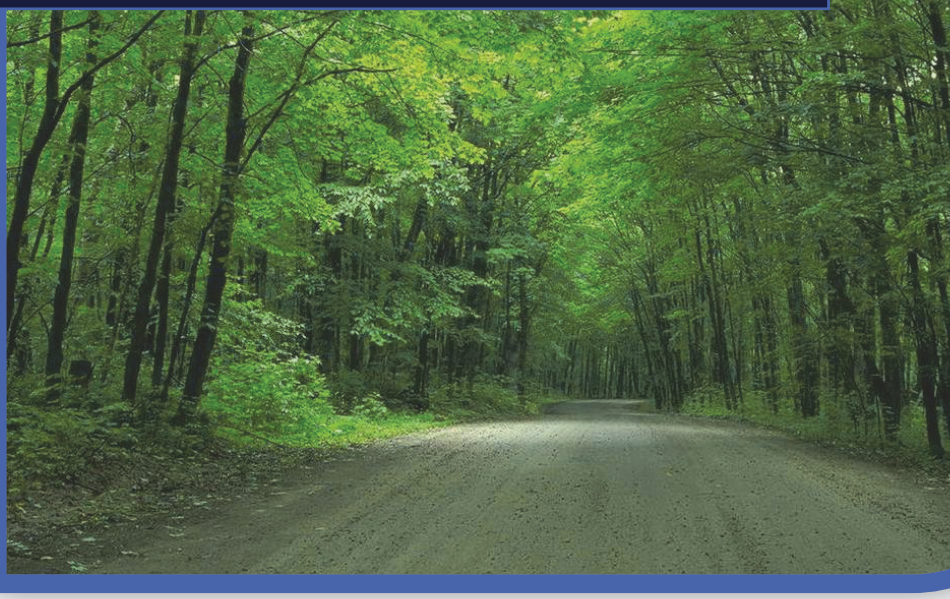
VERINA Engineering, P.C.

2016 REMEDIAL ACTION PROGRESS REPORT

FORMER BINGHAMTON PLASTICS FACILITY
BINGHAMTON, NEW YORK
NYSDEC SITE NO. 7-04-024



Verina Engineering, P.C.
1011 U.S. Highway 22, Suite 302
Bridgewater, New Jersey 08807

January 2017

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INTRODUCTION

This Remedial Action Progress Report (RAPR) was prepared by Verina Engineering, P.C. (VERINA), on behalf of Dover Corporation (Dover), for the remedial activities implemented in 2016 at the former Binghamton Plastics site in Binghamton, Broome County, New York, New York State Department of Conservation (NYSDEC) Site No. 7-04-024.

The activities implemented in 2016 include:

- Quarterly in-situ chemical oxidation (ISCO) injections;
- Semi-annual groundwater monitoring; and
- Monthly monitoring of the Active Sub-Slab Depressurization (ASD) System.

The project was implemented in accordance with the executed Order on Consent between Dover and the New York State of Environmental Conservation (NYSDEC), dated January 19, 2001, and subsequent approvals from the NYSDEC.

SITE HISTORY AND BACKGROUND

The former Binghamton Plastics site is located at 498 Conklin Avenue in Binghamton, Broome County, New York. The site occupies approximately two acres and consists of a one-story industrial building (approximately 44,800 square feet [ft^2]) with associated parking, landscaping, and storage areas. The site is located in a combined industrial and residential setting. Figure 1 shows the site location. A site map is presented on Figure 2.

Binghamton Plastics operated the facility until the early 1980s when Universal Instruments Corporation (UIC), a former subsidiary of Dover, purchased the property and converted the facility into a circuit board manufacturing plant. UIC operated the facility until it was taken over by Dover Electronics Corporation in the late 1980s. Manufacturing activities ceased in the early 1990s. In 1993 Dover Electronics was separated from Dover and re-named Dovatron, Inc. In 1996, Dovatron changed its name to DII Group.

In the early 1990s, the property was transferred to Flextronics International, Inc. but UIC retained responsibilities for the remediation of pre-existing environmental conditions. From the early 1990s until August 2001, the facility was leased to and used by McIntosh Laboratories for electronics repair operations. The site was then sold to TeamWorld, Inc., and the building is now used for silk screening, embroidery, packaging of clothing, and storage.

REMEDIAL ACTIVITIES

Remedial actions were implemented following the approval of the Remedial Design (RD) Package (BBL 2002) by the NYSDEC on June 29, 2002. The remedial action consisted of excavating the main source areas of constituents of concern (COCs) within the perched groundwater zone. Excavation and groundwater extraction activities were conducted to remove residual contamination in the form of

phase-separated hydrocarbons (PSH), adsorbed volatile organic compounds (VOCs), and impacted groundwater. Groundwater that drained from the excavated perched-zone soil during the remedial action or that accumulated in the open excavations was removed for offsite treatment and disposal.

Since 2004, the groundwater monitoring program has been implemented to assess the effectiveness of the remedial action in remediating COC concentrations within the perched groundwater at the site. The groundwater monitoring program consists of a baseline groundwater monitoring event that was conducted on April 1, 2002 prior to remedial activities and subsequent post-remedial quarterly groundwater monitoring events. The groundwater monitoring frequency was reduced from a quarterly to a semi-annual basis in 2011 based on the NYSDEC approval on December 23, 2010.

Pursuant to approval from NYSDEC in its letter dated November 14, 2008, the ISCO injection program was initiated in June 2009 to further reduce the residual COCs in groundwater. The injection of sodium permanganate solution has been conducted in the upgradient monitoring wells (MW-9, MW-10, and MW-17) as well as in the source area (MW-8, MW-11, and MW-16). The injection frequency was reduced from quarterly to semi-annual basis in 2011, yet returned to a quarterly injection schedule in 2012. Additionally, one direct-push injection event within the plume area was conducted at the site in May 2013. Since June 2009, a total of 27 rounds of sodium permanganate manual injections have been conducted at the site. The final quarterly injection event of 2016, which was scheduled to be completed in December, was unable to be completed as a result of unfavorable weather conditions and extremely low temperatures. Consequently, VERINA plans to complete this injection event in January 2017.

In accordance with the 2012 Remedial Design Work Plan - Active Sub-slab Depressurization (ASD) System (VERINA 2012), an ASD system was installed at the site in July 2012 to mitigate the indoor air quality at the site. Monthly inspections of the ASD system were implemented since its full-time operation in July 2012.

GROUNDWATER MONITORING AND ISCO INJECTION PROGRAM

GROUNDWATER MONITORING AND SAMPLING

Two rounds of semi-annual groundwater monitoring events were conducted in 2016 to monitor site groundwater conditions and to assess the effectiveness of the ISCO to remediate COCs at the site. The first semi-annual groundwater sampling event was conducted on March 17, 2016 and the second semi-annual/annual groundwater sampling event was conducted on September 15, 2016.

Prior to each sampling event, the depth to groundwater was measured from all 14 monitoring wells (DMW-3, DMW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-16, MW-17, and TMP-A) on site and recorded on VERINA's groundwater gauging logs in order to establish groundwater elevations and groundwater flow direction at the site. Water level measurements were taken with a Solinst® laser-marked water level meter equipped with a stainless steel probe and measuring tape graduated in units of 0.01 foot. Groundwater elevation measurements for March 2016 and September 2016 are summarized in Tables 1 and 2, respectively. A map showing the groundwater elevation isocontours and groundwater flow direction is included as Figure 3 for the March 2016 event and as Figure 4 for the September 2016 event.

After well gauging was completed, select monitoring wells including MW-8, MW-9, MW-10, MW-16, and MW-17 were sampled in March 2016. In addition to these wells, monitoring wells DMW-3, TMP-A, MW-11, MW-13, and MW-14 were also included during the September 2016 sampling event in accordance with VERINA'S 2015 Remedial Action Progress Report. Groundwater quality parameters, including pH, dissolved oxygen (DO), conductivity, temperature, turbidity, and oxidation-reduction potential (ORP), were measured via a YSI® 600XL or 556 water quality instrument coupled with a flow-through cell. In addition to measuring field parameters, the water from each well was visually inspected for the presence of a purple/pink color, which would indicate the presence of un-reacted permanganate. A change in color of the water in the wells from dark purple to light pink (i.e., > visual concentration of 0.5 milligrams per liter [mg/L]) or clear (i.e., < visual concentration of 0.5 mg/L) indicates that the permanganate would have been consumed, diluted, or transported with groundwater. The field procedures implemented during each groundwater monitoring event follow the previously approved Field Sampling and Analysis Plan (FSAP) and its two parts: the Field Sampling Plan and Quality Assurance Project Plan (QAPP) that were included in the Remedial Investigation/Feasibility Study Work Plan (Shield Environmental 1998) and the RD Package (BBL 2002) for the site.

Groundwater samples from monitoring wells that exhibited residual permanganate were collected in laboratory-provided unpreserved vials pre-charged in the field with approximately 1 to 3 milliliters (ml) of a 20 percent, by weight, sodium thiosulfate solution. The sodium thiosulfate solution was added to neutralize the residual permanganate in the water as it may influence the performance of the laboratory's analytical instruments. During the March 2016 sampling event, monitoring wells MW-8, MW-9, MW-16, and MW-17 exhibited residual permanganate; monitoring wells MW-8, MW-9, MW-11, MW-16, and MW-17 exhibited residual permanganate during the September 2016 sampling event. The purge water from each of these wells had a visible purple/pink color and therefore had its residual

sodium permanganate concentration analyzed for in the field immediately subsequent to site-specific parameter list (SSPL) VOC sampling using a Hach® DR890 or DR2800 colorimeter. A summary of the residual sodium permanganate groundwater concentrations is presented in Table 3.

As part of the QA/QC procedures, one duplicate sample, one matrix spike sample, one matrix spike duplicate sample, and one field blank sample per sampling date were also collected during each sampling event. Additionally, a trip blank sample was collected during the March 2016 sampling event but was not collected for the September 2016 sampling event. All samples were collected in laboratory-supplied glassware, packaged on ice, and shipped to ALS Environmental (formerly Columbia Analytical Services, Inc.), of Rochester, New York (New York Laboratory Certification 10145) for analysis. All samples were analyzed for SSPL VOCs using United States Environmental Protection Agency (USEPA) Method 8260C. The SSPL VOCs analyzed for were: tetrachloroethylene (PCE); trichloroethylene (TCE); 1,1,1-trichloroethane (TCA); 1,1-dichloroethane (1,1-DCA); 1,1-dichloroethene (1,1-DCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); and vinyl chloride (VC).

ISCO INJECTION PROGRAM

As approved by the NYSDEC, sodium permanganate is injected manually at six monitoring wells including MW-8, MW-9, MW-10, MW-11, MW-16, and MW-17 on a quarterly basis to further reduce the dissolved COC mass present in the groundwater. The ISCO injection program was initiated in June 2009. For 2016, manual injections occurred in the months of March, June, and September. The last quarterly injection event for 2016 was scheduled for December but unfavorable weather conditions and extremely low temperatures did not allow the injection to be completed. Therefore, VERINA plans to complete this injection event in January 2017.

The manual injections were performed at the above mentioned wells, via gravity feed, to deliver a 10 percent by weight sodium permanganate solution during each of the 2016 injection events. A total of 60 gallons were injected during each injection event. The ISCO injection events occurring in March and September were conducted following that month's respective groundwater monitoring activities. A manual injection summary is presented in Table 4.

GROUNDWATER ELEVATION AND FLOW DIRECTION

The groundwater elevation data from March and September 2016 are summarized in Tables 1 and 2, respectively. The groundwater elevation contour map for the March and September 2016 events are provided as Figure 3 and Figure 4, respectively.

The groundwater elevation contour maps indicate that the hydraulic gradient is low across the site and the groundwater flow within the perched groundwater zone is to the northwest, consistent with historical groundwater flow data. Although the groundwater flow is to the northwest, the low hydraulic gradient as well as the fact that the groundwater plume has not migrated from the site supports the perched groundwater site model.

GROUNDWATER MONITORING ANALYTICAL RESULTS

The groundwater analytical data for the March and September 2016 monitoring events are summarized in Tables 5 and 6, respectively. The historical distribution of SSPL VOCs, including pre-full scale ISCO injection initiation sampling results, is summarized in Table 7. An isoconcentration map comparing the total molar concentration of PCE and its daughter products as of June 2009, prior to the start of injection at the site, through September 2016 is presented as Figure 5. A graphical depiction of the decreasing trend of TCE concentrations, the contaminant of concern with the highest observed historic concentrations, is presented as Figure 6. The groundwater sampling field logs for both the March and September 2016 sampling events are provided in Appendix A. The complete laboratory data reports for the groundwater sampling events are presented in Appendix B. The electronic data deliverables (EDDs) for each groundwater sampling event are included under separate submission.

Based on the information collected during injection and from two rounds of semi-annual groundwater monitoring, VERINA made the following conclusions:

- In comparing the September 2016 to the June 2009 total molar concentration of PCE and its daughter products, the plume size of the highest molar concentration observed within the source zone near MW-8 and MW-16 has decreased significantly. This indicates an overall COC mass reduction (as represented by both PCE and daughter products) within the perched groundwater beneath the site. Approximately 97% mass reduction of COCs in groundwater was estimated since the ISCO injection was implemented in 2009.

- Contaminant concentrations within the source zone continue to decline since the initiation of ISCO injections.

- The plume of PCE and its daughter products continue to be contained within the perched groundwater on site.

- Several VOCs were detected above the NYSDEC groundwater quality standards in wells MW-8, MW-9, MW-10, MW-16 and/or MW-17 during the March 2016 sampling event. These VOCs consist of 1,1-dichloroethane, cis-1,2-dichloroethene, 1,1,1-trichloroethane, PCE and TCE.

- During the September 2016 sampling event, the VOCs 1,1-dichloroethane, cis-1,2-dichloroethene, 1,1,1-trichloroethane, TCE and vinyl chloride were detected above the NYSDEC groundwater quality standards in wells MW-8, MW-10, MW-11, MW-16 and/or MW-17. PCE was not detected above its NYSDEC groundwater quality standard in any of the wells sampled in September 2016.

ACTIVE SUB-SLAB DEPRESSURIZATION (ASD) OM&M

In accordance with the approved 2012 Remedial Design Work Plan – Active Sub-Slab Depressurization System (VERINA 2012), an ASD system was installed at the site. This system, shown on Figure 7, was installed in July 2012 serve as a mitigation measure for elevated COC concentrations (specifically PCE and TCE) detected in the indoor air at the facility. Since installation and start-up, the ASD system has been operated continuously without disruption. Two rounds of indoor air sampling were conducted on December 19, 2012 and December 10, 2013.

The ASD system has been effective at reducing the indoor air concentrations of COCs when comparing the December 2012 and December 2013 indoor air sampling results to the indoor air sampling results collected in March 2009 prior to the installation of the ASD system. Since no site specific COC concentrations in the indoor air samples exceeded the NYSDOH's Indoor Air Guidance Values during the 2013 indoor air sampling event, VERINA proposed that no additional indoor air sampling events being conducted unless changes or modifications to the ASD system and/or to the building are identified during the monthly ASD system inspections in the January 2014 Periodic Review Report (PRP). NYSDEC approved the PRP on August 1, 2014.

Since no changes or modifications were made to the ASD system in 2016, no indoor air samples were collected from the onsite building in 2016. Monthly inspections of the ASD system were implemented including observing and documenting the conditions of ASD system components and any structural changes or modifications to the buildings, as well as recording the pressure gauge measurements at each of the four vapor extraction points. Monthly ASD inspection logs are included as Appendix C.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings and conclusions of the groundwater monitoring program, field observation of the ISCO injection events, and ASD System OM&M results, VERINA has drawn the following conclusions:

- Based on the analytical results of the historic and current groundwater sampling events, COCs have not been detected in monitoring wells DMW-3, TMP-A, MW-11, MW-13, and MW-14 during several of the recent sampling events. This data supports the conclusion that the COC plume is contained at the site.

- A comparison of the 2016 groundwater sampling results to that of the historical sampling results indicates that the total VOC mass in the groundwater at the site has decreased significantly. A total of approximately 97% reduction of COCs in groundwater was estimated since the remedial action was implemented in June 2009.

- The ASD system has operated continuously since its installation in July 2012. The ASD system has effectively mitigated the indoor air COCs at the site.

Based on these conclusions, we recommend the following:

- VERINA will continue the same semi-annual sampling program in 2017. The wells will be included in the semi-annual sampling program in March and September 2017 will include MW-8, MW-9, MW-10, MW-16, and MW-17. In addition to these wells, monitoring wells DMW-3, TMP-A, MW-11, and MW-13 will be included in the annual sampling program in September 2017, as shown on Table 8.

- Since the 2016 analytical data indicated a slight increase in COCs in several wells as compared to 2015 data, VERINA will continue to quarterly inject 10% by weight sodium permanganate solution into wells MW-8, MW-9, MW-10, MW-11, MW-16 and MW-17 to further oxidize the COCs in groundwater on a quarterly basis. It is estimated a total of 60 gallons of 10% by weight sodium permanganate oxidant solution will be manually injected into selected monitoring wells on site during each of the injection events.

- VERINA will continue monthly inspections of the ASD system. No additional indoor air sampling will be conducted unless changes or modifications to the ASD system and/or to the building are identified during the monthly ASD system inspections.

REFERENCES

Blasland, Bouck, & Lee, Inc. (BBL). June 2002. *Remedial Design Package: Universal Instruments Corporation, Binghamton, New York.*

Shield Environmental. 1998. *Remedial Investigation/Feasibility Study Work Plan.*

Verina Engineering, P.C. (VERINA). May 2012. *Remedial Design Work Plan – Active Sub-slab Depressurization System.*

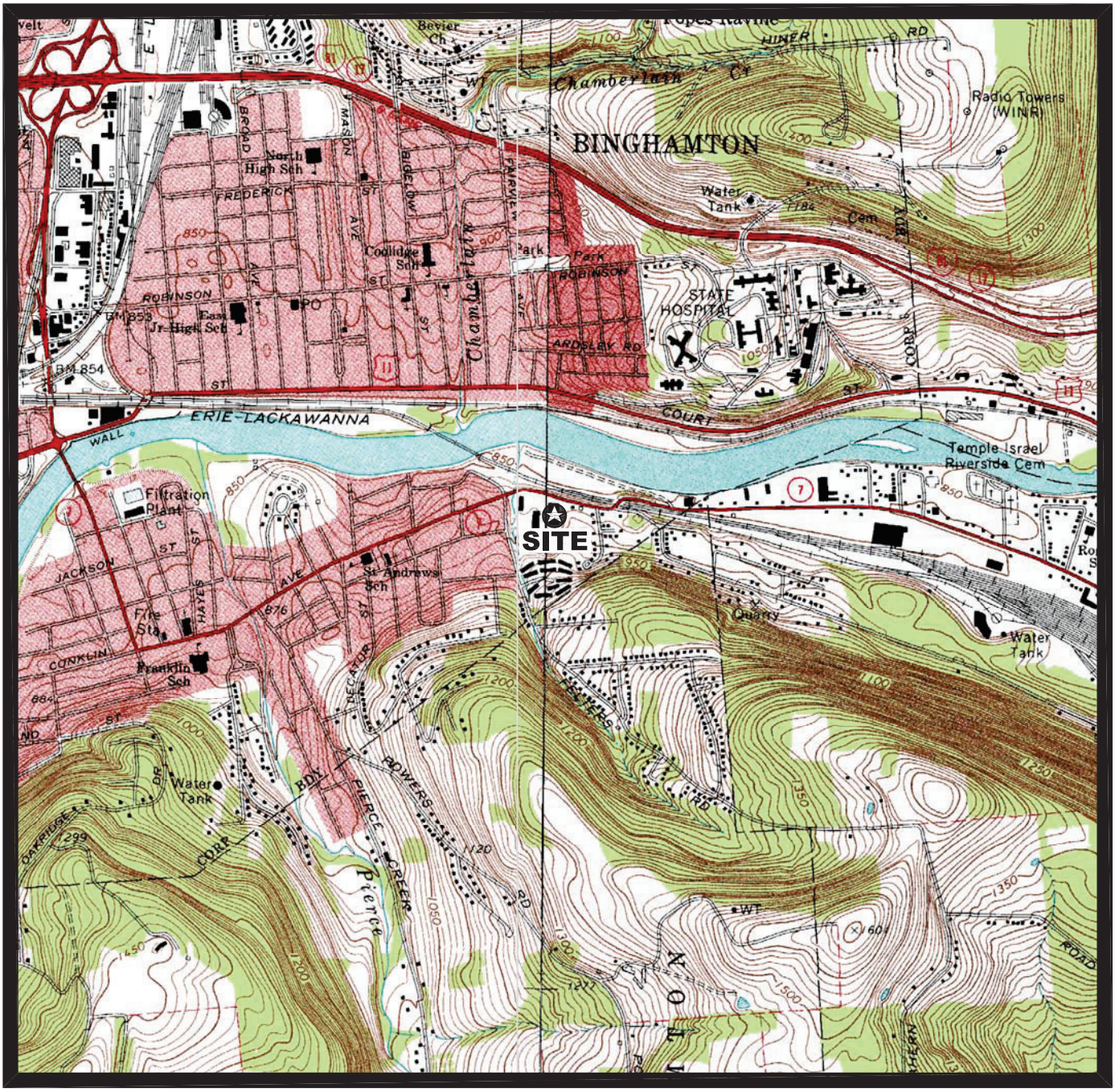
Verina Engineering, P.C. (VERINA). December 2012. *2012 Remedial Action Progress Report.*

Verina Engineering, P.C. (VERINA). January 2014. *2013 Remedial Action Progress Report.*

Verina Engineering, P.C. (VERINA). January 2015. *2014 Remedial Action Progress Report.*

Verina Engineering, P.C. (VERINA). January 2016. *2015 Remedial Action Progress Report.*

Figures



WEST BINGHAMTON AND
EAST BINGHAMTON QUADRANGLES
7.5–MINUTE SERIES

FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

REGIONAL LOCATION MAP

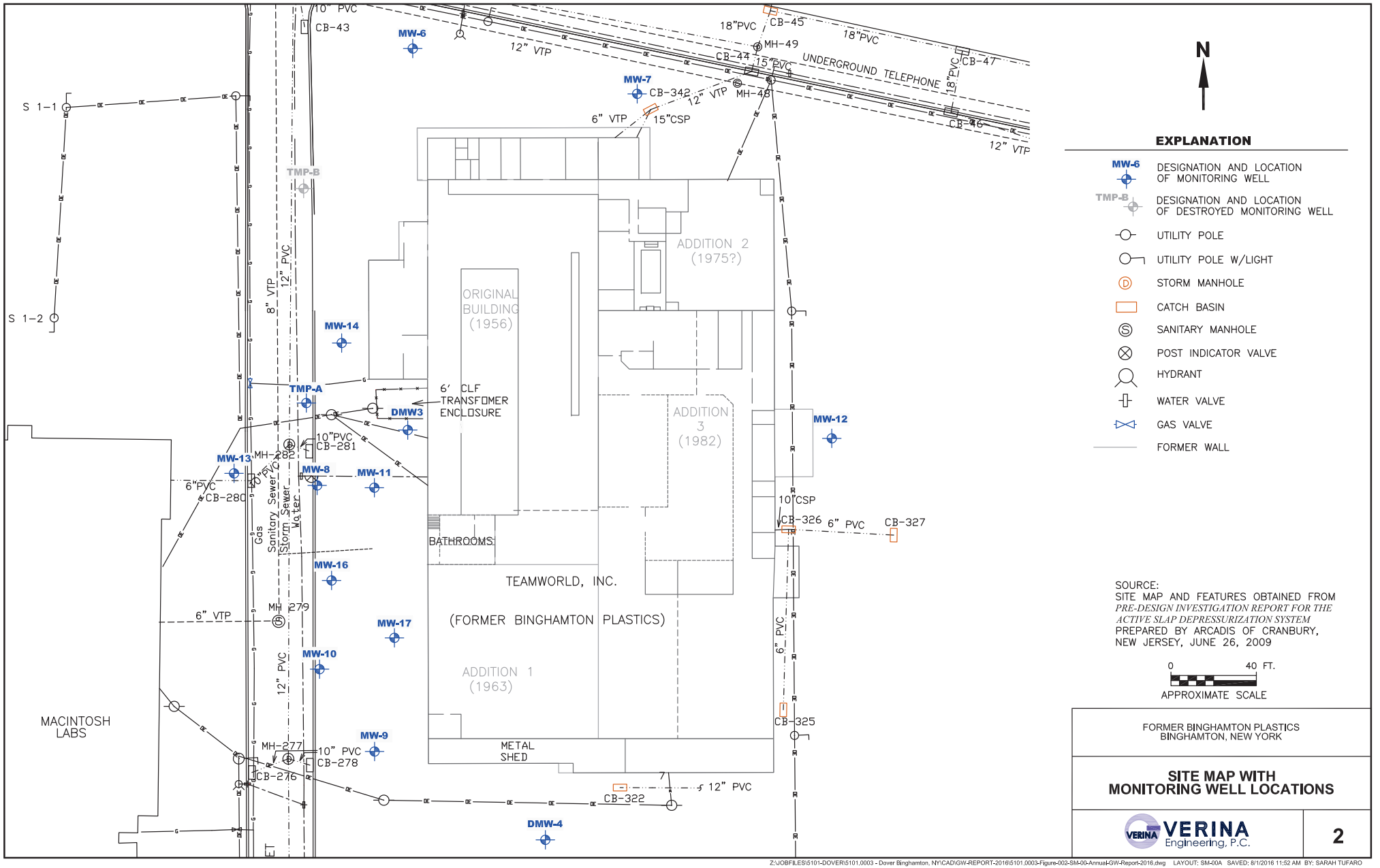
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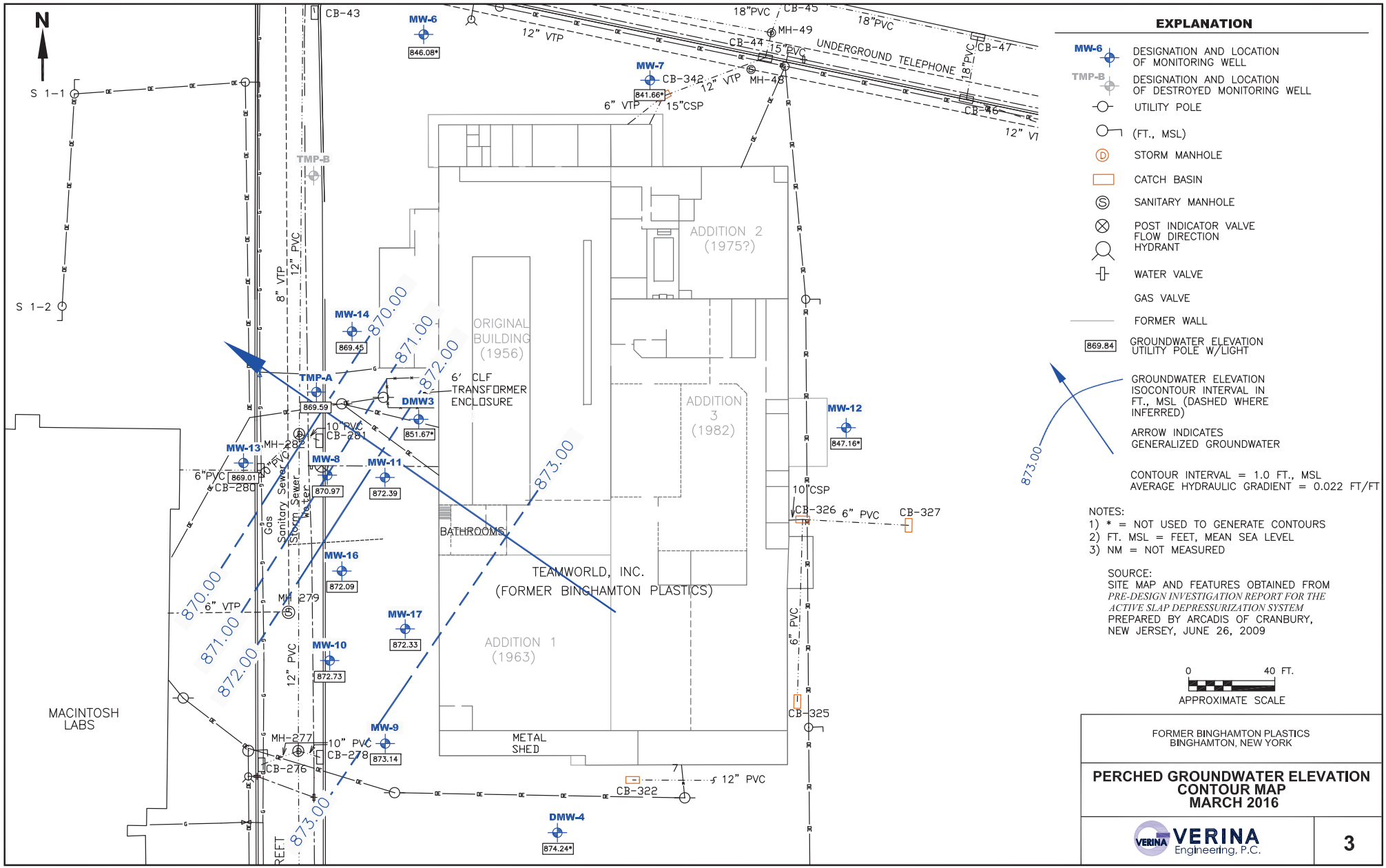
VERINA Engineering, P.C.

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EXPLANATION

- MW-6 — DESIGNATION AND LOCATION OF MONITORING WELL
- TMP-B — DESIGNATION AND LOCATION OF DESTROYED MONITORING WELL
- UTILITY POLE
- (FT., MSL)
- STORM MANHOLE
- CATCH BASIN
- SANITARY MANHOLE
- POST INDICATOR VALVE
- FLOW DIRECTION
- HYDRANT
- WATER VALVE
- GAS VALVE
- FORMER WALL
- 869.84 — GROUNDWATER ELEVATION UTILITY POLE W/LIGHT
- GROUNDWATER ELEVATION ISOCONTOUR INTERVAL IN FT., MSL (DASHED WHERE INFERRED)
- ARROW INDICATES GENERALIZED GROUNDWATER
- 873.00 — CONTOUR INTERVAL = 1.0 FT., MSL
- AVERAGE HYDRAULIC GRADIENT = 0.022 FT/FT

NOTES:
1) * = NOT USED TO GENERATE CONTOURS
2) FT. MSL = FEET, MEAN SEA LEVEL
3) NM = NOT MEASURED

SOURCE:
SITE MAP AND FEATURES OBTAINED FROM *PRE-DESIGN INVESTIGATION REPORT FOR THE ACTIVE SLAP DEPRESSURIZATION SYSTEM* PREPARED BY ARCADIS OF CRANBURY, NEW JERSEY, JUNE 26, 2009

0 40 FT.
APPROXIMATE SCALE

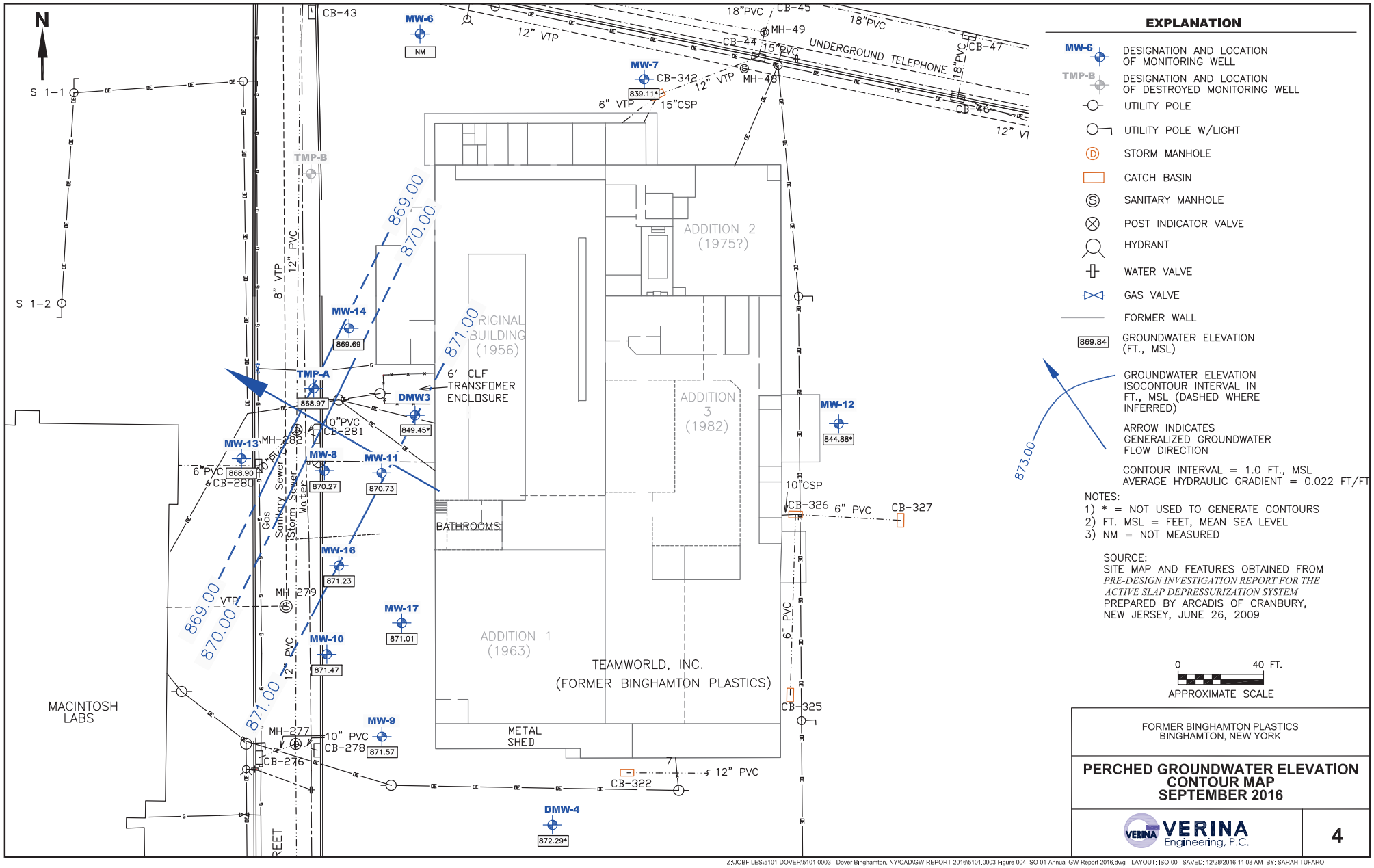
FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

PERCHED GROUNDWATER ELEVATION CONTOUR MAP MARCH 2016

VERINA Engineering, P.C.

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EXPLANATION

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- ARROW INDICATES GENERALIZED GROUNDWATER FLOW DIRECTION
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0 40 FT.
APPROXIMATE SCALE

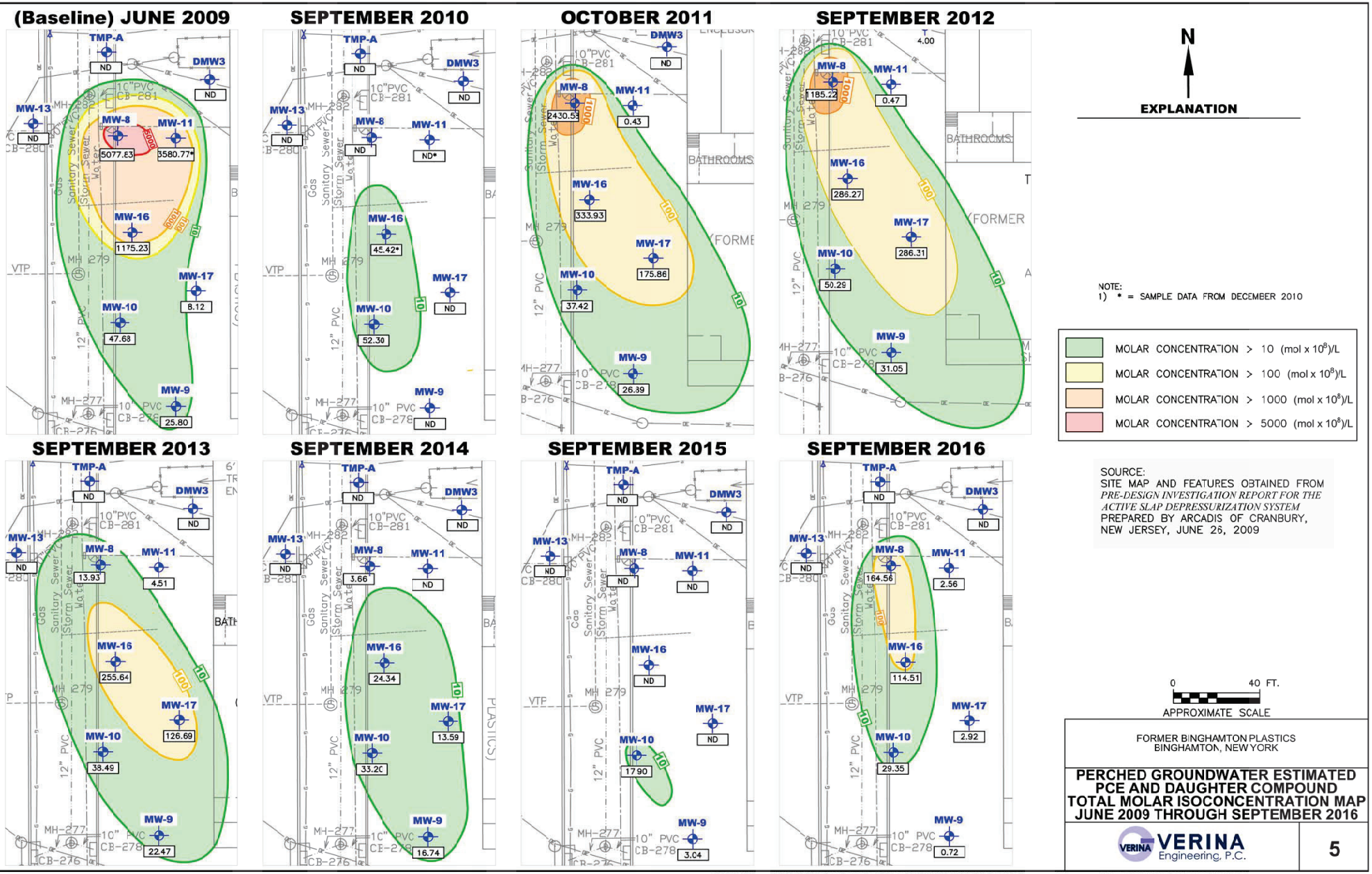
FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

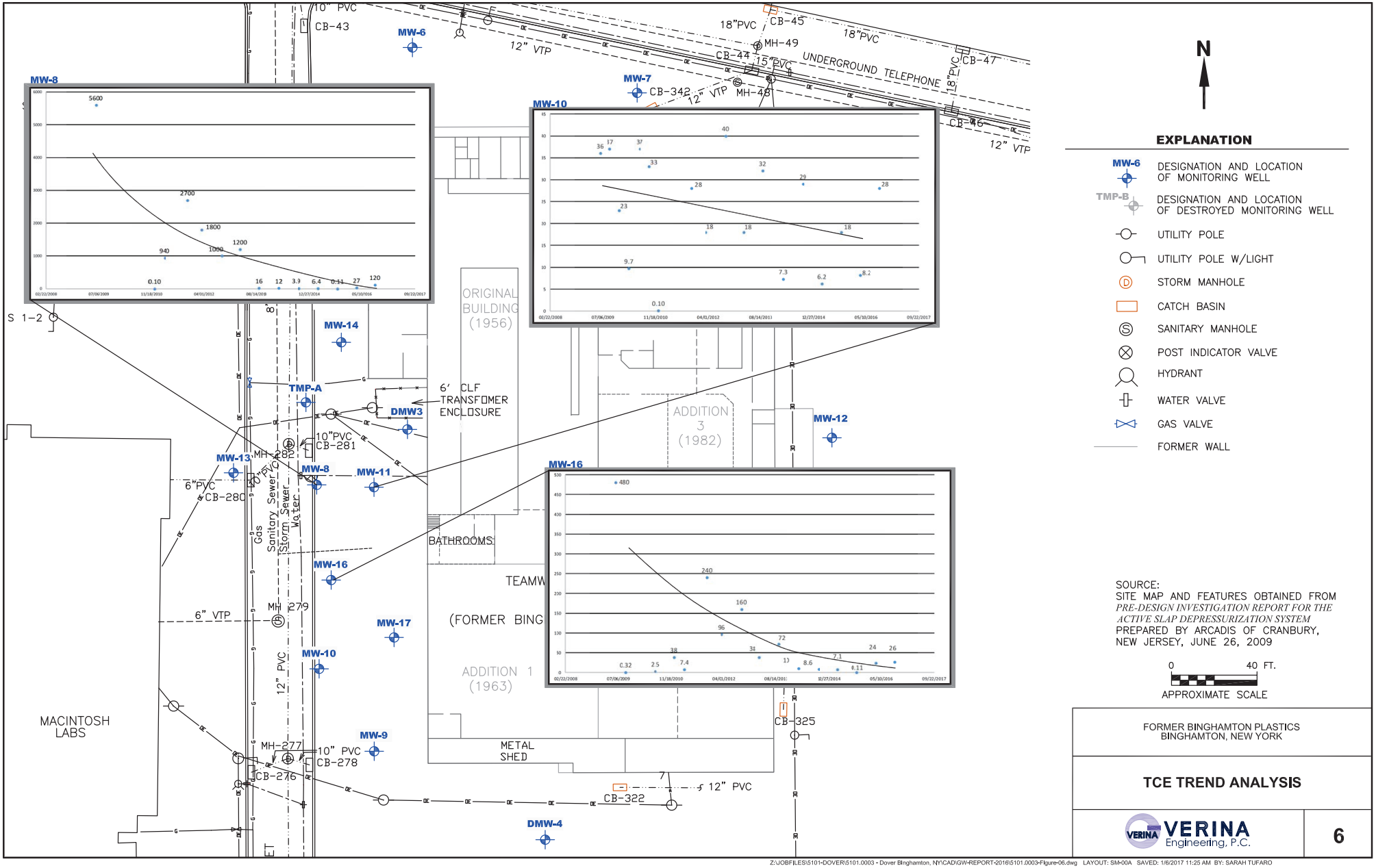
PERCHED GROUNDWATER ELEVATION CONTOUR MAP SEPTEMBER 2016

VERINA Engineering, P.C.

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(Baseline) JUNE 2009
SEPTEMBER 2010
OCTOBER 2011
SEPTEMBER 2012
SEPTEMBER 2013
SEPTEMBER 2014
SEPTEMBER 2015
SEPTEMBER 2016
TMP-A
DMW3
MW-13
MW-8
MW-11
MW-16
MW-17
MW-10
MW-9
ND
5077.63
3580.77*
1175.23
8.12
47.68
25.80
45.42*
52.30
ND*
2430.53
0.43
333.93
175.86
37.42
26.39
1185.22
0.47
286.27
286.31
50.29
31.05
13.93
4.51
255.64
126.69
38.49
22.47
3.66
24.34
13.59
33.20
16.74
1790
3.04
164.56
2.56
114.51
2.92
29.35
0.72
BATHROOMS
FORMER
VTP
MH-279
MH-277
MH-280
CB-276
CB-278
CB-281
10"PVC
12" PVC
Gas
Sanitary Sewer
Storm Sewer
Water
5000
1000
100
10
N
EXPLANATION
NOTE:
1) * = SAMPLE DATA FROM DECEMBER 2010
MOLAR CONCENTRATION > 10 (mol x 10^8)/L
MOLAR CONCENTRATION > 100 (mol x 10^8)/L
MOLAR CONCENTRATION > 1000 (mol x 10^8)/L
MOLAR CONCENTRATION > 5000 (mol x 10^8)/L
SOURCE:
SITE MAP AND FEATURES OBTAINED FROM
PRE-DESIGN INVESTIGATION REPORT FOR THE
ACTIVE SLAP DEPRESSURIZATION SYSTEM
PREPARED BY ARCADIS OF CRANBURY,
NEW JERSEY, JUNE 26, 2009
0
40 FT.
APPROXIMATE SCALE
FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK
PERCHED GROUNDWATER ESTIMATED
PCE AND DAUGHTER COMPOUND
TOTAL MOLAR ISOCONCENTRATION MAP
JUNE 2009 THROUGH SEPTEMBER 2016
VERINA Engineering, P.C.
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SOURCE:
SITE MAP AND FEATURES OBTAINED FROM *PRE-DESIGN INVESTIGATION REPORT FOR THE ACTIVE SLAP DEPRESSURIZATION SYSTEM* PREPARED BY ARCADIS OF CRANBURY, NEW JERSEY, JUNE 26, 2009

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APPROXIMATE SCALE

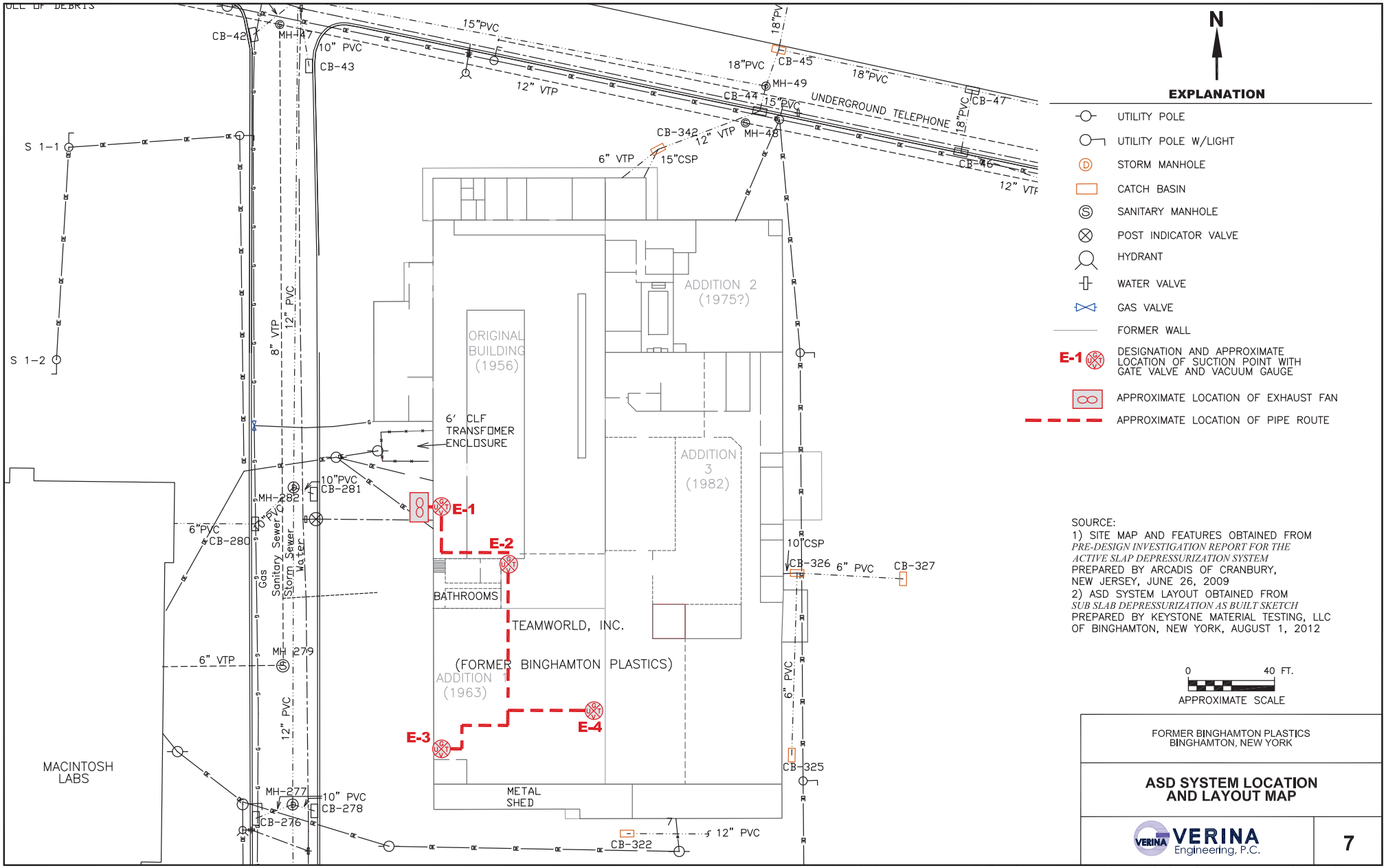
FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK

TCE TREND ANALYSIS

VERINA Engineering, P.C.

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N
EXPLANATION
UTILITY POLE
UTILITY POLE W/LIGHT
STORM MANHOLE
CATCH BASIN
SANITARY MANHOLE
POST INDICATOR VALVE
HYDRANT
WATER VALVE
GAS VALVE
FORMER WALL
E-1 DESIGNATION AND APPROXIMATE LOCATION OF SUCTION POINT WITH GATE VALVE AND VACUUM GAUGE
APPROXIMATE LOCATION OF EXHAUST FAN
APPROXIMATE LOCATION OF PIPE ROUTE
ADDITION 2 (1975?)
ORIGINAL BUILDING (1956)
ADDITION 3 (1982)
ADDITION 1 (1963)
6' CLF TRANSFOMER ENCLOSURE
BATHROOMS
TEAMWORLD, INC.
(FORMER BINGHAMTON PLASTICS)
METAL SHED
MACINTOSH LABS
E-1
E-2
E-3
E-4
CB-42
MH-47
10" PVC
CB-43
15"PVC
12" VTP
18"PVC
CB-45
MH-49
CB-44
15"PVC
UNDERGROUND TELEPHONE
CB-47
CB-342
12" VTP
MH-48
6" VTP
15"CSP
S 1-1
S 1-2
8" VTP
12" PVC
10"PVC
CB-281
MH-282
6"PVC
CB-280
Gas
Sanitary Sewer
Storm Sewer
Water
10"CSP
CB-326
6" PVC
CB-327
6" VTP
MH-279
12" PVC
6" PVC
CB-325
MH-277
10" PVC
CB-278
CB-276
12" PVC
CB-322
SOURCE:
1) SITE MAP AND FEATURES OBTAINED FROM PRE-DESIGN INVESTIGATION REPORT FOR THE ACTIVE SLAP DEPRESSURIZATION SYSTEM PREPARED BY ARCADIS OF CRANBURY, NEW JERSEY, JUNE 26, 2009
2) ASD SYSTEM LAYOUT OBTAINED FROM SUB SLAB DEPRESSURIZATION AS BUILT SKETCH PREPARED BY KEYSTONE MATERIAL TESTING, LLC OF BINGHAMTON, NEW YORK, AUGUST 1, 2012
0
40 FT.
APPROXIMATE SCALE
FORMER BINGHAMTON PLASTICS
BINGHAMTON, NEW YORK
ASD SYSTEM LOCATION AND LAYOUT MAP
VERINA Engineering, P.C.
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Z:\JOBFILES\5101-DOVER\5101.0003 - Dover Binghamton, NY\CAD\GW-REPORT-2016\5101.0003-Figure-007-IAS-01.dwg LAYOUT: SM-00A SAVED: 12/28/2016 11:07 AM BY: SARAH TUFARO

Tables

Table 1 - Groundwater Elevation Data - March 2016, Former Binghamton Plastics, Binghamton, New York

Monitoring Well	Well Diameter (in)	Total Depth (ft, bg)	Screened Interval (ft, bg)	Surface Elevation (ft, msl)	Top of Casing Elevation (ft, msl)	Top of PVC Elevation (ft, msl)	Depth to Water (ft, TOC)	Groundwater Elevation (ft, msl)
DMW-1	4	15	5-15	876.19	876.44	874.21	Abandoned	NA
DMW-3	2	48.10	41-48	875.16	875.16	874.22	22.55	851.67
DMW-4	2	15.38	4-14	878.32	878.38	877.91	3.67	874.24
MW-5	2	20	10-20	874.18	874.17	873.83	Abandoned	NA
MW-6	2	39.76	30-40	869.62	869.63	869.37	23.29	846.08
MW-7	2	40.50	30-40	869.96	869.99	869.60	27.94	841.66
MW-8	2	14.06	5-15	873.22	873.18	872.83	1.86	870.97
MW-9	2	14.43	5-15	875.02	875.04	874.76	1.62	873.14
MW-10	2	14.32	5-15	875.70	875.71	875.47	2.74	872.73
MW-11	2	19.13	10-20	874.53	874.52	874.14	1.75	872.39
MW-12	2	44.91	35-45	873.70	873.70	873.38	26.22	847.16
MW-13	2	13.72	5-15	874.08	874.09	873.60	4.59	869.01
MW-14	2	14.75	5-15	871.06	871.07	870.57	1.12	869.45
MW-15	2	15	5-15	874.06	874.16	873.69	Abandoned	NA
MW-16	2	14.11	5-15	874.56	NS	874.11	2.02	872.09
MW-17	2	14.45	5-15	874.03	NS	873.74	1.41	872.33
TMP-A	1	7.19	3-8	871.59	NS	871.39	1.83	869.56
TMP-B	1	10	5-10	869.57	NS	869.36	Abandoned	NA

NOTES:

Elevation is surveyed to National Vertical Datum - 1929

in = Inches

ft, bg = Feet below grade

ft, msl = Feet above mean sea level

ft, TOC = Feet from top of inner well casing

NA = Not available

NS = Not surveyed

Groundwater elevation measured on March 17, 2016

Table 2 - Groundwater Elevation Data - September 2016, Former Binghamton Plastics, Binghamton, New York

Monitoring Well	Well Diameter (in)	Total Depth (ft, bg)	Screened Interval (ft, bg)	Surface Elevation (ft, msl)	Top of Casing Elevation (ft, msl)	Top of PVC Elevation (ft, msl)	Depth to Water (ft, TOC)	Groundwater Elevation (ft, msl)
DMW-1	4	15	5-15	876.19	876.44	874.21	Abandoned	NA
DMW-3	2	48.33	41-48	875.16	875.16	874.22	24.77	849.45
DMW-4	2	15.59	4-14	878.32	878.38	877.91	5.62	872.29
MW-5	2	20	10-20	874.18	874.17	873.83	Abandoned	NA
MW-6	2	40.30	30-40	869.62	869.63	869.37	Dry	NA
MW-7	2	40.19	30-40	869.96	869.99	869.60	30.49	839.11
MW-8	2	14.26	5-15	873.22	873.18	872.83	2.56	870.27
MW-9	2	14.65	5-15	875.02	875.04	874.76	3.19	871.57
MW-10	2	14.54	5-15	875.70	875.71	875.47	4.00	871.47
MW-11	2	19.30	10-20	874.53	874.52	874.14	3.41	870.73
MW-12	2	44.68	35-45	873.70	873.70	873.38	28.50	844.88
MW-13	2	13.94	5-15	874.08	874.09	873.60	4.70	868.90
MW-14	2	14.17	5-15	871.06	871.07	870.57	0.88	869.69
MW-15	2	15	5-15	874.06	874.16	873.69	Abandoned	NA
MW-16	2	14.27	5-15	874.56	NS	874.11	2.88	871.23
MW-17	2	14.42	5-15	874.03	NS	873.74	2.73	871.01
TMP-A	1	7.35	3-8	871.59	NS	871.39	2.42	868.97
TMP-B	1	10	5-10	869.57	NS	869.36	Abandoned	NA

NOTES:

Elevation is surveyed to National Vertical Datum - 1929

in = Inches

ft, bg = Feet below grade

ft, msl = Feet above mean sea level

ft, TOC = Feet from top of inner well casing

NA = Not available

NS = Not surveyed

Groundwater elevation measured on September 15, 2016

Table 3 - Summary of Residual Sodium Permanganate Results, Former Binghamton Plastics, Binghamton, New York

Well ID No.	Residual Sodium Permanganate by Permanganate Ion Analysis (ppm)					
	December 2009	March 2010	June 2010	September 2010	December 2010	March 2011
MW-8	131.5	149	105.50	9.56	>19.8	3.74
MW-9	0.30	1.736	1.47	10.04	NS	18.91
MW-10	3.07	4.268	NS	3.57	>19.8	156.34
MW-11	132.2	149.1	151.70	120.80	>19.8	155.98
MW-16	29.71	95.1	76.99	105.60	>19.8	0.835
MW-17	NS	NS	103.00	11.21	>19.8	155.98

Well ID No.	Residual Sodium Permanganate by Permanganate Ion Analysis (ppm)					
	October 2011	March 2012	September 2012	March 2013	September 2013	March 2014
MW-8	0.16	17.2	1.3	0.5	70	14
MW-9	NS	7.3	NS	0.2	NS	3.0
MW-10	NS	2.4	NS	NS	NS	NS
MW-11	35.80	26.1	10.7	30	34	20
MW-16	146.46	4.6	1.7	1.1	1.3	3.1
MW-17	NS	NS	4.7	2.5	1.0	2.9

Well ID No.	Residual Sodium Permanganate by Permanganate Ion Analysis (ppm)					
	March 2014	September 2014	March 2015	September 2015	March 2016	September 2016
MW-8	14.0	10.0	10.3	164	102	35.1
MW-9	3.0	1.1	1.0	24	29	93.8
MW-10	NS	NS	NS	0.8	NS	NS
MW-11	20.0	11.1	NS	6.0	NS	221.2
MW-16	3.1	114	110.8	8.0	12	67
MW-17	2.9	24.4	23.7	104	99	112

NOTES:

ppm = parts per million

NS = Not sampled

A Hach DR890 or DR2800 colorimeter was used to measure the concentration of residual sodium permanganate

Table 4 - Summary of Sodium Permanganate Manual Injection Events, Former Binghamton Plastics, Binghamton, New York

	Injection Date				
Well ID No.	6/11/2009*	9/18/2009*	12/10/2009*	3/9/2010-3/10/2010*	6/23/2010*
MW-8	5	11	11	12.125	11
MW-9	5	11	11	11	11
MW-10	7	11	11	11	11
MW-11	3	5	5	2.75	5
MW-16	5	11	11	12.125	11
MW-17	5	11	11	11	11
Total	30	60	60	60	60

	Injection Date				
Well ID No.	9/22/2010*	12/16/2010*	3/24/2011**	11/4/2011**	3/22/2012**
MW-8	11	11	11	5	1.25
MW-9	11	11	11	22	35
MW-10	11	11	11	13	4.5
MW-11	5	5	5	2	1.25
MW-16	11	11	11	13	4.5
MW-17	11	11	11	5	1.5
Total	60	60	60	60	48

	Injection Date				
Well ID No.	6/22/2012**	9/17/2012-9/18/2012**	3/12/2013**	6/12/2013**	9/2/2013-9/6/2013*
MW-8	11	12	10	13	12.5
MW-9	11	12	13	10	11
MW-10	12	10	13	10	11
MW-11	3	4	2	4	4.5
MW-16	12	11	13	13	11
MW-17	11	11	9	10	10
Total	60	60	60	60	60

	Injection Date				
Well ID No.	12/10/2013*	3/20/2014-3/21/2014*	6/16/2014*	9/25/2014-9/26/2014*	12/17/2014 *
MW-8	10	10	12	6	6.5
MW-9	10	10	10	18	13
MW-10	12	10	10	15	15.5
MW-11	2	1.5	3	5	2
MW-16	15	12.5	15	13	13
MW-17	11	16	10	10	10
Total	60	60	60	67	60

NOTES:

All units are presented in gallons.

* A 10% of sodium permanganate solution was injected during this event .

** A 5% of sodium permanganate solution was injected during this event .

Table 4 - Summary of Sodium Permanganate Manual Injection Events, Former Binghamton Plastics, Binghamton, New York

Well ID No.	Injection Date				
	3/18/2015-3/19/2015*	6/26/2015 *	8/27/2015 *	12/17/2015 *	3/17/2016 *
MW-8	14.5	10	10	10	10
MW-9	10	13	10	10	12
MW-10	10	11	10	10	12
MW-11	2	2	10	10	8
MW-16	13.5	17	10	10	10
MW-17	10	7	10	10	8
Total	60	60	60	60	60

Well ID No.	Injection Date				
	6/23/2016 *	9/29/2016 *			
MW-8	12	10			
MW-9	10	10			
MW-10	10	10			
MW-11	6	10			
MW-16	12	10			
MW-17	10	10			
Total	60	60			

NOTES:

All units are presented in gallons.

* A 10% of sodium permanganate solution was injected during this event .

** A 5% of sodium permanganate solution was injected during this event .

Table 5 - Groundwater Analytical Data, March 2016, Former Binghamton Plastics, Binghamton, New York

Sample ID		MW-8	MW-9	MW-10	MW-16	DUP-031716
Laboratory ID		R1602524-007	R1602524-003	R1602524-004	R1602524-005	R1602524-008
Date Sampled	NYSDEC	3/17/2016	3/17/2016	3/17/2016	3/17/2016	3/17/2016
Units	GWQS	µg/l	µg/l	µg/l	µg/l	µg/l
1,1-Dichloroethane	5	**7.5**	1.0 U	0.97 J	**36**	**36**
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	**9.1**	0.31 J	2.9	**87**	**88**
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.4	1.7
Tetrachloroethene	5	1.0 U	1.0 U	0.76 J	0.89 J	0.70 J
1,1,1-Trichloroethane	5	**9.4**	1.0 U	1.2	**12**	**12**
Trichloroethene	5	**27**	**10**	**8.2**	**24**	**24**
Vinyl Chloride	2	1.0 U	1.0 U	1.0 U	1.2	0.96 J

Sample ID		MW-17	FB-031716	TRIP BLANK
Laboratory ID		R1602524-002	R1602524-006	R1602524-001
Date Sampled	NYSDEC	3/17/2016	3/17/2016	3/17/2016
Units	GWQS	µg/l	µg/l	µg/l
1,1-Dichloroethane	5	**13**	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	3.7	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	5	1.9	1.0 U	1.0 U
Trichloroethene	5	2.4	1.0 U	1.0 U
Vinyl Chloride	2	1.0 U	1.0 U	1.0 U

Notes:

J = Estimated value

µg/l = micrograms per liter

U = Compound analyzed for but not detected

DUP-031716 is a field duplicate of MW-16

Bold = concentration exceeds NYSDEC GWQS

NYSDEC = New York State Department of Environmental Conservation

GWQS = Ground Water Quality Standards

FB-031716 is the field blank samples

Table 6 - Groundwater Analytical Data, September 2016, Former Binghamton Plastics, Binghamton, New York

Sample ID		TMP-A	MW-8	MW-9	DUP-091516	MW-10	MW-11
Laboratory ID		R1609820-010	R1609820-006	R1609820-008	R1508047-012	R1609820-002	R1609820-004
Date Sampled	NYSDEC	9/15/2016	9/15/2016	9/15/2016	9/23/2015	9/15/2016	9/15/2016
Units	GWQS	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
1,1-Dichloroethane	5	0.21 J	3.7	1.0 U	1.0 U	1.2	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	**71**	1.0 U	1.0 U	**6.3**	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.6	1.0 U
1,1,1-Trichloroethane	5	1.0 U	2.4	0.45 J	0.47 J	3.5	**10**
Trichloroethene	5	1.0 U	**120**	0.95 J	0.91 J	**28**	1.0 U
Vinyl Chloride	2	1.0 U	1.0 U	1.0 U	1.0 U	0.36 J	1.0 U

Sample ID		MW-13	MW-16	MW-17	DMW-3	FB-091615
Laboratory ID		R1609820-009	R1609820-005	R1609820-003	R1609820-007	R1609820-011
Date Sampled	NYSDEC	9/15/2016	9/15/2016	9/15/2016	9/15/2016	9/15/2016
Units	GWQS	µg/l	µg/l	µg/l	µg/l	µg/l
1,1-Dichloroethane	5	1.0 U	**59**	**23**	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	1.0 U	**83**	1.4	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	0.87 J	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	0.61 J	0.30 J	1.0 U	1.0 U
1,1,1-Trichloroethane	5	1.0 U	**9.7**	3.4	1.0 U	1.0 U
Trichloroethene	5	1.0 U	**26**	1.7	1.0 U	1.0 U
Vinyl Chloride	2	1.0 U	**4.9**	1.0 U	1.0 U	1.0 U

Notes:

J = Estimated value

D = Compound identified in an analysis at a secondary dilution factor

U = Compound analyzed for but not detected above laboratory reporting limit given

DUP-091516 is a blind duplicate of MW-9

Bold = concentration exceeds NYSDEC GWQS

µg/l = micrograms per liter

NYSDEC = New York State Department of Environmental Conservation

GWQS = Ground Water Quality Standards

FB-091516 is a field blank sample

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
DMW-1	2/8/1999	1000	< 180	< 360	8200	71
DMW-3	12/10/1998	<2.5	<2.5	<0.5	1.1 J	<10
	9/18/2001	< 0.5	< 0.5	< 0.5	0.5 J	< 0.5
	4/1/2002	0.03 J	< 0.5	< 0.5	0.3 J	< 0.5
	9/19/2002	0.2 J	<0.5	0.07 J	0.3 J	<0.5
	3/28/2003	<0.5	<0.5	0.2 J	0.1 J	<0.5
	6/19/2003	0.8	<0.5	0.3 J	0.8	<0.5
	9/16/2003	<0.5	<0.5	0.3 J	0.08 J	<0.5
	1/6/2004	<0.5	0.091 J	0.31 J	0.16 J	<0.5
	4/6/2004	0.2 J	<0.5	0.25 J	0.15 J	<0.5
	6/24/2004	<0.5	<0.5	0.17	<0.5	<0.5
	9/20/2004	<0.5	<0.5	0.23 J	0.13 J	<0.5
	3/23/2005	<0.5	<0.5	<0.5	0.13J	<0.5
	9/27/2005	<2	<2	<1	<1	<2
	3/7/2006	<5	<5	0.43J	<5	<5
	5/25/2006	<5	<5	<5	<5	<5
	9/19/2006	<5	<5	<5	<5	<5
	4/2/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	8/28/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	10/15/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	3/24/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	7/22/2008	<5.0	<5.0	<5.0	0.88 J	<5.0
	10/7/2008	<5.0	<5.0	<5.0	0.40 J	<5.0
	12/2/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	3/11/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	6/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	12/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	3/9/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	6/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/14/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/21/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/27/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	3/14/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/6/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
	9/23/2015	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2016	<1.0	<1.0	<1.0	<1.0	<1.0
DMW-4	12/9/1998	< 2.5	< 2.5	< 5	1.2J	< 10
TMP-A	3/22/2005	<0.5	<0.5	<0.5	<0.5	<0.5
	9/27/2005	<2	<2	<1	<2	<2
	3/7/2006	<5	<5	<5	<5	<5
	5/25/2006	<5	<5	<5	<5	<5
	9/19/2006	<5	<5	<5	<5	<5
	4/2/2007	<5	<5	<5	<5	<5
	7/23/2008	<5	<5	<5	<5	<5
	10/7/2008	<5	<5	<5	<5	<5
	3/9/2009	<5	<5	<5	<5	<5
	6/9/2009	<5	<5	<5	<5	<5
	9/16/2009	<5	<5	<5	<5	<5
	3/8/2010	<5	<5	<5	<5	<5
	10/27/2011	<5	<5	<5	<5	<5
	3/13/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	3/11/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/5/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
	9/23/2015	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2016	<1.0	<1.0	<1.0	<1.0	<1.0
MW-2	12/10/1998	7.9	< 2.5	1.3 J	86	< 10
MW-5	12/10/1998	480	11	1	17,000	20
	9/18/2001	370 J	< 500	<500	23,000	< 500
	4/1/2002	0.3 J	< 0.5	0.06 J	48	< 0.5
MW-6	12/9/1998	< 2.5	< 2.5	< 5	< 5	< 10
MW-7	12/8/1998	< 2.5	< 2.5	< 5	< 5	< 10

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-8	12/10/1998	0.25	< 5	< 0.01	0.35	<20
	9/18/2001	650	< 25	< 25	100	44
	4/1/2002	170	2	6	230	6
	9/18/2002	240	3 J	<6	560	<6
	3/28/2003	370	4	0.4 J	420	16
	6/19/2003	1,000	19	<13	810	36
	9/16/2003	960	14 J	<31	250	240
	1/6/2004	670	7.3 J	<18	500	7.7 J
	4/6/2004	1,900	12 J	<50	420	300
	6/24/2004	2,500	27	83	170	430
	9/20/2004	6,200	75	<210	380	740
	3/23/2005	4,000	44 J	<0.5	930	490
	6/14/2005	<2	<2	<1	<1	<2
	9/27/2005	<2	<2	<1	<1	<2
	3/7/2006	<50	<50	<50	<50	<50
	4/2/2007	110	0.69J	<5.0	360D	<5.0
	10/15/2007	640 D	9.8 J	<13	2700 D	66
	3/24/2008	170	3.3 J	<13	790 D	4.2 J
	7/22/2008	900	14 J	<100	3400	120
	10/7/2008	640	18 J	<100	3200	82 J
	12/2/2008	440	6.4 J	<25	2200 D	3.6 J
	3/10/2009	450	<100	<100	2200	38 J
	6/9/2009	680	14 J	<50	5600 D	53
	9/14/2009	NS	NS	NS	NS	NS
	12/8/2009	NS	NS	NS	NS	NS
	3/8/2010	NS	NS	NS	NS	NS
	6/21/2010	NS	NS	NS	NS	NS
	9/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/15/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	100	0.43 J	<5.0	940 D	3.9 J
	10/27/2011	330 D	1.6 J	<5.0	2700 D	21
	3/13/2012	290	3.2 J	<50	1800	32 J
	9/17/2012	360	<50	<50	1000	33 J
	3/11/2013	210	11 J	<50	1200	5.3 J
	9/2/2013	1.7 J	<5.0	<5.0	16	<5.0
	3/17/2014	0.85 J	<5.0	<5.0	12	<5.0
	9/20/2014	0.67 J	<5.0	<5.0	3.9 J	<5.0
	3/18/2015	0.75 J	<5.0	<5.0	6.4	<5.0
	9/23/2015	<5.0	<5.0	<5.0	<5.0	<5.0
	3/17/2016	9.1	<1.0	<1.0	27	<1.0
	9/15/2016	71	<1.0	<1.0	120	<1.0
MW-9	12/10/1998	7.3	< 2.5	1.2J	77	< 10
	4/1/2002	0.6	< 0.5	0.2 J	20	< 0.5
	9/18/2002	7	0.08 J	1	57 J	0.9 J
	3/28/2003	1	<0.5	0.4 J	16	<0.5
	6/19/2003	3	0.04 J	0.5	26	0.09 J
	916/2003	4.1	<1.3	0.61 J	40	<1.3
	1/6/2004	2.4	0.083 J	0.48 J	23	<0.5
	4/6/2004	0.8 J	<1	0.61 J	30	<1
	6/24/2004	4.7	<0.5	0.53	27	0.52
	9/20/2004	6.2	<2.0	0.79 J	57	<2.0
	3/23/2005	0.78	<0.5	0.23 J	17	<0.5
	9/27/2005	5.5	<2	<2	46	<2
	3/7/2006	<5	<5	<5	<5	<5
	4/2/2007	0.85J	<5.0	<5.0	24	<5.0
	8/28/2007	8.4	<5.0	0.88 J	55	0.67 J
	10/15/2007	10	<5.0	0.81 J	55	<5.0
	3/24/2008	0.44 J	<5.0	<5.0	19	<5.0
	7/21/2008	12	<5.0	0.55 J	45	0.55 J
	10/8/2008	7.1	<5.0	0.59 J	49	<5.0
	12/2/2008	5.8	<5.0	0.47 J	49	<5.0
	3/10/2009	2.1 J	<5.0	<5.0	24	<5.0
	6/10/2009	1.4 J	<5.0	<5.0	32	<5.0
	9/16/2009	1.9 J	<5.0	0.83 J	24	<5.0
	12/8/2009	2.2 J	<5.0	0.43 J	32	<5.0
	3/8/2010	0.78 J	<5.0	<5.0	16	<5.0
	6/21/2010	1.60 J	<5.0	<5.0	37	<5.0
	9/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/16/2010	<5.0	<5.0	<5.0	3.6 J	<5.0
	3/23/2011	<5.0	<5.0	<5.0	14	<5.0
	10/26/2011	0.76 J	<5.0	0.38 J	34	<5.0
	3/13/2012	0.21 J	<5.0	<5.0	17	<5.0
	9/18/2012	1.1 J	<5.0	0.39 J	39	<5.0
	3/11/2013	<5.0	<5.0	<5.0	14	<5.0
	9/5/2013	0.94 J	<5.0	0.31 J	28	<5.0
	3/17/2014	0.41 J	<5.0	<5.0	14	<5.0
	9/21/2014	<5.0	<5.0	<5.0	22	<5.0
	3/19/2015	0.92 J	<5.0	<5.0	13	<5.0
	9/23/2015	<5.0	<5.0	<5.0	4.0 J	<5.0
	3/17/2016	0.31 J	<1.0	<1.0	10	<1.0
	9/15/2016	<1.0 (<1.0)	<1.0 (<1.0)	<1.0 (<1.0)	0.95 J (0.91 J)	<1.0 (<1.0)

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-10	12/10/1998	18	< 2.5	54	64	2.3 J
	9/18/2001	10	< 1.4	2	21	18
	4/1/2002	11	0.3 J	1	16	2
	9/18/2002	14	0.4 J	4	53 J	21
	3/28/2003	11	0.2 J	2	25	2
	6/19/2003	13	0.5 J	3	32	9
	9/16/2003	15	0.39 J	2.4	42	12
	1/6/2004	4.3	0.26 J	1.6	13	0.43 J
	4/6/2004	4.7	<0.5	0.89	13	0.38 J
	6/24/2004	16	0.65	2.6	45	8.6
	9/20/2004	3.4	0.15 J	2.7	16	0.9
	3/23/2005	3.8	0.11 J	1.1	12	0.57
	9/27/2005	13	<2	3	50	6.6
	3/7/2006	9.3	<5	1.6J	27	2.5J
	9/19/2006	17	0.48J	2.2J	32	5.9
	8/28/2007	12	0.33 J	2.2 J	31	5.9
	10/15/2007	4.8 J	<5.0	2.1 J	16	1.7 J
	3/24/2008	3.9 J	<5.0	0.53 J	6.6	<5.0
	7/21/2008	3.7 J	<5.0	0.45 J	5.3	0.72 J
	10/8/2008	12	0.26 J	1.4 J	25	5.3
	12/2/2008	4.4 J	<5.0	1.2 J	9.4	<5.0
	3/10/2009	4.3 J	<5.0	0.77 J	9.2	<5.0
	6/8/2009	15	<5.0	1.6 J	36	2.4 J
	9/14/2009	18	<5.0	2.0 J	37	4.8 J
	12/9/2009	13	<5.0	1.3 J	23	1.1 J
	3/8/2010	5.3	<5.0	0.71 J	9.7	<5.0
	6/22/2010	19	0.29 J	1.6 J	37	3.5 J
	9/21/2010	18	0.32 J	1.8 J	33	4.5 J
	12/15/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	86	<5.0	0.67 J	180	1.8 J
	10/26/2011	11	0.21 J	1.7 J	28	2.2 J
	3/13/2012	6	<5.0	0.81 J	18	0.46 J
	9/17/2012	14	<5.0	1.8 J	40	2.7 J
	3/11/2013	7.9	<5.0	0.72 J	18	0.49 J
	9/2/2013	11	<5.0	1.7 J	32	1.1 J
	3/17/2014	3.4 J	<5.0	0.63 J	7.3	<5.0
	9/21/2014	8.9	<5.0	1.4 J	29	0.69 J
	3/18/2015	2.1 J	<5.0	0.66 J	6.2	<5.0
	9/23/2015	3.2 J (3.1 J)	<5.0 (<5.0)	1.5 J (1.3 J)	18 (17)	<5.0 (<5.0)
	3/17/2016	2.9	<1.0	0.76 J	8.2	<1.0
	9/15/2016	6.3	<1.0	1.6	28	0.36 J
MW-11	12/9/1998	1,100	11	< 5	1,400	140
	9/18/2001	850	< 31	<31	700	77
	4/1/2002	1,100	12	<50	1,500	23
	9/19/2002	1,600	12 J	<25	2,100	82
	3/28/2003	1,200	11	0.2 J	2,400	58
	6/19/2003	1,300	10 J	<25	2,500	24 J
	9/16/2003	1,700	13 J	<83	2,500	170
	1/6/2004	1,200	31 J	<53	1,500	28 J
	4/6/2004	1,700	17	<83	2,300	6.8
	6/24/2004	1,600	18	<63	1,900	29
	9/20/2004	2,300 D	26 DJ	<63	2,200 D	58 DJ
	3/23/2005	1,500 D	21	<0.5	1,300 D	7.8
	6/14/2005	<2	<2	<1	<1	<2
	9/27/2005	<2	<2	<1	<1	<2
	3/7/2006	<500	<500	<500	<500	<500
	10/15/2007	<5.0	<5.0	<5.0	<5.0	< 5.0
	3/24/2008	130	<25	<25	520	5.2 J
	7/22/2008	1900	15 J	<100	2900	140
	10/7/2008	NS	NS	NS	NS	NS
	12/2/2008	NS	NS	NS	NS	NS
	3/11/2009	990	9.1 J	<25	3200 D	67
	6/8/2009	NS	NS	NS	NS	NS
	9/14/2009	NS	NS	NS	NS	NS
	12/8/2009	NS	NS	NS	NS	NS
	3/9/2010	NS	NS	NS	NS	NS
	6/21/2010	NS	NS	NS	NS	NS
	9/20/2010	NS	NS	NS	NS	NS
	12/16/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/27/2011	<5.0	<5.0	<5.0	0.57 J	<5.0
	3/14/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/17/2012	<5.0	<5.0	<5.0	0.62 J	<5.0
	3/11/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/2/2013	1.2 J	<5.0	<5.0	4.3 J	<5.0
	3/18/2014	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<25	<25	<25	<25	<25
	9/23/2015	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2016	<10	<10	<10	<10	<10

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-12	12/7/1998	< 2.5	< 2.5	< 5	< 5	< 10
MW-13	12/9/1998	< 2.5	< 2.5	< 5	< 5	< 10
	3/24/2008	NS	NS	NS	NS	NS
	7/23/2008	NS	NS	NS	NS	NS
	10/9/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	12/2/2008	<5.0	<5.0	<5.0	0.96 J	<5.0
	3/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	6/10/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	12/7/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	3/9/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	6/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/16/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/26/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	3/14/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/6/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
	9/23/2015	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2016	<1.0	<1.0	<1.0	<1.0	<1.0
MW-14	12/9/1998	< 2.5	< 2.5	< 5	< 5	< 10
	9/18/2001	< 0.5	< 0.5	< 0.5	0.2J	< 0.5
	3/28/2003	<0.5	<0.5	0.08 J	<0.5	<0.5
	6/19/2003	<0.5	<0.5	0.3 J	0.04 J	<0.5
	9/16/2003	<0.5	<0.5	0.087 J	<0.5	<0.5
	1/6/2004	<0.5	<0.5	<0.5	0.064 J	<0.5
	4/6/2004	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/2004	2.1	<0.5	0.27 J	6.5	<0.5
	9/20/2004	<0.5	<0.5	<0.5	<0.5	<0.5
	3/23/2005	<0.5	<0.5	<0.5	<0.5	<0.5
	3/7/2006	<5.0	<5.0	<5.0	<5.0	<5.0
	5/25/2006	<5.0	<5.0	<5.0	<5.0	<5.0
	9/19/2006	<5.0	<5.0	<5.0	<5.0	<5.0
	4/2/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	8/28/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	10/15/2007	<5.0	<5.0	<5.0	<5.0	<5.0
	3/24/2008	<5.0	<5.0	<5.0	0.62 J	<5.0
	7/23/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	10/7/2008	<5.0	<5.0	<5.0	0.32 J	<5.0
	12/3/2008	<5.0	<5.0	<5.0	<5.0	<5.0
	3/11/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	6/10/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	9/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	12/9/2009	<5.0	<5.0	<5.0	<5.0	<5.0
	3/9/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	6/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/14/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/21/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	10/26/2011	<5.0	<5.0	<5.0	<5.0	<5.0
	3/13/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/18/2012	<5.0	<5.0	<5.0	<5.0	<5.0
	9/6/2013	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2014	<5.0	<5.0	<5.0	<5.0	<5.0
MW-15	12/10/1998	960	11	14	6,900	23
	9/18/2001	790	< 84	< 84	4,000	68 J
	4/1/2002	510	10	17	3,400	34

See notes on last page.

Table 7 - Historical Groundwater Volatile Organic Compound Analytical Results, Former Binghamton Plastics, Binghamton, New York

Sample Location Units:	Sampling Date	cis-1,2-Dichloroethene µg/l	trans-1,2-Dichloroethene µg/l	Tetrachloroethene µg/l	Trichloroethene µg/l	Vinyl Chloride µg/l
MW-16	9/19/2002	1,500	11 J	<32	340	38
	3/28/2003	440	7	0.2 J	15	59
	6/19/2003	400	12	0.3 J	48	58
	9/16/2003	87	4.8	0.323 J	9	24
	1/6/2004	68	3.3	<2.5	6.6	20
	4/6/2004	22	1.1	0.23 J	2.6	5.6
	6/24/2004	6.8	2	0.23 J	4.1	2.3
	9/20/2004	78 D	5.2 D	<2.5	17	27 D
	3/23/2005	9.3	5.4	<0.5	0.95	4.4
	9/25/2005	12	5.4	<1	6.2	11
	3/7/2006	<500	<500	<500	<500	<500
	10/15/2007	240 D	13	0.64 J	110	140
	3/24/2008	NS	NS	NS	NS	NS
	7/22/2008	240	8.7 J	<13	69	87
	10/8/2008	710	13 J	1.1 J	330	180
	12/2/2008	450 D	10	0.94 J	320	88
	3/10/2009	270	4.6 J	1.1 J	280	42
	6/10/2009	650	10 J	<25	480	76
	9/15/2009	<5	<5	0.55 J	<5	<5
	12/8/2009	NS	NS	NS	NS	NS
	3/9/2010	NS	NS	NS	NS	NS
	6/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2010	NS	NS	NS	NS	NS
	12/16/2010	16	<5.0	<5.0	38	<5.0
	3/23/2011	4.1 J	<5.0	0.70 J	7.4	<5.0
	10/27/2011	140	5.6	1.8 J	240 D	<5.0
	3/13/2012	94	2.7 J	0.44 J	96	10
	9/17/2012	140	2.0 J	0.71 J	160	11
	3/11/2013	96	7.5	0.34 J	38	1.9 J
	9/5/2013	170	10	0.50 J	72	9.3
	3/17/2014	49	1.4 J	<5.0	10	14
	9/21/2014	17	<5.0	0.43 J	8.6	<5.0
	3/18/2015	31	0.35 J	<5.0	7.1	15
	9/23/2015	<5.0	<5.0	<5.0	<5.0	<5.0
	3/17/2016	87 (88)	1.4 (1.7)	0.89 J (0.70 J)	24 (24)	1.2 (0.96 J)
	9/15/2016	83	0.87 J	0.61 J	26	4.9
MW-17	9/19/2002	1,800	18 J	<42	2,800	38 J
	3/28/2003	280	11	0.3 J	2	180
	6/19/2003	50	13	<6	1	65
	9/16/2003	4	11	1.6 J	0.74 J	9.1
	1/6/2004	3.3 J	6.4	<4.2	0.81 J	2.4 J
	4/6/2004	3 J	6.8	<5	1.6 J	4.5 J
	6/24/2004	<4.2	9.8	2.2	1.1	1.5
	9/20/2004	3.3 J	11	2.1 J	<5.0	6.7
	3/25/2005	7.9	7.3	<0.5	0.8	5.9
	9/27/2005	150	8	<1	71	24
	3/7/2006	<50	<50	<50	<50	<50
	9/19/2006	0.33	24	3.2	31	17
	8/28/2007	55	2.4 J	0.82 J	110	82
	10/15/2007	37	1.5 J	0.38 J	73	6.6
	3/24/2008	3.0 J	0.33 J	<5.0	1.2 J	0.93 J
	7/21/2008	2.4 J	0.94 J	<5.0	0.66 J	1.1 J
	10/8/2008	16	1.6 J	0.21 J	35	5.7
	12/2/2008	6.6	0.46 J	<5.0	15	1.3 J
	3/10/2009	3.7 J	0.46 J	<5.0	4.4 J	1.9 J
	6/9/2009	2.8 J	0.78 J	<5.0	3.5 J	1.1 J
	9/14/2009	38	2.5 J	0.60 J	110	9.1
	12/8/2009	7.4	0.61 J	<5.0	23	2.1 J
	3/9/2010	4.5 J	<5.0	<5.0	6.5	1.1 J
	6/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	9/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	12/15/2010	<5.0	<5.0	<5.0	<5.0	<5.0
	3/23/2011	5.6	<5.0	<5.0	2.2 J	<5.0
	10/26/2011	87	4.2 J	0.53 J	65	20
	3/14/2012	77	3.3 J	0.27 J	40	18
	9/17/2012	200	10	0.44 J	74	8.2
	3/11/2013	53	2.8 J	<5.0	14	0.41 J
	9/5/2013	84	3.6 J	<5.0	45	1.3 J
	3/17/2014	18	1.0 J	<5.0	3.3 J	<5.0
	9/21/2014	10	<5.0	<5.0	4.3 J	<5.0
	3/18/2015	5.8 (7.8)	<5.0 (<5.0)	<5.0 (<5.0)	3.5 J (4.6 J)	<5.0 (<5.0)
	9/23/2015	<5.0	<5.0	<5.0	<5.0	<5.0
	3/17/2016	3.7	<1.0	<1.0	2.4	<1.0
	9/15/2016	1.4	<1.0	0.30 J	1.7	<1.0

NOTES:

J = Estimated value; compound detected below Detection Limit.

D = Compound identified in an analysis at a secondary dilution factor

= Baseline result

NS=Not sampled

µg/l = Micrograms per liter

< = Not detected above laboratory reporting limit given

Table 8 - Proposed 2017 Groundwater Monitoring Matrix, Former Binghamton Plastics, Binghamton, New York

Implemented Monitoring Matrix in 2016		
Well ID	Monitoring Schedule	Analysis
DMW-3	Annual	SSPL VOCs
TMP-A	Annual	SSPL VOCs
MW-8	Semiannual	SSPL VOCs
MW-9	Semiannual	SSPL VOCs
MW-10	Semiannual	SSPL VOCs
MW-11	Annual	SSPL VOCs
MW-13	Annual	SSPL VOCs
MW-16	Semiannual	SSPL VOCs
MW-17	Semiannual	SSPL VOCs

Proposed Monitoring Matrix to be Implemented in 2017		
Well ID	Monitoring Schedule	Analysis
DMW-3	Annual	SSPL VOCs
TMP-A	Annual	SSPL VOCs
MW-8	Semiannual	SSPL VOCs
MW-9	Semiannual	SSPL VOCs
MW-10	Semiannual	SSPL VOCs
MW-11	Annual	SSPL VOCs
MW-13	Annual	SSPL VOCs
MW-16	Semiannual	SSPL VOCs
MW-17	Semiannual	SSPL VOCs

Appendices

Appendix A

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-8	Date:	3/17/2016	
Field Personnel:	BLG	Weather:	Cloudy, 40s-50s F	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.1	Depth to Water (ft btoc):	1.9
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~12

POST-PURGE INFO:

Color:	Dark purple	Mn/MnO4 (mg/L):	41.6/102
Volume Purged (gal):	~4	Sample ID:	MW-8
Final Depth to Water (ft btoc):	4.97	Sample Time:	14:15

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
13:30	10.31	7.77	3.151	620.5	7.05	99	2.81	1.66	250	
13:35	9.72	7.87	3.183	617.8	6.70	100	2.51	1.67	250	
13:40	9.50	7.89	3.203	615.0	6.64	100	3.95	1.68	250	
13:45	9.47	7.89	3.193	614.7	6.56	2.10	4.15	1.68	250	
13:50	9.35	7.85	3.089	615.2	6.17	2.15	4.30	1.62	250	
13:55	9.32	7.80	3.005	615.1	5.63	2.11	4.46	1.57	250	
14:00	9.34	7.77	2.974	614.6	5.28	2.10	4.61	1.55	250	
14:05	9.13	7.74	2.974	615.0	5.00	2.09	4.74	1.54	250	
14:10	9.25	7.72	2.941	614.7	4.87	2.1	4.85	1.52	250	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-9	Date:	3/17/2016	
Field Personnel:	TML	Weather:	45-51 F, cloudy, chance of thunder storms	

PRE-PURGE INFO:

Well Depth (ft btoc):	~15	Depth to Water (ft btoc):	1.64
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Purple to clear	Mn/MnO4 (mg/L):	13/29
Volume Purged (gal):	~3.5	Sample ID:	MW-9
Final Depth to Water (ft btoc):	1.62	Sample Time:	11:15

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
10:25	9.07	6.87	2.495	620.5	8.09	722	1.66	1.21	200	Turbidity in AU
10:30	8.86	7.24	1.918	624.8	7.24	27.1	1.64	0.98	200	Turbidity in NTU
10:35	8.81	6.78	1.900	627.1	7.24	36.1	1.66	0.97	200	
10:40	8.81	6.77	1.899	627.5	7.15	33.4	1.66	0.97	200	
10:45	8.80	6.75	1.913	625.8	7.27	27.9	1.65	0.98	200	
10:50	8.86	6.75	1.920	625.3	7.30	22.6	1.66	0.98	200	
10:55	8.76	6.74	1.916	624.5	7.30	20.5	1.66	0.98	200	
11:00	8.77	6.73	1.914	624.4	7.30	15.6	1.66	0.98	200	
11:05	8.85	6.74	1.914	625.4	7.30	14.9	1.66	0.98	200	
11:10	8.77	6.74	1.913	625.5	7.28	14.5	1.66	0.98	200	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-10	Date:	3/17/2016	
Field Personnel:	TML	Weather:	51 F, partly cloudy, windy	

PRE-PURGE INFO:

Well Depth (ft btoc):	~15	Depth to Water (ft btoc):	2.74
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Brown	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~3	Sample ID:	MW-10 (MS/MSD)
Final Depth to Water (ft btoc):	2.75	Sample Time:	12:45

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
12:05	10.06	7.10	0.980	582.8	9.19	*91.5*	3.00	0.48	200	Turbidity in AU
12:10	8.52	6.80	0.969	612.7	7.91	*69.5*	3.03	0.48	200	
12:15	8.31	6.82	0.951	621.8	7.84	52.5	3.00	0.47	200	
12:20	8.18	6.81	0.964	621.7	7.15	34.7	3.02	0.48	200	
12:25	8.14	6.81	0.981	613.4	7.01	23.4	3.01	0.49	200	
12:30	8.11	6.79	0.991	611.3	6.46	18.5	3.01	0.49	200	
12:35	8.13	6.81	1.006	614.5	6.11	17.3	3.01	0.48	200	
12:40	8.14	6.79	1.010	617.3	5.93	16.8	3.00	0.48	200	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-16	Date:	3/17/2016	
Field Personnel:	BLG	Weather:	56 F, partly cloudy, rain	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.07	Depth to Water (ft btoc):	2.00
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Dark purple	Mn/MnO4 (mg/L):	5.2/12
Volume Purged (gal):	~5	Sample ID:	MW-16 (DUP-031716)
Final Depth to Water (ft btoc):	2.41	Sample Time:	12:51

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
11:56	9.25	7.79	1.831	506.2	7.92	*916*	2.50	0.92	250	Turbidity in AU
12:01	8.82	7.63	1.637	540.2	6.29	*655*	2.70	0.81	250	
12:06	8.58	7.44	1.428	562.4	5.51	99	2.75	0.72	250	
12:11	8.54	7.33	1.386	572.7	5.20	3.25	2.85	0.7	250	
12:16	8.73	7.27	1.341	582.9	4.52	3.3	2.83	0.67	250	
12:21	8.63	7.23	1.324	584.2	4.29	3.29	2.90	0.66	250	
12:26	8.79	7.24	1.309	586.5	3.95	3.27	2.87	0.66	250	
12:31	8.78	7.23	1.287	588.7	3.58	3.26	2.85	0.64	250	
12:36	8.54	7.23	1.267	590.8	3.32	3.21	2.90	0.63	250	
12:41	8.46	7.23	1.257	592.4	3.19	3.20	2.91	0.63	250	
12:46	8.44	7.24	1.250	593.8	3.15	3.19	2.90	0.63	250	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-17	Date:	3/17/2016	
Field Personnel:	BLG	Weather:	49 F, cloudy	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.46	Depth to Water (ft btoc):	1.42
PID Beneath PVC Cap (ppm)	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Purple	Mn/MnO4 (mg/L):	41/99
Volume Purged (gal):	~6	Sample ID:	MW-17
Final Depth to Water (ft btoc):	3.6	Sample Time:	10:52

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
9:47	10.03	6.62	1.156	510.1	21	*933*	2.30	0.58	300	Turbidity in AU
9:52	9.93	6.73	1.129	570.7	12.89	*915*	2.07	0.56	300	
9:57	9.92	6.85	1.127	583.5	9.38	*675*	3.70	0.57	300	
10:02	9.93	6.93	1.172	589.1	7.91	91	3.95	0.59	300	
10:07	9.97	6.97	1.252	593.1	7.3	93	4.30	0.63	300	
10:12	10.01	7.01	1.366	600.4	7.05	95	4.40	0.69	300	
10:17	10.04	7.02	1.453	603.7	6.99	97	4.50	0.74	300	
10:22	10.07	7.07	1.502	607.3	6.96	4.79	4.65	0.76	300	
10:27	10.07	7.09	1.545	609.3	6.9	4.30	4.71	0.79	300	
10:32	10.09	7.11	1.589	609.9	6.90	4.22	4.80	0.81	300	
10:37	10.11	7.13	1.616	611.6	6.90	4.21	4.85	0.83	300	
10:42	10.12	7.13	1.641	612.8	6.88	4.19	4.80	0.84	300	
10:47	10.16	7.15	1.657	613.6	6.85	4.17	4.85	0.86	300	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	TMP-A	Date:	9/15/2016	
Field Personnel:	KKA	Weather:	Sunny, 70s F, breezy	

PRE-PURGE INFO:

Well Depth (ft btoc):	7.35	Depth to Water (ft btoc):	2.42
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	3-8
Pump Used:	Bladder pump 0.75"	Depth of Pump (ft btoc):	~ 6

POST-PURGE INFO:

Color:	Clear	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~ 0.5	Sample ID:	TMP-A
Final Depth to Water (ft btoc):	2.85	Sample Time:	17:09

WELL PURGE DATA:

Time 5 minute intervals	Temperature (°C)	pH (units)	Conductivity (ms/cm)	REDOX (Eh-mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft)	Salinity (PPT)	Pumping Rate (ml/min)	Comment
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
16:29	25.11	8.50	1.674	377.8	3.68	38.0	2.70	0.85	50	
16:34	25.28	7.85	3.316	393.8	4.45	46.0	2.72	1.73	50	
16:39	24.86	7.76	3.333	390.2	4.65	24.0	2.75	1.74	50	
16:44	24.62	7.72	3.340	384.0	4.81	75.3	2.78	1.75	50	
16:49	24.31	7.70	3.342	378.4	4.91	57.0	7.82	1.75	50	
16:54	24.14	7.71	3.340	369.6	5.03	57.4	7.86	1.75	50	
16:59	24.20	7.71	3.340	364.0	5.11	53.3	7.91	1.75	50	
17:04	24.25	7.72	3.338	361.1	5.19	54.4	7.96	1.75	50	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-8	Date:	9/15/2016	
Field Personnel:	MWG	Weather:	70s F, sunny	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.26	Depth to Water (ft btoc):	2.56
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~ 12

POST-PURGE INFO:

Color:	Purple	Mn/MnO4 (mg/L):	16.2/35.1
Volume Purged (gal):	~ 3	Sample ID:	MW-8
Final Depth to Water (ft btoc):	5.25	Sample Time:	15:35

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
14:40	21.40	6.62	2.710	620.9	11.70	NA	2.63	1.45	200	
14:45	21.66	6.51	2.711	626.1	11.51	NA	2.90	1.46	200	
14:50	21.98	6.35	2.715	639.6	11.39	NA	3.20	1.45	200	
14:55	20.63	7.45	2.456	589.1	9.54	NA	3.50	1.25	200	
15:00	20.87	7.43	2.171	586.0	8.58	NA	4.00	1.09	200	
15:05	21.37	7.42	2.036	585.6	8.01	NA	4.26	1.02	100	Too dark purple to read turbidity
15:10	21.57	7.39	1.908	586.7	7.28	NA	4.41	0.97	100	
15:15	21.64	7.37	1.838	587.7	6.87	NA	4.55	0.93	100	
15:20	21.58	7.38	1.832	590.7	6.57	NA	4.70	0.93	100	
15:25	21.64	7.37	1.830	590.4	6.22	NA	4.84	0.90	100	
15:30	21.60	7.37	1.820	590.4	6.09	NA	4.97	0.89	100	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-9	Date:	9/15/2016	
Field Personnel:	MWG	Weather:	70s F, sunny	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.64	Depth to Water (ft btoc):	3.1
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~ 10

POST-PURGE INFO:

Color:	Purple	Mn/MnO4 (mg/L):	43.4/93.8
Volume Purged (gal):	~ 3	Sample ID:	MW-9 (DUP-091516)
Final Depth to Water (ft btoc):	3.10	Sample Time:	17:05

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
16:20	19.77	6.97	8.619	649.3	7.37	*2352*	3.11	4.92	150	
16:25	19.18	6.94	7.090	658.0	6.54	*1458*	3.11	3.83	150	
16:30	19.13	6.98	5.950	656.6	6.42	*1224*	3.11	3.19	150	
16:35	19.14	6.96	5.190	657.3	6.36	*1073*	3.11	2.79	150	
16:40	19.21	6.95	4.974	658.7	6.31	*875*	3.13	2.67	150	Turbidity in AU
16:45	19.23	6.95	4.778	659.9	6.23	*851*	3.13	2.56	150	
16:50	19.25	6.94	4.691	660.8	6.11	*781*	3.12	2.44	150	
16:55	19.25	6.94	4.659	661.1	6.15	*746*	3.12	2.38	150	
17:00	19.21	6.96	4.597	660.7	6.29	*722*	3.13	2.32	150	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-10	Date:	9/15/2016	
Field Personnel:	MWG	Weather:	Sunny, 70s F	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.54	Depth to Water (ft btoc):	4.00
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~ 11

POST-PURGE INFO:

Color:	Clear	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~ 6	Sample ID:	MW-10
Final Depth to Water (ft btoc):	4.35	Sample Time:	11:05

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
10:25	19.52	6.68	2.892	326.7	9.86	*969*	4.25	1.51	400	Turbidity in AU
10:30	20.31	6.72	2.823	411.5	5.20	NA	4.35	1.47	400	Too dark purple for turbidity
10:35	21.09	6.75	2.768	453.0	4.62	71.6	4.43	1.44	400	
10:40	21.38	6.75	2.819	457.2	4.46	49.1	4.47	1.47	400	
10:45	21.39	6.74	2.851	463.6	4.06	43.6	4.45	1.48	400	
10:50	21.58	6.74	2.861	473.0	3.95	37.0	4.50	1.49	400	
10:55	21.59	6.74	2.861	475.6	4.06	30.0	4.48	1.49	400	
11:00	21.65	6.74	2.859	483.0	3.97	25.1	4.50	1.49	400	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-11	Date:	9/15/2016	
Field Personnel:	MWG	Weather:	Sunny, 70s F	

PRE-PURGE INFO:

Well Depth (ft btoc):	19.30	Depth to Water (ft btoc):	3.41
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	10-20
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~ 15

POST-PURGE INFO:

Color:	Purple	Mn/MnO4 (mg/L):	102.2/221.2
Volume Purged (gal):	~ 3	Sample ID:	MW-11
Final Depth to Water (ft btoc):	7.52	Sample Time:	12:25

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
11:45	18.37	7.91	145.5	664.8	15.02	NA	4.35	115.80	200	
11:50	18.97	7.91	137.5	682.2	13.82	NA	5.60	106.40	100	
11:55	19.96	7.93	136.3	681.3	11.64	NA	5.80	105.96	100	
12:00	20.97	7.94	136.0	682.2	10.40	NA	5.80	105.65	100	
12:05	21.00	7.94	135.3	685.2	10.00	NA	5.95	105.07	150	
12:10	20.62	7.92	134.0	689.0	9.75	NA	6.25	103.51	150	
12:15	20.24	7.94	131.3	690.6	9.74	NA	6.54	101.11	150	
12:20	20.29	7.94	130.2	693.4	9.60	NA	6.72	100.00	150	

Too dark purple to read turbidity

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-13	Date:	9/15/2016	
Field Personnel:	TML	Weather:	68 F, sunny, slight breeze	

PRE-PURGE INFO:

Well Depth (ft btoc):	~ 15	Depth to Water (ft btoc):	4.68
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~ 12

POST-PURGE INFO:

Color:	Clear	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~ 4	Sample ID:	MW-13 (MS/MSD)
Final Depth to Water (ft btoc):	5.72	Sample Time:	16:15

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
15:40	19.28	6.58	6.325	363.3	6.21	89.3	5.11	3.47	200	
15:45	19.44	6.63	6.324	310.9	4.09	37.0	5.34	3.46	200	
15:50	19.75	6.66	6.182	311.9	4.30	25.00	5.52	3.36	200	
15:55	19.90	6.72	5.526	313.0	5.25	8.90	5.57	2.97	150	
16:00	19.96	6.78	4.835	314.7	5.79	2.59	5.58	2.59	150	Turbidity <5
16:05	19.93	6.78	4.781	319.4	5.63	2.16	5.63	2.57	150	
16:10	19.87	6.77	4.808	321.4	5.50	1.15	5.68	2.59	150	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-16	Date:	9/15/2016	
Field Personnel:	KKA	Weather:	Sunny, 70s F, breezy	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.27	Depth to Water (ft btoc):	2.88
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~ 10

POST-PURGE INFO:

Color:	Light purple	Mn/MnO4 (mg/L):	31/67
Volume Purged (gal):	~ 3	Sample ID:	MW-16
Final Depth to Water (ft btoc):	4.10	Sample Time:	12:46

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
12:11	20.85	7.79	0.738	514.0	9.75	18.1	3.85	0.37	300	
12:16	20.01	7.13	1.338	637.3	4.85	3.26	3.95	0.67	300	
12:21	20.00	7.04	1.298	642.9	4.72	3.76	4.04	0.65	300	
12:26	19.96	7.04	1.314	645.6	4.61	2.69	4.11	0.66	300	
12:31	19.96	7.04	1.309	646.7	4.53	2.28	4.14	0.66	300	
12:36	19.92	7.04	1.301	647.6	4.52	1.89	4.15	0.65	300	
12:41	19.94	7.04	1.289	648.0	4.36	2.02	4.15	0.65	300	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	MW-17	Date:	9/15/2016	
Field Personnel:	KKA	Weather:	Sunny, cool, 70s F	

PRE-PURGE INFO:

Well Depth (ft btoc):	14.42	Depth to Water (ft btoc):	2.73
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	5-15
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~10

POST-PURGE INFO:

Color:	Light purple	Mn/MnO4 (mg/L):	51.8/112
Volume Purged (gal):	~ 4	Sample ID:	MW-17
Final Depth to Water (ft btoc):	5.62	Sample Time:	11:23

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	*10%*	0.3 ft		100 - 500	
10:28	18.39	6.64	1.925	539.1	9.00	*977*	3.60	1.09	300	Turbidity in AU
10:33	19.23	7.11	2.046	623.6	11.17	*963*	4.90	1.02	300	
10:38	19.27	7.17	1.900	630.2	10.12	*764*	5.06	0.97	150	
10:43	19.20	7.22	2.063	635.6	10.53	NA	5.20	1.06	150	Too dark purple to read turbidity
10:48	19.15	7.22	2.131	640.5	10.43	NA	5.33	1.09	150	
10:53	19.13	7.22	2.174	643.4	10.33	NA	5.40	1.12	150	
10:58	19.10	7.23	2.224	644.9	10.23	NA	5.50	1.15	150	
11:03	19.11	7.24	2.271	645.8	10.44	NA	5.60	1.17	150	
11:08	19.09	7.26	2.322	647.0	10.37	NA	5.64	1.20	150	
11:13	19.09	7.26	2.346	648.0	10.48	NA	5.69	1.21	150	
11:18	19.10	7.27	2.348	648.8	10.42	NA	5.71	1.21	150	

LOW FLOW GROUND WATER PURGE/SAMPLING LOG

Former Binghamton Plastics Site, Binghamton, NY (5101.0003)

Project Name:	Dover-Binghamton	Project #:	5101.0003	Page: _1__ of _1__
Monitoring Well:	DMW-3	Date:	9/15/2016	
Field Personnel:	KKA	Weather:	Sunny, breezy, 70s F	

PRE-PURGE INFO:

Well Depth (ft btoc):	48.33	Depth to Water (ft btoc):	24.77
PID Beneath PVC Cap (ppm):	NA	Screened/Open Interval (ft btoc):	41-48
Pump Used:	Bladder pump 1.75"	Depth of Pump (ft btoc):	~ 45

POST-PURGE INFO:

Color:	Clear	Mn/MnO4 (mg/L):	NA
Volume Purged (gal):	~ 4	Sample ID:	DMW-3
Final Depth to Water (ft btoc):	34.16	Sample Time:	16:00

WELL PURGE DATA:

Time 5 minute intervals	**Temperature (°C)**	**pH (units)**	**Conductivity (ms/cm)**	**REDOX (Eh-mV)**	**DO (mg/L)**	**Turbidity (NTU)**	**Depth to Water (ft)**	**Salinity (PPT)**	**Pumping Rate (ml/min)**	**Comment**
	Reading	Reading	Reading	Reading	Reading	Reading	Reading			
	3%	0.1 unit	3%	10 mV	10%	10%	0.3 ft		100 - 500	
14:45	15.80	11.79	6.365	343.4	1.31	6.51	27.08	3.50	100	
14:50	15.61	11.90	6.510	300.6	0.70	5.84	28.91	3.58	100	
14:55	15.41	11.93	6.457	283.6	0.63	5.87	29.84	3.53	100	
15:00	15.37	12.03	6.202	262.1	0.56	3.62	30.92	3.39	100	
15:05	15.51	12.09	6.053	247.4	0.50	5.01	31.16	3.31	100	
15:10	15.63	12.10	5.933	235.9	0.53	3.30	31.41	3.24	100	Turbidity <5
15:15	15.68	12.08	5.761	227.6	0.59	3.66	31.67	3.12	100	
15:20	15.19	12.02	5.215	219.3	0.79	3.31	31.80	2.80	100	
15:25	15.01	11.90	4.150	210.4	1.61	3.30	31.94	2.19	100	
15:30	15.00	11.77	2.914	205.4	3.34	4.16	32.01	1.46	100	
15:35	15.06	11.46	1.264	207.7	6.59	3.46	32.10	0.60	100	
15:40	15.13	11.40	0.856	212.5	8.40	3.01	32.20	0.41	100	
15:45	15.30	11.37	0.742	213.0	8.08	2.16	32.28	0.35	100	
15:50	15.33	11.36	0.732	209.5	7.79	2.80	32.34	0.33	100	
15:55	15.42	11.35	0.726	207.3	8.02	2.99	32.41	0.25	100	

Appendix B

ALS Environmental
ALS Group USA, Corp
1565 Jefferson Rd, Building 300, Suite 360
Rochester, NY 14623
T: 585-288-5380
F: 585-288-8475
www.alsglobal.com

April 05, 2016

Analytical Report for Service Request No: R1602524

Ms. Tammy Yuan
Verina Consulting Group, LLC
1011 US Highway 22, Suite 302
Bridgewater, NJ 08807

Laboratory Results for: Binghamton/5101.0003

Dear Ms. Yuan:

Enclosed are the results of the sample(s) submitted to our laboratory on March 19, 2016. For your reference, these analyses have been assigned our service request number **R1602524**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice M Jaeger

Janice Jaeger
Project Manager

SDG NARRATIVE

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Bldg. 300, Suite 360
Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client:	Verina Consulting Group
Service Request No.:	R1602524
Project:	Dover - Binghamton
Date Received:	03/19/16
Sample Matrix:	Water
Project/Case No.:	

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS).

Sample Receipt

Samples were received for analysis at ALS Environmental on 03/19/16 in good condition. All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory.

Volatile Organics

Samples were analyzed for a site list of Volatile Organics by Methods 5030C/8260C from SW-846.

All Tuning criteria for BFB were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All Internal Standard Areas (IS) were within QC limits.

All surrogate standard recoveries were acceptable.

All Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD) recoveries were within limits.

Site specific QC was performed on MW-10. All MS/MSD recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination.

No other analytical or QC problems were encountered.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #:	5101.0003	Batch Complete:	Yes	Date Revised:	
Submission:	R1602524	Diskette Requested:	No	Date Due:	4/4/16
Client:	Verina Consulting Group, LLC	Date: 4/5/16		Protocol: SW846	
Client Rep:	JJAEGER	Custody Seal: Present/Absent:		Shipping No.:	
Project:	Binghamton	Chain of Custody: Present/Absent:		SDG #:	

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1602524-001	TRIP BLANK	Water	8260C	3/17/16	3/19/16			
R1602524-002	MW-17	Water	8260C	3/17/16	3/19/16			
R1602524-003	MW-9	Water	8260C	3/17/16	3/19/16			
R1602524-004QC	MW-10	Water	8260C	3/17/16	3/19/16			
R1602524-005	MW-16	Water	8260C	3/17/16	3/19/16			
R1602524-006	FB-031716	Water	8260C	3/17/16	3/19/16			
R1602524-007	MW-8	Water	8260C	3/17/16	3/19/16			
R1602524-008	DUP-031716	Water	8260C	3/17/16	3/19/16			

Folder Comments:

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

CHAINS OF CUSTODY

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Bldg. 300, Suite 360
Rochester, NY 14623
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

34334

ALS Environmental

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: Dover-Binghamton	Project Number: 5101.0003
Project Manager: Tammy Yuan	Report CC:
Company/Address: Verina Consulting Group, LLC 1011 U.S. Highway 22 Suite 302 Bridgewater, New Jersey 08807	
Phone #: 908 864 4400	Email: tyuan@vcg-llc.com
Sampler's Signature:	Sampler's Printed Name: Kevin Soldo, Tim Lovell, Barbara Goldman

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1/8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	SSPL VOCs							REMARKS/ ALTERNATE DESCRIPTION
Trip Blank		3/14/16	11:50	TB	3								✓						1	Trip Blank
MW-17		3/17/16	10:52	GW	3								✓						8	
MW-9			11:15	GW	3								✓						8	
MW-10 (MS & MSD)			12:45	GW	9								✓						1	MS & MSD
MW-16			12:51	GW	3								✓						8	
FB-031716			13:00	FB	3								✓						1	Field Blank
MW-8			14:15	GW	3								✓						8	
DUP-031716			—	GW	3								✓						8	Blind duplicate

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other Sodium Thiosulfate

SPECIAL INSTRUCTIONS/COMMENTS

Metals SSPL VOCs: PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, 1,1-DCA, 1,1,1-TCA, and VC

* call if you have any questions

See QAPP ☐

TURNAROUND REQUIREMENTS

____ RUSH (SURCHARGES APPLY)

____ 1 day ____ 2 day ____ 3 day

____ 4 day ____ 5 day

REQUESTED REPORT DATE: Standard

REPORT REQUIREMENTS

____ I. Results Only

✓ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)

____ III. Results + QC and Calibration Summaries

____ IV. Data Validation Report with Raw Data

Edata ____ Yes ____ No

INVOICE INFORMATION

PO #

BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	
Printed Name: Kevin Soldo	Printed Name: ALS	Printed Name:	Printed Name:	Printed Name:	
Firm: Verina	Firm: 3/18/16 0911	Firm:	Firm:	Firm:	
Date/Time: 3/18/16 11:15	Date/Time:	Date/Time:	Date/Time:	Date/Time:	Date/Time:

R1602524 5
Verina Consulting Group, LLC
Binghamton

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservati

R1602524 5
Verina Consulting Group, LLC
Binghamton

Project/Client Verina Folder Number .

Cooler received on 3/19/16 by: DSW

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	Y N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: ~~Wet Ice~~ **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 3/19/16 Time: 0936 ID: ~~IR#3~~ IR#5 From: Temp Blank (Sample Bottle)

Observed Temp (°C)	0.8						
Correction Factor (°C)	±0.0						
Corrected Temp (°C)	0.8						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by:

All samples held in storage location: R-002 by DSW on 3/19/16 at 0936
5035 samples placed in storage location: by on at

PC Secondary Review:

Cooler Breakdown: Date: 3/21/16 Time: 1142 by: MDS

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4114070	11/17				

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 5-317-002
Other Comments:

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC **Service Request:** R1602524
Project: Binghamton/5101.0003

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1602524-001.01					
	8260C				
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1130	In Lab / DLIPANI	
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-001.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-001.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-002.01					
	8260C				
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1130	In Lab / DLIPANI	
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-002.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-002.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-003.01					
	8260C				
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1130	In Lab / DLIPANI	
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-003.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-003.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.01					
	8260C				
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1129	In Lab / DLIPANI	

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC **Service Request:** R1602524
Project: Binghamton/5101.0003

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-004.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.04					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.05					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.06					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.07					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.08					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-004.09					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-005.01					
	8260C				
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1130	In Lab / DLIPANI	
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-005.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-005.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-006.01					
	8260C				

ALS ENVIRONMENTAL

Chain of Custody Report

Client: Verina Consulting Group, LLC **Service Request:** R1602524
Project: Binghamton/5101.0003

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1130	In Lab / DLIPANI	
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-006.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-006.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-007.01					
	8260C				
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1130	In Lab / DLIPANI	
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-007.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-007.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-008.01					
	8260C				
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
		3/22/16	1130	In Lab / DLIPANI	
		3/22/16	1822	R-001-S11 / DLIPANI	
R1602524-008.02					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	
R1602524-008.03					
		3/21/16	1143	SMO / MSTONE	
		3/21/16	1144	R-001 / MSTONE	

SAMPLE RESULTS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Bldg. 300, Suite 360
Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1150
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1602524-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 16:06		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 16:06		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 16:06		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 16:06		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 16:06		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 16:06		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 16:06		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 16:06		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85-122	3/22/16 16:06	
Dibromofluoromethane	112	89-119	3/22/16 16:06	
Toluene-d8	107	87-121	3/22/16 16:06	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1052
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-17	**Units:**	µg/L
Lab Code:	R1602524-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**1.9**		1.0	0.36	1	NA	3/22/16 15:34		488823	
1,1-Dichloroethane (1,1-DCA)	**13**		1.0	0.20	1	NA	3/22/16 15:34		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 15:34		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 15:34		488823	
Trichloroethene (TCE)	**2.4**		1.0	0.22	1	NA	3/22/16 15:34		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 15:34		488823	
cis-1,2-Dichloroethene	**3.7**		1.0	0.30	1	NA	3/22/16 15:34		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 15:34		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	3/22/16 15:34	
Dibromofluoromethane	114	89-119	3/22/16 15:34	
Toluene-d8	108	87-121	3/22/16 15:34	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1115
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-9	**Units:**	µg/L
Lab Code:	R1602524-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 16:38		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 16:38		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 16:38		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 16:38		488823	
Trichloroethene (TCE)	**10**		1.0	0.22	1	NA	3/22/16 16:38		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 16:38		488823	
cis-1,2-Dichloroethene	**0.31**	J	1.0	0.30	1	NA	3/22/16 16:38		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 16:38		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85-122	3/22/16 16:38	
Dibromofluoromethane	111	89-119	3/22/16 16:38	
Toluene-d8	107	87-121	3/22/16 16:38	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1245
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-10	**Units:**	µg/L
Lab Code:	R1602524-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**1.2**		1.0	0.36	1	NA	3/22/16 17:10		488823	
1,1-Dichloroethane (1,1-DCA)	**0.97**	J	1.0	0.20	1	NA	3/22/16 17:10		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 17:10		488823	
Tetrachloroethene (PCE)	**0.76**	J	1.0	0.30	1	NA	3/22/16 17:10		488823	
Trichloroethene (TCE)	**8.2**		1.0	0.22	1	NA	3/22/16 17:10		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 17:10		488823	
cis-1,2-Dichloroethene	**2.9**		1.0	0.30	1	NA	3/22/16 17:10		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 17:10		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85-122	3/22/16 17:10	
Dibromofluoromethane	111	89-119	3/22/16 17:10	
Toluene-d8	105	87-121	3/22/16 17:10	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1251
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-16	**Units:**	µg/L
Lab Code:	R1602524-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**12**		1.0	0.36	1	NA	3/22/16 17:42		488823	
1,1-Dichloroethane (1,1-DCA)	**36**		1.0	0.20	1	NA	3/22/16 17:42		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 17:42		488823	
Tetrachloroethene (PCE)	**0.89**	J	1.0	0.30	1	NA	3/22/16 17:42		488823	
Trichloroethene (TCE)	**24**		1.0	0.22	1	NA	3/22/16 17:42		488823	
Vinyl Chloride	**1.2**		1.0	0.32	1	NA	3/22/16 17:42		488823	
cis-1,2-Dichloroethene	**87**		1.0	0.30	1	NA	3/22/16 17:42		488823	
trans-1,2-Dichloroethene	**1.4**		1.0	0.33	1	NA	3/22/16 17:42		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	3/22/16 17:42	
Dibromofluoromethane	112	89-119	3/22/16 17:42	
Toluene-d8	106	87-121	3/22/16 17:42	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1300
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	FB-031716	**Units:**	µg/L
Lab Code:	R1602524-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 18:14		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 18:14		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 18:14		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 18:14		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 18:14		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 18:14		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 18:14		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 18:14		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	3/22/16 18:14	
Dibromofluoromethane	112	89-119	3/22/16 18:14	
Toluene-d8	104	87-121	3/22/16 18:14	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1415
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-8	**Units:**	µg/L
Lab Code:	R1602524-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**9.4**		1.0	0.36	1	NA	3/22/16 18:46		488823	
1,1-Dichloroethane (1,1-DCA)	**7.5**		1.0	0.20	1	NA	3/22/16 18:46		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 18:46		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 18:46		488823	
Trichloroethene (TCE)	**27**		1.0	0.22	1	NA	3/22/16 18:46		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 18:46		488823	
cis-1,2-Dichloroethene	**9.1**		1.0	0.30	1	NA	3/22/16 18:46		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 18:46		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	3/22/16 18:46	
Dibromofluoromethane	110	89-119	3/22/16 18:46	
Toluene-d8	105	87-121	3/22/16 18:46	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	DUP-031716	**Units:**	µg/L
Lab Code:	R1602524-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**12**		1.0	0.36	1	NA	3/22/16 19:18		488823	
1,1-Dichloroethane (1,1-DCA)	**36**		1.0	0.20	1	NA	3/22/16 19:18		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 19:18		488823	
Tetrachloroethene (PCE)	**0.70**	J	1.0	0.30	1	NA	3/22/16 19:18		488823	
Trichloroethene (TCE)	**24**		1.0	0.22	1	NA	3/22/16 19:18		488823	
Vinyl Chloride	**0.96**	J	1.0	0.32	1	NA	3/22/16 19:18		488823	
cis-1,2-Dichloroethene	**88**		1.0	0.30	1	NA	3/22/16 19:18		488823	
trans-1,2-Dichloroethene	**1.7**		1.0	0.33	1	NA	3/22/16 19:18		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	3/22/16 19:18	
Dibromofluoromethane	116	89-119	3/22/16 19:18	
Toluene-d8	112	87-121	3/22/16 19:18	

QC SUMMARY FORMS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Bldg. 300, Suite 360
Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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GC/MS VOA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1602997-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 11:51		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 11:51		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 11:51		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 11:51		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85-122	3/22/16 11:51	
Dibromofluoromethane	112	89-119	3/22/16 11:51	
Toluene-d8	107	87-121	3/22/16 11:51	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1602997-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 11:51		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 11:51		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 11:51		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 11:51		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85-122	3/22/16 11:51	
Dibromofluoromethane	112	89-119	3/22/16 11:51	
Toluene-d8	107	87-121	3/22/16 11:51	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Analyzed:**	3/22/16 11:51
Sample Matrix:	Water		

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-06
Lab Code:	RQ1602997-04	**File ID:**	I:\ACQUDATA\MSVOA6\DATA\032216\M7944.D\
Analytical Method:	8260C		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1602997-03	I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D\	3/22/16 10:47
TRIP BLANK	R1602524-001	I:\ACQUDATA\MSVOA6\DATA\032216\M7952.D\	3/22/16 16:06
MW-10	R1602524-004	I:\ACQUDATA\MSVOA6\DATA\032216\M7954.D\	3/22/16 17:10
FB-031716	R1602524-006	I:\ACQUDATA\MSVOA6\DATA\032216\M7956.D\	3/22/16 18:14
MW-10MS	RQ1602997-05	I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D\	3/22/16 19:50
MW-10DMS	RQ1602997-06	I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D\	3/22/16 20:22

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Analyzed:**	3/22/16 11:51
Sample Matrix:	Water		

Method Blank Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name:	Method Blank	**Instrument ID:**	R-MS-06
Lab Code:	RQ1602997-04	**File ID:**	I:\ACQUDATA\MSVOA6\DATA\032216\M7944.D\
Analytical Method:	8260C		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1602997-03	I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D\	3/22/16 10:47
MW-17	R1602524-002	I:\ACQUDATA\MSVOA6\DATA\032216\M7951.D\	3/22/16 15:34
MW-9	R1602524-003	I:\ACQUDATA\MSVOA6\DATA\032216\M7953.D\	3/22/16 16:38
MW-16	R1602524-005	I:\ACQUDATA\MSVOA6\DATA\032216\M7955.D\	3/22/16 17:42
MW-8	R1602524-007	I:\ACQUDATA\MSVOA6\DATA\032216\M7957.D\	3/22/16 18:46
DUP-031716	R1602524-008	I:\ACQUDATA\MSVOA6\DATA\032216\M7958.D\	3/22/16 19:18

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1602524
Date Collected: 3/17/16
Date Received: 3/19/16
Date Analyzed: 3/22/16

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: MW-10
Lab Code: R1602524-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

		MW-10MS Matrix Spike RQ1602997-05			MW-10DMS Duplicate Matrix Spike RQ1602997-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	1.2	57.6	50.0	113	57.9	50.0	114	74 - 127	<1	30
1,1-Dichloroethane (1,1-DCA)	0.97	53.6	50.0	105	53.6	50.0	105	74 - 132	<1	30
1,1-Dichloroethene (1,1-DCE)	ND	47.1	50.0	94	50.1	50.0	100	74 - 139	6	30
Tetrachloroethene (PCE)	0.76	48.4	50.0	95	54.3	50.0	107	67 - 137	12	30
Trichloroethene (TCE)	8.2	59.8	50.0	103	58.9	50.0	101	62 - 142	1	30
Vinyl Chloride	ND	51.2	50.0	102	52.7	50.0	105	60 - 157	3	30
cis-1,2-Dichloroethene	2.9	56.5	50.0	107	56.1	50.0	107	72 - 133	<1	30
trans-1,2-Dichloroethene	ND	48.5	50.0	97	47.4	50.0	95	77 - 125	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1602524
Date Analyzed: 3/22/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 488823

Lab Control Sample
RQ1602997-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	22.1	20.0	111	74 - 120
1,1-Dichloroethane (1,1-DCA)	20.1	20.0	100	78 - 117
1,1-Dichloroethene (1,1-DCE)	19.4	20.0	97	74 - 135
Tetrachloroethene (PCE)	20.3	20.0	102	78 - 124
Trichloroethene (TCE)	20.5	20.0	103	78 - 123
Vinyl Chloride	20.2	20.0	101	69 - 133
cis-1,2-Dichloroethene	20.8	20.0	104	80 - 121
trans-1,2-Dichloroethene	18.6	20.0	93	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1602524
Date Analyzed: 3/22/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 488823

Lab Control Sample
RQ1602997-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	22.1	20.0	111	74 - 120
1,1-Dichloroethane (1,1-DCA)	20.1	20.0	100	78 - 117
1,1-Dichloroethene (1,1-DCE)	19.4	20.0	97	74 - 135
Tetrachloroethene (PCE)	20.3	20.0	102	78 - 124
Trichloroethene (TCE)	20.5	20.0	103	78 - 123
Vinyl Chloride	20.2	20.0	101	69 - 133
cis-1,2-Dichloroethene	20.8	20.0	104	80 - 121
trans-1,2-Dichloroethene	18.6	20.0	93	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 11/30/15 11:53

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\113015\M6185.D\
Instrument ID: R-MS-06

Analytical Method: 8260C
Analysis Lot:

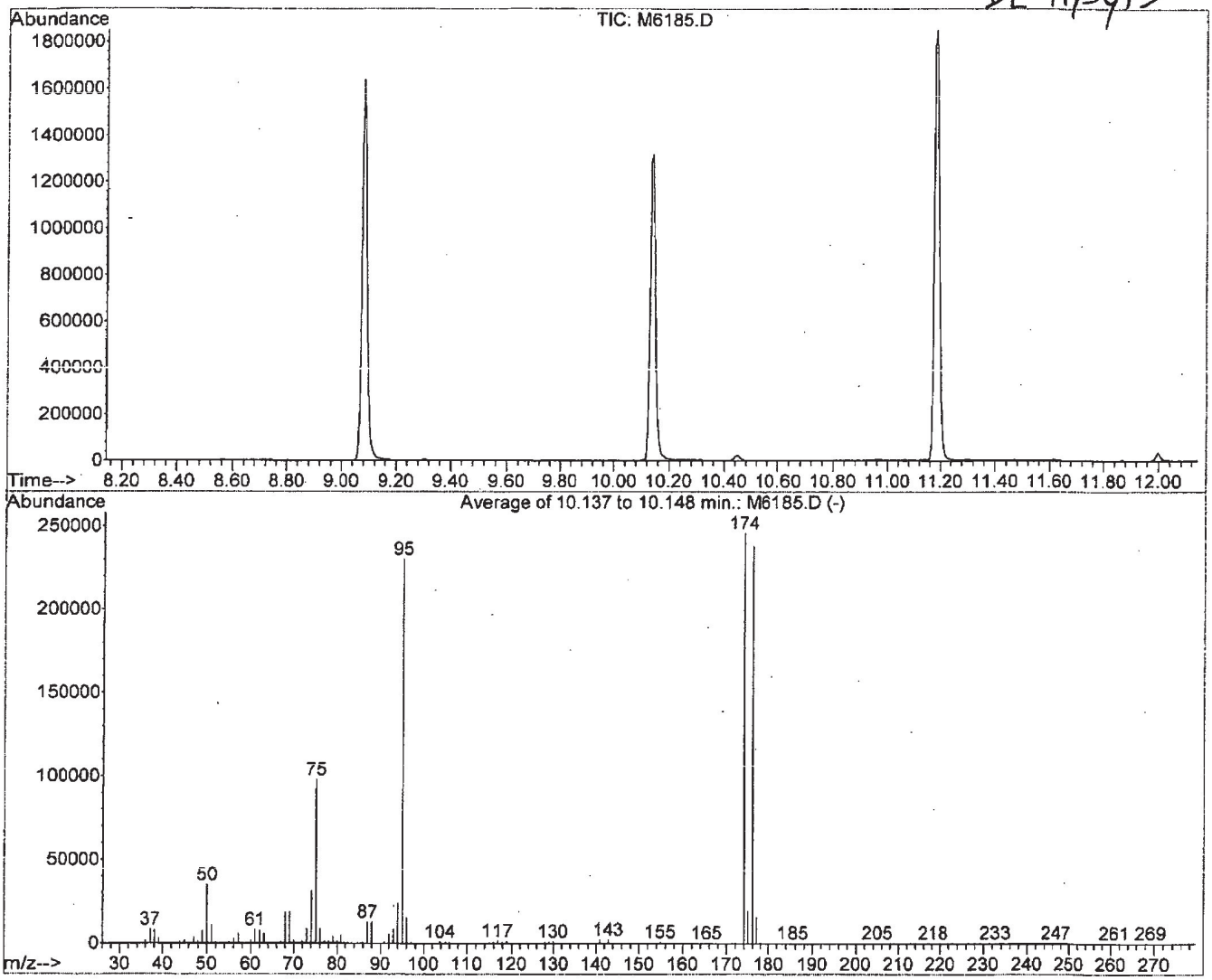
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	15.1	34789	Pass
75	95	30	60	42.5	97693	Pass
95	95	100	100	100.0	230037	Pass
96	95	5	9	6.6	15085	Pass
173	174	0	2	0.0	0	Pass
174	95	50	120	106.8	245739	Pass
175	174	5	9	7.7	18923	Pass
176	174	95	101	96.7	237717	Pass
177	176	5	9	6.7	15828	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D\	11/30/15 13:40	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D\	11/30/15 14:20	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D\	11/30/15 14:52	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D\	11/30/15 15:26	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6192.D\	11/30/15 16:02	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6193.D\	11/30/15 16:39	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D\	11/30/15 17:14	
Initial CalibrationICAL	150 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D\	11/30/15 17:49	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\MSVOA6\DATA\113015\M6196.D\	11/30/15 18:20	

BFB

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6185.D Vial: 8
Acq On : 30 Nov 2015 11:53 am Operator: D.Lipani
Sample : TUNE CHECK Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS

DL 11/30/15



AutoFind: Scans 1693, 1694, 1695; Background Corrected with Scan 1687

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.1	34789	PASS
75	95	30	60	42.5	97693	PASS
95	95	100	100	100.0	230037	PASS
96	95	5	9	6.6	15085	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	106.8	245739	PASS
175	174	5	9	7.7	18923	PASS
176	174	95	101	96.7	237717	PASS
177	176	5	9	6.7	15828	PASS

M6185.D W113015.M Mon Nov 30 12:12:58 2015

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 3/22/16 09:29

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\032216\M7940.D\
Instrument ID: R-MS-06

Analytical Method: 8260C
Analysis Lot: 488823

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.21	43003	Pass
75	95	30	60	43.98	116688	Pass
95	95	100	100	100.00	265301	Pass
96	95	5	9	6.84	18146	Pass
173	174	0	2	0.74	2047	Pass
174	95	50	120	104.89	278272	Pass
175	174	5	9	8.03	22357	Pass
176	174	95	101	98.32	273600	Pass
177	176	5	9	6.94	18997	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1602997-02	I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D\	3/22/16 10:11	
Lab Control Sample	RQ1602997-03	I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D\	3/22/16 10:47	
Method Blank	RQ1602997-04	I:\ACQUDATA\MSVOA6\DATA\032216\M7944.D\	3/22/16 11:51	
TRIP BLANK	R1602524-001	I:\ACQUDATA\MSVOA6\DATA\032216\M7952.D\	3/22/16 16:06	
MW-10	R1602524-004	I:\ACQUDATA\MSVOA6\DATA\032216\M7954.D\	3/22/16 17:10	
FB-031716	R1602524-006	I:\ACQUDATA\MSVOA6\DATA\032216\M7956.D\	3/22/16 18:14	
MW-10MS	RQ1602997-05	I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D\	3/22/16 19:50	
MW-10DMS	RQ1602997-06	I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D\	3/22/16 20:22	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 3/22/16 09:29

Tune Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\MSVOA6\DATA\032216\M7940.D\
Instrument ID: R-MS-06

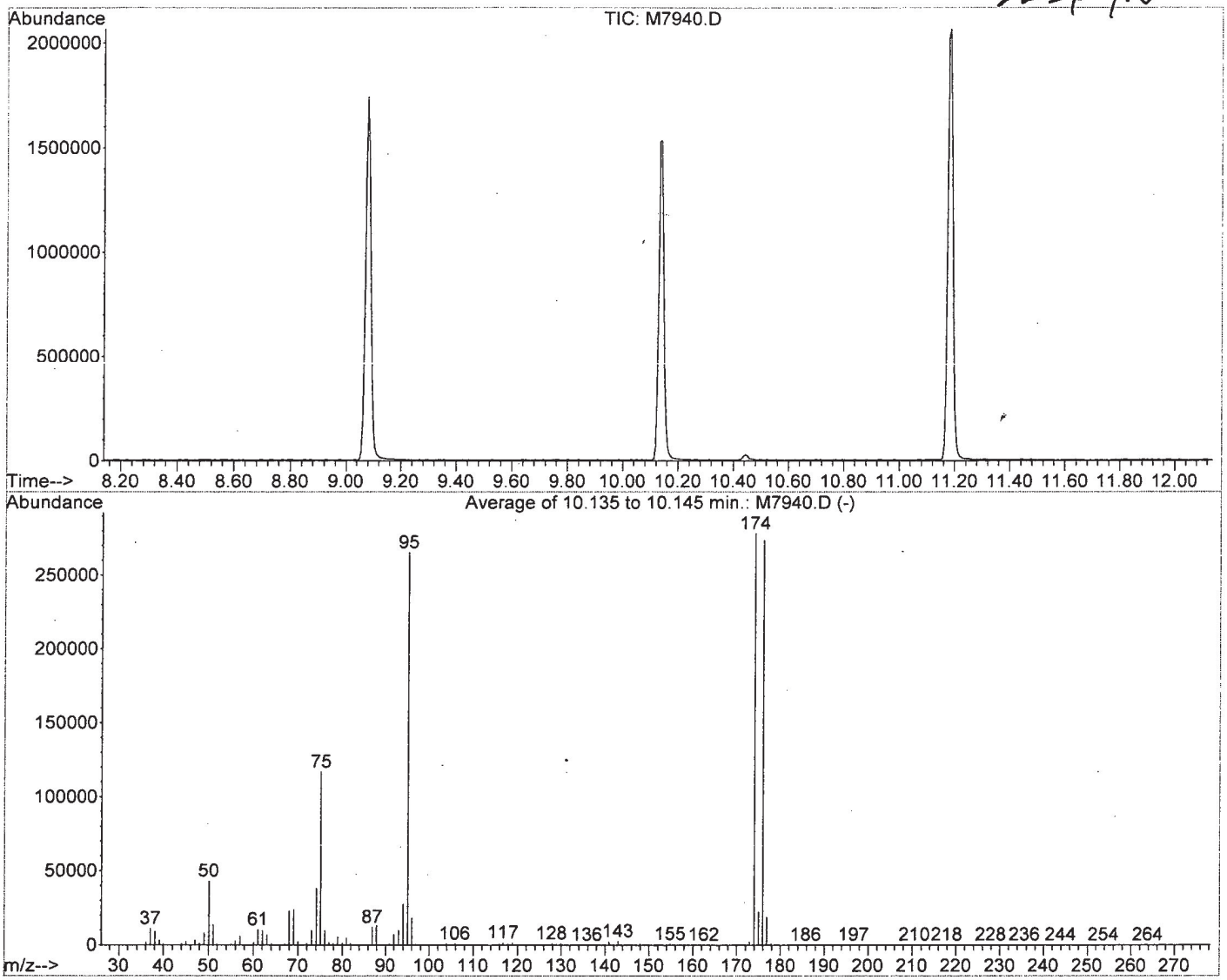
Analytical Method: 8260C
Analysis Lot: 488823

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.21	43003	Pass
75	95	30	60	43.98	116688	Pass
95	95	100	100	100.00	265301	Pass
96	95	5	9	6.84	18146	Pass
173	174	0	2	0.74	2047	Pass
174	95	50	120	104.89	278272	Pass
175	174	5	9	8.03	22357	Pass
176	174	95	101	98.32	273600	Pass
177	176	5	9	6.94	18997	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1602997-02	I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D\	3/22/16 10:11	
Lab Control Sample	RQ1602997-03	I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D\	3/22/16 10:47	
Method Blank	RQ1602997-04	I:\ACQUDATA\MSVOA6\DATA\032216\M7944.D\	3/22/16 11:51	
MW-17	R1602524-002	I:\ACQUDATA\MSVOA6\DATA\032216\M7951.D\	3/22/16 15:34	
MW-9	R1602524-003	I:\ACQUDATA\MSVOA6\DATA\032216\M7953.D\	3/22/16 16:38	
MW-16	R1602524-005	I:\ACQUDATA\MSVOA6\DATA\032216\M7955.D\	3/22/16 17:42	
MW-8	R1602524-007	I:\ACQUDATA\MSVOA6\DATA\032216\M7957.D\	3/22/16 18:46	
DUP-031716	R1602524-008	I:\ACQUDATA\MSVOA6\DATA\032216\M7958.D\	3/22/16 19:18	

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7940.D Vial: 5
Acq On : 22 Mar 2016 9:29 am Operator: D.Lipani
Sample : TUNE CHECK RQ1602997-01 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS

DL 3/22/16



Spectrum Information: Average of 10.135 to 10.145 min. Sub. scan = 1687

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	43003	PASS
75	95	30	60	44.0	116688	PASS
95	95	100	100	100.0	265301	PASS
96	95	5	9	6.8	18146	PASS
173	174	0.00	2	0.7	2047	PASS
174	95	50	120	104.9	278272	PASS
175	174	5	9	8.0	22357	PASS
176	174	95	101	98.3	273600	PASS
177	176	5	9	6.9	18997	PASS

M7940.D -W113015.M Tue Mar 22 09:45:09 2016

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 3/22/16 10:11

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1602997-02
Analysis Lot: 488823
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	507,305	11.18	909,772	5.67	785,583	9.08
	Upper Limit ==>	1,014,610	11.68	1,819,544	6.17	1,571,166	9.58
	Lower Limit ==>	253,653	10.68	454,886	5.17	392,792	8.58
	ICAL Result ==>	466,485	11.19	903,879	5.68	787,122	9.08
Associated Analyses							
Lab Control Sample	RQ1602997-03	505,023	11.18	909,479	5.67	802,958	9.08
Method Blank	RQ1602997-04	485,221	11.18	880,058	5.68	796,563	9.08
TRIP BLANK	R1602524-001	468,661	11.18	889,901	5.68	824,218	9.08
MW-10	R1602524-004	483,722	11.18	875,319	5.67	817,811	9.08
FB-031716	R1602524-006	472,003	11.18	878,014	5.68	796,432	9.08
MW-10MS	RQ1602997-05	512,330	11.19	902,562	5.67	831,029	9.08
MW-10DMS	RQ1602997-06	506,717	11.18	912,975	5.68	795,142	9.08

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 3/22/16 10:11

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1602997-02
Analysis Lot: 488823
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	639,416	4.35
	Upper Limit ==>	1,278,832	4.85
	Lower Limit ==>	319,708	3.85
	ICAL Result ==>	657,179	4.35
Associated Analyses			
Lab Control Sample	RQ1602997-03	652,205	4.35
Method Blank	RQ1602997-04	637,186	4.35
TRIP BLANK	R1602524-001	651,090	4.35
MW-10	R1602524-004	635,440	4.36
FB-031716	R1602524-006	639,490	4.35
MW-10MS	RQ1602997-05	644,551	4.35
MW-10DMS	RQ1602997-06	655,341	4.36

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 3/22/16 10:11

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1602997-02
Analysis Lot: 488823
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	507,305	11.18	909,772	5.67	785,583	9.08
	Upper Limit ==>	1,014,610	11.68	1,819,544	6.17	1,571,166	9.58
	Lower Limit ==>	253,653	10.68	454,886	5.17	392,792	8.58
	ICAL Result ==>	466,485	11.19	903,879	5.68	787,122	9.08
Associated Analyses							
Lab Control Sample	RQ1602997-03	505,023	11.18	909,479	5.67	802,958	9.08
Method Blank	RQ1602997-04	485,221	11.18	880,058	5.68	796,563	9.08
MW-17	R1602524-002	492,323	11.18	870,884	5.68	802,593	9.08
MW-9	R1602524-003	496,137	11.19	874,566	5.67	798,630	9.08
MW-16	R1602524-005	514,496	11.19	895,882	5.67	810,911	9.08
MW-8	R1602524-007	493,066	11.19	877,232	5.67	790,804	9.08
DUP-031716	R1602524-008	496,488	11.19	854,702	5.67	810,812	9.08

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 3/22/16 10:11

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D\
Instrument ID: R-MS-06
Analytical Method: 8260C

Lab Code: RQ1602997-02
Analysis Lot: 488823
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	639,416	4.35
	Upper Limit ==>	1,278,832	4.85
	Lower Limit ==>	319,708	3.85
	ICAL Result ==>	657,179	4.35
Associated Analyses			
Lab Control Sample	RQ1602997-03	652,205	4.35
Method Blank	RQ1602997-04	637,186	4.35
MW-17	R1602524-002	636,275	4.35
MW-9	R1602524-003	636,327	4.35
MW-16	R1602524-005	639,245	4.35
MW-8	R1602524-007	637,631	4.35
DUP-031716	R1602524-008	626,524	4.35

Results flagged with an asterisk (*) indicate values outside control criteria.

RAW DATA

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Bldg. 300, Suite 360
Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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GC/MS VOA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
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www.alsglobal.com

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1150
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1602524-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 16:06		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 16:06		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 16:06		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 16:06		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 16:06		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 16:06		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 16:06		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 16:06		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85-122	3/22/16 16:06	
Dibromofluoromethane	112	89-119	3/22/16 16:06	
Toluene-d8	107	87-121	3/22/16 16:06	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1052
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-17	**Units:**	µg/L
Lab Code:	R1602524-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**1.9**		1.0	0.36	1	NA	3/22/16 15:34		488823	
1,1-Dichloroethane (1,1-DCA)	**13**		1.0	0.20	1	NA	3/22/16 15:34		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 15:34		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 15:34		488823	
Trichloroethene (TCE)	**2.4**		1.0	0.22	1	NA	3/22/16 15:34		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 15:34		488823	
cis-1,2-Dichloroethene	**3.7**		1.0	0.30	1	NA	3/22/16 15:34		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 15:34		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	3/22/16 15:34	
Dibromofluoromethane	114	89-119	3/22/16 15:34	
Toluene-d8	108	87-121	3/22/16 15:34	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1115
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-9	**Units:**	µg/L
Lab Code:	R1602524-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 16:38		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 16:38		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 16:38		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 16:38		488823	
Trichloroethene (TCE)	**10**		1.0	0.22	1	NA	3/22/16 16:38		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 16:38		488823	
cis-1,2-Dichloroethene	**0.31**	J	1.0	0.30	1	NA	3/22/16 16:38		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 16:38		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85-122	3/22/16 16:38	
Dibromofluoromethane	111	89-119	3/22/16 16:38	
Toluene-d8	107	87-121	3/22/16 16:38	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1245
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-10	**Units:**	µg/L
Lab Code:	R1602524-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**1.2**		1.0	0.36	1	NA	3/22/16 17:10		488823	
1,1-Dichloroethane (1,1-DCA)	**0.97**	J	1.0	0.20	1	NA	3/22/16 17:10		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 17:10		488823	
Tetrachloroethene (PCE)	**0.76**	J	1.0	0.30	1	NA	3/22/16 17:10		488823	
Trichloroethene (TCE)	**8.2**		1.0	0.22	1	NA	3/22/16 17:10		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 17:10		488823	
cis-1,2-Dichloroethene	**2.9**		1.0	0.30	1	NA	3/22/16 17:10		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 17:10		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85-122	3/22/16 17:10	
Dibromofluoromethane	111	89-119	3/22/16 17:10	
Toluene-d8	105	87-121	3/22/16 17:10	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1251
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-16	**Units:**	µg/L
Lab Code:	R1602524-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**12**		1.0	0.36	1	NA	3/22/16 17:42		488823	
1,1-Dichloroethane (1,1-DCA)	**36**		1.0	0.20	1	NA	3/22/16 17:42		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 17:42		488823	
Tetrachloroethene (PCE)	**0.89**	J	1.0	0.30	1	NA	3/22/16 17:42		488823	
Trichloroethene (TCE)	**24**		1.0	0.22	1	NA	3/22/16 17:42		488823	
Vinyl Chloride	**1.2**		1.0	0.32	1	NA	3/22/16 17:42		488823	
cis-1,2-Dichloroethene	**87**		1.0	0.30	1	NA	3/22/16 17:42		488823	
trans-1,2-Dichloroethene	**1.4**		1.0	0.33	1	NA	3/22/16 17:42		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	3/22/16 17:42	
Dibromofluoromethane	112	89-119	3/22/16 17:42	
Toluene-d8	106	87-121	3/22/16 17:42	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1300
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	FB-031716	**Units:**	µg/L
Lab Code:	R1602524-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 18:14		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 18:14		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 18:14		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 18:14		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 18:14		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 18:14		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 18:14		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 18:14		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	3/22/16 18:14	
Dibromofluoromethane	112	89-119	3/22/16 18:14	
Toluene-d8	104	87-121	3/22/16 18:14	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1415
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-8	**Units:**	µg/L
Lab Code:	R1602524-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**9.4**		1.0	0.36	1	NA	3/22/16 18:46		488823	
1,1-Dichloroethane (1,1-DCA)	**7.5**		1.0	0.20	1	NA	3/22/16 18:46		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 18:46		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 18:46		488823	
Trichloroethene (TCE)	**27**		1.0	0.22	1	NA	3/22/16 18:46		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 18:46		488823	
cis-1,2-Dichloroethene	**9.1**		1.0	0.30	1	NA	3/22/16 18:46		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 18:46		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	3/22/16 18:46	
Dibromofluoromethane	110	89-119	3/22/16 18:46	
Toluene-d8	105	87-121	3/22/16 18:46	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	DUP-031716	**Units:**	µg/L
Lab Code:	R1602524-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**12**		1.0	0.36	1	NA	3/22/16 19:18		488823	
1,1-Dichloroethane (1,1-DCA)	**36**		1.0	0.20	1	NA	3/22/16 19:18		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 19:18		488823	
Tetrachloroethene (PCE)	**0.70**	J	1.0	0.30	1	NA	3/22/16 19:18		488823	
Trichloroethene (TCE)	**24**		1.0	0.22	1	NA	3/22/16 19:18		488823	
Vinyl Chloride	**0.96**	J	1.0	0.32	1	NA	3/22/16 19:18		488823	
cis-1,2-Dichloroethene	**88**		1.0	0.30	1	NA	3/22/16 19:18		488823	
trans-1,2-Dichloroethene	**1.7**		1.0	0.33	1	NA	3/22/16 19:18		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	3/22/16 19:18	
Dibromofluoromethane	116	89-119	3/22/16 19:18	
Toluene-d8	112	87-121	3/22/16 19:18	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1602997-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 11:51		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 11:51		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 11:51		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 11:51		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85-122	3/22/16 11:51	
Dibromofluoromethane	112	89-119	3/22/16 11:51	
Toluene-d8	107	87-121	3/22/16 11:51	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1602997-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.20	1	NA	3/22/16 11:51		488823	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	NA	3/22/16 11:51		488823	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
Trichloroethene (TCE)	1.0	U	1.0	0.22	1	NA	3/22/16 11:51		488823	
Vinyl Chloride	1.0	U	1.0	0.32	1	NA	3/22/16 11:51		488823	
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	1	NA	3/22/16 11:51		488823	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	NA	3/22/16 11:51		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85-122	3/22/16 11:51	
Dibromofluoromethane	112	89-119	3/22/16 11:51	
Toluene-d8	107	87-121	3/22/16 11:51	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1602997-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**22.1**		1.0	0.36	1	NA	3/22/16 10:47		488823	
1,1-Dichloroethane (1,1-DCA)	**20.1**		1.0	0.20	1	NA	3/22/16 10:47		488823	
1,1-Dichloroethene (1,1-DCE)	**19.4**		1.0	0.57	1	NA	3/22/16 10:47		488823	
Tetrachloroethene (PCE)	**20.3**		1.0	0.30	1	NA	3/22/16 10:47		488823	
Trichloroethene (TCE)	**20.5**		1.0	0.22	1	NA	3/22/16 10:47		488823	
Vinyl Chloride	**20.2**		1.0	0.32	1	NA	3/22/16 10:47		488823	
cis-1,2-Dichloroethene	**20.8**		1.0	0.30	1	NA	3/22/16 10:47		488823	
trans-1,2-Dichloroethene	**18.6**		1.0	0.33	1	NA	3/22/16 10:47		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	3/22/16 10:47	
Dibromofluoromethane	111	89-119	3/22/16 10:47	
Toluene-d8	105	87-121	3/22/16 10:47	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1602997-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**22.1**		1.0	0.36	1	NA	3/22/16 10:47		488823	
1,1-Dichloroethane (1,1-DCA)	**20.1**		1.0	0.20	1	NA	3/22/16 10:47		488823	
1,1-Dichloroethene (1,1-DCE)	**19.4**		1.0	0.57	1	NA	3/22/16 10:47		488823	
Tetrachloroethene (PCE)	**20.3**		1.0	0.30	1	NA	3/22/16 10:47		488823	
Trichloroethene (TCE)	**20.5**		1.0	0.22	1	NA	3/22/16 10:47		488823	
Vinyl Chloride	**20.2**		1.0	0.32	1	NA	3/22/16 10:47		488823	
cis-1,2-Dichloroethene	**20.8**		1.0	0.30	1	NA	3/22/16 10:47		488823	
trans-1,2-Dichloroethene	**18.6**		1.0	0.33	1	NA	3/22/16 10:47		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	85-122	3/22/16 10:47	
Dibromofluoromethane	111	89-119	3/22/16 10:47	
Toluene-d8	105	87-121	3/22/16 10:47	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1245
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-10	**Units:**	µg/L
Lab Code:	RQ1602997-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**57.6**		1.0	0.36	1	NA	3/22/16 19:50		488823	
1,1-Dichloroethane (1,1-DCA)	**53.6**		1.0	0.20	1	NA	3/22/16 19:50		488823	
1,1-Dichloroethene (1,1-DCE)	**47.1**		1.0	0.57	1	NA	3/22/16 19:50		488823	
Tetrachloroethene (PCE)	**48.4**		1.0	0.30	1	NA	3/22/16 19:50		488823	
Trichloroethene (TCE)	**59.8**		1.0	0.22	1	NA	3/22/16 19:50		488823	
Vinyl Chloride	**51.2**		1.0	0.32	1	NA	3/22/16 19:50		488823	
cis-1,2-Dichloroethene	**56.5**		1.0	0.30	1	NA	3/22/16 19:50		488823	
trans-1,2-Dichloroethene	**48.5**		1.0	0.33	1	NA	3/22/16 19:50		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85-122	3/22/16 19:50	
Dibromofluoromethane	110	89-119	3/22/16 19:50	
Toluene-d8	107	87-121	3/22/16 19:50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1602524
Project:	Binghamton/5101.0003	**Date Collected:**	3/17/16 1245
Sample Matrix:	Water	**Date Received:**	3/19/16
Sample Name:	MW-10	**Units:**	µg/L
Lab Code:	RQ1602997-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**57.9**		1.0	0.36	1	NA	3/22/16 20:22		488823	
1,1-Dichloroethane (1,1-DCA)	**53.6**		1.0	0.20	1	NA	3/22/16 20:22		488823	
1,1-Dichloroethene (1,1-DCE)	**50.1**		1.0	0.57	1	NA	3/22/16 20:22		488823	
Tetrachloroethene (PCE)	**54.3**		1.0	0.30	1	NA	3/22/16 20:22		488823	
Trichloroethene (TCE)	**58.9**		1.0	0.22	1	NA	3/22/16 20:22		488823	
Vinyl Chloride	**52.7**		1.0	0.32	1	NA	3/22/16 20:22		488823	
cis-1,2-Dichloroethene	**56.1**		1.0	0.30	1	NA	3/22/16 20:22		488823	
trans-1,2-Dichloroethene	**47.4**		1.0	0.33	1	NA	3/22/16 20:22		488823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85-122	3/22/16 20:22	
Dibromofluoromethane	111	89-119	3/22/16 20:22	
Toluene-d8	108	87-121	3/22/16 20:22	

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7952.D Vial: 17
Acq On : 22 Mar 2016 4:06 pm Operator: D.Lipani
Sample : R1602524-001|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:58 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	651090	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	889901	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	824218	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	468661	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	313482	56.16	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.32%			
42) surr1,1,2-dichloroethane-d	4.24	65	263031	57.78	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 115.56%			
62) SURR3,Toluene-d8	7.76	98	987249	53.26	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.52%			
82) SURR2,BFB	10.14	95	396431	53.73	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.46%			
Target Compounds						Qvalue
24) Carbon Disulfide	2.15	76	4734	0.27	ug/L	94

NT

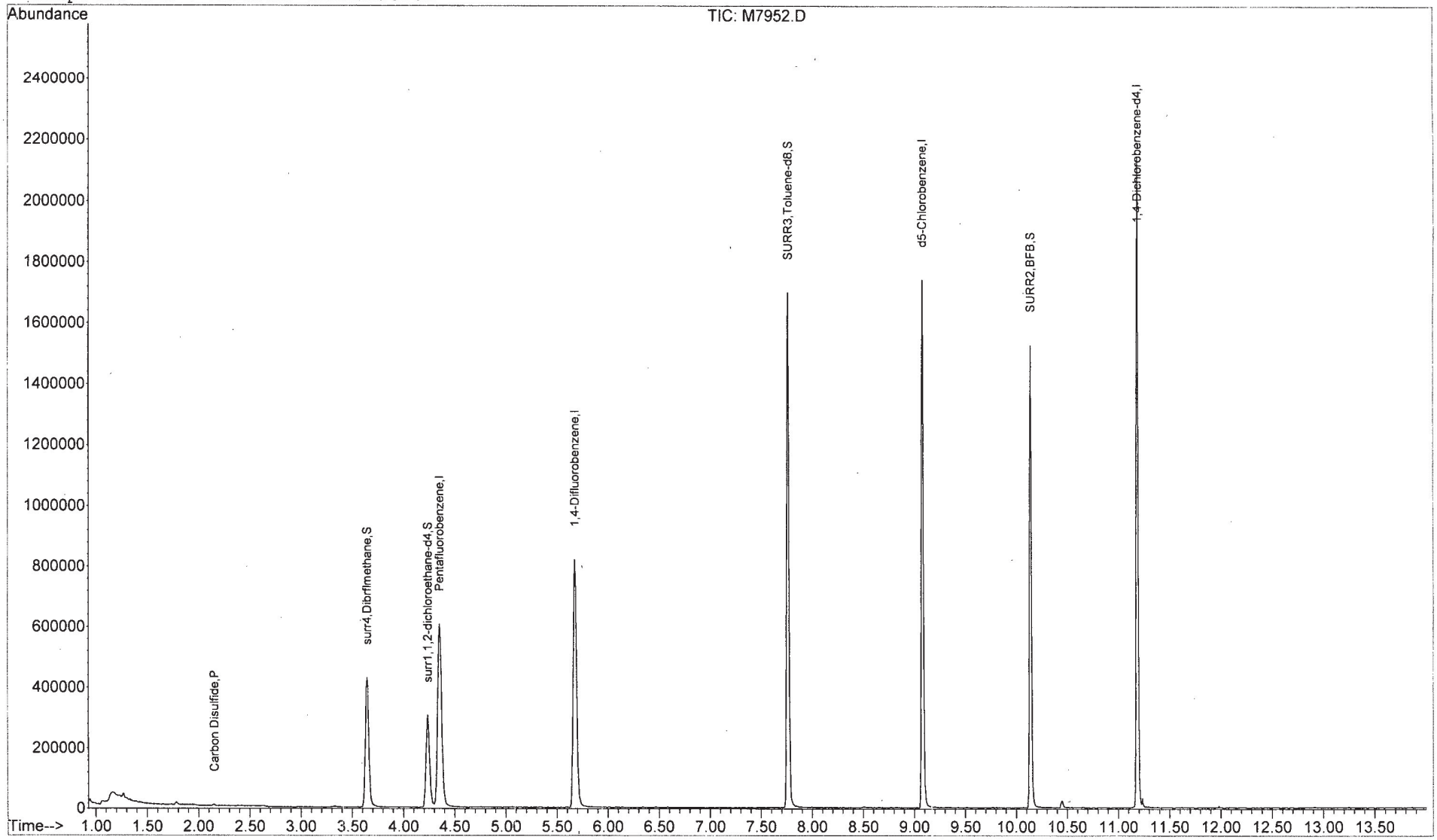
DL
3/23/16

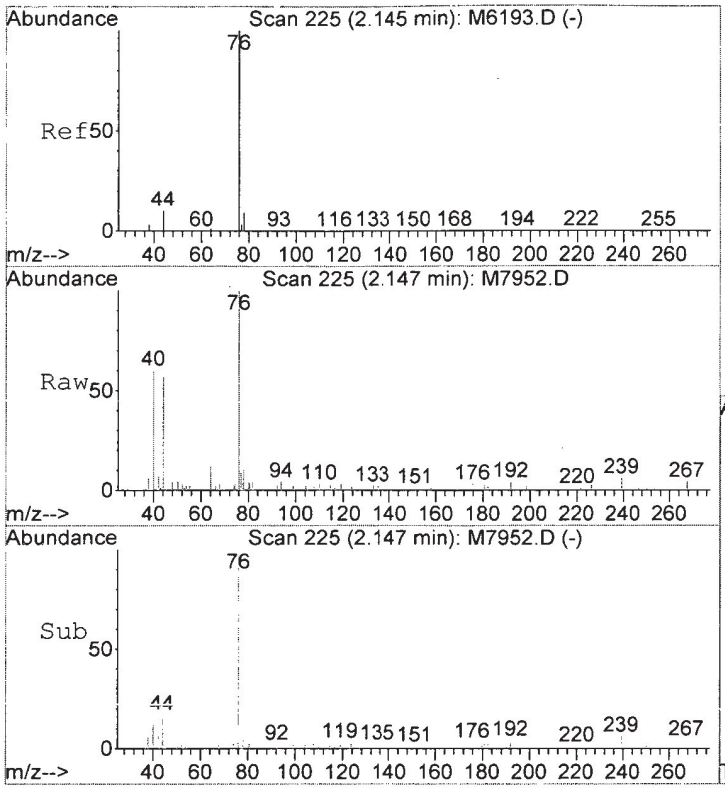
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M7952.D W113015.M Wed Mar 23 13:59:08 2016

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7952.D Vial: 17
Acq On : 22 Mar 2016 4:06 pm Operator: D.Lipani
Sample : R1602524-001|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:58 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

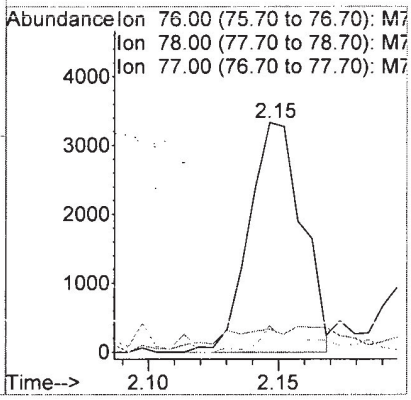




#24
Carbon Disulfide
Concen: 0.27 ug/L
RT: 2.15 min Scan# 225
Delta R.T. 0.00 min
Lab File: M7952.D
Acq: 22 Mar 2016 4:06 pm

Tgt Ion: 76 Resp: 4734

Ion	Ratio	Lower	Upper
76	100		
78	10.0	0.0	29.8
77	11.4	0.0	22.9



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7951.D Vial: 16
Acq On : 22 Mar 2016 3:34 pm Operator: D.Lipani
Sample : R1602524-002|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:55 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	636275	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	870884	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	802593	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	492323	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	311814	57.08	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 114.16%			
42) surr1,1,2-dichloroethane-d	4.24	65	255367	57.32	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 114.64%			
62) SURR3,Toluene-d8	7.76	98	975190	53.76	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.52%			
82) SURR2,BFB	10.14	95	382193	53.20	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.40%			
Target Compounds						Qvalue
6) Chloroethane	1.38	64	337631	87.29	ug/L	98
9) Freon 123a	1.60	67	12647	1.93	ug/L	92
12) Acetonitrile	1.66	41	942	2.27	ug/L #	1
13) 2-Propanol	1.72	45	943	6.06	ug/L #	1
14) Acetone	1.73	43	38222	50.15	ug/L	96
17) Iodomethane	1.96	142	437	1.18	ug/L	93
18) TBA	1.98	59	1347	5.36	ug/L	78
22) Methyl Acetate	2.10	43	788	0.34	ug/L	92
27) 1,1-Diclethane	2.71	63	109109	12.52	ug/L	97
31) 2-Butanone	3.18	43	9752	8.51	ug/L	91
33) cis-1,2-Dichloroethene	3.26	96	20906	3.74	ug/L	94
38) 1,1,1-Trichloroethane	4.47	97	13687	1.92	ug/L	98
47) Benzene	5.15	78	5875	0.30	ug/L	92
51) Trichloroethene	6.13	130	13848	2.39	ug/L	100
63) Toluene	7.83	91	5352	0.26	ug/L	83
68) 2-Hexanone	8.17	43	1123	0.62	ug/L	92
71) Tetrachloroethene	8.50	164	1216m	0.25	ug/L	

NTS

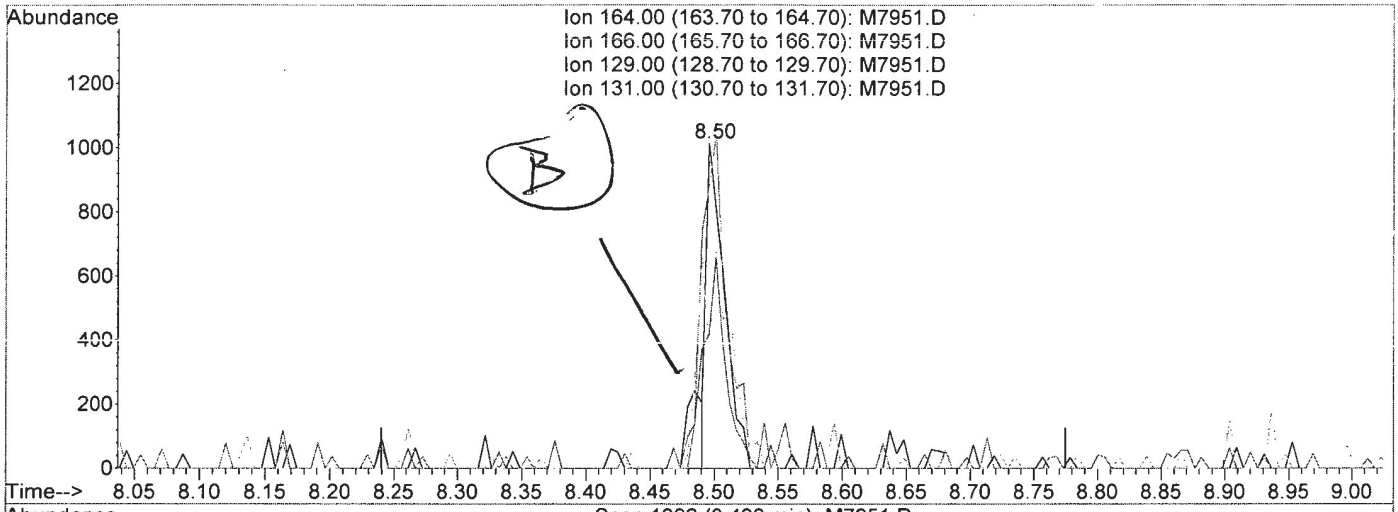
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3/23/16

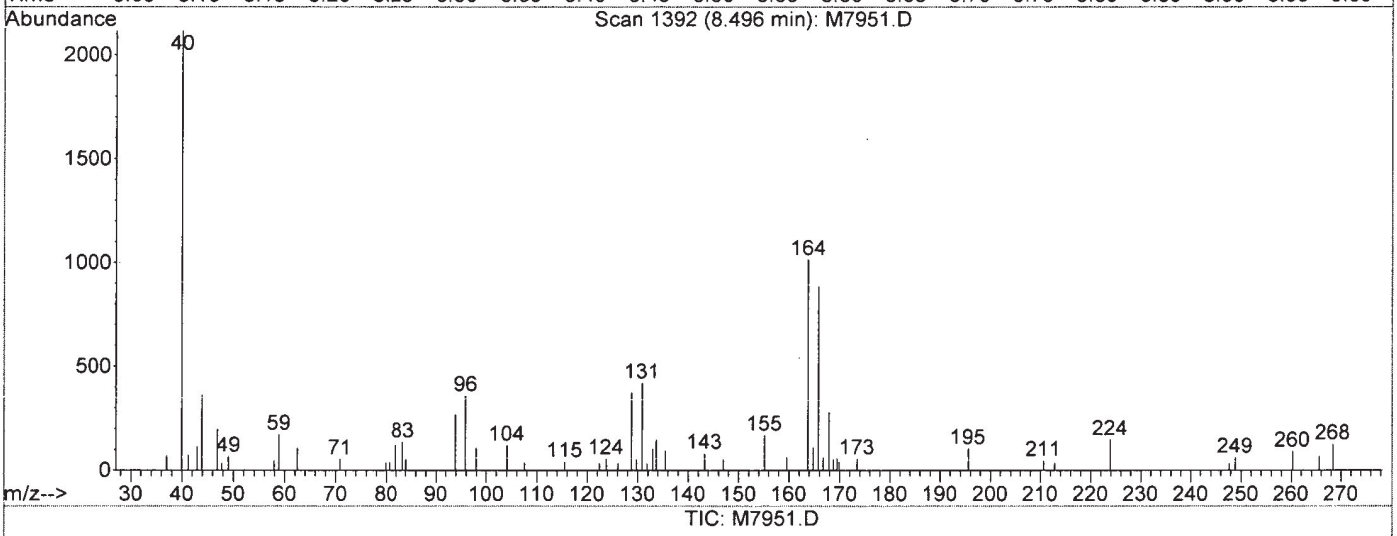
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Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7951.D Vial: 16
Acq On : 22 Mar 2016 3:34 pm Operator: D.Lipani
Sample : R1602524-002|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:52 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration





TIC: M7951.D

(71) Tetrachloroethene (P)

8.50min 0.21ug/L

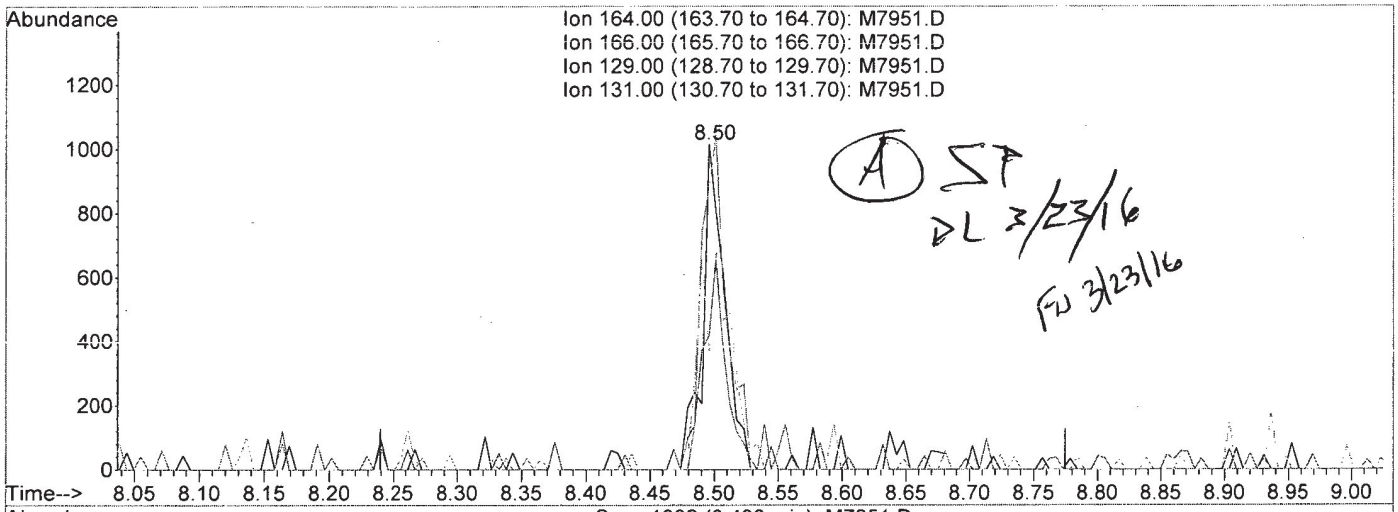
response 1008

Ion	Exp%	Act%
164.00	100	100
166.00	128.30	137.80
129.00	85.80	114.78#
131.00	83.80	0.00#

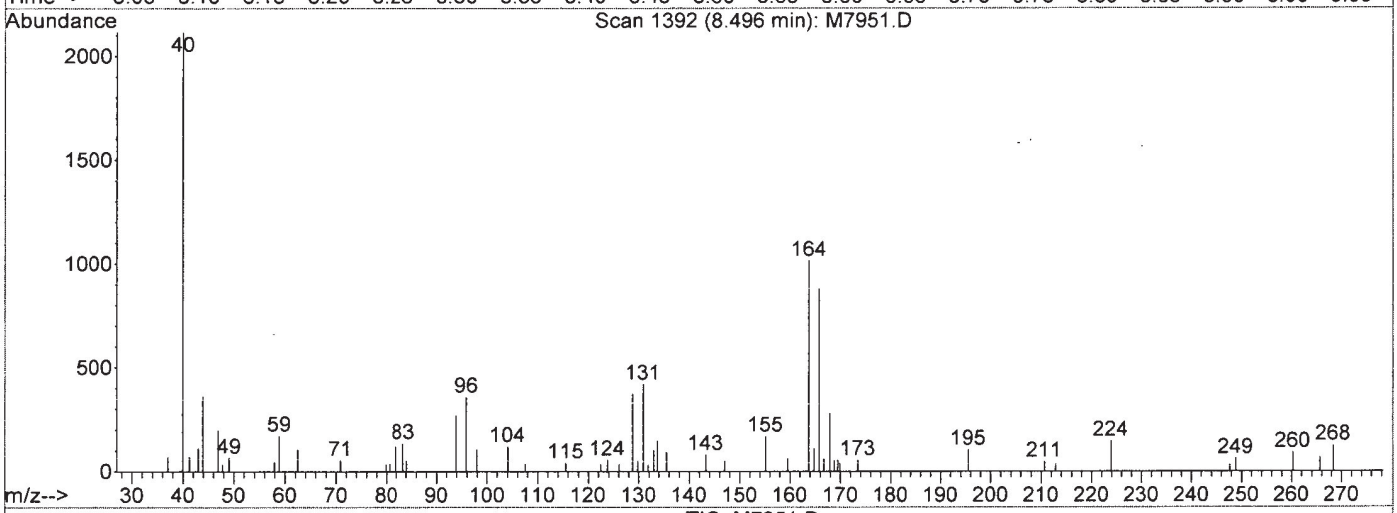
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7951.D Vial: 16
Acq On : 22 Mar 2016 3:34 pm Operator: D.Lipani
Sample : R1602524-002|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:54 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration



A SP DL 3/23/16 FW 3/23/16



TIC: M7951.D

(71) Tetrachloroethene (P)

8.50min 0.25ug/L m

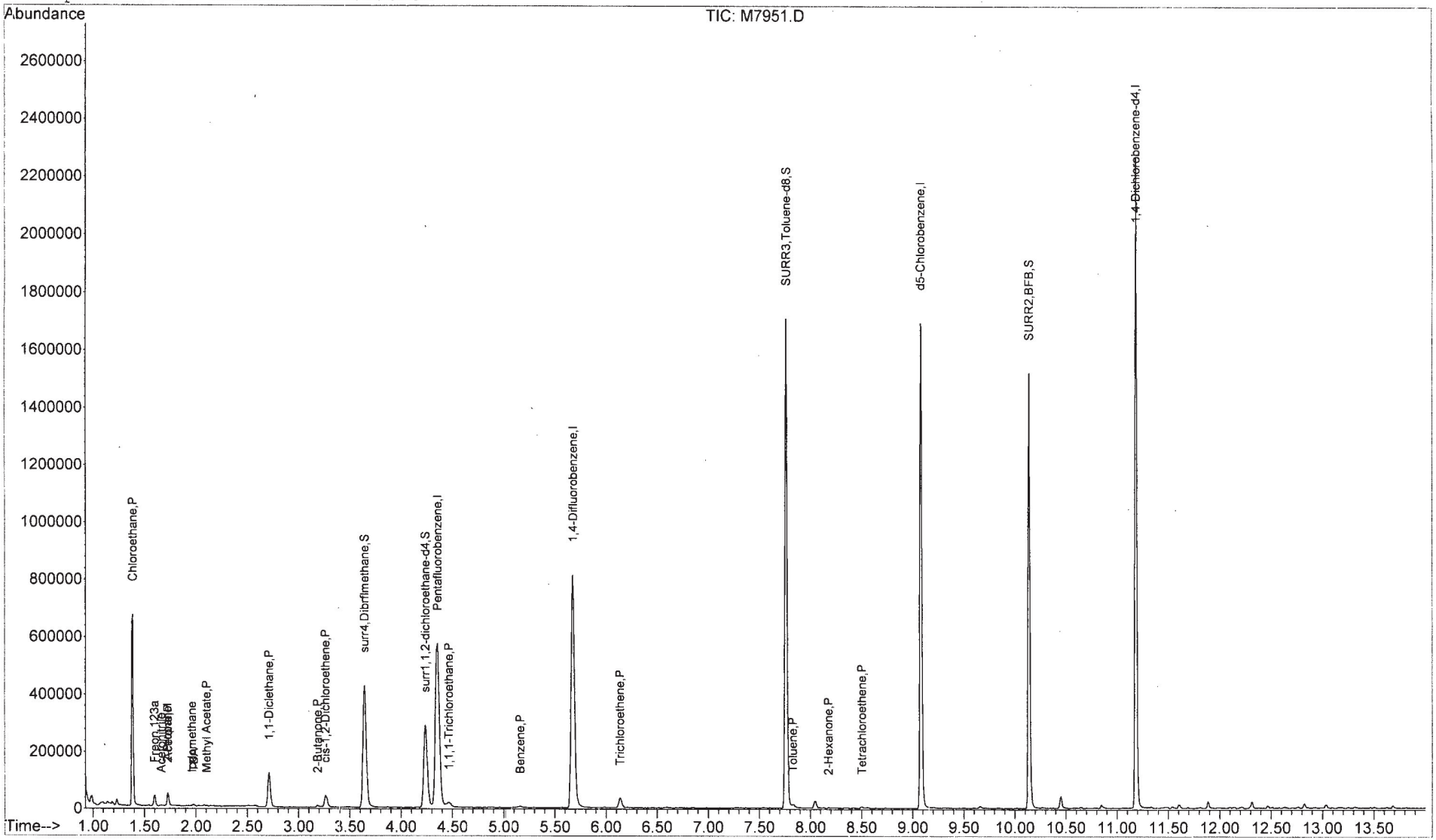
response 1216

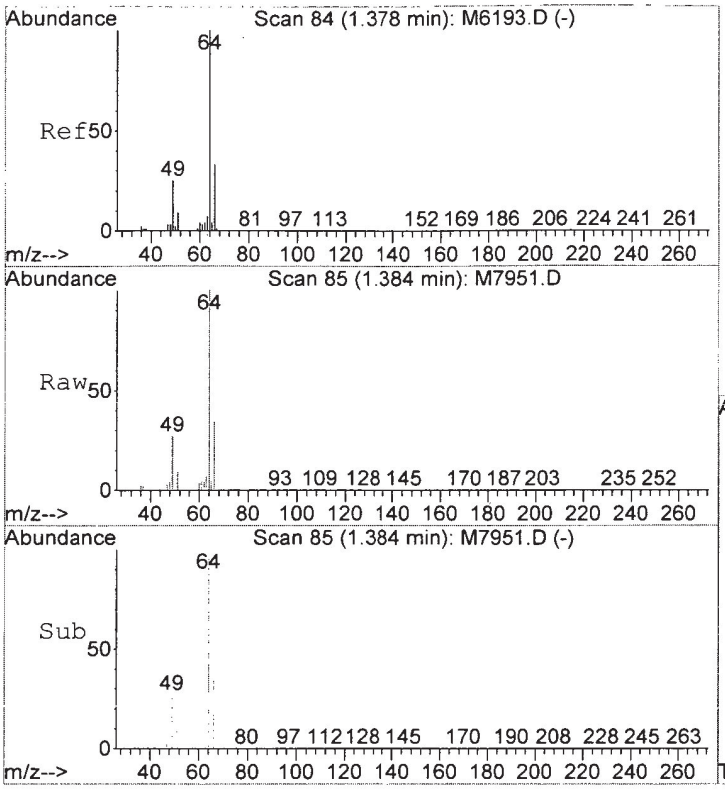
Ion	Exp%	Act%
164.00	100	100
166.00	128.30	114.23
129.00	85.80	95.15
131.00	83.80	0.00#

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7951.D Vial: 16
Acq On : 22 Mar 2016 3:34 pm Operator: D.Lipani
Sample : R1602524-002|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:55 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

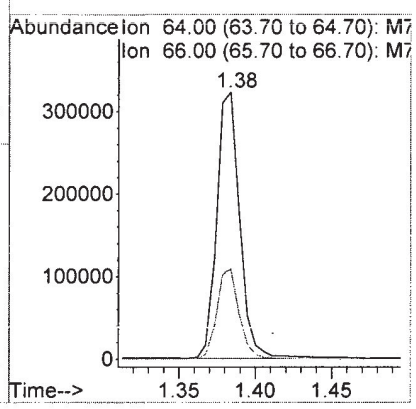


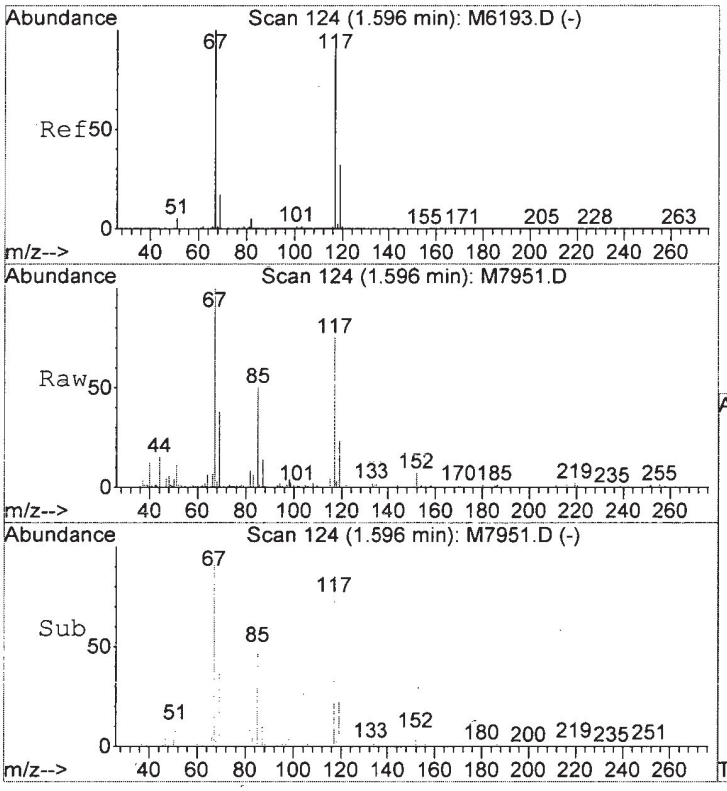


#6
Chloroethane
Concen: 87.29 ug/L
RT: 1.38 min Scan# 85
Delta R.T. 0.01 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 64 Resp: 337631

Ion	Ratio	Lower	Upper
64	100		
66	33.8	12.6	52.6

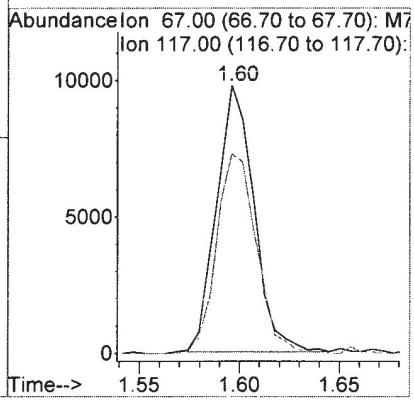


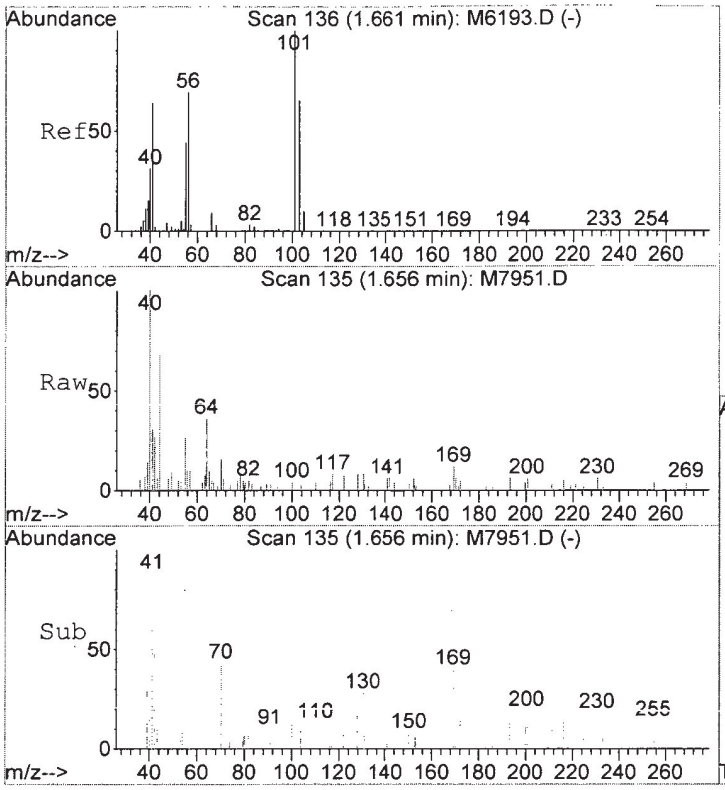


#9
Freon 123a
Concen: 1.93 ug/L
RT: 1.60 min Scan# 124
Delta R.T. 0.00 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 67 Resp: 12647

Ion	Ratio	Lower	Upper
67	100		
117	74.6	62.0	102.0

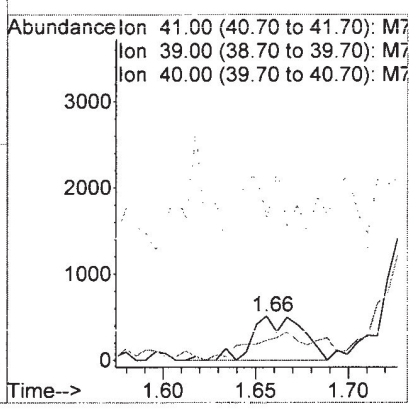


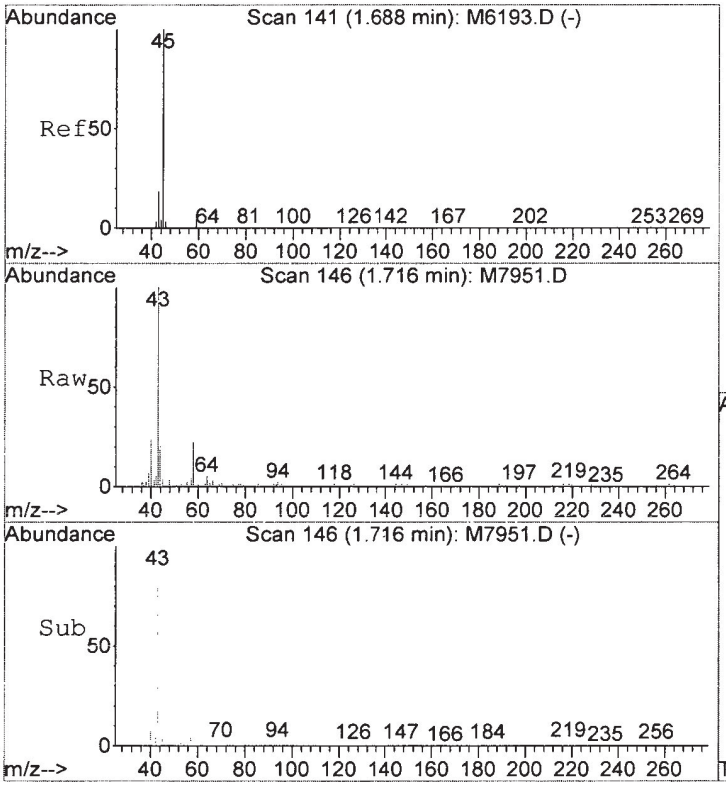


#12
Acetonitrile
Concen: 2.27 ug/L
RT: 1.66 min Scan# 135
Delta R.T. -0.01 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 41 Resp: 942

Ion	Ratio	Lower	Upper
41	100		
39	45.4	3.5	43.5#
40	325.0	29.1	69.1#

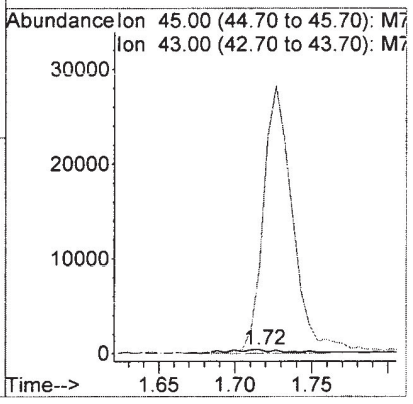


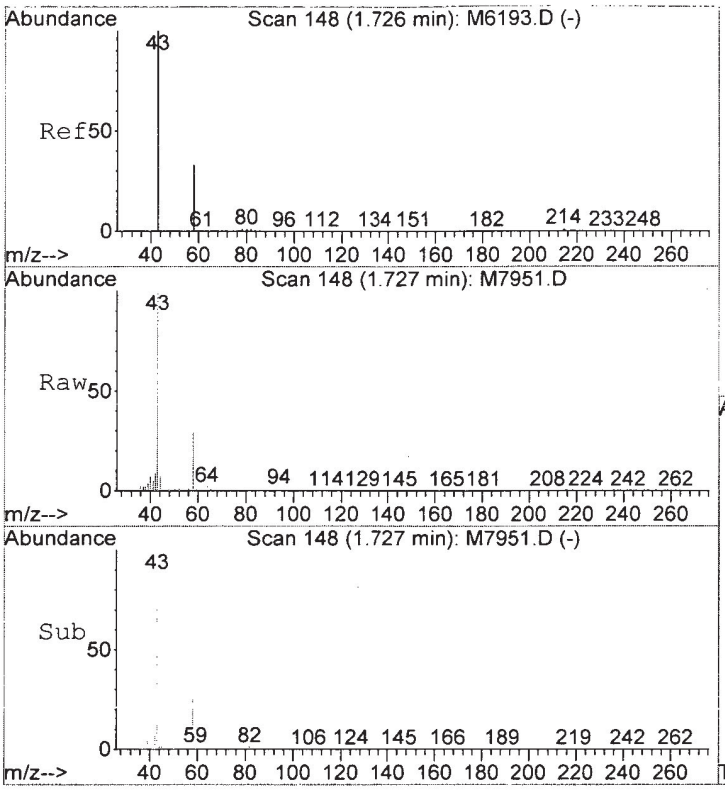


#13
2-Propanol
Concen: 6.06 ug/L
RT: 1.72 min Scan# 146
Delta R.T. 0.03 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 45 Resp: 943

Ion	Ratio	Lower	Upper
45	100		
43	2305.9	0.0	38.2#

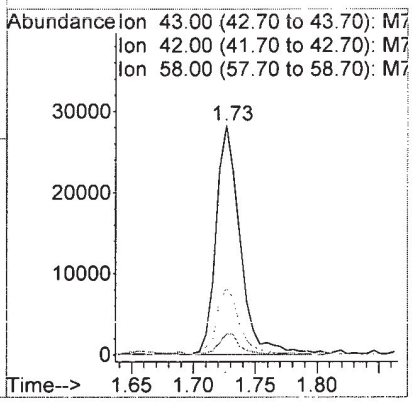


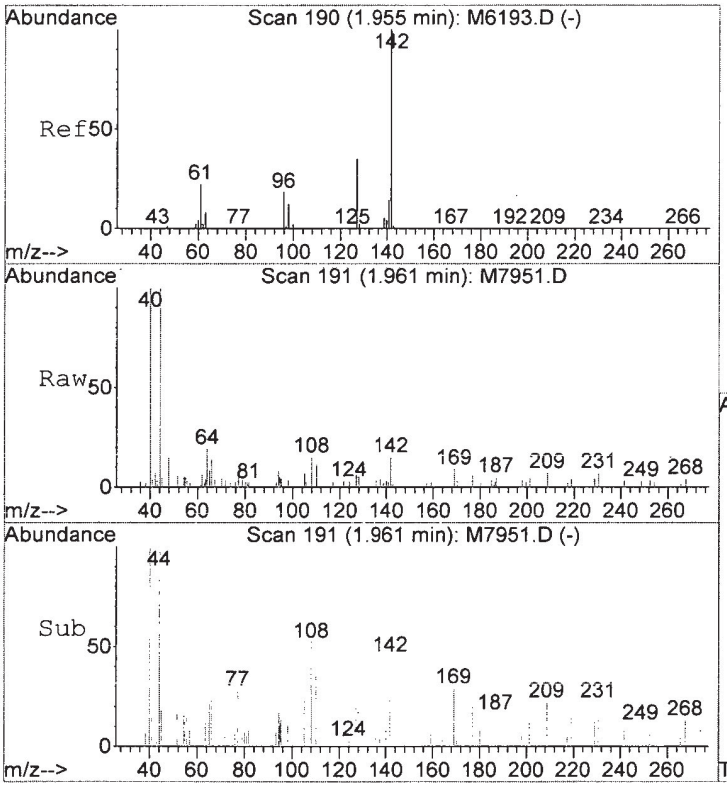


#14
Acetone
Concen: 50.15 ug/L
RT: 1.73 min Scan# 148
Delta R.T. 0.00 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 43 Resp: 38222

Ion	Ratio	Lower	Upper
43	100		
42	9.1	0.0	29.0
58	28.9	6.3	46.3

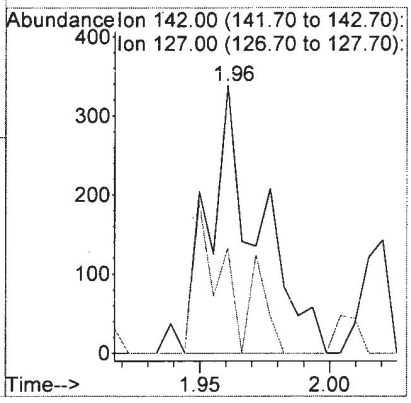


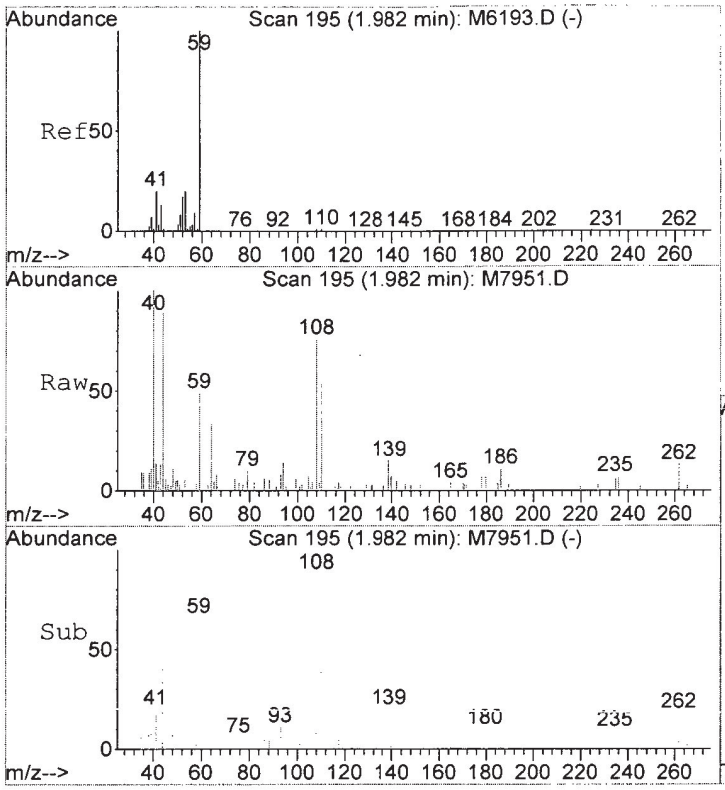


#17
Iodomethane
Concen: 1.18 ug/L
RT: 1.96 min Scan# 191
Delta R.T. 0.01 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion:142 Resp: 437

Ion	Ratio	Lower	Upper
142	100		
127	39.3	15.3	55.3

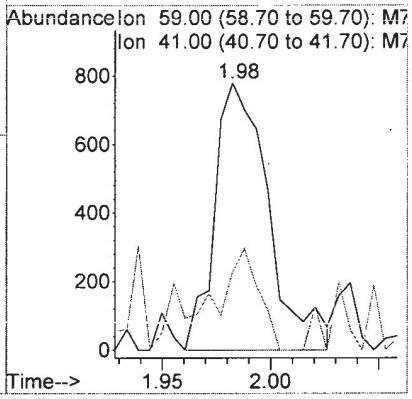


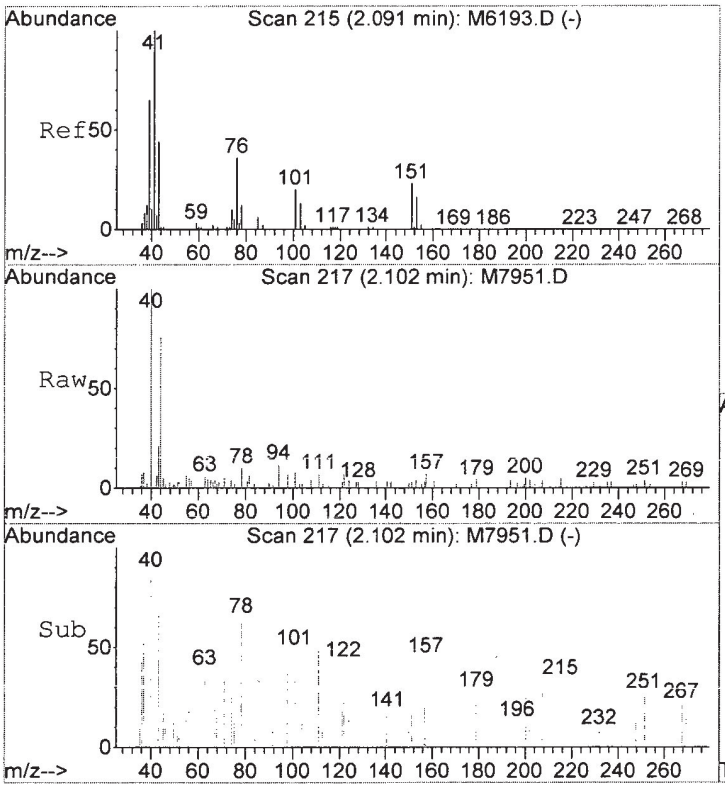


#18
TBA
Concen: 5.36 ug/L
RT: 1.98 min Scan# 195
Delta R.T. 0.00 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 59 Resp: 1347

Ion	Ratio	Lower	Upper
59	100		
41	29.3	0.0	39.4

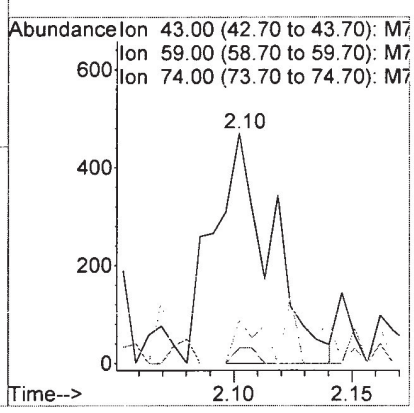


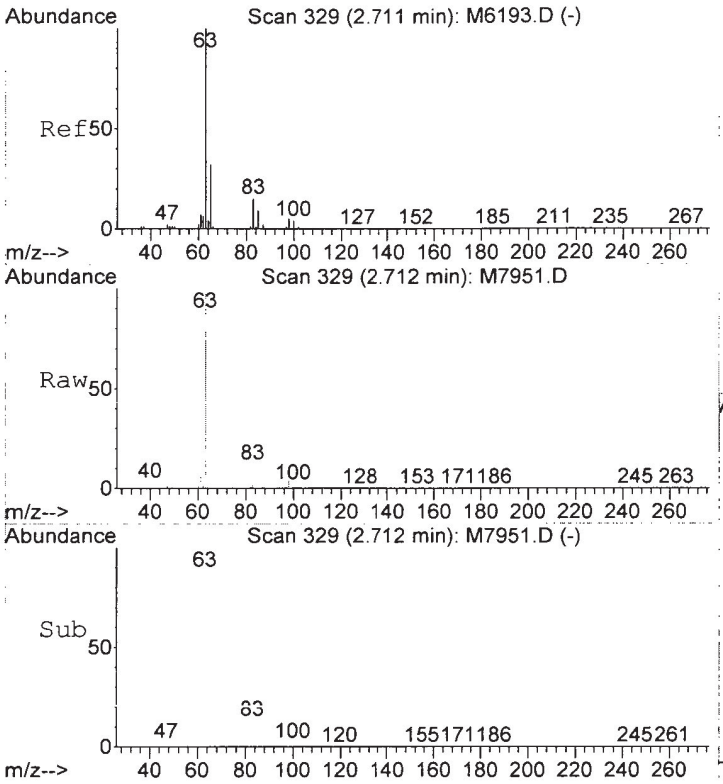


#22
Methyl Acetate
Concen: 0.34 ug/L
RT: 2.10 min Scan# 217
Delta R.T. 0.01 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 43 Resp: 788

Ion	Ratio	Lower	Upper
43	100		
59	6.6	0.0	29.2
74	18.7	2.4	42.4

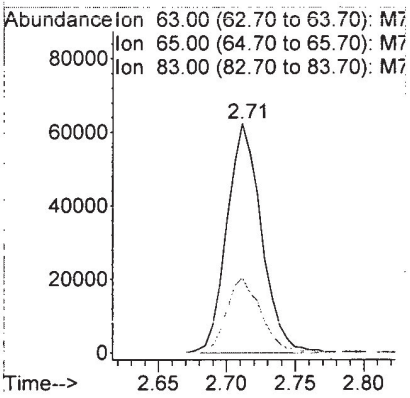


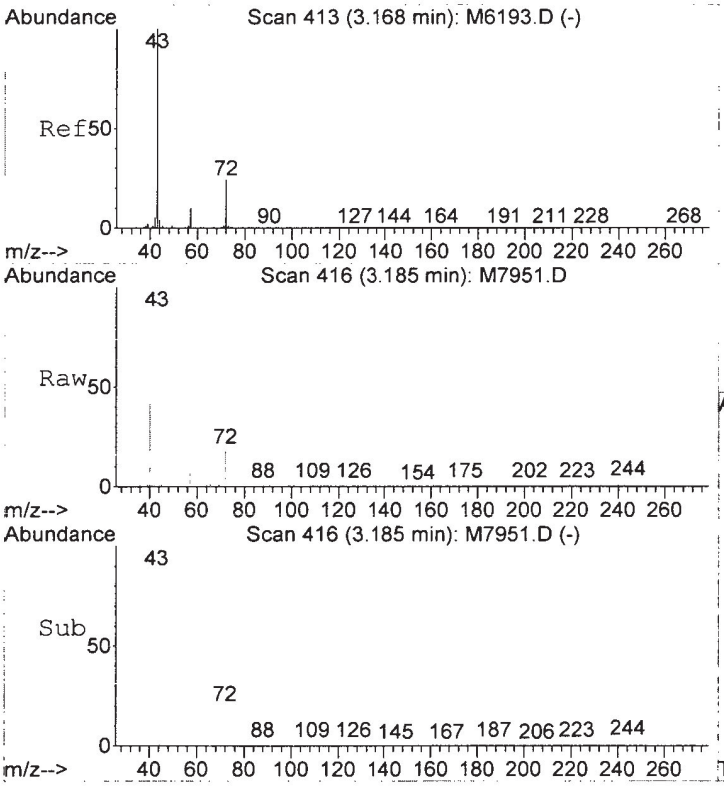


#27
1,1-Diclethane
Concen: 12.52 ug/L
RT: 2.71 min Scan# 329
Delta R.T. 0.00 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 63 Resp: 109109

Ion	Ratio	Lower	Upper
63	100		
65	32.9	12.2	52.2
83	12.5	0.0	35.5

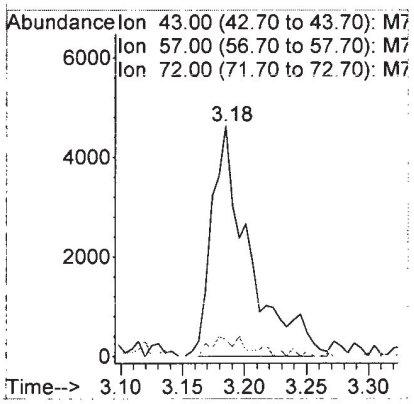


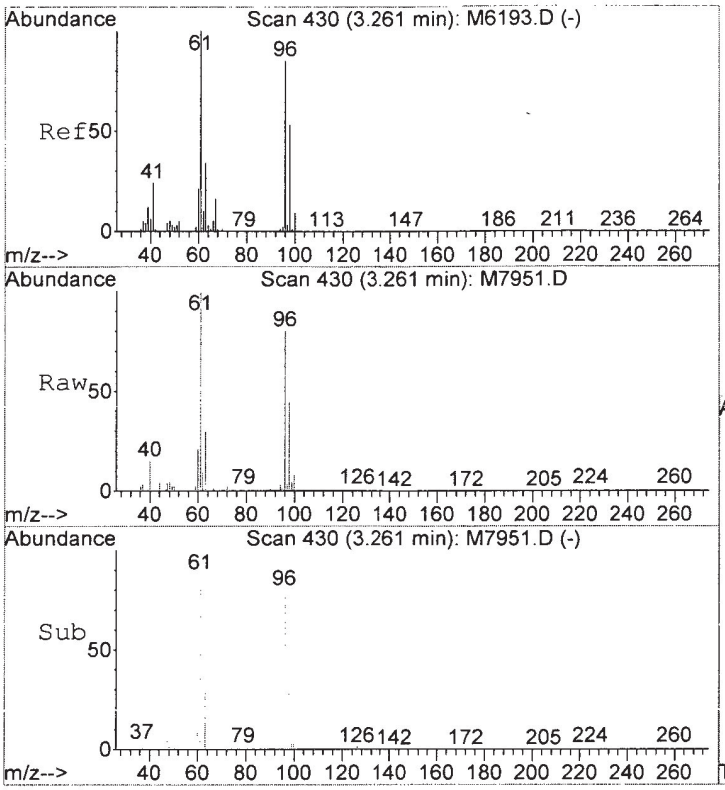


#31
2-Butanone
Concen: 8.51 ug/L
RT: 3.18 min Scan# 416
Delta R.T. 0.02 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 43 Resp: 9752

Ion	Ratio	Lower	Upper
43	100		
57	7.4	0.0	29.7
72	19.4	4.2	44.2

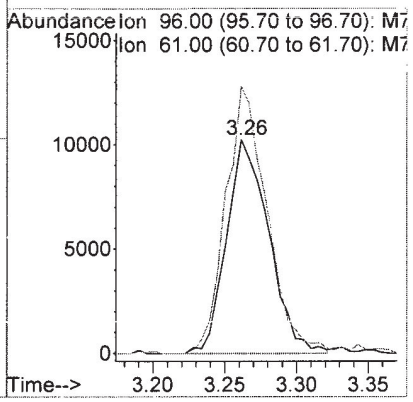


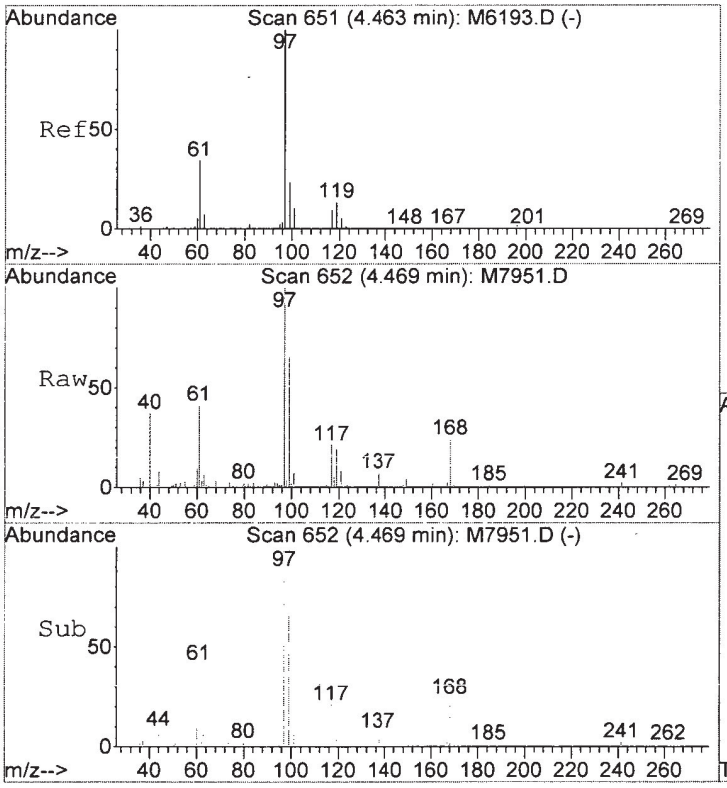


#33
cis-1,2-Dichloroethene
Concen: 3.74 ug/L
RT: 3.26 min Scan# 430
Delta R.T. 0.00 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 96 Resp: 20906

Ion	Ratio	Lower	Upper
96	100		
61	124.8	98.2	138.2

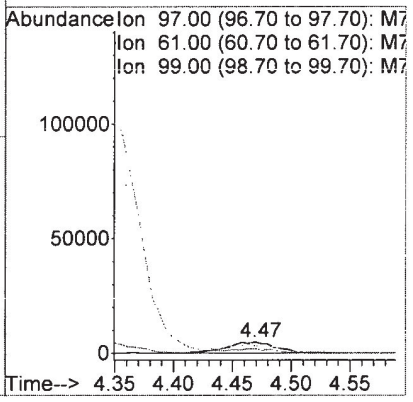


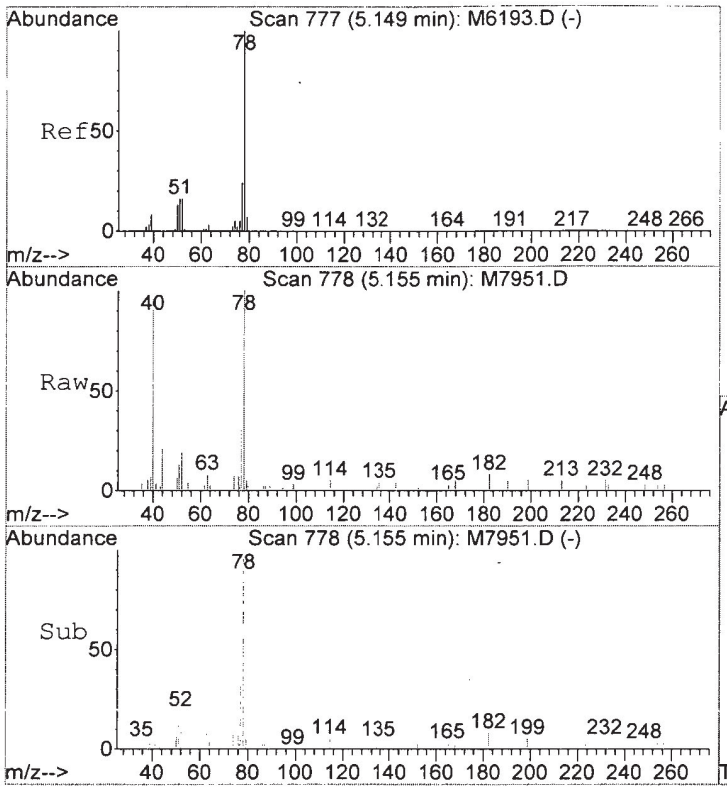


#38
1,1,1-Trichloroethane
Concen: 1.92 ug/L
RT: 4.47 min Scan# 652
Delta R.T. 0.01 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 97 Resp: 13687

Ion	Ratio	Lower	Upper
97	100		
61	41.4	19.7	59.7
99	65.4	47.3	87.3

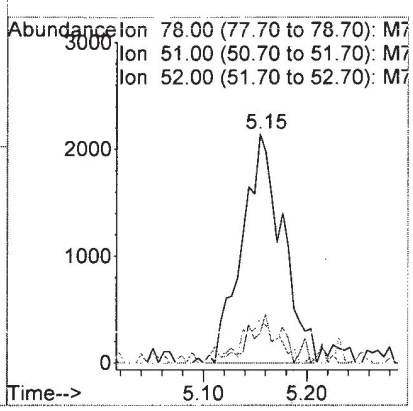


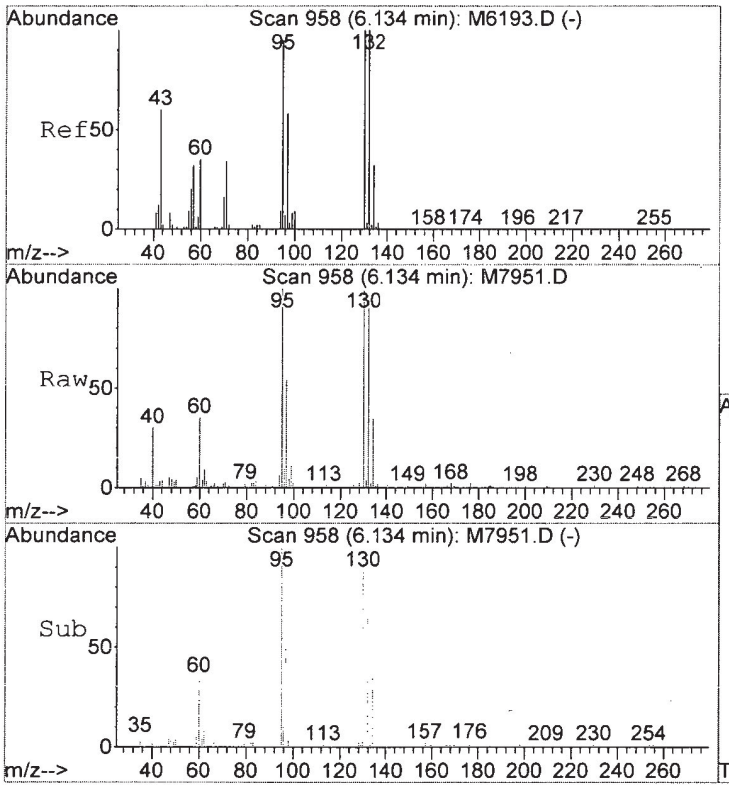


#47
Benzene
Concen: 0.30 ug/L
RT: 5.15 min Scan# 778
Delta R.T. 0.01 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 78 Resp: 5875

Ion	Ratio	Lower	Upper
78	100		
51	12.8	0.0	36.0
52	19.4	0.0	35.6

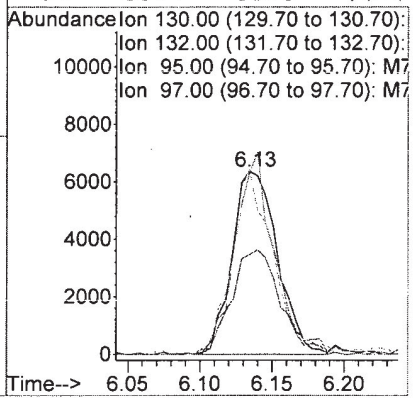


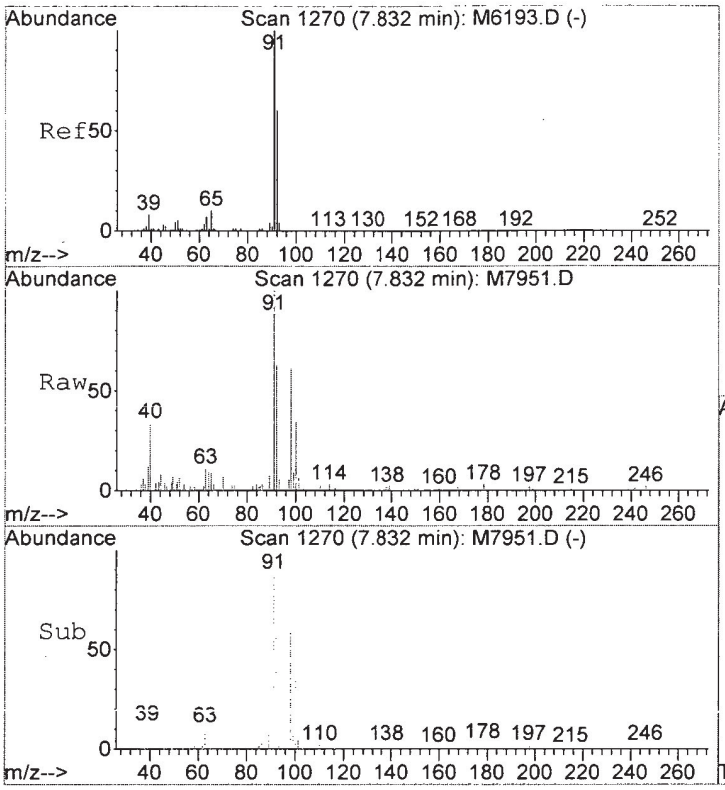


#51
Trichloroethene
Concen: 2.39 ug/L
RT: 6.13 min Scan# 958
Delta R.T. 0.00 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion:130 Resp: 13848

Ion	Ratio	Lower	Upper
130	100		
132	95.7	76.5	116.5
95	92.6	72.7	112.7
97	60.7	40.5	80.5

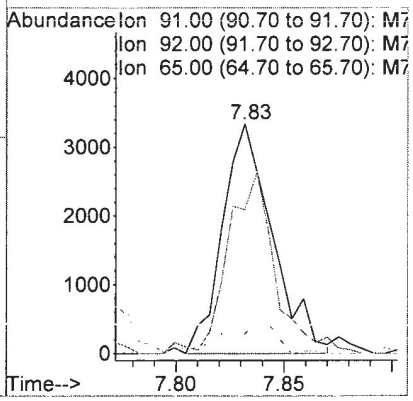


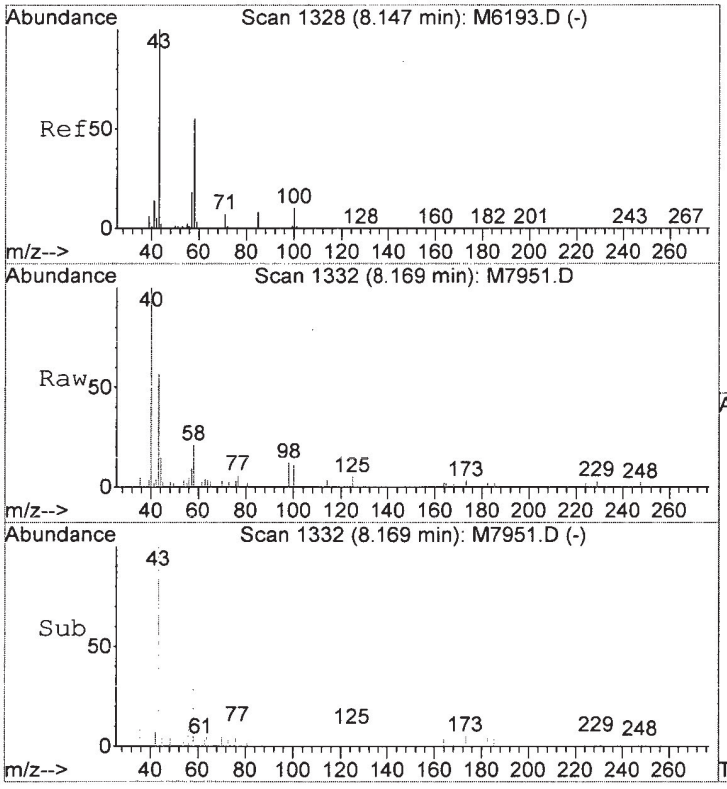


#63
Toluene
Concen: 0.26 ug/L
RT: 7.83 min Scan# 1270
Delta R.T. 0.00 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 91 Resp: 5352

Ion	Ratio	Lower	Upper
91	100		
92	73.1	39.0	79.0
65	6.6	0.0	30.4

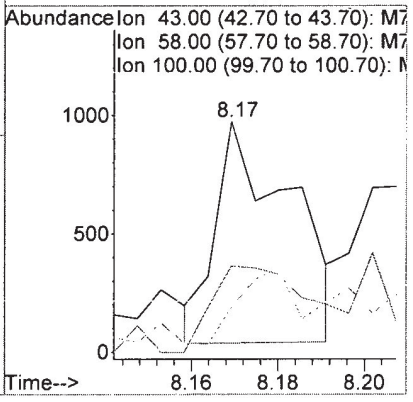


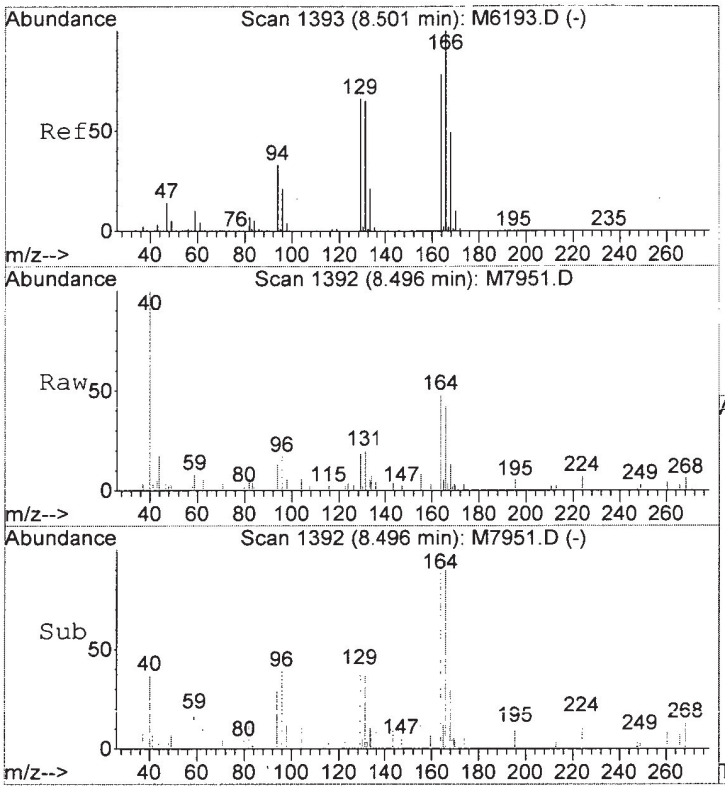


#68
2-Hexanone
Concen: 0.62 ug/L
RT: 8.17 min Scan# 1332
Delta R.T. 0.02 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion: 43 Resp: 1123

Ion	Ratio	Lower	Upper
43	100		
58	53.3	34.6	74.6
100	25.0	0.0	30.4

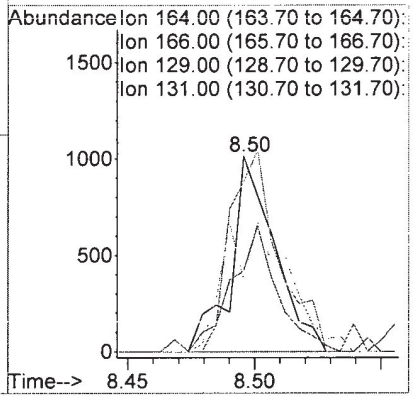




#71
Tetrachloroethene
Concen: 0.25 ug/L m
RT: 8.50 min Scan# 1392
Delta R.T. -0.01 min
Lab File: M7951.D
Acq: 22 Mar 2016 3:34 pm

Tgt Ion:164 Resp: 1216

Ion	Ratio	Lower	Upper
164	100		
166	114.2	108.3	148.3
129	95.1	65.8	105.8
131	0.0	63.8	103.8#



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7953.D Vial: 18
Acq On : 22 Mar 2016 4:38 pm Operator: D.Lipani
Sample : R1602524-003|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:02 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	4.35	168	636327	50.00	ug/L		0.00
39) 1,4-Difluorobenzene	5.67	114	874566	50.00	ug/L		0.00
64) d5-Chlorobenzene	9.08	117	798630	50.00	ug/L		0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	496137	50.00	ug/L		0.00
System Monitoring Compounds							
40) surr4,Dibrflmethane	3.64	113	304597	55.53	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.06%				
42) surr1,1,2-dichloroethane-d	4.23	65	251434	56.20	ug/L		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 112.40%				
62) SURR3,Toluene-d8	7.76	98	974581	53.50	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.00%				
82) SURR2,BFB	10.14	95	392741	54.94	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 109.88%				
Target Compounds							Qvalue
14) Acetone	1.73	43	994	1.30	ug/L		91
17) Iodomethane	1.96	142	242	1.15	ug/L		81
21) Freon 113	2.08	101	13618	2.62	ug/L		93
33) cis-1,2-Dichloroethene	3.27	96	1721m	0.31	ug/L		
38) 1,1,1-Trichloroethane	4.46	97	2002	0.28	ug/L	#	50
51) Trichloroethene	6.14	130	58242	10.01	ug/L		98
71) Tetrachloroethene	8.50	164	1233	0.25	ug/L	#	42-LT

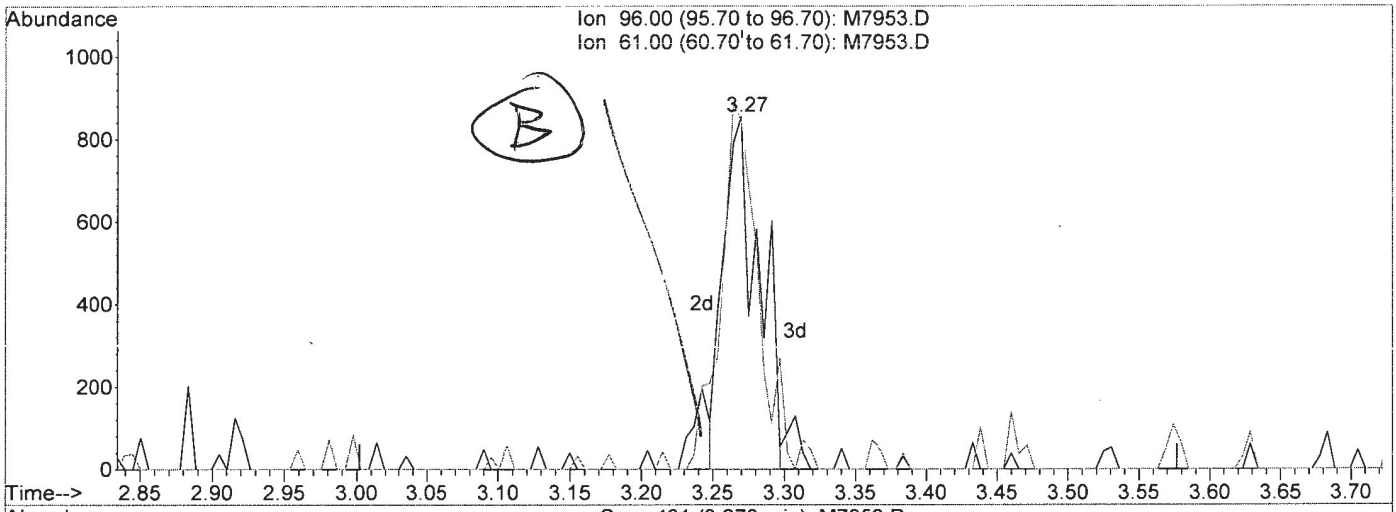
DL 3/23/16

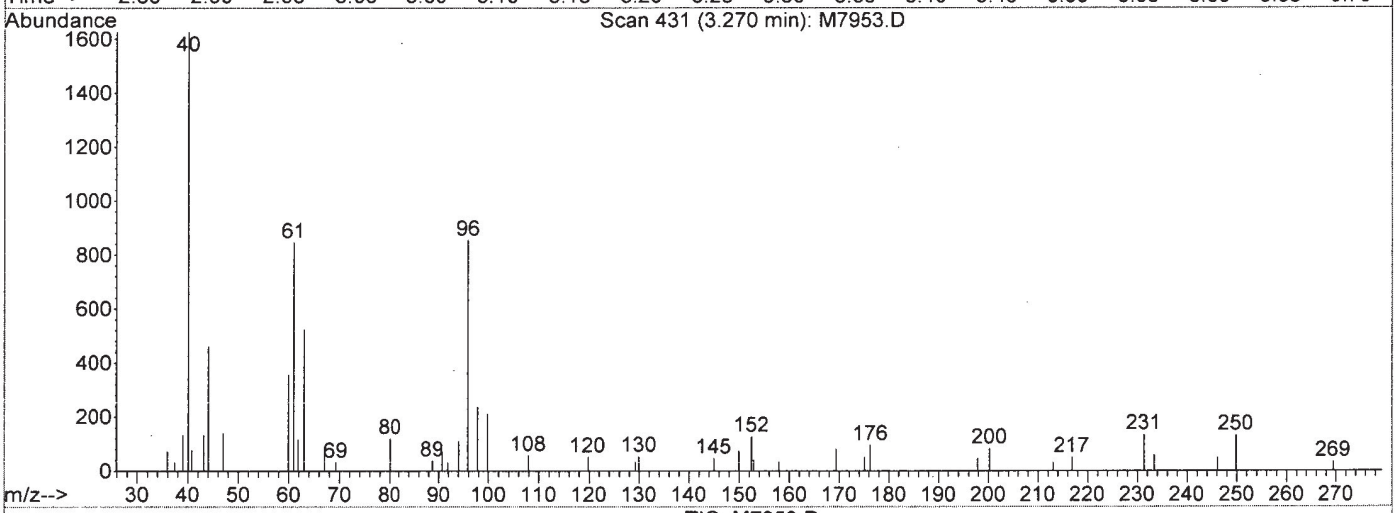
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7953.D Vial: 18
Acq On : 22 Mar 2016 4:38 pm Operator: D.Lipani
Sample : R1602524-003|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:00 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration





TIC: M7953.D

(33) cis-1,2-Dichloroethene (P)

3.27min 0.26ug/L

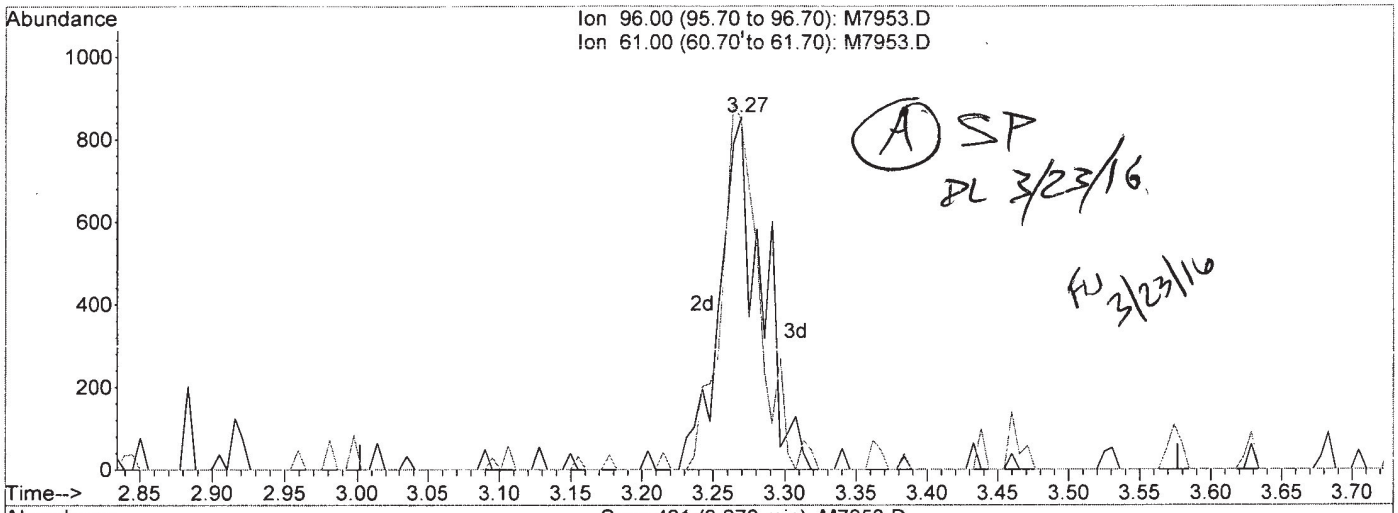
response 1476

Ion	Exp%	Act%
96.00	100	100
61.00	118.20	98.95
0.00	0.00	0.00
0.00	0.00	0.00

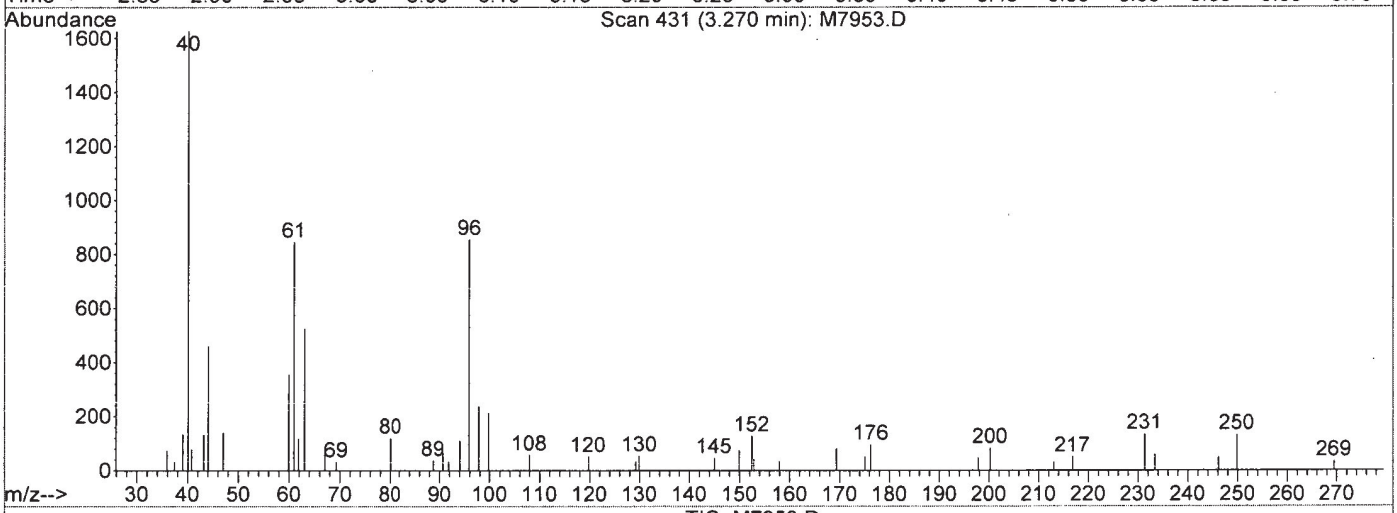
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7953.D Vial: 18
Acq On : 22 Mar 2016 4:38 pm Operator: D.Lipani
Sample : R1602524-003|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:01 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration



A SP DL 3/23/16 FW 3/23/16



TIC: M7953.D

(33) cis-1,2-Dichloroethene (P)

3.27min 0.31ug/L m

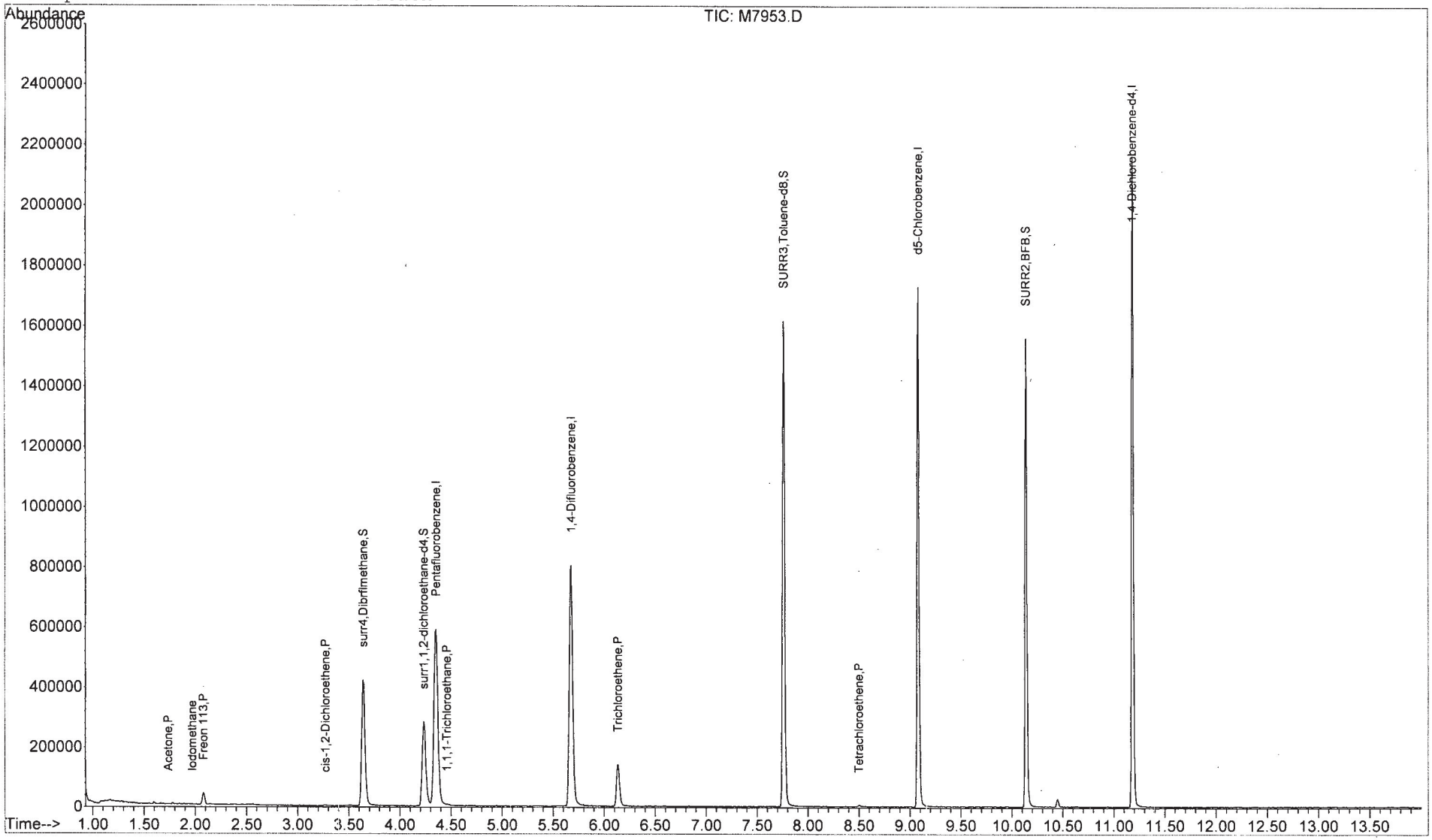
response 1721

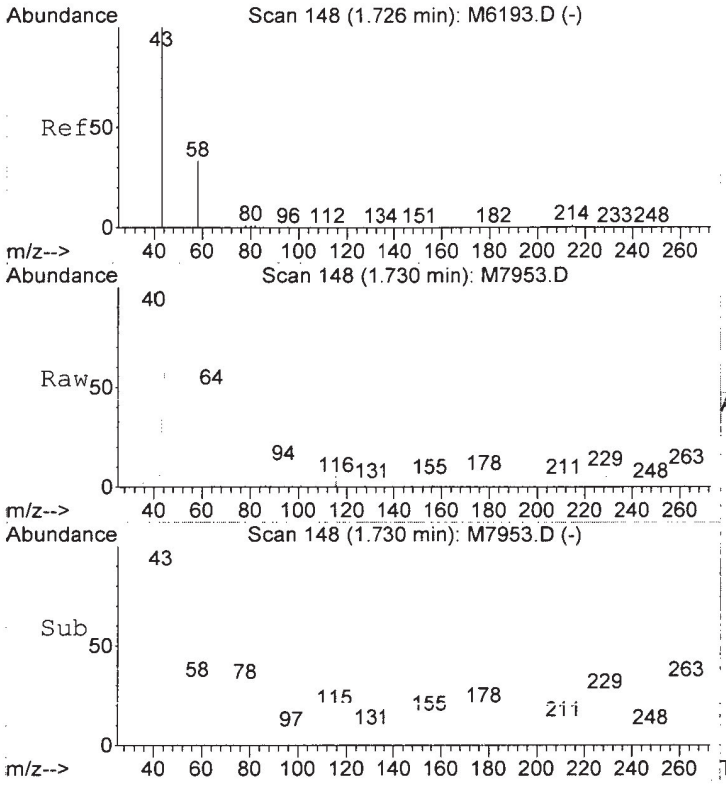
Ion	Exp%	Act%
96.00	100	100
61.00	118.20	98.95
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7953.D Vial: 18
Acq On : 22 Mar 2016 4:38 pm Operator: D.Lipani
Sample : R1602524-003|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:02 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

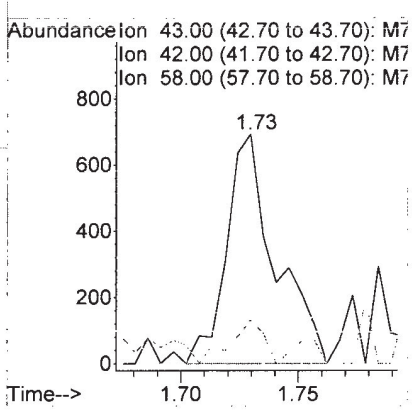


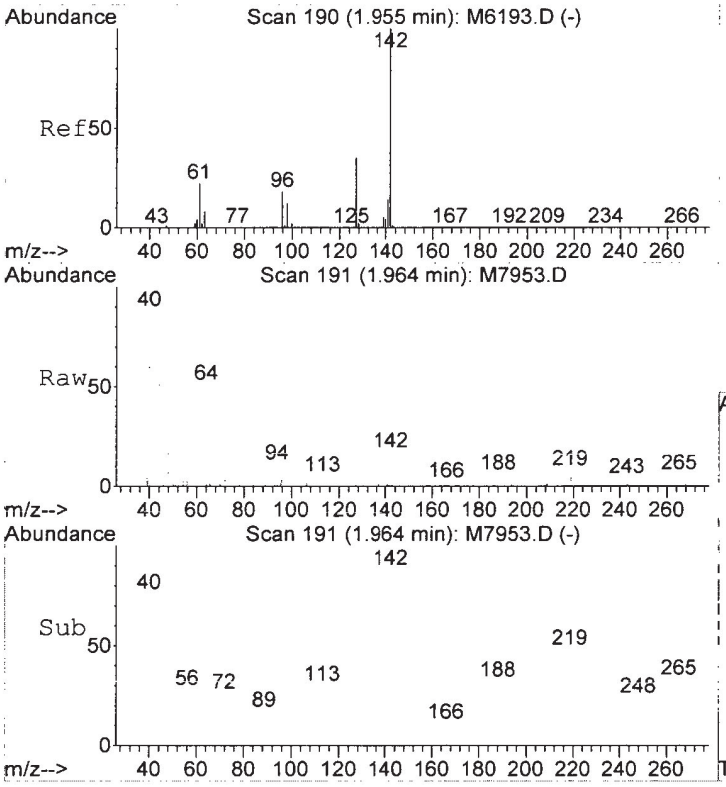


#14
Acetone
Concen: 1.30 ug/L
RT: 1.73 min Scan# 148
Delta R.T. 0.00 min
Lab File: M7953.D
Acq: 22 Mar 2016 4:38 pm

Tgt Ion: 43 Resp: 994

Ion	Ratio	Lower	Upper
43	100		
42	18.9	0.0	29.0
58	27.8	6.3	46.3

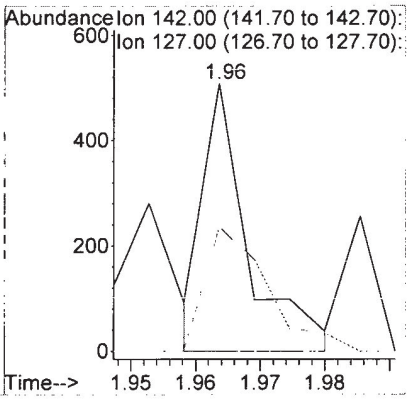


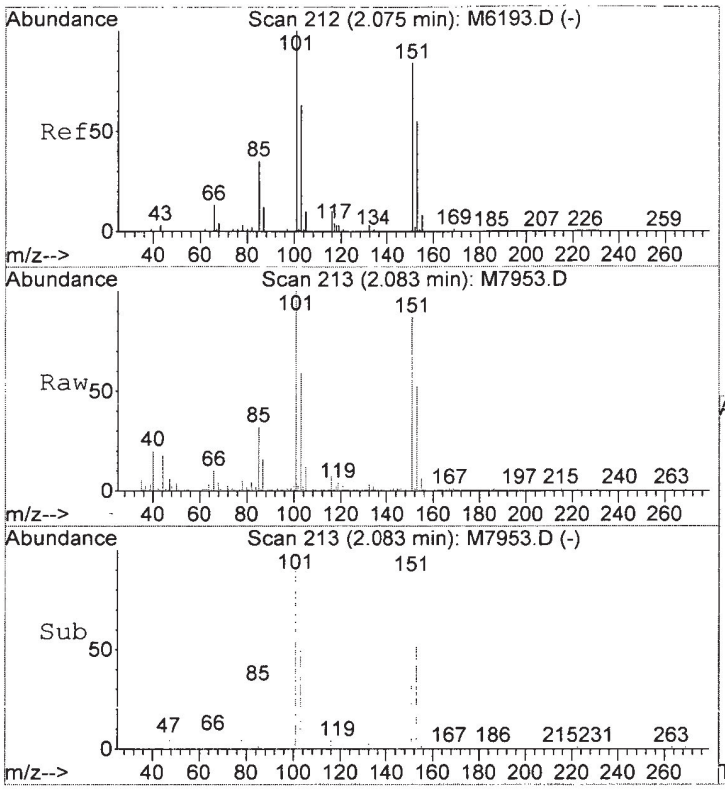


#17
Iodomethane
Concen: 1.15 ug/L
RT: 1.96 min Scan# 191
Delta R.T. 0.01 min
Lab File: M7953.D
Acq: 22 Mar 2016 4:38 pm

Tgt Ion:142 Resp: 242

Ion	Ratio	Lower	Upper
142	100		
127	46.3	15.3	55.3

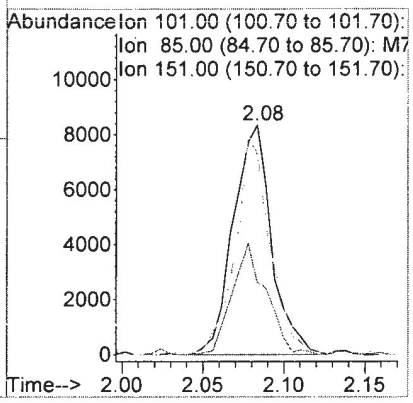


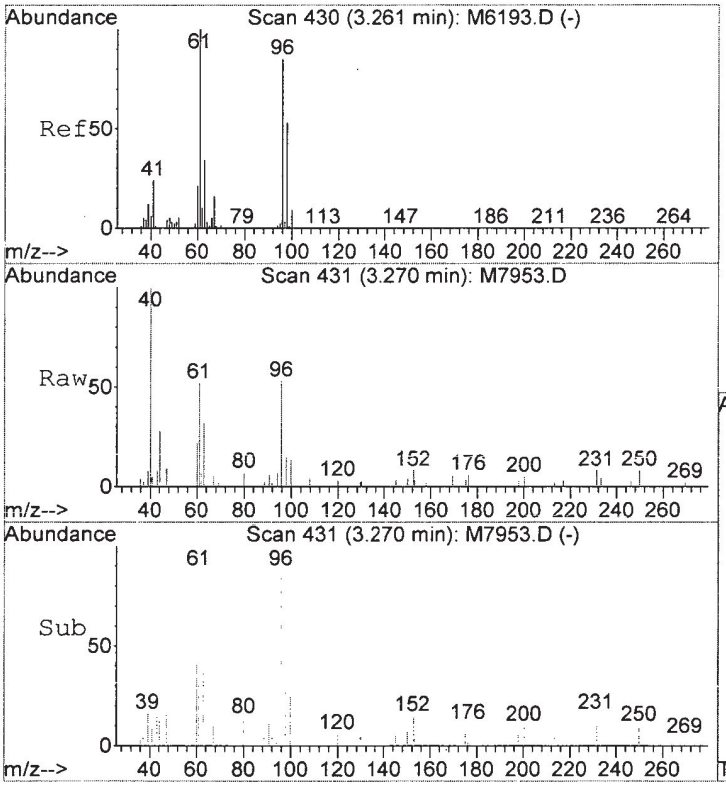


#21
Freon 113
Concen: 2.62 ug/L
RT: 2.08 min Scan# 213
Delta R.T. 0.01 min
Lab File: M7953.D
Acq: 22 Mar 2016 4:38 pm

Tgt Ion:101 Resp: 13618

Ion	Ratio	Lower	Upper
101	100		
85	31.5	20.1	60.1
151	87.3	64.0	104.0

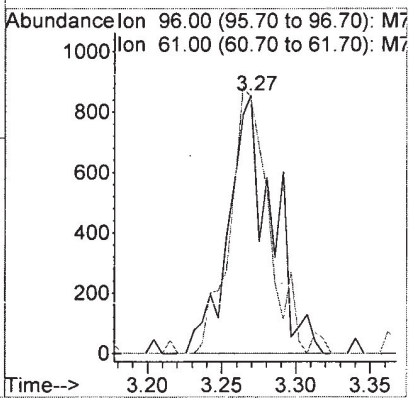


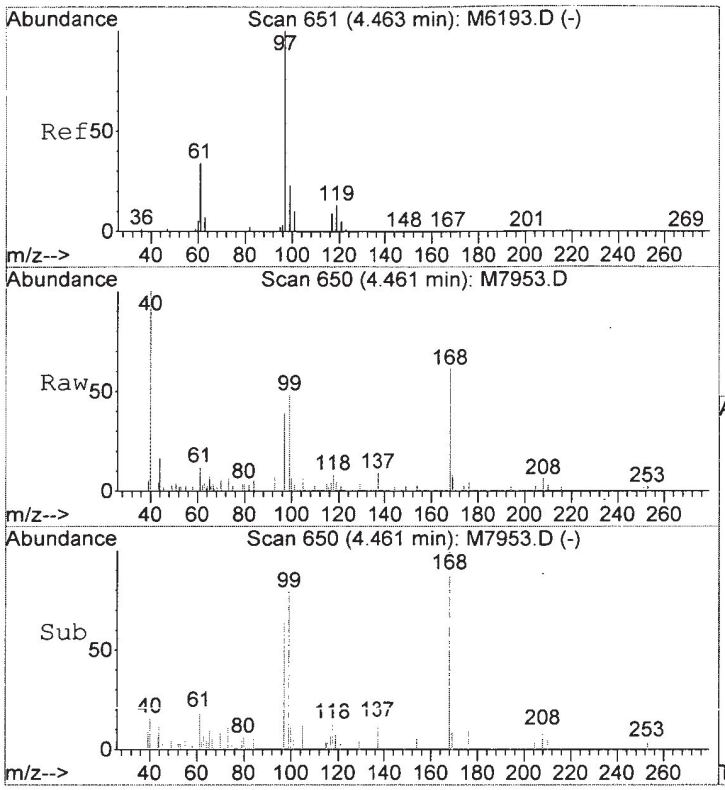


#33
cis-1,2-Dichloroethene
Concen: 0.31 ug/L m
RT: 3.27 min Scan# 431
Delta R.T. 0.01 min
Lab File: M7953.D
Acq: 22 Mar 2016 4:38 pm

Tgt Ion: 96 Resp: 1721

Ion	Ratio	Lower	Upper
96	100		
61	98.9	98.2	138.2

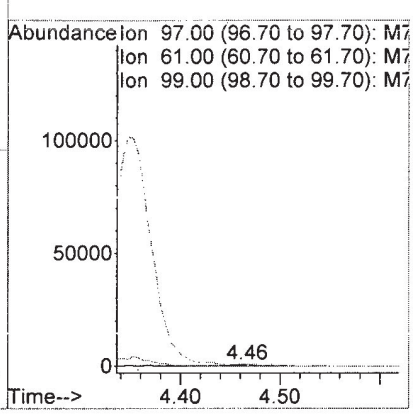


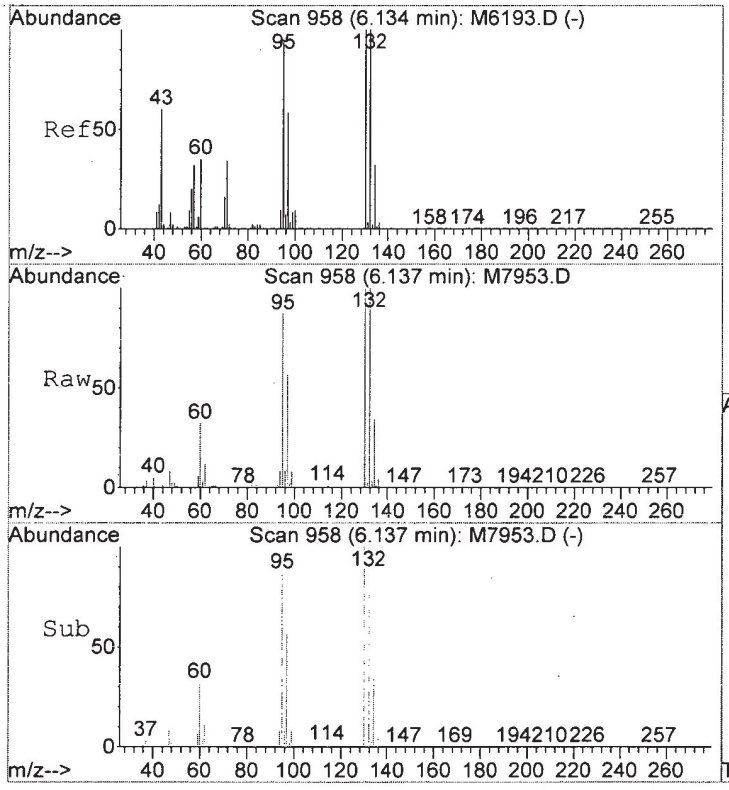


#38
1,1,1-Trichloroethane
Concen: 0.28 ug/L
RT: 4.46 min Scan# 650
Delta R.T. -0.00 min
Lab File: M7953.D
Acq: 22 Mar 2016 4:38 pm

Tgt Ion: 97 Resp: 2002

Ion	Ratio	Lower	Upper
97	100		
61	29.8	19.7	59.7
99	124.1	47.3	87.3#

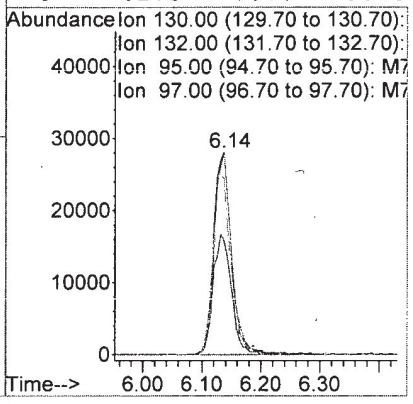


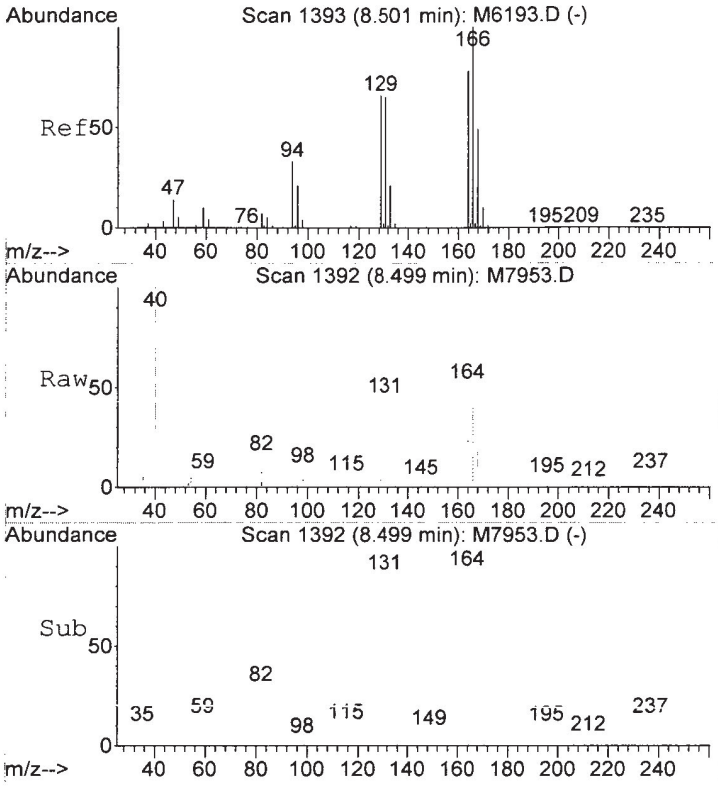


#51
Trichloroethene
Concen: 10.01 ug/L
RT: 6.14 min Scan# 958
Delta R.T. 0.00 min
Lab File: M7953.D
Acq: 22 Mar 2016 4:38 pm

