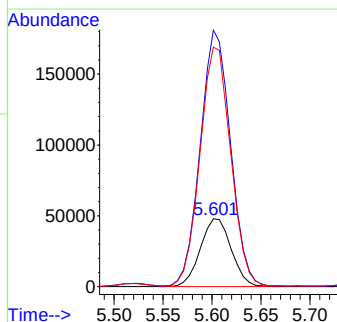
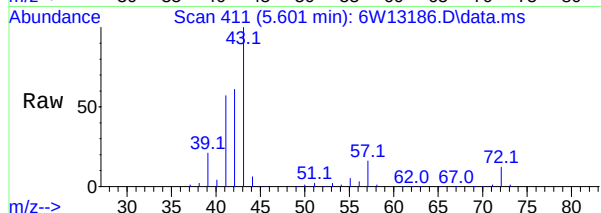
Tgt Ion	Ratio	Lower	Upper
58	100		
43	758.7	197.9	367.5#





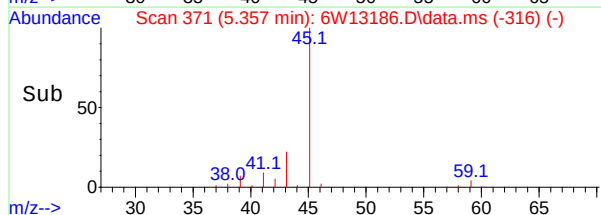
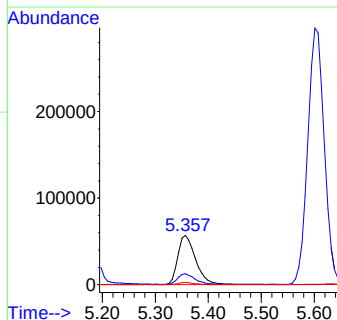
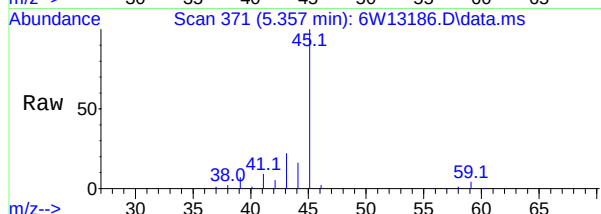
#24
Pentane
Concen: 20.40 ppb(v)
RT: 5.601 min Scan# 411
Delta R.T. 0.000 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

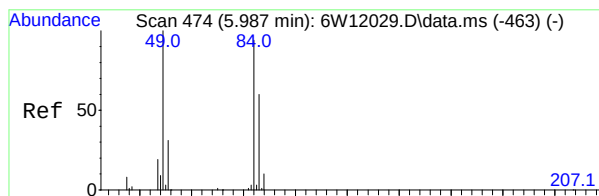
Tgt Ion: 57 Resp: 105165
Ion Ratio Lower Upper
57 100
42 379.2 250.3 464.9
41 353.9 214.8 399.0



#27
Isopropyl Alcohol
Concen: 3.17 ppb(v)
RT: 5.357 min Scan# 371
Delta R.T. 0.007 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

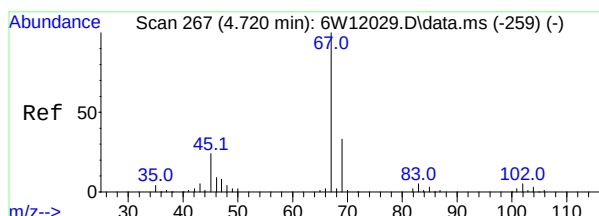
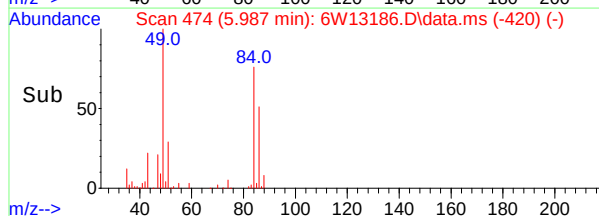
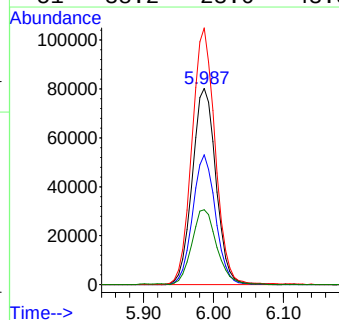
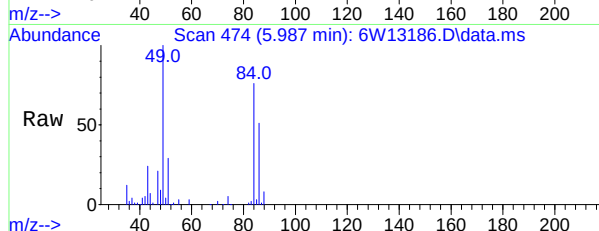
Tgt Ion: 45 Resp: 134046
Ion Ratio Lower Upper
45 100
43 22.0 12.6 23.4
59 4.3 3.1 5.8





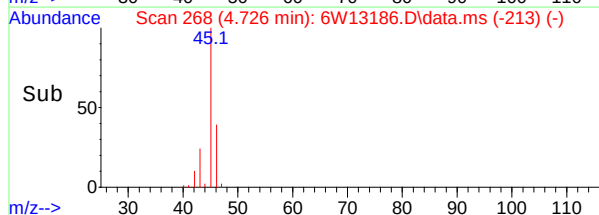
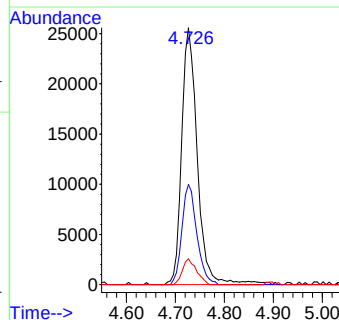
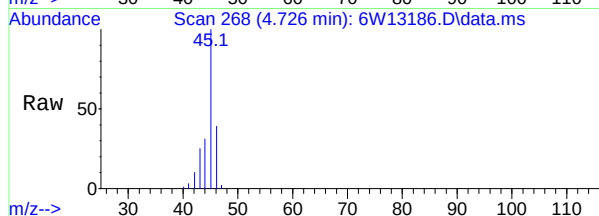
#30
Methylene Chloride
Concen: 8.32 ppb(v)
RT: 5.987 min Scan# 474
Delta R.T. 0.000 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

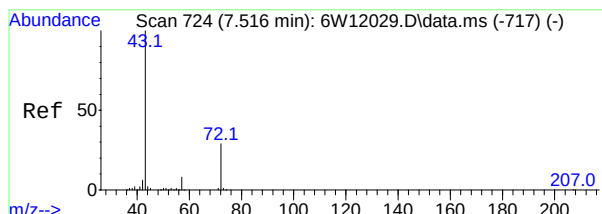
Tgt Ion: 84 Resp: 188507
Ion Ratio Lower Upper
84 100
86 66.1 45.1 83.7
49 130.9 74.7 138.7
51 38.2 23.6 43.8



#32
Ethanol
Concen: 6.38 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.006 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

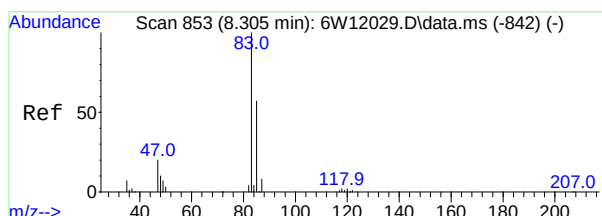
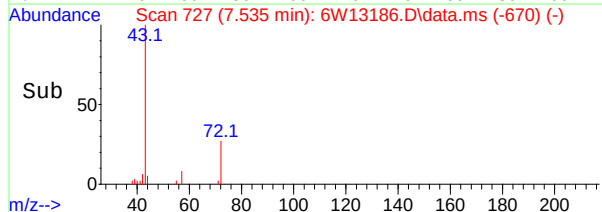
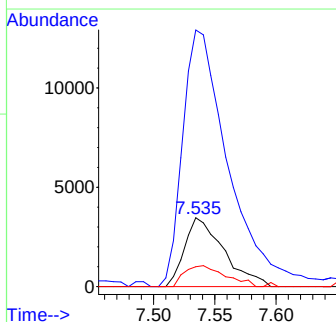
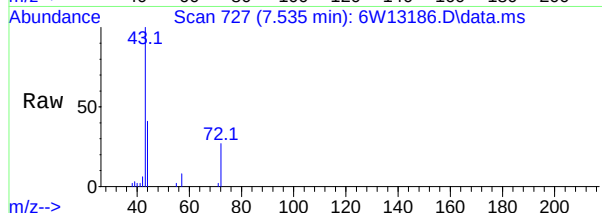
Tgt Ion: 45 Resp: 57078
Ion Ratio Lower Upper
45 100
46 39.0 27.7 51.5
42 10.1 5.5 10.1





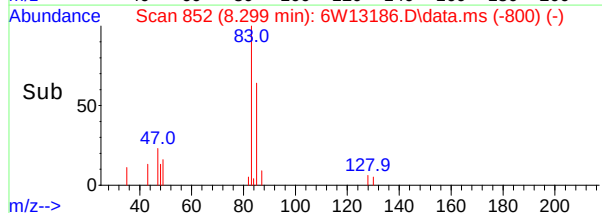
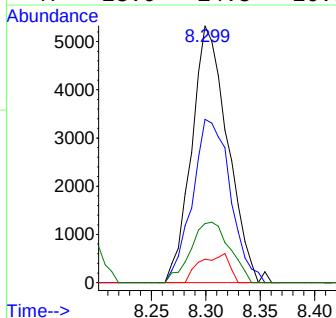
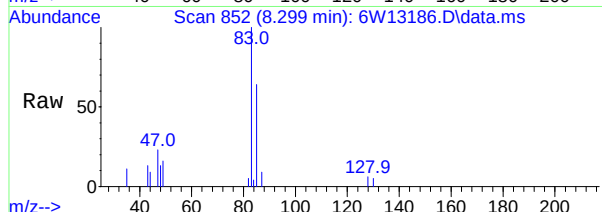
#40
2-Butanone
Concen: 0.65 ppb(v)
RT: 7.535 min Scan# 727
Delta R.T. 0.018 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

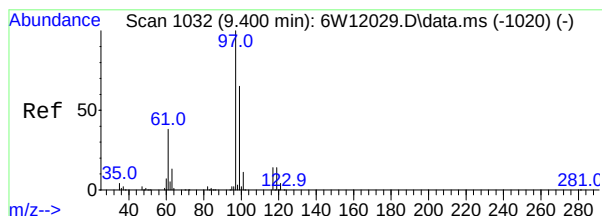
Tgt Ion: 72 Resp: 7711
Ion Ratio Lower Upper
72 100
43 372.4 240.3 446.3
57 29.1 20.1 37.3



#46
Chloroform
Concen: 0.23 ppb(v)
RT: 8.299 min Scan# 852
Delta R.T. -0.012 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

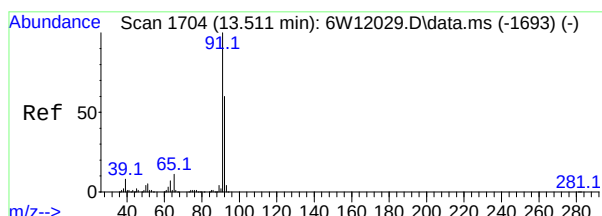
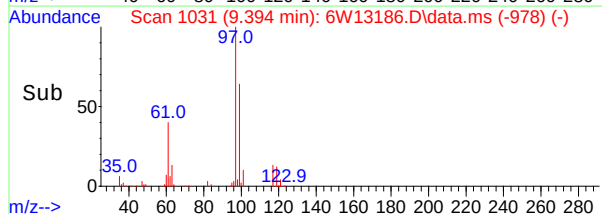
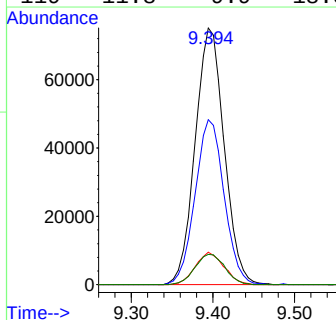
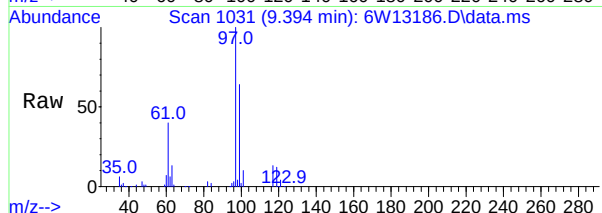
Tgt Ion: 83 Resp: 12260
Ion Ratio Lower Upper
83 100
85 63.6 45.2 84.0
87 9.2 7.3 13.5
47 23.0 14.3 26.5





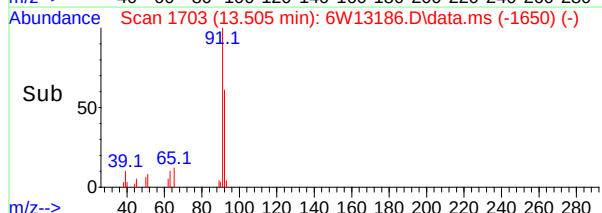
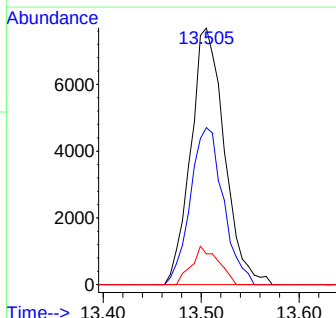
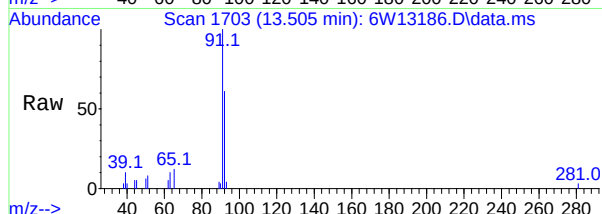
#49
1,1,1-Trichloroethane
Concen: 3.50 ppb(v)
RT: 9.394 min Scan# 1031
Delta R.T. -0.006 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

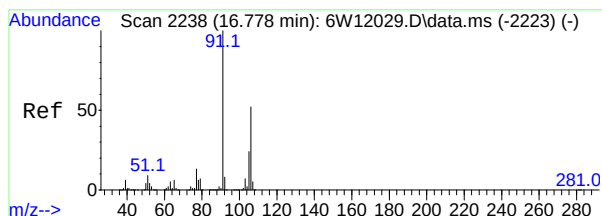
Tgt Ion:	97	Resp:	185738
Ion Ratio	Lower	Upper	
97	100		
99	64.3	45.4	84.4
117	12.6	10.1	18.7
119	11.8	9.9	18.3



#68
Toluene
Concen: 0.18 ppb(v)
RT: 13.505 min Scan# 1703
Delta R.T. -0.006 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

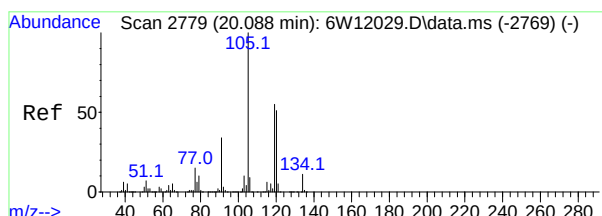
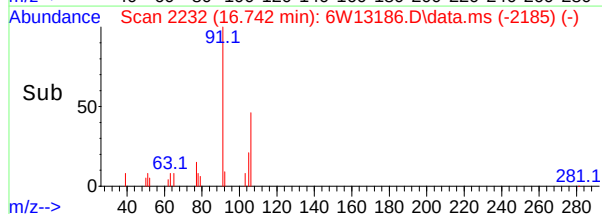
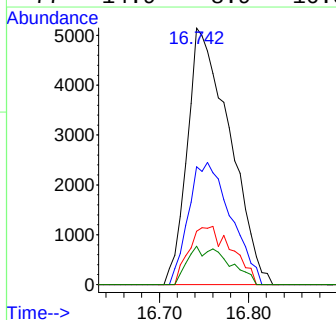
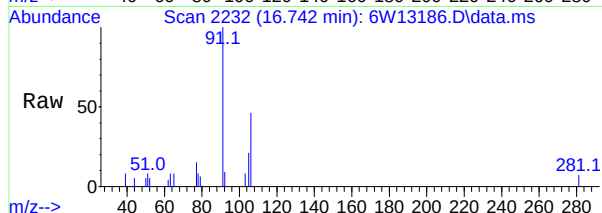
Tgt Ion:	91	Resp:	18360
Ion Ratio	Lower	Upper	
91	100		
92	61.1	41.7	77.5
65	12.0	7.4	13.8





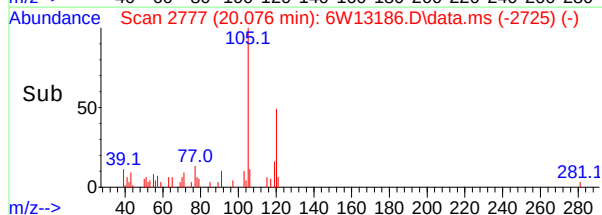
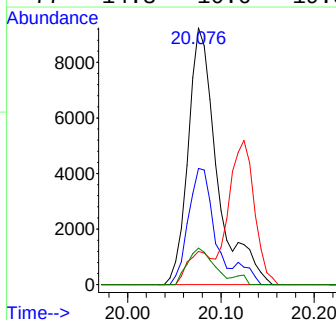
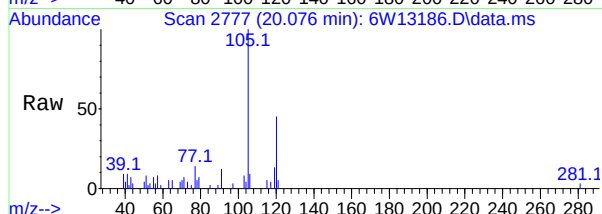
#81
m,p-Xylene
Concen: 0.16 ppb(v)
RT: 16.742 min Scan# 2232
Delta R.T. -0.043 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

Tgt Ion: 91 Resp: 16963
Ion Ratio Lower Upper
91 100
106 45.9 36.5 67.9
105 20.8 16.7 30.9
77 14.9 8.9 16.5



#97
1,2,4-Trimethylbenzene
Concen: 0.18 ppb(v)
RT: 20.076 min Scan# 2777
Delta R.T. -0.012 min
Lab File: 6W13186.D
Acq: 23 Jul 2019 7:53 pm

Tgt Ion: 105 Resp: 20077
Ion Ratio Lower Upper
105 100
120 45.3 36.0 67.0
119 13.0 38.7 71.9#
77 14.3 10.6 19.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13187.D
 Acq On : 23 Jul 2019 8:53 pm
 Operator : thomash
 Sample : jc91420-5
 Misc : MS36156,V6W538,400,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 24 14:06:03 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.158	130	246760	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	945773	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.891	82	448847	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.158	130	246760	10.00	ppb(v	0.00

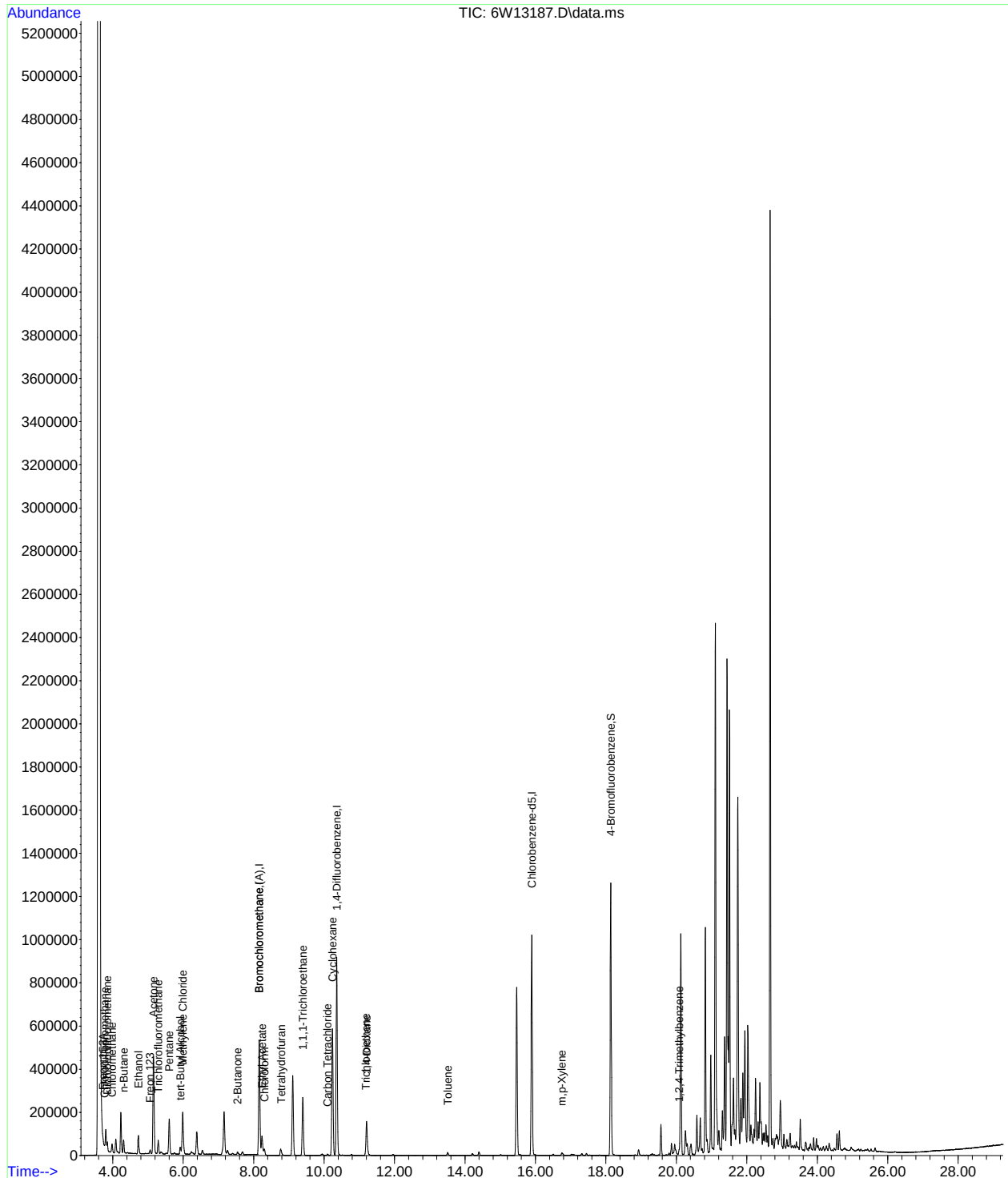
System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.136 95 562546 9.91 ppb(v -0.01
 Spiked Amount 10.000 Range 65 - 128 Recovery = 99.10%

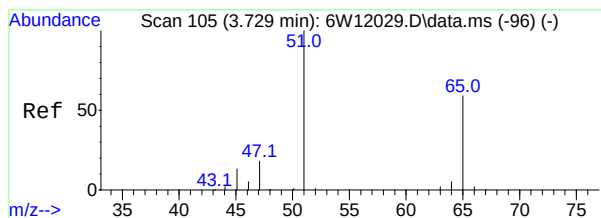
Target Compounds					Qvalue	
3) Freon 152A	3.723	65	5628	0.38	ppb(v#	39
4) Chlorodifluoromethane	3.766	67	2585	0.47	ppb(v	92
7) Dichlorodifluoromethane	3.845	85	36349	0.59	ppb(v	99
9) Chloromethane	3.980	50	43105	2.43	ppb(v	98
13) n-Butane	4.310	58	8180	2.25	ppb(v#	68
19) Freon 123	5.057	83	10265	0.18	ppb(v	95
22) Trichlorofluoromethane	5.289	101	62880	1.07	ppb(v	99
23) Acetone	5.148	58	66727	5.85	ppb(v#	1
24) Pentane	5.601	57	19500	3.82	ppb(v	90
30) Methylene Chloride	5.987	84	103958	4.64	ppb(v	89
32) Ethanol	4.726	45	102447	11.58	ppb(v	99
36) tert-Butyl Alcohol	5.919	59	43571	0.94	ppb(v#	88
40) 2-Butanone	7.540	72	4729	0.40	ppb(v#	58
44) Ethyl Acetate	8.238	61	17080	2.43	ppb(v	87
46) Chloroform	8.305	83	25509	0.48	ppb(v	96
48) Tetrahydrofuran	8.782	72	1766	0.17	ppb(v#	1
49) 1,1,1-Trichloroethane	9.394	97	218399	4.16	ppb(v	97
52) Carbon Tetrachloride	10.092	117	4384	0.08	ppb(v	87
53) Cyclohexane	10.232	56	327521	9.84	ppb(v	96
58) Trichloroethene	11.187	95	17823	0.48	ppb(v	90
63) 1,4-Dioxane	11.205	88	124454	5.39	ppb(v#	59
68) Toluene	13.505	91	14279	0.14	ppb(v	96
81) m,p-Xylene	16.748	91	14781	0.14	ppb(v	97
97) 1,2,4-Trimethylbenzene	20.082	105	17517	0.16	ppb(v#	67

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

Data Path : C:\msdchem\1\data\
Data File : 6W13187.D
Acq On : 23 Jul 2019 8:53 pm
Operator : thomash
Sample : jc91420-5
Misc : MS36156,V6W538,400,,,1
ALS Vial : 8 Sample Multiplier: 1

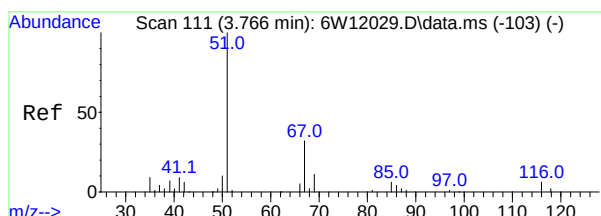
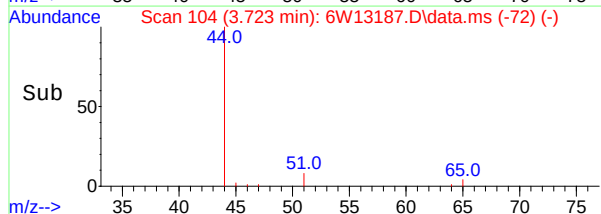
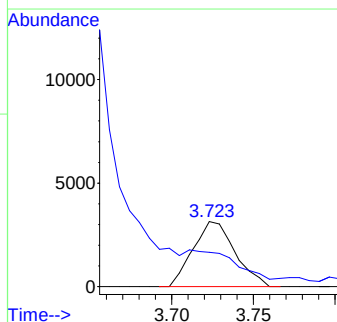
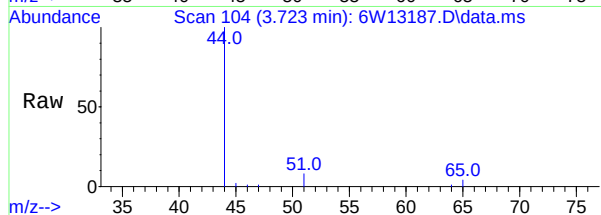
Quant Time: Jul 24 14:06:03 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration





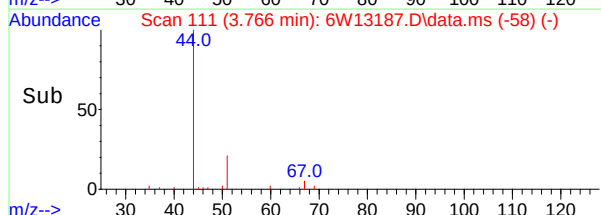
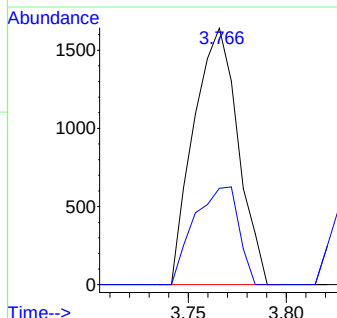
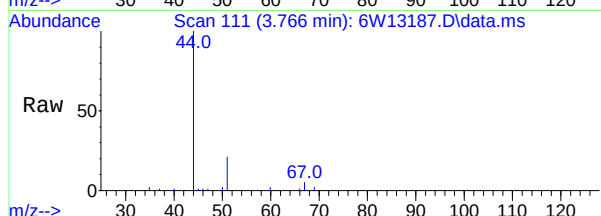
#3
Freon 152A
Concen: 0.38 ppb(v)
RT: 3.723 min Scan# 104
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

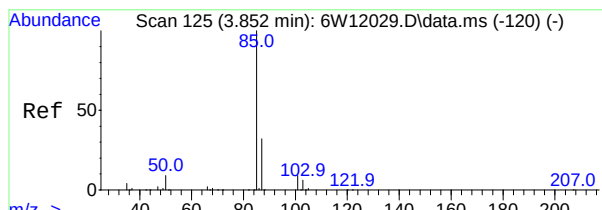
Tgt Ion: 65 Resp: 5628
Ion Ratio Lower Upper
65 100
45 52.5 16.0 29.8#



#4
Chlorodifluoromethane
Concen: 0.47 ppb(v)
RT: 3.766 min Scan# 111
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

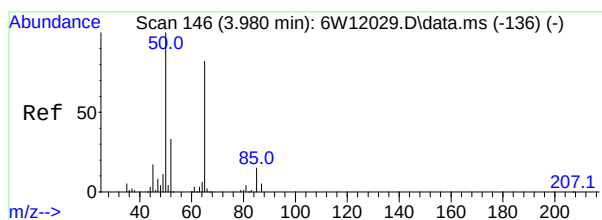
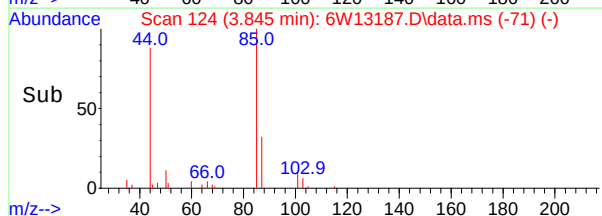
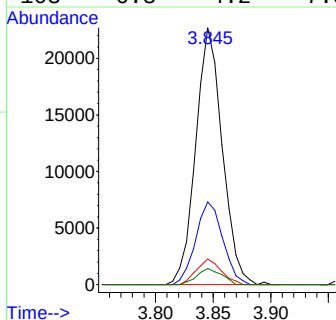
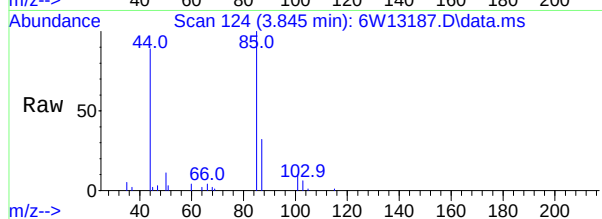
Tgt Ion: 67 Resp: 2585
Ion Ratio Lower Upper
67 100
69 37.6 23.2 43.0





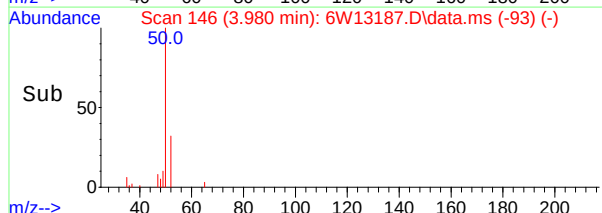
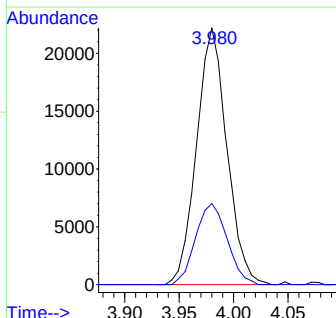
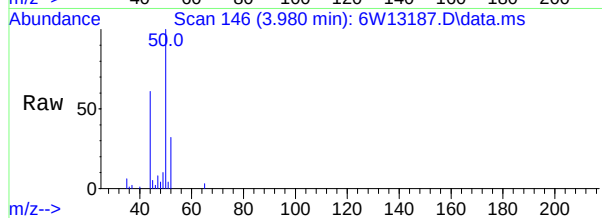
#7
 Dichlorodifluoromethane
 Concen: 0.59 ppb(v)
 RT: 3.845 min Scan# 124
 Delta R.T. -0.006 min
 Lab File: 6W13187.D
 Acq: 23 Jul 2019 8:53 pm

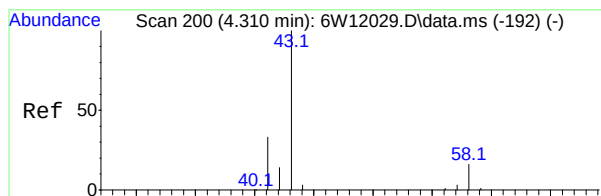
Tgt Ion:	85	Resp:	36349
Ion Ratio	Lower	Upper	
85	100		
87	32.2	22.7	42.1
101	10.0	6.3	11.7
103	6.3	4.2	7.8



#9
 Chloromethane
 Concen: 2.43 ppb(v)
 RT: 3.980 min Scan# 146
 Delta R.T. -0.006 min
 Lab File: 6W13187.D
 Acq: 23 Jul 2019 8:53 pm

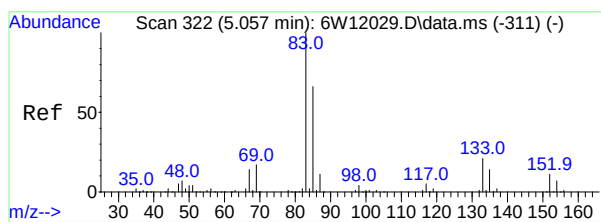
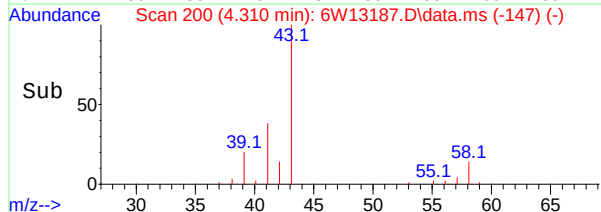
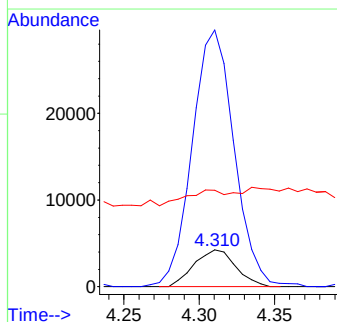
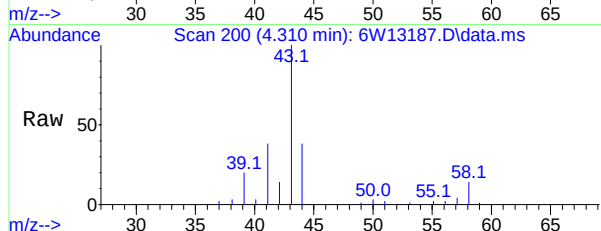
Tgt Ion:	50	Resp:	43105
Ion Ratio	Lower	Upper	
50	100		
52	31.6	23.0	42.8





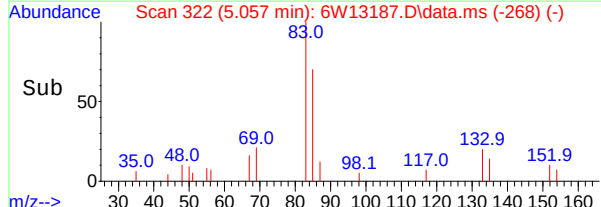
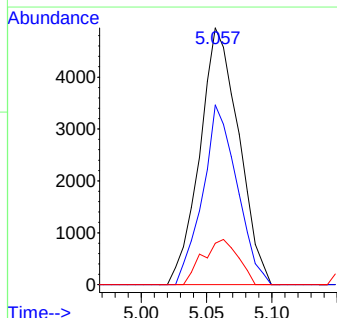
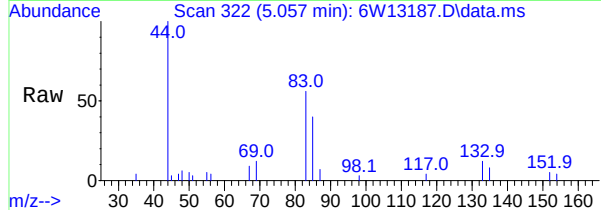
#13
n-Butane
Concen: 2.25 ppb(v)
RT: 4.310 min Scan# 200
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

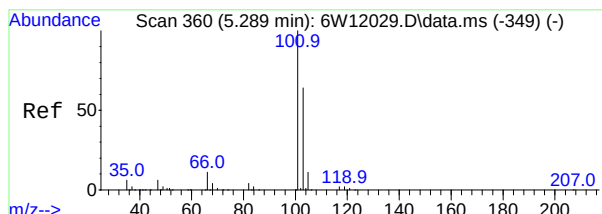
Tgt Ion: 58 Resp: 8180
Ion Ratio Lower Upper
58 100
43 696.1 451.4 838.4
44 261.2 17.1 31.7#



#19
Freon 123
Concen: 0.18 ppb(v)
RT: 5.057 min Scan# 322
Delta R.T. -0.000 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

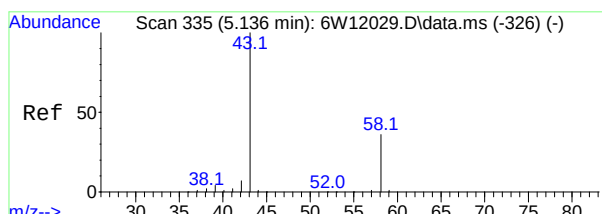
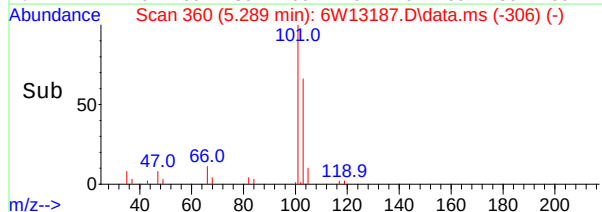
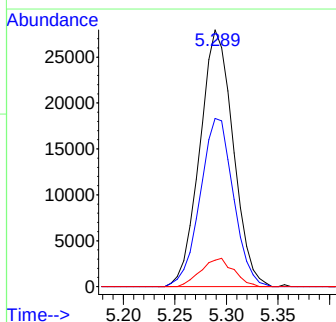
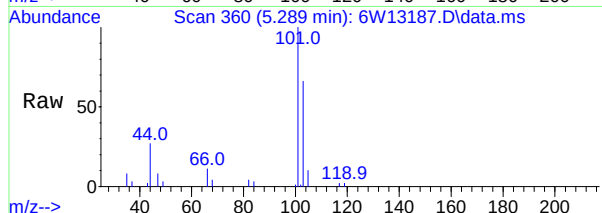
Tgt Ion: 83 Resp: 10265
Ion Ratio Lower Upper
83 100
85 69.9 45.9 85.3
67 16.2 9.9 18.5





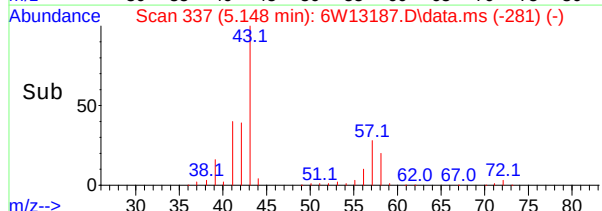
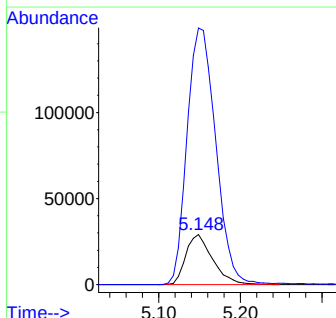
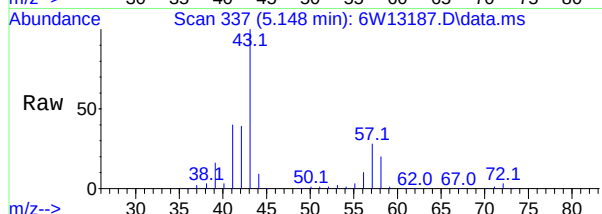
#22
 Trichlorofluoromethane
 Concen: 1.07 ppb(v)
 RT: 5.289 min Scan# 360
 Delta R.T. -0.000 min
 Lab File: 6W13187.D
 Acq: 23 Jul 2019 8:53 pm

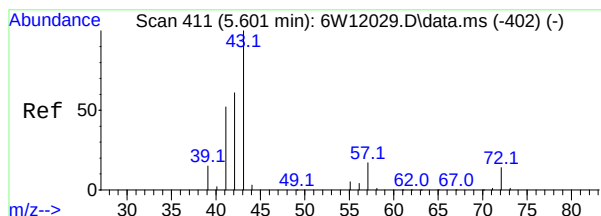
Tgt Ion: 101 Resp: 62880
 Ion Ratio Lower Upper
 101 100
 103 65.5 45.1 83.7
 105 10.3 7.5 13.9



#23
 Acetone
 Concen: 5.85 ppb(v)
 RT: 5.148 min Scan# 337
 Delta R.T. 0.012 min
 Lab File: 6W13187.D
 Acq: 23 Jul 2019 8:53 pm

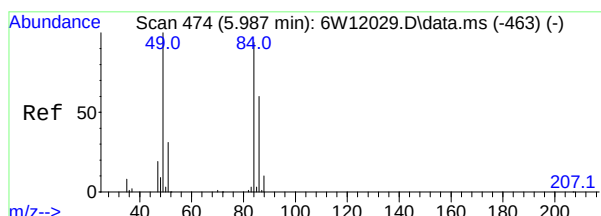
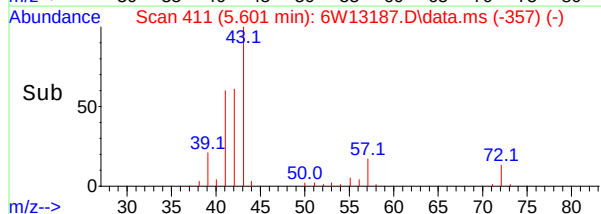
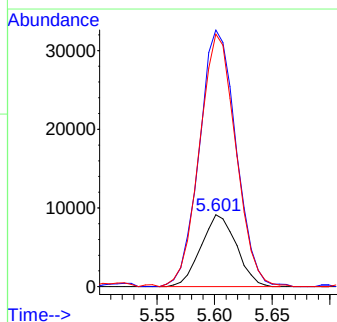
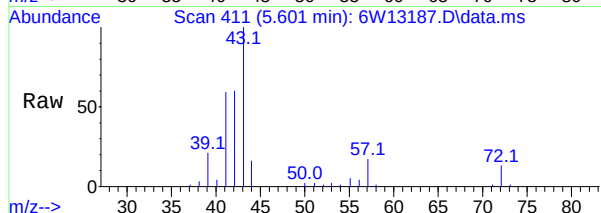
Tgt Ion: 58 Resp: 66727
 Ion Ratio Lower Upper
 58 100
 43 510.9 197.9 367.5#





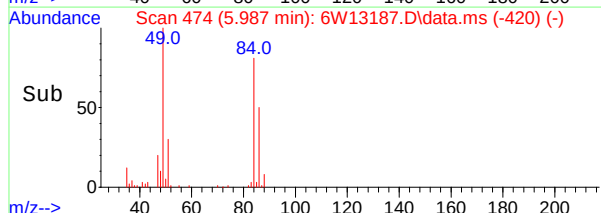
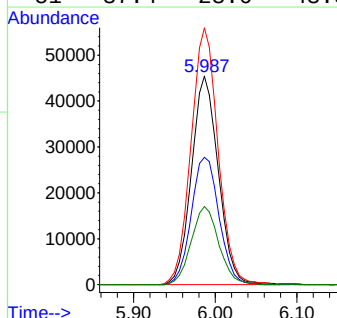
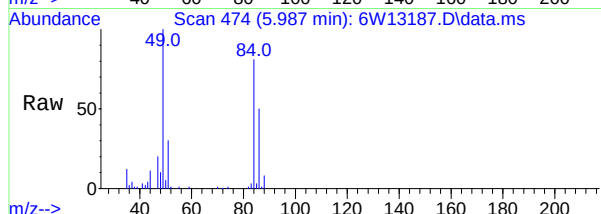
#24
Pentane
Concen: 3.82 ppb(v)
RT: 5.601 min Scan# 411
Delta R.T. -0.000 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

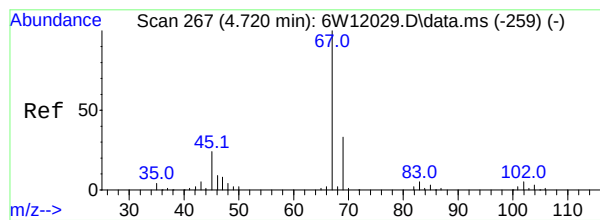
Tgt Ion: 57 Resp: 19500
Ion Ratio Lower Upper
57 100
42 356.8 250.3 464.9
41 350.9 214.8 399.0



#30
Methylene Chloride
Concen: 4.64 ppb(v)
RT: 5.987 min Scan# 474
Delta R.T. -0.000 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

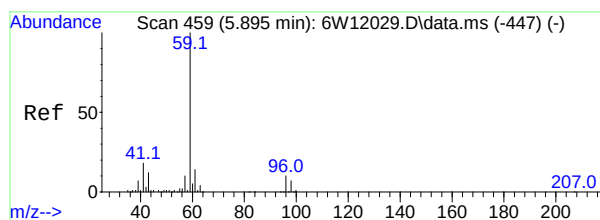
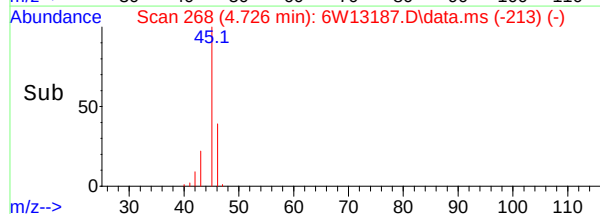
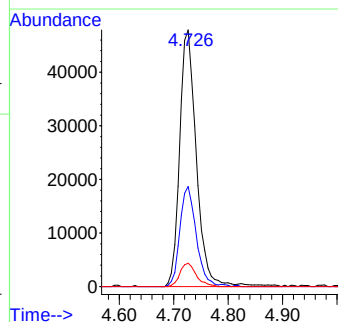
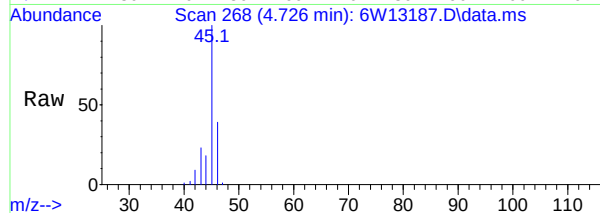
Tgt Ion: 84 Resp: 103958
Ion Ratio Lower Upper
84 100
86 61.1 45.1 83.7
49 123.2 74.7 138.7
51 37.4 23.6 43.8





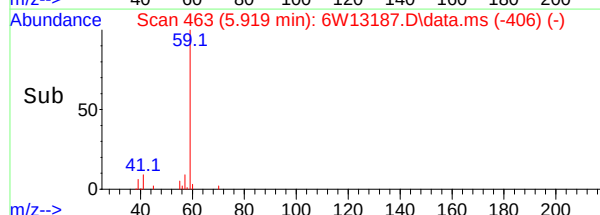
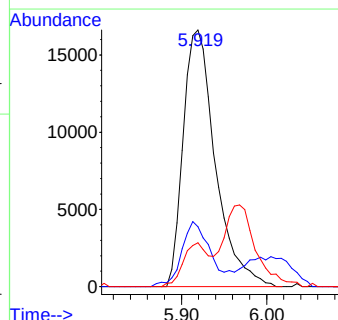
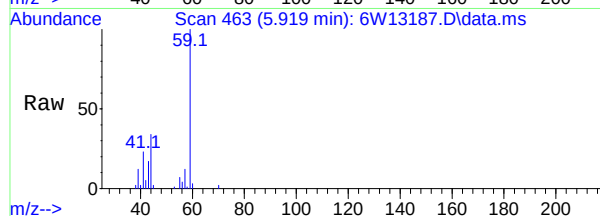
#32
Ethanol
Concen: 11.58 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

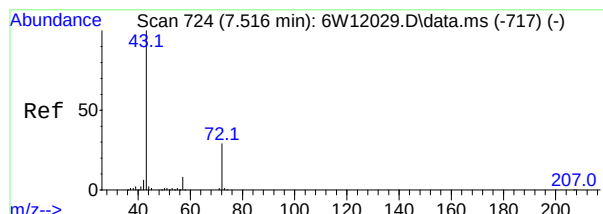
Tgt Ion: 45 Resp: 102447
Ion Ratio Lower Upper
45 100
46 39.0 27.7 51.5
42 9.1 5.5 10.1



#36
tert-Butyl Alcohol
Concen: 0.94 ppb(v)
RT: 5.919 min Scan# 463
Delta R.T. 0.018 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

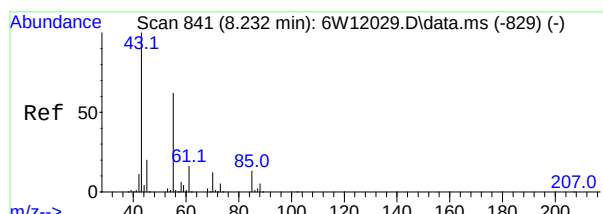
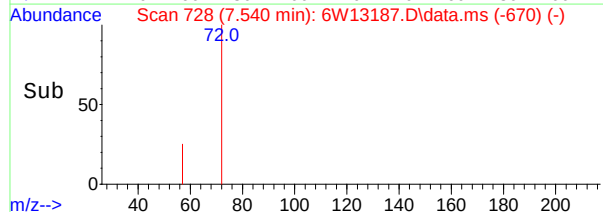
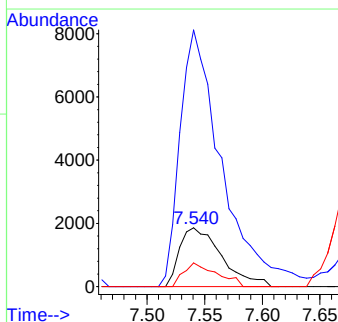
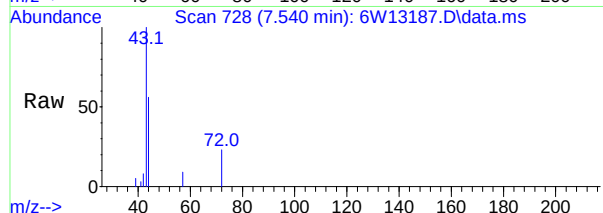
Tgt Ion: 59 Resp: 43571
Ion Ratio Lower Upper
59 100
41 23.3 12.8 23.8
43 17.1 8.6 16.0#