Tgt Ion:130 Resp: 58242

Ion	Ratio	Lower	Upper
130	100		
132	96.7	76.5	116.5
95	89.1	72.7	112.7
97	61.3	40.5	80.5

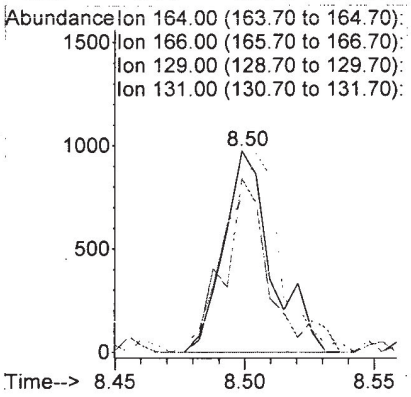




#71
Tetrachloroethene
Concen: 0.25 ug/L
RT: 8.50 min Scan# 1392
Delta R.T. -0.00 min
Lab File: M7953.D
Acq: 22 Mar 2016 4:38 pm

Tgt Ion:164 Resp: 1233

Ion	Ratio	Lower	Upper
164	100		
166	113.7	108.3	148.3
129	0.0	65.8	105.8#
131	0.0	63.8	103.8#



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7954.D Vial: 19
Acq On : 22 Mar 2016 5:10 pm Operator: D.Lipani
Sample : R1602524-004|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:12 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.36	168	635440	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	875319	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	817811	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	483722	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	306000	55.73	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.46%			
42) surr1,1,2-dichloroethane-d	4.24	65	252196	56.32	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 112.64%			
62) SURR3,Toluene-d8	7.76	98	958377	52.56	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 105.12%			
82) SURR2,BFB	10.14	95	392138	53.57	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.14%			
Target Compounds						Qvalue
9) Freon 123a	1.60	67	24338	3.71	ug/L	85
14) Acetone	1.73	43	2985	3.92	ug/L	94
21) Freon 113	2.08	101	13860	2.67	ug/L	88
24) Carbon Disulfide	2.15	76	4606	0.27	ug/L	90
27) 1,1-Diclethane	2.72	63	8431	0.97	ug/L	95
31) 2-Butanone	3.20	43	315	0.28	ug/L	80
33) cis-1,2-Dichloroethene	3.26	96	15954	2.86	ug/L	91
38) 1,1,1-Trichloroethane	4.46	97	8212	1.16	ug/L #	77
51) Trichloroethene	6.13	130	47735	8.20	ug/L	98
71) Tetrachloroethene	8.50	164	3761	0.76	ug/L	95

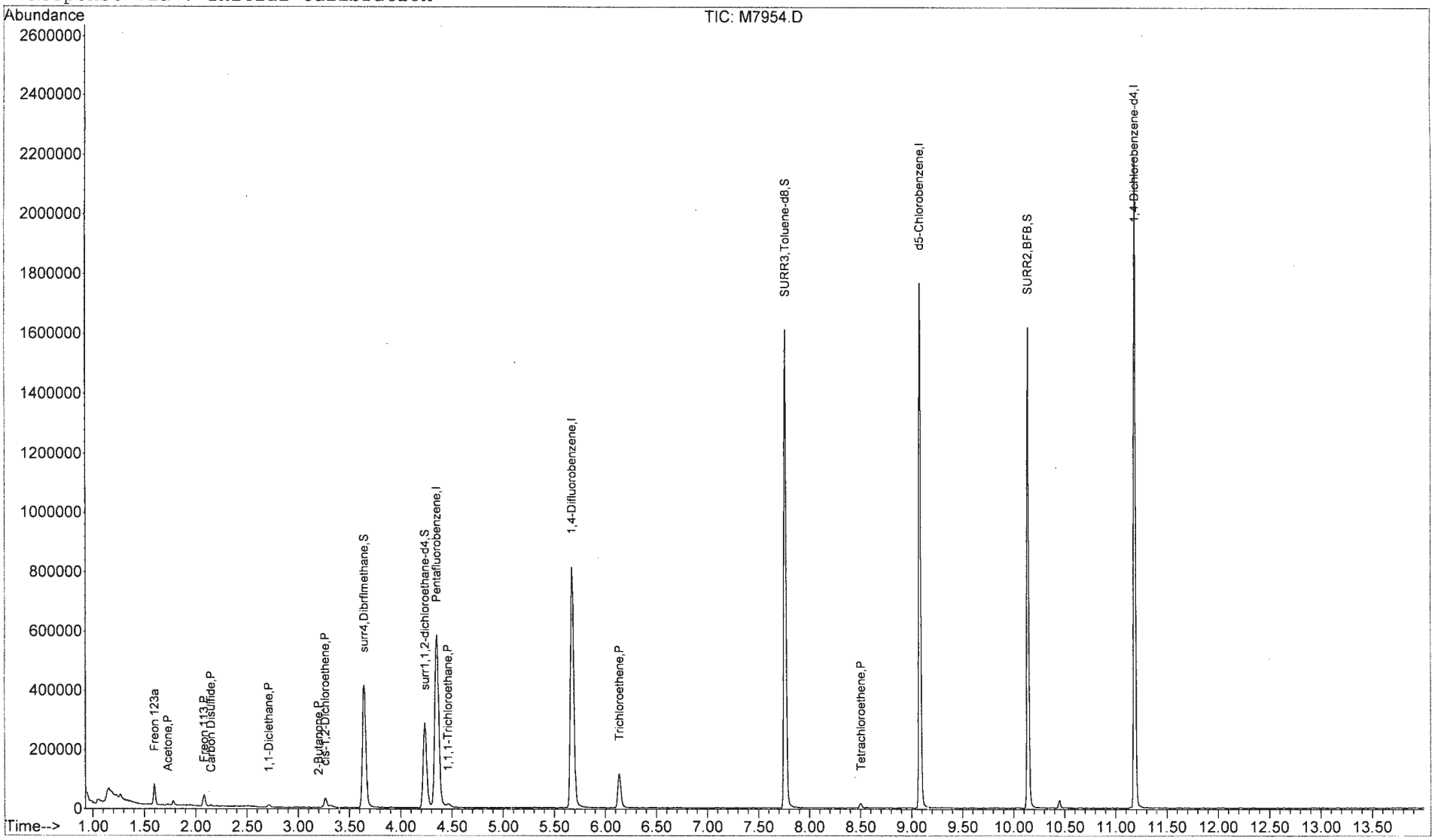
DL 3/23/16

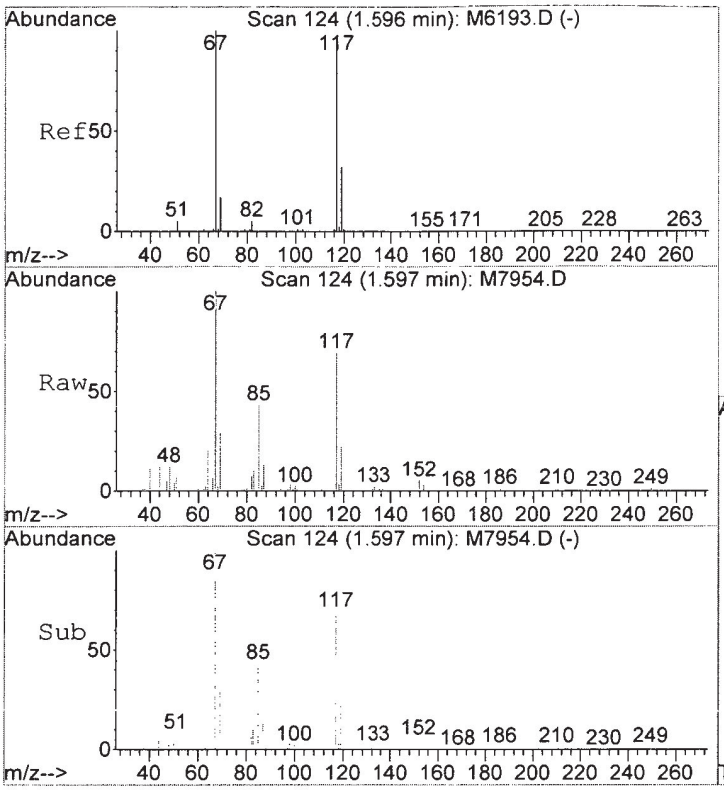
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7954.D Vial: 19
Acq On : 22 Mar 2016 5:10 pm Operator: D.Lipani
Sample : R1602524-004|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:12 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

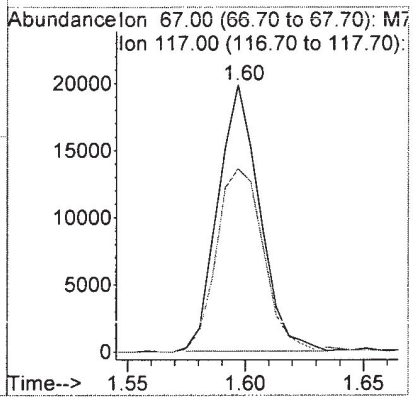


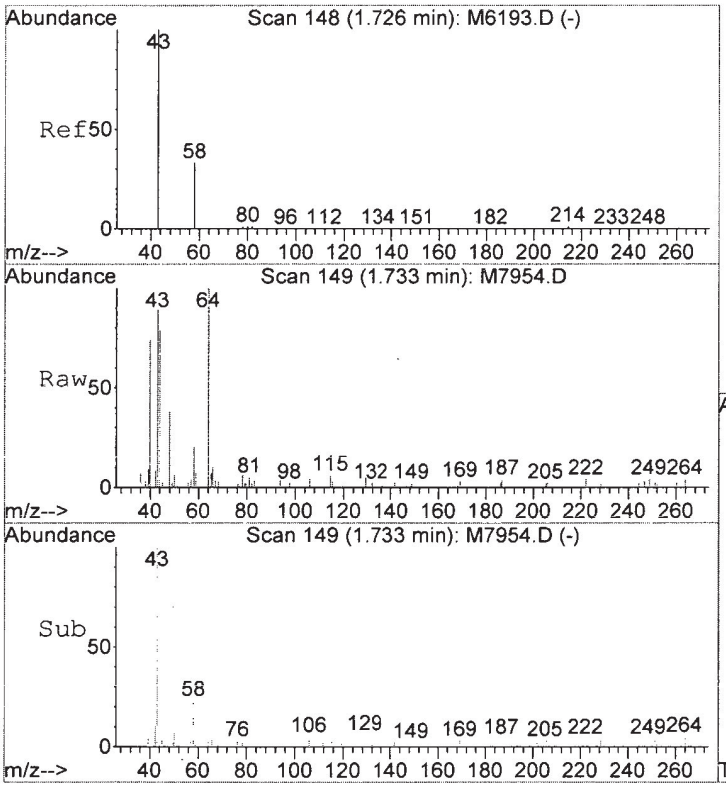


#9
Freon 123a
Concen: 3.71 ug/L
RT: 1.60 min Scan# 124
Delta R.T. 0.00 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion: 67 Resp: 24338

Ion	Ratio	Lower	Upper
67	100		
117	68.6	62.0	102.0

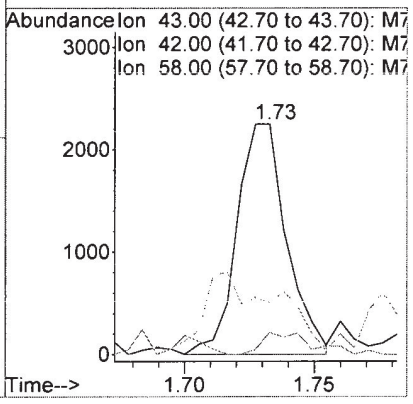


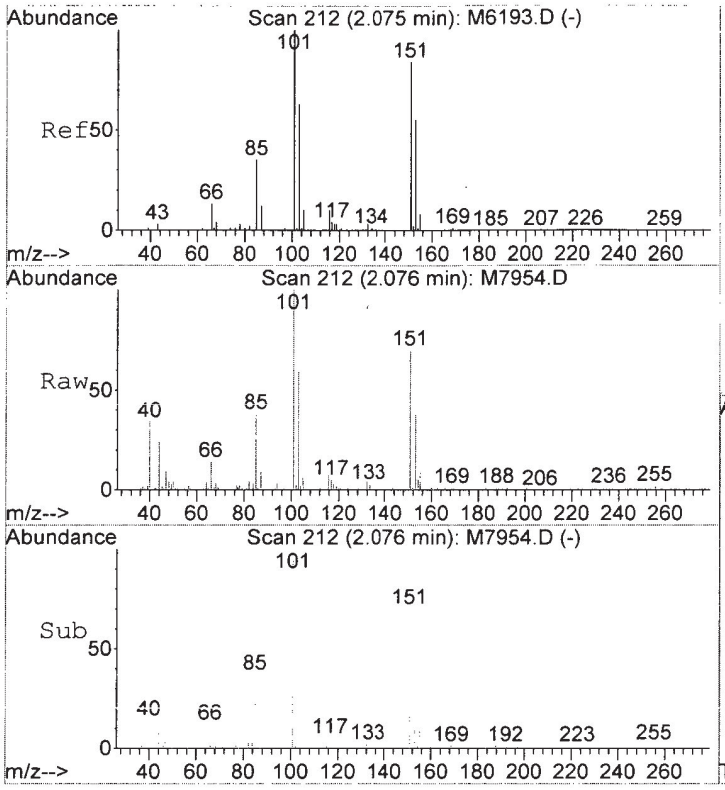


#14
Acetone
Concen: 3.92 ug/L
RT: 1.73 min Scan# 149
Delta R.T. 0.01 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion: 43 Resp: 2985

Ion	Ratio	Lower	Upper
43	100		
42	9.5	0.0	29.0
58	22.6	6.3	46.3

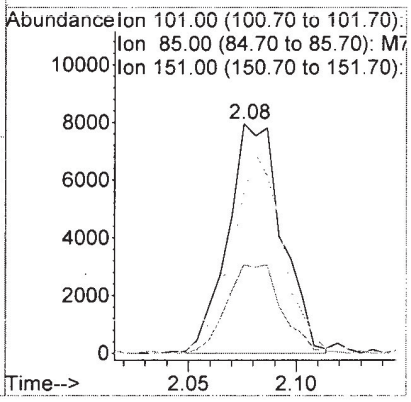


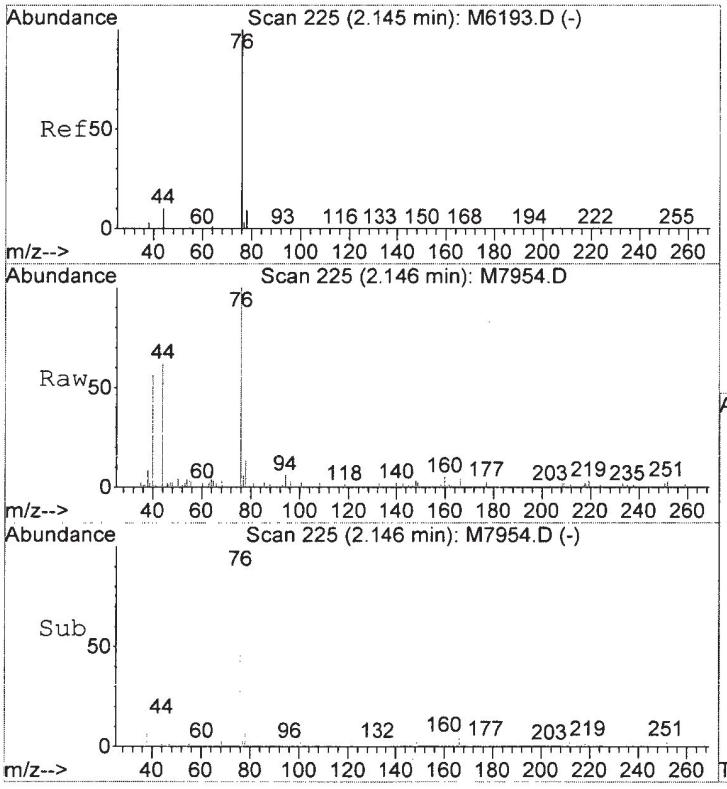


#21
Freon 113
Concen: 2.67 ug/L
RT: 2.08 min Scan# 212
Delta R.T. 0.00 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion:101 Resp: 13860

Ion	Ratio	Lower	Upper
101	100		
85	38.4	20.1	60.1
151	69.7	64.0	104.0

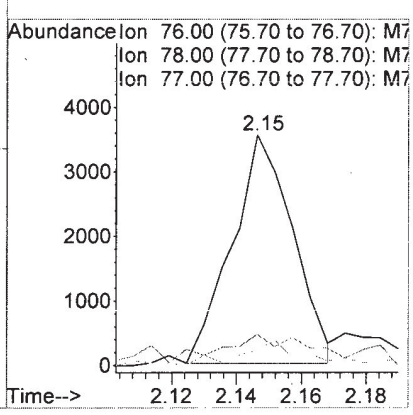


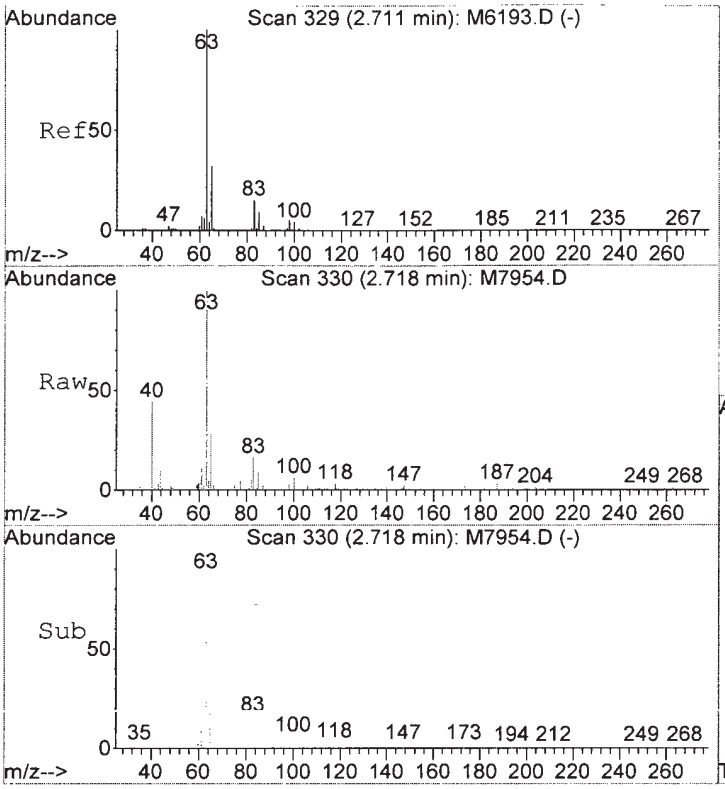


#24
Carbon Disulfide
Concen: 0.27 ug/L
RT: 2.15 min Scan# 225
Delta R.T. 0.00 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion: 76 Resp: 4606

Ion	Ratio	Lower	Upper
76	100		
78	13.5	0.0	29.8
77	6.3	0.0	22.9

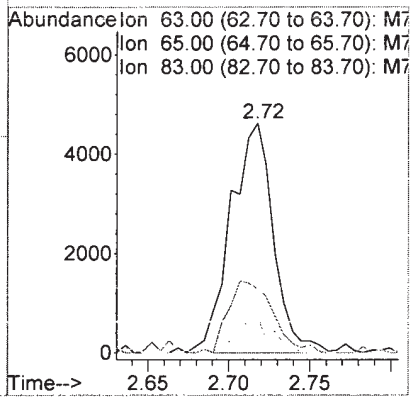


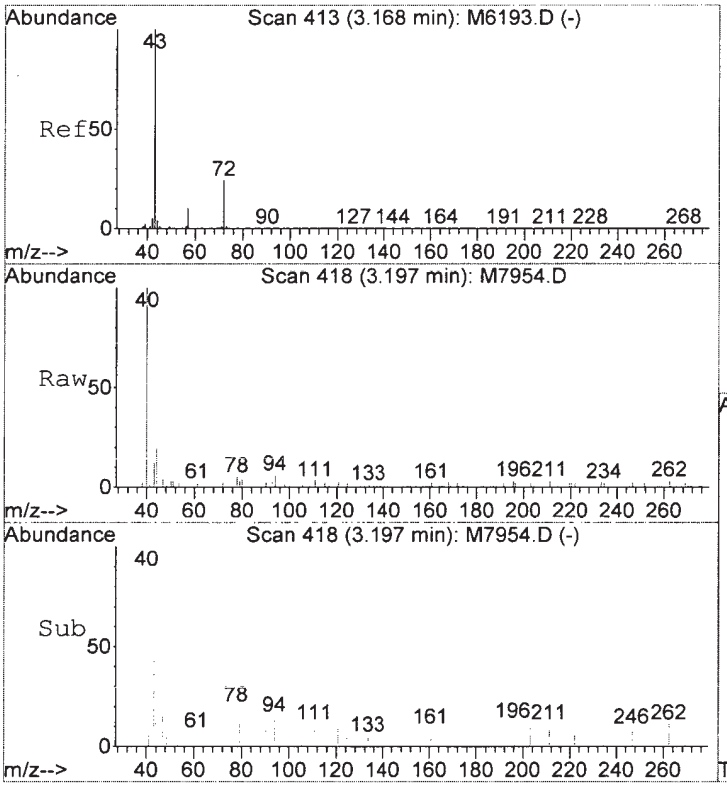


#27
1,1-Diclethane
Concen: 0.97 ug/L
RT: 2.72 min Scan# 330
Delta R.T. 0.01 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion: 63 Resp: 8431

Ion	Ratio	Lower	Upper
63	100		
65	27.9	12.2	52.2
83	15.8	0.0	35.5

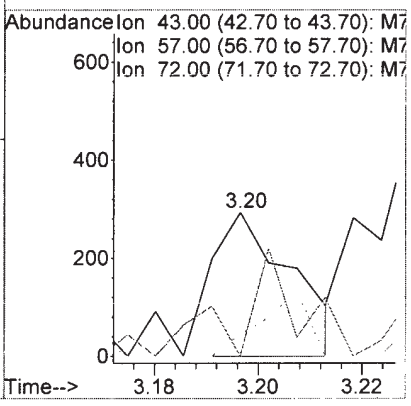


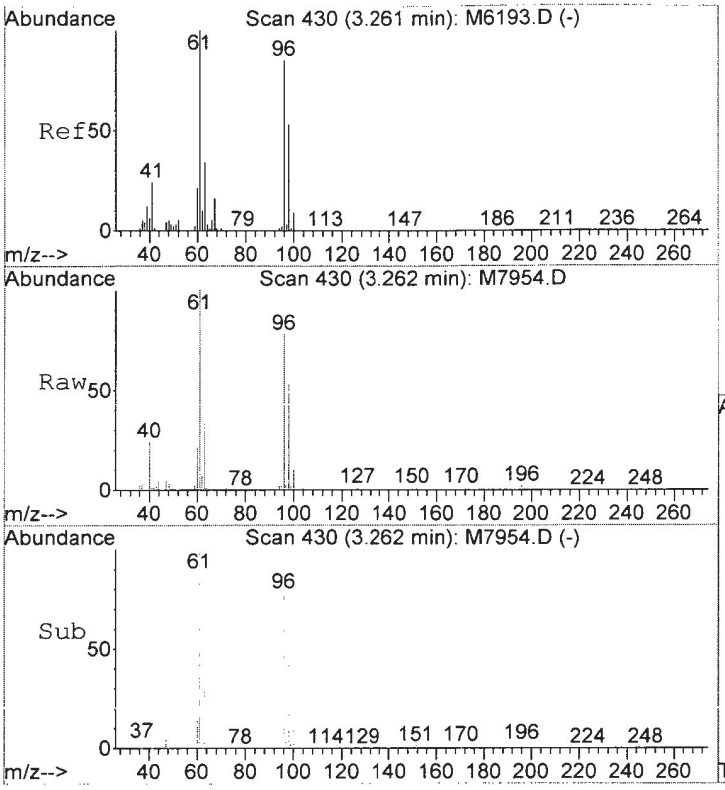


#31
2-Butanone
Concen: 0.28 ug/L
RT: 3.20 min Scan# 418
Delta R.T. 0.03 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion: 43 Resp: 315

Ion	Ratio	Lower	Upper
43	100		
57	0.0	0.0	29.7
72	15.4	4.2	44.2

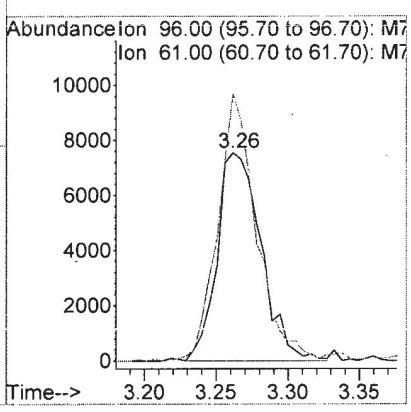


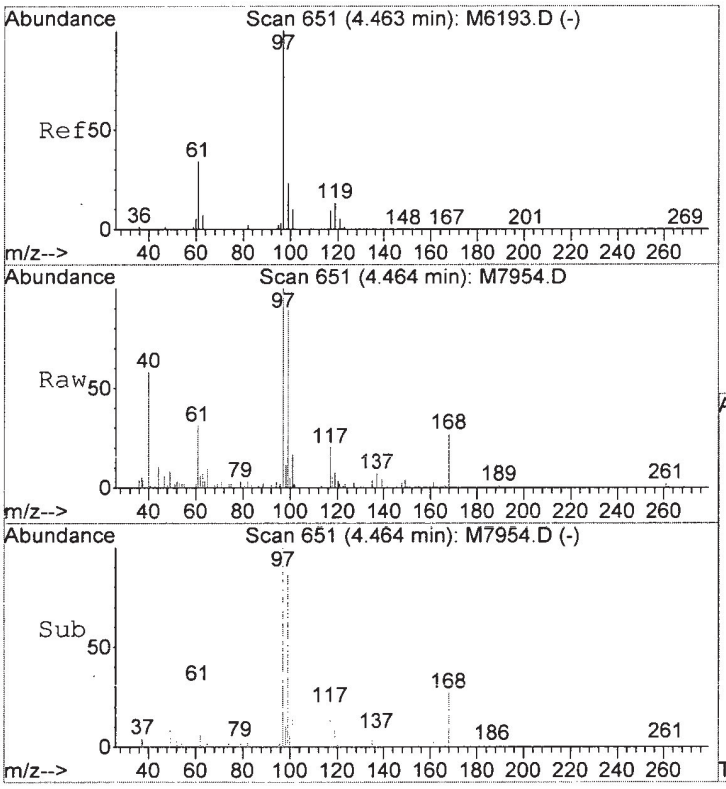


#33
cis-1,2-Dichloroethene
Concen: 2.86 ug/L
RT: 3.26 min Scan# 430
Delta R.T. 0.00 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion: 96 Resp: 15954

Ion	Ratio	Lower	Upper
96	100		
61	128.2	98.2	138.2

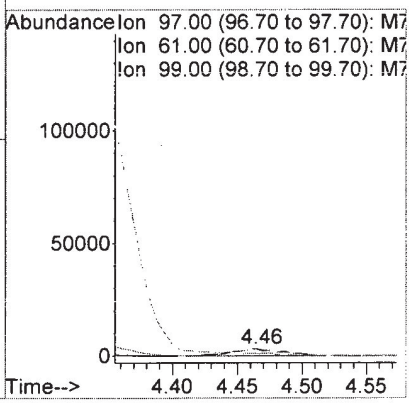


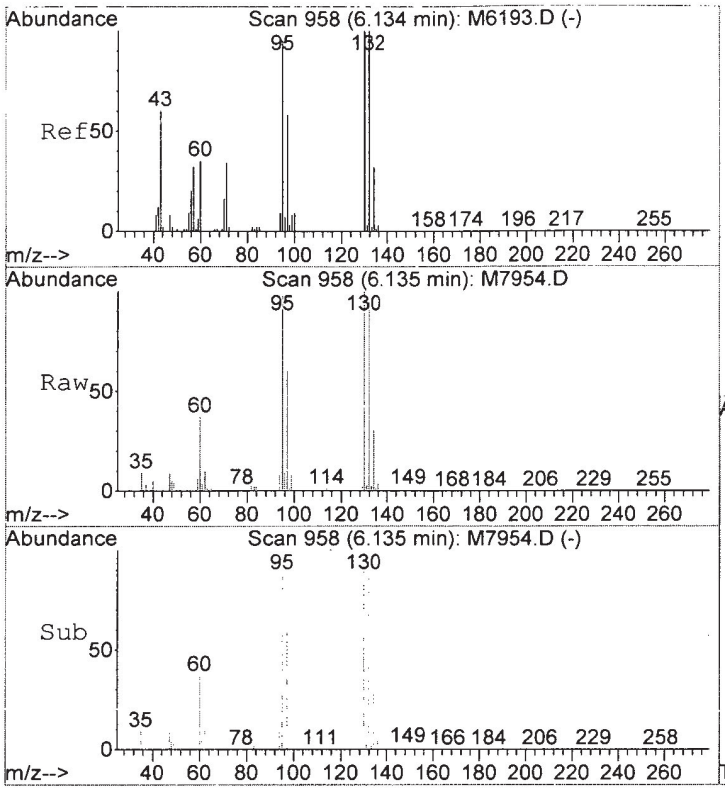


#38
1,1,1-Trichloroethane
Concen: 1.16 ug/L
RT: 4.46 min Scan# 651
Delta R.T. 0.00 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion: 97 Resp: 8212

Ion	Ratio	Lower	Upper
97	100		
61	30.9	19.7	59.7
99	89.3	47.3	87.3#

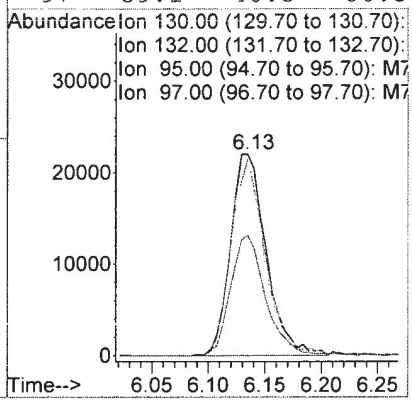


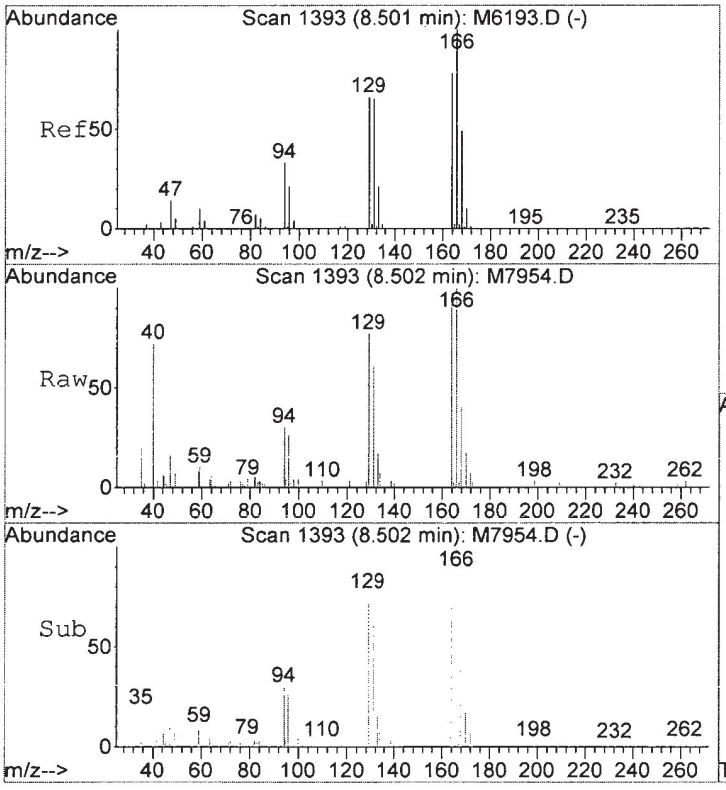


#51
Trichloroethene
Concen: 8.20 ug/L
RT: 6.13 min Scan# 958
Delta R.T. 0.00 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion:130 Resp: 47735

Ion	Ratio	Lower	Upper
130	100		
132	93.5	76.5	116.5
95	92.5	72.7	112.7
97	59.1	40.5	80.5

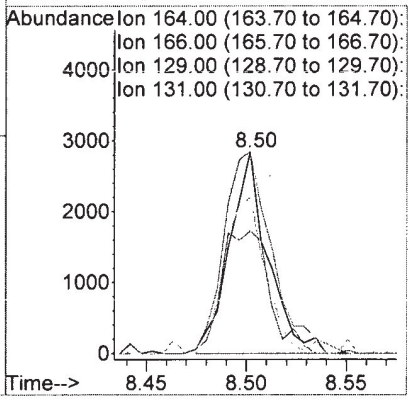




#71
Tetrachloroethene
Concen: 0.76 ug/L
RT: 8.50 min Scan# 1393
Delta R.T. 0.00 min
Lab File: M7954.D
Acq: 22 Mar 2016 5:10 pm

Tgt Ion:164 Resp: 3761

Ion	Ratio	Lower	Upper
164	100		
166	125.4	108.3	148.3
129	82.4	65.8	105.8
131	76.1	63.8	103.8



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7955.D Vial: 20
Acq On : 22 Mar 2016 5:42 pm Operator: D.Lipani
Sample : R1602524-005|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:17 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	639245	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	895882	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	810911	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	514496	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	313278	55.75	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.50%			
42) surr1,1,2-dichloroethane-d	4.24	65	262808	57.34	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 114.68%			
62) SURR3,Toluene-d8	7.76	98	990647	53.09	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.18%			
82) SURR2,BFB	10.14	95	391352	53.91	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.82%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.15	62	8887	1.15	ug/L #	1
6) Chloroethane	1.38	64	4653	1.20	ug/L	69
9) Freon 123a	1.60	67	59614	9.04	ug/L	94
14) Acetone	1.73	43	5041	6.58	ug/L	82
18) TBA	1.98	59	259	1.03	ug/L	78
21) Freon 113	2.08	101	46952	9.00	ug/L	91
25) trans-1,2-Dichloroethene	2.51	96	7929	1.37	ug/L	87
27) 1,1-Diclethane	2.71	63	314149	35.87	ug/L	97
31) 2-Butanone	3.23	43	289	0.25	ug/L	80
33) cis-1,2-Dichloroethene	3.26	96	486355	86.52	ug/L	98
38) 1,1,1-Trichloroethane	4.47	97	83281	11.66	ug/L	96
51) Trichloroethene	6.13	130	141829	23.80	ug/L	99
71) Tetrachloroethene	8.50	164	4390	0.89	ug/L	95

- not good! (SO_2 present)

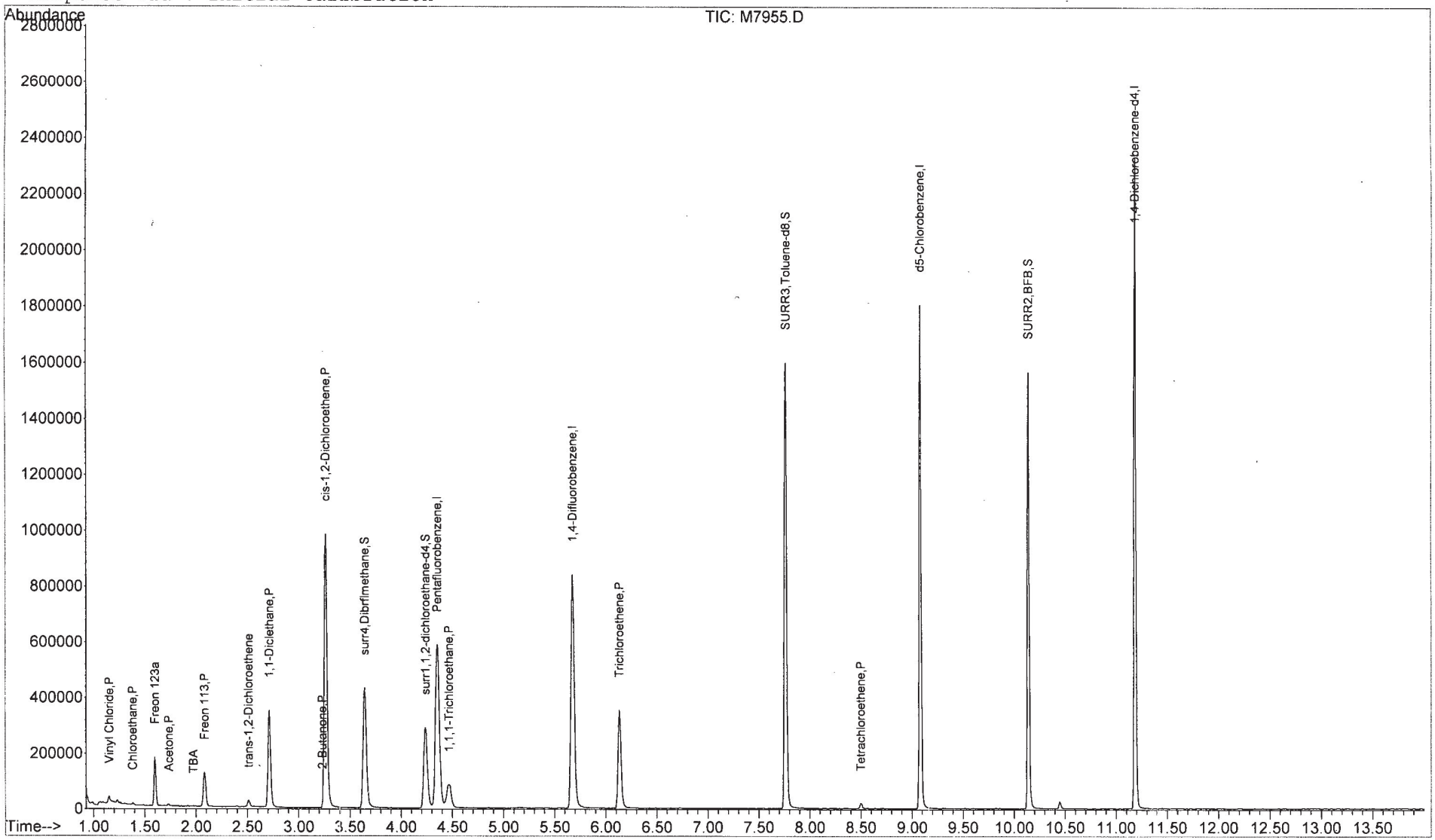
DL
3/23/16

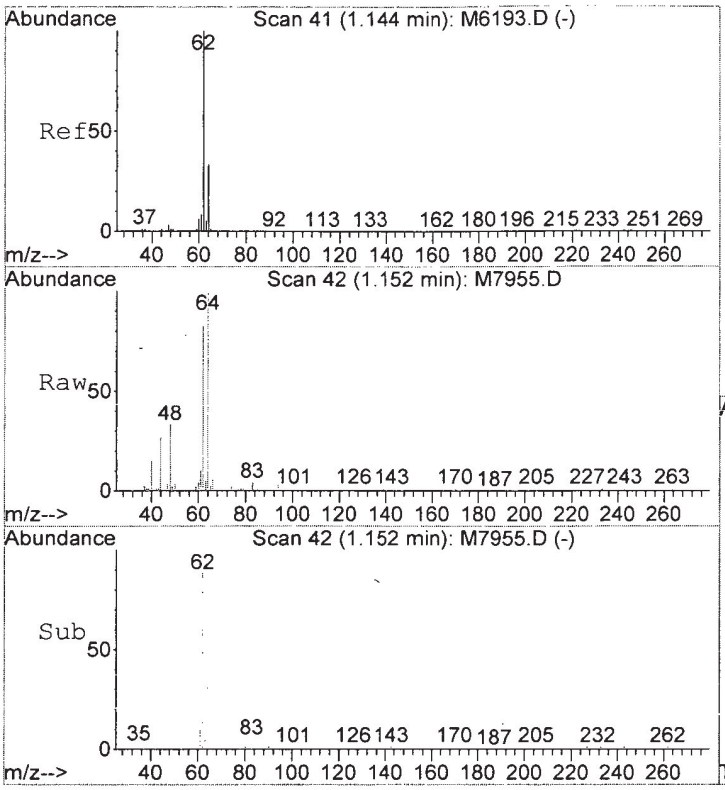
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7955.D Vial: 20
Acq On : 22 Mar 2016 5:42 pm Operator: D.Lipani
Sample : R1602524-005|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:17 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

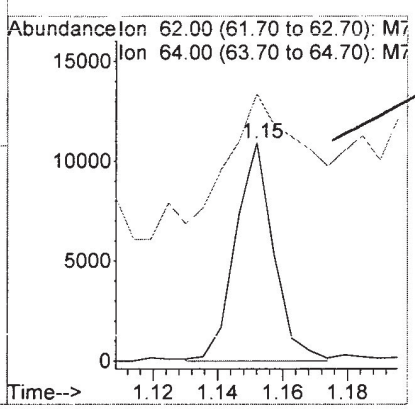




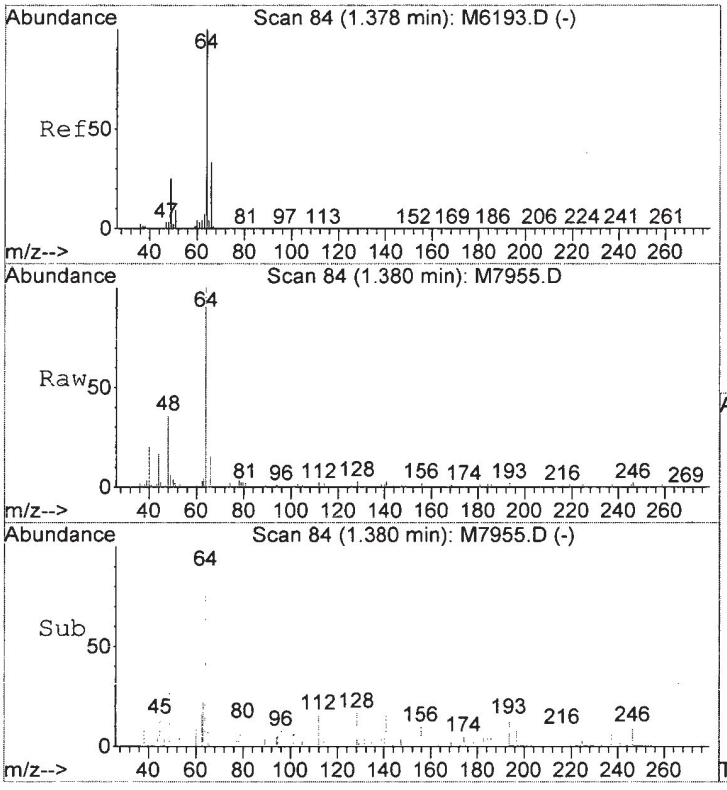
#4
Vinyl Chloride
Concen: 1.15 ug/L
RT: 1.15 min Scan# 42
Delta R.T. 0.01 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 62 Resp: 8887

Ion	Ratio	Lower	Upper
62	100		
64	122.4	13.4	53.4#



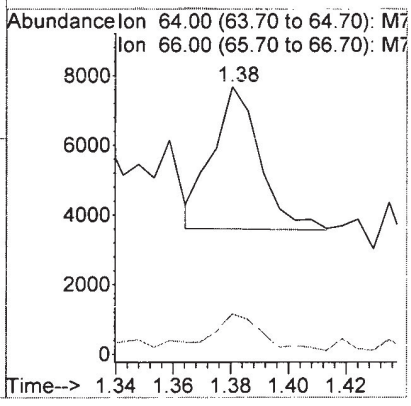
2nd ion (m/z 64) added to by SO_2.

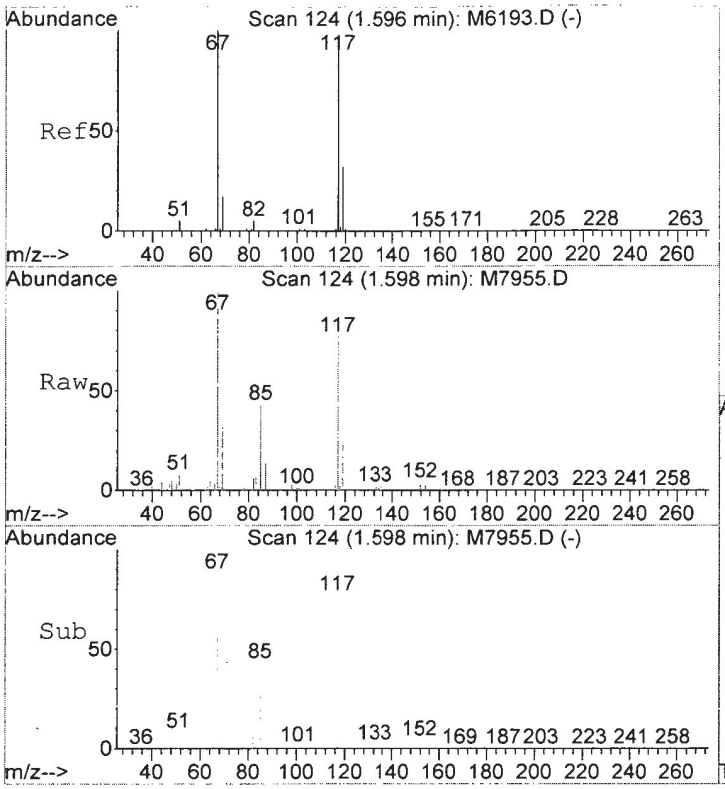


#6
Chloroethane
Concen: 1.20 ug/L
RT: 1.38 min Scan# 84
Delta R.T. 0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 64 Resp: 4653

Ion	Ratio	Lower	Upper
64	100		
66	14.9	12.6	52.6

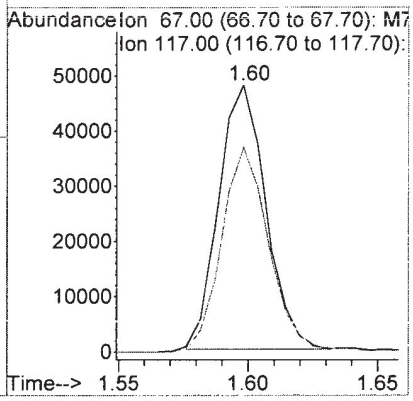


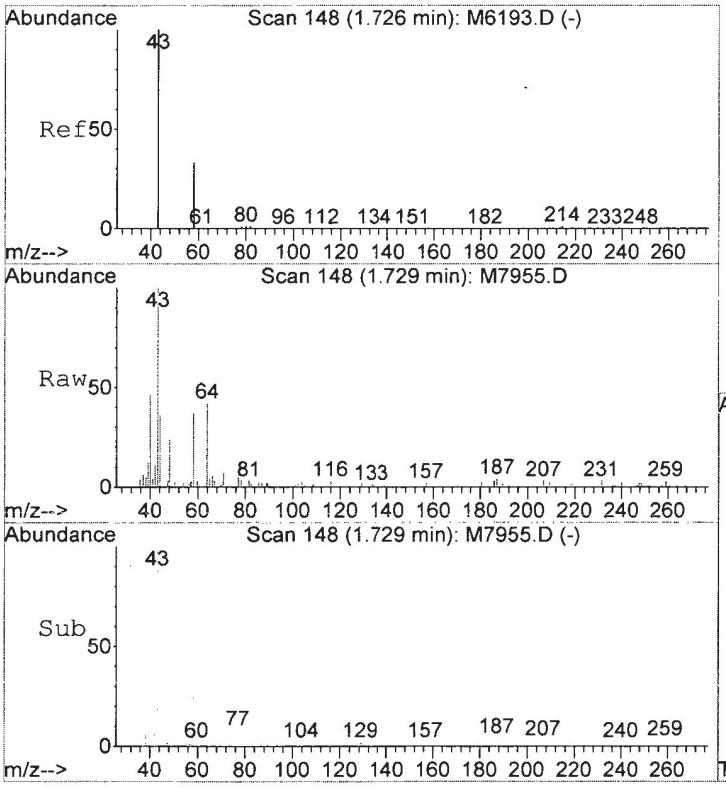


#9
Freon 123a
Concen: 9.04 ug/L
RT: 1.60 min Scan# 124
Delta R.T. 0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 67 Resp: 59614

Ion	Ratio	Lower	Upper
67	100		
117	76.7	62.0	102.0

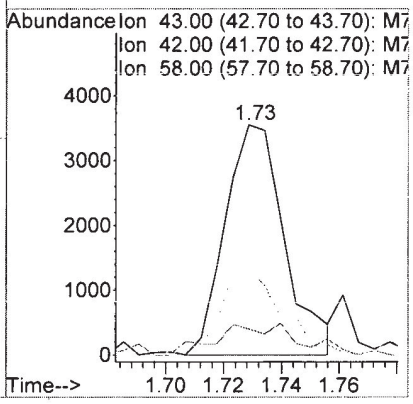


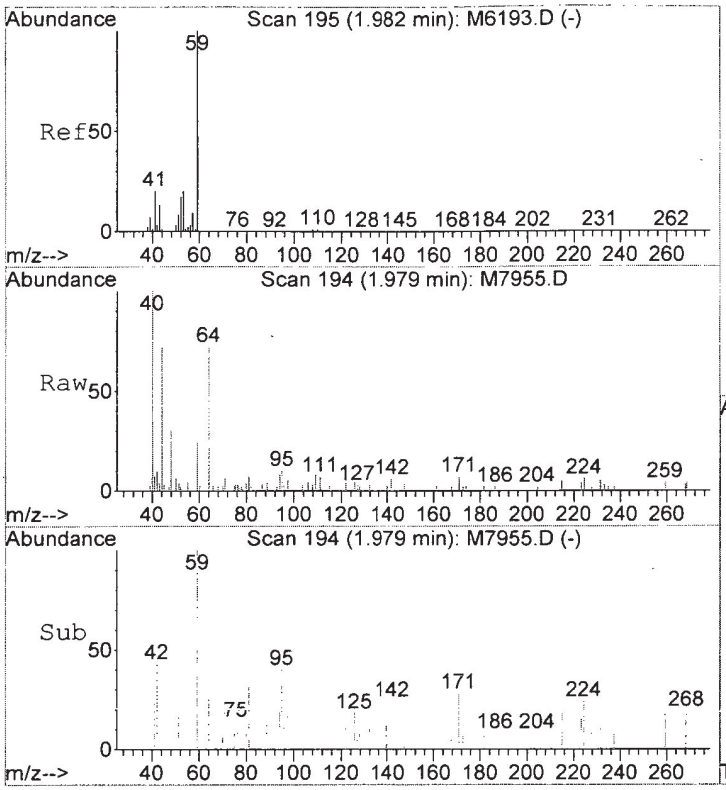


#14
Acetone
Concen: 6.58 ug/L
RT: 1.73 min Scan# 148
Delta R.T. 0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 43 Resp: 5041

Ion	Ratio	Lower	Upper
43	100		
42	11.2	0.0	29.0
58	37.4	6.3	46.3

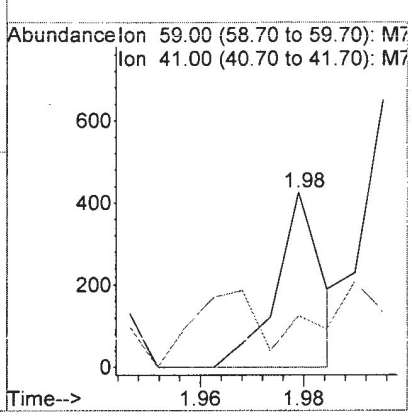


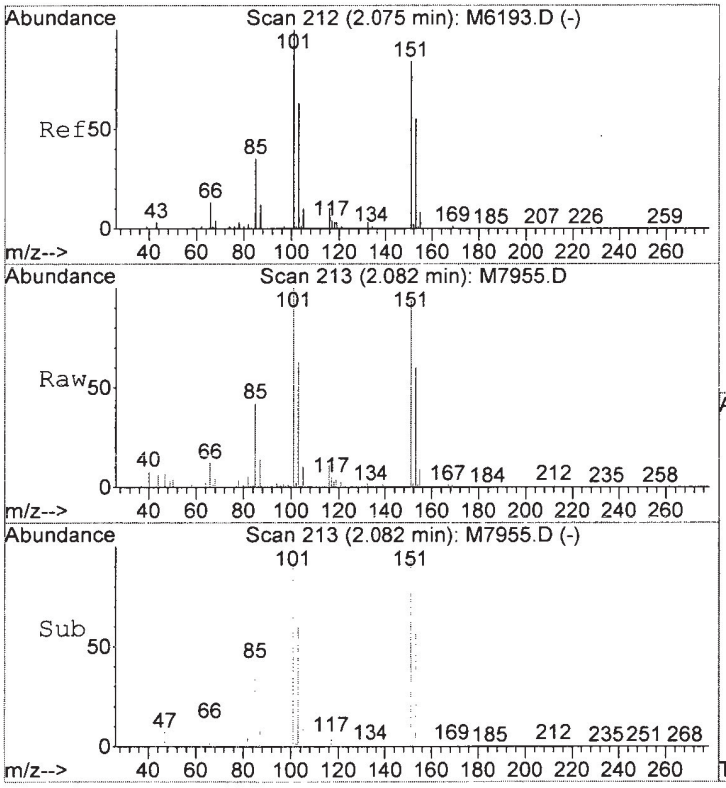


#18
TBA
Concen: 1.03 ug/L
RT: 1.98 min Scan# 194
Delta R.T. -0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 59 Resp: 259

Ion	Ratio	Lower	Upper
59	100		
41	29.4	0.0	39.4

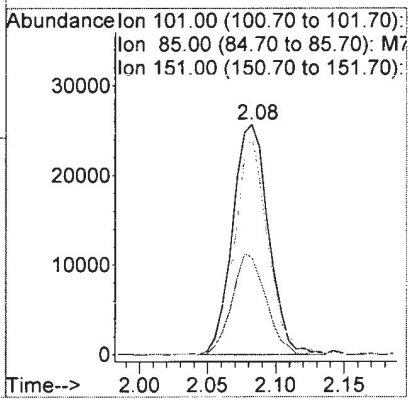


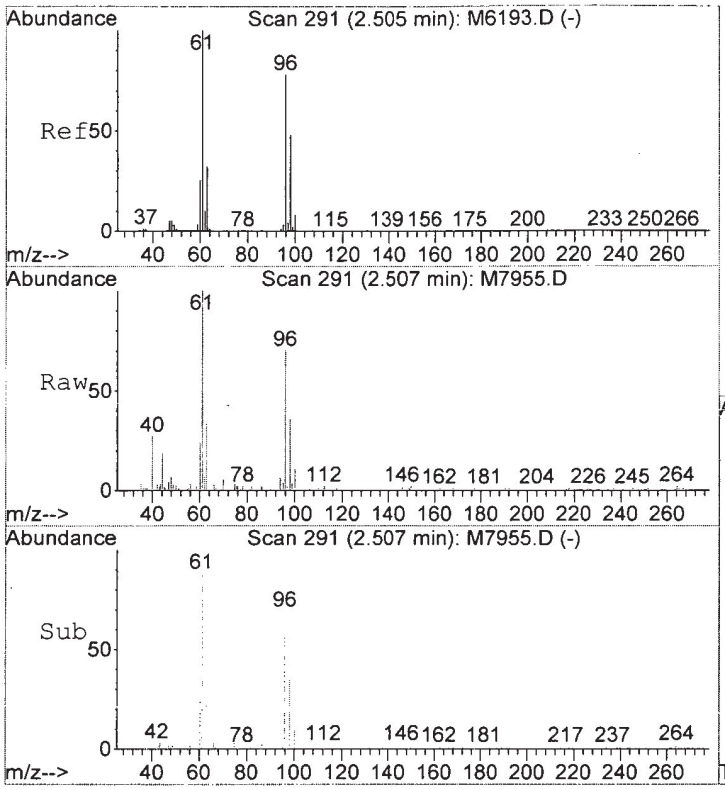


#21
Freon 113
Concen: 9.00 ug/L
RT: 2.08 min Scan# 213
Delta R.T. 0.01 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion:101 Resp: 46952

Ion	Ratio	Lower	Upper
101	100		
85	42.5	20.1	60.1
151	94.1	64.0	104.0

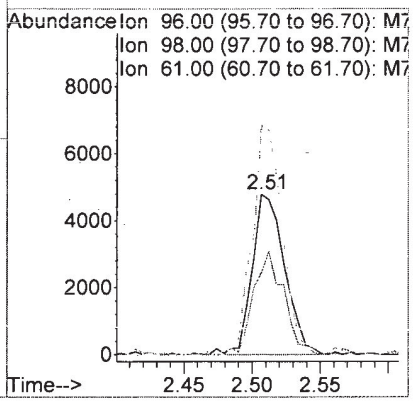


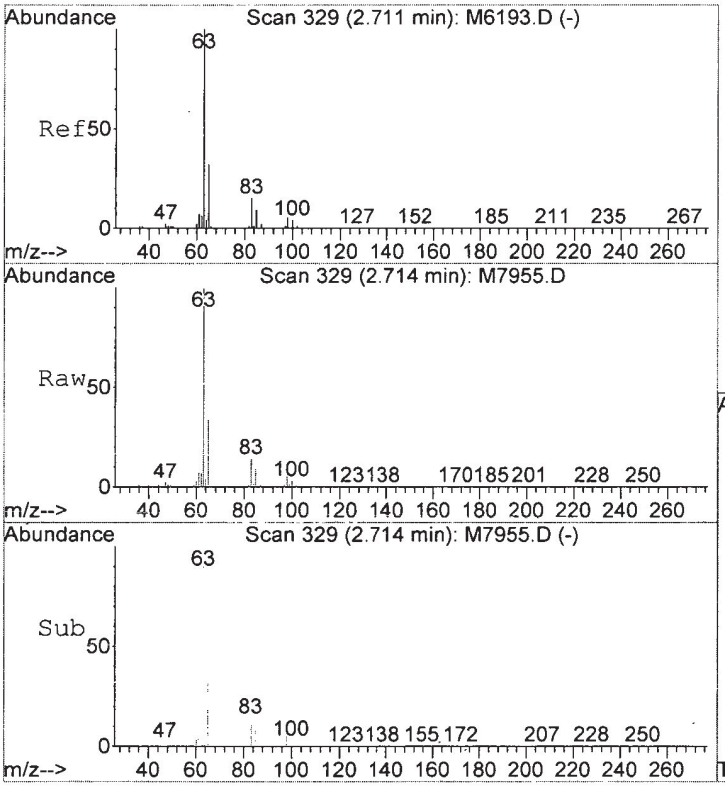


#25
trans-1,2-Dichloroethene
Concen: 1.37 ug/L
RT: 2.51 min Scan# 291
Delta R.T. 0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 96 Resp: 7929

Ion	Ratio	Lower	Upper
96	100		
98	51.0	41.7	81.7
61	143.1	108.8	148.8

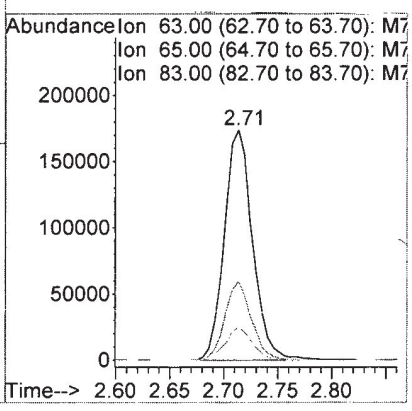


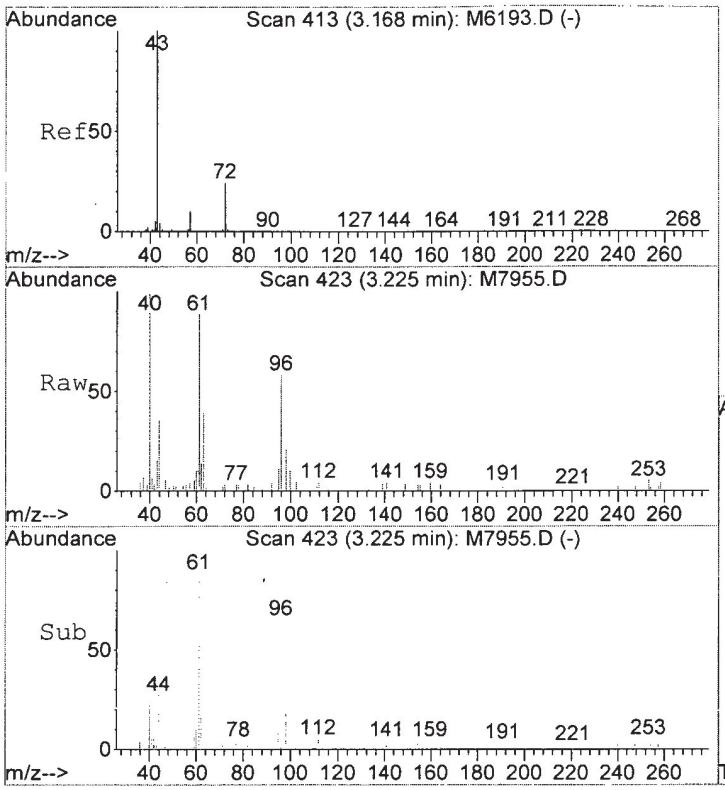


#27
1,1-Diclethane
Concen: 35.87 ug/L
RT: 2.71 min Scan# 329
Delta R.T. 0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 63 Resp: 314149

Ion	Ratio	Lower	Upper
63	100		
65	34.2	12.2	52.2
83	14.1	0.0	35.5

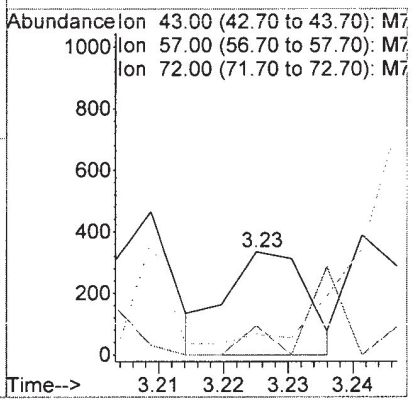


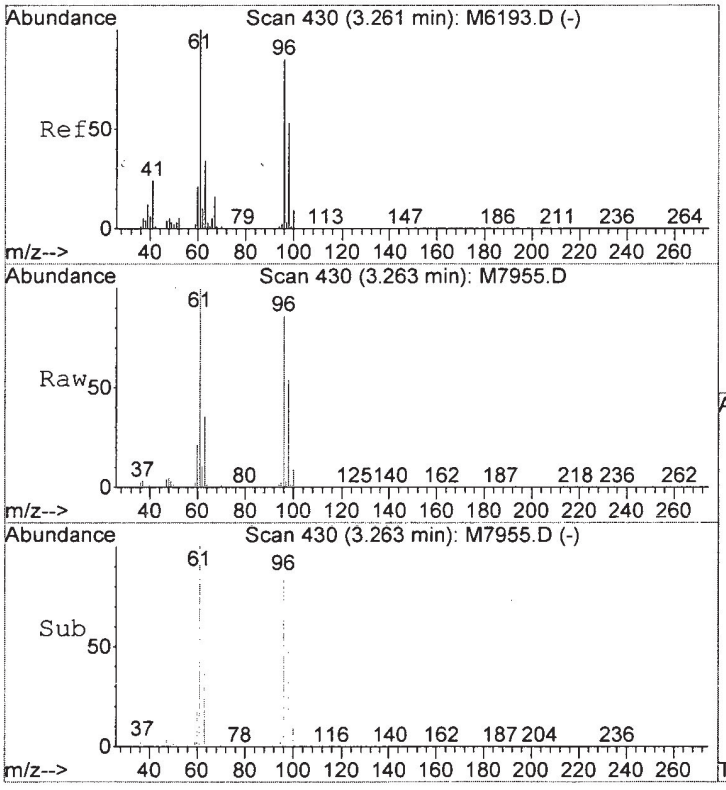


#31
2-Butanone
Concen: 0.25 ug/L
RT: 3.23 min Scan# 423
Delta R.T. 0.06 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 43 Resp: 289

Ion	Ratio	Lower	Upper
43	100		
57	28.1	0.0	29.7
72	20.1	4.2	44.2

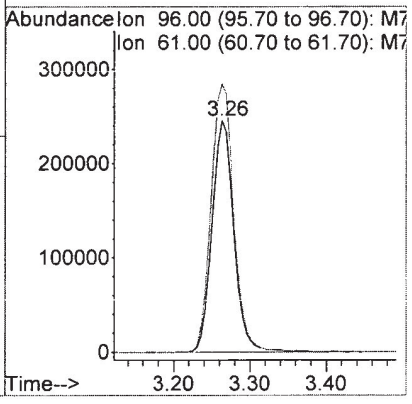


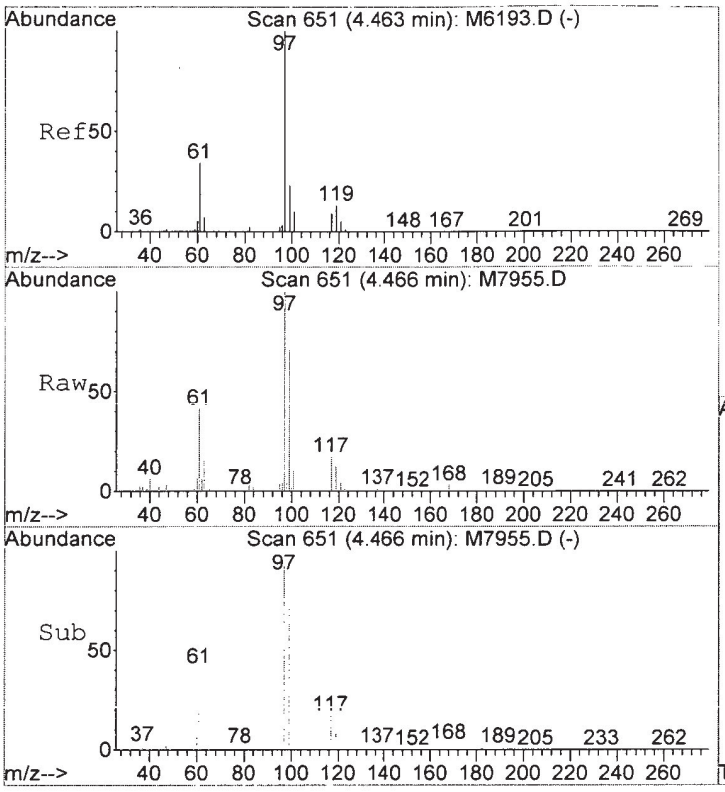


#33
cis-1,2-Dichloroethene
Concen: 86.52 ug/L
RT: 3.26 min Scan# 430
Delta R.T. 0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 96 Resp: 486355

Ion	Ratio	Lower	Upper
96	100		
61	115.7	98.2	138.2

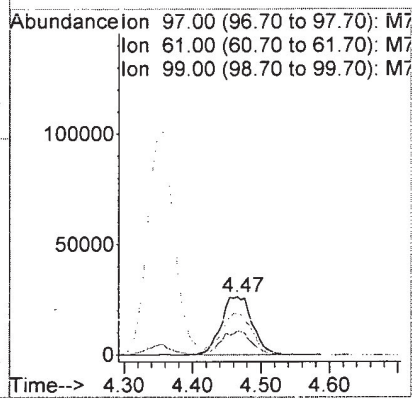


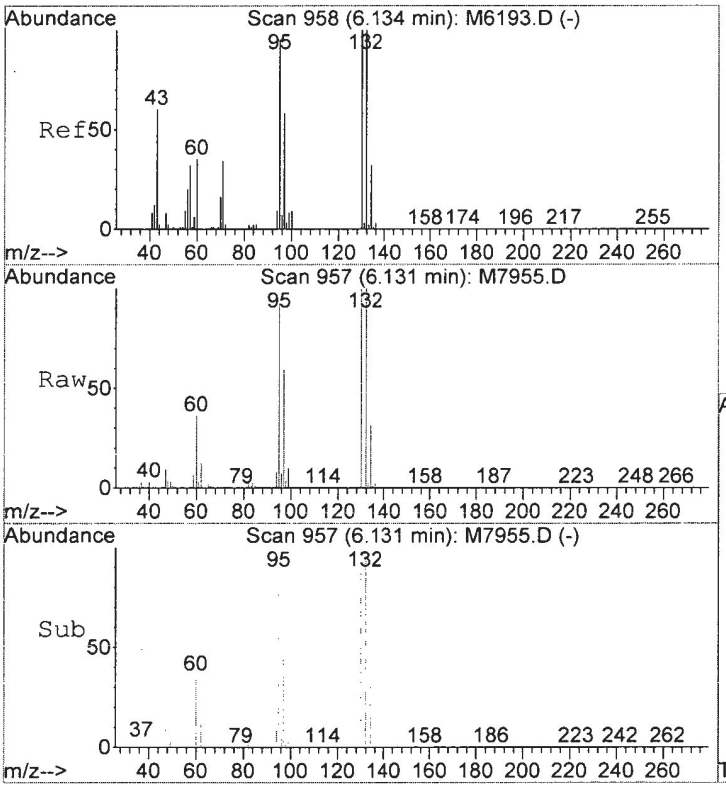


#38
1,1,1-Trichloroethane
Concen: 11.66 ug/L
RT: 4.47 min Scan# 651
Delta R.T. 0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion: 97 Resp: 83281

Ion	Ratio	Lower	Upper
97	100		
61	40.9	19.7	59.7
99	71.2	47.3	87.3

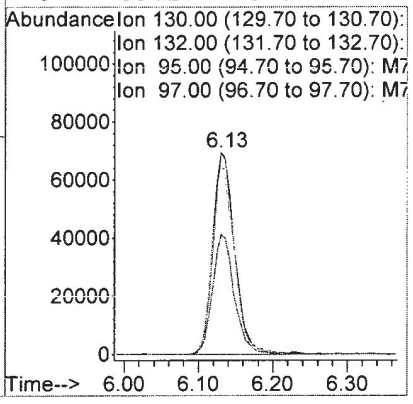


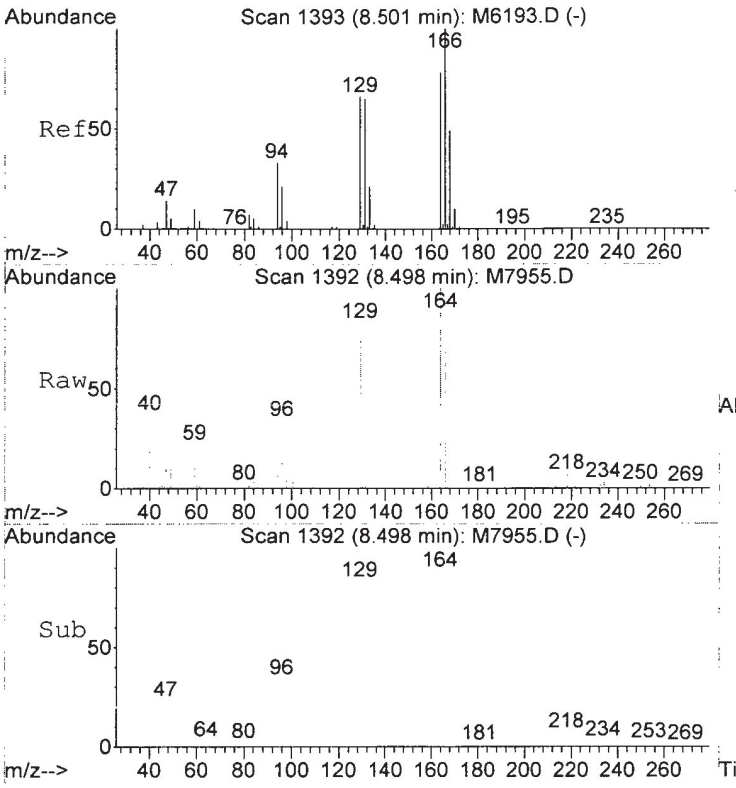


#51
Trichloroethene
Concen: 23.80 ug/L
RT: 6.13 min Scan# 957
Delta R.T. -0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion:130 Resp: 141829

Ion	Ratio	Lower	Upper
130	100		
132	95.9	76.5	116.5
95	93.4	72.7	112.7
97	59.2	40.5	80.5

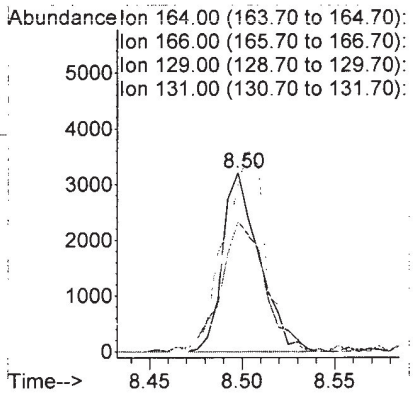




#71
Tetrachloroethene
Concen: 0.89 ug/L
RT: 8.50 min Scan# 1392
Delta R.T. -0.00 min
Lab File: M7955.D
Acq: 22 Mar 2016 5:42 pm

Tgt Ion:164 Resp: 4390

Ion	Ratio	Lower	Upper
164	100		
166	125.2	108.3	148.3
129	93.8	65.8	105.8
131	87.7	63.8	103.8



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7956.D Vial: 21
Acq On : 22 Mar 2016 6:14 pm Operator: D.Lipani
Sample : R1602524-006|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:22 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	639490	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	878014	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	796432	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	472003	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	308093	55.94	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.88%			
42) surr1,1,2-dichloroethane-d	4.23	65	253304	56.39	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 112.78%			
62) SURR3,Toluene-d8	7.76	98	953050	52.11	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 104.22%			
82) SURR2,BFB	10.14	95	385297	54.05	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.10%			
Target Compounds						Qvalue
14) Acetone	1.72	43	1196	1.56	ug/L	93
18) TBA	1.99	59	87	0.34	ug/L	57
24) Carbon Disulfide	2.14	76	4688	0.28	ug/L	91

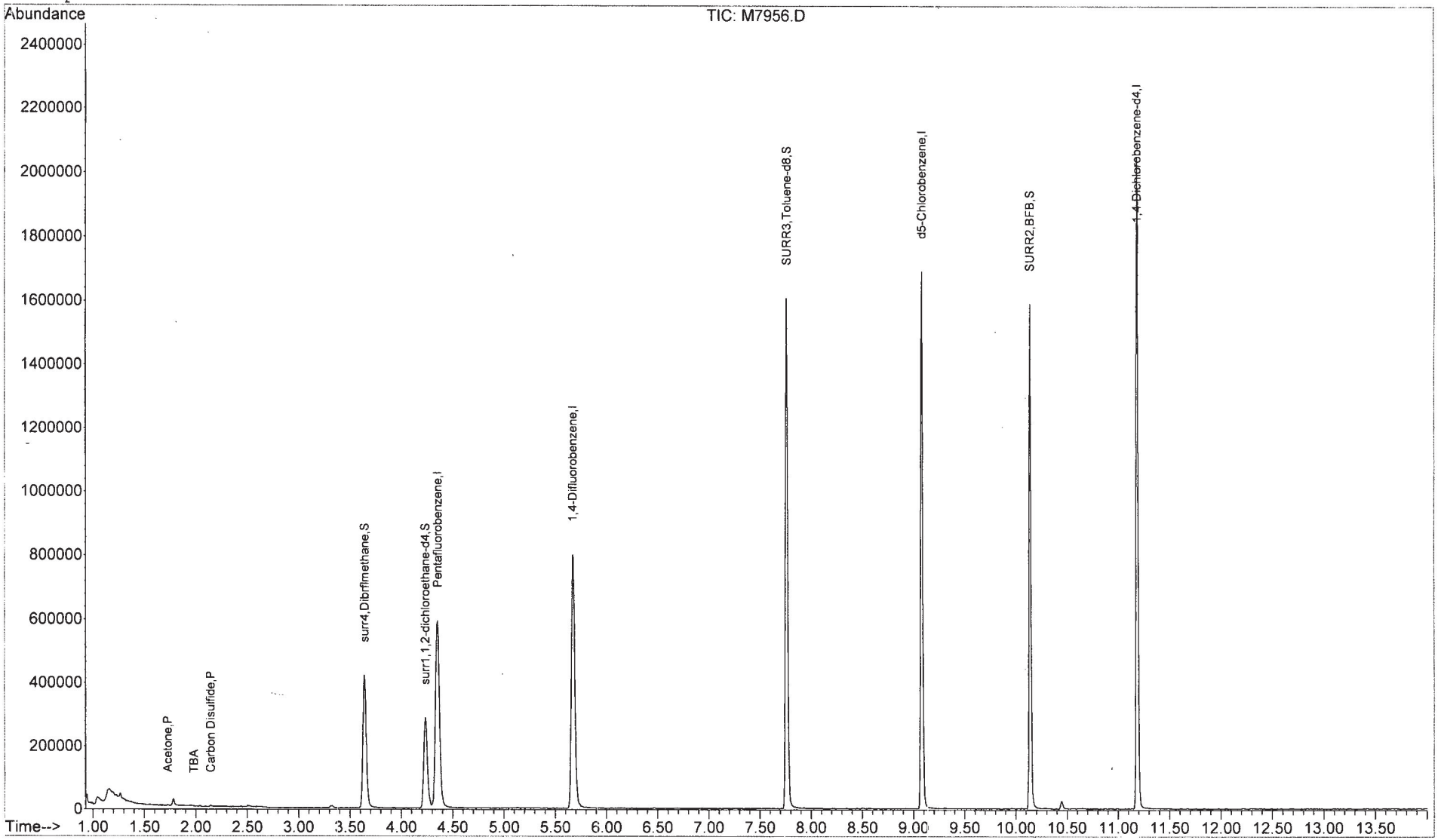
DL
3/23/16

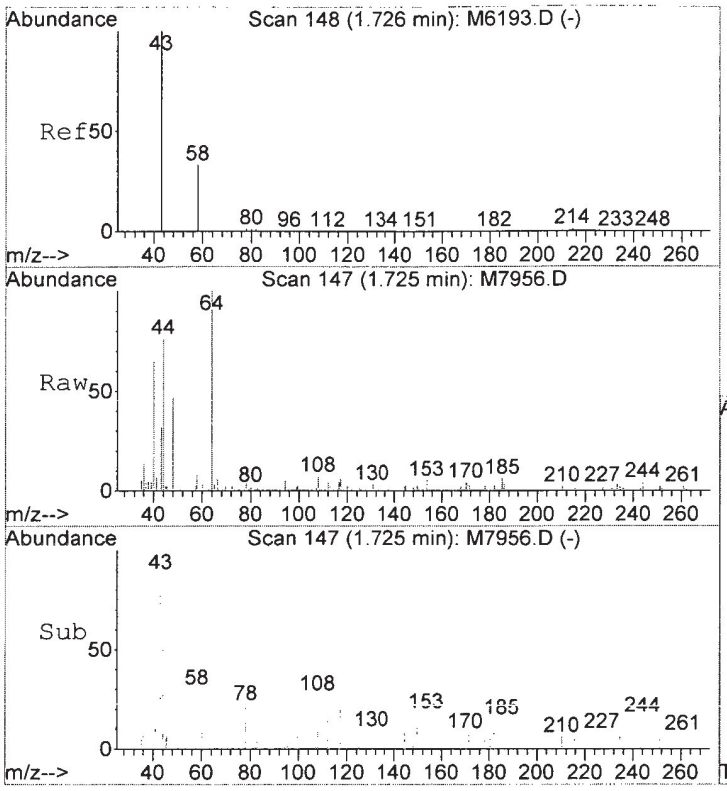
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7956.D Vial: 21
Acq On : 22 Mar 2016 6:14 pm Operator: D.Lipani
Sample : R1602524-006|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:22 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

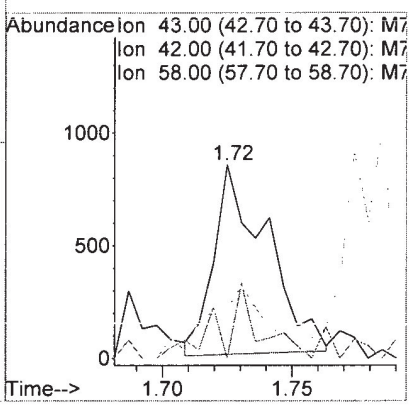


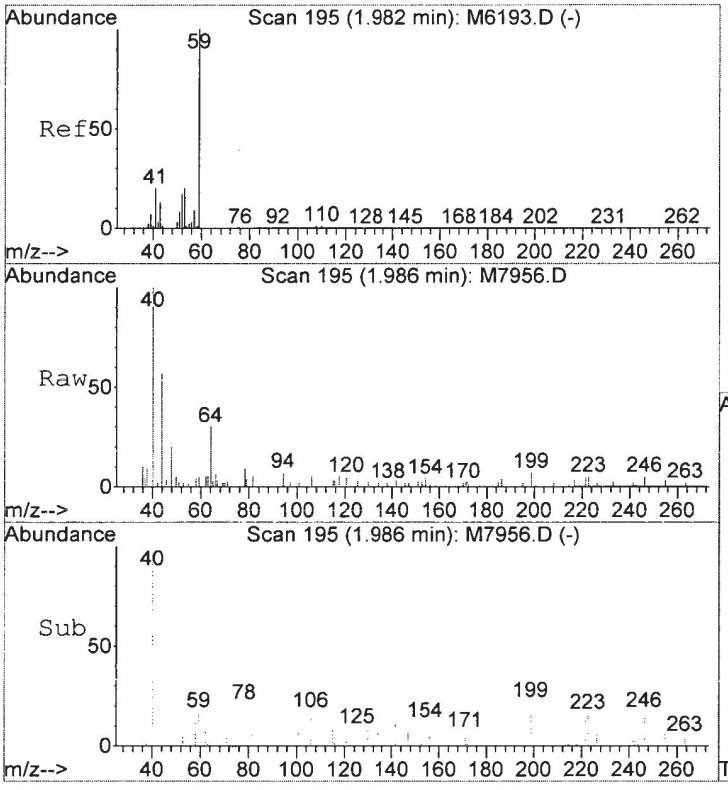


#14
Acetone
Concen: 1.56 ug/L
RT: 1.72 min Scan# 147
Delta R.T. -0.00 min
Lab File: M7956.D
Acq: 22 Mar 2016 6:14 pm

Tgt Ion: 43 Resp: 1196

Ion	Ratio	Lower	Upper
43	100		
42	0.0	0.0	29.0
58	25.6	6.3	46.3

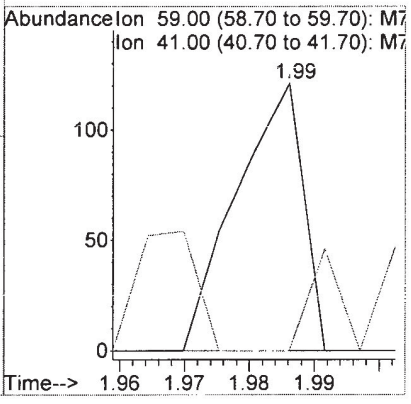


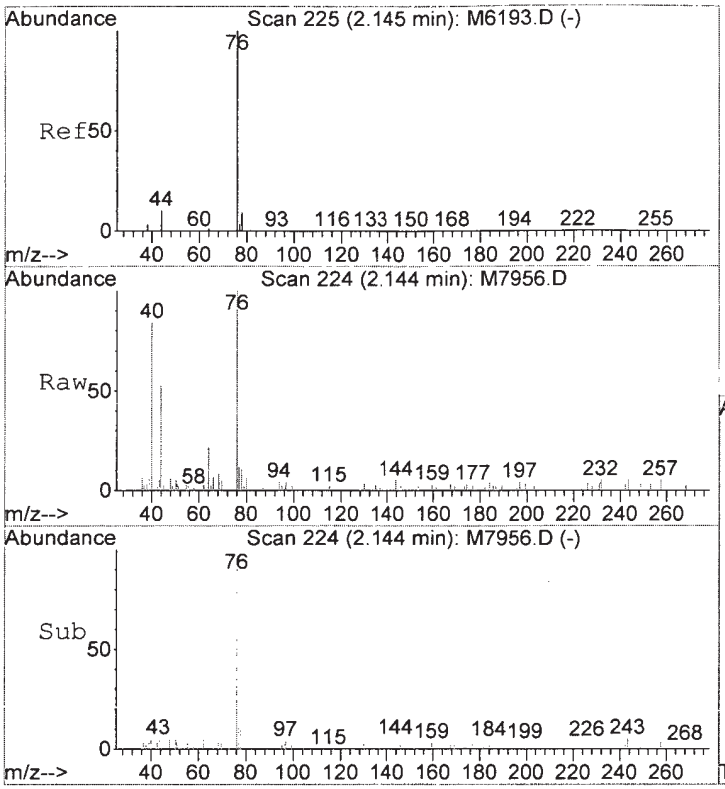


#18
TBA
Concen: 0.34 ug/L
RT: 1.99 min Scan# 195
Delta R.T. 0.00 min
Lab File: M7956.D
Acq: 22 Mar 2016 6:14 pm

Tgt Ion: 59 Resp: 87

Ion	Ratio	Lower	Upper
59	100		
41	0.0	0.0	39.4

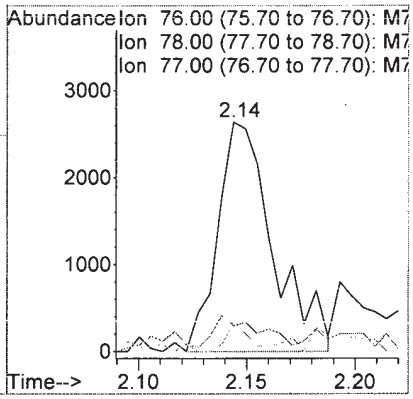




#24
Carbon Disulfide
Concen: 0.28 ug/L
RT: 2.14 min Scan# 224
Delta R.T. -0.00 min
Lab File: M7956.D
Acq: 22 Mar 2016 6:14 pm

Tgt Ion: 76 Resp: 4688

Ion	Ratio	Lower	Upper
76	100		
78	11.1	0.0	29.8
77	12.4	0.0	22.9



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7957.D Vial: 22
Acq On : 22 Mar 2016 6:46 pm Operator: D.Lipani
Sample : R1602524-007|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:26 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	637631	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	877232	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	790804	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	493066	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	303240	55.11	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 110.22%			
42) surr1,1,2-dichloroethane-d	4.24	65	264553	58.95	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 117.90%			
62) SURR3,Toluene-d8	7.76	98	960455	52.56	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 105.12%			
82) SURR2,BFB	10.14	95	382409	54.02	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.04%			
Target Compounds						Qvalue
9) Freon 123a	1.60	67	41057	6.24	ug/L	92 NTS
14) Acetone	1.73	43	9262	12.13	ug/L	97
21) Freon 113	2.08	101	129907	24.97	ug/L	99
22) Methyl Acetate	2.08	43	1201	0.51	ug/L #	42
27) 1,1-Diclethane	2.71	63	65529	7.50	ug/L	100
31) 2-Butanone	3.21	43	677	0.59	ug/L	92
33) cis-1,2-Dichloroethene	3.26	96	50792	9.06	ug/L	98
35) Chloroform	3.50	83	3121	0.35	ug/L	89
38) 1,1,1-Trichloroethane	4.46	97	67239	9.44	ug/L	99
43) 1,2-Dichloroethane	4.35	62	2421	0.47	ug/L #	50
47) Benzene	5.17	78	4926	0.25	ug/L	88
51) Trichloroethene	6.13	130	155845	26.71	ug/L	98

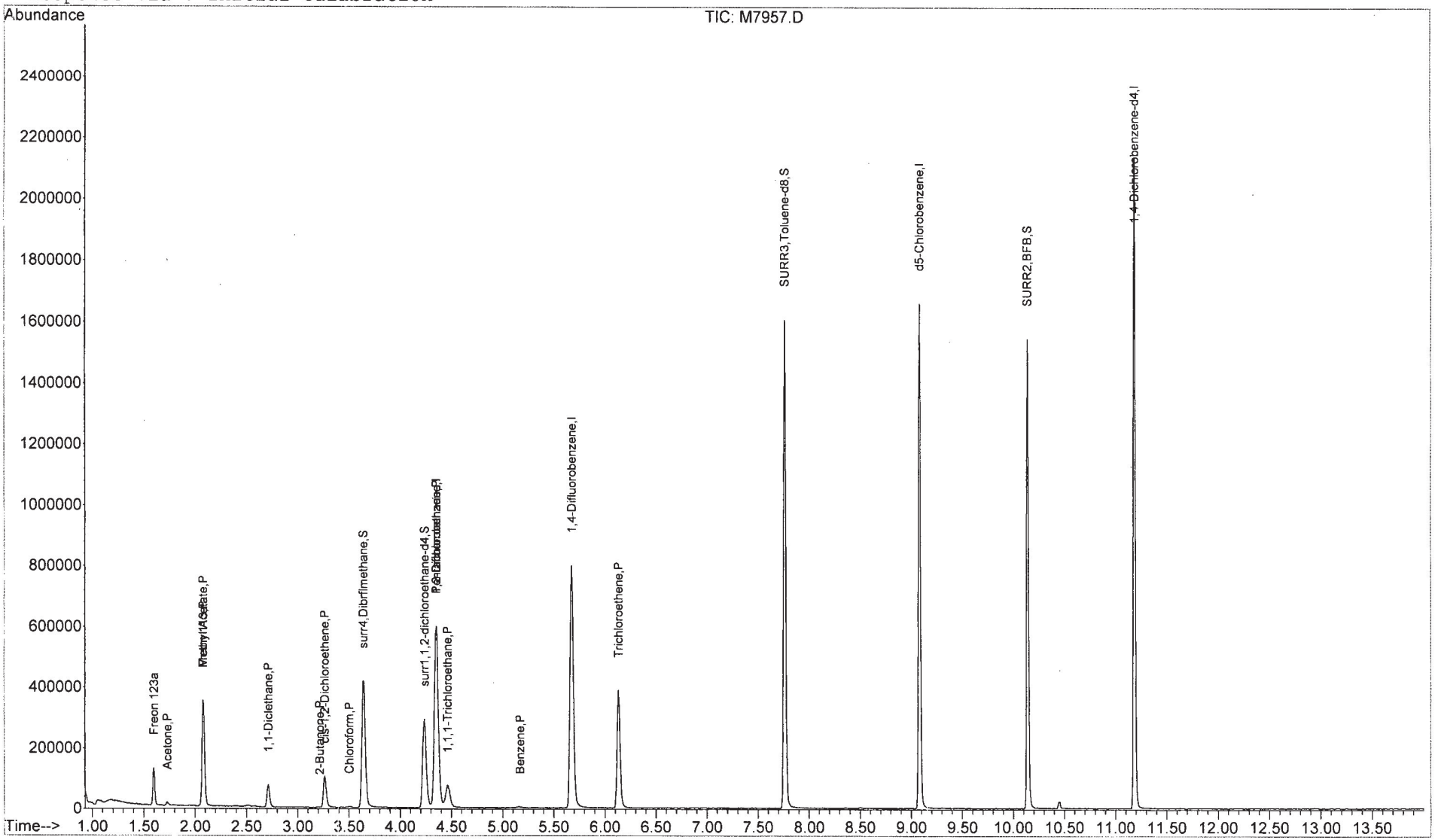
DL
3/23/16

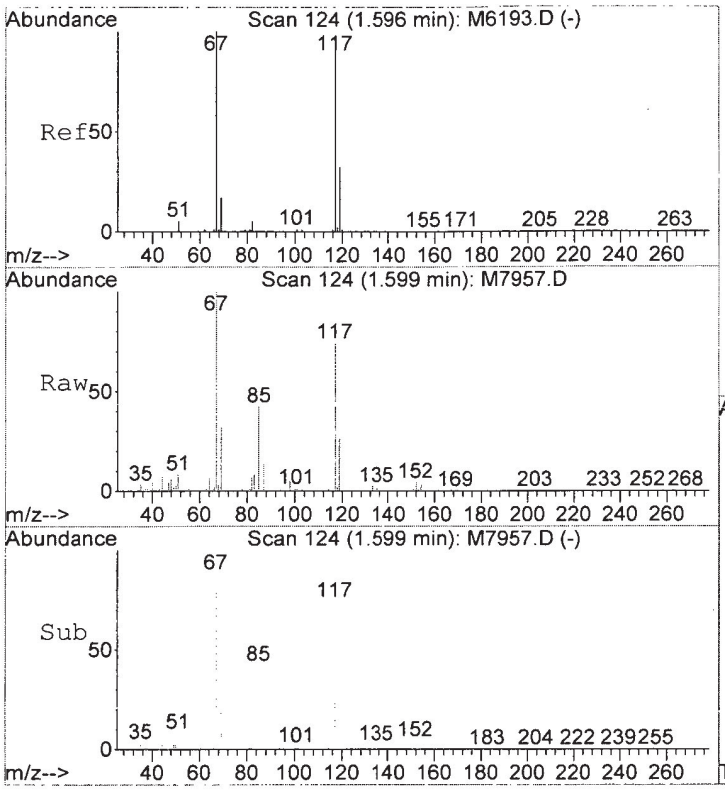
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7957.D Vial: 22
Acq On : 22 Mar 2016 6:46 pm Operator: D.Lipani
Sample : R1602524-007|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:26 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

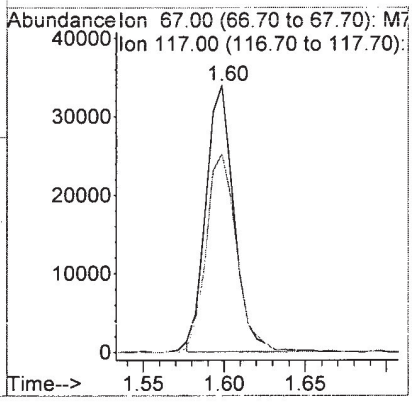


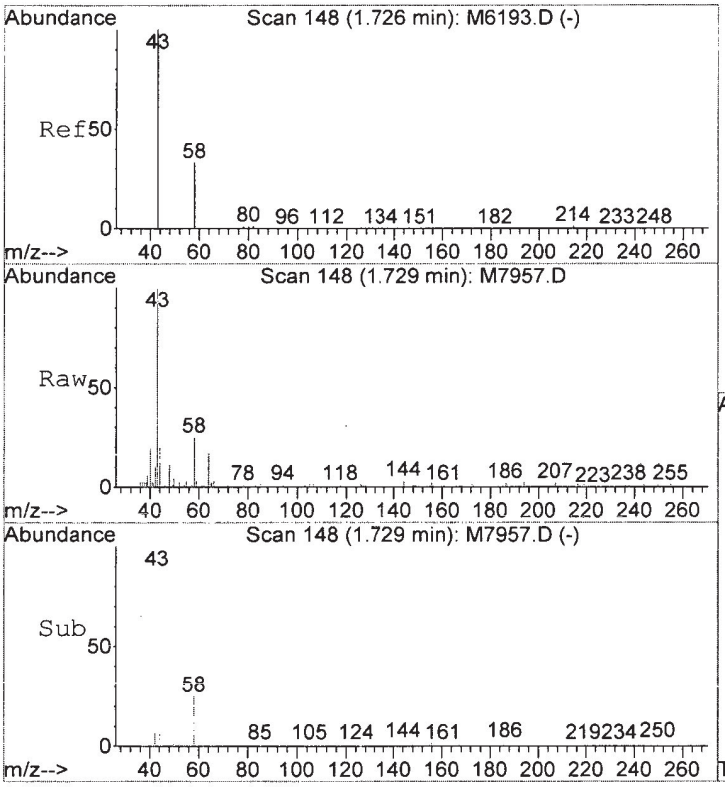


#9
Freon 123a
Concen: 6.24 ug/L
RT: 1.60 min Scan# 124
Delta R.T. 0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 67 Resp: 41057

Ion	Ratio	Lower	Upper
67	100		
117	74.4	62.0	102.0

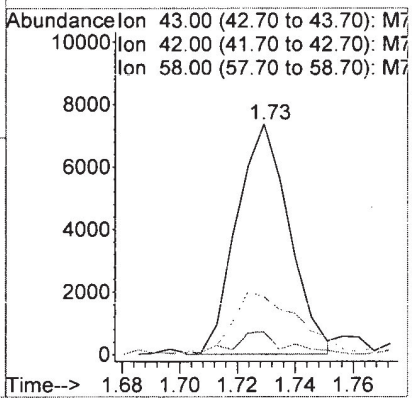


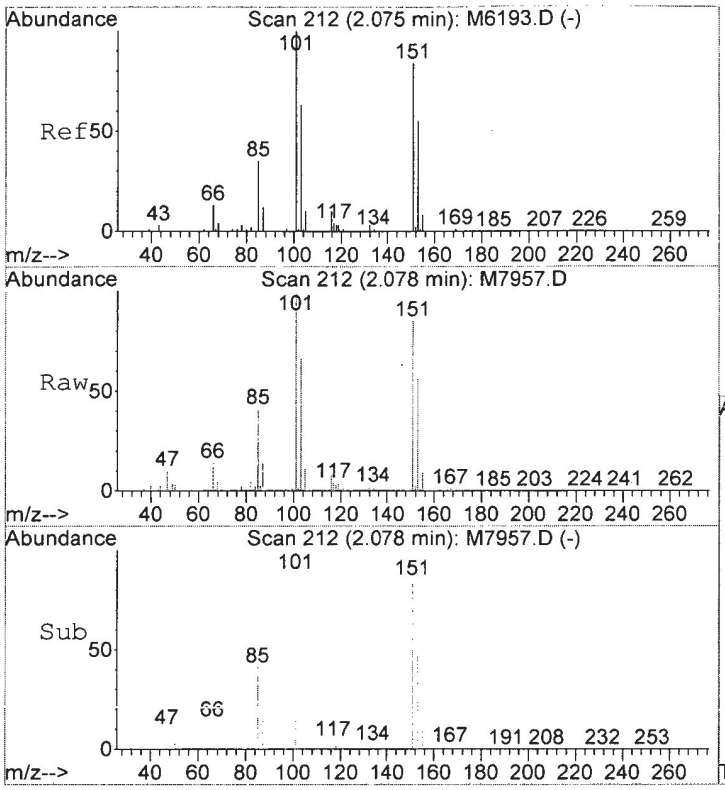


#14
Acetone
Concen: 12.13 ug/L
RT: 1.73 min Scan# 148
Delta R.T. 0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 43 Resp: 9262

Ion	Ratio	Lower	Upper
43	100		
42	9.9	0.0	29.0
58	25.0	6.3	46.3

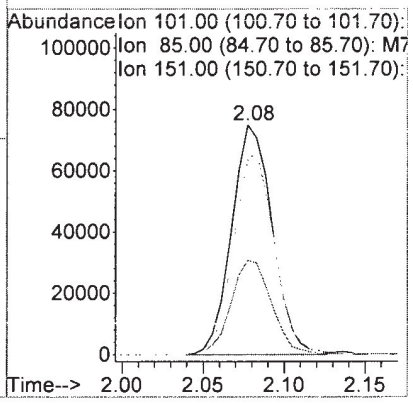


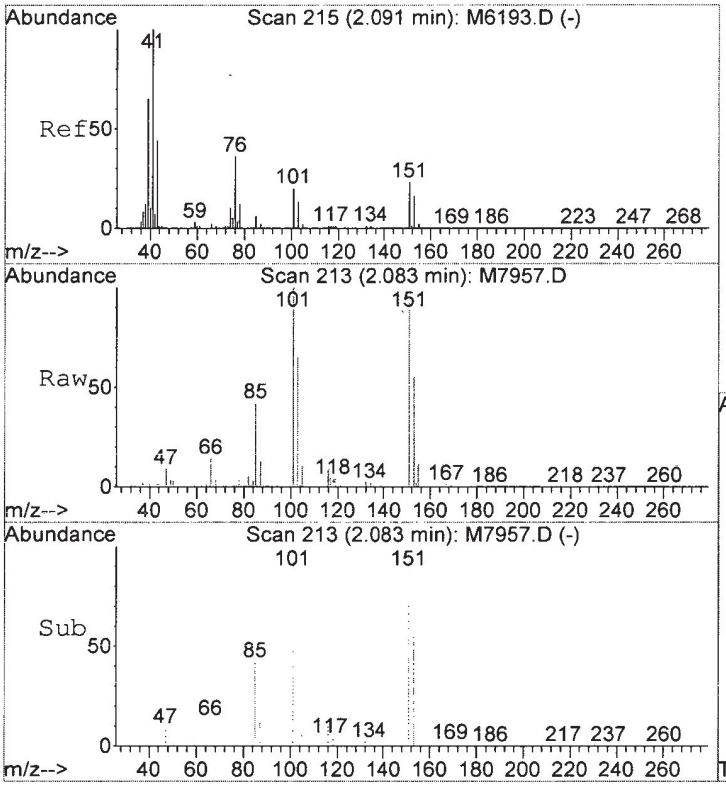


#21
Freon 113
Concen: 24.97 ug/L
RT: 2.08 min Scan# 212
Delta R.T. 0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion:101 Resp: 129907

Ion	Ratio	Lower	Upper
101	100		
85	41.0	20.1	60.1
151	85.1	64.0	104.0

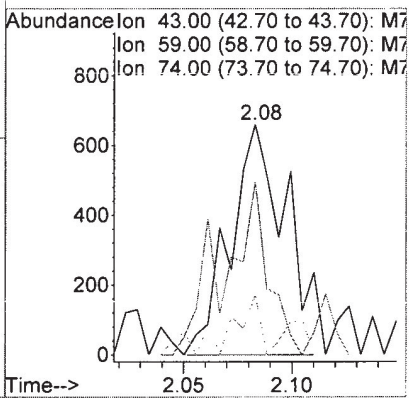


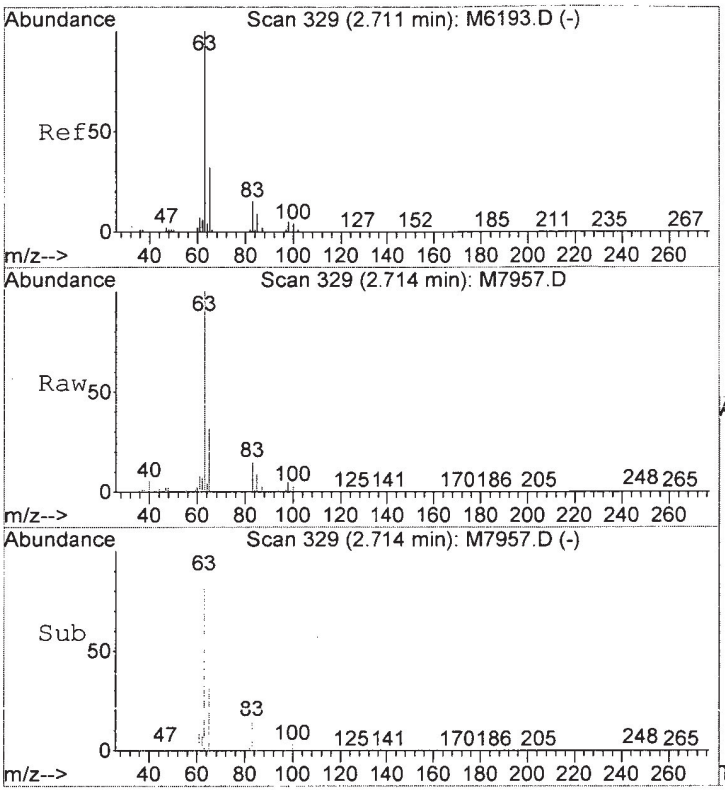


#22
Methyl Acetate
Concen: 0.51 ug/L
RT: 2.08 min Scan# 213
Delta R.T. -0.01 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 43 Resp: 1201

Ion	Ratio	Lower	Upper
43	100		
59	75.0	0.0	29.2#
74	25.8	2.4	42.4

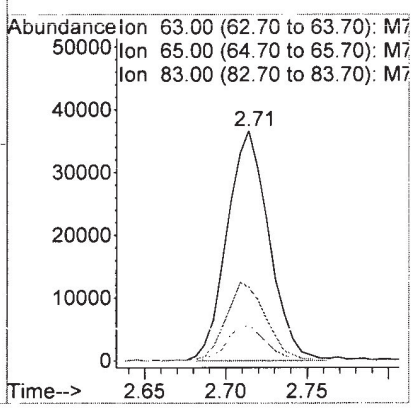


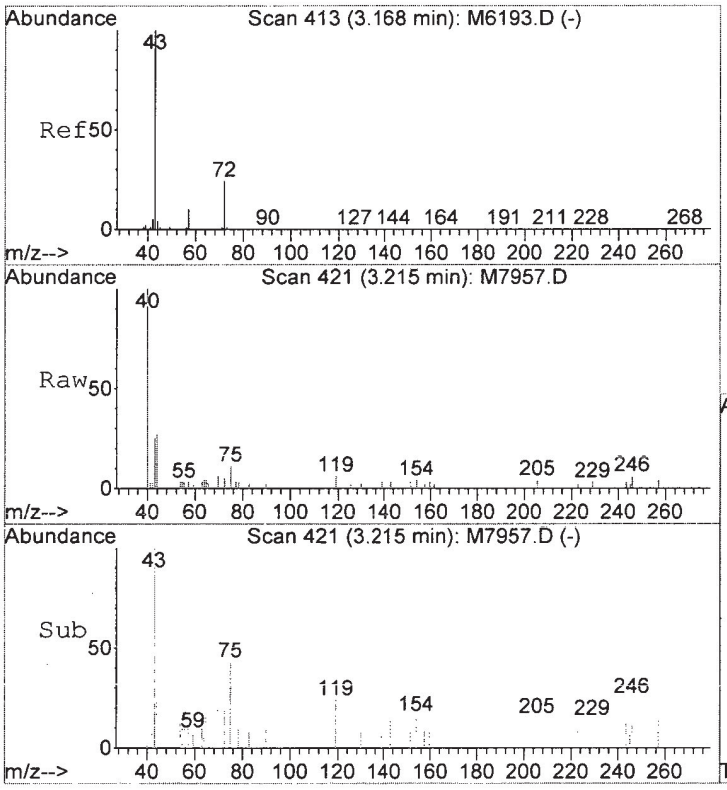


#27
1,1-Diclethane
Concen: 7.50 ug/L
RT: 2.71 min Scan# 329
Delta R.T. 0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 63 Resp: 65529

Ion	Ratio	Lower	Upper
63	100		
65	32.0	12.2	52.2
83	15.2	0.0	35.5

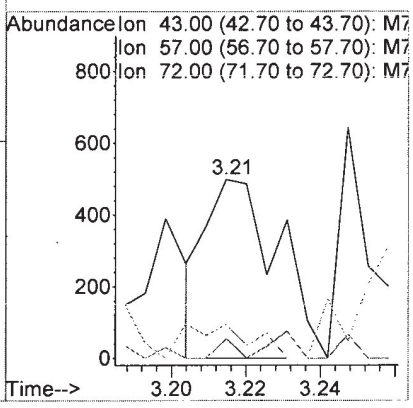


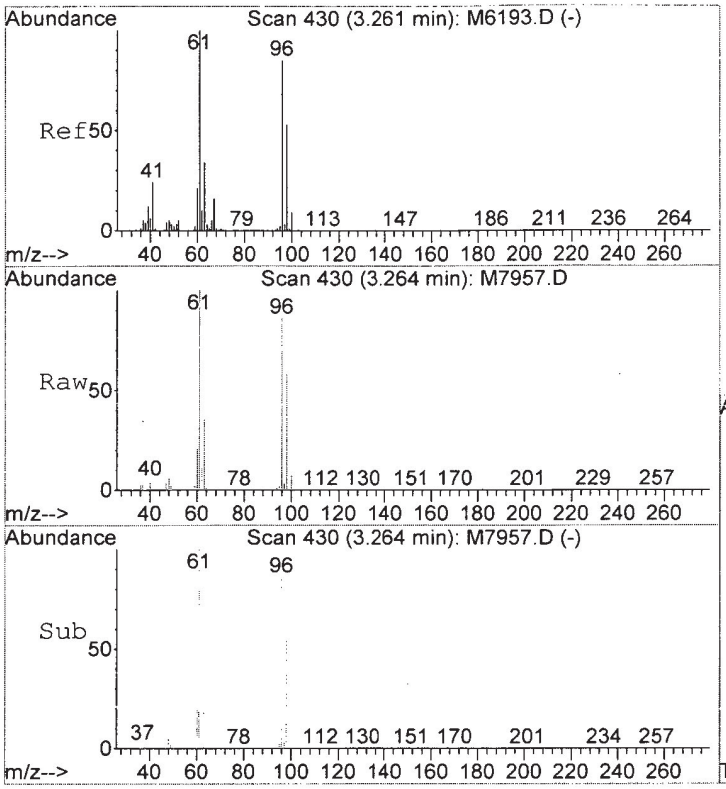


#31
2-Butanone
Concen: 0.59 ug/L
RT: 3.21 min Scan# 421
Delta R.T. 0.05 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 43 Resp: 677

Ion	Ratio	Lower	Upper
43	100		
57	10.8	0.0	29.7
72	19.0	4.2	44.2

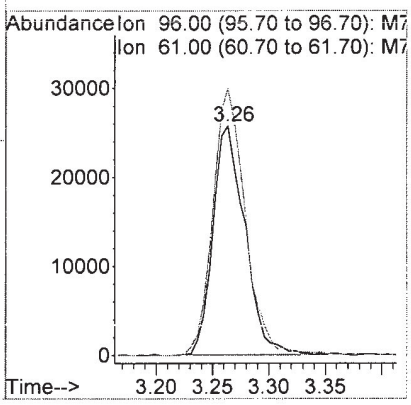


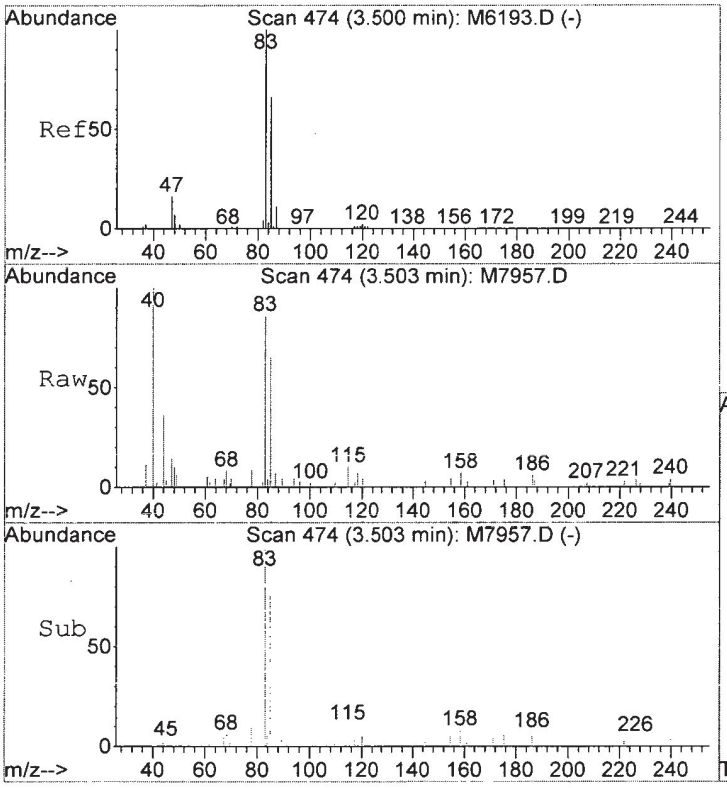


#33
cis-1,2-Dichloroethene
Concen: 9.06 ug/L
RT: 3.26 min Scan# 430
Delta R.T. 0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 96 Resp: 50792

Ion	Ratio	Lower	Upper
96	100		
61	116.3	98.2	138.2

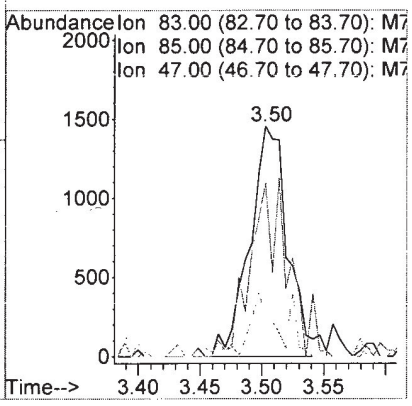


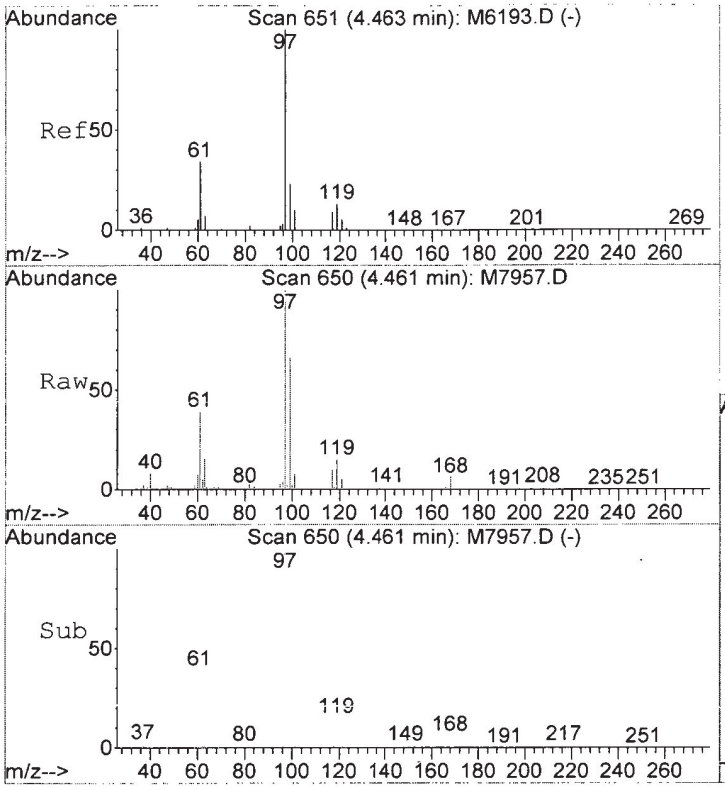


#35
Chloroform
Concen: 0.35 ug/L
RT: 3.50 min Scan# 474
Delta R.T. 0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 83 Resp: 3121

Ion	Ratio	Lower	Upper
83	100		
85	75.2	45.7	85.7
47	16.2	0.4	40.4

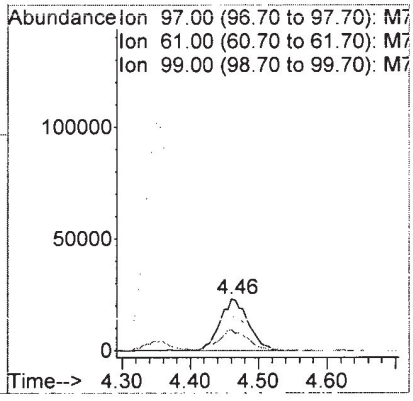


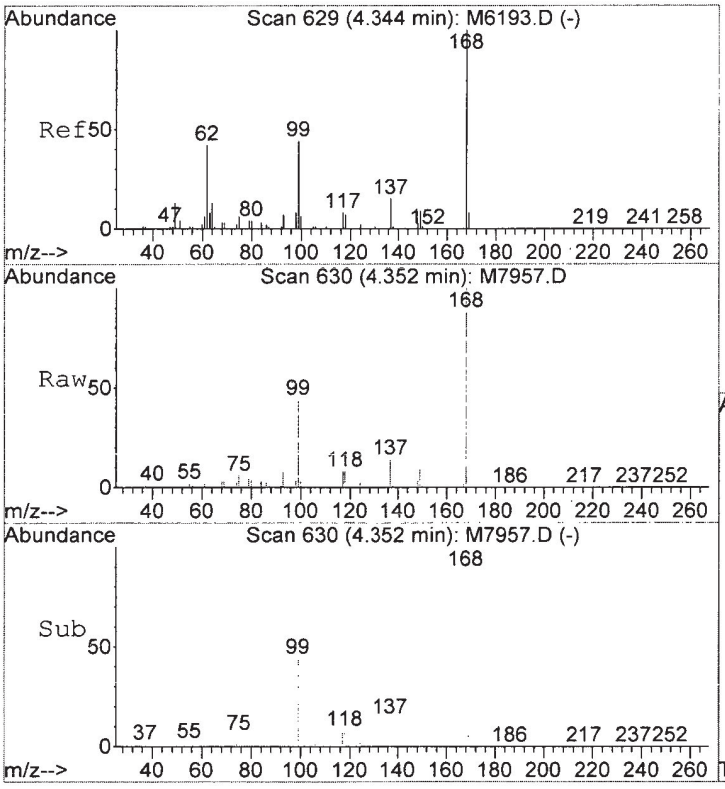


#38
1,1,1-Trichloroethane
Concen: 9.44 ug/L
RT: 4.46 min Scan# 650
Delta R.T. -0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 97 Resp: 67239

Ion	Ratio	Lower	Upper
97	100		
61	39.5	19.7	59.7
99	66.1	47.3	87.3

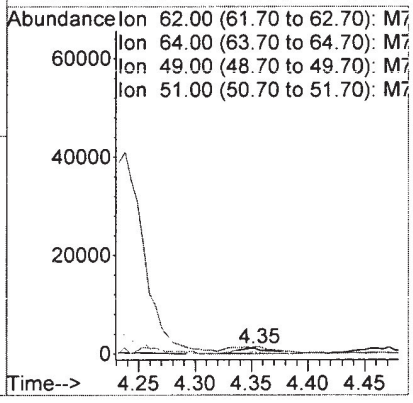


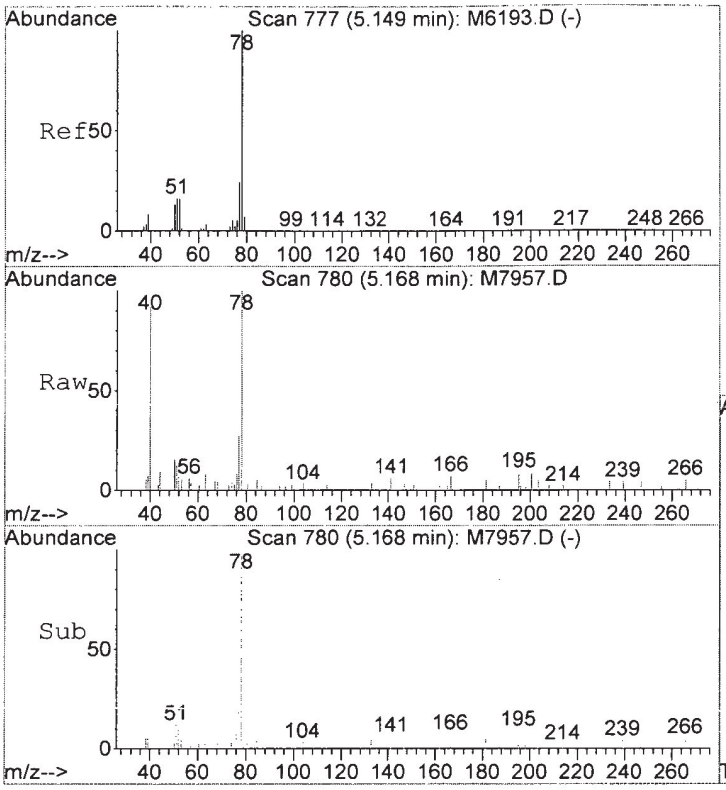


#43
1,2-Dichloroethane
Concen: 0.47 ug/L
RT: 4.35 min Scan# 630
Delta R.T. 0.01 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 62 Resp: 2421

Ion	Ratio	Lower	Upper
62	100		
64	35.2	12.1	52.1
49	37.9	11.3	51.3
51	118.1	0.0	31.8#

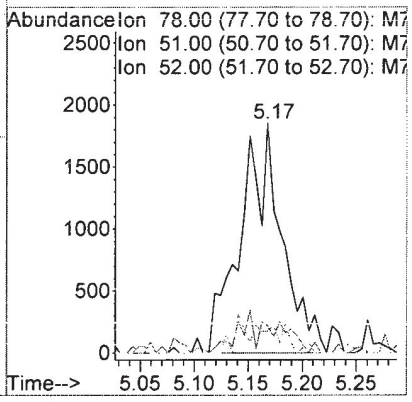


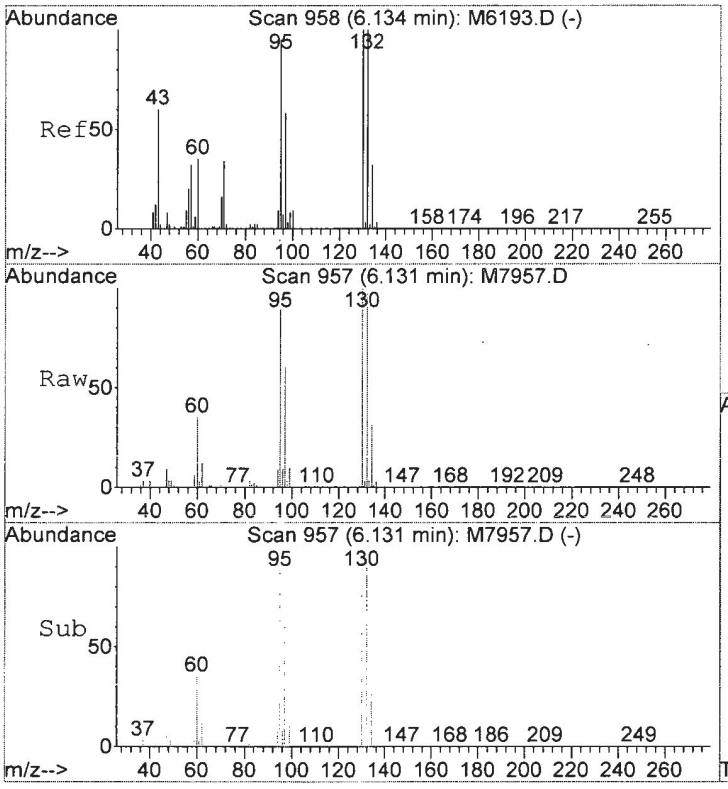


#47
Benzene
Concen: 0.25 ug/L
RT: 5.17 min Scan# 780
Delta R.T. 0.02 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion: 78 Resp: 4926

Ion	Ratio	Lower	Upper
78	100		
51	11.8	0.0	36.0
52	9.5	0.0	35.6

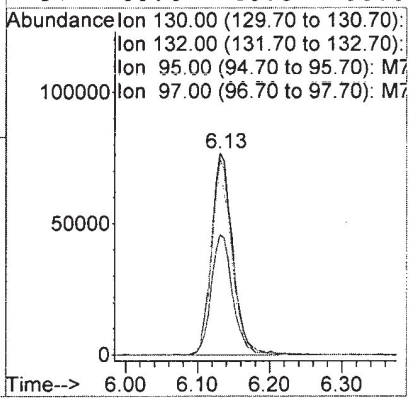




#51
Trichloroethene
Concen: 26.71 ug/L
RT: 6.13 min Scan# 957
Delta R.T. -0.00 min
Lab File: M7957.D
Acq: 22 Mar 2016 6:46 pm

Tgt Ion:130 Resp: 155845

Ion	Ratio	Lower	Upper
130	100		
132	94.5	76.5	116.5
95	88.8	72.7	112.7
97	60.6	40.5	80.5



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7958.D Vial: 23
Acq On : 22 Mar 2016 7:18 pm Operator: D.Lipani
Sample : R1602524-008|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:33 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	4.35	168	626524	50.00	ug/L		0.00
39) 1,4-Difluorobenzene	5.67	114	854702	50.00	ug/L		0.00
64) d5-Chlorobenzene	9.08	117	810812	50.00	ug/L		0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	496488	50.00	ug/L		0.00
System Monitoring Compounds							
40) surr4,Dibrflmethane	3.64	113	311467	58.10	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 116.20%				
42) surr1,1,2-dichloroethane-d	4.24	65	263050	60.16	ug/L		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 120.32%				
62) SURR3,Toluene-d8	7.76	98	1000397	56.19	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 112.38%				
82) SURR2,BFB	10.14	95	384134	52.93	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.86%				
Target Compounds						Qvalue	
4) Vinyl Chloride	1.15	62	7229	0.96	ug/L	#	1
6) Chloroethane	1.38	64	2309m	0.61	ug/L		
9) Freon 123a	1.60	67	60518	9.36	ug/L		94
14) Acetone	1.73	43	4808	6.41	ug/L		98
21) Freon 113	2.08	101	45851	8.97	ug/L		98
25) trans-1,2-Dichloroethene	2.51	96	9356	1.66	ug/L		84
27) 1,1-Diclethane	2.71	63	310716	36.20	ug/L		99
31) 2-Butanone	3.19	43	550	0.49	ug/L		79
33) cis-1,2-Dichloroethene	3.26	96	483962	87.84	ug/L		97
38) 1,1,1-Trichloroethane	4.46	97	80823	11.54	ug/L		92
43) 1,2-Dichloroethane	4.35	62	2022	0.40	ug/L	#	25
51) Trichloroethene	6.13	130	136513	24.01	ug/L		99
71) Tetrachloroethene	8.50	164	3438	0.70	ug/L		90

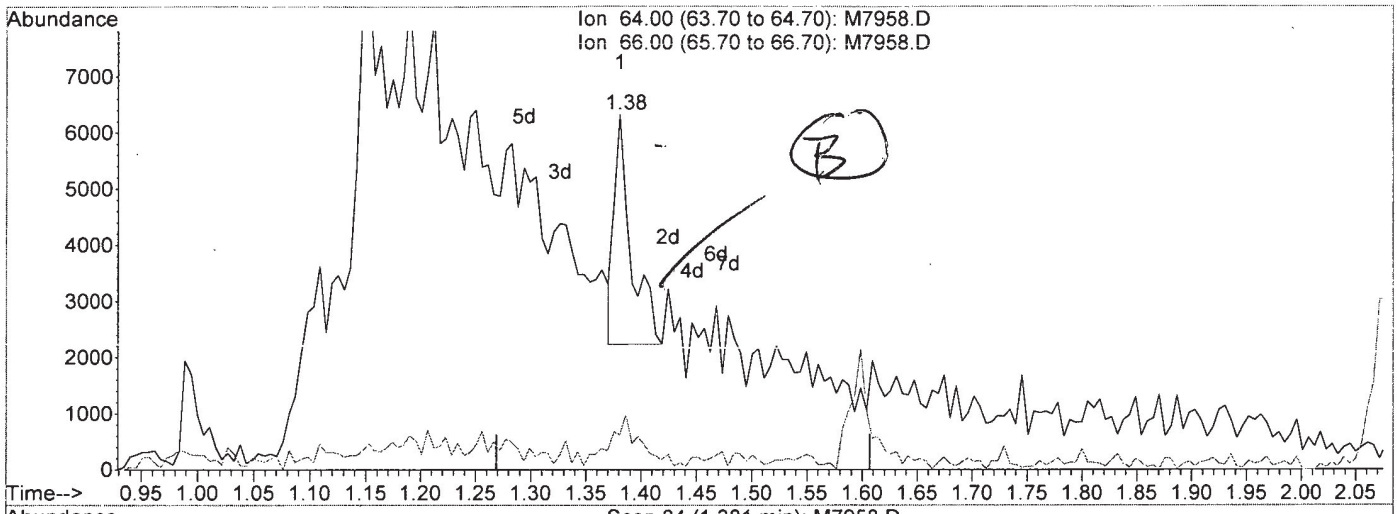
hit good
DL 3/23/16

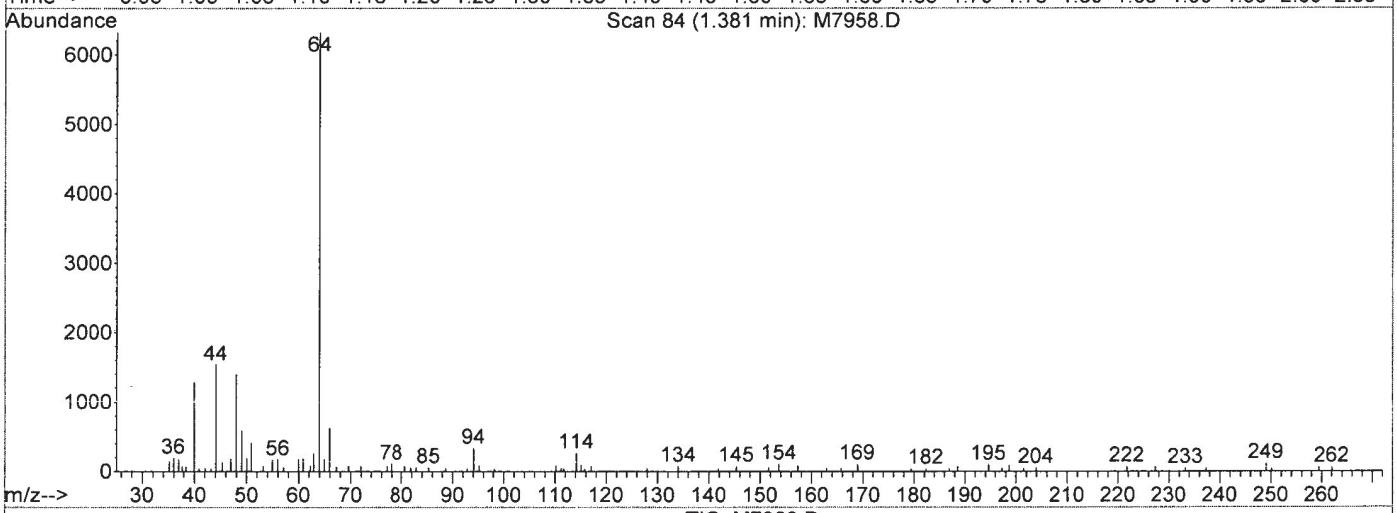
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7958.D Vial: 23
Acq On : 22 Mar 2016 7:18 pm Operator: D.Lipani
Sample : R1602524-008|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 19:36 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration





TIC: M7958.D

(6) Chloroethane (P)

1.38min 1.14ug/L

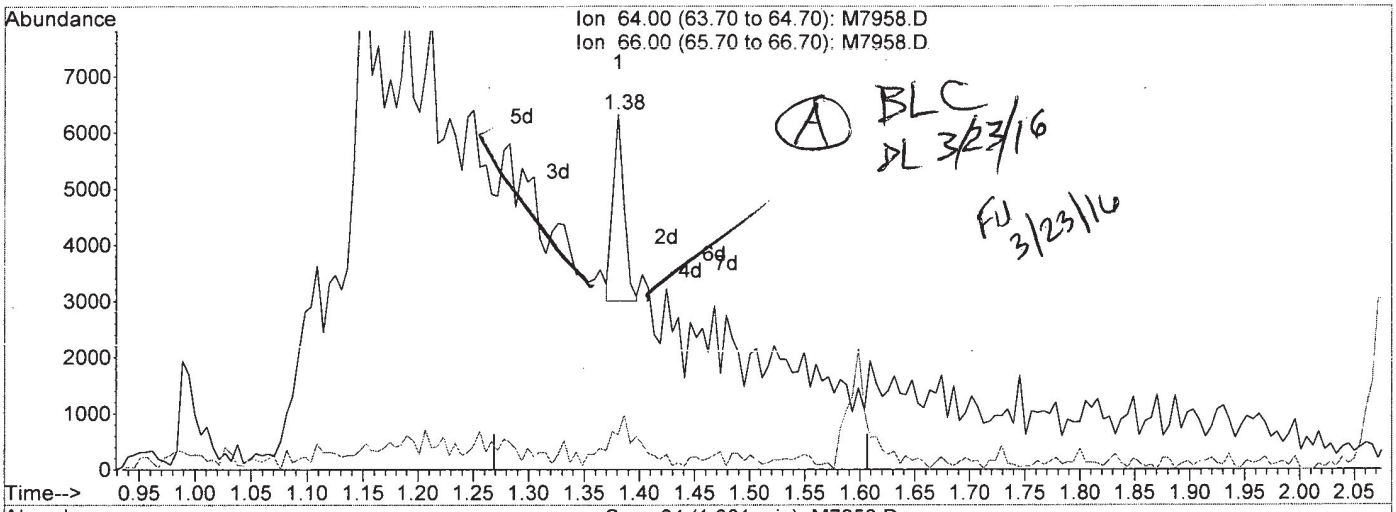
response 4344

Ion	Exp%	Act%
64.00	100	100
66.00	32.60	9.87#
0.00	0.00	0.00
0.00	0.00	0.00

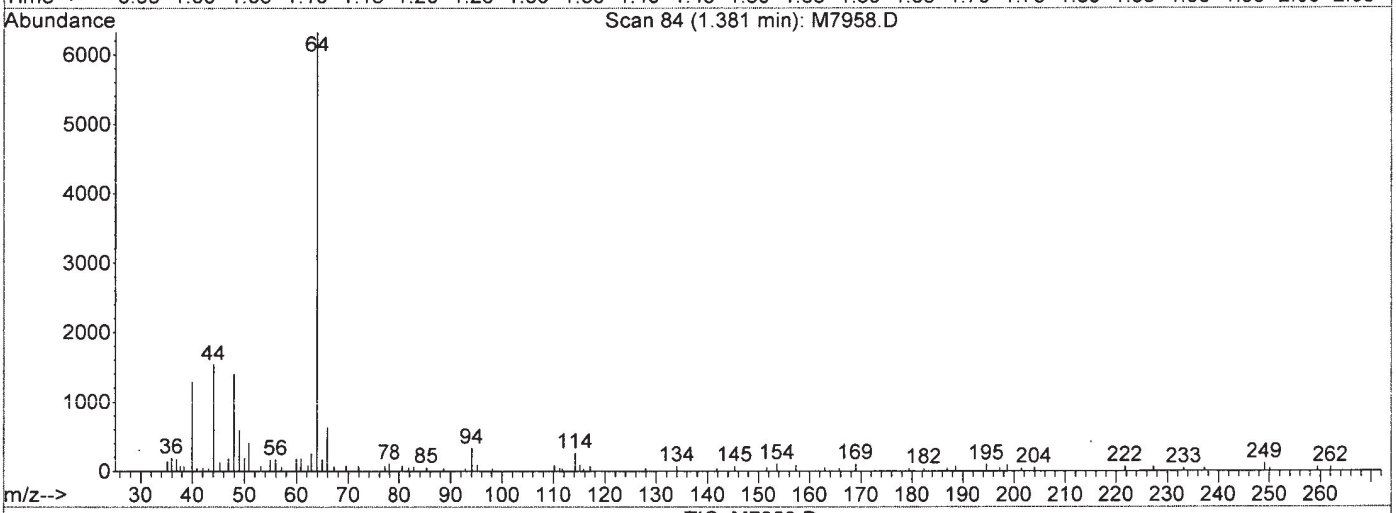
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7958.D Vial: 23
Acq On : 22 Mar 2016 7:18 pm Operator: D.Lipani
Sample : R1602524-008|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:29 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration



A BLC 3/23/16
DL 3/23/16
FU 3/23/16



TIC: M7958.D

(6) Chloroethane (P)

1.38min 0.61ug/L m

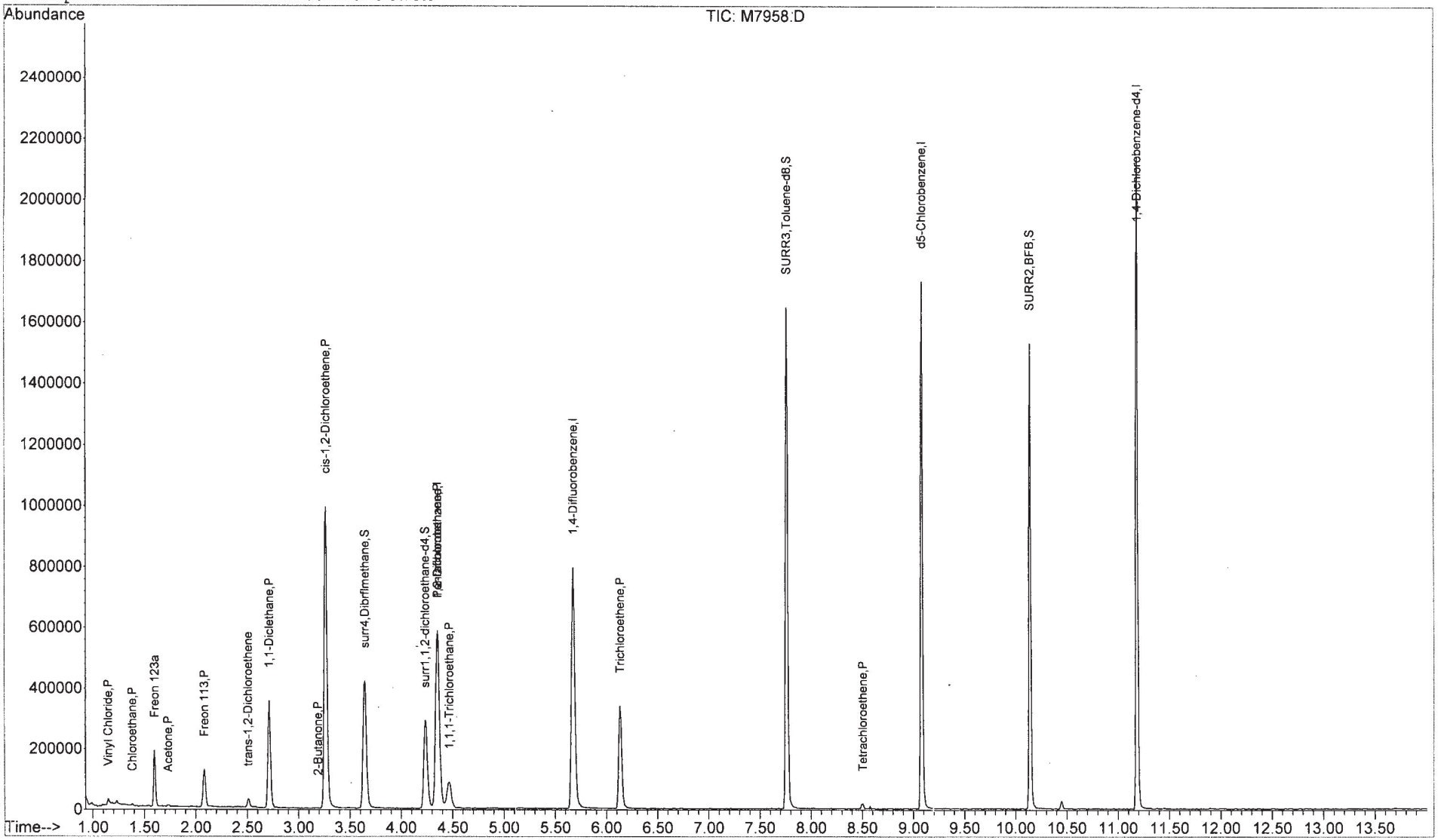
response 2309

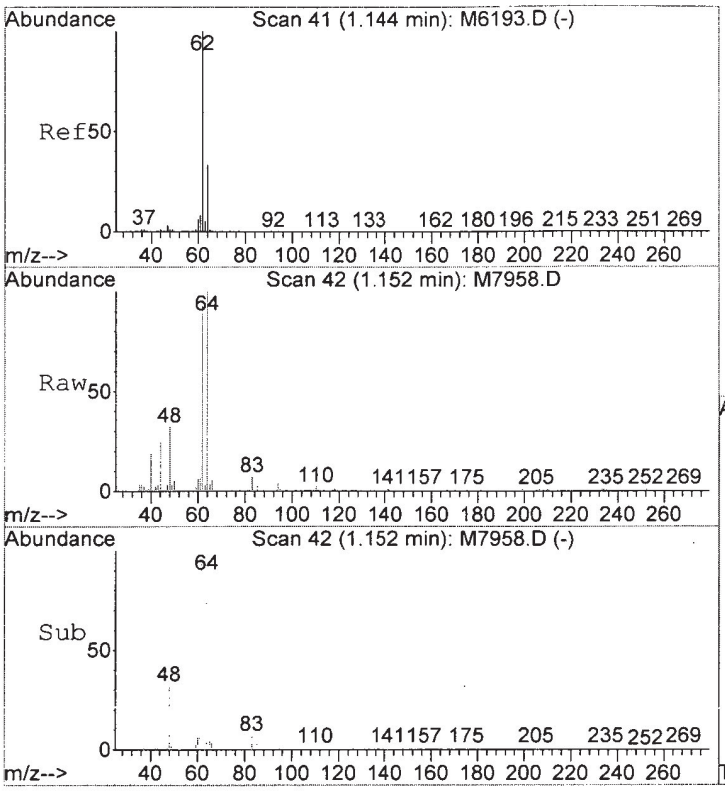
Ion	Exp%	Act%
64.00	100	100
66.00	32.60	9.87#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7958.D Vial: 23
Acq On : 22 Mar 2016 7:18 pm Operator: D.Lipani
Sample : R1602524-008|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:33 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

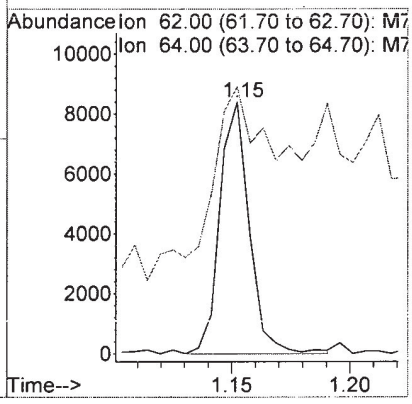


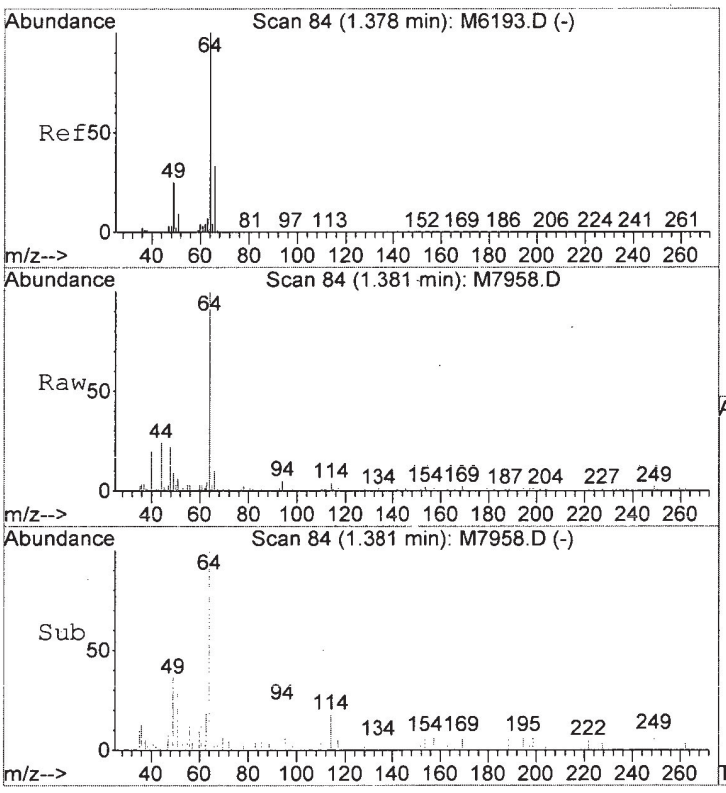


#4
Vinyl Chloride
Concen: 0.96 ug/L
RT: 1.15 min Scan# 42
Delta R.T. 0.01 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 62 Resp: 7229

Ion	Ratio	Lower	Upper
62	100		
64	106.0	13.4	53.4#

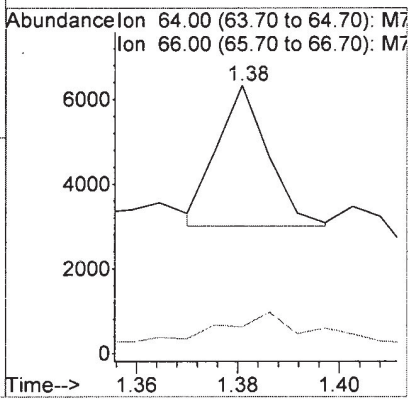


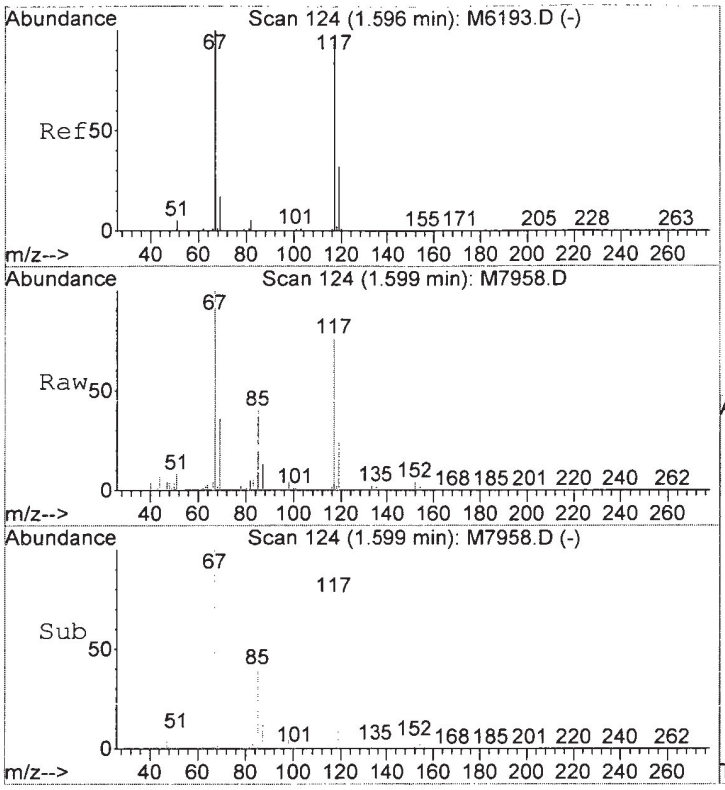


#6
Chloroethane
Concen: 0.61 ug/L m
RT: 1.38 min Scan# 84
Delta R.T. 0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 64 Resp: 2309

Ion	Ratio	Lower	Upper
64	100		
66	9.9	12.6	52.6#

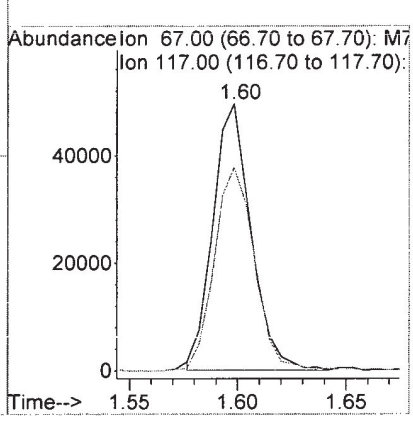


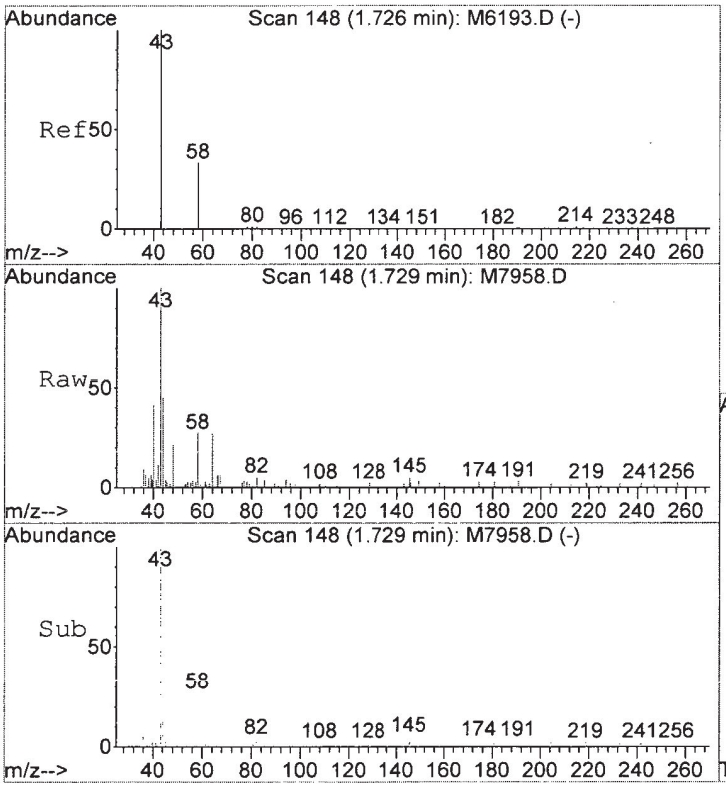


#9
Freon 123a
Concen: 9.36 ug/L
RT: 1.60 min Scan# 124
Delta R.T. 0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 67 Resp: 60518

Ion	Ratio	Lower	Upper
67	100		
117	76.2	62.0	102.0

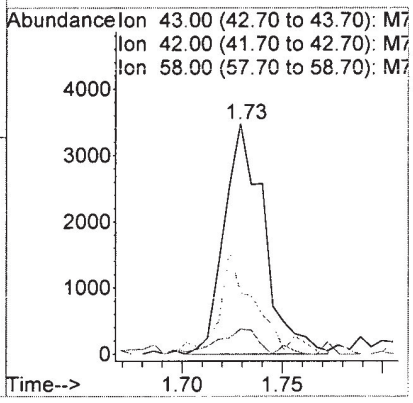


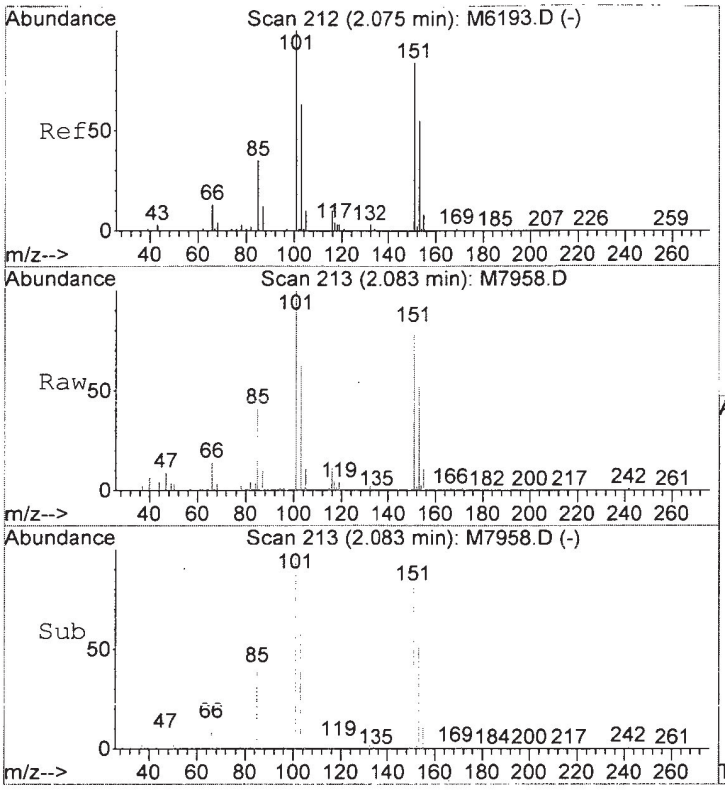


#14
Acetone
Concen: 6.41 ug/L
RT: 1.73 min Scan# 148
Delta R.T. 0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 43 Resp: 4808

Ion	Ratio	Lower	Upper
43	100		
42	10.9	0.0	29.0
58	26.8	6.3	46.3

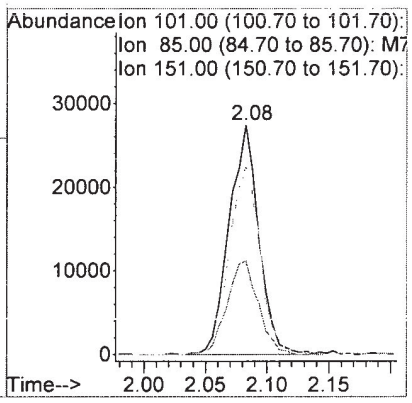


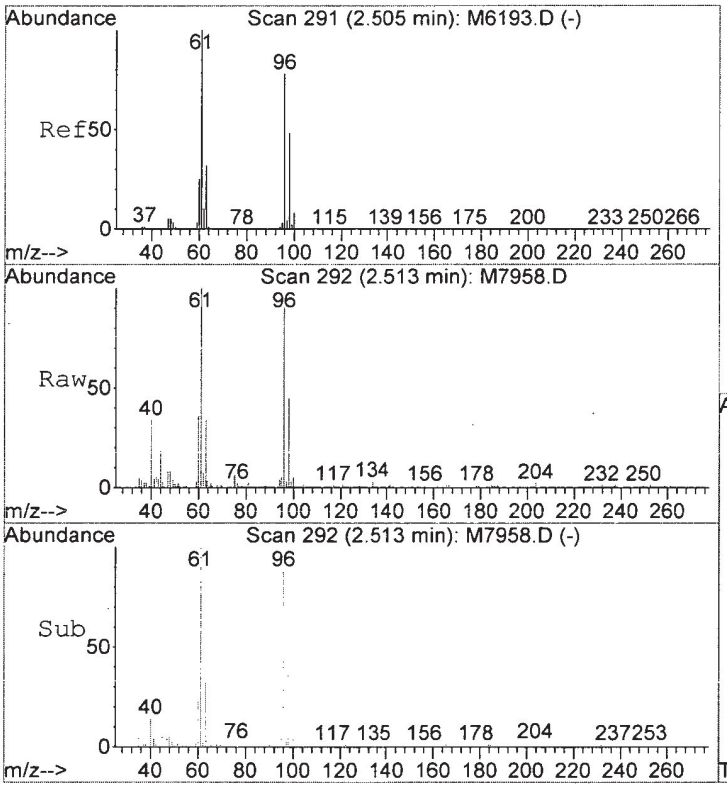


#21
Freon 113
Concen: 8.97 ug/L
RT: 2.08 min Scan# 213
Delta R.T. 0.01 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion:101 Resp: 45851

Ion	Ratio	Lower	Upper
101	100		
85	40.8	20.1	60.1
151	82.0	64.0	104.0

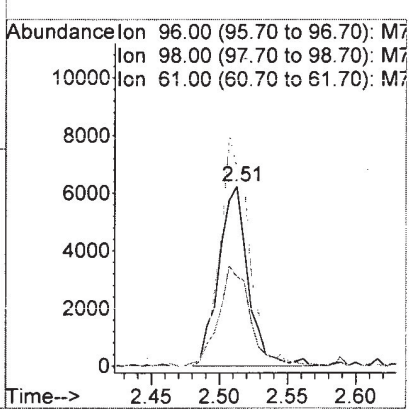


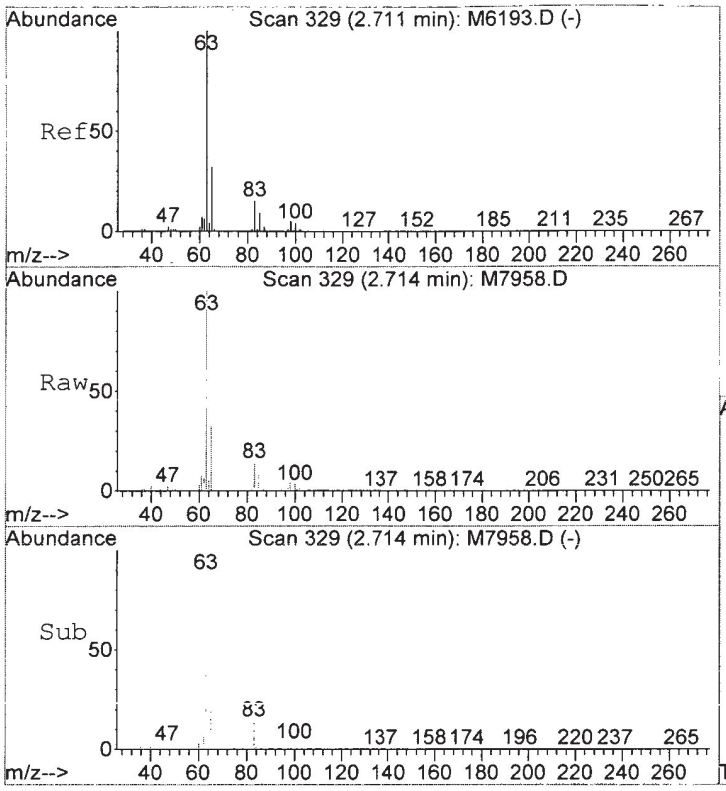


#25
trans-1,2-Dichloroethene
Concen: 1.66 ug/L
RT: 2.51 min Scan# 292
Delta R.T. 0.01 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 96 Resp: 9356

Ion	Ratio	Lower	Upper
96	100		
98	49.7	41.7	81.7
61	109.7	108.8	148.8

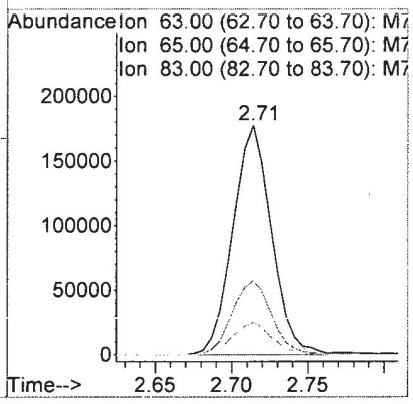


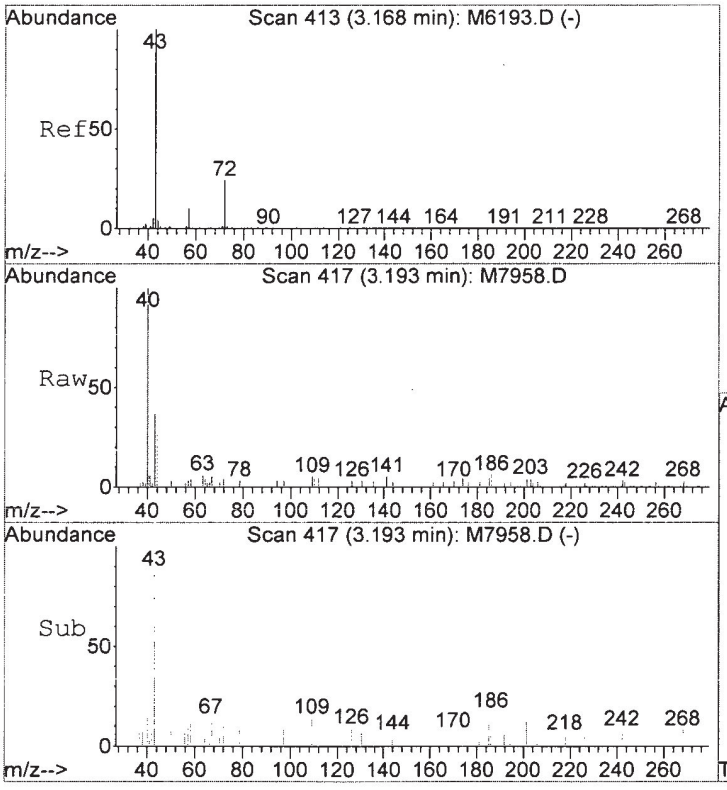


#27
1,1-Diclethane
Concen: 36.20 ug/L
RT: 2.71 min Scan# 329
Delta R.T. 0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 63 Resp: 310716

Ion	Ratio	Lower	Upper
63	100		
65	32.3	12.2	52.2
83	13.9	0.0	35.5

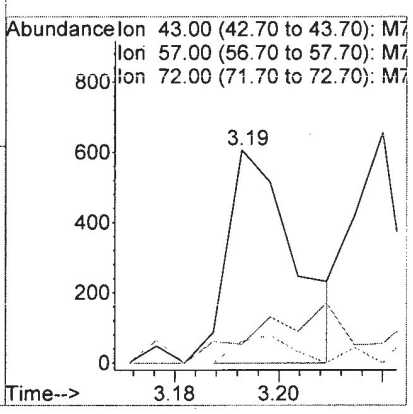


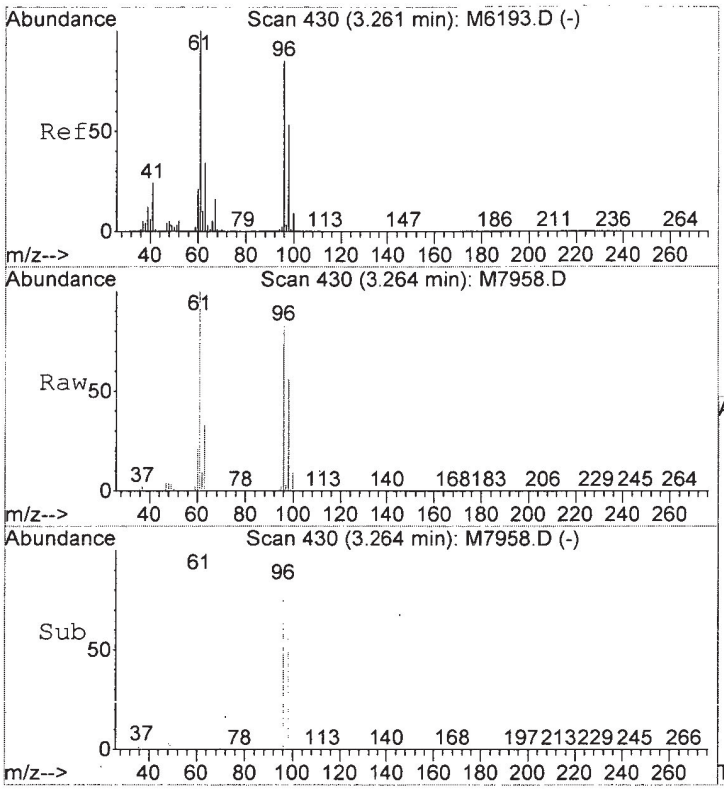


#31
2-Butanone
Concen: 0.49 ug/L
RT: 3.19 min Scan# 417
Delta R.T. 0.02 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 43 Resp: 550

Ion	Ratio	Lower	Upper
43	100		
57	8.7	0.0	29.7
72	10.1	4.2	44.2

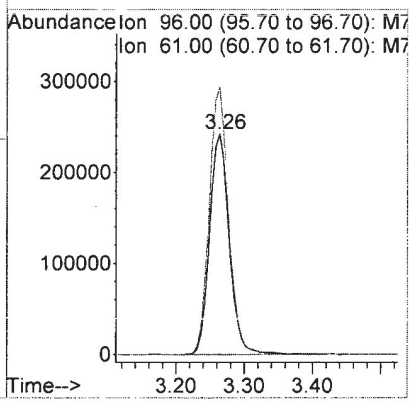


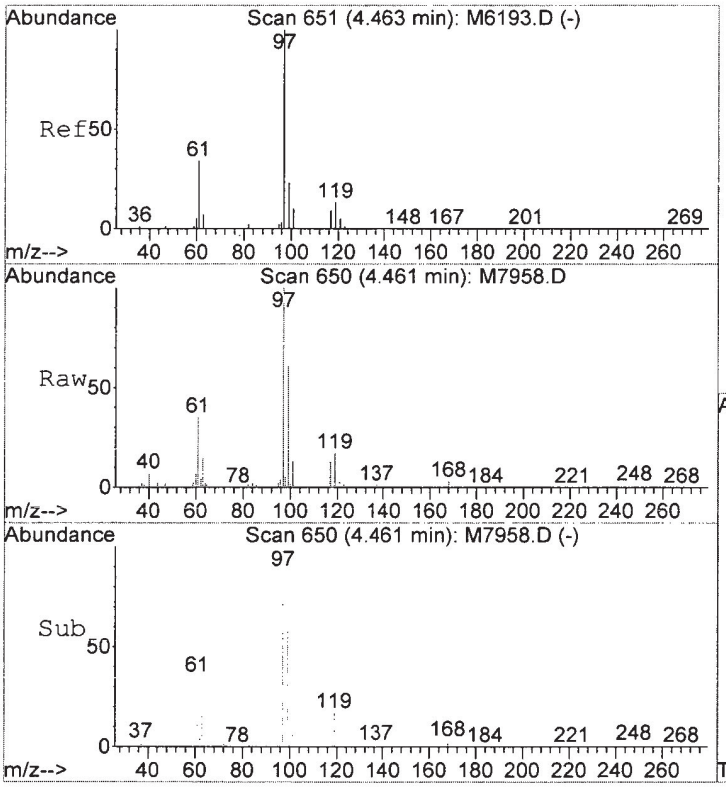


#33
cis-1,2-Dichloroethene
Concen: 87.84 ug/L
RT: 3.26 min Scan# 430
Delta R.T. 0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 96 Resp: 483962

Ion	Ratio	Lower	Upper
96	100		
61	121.0	98.2	138.2

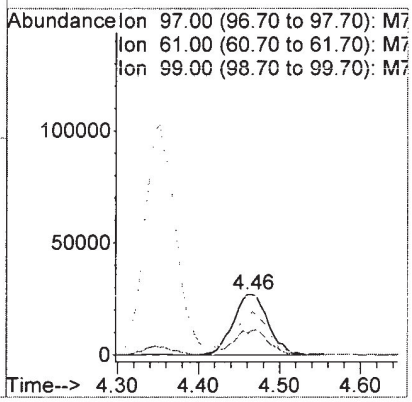


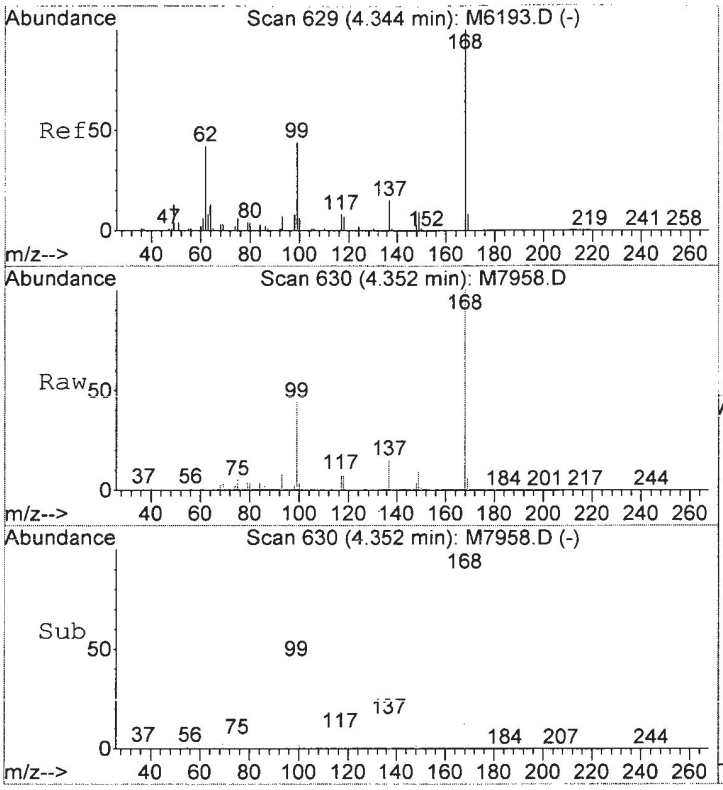


#38
1,1,1-Trichloroethane
Concen: 11.54 ug/L
RT: 4.46 min Scan# 650
Delta R.T. -0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 97 Resp: 80823

Ion	Ratio	Lower	Upper
97	100		
61	35.1	19.7	59.7
99	60.8	47.3	87.3

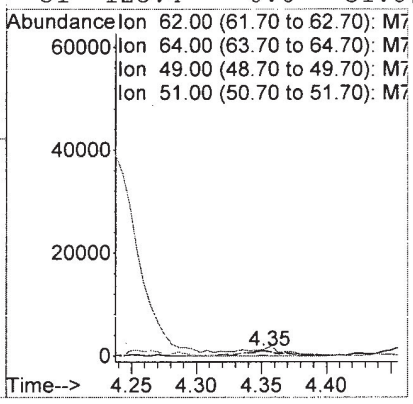


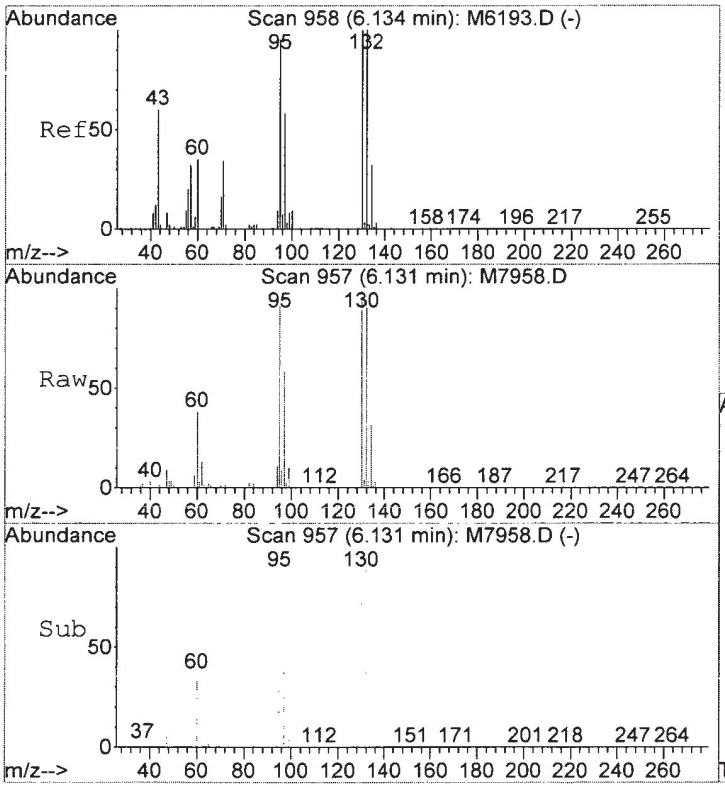


#43
1,2-Dichloroethane
Concen: 0.40 ug/L
RT: 4.35 min Scan# 630
Delta R.T. 0.01 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion: 62 Resp: 2022

Ion	Ratio	Lower	Upper
62	100		
64	15.4	12.1	52.1
49	52.8	11.3	51.3#
51	125.4	0.0	31.8#

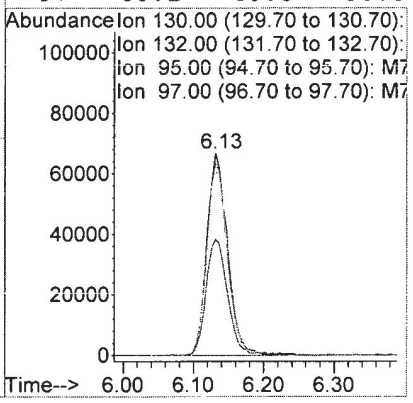


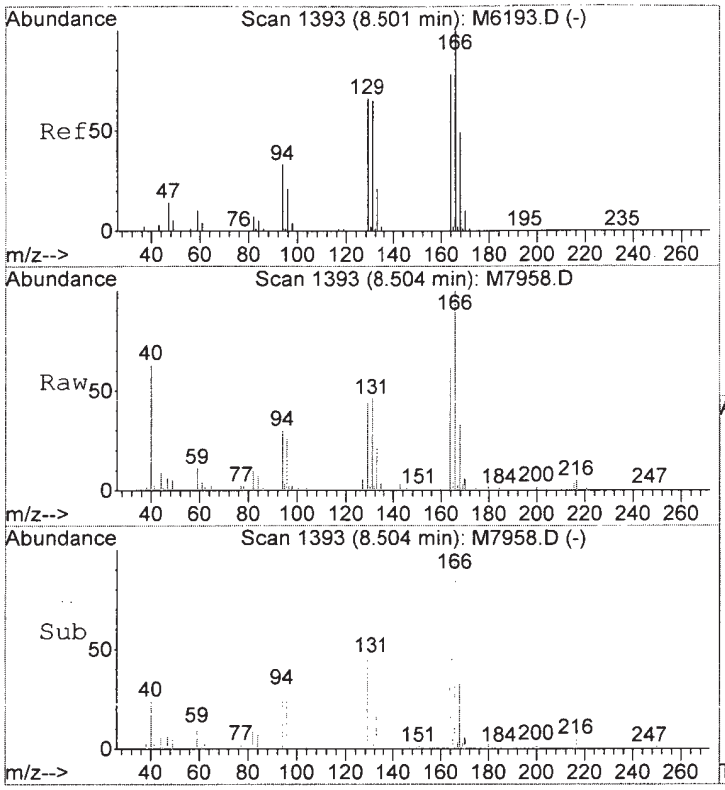


#51
Trichloroethene
Concen: 24.01 ug/L
RT: 6.13 min Scan# 957
Delta R.T. -0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion:130 Resp: 136513

Ion	Ratio	Lower	Upper
130	100		
132	97.3	76.5	116.5
95	94.5	72.7	112.7
97	60.2	40.5	80.5

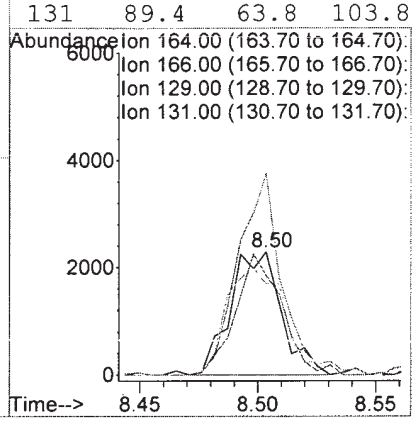




#71
Tetrachloroethene
Concen: 0.70 ug/L
RT: 8.50 min Scan# 1393
Delta R.T. 0.00 min
Lab File: M7958.D
Acq: 22 Mar 2016 7:18 pm

Tgt Ion:164 Resp: 3438

Ion	Ratio	Lower	Upper
164	100		
166	141.4	108.3	148.3
129	98.2	65.8	105.8
131	89.4	63.8	103.8



Initial Calibration - Summary Report

DL 12/2/15

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3197	<=15	2.8
1,1,1,2-Tetrachloroethane	T	Average RF			0.3197	<=20	2.8
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.5588	<=15	3.3
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.5588	<=20	3.3
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.4574	<=15	4.3
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.4574	<=20	4.3
1,1,2-Trichloroethane	T	Average RF		0.100	0.2120	<=15	3.0
1,1,2-Trichloroethane	T	Average RF		0.100	0.2120	<=20	3.0
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.4080	<=15	5.8
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.4080	<=20	5.8
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.6851	<=15	5.4
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.6851	<=20	5.4
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.4094	<=15	5.7
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.4094	<=20	5.7
1,1-Dichloropropene	T	Average RF			0.3659	<=15	5.9
1,1-Dichloropropene	T	Average RF			0.3659	<=20	5.9
1,2,3-Trichlorobenzene	T	Average RF			0.5714	<=15	3.9
1,2,3-Trichlorobenzene	T	Average RF			0.5714	<=20	3.9
1,2,3-Trichloropropane	T	Average RF			0.3117	<=15	7.3
1,2,3-Trichloropropane	T	Average RF			0.3117	<=20	7.3
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.6919	<=15	3.4
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.6919	<=20	3.4
1,2,4-Trimethylbenzene	T	Average RF			1.914	<=15	5.0
1,2,4-Trimethylbenzene	T	Average RF			1.914	<=20	5.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.06678	<=15	11.7
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.06678	<=20	11.7
1,2-Dibromoethane	T	Average RF		0.100	0.2384	<=15	3.0
1,2-Dibromoethane	T	Average RF		0.100	0.2384	<=20	3.0
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5160	<=15	4.5
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5160	<=20	4.5
1,2-Dichlorobenzene	T	Average RF		0.400	1.196	<=15	4.9
1,2-Dichlorobenzene	T	Average RF		0.400	1.196	<=20	4.9
1,2-Dichloroethane	T	Average RF		0.100	0.2953	<=15	14.2
1,2-Dichloroethane	T	Average RF		0.100	0.2953	<=20	14.2
1,2-Dichloropropane	T	Average RF		0.100	0.2849	<=15	7.5
1,2-Dichloropropane	T	Average RF		0.100	0.2849	<=20	7.5
1,3,5-Trimethylbenzene	T	Average RF			1.797	<=15	4.1
1,3,5-Trimethylbenzene	T	Average RF			1.797	<=20	4.1
1,3-Dichlorobenzene	T	Average RF		0.600	1.262	<=15	4.5
1,3-Dichlorobenzene	T	Average RF		0.600	1.262	<=20	4.5
1,3-Dichloropropane	T	Average RF			0.3578	<=15	3.7
1,3-Dichloropropane	T	Average RF			0.3578	<=20	3.7
1,4-Dichlorobenzene	T	Average RF		0.500	1.297	<=15	7.2
1,4-Dichlorobenzene	T	Average RF		0.500	1.297	<=20	7.2
1,4-Dioxane	T	Average RF			0.001664	<=15	9.3
1,4-Dioxane	T	Average RF			0.001664	<=20	9.3
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6707	<=15	5.1
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6707	<=20	5.1
2,2-Dichloropropane	T	Average RF			0.5341	<=15	5.4
2,2-Dichloropropane	T	Average RF			0.5341	<=20	5.4
2-Butanone (MEK)	T	Average RF		0.05	0.09002	<=15	5.4
2-Butanone (MEK)	T	Average RF		0.05	0.09002	<=20	5.4

Initial Calibration - Summary Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
2-Chloro-1,3-butadiene	T	Average RF			0.6243	<=15	4.2
2-Chloro-1,3-butadiene	T	Average RF			0.6243	<=20	4.2
2-Chloroethyl Vinyl Ether	T	Average RF			0.1234	<=15	9.1
2-Chloroethyl Vinyl Ether	T	Average RF			0.1234	<=20	9.1
2-Chlorotoluene	T	Average RF			1.619	<=15	4.2
2-Chlorotoluene	T	Average RF			1.619	<=20	4.2
2-Hexanone	T	Average RF		0.05	0.1127	<=15	5.5
2-Hexanone	T	Average RF		0.05	0.1127	<=20	5.5
2-Methyl-1-propanol	T	Average RF			0.005819	<=15	5.7
2-Methyl-1-propanol	T	Average RF			0.005819	<=20	5.7
2-Methyl-2-propanol	T	Average RF			0.01974	<=15	5.2
2-Methyl-2-propanol	T	Average RF			0.01974	<=20	5.2
2-Nitropropane	T	Average RF			0.03087	<=15	5.2
2-Nitropropane	T	Average RF			0.03087	<=20	5.2
2-Propanol	T	Average RF			0.01222	<=15	5.9
2-Propanol	T	Average RF			0.01222	<=20	5.9
3-Chloro-1-propene	T	Average RF			0.1945	<=15	6.4
3-Chloro-1-propene	T	Average RF			0.1945	<=20	6.4
4-Chlorotoluene	T	Average RF			1.707	<=15	5.0
4-Chlorotoluene	T	Average RF			1.707	<=20	5.0
4-Isopropyltoluene	T	Average RF			1.814	<=15	4.8
4-Isopropyltoluene	T	Average RF			1.814	<=20	4.8
4-Methyl-2-pentanone	T	Average RF		0.05	0.1487	<=15	4.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.1487	<=20	4.7
Acetone	T	Average RF		0.05	0.05989	<=15	4.1
Acetone	T	Average RF		0.05	0.05989	<=20	4.1
Acetonitrile	T	Average RF			0.03261	<=15	9.9
Acetonitrile	T	Average RF			0.03261	<=20	9.9
Acrolein	T	Average RF			0.04421	<=15	9.6
Acrolein	T	Average RF			0.04421	<=20	9.6
Acrylonitrile	T	Average RF			0.08981	<=15	8.2
Acrylonitrile	T	Average RF			0.08981	<=20	8.2
Benzene	T	Average RF		0.500	1.123	<=15	4.2
Benzene	T	Average RF		0.500	1.123	<=20	4.2
Bromobenzene	T	Average RF			0.6925	<=15	4.0
Bromobenzene	T	Average RF			0.6925	<=20	4.0
Bromochloromethane	T	Average RF			0.2114	<=15	7.6
Bromochloromethane	T	Average RF			0.2114	<=20	7.6
Bromodichloromethane	T	Average RF		0.200	0.3466	<=15	3.8
Bromodichloromethane	T	Average RF		0.200	0.3466	<=20	3.8
Bromoform	T	Average RF		0.100	0.1883	<=15	9.2
Bromoform	T	Average RF		0.100	0.1883	<=20	9.2
Bromomethane	T	Average RF		0.100	0.3600	<=15	13.8
Bromomethane	T	Average RF		0.100	0.3600	<=20	13.8
Carbon Disulfide	T	Average RF		0.100	1.326	<=15	6.5
Carbon Disulfide	T	Average RF		0.100	1.326	<=20	6.5
Carbon Tetrachloride	T	Average RF		0.05	0.3587	<=15	5.7
Carbon Tetrachloride	T	Average RF		0.05	0.3587	<=20	5.7
Chlorobenzene	T	Average RF		0.500	0.8851	<=15	4.3
Chlorobenzene	T	Average RF		0.500	0.8851	<=20	4.3
Chloroethane	T	Average RF		0.100	0.3039	<=15	6.2
Chloroethane	T	Average RF		0.100	0.3039	<=20	6.2

Initial Calibration - Summary Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Chloroform	T	Average RF		0.200	0.6934	<=15	6.7
Chloroform	T	Average RF		0.200	0.6934	<=20	6.7
Chloromethane	T	Average RF		0.100	0.5751	<=15	6.5
Chloromethane	T	Average RF		0.100	0.5751	<=20	6.5
Cyclohexane	T	Average RF		0.100	0.4454	<=15	3.9
Cyclohexane	T	Average RF		0.100	0.4454	<=20	3.9
Cyclohexanone	T	Average RF			0.006466	<=15	3.1
Cyclohexanone	T	Average RF			0.006466	<=20	3.1
Dibromochloromethane	T	Average RF		0.100	0.2976	<=15	4.8
Dibromochloromethane	T	Average RF		0.100	0.2976	<=20	4.8
Dibromomethane	T	Average RF			0.1528	<=15	5.9
Dibromomethane	T	Average RF			0.1528	<=20	5.9
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5414	<=15	6.5
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5414	<=20	6.5
Dichlorofluoromethane (CFC 21)	T	Average RF			0.7549	<=15	6.2
Dichlorofluoromethane (CFC 21)	T	Average RF			0.7549	<=20	6.2
Dichloromethane	T	Average RF		0.100	0.4583	<=15	8.8
Dichloromethane	T	Average RF		0.100	0.4583	<=20	8.8
Diethyl Ether	T	Average RF			0.2684	<=15	3.6
Diethyl Ether	T	Average RF			0.2684	<=20	3.6
Ethyl Methacrylate	T	Average RF			0.2684	<=15	6.3
Ethyl Methacrylate	T	Average RF			0.2684	<=20	6.3
Ethylbenzene	T	Average RF		0.100	0.4555	<=15	4.9
Ethylbenzene	T	Average RF		0.100	0.4555	<=20	4.9
Hexachlorobutadiene	T	Average RF			0.3309	<=15	9.8
Hexachlorobutadiene	T	Average RF			0.3309	<=20	9.8
Iodomethane	T	Linear	1/X		0.5562	>=0.99	0.9987
Isopropylbenzene (Cumene)	T	Average RF		0.100	1.379	<=15	4.9
Isopropylbenzene (Cumene)	T	Average RF		0.100	1.379	<=20	4.9
Methacrylonitrile	T	Average RF			0.09607	<=15	8.3
Methacrylonitrile	T	Average RF			0.09607	<=20	8.3
Methyl Acetate	T	Average RF		0.100	0.1830	<=15	5.4
Methyl Acetate	T	Average RF		0.100	0.1830	<=20	5.4
Methyl Methacrylate	T	Average RF			0.1109	<=15	14.7
Methyl Methacrylate	T	Average RF			0.1109	<=20	14.7
Methyl tert-Butyl Ether	T	Average RF		0.100	0.8499	<=15	3.1
Methyl tert-Butyl Ether	T	Average RF		0.100	0.8499	<=20	3.1
Methylcyclohexane	T	Average RF		0.100	0.2895	<=15	5.9
Methylcyclohexane	T	Average RF		0.100	0.2895	<=20	5.9
Naphthalene	T	Average RF			1.216	<=15	5.4
Naphthalene	T	Average RF			1.216	<=20	5.4
Nitrobenzene	T	Average RF			0.01625	<=15	10.7
Nitrobenzene	T	Average RF			0.01625	<=20	10.7
Propionitrile	T	Average RF			0.02972	<=15	5.1
Propionitrile	T	Average RF			0.02972	<=20	5.1
Styrene	T	Average RF		0.300	0.9094	<=15	4.1
Styrene	T	Average RF		0.300	0.9094	<=20	4.1
Tetrachloroethene (PCE)	T	Average RF		0.200	0.3030	<=15	3.3
Tetrachloroethene (PCE)	T	Average RF		0.200	0.3030	<=20	3.3
Tetrahydrofuran (THF)	T	Average RF			0.05873	<=15	6.2
Tetrahydrofuran (THF)	T	Average RF			0.05873	<=20	6.2
Toluene	T	Average RF		0.400	1.175	<=15	6.2

Initial Calibration - Summary Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Toluene	T	Average RF		0.400	1.175	<=20	6.2
Trichloroethene (TCE)	T	Average RF		0.200	0.3326	<=15	5.3
Trichloroethene (TCE)	T	Average RF		0.200	0.3326	<=20	5.3
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.6269	<=15	6.5
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.6269	<=20	6.5
Vinyl Acetate	T	Average RF			0.5794	<=15	4.7
Vinyl Acetate	T	Average RF			0.5794	<=20	4.7
Vinyl Chloride	T	Average RF		0.100	0.6039	<=15	6.4
Vinyl Chloride	T	Average RF		0.100	0.6039	<=20	6.4
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4397	<=15	3.1
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4397	<=20	3.1
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4066	<=15	3.7
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4066	<=20	3.7
m,p-Xylenes	T	Average RF		0.100	0.5526	<=15	3.6
m,p-Xylenes	T	Average RF		0.100	0.5526	<=20	3.6
n-Butyl Acetate	T	Average RF			0.2909	<=15	5.3
n-Butyl Acetate	T	Average RF			0.2909	<=20	5.3
n-Butylbenzene	T	Average RF			1.600	<=15	6.5
n-Butylbenzene	T	Average RF			1.600	<=20	6.5
n-Heptane	T	Average RF			0.2443	<=15	3.9
n-Heptane	T	Average RF			0.2443	<=20	3.9
n-Propylbenzene	T	Average RF			2.664	<=15	5.2
n-Propylbenzene	T	Average RF			2.664	<=20	5.2
o-Xylene	T	Average RF		0.300	0.5735	<=15	3.8
o-Xylene	T	Average RF		0.300	0.5735	<=20	3.8
sec-Butylbenzene	T	Average RF			2.195	<=15	5.0
sec-Butylbenzene	T	Average RF			2.195	<=20	5.0
tert-Butylbenzene	T	Average RF			1.563	<=15	5.3
tert-Butylbenzene	T	Average RF			1.563	<=20	5.3
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4511	<=15	3.5
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4511	<=20	3.5
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3336	<=15	3.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3336	<=20	3.9
trans-1,4-Dichloro-2-butene	T	Average RF			0.09214	<=15	12.8
trans-1,4-Dichloro-2-butene	T	Average RF			0.09214	<=20	12.8
1,2-Dichloroethane-d4	S	Average RF			0.2558	<=15	4.5
1,2-Dichloroethane-d4	S	Average RF			0.2558	<=20	4.5
4-Bromofluorobenzene	S	Average RF			0.4476	<=15	4.5
4-Bromofluorobenzene	S	Average RF			0.4476	<=20	4.5
Dibromofluoromethane	S	Average RF			0.3136	<=15	4.1
Dibromofluoromethane	S	Average RF			0.3136	<=20	4.1
Toluene-d8	S	Average RF			1.042	<=15	6.8
Toluene-d8	S	Average RF			1.042	<=20	6.8

Initial Calibration - Detailed Report

DL 12/2/15

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
12	RC1500131-12	STD #2 - 1.0 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D	11/30/15 14:20
02	RC1500131-02	STD #9 - 200 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6196.D	11/30/15 18:20
03	RC1500131-03	STD #8 - 150 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D	11/30/15 17:49
04	RC1500131-04	STD #7 - 100 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D	11/30/15 17:14
05	RC1500131-05	STD #6 - 50 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6193.D	11/30/15 16:39
06	RC1500131-06	STD #5 - 20 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6192.D	11/30/15 16:02
07	RC1500131-07	STD #4 - 5.0 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D	11/30/15 15:26
08	RC1500131-08	STD #3 - 2.0 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D	11/30/15 14:52
10	RC1500131-10	STD #1 - 0.5 PPB	I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D	11/30/15 13:40

Analyte — **Curve Fit** — **Weighting**

1,1,1,2-Tetrachloroethane — Average RF — RSD = 2.8 — Average RF = 0.3197

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3235	12	1.000	0.3316	08	2.000	0.2989	07	5.000	0.3262
06	20.000	0.3208	05	50.000	0.3186	04	100.000	0.3215	03	150.000	0.3196
02	200.000	0.3166									

1,1,1-Trichloroethane (TCA) — Average RF — RSD = 3.3 — Average RF = 0.5588

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.5534	12	1.000	0.5955	08	2.000	0.5364	07	5.000	0.5691
06	20.000	0.5763	05	50.000	0.5462	04	100.000	0.5456	03	150.000	0.5571
02	200.000	0.5492									

1,1,2,2-Tetrachloroethane — Average RF — RSD = 4.3 — Average RF = 0.4574

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4757	12	1.000	0.4307	08	2.000	0.4603	07	5.000	0.4883
06	20.000	0.4723	05	50.000	0.4622	04	100.000	0.4481	03	150.000	0.4329
02	200.000	0.4460									

1,1,2-Trichloroethane — Average RF — RSD = 3.0 — Average RF = 0.2120

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2132	12	1.000	0.2125	08	2.000	0.2071	07	5.000	0.2206
06	20.000	0.2229	05	50.000	0.2055	04	100.000	0.2086	03	150.000	0.2054
02	200.000	0.2124									

1,1,2-Trichlorotrifluoroethane — Average RF — RSD = 5.8 — Average RF = 0.4080

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4281	12	1.000	0.4379	08	2.000	0.3703	07	5.000	0.4340
06	20.000	0.4238	05	50.000	0.3891	04	100.000	0.3924	03	150.000	0.4014
02	200.000	0.3948									

1,1-Dichloroethane (1,1-DCA) — Average RF — RSD = 5.4 — Average RF = 0.6851

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.7522	12	1.000	0.7068	08	2.000	0.6643	07	5.000	0.7055
06	20.000	0.7073	05	50.000	0.6797	04	100.000	0.6527	03	150.000	0.6669
02	200.000	0.6300									

1,1-Dichloroethene (1,1-DCE) — Average RF — RSD = 5.7 — Average RF = 0.4094

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4535	12	1.000	0.3755	08	2.000	0.4162	07	5.000	0.4214
06	20.000	0.4280	05	50.000	0.4067	04	100.000	0.3934	03	150.000	0.4018
02	200.000	0.3882									

Initial Calibration - Detailed Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Signal ID: I

Analyte **Curve Fit** **Weighting**

1,1-Dichloropropene Average RF RSD = 5.9 Average RF = 0.3659

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4147	12	1.000	0.3521	08	2.000	0.3402	07	5.000	0.3789
06	20.000	0.3765	05	50.000	0.3551	04	100.000	0.3583	03	150.000	0.3594
02	200.000	0.3582									

1,2,3-Trichlorobenzene Average RF RSD = 3.9 Average RF = 0.5714

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.5750	12	1.000	0.5427	08	2.000	0.5557	07	5.000	0.6098
06	20.000	0.5948	05	50.000	0.5823	04	100.000	0.5764	03	150.000	0.5504
02	200.000	0.5550									

1,2,3-Trichloropropane Average RF RSD = 7.3 Average RF = 0.3117

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3559	12	1.000	0.2873	08	2.000	0.3370	07	5.000	0.3028
06	20.000	0.3244	05	50.000	0.3007	04	100.000	0.3034	03	150.000	0.2918
02	200.000	0.3020									

1,2,4-Trichlorobenzene Average RF RSD = 3.4 Average RF = 0.6919

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.6931	12	1.000	0.6881	08	2.000	0.6530	07	5.000	0.7220
06	20.000	0.7041	05	50.000	0.7212	04	100.000	0.7020	03	150.000	0.6779
02	200.000	0.6662									

1,2,4-Trimethylbenzene Average RF RSD = 5.0 Average RF = 1.914

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.897	12	1.000	1.875	08	2.000	1.872	07	5.000	2.048
06	20.000	2.046	05	50.000	1.944	04	100.000	1.873	03	150.000	1.762

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 11.7 Average RF = 0.06678

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	1.000	0.08572	08	2.000	0.06234	07	5.000	0.06691	06	20.000	0.06508
05	50.000	0.06338	04	100.000	0.06467	03	150.000	0.06170	02	200.000	0.06440

1,2-Dibromoethane Average RF RSD = 3.0 Average RF = 0.2384

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2317	12	1.000	0.2268	08	2.000	0.2294	07	5.000	0.2451
06	20.000	0.2451	05	50.000	0.2431	04	100.000	0.2437	03	150.000	0.2400
02	200.000	0.2408									

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 4.5 Average RF = 0.5160

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.5328	12	1.000	0.5482	08	2.000	0.5117	07	5.000	0.5306
06	20.000	0.5352	05	50.000	0.4956	04	100.000	0.5044	03	150.000	0.5111
02	200.000	0.4740									

1,2-Dichlorobenzene Average RF RSD = 4.9 Average RF = 1.196

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.188	12	1.000	1.200	08	2.000	1.191	07	5.000	1.266
06	20.000	1.280	05	50.000	1.192	04	100.000	1.159	03	150.000	1.094

1,2-Dichloroethane Average RF RSD = 14.2 Average RF = 0.2953

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	1.000	0.3875	08	2.000	0.3128	07	5.000	0.3060	06	20.000	0.2908
05	50.000	0.2669	04	100.000	0.2694	03	150.000	0.2632	02	200.000	0.2658

Initial Calibration - Detailed Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte	Curve Fit	Weighting

1,2-Dichloroethane-d4 — Average RF — RSD = 4.5 — Average RF = 0.2558

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	50.000	0.2615	08	60.000	0.2705	07	70.000	0.2608	06	100.000	0.2575
04	125.000	0.2405	03	150.000	0.2440						

1,2-Dichloropropane — Average RF — RSD = 7.5 — Average RF = 0.2849

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3294	12	1.000	0.3105	08	2.000	0.2661	07	5.000	0.2859
06	20.000	0.2845	05	50.000	0.2698	04	100.000	0.2705	03	150.000	0.2712
02	200.000	0.2760									

1,3,5-Trimethylbenzene — Average RF — RSD = 4.1 — Average RF = 1.797

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.762	12	1.000	1.758	08	2.000	1.812	07	5.000	1.910
06	20.000	1.882	05	50.000	1.811	04	100.000	1.764	03	150.000	1.679

1,3-Dichlorobenzene — Average RF — RSD = 4.5 — Average RF = 1.262

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.272	12	1.000	1.329	08	2.000	1.252	07	5.000	1.328
06	20.000	1.307	05	50.000	1.277	04	100.000	1.228	03	150.000	1.217
02	200.000	1.153									

1,3-Dichloropropane — Average RF — RSD = 3.7 — Average RF = 0.3578

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3835	12	1.000	0.3582	08	2.000	0.3649	07	5.000	0.3656
06	20.000	0.3613	05	50.000	0.3416	04	100.000	0.3548	03	150.000	0.3428
02	200.000	0.3471									

1,4-Dichlorobenzene — Average RF — RSD = 7.2 — Average RF = 1.297

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.450	12	1.000	1.374	08	2.000	1.251	07	5.000	1.364
06	20.000	1.338	05	50.000	1.283	04	100.000	1.251	03	150.000	1.209
02	200.000	1.150									

1,4-Dioxane — Average RF — RSD = 9.3 — Average RF = 0.001664

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	40.000	0.001920	07	100.000	0.001751	06	400.000	0.001754	05	1000.000	0.001603
04	2000.000	0.001530	03	3000.000	0.001622	02	4000.000	0.001470			

2,2-Dichloro-1,1,1-trifluoroethane (CFC — Average RF — RSD = 5.1 — Average RF = 0.6707

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.7295	12	1.000	0.6766	08	2.000	0.6824	07	5.000	0.6611
06	20.000	0.7044	05	50.000	0.6346	04	100.000	0.6398	03	150.000	0.6373

2,2-Dichloropropane — Average RF — RSD = 5.4 — Average RF = 0.5341

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.6017	12	1.000	0.5433	08	2.000	0.4990	07	5.000	0.5285
06	20.000	0.5409	05	50.000	0.5128	04	100.000	0.5184	03	150.000	0.5326
02	200.000	0.5296									

2-Butanone (MEK) — Average RF — RSD = 5.4 — Average RF = 0.09002

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	5.000	0.08320	06	20.000	0.08869	05	50.000	0.09016	04	100.000	0.08833
03	150.000	0.09152	02	200.000	0.09820						

Initial Calibration - Detailed Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte	Curve Fit	Weighting

2-Chloro-1,3-butadiene — Average RF — RSD = 4.2 — Average RF = 0.6243

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.5777	12	1.000	0.6413	08	2.000	0.5813	07	5.000	0.6467
06	20.000	0.6398	05	50.000	0.6325	04	100.000	0.6292	03	150.000	0.6350
02	200.000	0.6356									

2-Chloroethyl Vinyl Ether — Average RF — RSD = 9.1 — Average RF = 0.1234

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	1.000	0.1050	08	2.000	0.1062	07	5.000	0.1248	06	20.000	0.1325
05	50.000	0.1310	04	100.000	0.1282	03	150.000	0.1286	02	200.000	0.1307

2-Chlorotoluene — Average RF — RSD = 4.2 — Average RF = 1.619

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.679	12	1.000	1.666	08	2.000	1.651	07	5.000	1.694
06	20.000	1.612	05	50.000	1.604	04	100.000	1.551	03	150.000	1.495

2-Hexanone — Average RF — RSD = 5.5 — Average RF = 0.1127

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	5.000	0.1020	06	20.000	0.1106	05	50.000	0.1125	04	100.000	0.1185
03	150.000	0.1134	02	200.000	0.1189						

2-Methyl-1-propanol — Average RF — RSD = 5.7 — Average RF = 0.005819

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	40.000	0.005310	07	100.000	0.005537	06	400.000	0.006047	05	1000.000	0.005627
04	2000.000	0.005934	03	3000.000	0.006021	02	4000.000	0.006252			

2-Methyl-2-propanol — Average RF — RSD = 5.2 — Average RF = 0.01974

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	10.000	0.02142	12	20.000	0.02114	08	40.000	0.01951	07	100.000	0.01928
06	400.000	0.02043	05	1000.000	0.01907	04	2000.000	0.01846	03	3000.000	0.01900
02	4000.000	0.01934									

2-Nitropropane — Average RF — RSD = 5.2 — Average RF = 0.03087

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	4.000	0.03083	07	10.000	0.02984	06	40.000	0.02940	05	100.000	0.02934
04	200.000	0.03086	03	300.000	0.03206	02	400.000	0.03379			

2-Propanol — Average RF — RSD = 5.9 — Average RF = 0.01222

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	20.000	0.01249	08	40.000	0.01207	07	100.000	0.01205	06	400.000	0.01384
05	1000.000	0.01223	04	2000.000	0.01168	03	3000.000	0.01190	02	4000.000	0.01149

3-Chloro-1-propene — Average RF — RSD = 6.4 — Average RF = 0.1945

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2211	12	1.000	0.1974	08	2.000	0.1996	07	5.000	0.1976
06	20.000	0.1976	05	50.000	0.1853	04	100.000	0.1867	03	150.000	0.1871
02	200.000	0.1781									

4-Bromofluorobenzene — Average RF — RSD = 4.5 — Average RF = 0.4476

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	50.000	0.4829	08	60.000	0.4581	07	70.000	0.4461	06	100.000	0.4306
04	125.000	0.4368	03	150.000	0.4308						

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

4-Chlorotoluene Average RF RSD = 5.0 Average RF = 1.707

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.841	12	1.000	1.677	08	2.000	1.728	07	5.000	1.725
06	20.000	1.768	05	50.000	1.726	04	100.000	1.627	03	150.000	1.564

4-Isopropyltoluene Average RF RSD = 4.8 Average RF = 1.814

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.804	12	1.000	1.841	08	2.000	1.790	07	5.000	1.949
06	20.000	1.878	05	50.000	1.848	04	100.000	1.749	03	150.000	1.656

4-Methyl-2-pentanone Average RF RSD = 4.7 Average RF = 0.1487

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	5.000	0.1368	06	20.000	0.1469	05	50.000	0.1495	04	100.000	0.1500
03	150.000	0.1505	02	200.000	0.1585						

Acetone Average RF RSD = 4.1 Average RF = 0.05989

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	5.000	0.05707	06	20.000	0.05924	05	50.000	0.05950	04	100.000	0.05798
03	150.000	0.06194	02	200.000	0.06364						

Acetonitrile Average RF RSD = 9.9 Average RF = 0.03261

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	5.000	0.03818	08	10.000	0.03439	07	25.000	0.03560	06	100.000	0.03314
05	250.000	0.03068	04	500.000	0.02951	03	750.000	0.02992	02	1000.000	0.02951

Acrolein Average RF RSD = 9.6 Average RF = 0.04421

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	2.500	0.05488	12	5.000	0.04093	08	10.000	0.04164	07	25.000	0.04253
06	100.000	0.04569	05	250.000	0.04415	04	500.000	0.04233	03	750.000	0.04303
02	1000.000	0.04273									

Acrylonitrile Average RF RSD = 8.2 Average RF = 0.08981

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	2.500	0.1063	12	5.000	0.08797	08	10.000	0.09244	07	25.000	0.09379
06	100.000	0.09043	05	250.000	0.08591	04	500.000	0.08203	03	750.000	0.08390
02	1000.000	0.08551									

Benzene Average RF RSD = 4.2 Average RF = 1.123

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.182	12	1.000	1.160	08	2.000	1.136	07	5.000	1.140
06	20.000	1.176	05	50.000	1.100	04	100.000	1.092	03	150.000	1.071
02	200.000	1.050									

Bromobenzene Average RF RSD = 4.0 Average RF = 0.6925

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.7343	12	1.000	0.6972	08	2.000	0.6850	07	5.000	0.7192
06	20.000	0.7178	05	50.000	0.6922	04	100.000	0.6750	03	150.000	0.6645
02	200.000	0.6476									

Bromochloromethane Average RF RSD = 7.6 Average RF = 0.2114

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2420	12	1.000	0.2076	08	2.000	0.2189	07	5.000	0.2227
06	20.000	0.2199	05	50.000	0.2060	04	100.000	0.1971	03	150.000	0.1976
02	200.000	0.1907									

Initial Calibration - Detailed Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte	Curve Fit	Weighting

Bromodichloromethane Average RF RSD = 3.8 Average RF = 0.3466

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3465	12	1.000	0.3445	08	2.000	0.3167	07	5.000	0.3613
06	20.000	0.3576	05	50.000	0.3414	04	100.000	0.3538	03	150.000	0.3529
02	200.000	0.3446									

Bromoform Average RF RSD = 9.2 Average RF = 0.1883

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.1926	12	1.000	0.1790	08	2.000	0.1543	07	5.000	0.1824
06	20.000	0.1904	05	50.000	0.1908	04	100.000	0.2067	03	150.000	0.2100

Bromomethane Average RF RSD = 13.8 Average RF = 0.3600

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4708	12	1.000	0.3950	08	2.000	0.3391	07	5.000	0.3077
06	20.000	0.3173	05	50.000	0.3251	04	100.000	0.3542	03	150.000	0.3708
02	200.000	0.3603									

Carbon Disulfide Average RF RSD = 6.5 Average RF = 1.326

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.452	12	1.000	1.407	08	2.000	1.256	07	5.000	1.389
06	20.000	1.359	05	50.000	1.275	04	100.000	1.246	03	150.000	1.226

Carbon Tetrachloride Average RF RSD = 5.7 Average RF = 0.3587

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3363	12	1.000	0.3882	08	2.000	0.3212	07	5.000	0.3613
06	20.000	0.3746	05	50.000	0.3500	04	100.000	0.3657	03	150.000	0.3605
02	200.000	0.3700									

Chlorobenzene Average RF RSD = 4.3 Average RF = 0.8851

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.9312	12	1.000	0.9303	08	2.000	0.8381	07	5.000	0.8964
06	20.000	0.9098	05	50.000	0.8773	04	100.000	0.8590	03	150.000	0.8389

Chloroethane Average RF RSD = 6.2 Average RF = 0.3039

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3243	12	1.000	0.2969	08	2.000	0.2878	07	5.000	0.3396
06	20.000	0.3172	05	50.000	0.3024	04	100.000	0.2868	03	150.000	0.2938
02	200.000	0.2866									

Chloroform Average RF RSD = 6.7 Average RF = 0.6934

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.7918	12	1.000	0.7144	08	2.000	0.6501	07	5.000	0.7236
06	20.000	0.7069	05	50.000	0.6720	04	100.000	0.6489	03	150.000	0.6786
02	200.000	0.6542									

Chloromethane Average RF RSD = 6.5 Average RF = 0.5751

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.6244	12	1.000	0.5960	08	2.000	0.5985	07	5.000	0.6219
06	20.000	0.5806	05	50.000	0.5396	04	100.000	0.5281	03	150.000	0.5506
02	200.000	0.5363									

Cyclohexane Average RF RSD = 3.9 Average RF = 0.4454

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4686	12	1.000	0.4630	08	2.000	0.4222	07	5.000	0.4274
06	20.000	0.4553	05	50.000	0.4284	04	100.000	0.4504	03	150.000	0.4577
02	200.000	0.4357									

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

Cyclohexanone Average RF RSD = 3.1 Average RF = 0.006466

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	20.000	0.006080	08	40.000	0.006504	07	100.000	0.006537	06	400.000	0.006651
05	1000.000	0.006675	04	2000.000	0.006532	03	3000.000	0.006263	02	4000.000	0.006485

Dibromochloromethane Average RF RSD = 4.8 Average RF = 0.2976

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2924	12	1.000	0.2755	08	2.000	0.2733	07	5.000	0.3014
06	20.000	0.3048	05	50.000	0.3013	04	100.000	0.3134	03	150.000	0.3086
02	200.000	0.3073									

Dibromofluoromethane Average RF RSD = 4.1 Average RF = 0.3136

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	50.000	0.3200	08	60.000	0.3318	07	70.000	0.3191	06	100.000	0.3129
04	125.000	0.2976	03	150.000	0.3003						

Dibromomethane Average RF RSD = 5.9 Average RF = 0.1528

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.1663	12	1.000	0.1646	08	2.000	0.1402	07	5.000	0.1606
06	20.000	0.1522	05	50.000	0.1461	04	100.000	0.1477	03	150.000	0.1488
02	200.000	0.1489									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 6.5 Average RF = 0.5414

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.5187	12	1.000	0.5959	08	2.000	0.4951	07	5.000	0.5761
06	20.000	0.5647	05	50.000	0.5452	04	100.000	0.5216	03	150.000	0.5139

Dichlorofluoromethane (CFC 21) Average RF RSD = 6.2 Average RF = 0.7549

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.8069	12	1.000	0.8031	08	2.000	0.7344	07	5.000	0.7835
06	20.000	0.7939	05	50.000	0.7115	04	100.000	0.7073	03	150.000	0.6984

Dichloromethane Average RF RSD = 8.8 Average RF = 0.4583

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.5468	12	1.000	0.4755	08	2.000	0.4512	07	5.000	0.4808
06	20.000	0.4664	05	50.000	0.4335	04	100.000	0.4222	03	150.000	0.4280
02	200.000	0.4207									

Diethyl Ether Average RF RSD = 3.6 Average RF = 0.2684

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2614	12	1.000	0.2730	08	2.000	0.2735	07	5.000	0.2898
06	20.000	0.2698	05	50.000	0.2623	04	100.000	0.2587	03	150.000	0.2596
02	200.000	0.2677									

Ethyl Methacrylate Average RF RSD = 6.3 Average RF = 0.2684

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2530	12	1.000	0.2557	08	2.000	0.2368	07	5.000	0.2678
06	20.000	0.2783	05	50.000	0.2733	04	100.000	0.2911	03	150.000	0.2792
02	200.000	0.2803									

Ethylbenzene Average RF RSD = 4.9 Average RF = 0.4555

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4143	12	1.000	0.4848	08	2.000	0.4279	07	5.000	0.4676
06	20.000	0.4720	05	50.000	0.4464	04	100.000	0.4660	03	150.000	0.4632
02	200.000	0.4574									

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Hexachlorobutadiene — Curve Fit: Average RF — Weighting: RSD = 9.8 — Average RF = 0.3309

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3975	12	1.000	0.3026	08	2.000	0.3395	07	5.000	0.3423
06	20.000	0.3364	05	50.000	0.3528	04	100.000	0.3097	03	150.000	0.3026
02	200.000	0.2951									

Iodomethane — Curve Fit: Linear — Weighting: 1/X — R2 = 0.9987 — Y = 0.6371 X + -0.01431

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	2.000	0.3126	07	5.000	0.4278	06	20.000	0.5888	05	50.000	0.6653
04	100.000	0.6503	03	150.000	0.6352	02	200.000	0.6132			

Isopropylbenzene (Cumene) — Curve Fit: Average RF — RSD = 4.9 — Average RF = 1.379

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.487	12	1.000	1.358	08	2.000	1.344	07	5.000	1.424
06	20.000	1.421	05	50.000	1.382	04	100.000	1.355	03	150.000	1.260

Methacrylonitrile — Curve Fit: Average RF — RSD = 8.3 — Average RF = 0.09607

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	1.000	0.07863	08	2.000	0.09764	07	5.000	0.09396	06	20.000	0.1038
05	50.000	0.09672	04	100.000	0.09493	03	150.000	0.09866	02	200.000	0.1043

Methyl Acetate — Curve Fit: Average RF — RSD = 5.4 — Average RF = 0.1830

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.1981	12	1.000	0.1780	08	2.000	0.1792	07	5.000	0.2009
06	20.000	0.1837	05	50.000	0.1766	04	100.000	0.1726	03	150.000	0.1778
02	200.000	0.1800									

Methyl Methacrylate — Curve Fit: Average RF — RSD = 14.7 — Average RF = 0.1109

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	2.000	0.07668	07	5.000	0.1044	06	20.000	0.1183	05	50.000	0.1136
04	100.000	0.1228	03	150.000	0.1182	02	200.000	0.1221			

Methyl tert-Butyl Ether — Curve Fit: Average RF — RSD = 3.1 — Average RF = 0.8499

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.8653	12	1.000	0.8142	08	2.000	0.8342	07	5.000	0.8623
06	20.000	0.8992	05	50.000	0.8615	04	100.000	0.8306	03	150.000	0.8271
02	200.000	0.8549									

Methylcyclohexane — Curve Fit: Average RF — RSD = 5.9 — Average RF = 0.2895

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3092	12	1.000	0.3102	08	2.000	0.2619	07	5.000	0.2767
06	20.000	0.3048	05	50.000	0.2775	04	100.000	0.2939	03	150.000	0.2957
02	200.000	0.2760									

Naphthalene — Curve Fit: Average RF — RSD = 5.4 — Average RF = 1.216

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.271	12	1.000	1.129	08	2.000	1.147	07	5.000	1.246
06	20.000	1.307	05	50.000	1.272	04	100.000	1.243	03	150.000	1.177
02	200.000	1.151									

Nitrobenzene — Curve Fit: Average RF — RSD = 10.7 — Average RF = 0.01625

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	10.000	0.01706	06	40.000	0.01421	05	100.000	0.01402	04	200.000	0.01655
03	300.000	0.01747	02	400.000	0.01818						

Initial Calibration - Detailed Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Signal ID: 1

Propionitrile — Curve Fit: Average RF — Weighting: RSD = 5.1 — Average RF = 0.02972

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	2.500	0.02666	12	5.000	0.03091	08	10.000	0.02783	07	25.000	0.03134
06	100.000	0.03069	05	250.000	0.03033	04	500.000	0.02968	03	750.000	0.03013
02	1000.000	0.02992									

Styrene — Curve Fit: Average RF — Weighting: RSD = 4.1 — Average RF = 0.9094

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.9193	12	1.000	0.9487	08	2.000	0.8359	07	5.000	0.9366
06	20.000	0.9529	05	50.000	0.9154	04	100.000	0.9000	03	150.000	0.9040
02	200.000	0.8715									

Tetrachloroethene (PCE) — Curve Fit: Average RF — Weighting: RSD = 3.3 — Average RF = 0.3030

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3257	12	1.000	0.3102	08	2.000	0.2964	07	5.000	0.3007
06	20.000	0.2970	05	50.000	0.2986	04	100.000	0.3069	03	150.000	0.2961
02	200.000	0.2949									

Tetrahydrofuran (THF) — Curve Fit: Average RF — Weighting: RSD = 6.2 — Average RF = 0.05873

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	2.000	0.05178	07	5.000	0.05890	06	20.000	0.06063	05	50.000	0.05908
04	100.000	0.05708	03	150.000	0.06022	02	200.000	0.06344			

Toluene — Curve Fit: Average RF — Weighting: RSD = 6.2 — Average RF = 1.175

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.173	12	1.000	1.270	08	2.000	1.209	07	5.000	1.218
06	20.000	1.231	05	50.000	1.123	04	100.000	1.129	03	150.000	1.046

Toluene-d8 — Curve Fit: Average RF — Weighting: RSD = 6.8 — Average RF = 1.042

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	50.000	1.115	08	60.000	1.094	07	70.000	1.090	06	100.000	1.033
04	125.000	0.9782	03	150.000	0.9386						

Trichloroethene (TCE) — Curve Fit: Average RF — Weighting: RSD = 5.3 — Average RF = 0.3326

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3307	12	1.000	0.3615	08	2.000	0.2989	07	5.000	0.3436
06	20.000	0.3479	05	50.000	0.3295	04	100.000	0.3313	03	150.000	0.3238
02	200.000	0.3263									

Trichlorofluoromethane (CFC 11) — Curve Fit: Average RF — Weighting: RSD = 6.5 — Average RF = 0.6269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.6911	12	1.000	0.6477	08	2.000	0.5952	07	5.000	0.6701
06	20.000	0.6507	05	50.000	0.6251	04	100.000	0.6007	03	150.000	0.5951
02	200.000	0.5667									

Vinyl Acetate — Curve Fit: Average RF — Weighting: RSD = 4.7 — Average RF = 0.5794

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.6079	12	1.000	0.5421	08	2.000	0.5317	07	5.000	0.5771
06	20.000	0.6050	05	50.000	0.5790	04	100.000	0.5757	03	150.000	0.5910
02	200.000	0.6051									

Vinyl Chloride — Curve Fit: Average RF — Weighting: RSD = 6.4 — Average RF = 0.6039

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.6372	12	1.000	0.6385	08	2.000	0.5646	07	5.000	0.6474
06	20.000	0.6324	05	50.000	0.5910	04	100.000	0.5584	03	150.000	0.5615

Initial Calibration - Detailed Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** 1/X

cis-1,2-Dichloroethene RSD = 3.1 Average RF = 0.4397

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4466	12	1.000	0.4496	08	2.000	0.4277	07	5.000	0.4605
06	20.000	0.4535	05	50.000	0.4320	04	100.000	0.4186	03	150.000	0.4328
02	200.000	0.4360									

cis-1,3-Dichloropropene RSD = 3.7 Average RF = 0.4066

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4030	12	1.000	0.3772	08	2.000	0.3918	07	5.000	0.4059
06	20.000	0.4290	05	50.000	0.4110	04	100.000	0.4130	03	150.000	0.4118
02	200.000	0.4168									

m,p-Xylenes RSD = 3.6 Average RF = 0.5526

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	1.000	0.5440	12	2.000	0.5436	08	4.000	0.5248	07	10.000	0.5894
06	40.000	0.5719	05	100.000	0.5548	04	200.000	0.5646	03	300.000	0.5489
02	400.000	0.5318									

n-Butyl Acetate RSD = 5.3 Average RF = 0.2909

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
12	1.000	0.2732	08	2.000	0.2704	07	5.000	0.2779	06	20.000	0.2909
05	50.000	0.2950	04	100.000	0.3089	03	150.000	0.3041	02	200.000	0.3072

n-Butylbenzene RSD = 6.5 Average RF = 1.600

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.474	12	1.000	1.654	08	2.000	1.514	07	5.000	1.719
06	20.000	1.692	05	50.000	1.691	04	100.000	1.586	03	150.000	1.469

n-Heptane RSD = 3.9 Average RF = 0.2443

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.2613	12	1.000	0.2465	08	2.000	0.2317	07	5.000	0.2427
06	20.000	0.2521	05	50.000	0.2508	04	100.000	0.2418	03	150.000	0.2385
02	200.000	0.2334									

n-Propylbenzene RSD = 5.2 Average RF = 2.664

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	2.585	12	1.000	2.504	08	2.000	2.660	07	5.000	2.819
06	20.000	2.850	05	50.000	2.715	04	100.000	2.513			

o-Xylene RSD = 3.8 Average RF = 0.5735

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.5536	12	1.000	0.5394	08	2.000	0.5542	07	5.000	0.5930
06	20.000	0.5991	05	50.000	0.5680	04	100.000	0.6017	03	150.000	0.5719
02	200.000	0.5810									

sec-Butylbenzene RSD = 5.0 Average RF = 2.195

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	2.193	12	1.000	2.218	08	2.000	2.163	07	5.000	2.304
06	20.000	2.352	05	50.000	2.231	04	100.000	2.090	03	150.000	2.011

tert-Butylbenzene RSD = 5.3 Average RF = 1.563

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	1.633	12	1.000	1.526	08	2.000	1.453	07	5.000	1.685
06	20.000	1.642	05	50.000	1.558	04	100.000	1.527	03	150.000	1.482

Initial Calibration - Detailed Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Signal ID: 1

Analyte	Curve Fit	Weighting

trans-1,2-Dichloroethene Average RF RSD = 3.5 Average RF = 0.4511

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.4617	12	1.000	0.4536	08	2.000	0.4466	07	5.000	0.4818
06	20.000	0.4649	05	50.000	0.4437	04	100.000	0.4352	03	150.000	0.4384
02	200.000	0.4337									

trans-1,3-Dichloropropene Average RF RSD = 3.9 Average RF = 0.3336

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.3571	12	1.000	0.3238	08	2.000	0.3150	07	5.000	0.3425
06	20.000	0.3463	05	50.000	0.3269	04	100.000	0.3334	03	150.000	0.3255
02	200.000	0.3315									

trans-1,4-Dichloro-2-butene Average RF RSD = 12.8 Average RF = 0.09214

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
10	0.500	0.1010	12	1.000	0.07980	08	2.000	0.06978	07	5.000	0.09471
06	20.000	0.09099	05	50.000	0.09529	04	100.000	0.1010	03	150.000	0.1045

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.51	1.2	12	1.000	1.04	3.7	08	2.000	1.87	-6.5
07	5.000	5.10	2.0	06	20.000	20.07	0.4	05	50.000	49.83	-0.3
04	100.000	100.56	0.6	03	150.000	149.94	0.0	02	200.000	198.07	-1.0

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-1.0	12	1.000	1.07	6.6	08	2.000	1.92	-4.0
07	5.000	5.09	1.9	06	20.000	20.63	3.1	05	50.000	48.88	-2.2
04	100.000	97.64	-2.4	03	150.000	149.54	-0.3	02	200.000	196.58	-1.7

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.52	4.0	12	1.000	0.94	-5.8	08	2.000	2.01	0.6
07	5.000	5.34	6.8	06	20.000	20.65	3.3	05	50.000	50.52	1.0
04	100.000	97.96	-2.0	03	150.000	141.97	-5.4	02	200.000	195.02	-2.5

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	0.5	12	1.000	1.00	0.2	08	2.000	1.95	-2.3
07	5.000	5.20	4.0	06	20.000	21.02	5.1	05	50.000	48.45	-3.1
04	100.000	98.39	-1.6	03	150.000	145.34	-3.1	02	200.000	200.38	0.2

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.52	4.9	12	1.000	1.07	7.3	08	2.000	1.82	-9.2
07	5.000	5.32	6.4	06	20.000	20.77	3.9	05	50.000	47.68	-4.6
04	100.000	96.19	-3.8	03	150.000	147.60	-1.6	02	200.000	193.55	-3.2

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.55	9.8	12	1.000	1.03	3.2	08	2.000	1.94	-3.0
07	5.000	5.15	3.0	06	20.000	20.65	3.3	05	50.000	49.61	-0.8
04	100.000	95.28	-4.7	03	150.000	146.03	-2.6	02	200.000	183.94	-8.0

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.55	10.8	12	1.000	0.92	-8.3	08	2.000	2.03	1.7
07	5.000	5.15	2.9	06	20.000	20.91	4.6	05	50.000	49.66	-0.7
04	100.000	96.08	-3.9	03	150.000	147.21	-1.9	02	200.000	189.64	-5.2

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.57	13.3	12	1.000	0.96	-3.8	08	2.000	1.86	-7.0
07	5.000	5.18	3.6	06	20.000	20.57	2.9	05	50.000	48.52	-3.0
04	100.000	97.92	-2.1	03	150.000	147.31	-1.8	02	200.000	195.79	-2.1

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	0.6	12	1.000	0.95	-5.0	08	2.000	1.95	-2.7
07	5.000	5.34	6.7	06	20.000	20.82	4.1	05	50.000	50.96	1.9
04	100.000	100.89	0.9	03	150.000	144.49	-3.7	02	200.000	194.29	-2.9

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.57	14.2	12	1.000	0.92	-7.8	08	2.000	2.16	8.1
07	5.000	4.86	-2.9	06	20.000	20.82	4.1	05	50.000	48.23	-3.5
04	100.000	97.35	-2.7	03	150.000	140.40	-6.4	02	200.000	193.80	-3.1

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	0.2	12	1.000	0.99	-0.6	08	2.000	1.89	-5.6
07	5.000	5.22	4.3	06	20.000	20.35	1.8	05	50.000	52.11	4.2
04	100.000	101.45	1.5	03	150.000	146.96	-2.0	02	200.000	192.55	-3.7

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-0.9	12	1.000	0.98	-2.1	08	2.000	1.96	-2.2
07	5.000	5.35	7.0	06	20.000	21.38	6.9	05	50.000	50.78	1.6
04	100.000	97.82	-2.2	03	150.000	138.03	-8.0				

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	1.000	1.28	28.4	08	2.000	1.87	-6.6	07	5.000	5.01	0.2
06	20.000	19.49	-2.5	05	50.000	47.45	-5.1	04	100.000	96.85	-3.2
03	150.000	138.60	-7.6	02	200.000	192.88	-3.6				

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.49	-2.8	12	1.000	0.95	-4.9	08	2.000	1.92	-3.8
07	5.000	5.14	2.8	06	20.000	20.56	2.8	05	50.000	50.99	2.0
04	100.000	102.21	2.2	03	150.000	151.00	0.7	02	200.000	201.98	1.0

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.52	3.3	12	1.000	1.06	6.3	08	2.000	1.98	-0.8
07	5.000	5.14	2.8	06	20.000	20.75	3.7	05	50.000	48.02	-4.0
04	100.000	97.77	-2.2	03	150.000	148.59	-0.9	02	200.000	183.72	-8.1

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-0.7	12	1.000	1.00	0.3	08	2.000	1.99	-0.4
07	5.000	5.29	5.8	06	20.000	21.40	7.0	05	50.000	49.82	-0.4
04	100.000	96.91	-3.1	03	150.000	137.15	-8.6				

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	1.000	1.31	**31.2**	08	2.000	2.12	5.9	07	5.000	5.18	3.6
06	20.000	19.69	-1.5	05	50.000	45.19	-9.6	04	100.000	91.23	-8.8
03	150.000	133.70	-10.9	02	200.000	180.00	-10.0				

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	50.000	51.12	2.2	08	60.000	63.44	5.7	07	70.000	71.38	2.0
06	100.000	100.65	0.7	04	125.000	117.52	-6.0	03	150.000	143.07	-4.6

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.58	15.6	12	1.000	1.09	9.0	08	2.000	1.87	-6.6
07	5.000	5.02	0.3	06	20.000	19.97	-0.1	05	50.000	47.35	-5.3
04	100.000	94.97	-5.0	03	150.000	142.78	-4.8	02	200.000	193.78	-3.1

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.49	-1.9	12	1.000	0.98	-2.2	08	2.000	2.02	0.8
07	5.000	5.31	6.3	06	20.000	20.94	4.7	05	50.000	50.38	0.8
04	100.000	98.15	-1.9	03	150.000	140.15	-6.6				

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	0.7	12	1.000	1.05	5.2	08	2.000	1.98	-0.8
07	5.000	5.26	5.2	06	20.000	20.70	3.5	05	50.000	50.56	1.1
04	100.000	97.24	-2.8	03	150.000	144.63	-3.6	02	200.000	182.69	-8.7

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	7.2	12	1.000	1.00	0.1	08	2.000	2.04	2.0
07	5.000	5.11	2.2	06	20.000	20.20	1.0	05	50.000	47.74	-4.5
04	100.000	99.19	-0.8	03	150.000	143.72	-4.2	02	200.000	194.02	-3.0

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.56	11.8	12	1.000	1.06	6.0	08	2.000	1.93	-3.5
07	5.000	5.26	5.2	06	20.000	20.63	3.2	05	50.000	49.46	-1.1
04	100.000	96.47	-3.5	03	150.000	139.86	-6.8	02	200.000	177.36	-11.3

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	40.000	46.14	15.4	07	100.000	105.23	5.2	06	400.000	421.49	5.4
05	1000.000	963.37	-3.7	04	2000.000	1,839.02	-8.0	03	3000.000	2,923.62	-2.5
02	4000.000	3,531.95	-11.7								

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	8.8	12	1.000	1.01	0.9	08	2.000	2.04	1.8
07	5.000	4.93	-1.4	06	20.000	21.00	5.0	05	50.000	47.31	-5.4
04	100.000	95.39	-4.6	03	150.000	142.52	-5.0				

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.56	12.7	12	1.000	1.02	1.7	08	2.000	1.87	-6.6
07	5.000	4.95	-1.0	06	20.000	20.25	1.3	05	50.000	48.00	-4.0
04	100.000	97.06	-2.9	03	150.000	149.59	-0.3	02	200.000	198.33	-0.8

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	5.000	4.62	-7.6	06	20.000	19.71	-1.5	05	50.000	50.08	0.2
04	100.000	98.12	-1.9	03	150.000	152.50	1.7	02	200.000	218.19	9.1

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.46	-7.5	12	1.000	1.03	2.7	08	2.000	1.86	-6.9
07	5.000	5.18	3.6	06	20.000	20.49	2.5	05	50.000	50.66	1.3
04	100.000	100.77	0.8	03	150.000	152.56	1.7	02	200.000	203.62	1.8

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	1.000	0.85	-14.9	08	2.000	1.72	-13.9	07	5.000	5.06	1.1
06	20.000	21.48	7.4	05	50.000	53.11	6.2	04	100.000	103.93	3.9
03	150.000	156.32	4.2	02	200.000	211.85	5.9				

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.52	3.7	12	1.000	1.03	2.9	08	2.000	2.04	2.0
07	5.000	5.23	4.6	06	20.000	19.92	-0.4	05	50.000	49.53	-0.9
04	100.000	95.79	-4.2	03	150.000	138.52	-7.7				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	5.000	4.53	-9.5	06	20.000	19.64	-1.8	05	50.000	49.93	-0.1
04	100.000	105.20	5.2	03	150.000	150.94	0.6	02	200.000	211.10	5.5

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	40.000	36.51	-8.7	07	100.000	95.16	-4.8	06	400.000	415.73	3.9
05	1000.000	967.13	-3.3	04	2000.000	2,039.72	2.0	03	3000.000	3,104.60	3.5
02	4000.000	4,298.31	7.5								

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	10.000	10.85	8.5	12	20.000	21.42	7.1	08	40.000	39.54	-1.1
07	100.000	97.69	-2.3	06	400.000	413.96	3.5	05	1000.000	965.88	-3.4
04	2000.000	1,870.64	-6.5	03	3000.000	2,887.58	-3.7	02	4000.000	3,918.99	-2.0

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	4.000	3.99	-0.1	07	10.000	9.66	-3.4	06	40.000	38.10	-4.8
05	100.000	95.04	-5.0	04	200.000	199.89	-0.1	03	300.000	311.49	3.8
02	400.000	437.81	9.5								

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	20.000	20.44	2.2	08	40.000	39.51	-1.2	07	100.000	98.65	-1.3
06	400.000	453.17	13.3	05	1000.000	1,000.63	0.1	04	2000.000	1,911.30	-4.4
03	3000.000	2,921.28	-2.6	02	4000.000	3,761.62	-6.0				

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.57	13.7	12	1.000	1.01	1.5	08	2.000	2.05	2.6
07	5.000	5.08	1.6	06	20.000	20.32	1.6	05	50.000	47.64	-4.7
04	100.000	96.01	-4.0	03	150.000	144.31	-3.8	02	200.000	183.12	-8.4

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	50.000	53.95	7.9	08	60.000	61.42	2.4	07	70.000	69.77	-0.3
06	100.000	96.21	-3.8	04	125.000	121.99	-2.4	03	150.000	144.37	-3.8

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	7.8	12	1.000	0.98	-1.7	08	2.000	2.02	1.2
07	5.000	5.05	1.1	06	20.000	20.71	3.6	05	50.000	50.55	1.1
04	100.000	95.32	-4.7	03	150.000	137.43	-8.4				

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-0.6	12	1.000	1.01	1.5	08	2.000	1.97	-1.3
07	5.000	5.37	7.4	06	20.000	20.70	3.5	05	50.000	50.92	1.8
04	100.000	96.38	-3.6	03	150.000	136.93	-8.7				

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	5.000	4.60	-8.0	06	20.000	19.76	-1.2	05	50.000	50.26	0.5
04	100.000	100.86	0.9	03	150.000	151.81	1.2	02	200.000	213.20	6.6

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	5.000	4.76	-4.7	06	20.000	19.78	-1.1	05	50.000	49.67	-0.7
04	100.000	96.80	-3.2	03	150.000	155.14	3.4	02	200.000	212.49	6.2

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	5.000	5.85	17.1	08	10.000	10.54	5.4	07	25.000	27.29	9.1
06	100.000	101.61	1.6	05	250.000	235.15	-5.9	04	500.000	452.46	-9.5
03	750.000	688.03	-8.3	02	1000.000	904.78	-9.5				

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	2.500	3.10	24.1	12	5.000	4.63	-7.4	08	10.000	9.42	-5.8
07	25.000	24.05	-3.8	06	100.000	103.34	3.3	05	250.000	249.62	-0.2
04	500.000	478.74	-4.3	03	750.000	729.91	-2.7	02	1000.000	966.54	-3.3

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	2.500	2.96	18.4	12	5.000	4.90	-2.1	08	10.000	10.29	2.9
07	25.000	26.11	4.4	06	100.000	100.68	0.7	05	250.000	239.14	-4.3
04	500.000	456.69	-8.7	03	750.000	700.59	-6.6	02	1000.000	952.12	-4.8

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	5.3	12	1.000	1.03	3.3	08	2.000	2.02	1.1
07	5.000	5.08	1.5	06	20.000	20.95	4.8	05	50.000	48.96	-2.1
04	100.000	97.24	-2.8	03	150.000	143.00	-4.7	02	200.000	187.01	-6.5

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	6.0	12	1.000	1.01	0.7	08	2.000	1.98	-1.1
07	5.000	5.19	3.8	06	20.000	20.73	3.6	05	50.000	49.97	-0.1
04	100.000	97.46	-2.5	03	150.000	143.94	-4.0	02	200.000	187.03	-6.5

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.57	14.5	12	1.000	0.98	-1.8	08	2.000	2.07	3.6
07	5.000	5.27	5.3	06	20.000	20.80	4.0	05	50.000	48.72	-2.6
04	100.000	93.25	-6.7	03	150.000	140.22	-6.5	02	200.000	180.43	-9.8

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	0.0	12	1.000	0.99	-0.6	08	2.000	1.83	-8.6
07	5.000	5.21	4.2	06	20.000	20.63	3.2	05	50.000	49.25	-1.5
04	100.000	102.08	2.1	03	150.000	152.72	1.8	02	200.000	198.86	-0.6

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.51	2.3	12	1.000	0.95	-4.9	08	2.000	1.64	-18.0
07	5.000	4.84	-3.1	06	20.000	20.23	1.1	05	50.000	50.68	1.4
04	100.000	109.77	9.8	03	150.000	167.32	11.5				

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.65	**30.8**	12	1.000	1.10	9.7	08	2.000	1.88	-5.8
07	5.000	4.27	-14.5	06	20.000	17.62	-11.9	05	50.000	45.15	-9.7
04	100.000	98.38	-1.6	03	150.000	154.50	3.0	02	200.000	200.17	0.1

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.55	9.5	12	1.000	1.06	6.1	08	2.000	1.89	-5.3
07	5.000	5.24	4.7	06	20.000	20.50	2.5	05	50.000	48.07	-3.9
04	100.000	93.97	-6.0	03	150.000	138.62	-7.6				

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.47	-6.2	12	1.000	1.08	8.2	08	2.000	1.79	-10.4
07	5.000	5.04	0.7	06	20.000	20.89	4.5	05	50.000	48.79	-2.4
04	100.000	101.97	2.0	03	150.000	150.79	0.5	02	200.000	206.32	3.2

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	5.2	12	1.000	1.05	5.1	08	2.000	1.89	-5.3
07	5.000	5.06	1.3	06	20.000	20.56	2.8	05	50.000	49.56	-0.9
04	100.000	97.05	-2.9	03	150.000	142.16	-5.2				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	6.7	12	1.000	0.98	-2.3	08	2.000	1.89	-5.3
07	5.000	5.59	11.7	06	20.000	20.87	4.4	05	50.000	49.75	-0.5
04	100.000	94.36	-5.6	03	150.000	144.99	-3.3	02	200.000	188.62	-5.7

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.57	14.2	12	1.000	1.03	3.0	08	2.000	1.88	-6.2
07	5.000	5.22	4.4	06	20.000	20.39	1.9	05	50.000	48.46	-3.1
04	100.000	93.58	-6.4	03	150.000	146.79	-2.1	02	200.000	188.71	-5.6

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	8.6	12	1.000	1.04	3.6	08	2.000	2.08	4.1
07	5.000	5.41	8.1	06	20.000	20.19	0.9	05	50.000	46.91	-6.2
04	100.000	91.82	-8.2	03	150.000	143.61	-4.3	02	200.000	186.50	-6.7

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	5.2	12	1.000	1.04	4.0	08	2.000	1.90	-5.2
07	5.000	4.80	-4.0	06	20.000	20.45	2.2	05	50.000	48.09	-3.8
04	100.000	101.12	1.1	03	150.000	154.12	2.7	02	200.000	195.64	-2.2

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	20.000	18.81	-6.0	08	40.000	40.24	0.6	07	100.000	101.10	1.1
06	400.000	411.45	2.9	05	1000.000	1,032.27	3.2	04	2000.000	2,020.39	1.0
03	3000.000	2,905.92	-3.1	02	4000.000	4,011.92	0.3				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.49	-1.7	12	1.000	0.93	-7.4	08	2.000	1.84	-8.2
07	5.000	5.07	1.3	06	20.000	20.49	2.4	05	50.000	50.62	1.2
04	100.000	105.31	5.3	03	150.000	155.58	3.7	02	200.000	206.52	3.3

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	50.000	51.02	2.0	08	60.000	63.48	5.8	07	70.000	71.23	1.8
06	100.000	99.76	-0.2	04	125.000	118.62	-5.1	03	150.000	143.61	-4.3

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	8.8	12	1.000	1.08	7.7	08	2.000	1.83	-8.3
07	5.000	5.26	5.1	06	20.000	19.92	-0.4	05	50.000	47.79	-4.4
04	100.000	96.62	-3.4	03	150.000	146.06	-2.6	02	200.000	194.89	-2.6

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.48	-4.2	12	1.000	1.10	10.1	08	2.000	1.83	-8.6
07	5.000	5.32	6.4	06	20.000	20.86	4.3	05	50.000	50.35	0.7
04	100.000	96.34	-3.7	03	150.000	142.39	-5.1				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	6.9	12	1.000	1.06	6.4	08	2.000	1.95	-2.7
07	5.000	5.19	3.8	06	20.000	21.03	5.2	05	50.000	47.13	-5.7
04	100.000	93.69	-6.3	03	150.000	138.78	-7.5				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.60	19.3	12	1.000	1.04	3.7	08	2.000	1.97	-1.6
07	5.000	5.24	4.9	06	20.000	20.35	1.8	05	50.000	47.30	-5.4
04	100.000	92.11	-7.9	03	150.000	140.07	-6.6	02	200.000	183.58	-8.2

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.49	-2.6	12	1.000	1.02	1.7	08	2.000	2.04	1.9
07	5.000	5.40	8.0	06	20.000	20.10	0.5	05	50.000	48.86	-2.3
04	100.000	96.38	-3.6	03	150.000	145.06	-3.3	02	200.000	199.48	-0.3

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.47	-5.7	12	1.000	0.95	-4.7	08	2.000	1.76	-11.8
07	5.000	4.99	-0.2	06	20.000	20.74	3.7	05	50.000	50.92	1.8
04	100.000	108.45	8.5	03	150.000	156.03	4.0	02	200.000	208.89	4.4

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.45	-9.0	12	1.000	1.06	6.4	08	2.000	1.88	-6.1
07	5.000	5.13	2.7	06	20.000	20.72	3.6	05	50.000	49.00	-2.0
04	100.000	102.30	2.3	03	150.000	152.52	1.7	02	200.000	200.83	0.4

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.60	20.1	12	1.000	0.91	-8.6	08	2.000	2.05	2.6
07	5.000	5.17	3.4	06	20.000	20.33	1.7	05	50.000	53.30	6.6
04	100.000	93.58	-6.4	03	150.000	137.16	-8.6	02	200.000	178.32	-10.8

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	2.000	2.10	5.2	07	5.000	4.48	-10.4	06	20.000	19.61	-2.0
05	50.000	53.33	6.7	04	100.000	103.19	3.2	03	150.000	150.66	0.4
02	200.000	193.62	-3.2								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	7.9	12	1.000	0.99	-1.5	08	2.000	1.95	-2.6
07	5.000	5.16	3.3	06	20.000	20.61	3.1	05	50.000	50.12	0.2
04	100.000	98.25	-1.7	03	150.000	137.04	-8.6				

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	1.000	0.82	-18.2	08	2.000	2.03	1.6	07	5.000	4.89	-2.2
06	20.000	21.60	8.0	05	50.000	50.34	0.7	04	100.000	98.81	-1.2
03	150.000	154.05	2.7	02	200.000	217.04	8.5				

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	8.3	12	1.000	0.97	-2.7	08	2.000	1.96	-2.0
07	5.000	5.49	9.8	06	20.000	20.08	0.4	05	50.000	48.27	-3.5
04	100.000	94.31	-5.7	03	150.000	145.76	-2.8	02	200.000	196.70	-1.7

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	2.000	1.38	-30.8	07	5.000	4.71	-5.9	06	20.000	21.33	6.7
05	50.000	51.22	2.4	04	100.000	110.80	10.8	03	150.000	159.94	6.6
02	200.000	220.33	10.2								

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.51	1.8	12	1.000	0.96	-4.2	08	2.000	1.96	-1.8
07	5.000	5.07	1.5	06	20.000	21.16	5.8	05	50.000	50.68	1.4
04	100.000	97.72	-2.3	03	150.000	145.97	-2.7	02	200.000	201.16	0.6

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	6.8	12	1.000	1.07	7.1	08	2.000	1.81	-9.5
07	5.000	4.78	-4.4	06	20.000	21.06	5.3	05	50.000	47.92	-4.2
04	100.000	101.49	1.5	03	150.000	153.19	2.1	02	200.000	190.64	-4.7

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.52	4.5	12	1.000	0.93	-7.2	08	2.000	1.89	-5.7
07	5.000	5.12	2.4	06	20.000	21.50	7.5	05	50.000	52.32	4.6
04	100.000	102.27	2.3	03	150.000	145.17	-3.2	02	200.000	189.34	-5.3

Nitrobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
07	10.000	10.50	5.0	06	40.000	34.99	-12.5	05	100.000	86.30	-13.7
04	200.000	203.68	1.8	03	300.000	322.52	7.5	02	400.000	447.55	11.9

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	2.500	2.24	-10.3	12	5.000	5.20	4.0	08	10.000	9.36	-6.4
07	25.000	26.36	5.4	06	100.000	103.27	3.3	05	250.000	255.14	2.1
04	500.000	499.26	-0.1	03	750.000	760.22	1.4	02	1000.000	1,006.87	0.7

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.51	1.1	12	1.000	1.04	4.3	08	2.000	1.84	-8.1
07	5.000	5.15	3.0	06	20.000	20.96	4.8	05	50.000	50.33	0.7
04	100.000	98.97	-1.0	03	150.000	149.12	-0.6	02	200.000	191.67	-4.2

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	7.5	12	1.000	1.02	2.4	08	2.000	1.96	-2.2
07	5.000	4.96	-0.7	06	20.000	19.61	-2.0	05	50.000	49.29	-1.4
04	100.000	101.30	1.3	03	150.000	146.60	-2.3	02	200.000	194.71	-2.6

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
08	2.000	1.76	-11.8	07	5.000	5.01	0.3	06	20.000	20.65	3.2
05	50.000	50.29	0.6	04	100.000	97.18	-2.8	03	150.000	153.80	2.5
02	200.000	216.02	8.0								

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-0.1	12	1.000	1.08	8.1	08	2.000	2.06	2.9
07	5.000	5.18	3.6	06	20.000	20.95	4.8	05	50.000	47.80	-4.4
04	100.000	96.06	-3.9	03	150.000	133.53	-11.0				

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	50.000	53.52	7.0	08	60.000	63.05	5.1	07	70.000	73.29	4.7
06	100.000	99.14	-0.9	04	125.000	117.40	-6.1	03	150.000	135.18	-9.9

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-0.6	12	1.000	1.09	8.7	08	2.000	1.80	-10.1
07	5.000	5.17	3.3	06	20.000	20.92	4.6	05	50.000	49.53	-0.9
04	100.000	99.61	-0.4	03	150.000	146.00	-2.7	02	200.000	196.21	-1.9

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.55	10.2	12	1.000	1.03	3.3	08	2.000	1.90	-5.1
07	5.000	5.34	6.9	06	20.000	20.76	3.8	05	50.000	49.85	-0.3
04	100.000	95.82	-4.2	03	150.000	142.39	-5.1	02	200.000	180.79	-9.6

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.52	4.9	12	1.000	0.94	-6.4	08	2.000	1.84	-8.2
07	5.000	4.98	-0.4	06	20.000	20.88	4.4	05	50.000	49.97	-0.1
04	100.000	99.36	-0.6	03	150.000	153.00	2.0	02	200.000	208.88	4.4

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	5.5	12	1.000	1.06	5.7	08	2.000	1.87	-6.5
07	5.000	5.36	7.2	06	20.000	20.95	4.7	05	50.000	48.93	-2.1
04	100.000	92.47	-7.5	03	150.000	139.48	-7.0				

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.51	1.6	12	1.000	1.02	2.3	08	2.000	1.95	-2.7
07	5.000	5.24	4.7	06	20.000	20.63	3.1	05	50.000	49.12	-1.8
04	100.000	95.21	-4.8	03	150.000	147.63	-1.6	02	200.000	198.32	-0.8

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-0.9	12	1.000	0.93	-7.2	08	2.000	1.93	-3.7
07	5.000	4.99	-0.2	06	20.000	21.10	5.5	05	50.000	50.54	1.1
04	100.000	101.56	1.6	03	150.000	151.93	1.3	02	200.000	205.01	2.5

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	1.000	0.98	-1.6	12	2.000	1.97	-1.6	08	4.000	3.80	-5.0
07	10.000	10.66	6.6	06	40.000	41.40	3.5	05	100.000	100.39	0.4
04	200.000	204.34	2.2	03	300.000	297.96	-0.7	02	400.000	384.91	-3.8

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
12	1.000	0.94	-6.1	08	2.000	1.86	-7.1	07	5.000	4.78	-4.5
06	20.000	19.99	0.0	05	50.000	50.69	1.4	04	100.000	106.18	6.2
03	150.000	156.76	4.5	02	200.000	211.18	5.6				

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.46	-7.9	12	1.000	1.03	3.4	08	2.000	1.89	-5.4
07	5.000	5.37	7.4	06	20.000	21.15	5.8	05	50.000	52.85	5.7
04	100.000	99.15	-0.9	03	150.000	137.69	-8.2				

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.53	7.0	12	1.000	1.01	0.9	08	2.000	1.90	-5.2
07	5.000	4.97	-0.7	06	20.000	20.64	3.2	05	50.000	51.33	2.7
04	100.000	98.96	-1.0	03	150.000	146.45	-2.4	02	200.000	191.10	-4.5

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.49	-3.0	12	1.000	0.94	-6.0	08	2.000	2.00	-0.1
07	5.000	5.29	5.8	06	20.000	21.40	7.0	05	50.000	50.96	1.9
04	100.000	94.35	-5.6								

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.48	-3.5	12	1.000	0.94	-6.0	08	2.000	1.93	-3.4
07	5.000	5.17	3.4	06	20.000	20.89	4.4	05	50.000	49.51	-1.0
04	100.000	104.91	4.9	03	150.000	149.58	-0.3	02	200.000	202.61	1.3

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.50	-0.1	12	1.000	1.01	1.0	08	2.000	1.97	-1.5
07	5.000	5.25	5.0	06	20.000	21.43	7.1	05	50.000	50.81	1.6
04	100.000	95.20	-4.8	03	150.000	137.42	-8.4				

Initial Calibration - Detailed Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Signal ID:	1

Analyte

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.52	4.5	12	1.000	0.98	-2.4	08	2.000	1.86	-7.1
07	5.000	5.39	7.8	06	20.000	21.00	5.0	05	50.000	49.83	-0.3
04	100.000	97.70	-2.3	03	150.000	142.19	-5.2				

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.51	2.4	12	1.000	1.01	0.6	08	2.000	1.98	-1.0
07	5.000	5.34	6.8	06	20.000	20.61	3.1	05	50.000	49.18	-1.6
04	100.000	96.49	-3.5	03	150.000	145.79	-2.8	02	200.000	192.29	-3.9

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.54	7.1	12	1.000	0.97	-2.9	08	2.000	1.89	-5.6
07	5.000	5.13	2.7	06	20.000	20.76	3.8	05	50.000	49.00	-2.0
04	100.000	99.96	0.0	03	150.000	146.38	-2.4	02	200.000	198.78	-0.6

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
10	0.500	0.55	9.7	12	1.000	0.87	-13.4	08	2.000	1.51	-24.3
07	5.000	5.14	2.8	06	20.000	19.75	-1.2	05	50.000	51.71	3.4
04	100.000	109.59	9.6	03	150.000	170.20	13.5				

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:36 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	630052	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	851860	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	756151	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	465887	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	289464	54.17	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 108.34%			
42) surr1,1,2-dichloroethane-d	4.23	65	236575	54.29	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 108.58%			
62) SURR3,Toluene-d8	7.76	98	968865	54.60	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 109.20%			
82) SURR2,BFB	10.14	95	365213	53.96	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	3268	0.48	ug/L	96
3) Chloromethane	1.07	50	3934	0.54	ug/L	86
4) Vinyl Chloride	1.15	62	4015	0.53	ug/L	99
5) Bromomethane	1.31	94	2966m	0.67	ug/L	
6) Chloroethane	1.38	64	2043	0.53	ug/L	95
7) Freon 21	1.40	67	5084	0.53	ug/L	86
8) Freon 123	1.57	83	4596	0.54	ug/L #	79
9) Freon 123a	1.60	67	3357	0.52	ug/L	78
10) Acrolein	1.66	56	1729m	3.15	ug/L	
11) Trichlorofluoromethane	1.64	101	4354	0.55	ug/L	88
12) Acetonitrile	1.67	41	1164	2.83	ug/L	74
15) Diethyl Ether	1.79	59	1647	0.49	ug/L	91
16) 1,1-Diclethene	1.94	96	2857	0.55	ug/L	95
17) Iodomethane	1.96	142	1813	0.85	ug/L	71
18) TBA	1.98	59	2699	10.85	ug/L	64
19) Acrylonitrile	2.00	53	3350	2.96	ug/L	97
20) Methylene Chloride	2.04	84	3445	0.60	ug/L #	71
21) Freon 113	2.07	101	2697	0.52	ug/L	96
22) Methyl Acetate	2.10	43	1248	0.55	ug/L	86
23) Allyl Chloride	2.10	76	1393	0.57	ug/L	99
24) Carbon Disulfide	2.14	76	9148	0.55	ug/L	99
25) trans-1,2-Dichloroethene	2.51	96	2909	0.51	ug/L	90
26) Methyl-t-Butyl Ether	2.63	73	5452	0.51	ug/L	98
27) 1,1-Diclethane	2.71	63	4739	0.55	ug/L	91
28) Propionitrile	2.77	54	840	2.26	ug/L	88
29) Vinyl Acetate	2.91	43	3830m	0.54	ug/L	
30) 2-Chloro-1,3-Butadiene	3.05	53	3640	0.46	ug/L	86
33) cis-1,2-Dichloroethene	3.27	96	2814	0.51	ug/L	92
34) Bromochloromethane	3.43	128	1525	0.57	ug/L #	81
35) Chloroform	3.50	83	4989	0.57	ug/L	84
36) 2,2-Dichloropropane	3.57	77	3791	0.56	ug/L	79
38) 1,1,1-Trichloroethane	4.47	97	3487	0.50	ug/L	77
43) 1,2-Dichloroethane	4.35	62	4063	0.81	ug/L #	58
44) 1,1-Dichloropropene	4.80	75	3533	0.57	ug/L #	75
45) Cyclohexane	4.87	56	3992	0.53	ug/L	85

DL 12/1/15

(#) = qualifier out of range (m) = manual integration

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:36 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

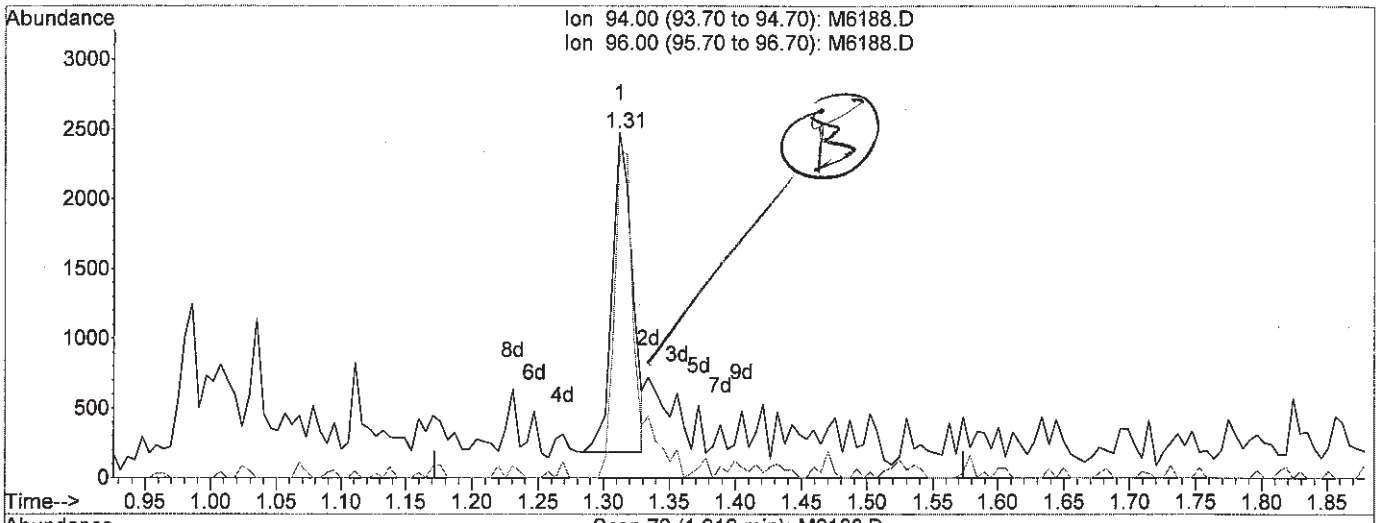
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Carbontetrachloride	5.03	119	2865	0.47	ug/L		89
47)	Benzene	5.15	78	10071	0.53	ug/L		88
48)	Dibromomethane	6.00	93	1417m	0.55	ug/L		
49)	1,2-Diclpropane	6.06	63	2806	0.58	ug/L		89
50)	n-Heptane	6.16	43	2226	0.54	ug/L	#	82
51)	Trichloroethene	6.14	130	2817	0.50	ug/L		95
52)	Bromodichloromethane	6.20	83	2952	0.50	ug/L		90
56)	Methylcyclohexane	6.73	55	2634	0.53	ug/L		92
57)	2-Chloroethylvinyl Ether	6.90	63	1137m	0.54	ug/L		
58)	cis-1,3-Dichloropropene	7.05	75	3433m	0.50	ug/L		
60)	trans-1,3-Dichloropropene	7.55	75	3042	0.52	ug/L	#	44
61)	1,1,2-Trichloroethane	7.66	97	1816	0.50	ug/L		98
63)	Toluene	7.83	91	9996	0.50	ug/L		97
65)	1,3-Dichloropropane	7.91	76	2900	0.54	ug/L		94
66)	Ethyl Methacrylate	8.10	69	1913m	0.47	ug/L		
67)	Dibromochloromethane	8.09	129	2211	0.49	ug/L		96
69)	1,2-Dibromoethane	8.31	107	1752	0.49	ug/L		97
71)	Tetrachloroethene	8.50	164	2463	0.54	ug/L		98
72)	1,1,1,2-Tetrachloroethane	9.05	131	2446	0.51	ug/L		89
73)	Chlorobenzene	9.11	112	7041	0.53	ug/L		93
74)	Ethylbenzene	9.33	106	3133	0.45	ug/L	#	79
75)	Bromoform	9.51	173	1456	0.51	ug/L	#	36
76)	(m+p)Xylene	9.51	106	8227	0.98	ug/L		90
77)	o-Xylene	9.83	106	4186	0.48	ug/L		99
78)	Cyclohexanone	9.75	55	1142	11.54	ug/L		78
79)	Styrene	9.77	104	6951	0.51	ug/L		98
80)	trans-1,4-Dichloro-2-Buten	10.01	75	764m	0.56	ug/L		
81)	Isopropylbenzene	10.14	105	11247	0.53	ug/L		89
84)	1,1,2,2-Tetrachloroethane	9.82	83	2216	0.52	ug/L		98
85)	1,2,3-Trichloropropane	9.94	75	1658	0.57	ug/L		92
86)	Bromobenzene	10.28	156	3421	0.53	ug/L		94
87)	n-Propylbenzene	10.50	91	12042	0.49	ug/L		97
88)	2-Chlorotoluene	10.54	91	7824	0.51	ug/L		98
89)	4-Chlorotoluene	10.61	91	8576	0.53	ug/L		90
90)	1,3,5-Trimethylbenzene	10.77	105	8211	0.49	ug/L		94
91)	tert-Butylbenzene	10.95	119	7610	0.52	ug/L		99
92)	1,2,4-Trimethylbenzene	11.06	105	8838	0.49	ug/L		99
93)	sec-Butylbenzene	11.13	105	10219	0.49	ug/L		97
94)	1,3-Dclbenz	11.15	146	5925	0.50	ug/L		94
95)	1,4-Dclbenz	11.21	146	6756	0.56	ug/L	#	41
96)	p-Isopropyltoluene	11.30	119	8405	0.50	ug/L		99
97)	1,2-Dclbenz	11.47	146	5535	0.50	ug/L		98
98)	n-Butylbenzene	11.62	91	6868	0.46	ug/L		95
101)	1,2,4-Tcbenzene	12.91	180	3229	0.50	ug/L		94
102)	Naphthalen	13.09	128	5921	0.52	ug/L		80
103)	Hexachlorobt	13.17	225	1852	0.60	ug/L	#	78
104)	1,2,3-Tclbenzene	13.25	180	2679	0.50	ug/L		83