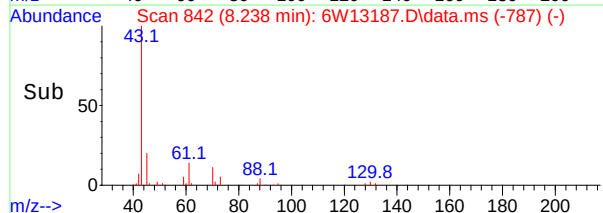
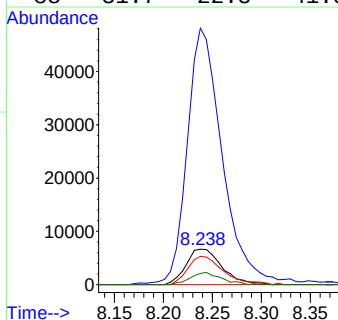
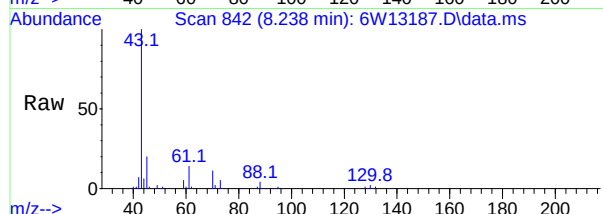
#40
2-Butanone
Concen: 0.40 ppb(v)
RT: 7.540 min Scan# 728
Delta R.T. 0.024 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

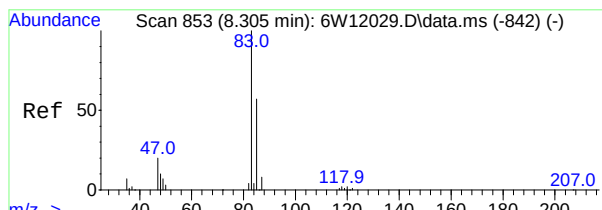
Tgt Ion: 72 Resp: 4729
Ion Ratio Lower Upper
72 100
43 436.0 240.3 446.3
57 40.4 20.1 37.3#



#44
Ethyl Acetate
Concen: 2.43 ppb(v)
RT: 8.238 min Scan# 842
Delta R.T. 0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

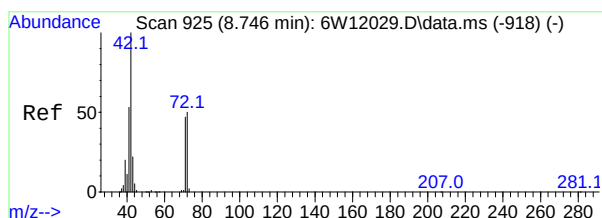
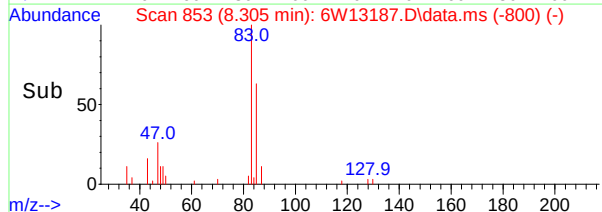
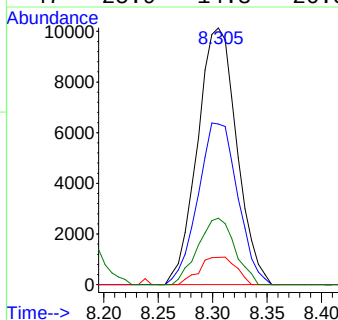
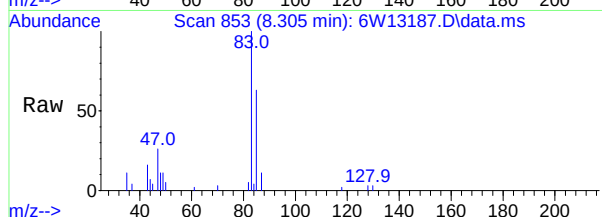
Tgt Ion: 61 Resp: 17080
Ion Ratio Lower Upper
61 100
43 722.2 469.9 872.7
70 79.5 54.9 101.9
88 31.7 22.3 41.5





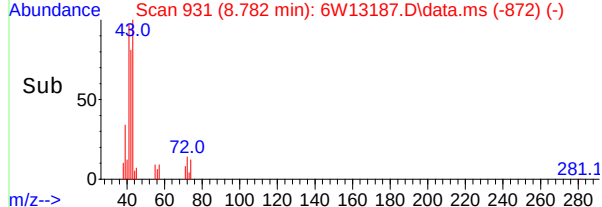
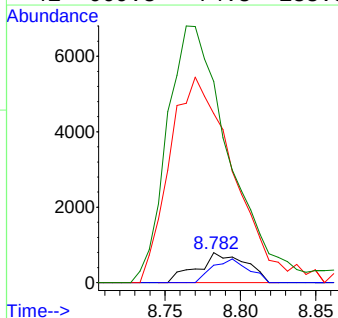
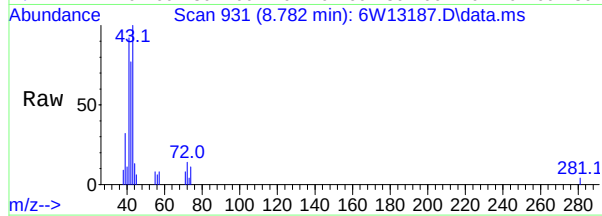
#46
Chloroform
Concen: 0.48 ppb(v)
RT: 8.305 min Scan# 853
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

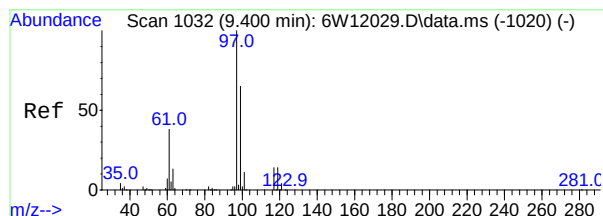
Tgt Ion: 83 Resp: 25509
Ion Ratio Lower Upper
83 100
85 62.5 45.2 84.0
87 10.6 7.3 13.5
47 25.9 14.3 26.5



#48
Tetrahydrofuran
Concen: 0.17 ppb(v)
RT: 8.782 min Scan# 931
Delta R.T. 0.030 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

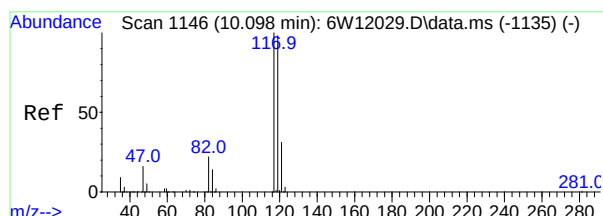
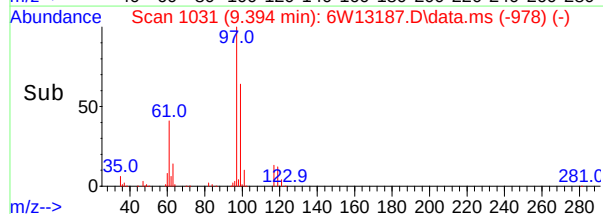
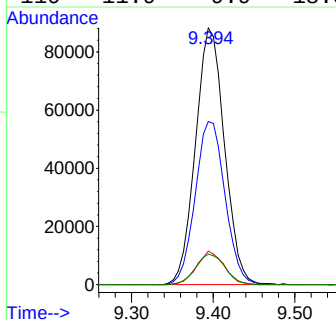
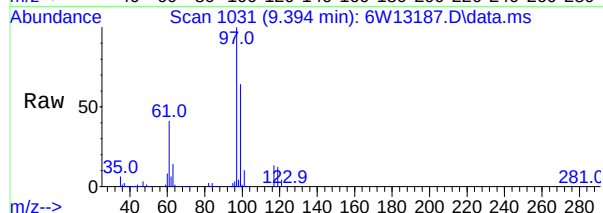
Tgt Ion: 72 Resp: 1766
Ion Ratio Lower Upper
72 100
71 58.2 66.3 123.1#
42 562.4 140.8 261.4#
41 669.3 74.8 138.8#





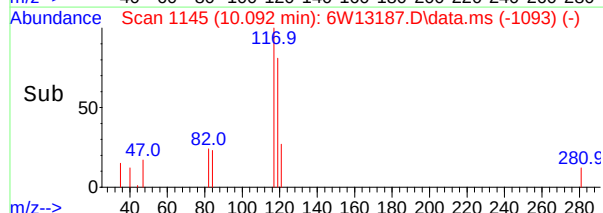
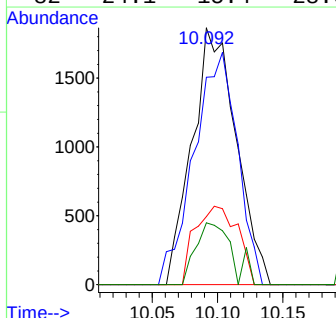
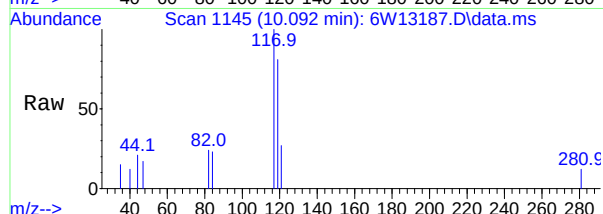
#49
1,1,1-Trichloroethane
Concen: 4.16 ppb(v)
RT: 9.394 min Scan# 1031
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

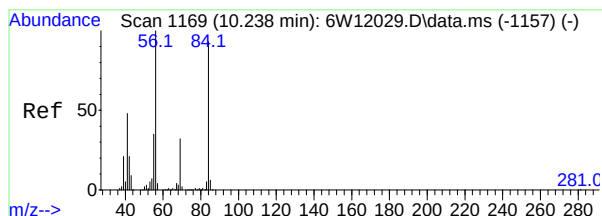
Tgt Ion	Resp	Lower	Upper
97	100		
99	63.5	45.4	84.4
117	13.1	10.1	18.7
119	11.9	9.9	18.3



#52
Carbon Tetrachloride
Concen: 0.08 ppb(v)
RT: 10.092 min Scan# 1145
Delta R.T. -0.012 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

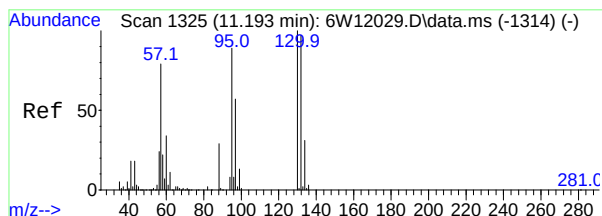
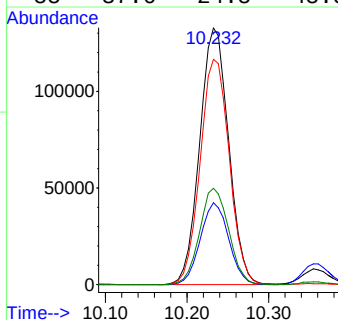
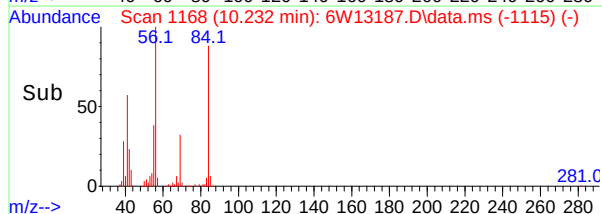
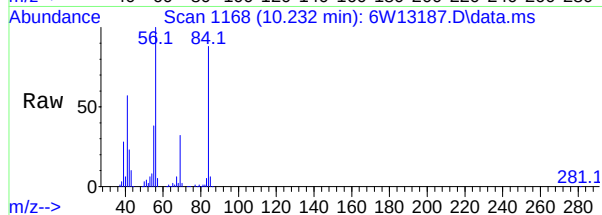
Tgt Ion	Resp	Lower	Upper
117	100		
119	80.8	68.5	127.1
121	26.5	21.6	40.2
82	24.1	15.4	28.6





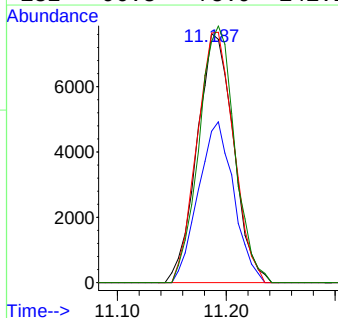
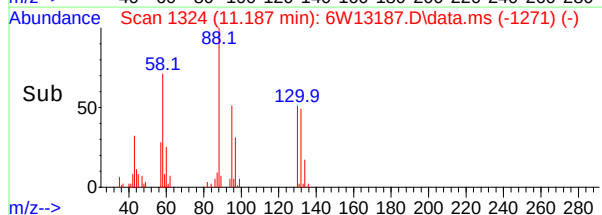
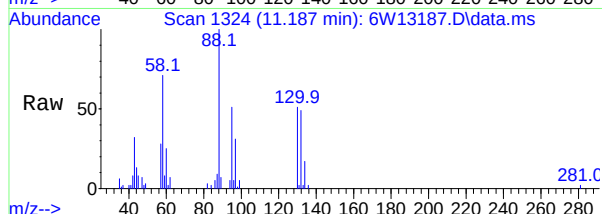
#53
Cyclohexane
Concen: 9.84 ppb(v)
RT: 10.232 min Scan# 1168
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

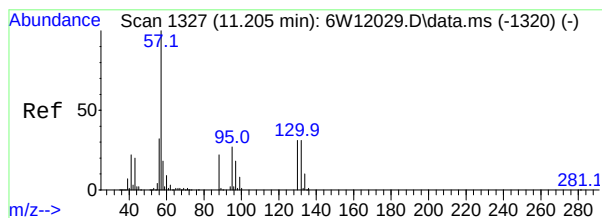
Tgt Ion: 56 Resp: 327521
Ion Ratio Lower Upper
56 100
69 31.9 22.5 41.7
84 87.7 64.8 120.4
55 37.6 24.5 45.5



#58
Trichloroethene
Concen: 0.48 ppb(v)
RT: 11.187 min Scan# 1324
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

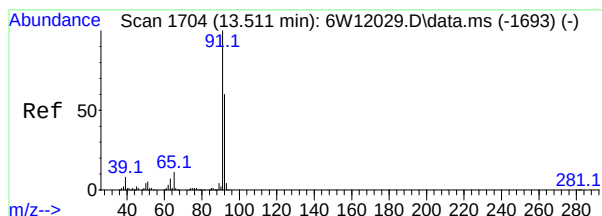
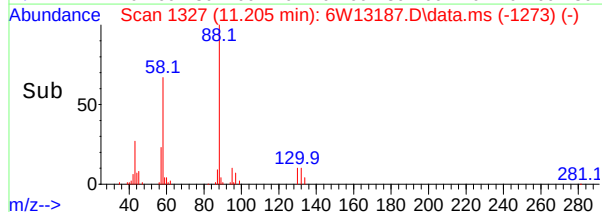
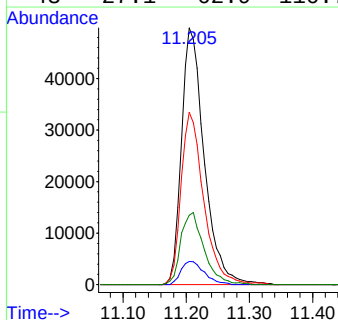
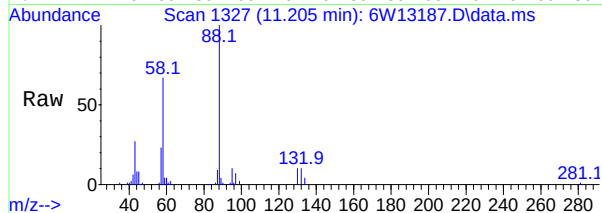
Tgt Ion: 95 Resp: 17823
Ion Ratio Lower Upper
95 100
97 60.8 45.1 83.7
130 100.2 78.6 146.0
132 96.8 75.9 141.1





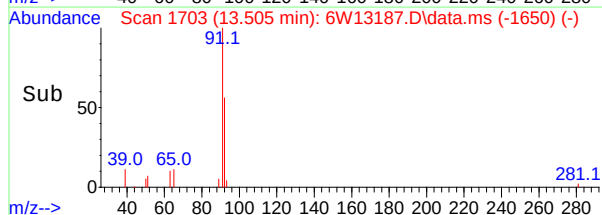
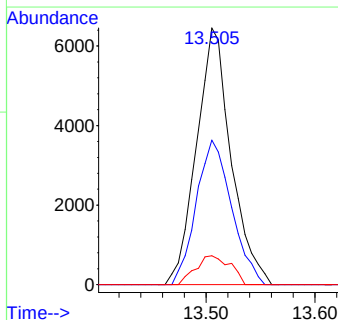
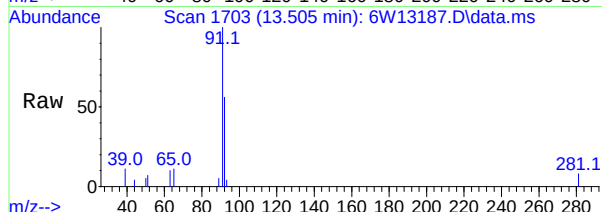
#63
1,4-Dioxane
Concen: 5.39 ppb(v)
RT: 11.205 min Scan# 1327
Delta R.T. -0.000 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

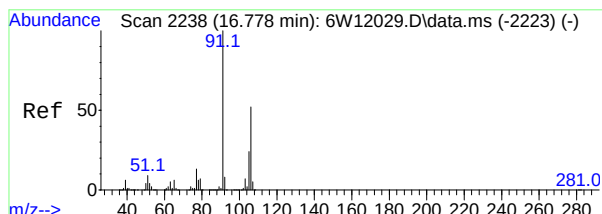
Tgt Ion: 88 Resp: 124454
Ion Ratio Lower Upper
88 100
87 9.0 6.3 11.7
58 67.1 57.7 107.3
43 27.1 62.9 116.7#



#68
Toluene
Concen: 0.14 ppb(v)
RT: 13.505 min Scan# 1703
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

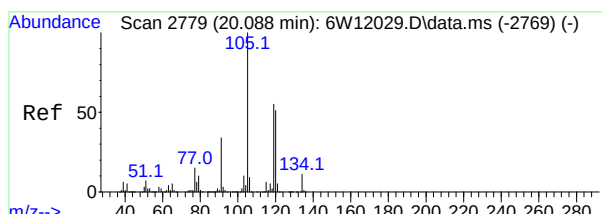
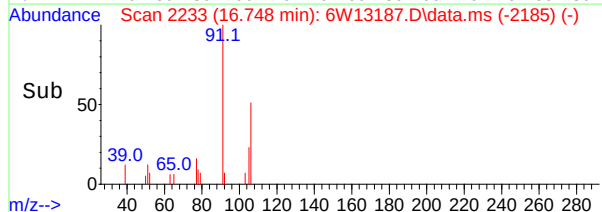
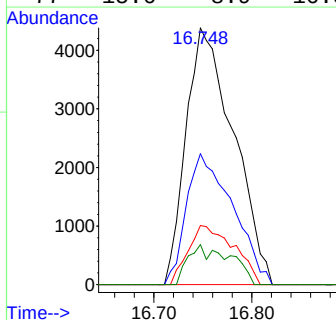
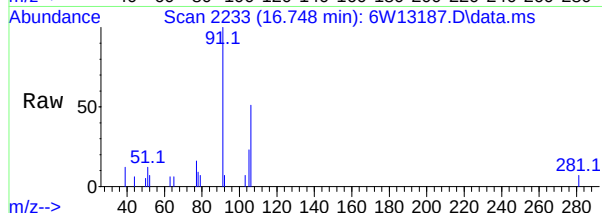
Tgt Ion: 91 Resp: 14279
Ion Ratio Lower Upper
91 100
92 56.3 41.7 77.5
65 11.2 7.4 13.8





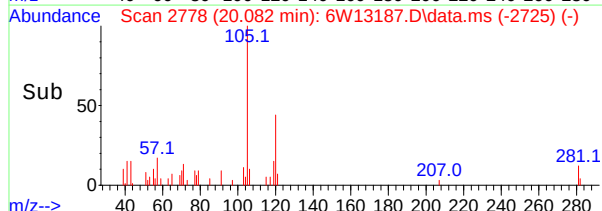
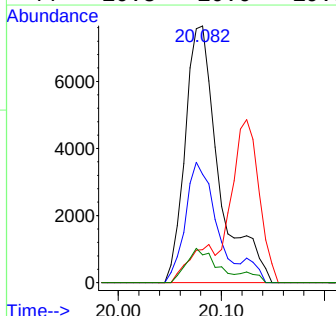
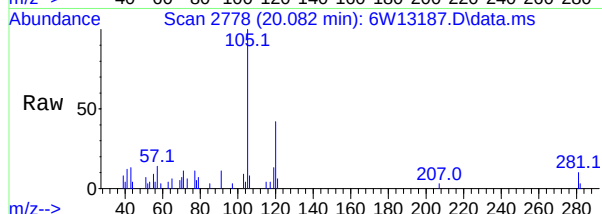
#81
m,p-Xylene
Concen: 0.14 ppb(v)
RT: 16.748 min Scan# 2233
Delta R.T. -0.037 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

Tgt Ion: 91 Resp: 14781
Ion Ratio Lower Upper
91 100
106 51.0 36.5 67.9
105 23.0 16.7 30.9
77 15.6 8.9 16.5



#97
1,2,4-Trimethylbenzene
Concen: 0.16 ppb(v)
RT: 20.082 min Scan# 2778
Delta R.T. -0.006 min
Lab File: 6W13187.D
Acq: 23 Jul 2019 8:53 pm

Tgt Ion: 105 Resp: 17517
Ion Ratio Lower Upper
105 100
120 42.2 36.0 67.0
119 12.9 38.7 71.9#
77 10.8 10.6 19.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13188.D
 Acq On : 23 Jul 2019 9:54 pm
 Operator : thomash
 Sample : jc91420-6
 Misc : MS36156,V6W538,400,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 24 14:08:43 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.159	130	253753	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.355	114	939677	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.891	82	451020	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.159	130	253753	10.00	ppb(v	0.00

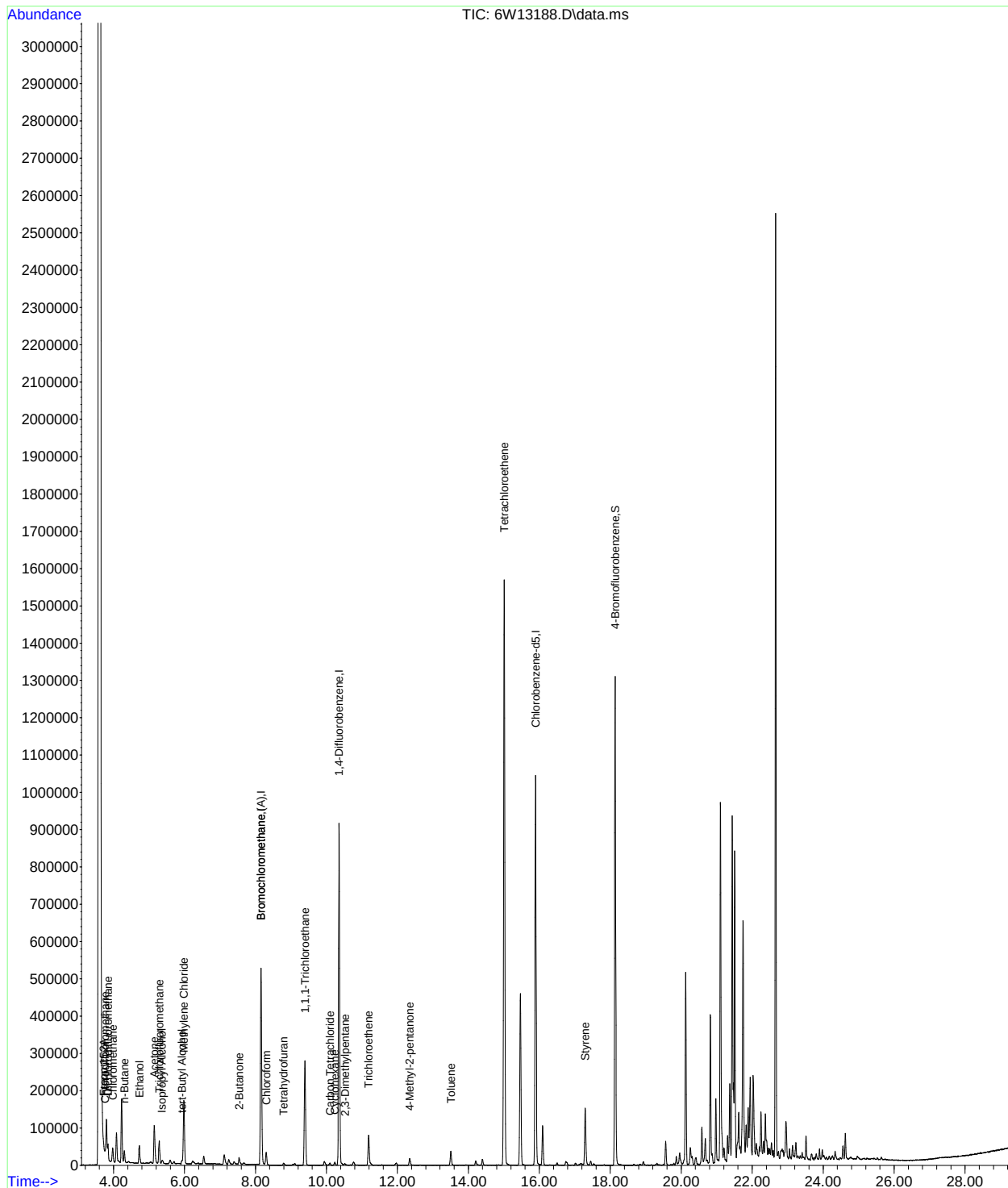
System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.136 95 589854 10.34 ppb(v -0.01
 Spiked Amount 10.000 Range 65 - 128 Recovery = 103.40%

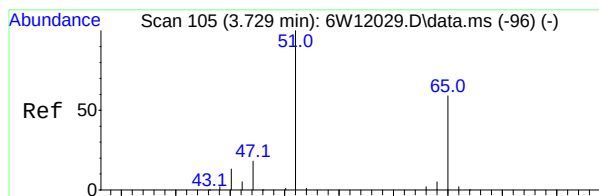
Target Compounds					Qvalue	
3) Freon 152A	3.723	65	5868	0.39	ppb(v#	53
4) Chlorodifluoromethane	3.760	67	2935	0.51	ppb(v	95
7) Dichlorodifluoromethane	3.846	85	38725	0.61	ppb(v	96
9) Chloromethane	3.974	50	39998	2.19	ppb(v	99
13) n-Butane	4.304	58	3712	0.99	ppb(v#	37
22) Trichlorofluoromethane	5.283	101	62126	1.03	ppb(v	99
23) Acetone	5.142	58	45567	3.89	ppb(v	69
27) Isopropyl Alcohol	5.363	45	11988	0.28	ppb(v#	89
30) Methylene Chloride	5.981	84	95064	4.12	ppb(v	93
32) Ethanol	4.726	45	60030	6.60	ppb(v	97
36) tert-Butyl Alcohol	5.932	59	13059	0.27	ppb(v	92
40) 2-Butanone	7.541	72	7923	0.66	ppb(v	99
46) Chloroform	8.305	83	31907	0.59	ppb(v	95
48) Tetrahydrofuran	8.795	72	1534	0.14	ppb(v#	81
49) 1,1,1-Trichloroethane	9.394	97	231587	4.29	ppb(v	97
52) Carbon Tetrachloride	10.098	117	4550	0.08	ppb(v#	82
53) Cyclohexane	10.232	56	4357	0.13	ppb(v	94
54) 2,3-Dimethylpentane	10.526	71	498	0.03	ppb(v#	21
58) Trichloroethene	11.187	95	32652	0.89	ppb(v	95
66) 4-Methyl-2-pentanone	12.343	58	5929	0.28	ppb(v	82
68) Toluene	13.505	91	37388	0.37	ppb(v#	98
74) Tetrachloroethene	15.010	166	632338	10.63	ppb(v	98
82) Styrene	17.292	104	104384	1.51	ppb(v	94

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

Data Path : C:\msdchem\1\data\
Data File : 6W13188.D
Acq On : 23 Jul 2019 9:54 pm
Operator : thomash
Sample : jc91420-6
Misc : MS36156,V6W538,400,,,,,1
ALS Vial : 9 Sample Multiplier: 1

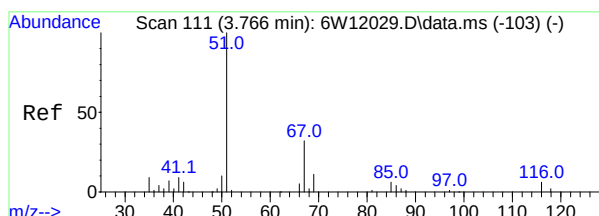
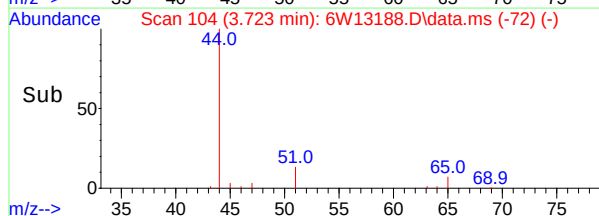
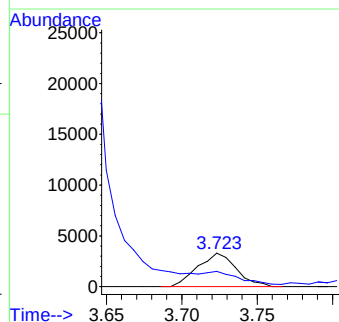
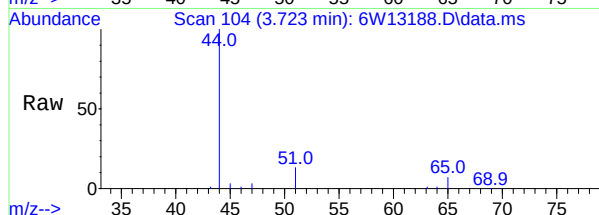
Quant Time: Jul 24 14:08:43 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration





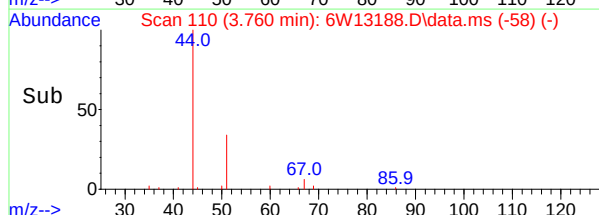
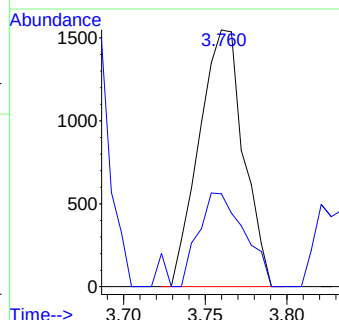
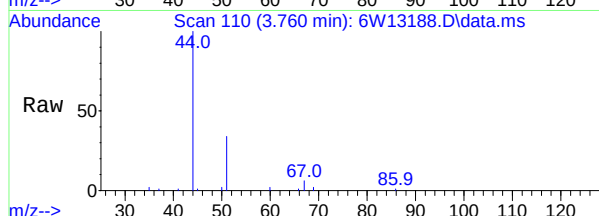
#3
 Freon 152A
 Concen: 0.39 ppb(v)
 RT: 3.723 min Scan# 104
 Delta R.T. -0.006 min
 Lab File: 6W13188.D
 Acq: 23 Jul 2019 9:54 pm

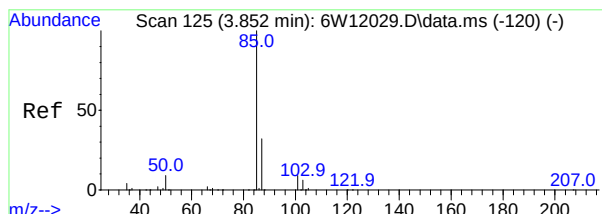
Tgt Ion: 65 Resp: 5868
 Ion Ratio Lower Upper
 65 100
 45 45.9 16.0 29.8#



#4
 Chlorodifluoromethane
 Concen: 0.51 ppb(v)
 RT: 3.760 min Scan# 110
 Delta R.T. -0.012 min
 Lab File: 6W13188.D
 Acq: 23 Jul 2019 9:54 pm

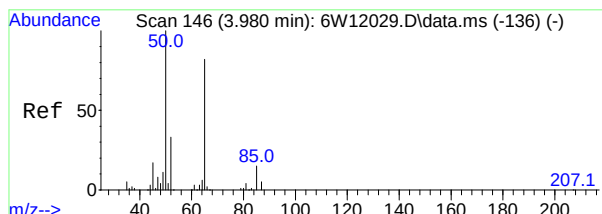
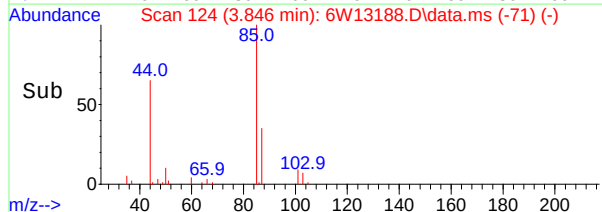
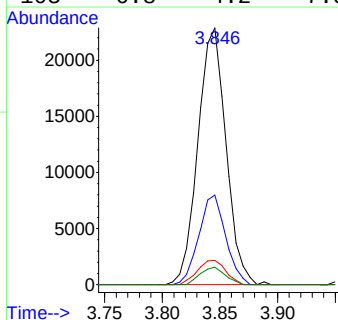
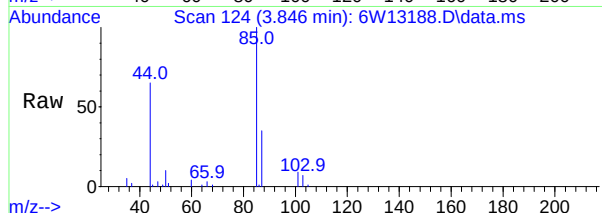
Tgt Ion: 67 Resp: 2935
 Ion Ratio Lower Upper
 67 100
 69 36.2 23.2 43.0





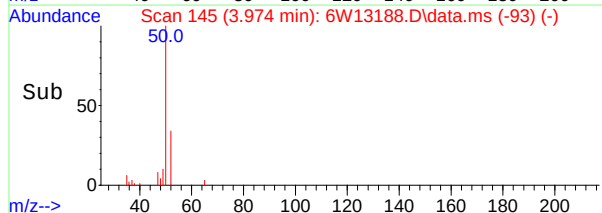
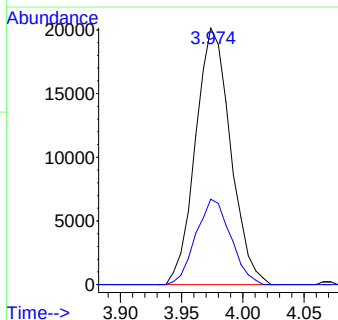
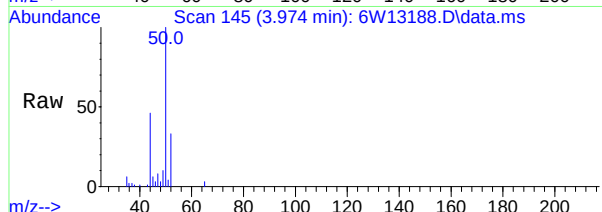
#7
Dichlorodifluoromethane
Concen: 0.61 ppb(v)
RT: 3.846 min Scan# 124
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

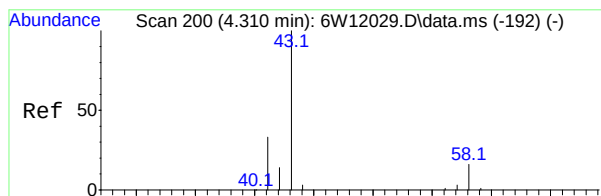
Tgt Ion: 85 Resp: 38725
Ion Ratio Lower Upper
85 100
87 34.9 22.7 42.1
101 9.5 6.3 11.7
103 6.8 4.2 7.8



#9
Chloromethane
Concen: 2.19 ppb(v)
RT: 3.974 min Scan# 145
Delta R.T. -0.012 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

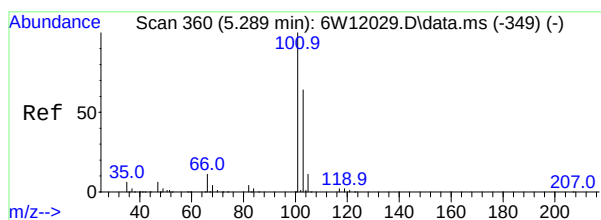
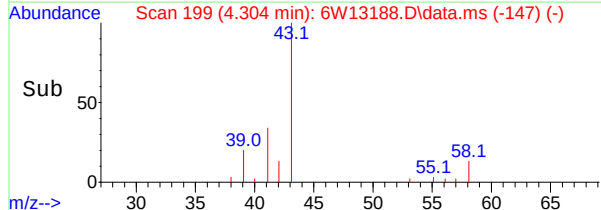
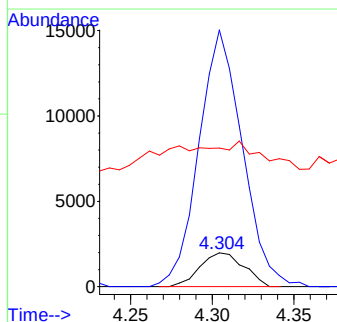
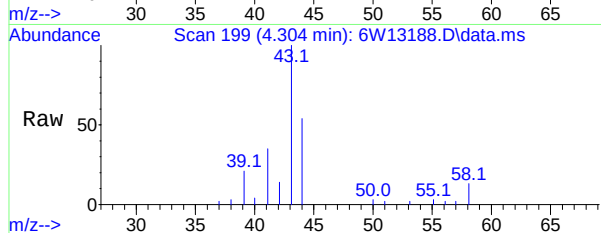
Tgt Ion: 50 Resp: 39998
Ion Ratio Lower Upper
50 100
52 33.3 23.0 42.8





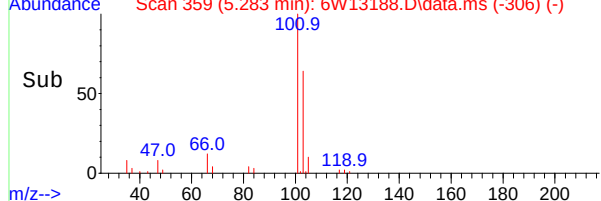
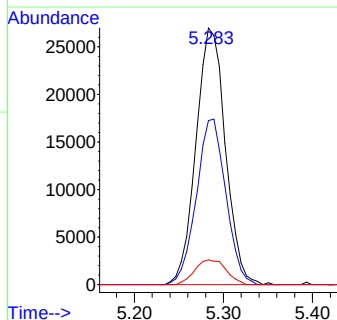
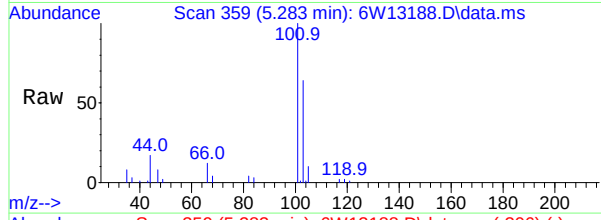
#13
n-Butane
Concen: 0.99 ppb(v)
RT: 4.304 min Scan# 199
Delta R.T. -0.012 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

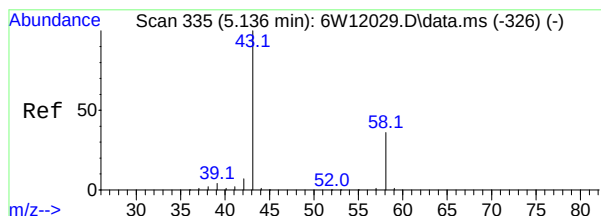
Tgt Ion: 58 Resp: 3712
Ion Ratio Lower Upper
58 100
43 761.4 451.4 838.4
44 410.9 17.1 31.7#



#22
Trichlorofluoromethane
Concen: 1.03 ppb(v)
RT: 5.283 min Scan# 359
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

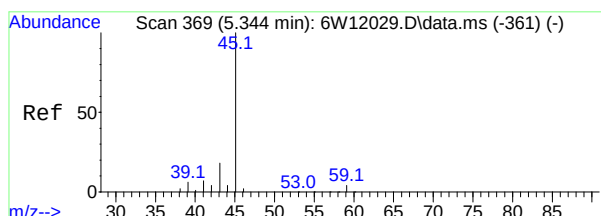
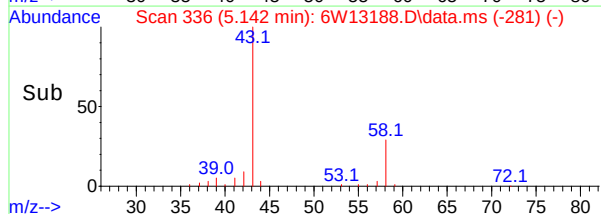
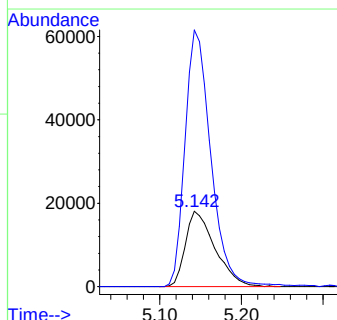
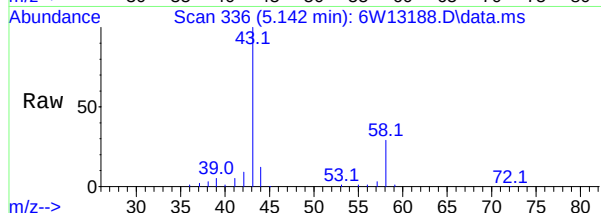
Tgt Ion: 101 Resp: 62126
Ion Ratio Lower Upper
101 100
103 63.9 45.1 83.7
105 9.7 7.5 13.9





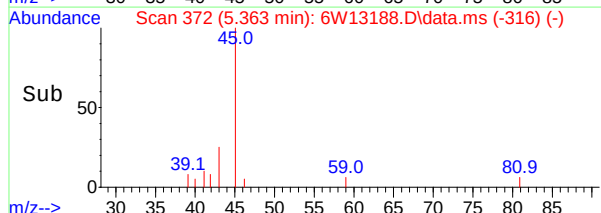
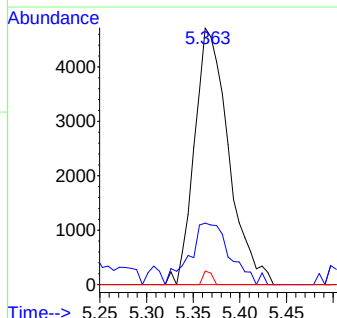
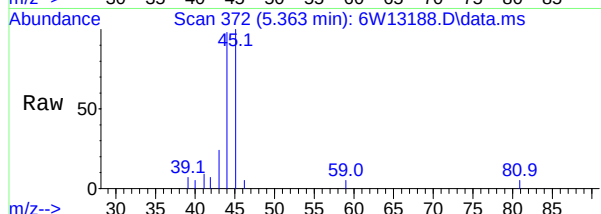
#23
Acetone
Concen: 3.89 ppb(v)
RT: 5.142 min Scan# 336
Delta R.T. 0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

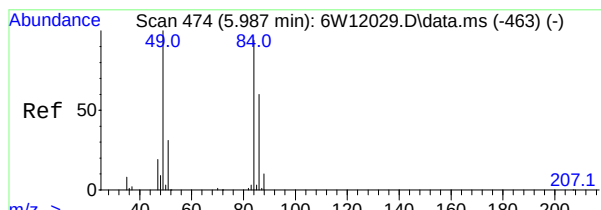
Tgt Ion: 58 Resp: 45567
Ion Ratio Lower Upper
58 100
43 340.4 197.9 367.5



#27
Isopropyl Alcohol
Concen: 0.28 ppb(v)
RT: 5.363 min Scan# 372
Delta R.T. 0.013 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

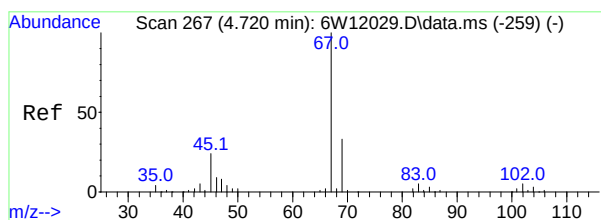
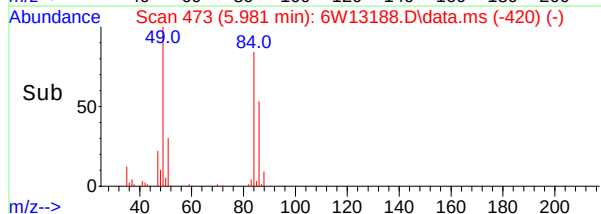
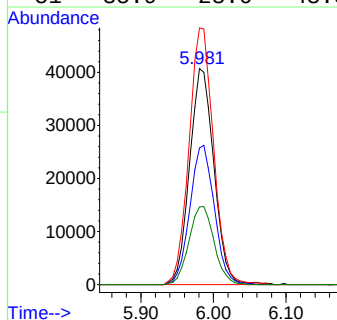
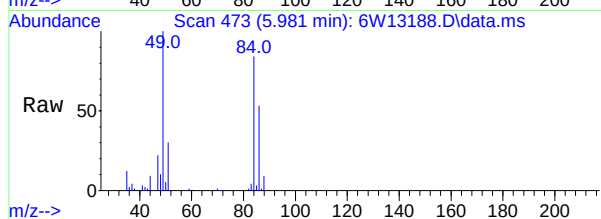
Tgt Ion: 45 Resp: 11988
Ion Ratio Lower Upper
45 100
43 24.0 12.6 23.4#
59 5.3 3.1 5.8





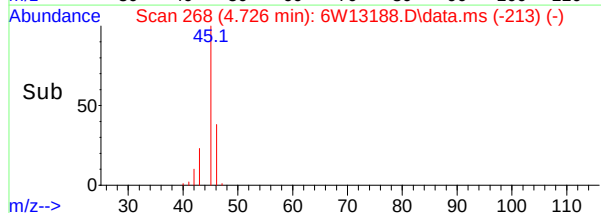
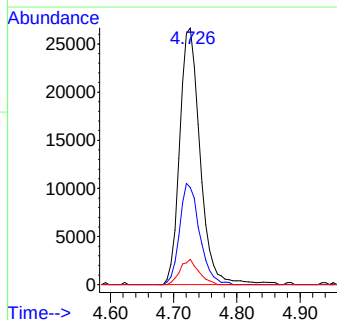
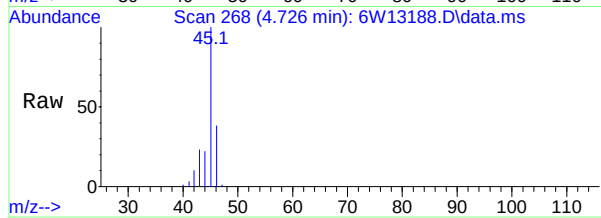
#30
Methylene Chloride
Concen: 4.12 ppb(v)
RT: 5.981 min Scan# 473
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

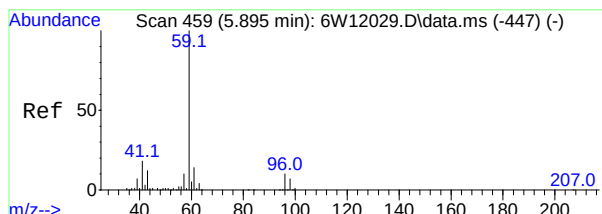
Tgt Ion: 84 Resp: 95064
Ion Ratio Lower Upper
84 100
86 63.3 45.1 83.7
49 118.9 74.7 138.7
51 35.9 23.6 43.8



#32
Ethanol
Concen: 6.60 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

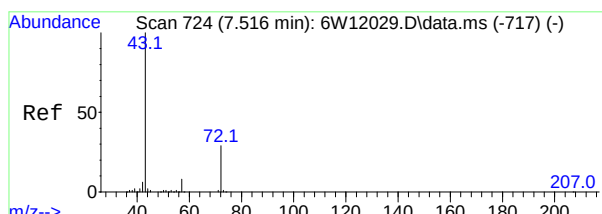
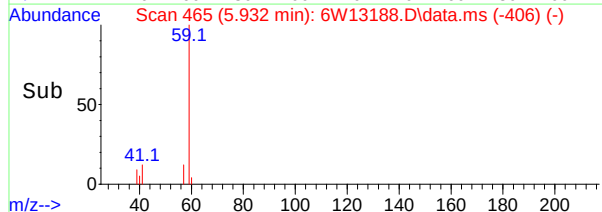
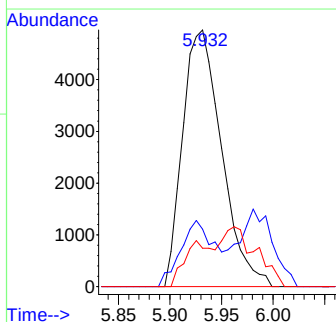
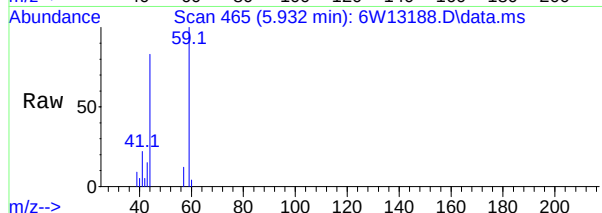
Tgt Ion: 45 Resp: 60030
Ion Ratio Lower Upper
45 100
46 37.8 27.7 51.5
42 9.8 5.5 10.1





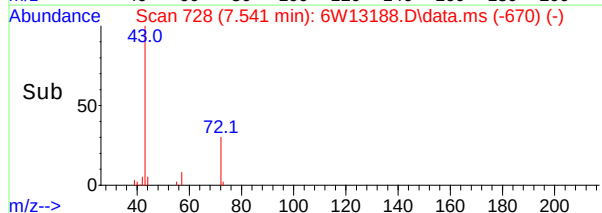
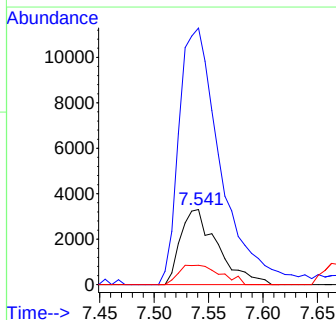
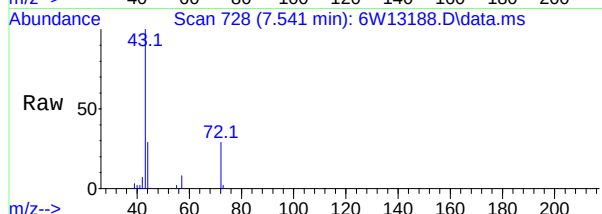
#36
tert-Butyl Alcohol
Concen: 0.27 ppb(v)
RT: 5.932 min Scan# 465
Delta R.T. 0.031 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

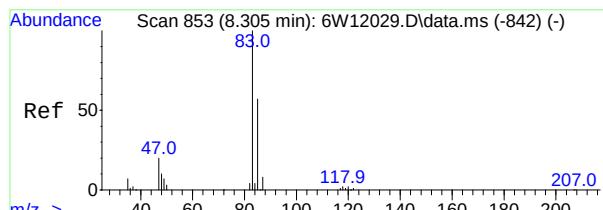
Tgt Ion: 59 Resp: 13059
Ion Ratio Lower Upper
59 100
41 22.3 12.8 23.8
43 14.9 8.6 16.0



#40
2-Butanone
Concen: 0.66 ppb(v)
RT: 7.541 min Scan# 728
Delta R.T. 0.025 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

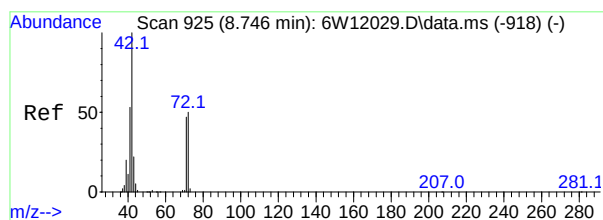
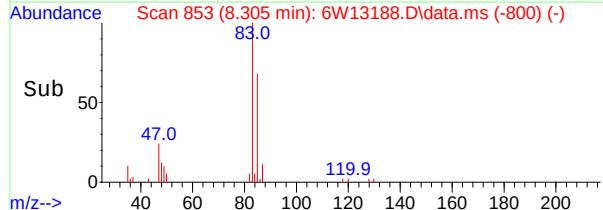
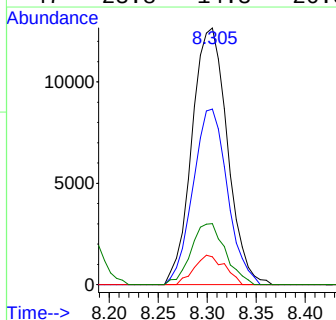
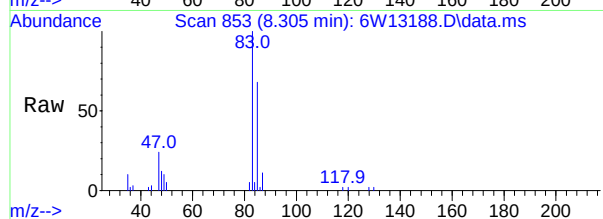
Tgt Ion: 72 Resp: 7923
Ion Ratio Lower Upper
72 100
43 341.4 240.3 446.3
57 25.7 20.1 37.3





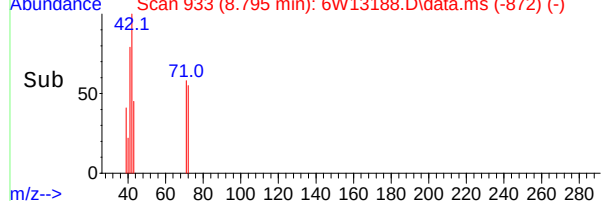
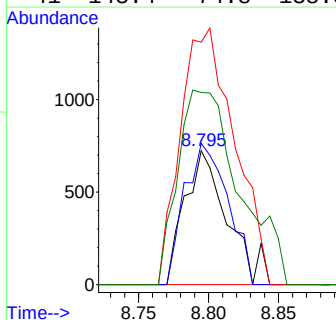
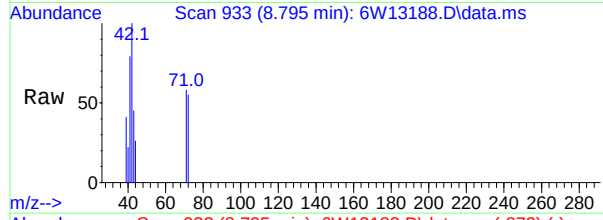
#46
Chloroform
Concen: 0.59 ppb(v)
RT: 8.305 min Scan# 853
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

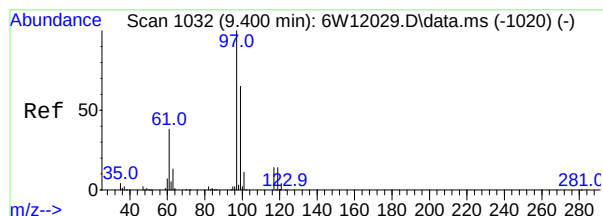
Tgt Ion: 83 Resp: 31907
Ion Ratio Lower Upper
83 100
85 68.3 45.2 84.0
87 10.8 7.3 13.5
47 23.8 14.3 26.5



#48
Tetrahydrofuran
Concen: 0.14 ppb(v)
RT: 8.795 min Scan# 933
Delta R.T. 0.043 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

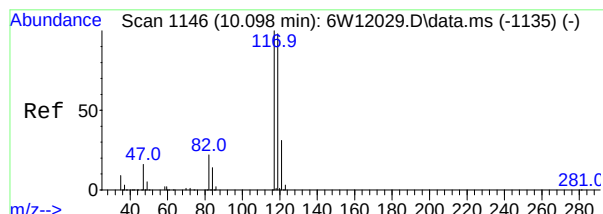
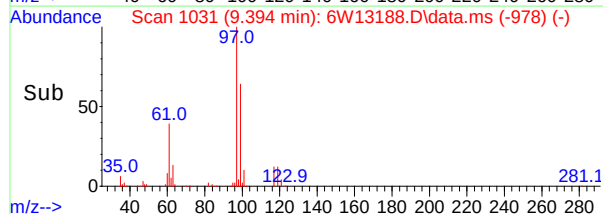
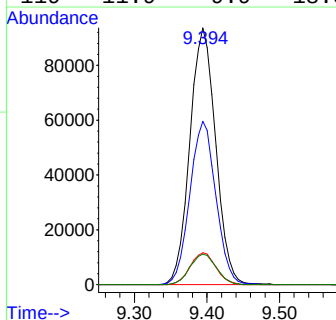
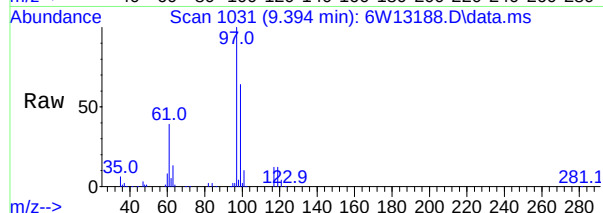
Tgt Ion: 72 Resp: 1534
Ion Ratio Lower Upper
72 100
71 105.4 66.3 123.1
42 180.9 140.8 261.4
41 143.4 74.8 138.8#





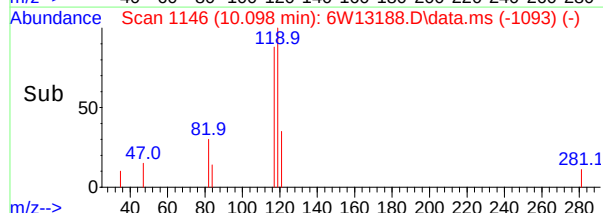
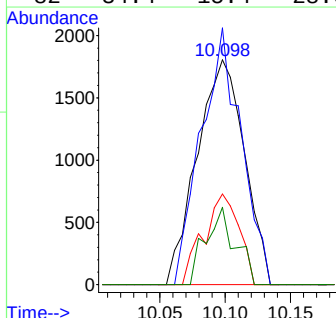
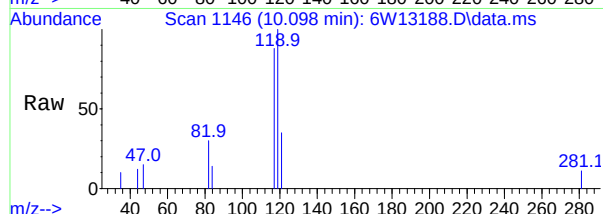
#49
1,1,1-Trichloroethane
Concen: 4.29 ppb(v)
RT: 9.394 min Scan# 1031
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

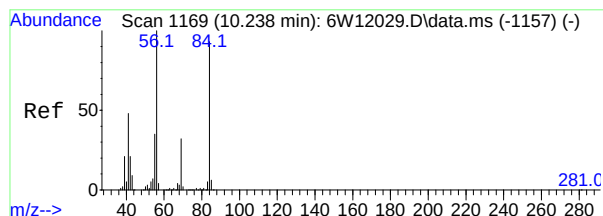
Tgt Ion	Resp	Lower	Upper
97	100		
99	63.6	45.4	84.4
117	12.4	10.1	18.7
119	11.9	9.9	18.3



#52
Carbon Tetrachloride
Concen: 0.08 ppb(v)
RT: 10.098 min Scan# 1146
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

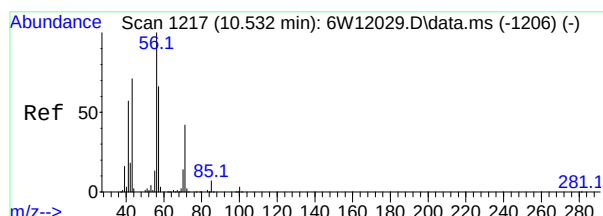
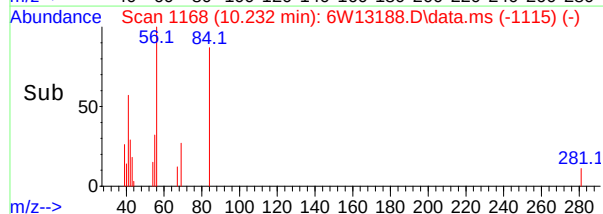
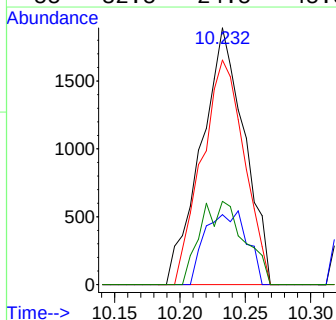
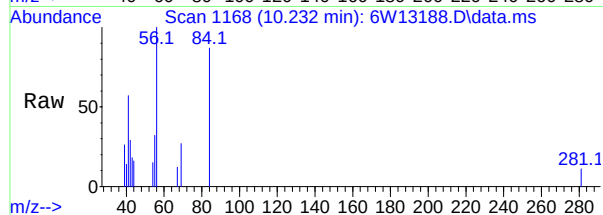
Tgt Ion	Resp	Lower	Upper
117	100		
119	114.2	68.5	127.1
121	40.3	21.6	40.2#
82	34.4	15.4	28.6#





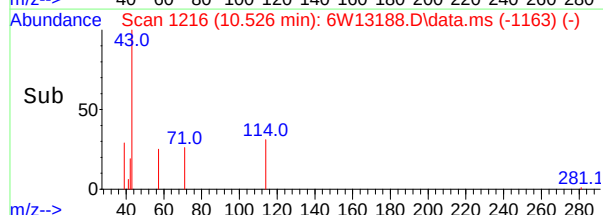
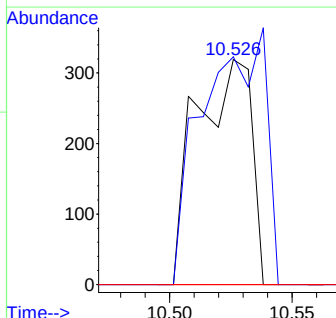
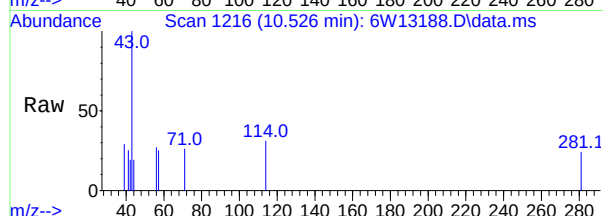
#53
Cyclohexane
Concen: 0.13 ppb(v)
RT: 10.232 min Scan# 1168
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

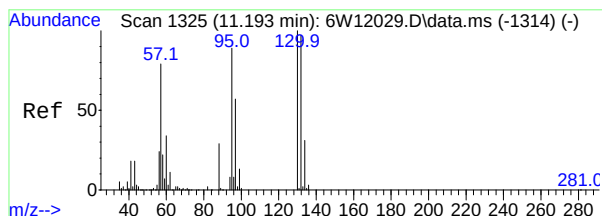
Tgt Ion: 56 Resp: 4357
Ion Ratio Lower Upper
56 100
69 27.3 22.5 41.7
84 87.5 64.8 120.4
55 32.5 24.5 45.5



#54
2,3-Dimethylpentane
Concen: 0.03 ppb(v)
RT: 10.526 min Scan# 1216
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

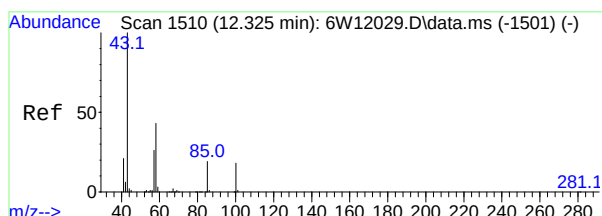
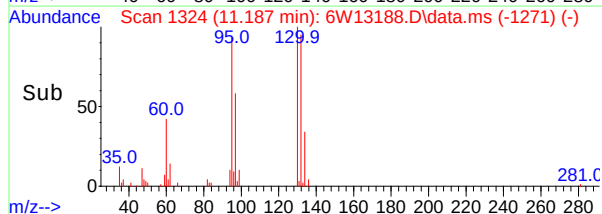
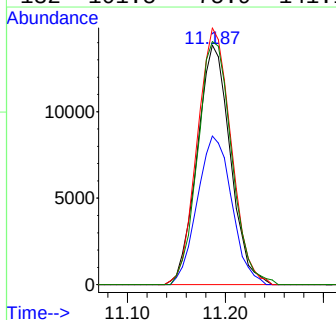
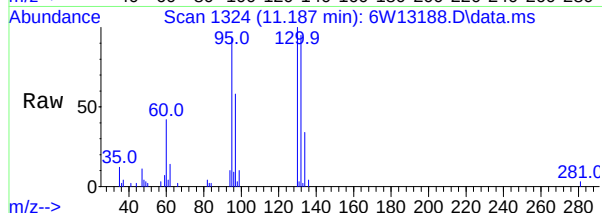
Tgt Ion: 71 Resp: 498
Ion Ratio Lower Upper
71 100
56 101.3 167.4 310.8#
85 0.0 11.8 22.0#





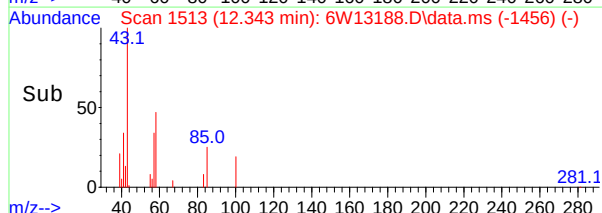
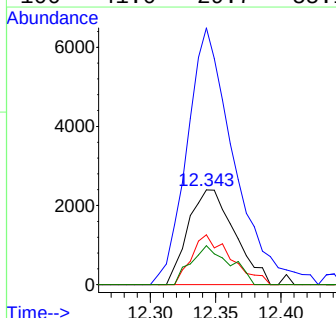
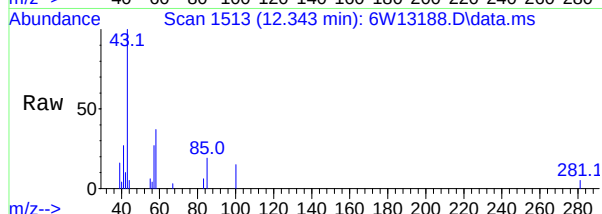
#58
Trichloroethene
Concen: 0.89 ppb(v)
RT: 11.187 min Scan# 1324
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

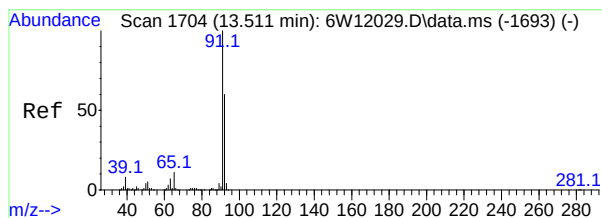
Tgt Ion: 95 Resp: 32652
Ion Ratio Lower Upper
95 100
97 62.1 45.1 83.7
130 107.2 78.6 146.0
132 101.5 75.9 141.1



#66
4-Methyl-2-pentanone
Concen: 0.28 ppb(v)
RT: 12.343 min Scan# 1513
Delta R.T. 0.018 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

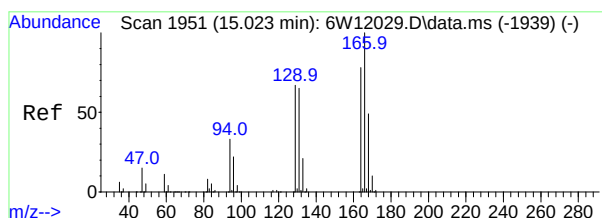
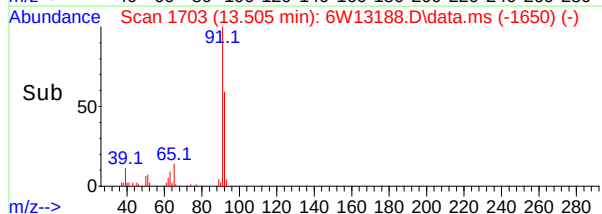
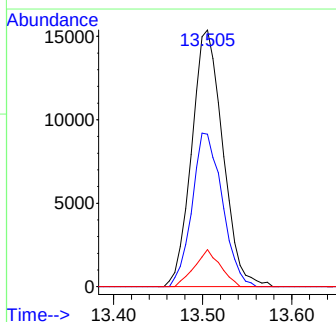
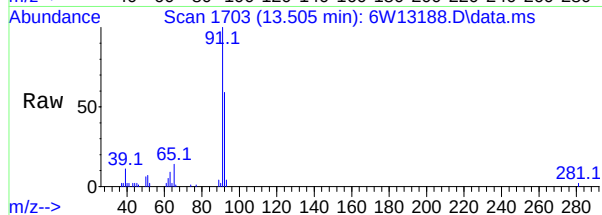
Tgt Ion: 58 Resp: 5929
Ion Ratio Lower Upper
58 100
43 271.0 162.5 301.7
85 52.6 33.0 61.4
100 41.0 29.7 55.1





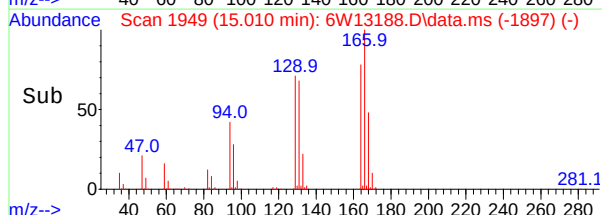
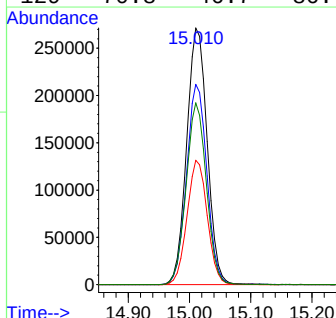
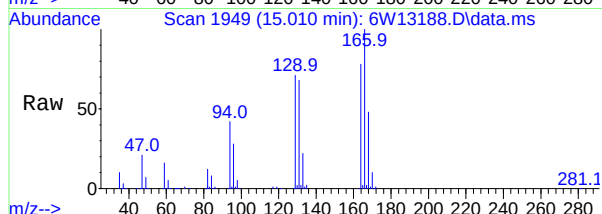
#68
Toluene
Concen: 0.37 ppb(v)
RT: 13.505 min Scan# 1703
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

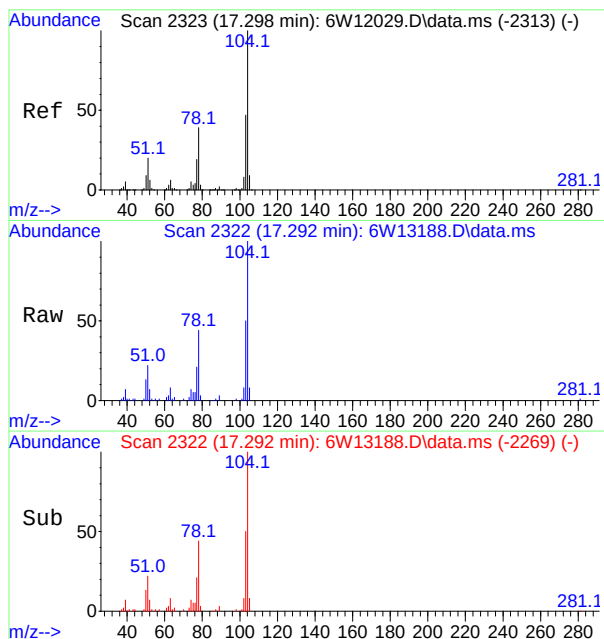
Tgt Ion: 91 Resp: 37388
Ion Ratio Lower Upper
91 100
92 59.4 41.7 77.5
65 14.4 7.4 13.8#



#74
Tetrachloroethene
Concen: 10.63 ppb(v)
RT: 15.010 min Scan# 1949
Delta R.T. -0.012 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

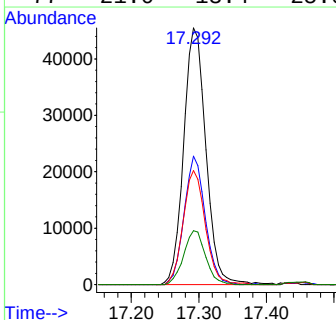
Tgt Ion: 166 Resp: 632338
Ion Ratio Lower Upper
166 100
164 78.1 54.4 101.0
168 48.4 34.0 63.2
129 70.8 46.7 86.7





#82
Styrene
Concen: 1.51 ppb(v)
RT: 17.292 min Scan# 2322
Delta R.T. -0.006 min
Lab File: 6W13188.D
Acq: 23 Jul 2019 9:54 pm

Tgt Ion:	104	Resp:	104384
Ion Ratio	Lower	Upper	
104	100		
103	50.0	33.1	61.5
78	44.4	27.2	50.6
77	21.0	13.4	25.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W13182.D
Acq On : 23 Jul 2019 2:08 pm
Operator : thomash
Sample : mb
Misc : MS36116,V6W537,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 24 13:37:02 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.158	130	253255	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.355	114	935529	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.891	82	434557	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.158	130	253255	10.00	ppb(v	0.00

System Monitoring Compounds
92) 4-Bromofluorobenzene 18.136 95 528236 9.61 ppb(v -0.01
Spiked Amount 10.000 Range 65 - 128 Recovery = 96.10%

Target Compounds	Qvalue

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

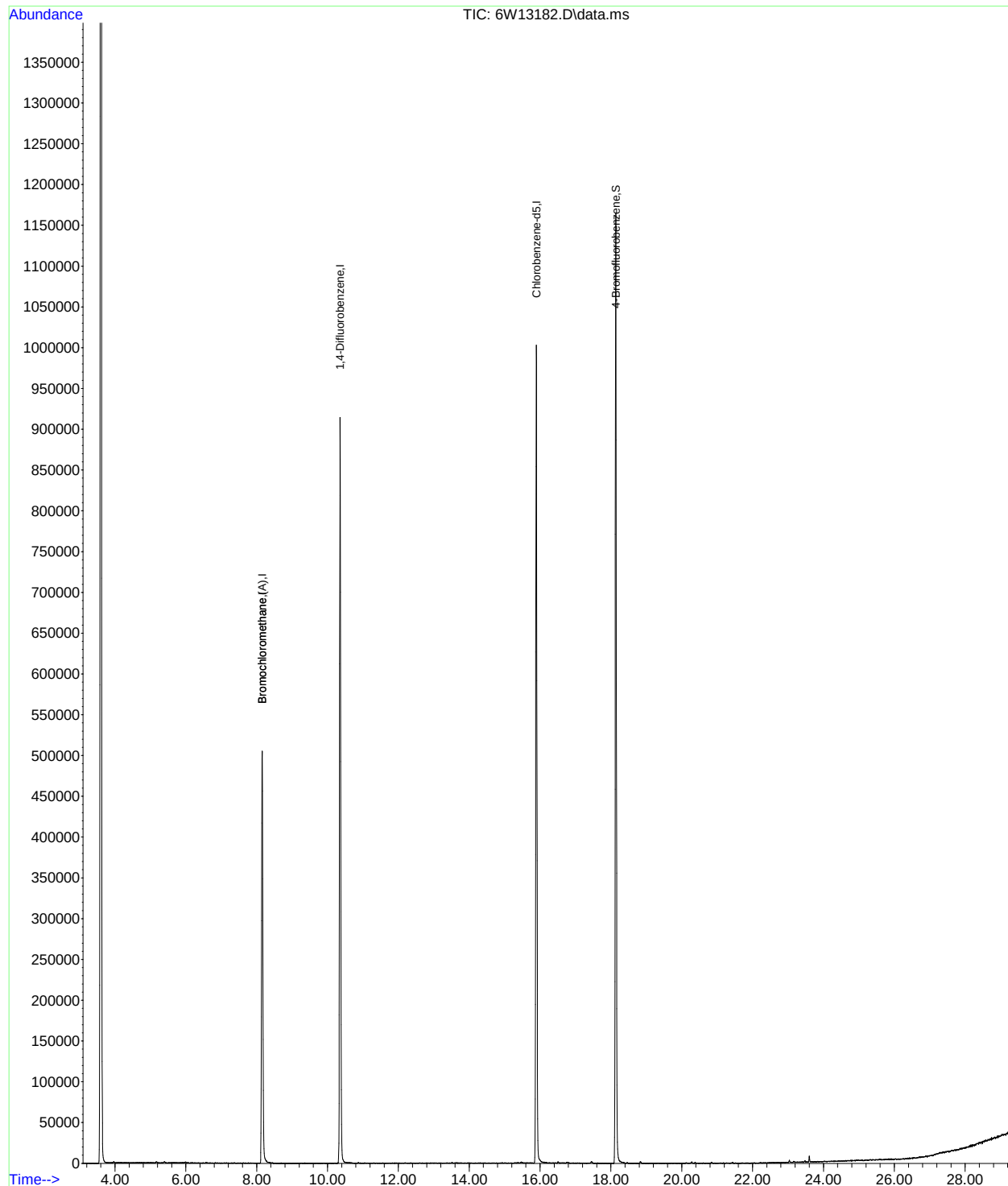
7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W13182.D
Acq On : 23 Jul 2019 2:08 pm
Operator : thomash
Sample : mb
Misc : MS36116,V6W537,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 24 13:37:02 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W12875.D
Acq On : 3 Jul 2019 9:50 am
Operator : danat
Sample : mb
Misc : MS35902,V6W525,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 03 13:56:02 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.158	130	235876	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.361	114	878005	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.897	82	398767	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.158	130	235876	10.00	ppb(v)	0.00

System Monitoring Compounds
92) 4-Bromofluorobenzene 18.136 95 477588 9.47 ppb(v) -0.01
Spiked Amount 10.000 Range 65 - 128 Recovery = 94.70%

Target Compounds	Qvalue

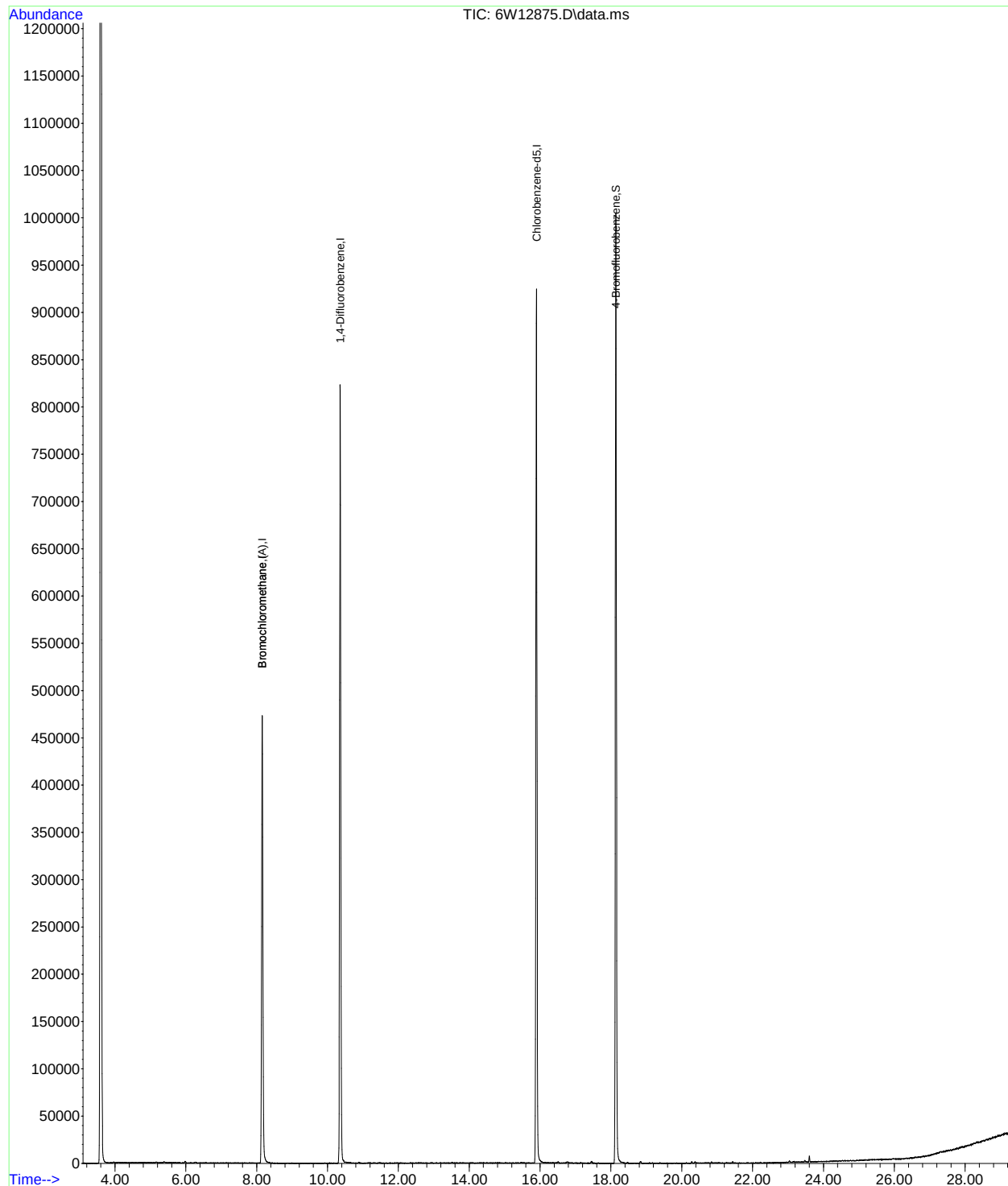
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.2

7

Data Path : C:\msdchem\1\data\
Data File : 6W12875.D
Acq On : 3 Jul 2019 9:50 am
Operator : danat
Sample : mb
Misc : MS35902,V6W525,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 03 13:56:02 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13179.D
 Acq On : 23 Jul 2019 11:34 am
 Operator : thomash
 Sample : bs
 Misc : MS36116,V6W537,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 24 13:35:52 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.158	130	259783	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	969423	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	504813	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.158	130	259783	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.136	95	690764	10.82	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	108.20%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	158275	10.25	ppb(v	90
4) Chlorodifluoromethane	3.766	67	78557	13.44	ppb(v	98
5) Propene	3.790	41	173697	10.81	ppb(v	98
6) Chlorotrifluoroethene	3.797	116	422604	10.45	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	779311	12.02	ppb(v	99
8) 1-Chloro-1,1-difluoro...	3.962	65	609456	13.51	ppb(v	96
9) Chloromethane	3.980	50	199360	10.67	ppb(v	97
10) Dichlorotetrafluoroethane	4.060	85	715022	10.72	ppb(v	99
11) Vinyl Chloride	4.157	62	235737	10.40	ppb(v#	98
12) 1,3-Butadiene	4.268	54	166002	10.92	ppb(v	90
13) n-Butane	4.310	58	43887	11.46	ppb(v	90
14) Bromomethane	4.494	94	233984	9.61	ppb(v	99
15) Acrolein	5.026	56	85995	8.66	ppb(v#	92
16) Chloroethane	4.629	64	116053	10.48	ppb(v#	94
17) Dichlorofluoromethane	4.708	67	575491	10.75	ppb(v	98
18) Acetonitrile	4.916	41	165519	7.89	ppb(v	98
19) Freon 123	5.051	83	537492	9.16	ppb(v	97
20) Freon 123A	5.100	117	346625	9.78	ppb(v	98
21) Bromoethene	4.928	106	234565	9.34	ppb(v#	96
22) Trichlorofluoromethane	5.289	101	718686	11.64	ppb(v	99
23) Acetone	5.136	58	103844	8.65	ppb(v	71
24) Pentane	5.595	57	55723	10.37	ppb(v	91
26) Iodomethane	5.797	142	683479	9.11	ppb(v	83
27) Isopropyl Alcohol	5.344	45	406757	9.22	ppb(v	95
28) 1,1-Dichloroethene	5.864	61	383012	11.18	ppb(v	91
29) Freon 113	6.225	101	507954	9.53	ppb(v	98
30) Methylene Chloride	5.981	84	206476	8.74	ppb(v	91
31) Carbon Disulfide	6.262	76	649917	9.27	ppb(v	99
32) Ethanol	4.720	45	84531	9.07	ppb(v	99
33) Acrylonitrile	5.552	53	174459	9.43	ppb(v	99
34) 3-Chloropropene	6.091	76	116914	10.73	ppb(v	78
35) trans-1,2-Dichloroethene	6.892	61	342289	10.42	ppb(v	96
36) tert-Butyl Alcohol	5.895	59	554854	11.34	ppb(v	98
37) Methyl tert-Butyl Ether	7.155	73	740234	11.35	ppb(v	98
38) Vinyl Acetate	7.253	43	682525	12.20	ppb(v	98
39) 1,1-Dichloroethane	7.100	63	425726	9.74	ppb(v	100
40) 2-Butanone	7.510	72	125845	10.23	ppb(v	81
41) Hexane	8.189	57	365203	10.27	ppb(v	90
42) cis-1,2-Dichloroethene	7.981	61	343266	10.62	ppb(v	93
43) Di-isopropyl Ether	8.195	87	224200	10.50	ppb(v	90
44) Ethyl Acetate	8.232	61	80281	10.83	ppb(v	79
45) Methyl Acrylate	8.214	55	487814	10.60	ppb(v	98
46) Chloroform	8.299	83	588982	10.63	ppb(v	98
47) 2,4-Dimethylpentane	9.174	57	425040	10.41	ppb(v	98
48) Tetrahydrofuran	8.752	72	113514	10.41	ppb(v	97
49) 1,1,1-Trichloroethane	9.394	97	644345	11.66	ppb(v	98
50) 1,2-Dichloroethane	9.119	62	395819	12.79	ppb(v	97
51) Benzene	9.926	78	765009	9.24	ppb(v	98
52) Carbon Tetrachloride	10.098	117	710636	11.97	ppb(v	99
53) Cyclohexane	10.232	56	367480	10.49	ppb(v	98
54) 2,3-Dimethylpentane	10.526	71	168860	9.96	ppb(v	95
56) 2,2,4-Trimethylpentane	11.217	57	1230279	10.02	ppb(v	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13179.D
 Acq On : 23 Jul 2019 11:34 am
 Operator : thomash
 Sample : bs
 Misc : MS36116,V6W537,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

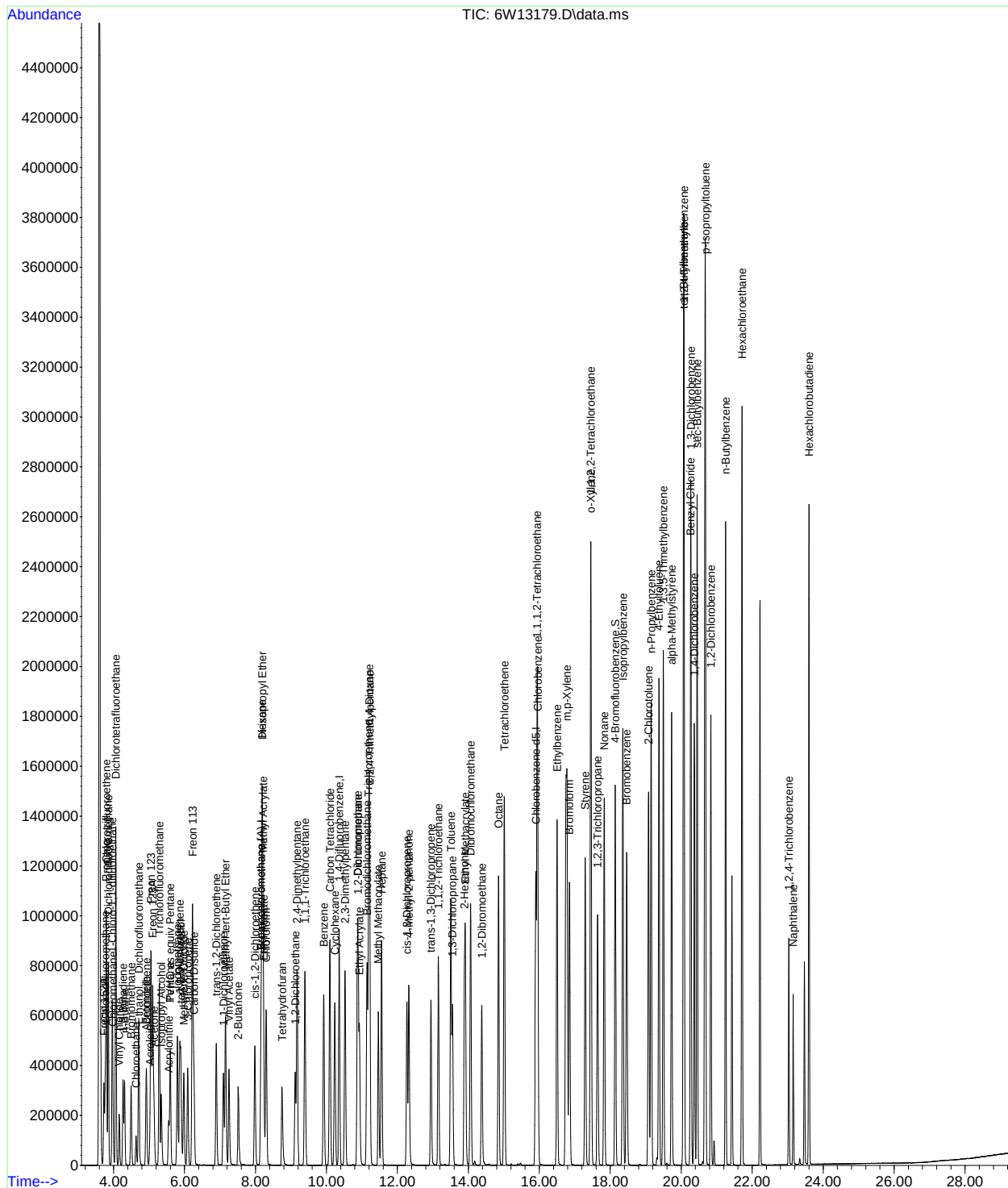
Quant Time: Jul 24 13:35:52 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.554	71	277443	10.49	ppb(v)	97
58) Trichloroethene	11.187	95	380091	10.02	ppb(v)	94
59) 1,2-Dichloropropane	10.893	63	278829	9.11	ppb(v)	90
60) Dibromomethane	10.875	174	400396	9.00	ppb(v)	98
61) Ethyl Acrylate	10.930	55	621454	12.07	ppb(v)	99
62) Methyl Methacrylate	11.462	69	310083	11.53	ppb(v)	92
63) 1,4-Dioxane	11.205	88	192412	8.13	ppb(v)	84
64) Bromodichloromethane	11.144	83	659760	10.83	ppb(v)	99
65) cis-1,3-Dichloropropene	12.270	75	489563	10.97	ppb(v)	98
66) 4-Methyl-2-pentanone	12.319	58	248811	11.49	ppb(v)	91
67) trans-1,3-Dichloropropene	12.943	75	488258	12.47	ppb(v)	96
68) Toluene	13.505	91	1000035	9.52	ppb(v)	99
69) 1,1,2-Trichloroethane	13.157	97	339767	9.42	ppb(v)	99
70) 1,3-Dichloropropane	13.548	76	492131	10.42	ppb(v)	92
71) 2-Hexanone	13.891	58	347355	10.77	ppb(v)	95
72) Ethyl Methacrylate	13.915	69	550593	12.25	ppb(v)	99
73) Dibromochloromethane	14.062	129	752053	11.04	ppb(v)	99
74) Tetrachloroethene	15.016	166	602250	9.81	ppb(v)	99
75) 1,2-Dibromoethane	14.380	107	575189	10.47	ppb(v)	99
76) Octane	14.851	43	608690	11.79	ppb(v)	95
77) 1,1,1,2-Tetrachloroethane	15.940	131	507134	10.45	ppb(v)	97
79) Chlorobenzene	15.959	112	853187	8.32	ppb(v)	96
80) Ethylbenzene	16.503	91	1375406	8.72	ppb(v)	97
81) m,p-Xylene	16.778	91	2236819	18.63	ppb(v)	97
82) Styrene	17.292	104	830453	10.73	ppb(v)	96
83) Nonane	17.831	43	671820	11.22	ppb(v)	95
84) o-Xylene	17.445	91	1171112	9.11	ppb(v)	96
85) Bromoform	16.846	173	758580	10.23	ppb(v)	98
86) 1,1,2,2-Tetrachloroethane	17.451	83	774476	9.07	ppb(v)	99
87) 1,2,3-Trichloropropane	17.641	75	603444	9.68	ppb(v)	99
88) Isopropylbenzene	18.357	105	1637784	9.89	ppb(v)	98
89) Bromobenzene	18.461	156	536912	9.42	ppb(v)	91
90) 2-Chlorotoluene	19.079	126	389834	10.12	ppb(v)	93
91) n-Propylbenzene	19.152	120	451815	10.60	ppb(v)	92
93) 4-Ethyltoluene	19.372	105	1588264	11.02	ppb(v)	98
94) 1,3,5-Trimethylbenzene	19.495	105	1418130	11.14	ppb(v)	97
95) alpha-Methylstyrene	19.727	118	676859	11.88	ppb(v)	98
96) tert-Butylbenzene	20.070	134	342534	10.89	ppb(v)	84
97) 1,2,4-Trimethylbenzene	20.082	105	1452341	11.58	ppb(v)	98
98) 1,3-Dichlorobenzene	20.272	146	914998	10.50	ppb(v)	96
99) Benzyl Chloride	20.259	91	978468	12.19	ppb(v)	97
100) 1,4-Dichlorobenzene	20.369	146	870355	10.63	ppb(v)	97
101) sec-Butylbenzene	20.449	134	432514	10.94	ppb(v)	91
102) p-Isopropyltoluene	20.681	134	474066	11.24	ppb(v)	94
103) 1,2-Dichlorobenzene	20.834	146	858963	10.18	ppb(v)	96
104) n-Butylbenzene	21.250	134	405340	11.89	ppb(v)	91
105) Hexachloroethane	21.715	201	602516	10.89	ppb(v)	98
106) 1,2,4-Trichlorobenzene	23.031	180	287736	8.70	ppb(v)	98
107) Naphthalene	23.153	128	543465	6.93	ppb(v)	99
108) Hexachlorobutadiene	23.600	225	532028	8.94	ppb(v)	98
110) TVHC as equiv Pentane	5.595	TIC	991606	8.83	ppb(v)	100

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

Data Path : C:\msdchem\1\data\
Data File : 6W13179.D
Acq On : 23 Jul 2019 11:34 am
Operator : thomash
Sample : bs
Misc : MS36116,V6W537,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 24 13:35:52 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



7.3.1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13180.D
 Acq On : 23 Jul 2019 12:22 pm
 Operator : thomash
 Sample : bsd
 Misc : MS36116,V6W537,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 24 13:36:10 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.158	130	264863	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	997506	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	510561	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.158	130	264863	10.00	ppb(v	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.142 95 707745 10.96 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 109.60%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	157942	10.03	ppb(v	91
4) Chlorodifluoromethane	3.766	67	76779	12.88	ppb(v	99
5) Propene	3.790	41	168714	10.30	ppb(v	97
6) Chlorotrifluoroethene	3.796	116	428520	10.39	ppb(v	98
7) Dichlorodifluoromethane	3.852	85	782227	11.84	ppb(v	99
8) 1-Chloro-1,1-difluoro...	3.962	65	605829	13.17	ppb(v	97
9) Chloromethane	3.980	50	199789	10.48	ppb(v	98
10) Dichlorotetrafluoroethane	4.059	85	740157	10.88	ppb(v	99
11) Vinyl Chloride	4.157	62	243689	10.54	ppb(v#	99
12) 1,3-Butadiene	4.268	54	172926	11.16	ppb(v	94
13) n-Butane	4.310	58	46010	11.78	ppb(v	88
14) Bromomethane	4.494	94	246696	9.94	ppb(v	100
15) Acrolein	5.020	56	91919	9.07	ppb(v#	93
16) Chloroethane	4.628	64	119322	10.57	ppb(v	96
17) Dichlorofluoromethane	4.708	67	592291	10.86	ppb(v	99
18) Acetonitrile	4.910	41	172404	8.06	ppb(v	99
19) Freon 123	5.051	83	560048	9.36	ppb(v	98
20) Freon 123A	5.099	117	360612	9.98	ppb(v	97
21) Bromoethene	4.928	106	244746	9.56	ppb(v#	96
22) Trichlorofluoromethane	5.289	101	739019	11.74	ppb(v	99
23) Acetone	5.136	58	107187	8.76	ppb(v	66
24) Pentane	5.601	57	56969	10.40	ppb(v	94
26) Iodomethane	5.797	142	695662	9.10	ppb(v	84
27) Isopropyl Alcohol	5.344	45	417717	9.28	ppb(v	96
28) 1,1-Dichloroethene	5.864	61	375511	10.75	ppb(v	92
29) Freon 113	6.225	101	519676	9.56	ppb(v	99
30) Methylene Chloride	5.980	84	211454	8.78	ppb(v	93
31) Carbon Disulfide	6.262	76	661048	9.24	ppb(v	100
32) Ethanol	4.720	45	86913	9.15	ppb(v	99
33) Acrylonitrile	5.552	53	182341	9.67	ppb(v	99
34) 3-Chloropropene	6.091	76	119178	10.73	ppb(v	80
35) trans-1,2-Dichloroethene	6.892	61	339388	10.13	ppb(v	96
36) tert-Butyl Alcohol	5.895	59	561104	11.25	ppb(v	98
37) Methyl tert-Butyl Ether	7.155	73	739521	11.12	ppb(v	99
38) Vinyl Acetate	7.253	43	667457	11.70	ppb(v	98
39) 1,1-Dichloroethane	7.100	63	420750	9.44	ppb(v	99
40) 2-Butanone	7.510	72	125960	10.04	ppb(v	91
41) Hexane	8.189	57	363044	10.01	ppb(v	94
42) cis-1,2-Dichloroethene	7.981	61	338877	10.28	ppb(v	94
43) Di-isopropyl Ether	8.195	87	226693	10.41	ppb(v	97
44) Ethyl Acetate	8.232	61	80132	10.61	ppb(v	91
45) Methyl Acrylate	8.213	55	487773	10.40	ppb(v	98
46) Chloroform	8.299	83	593778	10.51	ppb(v	99
47) 2,4-Dimethylpentane	9.168	57	423316	10.17	ppb(v	99
48) Tetrahydrofuran	8.746	72	113947	10.25	ppb(v	96
49) 1,1,1-Trichloroethane	9.394	97	645297	11.45	ppb(v	99
50) 1,2-Dichloroethane	9.113	62	389220	12.34	ppb(v	97
51) Benzene	9.926	78	773842	9.16	ppb(v	98
52) Carbon Tetrachloride	10.098	117	712552	11.77	ppb(v	99
53) Cyclohexane	10.232	56	369109	10.33	ppb(v	98
54) 2,3-Dimethylpentane	10.526	71	170757	9.88	ppb(v	92
56) 2,2,4-Trimethylpentane	11.217	57	1238678	9.80	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13180.D
 Acq On : 23 Jul 2019 12:22 pm
 Operator : thomash
 Sample : bsd
 Misc : MS36116,V6W537,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 24 13:36:10 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