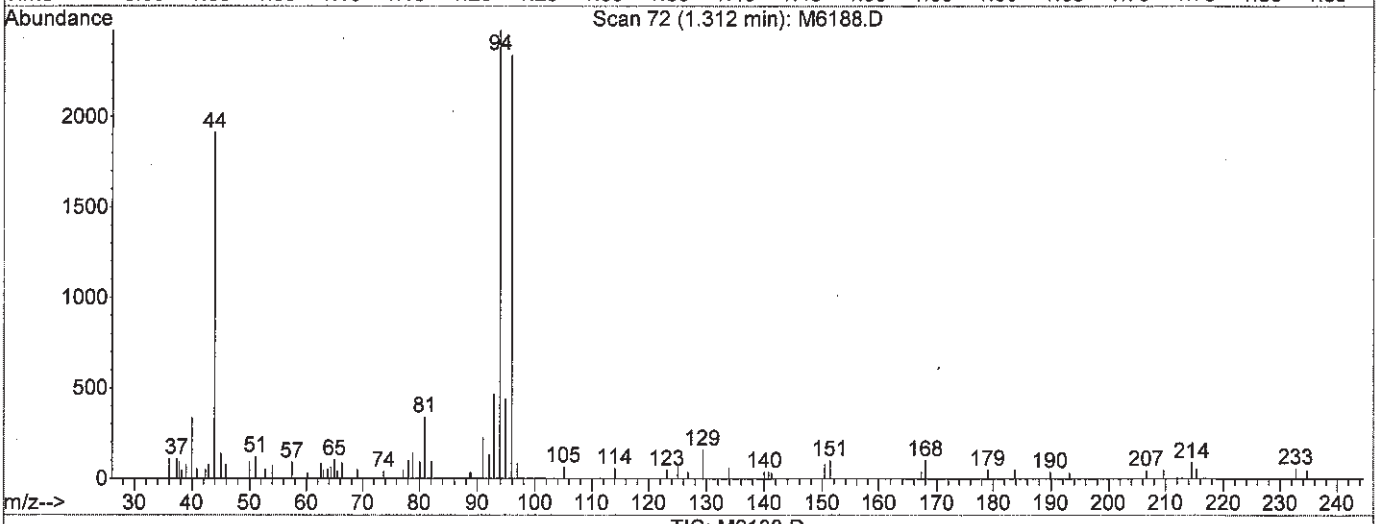
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:28 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(5) Bromomethane (P)

1.31min 0.55ug/L

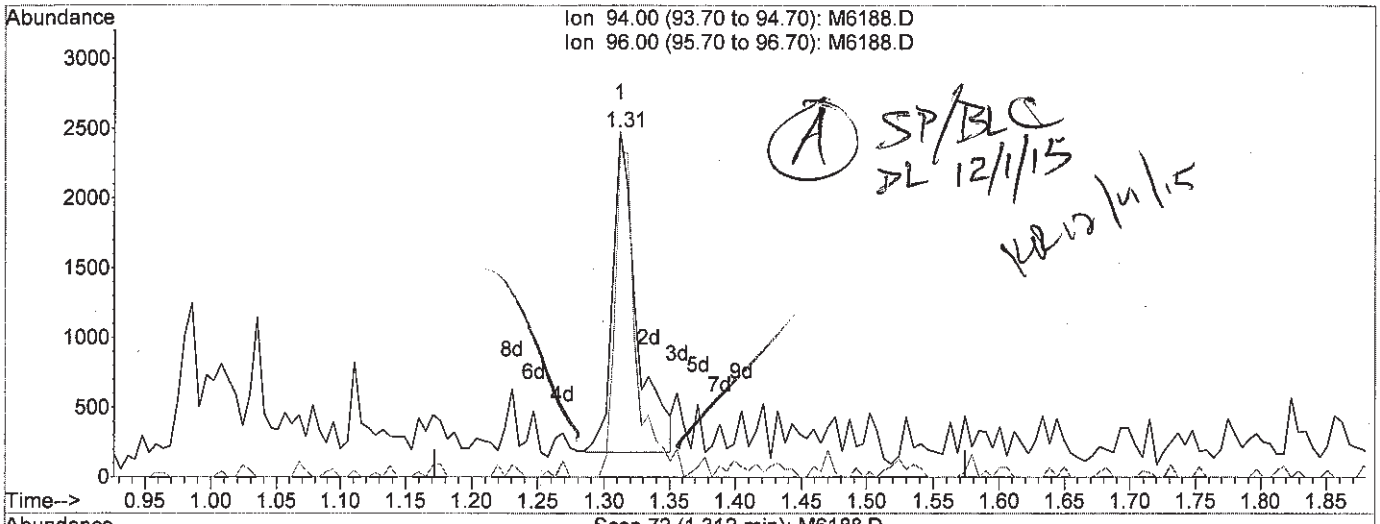
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Ion	Exp%	Act%
94.00	100	100
96.00	95.90	94.47
0.00	0.00	0.00
0.00	0.00	0.00

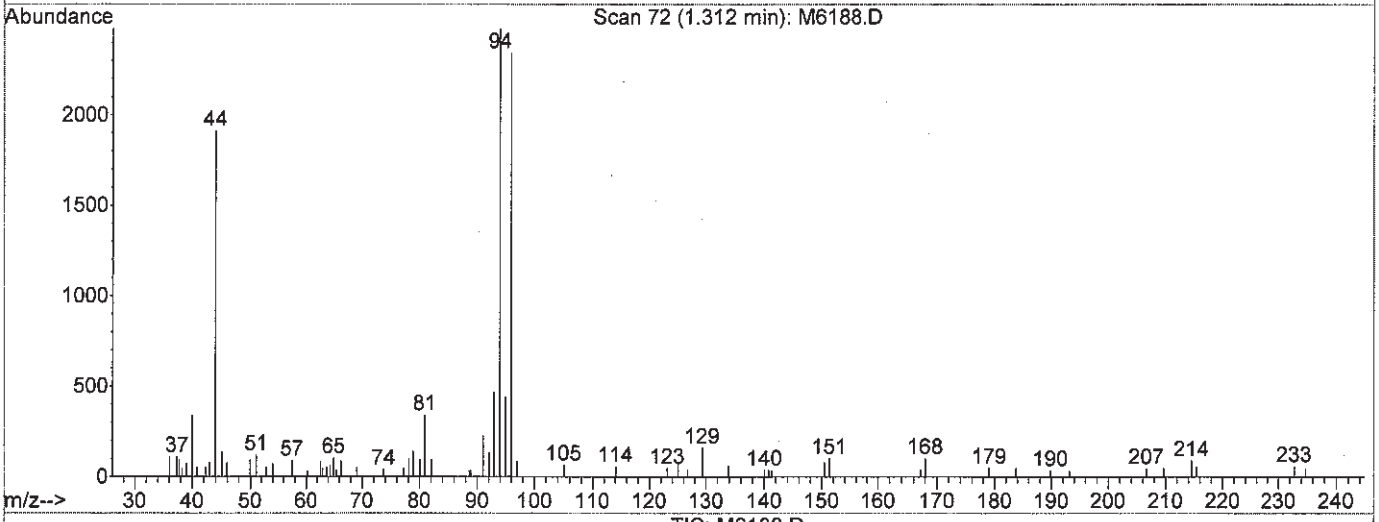
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:28 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration



A SP/BLC DL 12/1/15 KB 12/4/15



TIC: M6188.D

(5) Bromomethane (P)

1.31min 0.67ug/L m

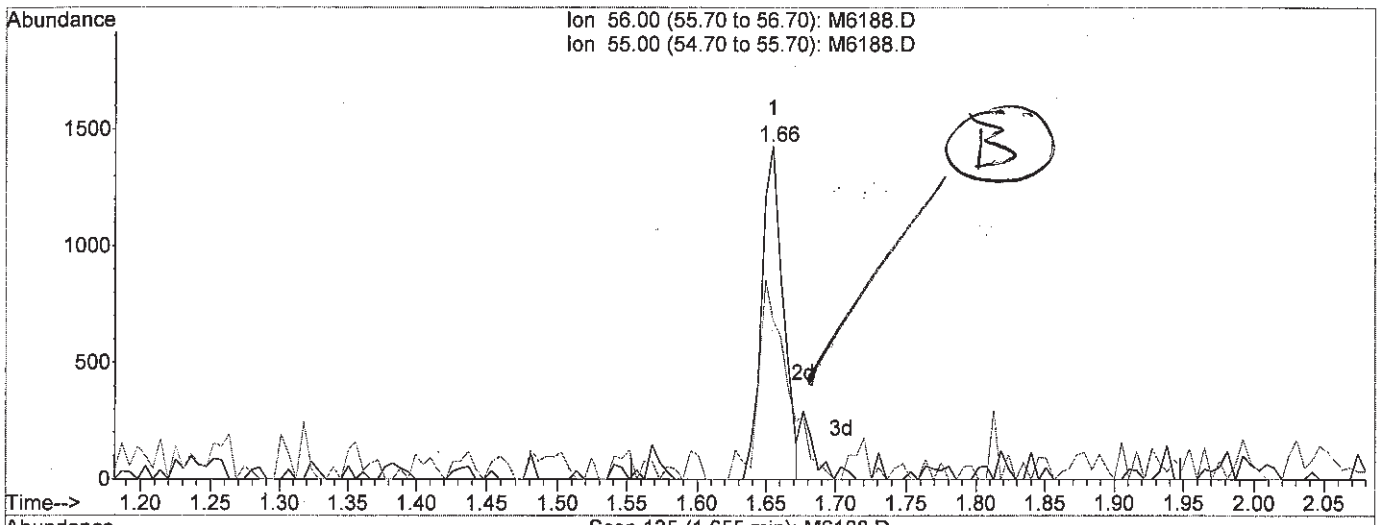
response 2966

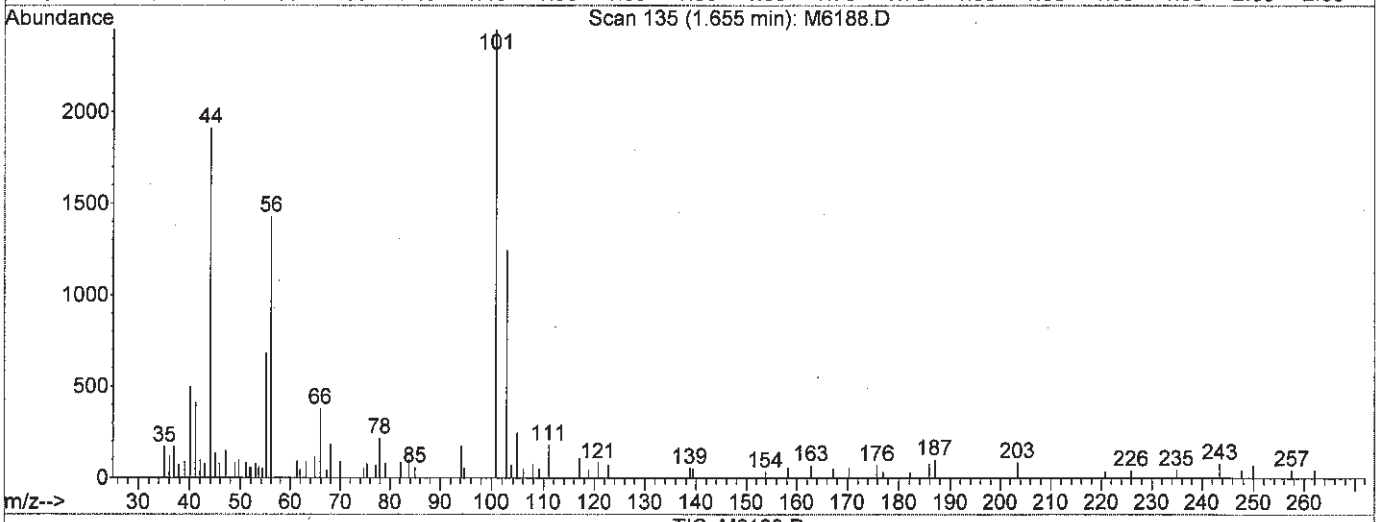
Ion	Exp%	Act%
94.00	100	100
96.00	95.90	94.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:28 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(10) Acrolein

1.66min 2.80ug/L

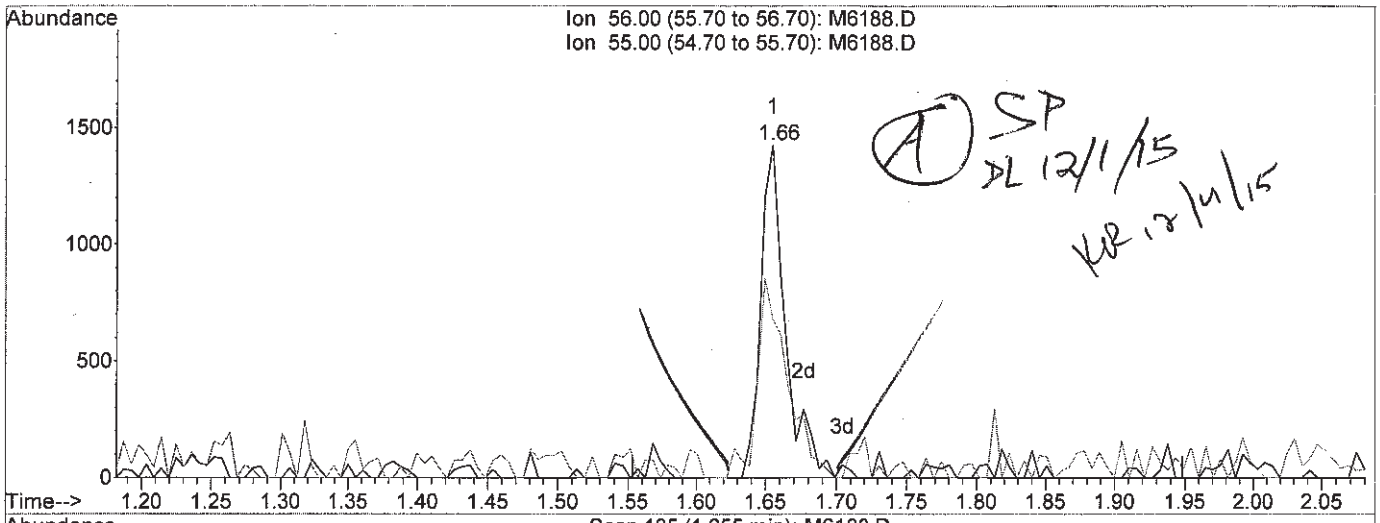
response 1537

Ion	Exp%	Act%
56.00	100	100
55.00	69.70	47.69#
0.00	0.00	0.00
0.00	0.00	0.00

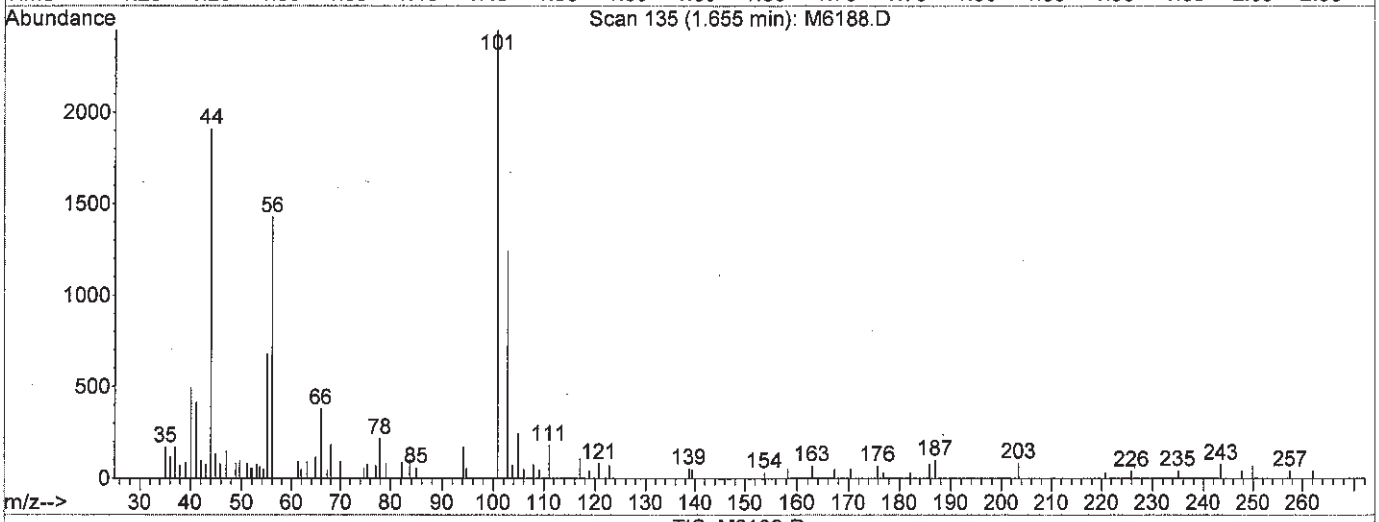
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:28 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration



A SP 12/1/15 KP 12/4/15



TIC: M6188.D

(10) Acrolein

1.66min 3.15ug/L m

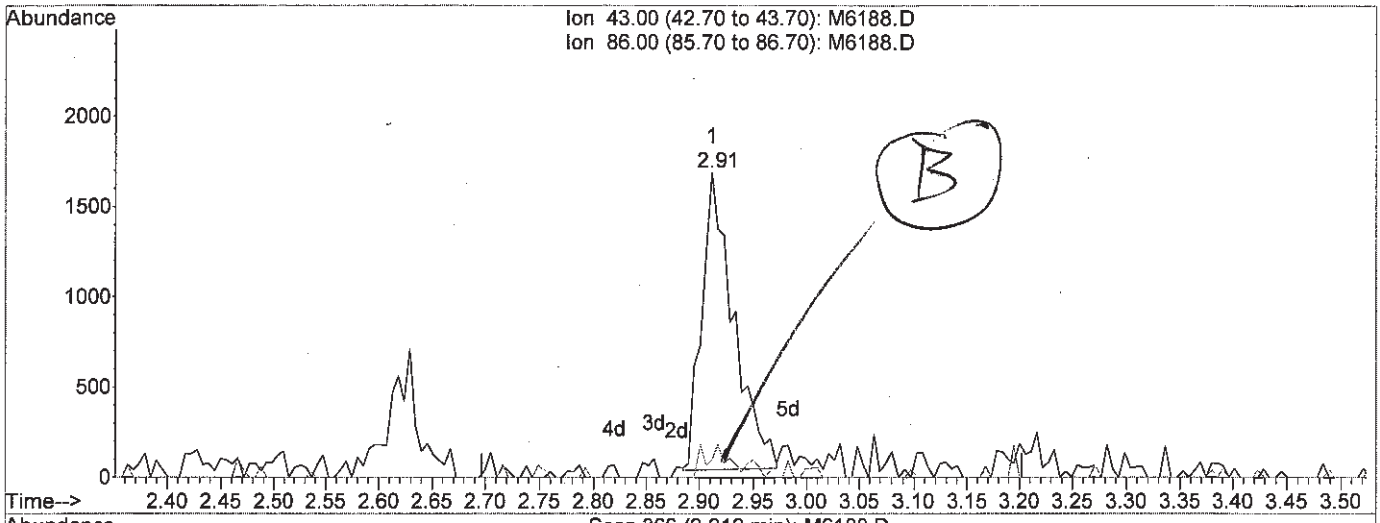
response 1729

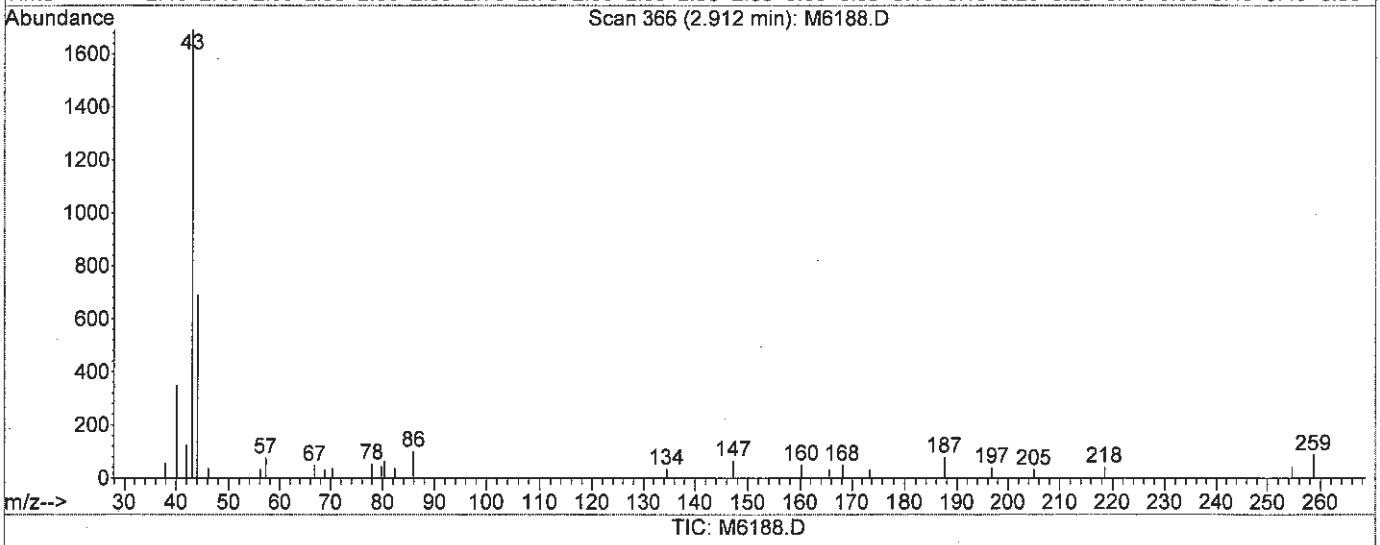
Ion	Exp%	Act%
56.00	100	100
55.00	69.70	47.69#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:29 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(29) Vinyl Acetate

2.91min 0.47ug/L

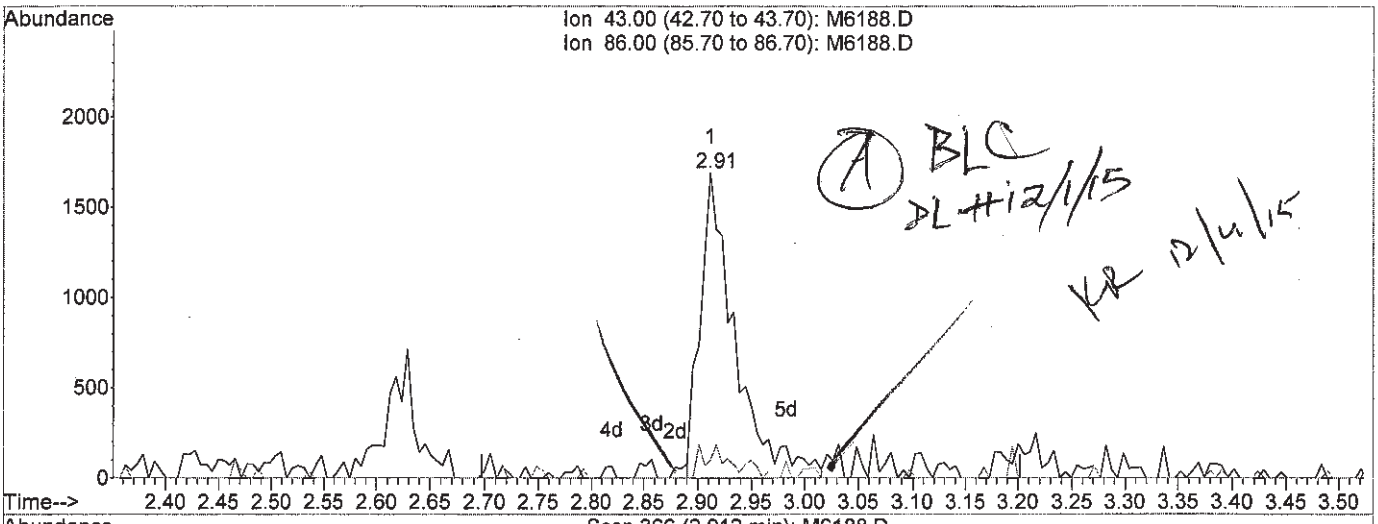
response 3340

Ion	Exp%	Act%
43.00	100	100
86.00	9.30	5.92
0.00	0.00	0.00
0.00	0.00	0.00

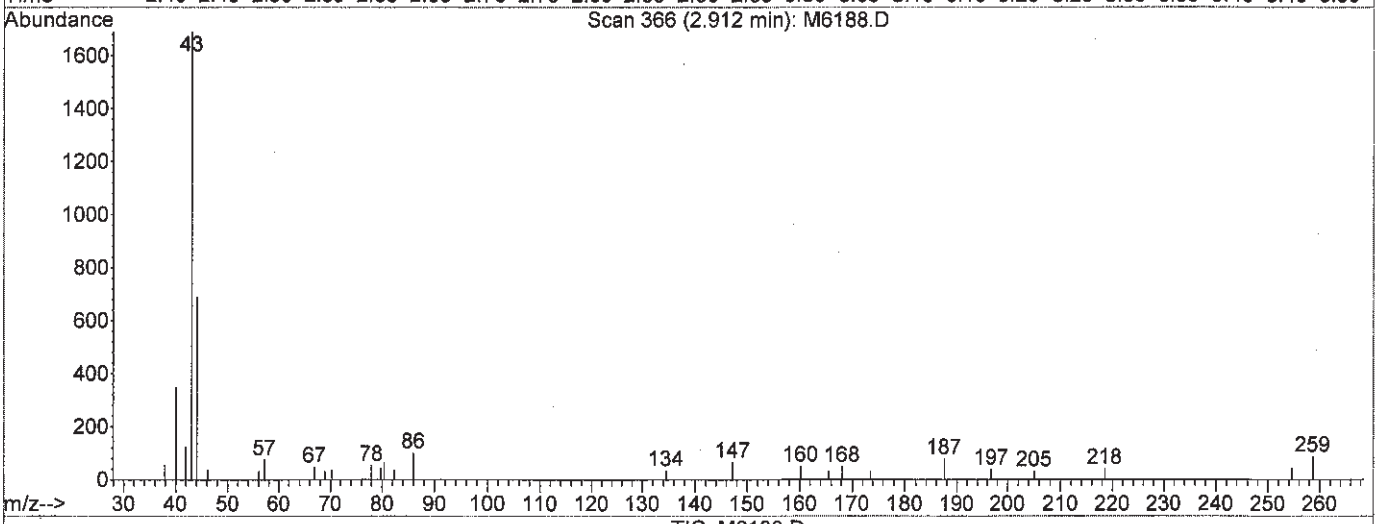
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:30 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration



A BLC DL+12/1/15 KR 12/4/15



TIC: M6188.D

(29) Vinyl Acetate

2.91min 0.54ug/L m

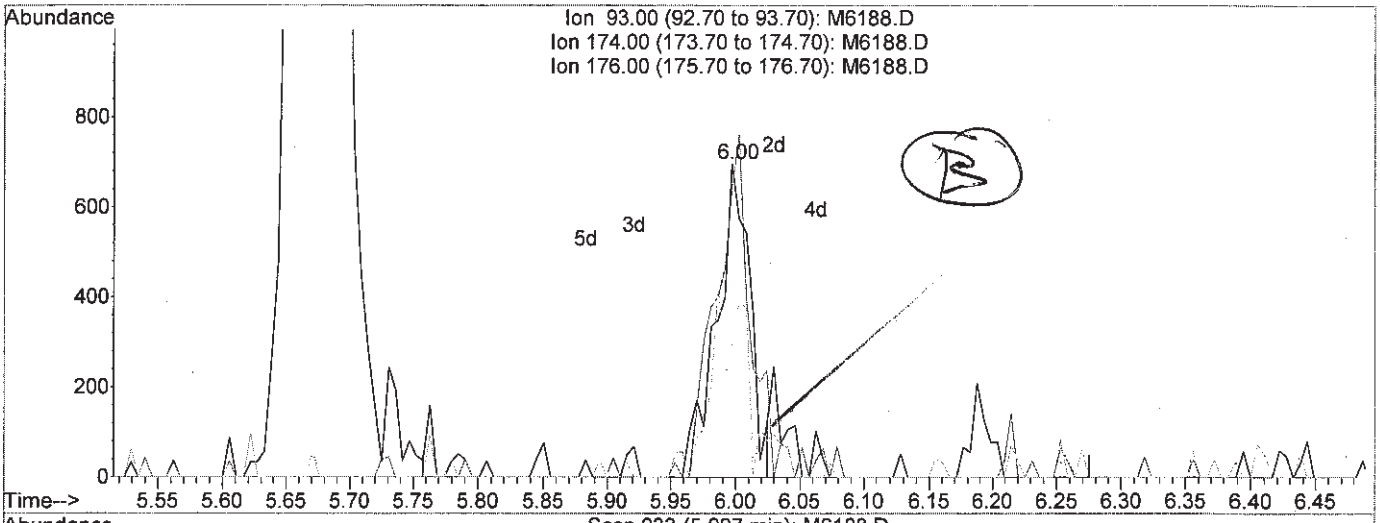
response 3830

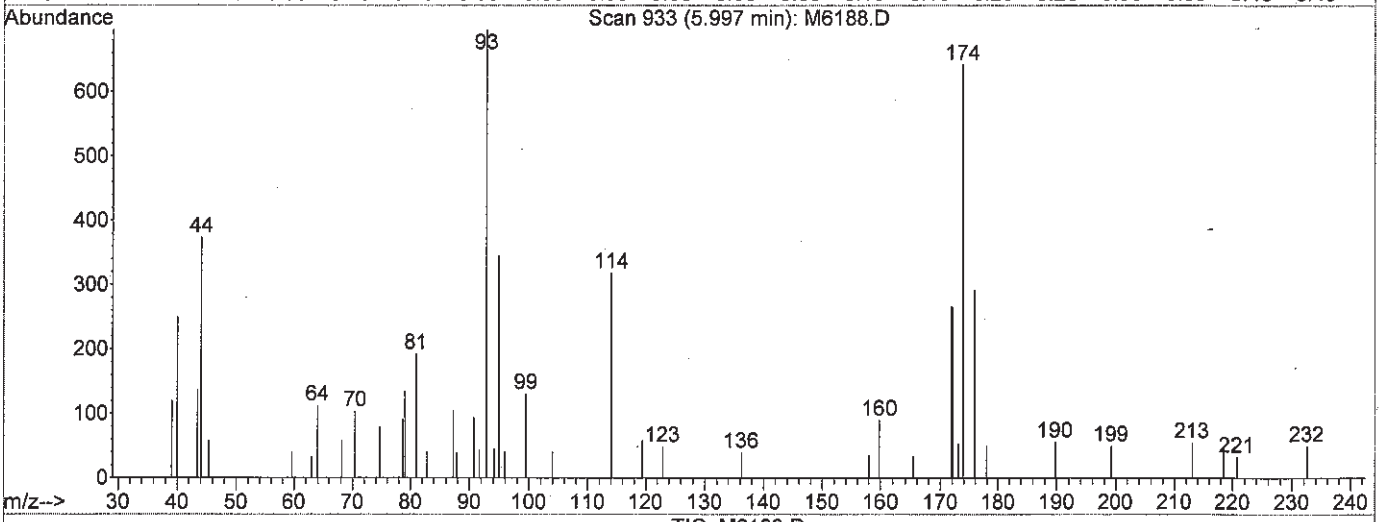
Ion	Exp%	Act%
43.00	100	100
86.00	9.30	5.92
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:30 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(48) Dibromomethane

6.00min 0.48ug/L

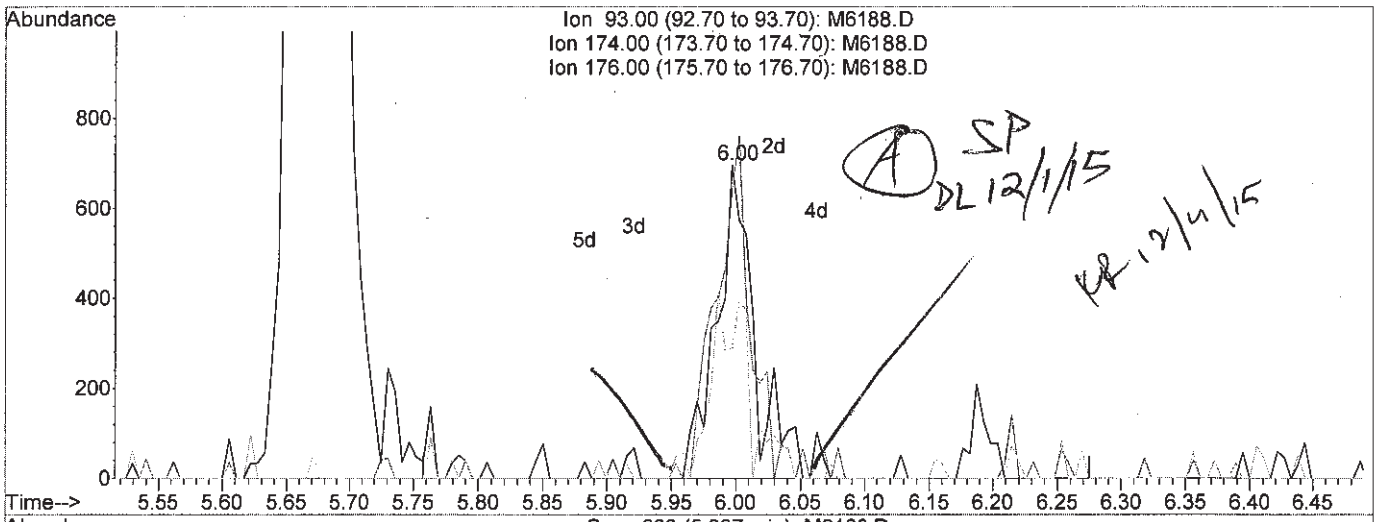
response 1240

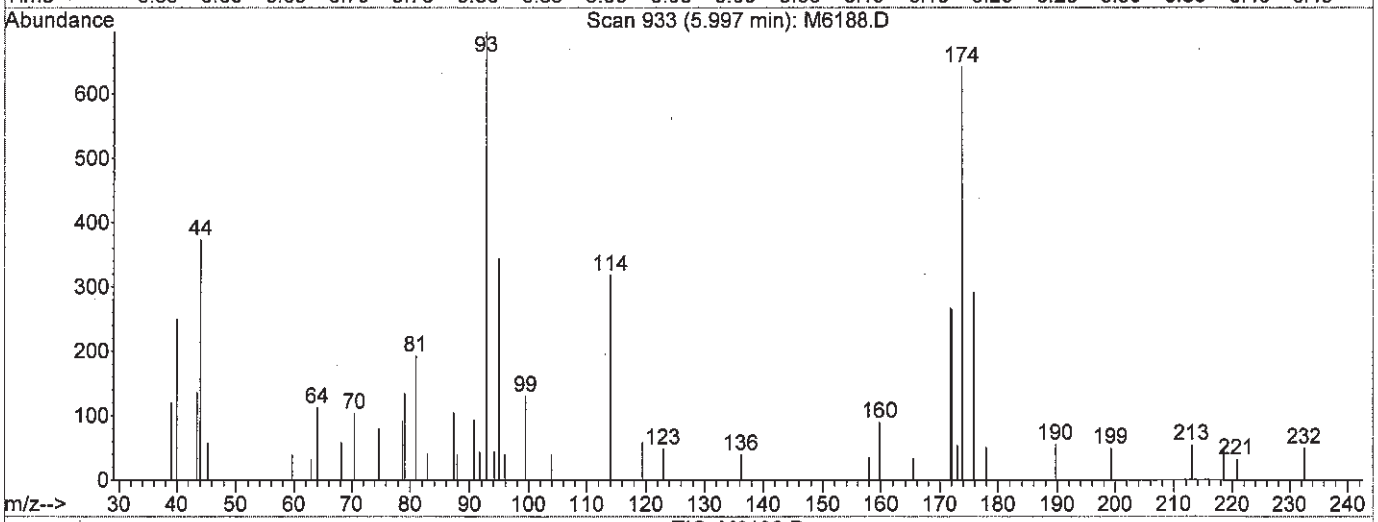
Ion	Exp%	Act%
93.00	100	100
174.00	118.50	115.16
176.00	59.10	32.98#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:31 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(48) Dibromomethane

6.00min 0.55ug/L m

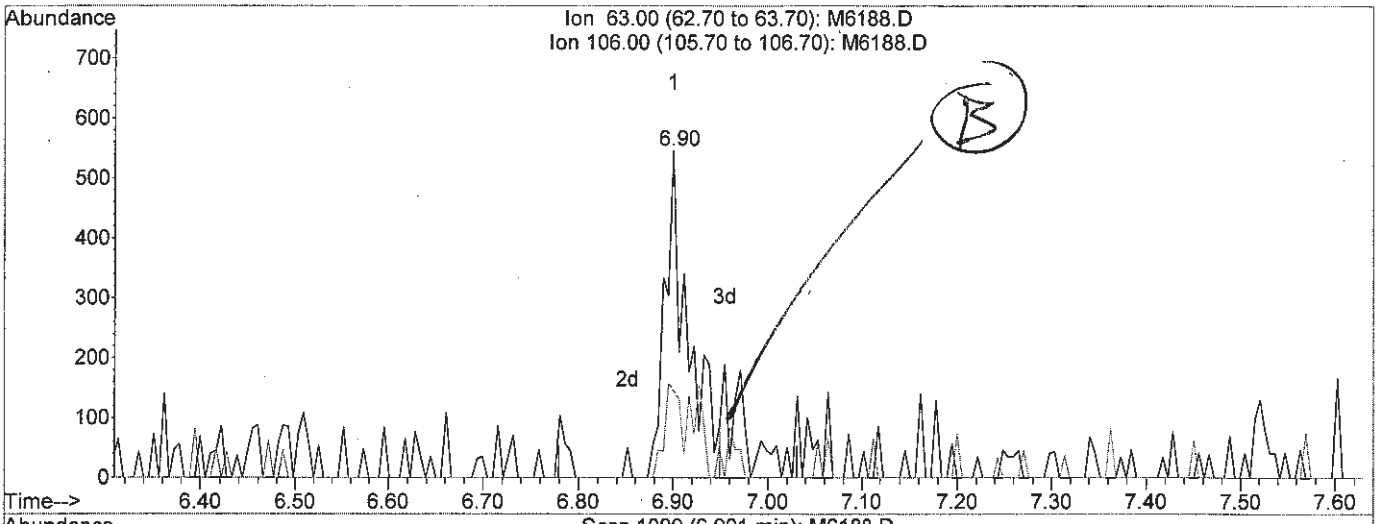
response 1417

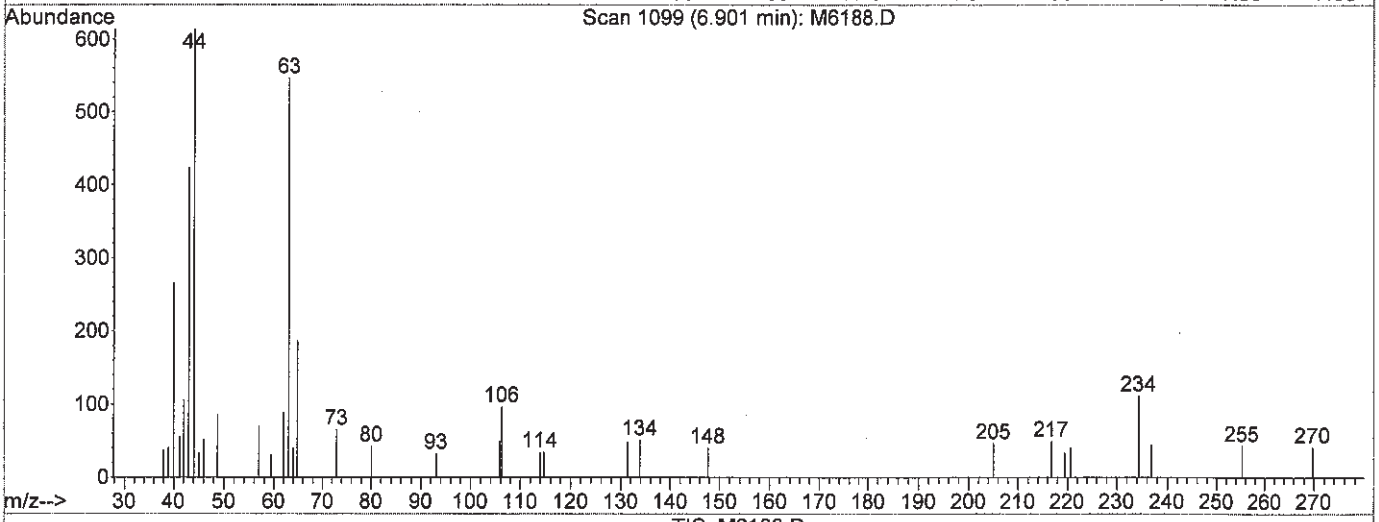
Ion	Exp%	Act%
93.00	100	100
174.00	118.50	100.78
176.00	59.10	28.86#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:31 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(57) 2-Chloroethylvinyl Ether

6.90min 0.45ug/L

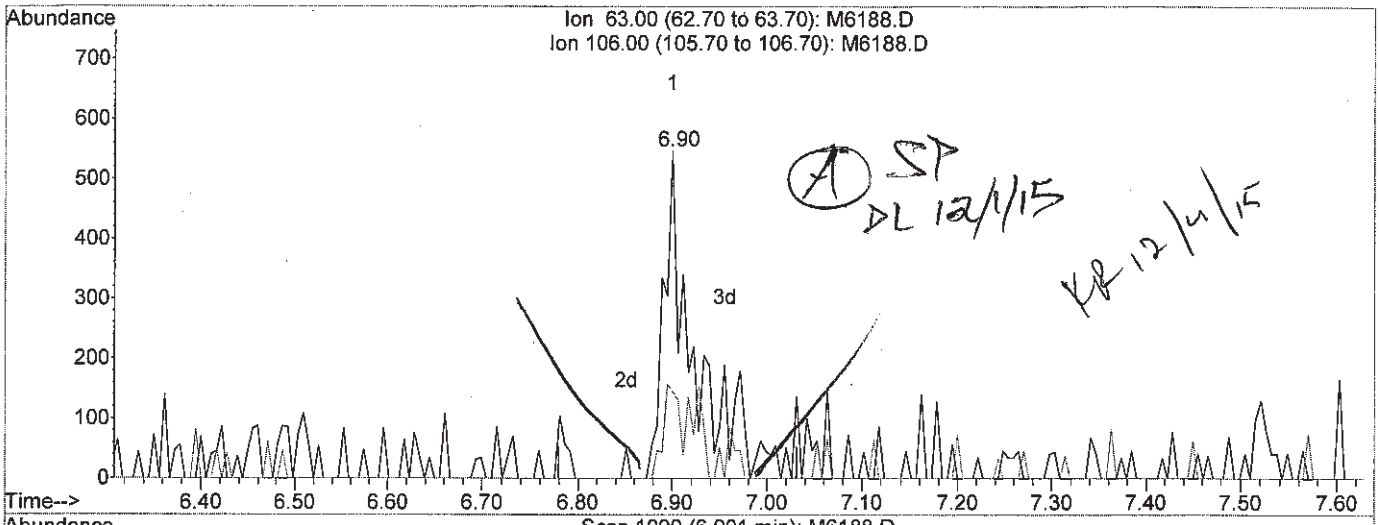
response 938

Ion	Exp%	Act%
63.00	100	100
106.00	25.70	26.56
0.00	0.00	0.00
0.00	0.00	0.00

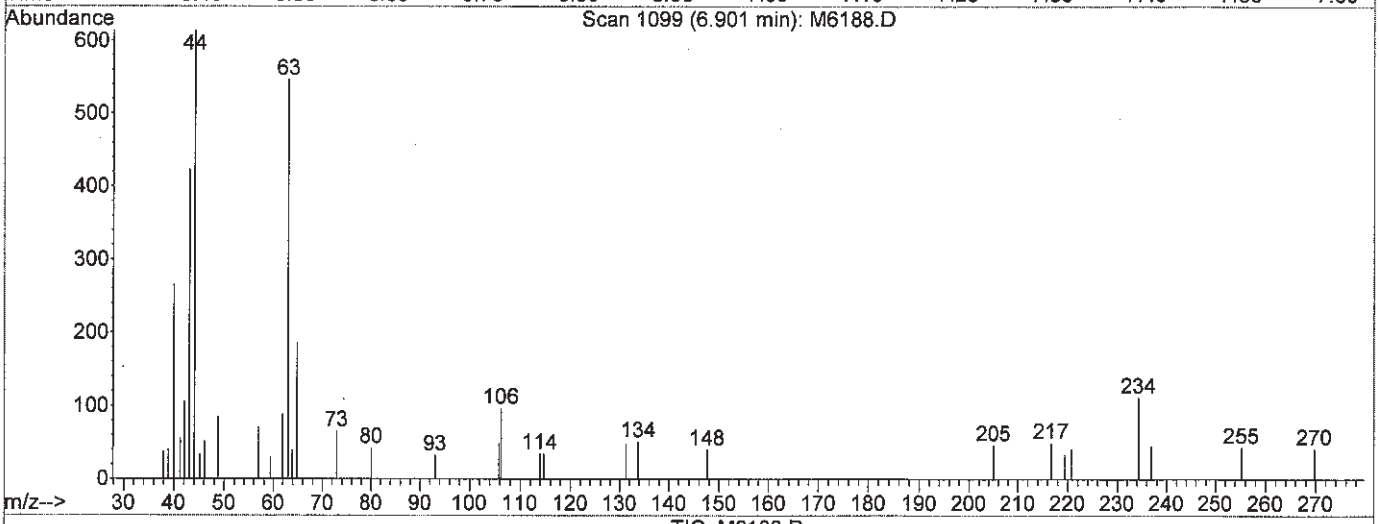
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:32 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration



A SP DL 12/1/15 KB 12/4/15



TIC: M6188.D

(57) 2-Chloroethylvinyl Ether

6.90min 0.54ug/L m

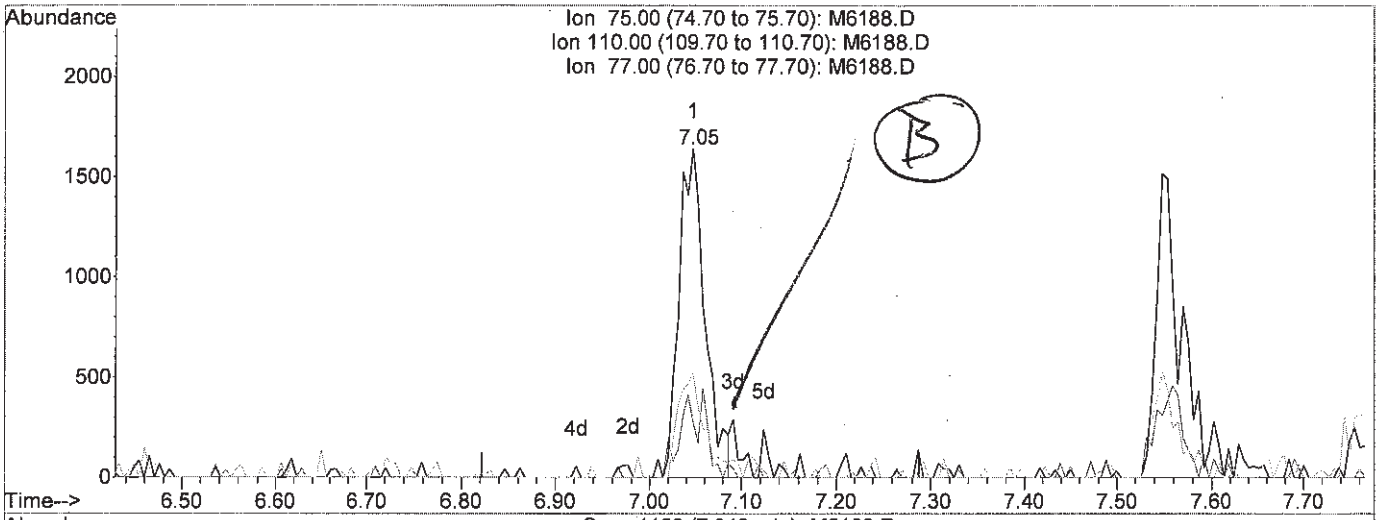
response 1137

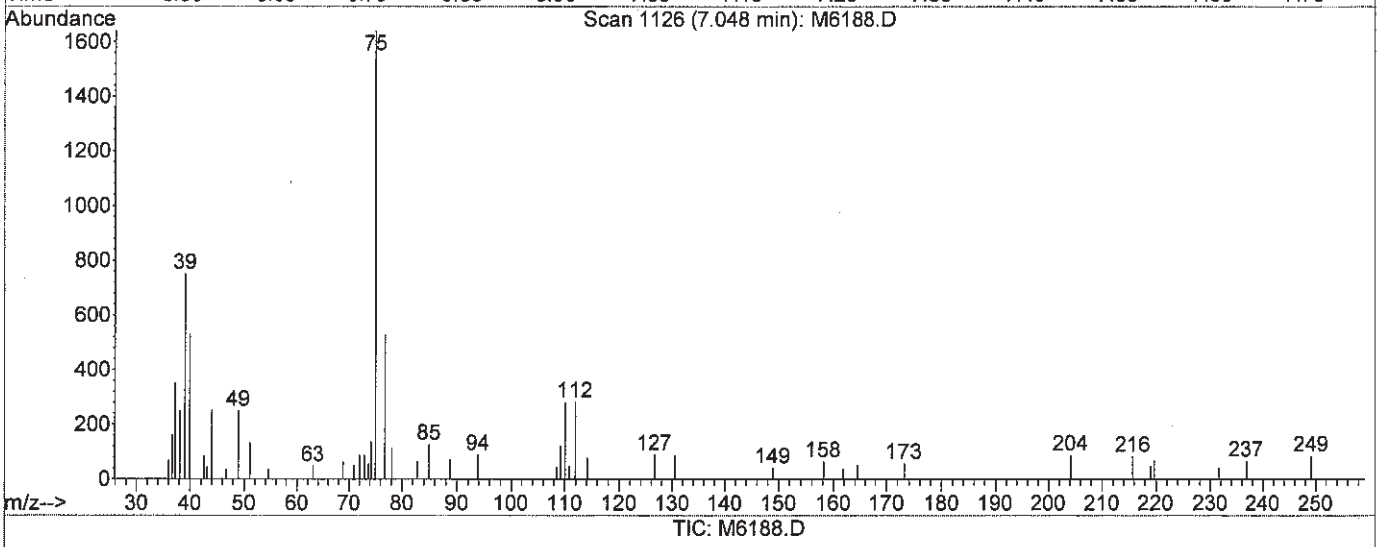
Ion	Exp%	Act%
63.00	100	100
106.00	25.70	17.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:32 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(58) cis-1,3-Dichloropropene (P)

7.05min 0.47ug/L

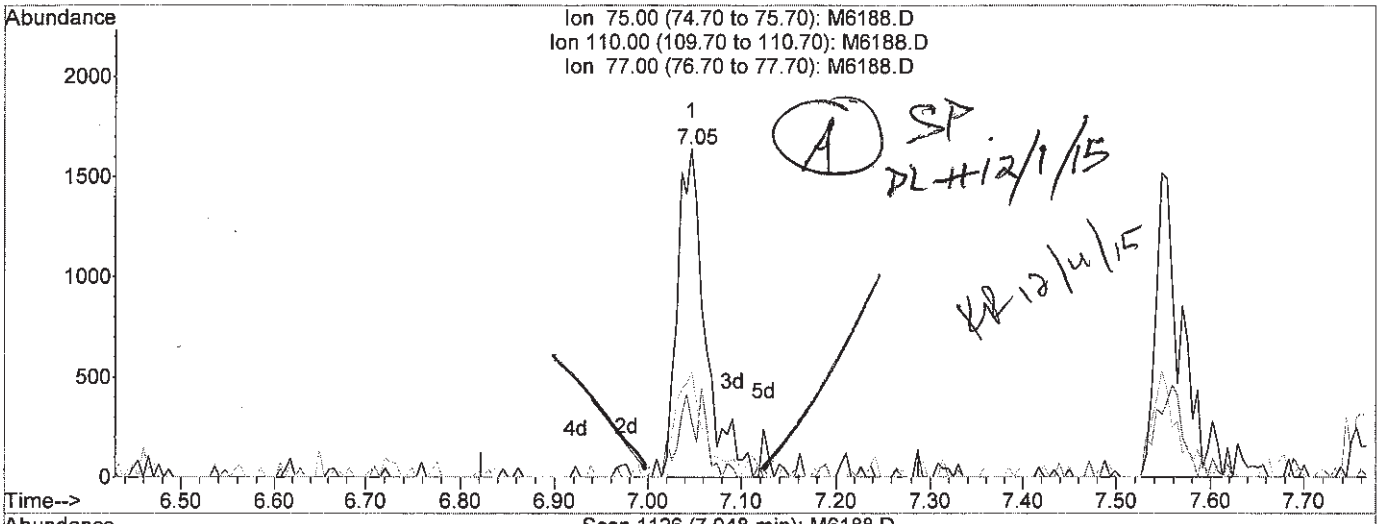
response 3272

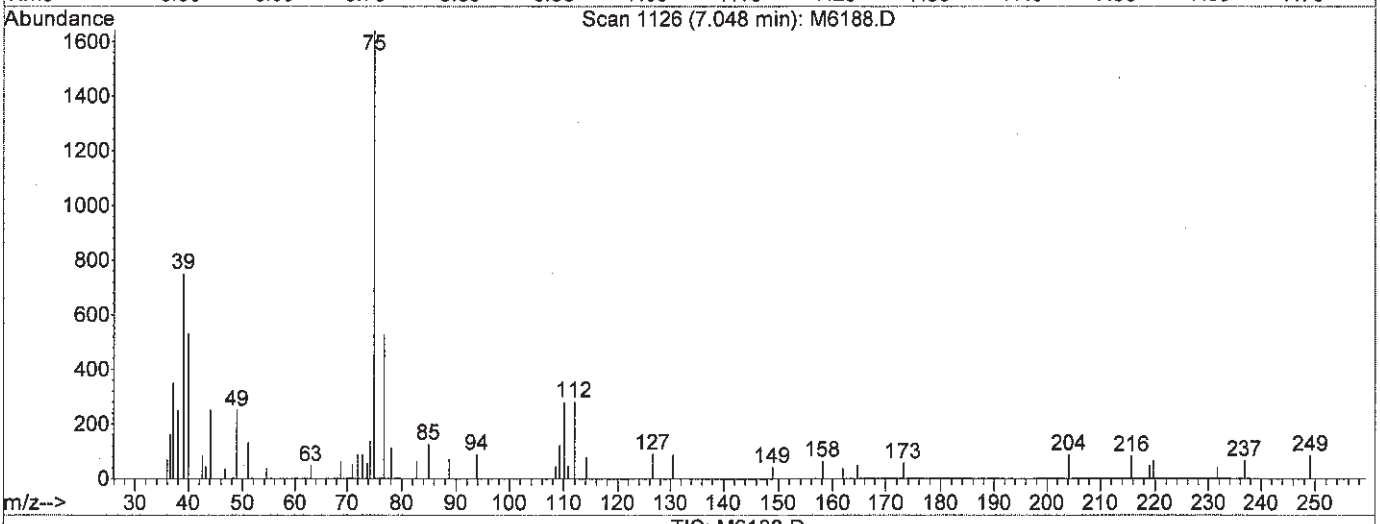
Ion	Exp%	Act%
75.00	100	100
110.00	25.10	15.77
77.00	32.70	33.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:33 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(58) cis-1,3-Dichloropropene (P)

7.05min 0.50ug/L m

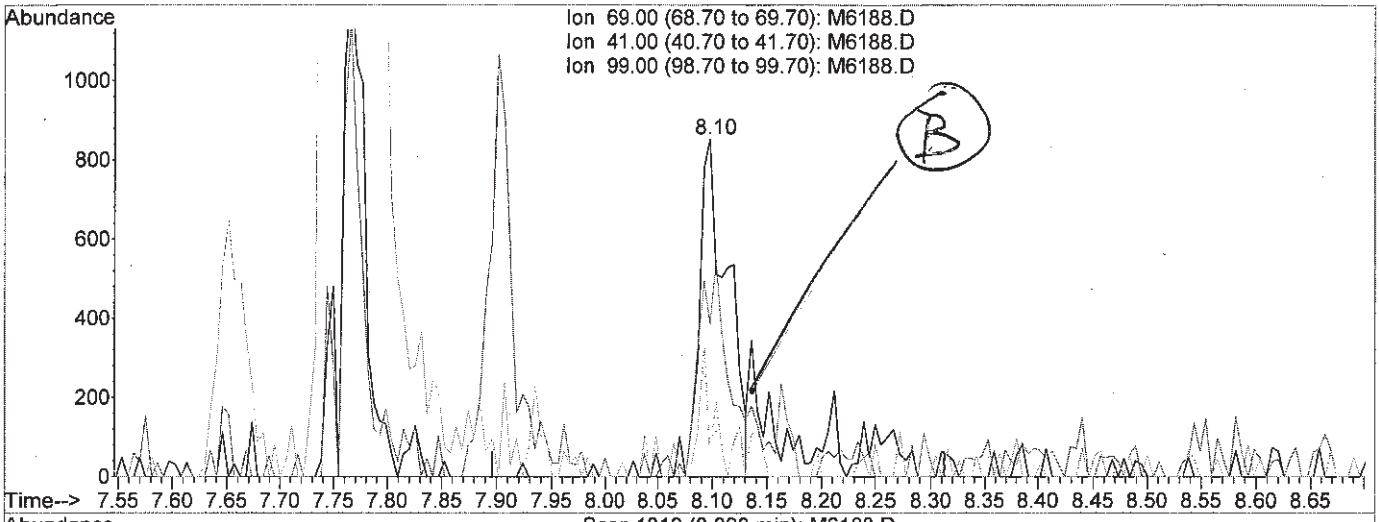
response 3433

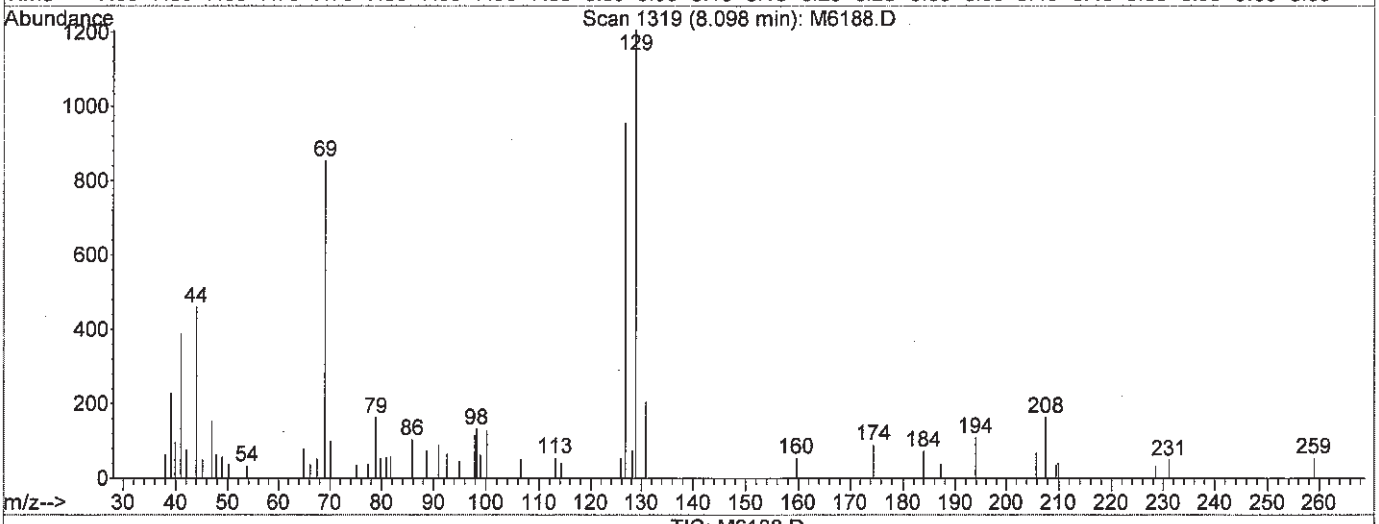
Ion	Exp%	Act%
75.00	100	100
110.00	25.10	15.03
77.00	32.70	31.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:33 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(66) Ethyl Methacrylate

8.10min 0.38ug/L

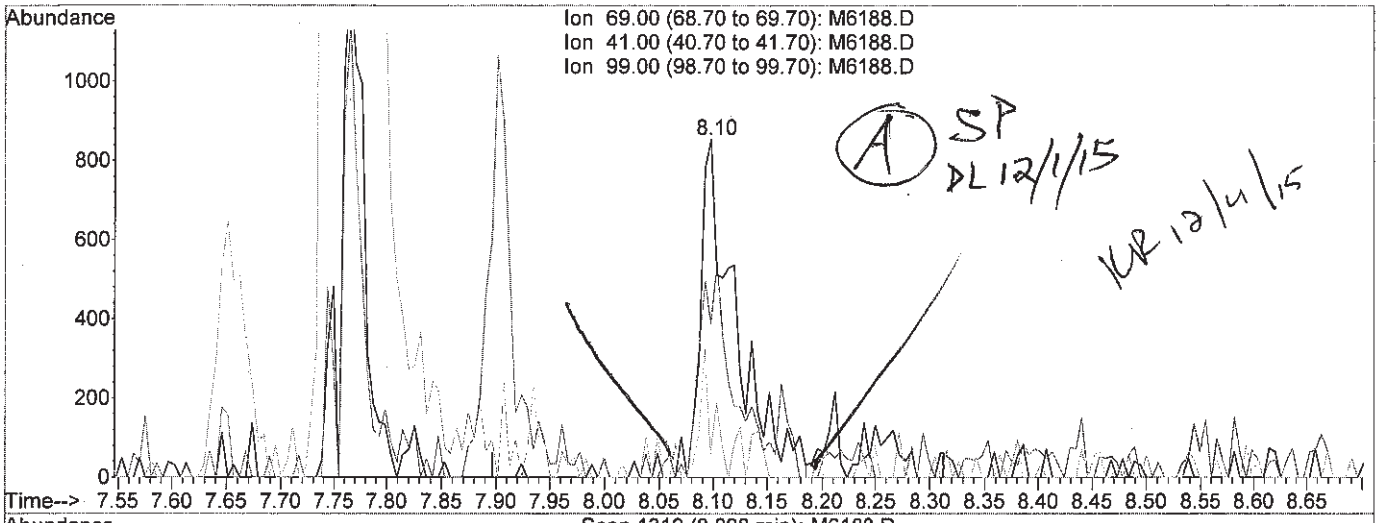
response 1528

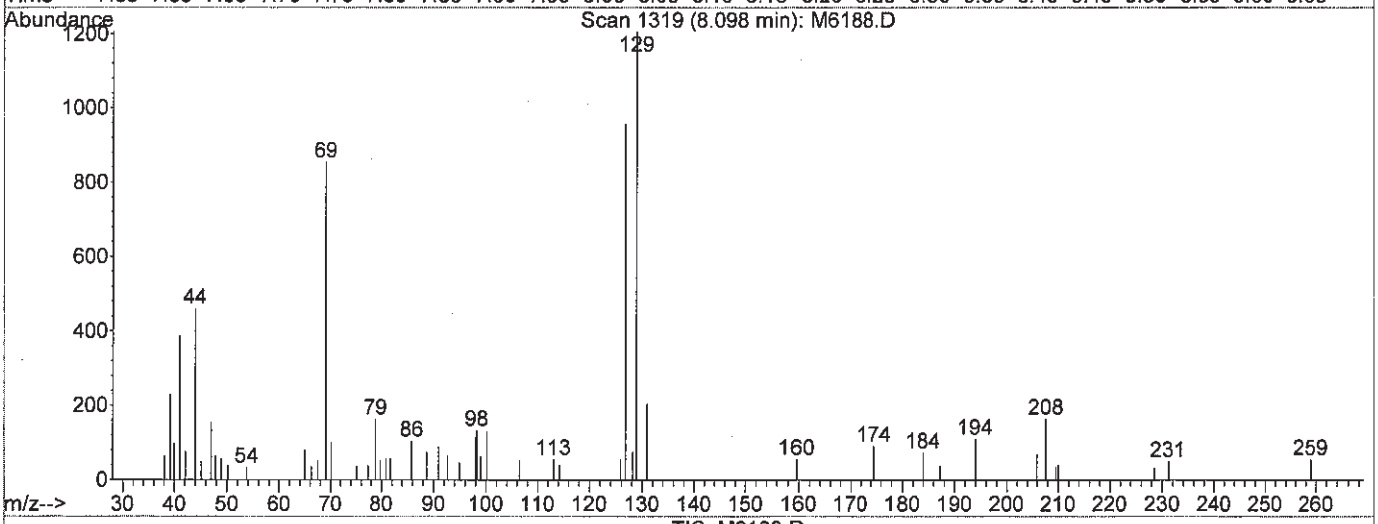
Ion	Exp%	Act%
69.00	100	100
41.00	65.10	45.37
99.00	19.80	7.15
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:33 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(66) Ethyl Methacrylate

8.10min 0.47ug/L m

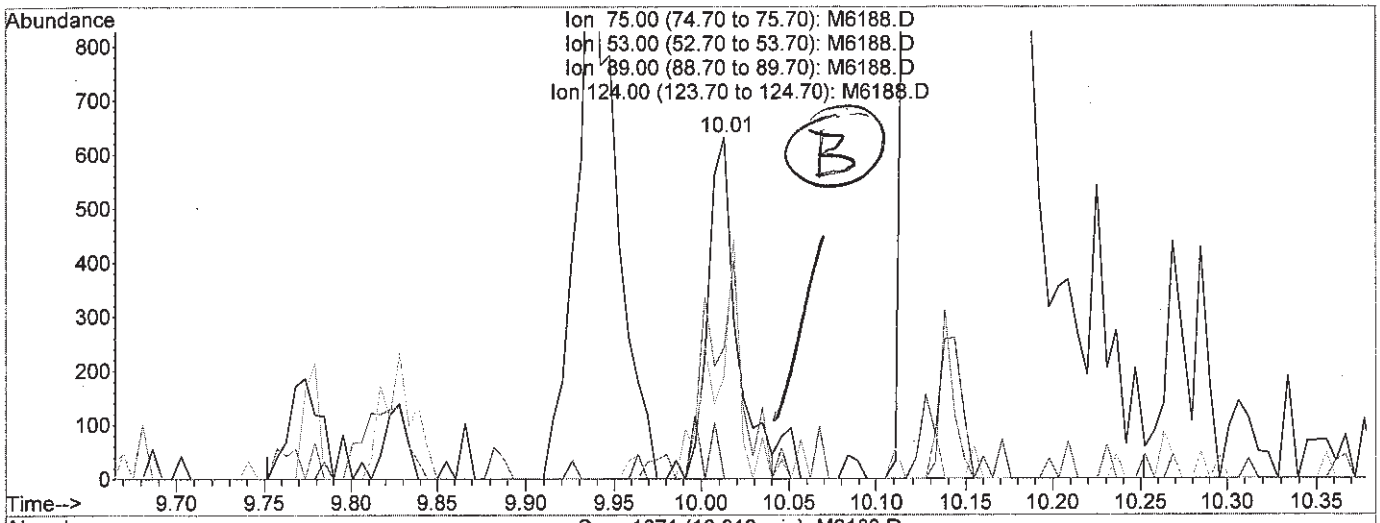
response 1913

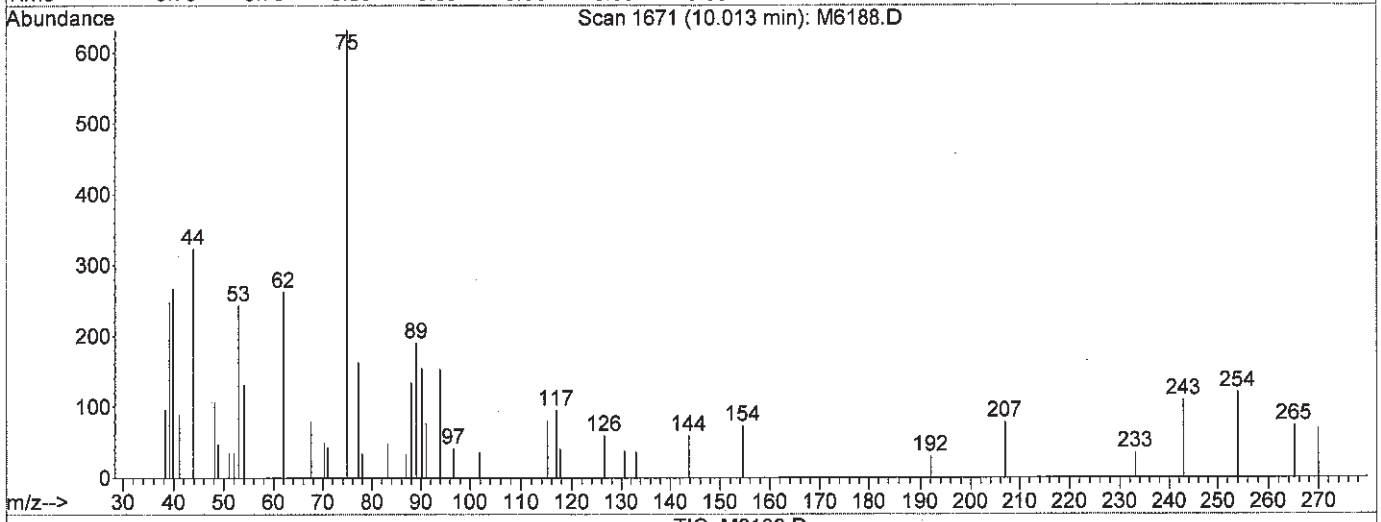
Ion	Exp%	Act%
69.00	100	100
41.00	65.10	45.37
99.00	19.80	7.15
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:34 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(80) trans-1,4-Dichloro-2-Butene

10.01min 0.52ug/L

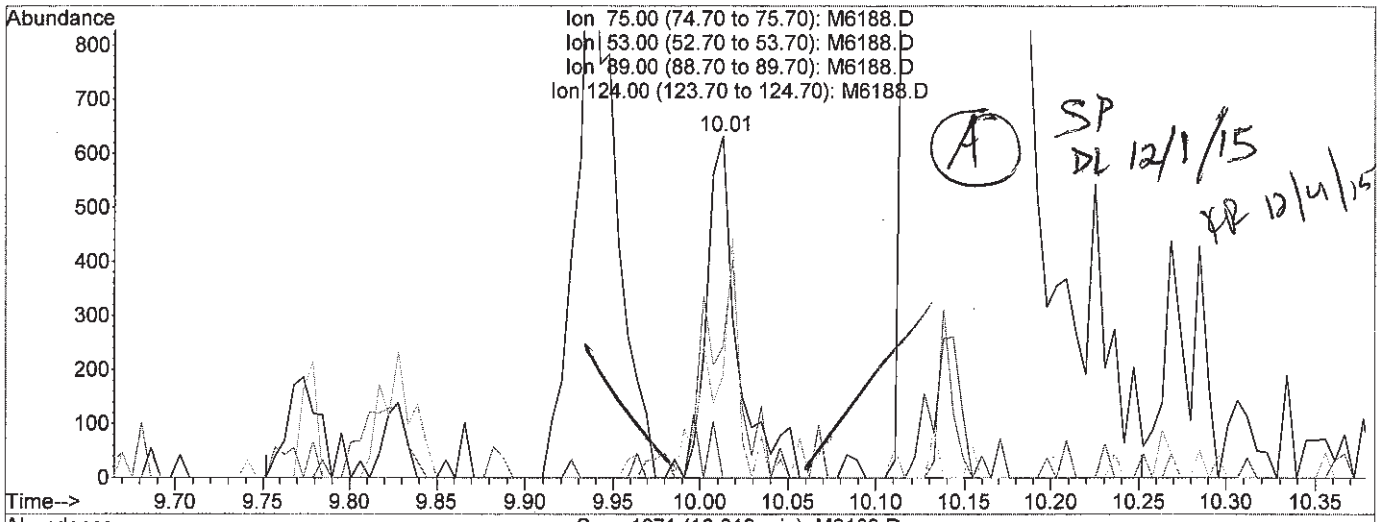
response 708

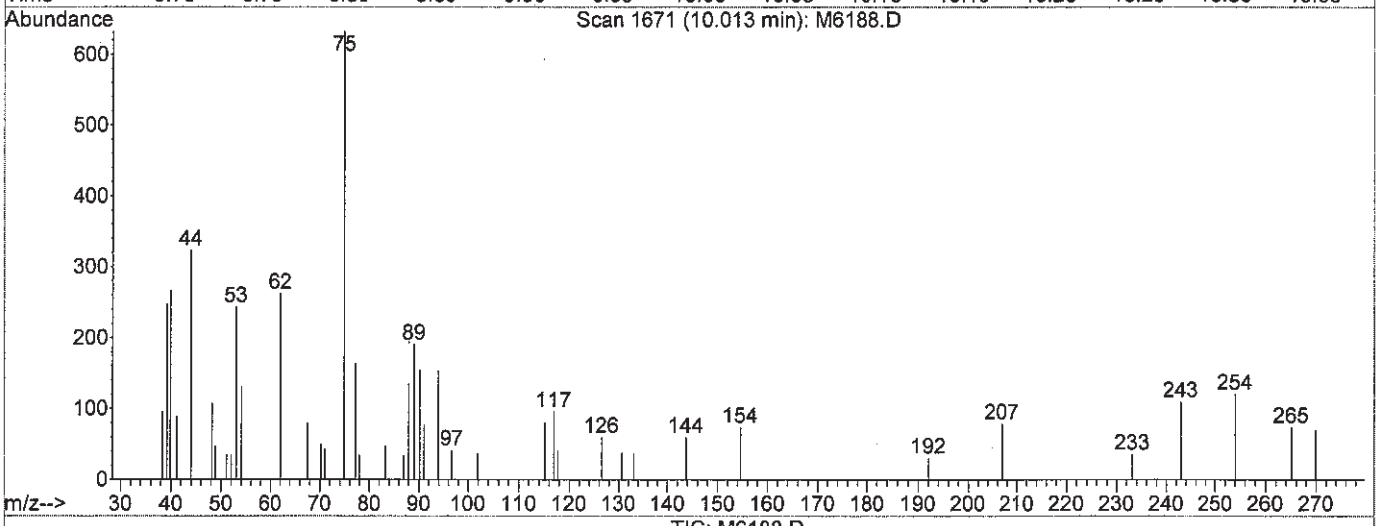
Ion	Exp%	Act%
75.00	100	100
53.00	65.30	38.45#
89.00	50.50	30.06#
124.00	19.60	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:35 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Multiple Level Calibration





TIC: M6188.D

(80) trans-1,4-Dichloro-2-Butene

10.01min 0.56ug/L m

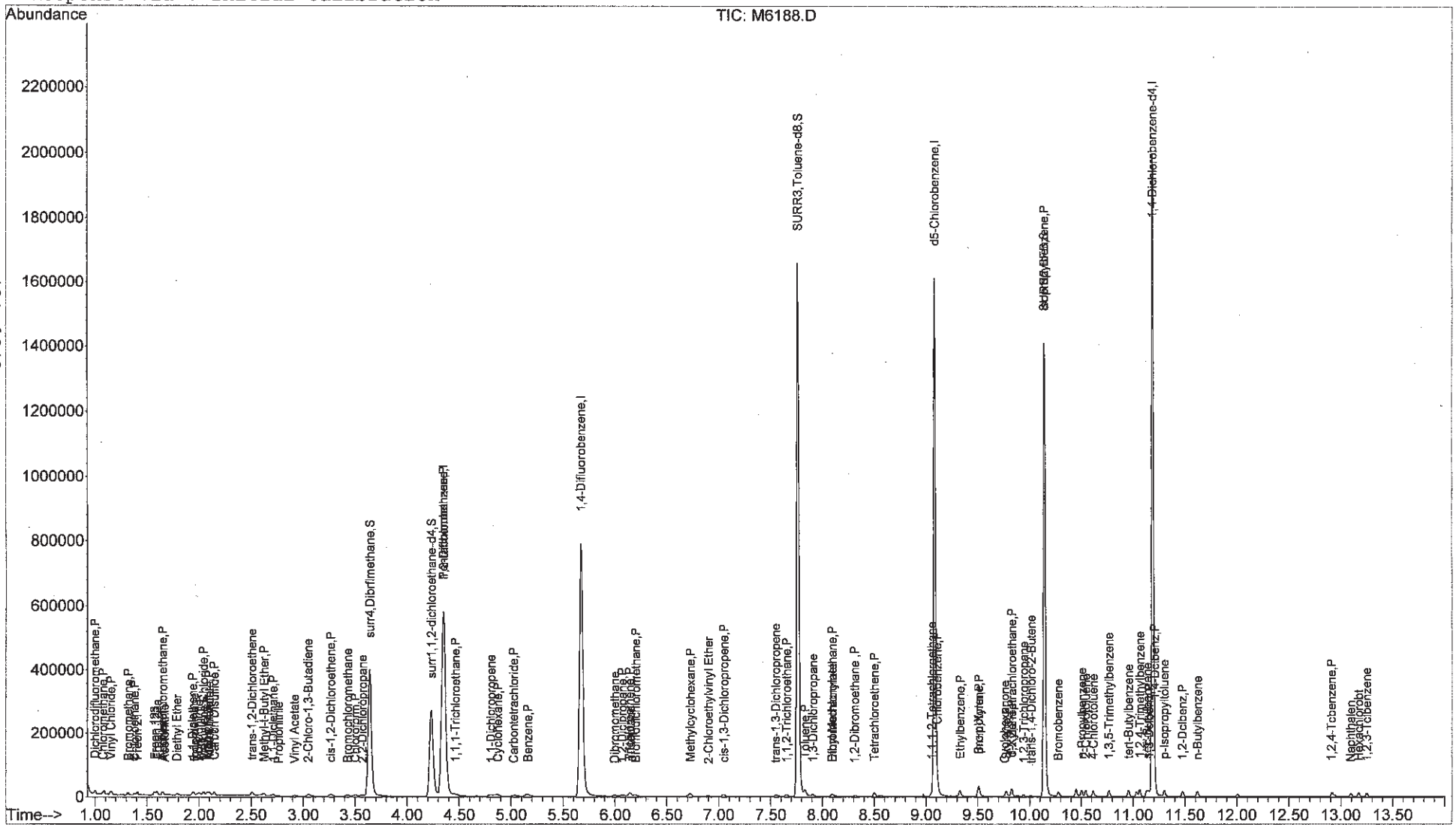
response 764

Ion	Exp%	Act%
75.00	100	100
53.00	65.30	38.45#
89.00	50.50	30.06#
124.00	19.60	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6188.D Vial: 11
Acq On : 30 Nov 2015 1:40 pm Operator: D.Lipani
Sample : STD #1 - 0.5 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:36 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:18:37 2015
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:47 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	4.35	168	639672	50.00	ug/L		0.00
39) 1,4-Difluorobenzene	5.67	114	855957	50.00	ug/L		0.00
64) d5-Chlorobenzene	9.08	117	775044	50.00	ug/L		0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	466644	50.00	ug/L		0.00
System Monitoring Compounds							
40) surr4,Dibrflmethane	3.64	113	291674	54.33	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 108.66%				
42) surr1,1,2-dichloroethane-d	4.23	65	236429	53.99	ug/L		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 107.98%				
62) SURR3,Toluene-d8	7.76	98	978263	54.87	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 109.74%				
82) SURR2,BFB	10.14	95	367941	53.04	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.08%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.00	85	7623	1.10	ug/L		86
3) Chloromethane	1.07	50	7625	1.04	ug/L		95
4) Vinyl Chloride	1.15	62	8168	1.06	ug/L		97
5) Bromomethane	1.32	94	5054	1.10	ug/L		91
6) Chloroethane	1.38	64	3798	0.98	ug/L		77
7) Freon 21	1.40	67	10275	1.06	ug/L		94
8) Freon 123	1.57	83	8656	1.01	ug/L		91
9) Freon 123a	1.59	67	7014	1.07	ug/L	#	61
10) Acrolein	1.65	56	2618	4.63	ug/L		91
11) Trichlorofluoromethane	1.65	101	8286	1.03	ug/L		89
12) Acetonitrile	1.66	41	2442	5.85	ug/L		94
13) 2-Propanol	1.70	45	3196	20.44	ug/L		98
15) Diethyl Ether	1.79	59	3492	1.02	ug/L		89
16) 1,1-Diclethene	1.94	96	4804	0.92	ug/L	#	81
17) Iodomethane	1.96	142	4425m	1.20	ug/L		
18) TBA	1.98	59	5410	21.42	ug/L		94
19) Acrylonitrile	2.00	53	5627	4.90	ug/L		94
20) Methylene Chloride	2.04	84	6083	1.04	ug/L		91
21) Freon 113	2.08	101	5602	1.07	ug/L		92
22) Methyl Acetate	2.09	43	2277	0.98	ug/L		95
23) Allyl Chloride	2.10	76	2525	1.01	ug/L		98
24) Carbon Disulfide	2.14	76	18006	1.06	ug/L		99
25) trans-1,2-Dichloroethene	2.51	96	5803	1.01	ug/L		97
26) Methyl-t-Butyl Ether	2.63	73	10417	0.96	ug/L		96
27) 1,1-Diclethane	2.71	63	9042	1.03	ug/L		97
28) Propionitrile	2.77	54	1977m	5.23	ug/L		
29) Vinyl Acetate	2.90	43	6935m	0.94	ug/L		
30) 2-Chloro-1,3-Butadiene	3.05	53	8204	1.03	ug/L		86
32) Methacrylonitrile	3.28	67	1006	0.82	ug/L	#	84
33) cis-1,2-Dichloroethene	3.27	96	5752	1.02	ug/L		91
34) Bromochloromethane	3.43	128	2656	0.98	ug/L	#	76
35) Chloroform	3.50	83	9139	1.03	ug/L		88
36) 2,2-Dichloropropane	3.57	77	6951	1.02	ug/L		93
38) 1,1,1-Trichloroethane	4.45	97	7619	1.07	ug/L		86
43) 1,2-Dichloroethane	4.34	62	6633	1.31	ug/L	#	69

DL 12/1/15

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:47 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	1,1-Dichloropropene	4.80	75	6027	0.96	ug/L		99
45)	Cyclohexane	4.86	56	7927	1.04	ug/L	#	74
46)	Carbontetrachloride	5.04	119	6646	1.08	ug/L		93
47)	Benzene	5.15	78	19863	1.03	ug/L		87
48)	Dibromomethane	5.99	93	2817	1.08	ug/L	#	83
49)	1,2-Diclpropane	6.07	63	5316	1.09	ug/L		88
50)	n-Heptane	6.15	43	4220	1.02	ug/L		88
51)	Trichloroethene	6.13	130	6189	1.09	ug/L		94
52)	Bromodichloromethane	6.20	83	5898	0.99	ug/L		97
56)	Methylcyclohexane	6.72	55	5310	1.07	ug/L		97
57)	2-Chloroethylvinyl Ether	6.89	63	1797m	0.85	ug/L		
58)	cis-1,3-Dichloropropene	7.03	75	6458	0.93	ug/L		96
60)	trans-1,3-Dichloropropene	7.55	75	5544	0.94	ug/L		94
61)	1,1,2-Trichloroethane	7.65	97	3638	1.00	ug/L		99
63)	Toluene	7.83	91	21745	1.08	ug/L		92
65)	1,3-Dichloropropane	7.90	76	5552	1.00	ug/L		98
66)	Ethyl Methacrylate	8.09	69	3963m	0.95	ug/L		
67)	Dibromochloromethane	8.09	129	4271	0.93	ug/L		94
69)	1,2-Dibromoethane	8.31	107	3515	0.95	ug/L		93
70)	n-Butyl Acetate	8.55	43	4235m	0.94	ug/L		
71)	Tetrachloroethene	8.50	164	4809	1.02	ug/L		91
72)	1,1,1,2-Tetrachloroethane	9.05	131	5140	1.04	ug/L	#	84
73)	Chlorobenzene	9.11	112	14420	1.05	ug/L		94
74)	Ethylbenzene	9.32	106	7515	1.06	ug/L		96
75)	Bromoform	9.50	173	2775	0.95	ug/L		94
76)	(m+p)Xylene	9.50	106	16853	1.96	ug/L		94
77)	o-Xylene	9.83	106	8361	0.94	ug/L		96
78)	Cyclohexanone	9.75	55	1885	18.58	ug/L		79
79)	Styrene	9.77	104	14705	1.04	ug/L		94
80)	trans-1,4-Dichloro-2-Buten	10.01	75	1237m	0.87	ug/L		
81)	Isopropylbenzene	10.14	105	21055	0.97	ug/L		95
84)	1,1,2,2-Tetrachloroethane	9.82	83	4020	0.94	ug/L		96
85)	1,2,3-Trichloropropane	9.94	75	2681m	0.92	ug/L		
86)	Bromobenzene	10.28	156	6507	1.01	ug/L		96
87)	n-Propylbenzene	10.50	91	23368	0.94	ug/L		97
88)	2-Chlorotoluene	10.54	91	15548	1.02	ug/L		96
89)	4-Chlorotoluene	10.61	91	15653	0.97	ug/L		98
90)	1,3,5-Trimethylbenzene	10.77	105	16407	0.97	ug/L		98
91)	tert-Butylbenzene	10.95	119	14238	0.97	ug/L		98
92)	1,2,4-Trimethylbenzene	11.06	105	17496	0.97	ug/L		98
93)	sec-Butylbenzene	11.13	105	20701	1.00	ug/L		99
94)	1,3-Dclbenz	11.15	146	12401	1.03	ug/L		95
95)	1,4-Dclbenz	11.20	146	12824m	1.06	ug/L		
96)	p-Isopropyltoluene	11.30	119	17186	1.01	ug/L		99
97)	1,2-Dclbenz	11.47	146	11197	1.00	ug/L		95
98)	n-Butylbenzene	11.62	91	15440	1.03	ug/L		96
99)	1,2-Dibromo-3-chloropropan	11.84	75	800	1.28	ug/L	#	67
101)	1,2,4-Tcbenzene	12.92	180	6422	0.99	ug/L		97
102)	Naphthalen	13.10	128	10535	0.93	ug/L		96
103)	Hexachlorobt	13.17	225	2824	0.91	ug/L		88

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:47 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

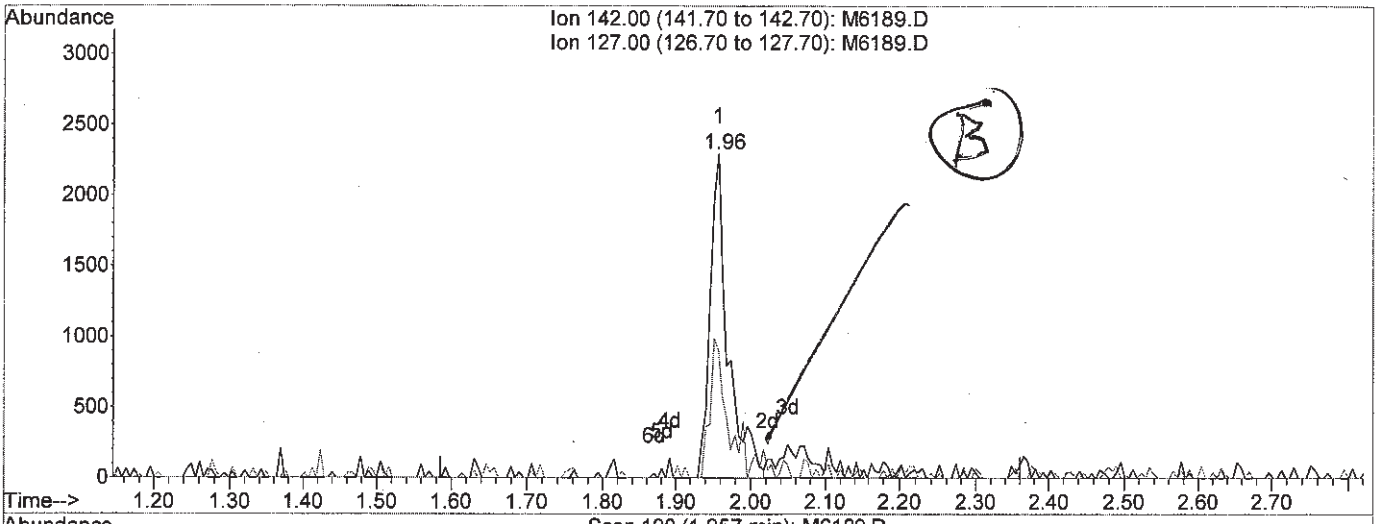
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
104)	1,2,3-Tclbenzene	13.25	180	5065	0.95	ug/L	93

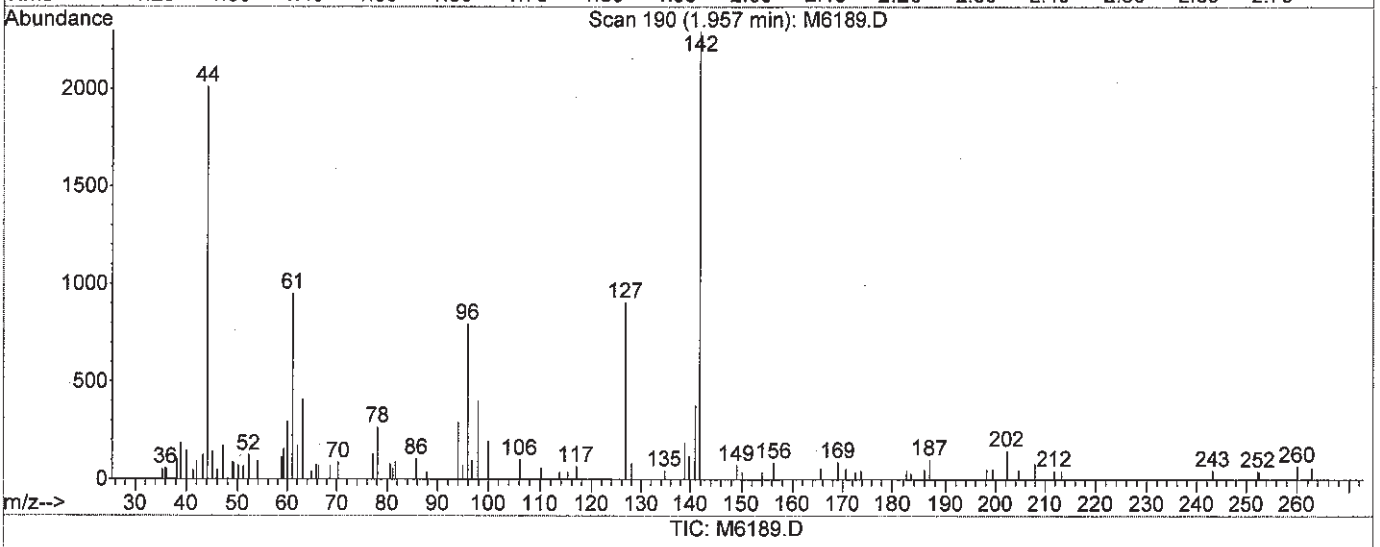
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:39 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(17) Iodomethane

1.96min 1.11ug/L

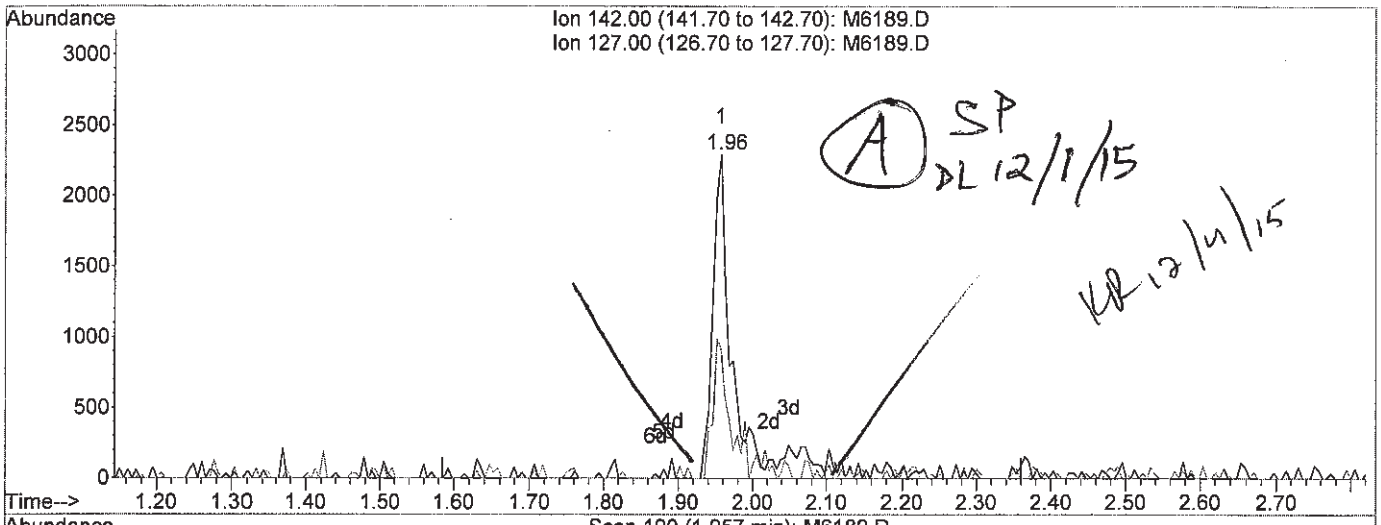
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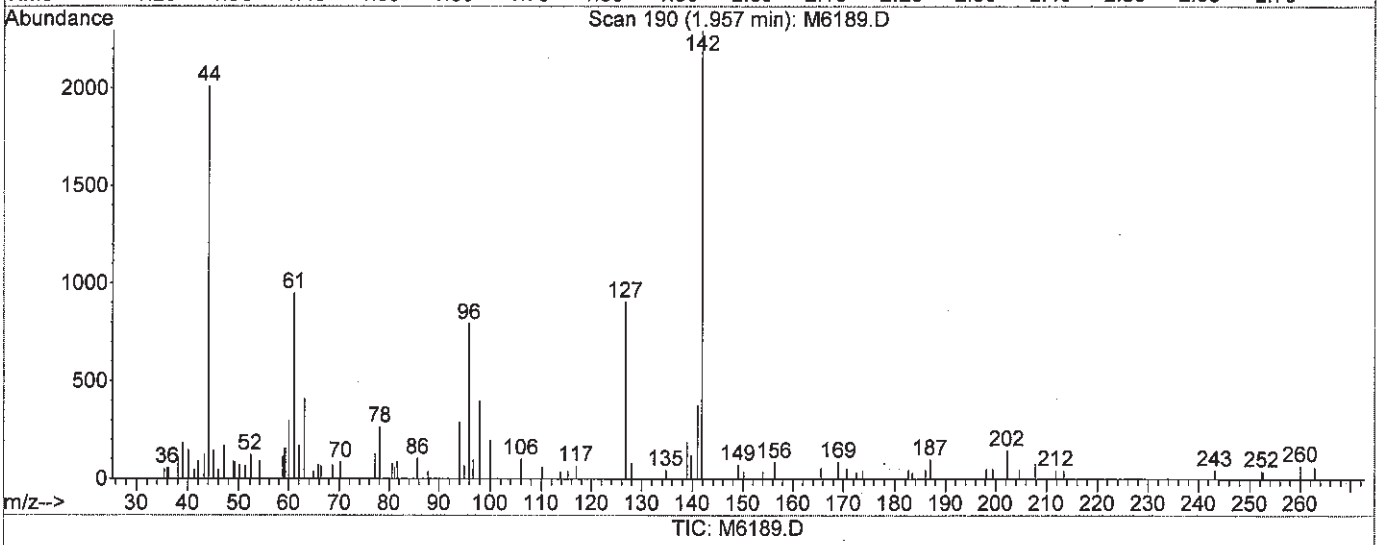
Ion	Exp%	Act%
142.00	100	100
127.00	35.30	39.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:40 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(17) Iodomethane

1.96min 1.20ug/L m

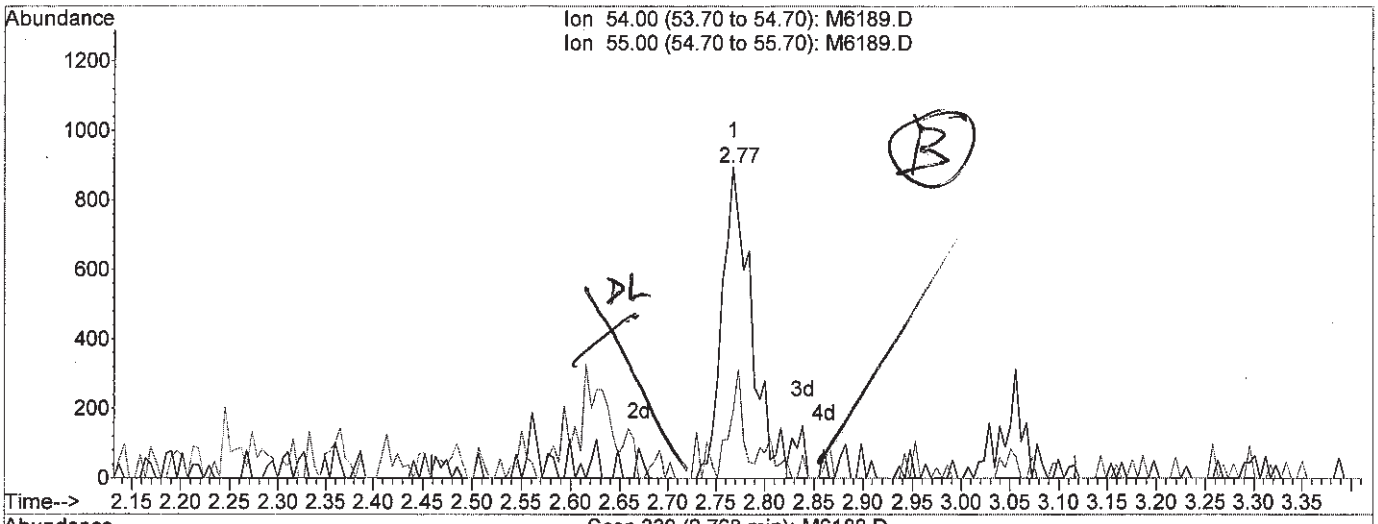
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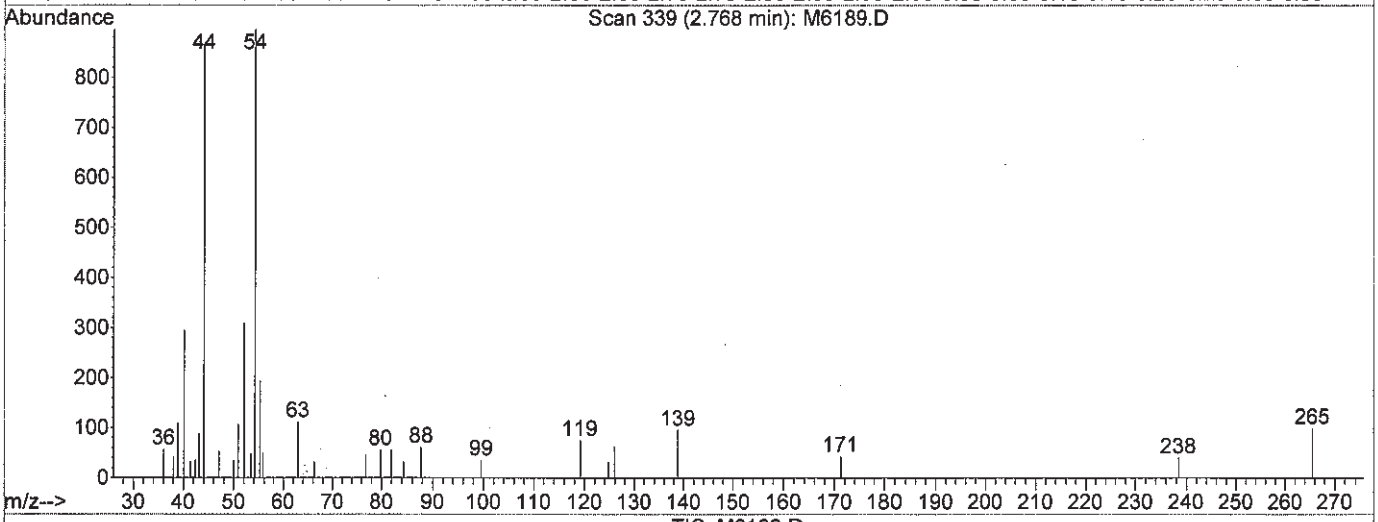
Ion	Exp%	Act%
142.00	100	100
127.00	35.30	39.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:40 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(28) Propionitrile

2.77min 4.93ug/L

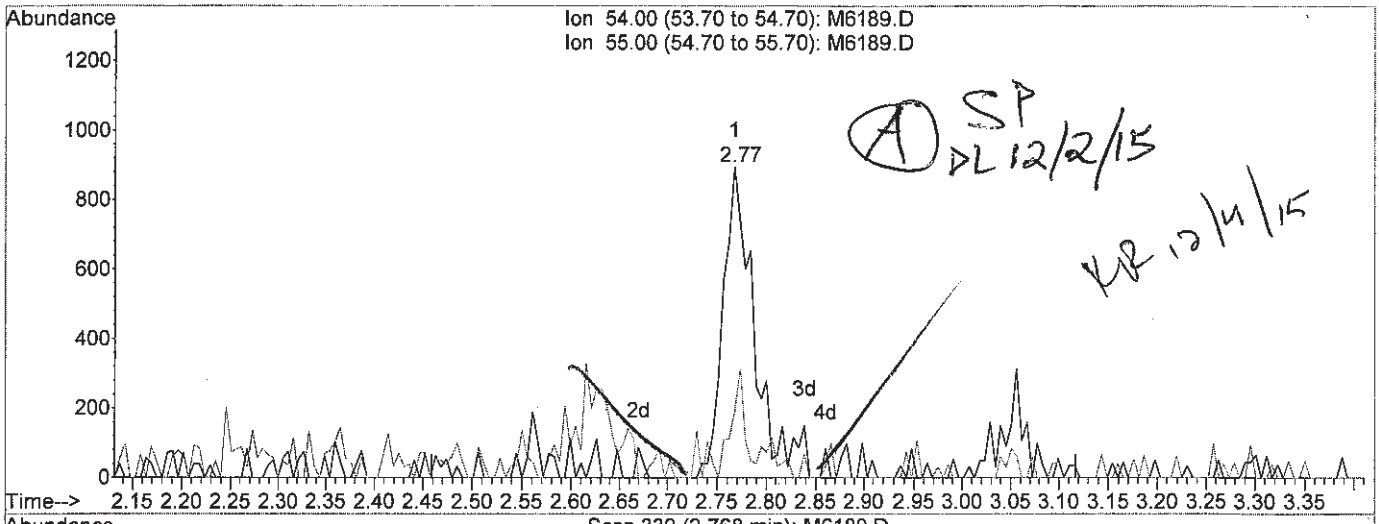
response 1862

Ion	Exp%	Act%
54.00	100	100
55.00	13.80	21.45
0.00	0.00	0.00
0.00	0.00	0.00

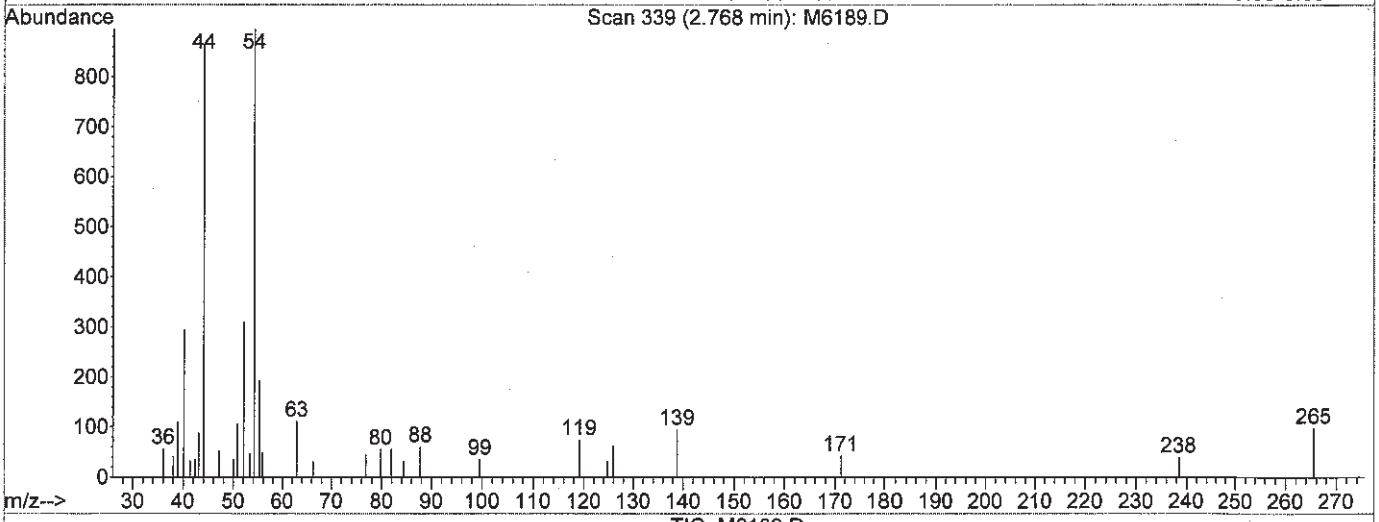
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:40 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration



A SP DL 12/2/15 KB 12/4/15



TIC: M6189.D

(28) Propionitrile

2.77min 5.23ug/L m

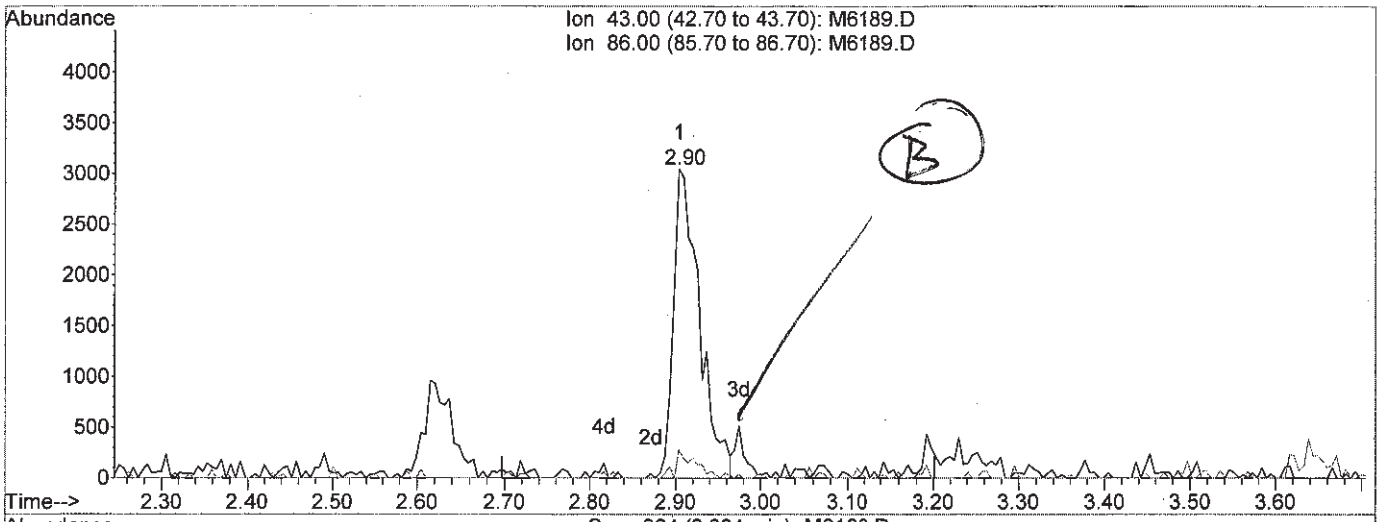
response 1977

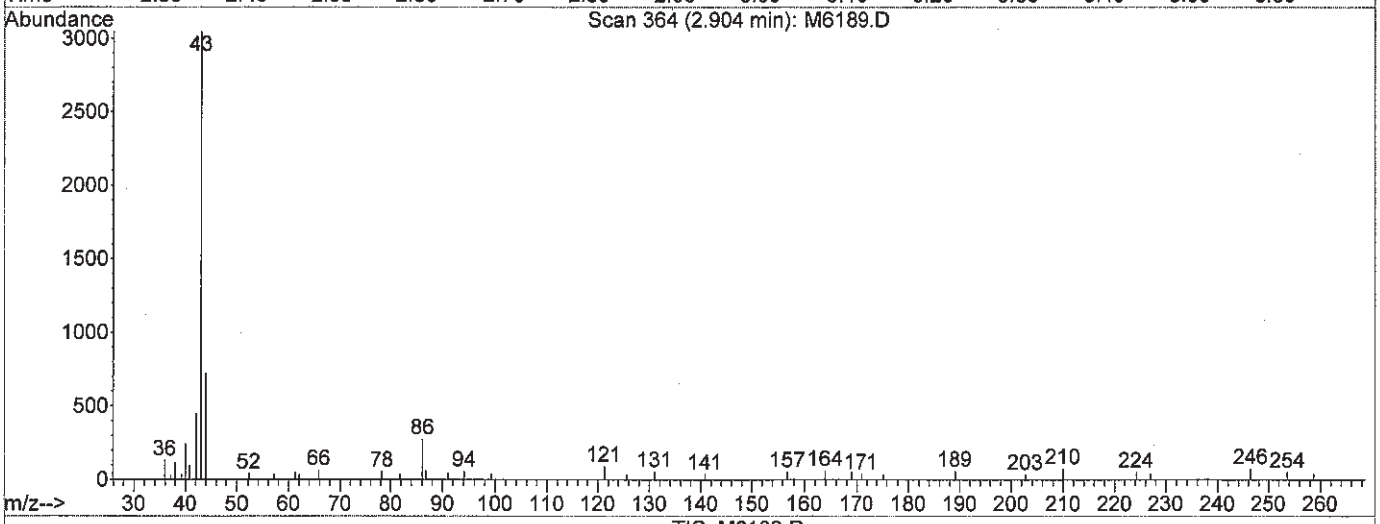
Ion	Exp%	Act%
54.00	100	100
55.00	13.80	21.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:40 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(29) Vinyl Acetate

2.90min 0.88ug/L

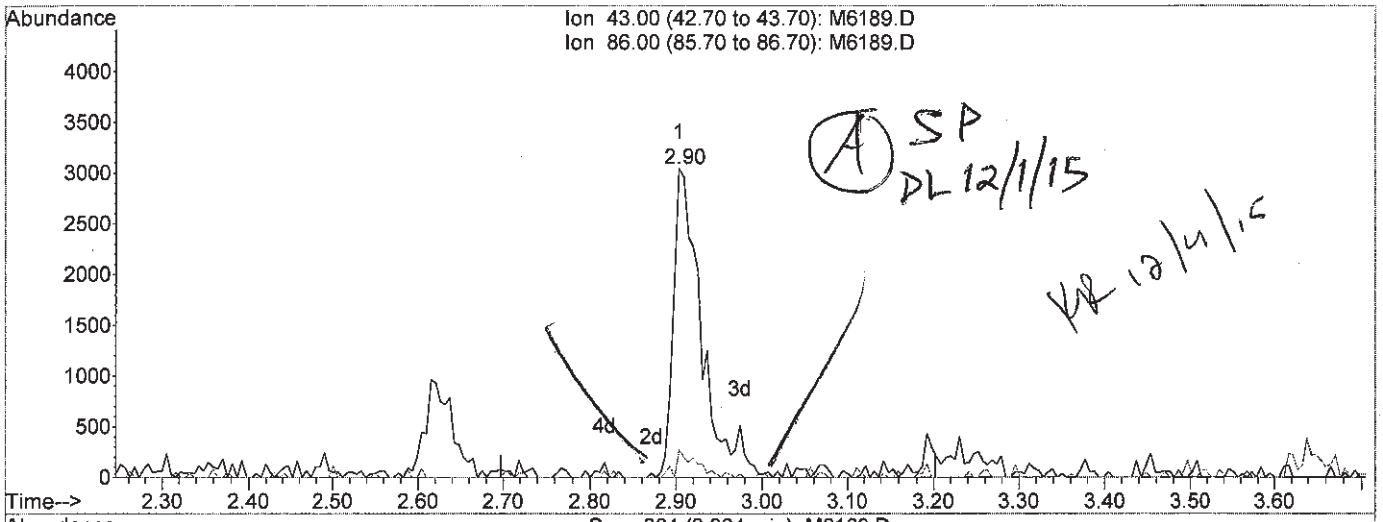
response 6483

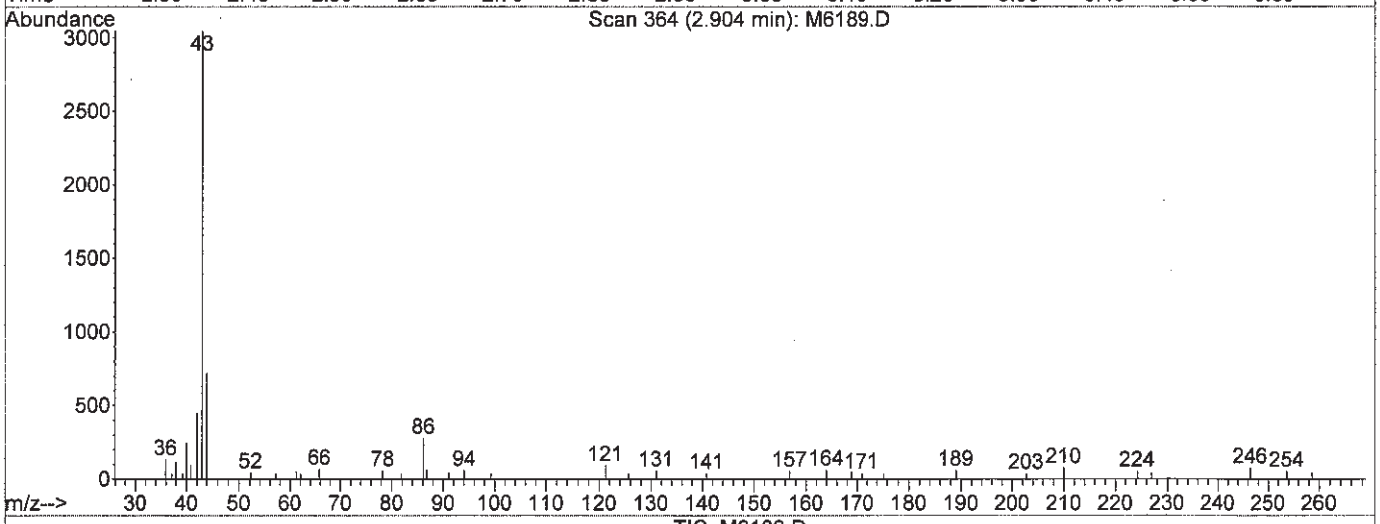
Ion	Exp%	Act%
43.00	100	100
86.00	9.30	9.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:41 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(29) Vinyl Acetate

2.90min 0.94ug/L m

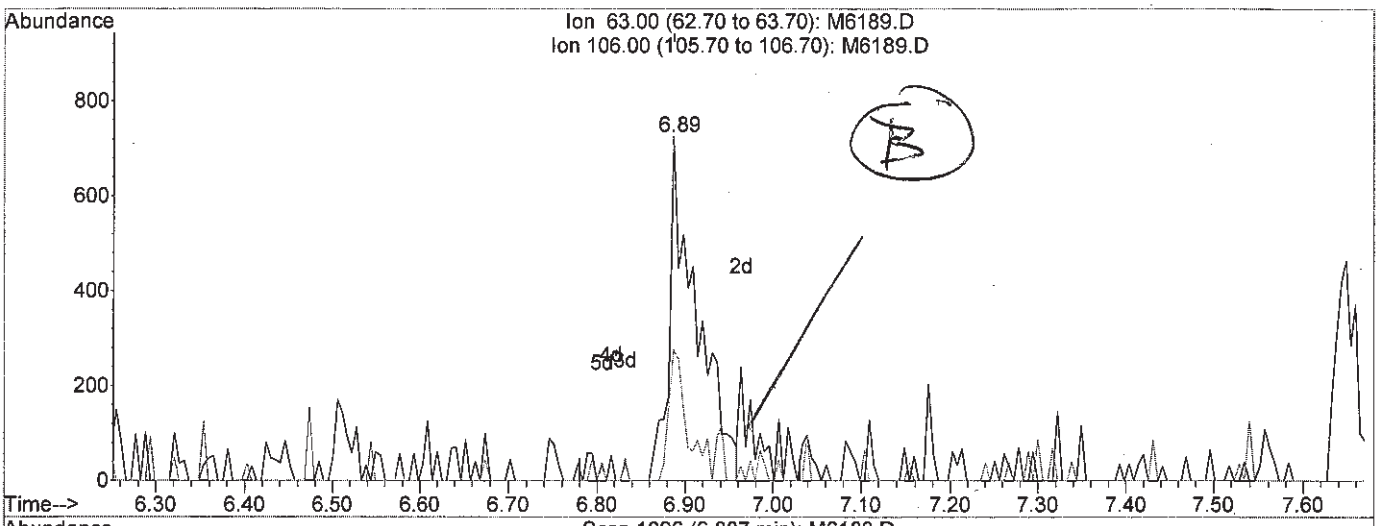
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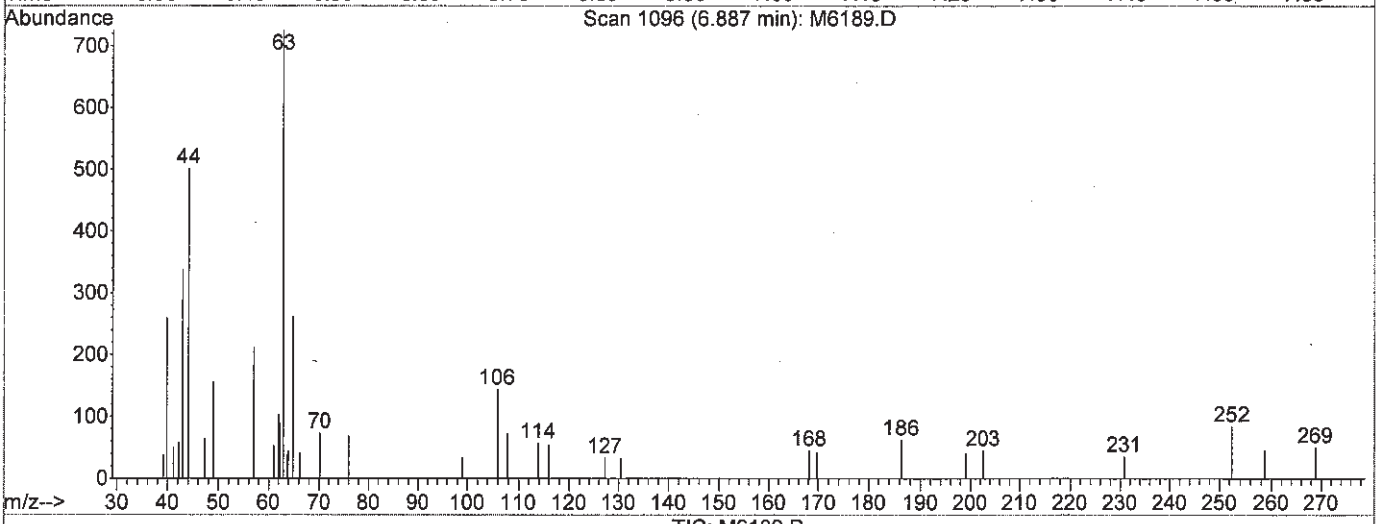
Ion	Exp%	Act%
43.00	100	100
86.00	9.30	9.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:42 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(57) 2-Chloroethylvinyl Ether

6.89min 0.73ug/L

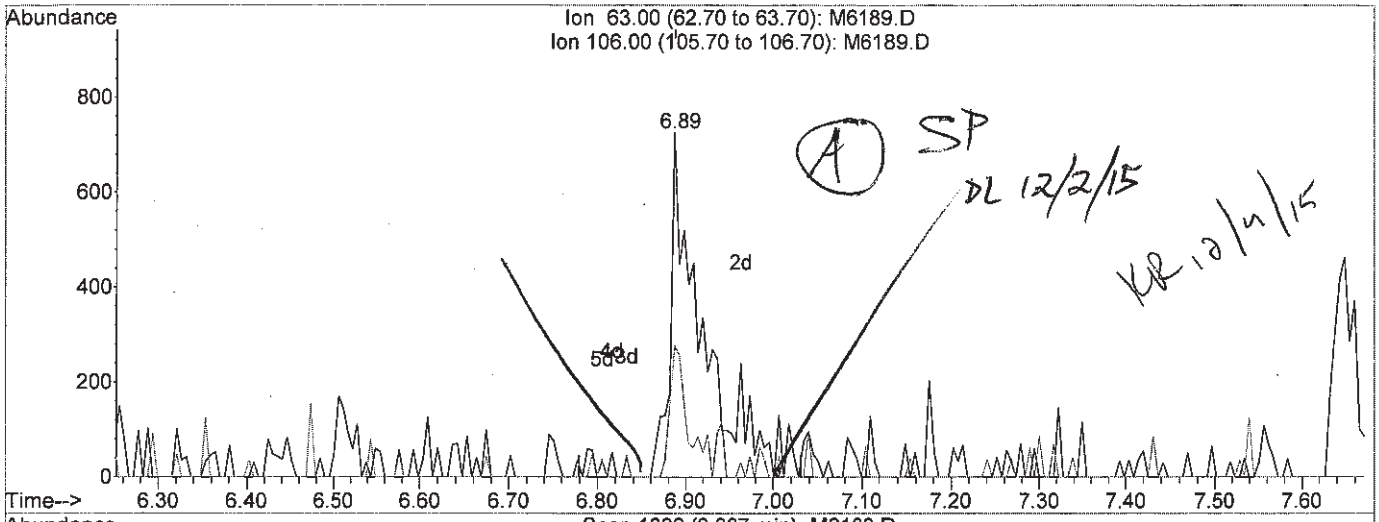
response 1549

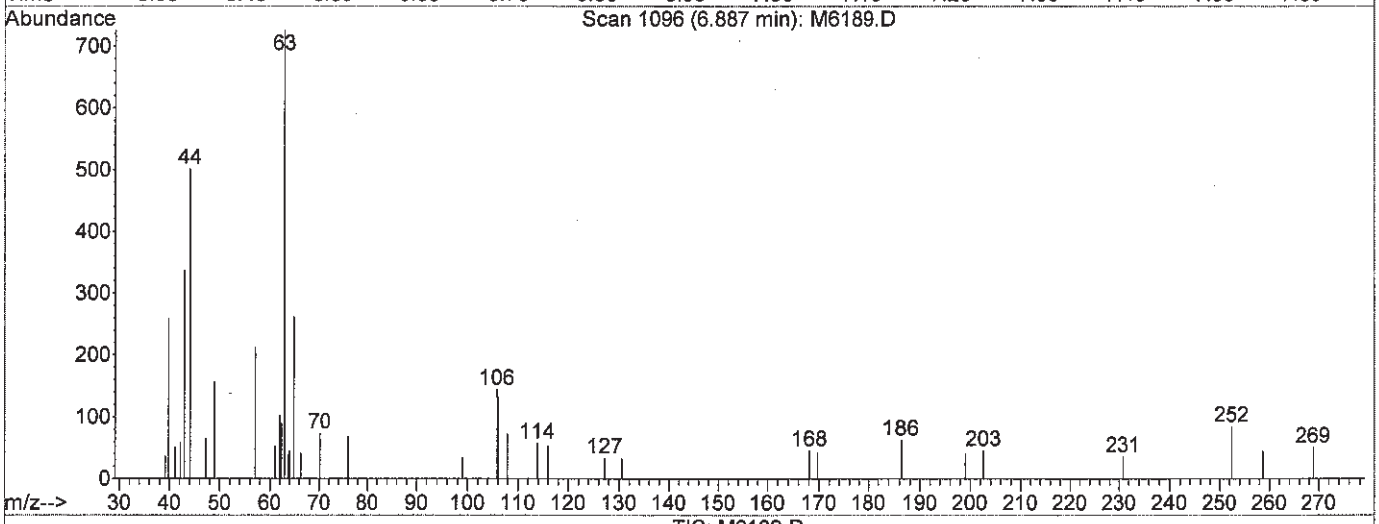
Ion	Exp%	Act%
63.00	100	100
106.00	25.70	38.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:43 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(57) 2-Chloroethylvinyl Ether

6.89min 0.85ug/L m

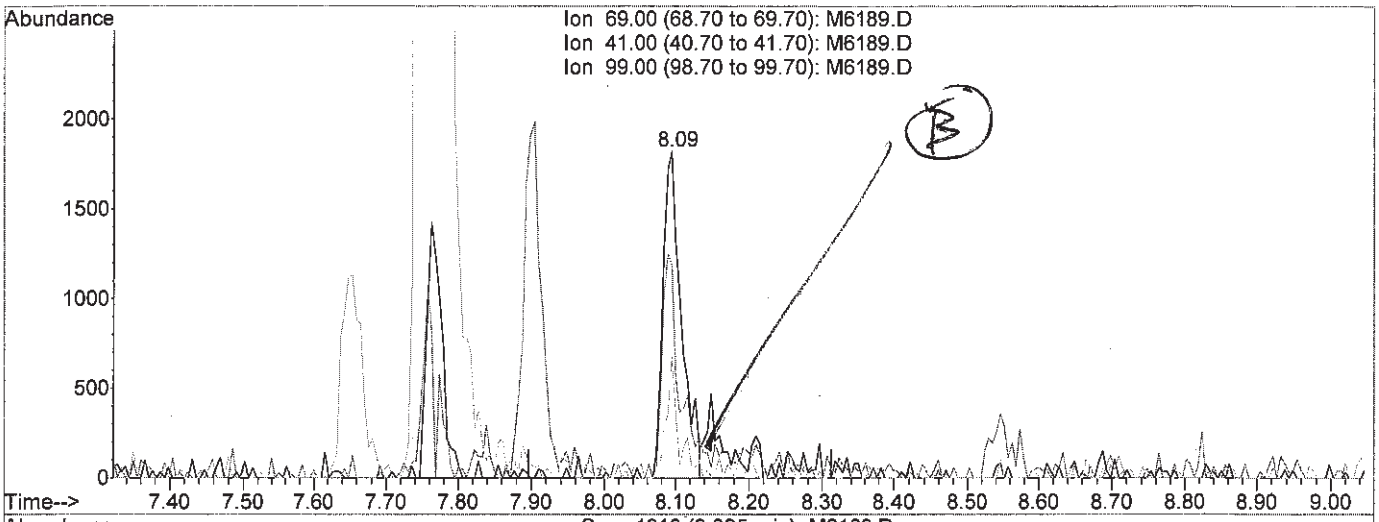
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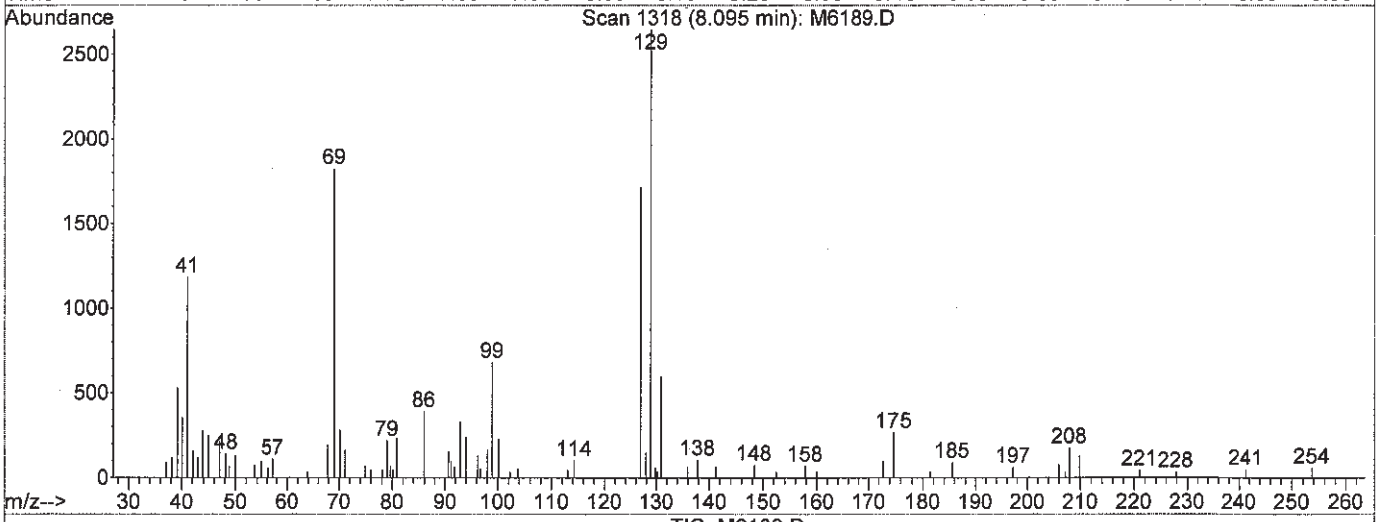
Ion	Exp%	Act%
63.00	100	100
106.00	25.70	19.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:43 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(66) Ethyl Methacrylate

8.09min 0.79ug/L

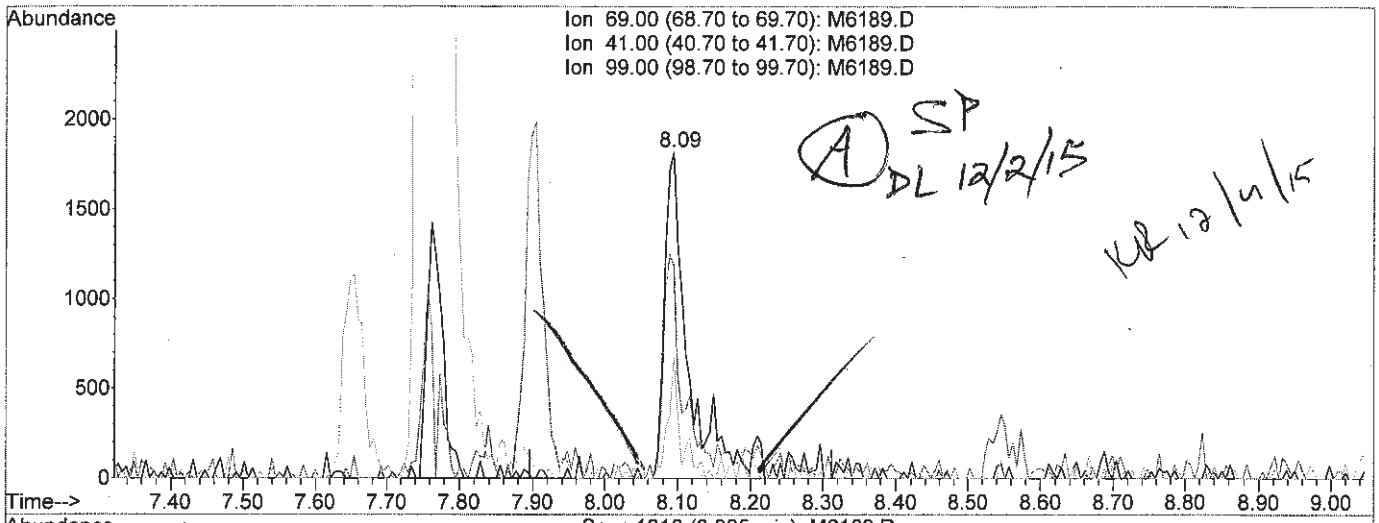
response 3278

Ion	Exp%	Act%
69.00	100	100
41.00	65.10	64.85
99.00	19.80	37.23
0.00	0.00	0.00

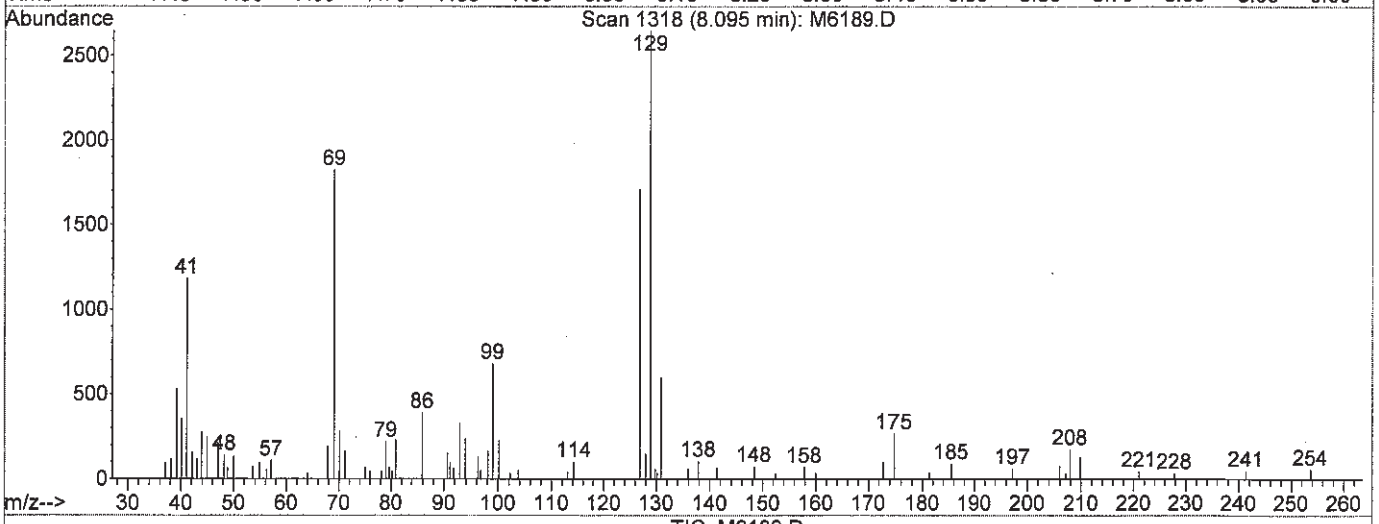
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:43 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration



SP
DL 12/2/15
KB 12/4/15



TIC: M6189.D

(66) Ethyl Methacrylate

8.09min 0.95ug/L m

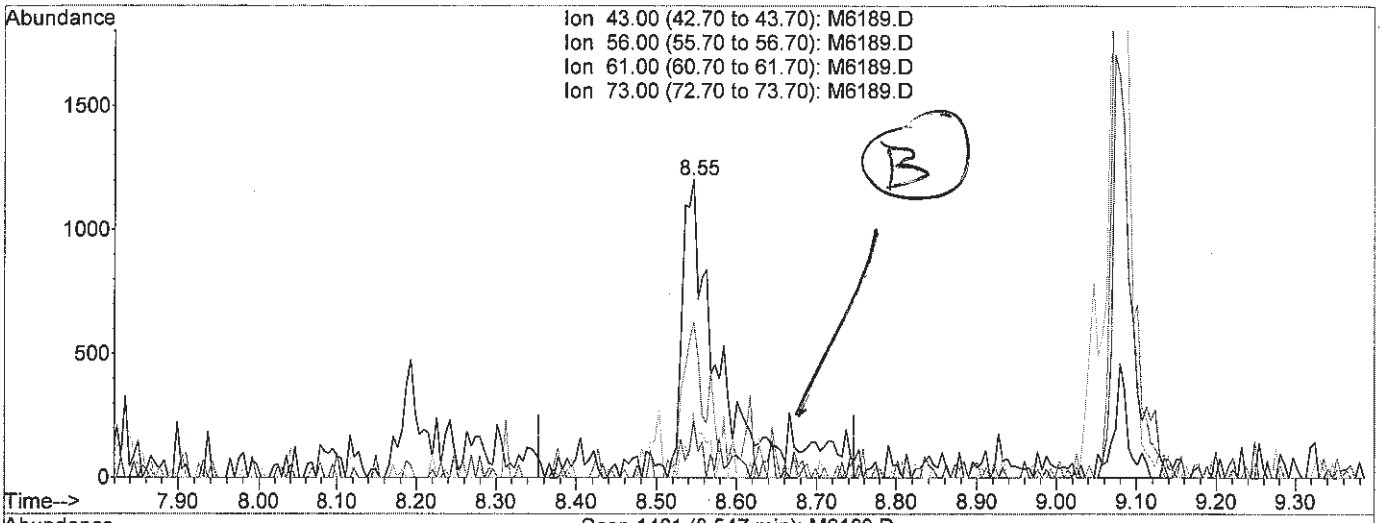
response 3963

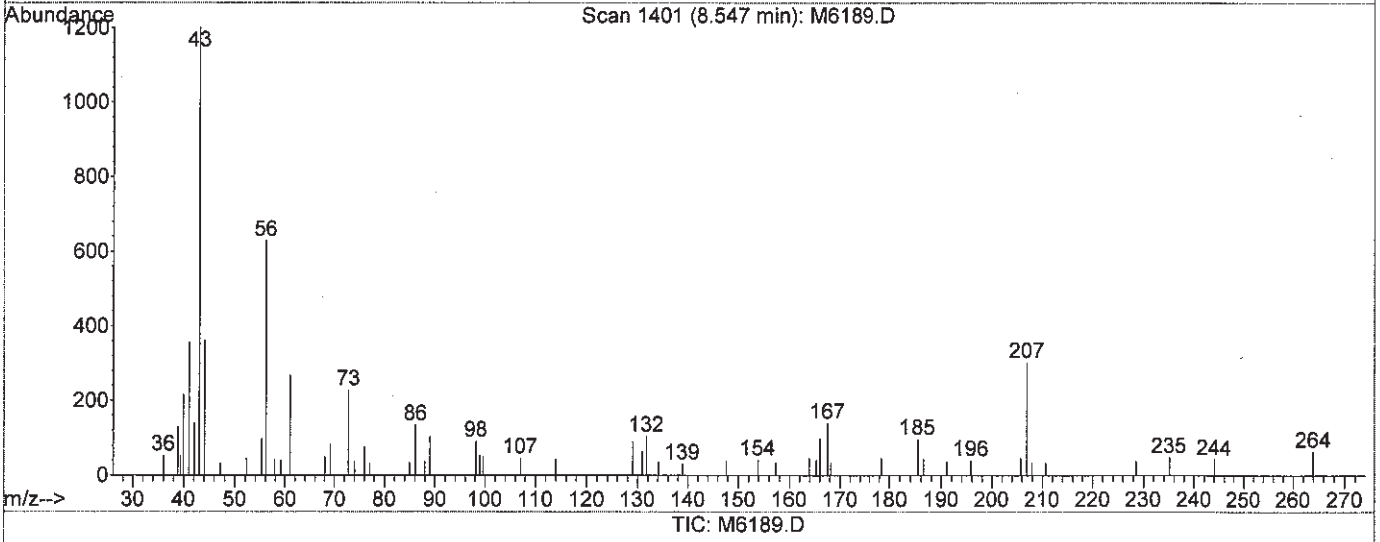
Ion	Exp%	Act%
69.00	100	100
41.00	65.10	64.85
99.00	19.80	37.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:43 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Single Level Calibration





TIC: M6189.D

(70) n-Butyl Acetate

8.55min 0.78ug/L

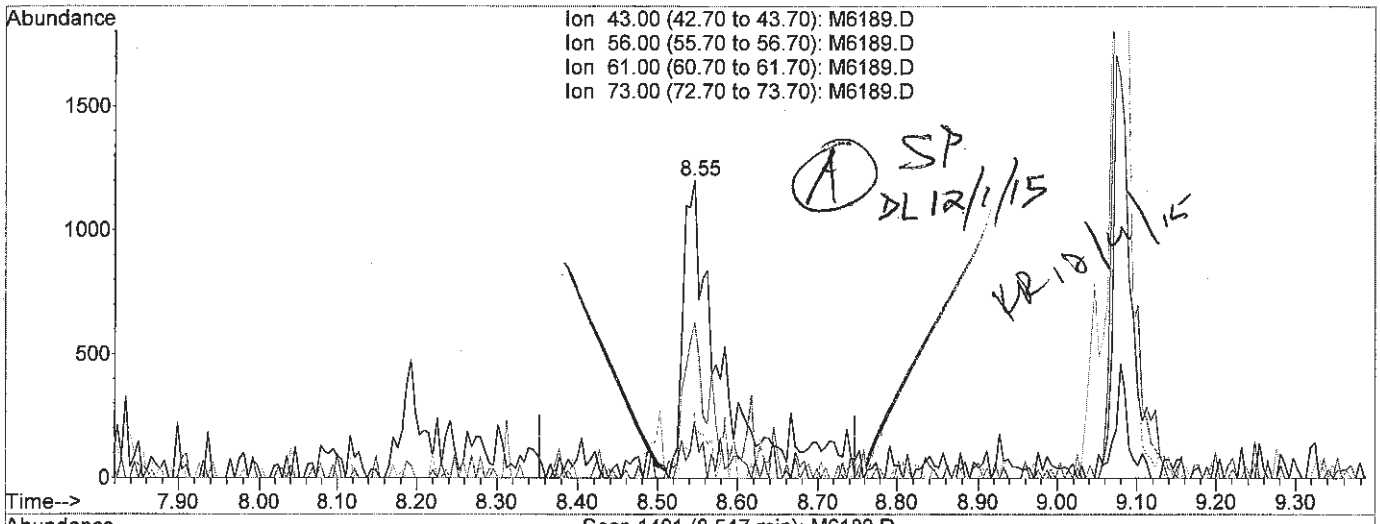
response 3523

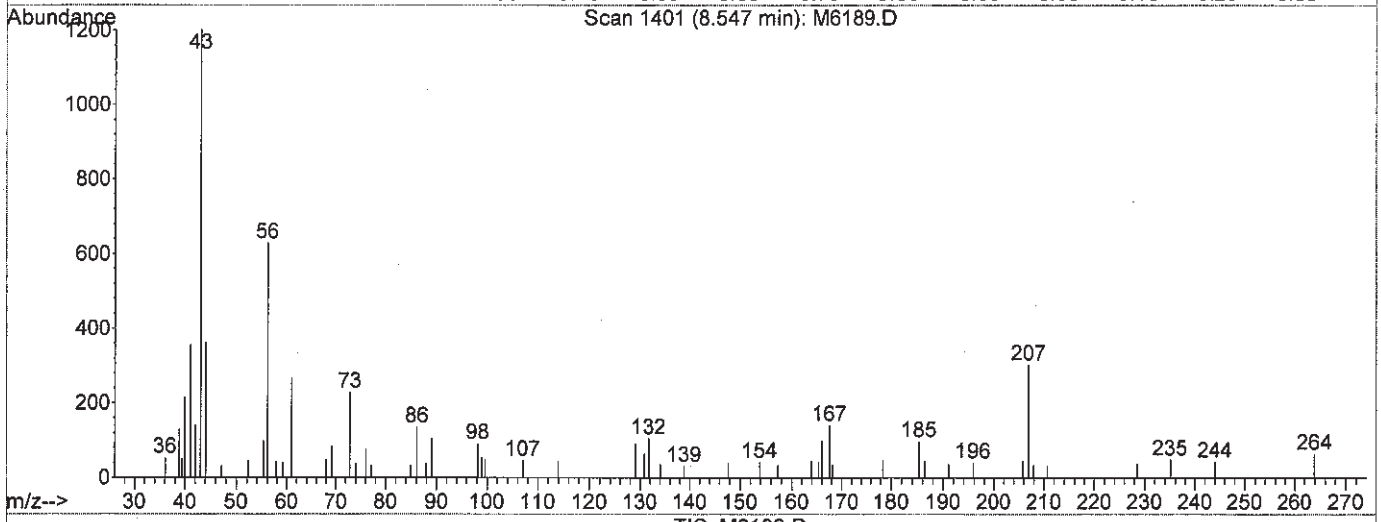
Ion	Exp%	Act%
43.00	100	100
56.00	41.50	0.00#
61.00	16.70	0.00
73.00	15.40	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:44 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Single Level Calibration





TIC: M6189.D

(70) n-Butyl Acetate

8.55min 0.94ug/L m

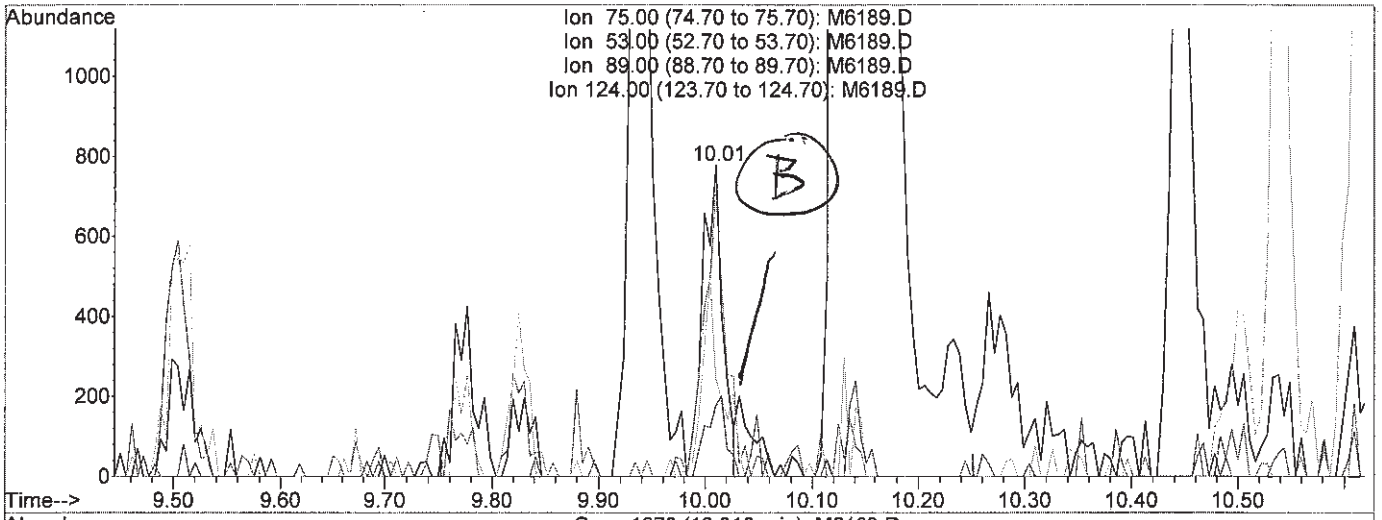
response 4235

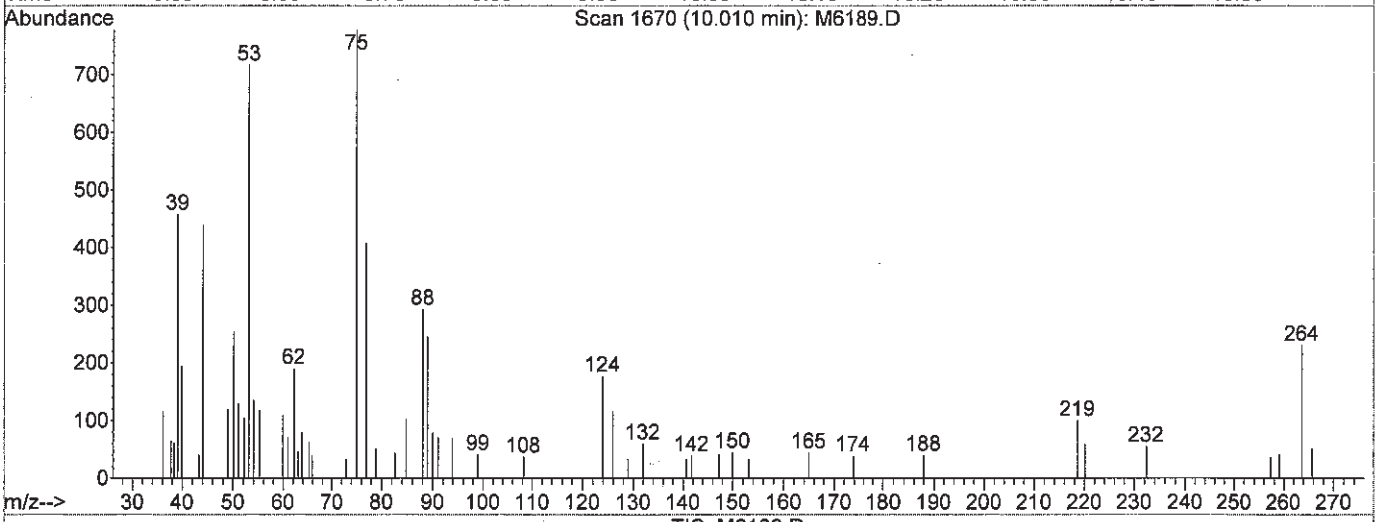
Ion	Exp%	Act%
43.00	100	100
56.00	41.50	0.00#
61.00	16.70	0.00
73.00	15.40	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:44 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(80) trans-1,4-Dichloro-2-Butene

10.01min 0.72ug/L

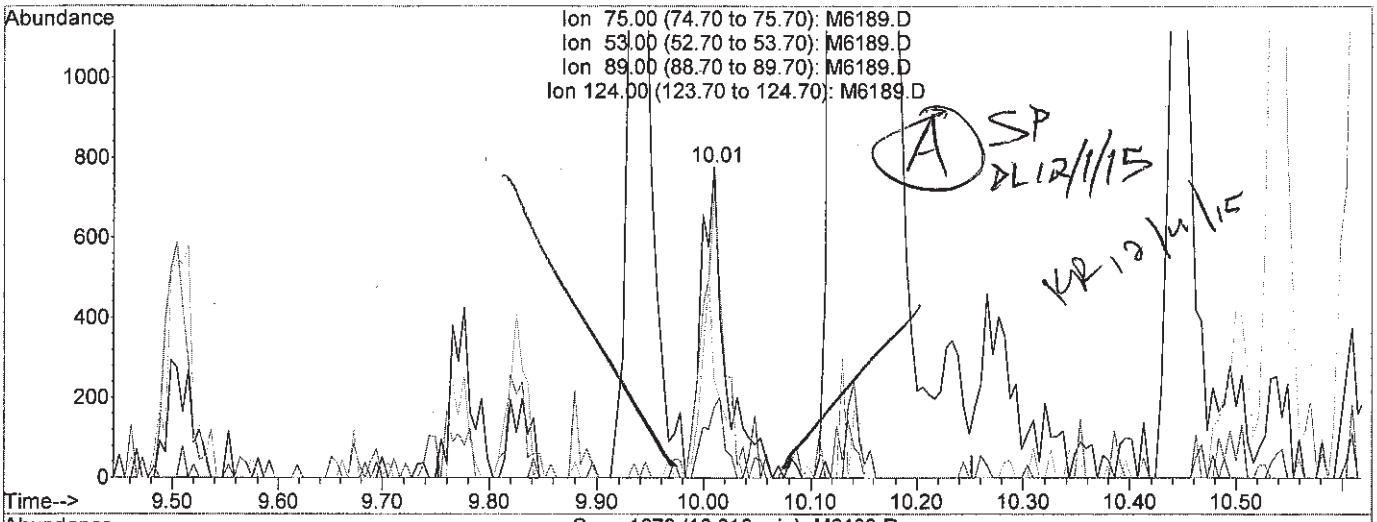
response 1024

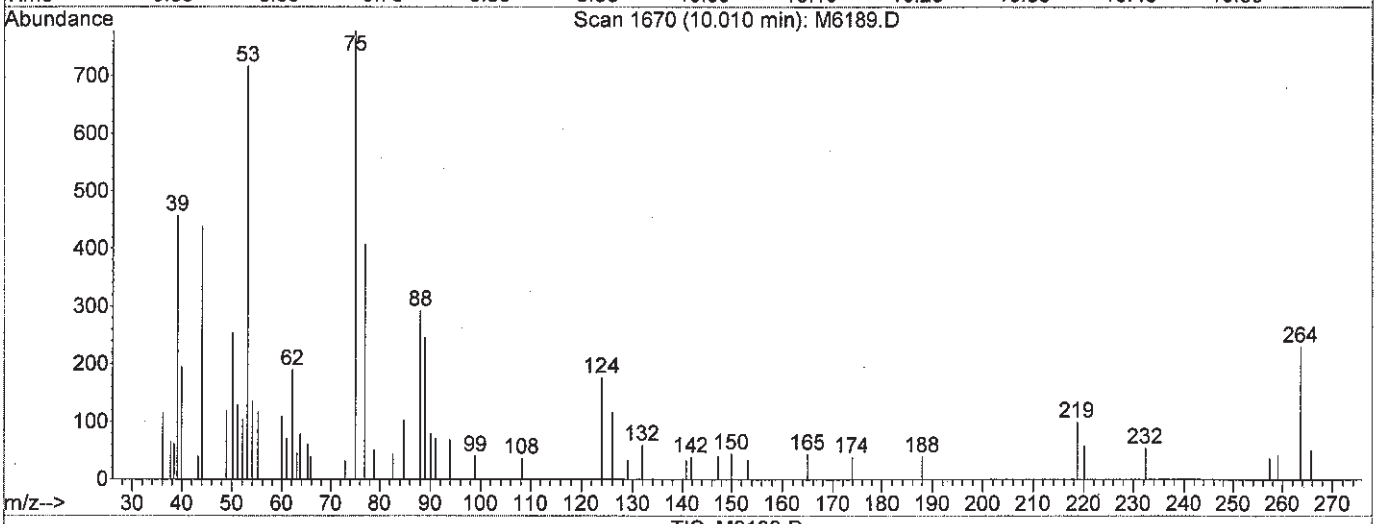
Ion	Exp%	Act%
75.00	100	100
53.00	65.30	92.15#
89.00	50.50	31.53
124.00	19.60	22.65

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:45 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(80) trans-1,4-Dichloro-2-Butene

10.01min 0.87ug/L m

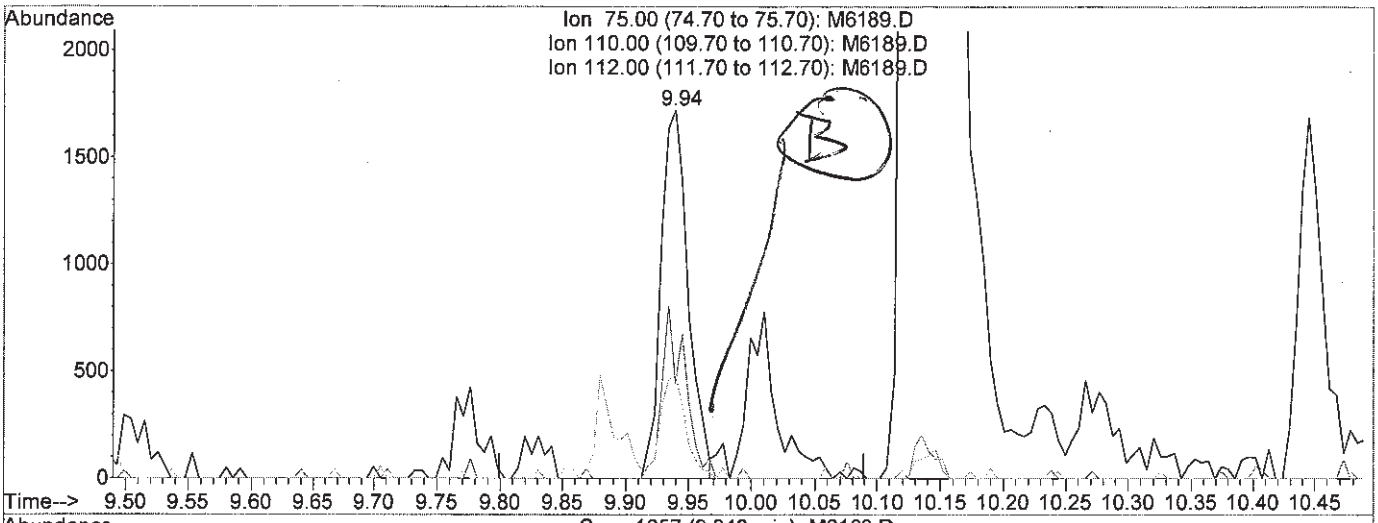
response 1237

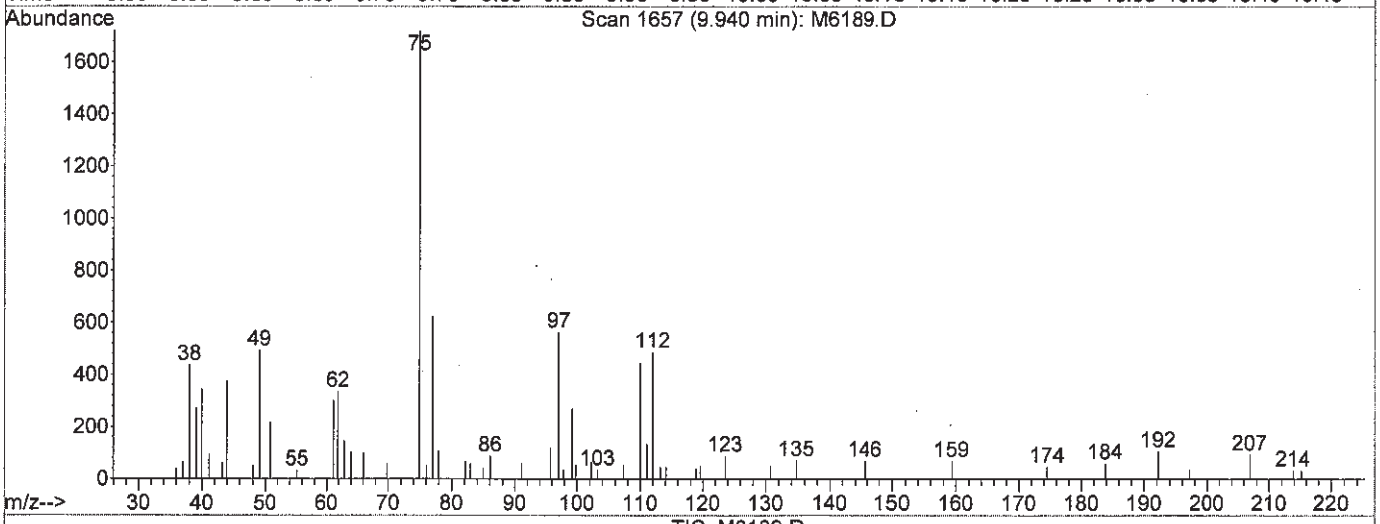
Ion	Exp%	Act%
75.00	100	100
53.00	65.30	92.15#
89.00	50.50	31.53
124.00	19.60	22.65

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:45 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(85) 1,2,3-Trichloropropane

9.94min 0.89ug/L

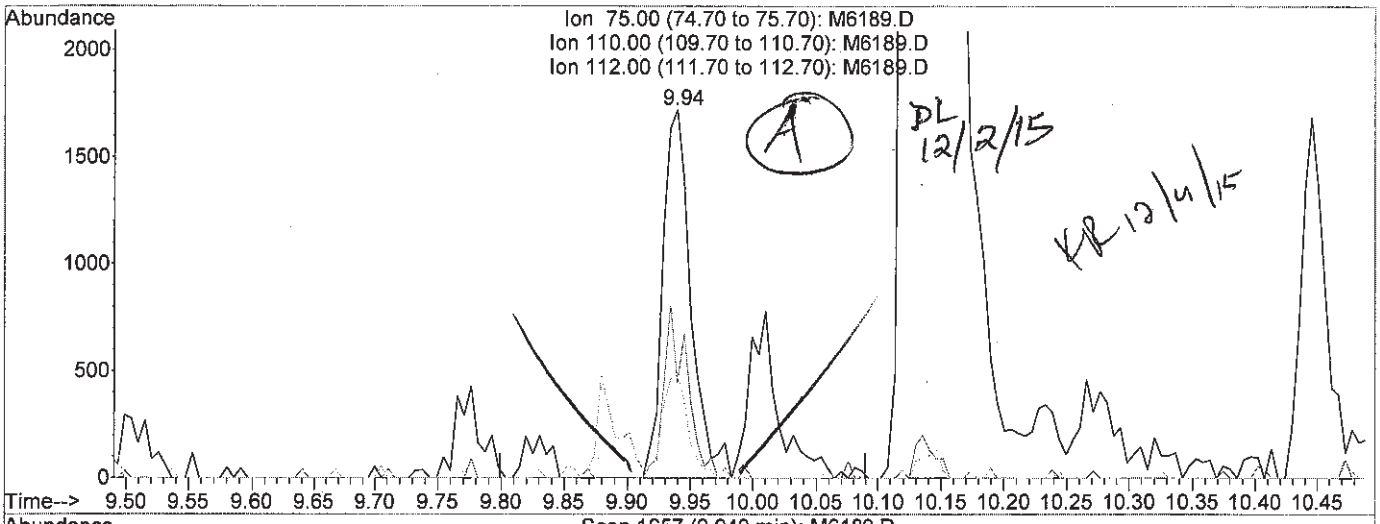
response 2591

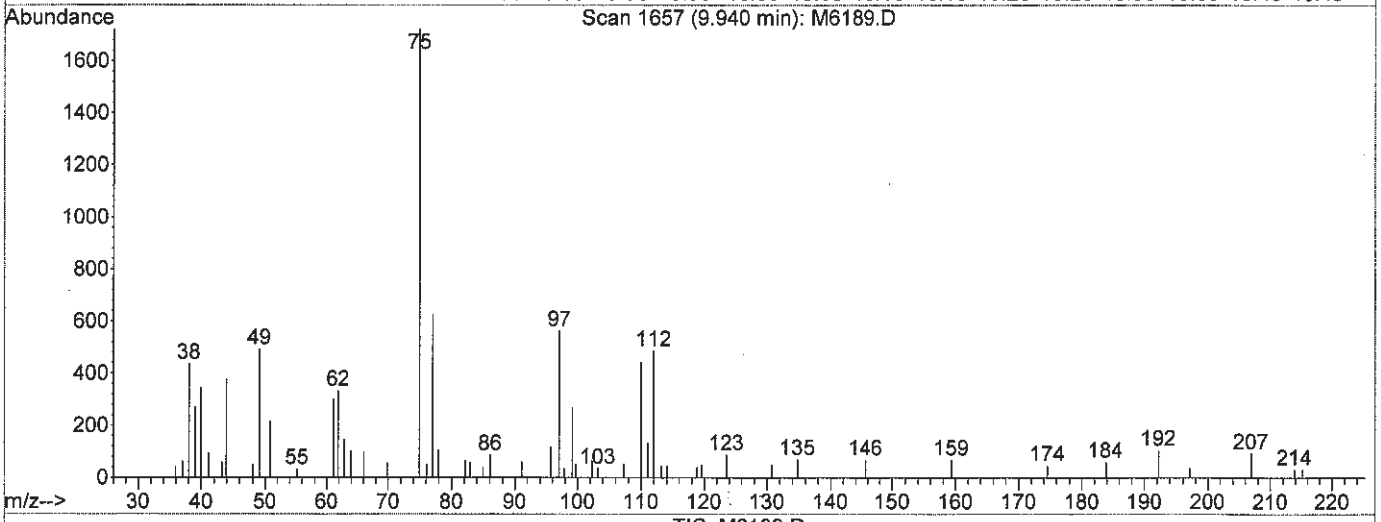
Ion	Exp%	Act%
75.00	100	100
110.00	36.90	39.64
112.00	24.20	26.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:46 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(85) 1,2,3-Trichloropropane

9.94min 0.92ug/L m

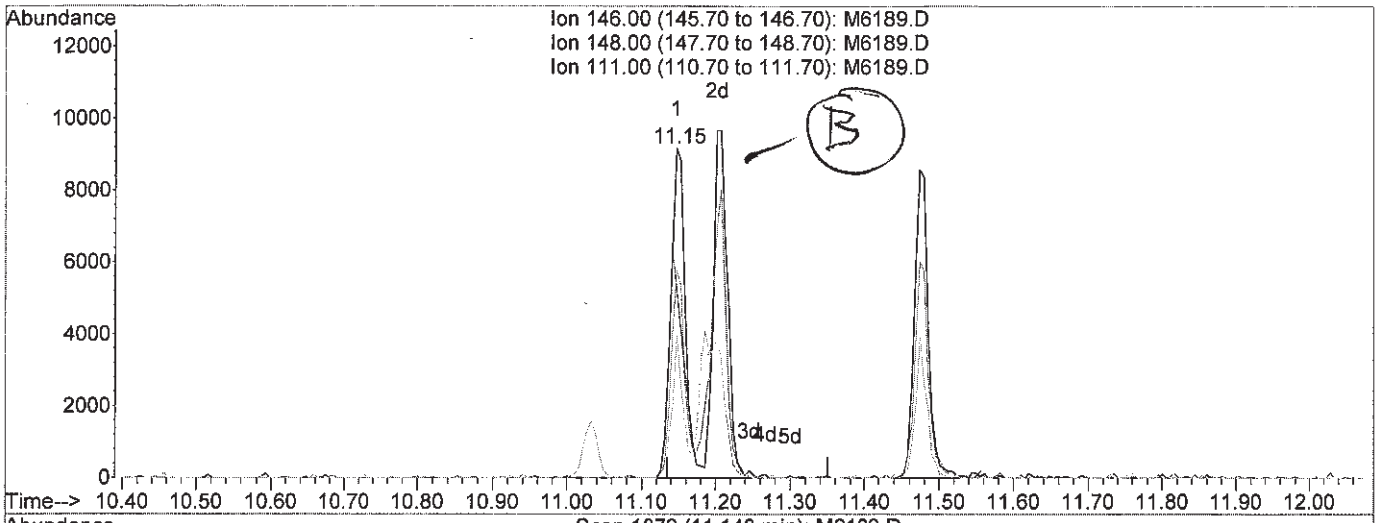
response 2681

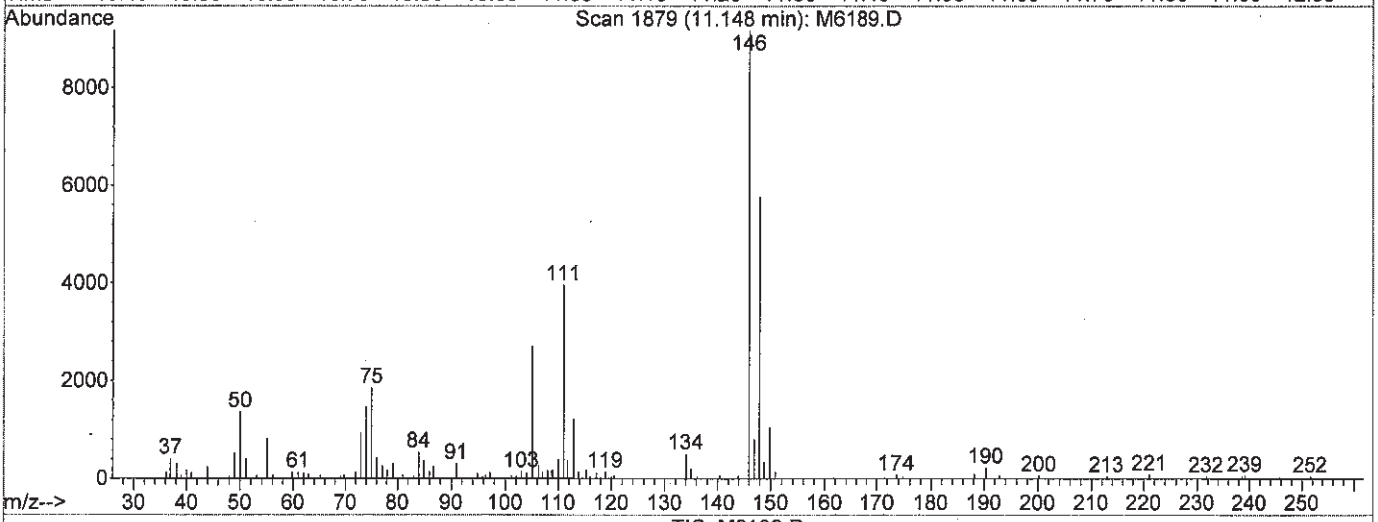
Ion	Exp%	Act%
75.00	100	100
110.00	36.90	38.31
112.00	24.20	25.77
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:46 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration





TIC: M6189.D

(95) 1,4-Dclbenz (P)

11.15min 0.23ug/L

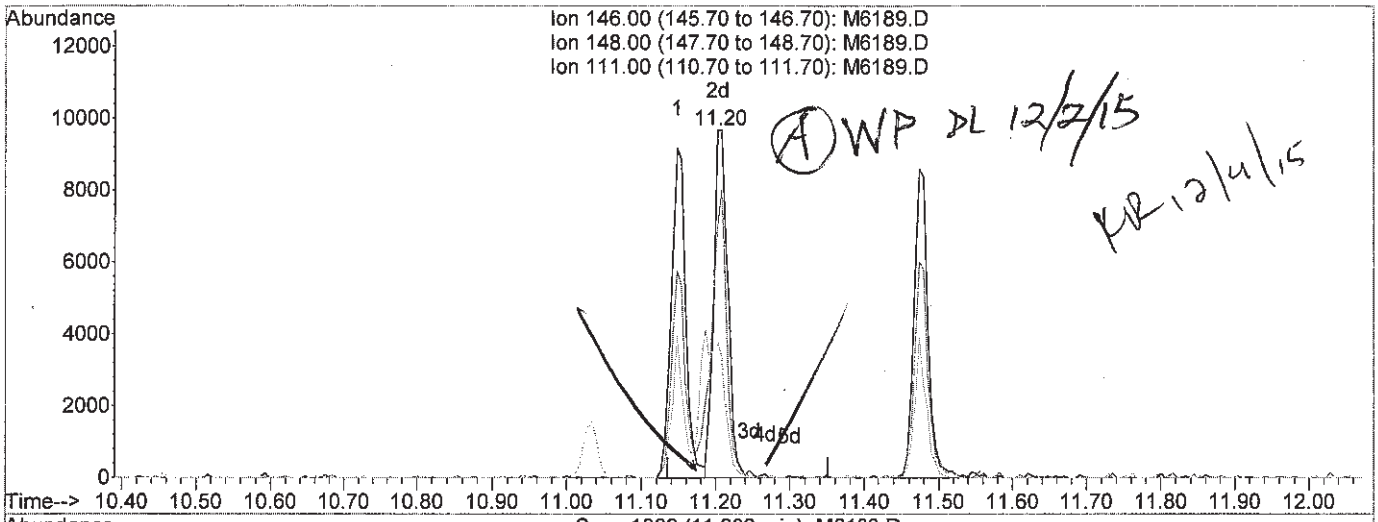
response 2750

Ion	Exp%	Act%
146.00	100	100
148.00	65.00	47.71
111.00	35.90	37.93
0.00	0.00	0.00

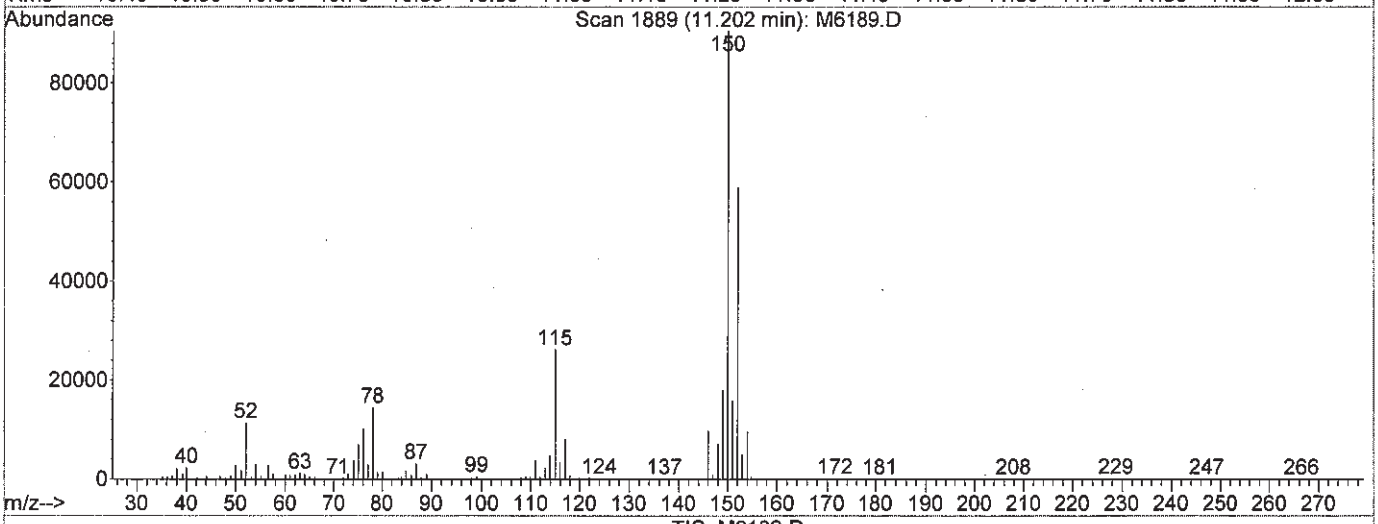
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:47 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Multiple Level Calibration



A WP DL 12/2/15
MB 12/4/15



TIC: M6189.D

(95) 1,4-Dclbenz (P)

11.20min 1.06ug/L m

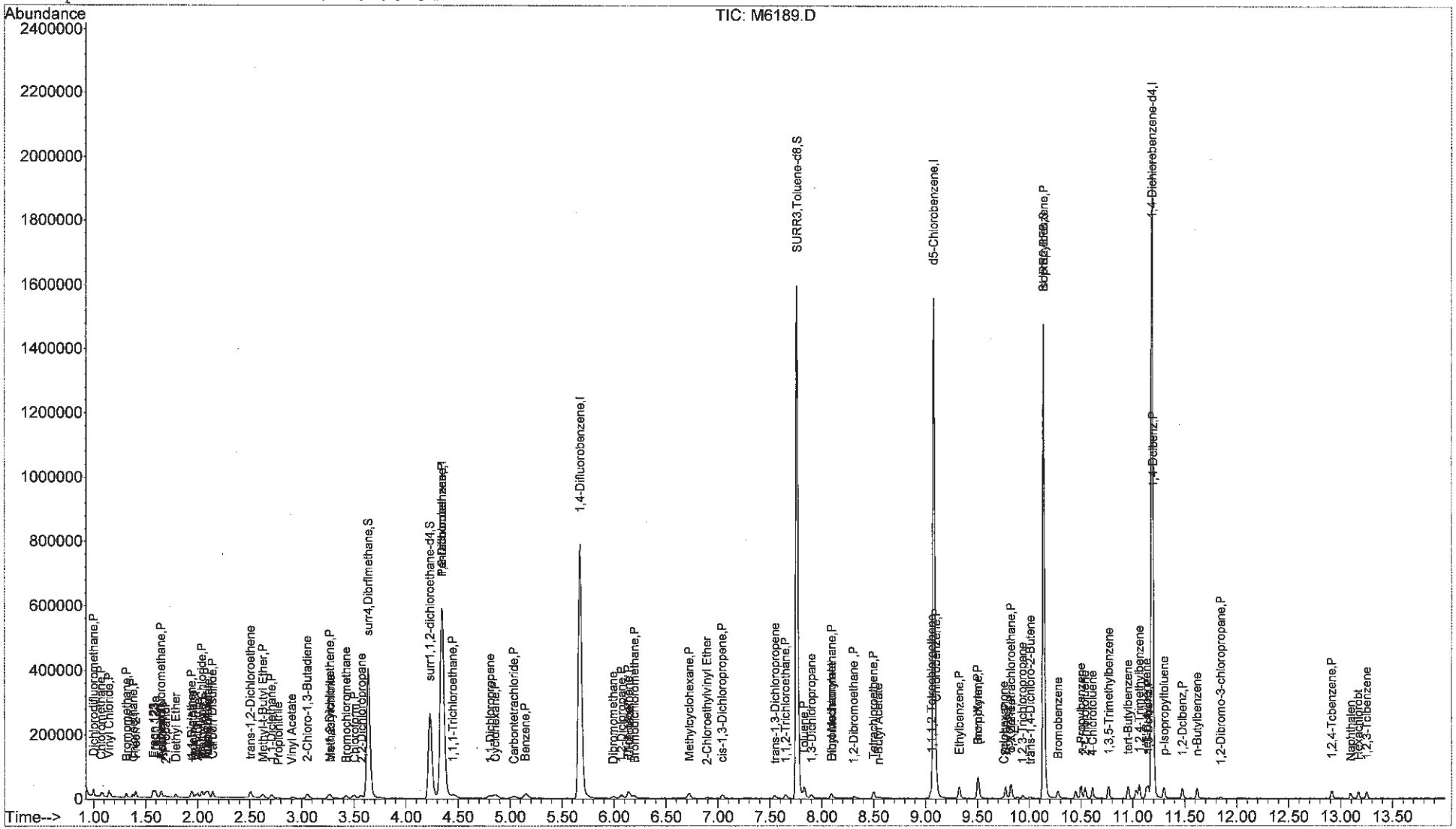
response 12824

Ion	Exp%	Act%
146.00	100	100
148.00	65.00	10.23#
111.00	35.90	8.13#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6189.D Vial: 12
Acq On : 30 Nov 2015 2:20 pm Operator: D.Lipani
Sample : STD #2 - 1.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:47 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:36:37 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:59 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	4.35	168	629623	50.00	ug/L		0.00
39) 1,4-Difluorobenzene	5.68	114	865274	50.00	ug/L		0.00
64) d5-Chlorobenzene	9.08	117	770294	50.00	ug/L		0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	456799	50.00	ug/L		0.00
System Monitoring Compounds							
40) surr4,Dibrflmethane	3.64	113	344510	63.48	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 126.96%#				
42) surr1,1,2-dichloroethane-d	4.24	65	280827	63.44	ug/L		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 126.88%				
62) SURR3,Toluene-d8	7.76	98	1136448	63.05	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 126.10%#				
82) SURR2,BFB	10.14	95	423483	61.42	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 122.84%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.00	85	12468	1.83	ug/L		99
3) Chloromethane	1.07	50	15073	2.08	ug/L		100
4) Vinyl Chloride	1.14	62	14219	1.87	ug/L		93
5) Bromomethane	1.31	94	8541m	1.89	ug/L		
6) Chloroethane	1.38	64	7249	1.89	ug/L		94
7) Freon 21	1.41	67	18495	1.95	ug/L		97
8) Freon 123	1.57	83	17187	2.04	ug/L		97
9) Freon 123a	1.59	67	12888	1.99	ug/L		90
10) Acrolein	1.66	56	5244	9.42	ug/L		88
11) Trichlorofluoromethane	1.65	101	14990	1.90	ug/L		94
12) Acetonitrile	1.67	41	4330	10.54	ug/L	#	77
13) 2-Propanol	1.69	45	6080	39.51	ug/L		97
14) Acetone	1.73	43	1853	2.46	ug/L	#	68
15) Diethyl Ether	1.79	59	6887	2.04	ug/L		88
16) 1,1-Diclethene	1.94	96	10482	2.03	ug/L		88
17) Iodomethane	1.96	142	7874m	1.63	ug/L		
18) TBA	1.98	59	9829	39.54	ug/L		92
19) Acrylonitrile	2.00	53	11641	10.29	ug/L		83
20) Methylene Chloride	2.04	84	11364	1.97	ug/L		92
21) Freon 113	2.08	101	9327	1.82	ug/L		92
22) Methyl Acetate	2.10	43	4514	1.98	ug/L		75
23) Allyl Chloride	2.10	76	5027m	2.05	ug/L		
24) Carbon Disulfide	2.15	76	31621	1.89	ug/L		98
25) trans-1,2-Dichloroethene	2.51	96	11248	1.98	ug/L		93
26) Methyl-t-Butyl Ether	2.62	73	21010	1.96	ug/L		98
27) 1,1-Diclethane	2.71	63	16730	1.94	ug/L		96
28) Propionitrile	2.77	54	3504	9.36	ug/L		74
29) Vinyl Acetate	2.91	43	13390m	1.84	ug/L		
30) 2-Chloro-1,3-Butadiene	3.05	53	14640	1.86	ug/L		95
32) Methacrylonitrile	3.27	67	2459	2.03	ug/L	#	69
33) cis-1,2-Dichloroethene	3.26	96	10771	1.95	ug/L		98
34) Bromochloromethane	3.42	128	5513	2.07	ug/L	#	89
35) Chloroform	3.50	83	16373	1.88	ug/L		92
36) 2,2-Dichloropropane	3.57	77	12567	1.87	ug/L		88
37) Tetrahydrofuran	3.93	42	1304m	1.76	ug/L		

DL 12/2/15

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:59 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1,1-Trichloroethane	4.46	97	13510	1.92	ug/L		84
41)	Iso-Butyl Alcohol	3.75	43	3676m	36.51	ug/L		
43)	1,2-Dichloroethane	4.35	62	10828m	2.12	ug/L		
44)	1,1-Dichloropropene	4.80	75	11776	1.86	ug/L		86
45)	Cyclohexane	4.86	56	14613	1.90	ug/L		90
46)	Carbontetrachloride	5.05	119	11117	1.79	ug/L		85
47)	Benzene	5.14	78	39303	2.02	ug/L		93
48)	Dibromomethane	5.99	93	4852	1.83	ug/L		94
49)	1,2-Diclpropane	6.07	63	9211	1.87	ug/L		98
50)	n-Heptane	6.14	43	8018m	1.91	ug/L		
51)	Trichloroethene	6.13	130	10345	1.80	ug/L		94
52)	Bromodichloromethane	6.19	83	10961	1.83	ug/L		83
53)	2-Nitropropane	6.25	41	2134m	4.07	ug/L		
54)	1,4-Dioxane	6.46	88	1329m	46.14	ug/L		
55)	Methyl Methacrylate	6.62	69	2654	1.38	ug/L		97
56)	Methylcyclohexane	6.72	55	9064	1.81	ug/L		95
57)	2-Chloroethylvinyl Ether	6.89	63	3676	1.72	ug/L		96
58)	cis-1,3-Dichloropropene	7.04	75	13559	1.93	ug/L		94
59)	4-Methyl-2-pentanone	7.26	43	4022	1.57	ug/L	#	81
60)	trans-1,3-Dichloropropene	7.54	75	10903	1.83	ug/L		96
61)	1,1,2-Trichloroethane	7.65	97	7169	1.95	ug/L		98
63)	Toluene	7.83	91	41850	2.06	ug/L		97
65)	1,3-Dichloropropane	7.90	76	11242	2.04	ug/L		98
66)	Ethyl Methacrylate	8.09	69	7295	1.76	ug/L		89
67)	Dibromochloromethane	8.09	129	8421	1.84	ug/L		96
69)	1,2-Dibromoethane	8.31	107	7067	1.92	ug/L		97
70)	n-Butyl Acetate	8.53	43	8332m	1.86	ug/L		
71)	Tetrachloroethene	8.50	164	9133	1.96	ug/L		96
72)	1,1,1,2-Tetrachloroethane	9.05	131	9210	1.87	ug/L		94
73)	Chlorobenzene	9.11	112	25822	1.89	ug/L		98
74)	Ethylbenzene	9.32	106	13184	1.88	ug/L	#	89
75)	Bromoform	9.51	173	4754	1.64	ug/L		92
76)	(m+p)Xylene	9.51	106	32339	3.78	ug/L		94
77)	o-Xylene	9.82	106	17075	1.93	ug/L		98
78)	Cyclohexanone	9.75	55	4008m	39.74	ug/L		
79)	Styrene	9.77	104	25756	1.84	ug/L		96
80)	trans-1,4-Dichloro-2-Buten	10.01	75	2150m	1.52	ug/L		
81)	Isopropylbenzene	10.13	105	41397	1.92	ug/L		98
84)	1,1,2,2-Tetrachloroethane	9.82	83	8410	2.01	ug/L		96
85)	1,2,3-Trichloropropane	9.94	75	6158	2.16	ug/L		93
86)	Bromobenzene	10.28	156	12516	1.98	ug/L		99
87)	n-Propylbenzene	10.50	91	48603	2.00	ug/L		98
88)	2-Chlorotoluene	10.54	91	30165	2.02	ug/L		98
89)	4-Chlorotoluene	10.61	91	31566	2.00	ug/L		98
90)	1,3,5-Trimethylbenzene	10.77	105	33104	2.00	ug/L		98
91)	tert-Butylbenzene	10.95	119	26549	1.85	ug/L		99
92)	1,2,4-Trimethylbenzene	11.06	105	34197	1.93	ug/L		99
93)	sec-Butylbenzene	11.13	105	39514	1.95	ug/L		100
94)	1,3-Dclbenz	11.15	146	22873	1.95	ug/L		98
95)	1,4-Dclbenz	11.21	146	22855m	1.93	ug/L		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:59 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Initial Calibration
DataAcq Meth : W113015

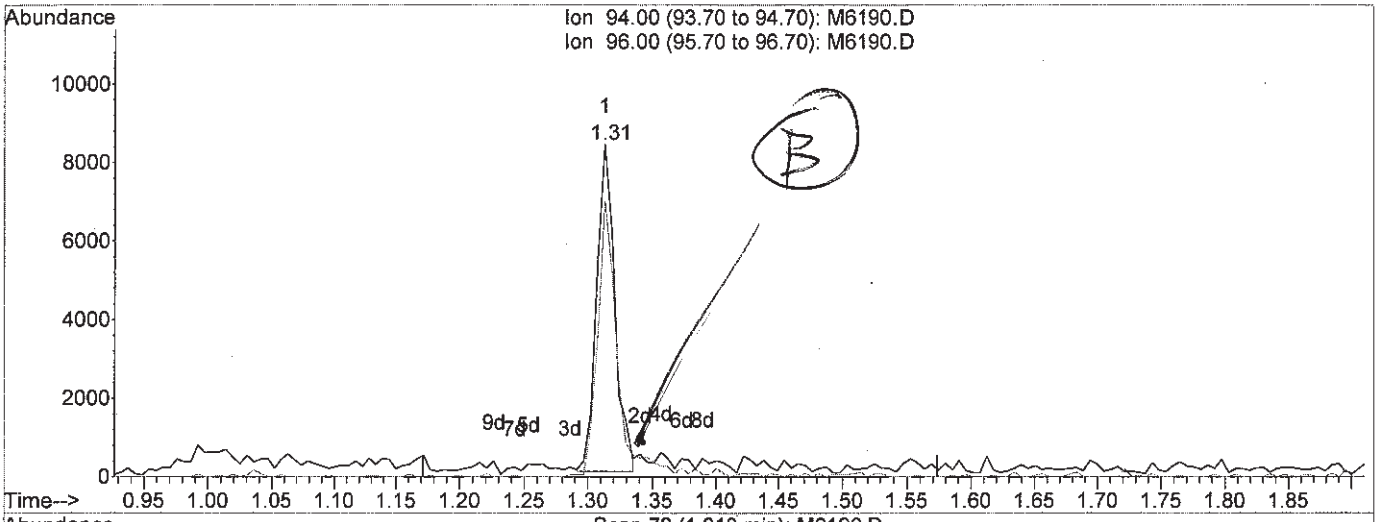
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96)	p-Isopropyltoluene	11.30	119	32709	1.97	ug/L	98
97)	1,2-Dclbenz	11.48	146	21764	1.99	ug/L	96
98)	n-Butylbenzene	11.61	91	27657	1.89	ug/L	96
99)	1,2-Dibromo-3-chloropropan	11.84	75	1139	1.87	ug/L	88
101)	1,2,4-Tcbenzene	12.91	180	11932	1.89	ug/L	95
102)	Naphthalen	13.09	128	20951	1.89	ug/L	98
103)	Hexachlorobt	13.17	225	6203	2.05	ug/L	96
104)	1,2,3-Tclbenzene	13.25	180	10154	1.95	ug/L	96

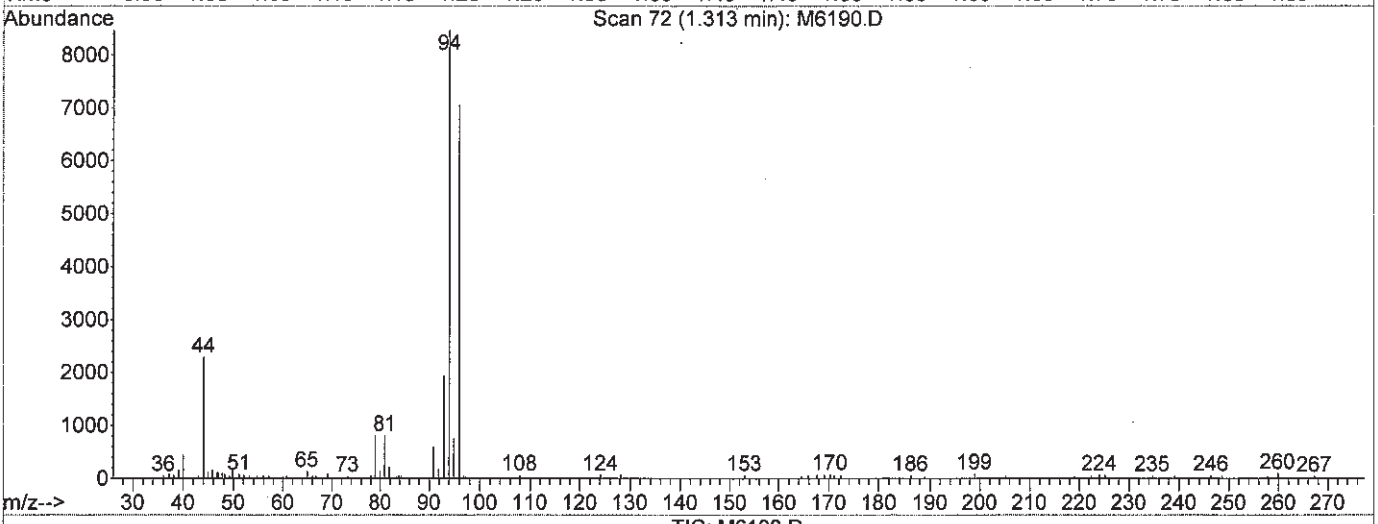
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:48 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(5) Bromomethane (P)

1.31min 1.82ug/L

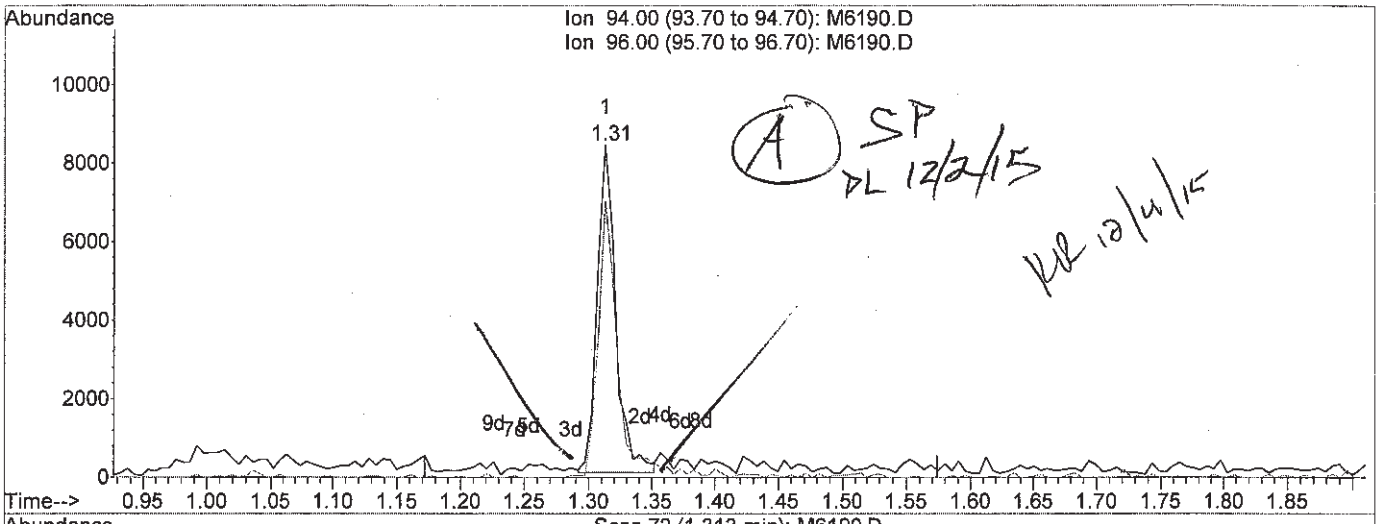
response 8229

Ion	Exp%	Act%
94.00	100	100
96.00	95.90	83.23
0.00	0.00	0.00
0.00	0.00	0.00

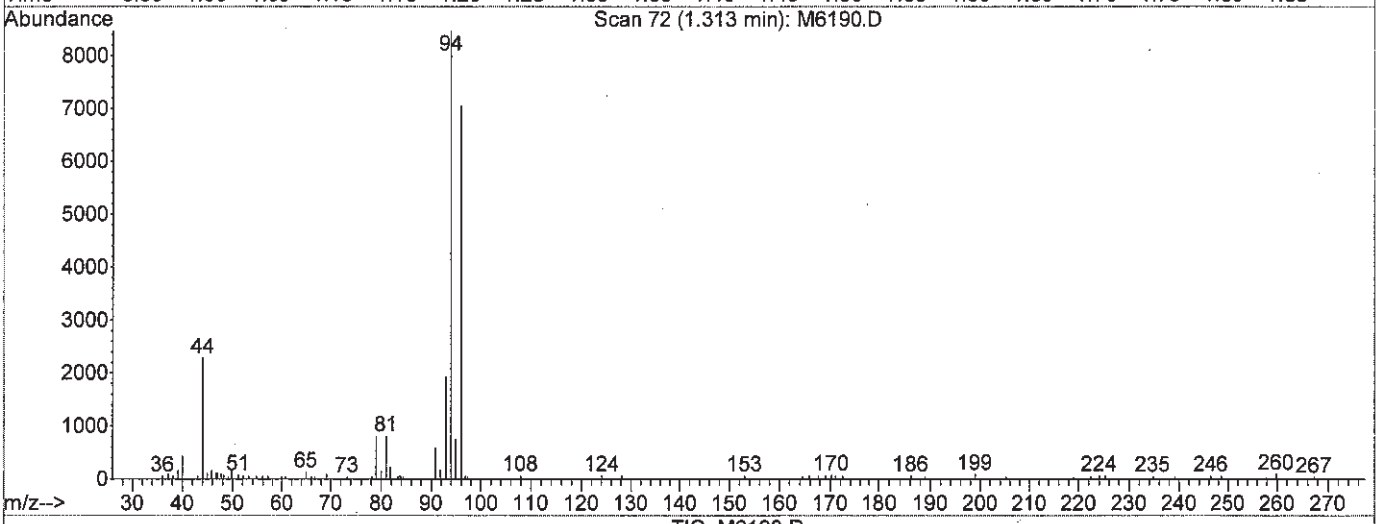
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:49 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration



A SP DL 12/2/15 KR 12/4/15



TIC: M6190.D

(5) Bromomethane (P)

1.31min 1.89ug/L m

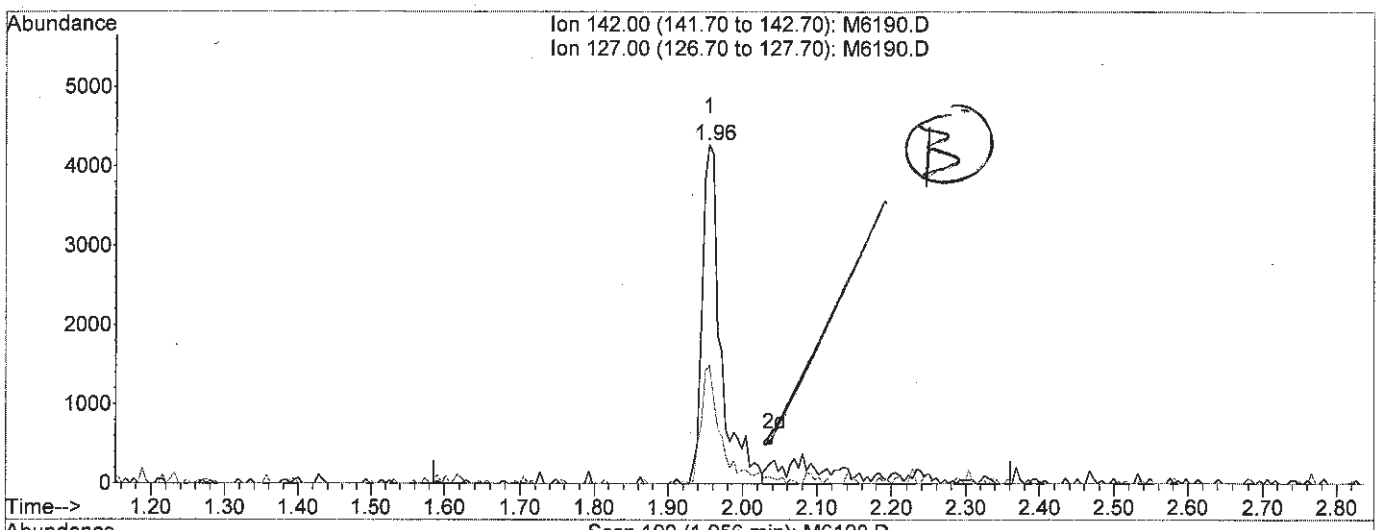
response 8541

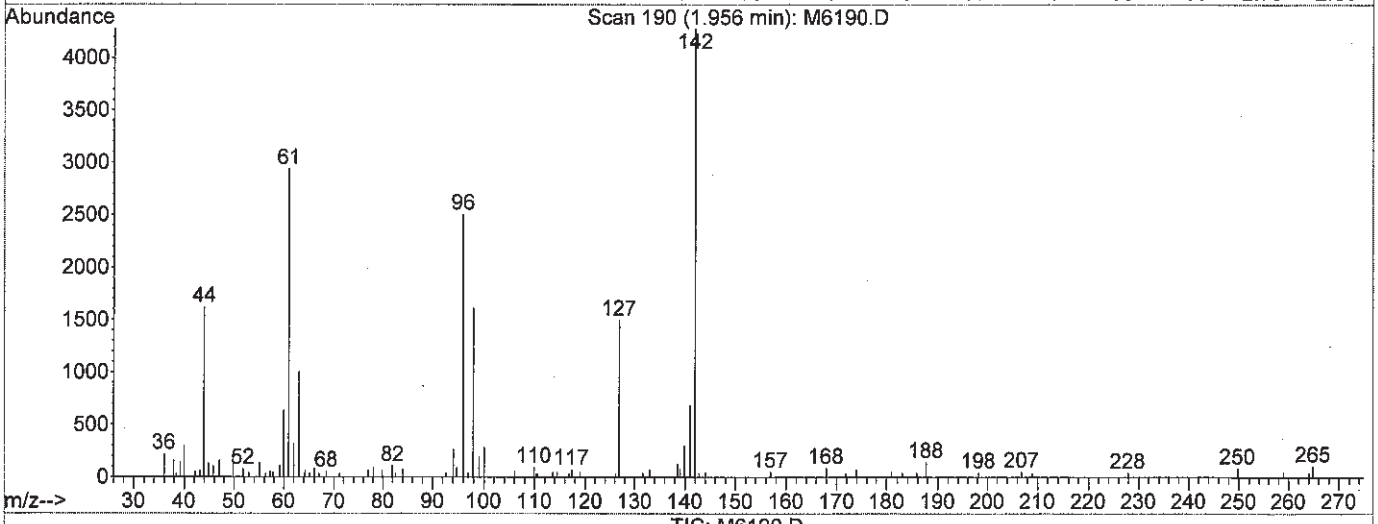
Ion	Exp%	Act%
94.00	100	100
96.00	95.90	83.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:49 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(17) Iodomethane

1.96min 1.57ug/L

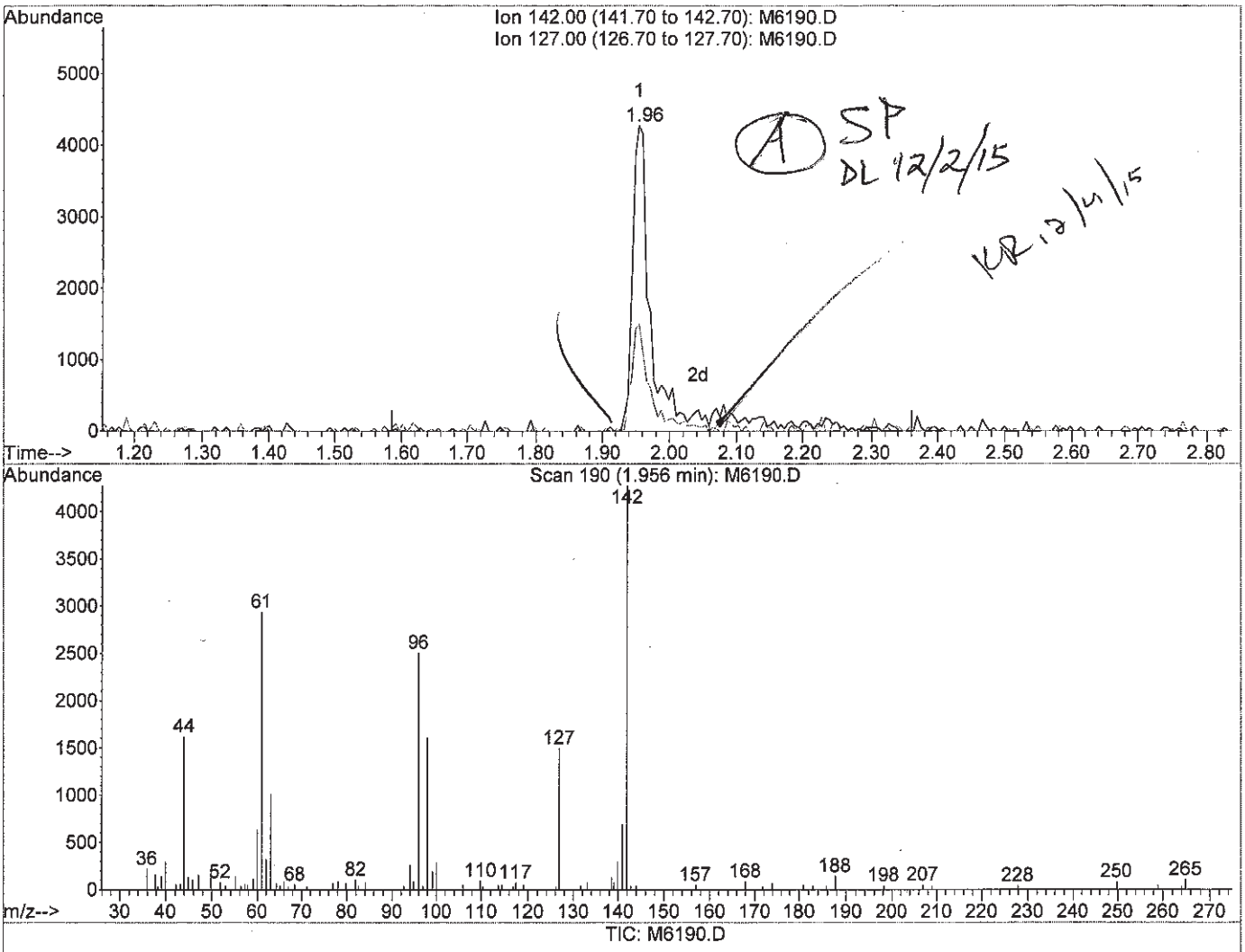
response 7480

Ion	Exp%	Act%
142.00	100	100
127.00	35.30	34.96
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:50 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration



TIC: M6190.D

A SP DL 12/2/15 KR 12/4/15

(17) Iodomethane

1.96min 1.63ug/L m

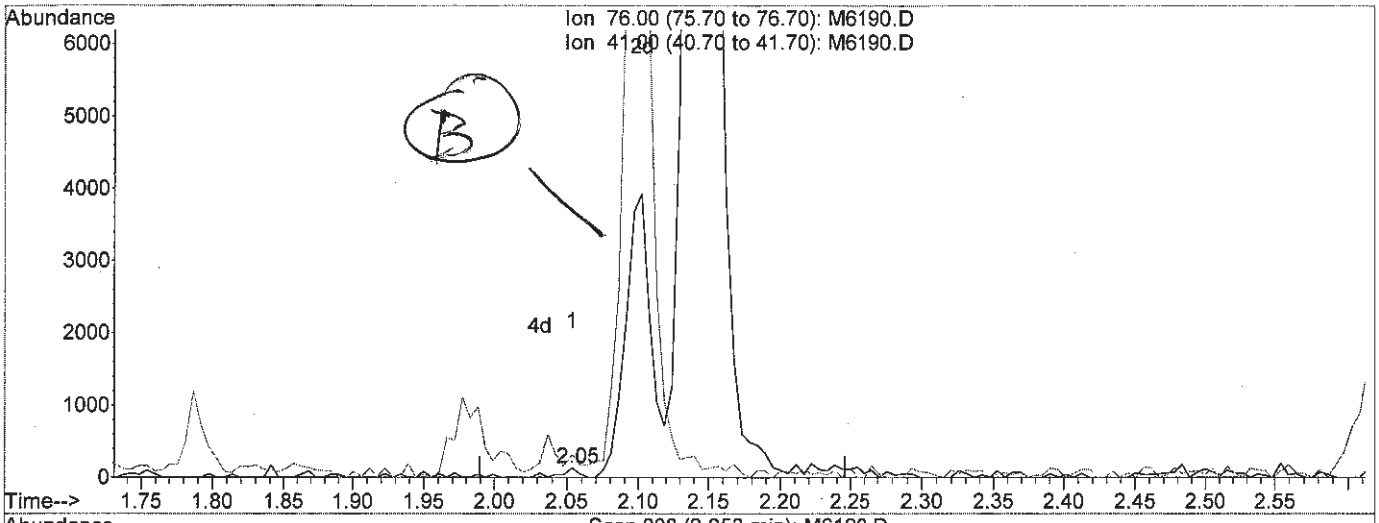
response 7874

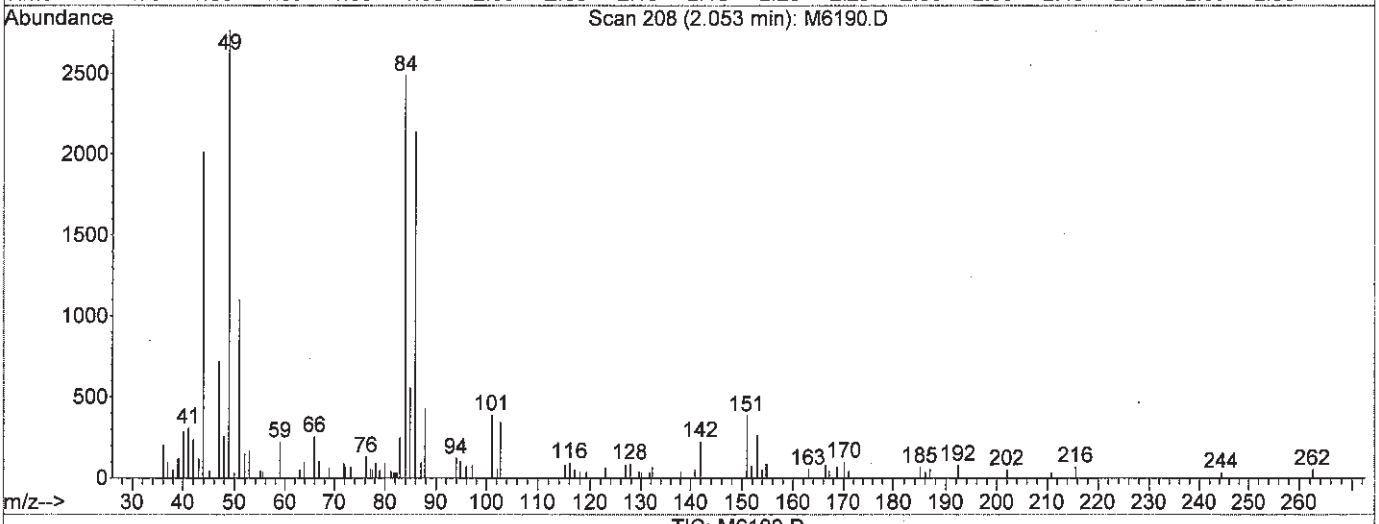
Ion	Exp%	Act%
142.00	100	100
127.00	35.30	34.96
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:50 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(23) Allyl Chloride

2.05min 0.03ug/L

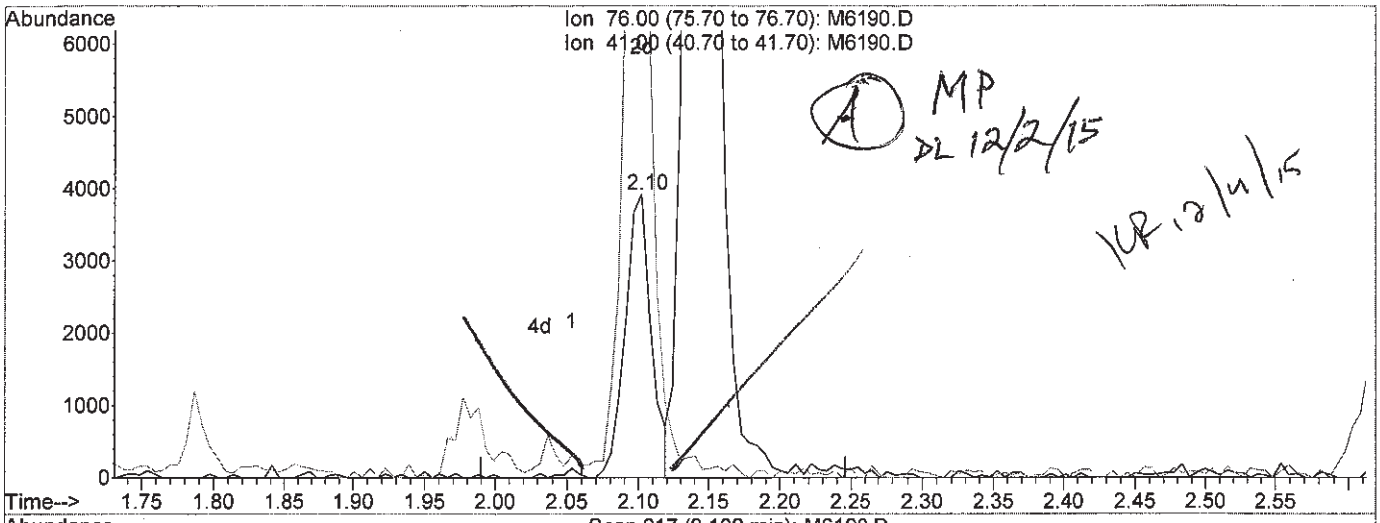
response 82

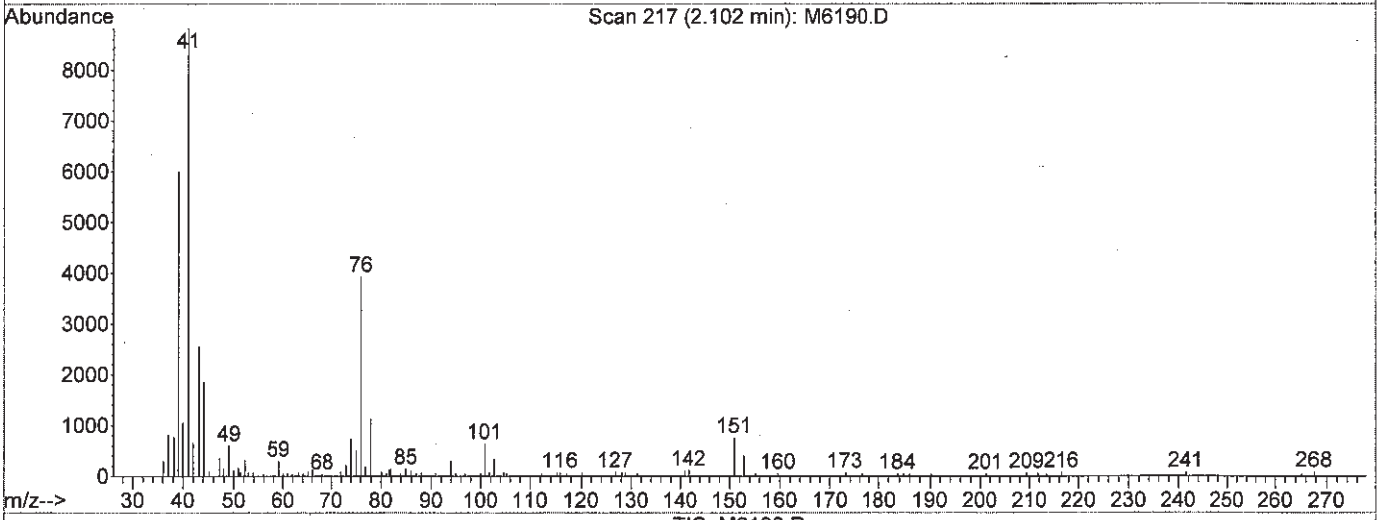
Ion	Exp%	Act%
76.00	100	100
41.00	250.90	237.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:50 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(23) Allyl Chloride

2.10min 2.05ug/L m

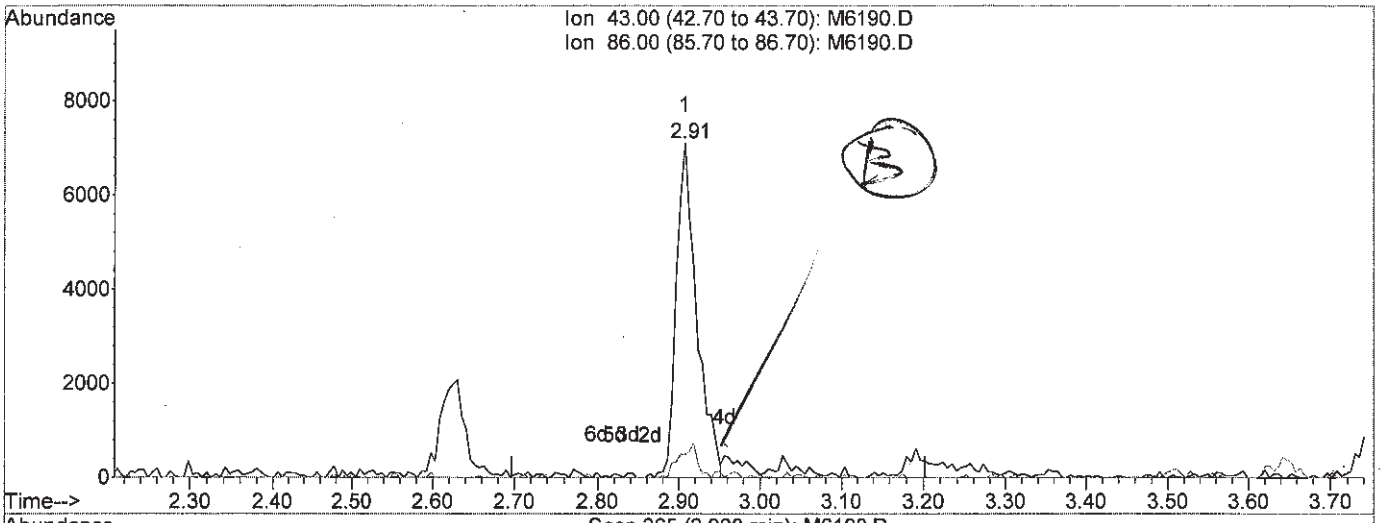
response 5027

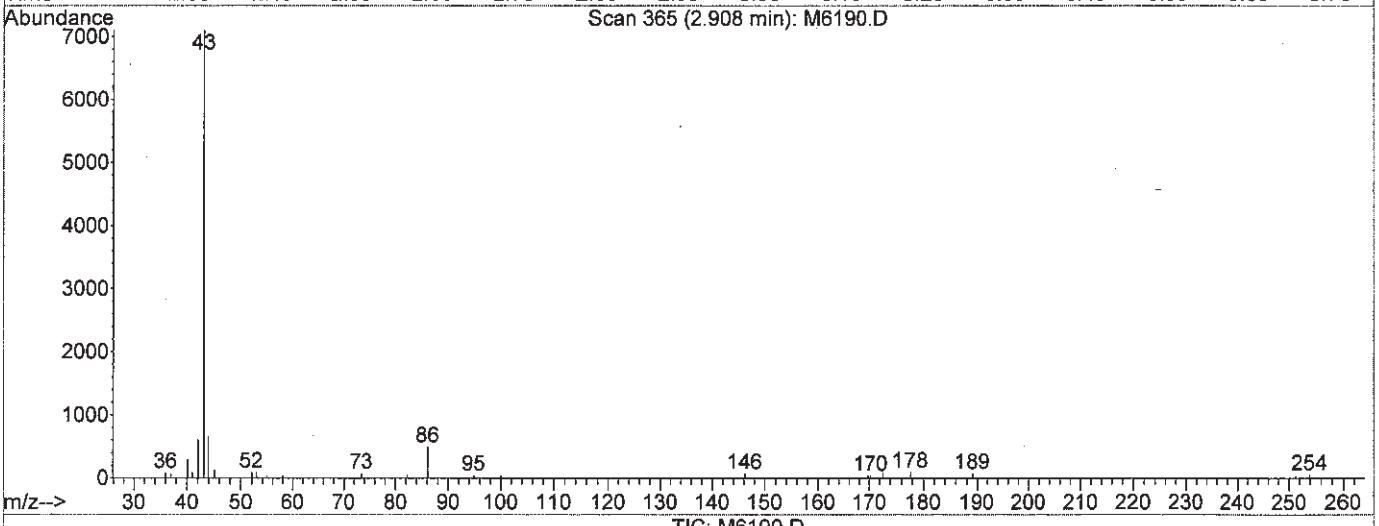
Ion	Exp%	Act%
76.00	100	100
41.00	250.90	224.83#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:50 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(29) Vinyl Acetate

2.91min 1.72ug/L

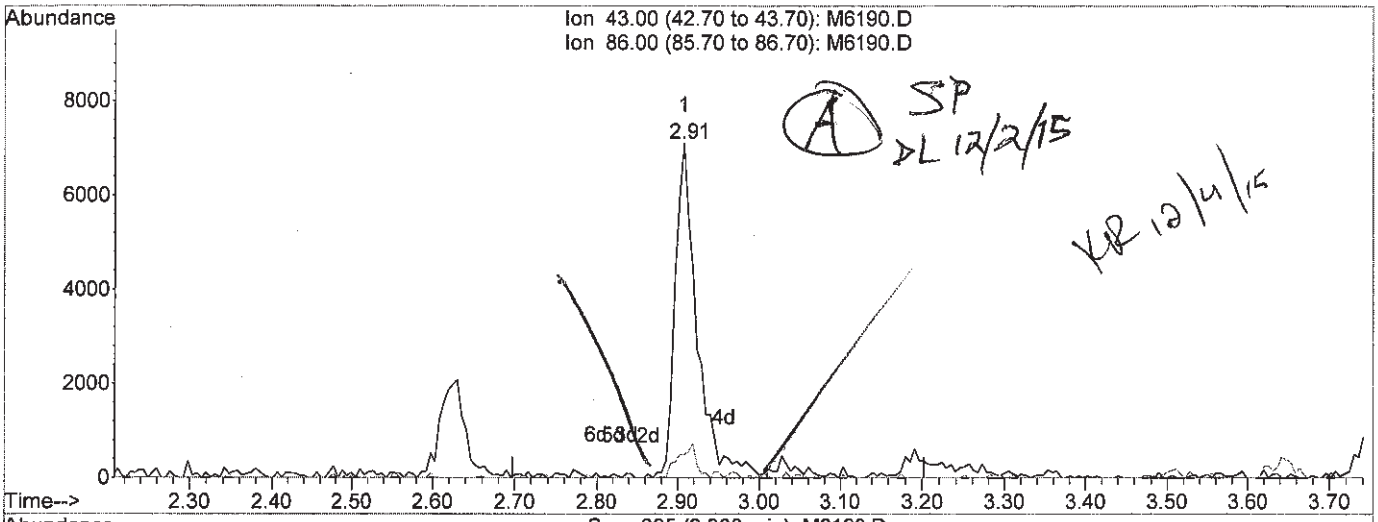
response 12545

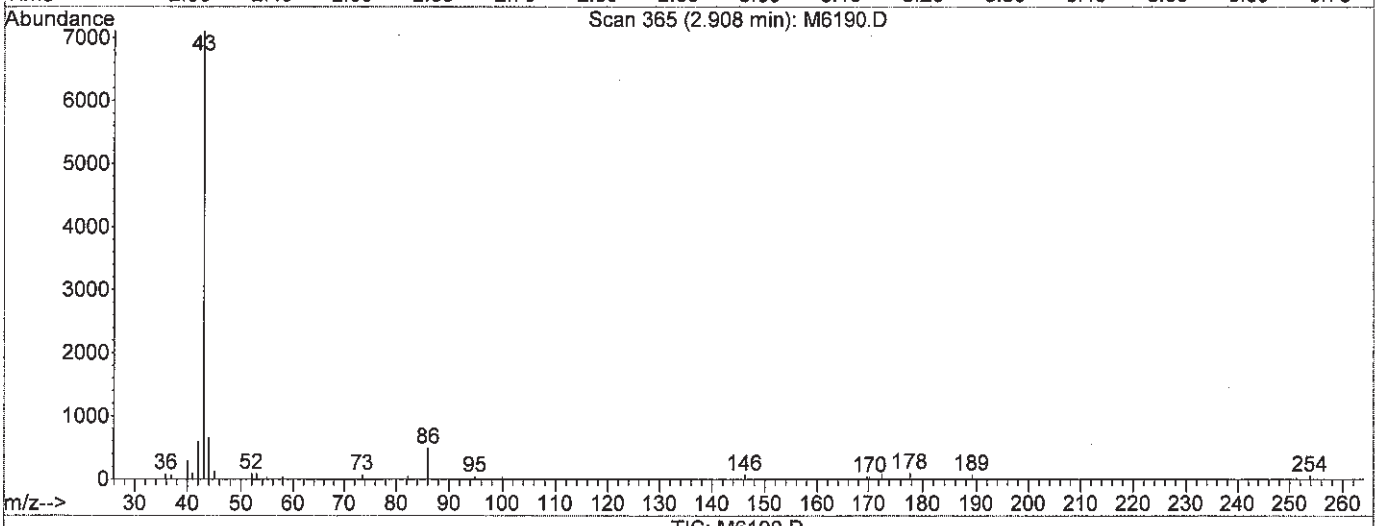
Ion	Exp%	Act%
43.00	100	100
86.00	9.30	6.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:51 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(29) Vinyl Acetate

2.91min 1.84ug/L m

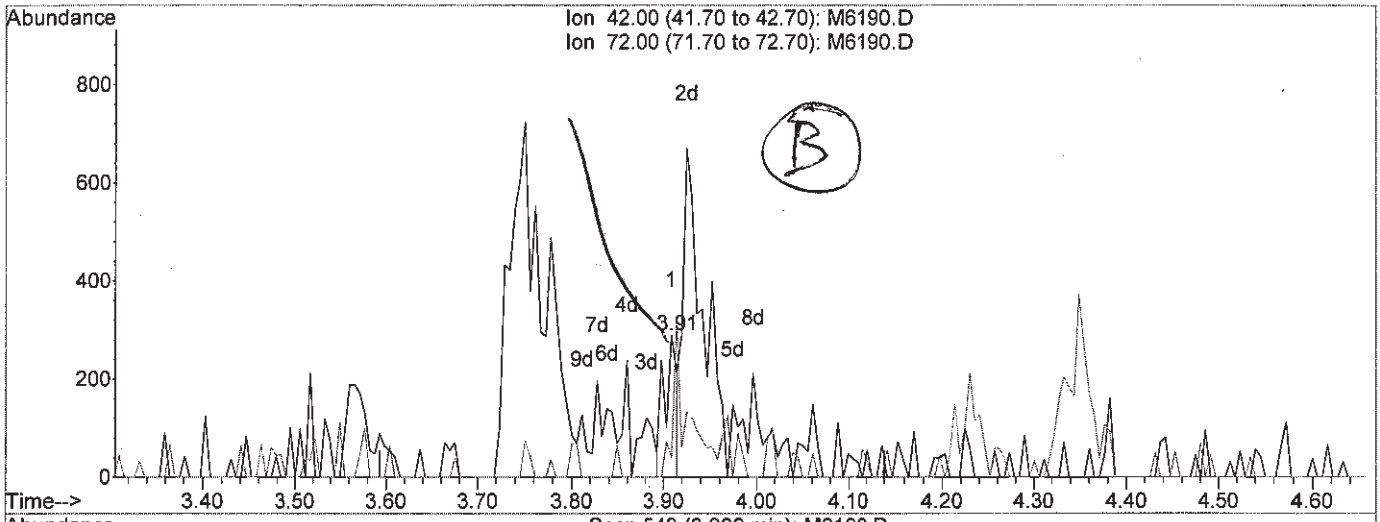
response 13390

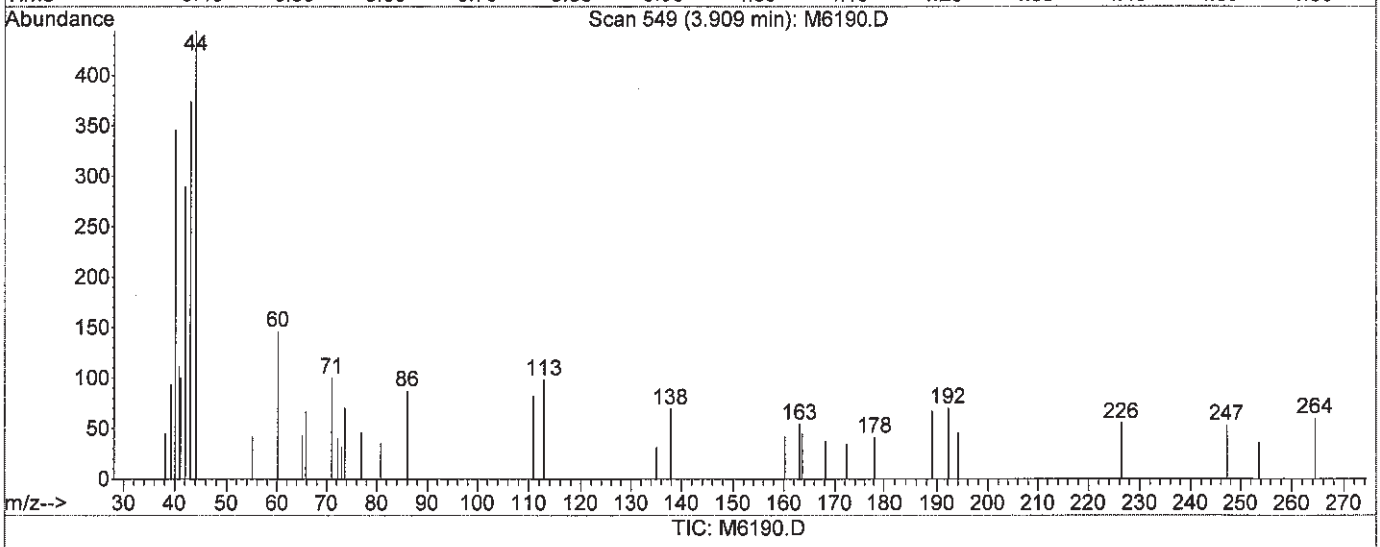
Ion	Exp%	Act%
43.00	100	100
86.00	9.30	6.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:51 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(37) Tetrahydrofuran

3.91min 0.37ug/L

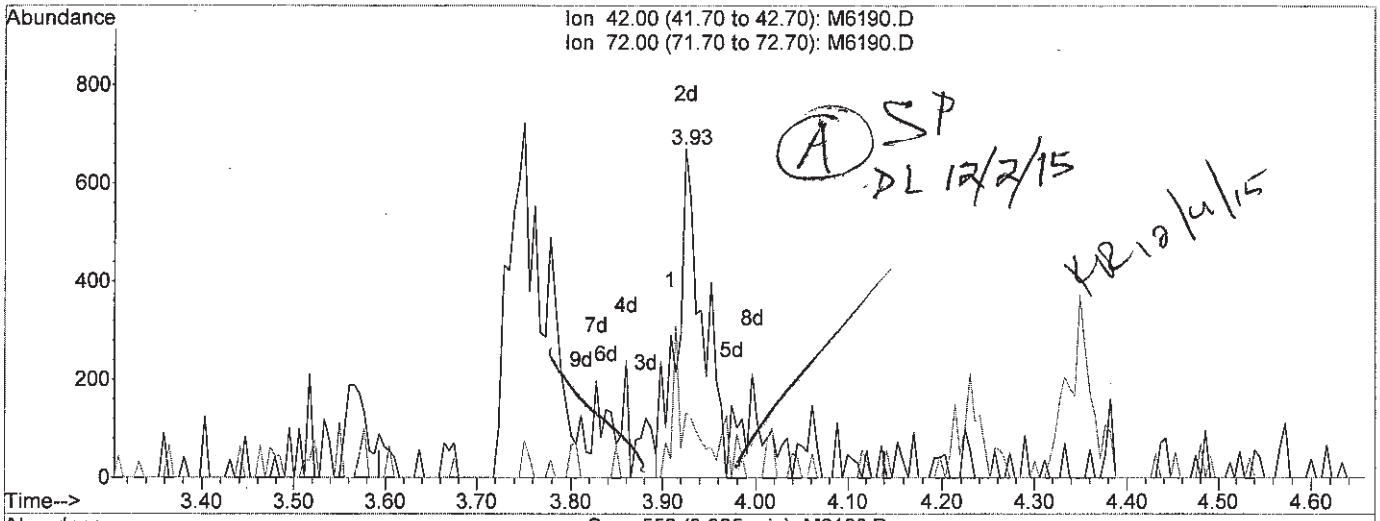
response 275

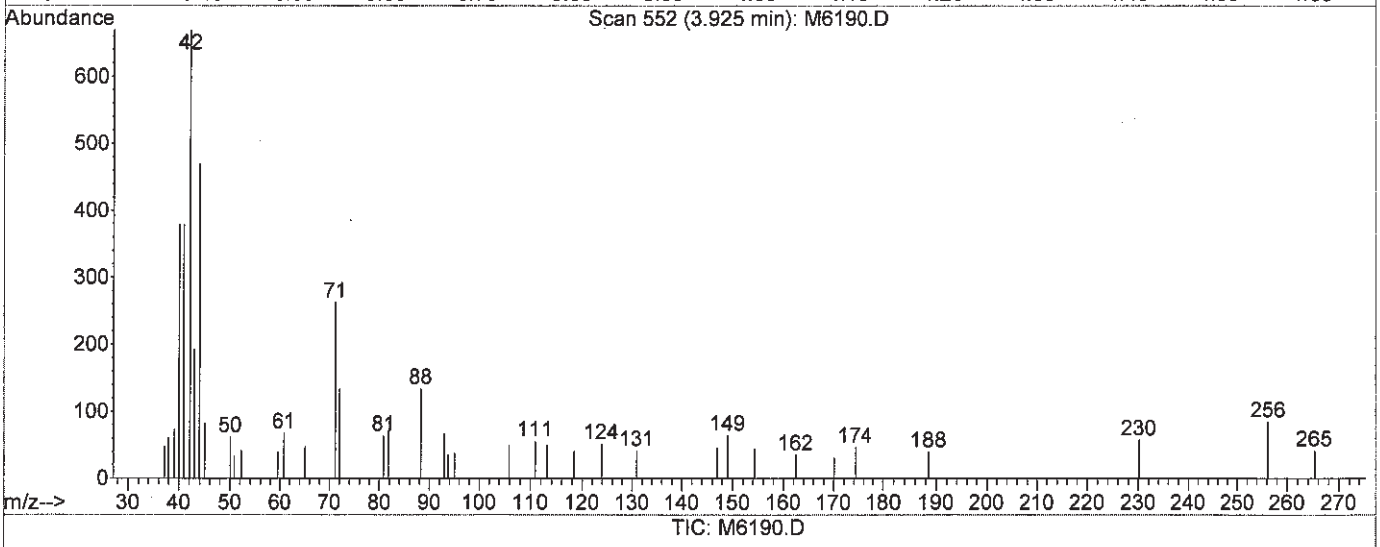
Ion	Exp%	Act%
42.00	100	100
72.00	45.40	13.84#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:51 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(37) Tetrahydrofuran

3.93min 1.76ug/L m

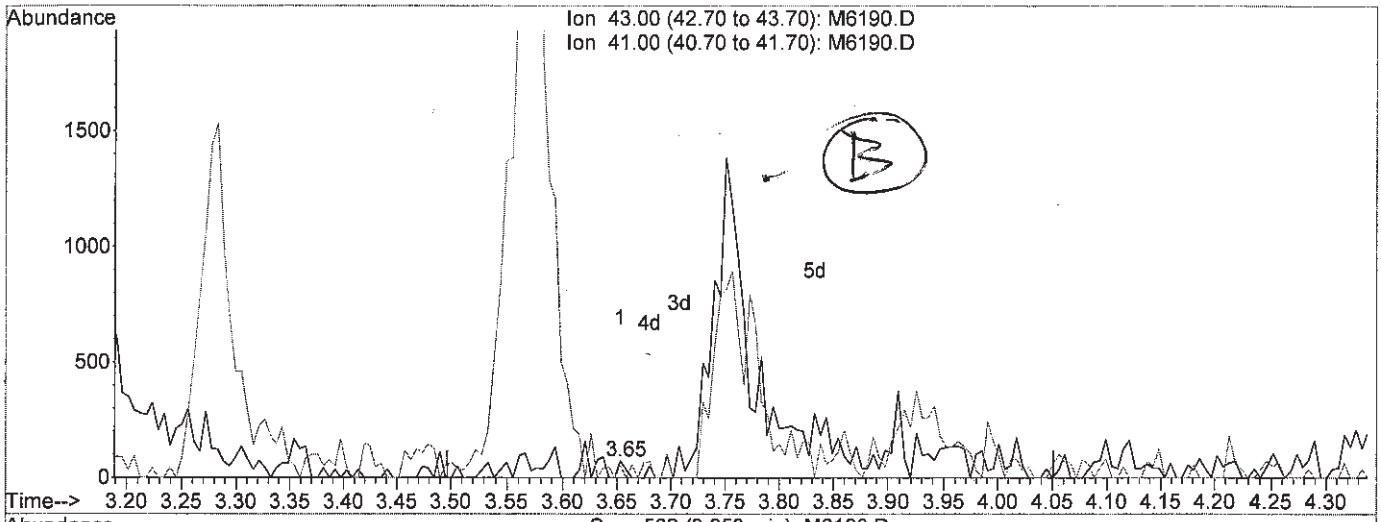
response 1304

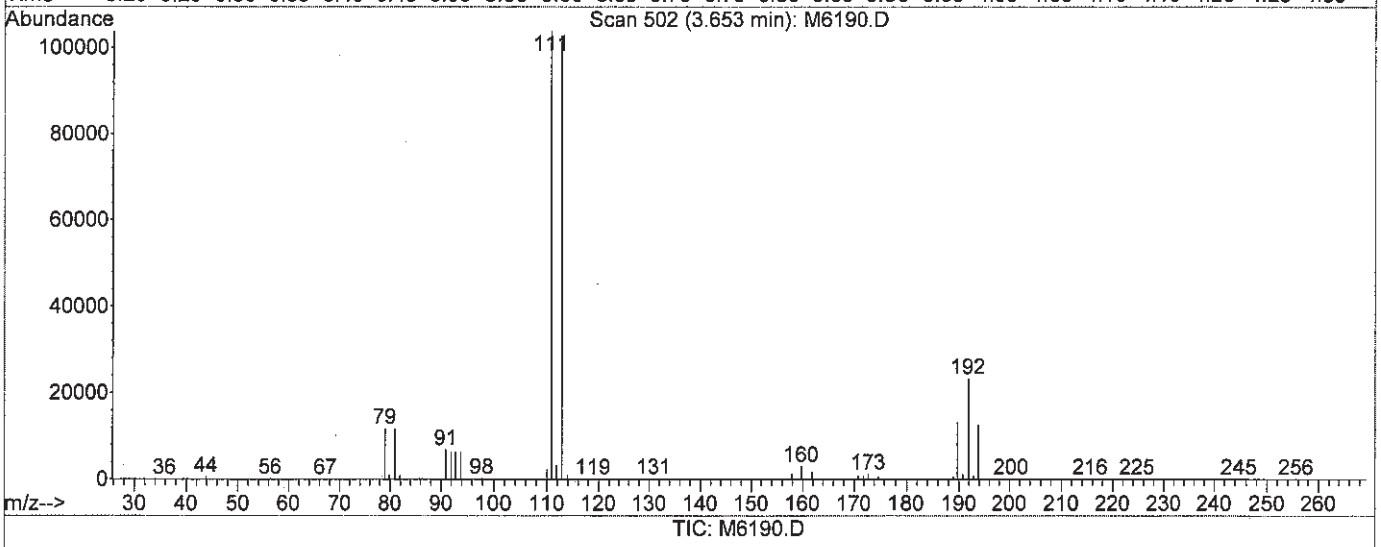
Ion	Exp%	Act%
42.00	100	100
72.00	45.40	19.88#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:51 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(41) Iso-Butyl Alcohol

3.65min 0.34ug/L

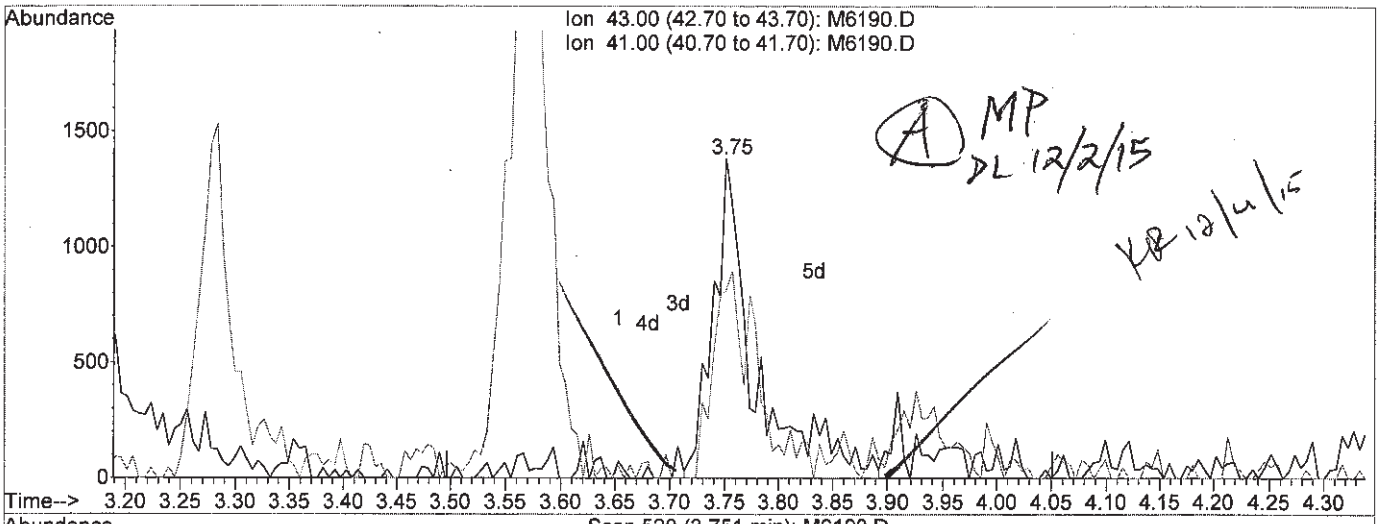
response 34

Ion	Exp%	Act%
43.00	100	100
41.00	79.60	69.44
0.00	0.00	0.00
0.00	0.00	0.00

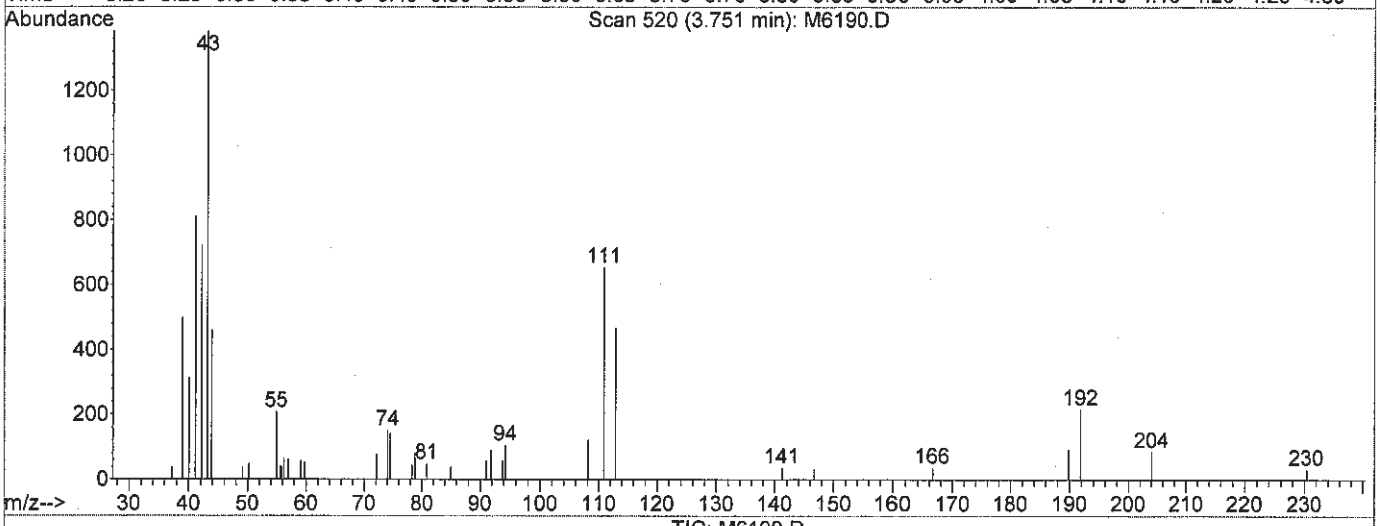
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:52 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration



MP 12/2/15
KB 12/4/15



TIC: M6190.D

(41) Iso-Butyl Alcohol

3.75min 36.51ug/L m

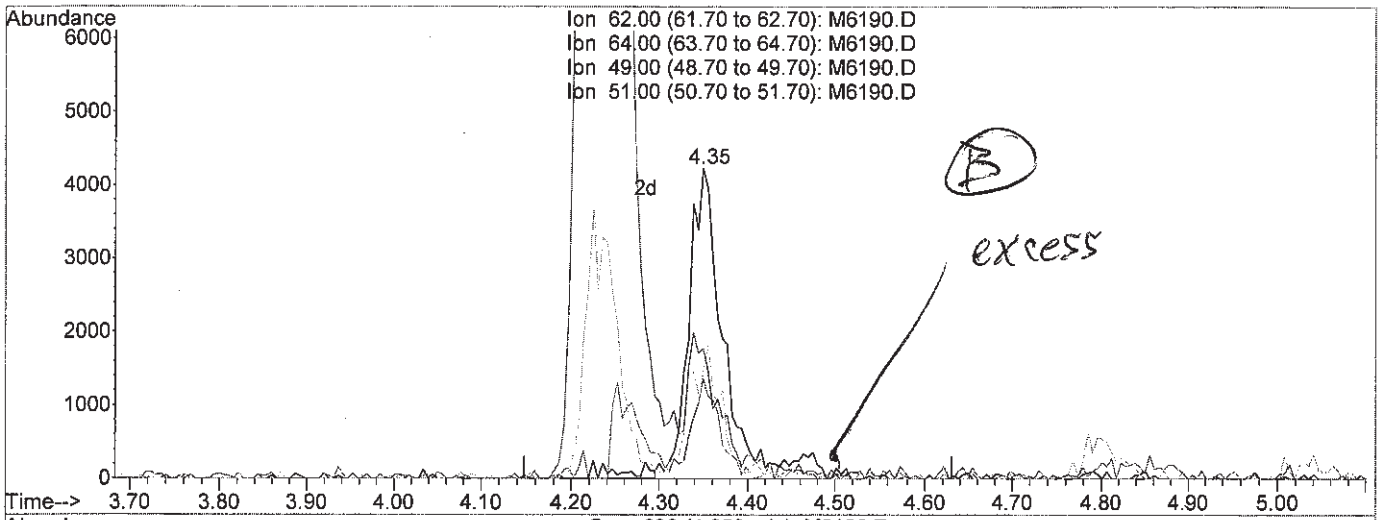
response 3676

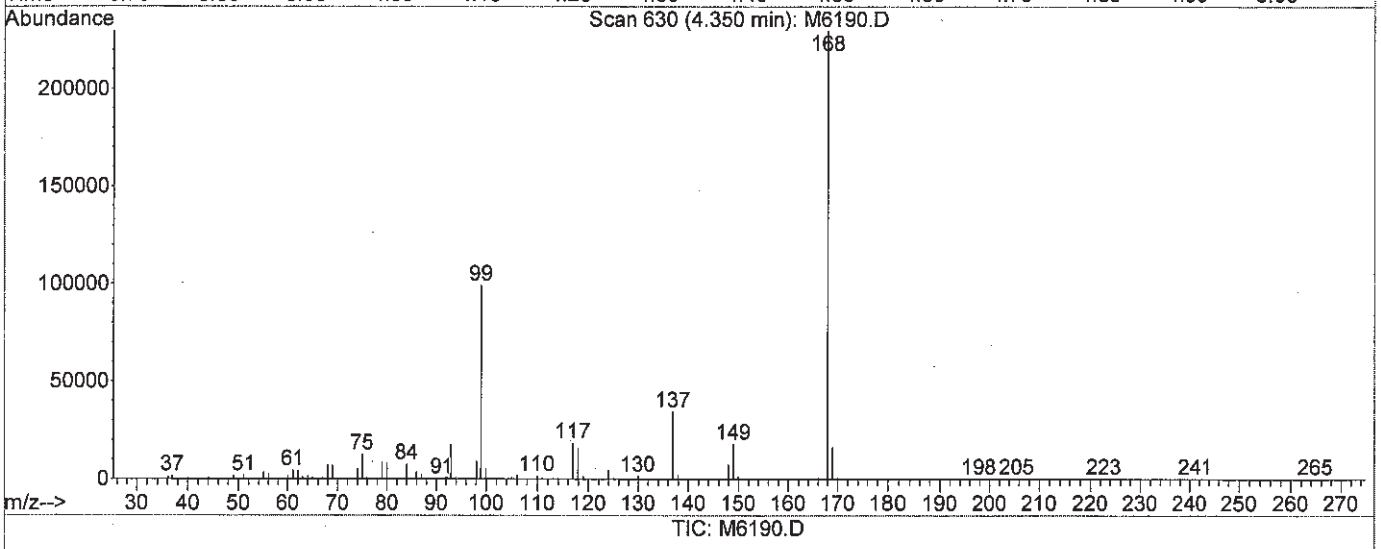
Ion	Exp%	Act%
43.00	100	100
41.00	79.60	58.76#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:52 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(43) 1,2-Dichloroethane (P)

4.35min 2.28ug/L

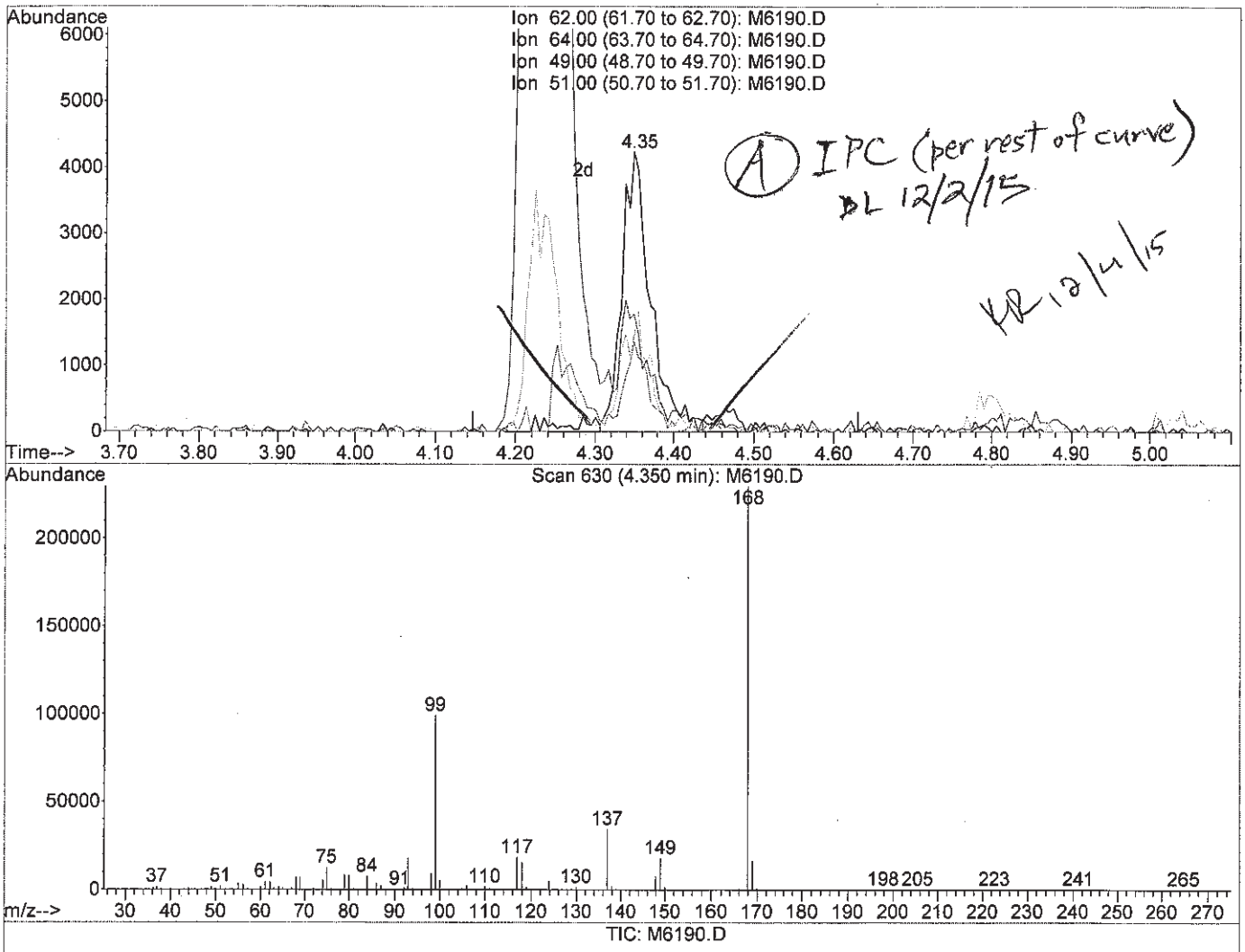
response 11650

Ion	Exp%	Act%
62.00	100	100
64.00	32.10	32.22
49.00	31.30	34.68
51.00	11.80	41.93#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:53 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration



A IPC (per rest of curve)
DL 12/2/15

KR 12/4/15

TIC: M6190.D

(43) 1,2-Dichloroethane (P)

4.35min 2.12ug/L m

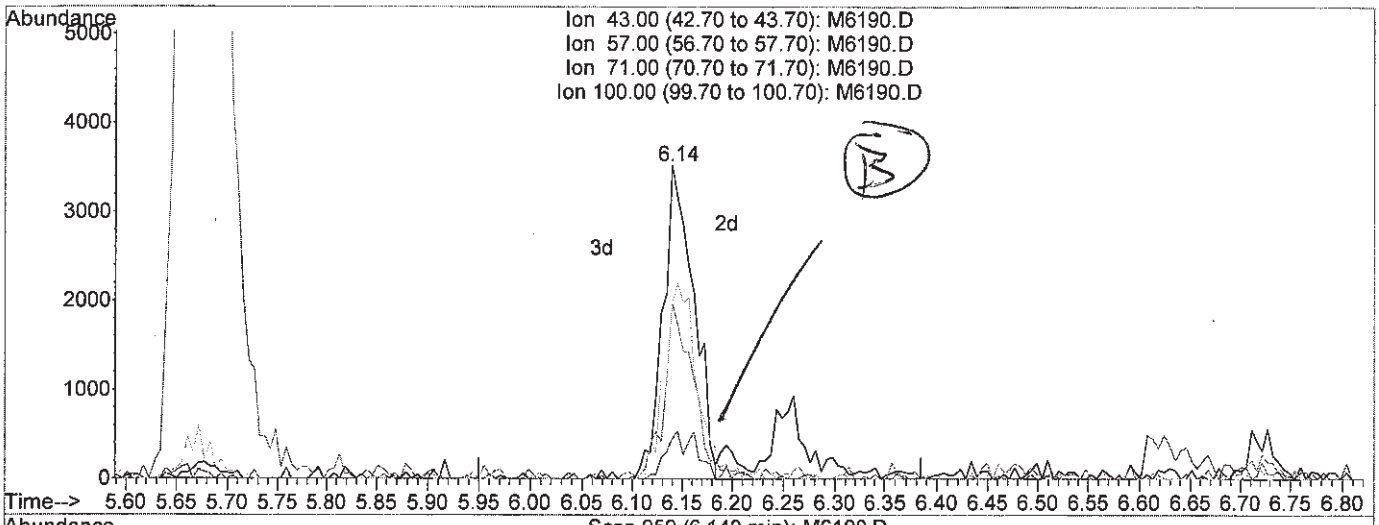
response 10828

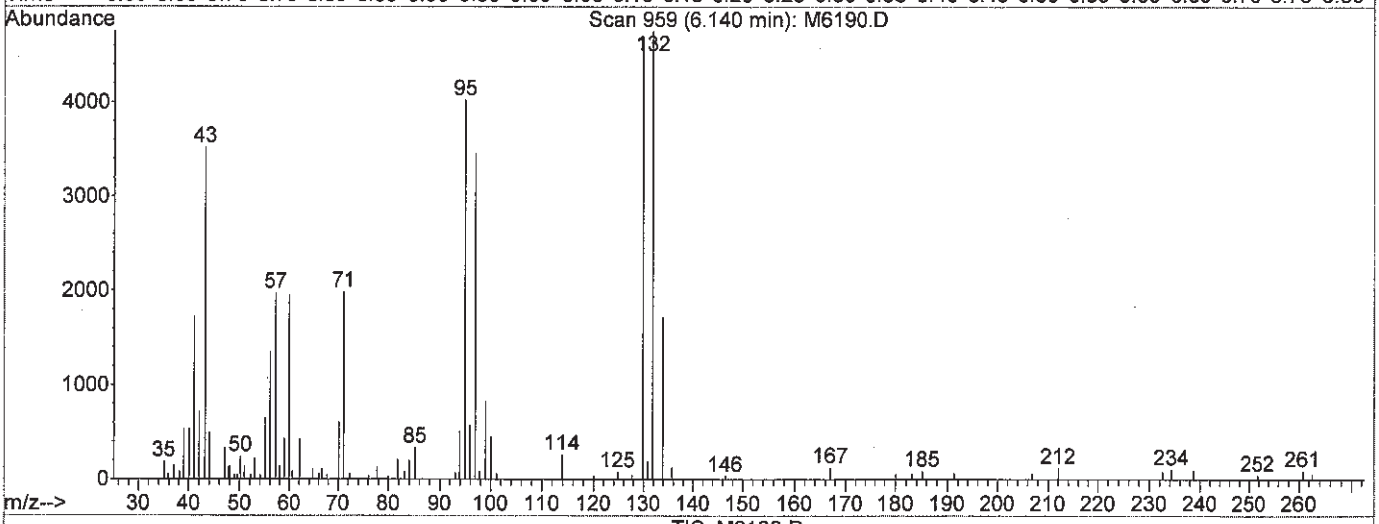
Ion	Exp%	Act%
62.00	100	100
64.00	32.10	32.22
49.00	31.30	34.68
51.00	11.80	41.93#

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:53 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(50) n-Heptane

6.14min 1.79ug/L

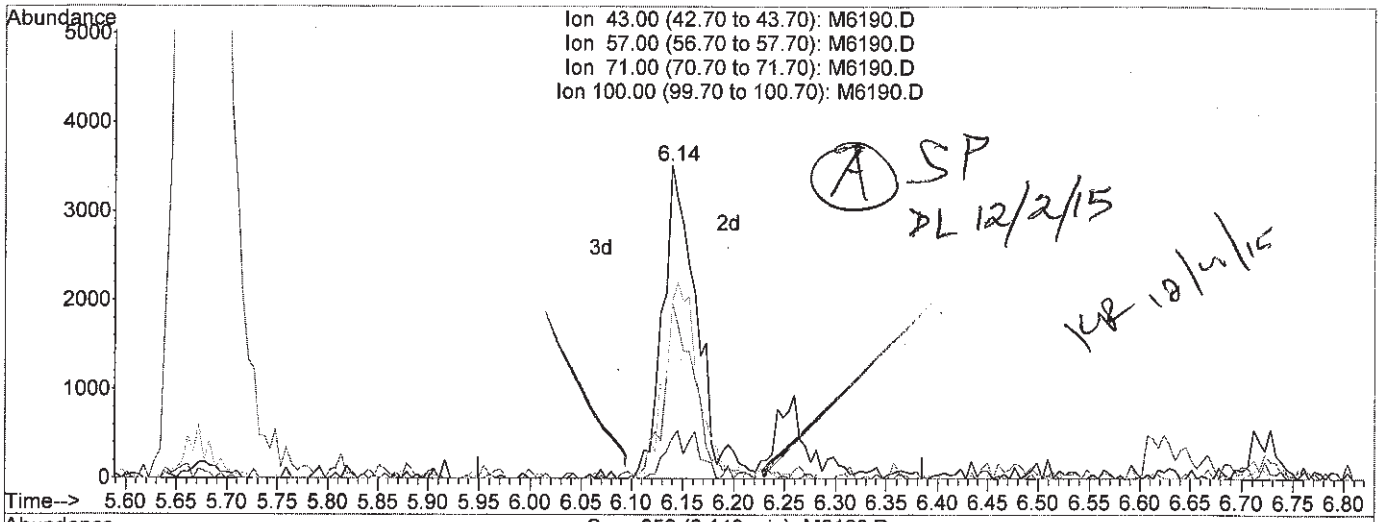
response 7537

Ion	Exp%	Act%
43.00	100	100
57.00	55.30	56.14
71.00	60.70	56.43
100.00	17.40	12.80

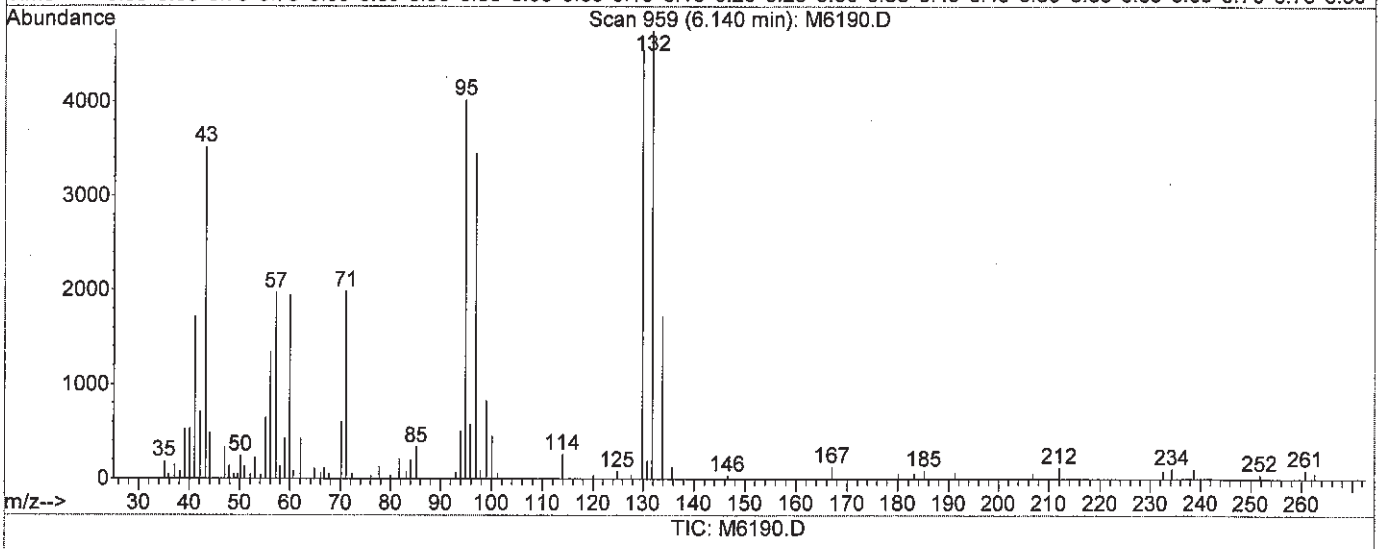
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:54 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration



A SP DL 12/2/15 KB 12/4/15



TIC: M6190.D

(50) n-Heptane

6.14min 1.91ug/L m

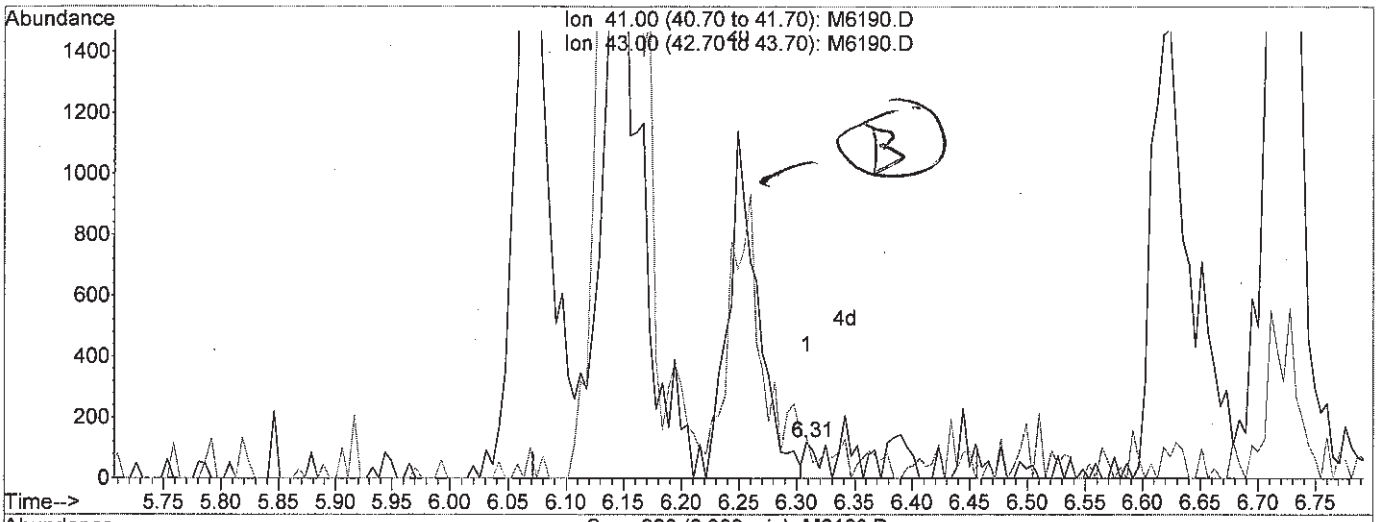
response 8018

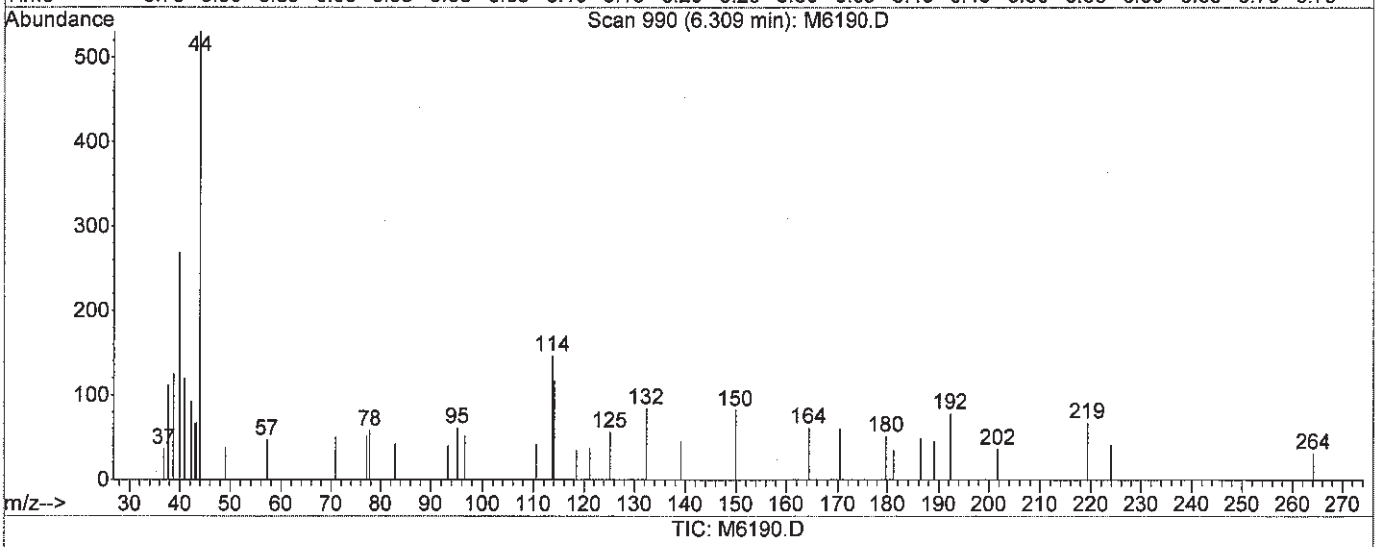
Ion	Exp%	Act%
43.00	100	100
57.00	55.30	56.14
71.00	60.70	56.43
100.00	17.40	12.80

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:54 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(53) 2-Nitropropane

6.31min 0.22ug/L

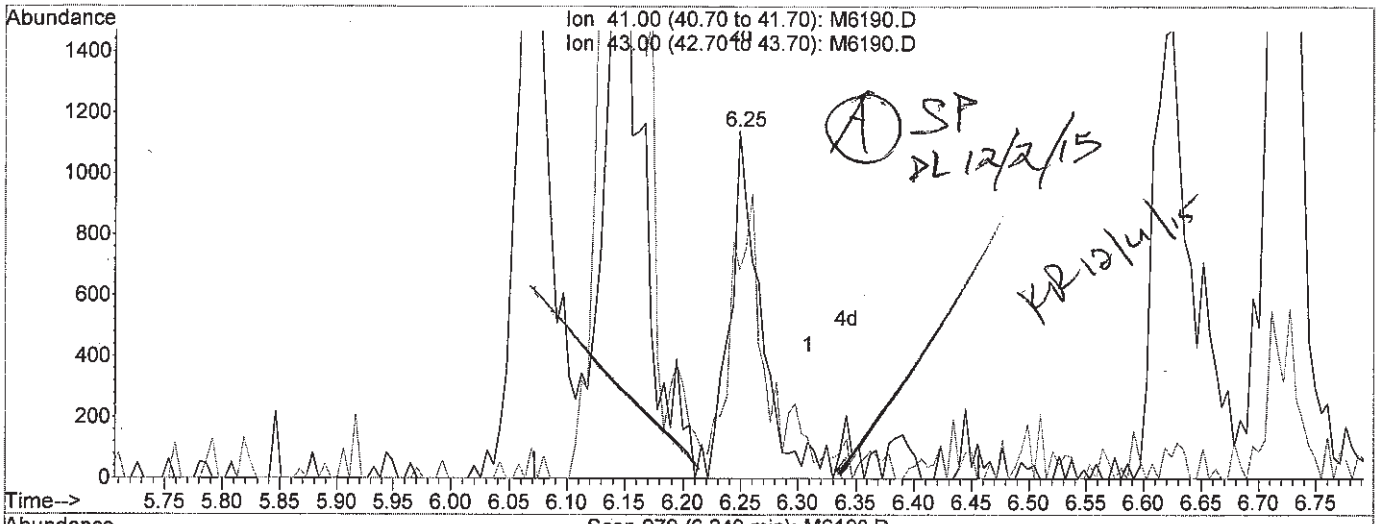
response 115

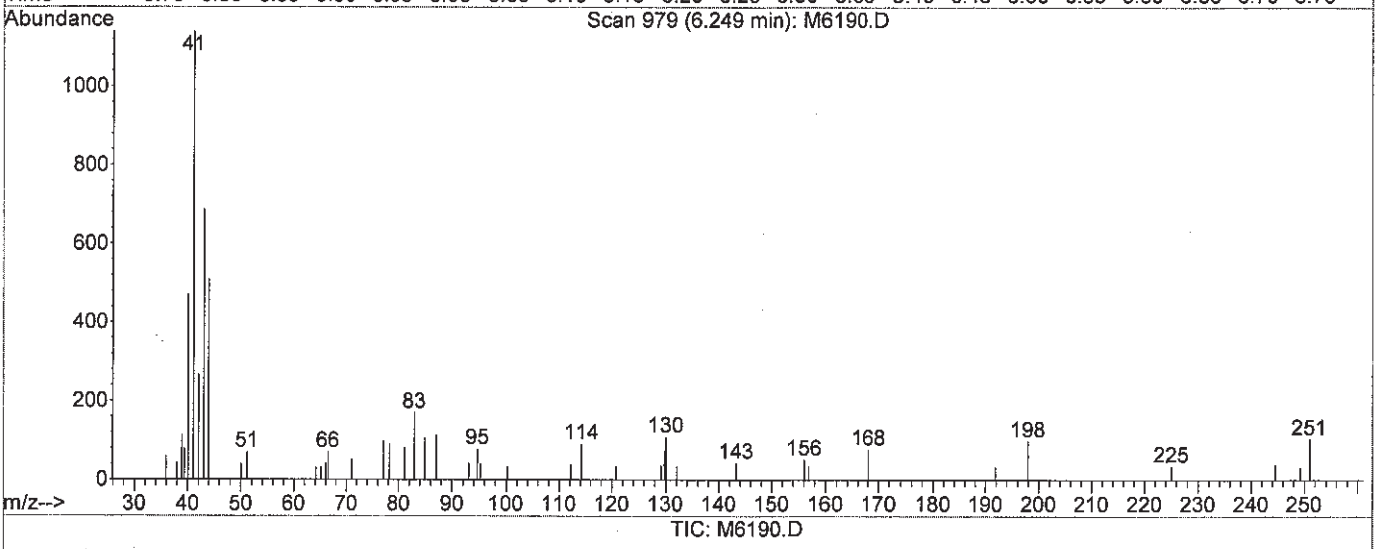
Ion	Exp%	Act%
41.00	100	100
43.00	121.90	111.76
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:54 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(53) 2-Nitropropane

6.25min 4.07ug/L m

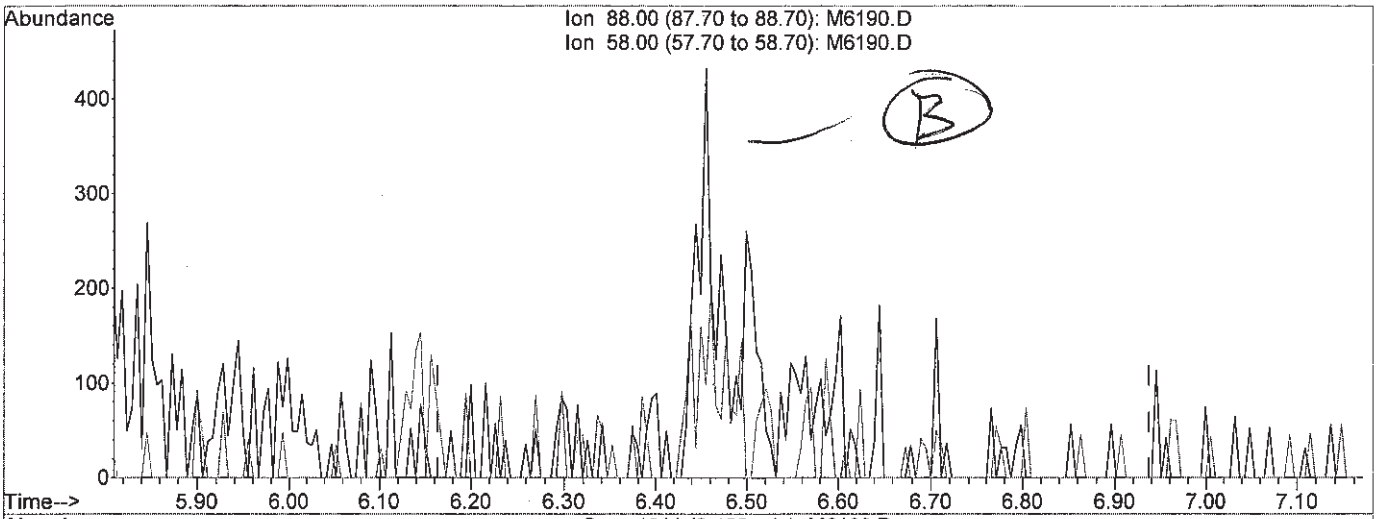
response 2134

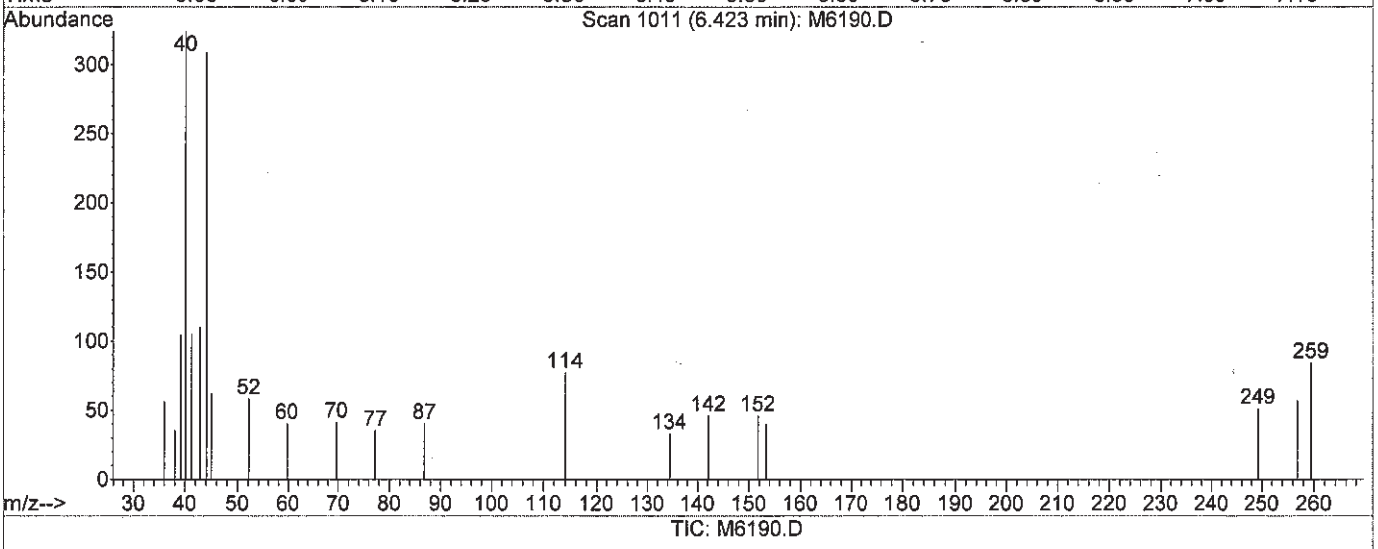
Ion	Exp%	Act%
41.00	100	100
43.00	121.90	60.23#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:54 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(54) 1,4-Dioxane

6.42min 0.00ug/L

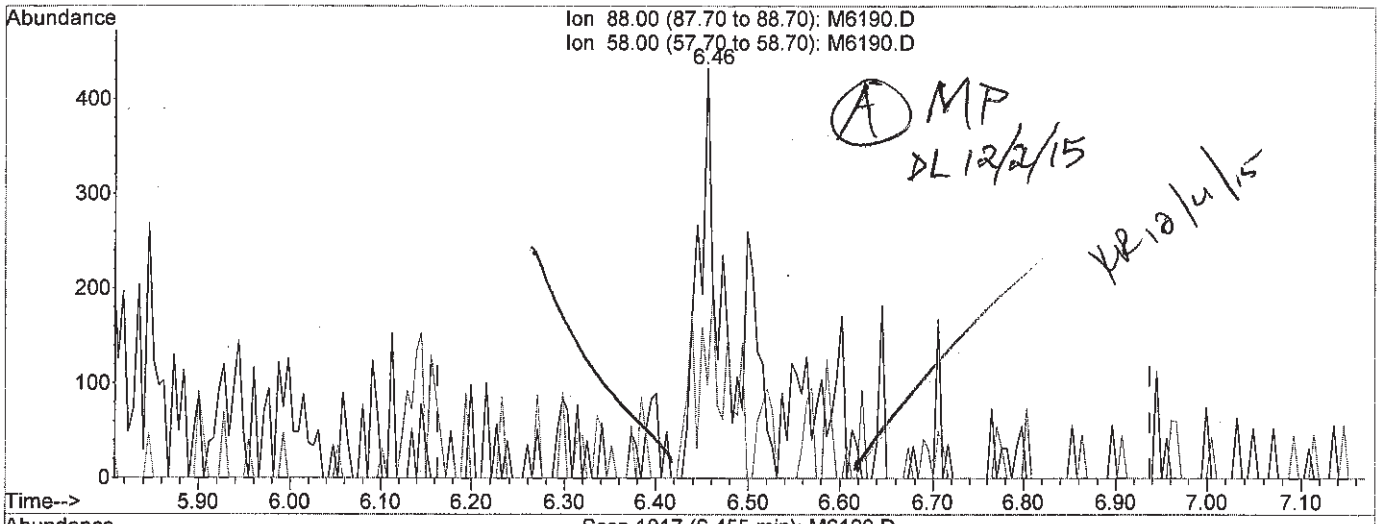
response 0

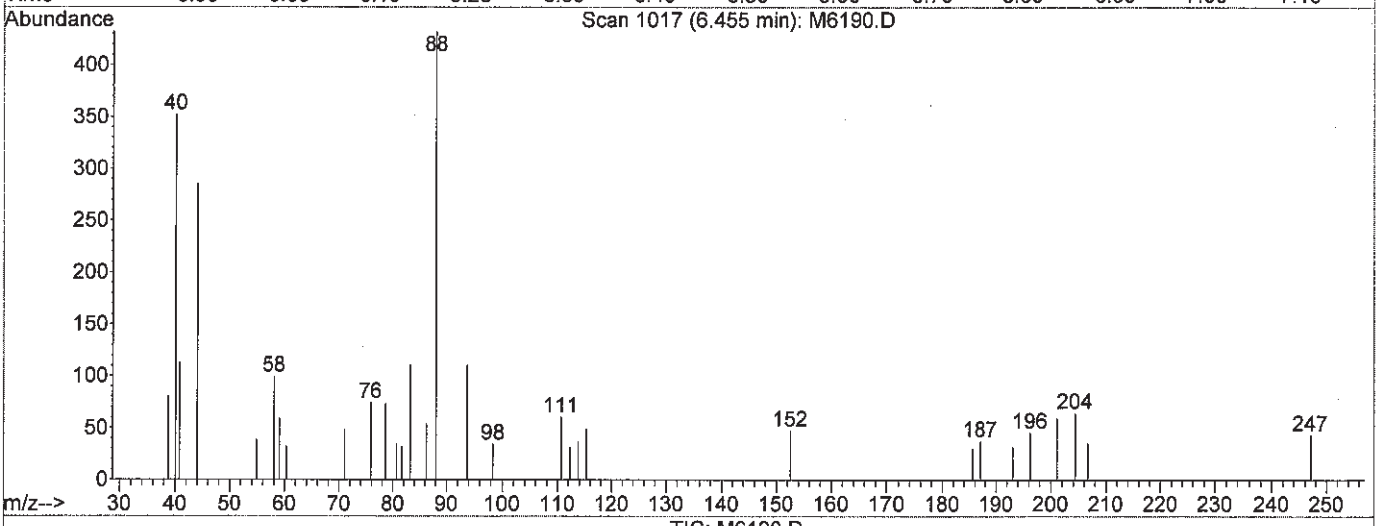
Ion	Exp%	Act%
88.00	100	0.00
58.00	60.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:55 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(54) 1,4-Dioxane

6.46min 46.14ug/L m

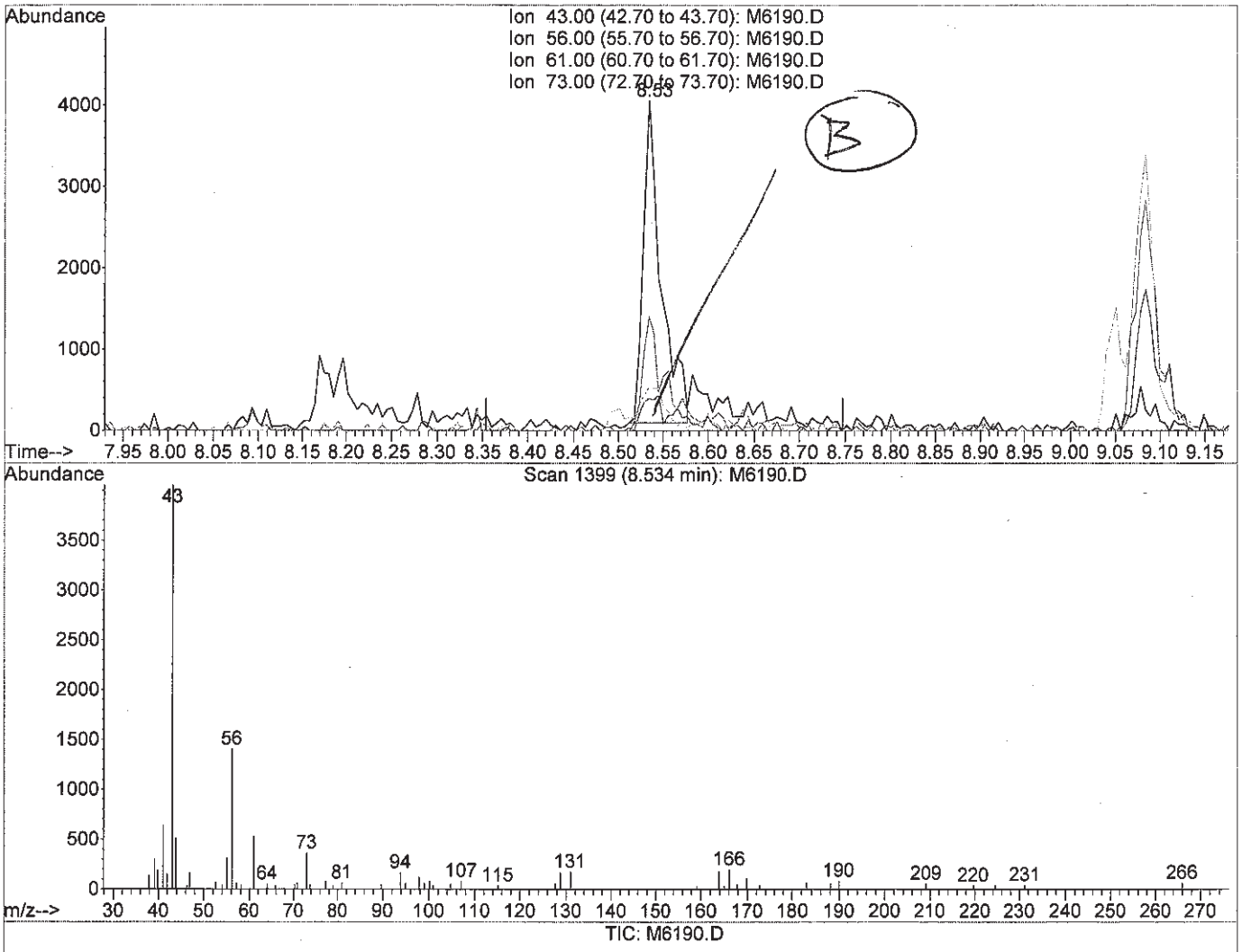
response 1329

Ion	Exp%	Act%
88.00	100	100
58.00	60.40	22.92#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:56 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration



TIC: M6190.D

(70) n-Butyl Acetate

8.53min 1.24ug/L

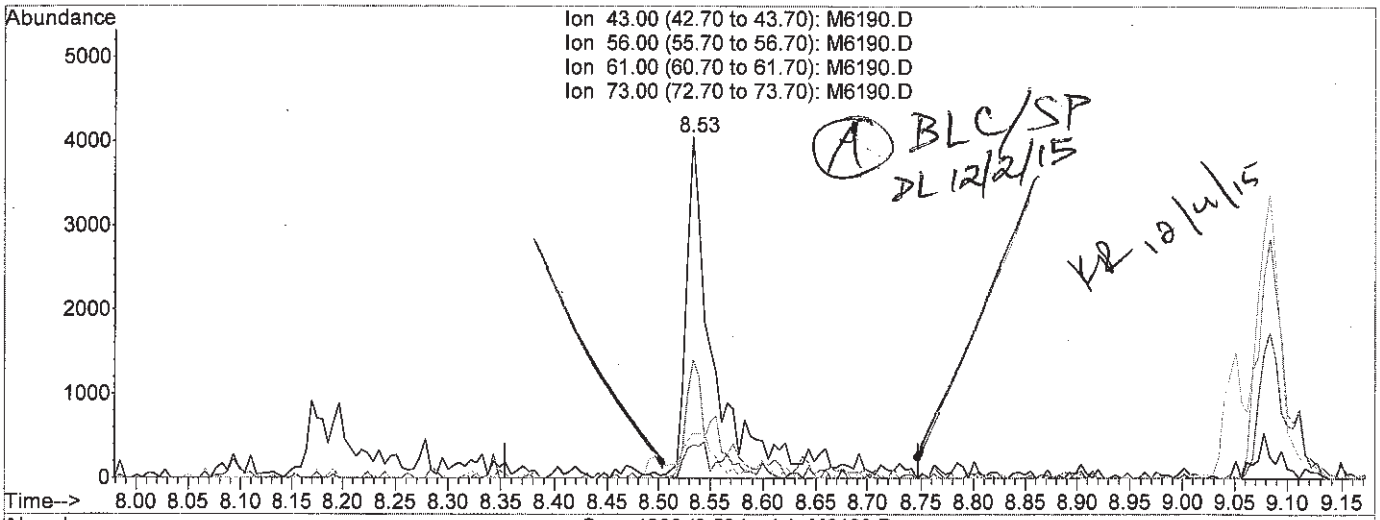
response 5576

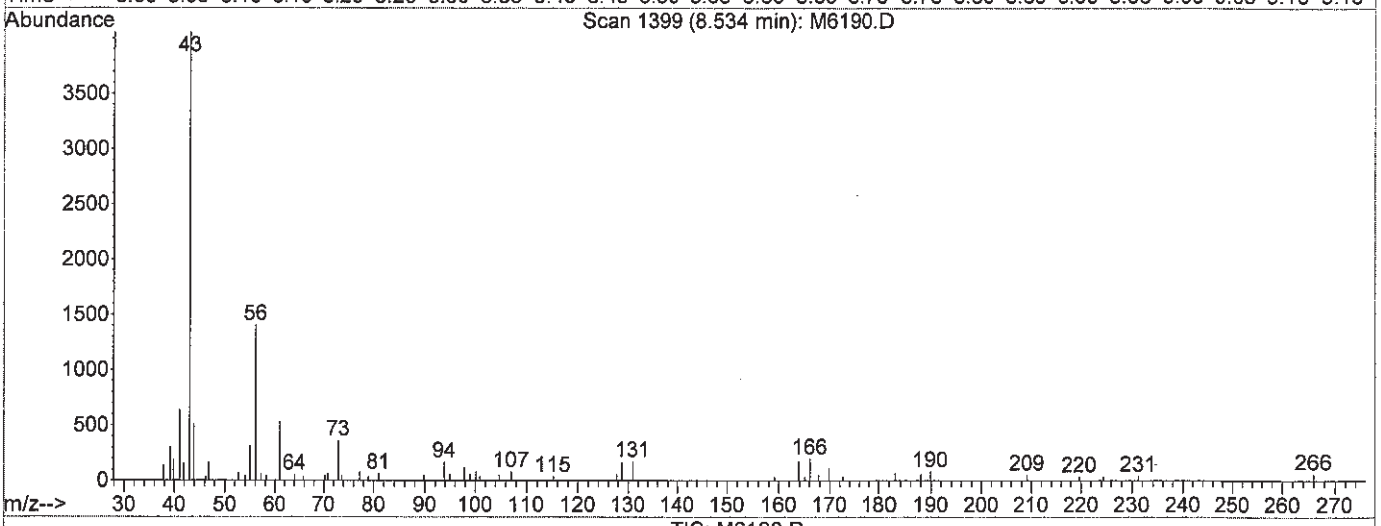
Ion	Exp%	Act%
43.00	100	100
56.00	41.50	26.26
61.00	16.70	0.00
73.00	15.40	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:56 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Single Level Calibration





TIC: M6190.D

(70) n-Butyl Acetate

8.53min 1.86ug/L m

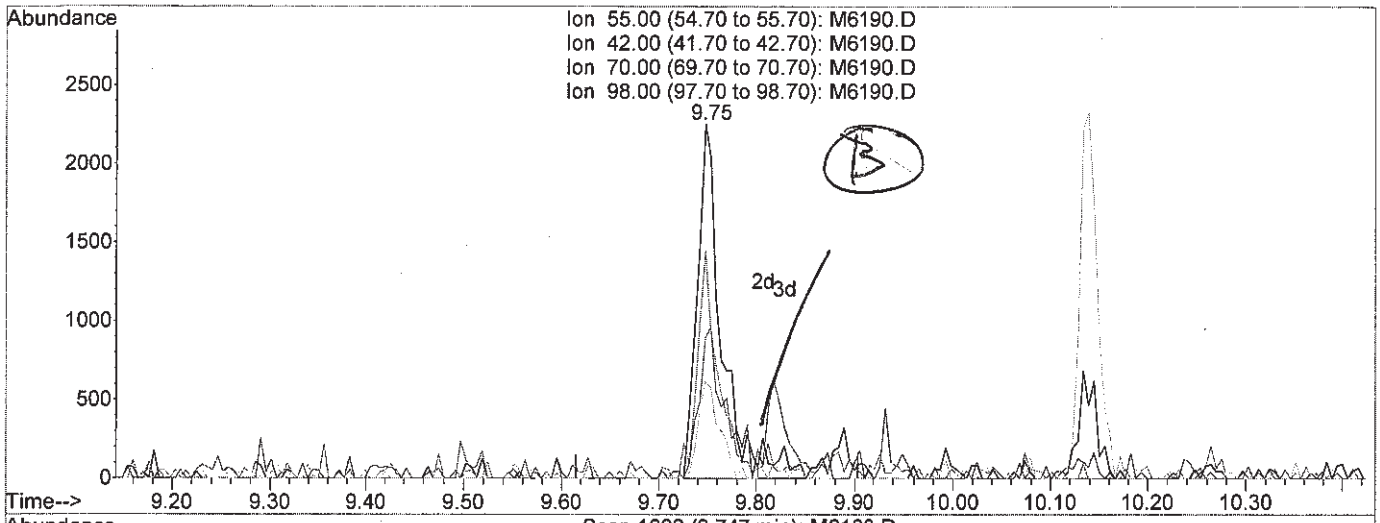
response 8332

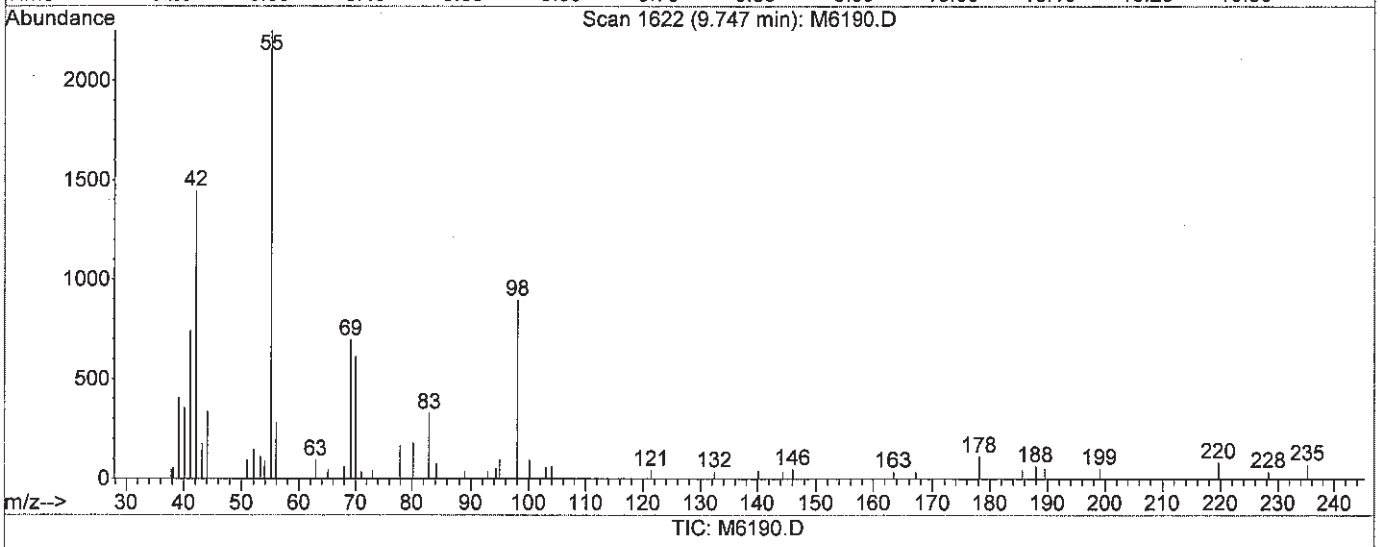
Ion	Exp%	Act%
43.00	100	100
56.00	41.50	17.57#
61.00	16.70	0.00
73.00	15.40	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:56 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(78) Cyclohexanone

9.75min 36.61ug/L

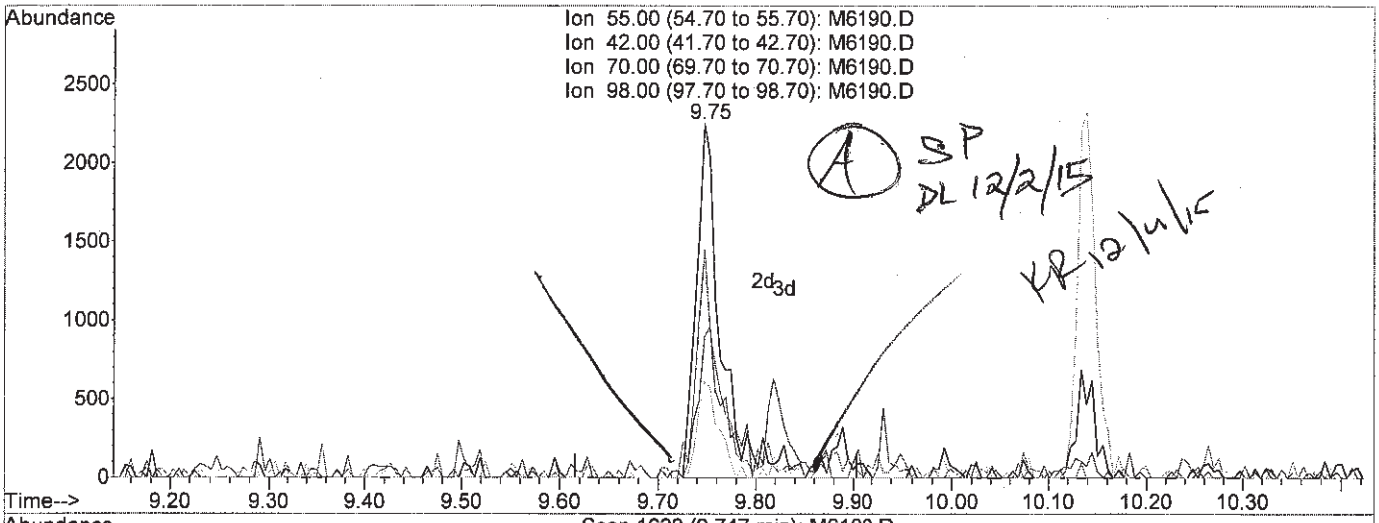
response 3692

Ion	Exp%	Act%
55.00	100	100
42.00	63.70	64.13
70.00	23.60	27.16
98.00	45.50	39.78

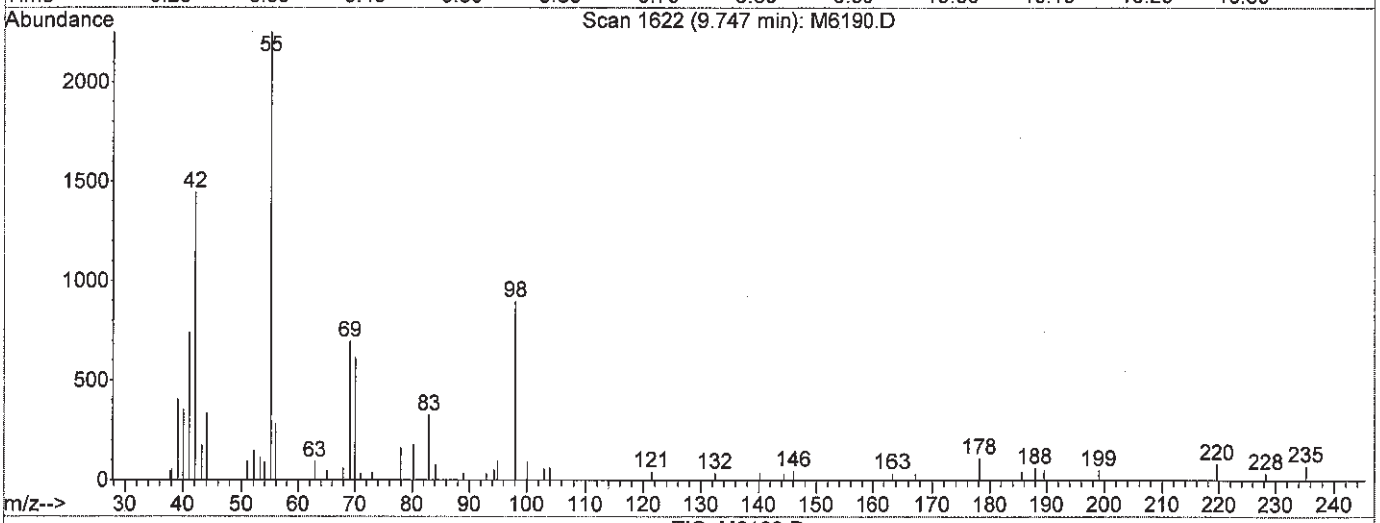
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:57 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration



A SP DL 12/2/15 KR 12/4/15



TIC: M6190.D

(78) Cyclohexanone

9.75min 39.74ug/L m

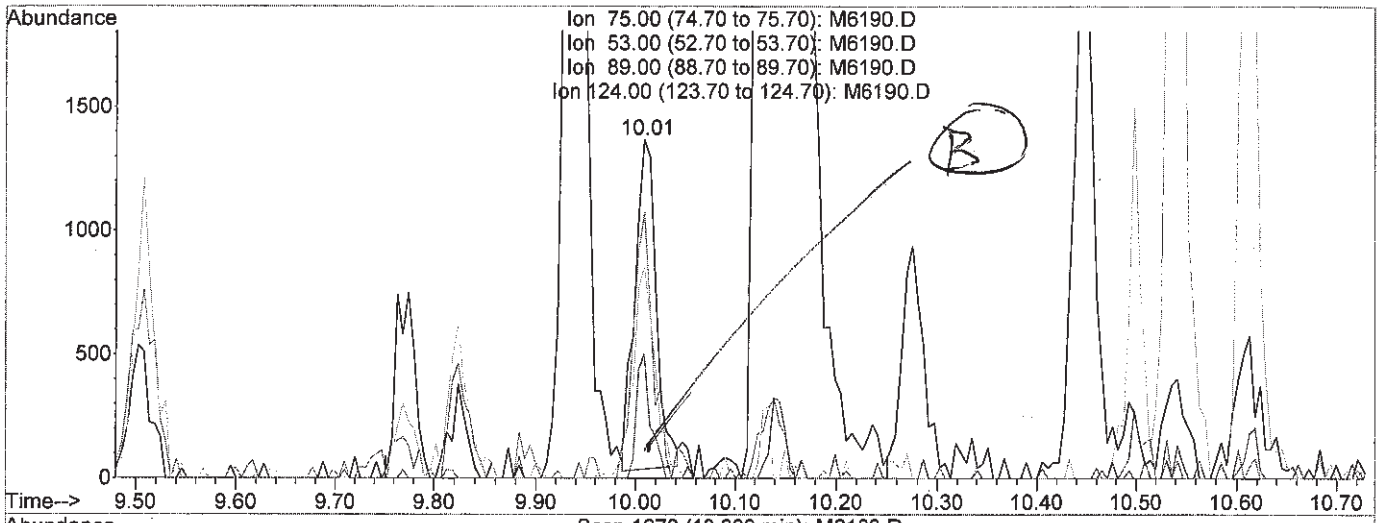
response 4008

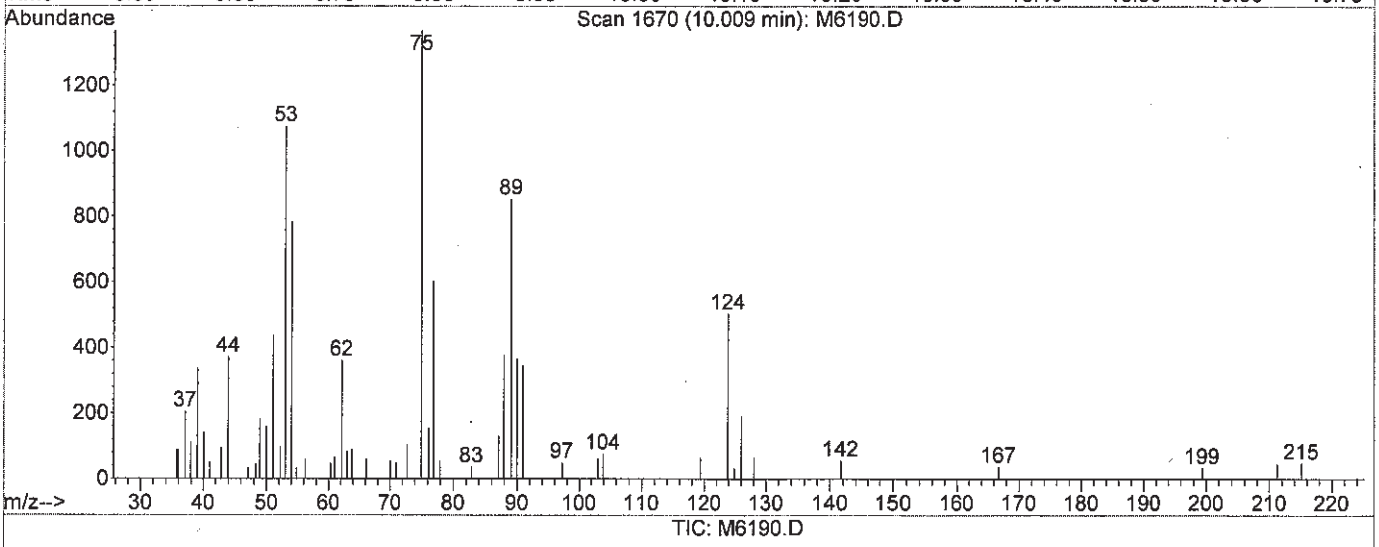
Ion	Exp%	Act%
55.00	100	100
42.00	63.70	64.13
70.00	23.60	27.16
98.00	45.50	39.78

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:57 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(80) trans-1,4-Dichloro-2-Butene

10.01min 1.37ug/L

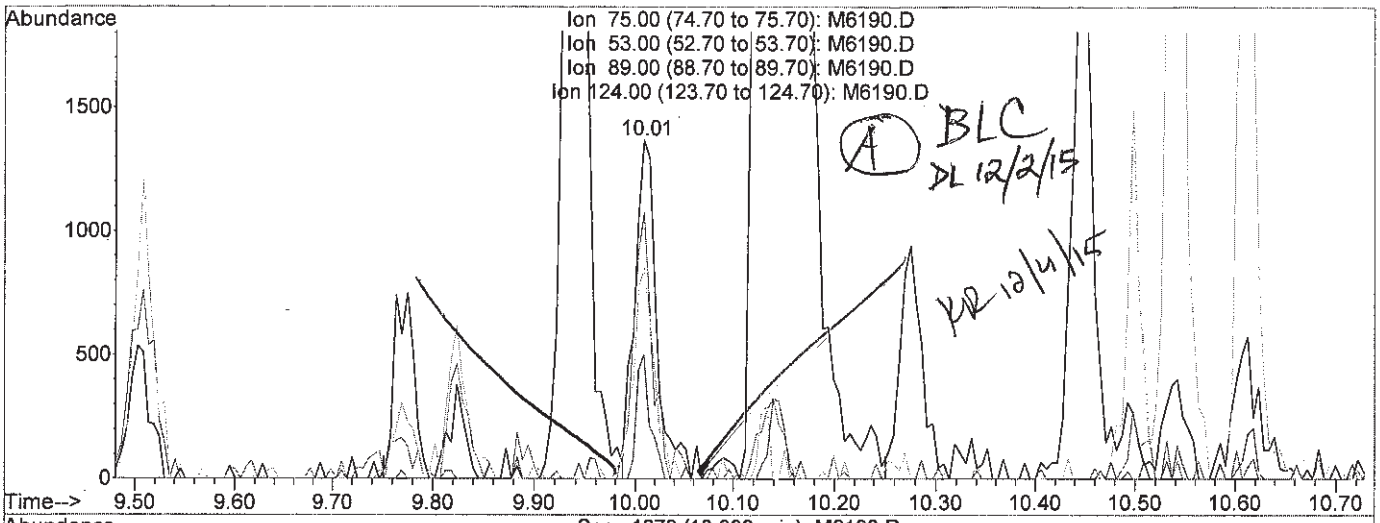
response 1936

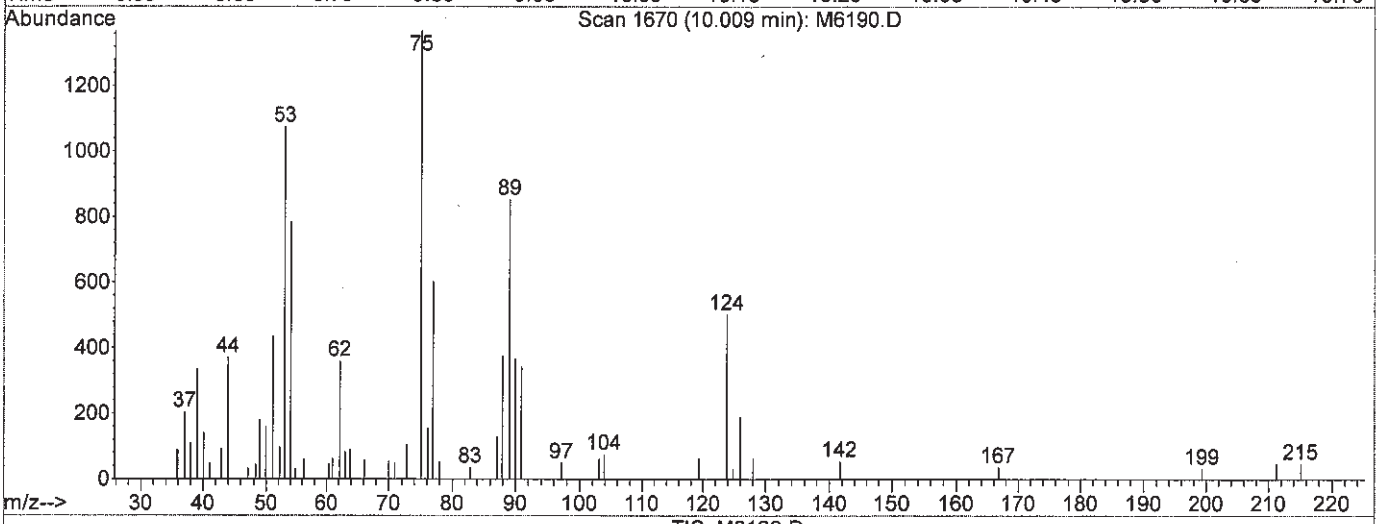
Ion	Exp%	Act%
75.00	100	100
53.00	65.30	78.57
89.00	50.50	62.40
124.00	19.60	36.80

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:58 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(80) trans-1,4-Dichloro-2-Butene

10.01min 1.52ug/L m

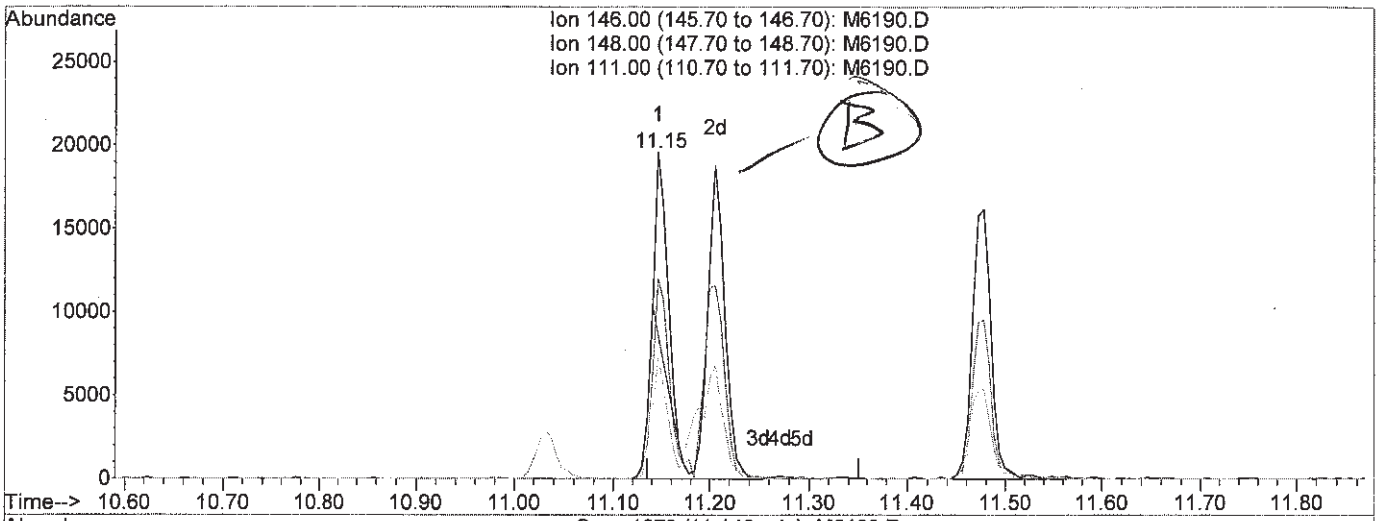
response 2150

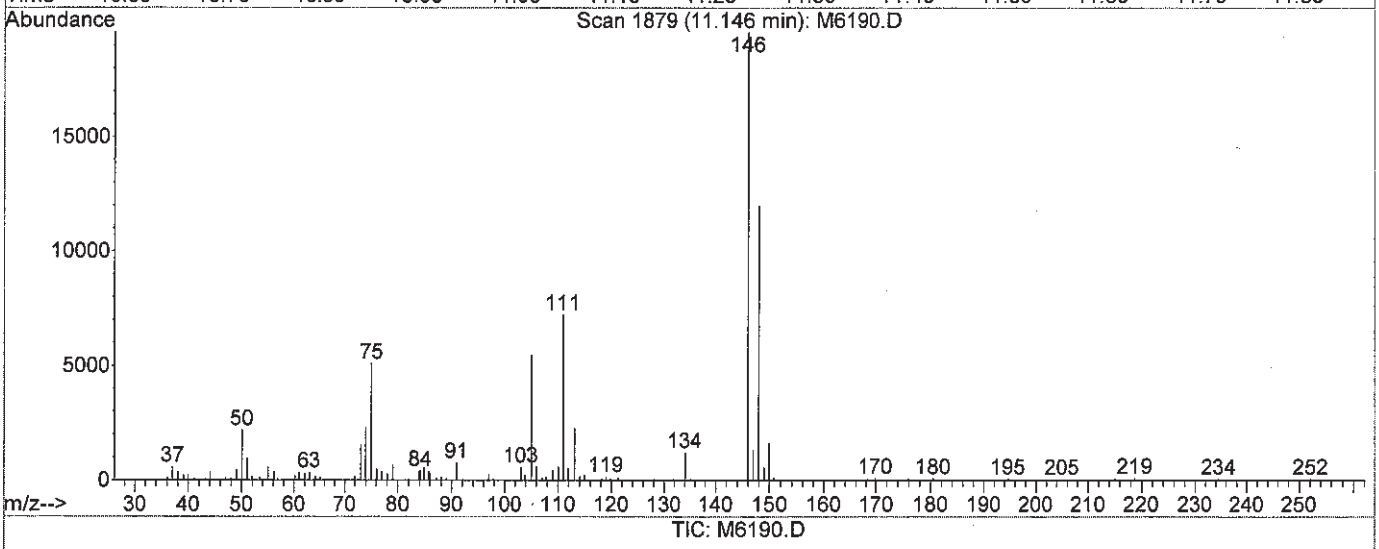
Ion	Exp%	Act%
75.00	100	100
53.00	65.30	78.57
89.00	50.50	62.40
124.00	19.60	36.80

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:58 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration





TIC: M6190.D

(95) 1,4-Dclbenz (P)

11.15min 0.64ug/L

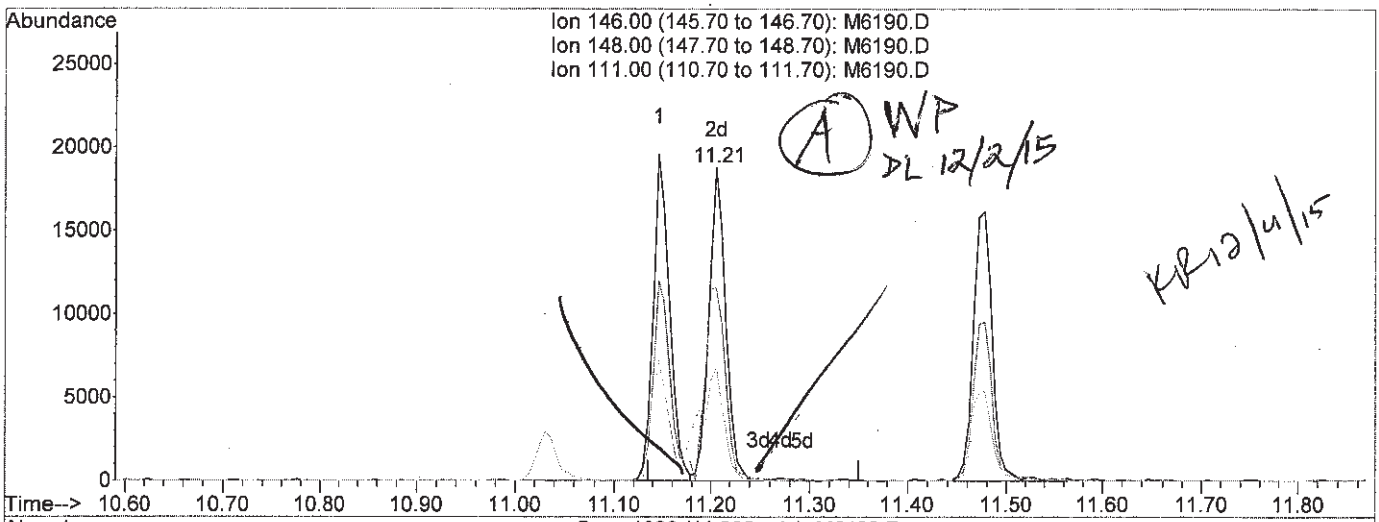
response 7615

Ion	Exp%	Act%
146.00	100	100
148.00	65.00	61.30
111.00	35.90	26.70
0.00	0.00	0.00

Quantitation Report (Qedit)

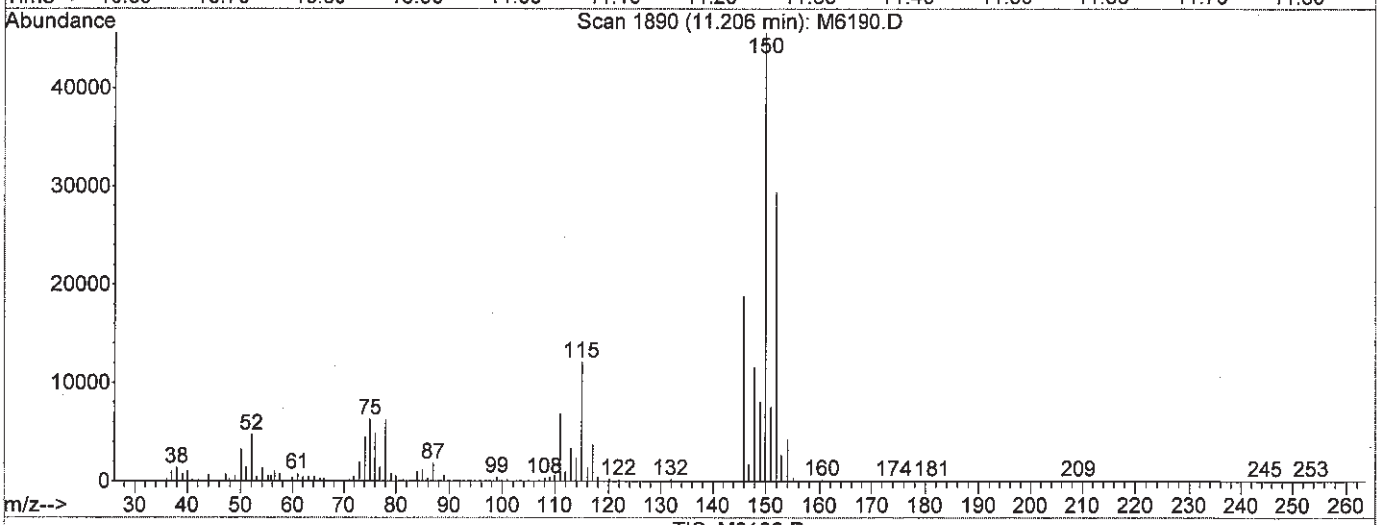
Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:58 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Multiple Level Calibration



A WP DL 12/2/15

KP 12/4/15



TIC: M6190.D

(95) 1,4-Dclbenz (P)

11.21min 1.93ug/L m

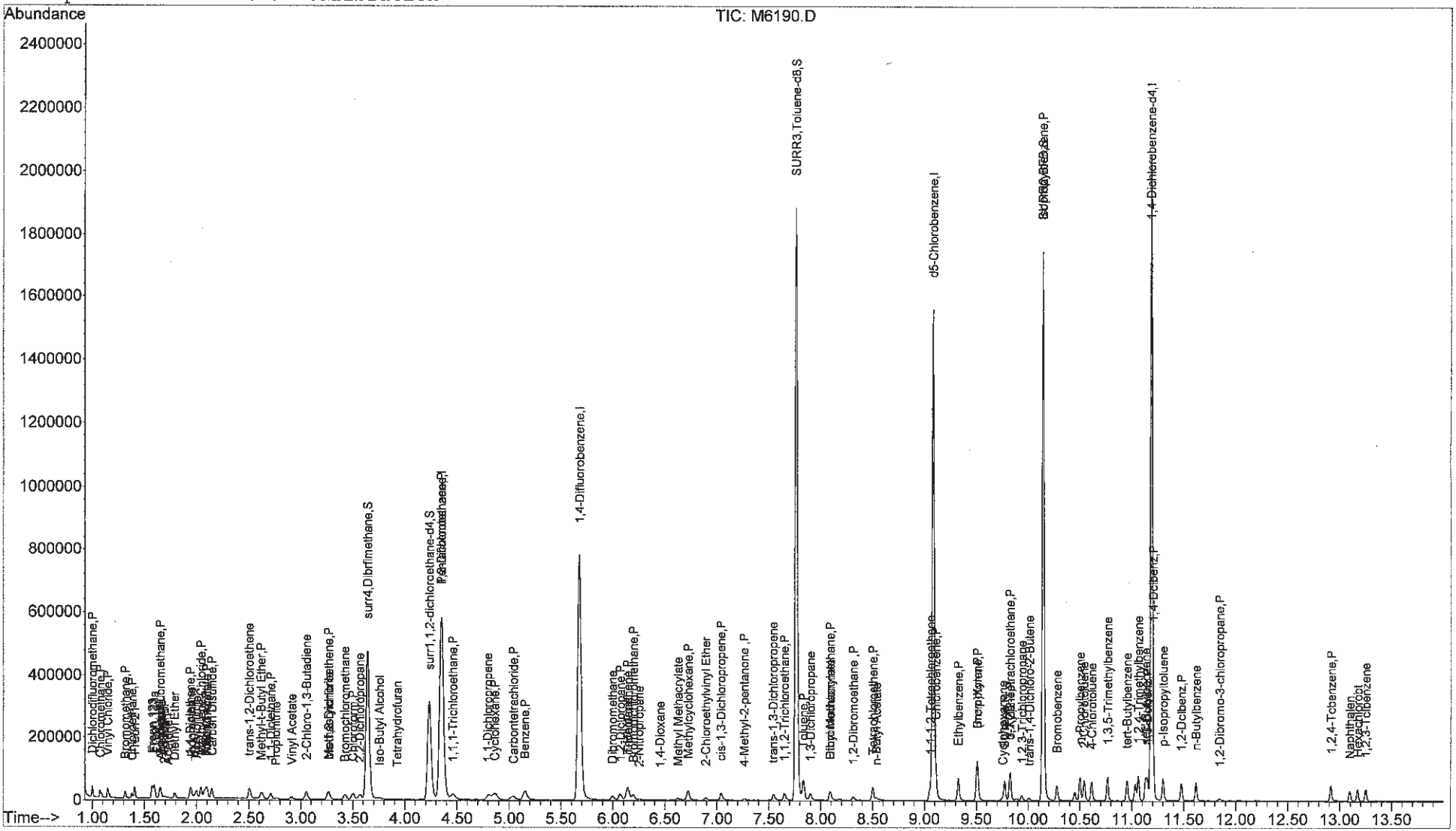
response 22855

Ion	Exp%	Act%
146.00	100	100
148.00	65.00	20.42#
111.00	35.90	8.90#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6190.D Vial: 13
Acq On : 30 Nov 2015 2:52 pm Operator: D.Lipani
Sample : STD #3 - 2.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:59 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:48:10 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:14 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	643258	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	874441	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	782415	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	464923	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	390705	71.23	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 142.46%#			
42) surr1,1,2-dichloroethane-d	4.23	65	319325	71.38	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 142.76%#			
62) SURR3,Toluene-d8	7.76	98	1334916	73.29	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 146.58%#			
82) SURR2,BFB	10.14	95	488668	69.77	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 139.54%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	37061	5.32	ug/L	98
3) Chloromethane	1.07	50	40006	5.41	ug/L	99
4) Vinyl Chloride	1.15	62	41643	5.36	ug/L	93
5) Bromomethane	1.31	94	19791	4.27	ug/L	98
6) Chloroethane	1.38	64	21848	5.59	ug/L	98
7) Freon 21	1.41	67	50400	5.19	ug/L	100
8) Freon 123	1.57	83	42523	4.93	ug/L	98
9) Freon 123a	1.59	67	34130m	5.17	ug/L	
10) Acrolein	1.65	56	13680	24.05	ug/L	96
11) Trichlorofluoromethane	1.65	101	43107	5.34	ug/L	98
12) Acetonitrile	1.66	41	11449	27.29	ug/L	88
13) 2-Propanol	1.69	45	15508	98.65	ug/L	94
14) Acetone	1.72	43	3671	4.76	ug/L	88
15) Diethyl Ether	1.79	59	18640	5.40	ug/L	95
16) 1,1-Diclethene	1.94	96	27107	5.15	ug/L	93
17) Iodomethane	1.96	142	27516	4.31	ug/L	98
18) TBA	1.98	59	24810	97.69	ug/L	97
19) Acrylonitrile	2.00	53	30166	26.11	ug/L	99
20) Methylene Chloride	2.04	84	30925	5.24	ug/L	98
21) Freon 113	2.08	101	27917	5.32	ug/L	95
22) Methyl Acetate	2.10	43	12922	5.55	ug/L	96
23) Allyl Chloride	2.10	76	12709m	5.08	ug/L	
24) Carbon Disulfide	2.15	76	89325	5.24	ug/L	100
25) trans-1,2-Dichloroethene	2.51	96	30994	5.34	ug/L	91
26) Methyl-t-Butyl Ether	2.62	73	55468	5.07	ug/L	96
27) 1,1-Diclethane	2.71	63	45385	5.15	ug/L	96
28) Propionitrile	2.76	54	10079	26.36	ug/L	98
29) Vinyl Acetate	2.91	43	37125	4.98	ug/L	95
30) 2-Chloro-1,3-Butadiene	3.05	53	41598	5.18	ug/L	84
31) 2-Butanone	3.19	43	5352	4.62	ug/L	96
32) Methacrylonitrile	3.27	67	6044	4.89	ug/L	97
33) cis-1,2-Dichloroethene	3.26	96	29622	5.24	ug/L	98
34) Bromochloromethane	3.43	128	14323	5.27	ug/L	90
35) Chloroform	3.50	83	46546	5.22	ug/L	97
36) 2,2-Dichloropropane	3.57	77	33997	4.95	ug/L	97

DL 12/2/15

(#) = qualifier out of range (m) = manual integration
M6191.D W113015.M Tue Dec 01 10:15:08 2015 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:14 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	Tetrahydrofuran	3.91	42	3789m	5.01	ug/L	
38)	1,1,1-Trichloroethane	4.46	97	36611	5.09	ug/L	98
41)	Iso-Butyl Alcohol	3.75	43	9683m	95.16	ug/L	
43)	1,2-Dichloroethane	4.34	62	26758	5.18	ug/L	94
44)	1,1-Dichloropropene	4.80	75	33136	5.18	ug/L	98
45)	Cyclohexane	4.87	56	37375	4.80	ug/L	88
46)	Carbontetrachloride	5.04	119	31593	5.04	ug/L	95
47)	Benzene	5.15	78	99669	5.08	ug/L	97
48)	Dibromomethane	5.99	93	14047	5.26	ug/L	92
49)	1,2-Diclpropane	6.06	63	24997	5.02	ug/L	94
50)	n-Heptane	6.15	43	21220	4.97	ug/L	95
51)	Trichloroethene	6.13	130	30047	5.17	ug/L	98
52)	Bromodichloromethane	6.19	83	31594	5.21	ug/L	99
53)	2-Nitropropane	6.24	41	5218m	9.85	ug/L	
54)	1,4-Dioxane	6.44	88	3063m	105.23	ug/L	
55)	Methyl Methacrylate	6.61	69	9127	4.71	ug/L	92
56)	Methylcyclohexane	6.72	55	24196	4.78	ug/L	98
57)	2-Chloroethylvinyl Ether	6.88	63	10910	5.06	ug/L	94
58)	cis-1,3-Dichloropropene	7.03	75	35492	4.99	ug/L	97
59)	4-Methyl-2-pentanone	7.26	43	11966m	4.62	ug/L	
60)	trans-1,3-Dichloropropene	7.54	75	29946	4.98	ug/L	99
61)	1,1,2-Trichloroethane	7.65	97	19287	5.20	ug/L	98
63)	Toluene	7.83	91	106470	5.18	ug/L	98
65)	1,3-Dichloropropane	7.90	76	28607	5.11	ug/L	97
66)	Ethyl Methacrylate	8.08	69	20956	4.99	ug/L	92
67)	Dibromochloromethane	8.09	129	23584	5.07	ug/L	99
68)	2-Hexanone	8.16	43	7981	4.77	ug/L	100
69)	1,2-Dibromoethane	8.31	107	19176	5.14	ug/L	97
70)	n-Butyl Acetate	8.53	43	21747	4.74	ug/L	92
71)	Tetrachloroethene	8.50	164	23527	4.96	ug/L	97
72)	1,1,1,2-Tetrachloroethane	9.05	131	25523	5.10	ug/L	91
73)	Chlorobenzene	9.11	112	70135	5.06	ug/L	93
74)	Ethylbenzene	9.32	106	36585	5.13	ug/L	96
75)	Bromoform	9.51	173	14273	4.84	ug/L	99
76)	(m+p)Xylene	9.50	106	92227	10.61	ug/L	97
77)	o-Xylene	9.82	106	46400	5.17	ug/L	97
78)	Cyclohexanone	9.75	55	10230	99.87	ug/L	93
79)	Styrene	9.77	104	73284	5.15	ug/L	98
80)	trans-1,4-Dichloro-2-Buten	10.00	75	7410m	5.17	ug/L	
81)	Isopropylbenzene	10.14	105	111442	5.10	ug/L	98
84)	1,1,2,2-Tetrachloroethane	9.82	83	22701	5.34	ug/L	98
85)	1,2,3-Trichloropropane	9.94	75	14078	4.86	ug/L	99
86)	Bromobenzene	10.28	156	33436	5.19	ug/L	98
87)	n-Propylbenzene	10.50	91	131049	5.29	ug/L	98
88)	2-Chlorotoluene	10.54	91	78741	5.17	ug/L	96
89)	4-Chlorotoluene	10.61	91	80214	4.99	ug/L	99
90)	1,3,5-Trimethylbenzene	10.77	105	88815	5.27	ug/L	99
91)	tert-Butylbenzene	10.96	119	78362	5.35	ug/L	99
92)	1,2,4-Trimethylbenzene	11.06	105	95198	5.29	ug/L	99
93)	sec-Butylbenzene	11.13	105	107132	5.19	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:14 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Initial Calibration
DataAcq Meth : W113015

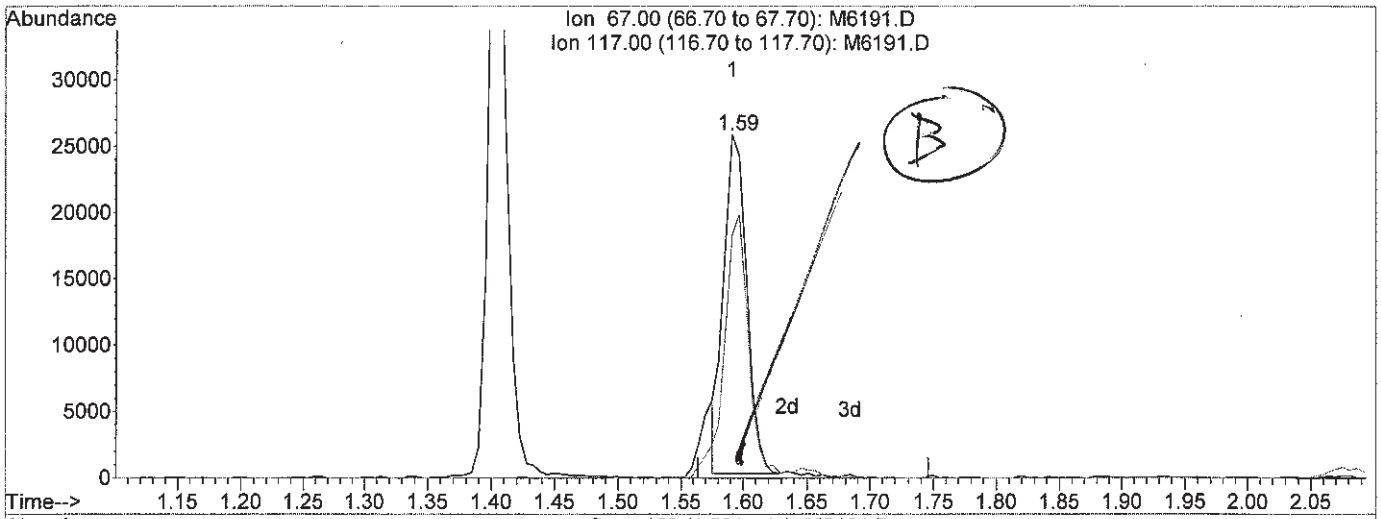
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
94)	1,3-Dclbenz	11.15	146	61756	5.17	ug/L		99
95)	1,4-Dclbenz	11.21	146	63429	5.26	ug/L		94
96)	p-Isopropyltoluene	11.30	119	90625	5.37	ug/L		99
97)	1,2-Dclbenz	11.47	146	58852	5.29	ug/L		96
98)	n-Butylbenzene	11.61	91	79926	5.37	ug/L		96
99)	1,2-Dibromo-3-chloropropan	11.84	75	3111	5.01	ug/L		96
100)	Nitrobenzene	12.03	77	1586	10.50	ug/L	#	63
101)	1,2,4-Tcbenzene	12.91	180	33566	5.22	ug/L		97
102)	Naphthalen	13.09	128	57908	5.12	ug/L		100
103)	Hexachlorobt	13.17	225	15915	5.17	ug/L		98
104)	1,2,3-Tclbenzene	13.25	180	28351	5.34	ug/L		99

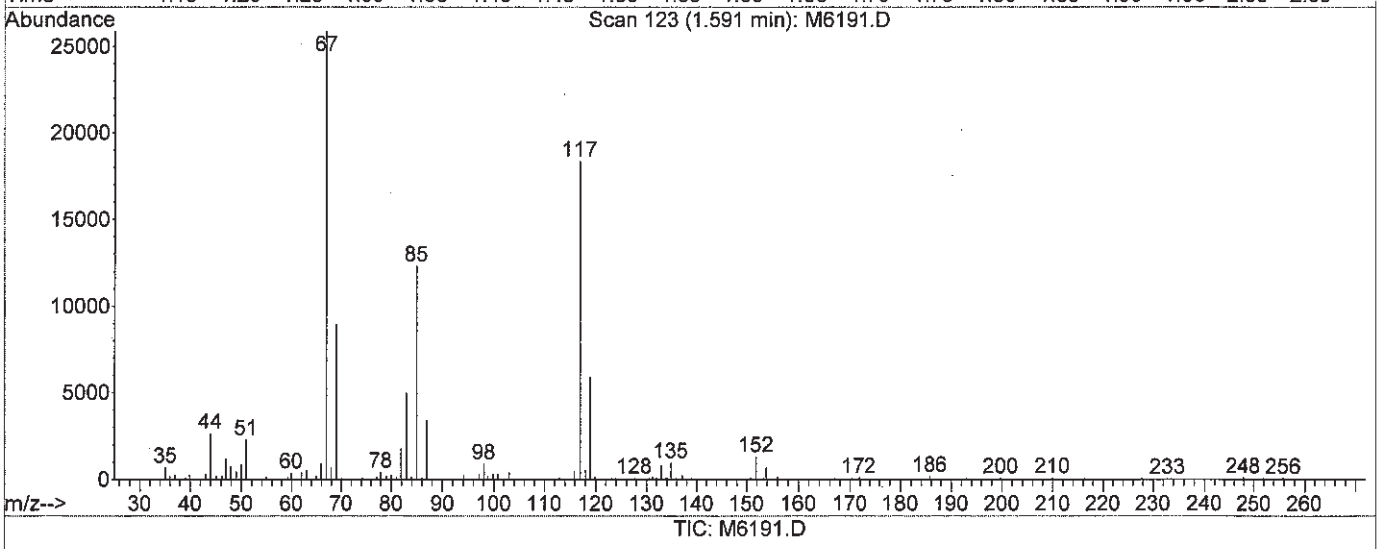
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:08 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Multiple Level Calibration





TIC: M6191.D

(9) Freon 123a

1.59min 4.95ug/L

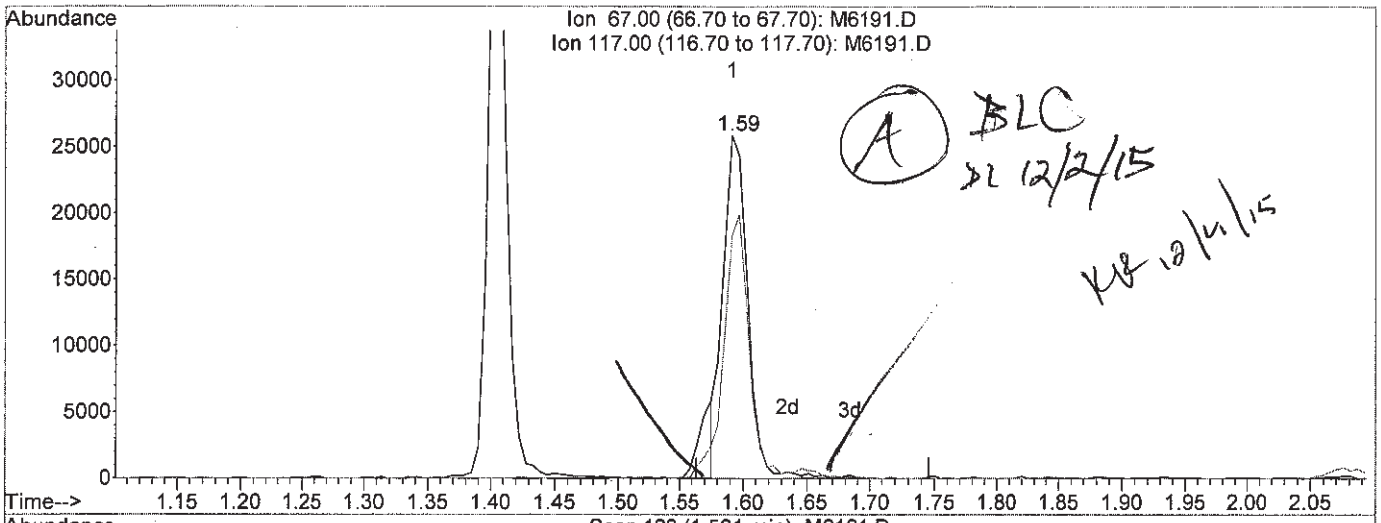
response 32673

Ion	Exp%	Act%
67.00	100	100
117.00	82.00	71.00
0.00	0.00	0.00
0.00	0.00	0.00

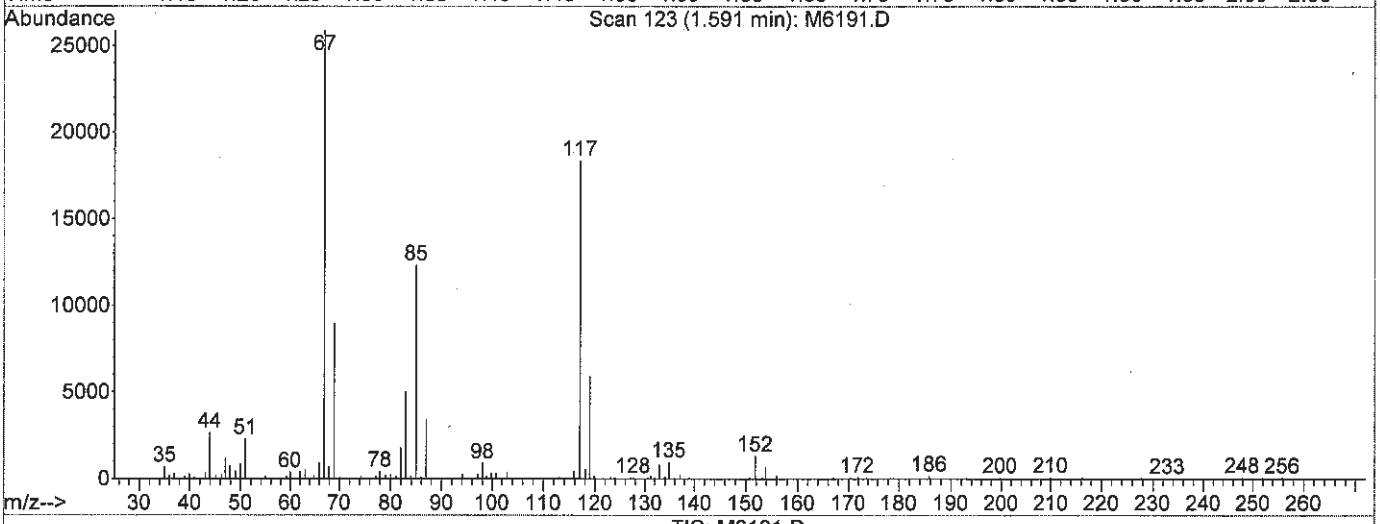
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:08 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Multiple Level Calibration



A BLC 12/2/15 KB 12/4/15



TIC: M6191.D

(9) Freon 123a

1.59min 5.17ug/L m

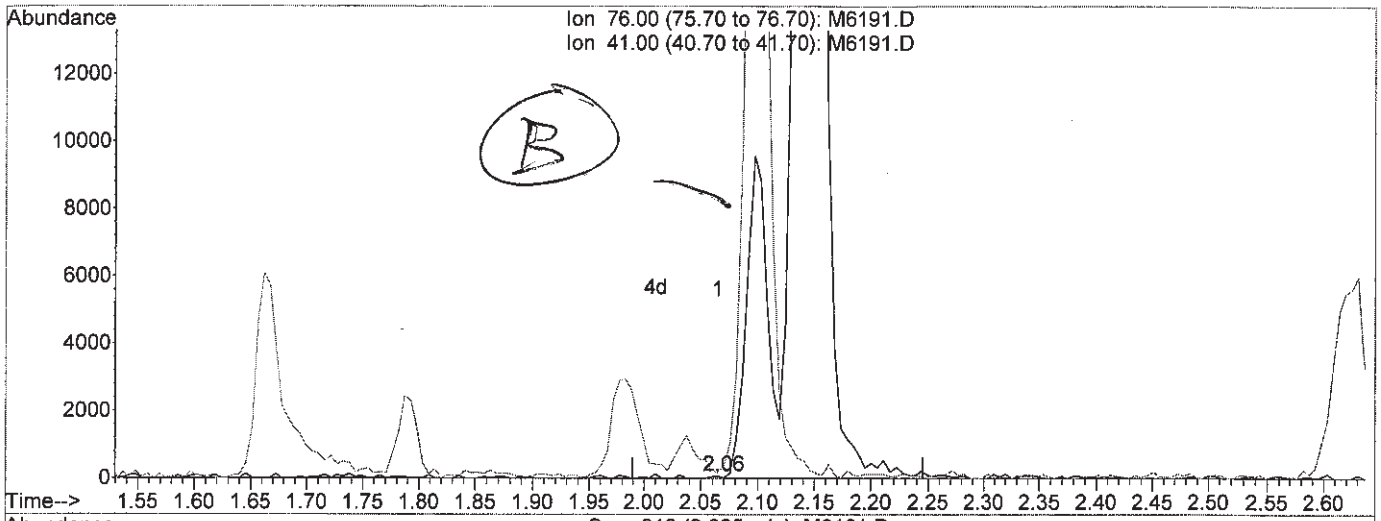
response 34130

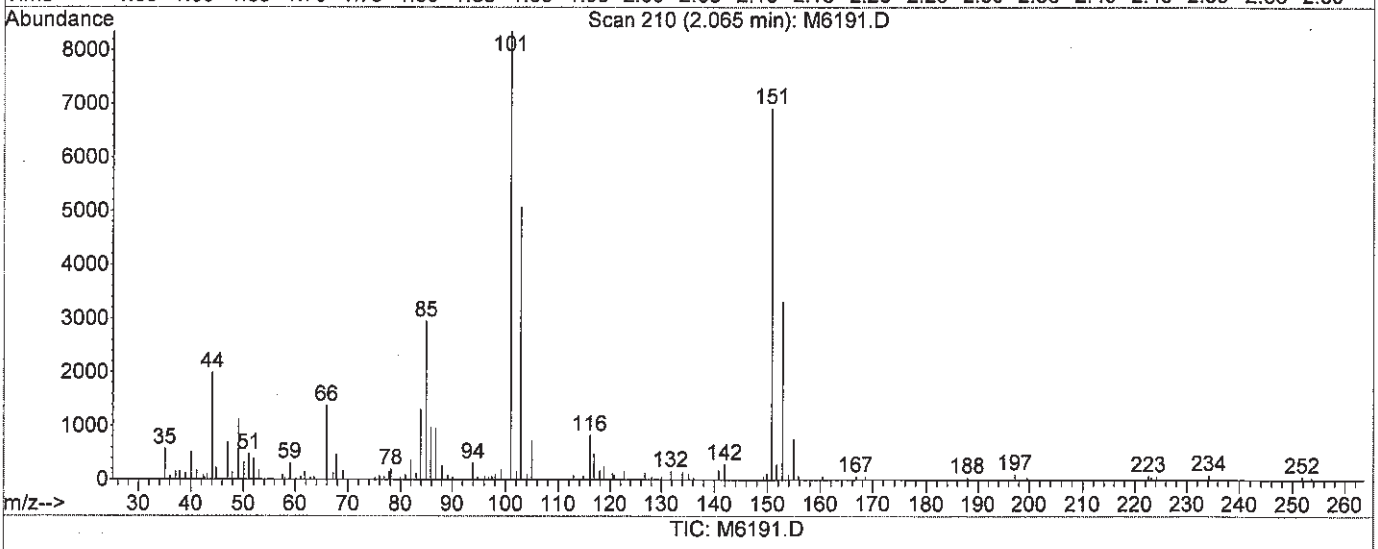
Ion	Exp%	Act%
67.00	100	100
117.00	82.00	71.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:08 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Multiple Level Calibration





TIC: M6191.D

(23) Allyl Chloride

2.06min 0.01ug/L

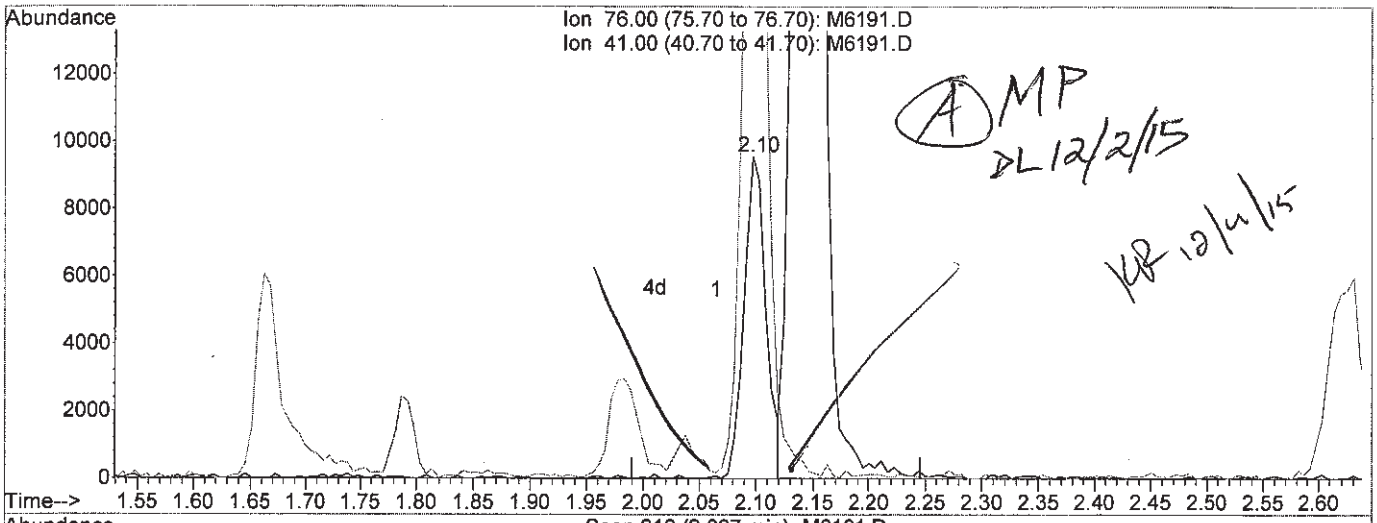
response 35

Ion	Exp%	Act%
76.00	100	100
41.00	250.90	238.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

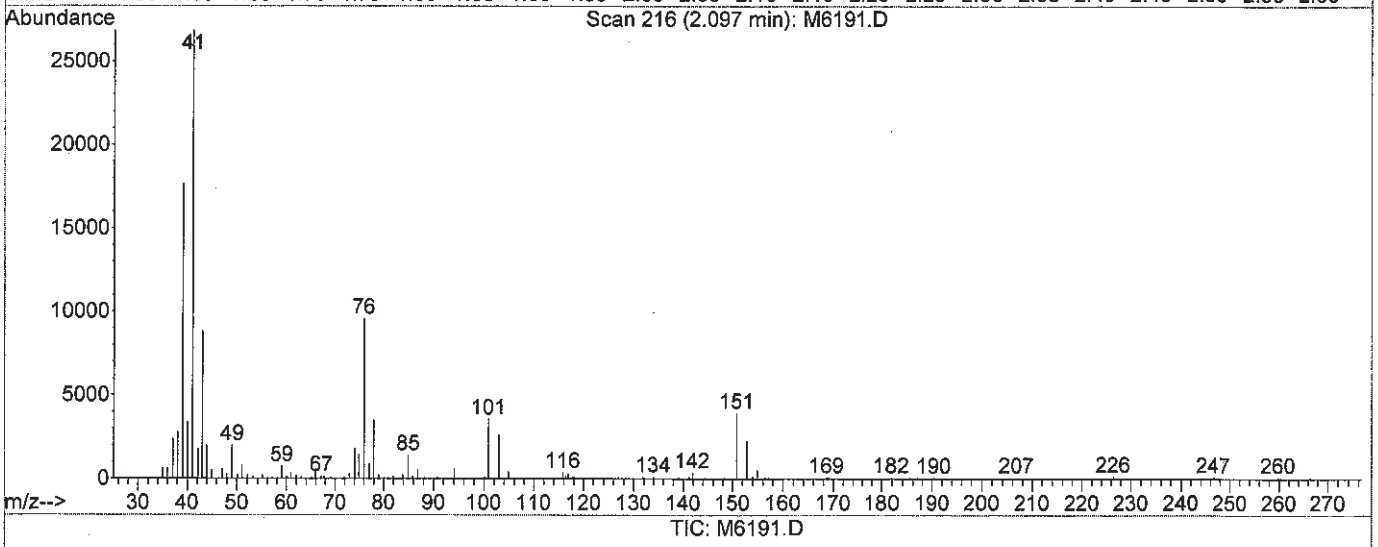
Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:09 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Multiple Level Calibration



AMP 12/2/15

KB 12/4/15



TIC: M6191.D

(23) Allyl Chloride

2.10min 5.08ug/L m

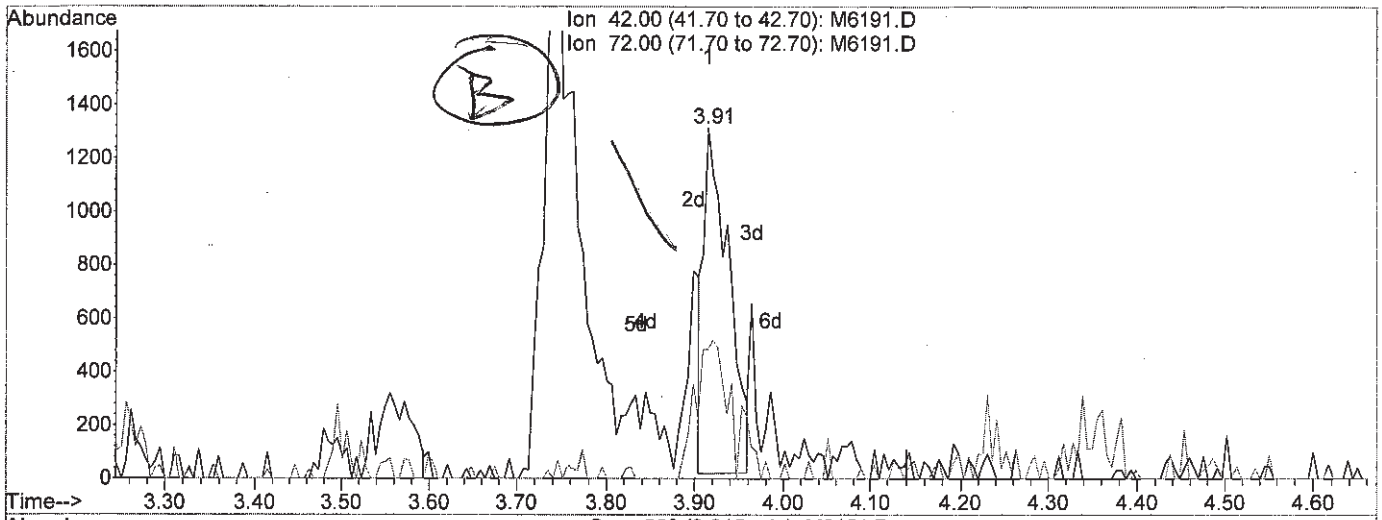
response 12709

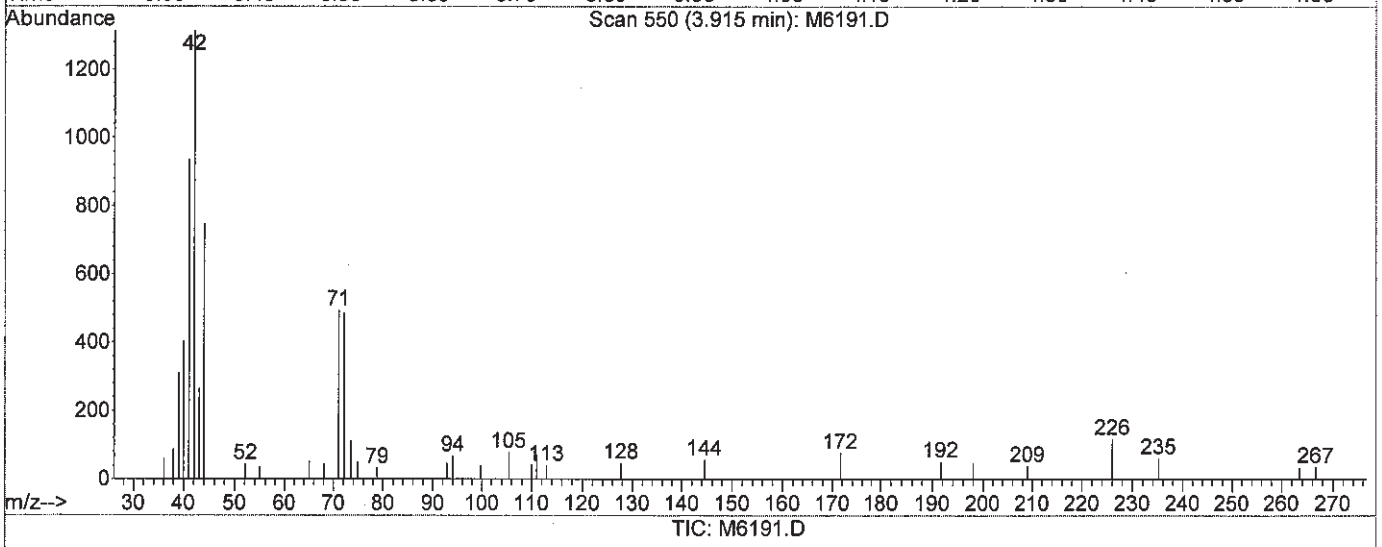
Ion	Exp%	Act%
76.00	100	100
41.00	250.90	280.73#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:09 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration





TIC: M6191.D

(37) Tetrahydrofuran

3.91min 3.33ug/L

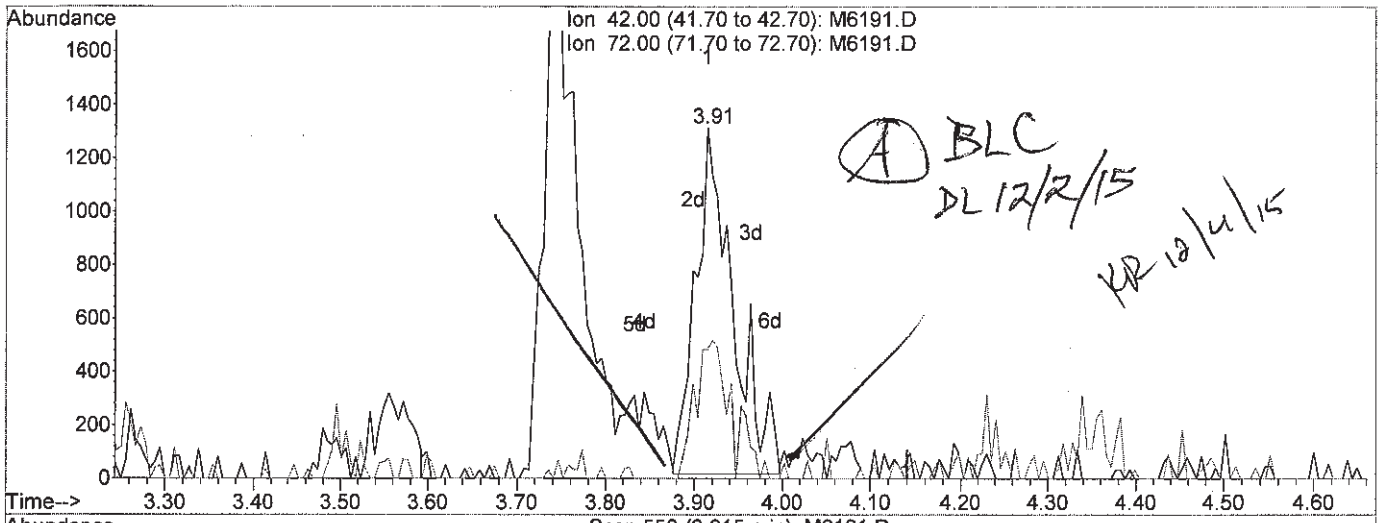
response 2517

Ion	Exp%	Act%
42.00	100	100
72.00	45.40	36.86
0.00	0.00	0.00
0.00	0.00	0.00

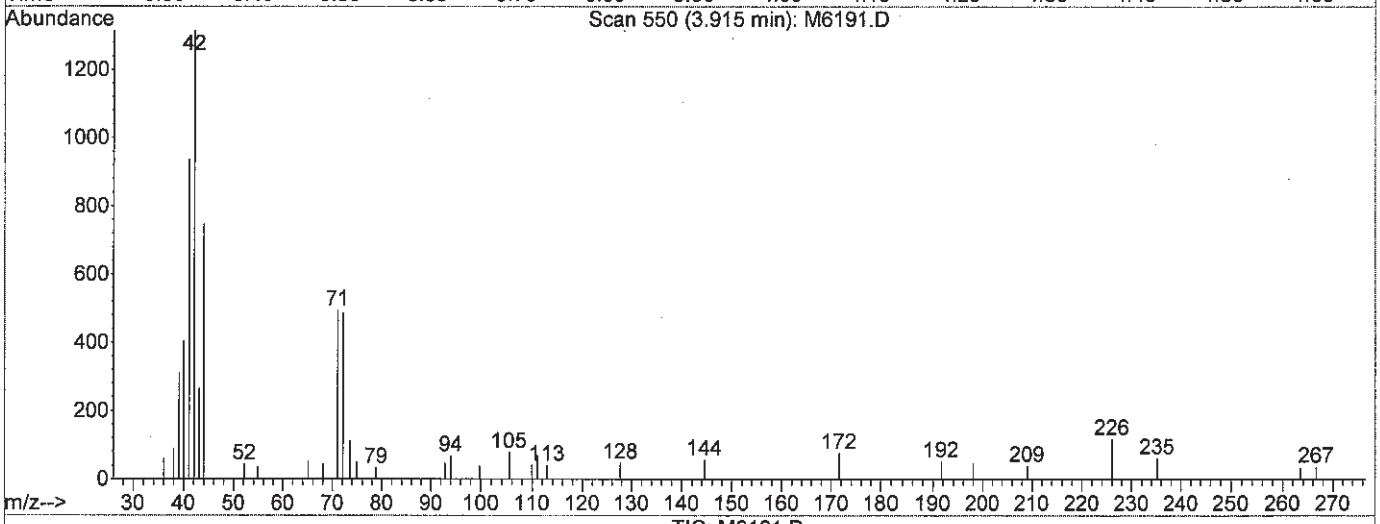
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:10 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration



A BLC DL 12/2/15 KR 12/4/15



TIC: M6191.D

(37) Tetrahydrofuran

3.91min 5.01ug/L m

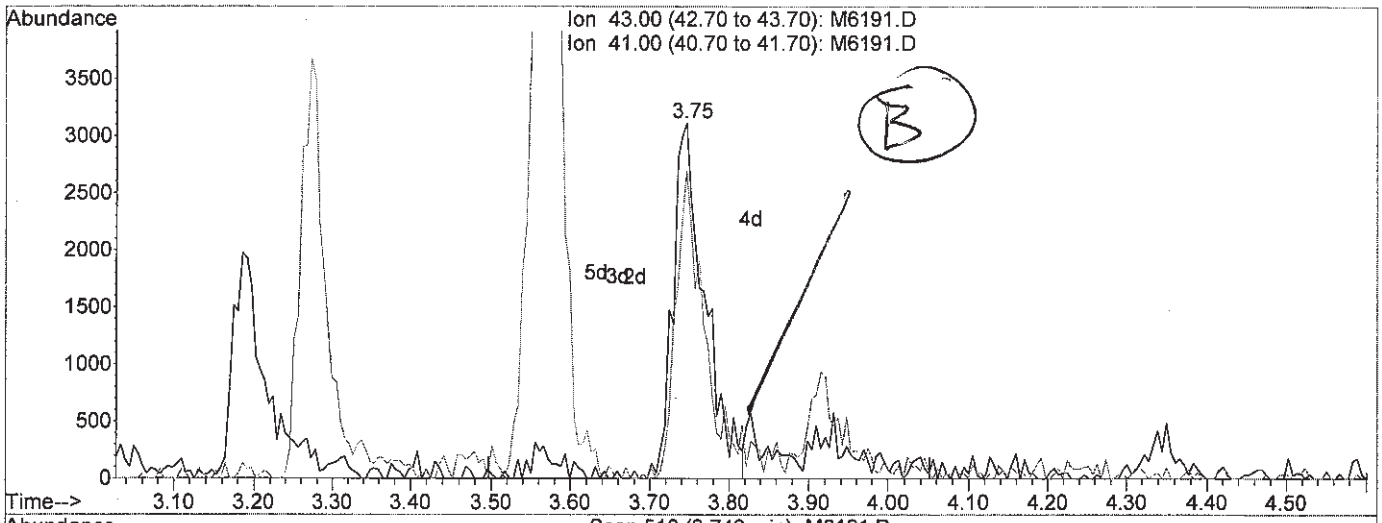
response 3789

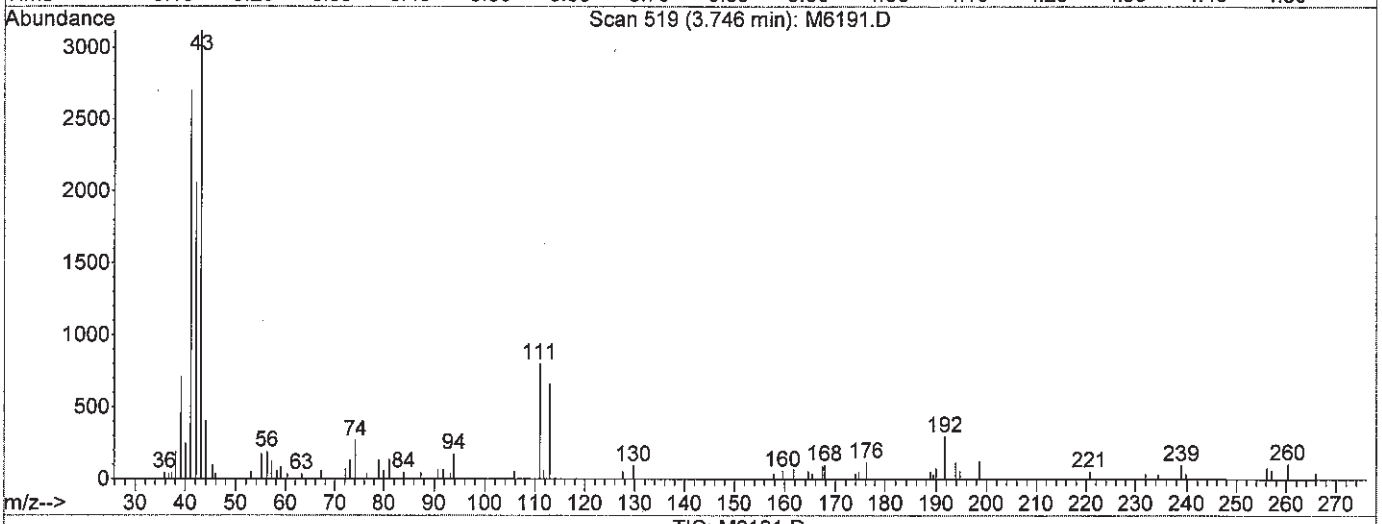
Ion	Exp%	Act%
42.00	100	100
72.00	45.40	36.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:10 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration





TIC: M6191.D

(41) Iso-Butyl Alcohol

3.75min 84.72ug/L

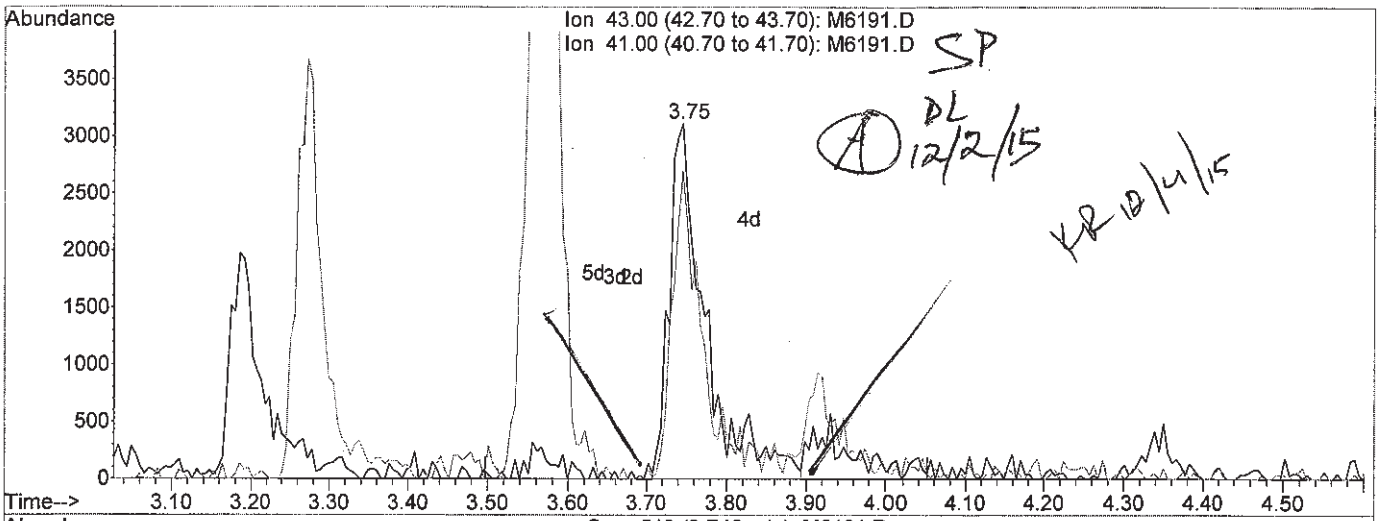
response 8621

Ion	Exp%	Act%
43.00	100	100
41.00	79.60	86.57
0.00	0.00	0.00
0.00	0.00	0.00

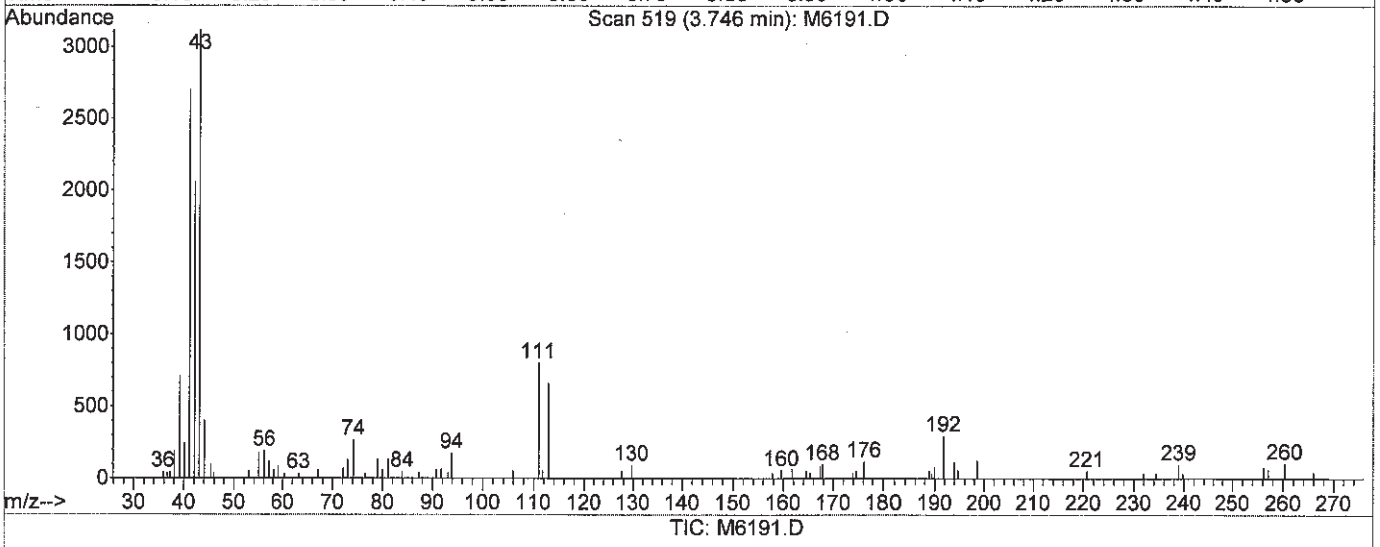
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:11 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration



SP
DL 12/2/15
KR 12/4/15



TIC: M6191.D

(41) Iso-Butyl Alcohol

3.75min 95.16ug/L m

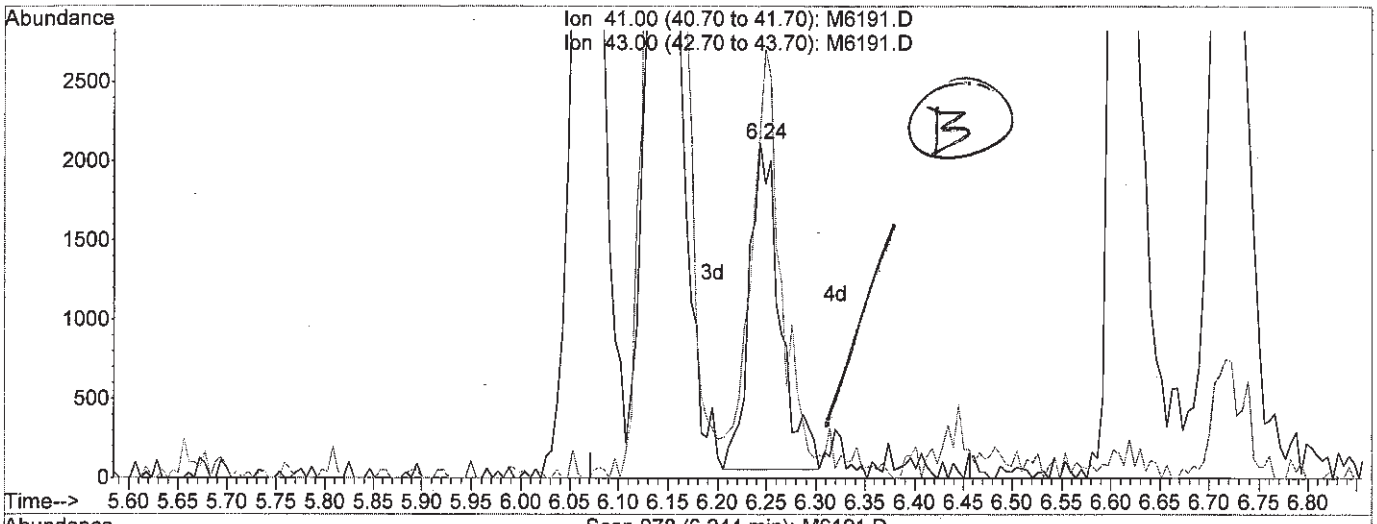
response 9683

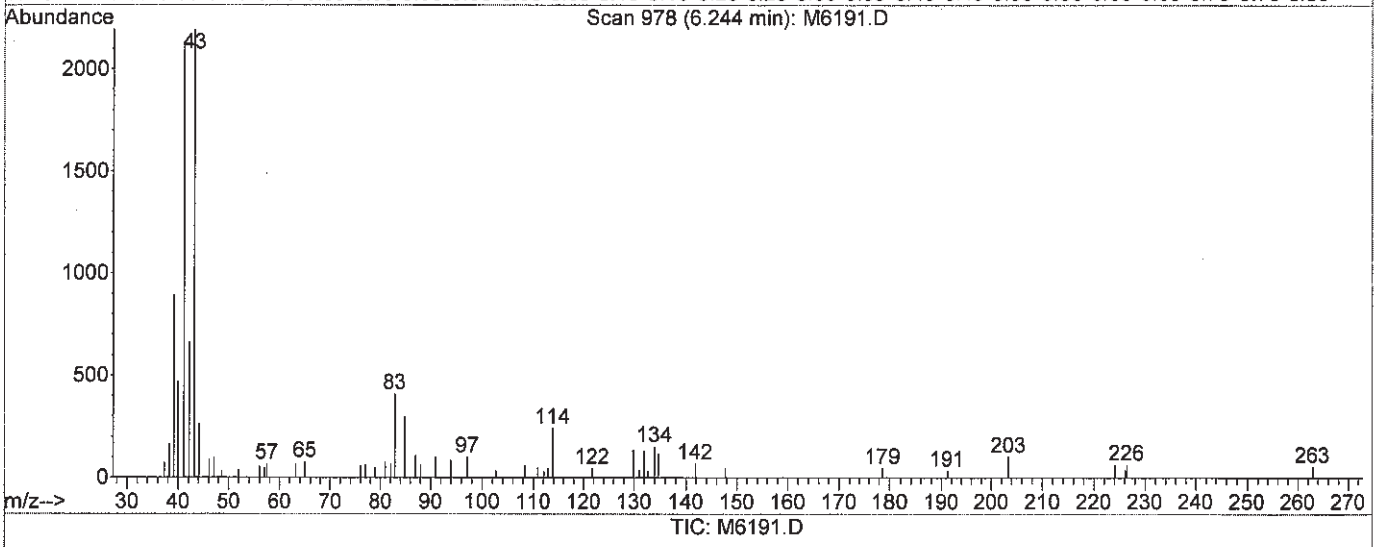
Ion	Exp%	Act%
43.00	100	100
41.00	79.60	86.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:11 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration





TIC: M6191.D

(53) 2-Nitropropane

6.24min 8.51ug/L

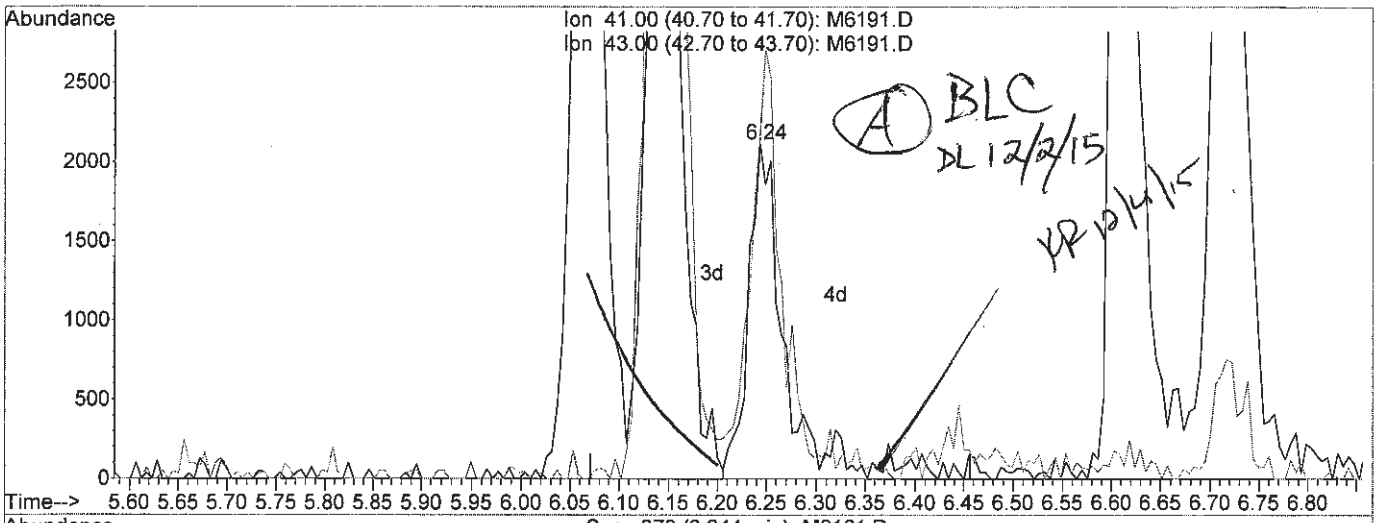
response 4508

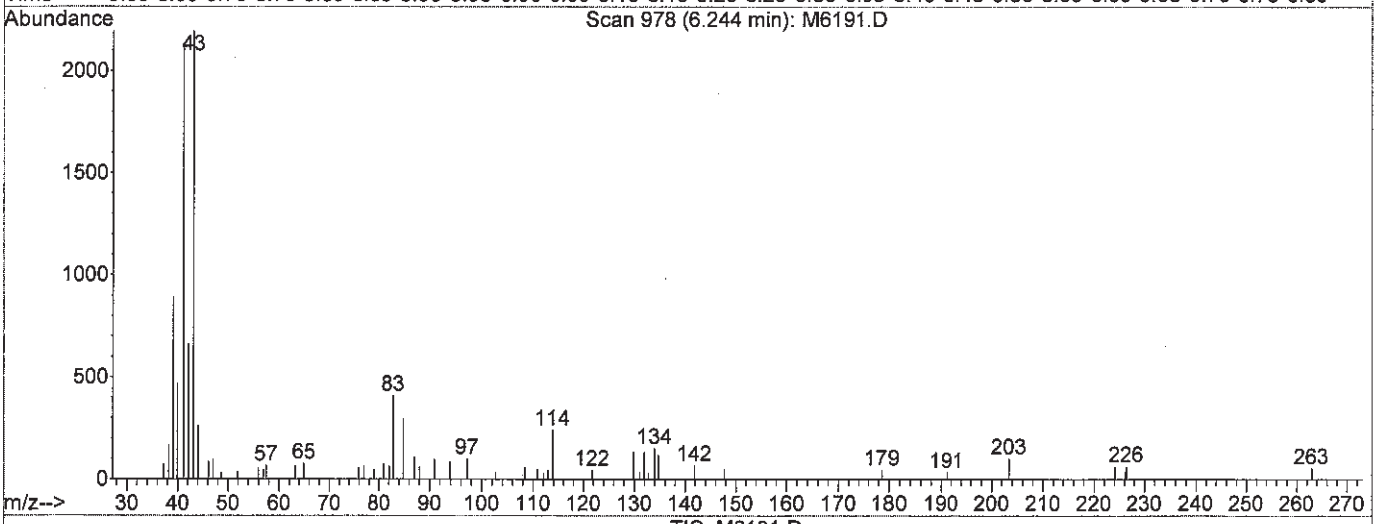
Ion	Exp%	Act%
41.00	100	100
43.00	121.90	103.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:12 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration





TIC: M6191.D

(53) 2-Nitropropane

6.24min 9.85ug/L m

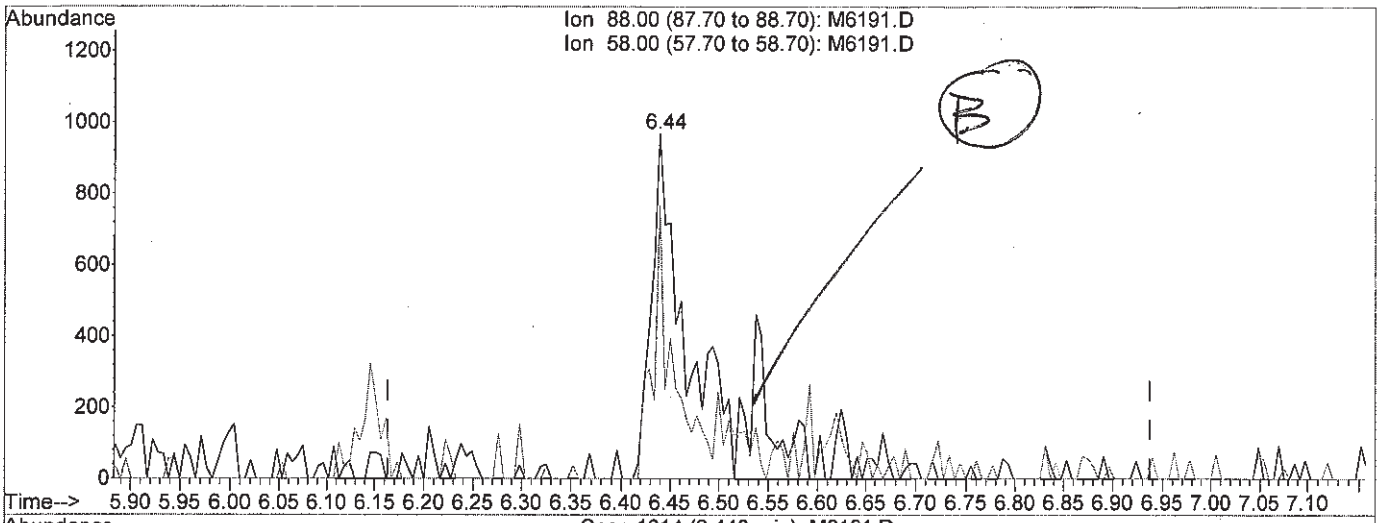
response 5218

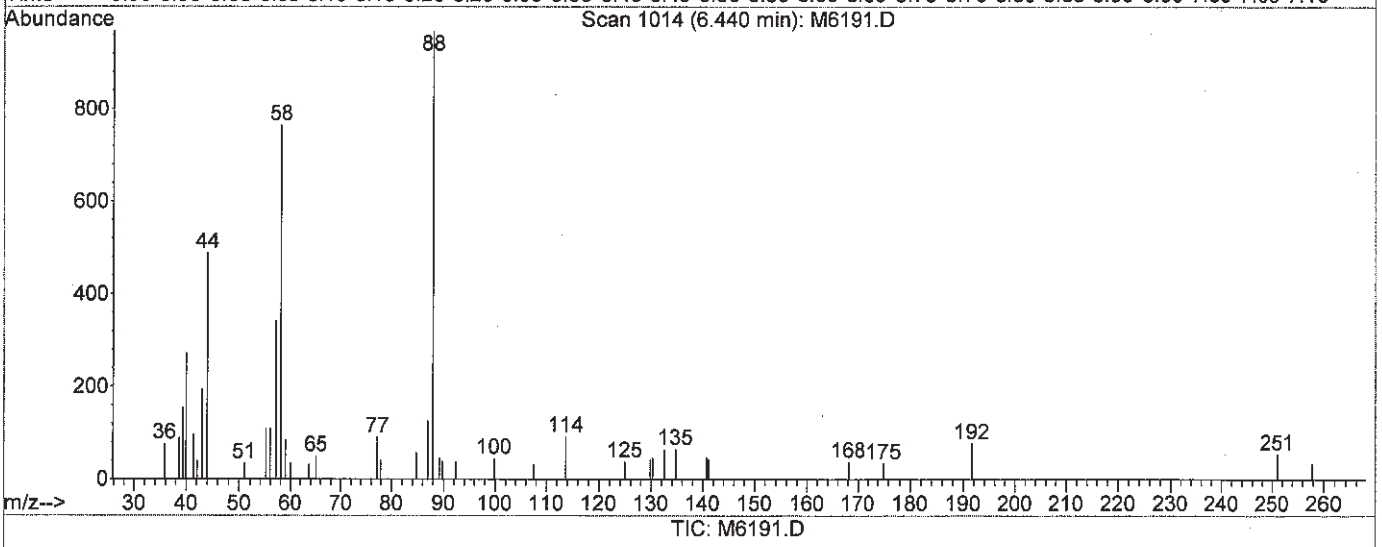
Ion	Exp%	Act%
41.00	100	100
43.00	121.90	103.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:12 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration





TIC: M6191.D

(54) 1,4-Dioxane

6.44min 80.22ug/L

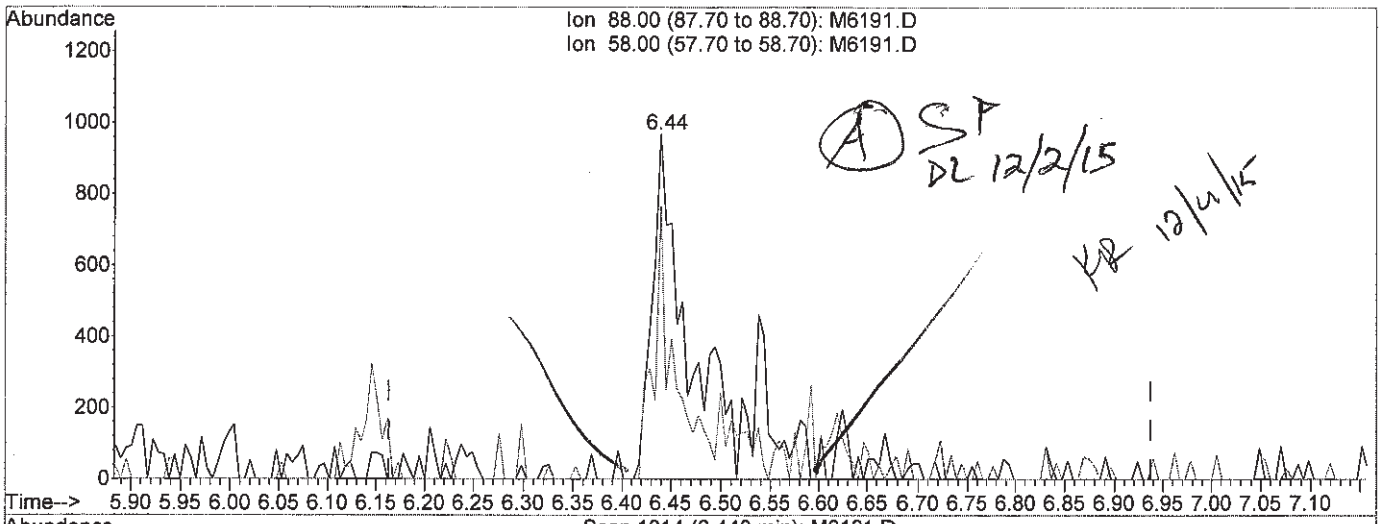
response 2335

Ion	Exp%	Act%
88.00	100	100
58.00	60.40	78.93
0.00	0.00	0.00
0.00	0.00	0.00

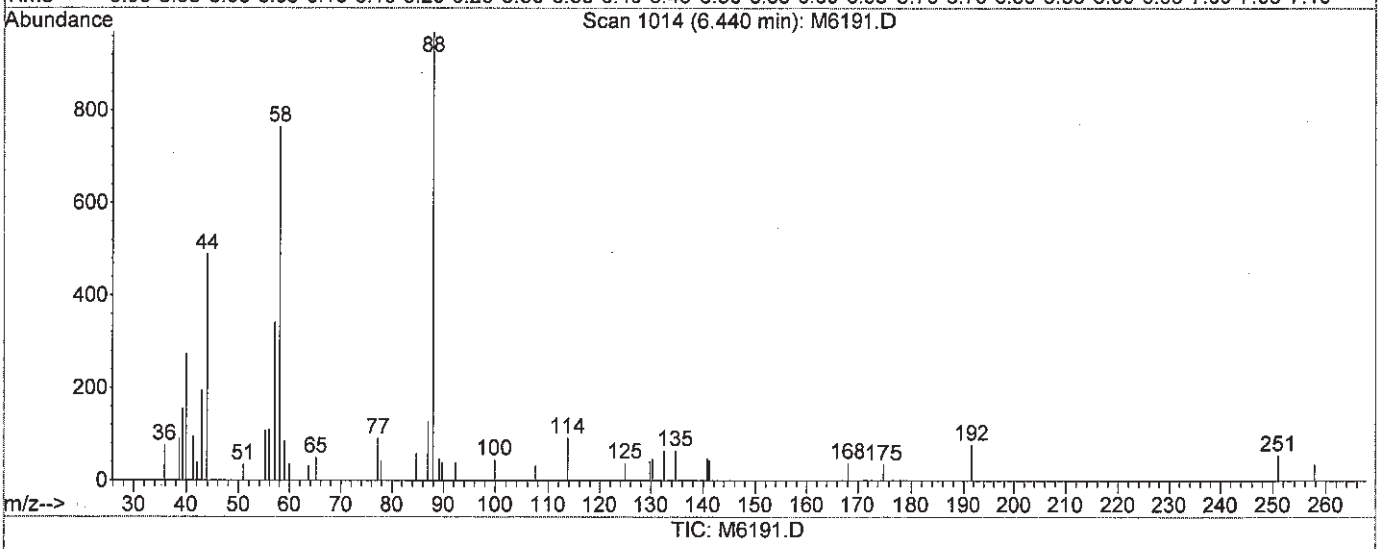
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:12 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration



SP DL 12/2/15 KB 12/4/15



TIC: M6191.D

(54) 1,4-Dioxane

6.44min 105.23ug/L m

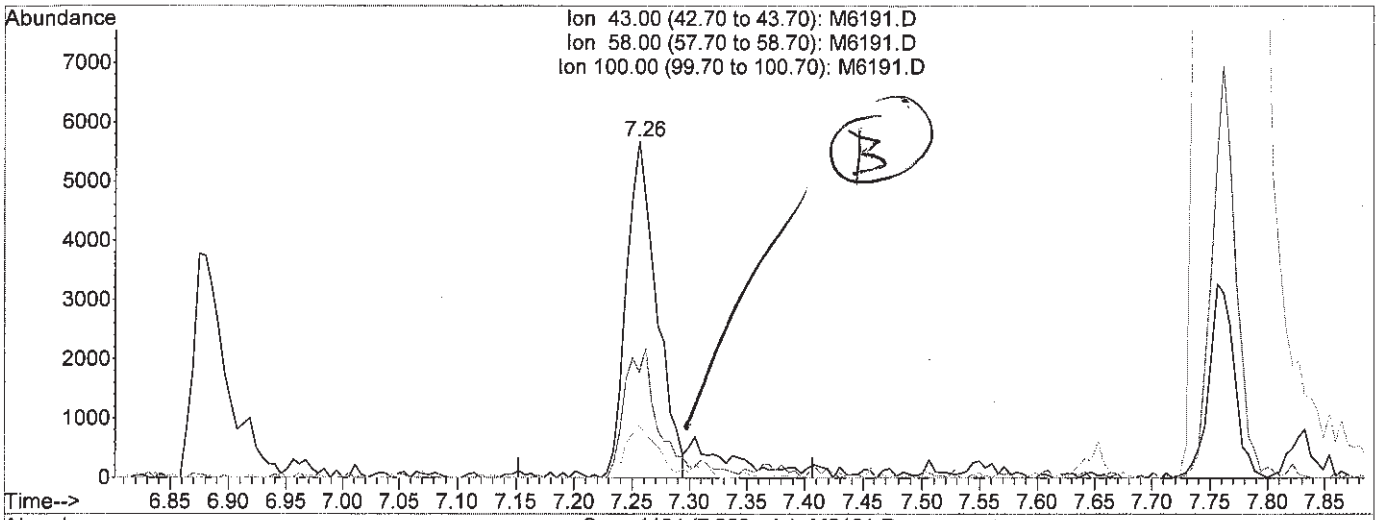
response 3063

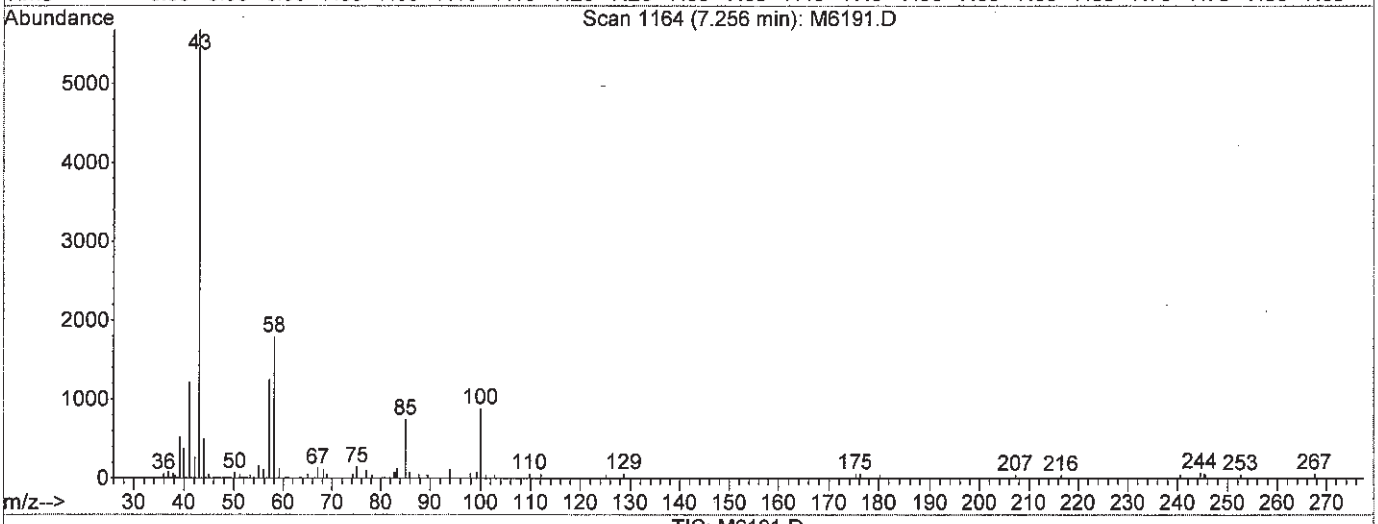
Ion	Exp%	Act%
88.00	100	100
58.00	60.40	78.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:12 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration





TIC: M6191.D

(59) 4-Methyl-2-pentanone (P)

7.26min 3.95ug/L

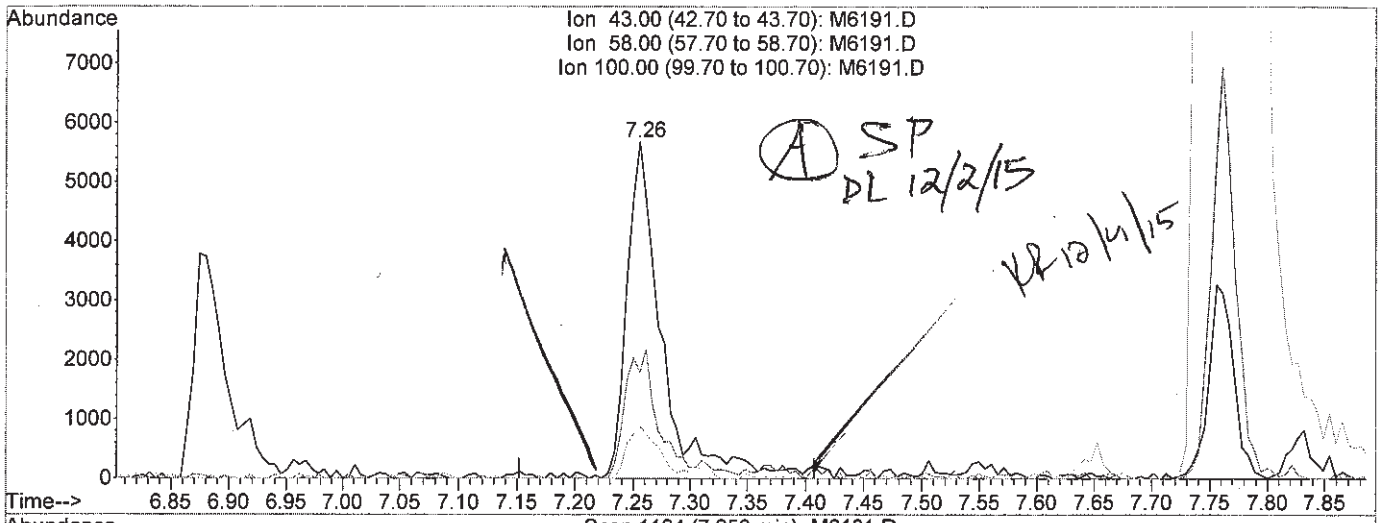
response 10217

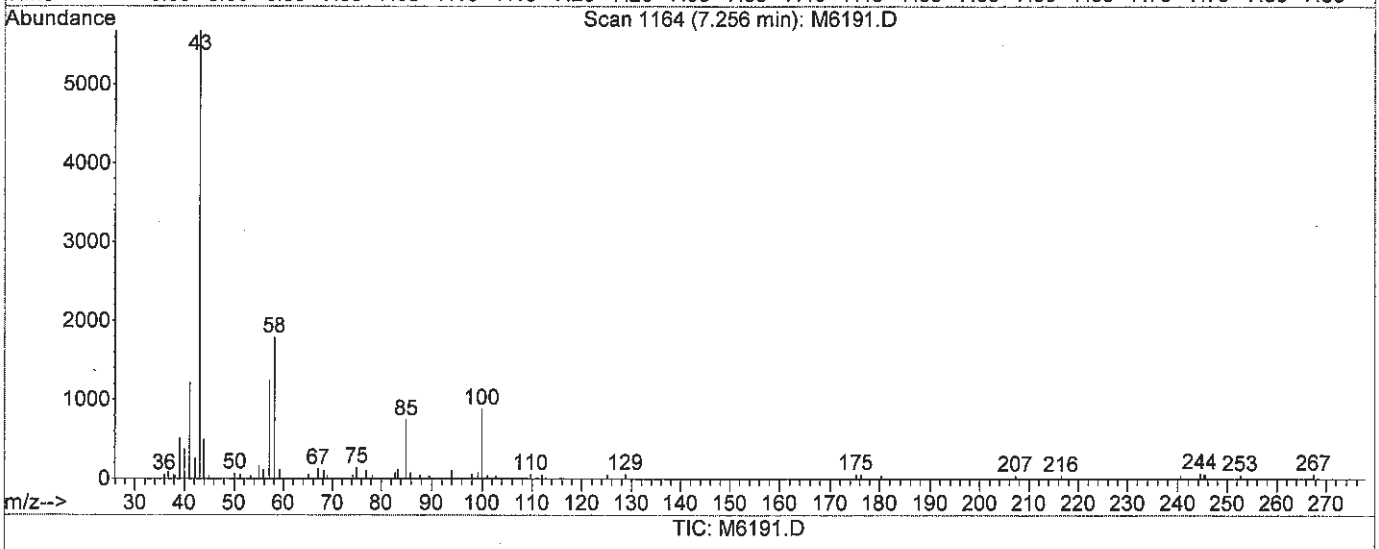
Ion	Exp%	Act%
43.00	100	100
58.00	38.80	41.17
100.00	13.20	16.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:13 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Single Level Calibration





TIC: M6191.D

(59) 4-Methyl-2-pentanone (P)

7.26min 4.62ug/L m

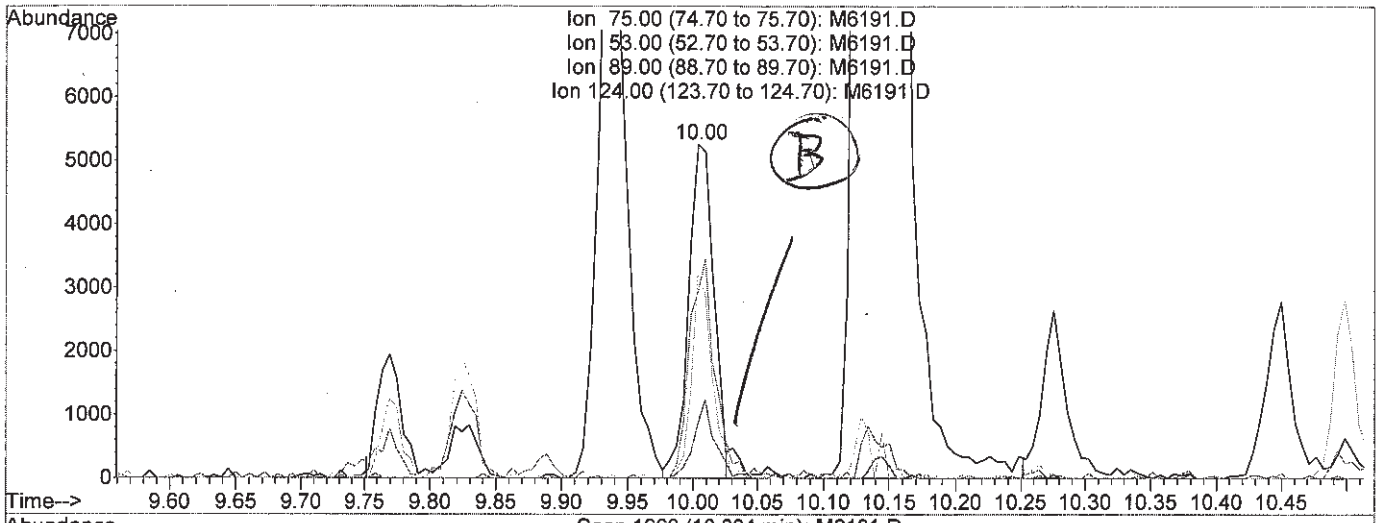
response 11966

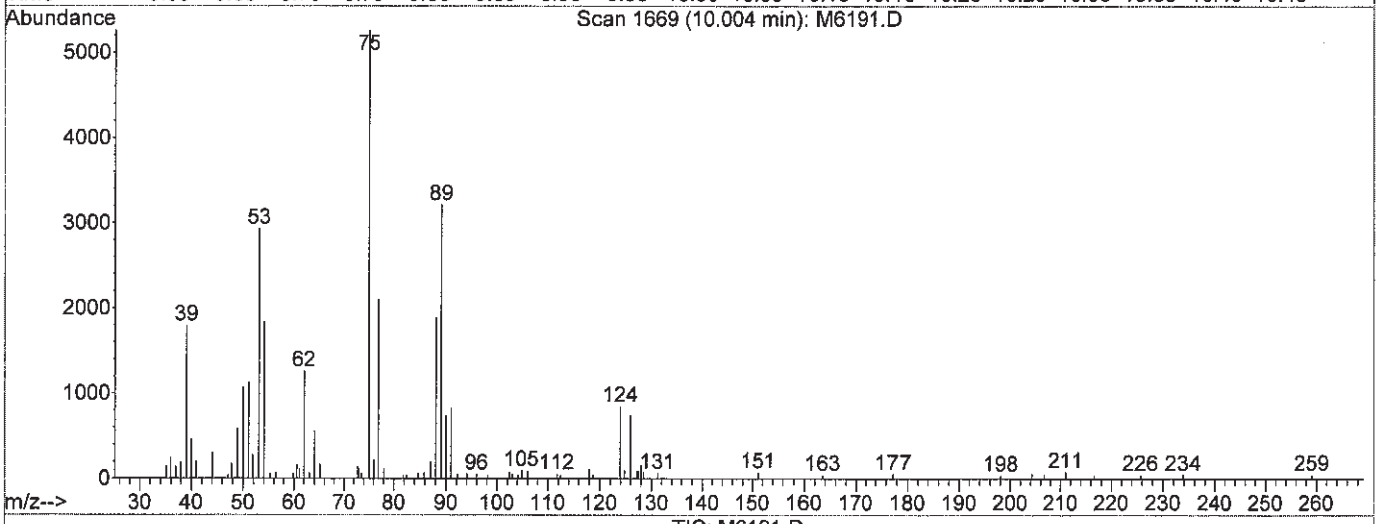
Ion	Exp%	Act%
43.00	100	100
58.00	38.80	35.15
100.00	13.20	14.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:13 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Multiple Level Calibration





TIC: M6191.D

(80) trans-1,4-Dichloro-2-Butene

10.00min 4.95ug/L

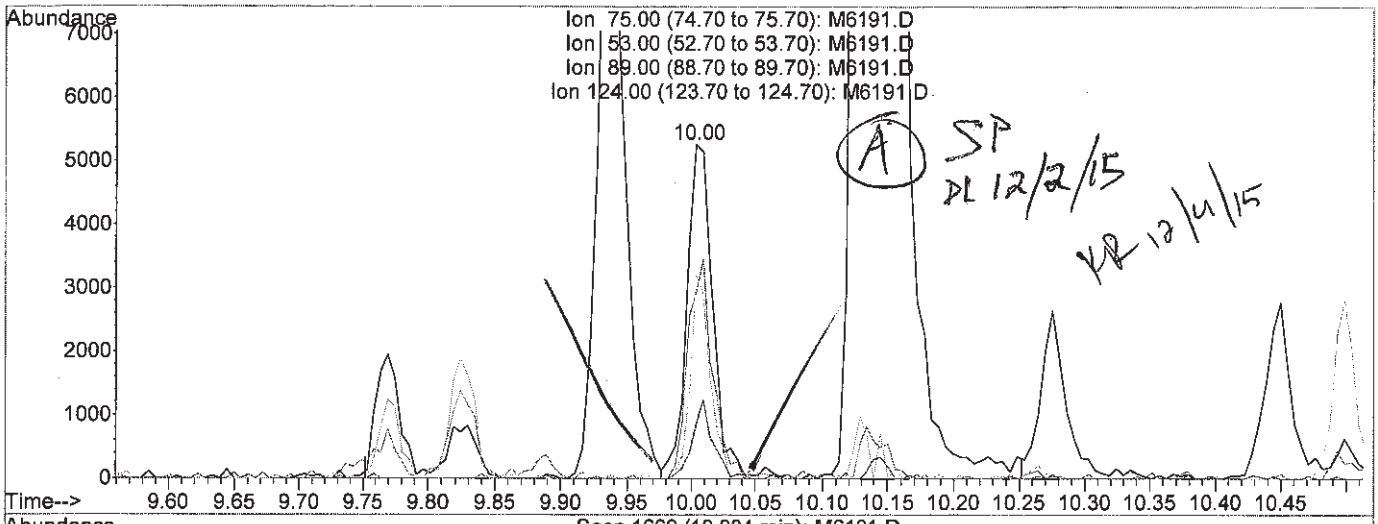
response 7095

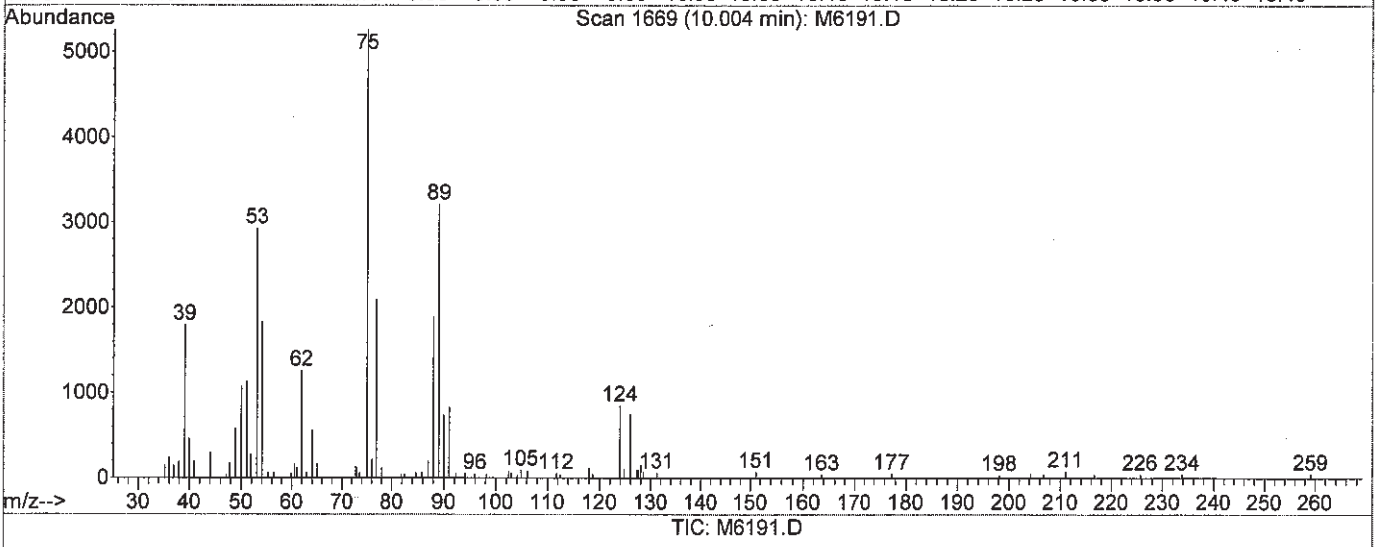
Ion	Exp%	Act%
75.00	100	100
53.00	65.30	55.61
89.00	50.50	61.03
124.00	19.60	16.01

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:14 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Multiple Level Calibration





TIC: M6191.D

(80) trans-1,4-Dichloro-2-Butene

10.00min 5.17ug/L m

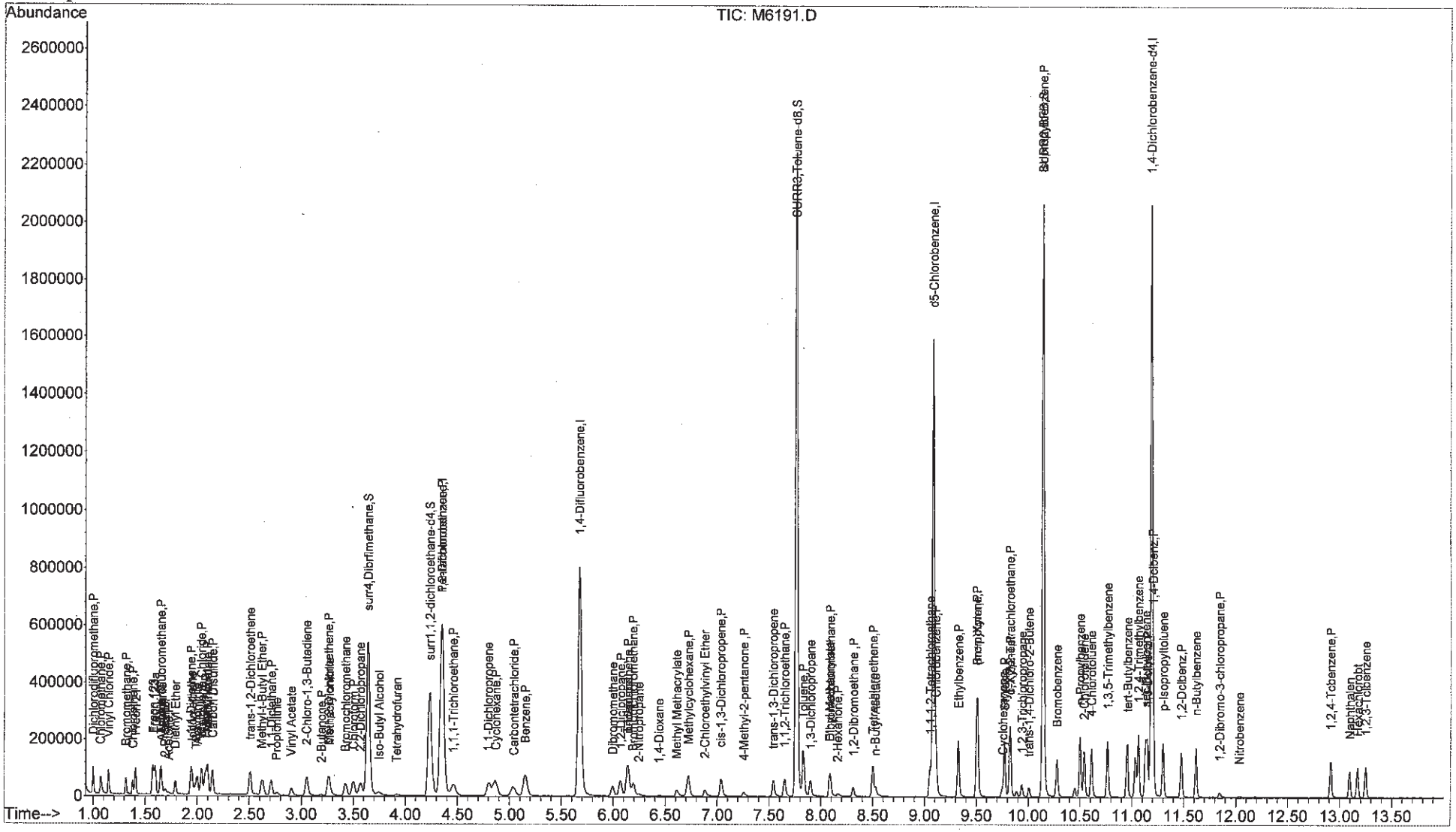
response 7410

Ion	Exp%	Act%
75.00	100	100
53.00	65.30	55.61
89.00	50.50	61.03
124.00	19.60	16.01

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6191.D Vial: 14
Acq On : 30 Nov 2015 3:26 pm Operator: D.Lipani
Sample : STD #4 - 5.0 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:14 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:59:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6192.D Vial: 15
Acq On : 30 Nov 2015 4:02 pm Operator: D.Lipani
Sample : STD #5 - 20 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:15 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:15:20 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	4.35	168	644685	50.00	ug/L		0.00
39) 1,4-Difluorobenzene	5.67	114	878481	50.00	ug/L		0.00
64) d5-Chlorobenzene	9.08	117	793638	50.00	ug/L		0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	469272	50.00	ug/L		0.00
System Monitoring Compounds							
40) surr4,Dibrflmethane	3.64	113	549718	99.76	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 199.52%#				
42) surr1,1,2-dichloroethane-d	4.23	65	452338	100.65	ug/L		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 201.30%#				
62) SURR3,Toluene-d8	7.76	98	1814236	99.14	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 198.28%#				
82) SURR2,BFB	10.14	95	683509	96.21	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 192.42%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.00	85	145633	20.86	ug/L		98
3) Chloromethane	1.07	50	149712	20.19	ug/L		99
4) Vinyl Chloride	1.15	62	163084	20.95	ug/L		98
5) Bromomethane	1.32	94	81812	17.62	ug/L		96
6) Chloroethane	1.38	64	81807	20.87	ug/L		99
7) Freon 21	1.40	67	204717	21.03	ug/L		93
8) Freon 123	1.57	83	181639	21.00	ug/L		98
9) Freon 123a	1.59	67	138013	20.75	ug/L		94
10) Acrolein	1.65	56	58911	103.34	ug/L		97
11) Trichlorofluoromethane	1.65	101	167792	20.76	ug/L		99
12) Acetonitrile	1.66	41	42728	101.61	ug/L		96
13) 2-Propanol	1.69	45	71395	453.17	ug/L		99
14) Acetone	1.72	43	15277	19.78	ug/L		95
15) Diethyl Ether	1.79	59	69576	20.10	ug/L		95
16) 1,1-Diclethene	1.94	96	110380	20.91	ug/L		97
17) Iodomethane	1.95	142	151847	21.16	ug/L		98
18) TBA	1.98	59	105362	413.96	ug/L		99
19) Acrylonitrile	2.00	53	116596	100.68	ug/L		96
20) Methylene Chloride	2.04	84	120261	20.35	ug/L		97
21) Freon 113	2.08	101	109285	20.77	ug/L		97
22) Methyl Acetate	2.09	43	47364	20.28	ug/L		94
23) Allyl Chloride	2.10	76	50947	20.32	ug/L	#	85
24) Carbon Disulfide	2.14	76	350557	20.50	ug/L		99
25) trans-1,2-Dichloroethene	2.51	96	119896	20.61	ug/L		95
26) Methyl-t-Butyl Ether	2.62	73	231882	21.16	ug/L		97
27) 1,1-Diclethane	2.71	63	182402	20.65	ug/L		98
28) Propionitrile	2.76	54	39572	103.27	ug/L		97
29) Vinyl Acetate	2.90	43	156013	20.88	ug/L		96
30) 2-Chloro-1,3-Butadiene	3.05	53	164980	20.49	ug/L		99
31) 2-Butanone	3.17	43	22871	19.71	ug/L		95
32) Methacrylonitrile	3.27	67	26761	21.60	ug/L		96
33) cis-1,2-Dichloroethene	3.26	96	116935	20.63	ug/L		100
34) Bromochloromethane	3.42	128	56703	20.80	ug/L		99
35) Chloroform	3.50	83	182285	20.39	ug/L		98
36) 2,2-Dichloropropane	3.57	77	139480	20.25	ug/L		97

(#) = qualifier out of range (m) = manual integration

DL 12/2/15

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6192.D Vial: 15
Acq On : 30 Nov 2015 4:02 pm Operator: D.Lipani
Sample : STD #5 - 20 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:15 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:15:20 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	3.91	42	15635	20.65	ug/L		97
38)	1,1,1-Trichloroethane	4.47	97	148614	20.63	ug/L		94
41)	Iso-Butyl Alcohol	3.74	43	42500	415.73	ug/L		90
43)	1,2-Dichloroethane	4.35	62	102173	19.69	ug/L		98
44)	1,1-Dichloropropene	4.80	75	132288	20.57	ug/L		93
45)	Cyclohexane	4.86	56	160004	20.45	ug/L		94
46)	Carbontetrachloride	5.03	119	131643	20.89	ug/L		98
47)	Benzene	5.15	78	413397	20.95	ug/L		97
48)	Dibromomethane	5.99	93	53492	19.92	ug/L		99
49)	1,2-Diclpropane	6.06	63	99954	19.97	ug/L		98
50)	n-Heptane	6.15	43	88603	20.64	ug/L		98
51)	Trichloroethene	6.13	130	122252	20.92	ug/L		99
52)	Bromodichloromethane	6.19	83	125653	20.63	ug/L		100
53)	2-Nitropropane	6.25	41	20665	38.10	ug/L	#	78
54)	1,4-Dioxane	6.43	88	12325	421.49	ug/L		94
55)	Methyl Methacrylate	6.60	69	41556	21.33	ug/L		97
56)	Methylcyclohexane	6.72	55	107109	21.06	ug/L		98
57)	2-Chloroethylvinyl Ether	6.88	63	46548	21.48	ug/L		96
58)	cis-1,3-Dichloropropene	7.03	75	150762	21.10	ug/L		99
59)	4-Methyl-2-pentanone	7.25	43	51616	19.76	ug/L		97
60)	trans-1,3-Dichloropropene	7.54	75	121693	20.13	ug/L		99
61)	1,1,2-Trichloroethane	7.65	97	78312	21.02	ug/L		99
63)	Toluene	7.83	91	432450	20.95	ug/L		100
65)	1,3-Dichloropropane	7.89	76	114696	20.20	ug/L		97
66)	Ethyl Methacrylate	8.08	69	88349	20.74	ug/L		96
67)	Dibromochloromethane	8.09	129	96769	20.49	ug/L		99
68)	2-Hexanone	8.16	43	35122	19.77	ug/L		100
69)	1,2-Dibromoethane	8.31	107	77813	20.56	ug/L		98
70)	n-Butyl Acetate	8.52	43	92337	19.82	ug/L		96
71)	Tetrachloroethene	8.50	164	94287	19.61	ug/L		99
72)	1,1,1,2-Tetrachloroethane	9.05	131	101855	20.07	ug/L		99
73)	Chlorobenzene	9.11	112	288810	20.56	ug/L		99
74)	Ethylbenzene	9.33	106	149828	20.72	ug/L		96
75)	Bromoform	9.50	173	60442	20.23	ug/L		98
76)	(m+p)Xylene	9.50	106	363119	41.20	ug/L		97
77)	o-Xylene	9.83	106	190172	20.90	ug/L		99
78)	Cyclohexanone	9.74	55	42229	405.28	ug/L		96
79)	Styrene	9.77	104	302502	20.96	ug/L		100
80)	trans-1,4-Dichloro-2-Buten	10.01	75	28886	19.75	ug/L		96
81)	Isopropylbenzene	10.14	105	451205	20.36	ug/L		100
84)	1,1,2,2-Tetrachloroethane	9.82	83	88651	20.65	ug/L		98
85)	1,2,3-Trichloropropane	9.93	75	60896	20.82	ug/L		97
86)	Bromobenzene	10.28	156	134737	20.73	ug/L		98
87)	n-Propylbenzene	10.50	91	534945	21.40	ug/L		98
88)	2-Chlorotoluene	10.54	91	302661	19.70	ug/L		99
89)	4-Chlorotoluene	10.61	91	331813	20.47	ug/L		100
90)	1,3,5-Trimethylbenzene	10.76	105	353197	20.74	ug/L		98
91)	tert-Butylbenzene	10.95	119	308163	20.85	ug/L		99
92)	1,2,4-Trimethylbenzene	11.06	105	384106	21.14	ug/L		99
93)	sec-Butylbenzene	11.13	105	441458	21.17	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6192.D Vial: 15
Acq On : 30 Nov 2015 4:02 pm Operator: D.Lipani
Sample : STD #5 - 20 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:15 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:15:20 2015
Response via : Initial Calibration
DataAcq Meth : W113015

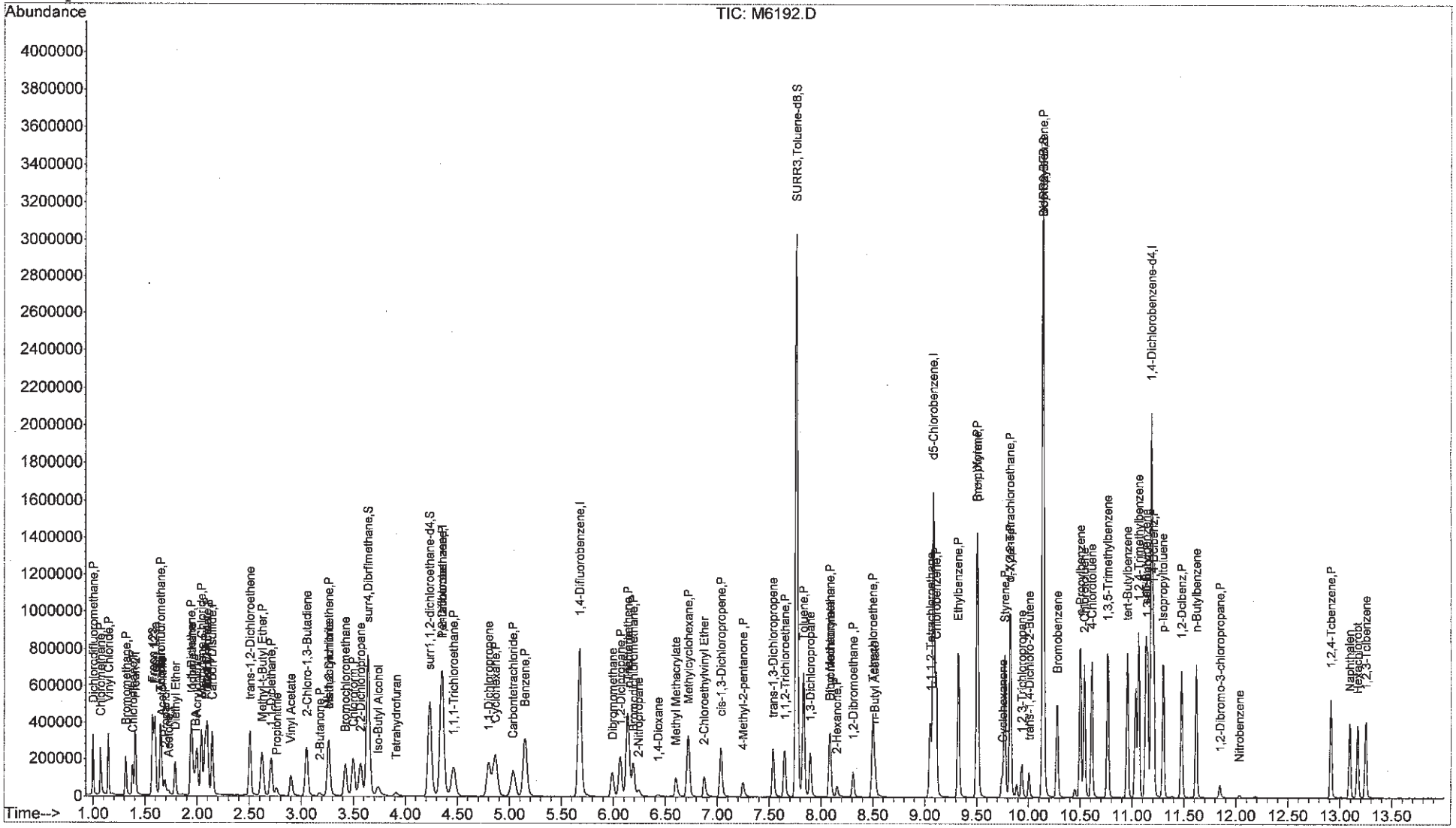
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.15	146	245327	20.35	ug/L	99
95)	1,4-Dclbenz	11.21	146	251099	20.63	ug/L	99
96)	p-Isopropyltoluene	11.30	119	352492	20.70	ug/L	99
97)	1,2-Dclbenz	11.47	146	240317	21.40	ug/L	98
98)	n-Butylbenzene	11.62	91	317615	21.15	ug/L	98
99)	1,2-Dibromo-3-chloropropan	11.84	75	12217	19.49	ug/L	95
100)	Nitrobenzene	12.03	77	5336	34.99	ug/L	92
101)	1,2,4-Tcbenzene	12.91	180	132167	20.35	ug/L	100
102)	Naphthalen	13.09	128	245308	21.50	ug/L	100
103)	Hexachlorobt	13.17	225	63150	20.33	ug/L	99
104)	1,2,3-Tclbenzene	13.25	180	111655	20.82	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6192.D Vial: 15
Acq On : 30 Nov 2015 4:02 pm Operator: D.Lipani
Sample : STD #5 - 20 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:15 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:15:20 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6193.D Vial: 16
Acq On : 30 Nov 2015 4:39 pm Operator: D.Lipani
Sample : STD #6 - 50 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:13 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:10:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	657179	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	903879	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	787122	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	466485	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	289267	51.02	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.04%			
42) surr1,1,2-dichloroethane-d	4.23	65	236390	51.12	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.24%			
62) SURR3,Toluene-d8	7.76	98	1007650	53.52	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.04%			
82) SURR2,BFB	10.14	95	380131	53.95	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	358272	50.35	ug/L	100
3) Chloromethane	1.07	50	354626	46.91	ug/L	100
4) Vinyl Chloride	1.14	62	388385	48.93	ug/L	100
5) Bromomethane	1.31	94	213654	46.54	ug/L	100
6) Chloroethane	1.38	64	198728	49.75	ug/L	100
7) Freon 21	1.41	67	467590	47.13	ug/L	100
8) Freon 123	1.57	83	417029	47.31	ug/L	100
9) Freon 123a	1.60	67	325683	48.26	ug/L	100
10) Acrolein	1.65	56	145060	253.50	ug/L	100
11) Trichlorofluoromethane	1.65	101	410805	49.85	ug/L	100
12) Acetonitrile	1.66	41	100804	235.15	ug/L	100
13) 2-Propanol	1.69	45	160702	1000.63	ug/L	100
14) Acetone	1.73	43	39100	49.67	ug/L	100
15) Diethyl Ether	1.79	59	172382	48.86	ug/L	100
16) 1,1-Diclethene	1.94	96	267245	49.66	ug/L	100
17) Iodomethane	1.96	142	437202	56.73	ug/L	100
18) TBA	1.98	59	250601	965.88	ug/L	100
19) Acrylonitrile	2.00	53	282300	239.14	ug/L	100
20) Methylene Chloride	2.04	84	284916	47.30	ug/L	100
21) Freon 113	2.07	101	255702	47.68	ug/L	100
22) Methyl Acetate	2.09	43	116084	48.77	ug/L	100
23) Allyl Chloride	2.10	76	121776	47.64	ug/L	100
24) Carbon Disulfide	2.15	76	837911	48.07	ug/L	100
25) trans-1,2-Dichloroethene	2.50	96	291565	49.18	ug/L	100
26) Methyl-t-Butyl Ether	2.62	73	566128	50.68	ug/L	100
27) 1,1-Diclethane	2.71	63	446709	49.61	ug/L	100
28) Propionitrile	2.76	54	99666	256.87	ug/L	100
29) Vinyl Acetate	2.90	43	380535	51.08	ug/L	100
30) 2-Chloro-1,3-Butadiene	3.05	53	415697	50.66	ug/L	100
31) 2-Butanone	3.17	43	59252	50.08	ug/L	100
32) Methacrylonitrile	3.27	67	63564	50.34	ug/L	100
33) cis-1,2-Dichloroethene	3.26	96	283873	49.12	ug/L	100
34) Bromochloromethane	3.42	128	135377	48.72	ug/L	100
35) Chloroform	3.50	83	441647	48.46	ug/L	100
36) 2,2-Dichloropropane	3.57	77	336977	48.00	ug/L	100

(#) = qualifier out of range (m) = manual integration

DL 12/2/15

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6193.D Vial: 16
Acq On : 30 Nov 2015 4:39 pm Operator: D.Lipani
Sample : STD #6 - 50 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:13 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:10:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	Tetrahydrofuran	3.91	42	38824	50.28	ug/L	100
38)	1,1,1-Trichloroethane	4.46	97	358973	48.88	ug/L	100
41)	Iso-Butyl Alcohol	3.73	43	101728	967.13	ug/L	100
43)	1,2-Dichloroethane	4.34	62	241229	45.14	ug/L	100
44)	1,1-Dichloropropene	4.80	75	320966	48.52	ug/L	100
45)	Cyclohexane	4.87	56	387223	48.09	ug/L	100
46)	Carbontetrachloride	5.04	119	316333	48.79	ug/L	100
47)	Benzene	5.15	78	993882	48.96	ug/L	100
48)	Dibromomethane	5.99	93	132036	48.53	ug/L	100
49)	1,2-Diclpropane	6.06	63	243830	47.35	ug/L	100
50)	n-Heptane	6.14	43	226706	51.66	ug/L	100
51)	Trichloroethene	6.13	130	297839	49.53	ug/L	100
52)	Bromodichloromethane	6.19	83	308559	49.25	ug/L	100
53)	2-Nitropropane	6.24	41	53044	96.86	ug/L	100
54)	1,4-Dioxane	6.42	88	28985	963.37	ug/L	100
55)	Methyl Methacrylate	6.60	69	102651	51.22	ug/L	100
56)	Methylcyclohexane	6.72	55	250794	47.92	ug/L	100
57)	2-Chloroethylvinyl Ether	6.87	63	118443	53.11	ug/L	100
58)	cis-1,3-Dichloropropene	7.03	75	371521	50.81	ug/L	100
59)	4-Methyl-2-pentanone	7.24	43	135101	50.57	ug/L	100
60)	trans-1,3-Dichloropropene	7.54	75	295465	47.51	ug/L	100
61)	1,1,2-Trichloroethane	7.65	97	185716	48.45	ug/L	100
63)	Toluene	7.83	91	1015279	47.80	ug/L	100
65)	1,3-Dichloropropane	7.90	76	268894	47.74	ug/L	100
66)	Ethyl Methacrylate	8.08	69	215147	50.92	ug/L	100
67)	Dibromochloromethane	8.09	129	237133	50.62	ug/L	100
68)	2-Hexanone	8.15	43	88551	52.68	ug/L	99
69)	1,2-Dibromoethane	8.31	107	191378	50.99	ug/L	100
70)	n-Butyl Acetate	8.52	43	232171	50.67	ug/L	100
71)	Tetrachloroethene	8.50	164	235060	49.30	ug/L	100
72)	1,1,1,2-Tetrachloroethane	9.05	131	250808	49.83	ug/L	100
73)	Chlorobenzene	9.11	112	690539	49.56	ug/L	100
74)	Ethylbenzene	9.32	106	351395	49.00	ug/L	100
75)	Bromoform	9.50	173	150204	50.68	ug/L	100
76)	(m+p)Xylene	9.51	106	873359	99.92	ug/L	100
77)	o-Xylene	9.82	106	447061	49.52	ug/L	100
78)	Cyclohexanone	9.74	55	105076	1021.01	ug/L	100
79)	Styrene	9.77	104	720516	50.33	ug/L	100
80)	trans-1,4-Dichloro-2-Buten	10.00	75	75003	52.76	ug/L	100
81)	Isopropylbenzene	10.14	105	1087980	49.51	ug/L	100
84)	1,1,2,2-Tetrachloroethane	9.82	83	215590	50.52	ug/L	100
85)	1,2,3-Trichloropropane	9.94	75	140256	48.40	ug/L	100
86)	Bromobenzene	10.27	156	322887	49.97	ug/L	100
87)	n-Propylbenzene	10.50	91	1266348	50.96	ug/L	100
88)	2-Chlorotoluene	10.54	91	748161	49.00	ug/L	100
89)	4-Chlorotoluene	10.61	91	805045	49.95	ug/L	100
90)	1,3,5-Trimethylbenzene	10.76	105	844763	49.91	ug/L	100
91)	tert-Butylbenzene	10.95	119	726753	49.46	ug/L	100
92)	1,2,4-Trimethylbenzene	11.06	105	906959	50.21	ug/L	100
93)	sec-Butylbenzene	11.13	105	1040586	50.21	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6193.D Vial: 16
Acq On : 30 Nov 2015 4:39 pm Operator: D.Lipani
Sample : STD #6 - 50 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:13 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:10:37 2015
Response via : Initial Calibration
DataAcq Meth : W113015

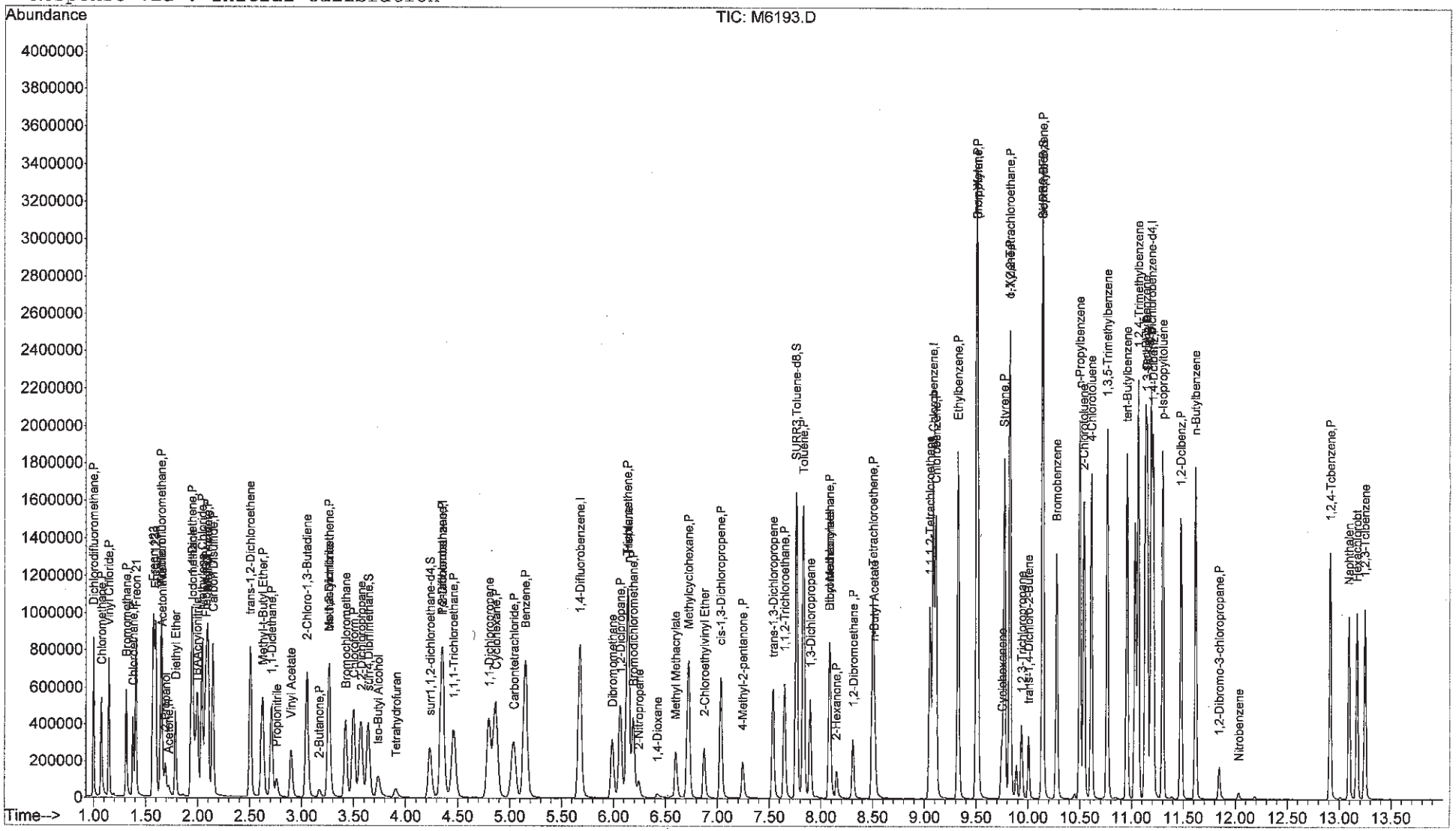
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.15	146	595539	49.69	ug/L	100
95)	1,4-Dclbenz	11.21	146	598294	49.50	ug/L	100
96)	p-Isopropyltoluene	11.30	119	862023	50.92	ug/L	100
97)	1,2-Dclbenz	11.47	146	556050	49.82	ug/L	100
98)	n-Butylbenzene	11.61	91	788966	52.85	ug/L	100
99)	1,2-Dibromo-3-chloropropan	11.84	75	29564	47.45	ug/L	100
100)	Nitrobenzene	12.03	77	13081	86.30	ug/L	100
101)	1,2,4-Tcbenzene	12.91	180	336419	52.11	ug/L	100
102)	Naphthalen	13.09	128	593480	52.32	ug/L	100
103)	Hexachlorobt	13.17	225	164583	53.30	ug/L	100
104)	1,2,3-Tclbenzene	13.25	180	271626	50.96	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6193.D Vial: 16
Acq On : 30 Nov 2015 4:39 pm Operator: D.Lipani
Sample : STD #6 - 50 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 9:13 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 09:14:56 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D Vial: 17
Acq On : 30 Nov 2015 5:14 pm Operator: D.Lipani
Sample : STD #7 - 100 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:20 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:18:35 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	670703	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	904958	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	789810	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	491522	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	673305	118.62	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 237.24%#			
42) surr1,1,2-dichloroethane-d	4.23	65	544069	117.52	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 235.04%#			
62) SURR3,Toluene-d8	7.76	98	2212970	117.40	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 234.80%#			
82) SURR2,BFB	10.14	95	862474	121.99	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 243.98%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	699657	96.34	ug/L	98
3) Chloromethane	1.07	50	708373	91.82	ug/L	99
4) Vinyl Chloride	1.14	62	749068	92.47	ug/L	98
5) Bromomethane	1.31	94	475132	98.38	ug/L	100
6) Chloroethane	1.38	64	384715	94.36	ug/L	100
7) Freon 21	1.40	67	948717	93.69	ug/L	99
8) Freon 123	1.57	83	858203	95.39	ug/L	98
9) Freon 123a	1.60	67	676649	97.77	ug/L	99
10) Acrolein	1.65	56	283933	478.74	ug/L	98
11) Trichlorofluoromethane	1.65	101	805831	95.82	ug/L	98
12) Acetonitrile	1.66	41	197947	452.46	ug/L	94
13) 2-Propanol	1.69	45	313272	1911.30	ug/L	99
14) Acetone	1.72	43	77769	96.80	ug/L	95
15) Diethyl Ether	1.79	59	347014	96.38	ug/L	99
16) 1,1-Diclethene	1.94	96	527648	96.08	ug/L	99
17) Iodomethane	1.95	142	872306	106.54	ug/L	98
18) TBA	1.98	59	495332	1870.64	ug/L	99
19) Acrylonitrile	2.00	53	550211	456.69	ug/L	98
20) Methylene Chloride	2.04	84	566300	92.11	ug/L	97
21) Freon 113	2.07	101	526398	96.19	ug/L	99
22) Methyl Acetate	2.09	43	231473	95.29	ug/L	98
23) Allyl Chloride	2.10	76	250496	96.01	ug/L	94
24) Carbon Disulfide	2.14	76	1671668	93.97	ug/L	99
25) trans-1,2-Dichloroethene	2.50	96	583832	96.49	ug/L	97
26) Methyl-t-Butyl Ether	2.62	73	1114124	97.72	ug/L	99
27) 1,1-Diclethane	2.71	63	875549	95.28	ug/L	97
28) Propionitrile	2.76	54	199039	499.26	ug/L	95
29) Vinyl Acetate	2.90	43	772228	99.36	ug/L	99
30) 2-Chloro-1,3-Butadiene	3.05	53	843954	100.77	ug/L	99
31) 2-Butanone	3.17	43	118484	98.12	ug/L	97
32) Methacrylonitrile	3.27	67	127336	98.81	ug/L	89
33) cis-1,2-Dichloroethene	3.26	96	561578	95.21	ug/L	98
34) Bromochloromethane	3.42	128	264436	93.25	ug/L	97
35) Chloroform	3.50	83	870379	93.58	ug/L	100
36) 2,2-Dichloropropane	3.57	77	695359	97.06	ug/L	96

DL 12/2/15

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D Vial: 17
Acq On : 30 Nov 2015 5:14 pm Operator: D.Lipani
Sample : STD #7 - 100 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:20 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:18:35 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	Tetrahydrofuran	3.90	42	76562	97.18	ug/L	97
38)	1,1,1-Trichloroethane	4.46	97	731816	97.64	ug/L	99
41)	Iso-Butyl Alcohol	3.74	43	214805	2039.72	ug/L	86
43)	1,2-Dichloroethane	4.35	62	487599	91.23	ug/L	98
44)	1,1-Dichloropropene	4.80	75	648575	97.92	ug/L	99
45)	Cyclohexane	4.86	56	815177	101.12	ug/L	95
46)	Carbontetrachloride	5.04	119	661925	101.97	ug/L	95
47)	Benzene	5.15	78	1976237	97.24	ug/L	99
48)	Dibromomethane	5.99	93	267247	96.62	ug/L	99
49)	1,2-Diclpropane	6.07	63	489633	94.97	ug/L	99
50)	n-Heptane	6.14	43	437587	98.96	ug/L	97
51)	Trichloroethene	6.13	130	599641	99.61	ug/L	100
52)	Bromodichloromethane	6.19	83	640379	102.08	ug/L	100
53)	2-Nitropropane	6.24	41	111699	199.89	ug/L	98
54)	1,4-Dioxane	6.42	88	55397	1839.02	ug/L	100
55)	Methyl Methacrylate	6.60	69	222341	110.80	ug/L	98
56)	Methylcyclohexane	6.72	55	531845	101.49	ug/L	99
57)	2-Chloroethylvinyl Ether	6.87	63	232055	103.93	ug/L	96
58)	cis-1,3-Dichloropropene	7.03	75	747424	101.56	ug/L	99
59)	4-Methyl-2-pentanone	7.24	43	271443	100.86	ug/L	96
60)	trans-1,3-Dichloropropene	7.54	75	603474m	96.93	ug/L	
61)	1,1,2-Trichloroethane	7.65	97	377572	98.39	ug/L	98
63)	Toluene	7.83	91	2042638	96.06	ug/L	98
65)	1,3-Dichloropropane	7.90	76	560525	99.19	ug/L	99
66)	Ethyl Methacrylate	8.08	69	459775	108.45	ug/L	98
67)	Dibromochloromethane	8.09	129	495002	105.31	ug/L	99
68)	2-Hexanone	8.15	43	187215	105.51	ug/L	99
69)	1,2-Dibromoethane	8.31	107	384919	102.21	ug/L	99
70)	n-Butyl Acetate	8.52	43	487978	105.26	ug/L	98
71)	Tetrachloroethene	8.50	164	484762	101.31	ug/L	99
72)	1,1,1,2-Tetrachloroethane	9.05	131	507847	100.56	ug/L	99
73)	Chlorobenzene	9.11	112	1356955	97.05	ug/L	99
74)	Ethylbenzene	9.32	106	736090	102.30	ug/L	92
75)	Bromoform	9.51	173	326456	109.77	ug/L	98
76)	(m+p)Xylene	9.51	106	1783800	203.38	ug/L	93
77)	o-Xylene	9.83	106	950499	104.97	ug/L	94
78)	Cyclohexanone	9.75	55	206359	1988.93	ug/L	98
79)	Styrene	9.77	104	1421645	98.97	ug/L	98
80)	trans-1,4-Dichloro-2-Buten	10.00	75	159507	109.59	ug/L	99
81)	Isopropylbenzene	10.14	105	2140201	97.05	ug/L	97
84)	1,1,2,2-Tetrachloroethane	9.82	83	440453	97.96	ug/L	99
85)	1,2,3-Trichloropropane	9.94	75	298284	97.35	ug/L	99
86)	Bromobenzene	10.27	156	663524	97.46	ug/L	99
87)	n-Propylbenzene	10.50	91	2470467	94.35	ug/L	98
88)	2-Chlorotoluene	10.54	91	1524626	94.76	ug/L	99
89)	4-Chlorotoluene	10.61	91	1599356	94.19	ug/L	99
90)	1,3,5-Trimethylbenzene	10.76	105	1734043	97.23	ug/L	98
91)	tert-Butylbenzene	10.95	119	1501487	96.98	ug/L	99
92)	1,2,4-Trimethylbenzene	11.06	105	1840945	96.72	ug/L	98
93)	sec-Butylbenzene	11.13	105	2054358	94.07	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D Vial: 17
Acq On : 30 Nov 2015 5:14 pm Operator: D.Lipani
Sample : STD #7 - 100 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:20 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:18:35 2015
Response via : Initial Calibration
DataAcq Meth : W113015

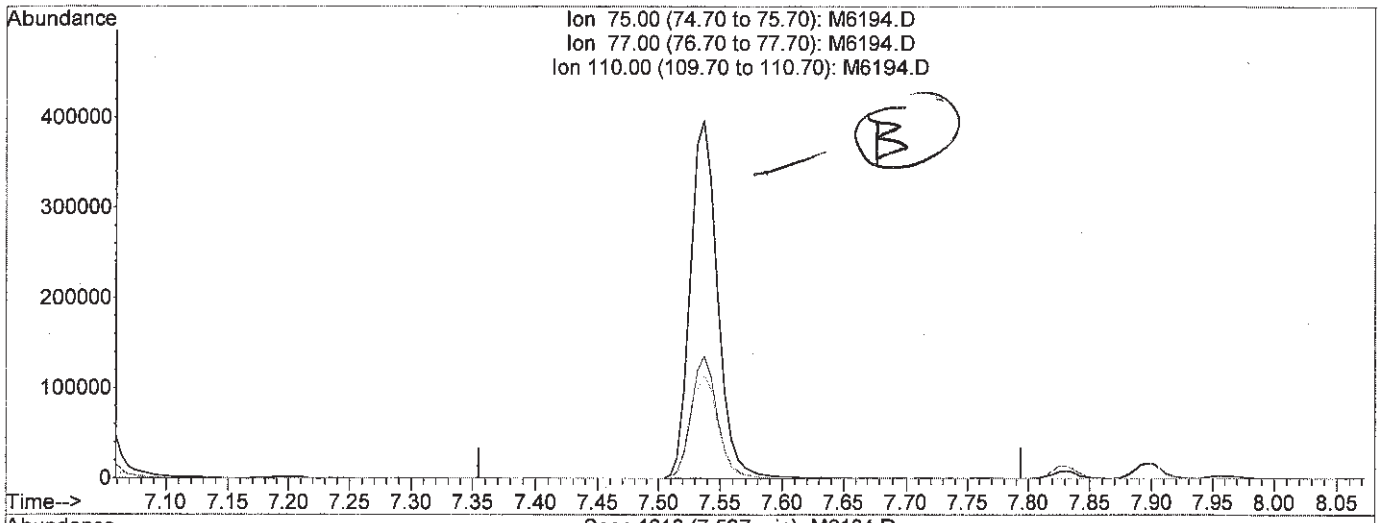
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.15	146	1206816	95.57	ug/L	100
95)	1,4-Dclbenz	11.21	146	1229636	96.47	ug/L	99
96)	p-Isopropyltoluene	11.30	119	1719157	96.38	ug/L	98
97)	1,2-Dclbenz	11.48	146	1139693	96.91	ug/L	99
98)	n-Butylbenzene	11.62	91	1559408	99.15	ug/L	98
99)	1,2-Dibromo-3-chloropropan	11.84	75	63575	96.85	ug/L	97
100)	Nitrobenzene	12.03	77	32530	203.68	ug/L	95
101)	1,2,4-Tcbenzene	12.91	180	690089	101.45	ug/L	99
102)	Naphthalen	13.09	128	1222324	102.27	ug/L	99
103)	Hexachlorobt	13.17	225	304436	93.58	ug/L	99
104)	1,2,3-Tclbenzene	13.25	180	566657	100.89	ug/L	98

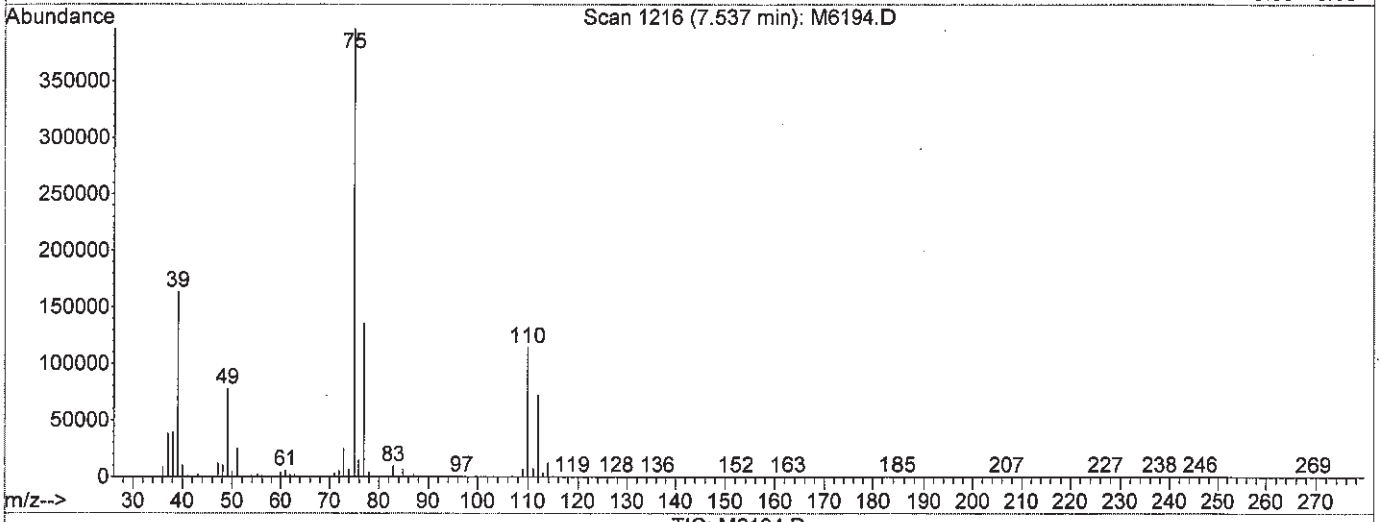
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D Vial: 17
Acq On : 30 Nov 2015 5:14 pm Operator: D.Lipani
Sample : STD #7 - 100 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:19 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:18:35 2015
Response via : Multiple Level Calibration





TIC: M6194.D

(60) trans-1,3-Dichloropropene

7.54min 0.00ug/L

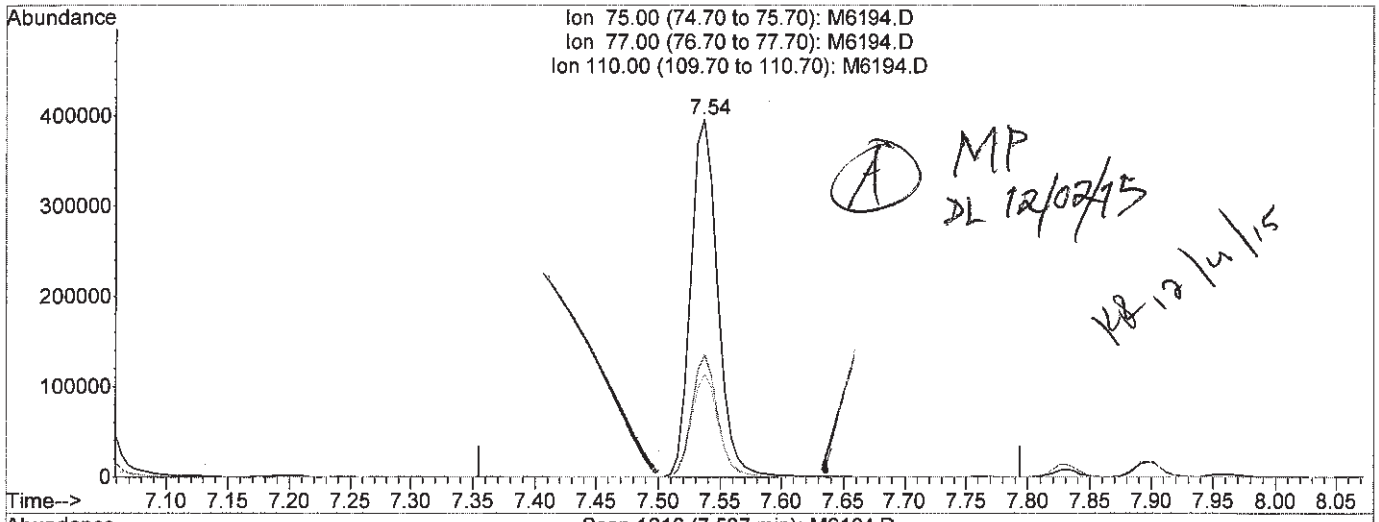
response 0

Ion	Exp%	Act%
75.00	100	0.00
77.00	32.50	0.00#
110.00	27.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

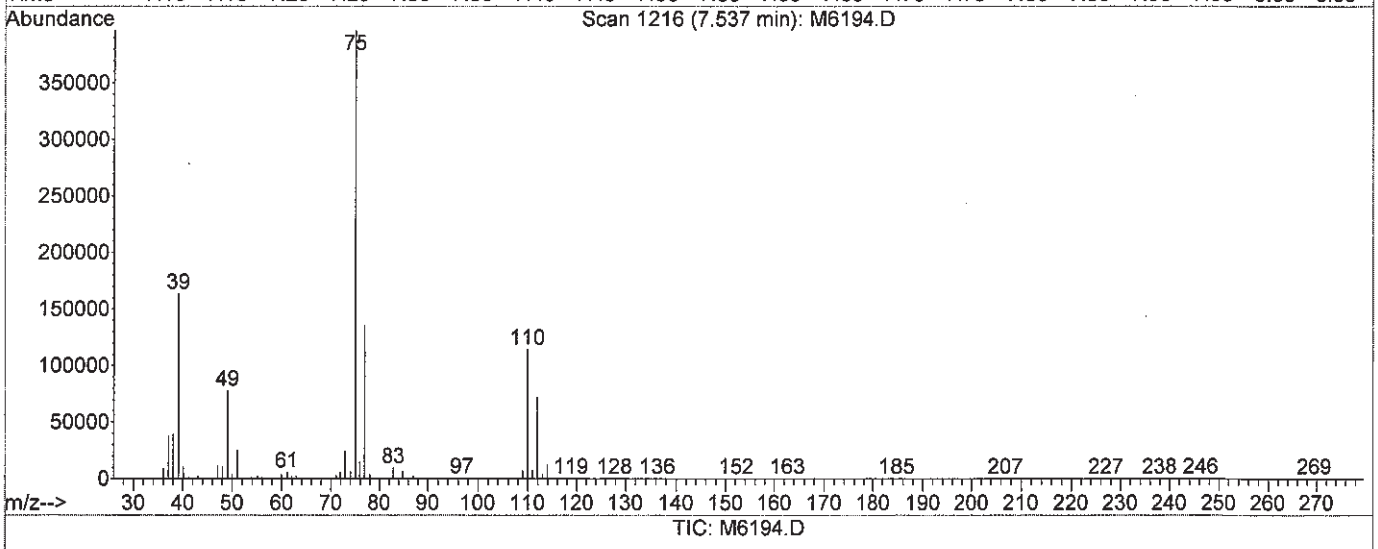
Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D Vial: 17
Acq On : 30 Nov 2015 5:14 pm Operator: D.Lipani
Sample : STD #7 - 100 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:20 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:18:35 2015
Response via : Multiple Level Calibration



MP 12/02/15

KB 12/4/15



TIC: M6194.D

(60) trans-1,3-Dichloropropene

7.54min 96.93ug/L m

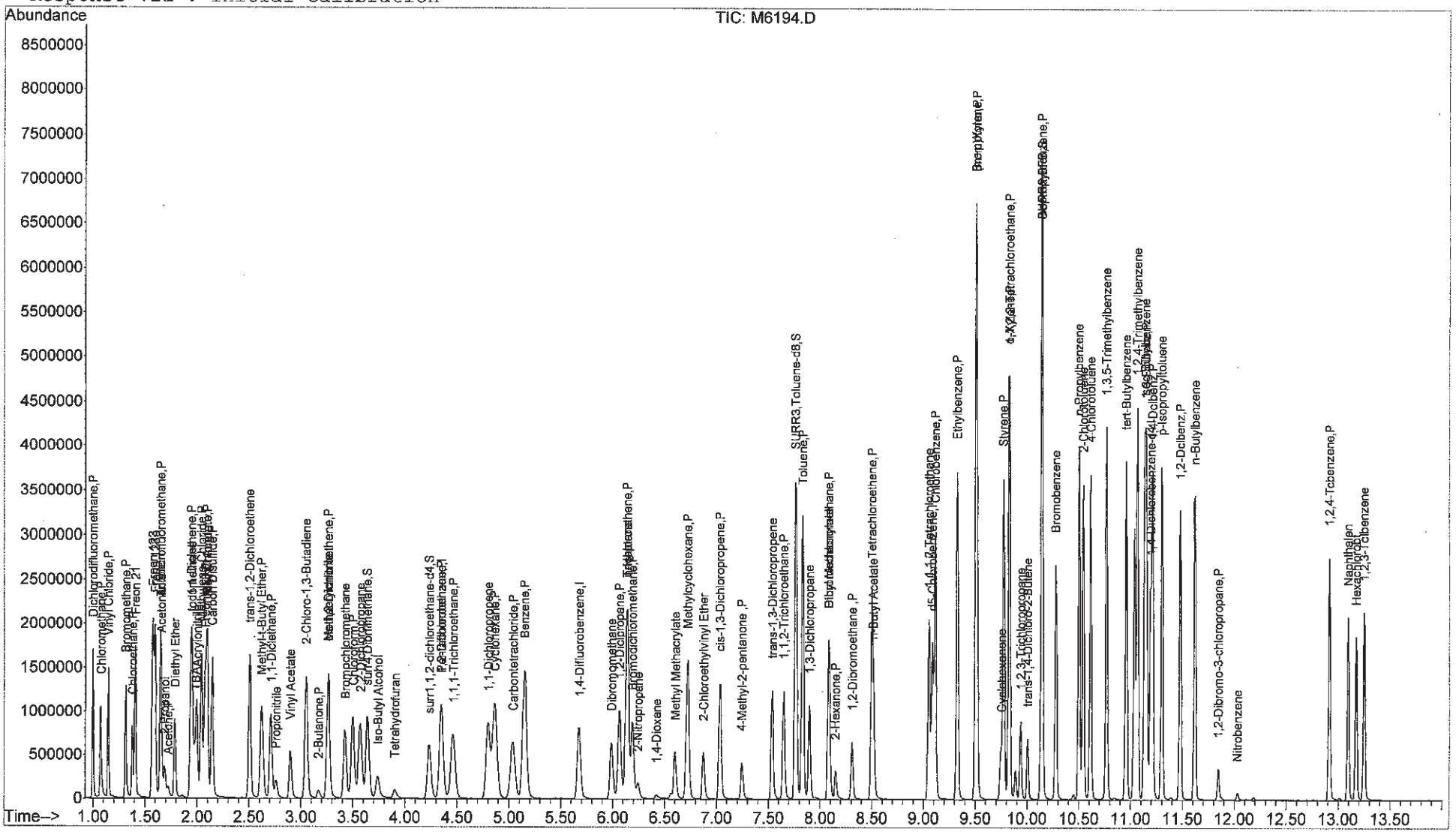
response 603474

Ion	Exp%	Act%
75.00	100	100
77.00	32.50	0.00#
110.00	27.90	0.00#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6194.D Vial: 17
Acq On : 30 Nov 2015 5:14 pm Operator: D.Lipani
Sample : STD #7 - 100 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:20 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:18:35 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D Vial: 18
Acq On : 30 Nov 2015 5:49 pm Operator: D.Lipani
Sample : STD #8 - 150 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:23 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:22:03 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	666051	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	918467	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	808207	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	513575	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	827358	143.61	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 287.22%#			
42) surr1,1,2-dichloroethane-d	4.23	65	672248	143.07	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 286.14%#			
62) SURR3,Toluene-d8	7.77	98	2586196	135.18	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 270.36%#			
82) SURR2,BFB	10.14	95	1044463	144.37	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 288.74%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	1026889	142.39	ug/L	95
3) Chloromethane	1.07	50	1100164	143.61	ug/L	99
4) Vinyl Chloride	1.14	62	1122006	139.48	ug/L	96
5) Bromomethane	1.31	94	740980	154.50	ug/L	99
6) Chloroethane	1.38	64	587039	144.99	ug/L	98
7) Freon 21	1.41	67	1395495	138.78	ug/L	97
8) Freon 123	1.57	83	1273342	142.52	ug/L	97
9) Freon 123a	1.59	67	1021278	148.59	ug/L	91
10) Acrolein	1.65	56	429898	729.91	ug/L	100
11) Trichlorofluoromethane	1.65	101	1189110	142.39	ug/L	97
12) Acetonitrile	1.66	41	298922	688.03	ug/L	96
13) 2-Propanol	1.69	45	475493	2921.28	ug/L	100
14) Acetone	1.72	43	123775	155.14	ug/L	88
15) Diethyl Ether	1.79	59	518657	145.06	ug/L	98
16) 1,1-Diclethene	1.94	96	802815	147.21	ug/L	98
17) Iodomethane	1.95	142	1269150	150.45	ug/L	96
18) TBA	1.98	59	759310	2887.58	ug/L	100
19) Acrylonitrile	2.00	53	838201	700.59	ug/L	100
20) Methylene Chloride	2.04	84	855165	140.07	ug/L	99
21) Freon 113	2.07	101	802158	147.60	ug/L	99
22) Methyl Acetate	2.09	43	355279	147.28	ug/L	98
23) Allyl Chloride	2.10	76	373873	144.31	ug/L	93
24) Carbon Disulfide	2.15	76	2448942	138.62	ug/L	97
25) trans-1,2-Dichloroethene	2.50	96	876014	145.79	ug/L	98
26) Methyl-t-Butyl Ether	2.62	73	1652660	145.97	ug/L	100
27) 1,1-Diclethane	2.71	63	1332663	146.03	ug/L	96
28) Propionitrile	2.76	54	300975	760.22	ug/L	97
29) Vinyl Acetate	2.90	43	1180922	153.00	ug/L	99
30) 2-Chloro-1,3-Butadiene	3.05	53	1268790	152.56	ug/L	99
31) 2-Butanone	3.17	43	182861	152.50	ug/L	97
32) Methacrylonitrile	3.27	67	197143	154.05	ug/L	96
33) cis-1,2-Dichloroethene	3.26	96	864718	147.63	ug/L	97
34) Bromochloromethane	3.42	128	394862	140.22	ug/L	95
35) Chloroform	3.50	83	1355879	146.79	ug/L	99
36) 2,2-Dichloropropane	3.57	77	1064266	149.59	ug/L	98

(#) = qualifier out of range (m) = manual integration

DL 12/2/15

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D Vial: 18
Acq On : 30 Nov 2015 5:49 pm Operator: D.Lipani
Sample : STD #8 - 150 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:23 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:22:03 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	3.90	42	120328	153.80	ug/L		90
38)	1,1,1-Trichloroethane	4.46	97	1113080	149.54	ug/L		99
41)	Iso-Butyl Alcohol	3.73	43	331829	3104.60	ug/L		85
43)	1,2-Dichloroethane	4.35	62	725237	133.70	ug/L		99
44)	1,1-Dichloropropene	4.80	75	990254	147.31	ug/L		98
45)	Cyclohexane	4.87	56	1261016	154.12	ug/L		100
46)	Carbontetrachloride	5.04	119	993449	150.79	ug/L		97
47)	Benzene	5.15	78	2949743	143.00	ug/L		99
48)	Dibromomethane	5.99	93	410027	146.06	ug/L		99
49)	1,2-Diclpropane	6.07	63	747132	142.78	ug/L		99
50)	n-Heptane	6.14	43	657265	146.45	ug/L		99
51)	Trichloroethene	6.13	130	892065	146.00	ug/L		99
52)	Bromodichloromethane	6.19	83	972299	152.72	ug/L		100
53)	2-Nitropropane	6.25	41	176656	311.49	ug/L		97
54)	1,4-Dioxane	6.42	88	89383	2923.62	ug/L		95
55)	Methyl Methacrylate	6.60	69	325744	159.94	ug/L		100
56)	Methylcyclohexane	6.72	55	814741	153.19	ug/L		99
57)	2-Chloroethylvinyl Ether	6.87	63	354242	156.32	ug/L		93
58)	cis-1,3-Dichloropropene	7.04	75	1134778	151.93	ug/L		99
59)	4-Methyl-2-pentanone	7.24	43	414678	151.81	ug/L		98
60)	trans-1,3-Dichloropropene	7.54	75	896961m	146.36	ug/L		
61)	1,1,2-Trichloroethane	7.65	97	566042	145.34	ug/L		100
63)	Toluene	7.83	91	2881730	133.53	ug/L		96
65)	1,3-Dichloropropane	7.90	76	831098	143.72	ug/L		98
66)	Ethyl Methacrylate	8.08	69	676880	156.03	ug/L		99
67)	Dibromochloromethane	8.09	129	748278	155.58	ug/L		99
68)	2-Hexanone	8.15	43	274867	151.13	ug/L		99
69)	1,2-Dibromoethane	8.31	107	581876	151.00	ug/L		100
70)	n-Butyl Acetate	8.52	43	737228	155.40	ug/L		97
71)	Tetrachloroethene	8.50	164	717925	146.62	ug/L		99
72)	1,1,1,2-Tetrachloroethane	9.05	131	774834	149.94	ug/L		98
73)	Chlorobenzene	9.11	112	2033948	142.16	ug/L		98
74)	Ethylbenzene	9.32	106	1122974	152.52	ug/L	#	86
75)	Bromoform	9.51	173	509208	167.32	ug/L		98
76)	(m+p)Xylene	9.51	106	2661724	296.57	ug/L	#	87
77)	o-Xylene	9.83	106	1386691	149.60	ug/L		91
78)	Cyclohexanone	9.75	55	303719	2857.69	ug/L		98
79)	Styrene	9.77	104	2191951	149.12	ug/L		97
80)	trans-1,4-Dichloro-2-Buten	10.01	75	253487	170.20	ug/L		96
81)	Isopropylbenzene	10.14	105	3054575	135.37	ug/L		95
84)	1,1,2,2-Tetrachloroethane	9.82	83	666946	141.97	ug/L		100
85)	1,2,3-Trichloropropane	9.94	75	449509	140.40	ug/L		99
86)	Bromobenzene	10.27	156	1023877	143.94	ug/L		99
87)	n-Propylbenzene	10.50	91	3549895	129.75	ug/L		94
88)	2-Chlorotoluene	10.54	91	2303494	137.02	ug/L		97
89)	4-Chlorotoluene	10.61	91	2409534	135.81	ug/L		97
90)	1,3,5-Trimethylbenzene	10.76	105	2587318	138.85	ug/L		95
91)	tert-Butylbenzene	10.95	119	2283291	141.15	ug/L		97
92)	1,2,4-Trimethylbenzene	11.06	105	2714244	136.47	ug/L		95
93)	sec-Butylbenzene	11.13	105	3098463	135.79	ug/L		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D Vial: 18
Acq On : 30 Nov 2015 5:49 pm Operator: D.Lipani
Sample : STD #8 - 150 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:23 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:22:03 2015
Response via : Initial Calibration
DataAcq Meth : W113015

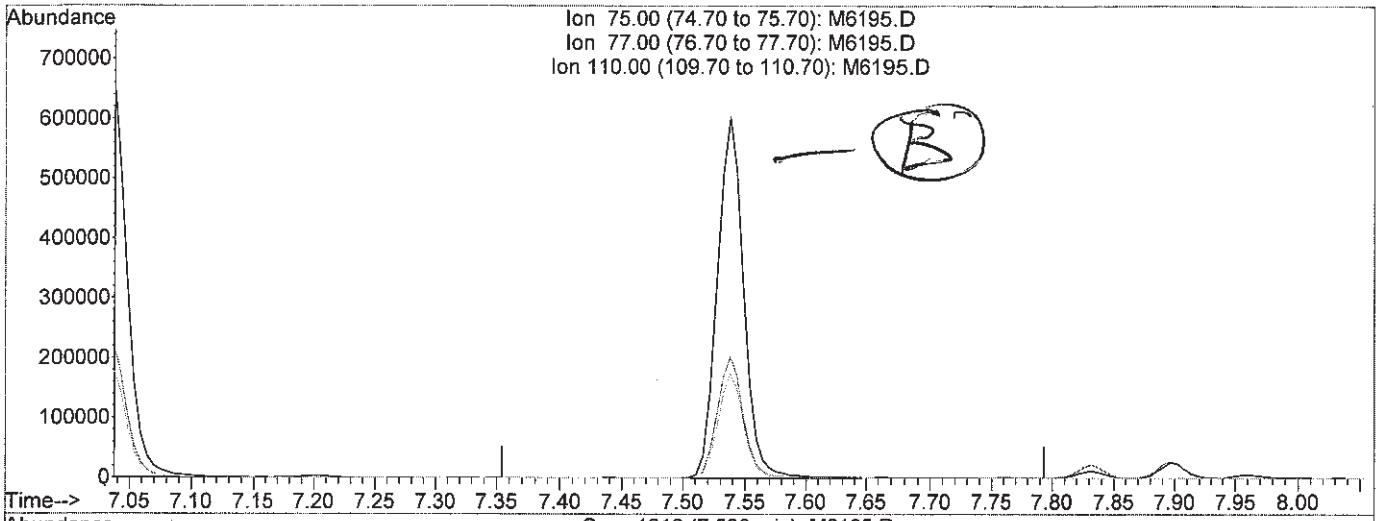
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.15	146	1875475	142.14	ug/L	98
95)	1,4-Dclbenz	11.21	146	1862589	139.86	ug/L	98
96)	p-Isopropyltoluene	11.30	119	2552061	136.93	ug/L	96
97)	1,2-Dclbenz	11.48	146	1685164	137.15	ug/L	98
98)	n-Butylbenzene	11.62	91	2262821	137.69	ug/L	97
99)	1,2-Dibromo-3-chloropropan	11.84	75	95065	138.60	ug/L	98
100)	Nitrobenzene	12.03	77	53823	322.52	ug/L	81
101)	1,2,4-Tcbenzene	12.91	180	1044472	146.96	ug/L	99
102)	Naphthalen	13.09	128	1812925	145.17	ug/L	98
103)	Hexachlorobt	13.17	225	466249	137.16	ug/L	99
104)	1,2,3-Tclbenzene	13.25	180	847964	144.49	ug/L	97

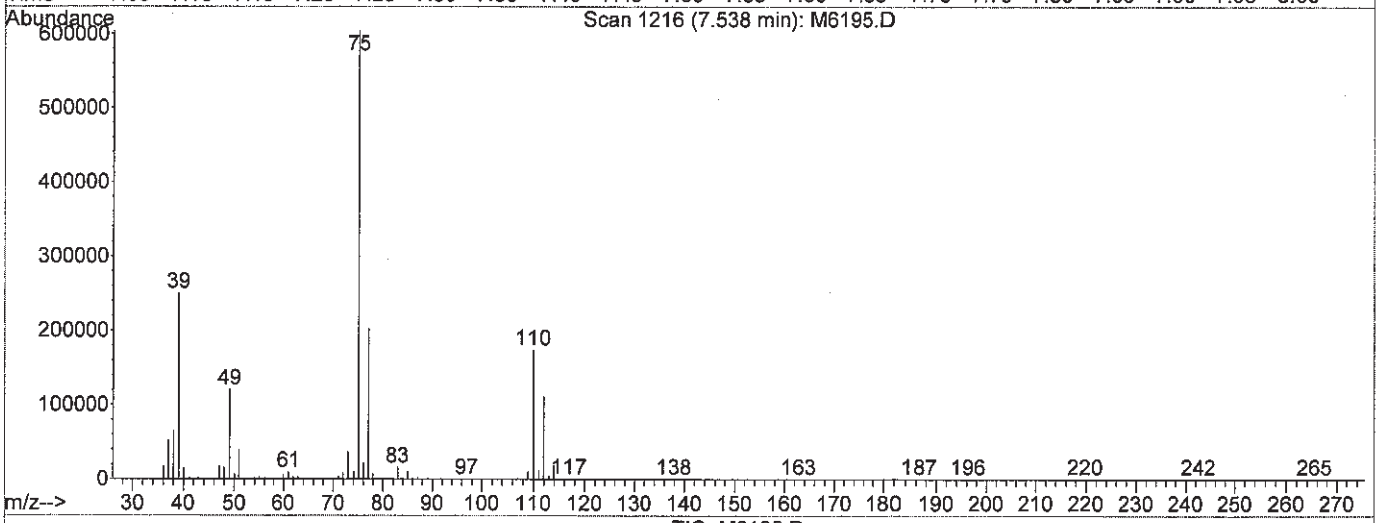
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D Vial: 18
Acq On : 30 Nov 2015 5:49 pm Operator: D.Lipani
Sample : STD #8 - 150 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:22 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:22:03 2015
Response via : Multiple Level Calibration





TIC: M6195.D

(60) trans-1,3-Dichloropropene

7.54min 0.00ug/L

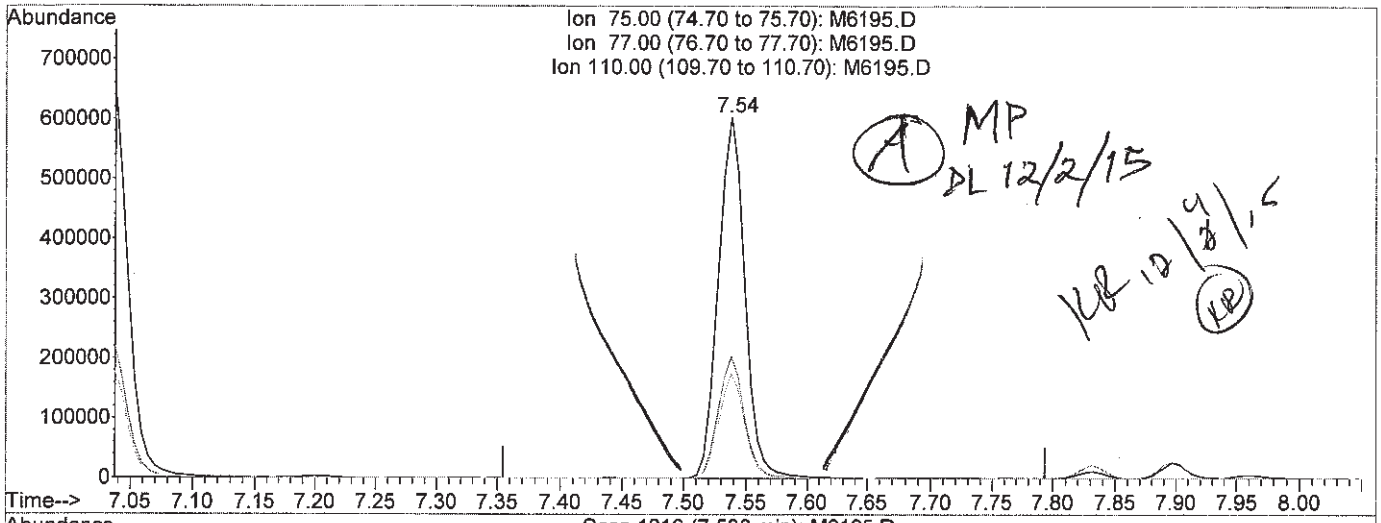
response 0

Ion	Exp%	Act%
75.00	100	0.00
77.00	32.50	0.00#
110.00	27.90	0.00#
0.00	0.00	0.00

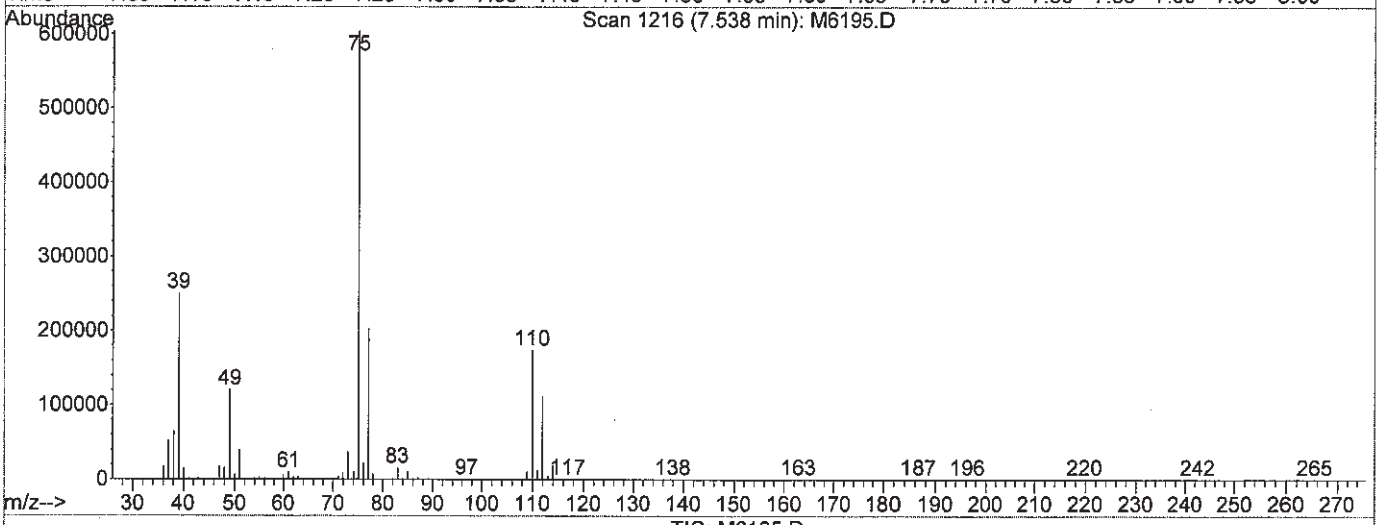
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D Vial: 18
Acq On : 30 Nov 2015 5:49 pm Operator: D.Lipani
Sample : STD #8 - 150 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:23 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:22:03 2015
Response via : Multiple Level Calibration



A MP DL 12/2/15



TIC: M6195.D

(60) trans-1,3-Dichloropropene

7.54min 146.36ug/L m

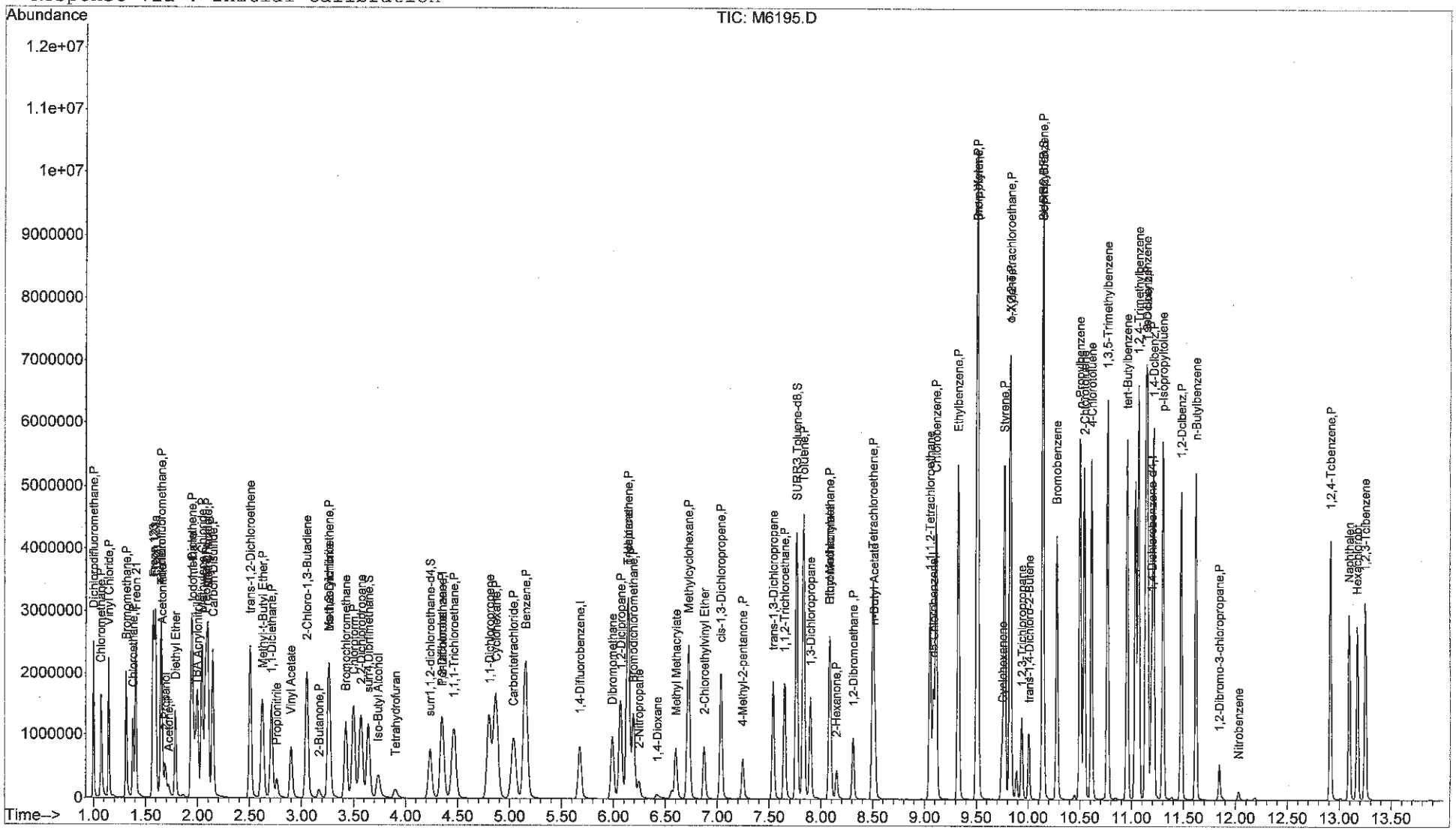
response 896961

Ion	Exp%	Act%
75.00	100	100
77.00	32.50	0.00#
110.00	27.90	0.00#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6195.D Vial: 18
Acq On : 30 Nov 2015 5:49 pm Operator: D.Lipani
Sample : STD #8 - 150 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:23 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:22:03 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6196.D Vial: 19
Acq On : 30 Nov 2015 6:20 pm Operator: D.Lipani
Sample : STD #9 - 200 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:24 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:24:26 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	671428	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	913036	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	823686	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	524034	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	301243	52.60	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.20%			
42) surr1,1,2-dichloroethane-d	4.24	65	246661	52.81	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 105.62%			
62) SURR3,Toluene-d8	7.77	98	1041341	54.75	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 109.50%			
82) SURR2,BFB	10.14	95	420587	57.04	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 114.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	1277889	175.77	ug/L	94
3) Chloromethane	1.07	50	1440348	186.50	ug/L	98
4) Vinyl Chloride	1.14	62	1430500	176.40	ug/L	94
5) Bromomethane	1.31	94	967789	200.17	ug/L	97
6) Chloroethane	1.38	64	769840	188.62	ug/L	97
7) Freon 21	1.41	67	1760358	173.66	ug/L	95
8) Freon 123	1.57	83	1603103	178.00	ug/L	96
9) Freon 123a	1.60	67	1272938	183.72	ug/L	99
10) Acrolein	1.65	56	573857	966.54	ug/L	99
11) Trichlorofluoromethane	1.65	101	1522004	180.79	ug/L	95
12) Acetonitrile	1.66	41	396263	904.78	ug/L	94
13) 2-Propanol	1.69	45	617217	3761.62	ug/L	98
14) Acetone	1.72	43	170907	212.49	ug/L	94
15) Diethyl Ether	1.79	59	718997	199.48	ug/L	97
16) 1,1-Diclethene	1.94	96	1042582	189.64	ug/L	92
17) Iodomethane	1.96	142	1646873	187.93	ug/L	95
18) TBA	1.98	59	1038845	3918.99	ug/L	99
19) Acrylonitrile	2.00	53	1148332	952.12	ug/L	99
20) Methylene Chloride	2.04	84	1129907	183.58	ug/L	97
21) Freon 113	2.07	101	1060400	193.55	ug/L	99
22) Methyl Acetate	2.10	43	483319	198.75	ug/L	97
23) Allyl Chloride	2.10	76	478270	183.12	ug/L	93
24) Carbon Disulfide	2.15	76	3116020	174.97	ug/L	96
25) trans-1,2-Dichloroethene	2.50	96	1164769	192.29	ug/L	96
26) Methyl-t-Butyl Ether	2.62	73	2295890	201.16	ug/L	99
27) 1,1-Diclethane	2.71	63	1692088	183.94	ug/L	98
28) Propionitrile	2.76	54	401843	1006.87	ug/L	96
29) Vinyl Acetate	2.90	43	1625179	208.88	ug/L	99
30) 2-Chloro-1,3-Butadiene	3.05	53	1707134	203.62	ug/L	100
31) 2-Butanone	3.17	43	263742	218.19	ug/L	98
32) Methacrylonitrile	3.27	67	279998	217.04	ug/L	97
33) cis-1,2-Dichloroethene	3.26	96	1170942	198.32	ug/L	100
34) Bromochloromethane	3.42	128	512181	180.43	ug/L	96
35) Chloroform	3.50	83	1757106	188.71	ug/L	99
36) 2,2-Dichloropropane	3.57	77	1422465	198.33	ug/L	97

(#) = qualifier out of range (m) = manual integration

DL 12/2/15

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6196.D Vial: 19
Acq On : 30 Nov 2015 6:20 pm Operator: D.Lipani
Sample : STD #9 - 200 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:24 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:24:26 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	3.90	42	170372	216.02	ug/L		99
38)	1,1,1-Trichloroethane	4.46	97	1474995	196.58	ug/L		100
41)	Iso-Butyl Alcohol	3.74	43	456699	4298.31	ug/L		88
43)	1,2-Dichloroethane	4.35	62	970626	180.00	ug/L		98
44)	1,1-Dichloropropene	4.81	75	1308363	195.79	ug/L		97
45)	Cyclohexane	4.87	56	1591287	195.64	ug/L		98
46)	Carbontetrachloride	5.04	119	1351282	206.32	ug/L		96
47)	Benzene	5.15	78	3834708	187.01	ug/L		99
48)	Dibromomethane	5.99	93	543879	194.89	ug/L		99
49)	1,2-Diclpropane	6.07	63	1008028	193.78	ug/L		99
50)	n-Heptane	6.14	43	852571	191.10	ug/L		99
51)	Trichloroethene	6.13	130	1191708	196.21	ug/L		100
52)	Bromodichloromethane	6.19	83	1258616	198.86	ug/L		100
53)	2-Nitropropane	6.25	41	246832	437.81	ug/L		98
54)	1,4-Dioxane	6.42	88	107343	3531.95	ug/L		93
55)	Methyl Methacrylate	6.60	69	446076	220.33	ug/L		99
56)	Methylcyclohexane	6.72	55	1007939	190.64	ug/L		98
57)	2-Chloroethylvinyl Ether	6.87	63	477234	211.85	ug/L		98
58)	cis-1,3-Dichloropropene	7.04	75	1522205	205.01	ug/L		98
59)	4-Methyl-2-pentanone	7.24	43	578920	213.20	ug/L		97
60)	trans-1,3-Dichloropropene	7.54	75	1210817	198.78	ug/L		99
61)	1,1,2-Trichloroethane	7.65	97	775811	200.38	ug/L		99
63)	Toluene	7.83	91	3736422	174.16	ug/L		94
65)	1,3-Dichloropropane	7.90	76	1143488	194.02	ug/L		98
66)	Ethyl Methacrylate	8.08	69	923559	208.89	ug/L		98
67)	Dibromochloromethane	8.09	129	1012354	206.52	ug/L		99
68)	2-Hexanone	8.15	43	391770	211.23	ug/L		98
69)	1,2-Dibromoethane	8.31	107	793243	201.98	ug/L		99
70)	n-Butyl Acetate	8.52	43	1012197	209.36	ug/L		98
71)	Tetrachloroethene	8.50	164	971771	194.73	ug/L		99
72)	1,1,1,2-Tetrachloroethane	9.06	131	1043174	198.07	ug/L		98
73)	Chlorobenzene	9.11	112	2608130	178.87	ug/L		96
74)	Ethylbenzene	9.33	106	1507046	200.83	ug/L	#	79
75)	Bromoform	9.51	173	724427	233.57	ug/L		98
76)	(m+p)Xylene	9.51	106	3504234	383.10	ug/L	#	80
77)	o-Xylene	9.83	106	1914371	202.62	ug/L	#	87
78)	Cyclohexanone	9.75	55	427346	3941.99	ug/L		98
79)	Styrene	9.77	104	2871278	191.67	ug/L		95
80)	trans-1,4-Dichloro-2-Buten	10.01	75	369247	243.26	ug/L		96
81)	Isopropylbenzene	10.14	105	3962423	172.30	ug/L		91
84)	1,1,2,2-Tetrachloroethane	9.82	83	934806	195.02	ug/L		100
85)	1,2,3-Trichloropropane	9.94	75	633115	193.80	ug/L		99
86)	Bromobenzene	10.28	156	1357528	187.03	ug/L		98
87)	n-Propylbenzene	10.50	91	4502437	161.29	ug/L		90
88)	2-Chlorotoluene	10.54	91	2801511	163.32	ug/L		92
89)	4-Chlorotoluene	10.61	91	3044674	168.18	ug/L		94
90)	1,3,5-Trimethylbenzene	10.77	105	3300220	173.57	ug/L		93
91)	tert-Butylbenzene	10.96	119	2878607	174.39	ug/L		95
92)	1,2,4-Trimethylbenzene	11.07	105	3435378	169.28	ug/L		92
93)	sec-Butylbenzene	11.13	105	3864512	165.98	ug/L		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6196.D Vial: 19
Acq On : 30 Nov 2015 6:20 pm Operator: D.Lipani
Sample : STD #9 - 200 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:24 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:24:26 2015
Response via : Initial Calibration
DataAcq Meth : W113015

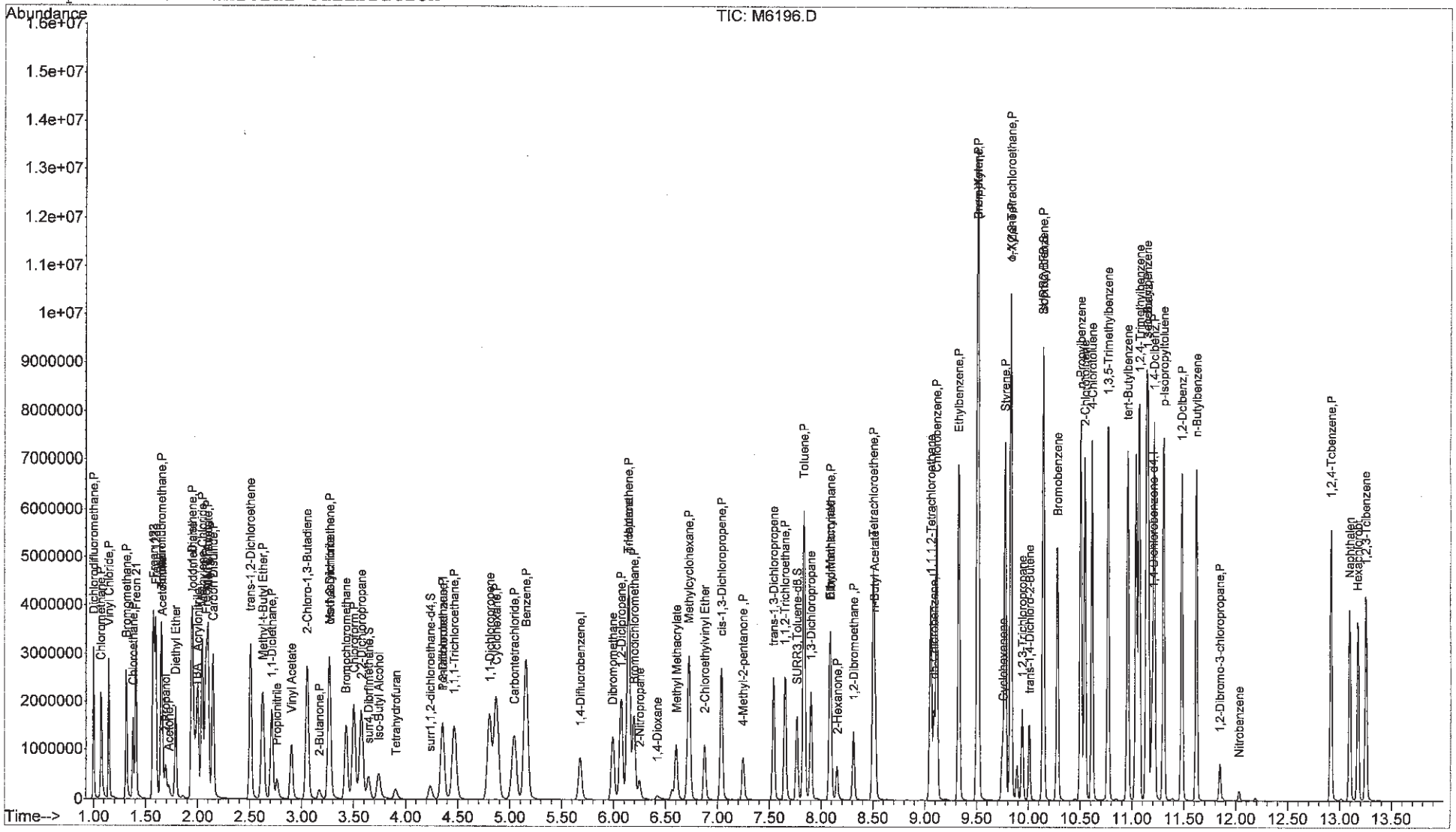
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.15	146	2417305	179.55	ug/L	96
95)	1,4-Dclbenz	11.21	146	2410154	177.36	ug/L	95
96)	p-Isopropyltoluene	11.30	119	3254458	171.13	ug/L	93
97)	1,2-Dclbenz	11.48	146	2257597	180.07	ug/L	96
98)	n-Butylbenzene	11.62	91	2886591	172.14	ug/L	94
99)	1,2-Dibromo-3-chloropropan	11.84	75	134989	192.88	ug/L	98
100)	Nitrobenzene	12.03	77	76208	447.55	ug/L	84
101)	1,2,4-Tcbenzene	12.91	180	1396394	192.55	ug/L	99
102)	Naphthalen	13.09	128	2412561	189.34	ug/L	98
103)	Hexachlorobt	13.18	225	618499	178.32	ug/L	99
104)	1,2,3-Tclbenzene	13.25	180	1163424	194.29	ug/L	97

(#) = qualifier out of range (m) = manual integration
M6196.D W113015.M Tue Dec 01 10:27:13 2015 Page 3

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6196.D Vial: 19
Acq On : 30 Nov 2015 6:20 pm Operator: D.Lipani
Sample : STD #9 - 200 PPB Inst : MS#6
Misc : 8260C ICAL GCMS#6 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 10:24 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:24:26 2015
Response via : Initial Calibration



Initial Calibration Verification Summary Report

DL 12/2/15

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1500131-13	T	Average RF	50	49.94	ppm	-0.1	<=20
1,1,1,2-Tetrachloroethane	RC1500131-13	T	Average RF	50	49.94	ppm	-0.1	<=30
1,1,1-Trichloroethane (TCA)	RC1500131-13	T	Average RF	50	49.18	ppm	-1.6	<=30
1,1,1-Trichloroethane (TCA)	RC1500131-13	T	Average RF	50	49.18	ppm	-1.6	<=20
1,1,2,2-Tetrachloroethane	RC1500131-13	T	Average RF	50	48.93	ppm	-2.1	<=20
1,1,2,2-Tetrachloroethane	RC1500131-13	T	Average RF	50	48.93	ppm	-2.1	<=30
1,1,2-Trichloroethane	RC1500131-13	T	Average RF	50	49.91	ppm	-0.2	<=20
1,1,2-Trichloroethane	RC1500131-13	T	Average RF	50	49.91	ppm	-0.2	<=30
1,1,2-Trichlorotrifluoroethane	RC1500131-13	T	Average RF	50	49.46	ppm	-1.1	<=20
1,1,2-Trichlorotrifluoroethane	RC1500131-13	T	Average RF	50	49.46	ppm	-1.1	<=30
1,1-Dichloroethane (1,1-DCA)	RC1500131-13	T	Average RF	50	51.17	ppm	2.3	<=30
1,1-Dichloroethane (1,1-DCA)	RC1500131-13	T	Average RF	50	51.17	ppm	2.3	<=20
1,1-Dichloroethene (1,1-DCE)	RC1500131-13	T	Average RF	50	49.41	ppm	-1.2	<=20
1,1-Dichloroethene (1,1-DCE)	RC1500131-13	T	Average RF	50	49.41	ppm	-1.2	<=30
1,1-Dichloropropene	RC1500131-13	T	Average RF	50	51.94	ppm	3.9	<=20
1,1-Dichloropropene	RC1500131-13	T	Average RF	50	51.94	ppm	3.9	<=30
1,2,3-Trichlorobenzene	RC1500131-13	T	Average RF	50	47.04	ppm	-5.9	<=30
1,2,3-Trichlorobenzene	RC1500131-13	T	Average RF	50	47.04	ppm	-5.9	<=20
1,2,3-Trichloropropane	RC1500131-13	T	Average RF	50	49.17	ppm	-1.7	<=30
1,2,3-Trichloropropane	RC1500131-13	T	Average RF	50	49.17	ppm	-1.7	<=20
1,2,4-Trichlorobenzene	RC1500131-13	T	Average RF	50	49.94	ppm	-0.1	<=20
1,2,4-Trichlorobenzene	RC1500131-13	T	Average RF	50	49.94	ppm	-0.1	<=30
1,2,4-Trimethylbenzene	RC1500131-13	T	Average RF	50	49.29	ppm	-1.4	<=30
1,2,4-Trimethylbenzene	RC1500131-13	T	Average RF	50	49.29	ppm	-1.4	<=20
1,2-Dibromo-3-chloropropane (DBCP)	RC1500131-13	T	Average RF	50	46.48	ppm	-7.0	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1500131-13	T	Average RF	50	46.48	ppm	-7.0	<=20
1,2-Dibromoethane	RC1500131-13	T	Average RF	50	50.36	ppm	0.7	<=20
1,2-Dibromoethane	RC1500131-13	T	Average RF	50	50.36	ppm	0.7	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1500131-13	T	Average RF	50	50.37	ppm	0.7	<=20
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1500131-13	T	Average RF	50	50.37	ppm	0.7	<=30
1,2-Dichlorobenzene	RC1500131-13	T	Average RF	50	47.63	ppm	-4.7	<=20
1,2-Dichlorobenzene	RC1500131-13	T	Average RF	50	47.63	ppm	-4.7	<=30
1,2-Dichloroethane	RC1500131-13	T	Average RF	50	46.78	ppm	-6.4	<=20
1,2-Dichloroethane	RC1500131-13	T	Average RF	50	46.78	ppm	-6.4	<=30
1,2-Dichloropropane	RC1500131-13	T	Average RF	50	49.96	ppm	-0.1	<=30
1,2-Dichloropropane	RC1500131-13	T	Average RF	50	49.96	ppm	-0.1	<=20
1,3,5-Trimethylbenzene	RC1500131-13	T	Average RF	50	50.82	ppm	1.6	<=30
1,3,5-Trimethylbenzene	RC1500131-13	T	Average RF	50	50.82	ppm	1.6	<=20
1,3-Dichlorobenzene	RC1500131-13	T	Average RF	50	49.44	ppm	-1.1	<=20
1,3-Dichlorobenzene	RC1500131-13	T	Average RF	50	49.44	ppm	-1.1	<=30
1,3-Dichloropropane	RC1500131-13	T	Average RF	50	51.39	ppm	2.8	<=20
1,3-Dichloropropane	RC1500131-13	T	Average RF	50	51.39	ppm	2.8	<=30
1,4-Dichlorobenzene	RC1500131-13	T	Average RF	50	49.38	ppm	-1.2	<=30
1,4-Dichlorobenzene	RC1500131-13	T	Average RF	50	49.38	ppm	-1.2	<=20
1,4-Dioxane	RC1500131-11	T	Average RF	1000	820.7	ppm	-17.9	<=20
1,4-Dioxane	RC1500131-11	T	Average RF	1000	820.7	ppm	-17.9	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1500131-13	T	Average RF	50	47.69	ppm	-4.6	<=20
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1500131-13	T	Average RF	50	47.69	ppm	-4.6	<=30
2,2-Dichloropropane	RC1500131-13	T	Average RF	50	46.74	ppm	-6.5	<=20
2,2-Dichloropropane	RC1500131-13	T	Average RF	50	46.74	ppm	-6.5	<=30
2-Butanone (MEK)	RC1500131-13	T	Average RF	50	47.84	ppm	-4.3	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1500131 **Instrument ID:** R-MS-06
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
2-Butanone (MEK)	RC1500131-13	T	Average RF	50	47.84	ppm	-4.3	<=20
2-Chloro-1,3-butadiene	RC1500131-13	T	Average RF	50	43.59	ppm	-12.8	<=30
2-Chloro-1,3-butadiene	RC1500131-13	T	Average RF	50	43.59	ppm	-12.8	<=20
2-Chloroethyl Vinyl Ether	RC1500131-13	T	Average RF	50	52.13	ppm	4.3	<=20
2-Chloroethyl Vinyl Ether	RC1500131-13	T	Average RF	50	52.13	ppm	4.3	<=30
2-Chlorotoluene	RC1500131-13	T	Average RF	50	48.50	ppm	-3.0	<=30
2-Chlorotoluene	RC1500131-13	T	Average RF	50	48.50	ppm	-3.0	<=20
2-Hexanone	RC1500131-13	T	Average RF	50	49.38	ppm	-1.2	<=20
2-Hexanone	RC1500131-13	T	Average RF	50	49.38	ppm	-1.2	<=30
2-Methyl-1-propanol	RC1500131-13	T	Average RF	1000	874.5	ppm	-12.5	<=30
2-Methyl-1-propanol	RC1500131-13	T	Average RF	1000	874.5	ppm	-12.5	<=20
2-Methyl-2-propanol	RC1500131-13	T	Average RF	1000	813.7	ppm	-18.6	<=20
2-Methyl-2-propanol	RC1500131-13	T	Average RF	1000	813.7	ppm	-18.6	<=30
2-Nitropropane	RC1500131-13	T	Average RF	100	93.56	ppm	-6.4	<=20
2-Nitropropane	RC1500131-13	T	Average RF	100	93.56	ppm	-6.4	<=30
2-Propanol	RC1500131-13	T	Average RF	1000	762.6	ppm	-23.7	<=30
2-Propanol	RC1500131-13	T	Average RF	1000	762.6	ppm	-23.7	<=20
3-Chloro-1-propene	RC1500131-13	T	Average RF	50	55.46	ppm	10.9	<=30
3-Chloro-1-propene	RC1500131-13	T	Average RF	50	55.46	ppm	10.9	<=20
4-Chlorotoluene	RC1500131-13	T	Average RF	50	48.60	ppm	-2.8	<=30
4-Chlorotoluene	RC1500131-13	T	Average RF	50	48.60	ppm	-2.8	<=20
4-Isopropyltoluene	RC1500131-13	T	Average RF	50	48.73	ppm	-2.5	<=30
4-Isopropyltoluene	RC1500131-13	T	Average RF	50	48.73	ppm	-2.5	<=20
4-Methyl-2-pentanone	RC1500131-13	T	Average RF	50	49.46	ppm	-1.1	<=30
4-Methyl-2-pentanone	RC1500131-13	T	Average RF	50	49.46	ppm	-1.1	<=20
Acetone	RC1500131-13	T	Average RF	50	47.19	ppm	-5.6	<=20
Acetone	RC1500131-13	T	Average RF	50	47.19	ppm	-5.6	<=30
Acetonitrile	RC1500131-13	T	Average RF	250	214.9	ppm	-14.0	<=20
Acetonitrile	RC1500131-13	T	Average RF	250	214.9	ppm	-14.0	<=30
Acrolein	RC1500131-13	T	Average RF	100	73.77	ppm	-26.2	<=20
Acrolein	RC1500131-13	T	Average RF	100	73.77	ppm	-26.2	<=30
Acrylonitrile	RC1500131-13	T	Average RF	250	226.4	ppm	-9.4	<=20
Acrylonitrile	RC1500131-13	T	Average RF	250	226.4	ppm	-9.4	<=30
Benzene	RC1500131-13	T	Average RF	50	49.51	ppm	-1.0	<=30
Benzene	RC1500131-13	T	Average RF	50	49.51	ppm	-1.0	<=20
Bromobenzene	RC1500131-13	T	Average RF	50	49.22	ppm	-1.6	<=30
Bromobenzene	RC1500131-13	T	Average RF	50	49.22	ppm	-1.6	<=20
Bromochloromethane	RC1500131-13	T	Average RF	50	49.37	ppm	-1.3	<=30
Bromochloromethane	RC1500131-13	T	Average RF	50	49.37	ppm	-1.3	<=20
Bromodichloromethane	RC1500131-13	T	Average RF	50	51.39	ppm	2.8	<=20
Bromodichloromethane	RC1500131-13	T	Average RF	50	51.39	ppm	2.8	<=30
Bromoform	RC1500131-13	T	Average RF	50	53.23	ppm	6.5	<=30
Bromoform	RC1500131-13	T	Average RF	50	53.23	ppm	6.5	<=20
Bromomethane	RC1500131-13	T	Average RF	50	45.59	ppm	-8.8	<=30
Bromomethane	RC1500131-13	T	Average RF	50	45.59	ppm	-8.8	<=20
Carbon Disulfide	RC1500131-13	T	Average RF	50	44.20	ppm	-11.6	<=20
Carbon Disulfide	RC1500131-13	T	Average RF	50	44.20	ppm	-11.6	<=30
Carbon Tetrachloride	RC1500131-13	T	Average RF	50	49.27	ppm	-1.5	<=20
Carbon Tetrachloride	RC1500131-13	T	Average RF	50	49.27	ppm	-1.5	<=30
Chlorobenzene	RC1500131-13	T	Average RF	50	49.76	ppm	-0.5	<=30
Chlorobenzene	RC1500131-13	T	Average RF	50	49.76	ppm	-0.5	<=20