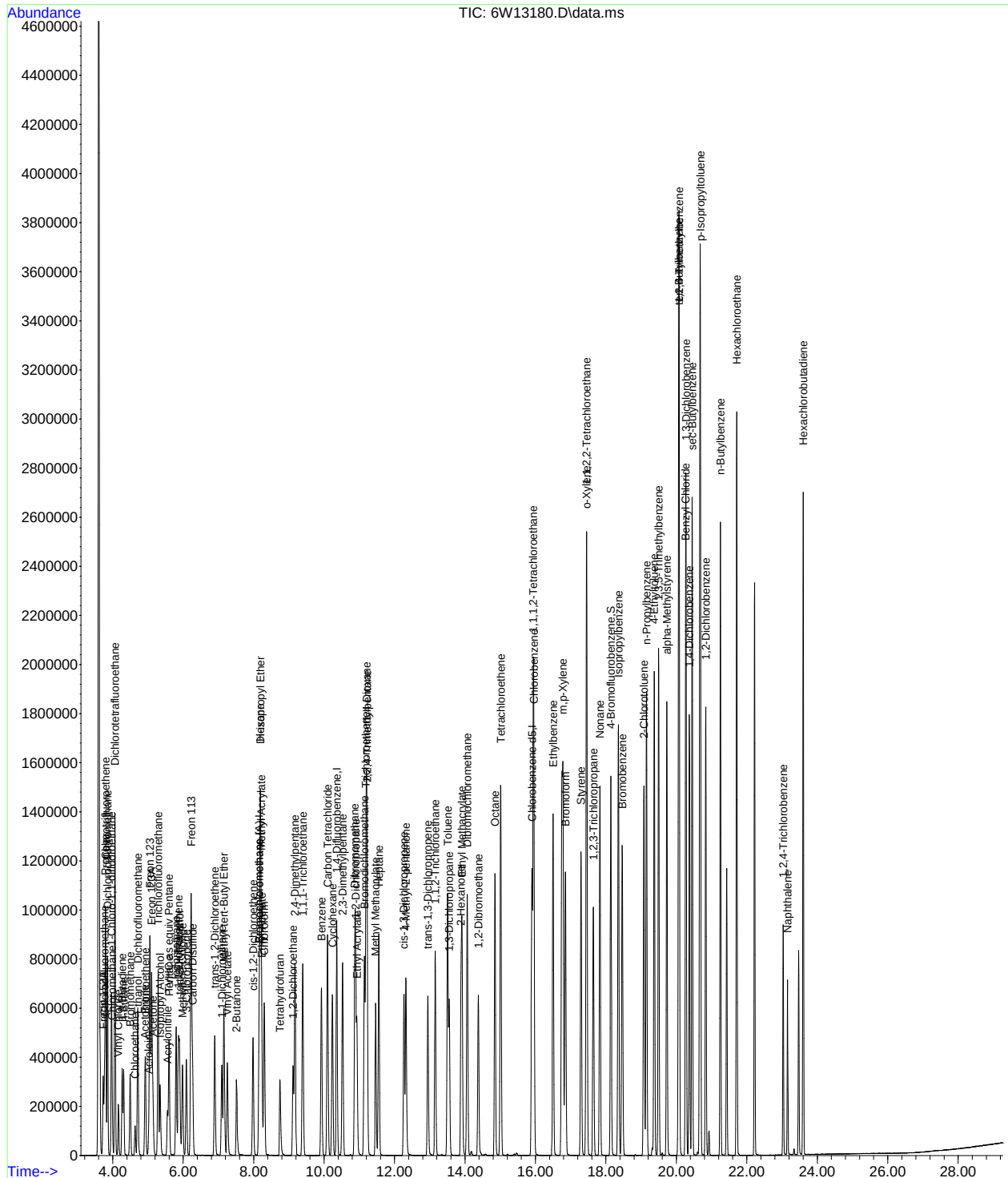
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.554	71	279988	10.29	ppb(v)	97
58) Trichloroethene	11.187	95	385674	9.88	ppb(v)	96
59) 1,2-Dichloropropane	10.899	63	281575	8.94	ppb(v)	91
60) Dibromomethane	10.868	174	415547	9.07	ppb(v)	94
61) Ethyl Acrylate	10.936	55	628443	11.86	ppb(v)	98
62) Methyl Methacrylate	11.462	69	312518	11.29	ppb(v)	91
63) 1,4-Dioxane	11.205	88	194908	8.01	ppb(v)	83
64) Bromodichloromethane	11.144	83	667765	10.66	ppb(v)	100
65) cis-1,3-Dichloropropene	12.263	75	494565	10.77	ppb(v)	99
66) 4-Methyl-2-pentanone	12.318	58	251111	11.27	ppb(v)	92
67) trans-1,3-Dichloropropene	12.942	75	487552	12.10	ppb(v)	97
68) Toluene	13.505	91	1020896	9.45	ppb(v)	99
69) 1,1,2-Trichloroethane	13.157	97	347910	9.37	ppb(v)	99
70) 1,3-Dichloropropane	13.548	76	499343	10.27	ppb(v)	94
71) 2-Hexanone	13.885	58	347300	10.46	ppb(v)	91
72) Ethyl Methacrylate	13.915	69	558099	12.06	ppb(v)	99
73) Dibromochloromethane	14.062	129	767198	10.94	ppb(v)	99
74) Tetrachloroethene	15.016	166	620121	9.82	ppb(v)	99
75) 1,2-Dibromoethane	14.380	107	588831	10.42	ppb(v)	99
76) Octane	14.851	43	594428	11.19	ppb(v)	97
77) 1,1,1,2-Tetrachloroethane	15.940	131	516211	10.34	ppb(v)	97
79) Chlorobenzene	15.958	112	870489	8.40	ppb(v)	97
80) Ethylbenzene	16.503	91	1385043	8.68	ppb(v)	98
81) m,p-Xylene	16.778	91	2269854	18.69	ppb(v)	97
82) Styrene	17.292	104	856096	10.93	ppb(v)	96
83) Nonane	17.830	43	665496	10.99	ppb(v)	96
84) o-Xylene	17.445	91	1183973	9.11	ppb(v)	98
85) Bromoform	16.852	173	770776	10.27	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.451	83	791287	9.16	ppb(v)	99
87) 1,2,3-Trichloropropane	17.647	75	605424	9.61	ppb(v)	99
88) Isopropylbenzene	18.357	105	1660813	9.92	ppb(v)	98
89) Bromobenzene	18.467	156	552968	9.59	ppb(v)	96
90) 2-Chlorotoluene	19.078	126	397139	10.19	ppb(v)	94
91) n-Propylbenzene	19.152	120	460479	10.68	ppb(v)	97
93) 4-Ethyltoluene	19.372	105	1619512	11.11	ppb(v)	98
94) 1,3,5-Trimethylbenzene	19.494	105	1446909	11.23	ppb(v)	96
95) alpha-Methylstyrene	19.727	118	685786	11.90	ppb(v)	97
96) tert-Butylbenzene	20.070	134	350282	11.01	ppb(v)	83
97) 1,2,4-Trimethylbenzene	20.082	105	1468432	11.57	ppb(v)	97
98) 1,3-Dichlorobenzene	20.271	146	930058	10.55	ppb(v)	98
99) Benzyl Chloride	20.259	91	985527	12.14	ppb(v)	97
100) 1,4-Dichlorobenzene	20.369	146	890865	10.76	ppb(v)	98
101) sec-Butylbenzene	20.449	134	444710	11.12	ppb(v)	97
102) p-Isopropyltoluene	20.681	134	484319	11.35	ppb(v)	96
103) 1,2-Dichlorobenzene	20.834	146	878212	10.30	ppb(v)	97
104) n-Butylbenzene	21.250	134	410671	11.91	ppb(v)	91
105) Hexachloroethane	21.715	201	612834	10.95	ppb(v)	99
106) 1,2,4-Trichlorobenzene	23.031	180	297943	8.91	ppb(v)	97
107) Naphthalene	23.153	128	565289	7.13	ppb(v)	99
108) Hexachlorobutadiene	23.599	225	540471	8.98	ppb(v)	99
110) TVHC as equiv Pentane	5.595	TIC	1021447	8.92	ppb(v)	100

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

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\  
Data File : 6W13180.D  
Acq On : 23 Jul 2019 12:22 pm  
Operator : thomash  
Sample : bsd  
Misc : MS36116,V6W537,,,,,1  
ALS Vial : 2 Sample Multiplier: 1
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Quant Time: Jul 24 13:36:10 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



7.3.2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12872.D
 Acq On : 3 Jul 2019 7:16 am
 Operator : danat
 Sample : bs
 Misc : MS35902,V6W525,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 03 13:54:46 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.158	130	245890	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	921220	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	473749	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.158	130	245890	10.00	ppb(v	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.143 95 644523 10.76 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 107.60%

Target Compounds					Qvalue
3) Freon 152A	3.723	65	168114	11.50	ppb(v 93
4) Chlorodifluoromethane	3.760	67	74193	13.41	ppb(v 100
5) Propene	3.784	41	189431	12.45	ppb(v 98
6) Chlorotrifluoroethene	3.790	116	431498	11.27	ppb(v 99
7) Dichlorodifluoromethane	3.845	85	759631	12.38	ppb(v 99
8) 1-Chloro-1,1-difluoro...	3.956	65	570337	13.35	ppb(v 97
9) Chloromethane	3.980	50	213357	12.06	ppb(v 99
10) Dichlorotetrafluoroethane	4.053	85	724660	11.47	ppb(v 97
11) Vinyl Chloride	4.157	62	251048	11.70	ppb(v# 98
12) 1,3-Butadiene	4.261	54	179548	12.48	ppb(v 95
13) n-Butane	4.304	58	47662	13.15	ppb(v 87
14) Bromomethane	4.488	94	242115	10.51	ppb(v 100
15) Acrolein	5.020	56	95614	10.17	ppb(v# 96
16) Chloroethane	4.629	64	122922	11.72	ppb(v 97
17) Dichlorofluoromethane	4.702	67	575678	11.37	ppb(v 99
18) Acetonitrile	4.910	41	169339	8.53	ppb(v 99
19) Freon 123	5.051	83	547976	9.86	ppb(v 97
20) Freon 123A	5.100	117	339091	10.11	ppb(v 99
21) Bromoethene	4.922	106	237877	10.01	ppb(v# 98
22) Trichlorofluoromethane	5.283	101	671997	11.50	ppb(v 99
23) Acetone	5.130	58	104267	9.18	ppb(v 75
24) Pentane	5.595	57	57715	11.35	ppb(v 93
26) Iodomethane	5.791	142	664256	9.35	ppb(v 86
27) Isopropyl Alcohol	5.344	45	395412	9.46	ppb(v 98
28) 1,1-Dichloroethene	5.864	61	364019	11.23	ppb(v 91
29) Freon 113	6.219	101	503018	9.97	ppb(v 98
30) Methylene Chloride	5.981	84	207832	9.30	ppb(v 92
31) Carbon Disulfide	6.262	76	666810	10.04	ppb(v 100
32) Ethanol	4.714	45	82834	9.39	ppb(v 99
33) Acrylonitrile	5.546	53	173721	9.92	ppb(v 98
34) 3-Chloropropene	6.085	76	118586	11.50	ppb(v 79
35) trans-1,2-Dichloroethene	6.886	61	342127	11.00	ppb(v 94
36) tert-Butyl Alcohol	5.895	59	525175	11.34	ppb(v 97
37) Methyl tert-Butyl Ether	7.149	73	721977	11.69	ppb(v 98
38) Vinyl Acetate	7.253	43	683723	12.91	ppb(v 97
39) 1,1-Dichloroethane	7.094	63	433393	10.47	ppb(v 99
40) 2-Butanone	7.510	72	124264	10.67	ppb(v 85
41) Hexane	8.189	57	382861	11.37	ppb(v 93
42) cis-1,2-Dichloroethene	7.975	61	339401	11.09	ppb(v 92
43) Di-isopropyl Ether	8.189	87	224840	11.12	ppb(v 83
44) Ethyl Acetate	8.226	61	80954	11.54	ppb(v 70
45) Methyl Acrylate	8.213	55	473414	10.87	ppb(v 99
46) Chloroform	8.299	83	569210	10.85	ppb(v 99
47) 2,4-Dimethylpentane	9.168	57	449731	11.64	ppb(v 98
48) Tetrahydrofuran	8.746	72	115449	11.19	ppb(v 90
49) 1,1,1-Trichloroethane	9.394	97	600143	11.47	ppb(v 98
50) 1,2-Dichloroethane	9.113	62	362263	12.37	ppb(v 97
51) Benzene	9.920	78	787049	10.04	ppb(v 98
52) Carbon Tetrachloride	10.098	117	661504	11.77	ppb(v 99
53) Cyclohexane	10.232	56	390142	11.76	ppb(v 97
54) 2,3-Dimethylpentane	10.526	71	175211	10.92	ppb(v 91
56) 2,2,4-Trimethylpentane	11.211	57	1295873	11.10	ppb(v 97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12872.D
 Acq On : 3 Jul 2019 7:16 am
 Operator : danat
 Sample : bs
 Misc : MS35902,V6W525,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

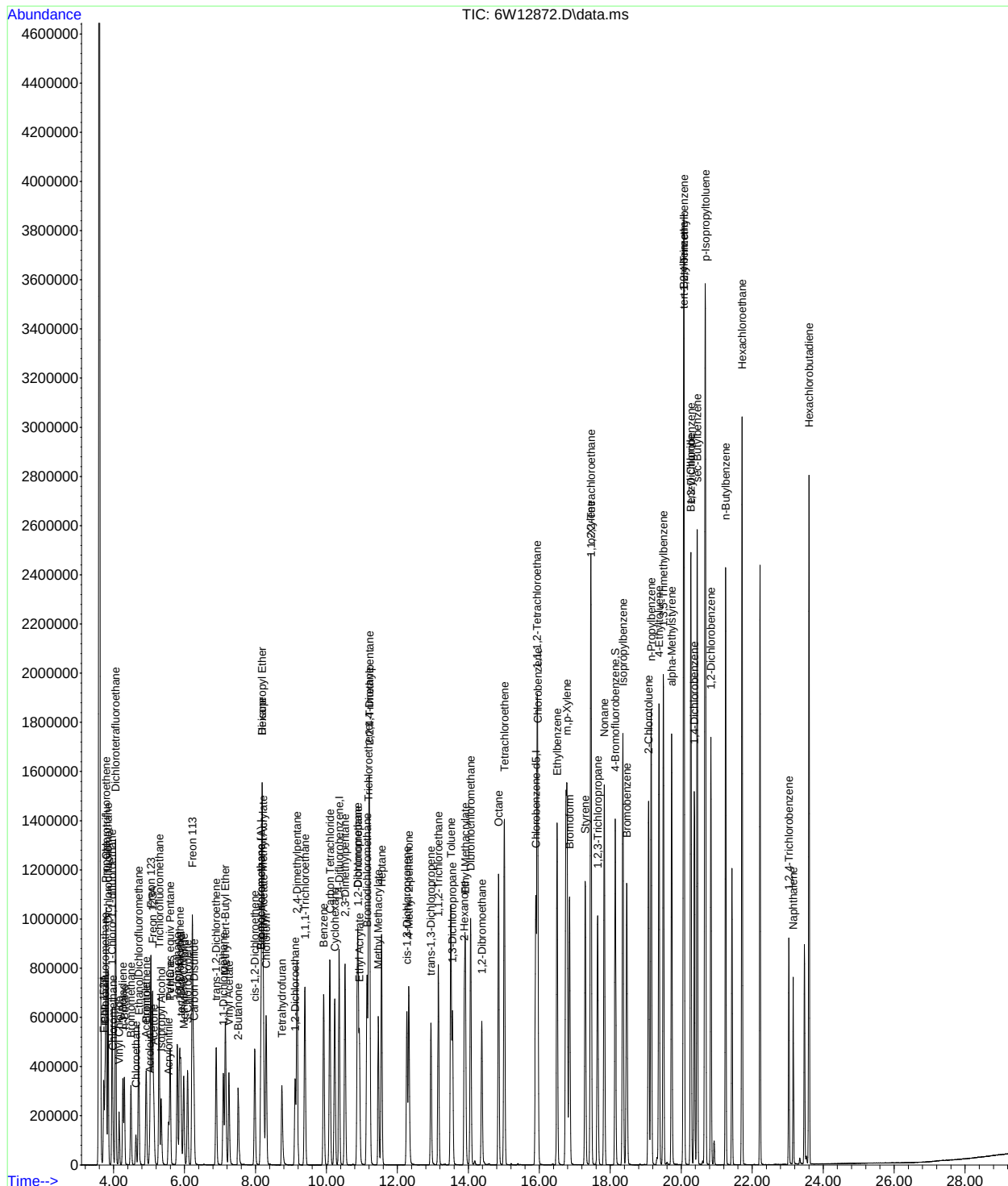
Quant Time: Jul 03 13:54:46 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.554	71	290063	11.54	ppb(v	96
58) Trichloroethene	11.187	95	371981	10.32	ppb(v	94
59) 1,2-Dichloropropane	10.893	63	295150	10.15	ppb(v	94
60) Dibromomethane	10.875	174	376163	8.89	ppb(v	98
61) Ethyl Acrylate	10.930	55	606265	12.39	ppb(v	98
62) Methyl Methacrylate	11.462	69	308031	12.05	ppb(v	89
63) 1,4-Dioxane	11.205	88	185768	8.26	ppb(v#	77
64) Bromodichloromethane	11.144	83	637637	11.02	ppb(v	99
65) cis-1,3-Dichloropropene	12.270	75	477327	11.25	ppb(v	98
66) 4-Methyl-2-pentanone	12.318	58	255293	12.41	ppb(v	92
67) trans-1,3-Dichloropropene	12.942	75	429949	11.56	ppb(v	97
68) Toluene	13.505	91	1007930	10.10	ppb(v	99
69) 1,1,2-Trichloroethane	13.157	97	342026	9.98	ppb(v	98
70) 1,3-Dichloropropane	13.548	76	488355	10.88	ppb(v	92
71) 2-Hexanone	13.885	58	334874	10.92	ppb(v	89
72) Ethyl Methacrylate	13.915	69	542220	12.69	ppb(v	98
73) Dibromochloromethane	14.062	129	723140	11.17	ppb(v	99
74) Tetrachloroethene	15.016	166	584035	10.01	ppb(v	98
75) 1,2-Dibromoethane	14.380	107	538392	10.32	ppb(v	98
76) Octane	14.851	43	648486	13.22	ppb(v	94
77) 1,1,1,2-Tetrachloroethane	15.940	131	497986	10.80	ppb(v	97
79) Chlorobenzene	15.959	112	832484	8.66	ppb(v	97
80) Ethylbenzene	16.503	91	1374191	9.28	ppb(v	98
81) m,p-Xylene	16.772	91	2193834	19.47	ppb(v	98
82) Styrene	17.292	104	801746	11.04	ppb(v	97
83) Nonane	17.831	43	718328	12.78	ppb(v	94
84) o-Xylene	17.445	91	1158988	9.61	ppb(v	98
85) Bromoform	16.852	173	729622	10.48	ppb(v	100
86) 1,1,2,2-Tetrachloroethane	17.457	83	812300	10.14	ppb(v	100
87) 1,2,3-Trichloropropane	17.647	75	607404	10.39	ppb(v	99
88) Isopropylbenzene	18.357	105	1638417	10.54	ppb(v	99
89) Bromobenzene	18.467	156	501979	9.39	ppb(v	92
90) 2-Chlorotoluene	19.079	126	392176	10.85	ppb(v	93
91) n-Propylbenzene	19.152	120	452808	11.31	ppb(v	94
93) 4-Ethyltoluene	19.378	105	1577728	11.67	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.495	105	1419619	11.88	ppb(v	97
95) alpha-Methylstyrene	19.727	118	660580	12.35	ppb(v	98
96) tert-Butylbenzene	20.070	134	344240	11.66	ppb(v	87
97) 1,2,4-Trimethylbenzene	20.082	105	1436324	12.20	ppb(v	94
98) 1,3-Dichlorobenzene	20.271	146	838698	10.25	ppb(v	97
99) Benzyl Chloride	20.265	91	910929	12.09	ppb(v	98
100) 1,4-Dichlorobenzene	20.369	146	767068	9.99	ppb(v	97
101) sec-Butylbenzene	20.455	134	434569	11.71	ppb(v	96
102) p-Isopropyltoluene	20.681	134	468316	11.83	ppb(v	92
103) 1,2-Dichlorobenzene	20.834	146	833503	10.53	ppb(v	97
104) n-Butylbenzene	21.250	134	394995	12.35	ppb(v	90
105) Hexachloroethane	21.715	201	598676	11.53	ppb(v	93
106) 1,2,4-Trichlorobenzene	23.031	180	300748	9.69	ppb(v	99
107) Naphthalene	23.153	128	616487	8.38	ppb(v	100
108) Hexachlorobutadiene	23.600	225	560883	10.05	ppb(v	98
110) TVHC as equiv Pentane	5.595	TIC	1048107	9.86	ppb(v	100

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


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Data Path : C:\msdchem\1\data\  
Data File : 6W12872.D  
Acq On : 3 Jul 2019 7:16 am  
Operator : danat  
Sample : bs  
Misc : MS35902,V6W525,,,,,1  
ALS Vial : 3 Sample Multiplier: 1
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Quant Time: Jul 03 13:54:46 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12873.D
 Acq On : 3 Jul 2019 8:04 am
 Operator : danat
 Sample : bsd
 Misc : MS35902,V6W525,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 03 13:55:19 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.158	130	256667	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	959476	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	483015	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.158	130	256667	10.00	ppb(v	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.143 95 654946 10.72 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 107.20%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	169773	11.12	ppb(v	97
4) Chlorodifluoromethane	3.766	67	74071	12.83	ppb(v	99
5) Propene	3.790	41	187860	11.83	ppb(v	99
6) Chlorotrifluoroethene	3.797	116	438566	10.97	ppb(v	98
7) Dichlorodifluoromethane	3.845	85	771401	12.05	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.962	65	567780	12.74	ppb(v	98
9) Chloromethane	3.980	50	214543	11.62	ppb(v	99
10) Dichlorotetrafluoroethane	4.060	85	734140	11.14	ppb(v	100
11) Vinyl Chloride	4.157	62	254988	11.38	ppb(v#	99
12) 1,3-Butadiene	4.268	54	180538	12.02	ppb(v	95
13) n-Butane	4.310	58	47587	12.57	ppb(v	85
14) Bromomethane	4.494	94	248675	10.34	ppb(v	99
15) Acrolein	5.020	56	96657	9.85	ppb(v#	96
16) Chloroethane	4.629	64	124904	11.41	ppb(v	97
17) Dichlorofluoromethane	4.702	67	582398	11.01	ppb(v	99
18) Acetonitrile	4.910	41	170360	8.22	ppb(v	99
19) Freon 123	5.051	83	564332	9.73	ppb(v	98
20) Freon 123A	5.100	117	354202	10.12	ppb(v	99
21) Bromoethene	4.922	106	247137	9.96	ppb(v	97
22) Trichlorofluoromethane	5.283	101	684082	11.22	ppb(v	98
23) Acetone	5.136	58	105219	8.87	ppb(v	79
24) Pentane	5.595	57	58477	11.01	ppb(v	96
26) Iodomethane	5.797	142	725856	9.79	ppb(v	91
27) Isopropyl Alcohol	5.344	45	401150	9.20	ppb(v	98
28) 1,1-Dichloroethene	5.864	61	380142	11.23	ppb(v	92
29) Freon 113	6.219	101	524315	9.96	ppb(v	99
30) Methylene Chloride	5.981	84	216561	9.28	ppb(v	94
31) Carbon Disulfide	6.262	76	687916	9.93	ppb(v	100
32) Ethanol	4.720	45	83257	9.04	ppb(v	99
33) Acrylonitrile	5.552	53	176567	9.66	ppb(v	99
34) 3-Chloropropene	6.091	76	123682	11.49	ppb(v	85
35) trans-1,2-Dichloroethene	6.892	61	345885	10.66	ppb(v	96
36) tert-Butyl Alcohol	5.895	59	540472	11.18	ppb(v	99
37) Methyl tert-Butyl Ether	7.155	73	742592	11.52	ppb(v	99
38) Vinyl Acetate	7.253	43	683500	12.37	ppb(v	97
39) 1,1-Dichloroethane	7.100	63	441982	10.23	ppb(v	99
40) 2-Butanone	7.510	72	126929	10.44	ppb(v	83
41) Hexane	8.189	57	388748	11.06	ppb(v	95
42) cis-1,2-Dichloroethene	7.981	61	346527	10.85	ppb(v	94
43) Di-isopropyl Ether	8.195	87	233697	11.07	ppb(v	88
44) Ethyl Acetate	8.226	61	83558	11.41	ppb(v	78
45) Methyl Acrylate	8.214	55	474873	10.45	ppb(v	99
46) Chloroform	8.305	83	581314	10.62	ppb(v	99
47) 2,4-Dimethylpentane	9.174	57	456798	11.33	ppb(v	99
48) Tetrahydrofuran	8.746	72	118467	11.00	ppb(v	93
49) 1,1,1-Trichloroethane	9.394	97	612464	11.22	ppb(v	99
50) 1,2-Dichloroethane	9.119	62	362885	11.87	ppb(v	98
51) Benzene	9.926	78	809141	9.89	ppb(v	98
52) Carbon Tetrachloride	10.098	117	676210	11.53	ppb(v	100
53) Cyclohexane	10.232	56	396727	11.46	ppb(v	97
54) 2,3-Dimethylpentane	10.526	71	181895	10.86	ppb(v	91
56) 2,2,4-Trimethylpentane	11.217	57	1314266	10.81	ppb(v	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12873.D
 Acq On : 3 Jul 2019 8:04 am
 Operator : danat
 Sample : bsd
 Misc : MS35902,V6W525,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 03 13:55:19 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

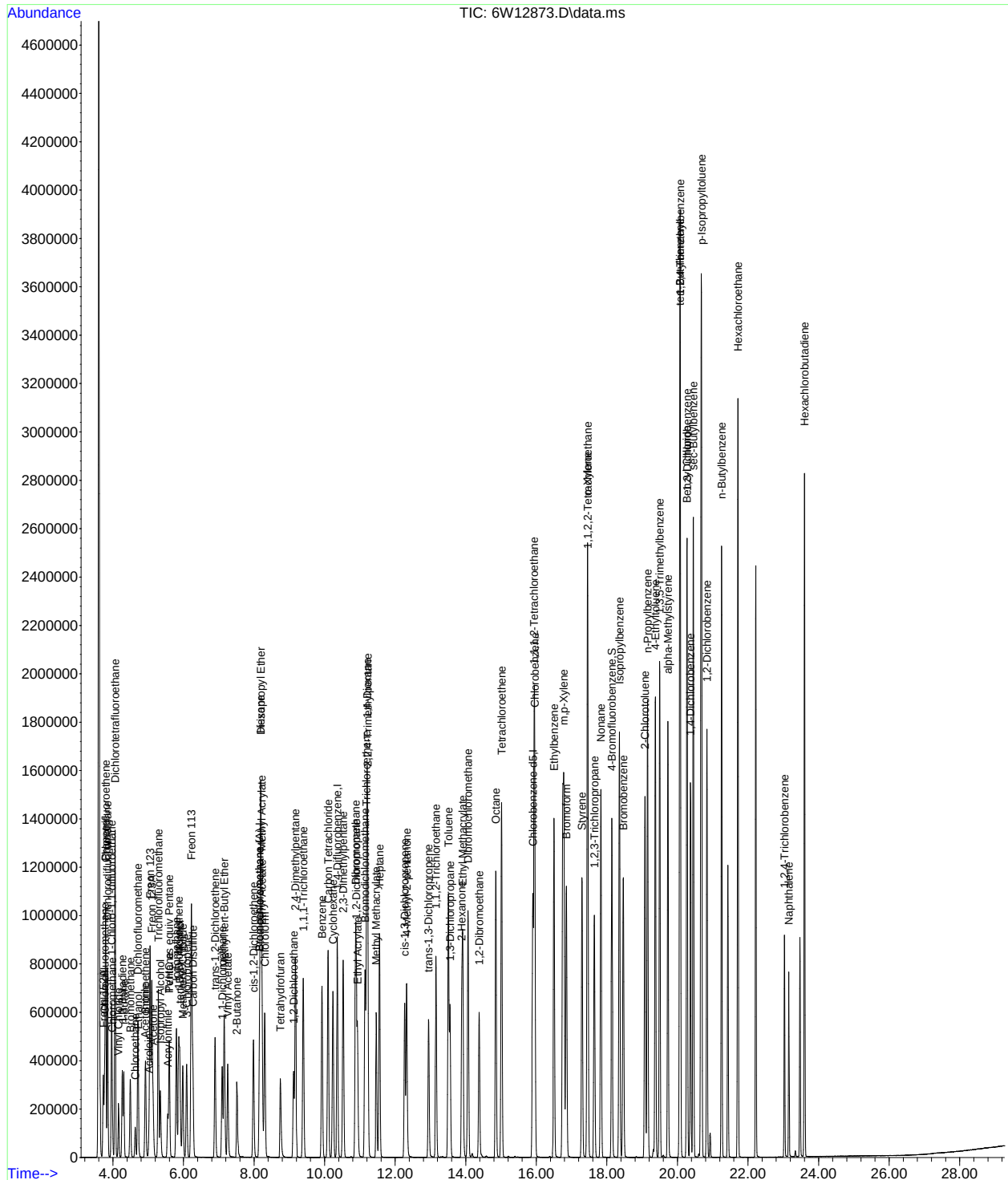
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.554	71	299198	11.43	ppb(v	97
58) Trichloroethene	11.187	95	385367	10.26	ppb(v	96
59) 1,2-Dichloropropane	10.899	63	299228	9.88	ppb(v	95
60) Dibromomethane	10.875	174	392631	8.91	ppb(v	95
61) Ethyl Acrylate	10.936	55	610681	11.98	ppb(v	99
62) Methyl Methacrylate	11.462	69	316662	11.90	ppb(v	92
63) 1,4-Dioxane	11.205	88	192332	8.21	ppb(v#	82
64) Bromodichloromethane	11.144	83	649519	10.78	ppb(v	100
65) cis-1,3-Dichloropropene	12.270	75	485897	11.00	ppb(v	98
66) 4-Methyl-2-pentanone	12.325	58	259493	12.11	ppb(v	94
67) trans-1,3-Dichloropropene	12.943	75	435299	11.24	ppb(v	97
68) Toluene	13.505	91	1043117	10.03	ppb(v	100
69) 1,1,2-Trichloroethane	13.157	97	356628	9.99	ppb(v	99
70) 1,3-Dichloropropane	13.554	76	497232	10.63	ppb(v	94
71) 2-Hexanone	13.885	58	339238	10.62	ppb(v	96
72) Ethyl Methacrylate	13.915	69	555979	12.49	ppb(v	99
73) Dibromochloromethane	14.062	129	745069	11.05	ppb(v	100
74) Tetrachloroethene	15.016	166	613802	10.10	ppb(v	99
75) 1,2-Dibromoethane	14.380	107	550197	10.12	ppb(v	99
76) Octane	14.851	43	644538	12.61	ppb(v	96
77) 1,1,1,2-Tetrachloroethane	15.940	131	513754	10.70	ppb(v	98
79) Chlorobenzene	15.959	112	857403	8.74	ppb(v	97
80) Ethylbenzene	16.503	91	1409548	9.34	ppb(v	99
81) m,p-Xylene	16.772	91	2240603	19.50	ppb(v	98
82) Styrene	17.292	104	821930	11.10	ppb(v	97
83) Nonane	17.831	43	705827	12.32	ppb(v	96
84) o-Xylene	17.451	91	1178857	9.59	ppb(v	99
85) Bromoform	16.852	173	753147	10.61	ppb(v	100
86) 1,1,2,2-Tetrachloroethane	17.457	83	824641	10.09	ppb(v	99
87) 1,2,3-Trichloropropane	17.647	75	612519	10.27	ppb(v	99
88) Isopropylbenzene	18.357	105	1673661	10.56	ppb(v	98
89) Bromobenzene	18.467	156	517625	9.49	ppb(v	94
90) 2-Chlorotoluene	19.079	126	400327	10.86	ppb(v	94
91) n-Propylbenzene	19.152	120	461058	11.30	ppb(v	95
93) 4-Ethyltoluene	19.378	105	1610817	11.68	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.495	105	1444429	11.85	ppb(v	98
95) alpha-Methylstyrene	19.727	118	679959	12.47	ppb(v	99
96) tert-Butylbenzene	20.070	134	354208	11.77	ppb(v	88
97) 1,2,4-Trimethylbenzene	20.082	105	1463793	12.20	ppb(v	95
98) 1,3-Dichlorobenzene	20.272	146	862636	10.34	ppb(v	98
99) Benzyl Chloride	20.265	91	945627	12.31	ppb(v	99
100) 1,4-Dichlorobenzene	20.369	146	793334	10.13	ppb(v	97
101) sec-Butylbenzene	20.455	134	443893	11.73	ppb(v	95
102) p-Isopropyltoluene	20.681	134	485926	12.04	ppb(v	91
103) 1,2-Dichlorobenzene	20.834	146	867384	10.75	ppb(v	98
104) n-Butylbenzene	21.250	134	408898	12.54	ppb(v	90
105) Hexachloroethane	21.715	201	613438	11.59	ppb(v	94
106) 1,2,4-Trichlorobenzene	23.031	180	298804	9.44	ppb(v	99
107) Naphthalene	23.153	128	622230	8.29	ppb(v	99
108) Hexachlorobutadiene	23.600	225	568947	10.00	ppb(v	99
110) TVHC as equiv Pentane	5.595	TIC	1014313	9.14	ppb(v	100