Initial Calibration Verification Summary Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Chloroethane	RC1500131-13	T	Average RF	50	48.82	ppm	-2.4	<=20
Chloroethane	RC1500131-13	T	Average RF	50	48.82	ppm	-2.4	<=30
Chloroform	RC1500131-13	T	Average RF	50	47.20	ppm	-5.6	<=20
Chloroform	RC1500131-13	T	Average RF	50	47.20	ppm	-5.6	<=30
Chloromethane	RC1500131-13	T	Average RF	50	47.21	ppm	-5.6	<=20
Chloromethane	RC1500131-13	T	Average RF	50	47.21	ppm	-5.6	<=30
Cyclohexane	RC1500131-13	T	Average RF	50	48.41	ppm	-3.2	<=30
Cyclohexane	RC1500131-13	T	Average RF	50	48.41	ppm	-3.2	<=20
Cyclohexanone	RC1500131-13	T	Average RF	1000	934.8	ppm	-6.5	<=20
Cyclohexanone	RC1500131-13	T	Average RF	1000	934.8	ppm	-6.5	<=30
Dibromochloromethane	RC1500131-13	T	Average RF	50	52.79	ppm	5.6	<=20
Dibromochloromethane	RC1500131-13	T	Average RF	50	52.79	ppm	5.6	<=30
Dibromomethane	RC1500131-13	T	Average RF	50	48.57	ppm	-2.9	<=20
Dibromomethane	RC1500131-13	T	Average RF	50	48.57	ppm	-2.9	<=30
Dichlorodifluoromethane (CFC 12)	RC1500131-13	T	Average RF	50	53.63	ppm	7.3	<=20
Dichlorodifluoromethane (CFC 12)	RC1500131-13	T	Average RF	50	53.63	ppm	7.3	<=30
Dichlorofluoromethane (CFC 21)	RC1500131-13	T	Average RF	50	52.19	ppm	4.4	<=20
Dichlorofluoromethane (CFC 21)	RC1500131-13	T	Average RF	50	52.19	ppm	4.4	<=30
Dichloromethane	RC1500131-13	T	Average RF	50	45.66	ppm	-8.7	<=30
Dichloromethane	RC1500131-13	T	Average RF	50	45.66	ppm	-8.7	<=20
Diethyl Ether	RC1500131-13	T	Average RF	50	47.95	ppm	-4.1	<=30
Diethyl Ether	RC1500131-13	T	Average RF	50	47.95	ppm	-4.1	<=20
Ethyl Methacrylate	RC1500131-13	T	Average RF	50	52.56	ppm	5.1	<=20
Ethyl Methacrylate	RC1500131-13	T	Average RF	50	52.56	ppm	5.1	<=30
Ethylbenzene	RC1500131-13	T	Average RF	50	50.41	ppm	0.8	<=30
Ethylbenzene	RC1500131-13	T	Average RF	50	50.41	ppm	0.8	<=20
Hexachlorobutadiene	RC1500131-13	T	Average RF	50	44.67	ppm	-10.7	<=30
Hexachlorobutadiene	RC1500131-13	T	Average RF	50	44.67	ppm	-10.7	<=20
Iodomethane	RC1500131-13	T	Linear	50	47.88	ppm	-4.2	<=30
Iodomethane	RC1500131-13	T	Linear	50	47.88	ppm	-4.2	<=20
Isopropylbenzene (Cumene)	RC1500131-13	T	Average RF	50	49.71	ppm	-0.6	<=30
Isopropylbenzene (Cumene)	RC1500131-13	T	Average RF	50	49.71	ppm	-0.6	<=20
Methacrylonitrile	RC1500131-13	T	Average RF	50	49.57	ppm	-0.9	<=30
Methacrylonitrile	RC1500131-13	T	Average RF	50	49.57	ppm	-0.9	<=20
Methyl Acetate	RC1500131-13	T	Average RF	50	46.55	ppm	-6.9	<=20
Methyl Acetate	RC1500131-13	T	Average RF	50	46.55	ppm	-6.9	<=30
Methyl Methacrylate	RC1500131-13	T	Average RF	50	53.39	ppm	6.8	<=20
Methyl Methacrylate	RC1500131-13	T	Average RF	50	53.39	ppm	6.8	<=30
Methyl tert-Butyl Ether	RC1500131-13	T	Average RF	50	51.11	ppm	2.2	<=20
Methyl tert-Butyl Ether	RC1500131-13	T	Average RF	50	51.11	ppm	2.2	<=30
Methylcyclohexane	RC1500131-13	T	Average RF	50	48.27	ppm	-3.5	<=20
Methylcyclohexane	RC1500131-13	T	Average RF	50	48.27	ppm	-3.5	<=30
Naphthalene	RC1500131-13	T	Average RF	50	48.55	ppm	-2.9	<=20
Naphthalene	RC1500131-13	T	Average RF	50	48.55	ppm	-2.9	<=30
Nitrobenzene	RC1500131-13	T	Average RF	100	78.34	ppm	-21.7	<=30
Nitrobenzene	RC1500131-13	T	Average RF	100	78.34	ppm	-21.7	<=20
Propionitrile	RC1500131-13	T	Average RF	250	243.9	ppm	-2.5	<=30
Propionitrile	RC1500131-13	T	Average RF	250	243.9	ppm	-2.5	<=20
Styrene	RC1500131-13	T	Average RF	50	52.10	ppm	4.2	<=20
Styrene	RC1500131-13	T	Average RF	50	52.10	ppm	4.2	<=30
Tetrachloroethene (PCE)	RC1500131-13	T	Average RF	50	49.28	ppm	-1.4	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1500131	**Instrument ID:**	R-MS-06
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Tetrachloroethene (PCE)	RC1500131-13	T	Average RF	50	49.28	ppm	-1.4	<=20
Tetrahydrofuran (THF)	RC1500131-13	T	Average RF	50	49.85	ppm	-0.3	<=20
Tetrahydrofuran (THF)	RC1500131-13	T	Average RF	50	49.85	ppm	-0.3	<=30
Toluene	RC1500131-13	T	Average RF	50	48.56	ppm	-2.9	<=20
Toluene	RC1500131-13	T	Average RF	50	48.56	ppm	-2.9	<=30
Trichloroethene (TCE)	RC1500131-13	T	Average RF	50	49.39	ppm	-1.2	<=30
Trichloroethene (TCE)	RC1500131-13	T	Average RF	50	49.39	ppm	-1.2	<=20
Trichlorofluoromethane (CFC 11)	RC1500131-13	T	Average RF	50	48.82	ppm	-2.4	<=20
Trichlorofluoromethane (CFC 11)	RC1500131-13	T	Average RF	50	48.82	ppm	-2.4	<=30
Vinyl Acetate	RC1500131-13	T	Average RF	50	46.08	ppm	-7.8	<=20
Vinyl Acetate	RC1500131-13	T	Average RF	50	46.08	ppm	-7.8	<=30
Vinyl Chloride	RC1500131-13	T	Average RF	50	47.88	ppm	-4.2	<=20
Vinyl Chloride	RC1500131-13	T	Average RF	50	47.88	ppm	-4.2	<=30
cis-1,2-Dichloroethene	RC1500131-13	T	Average RF	50	49.56	ppm	-0.9	<=30
cis-1,2-Dichloroethene	RC1500131-13	T	Average RF	50	49.56	ppm	-0.9	<=20
cis-1,3-Dichloropropene	RC1500131-13	T	Average RF	50	50.88	ppm	1.8	<=30
cis-1,3-Dichloropropene	RC1500131-13	T	Average RF	50	50.88	ppm	1.8	<=20
m,p-Xylenes	RC1500131-13	T	Average RF	100	103.4	ppm	3.4	<=20
m,p-Xylenes	RC1500131-13	T	Average RF	100	103.4	ppm	3.4	<=30
n-Butyl Acetate	RC1500131-13	T	Average RF	50	49.72	ppm	-0.6	<=20
n-Butyl Acetate	RC1500131-13	T	Average RF	50	49.72	ppm	-0.6	<=30
n-Butylbenzene	RC1500131-13	T	Average RF	50	48.81	ppm	-2.4	<=30
n-Butylbenzene	RC1500131-13	T	Average RF	50	48.81	ppm	-2.4	<=20
n-Heptane	RC1500131-13	T	Average RF	50	47.58	ppm	-4.8	<=20
n-Heptane	RC1500131-13	T	Average RF	50	47.58	ppm	-4.8	<=30
n-Propylbenzene	RC1500131-13	T	Average RF	50	47.92	ppm	-4.2	<=20
n-Propylbenzene	RC1500131-13	T	Average RF	50	47.92	ppm	-4.2	<=30
o-Xylene	RC1500131-13	T	Average RF	50	48.78	ppm	-2.4	<=30
o-Xylene	RC1500131-13	T	Average RF	50	48.78	ppm	-2.4	<=20
sec-Butylbenzene	RC1500131-13	T	Average RF	50	47.86	ppm	-4.3	<=20
sec-Butylbenzene	RC1500131-13	T	Average RF	50	47.86	ppm	-4.3	<=30
tert-Butylbenzene	RC1500131-13	T	Average RF	50	47.21	ppm	-5.6	<=30
tert-Butylbenzene	RC1500131-13	T	Average RF	50	47.21	ppm	-5.6	<=20
trans-1,2-Dichloroethene	RC1500131-13	T	Average RF	50	48.64	ppm	-2.7	<=20
trans-1,2-Dichloroethene	RC1500131-13	T	Average RF	50	48.64	ppm	-2.7	<=30
trans-1,3-Dichloropropene	RC1500131-13	T	Average RF	50	49.85	ppm	-0.3	<=30
trans-1,3-Dichloropropene	RC1500131-13	T	Average RF	50	49.85	ppm	-0.3	<=20
trans-1,4-Dichloro-2-butene	RC1500131-13	T	Average RF	50	51.09	ppm	2.2	<=30
trans-1,4-Dichloro-2-butene	RC1500131-13	T	Average RF	50	51.09	ppm	2.2	<=20
1,2-Dichloroethane-d4	RC1500131-13	S	Average RF	50	52.19	ppm	4.4	<=30
1,2-Dichloroethane-d4	RC1500131-13	S	Average RF	50	52.19	ppm	4.4	<=20
4-Bromofluorobenzene	RC1500131-13	S	Average RF	50	54.79	ppm	9.6	<=20
4-Bromofluorobenzene	RC1500131-13	S	Average RF	50	54.79	ppm	9.6	<=30
Dibromofluoromethane	RC1500131-13	S	Average RF	50	52.25	ppm	4.5	<=30
Dibromofluoromethane	RC1500131-13	S	Average RF	50	52.25	ppm	4.5	<=20
Toluene-d8	RC1500131-13	S	Average RF	50	53.45	ppm	6.9	<=30
Toluene-d8	RC1500131-13	S	Average RF	50	53.45	ppm	6.9	<=20

Initial Calibration Verification Summary Report

Exceptions

QAP	Method
DOD QSM v5.0 Rochester	8260C

Compound	Type	Criteria	Result
Nitrobenzene	Percent Difference	<= 20	-21.66
2-Propanol	Percent Difference	<= 20	-23.74
Acrolein	Percent Difference	<= 20	-26.23

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6199.D Vial: 22
Acq On : 30 Nov 2015 7:56 pm Operator: D.Lipani
Sample : ICV 50 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 2 12:05 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	681006	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	917744	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	806155	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	501158	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	300773	52.25	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.50%			
42) surr1,1,2-dichloroethane-d	4.23	65	245045	52.19	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 104.38%			
62) SURR3,Toluene-d8	7.76	98	1021776	53.45	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.90%			
82) SURR2,BFB	10.14	95	395384	54.79	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 109.58%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	395430	53.63	ug/L	98
3) Chloromethane	1.07	50	369779	47.21	ug/L	99
4) Vinyl Chloride	1.15	62	393783	47.88	ug/L	99
5) Bromomethane	1.31	94	223562	45.59	ug/L	98
6) Chloroethane	1.38	64	202112	48.82	ug/L	100
7) Freon 21	1.41	67	536554	52.19	ug/L	98
8) Freon 123	1.57	83	435619	47.69	ug/L	100
9) Freon 123a	1.59	67	353955	50.37	ug/L	88
10) Acrolein	1.65	56	44425	73.77	ug/L	98
11) Trichlorofluoromethane	1.65	101	416841	48.82	ug/L	98
12) Acetonitrile	1.66	41	95462	214.90	ug/L	90
13) 2-Propanol	1.69	45	126920	762.63	ug/L	99
14) Acetone	1.72	43	38496	47.19	ug/L	92
15) Diethyl Ether	1.79	59	175292	47.95	ug/L	97
16) 1,1-Diclethene	1.94	96	275519	49.41	ug/L	96
17) Iodomethane	1.96	142	405724	47.88	ug/L	99
18) TBA	1.98	59	218773	813.70	ug/L	98
19) Acrylonitrile	1.99	53	276957	226.40	ug/L	100
20) Methylene Chloride	2.04	84	285053	45.66	ug/L	94
21) Freon 113	2.08	101	274859	49.46	ug/L	100
22) Methyl Acetate	2.09	43	116023	46.55	ug/L	98
23) Allyl Chloride	2.10	76	146926	55.46	ug/L	97
24) Carbon Disulfide	2.15	76	798325	44.20	ug/L	99
25) trans-1,2-Dichloroethene	2.51	96	298847	48.64	ug/L	97
26) Methyl-t-Butyl Ether	2.62	73	591636	51.11	ug/L	98
27) 1,1-Diclethane	2.71	63	477415	51.17	ug/L	98
28) Propionitrile	2.76	54	98715	243.86	ug/L	98
29) Vinyl Acetate	2.90	43	363632	46.08	ug/L	97
30) 2-Chloro-1,3-Butadiene	3.05	53	370714	43.59	ug/L	98
31) 2-Butanone	3.16	43	58653	47.84	ug/L	92
32) Methacrylonitrile	3.27	67	64866	49.57	ug/L	97
33) cis-1,2-Dichloroethene	3.26	96	296807	49.56	ug/L	97
34) Bromochloromethane	3.42	128	142143	49.37	ug/L	97
35) Chloroform	3.50	83	445713	47.20	ug/L	99
36) 2,2-Dichloropropane	3.57	77	340035	46.74	ug/L	96

DL 12/2/15

(#) = qualifier out of range (m) = manual integration

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6199.D Vial: 22
Acq On : 30 Nov 2015 7:56 pm Operator: D.Lipani
Sample : ICV 50 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 2 12:05 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Tetrahydrofuran	3.90	42	39873	49.85 ug/L	92
38) 1,1,1-Trichloroethane	4.46	97	374305	49.18 ug/L	95
41) Iso-Butyl Alcohol	3.74	43	93398	874.52 ug/L	94
43) 1,2-Dichloroethane	4.35	62	253557	46.78 ug/L	98
44) 1,1-Dichloropropene	4.80	75	348872	51.94 ug/L	98
45) Cyclohexane	4.87	56	395792	48.41 ug/L	98
46) Carbontetrachloride	5.04	119	324318	49.27 ug/L	98
47) Benzene	5.15	78	1020377	49.51 ug/L	98
48) Dibromomethane	5.99	93	136252	48.57 ug/L	99
49) 1,2-Diclpropane	6.06	63	261231	49.96 ug/L	99
50) n-Heptane	6.14	43	213383	47.58 ug/L	95
51) Trichloroethene	6.13	130	301518	49.39 ug/L	99
52) Bromodichloromethane	6.19	83	326925	51.39 ug/L	99
53) 2-Nitropropane	6.24	41	53022	93.56 ug/L	99
54) 1,4-Dioxane	6.43	88	20139	659.24 ug/L	89
55) Methyl Methacrylate	6.60	69	108643	53.39 ug/L	93
56) Methylcyclohexane	6.72	55	256496	48.27 ug/L	100
57) 2-Chloroethylvinyl Ether	6.88	63	118040	52.13 ug/L	100
58) cis-1,3-Dichloropropene	7.03	75	379720	50.88 ug/L	99
59) 4-Methyl-2-pentanone	7.25	43	134986	49.46 ug/L	99
60) trans-1,3-Dichloropropene	7.53	75	305232m	49.85 ug/L	
61) 1,1,2-Trichloroethane	7.65	97	194234	49.91 ug/L	100
63) Toluene	7.83	91	1047200	48.56 ug/L	100
65) 1,3-Dichloropropane	7.89	76	296416	51.39 ug/L	100
66) Ethyl Methacrylate	8.08	69	227429	52.56 ug/L	97
67) Dibromochloromethane	8.09	129	253261	52.79 ug/L	98
68) 2-Hexanone	8.15	43	89698	49.38 ug/L	99
69) 1,2-Dibromoethane	8.31	107	193584	50.36 ug/L	99
70) n-Butyl Acetate	8.52	43	233247	49.72 ug/L	99
71) Tetrachloroethene	8.50	164	240704	49.28 ug/L	99
72) 1,1,1,2-Tetrachloroethane	9.05	131	257401	49.94 ug/L	97
73) Chlorobenzene	9.11	112	710173	49.76 ug/L	100
74) Ethylbenzene	9.32	106	370235	50.41 ug/L	99
75) Bromoform	9.50	173	161587	53.23 ug/L	98
76) (m+p)Xylene	9.50	106	921565	103.43 ug/L	98
77) o-Xylene	9.82	106	451046	48.78 ug/L	99
78) Cyclohexanone	9.74	55	97452	934.77 ug/L	98
79) Styrene	9.77	104	763804	52.10 ug/L	99
80) trans-1,4-Dichloro-2-Buten	10.00	75	75895	51.09 ug/L	98
81) Isopropylbenzene	10.13	105	1105205	49.71 ug/L	100
84) 1,1,2,2-Tetrachloroethane	9.82	83	224320	48.93 ug/L	98
85) 1,2,3-Trichloropropane	9.93	75	153611	49.17 ug/L	99
86) Bromobenzene	10.28	156	341637	49.22 ug/L	99
87) n-Propylbenzene	10.50	91	1279247	47.92 ug/L	99
88) 2-Chlorotoluene	10.54	91	787025	48.50 ug/L	99
89) 4-Chlorotoluene	10.61	91	831469	48.60 ug/L	99
90) 1,3,5-Trimethylbenzene	10.77	105	915457	50.82 ug/L	99
91) tert-Butylbenzene	10.95	119	739763	47.21 ug/L	99
92) 1,2,4-Trimethylbenzene	11.06	105	945880	49.29 ug/L	100
93) sec-Butylbenzene	11.13	105	1053095	47.86 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6199.D Vial: 22
Acq On : 30 Nov 2015 7:56 pm Operator: D.Lipani
Sample : ICV 50 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 2 12:05 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

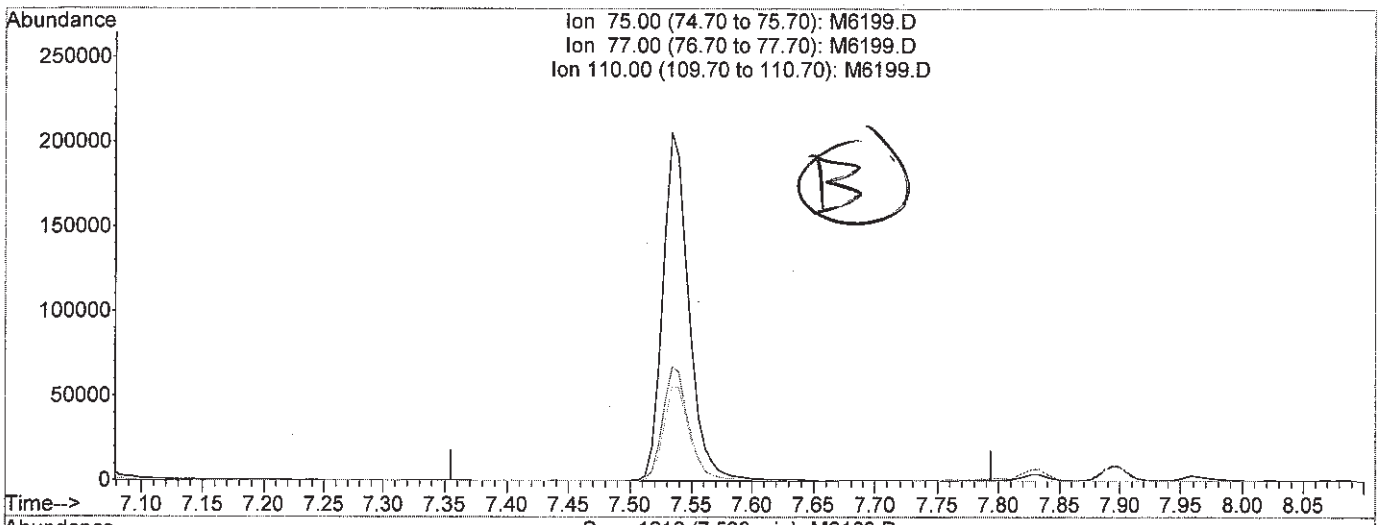
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.15	146	625638	49.44	ug/L	100
95)	1,4-Dclbenz	11.21	146	641744	49.38	ug/L	100
96)	p-Isopropyltoluene	11.30	119	886211	48.73	ug/L	100
97)	1,2-Dclbenz	11.47	146	571150	47.63	ug/L	100
98)	n-Butylbenzene	11.62	91	782799	48.81	ug/L	100
99)	1,2-Dibromo-3-chloropropan	11.84	75	31111	46.48	ug/L	97
100)	Nitrobenzene	12.03	77	12757	78.34	ug/L	88
101)	1,2,4-Tcbenzene	12.91	180	346368	49.94	ug/L	100
102)	Naphthalen	13.09	128	591670	48.55	ug/L	99
103)	Hexachlorobt	13.17	225	148190	44.67	ug/L	99
104)	1,2,3-Tclbenzene	13.25	180	269360	47.04	ug/L	99

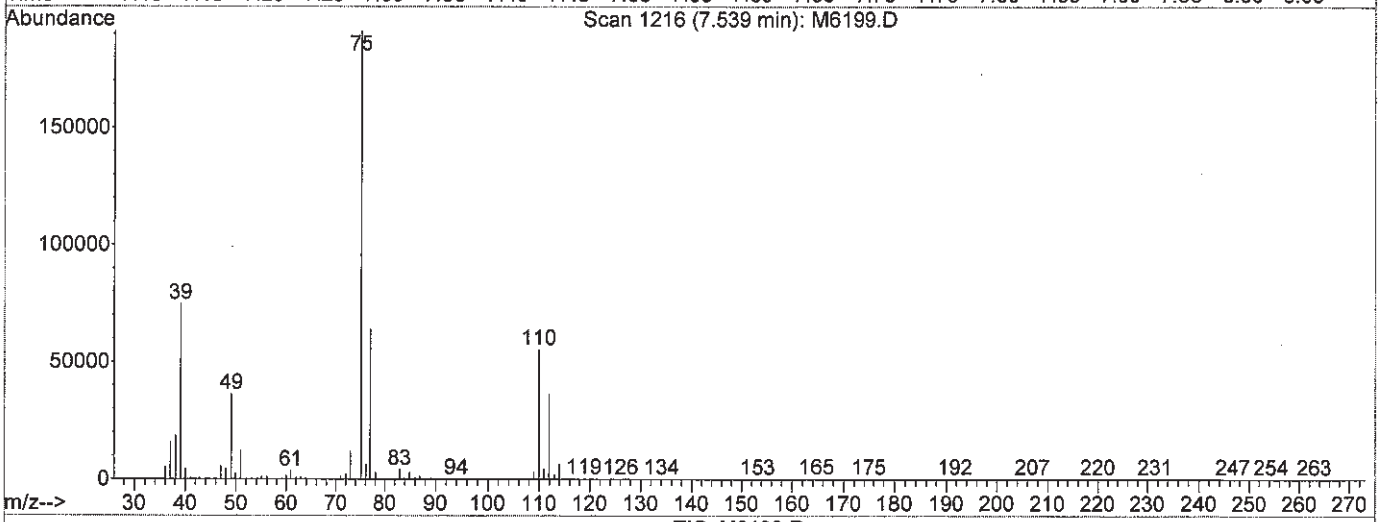
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6199.D Vial: 22
Acq On : 30 Nov 2015 7:56 pm Operator: D.Lipani
Sample : ICV 50 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 2 12:05 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration





TIC: M6199.D

(60) trans-1,3-Dichloropropene

7.54min 0.00ug/L

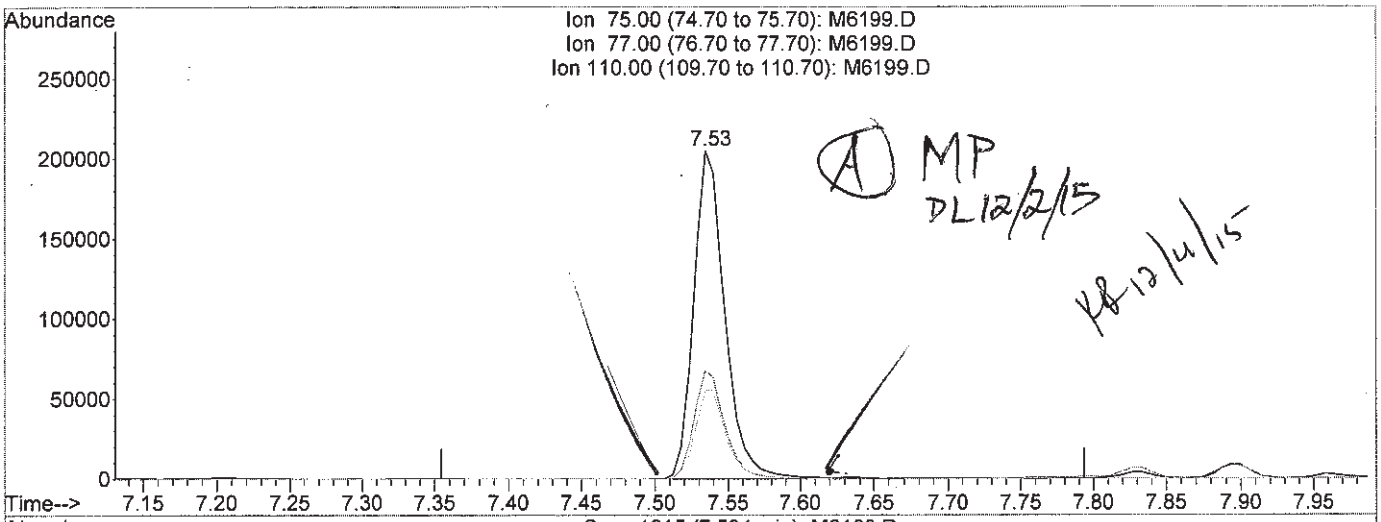
response 0

Ion	Exp%	Act%
75.00	100	0.00
77.00	32.50	0.00#
110.00	27.90	0.00#
0.00	0.00	0.00

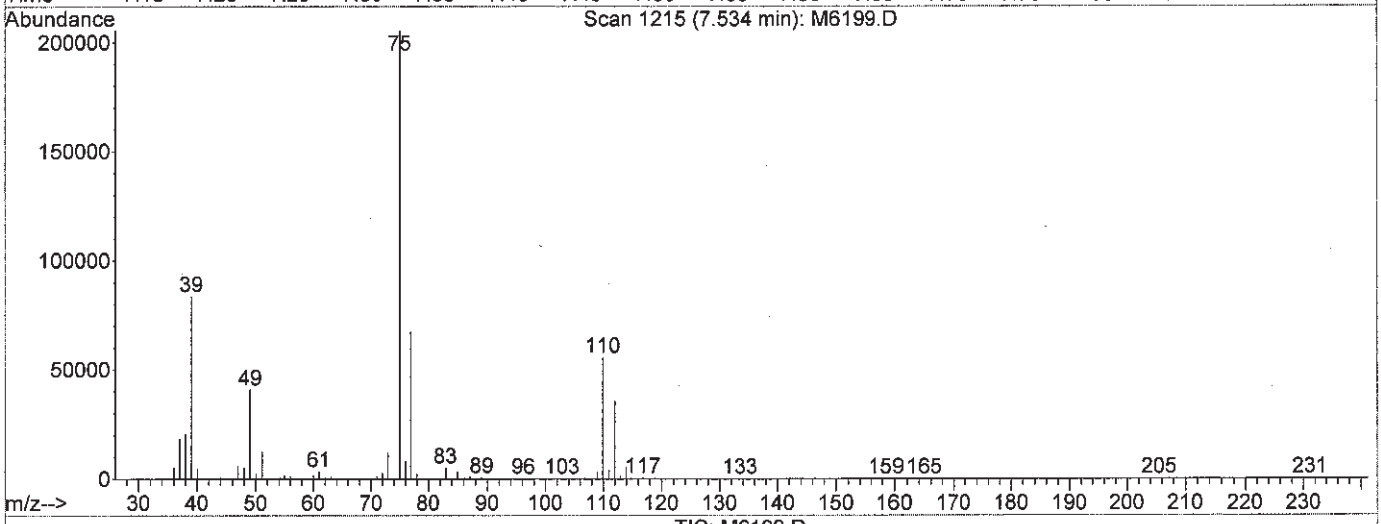
Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6199.D Vial: 22
Acq On : 30 Nov 2015 7:56 pm Operator: D.Lipani
Sample : ICV 50 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 2 12:05 2015 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration



A MP DL 12/2/15 KB 12/4/15



TIC: M6199.D

(60) trans-1,3-Dichloropropene

7.53min 49.85ug/L m

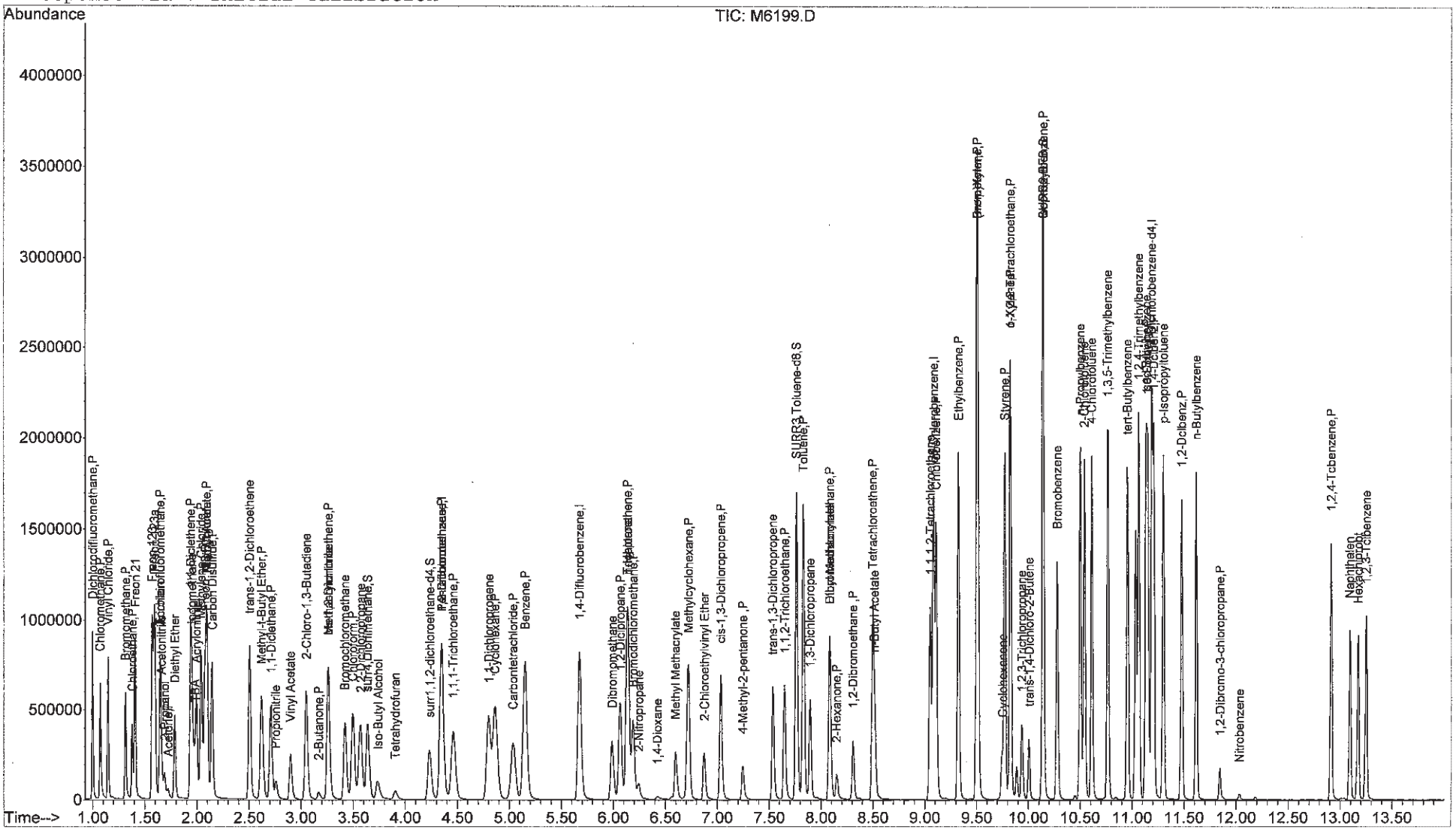
response 305232

Ion	Exp%	Act%
75.00	100	100
77.00	32.50	0.00#
110.00	27.90	0.00#
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6199.D Vial: 22
Acq On : 30 Nov 2015 7:56 pm Operator: D.Lipani
Sample : ICV 50 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 2 12:05 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\120115\M6209.D Vial: 7
Acq On : 1 Dec 2015 11:00 am Operator: D.Lipani
Sample : ICV #2-1,4-Dioxane Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 11:17 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:35:45 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	4.35	168	692607	50.00	ug/L		0.00
39) 1,4-Difluorobenzene	5.67	114	957821	50.00	ug/L		0.00
64) d5-Chlorobenzene	9.08	117	839639	50.00	ug/L		0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	507357	50.00	ug/L		0.00
System Monitoring Compounds							
40) surr4,Dibrflmethane	3.64	113	305351	50.83	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.66%				
42) surr1,1,2-dichloroethane-d	4.23	65	253778	51.79	ug/L		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 103.58%				
62) SURR3,Toluene-d8	7.76	98	1076818	53.97	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.94%				
82) SURR2,BFB	10.14	95	397811	52.93	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.86%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.00	85	429474	57.27	ug/L		98
3) Chloromethane	1.07	50	387745	48.67	ug/L		97
4) Vinyl Chloride	1.14	62	418905	50.08	ug/L		99
5) Bromomethane	1.31	94	221101	44.33	ug/L		99
6) Chloroethane	1.38	64	214041	50.84	ug/L		99
10) Acrolein	1.65	56	1473	2.41	ug/L		84
11) Trichlorofluoromethane	1.65	101	450225	51.84	ug/L		98
12) Acetonitrile	1.66	41	94902	210.06	ug/L		92
13) 2-Propanol	1.69	45	10704	63.24	ug/L		97
14) Acetone	1.72	43	3106	3.74	ug/L		88
15) Diethyl Ether	1.79	59	183542	49.37	ug/L		97
16) 1,1-Diclethene	1.94	96	288960	50.95	ug/L		99
17) Iodomethane	1.96	142	45772	6.37	ug/L		93
18) TBA	1.98	59	251573	920.03	ug/L		99
19) Acrylonitrile	2.00	53	286838	230.55	ug/L		100
20) Methylene Chloride	2.04	84	302533	47.65	ug/L		99
21) Freon 113	2.08	101	290757	51.45	ug/L		97
22) Methyl Acetate	2.09	43	7022	2.77	ug/L	#	27
23) Allyl Chloride	2.10	76	158560	58.85	ug/L		90
24) Carbon Disulfide	2.10	76	158463	8.63	ug/L	#	48
25) trans-1,2-Dichloroethene	2.51	96	311820	49.90	ug/L		97
26) Methyl-t-Butyl Ether	2.62	73	577665	49.07	ug/L		97
27) 1,1-Diclethane	2.71	63	456660	48.12	ug/L		97
28) Propionitrile	2.76	54	96894	235.36	ug/L		93
31) 2-Butanone	3.18	43	261	0.21	ug/L		71
32) Methacrylonitrile	3.27	67	66865	50.24	ug/L		97
33) cis-1,2-Dichloroethene	3.26	96	302134	49.61	ug/L		98
34) Bromochloromethane	3.42	128	144262	49.27	ug/L		97
35) Chloroform	3.50	83	465137	48.43	ug/L		99
36) 2,2-Dichloropropane	3.57	77	356068	48.13	ug/L		98
37) Tetrahydrofuran	3.90	42	39686	48.78	ug/L		87
38) 1,1,1-Trichloroethane	4.46	97	396436	51.22	ug/L		96
41) Iso-Butyl Alcohol	3.73	43	100812	904.45	ug/L		93
43) 1,2-Dichloroethane	4.35	62	258149	45.64	ug/L		98
44) 1,1-Dichloropropene	4.80	75	363109	51.80	ug/L		96

(#) = qualifier out of range (m) = manual integration

DL 12/1/15

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\120115\M6209.D Vial: 7
Acq On : 1 Dec 2015 11:00 am Operator: D.Lipani
Sample : ICV #2-1,4-Dioxane Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 11:17 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:35:45 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
46)	Carbontetrachloride	5.04	119	337681	49.15 ug/L	95
47)	Benzene	5.15	78	1048254	48.73 ug/L	98
48)	Dibromomethane	5.99	93	140451	47.98 ug/L	99
49)	1,2-Diclpropane	6.06	63	268819	49.26 ug/L	98
50)	n-Heptane	6.15	43	241175	51.53 ug/L	98
51)	Trichloroethene	6.13	130	309478	48.57 ug/L	99
52)	Bromodichloromethane	6.19	83	336087	50.62 ug/L	99
53)	2-Nitropropane	6.24	41	58425	98.79 ug/L	94
54)	1,4-Dioxane	6.42	88	26167	820.73 ug/L	95
55)	Methyl Methacrylate	6.60	69	114726	54.02 ug/L	98
56)	Methylcyclohexane	6.72	55	1119	0.20 ug/L	95
58)	cis-1,3-Dichloropropene	7.03	75	395202	50.74 ug/L	100
61)	1,1,2-Trichloroethane	7.65	97	200141	49.28 ug/L	99
63)	Toluene	7.83	91	1074804	47.76 ug/L	99
65)	1,3-Dichloropropane	7.90	76	303053	50.44 ug/L	99
66)	Ethyl Methacrylate	8.08	69	226806	50.32 ug/L	98
67)	Dibromochloromethane	8.09	129	250551	50.14 ug/L	99
68)	2-Hexanone	8.20	43	1115	0.59 ug/L	79
69)	1,2-Dibromoethane	8.31	107	194902	48.68 ug/L	99
71)	Tetrachloroethene	8.50	164	252749	49.68 ug/L	100
72)	1,1,1,2-Tetrachloroethane	9.05	131	269392	50.18 ug/L	98
73)	Chlorobenzene	9.11	112	731967	49.25 ug/L	99
74)	Ethylbenzene	9.32	106	380989	49.81 ug/L	98
75)	Bromoform	9.50	173	162775	51.48 ug/L	97
76)	(m+p)Xylene	9.51	106	934807	100.73 ug/L	99
77)	o-Xylene	9.82	106	465988	48.38 ug/L	99
78)	Cyclohexanone	9.74	55	108185	996.34 ug/L	97
79)	Styrene	9.77	104	776499	50.85 ug/L	100
80)	trans-1,4-Dichloro-2-Buten	10.00	75	79902	51.64 ug/L	98
81)	Isopropylbenzene	10.14	105	1116418	48.21 ug/L	100
84)	1,1,2,2-Tetrachloroethane	9.82	83	223222	48.10 ug/L	99
85)	1,2,3-Trichloropropane	9.94	75	153678	48.59 ug/L	99
86)	Bromobenzene	10.28	156	345236	49.13 ug/L	98
87)	n-Propylbenzene	10.50	91	1300581	48.12 ug/L	99
88)	2-Chlorotoluene	10.54	91	804989	49.00 ug/L	100
89)	4-Chlorotoluene	10.61	91	849540	49.05 ug/L	99
90)	1,3,5-Trimethylbenzene	10.77	105	905852	49.67 ug/L	99
91)	tert-Butylbenzene	10.96	119	749818	47.27 ug/L	99
92)	1,2,4-Trimethylbenzene	11.06	105	943454	48.57 ug/L	99
93)	sec-Butylbenzene	11.13	105	1057445	47.47 ug/L	99
94)	1,3-Dclbenz	11.15	146	634221	49.51 ug/L	99
95)	1,4-Dclbenz	11.21	146	628412	47.76 ug/L	100
96)	p-Isopropyltoluene	11.30	119	942019	51.16 ug/L	100
97)	1,2-Dclbenz	11.47	146	594109	48.94 ug/L	99
98)	n-Butylbenzene	11.61	91	831786	51.23 ug/L	99
99)	1,2-Dibromo-3-chloropropan	11.84	75	29860	44.07 ug/L	96
100)	Nitrobenzene	12.03	77	14542	88.21 ug/L	81
101)	1,2,4-Tcbenzene	12.91	180	358411	51.05 ug/L	99
102)	Naphthalen	13.09	128	624987	50.66 ug/L	99
103)	Hexachlorobt	13.17	225	168618	50.21 ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\120115\M6209.D Vial: 7
Acq On : 1 Dec 2015 11:00 am Operator: D.Lipani
Sample : ICV #2-1,4-Dioxane Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 11:17 2015 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:35:45 2015
Response via : Initial Calibration
DataAcq Meth : W113015

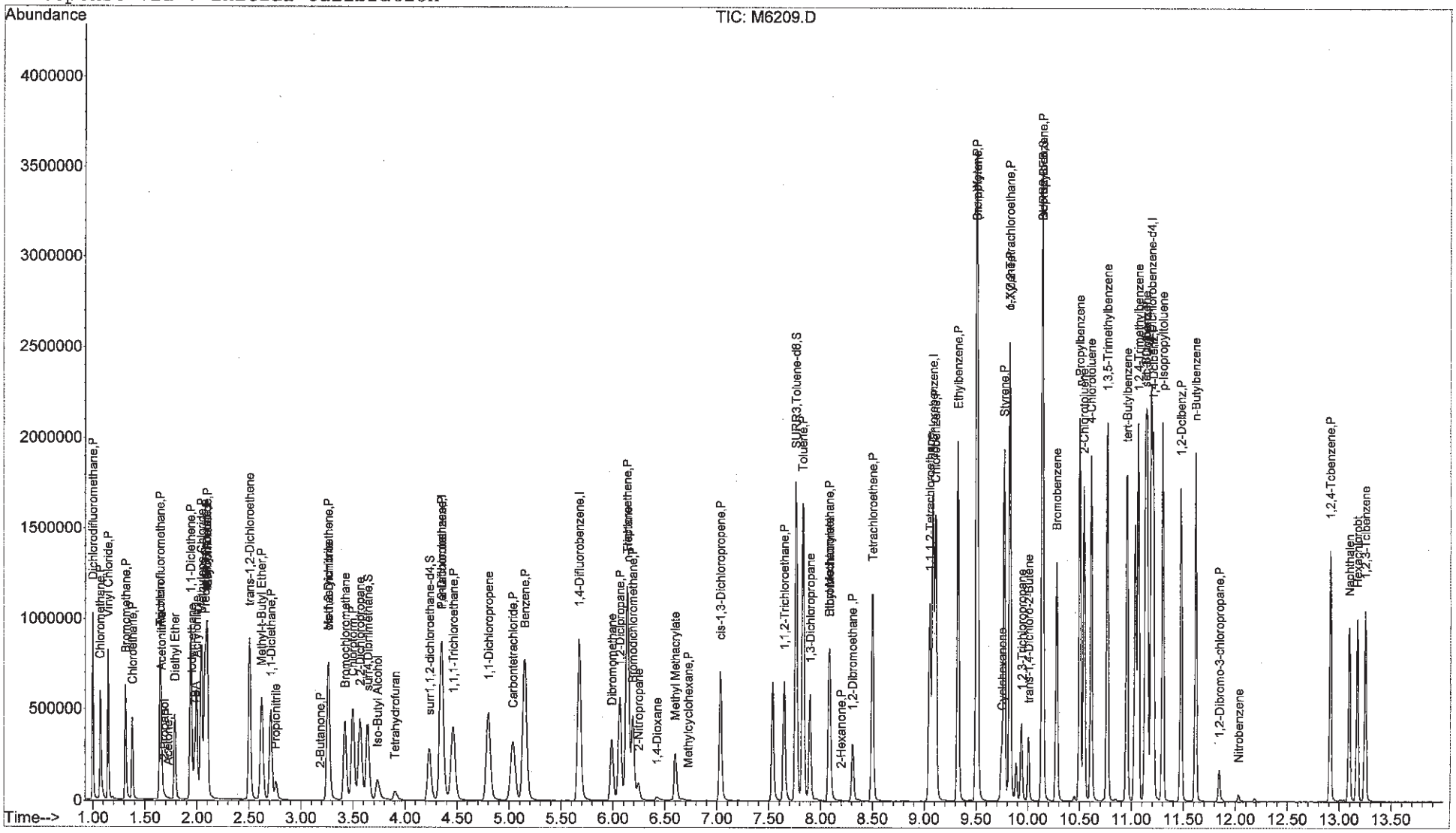
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
104) 1,2,3-Tclbenzene	13.25	180	278458	48.03	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\120115\M6209.D Vial: 7
Acq On : 1 Dec 2015 11:00 am Operator: D.Lipani
Sample : ICV #2-1,4-Dioxane Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Dec 1 11:17 2015 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Tue Dec 01 10:35:45 2015
Response via : Initial Calibration



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Client: Verina Consulting Group, LLC
Project: Binghamton/5101.0003

Service Request: R1602524
Date Analyzed: 3/22/16

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D\

Calibration Date: 11/30/15
Calibration ID: RC1500131
Analysis Lot: 488823
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	53.7	0.5588	0.6000	7.4	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.0	0.6851	0.6710	-2.1	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	47.5	0.4094	0.3893	-4.9	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	51.7	0.3030	0.3135	3.5	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	49.9	0.3326	0.3317	-0.3	NA	± 20 %	Average RF
Vinyl Chloride	50.0	48.4	0.6039	0.5844	-3.2	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	51.1	0.4397	0.4491	2.1	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	48.2	0.4511	0.4347	-3.6	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	55.5	0.4476	0.4965	10.9	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	54.0	0.3136	0.3386	7.9	NA	± 20 %	Average RF
Toluene-d8	50.0	53.1	1.042	1.105	6.1	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration

DL 3/22/16

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)	
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	97	0.00	
2	P	Dichlorodifluoromethane	0.5414	0.6906	-27.6#	123	0.00	~NT
3	P	Chloromethane	0.5751	0.5586	2.9	101	0.00	
4	P	Vinyl Chloride	0.6039	0.5844	3.2	96	0.00	
5	P	Bromomethane	0.3600	0.3803	-5.6	114	0.00	
6	P	Chloroethane	0.3039	0.2847	6.3	92	0.00	
7		Freon 21	0.7549	0.7333	2.9	100	0.00	
8		Freon 123	0.6707	0.6244	6.9	96	0.00	
9		Freon 123a	0.5160	0.4774	7.5	94	0.00	
10		Acrolein	0.0442	~~0.0139~~ 0.03468	~~68.6#~~	31#	0.00	
11	P	Trichlorofluoromethane	0.6269	0.6695	-6.8	104	0.00	
12		Acetonitrile	0.0326	0.0252	22.7#	80	0.00	
13		2-Propanol	0.0122	0.0090	26.2#	71	0.00	
14	P	Acetone	0.0599	0.0625	-4.3	102	0.00	
15		Diethyl Ether	0.2684	0.2457	8.5	91	0.00	
16	P	1,1-Diclethene	0.4094	0.3893	4.9	93	0.00	
17		Iodomethane	0.5562	0.4953	10.9	72	0.00	
18		TBA	0.0197	0.0148	24.9#	76	0.00	~NT
19		Acrylonitrile	0.0898	0.0776	13.6	88	0.00	
20	P	Methylene Chloride	0.4583	0.4067	11.3	91	0.00	
21	P	Freon 113	0.4080	0.4017	1.5	100	0.00	
22	P	Methyl Acetate	0.1830	0.1527	16.6	84	0.00	
23		Allyl Chloride	0.1945	0.1717	11.7	90	0.00	
24	P	Carbon Disulfide	1.3262	1.2813	3.4	98	0.00	
25		trans-1,2-Dichloroethene	0.4511	0.4347	3.6	95	0.00	
26	P	Methyl-t-Butyl Ether	0.8499	0.7704	9.4	87	0.00	
27	P	1,1-Diclethane	0.6851	0.6710	2.1	96	0.00	
28		Propionitrile	0.0297	0.0259	12.8	83	0.00	
29		Vinyl Acetate	0.5794	0.6077	-4.9	102	0.00	
30		2-Chloro-1,3-Butadiene	0.6243	0.6974	-11.7	107	0.00	
31	P	2-Butanone	0.0900	0.0864#	4.0	93	0.00	
32		Methacrylonitrile	0.0961	0.0912	5.1	92	0.00	
33	P	cis-1,2-Dichloroethene	0.4397	0.4491	-2.1	101	0.00	
34		Bromochloromethane	0.2114	0.2235	-5.7	106	0.00	
35	P	Chloroform	0.6934	0.7413	-6.9	107	0.00	
36		2,2-Dichloropropane	0.5341	0.5643	-5.7	107	0.00	
37		Tetrahydrofuran	0.0587	0.0520	11.4	86	0.00	
38	P	1,1,1-Trichloroethane	0.5588	0.6000	-7.4	107	0.00	
39	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	101	0.00	
40	S	surr4,Dibrflmethane	0.3136	0.3386	-8.0	106	0.00	
41		Iso-Butyl Alcohol	0.0058	0.0047	19.0	84	0.00	
42	S	surr1,1,2-dichloroethane-d4	0.2558	0.2774	-8.4	107	0.00	
43	P	1,2-Dichloroethane	0.2953	0.2815	4.7	106	0.00	
44		1,1-Dichloropropene	0.3659	0.3719	-1.6	105	0.00	
45	P	Cyclohexane	0.4454	0.4312	3.2	101	0.00	
46	P	Carbontetrachloride	0.3587	0.3872	-7.9	111	0.00	
47	P	Benzene	1.1229	1.0939	2.6	100	0.00	
48		Dibromomethane	0.1528	0.1520	0.5	105	0.00	
49	P	1,2-Diclpropane	0.2849	0.2682	5.9	100	0.00	

Acrolein:
$\frac{(44350)(50)}{(639416)(100)} = 0.03468$
→ -21.9% (NT)

(#) = Out of Range

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
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)	
50		n-Heptane	0.2443	0.2532	-3.6	102	0.00	
51	P	Trichloroethene	0.3326	0.3317	0.3	101	0.00	
52	P	Bromodichloromethane	0.3466	0.3577	-3.2	105	0.00	
53		2-Nitropropane	0.0309	0.0322	-4.2	111	0.00	
54		1,4-Dioxane	0.0017	0.0011	35.3#	68	0.00	- NT
55		Methyl Methacrylate	0.1109	0.1088	1.9	96	0.00	
56	P	Methylcyclohexane	0.2895	0.2977	-2.8	108	0.00	
57		2-Chloroethylvinyl Ether	0.1234	0.1219	1.2	94	0.00	
58	P	cis-1,3-Dichloropropene	0.4066	0.4086	-0.5	100	0.00	
59	P	4-Methyl-2-pentanone	0.1487	0.1403	5.6	94	0.00	
60		trans-1,3-Dichloropropene	0.3336	0.3261	2.2	100	0.00	
61	P	1,1,2-Trichloroethane	0.2120	0.2018	4.8	99	0.00	
62	S	SURR3,Toluene-d8	1.0415	1.1053	-6.1	100	0.00	
63	P	Toluene	1.1748	1.1283	4.0	101	0.00	
64	I	d5-Chlorobenzene	1.0000	1.0000	0.0	100	0.00	
65		1,3-Dichloropropane	0.3578	0.3532	1.3	103	0.00	
66		Ethyl Methacrylate	0.2684	0.2542	5.3	93	0.00	
67	P	Dibromochloromethane	0.2976	0.3106	-4.4	103	0.00	
68	P	2-Hexanone	0.1127	0.1084	3.8	96	0.00	
69	P	1,2-Dibromoethane	0.2384	0.2459	-3.1	101	0.00	
70		n-Butyl Acetate	0.2909	0.2808	3.5	95	0.00	
71	P	Tetrachloroethene	0.3030	0.3135	-3.5	105	0.00	
72		1,1,1,2-Tetrachloroethane	0.3197	0.3343	-4.6	105	0.00	
73	P	Chlorobenzene	0.8851	0.8825	0.3	100	0.00	
74	P	Ethylbenzene	0.4555	0.4604	-1.1	103	0.00	
75	P	Bromoform	0.1883	0.1999	-6.2	105	0.00	
76	P	(m+p)Xylene	0.5526	0.5698	-3.1	103	0.00	
77	P	o-Xylene	0.5735	0.5759	-0.4	101	0.00	
78		Cyclohexanone	0.0065	0.0111	-70.8#	165	0.00	- NT
79	P	Styrene	0.9094	0.9200	-1.2	100	0.00	
80		trans-1,4-Dichloro-2-Butene	0.0921	0.0759	17.6	79	0.00	
81	P	Isopropylbenzene	1.3790	1.4214	-3.1	103	0.00	
82	S	SURR2,BFB	0.4476	0.4965	-10.9	103	0.00	
83	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	109	0.00	
84	P	1,1,2,2-Tetrachloroethane	0.4574	0.4092	10.5	96	0.00	
85		1,2,3-Trichloropropane	0.3117	0.2802	10.1	101	0.00	
86		Bromobenzene	0.6925	0.6483	6.4	102	0.00	
87		n-Propylbenzene	2.6636	2.6639	-0.0	107	0.00	
88		2-Chlorotoluene	1.6190	1.5107	6.7	102	0.00	
89		4-Chlorotoluene	1.7069	1.6356	4.2	103	0.00	
90		1,3,5-Trimethylbenzene	1.7973	1.7648	1.8	106	0.00	
91		tert-Butylbenzene	1.5633	1.5520	0.7	108	0.00	
92		1,2,4-Trimethylbenzene	1.9145	1.8961	1.0	106	0.00	
93		sec-Butylbenzene	2.1952	2.2609	-3.0	110	0.00	
94	P	1,3-Dclbenz	1.2625	1.2409	1.7	106	0.00	
95	P	1,4-Dclbenz	1.2966	1.2424	4.2	105	0.00	
96		p-Isopropyltoluene	1.8145	1.8272	-0.7	108	0.00	
97	P	1,2-Dclbenz	1.1963	1.1701	2.2	107	0.00	

(#) = Out of Range

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
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)
98		n-Butylbenzene	1.6000	1.6517	-3.2	106	0.00
99	P	1,2-Dibromo-3-chloropropane	0.0668	0.0616	7.8	106	0.00
100		Nitrobenzene	0.0162	0.0146	9.9	113	0.00
101	P	1,2,4-Tcbenzene	0.6919	0.7198	-4.0	109	0.00
102		Naphthalen	1.2158	1.1732	3.5	100	0.00
103		Hexachlorobt	0.3309	0.3251	1.8	100	0.00
104		1,2,3-Tclbenzene	0.5714	0.5720	-0.1	107	0.00

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV RQ1602997-02 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 10:30 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	639416	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	909772	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	785583	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	507305	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	308004	53.97	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 107.94%			
42) surr1,1,2-dichloroethane-d	4.23	65	252371	54.22	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 108.44%			
62) SURR3,Toluene-d8	7.76	98	1005532	53.06	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.12%			
82) SURR2,BFB	10.14	95	390021	55.46	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 110.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	441568	63.78	ug/L	97
3) Chloromethane	1.07	50	357164	48.56	ug/L	100
4) Vinyl Chloride	1.15	62	373658	48.39	ug/L	99
5) Bromomethane	1.32	94	243140	52.81	ug/L	99
6) Chloroethane	1.38	64	182068	46.84	ug/L	98
7) Freon 21	1.40	67	468901	48.57	ug/L	98
8) Freon 123	1.57	83	399253	46.55	ug/L	97
9) Freon 123a	1.60	67	305232	46.26	ug/L	95
10) Acrolein	1.66	56	44350	78.44	ug/L	96
11) Trichlorofluoromethane	1.65	101	428089	53.39	ug/L	99
12) Acetonitrile	1.67	41	80709	193.51	ug/L	88
13) 2-Propanol	1.69	45	114708	734.09	ug/L	99
14) Acetone	1.72	43	39942	52.15	ug/L	98
15) Diethyl Ether	1.79	59	157128	45.78	ug/L	98
16) 1,1-Diclethene	1.94	96	248898	47.54	ug/L	100
17) Iodomethane	1.95	142	316716	40.00	ug/L	93
18) TBA	1.98	59	189538	750.82	ug/L	98
19) Acrylonitrile	2.00	53	247993	215.91	ug/L	99
20) Methylene Chloride	2.04	84	260073	44.37	ug/L	98
21) Freon 113	2.08	101	256876	49.23	ug/L	97
22) Methyl Acetate	2.10	43	97623	41.72	ug/L	99
23) Allyl Chloride	2.10	76	109788	44.14	ug/L	93
24) Carbon Disulfide	2.14	76	819313	48.31	ug/L	99
25) trans-1,2-Dichloroethene	2.50	96	277928	48.18	ug/L	98
26) Methyl-t-Butyl Ether	2.62	73	492620	45.32	ug/L	98
27) 1,1-Diclethane	2.71	63	429017	48.97	ug/L	96
28) Propionitrile	2.76	54	82854	217.99	ug/L	98
29) Vinyl Acetate	2.90	43	388543	52.44	ug/L	98
30) 2-Chloro-1,3-Butadiene	3.05	53	445907	55.85	ug/L	97
31) 2-Butanone	3.17	43	55216	47.97	ug/L	91
32) Methacrylonitrile	3.27	67	58346	47.49	ug/L	97
33) cis-1,2-Dichloroethene	3.26	96	287144	51.07	ug/L	99
34) Bromochloromethane	3.42	128	142925	52.87	ug/L	96
35) Chloroform	3.49	83	474008	53.46	ug/L	98
36) 2,2-Dichloropropane	3.57	77	360821	52.83	ug/L	97

(#) = qualifier out of range (m) = manual integration

DL 3/22/16

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 10:30 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	Tetrahydrofuran	3.90	42	33273	44.30	ug/L	89
38)	1,1,1-Trichloroethane	4.46	97	383647	53.69	ug/L	99
41)	Iso-Butyl Alcohol	3.73	43	85344	806.11	ug/L	97
43)	1,2-Dichloroethane	4.35	62	256071	47.66	ug/L	96
44)	1,1-Dichloropropene	4.80	75	338342	50.81	ug/L	97
45)	Cyclohexane	4.86	56	392326	48.41	ug/L	96
46)	Carbontetrachloride	5.03	119	352308	53.99	ug/L	99
47)	Benzene	5.15	78	995163	48.71	ug/L	99
48)	Dibromomethane	5.98	93	138288	49.73	ug/L	95
49)	1,2-Diclpropane	6.06	63	244012	47.08	ug/L	99
50)	n-Heptane	6.14	43	230395	51.83	ug/L	96
51)	Trichloroethene	6.13	130	301737	49.86	ug/L	99
52)	Bromodichloromethane	6.19	83	325418	51.60	ug/L	99
53)	2-Nitropropane	6.24	41	58674	104.45	ug/L	86
54)	1,4-Dioxane	6.42	88	~~19134~~	~~631.83 ug/L~~	→	94
55)	Methyl Methacrylate	6.60	69	99019	49.08	ug/L	93
56)	Methylcyclohexane	6.72	55	270851	51.41	ug/L	99
57)	2-Chloroethylvinyl Ether	6.87	63	110863	49.39	ug/L	98
58)	cis-1,3-Dichloropropene	7.03	75	371756	50.25	ug/L	100
59)	4-Methyl-2-pentanone	7.24	43	127660	47.18	ug/L	100
60)	trans-1,3-Dichloropropene	7.53	75	296665	48.88	ug/L	98
61)	1,1,2-Trichloroethane	7.65	97	183624	47.60	ug/L	99
63)	Toluene	7.83	91	1026460	48.02	ug/L	100
65)	1,3-Dichloropropane	7.89	76	277498	49.37	ug/L	97
66)	Ethyl Methacrylate	8.08	69	199674	47.35	ug/L	94
67)	Dibromochloromethane	8.09	129	244000	52.19	ug/L	98
68)	2-Hexanone	8.15	43	85164	48.12	ug/L	99
69)	1,2-Dibromoethane	8.30	107	193202	51.58	ug/L	100
70)	n-Butyl Acetate	8.52	43	220599	48.26	ug/L	96
71)	Tetrachloroethene	8.49	164	246276	51.74	ug/L	98
72)	1,1,1,2-Tetrachloroethane	9.05	131	262616	52.28	ug/L	100
73)	Chlorobenzene	9.10	112	693260	49.85	ug/L	99
74)	Ethylbenzene	9.32	106	361667	50.53	ug/L	100
75)	Bromoform	9.50	173	157016	53.08	ug/L	98
76)	(m+p)Xylene	9.50	106	895207	103.10	ug/L	98
77)	o-Xylene	9.82	106	452451	50.21	ug/L	99
78)	Cyclohexanone	9.74	55	173637	1709.17	ug/L	94
79)	Styrene	9.77	104	722717	50.58	ug/L	98
80)	trans-1,4-Dichloro-2-Buten	10.00	75	59609	41.18	ug/L	97
81)	Isopropylbenzene	10.13	105	1116598	51.54	ug/L	100
84)	1,1,2,2-Tetrachloroethane	9.82	83	207577	44.73	ug/L	99
85)	1,2,3-Trichloropropane	9.93	75	142141	44.95	ug/L	98
86)	Bromobenzene	10.27	156	328892	46.81	ug/L	99
87)	n-Propylbenzene	10.50	91	1351434	50.01	ug/L	99
88)	2-Chlorotoluene	10.54	91	766379	46.65	ug/L	98
89)	4-Chlorotoluene	10.61	91	829757	47.91	ug/L	99
90)	1,3,5-Trimethylbenzene	10.76	105	895305	49.10	ug/L	100
91)	tert-Butylbenzene	10.95	119	787353	49.64	ug/L	100
92)	1,2,4-Trimethylbenzene	11.06	105	961889	49.52	ug/L	100
93)	sec-Butylbenzene	11.13	105	1146957	51.50	ug/L	99

19647 = 648.77m
DL
3/22/16

(#) = qualifier out of range (m) = manual integration

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 10:30 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

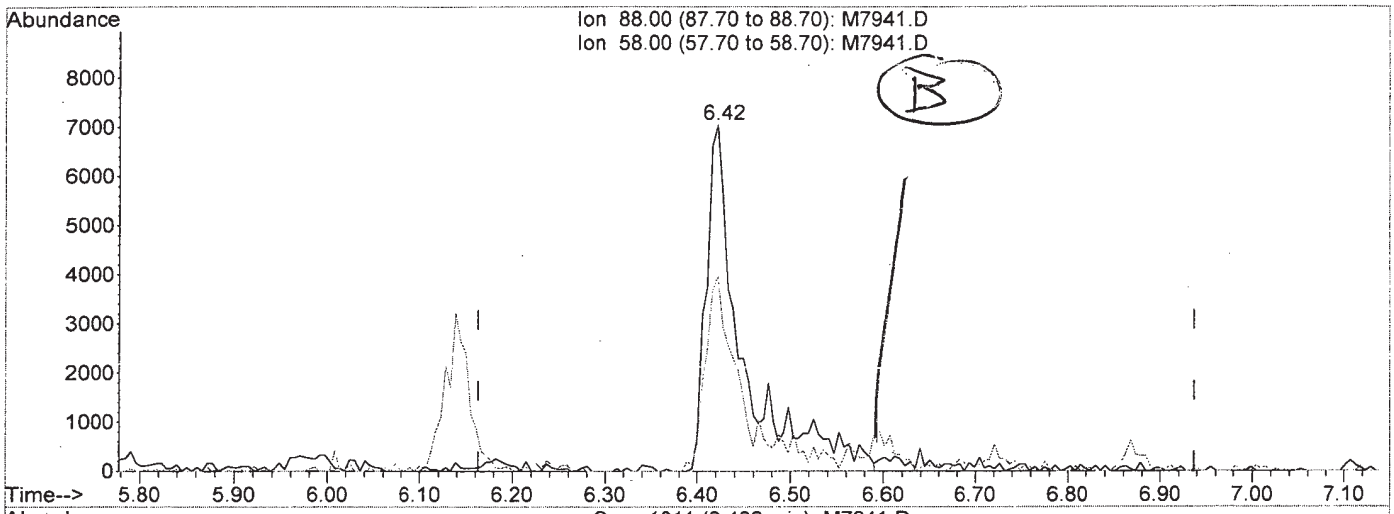
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.14	146	629515	49.15	ug/L	100
95)	1,4-Dclbenz	11.20	146	630293	47.91	ug/L	99
96)	p-Isopropyltoluene	11.30	119	926925	50.35	ug/L	100
97)	1,2-Dclbenz	11.47	146	593619	48.91	ug/L	100
98)	n-Butylbenzene	11.61	91	837894	51.62	ug/L	98
99)	1,2-Dibromo-3-chloropropan	11.84	75	31253	46.13	ug/L	92
100)	Nitrobenzene	12.03	77	14789	89.72	ug/L	70
101)	1,2,4-Tcbenzene	12.91	180	365135	52.01	ug/L	97
102)	Naphthalen	13.09	128	595192	48.25	ug/L	100
103)	Hexachlorobt	13.16	225	164915	49.11	ug/L	99
104)	1,2,3-Tclbenzene	13.25	180	290200	50.06	ug/L	100

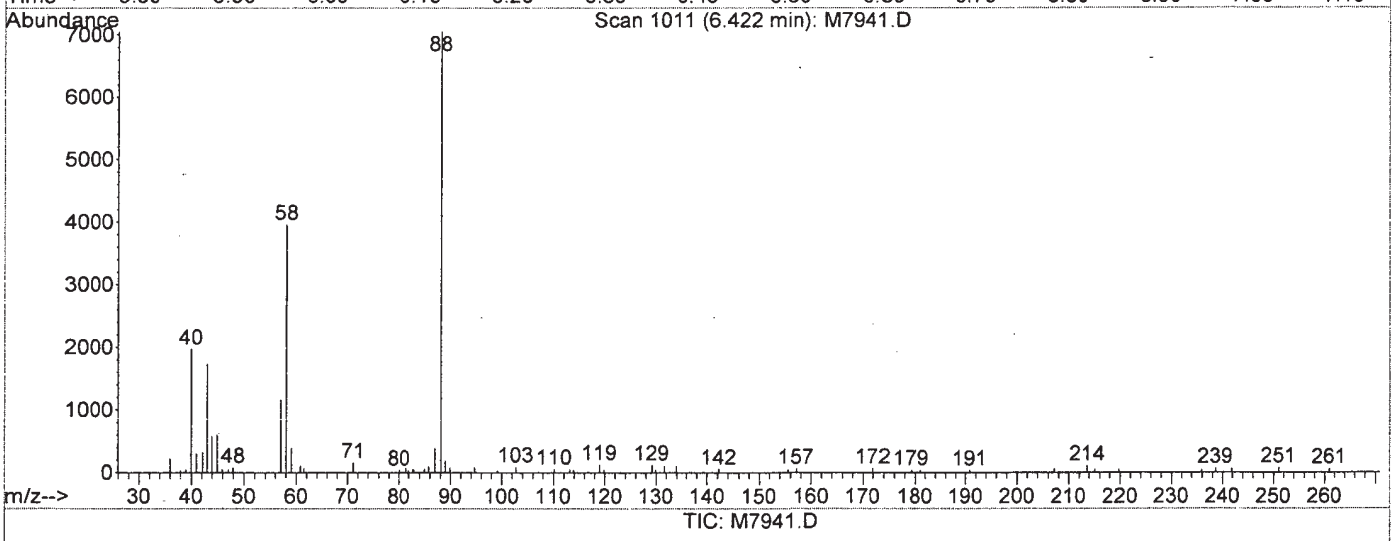
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 10:30 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Single Level Calibration





TIC: M7941.D

(54) 1,4-Dioxane

6.42min 631.83ug/L

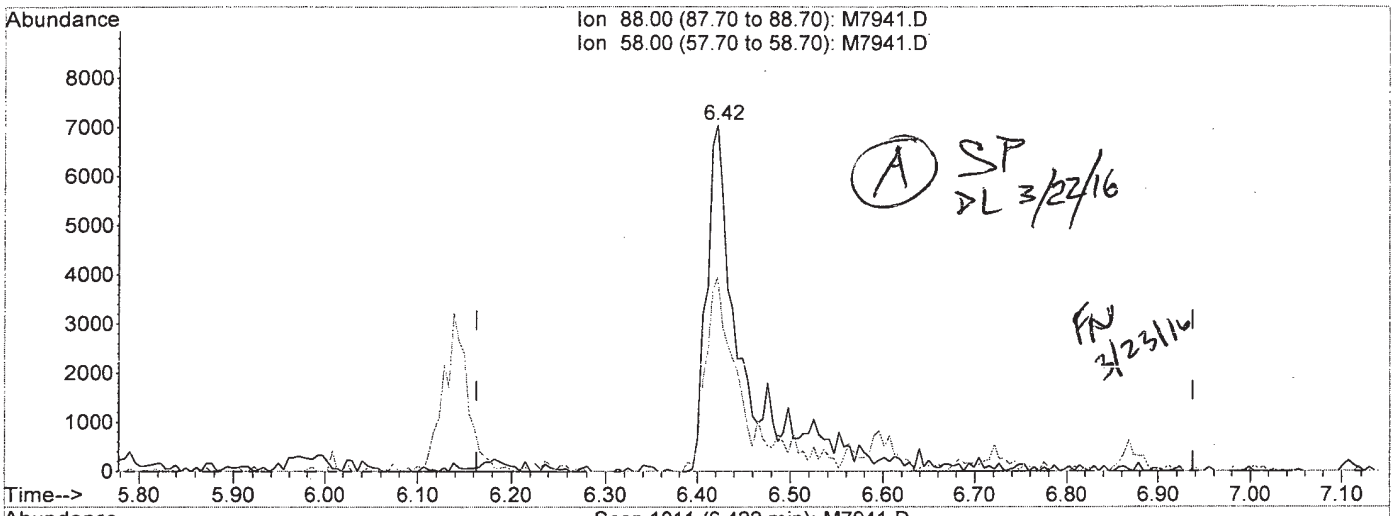
response 19134

Ion	Exp%	Act%
88.00	100	100
58.00	60.40	56.18
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

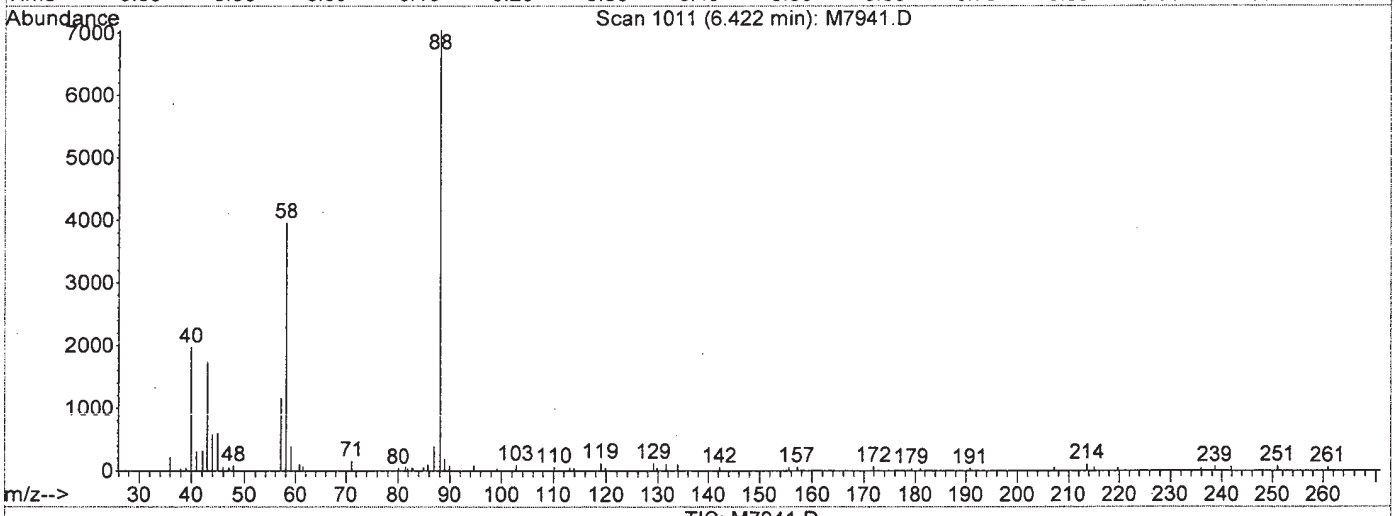
Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 10:32 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Single Level Calibration



A SP 3/22/16

FN 3/23/16



TIC: M7941.D

(54) 1,4-Dioxane

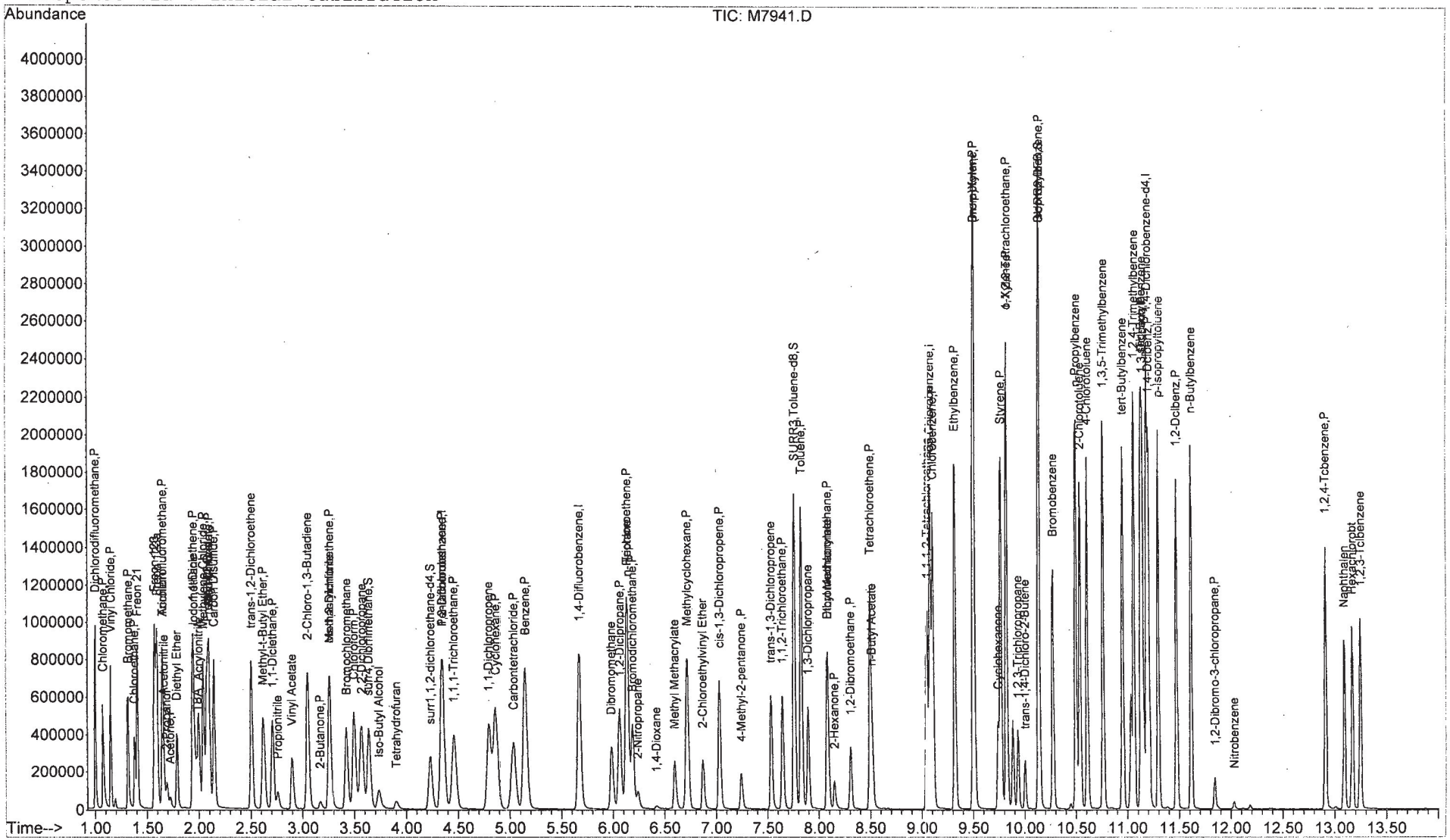
6.42min 648.77ug/L m

response 19647

Ion	Exp%	Act%
88.00	100	100
58.00	60.40	56.18
0.00	0.00	0.00
0.00	0.00	0.00

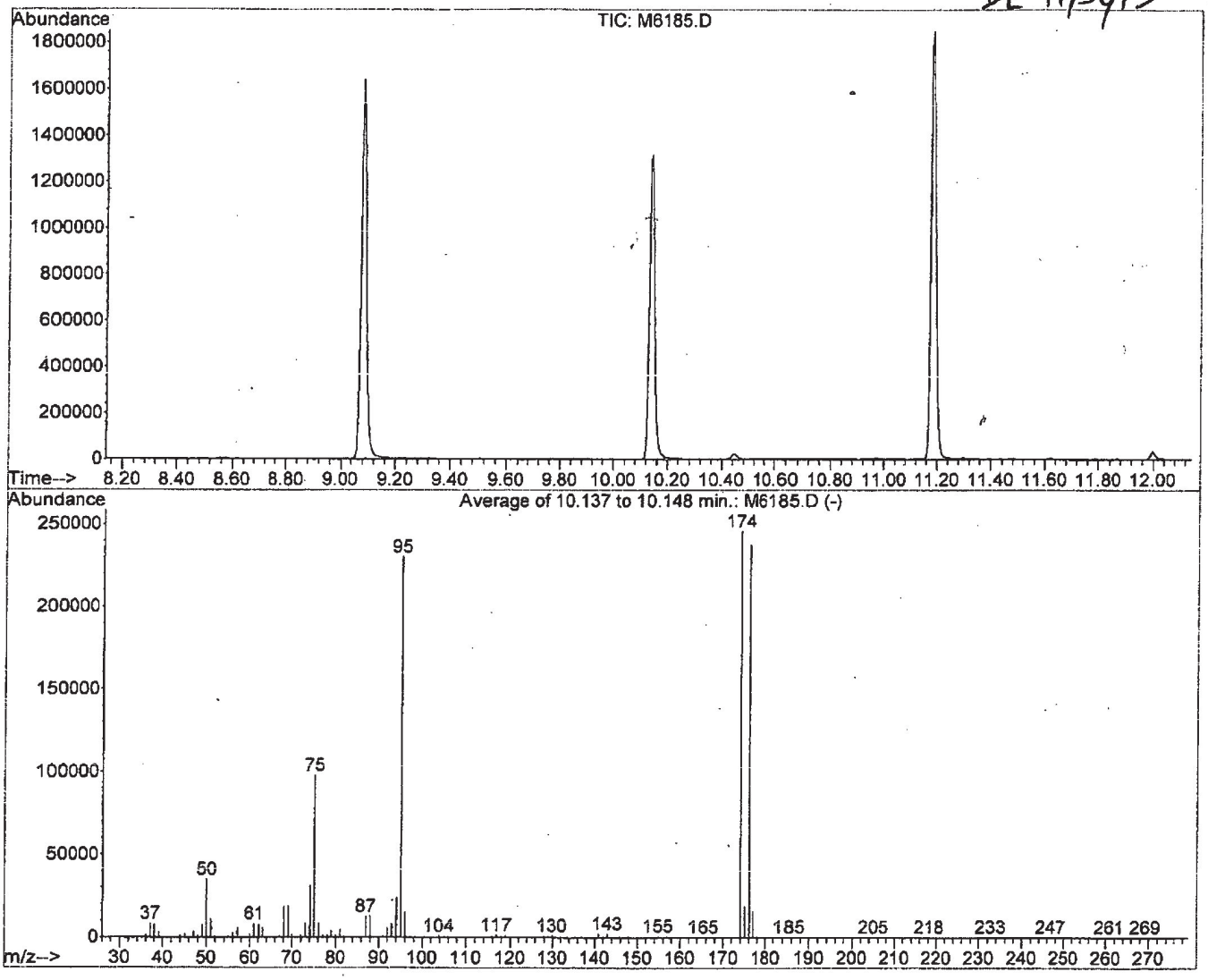
Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7941.D Vial: 6
Acq On : 22 Mar 2016 10:11 am Operator: D.Lipani
Sample : CCV Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 10:30 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration



Data File : I:\ACQUDATA\MSVOA6\DATA\113015\M6185.D Vial: 8
Acq On : 30 Nov 2015 11:53 am Operator: D.Lipani
Sample : TUNE CHECK Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS

DL 11/30/15



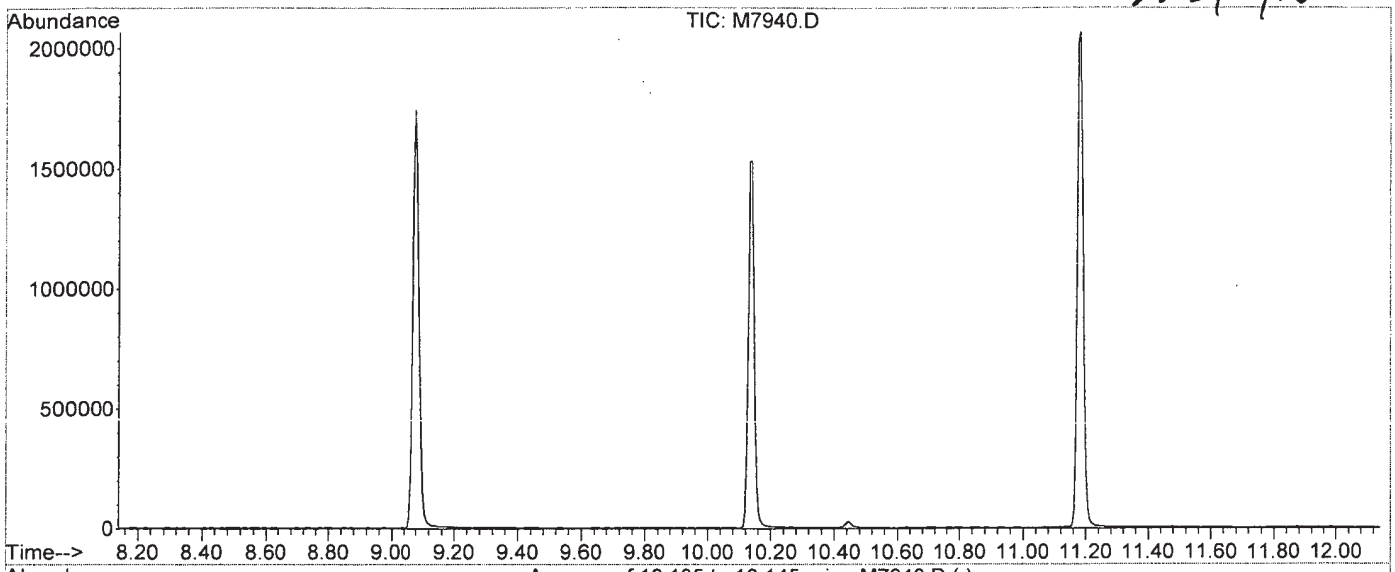
AutoFind: Scans 1693, 1694, 1695; Background Corrected with Scan 1687

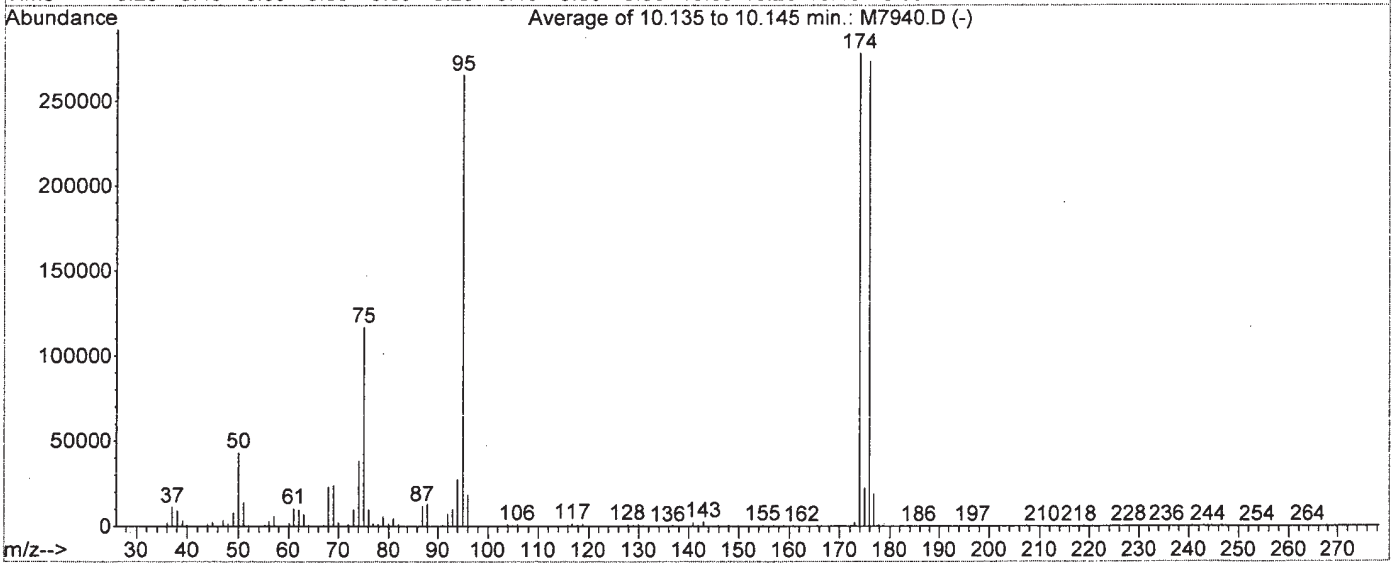
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.1	34789	PASS
75	95	30	60	42.5	97693	PASS
95	95	100	100	100.0	230037	PASS
96	95	5	9	6.6	15085	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	106.8	245739	PASS
175	174	5	9	7.7	18923	PASS
176	174	95	101	96.7	237717	PASS
177	176	5	9	6.7	15828	PASS

M6185.D W113015.M Mon Nov 30 12:12:58 2015

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7940.D Vial: 5
Acq On : 22 Mar 2016 9:29 am Operator: D.Lipani
Sample : TUNE CHECK RQ1602997-01 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS

DL 3/22/16





Spectrum Information: Average of 10.135 to 10.145 min. Sub. scan = 1687

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	43003	PASS
75	95	30	60	44.0	116688	PASS
95	95	100	100	100.0	265301	PASS
96	95	5	9	6.8	18146	PASS
173	174	0.00	2	0.7	2047	PASS
174	95	50	120	104.9	278272	PASS
175	174	5	9	8.0	22357	PASS
176	174	95	101	98.3	273600	PASS
177	176	5	9	6.9	18997	PASS

M7940.D W113015.M Tue Mar 22 09:45:09 2016

Quantitation Report (QT Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7944.D Vial: 9
Acq On : 22 Mar 2016 11:51 am Operator: D.Lipani
Sample : MET BLK RQ1602997-04 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:03 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	637186	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	880058	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	796563	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	485221	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	310267	56.21	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.42%			
42) surr1,1,2-dichloroethane-d	4.24	65	262527	58.31	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 116.62%			
62) SURR3,Toluene-d8	7.76	98	980507	53.49	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.98%			
82) SURR2,BFB	10.14	95	399569	56.04	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 112.08%			
Target Compounds						Qvalue
5) Bromomethane	1.32	94	3517	0.77	ug/L #	56 NT
10) Acrolein	1.66	56	284	0.50	ug/L #	48
14) Acetone	1.73	43	430	0.56	ug/L	85
17) Iodomethane	1.96	142	3417	1.54	ug/L	99
101) 1,2,4-Tcbenzene	12.91	180	1859	0.28	ug/L	93
102) Naphthalen	13.09	128	3108	0.26	ug/L	92
103) Hexachlorobt	13.17	225	1083	0.34	ug/L	81
104) 1,2,3-Tclbenzene	13.25	180	1742	0.31	ug/L	86

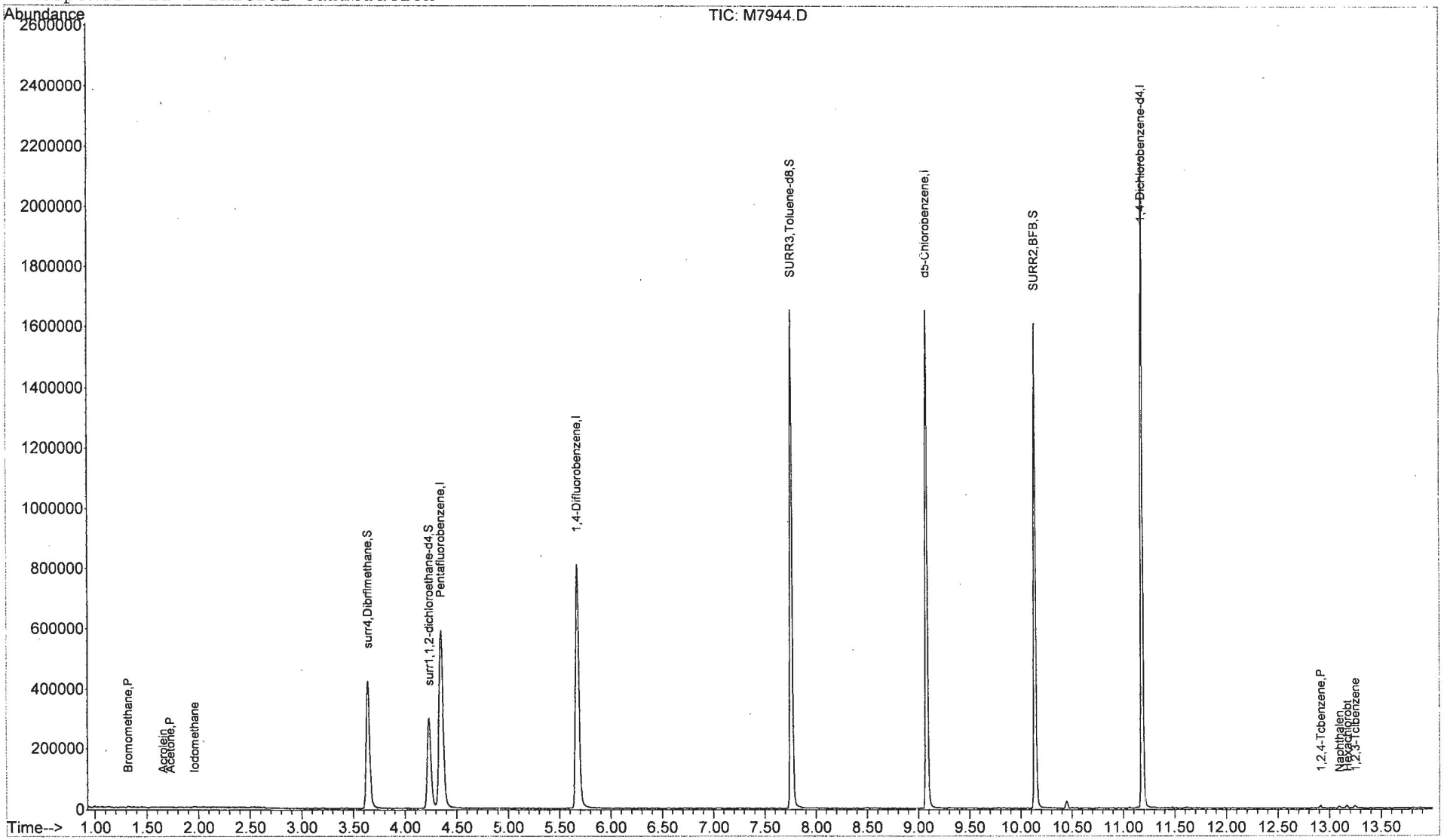
DL
3/23/16

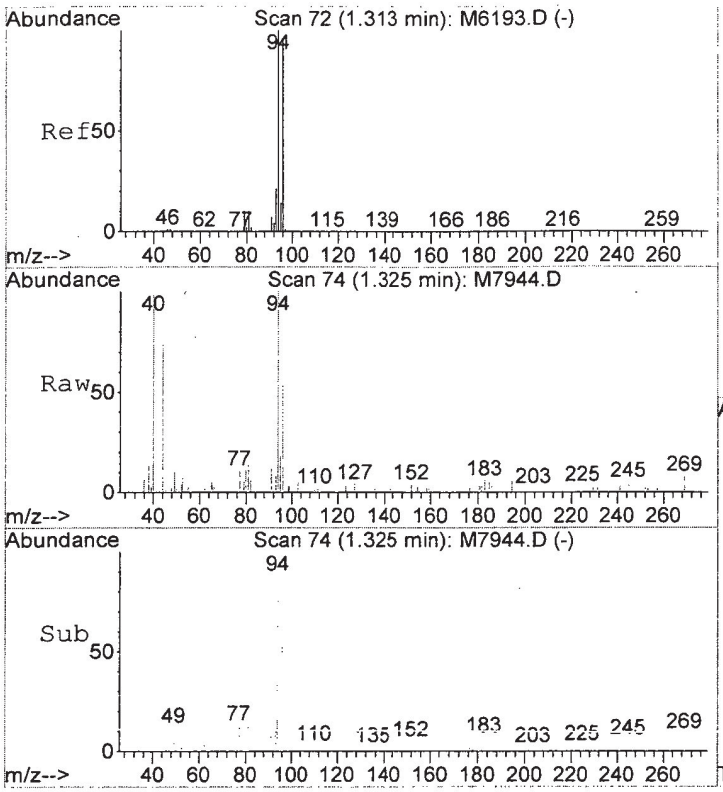
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7944.D Vial: 9
Acq On : 22 Mar 2016 11:51 am Operator: D.Lipani
Sample : MET BLK Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 13:03 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration

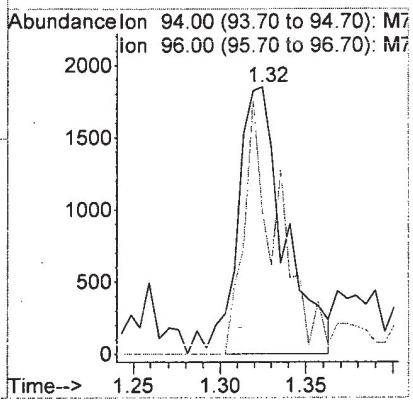


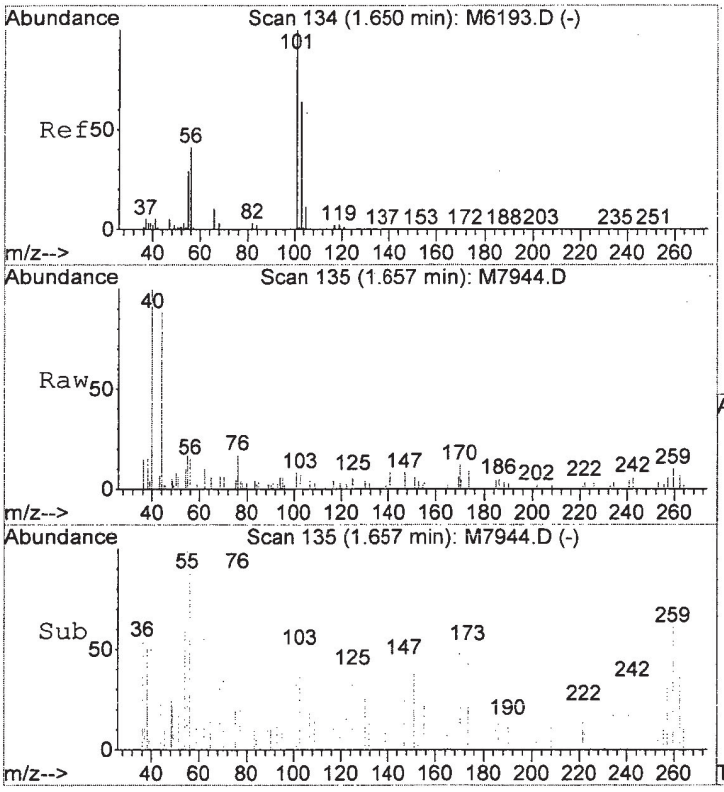


#5
Bromomethane
Concen: 0.77 ug/L
RT: 1.32 min Scan# 74
Delta R.T. 0.01 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion: 94 Resp: 3517

Ion	Ratio	Lower	Upper
94	100		
96	53.1	75.9	115.9#

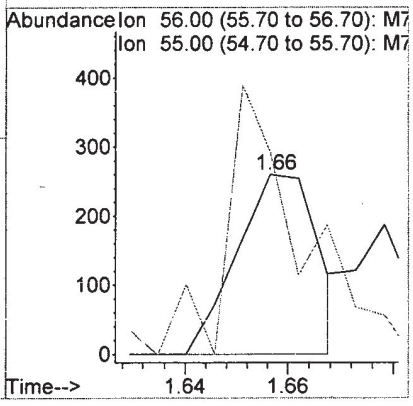


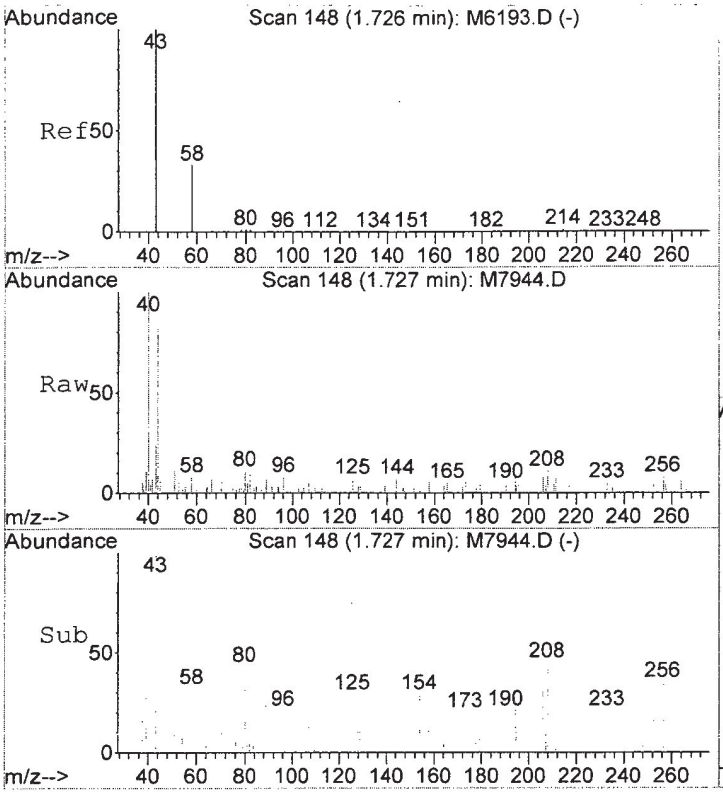


#10
Acrolein
Concen: 0.50 ug/L
RT: 1.66 min Scan# 135
Delta R.T. 0.01 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion: 56 Resp: 284

Ion	Ratio	Lower	Upper
56	100		
55	112.3	49.7	89.7#

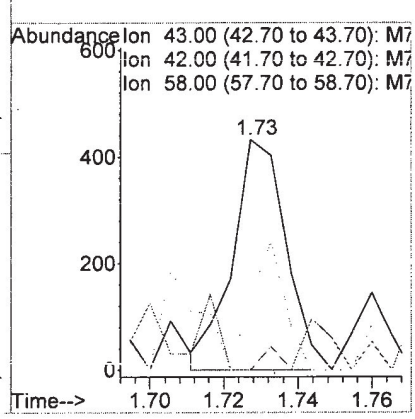


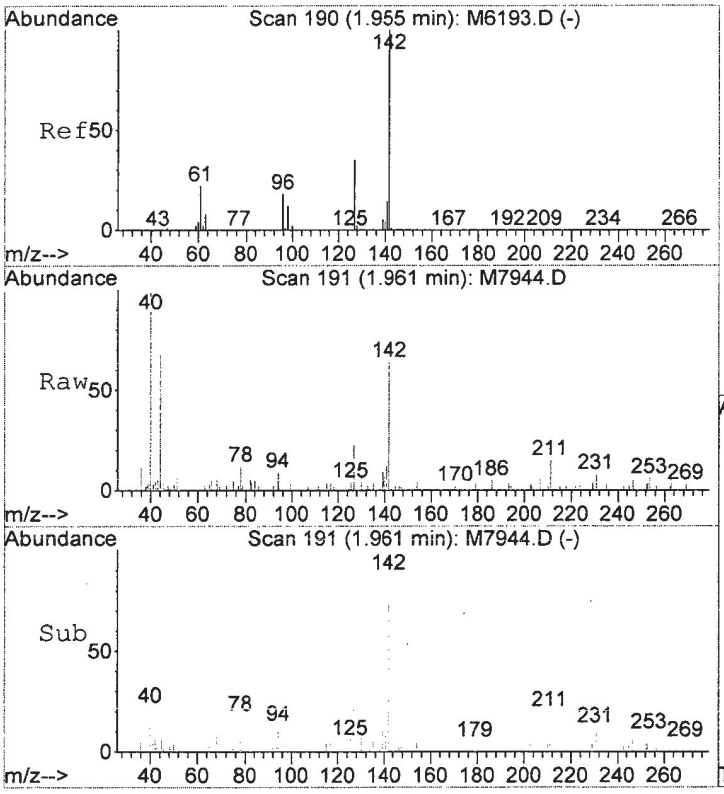


#14
Acetone
Concen: 0.56 ug/L
RT: 1.73 min Scan# 148
Delta R.T. 0.00 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion: 43 Resp: 430

Ion	Ratio	Lower	Upper
43	100		
42	0.0	0.0	29.0
58	31.9	6.3	46.3

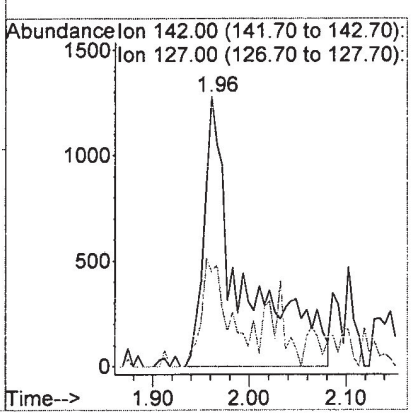


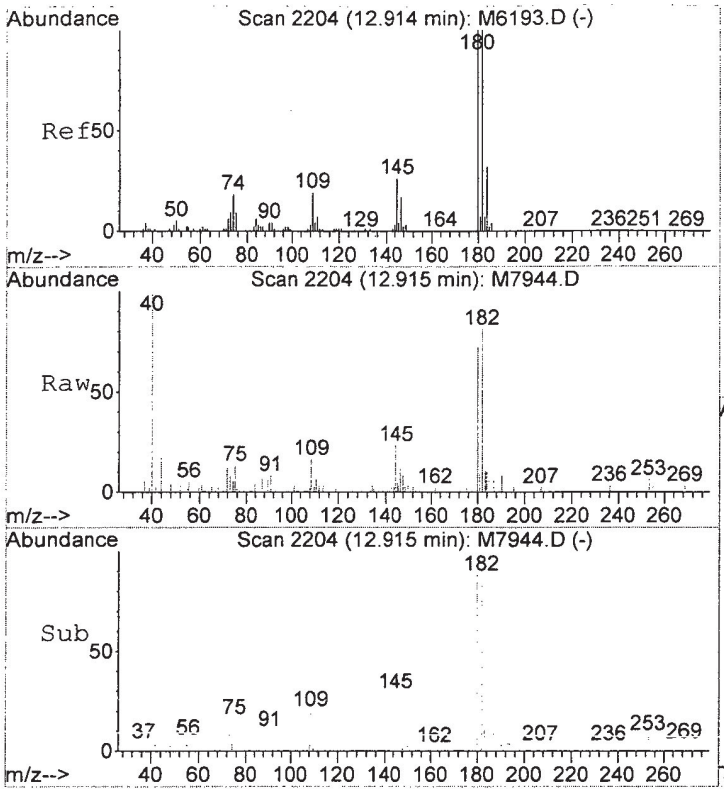


#17
Iodomethane
Concen: 1.54 ug/L
RT: 1.96 min Scan# 191
Delta R.T. 0.01 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion:142 Resp: 3417

Ion	Ratio	Lower	Upper
142	100		
127	34.9	15.3	55.3

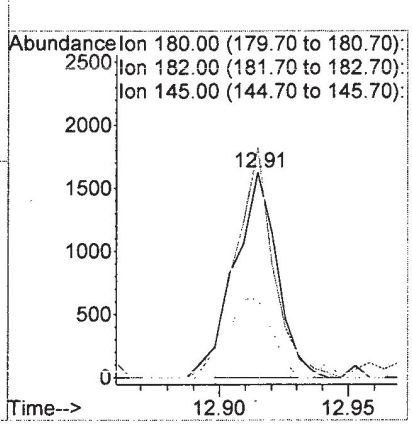


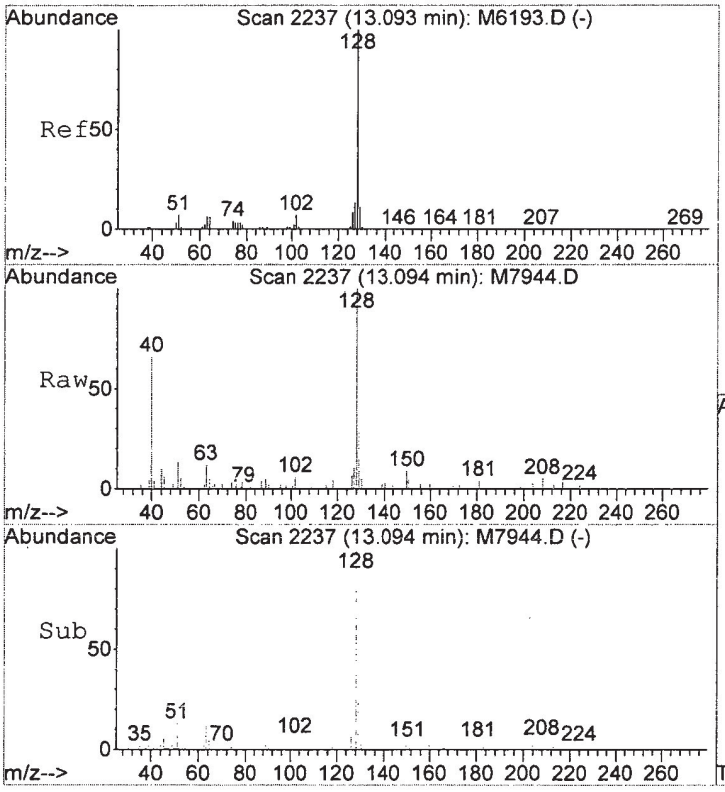


#101
1,2,4-Tcbenzene
Concen: 0.28 ug/L
RT: 12.91 min Scan# 2204
Delta R.T. 0.00 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion:180 Resp: 1859

Ion	Ratio	Lower	Upper
180	100		
182	100.4	77.0	117.0
145	37.2	7.1	47.1

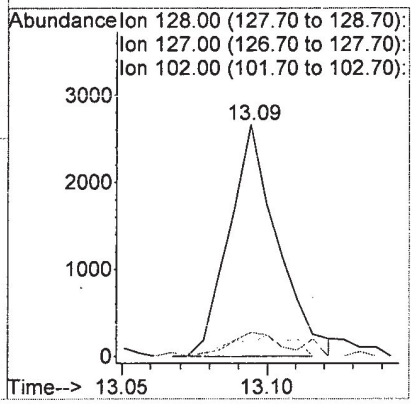


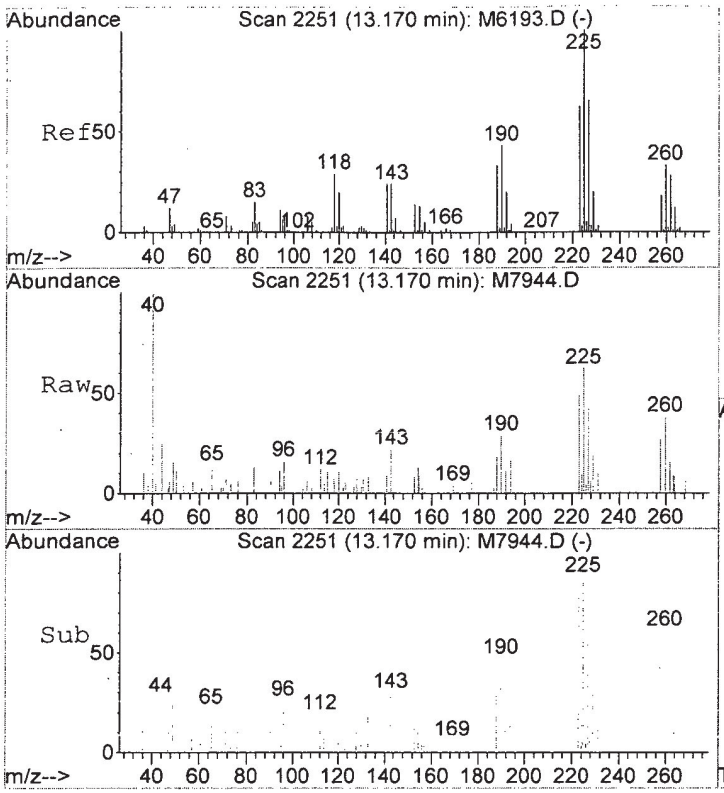


#102
Naphthalen
Concen: 0.26 ug/L
RT: 13.09 min Scan# 2237
Delta R.T. 0.00 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion:128 Resp: 3108

Ion	Ratio	Lower	Upper
128	100		
127	10.3	0.0	32.8
102	11.0	0.0	27.4

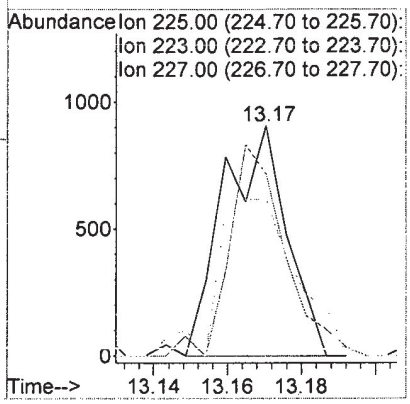


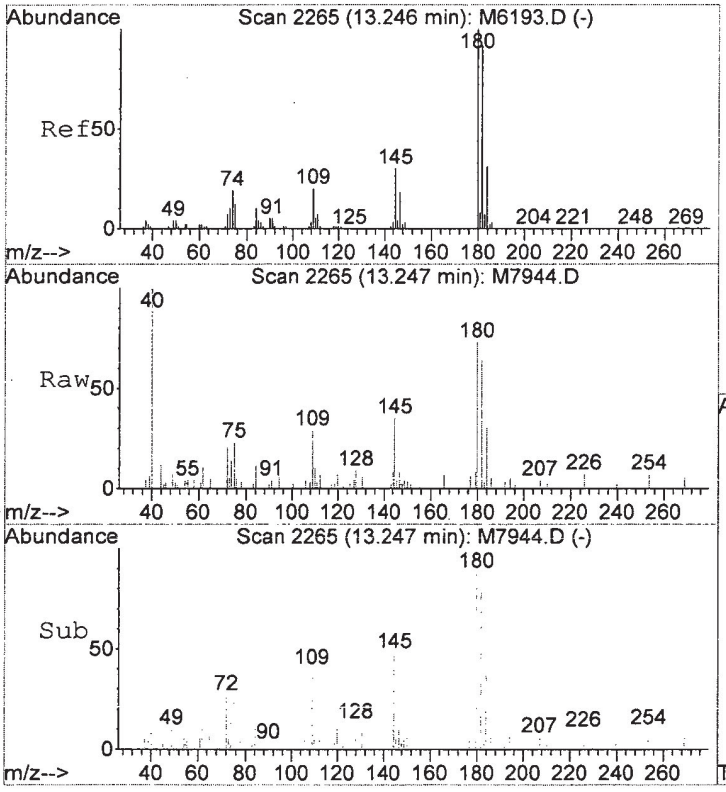


#103
Hexachlorobt
Concen: 0.34 ug/L
RT: 13.17 min Scan# 2251
Delta R.T. 0.00 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion:225 Resp: 1083

Ion	Ratio	Lower	Upper
225	100		
223	77.4	42.5	82.5
227	80.1	45.1	85.1

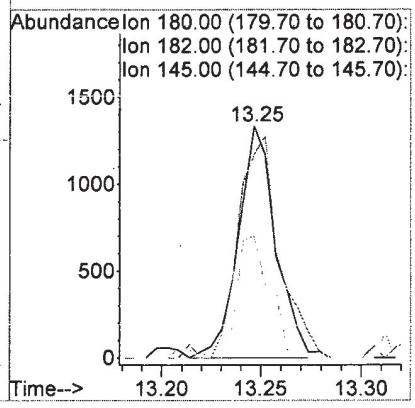




#104
1,2,3-Tclbenzene
Concen: 0.31 ug/L
RT: 13.25 min Scan# 2265
Delta R.T. 0.00 min
Lab File: M7944.D
Acq: 22 Mar 2016 11:51 am

Tgt Ion:180 Resp: 1742

Ion	Ratio	Lower	Upper
180	100		
182	103.4	75.0	115.0
145	45.3	8.8	48.8



Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D Vial: 7
Acq On : 22 Mar 2016 10:47 am Operator: D.Lipani
Sample : LCS RQ1602997-03 Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 11:06 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	652205	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	909479	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	802958	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	505023	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	315621	55.33	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 110.66%			
42) surr1,1,2-dichloroethane-d	4.23	65	260427	55.97	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 111.94%			
62) SURR3,Toluene-d8	7.76	98	995962	52.57	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 105.14%			
82) SURR2,BFB	10.14	95	400106	55.67	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 111.34%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	181182	25.66	ug/L	99
3) Chloromethane	1.08	50	139965	18.66	ug/L	96
4) Vinyl Chloride	1.15	62	158816	20.16	ug/L	97
5) Bromomethane	1.32	94	100244	21.34	ug/L	98
6) Chloroethane	1.38	64	76332	19.25	ug/L	96
7) Freon 21	1.41	67	198910	20.20	ug/L	99
8) Freon 123	1.58	83	151266	17.29	ug/L	95
9) Freon 123a	1.59	67	129095	19.18	ug/L	88
10) Acrolein	1.66	56	18321	31.77	ug/L	97
11) Trichlorofluoromethane	1.65	101	171159	20.93	ug/L	98
12) Acetonitrile	1.66	41	38906	91.45	ug/L	85
13) 2-Propanol	1.69	45	55971	351.17	ug/L	99
14) Acetone	1.72	43	16820	21.53	ug/L	90
15) Diethyl Ether	1.79	59	70841	20.23	ug/L	98
16) 1,1-Diclethene	1.94	96	103660	19.41	ug/L	98
17) Iodomethane	1.96	142	127705	16.49	ug/L	96
18) TBA	1.98	59	99567	386.68	ug/L	100
19) Acrylonitrile	2.00	53	105243	89.83	ug/L	100
20) Methylene Chloride	2.04	84	105853	17.71	ug/L	95
21) Freon 113	2.08	101	104358	19.61	ug/L	97
22) Methyl Acetate	2.09	43	42312	17.73	ug/L	92
23) Allyl Chloride	2.10	76	51433	20.27	ug/L #	86
24) Carbon Disulfide	2.15	76	309494	17.89	ug/L	99
25) trans-1,2-Dichloroethene	2.51	96	109629	18.63	ug/L	96
26) Methyl-t-Butyl Ether	2.63	73	219032	19.76	ug/L	93
27) 1,1-Diclethane	2.71	63	179617	20.10	ug/L	98
28) Propionitrile	2.76	54	37808	97.53	ug/L	99
29) Vinyl Acetate	2.90	43	157789	20.88	ug/L	96
30) 2-Chloro-1,3-Butadiene	3.05	53	149068	18.30	ug/L	95
31) 2-Butanone	3.17	43	25147	21.42	ug/L	97
32) Methacrylonitrile	3.26	67	26009	20.75	ug/L	86
33) cis-1,2-Dichloroethene	3.26	96	119173	20.78	ug/L	100
34) Bromochloromethane	3.42	128	56519	20.50	ug/L	94
35) Chloroform	3.50	83	191558	21.18	ug/L	99
36) 2,2-Dichloropropane	3.57	77	144249	20.71	ug/L	98

DL 3/22/16

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D Vial: 7
Acq On : 22 Mar 2016 10:47 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 11:06 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	Tetrahydrofuran	3.91	42	16414	21.43 ug/L	85
38)	1,1,1-Trichloroethane	4.46	97	161231	22.12 ug/L	96
41)	Iso-Butyl Alcohol	3.74	43	42897	405.31 ug/L	84
43)	1,2-Dichloroethane	4.35	62	112023	20.86 ug/L	96
44)	1,1-Dichloropropene	4.80	75	142235	21.37 ug/L	97
45)	Cyclohexane	4.86	56	141630	17.48 ug/L	92
46)	Carbontetrachloride	5.04	119	141165	21.64 ug/L	94
47)	Benzene	5.15	78	409065	20.03 ug/L	97
48)	Dibromomethane	5.98	93	57755	20.78 ug/L	98
49)	1,2-Diclpropane	6.06	63	105601	20.38 ug/L	96
50)	n-Heptane	6.14	43	93669	21.08 ug/L	96
51)	Trichloroethene	6.13	130	124199	20.53 ug/L	99
52)	Bromodichloromethane	6.19	83	134571	21.35 ug/L	100
53)	2-Nitropropane	6.24	41	24277	43.23 ug/L	96
54)	1,4-Dioxane	6.42	88	9884	326.49 ug/L	88
55)	Methyl Methacrylate	6.60	69	43245	21.44 ug/L	90
56)	Methylcyclohexane	6.72	55	94738	17.99 ug/L	98
57)	2-Chloroethylvinyl Ether	6.87	63	45381	20.22 ug/L	91
58)	cis-1,3-Dichloropropene	7.03	75	156452	21.15 ug/L	98
59)	4-Methyl-2-pentanone	7.25	43	55486	20.51 ug/L	100
60)	trans-1,3-Dichloropropene	7.54	75	130993	21.59 ug/L	98
61)	1,1,2-Trichloroethane	7.64	97	80464	20.86 ug/L	99
63)	Toluene	7.82	91	419509	19.63 ug/L	99
65)	1,3-Dichloropropane	7.89	76	121695	21.18 ug/L	97
66)	Ethyl Methacrylate	8.07	69	88579	20.55 ug/L	95
67)	Dibromochloromethane	8.08	129	105670	22.11 ug/L	99
68)	2-Hexanone	8.15	43	35788	19.78 ug/L	99
69)	1,2-Dibromoethane	8.31	107	83925	21.92 ug/L	99
70)	n-Butyl Acetate	8.52	43	97709	20.91 ug/L	93
71)	Tetrachloroethene	8.50	164	98809	20.31 ug/L	98
72)	1,1,1,2-Tetrachloroethane	9.05	131	107223	20.88 ug/L	96
73)	Chlorobenzene	9.11	112	281969	19.84 ug/L	99
74)	Ethylbenzene	9.32	106	146055	19.97 ug/L	96
75)	Bromoform	9.50	173	65538	21.68 ug/L	97
76)	(m+p)Xylene	9.50	106	362938	40.89 ug/L	99
77)	o-Xylene	9.82	106	180383	19.58 ug/L	98
78)	Cyclohexanone	9.74	55	80200	772.35 ug/L	97
79)	Styrene	9.77	104	297251	20.35 ug/L	100
80)	trans-1,4-Dichloro-2-Buten	10.00	75	23273	15.73 ug/L	95
81)	Isopropylbenzene	10.14	105	450540	20.34 ug/L	98
84)	1,1,2,2-Tetrachloroethane	9.81	83	93540	20.25 ug/L	98
85)	1,2,3-Trichloropropane	9.93	75	61978	19.69 ug/L	98
86)	Bromobenzene	10.27	156	140798	20.13 ug/L	96
87)	n-Propylbenzene	10.50	91	513918	19.10 ug/L	97
88)	2-Chlorotoluene	10.54	91	312583	19.12 ug/L	100
89)	4-Chlorotoluene	10.60	91	335135	19.44 ug/L	98
90)	1,3,5-Trimethylbenzene	10.76	105	367830	20.26 ug/L	98
91)	tert-Butylbenzene	10.95	119	304493	19.28 ug/L	99
92)	1,2,4-Trimethylbenzene	11.06	105	385078	19.91 ug/L	99
93)	sec-Butylbenzene	11.13	105	436089	19.67 ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D Vial: 7
Acq On : 22 Mar 2016 10:47 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 11:06 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

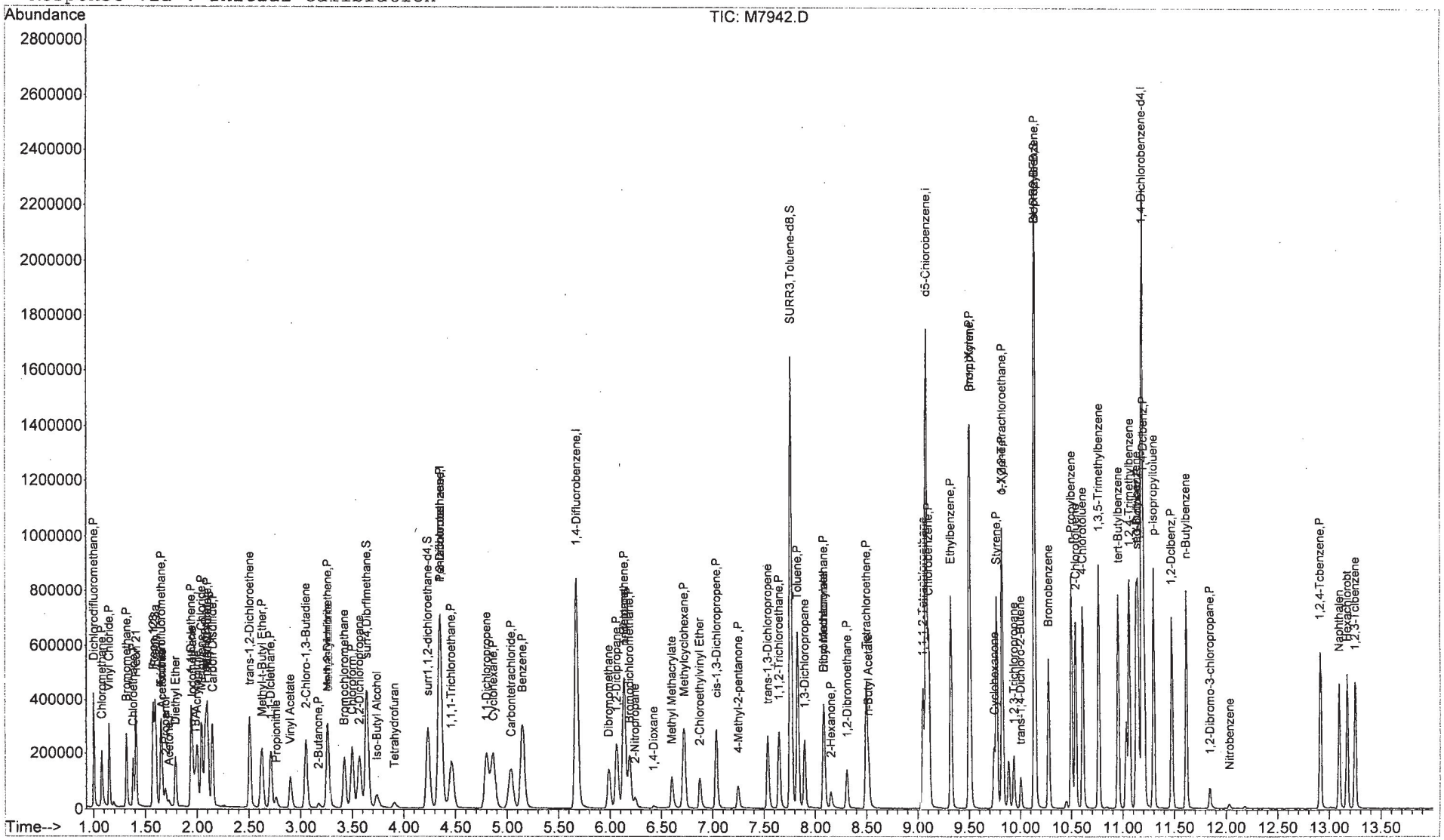
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
94)	1,3-Dclbenz	11.15	146	251857	19.75	ug/L	100
95)	1,4-Dclbenz	11.20	146	259078	19.78	ug/L	98
96)	p-Isopropyltoluene	11.30	119	391008	21.33	ug/L	99
97)	1,2-Dclbenz	11.47	146	243196	20.13	ug/L	99
98)	n-Butylbenzene	11.61	91	343634	21.26	ug/L	98
99)	1,2-Dibromo-3-chloropropan	11.84	75	12990	19.26	ug/L	99
100)	Nitrobenzene	12.03	77	6787	41.36	ug/L	95
101)	1,2,4-Tcbenzene	12.91	180	152678	21.85	ug/L	99
102)	Naphthalen	13.09	128	271320	22.09	ug/L	100
103)	Hexachlorobt	13.17	225	76933	23.02	ug/L	98
104)	1,2,3-Tclbenzene	13.25	180	126483	21.92	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7942.D Vial: 7
Acq On : 22 Mar 2016 10:47 am Operator: D.Lipani
Sample : LCS Inst : MS#6
Misc : 8260C Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 11:06 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D Vial: 24
Acq On : 22 Mar 2016 7:50 pm Operator: D.Lipani
Sample : R1602524-004MS|1.0 RQ1602997-05 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:08 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.35	168	644551	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.67	114	902562	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	831029	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.19	152	512330	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	310779	54.90	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 109.80%			
42) surr1,1,2-dichloroethane-d	4.24	65	259107	56.12	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 112.24%			
62) SURR3,Toluene-d8	7.76	98	1005670	53.49	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.98%			
82) SURR2,BFB	10.14	95	394887	53.08	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.16%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	431018	61.76	ug/L	99
3) Chloromethane	1.08	50	360406	48.61	ug/L	100
4) Vinyl Chloride	1.15	62	398193	51.15	ug/L	91
5) Bromomethane	1.31	94	143051	30.82	ug/L	95
6) Chloroethane	1.38	64	199477	50.91	ug/L	99
7) Freon 21	1.41	67	529303	54.39	ug/L	100
8) Freon 123	1.58	83	424407	49.09	ug/L	96
9) Freon 123a	1.60	67	381701	57.39	ug/L	95
10) Acrolein	1.66	56	22356	39.22	ug/L	89
11) Trichlorofluoromethane	1.65	101	435059	53.83	ug/L	99
12) Acetonitrile	1.67	41	98652	234.64	ug/L	88
13) 2-Propanol	1.70	45	149152	946.91	ug/L	98
14) Acetone	1.73	43	51693	66.95	ug/L	92
15) Diethyl Ether	1.79	59	168504	48.70	ug/L	95
16) 1,1-Diclethene	1.95	96	248289	47.05	ug/L	97
17) Iodomethane	1.96	142	358948	44.83	ug/L	93
18) TBA	1.98	59	276016	1084.68	ug/L	97
19) Acrylonitrile	2.00	53	269558	232.82	ug/L	98
20) Methylene Chloride	2.04	84	267932	45.35	ug/L	97
21) Freon 113	2.08	101	273098	51.93	ug/L	98
22) Methyl Acetate	2.10	43	113497	48.12	ug/L	98
23) Allyl Chloride	2.10	76	53426	21.31	ug/L	91
24) Carbon Disulfide	2.15	76	525338	30.73	ug/L	98
25) trans-1,2-Dichloroethene	2.51	96	281864	48.47	ug/L	94
26) Methyl-t-Butyl Ether	2.63	73	582385	53.16	ug/L	98
27) 1,1-Diclethane	2.71	63	472918	53.55	ug/L	98
28) Propionitrile	2.76	54	103669	270.59	ug/L	99
29) Vinyl Acetate	2.90	43	407206	54.52	ug/L	98
30) 2-Chloro-1,3-Butadiene	3.05	53	370420	46.02	ug/L	88
31) 2-Butanone	3.17	43	68968	59.43	ug/L	97
32) Methacrylonitrile	3.27	67	66960	54.07	ug/L	97
33) cis-1,2-Dichloroethene	3.26	96	320053	56.47	ug/L	97
34) Bromochloromethane	3.43	128	145227	53.29	ug/L	95
35) Chloroform	3.50	83	480754	53.78	ug/L	99
36) 2,2-Dichloropropane	3.57	77	359207	52.17	ug/L	98

(#) = qualifier out of range (m) = manual integration

DL 3/23/16

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D Vial: 24
Acq On : 22 Mar 2016 7:50 pm Operator: D.Lipani
Sample : R1602524-004MS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:08 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	Tetrahydrofuran	3.90	42	44992	59.43 ug/L	93
38)	1,1,1-Trichloroethane	4.47	97	415199	57.64 ug/L	98
41)	Iso-Butyl Alcohol	3.74	43	113731	1082.82 ug/L	98
43)	1,2-Dichloroethane	4.35	62	279788	52.49 ug/L	98
44)	1,1-Dichloropropene	4.80	75	367853	55.69 ug/L	98
45)	Cyclohexane	4.87	56	403305	50.16 ug/L	96
46)	Carbontetrachloride	5.04	119	327987	50.66 ug/L	96
47)	Benzene	5.15	78	1037807	51.20 ug/L	98
48)	Dibromomethane	5.99	93	148143	53.70 ug/L	99
49)	1,2-Diclpropane	6.07	63	264260	51.39 ug/L	98
50)	n-Heptane	6.14	43	219338	49.73 ug/L	94
51)	Trichloroethene	6.14	130	358920	59.78 ug/L	100
52)	Bromodichloromethane	6.19	83	332310	53.12 ug/L	99
53)	2-Nitropropane	6.24	41	65265	117.11 ug/L	90
54)	1,4-Dioxane	6.42	88	~~26141~~	~~870.11~~ ug/L	→ 98
55)	Methyl Methacrylate	6.60	69	108177	54.05 ug/L	95
56)	Methylcyclohexane	6.72	55	264590	50.63 ug/L	99
58)	cis-1,3-Dichloropropene	7.03	75	222481	30.31 ug/L	100
59)	4-Methyl-2-pentanone	7.24	43	159100	59.27 ug/L	99
60)	trans-1,3-Dichloropropene	7.53	75	192020	31.89 ug/L	97
61)	1,1,2-Trichloroethane	7.64	97	204630	53.47 ug/L	100
63)	Toluene	7.83	91	1035237	48.82 ug/L	100
65)	1,3-Dichloropropane	7.89	76	317807	53.45 ug/L	98
66)	Ethyl Methacrylate	8.08	69	222679	49.92 ug/L	94
67)	Dibromochloromethane	8.08	129	255193	51.60 ug/L	99
68)	2-Hexanone	8.15	43	104310	55.71 ug/L	98
69)	1,2-Dibromoethane	8.31	107	212899	53.73 ug/L	99
70)	n-Butyl Acetate	8.51	43	258835	53.53 ug/L	96
71)	Tetrachloroethene	8.50	164	243625	48.38 ug/L	96
72)	1,1,1,2-Tetrachloroethane	9.05	131	270008	50.81 ug/L	98
73)	Chlorobenzene	9.11	112	723504	49.18 ug/L	99
74)	Ethylbenzene	9.32	106	376837	49.77 ug/L	98
75)	Bromoform	9.50	173	149719	47.85 ug/L	97
76)	(m+p)Xylene	9.50	106	915783	99.70 ug/L	99
77)	o-Xylene	9.83	106	447596	46.95 ug/L	100
78)	Cyclohexanone	9.74	55	95332	887.07 ug/L	98
79)	Styrene	9.77	104	663605	43.91 ug/L	99
80)	trans-1,4-Dichloro-2-Buten	10.00	75	11183	7.30 ug/L	92
81)	Isopropylbenzene	10.14	105	1117396	48.75 ug/L	99
84)	1,1,2,2-Tetrachloroethane	9.82	83	241435	51.52 ug/L	99
85)	1,2,3-Trichloropropane	9.93	75	166631	52.17 ug/L	97
86)	Bromobenzene	10.28	156	352799	49.72 ug/L	97
87)	n-Propylbenzene	10.49	91	1302421	47.72 ug/L	99
88)	2-Chlorotoluene	10.54	91	788698	47.54 ug/L	100
89)	4-Chlorotoluene	10.61	91	830600	47.49 ug/L	99
90)	1,3,5-Trimethylbenzene	10.76	105	883997	48.00 ug/L	99
91)	tert-Butylbenzene	10.95	119	762605	47.61 ug/L	100
92)	1,2,4-Trimethylbenzene	11.06	105	960203	48.95 ug/L	99
93)	sec-Butylbenzene	11.13	105	1046771	46.54 ug/L	99
94)	1,3-Dclbenz	11.15	146	626072	48.40 ug/L	100

27999 = 931.95m

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D Vial: 24
Acq On : 22 Mar 2016 7:50 pm Operator: D.Lipani
Sample : R1602524-004MS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:08 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

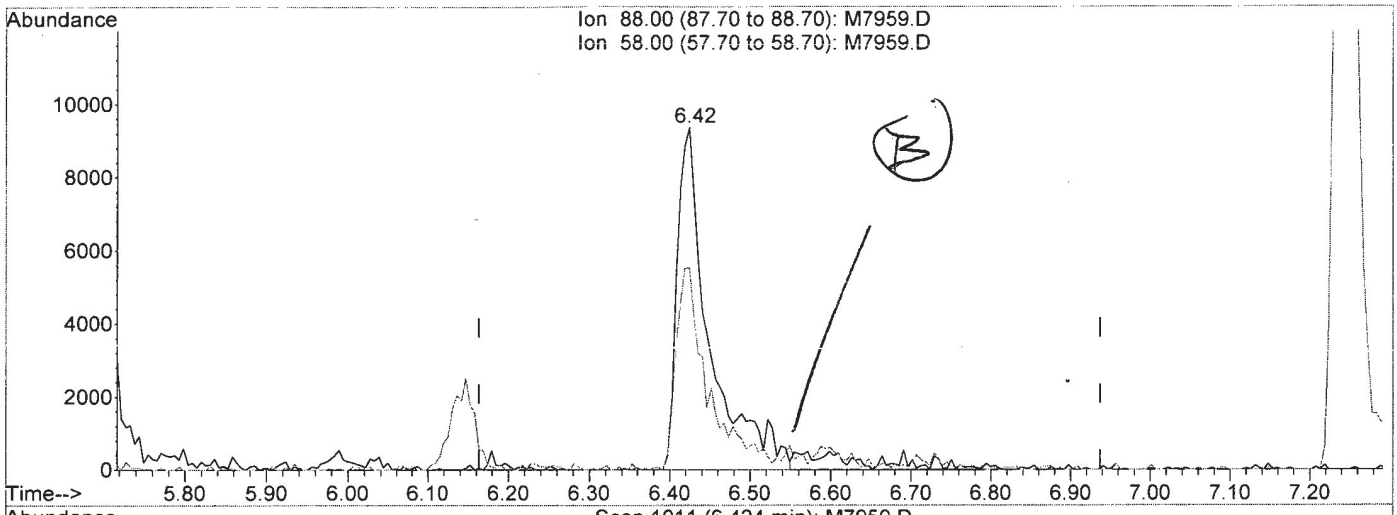
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95)	1,4-Dclbenz	11.21	146	638260	48.04	ug/L	98
96)	p-Isopropyltoluene	11.29	119	913974	49.16	ug/L	100
97)	1,2-Dclbenz	11.47	146	596333	48.65	ug/L	99
98)	n-Butylbenzene	11.62	91	829705	50.61	ug/L	100
99)	1,2-Dibromo-3-chloropropan	11.84	75	37998	55.53	ug/L	95
100)	Nitrobenzene	12.03	77	5840	35.08	ug/L	98
101)	1,2,4-Tcbenzene	12.91	180	356051	50.22	ug/L	99
102)	Naphthalen	13.09	128	655465	52.62	ug/L	99
103)	Hexachlorobt	13.17	225	156312	46.10	ug/L	99
104)	1,2,3-Tclbenzene	13.24	180	295752	50.52	ug/L	98

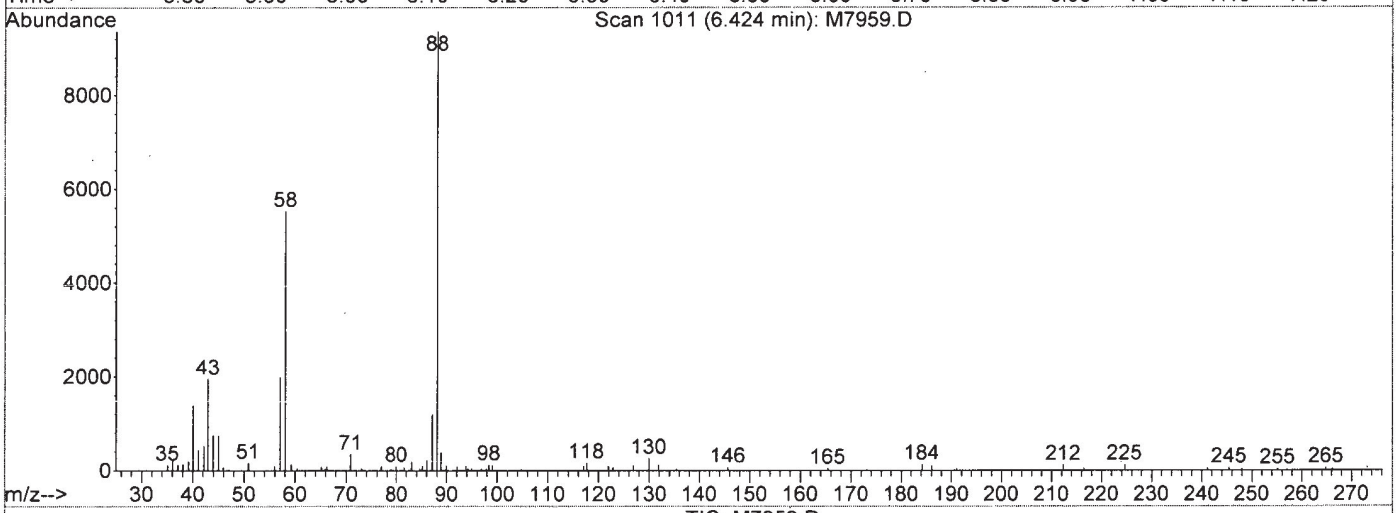
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D Vial: 24
Acq On : 22 Mar 2016 7:50 pm Operator: D.Lipani
Sample : R1602524-004MS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:08 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Single Level Calibration





TIC: M7959.D

(54) 1,4-Dioxane

6.42min 870.11ug/L

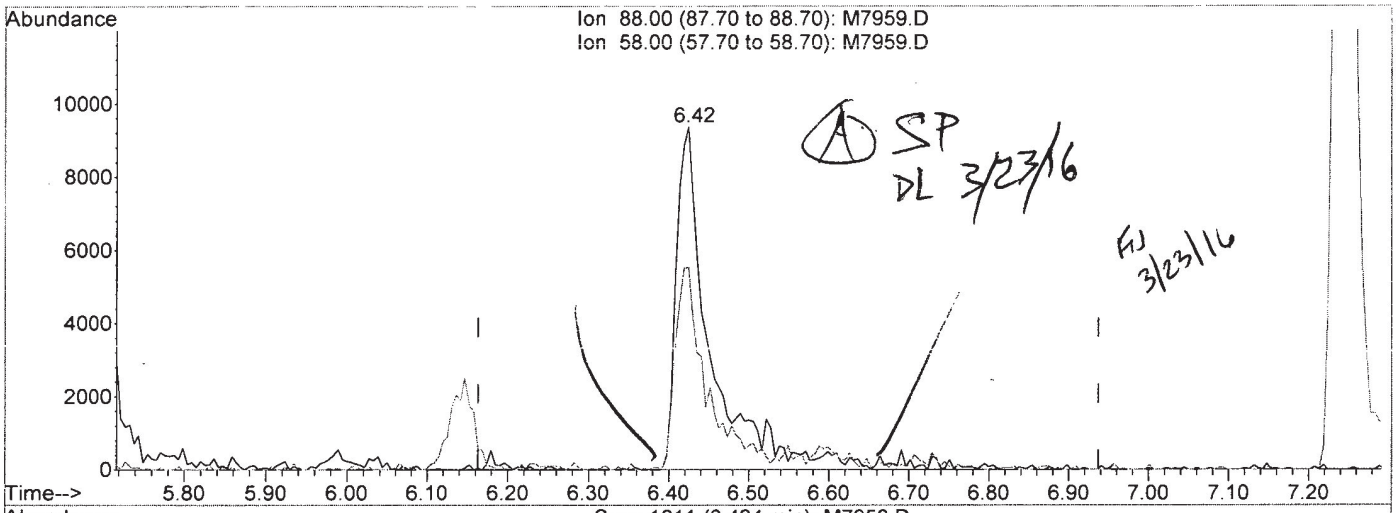
response 26141

Ion	Exp%	Act%
88.00	100	100
58.00	60.40	59.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

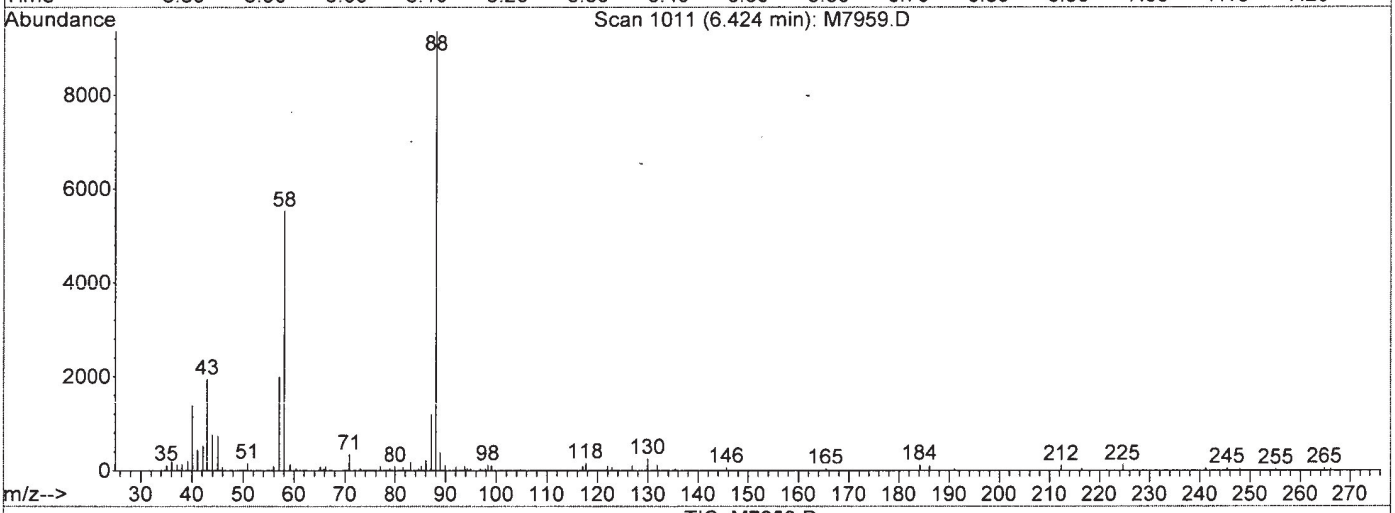
Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D Vial: 24
Acq On : 22 Mar 2016 7:50 pm Operator: D.Lipani
Sample : R1602524-004MS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:39 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Single Level Calibration



SP 3/23/16

FJ 3/23/16



TIC: M7959.D

(54) 1,4-Dioxane

6.42min 931.95ug/L m

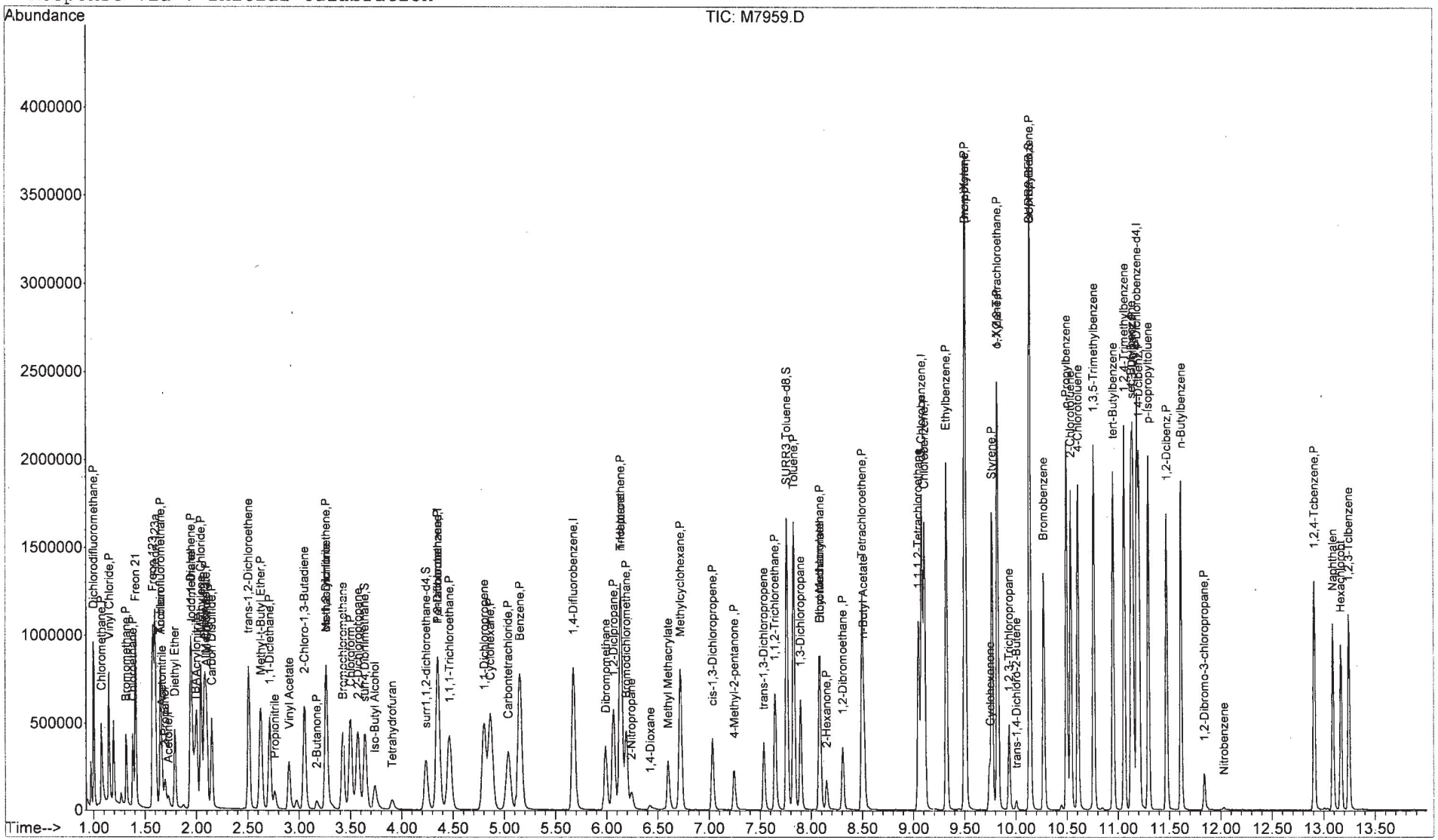
response 27999

Ion	Exp%	Act%
88.00	100	100
58.00	60.40	59.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7959.D Vial: 24
Acq On : 22 Mar 2016 7:50 pm Operator: D.Lipani
Sample : R1602524-004MS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:08 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D Vial: 25
Acq On : 22 Mar 2016 8:22 pm Operator: D.Lipani
Sample : R1602524-004DMS|1.0 RQ1602997-06 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:40 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.36	168	655341	50.00	ug/L	0.00
39) 1,4-Difluorobenzene	5.68	114	912975	50.00	ug/L	0.00
64) d5-Chlorobenzene	9.08	117	795142	50.00	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	11.18	152	506717	50.00	ug/L	0.00
System Monitoring Compounds						
40) surr4,Dibrflmethane	3.64	113	318177	55.56	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.12%			
42) surr1,1,2-dichloroethane-d	4.24	65	264996	56.74	ug/L	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 113.48%			
62) SURR3,Toluene-d8	7.76	98	1030517	54.19	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.38%			
82) SURR2,BFB	10.14	95	385177	54.12	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.24%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.00	85	439783	61.98	ug/L	99
3) Chloromethane	1.07	50	364457	48.35	ug/L	98
4) Vinyl Chloride	1.15	62	416784	52.66	ug/L	98
5) Bromomethane	1.32	94	135495	28.71	ug/L	99
6) Chloroethane	1.38	64	192937	48.43	ug/L	98
7) Freon 21	1.41	67	552960	55.89	ug/L	97
8) Freon 123	1.57	83	432084	49.15	ug/L	100
9) Freon 123a	1.60	67	398223	58.89	ug/L	92
10) Acrolein	1.66	56	40354	69.64	ug/L	92
11) Trichlorofluoromethane	1.65	101	447446	54.45	ug/L	98
12) Acetonitrile	1.67	41	101622	237.73	ug/L	87
13) 2-Propanol	1.69	45	157258	981.93	ug/L	100
14) Acetone	1.73	43	51328	65.38	ug/L	94
15) Diethyl Ether	1.79	59	179554	51.04	ug/L	98
16) 1,1-Diclethene	1.94	96	268781	50.09	ug/L	99
17) Iodomethane	1.96	142	416373	50.99	ug/L	94
18) TBA	1.98	59	~~292285~~	~~1129.70 ug/L~~	→	93
19) Acrylonitrile	2.00	53	282577	240.05	ug/L	94
20) Methylene Chloride	2.04	84	265914	44.27	ug/L	99
21) Freon 113	2.08	101	277722	51.94	ug/L	97
22) Methyl Acetate	2.10	43	110641	46.13	ug/L	99
23) Allyl Chloride	2.10	76	56087	22.00	ug/L	93
24) Carbon Disulfide	2.15	76	458870	26.40	ug/L	99
25) trans-1,2-Dichloroethene	2.51	96	280289	47.41	ug/L	94
26) Methyl-t-Butyl Ether	2.62	73	593363	53.27	ug/L	97
27) 1,1-Diclethane	2.71	63	481088	53.58	ug/L	98
28) Propionitrile	2.76	54	103828	266.54	ug/L	93
29) Vinyl Acetate	2.90	43	397227	52.31	ug/L	96
30) 2-Chloro-1,3-Butadiene	3.05	53	400582	48.95	ug/L	94
31) 2-Butanone	3.17	43	72965	61.84	ug/L	91
32) Methacrylonitrile	3.27	67	66928	53.15	ug/L	96
33) cis-1,2-Dichloroethene	3.26	96	323517	56.14	ug/L	98
34) Bromochloromethane	3.42	128	150982	54.49	ug/L	95
35) Chloroform	3.50	83	492090	54.15	ug/L	94
36) 2,2-Dichloropropane	3.57	77	364236	52.03	ug/L	97

DL 3/23/16

275764 = 1065.84m

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D Vial: 25
Acq On : 22 Mar 2016 8:22 pm Operator: D.Lipani
Sample : R1602524-004DMS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:40 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	Tetrahydrofuran	3.91	42	44751	58.13	ug/L	92
38)	1,1,1-Trichloroethane	4.46	97	424268	57.93	ug/L	97
41)	Iso-Butyl Alcohol	3.74	43	115792	1089.87	ug/L	90
43)	1,2-Dichloroethane	4.35	62	291170	54.00	ug/L	99
44)	1,1-Dichloropropene	4.80	75	380173	56.90	ug/L	99
45)	Cyclohexane	4.86	56	406321	49.96	ug/L	94
46)	Carbontetrachloride	5.04	119	313544	47.88	ug/L	91
47)	Benzene	5.16	78	1033694	50.41	ug/L	99
48)	Dibromomethane	5.99	93	150856	54.06	ug/L	97
49)	1,2-Diclpropane	6.06	63	270721	52.05	ug/L	100
50)	n-Heptane	6.14	43	210887	47.27	ug/L	96
51)	Trichloroethene	6.13	130	357839	58.92	ug/L	99
52)	Bromodichloromethane	6.19	83	332116	52.48	ug/L	99
53)	2-Nitropropane	6.24	41	70465	124.99	ug/L	99
54)	1,4-Dioxane	6.42	88	25328	833.43	ug/L	99
55)	Methyl Methacrylate	6.60	69	117830	58.20	ug/L	97
56)	Methylcyclohexane	6.72	55	268954	50.87	ug/L	99
58)	cis-1,3-Dichloropropene	7.03	75	250553	33.75	ug/L	99
59)	4-Methyl-2-pentanone	7.24	43	159841	58.87	ug/L	97
60)	trans-1,3-Dichloropropene	7.53	75	199514	32.76	ug/L	99
61)	1,1,2-Trichloroethane	7.65	97	209690	54.16	ug/L	98
63)	Toluene	7.83	91	1068922	49.83	ug/L	100
65)	1,3-Dichloropropane	7.90	76	313842	55.16	ug/L	99
66)	Ethyl Methacrylate	8.08	69	239621	56.14	ug/L	94
67)	Dibromochloromethane	8.09	129	243429	51.44	ug/L	99
68)	2-Hexanone	8.15	43	112303	62.69	ug/L	99
69)	1,2-Dibromoethane	8.31	107	213819	56.40	ug/L	98
70)	n-Butyl Acetate	8.52	43	262202	56.67	ug/L	96
71)	Tetrachloroethene	8.50	164	261771	54.33	ug/L	99
72)	1,1,1,2-Tetrachloroethane	9.05	131	269396	52.99	ug/L	100
73)	Chlorobenzene	9.11	112	719094	51.09	ug/L	100
74)	Ethylbenzene	9.32	106	383323	52.92	ug/L	99
75)	Bromoform	9.50	173	135809	45.36	ug/L	98
76)	(m+p)Xylene	9.51	106	938443	106.78	ug/L	98
77)	o-Xylene	9.82	106	455258	49.91	ug/L	100
78)	Cyclohexanone	9.74	55	97801	951.11	ug/L	97
79)	Styrene	9.77	104	646200	44.68	ug/L	99
80)	trans-1,4-Dichloro-2-Buten	10.00	75	10930	7.46	ug/L	96
81)	Isopropylbenzene	10.13	105	1105855	50.43	ug/L	99
84)	1,1,2,2-Tetrachloroethane	9.82	83	245517	52.97	ug/L	99
85)	1,2,3-Trichloropropane	9.93	75	170137	53.86	ug/L	100
86)	Bromobenzene	10.28	156	362563	51.66	ug/L	96
87)	n-Propylbenzene	10.50	91	1335511	49.48	ug/L	99
88)	2-Chlorotoluene	10.54	91	788227	48.04	ug/L	98
89)	4-Chlorotoluene	10.61	91	828204	47.88	ug/L	99
90)	1,3,5-Trimethylbenzene	10.76	105	920843	50.56	ug/L	99
91)	tert-Butylbenzene	10.95	119	775118	48.92	ug/L	100
92)	1,2,4-Trimethylbenzene	11.06	105	957333	49.34	ug/L	100
93)	sec-Butylbenzene	11.13	105	1073162	48.24	ug/L	99
94)	1,3-Dclbenz	11.15	146	634143	49.56	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D Vial: 25
Acq On : 22 Mar 2016 8:22 pm Operator: D.Lipani
Sample : R1602524-004DMS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:40 2016 Quant Results File: W113015.RES

Quant Method : I:\ACQUDATA\M...\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration
DataAcq Meth : W113015

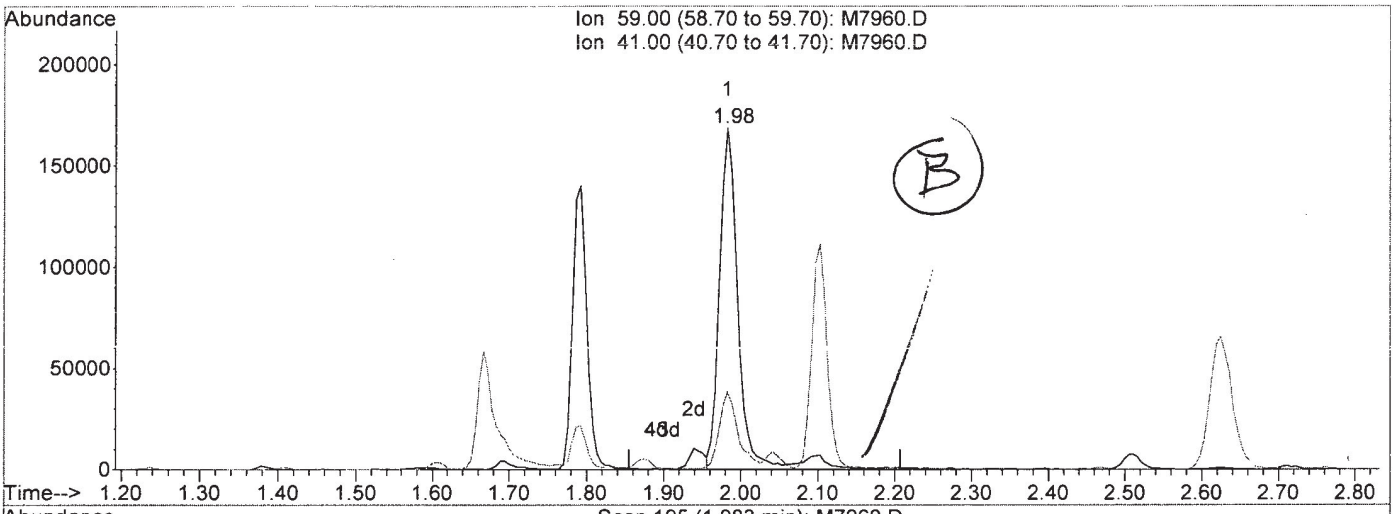
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95)	1,4-Dclbenz	11.21	146	646052	49.17	ug/L	99
96)	p-Isopropyltoluene	11.30	119	941117	51.18	ug/L	99
97)	1,2-Dclbenz	11.47	146	621264	51.25	ug/L	99
98)	n-Butylbenzene	11.61	91	823335	50.78	ug/L	99
99)	1,2-Dibromo-3-chloropropan	11.84	75	38060	56.24	ug/L	97
100)	Nitrobenzene	12.03	77	4343	26.38	ug/L	96
101)	1,2,4-Tcbenzene	12.91	180	375037	53.48	ug/L	100
102)	Naphthalen	13.09	128	722472	58.64	ug/L	99
103)	Hexachlorobt	13.17	225	157738	47.03	ug/L	99
104)	1,2,3-Tclbenzene	13.25	180	317523	54.84	ug/L	99

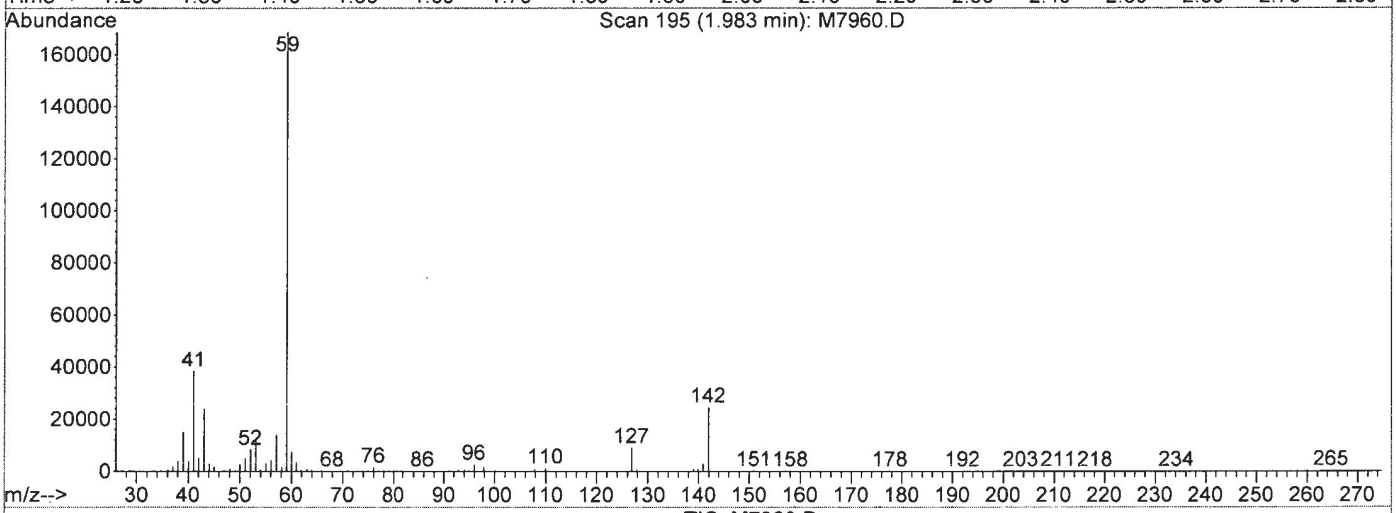
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D Vial: 25
Acq On : 22 Mar 2016 8:22 pm Operator: D.Lipani
Sample : R1602524-004DMS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:40 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration





TIC: M7960.D

(18) TBA

1.98min 1129.70ug/L

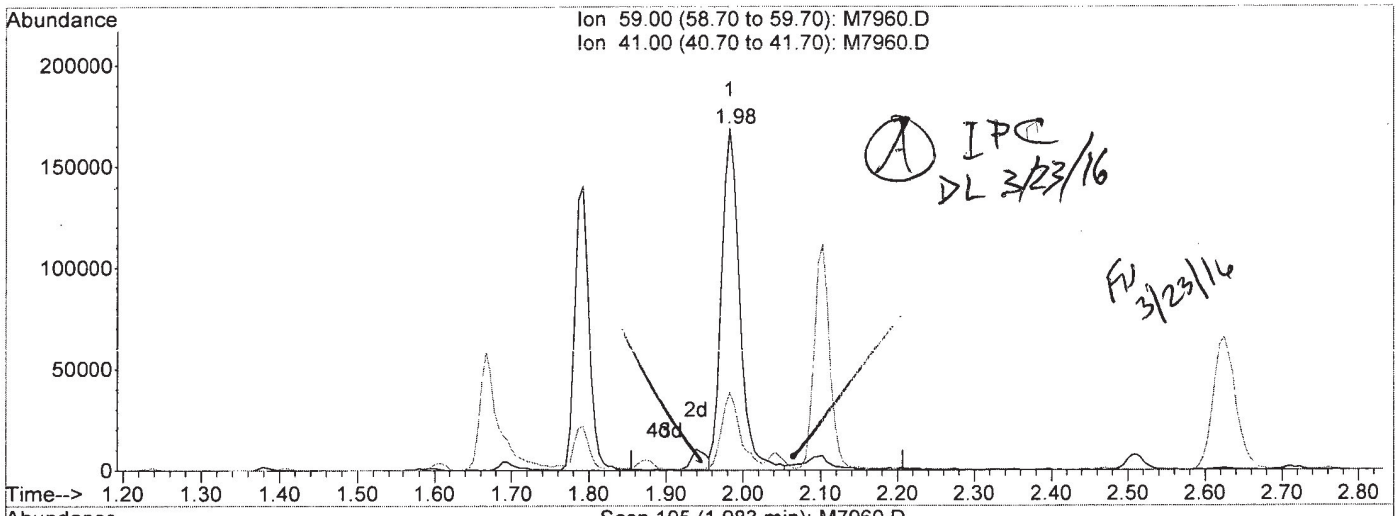
response 292285

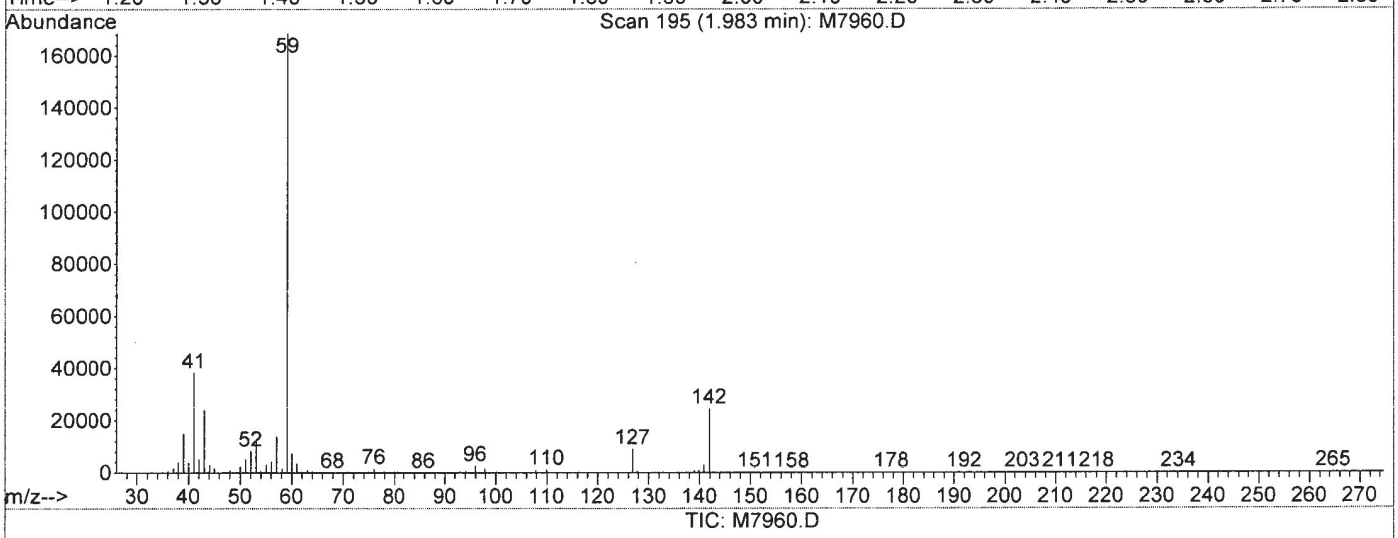
Ion	Exp%	Act%
59.00	100	100
41.00	19.40	22.71
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D Vial: 25
Acq On : 22 Mar 2016 8:22 pm Operator: D.Lipani
Sample : R1602524-004DMS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 23 14:42 2016 Quant Results File: temp.res

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Multiple Level Calibration





TIC: M7960.D

(18) TBA

1.98min 1065.84ug/L m

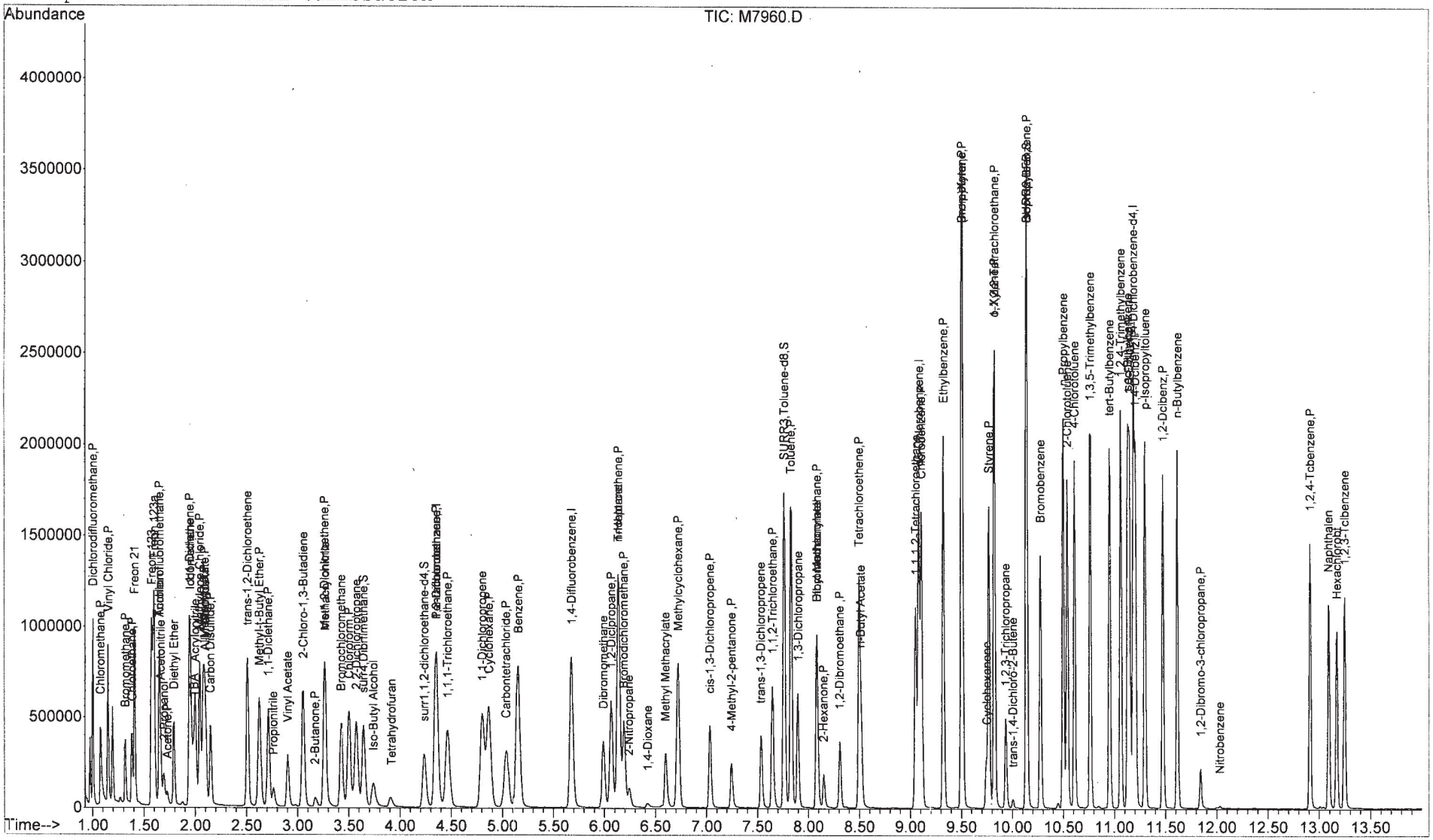
response 275764

Ion	Exp%	Act%
59.00	100	100
41.00	19.40	22.71
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : I:\ACQUDATA\MSVOA6\DATA\032216\M7960.D Vial: 25
Acq On : 22 Mar 2016 8:22 pm Operator: D.Lipani
Sample : R1602524-004DMS|1.0 Inst : MS#6
Misc : Verina 8260C 6646 T4 Multiplr: 1.00
MS Integration Params: CPD4.P
Quant Time: Mar 22 20:40 2016 Quant Results File: W113015.RES

Method : I:\ACQUDATA\MSVOA6\METHODS\W113015.M (RTE Integrator)
Title : 8260C WATERS
Last Update : Wed Dec 02 11:59:38 2015
Response via : Initial Calibration



Analysis: 8260C
Date: 11/30/15
Instr. GCMS#6

Analyst: D. Lipani
Data Path: j:\acqudata\msvoa 6\DATA\113015\...

Tune Method: W091015.M → W113015.M
Run Method: ↓ ↓ ↓ ↓
LIMS Run#: (ICAL)

Pos.	Sample	Diln.	Diln. Prep.		Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	Blk									M6180	N	
2	Blk									81	Y	
3	Tune Check		(Run as a Blk)							82	Y	
4	CCV									83	N	gases ↑, other compounds ↓
~~5~~	DL 11/30/15	→ Will recalibrate										
5	Blk									M6184	O.K.	
6	Tune Check									85	Y	
7	Inst Blk									86	Y	
8	Inst Blk →		→ Evian							87	Y	use
		Surr	1°Targ	1°Targ	1°TG	1°HSL		1°Frt		~~88~~	EE	Final
		500	5.0	10	500	500		500		~~89~~	DL 11-30-15	Volume Evian
9	STD #1 - 0.5PPB	—	5.0µl	—	—	—		—		M6188	Y	50mL
10	#2 - 1.0PPB	—	—	5.0µl	—	—		—		89	Y	50mL
11	#3 - 2.0PPB	1.0µl	—	10µl	—	—		—		M6190	Y	50mL
12	#4 - 5.0PPB	8.0µl	—	"	2.0µl				→	91	Y	200mL
13	#5 - 20PPB	5.0µl	—	—	2.0µl				→	92	Y	50mL
14	#6 - 50PPB	—	—	—	5.0µl				→	93	Y	↓
15	#7 - 100PPB	7.5µl	—	—	10µl				→	94	Y	
16	#8 - 150PPB	10µl	—	—	15µl				→	95	Y	
17	#9 - 200PPB	—	—	—	20µl				→	96	Y	
18	Blk									97	O.K.	
19	Blk									98	Y	
20	ICV 50									99	Y	1,4-Diox ↓ - repeat
21-27)	Blks									M6200-06	Y	
	EOD DL 11-30-15											

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

Primary TG : 85998 10µl
Primary HSL : 86114 ↓ / 1.0mL MeOH
Primary Frt : 85806 ↓
Primary :
Primary :
↓ "1°Targ" 5.0

20µl ↓ / 1.0mL MeOH ↓ "1°Targ" 10

Secondary TG : 86000 5.0µl
Secondary HSL : 85909 5.0µl / 50mL DI = ICV 50
Secondary Frt : 85637 12.5µl
Secondary :
Secondary :
DL 11-30-15

Combined IS/Surr 500 : 86201
Surrogate 500 : 85821
Internal Std : —

Analysis: 8260C
Analyst: R. Lipani
Tune Method: W113015.M
Date: 03/22/16
Data Path: j:\acqudata\msvoa 6\DATA\032216...
Run Method: ↓ ↓ ↓
Instr. GCMS#6
LIMS Run#: 488823

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	High Gases + Acrolein Std.								M7938	Y	
2	Blk								↓ 39	O.K.	
3	Tune Check		(Run as a Blk)						M7940	Y	
4	CCV								41	Y	
5	LCS								42	Y	
6	MetBlk								43	N	
7	MetBlk								44	Y	
8	R1602496-005	1.0			7979	IV	-3	6	45	Y	
9	-008	2.5	20mL/50mL		↓	↓	-2	6	46	Y	= DL
10	-012	2.5	↓ ↓		↓	↓	-2	6	47	Y	= DL
11	-010	5.0	10mL/50mL		↓	↓	-2	6	48	Y	= DL
12	-015	~~1.0~~ 2.5	2.0mL/50mL		↓	↓	-2	6	↓ 49	Y	
13	R1602524-001	1.0	↖ EE DL 3/22/16		6646	IV	-1	<2	M7950	(N)	PCE x-over rpt 1.0
14	-002	1.0			7979	↓	-1	6	51	Y	
15	-001	1.0			6646	↓	-2	<2	52	Y	
16	-003	1.0			7979	↓	-1	6	53	Y	
17	-004	1.0			6646	↓	-1	<2	54	Y	
18	-005	1.0			7979	↓	-1	6	55	Y	
19	-006	1.0			6646	↓	-1	<2	56	Y	
20	-007	1.0			7979	↓	-1	6	57	Y	
21	-008	1.0			↓	↓	-1	6	↓ 58	Y	
22	-004MS	1.0			6646	↓	-2	<2	59	Y	
23	-004MSD	1.0			↓	↓	-3	<2	M7960	Y	
24	Blk				—	—	—	—	↓ 61	O.K.	
—	EOD DL 3-22-16										

All samples = 10 mL + 1.0 uL combined IS/Surr. 10 mL purged

Primary TG : 88694 5.0µl
Primary HSL : 88867
Primary Fr+ : 88922 ↓
Primary :
Primary :
/ 50mL DI = CCV.

Secondary TG : 88742 2.0µl
Secondary HSL : 88880 2.0µl
Secondary Fr+ : 88440 5.0µl
Secondary :
Secondary :
/ 50mL DI = LCS.

, 4.25µl Combined IS/Surr 500 : 88655
, 4.25µl Surrogate :
, 10.6µl Internal Std :

↳ into full vials
Sample for MS/MSD.

October 26, 2016 Service Request No:R1609820

Ms. Sarah Tufaro
Verina Consulting Group, LLC
1011 US Highway 22, Suite 302
Bridgewater, NJ 08807

Laboratory Results for: Dover - Binghamton

Dear Ms.Tufaro,

Enclosed are the results of the sample(s) submitted to our laboratory September 16, 2016
For your reference, these analyses have been assigned our service request number **R1609820.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

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ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton/5101.0003
Sample Matrix: Water

Service Request:R1609820
Date Received:9/16/16

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt

Twelve water samples were received for analysis at ALS Environmental on 09/16/2016. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at ≤6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Volatile Organic Analyses:

Method 8260, R1609820-04: The Method Reporting Limit (MRL) was elevated due to the color of the sample. It was not possible to read the pH because the color of the sample is so dark.

Approved by _____ Date 10/26/2016

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-10	Lab ID: R1609820-002					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	3.5		0.36	1.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	1.2		0.20	1.0	ug/L	8260C
Tetrachloroethene (PCE)	1.6		0.30	1.0	ug/L	8260C
Trichloroethene (TCE)	28		0.22	1.0	ug/L	8260C
Vinyl Chloride	0.36	J	0.32	1.0	ug/L	8260C
cis-1,2-Dichloroethene	6.3		0.30	1.0	ug/L	8260C

CLIENT ID: MW-17	Lab ID: R1609820-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	3.4		0.36	1.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	23		0.20	1.0	ug/L	8260C
Tetrachloroethene (PCE)	0.30	J	0.30	1.0	ug/L	8260C
Trichloroethene (TCE)	1.7		0.22	1.0	ug/L	8260C
cis-1,2-Dichloroethene	1.4		0.30	1.0	ug/L	8260C

CLIENT ID: MW-11	Lab ID: R1609820-004					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	10		3.6	10	ug/L	8260C

CLIENT ID: MW-16	Lab ID: R1609820-005					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	9.7		0.36	1.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	59		0.20	1.0	ug/L	8260C
1,1-Dichloroethene (1,1-DCE)	1.0		0.57	1.0	ug/L	8260C
Tetrachloroethene (PCE)	0.61	J	0.30	1.0	ug/L	8260C
Trichloroethene (TCE)	26		0.22	1.0	ug/L	8260C
Vinyl Chloride	4.9		0.32	1.0	ug/L	8260C
cis-1,2-Dichloroethene	83		0.30	1.0	ug/L	8260C
trans-1,2-Dichloroethene	0.87	J	0.33	1.0	ug/L	8260C

CLIENT ID: MW-8	Lab ID: R1609820-006					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	2.4		0.36	1.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	3.7		0.20	1.0	ug/L	8260C
Trichloroethene (TCE)	120		0.22	1.0	ug/L	8260C
cis-1,2-Dichloroethene	71		0.30	1.0	ug/L	8260C

CLIENT ID: MW-9	Lab ID: R1609820-008					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	0.45	J	0.36	1.0	ug/L	8260C
Trichloroethene (TCE)	0.95	J	0.22	1.0	ug/L	8260C

SAMPLE DETECTION SUMMARY

CLIENT ID: TMP-A	Lab ID: R1609820-010					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1-Dichloroethane (1,1-DCA)	0.21	J	0.20	1.0	ug/L	8260C

CLIENT ID: DUP-091516	Lab ID: R1609820-012					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	0.47	J	0.36	1.0	ug/L	8260C
Trichloroethene (TCE)	0.91	J	0.22	1.0	ug/L	8260C

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1609820-002	MW-10	9/15/2016	1105
R1609820-003	MW-17	9/15/2016	1123
R1609820-004	MW-11	9/15/2016	1225
R1609820-005	MW-16	9/15/2016	1246
R1609820-006	MW-8	9/15/2016	1535
R1609820-007	DMW-3	9/15/2016	1600
R1609820-008	MW-9	9/15/2016	1705
R1609820-009	MW-13	9/15/2016	1615
R1609820-010	TMP-A	9/15/2016	1709
R1609820-011	FB-091516	9/15/2016	1715
R1609820-012	DUP-091516	9/15/2016	

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

40130

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2

Project Name: Dover - Binghamton	Project Number: 5101.0003
Project Manager: Sarah Tufaro	Report CC:
Company/Address: 1011 US Hwy 22, Suite 302, Bridgewater, NJ 08807	
Phone #: (908)864-4400	Email: STufaro@vcg-llc.com
Sampler's Signature: Kerry Austin	Sampler's Printed Name: Kerry Austin

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1 — 8

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other $Na_2S_2O_3$

REMARKS/ALTERNATE DESCRIPTION

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	VOA 8260								
Trip Blank				TB	3	X															
MW-10		9/15/16	11:05	GW	3	X															
MW-17		9/15/16	11:23	GW	3								X								
MW-11		9/15/16	12:25	GW	3								X								
MW-16		9/15/16	12:46	GW	3								X								
MW-8		9/15/16	15:35	GW	3								X								
DMW-3		9/15/16	16:00	GW	3	X															
MW-9		9/15/16	17:05	GW	3								X								
MW-13 (MS/MSD)		9/15/16	16:15	GW	9	X															
TMP-A		9/15/16	17:09	GW	3	X															
FB-091516		9/15/16	17:15	GW	3	X															

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day

REQUESTED REPORT DATE: Standard

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data

Edata X Yes ____ No

INVOICE INFORMATION
PO # 5101.0003
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Kerry Austin	Signature: Gregory O. Esmeran	Signature	Signature	Signature	
Printed Name: Verina Consulting	Printed Name:	Printed Name	Printed Name	Printed Name	
Firm: 9/15/16 18:00	Firm: ALS	Firm	Firm	Firm	
Date/Time	Date/Time: 9-16-16 09:35	Date/Time	Date/Time	Date/Time	Date/Time

R1609820 5
Verina Consulting Group, LLC
Binghamton

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

40129

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Project Name: Dover - Binghamton	Project Number: 5101.0003
Project Manager: Sarah Tufaro	Report CC:
Company/Address: 1011 US Hwy 22, Suite 302, Bridgewater, NJ 08807	
Phone #: (908) 864-4400	Email: STufaro@vcg-llc.com
Sampler's Signature: Kerry Austin	Sampler's Printed Name: Kerry Austin

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	VOA 8260							
DUP-091516		9/15/16	--	GW	3								X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other $Na_2S_2O_3$

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day ____ 2 day ____ 3 day
_____ 4 day ____ 5 day
REQUESTED REPORT DATE: Standard

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
X IV. Data Validation Report with Raw Data
Edata X Yes ____ No

INVOICE INFORMATION
PO # 5101.0003
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Kerry Austin	Signature:	Signature:	Signature:	Signature:	
Printed Name: Kerry Austin	Printed Name: Gregory O. Esmerian	Printed Name:	Printed Name:	Printed Name:	
Firm: Verina Consulting	Firm: ALS	Firm:	Firm:	Firm:	
Date/Time: 9/15/16 18:00	Date/Time: 9-16-16 09:35	Date/Time:	Date/Time:	Date/Time:	

R1609820 5
Verina Consulting Group, LLC
Binghamton

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Verina Consulting Folder Number _____

Cooler received on 9-16-16 by: RE

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y (N)
2	Custody papers properly completed (ink, signed)?	(Y) N
3	Did all bottles arrive in good condition (unbroken)?	Y N
4	Circle: (Wet Ice) Dry Ice Gel packs present?	(Y) N

5a	Perchlorate samples have required headspace?	Y N (NA)
5b	Did VOA vials, Alk,or Sulfide have sig* bubbles?	Y (N) NA
6	Where did the bottles originate?	(ALS/ROC) (CLIENT)
7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 9-16-16 Time: 0950 ID: IR#5 (IR#6) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	2.6						
Correction Factor (°C)	+0.5						
Corrected Temp (°C)	3.1						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by RE on 9-16-16 at 09:53
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown: Date: 9/16/16 Time: 1335 by: (A)

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) (NO)
3. Were correct containers used for the tests indicated? (YES) NO
4. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (NA)
5. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (NA)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4/115022					

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 6-145-002, 6-145-001
Other Comments:

No Trip Blanks rec'd

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

PC Secondary Review: MS 9/16/16 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton/5101.0003

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1609820-002.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1540	R-001-S12 / KRUEST	
		9/20/2016	1220	In Lab / KRUEST	
		9/20/2016	1353	R-001-S12 / KRUEST	
R1609820-002.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-002.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-003.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1536	In Lab / KRUEST	
		9/19/2016	1540	R-001-S12 / KRUEST	
R1609820-003.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-003.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-004.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1540	R-001-S12 / KRUEST	
		9/20/2016	1220	In Lab / KRUEST	
		9/20/2016	1353	R-001-S12 / KRUEST	
R1609820-004.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-004.03					

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton/5101.0003

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-005.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1536	In Lab / KRUEST	
		9/19/2016	1540	R-001-S12 / KRUEST	
R1609820-005.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-005.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-006.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1536	In Lab / KRUEST	
		9/19/2016	1540	R-001-S12 / KRUEST	
R1609820-006.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-006.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-007.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1540	R-001-S12 / KRUEST	
		9/20/2016	1220	In Lab / KRUEST	
		9/20/2016	1353	R-001-S12 / KRUEST	
R1609820-007.02					
		9/16/2016	1335	R-001 / GESMERIAN	

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton/5101.0003

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-007.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-008.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1536	In Lab / KRUEST	
		9/19/2016	1540	R-001-S12 / KRUEST	
R1609820-008.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-008.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1540	R-001-S12 / KRUEST	
		9/20/2016	1220	In Lab / KRUEST	
		9/20/2016	1353	R-001-S12 / KRUEST	
R1609820-009.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.04					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.05					

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton/5101.0003

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.06					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.07					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.08					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-009.09					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-010.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1540	R-001-S12 / KRUEST	
		9/20/2016	1220	In Lab / KRUEST	
		9/20/2016	1353	R-001-S12 / KRUEST	
R1609820-010.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-010.03					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-011.01					
	8260C				
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
		9/19/2016	1239	In Lab / KRUEST	
		9/19/2016	1540	R-001-S12 / KRUEST	

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton/5101.0003

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R1609820-011.02					
		9/16/2016	1335	R-001 / GESMERIAN	
		9/16/2016	1335	SMO / GESMERIAN	
R1609820-011.03					
		9/16/2016	1335	SMO / GESMERIAN	
		9/16/2016	1335	R-001 / GESMERIAN	
R1609820-012.01					
	8260C				
		9/16/2016	1335	SMO / GESMERIAN	
		9/16/2016	1335	R-001 / GESMERIAN	
		9/19/2016	1540	R-001-S12 / KRUEST	
		9/20/2016	1220	In Lab / KRUEST	
		9/20/2016	1353	R-001-S12 / KRUEST	
R1609820-012.02					
		9/16/2016	1335	SMO / GESMERIAN	
		9/16/2016	1335	R-001 / GESMERIAN	
R1609820-012.03					
		9/16/2016	1335	SMO / GESMERIAN	
		9/16/2016	1335	R-001 / GESMERIAN	

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003		

Sample Name:	MW-10	**Date Collected:**	09/15/16
Lab Code:	R1609820-002	**Date Received:**	09/16/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-17	**Date Collected:**	09/15/16
Lab Code:	R1609820-003	**Date Received:**	09/16/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-11	**Date Collected:**	09/15/16
Lab Code:	R1609820-004	**Date Received:**	09/16/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-16	**Date Collected:**	09/15/16
Lab Code:	R1609820-005	**Date Received:**	09/16/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-8	**Date Collected:**	09/15/16
Lab Code:	R1609820-006	**Date Received:**	09/16/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton/5101.0003
Service Request: R1609820

Sample Name: DMW-3
Lab Code: R1609820-007
Sample Matrix: Water
Date Collected: 09/15/16
Date Received: 09/16/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-9
Lab Code: R1609820-008
Sample Matrix: Water
Date Collected: 09/15/16
Date Received: 09/16/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-13
Lab Code: R1609820-009
Sample Matrix: Water
Date Collected: 09/15/16
Date Received: 09/16/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: TMP-A
Lab Code: R1609820-010
Sample Matrix: Water
Date Collected: 09/15/16
Date Received: 09/16/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: FB-091516
Lab Code: R1609820-011
Sample Matrix: Water
Date Collected: 09/15/16
Date Received: 09/16/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003		

Sample Name:	DUP-091516	**Date Collected:**	09/15/16
Lab Code:	R1609820-012	**Date Received:**	09/16/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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www.alsglobal.com

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 11:05
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1609820-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**3.5**	1.0	0.36	1	09/20/16 16:15	
1,1-Dichloroethane (1,1-DCA)	**1.2**	1.0	0.20	1	09/20/16 16:15	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 16:15	
Tetrachloroethene (PCE)	**1.6**	1.0	0.30	1	09/20/16 16:15	
Trichloroethene (TCE)	**28**	1.0	0.22	1	09/20/16 16:15	
Vinyl Chloride	**0.36 J**	1.0	0.32	1	09/20/16 16:15	
cis-1,2-Dichloroethene	**6.3**	1.0	0.30	1	09/20/16 16:15	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 16:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/20/16 16:15	
Dibromofluoromethane	113	89 - 119	09/20/16 16:15	
Toluene-d8	115	87 - 121	09/20/16 16:15	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 16:00
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	DMW-3	**Units:**	ug/L
Lab Code:	R1609820-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 16:45	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 16:45	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 16:45	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 16:45	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 16:45	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 16:45	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 16:45	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 16:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/20/16 16:45	
Dibromofluoromethane	111	89 - 119	09/20/16 16:45	
Toluene-d8	113	87 - 121	09/20/16 16:45	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 16:15
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-13	**Units:**	ug/L
Lab Code:	R1609820-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 15:44	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 15:44	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 15:44	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 15:44	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 15:44	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 15:44	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 15:44	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 15:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	09/20/16 15:44	
Dibromofluoromethane	110	89 - 119	09/20/16 15:44	
Toluene-d8	114	87 - 121	09/20/16 15:44	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 17:09
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	TMP-A	**Units:**	ug/L
Lab Code:	R1609820-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 17:16	
1,1-Dichloroethane (1,1-DCA)	**0.21 J**	1.0	0.20	1	09/20/16 17:16	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 17:16	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 17:16	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 17:16	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 17:16	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 17:16	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 17:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85 - 122	09/20/16 17:16	
Dibromofluoromethane	111	89 - 119	09/20/16 17:16	
Toluene-d8	115	87 - 121	09/20/16 17:16	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 17:15
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	FB-091516	**Units:**	ug/L
Lab Code:	R1609820-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/19/16 13:21	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/19/16 13:21	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 13:21	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 13:21	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/19/16 13:21	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 13:21	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/19/16 13:21	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 13:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	109	85 - 122	09/19/16 13:21	
Dibromofluoromethane	114	89 - 119	09/19/16 13:21	
Toluene-d8	115	87 - 121	09/19/16 13:21	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 11:23
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-17	**Units:**	ug/L
Lab Code:	R1609820-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**3.4**	1.0	0.36	1	09/19/16 19:30	
1,1-Dichloroethane (1,1-DCA)	**23**	1.0	0.20	1	09/19/16 19:30	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 19:30	
Tetrachloroethene (PCE)	**0.30 J**	1.0	0.30	1	09/19/16 19:30	
Trichloroethene (TCE)	**1.7**	1.0	0.22	1	09/19/16 19:30	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 19:30	
cis-1,2-Dichloroethene	**1.4**	1.0	0.30	1	09/19/16 19:30	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 19:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85 - 122	09/19/16 19:30	
Dibromofluoromethane	113	89 - 119	09/19/16 19:30	
Toluene-d8	114	87 - 121	09/19/16 19:30	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 12:25
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1609820-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**10**	10	3.6	10	09/20/16 14:43	
1,1-Dichloroethane (1,1-DCA)	10 U	10	2.0	10	09/20/16 14:43	
1,1-Dichloroethene (1,1-DCE)	10 U	10	5.7	10	09/20/16 14:43	
Tetrachloroethene (PCE)	10 U	10	3.0	10	09/20/16 14:43	
Trichloroethene (TCE)	10 U	10	2.2	10	09/20/16 14:43	
Vinyl Chloride	10 U	10	3.2	10	09/20/16 14:43	
cis-1,2-Dichloroethene	10 U	10	3.0	10	09/20/16 14:43	
trans-1,2-Dichloroethene	10 U	10	3.3	10	09/20/16 14:43	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	09/20/16 14:43	
Dibromofluoromethane	111	89 - 119	09/20/16 14:43	
Toluene-d8	114	87 - 121	09/20/16 14:43	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 12:46
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-16	**Units:**	ug/L
Lab Code:	R1609820-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**9.7**	1.0	0.36	1	09/19/16 20:01	
1,1-Dichloroethane (1,1-DCA)	**59**	1.0	0.20	1	09/19/16 20:01	
1,1-Dichloroethene (1,1-DCE)	**1.0**	1.0	0.57	1	09/19/16 20:01	
Tetrachloroethene (PCE)	**0.61**	1.0	0.30	1	09/19/16 20:01	J
Trichloroethene (TCE)	**26**	1.0	0.22	1	09/19/16 20:01	
Vinyl Chloride	**4.9**	1.0	0.32	1	09/19/16 20:01	
cis-1,2-Dichloroethene	**83**	1.0	0.30	1	09/19/16 20:01	
trans-1,2-Dichloroethene	**0.87**	1.0	0.33	1	09/19/16 20:01	J

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85 - 122	09/19/16 20:01	
Dibromofluoromethane	113	89 - 119	09/19/16 20:01	
Toluene-d8	114	87 - 121	09/19/16 20:01	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 15:35
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-8	**Units:**	ug/L
Lab Code:	R1609820-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**2.4**	1.0	0.36	1	09/19/16 20:31	
1,1-Dichloroethane (1,1-DCA)	**3.7**	1.0	0.20	1	09/19/16 20:31	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 20:31	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 20:31	
Trichloroethene (TCE)	**120**	1.0	0.22	1	09/19/16 20:31	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 20:31	
cis-1,2-Dichloroethene	**71**	1.0	0.30	1	09/19/16 20:31	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 20:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	09/19/16 20:31	
Dibromofluoromethane	111	89 - 119	09/19/16 20:31	
Toluene-d8	114	87 - 121	09/19/16 20:31	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 17:05
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1609820-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**0.45 J**	1.0	0.36	1	09/19/16 21:02	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/19/16 21:02	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 21:02	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 21:02	
Trichloroethene (TCE)	**0.95 J**	1.0	0.22	1	09/19/16 21:02	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 21:02	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/19/16 21:02	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 21:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/19/16 21:02	
Dibromofluoromethane	114	89 - 119	09/19/16 21:02	
Toluene-d8	114	87 - 121	09/19/16 21:02	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	DUP-091516	**Units:**	ug/L
Lab Code:	R1609820-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**0.47 J**	1.0	0.36	1	09/20/16 15:14	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 15:14	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 15:14	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 15:14	
Trichloroethene (TCE)	**0.91 J**	1.0	0.22	1	09/20/16 15:14	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 15:14	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 15:14	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 15:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/20/16 15:14	
Dibromofluoromethane	111	89 - 119	09/20/16 15:14	
Toluene-d8	114	87 - 121	09/20/16 15:14	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton/5101.0003
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 89 - 119	Toluene-d8 87 - 121
MW-10	R1609820-002	107	113	115
DMW-3	R1609820-007	107	111	113
MW-13	R1609820-009	106	110	114
TMP-A	R1609820-010	108	111	115
FB-091516	R1609820-011	109	114	115
Lab Control Sample	RQ1611053-03	107	111	114
Method Blank	RQ1611053-04	104	111	114
Lab Control Sample	RQ1611116-03	108	114	115
Method Blank	RQ1611116-04	105	113	115
MW-13 MS	RQ1611116-05	111	113	115
MW-13 DMS	RQ1611116-06	110	112	116

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16
Sample Matrix:	Water	**Date Received:**	09/16/16
		Date Analyzed:	09/20/16
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-13	**Units:**	ug/L
Lab Code:	R1609820-009	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ1611116-05			Duplicate Matrix Spike RQ1611116-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	1.0 U	48.7	50.0	97	50.5	50.0	101	74-127	4	30
1,1-Dichloroethane (1,1-DCA)	1.0 U	54.7	50.0	109	54.4	50.0	109	74-132	<1	30
1,1-Dichloroethene (1,1-DCE)	1.0 U	56.7	50.0	113	56.7	50.0	113	74-139	<1	30
Tetrachloroethene (PCE)	1.0 U	58.0	50.0	116	58.5	50.0	117	67-137	<1	30
Trichloroethene (TCE)	1.0 U	56.0	50.0	112	56.5	50.0	113	62-142	<1	30
Vinyl Chloride	1.0 U	56.4	50.0	113	55.7	50.0	111	60-157	1	30
cis-1,2-Dichloroethene	1.0 U	56.6	50.0	113	57.5	50.0	115	72-133	2	30
trans-1,2-Dichloroethene	1.0 U	53.4	50.0	107	55.7	50.0	111	77-125	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/19/16 12:50
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1611053-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\091916\P5138.D\

Analysis Method: 8260C
Prep Method: EPA 5030C
Analysis Lot: 514674

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1611053-03	I:\ACQUDATA\msvoa12\Data\091916\P5136.D\	09/19/16 11:49
FB-091516	R1609820-011	I:\ACQUDATA\msvoa12\Data\091916\P5139.D\	09/19/16 13:21

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/20/16 12:09
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1611116-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\092016\P5183.D\

Analysis Method: 8260C
Prep Method: EPA 5030C
Analysis Lot: 514854

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1611116-03	I:\ACQUDATA\msvoa12\Data\092016\P5181.D\	09/20/16 11:08
MW-13	R1609820-009	I:\ACQUDATA\msvoa12\Data\092016\P5190.D\	09/20/16 15:44
MW-10	R1609820-002	I:\ACQUDATA\msvoa12\Data\092016\P5191.D\	09/20/16 16:15
DMW-3	R1609820-007	I:\ACQUDATA\msvoa12\Data\092016\P5192.D\	09/20/16 16:45
TMP-A	R1609820-010	I:\ACQUDATA\msvoa12\Data\092016\P5193.D\	09/20/16 17:16
MW-13	RQ1611116-05	I:\ACQUDATA\msvoa12\Data\092016\P5200.D\	09/20/16 21:03
MW-13	RQ1611116-06	I:\ACQUDATA\msvoa12\Data\092016\P5201.D\	09/20/16 21:34

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1611053-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/19/16 12:50	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/19/16 12:50	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 12:50	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 12:50	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/19/16 12:50	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 12:50	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/19/16 12:50	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 12:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	09/19/16 12:50	
Dibromofluoromethane	111	89 - 119	09/19/16 12:50	
Toluene-d8	114	87 - 121	09/19/16 12:50	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1611116-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 12:09	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 12:09	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 12:09	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 12:09	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 12:09	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 12:09	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 12:09	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 12:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	09/20/16 12:09	
Dibromofluoromethane	113	89 - 119	09/20/16 12:09	
Toluene-d8	115	87 - 121	09/20/16 12:09	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/19/16 11:49
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1611053-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\091916\P5136.D\
Analysis Method:	8260C	**Analysis Lot:**	514674
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1611053-04	I:\ACQUDATA\msvoa12\Data\091916\P5138.D\	09/19/16 12:50
FB-091516	R1609820-011	I:\ACQUDATA\msvoa12\Data\091916\P5139.D\	09/19/16 13:21

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/20/16 11:08
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1611116-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\092016\P5181.D\
Analysis Method:	8260C	**Analysis Lot:**	514854
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1611116-04	I:\ACQUDATA\msvoa12\Data\092016\P5183.D\	09/20/16 12:09
MW-13	R1609820-009	I:\ACQUDATA\msvoa12\Data\092016\P5190.D\	09/20/16 15:44
MW-10	R1609820-002	I:\ACQUDATA\msvoa12\Data\092016\P5191.D\	09/20/16 16:15
DMW-3	R1609820-007	I:\ACQUDATA\msvoa12\Data\092016\P5192.D\	09/20/16 16:45
TMP-A	R1609820-010	I:\ACQUDATA\msvoa12\Data\092016\P5193.D\	09/20/16 17:16
MW-13	RQ1611116-05	I:\ACQUDATA\msvoa12\Data\092016\P5200.D\	09/20/16 21:03
MW-13	RQ1611116-06	I:\ACQUDATA\msvoa12\Data\092016\P5201.D\	09/20/16 21:34

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1609820
Date Analyzed: 09/19/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1611053-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	17.2	20.0	86	74-120
1,1-Dichloroethane (1,1-DCA)	8260C	19.4	20.0	97	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	19.4	20.0	97	74-135
Tetrachloroethene (PCE)	8260C	21.1	20.0	105	78-124
Trichloroethene (TCE)	8260C	20.3	20.0	101	78-123
Vinyl Chloride	8260C	18.2	20.0	91	69-133
cis-1,2-Dichloroethene	8260C	20.6	20.0	103	80-121
trans-1,2-Dichloroethene	8260C	19.5	20.0	97	80-120

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton/5101.0003
Sample Matrix: Water

Service Request: R1609820
Date Analyzed: 09/20/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1611116-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.2	20.0	96	74-120
1,1-Dichloroethane (1,1-DCA)	8260C	21.9	20.0	110	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	21.7	20.0	108	74-135
Tetrachloroethene (PCE)	8260C	23.8	20.0	119	78-124
Trichloroethene (TCE)	8260C	22.7	20.0	113	78-123
Vinyl Chloride	8260C	22.1	20.0	111	69-133
cis-1,2-Dichloroethene	8260C	22.6	20.0	113	80-121
trans-1,2-Dichloroethene	8260C	22.0	20.0	110	80-120

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 10:47

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\091916\P5134.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 514674

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.36	85686	Pass
75	95	30	60	49.46	218880	Pass
95	95	100	100	100.00	442525	Pass
96	95	5	9	6.37	28179	Pass
173	174	0	2	1.14	3979	Pass
174	95	50	120	78.82	348800	Pass
175	174	5	9	7.04	24552	Pass
176	174	95	101	96.02	334933	Pass
177	176	5	9	6.55	21946	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1611053-02	I:\ACQUDATA\msvoa12\Data\091916\P5135.D\	09/19/16 11:18	
Lab Control Sample	RQ1611053-03	I:\ACQUDATA\msvoa12\Data\091916\P5136.D\	09/19/16 11:49	
Method Blank	RQ1611053-04	I:\ACQUDATA\msvoa12\Data\091916\P5138.D\	09/19/16 12:50	
FB-091516	R1609820-011	I:\ACQUDATA\msvoa12\Data\091916\P5139.D\	09/19/16 13:21	

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 10:47

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\092016\P5178.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 514854

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.80	81232	Pass
75	95	30	60	49.39	213376	Pass
95	95	100	100	100.00	432021	Pass
96	95	5	9	6.07	26213	Pass
173	174	0	2	1.10	3643	Pass
174	95	50	120	76.32	329734	Pass
175	174	5	9	7.96	26262	Pass
176	174	95	101	95.71	315584	Pass
177	176	5	9	7.15	22558	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1611116-02	I:\ACQUDATA\msvoa12\Data\092016\P5179.D\	09/20/16 10:06	
Lab Control Sample	RQ1611116-03	I:\ACQUDATA\msvoa12\Data\092016\P5181.D\	09/20/16 11:08	
Method Blank	RQ1611116-04	I:\ACQUDATA\msvoa12\Data\092016\P5183.D\	09/20/16 12:09	
MW-13	R1609820-009	I:\ACQUDATA\msvoa12\Data\092016\P5190.D\	09/20/16 15:44	
MW-10	R1609820-002	I:\ACQUDATA\msvoa12\Data\092016\P5191.D\	09/20/16 16:15	
DMW-3	R1609820-007	I:\ACQUDATA\msvoa12\Data\092016\P5192.D\	09/20/16 16:45	
TMP-A	R1609820-010	I:\ACQUDATA\msvoa12\Data\092016\P5193.D\	09/20/16 17:16	
MW-13	RQ1611116-05	I:\ACQUDATA\msvoa12\Data\092016\P5200.D\	09/20/16 21:03	
MW-13	RQ1611116-06	I:\ACQUDATA\msvoa12\Data\092016\P5201.D\	09/20/16 21:34	

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 11:18

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\091916\P5135.D\ **Lab Code:**RQ1611053-02
Instrument ID: R-MS-12 **Analysis Lot:**514674
Analysis Method: 8260C **Signal ID:**

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	ICAL Result ==>	743,732	12.02	1,474,756	6.77	1,378,260	9.99
	Upper Limit ==>	1,487,464	12.52	2,949,512	7.27	2,756,520	10.49
	Lower Limit ==>	371,866	11.52	737,378	6.27	689,130	9.49
Associated Analyses							
Lab Control Sample	RQ1611053-03	723272	12.02	1467269	6.77	1386548	9.99
Method Blank	RQ1611053-04	708111	12.02	1485491	6.77	1383566	9.99
FB-091516	R1609820-011	701453	12.02	1465712	6.77	1382607	9.99

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 11:18

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\091916\P5135.D\ **Lab Code:**RQ1611053-02
Instrument ID: R-MS-12 **Analysis Lot:**514674
Analysis Method: 8260C **Signal ID:**

		Pentafluorobenzene	
		Area	**RT**
	ICAL Result ==>	895,426	5.74
	Upper Limit ==>	1,790,852	6.24
	Lower Limit ==>	447,713	5.24
Associated Analyses			
Lab Control Sample	RQ1611053-03	885159	5.74
Method Blank	RQ1611053-04	888935	5.74
FB-091516	R1609820-011	882331	5.74

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/20/16 10:06

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\092016\P5179.D\ **Lab Code:**RQ1611116-02
Instrument ID: R-MS-12 **Analysis Lot:**514854
Analysis Method: 8260C **Signal ID:**

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	ICAL Result ==>	717,263	12.02	1,427,842	6.77	1,340,525	9.99
	Upper Limit ==>	1,434,526	12.52	2,855,684	7.27	2,681,050	10.49
	Lower Limit ==>	358,632	11.52	713,921	6.27	670,263	9.49
Associated Analyses							
Lab Control Sample	RQ1611116-03	692951	12.02	1399587	6.77	1313472	9.99
Method Blank	RQ1611116-04	665378	12.02	1398394	6.77	1310115	9.99
MW-13	R1609820-009	665797	12.02	1384342	6.77	1299943	9.99
MW-10	R1609820-002	659744	12.02	1376201	6.77	1288146	9.99
DMW-3	R1609820-007	662307	12.02	1373093	6.77	1309021	9.99
TMP-A	R1609820-010	661124	12.02	1370436	6.77	1293934	9.99
MW-13	RQ1611116-05	700081	12.02	1386673	6.77	1316607	9.99
MW-13	RQ1611116-06	698583	12.02	1408668	6.77	1326033	9.99

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/20/16 10:06

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\092016\P5179.D\ **Lab Code:**RQ1611116-02
Instrument ID: R-MS-12 **Analysis Lot:**514854
Analysis Method: 8260C **Signal ID:**

		Pentafluorobenzene	
		Area	**RT**
	ICAL Result ==>	845,710	5.74
	Upper Limit ==>	1,691,420	6.24
	Lower Limit ==>	422,855	5.24
Associated Analyses			
Lab Control Sample	RQ1611116-03	843034	5.74
Method Blank	RQ1611116-04	811986	5.74
MW-13	R1609820-009	805537	5.74
MW-10	R1609820-002	817433	5.74
DMW-3	R1609820-007	815196	5.74
TMP-A	R1609820-010	813773	5.74
MW-13	RQ1611116-05	837304	5.74
MW-13	RQ1611116-06	835740	5.74

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton/5101.0003
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 89 - 119	Toluene-d8 87 - 121
MW-17	R1609820-003	108	113	114
MW-11	R1609820-004	106	111	114
MW-16	R1609820-005	108	113	114
MW-8	R1609820-006	106	111	114
MW-9	R1609820-008	107	114	114
DUP-091516	R1609820-012	107	111	114
Lab Control Sample	RQ1611053-03	107	111	114
Method Blank	RQ1611053-04	104	111	114
Lab Control Sample	RQ1611116-03	108	114	115
Method Blank	RQ1611116-04	105	113	115

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/19/16 12:50
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1611053-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\091916\P5138.D\
Analysis Method:	8260C	**Analysis Lot:**	514674
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1611053-03	I:\ACQUDATA\msvoa12\Data\091916\P5136.D\	09/19/16 11:49
MW-17	R1609820-003	I:\ACQUDATA\msvoa12\Data\091916\P5151.D\	09/19/16 19:30
MW-16	R1609820-005	I:\ACQUDATA\msvoa12\Data\091916\P5152.D\	09/19/16 20:01
MW-8	R1609820-006	I:\ACQUDATA\msvoa12\Data\091916\P5153.D\	09/19/16 20:31
MW-9	R1609820-008	I:\ACQUDATA\msvoa12\Data\091916\P5154.D\	09/19/16 21:02

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/20/16 12:09
Sample Matrix:	Water	**Date Extracted:**	

Method Blank Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name:	Method Blank	**Instrument ID:**	R-MS-12
Lab Code:	RQ1611116-04	**File ID:**	I:\ACQUDATA\msvoa12\Data\092016\P5183.D\
Analysis Method:	8260C	**Analysis Lot:**	514854
Prep Method:	EPA 5030C		

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1611116-03	I:\ACQUDATA\msvoa12\Data\092016\P5181.D\	09/20/16 11:08
MW-11	R1609820-004	I:\ACQUDATA\msvoa12\Data\092016\P5188.D\	09/20/16 14:43
DUP-091516	R1609820-012	I:\ACQUDATA\msvoa12\Data\092016\P5189.D\	09/20/16 15:14

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1611053-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/19/16 12:50	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/19/16 12:50	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 12:50	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 12:50	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/19/16 12:50	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 12:50	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/19/16 12:50	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 12:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	09/19/16 12:50	
Dibromofluoromethane	111	89 - 119	09/19/16 12:50	
Toluene-d8	114	87 - 121	09/19/16 12:50	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1611116-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 12:09	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 12:09	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 12:09	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 12:09	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 12:09	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 12:09	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 12:09	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 12:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	09/20/16 12:09	
Dibromofluoromethane	113	89 - 119	09/20/16 12:09	
Toluene-d8	115	87 - 121	09/20/16 12:09	

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/19/16 11:49
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1611053-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\091916\P5136.D\
Analysis Method:	8260C	**Analysis Lot:**	514674
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1611053-04	I:\ACQUDATA\msvoa12\Data\091916\P5138.D\	09/19/16 12:50
MW-17	R1609820-003	I:\ACQUDATA\msvoa12\Data\091916\P5151.D\	09/19/16 19:30
MW-16	R1609820-005	I:\ACQUDATA\msvoa12\Data\091916\P5152.D\	09/19/16 20:01
MW-8	R1609820-006	I:\ACQUDATA\msvoa12\Data\091916\P5153.D\	09/19/16 20:31
MW-9	R1609820-008	I:\ACQUDATA\msvoa12\Data\091916\P5154.D\	09/19/16 21:02

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Analyzed:**	09/20/16 11:08
Sample Matrix:	Water	**Date Extracted:**	

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Sample Name:	Lab Control Sample	**Instrument ID:**	R-MS-12
Lab Code:	RQ1611116-03	**File ID:**	I:\ACQUDATA\msvoa12\Data\092016\P5181.D\
Analysis Method:	8260C	**Analysis Lot:**	514854
Prep Method:	EPA 5030C		

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	RQ1611116-04	I:\ACQUDATA\msvoa12\Data\092016\P5183.D\	09/20/16 12:09
MW-11	R1609820-004	I:\ACQUDATA\msvoa12\Data\092016\P5188.D\	09/20/16 14:43
DUP-091516	R1609820-012	I:\ACQUDATA\msvoa12\Data\092016\P5189.D\	09/20/16 15:14

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 10:47

Tune Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa12\Data\091916\P5134.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 514674

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.36	85686	Pass
75	95	30	60	49.46	218880	Pass
95	95	100	100	100.00	442525	Pass
96	95	5	9	6.37	28179	Pass
173	174	0	2	1.14	3979	Pass
174	95	50	120	78.82	348800	Pass
175	174	5	9	7.04	24552	Pass
176	174	95	101	96.02	334933	Pass
177	176	5	9	6.55	21946	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1611053-02	I:\ACQUDATA\msvoa12\Data\091916\P5135.D\	09/19/16 11:18	
Lab Control Sample	RQ1611053-03	I:\ACQUDATA\msvoa12\Data\091916\P5136.D\	09/19/16 11:49	
Method Blank	RQ1611053-04	I:\ACQUDATA\msvoa12\Data\091916\P5138.D\	09/19/16 12:50	
MW-17	R1609820-003	I:\ACQUDATA\msvoa12\Data\091916\P5151.D\	09/19/16 19:30	
MW-16	R1609820-005	I:\ACQUDATA\msvoa12\Data\091916\P5152.D\	09/19/16 20:01	
MW-8	R1609820-006	I:\ACQUDATA\msvoa12\Data\091916\P5153.D\	09/19/16 20:31	
MW-9	R1609820-008	I:\ACQUDATA\msvoa12\Data\091916\P5154.D\	09/19/16 21:02	

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 10:47

Tune Summary
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa12\Data\092016\P5178.D\ **Analytical Method:** 8260C
Instrument ID: R-MS-12 **Analysis Lot:** 514854

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.80	81232	Pass
75	95	30	60	49.39	213376	Pass
95	95	100	100	100.00	432021	Pass
96	95	5	9	6.07	26213	Pass
173	174	0	2	1.10	3643	Pass
174	95	50	120	76.32	329734	Pass
175	174	5	9	7.96	26262	Pass
176	174	95	101	95.71	315584	Pass
177	176	5	9	7.15	22558	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	RQ1611116-02	I:\ACQUDATA\msvoa12\Data\092016\P5179.D\	09/20/16 10:06	
Lab Control Sample	RQ1611116-03	I:\ACQUDATA\msvoa12\Data\092016\P5181.D\	09/20/16 11:08	
Method Blank	RQ1611116-04	I:\ACQUDATA\msvoa12\Data\092016\P5183.D\	09/20/16 12:09	
MW-11	R1609820-004	I:\ACQUDATA\msvoa12\Data\092016\P5188.D\	09/20/16 14:43	
DUP-091516	R1609820-012	I:\ACQUDATA\msvoa12\Data\092016\P5189.D\	09/20/16 15:14	

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 11:18

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa12\Data\091916\P5135.D\ **Lab Code:**RQ1611053-02
Instrument ID: R-MS-12 **Analysis Lot:**514674
Analysis Method: 8260C **Signal ID:**

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	ICAL Result ==>	743,732	12.02	1,474,756	6.77	1,378,260	9.99
	Upper Limit ==>	1,487,464	12.52	2,949,512	7.27	2,756,520	10.49
	Lower Limit ==>	371,866	11.52	737,378	6.27	689,130	9.49
Associated Analyses							
Lab Control Sample	RQ1611053-03	723272	12.02	1467269	6.77	1386548	9.99
Method Blank	RQ1611053-04	708111	12.02	1485491	6.77	1383566	9.99
MW-17	R1609820-003	700514	12.02	1445983	6.77	1351015	9.99
MW-16	R1609820-005	692325	12.02	1445197	6.77	1352572	9.99
MW-8	R1609820-006	688433	12.02	1450750	6.77	1352457	9.99
MW-9	R1609820-008	693223	12.02	1431596	6.77	1344786	9.99

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/19/16 11:18

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa12\Data\091916\P5135.D\ **Lab Code:**RQ1611053-02
Instrument ID: R-MS-12 **Analysis Lot:**514674
Analysis Method: 8260C **Signal ID:**

		Pentafluorobenzene	
		Area	**RT**
	ICAL Result ==>	895,426	5.74
	Upper Limit ==>	1,790,852	6.24
	Lower Limit ==>	447,713	5.24
Associated Analyses			
Lab Control Sample	RQ1611053-03	885159	5.74
Method Blank	RQ1611053-04	888935	5.74
MW-17	R1609820-003	854572	5.74
MW-16	R1609820-005	865445	5.74
MW-8	R1609820-006	855156	5.74
MW-9	R1609820-008	854590	5.74

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/20/16 10:06

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa12\Data\092016\P5179.D\ **Lab Code:**RQ1611116-02
Instrument ID: R-MS-12 **Analysis Lot:**514854
Analysis Method: 8260C **Signal ID:**

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	ICAL Result ==>	717,263	12.02	1,427,842	6.77	1,340,525	9.99
	Upper Limit ==>	1,434,526	12.52	2,855,684	7.27	2,681,050	10.49
	Lower Limit ==>	358,632	11.52	713,921	6.27	670,263	9.49
Associated Analyses							
Lab Control Sample	RQ1611116-03	692951	12.02	1399587	6.77	1313472	9.99
Method Blank	RQ1611116-04	665378	12.02	1398394	6.77	1310115	9.99
MW-11	R1609820-004	667571	12.02	1377750	6.77	1288984	9.99
DUP-091516	R1609820-012	665685	12.02	1390494	6.77	1299884	9.99

QA/QC Report

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003 **Date Analyzed:**09/20/16 10:06

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS, Unpreserved

File ID: I:\ACQUDATA\msvoa12\Data\092016\P5179.D\ **Lab Code:**RQ1611116-02
Instrument ID: R-MS-12 **Analysis Lot:**514854
Analysis Method: 8260C **Signal ID:**

		Pentafluorobenzene	
		Area	**RT**
	ICAL Result ==>	845,710	5.74
	Upper Limit ==>	1,691,420	6.24
	Lower Limit ==>	422,855	5.24
Associated Analyses			
Lab Control Sample	RQ1611116-03	843034	5.74
Method Blank	RQ1611116-04	811986	5.74
MW-11	R1609820-004	805801	5.74
DUP-091516	R1609820-012	818408	5.74

Raw Data

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 11:05
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1609820-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**3.5**		1.0	0.36	1	09/20/16 16:15	
1,1-Dichloroethane (1,1-DCA)	**1.2**		1.0	0.20	1	09/20/16 16:15	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	09/20/16 16:15	
Tetrachloroethene (PCE)	**1.6**		1.0	0.30	1	09/20/16 16:15	
Trichloroethene (TCE)	**28**		1.0	0.22	1	09/20/16 16:15	
Vinyl Chloride	**0.36**	**J**	1.0	0.32	1	09/20/16 16:15	
cis-1,2-Dichloroethene	**6.3**		1.0	0.30	1	09/20/16 16:15	
trans-1,2-Dichloroethene	1.0	U	1.0	0.33	1	09/20/16 16:15	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/20/16 16:15	
Dibromofluoromethane	113	89 - 119	09/20/16 16:15	
Toluene-d8	115	87 - 121	09/20/16 16:15	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 16:00
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	DMW-3	**Units:**	ug/L
Lab Code:	R1609820-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 16:45	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 16:45	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 16:45	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 16:45	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 16:45	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 16:45	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 16:45	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 16:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/20/16 16:45	
Dibromofluoromethane	111	89 - 119	09/20/16 16:45	
Toluene-d8	113	87 - 121	09/20/16 16:45	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 16:15
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-13	**Units:**	ug/L
Lab Code:	R1609820-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 15:44	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 15:44	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 15:44	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 15:44	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 15:44	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 15:44	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 15:44	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 15:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	09/20/16 15:44	
Dibromofluoromethane	110	89 - 119	09/20/16 15:44	
Toluene-d8	114	87 - 121	09/20/16 15:44	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 17:09
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	TMP-A	**Units:**	ug/L
Lab Code:	R1609820-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/20/16 17:16	
1,1-Dichloroethane (1,1-DCA)	**0.21 J**	1.0	0.20	1	09/20/16 17:16	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 17:16	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 17:16	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/20/16 17:16	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 17:16	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 17:16	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 17:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85 - 122	09/20/16 17:16	
Dibromofluoromethane	111	89 - 119	09/20/16 17:16	
Toluene-d8	115	87 - 121	09/20/16 17:16	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 17:15
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	FB-091516	**Units:**	ug/L
Lab Code:	R1609820-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

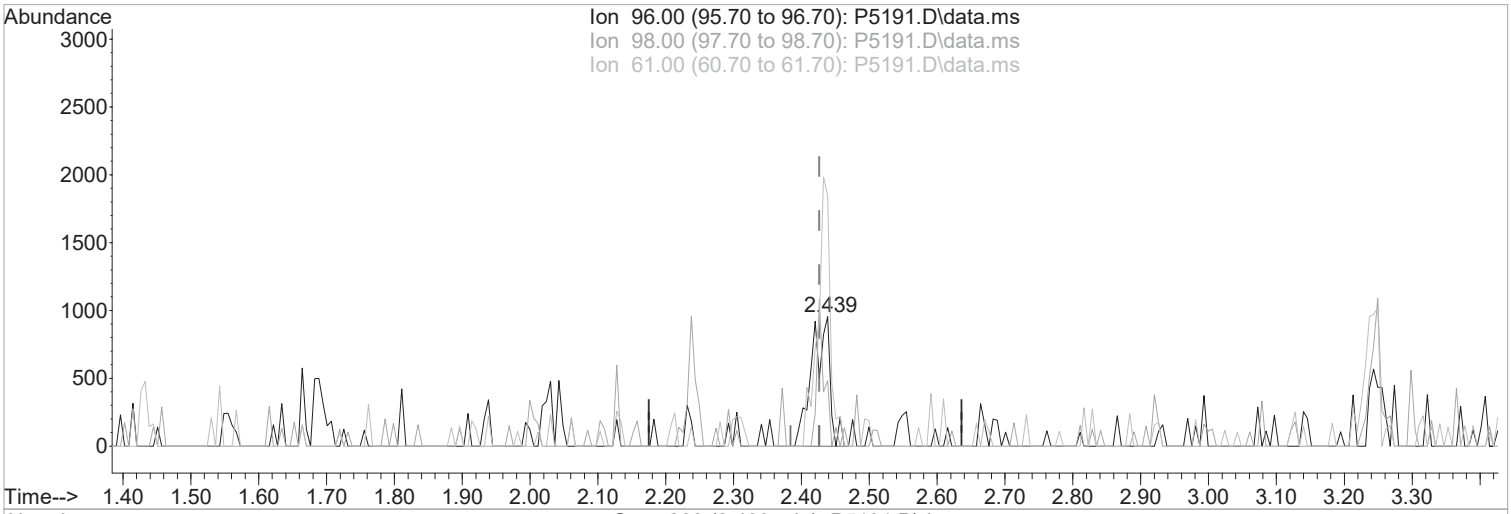
Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	09/19/16 13:21	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/19/16 13:21	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 13:21	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 13:21	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	09/19/16 13:21	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 13:21	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/19/16 13:21	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 13:21	

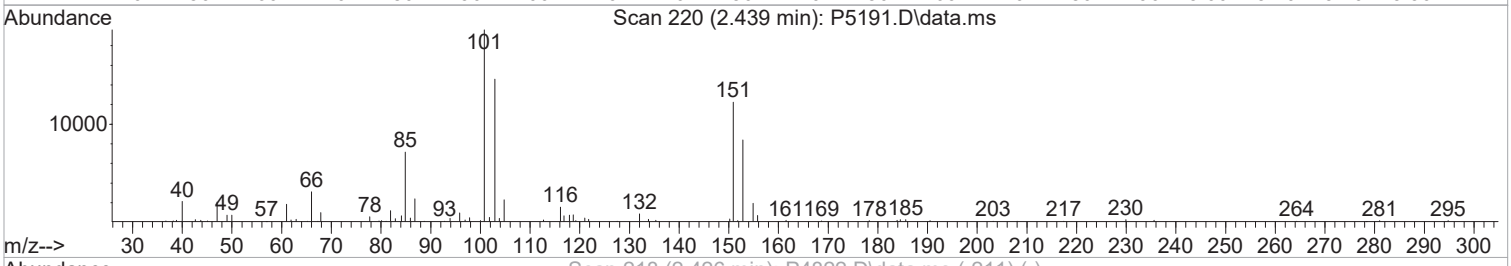
Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	109	85 - 122	09/19/16 13:21	
Dibromofluoromethane	114	89 - 119	09/19/16 13:21	
Toluene-d8	115	87 - 121	09/19/16 13:21	

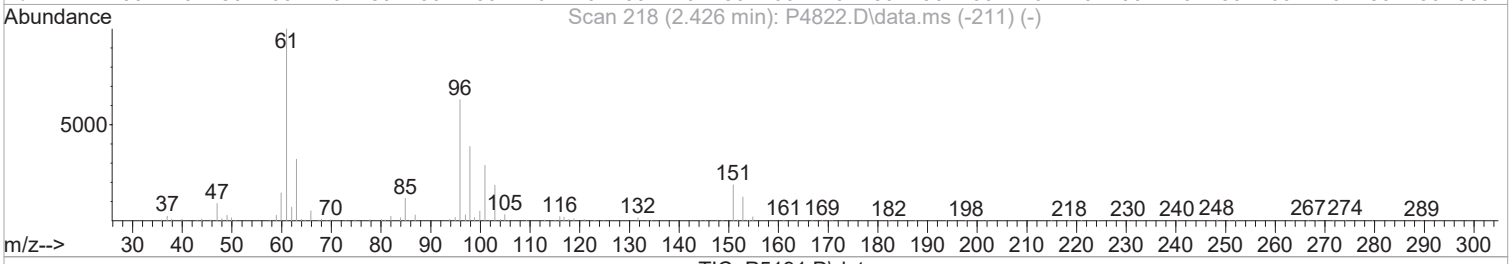
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5191.D
Acq On : 20 Sep 2016 4:15 pm
Operator : K.Ruest
Sample : R1609820-002|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 20 16:33:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5191.D\data.ms

(13) 1,1-Diclethene (P)

2.439min (+0.012) 0.29 ppb m

response 1788

Ion	Exp%	Act%
96.00	100	100
98.00	63.00	50.58
61.00	165.90	192.98#
0.00	0.00	0.00

Manual Integration:

After

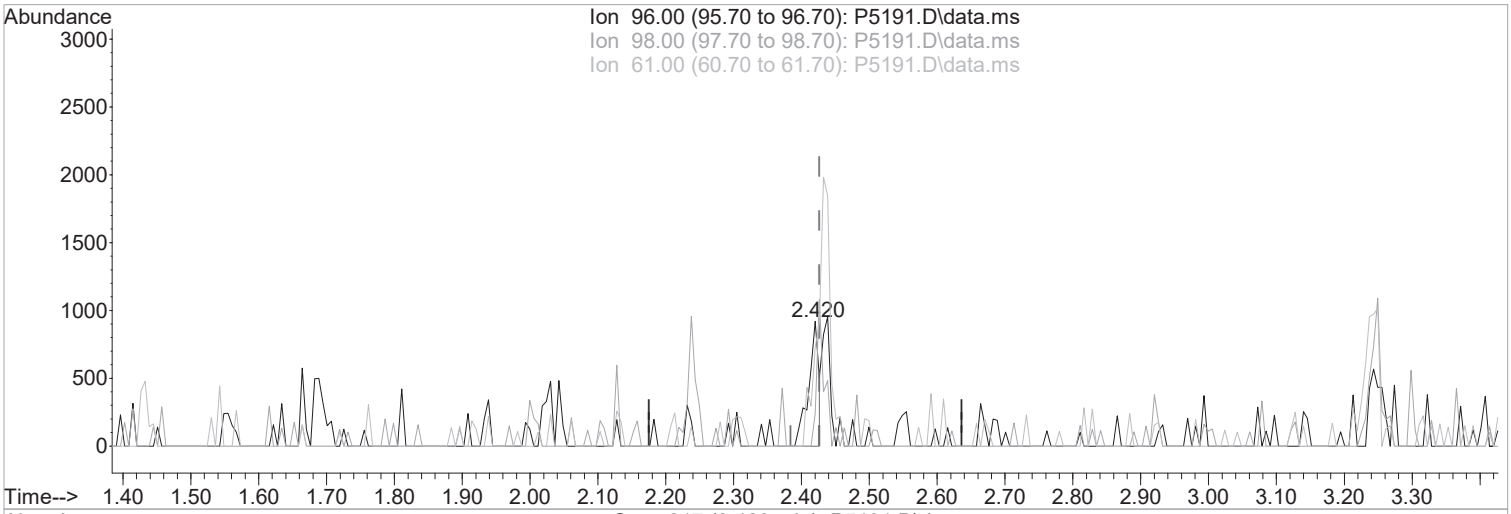
Split Peak

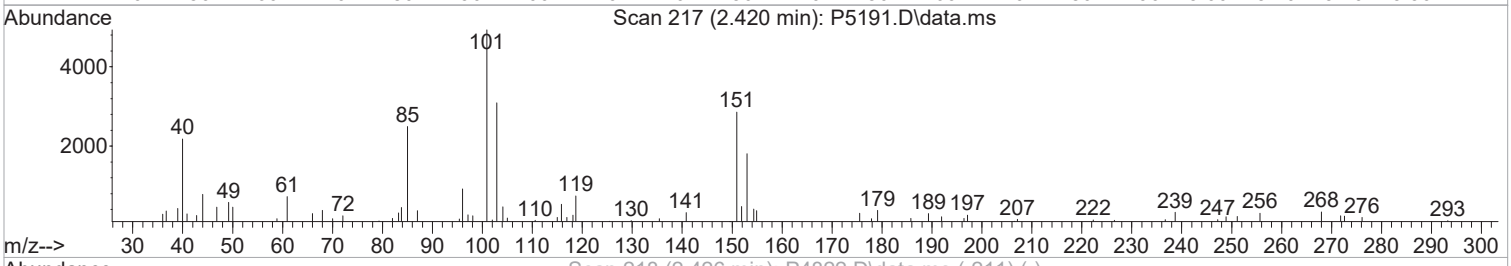
09/21/16

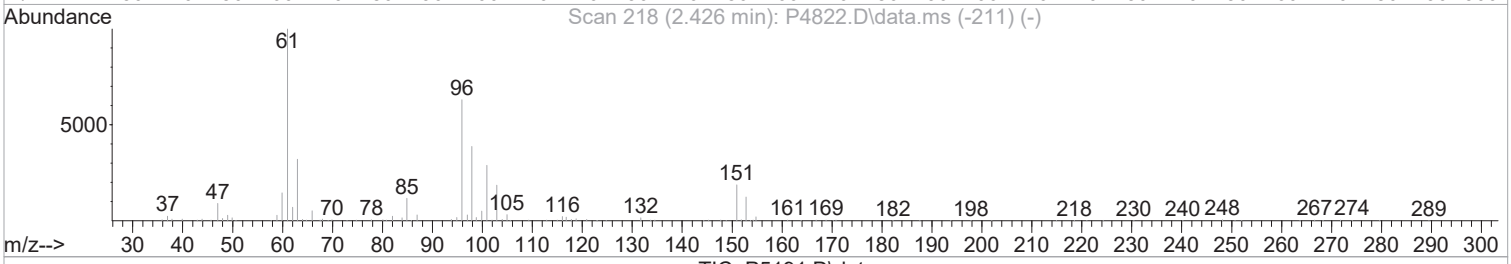
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5191.D
Acq On : 20 Sep 2016 4:15 pm
Operator : K.Ruest
Sample : R1609820-002|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 20 16:33:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5191.D\data.ms

(13) 1,1-Diclethene (P)

2.420min (-0.006) 0.16 ppb

response 980

Ion	Exp%	Act%
96.00	100	100
98.00	63.00	26.41#
61.00	165.90	79.13#
0.00	0.00	0.00

Manual Integration:

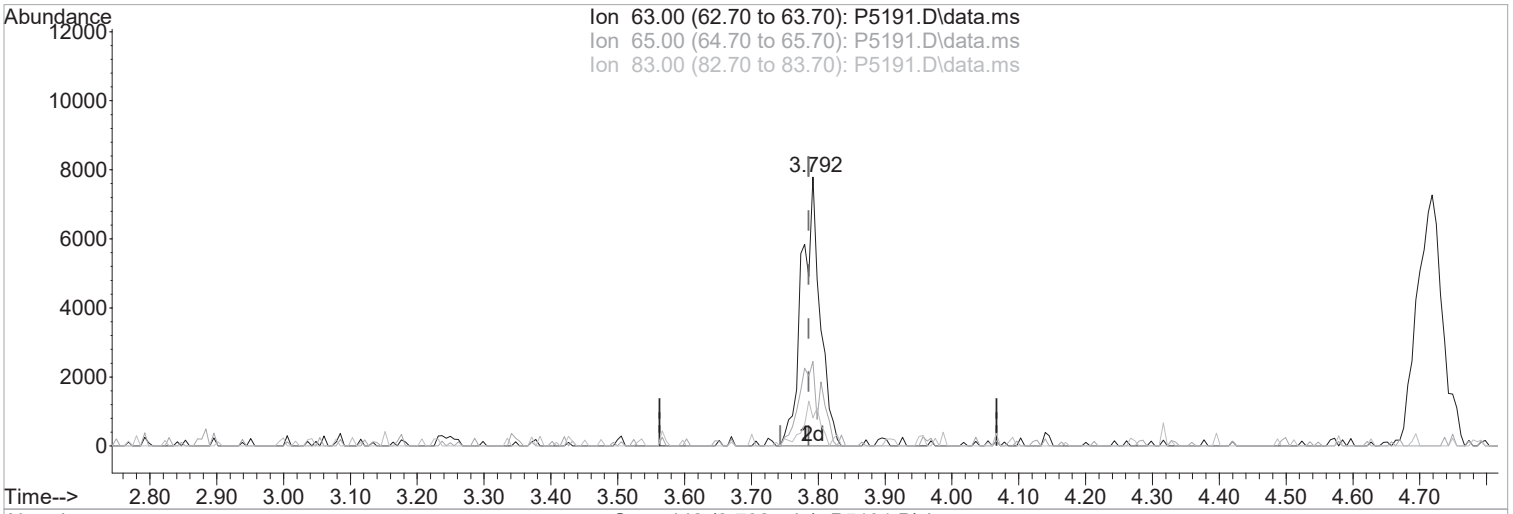
Before

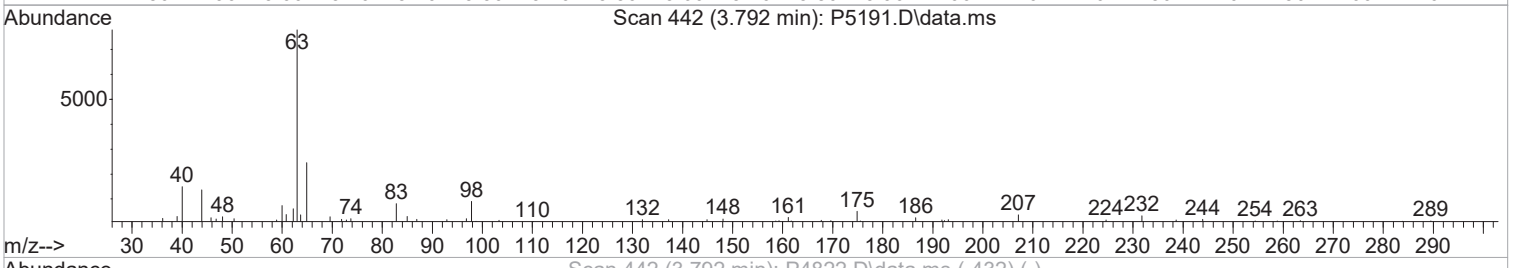
09/21/16

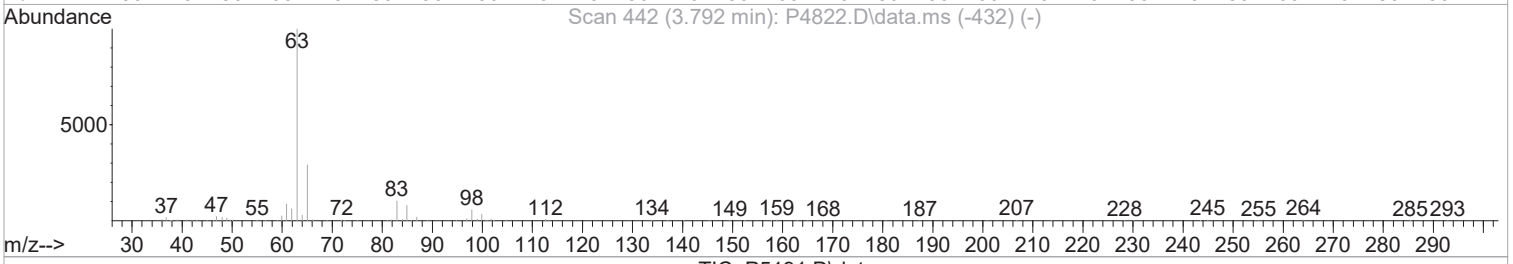
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5191.D
Acq On : 20 Sep 2016 4:15 pm
Operator : K.Ruest
Sample : R1609820-002|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 20 16:33:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5191.D\data.ms

(28) 1,1-Diclethane (P)

3.792min (+0.006) 1.21 ppb m

response 14841

Ion	Exp%	Act%
63.00	100	100
65.00	32.60	31.49
83.00	12.90	10.51
0.00	0.00	0.00

Manual Integration:

After

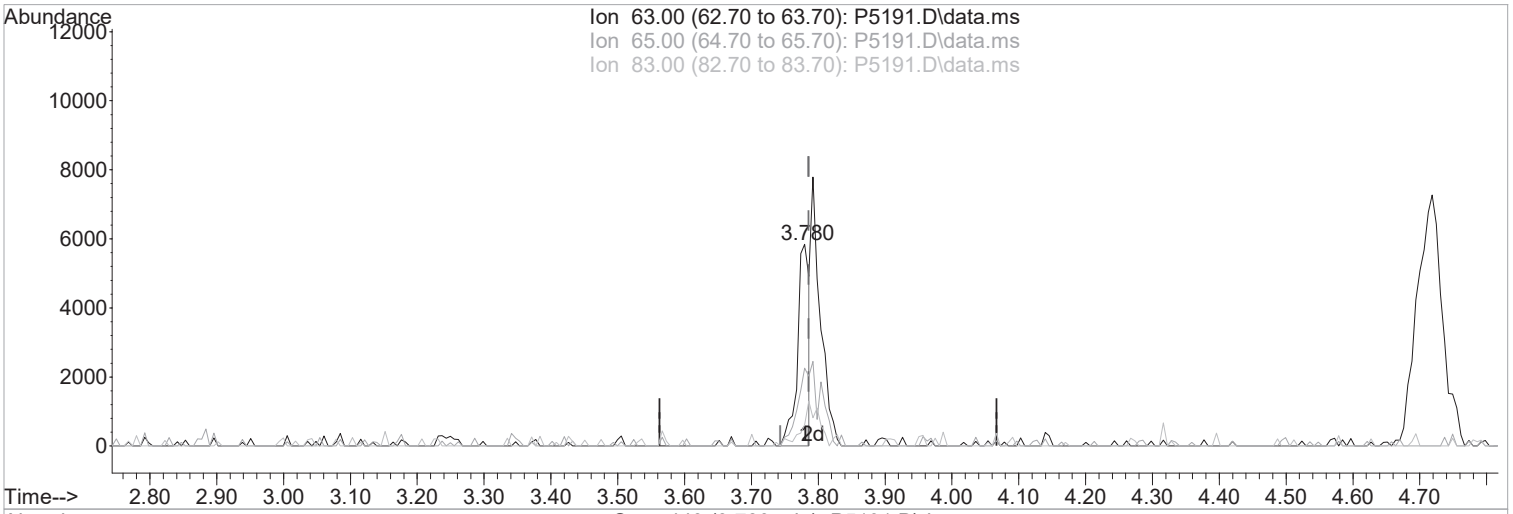
Split Peak

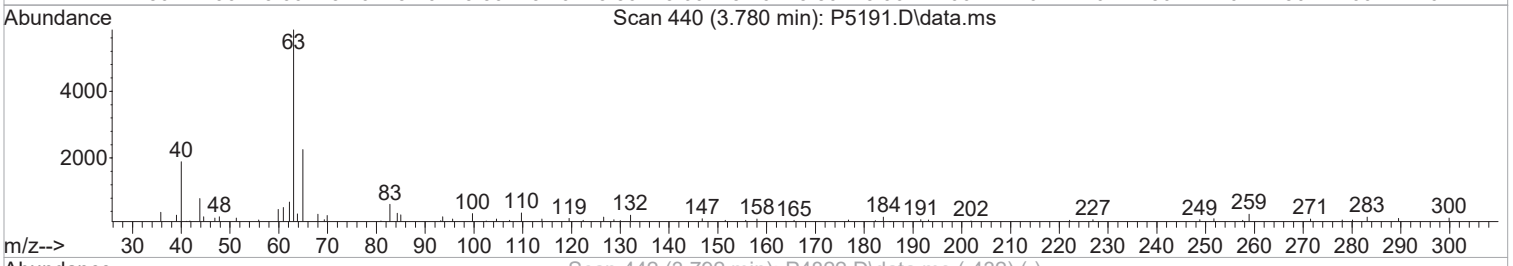
09/21/16

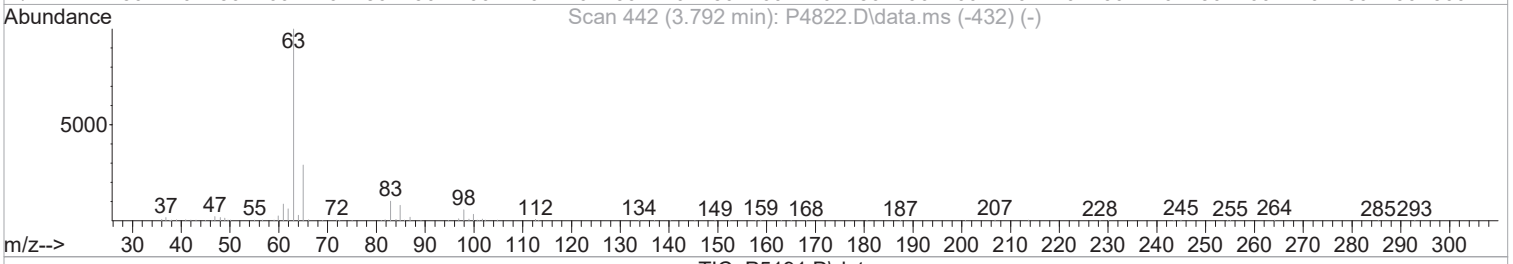
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5191.D
Acq On : 20 Sep 2016 4:15 pm
Operator : K.Ruest
Sample : R1609820-002|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 20 16:33:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5191.D\data.ms

(28) 1,1-Diclethane (P)

3.780min (-0.006) 0.59 ppb

response 7284

Ion	Exp%	Act%
63.00	100	100
65.00	32.60	38.56
83.00	12.90	10.53
0.00	0.00	0.00

Manual Integration:

Before

09/21/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5191.D
Acq On : 20 Sep 2016 4:15 pm
Operator : K.Ruest
Sample : R1609820-002|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 21 12:01:22 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

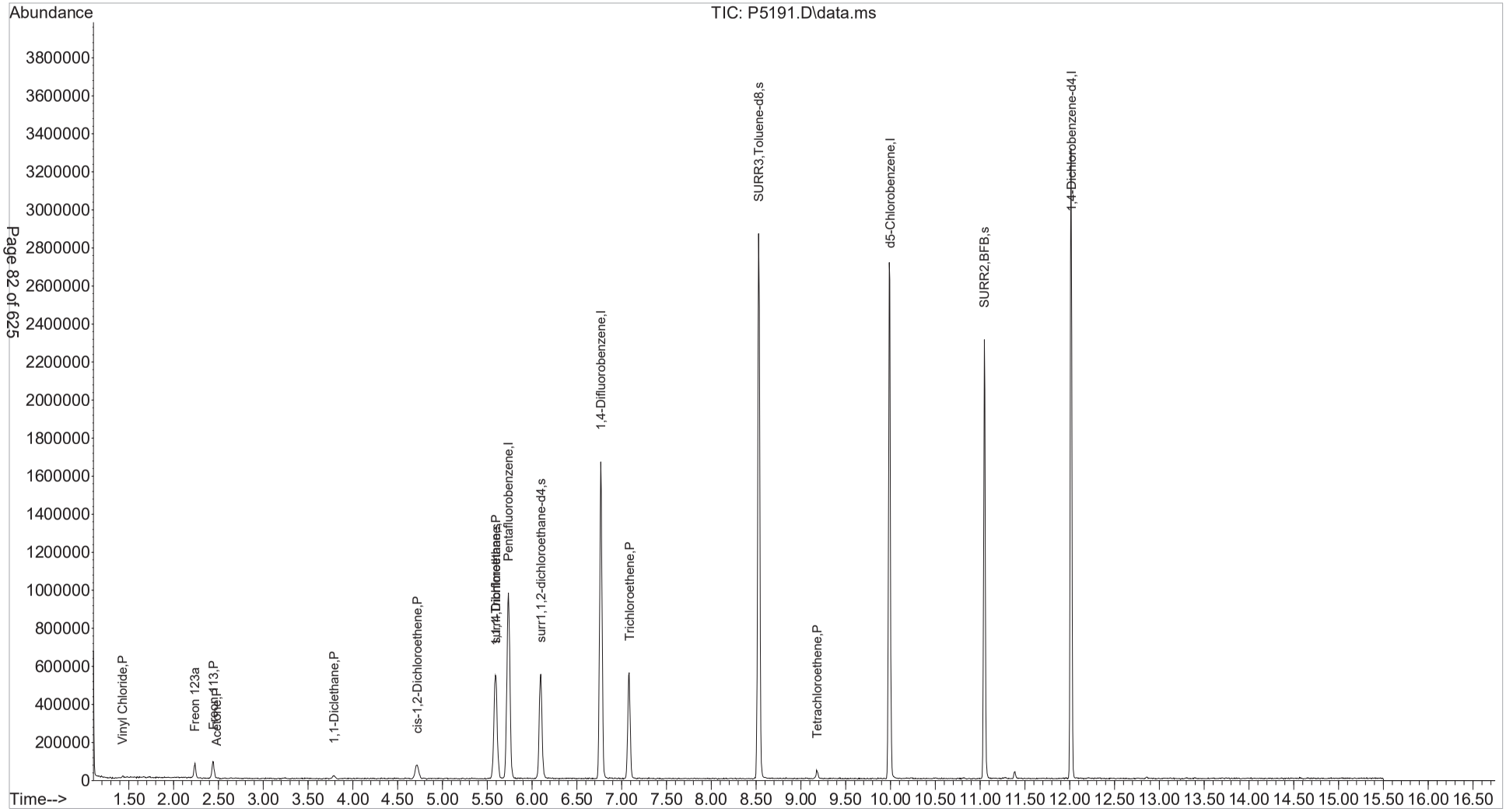
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	817433	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1376201	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1288146	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	659744	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	400805	56.26	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.52%				
48) surr1,1,2-dichloroetha...	6.096	65	413804	49.42	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 98.84%				
65) SURR3,Toluene-d8	8.529	98	1761145	57.62	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.24%				
70) SURR2,BFB	11.047	95	636386	53.53	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.06%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.427	62	4261	0.36	ppb	#	30
10) Freon 123a	2.237	67	28931	3.38	ppb		86
14) Freon 113	2.439	101	33660	5.59	ppb		85
15) Acetone	2.481	43	3128	1.96	ppb		87
19) Acetonitrile	2.768	40	598	Below Cal		#	1
28) 1,1-Diclethane	3.792	63	14841m	1.21	ppb		
34) cis-1,2-Dichloroethene	4.719	96	46858	6.30	ppb	#	81
41) 1,1,1-Trichloroethane	5.596	97	35694	3.51	ppb		89
54) Trichloroethene	7.084	130	192700	28.41	ppb		99
72) Tetrachloroethene	9.175	164	8109	1.63	ppb	#	77

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

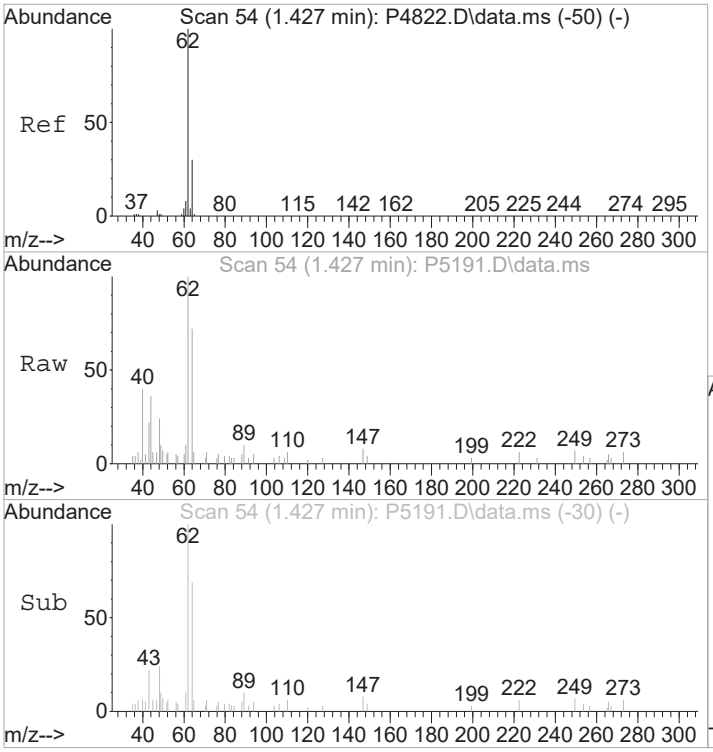
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5191.D
Acq On : 20 Sep 2016 4:15 pm
Operator : K.Ruest
Sample : R1609820-002|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 21 12:01:22 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