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

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\  
Data File : 6W12873.D  
Acq On : 3 Jul 2019 8:04 am  
Operator : danat  
Sample : bsd  
Misc : MS35902,V6W525,,,,,1  
ALS Vial : 4 Sample Multiplier: 1
```

Quant Time: Jul 03 13:55:19 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13190.D
 Acq On : 23 Jul 2019 11:32 pm
 Operator : thomash
 Sample : jc91516-1dup
 Misc : MS36116,V6W538,100,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 24 14:16:35 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.158	130	250051	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.355	114	909473	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.891	82	434684	10.00	ppb(v	-0.01
109) Bromochloromethane (A)	8.158	130	250051	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.136	95	546866	9.95	ppb(v	-0.01
Spiked Amount	10.000	Range	65 - 128	Recovery	=	99.50%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	6825	0.46	ppb(v#	81
7) Dichlorodifluoromethane	3.845	85	9312	0.15	ppb(v	95
8) 1-Chloro-1,1-difluoroe...	3.962	65	42819	0.99	ppb(v#	70
9) Chloromethane	3.980	50	2748	0.15	ppb(v	96
22) Trichlorofluoromethane	5.283	101	13916	0.23	ppb(v	99
23) Acetone	5.149	58	6402	0.55	ppb(v	72
28) 1,1-Dichloroethene	5.864	61	19433	0.59	ppb(v	87
30) Methylene Chloride	5.981	84	9823	0.43	ppb(v	89
32) Ethanol	4.726	45	5546	0.62	ppb(v#	94
40) 2-Butanone	7.534	72	15243	1.29	ppb(v	73
41) Hexane	8.189	57	17249	0.50	ppb(v#	54
66) 4-Methyl-2-pentanone	12.349	58	4619	0.23	ppb(v	79
68) Toluene	13.505	91	286363	2.91	ppb(v	99

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

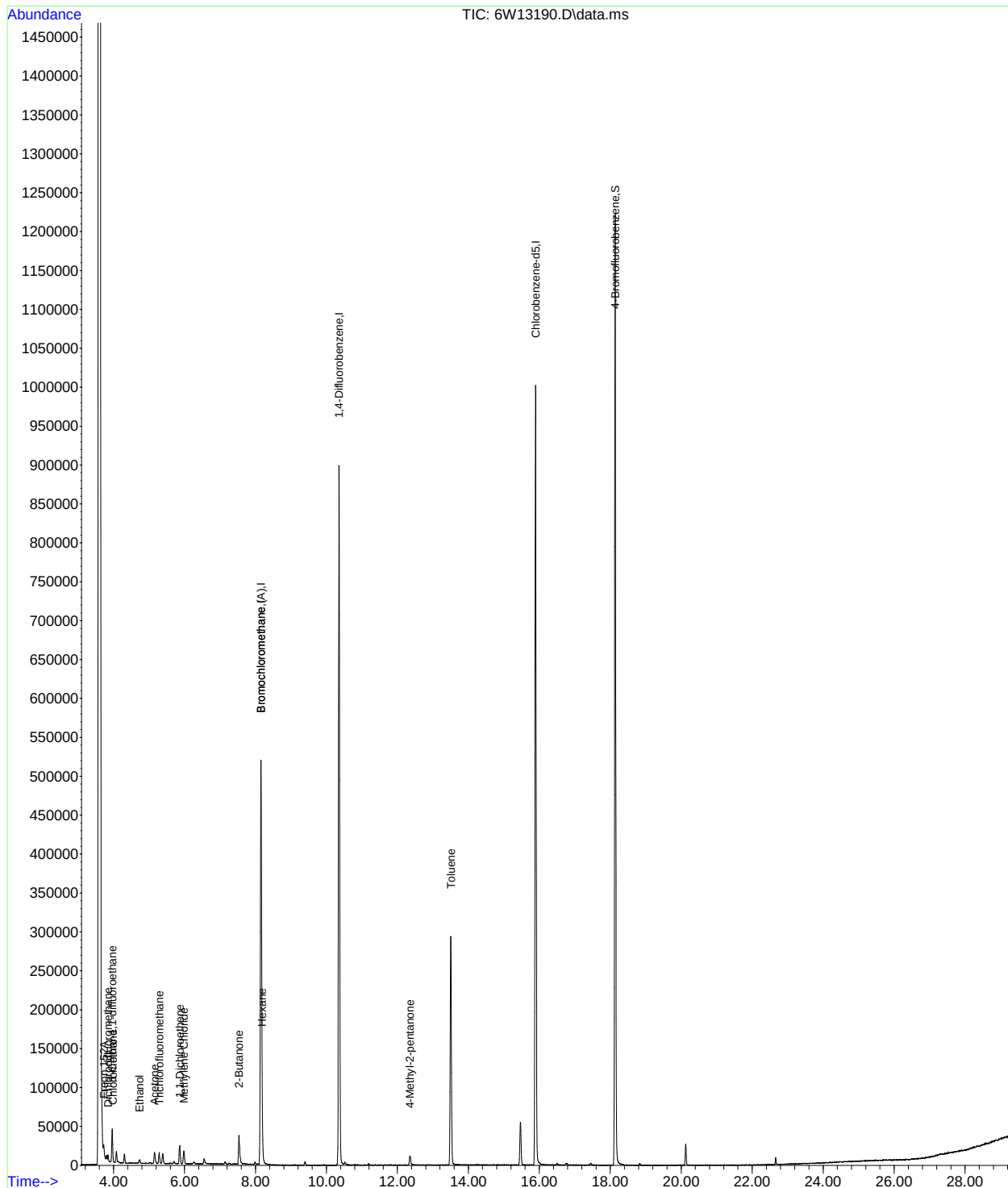
7.4.1

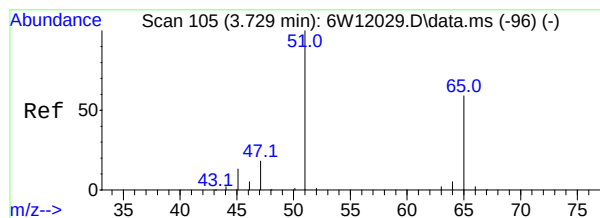
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W13190.D
Acq On : 23 Jul 2019 11:32 pm
Operator : thomash
Sample : jc91516-1dup
Misc : MS36116,V6W538,100,,,1
ALS Vial : 10 Sample Multiplier: 1

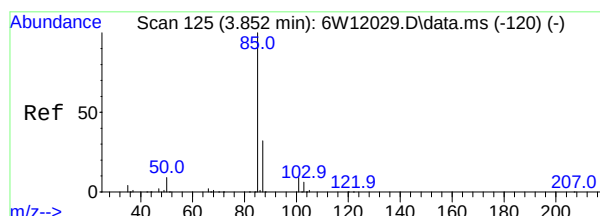
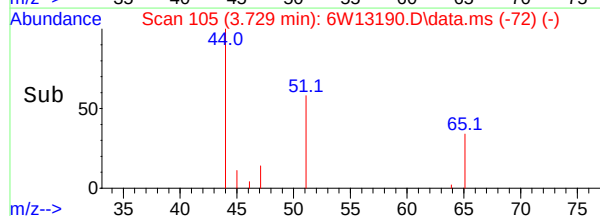
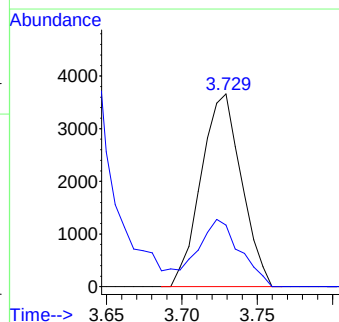
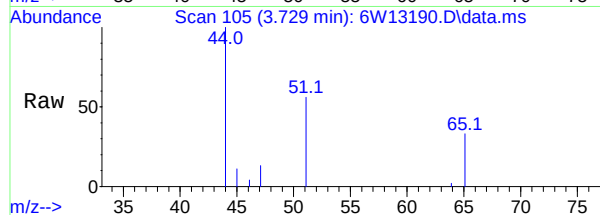
Quant Time: Jul 24 14:16:35 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration





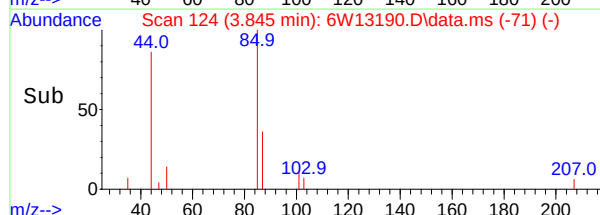
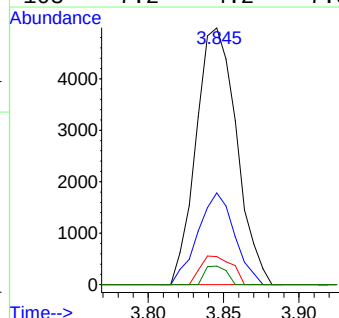
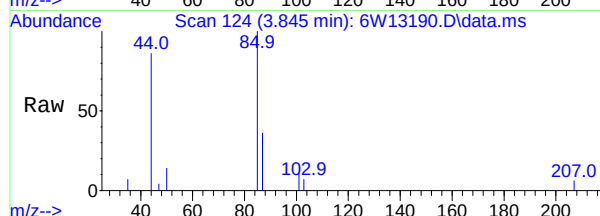
#3
 Freon 152A
 Concen: 0.46 ppb(v)
 RT: 3.729 min Scan# 105
 Delta R.T. 0.000 min
 Lab File: 6W13190.D
 Acq: 23 Jul 2019 11:32 pm

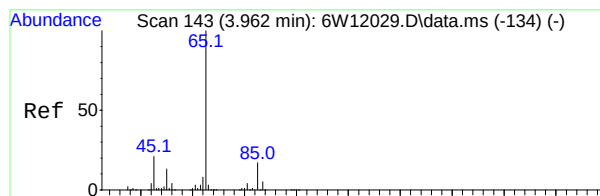
Tgt Ion: 65 Resp: 6825
 Ion Ratio Lower Upper
 65 100
 45 32.0 16.0 29.8#



#7
 Dichlorodifluoromethane
 Concen: 0.15 ppb(v)
 RT: 3.845 min Scan# 124
 Delta R.T. -0.006 min
 Lab File: 6W13190.D
 Acq: 23 Jul 2019 11:32 pm

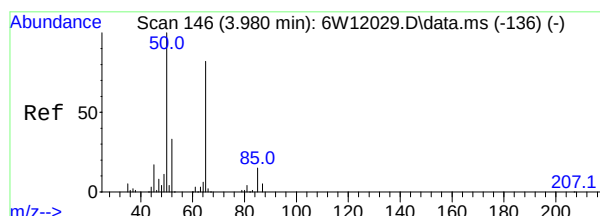
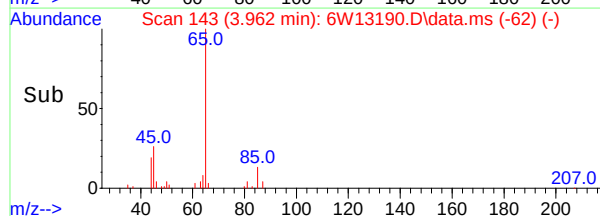
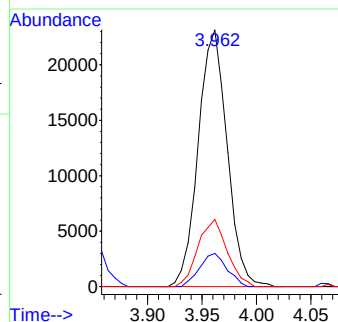
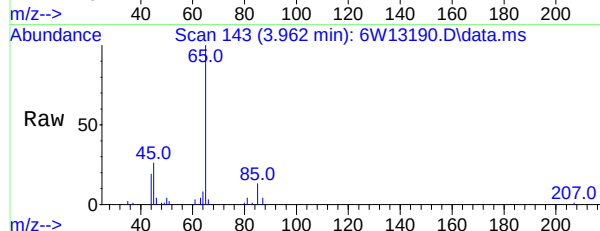
Tgt Ion: 85 Resp: 9312
 Ion Ratio Lower Upper
 85 100
 87 35.7 22.7 42.1
 101 11.0 6.3 11.7
 103 7.2 4.2 7.8





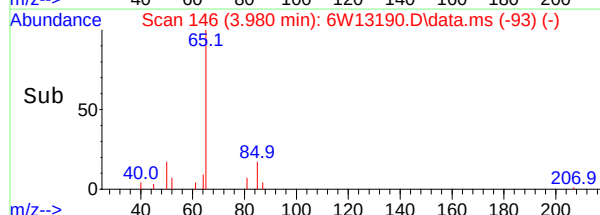
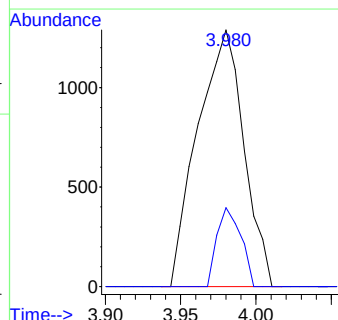
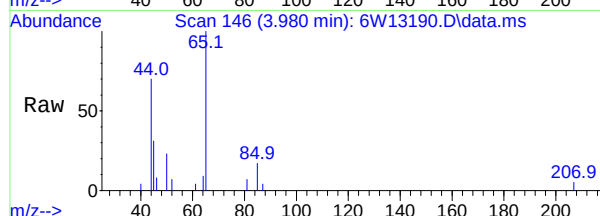
#8
1-Chloro-1,1-difluoroethane
Concen: 0.99 ppb(v)
RT: 3.962 min Scan# 143
Delta R.T. -0.006 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

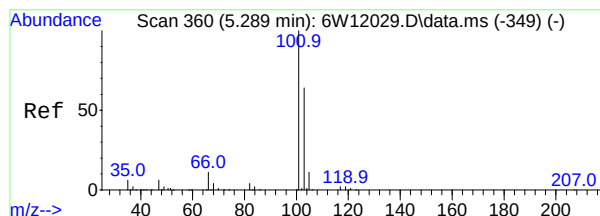
Tgt Ion: 65 Resp: 42819
Ion Ratio Lower Upper
65 100
85 12.3 14.1 21.1#
45 0.0 17.2 25.8#



#9
Chloromethane
Concen: 0.15 ppb(v)
RT: 3.980 min Scan# 146
Delta R.T. -0.006 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

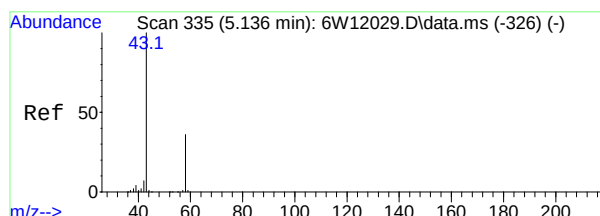
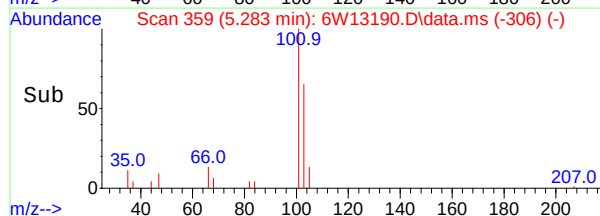
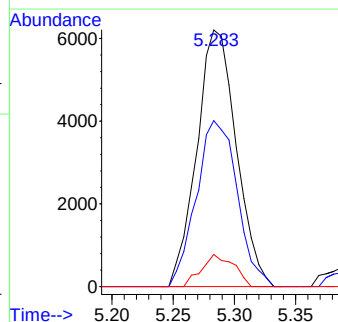
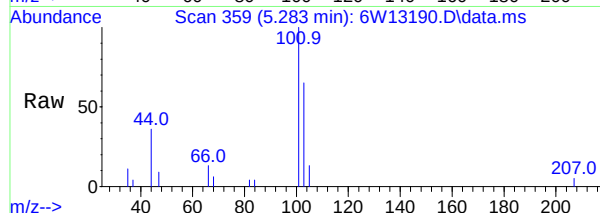
Tgt Ion: 50 Resp: 2748
Ion Ratio Lower Upper
50 100
52 30.7 23.0 42.8





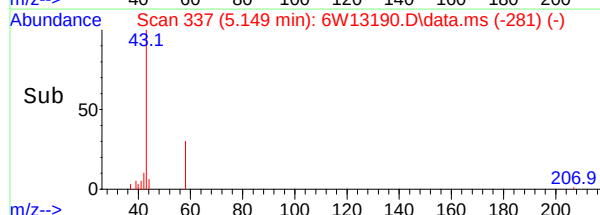
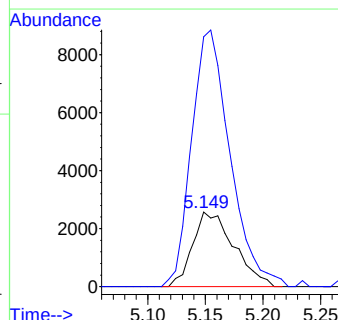
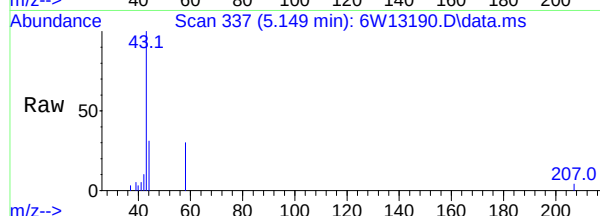
#22
 Trichlorofluoromethane
 Concen: 0.23 ppb(v)
 RT: 5.283 min Scan# 359
 Delta R.T. -0.006 min
 Lab File: 6W13190.D
 Acq: 23 Jul 2019 11:32 pm

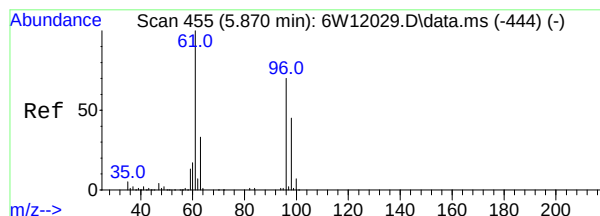
Tgt Ion: 101 Resp: 13916
 Ion Ratio Lower Upper
 101 100
 103 64.6 45.1 83.7
 105 12.5 7.5 13.9



#23
 Acetone
 Concen: 0.55 ppb(v)
 RT: 5.149 min Scan# 337
 Delta R.T. 0.012 min
 Lab File: 6W13190.D
 Acq: 23 Jul 2019 11:32 pm

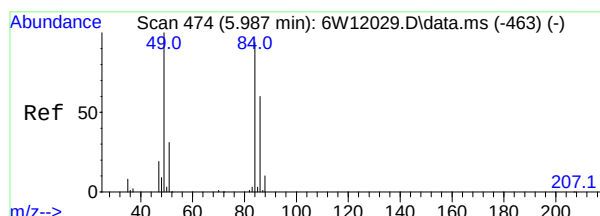
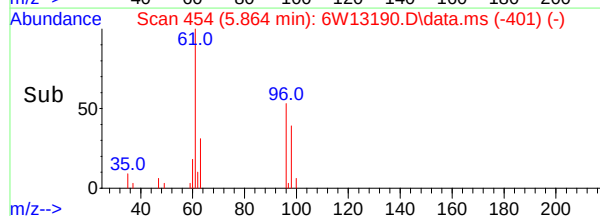
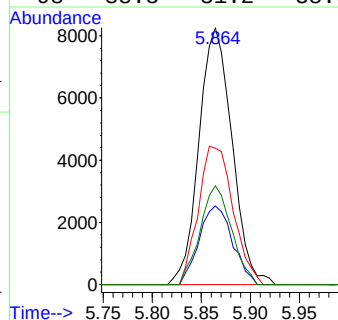
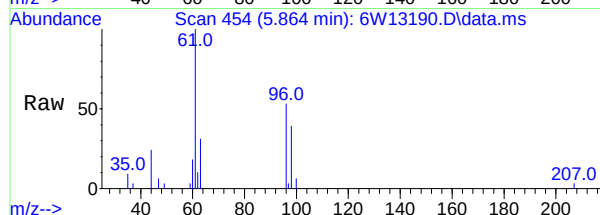
Tgt Ion: 58 Resp: 6402
 Ion Ratio Lower Upper
 58 100
 43 335.3 197.9 367.5





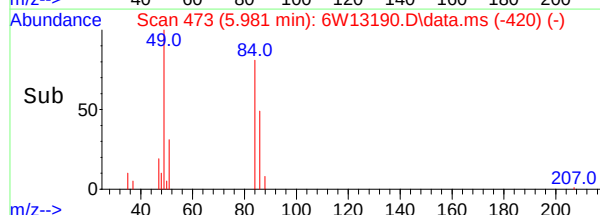
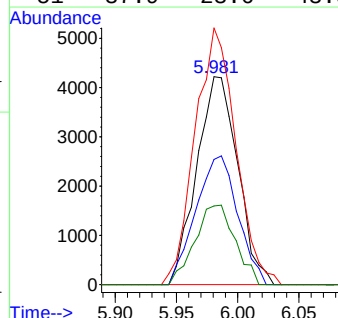
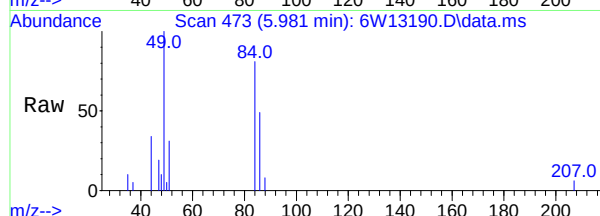
#28
1,1-Dichloroethene
Concen: 0.59 ppb(v)
RT: 5.864 min Scan# 454
Delta R.T. -0.006 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

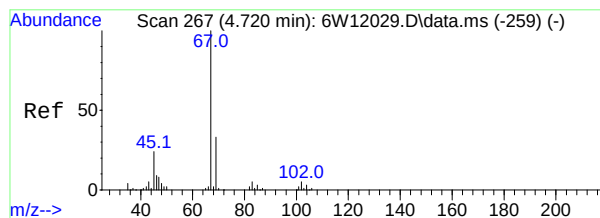
Tgt Ion: 61 Resp: 19433
Ion Ratio Lower Upper
61 100
63 30.6 22.7 42.3
96 53.1 48.6 90.3
98 38.5 31.2 58.0



#30
Methylene Chloride
Concen: 0.43 ppb(v)
RT: 5.981 min Scan# 473
Delta R.T. -0.006 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

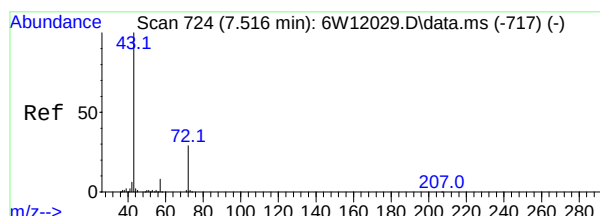
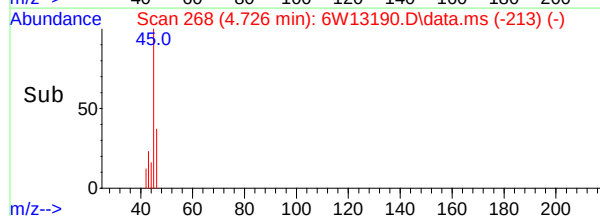
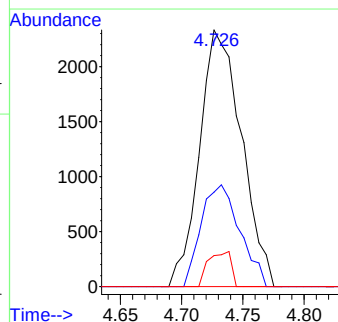
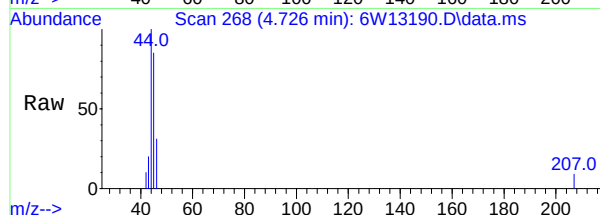
Tgt Ion: 84 Resp: 9823
Ion Ratio Lower Upper
84 100
86 60.2 45.1 83.7
49 123.4 74.7 138.7
51 37.9 23.6 43.8





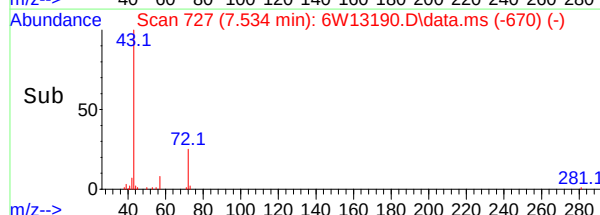
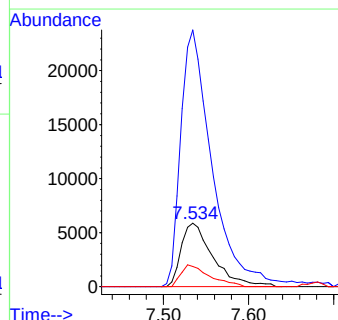
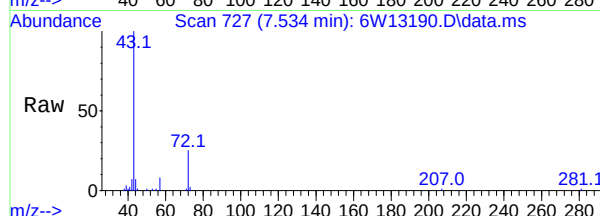
#32
Ethanol
Concen: 0.62 ppb(v)
RT: 4.726 min Scan# 268
Delta R.T. 0.006 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

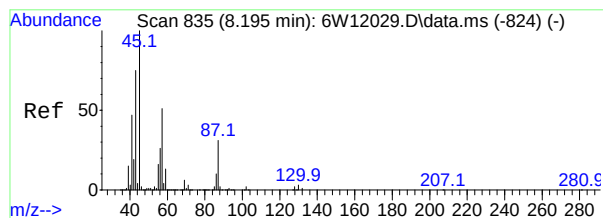
Tgt Ion: 45 Resp: 5546
Ion Ratio Lower Upper
45 100
46 36.8 27.7 51.5
42 12.1 5.5 10.1#



#40
2-Butanone
Concen: 1.29 ppb(v)
RT: 7.534 min Scan# 727
Delta R.T. 0.018 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

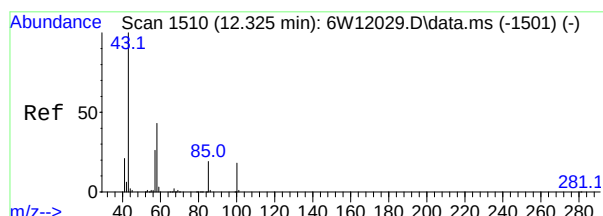
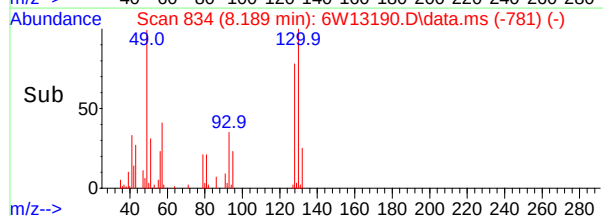
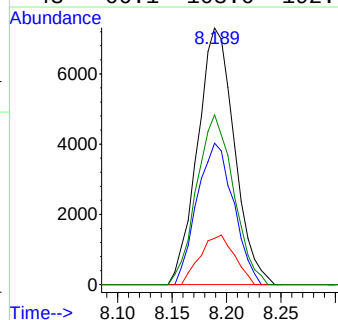
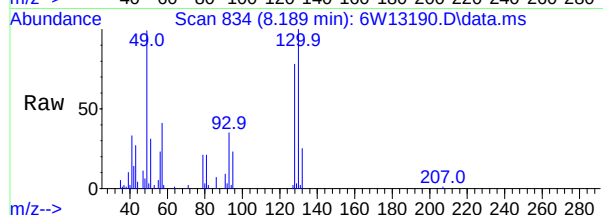
Tgt Ion: 72 Resp: 15243
Ion Ratio Lower Upper
72 100
43 405.2 240.3 446.3
57 31.8 20.1 37.3





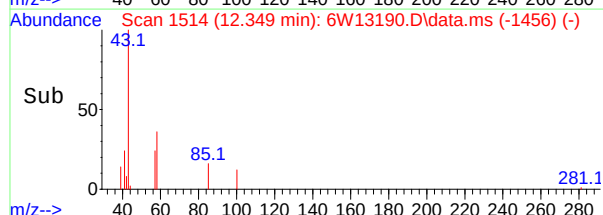
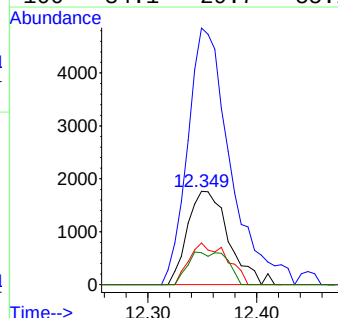
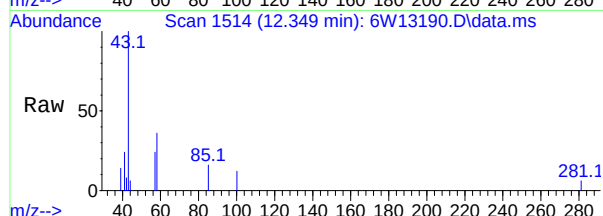
#41
Hexane
Concen: 0.50 ppb(v)
RT: 8.189 min Scan# 834
Delta R.T. -0.006 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

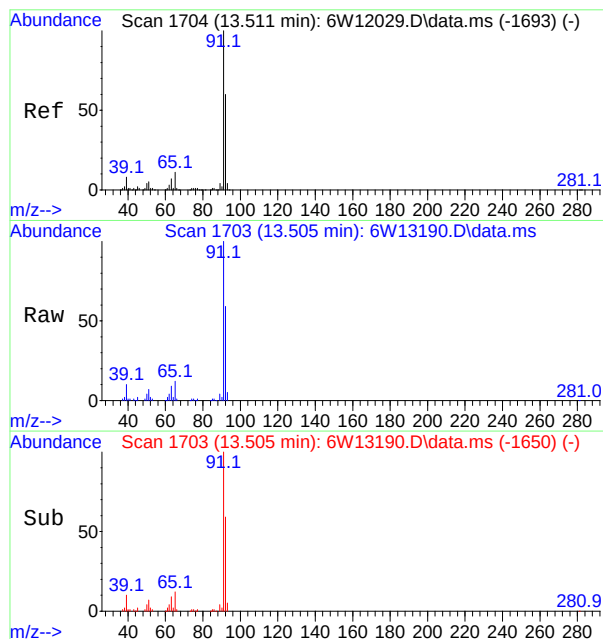
Tgt Ion: 57 Resp: 17249
Ion Ratio Lower Upper
57 100
56 55.2 36.0 66.8
86 18.0 13.6 25.2
43 66.1 103.6 192.4#



#66
4-Methyl-2-pentanone
Concen: 0.23 ppb(v)
RT: 12.349 min Scan# 1514
Delta R.T. 0.024 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

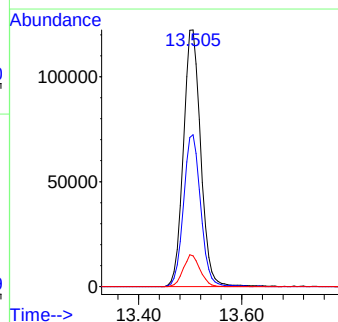
Tgt Ion: 58 Resp: 4619
Ion Ratio Lower Upper
58 100
43 274.6 162.5 301.7
85 44.5 33.0 61.4
100 34.1 29.7 55.1





#68
Toluene
Concen: 2.91 ppb(v)
RT: 13.505 min Scan# 1703
Delta R.T. -0.006 min
Lab File: 6W13190.D
Acq: 23 Jul 2019 11:32 pm

Tgt Ion: 91 Resp: 286363
Ion Ratio Lower Upper
91 100
92 59.1 41.7 77.5
65 12.0 7.4 13.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W12879.D
Acq On : 3 Jul 2019 1:32 pm
Operator : danat
Sample : scc(a990),cp10404
Misc : MS35957,V6W525,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 03 15:31:48 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.159	130	236037	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.355	114	880131	10.00	ppb(v	-0.01
78) Chlorobenzene-d5	15.897	82	402538	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.159	130	236037	10.00	ppb(v	0.00

System Monitoring Compounds
92) 4-Bromofluorobenzene 18.136 95 492935 9.69 ppb(v -0.01
Spiked Amount 10.000 Range 65 - 128 Recovery = 96.90%

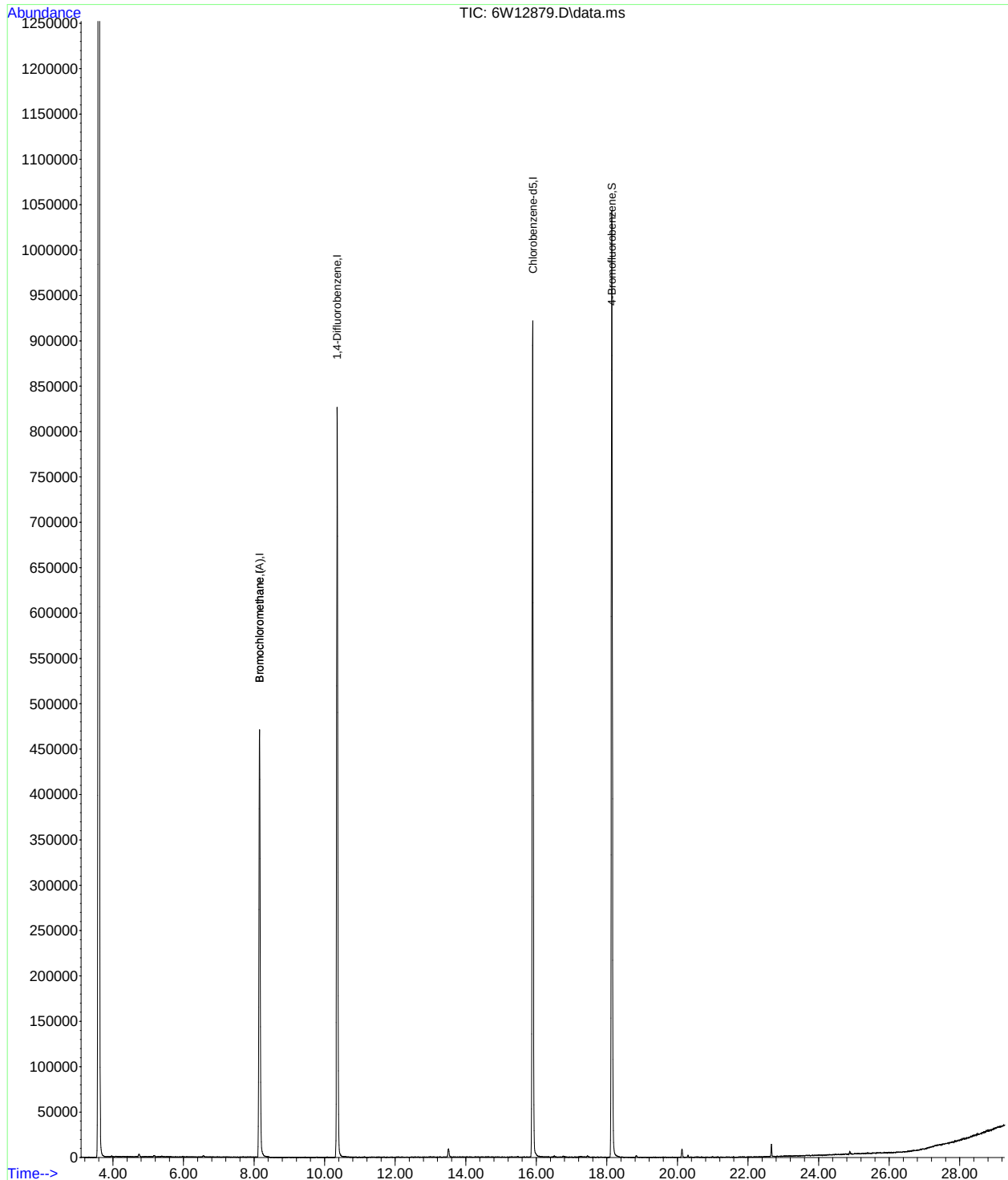
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W12879.D
Acq On : 3 Jul 2019 1:32 pm
Operator : danat
Sample : scc(a990),cp10404
Misc : MS35957,V6W525,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 03 15:31:48 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration

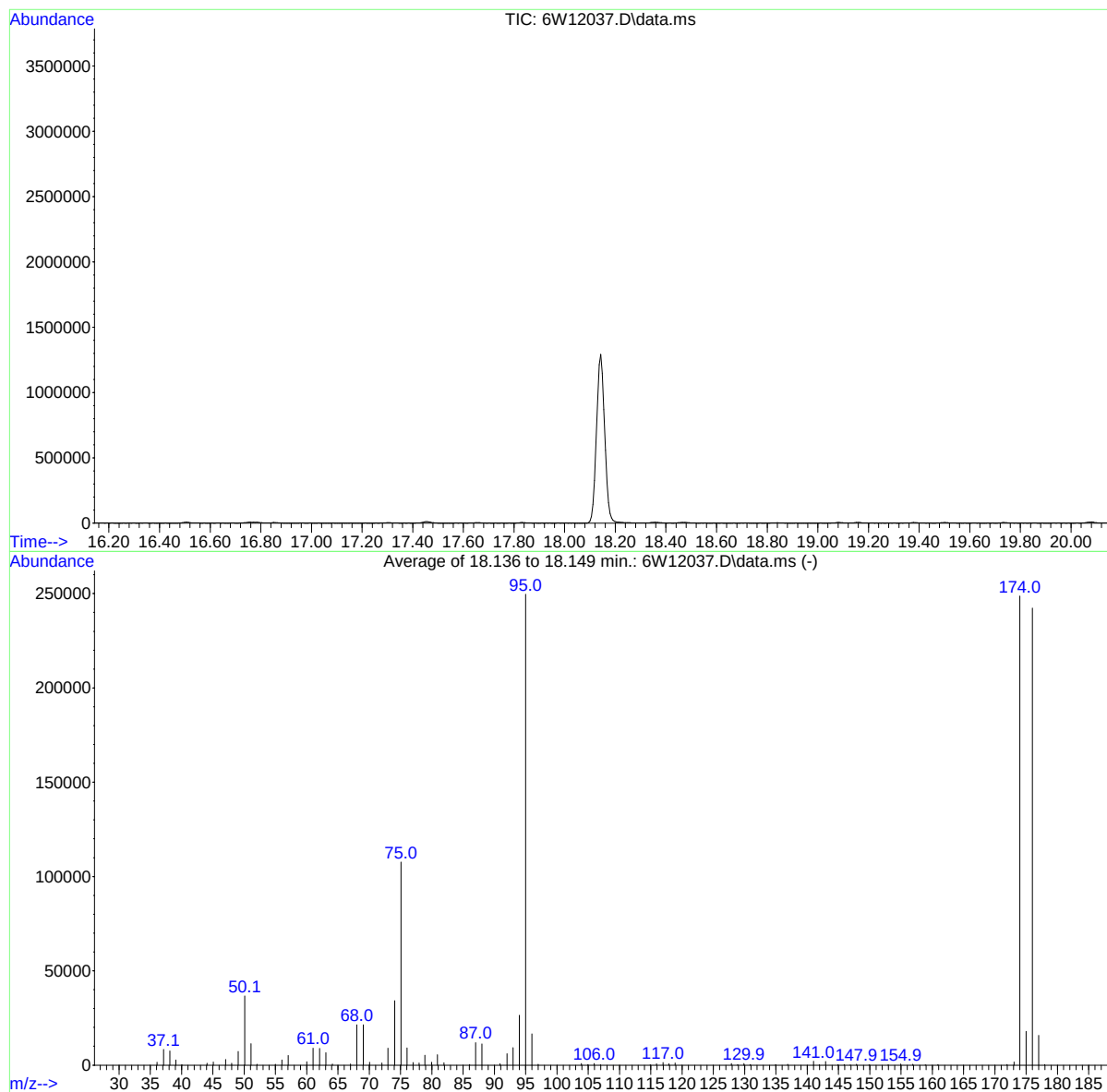


BFB

Data File : C:\msdchem\1\data\6W12037.D
Acq On : 16 May 2019 3:34 pm
Sample : bfb
Misc : MS33831,V6W487,,,,,1
MS Integration Params: Rteint.p

Vial: 1
Operator: thomash
Inst : GCMS6W
Multiplr: 1.00

Method : C:\msdchem\1\methods\m6w487.M (RTE Integrator)
Title : T0-15 Full Scan Mode



AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2450

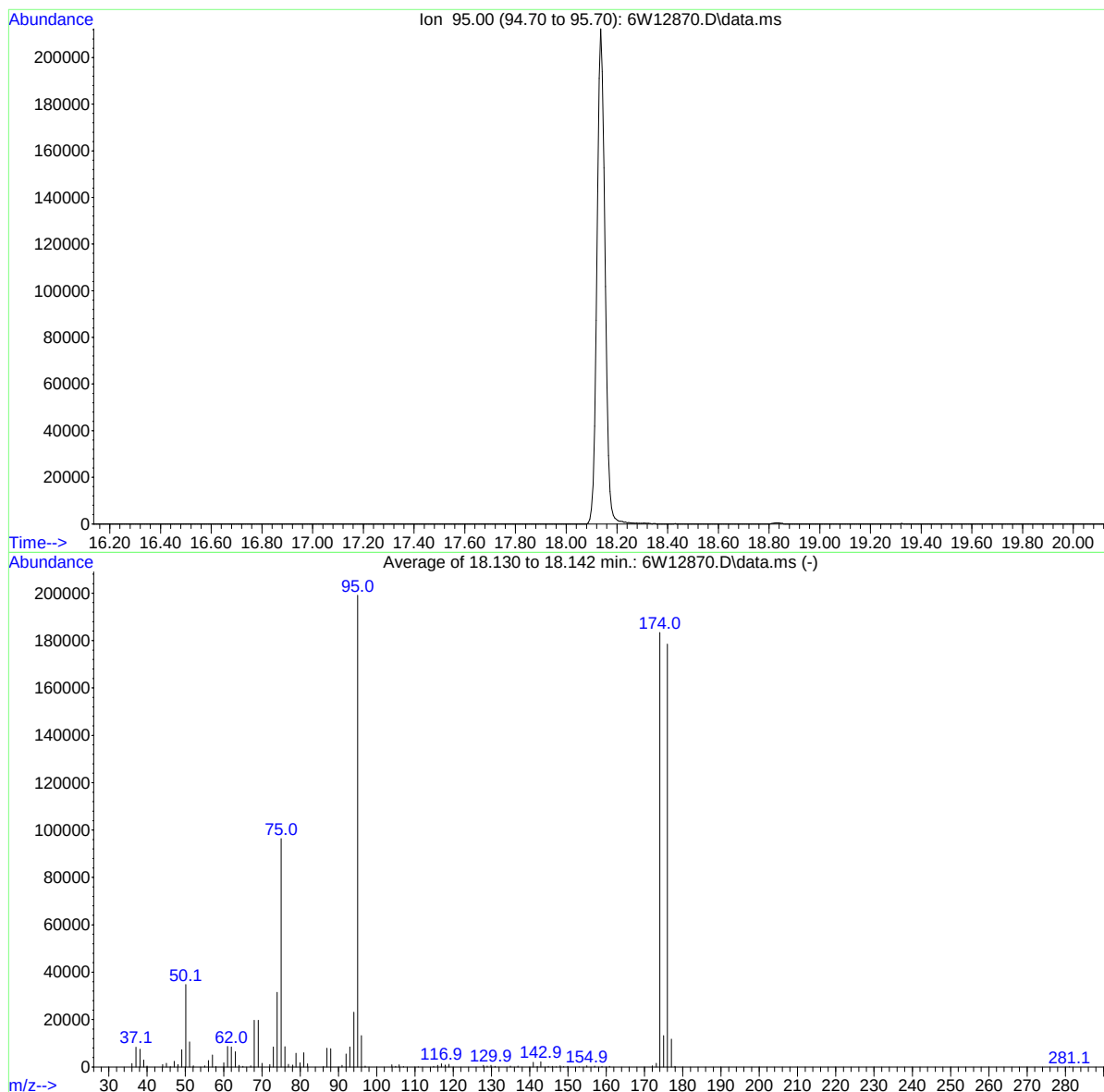
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.7	36707	PASS
75	95	30	66	43.1	107667	PASS
95	95	100	100	100.0	249621	PASS
96	95	5	9	6.7	16626	PASS
173	174	0.00	2	0.7	1695	PASS
174	95	50	120	99.6	248683	PASS
175	174	4	9	7.2	17899	PASS
176	174	93	101	97.5	242347	PASS
177	176	5	9	6.5	15807	PASS

BFB

Data File : C:\msdchem\1\data\6W12870.D
Acq On : 3 Jul 2019 5:34 am
Sample : bfb
Misc : MS35902,V6W525,,,,,1
MS Integration Params: Rteint.p

Vial: 1
Operator: danat
Inst : GCMS6W
Multiplr: 1.00

Method : C:\msdchem\1\methods\m6w487.M (RTE Integrator)
Title : T0-15 Full Scan Mode



AutoFind: Scans 2459, 2460, 2461; Background Corrected with Scan 2449

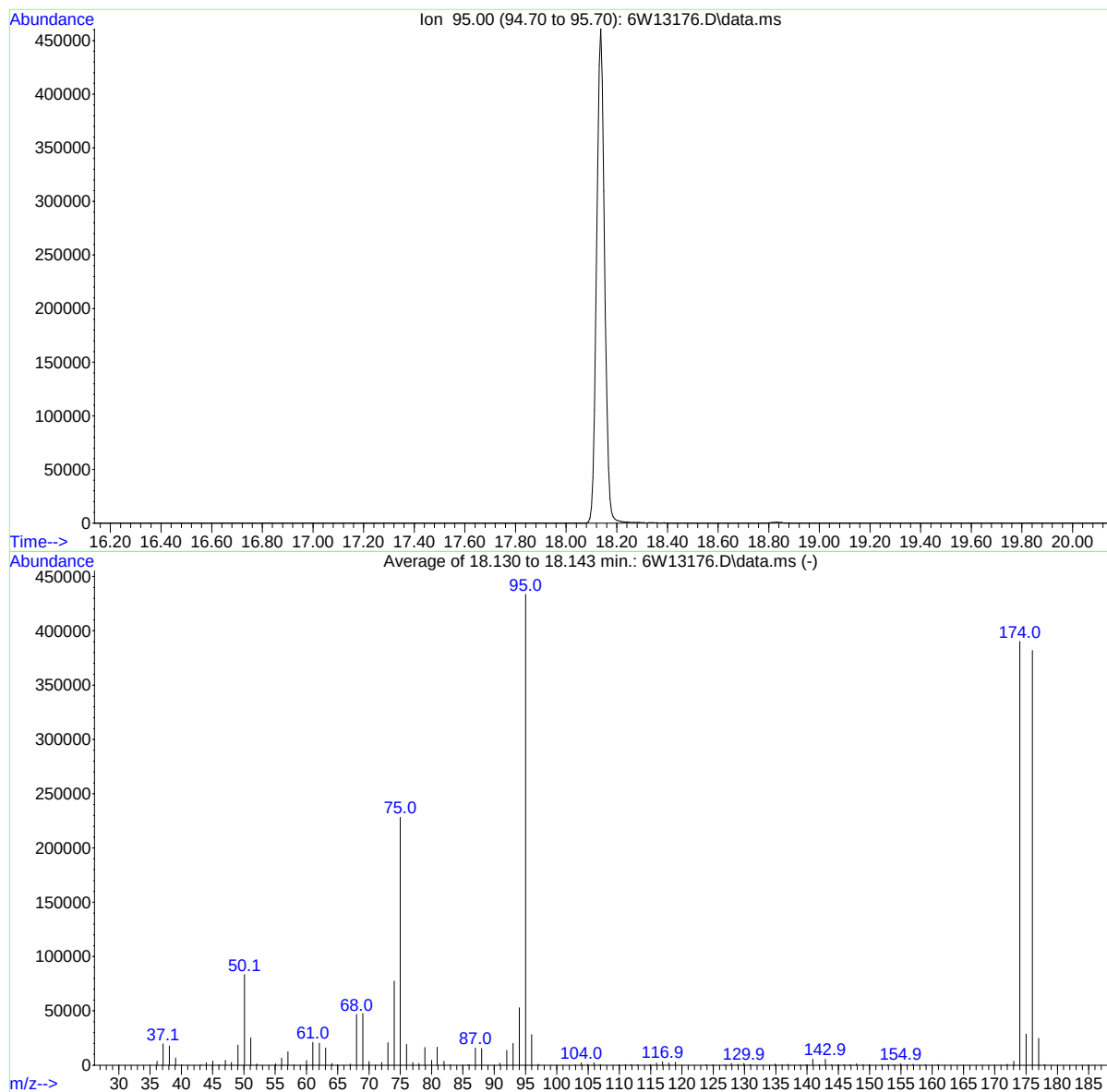
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.5	34808	PASS
75	95	30	66	48.4	96451	PASS
95	95	100	100	100.0	199104	PASS
96	95	5	9	6.6	13226	PASS
173	174	0.00	2	0.8	1545	PASS
174	95	50	120	92.1	183381	PASS
175	174	4	9	7.2	13211	PASS
176	174	93	101	97.4	178560	PASS
177	176	5	9	6.6	11796	PASS

BFB

Data File : C:\msdchem\1\data\6W13176.D
Acq On : 23 Jul 2019 9:07 am
Sample : bfb
Misc : MS36116,V6W537,,,,,1
MS Integration Params: Rteint.p

Vial: 1
Operator: thomash
Inst : GCMS6W
Multiplr: 1.00

Method : C:\msdchem\1\methods\m6w487.M (RTE Integrator)
Title : T0-15 Full Scan Mode



AutoFind: Scans 2459, 2460, 2461; Background Corrected with Scan 2448

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.2	83307	PASS
75	95	30	66	52.6	228181	PASS
95	95	100	100	100.0	433600	PASS
96	95	5	9	6.5	28187	PASS
173	174	0.00	2	0.9	3603	PASS
174	95	50	120	90.0	390187	PASS
175	174	4	9	7.3	28675	PASS
176	174	93	101	97.9	381909	PASS
177	176	5	9	6.4	24587	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12038.D
 Acq On : 16 May 2019 4:21 pm
 Operator : thomash
 Sample : ic487-0.04
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 15:22:24 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.165	130	297901	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	1071090	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	456333	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.165	130	297901	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.143	95	553328	9.48	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	94.80%

Target Compounds						Qvalue
3) Freon 152A	3.735	65	733	0.04	ppb(v#	53
5) Propene	3.797	41	807	0.04	ppb(v#	87
6) Chlorotrifluoroethene	3.797	116	1996	0.04	ppb(v#	82
7) Dichlorodifluoromethane	3.852	85	3174	0.04	ppb(v#	87
8) 1-Chloro-1,1-difluoro...	3.968	65	2278	0.04	ppb(v#	1
9) Chloromethane	3.986	50	862	0.04	ppb(v#	42
10) Dichlorotetrafluoroethane	4.060	85	3361	0.04	ppb(v	90
11) Vinyl Chloride	4.164	62	1024	0.04	ppb(v#	48
12) 1,3-Butadiene	4.268	54	717	0.04	ppb(v#	85
14) Bromomethane	4.494	94	1228	0.04	ppb(v#	78
16) Chloroethane	4.641	64	299	0.02	ppb(v#	50
17) Dichlorofluoromethane	4.708	67	2640	0.04	ppb(v#	91
18) Acetonitrile	4.928	41	1187	0.05	ppb(v#	62
19) Freon 123	5.057	83	2782	0.04	ppb(v#	92
20) Freon 123A	5.106	117	1476	0.04	ppb(v	87
21) Bromoethene	4.928	106	1130	0.04	ppb(v#	92
22) Trichlorofluoromethane	5.295	101	2969	0.04	ppb(v#	89
26) Iodomethane	5.797	142	3511	0.04	ppb(v	88
28) 1,1-Dichloroethene	5.870	61	1624	0.04	ppb(v	94
29) Freon 113	6.225	101	2486	0.04	ppb(v	94
31) Carbon Disulfide	6.268	76	3374	0.04	ppb(v#	75
33) Acrylonitrile	5.571	53	689	0.03	ppb(v#	77
34) 3-Chloropropene	6.091	76	232	0.02	ppb(v#	73
35) trans-1,2-Dichloroethene	6.898	61	1478	0.04	ppb(v	95
36) tert-Butyl Alcohol	5.962	59	2220	0.04	ppb(v#	63
37) Methyl tert-Butyl Ether	7.198	73	3161	0.04	ppb(v	96
38) Vinyl Acetate	7.284	43	2037	0.03	ppb(v#	70
39) 1,1-Dichloroethane	7.100	63	2133	0.04	ppb(v#	94
41) Hexane	8.201	57	1558	0.04	ppb(v#	62
42) cis-1,2-Dichloroethene	7.981	61	1432	0.04	ppb(v#	87
43) Di-isopropyl Ether	8.226	87	734	0.03	ppb(v#	94
46) Chloroform	8.305	83	2749	0.04	ppb(v#	92
47) 2,4-Dimethylpentane	9.180	57	1642	0.03	ppb(v	89
49) 1,1,1-Trichloroethane	9.406	97	2636	0.04	ppb(v#	80
50) 1,2-Dichloroethane	9.131	62	1280	0.04	ppb(v#	89
51) Benzene	9.933	78	4186	0.04	ppb(v	93
52) Carbon Tetrachloride	10.104	117	2768	0.04	ppb(v	90
53) Cyclohexane	10.232	56	1411	0.03	ppb(v#	85
54) 2,3-Dimethylpentane	10.532	71	633	0.03	ppb(v#	72
56) 2,2,4-Trimethylpentane	11.217	57	5252	0.04	ppb(v#	91
57) Heptane	11.560	71	859	0.03	ppb(v#	81
58) Trichloroethene	11.193	95	1512	0.03	ppb(v	89
59) 1,2-Dichloropropane	10.899	63	1359	0.04	ppb(v#	73
60) Dibromomethane	10.887	174	2293	0.05	ppb(v	93
61) Ethyl Acrylate	10.985	55	1216	0.02	ppb(v#	76
62) Methyl Methacrylate	11.499	69	677	0.02	ppb(v#	79
63) 1,4-Dioxane	11.285	88	970	0.04	ppb(v#	39
64) Bromodichloromethane	11.150	83	2611	0.04	ppb(v#	85
65) cis-1,3-Dichloropropene	12.288	75	1596	0.03	ppb(v#	64
66) 4-Methyl-2-pentanone	12.386	58	516	0.02	ppb(v#	80
67) trans-1,3-Dichloropropene	12.967	75	1272	0.03	ppb(v#	48
68) Toluene	13.511	91	5265	0.04	ppb(v#	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12038.D
 Acq On : 16 May 2019 4:21 pm
 Operator : thomash
 Sample : ic487-0.04
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 15:22:24 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : TO-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

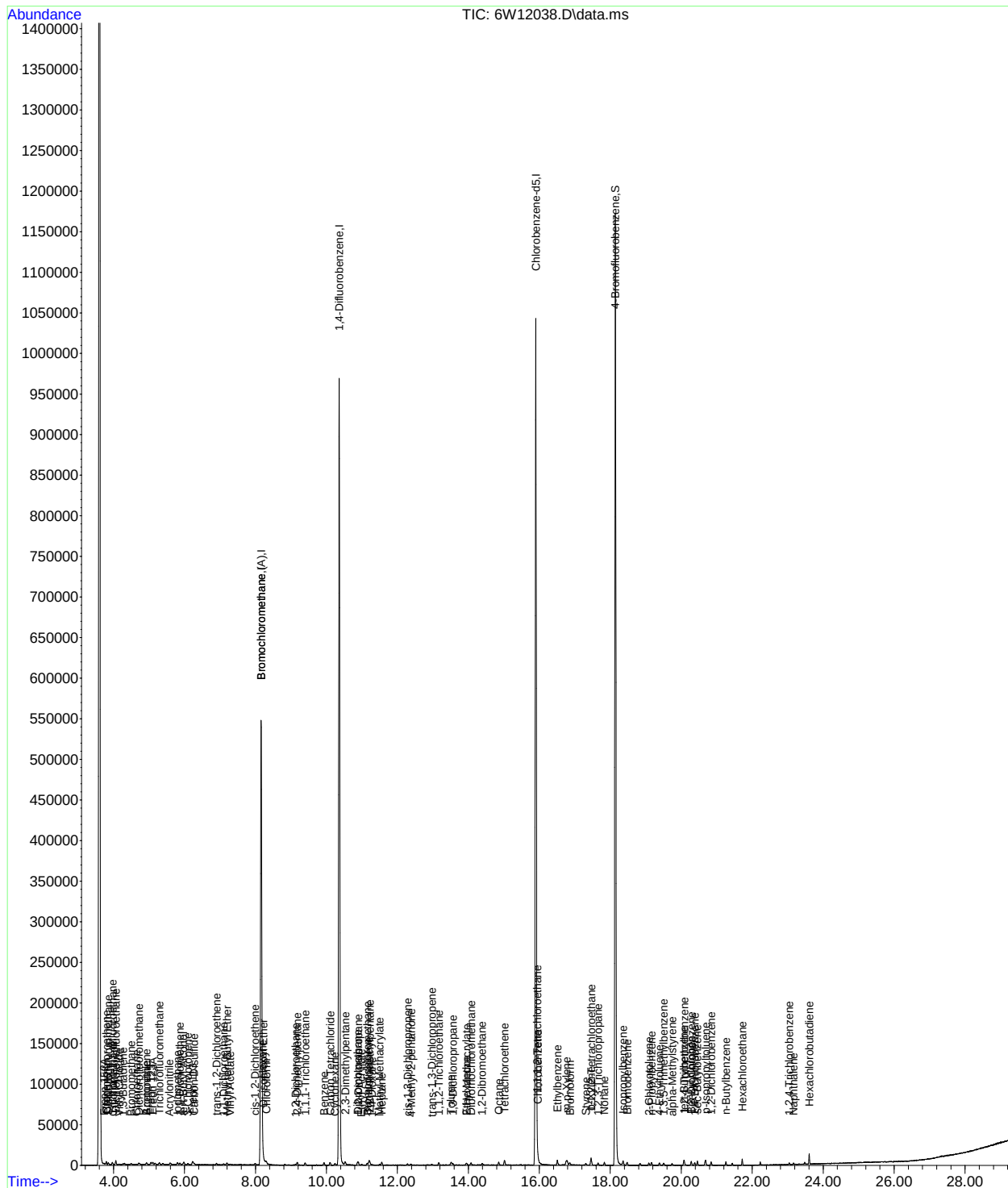
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) 1,1,2-Trichloroethane	13.169	97	1497	0.04	ppb(v	95
70) 1,3-Dichloropropane	13.560	76	1841	0.03	ppb(v#	90
71) 2-Hexanone	13.946	58	640	0.02	ppb(v#	80
72) Ethyl Methacrylate	13.946	69	1105	0.02	ppb(v#	62
73) Dibromochloromethane	14.074	129	2802	0.04	ppb(v#	91
74) Tetrachloroethene	15.016	166	2726	0.04	ppb(v	95
75) 1,2-Dibromoethane	14.386	107	2075	0.03	ppb(v#	94
76) Octane	14.857	43	1984	0.03	ppb(v	94
77) 1,1,1,2-Tetrachloroethane	15.946	131	2052	0.04	ppb(v#	1
79) Chlorobenzene	15.959	112	3936	0.04	ppb(v	92
80) Ethylbenzene	16.509	91	7384	0.05	ppb(v	98
81) m,p-Xylene	16.766	91	9541	0.09	ppb(v	98
82) Styrene	17.311	104	1881	0.02	ppb(v#	86
83) Nonane	17.831	43	1716	0.03	ppb(v#	94
84) o-Xylene	17.457	91	6249	0.06	ppb(v	94
85) Bromoform	16.864	173	2366	0.03	ppb(v#	92
86) 1,1,2,2-Tetrachloroethane	17.464	83	3099	0.04	ppb(v#	95
87) 1,2,3-Trichloropropane	17.659	75	2207	0.04	ppb(v	96
88) Isopropylbenzene	18.363	105	5515	0.04	ppb(v	99
89) Bromobenzene	18.479	156	1822	0.04	ppb(v	92
90) 2-Chlorotoluene	19.091	126	987	0.03	ppb(v#	71
91) n-Propylbenzene	19.158	120	1035	0.02	ppb(v	99
93) 4-Ethyltoluene	19.384	105	3799	0.03	ppb(v#	82
94) 1,3,5-Trimethylbenzene	19.507	105	3301	0.03	ppb(v#	85
95) alpha-Methylstyrene	19.745	118	1113	0.02	ppb(v	94
96) tert-Butylbenzene	20.076	134	736	0.02	ppb(v	95
97) 1,2,4-Trimethylbenzene	20.088	105	3282	0.03	ppb(v	96
98) 1,3-Dichlorobenzene	20.284	146	2546	0.03	ppb(v	94
99) Benzyl Chloride	20.278	91	1856	0.02	ppb(v#	62
100) 1,4-Dichlorobenzene	20.382	146	2306	0.03	ppb(v	89
101) sec-Butylbenzene	20.455	134	926	0.02	ppb(v	96
102) p-Isopropyltoluene	20.694	134	996	0.02	ppb(v	95
103) 1,2-Dichlorobenzene	20.840	146	2802	0.04	ppb(v	97
104) n-Butylbenzene	21.263	134	673	0.02	ppb(v	92
105) Hexachloroethane	21.721	201	1544	0.03	ppb(v	93
106) 1,2,4-Trichlorobenzene	23.043	180	1041	0.03	ppb(v	97
107) Naphthalene	23.165	128	2380	0.03	ppb(v#	81
108) Hexachlorobutadiene	23.606	225	2902	0.05	ppb(v	99

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

7.7.1
7

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Data Path : C:\msdchem\1\data\  
Data File : 6W12038.D  
Acq On : 16 May 2019 4:21 pm  
Operator : thomash  
Sample : ic487-0.04  
Misc : MS33831,V6W487,,,,,1  
ALS Vial : 1 Sample Multiplier: 1
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Quant Time: May 17 15:22:24 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12039.D
 Acq On : 16 May 2019 5:08 pm
 Operator : thomash
 Sample : ic487-0.1
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 15:22:37 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.164	130	296925	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	1071007	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	452246	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.164	130	296925	10.00	ppb(v	0.00

System Monitoring Compounds						
92) 4-Bromofluorobenzene	18.142	95	558488	9.65	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	96.50%

Target Compounds						Qvalue
3) Freon 152A	3.735	65	1757	0.10	ppb(v	97
4) Chlorodifluoromethane	3.772	67	564	0.08	ppb(v#	42
5) Propene	3.796	41	1808	0.10	ppb(v#	91
6) Chlorotrifluoroethene	3.803	116	4549	0.10	ppb(v	95
7) Dichlorodifluoromethane	3.852	85	7387	0.10	ppb(v	99
8) 1-Chloro-1,1-difluoro...	3.968	65	5193	0.10	ppb(v#	71
9) Chloromethane	3.992	50	2044	0.09	ppb(v	93
10) Dichlorotetrafluoroethane	4.066	85	7400	0.10	ppb(v	98
11) Vinyl Chloride	4.164	62	2454	0.09	ppb(v#	99
12) 1,3-Butadiene	4.274	54	1504	0.08	ppb(v	96
13) n-Butane	4.316	58	241	0.05	ppb(v#	82
14) Bromomethane	4.494	94	2720	0.10	ppb(v#	94
15) Acrolein	5.038	56	948	0.08	ppb(v#	89
16) Chloroethane	4.635	64	1304	0.09	ppb(v#	80
17) Dichlorofluoromethane	4.708	67	6238	0.10	ppb(v	97
18) Acetonitrile	4.928	41	2867	0.12	ppb(v#	77
19) Freon 123	5.063	83	6902	0.10	ppb(v	97
20) Freon 123A	5.112	117	4095	0.10	ppb(v	99
21) Bromoethene	4.934	106	2666	0.09	ppb(v#	91
22) Trichlorofluoromethane	5.295	101	6996	0.10	ppb(v	96
23) Acetone	5.173	58	1559	0.11	ppb(v	82
24) Pentane	5.607	57	385	0.06	ppb(v	81
26) Iodomethane	5.809	142	8449	0.10	ppb(v	95
28) 1,1-Dichloroethene	5.870	61	3831	0.10	ppb(v	96
29) Freon 113	6.231	101	6268	0.10	ppb(v	96
30) Methylene Chloride	5.993	84	3140	0.12	ppb(v	90
31) Carbon Disulfide	6.274	76	8072	0.10	ppb(v	99
33) Acrylonitrile	5.571	53	2031	0.09	ppb(v	97
34) 3-Chloropropene	6.103	76	1152	0.08	ppb(v	85
35) trans-1,2-Dichloroethene	6.904	61	3582	0.09	ppb(v	91
36) tert-Butyl Alcohol	5.956	59	5168	0.09	ppb(v#	91
37) Methyl tert-Butyl Ether	7.192	73	6958	0.09	ppb(v	92
38) Vinyl Acetate	7.284	43	5091	0.07	ppb(v	93
39) 1,1-Dichloroethane	7.106	63	5002	0.10	ppb(v#	94
40) 2-Butanone	7.559	72	1019	0.06	ppb(v#	78
41) Hexane	8.201	57	3724	0.09	ppb(v	77
42) cis-1,2-Dichloroethene	7.987	61	3469	0.09	ppb(v	93
43) Di-isopropyl Ether	8.226	87	2149	0.08	ppb(v	84
44) Ethyl Acetate	8.275	61	483	0.05	ppb(v#	75
46) Chloroform	8.305	83	6168	0.10	ppb(v	93
47) 2,4-Dimethylpentane	9.180	57	4054	0.08	ppb(v	95
48) Tetrahydrofuran	8.819	72	834	0.06	ppb(v	98
49) 1,1,1-Trichloroethane	9.400	97	6180	0.10	ppb(v	95
50) 1,2-Dichloroethane	9.131	62	3344	0.09	ppb(v#	86
51) Benzene	9.932	78	9427	0.10	ppb(v	93
52) Carbon Tetrachloride	10.104	117	6401	0.09	ppb(v	95
53) Cyclohexane	10.238	56	3520	0.08	ppb(v	93
54) 2,3-Dimethylpentane	10.526	71	1756	0.08	ppb(v#	96
56) 2,2,4-Trimethylpentane	11.217	57	12300	0.09	ppb(v	97
57) Heptane	11.560	71	2466	0.08	ppb(v	91
58) Trichloroethene	11.193	95	3963	0.09	ppb(v	94
59) 1,2-Dichloropropane	10.905	63	3438	0.10	ppb(v	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12039.D
 Acq On : 16 May 2019 5:08 pm
 Operator : thomash
 Sample : ic487-0.1
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 15:22:37 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

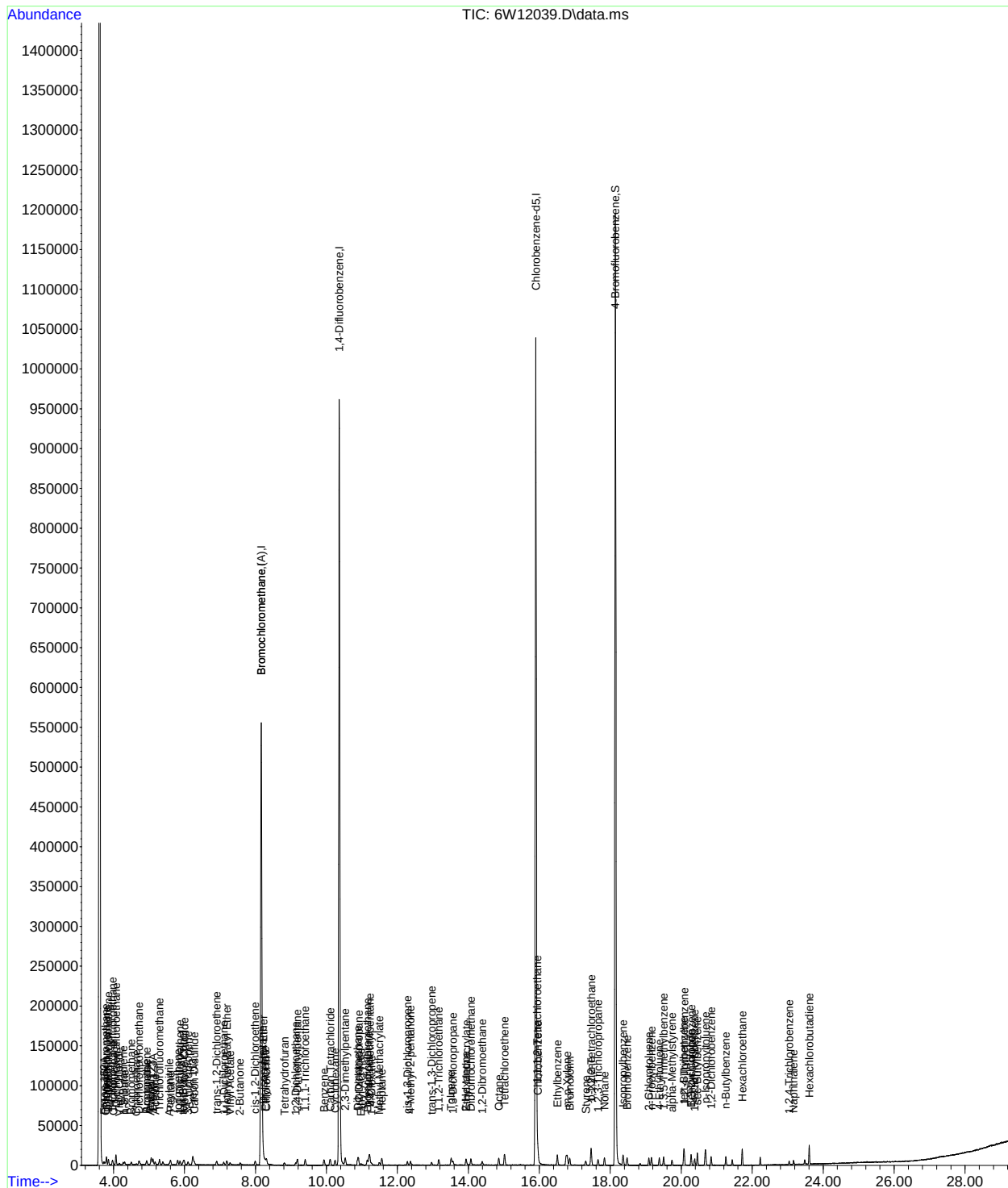
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
60) Dibromomethane	10.881	174	4727	0.10	ppb(v	93
61) Ethyl Acrylate	10.973	55	4276	0.06	ppb(v#	76
62) Methyl Methacrylate	11.486	69	2085	0.06	ppb(v	89
63) 1,4-Dioxane	11.266	88	2454	0.09	ppb(v#	50
64) Bromodichloromethane	11.150	83	6321	0.09	ppb(v	95
65) cis-1,3-Dichloropropene	12.282	75	3998	0.07	ppb(v	96
66) 4-Methyl-2-pentanone	12.367	58	1676	0.06	ppb(v	93
67) trans-1,3-Dichloropropene	12.961	75	3283	0.07	ppb(v	96
68) Toluene	13.511	91	10418	0.09	ppb(v	97
69) 1,1,2-Trichloroethane	13.163	97	3693	0.09	ppb(v	91
70) 1,3-Dichloropropane	13.560	76	4690	0.08	ppb(v	97
71) 2-Hexanone	13.927	58	2527	0.06	ppb(v#	94
72) Ethyl Methacrylate	13.940	69	3409	0.06	ppb(v#	78
73) Dibromochloromethane	14.068	129	6528	0.08	ppb(v	98
74) Tetrachloroethene	15.016	166	6436	0.09	ppb(v	96
75) 1,2-Dibromoethane	14.392	107	5148	0.08	ppb(v#	96
76) Octane	14.857	43	4512	0.07	ppb(v	93
77) 1,1,1,2-Tetrachloroethane	15.946	131	4991	0.09	ppb(v#	1
79) Chlorobenzene	15.958	112	9255	0.11	ppb(v	98
80) Ethylbenzene	16.509	91	14142	0.10	ppb(v	97
81) m,p-Xylene	16.784	91	20618	0.19	ppb(v	97
82) Styrene	17.310	104	4859	0.06	ppb(v	95
83) Nonane	17.837	43	4182	0.07	ppb(v#	90
84) o-Xylene	17.457	91	11682	0.11	ppb(v	97
85) Bromoform	16.858	173	5879	0.09	ppb(v	95
86) 1,1,2,2-Tetrachloroethane	17.463	83	7580	0.10	ppb(v#	98
87) 1,2,3-Trichloropropane	17.659	75	5321	0.09	ppb(v	98
88) Isopropylbenzene	18.363	105	13434	0.09	ppb(v	99
89) Bromobenzene	18.473	156	4587	0.09	ppb(v	90
90) 2-Chlorotoluene	19.085	126	2760	0.07	ppb(v	93
91) n-Propylbenzene	19.158	120	2863	0.07	ppb(v	79
93) 4-Ethyltoluene	19.384	105	9232	0.06	ppb(v	97
94) 1,3,5-Trimethylbenzene	19.507	105	8945	0.07	ppb(v	95
95) alpha-Methylstyrene	19.739	118	3244	0.05	ppb(v	96
96) tert-Butylbenzene	20.070	134	2113	0.07	ppb(v	90
97) 1,2,4-Trimethylbenzene	20.088	105	8340	0.07	ppb(v	96
98) 1,3-Dichlorobenzene	20.278	146	6327	0.08	ppb(v	94
99) Benzyl Chloride	20.271	91	4905	0.06	ppb(v#	94
100) 1,4-Dichlorobenzene	20.375	146	5497	0.07	ppb(v	92
101) sec-Butylbenzene	20.455	134	2766	0.07	ppb(v	89
102) p-Isopropyltoluene	20.687	134	2815	0.07	ppb(v	96
103) 1,2-Dichlorobenzene	20.840	146	6483	0.08	ppb(v	97
104) n-Butylbenzene	21.256	134	2132	0.06	ppb(v	89
105) Hexachloroethane	21.721	201	3860	0.07	ppb(v	94
106) 1,2,4-Trichlorobenzene	23.037	180	2018	0.06	ppb(v	95
107) Naphthalene	23.165	128	5059	0.07	ppb(v	98
108) Hexachlorobutadiene	23.606	225	5263	0.10	ppb(v	97

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

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\  
Data File : 6W12039.D  
Acq On : 16 May 2019 5:08 pm  
Operator : thomash  
Sample : ic487-0.1  
Misc : MS33831,V6W487,,,,,1  
ALS Vial : 1 Sample Multiplier: 1
```