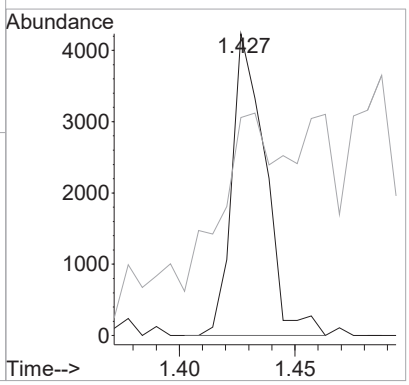
1st 09/21/16
2nd 09/22/16

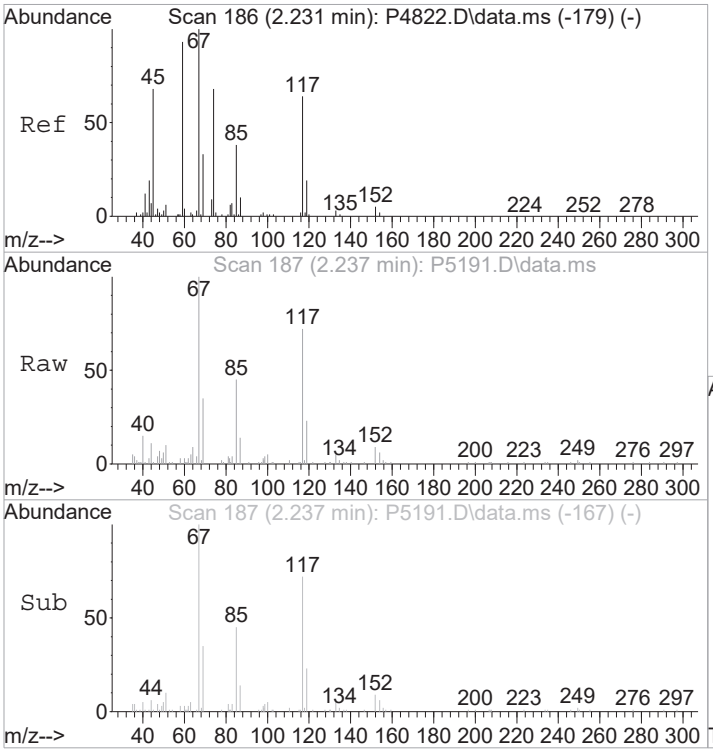


#4
Vinyl Chloride
Concen: 0.36 ppb
RT: 1.427 min Scan# 54
Delta R.T. 0.000 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion: 62 Resp: 4261

Ion	Ratio	Lower	Upper
62	100		
64	72.1	12.9	52.9#

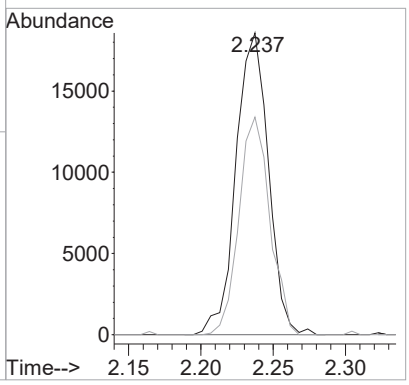


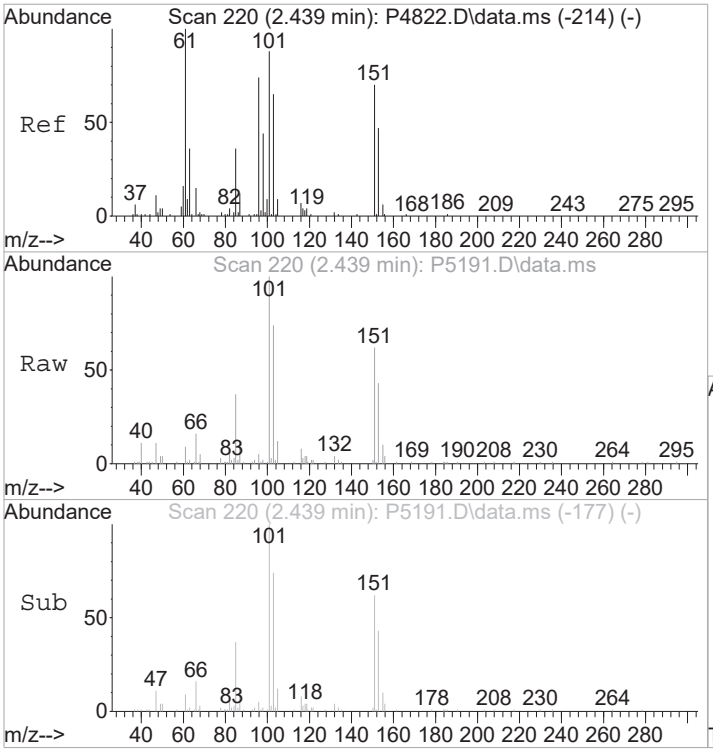


#10
Freon 123a
Concen: 3.38 ppb
RT: 2.237 min Scan# 187
Delta R.T. 0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion: 67 Resp: 28931

Ion	Ratio	Lower	Upper
67	100		
117	72.1	41.5	81.5

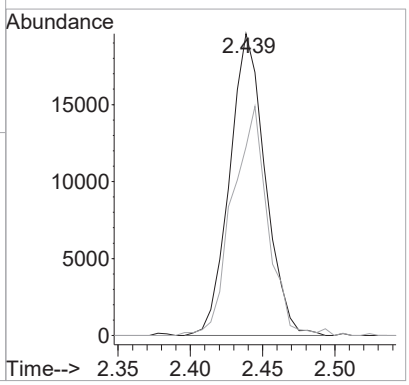


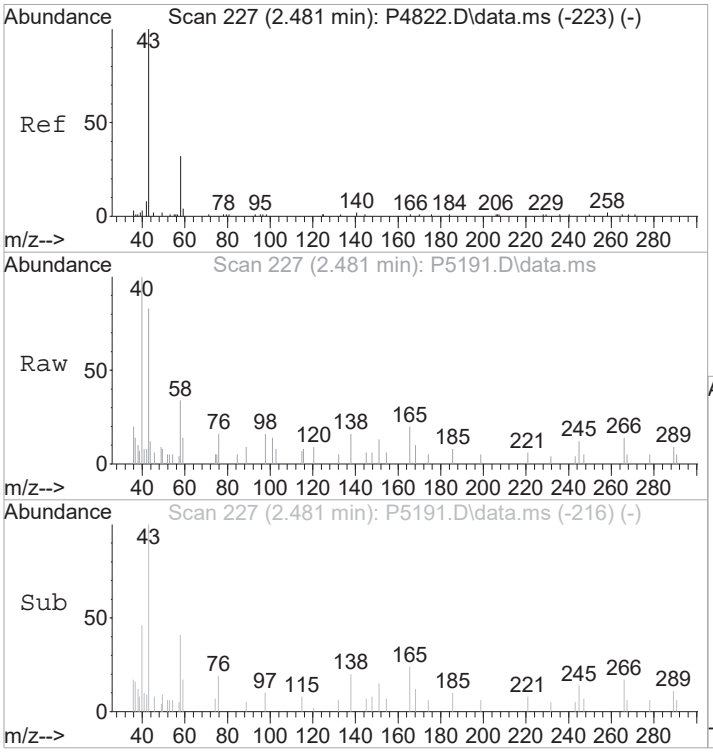


#14
Freon 113
Concen: 5.59 ppb
RT: 2.439 min Scan# 220
Delta R.T. 0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion:101 Resp: 33660

Ion	Ratio	Lower	Upper
101	100		
151	62.5	55.4	95.4

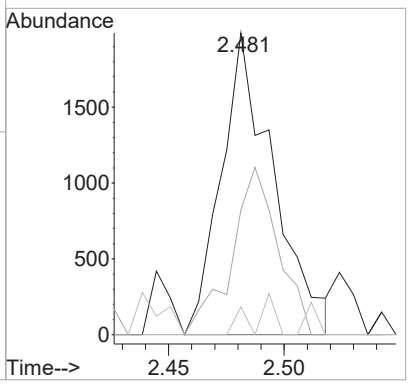


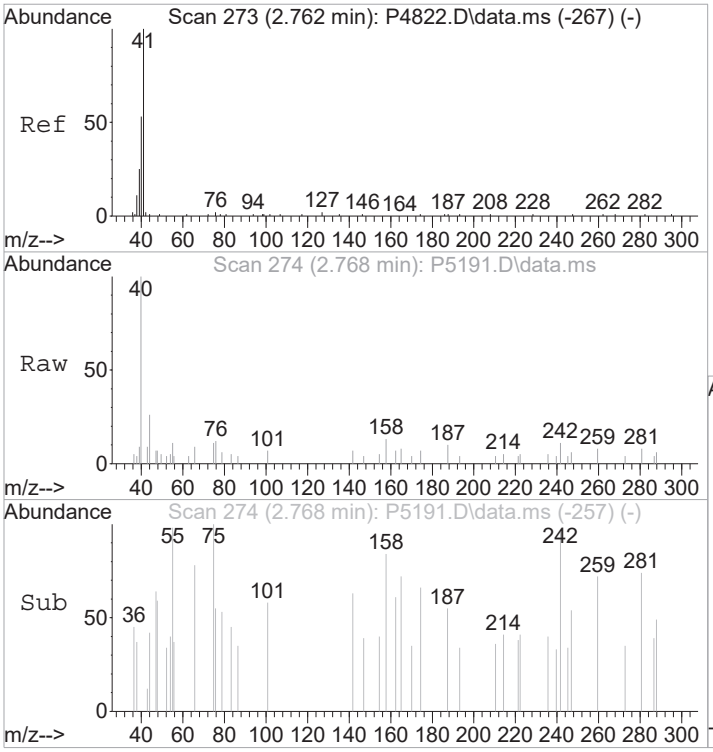


#15
Acetone
Concen: 1.96 ppb
RT: 2.481 min Scan# 227
Delta R.T. -0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion: 43 Resp: 3128

Ion	Ratio	Lower	Upper
43	100		
58	41.4	13.2	53.2
42	9.2	0.0	26.9

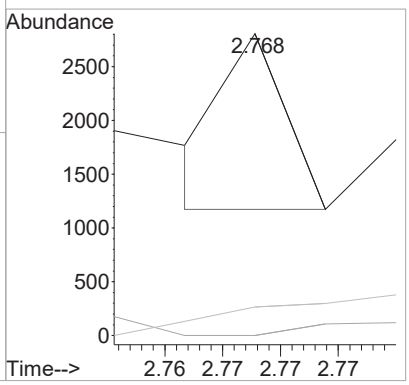


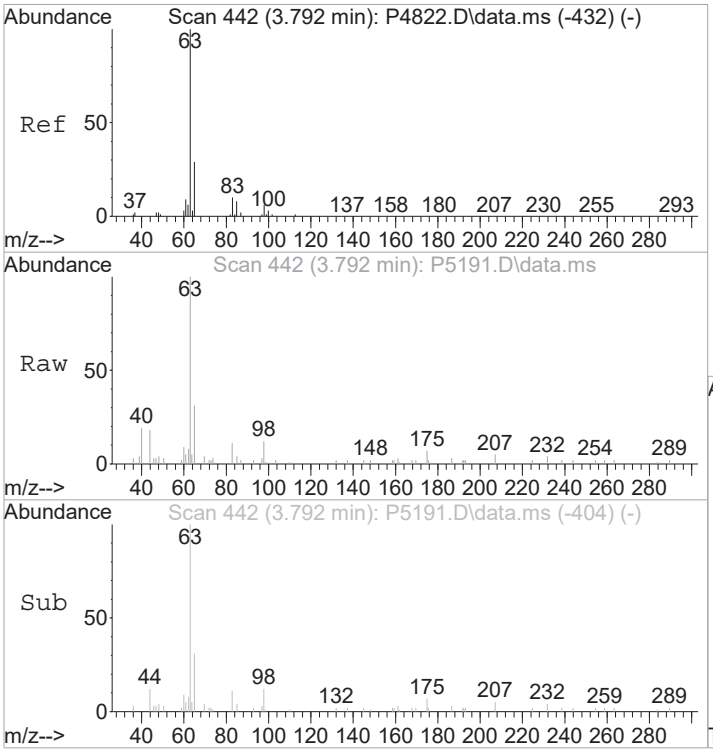


#19
Acetonitrile
Concen: Below Cal
RT: 2.768 min Scan# 274
Delta R.T. 0.013 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion: 40 Resp: 598

Ion	Ratio	Lower	Upper
40	100		
41	0.0	183.8	223.8#
39	9.4	19.1	59.1#

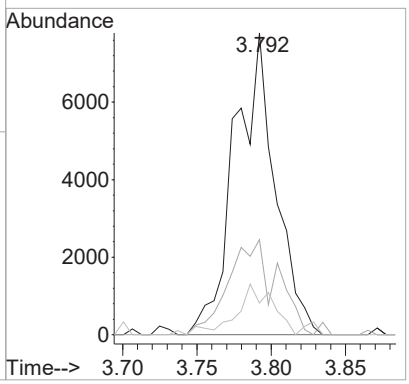


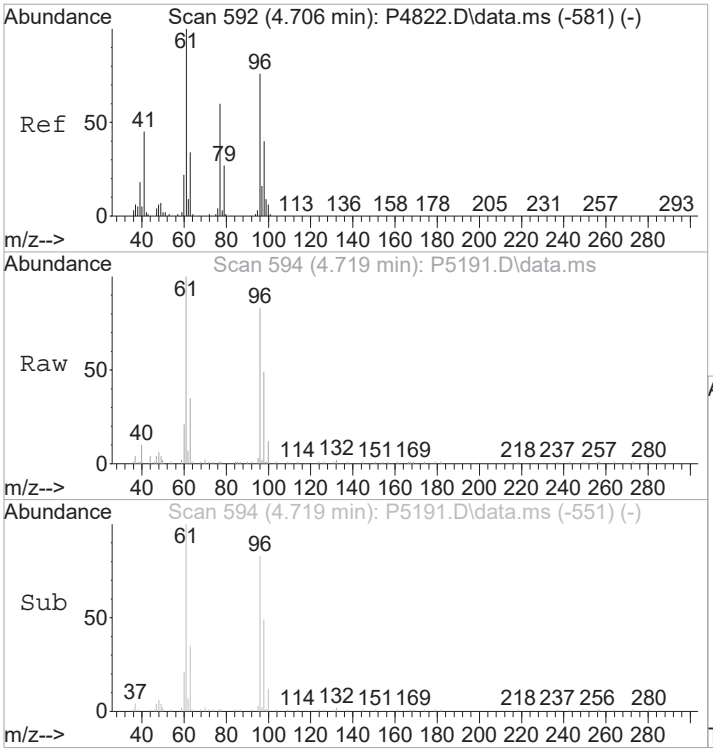


#28
1,1-Diclethane
Concen: 1.21 ppb m
RT: 3.792 min Scan# 442
Delta R.T. 0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion: 63 Resp: 14841

Ion	Ratio	Lower	Upper
63	100		
65	31.5	12.6	52.6
83	10.5	0.0	32.9

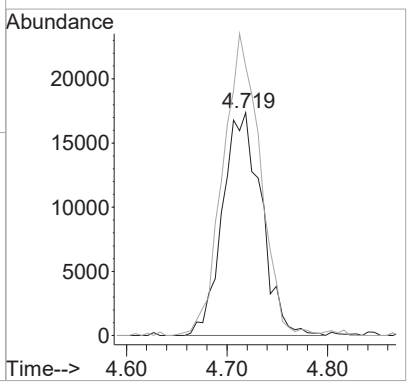


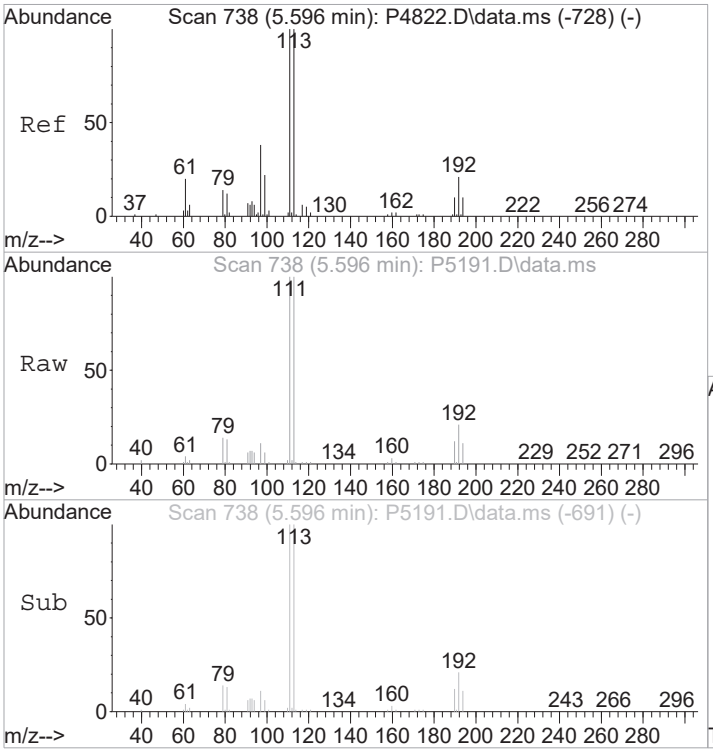


#34
cis-1,2-Dichloroethene
Concen: 6.30 ppb
RT: 4.719 min Scan# 594
Delta R.T. 0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion: 96 Resp: 46858

Ion	Ratio	Lower	Upper
96	100		
61	120.7	124.4	164.4#

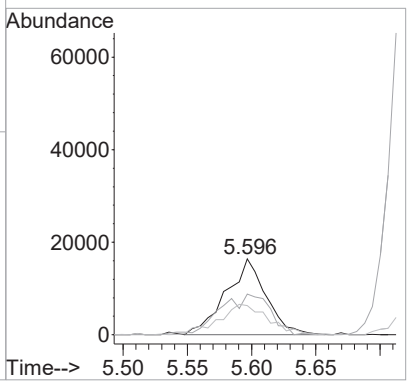


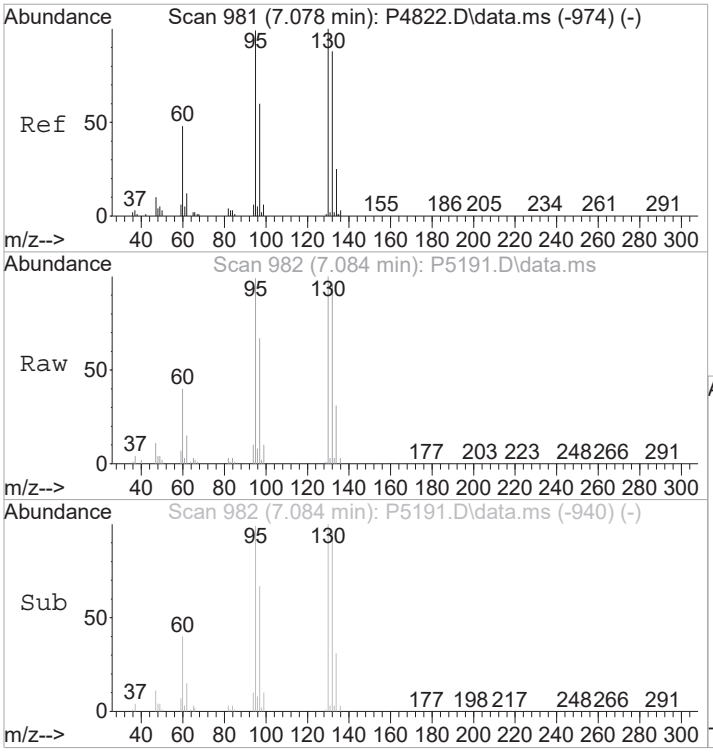


#41
1,1,1-Trichloroethane
Concen: 3.51 ppb
RT: 5.596 min Scan# 738
Delta R.T. 0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion: 97 Resp: 35694

Ion	Ratio	Lower	Upper
97	100		
99	53.7	42.8	82.8
61	38.4	25.5	65.5

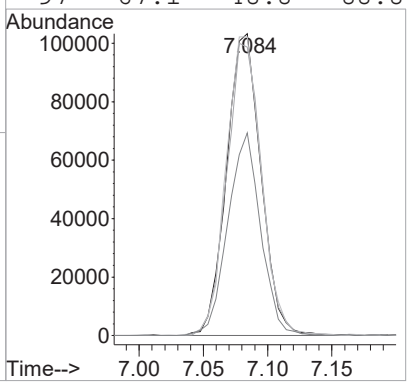


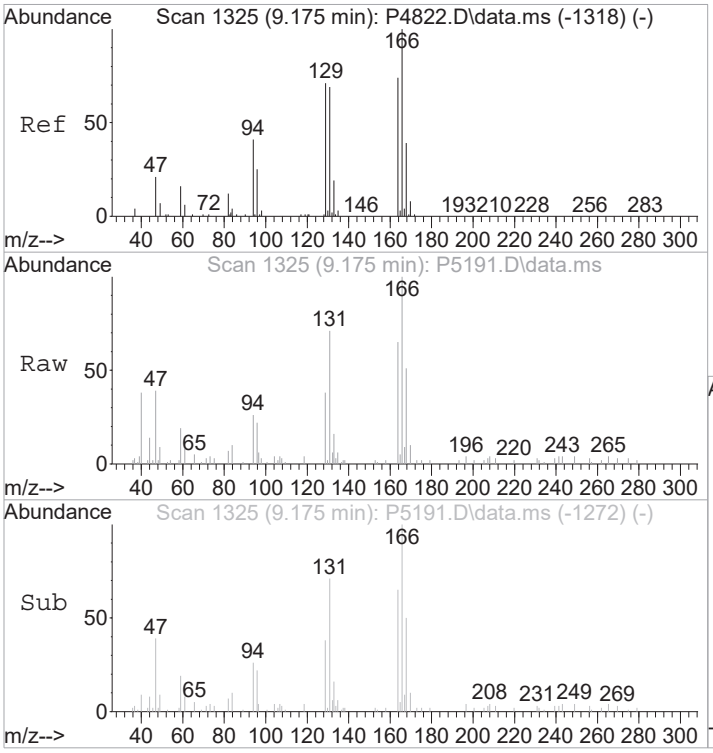


#54
Trichloroethene
Concen: 28.41 ppb
RT: 7.084 min Scan# 982
Delta R.T. 0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion:130 Resp: 192700

Ion	Ratio	Lower	Upper
130	100		
132	95.5	76.6	116.6
95	98.9	80.2	120.2
97	67.1	48.8	88.8

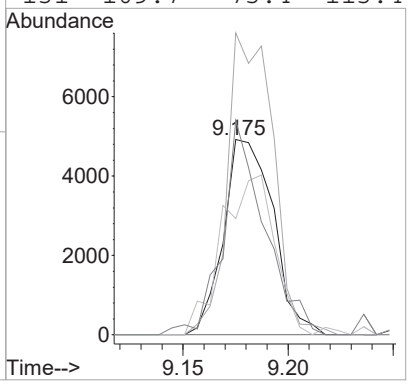




#72
Tetrachloroethene
Concen: 1.63 ppb
RT: 9.175 min Scan# 1325
Delta R.T. -0.006 min
Lab File: P5191.D
Acq: 20 Sep 2016 4:15 pm

Tgt Ion:164 Resp: 8109

Ion	Ratio	Lower	Upper
164	100		
166	154.6	114.3	154.3#
129	61.9	77.3	117.3#
131	109.7	73.4	113.4



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5192.D
Acq On : 20 Sep 2016 4:45 pm
Operator : K.Ruest
Sample : R1609820-007|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 12:03:13 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

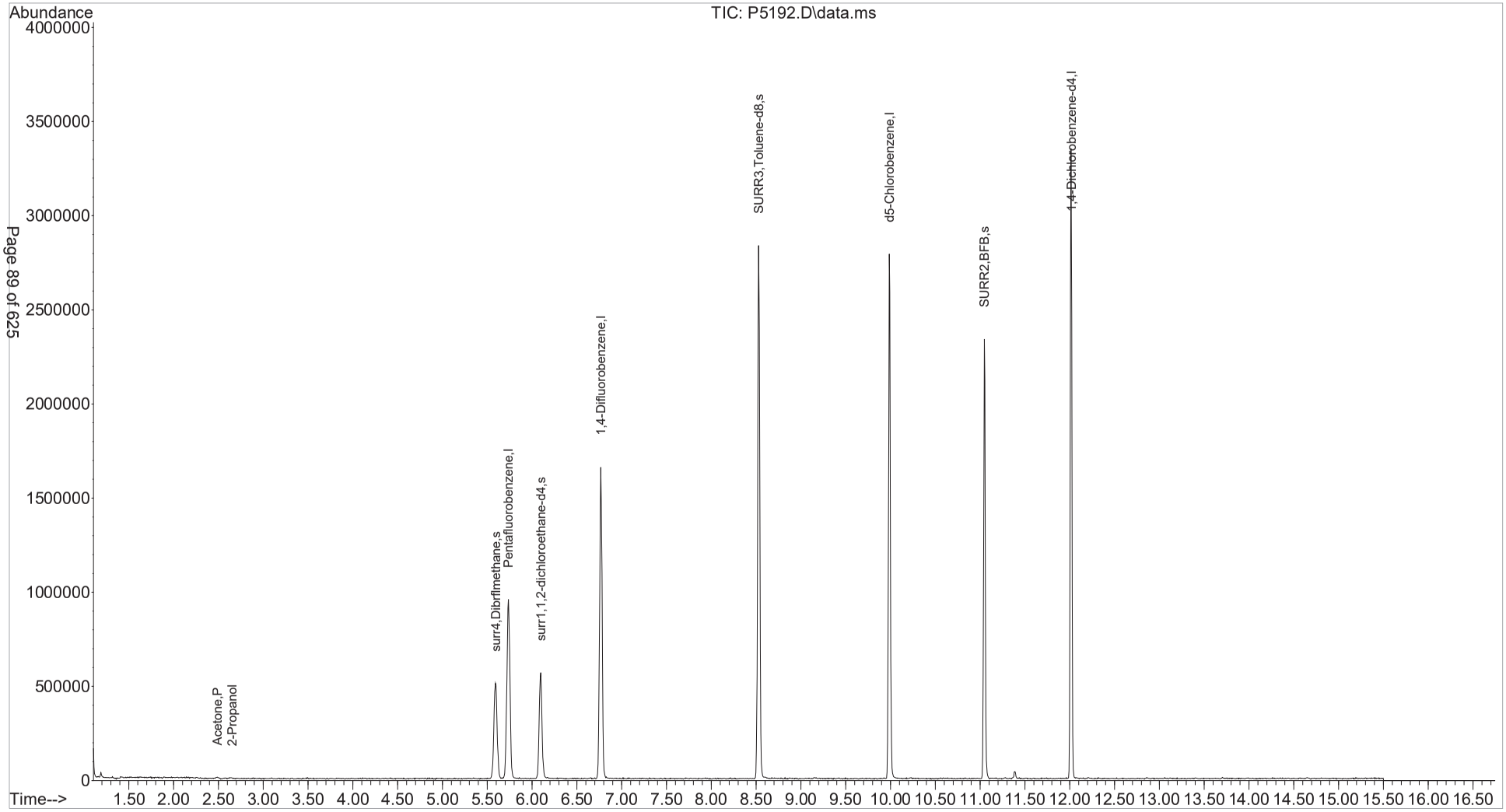
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.737	168	815196	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.767	114	1373093	50.00	ppb	0.00
71) d5-Chlorobenzene	9.986	117	1309021	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	662307	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.590	113	395775	55.68	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.36%			
48) surr1,1,2-dichloroetha...	6.096	65	415407	49.72	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.44%			
65) SURR3,Toluene-d8	8.529	98	1719642	56.39	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 112.78%			
70) SURR2,BFB	11.047	95	631827	53.26	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.52%			
Target Compounds						Qvalue
15) Acetone	2.487	43	7776	4.88	ppb	83
16) 2-Propanol	2.646	45	2357	7.63	ppb	71

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

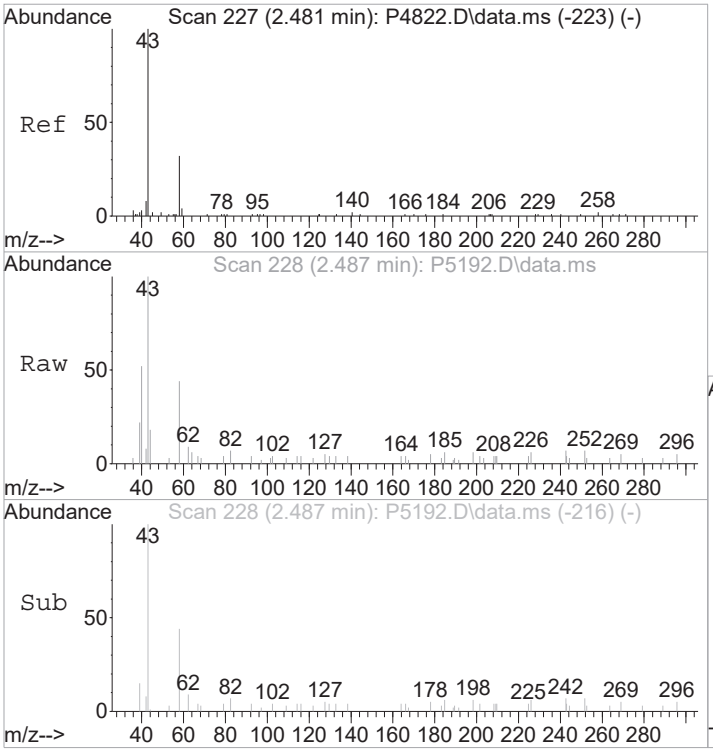
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5192.D
Acq On : 20 Sep 2016 4:45 pm
Operator : K.Ruest
Sample : R1609820-007|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 12:03:13 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



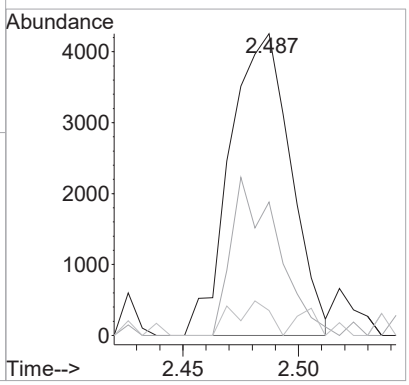
1st 09/21/16
2nd 09/22/16

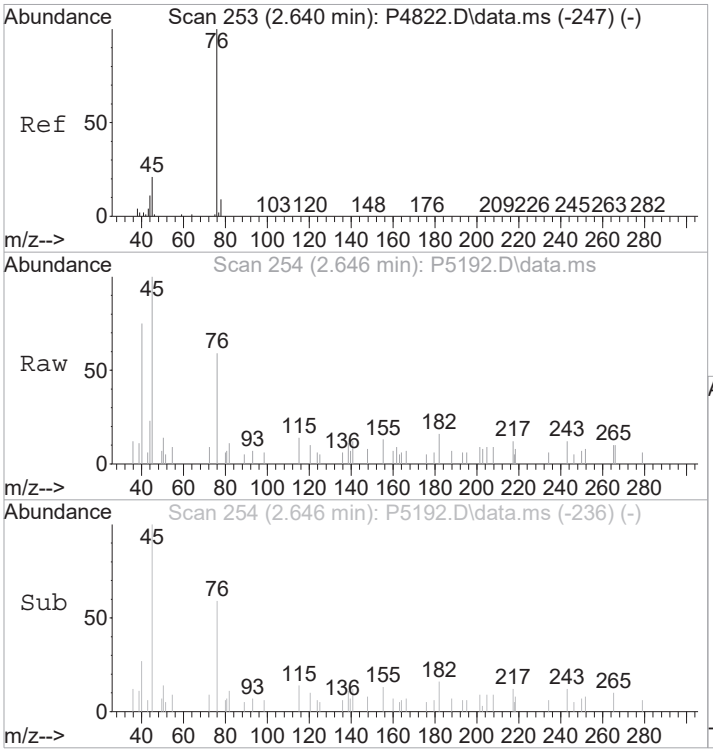


#15
Acetone
Concen: 4.88 ppb
RT: 2.487 min Scan# 228
Delta R.T. -0.000 min
Lab File: P5192.D
Acq: 20 Sep 2016 4:45 pm

Tgt Ion: 43 Resp: 7776

Ion	Ratio	Lower	Upper
43	100		
58	44.2	13.2	53.2
42	8.3	0.0	26.9

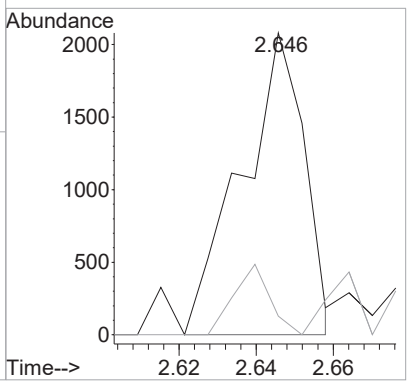




#16
2-Propanol
Concen: 7.63 ppb
RT: 2.646 min Scan# 254
Delta R.T. -0.000 min
Lab File: P5192.D
Acq: 20 Sep 2016 4:45 pm

Tgt Ion: 45 Resp: 2357

Ion	Ratio	Lower	Upper
45	100		
43	6.2	0.0	39.2



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5190.D
Acq On : 20 Sep 2016 3:44 pm
Operator : K.Ruest
Sample : R1609820-009|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 21 11:58:27 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

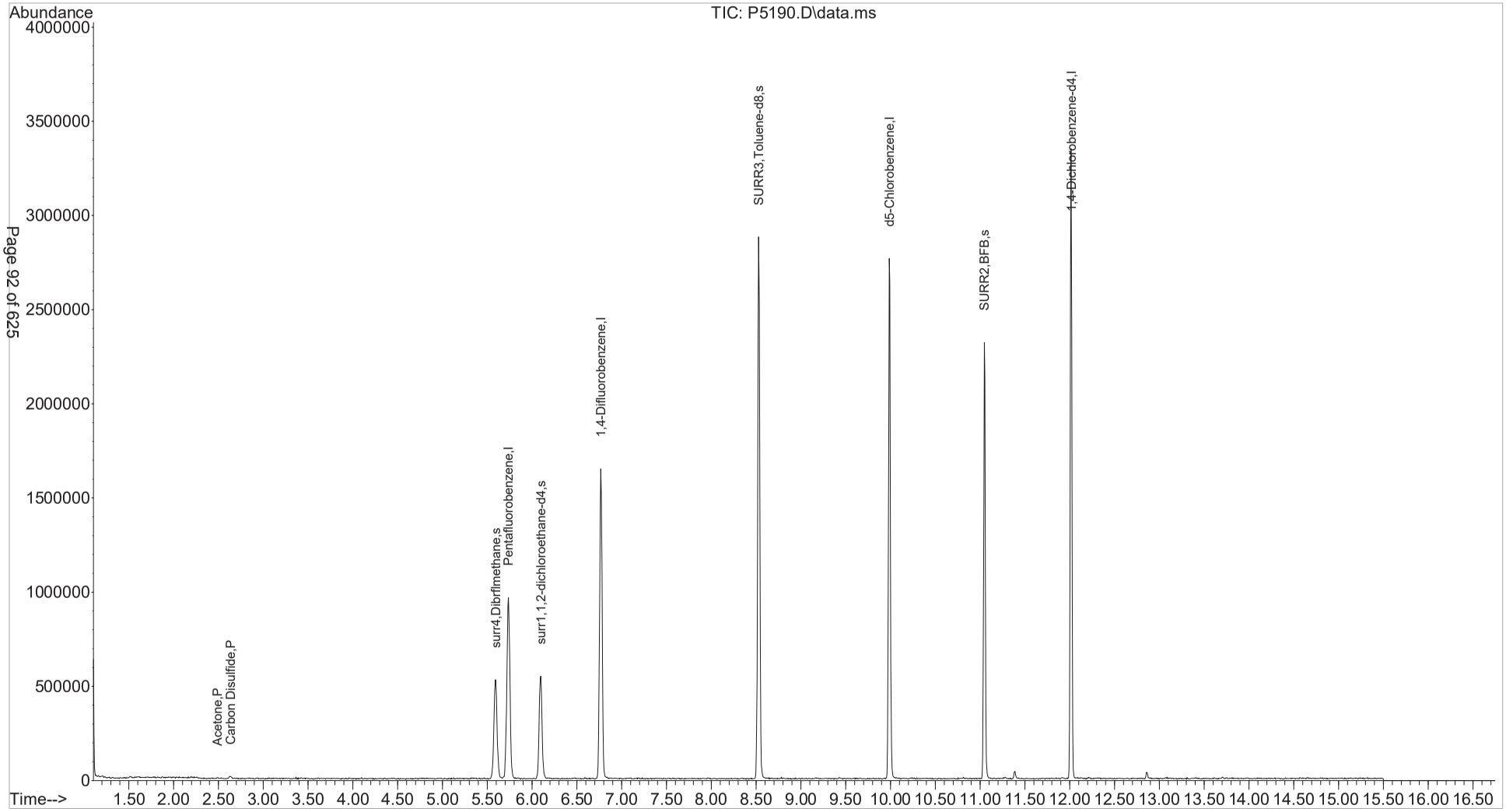
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.737	168	805537	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.767	114	1384342	50.00	ppb	0.00
71) d5-Chlorobenzene	9.986	117	1299943	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	665797	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.590	113	393279	54.88	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 109.76%			
48) surr1,1,2-dichloroetha...	6.096	65	424238	50.37	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.74%			
65) SURR3,Toluene-d8	8.529	98	1757391	57.16	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.32%			
70) SURR2,BFB	11.047	95	631407	52.79	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.58%			
Target Compounds						Qvalue
15) Acetone	2.487	43	3908	2.48	ppb	94
18) Carbon Disulfide	2.634	76	15889	0.78	ppb	94

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

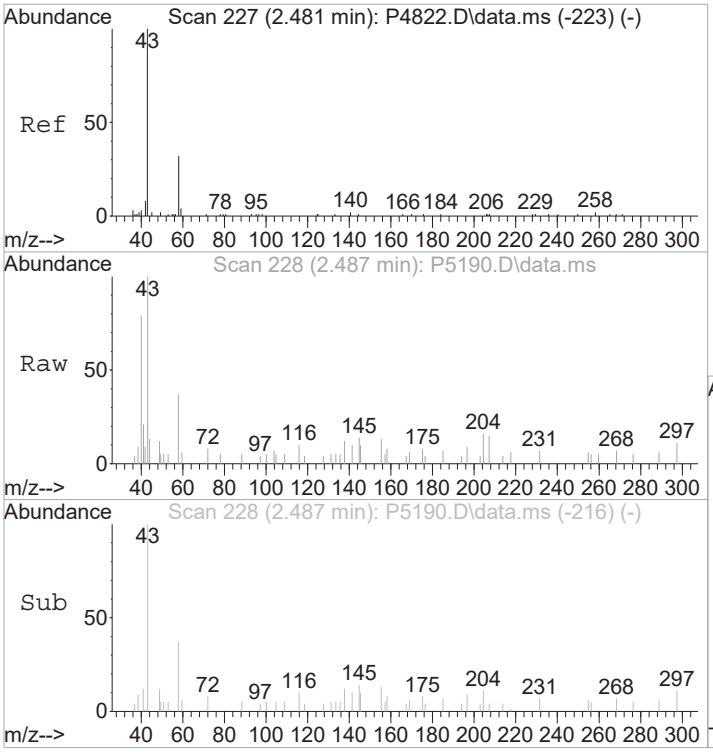
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5190.D
Acq On : 20 Sep 2016 3:44 pm
Operator : K.Ruest
Sample : R1609820-009|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 21 11:58:27 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



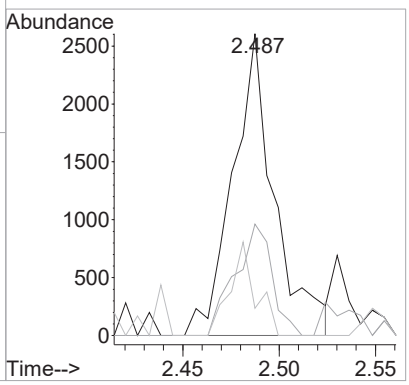
1st 09/21/16
2nd 09/22/16

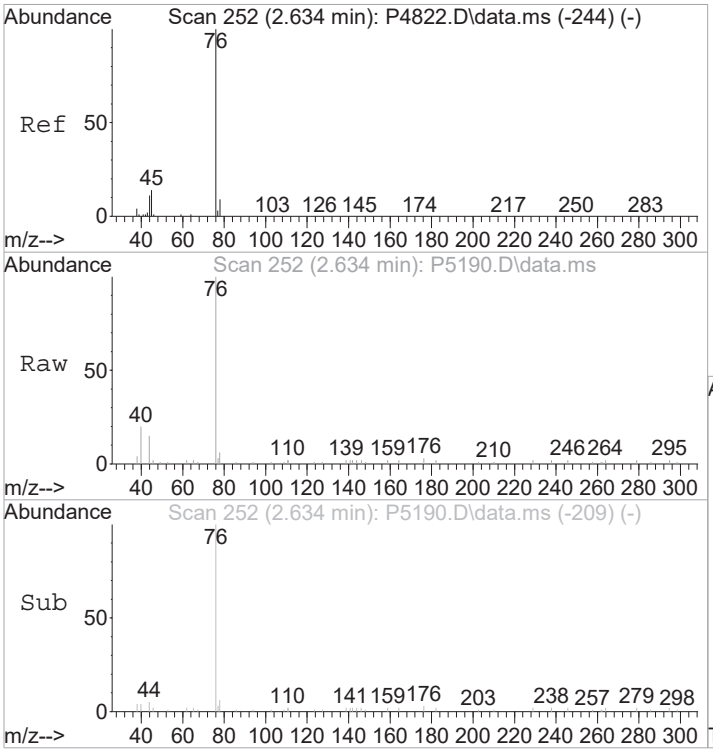


#15
Acetone
Concen: 2.48 ppb
RT: 2.487 min Scan# 228
Delta R.T. 0.000 min
Lab File: P5190.D
Acq: 20 Sep 2016 3:44 pm

Tgt Ion: 43 Resp: 3908

Ion	Ratio	Lower	Upper
43	100		
58	36.9	13.2	53.2
42	9.1	0.0	26.9

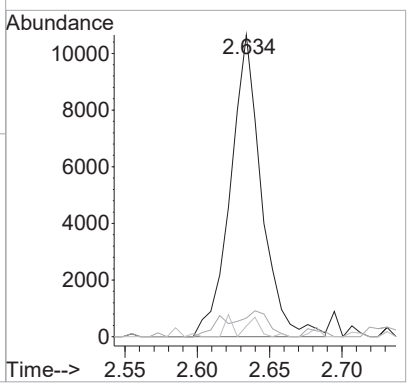




#18
Carbon Disulfide
Concen: 0.78 ppb
RT: 2.634 min Scan# 252
Delta R.T. 0.006 min
Lab File: P5190.D
Acq: 20 Sep 2016 3:44 pm

Tgt Ion: 76 Resp: 15889

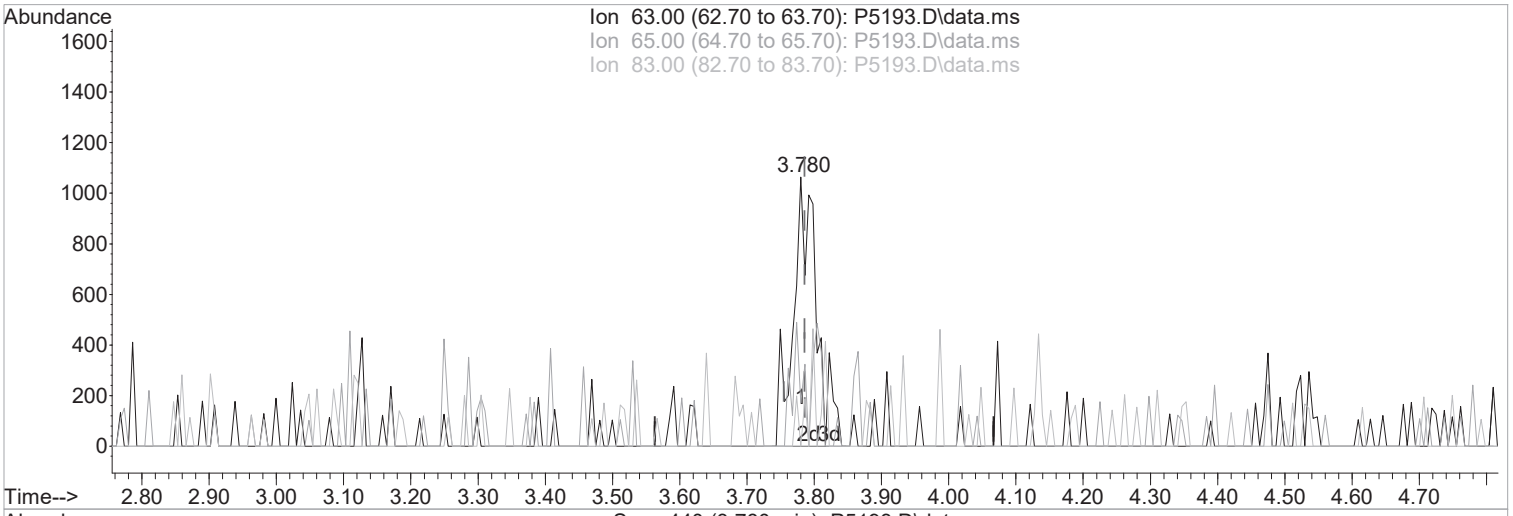
Ion	Ratio	Lower	Upper
76	100		
78	6.2	0.0	29.0
77	3.5	0.0	22.9

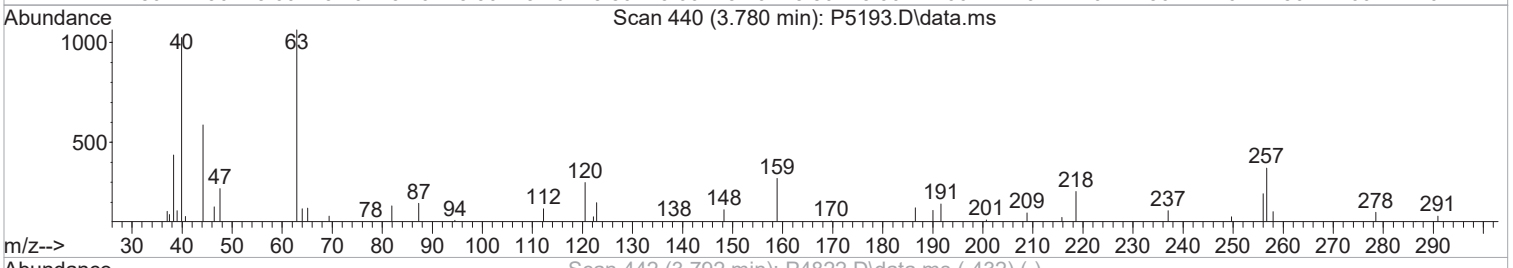


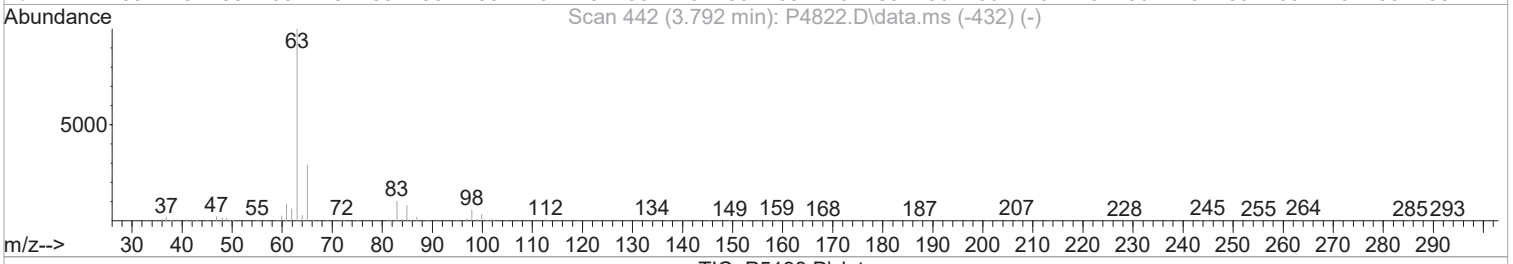
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5193.D
Acq On : 20 Sep 2016 5:16 pm
Operator : K.Ruest
Sample : R1609820-010|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 20 17:36:42 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5193.D\data.ms

(28) 1,1-Diclethane (P)

3.780min (-0.006) 0.21 ppb m

response 2594

Ion	Exp%	Act%
63.00	100	100
65.00	32.60	15.98
83.00	12.90	0.00
0.00	0.00	0.00

Manual Integration:

After

Split Peak

09/21/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5193.D
Acq On : 20 Sep 2016 5:16 pm
Operator : K.Ruest
Sample : R1609820-010|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 21 12:05:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

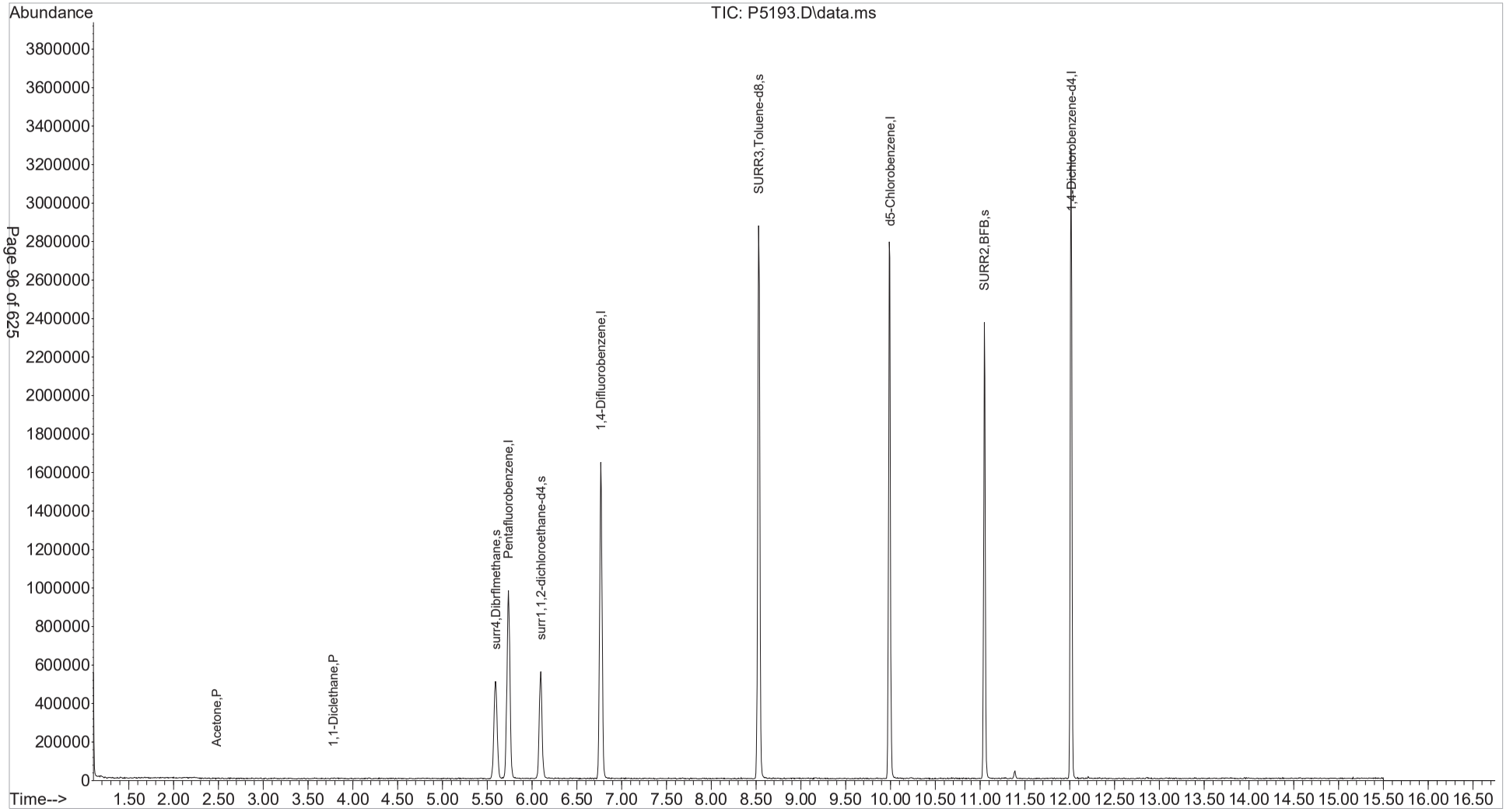
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.737	168	813773	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.767	114	1370436	50.00	ppb	0.00
71) d5-Chlorobenzene	9.992	117	1293934	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	661124	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.590	113	395111	55.69	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.38%			
48) surr1,1,2-dichloroetha...	6.096	65	414587	49.72	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.44%			
65) SURR3,Toluene-d8	8.529	98	1751470	57.54	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.08%			
70) SURR2,BFB	11.047	95	639802	54.04	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.08%			
Target Compounds						Qvalue
15) Acetone	2.481	43	1241	0.78	ppb	79
28) 1,1-Diclethane	3.780	63	2594m	0.21	ppb	

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

Quantitation Report (QT Reviewed)

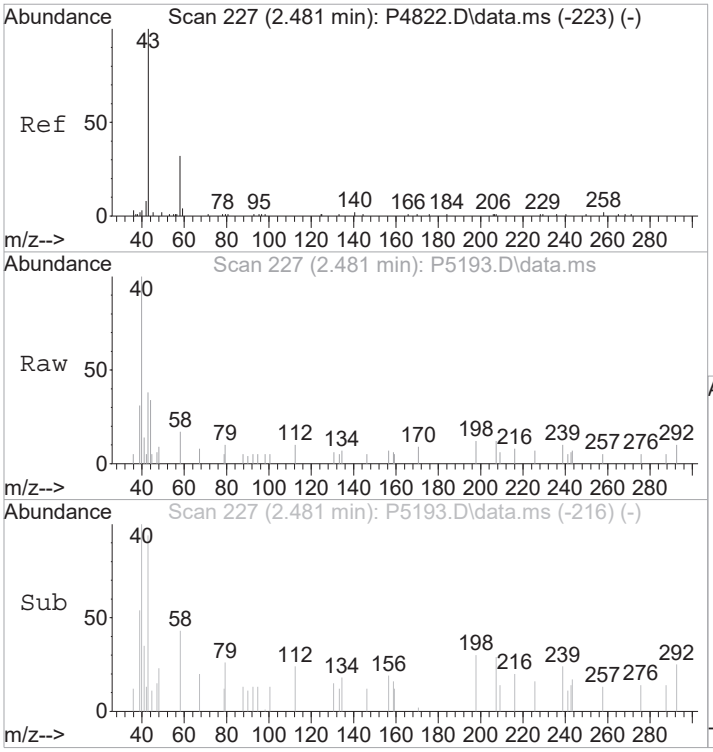
Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5193.D
Acq On : 20 Sep 2016 5:16 pm
Operator : K.Ruest
Sample : R1609820-010|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 21 12:05:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Page 96 of 625

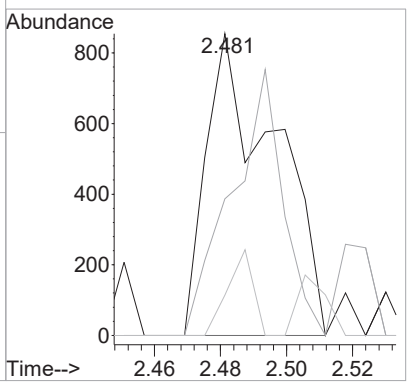
1st 09/21/16
2nd 09/22/16

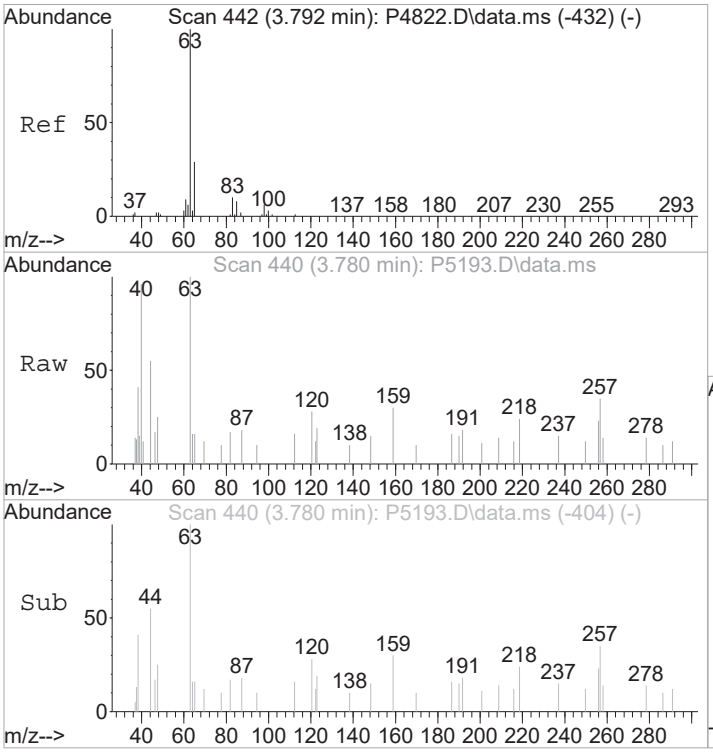


#15
Acetone
Concen: 0.78 ppb
RT: 2.481 min Scan# 227
Delta R.T. -0.006 min
Lab File: P5193.D
Acq: 20 Sep 2016 5:16 pm

Tgt Ion: 43 Resp: 1241

Ion	Ratio	Lower	Upper
43	100		
58	45.3	13.2	53.2
42	13.3	0.0	26.9

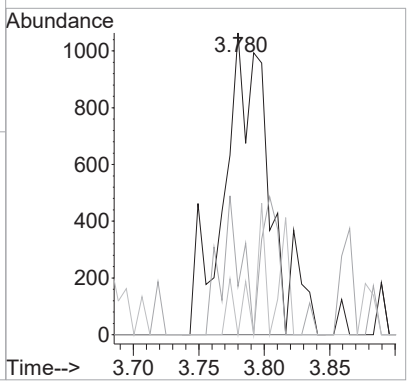




#28
1,1-Diclethane
Concen: 0.21 ppb m
RT: 3.780 min Scan# 440
Delta R.T. -0.006 min
Lab File: P5193.D
Acq: 20 Sep 2016 5:16 pm

Tgt Ion: 63 Resp: 2594

Ion	Ratio	Lower	Upper
63	100		
65	16.0	12.6	52.6
83	0.0	0.0	32.9



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5139.D
Acq On : 19 Sep 2016 1:21 pm
Operator : K.Ruest
Sample : R1609820-011|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 13:44:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

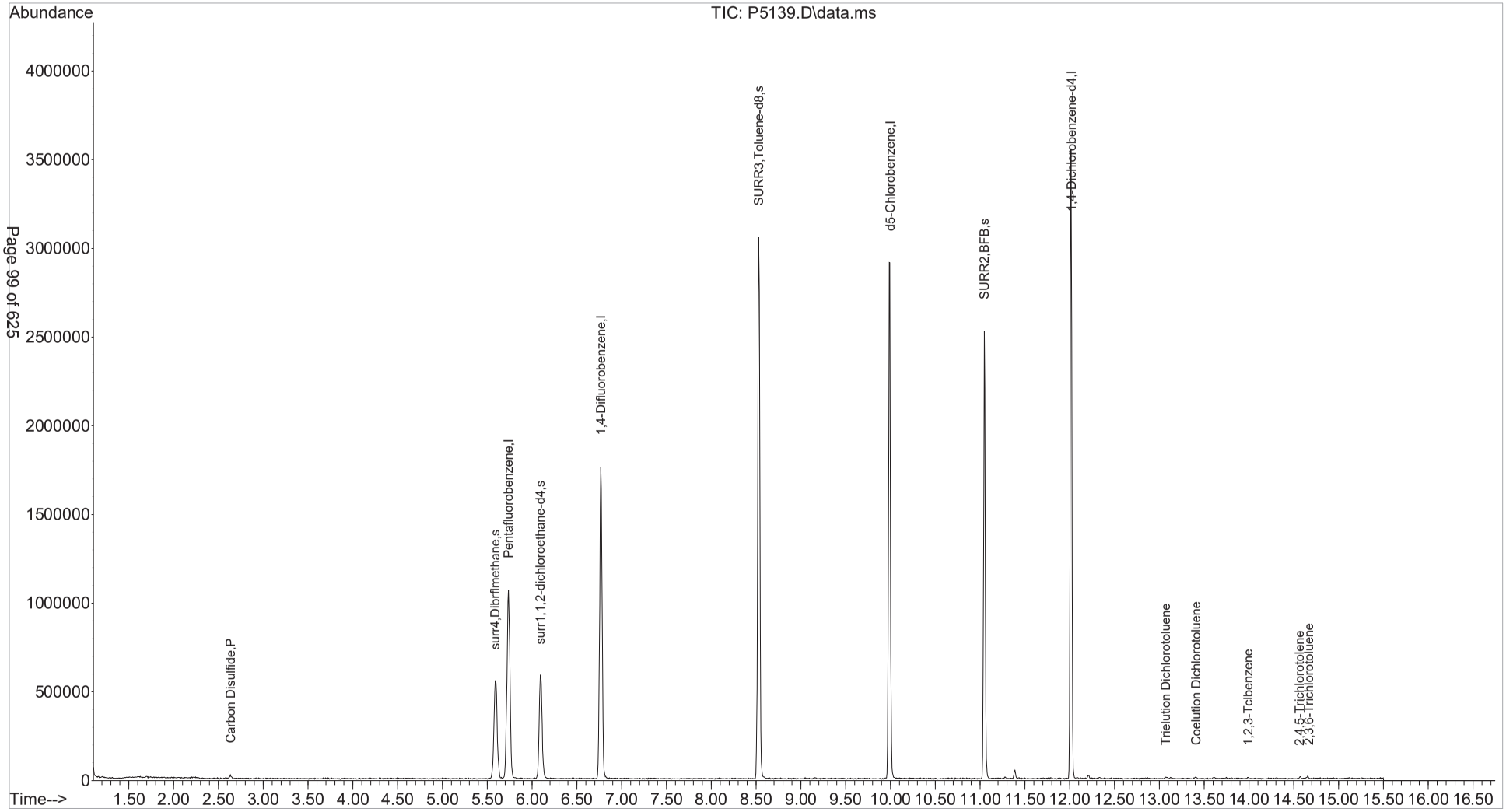
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	882331	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1465712	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1382607	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	701453	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	433955	57.19	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 114.38%				
48) surr1,1,2-dichloroetha...	6.090	65	463578	51.98	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.96%				
65) SURR3,Toluene-d8	8.529	98	1872652	57.52	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.04%				
70) SURR2,BFB	11.047	95	688080	54.34	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.68%				
Target Compounds							Qvalue
18) Carbon Disulfide	2.634	76	21205	0.95	ppb		96
112) Trielution Dichlorotol...	13.071	125	3585	0.31	ppb	#	78
114) Coelution Dichlorotoluene	13.406	125	2496	0.20	ppb	#	51
118) 1,2,3-Tclbenzene	13.991	180	1430	0.20	ppb		89
119) 2,4,5-Trichlorotolene	14.564	159	1787	0.36	ppb	#	74
120) 2,3,6-Trichlorotoluene	14.662	159	1674	0.36	ppb	#	84

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

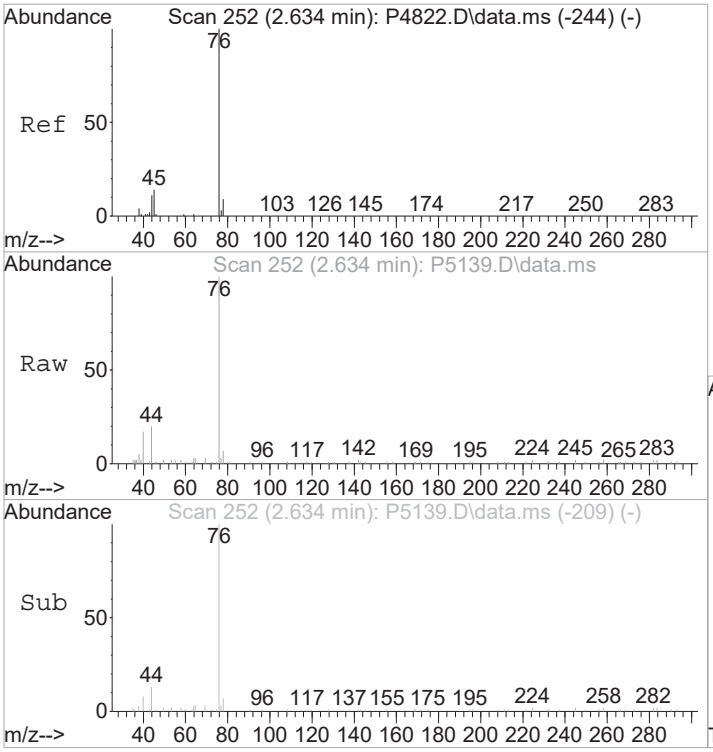
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5139.D
Acq On : 19 Sep 2016 1:21 pm
Operator : K.Ruest
Sample : R1609820-011|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 13:44:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



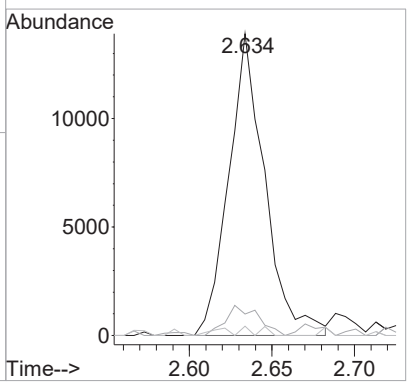
1st 09/19/16
2nd 09/20/16

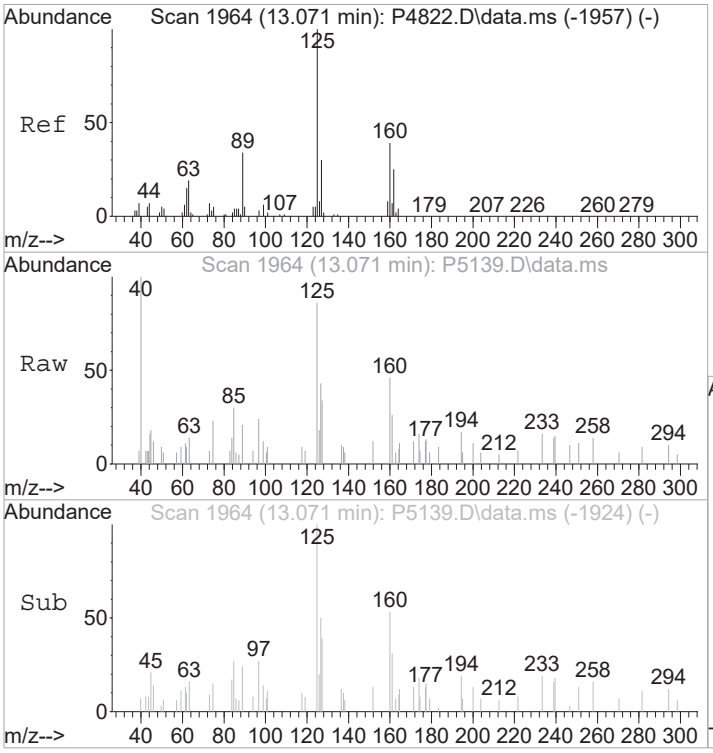


#18
Carbon Disulfide
Concen: 0.95 ppb
RT: 2.634 min Scan# 252
Delta R.T. 0.006 min
Lab File: P5139.D
Acq: 19 Sep 2016 1:21 pm

Tgt Ion: 76 Resp: 21205

Ion	Ratio	Lower	Upper
76	100		
78	7.2	0.0	29.0
77	3.1	0.0	22.9

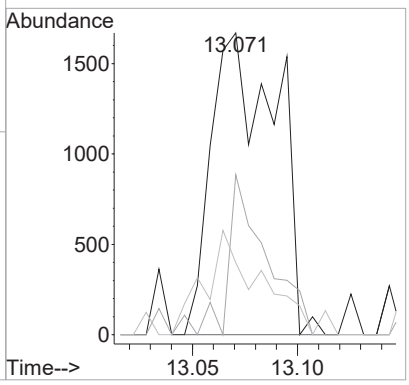


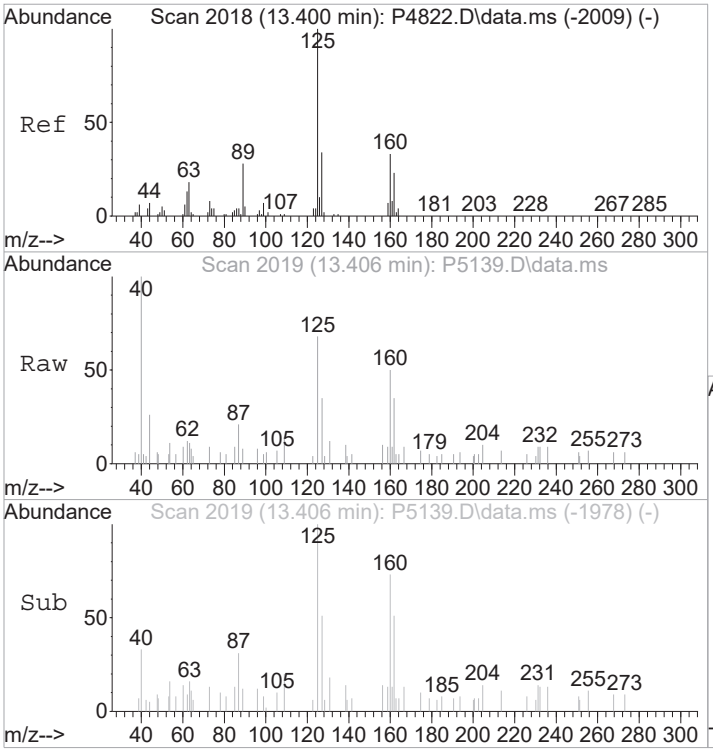


#112
Trielution Dichlorotoluene
Concen: 0.31 ppb
RT: 13.071 min Scan# 1964
Delta R.T. -0.006 min
Lab File: P5139.D
Acq: 19 Sep 2016 1:21 pm

Tgt Ion:125 Resp: 3585

Ion	Ratio	Lower	Upper
125	100		
160	53.0	31.5	47.3#
89	23.8	29.0	43.4#

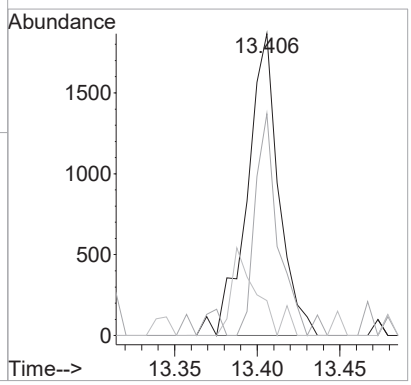


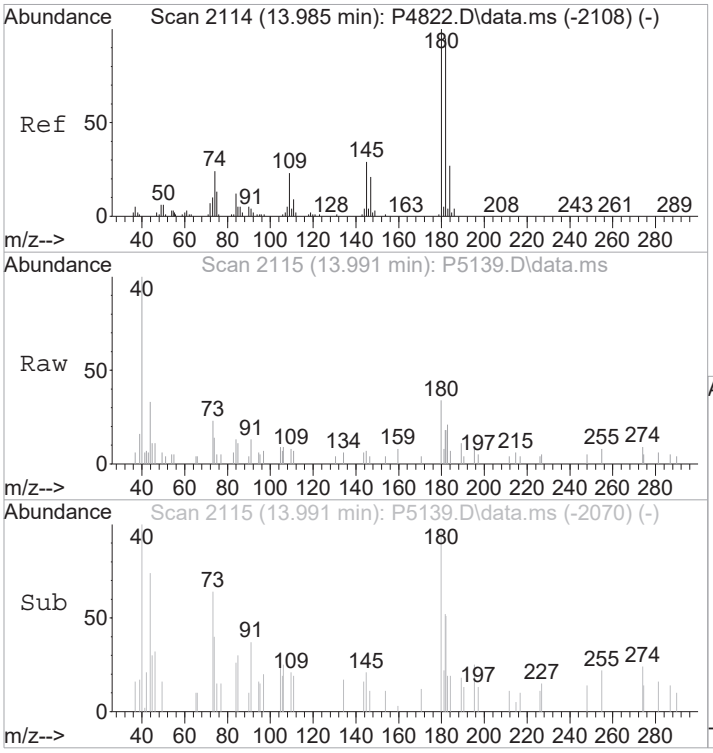


#114
Coelution Dichlorotoluene
Concen: 0.20 ppb
RT: 13.406 min Scan# 2019
Delta R.T. -0.000 min
Lab File: P5139.D
Acq: 19 Sep 2016 1:21 pm

Tgt Ion:125 Resp: 2496

Ion	Ratio	Lower	Upper
125	100		
160	73.4	29.1	43.7#
89	11.6	23.3	34.9#

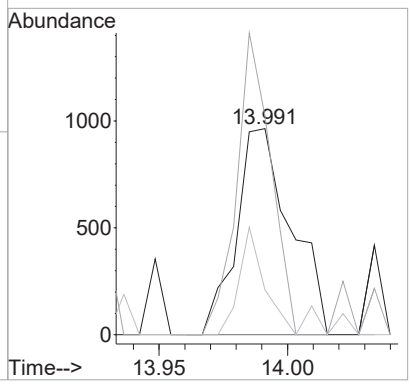


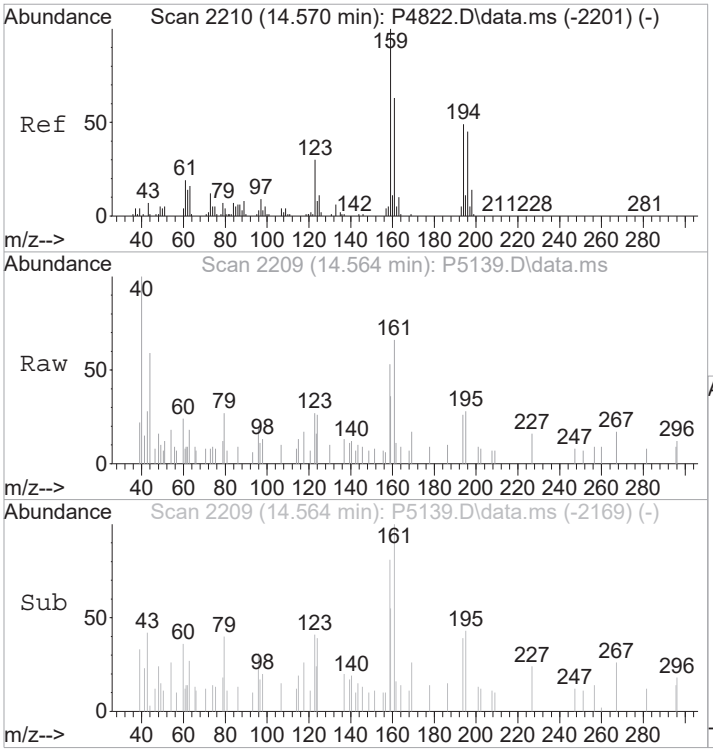


#118
1,2,3-Tclbenzene
Concen: 0.20 ppb
RT: 13.991 min Scan# 2115
Delta R.T. 0.006 min
Lab File: P5139.D
Acq: 19 Sep 2016 1:21 pm

Tgt Ion:180 Resp: 1430

Ion	Ratio	Lower	Upper
180	100		
182	106.0	79.1	119.1
145	21.8	13.9	53.9

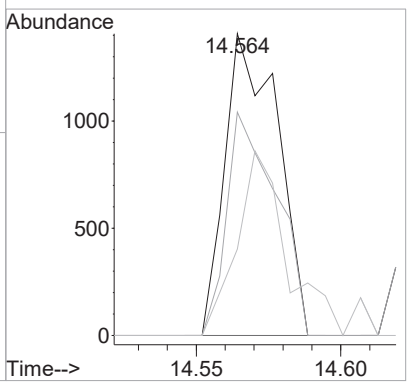


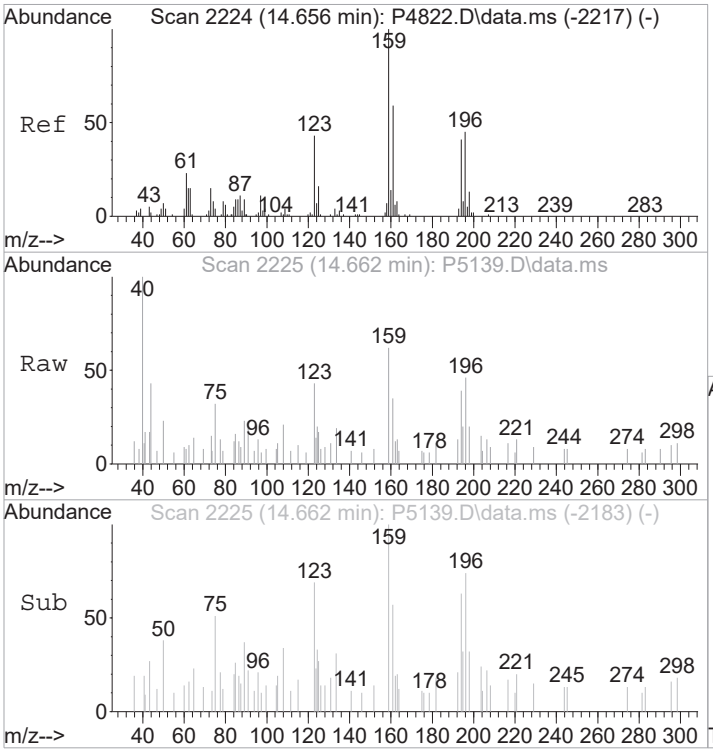


#119
2,4,5-Trichlorotolene
Concen: 0.36 ppb
RT: 14.564 min Scan# 2209
Delta R.T. -0.006 min
Lab File: P5139.D
Acq: 19 Sep 2016 1:21 pm

Tgt Ion:159 Resp: 1787

Ion	Ratio	Lower	Upper
159	100		
161	86.1	50.6	76.0#
194	28.6	33.6	50.4#

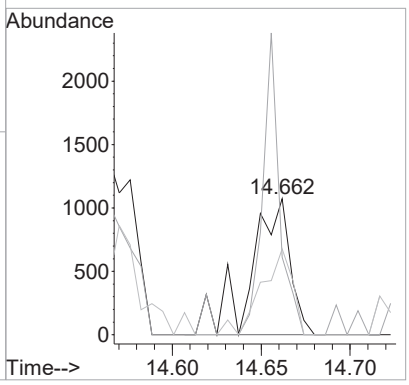




#120
2,3,6-Trichlorotoluene
Concen: 0.36 ppb
RT: 14.662 min Scan# 2225
Delta R.T. 0.006 min
Lab File: P5139.D
Acq: 19 Sep 2016 1:21 pm

Tgt Ion:159 Resp: 1674

Ion	Ratio	Lower	Upper
159	100		
161	57.0	49.3	73.9
194	63.1	35.2	52.8#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5138.D
Acq On : 19 Sep 2016 12:50 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 13:42:44 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

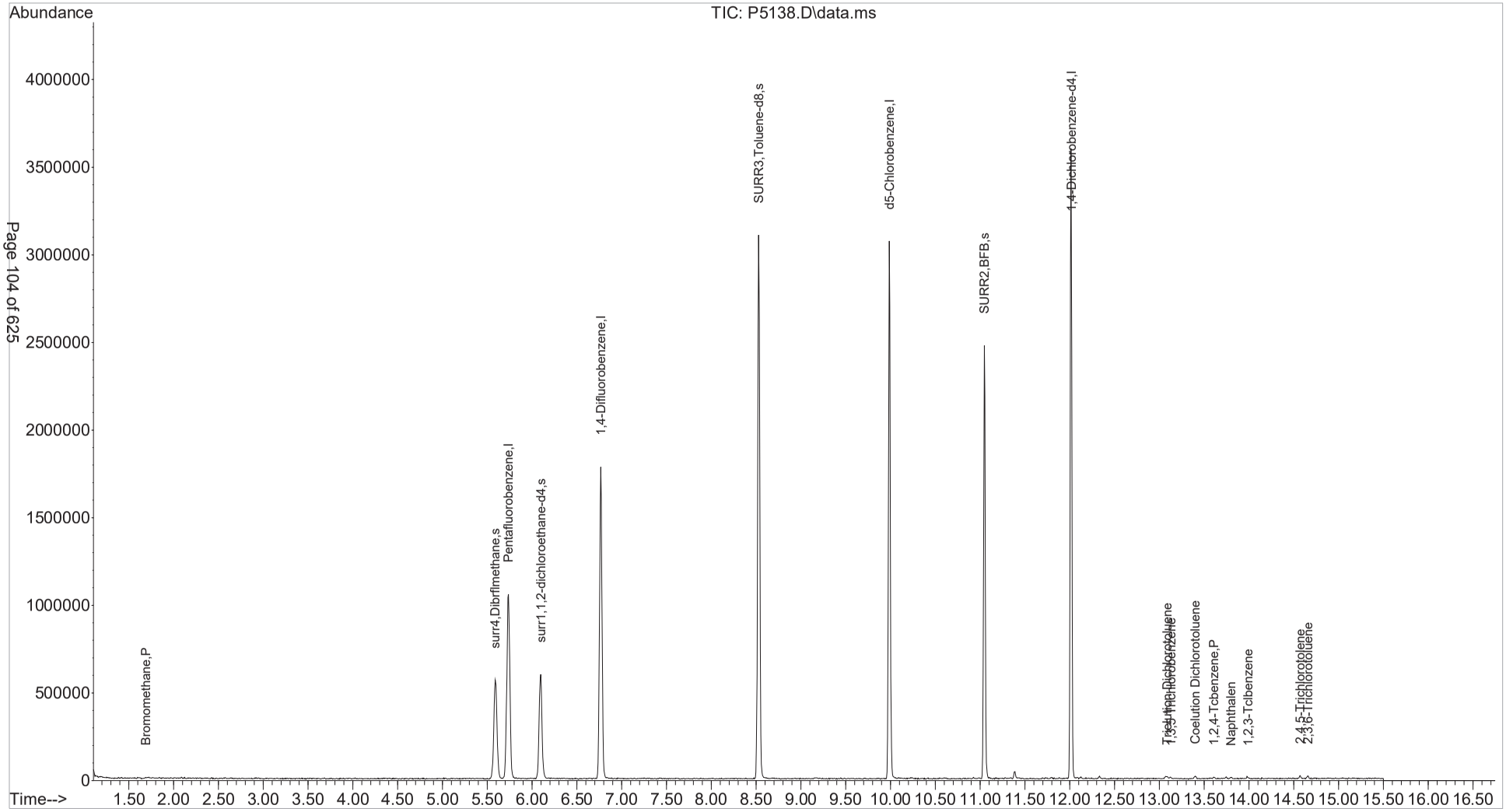
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	888935	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1485491	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1383566	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	708111	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	427462	55.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.18%				
48) surr1,1,2-dichloroetha...	6.096	65	463051	51.23	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.46%				
65) SURR3,Toluene-d8	8.529	98	1884314	57.11	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.22%				
70) SURR2,BFB	11.047	95	669593	52.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.36%				
Target Compounds							Qvalue
5) Bromomethane	1.689	94	2367	0.46	ppb		100
19) Acetonitrile	2.786	40	619	Below Cal		#	1
112) Trielution Dichlorotol...	13.089	125	5564	0.47	ppb		94
113) 1,3,5 Trichlorobenzene	13.132	180	2184	0.23	ppb		89
114) Coelution Dichlorotoluene	13.400	125	4223	0.34	ppb	#	81
115) 1,2,4-Tcbenzene	13.607	180	1881	0.22	ppb	#	73
117) Naphthalen	13.796	128	4266	0.24	ppb		74
118) 1,2,3-Tclbenzene	13.991	180	1953	0.27	ppb	#	66
119) 2,4,5-Trichlorotolene	14.570	159	3379	0.67	ppb	#	63
120) 2,3,6-Trichlorotoluene	14.656	159	2922	0.62	ppb	#	65

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

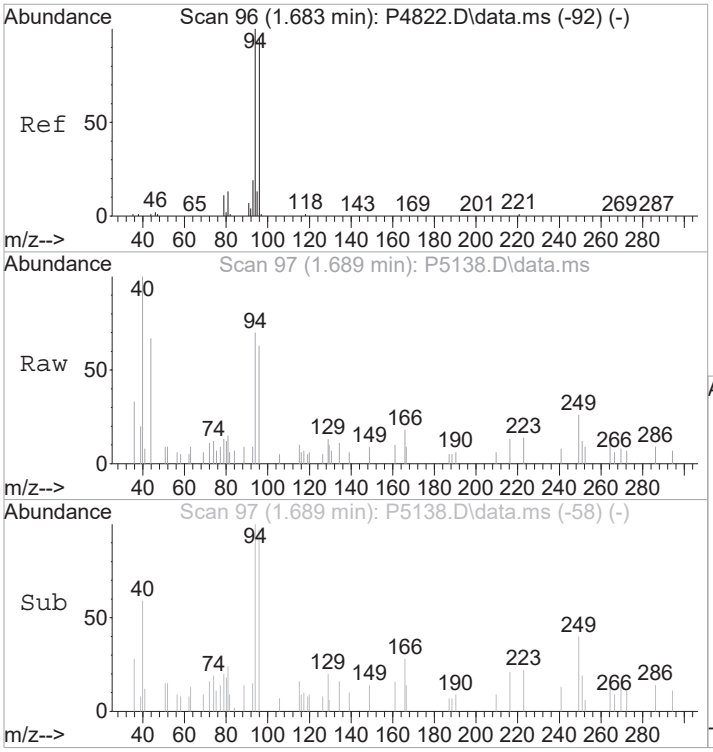
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5138.D
Acq On : 19 Sep 2016 12:50 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 13:42:44 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



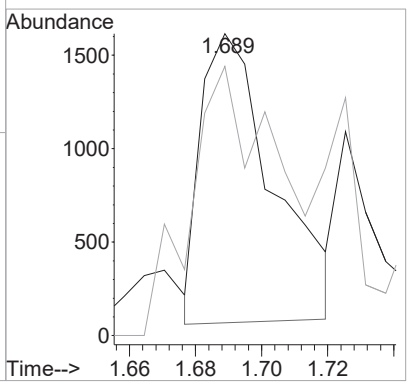
1st 09/19/16
2nd 09/20/16

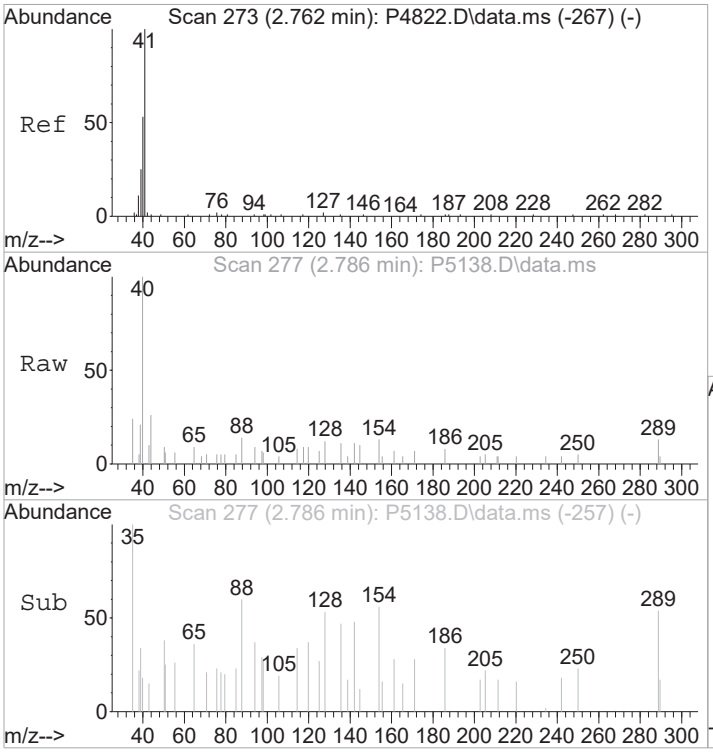


#5
Bromomethane
Concen: 0.46 ppb
RT: 1.689 min Scan# 97
Delta R.T. 0.012 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion: 94 Resp: 2367

Ion	Ratio	Lower	Upper
94	100		
96	89.2	69.2	109.2

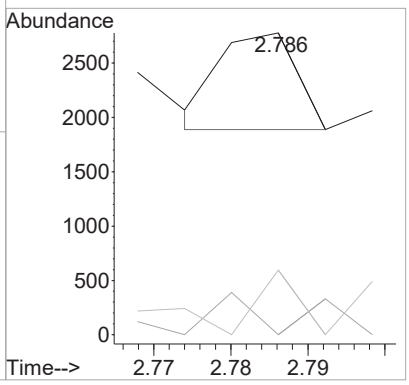


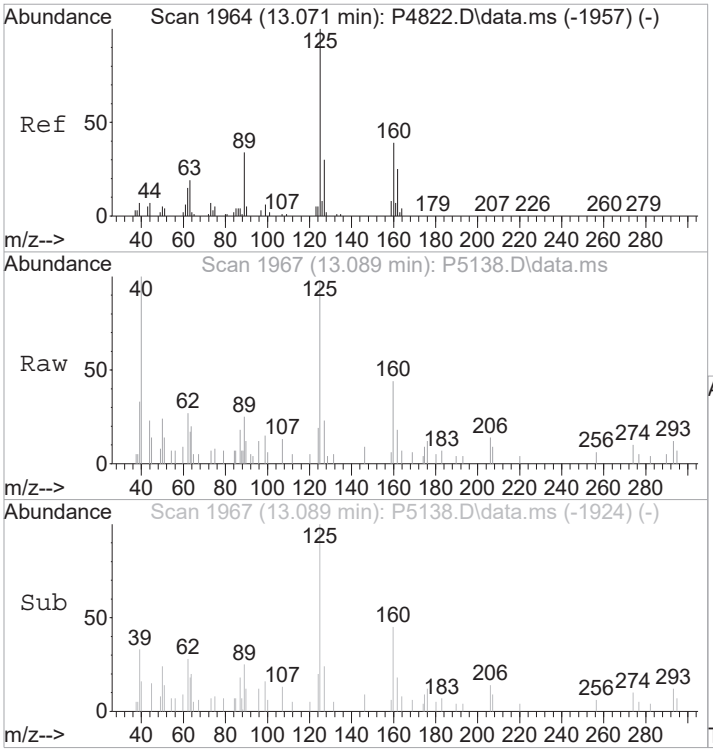


#19
Acetonitrile
Concen: Below Cal
RT: 2.786 min Scan# 277
Delta R.T. 0.031 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion: 40 Resp: 619

Ion	Ratio	Lower	Upper
40	100		
41	0.0	183.8	223.8#
39	21.4	19.1	59.1

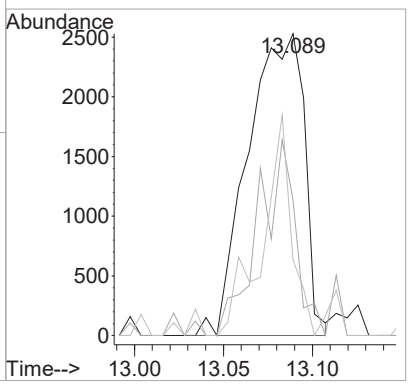


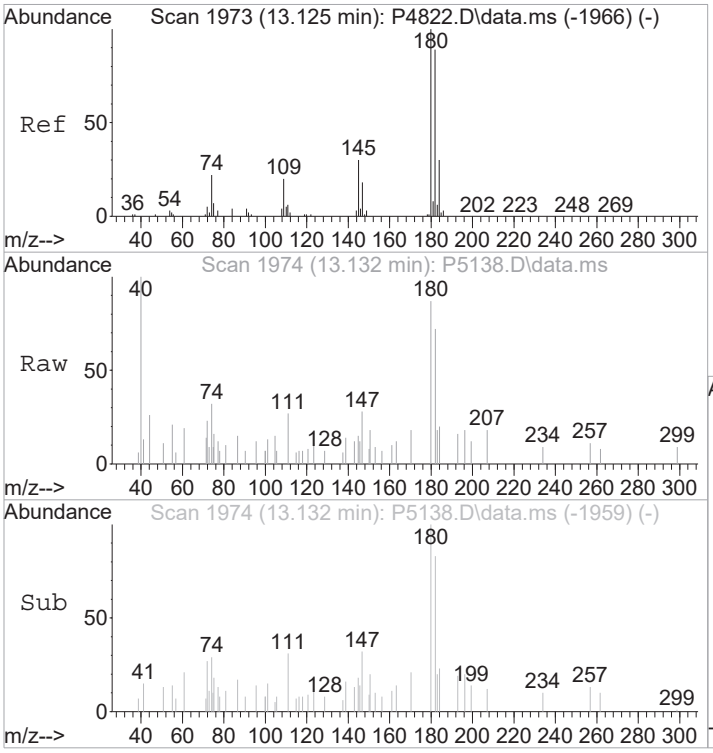


#112
Trielution Dichlorotoluene
Concen: 0.47 ppb
RT: 13.089 min Scan# 1967
Delta R.T. 0.012 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:125 Resp: 5564

Ion	Ratio	Lower	Upper
125	100		
160	44.9	31.5	47.3
89	37.4	29.0	43.4

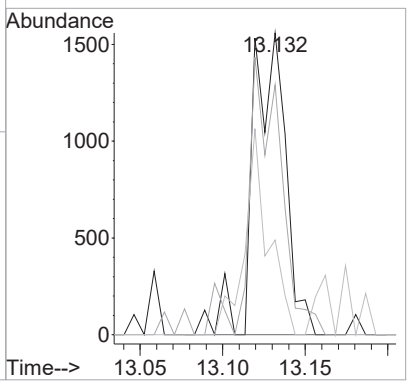


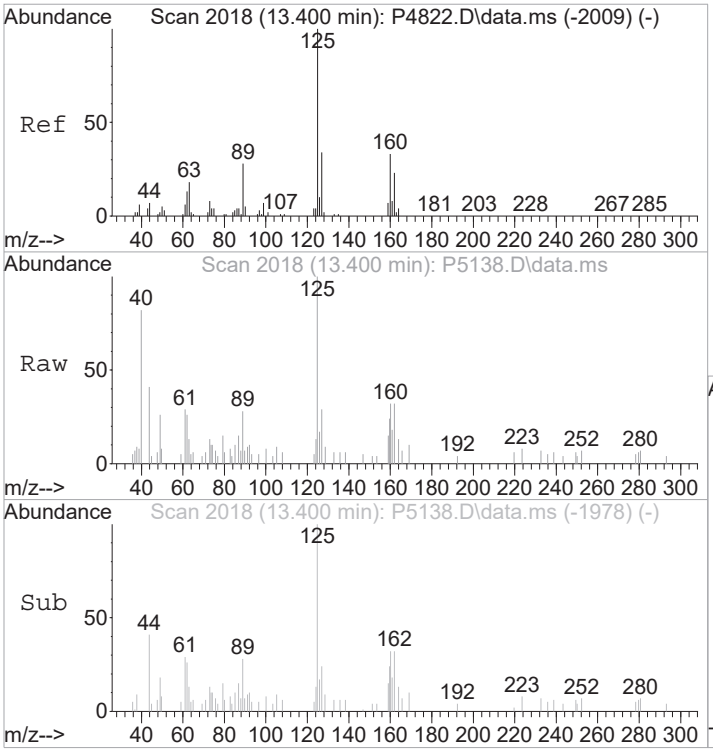


#113
1,3,5 Trichlorobenzene
Concen: 0.23 ppb
RT: 13.132 min Scan# 1974
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:180 Resp: 2184

Ion	Ratio	Lower	Upper
180	100		
182	82.8	76.7	115.1
145	31.4	24.2	36.4

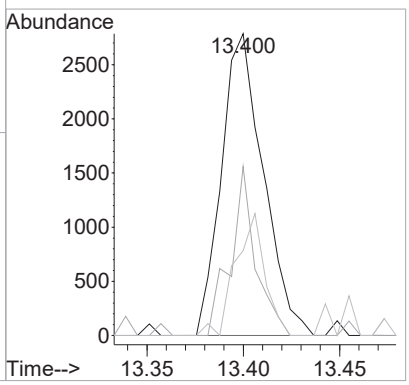


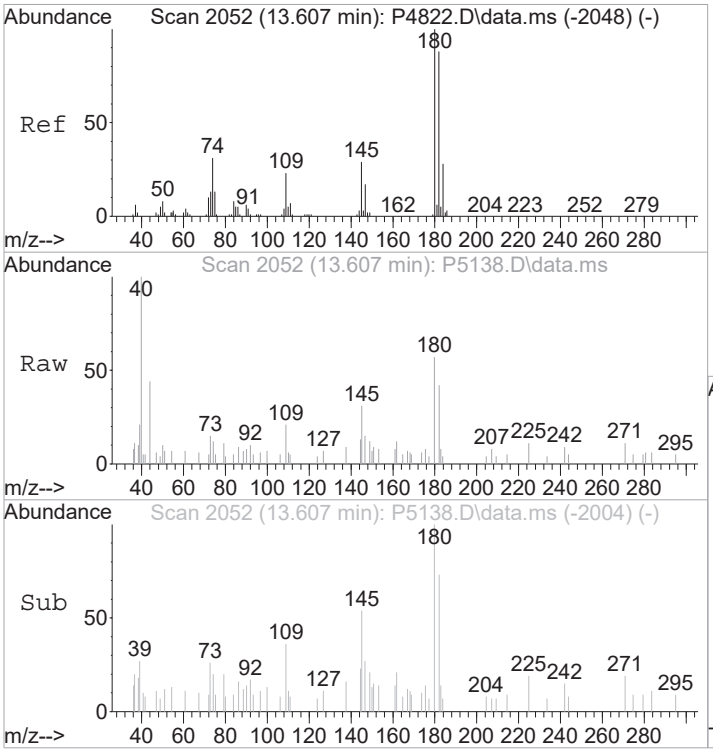


#114
Coelution Dichlorotoluene
Concen: 0.34 ppb
RT: 13.400 min Scan# 2018
Delta R.T. -0.006 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:125 Resp: 4223

Ion	Ratio	Lower	Upper
125	100		
160	56.0	29.1	43.7#
89	28.1	23.3	34.9

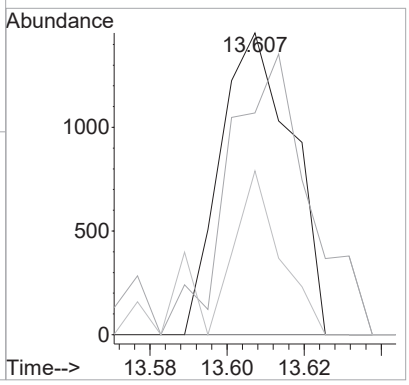


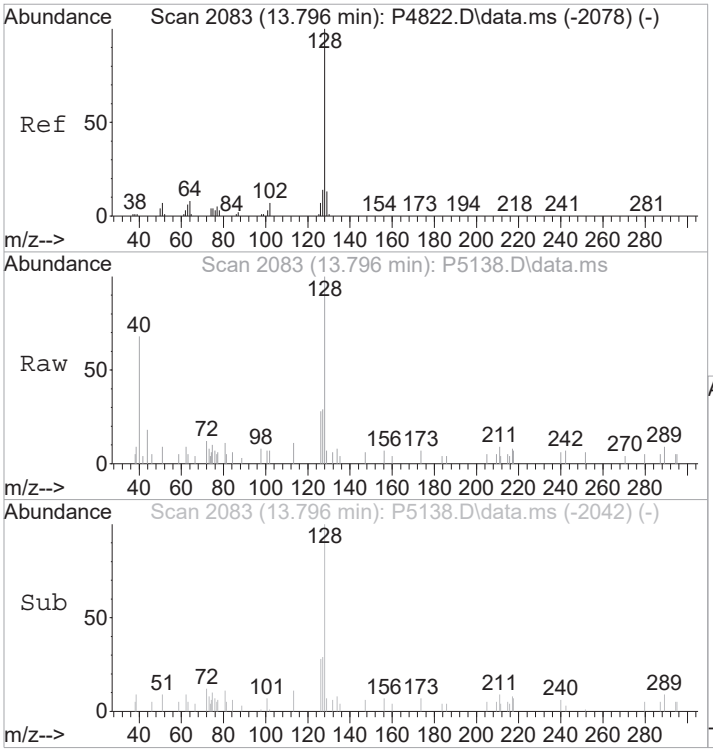


#115
1,2,4-Tcbenzene
Concen: 0.22 ppb
RT: 13.607 min Scan# 2052
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:180 Resp: 1881

Ion	Ratio	Lower	Upper
180	100		
182	73.4	75.4	115.4#
145	54.3	12.4	52.4#

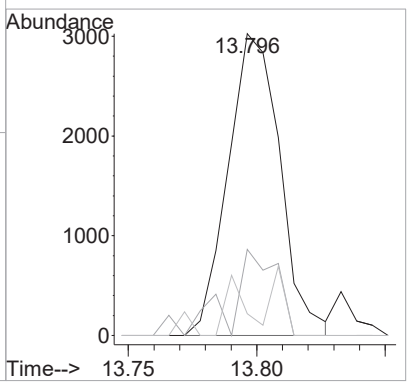


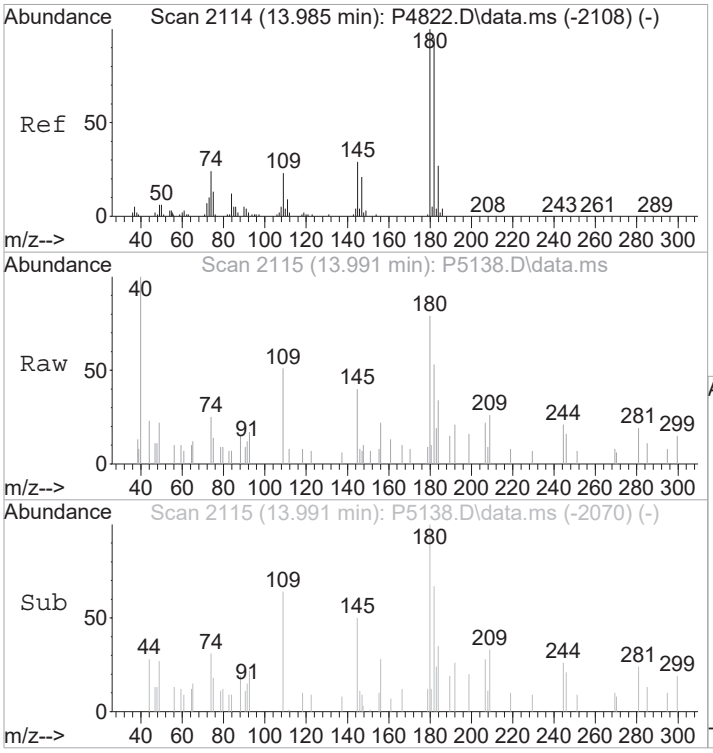


#117
Naphthalen
Concen: 0.24 ppb
RT: 13.796 min Scan# 2083
Delta R.T. -0.006 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:128 Resp: 4266

Ion	Ratio	Lower	Upper
128	100		
127	28.6	0.0	32.6
102	7.3	0.0	28.5

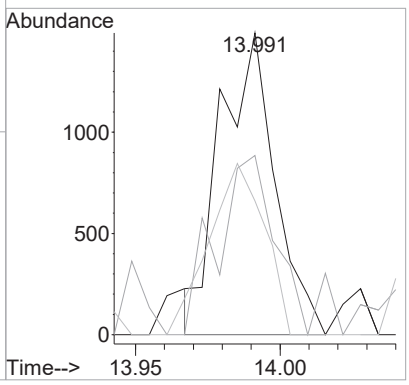


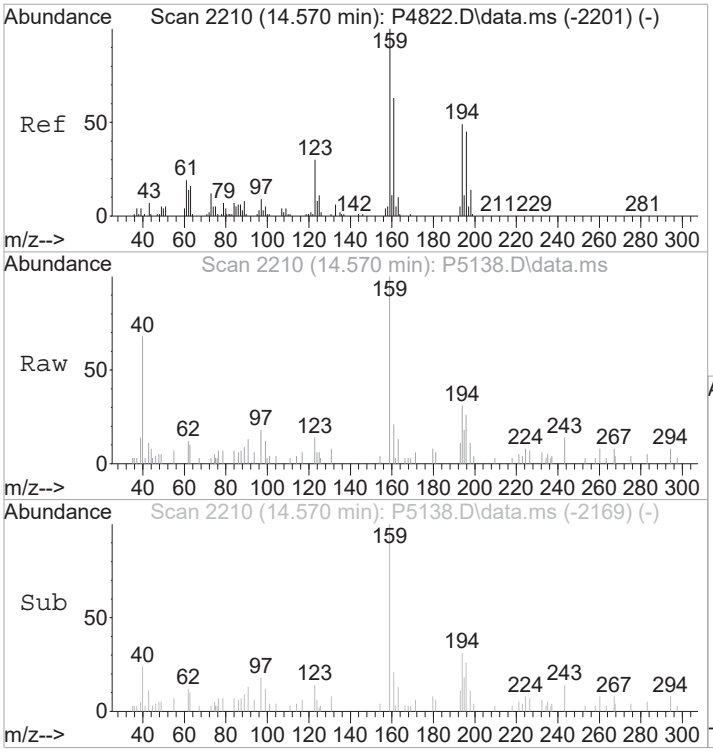


#118
1,2,3-Tclbenzene
Concen: 0.27 ppb
RT: 13.991 min Scan# 2115
Delta R.T. 0.006 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:180 Resp: 1953

Ion	Ratio	Lower	Upper
180	100		
182	59.4	79.1	119.1#
145	44.3	13.9	53.9

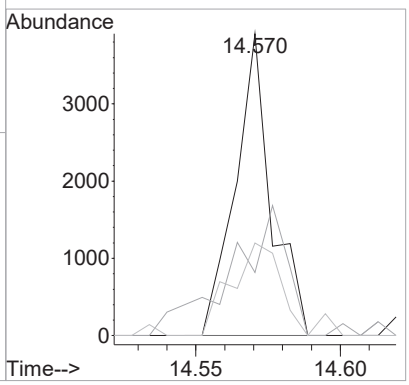


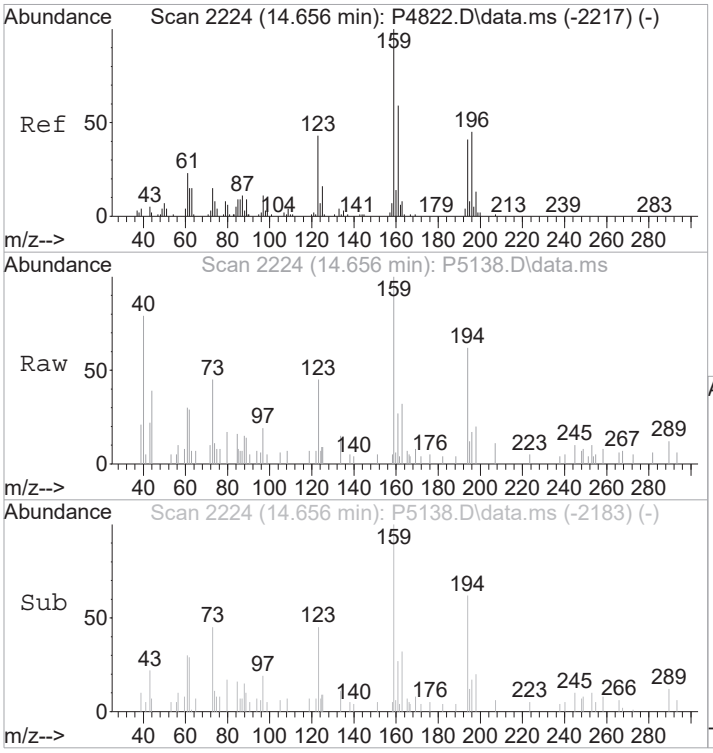


#119
2,4,5-Trichlorotolene
Concen: 0.67 ppb
RT: 14.570 min Scan# 2210
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:159 Resp: 3379

Ion	Ratio	Lower	Upper
159	100		
161	24.2	50.6	76.0#
194	30.7	33.6	50.4#

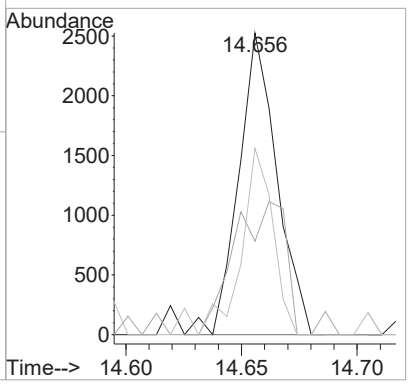




#120
2,3,6-Trichlorotoluene
Concen: 0.62 ppb
RT: 14.656 min Scan# 2224
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:159 Resp: 2922

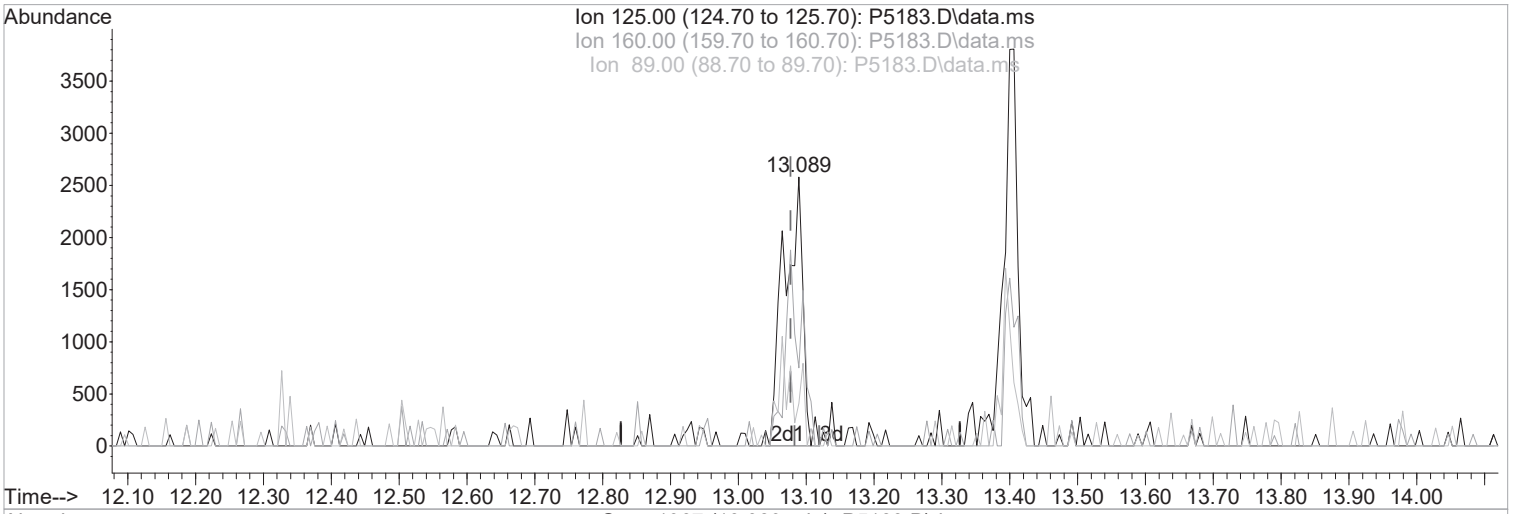
Ion	Ratio	Lower	Upper
159	100		
161	30.9	49.3	73.9#
194	61.7	35.2	52.8#

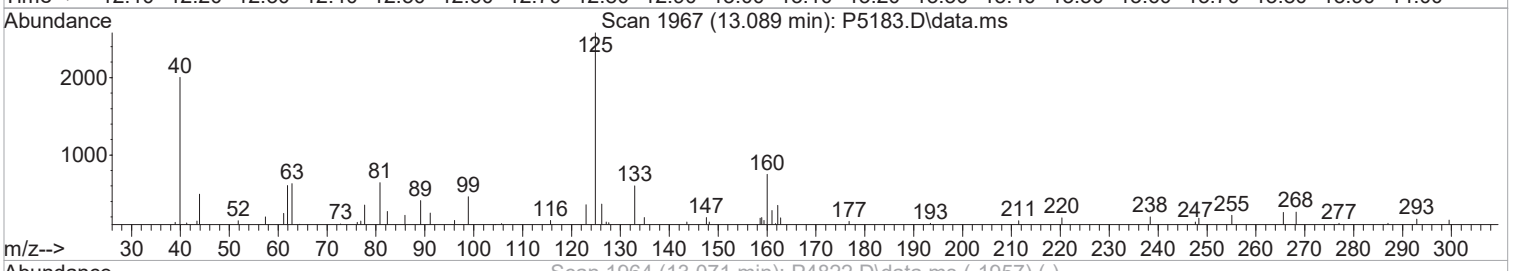


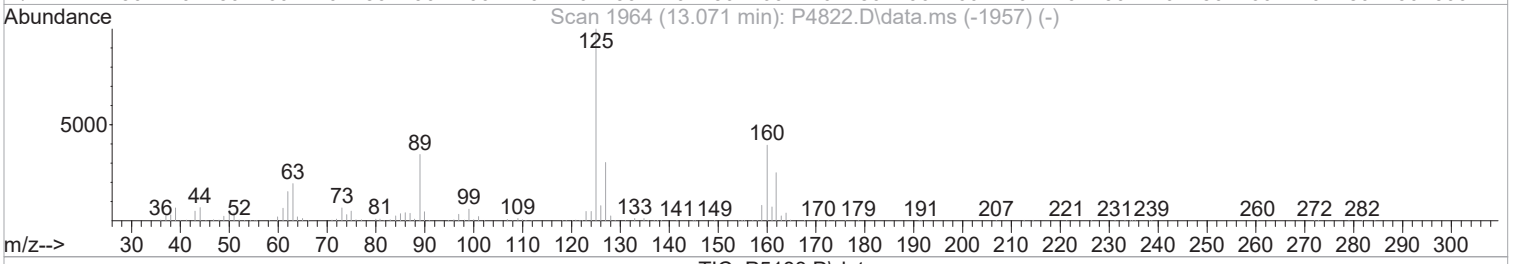
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(112) Trielution Dichlorotoluene

13.089min (+0.012) 0.45 ppb m

response 4948

Ion	Exp%	Act%
125.00	100	100
160.00	39.40	29.03#
89.00	36.20	15.93#
0.00	0.00	0.00

Manual Integration:

After

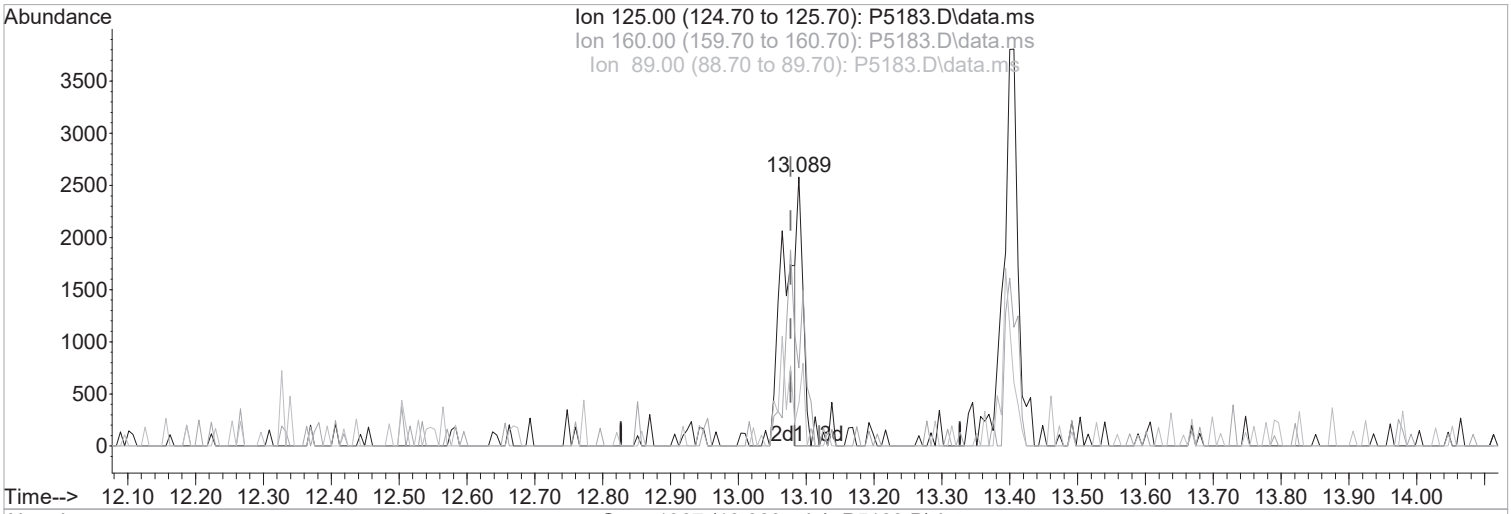
Split Peak

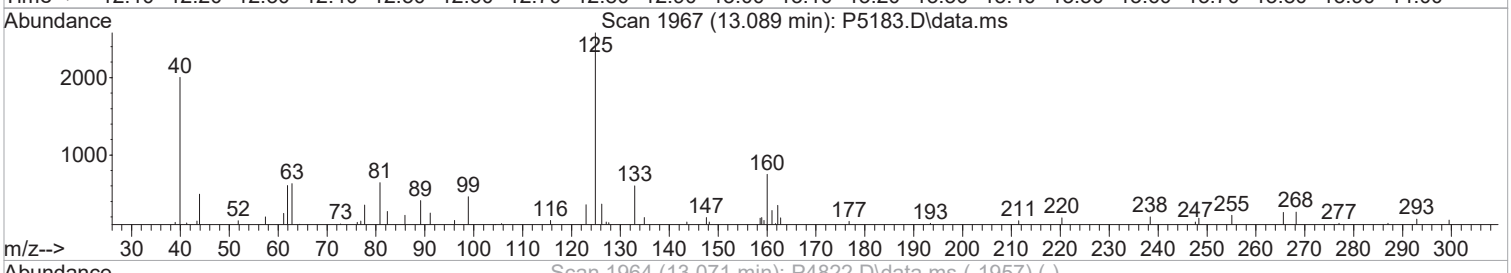
09/20/16

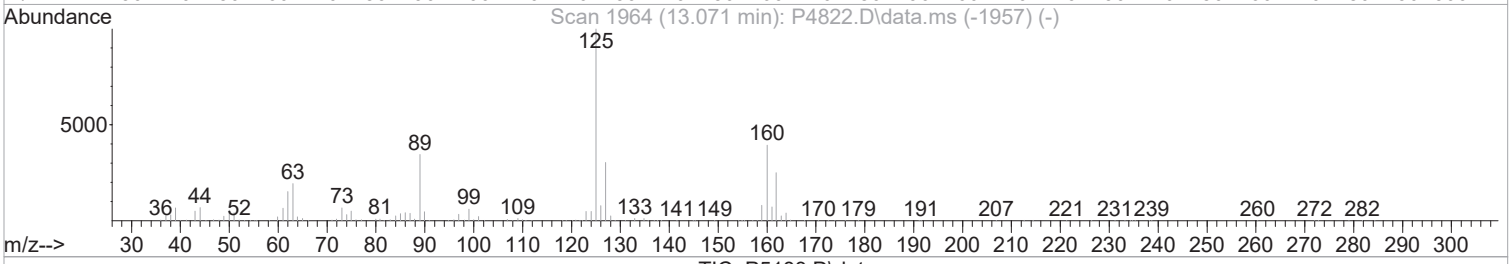
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(112) Trielution Dichlorotoluene

13.089min (+0.012) 0.15 ppb

response 1712

Ion	Exp%	Act%
125.00	100	100
160.00	39.40	29.03#
89.00	36.20	15.93#
0.00	0.00	0.00

Manual Integration:

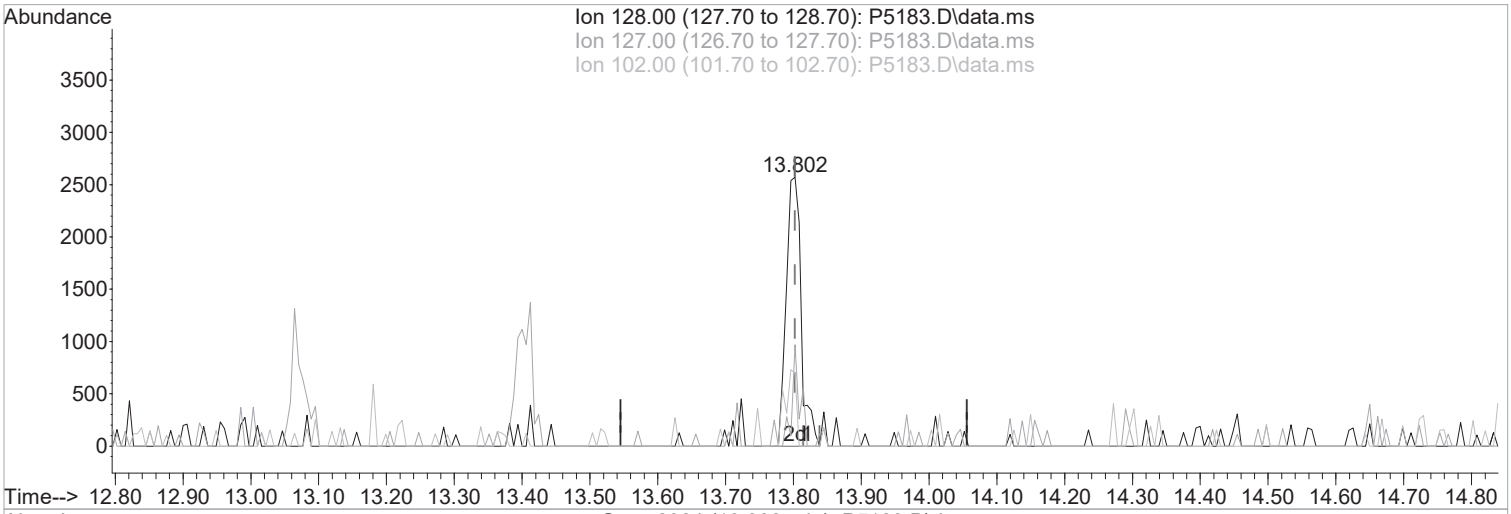
Before

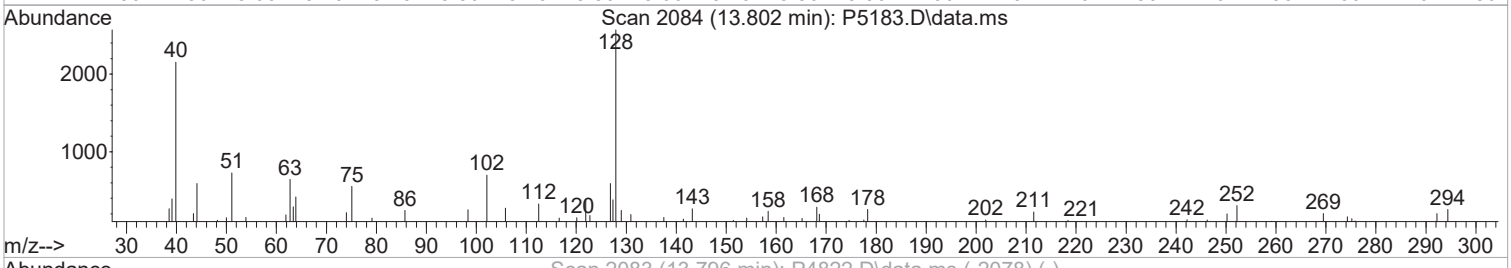
09/20/16

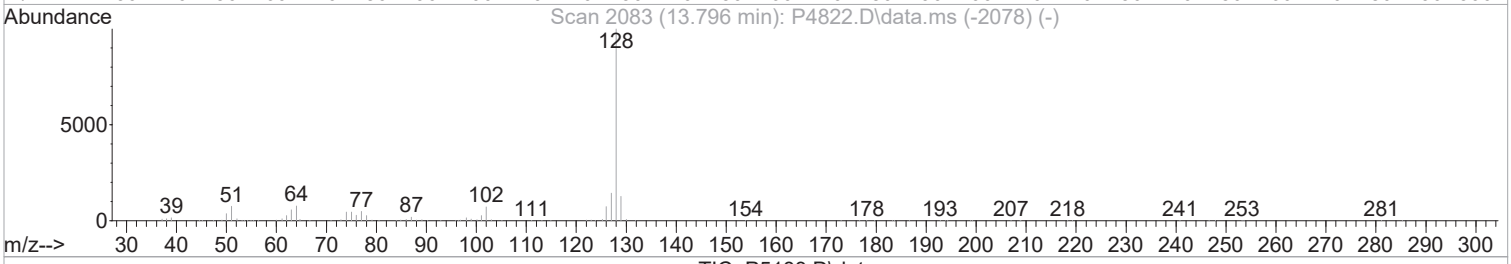
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(117) Naphthalen

13.802min (+0.000) 0.23 ppb m

response 3911

Ion	Exp%	Act%
128.00	100	100
127.00	12.60	22.98
102.00	8.50	27.10
0.00	0.00	0.00

Manual Integration:

After

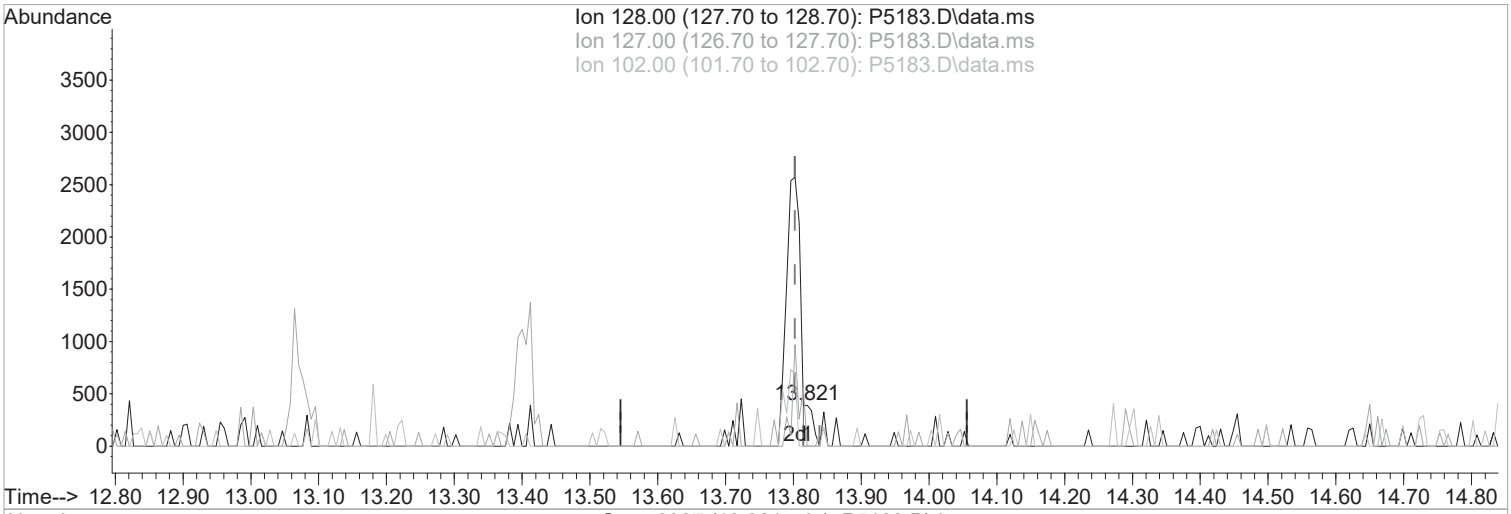
Peak not found.

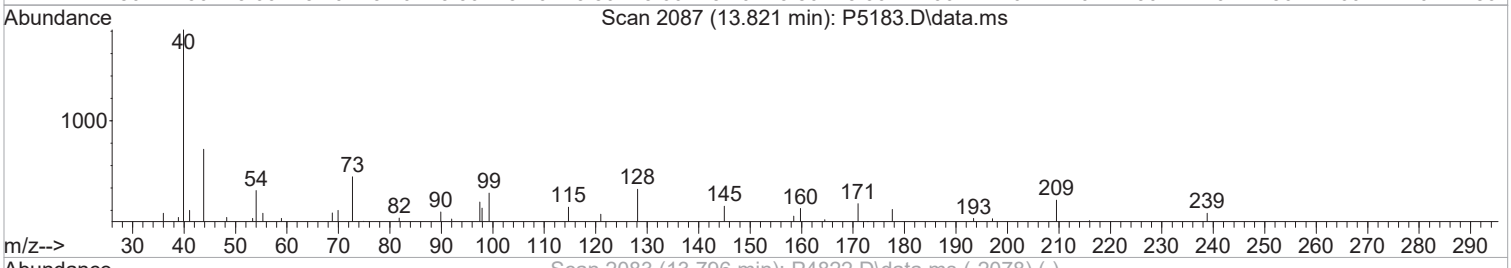
09/20/16

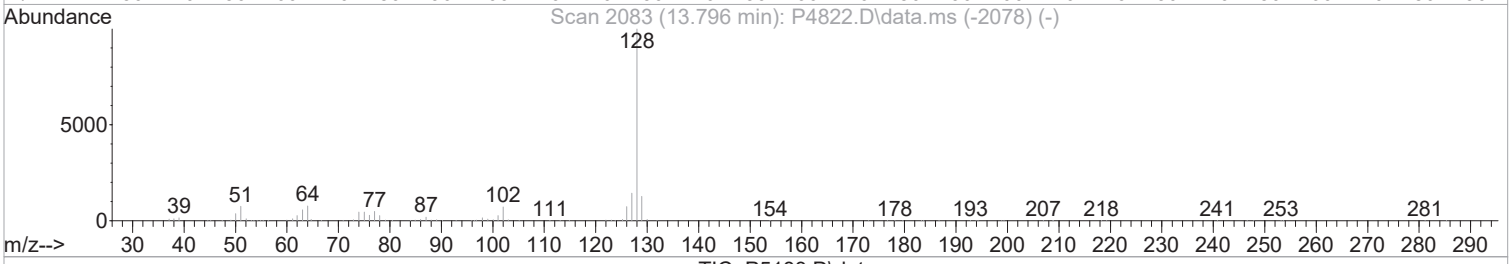
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(117) Naphthalen

13.821min (+0.018) 0.02 ppb

response 310

Ion	Exp%	Act%
128.00	100	100
127.00	12.60	0.00
102.00	8.50	0.00
0.00	0.00	0.00

Manual Integration:

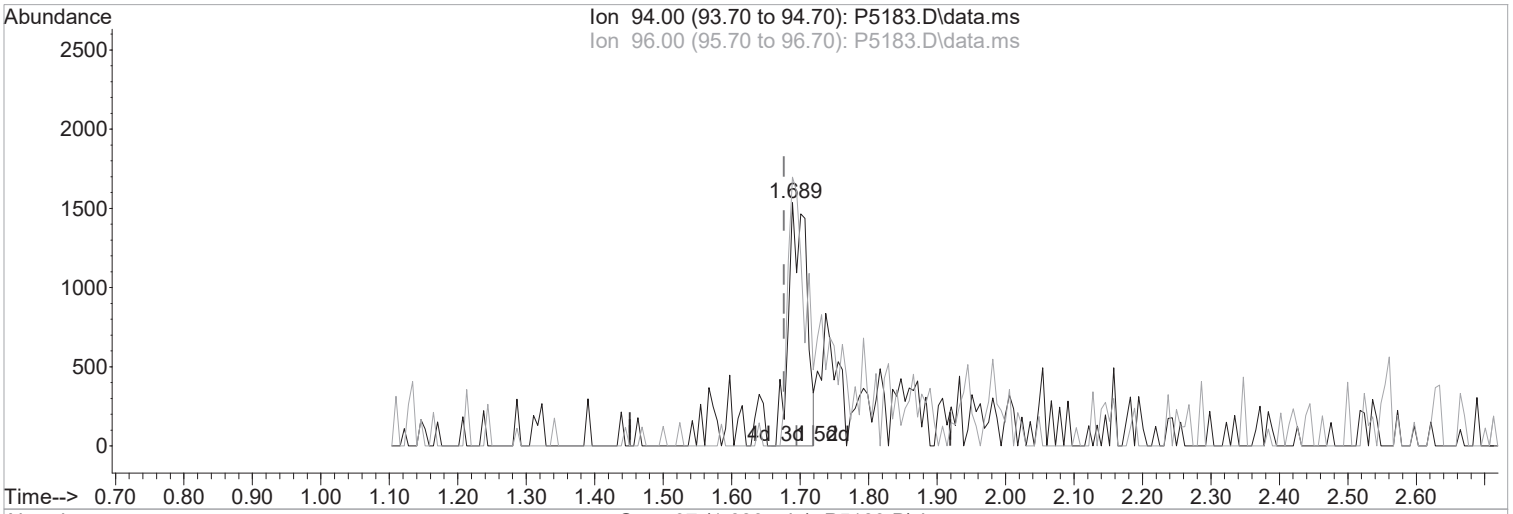
Before

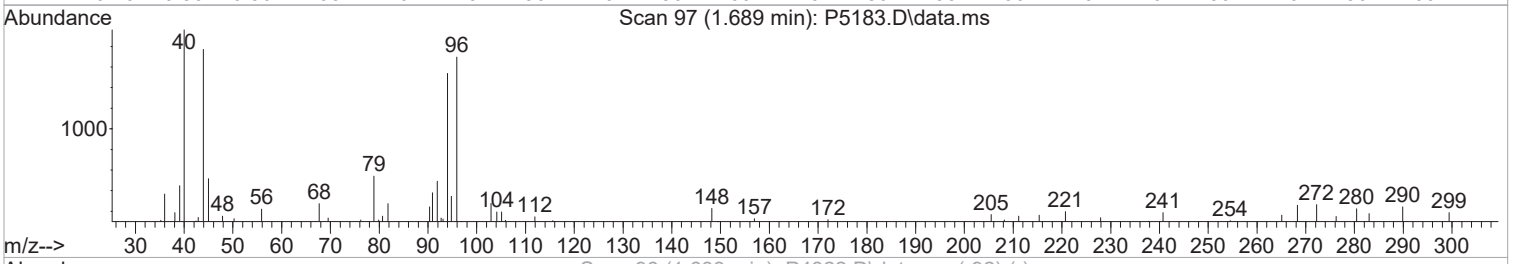
09/20/16

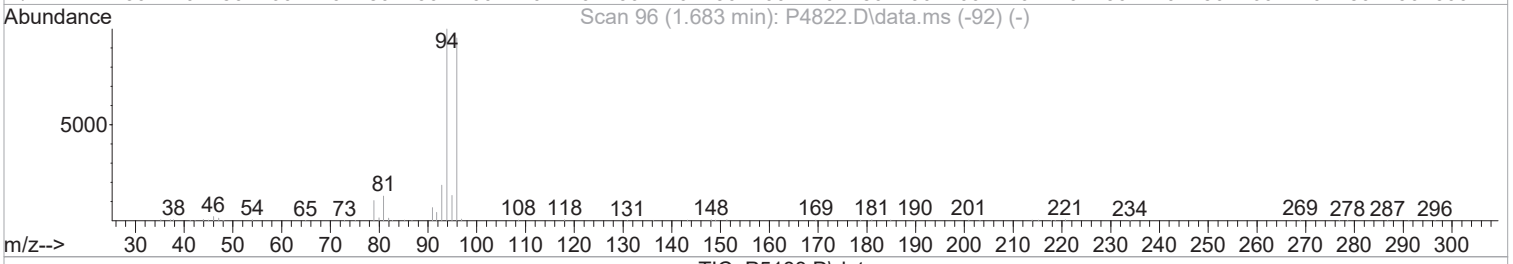
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(5) Bromomethane (P)

1.689min (+0.012) 0.61 ppb m

response 2863

Ion	Exp%	Act%
94.00	100	100
96.00	89.20	110.47#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

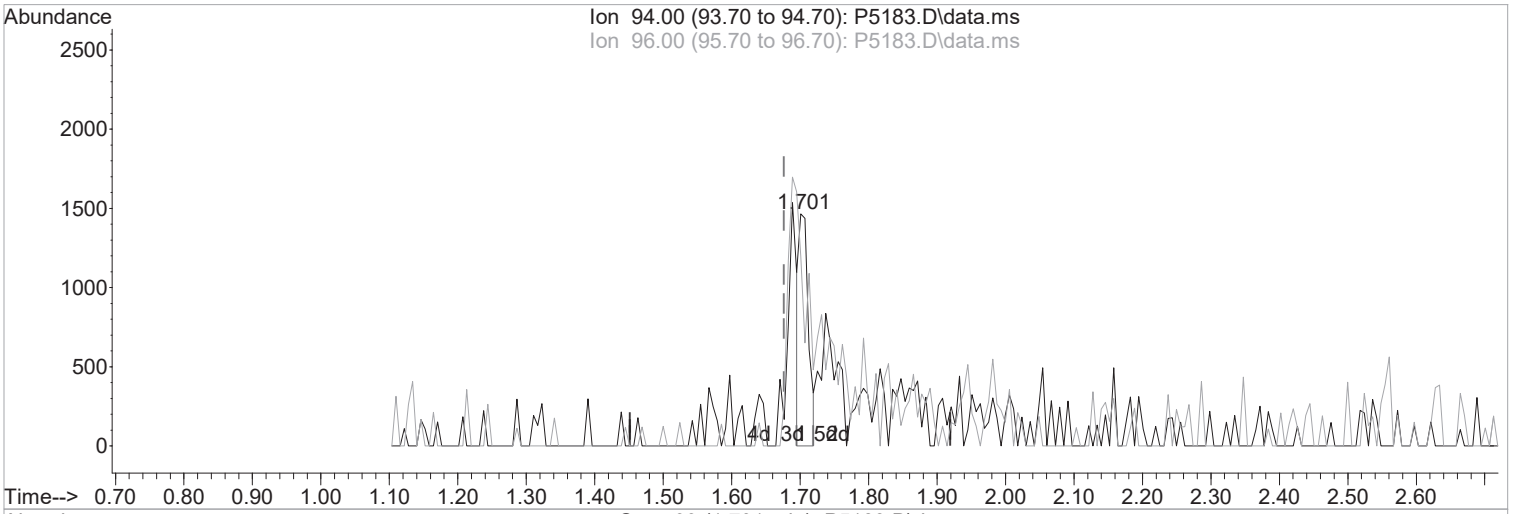
Split Peak

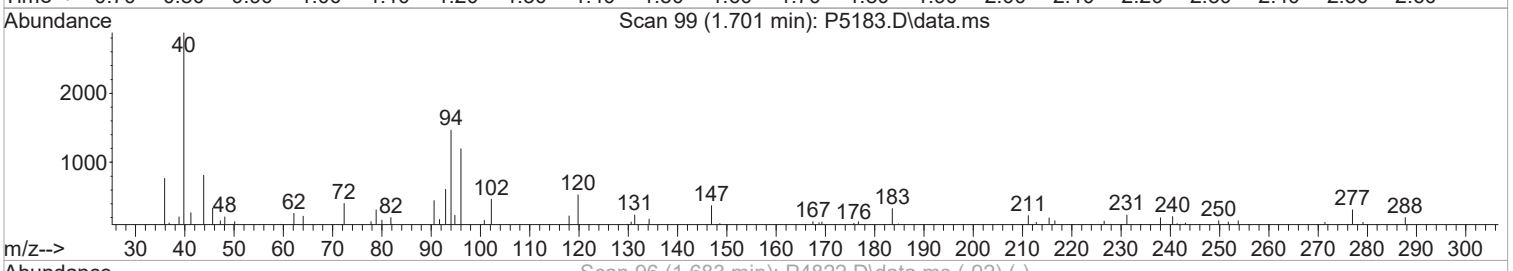
09/20/16

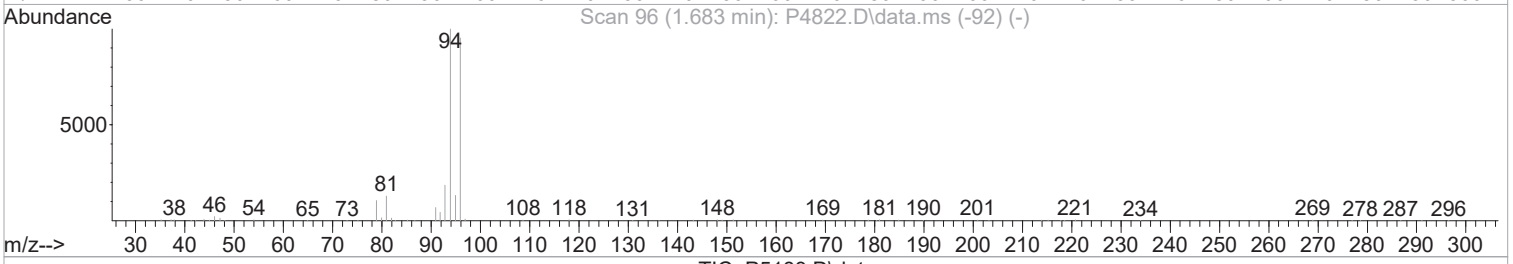
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(5) Bromomethane (P)

1.701min (+0.024) 0.30 ppb

response 1407

Ion	Exp%	Act%
94.00	100	100
96.00	89.20	81.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 17:25:14 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

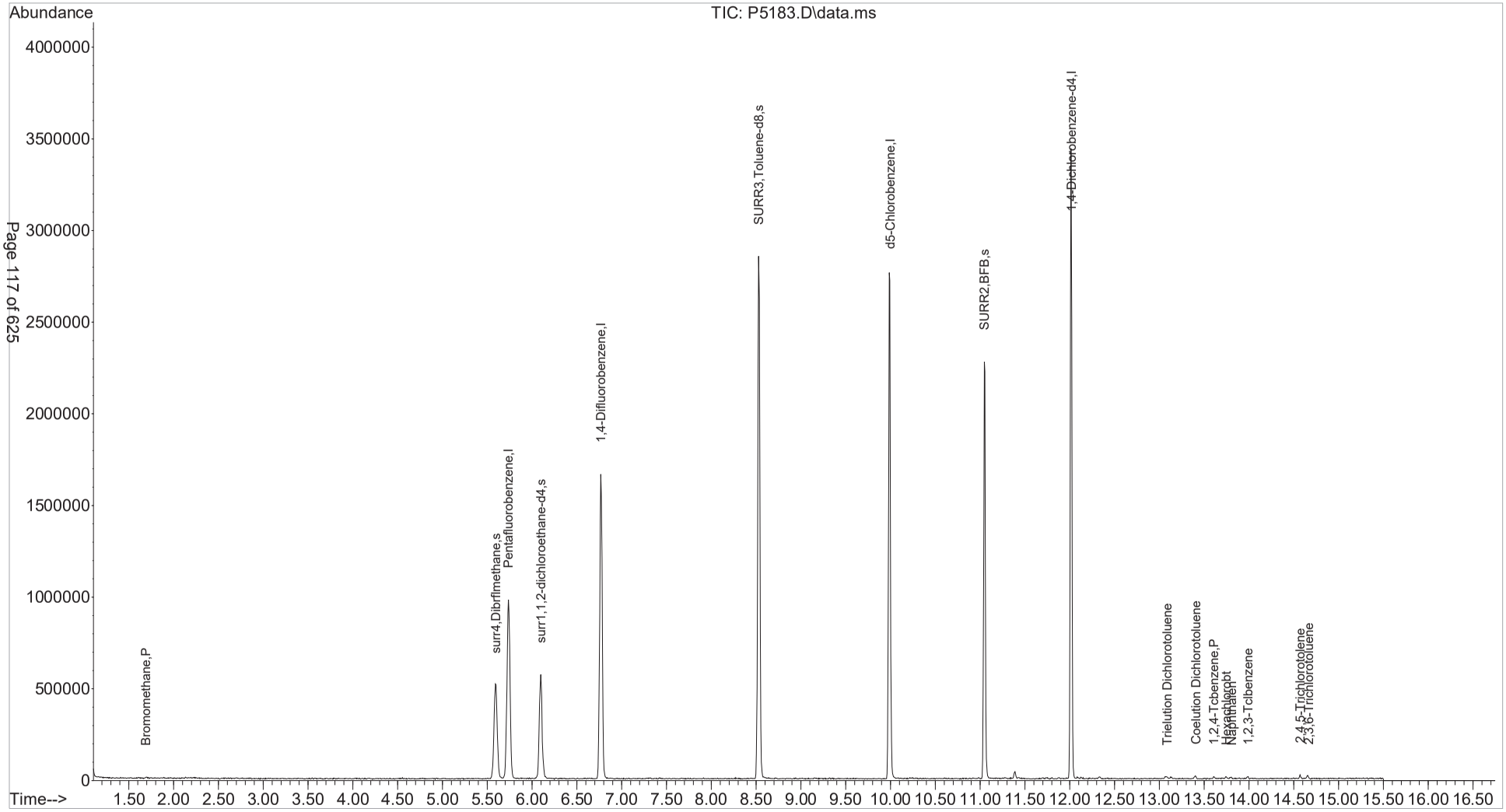
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	811986	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1398394	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1310115	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	665378	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.597	113	408078	56.37	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.74%				
48) surr1,1,2-dichloroetha...	6.096	65	428105	50.32	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.64%				
65) SURR3,Toluene-d8	8.529	98	1784918	57.47	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.94%				
70) SURR2,BFB	11.047	95	635849	52.63	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.26%				
Target Compounds							Qvalue
5) Bromomethane	1.689	94	2863m	0.61	ppb		
112) Trielution Dichlorotol...	13.089	125	4948m	0.45	ppb		
114) Coelution Dichlorotoluene	13.406	125	5750	0.49	ppb	#	83
115) 1,2,4-Tcbenzene	13.607	180	2671	0.34	ppb		94
116) Hexachlorobt	13.747	225	1029	0.32	ppb	#	66
117) Naphthalen	13.802	128	3911m	0.23	ppb		
118) 1,2,3-Tclbenzene	13.991	180	2587	0.39	ppb		81
119) 2,4,5-Trichlorotolene	14.570	159	3785	0.80	ppb	#	68
120) 2,3,6-Trichlorotoluene	14.662	159	3096	0.70	ppb	#	59

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

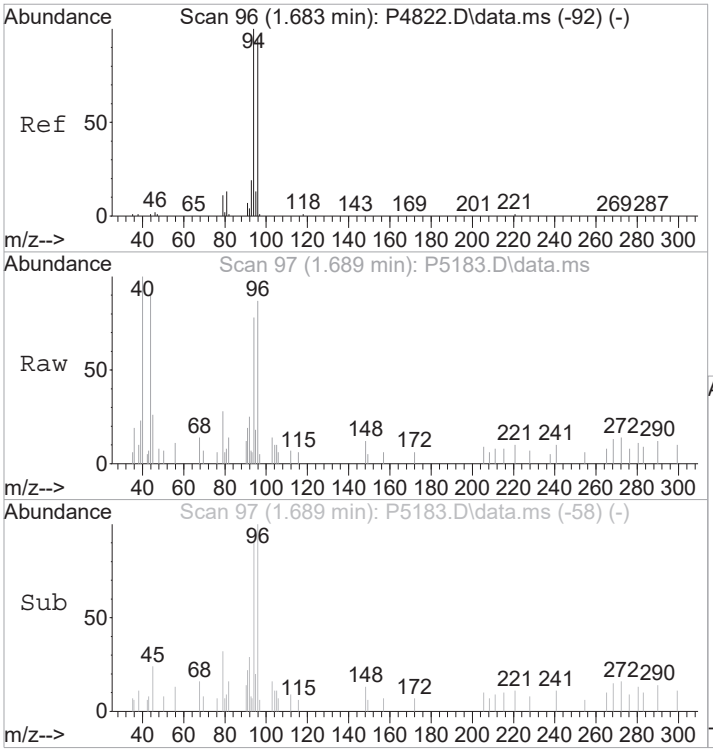
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 17:25:14 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



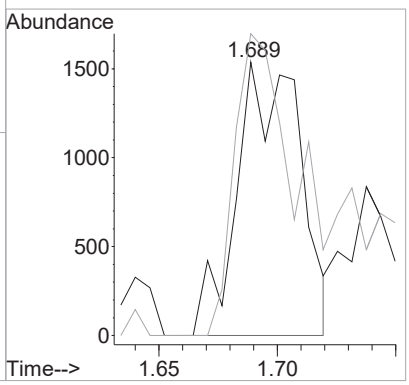
1st 09/20/16
2nd 09/22/16

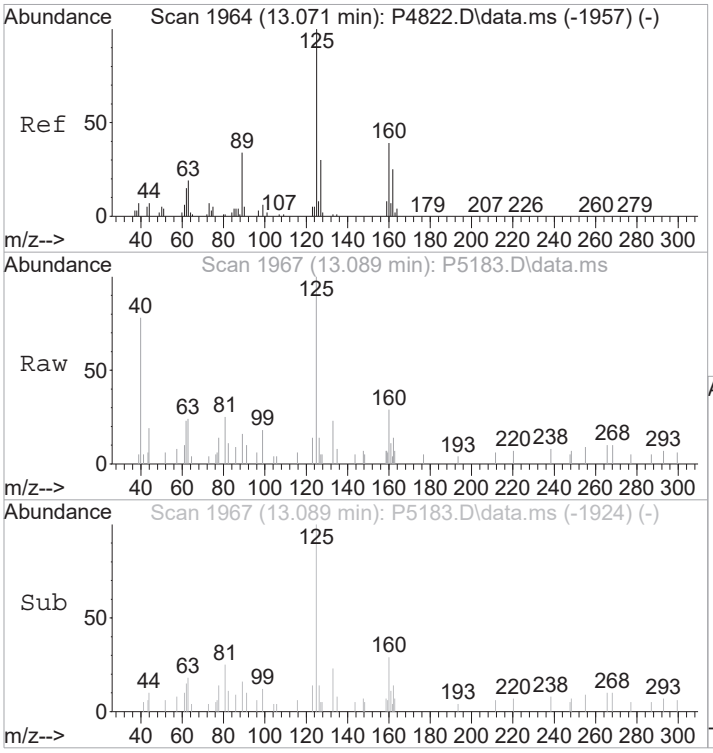


#5
Bromomethane
Concen: 0.61 ppb m
RT: 1.689 min Scan# 97
Delta R.T. 0.012 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion: 94 Resp: 2863

Ion	Ratio	Lower	Upper
94	100		
96	110.5	69.2	109.2#

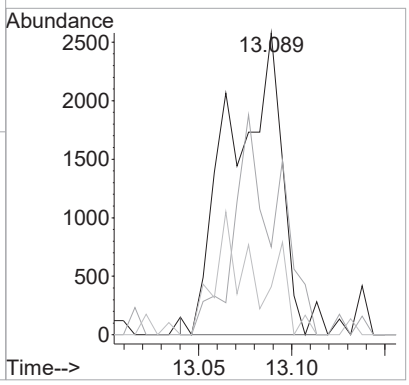


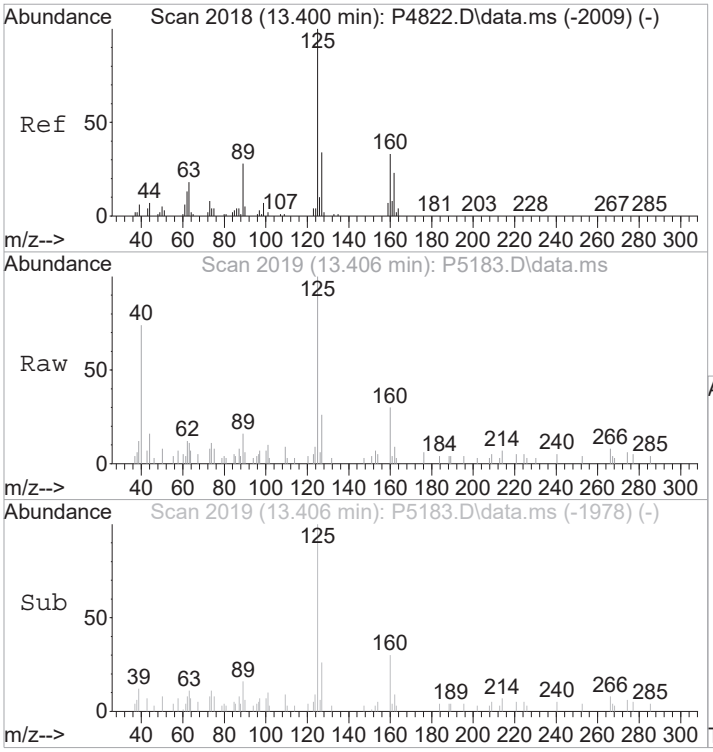


#112
Trielution Dichlorotoluene
Concen: 0.45 ppb m
RT: 13.089 min Scan# 1967
Delta R.T. 0.012 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:125 Resp: 4948

Ion	Ratio	Lower	Upper
125	100		
160	29.0	31.5	47.3#
89	15.9	29.0	43.4#

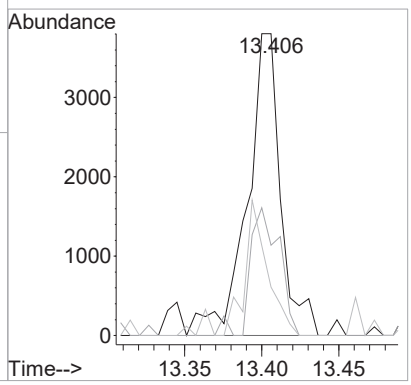


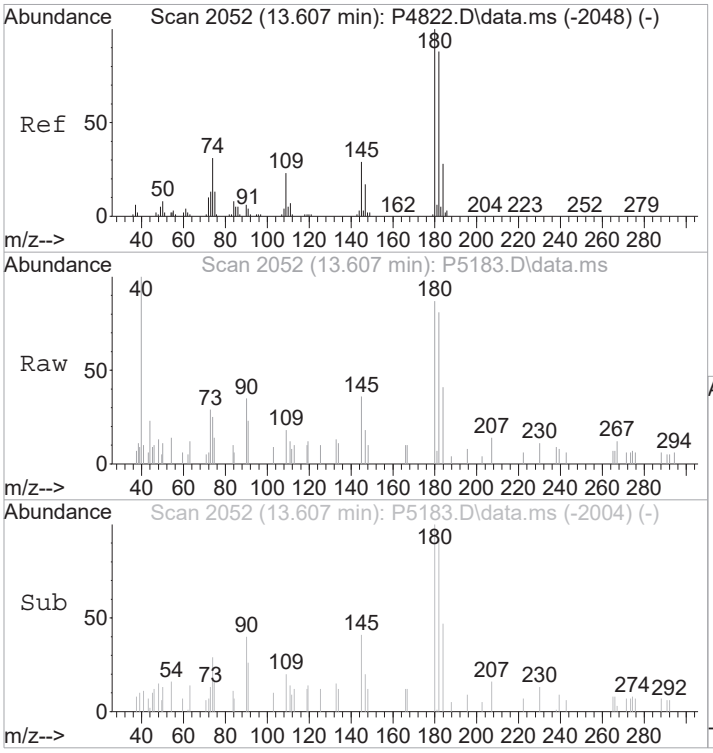


#114
Coelution Dichlorotoluene
Concen: 0.49 ppb
RT: 13.406 min Scan# 2019
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:125 Resp: 5750

Ion	Ratio	Lower	Upper
125	100		
160	30.0	29.1	43.7
89	16.0	23.3	34.9#

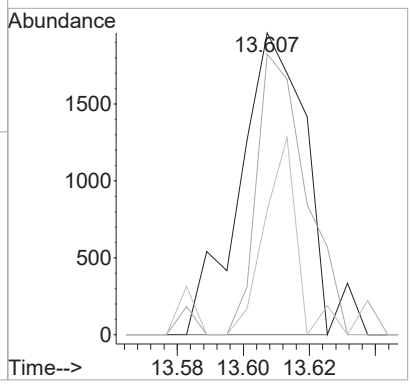


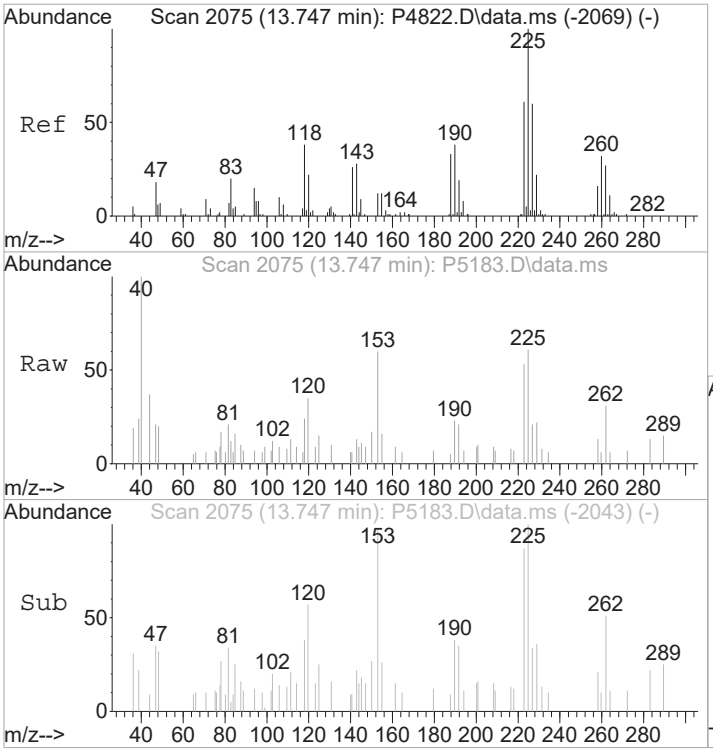


#115
1,2,4-Tcbenzene
Concen: 0.34 ppb
RT: 13.607 min Scan# 2052
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:180 Resp: 2671

Ion	Ratio	Lower	Upper
180	100		
182	92.9	75.4	115.4
145	41.3	12.4	52.4

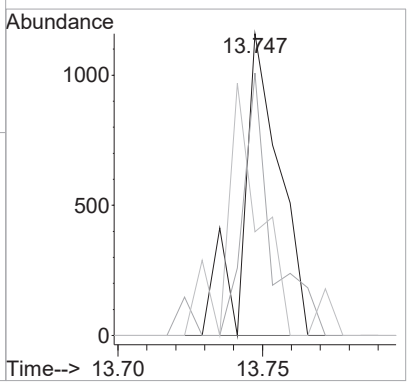


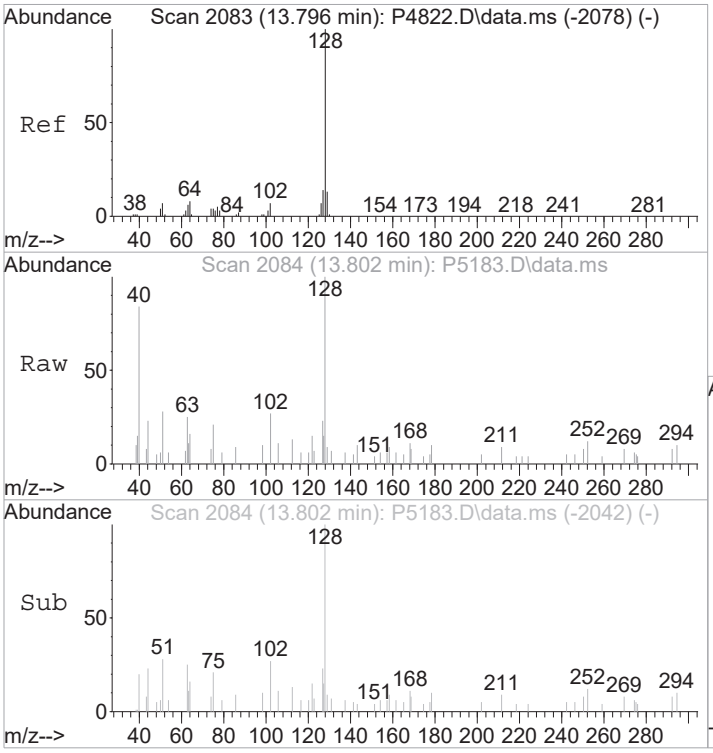


#116
Hexachlorobt
Concen: 0.32 ppb
RT: 13.747 min Scan# 2075
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:225 Resp: 1029

Ion	Ratio	Lower	Upper
225	100		
223	86.9	46.9	86.9
227	34.4	49.7	89.7#

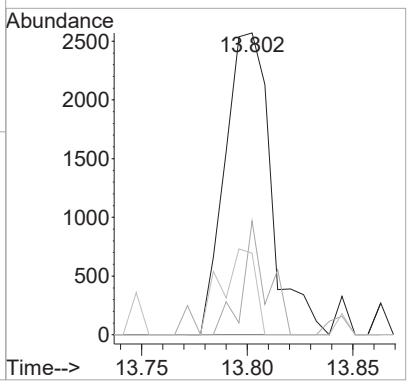


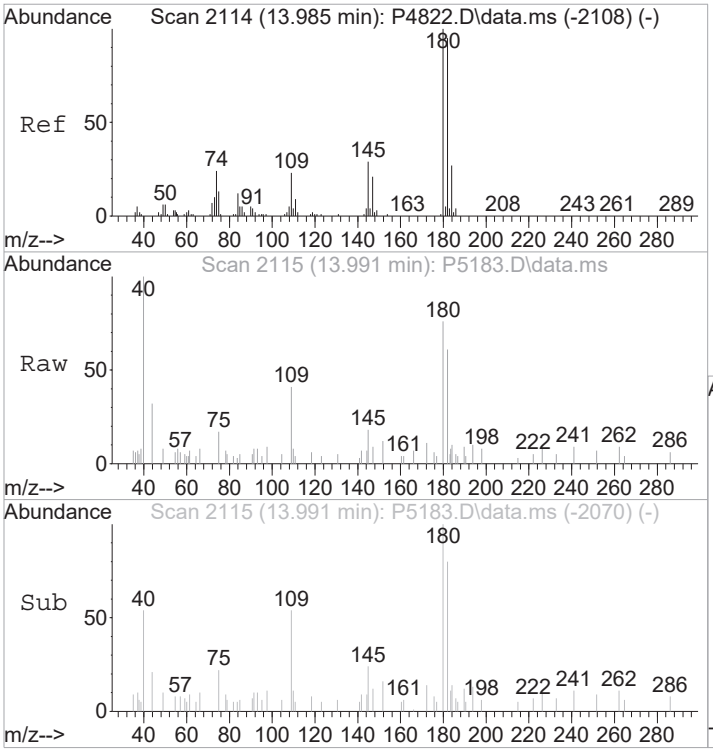


#117
Naphthalen
Concen: 0.23 ppb m
RT: 13.802 min Scan# 2084
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:128 Resp: 3911

Ion	Ratio	Lower	Upper
128	100		
127	23.0	0.0	32.6
102	27.1	0.0	28.5

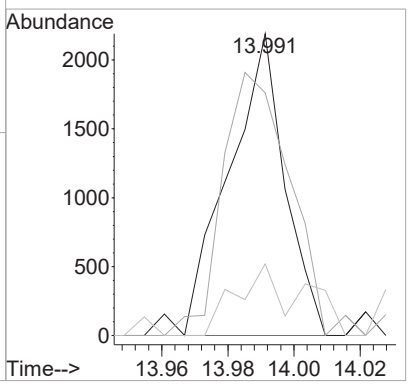


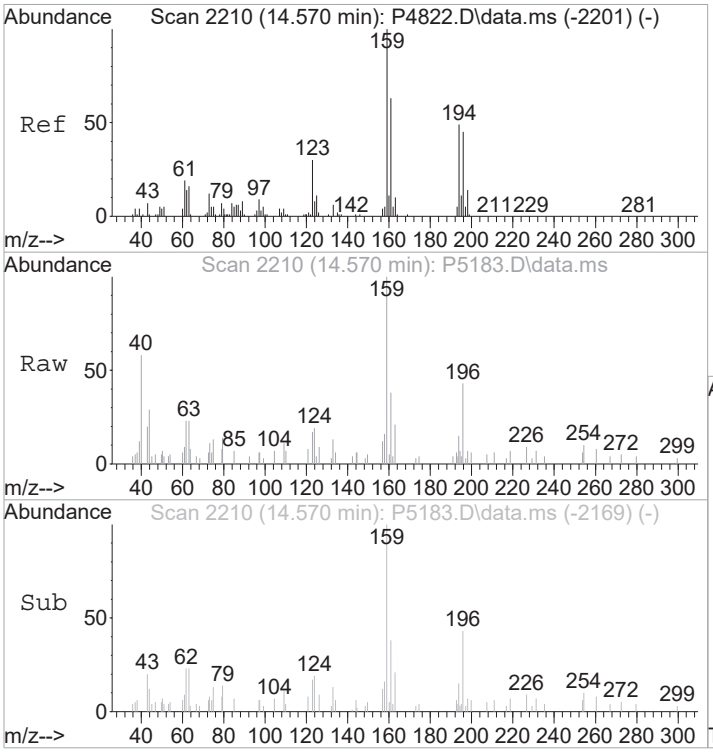


#118
1,2,3-Tclbenzene
Concen: 0.39 ppb
RT: 13.991 min Scan# 2115
Delta R.T. 0.006 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:180 Resp: 2587

Ion	Ratio	Lower	Upper
180	100		
182	80.3	79.1	119.1
145	23.8	13.9	53.9

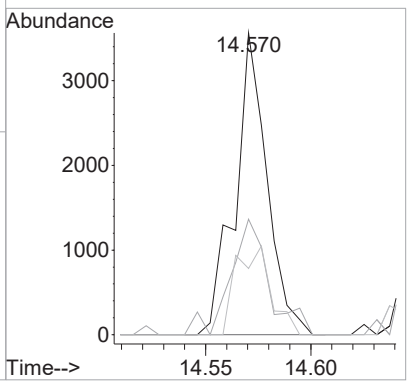


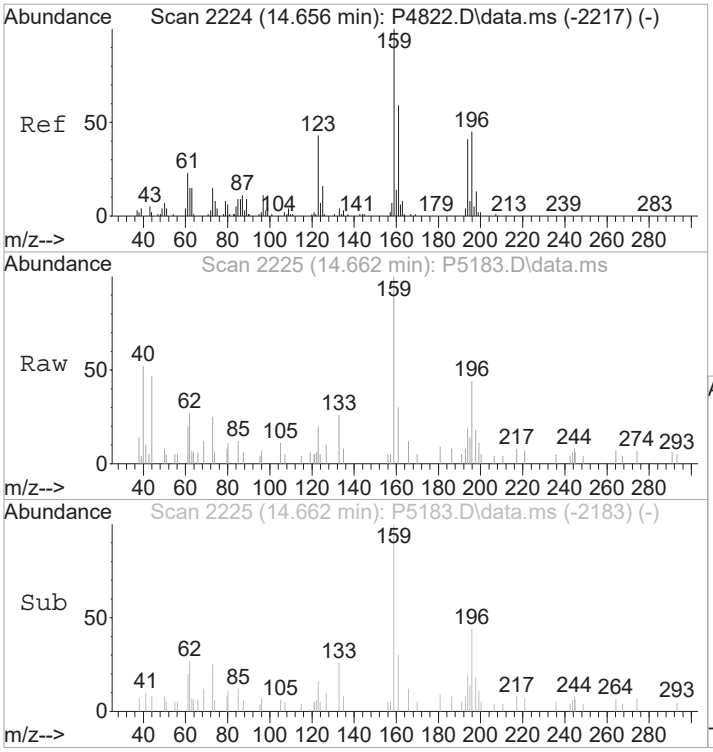


#119
2,4,5-Trichlorotolene
Concen: 0.80 ppb
RT: 14.570 min Scan# 2210
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:159 Resp: 3785

Ion	Ratio	Lower	Upper
159	100		
161	38.3	50.6	76.0#
194	22.0	33.6	50.4#

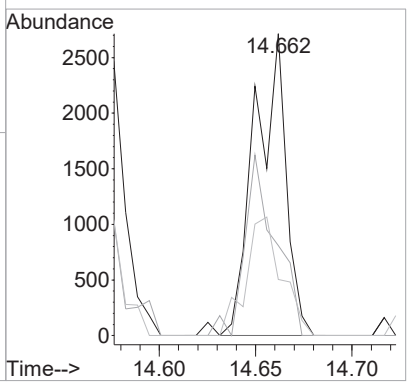




#120
2,3,6-Trichlorotoluene
Concen: 0.70 ppb
RT: 14.662 min Scan# 2225
Delta R.T. 0.006 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:159 Resp: 3096

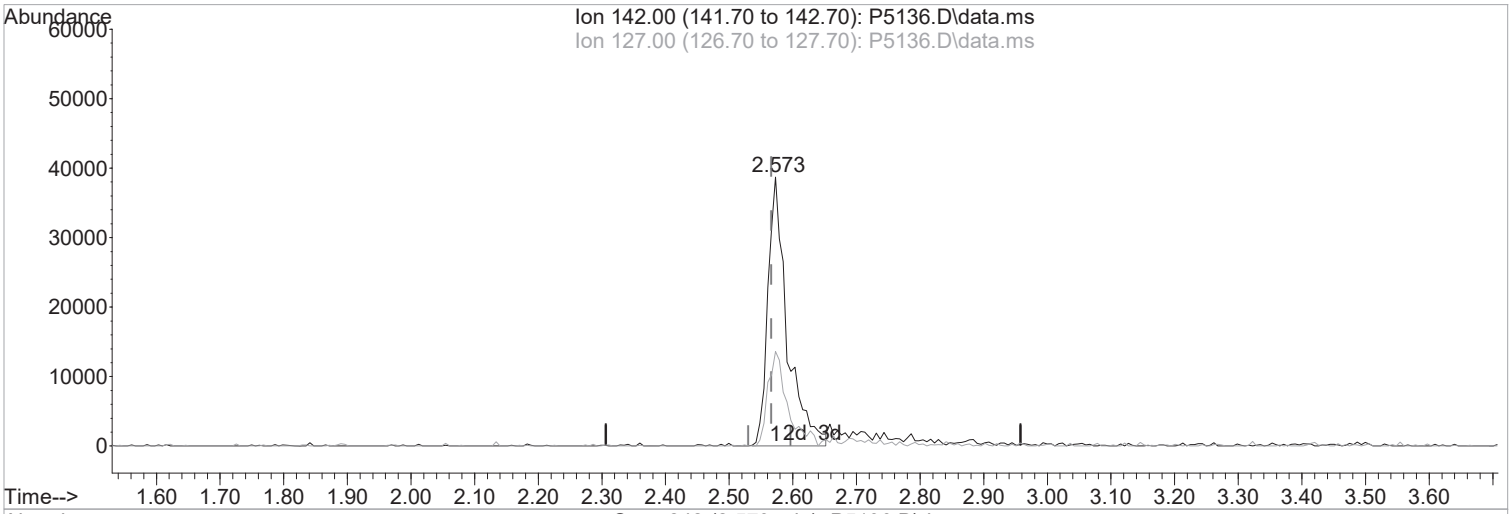
Ion	Ratio	Lower	Upper
159	100		
161	29.8	49.3	73.9#
194	18.6	35.2	52.8#

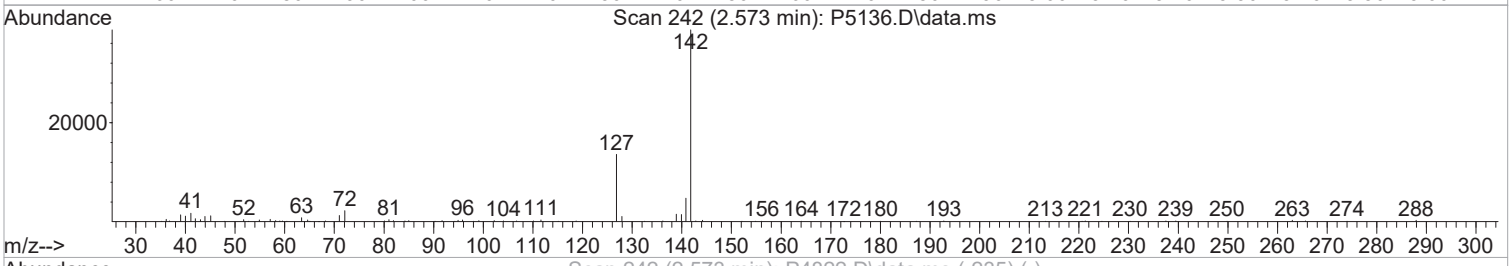


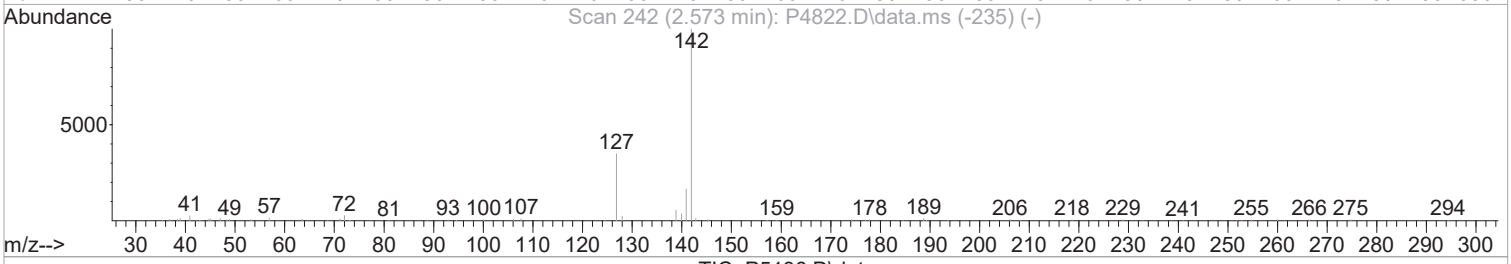
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5136.D\data.ms

(17) Iodomethane

2.573min (+0.007) 14.04 ppb m

response 82098

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	35.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

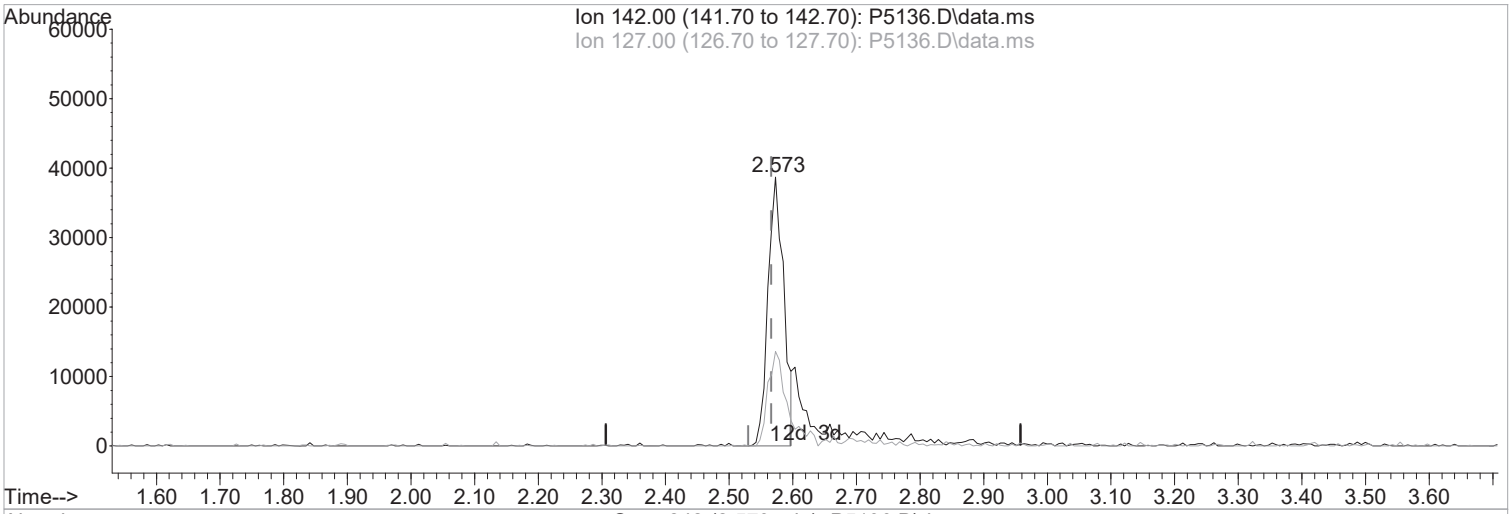
Split Peak

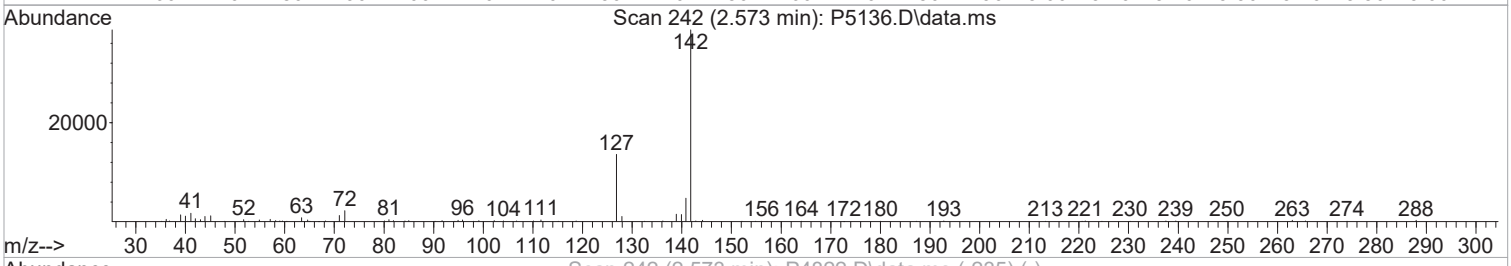
09/19/16

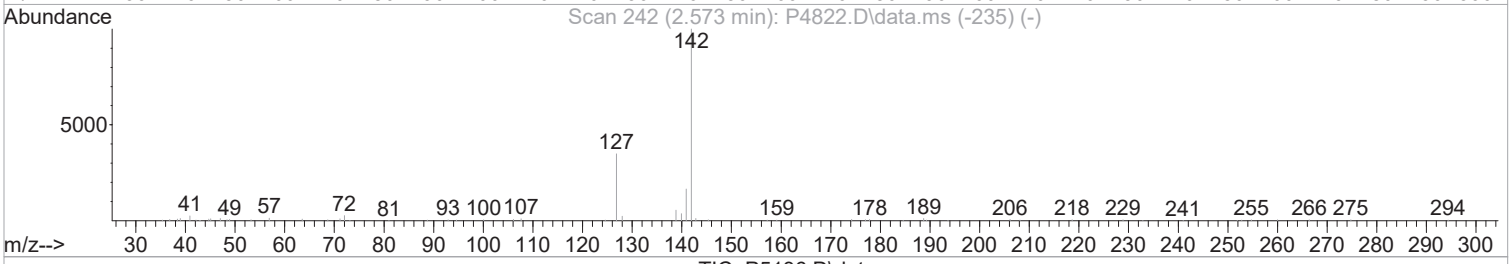
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5136.D\data.ms

(17) Iodomethane

2.573min (+0.007) 11.79 ppb

response 67489

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	35.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

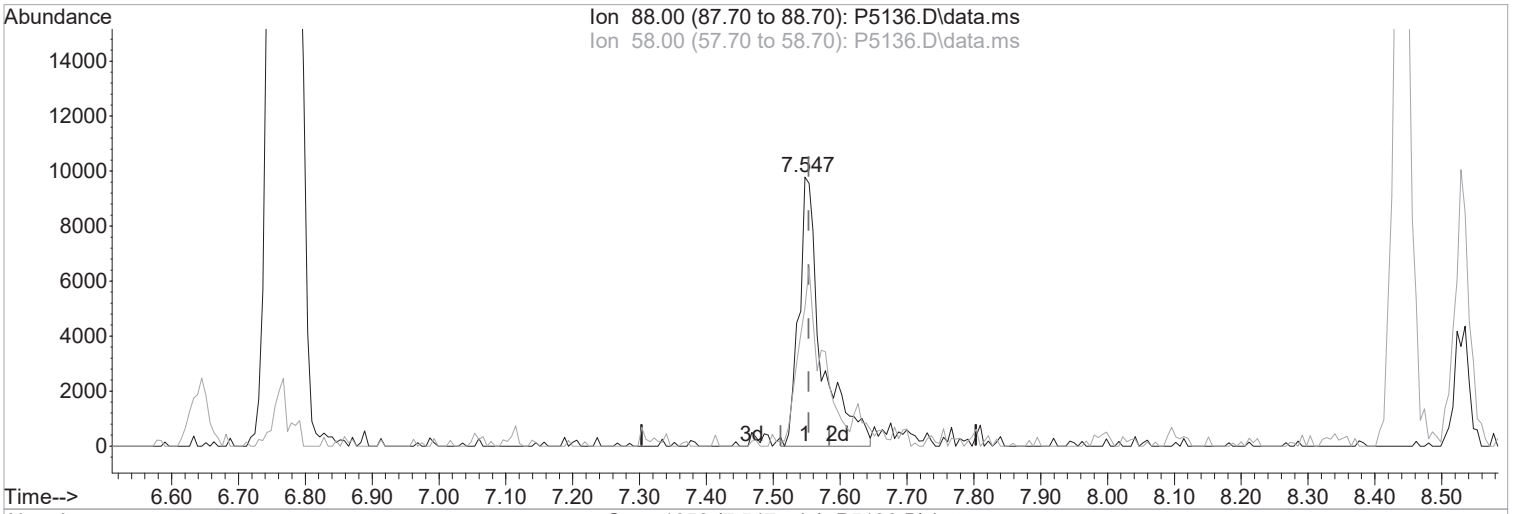
Before

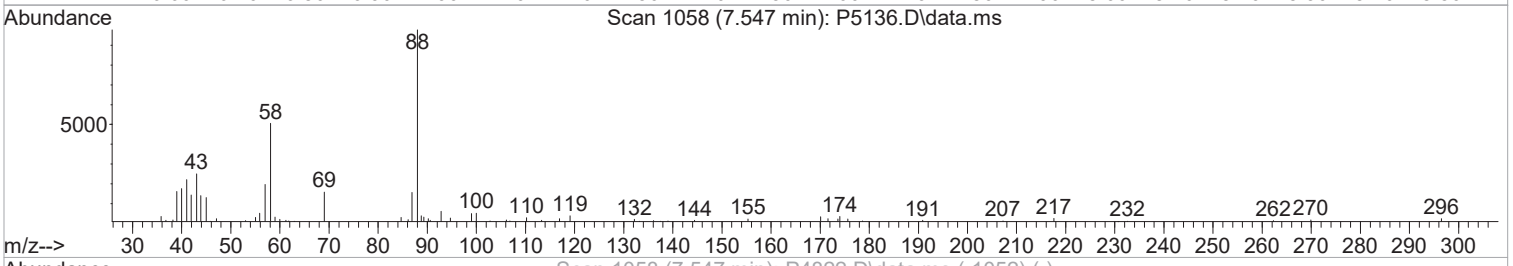
09/19/16

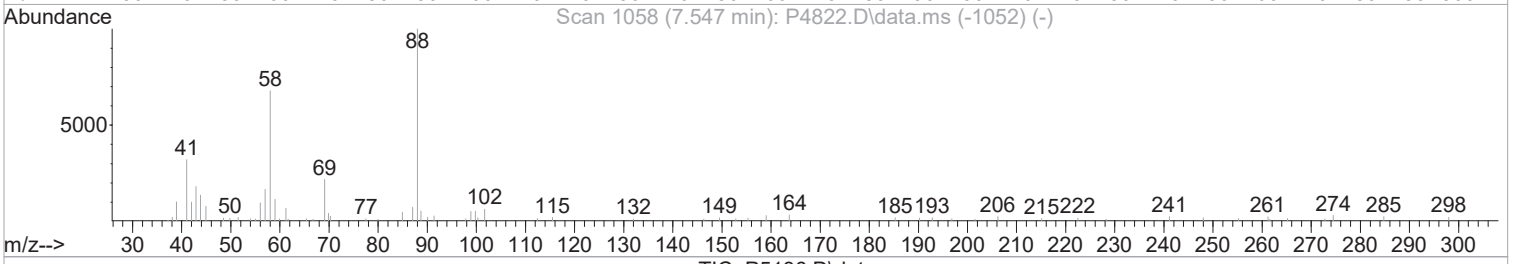
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5136.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 475.10 ppb m

response 22880

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	51.63#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

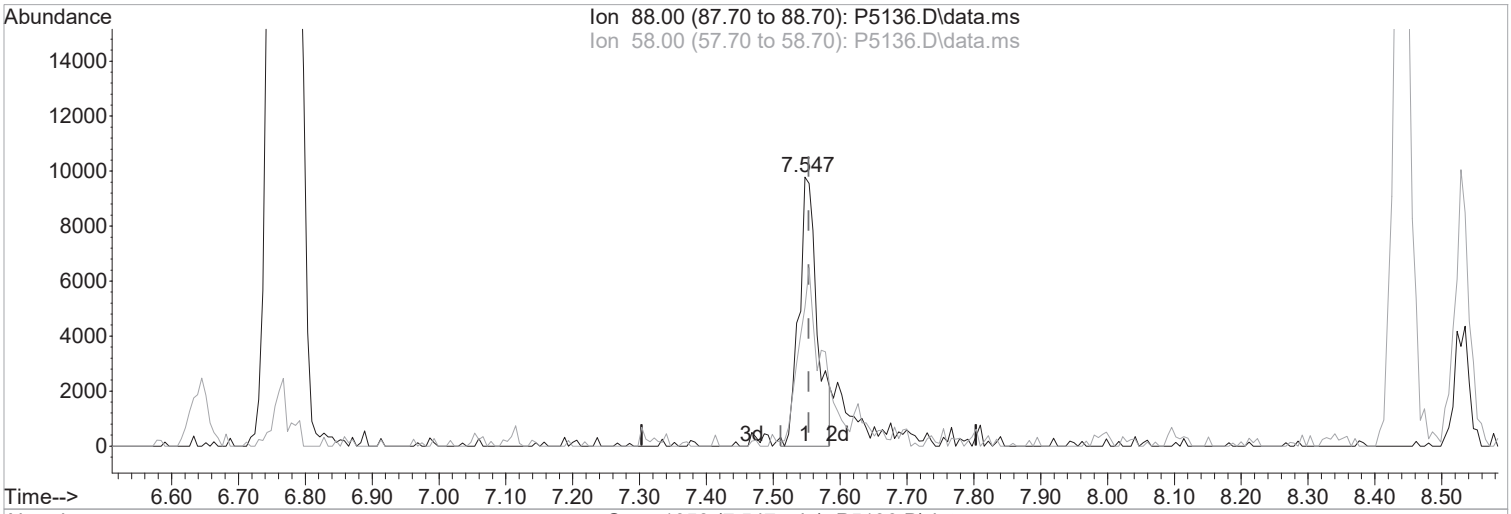
Split Peak

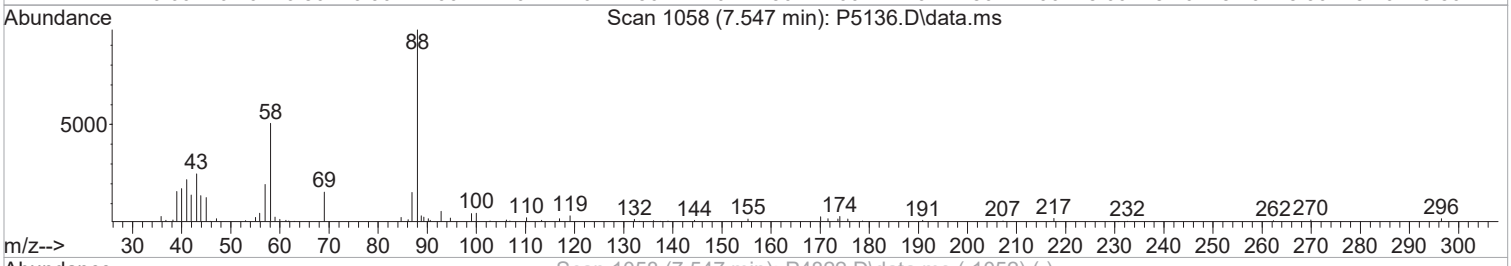
09/19/16

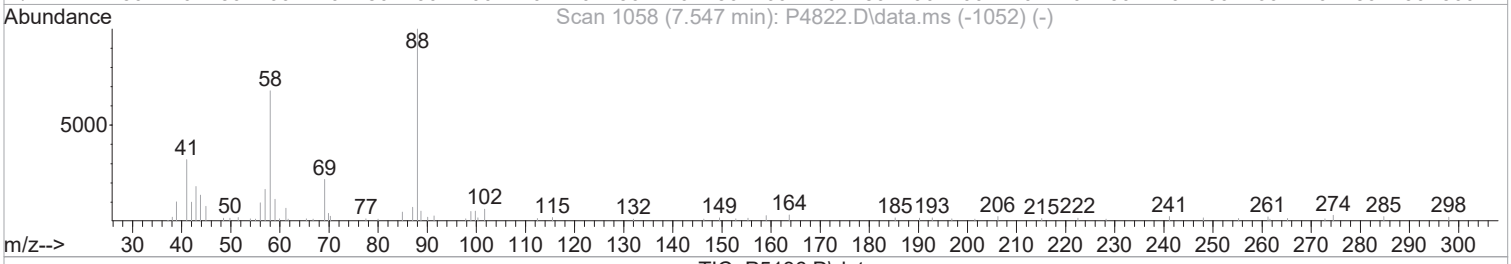
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5136.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 382.91 ppb

response 18440

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	51.63#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/16

1st KR 09/19/16
2nd DL 09/20/16

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	885159	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1467269	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1386548	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	723272	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	421616	55.51	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.02%				
48) surr1,1,2-dichloroetha...	6.096	65	462243	51.78	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.56%				
65) SURR3,Toluene-d8	8.529	98	1862355	57.15	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.30%				
70) SURR2,BFB	11.047	95	679311	53.59	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	150655	14.43	ppb		95
3) Chloromethane	1.347	50	196182	17.34	ppb		98
4) Vinyl Chloride	1.433	62	229746	18.16	ppb		97
5) Bromomethane	1.689	94	76601	14.95	ppb		97
6) Chloroethane	1.768	64	120354	17.71	ppb		100
7) Freon 21	1.927	67	310073	21.21	ppb		98
8) Trichlorofluoromethane	1.975	101	197187	18.08	ppb		99
9) Diethyl Ether	2.231	59	123624	19.06	ppb		91
10) Freon 123a	2.237	67	190495	20.58	ppb		91
11) Freon 123	2.292	83	236679	21.53	ppb		97
12) Acrolein	2.341	56	30288	35.20	ppb		78
13) 1,1-Diclethene	2.433	96	129258	19.39	ppb		88
14) Freon 113	2.439	101	128457	19.69	ppb		87
15) Acetone	2.487	43	33527	19.39	ppb		79
16) 2-Propanol	2.646	45	125188	372.98	ppb		97
17) Iodomethane	2.573	142	82098m	14.04	ppb		
18) Carbon Disulfide	2.634	76	514878	23.06	ppb		98
19) Acetonitrile	2.756	40	29658	109.01	ppb	#	66
20) Allyl Chloride	2.798	76	82658	21.90	ppb	#	80
21) Methyl Acetate	2.829	43	93105	22.25	ppb		95
22) Methylene Chloride	2.926	84	146534	19.63	ppb		95
23) TBA	3.091	59	203478	381.46	ppb		98
24) Acrylonitrile	3.213	53	212480	104.84	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	365317	18.49	ppb		97
26) trans-1,2-Dichloroethene	3.243	96	149042	19.49	ppb		94
28) 1,1-Diclethane	3.786	63	258565	19.43	ppb		92
29) Vinyl Acetate	3.896	86	27210	19.49	ppb	#	70
30) DIPE	3.944	45	577406	21.10	ppb		94
31) 2-Chloro-1,3-Butadiene	3.926	53	251587	16.98	ppb		92
32) ETBE	4.524	59	444157	18.32	ppb		96
33) 2,2-Dichloropropane	4.700	77	182250	15.97	ppb		95
34) cis-1,2-Dichloroethene	4.713	96	166146	20.62	ppb		92
35) 2-Butanone	4.780	43	55897	21.93	ppb		95
36) Propionitrile	4.865	54	81128	110.64	ppb		90
37) Bromochloromethane	5.139	130	84789	20.12	ppb		99
38) Methacrylonitrile	5.158	67	49066	20.59	ppb		91
39) Tetrahydrofuran	5.237	42	37825	22.56	ppb		80
40) Chloroform	5.328	83	238159	18.43	ppb		94
41) 1,1,1-Trichloroethane	5.597	97	189978	17.23	ppb		99

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.401	73	408127	19.31	ppb		97
44)	Cyclohexane	5.682	41	163338	19.98	ppb		82
46)	Carbontetrachloride	5.859	121	49668	17.65	ppb		94
47)	1,1-Dichloropropene	5.871	75	201252	20.08	ppb		94
49)	Benzene	6.170	78	610445	20.66	ppb		100
50)	1,2-Dichloroethane	6.212	62	168949	19.17	ppb		96
51)	Iso-Butyl Alcohol	6.194	43	104681	380.12	ppb		77
52)	n-Heptane	6.639	43	212954	23.69	ppb		94
53)	1-Butanol	7.115	56	158591	1001.42	ppb		96
54)	Trichloroethene	7.078	130	146712	20.29	ppb		94
55)	Methylcyclohexane	7.310	55	224581	23.36	ppb		94
56)	1,2-Diclpropane	7.352	63	169104	21.18	ppb		100
57)	Dibromomethane	7.492	93	79412	21.08	ppb		91
58)	1,4-Dioxane	7.547	88	22880m	475.10	ppb		
59)	Methyl Methacrylate	7.578	69	91018	20.22	ppb		93
60)	Bromodichloromethane	7.712	83	188495	19.39	ppb		99
61)	2-Nitropropane	7.986	41	52455	32.94	ppb		93
62)	2-Chloroethylvinyl Ether	8.108	63	93598	21.97	ppb		94
63)	cis-1,3-Dichloropropene	8.236	75	241319	19.44	ppb		95
64)	4-Methyl-2-pentanone	8.437	43	115519	20.60	ppb		94
66)	Toluene	8.602	91	657349	21.08	ppb		99
67)	trans-1,3-Dichloropropene	8.864	75	201123	19.46	ppb		97
68)	Ethyl Methacrylate	8.998	69	180272	19.22	ppb		89
69)	1,1,2-Trichloroethane	9.047	97	119014	20.80	ppb		98
72)	Tetrachloroethene	9.181	164	112726	21.08	ppb		93
73)	2-Hexanone	9.328	43	82767	20.62	ppb		87
74)	1,3-Dichloropropane	9.212	76	219652	21.16	ppb		96
75)	Dibromochloromethane	9.431	129	134047	19.47	ppb		96
76)	N-Butyl Acetate	9.480	43	198609	18.95	ppb		93
77)	1,2-Dibromoethane	9.529	107	115143	20.46	ppb		99
78)	Chlorobenzene	10.016	112	408625	20.09	ppb		99
79)	3-CBTF	10.029	180	226751	22.50	ppb		98
80)	4-CBTF	10.083	180	207040	23.23	ppb		97
81)	1,1,1,2-Tetrachloroethane	10.096	131	143641	20.19	ppb		92
82)	Ethylbenzene	10.132	106	233706	20.61	ppb		96
83)	(m+p)Xylene	10.242	106	553694	41.49	ppb		88
84)	o-Xylene	10.596	106	264329	19.89	ppb		88
85)	Styrene	10.608	104	466887	21.04	ppb		98
87)	Bromoform	10.760	173	78910	22.88	ppb		99
88)	2-CBTF	10.833	180	216430	22.72	ppb		95
89)	Isopropylbenzene	10.925	105	690178	21.80	ppb		99
90)	Cyclohexanone	10.986	55	230356	365.14	ppb		93
91)	trans-1,4-Dichloro-2-B...	11.230	53	37109	15.05	ppb		90
92)	1,1,2,2-Tetrachloroethane	11.181	83	154882	20.89	ppb		93
93)	Bromobenzene	11.169	156	170066	21.15	ppb		96
94)	1,2,3-Trichloropropane	11.211	110	43725	20.38	ppb	#	74
95)	n-Propylbenzene	11.278	91	865080	23.55	ppb		96
96)	2-Chlorotoluene	11.339	91	490017	20.66	ppb		99
97)	3-Chlorotoluene	11.394	91	558173	23.09	ppb		93
98)	4-Chlorotoluene	11.431	91	593302	21.46	ppb		98
99)	1,3,5-Trimethylbenzene	11.431	105	589602	21.53	ppb		97
100)	tert-Butylbenzene	11.699	119	484617	22.29	ppb		98
101)	1,2,4-Trimethylbenzene	11.736	105	608256	21.64	ppb		97
102)	3,4-DCBTF	11.797	214	172822	25.52	ppb		98
103)	sec-Butylbenzene	11.882	105	757544	24.42	ppb		96
104)	p-Isopropyltoluene	11.998	119	623214	23.28	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	337751	22.14	ppb	97
106) 1,4-Dclbenz	12.034	146	340318	21.44	ppb	100
107) 2,4-DCBTF	12.089	214	160916	25.05	ppb	97
108) 2,5-DCBTF	12.126	214	175948	25.82	ppb	97
109) n-Butylbenzene	12.333	91	624774	25.81	ppb	99
110) 1,2-Dclbenz	12.333	146	324299	22.46	ppb	94
111) 1,2-Dibromo-3-chloropr...	12.955	157	27646	20.30	ppb	96
112) Trielution Dichlorotol...	13.071	125	918580	76.47	ppb	97
113) 1,3,5 Trichlorobenzene	13.126	180	262378	27.25	ppb	97
114) Coelution Dichlorotoluene	13.400	125	664664	52.20	ppb	99
115) 1,2,4-Tcbenzene	13.607	180	238128	27.79	ppb	94
116) Hexachlorobt	13.747	225	94309	26.76	ppb	90
117) Naphthalen	13.796	128	478257	26.05	ppb	97
118) 1,2,3-Tclbenzene	13.985	180	207682	28.61	ppb	94
119) 2,4,5-Trichlorotolene	14.570	159	167241	32.33	ppb	99
120) 2,3,6-Trichlorotoluene	14.656	159	146604	30.47	ppb	90

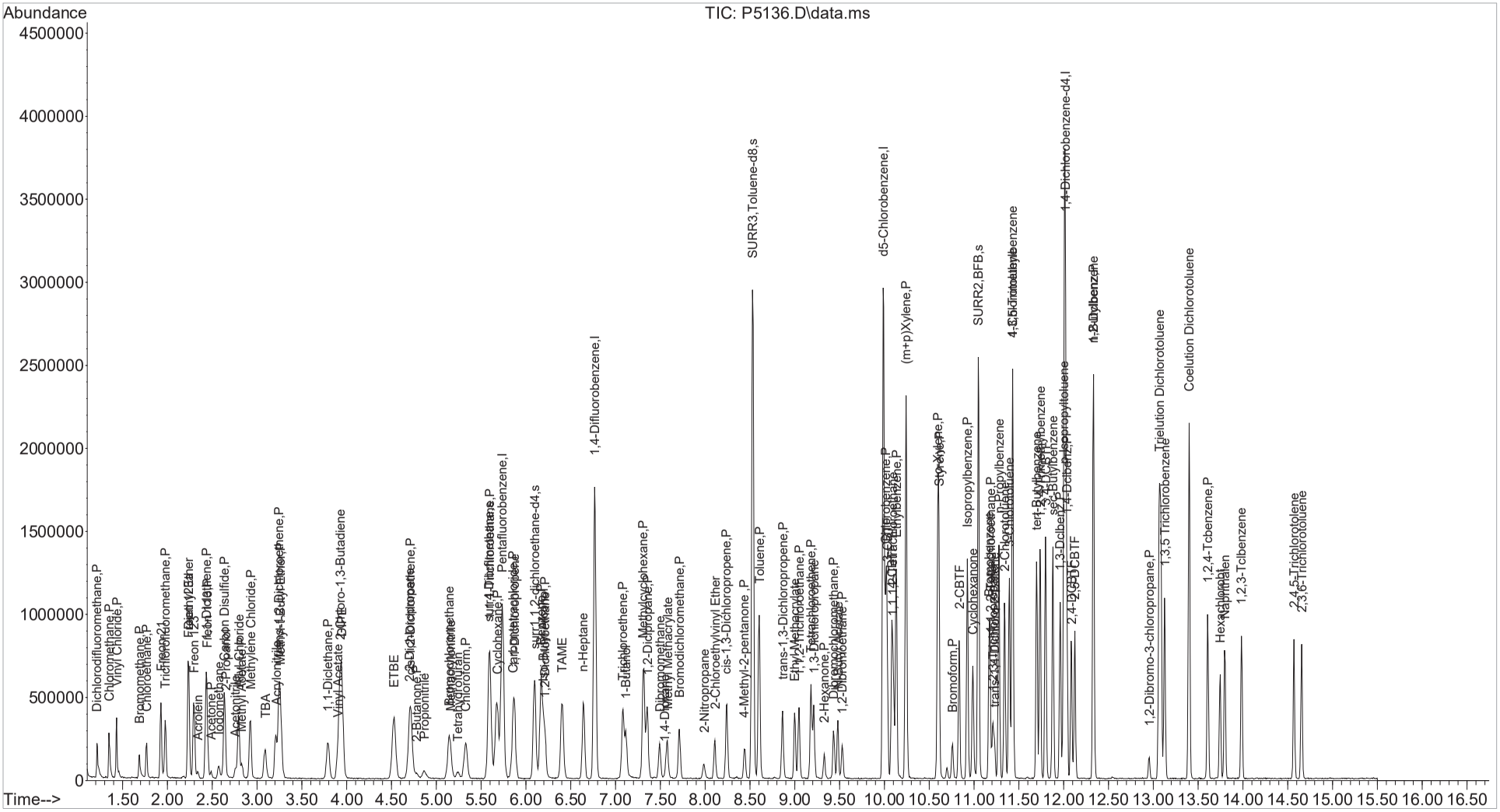
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

1st 09/19/16
2nd 09/20/16



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Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	843034	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1399587	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1313472	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	692951	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.597	113	412340	56.91	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 113.82%				
48) surr1,1,2-dichloroetha...	6.097	65	436287	51.23	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.46%				
65) SURR3,Toluene-d8	8.529	98	1784047	57.39	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.78%				
70) SURR2,BFB	11.047	95	654057	54.09	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	212826	21.40	ppb		98
3) Chloromethane	1.347	50	214647	19.92	ppb		98
4) Vinyl Chloride	1.433	62	266328	22.11	ppb		95
5) Bromomethane	1.689	94	73912	15.15	ppb		96
6) Chloroethane	1.768	64	125425	19.38	ppb		92
7) Freon 21	1.927	67	271891	19.53	ppb		96
8) Trichlorofluoromethane	1.975	101	207441	19.98	ppb		98
9) Diethyl Ether	2.231	59	131270	21.25	ppb		95
10) Freon 123a	2.237	67	173252	19.65	ppb		89
11) Freon 123	2.298	83	206052	19.68	ppb		96
12) Acrolein	2.341	56	24496	29.89	ppb		89
13) 1,1-Diclethene	2.433	96	137682	21.68	ppb		97
14) Freon 113	2.439	101	135605	21.82	ppb		96
15) Acetone	2.487	43	36039	21.89	ppb		93
16) 2-Propanol	2.646	45	123848	387.43	ppb		97
17) Iodomethane	2.573	142	61215	11.29	ppb		92
18) Carbon Disulfide	2.634	76	421718	19.83	ppb		100
19) Acetonitrile	2.762	40	37392	145.22	ppb	#	86
20) Allyl Chloride	2.798	76	87073	24.22	ppb	#	83
21) Methyl Acetate	2.829	43	84426	21.18	ppb		96
22) Methylene Chloride	2.926	84	157673	22.18	ppb		97
23) TBA	3.085	59	193238	380.36	ppb		89
24) Acrylonitrile	3.207	53	228046	118.14	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	376124	19.99	ppb		99
26) trans-1,2-Dichloroethene	3.243	96	160504	22.04	ppb		92
28) 1,1-Diclethane	3.792	63	278015	21.94	ppb		98
29) Vinyl Acetate	3.896	86	24541	18.46	ppb	#	81
30) DIPE	3.945	45	527104	20.23	ppb		96
31) 2-Chloro-1,3-Butadiene	3.926	53	206985	14.67	ppb		96
32) ETBE	4.530	59	408592	17.70	ppb		95
33) 2,2-Dichloropropane	4.700	77	185893	17.10	ppb		98
34) cis-1,2-Dichloroethene	4.713	96	173006	22.55	ppb		93
35) 2-Butanone	4.780	43	51754	21.32	ppb		89
36) Propionitrile	4.865	54	78020	111.72	ppb		91
37) Bromochloromethane	5.145	130	87494	21.80	ppb		98
38) Methacrylonitrile	5.158	67	49810	21.95	ppb		98
39) Tetrahydrofuran	5.237	42	35802	22.42	ppb		82
40) Chloroform	5.334	83	244516	19.87	ppb		95
41) 1,1,1-Trichloroethane	5.597	97	201882	19.23	ppb		98

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.407	73	366840	18.22	ppb		94
44) Cyclohexane	5.676	41	147300	18.89	ppb		91
46) Carbontetrachloride	5.865	121	52440	19.53	ppb		85
47) 1,1-Dichloropropene	5.871	75	210526	22.02	ppb		93
49) Benzene	6.176	78	634590	22.52	ppb		96
50) 1,2-Dichloroethane	6.212	62	170975	20.33	ppb		97
51) Iso-Butyl Alcohol	6.206	43	107209	408.12	ppb		83
52) n-Heptane	6.645	43	226745	26.45	ppb		96
53) 1-Butanol	7.115	56	153119	1013.62	ppb		98
54) Trichloroethene	7.084	130	156368	22.67	ppb		92
55) Methylcyclohexane	7.310	55	200114	21.82	ppb		93
56) 1,2-Diclpropane	7.352	63	169281	22.22	ppb		97
57) Dibromomethane	7.486	93	78756	21.92	ppb		91
58) 1,4-Dioxane	7.554	88	25143	547.34	ppb		99
59) Methyl Methacrylate	7.578	69	95135	22.16	ppb		86
60) Bromodichloromethane	7.712	83	192364	20.74	ppb		100
61) 2-Nitropropane	7.986	41	50441	33.21	ppb		100
62) 2-Chloroethylvinyl Ether	8.108	63	73536	18.10	ppb		98
63) cis-1,3-Dichloropropene	8.242	75	253782	21.44	ppb		99
64) 4-Methyl-2-pentanone	8.438	43	106905	19.98	ppb		95
66) Toluene	8.602	91	682388	22.94	ppb		99
67) trans-1,3-Dichloropropene	8.864	75	199374	20.22	ppb		98
68) Ethyl Methacrylate	8.998	69	185008	20.68	ppb		99
69) 1,1,2-Trichloroethane	9.047	97	116138	21.28	ppb		98
72) Tetrachloroethene	9.181	164	120351	23.76	ppb		85
73) 2-Hexanone	9.334	43	81561	21.45	ppb		96
74) 1,3-Dichloropropane	9.212	76	225712	22.95	ppb		98
75) Dibromochloromethane	9.431	129	128027	19.63	ppb		95
76) N-Butyl Acetate	9.480	43	191040	19.24	ppb		96
77) 1,2-Dibromoethane	9.529	107	116803	21.91	ppb		94
78) Chlorobenzene	10.016	112	414249	21.50	ppb		98
79) 3-CBTF	10.029	180	200544	21.01	ppb		91
80) 4-CBTF	10.084	180	174506	20.67	ppb		96
81) 1,1,1,2-Tetrachloroethane	10.102	131	137210	20.36	ppb		94
82) Ethylbenzene	10.132	106	233868	21.77	ppb	#	87
83) (m+p)Xylene	10.242	106	577345	45.67	ppb		90
84) o-Xylene	10.596	106	283123	22.49	ppb		89
85) Styrene	10.608	104	498953	23.74	ppb		97
87) Bromoform	10.760	173	81687	24.73	ppb		96
88) 2-CBTF	10.833	180	187913	20.59	ppb		97
89) Isopropylbenzene	10.925	105	724203	23.87	ppb		96
90) Cyclohexanone	10.986	55	348565	576.70	ppb		93
91) trans-1,4-Dichloro-2-B...	11.230	53	34371	14.55	ppb		95
92) 1,1,2,2-Tetrachloroethane	11.181	83	150769	21.23	ppb		96
93) Bromobenzene	11.175	156	173949	22.58	ppb	#	89
94) 1,2,3-Trichloropropane	11.211	110	42516	20.68	ppb	#	83
95) n-Propylbenzene	11.278	91	910143	25.86	ppb		95
96) 2-Chlorotoluene	11.339	91	507224	22.33	ppb		100
97) 3-Chlorotoluene	11.394	91	498697	21.53	ppb		96
98) 4-Chlorotoluene	11.431	91	610742	23.06	ppb		98
99) 1,3,5-Trimethylbenzene	11.431	105	615359	23.45	ppb		97
100) tert-Butylbenzene	11.699	119	500459	24.02	ppb		97
101) 1,2,4-Trimethylbenzene	11.742	105	618366	22.96	ppb		99
102) 3,4-DCBTF	11.797	214	150250	23.15	ppb		96
103) sec-Butylbenzene	11.882	105	773616	26.03	ppb		96
104) p-Isopropyltoluene	12.004	119	638481	24.89	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	348012	23.81	ppb	95
106) 1,4-Dclbenz	12.034	146	346685	22.80	ppb	98
107) 2,4-DCBTF	12.089	214	138546	22.51	ppb	97
108) 2,5-DCBTF	12.126	214	152161	23.31	ppb	100
109) n-Butylbenzene	12.333	91	624311	26.92	ppb	99
110) 1,2-Dclbenz	12.339	146	328302	23.73	ppb	91
111) 1,2-Dibromo-3-chloropr...	12.955	157	26756	20.51	ppb	94
112) Trielution Dichlorotol...	13.071	125	806822	70.10	ppb	97
113) 1,3,5 Trichlorobenzene	13.126	180	220757	23.93	ppb	99
114) Coelution Dichlorotoluene	13.400	125	576912	47.29	ppb	98
115) 1,2,4-Tcbenzene	13.607	180	233417	28.43	ppb	98
116) Hexachlorobt	13.747	225	86198	25.53	ppb	88
117) Naphthalen	13.796	128	466245	26.50	ppb	99
118) 1,2,3-Tclbenzene	13.985	180	197235	28.36	ppb	98
119) 2,4,5-Trichlorotolene	14.570	159	137516	27.74	ppb	96
120) 2,3,6-Trichlorotoluene	14.656	159	124421	26.99	ppb	98

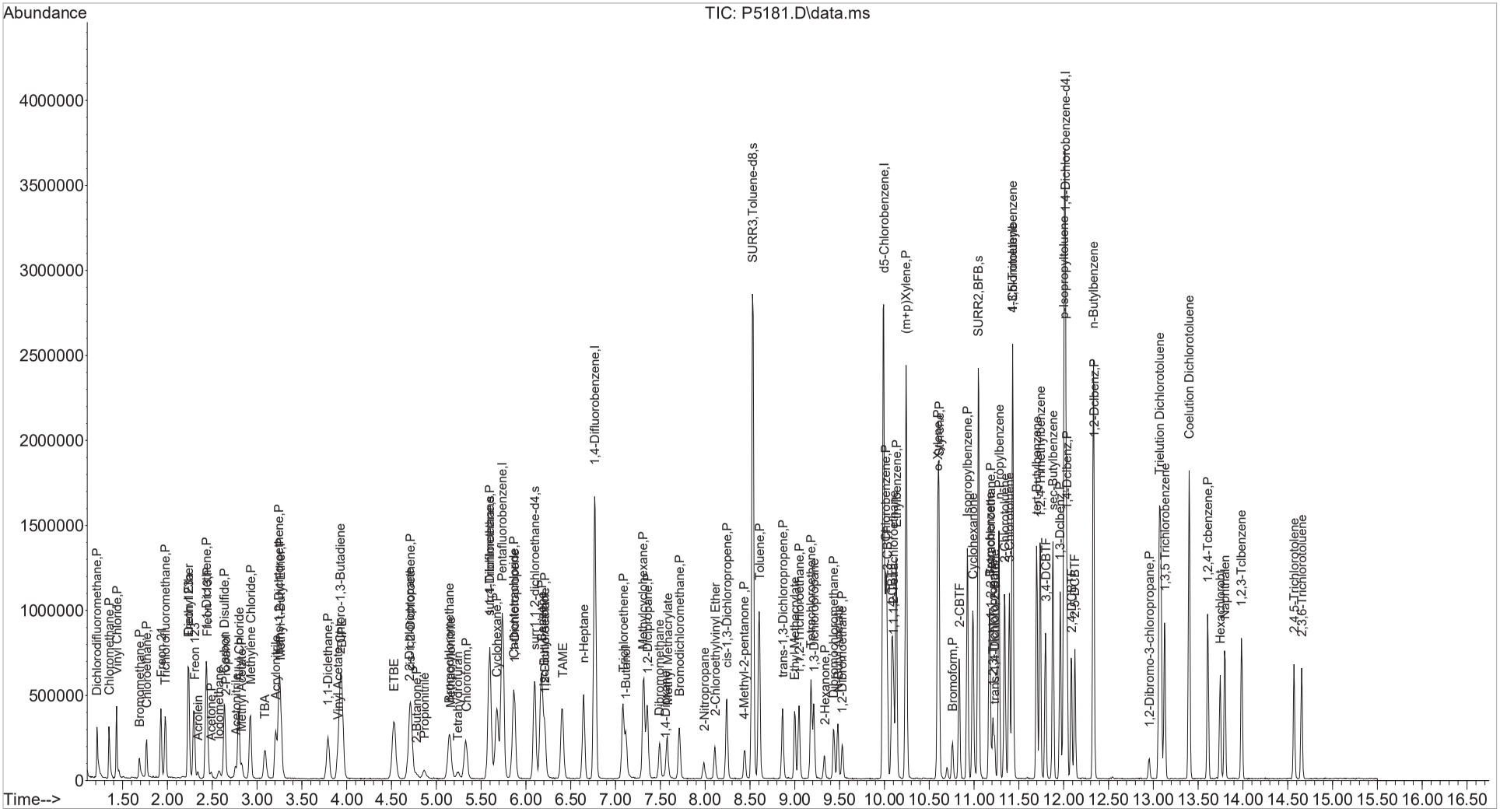
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/20/16 2nd 09/22/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5200.D
Acq On : 20 Sep 2016 9:03 pm
Operator : K.Ruest
Sample : R1609820-009MS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 21 09:16:51 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	837304	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1386673	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1316607	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	700081	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.597	113	406179	56.58	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 113.16%				
48) surr1,1,2-dichloroetha...	6.097	65	426325	50.53	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 101.06%				
65) SURR3,Toluene-d8	8.529	98	1776564	57.68	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.36%				
70) SURR2,BFB	11.047	95	666742	55.66	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 111.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	537668	54.43	ppb		97
3) Chloromethane	1.347	50	541203	50.56	ppb		100
4) Vinyl Chloride	1.433	62	674447	56.36	ppb		97
5) Bromomethane	1.683	94	121874	25.15	ppb		95
6) Chloroethane	1.762	64	325284	50.61	ppb		98
7) Freon 21	1.927	67	717687	51.90	ppb		96
8) Trichlorofluoromethane	1.975	101	526380	51.04	ppb		96
9) Diethyl Ether	2.231	59	313929	51.17	ppb		98
10) Freon 123a	2.238	67	463694	52.96	ppb		90
11) Freon 123	2.292	83	539713	51.90	ppb		98
12) Acrolein	2.335	56	52441	64.43	ppb		86
13) 1,1-Diclethene	2.433	96	357292	56.65	ppb		90
14) Freon 113	2.439	101	348756	56.50	ppb		97
15) Acetone	2.487	43	67715	41.41	ppb		95
16) 2-Propanol	2.640	45	259576	817.58	ppb		99
17) Iodomethane	2.573	142	168084	28.37	ppb		92
18) Carbon Disulfide	2.634	76	713175	33.77	ppb		99
19) Acetonitrile	2.750	40	71957	284.00	ppb	#	85
20) Allyl Chloride	2.792	76	131829	36.93	ppb	#	83
21) Methyl Acetate	2.829	43	198722	50.20	ppb		93
22) Methylene Chloride	2.920	84	388405	55.01	ppb		96
23) TBA	3.091	59	424235	840.77	ppb		90
24) Acrylonitrile	3.207	53	501258	261.45	ppb		95
25) Methyl-t-Butyl Ether	3.262	73	863331	46.19	ppb		99
26) trans-1,2-Dichloroethene	3.243	96	386161	53.39	ppb		100
28) 1,1-Diclethane	3.792	63	688839	54.73	ppb		98
29) Vinyl Acetate	3.908	86	55781	42.24	ppb	#	76
30) DIPE	3.945	45	1412791	54.58	ppb		93
31) 2-Chloro-1,3-Butadiene	3.926	53	547787	39.08	ppb		98
32) ETBE	4.524	59	1054685	46.00	ppb		98
33) 2,2-Dichloropropane	4.700	77	458412	42.46	ppb		96
34) cis-1,2-Dichloroethene	4.719	96	431042	56.56	ppb		85
35) 2-Butanone	4.774	43	114733	47.58	ppb		97
36) Propionitrile	4.865	54	186576	268.99	ppb		89
37) Bromochloromethane	5.146	130	210297	52.75	ppb		95
38) Methacrylonitrile	5.158	67	113890	50.52	ppb		90
39) Tetrahydrofuran	5.231	42	80723	50.89	ppb		75
40) Chloroform	5.328	83	613653	50.20	ppb		98
41) 1,1,1-Trichloroethane	5.597	97	508079	48.72	ppb		96

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5200.D
Acq On : 20 Sep 2016 9:03 pm
Operator : K.Ruest
Sample : R1609820-009MS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 21 09:16:51 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.401	73	947296	47.38	ppb	98
44) Cyclohexane	5.676	41	388363	50.26	ppb	100
46) Carbontetrachloride	5.859	121	123842	46.56	ppb	100
47) 1,1-Dichloropropene	5.871	75	536934	56.69	ppb	96
49) Benzene	6.170	78	1588435	56.90	ppb	99
50) 1,2-Dichloroethane	6.206	62	415140	49.83	ppb	99
51) Iso-Butyl Alcohol	6.200	43	222531	855.02	ppb	94
52) n-Heptane	6.639	43	515651	60.71	ppb	99
53) 1-Butanol	7.115	56	349567	2335.63	ppb	100
54) Trichloroethene	7.084	130	382623	55.98	ppb	95
55) Methylcyclohexane	7.316	55	514927	56.68	ppb	97
56) 1,2-Diclpropane	7.352	63	426567	56.52	ppb	100
57) Dibromomethane	7.493	93	185962	52.23	ppb	94
58) 1,4-Dioxane	7.547	88	49777	1093.70	ppb	85
59) Methyl Methacrylate	7.578	69	217262	51.08	ppb	86
60) Bromodichloromethane	7.712	83	437244	47.59	ppb	97
61) 2-Nitropropane	7.986	41	114101	75.83	ppb	87
63) cis-1,3-Dichloropropene	8.242	75	505239	43.07	ppb	98
64) 4-Methyl-2-pentanone	8.438	43	271686	51.26	ppb	95
66) Toluene	8.602	91	1710030	58.03	ppb	99
67) trans-1,3-Dichloropropene	8.864	75	402196	41.18	ppb	99
68) Ethyl Methacrylate	8.998	69	445641	50.28	ppb	90
69) 1,1,2-Trichloroethane	9.047	97	284654	52.64	ppb	91
72) Tetrachloroethene	9.181	164	294604	58.03	ppb	89
73) 2-Hexanone	9.328	43	178369	46.80	ppb	93
74) 1,3-Dichloropropane	9.212	76	533920	54.17	ppb	97
75) Dibromochloromethane	9.431	129	269727	41.26	ppb	94
76) N-Butyl Acetate	9.480	43	432871	43.49	ppb	98
77) 1,2-Dibromoethane	9.529	107	279660	52.34	ppb	99
78) Chlorobenzene	10.017	112	1024293	53.05	ppb	96
79) 3-CBTF	10.029	180	543841	56.83	ppb	97
80) 4-CBTF	10.084	180	493681	58.33	ppb	99
81) 1,1,1,2-Tetrachloroethane	10.102	131	347690	51.47	ppb	96
82) Ethylbenzene	10.132	106	608761	56.52	ppb	99
83) (m+p)Xylene	10.242	106	1453047	114.67	ppb	99
84) o-Xylene	10.596	106	724613	57.43	ppb	96
85) Styrene	10.608	104	1087738	51.63	ppb	98
87) Bromoform	10.760	173	147979	44.34	ppb	99
88) 2-CBTF	10.833	180	527034	57.17	ppb	94
89) Isopropylbenzene	10.925	105	1798729	58.69	ppb	99
90) Cyclohexanone	10.986	55	177515	290.71	ppb	91
91) trans-1,4-Dichloro-2-B...	11.230	53	36388	15.25	ppb	92
92) 1,1,2,2-Tetrachloroethane	11.181	83	361158	50.34	ppb	97
93) Bromobenzene	11.169	156	430041	55.25	ppb	97
94) 1,2,3-Trichloropropane	11.211	110	91352	43.99	ppb	93
95) n-Propylbenzene	11.278	91	2183418	61.40	ppb	96
96) 2-Chlorotoluene	11.339	91	1268862	55.28	ppb	98
97) 3-Chlorotoluene	11.394	91	1339989	57.27	ppb	97
98) 4-Chlorotoluene	11.431	91	1482954	55.42	ppb	98
99) 1,3,5-Trimethylbenzene	11.431	105	1482982	55.93	ppb	99
100) tert-Butylbenzene	11.699	119	1235784	58.71	ppb	98
101) 1,2,4-Trimethylbenzene	11.736	105	1409517	51.80	ppb	100
102) 3,4-DCBTF	11.797	214	404203	61.65	ppb	98
103) sec-Butylbenzene	11.882	105	1882748	62.71	ppb	98
104) p-Isopropyltoluene	12.004	119	1540204	59.43	ppb	98
105) 1,3-Dclbenz	11.961	146	858138	58.11	ppb	97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5200.D
Acq On : 20 Sep 2016 9:03 pm
Operator : K.Ruest
Sample : R1609820-009MS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 21 09:16:51 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	12.034	146	859389	55.95	ppb	97
107) 2,4-DCBTF	12.089	214	383207	61.63	ppb	96
108) 2,5-DCBTF	12.126	214	424028	64.29	ppb	95
109) n-Butylbenzene	12.333	91	1525014	65.10	ppb	99
110) 1,2-Dclbenz	12.333	146	795410	56.91	ppb	96
111) 1,2-Dibromo-3-chloropr...	12.955	157	62685	47.56	ppb	89
112) Trielution Dichlorotol...	13.071	125	2188194	188.19	ppb	97
113) 1,3,5 Trichlorobenzene	13.126	180	609554	65.42	ppb	99
114) Coelution Dichlorotoluene	13.400	125	1537393	124.74	ppb	99
115) 1,2,4-Tcbenzene	13.607	180	540818	65.21	ppb	95
116) Hexachlorobt	13.747	225	209794	61.51	ppb	97
117) Naphthalen	13.796	128	1067882	60.09	ppb	98
118) 1,2,3-Tclbenzene	13.985	180	454035	64.61	ppb	98
119) 2,4,5-Trichlorotolene	14.570	159	326915	65.28	ppb	99
120) 2,3,6-Trichlorotoluene	14.656	159	291490	62.59	ppb	93

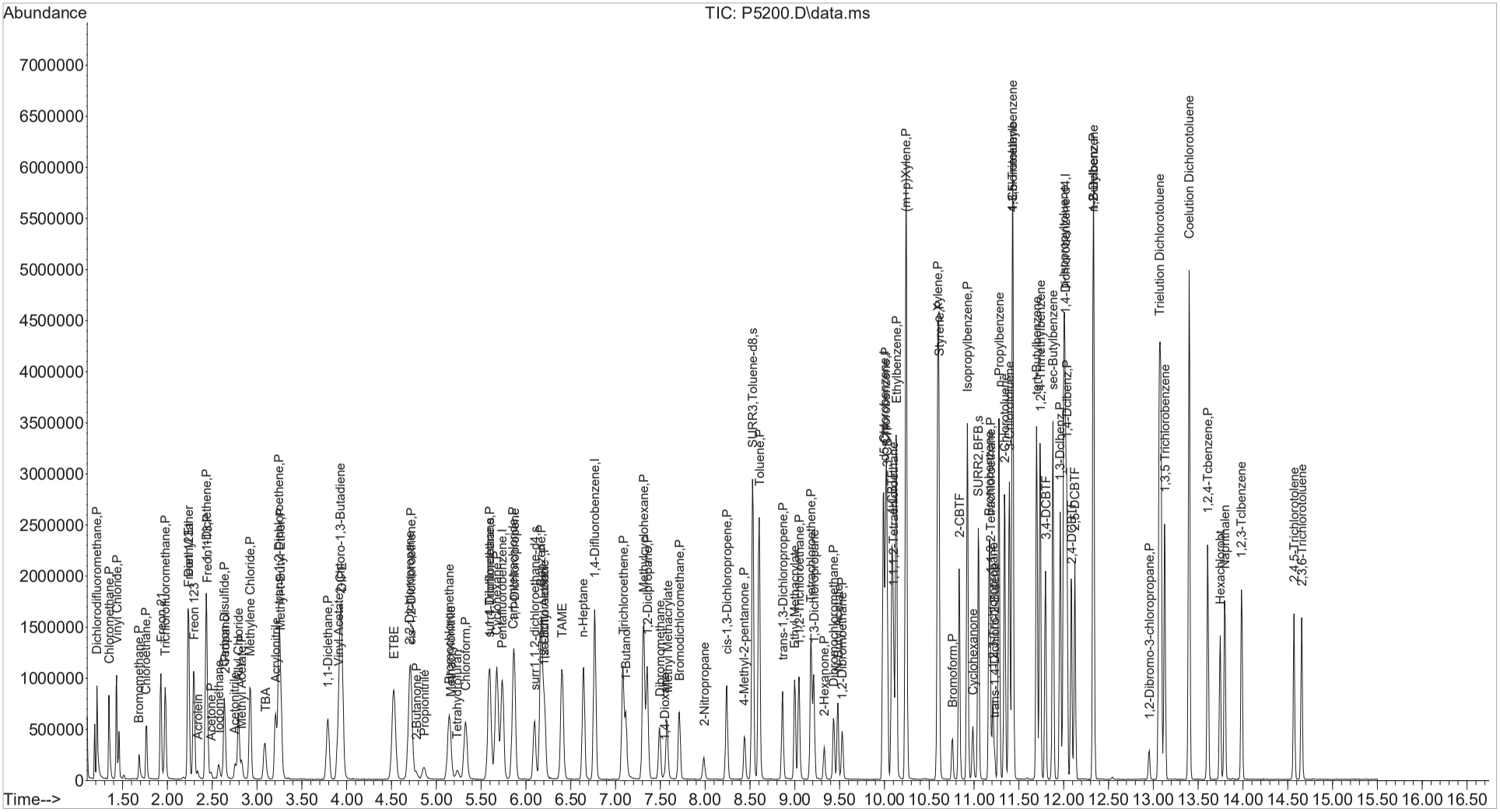
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/21/16 2nd 09/22/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5200.D
Acq On : 20 Sep 2016 9:03 pm
Operator : K.Ruest
Sample : R1609820-009MS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 21 09:16:51 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5201.D
Acq On : 20 Sep 2016 9:34 pm
Operator : K.Ruest
Sample : R1609820-009DMS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 21 09:17:18 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	835740	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1408668	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1326033	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	698583	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.591	113	409786	56.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.40%				
48) surr1,1,2-dichloroetha...	6.097	65	415071	48.43	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 96.86%				
65) SURR3,Toluene-d8	8.529	98	1806781	57.75	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.50%				
70) SURR2,BFB	11.047	95	669185	54.99	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 109.98%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	524504	53.20	ppb		99
3) Chloromethane	1.347	50	533714	49.95	ppb		97
4) Vinyl Chloride	1.433	62	664709	55.65	ppb		100
5) Bromomethane	1.683	94	167114	34.55	ppb		100
6) Chloroethane	1.762	64	325263	50.70	ppb		97
7) Freon 21	1.927	67	711116	51.52	ppb		99
8) Trichlorofluoromethane	1.975	101	535557	52.02	ppb		97
9) Diethyl Ether	2.231	59	302904	49.46	ppb		95
10) Freon 123a	2.238	67	462583	52.93	ppb		94
11) Freon 123	2.292	83	550774	53.06	ppb		97
12) Acrolein	2.335	56	53568	65.94	ppb		88
13) 1,1-Diclethene	2.426	96	357003	56.71	ppb		99
14) Freon 113	2.439	101	349085	56.66	ppb		97
15) Acetone	2.487	43	65294	40.00	ppb		94
16) 2-Propanol	2.640	45	261019	823.66	ppb		98
17) Iodomethane	2.573	142	262228	42.70	ppb		98
18) Carbon Disulfide	2.634	76	736997	34.96	ppb		100
19) Acetonitrile	2.756	40	79731	315.58	ppb		89
20) Allyl Chloride	2.792	76	139387	39.12	ppb		92
21) Methyl Acetate	2.829	43	187651	47.49	ppb		94
22) Methylene Chloride	2.920	84	387673	55.01	ppb		94
23) TBA	3.085	59	402259	798.71	ppb		88
24) Acrylonitrile	3.207	53	487112	254.55	ppb		94
25) Methyl-t-Butyl Ether	3.262	73	856369	45.90	ppb		98
26) trans-1,2-Dichloroethene	3.243	96	401978	55.68	ppb		94
28) 1,1-Diclethane	3.792	63	683610	54.41	ppb		97
29) Vinyl Acetate	3.902	86	55913	42.42	ppb	#	83
30) DIPE	3.945	45	1422279	55.05	ppb		94
31) 2-Chloro-1,3-Butadiene	3.926	53	525201	37.54	ppb		97
32) ETBE	4.518	59	1080715	47.22	ppb		97
33) 2,2-Dichloropropane	4.707	77	463138	42.97	ppb		98
34) cis-1,2-Dichloroethene	4.713	96	437047	57.45	ppb		94
35) 2-Butanone	4.780	43	107554	44.68	ppb		90
36) Propionitrile	4.865	54	180016	260.02	ppb		97
37) Bromochloromethane	5.145	130	201174	50.55	ppb		97
38) Methacrylonitrile	5.152	67	108550	48.25	ppb		90
39) Tetrahydrofuran	5.237	42	72925	46.06	ppb		90
40) Chloroform	5.328	83	614758	50.38	ppb		96
41) 1,1,1-Trichloroethane	5.591	97	525457	50.48	ppb		96

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5201.D
Acq On : 20 Sep 2016 9:34 pm
Operator : K.Ruest
Sample : R1609820-009DMS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 21 09:17:18 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) TAME	6.401	73	939677	47.08	ppb	92
44) Cyclohexane	5.676	41	380953	48.53	ppb	96
46) Carbontetrachloride	5.859	121	122790	45.44	ppb	93
47) 1,1-Dichloropropene	5.865	75	530113	55.10	ppb	96
49) Benzene	6.170	78	1616349	56.99	ppb	99
50) 1,2-Dichloroethane	6.206	62	412880	48.79	ppb	96
51) Iso-Butyl Alcohol	6.194	43	220392	833.57	ppb	95
52) n-Heptane	6.639	43	509805	59.08	ppb	97
53) 1-Butanol	7.115	56	325189	2138.82	ppb	94
54) Trichloroethene	7.078	130	392041	56.47	ppb	93
55) Methylcyclohexane	7.310	55	528528	57.27	ppb	97
56) 1,2-Diclpropane	7.352	63	438038	57.13	ppb	99
57) Dibromomethane	7.487	93	196388	54.30	ppb	90
58) 1,4-Dioxane	7.547	88	50330	1088.58	ppb	87
59) Methyl Methacrylate	7.572	69	213005	49.30	ppb	89
60) Bromodichloromethane	7.712	83	443377	47.50	ppb	99
61) 2-Nitropropane	7.986	41	116891	76.47	ppb	99
63) cis-1,3-Dichloropropene	8.236	75	527237	44.25	ppb	98
64) 4-Methyl-2-pentanone	8.438	43	267560	49.69	ppb	95
66) Toluene	8.602	91	1734690	57.94	ppb	98
67) trans-1,3-Dichloropropene	8.864	75	416779	42.00	ppb	99
68) Ethyl Methacrylate	8.998	69	437369	48.57	ppb	91
69) 1,1,2-Trichloroethane	9.047	97	281152	51.18	ppb	96
72) Tetrachloroethene	9.181	164	298855	58.45	ppb	92
73) 2-Hexanone	9.328	43	171977	44.80	ppb	95
74) 1,3-Dichloropropane	9.212	76	528471	53.24	ppb	98
75) Dibromochloromethane	9.431	129	273271	41.51	ppb	94
76) N-Butyl Acetate	9.480	43	429401	42.83	ppb	99
77) 1,2-Dibromoethane	9.529	107	270772	50.31	ppb	98
78) Chlorobenzene	10.016	112	1035965	53.27	ppb	99
79) 3-CBTF	10.029	180	541238	56.16	ppb	99
80) 4-CBTF	10.084	180	483344	56.70	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.102	131	347267	51.04	ppb	97
82) Ethylbenzene	10.132	106	594337	54.79	ppb	95
83) (m+p)Xylene	10.242	106	1436847	112.59	ppb	96
84) o-Xylene	10.596	106	701232	55.18	ppb	97
85) Styrene	10.608	104	979944	46.18	ppb	98
87) Bromoform	10.760	173	151524	45.49	ppb	93
88) 2-CBTF	10.833	180	528815	57.48	ppb	98
89) Isopropylbenzene	10.925	105	1788405	58.48	ppb	99
90) Cyclohexanone	10.986	55	169071	277.47	ppb	90
91) trans-1,4-Dichloro-2-B...	11.230	53	40408	16.97	ppb	92
92) 1,1,2,2-Tetrachloroethane	11.181	83	355288	49.62	ppb	98
93) Bromobenzene	11.169	156	431427	55.55	ppb	97
94) 1,2,3-Trichloropropane	11.211	110	91937	44.36	ppb	96
95) n-Propylbenzene	11.278	91	2212631	62.36	ppb	97
96) 2-Chlorotoluene	11.339	91	1280408	55.90	ppb	98
97) 3-Chlorotoluene	11.394	91	1351059	57.87	ppb	99
98) 4-Chlorotoluene	11.431	91	1489353	55.78	ppb	98
99) 1,3,5-Trimethylbenzene	11.431	105	1470486	55.58	ppb	97
100) tert-Butylbenzene	11.699	119	1259461	59.96	ppb	98
101) 1,2,4-Trimethylbenzene	11.736	105	1350317	49.73	ppb	98
102) 3,4-DCBTF	11.797	214	415071	63.45	ppb	100
103) sec-Butylbenzene	11.882	105	1888526	63.04	ppb	99
104) p-Isopropyltoluene	12.004	119	1560209	60.33	ppb	99
105) 1,3-Dclbenz	11.961	146	835182	56.68	ppb	97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5201.D
Acq On : 20 Sep 2016 9:34 pm
Operator : K.Ruest
Sample : R1609820-009DMS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 21 09:17:18 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,4-Dclbenz	12.034	146	842790	54.98	ppb	98
107) 2,4-DCBTF	12.089	214	391575	63.11	ppb	98
108) 2,5-DCBTF	12.126	214	414433	62.97	ppb	97
109) n-Butylbenzene	12.333	91	1519320	64.99	ppb	99
110) 1,2-Dclbenz	12.333	146	787319	56.45	ppb	95
111) 1,2-Dibromo-3-chloropr...	12.955	157	58387	44.40	ppb	97
112) Trielution Dichlorotol...	13.077	125	2212429	190.68	ppb	95
113) 1,3,5 Trichlorobenzene	13.132	180	604146	64.97	ppb	97
114) Coelution Dichlorotoluene	13.400	125	1534727	124.79	ppb	99
115) 1,2,4-Tcbenzene	13.607	180	538220	65.03	ppb	98
116) Hexachlorobt	13.747	225	214663	63.07	ppb	95
117) Naphthalen	13.796	128	1047407	59.06	ppb	100
118) 1,2,3-Tclbenzene	13.985	180	456757	65.14	ppb	95
119) 2,4,5-Trichlorotolene	14.570	159	343464	68.74	ppb	99
120) 2,3,6-Trichlorotoluene	14.656	159	318736	68.58	ppb	96

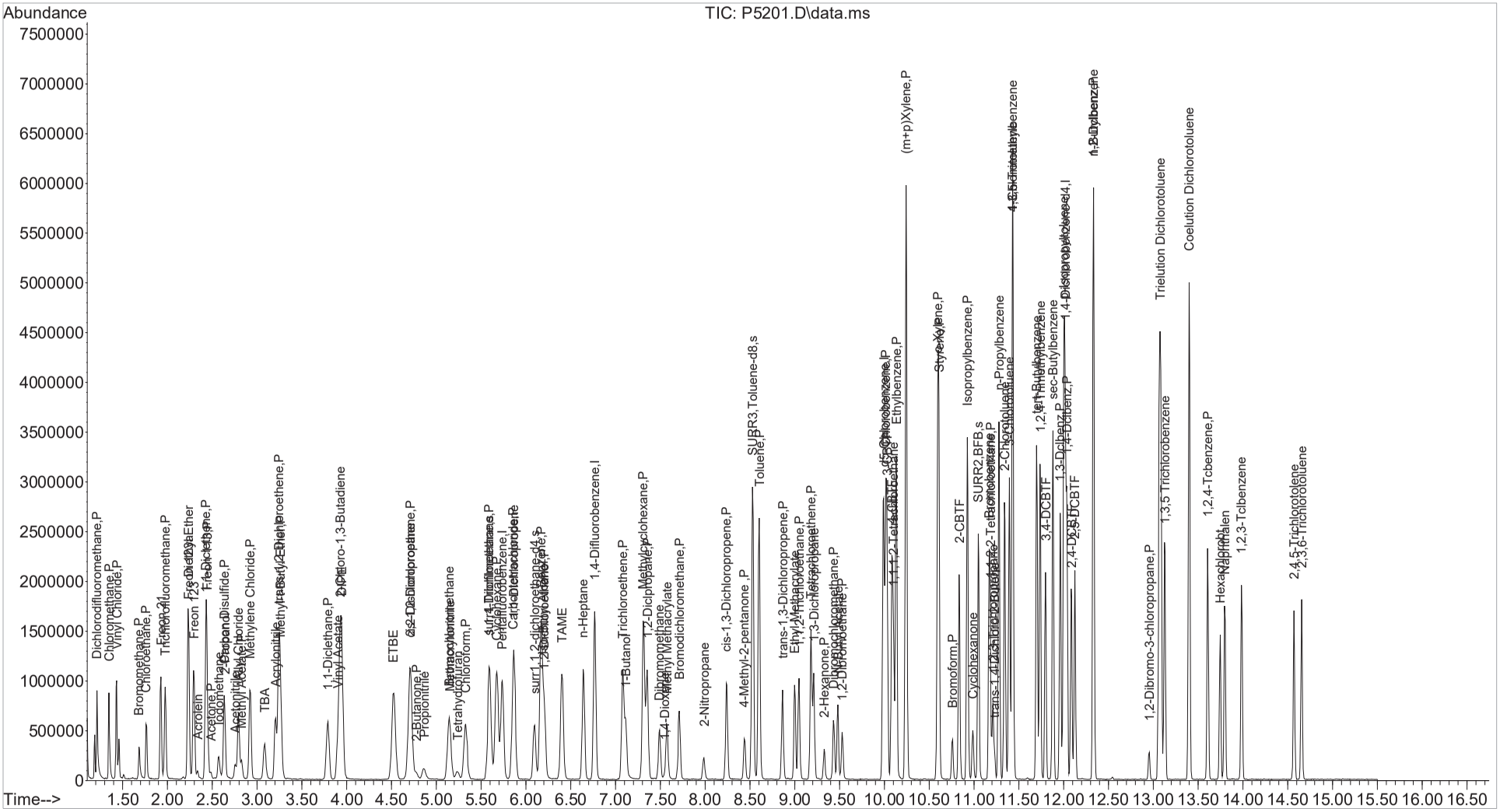
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/21/16 2nd 09/22/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5201.D
Acq On : 20 Sep 2016 9:34 pm
Operator : K.Ruest
Sample : R1609820-009DMS|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 21 09:17:18 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	108	0.00
2	P	Dichlorodifluoromethane	0.5899	0.6305	-6.9	107	0.00
3	P	Chloromethane	0.6392	0.6153	3.7	101	0.00
4	P	Vinyl Chloride	0.7146	0.6566	8.1	94	0.00
5	P	Bromomethane	0.2894	0.2603	10.1	98	0.01
6	P	Chloroethane	0.3838	0.3409	11.2	94	0.00
7		Freon 21	0.8258	0.8206	0.6	104	0.00
8	P	Trichlorofluoromethane	0.6159	0.5708	7.3	100	0.00
9		Diethyl Ether	0.3664	0.3358	8.4	100	0.00
10		Freon 123a	0.5228	0.5251	-0.4	105	0.00
11		Freon 123	0.6210	0.6195	0.2	110	0.00
12		Acrolein	0.0486	0.0390	19.8	82	0.00
13	P	1,1-Diclethene	0.3766	0.3726	1.1	105	0.00
14	P	Freon 113	0.3686	0.3830	-3.9	111	0.00
15	P	Acetone	0.0977	0.0945	3.3	111	0.00
16		2-Propanol	0.0190	0.0179	5.8	102	0.00
17		Iodomethane	0.3499	0.2133	NT 40.0 ~~39.0#~~	54	0.00
18	P	Carbon Disulfide	1.2612	1.3255	-5.1	111	0.00
19		Acetonitrile	0.0159	0.0152	-0.7 ~~4.4~~	132	0.00
20		Allyl Chloride	0.2132	0.2539	-19.1	124	0.00
21	P	Methyl Acetate	0.2364	0.2402	-1.6	107	0.00
22	P	Methylene Chloride	0.4216	0.4154	1.5	107	0.00
23		TBA	0.0301	0.0252	16.3	87	0.00
24		Acrylonitrile	0.1145	0.1166	-1.8	111	0.00
25	P	Methyl-t-Butyl Ether	1.1162	0.9821	12.0	96	0.00
26	P	trans-1,2-Dichloroethene	0.4319	0.4195	2.9	106	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-0.04
28	P	1,1-Diclethane	0.7516	0.7057	6.1	102	0.00
29		Vinyl Acetate	0.0789	0.0736	6.7	95	0.00
30		DIPE	1.5456	1.6080	-4.0	114	0.00
31		2-Chloro-1,3-Butadiene	0.8371	0.6896	17.6	90	0.00
32		ETBE	1.3692	1.2322	10.0	96	0.00
33		2,2-Dichloropropane	0.6448	0.5239	18.8	88	0.00
34	P	cis-1,2-Dichloroethene	0.4551	0.4631	-1.8	109	0.00
35	P	2-Butanone	0.1440	0.1432	0.6	109	0.01
36		Propionitrile	0.0414	0.0399	3.6	106	0.00
37		Bromochloromethane	0.2381	0.2342	1.6	106	0.00
38		Methacrylonitrile	0.1346	0.1296	3.7	103	0.00
39		Tetrahydrofuran	0.0947	0.0909	4.0	100	0.01
40	P	Chloroform	0.7300	0.6780	7.1	102	0.00
41	P	1,1,1-Trichloroethane	0.6227	0.5418	13.0	97	0.00
42		TAME	1.1940	1.1101	7.0	97	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	108	0.00
44	P	Cyclohexane	0.2786	0.2954	-6.0	113	0.00
45	s	surr4,Dibrflmethane	0.2588	0.2894	-11.8	109	0.00
46	P	Carbontetrachloride	0.0959	0.0860	10.3	92	0.00
47		1,1-Dichloropropene	0.3415	0.3554	-4.1	107	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3042	0.3038	0.1	96	0.00
49	P	Benzene	1.0067	1.0297	-2.3	107	0.00
50	P	1,2-Dichloroethane	0.3004	0.2660	11.5	93	0.00
51		Iso-Butyl Alcohol	0.0094	0.0085	9.6	95	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
52		n-Heptane	0.3063	0.3694	NT	-20.6#	128	0.00
53		1-Butanol	0.0054	0.0052		3.7	98	0.00
54	P	Trichloroethene	0.2464	0.2358		4.3	100	0.00
55	P	Methylcyclohexane	0.3276	0.3867		-18.0	120	0.00
56	P	1,2-Diclpropane	0.2721	0.2843		-4.5	112	0.00
57		Dibromomethane	0.1284	0.1248		2.8	106	0.00
58		1,4-Dioxane	0.0016	0.0019		-18.7	118	0.00
59		Methyl Methacrylate	0.1534	0.1410		8.1	98	0.00
60	P	Bromodichloromethane	0.3313	0.3125		5.7	101	0.00
61		2-Nitropropane	0.0543	0.0399	NT	26.5#	78	0.00
62		2-Chloroethylvinyl Ether	0.1452	0.1406		3.2	100	0.00
63	P	cis-1,3-Dichloropropene	0.4229	0.4186		1.0	103	0.00
64	P	4-Methyl-2-pentanone	0.1911	0.1886		1.3	103	0.00
65	s	SURR3,Toluene-d8	1.1105	1.2866		-15.9	109	0.00
66	P	Toluene	1.0626	1.0997		-3.5	106	0.00
67	P	trans-1,3-Dichloropropene	0.3522	0.3237		8.1	94	0.00
68		Ethyl Methacrylate	0.3196	0.2882		9.8	97	0.00
69	P	1,1,2-Trichloroethane	0.1950	0.1900		2.6	107	0.00
70	s	SURR2,BFB	0.4320	0.4664		-8.0	103	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000		0.0	109	0.00
72	P	Tetrachloroethene	0.1928	0.2042		-5.9	110	0.00
73	P	2-Hexanone	0.1447	0.1473		-1.8	103	0.00
74		1,3-Dichloropropane	0.3743	0.3890		-3.9	109	0.00
75	P	Dibromochloromethane	0.2483	0.2226		10.4	96	0.00
76		N-Butyl Acetate	0.3780	0.3592		5.0	95	0.00
77	P	1,2-Dibromoethane	0.2029	0.1921		5.3	100	0.00
78	P	Chlorobenzene	0.7333	0.7243		1.2	104	0.00
79		3-CBTF	0.3634	0.4003		-10.2	124	0.00
80		4-CBTF	0.3214	0.3666		-14.1	127	0.00
81		1,1,1,2-Tetrachloroethane	0.2565	0.2475		3.5	102	0.00
82	P	Ethylbenzene	0.4090	0.4119		-0.7	103	0.00
83	P	(m+p)Xylene	0.4812	0.4961		-3.1	105	0.00
84	P	o-Xylene	0.4791	0.4873		-1.7	106	0.00
85	P	Styrene	0.8001	0.8409		-5.1	106	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000		0.0	113	0.00
87	P	Bromoform	0.2384	0.2374		0.4	109	0.00
88		2-CBTF	0.6584	0.7234		-9.9	126	0.00
89	P	Isopropylbenzene	2.1888	2.2819		-4.3	109	0.00
90		Cyclohexanone	0.0436	0.0386		11.5	102	0.00
91		trans-1,4-Dichloro-2-Butene	0.1705	0.1205		29.3#	85	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5124	0.4745		7.4	104	0.00
93		Bromobenzene	0.5559	0.5481		1.4	107	0.00
94		1,2,3-Trichloropropane	0.1483	0.1328		10.5	105	0.00
95		n-Propylbenzene	2.5395	2.8210		-11.1	115	0.00
96		2-Chlorotoluene	1.6393	1.6029		2.2	105	0.00
97		3-Chlorotoluene	1.6711	1.7753		-6.2	117	0.00
98		4-Chlorotoluene	1.9112	1.9295		-1.0	107	0.00
99		1,3,5-Trimethylbenzene	1.8936	1.9134		-1.0	108	0.00
100		tert-Butylbenzene	1.5033	1.6037		-6.7	113	0.00
101		1,2,4-Trimethylbenzene	1.9435	1.9796		-1.9	108	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
102		3,4-DCBTF	0.4682	0.5778	NT	-23.4#	142	0.00
103		sec-Butylbenzene	2.1443	2.4276		-13.2	120	0.00
104		p-Isopropyltoluene	1.8509	1.9949		-7.8	112	0.00
105	P	1,3-Dclbenz	1.0547	1.1046		-4.7	115	0.00
106	P	1,4-Dclbenz	1.0971	1.1273		-2.8	114	0.00
107		2,4-DCBTF	0.4441	0.5369	NT	-20.9#	144	0.00
108		2,5-DCBTF	0.4710	0.5734	NT	-21.7#	144	0.00
109		n-Butylbenzene	1.6732	2.0066		-19.9	125	0.00
110	P	1,2-Dclbenz	0.9983	1.0408		-4.3	114	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0941	0.0819		13.0	96	0.00
112		Trielution Dichlorotoluene	0.8304	0.9652		-16.2	127	0.00
113		1,3,5 Trichlorobenzene	0.6655	0.8350		-25.5#	141	0.00
114		Coelution Dichlorotoluene	0.8802	1.0390		-18.0	125	0.00
115	P	1,2,4-Tcbenzene	0.5924	0.7105		-19.9	127	0.00
116		Hexachlorobt	0.2436	0.2881		-18.3	133	0.00
117		Naphthalen	1.2693	1.3793		-8.7	111	0.00
118		1,2,3-Tclbenzene	0.5019	0.6112		-21.8#	127	0.00
119		2,4,5-Trichlorotolene	0.3576	0.4550	NT	-27.2#	139	0.00
120		2,3,6-Trichlorotoluene	0.3326	0.4131	NT	-24.2#	138	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1st 09/19/16
2nd 09/20/16

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	895426	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1474756	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1378260	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	743732	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	426855	55.91	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.82%				
48) surr1,1,2-dichloroetha...	6.096	65	448062	49.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.86%				
65) SURR3,Toluene-d8	8.529	98	1897482	57.93	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.86%				
70) SURR2,BFB	11.047	95	687783	53.98	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.96%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	564608	53.45	ppb		99
3) Chloromethane	1.347	50	550932	48.13	ppb		99
4) Vinyl Chloride	1.433	62	587933	45.94	ppb		98
5) Bromomethane	1.689	94	233103	44.98	ppb		97
6) Chloroethane	1.768	64	305224	44.41	ppb		98
7) Freon 21	1.926	67	734808	49.69	ppb		98
8) Trichlorofluoromethane	1.975	101	511066	46.33	ppb		96
9) Diethyl Ether	2.231	59	300722	45.83	ppb		97
10) Freon 123a	2.237	67	470180	50.22	ppb		88
11) Freon 123	2.292	83	554682	49.87	ppb		98
12) Acrolein	2.341	56	174712	200.73	ppb		93
13) 1,1-Diclethene	2.432	96	333623	49.46	ppb		92
14) Freon 113	2.439	101	342975	51.96	ppb		97
15) Acetone	2.487	43	84652	48.41	ppb		98
16) 2-Propanol	2.646	45	320404	943.66	ppb		100
17) Iodomethane	2.573	142	190963	29.99	ppb		99
18) Carbon Disulfide	2.634	76	1186847	52.55	ppb		99
19) Acetonitrile	2.762	40	68275	251.66	ppb	#	81
20) Allyl Chloride	2.798	76	227378	59.56	ppb	#	89
21) Methyl Acetate	2.829	43	215089	50.81	ppb		100
22) Methylene Chloride	2.926	84	371983	49.26	ppb		93
23) TBA	3.091	59	451640	836.98	ppb		86
24) Acrylonitrile	3.207	53	521976	254.59	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	879419	43.99	ppb		100
26) trans-1,2-Dichloroethene	3.243	96	375635	48.57	ppb		99
28) 1,1-Diclethane	3.792	63	631946	46.95	ppb		98
29) Vinyl Acetate	3.908	86	65913	46.68	ppb	#	85
30) DIPE	3.944	45	1439847	52.02	ppb		94
31) 2-Chloro-1,3-Butadiene	3.926	53	617468	41.19	ppb		95
32) ETBE	4.530	59	1103301	45.00	ppb		96
33) 2,2-Dichloropropane	4.706	77	469152	40.63	ppb		96
34) cis-1,2-Dichloroethene	4.719	96	414690	50.88	ppb		92
35) 2-Butanone	4.780	43	128197	49.71	ppb		89
36) Propionitrile	4.865	54	178574	240.74	ppb		97
37) Bromochloromethane	5.145	130	209720	49.19	ppb		98
38) Methacrylonitrile	5.157	67	116011	48.12	ppb		90
39) Tetrahydrofuran	5.243	42	81426	48.00	ppb		86
40) Chloroform	5.328	83	607129	46.44	ppb		94
41) 1,1,1-Trichloroethane	5.596	97	485175	43.51	ppb		97