Quant Time: May 17 15:22:37 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Manual Integrations
APPROVED
(compounds with "m" flag)

Dana Tryon
05/20/19 14:42

Data Path : C:\msdchem\1\data\
Data File : 6W12040.D
Acq On : 16 May 2019 5:56 pm
Operator : thomash
Sample : ic487-0.2
Misc : MS33831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 15:22:06 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.165	130	293278	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	1058523	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	454229	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.165	130	293278	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.143	95	570236	9.81	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	98.10%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	3554	0.20	ppb(v	97
4) Chlorodifluoromethane	3.772	67	1322	0.19	ppb(v	92
5) Propene	3.797	41	3738	0.20	ppb(v	92
6) Chlorotrifluoroethene	3.797	116	9001	0.20	ppb(v	99
7) Dichlorodifluoromethane	3.852	85	14895	0.20	ppb(v	97
8) 1-Chloro-1,1-difluoro...	3.962	65	10526	0.21	ppb(v#	89
9) Chloromethane	3.980	50	4397	0.20	ppb(v	98
10) Dichlorotetrafluoroethane	4.060	85	15220	0.20	ppb(v	98
11) Vinyl Chloride	4.164	62	5104	0.19	ppb(v#	97
12) 1,3-Butadiene	4.274	54	3325	0.18	ppb(v	97
13) n-Butane	4.310	58	874	0.18	ppb(v#	78
14) Bromomethane	4.494	94	5385	0.20	ppb(v	97
15) Acrolein	5.032	56	2441	0.21	ppb(v#	86
16) Chloroethane	4.635	64	2631	0.19	ppb(v#	95
17) Dichlorofluoromethane	4.708	67	12508	0.21	ppb(v	96
18) Acetonitrile	4.928	41	5731	0.25	ppb(v	97
19) Freon 123	5.057	83	13779	0.21	ppb(v	99
20) Freon 123A	5.106	117	8429	0.21	ppb(v	94
21) Bromoethene	4.928	106	5879	0.20	ppb(v	94
22) Trichlorofluoromethane	5.289	101	14546	0.21	ppb(v	97
23) Acetone	5.161	58	3358	0.25	ppb(v	84
24) Pentane	5.601	57	1177	0.17	ppb(v	97
26) Iodomethane	5.803	142	17263	0.20	ppb(v	97
27) Isopropyl Alcohol	5.375	45	13452	0.25	ppb(v	97
28) 1,1-Dichloroethene	5.864	61	7793	0.20	ppb(v	93
29) Freon 113	6.231	101	12439	0.21	ppb(v	95
30) Methylene Chloride	5.987	84	5835	0.23	ppb(v	96
31) Carbon Disulfide	6.268	76	15834	0.20	ppb(v	99
33) Acrylonitrile	5.565	53	4601	0.20	ppb(v	95
34) 3-Chloropropene	6.103	76	2606	0.18	ppb(v	94
35) trans-1,2-Dichloroethene	6.904	61	7593	0.20	ppb(v	93
36) tert-Butyl Alcohol	5.944	59	11992	0.21	ppb(v	92
37) Methyl tert-Butyl Ether	7.186	73	14136	0.18	ppb(v	97
38) Vinyl Acetate	7.277	43	12458	0.17	ppb(v	97
39) 1,1-Dichloroethane	7.100	63	10303	0.21	ppb(v#	97
40) 2-Butanone	7.553	72	3062	0.19	ppb(v	99
41) Hexane	8.195	57	7834	0.18	ppb(v	82
42) cis-1,2-Dichloroethene	7.987	61	7317	0.19	ppb(v	96
43) Di-isopropyl Ether	8.213	87	4679	0.18	ppb(v	90
44) Ethyl Acetate	8.256	61	1554	0.16	ppb(v	94
45) Methyl Acrylate	8.244	55	10602	0.19	ppb(v	98
46) Chloroform	8.305	83	12824	0.21	ppb(v	97
47) 2,4-Dimethylpentane	9.180	57	8744	0.17	ppb(v	98
48) Tetrahydrofuran	8.801	72	2336	0.17	ppb(v	90
49) 1,1,1-Trichloroethane	9.400	97	12499	0.20	ppb(v	97
50) 1,2-Dichloroethane	9.125	62	7330	0.20	ppb(v#	92
51) Benzene	9.933	78	18192	0.19	ppb(v	98
52) Carbon Tetrachloride	10.098	117	13551	0.20	ppb(v	99
53) Cyclohexane	10.232	56	7302	0.17	ppb(v	96
54) 2,3-Dimethylpentane	10.526	71	3717	0.18	ppb(v	94
56) 2,2,4-Trimethylpentane	11.217	57	26088	0.18	ppb(v	97
57) Heptane	11.560	71	5413	0.17	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12040.D
 Acq On : 16 May 2019 5:56 pm
 Operator : thomash
 Sample : ic487-0.2
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 15:22:06 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

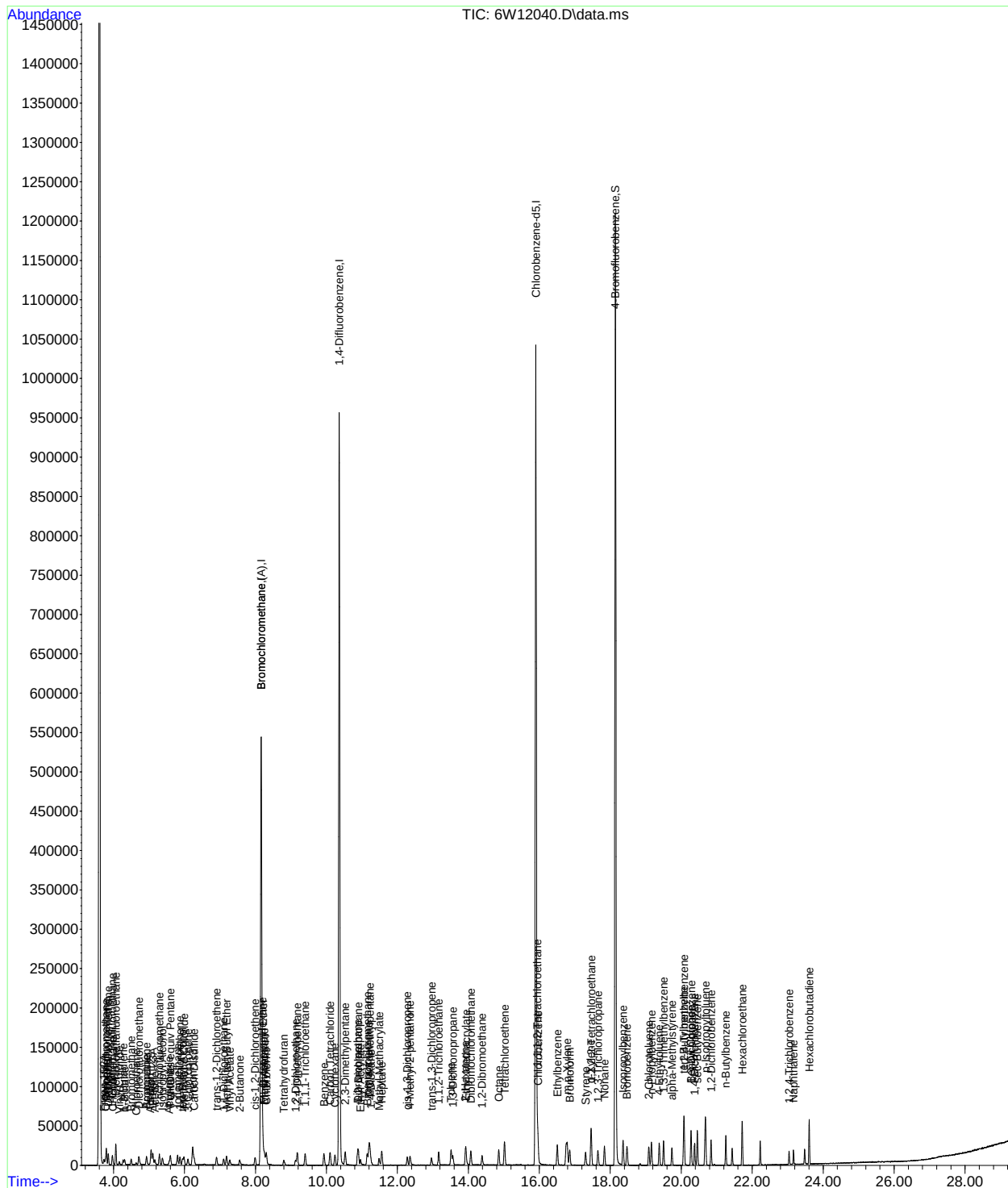
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) Trichloroethene	11.193	95	8530	0.20	ppb(v	98
59) 1,2-Dichloropropane	10.899	63	6699	0.20	ppb(v	95
60) Dibromomethane	10.875	174	9972	0.21	ppb(v	96
61) Ethyl Acrylate	10.960	55	11175	0.17	ppb(v	99
62) Methyl Methacrylate	11.486	69	5554	0.16	ppb(v	99
63) 1,4-Dioxane	11.248	88	6838	0.25	ppb(v#	63
64) Bromodichloromethane	11.150	83	13251	0.19	ppb(v	97
65) cis-1,3-Dichloropropene	12.276	75	9429	0.18	ppb(v	95
66) 4-Methyl-2-pentanone	12.349	58	4457	0.16	ppb(v	91
67) trans-1,3-Dichloropropene	12.961	75	8518	0.18	ppb(v	97
68) Toluene	13.511	91	21438	0.18	ppb(v	97
69) 1,1,2-Trichloroethane	13.163	97	7846	0.19	ppb(v	97
70) 1,3-Dichloropropane	13.560	76	10312	0.19	ppb(v	98
71) 2-Hexanone	13.915	58	8394	0.20	ppb(v	95
72) Ethyl Methacrylate	13.934	69	8930	0.15	ppb(v#	89
73) Dibromochloromethane	14.068	129	14263	0.18	ppb(v	97
74) Tetrachloroethene	15.023	166	13440	0.20	ppb(v	96
75) 1,2-Dibromoethane	14.386	107	12410	0.20	ppb(v	95
76) Octane	14.857	43	9733	0.15	ppb(v	92
77) 1,1,1,2-Tetrachloroethane	15.946	131	10896	0.20	ppb(v#	4
79) Chlorobenzene	15.965	112	20897	0.24	ppb(v	97
80) Ethylbenzene	16.509	91	27703	0.20	ppb(v	97
81) m,p-Xylene	16.784	91	45253	0.42	ppb(v	99
82) Styrene	17.304	104	12987	0.17	ppb(v	97
83) Nonane	17.837	43	10513	0.17	ppb(v	94
84) o-Xylene	17.451	91	23127	0.21	ppb(v	98
85) Bromoform	16.858	173	13410	0.19	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.463	83	16624	0.22	ppb(v	97
87) 1,2,3-Trichloropropane	17.653	75	12696	0.22	ppb(v	96
88) Isopropylbenzene	18.363	105	30508	0.19	ppb(v	99
89) Bromobenzene	18.467	156	11707	0.23	ppb(v	95
90) 2-Chlorotoluene	19.085	126	7256	0.19	ppb(v	94
91) n-Propylbenzene	19.158	120	7620	0.17	ppb(v	95
93) 4-Ethyltoluene	19.378	105	25567	0.17	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.501	105	23517	0.18	ppb(v	99
95) alpha-Methylstyrene	19.733	118	9512	0.16	ppb(v	96
96) tert-Butylbenzene	20.070	134	5925	0.18	ppb(v	78
97) 1,2,4-Trimethylbenzene	20.082	105	23729	0.19	ppb(v#	81
98) 1,3-Dichlorobenzene	20.278	146	17656	0.22	ppb(v	97
99) Benzyl Chloride	20.271	91	14789	0.18	ppb(v	99
100) 1,4-Dichlorobenzene	20.375	146	16587	0.22	ppb(v	97
101) sec-Butylbenzene	20.455	134	7619	0.19	ppb(v	96
102) p-Isopropyltoluene	20.687	134	8370	0.19	ppb(v	94
103) 1,2-Dichlorobenzene	20.840	146	17219	0.22	ppb(v	98
104) n-Butylbenzene	21.256	134	6323	0.18	ppb(v	97
105) Hexachloroethane	21.721	201	10798	0.20	ppb(v	95
106) 1,2,4-Trichlorobenzene	23.037	180	6640	0.21	ppb(v	95
107) Naphthalene	23.165	128	16776	0.22	ppb(v	99
108) Hexachlorobutadiene	23.606	225	11943	0.23	ppb(v	99
110) TVHC as equiv Pentane	5.601	TIC	31916m	0.25	ppb(v	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6WJ2040.D
Acq On : 16 May 2019 5:56 pm
Operator : thomash
Sample : ic487-0.2
Misc : MS33831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 15:22:06 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:

V6W487-IC487

Method:

TO-15

Lab FileID:

6W12040.D

Analyst approved:

05/20/19 09:52 Thomas Hilbig

Injection Time:

05/16/19 17:56

Supervisor approved:

05/20/19 14:42 Dana Tryon

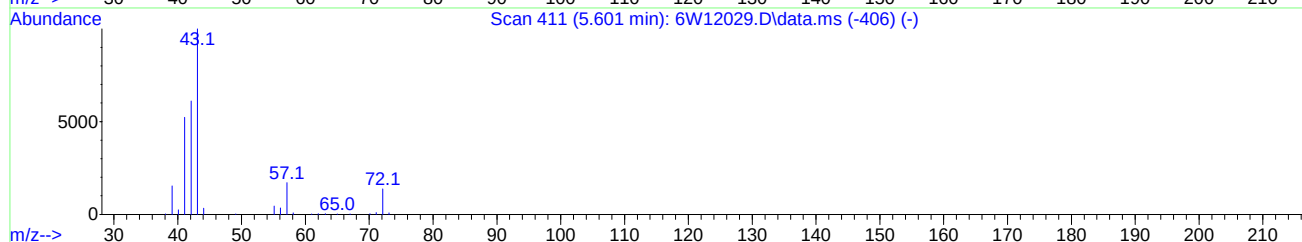
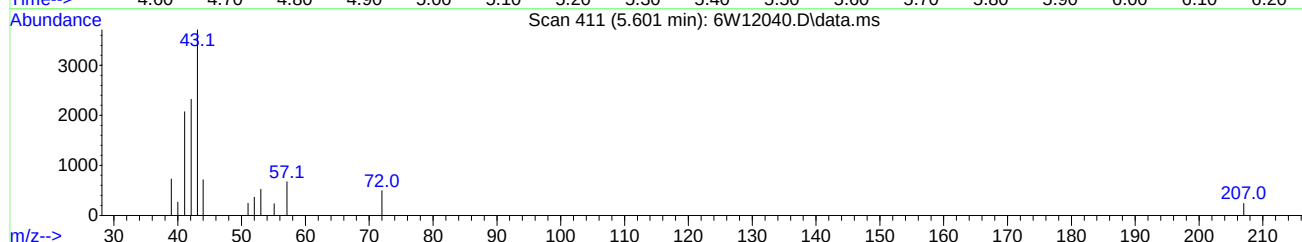
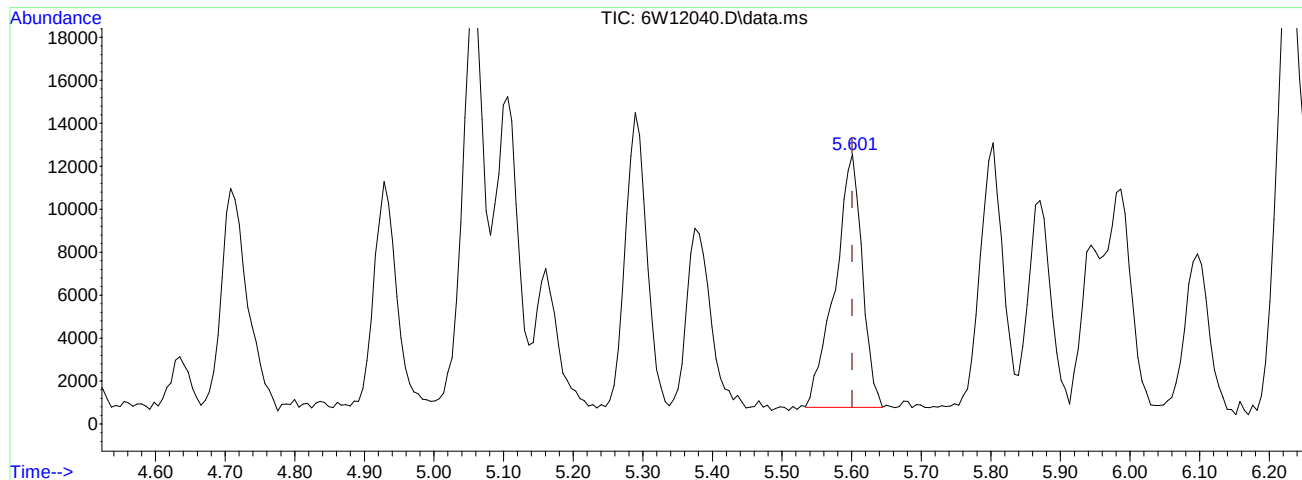
Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.60	Missed peak

7.7.3.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6W12040.D
Acq On : 16 May 2019 5:56 pm
Operator : thomash
Sample : ic487-0.2
Misc : MS33831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 08:46:34 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



TIC: 6W12040.D\data.ms

(110) TVHC as equiv Pentane

5.601min (-0.000) 0.25ppb(v) m

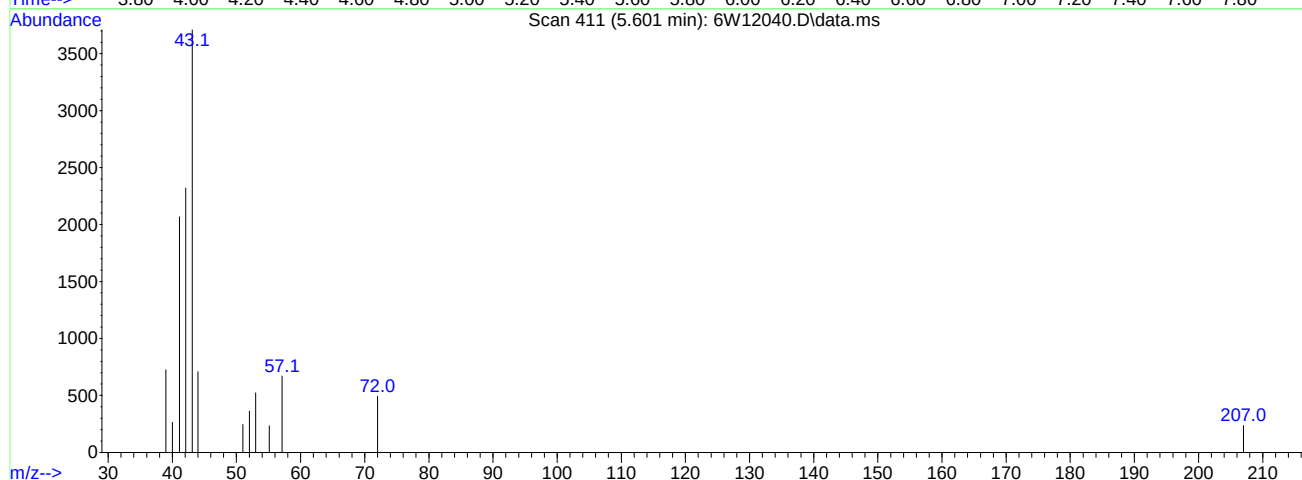
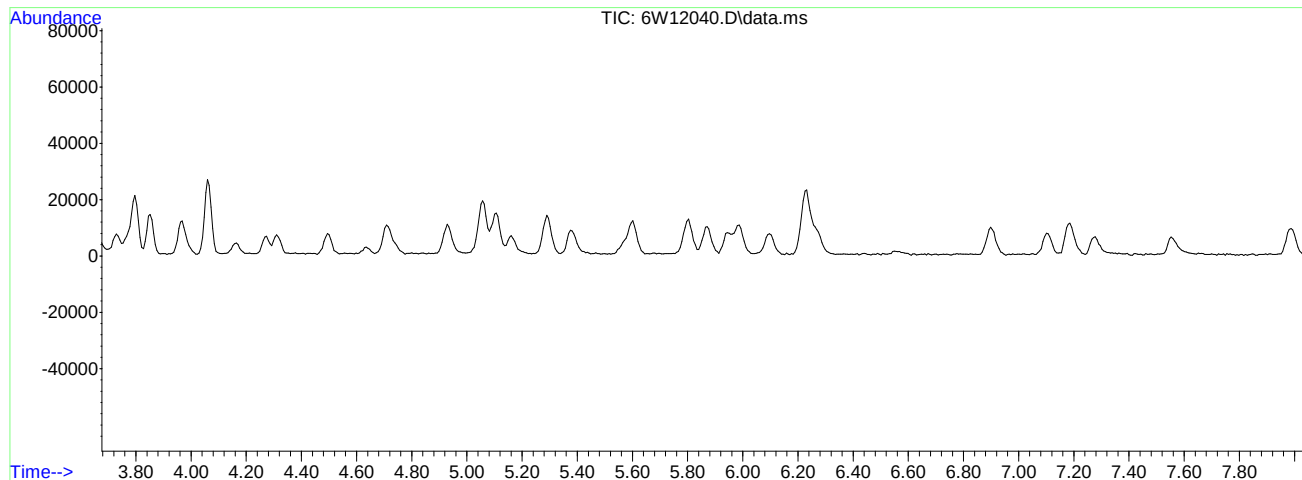
response 31916

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Raw Data\
Data File : 6W12040.D
Acq On : 16 May 2019 5:56 pm
Operator : thomash
Sample : ic487-0.2
Misc : MS33831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 09:58:56 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



TIC: 6W12040.D\data.ms

(110) TVHC as equiv Pentane

5.601min (-5.601) 0.00ppb(v)

response 0

Signal	Exp%	Act%
TIC	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Manual Integrations
APPROVED
(compounds with "m" flag)

Dana Tryon
05/20/19 14:42

Data Path : C:\msdchem\1\data\
Data File : 6W12041.D
Acq On : 16 May 2019 6:45 pm
Operator : thomash
Sample : ic487-0.5
Misc : MS33831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 09:03:05 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	8.158	130	291279	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.361	114	1046375	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	451532	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.158	130	291279	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.143	95	581551	10.06	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.60%

Target Compounds						Qvalue
3) Freon 152A	3.723	65	8724	0.50	ppb(v	97
4) Chlorodifluoromethane	3.766	67	3424	0.50	ppb(v	99
5) Propene	3.790	41	8805	0.48	ppb(v	93
6) Chlorotrifluoroethene	3.797	116	21671	0.47	ppb(v	99
7) Dichlorodifluoromethane	3.845	85	36372	0.50	ppb(v	99
8) 1-Chloro-1,1-difluoro...	3.962	65	24874	0.50	ppb(v#	94
9) Chloromethane	3.980	50	10775	0.50	ppb(v	95
10) Dichlorotetrafluoroethane	4.060	85	36730	0.49	ppb(v	98
11) Vinyl Chloride	4.157	62	12896	0.49	ppb(v#	97
12) 1,3-Butadiene	4.268	54	8252	0.46	ppb(v	97
13) n-Butane	4.304	58	2215	0.46	ppb(v#	89
14) Bromomethane	4.494	94	13426	0.49	ppb(v	97
15) Acrolein	5.032	56	5869	0.51	ppb(v#	92
16) Chloroethane	4.629	64	6607	0.49	ppb(v	97
17) Dichlorofluoromethane	4.708	67	29857	0.50	ppb(v	98
18) Acetonitrile	4.922	41	13406	0.59	ppb(v	99
19) Freon 123	5.051	83	32585	0.50	ppb(v	99
20) Freon 123A	5.100	117	20045	0.50	ppb(v	97
21) Bromoethene	4.922	106	13946	0.49	ppb(v	95
22) Trichlorofluoromethane	5.289	101	34864	0.51	ppb(v	99
23) Acetone	5.149	58	7218	0.53	ppb(v	98
24) Pentane	5.595	57	3044	0.45	ppb(v	93
26) Iodomethane	5.797	142	42101	0.50	ppb(v	100
27) Isopropyl Alcohol	5.363	45	31536	0.58	ppb(v	97
28) 1,1-Dichloroethene	5.864	61	19084	0.49	ppb(v	99
29) Freon 113	6.225	101	30189	0.50	ppb(v	98
30) Methylene Chloride	5.981	84	12962	0.51	ppb(v	98
31) Carbon Disulfide	6.268	76	38728	0.49	ppb(v	99
32) Ethanol	4.726	45	8518	0.69	ppb(v	97
33) Acrylonitrile	5.565	53	11327	0.51	ppb(v	94
34) 3-Chloropropene	6.097	76	6417	0.46	ppb(v	86
35) trans-1,2-Dichloroethene	6.898	61	18269	0.48	ppb(v	98
36) tert-Butyl Alcohol	5.925	59	28731	0.50	ppb(v	96
37) Methyl tert-Butyl Ether	7.173	73	34867	0.45	ppb(v	97
38) Vinyl Acetate	7.265	43	32061	0.45	ppb(v	99
39) 1,1-Dichloroethane	7.100	63	24701	0.50	ppb(v	98
40) 2-Butanone	7.541	72	7997	0.49	ppb(v	96
41) Hexane	8.195	57	19373	0.46	ppb(v	92
42) cis-1,2-Dichloroethene	7.987	61	18077	0.48	ppb(v	93
43) Di-isopropyl Ether	8.207	87	12062	0.46	ppb(v	100
44) Ethyl Acetate	8.250	61	4573	0.48	ppb(v	89
45) Methyl Acrylate	8.232	55	27162	0.50	ppb(v	98
46) Chloroform	8.305	83	30958	0.50	ppb(v	99
47) 2,4-Dimethylpentane	9.174	57	22070	0.44	ppb(v	92
48) Tetrahydrofuran	8.789	72	6025	0.44	ppb(v	89
49) 1,1,1-Trichloroethane	9.400	97	30541	0.49	ppb(v	96
50) 1,2-Dichloroethane	9.119	62	18357	0.51	ppb(v	98
51) Benzene	9.926	78	44383	0.48	ppb(v	98
52) Carbon Tetrachloride	10.098	117	32944	0.49	ppb(v	98
53) Cyclohexane	10.238	56	18200	0.42	ppb(v	95
54) 2,3-Dimethylpentane	10.532	71	9553	0.46	ppb(v	91
56) 2,2,4-Trimethylpentane	11.217	57	66979	0.48	ppb(v	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12041.D
 Acq On : 16 May 2019 6:45 pm
 Operator : thomash
 Sample : ic487-0.5
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 09:03:05 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : TO-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

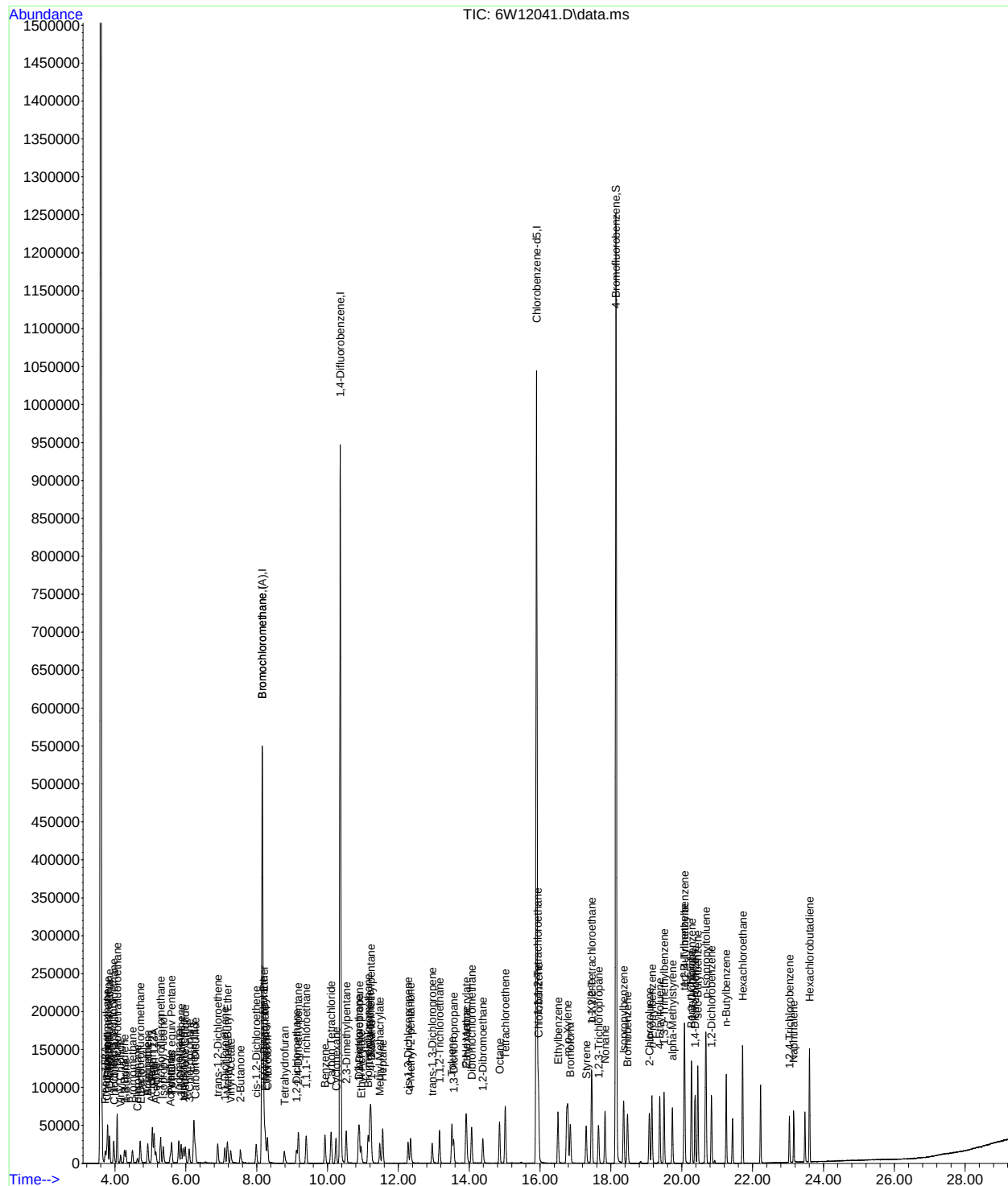
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.560	71	14161	0.44	ppb(v	94
58) Trichloroethene	11.193	95	20527	0.49	ppb(v	99
59) 1,2-Dichloropropane	10.899	63	16707	0.50	ppb(v	98
60) Dibromomethane	10.875	174	23762	0.52	ppb(v	93
61) Ethyl Acrylate	10.948	55	30828	0.46	ppb(v	99
62) Methyl Methacrylate	11.474	69	15950	0.46	ppb(v	99
63) 1,4-Dioxane	11.236	88	17576	0.66	ppb(v#	78
64) Bromodichloromethane	11.144	83	33141	0.49	ppb(v	100
65) cis-1,3-Dichloropropene	12.276	75	23912	0.46	ppb(v	98
66) 4-Methyl-2-pentanone	12.343	58	12619	0.46	ppb(v	98
67) trans-1,3-Dichloropropene	12.955	75	22317	0.48	ppb(v	99
68) Toluene	13.511	91	53022	0.46	ppb(v	100
69) 1,1,2-Trichloroethane	13.163	97	19680	0.49	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	26352	0.49	ppb(v	98
71) 2-Hexanone	13.909	58	24998	0.60	ppb(v	93
72) Ethyl Methacrylate	13.921	69	25897	0.45	ppb(v	98
73) Dibromochloromethane	14.068	129	35989	0.47	ppb(v	99
74) Tetrachloroethene	15.016	166	32887	0.49	ppb(v	98
75) 1,2-Dibromoethane	14.386	107	31516	0.51	ppb(v	97
76) Octane	14.857	43	27022	0.43	ppb(v	97
77) 1,1,1,2-Tetrachloroethane	15.940	131	25784	0.48	ppb(v#	33
79) Chlorobenzene	15.959	112	50585	0.58	ppb(v	99
80) Ethylbenzene	16.509	91	68724	0.51	ppb(v	99
81) m,p-Xylene	16.778	91	117130	1.10	ppb(v	99
82) Styrene	17.304	104	38573	0.50	ppb(v	98
83) Nonane	17.837	43	29879	0.49	ppb(v	99
84) o-Xylene	17.451	91	57579	0.53	ppb(v	99
85) Bromoform	16.852	173	35075	0.51	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.457	83	42490	0.55	ppb(v	100
87) 1,2,3-Trichloropropane	17.653	75	31524	0.56	ppb(v	99
88) Isopropylbenzene	18.357	105	81388	0.52	ppb(v	99
89) Bromobenzene	18.467	156	30879	0.61	ppb(v	94
90) 2-Chlorotoluene	19.085	126	19623	0.52	ppb(v	92
91) n-Propylbenzene	19.158	120	22644	0.52	ppb(v	98
93) 4-Ethyltoluene	19.378	105	75971	0.52	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.501	105	67178	0.52	ppb(v	100
95) alpha-Methylstyrene	19.733	118	29777	0.49	ppb(v	99
96) tert-Butylbenzene	20.070	134	16800	0.52	ppb(v	98
97) 1,2,4-Trimethylbenzene	20.082	105	69846	0.55	ppb(v#	88
98) 1,3-Dichlorobenzene	20.278	146	51048	0.64	ppb(v	99
99) Benzyl Chloride	20.265	91	43674	0.55	ppb(v	99
100) 1,4-Dichlorobenzene	20.375	146	50496	0.68	ppb(v	98
101) sec-Butylbenzene	20.455	134	21371	0.53	ppb(v	96
102) p-Isopropyltoluene	20.687	134	23784	0.55	ppb(v	99
103) 1,2-Dichlorobenzene	20.834	146	47232	0.61	ppb(v	100
104) n-Butylbenzene	21.256	134	19089	0.54	ppb(v	91
105) Hexachloroethane	21.721	201	30629	0.56	ppb(v	97
106) 1,2,4-Trichlorobenzene	23.037	180	21423	0.68	ppb(v	100
107) Naphthalene	23.159	128	57144	0.76	ppb(v	98
108) Hexachlorobutadiene	23.606	225	31074	0.59	ppb(v	99
110) TVHC as equiv Pentane	5.595	TIC	81975m	0.65	ppb(v	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W12041.D
Acq On : 16 May 2019 6:45 pm
Operator : thomash
Sample : ic487-0.5
Misc : MS3831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 09:03:05 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



7.7.4

Manual Integration Approval Summary

Sample Number:

V6W487-IC487

Method:

TO-15

Lab FileID:

6W12041.D

Analyst approved:

05/20/19 09:52 Thomas Hilbig

Injection Time:

05/16/19 18:45

Supervisor approved:

05/20/19 14:42 Dana Tryon

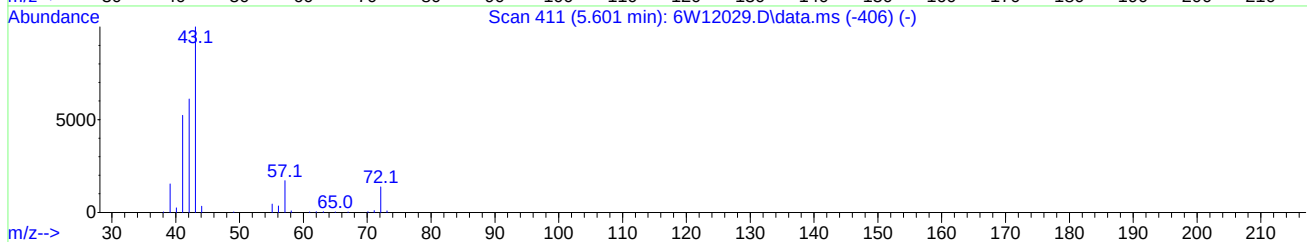
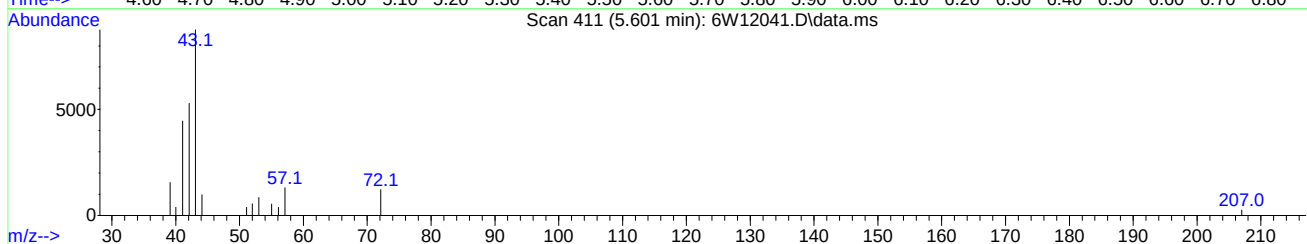
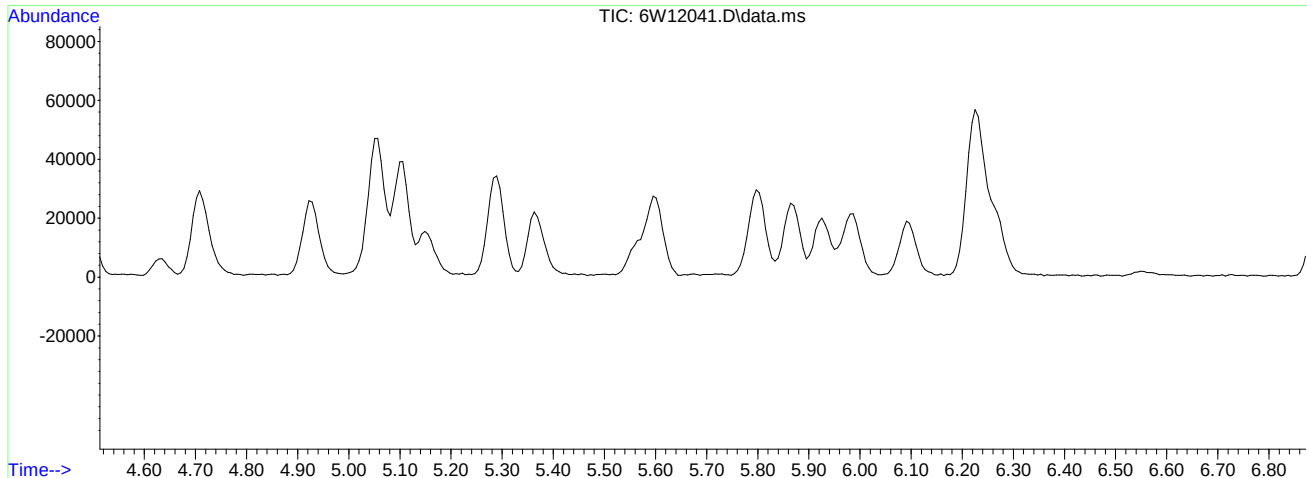
Parameter	CAS	Sig#	R.T. (min.)	Reason
TVHC As Equiv Pentane			5.60	Missed peak

7.7.4.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6W12041.D
Acq On : 16 May 2019 6:45 pm
Operator : thomash
Sample : ic487-0.5
Misc : MS33831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 08:46:50 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



TIC: 6W12041.D\data.ms

(110) TVHC as equiv Pentane

5.601min (-5.601) 0.00ppb(v)

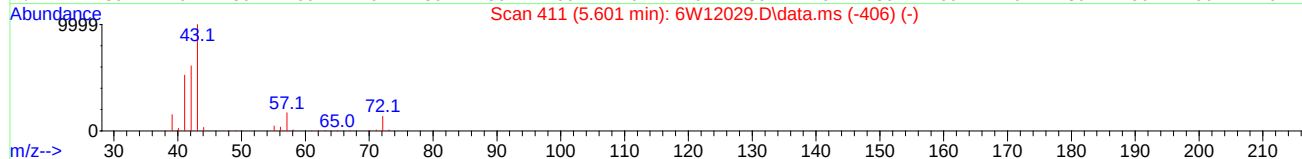
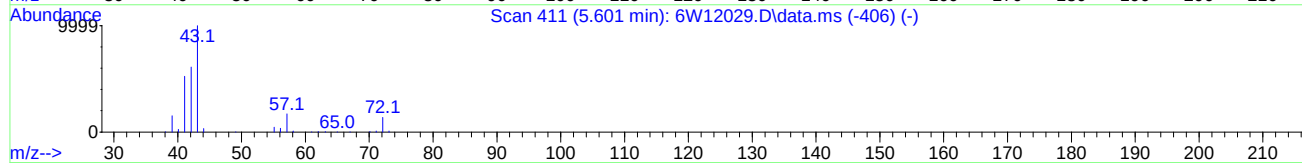
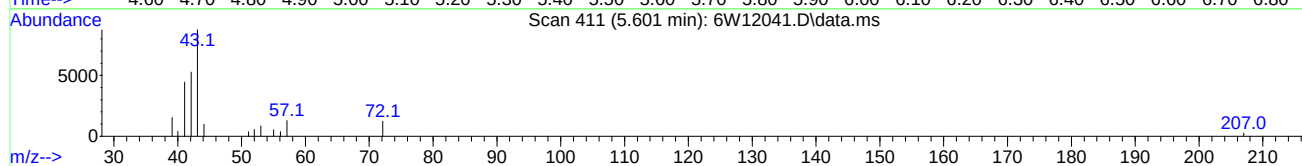
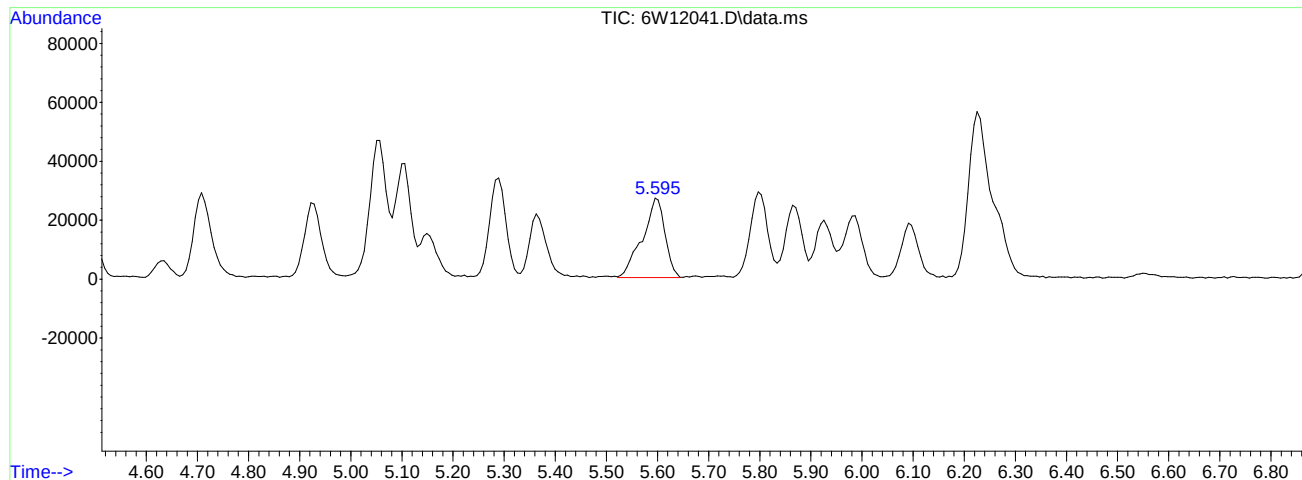
response 0