1st 09/19/16
2nd 09/20/16

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.401	73	994042	46.49	ppb		93
44)	Cyclohexane	5.676	41	435619	53.00	ppb		96
46)	Carbontetrachloride	5.859	121	126832	44.84	ppb		100
47)	1,1-Dichloropropene	5.871	75	524195	52.04	ppb		97
49)	Benzene	6.176	78	1518580	51.15	ppb		97
50)	1,2-Dichloroethane	6.212	62	392302	44.28	ppb		98
51)	Iso-Butyl Alcohol	6.200	43	249505	901.40	ppb		91
52)	n-Heptane	6.645	43	544731	60.30	ppb		99
53)	1-Butanol	7.114	56	382478	2402.89	ppb		97
54)	Trichloroethene	7.084	130	347821	47.85	ppb		94
55)	Methylcyclohexane	7.310	55	570219	59.02	ppb		99
56)	1,2-Diclpropane	7.352	63	419312	52.24	ppb		97
57)	Dibromomethane	7.492	93	184066	48.61	ppb		96
58)	1,4-Dioxane	7.547	88	55199	1140.39	ppb		94
59)	Methyl Methacrylate	7.578	69	207978	45.98	ppb		94
60)	Bromodichloromethane	7.712	83	460825	47.16	ppb		98
61)	2-Nitropropane	7.980	41	117606	73.49	ppb		95
62)	2-Chloroethylvinyl Ether	8.108	63	207361	48.43	ppb		100
63)	cis-1,3-Dichloropropene	8.242	75	617365	49.49	ppb		98
64)	4-Methyl-2-pentanone	8.437	43	278195	49.35	ppb		96
66)	Toluene	8.602	91	1621838	51.75	ppb		96
67)	trans-1,3-Dichloropropene	8.864	75	477319	45.95	ppb		99
68)	Ethyl Methacrylate	8.998	69	424975	45.08	ppb		92
69)	1,1,2-Trichloroethane	9.047	97	280232	48.73	ppb		92
72)	Tetrachloroethene	9.181	164	281396	52.95	ppb		94
73)	2-Hexanone	9.327	43	203040	50.89	ppb		99
74)	1,3-Dichloropropane	9.212	76	536149	51.96	ppb		99
75)	Dibromochloromethane	9.437	129	306794	44.83	ppb		97
76)	N-Butyl Acetate	9.480	43	495057	47.51	ppb		99
77)	1,2-Dibromoethane	9.529	107	264735	47.33	ppb		98
78)	Chlorobenzene	10.016	112	998297	49.39	ppb		98
79)	3-CBTF	10.028	180	551673	55.07	ppb		98
80)	4-CBTF	10.083	180	505293	57.03	ppb		99
81)	1,1,1,2-Tetrachloroethane	10.102	131	341096	48.23	ppb		98
82)	Ethylbenzene	10.132	106	567667	50.35	ppb		98
83)	(m+p)Xylene	10.242	106	1367484	103.09	ppb		98
84)	o-Xylene	10.595	106	671569	50.85	ppb		99
85)	Styrene	10.608	104	1159015	52.55	ppb		97
87)	Bromoform	10.760	173	176557	49.79	ppb		100
88)	2-CBTF	10.839	180	537989	54.93	ppb		90
89)	Isopropylbenzene	10.925	105	1697086	52.12	ppb		99
90)	Cyclohexanone	10.986	55	573916	884.70	ppb		91
91)	trans-1,4-Dichloro-2-B...	11.229	53	89647	35.36	ppb		81
92)	1,1,2,2-Tetrachloroethane	11.181	83	352867	46.29	ppb		99
93)	Bromobenzene	11.169	156	407643	49.30	ppb		95
94)	1,2,3-Trichloropropane	11.211	110	98754	44.76	ppb	#	85
95)	n-Propylbenzene	11.278	91	2098086	55.54	ppb		97
96)	2-Chlorotoluene	11.339	91	1192144	48.89	ppb		99
97)	3-Chlorotoluene	11.394	91	1320318	53.12	ppb		97
98)	4-Chlorotoluene	11.431	91	1434999	50.48	ppb		99
99)	1,3,5-Trimethylbenzene	11.431	105	1423053	50.52	ppb		97
100)	tert-Butylbenzene	11.699	119	1192750	53.34	ppb		98
101)	1,2,4-Trimethylbenzene	11.735	105	1472292	50.93	ppb		98
102)	3,4-DCBTF	11.796	214	429745	61.70	ppb		97
103)	sec-Butylbenzene	11.882	105	1805474	56.61	ppb		100
104)	p-Isopropyltoluene	12.004	119	1483702	53.89	ppb		100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	821513	52.36	ppb	96
106) 1,4-Dclbenz	12.034	146	838375	51.38	ppb	98
107) 2,4-DCBTF	12.089	214	399317	60.45	ppb	96
108) 2,5-DCBTF	12.126	214	426482	60.87	ppb	97
109) n-Butylbenzene	12.333	91	1492386	59.96	ppb	98
110) 1,2-Dclbenz	12.333	146	774040	52.13	ppb	96
111) 1,2-Dibromo-3-chloropr...	12.955	157	60930	43.52	ppb	95
112) Trielution Dichlorotol...	13.071	125	2153634	174.35	ppb	95
113) 1,3,5 Trichlorobenzene	13.125	180	620980	62.73	ppb	97
114) Coelution Dichlorotoluene	13.400	125	1545408	118.03	ppb	98
115) 1,2,4-Tcbenzene	13.607	180	528407	59.97	ppb	97
116) Hexachlorobt	13.747	225	214273	59.13	ppb	95
117) Naphthalen	13.796	128	1025815	54.33	ppb	99
118) 1,2,3-Tclbenzene	13.985	180	454597	60.89	ppb	94
119) 2,4,5-Trichlorotolene	14.570	159	338361	63.60	ppb	99
120) 2,3,6-Trichlorotoluene	14.656	159	307231	62.09	ppb	96

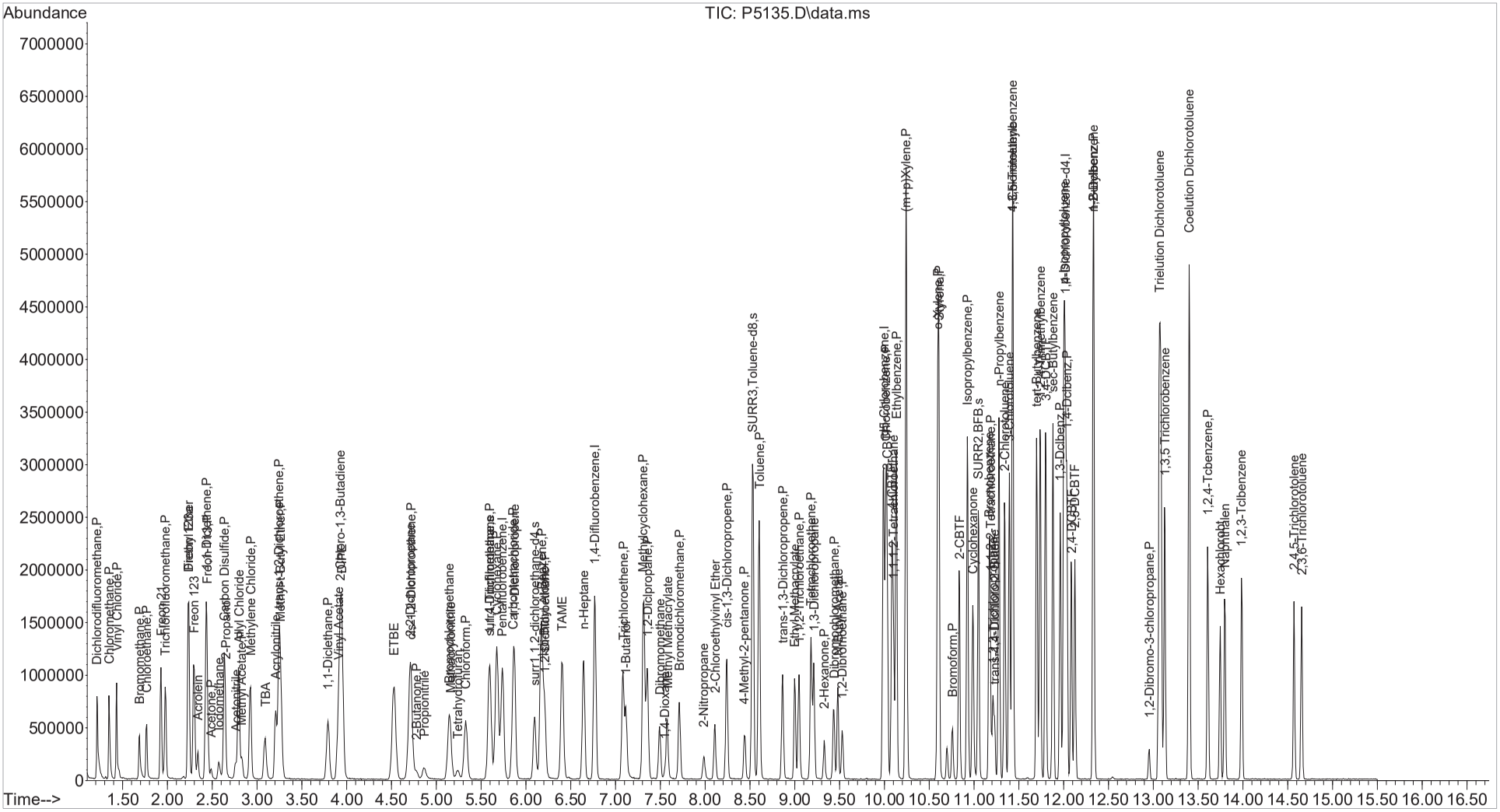
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

1st 09/19/16 2nd 09/20/16

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	102	0.00
2	P	Dichlorodifluoromethane	0.5899	0.6985	-18.4	112	0.00
3	P	Chloromethane	0.6392	0.6760	-5.8	105	0.00
4	P	Vinyl Chloride	0.7146	0.7290	-2.0	99	0.00
5	P	Bromomethane	0.2894	0.2820	2.6	100	0.01
6	P	Chloroethane	0.3838	0.3835	0.1	100	0.00
7		Freon 21	0.8258	0.8334	-0.9	100	0.00
8	P	Trichlorofluoromethane	0.6159	0.6316	-2.5	105	0.00
9		Diethyl Ether	0.3664	0.3452	5.8	97	0.00
10		Freon 123a	0.5228	0.5418	-3.6	102	0.00
11		Freon 123	0.6210	0.6337	-2.0	106	0.00
12		Acrolein	0.0486	0.0399	17.9	79	0.00
13	P	1,1-Diclethene	0.3766	0.4164	-10.6	111	0.00
14	P	Freon 113	0.3686	0.4205	-14.1	115	0.00
15	P	Acetone	0.0977	0.0999	-2.3	111	0.00
16		2-Propanol	0.0190	0.0185	2.6	100	0.00
17		Iodomethane	0.3499	0.2166	39.2 ~~-38.1#~~	52	0.00
18	P	Carbon Disulfide	1.2612	1.3447	-6.6	106	0.00
19		Acetonitrile	0.0159	0.0178	-18.0 ~~-11.9~~	146	0.00
20		Allyl Chloride	0.2132	0.2738	-28.4#	127	0.00
21	P	Methyl Acetate	0.2364	0.2472	-4.6	104	0.00
22	P	Methylene Chloride	0.4216	0.4523	-7.3	110	0.00
23		TBA	0.0301	0.0279	7.3	91	0.00
24		Acrylonitrile	0.1145	0.1266	-10.6	114	0.00
25	P	Methyl-t-Butyl Ether	1.1162	1.0723	3.9	99	0.00
26	P	trans-1,2-Dichloroethene	0.4319	0.4653	-7.7	111	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-4.16#
28	P	1,1-Diclethane	0.7516	0.7914	-5.3	108	0.00
29		Vinyl Acetate	0.0789	0.0849	-7.6	103	0.00
30		DIPE	1.5456	1.7108	-10.7	114	0.00
31		2-Chloro-1,3-Butadiene	0.8371	0.7031	16.0	87	0.00
32		ETBE	1.3692	1.3059	4.6	96	0.00
33		2,2-Dichloropropane	0.6448	0.5677	12.0	90	0.00
34	P	cis-1,2-Dichloroethene	0.4551	0.4941	-8.6	110	0.00
35	P	2-Butanone	0.1440	0.1551	-7.7	111	0.00
36		Propionitrile	0.0414	0.0451	-8.9	113	0.00
37		Bromochloromethane	0.2381	0.2502	-5.1	107	0.00
38		Methacrylonitrile	0.1346	0.1381	-2.6	104	0.00
39		Tetrahydrofuran	0.0947	0.0993	-4.9	103	0.01
40	P	Chloroform	0.7300	0.7387	-1.2	105	0.00
41	P	1,1,1-Trichloroethane	0.6227	0.5908	5.1	99	0.00
42		TAME	1.1940	1.1742	1.7	97	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	104	0.00
44	P	Cyclohexane	0.2786	0.2979	-6.9	110	0.00
45	s	surr4,Dibrflmethane	0.2588	0.2859	-10.5	104	0.00
46	P	Carbontetrachloride	0.0959	0.0926	3.4	96	0.00
47		1,1-Dichloropropene	0.3415	0.3789	-11.0	110	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3042	0.3046	-0.1	93	0.00
49	P	Benzene	1.0067	1.1043	-9.7	111	0.00
50	P	1,2-Dichloroethane	0.3004	0.2874	4.3	97	0.00
51		Iso-Butyl Alcohol	0.0094	0.0093	1.1	100	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
52		n-Heptane	0.3063	0.3953	NT	-29.1#	132	0.00
53		1-Butanol	0.0054	0.0057		-5.6	104	0.00
54	P	Trichloroethene	0.2464	0.2553		-3.6	105	0.00
55	P	Methylcyclohexane	0.3276	0.3918		-19.6	118	0.00
56	P	1,2-Diclpropane	0.2721	0.3010		-10.6	115	0.00
57		Dibromomethane	0.1284	0.1315		-2.4	108	0.00
58		1,4-Dioxane	0.0016	0.0020		-25.0#	122	0.00
59		Methyl Methacrylate	0.1534	0.1508		1.7	102	0.00
60	P	Bromodichloromethane	0.3313	0.3350		-1.1	105	0.00
61		2-Nitropropane	0.0543	0.0416	NT	23.4#	79	0.00
62		2-Chloroethylvinyl Ether	0.1452	0.1403		3.4	96	0.00
63	P	cis-1,3-Dichloropropene	0.4229	0.4512		-6.7	108	0.00
64	P	4-Methyl-2-pentanone	0.1911	0.1903		0.4	100	0.00
65	s	SURR3,Toluene-d8	1.1105	1.2703		-14.4	104	0.00
66	P	Toluene	1.0626	1.1745		-10.5	110	0.00
67	P	trans-1,3-Dichloropropene	0.3522	0.3545		-0.7	99	0.00
68		Ethyl Methacrylate	0.3196	0.3153		1.3	103	0.00
69	P	1,1,2-Trichloroethane	0.1950	0.1986		-1.8	108	0.00
70	s	SURR2,BFB	0.4320	0.4711		-9.1	101	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000		0.0	106	0.00
72	P	Tetrachloroethene	0.1928	0.2135		-10.7	112	0.00
73	P	2-Hexanone	0.1447	0.1491		-3.0	101	0.00
74		1,3-Dichloropropane	0.3743	0.4092		-9.3	111	0.00
75	P	Dibromochloromethane	0.2483	0.2457		1.0	103	0.00
76		N-Butyl Acetate	0.3780	0.3692		2.3	95	0.00
77	P	1,2-Dibromoethane	0.2029	0.2034		-0.2	103	0.00
78	P	Chlorobenzene	0.7333	0.7667		-4.6	107	0.00
79		3-CBTF	0.3634	0.4123		-13.5	124	0.00
80		4-CBTF	0.3214	0.3730		-16.1	125	0.00
81		1,1,1,2-Tetrachloroethane	0.2565	0.2610		-1.8	105	0.00
82	P	Ethylbenzene	0.4090	0.4431		-8.3	108	0.00
83	P	(m+p)Xylene	0.4812	0.5267		-9.5	109	0.00
84	P	o-Xylene	0.4791	0.5229		-9.1	111	0.00
85	P	Styrene	0.8001	0.9000		-12.5	111	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000		0.0	109	0.00
87	P	Bromoform	0.2384	0.2573		-7.9	113	0.00
88		2-CBTF	0.6584	0.7327		-11.3	123	0.00
89	P	Isopropylbenzene	2.1888	2.4421		-11.6	113	0.00
90		Cyclohexanone	0.0436	0.0589	NT	-35.1#	150	0.00
91		trans-1,4-Dichloro-2-Butene	0.1705	0.1233		27.7#	84	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5124	0.5175		-1.0	110	0.00
93		Bromobenzene	0.5559	0.5894		-6.0	111	0.00
94		1,2,3-Trichloropropane	0.1483	0.1420		4.2	109	0.00
95		n-Propylbenzene	2.5395	3.0382		-19.6	119	0.00
96		2-Chlorotoluene	1.6393	1.7454		-6.5	110	0.00
97		3-Chlorotoluene	1.6711	1.8509		-10.8	117	0.00
98		4-Chlorotoluene	1.9112	2.0646		-8.0	111	0.00
99		1,3,5-Trimethylbenzene	1.8936	2.0509		-8.3	112	0.00
100		tert-Butylbenzene	1.5033	1.6932		-12.6	115	0.00
101		1,2,4-Trimethylbenzene	1.9435	2.1087		-8.5	111	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
102		3,4-DCBTF	0.4682	0.5967	NT	-27.4#	142	0.00
103		sec-Butylbenzene	2.1443	2.6179	NT	-22.1#	125	0.00
104		p-Isopropyltoluene	1.8509	2.0839		-12.6	113	0.00
105	P	1,3-Dclbenz	1.0547	1.1755		-11.5	118	0.00
106	P	1,4-Dclbenz	1.0971	1.1642		-6.1	114	0.00
107		2,4-DCBTF	0.4441	0.5429	NT	-22.2#	140	0.00
108		2,5-DCBTF	0.4710	0.5870	NT	-24.6#	142	0.00
109		n-Butylbenzene	1.6732	2.0775	NT	-24.2#	125	0.00
110	P	1,2-Dclbenz	0.9983	1.0957		-9.8	116	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0941	0.0875		7.0	99	0.00
112		Trielution Dichlorotoluene	0.8304	1.0042	NT	-20.9#	127	0.00
113		1,3,5 Trichlorobenzene	0.6655	0.8543	NT	-28.4#	139	0.00
114		Coelution Dichlorotoluene	0.8802	1.0729	NT	-21.9#	125	0.00
115	P	1,2,4-Tcbenzene	0.5924	0.7246		-22.3#	125	0.00
116		Hexachlorobt	0.2436	0.2930		-20.3#	131	0.00
117		Naphthalen	1.2693	1.4582		-14.9	113	0.00
118		1,2,3-Tclbenzene	0.5019	0.6295	NT	-25.4#	126	0.00
119		2,4,5-Trichlorotolene	0.3576	0.4555	NT	-27.4#	134	0.00
120		2,3,6-Trichlorotoluene	0.3326	0.4238	NT	-27.4#	137	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	845710	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1427842	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1340525	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	717263	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.596	113	408289	55.24	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 110.48%				
48) surr1,1,2-dichloroetha...	6.096	65	434978	50.07	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.14%				
65) SURR3,Toluene-d8	8.529	98	1813833	57.20	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.40%				
70) SURR2,BFB	11.047	95	672648	54.53	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 109.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	590688	59.20	ppb		97
3) Chloromethane	1.347	50	571723	52.88	ppb		97
4) Vinyl Chloride	1.433	62	616547	51.01	ppb		97
5) Bromomethane	1.689	94	238496	48.72	ppb		99
6) Chloroethane	1.768	64	324290	49.95	ppb		94
7) Freon 21	1.926	67	704849	50.46	ppb		98
8) Trichlorofluoromethane	1.975	101	534171	51.28	ppb		100
9) Diethyl Ether	2.231	59	291956	47.11	ppb		93
10) Freon 123a	2.237	67	458192	51.81	ppb		92
11) Freon 123	2.292	83	535906	51.02	ppb		99
12) Acrolein	2.341	56	168762	205.29	ppb		97
13) 1,1-Diclethene	2.432	96	352124	55.28	ppb		92
14) Freon 113	2.439	101	355663	57.05	ppb		99
15) Acetone	2.487	43	84483	51.15	ppb		93
16) 2-Propanol	2.640	45	313689	978.19	ppb		99
17) Iodomethane	2.573	142	183162	30.41	ppb		93
18) Carbon Disulfide	2.634	76	1137237	53.31	ppb		99
19) Acetonitrile	2.756	40	75478	295.04	ppb	#	82
20) Allyl Chloride	2.792	76	231536	64.21	ppb		92
21) Methyl Acetate	2.829	43	209034	52.28	ppb		97
22) Methylene Chloride	2.926	84	382535	53.64	ppb		93
23) TBA	3.085	59	472287	926.69	ppb		91
24) Acrylonitrile	3.207	53	535371	276.47	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	906857	48.03	ppb		98
26) trans-1,2-Dichloroethene	3.243	96	393484	53.86	ppb		98
28) 1,1-Diclethane	3.792	63	669260	52.64	ppb		100
29) Vinyl Acetate	3.896	86	71763	53.81	ppb	#	92
30) DIPE	3.944	45	1446827	55.34	ppb		94
31) 2-Chloro-1,3-Butadiene	3.926	53	594635	42.00	ppb		99
32) ETBE	4.524	59	1104384	47.69	ppb		99
33) 2,2-Dichloropropane	4.706	77	480087	44.02	ppb		97
34) cis-1,2-Dichloroethene	4.712	96	417890	54.29	ppb		98
35) 2-Butanone	4.773	43	131190	53.86	ppb		89
36) Propionitrile	4.865	54	190629	272.10	ppb		97
37) Bromochloromethane	5.145	130	211560	52.53	ppb		89
38) Methacrylonitrile	5.151	67	116815	51.31	ppb		93
39) Tetrahydrofuran	5.243	42	83943	52.39	ppb	#	69
40) Chloroform	5.328	83	624707	50.60	ppb		95
41) 1,1,1-Trichloroethane	5.596	97	499677	47.44	ppb		98

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.407	73	993022	49.17	ppb		95
44) Cyclohexane	5.676	41	425396	53.46	ppb		90
46) Carbontetrachloride	5.859	121	132276	48.30	ppb		98
47) 1,1-Dichloropropene	5.871	75	541039	55.48	ppb		92
49) Benzene	6.170	78	1576783	54.85	ppb		99
50) 1,2-Dichloroethane	6.212	62	410409	47.84	ppb		93
51) Iso-Butyl Alcohol	6.200	43	264713	987.76	ppb		95
52) n-Heptane	6.645	43	564414	64.53	ppb		98
53) 1-Butanol	7.114	56	407789	2646.08	ppb		97
54) Trichloroethene	7.078	130	364468	51.79	ppb		92
55) Methylcyclohexane	7.316	55	559467	59.81	ppb		95
56) 1,2-Diclpropane	7.352	63	429719	55.30	ppb		95
57) Dibromomethane	7.492	93	187761	51.21	ppb		97
58) 1,4-Dioxane	7.553	88	57044	1217.23	ppb		88
59) Methyl Methacrylate	7.578	69	215264	49.15	ppb		93
60) Bromodichloromethane	7.712	83	478396	50.57	ppb		99
61) 2-Nitropropane	7.986	41	118827	76.69	ppb		91
62) 2-Chloroethylvinyl Ether	8.108	63	200389	48.34	ppb		97
63) cis-1,3-Dichloropropene	8.242	75	644225	53.34	ppb		98
64) 4-Methyl-2-pentanone	8.443	43	271680	49.78	ppb		96
66) Toluene	8.602	91	1677006	55.27	ppb		98
67) trans-1,3-Dichloropropene	8.864	75	506179	50.33	ppb		98
68) Ethyl Methacrylate	8.998	69	450194	49.33	ppb		95
69) 1,1,2-Trichloroethane	9.047	97	283518	50.92	ppb		94
72) Tetrachloroethene	9.181	164	286267	55.38	ppb		97
73) 2-Hexanone	9.327	43	199889	51.51	ppb		96
74) 1,3-Dichloropropane	9.212	76	548595	54.67	ppb		98
75) Dibromochloromethane	9.431	129	329419	49.49	ppb		99
76) N-Butyl Acetate	9.480	43	494897	48.83	ppb		99
77) 1,2-Dibromoethane	9.529	107	272725	50.13	ppb		94
78) Chlorobenzene	10.016	112	1027732	52.27	ppb		99
79) 3-CBTF	10.029	180	552723	56.73	ppb		99
80) 4-CBTF	10.083	180	499993	58.02	ppb		97
81) 1,1,1,2-Tetrachloroethane	10.102	131	349890	50.87	ppb		98
82) Ethylbenzene	10.132	106	593926	54.16	ppb		99
83) (m+p)Xylene	10.242	106	1412085	109.45	ppb		99
84) o-Xylene	10.595	106	700897	54.56	ppb		97
85) Styrene	10.608	104	1206479	56.24	ppb		99
87) Bromoform	10.760	173	184572	53.97	ppb		91
88) 2-CBTF	10.839	180	525524	55.64	ppb		89
89) Isopropylbenzene	10.925	105	1751597	55.78	ppb		99
90) Cyclohexanone	10.986	55	844681	1350.14	ppb		93
91) trans-1,4-Dichloro-2-B...	11.230	53	88449	36.17	ppb		90
92) 1,1,2,2-Tetrachloroethane	11.181	83	371205	50.50	ppb		97
93) Bromobenzene	11.169	156	422764	53.01	ppb		96
94) 1,2,3-Trichloropropane	11.211	110	101885	47.88	ppb	#	81
95) n-Propylbenzene	11.278	91	2179189	59.82	ppb		97
96) 2-Chlorotoluene	11.339	91	1251921	53.24	ppb		98
97) 3-Chlorotoluene	11.394	91	1327586	55.38	ppb		96
98) 4-Chlorotoluene	11.431	91	1480897	54.02	ppb		100
99) 1,3,5-Trimethylbenzene	11.431	105	1471030	54.15	ppb		99
100) tert-Butylbenzene	11.699	119	1214459	56.31	ppb		98
101) 1,2,4-Trimethylbenzene	11.736	105	1512495	54.25	ppb		97
102) 3,4-DCBTF	11.796	214	427988	63.72	ppb		96
103) sec-Butylbenzene	11.882	105	1877688	61.04	ppb		97
104) p-Isopropyltoluene	12.004	119	1494681	56.29	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	843176	55.73	ppb	99
106) 1,4-Dclbenz	12.034	146	835052	53.06	ppb	97
107) 2,4-DCBTF	12.089	214	389435	61.13	ppb	95
108) 2,5-DCBTF	12.126	214	421020	62.31	ppb	96
109) n-Butylbenzene	12.333	91	1490095	62.08	ppb	98
110) 1,2-Dclbenz	12.339	146	785914	54.88	ppb	95
111) 1,2-Dibromo-3-chloropr...	12.955	157	62773	46.49	ppb	87
112) Trielution Dichlorotol...	13.077	125	2160778	181.38	ppb	97
113) 1,3,5 Trichlorobenzene	13.132	180	612764	64.18	ppb	97
114) Coelution Dichlorotoluene	13.400	125	1539039	121.89	ppb	99
115) 1,2,4-Tcbenzene	13.607	180	519705	61.16	ppb	98
116) Hexachlorobt	13.747	225	210128	60.13	ppb	91
117) Naphthalen	13.802	128	1045898	57.44	ppb	98
118) 1,2,3-Tclbenzene	13.985	180	451487	62.71	ppb	100
119) 2,4,5-Trichlorotolene	14.570	159	326733	63.68	ppb	95
120) 2,3,6-Trichlorotoluene	14.656	159	303942	63.70	ppb	97

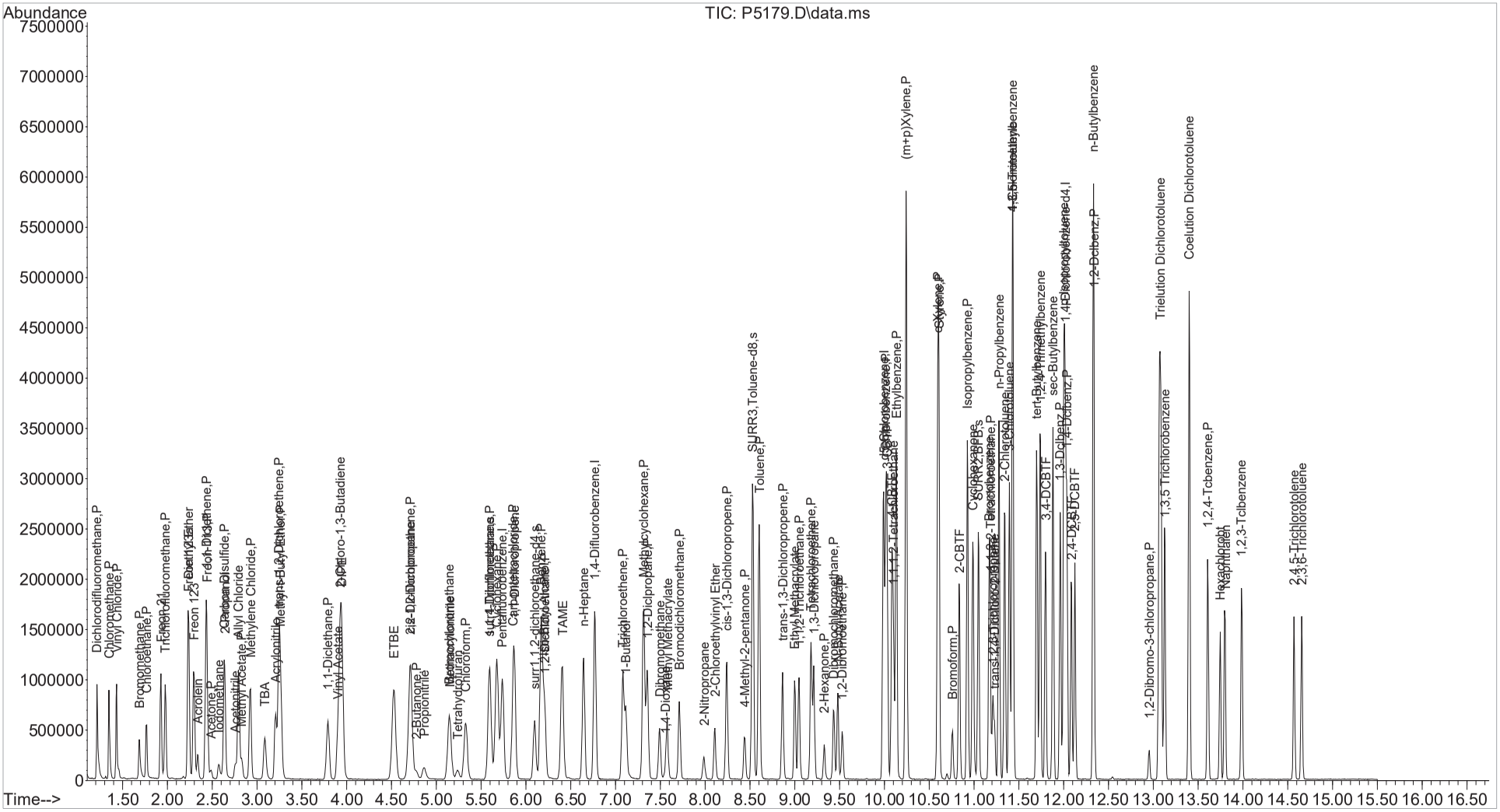
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/20/16 2nd 09/22/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

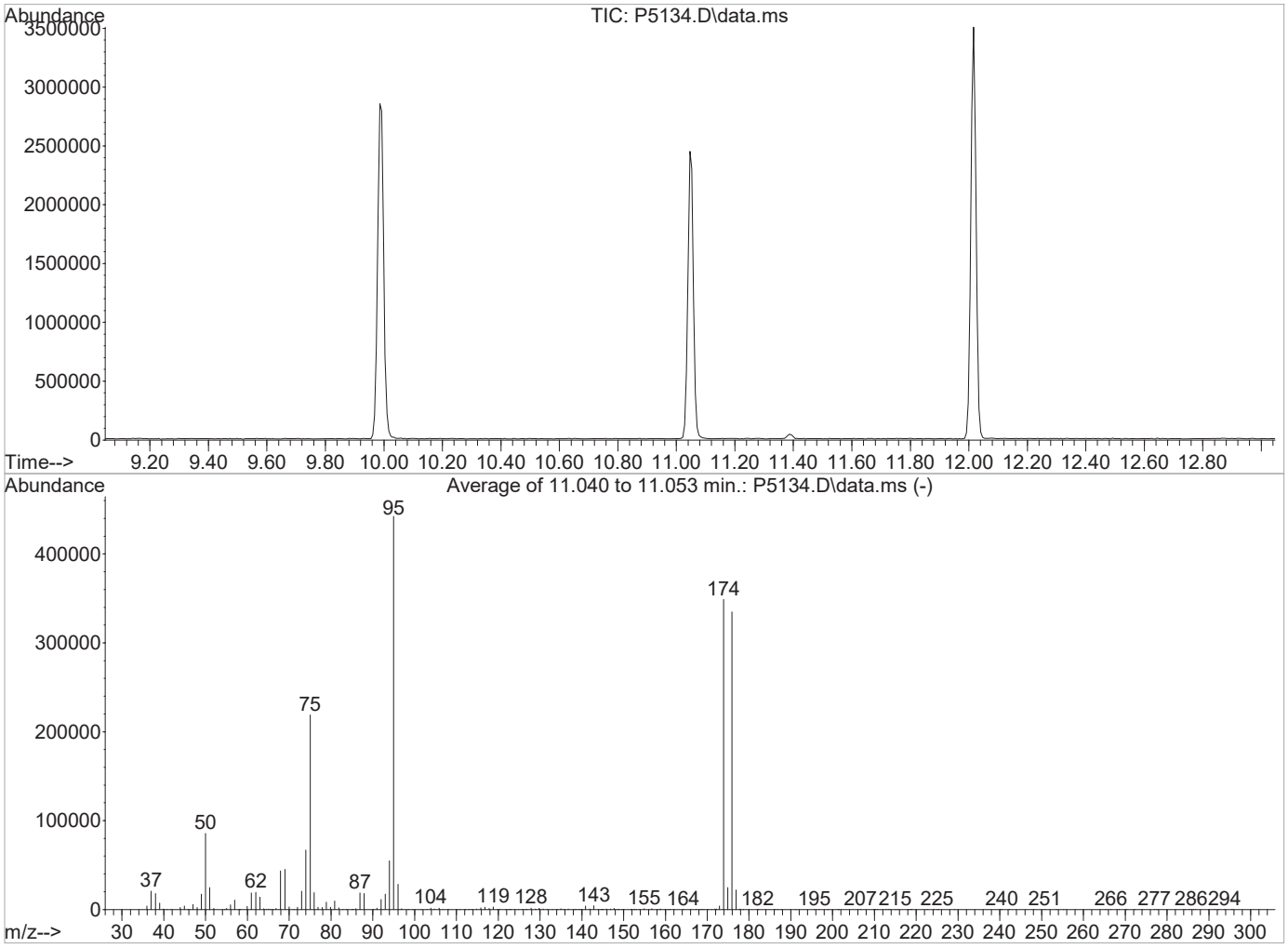


1st 09/19/16
2nd 09/20/16

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5134.D
Acq On : 19 Sep 2016 10:47 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue May 10 12:23:15 2016



AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

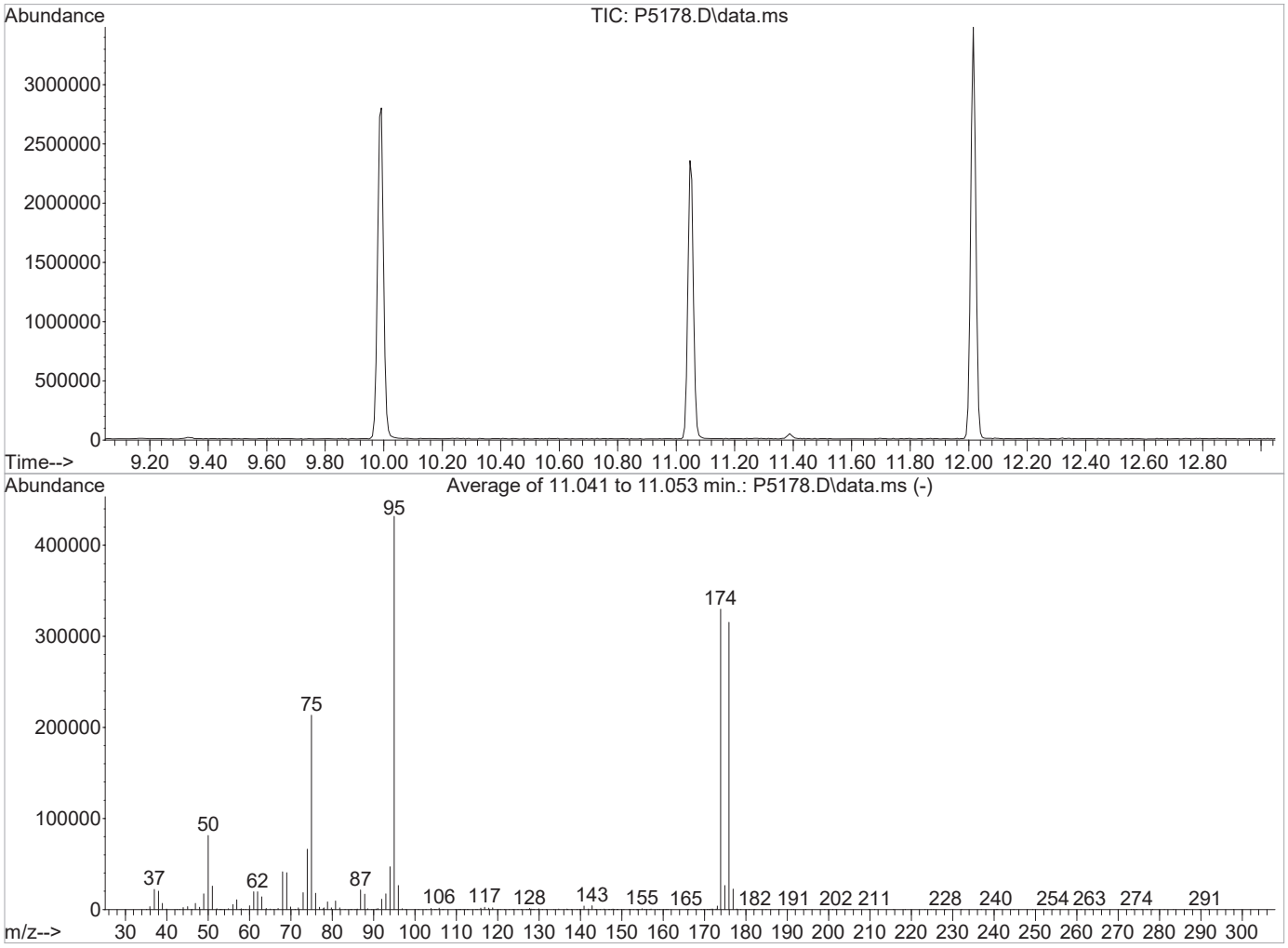
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	85686	PASS
75	95	30	60	49.5	218880	PASS
95	95	100	100	100.0	442525	PASS
96	95	5	9	6.4	28179	PASS
173	174	0.00	2	1.1	3979	PASS
174	95	50	120	78.8	348800	PASS
175	174	5	9	7.0	24552	PASS
176	174	95	101	96.0	334933	PASS
177	176	5	9	6.6	21946	PASS

1st 09/20/16
2nd 09/22/16

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5178.D
Acq On : 20 Sep 2016 9:36 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue May 10 12:23:15 2016



AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	81232	PASS
75	95	30	60	49.4	213376	PASS
95	95	100	100	100.0	432021	PASS
96	95	5	9	6.1	26213	PASS
173	174	0.00	2	1.1	3643	PASS
174	95	50	120	76.3	329734	PASS
175	174	5	9	8.0	26262	PASS
176	174	95	101	95.7	315584	PASS
177	176	5	9	7.1	22558	PASS

Initial Calibration - Summary Report

KR 5/10/16

Calibration ID: RC1600048
8260 waters W050916

Instrument ID: R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.2565	<=20	5.2
1,1,1,2-Tetrachloroethane	T	Average RF			0.2565	<=35	5.2
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.6227	<=20	7.6
1,1,1-Trichloroethane (TCA)	T	Average RF			0.6227	<=35	7.6
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5124	<=20	6.8
1,1,2,2-Tetrachloroethane	T	Average RF			0.5124	<=35	6.8
1,1,2-Trichloroethane	T	Average RF		0.100	0.1950	<=20	11.7
1,1,2-Trichloroethane	T	Average RF			0.1950	<=35	11.7
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3686	<=20	4.9
1,1,2-Trichlorotrifluoroethane	T	Average RF			0.3686	<=35	4.9
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.7516	<=20	4.0
1,1-Dichloroethane (1,1-DCA)	T	Average RF			0.7516	<=35	4.0
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3766	<=20	3.6
1,1-Dichloroethene (1,1-DCE)	T	Average RF			0.3766	<=35	3.6
1,1-Dichloropropene	T	Average RF			0.3415	<=20	3.5
1,1-Dichloropropene	T	Average RF			0.3415	<=35	3.5
1,2,3-Trichlorobenzene	T	Average RF			0.5019	<=20	5.9
1,2,3-Trichlorobenzene	T	Average RF			0.5019	<=35	5.9
1,2,3-Trichloropropane	T	Average RF			0.1483	<=20	10.0
1,2,3-Trichloropropane	T	Average RF			0.1483	<=35	10.0
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.5924	<=20	4.2
1,2,4-Trichlorobenzene	T	Average RF			0.5924	<=35	4.2
1,2,4-Trimethylbenzene	T	Average RF			1.943	<=20	9.9
1,2,4-Trimethylbenzene	T	Average RF			1.943	<=35	9.9
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.09412	<=20	10.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF			0.09412	<=35	10.0
1,2-Dibromoethane	T	Average RF		0.100	0.2029	<=20	4.9
1,2-Dibromoethane	T	Average RF			0.2029	<=35	4.9
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5228	<=20	5.0
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5228	<=35	5.0
1,2-Dichlorobenzene	T	Average RF		0.400	0.9983	<=20	4.7
1,2-Dichlorobenzene	T	Average RF			0.9983	<=35	4.7
1,2-Dichloroethane	T	Average RF		0.100	0.3004	<=20	2.9
1,2-Dichloroethane	T	Average RF			0.3004	<=35	2.9
1,2-Dichloropropane	T	Average RF		0.100	0.2721	<=20	3.6
1,2-Dichloropropane	T	Average RF			0.2721	<=35	3.6
1,3,5-Trichlorobenzene	T	Average RF			0.6655	<=20	3.8
1,3,5-Trichlorobenzene	T	Average RF			0.6655	<=35	3.8
1,3,5-Trimethylbenzene	T	Average RF			1.894	<=20	9.2
1,3,5-Trimethylbenzene	T	Average RF			1.894	<=35	9.2
1,3-Dichlorobenzene	T	Average RF		0.600	1.055	<=20	5.2
1,3-Dichlorobenzene	T	Average RF			1.055	<=35	5.2
1,3-Dichloropropane	T	Average RF			0.3743	<=20	3.7
1,3-Dichloropropane	T	Average RF			0.3743	<=35	3.7
1,4-Dichlorobenzene	T	Average RF		0.500	1.097	<=20	8.1
1,4-Dichlorobenzene	T	Average RF			1.097	<=35	8.1
1,4-Dioxane	T	Average RF			0.001641	<=20	12.6
1,4-Dioxane	T	Average RF			0.001641	<=35	12.6
1-Butanol	T	Average RF			0.005397	<=20	7.8
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3214	<=20	5.4
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3214	<=35	5.4
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6210	<=20	10.0

Initial Calibration - Summary Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6210	<=35	10.0
2,2-Dichloropropane	T	Average RF			0.6448	<=20	4.0
2,2-Dichloropropane	T	Average RF			0.6448	<=35	4.0
2,3,6-Trichlorotoluene	T	Average RF			0.3326	<=20	2.9
2,3,6-Trichlorotoluene	T	Average RF			0.3326	<=35	2.9
2,4,5-Trichlorotoluene	T	Average RF			0.3576	<=20	7.2
2,4,5-Trichlorotoluene	T	Average RF			0.3576	<=35	7.2
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.8304	<=20	5.3
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.8304	<=35	5.3
2,4-Dichlorobenzotrifluoride	T	Average RF			0.4441	<=20	8.7
2,4-Dichlorobenzotrifluoride	T	Average RF			0.4441	<=35	8.7
2,5-Dichlorobenzotrifluoride	T	Average RF			0.4710	<=20	7.1
2,5-Dichlorobenzotrifluoride	T	Average RF			0.4710	<=35	7.1
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1440	<=20	5.8
2-Butanone (MEK)	T	Average RF			0.1440	<=35	5.8
2-Chloro-1,3-butadiene	T	Average RF			0.8371	<=20	2.5
2-Chlorobenzotrifluoride	T	Average RF			0.6584	<=20	4.5
2-Chlorobenzotrifluoride	T	Average RF			0.6584	<=35	4.5
2-Chloroethyl Vinyl Ether	T	Average RF			0.1452	<=20	8.4
2-Chloroethyl Vinyl Ether	T	Average RF			0.1452	<=35	8.4
2-Chlorotoluene	T	Average RF			1.639	<=20	9.2
2-Chlorotoluene	T	Average RF			1.639	<=35	9.2
2-Hexanone	T	Average RF		0.05	0.1447	<=20	6.6
2-Hexanone	T	Average RF			0.1447	<=35	6.6
2-Methyl-1-propanol	T	Average RF			0.009385	<=20	5.9
2-Methyl-1-propanol	T	Average RF			0.009385	<=35	5.9
2-Methyl-2-propanol	T	Average RF			0.03013	<=20	6.9
2-Methyl-2-propanol	T	Average RF			0.03013	<=35	6.9
2-Nitropropane	T	Average RF			0.05426	<=20	4.7
2-Propanol	T	Average RF			0.01896	<=20	9.0
2-Propanol	T	Average RF			0.01896	<=35	9.0
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			0.8802	<=20	6.4
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			0.8802	<=35	6.4
3,4-Dichlorobenzotrifluoride	T	Average RF			0.4682	<=20	5.9
3,4-Dichlorobenzotrifluoride	T	Average RF			0.4682	<=35	5.9
3-Chloro-1-propene	T	Average RF			0.2132	<=20	11.4
3-Chloro-1-propene	T	Average RF			0.2132	<=35	11.4
3-Chlorobenzotrifluoride	T	Average RF			0.3634	<=20	4.3
3-Chlorobenzotrifluoride	T	Average RF			0.3634	<=35	4.3
3-Chlorotoluene	T	Average RF			1.671	<=20	7.8
3-Chlorotoluene	T	Average RF			1.671	<=35	7.8
4-Chlorotoluene	T	Average RF			1.911	<=20	8.8
4-Chlorotoluene	T	Average RF			1.911	<=35	8.8
4-Isopropyltoluene	T	Average RF			1.851	<=20	9.6
4-Isopropyltoluene	T	Average RF			1.851	<=35	9.6
4-Methyl-2-pentanone	T	Average RF		0.05	0.1911	<=20	5.1
4-Methyl-2-pentanone	T	Average RF			0.1911	<=35	5.1
Acetone	T	Average RF		0.05	0.09765	<=20	7.2
Acetone	T	Average RF			0.09765	<=35	7.2
Acetonitrile	T	Linear	1/X		0.01593	>=0.99	0.9953
Acrolein	T	Average RF			0.04860	<=20	10.3

Initial Calibration - Summary Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acrolein	T	Average RF			0.04860	<=35	10.3
Acrylonitrile	T	Average RF			0.1145	<=20	4.5
Acrylonitrile	T	Average RF			0.1145	<=35	4.5
Benzene	T	Average RF		0.500	1.007	<=20	5.3
Benzene	T	Average RF			1.007	<=35	5.3
Bromobenzene	T	Average RF			0.5559	<=20	5.5
Bromobenzene	T	Average RF			0.5559	<=35	5.5
Bromochloromethane	T	Average RF			0.2381	<=20	6.3
Bromochloromethane	T	Average RF			0.2381	<=35	6.3
Bromodichloromethane	T	Average RF		0.200	0.3313	<=20	7.9
Bromodichloromethane	T	Average RF			0.3313	<=35	7.9
Bromoform	T	Average RF		0.100	0.2384	<=20	5.9
Bromoform	T	Average RF			0.2384	<=35	5.9
Bromomethane	T	Average RF		0.100	0.2894	<=20	6.4
Bromomethane	T	Average RF			0.2894	<=35	6.4
Carbon Disulfide	T	Average RF		0.100	1.261	<=20	3.6
Carbon Disulfide	T	Average RF			1.261	<=35	3.6
Carbon Tetrachloride	T	Average RF		0.05	0.09590	<=20	4.9
Carbon Tetrachloride	T	Average RF			0.09590	<=35	4.9
Chlorobenzene	T	Average RF		0.500	0.7333	<=20	5.7
Chlorobenzene	T	Average RF			0.7333	<=35	5.7
Chloroethane	T	Average RF		0.100	0.3838	<=20	7.1
Chloroethane	T	Average RF			0.3838	<=35	7.1
Chloroform	T	Average RF		0.200	0.7300	<=20	5.9
Chloroform	T	Average RF			0.7300	<=35	5.9
Chloromethane	T	Average RF		0.100	0.6392	<=20	4.5
Chloromethane	T	Average RF			0.6392	<=35	4.5
Cyclohexane	T	Average RF		0.100	0.2786	<=20	7.8
Cyclohexane	T	Average RF			0.2786	<=35	7.8
Cyclohexanone	T	Average RF			0.04361	<=20	8.5
Cyclohexanone	T	Average RF			0.04361	<=35	8.5
Dibromochloromethane	T	Average RF		0.100	0.2483	<=20	9.2
Dibromochloromethane	T	Average RF			0.2483	<=35	9.2
Dibromomethane	T	Average RF			0.1284	<=20	5.0
Dibromomethane	T	Average RF			0.1284	<=35	5.0
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5899	<=20	8.9
Dichlorodifluoromethane (CFC 12)	T	Average RF			0.5899	<=35	8.9
Dichlorofluoromethane (CFC 21)	T	Average RF			0.8258	<=20	6.0
Dichloromethane	T	Average RF		0.100	0.4216	<=20	2.7
Dichloromethane	T	Average RF			0.4216	<=35	2.7
Diethyl Ether	T	Average RF			0.3664	<=20	4.4
Diethyl Ether	T	Average RF			0.3664	<=35	4.4
Diisopropyl Ether	T	Average RF			1.546	<=20	4.7
Diisopropyl Ether	T	Average RF			1.546	<=35	4.7
Ethyl Methacrylate	T	Average RF			0.3196	<=20	5.2
Ethyl Methacrylate	T	Average RF			0.3196	<=35	5.2
Ethyl tert-Butyl Ether	T	Average RF			1.369	<=20	3.9
Ethylbenzene	T	Average RF		0.100	0.4090	<=20	4.8
Ethylbenzene	T	Average RF			0.4090	<=35	4.8
Hexachlorobutadiene	T	Average RF			0.2436	<=20	8.5
Hexachlorobutadiene	T	Average RF			0.2436	<=35	8.5
Iodomethane	T	Quadratic	1/X2		0.3499	>=0.99	0.9910

Initial Calibration - Summary Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.189	<=20	12.2
Isopropylbenzene (Cumene)	T	Average RF			2.189	<=35	12.2
Methacrylonitrile	T	Average RF			0.1346	<=20	3.5
Methacrylonitrile	T	Average RF			0.1346	<=35	3.5
Methyl Acetate	T	Average RF		0.100	0.2364	<=20	4.1
Methyl Methacrylate	T	Average RF			0.1534	<=20	6.4
Methyl Methacrylate	T	Average RF			0.1534	<=35	6.4
Methyl tert-Butyl Ether	T	Average RF		0.100	1.116	<=20	3.6
Methyl tert-Butyl Ether	T	Average RF			1.116	<=35	3.6
Methylcyclohexane	T	Average RF		0.100	0.3276	<=20	5.2
Naphthalene	T	Average RF			1.269	<=20	7.5
Naphthalene	T	Average RF			1.269	<=35	7.5
Propionitrile	T	Average RF			0.04142	<=20	7.0
Propionitrile	T	Average RF			0.04142	<=35	7.0
Styrene	T	Average RF		0.300	0.8001	<=20	6.5
Styrene	T	Average RF			0.8001	<=35	6.5
Tetrachloroethene (PCE)	T	Average RF		0.200	0.1928	<=20	5.2
Tetrachloroethene (PCE)	T	Average RF			0.1928	<=35	5.2
Tetrahydrofuran (THF)	T	Average RF			0.09472	<=20	6.3
Tetrahydrofuran (THF)	T	Average RF			0.09472	<=35	6.3
Toluene	T	Average RF		0.400	1.063	<=20	8.5
Toluene	T	Average RF			1.063	<=35	8.5
Trichloroethene (TCE)	T	Average RF		0.200	0.2464	<=20	3.7
Trichloroethene (TCE)	T	Average RF			0.2464	<=35	3.7
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.6159	<=20	6.5
Trichlorofluoromethane (CFC 11)	T	Average RF			0.6159	<=35	6.5
Vinyl Acetate	T	Average RF			0.07885	<=20	4.2
Vinyl Acetate	T	Average RF			0.07885	<=35	4.2
Vinyl Chloride	T	Average RF		0.100	0.7146	<=20	5.6
Vinyl Chloride	T	Average RF			0.7146	<=35	5.6
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4551	<=20	7.3
cis-1,2-Dichloroethene	T	Average RF			0.4551	<=35	7.3
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4229	<=20	6.8
cis-1,3-Dichloropropene	T	Average RF			0.4229	<=35	6.8
m,p-Xylenes	T	Average RF		0.100	0.4812	<=20	7.1
m,p-Xylenes	T	Average RF			0.4812	<=35	7.1
n-Butyl Acetate	T	Average RF			0.3780	<=20	6.0
n-Butyl Acetate	T	Average RF			0.3780	<=35	6.0
n-Butylbenzene	T	Average RF			1.673	<=20	8.9
n-Butylbenzene	T	Average RF			1.673	<=35	8.9
n-Heptane	T	Average RF			0.3063	<=20	7.3
n-Heptane	T	Average RF			0.3063	<=35	7.3
n-Propylbenzene	T	Average RF			2.540	<=20	14.9
n-Propylbenzene	T	Average RF			2.540	<=35	14.9
o-Xylene	T	Average RF		0.300	0.4791	<=20	4.2
o-Xylene	T	Average RF			0.4791	<=35	4.2
sec-Butylbenzene	T	Average RF			2.144	<=20	11.7
sec-Butylbenzene	T	Average RF			2.144	<=35	11.7
tert-Amyl Methyl Ether	T	Average RF			1.194	<=20	5.6
tert-Butylbenzene	T	Average RF			1.503	<=20	7.7
tert-Butylbenzene	T	Average RF			1.503	<=35	7.7
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4319	<=20	5.9

Initial Calibration - Summary Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
trans-1,2-Dichloroethene	T	Average RF			0.4319	<=35	5.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3522	<=20	6.5
trans-1,3-Dichloropropene	T	Average RF			0.3522	<=35	6.5
trans-1,4-Dichloro-2-butene	T	Average RF			0.1705	<=20	11.7
trans-1,4-Dichloro-2-butene	T	Average RF			0.1705	<=35	11.7
1,2-Dichloroethane-d4	S	Average RF			0.3042	<=20	8.8
1,2-Dichloroethane-d4	S	Average RF			0.3042	<=35	8.8
4-Bromofluorobenzene	S	Average RF			0.4320	<=20	8.9
4-Bromofluorobenzene	S	Average RF			0.4320	<=35	8.9
Dibromofluoromethane	S	Average RF			0.2588	<=20	8.3
Dibromofluoromethane	S	Average RF			0.2588	<=35	8.3
Toluene-d8	S	Average RF			1.111	<=20	12.1
Toluene-d8	S	Average RF			1.111	<=35	12.1

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
Tetrachloroethene (PCE)	Minimum RF	>= 0.200	

Initial Calibration - Detailed Report

KR 5/10/16

Calibration ID: RC1600048 — **Instrument ID:** R-MS-12
5860 waters W0509I6 — **Signal ID:** 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1600048-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\050916\P1872.D	5/9/16 14:19
02	RC1600048-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1873.D	5/9/16 14:50
03	RC1600048-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1874.D	5/9/16 15:21
04	RC1600048-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1875.D	5/9/16 15:51
05	RC1600048-05	20ppb	I:\ACQUDATA\msvoa12\Data\050916\P1876.D	5/9/16 16:22
06	RC1600048-06	50ppb	I:\ACQUDATA\msvoa12\Data\050916\P1877.D	5/9/16 16:52
07	RC1600048-07	100ppb	I:\ACQUDATA\msvoa12\Data\050916\P1878.D	5/9/16 17:23
08	RC1600048-08	150ppb	I:\ACQUDATA\msvoa12\Data\050916\P1879.D	5/9/16 17:54
09	RC1600048-09	200ppb	I:\ACQUDATA\msvoa12\Data\050916\P1880.D	5/9/16 18:24

Analyte — **Curve Fit** — **Weighting**

1,1,1,2-Tetrachloroethane — Average RF — RSD = 5.2 — Average RF = 0.2565

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2303	02	1.000	0.2735	03	2.000	0.2472	04	5.000	0.2535
05	20.000	0.2717	06	50.000	0.2646	07	100.000	0.2549	08	150.000	0.2515
09	200.000	0.2616									

1,1,1-Trichloroethane (TCA) — Average RF — RSD = 7.6 — Average RF = 0.6227

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7360	02	1.000	0.6161	03	2.000	0.6280	04	5.000	0.6366
05	20.000	0.6226	06	50.000	0.6085	07	100.000	0.5958	08	150.000	0.5692
09	200.000	0.5916									

1,1,2,2-Tetrachloroethane — Average RF — RSD = 6.8 — Average RF = 0.5124

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5692	02	1.000	0.5351	03	2.000	0.5332	04	5.000	0.4975
05	20.000	0.5386	06	50.000	0.5122	07	100.000	0.4643	08	150.000	0.4689
09	200.000	0.4930									

1,1,2-Trichloroethane — Average RF — RSD = 11.7 — Average RF = 0.1950

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2510	02	1.000	0.2038	03	2.000	0.1776	04	5.000	0.1914
05	20.000	0.1961	06	50.000	0.1913	07	100.000	0.1773	08	150.000	0.1814
09	200.000	0.1849									

1,1,2-Trichlorotrifluoroethane — Average RF — RSD = 4.9 — Average RF = 0.3686

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3749	02	1.000	0.3968	03	2.000	0.3433	04	5.000	0.3690
05	20.000	0.3866	06	50.000	0.3759	07	100.000	0.3655	08	150.000	0.3419
09	200.000	0.3633									

1,1-Dichloroethane (1,1-DCA) — Average RF — RSD = 4.0 — Average RF = 0.7516

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8076	02	1.000	0.7351	03	2.000	0.7552	04	5.000	0.7296
05	20.000	0.7938	06	50.000	0.7542	07	100.000	0.7373	08	150.000	0.7237
09	200.000	0.7281									

1,1-Dichloroethene (1,1-DCE) — Average RF — RSD = 3.6 — Average RF = 0.3766

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3778	02	1.000	0.3633	03	2.000	0.3551	04	5.000	0.3937
05	20.000	0.3942	06	50.000	0.3852	07	100.000	0.3789	08	150.000	0.3646
09	200.000	0.3767									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,1-Dichloropropene Average RF RSD = 3.5 Average RF = 0.3415

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3316	02	1.000	0.3482	03	2.000	0.3354	04	5.000	0.3329
05	20.000	0.3594	06	50.000	0.3587	07	100.000	0.3416	08	150.000	0.3253
09	200.000	0.3403									

1,2,3-Trichlorobenzene Average RF RSD = 5.9 Average RF = 0.5019

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4701	02	1.000	0.4774	03	2.000	0.4852	04	5.000	0.4741
05	20.000	0.5491	06	50.000	0.5426	07	100.000	0.5029	08	150.000	0.4942
09	200.000	0.5215									

1,2,3-Trichloropropane Average RF RSD = 10.0 Average RF = 0.1483

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1797	02	1.000	0.1585	03	2.000	0.1502	04	5.000	0.1521
05	20.000	0.1487	06	50.000	0.1417	07	100.000	0.1316	08	150.000	0.1326
09	200.000	0.1399									

1,2,4-Trichlorobenzene Average RF RSD = 4.2 Average RF = 0.5924

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5752	02	1.000	0.6044	03	2.000	0.5810	04	5.000	0.5626
05	20.000	0.6307	06	50.000	0.6319	07	100.000	0.5856	08	150.000	0.5726
09	200.000	0.5874									

1,2,4-Trimethylbenzene Average RF RSD = 9.9 Average RF = 1.943

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.035	02	1.000	2.036	03	2.000	2.051	04	5.000	2.068
05	20.000	2.112	06	50.000	2.072	07	100.000	1.858	08	150.000	1.678
09	200.000	1.581									

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 10.0 Average RF = 0.09412

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08839	03	2.000	0.1137	04	5.000	0.08662	05	20.000	0.09972
06	50.000	0.09590	07	100.000	0.08743	08	150.000	0.08586	09	200.000	0.09533

1,2-Dibromoethane Average RF RSD = 4.9 Average RF = 0.2029

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2150	02	1.000	0.1971	03	2.000	0.1909	04	5.000	0.2045
05	20.000	0.2198	06	50.000	0.2091	07	100.000	0.1929	08	150.000	0.1966
09	200.000	0.2005									

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 5.0 Average RF = 0.5228

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5633	02	1.000	0.5064	03	2.000	0.5589	04	5.000	0.5148
05	20.000	0.4865	06	50.000	0.5423	07	100.000	0.5148	08	150.000	0.5022
09	200.000	0.5164									

1,2-Dichlorobenzene Average RF RSD = 4.7 Average RF = 0.9983

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9694	02	1.000	1.087	03	2.000	0.9761	04	5.000	0.9784
05	20.000	1.060	06	50.000	1.024	07	100.000	0.9744	08	150.000	0.9528
09	200.000	0.9627									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,2-Dichloroethane Average RF RSD = 2.9 Average RF = 0.3004

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2920	02	1.000	0.3078	03	2.000	0.2946	04	5.000	0.3013
05	20.000	0.3164	06	50.000	0.3079	07	100.000	0.2913	08	150.000	0.2936
09	200.000	0.2987									

1,2-Dichloroethane-d4 Average RF RSD = 8.8 Average RF = 0.3042

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3414	03	60.000	0.3264	04	70.000	0.3094	05	100.000	0.2940
07	125.000	0.2844	08	150.000	0.2696						

1,2-Dichloropropane Average RF RSD = 3.6 Average RF = 0.2721

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2935	02	1.000	0.2770	03	2.000	0.2635	04	5.000	0.2678
05	20.000	0.2789	06	50.000	0.2722	07	100.000	0.2641	08	150.000	0.2629
09	200.000	0.2694									

1,3,5-Trichlorobenzene Average RF RSD = 3.8 Average RF = 0.6655

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6807	02	1.000	0.6131	03	2.000	0.6800	04	5.000	0.6819
05	20.000	0.6974	06	50.000	0.6662	07	100.000	0.6635	08	150.000	0.6432
09	200.000	0.6635									

1,3,5-Trimethylbenzene Average RF RSD = 9.2 Average RF = 1.894

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.994	02	1.000	1.987	03	2.000	1.950	04	5.000	1.961
05	20.000	2.096	06	50.000	1.992	07	100.000	1.835	08	150.000	1.662
09	200.000	1.565									

1,3-Dichlorobenzene Average RF RSD = 5.2 Average RF = 1.055

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.138	02	1.000	1.072	03	2.000	1.015	04	5.000	1.063
05	20.000	1.118	06	50.000	1.086	07	100.000	1.025	08	150.000	0.9865
09	200.000	0.9877									

1,3-Dichloropropane Average RF RSD = 3.7 Average RF = 0.3743

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3745	02	1.000	0.3740	03	2.000	0.3794	04	5.000	0.3503
05	20.000	0.3969	06	50.000	0.3903	07	100.000	0.3643	08	150.000	0.3655
09	200.000	0.3736									

1,4-Dichlorobenzene Average RF RSD = 8.1 Average RF = 1.097

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.298	02	1.000	1.078	03	2.000	1.067	04	5.000	1.107
05	20.000	1.153	06	50.000	1.109	07	100.000	1.043	08	150.000	1.007
09	200.000	1.010									

1,4-Dioxane Average RF RSD = 12.6 Average RF = 0.001641

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.001243	04	100.000	0.001712	05	400.000	0.001610	06	1000.000	0.001704
07	2000.000	0.001595	08	3000.000	0.001695	09	4000.000	0.001928			

1-Butanol Average RF RSD = 7.8 Average RF = 0.005397

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.005490	03	100.000	0.004962	04	250.000	0.004749	05	1000.000	0.005398
06	2500.000	0.005707	07	5000.000	0.005380	08	7500.000	0.005358	09	10000.000	0.006129

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 5.4 Average RF = 0.3214

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3407	02	1.000	0.2820	03	2.000	0.3273	04	5.000	0.3361
05	20.000	0.3293	06	50.000	0.3157	07	100.000	0.3173	08	150.000	0.3140
09	200.000	0.3303									

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 10.0 Average RF = 0.6210

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7559	02	1.000	0.6858	03	2.000	0.6047	04	5.000	0.6193
05	20.000	0.5599	06	50.000	0.6099	07	100.000	0.5871	08	150.000	0.5707
09	200.000	0.5960									

2,2-Dichloropropane Average RF RSD = 4.0 Average RF = 0.6448

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.6845	03	2.000	0.6143	04	5.000	0.6327	05	20.000	0.6769
06	50.000	0.6460	07	100.000	0.6526	08	150.000	0.6150	09	200.000	0.6362

2,3,6-Trichlorotoluene Average RF RSD = 2.9 Average RF = 0.3326

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3293	03	2.000	0.3313	04	5.000	0.3312	05	20.000	0.3222
06	50.000	0.3363	07	100.000	0.3293	08	150.000	0.3275	09	200.000	0.3540

2,4,5-Trichlorotoluene Average RF RSD = 7.2 Average RF = 0.3576

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3016	03	2.000	0.3615	04	5.000	0.3452	05	20.000	0.3683
06	50.000	0.3680	07	100.000	0.3667	08	150.000	0.3602	09	200.000	0.3896

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 5.3 Average RF = 0.8304

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.8361	02	3.000	0.8632	03	6.000	0.8012	04	15.000	0.8619
05	60.000	0.8909	06	150.000	0.8565	07	300.000	0.8252	08	450.000	0.7847
09	600.000	0.7541									

2,4-Dichlorobenzotrifluoride Average RF RSD = 8.7 Average RF = 0.4441

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5331	02	1.000	0.4721	03	2.000	0.4207	04	5.000	0.4149
05	20.000	0.4566	06	50.000	0.4199	07	100.000	0.4255	08	150.000	0.4194
09	200.000	0.4344									

2,5-Dichlorobenzotrifluoride Average RF RSD = 7.1 Average RF = 0.4710

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4558	02	1.000	0.5566	03	2.000	0.4568	04	5.000	0.4541
05	20.000	0.4721	06	50.000	0.4479	07	100.000	0.4540	08	150.000	0.4632
09	200.000	0.4787									

2-Butanone (MEK) Average RF RSD = 5.8 Average RF = 0.1440

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1547	05	20.000	0.1333	06	50.000	0.1426	07	100.000	0.1377
08	150.000	0.1432	09	200.000	0.1525						

2-Chloro-1,3-butadiene Average RF RSD = 2.5 Average RF = 0.8371

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8632	02	1.000	0.8543	03	2.000	0.8696	04	5.000	0.8352
05	20.000	0.8166	06	50.000	0.8272	07	100.000	0.8132	08	150.000	0.8182
09	200.000	0.8363									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2-Chlorobenzotrifluoride Average RF RSD = 4.5 Average RF = 0.6584

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6164	02	1.000	0.6687	03	2.000	0.7117	04	5.000	0.6471
05	20.000	0.6920	06	50.000	0.6485	07	100.000	0.6436	08	150.000	0.6336
09	200.000	0.6644									

2-Chloroethyl Vinyl Ether Average RF RSD = 8.4 Average RF = 0.1452

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1584	03	2.000	0.1205	04	5.000	0.1390	05	20.000	0.1398
06	50.000	0.1521	07	100.000	0.1467	08	150.000	0.1479	09	200.000	0.1569

2-Chlorotoluene Average RF RSD = 9.2 Average RF = 1.639

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.817	02	1.000	1.712	03	2.000	1.609	04	5.000	1.707
05	20.000	1.801	06	50.000	1.716	07	100.000	1.562	08	150.000	1.438
09	200.000	1.392									

2-Hexanone Average RF RSD = 6.6 Average RF = 0.1447

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1364	04	5.000	0.1301	05	20.000	0.1446	06	50.000	0.1563
07	100.000	0.1434	08	150.000	0.1463	09	200.000	0.1560			

2-Methyl-1-propanol Average RF RSD = 5.9 Average RF = 0.009385

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01025	03	40.000	0.009383	04	100.000	0.008726	05	400.000	0.009118
06	1000.000	0.009625	07	2000.000	0.008808	08	3000.000	0.009116	09	4000.000	0.01005

2-Methyl-2-propanol Average RF RSD = 6.9 Average RF = 0.03013

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.03061	03	40.000	0.02641	04	100.000	0.02861	05	400.000	0.03198
06	1000.000	0.03141	07	2000.000	0.02933	08	3000.000	0.02973	09	4000.000	0.03296

2-Nitropropane Average RF RSD = 4.7 Average RF = 0.05426

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.05638	03	4.000	0.05520	04	10.000	0.05451	05	40.000	0.05740
06	100.000	0.05503	07	200.000	0.04935	08	300.000	0.05205	09	400.000	0.05415

2-Propanol Average RF RSD = 9.0 Average RF = 0.01896

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.02208	03	40.000	0.01686	04	100.000	0.01810	05	400.000	0.01792
06	1000.000	0.01898	07	2000.000	0.01848	08	3000.000	0.01833	09	4000.000	0.02092

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 6.4 Average RF = 0.8802

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8639	02	2.000	0.8556	03	4.000	0.8747	04	10.000	0.9232
05	40.000	0.9705	06	100.000	0.9336	07	200.000	0.8887	08	300.000	0.8260
09	400.000	0.7856									

3,4-Dichlorobenzotrifluoride Average RF RSD = 5.9 Average RF = 0.4682

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5023	02	1.000	0.4108	03	2.000	0.5012	04	5.000	0.4597
05	20.000	0.4765	06	50.000	0.4572	07	100.000	0.4670	08	150.000	0.4598
09	200.000	0.4797									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting										
3-Chloro-1-propene	Average RF		RSD = 11.4		Average RF = 0.2132							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.2485	02	1.000	0.2300	03	2.000	0.2152	04	5.000	0.2192	
05	20.000	0.2285	06	50.000	0.2217	07	100.000	0.2027	08	150.000	0.1708	
09	200.000	0.1820										
3-Chlorobenzotrifluoride	Average RF		RSD = 4.3		Average RF = 0.3634							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.3989	02	1.000	0.3764	03	2.000	0.3557	04	5.000	0.3546	
05	20.000	0.3624	06	50.000	0.3517	07	100.000	0.3578	08	150.000	0.3489	
09	200.000	0.3642										
3-Chlorotoluene	Average RF		RSD = 7.8		Average RF = 1.671							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	1.749	02	1.000	1.642	03	2.000	1.682	04	5.000	1.838	
05	20.000	1.829	06	50.000	1.711	07	100.000	1.623	08	150.000	1.512	
09	200.000	1.453										
4-Bromofluorobenzene	Average RF		RSD = 8.9		Average RF = 0.4320							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
06	50.000	0.4859	03	60.000	0.4631	04	70.000	0.4435	05	100.000	0.4115	
07	125.000	0.4013	08	150.000	0.3865							
4-Chlorotoluene	Average RF		RSD = 8.8		Average RF = 1.911							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	1.990	02	1.000	2.007	03	2.000	1.945	04	5.000	2.006	
05	20.000	2.101	06	50.000	2.022	07	100.000	1.848	08	150.000	1.687	
09	200.000	1.595										
4-Isopropyltoluene	Average RF		RSD = 9.6		Average RF = 1.851							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	1.818	02	1.000	1.950	03	2.000	1.938	04	5.000	1.942	
05	20.000	2.046	06	50.000	2.007	07	100.000	1.813	08	150.000	1.620	
09	200.000	1.525										
4-Methyl-2-pentanone	Average RF		RSD = 5.1		Average RF = 0.1911							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
03	2.000	0.1778	04	5.000	0.1818	05	20.000	0.1904	06	50.000	0.1974	
07	100.000	0.1883	08	150.000	0.1953	09	200.000	0.2069				
Acetone	Average RF		RSD = 7.2		Average RF = 0.09765							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
04	5.000	0.1098	05	20.000	0.09775	06	50.000	0.09249	07	100.000	0.08949	
08	150.000	0.09670	09	200.000	0.09965							
Acetonitrile	Linear	1/X	R2 = 0.9953		Y = 0.01498 X + 8.398E-4							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
03	10.000	0.02178	04	25.000	0.01697	05	100.000	0.01454	06	250.000	0.01254	
07	500.000	0.01464	08	750.000	0.01533	09	1000.000	0.01572				
Acrolein	Average RF		RSD = 10.3		Average RF = 0.04860							
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
02	5.000	0.04577	03	10.000	0.04232	04	25.000	0.04238	05	100.000	0.04672	
06	250.000	0.05175	07	500.000	0.05097	08	750.000	0.05330	09	1000.000	0.05561	

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

Acrylonitrile Average RF RSD = 4.5 Average RF = 0.1145

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1196	02	5.000	0.1154	03	10.000	0.1051	04	25.000	0.1105
05	100.000	0.1211	06	250.000	0.1137	07	500.000	0.1111	08	750.000	0.1144
09	1000.000	0.1195									

Benzene Average RF RSD = 5.3 Average RF = 1.007

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.018	02	1.000	1.004	03	2.000	1.029	04	5.000	1.037
05	20.000	1.093	06	50.000	1.040	07	100.000	0.9789	08	150.000	0.9343
09	200.000	0.9263									

Bromobenzene Average RF RSD = 5.5 Average RF = 0.5559

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5970	02	1.000	0.5433	03	2.000	0.5051	04	5.000	0.5826
05	20.000	0.5835	06	50.000	0.5776	07	100.000	0.5419	08	150.000	0.5291
09	200.000	0.5433									

Bromochloromethane Average RF RSD = 6.3 Average RF = 0.2381

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2469	02	1.000	0.2159	03	2.000	0.2517	04	5.000	0.2593
05	20.000	0.2512	06	50.000	0.2392	07	100.000	0.2270	08	150.000	0.2228
09	200.000	0.2288									

Bromodichloromethane Average RF RSD = 7.9 Average RF = 0.3313

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3042	02	1.000	0.3917	03	2.000	0.3169	04	5.000	0.3428
05	20.000	0.3419	06	50.000	0.3330	07	100.000	0.3159	08	150.000	0.3136
09	200.000	0.3219									

Bromoform Average RF RSD = 5.9 Average RF = 0.2384

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2282	02	1.000	0.2591	03	2.000	0.2132	04	5.000	0.2468
05	20.000	0.2499	06	50.000	0.2464	07	100.000	0.2299	08	150.000	0.2299
09	200.000	0.2421									

Bromomethane Average RF RSD = 6.4 Average RF = 0.2894

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3012	02	1.000	0.2991	03	2.000	0.2627	04	5.000	0.2628
05	20.000	0.2768	06	50.000	0.2879	07	100.000	0.2970	08	150.000	0.3000
09	200.000	0.3172									

Carbon Disulfide Average RF RSD = 3.6 Average RF = 1.261

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.339	02	1.000	1.288	03	2.000	1.240	04	5.000	1.260
05	20.000	1.276	06	50.000	1.300	07	100.000	1.235	08	150.000	1.222
09	200.000	1.191									

Carbon Tetrachloride Average RF RSD = 4.9 Average RF = 0.09590

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1008	02	1.000	0.09074	03	2.000	0.1022	04	5.000	0.09527
05	20.000	0.09651	06	50.000	0.1006	07	100.000	0.09432	08	150.000	0.08826
09	200.000	0.09436									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Chlorobenzene Average RF RSD = 5.7 Average RF = 0.7333

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7321	02	1.000	0.7836	03	2.000	0.7089	04	5.000	0.7610
05	20.000	0.7803	06	50.000	0.7629	07	100.000	0.7186	08	150.000	0.6798
09	200.000	0.6726									

Chloroethane Average RF RSD = 7.1 Average RF = 0.3838

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4496	02	1.000	0.3617	03	2.000	0.3747	04	5.000	0.3667
05	20.000	0.3914	06	50.000	0.3946	07	100.000	0.3768	08	150.000	0.3632
09	200.000	0.3756									

Chloroform Average RF RSD = 5.9 Average RF = 0.7300

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8084	02	1.000	0.7897	03	2.000	0.6896	04	5.000	0.7021
05	20.000	0.7490	06	50.000	0.7195	07	100.000	0.7059	08	150.000	0.6974
09	200.000	0.7083									

Chloromethane Average RF RSD = 4.5 Average RF = 0.6392

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5759	02	1.000	0.6520	03	2.000	0.6524	04	5.000	0.6230
05	20.000	0.6742	06	50.000	0.6600	07	100.000	0.6427	08	150.000	0.6257
09	200.000	0.6471									

Cyclohexane Average RF RSD = 7.8 Average RF = 0.2786

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3170	03	2.000	0.3045	04	5.000	0.2670	05	20.000	0.2536
06	50.000	0.2822	07	100.000	0.2682	08	150.000	0.2632	09	200.000	0.2733

Cyclohexanone Average RF RSD = 8.5 Average RF = 0.04361

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.05029	03	40.000	0.04601	04	100.000	0.04269	05	400.000	0.04573
06	1000.000	0.04274	07	2000.000	0.03886	08	3000.000	0.03957	09	4000.000	0.04299

Dibromochloromethane Average RF RSD = 9.2 Average RF = 0.2483

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2997	02	1.000	0.2628	03	2.000	0.2360	04	5.000	0.2247
05	20.000	0.2520	06	50.000	0.2522	07	100.000	0.2320	08	150.000	0.2329
09	200.000	0.2419									

Dibromofluoromethane Average RF RSD = 8.3 Average RF = 0.2588

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.2867	03	60.000	0.2772	04	70.000	0.2672	05	100.000	0.2472
07	125.000	0.2423	08	150.000	0.2324						

Dibromomethane Average RF RSD = 5.0 Average RF = 0.1284

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1408	02	1.000	0.1298	03	2.000	0.1180	04	5.000	0.1270
05	20.000	0.1339	06	50.000	0.1273	07	100.000	0.1233	08	150.000	0.1253
09	200.000	0.1300									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 8.9 Average RF = 0.5899

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6441	02	1.000	0.5416	03	2.000	0.5513	04	5.000	0.4940
05	20.000	0.6382	06	50.000	0.6413	07	100.000	0.6180	08	150.000	0.5815
09	200.000	0.5988									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dichlorofluoromethane (CFC 21) Average RF RSD = 6.0 Average RF = 0.8258

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8601	02	1.000	0.9351	03	2.000	0.8132	04	5.000	0.8129
05	20.000	0.7837	06	50.000	0.8538	07	100.000	0.7965	08	150.000	0.7825
09	200.000	0.7941									

Dichloromethane Average RF RSD = 2.7 Average RF = 0.4216

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4298	02	1.000	0.4405	03	2.000	0.4130	04	5.000	0.4108
05	20.000	0.4365	06	50.000	0.4216	07	100.000	0.4123	08	150.000	0.4107
09	200.000	0.4195									

Diethyl Ether Average RF RSD = 4.4 Average RF = 0.3664

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3553	03	2.000	0.4031	04	5.000	0.3532	05	20.000	0.3723
06	50.000	0.3647	07	100.000	0.3577	08	150.000	0.3583	09	200.000	0.3663

Diisopropyl Ether Average RF RSD = 4.7 Average RF = 1.546

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.645	02	1.000	1.523	03	2.000	1.517	04	5.000	1.525
05	20.000	1.681	06	50.000	1.532	07	100.000	1.539	08	150.000	1.440
09	200.000	1.509									

Ethyl Methacrylate Average RF RSD = 5.2 Average RF = 0.3196

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3490	02	1.000	0.3349	03	2.000	0.3006	04	5.000	0.3068
05	20.000	0.3340	06	50.000	0.3194	07	100.000	0.3037	08	150.000	0.3092
09	200.000	0.3187									

Ethyl tert-Butyl Ether Average RF RSD = 3.9 Average RF = 1.369

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.328	02	1.000	1.356	03	2.000	1.316	04	5.000	1.373
05	20.000	1.479	06	50.000	1.394	07	100.000	1.394	08	150.000	1.299
09	200.000	1.384									

Ethylbenzene Average RF RSD = 4.8 Average RF = 0.4090

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4218	02	1.000	0.3967	03	2.000	0.3817	04	5.000	0.4274
05	20.000	0.4269	06	50.000	0.4343	07	100.000	0.4058	08	150.000	0.3844
09	200.000	0.4020									

Hexachlorobutadiene Average RF RSD = 8.5 Average RF = 0.2436

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2920	02	1.000	0.2338	03	2.000	0.2385	04	5.000	0.2495
05	20.000	0.2530	06	50.000	0.2437	07	100.000	0.2309	08	150.000	0.2206
09	200.000	0.2304									

Iodomethane Quadratic 1/X2 COD = 0.9910 $Y = 0.03013 X^2 + 0.3513 X + -0.008272$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1696	04	5.000	0.2119	05	20.000	0.3175	06	50.000	0.4252
07	100.000	0.4420	08	150.000	0.4428	09	200.000	0.4404			

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Isopropylbenzene (Cumene) — Curve Fit: Average RF — Weighting: RSD = 12.2 — Average RF = 2.189

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.488	02	1.000	2.206	03	2.000	2.211	04	5.000	2.375
05	20.000	2.432	06	50.000	2.351	07	100.000	2.086	08	150.000	1.836
09	200.000	1.716									

Methacrylonitrile — Curve Fit: Average RF — Weighting: RSD = 3.5 — Average RF = 0.1346

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1298	04	5.000	0.1359	05	20.000	0.1412	06	50.000	0.1366
07	100.000	0.1297	08	150.000	0.1304	09	200.000	0.1386			

Methyl Acetate — Curve Fit: Average RF — Weighting: RSD = 4.1 — Average RF = 0.2364

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2348	04	5.000	0.2201	05	20.000	0.2372	06	50.000	0.2430
07	100.000	0.2384	08	150.000	0.2304	09	200.000	0.2506			

Methyl Methacrylate — Curve Fit: Average RF — Weighting: RSD = 6.4 — Average RF = 0.1534

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1713	02	1.000	0.1369	03	2.000	0.1564	04	5.000	0.1541
05	20.000	0.1598	06	50.000	0.1548	07	100.000	0.1446	08	150.000	0.1475
09	200.000	0.1549									

Methyl tert-Butyl Ether — Curve Fit: Average RF — Weighting: RSD = 3.6 — Average RF = 1.116

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.096	02	1.000	1.112	03	2.000	1.113	04	5.000	1.145
05	20.000	1.210	06	50.000	1.115	07	100.000	1.082	08	150.000	1.080
09	200.000	1.093									

Methylcyclohexane — Curve Fit: Average RF — Weighting: RSD = 5.2 — Average RF = 0.3276

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3525	03	2.000	0.3041	04	5.000	0.3329	05	20.000	0.3061
06	50.000	0.3463	07	100.000	0.3294	08	150.000	0.3208	09	200.000	0.3287

Naphthalene — Curve Fit: Average RF — Weighting: RSD = 7.5 — Average RF = 1.269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.128	02	1.000	1.297	03	2.000	1.192	04	5.000	1.273
05	20.000	1.422	06	50.000	1.404	07	100.000	1.273	08	150.000	1.212
09	200.000	1.223									

Propionitrile — Curve Fit: Average RF — Weighting: RSD = 7.0 — Average RF = 0.04142

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.03803	03	10.000	0.04741	04	25.000	0.04046	05	100.000	0.04211
06	250.000	0.04070	07	500.000	0.03876	08	750.000	0.04102	09	1000.000	0.04286

Styrene — Curve Fit: Average RF — Weighting: RSD = 6.5 — Average RF = 0.8001

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7641	02	1.000	0.7557	03	2.000	0.8019	04	5.000	0.8392
05	20.000	0.8786	06	50.000	0.8640	07	100.000	0.8060	08	150.000	0.7594
09	200.000	0.7324									

Tetrachloroethene (PCE) — Curve Fit: Average RF — Weighting: RSD = 5.2 — Average RF = 0.1928

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1801	02	1.000	0.1936	03	2.000	0.1803	04	5.000	0.1889
05	20.000	0.2097	06	50.000	0.2017	07	100.000	0.1997	08	150.000	0.1858
09	200.000	0.1954									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Weighting

Tetrahydrofuran (THF) Average RF RSD = 6.3 Average RF = 0.09472

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1006	04	5.000	0.09422	05	20.000	0.1009	06	50.000	0.09855
07	100.000	0.08736	08	150.000	0.08616	09	200.000	0.09529			

Toluene Average RF RSD = 8.5 Average RF = 1.063

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.128	02	1.000	1.079	03	2.000	1.123	04	5.000	1.113
05	20.000	1.146	06	50.000	1.114	07	100.000	1.027	08	150.000	0.9420
09	200.000	0.8925									

Toluene-d8 Average RF RSD = 12.1 Average RF = 1.111

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.276	03	60.000	1.229	04	70.000	1.170	05	100.000	1.047
07	125.000	1.001	08	150.000	0.9398						

Trichloroethene (TCE) Average RF RSD = 3.7 Average RF = 0.2464

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2473	02	1.000	0.2542	03	2.000	0.2292	04	5.000	0.2455
05	20.000	0.2575	06	50.000	0.2535	07	100.000	0.2501	08	150.000	0.2350
09	200.000	0.2457									

Trichlorofluoromethane (CFC 11) Average RF RSD = 6.5 Average RF = 0.6159

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6926	02	1.000	0.6456	03	2.000	0.6383	04	5.000	0.5760
05	20.000	0.6231	06	50.000	0.6170	07	100.000	0.5980	08	150.000	0.5615
09	200.000	0.5910									

Vinyl Acetate Average RF RSD = 4.2 Average RF = 0.07885

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08118	03	2.000	0.08125	04	5.000	0.07868	05	20.000	0.07342
06	50.000	0.08404	07	100.000	0.07790	08	150.000	0.07864	09	200.000	0.07570

Vinyl Chloride Average RF RSD = 5.6 Average RF = 0.7146

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7563	02	1.000	0.7110	03	2.000	0.6429	04	5.000	0.6998
05	20.000	0.7621	06	50.000	0.7544	07	100.000	0.7294	08	150.000	0.6784
09	200.000	0.6969									

cis-1,2-Dichloroethene Average RF RSD = 7.3 Average RF = 0.4551

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5179	02	1.000	0.4843	03	2.000	0.4012	04	5.000	0.4290
05	20.000	0.4658	06	50.000	0.4596	07	100.000	0.4456	08	150.000	0.4398
09	200.000	0.4529									

cis-1,3-Dichloropropene Average RF RSD = 6.8 Average RF = 0.4229

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3538	02	1.000	0.4468	03	2.000	0.4319	04	5.000	0.4169
05	20.000	0.4543	06	50.000	0.4373	07	100.000	0.4232	08	150.000	0.4193
09	200.000	0.4229									

m,p-Xylenes Average RF RSD = 7.1 Average RF = 0.4812

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5134	02	2.000	0.4783	03	4.000	0.4829	04	10.000	0.4982
05	40.000	0.5148	06	100.000	0.5135	07	200.000	0.4752	08	300.000	0.4350
09	400.000	0.4197									

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

n-Butyl Acetate Average RF RSD = 6.0 Average RF = 0.3780

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3377	02	1.000	0.3776	03	2.000	0.3614	04	5.000	0.3606
05	20.000	0.3994	06	50.000	0.4127	07	100.000	0.3835	08	150.000	0.3753
09	200.000	0.3938									

n-Butylbenzene Average RF RSD = 8.9 Average RF = 1.673

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.858	02	1.000	1.637	03	2.000	1.623	04	5.000	1.736
05	20.000	1.822	06	50.000	1.806	07	100.000	1.662	08	150.000	1.493
09	200.000	1.420									

n-Heptane Average RF RSD = 7.3 Average RF = 0.3063

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3539	03	2.000	0.3021	04	5.000	0.3018	05	20.000	0.3160
06	50.000	0.3115	07	100.000	0.2960	08	150.000	0.2812	09	200.000	0.2877

n-Propylbenzene Average RF RSD = 14.9 Average RF = 2.540

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.600	02	1.000	2.748	03	2.000	2.673	04	5.000	2.886
05	20.000	2.916	06	50.000	2.762	07	100.000	2.397	08	150.000	2.030
09	200.000	1.844									

o-Xylene Average RF RSD = 4.2 Average RF = 0.4791

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4551	02	1.000	0.4595	03	2.000	0.4903	04	5.000	0.4677
05	20.000	0.5143	06	50.000	0.5018	07	100.000	0.4847	08	150.000	0.4640
09	200.000	0.4748									

sec-Butylbenzene Average RF RSD = 11.7 Average RF = 2.144

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.294	02	1.000	2.315	03	2.000	2.276	04	5.000	2.321
05	20.000	2.318	06	50.000	2.276	07	100.000	2.038	08	150.000	1.792
09	200.000	1.670									

tert-Amyl Methyl Ether Average RF RSD = 5.6 Average RF = 1.194

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.138	02	1.000	1.228	03	2.000	1.109	04	5.000	1.147
05	20.000	1.324	06	50.000	1.236	07	100.000	1.203	08	150.000	1.142
09	200.000	1.217									

tert-Butylbenzene Average RF RSD = 7.7 Average RF = 1.503

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.628	02	1.000	1.423	03	2.000	1.470	04	5.000	1.612
05	20.000	1.624	06	50.000	1.599	07	100.000	1.480	08	150.000	1.367
09	200.000	1.328									

trans-1,2-Dichloroethene Average RF RSD = 5.9 Average RF = 0.4319

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4292	02	1.000	0.4876	03	2.000	0.4506	04	5.000	0.4164
05	20.000	0.4401	06	50.000	0.4305	07	100.000	0.4178	08	150.000	0.4009
09	200.000	0.4138									

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte	**Curve Fit**	**Weighting**

trans-1,3-Dichloropropene — Average RF — RSD = 6.5 — Average RF = 0.3522

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3189	02	1.000	0.3135	03	2.000	0.3639	04	5.000	0.3494
05	20.000	0.3840	06	50.000	0.3725	07	100.000	0.3538	08	150.000	0.3563
09	200.000	0.3575									

trans-1,4-Dichloro-2-butene — Average RF — RSD = 11.7 — Average RF = 0.1705

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2206	02	1.000	0.1703	03	2.000	0.1654	04	5.000	0.1690
05	20.000	0.1737	06	50.000	0.1589	07	100.000	0.1530	08	150.000	0.1573
09	200.000	0.1659									

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.2	02	1.000	1.07	6.6	03	2.000	1.93	-3.6
04	5.000	4.94	-1.2	05	20.000	21.18	5.9	06	50.000	51.57	3.1
07	100.000	99.35	-0.7	08	150.000	147.05	-2.0	09	200.000	203.92	2.0

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.2	02	1.000	0.99	-1.1	03	2.000	2.02	0.8
04	5.000	5.11	2.2	05	20.000	20.00	0.0	06	50.000	48.86	-2.3
07	100.000	95.67	-4.3	08	150.000	137.11	-8.6	09	200.000	190.02	-5.0

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.1	02	1.000	1.04	4.4	03	2.000	2.08	4.0
04	5.000	4.85	-2.9	05	20.000	21.02	5.1	06	50.000	49.98	0.0
07	100.000	90.61	-9.4	08	150.000	137.24	-8.5	09	200.000	192.43	-3.8

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.64	28.7	02	1.000	1.05	4.5	03	2.000	1.82	-8.9
04	5.000	4.91	-1.8	05	20.000	20.12	0.6	06	50.000	49.05	-1.9
07	100.000	90.94	-9.1	08	150.000	139.57	-7.0	09	200.000	189.65	-5.2

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	1.08	7.7	03	2.000	1.86	-6.9
04	5.000	5.01	0.1	05	20.000	20.98	4.9	06	50.000	50.99	2.0
07	100.000	99.16	-0.8	08	150.000	139.14	-7.2	09	200.000	197.14	-1.4

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.4	02	1.000	0.98	-2.2	03	2.000	2.01	0.5
04	5.000	4.85	-2.9	05	20.000	21.12	5.6	06	50.000	50.17	0.3
07	100.000	98.09	-1.9	08	150.000	144.43	-3.7	09	200.000	193.75	-3.1

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.3	02	1.000	0.96	-3.5	03	2.000	1.89	-5.7
04	5.000	5.23	4.5	05	20.000	20.93	4.7	06	50.000	51.13	2.3
07	100.000	100.60	0.6	08	150.000	145.22	-3.2	09	200.000	200.06	0.0

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.9	02	1.000	1.02	2.0	03	2.000	1.96	-1.8
04	5.000	4.87	-2.5	05	20.000	21.05	5.3	06	50.000	52.51	5.0
07	100.000	100.04	0.0	08	150.000	142.90	-4.7	09	200.000	199.28	-0.4

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.3	02	1.000	0.95	-4.9	03	2.000	1.93	-3.3
04	5.000	4.72	-5.5	05	20.000	21.88	9.4	06	50.000	54.06	8.1
07	100.000	100.19	0.2	08	150.000	147.70	-1.5	09	200.000	207.80	3.9

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.61	21.1	02	1.000	1.07	6.9	03	2.000	2.02	1.2
04	5.000	5.13	2.5	05	20.000	20.04	0.2	06	50.000	47.78	-4.4
07	100.000	88.74	-11.3	08	150.000	134.06	-10.6	09	200.000	188.65	-5.7

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.9	02	1.000	1.02	2.0	03	2.000	1.96	-1.9
04	5.000	4.75	-5.0	05	20.000	21.29	6.5	06	50.000	53.34	6.7
07	100.000	98.86	-1.1	08	150.000	145.01	-3.3	09	200.000	198.31	-0.8

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	1.05	4.8	03	2.000	2.11	5.5
04	5.000	5.32	6.4	05	20.000	21.74	8.7	06	50.000	53.31	6.6
07	100.000	95.61	-4.4	08	150.000	129.50	-13.7	09	200.000	162.72	-18.6

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.1	03	2.000	2.42	20.8	04	5.000	4.60	-8.0
05	20.000	21.19	5.9	06	50.000	50.95	1.9	07	100.000	92.89	-7.1
08	150.000	136.83	-8.8	09	200.000	202.57	1.3				

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.9	02	1.000	0.97	-2.9	03	2.000	1.88	-5.9
04	5.000	5.04	0.8	05	20.000	21.67	8.3	06	50.000	51.52	3.0
07	100.000	95.04	-5.0	08	150.000	145.33	-3.1	09	200.000	197.59	-1.2

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.7	02	1.000	0.97	-3.2	03	2.000	2.14	6.9
04	5.000	4.92	-1.5	05	20.000	18.61	-7.0	06	50.000	51.86	3.7
07	100.000	98.47	-1.5	08	150.000	144.07	-4.0	09	200.000	197.54	-1.2

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.9	02	1.000	1.09	8.9	03	2.000	1.96	-2.2
04	5.000	4.90	-2.0	05	20.000	21.23	6.1	06	50.000	51.31	2.6
07	100.000	97.61	-2.4	08	150.000	143.16	-4.6	09	200.000	192.87	-3.6

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.8	02	1.000	1.02	2.5	03	2.000	1.96	-1.9
04	5.000	5.01	0.3	05	20.000	21.07	5.3	06	50.000	51.25	2.5
07	100.000	96.98	-3.0	08	150.000	146.61	-2.3	09	200.000	198.90	-0.5

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	56.12	12.2	03	60.000	64.37	7.3	04	70.000	71.19	1.7
05	100.000	96.65	-3.4	07	125.000	116.87	-6.5	08	150.000	132.95	-11.4

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.8	02	1.000	1.02	1.8	03	2.000	1.94	-3.2
04	5.000	4.92	-1.6	05	20.000	20.50	2.5	06	50.000	50.00	0.0
07	100.000	97.04	-3.0	08	150.000	144.91	-3.4	09	200.000	197.97	-1.0

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.3	02	1.000	0.92	-7.9	03	2.000	2.04	2.2
04	5.000	5.12	2.5	05	20.000	20.96	4.8	06	50.000	50.05	0.1
07	100.000	99.70	-0.3	08	150.000	144.98	-3.3	09	200.000	199.39	-0.3

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.3	02	1.000	1.05	4.9	03	2.000	2.06	3.0
04	5.000	5.18	3.5	05	20.000	22.13	10.7	06	50.000	52.60	5.2
07	100.000	96.89	-3.1	08	150.000	131.66	-12.2	09	200.000	165.33	-17.3

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.9	02	1.000	1.02	1.6	03	2.000	1.92	-3.8
04	5.000	5.04	0.8	05	20.000	21.21	6.0	06	50.000	51.49	3.0
07	100.000	97.19	-2.8	08	150.000	140.31	-6.5	09	200.000	187.30	-6.4

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.0	02	1.000	1.00	-0.1	03	2.000	2.03	1.4
04	5.000	4.68	-6.4	05	20.000	21.20	6.0	06	50.000	52.14	4.3
07	100.000	97.34	-2.7	08	150.000	146.47	-2.4	09	200.000	199.62	-0.2

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.3	02	1.000	0.98	-1.7	03	2.000	1.95	-2.7
04	5.000	5.05	0.9	05	20.000	21.03	5.1	06	50.000	50.56	1.1
07	100.000	95.07	-4.9	08	150.000	137.67	-8.2	09	200.000	184.21	-7.9

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	30.31	-24.2	04	100.000	104.34	4.3	05	400.000	392.47	-1.9
06	1000.000	1,038.28	3.8	07	2000.000	1,944.24	-2.8	08	3000.000	3,098.36	3.3
09	4000.000	4,698.17	17.5								

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	50.87	1.7	03	100.000	91.95	-8.1	04	250.000	219.99	-12.0
05	1000.000	1,000.24	0.0	06	2500.000	2,643.75	5.7	07	5000.000	4,984.52	-0.3
08	7500.000	7,446.45	-0.7	09	10000.000	11,357.56	13.6				

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.0	02	1.000	0.88	-12.3	03	2.000	2.04	1.8
04	5.000	5.23	4.6	05	20.000	20.49	2.5	06	50.000	49.12	-1.8
07	100.000	98.72	-1.3	08	150.000	146.55	-2.3	09	200.000	205.51	2.8

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.61	21.7	02	1.000	1.10	10.4	03	2.000	1.95	-2.6
04	5.000	4.99	-0.3	05	20.000	18.03	-9.8	06	50.000	49.10	-1.8
07	100.000	94.53	-5.5	08	150.000	137.84	-8.1	09	200.000	191.93	-4.0

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.06	6.2	03	2.000	1.91	-4.7	04	5.000	4.91	-1.9
05	20.000	21.00	5.0	06	50.000	50.10	0.2	07	100.000	101.21	1.2
08	150.000	143.08	-4.6	09	200.000	197.34	-1.3				

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.99	-1.0	03	2.000	1.99	-0.4	04	5.000	4.98	-0.4
05	20.000	19.37	-3.1	06	50.000	50.54	1.1	07	100.000	98.99	-1.0
08	150.000	147.70	-1.5	09	200.000	212.85	6.4				

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.84	-15.7	03	2.000	2.02	1.1	04	5.000	4.83	-3.5
05	20.000	20.59	3.0	06	50.000	51.45	2.9	07	100.000	102.52	2.5
08	150.000	151.08	0.7	09	200.000	217.86	8.9				

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.51	0.7	02	3.000	3.12	3.9	03	6.000	5.79	-3.5
04	15.000	15.57	3.8	05	60.000	64.37	7.3	06	150.000	154.71	3.1
07	300.000	298.12	-0.6	08	450.000	425.21	-5.5	09	600.000	544.87	-9.2

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.1	02	1.000	1.06	6.3	03	2.000	1.89	-5.3
04	5.000	4.67	-6.6	05	20.000	20.57	2.8	06	50.000	47.28	-5.4
07	100.000	95.82	-4.2	08	150.000	141.67	-5.6	09	200.000	195.66	-2.2

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.2	02	1.000	1.18	18.2	03	2.000	1.94	-3.0
04	5.000	4.82	-3.6	05	20.000	20.04	0.2	06	50.000	47.55	-4.9
07	100.000	96.39	-3.6	08	150.000	147.51	-1.7	09	200.000	203.27	1.6

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.37	7.4	05	20.000	18.51	-7.5	06	50.000	49.53	-0.9
07	100.000	95.66	-4.3	08	150.000	149.19	-0.5	09	200.000	211.78	5.9

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	1.02	2.1	03	2.000	2.08	3.9
04	5.000	4.99	-0.2	05	20.000	19.51	-2.4	06	50.000	49.41	-1.2
07	100.000	97.15	-2.9	08	150.000	146.61	-2.3	09	200.000	199.81	-0.1

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.4	02	1.000	1.02	1.6	03	2.000	2.16	8.1
04	5.000	4.91	-1.7	05	20.000	21.02	5.1	06	50.000	49.24	-1.5
07	100.000	97.74	-2.3	08	150.000	144.34	-3.8	09	200.000	201.82	0.9

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.09	9.1	03	2.000	1.66	-17.0	04	5.000	4.79	-4.2
05	20.000	19.25	-3.7	06	50.000	52.39	4.8	07	100.000	101.05	1.1
08	150.000	152.85	1.9	09	200.000	216.18	8.1				

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.8	02	1.000	1.04	4.4	03	2.000	1.96	-1.8
04	5.000	5.21	4.1	05	20.000	21.98	9.9	06	50.000	52.35	4.7
07	100.000	95.27	-4.7	08	150.000	131.58	-12.3	09	200.000	169.78	-15.1

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.88	-5.8	04	5.000	4.49	-10.1	05	20.000	19.98	-0.1
06	50.000	54.00	8.0	07	100.000	99.09	-0.9	08	150.000	151.63	1.1
09	200.000	215.58	7.8								

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	21.85	9.2	03	40.000	40.00	0.0	04	100.000	92.98	-7.0
05	400.000	388.63	-2.8	06	1000.000	1,025.65	2.6	07	2000.000	1,877.18	-6.1
08	3000.000	2,914.01	-2.9	09	4000.000	4,283.75	7.1				

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	20.32	1.6	03	40.000	35.06	-12.4	04	100.000	94.97	-5.0
05	400.000	424.57	6.1	06	1000.000	1,042.53	4.3	07	2000.000	1,946.98	-2.7
08	3000.000	2,959.93	-1.3	09	4000.000	4,375.87	9.4				

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	2.08	3.9	03	4.000	4.07	1.7	04	10.000	10.05	0.5
05	40.000	42.31	5.8	06	100.000	101.42	1.4	07	200.000	181.91	-9.0
08	300.000	287.79	-4.1	09	400.000	399.19	-0.2				

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	23.30	16.5	03	40.000	35.57	-11.1	04	100.000	95.49	-4.5
05	400.000	378.13	-5.5	06	1000.000	1,000.99	0.1	07	2000.000	1,949.43	-2.5
08	3000.000	2,900.17	-3.3	09	4000.000	4,413.20	10.3				

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.98	-1.8	02	2.000	1.94	-2.8	03	4.000	3.98	-0.6
04	10.000	10.49	4.9	05	40.000	44.10	10.3	06	100.000	106.06	6.1
07	200.000	201.94	1.0	08	300.000	281.52	-6.2	09	400.000	357.01	-10.7

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.3	02	1.000	0.88	-12.3	03	2.000	2.14	7.0
04	5.000	4.91	-1.8	05	20.000	20.35	1.8	06	50.000	48.82	-2.4
07	100.000	99.73	-0.3	08	150.000	147.30	-1.8	09	200.000	204.88	2.4

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.6	02	1.000	1.08	7.9	03	2.000	2.02	0.9
04	5.000	5.14	2.8	05	20.000	21.44	7.2	06	50.000	52.00	4.0
07	100.000	95.08	-4.9	08	150.000	120.18	-19.9	09	200.000	170.71	-14.6

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.8	02	1.000	1.04	3.6	03	2.000	1.96	-2.1
04	5.000	4.88	-2.4	05	20.000	19.94	-0.3	06	50.000	48.39	-3.2
07	100.000	98.46	-1.5	08	150.000	144.00	-4.0	09	200.000	200.44	0.2

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	0.98	-1.8	03	2.000	2.01	0.7
04	5.000	5.50	10.0	05	20.000	21.89	9.5	06	50.000	51.20	2.4
07	100.000	97.13	-2.9	08	150.000	135.70	-9.5	09	200.000	173.86	-13.1

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	56.24	12.5	03	60.000	64.33	7.2	04	70.000	71.87	2.7
05	100.000	95.27	-4.7	07	125.000	116.12	-7.1	08	150.000	134.20	-10.5

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	1.05	5.0	03	2.000	2.04	1.8
04	5.000	5.25	5.0	05	20.000	21.98	9.9	06	50.000	52.90	5.8
07	100.000	96.68	-3.3	08	150.000	132.39	-11.7	09	200.000	166.87	-16.6

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.8	02	1.000	1.05	5.3	03	2.000	2.09	4.7
04	5.000	5.25	4.9	05	20.000	22.11	10.5	06	50.000	54.22	8.4
07	100.000	97.93	-2.1	08	150.000	131.28	-12.5	09	200.000	164.81	-17.6

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.86	-7.0	04	5.000	4.76	-4.9	05	20.000	19.92	-0.4
06	50.000	51.64	3.3	07	100.000	98.52	-1.5	08	150.000	153.26	2.2
09	200.000	216.55	8.3								

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.62	12.5	05	20.000	20.02	0.1	06	50.000	47.36	-5.3
07	100.000	91.64	-8.4	08	150.000	148.53	-1.0	09	200.000	204.09	2.0

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	11.73	17.3	04	25.000	25.51	2.1	05	100.000	94.26	-5.7
06	250.000	206.48	-17.4	07	500.000	485.78	-2.8	08	750.000	764.78	2.0
09	1000.000	1,046.45	4.6								

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.71	-5.8	03	10.000	8.71	-12.9	04	25.000	21.80	-12.8
05	100.000	96.13	-3.9	06	250.000	266.22	6.5	07	500.000	524.31	4.9
08	750.000	822.46	9.7	09	1000.000	1,144.17	14.4				

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.61	4.4	02	5.000	5.04	0.8	03	10.000	9.18	-8.2
04	25.000	24.12	-3.5	05	100.000	105.76	5.8	06	250.000	248.23	-0.7
07	500.000	485.37	-2.9	08	750.000	749.45	-0.1	09	1000.000	1,044.19	4.4

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.1	02	1.000	1.00	-0.3	03	2.000	2.04	2.2
04	5.000	5.15	3.0	05	20.000	21.71	8.6	06	50.000	51.64	3.3
07	100.000	97.24	-2.8	08	150.000	139.21	-7.2	09	200.000	184.04	-8.0

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.4	02	1.000	0.98	-2.3	03	2.000	1.82	-9.1
04	5.000	5.24	4.8	05	20.000	20.99	5.0	06	50.000	51.95	3.9
07	100.000	97.48	-2.5	08	150.000	142.75	-4.8	09	200.000	195.45	-2.3

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	0.91	-9.3	03	2.000	2.11	5.7
04	5.000	5.45	8.9	05	20.000	21.10	5.5	06	50.000	50.22	0.4
07	100.000	95.35	-4.6	08	150.000	140.37	-6.4	09	200.000	192.19	-3.9

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.2	02	1.000	1.18	18.2	03	2.000	1.91	-4.4
04	5.000	5.17	3.5	05	20.000	20.64	3.2	06	50.000	50.26	0.5
07	100.000	95.34	-4.7	08	150.000	141.97	-5.4	09	200.000	194.30	-2.9

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.3	02	1.000	1.09	8.7	03	2.000	1.79	-10.6
04	5.000	5.18	3.5	05	20.000	20.96	4.8	06	50.000	51.67	3.3
07	100.000	96.44	-3.6	08	150.000	144.68	-3.5	09	200.000	203.10	1.6

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	1.03	3.3	03	2.000	1.82	-9.2
04	5.000	4.54	-9.2	05	20.000	19.13	-4.4	06	50.000	49.73	-0.5
07	100.000	102.64	2.6	08	150.000	155.50	3.7	09	200.000	219.21	9.6

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	1.02	2.1	03	2.000	1.97	-1.7
04	5.000	5.00	-0.1	05	20.000	20.23	1.2	06	50.000	51.55	3.1
07	100.000	97.92	-2.1	08	150.000	145.36	-3.1	09	200.000	188.81	-5.6

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
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Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.1	02	1.000	0.95	-5.4	03	2.000	2.13	6.6
04	5.000	4.97	-0.7	05	20.000	20.13	0.6	06	50.000	52.47	4.9
07	100.000	98.35	-1.7	08	150.000	138.05	-8.0	09	200.000	196.77	-1.6

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.2	02	1.000	1.07	6.9	03	2.000	1.93	-3.3
04	5.000	5.19	3.8	05	20.000	21.28	6.4	06	50.000	52.02	4.0
07	100.000	98.00	-2.0	08	150.000	139.06	-7.3	09	200.000	183.44	-8.3

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.1	02	1.000	0.94	-5.8	03	2.000	1.95	-2.4
04	5.000	4.78	-4.5	05	20.000	20.39	2.0	06	50.000	51.40	2.8
07	100.000	98.18	-1.8	08	150.000	141.94	-5.4	09	200.000	195.74	-2.1

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.7	02	1.000	1.08	8.2	03	2.000	1.89	-5.5
04	5.000	4.81	-3.8	05	20.000	20.52	2.6	06	50.000	49.28	-1.4
07	100.000	96.70	-3.3	08	150.000	143.30	-4.5	09	200.000	194.05	-3.0

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.9	02	1.000	1.02	2.0	03	2.000	2.04	2.1
04	5.000	4.87	-2.5	05	20.000	21.10	5.5	06	50.000	51.63	3.3
07	100.000	100.54	0.5	08	150.000	146.82	-2.1	09	200.000	202.45	1.2

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.14	13.8	03	2.000	2.19	9.3	04	5.000	4.79	-4.2
05	20.000	18.20	-9.0	06	50.000	50.64	1.3	07	100.000	96.27	-3.7
08	150.000	141.71	-5.5	09	200.000	196.17	-1.9				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	23.06	15.3	03	40.000	42.20	5.5	04	100.000	97.88	-2.1
05	400.000	419.46	4.9	06	1000.000	979.98	-2.0	07	2000.000	1,782.23	-10.9
08	3000.000	2,722.12	-9.3	09	4000.000	3,943.36	-1.4				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.7	02	1.000	1.06	5.9	03	2.000	1.90	-4.9
04	5.000	4.53	-9.5	05	20.000	20.30	1.5	06	50.000	50.80	1.6
07	100.000	93.45	-6.5	08	150.000	140.70	-6.2	09	200.000	194.91	-2.5

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	55.39	10.8	03	60.000	64.25	7.1	04	70.000	72.27	3.2
05	100.000	95.50	-4.5	07	125.000	117.00	-6.4	08	150.000	134.69	-10.2

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.7	02	1.000	1.01	1.1	03	2.000	1.84	-8.1
04	5.000	4.95	-1.1	05	20.000	20.85	4.3	06	50.000	49.59	-0.8
07	100.000	96.07	-3.9	08	150.000	146.42	-2.4	09	200.000	202.52	1.3

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	0.92	-8.2	03	2.000	1.87	-6.5
04	5.000	4.19	-16.3	05	20.000	21.64	8.2	06	50.000	54.36	8.7
07	100.000	104.78	4.8	08	150.000	147.87	-1.4	09	200.000	203.02	1.5

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.2	02	1.000	1.13	13.2	03	2.000	1.97	-1.5
04	5.000	4.92	-1.6	05	20.000	18.98	-5.1	06	50.000	51.69	3.4
07	100.000	96.46	-3.5	08	150.000	142.14	-5.2	09	200.000	192.33	-3.8

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.9	02	1.000	1.04	4.5	03	2.000	1.96	-2.0
04	5.000	4.87	-2.6	05	20.000	20.71	3.5	06	50.000	49.99	0.0
07	100.000	97.78	-2.2	08	150.000	146.10	-2.6	09	200.000	198.97	-0.5

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.97	-3.0	03	2.000	2.20	10.0	04	5.000	4.82	-3.6
05	20.000	20.32	1.6	06	50.000	49.78	-0.4	07	100.000	97.63	-2.4
08	150.000	146.68	-2.2	09	200.000	199.98	0.0				

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.4	02	1.000	0.99	-1.4	03	2.000	1.96	-1.8
04	5.000	4.93	-1.3	05	20.000	21.75	8.8	06	50.000	49.56	-0.9
07	100.000	99.55	-0.5	08	150.000	139.71	-6.9	09	200.000	195.31	-2.3

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	1.05	4.8	03	2.000	1.88	-5.9
04	5.000	4.80	-4.0	05	20.000	20.90	4.5	06	50.000	49.97	-0.1
07	100.000	95.02	-5.0	08	150.000	145.10	-3.3	09	200.000	199.47	-0.3

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-3.0	02	1.000	0.99	-1.0	03	2.000	1.92	-3.9
04	5.000	5.01	0.3	05	20.000	21.61	8.0	06	50.000	50.90	1.8
07	100.000	101.79	1.8	08	150.000	142.29	-5.1	09	200.000	202.16	1.1

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	0.97	-3.0	03	2.000	1.87	-6.7
04	5.000	5.23	4.5	05	20.000	20.87	4.4	06	50.000	53.09	6.2
07	100.000	99.22	-0.8	08	150.000	140.96	-6.0	09	200.000	196.55	-1.7

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	19.9	02	1.000	0.96	-4.0	03	2.000	1.96	-2.1
04	5.000	5.12	2.4	05	20.000	20.77	3.9	06	50.000	50.03	0.1
07	100.000	94.77	-5.2	08	150.000	135.83	-9.4	09	200.000	189.18	-5.4

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.13	6.7	04	5.000	4.16	-16.7	05	20.000	18.65	-6.7
06	50.000	56.27	12.5	07	100.000	107.25	7.2	08	150.000	151.08	0.7
09	200.000	189.98	-5.0								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.7	02	1.000	1.01	0.8	03	2.000	2.02	1.0
04	5.000	5.42	8.5	05	20.000	22.22	11.1	06	50.000	53.70	7.4
07	100.000	95.28	-4.7	08	150.000	125.79	-16.1	09	200.000	156.78	-21.6

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.93	-3.5	04	5.000	5.05	1.0	05	20.000	20.98	4.9
06	50.000	50.74	1.5	07	100.000	96.37	-3.6	08	150.000	145.29	-3.1
09	200.000	205.90	3.0								

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.99	-0.7	04	5.000	4.66	-6.9	05	20.000	20.07	0.4
06	50.000	51.41	2.8	07	100.000	100.86	0.9	08	150.000	146.23	-2.5
09	200.000	212.03	6.0								

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.7	02	1.000	0.89	-10.7	03	2.000	2.04	2.0
04	5.000	5.02	0.5	05	20.000	20.84	4.2	06	50.000	50.46	0.9
07	100.000	94.28	-5.7	08	150.000	144.23	-3.8	09	200.000	202.06	1.0

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.8	02	1.000	1.00	-0.3	03	2.000	1.99	-0.3
04	5.000	5.13	2.5	05	20.000	21.69	8.4	06	50.000	49.93	-0.1
07	100.000	96.92	-3.1	08	150.000	145.12	-3.3	09	200.000	195.85	-2.1

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.08	7.6	03	2.000	1.86	-7.2	04	5.000	5.08	1.6
05	20.000	18.69	-6.6	06	50.000	52.86	5.7	07	100.000	100.55	0.6
08	150.000	146.90	-2.1	09	200.000	200.65	0.3				

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.1	02	1.000	1.02	2.2	03	2.000	1.88	-6.1
04	5.000	5.01	0.3	05	20.000	22.40	12.0	06	50.000	55.29	10.6
07	100.000	100.26	0.3	08	150.000	143.27	-4.5	09	200.000	192.69	-3.7

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.59	-8.2	03	10.000	11.45	14.5	04	25.000	24.42	-2.3
05	100.000	101.68	1.7	06	250.000	245.64	-1.7	07	500.000	467.84	-6.4
08	750.000	742.82	-1.0	09	1000.000	1,034.88	3.5				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.5	02	1.000	0.94	-5.6	03	2.000	2.00	0.2
04	5.000	5.24	4.9	05	20.000	21.96	9.8	06	50.000	53.99	8.0
07	100.000	100.73	0.7	08	150.000	142.37	-5.1	09	200.000	183.06	-8.5

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.6	02	1.000	1.00	0.4	03	2.000	1.87	-6.5
04	5.000	4.90	-2.0	05	20.000	21.75	8.8	06	50.000	52.31	4.6
07	100.000	103.56	3.6	08	150.000	144.54	-3.6	09	200.000	202.75	1.4

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.12	6.2	04	5.000	4.97	-0.5	05	20.000	21.30	6.5
06	50.000	52.02	4.0	07	100.000	92.22	-7.8	08	150.000	136.43	-9.0
09	200.000	201.20	0.6								

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	1.02	1.6	03	2.000	2.11	5.7
04	5.000	5.24	4.7	05	20.000	21.56	7.8	06	50.000	52.41	4.8
07	100.000	96.63	-3.4	08	150.000	132.97	-11.4	09	200.000	167.98	-16.0

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	57.46	14.9	03	60.000	66.41	10.7	04	70.000	73.77	5.4
05	100.000	94.28	-5.7	07	125.000	112.62	-9.9	08	150.000	126.95	-15.4

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	1.03	3.1	03	2.000	1.86	-7.0
04	5.000	4.98	-0.4	05	20.000	20.90	4.5	06	50.000	51.42	2.8
07	100.000	101.49	1.5	08	150.000	143.05	-4.6	09	200.000	199.37	-0.3

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.5	02	1.000	1.05	4.8	03	2.000	2.07	3.6
04	5.000	4.68	-6.5	05	20.000	20.23	1.2	06	50.000	50.09	0.2
07	100.000	97.09	-2.9	08	150.000	136.75	-8.8	09	200.000	191.91	-4.0

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.03	3.0	03	2.000	2.06	3.0	04	5.000	4.99	-0.2
05	20.000	18.62	-6.9	06	50.000	53.29	6.6	07	100.000	98.79	-1.2
08	150.000	149.60	-0.3	09	200.000	192.00	-4.0				

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.8	02	1.000	0.99	-0.5	03	2.000	1.80	-10.0
04	5.000	4.90	-2.1	05	20.000	21.33	6.6	06	50.000	52.79	5.6
07	100.000	102.08	2.1	08	150.000	142.40	-5.1	09	200.000	195.06	-2.5

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.8	02	1.000	1.06	6.4	03	2.000	1.76	-11.9
04	5.000	4.71	-5.7	05	20.000	20.47	2.3	06	50.000	50.49	1.0
07	100.000	97.90	-2.1	08	150.000	144.97	-3.4	09	200.000	199.01	-0.5

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.3	02	1.000	1.06	5.6	03	2.000	2.04	2.1
04	5.000	4.93	-1.4	05	20.000	21.48	7.4	06	50.000	51.70	3.4
07	100.000	100.07	0.1	08	150.000	148.72	-0.9	09	200.000	199.97	0.0

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.07	6.7	02	2.000	1.99	-0.6	03	4.000	4.01	0.4
04	10.000	10.35	3.5	05	40.000	42.79	7.0	06	100.000	106.70	6.7
07	200.000	197.49	-1.3	08	300.000	271.21	-9.6	09	400.000	348.83	-12.8

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.7	02	1.000	1.00	-0.1	03	2.000	1.91	-4.4
04	5.000	4.77	-4.6	05	20.000	21.13	5.7	06	50.000	54.59	9.2
07	100.000	101.46	1.5	08	150.000	148.92	-0.7	09	200.000	208.37	4.2

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.0	02	1.000	0.98	-2.2	03	2.000	1.94	-3.0
04	5.000	5.19	3.8	05	20.000	21.78	8.9	06	50.000	53.98	8.0
07	100.000	99.35	-0.6	08	150.000	133.85	-10.8	09	200.000	169.73	-15.1

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.16	15.5	03	2.000	1.97	-1.4	04	5.000	4.93	-1.4
05	20.000	20.64	3.2	06	50.000	50.86	1.7	07	100.000	96.64	-3.4
08	150.000	137.70	-8.2	09	200.000	187.90	-6.1				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.4	02	1.000	1.08	8.2	03	2.000	2.11	5.3
04	5.000	5.68	13.7	05	20.000	22.97	14.8	06	50.000	54.39	8.8
07	100.000	94.39	-5.6	08	150.000	119.89	-20.1	09	200.000	145.19	-27.4

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.0	02	1.000	0.96	-4.1	03	2.000	2.05	2.3
04	5.000	4.88	-2.4	05	20.000	21.47	7.3	06	50.000	52.37	4.7
07	100.000	101.16	1.2	08	150.000	145.27	-3.2	09	200.000	198.19	-0.9

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	7.0	02	1.000	1.08	7.9	03	2.000	2.12	6.1
04	5.000	5.41	8.3	05	20.000	21.62	8.1	06	50.000	53.06	6.1
07	100.000	95.02	-5.0	08	150.000	125.34	-16.4	09	200.000	155.78	-22.1

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.03	2.9	03	2.000	1.86	-7.1
04	5.000	4.80	-3.9	05	20.000	22.18	10.9	06	50.000	51.76	3.5
07	100.000	100.76	0.8	08	150.000	143.52	-4.3	09	200.000	203.92	2.0

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.3	02	1.000	0.95	-5.3	03	2.000	1.96	-2.2
04	5.000	5.36	7.2	05	20.000	21.60	8.0	06	50.000	53.17	6.3
07	100.000	98.44	-1.6	08	150.000	136.42	-9.1	09	200.000	176.66	-11.7

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	1.13	12.9	03	2.000	2.09	4.3
04	5.000	4.82	-3.6	05	20.000	20.38	1.9	06	50.000	49.84	-0.3
07	100.000	96.75	-3.3	08	150.000	139.25	-7.2	09	200.000	191.61	-4.2

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.4	02	1.000	0.89	-11.0	03	2.000	2.07	3.3
04	5.000	4.96	-0.8	05	20.000	21.80	9.0	06	50.000	52.88	5.8
07	100.000	100.45	0.5	08	150.000	151.75	1.2	09	200.000	203.01	1.5

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.65	29.4	02	1.000	1.00	-0.1	03	2.000	1.94	-2.9
04	5.000	4.96	-0.9	05	20.000	20.38	1.9	06	50.000	46.60	-6.8
07	100.000	89.74	-10.3	08	150.000	138.39	-7.7	09	200.000	194.70	-2.6

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	820055	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1375536	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1269431	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	637721	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	393438	49.01	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.02%				
48) surr1,1,2-dichloroetha...	6.090	65	453168	47.04	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.08%				
65) SURR3,Toluene-d8	8.529	98	1756937	47.74	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.48%				
70) SURR2,BFB	11.047	95	658651	48.83	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.66%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	5282	0.55	ppb		96
3) Chloromethane	1.341	50	4723	0.45	ppb		77
4) Vinyl Chloride	1.427	62	6202	0.53	ppb		98
5) Bromomethane	1.683	94	2470m	0.52	ppb		
6) Chloroethane	1.762	64	3687	0.59	ppb		73
7) Freon 21	1.920	67	7053m	0.52	ppb		
8) Trichlorofluoromethane	1.969	101	5680	0.56	ppb		92
9) Diethyl Ether	2.225	59	3432	0.57	ppb	#	73
10) Freon 123a	2.231	67	4619m	0.52	ppb		
11) Freon 123	2.292	83	6199	0.60	ppb		94
13) 1,1-Diclethene	2.432	96	3098m	0.50	ppb		
14) Freon 113	2.432	101	3074	0.51	ppb		93
18) Carbon Disulfide	2.628	76	10983	0.53	ppb		88
20) Allyl Chloride	2.786	76	2038	0.58	ppb	#	77
22) Methylene Chloride	2.926	84	3525	0.51	ppb	#	80
23) TBA	3.085	59	4622m	9.35	ppb		
24) Acrylonitrile	3.207	53	4903	2.61	ppb		85
25) Methyl-t-Butyl Ether	3.262	73	8991	0.49	ppb	#	86
26) trans-1,2-Dichloroethene	3.231	96	3520	0.50	ppb	#	55
28) 1,1-Diclethane	3.780	63	6623	0.54	ppb		81
29) Vinyl Acetate	3.889	86	948m	0.72	ppb		
30) DIPE	3.938	45	13487	0.53	ppb		87
31) 2-Chloro-1,3-Butadiene	3.926	53	7079	0.51	ppb		96
32) ETBE	4.517	59	10893	0.49	ppb		88
33) 2,2-Dichloropropane	4.694	77	6768	0.64	ppb		89
34) cis-1,2-Dichloroethene	4.713	96	4247m	0.57	ppb		
37) Bromochloromethane	5.151	130	2025m	0.52	ppb		
40) Chloroform	5.328	83	6629	0.55	ppb		98
41) 1,1,1-Trichloroethane	5.584	97	6036m	0.59	ppb		
42) TAME	6.401	73	9336	0.48	ppb		80
46) Carbontetrachloride	5.859	121	1387m	0.53	ppb		
47) 1,1-Dichloropropene	5.865	75	4561m	0.48	ppb		
49) Benzene	6.170	78	14002	0.51	ppb		77
50) 1,2-Dichloroethane	6.206	62	4016	0.49	ppb		88

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	n-Heptane	6.639	43	6130	0.73	ppb		93
53)	1-Butanol	7.121	56	3735m	24.91	ppb		
54)	Trichloroethene	7.084	130	3402m	0.50	ppb		
55)	Methylcyclohexane	7.303	55	5179	0.57	ppb		85
56)	1,2-Diclpropane	7.364	63	4037m	0.54	ppb		
57)	Dibromomethane	7.486	93	1937	0.55	ppb		81
59)	Methyl Methacrylate	7.572	69	2356m	0.54	ppb		
60)	Bromodichloromethane	7.706	83	4184m	0.46	ppb		
61)	2-Nitropropane	7.968	41	2953m	1.99	ppb		
62)	2-Chloroethylvinyl Ether	8.114	63	1517	0.38	ppb		77
63)	cis-1,3-Dichloropropene	8.236	75	4867	0.42	ppb		99
66)	Toluene	8.602	91	15516	0.53	ppb		93
67)	trans-1,3-Dichloropropene	8.858	75	4387	0.45	ppb		99
68)	Ethyl Methacrylate	8.998	69	4801	0.55	ppb		78
69)	1,1,2-Trichloroethane	9.047	97	3452	0.64	ppb	#	74
72)	Tetrachloroethene	9.175	164	2286	0.47	ppb	#	83
74)	1,3-Dichloropropane	9.212	76	4754	0.50	ppb		84
75)	Dibromochloromethane	9.437	129	3804	0.60	ppb	#	75
76)	N-Butyl Acetate	9.474	43	4287	0.45	ppb		97
77)	1,2-Dibromoethane	9.529	107	2729	0.53	ppb	#	77
78)	Chlorobenzene	10.010	112	9293	0.50	ppb	#	82
79)	3-CBTF	10.022	180	5064	0.55	ppb	#	80
80)	4-CBTF	10.083	180	4325	0.53	ppb		87
81)	1,1,1,2-Tetrachloroethane	10.102	131	2924	0.45	ppb	#	84
82)	Ethylbenzene	10.132	106	5355	0.52	ppb	#	87
83)	(m+p)Xylene	10.242	106	13034	1.07	ppb	#	73
84)	o-Xylene	10.595	106	5777	0.47	ppb	#	82
85)	Styrene	10.608	104	9700	0.48	ppb		94
87)	Bromoform	10.760	173	1455m	0.48	ppb		
88)	2-CBTF	10.833	180	3931	0.47	ppb		98
89)	Isopropylbenzene	10.925	105	15868	0.57	ppb		82
90)	Cyclohexanone	10.986	55	6412	11.55	ppb		90
91)	trans-1,4-Dichloro-2-B...	11.223	53	1407	0.65	ppb	#	68
92)	1,1,2,2-Tetrachloroethane	11.181	83	3630m	0.56	ppb		
93)	Bromobenzene	11.175	156	3807	0.54	ppb	#	40
94)	1,2,3-Trichloropropane	11.199	110	1146	0.59	ppb	#	1
95)	n-Propylbenzene	11.272	91	16578	0.51	ppb		96
96)	2-Chlorotoluene	11.339	91	11586	0.55	ppb		81
97)	3-Chlorotoluene	11.394	91	11153	0.52	ppb		98
98)	4-Chlorotoluene	11.431	91	12693	0.52	ppb		91
99)	1,3,5-Trimethylbenzene	11.431	105	12719	0.53	ppb		86
100)	tert-Butylbenzene	11.699	119	10384	0.54	ppb		91
101)	1,2,4-Trimethylbenzene	11.736	105	12977	0.52	ppb		87
102)	3,4-DCBTF	11.796	214	3203	0.54	ppb		87
103)	sec-Butylbenzene	11.876	105	14629	0.53	ppb		90
104)	p-Isopropyltoluene	12.004	119	11591	0.49	ppb		93
105)	1,3-Dclbenz	11.961	146	7260	0.54	ppb		83
106)	1,4-Dclbenz	12.034	146	8276	0.59	ppb	#	81
107)	2,4-DCBTF	12.083	214	3400	0.60	ppb	#	67
108)	2,5-DCBTF	12.126	214	2907	0.48	ppb		93
109)	n-Butylbenzene	12.333	91	11848	0.56	ppb		97

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

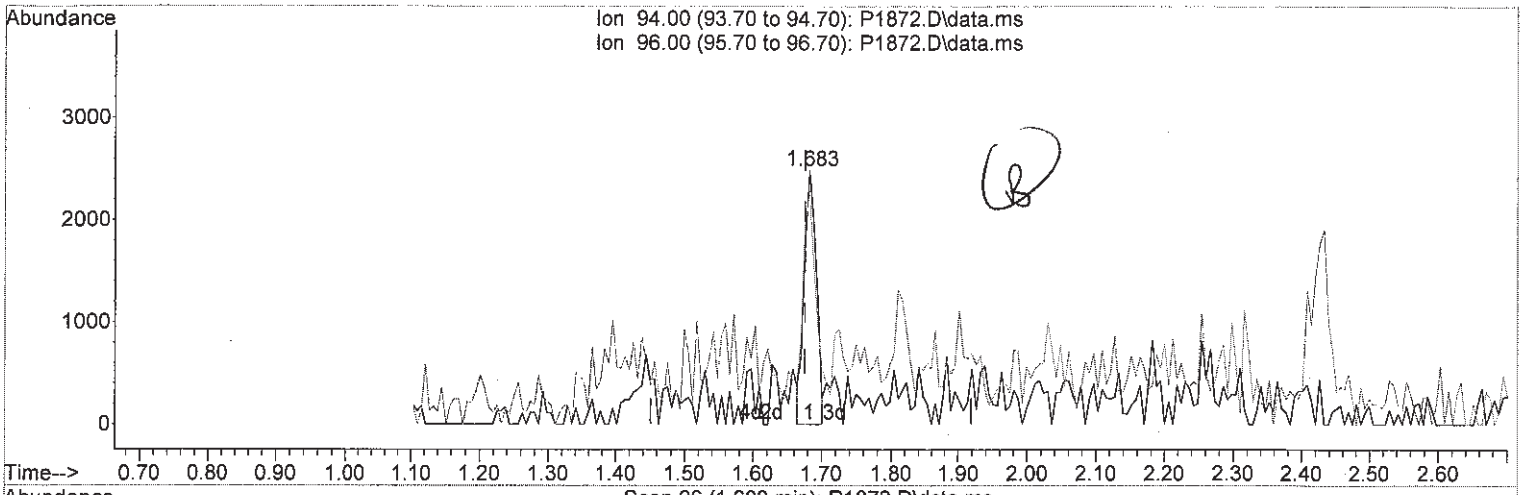
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) 1,2-Dclbenz	12.333	146	6182	0.49	ppb		78
111) 1,2-Dibromo-3-chloropr...	12.955	157	1030	0.86	ppb	#	80
112) Trielution Dichlorotol...	13.071	125	15996	1.51	ppb	#	88
113) 1,3,5 Trichlorobenzene	13.132	180	4341	0.51	ppb		95
114) Coelution Dichlorotoluene	13.400	125	11019	0.98	ppb		97
115) 1,2,4-Tcbenzene	13.607	180	3668	0.49	ppb	#	77
116) Hexachlorobt	13.741	225	1862	0.60	ppb	#	59
117) Naphthalen	13.802	128	7195	0.44	ppb		96
118) 1,2,3-Tclbenzene	13.985	180	2998	0.47	ppb		85
119) 2,4,5-Trichlorotolene	14.570	159	2532	0.56	ppb	#	85
120) 2,3,6-Trichlorotoluene	14.656	159	1979	0.47	ppb	#	60

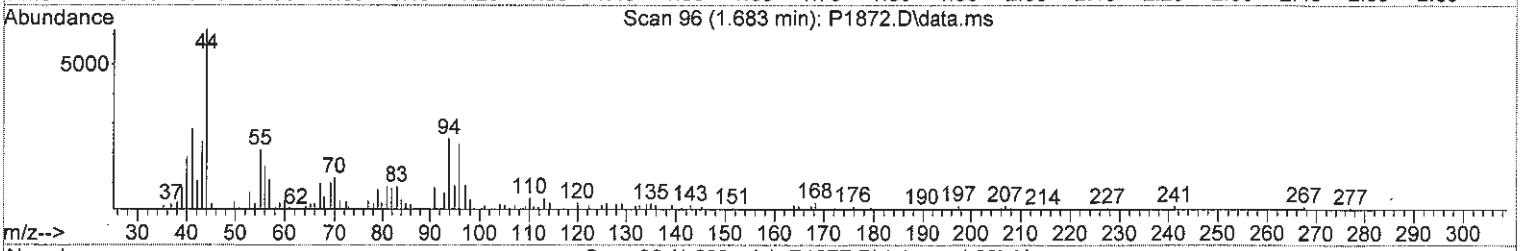
(#) = qualifier out of range (m) = manual integration (+) = signals summed

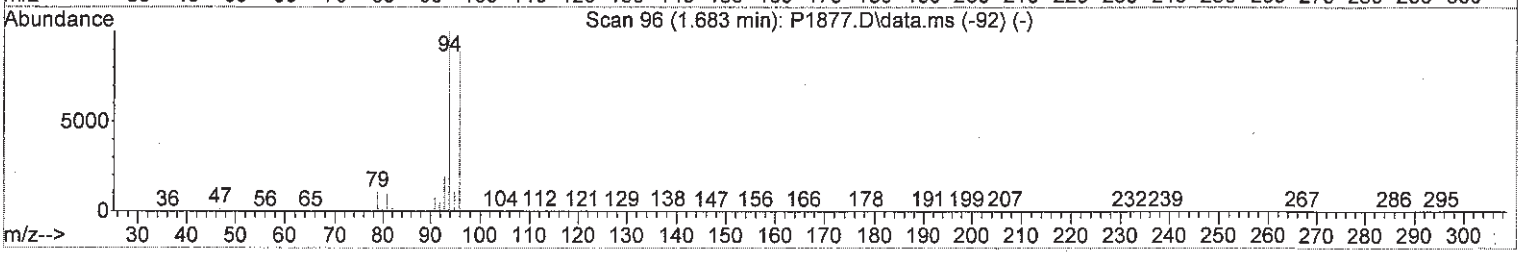
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(5) Bromomethane (P)

1.683min (+0.006) 0.63 ppb

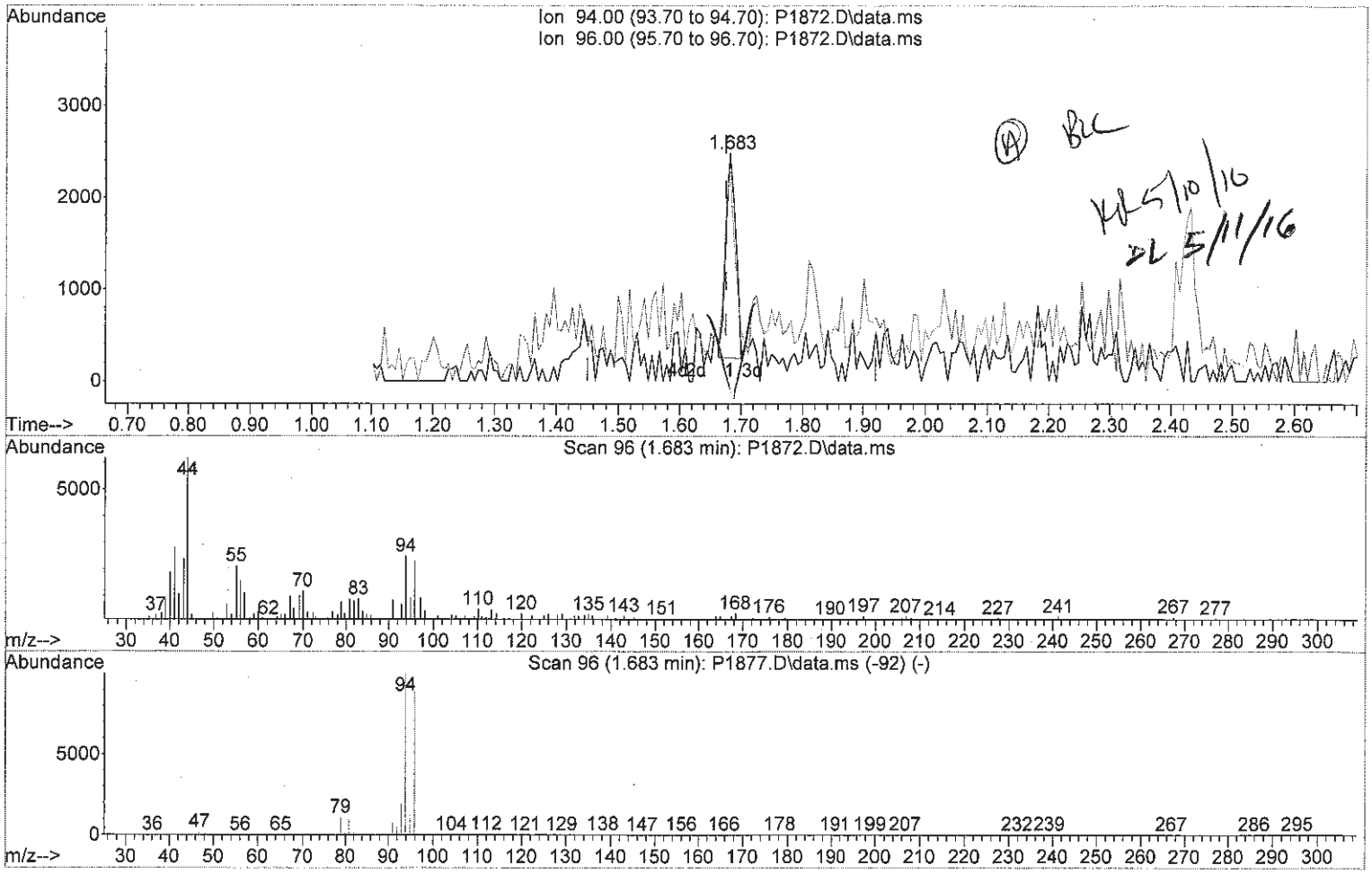
response 3027

Ion	Exp%	Act%
94.00	100	100
96.00	89.20	92.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(5) Bromomethane (P)

1.683min (+0.006) 0.52 ppb m

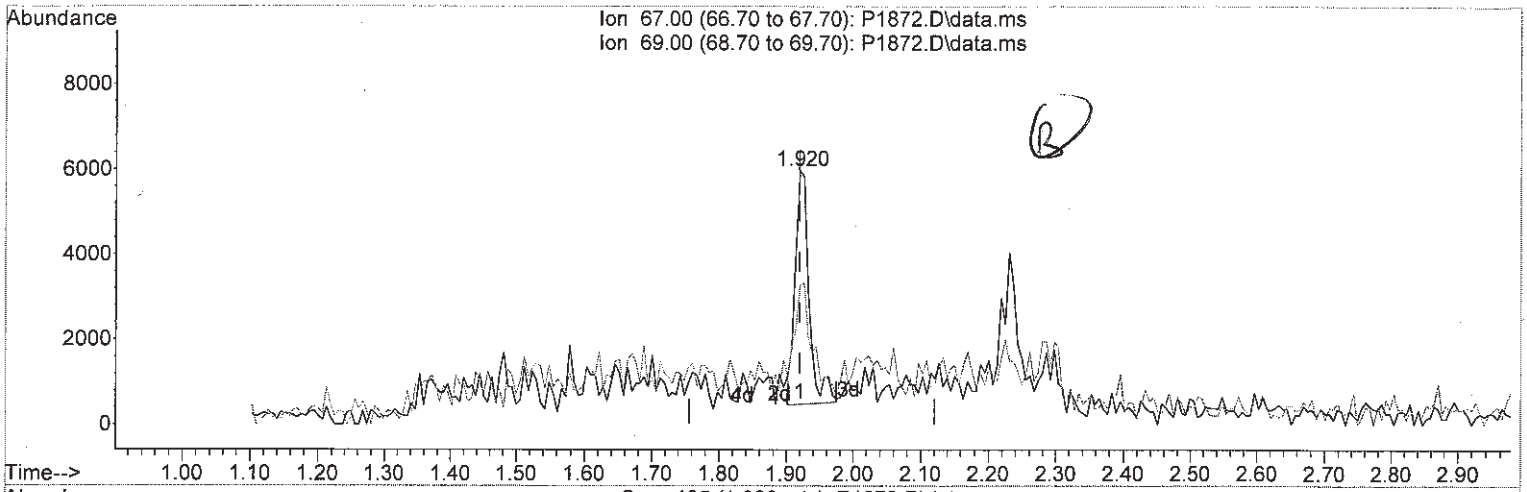
response 2470

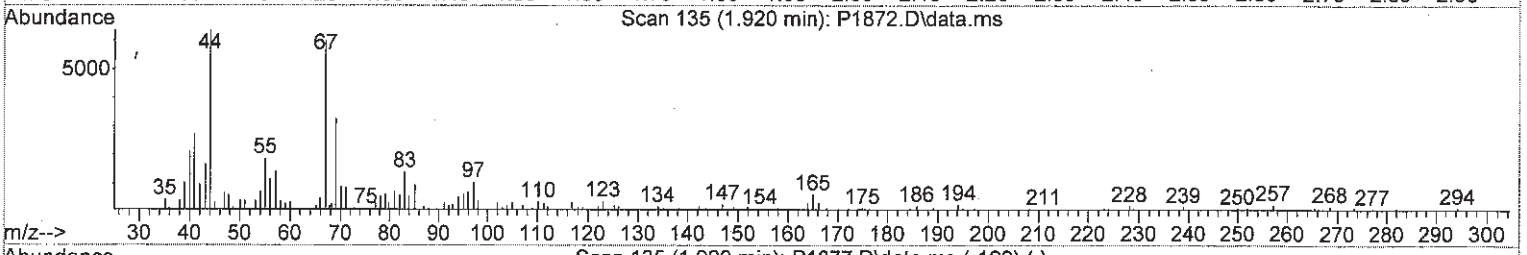
Ion	Exp%	Act%
94.00	100	100
96.00	89.20	92.02
0.00	0.00	0.00
0.00	0.00	0.00

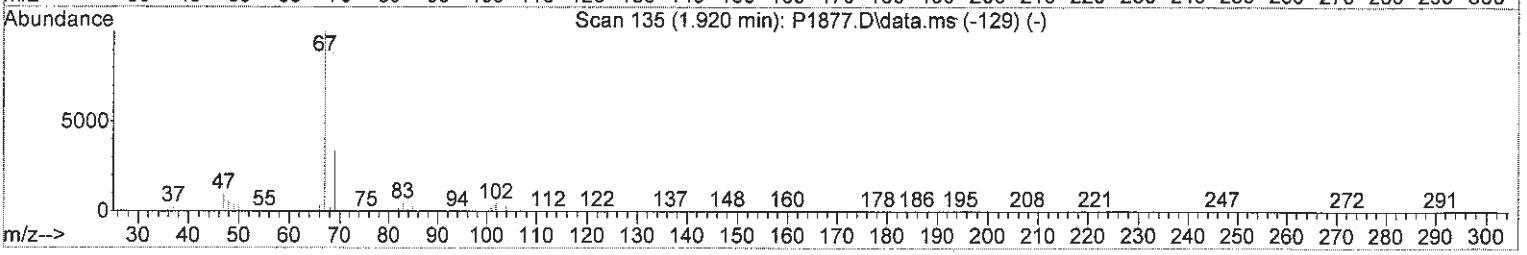
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(7) Freon 21

1.920min (+0.000) 0.59 ppb

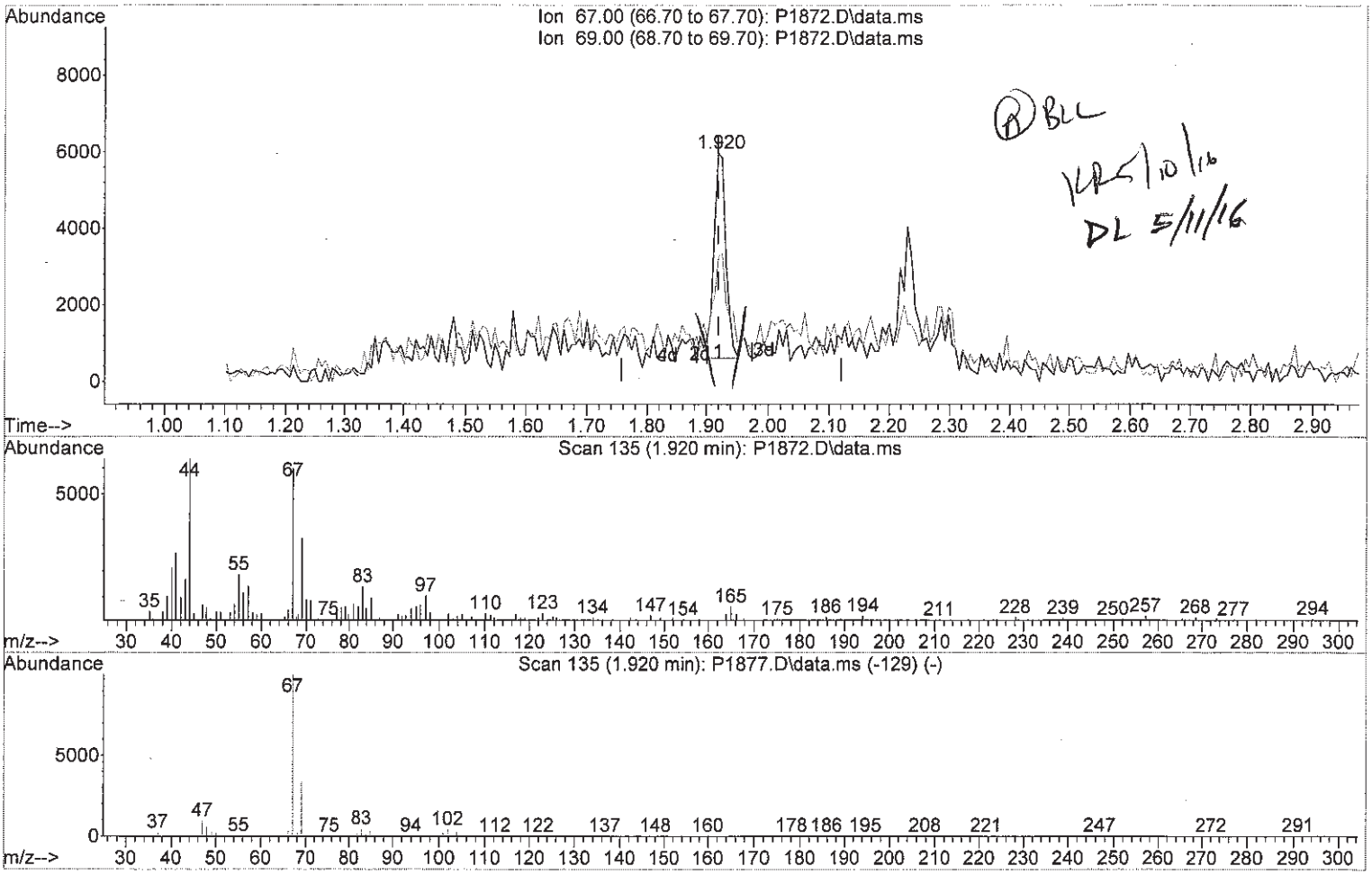
response 7948

Ion	Exp%	Act%
67.00	100	100
69.00	34.20	54.64#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(7) Freon 21

1.920min (+0.000) 0.52 ppb m

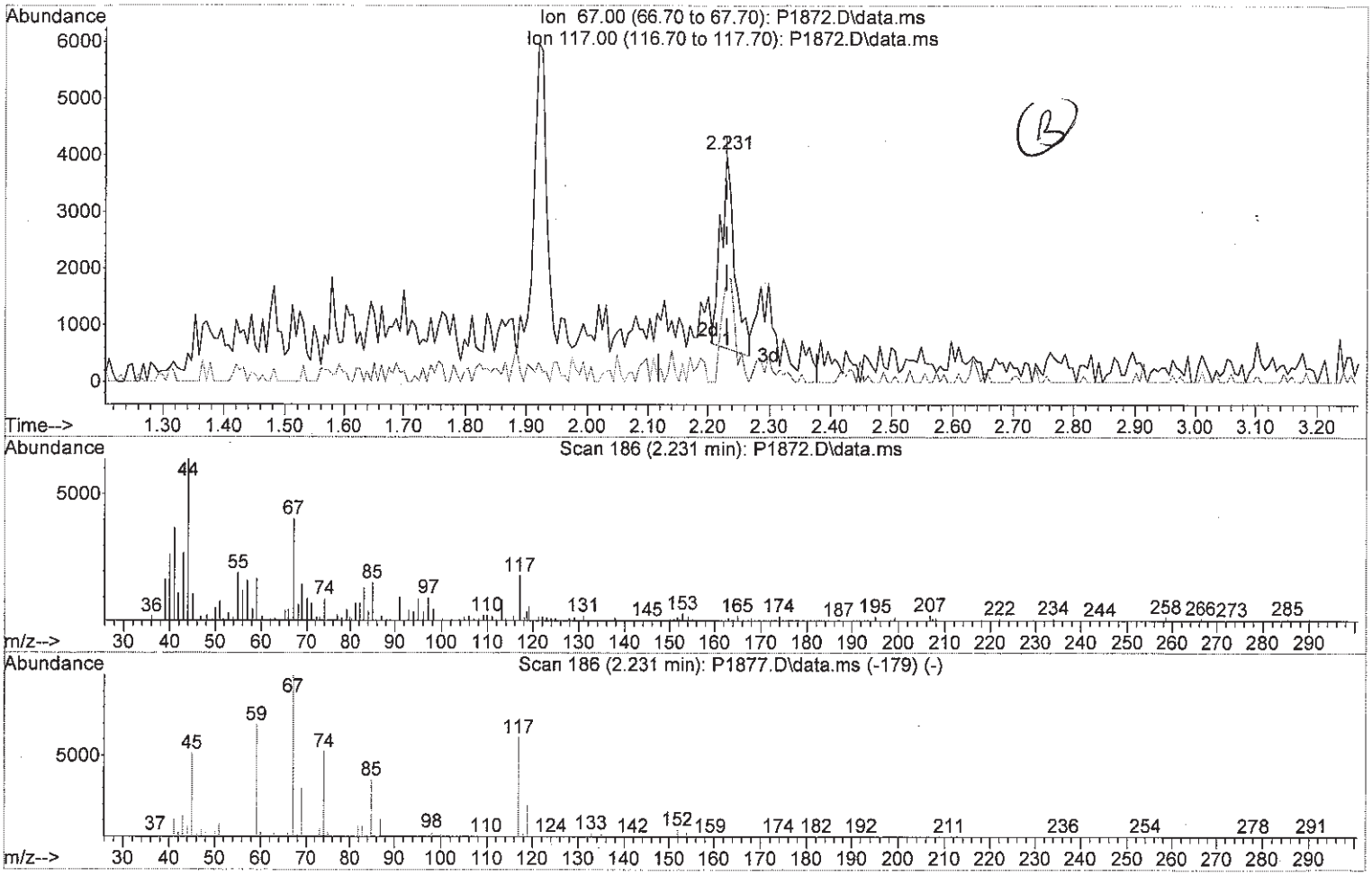
response 7053

Ion	Exp%	Act%
67.00	100	100
69.00	34.20	54.64#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(10) Freon 123a

2.231min (+0.000) 0.60 ppb

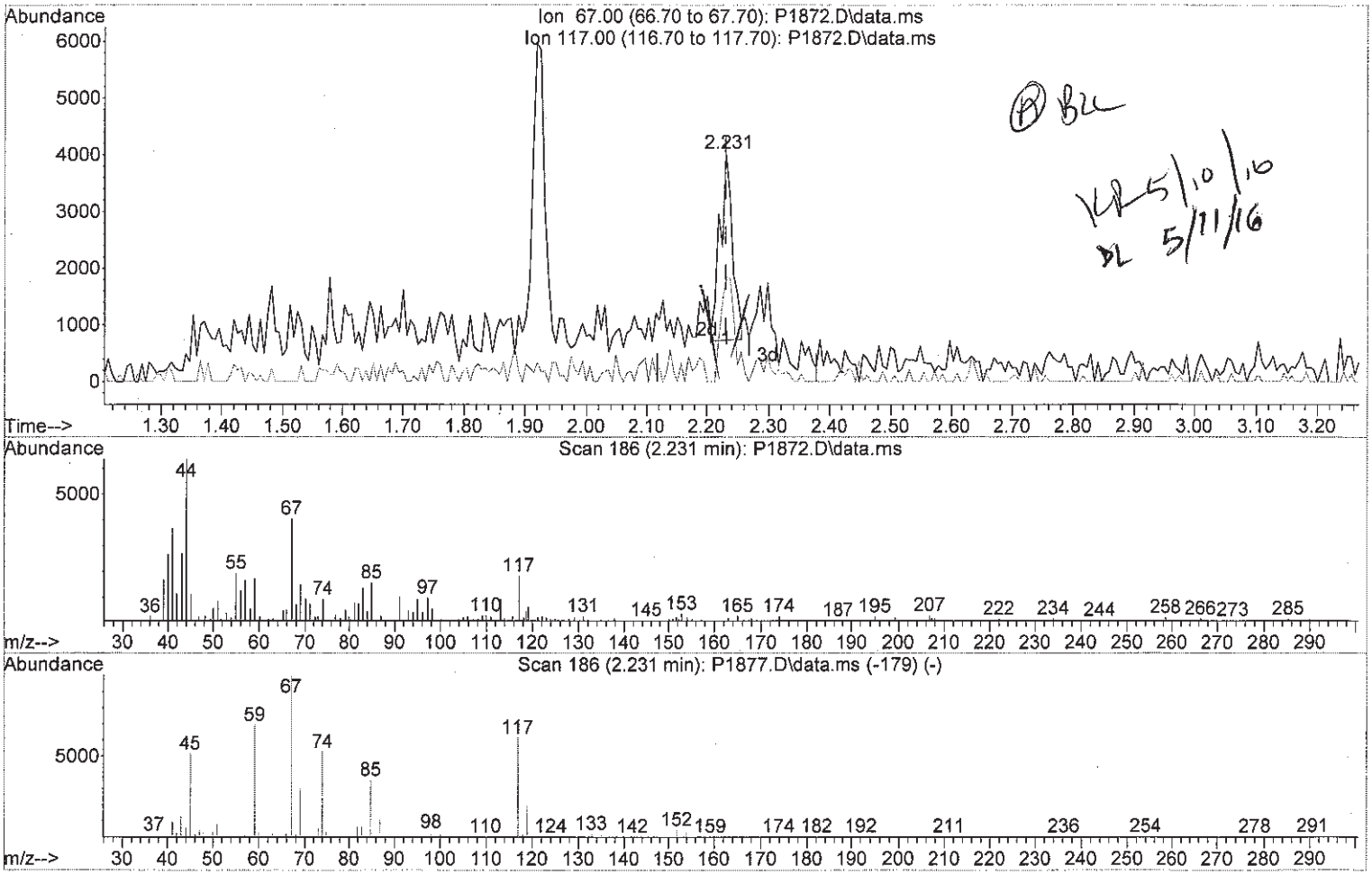
response 5386

Ion	Exp%	Act%
67.00	100	100
117.00	61.50	45.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(10) Freon 123a

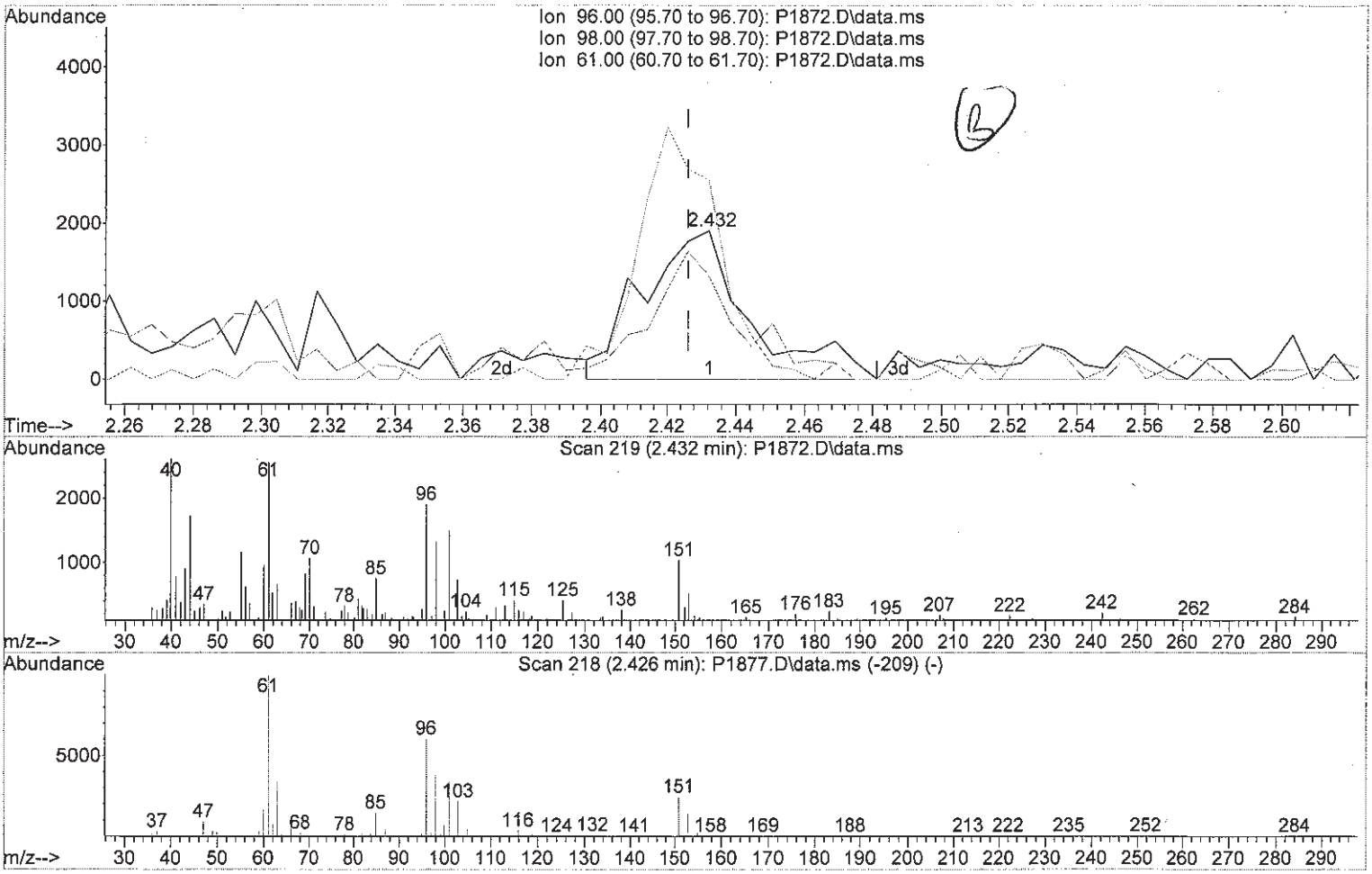
2.231min (+0.000) 0.52 ppb m

response 4619

Ion	Exp%	Act%
67.00	100	100
117.00	61.50	45.51
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(13) 1,1-Diclethene (P)

2.432min (+0.006) 0.66 ppb

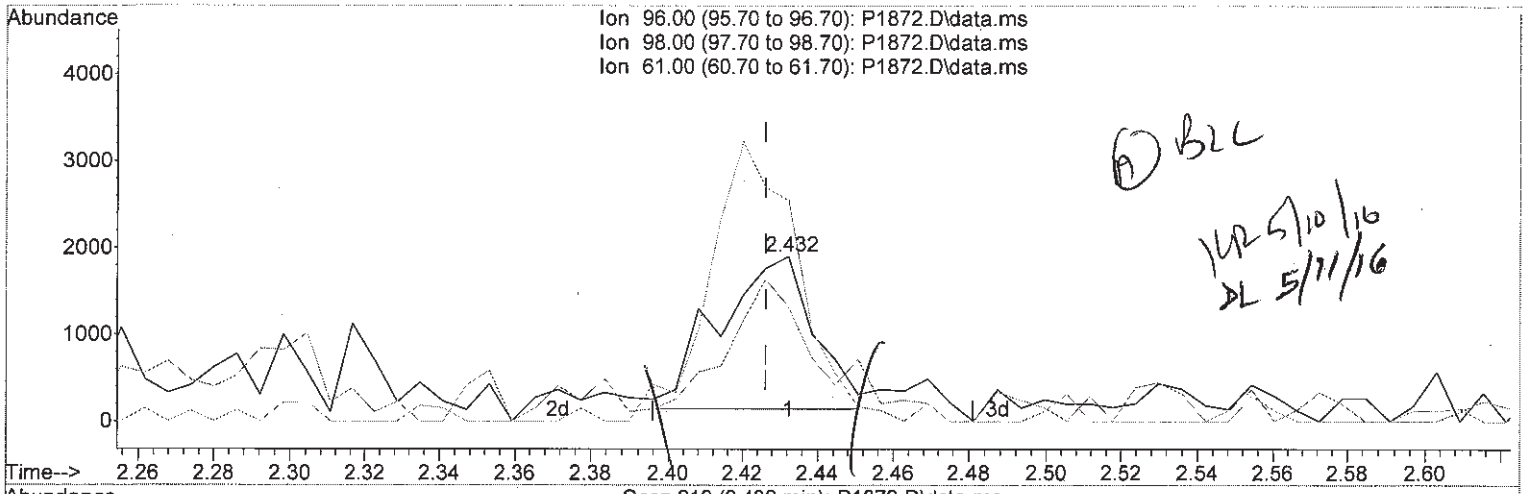
response 4096

Ion	Exp%	Act%
96.00	100	100
98.00	63.00	69.25
61.00	165.90	133.97#
0.00	0.00	0.00

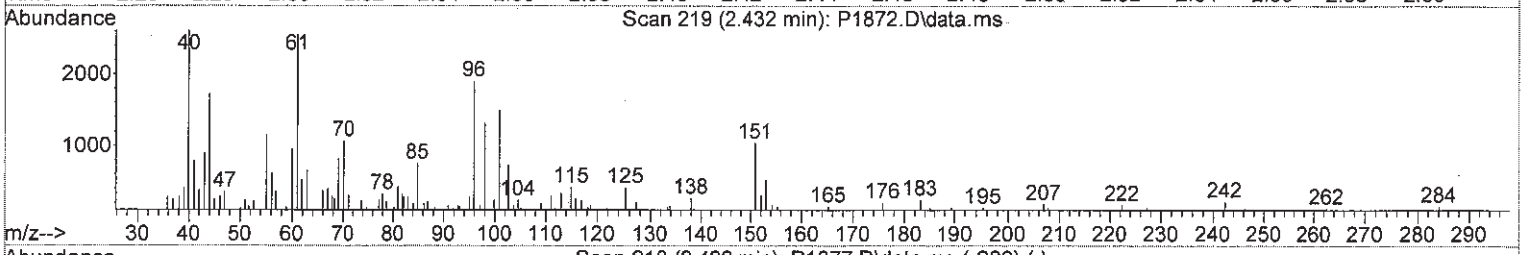
Quantitation Report (Qedit)

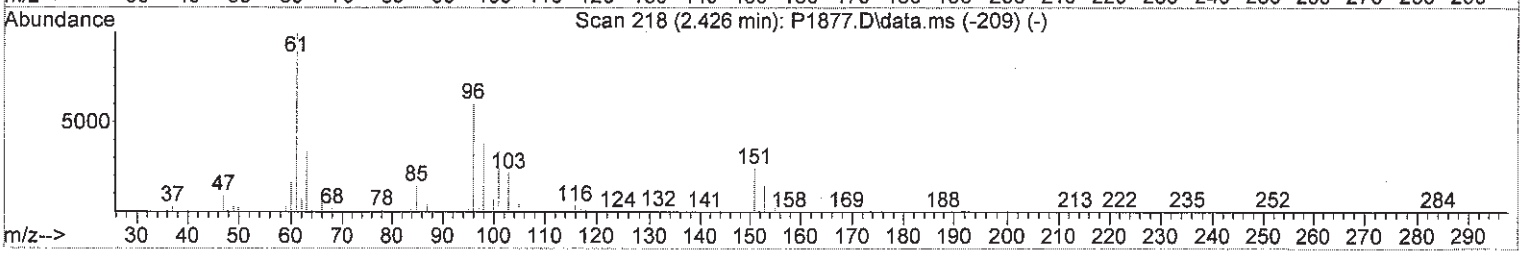
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



BLC 5/10/16 DL 5/11/16





TIC: P1872.D\data.ms

(13) 1,1-Diclethene (P)

2.432min (+0.006) 0.50 ppb m

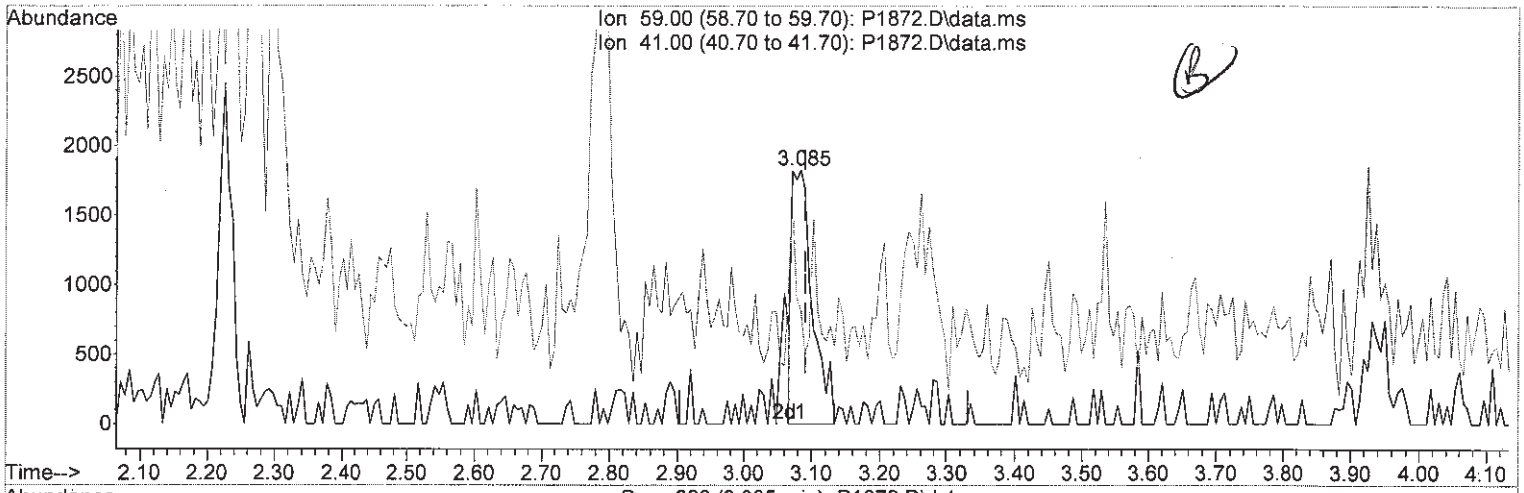
response 3098

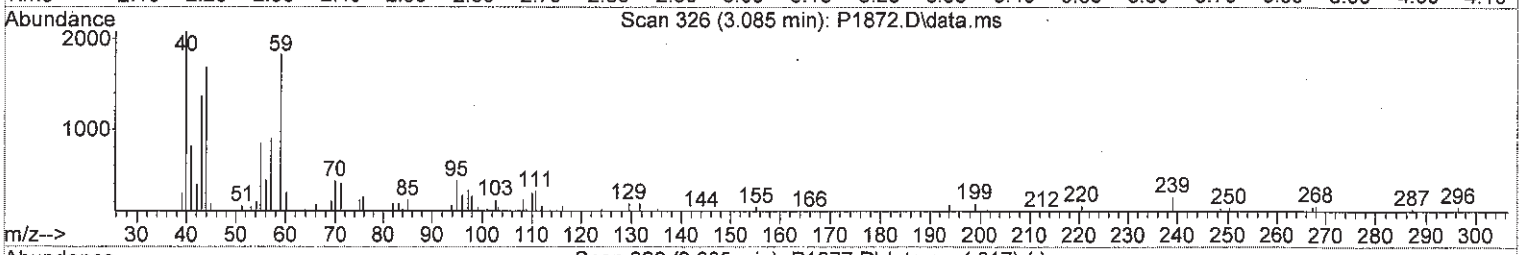
Ion	Exp%	Act%
96.00	100	100
98.00	63.00	69.25
61.00	165.90	133.97#
0.00	0.00	0.00

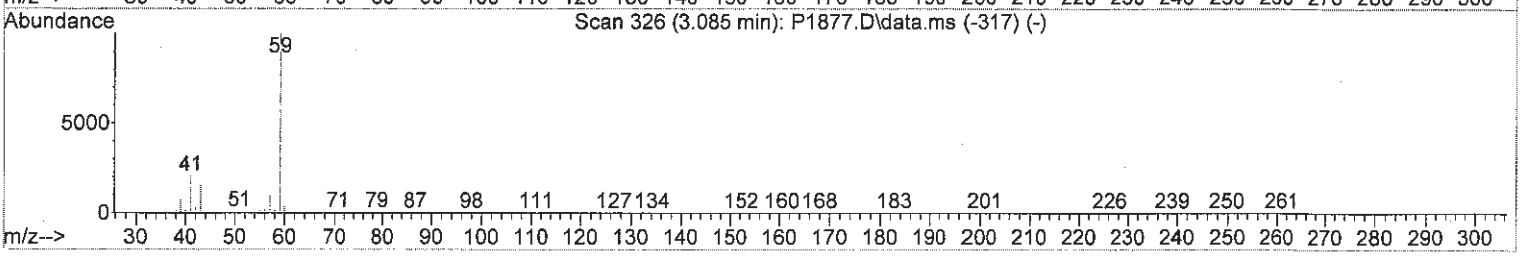
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(23) TBA

3.085min (-0.006) 7.77 ppb

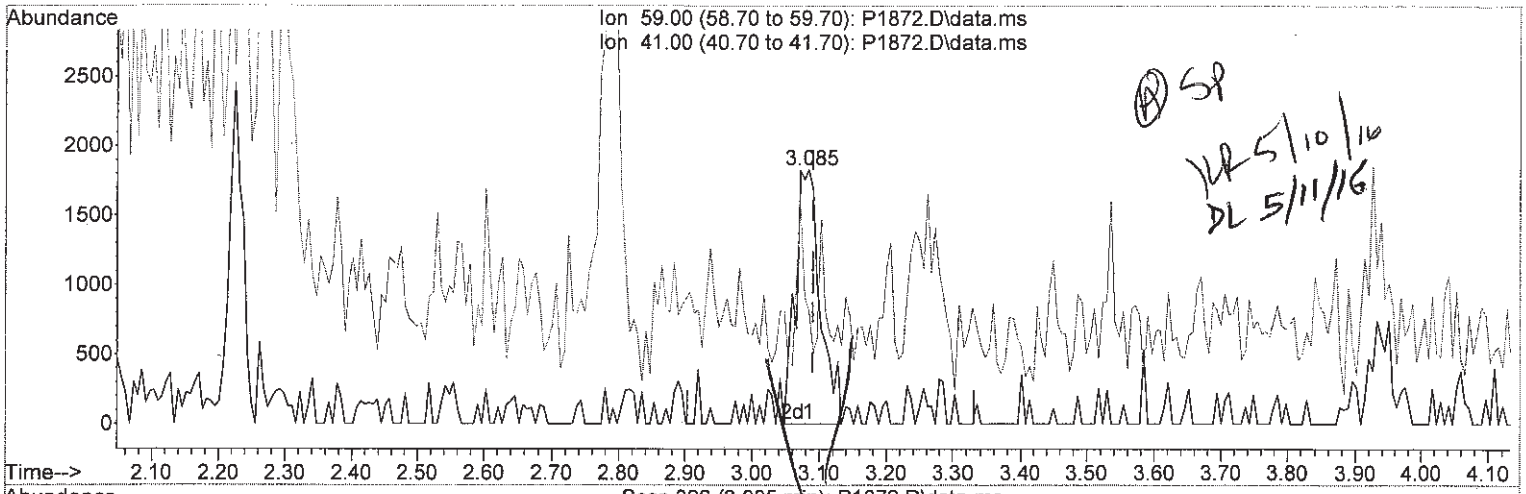
response 3838

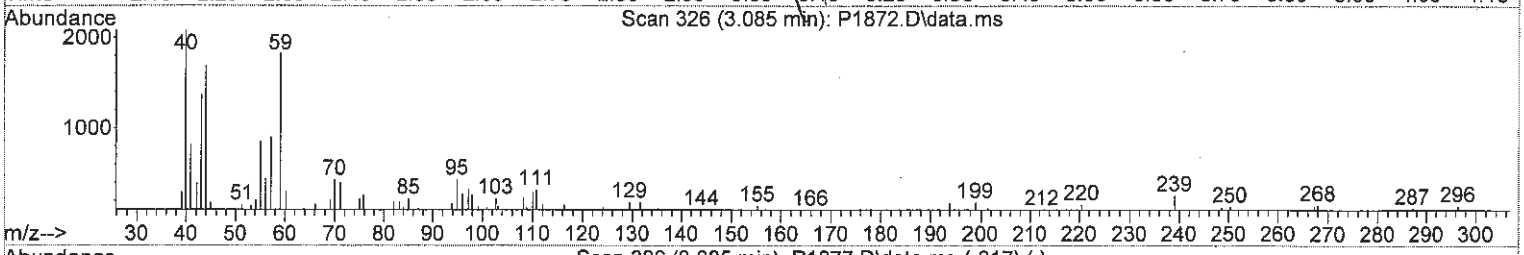
Ion	Exp%	Act%
59.00	100	100
41.00	20.90	44.60#
0.00	0.00	0.00
0.00	0.00	0.00

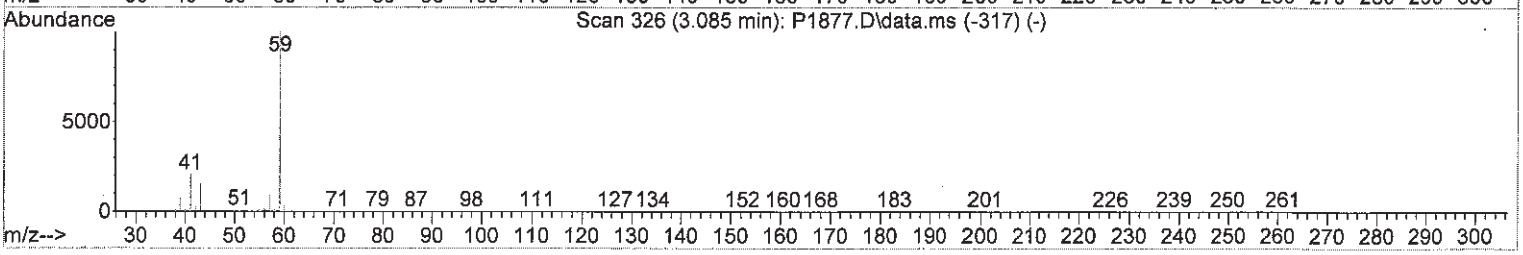
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(23) TBA

3.085min (-0.006) 9.35 ppb m

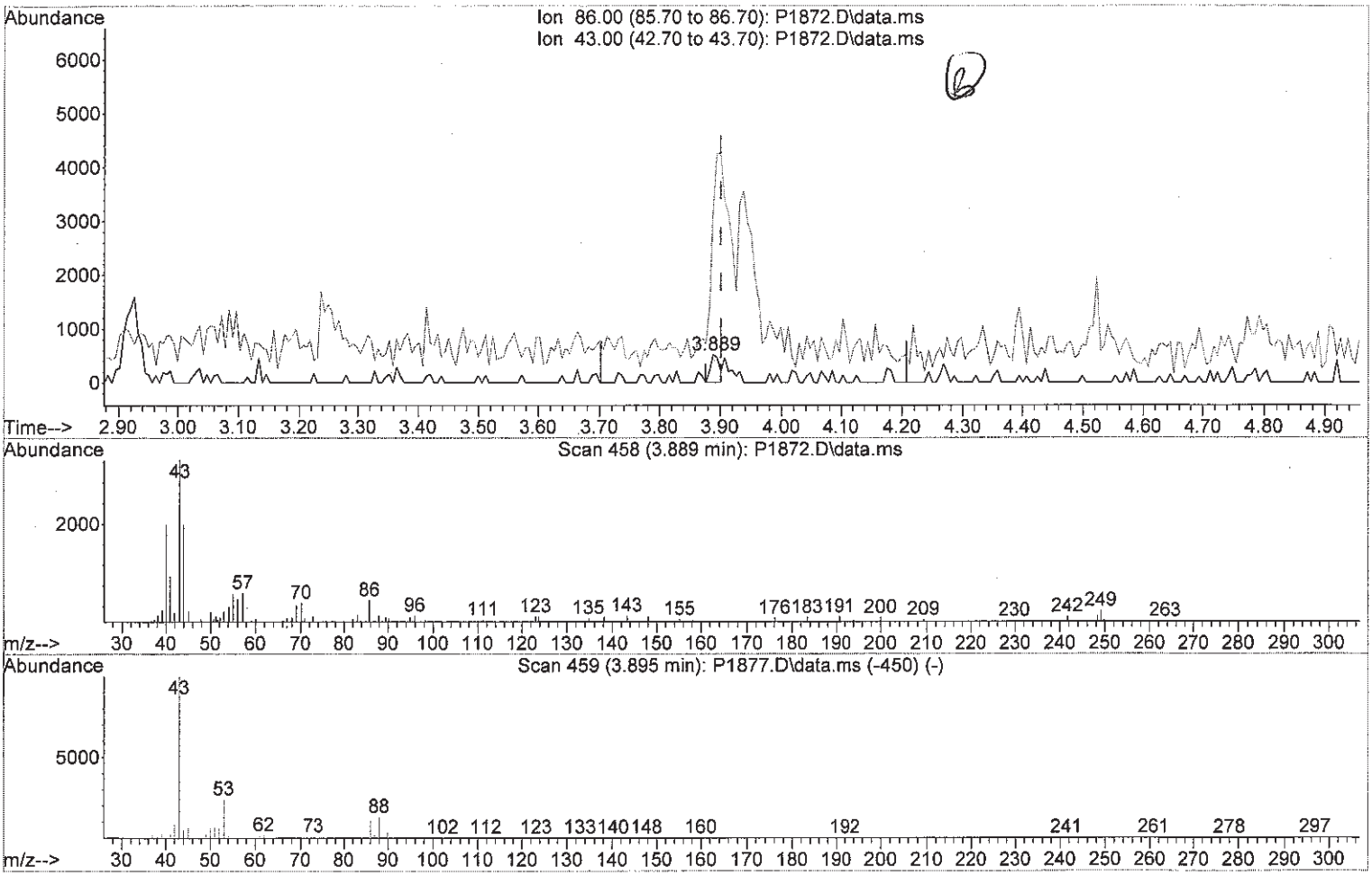
response 4622

Ion	Exp%	Act%
59.00	100	100
41.00	20.90	44.60#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(29) Vinyl Acetate

3.889min (-0.012) 0.38 ppb

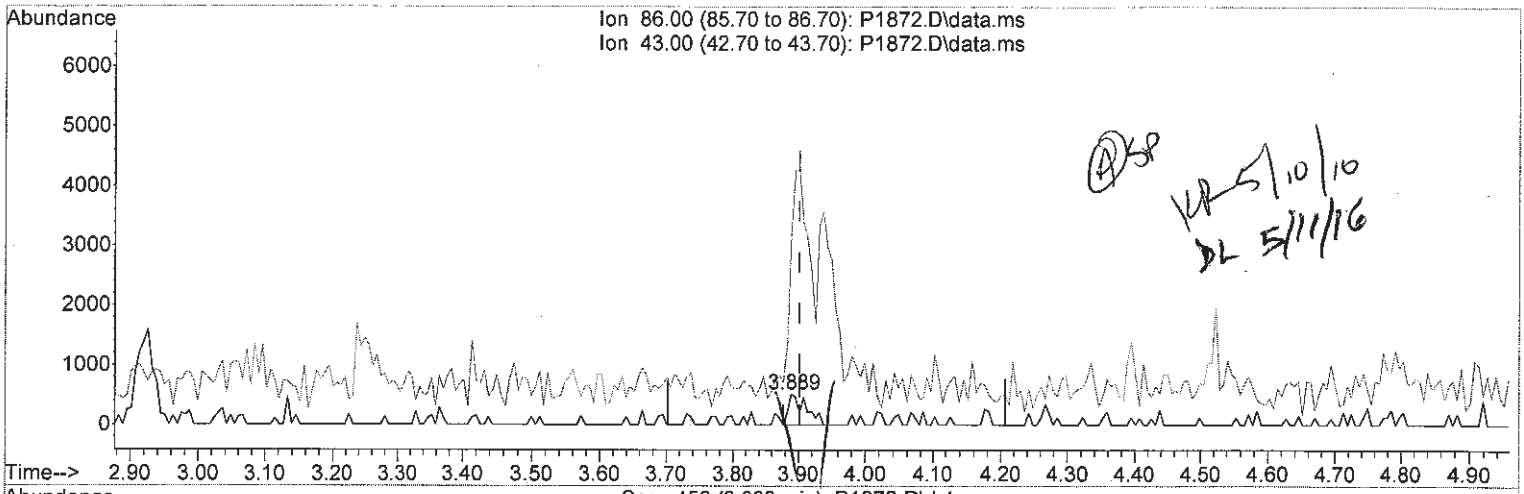
response 509

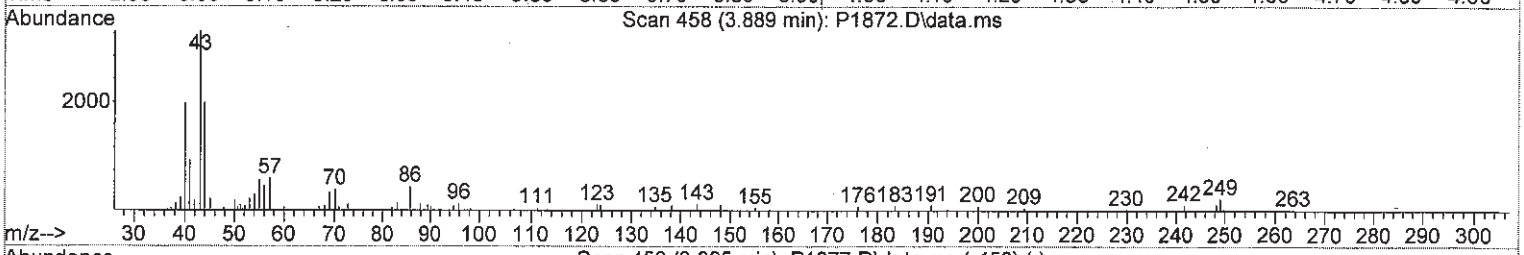
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	630.02#
0.00	0.00	0.00
0.00	0.00	0.00

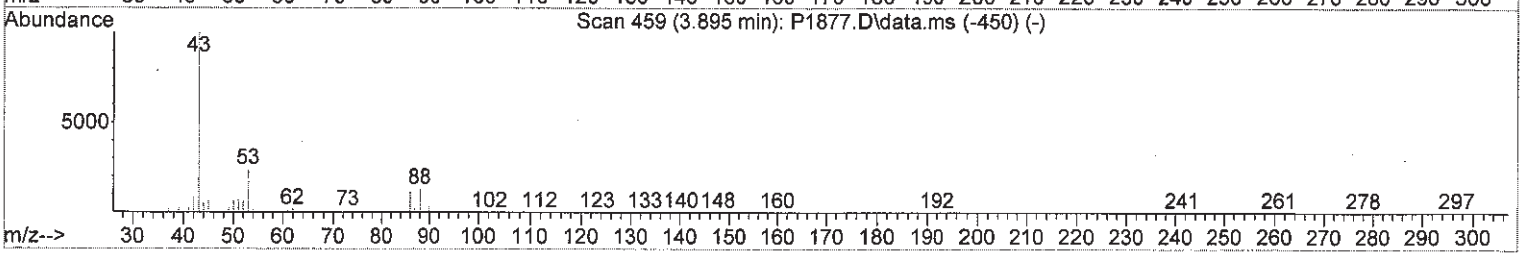
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

- (29) Vinyl Acetate

3.889min (-0.012) 0.72 ppb m

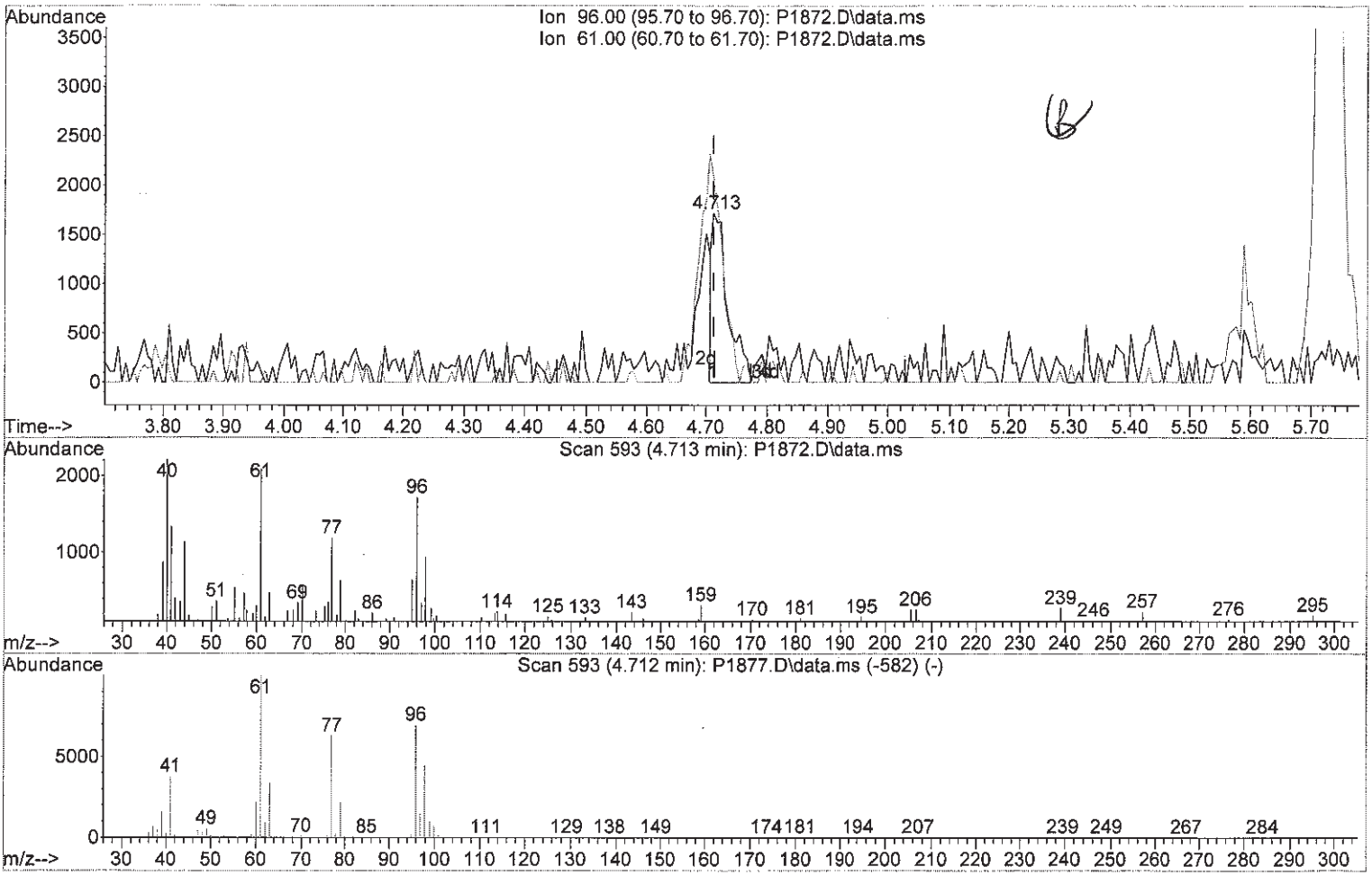
response 948

Ion	Exp%	Act%
86.00	100	100
43.00	938.30	630.02#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.713min (+0.000) 0.41 ppb

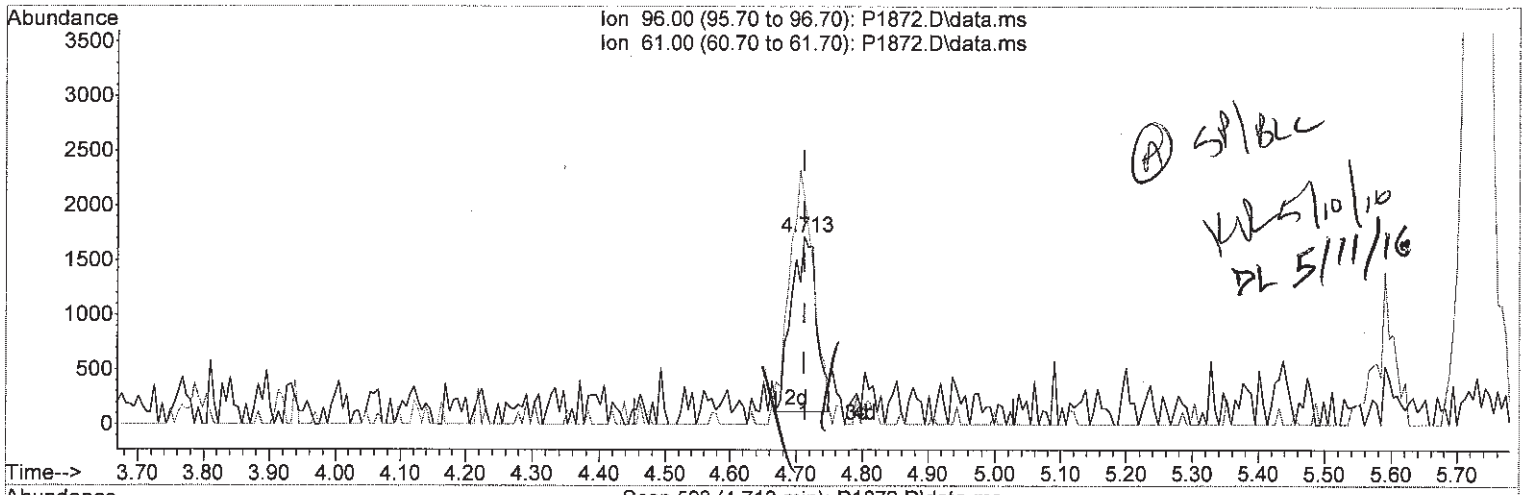
response 3042

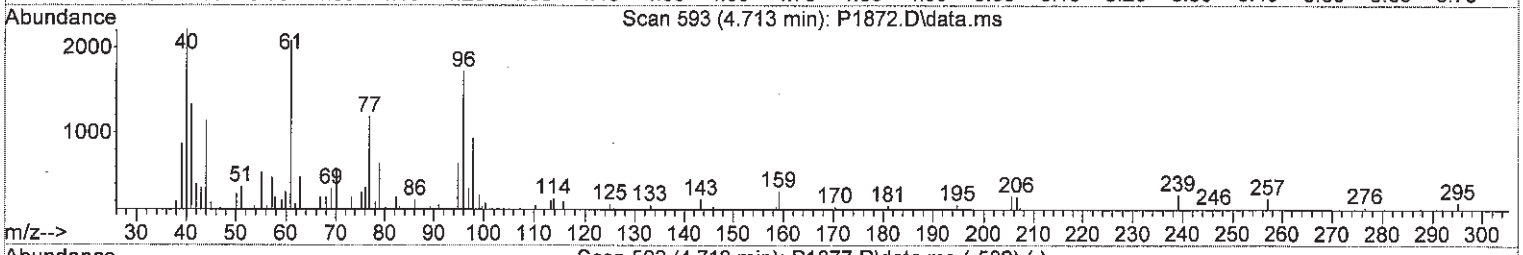
Ion	Exp%	Act%
96.00	100	100
61.00	144.40	121.25#
0.00	0.00	0.00
0.00	0.00	0.00

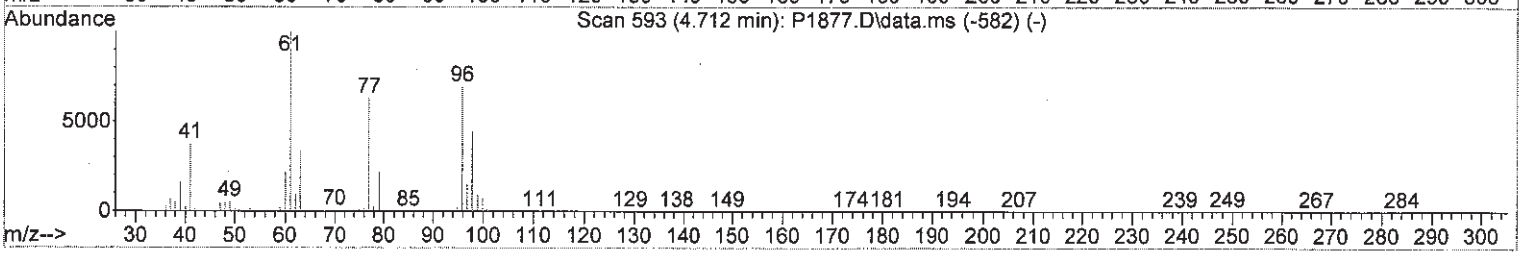
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.713min (+0.000) 0.57 ppb m

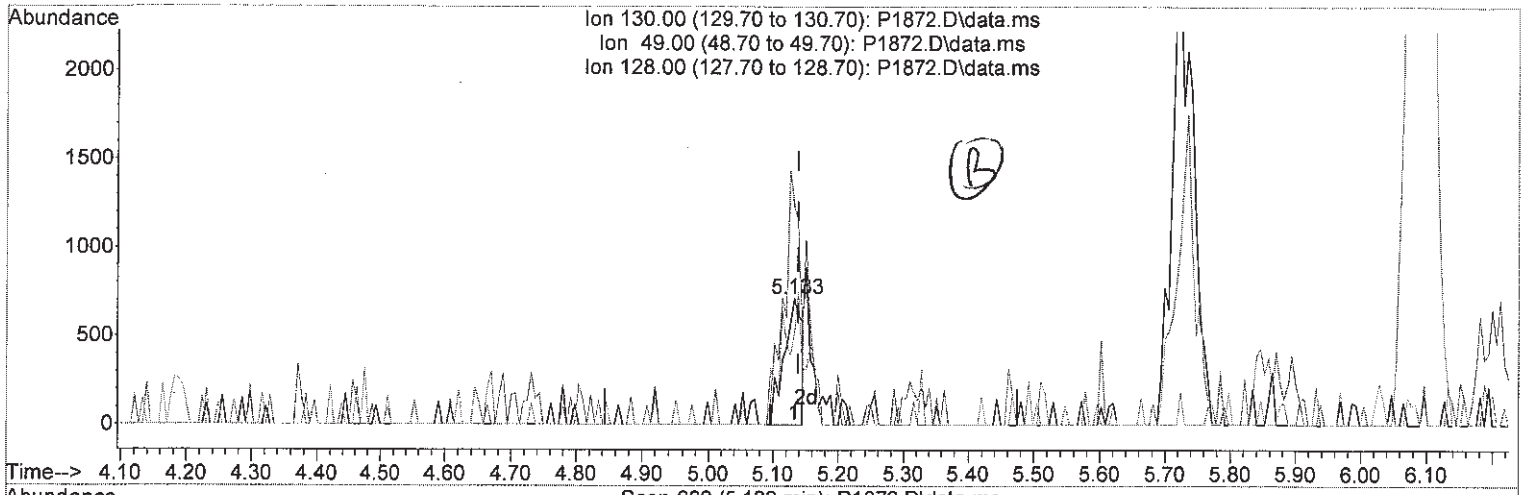
response 4247

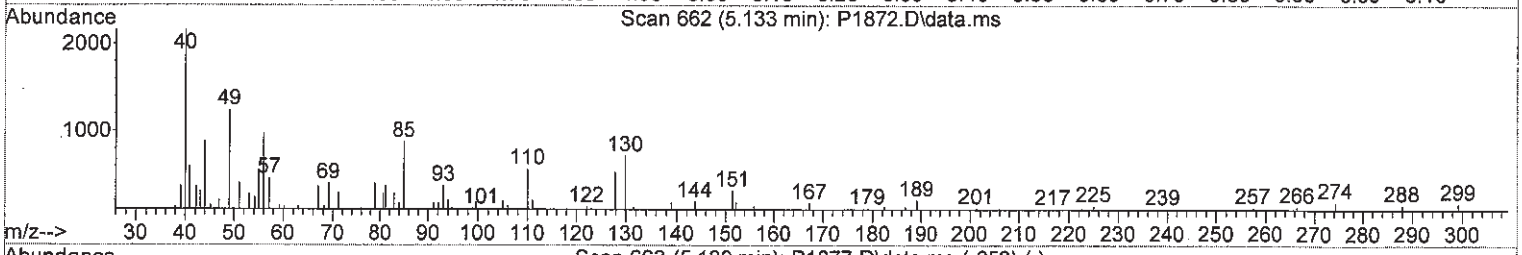
Ion	Exp%	Act%
96.00	100	100
61.00	144.40	121.25#
0.00	0.00	0.00
0.00	0.00	0.00

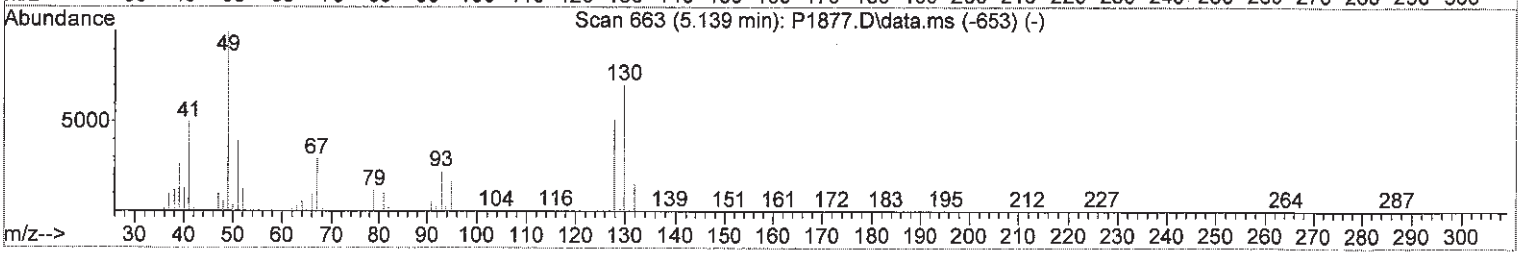
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(37) Bromochloromethane

5.133min (-0.006) 0.35 ppb

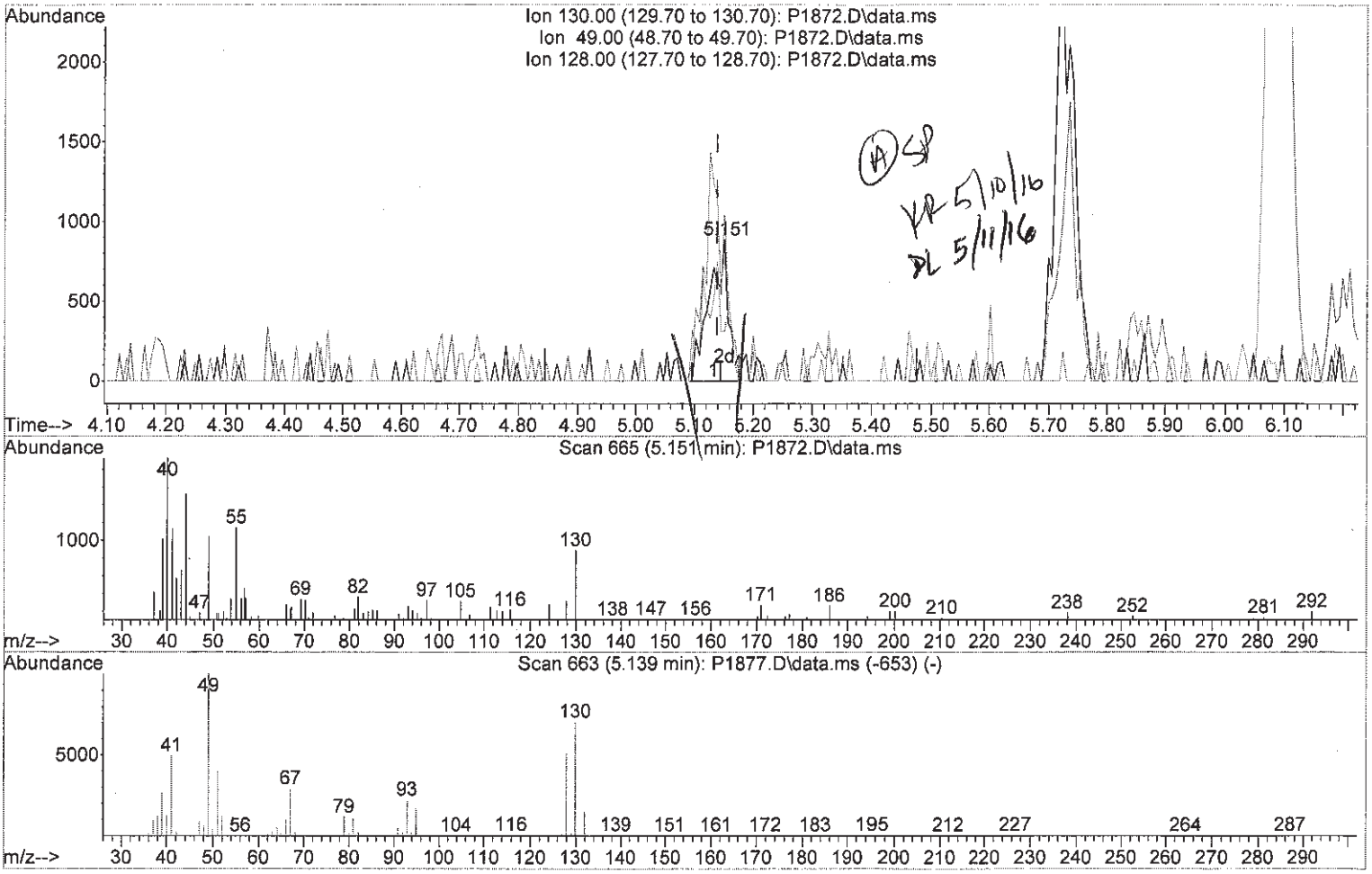
response 1355

Ion	Exp%	Act%
130.00	100	100
49.00	142.20	173.98#
128.00	73.20	73.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(37) Bromochloromethane

5.151min (+0.012) 0.52 ppb m

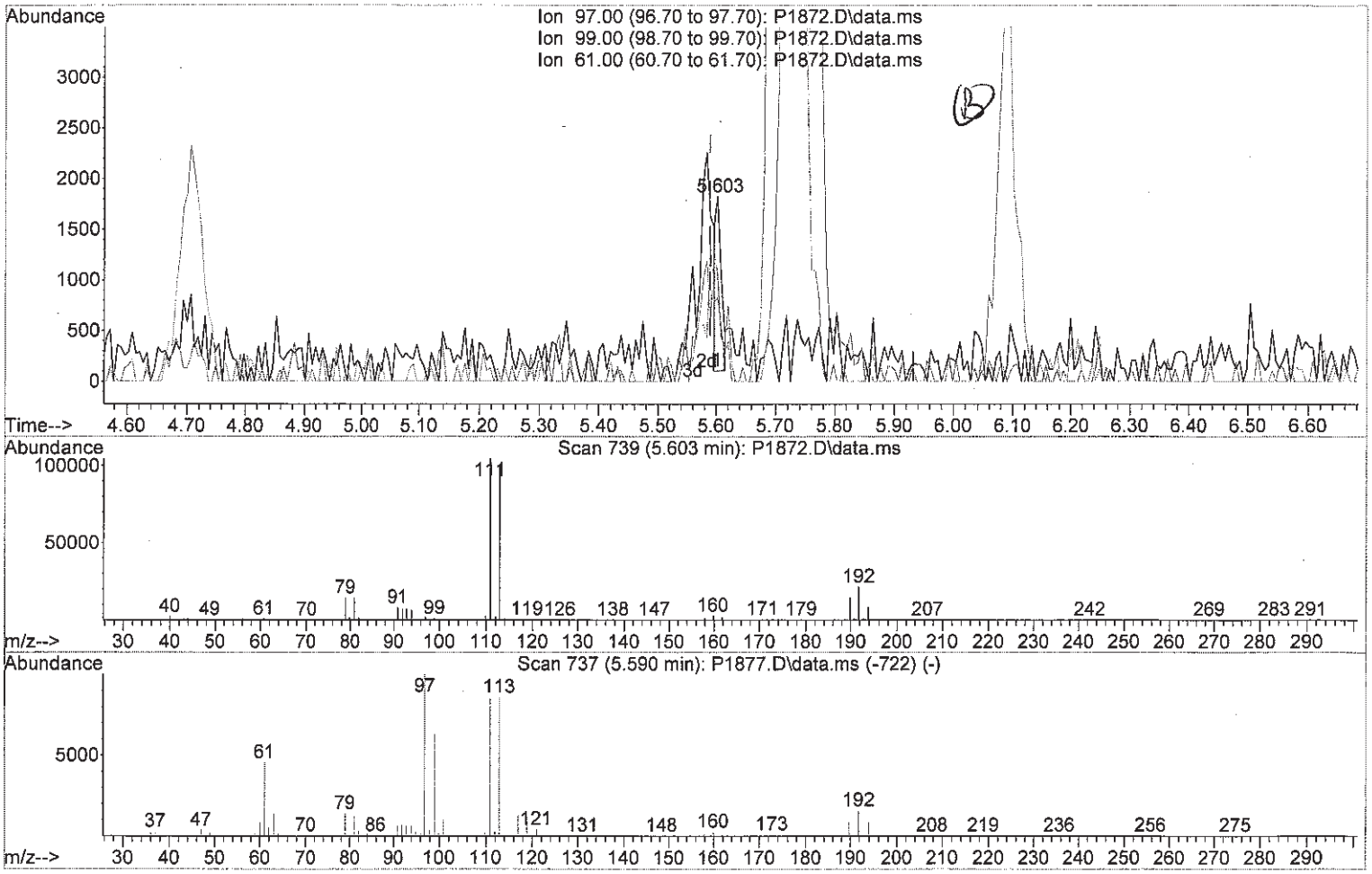
response 2025

Ion	Exp%	Act%
130.00	100	100
49.00	142.20	117.42#
128.00	73.20	35.18#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.603min (+0.012) 0.11 ppb

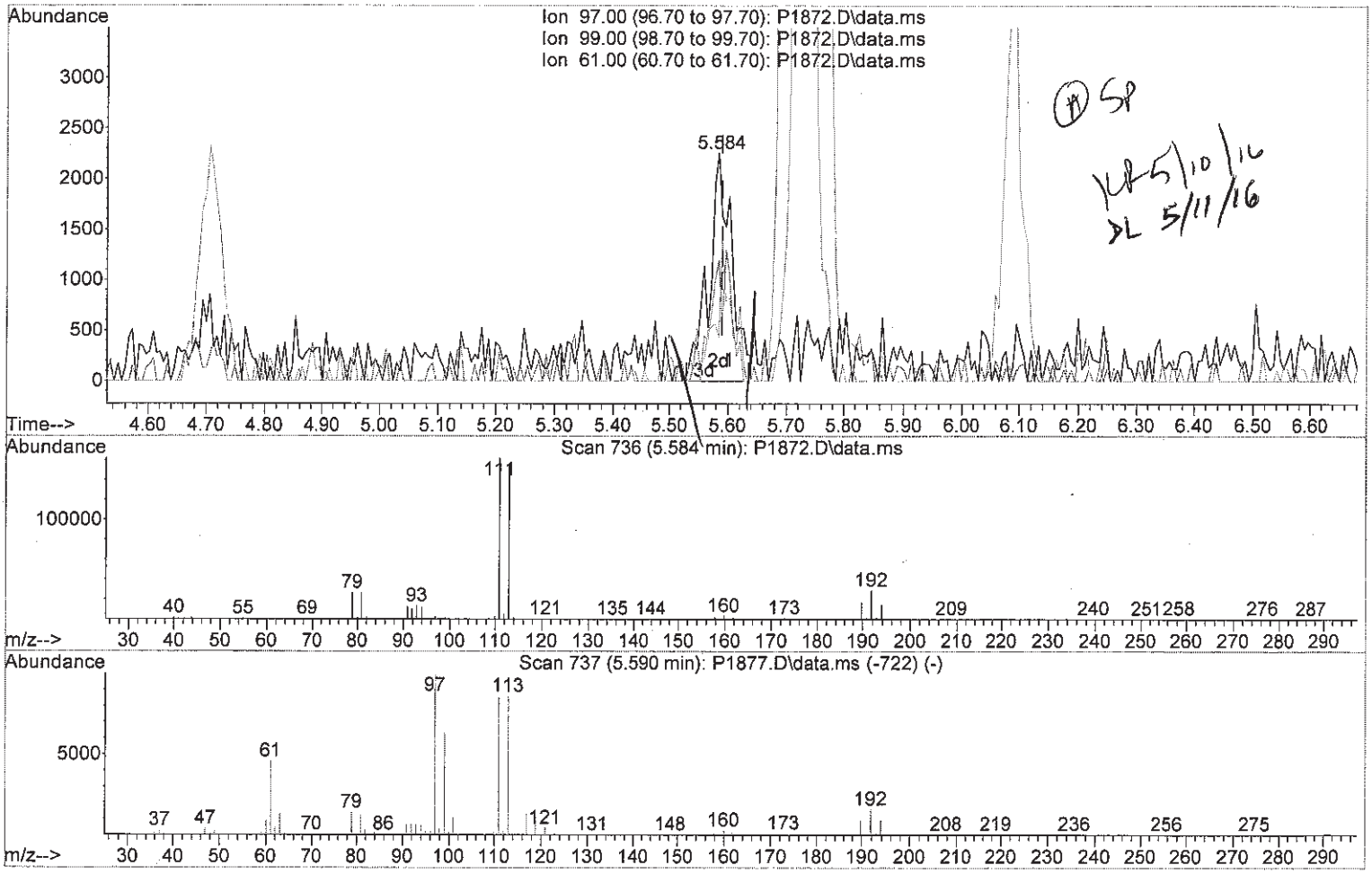
response 1116

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	57.10
61.00	45.50	45.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.584min (-0.006) 0.59 ppb m

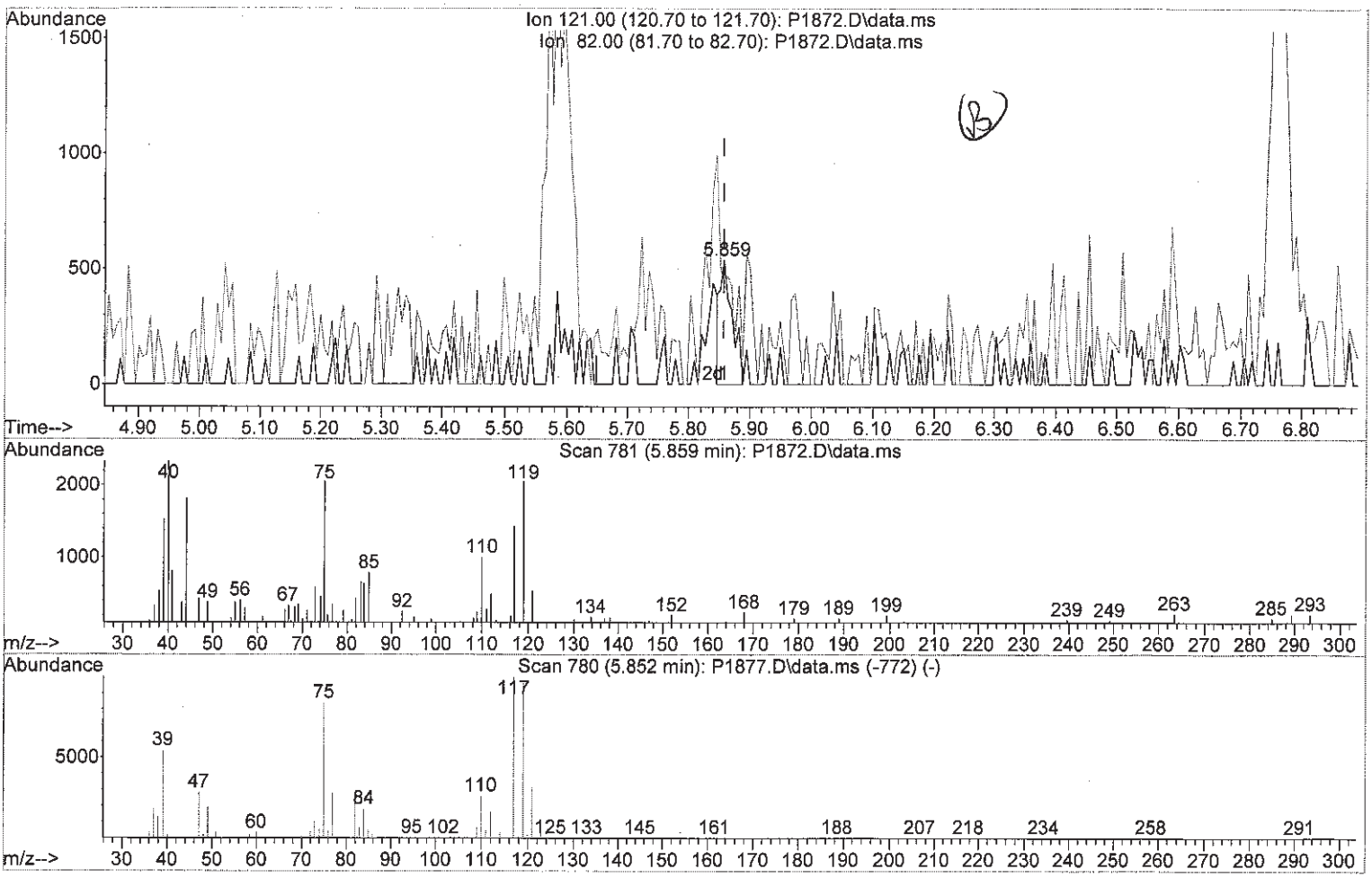
response 6036

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	52.71
61.00	45.50	19.27#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(46) Carbontetrachloride (P)

5.859min (+0.000) 0.28 ppb

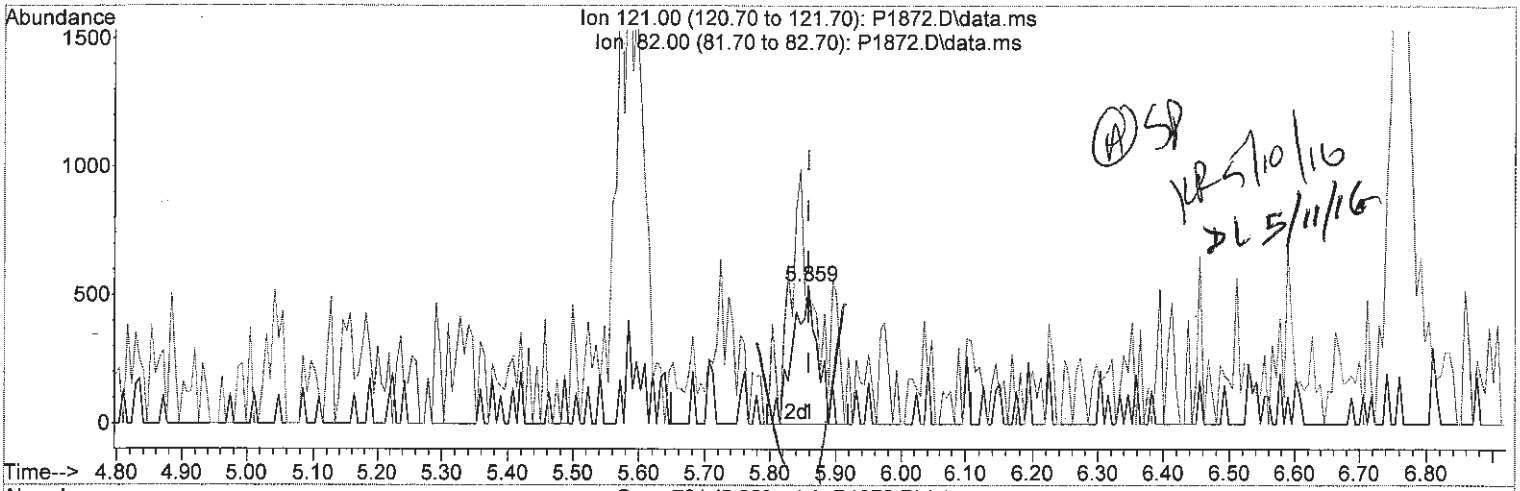
response 747

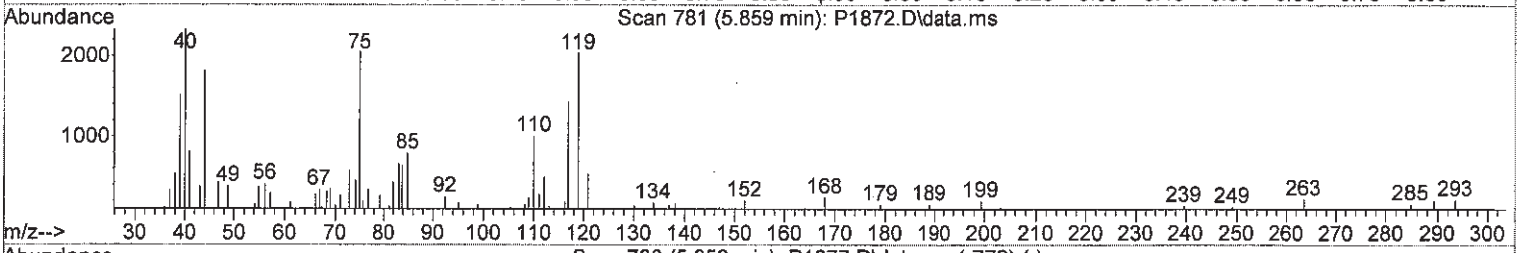
Ion	Exp%	Act%
121.00	100	100
82.00	86.70	79.89
0.00	0.00	0.00
0.00	0.00	0.00

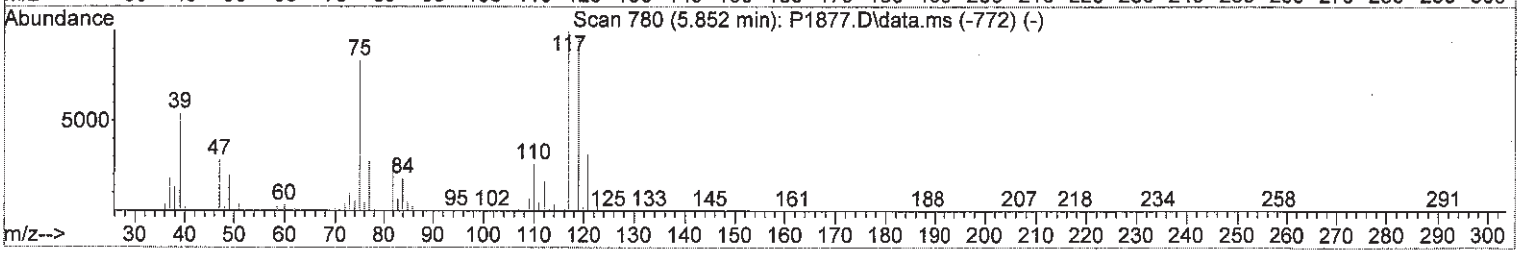
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(46) Carbontetrachloride (P)

5.859min (+0.000) 0.53 ppb m

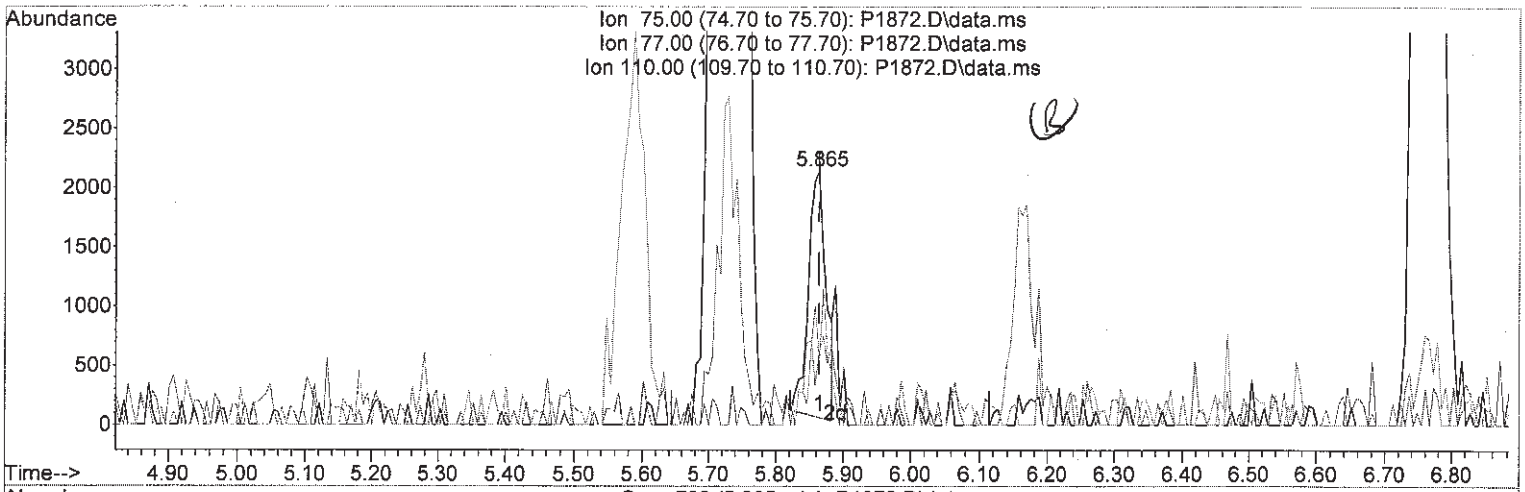
response 1387

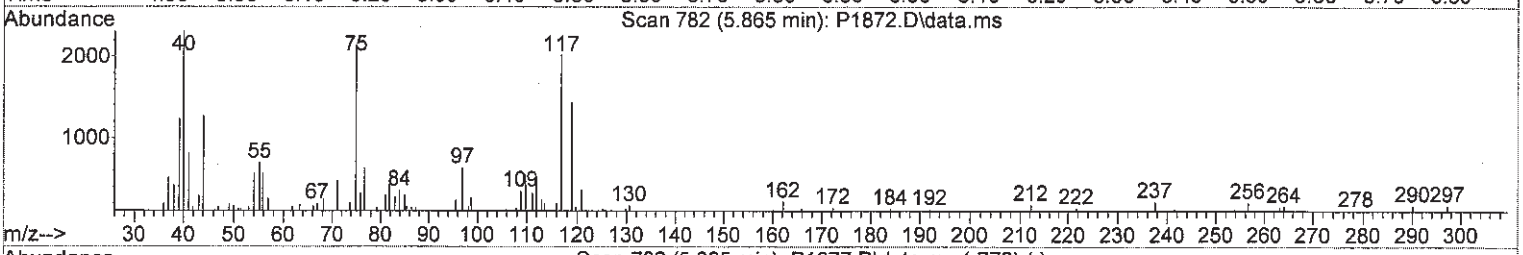
Ion	Exp%	Act%
121.00	100	100
82.00	86.70	79.89
0.00	0.00	0.00
0.00	0.00	0.00

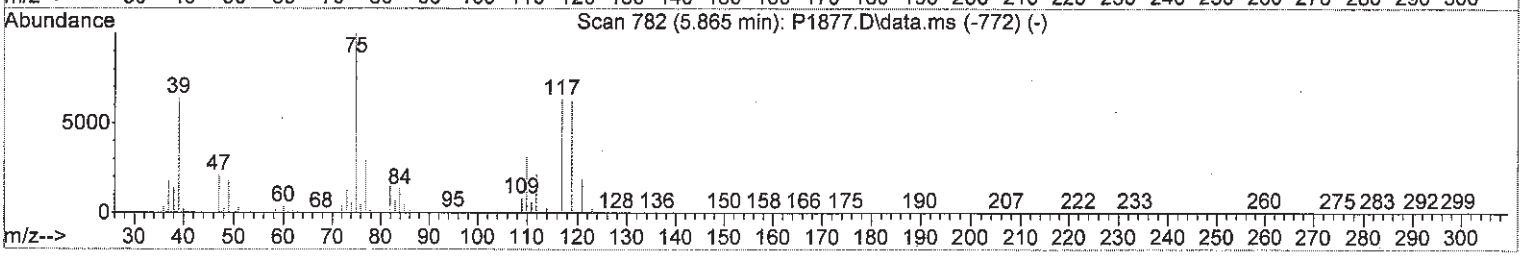
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(47) 1,1-Dichloropropene

5.865min (+0.000) 0.40 ppb

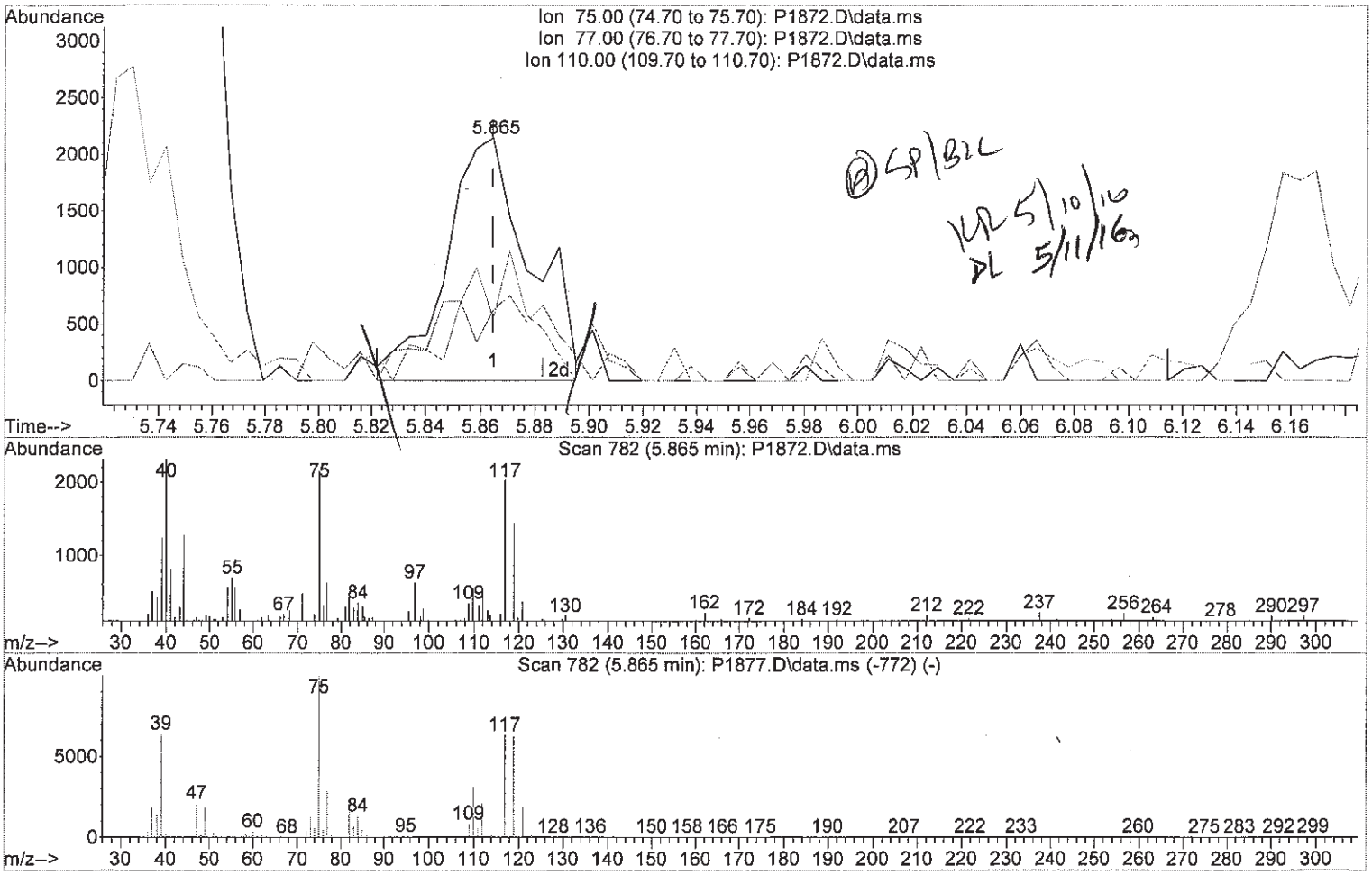
response 3782

Ion	Exp%	Act%
75.00	100	100
77.00	28.70	29.16
110.00	31.50	25.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(47) 1,1-Dichloropropene

5.865min (+0.000) 0.48 ppb m

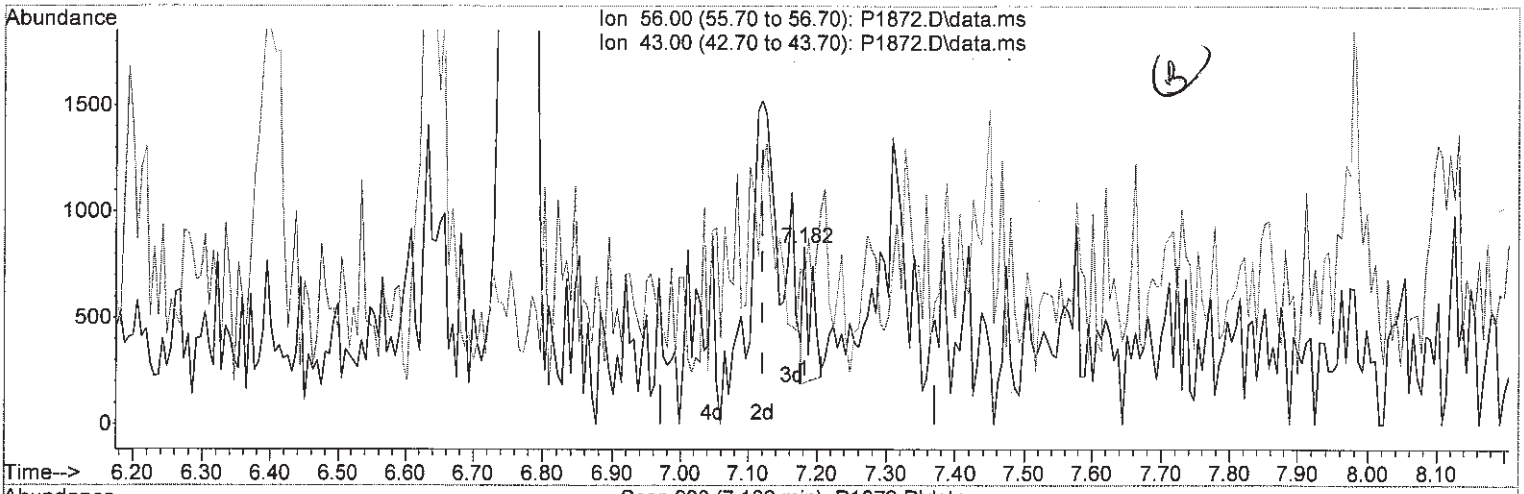
response 4561

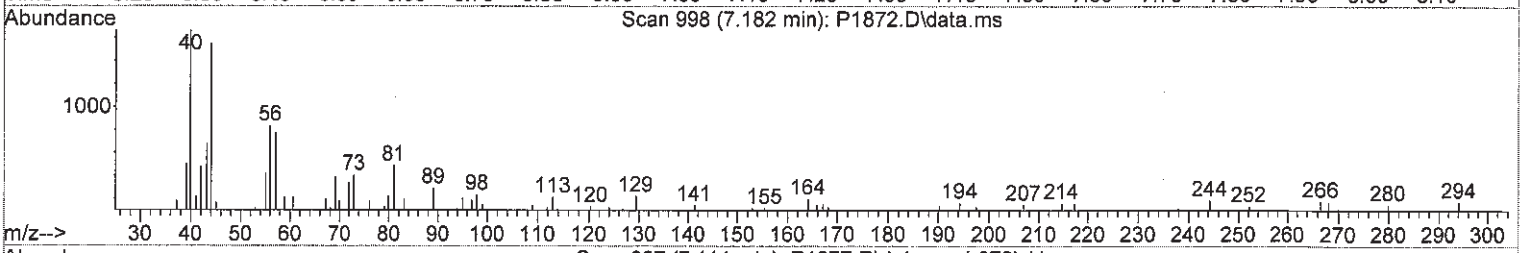
Ion	Exp%	Act%
75.00	100	100
77.00	28.70	29.16
110.00	31.50	25.42
0.00	0.00	0.00

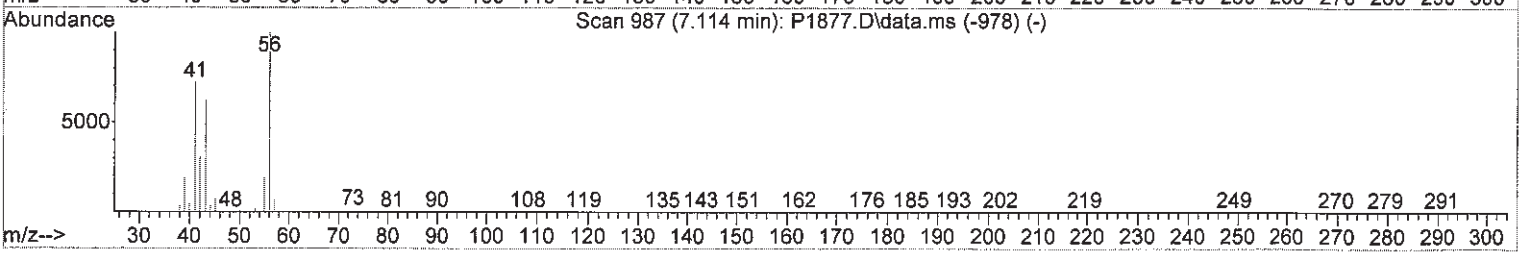
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(53) 1-Butanol

7.182min (+0.061) 3.81 ppb

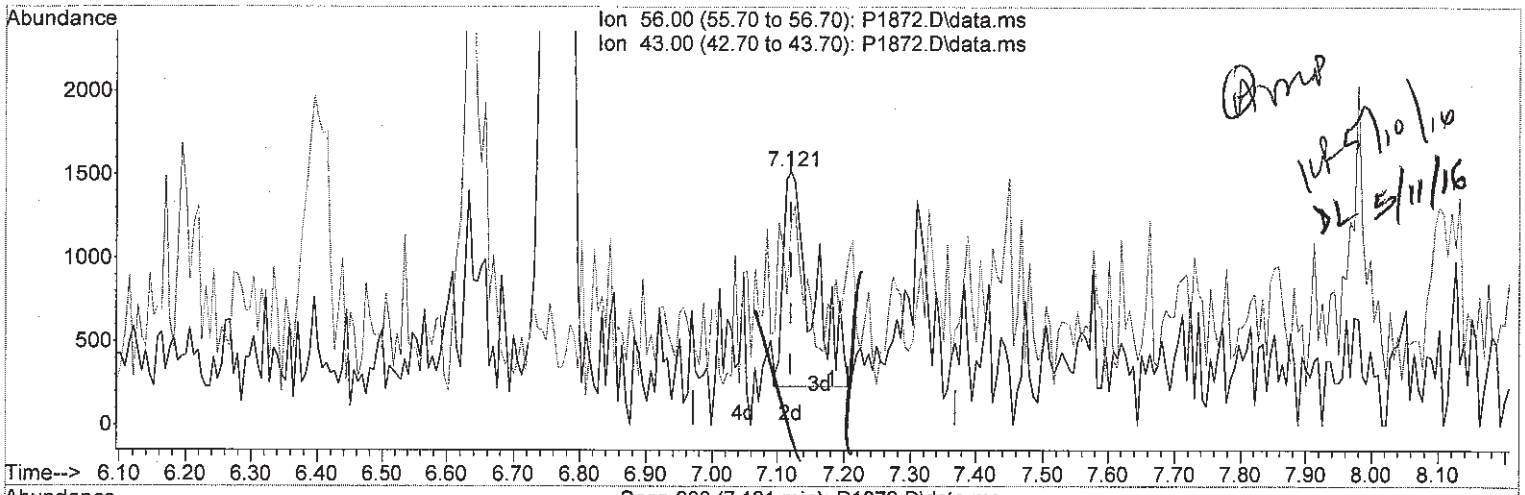
response 572

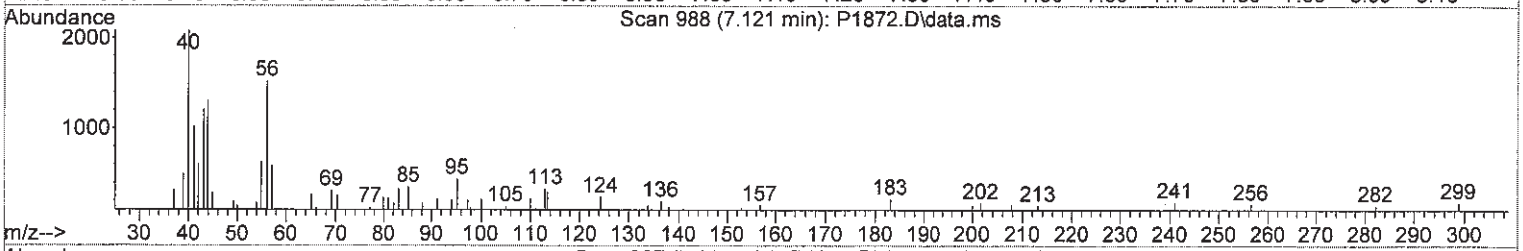
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	72.73
0.00	0.00	0.00
0.00	0.00	0.00

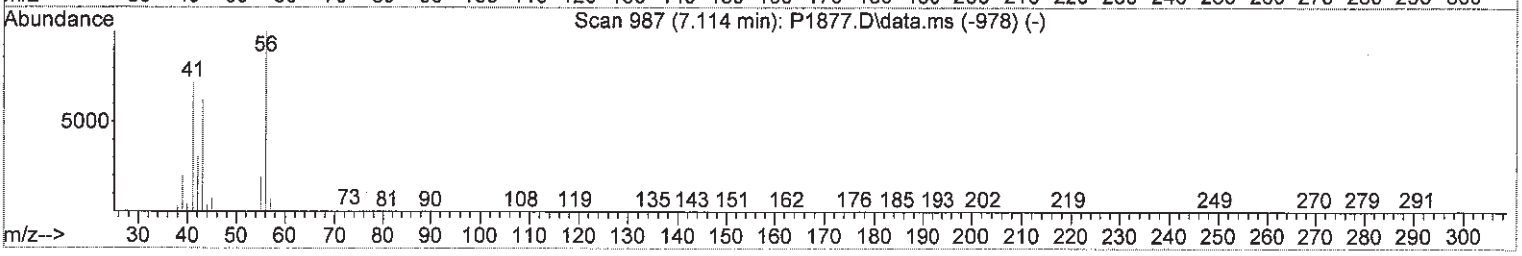
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(53) 1-Butanol

7.121min (+0.000) 24.91 ppb m

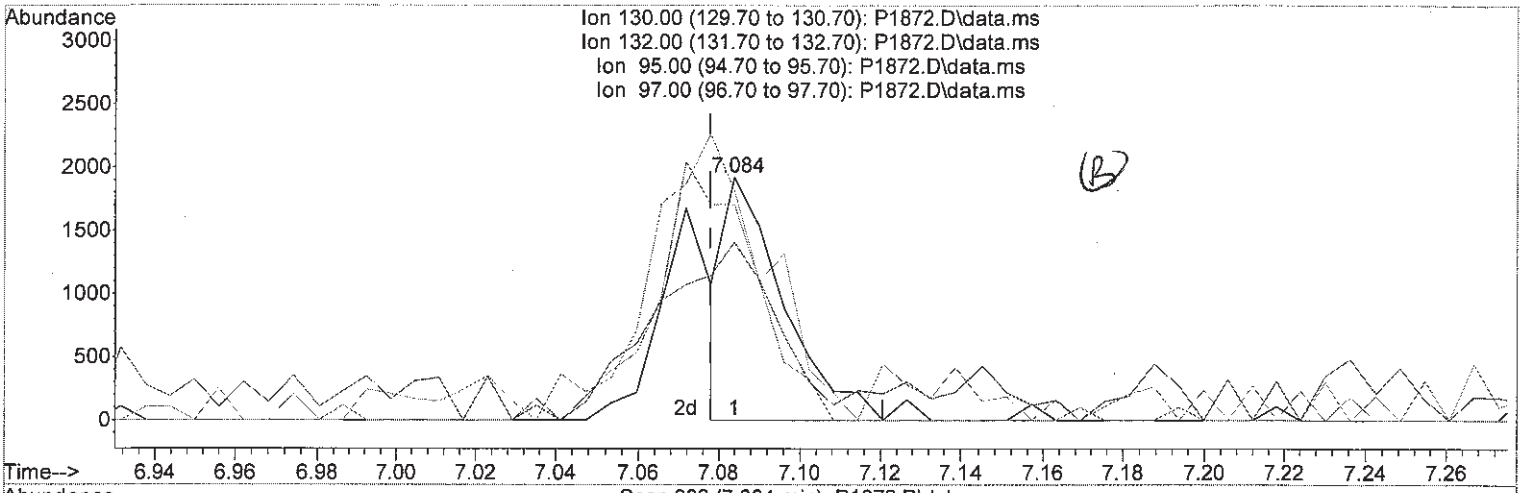
response 3735

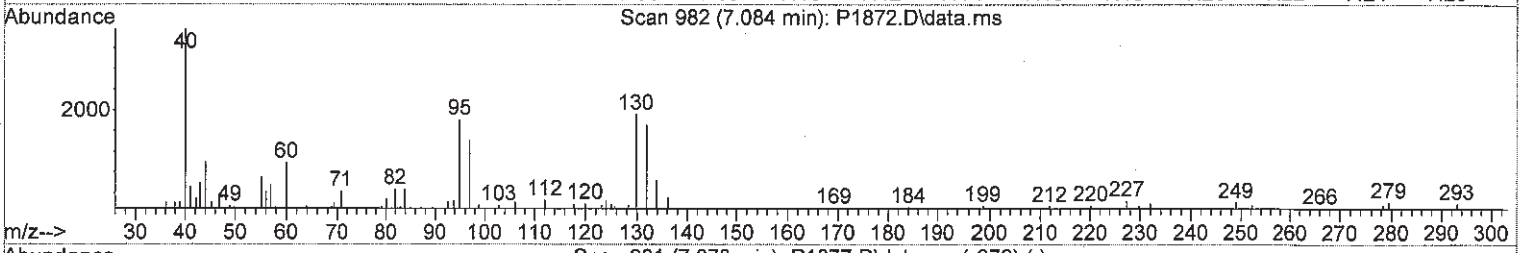
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	11.14#
0.00	0.00	0.00
0.00	0.00	0.00

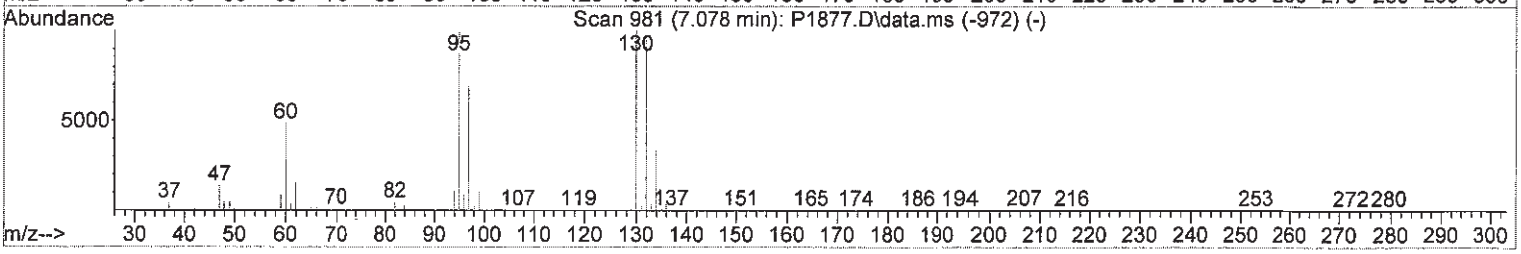
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.006) 0.28 ppb

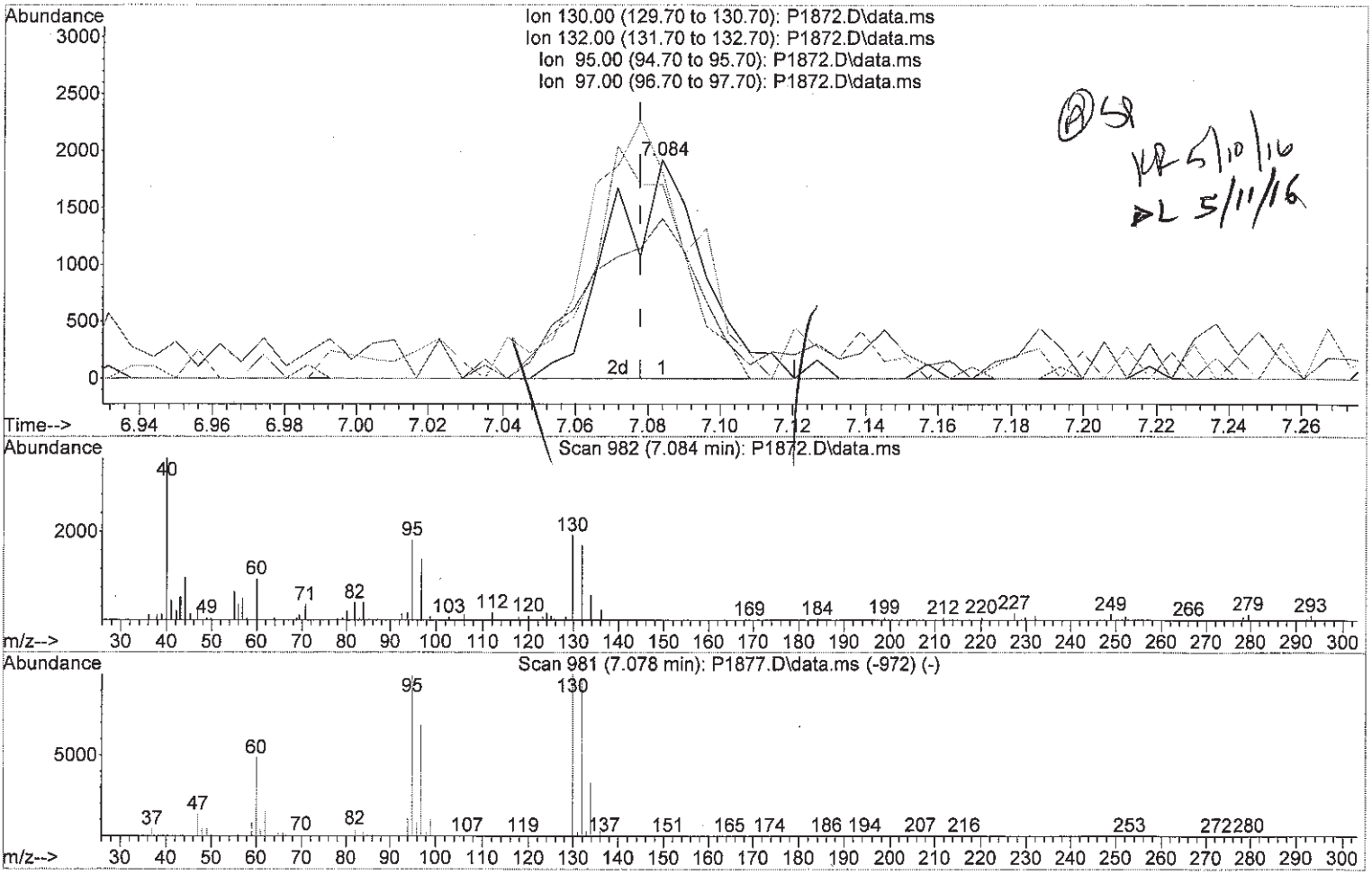
response 1931

Ion	Exp%	Act%
130.00	100	100
132.00	96.60	88.89
95.00	100.20	94.53
97.00	68.80	73.10

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.006) 0.50 ppb m

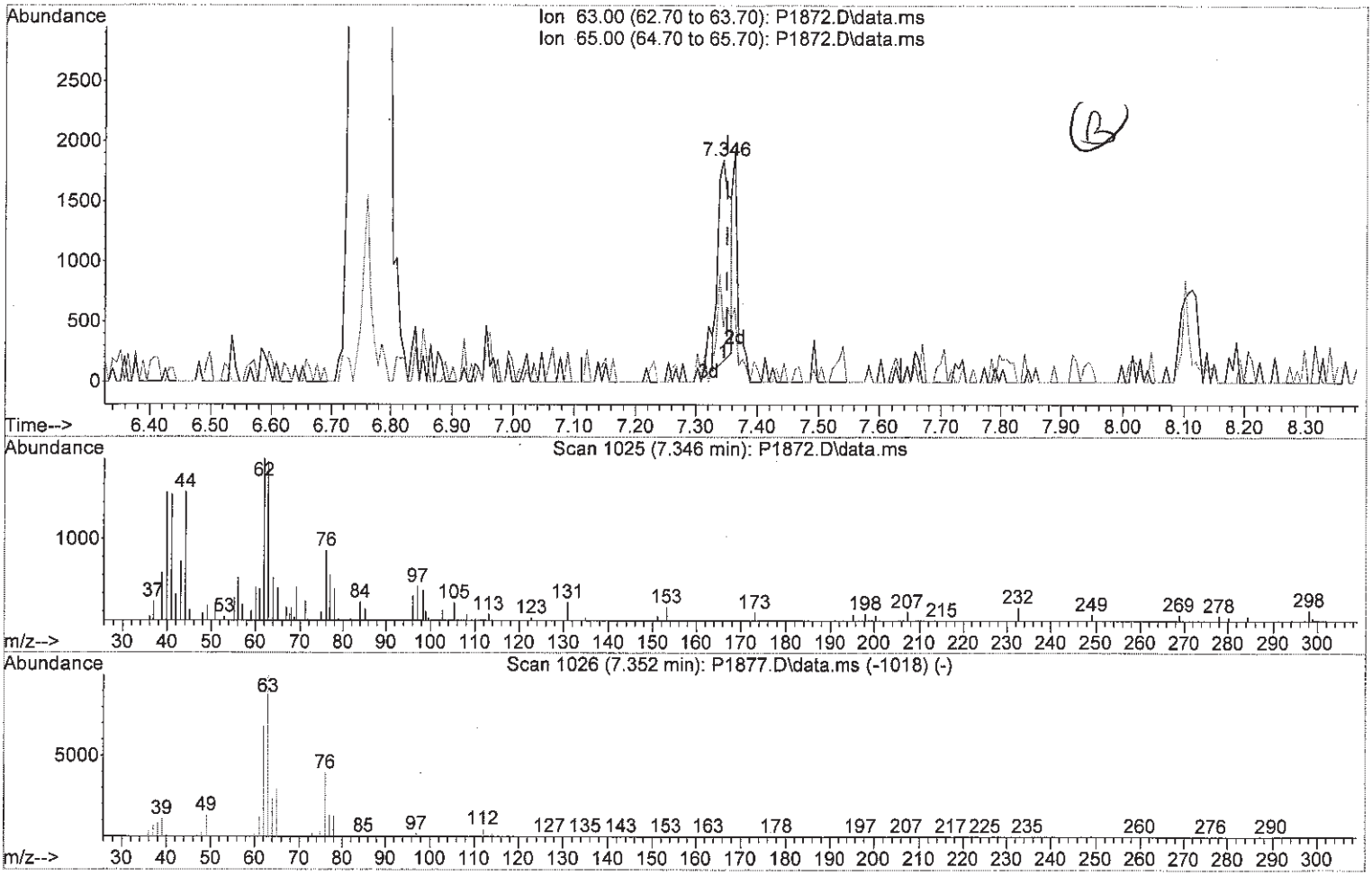
response 3402

Ion	Exp%	Act%
130.00	100	100
132.00	96.60	88.89
95.00	100.20	94.53
97.00	68.80	73.10