Signal	Exp%	Act%
TIC	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : 6W12041.D
Acq On : 16 May 2019 6:45 pm
Operator : thomash
Sample : ic487-0.5
Misc : MS33831,V6W487,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 08:46:50 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



TIC: 6W12041.D\data.ms

(110) TVHC as equiv Pentane

5.595min (-0.006) 0.65ppb(v) m

response 81975

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12042.D
 Acq On : 16 May 2019 7:31 pm
 Operator : thomash
 Sample : ic487-5
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:03:56 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.164	130	298852	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.361	114	1084169	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.903	82	492115	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.164	130	298852	10.00	ppb(v)	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.142	95	654969	10.40	ppb(v)	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	104.00%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	89444	4.99	ppb(v)	98
4) Chlorodifluoromethane	3.766	67	35915	5.13	ppb(v)	100
5) Propene	3.790	41	94782	5.03	ppb(v)	99
6) Chlorotrifluoroethene	3.796	116	234629	5.00	ppb(v)	99
7) Dichlorodifluoromethane	3.851	85	374529	5.05	ppb(v)	100
8) 1-Chloro-1,1-difluoroethane	3.962	65	259872	5.06	ppb(v)	99
9) Chloromethane	3.980	50	110139	5.02	ppb(v)	100
10) Dichlorotetrafluoroethane	4.059	85	387402	5.05	ppb(v)	99
11) Vinyl Chloride	4.157	62	132689	4.95	ppb(v)	98
12) 1,3-Butadiene	4.267	54	91731	4.98	ppb(v)	98
13) n-Butane	4.310	58	24272	4.94	ppb(v)	100
14) Bromomethane	4.494	94	141733	5.06	ppb(v)	100
15) Acrolein	5.026	56	58372	4.94	ppb(v)	98
16) Chloroethane	4.628	64	70811	5.11	ppb(v)	99
17) Dichlorofluoromethane	4.708	67	312950	5.12	ppb(v)	99
18) Acetonitrile	4.916	41	103554	4.43	ppb(v)	98
19) Freon 123	5.057	83	343774	5.11	ppb(v)	98
20) Freon 123A	5.099	117	212130	5.12	ppb(v)	99
21) Bromoethene	4.928	106	148642	5.07	ppb(v)	100
22) Trichlorofluoromethane	5.289	101	365261	5.19	ppb(v)	99
23) Acetone	5.136	58	63771	4.57	ppb(v)	98
24) Pentane	5.601	57	35262	5.09	ppb(v)	98
26) Iodomethane	5.797	142	440852	5.11	ppb(v)	99
27) Isopropyl Alcohol	5.344	45	225022	4.05	ppb(v)	99
28) 1,1-Dichloroethene	5.864	61	204342	5.10	ppb(v)	98
29) Freon 113	6.225	101	315007	5.12	ppb(v)	99
30) Methylene Chloride	5.987	84	133273	5.08	ppb(v)	99
31) Carbon Disulfide	6.268	76	415553	5.09	ppb(v)	99
32) Ethanol	4.720	45	47377	3.75	ppb(v)	99
33) Acrylonitrile	5.552	53	110815	4.83	ppb(v)	97
34) 3-Chloropropene	6.091	76	71240	4.95	ppb(v)	99
35) trans-1,2-Dichloroethene	6.892	61	194697	4.99	ppb(v)	98
36) tert-Butyl Alcohol	5.901	59	284995	4.86	ppb(v)	99
37) Methyl tert-Butyl Ether	7.155	73	340681	4.25	ppb(v)	99
38) Vinyl Acetate	7.259	43	339589	4.63	ppb(v)	98
39) 1,1-Dichloroethane	7.100	63	250634	4.97	ppb(v)	99
40) 2-Butanone	7.522	72	63338	3.78	ppb(v)	96
41) Hexane	8.195	57	227708	5.23	ppb(v)	98
42) cis-1,2-Dichloroethene	7.981	61	195869	5.09	ppb(v)	98
43) Di-isopropyl Ether	8.195	87	139954	5.19	ppb(v)	97
44) Ethyl Acetate	8.232	61	48064	4.88	ppb(v)	93
45) Methyl Acrylate	8.220	55	271784	4.85	ppb(v)	100
46) Chloroform	8.305	83	325912	5.15	ppb(v)	99
47) 2,4-Dimethylpentane	9.174	57	262104	5.11	ppb(v)	99
48) Tetrahydrofuran	8.752	72	69459	4.90	ppb(v)	99
49) 1,1,1-Trichloroethane	9.400	97	330496	5.17	ppb(v)	99
50) 1,2-Dichloroethane	9.119	62	189086	5.16	ppb(v)	99
51) Benzene	9.926	78	484582	5.08	ppb(v)	99
52) Carbon Tetrachloride	10.098	117	356054	5.17	ppb(v)	98
53) Cyclohexane	10.238	56	226163	5.09	ppb(v)	99
54) 2,3-Dimethylpentane	10.526	71	107744	5.08	ppb(v)	99
56) 2,2,4-Trimethylpentane	11.217	57	760963	5.21	ppb(v)	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12042.D
 Acq On : 16 May 2019 7:31 pm
 Operator : thomash
 Sample : ic487-5
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:03:56 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

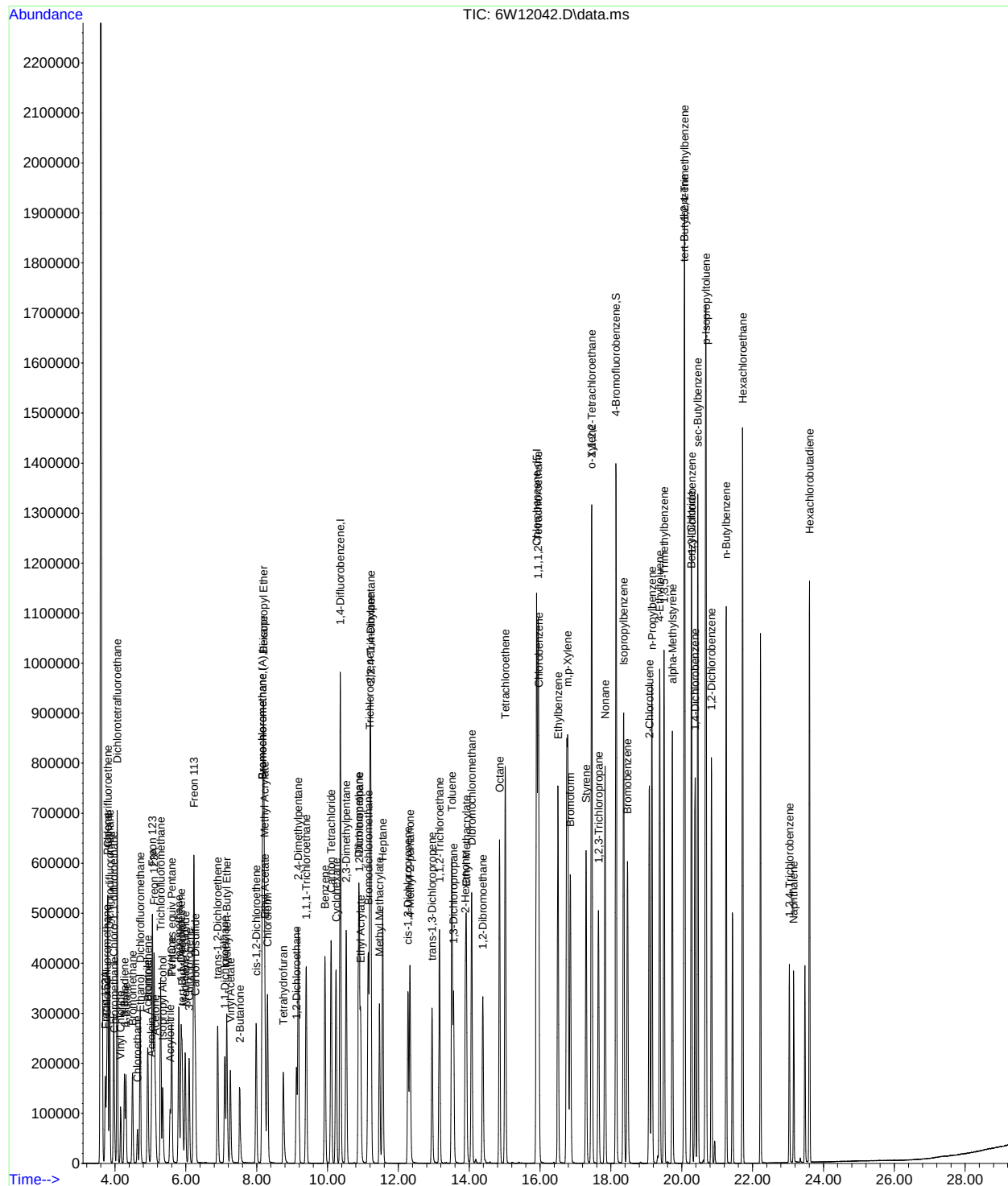
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.560	71	169213	5.09	ppb(v)	97
58) Trichloroethene	11.193	95	225977	5.15	ppb(v)	99
59) 1,2-Dichloropropane	10.899	63	178632	5.15	ppb(v)	99
60) Dibromomethane	10.875	174	246285	5.15	ppb(v)	99
61) Ethyl Acrylate	10.936	55	334264	4.83	ppb(v)	99
62) Methyl Methacrylate	11.468	69	175290	4.93	ppb(v)	98
63) 1,4-Dioxane	11.211	88	115109	4.17	ppb(v)	83
64) Bromodichloromethane	11.150	83	358659	5.14	ppb(v)	99
65) cis-1,3-Dichloropropene	12.269	75	276141	5.08	ppb(v)	99
66) 4-Methyl-2-pentanone	12.325	58	146014	5.09	ppb(v)	99
67) trans-1,3-Dichloropropene	12.948	75	237610	4.98	ppb(v)	100
68) Toluene	13.511	91	609082	5.11	ppb(v)	99
69) 1,1,2-Trichloroethane	13.163	97	211316	5.05	ppb(v)	99
70) 1,3-Dichloropropane	13.554	76	284903	5.10	ppb(v)	99
71) 2-Hexanone	13.891	58	185842	4.33	ppb(v)	99
72) Ethyl Methacrylate	13.921	69	298753	4.98	ppb(v)	99
73) Dibromochloromethane	14.068	129	406844	5.12	ppb(v)	100
74) Tetrachloroethene	15.016	166	347780	4.97	ppb(v)	99
75) 1,2-Dibromoethane	14.386	107	316513	4.92	ppb(v)	98
76) Octane	14.857	43	338714	5.19	ppb(v)	99
77) 1,1,1,2-Tetrachloroethane	15.946	131	283337	5.12	ppb(v)	99
79) Chlorobenzene	15.965	112	503834	5.32	ppb(v)	100
80) Ethylbenzene	16.509	91	781146	5.30	ppb(v)	99
81) m,p-Xylene	16.778	91	1224745	10.59	ppb(v)	100
82) Styrene	17.298	104	448996	5.30	ppb(v)	99
83) Nonane	17.837	43	359271	5.39	ppb(v)	100
84) o-Xylene	17.451	91	629218	5.31	ppb(v)	100
85) Bromoform	16.852	173	396927	5.32	ppb(v)	100
86) 1,1,2,2-Tetrachloroethane	17.457	83	438008	5.24	ppb(v)	99
87) 1,2,3-Trichloropropane	17.653	75	315938	5.15	ppb(v)	99
88) Isopropylbenzene	18.363	105	890499	5.24	ppb(v)	100
89) Bromobenzene	18.467	156	284344	5.19	ppb(v)	97
90) 2-Chlorotoluene	19.085	126	216727	5.24	ppb(v)	98
91) n-Propylbenzene	19.158	120	246238	5.21	ppb(v)	100
93) 4-Ethyltoluene	19.378	105	832501	5.22	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.501	105	730225	5.23	ppb(v)	100
95) alpha-Methylstyrene	19.733	118	341492	5.18	ppb(v)	99
96) tert-Butylbenzene	20.070	134	184490	5.24	ppb(v)	97
97) 1,2,4-Trimethylbenzene	20.082	105	714957	5.20	ppb(v#)	82
98) 1,3-Dichlorobenzene	20.278	146	446142	5.13	ppb(v)	99
99) Benzyl Chloride	20.265	91	425929	4.89	ppb(v)	99
100) 1,4-Dichlorobenzene	20.375	146	411049	5.06	ppb(v)	99
101) sec-Butylbenzene	20.455	134	226049	5.16	ppb(v)	99
102) p-Isopropyltoluene	20.687	134	240688	5.14	ppb(v)	99
103) 1,2-Dichlorobenzene	20.834	146	418759	4.96	ppb(v)	98
104) n-Butylbenzene	21.256	134	191823	4.95	ppb(v)	96
105) Hexachloroethane	21.721	201	301819	5.04	ppb(v)	98
106) 1,2,4-Trichlorobenzene	23.037	180	134797	3.94	ppb(v)	98
107) Naphthalene	23.159	128	312058	3.83	ppb(v)	100
108) Hexachlorobutadiene	23.606	225	246198	4.28	ppb(v)	99
110) TVHC as equiv Pentane	5.601	TIC	620133	4.81	ppb(v)	100

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

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\  
Data File : 6W12042.D  
Acq On : 16 May 2019 7:31 pm  
Operator : thomash  
Sample : ic487-5  
Misc : MS3831,V6W487,,,,,1  
ALS Vial : 5 Sample Multiplier: 1
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Quant Time: May 17 09:03:56 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12043.D
 Acq On : 16 May 2019 8:18 pm
 Operator : thomash
 Sample : icc487-10
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:05:58 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.165	130	310356	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.367	114	1130166	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.903	82	530428	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.165	130	310356	10.00	ppb(v)	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.149	95	689476	10.16	ppb(v)	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	101.60%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	188144	10.10	ppb(v)	99
4) Chlorodifluoromethane	3.772	67	73822	10.15	ppb(v)	100
5) Propene	3.797	41	195855	10.01	ppb(v)	98
6) Chlorotrifluoroethene	3.803	116	499169	10.23	ppb(v)	99
7) Dichlorodifluoromethane	3.852	85	782922	10.17	ppb(v)	100
8) 1-Chloro-1,1-difluoro...	3.968	65	542156	10.17	ppb(v)	100
9) Chloromethane	3.986	50	232701	10.21	ppb(v)	100
10) Dichlorotetrafluoroethane	4.060	85	822446	10.32	ppb(v)	98
11) Vinyl Chloride	4.164	62	285760	10.26	ppb(v)	100
12) 1,3-Butadiene	4.274	54	196179	10.26	ppb(v)	99
13) n-Butane	4.317	58	52818	10.35	ppb(v)	99
14) Bromomethane	4.494	94	293758	10.10	ppb(v)	100
15) Acrolein	5.026	56	120473	9.83	ppb(v)	99
16) Chloroethane	4.635	64	143860	10.00	ppb(v)	99
17) Dichlorofluoromethane	4.708	67	630634	9.93	ppb(v)	99
18) Acetonitrile	4.916	41	204555	8.44	ppb(v)	100
19) Freon 123	5.057	83	691737	9.90	ppb(v)	100
20) Freon 123A	5.106	117	427911	9.94	ppb(v)	98
21) Bromoethene	4.934	106	306128	10.04	ppb(v)	99
22) Trichlorofluoromethane	5.289	101	726255	9.94	ppb(v)	100
23) Acetone	5.136	58	127598	8.81	ppb(v)	100
24) Pentane	5.601	57	70874	9.85	ppb(v)	98
26) Iodomethane	5.803	142	899676	10.04	ppb(v)	99
27) Isopropyl Alcohol	5.350	45	448223	7.77	ppb(v)	100
28) 1,1-Dichloroethene	5.870	61	420477	10.11	ppb(v)	99
29) Freon 113	6.231	101	635434	9.95	ppb(v)	98
30) Methylene Chloride	5.987	84	270786	9.94	ppb(v)	99
31) Carbon Disulfide	6.268	76	841298	9.93	ppb(v)	100
32) Ethanol	4.720	45	95744	7.29	ppb(v)	98
33) Acrylonitrile	5.558	53	222716	9.36	ppb(v)	98
34) 3-Chloropropene	6.097	76	149701	10.02	ppb(v)	96
35) trans-1,2-Dichloroethene	6.898	61	402987	9.94	ppb(v)	99
36) tert-Butyl Alcohol	5.901	59	594642	9.76	ppb(v)	100
37) Methyl tert-Butyl Ether	7.161	73	837197	10.05	ppb(v)	99
38) Vinyl Acetate	7.259	43	748342	9.83	ppb(v)	100
39) 1,1-Dichloroethane	7.106	63	515481	9.83	ppb(v)	99
40) 2-Butanone	7.516	72	151586	8.72	ppb(v)	99
41) Hexane	8.195	57	452695	10.01	ppb(v)	100
42) cis-1,2-Dichloroethene	7.987	61	396760	9.94	ppb(v)	99
43) Di-isopropyl Ether	8.195	87	283125	10.11	ppb(v)	99
44) Ethyl Acetate	8.232	61	98515	9.64	ppb(v)	93
45) Methyl Acrylate	8.220	55	544542	9.36	ppb(v)	100
46) Chloroform	8.311	83	649464	9.88	ppb(v)	99
47) 2,4-Dimethylpentane	9.180	57	531259	9.98	ppb(v)	99
48) Tetrahydrofuran	8.752	72	141123	9.59	ppb(v)	98
49) 1,1,1-Trichloroethane	9.400	97	657894	9.91	ppb(v)	100
50) 1,2-Dichloroethane	9.125	62	372087	9.77	ppb(v)	99
51) Benzene	9.933	78	978753	9.88	ppb(v)	100
52) Carbon Tetrachloride	10.104	117	715098	10.00	ppb(v)	99
53) Cyclohexane	10.238	56	460708	9.99	ppb(v)	99
54) 2,3-Dimethylpentane	10.532	71	217162	9.86	ppb(v)	99
56) 2,2,4-Trimethylpentane	11.223	57	1509776	9.92	ppb(v)	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12043.D
 Acq On : 16 May 2019 8:18 pm
 Operator : thomash
 Sample : icc487-10
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:05:58 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : TO-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.560	71	346896	10.01	ppb(v)	100
58) Trichloroethene	11.193	95	456261	9.98	ppb(v)	99
59) 1,2-Dichloropropane	10.905	63	359528	9.94	ppb(v)	99
60) Dibromomethane	10.881	174	496397	9.97	ppb(v)	97
61) Ethyl Acrylate	10.936	55	695645	9.63	ppb(v)	100
62) Methyl Methacrylate	11.468	69	368353	9.94	ppb(v)	99
63) 1,4-Dioxane	11.205	88	237950	8.28	ppb(v)	93
64) Bromodichloromethane	11.150	83	727433	10.00	ppb(v)	100
65) cis-1,3-Dichloropropene	12.276	75	570789	10.08	ppb(v)	99
66) 4-Methyl-2-pentanone	12.325	58	299221	10.00	ppb(v)	99
67) trans-1,3-Dichloropropene	12.949	75	496432	9.99	ppb(v)	100
68) Toluene	13.511	91	1250342	10.06	ppb(v)	100
69) 1,1,2-Trichloroethane	13.163	97	431205	9.90	ppb(v)	100
70) 1,3-Dichloropropane	13.554	76	573082	9.84	ppb(v)	100
71) 2-Hexanone	13.891	58	395793	8.84	ppb(v)	100
72) Ethyl Methacrylate	13.921	69	628291	10.05	ppb(v)	100
73) Dibromochloromethane	14.068	129	847400	10.23	ppb(v)	100
74) Tetrachloroethene	15.023	166	728250	9.99	ppb(v)	100
75) 1,2-Dibromoethane	14.386	107	662422	9.87	ppb(v)	99
76) Octane	14.857	43	688046	10.10	ppb(v)	100
77) 1,1,1,2-Tetrachloroethane	15.946	131	583172	10.10	ppb(v)	99
79) Chlorobenzene	15.965	112	1041182	10.20	ppb(v)	99
80) Ethylbenzene	16.509	91	1618502	10.19	ppb(v)	99
81) m,p-Xylene	16.784	91	2504091	20.08	ppb(v)	100
82) Styrene	17.298	104	958479	10.50	ppb(v)	100
83) Nonane	17.837	43	722775	10.05	ppb(v)	99
84) o-Xylene	17.451	91	1295008	10.13	ppb(v)	100
85) Bromoform	16.858	173	843797	10.49	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.457	83	903429	10.03	ppb(v)	100
87) 1,2,3-Trichloropropane	17.653	75	650951	9.84	ppb(v)	99
88) Isopropylbenzene	18.363	105	1842239	10.06	ppb(v)	100
89) Bromobenzene	18.473	156	601851	10.20	ppb(v)	100
90) 2-Chlorotoluene	19.085	126	454494	10.20	ppb(v)	96
91) n-Propylbenzene	19.158	120	513167	10.07	ppb(v)	100
93) 4-Ethyltoluene	19.378	105	1734393	10.08	ppb(v)	100
94) 1,3,5-Trimethylbenzene	19.501	105	1505926	10.00	ppb(v)	100
95) alpha-Methylstyrene	19.733	118	734912	10.34	ppb(v)	100
96) tert-Butylbenzene	20.070	134	384257	10.13	ppb(v)	98
97) 1,2,4-Trimethylbenzene	20.088	105	1481523	9.99	ppb(v)	99
98) 1,3-Dichlorobenzene	20.278	146	945609	10.09	ppb(v)	99
99) Benzyl Chloride	20.265	91	959112	10.22	ppb(v)	100
100) 1,4-Dichlorobenzene	20.375	146	885043	10.10	ppb(v)	100
101) sec-Butylbenzene	20.455	134	472552	10.01	ppb(v)	100
102) p-Isopropyltoluene	20.688	134	500297	9.90	ppb(v)	97
103) 1,2-Dichlorobenzene	20.840	146	888005	9.76	ppb(v)	99
104) n-Butylbenzene	21.256	134	417886	10.00	ppb(v)	99
105) Hexachloroethane	21.721	201	629104	9.75	ppb(v)	99
106) 1,2,4-Trichlorobenzene	23.037	180	323559	8.77	ppb(v)	98
107) Naphthalene	23.159	128	719545	8.18	ppb(v)	99
108) Hexachlorobutadiene	23.606	225	556064	8.98	ppb(v)	99
110) TVHC as equiv Pentane	5.601	TIC	1176320	8.79	ppb(v)	100

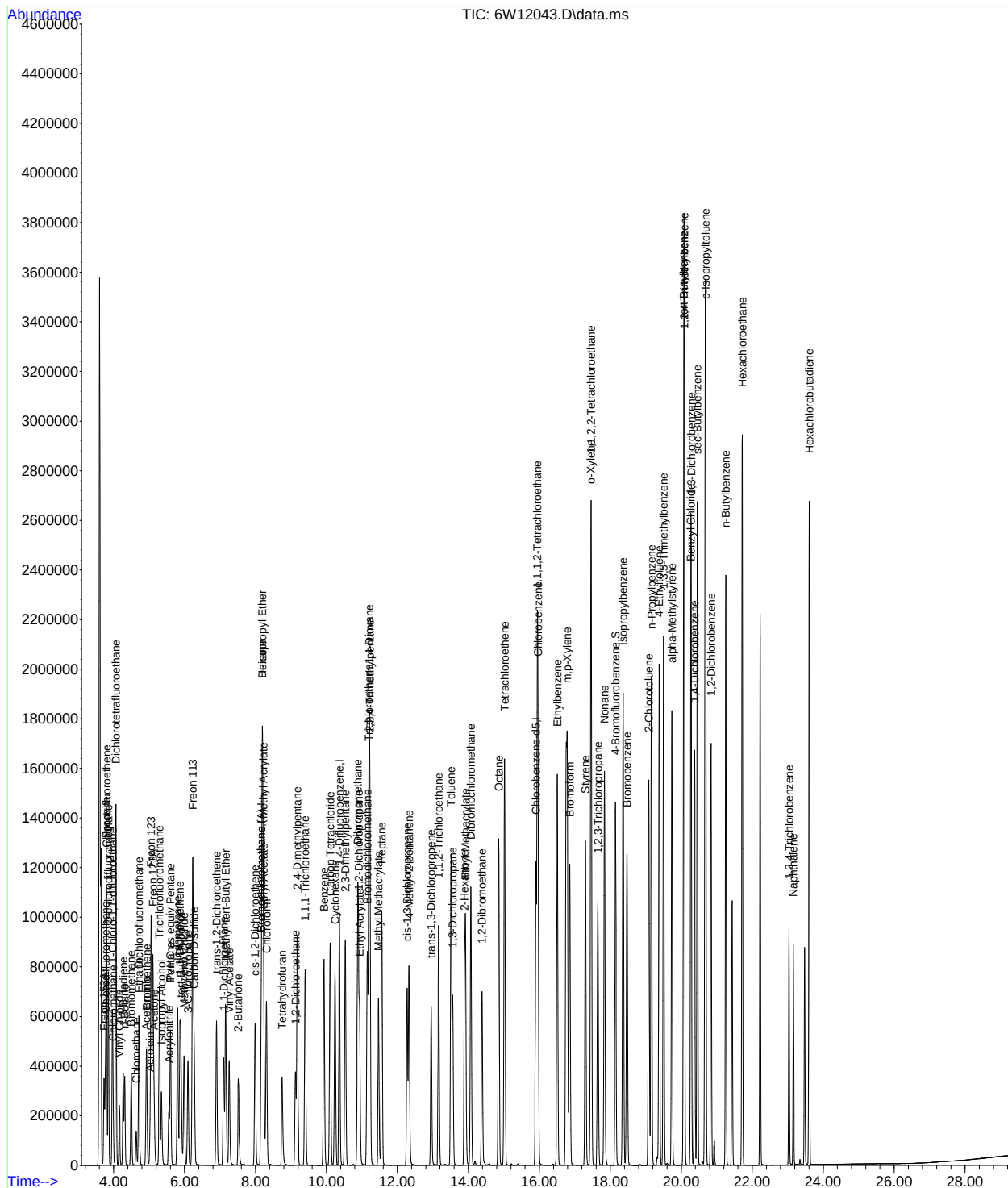
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6WJ2043.D
Acq On : 16 May 2019 8:18 pm
Operator : thomash
Sample : icc487-10
Misc : MS33831,V6W487,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:05:58 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12044.D
 Acq On : 16 May 2019 9:06 pm
 Operator : thomash
 Sample : ic487-20
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:08:01 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.165	130	325007	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	1198074	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.903	82	589466	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.165	130	325007	10.00	ppb(v	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.149	95	755328	10.01	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	100.10%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	382071	19.59	ppb(v	100
4) Chlorodifluoromethane	3.766	67	149205	19.60	ppb(v	100
5) Propene	3.797	41	391308	19.09	ppb(v	99
6) Chlorotrifluoroethene	3.803	116	1020655	19.98	ppb(v	99
7) Dichlorodifluoromethane	3.852	85	1609155	19.95	ppb(v	100
8) 1-Chloro-1,1-difluoro...	3.962	65	1098227	19.67	ppb(v	100
9) Chloromethane	3.986	50	471998	19.78	ppb(v	99
10) Dichlorotetrafluoroethane	4.060	85	1672767	20.05	ppb(v	99
11) Vinyl Chloride	4.164	62	592286	20.30	ppb(v	100
12) 1,3-Butadiene	4.274	54	406493	20.30	ppb(v	99
13) n-Butane	4.317	58	109111	20.42	ppb(v	93
14) Bromomethane	4.494	94	617692	20.28	ppb(v	99
15) Acrolein	5.026	56	254880	19.85	ppb(v	98
16) Chloroethane	4.635	64	300817	19.97	ppb(v	99
17) Dichlorofluoromethane	4.708	67	1305713	19.63	ppb(v	100
18) Acetonitrile	4.916	41	423638	16.68	ppb(v	100
19) Freon 123	5.057	83	1447322	19.78	ppb(v	99
20) Freon 123A	5.106	117	893913	19.84	ppb(v	97
21) Bromoethene	4.928	106	653199	20.47	ppb(v	100
22) Trichlorofluoromethane	5.289	101	1497226	19.57	ppb(v	100
23) Acetone	5.136	58	267449	17.64	ppb(v	96
24) Pentane	5.601	57	147504	19.58	ppb(v	91
26) Iodomethane	5.803	142	1862754	19.85	ppb(v	99
27) Isopropyl Alcohol	5.350	45	929409	15.39	ppb(v	100
28) 1,1-Dichloroethene	5.870	61	835647	19.18	ppb(v	98
29) Freon 113	6.225	101	1292203	19.33	ppb(v	100
30) Methylene Chloride	5.987	84	552869	19.38	ppb(v	100
31) Carbon Disulfide	6.268	76	1723847	19.42	ppb(v	100
32) Ethanol	4.720	45	198695	14.45	ppb(v	100
33) Acrylonitrile	5.558	53	462731	18.56	ppb(v	98
34) 3-Chloropropene	6.097	76	310830	19.87	ppb(v	96
35) trans-1,2-Dichloroethene	6.898	61	827052	19.47	ppb(v	98
36) tert-Butyl Alcohol	5.901	59	1195824	18.75	ppb(v	98
37) Methyl tert-Butyl Ether	7.155	73	1728398	19.82	ppb(v	99
38) Vinyl Acetate	7.259	43	1547215	19.41	ppb(v	99
39) 1,1-Dichloroethane	7.106	63	1047826	19.09	ppb(v	99
40) 2-Butanone	7.516	72	320263	17.60	ppb(v	98
41) Hexane	8.195	57	906355	19.13	ppb(v	97
42) cis-1,2-Dichloroethene	7.987	61	818371	19.57	ppb(v	99
43) Di-isopropyl Ether	8.195	87	578600	19.72	ppb(v	93
44) Ethyl Acetate	8.232	61	201024	18.79	ppb(v	98
45) Methyl Acrylate	8.220	55	1105501	18.14	ppb(v	99
46) Chloroform	8.311	83	1330965	19.33	ppb(v	99
47) 2,4-Dimethylpentane	9.180	57	1095731	19.66	ppb(v	99
48) Tetrahydrofuran	8.746	72	299897	19.46	ppb(v	95
49) 1,1,1-Trichloroethane	9.400	97	1352289	19.45	ppb(v	99
50) 1,2-Dichloroethane	9.125	62	765716	19.20	ppb(v	98
51) Benzene	9.933	78	2039225	19.66	ppb(v	100
52) Carbon Tetrachloride	10.104	117	1475299	19.69	ppb(v	98
53) Cyclohexane	10.239	56	954759	19.77	ppb(v	99
54) 2,3-Dimethylpentane	10.532	71	451944	19.60	ppb(v	97
56) 2,2,4-Trimethylpentane	11.223	57	3047333	18.89	ppb(v	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12044.D
 Acq On : 16 May 2019 9:06 pm
 Operator : thomash
 Sample : ic487-20
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:08:01 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

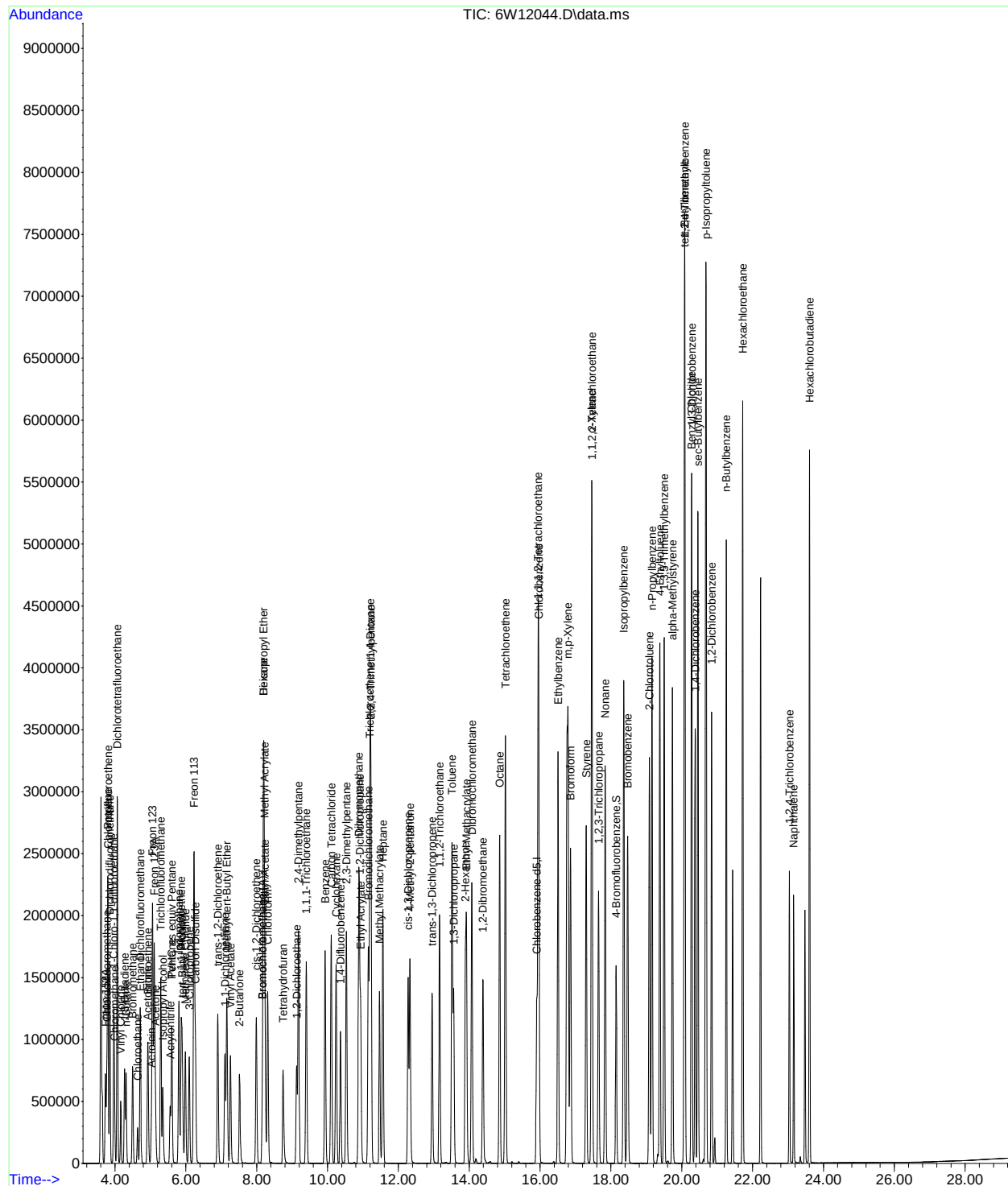
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	719021	19.58	ppb(v)	99
58) Trichloroethene	11.193	95	947263	19.55	ppb(v)	99
59) 1,2-Dichloropropane	10.905	63	729143	19.01	ppb(v)	99
60) Dibromomethane	10.881	174	1046291	19.81	ppb(v)	97
61) Ethyl Acrylate	10.936	55	1448059	18.92	ppb(v)	99
62) Methyl Methacrylate	11.468	69	775444	19.74	ppb(v)	97
63) 1,4-Dioxane	11.205	88	498846	16.37	ppb(v)	85
64) Bromodichloromethane	11.150	83	1501047	19.46	ppb(v)	100
65) cis-1,3-Dichloropropene	12.276	75	1202999	20.04	ppb(v)	99
66) 4-Methyl-2-pentanone	12.325	58	621264	19.59	ppb(v)	96
67) trans-1,3-Dichloropropene	12.949	75	1076398	20.43	ppb(v)	99
68) Toluene	13.511	91	2630179	19.96	ppb(v)	100
69) 1,1,2-Trichloroethane	13.163	97	906376	19.62	ppb(v)	99
70) 1,3-Dichloropropane	13.560	76	1198234	19.41	ppb(v)	99
71) 2-Hexanone	13.891	58	837542	17.64	ppb(v)	97
72) Ethyl Methacrylate	13.921	69	1313830	19.82	ppb(v)	99
73) Dibromochloromethane	14.074	129	1776948	20.24	ppb(v)	100
74) Tetrachloroethene	15.023	166	1526293	19.74	ppb(v)	100
75) 1,2-Dibromoethane	14.386	107	1417668	19.93	ppb(v)	100
76) Octane	14.863	43	1395918	19.34	ppb(v)	96
77) 1,1,1,2-Tetrachloroethane	15.946	131	1217341	19.89	ppb(v)	99
79) Chlorobenzene	15.965	112	2172723	19.15	ppb(v)	99
80) Ethylbenzene	16.509	91	3392976	19.23	ppb(v)	99
81) m,p-Xylene	16.784	91	5167341	37.29	ppb(v)	100
82) Styrene	17.304	104	2072026	20.43	ppb(v)	100
83) Nonane	17.837	43	1453890	18.20	ppb(v)	98
84) o-Xylene	17.457	91	2654149	18.68	ppb(v)	100
85) Bromoform	16.858	173	1799760	20.13	ppb(v)	99
86) 1,1,2,2-Tetrachloroethane	17.464	83	1850313	18.48	ppb(v)	99
87) 1,2,3-Trichloropropane	17.653	75	1343690	18.28	ppb(v)	99
88) Isopropylbenzene	18.363	105	3820430	18.78	ppb(v)	99
89) Bromobenzene	18.473	156	1267459	19.32	ppb(v)	98
90) 2-Chlorotoluene	19.085	126	945729	19.10	ppb(v)	99
91) n-Propylbenzene	19.158	120	1072074	18.93	ppb(v)	100
93) 4-Ethyltoluene	19.384	105	3639248	19.03	ppb(v)	99
94) 1,3,5-Trimethylbenzene	19.507	105	3115418	18.62	ppb(v)	100
95) alpha-Methylstyrene	19.733	118	1566568	19.83	ppb(v)	100
96) tert-Butylbenzene	20.076	134	778680	18.47	ppb(v)	98
97) 1,2,4-Trimethylbenzene	20.088	105	3031186	18.40	ppb(v)	91
98) 1,3-Dichlorobenzene	20.278	146	1990385	19.11	ppb(v)	99
99) Benzyl Chloride	20.272	91	2126153	20.38	ppb(v)	99
100) 1,4-Dichlorobenzene	20.382	146	1875745	19.26	ppb(v)	99
101) sec-Butylbenzene	20.461	134	961235	18.33	ppb(v)	95
102) p-Isopropyltoluene	20.688	134	1019961	18.17	ppb(v)	98
103) 1,2-Dichlorobenzene	20.840	146	1855968	18.35	ppb(v)	99
104) n-Butylbenzene	21.256	134	888250	19.12	ppb(v)	98
105) Hexachloroethane	21.721	201	1317165	18.37	ppb(v)	100
106) 1,2,4-Trichlorobenzene	23.037	180	803066	19.59	ppb(v)	99
107) Naphthalene	23.159	128	1755750	17.97	ppb(v)	99
108) Hexachlorobutadiene	23.606	225	1205931	17.52	ppb(v)	99
110) TVHC as equiv Pentane	5.601	TIC	2369086	16.90	ppb(v)	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6W12044.D
Acq On : 16 May 2019 9:06 pm
Operator : thomash
Sample : ic487-20
Misc : MS3831,V6W487,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:08:01 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12046.D
 Acq On : 16 May 2019 10:46 pm
 Operator : thomash
 Sample : ic487-40
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:10:25 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.164	130	325818	10.00	ppb(v	0.00
55) 1,4-Difluorobenzene	10.367	114	1194690	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.903	82	658869	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.164	130	325818	10.00	ppb(v	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.148 95 798513 9.47 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 94.70%

Target Compounds					Qvalue
3) Freon 152A	3.729	65	720811	36.87	ppb(v 100
4) Chlorodifluoromethane	3.766	67	282644	37.03	ppb(v 99
5) Propene	3.790	41	722523	35.16	ppb(v 100
6) Chlorotrifluoroethene	3.796	116	1928764	37.66	ppb(v 99
7) Dichlorodifluoromethane	3.845	85	2954568	36.54	ppb(v 99
8) 1-Chloro-1,1-difluoro...	3.962	65	2028890	36.25	ppb(v 99
9) Chloromethane	3.980	50	836691	34.98	ppb(v 100
10) Dichlorotetrafluoroethane	4.059	85	3001497	35.89	ppb(v 97
11) Vinyl Chloride	4.157	62	1071376	36.63	ppb(v 100
12) 1,3-Butadiene	4.267	54	739848	36.86	ppb(v 99
13) n-Butane	4.310	58	194794	36.36	ppb(v 93
14) Bromomethane	4.494	94	1126690	36.90	ppb(v 99
15) Acrolein	5.020	56	479494	37.26	ppb(v 99
16) Chloroethane	4.628	64	545591	36.12	ppb(v 99
17) Dichlorofluoromethane	4.702	67	2405885	36.08	ppb(v 100
18) Acetonitrile	4.910	41	774580	30.42	ppb(v 100
19) Freon 123	5.057	83	2707417	36.92	ppb(v 99
20) Freon 123A	5.099	117	1703396	37.70	ppb(v 97
21) Bromoethene	4.928	106	1224378	38.27	ppb(v 99
22) Trichlorofluoromethane	5.289	101	2864399	37.35	ppb(v 99
23) Acetone	5.130	58	510696	33.60	ppb(v 96
24) Pentane	5.595	57	283420	37.52	ppb(v 90
26) Iodomethane	5.797	142	3598538	38.24	ppb(v 98
27) Isopropyl Alcohol	5.350	45	1767167	29.19	ppb(v 99
28) 1,1-Dichloroethene	5.864	61	1626462	37.25	ppb(v 99
29) Freon 113	6.225	101	2445087	36.48	ppb(v 98
30) Methylene Chloride	5.987	84	1048912	36.68	ppb(v 97
31) Carbon Disulfide	6.268	76	3318946	37.30	ppb(v 100
32) Ethanol	4.720	45	361365	26.21	ppb(v 99
33) Acrylonitrile	5.552	53	913714	36.57	ppb(v 98
34) 3-Chloropropene	6.090	76	587116	37.45	ppb(v 95
35) trans-1,2-Dichloroethene	6.892	61	1625585	38.18	ppb(v 98
36) tert-Butyl Alcohol	5.901	59	2319621	36.27	ppb(v 98
37) Methyl tert-Butyl Ether	7.155	73	3456374	39.53	ppb(v 99
38) Vinyl Acetate	7.259	43	3145594	39.37	ppb(v 99
39) 1,1-Dichloroethane	7.100	63	2071089	37.64	ppb(v 98
40) 2-Butanone	7.516	72	646720	35.44	ppb(v 97
41) Hexane	8.195	57	1759215	37.05	ppb(v 93
42) cis-1,2-Dichloroethene	7.987	61	1630089	38.89	ppb(v 98
43) Di-isopropyl Ether	8.195	87	1138190	38.70	ppb(v 89
44) Ethyl Acetate	8.238	61	399996	37.29	ppb(v 88
45) Methyl Acrylate	8.226	55	2186167	35.78	ppb(v 98
46) Chloroform	8.311	83	2667036	38.65	ppb(v 99
47) 2,4-Dimethylpentane	9.180	57	2177641	38.97	ppb(v 99
48) Tetrahydrofuran	8.739	72	604966	39.16	ppb(v 96
49) 1,1,1-Trichloroethane	9.400	97	2720067	39.03	ppb(v 99
50) 1,2-Dichloroethane	9.125	62	1534757	38.39	ppb(v 99
51) Benzene	9.932	78	4089971	39.34	ppb(v 99
52) Carbon Tetrachloride	10.104	117	2964453	39.47	ppb(v 98
53) Cyclohexane	10.238	56	1905230	39.35	ppb(v 98
54) 2,3-Dimethylpentane	10.532	71	899544	38.91	ppb(v 97
56) 2,2,4-Trimethylpentane	11.229	57	5906266	36.71	ppb(v 99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12046.D
 Acq On : 16 May 2019 10:46 pm
 Operator : thomash
 Sample : ic487-40
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 17 09:10:25 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Thu May 16 09:17:15 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.566	71	1461103	39.90	ppb(v	99
58) Trichloroethene	11.199	95	1895843	39.23	ppb(v	98
59) 1,2-Dichloropropane	10.905	63	1436199	37.55	ppb(v	99
60) Dibromomethane	10.881	174	2105691	39.99	ppb(v	98
61) Ethyl Acrylate	10.942	55	2931206	38.40	ppb(v	99
62) Methyl Methacrylate	11.474	69	1559773	39.82	ppb(v	95
63) 1,4-Dioxane	11.205	88	987599	32.50	ppb(v#	75
64) Bromodichloromethane	11.156	83	3031778	39.42	ppb(v	99
65) cis-1,3-Dichloropropene	12.275	75	2482856	41.47	ppb(v	99
66) 4-Methyl-2-pentanone	12.324	58	1263036	39.93	ppb(v	96
67) trans-1,3-Dichloropropene	12.955	75	2252414	42.86	ppb(v	99
68) Toluene	13.517	91	5313019	40.44	ppb(v	100
69) 1,1,2-Trichloroethane	13.169	97	1845209	40.06	ppb(v	99
70) 1,3-Dichloropropane	13.560	76	2424203	39.37	ppb(v	98
71) 2-Hexanone	13.897	58	1721379	36.37	ppb(v	95
72) Ethyl Methacrylate	13.927	69	2686815	40.64	ppb(v	99
73) Dibromochloromethane	14.074	129	3617442	41.32	ppb(v	99
74) Tetrachloroethene	15.022	166	3072625	39.86	ppb(v	98
75) 1,2-Dibromoethane	14.392	107	2947922	41.55	ppb(v	100
76) Octane	14.863	43	2789541	38.75	ppb(v	93
77) 1,1,1,2-Tetrachloroethane	15.952	131	2413507	39.55	ppb(v	99
79) Chlorobenzene	15.971	112	4333534	34.17	ppb(v	99
80) Ethylbenzene	16.515	91	6927110	35.12	ppb(v	100
81) m,p-Xylene	16.790	91	10604162	68.47	ppb(v	100
82) Styrene	17.304	104	4309723	38.02	ppb(v	99
83) Nonane	17.843	43	2867881	32.11	ppb(v	96
84) o-Xylene	17.457	91	5301580	33.39	ppb(v	100
85) Bromoform	16.864	173	3689163	36.92	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.469	83	3674017	32.83	ppb(v	99
87) 1,2,3-Trichloropropane	17.659	75	2751095	33.49	ppb(v	99
88) Isopropylbenzene	18.369	105	7796267	34.29	ppb(v	99
89) Bromobenzene	18.479	156	2625831	35.81	ppb(v	100
90) 2-Chlorotoluene	19.091	126	1963946	35.49	ppb(v	96
91) n-Propylbenzene	19.164	120	2209502	34.91	ppb(v	94
93) 4-Ethyltoluene	19.384	105	7361260	34.45	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.507	105	6275308	33.56	ppb(v	100
95) alpha-Methylstyrene	19.739	118	3256257	36.88	ppb(v	99
96) tert-Butylbenzene	20.082	134	1538554	32.64	ppb(v	98
97) 1,2,4-Trimethylbenzene	20.094	105	5962600	32.38	ppb(v	94
98) 1,3-Dichlorobenzene	20.284	146	4038686	34.68	ppb(v	98
99) Benzyl Chloride	20.277	91	4525857	38.81	ppb(v	99
100) 1,4-Dichlorobenzene	20.381	146	3951119	36.30	ppb(v	99
101) sec-Butylbenzene	20.461	134	1946006	33.19	ppb(v	94
102) p-Isopropyltoluene	20.693	134	1987479	31.67	ppb(v	94
103) 1,2-Dichlorobenzene	20.846	146	3846664	34.03	ppb(v	98
104) n-Butylbenzene	21.262	134	1845306	35.54	ppb(v	97
105) Hexachloroethane	21.721	201	2622685	32.73	ppb(v	99
106) 1,2,4-Trichlorobenzene	23.037	180	1860177	40.60	ppb(v	99
107) Naphthalene	23.165	128	3982521	36.47	ppb(v	100
108) Hexachlorobutadiene	23.605	225	2401281	31.21	ppb(v	99
110) TVHC as equiv Pentane	5.595	TIC	4278830	30.44	ppb(v	100

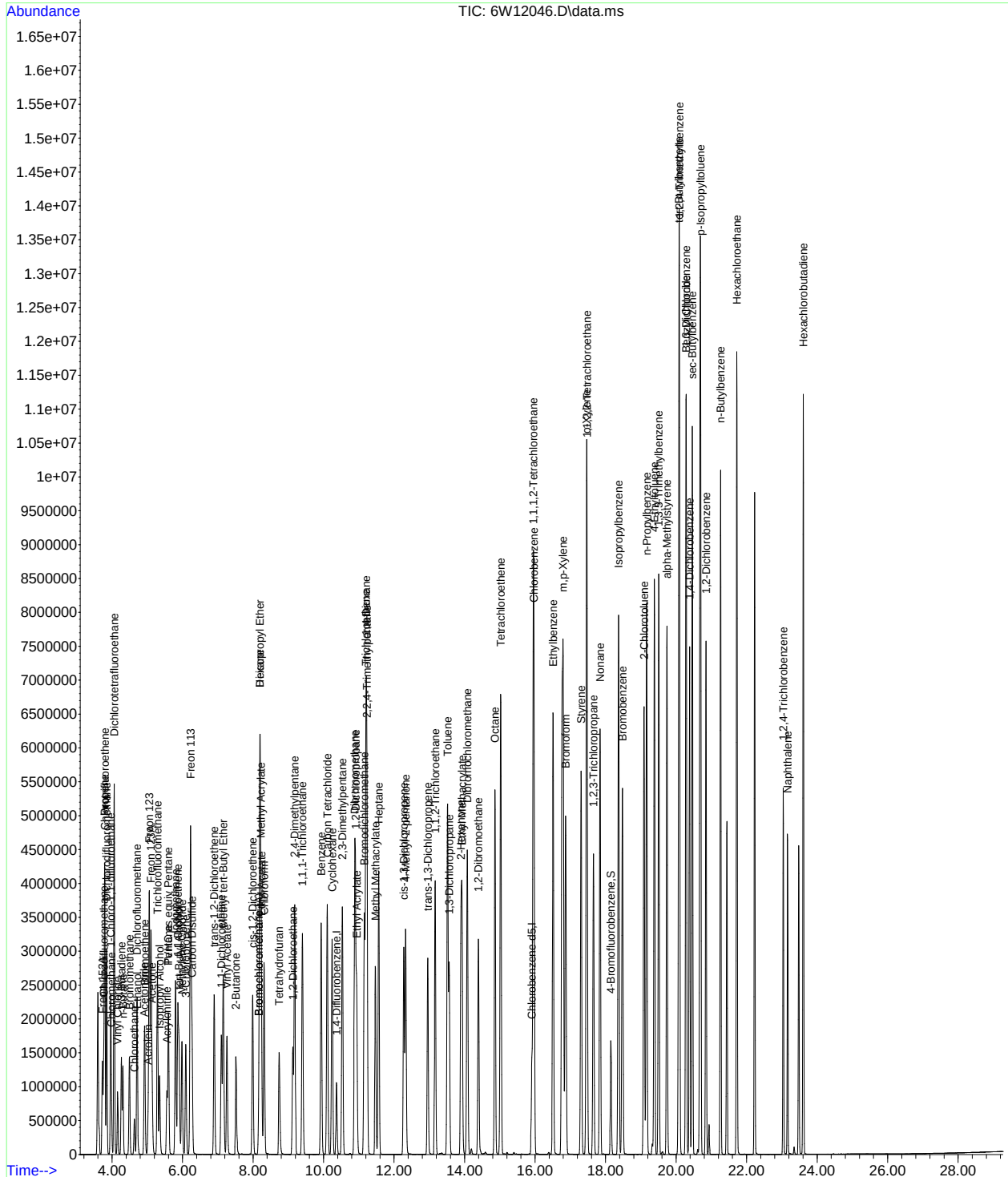
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.8
7

Quantitation Report (QT Reviewed)

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Data Path : C:\msdchem\1\data\  
Data File : 6WJ2046.D  
Acq On : 16 May 2019 10:46 pm  
Operator : thomash  
Sample : ic487-40  
Misc : MS33831,V6W487,,,,,1  
ALS Vial : 5 Sample Multiplier: 1
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Quant Time: May 17 09:10:25 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : T0-15 Full Scan Mode
QLast Update : Thu May 16 09:17:15 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12052.D
 Acq On : 17 May 2019 11:28 am
 Operator : thomash
 Sample : icv487-10
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 20 09:47:06 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.158	130	338715	10.00	ppb(v)	0.00
55) 1,4-Difluorobenzene	10.361	114	1240181	10.00	ppb(v)	0.00
78) Chlorobenzene-d5	15.897	82	579211	10.00	ppb(v)	0.00
109) Bromochloromethane (A)	8.158	130	338715	10.00	ppb(v)	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.143	95	783814	10.70	ppb(v)	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	107.00%

Target Compounds						Qvalue
3) Freon 152A	3.729	65	207331	10.29	ppb(v)	100
4) Chlorodifluoromethane	3.766	67	80882	10.61	ppb(v)	99
5) Propene	3.790	41	213890	10.21	ppb(v)	99
6) Chlorotrifluoroethene	3.797	116	568834	10.78	ppb(v)	99
7) Dichlorodifluoromethane	3.852	85	867136	10.26	ppb(v)	99
8) 1-Chloro-1,1-difluoro...	3.962	65	609300	10.36	ppb(v)	100
9) Chloromethane	3.980	50	254582	10.45	ppb(v)	99
10) Dichlorotetrafluoroethane	4.060	85	894552	10.28	ppb(v)	99
11) Vinyl Chloride	4.157	62	314995	10.65	ppb(v)	99
12) 1,3-Butadiene	4.268	54	215484	10.87	ppb(v)	97
13) n-Butane	4.310	58	57567	11.53	ppb(v)	95
14) Bromomethane	4.494	94	327703	10.32	ppb(v)	99
15) Acrolein	5.020	56	130369	10.06	ppb(v)	99
16) Chloroethane	4.635	64	162415	11.25	ppb(v)	100
17) Dichlorofluoromethane	4.708	67	650797	9.33	ppb(v)	99
18) Acetonitrile	4.916	41	212662	7.78	ppb(v)	99
19) Freon 123	5.051	83	793511	10.37	ppb(v)	100
20) Freon 123A	5.100	117	526879	11.40	ppb(v)	98
21) Bromoethene	4.928	106	342202	10.45	ppb(v)	99
22) Trichlorofluoromethane	5.289	101	791149	9.83	ppb(v)	99
23) Acetone	5.136	58	143149	9.15	ppb(v)	96
24) Pentane	5.595	57	77544	11.07	ppb(v)	89
26) Iodomethane	5.797	142	1021770	10.45	ppb(v)	100
27) Isopropyl Alcohol	5.344	45	498623	8.66	ppb(v)	100
28) 1,1-Dichloroethene	5.864	61	490252	10.98	ppb(v)	98
29) Freon 113	6.225	101	730289	10.51	ppb(v)	99
30) Methylene Chloride	5.981	84	305864	9.94	ppb(v)	100
31) Carbon Disulfide	6.262	76	972830	10.64	ppb(v)	100
32) Ethanol	4.720	45	104336	8.59	ppb(v)	99
33) Acrylonitrile	5.552	53	237318	9.84	ppb(v)	98
34) 3-Chloropropene	6.091	76	165469	11.65	ppb(v)	95
35) trans-1,2-Dichloroethene	6.892	61	449541	10.50	ppb(v)	98
36) tert-Butyl Alcohol	5.895	59	583033	9.14	ppb(v)	99
37) Methyl tert-Butyl Ether	7.155	73	906092	10.65	ppb(v)	99
38) Vinyl Acetate	7.253	43	789116	10.82	ppb(v)	99
39) 1,1-Dichloroethane	7.100	63	551879	9.68	ppb(v)	100
40) 2-Butanone	7.510	72	167551	10.44	ppb(v)	100
41) Hexane	8.189	57	490100	10.57	ppb(v)	97
42) cis-1,2-Dichloroethene	7.981	61	425416	10.09	ppb(v)	98
43) Di-isopropyl Ether	8.195	87	306354	11.00	ppb(v)	93
44) Ethyl Acetate	8.226	61	108980	11.28	ppb(v)	97
45) Methyl Acrylate	8.213	55	590646	9.85	ppb(v)	100
46) Chloroform	8.305	83	692735	9.59	ppb(v)	99
47) 2,4-Dimethylpentane	9.174	57	574415	10.79	ppb(v)	100
48) Tetrahydrofuran	8.746	72	153407	10.79	ppb(v)	95
49) 1,1,1-Trichloroethane	9.394	97	706238	9.80	ppb(v)	99
50) 1,2-Dichloroethane	9.119	62	397235	9.84	ppb(v)	99
51) Benzene	9.926	78	1058384	9.80	ppb(v)	99
52) Carbon Tetrachloride	10.098	117	770781	9.96	ppb(v)	100
53) Cyclohexane	10.232	56	491770	10.76	ppb(v)	98
54) 2,3-Dimethylpentane	10.526	71	239821	10.85	ppb(v)	98
56) 2,2,4-Trimethylpentane	11.217	57	1620920	10.32	ppb(v)	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12052.D
 Acq On : 17 May 2019 11:28 am
 Operator : thomash
 Sample : icv487-10
 Misc : MS33831,V6W487,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

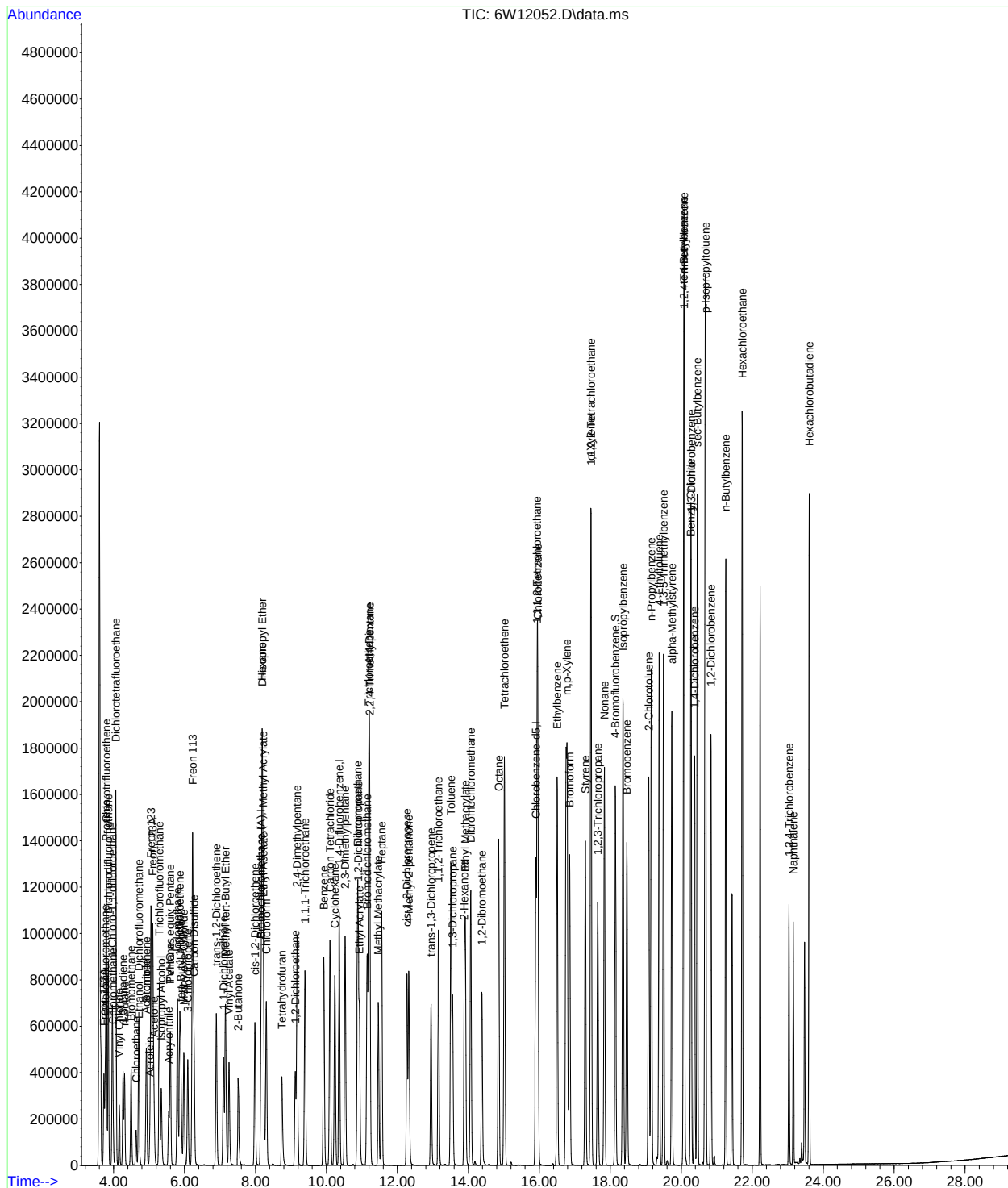
Quant Time: May 20 09:47:06 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.560	71	380526	11.25	ppb(v	99
58) Trichloroethene	11.193	95	487561	10.05	ppb(v	100
59) 1,2-Dichloropropane	10.899	63	380888	9.73	ppb(v	99
60) Dibromomethane	10.875	174	550823	9.67	ppb(v	97
61) Ethyl Acrylate	10.930	55	737110	11.19	ppb(v	99
62) Methyl Methacrylate	11.462	69	398026	11.57	ppb(v	98
63) 1,4-Dioxane	11.205	88	247928	8.19	ppb(v	97
64) Bromodichloromethane	11.144	83	780653	10.02	ppb(v	100
65) cis-1,3-Dichloropropene	12.270	75	654740	11.46	ppb(v	99
66) 4-Methyl-2-pentanone	12.318	58	315429	11.39	ppb(v	98
67) trans-1,3-Dichloropropene	12.949	75	541952	10.82	ppb(v	100
68) Toluene	13.505	91	1339618	9.97	ppb(v	100
69) 1,1,2-Trichloroethane	13.157	97	462761	10.03	ppb(v	99
70) 1,3-Dichloropropane	13.554	76	625619	10.35	ppb(v	98
71) 2-Hexanone	13.885	58	429722	10.41	ppb(v	98
72) Ethyl Methacrylate	13.915	69	670385	11.65	ppb(v	99
73) Dibromochloromethane	14.068	129	908833	10.42	ppb(v	100
74) Tetrachloroethene	15.016	166	774757	9.86	ppb(v	99
75) 1,2-Dibromoethane	14.380	107	714571	10.17	ppb(v	100
76) Octane	14.857	43	733632	11.11	ppb(v	97
77) 1,1,1,2-Tetrachloroethane	15.940	131	633748	10.21	ppb(v	98
79) Chlorobenzene	15.959	112	1100360	9.36	ppb(v	100
80) Ethylbenzene	16.503	91	1733706	9.58	ppb(v	99
81) m,p-Xylene	16.778	91	2613931	18.97	ppb(v	99
82) Styrene	17.298	104	1032815	11.63	ppb(v	100
83) Nonane	17.837	43	766158	11.15	ppb(v	98
84) o-Xylene	17.451	91	1350790	9.16	ppb(v	100
85) Bromoform	16.852	173	923743	10.85	ppb(v	99
86) 1,1,2,2-Tetrachloroethane	17.457	83	967373	9.87	ppb(v	100
87) 1,2,3-Trichloropropane	17.647	75	698878	9.78	ppb(v	100
88) Isopropylbenzene	18.357	105	2009564	10.58	ppb(v	100
89) Bromobenzene	18.467	156	643537	9.84	ppb(v	97
90) 2-Chlorotoluene	19.085	126	497229	11.25	ppb(v	96
91) n-Propylbenzene	19.152	120	555931	11.36	ppb(v	100
93) 4-Ethyltoluene	19.378	105	1855617	11.22	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.501	105	1575305	10.78	ppb(v	100
95) alpha-Methylstyrene	19.733	118	792978	12.13	ppb(v	99
96) tert-Butylbenzene	20.070	134	408053	11.31	ppb(v	100
97) 1,2,4-Trimethylbenzene	20.082	105	1552279	10.78	ppb(v#	81
98) 1,3-Dichlorobenzene	20.278	146	1001991	10.02	ppb(v	98
99) Benzyl Chloride	20.265	91	1066304	11.57	ppb(v	100
100) 1,4-Dichlorobenzene	20.375	146	946336	10.08	ppb(v	100
101) sec-Butylbenzene	20.455	134	504067	11.11	ppb(v	99
102) p-Isopropyltoluene	20.688	134	537691	11.11	ppb(v	97
103) 1,2-Dichlorobenzene	20.834	146	952986	9.85	ppb(v	99
104) n-Butylbenzene	21.256	134	463954	11.86	ppb(v	100
105) Hexachloroethane	21.721	201	695165	10.95	ppb(v	99
106) 1,2,4-Trichlorobenzene	23.037	180	387401	10.21	ppb(v	99
107) Naphthalene	23.159	128	863377	9.60	ppb(v	99
108) Hexachlorobutadiene	23.606	225	608096	8.91	ppb(v	99
110) TVHC as equiv Pentane	5.595	TIC	1280590	8.75	ppb(v	100

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

Data Path : C:\msdchem\1\data\
Data File : 6WJ2052.D
Acq On : 17 May 2019 11:28 am
Operator : thomash
Sample : icv487-10
Misc : MS33831,V6W487,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 20 09:47:06 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12871.D
 Acq On : 3 Jul 2019 6:21 am
 Operator : danat
 Sample : CC487-10
 Misc : MS35902,V6W525,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 03 13:53:51 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.159	130	229078	10.00	ppb(v #	0.00
55) 1,4-Difluorobenzene	10.361	114	856288	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	453620	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.159	130	229078	10.00	ppb(v #	0.00

System Monitoring Compounds
 92) 4-Bromofluorobenzene 18.143 95 623138 10.86 ppb(v 0.00
 Spiked Amount 10.000 Range 65 - 128 Recovery = 108.60%

Target Compounds					Qvalue
3) Freon 152A	3.723	65	140473	10.31	ppb(v 90
4) Chlorodifluoromethane	3.760	67	66965	12.99	ppb(v 97
5) Propene	3.784	41	166496	11.75	ppb(v 98
6) Chlorotrifluoroethene	3.790	116	353811	9.92	ppb(v 98
7) Dichlorodifluoromethane	3.839	85	644910	11.28	ppb(v 99
8) 1-Chloro-1,1-difluoro...	3.956	65	504685	12.68	ppb(v# 96
9) Chloromethane	3.974	50	172923	10.49	ppb(v 99
10) Dichlorotetrafluoroethane	4.054	85	591992	10.06	ppb(v 99
11) Vinyl Chloride	4.151	62	201641	10.08	ppb(v# 98
12) 1,3-Butadiene	4.262	54	145212	10.83	ppb(v 91
13) n-Butane	4.304	58	37562	11.12	ppb(v 79
14) Bromomethane	4.488	94	198477	9.25	ppb(v 98
15) Acrolein	5.014	56	85333	9.74	ppb(v# 96
16) Chloroethane	4.622	64	102548	10.50	ppb(v 96
17) Dichlorofluoromethane	4.702	67	511009	10.83	ppb(v 99
18) Acetonitrile	4.910	41	154277	8.34	ppb(v 96
19) Freon 123	5.045	83	496713	9.59	ppb(v 99
20) Freon 123A	5.094	117	309572	9.91	ppb(v 98
21) Bromoethene	4.922	106	209113	9.45	ppb(v# 97
22) Trichlorofluoromethane	5.283	101	637580	11.71	ppb(v 100
23) Acetone	5.130	58	95665	9.04	ppb(v 70
24) Pentane	5.595	57	55117	11.63	ppb(v 94
26) Iodomethane	5.791	142	615397	9.30	ppb(v 85
27) Isopropyl Alcohol	5.338	45	372493	9.57	ppb(v 95
28) 1,1-Dichloroethene	5.858	61	340373	11.27	ppb(v 89
29) Freon 113	6.219	101	477033	10.15	ppb(v 99
30) Methylene Chloride	5.974	84	184292	8.85	ppb(v 89
31) Carbon Disulfide	6.256	76	627779	10.15	ppb(v 99
32) Ethanol	4.714	45	72570	8.83	ppb(v 98
33) Acrylonitrile	5.546	53	162390	9.96	ppb(v 98
34) 3-Chloropropene	6.085	76	111960	11.65	ppb(v 78
35) trans-1,2-Dichloroethene	6.886	61	327370	11.30	ppb(v 92
36) tert-Butyl Alcohol	5.895	59	479175	11.11	ppb(v 97
37) Methyl tert-Butyl Ether	7.149	73	689371	11.98	ppb(v 98
38) Vinyl Acetate	7.247	43	665414	13.49	ppb(v 94
39) 1,1-Dichloroethane	7.094	63	417784	10.83	ppb(v 99
40) 2-Butanone	7.510	72	115986	10.69	ppb(v 77
41) Hexane	8.189	57	367522	11.72	ppb(v 90
42) cis-1,2-Dichloroethene	7.975	61	325573	11.42	ppb(v 92
43) Di-isopropyl Ether	8.189	87	214398	11.38	ppb(v 80
44) Ethyl Acetate	8.226	61	77557	11.87	ppb(v 69
45) Methyl Acrylate	8.214	55	456763	11.26	ppb(v 97
46) Chloroform	8.299	83	549515	11.25	ppb(v 99
47) 2,4-Dimethylpentane	9.168	57	430330	11.95	ppb(v 98
48) Tetrahydrofuran	8.746	72	108625	11.30	ppb(v 89
49) 1,1,1-Trichloroethane	9.394	97	581290	11.93	ppb(v 99
50) 1,2-Dichloroethane	9.113	62	354401	12.99	ppb(v 98
51) Benzene	9.920	78	750309	10.27	ppb(v 97
52) Carbon Tetrachloride	10.092	117	642209	12.27	ppb(v 98
53) Cyclohexane	10.232	56	373706	12.09	ppb(v 96
54) 2,3-Dimethylpentane	10.526	71	168896	11.30	ppb(v 90
56) 2,2,4-Trimethylpentane	11.211	57	1264841	11.66	ppb(v 97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W12871.D
 Acq On : 3 Jul 2019 6:21 am
 Operator : danat
 Sample : CC487-10
 Misc : MS35902,V6W525,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

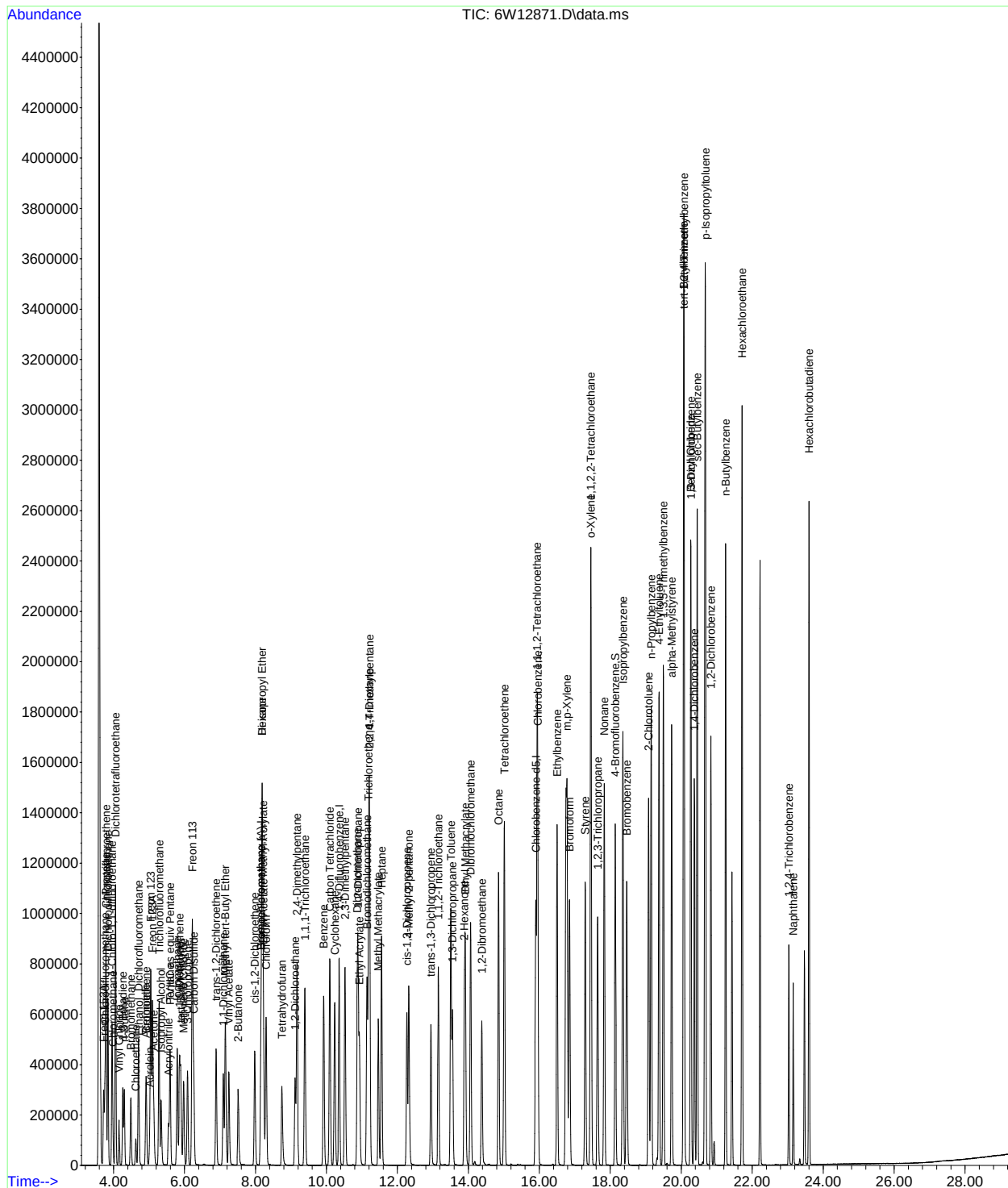
Quant Time: Jul 03 13:53:51 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.554	71	276520	11.84	ppb(v	96
58) Trichloroethene	11.187	95	358155	10.69	ppb(v	94
59) 1,2-Dichloropropane	10.893	63	283583	10.49	ppb(v	94
60) Dibromomethane	10.869	174	357925	9.11	ppb(v	93
61) Ethyl Acrylate	10.930	55	584666	12.85	ppb(v	98
62) Methyl Methacrylate	11.462	69	294955	12.42	ppb(v	86
63) 1,4-Dioxane	11.205	88	177989	8.52	ppb(v#	70
64) Bromodichloromethane	11.144	83	618840	11.51	ppb(v	100
65) cis-1,3-Dichloropropene	12.270	75	456673	11.58	ppb(v	98
66) 4-Methyl-2-pentanone	12.319	58	246203	12.88	ppb(v	89
67) trans-1,3-Dichloropropene	12.943	75	412614	11.93	ppb(v	96
68) Toluene	13.505	91	969307	10.45	ppb(v	98
69) 1,1,2-Trichloroethane	13.157	97	327031	10.26	ppb(v	98
70) 1,3-Dichloropropane	13.548	76	475355	11.39	ppb(v	91
71) 2-Hexanone	13.885	58	322607	11.32	ppb(v	90
72) Ethyl Methacrylate	13.915	69	521820	13.14	ppb(v	98
73) Dibromochloromethane	14.062	129	695151	11.55	ppb(v	99
74) Tetrachloroethene	15.016	166	558818	10.30	ppb(v	98
75) 1,2-Dibromoethane	14.380	107	516397	10.65	ppb(v	100
76) Octane	14.851	43	641279	14.06	ppb(v	92
77) 1,1,1,2-Tetrachloroethane	15.940	131	480716	11.22	ppb(v	96
79) Chlorobenzene	15.959	112	799952	8.69	ppb(v	97
80) Ethylbenzene	16.503	91	1331224	9.39	ppb(v	97
81) m,p-Xylene	16.778	91	2131975	19.76	ppb(v	98
82) Styrene	17.292	104	763139	10.97	ppb(v	96
83) Nonane	17.831	43	717900	13.34	ppb(v	94
84) o-Xylene	17.445	91	1123648	9.73	ppb(v	98
85) Bromoform	16.852	173	709145	10.64	ppb(v	100
86) 1,1,2,2-Tetrachloroethane	17.451	83	795289	10.36	ppb(v	100
87) 1,2,3-Trichloropropane	17.647	75	594007	10.61	ppb(v	99
88) Isopropylbenzene	18.357	105	1607017	10.80	ppb(v	97
89) Bromobenzene	18.467	156	482501	9.42	ppb(v	93
90) 2-Chlorotoluene	19.079	126	380176	10.98	ppb(v	92
91) n-Propylbenzene	19.152	120	436137	11.38	ppb(v	89
93) 4-Ethyltoluene	19.378	105	1543507	11.92	ppb(v	99
94) 1,3,5-Trimethylbenzene	19.495	105	1390187	12.15	ppb(v	97
95) alpha-Methylstyrene	19.727	118	647671	12.65	ppb(v	99
96) tert-Butylbenzene	20.070	134	340125	12.03	ppb(v	89
97) 1,2,4-Trimethylbenzene	20.082	105	1413580	12.54	ppb(v	95
98) 1,3-Dichlorobenzene	20.272	146	823167	10.51	ppb(v	97
99) Benzyl Chloride	20.265	91	909339	12.60	ppb(v	98
100) 1,4-Dichlorobenzene	20.369	146	754553	10.26	ppb(v	97
101) sec-Butylbenzene	20.455	134	427036	12.02	ppb(v	95
102) p-Isopropyltoluene	20.681	134	466372	12.31	ppb(v	92
103) 1,2-Dichlorobenzene	20.834	146	818135	10.80	ppb(v	97
104) n-Butylbenzene	21.250	134	390805	12.76	ppb(v	87
105) Hexachloroethane	21.715	201	590023	11.87	ppb(v	92
106) 1,2,4-Trichlorobenzene	23.031	180	277628	9.34	ppb(v	99
107) Naphthalene	23.153	128	570420	8.10	ppb(v	100
108) Hexachlorobutadiene	23.600	225	526018	9.84	ppb(v	99
110) TVHC as equiv Pentane	5.589	TIC	1366753	13.80	ppb(v	100

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

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Data Path : C:\msdchem\1\data\  
Data File : 6WJ2871.D  
Acq On : 3 Jul 2019 6:21 am  
Operator : danat  
Sample : CC487-10  
Misc : MS35902,V6W525,,,,,1  
ALS Vial : 2 Sample Multiplier: 1
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Quant Time: Jul 03 13:53:51 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13178.D
 Acq On : 23 Jul 2019 10:45 am
 Operator : thomash
 Sample : cc487-10
 Misc : MS36116,V6W537,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 24 13:35:12 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	8.158	130	251061	10.00	ppb(v #	0.00
55) 1,4-Difluorobenzene	10.361	114	933035	10.00	ppb(v	0.00
78) Chlorobenzene-d5	15.897	82	502910	10.00	ppb(v	0.00
109) Bromochloromethane (A)	8.158	130	251061	10.00	ppb(v #	0.00

System Monitoring Compounds

92) 4-Bromofluorobenzene	18.142	95	682559	10.73	ppb(v	0.00
Spiked Amount	10.000	Range	65 - 128	Recovery	=	107.30%

Target Compounds					Qvalue	
3) Freon 152A	3.729	65	162206	10.86	ppb(v	87
4) Chlorodifluoromethane	3.766	67	80698	14.29	ppb(v	99
5) Propene	3.790	41	183910	11.84	ppb(v	98
6) Chlorotrifluoroethene	3.796	116	419344	10.73	ppb(v	97
7) Dichlorodifluoromethane	3.851	85	800019	12.77	ppb(v	99
8) 1-Chloro-1,1-difluoroethane	3.962	65	626428	14.37	ppb(v#	96
9) Chloromethane	3.980	50	204251	11.31	ppb(v	99
10) Dichlorotetrafluoroethane	4.059	85	717546	11.13	ppb(v	100
11) Vinyl Chloride	4.157	62	239226	10.92	ppb(v#	99
12) 1,3-Butadiene	4.267	54	169293	11.52	ppb(v	91
13) n-Butane	4.310	58	43754	11.82	ppb(v	85
14) Bromomethane	4.494	94	233248	9.91	ppb(v	99
15) Acrolein	5.020	56	87794	9.14	ppb(v#	92
16) Chloroethane	4.628	64	115540	10.79	ppb(v	96
17) Dichlorofluoromethane	4.702	67	581875	11.25	ppb(v	99
18) Acetonitrile	4.910	41	170587	8.42	ppb(v	98
19) Freon 123	5.051	83	535484	9.44	ppb(v	98
20) Freon 123A	5.099	117	340145	9.93	ppb(v	98
21) Bromoethene	4.922	106	230359	9.49	ppb(v#	95
22) Trichlorofluoromethane	5.283	101	717568	12.03	ppb(v	99
23) Acetone	5.136	58	104135	8.98	ppb(v	63
24) Pentane	5.595	57	54461	10.49	ppb(v	87
26) Iodomethane	5.797	142	639218	8.82	ppb(v#	81
27) Isopropyl Alcohol	5.344	45	415398	9.74	ppb(v	94
28) 1,1-Dichloroethene	5.864	61	377099	11.39	ppb(v	89
29) Freon 113	6.219	101	495527	9.62	ppb(v	97
30) Methylene Chloride	5.980	84	202041	8.85	ppb(v	89
31) Carbon Disulfide	6.262	76	638780	9.42	ppb(v	100
32) Ethanol	4.720	45	86000	9.55	ppb(v	99
33) Acrylonitrile	5.552	53	178008	9.96	ppb(v	99
34) 3-Chloropropene	6.091	76	113111	10.74	ppb(v#	74
35) trans-1,2-Dichloroethene	6.892	61	343524	10.82	ppb(v	91
36) tert-Butyl Alcohol	5.895	59	546838	11.57	ppb(v	95
37) Methyl tert-Butyl Ether	7.155	73	728360	11.55	ppb(v	98
38) Vinyl Acetate	7.253	43	704562	13.03	ppb(v	95
39) 1,1-Dichloroethane	7.094	63	430767	10.19	ppb(v	99
40) 2-Butanone	7.510	72	122988	10.34	ppb(v	77
41) Hexane	8.189	57	368408	10.72	ppb(v	88
42) cis-1,2-Dichloroethene	7.981	61	343396	10.99	ppb(v	90
43) Di-isopropyl Ether	8.189	87	219244	10.62	ppb(v	79
44) Ethyl Acetate	8.226	61	81655	11.40	ppb(v	64
45) Methyl Acrylate	8.213	55	498119	11.21	ppb(v	97
46) Chloroform	8.299	83	588898	11.00	ppb(v	98
47) 2,4-Dimethylpentane	9.168	57	432508	10.96	ppb(v	97
48) Tetrahydrofuran	8.746	72	111315	10.56	ppb(v	88
49) 1,1,1-Trichloroethane	9.394	97	641469	12.01	ppb(v	98
50) 1,2-Dichloroethane	9.119	62	405570	13.56	ppb(v	97
51) Benzene	9.926	78	755225	9.43	ppb(v	97
52) Carbon Tetrachloride	10.098	117	705774	12.30	ppb(v	99
53) Cyclohexane	10.232	56	371446	10.97	ppb(v	95
54) 2,3-Dimethylpentane	10.526	71	166780	10.18	ppb(v	89
56) 2,2,4-Trimethylpentane	11.211	57	1256176	10.63	ppb(v	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
 Data File : 6W13178.D
 Acq On : 23 Jul 2019 10:45 am
 Operator : thomash
 Sample : cc487-10
 Misc : MS36116,V6W537,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

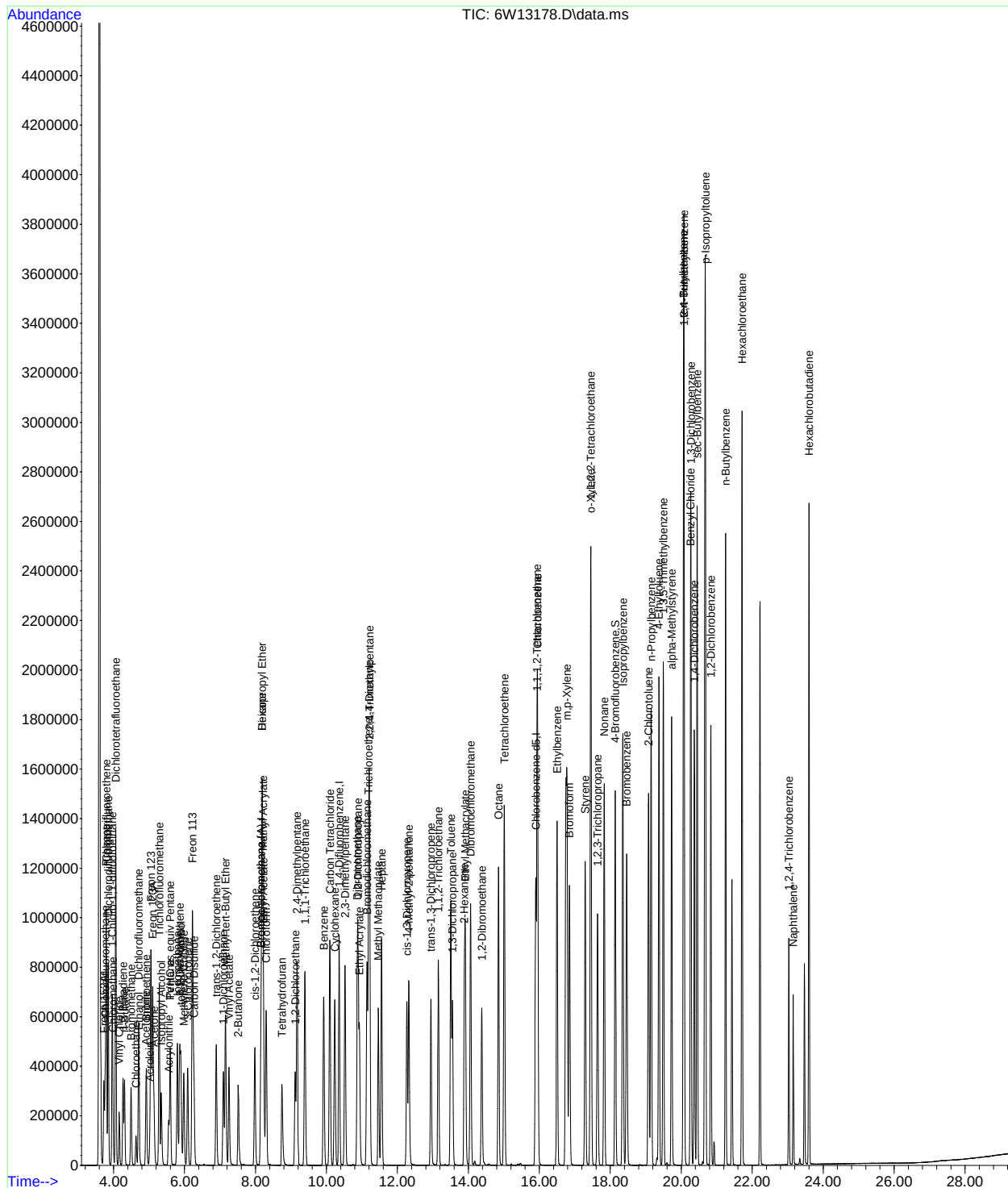
Quant Time: Jul 24 13:35:12 2019
 Quant Method : C:\msdchem\1\methods\m6w487.M
 Quant Title : T0-15 Full Scan Mode
 QLast Update : Fri May 17 14:09:49 2019
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) Heptane	11.554	71	276153	10.85	ppb(v	96
58) Trichloroethene	11.187	95	374111	10.25	ppb(v	93
59) 1,2-Dichloropropane	10.893	63	283150	9.61	ppb(v	91
60) Dibromomethane	10.868	174	386481	9.02	ppb(v	91
61) Ethyl Acrylate	10.930	55	633414	12.78	ppb(v	98
62) Methyl Methacrylate	11.462	69	309140	11.94	ppb(v	82
63) 1,4-Dioxane	11.205	88	189428	8.32	ppb(v#	77
64) Bromodichloromethane	11.144	83	665646	11.36	ppb(v	100
65) cis-1,3-Dichloropropene	12.269	75	482252	11.22	ppb(v	98
66) 4-Methyl-2-pentanone	12.318	58	252427	12.12	ppb(v	87
67) trans-1,3-Dichloropropene	12.942	75	483686	12.84	ppb(v	96
68) Toluene	13.505	91	983791	9.73	ppb(v	99
69) 1,1,2-Trichloroethane	13.156	97	336658	9.70	ppb(v	98
70) 1,3-Dichloropropane	13.548	76	490370	10.79	ppb(v#	89
71) 2-Hexanone	13.884	58	351617	11.32	ppb(v	86
72) Ethyl Methacrylate	13.915	69	550503	12.72	ppb(v	98
73) Dibromochloromethane	14.062	129	740408	11.29	ppb(v	99
74) Tetrachloroethene	15.016	166	577137	9.77	ppb(v	98
75) 1,2-Dibromoethane	14.380	107	565634	10.70	ppb(v	98
76) Octane	14.851	43	639089	12.86	ppb(v	91
77) 1,1,1,2-Tetrachloroethane	15.934	131	499361	10.69	ppb(v	100
79) Chlorobenzene	15.952	112	833965	8.17	ppb(v	94
80) Ethylbenzene	16.503	91	1368076	8.71	ppb(v	97
81) m,p-Xylene	16.772	91	2228318	18.63	ppb(v	96
82) Styrene	17.292	104	814358	10.56	ppb(v	95
83) Nonane	17.830	43	713790	11.97	ppb(v	94
84) o-Xylene	17.445	91	1154641	9.02	ppb(v	96
85) Bromoform	16.845	173	730779	9.89	ppb(v	98
86) 1,1,2,2-Tetrachloroethane	17.451	83	779736	9.17	ppb(v	99
87) 1,2,3-Trichloropropane	17.641	75	606437	9.77	ppb(v	99
88) Isopropylbenzene	18.357	105	1621021	9.82	ppb(v	97
89) Bromobenzene	18.461	156	521173	9.18	ppb(v	90
90) 2-Chlorotoluene	19.078	126	378868	9.87	ppb(v	87
91) n-Propylbenzene	19.152	120	443672	10.44	ppb(v	94
93) 4-Ethyltoluene	19.372	105	1572556	10.95	ppb(v	97
94) 1,3,5-Trimethylbenzene	19.494	105	1395954	11.00	ppb(v	97
95) alpha-Methylstyrene	19.727	118	657454	11.58	ppb(v	98
96) tert-Butylbenzene	20.063	134	333321	10.64	ppb(v	83
97) 1,2,4-Trimethylbenzene	20.082	105	1429200	11.44	ppb(v	98
98) 1,3-Dichlorobenzene	20.271	146	889558	10.24	ppb(v	96
99) Benzyl Chloride	20.259	91	965202	12.07	ppb(v	96
100) 1,4-Dichlorobenzene	20.369	146	838063	10.28	ppb(v	96
101) sec-Butylbenzene	20.449	134	423921	10.76	ppb(v	92
102) p-Isopropyltoluene	20.681	134	460711	10.97	ppb(v	90
103) 1,2-Dichlorobenzene	20.834	146	830750	9.89	ppb(v	96
104) n-Butylbenzene	21.250	134	394601	11.62	ppb(v	87
105) Hexachloroethane	21.715	201	582156	10.56	ppb(v	95
106) 1,2,4-Trichlorobenzene	23.030	180	282338	8.57	ppb(v	99
107) Naphthalene	23.153	128	543807	6.96	ppb(v	99
108) Hexachlorobutadiene	23.599	225	524718	8.85	ppb(v	99
110) TVHC as equiv Pentane	5.595	TIC	1008634	9.29	ppb(v	100

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

Data Path : C:\msdchem\1\data\
Data File : 6W13178.D
Acq On : 23 Jul 2019 10:45 am
Operator : thomash
Sample : cc487-10
Misc : MS36116,V6W537,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 24 13:35:12 2019
Quant Method : C:\msdchem\1\methods\m6w487.M
Quant Title : TO-15 Full Scan Mode
QLast Update : Fri May 17 14:09:49 2019
Response via : Initial Calibration



Batch ID: V6w487

Analyst Signature:

Columns: RTX-1 60m x 0.32mm x 1.0μ

Method: 627075

Seq. File: GW20130516.S

Initial Cal. Method: MBW/87, M

Method: T015 CTD3

Standard Data

<u>Standard Data</u>		
Lot #	Description	Conc.
A58452	Int / sum	1000 ppm
A58470	T015 LCS (A964)	40 ppm

Standard Data

Standard Data		
Lot #	Description	Conc.
A58461	T015 STD (A971)	4.0ppm
A58468	T015 STD (A964)	1.0ppm
A58469	T015 STD (A978)	2.4ppm
A5847	T015 LPS (A969)	1/2 ppm

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the crit of SGS SOP EQA044.

Supervisor Signature:

Date: 5/21/10

Supervisor Signature: <i>[Signature]</i>										Date: 5/2/14	
AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comment
1	6W12037	BFB		A978	40					OK	
1	6W12038	1C487-a04		A978	40					OK	
1	6W12039	1C487-a.1		A978	100					OK	
2	6W12040	1C487-a.2		A964	80					OK	
2	6W12041	1C487-a.5		A964	200					OK	
5	6W12042	1C487-5		A971	50					OK	
5	6W12043	1C487-10		A971	100					OK	
5	6W12044	1C487-20		A971	200					OK	
3	6W12045	1B		A963	100					OK	
5	6W12046	1C487-40		A971	400					OK	
3	6W12047	1B		A963	100					OK	
3	6W12048	1B		A963	100					OK	
4	6W12049	1C487-10		A969	100					OK	
3	6W12050	1B		A963	100					OK	
4	6W12051	1C487-10		A969	100					OK	
4	6W12052	1C487-10		A969	100					OK	
799 5/17/14											

All strikeouts must be initial and dated. Comment is require for anything other than a transposition.

All strikeouts must be initial and dated. Comment is require for anything other than a transcription error.

DAYT-AIR-0006-06-FORM-TO15 Instrument Log

47

1/9/18

Instrument Run Log V6W487 page 1 of 1

SGS

254 of 256

JC91420

Date: 07/03/2019

Analyst Signature: RTY

Columns: RTX-1, 60m x 0.34mm

Method: 6107015

Seq. File: 61020190703

Initial Cal. Method: M6W487

AS Data

Method: TOK-CTP3

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
AS8459	Int/Supri	100ppbV
AS8515	T015 Std (A970)	40ppbV
AS8576	T015 Std (A974)	20ppbV

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature

Date: 7/8/18

Supervisor Signature: <i>[Signature]</i>										Date: 1/8/18	
AS #	Data File	Sample ID	TEST	Canister Serial #	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surf	Status Data	Comment
1	6W12870	BFB		OPEN	400					OK	
2	6W12871	CC487-10		A970	100			✓	✓	OK	Final 1734
2	6W12872	BS		A974	100			✓	✓	OK	Vinyl acetate ↑
2	6W12873	BSD		A974	100			✓	✓	OK	
3	6W12874	IB		M165	101						
3	6W12875	M3		A463	410			✓	✓	OK	
4	6W12876	TC90949-1	4015 9049-1	M1494	400	1		✓	✓	OK/DL	200X, acetone ↑
✓	6W12877	TC90949-1	MS35957	M1494	400	1		✓	✓	OK	
✓	6W12878	TC90949-1		A120	20	1		✓	✓	OK/DL	
0	6W12879	SEC CP10404		A990	400	1		✓	✓	OK/DL	
6	6W12880	TC91096-1	4015 1096-1	M131	100	1		✓	✓	OK	
7	6W12881	TC91096-2	MS35957	A504	100	1		✓	✓	OK	
8	6W12882	TC91096-3		M420	100	1		✓	✓	OK	
9	6W12883	TC90949-2		M204	400	1		✓	✓	OK/DL	
9	6W12884	TC90949-2		M204	20	1		✓	✓	OK/DL	acetone ↑ RR 200X
10	6W12885	TC90949-3		A322	400	1		✓	✓	OK/DL	
11	6W12886	TC90949-4		A322	20	1		✓	✓	OK/DL	acetone ↑ RR 200X
11	6W12887	TC90949-4		M652	400	1		✓	✓	OK/DL	
11	6W12888	TC90949-4		M652	20	1		✓	✓	OK/DL	acetone ↑ RR 100X
12	6W12889	TC90949-5		R1150	100	1.2		✓	✓	OK/DL	
12	6W12890	TC90949-5		R1150	20	1.8		✓	✓	OK/DL	acetone ↑ RR 100X
13	6W12891	TC90949-6		A1247	100	1		✓	✓	OK/DL	
13	6W12892	TC90949-6		A1247	20	1		✓	✓	OK/DL	
14	6W12893	TC90815-1	4015 90815-1	M149	400	1		✓	✓	OK/DL	acetone ↑ RR 200X
15	6W12894	TC90815-2	MS35957	M150	400	1		✓	✓	OK	
										TH	7/8/18

All strikeouts must be initial and dated. Comments must be dated.

All strikeouts must be initial and dated. Comment is require for anything other than a transcription error.

DAYT-AIR-0006-06-FORM-TO15 Instrument Log

123

1/9/18

345

TO-15

Batch ID: V6W 538

Date: 7/23/17

Analyst Signature: *[Signature]*

Columns: RTX-1 60m x 0.32mm i.d.

Method: 6WTD15

Seq. File: 6W20190723.S

Initial Cal. Method: 16W487.M

AS Data

Method: T015 CTD3

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
A58452	Int/burr	100ppbv
A58517	T015 STD (A977)	40ppbv

(M) Manually integrated chromatographic peaks in the following reportable file have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature: *[Signature]*

Date: 7/24/17

AS #	Data File	Sample ID	TEST	Canister Serial#	Vol Sample	Dil Fact	TICS	Int. STD Areas	Surr	Status Data	Comment
1	6W13176	BFB		OT Position	400					OK	
2	6W13177	CC487-10		A977	100					RR	CTE T
2	6W13178	CC487-10		A977	100					OK	Vinyl acetate T 12 DCA T NAP4
2	6W13179	BS		A977	100					OK	
2	6W13180	BSD		A977	100					OK	
3	6W13181	IB		A963	100					OK	
3	6W13182	MB		A963	400					OK	
4	6W13183	JC91420-1	N4LL MS 36156	M314	400	1				OK	
5	6W13184	JC91420-2	✓	A765	400	1				OK	
6	6W13185	JC91420-3	✓	A474	400	1				OK	
7	6W13186	JC91420-4	✓	A996	400	1				OK	
8	6W13187	JC91420-5	✓	M152	400	1				OK	
9	6W13188	JC91420-6	✓	A1037	400	1				OK	
10	6W13189	JC91516-1	STD MS 36116	A643	100	1				OK	
10	6W13190	JC91516-1008	✓	A643	100	1				OK	
11	6W13191	JC91516-2	✓	A071	100	1				OK	
11	6W13192	JC91516-2	✓	A071	20	1				OK	RR TCE T
12	6W13193	JC91908-1	STD MS 36298	A074	400	1				OK	
13	6W13194	JC91409-1	SC MS 36083	A1205	160	1.60				OK	over cal RR 1000
14	6W13195	SCC CP10434		M137	400					OK	
15	6W13196	SCC CP10434		A876	400					OK	
16	6W13197	SCC CP10434		A800	400					OK	
1	6W13198	SCC CP10434		A1110	400					OK	
2	6W13199	SCC CP10431		A754	400					OK	
3	6W13200	SCC CP10440		A640	400					OK	
4	6W13201	SCC CP10431		A902	400					OK	
										TH	7/24/17

All strikeouts must be initial and dated. Comment is required for anything other than a transcription error.