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(56) 1,2-Dichlpropane (P)

7.346min (-0.006) 0.31 ppb

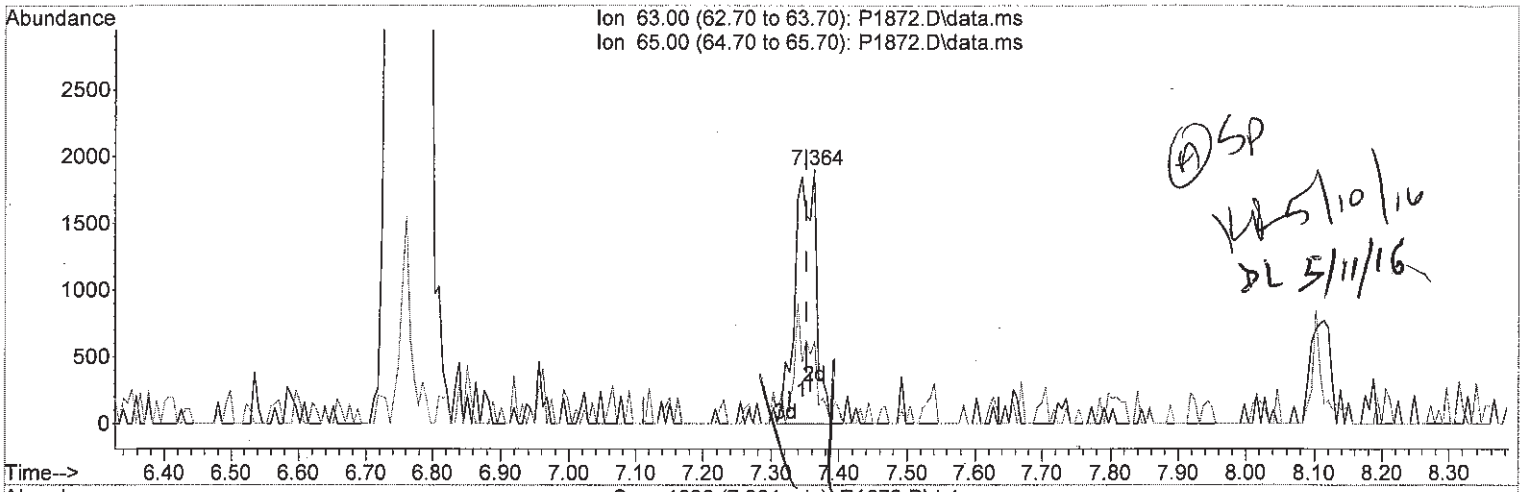
response 2356

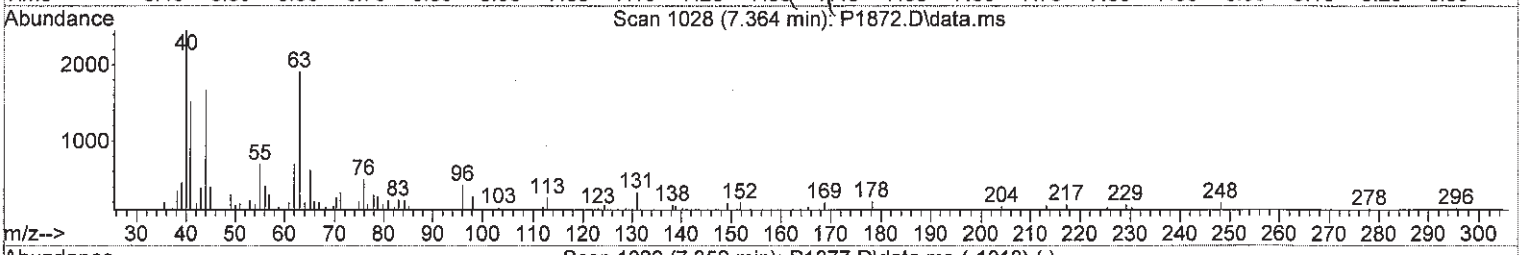
Ion	Exp%	Act%
63.00	100	100
65.00	31.10	24.69
0.00	0.00	0.00
0.00	0.00	0.00

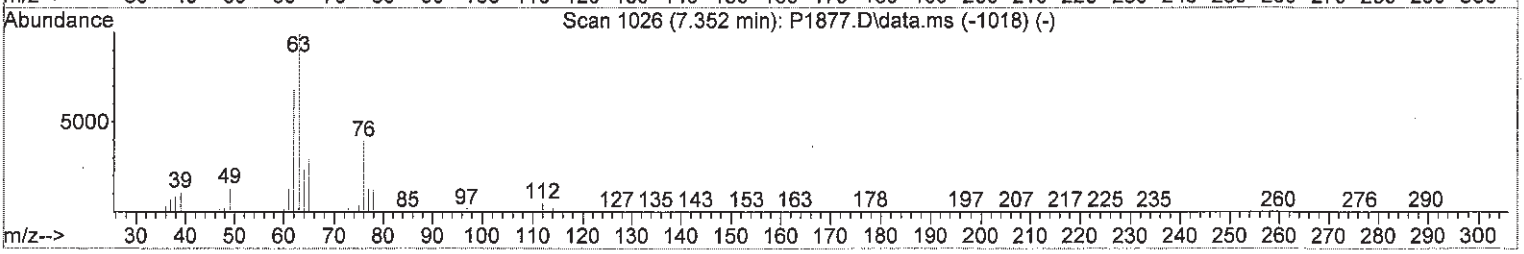
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(56) 1,2-Dichloropane (P)

7.364min (+0.012) 0.54 ppb m

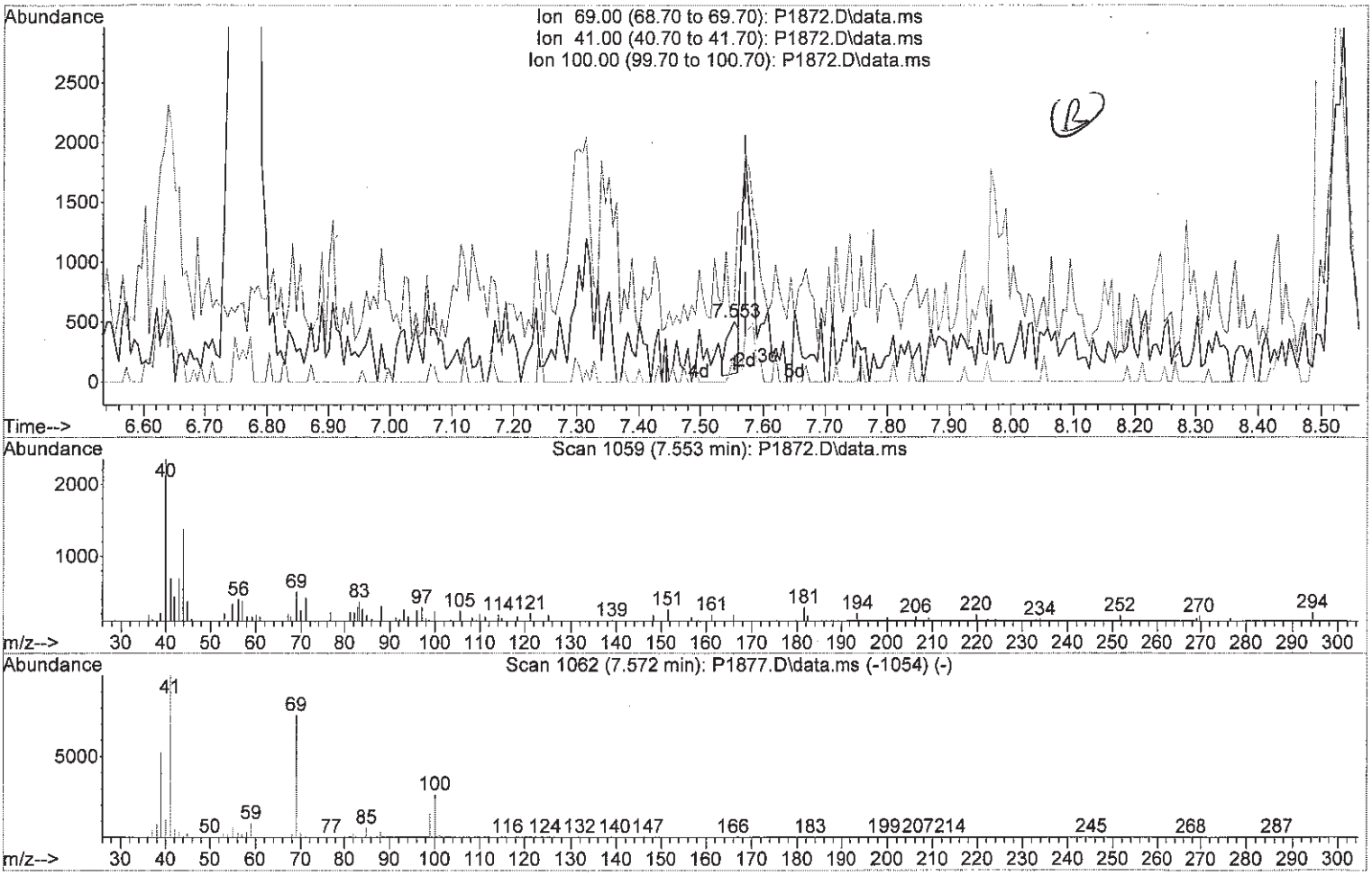
response 4037

Ion	Exp%	Act%
63.00	100	100
65.00	31.10	32.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(59) Methyl Methacrylate

7.553min (-0.018) 0.12 ppb

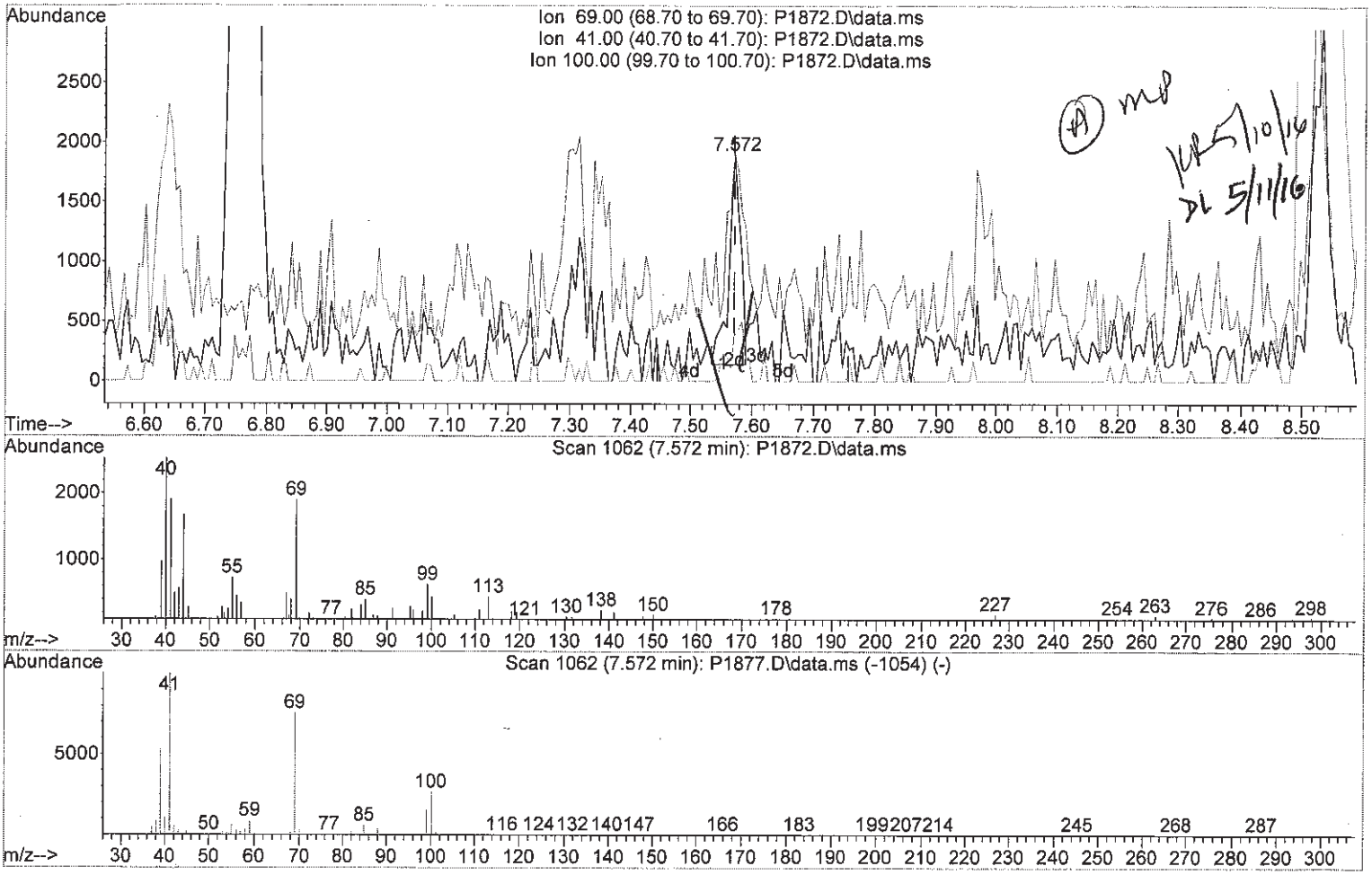
response 542

Ion	Exp%	Act%
69.00	100	100
41.00	132.90	138.12
100.00	35.00	45.31
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(59) Methyl Methacrylate

7.572min (+0.000) 0.54 ppb m

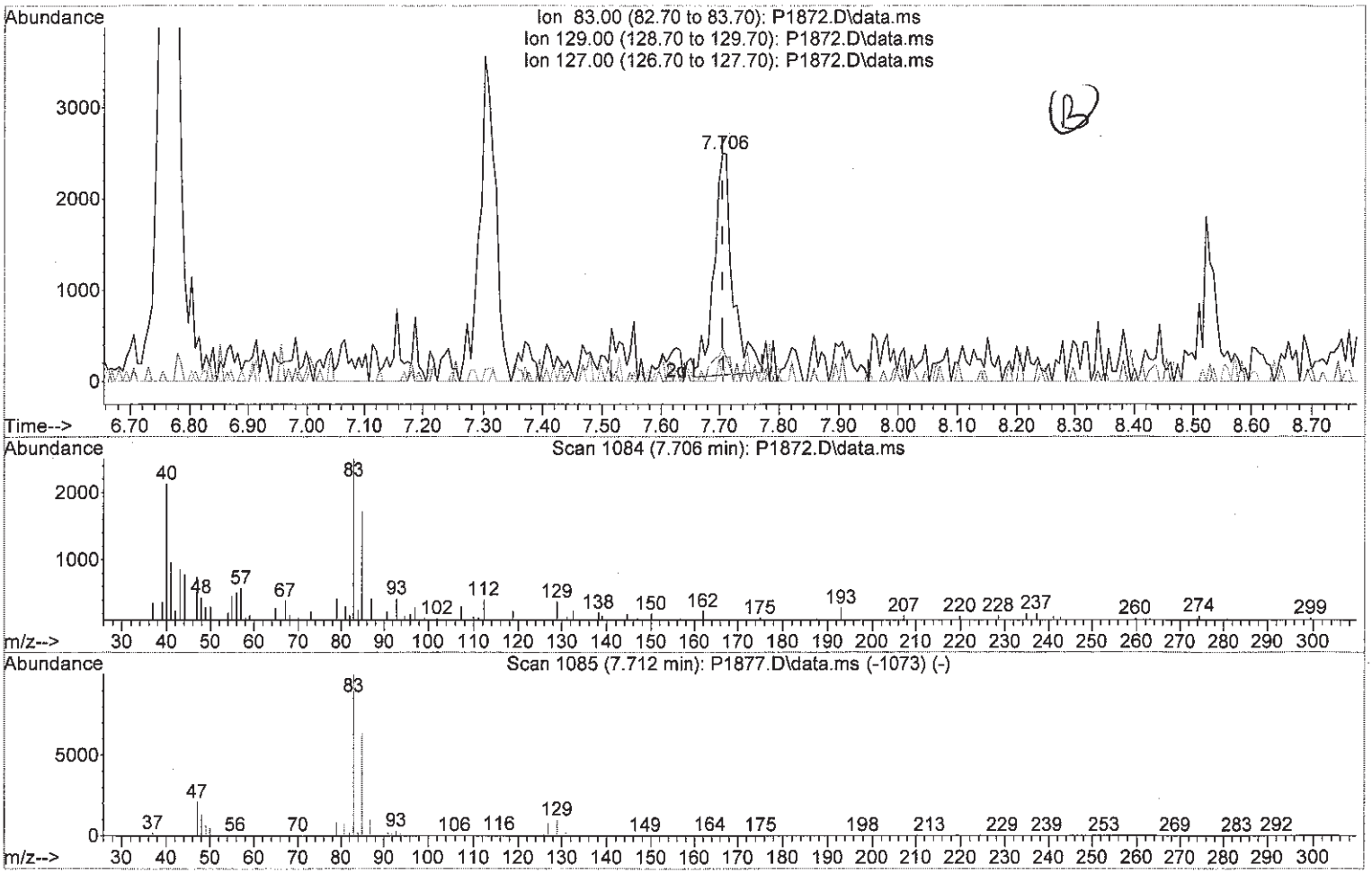
response 2356

Ion	Exp%	Act%
69.00	100	100
41.00	132.90	100.69#
100.00	35.00	22.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(60) Bromodichloromethane (P)

7.706min (+0.000) 0.59 ppb

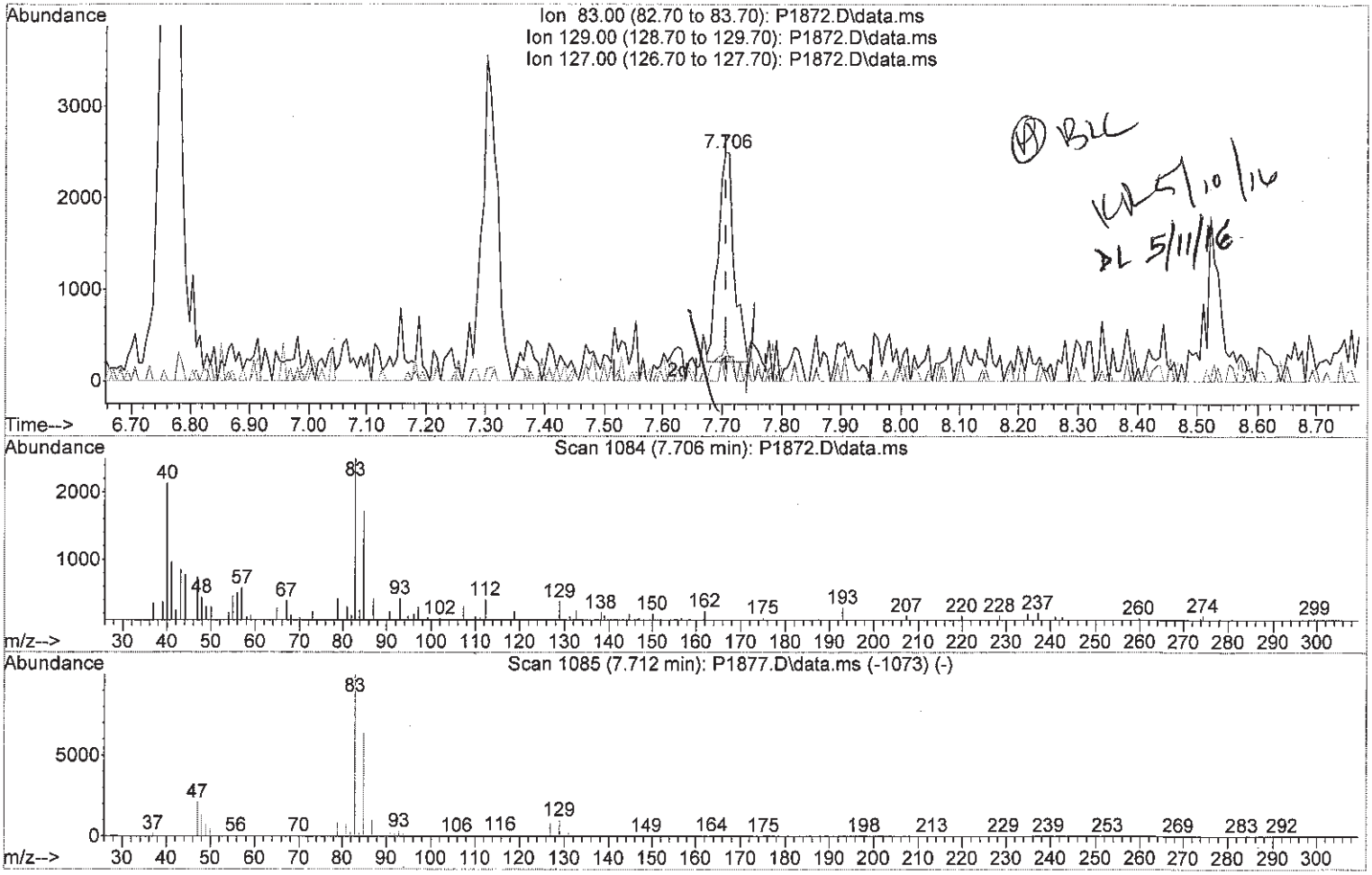
response 5409

Ion	Exp%	Act%
83.00	100	100
129.00	9.90	14.93
127.00	7.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(60) Bromodichloromethane (P)

7.706min (+0.000) 0.46 ppb m

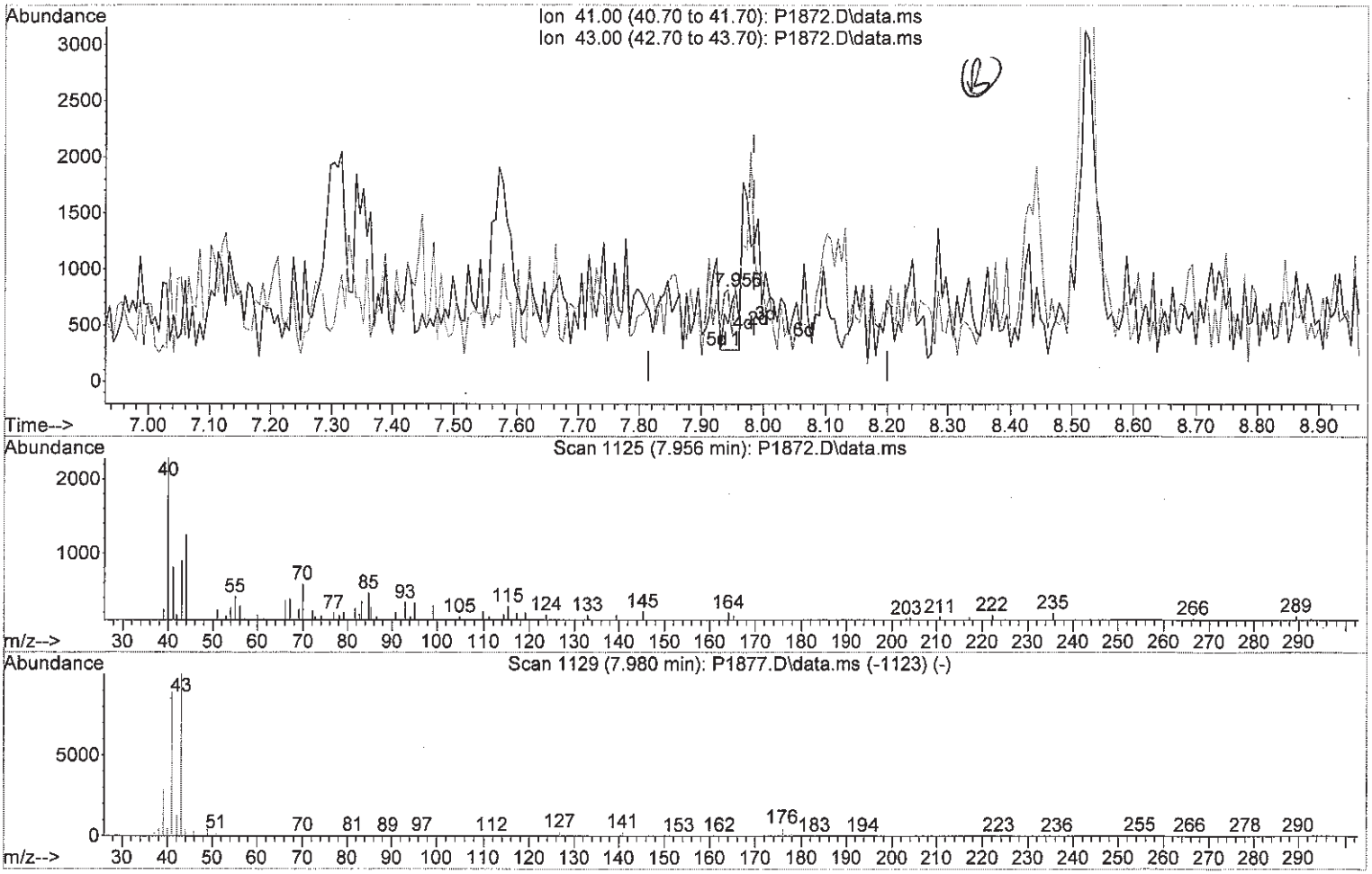
response 4184

Ion	Exp%	Act%
83.00	100	100
129.00	9.90	14.93
127.00	7.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(61) 2-Nitropropane

7.956min (-0.030) 0.43 ppb

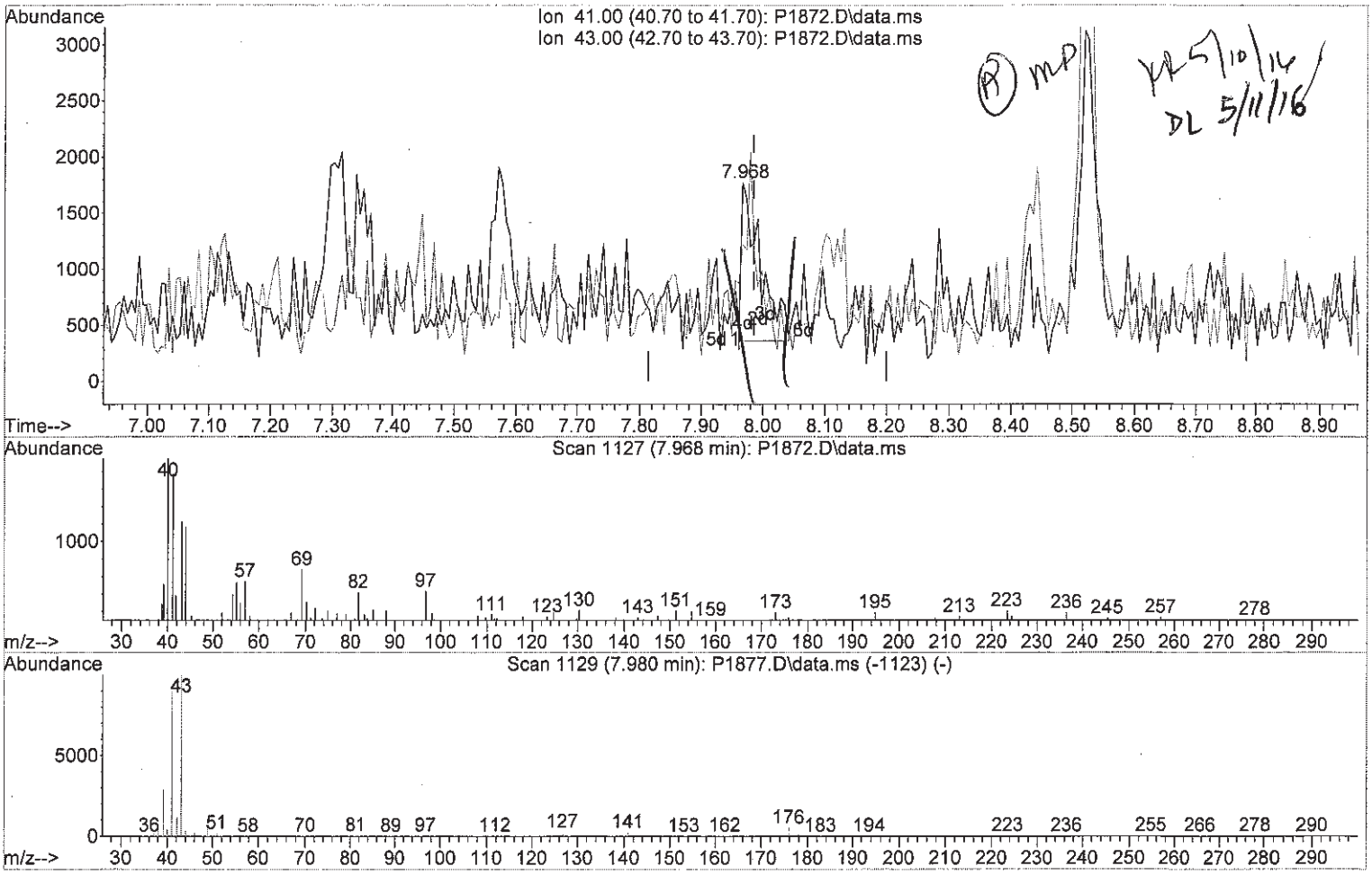
response 639

Ion	Exp%	Act%
41.00	100	100
43.00	112.20	111.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(61) 2-Nitropropane

7.968min (-0.018) 1.99 ppb m

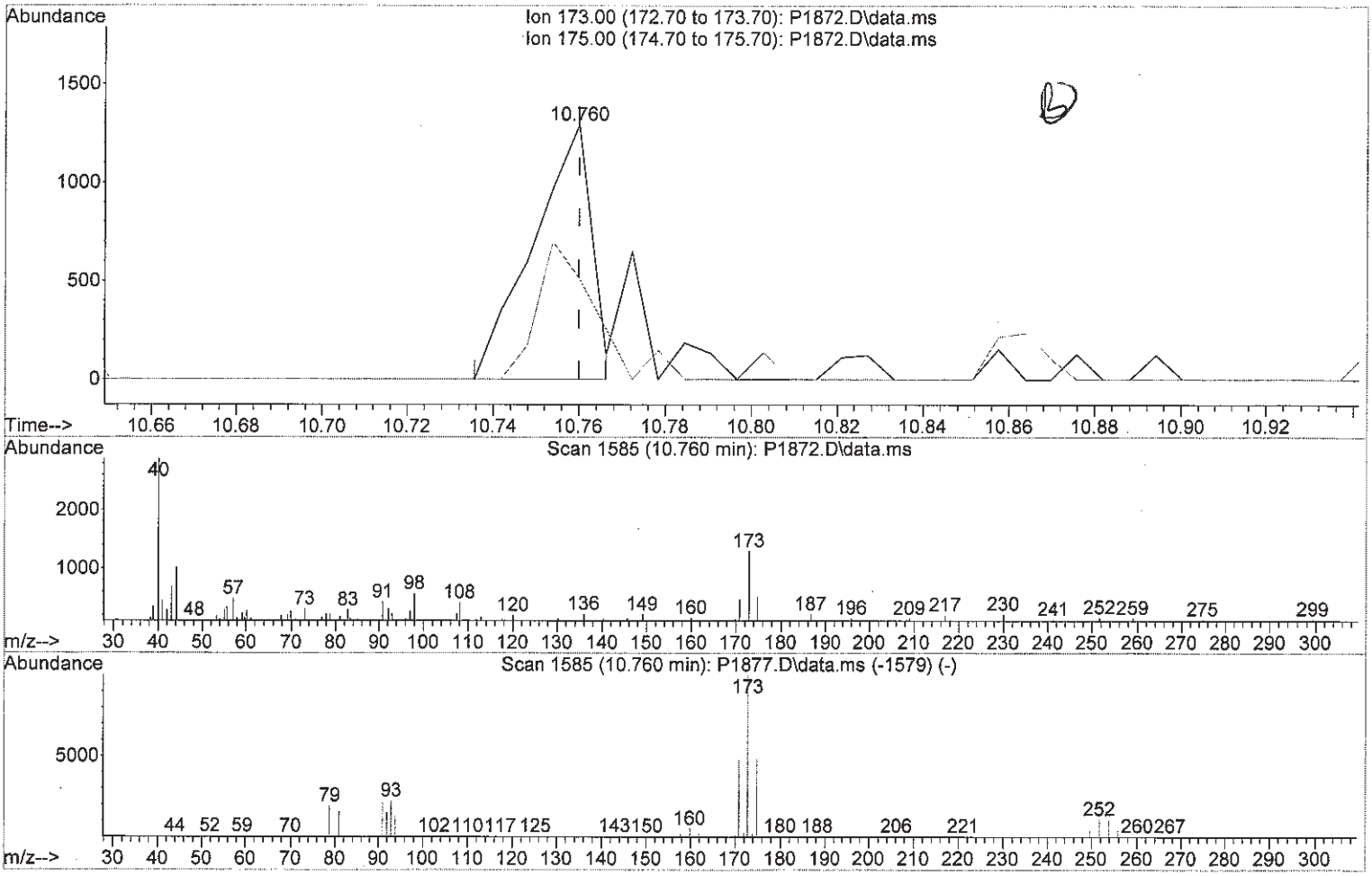
response 2953

Ion	Exp%	Act%
41.00	100	100
43.00	112.20	68.94#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(87) Bromoform (P)

10.760min (+0.000) 0.40 ppb

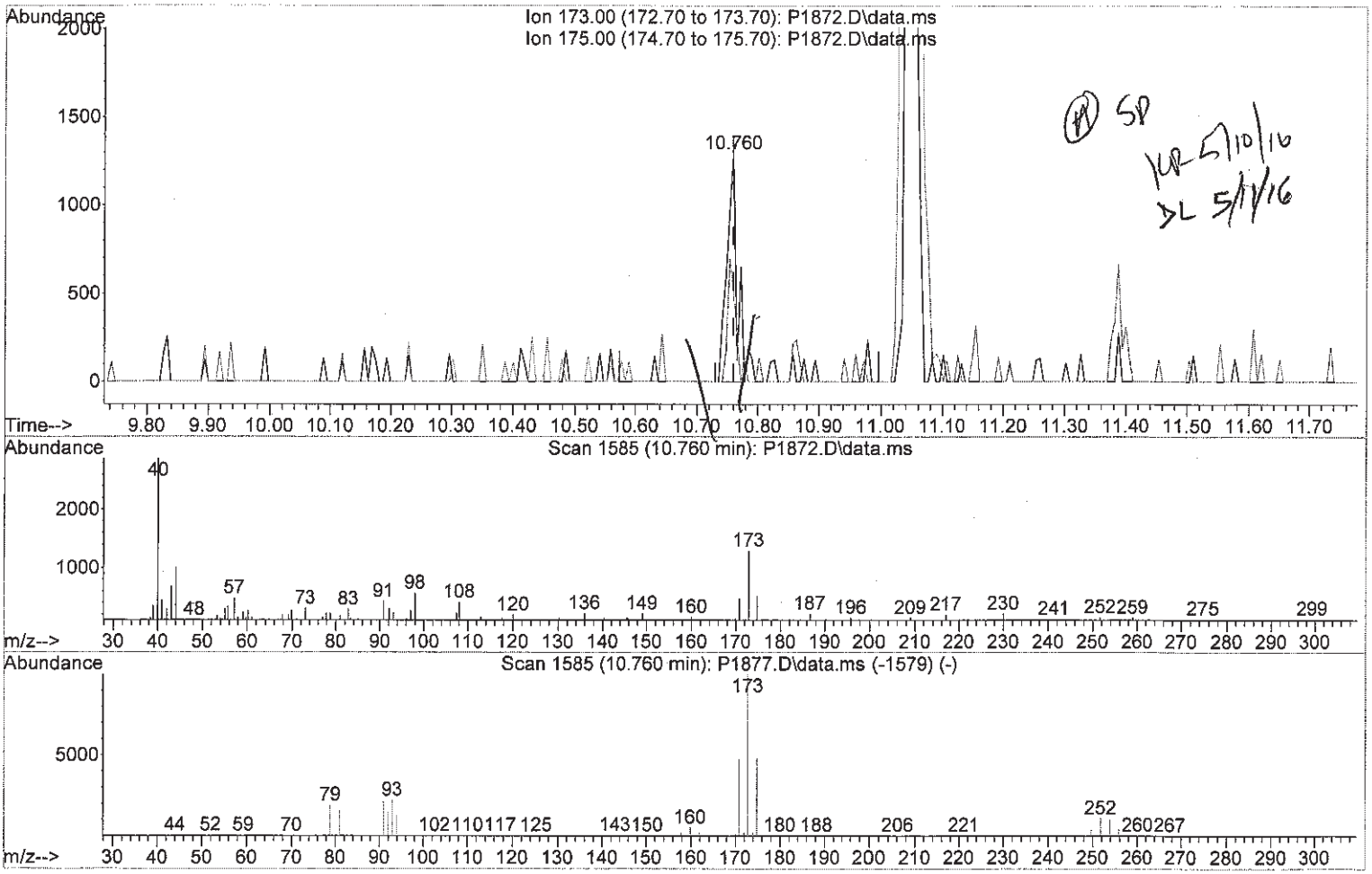
response 1217

Ion	Exp%	Act%
173.00	100	100
175.00	48.00	39.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(87) Bromoform (P)

10.760min (+0.000) 0.48 ppb m

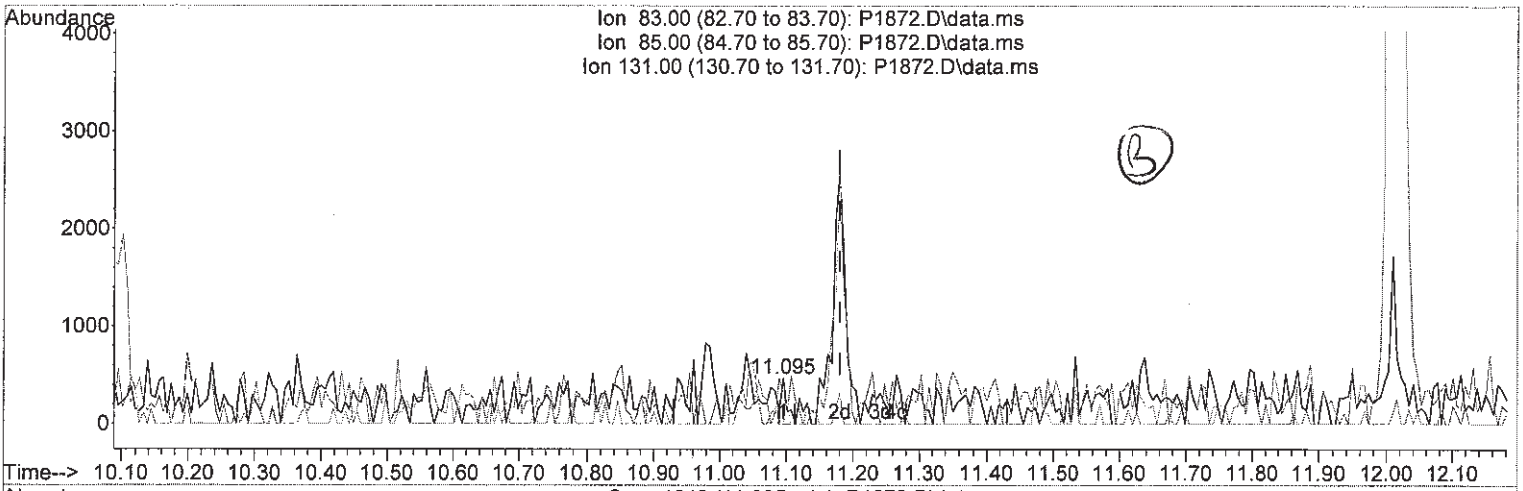
response 1455

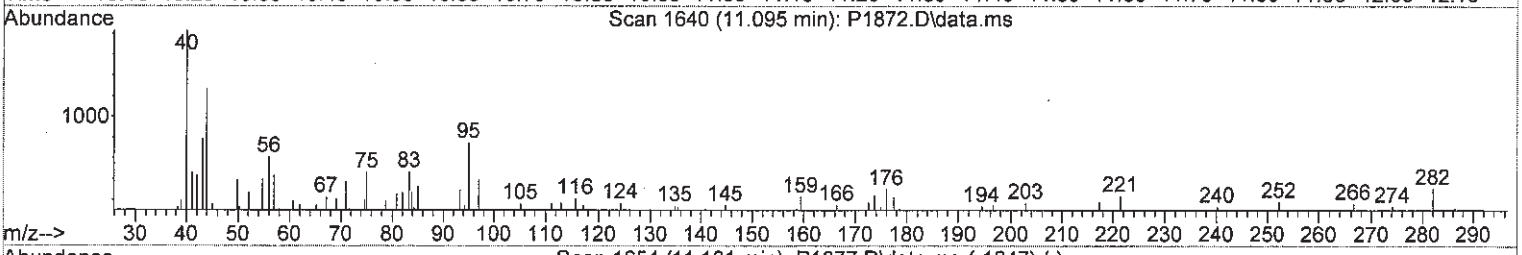
Ion	Exp%	Act%
173.00	100	100
175.00	48.00	39.55
0.00	0.00	0.00
0.00	0.00	0.00

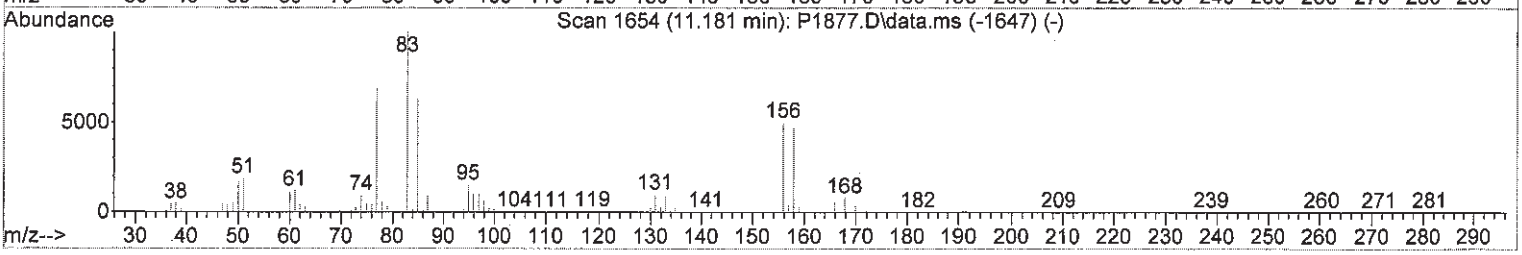
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(92) 1,1,2,2-Tetrachloroethane (P)

11.095min (-0.085) 0.04 ppb

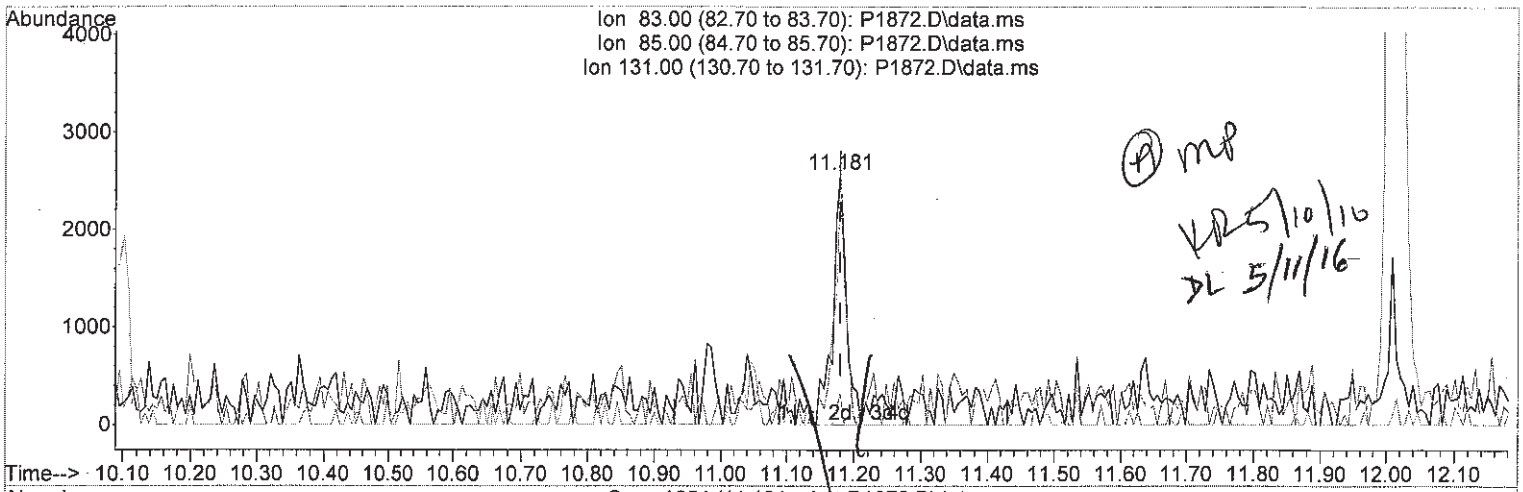
response 269

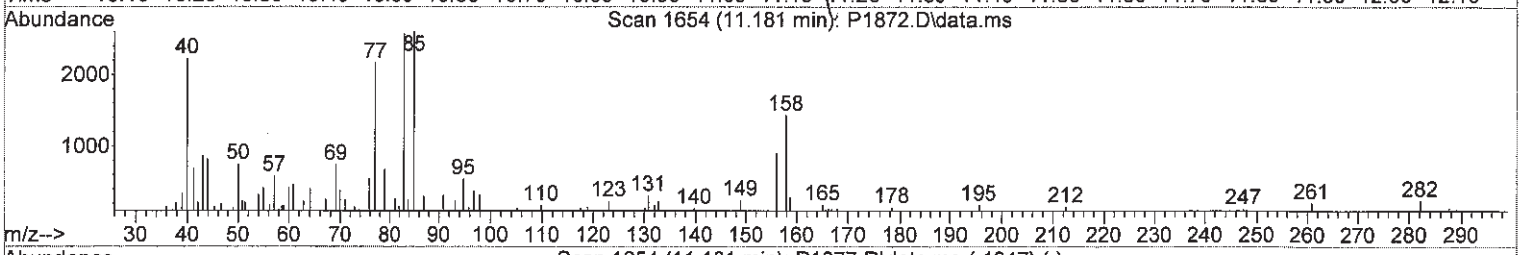
Ion	Exp%	Act%
83.00	100	100
85.00	63.50	69.25
131.00	10.00	0.00
0.00	0.00	0.00

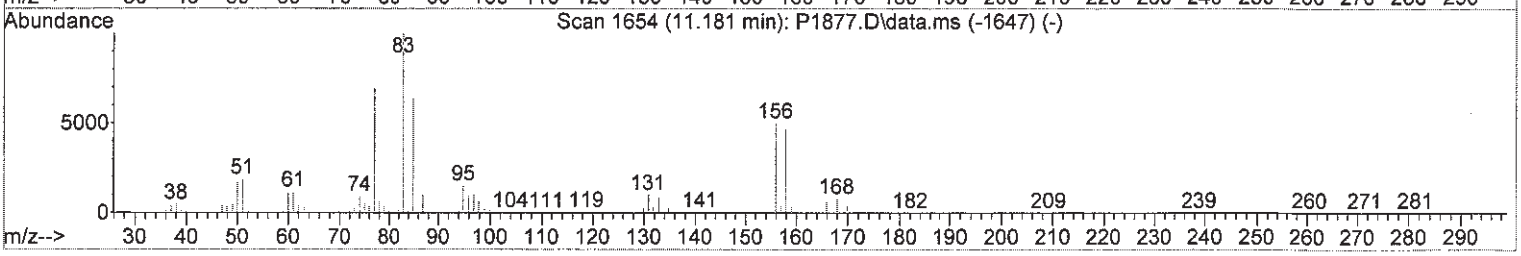
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(92) 1,1,2,2-Tetrachloroethane (P)

11.181min (+0.000) 0.56 ppb m

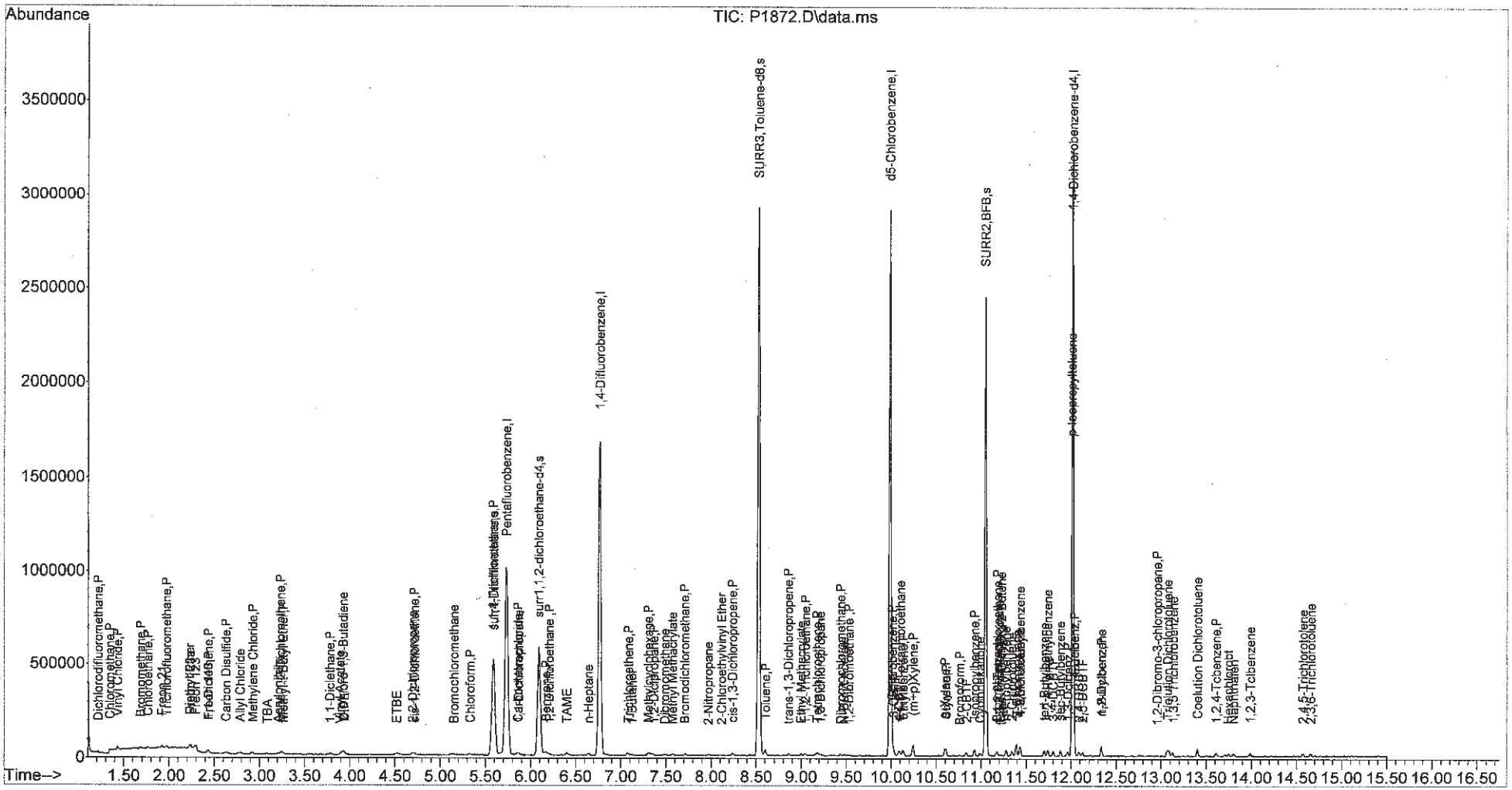
response 3630

Ion	Exp%	Act%
83.00	100	100
85.00	63.50	101.29#
131.00	10.00	11.96
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	803776	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1360448	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1250027	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	626776	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	390129	49.19	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.38%				
48) surr1,1,2-dichloroetha...	6.090	65	457305	48.45	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 96.90%				
65) SURR3,Toluene-d8	8.529	98	1722251	47.01	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.02%				
70) SURR2,BFB	11.047	95	654486	49.16	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	8706	0.92	ppb		91
3) Chloromethane	1.347	50	10482	1.02	ppb		100
4) Vinyl Chloride	1.427	62	11429	0.99	ppb		96
5) Bromomethane	1.683	94	4808	1.03	ppb		88
6) Chloroethane	1.762	64	5815	0.94	ppb		74
7) Freon 21	1.920	67	15033	1.13	ppb		97
8) Trichlorofluoromethane	1.975	101	10378	1.05	ppb		95
9) Diethyl Ether	2.225	59	5712	0.97	ppb		86
10) Freon 123a	2.231	67	8140m	0.93	ppb		
11) Freon 123	2.292	83	11024m	1.09	ppb		
12) Acrolein	2.341	56	3679m	4.65	ppb		
13) 1,1-Diclethene	2.426	96	5841	0.96	ppb	#	79
14) Freon 113	2.438	101	6379	1.08	ppb		95
16) 2-Propanol	2.646	45	7100	23.29	ppb		70
17) Iodomethane	2.567	142	1953	0.35	ppb		92
18) Carbon Disulfide	2.634	76	20703	1.02	ppb		97
19) Acetonitrile	2.762	40	1438	5.67	ppb	#	28
20) Allyl Chloride	2.798	76	3698m	1.08	ppb		
22) Methylene Chloride	2.920	84	7082	1.04	ppb	#	83
23) TBA	3.085	59	9841	20.32	ppb		94
24) Acrylonitrile	3.207	53	9274	5.04	ppb		97
25) Methyl-t-Butyl Ether	3.255	73	17882	1.00	ppb		98
26) trans-1,2-Dichloroethene	3.243	96	7838	1.13	ppb	#	75
28) 1,1-Diclethane	3.786	63	11817	0.98	ppb		73
29) Vinyl Acetate	3.908	86	1305m	1.01	ppb		
30) DIPE	3.938	45	24489	0.99	ppb		98
31) 2-Chloro-1,3-Butadiene	3.926	53	13733	1.02	ppb		85
32) ETBE	4.517	59	21796	0.99	ppb		96
33) 2,2-Dichloropropane	4.694	77	11004	1.06	ppb	#	78
34) cis-1,2-Dichloroethene	4.700	96	7785m	1.06	ppb		
36) Propionitrile	4.871	54	3057	4.45	ppb	#	1
37) Bromochloromethane	5.127	130	3470	0.91	ppb	#	75
40) Chloroform	5.310	83	12695m	1.08	ppb		
41) 1,1,1-Trichloroethane	5.590	97	9904	0.99	ppb		98

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.395	73	19744	1.03	ppb		93
44)	Cyclohexane	5.670	41	8625	1.14	ppb		97
46)	Carbontetrachloride	5.840	121	2469m	0.95	ppb		
47)	1,1-Dichloropropene	5.871	75	9473	1.02	ppb		90
49)	Benzene	6.163	78	27318	1.00	ppb		93
50)	1,2-Dichloroethane	6.200	62	8374	1.02	ppb		88
51)	Iso-Butyl Alcohol	6.206	43	5578	21.85	ppb		97
52)	n-Heptane	6.639	43	9628m	1.15	ppb		
53)	1-Butanol	7.114	56	7469m	50.37	ppb		
54)	Trichloroethene	7.072	130	6916	1.03	ppb	#	74
55)	Methylcyclohexane	7.309	55	9591	1.08	ppb	#	76
56)	1,2-Diclpropane	7.352	63	7536	1.02	ppb		98
57)	Dibromomethane	7.492	93	3532m	1.01	ppb		
59)	Methyl Methacrylate	7.572	69	3725	0.86	ppb		88
60)	Bromodichloromethane	7.706	83	10658	1.18	ppb		89
61)	2-Nitropropane	7.974	41	3068m	2.09	ppb		
62)	2-Chloroethylvinyl Ether	8.108	63	4311	1.09	ppb		92
63)	cis-1,3-Dichloropropene	8.236	75	12158	1.06	ppb		96
64)	4-Methyl-2-pentanone	8.437	43	5433	1.04	ppb	#	74
66)	Toluene	8.596	91	29365	1.02	ppb		92
67)	trans-1,3-Dichloropropene	8.864	75	8530	0.89	ppb		89
68)	Ethyl Methacrylate	8.998	69	9112	1.05	ppb		90
69)	1,1,2-Trichloroethane	9.041	97	5546m	1.04	ppb		
72)	Tetrachloroethene	9.181	164	4840	1.00	ppb	#	70
73)	2-Hexanone	9.327	43	3515	0.97	ppb		97
74)	1,3-Dichloropropane	9.212	76	9350	1.00	ppb	#	76
75)	Dibromochloromethane	9.425	129	6571	1.06	ppb	#	78
76)	N-Butyl Acetate	9.480	43	9441	1.00	ppb		90
77)	1,2-Dibromoethane	9.529	107	4928	0.97	ppb	#	76
78)	Chlorobenzene	10.010	112	19591	1.07	ppb		95
79)	3-CBTF	10.035	180	9410	1.03	ppb	#	61
80)	4-CBTF	10.083	180	7051	0.88	ppb		87
81)	1,1,1,2-Tetrachloroethane	10.102	131	6838	1.07	ppb		91
82)	Ethylbenzene	10.132	106	9917	0.97	ppb	#	90
83)	(m+p)Xylene	10.242	106	23914	1.99	ppb		96
84)	o-Xylene	10.595	106	11488	0.96	ppb		100
85)	Styrene	10.608	104	18892	0.94	ppb		91
87)	Bromoform	10.754	173	3248	1.09	ppb		88
88)	2-CBTF	10.833	180	8382	1.02	ppb	#	84
89)	Isopropylbenzene	10.925	105	27657	1.01	ppb		94
90)	Cyclohexanone	10.986	55	12608	23.11	ppb		93
91)	trans-1,4-Dichloro-2-B...	11.229	53	2135	1.00	ppb		91
92)	1,1,2,2-Tetrachloroethane	11.181	83	6708	1.04	ppb		96
93)	Bromobenzene	11.169	156	6810	0.98	ppb	#	83
94)	1,2,3-Trichloropropane	11.205	110	1987m	1.05	ppb		
95)	n-Propylbenzene	11.278	91	34444	1.08	ppb		96
96)	2-Chlorotoluene	11.339	91	21460	1.04	ppb		94
97)	3-Chlorotoluene	11.394	91	20581	0.98	ppb		94
98)	4-Chlorotoluene	11.431	91	25159	1.05	ppb		95
99)	1,3,5-Trimethylbenzene	11.425	105	24908	1.05	ppb		97
100)	tert-Butylbenzene	11.699	119	17841	0.95	ppb		92

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

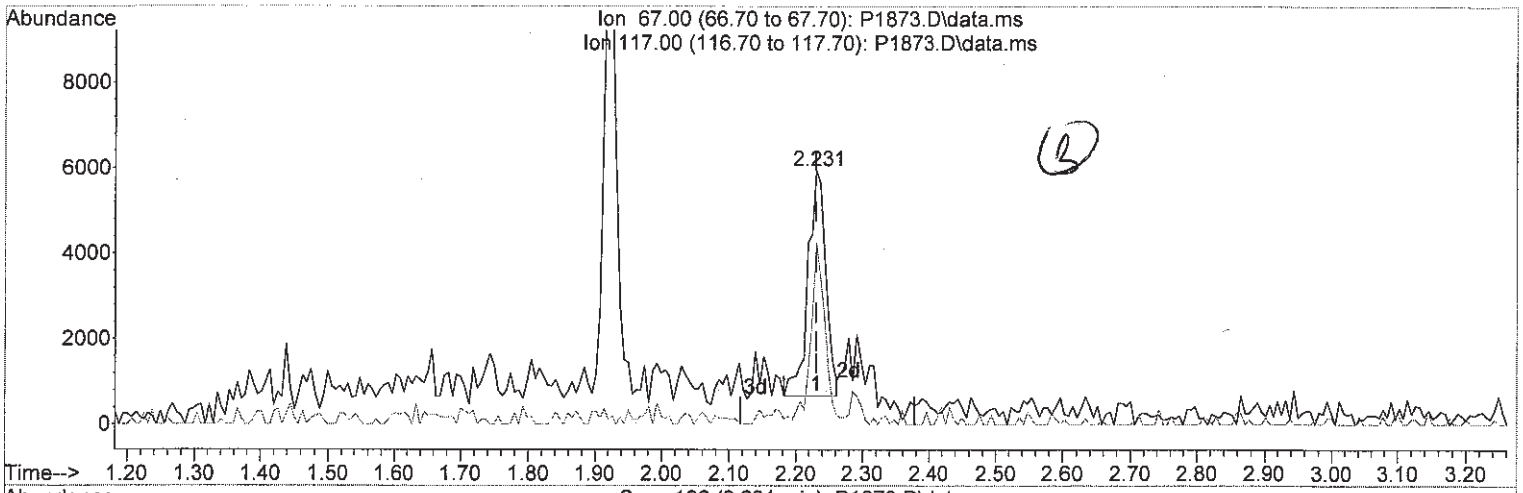
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 1,2,4-Trimethylbenzene	11.735	105	25523	1.05	ppb		96
102) 3,4-DCBTF	11.803	214	5150	0.88	ppb		95
103) sec-Butylbenzene	11.882	105	29015	1.08	ppb		97
104) p-Isopropyltoluene	11.998	119	24441	1.05	ppb		93
105) 1,3-Dclbenz	11.961	146	13435	1.02	ppb		91
106) 1,4-Dclbenz	12.034	146	13516	0.98	ppb		92
107) 2,4-DCBTF	12.089	214	5918	1.06	ppb		90
108) 2,5-DCBTF	12.126	214	6977	1.18	ppb	#	89
109) n-Butylbenzene	12.333	91	20520	0.98	ppb		95
110) 1,2-Dclbenz	12.333	146	13624	1.09	ppb		82
111) 1,2-Dibromo-3-chloropr...	12.955	157	1108	0.94	ppb	#	70
112) Trielution Dichlorotol...	13.071	125	32463	3.12	ppb	#	90
113) 1,3,5 Trichlorobenzene	13.125	180	7685	0.92	ppb	#	71
114) Coelution Dichlorotoluene	13.400	125	21450	1.94	ppb		97
115) 1,2,4-Tcbenzene	13.607	180	7576	1.02	ppb		98
116) Hexachlorobt	13.747	225	2931	0.96	ppb	#	73
117) Naphthalen	13.796	128	16264	1.02	ppb		97
118) 1,2,3-Tclbenzene	13.985	180	5985	0.95	ppb	#	76
119) 2,4,5-Trichlorotolene	14.570	159	3781m	0.84	ppb		
120) 2,3,6-Trichlorotoluene	14.656	159	4128	0.99	ppb		88

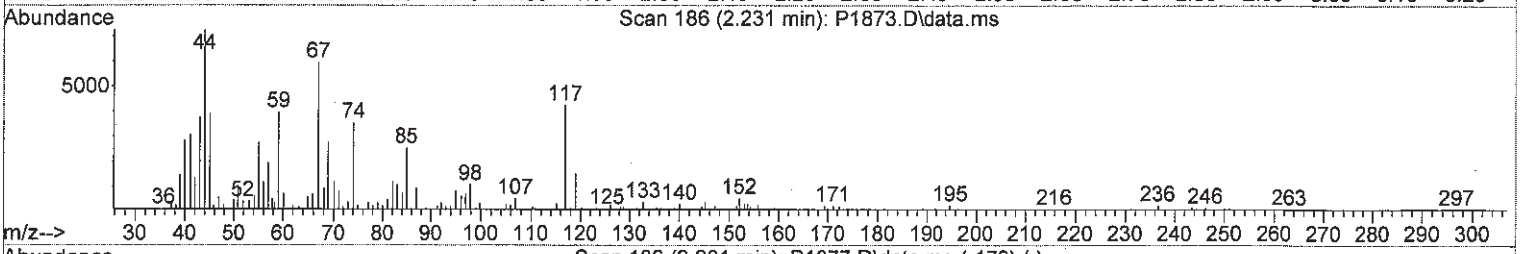
(#) = qualifier out of range (m) = manual integration (+) = signals summed

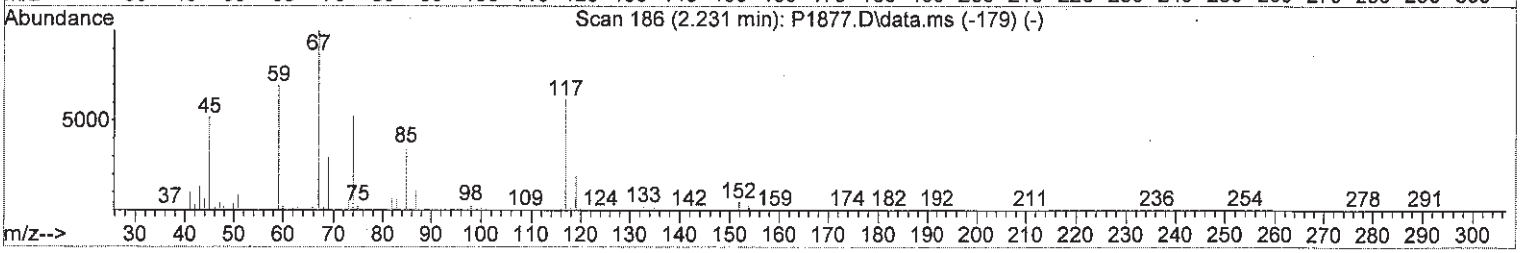
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(10) Freon 123a

2.231min (-0.000) 1.13 ppb

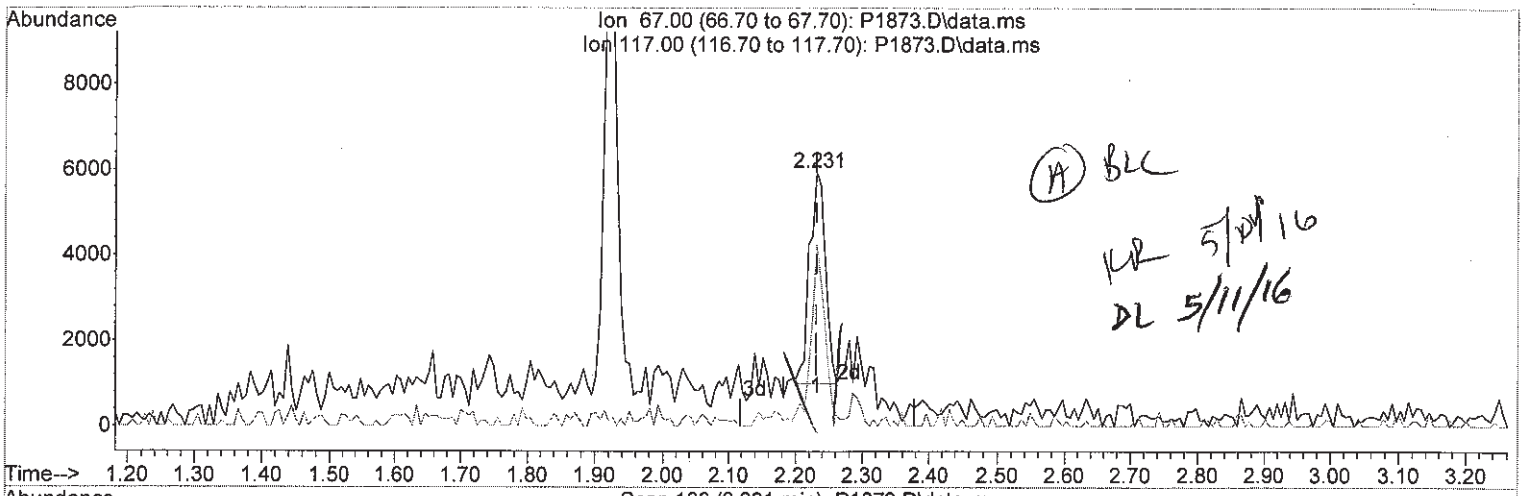
response 9850

Ion	Exp%	Act%
67.00	100	100
117.00	61.50	71.32
0.00	0.00	0.00
0.00	0.00	0.00

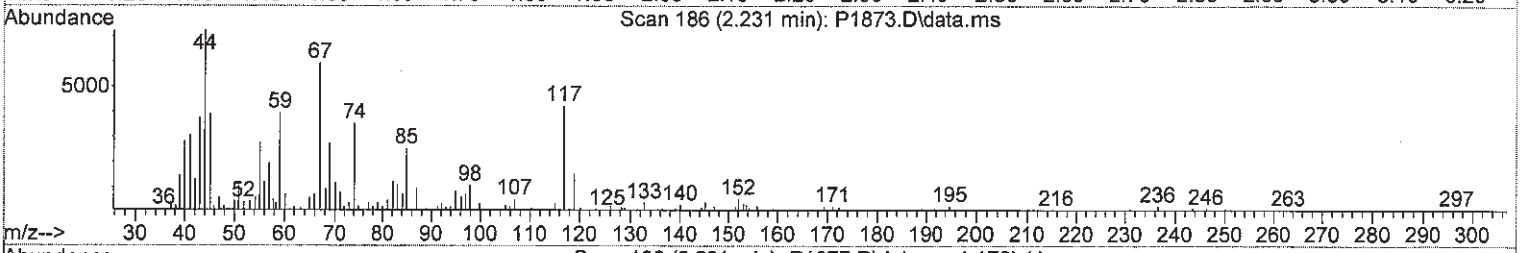
Quantitation Report (Qedit)

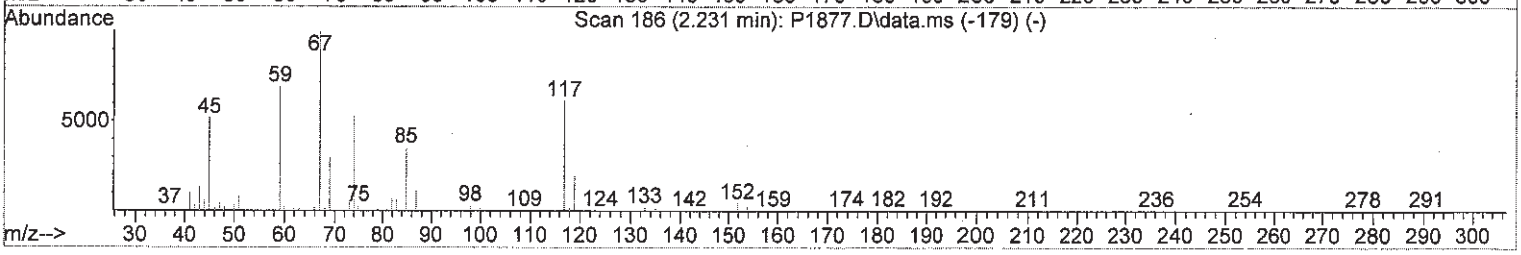
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



(A) BLC
KR 5/11/16
DL 5/11/16





TIC: P1873.D\data.ms

(10) Freon 123a

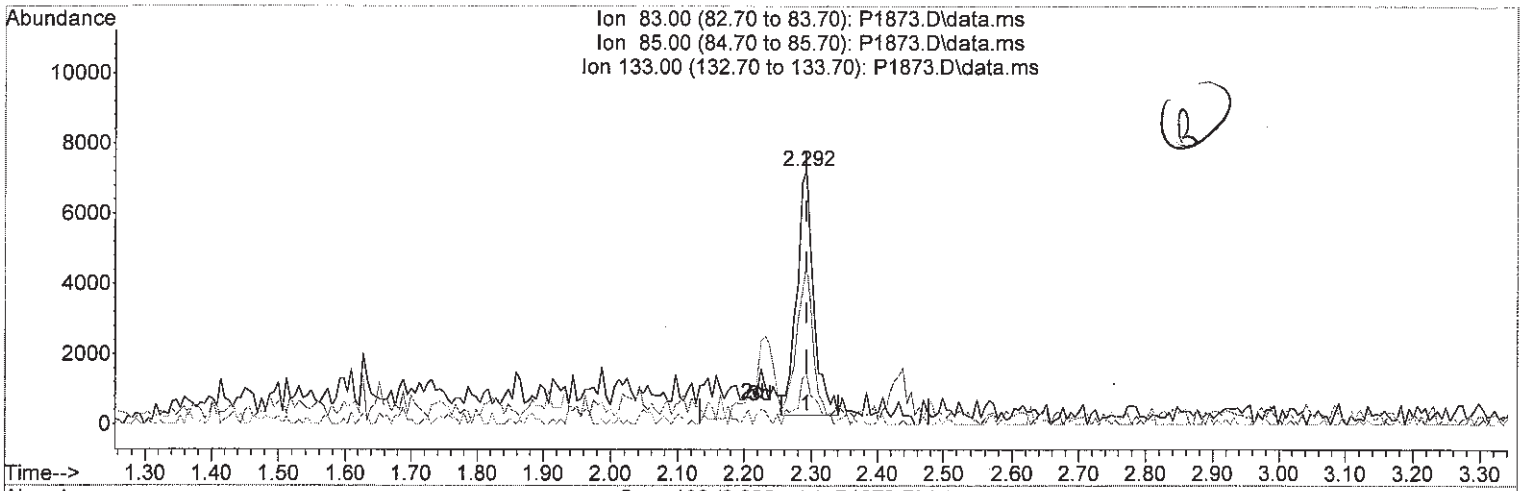
2.231min (-0.000) 0.93 ppb m

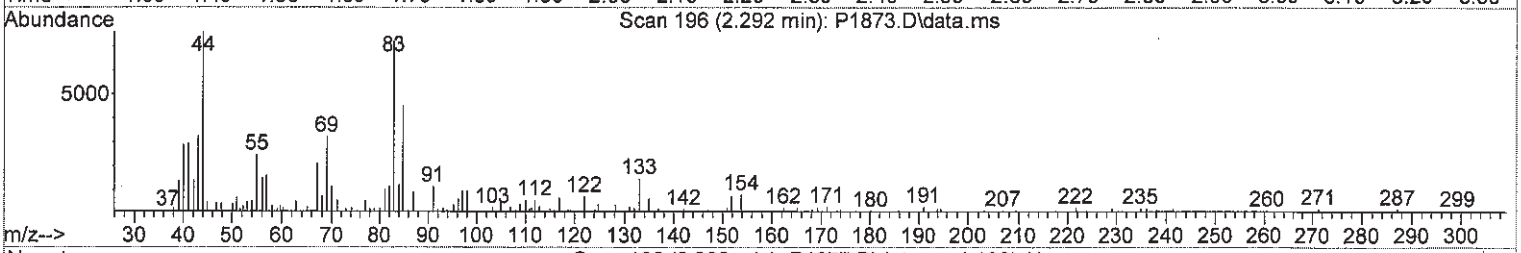
response 8140

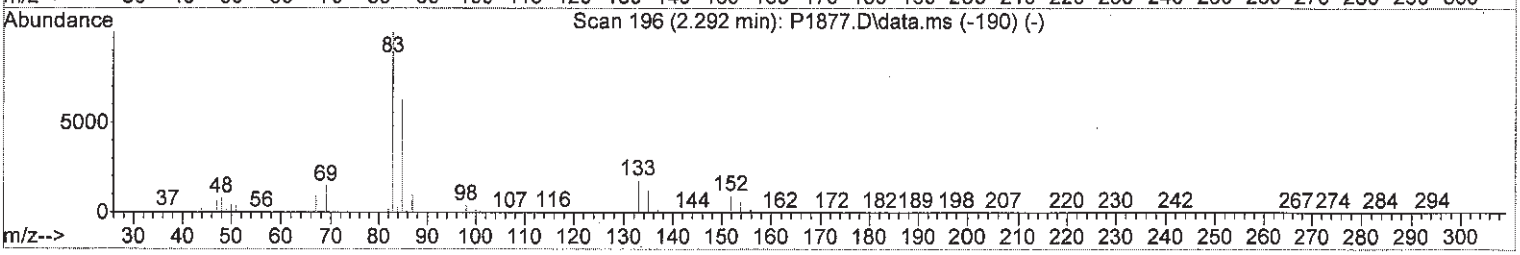
Ion	Exp%	Act%
67.00	100	100
117.00	61.50	71.32
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(11) Freon 123

2.292min (-0.000) 1.20 ppb

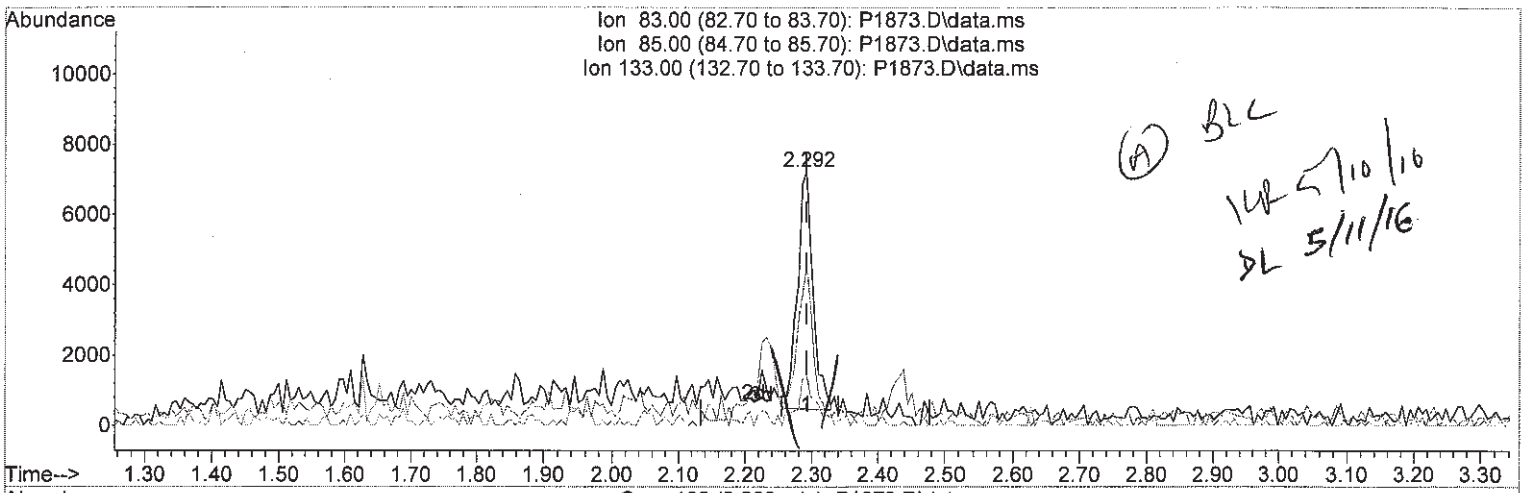
response 12114

Ion	Exp%	Act%
83.00	100	100
85.00	65.30	62.66
133.00	18.00	20.20
0.00	0.00	0.00

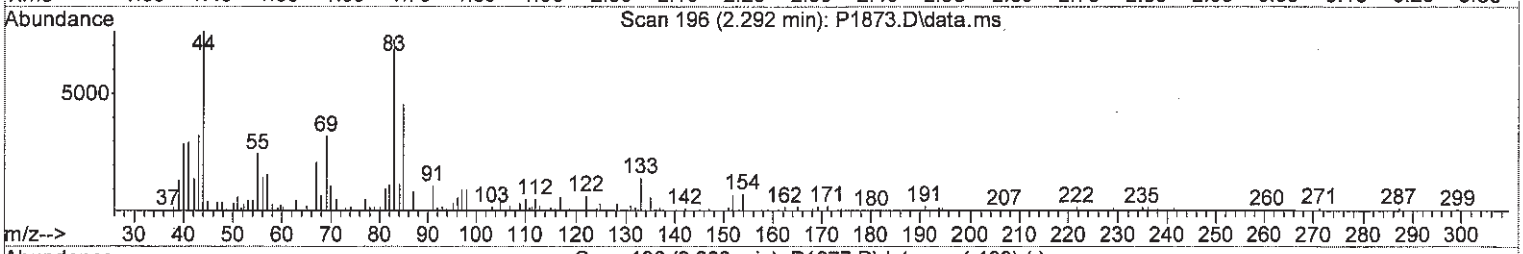
Quantitation Report (Qedit)

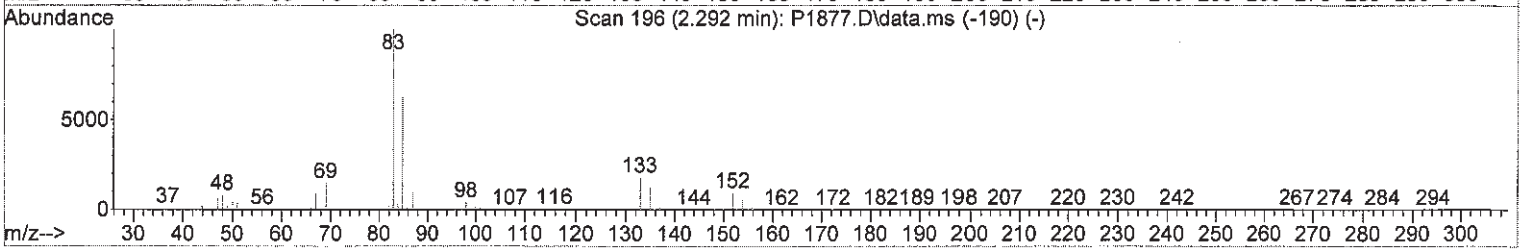
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



(A) BLC 5/10/16 DL 5/11/16





TIC: P1873.D\data.ms

(11) Freon 123

2.292min (-0.000) 1.09 ppb m

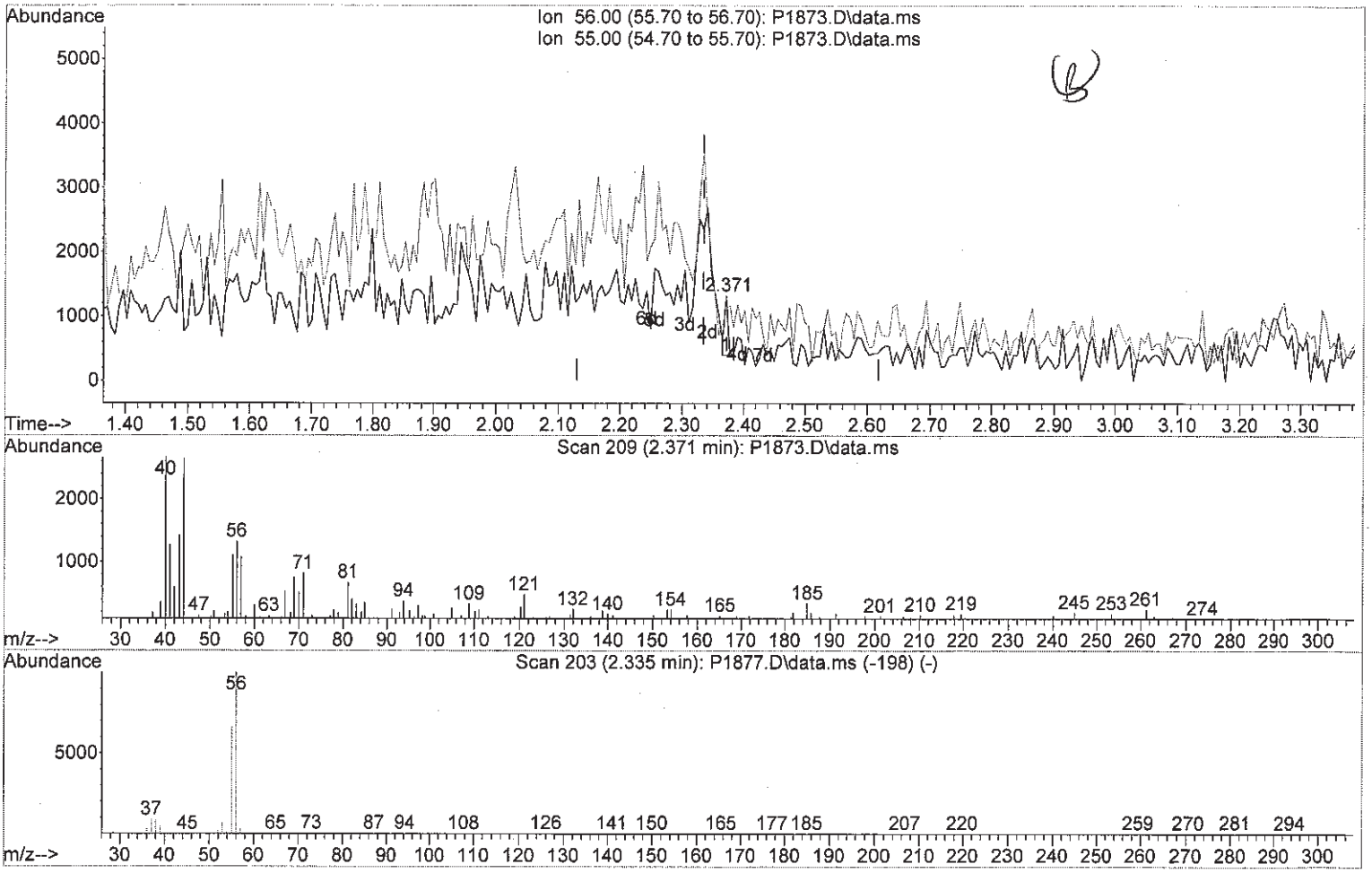
response 11024

Ion	Exp%	Act%
83.00	100	100
85.00	65.30	62.66
133.00	18.00	20.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(12) Acrolein

2.371min (+0.037) 0.44 ppb

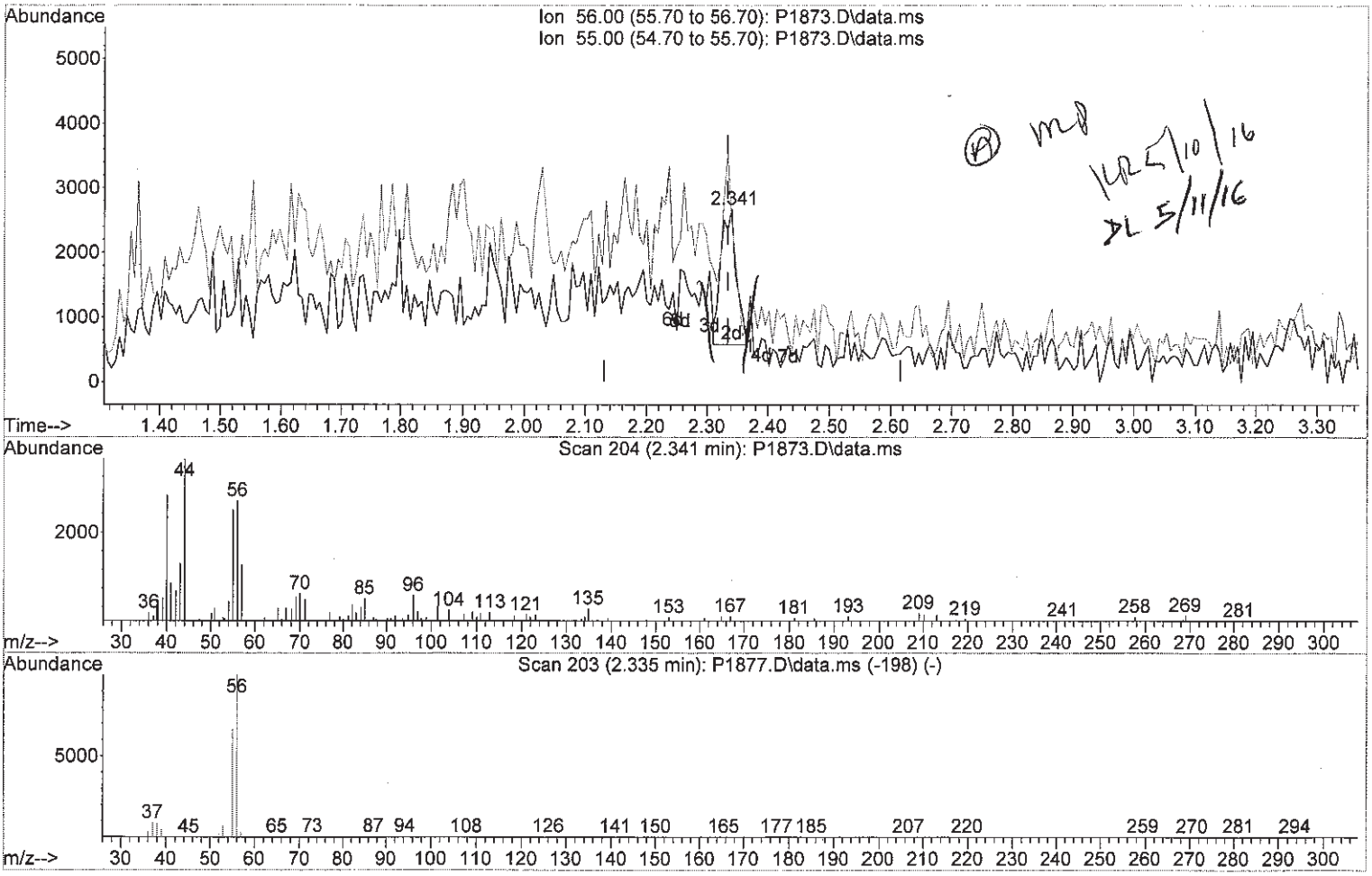
response 348

Ion	Exp%	Act%
56.00	100	100
55.00	68.60	83.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(12) Acrolein

2.341min (+0.006) 4.65 ppb m

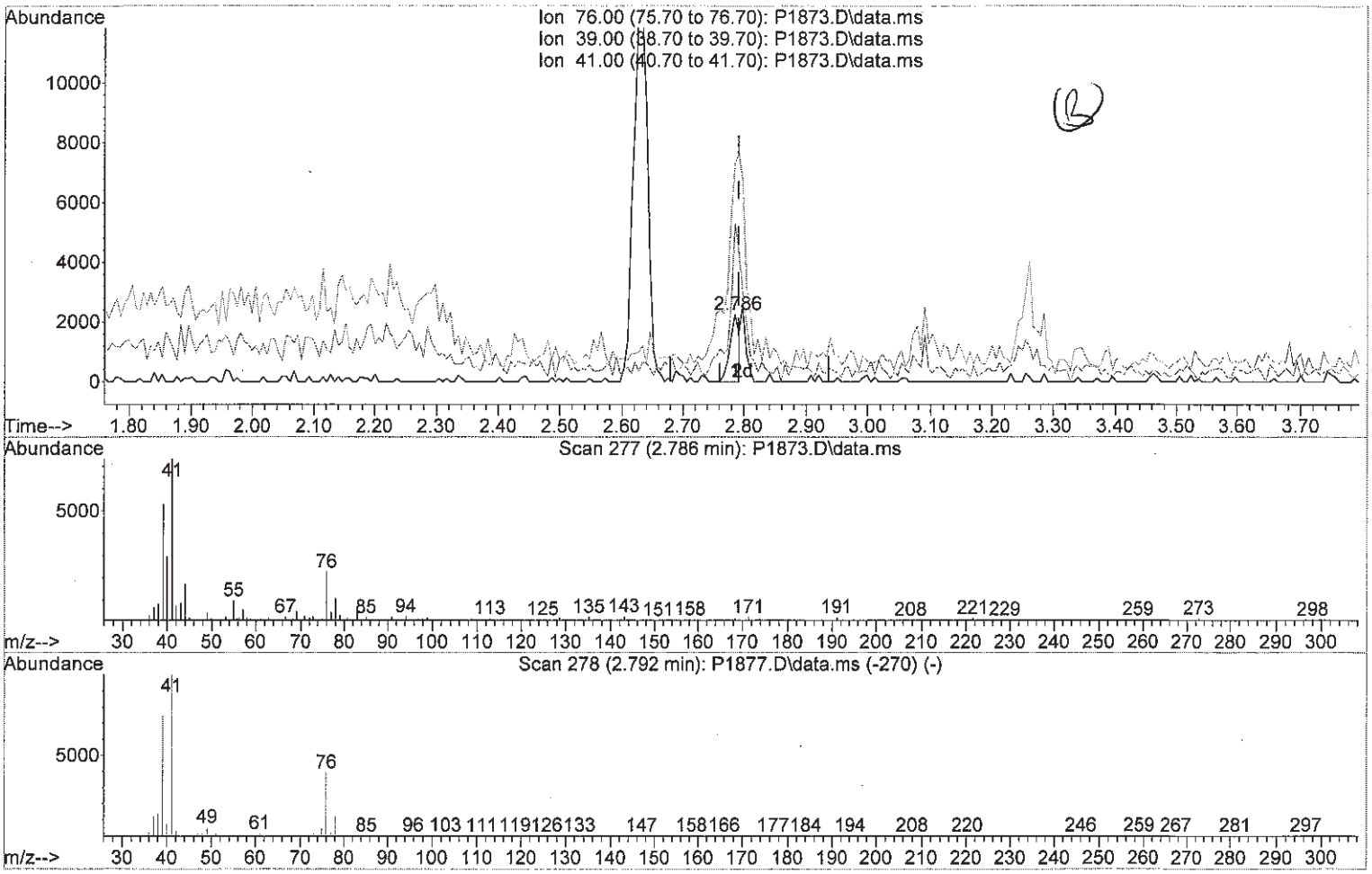
response 3679

Ion	Exp%	Act%
56.00	100	100
55.00	68.60	92.45#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(20) Allyl Chloride

2.786min (-0.006) 0.67 ppb

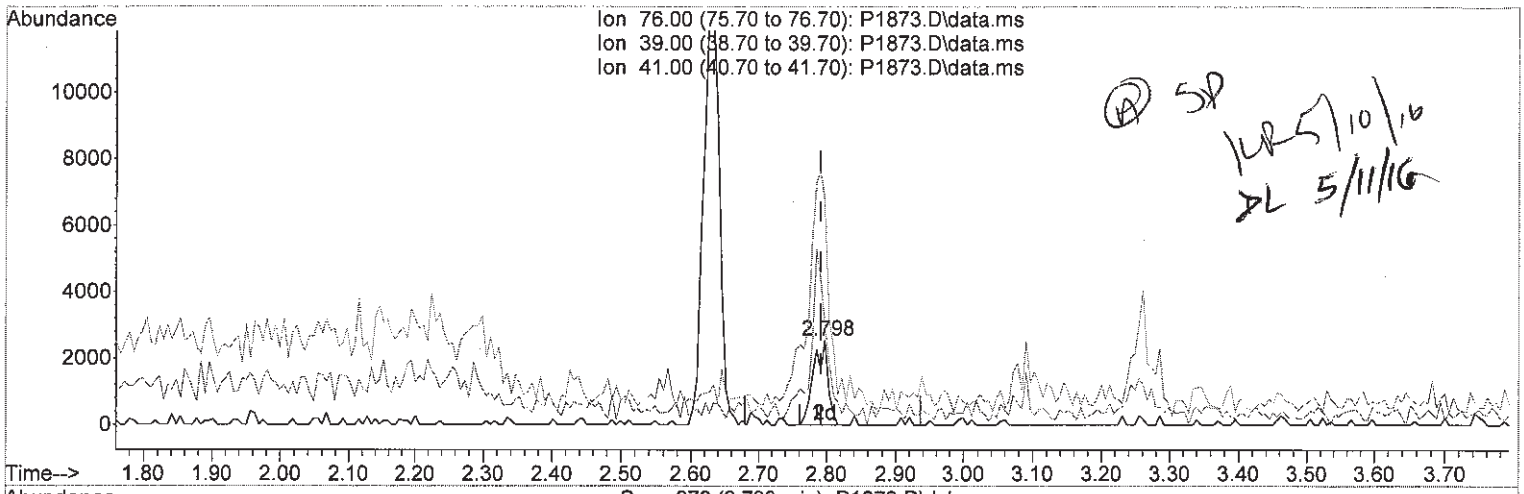
response 2305

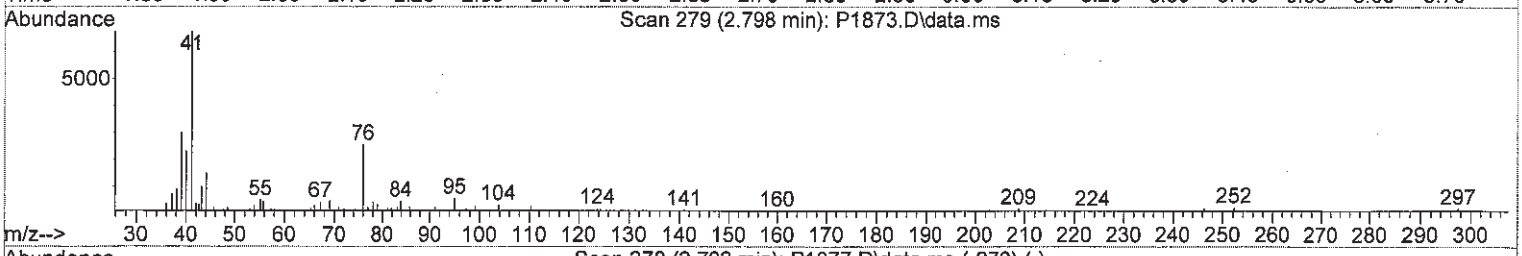
Ion	Exp%	Act%
76.00	100	100
39.00	197.20	235.03#
41.00	290.60	324.35#
0.00	0.00	0.00

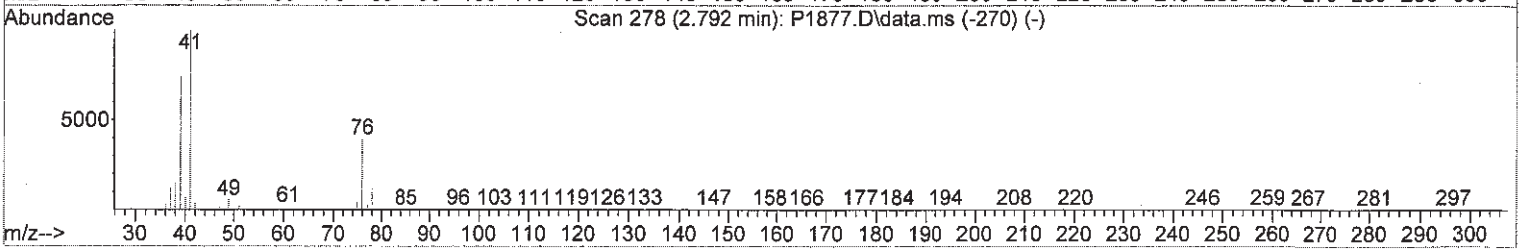
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(20) Allyl Chloride

2.798min (+0.006) 1.08 ppb m

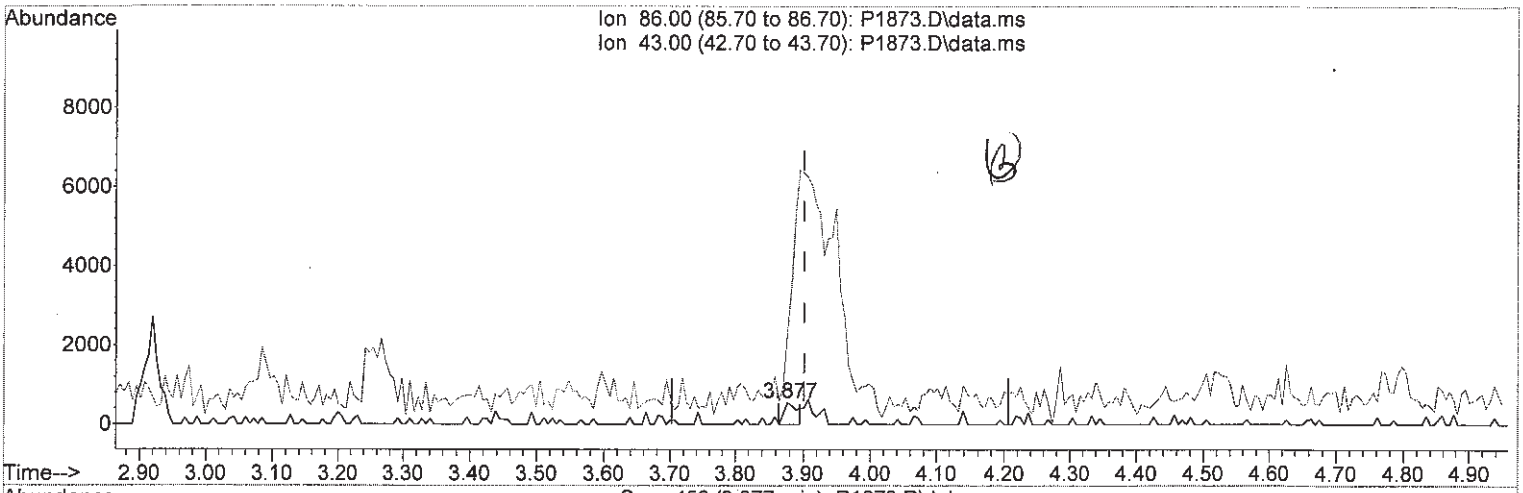
response 3698

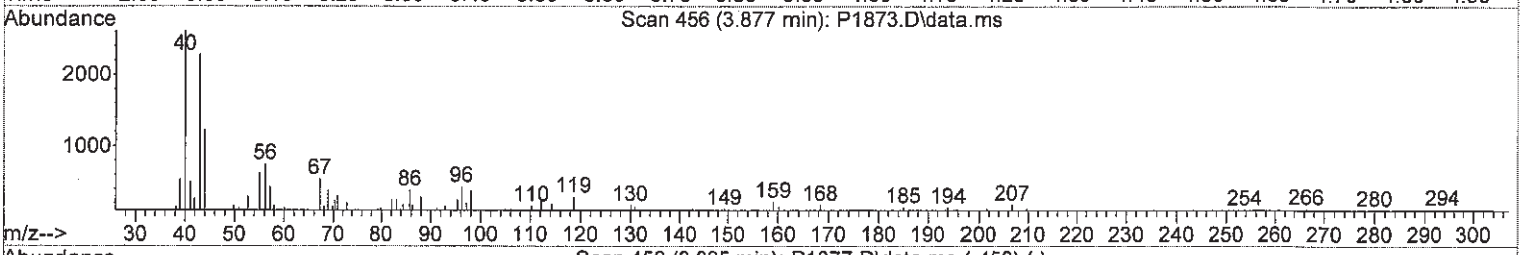
Ion	Exp%	Act%
76.00	100	100
39.00	197.20	118.21#
41.00	290.60	266.30#
0.00	0.00	0.00

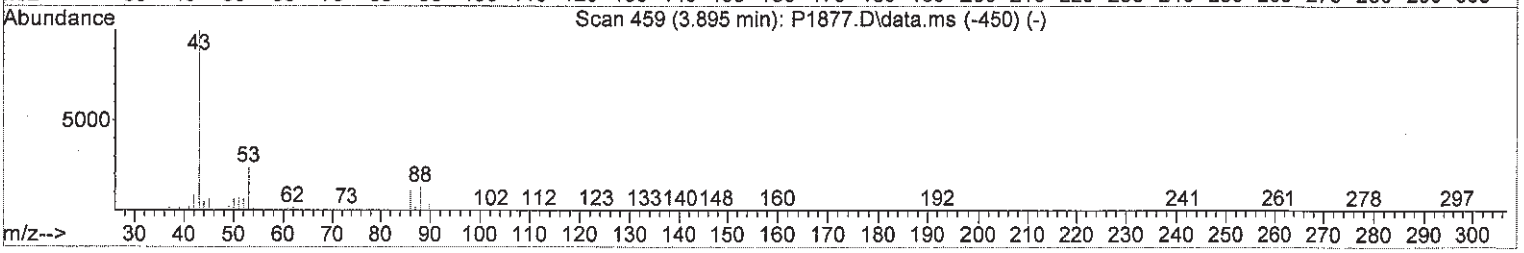
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(29) Vinyl Acetate

3.877min (-0.024) 0.57 ppb

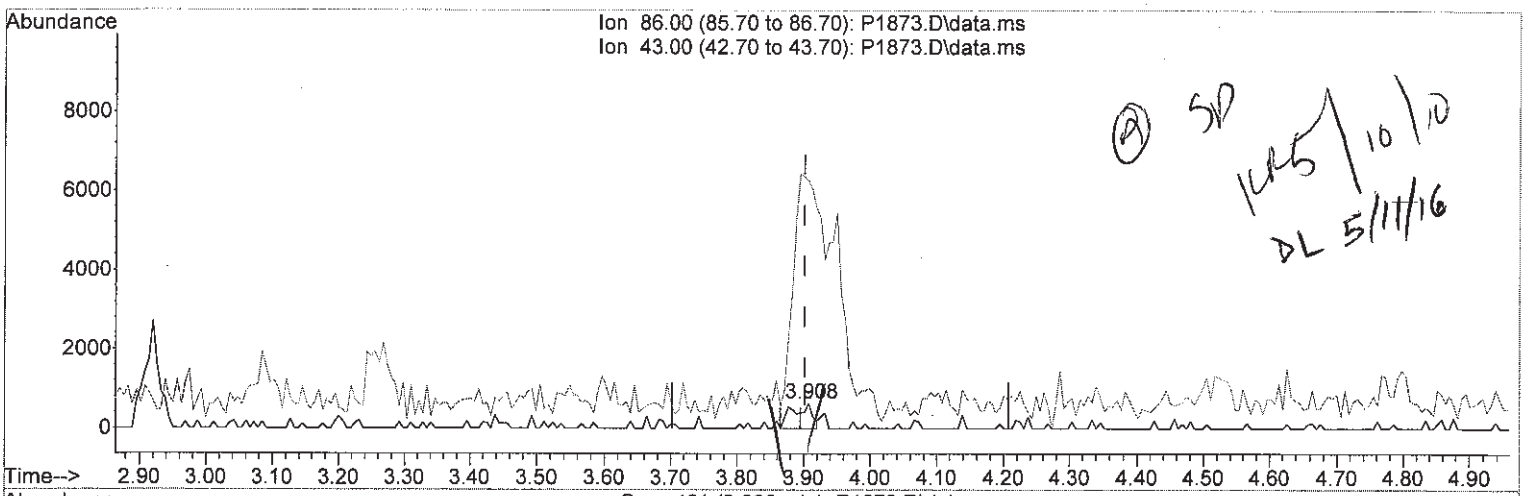
response 745

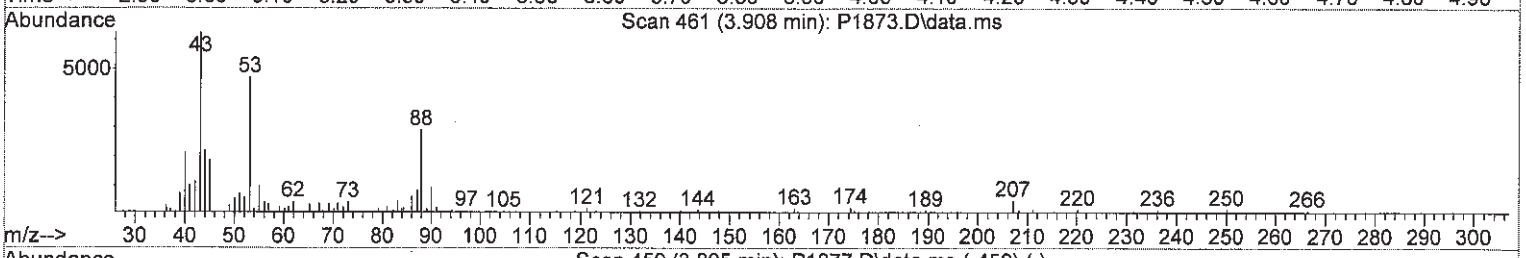
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	418.93#
0.00	0.00	0.00
0.00	0.00	0.00

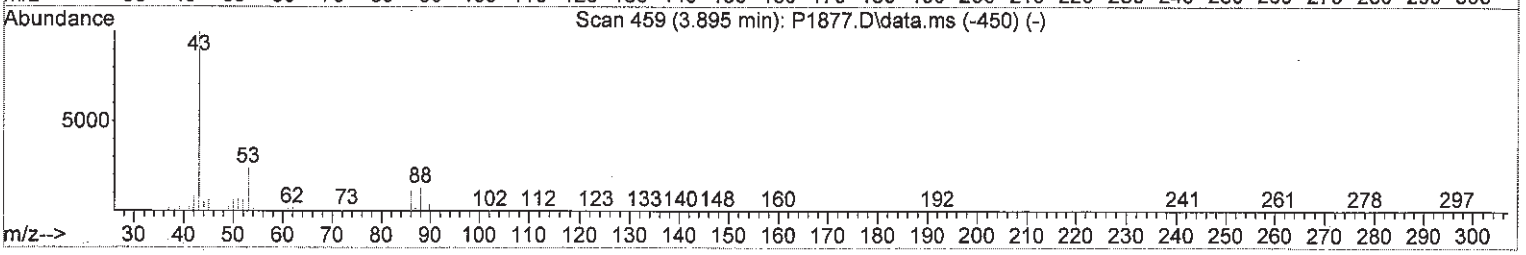
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(29) Vinyl Acetate

3.908min (+0.006) 1.01 ppb m

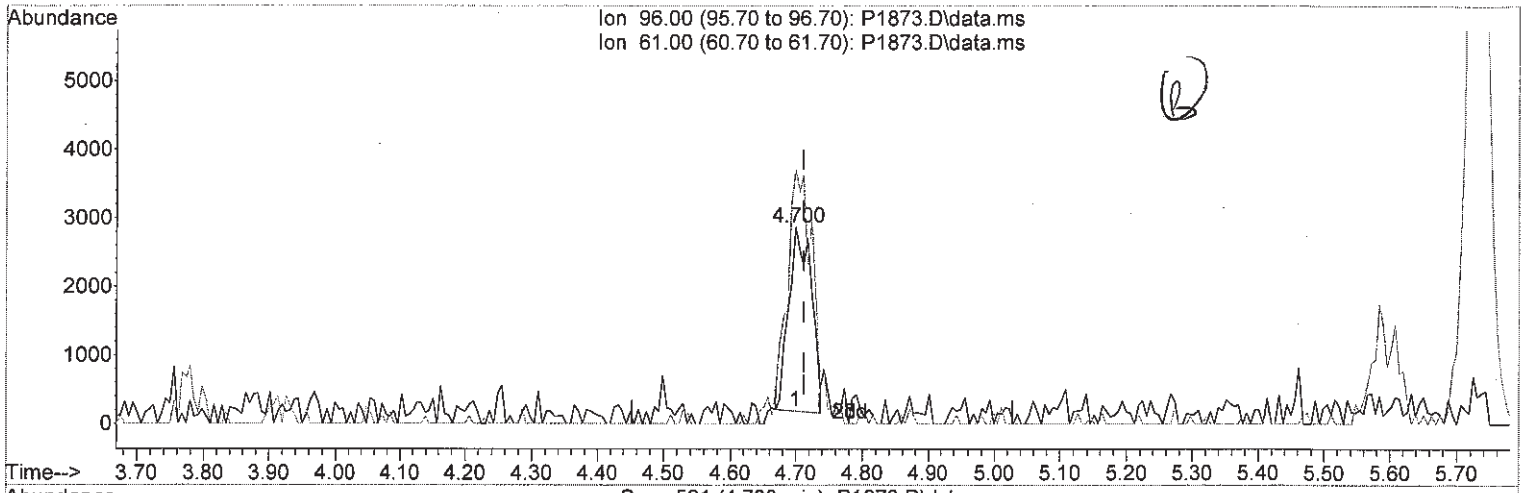
response 1305

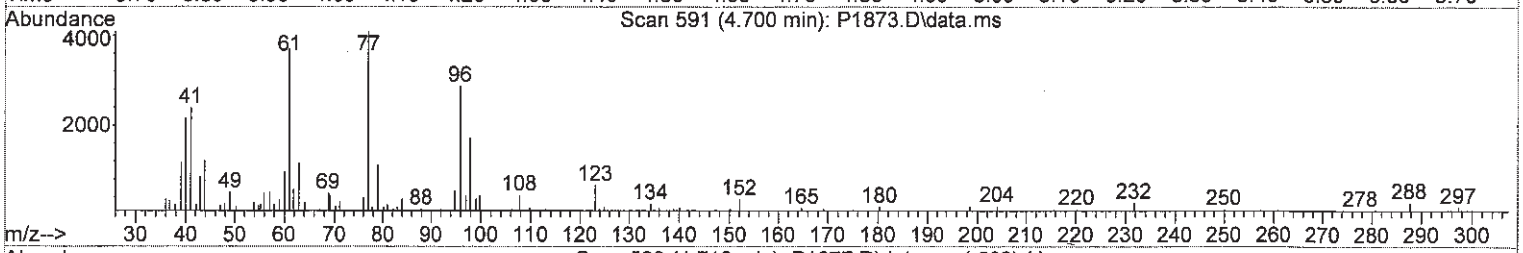
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	983.12#
0.00	0.00	0.00
0.00	0.00	0.00

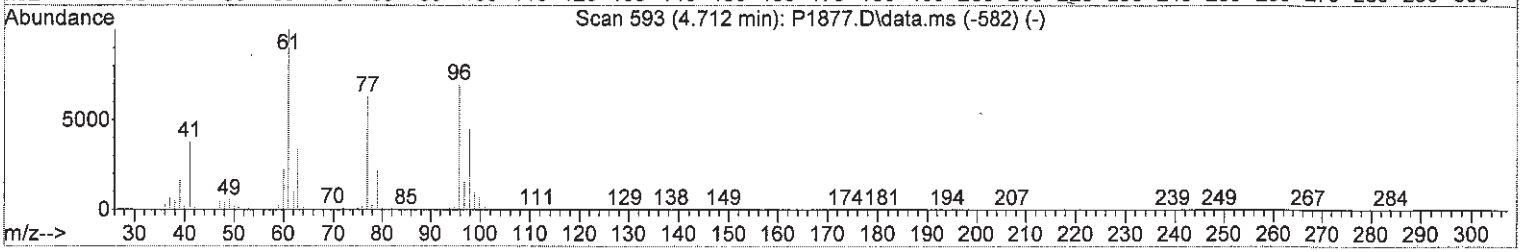
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.700min (-0.012) 0.87 ppb

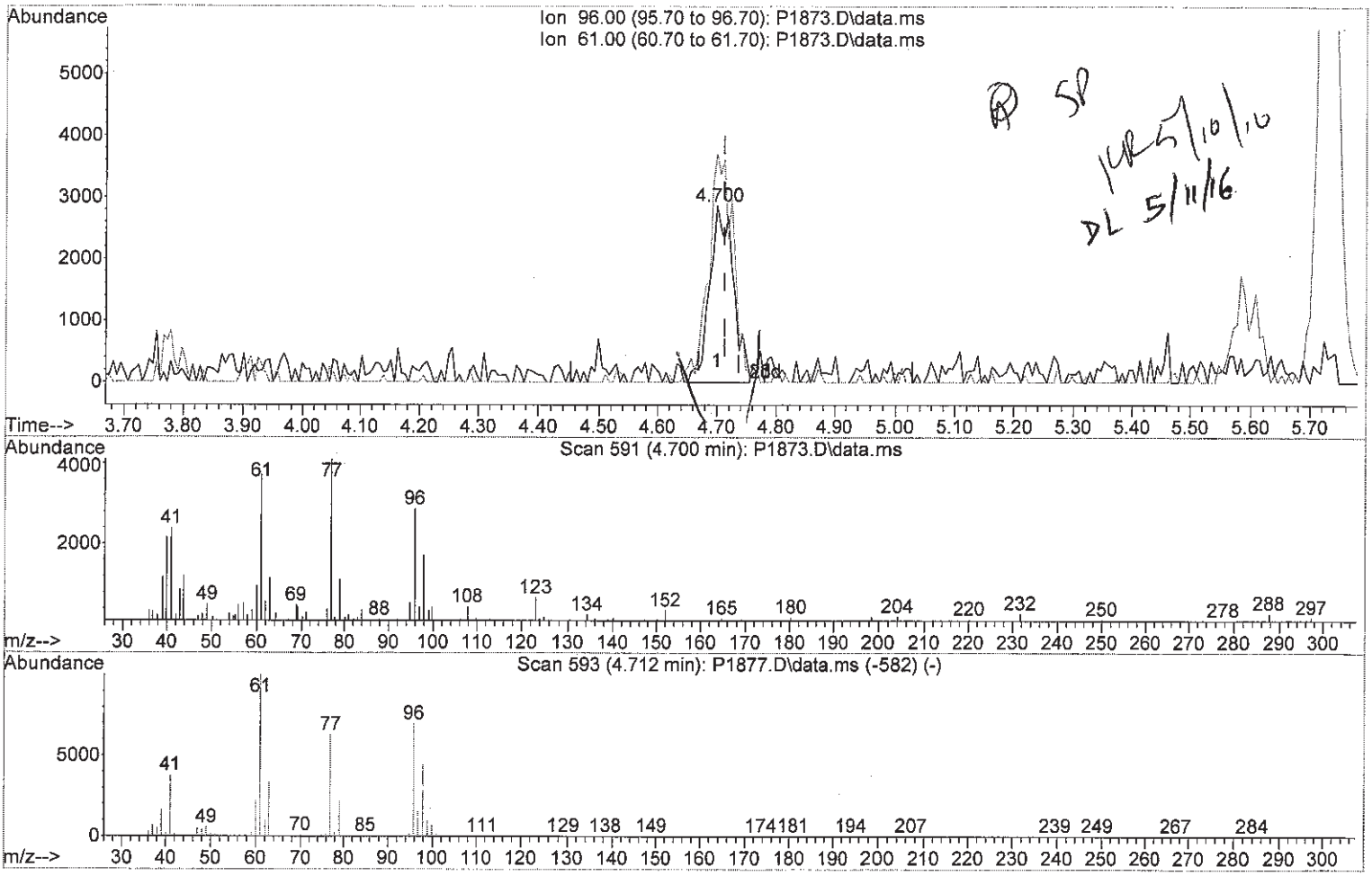
response 6352

Ion	Exp%	Act%
96.00	100	100
61.00	144.40	129.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(34) cis-1,2-Dichloroethene (P)

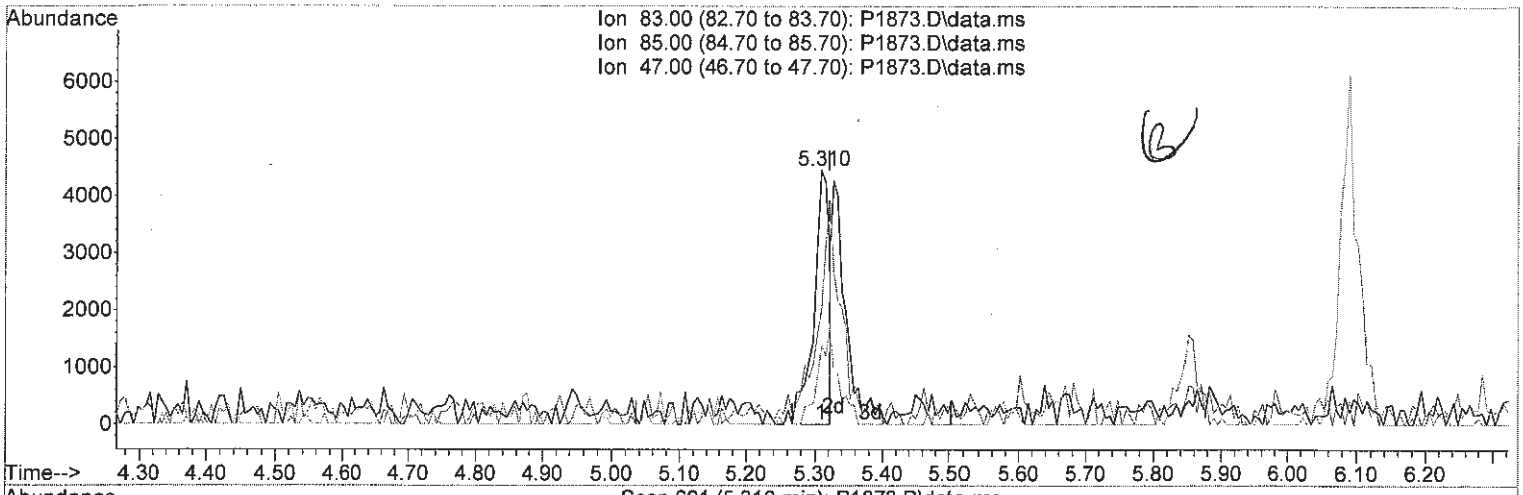
4.700min (-0.012) 1.06 ppb m

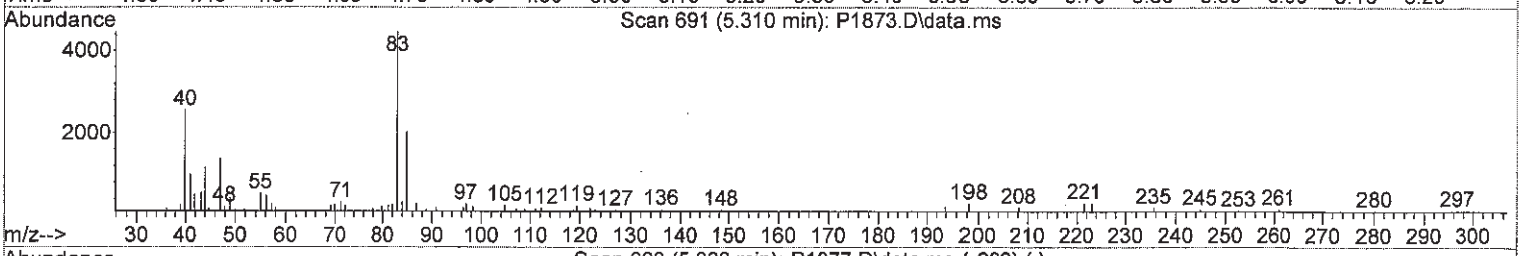
response 7785

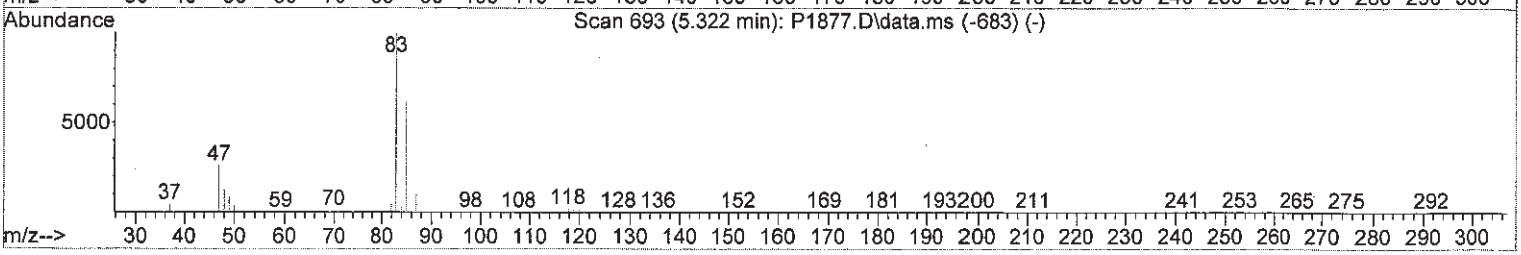
Ion	Exp%	Act%
96.00	100	100
61.00	144.40	129.29
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(40) Chloroform (P)

5.310min (-0.012) 0.60 ppb

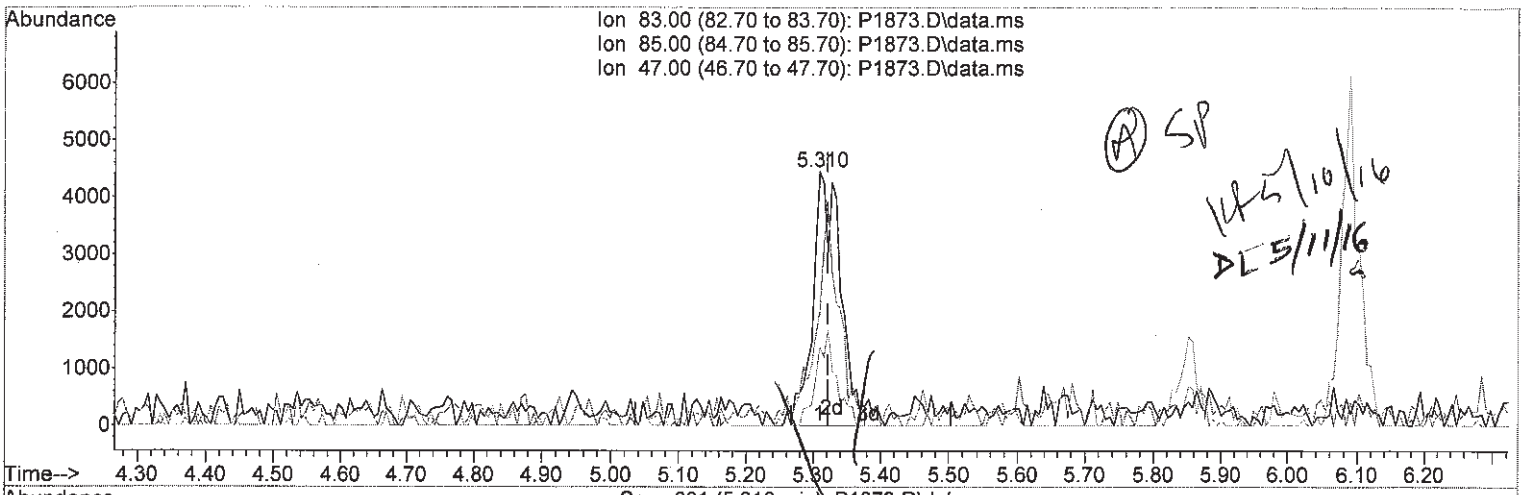
response 7034

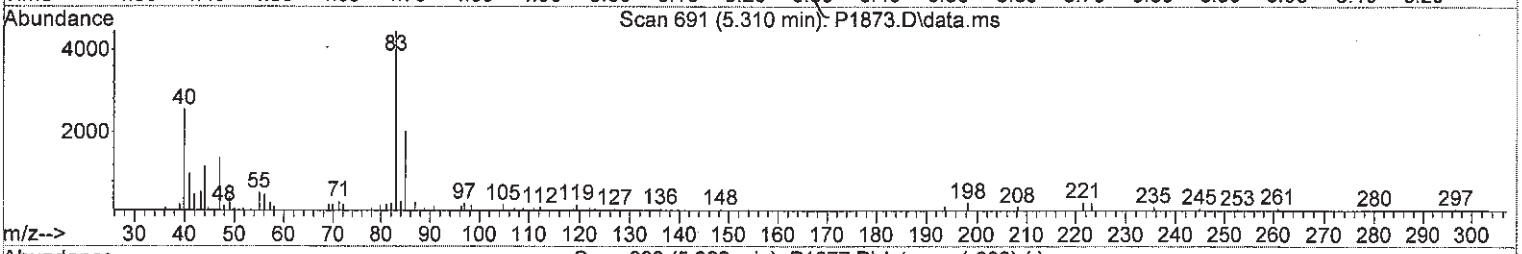
Ion	Exp%	Act%
83.00	100	100
85.00	62.50	45.38
47.00	25.90	31.00
0.00	0.00	0.00

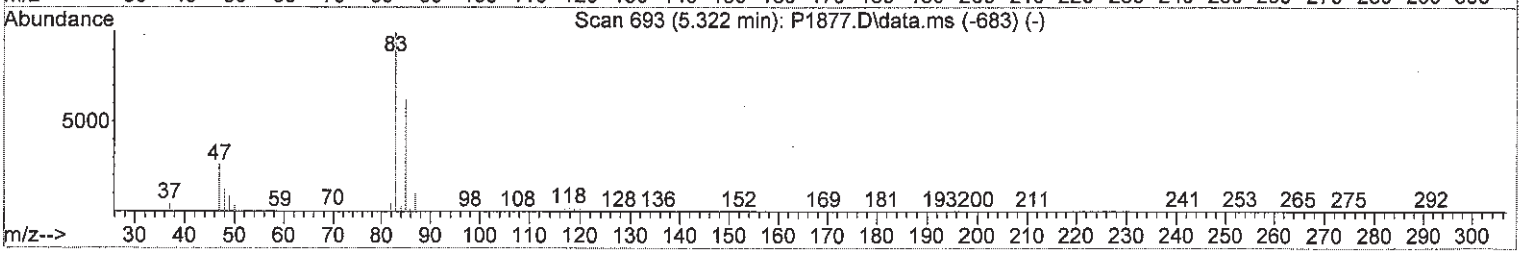
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(40) Chloroform (P)

5.310min (-0.012) 1.08 ppb m

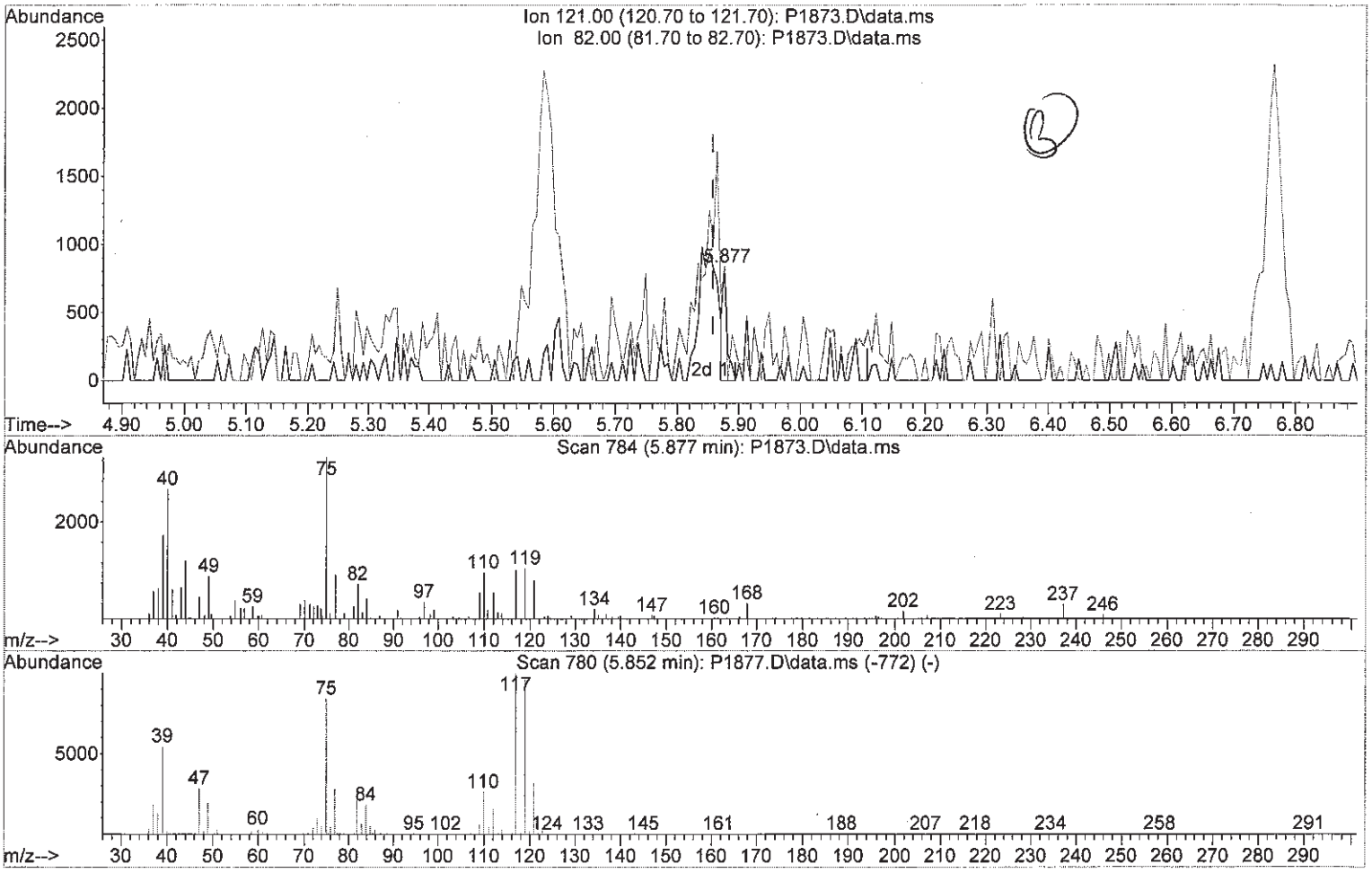
response 12695

Ion	Exp%	Act%
83.00	100	100
85.00	62.50	45.38
47.00	25.90	31.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(46) Carbontetrachloride (P)

5.877min (+0.018) 0.16 ppb

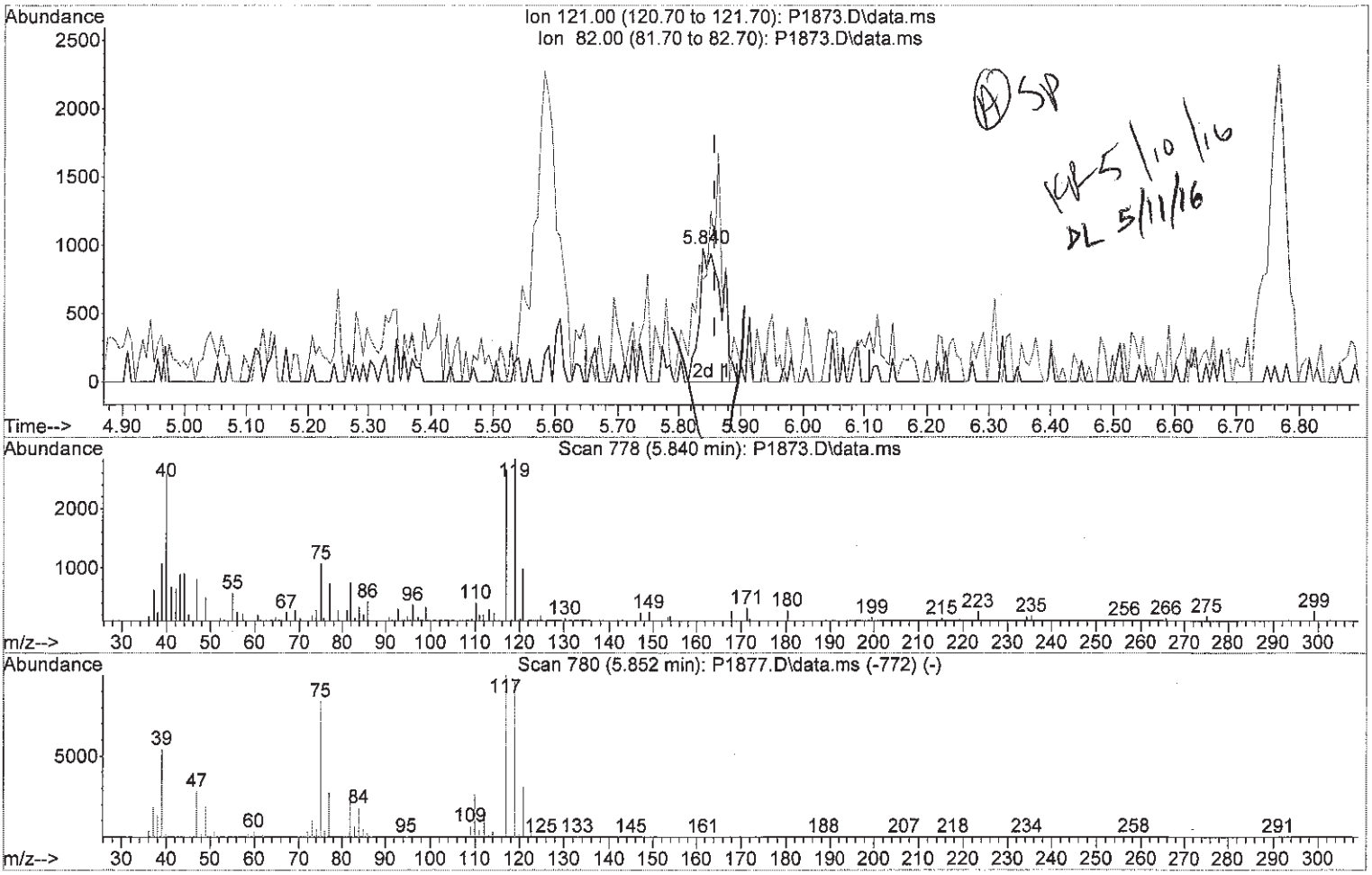
response 416

Ion	Exp%	Act%
121.00	100	100
82.00	86.70	92.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(46) Carbontetrachloride (P)

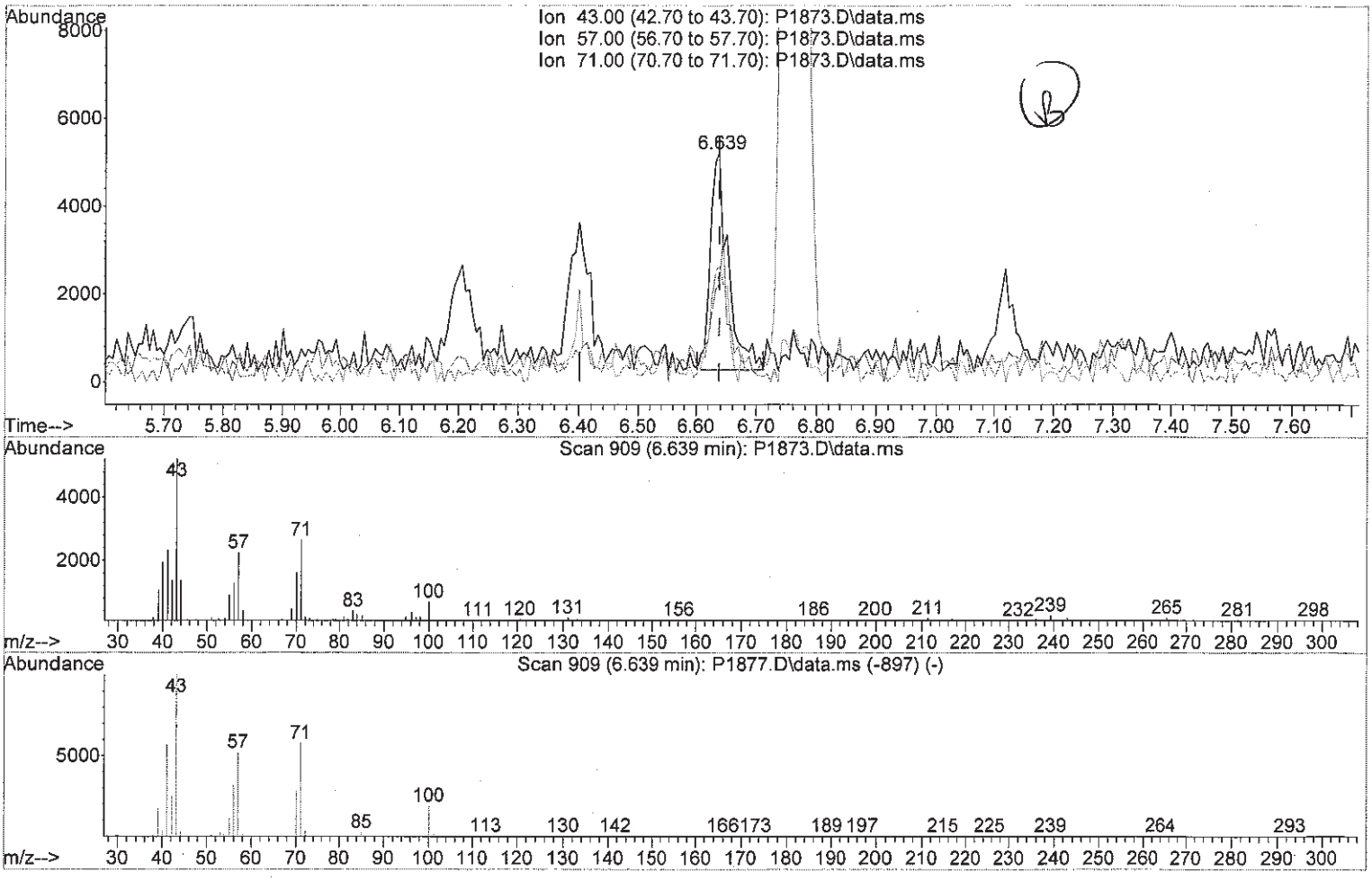
5.840min (-0.018) 0.95 ppb m

response 2469

Ion	Exp%	Act%
121.00	100	100
82.00	86.70	76.25
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(52) n-Heptane

6.639min (-0.000) 1.21 ppb

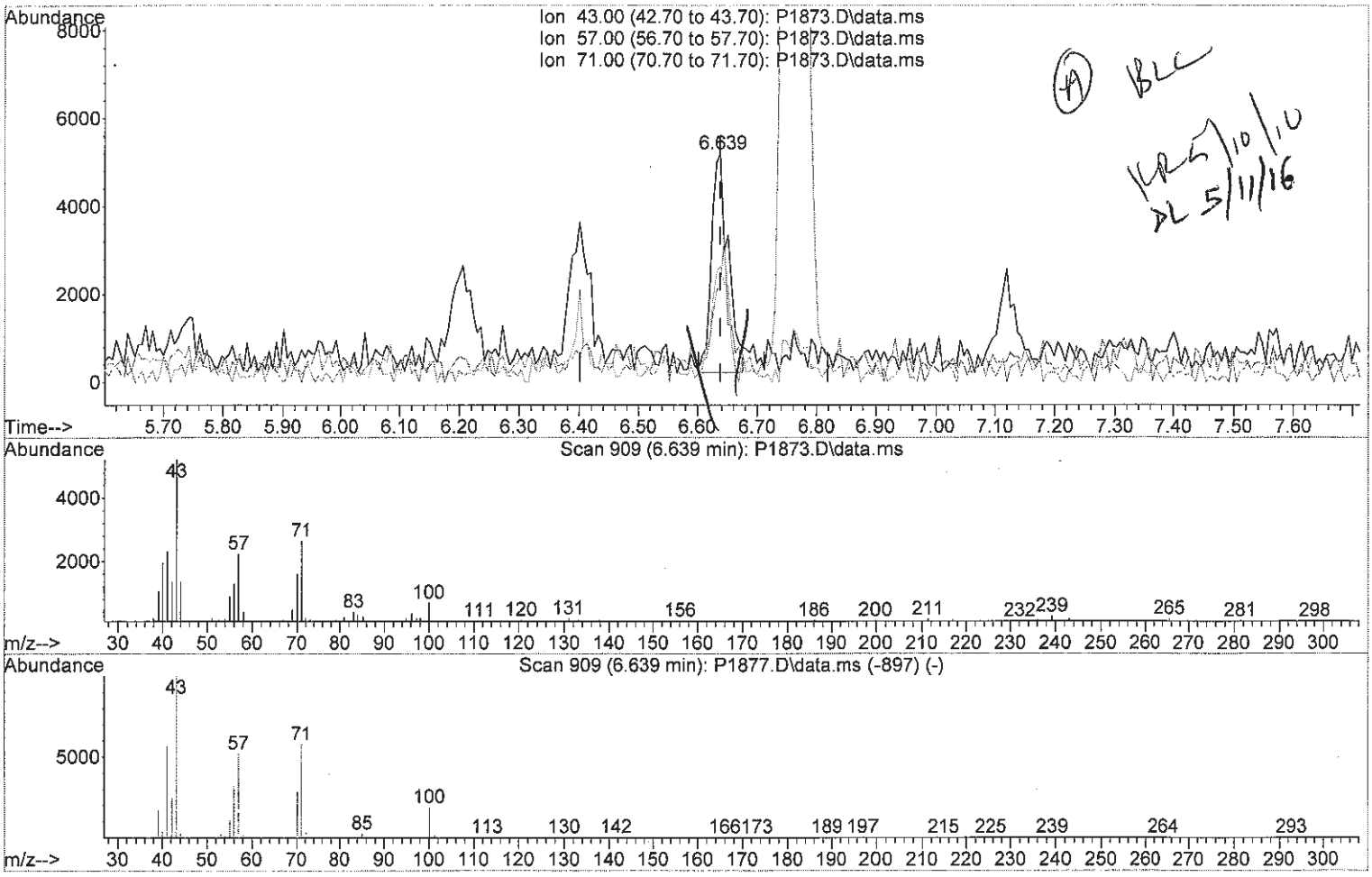
response 10115

Ion	Exp%	Act%
43.00	100	100
57.00	52.20	42.98
71.00	57.70	50.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(52) n-Heptane

6.639min (-0.000) 1.15 ppb m

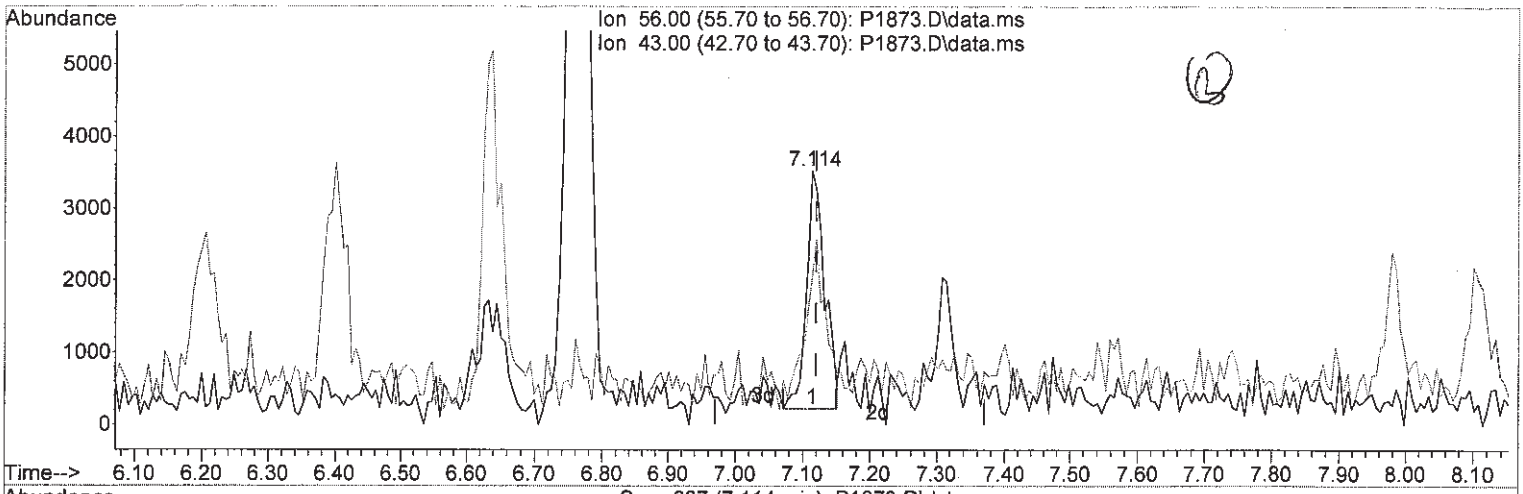
response 9628

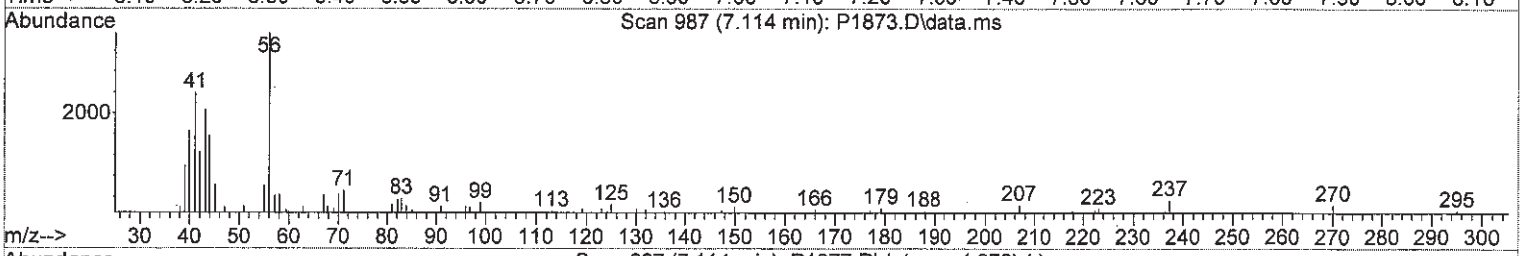
Ion	Exp%	Act%
43.00	100	100
57.00	52.20	42.98
71.00	57.70	50.75
0.00	0.00	0.00

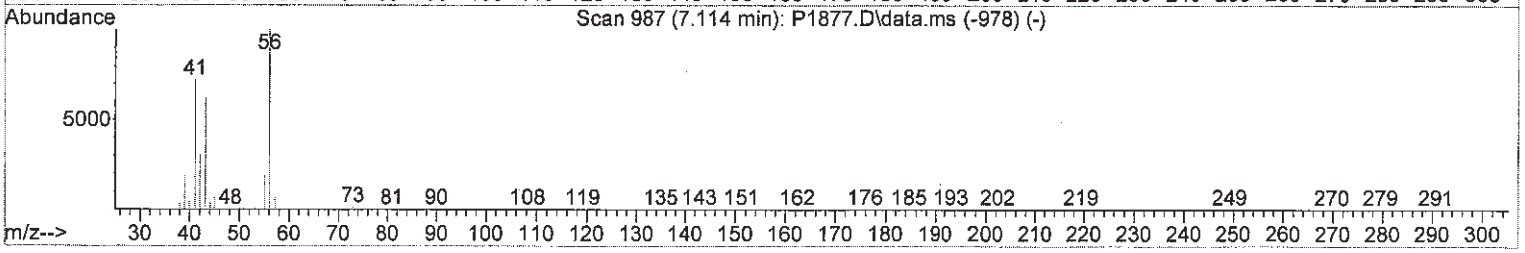
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(53) 1-Butanol

7.114min (-0.006) 42.09 ppb

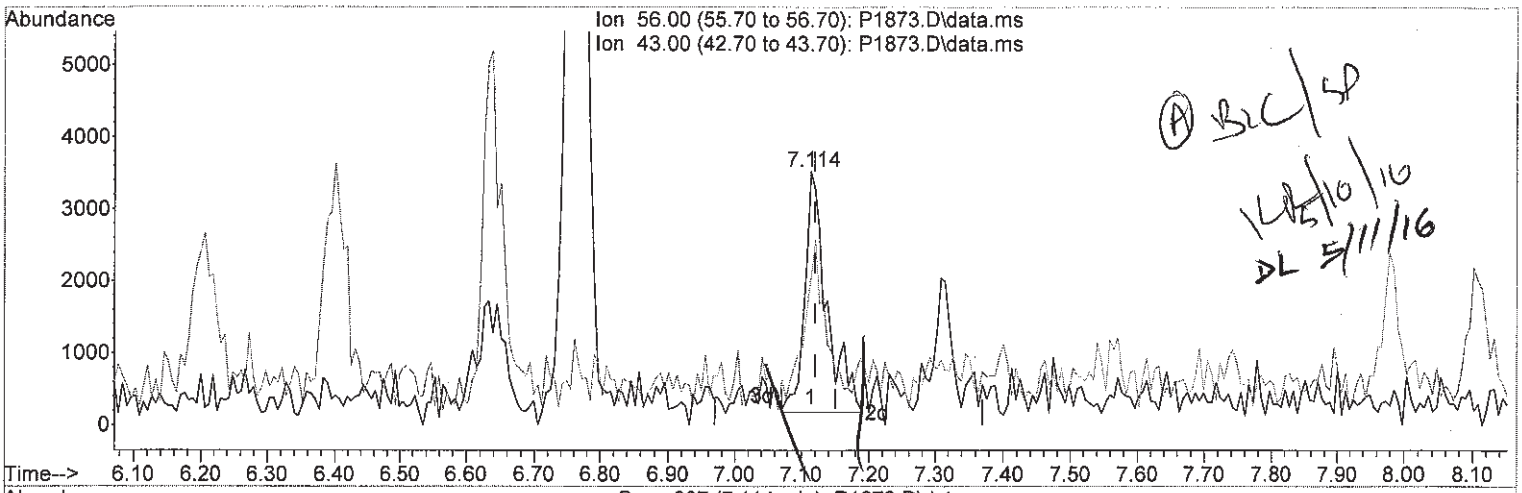
response 6241

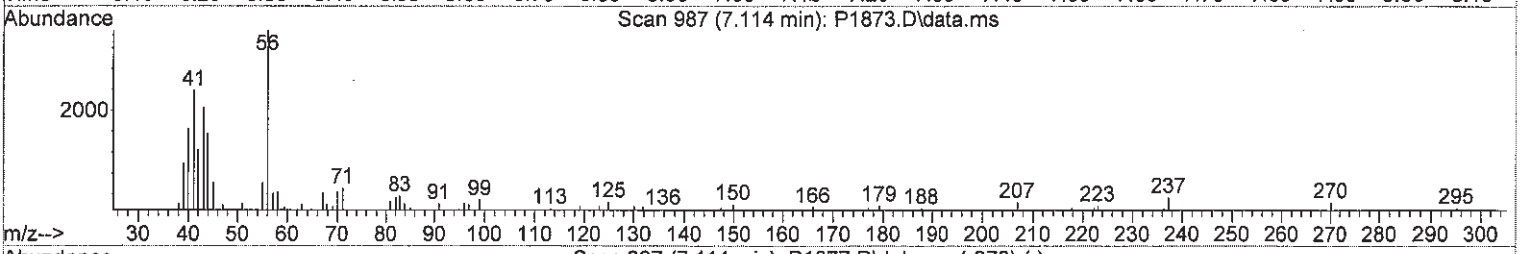
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	89.60#
0.00	0.00	0.00
0.00	0.00	0.00

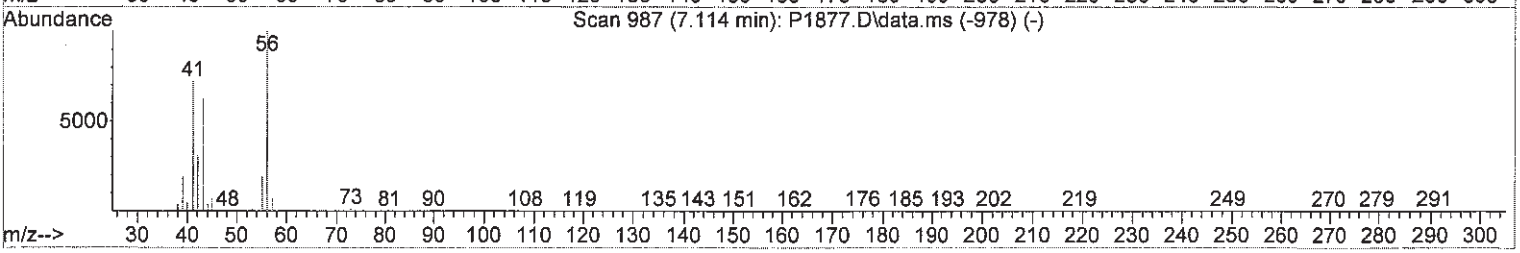
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(53) 1-Butanol

7.114min (-0.006) 50.37 ppb m

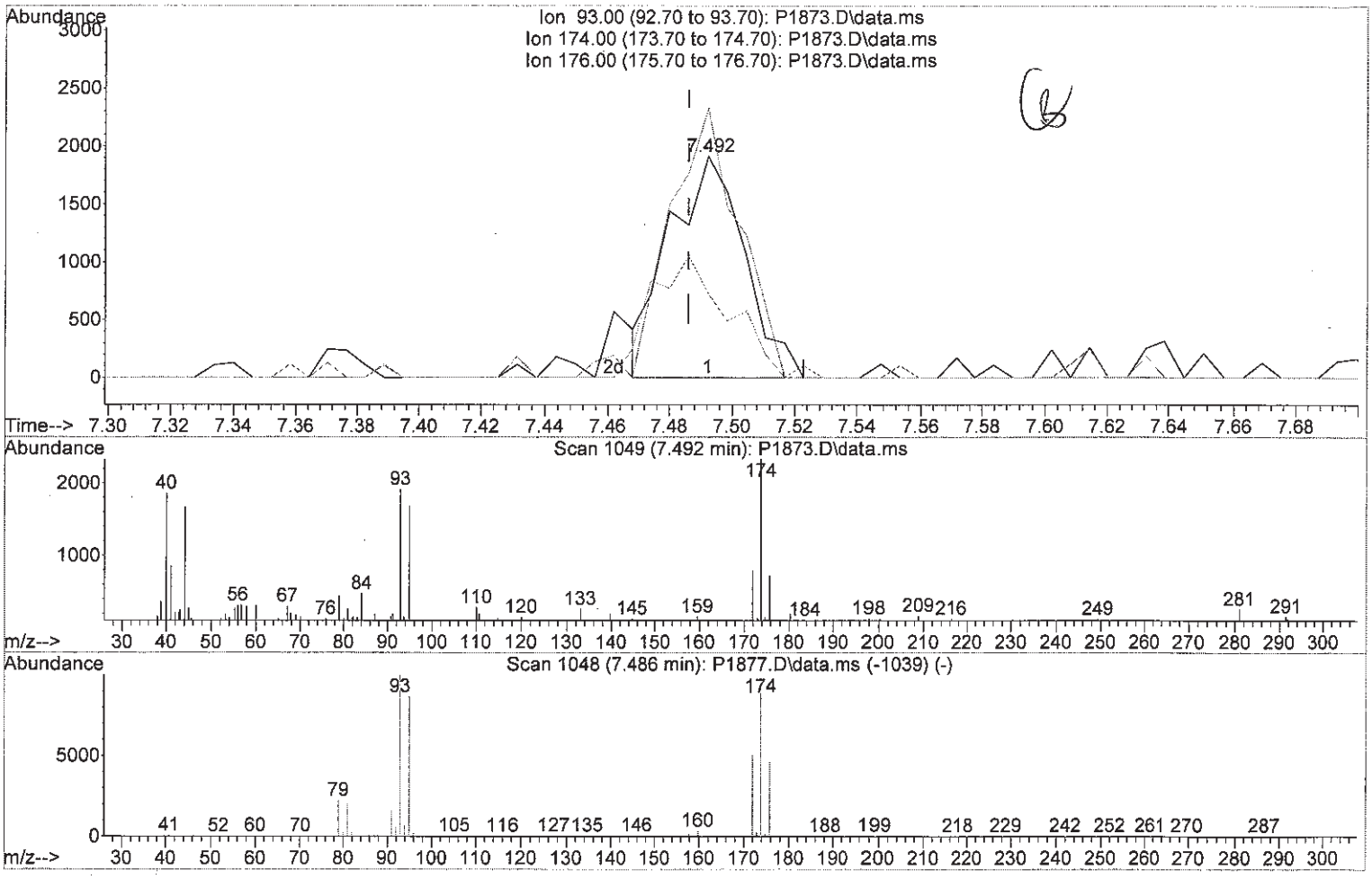
response 7469

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	74.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(57) Dibromomethane

7.492min (+0.006) 0.91 ppb

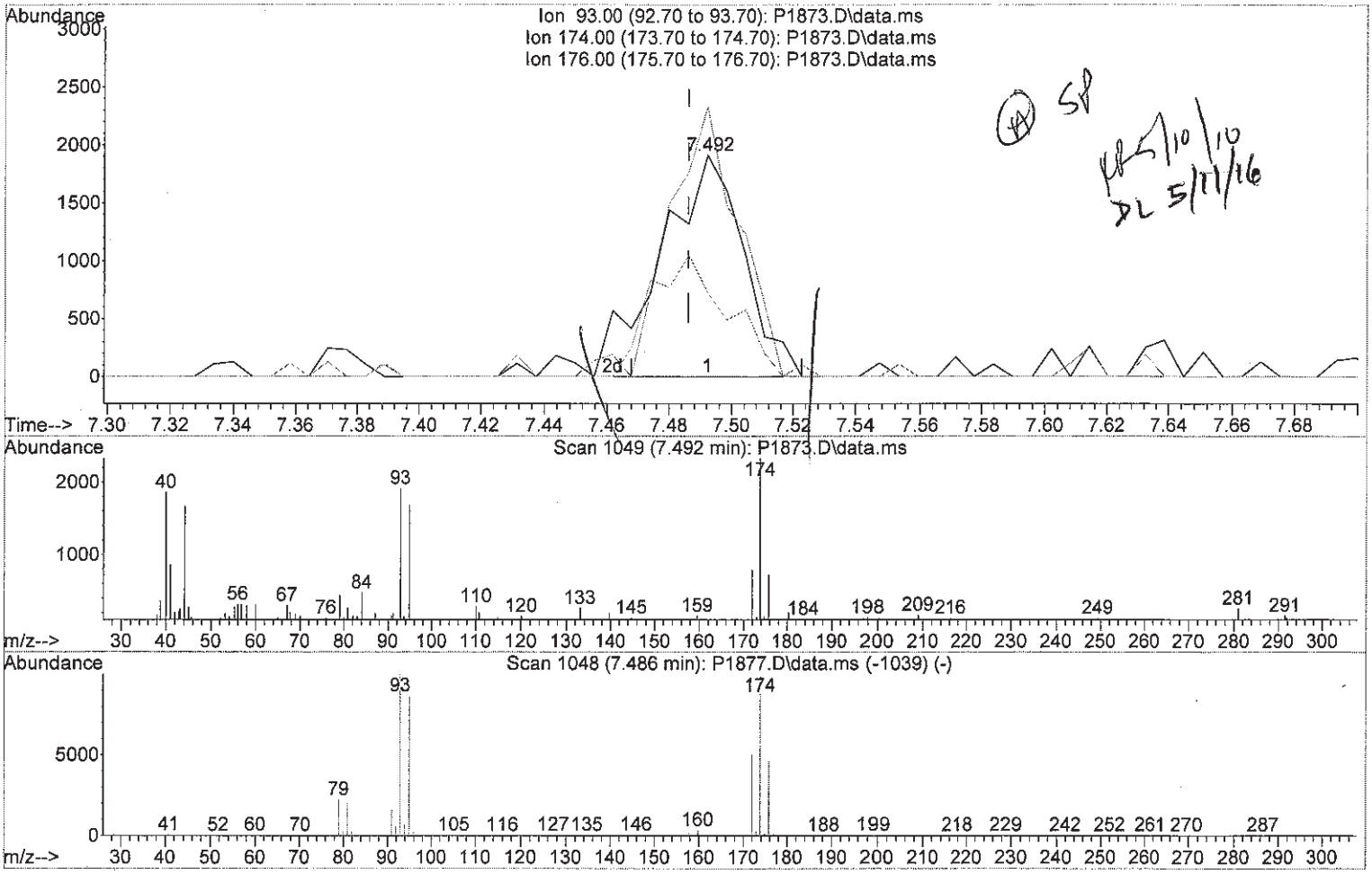
response 3171

Ion	Exp%	Act%
93.00	100	100
174.00	98.50	119.98#
176.00	46.10	35.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(57) Dibromomethane

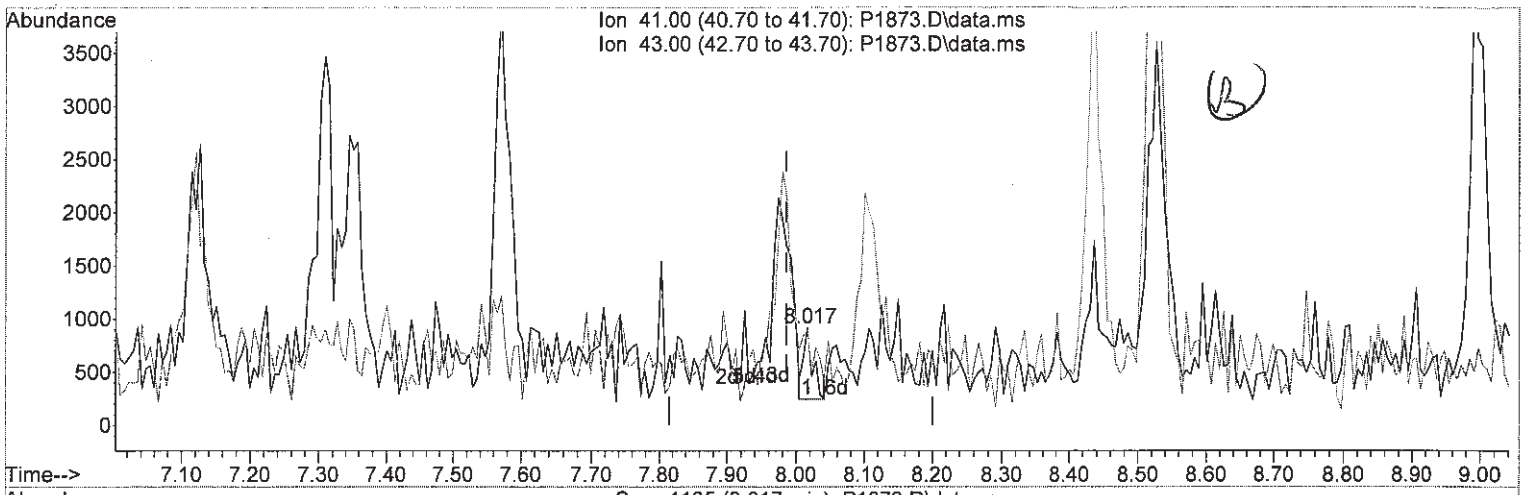
7.492min (+0.006) 1.01 ppb m

response 3532

Ion	Exp%	Act%
93.00	100	100
174.00	98.50	121.84#
176.00	46.10	37.82
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(61) 2-Nitropropane

8.017min (+0.030) 0.42 ppb

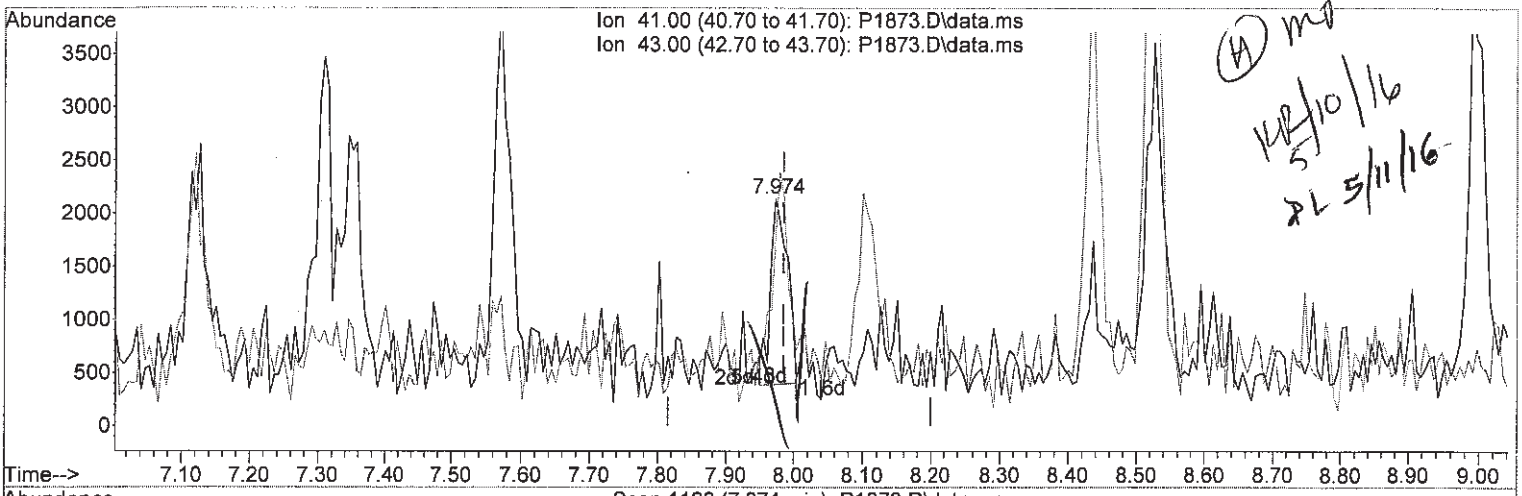
response 613

Ion	Exp%	Act%
41.00	100	100
43.00	112.20	98.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(61) 2-Nitropropane

7.974min (-0.012) 2.09 ppb m

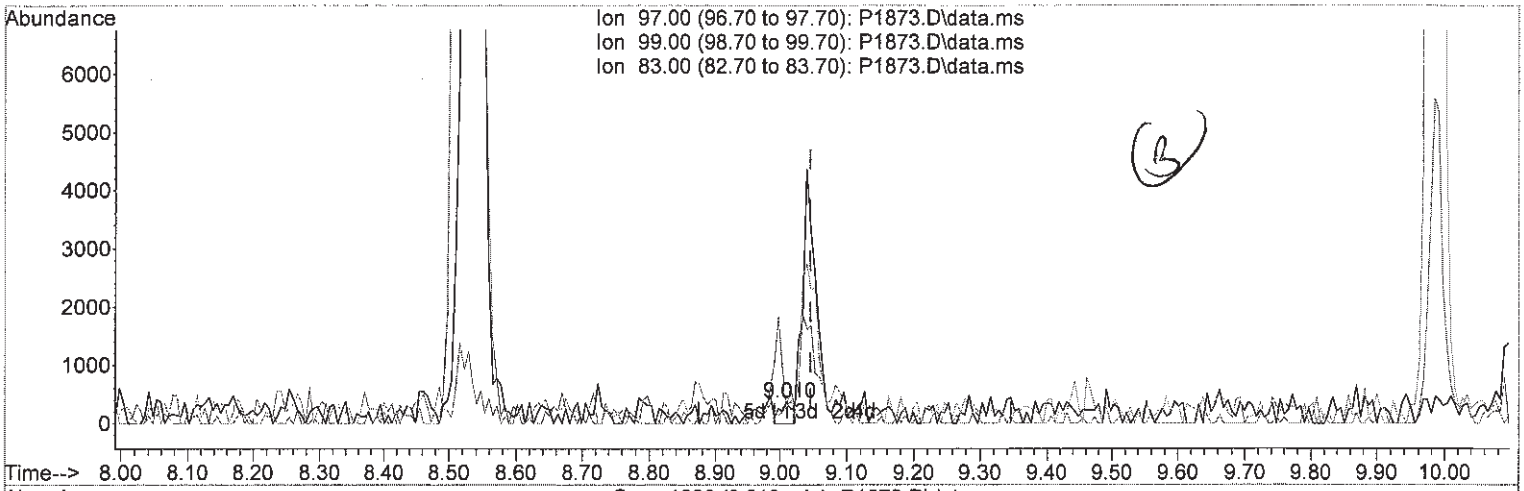
response 3068

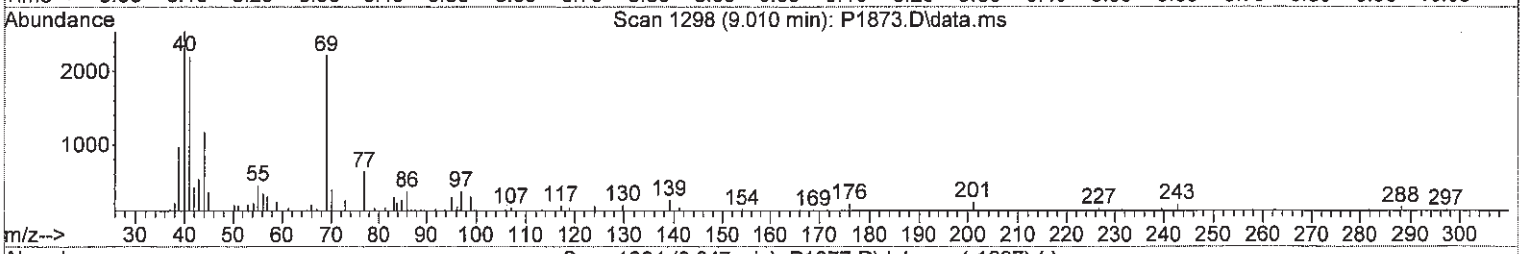
Ion	Exp%	Act%
41.00	100	100
43.00	112.20	83.67#
0.00	0.00	0.00
0.00	0.00	0.00

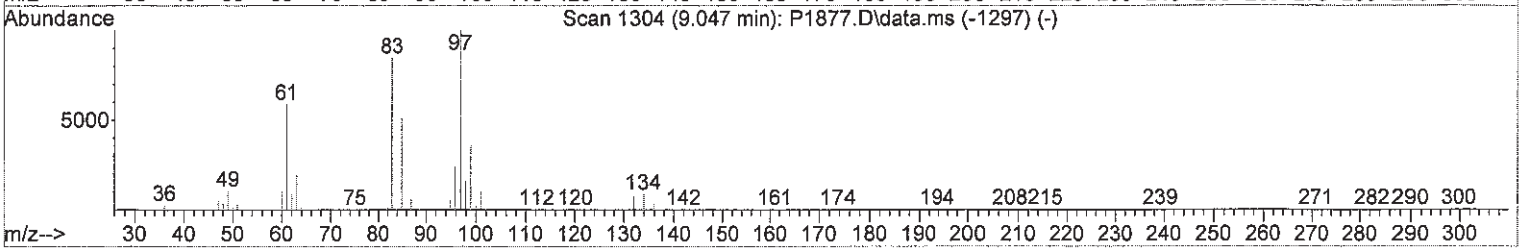
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(69) 1,1,2-Trichloroethane (P)

9.010min (-0.037) 0.09 ppb

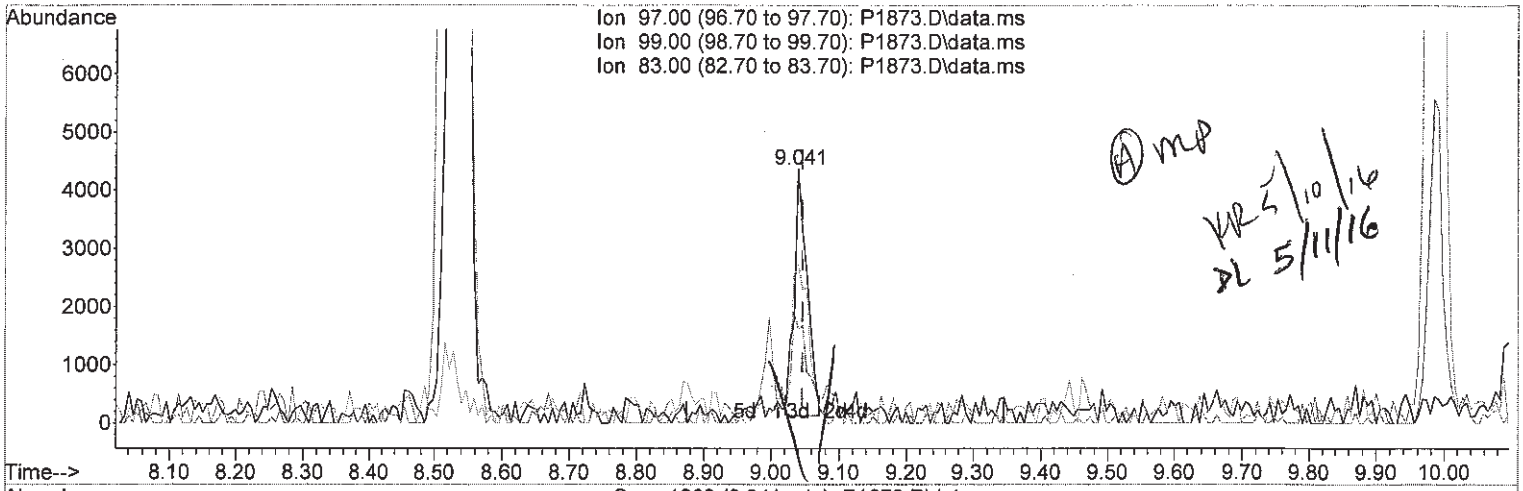
response 479

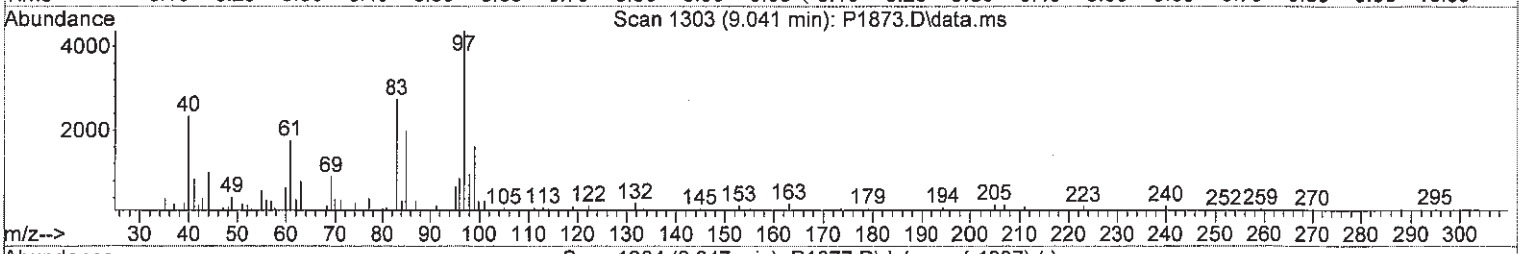
Ion	Exp%	Act%
97.00	100	100
99.00	59.60	79.50
83.00	84.40	76.18
0.00	0.00	0.00

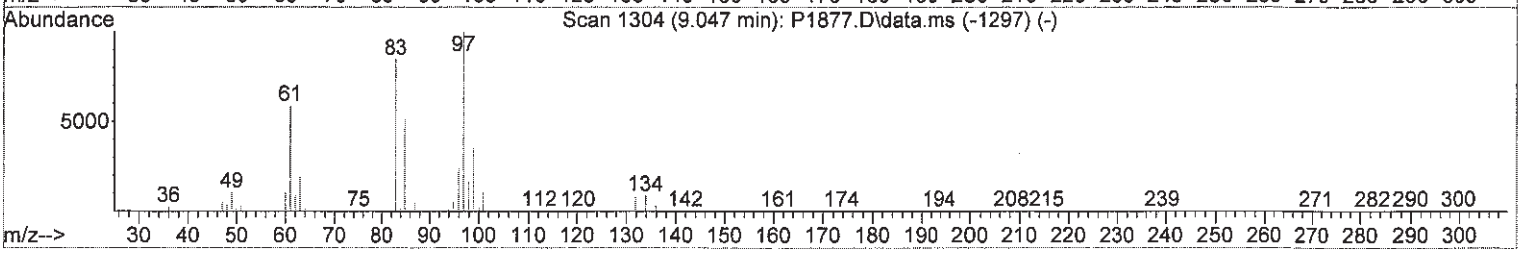
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(69) 1,1,2-Trichloroethane (P)

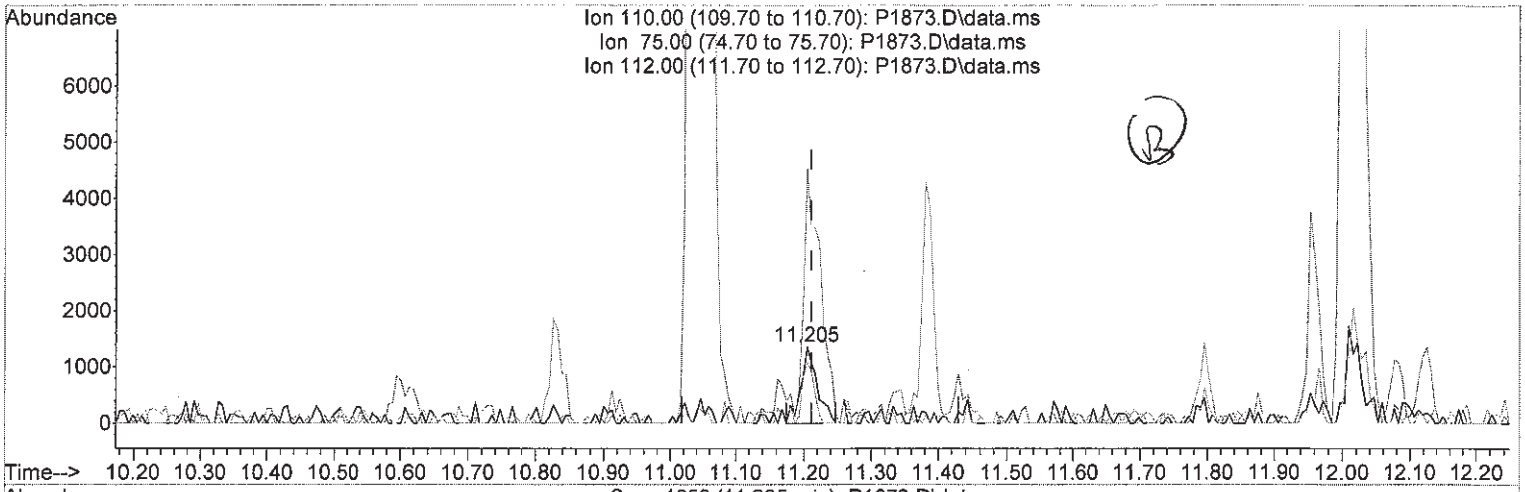
9.041min (-0.006) 1.04 ppb m

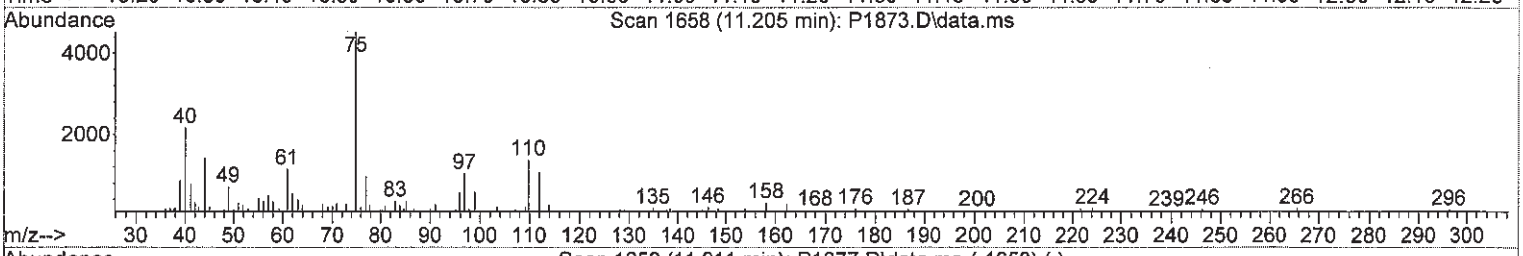
response 5546

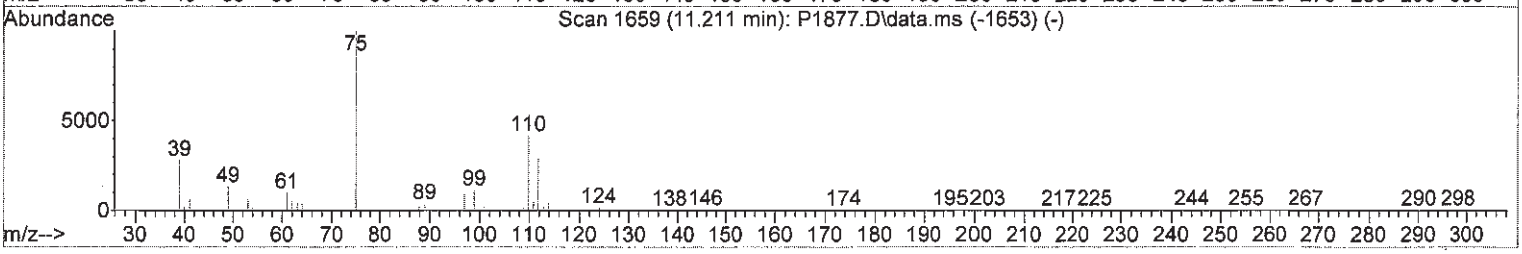
Ion	Exp%	Act%
97.00	100	100
99.00	59.60	37.03#
83.00	84.40	62.65#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(94) 1,2,3-Trichloropropane

11.205min (-0.006) 1.22 ppb

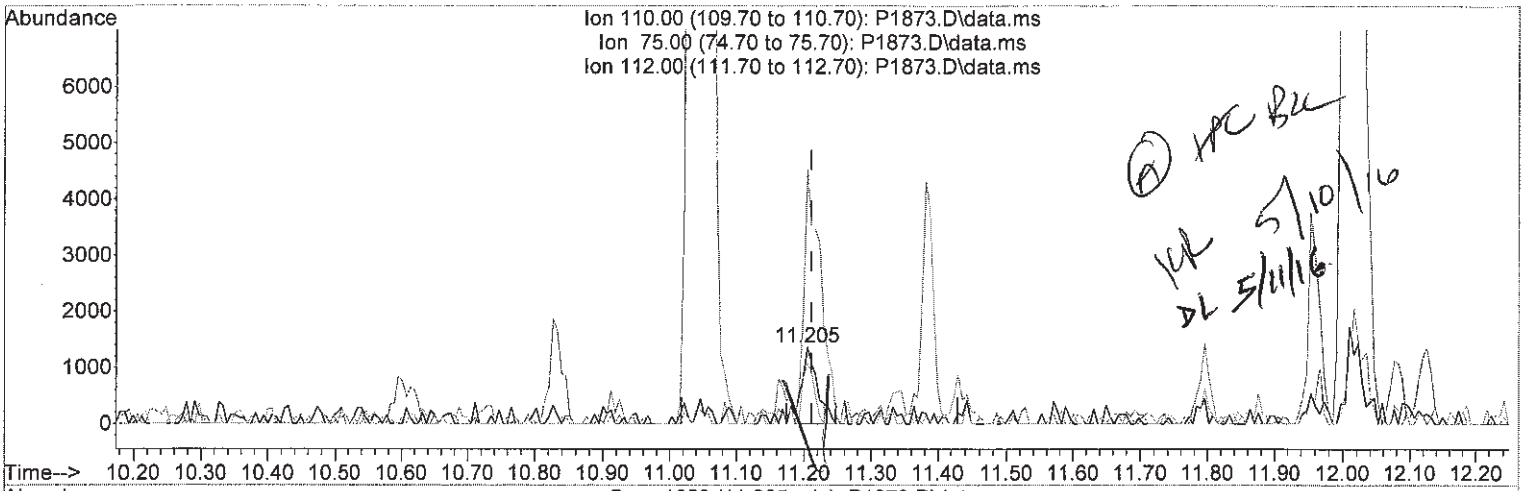
response 2308

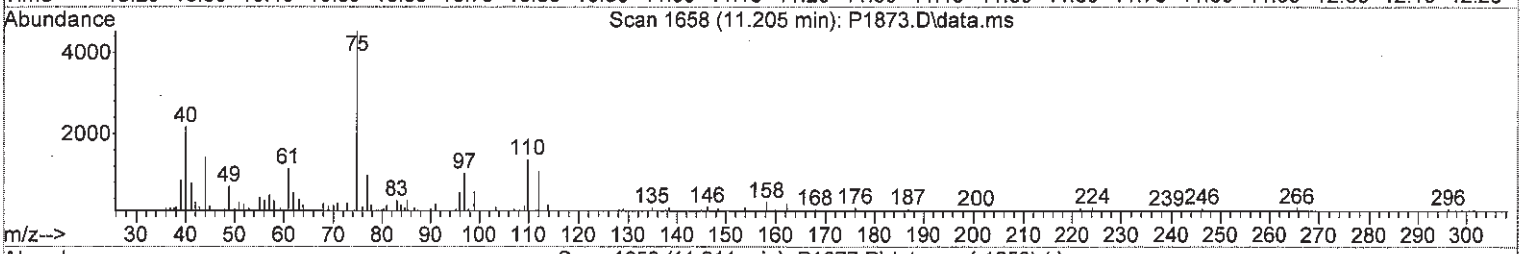
Ion	Exp%	Act%
110.00	100	100
75.00	286.70	331.74#
112.00	68.90	78.18
0.00	0.00	0.00

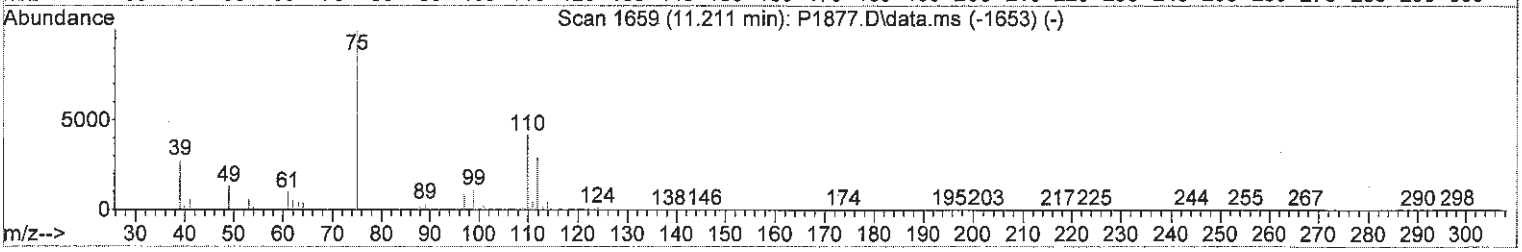
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(94) 1,2,3-Trichloropropane

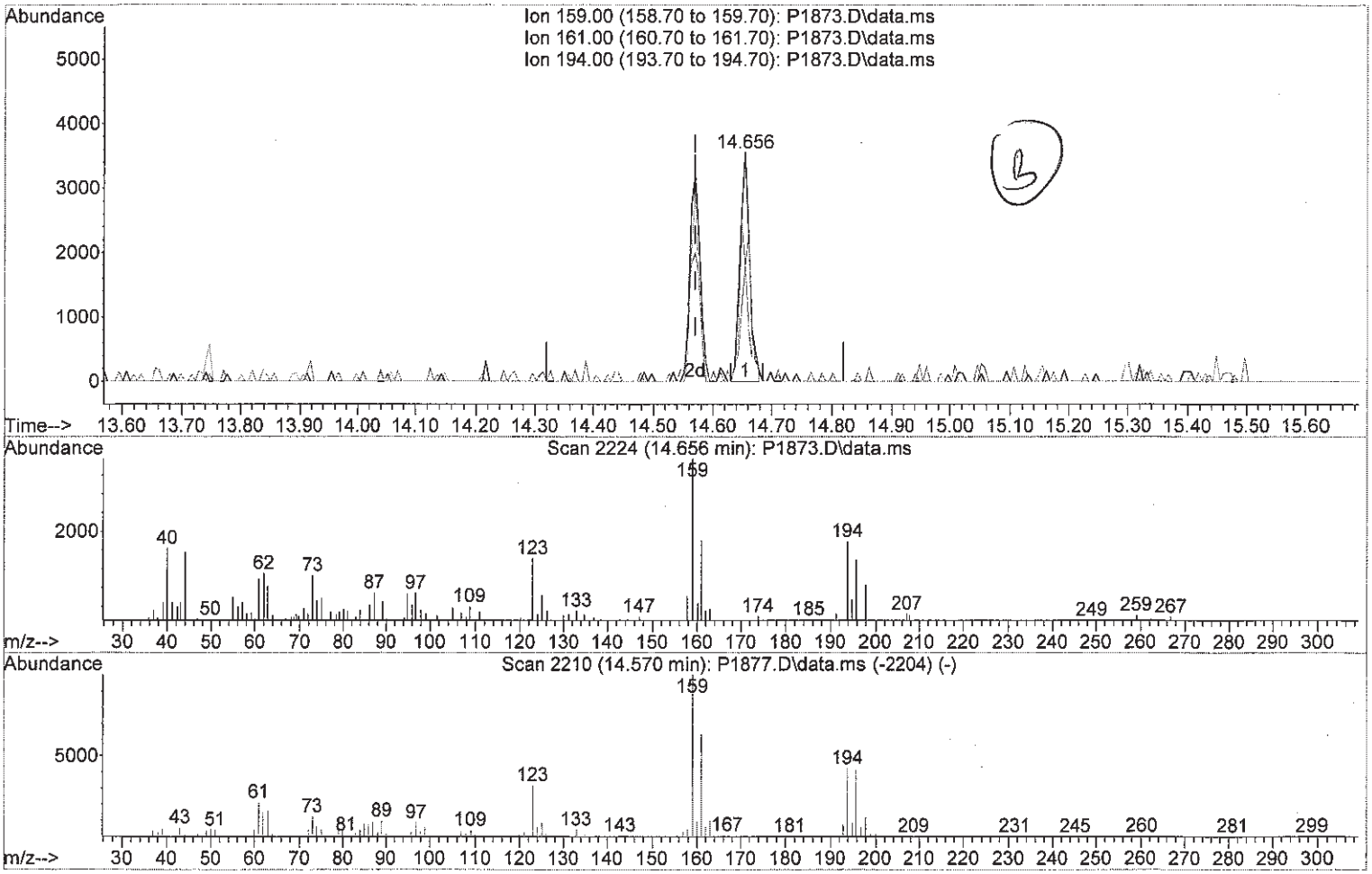
11.205min (-0.006) 1.05 ppb m

response 1987

Ion	Exp%	Act%
110.00	100	100
75.00	286.70	331.74#
112.00	68.90	78.18
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(119) 2,4,5-Trichlorotolene

14.656min (+0.085) 0.92 ppb

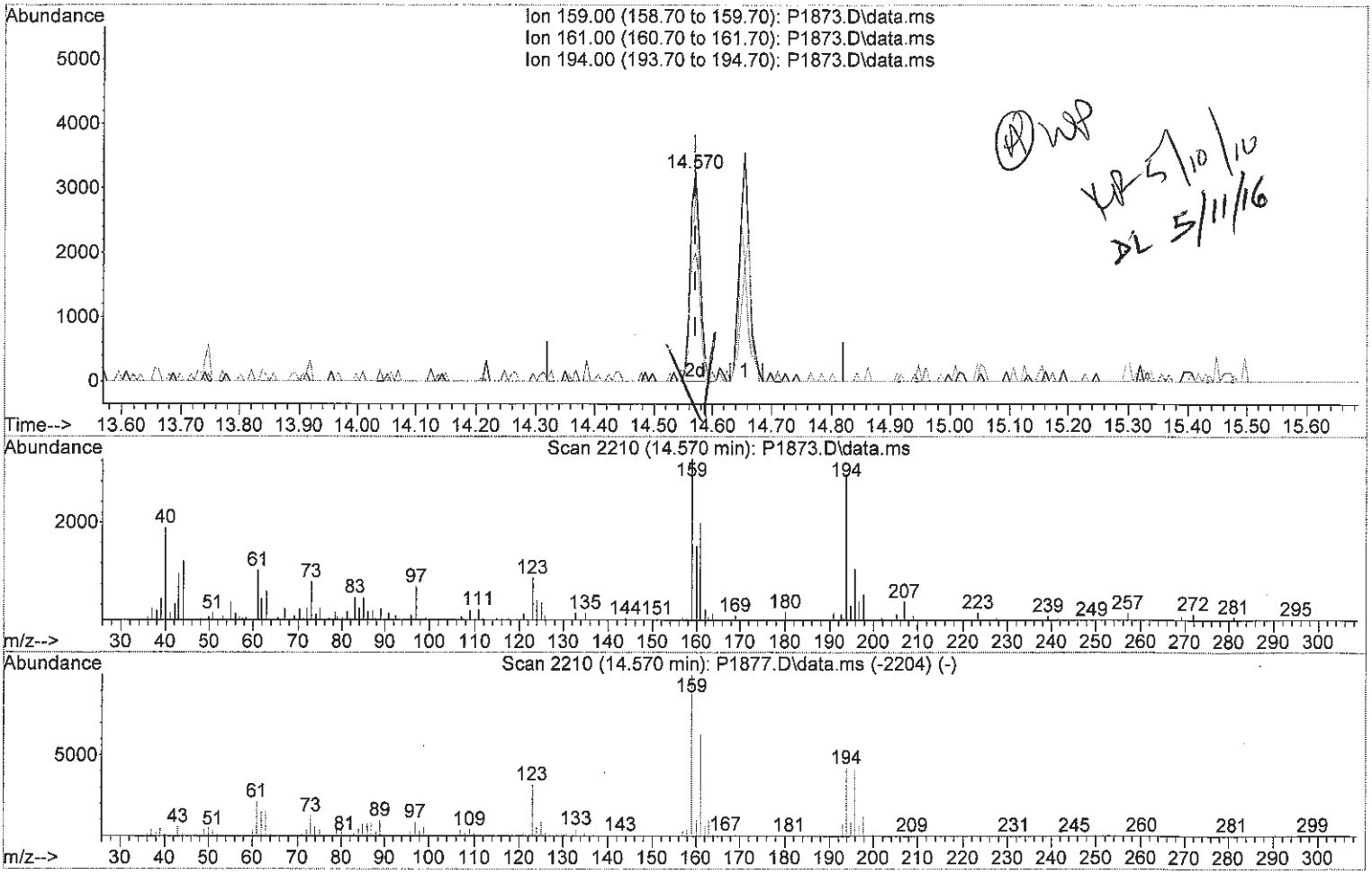
response 4128

Ion	Exp%	Act%
159.00	100	100
161.00	63.30	50.94
194.00	42.00	50.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(119) 2,4,5-Trichlorotolene

14.570min (-0.000) 0.84 ppb m

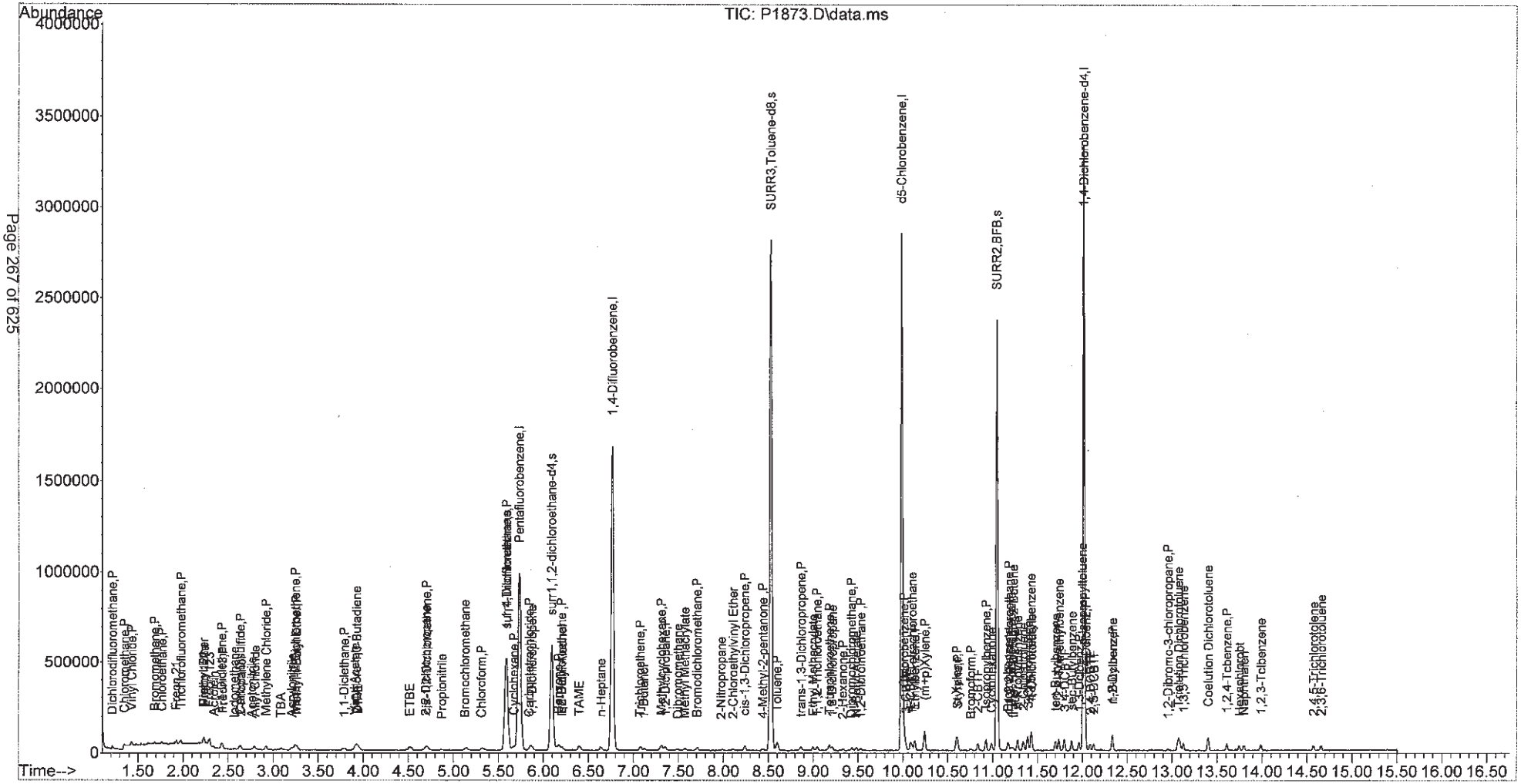
response 3781

Ion	Exp%	Act%
159.00	100	100
161.00	63.30	61.48
194.00	42.00	90.52#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	820631	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1363173	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1263494	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	637002	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.584	113	453376	60.32	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	120.64%#			
48) surr1,1,2-dichloroetha...	6.090	65	533911	60.12	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	120.24%			
65) SURR3,Toluene-d8	8.529	98	2010601	60.56	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	121.12%#			
70) SURR2,BFB	11.047	95	757589	60.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	120.36%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	18097	1.87	ppb		96
3) Chloromethane	1.341	50	21416	2.04	ppb		95
4) Vinyl Chloride	1.426	62	21103	1.80	ppb		80
5) Bromomethane	1.683	94	8624m	1.81	ppb		
6) Chloroethane	1.762	64	12300	1.95	ppb		98
7) Freon 21	1.920	67	26694	1.97	ppb		82
8) Trichlorofluoromethane	1.975	101	20953	2.07	ppb		99
9) Diethyl Ether	2.231	59	13233	2.20	ppb		88
10) Freon 123a	2.231	67	18346	2.05	ppb		82
11) Freon 123	2.286	83	19850	1.92	ppb		90
12) Acrolein	2.335	56	6946	8.59	ppb		95
13) 1,1-Diclethene	2.426	96	11657	1.88	ppb	#	87
14) Freon 113	2.432	101	11269	1.86	ppb		97
15) Acetone	2.481	43	4396	2.74	ppb		71
16) 2-Propanol	2.646	45	11069	35.56	ppb		79
17) Iodomethane	2.560	142	5567	0.97	ppb		93
18) Carbon Disulfide	2.627	76	40701	1.97	ppb		96
19) Acetonitrile	2.762	40	3574m	13.81	ppb		
20) Allyl Chloride	2.786	76	7064	2.02	ppb	#	82
21) Methyl Acetate	2.823	43	7709	1.99	ppb		94
22) Methylene Chloride	2.914	84	13558	1.96	ppb		82
23) TBA	3.085	59	17337	35.06	ppb		89
24) Acrylonitrile	3.201	53	17251	9.18	ppb		95
25) Methyl-t-Butyl Ether	3.255	73	36529	1.99	ppb		99
26) trans-1,2-Dichloroethene	3.243	96	14791	2.09	ppb		85
28) 1,1-Diclethane	3.786	63	24791	2.01	ppb		89
29) Vinyl Acetate	3.889	86	2667m	2.01	ppb		
30) DIPE	3.938	45	49800	1.96	ppb		91
31) 2-Chloro-1,3-Butadiene	3.920	53	28546	2.07	ppb	#	71
32) ETBE	4.523	59	43193	1.92	ppb		85
33) 2,2-Dichloropropane	4.700	77	20163m	1.91	ppb		
34) cis-1,2-Dichloroethene	4.706	96	13168	1.76	ppb		87
35) 2-Butanone	4.792	43	6560	2.71	ppb		86
36) Propionitrile	4.865	54	7781	11.09	ppb	#	43

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.139	130	8263	2.11	ppb	#	80
38) Methacrylonitrile	5.157	67	4262	2.02	ppb	#	60
39) Tetrahydrofuran	5.231	42	3303m	2.15	ppb		
40) Chloroform	5.322	83	22637	1.89	ppb		88
41) 1,1,1-Trichloroethane	5.590	97	20613	2.02	ppb		98
42) TAME	6.395	73	36405	1.86	ppb		97
44) Cyclohexane	5.670	41	16606	2.19	ppb		90
46) Carbontetrachloride	5.852	121	5573	2.14	ppb		84
47) 1,1-Dichloropropene	5.865	75	18290	1.96	ppb		96
49) Benzene	6.169	78	56088	2.04	ppb		98
50) 1,2-Dichloroethane	6.212	62	16061	1.96	ppb		88
51) Iso-Butyl Alcohol	6.194	43	10233	40.00	ppb		82
52) n-Heptane	6.633	43	16471	1.97	ppb		95
53) 1-Butanol	7.114	56	13528	91.04	ppb		97
54) Trichloroethene	7.084	130	12495	1.86	ppb		91
55) Methylcyclohexane	7.309	55	16581	1.86	ppb		90
56) 1,2-Diclpropane	7.346	63	14370	1.94	ppb		92
57) Dibromomethane	7.486	93	6433	1.84	ppb		82
58) 1,4-Dioxane	7.553	88	1356m	30.45	ppb		
59) Methyl Methacrylate	7.578	69	8527	1.97	ppb		88
60) Bromodichloromethane	7.706	83	17279	1.91	ppb		98
61) 2-Nitropropane	7.980	41	6020	4.10	ppb		95
62) 2-Chloroethylvinyl Ether	8.102	63	6571	1.66	ppb		95
63) cis-1,3-Dichloropropene	8.236	75	23551	2.04	ppb		97
64) 4-Methyl-2-pentanone	8.443	43	9693	1.85	ppb		86
66) Toluene	8.596	91	61219	2.11	ppb		97
67) trans-1,3-Dichloropropene	8.864	75	19844	2.07	ppb		94
68) Ethyl Methacrylate	8.998	69	16392	1.88	ppb		97
69) 1,1,2-Trichloroethane	9.047	97	9684	1.81	ppb		94
72) Tetrachloroethene	9.181	164	9113	1.87	ppb		98
73) 2-Hexanone	9.327	43	6894	1.88	ppb		98
74) 1,3-Dichloropropane	9.205	76	19176	2.03	ppb		99
75) Dibromochloromethane	9.431	129	11927	1.90	ppb		88
76) N-Butyl Acetate	9.480	43	18267	1.91	ppb		92
77) 1,2-Dibromoethane	9.535	107	9646	1.88	ppb		94
78) Chlorobenzene	10.010	112	35826	1.93	ppb		94
79) 3-CBTF	10.028	180	17979m	1.96	ppb		
80) 4-CBTF	10.077	180	16540	2.04	ppb		92
81) 1,1,1,2-Tetrachloroethane	10.096	131	12495	1.93	ppb		86
82) Ethylbenzene	10.126	106	19293	1.87	ppb		99
83) (m+p)Xylene	10.242	106	48816	4.01	ppb		96
84) o-Xylene	10.595	106	24780	2.05	ppb		98
85) Styrene	10.608	104	40526	2.00	ppb		96
87) Bromoform	10.760	173	5433	1.79	ppb		92
88) 2-CBTF	10.833	180	18135	2.16	ppb		88
89) Isopropylbenzene	10.925	105	56342	2.02	ppb		93
90) Cyclohexanone	10.986	55	23449	42.30	ppb		99
91) trans-1,4-Dichloro-2-B...	11.229	53	4215	1.94	ppb	#	68
92) 1,1,2,2-Tetrachloroethane	11.181	83	13585	2.08	ppb		92
93) Bromobenzene	11.168	156	12869	1.82	ppb	#	71
94) 1,2,3-Trichloropropane	11.211	110	3826	1.99	ppb	#	65

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

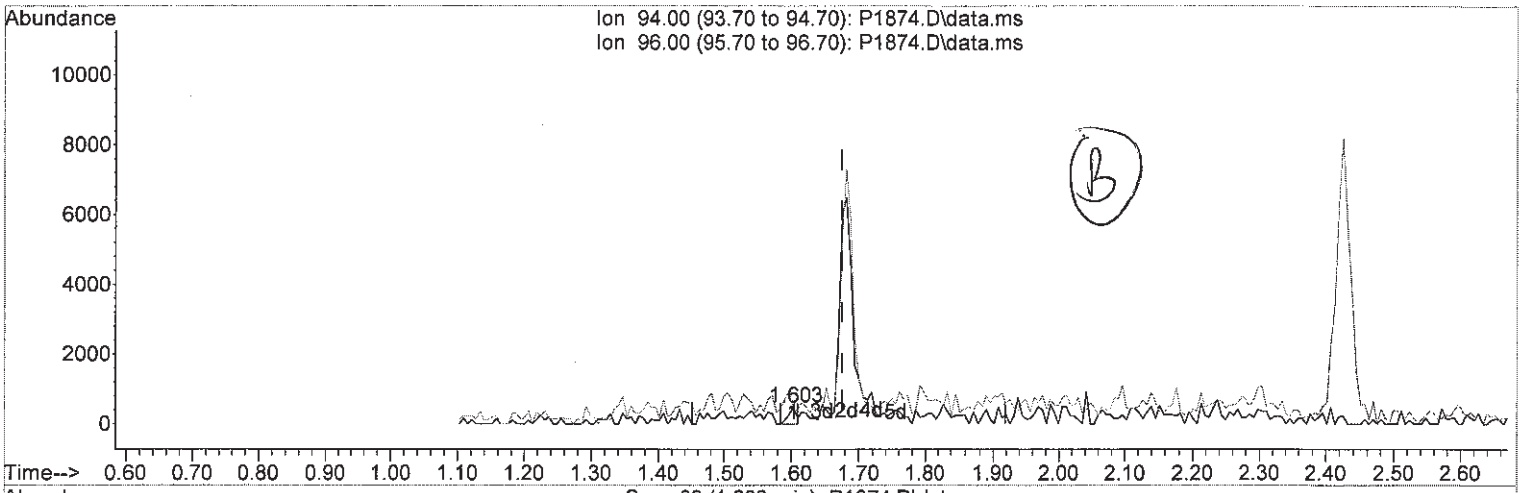
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	68116	2.11	ppb		95
96)	2-Chlorotoluene	11.339	91	41000	1.96	ppb		94
97)	3-Chlorotoluene	11.394	91	42870	2.01	ppb		98
98)	4-Chlorotoluene	11.431	91	49553	2.04	ppb		91
99)	1,3,5-Trimethylbenzene	11.425	105	49697	2.06	ppb		95
100)	tert-Butylbenzene	11.699	119	37448	1.96	ppb		85
101)	1,2,4-Trimethylbenzene	11.735	105	52251	2.11	ppb		98
102)	3,4-DCBTF	11.796	214	12770	2.14	ppb	#	85
103)	sec-Butylbenzene	11.882	105	57987	2.12	ppb		96
104)	p-Isopropyltoluene	12.004	119	49377	2.09	ppb		94
105)	1,3-Dclbenz	11.961	146	25863	1.92	ppb		91
106)	1,4-Dclbenz	12.034	146	27195	1.95	ppb		92
107)	2,4-DCBTF	12.089	214	10719	1.89	ppb	#	93
108)	2,5-DCBTF	12.126	214	11640	1.94	ppb		93
109)	n-Butylbenzene	12.333	91	41361	1.94	ppb		91
110)	1,2-Dclbenz	12.333	146	24872	1.96	ppb		92
111)	1,2-Dibromo-3-chloropr...	12.955	157	2898	2.42	ppb		90
112)	Trielution Dichlorotol...	13.071	125	61246	5.79	ppb		95
113)	1,3,5 Trichlorobenzene	13.125	180	17327	2.04	ppb		86
114)	Coelution Dichlorotoluene	13.400	125	44576	3.98	ppb		95
115)	1,2,4-Tcbenzene	13.607	180	14803	1.96	ppb		90
116)	Hexachlorobt	13.741	225	6078	1.96	ppb		97
117)	Naphthalen	13.796	128	30377	1.88	ppb		98
118)	1,2,3-Tclbenzene	13.985	180	12362	1.93	ppb		91
119)	2,4,5-Trichlorotolene	14.570	159	9212	2.02	ppb		94
120)	2,3,6-Trichlorotoluene	14.656	159	8441	1.99	ppb		95

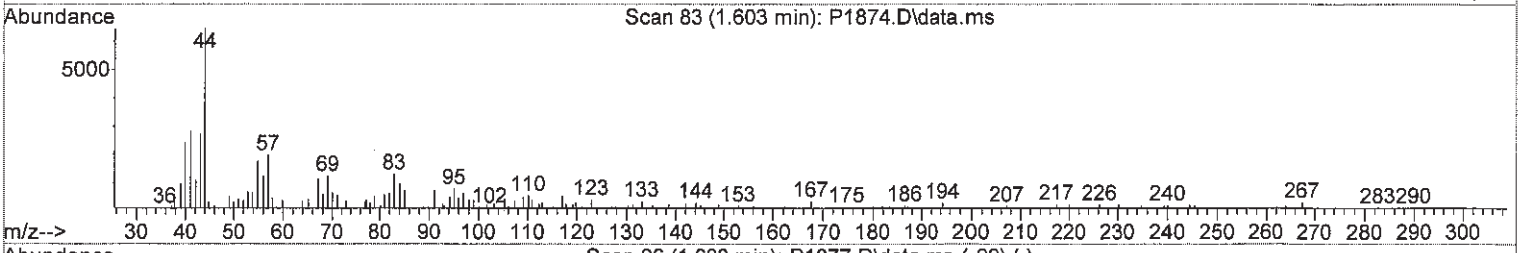
(#) = qualifier out of range (m) = manual integration (+) = signals summed

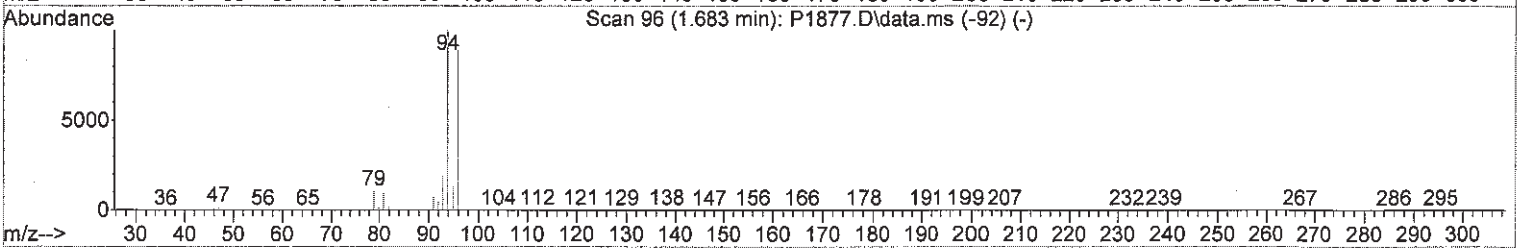
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(5) Bromomethane (P)

1.603min (-0.073) 0.08 ppb

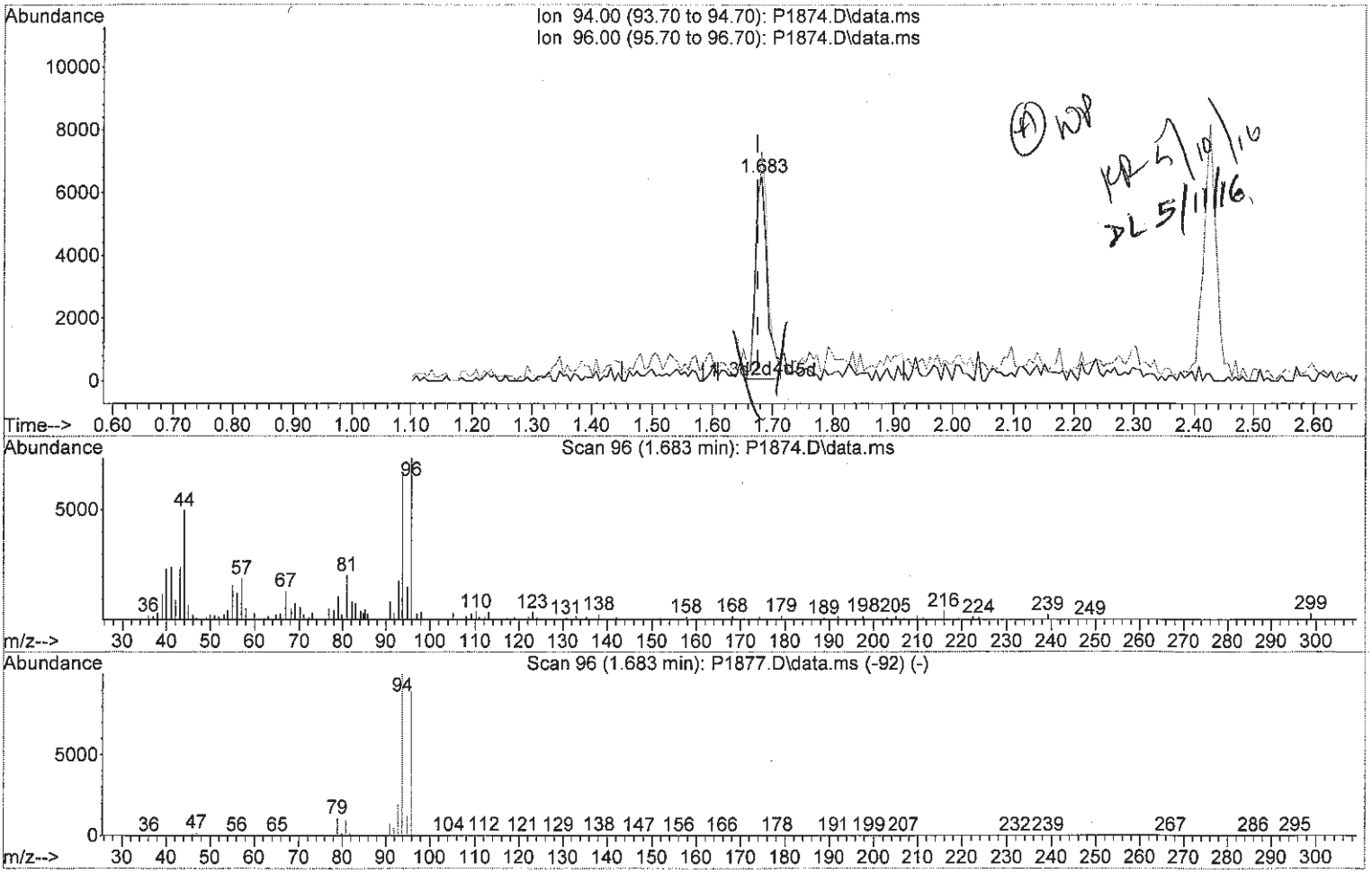
response 378

Ion	Exp%	Act%
94.00	100	100
96.00	89.20	92.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(5) Bromomethane (P)

1.683min (+0.006) 1.81 ppb m

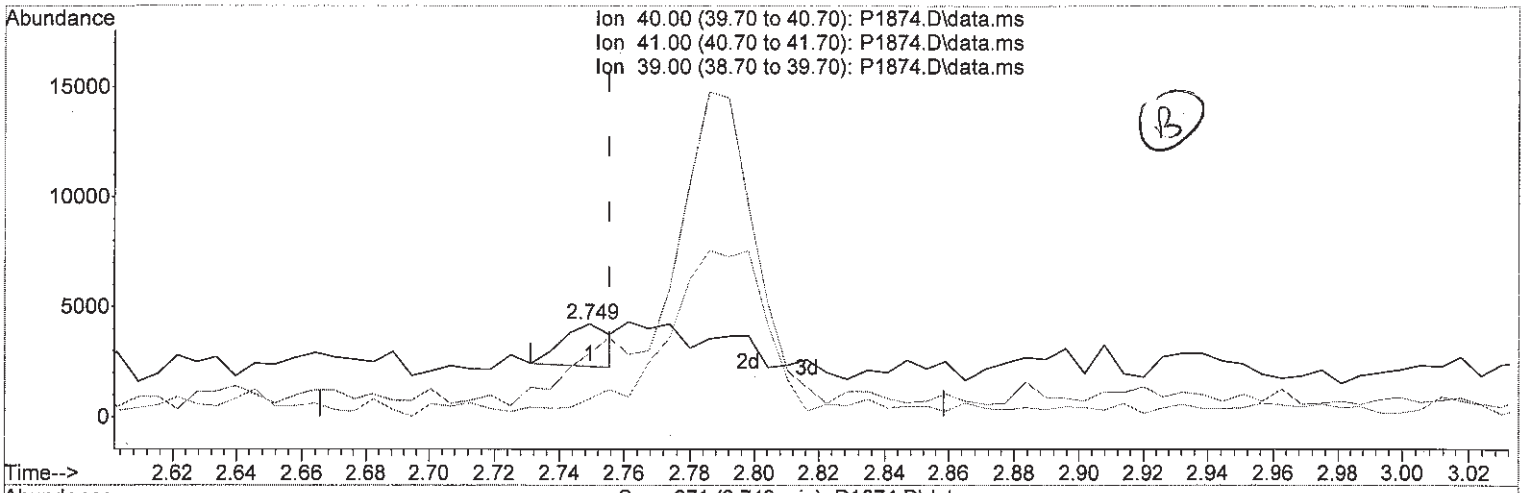
response 8624

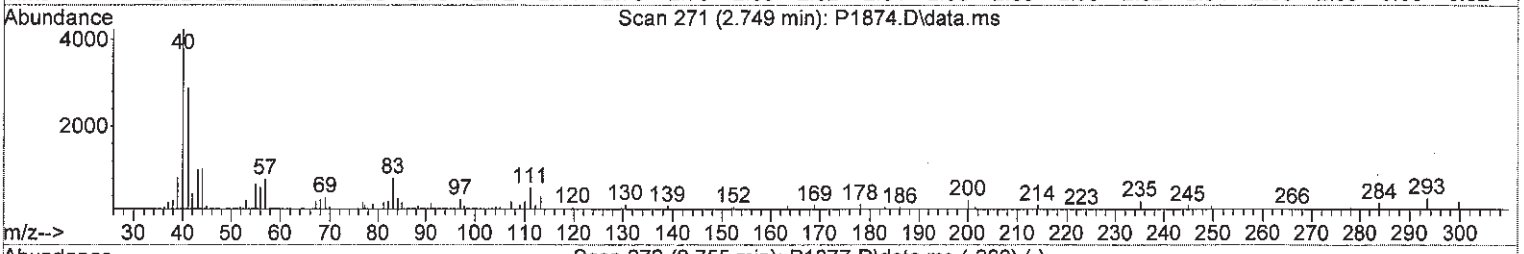
Ion	Exp%	Act%
94.00	100	100
96.00	89.20	112.12#
0.00	0.00	0.00
0.00	0.00	0.00

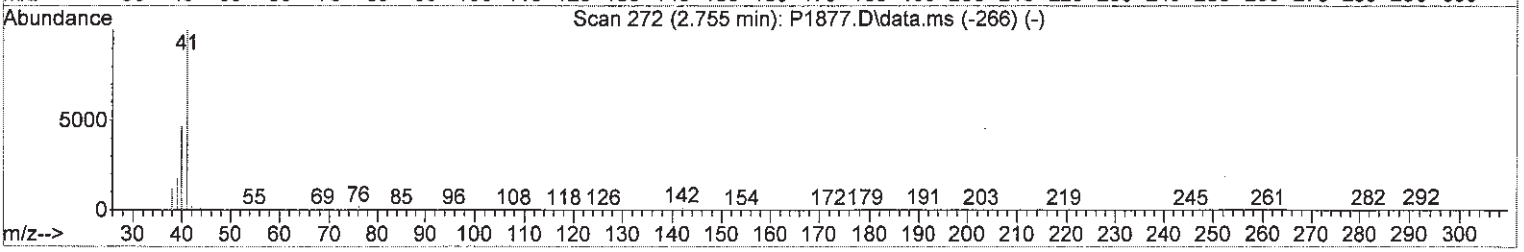
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(19) Acetonitrile

2.749min (-0.006) 7.70 ppb

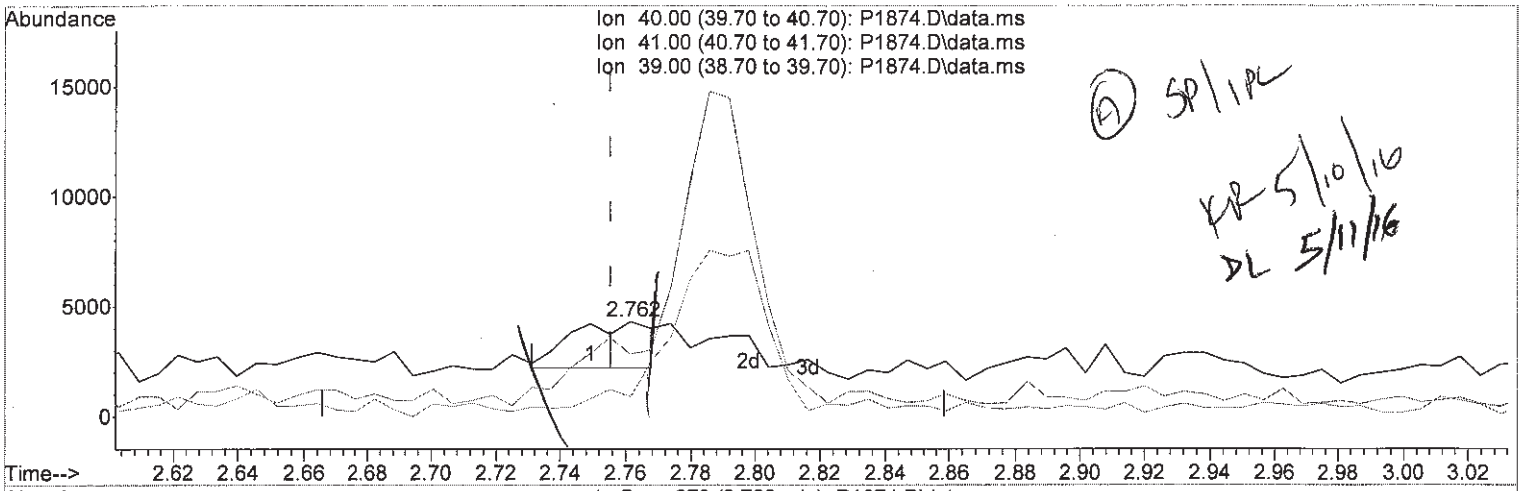
response 1993

Ion	Exp%	Act%
40.00	100	100
41.00	203.80	68.40#
39.00	39.10	19.40
0.00	0.00	0.00

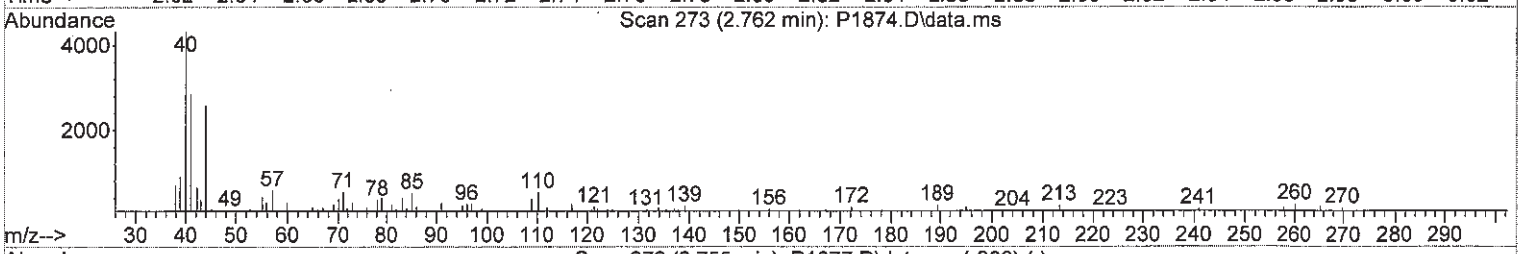
Quantitation Report (Qedit)

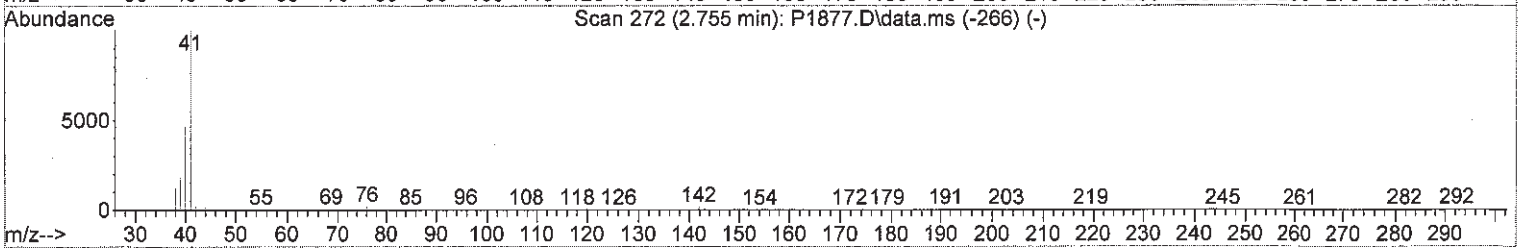
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



SP/1PL
KR 5/10/16
DL 5/11/16





TIC: P1874.D\data.ms

(19) Acetonitrile

2.762min (+0.006) 13.81 ppb m

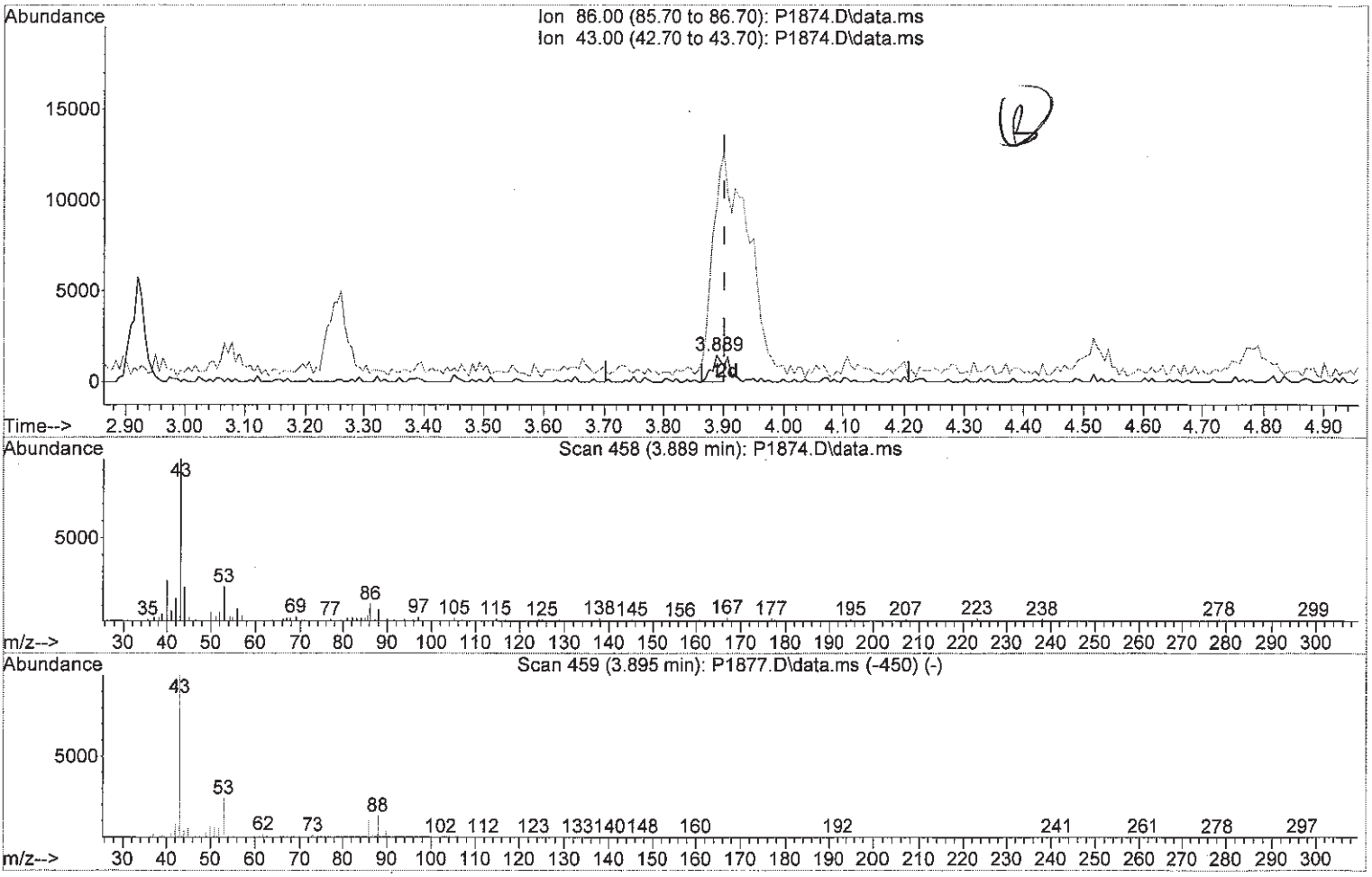
response 3574

Ion	Exp%	Act%
40.00	100	100
41.00	203.80	65.94#
39.00	39.10	20.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(29) Vinyl Acetate

3.889min (-0.012) 1.36 ppb

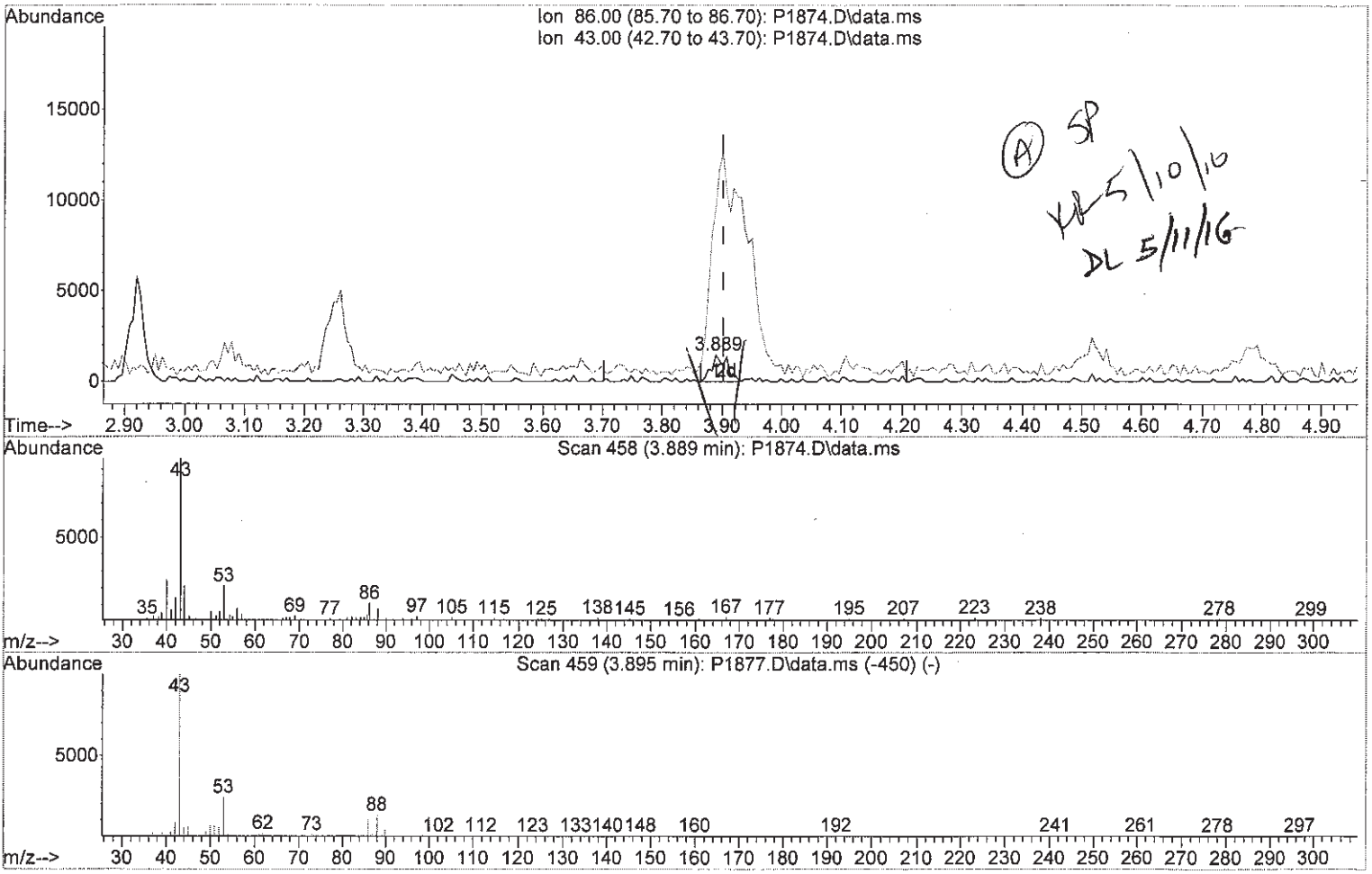
response 1806

Ion	Exp%	Act%
86.00	100	100
43.00	938.30	658.04#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(29) Vinyl Acetate

3.889min (-0.012) 2.01 ppb m

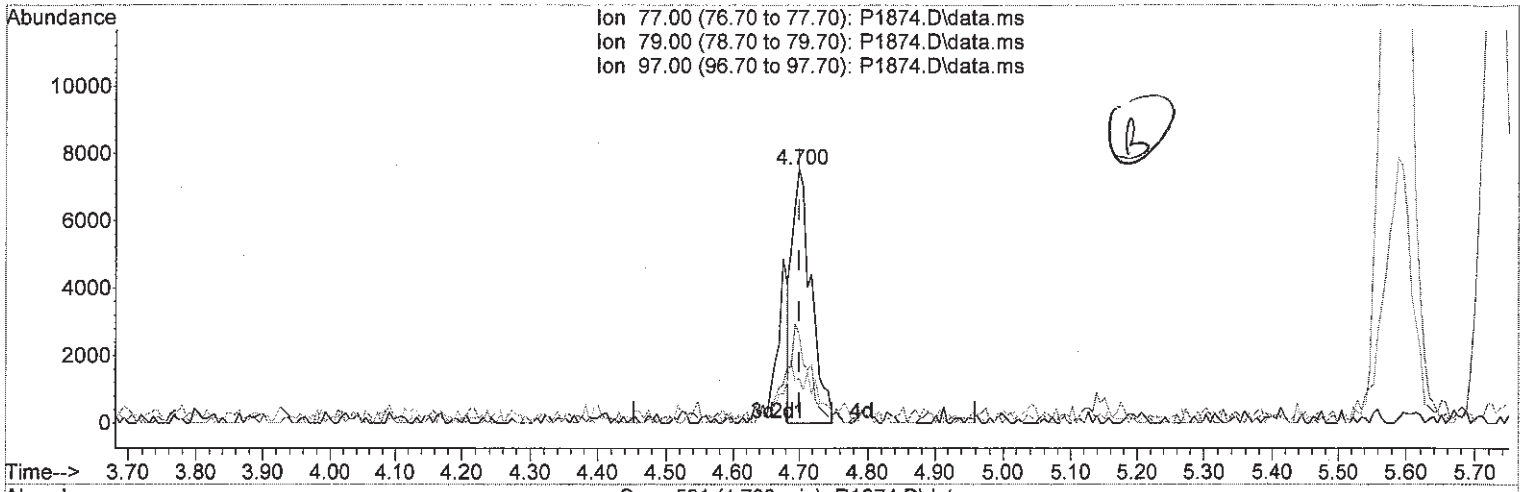
response 2667

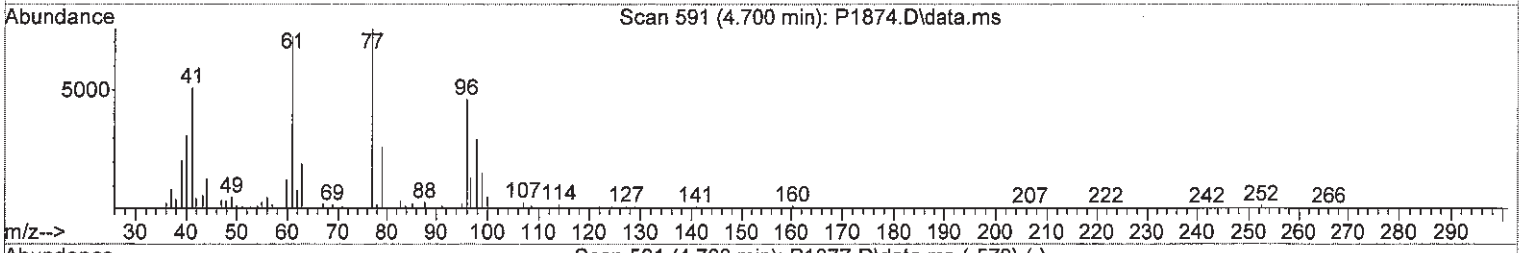
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	886.08#
0.00	0.00	0.00
0.00	0.00	0.00

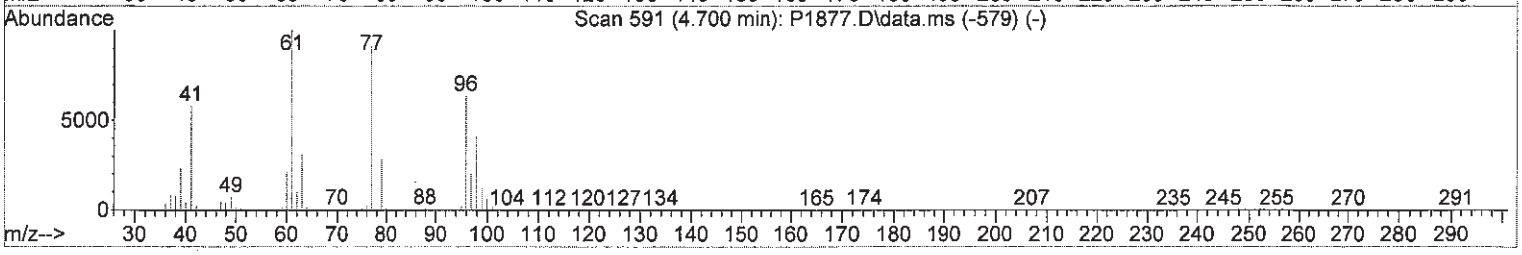
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(33) 2,2-Dichloropropane

4.700min (-0.000) 1.41 ppb

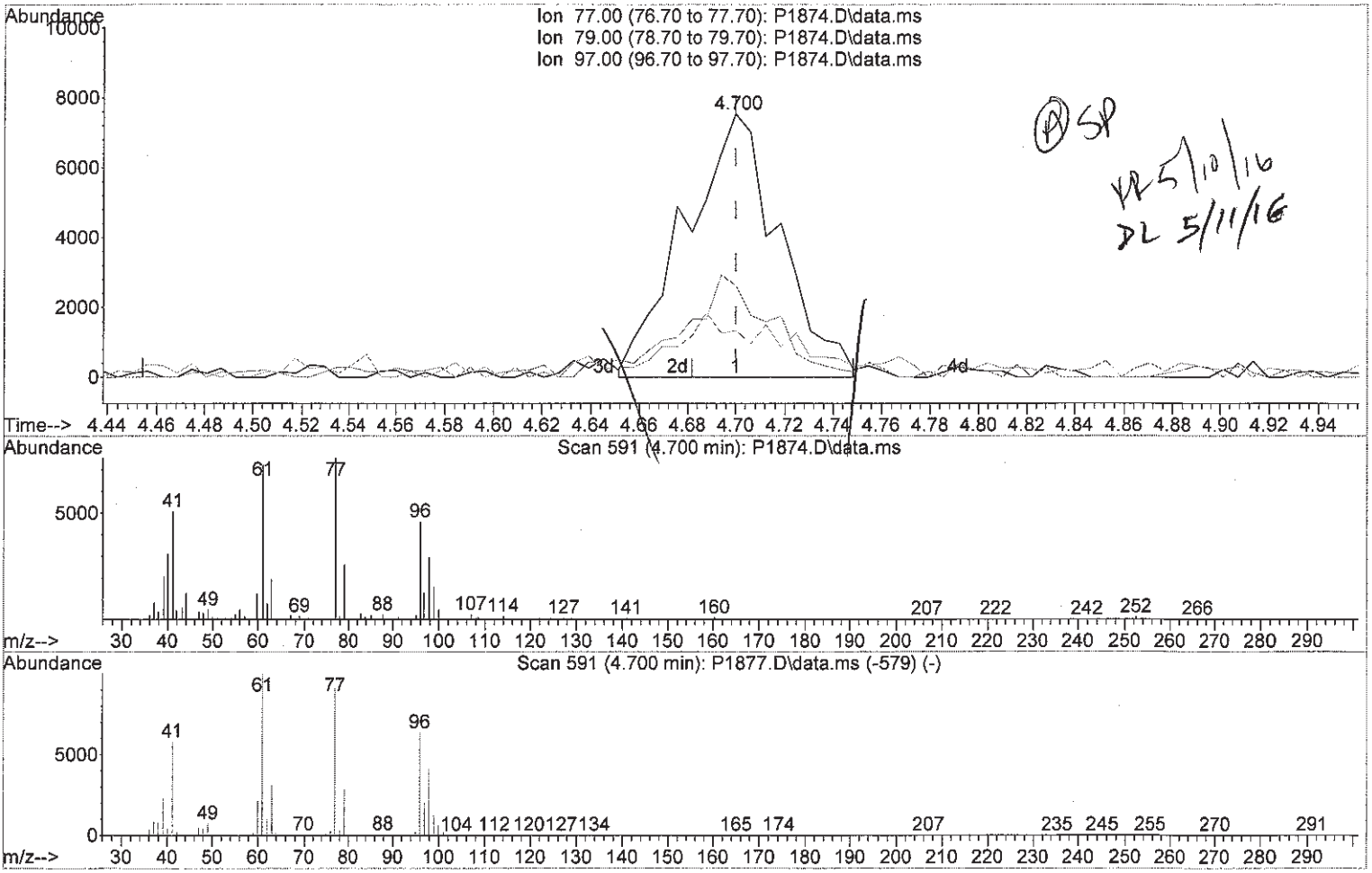
response 14959

Ion	Exp%	Act%
77.00	100	100
79.00	31.60	34.82
97.00	21.90	17.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(33) 2,2-Dichloropropane

4.700min (-0.000) 1.91 ppb m

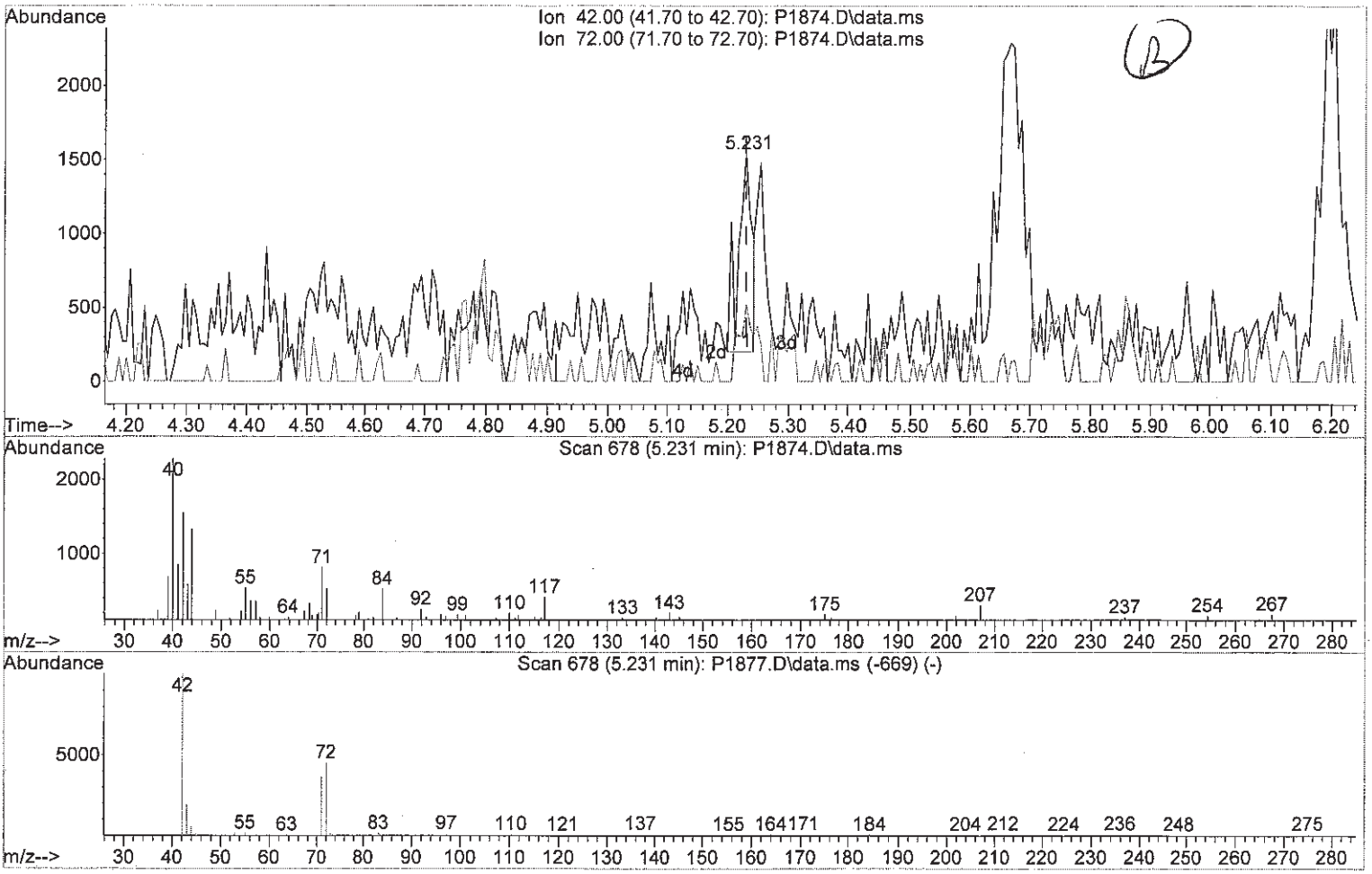
response 20163

Ion	Exp%	Act%
77.00	100	100
79.00	31.60	34.82
97.00	21.90	17.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(39) Tetrahydrofuran

5.231min (-0.000) 1.34 ppb

response 2054

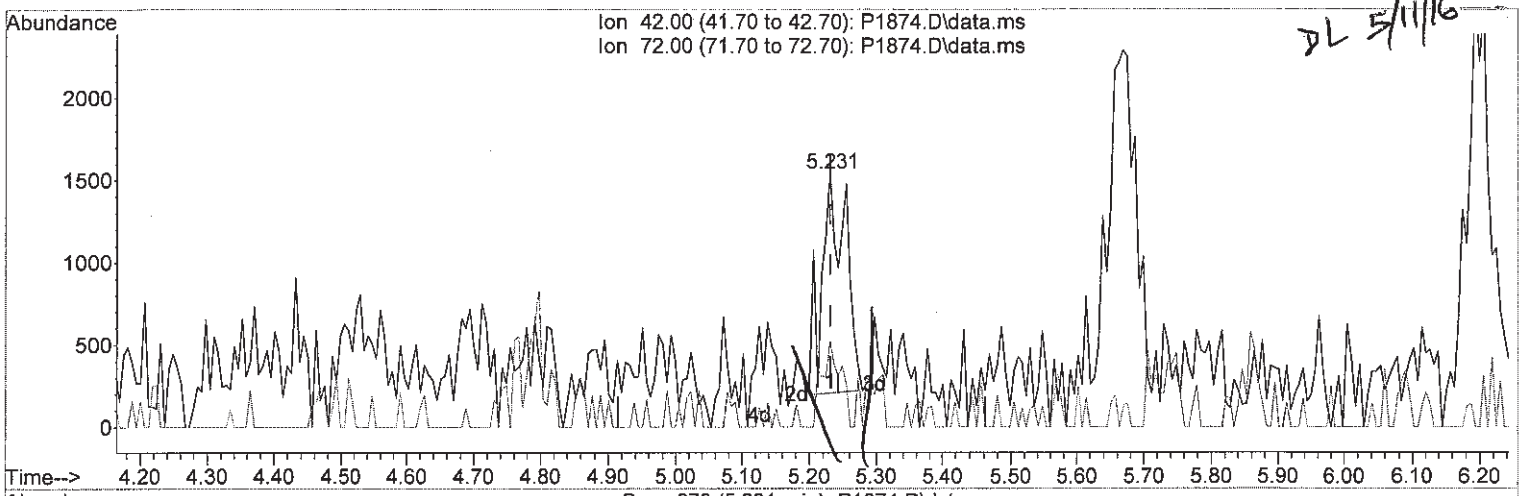
Ion	Exp%	Act%
42.00	100	100
72.00	44.00	33.90
0.00	0.00	0.00
0.00	0.00	0.00

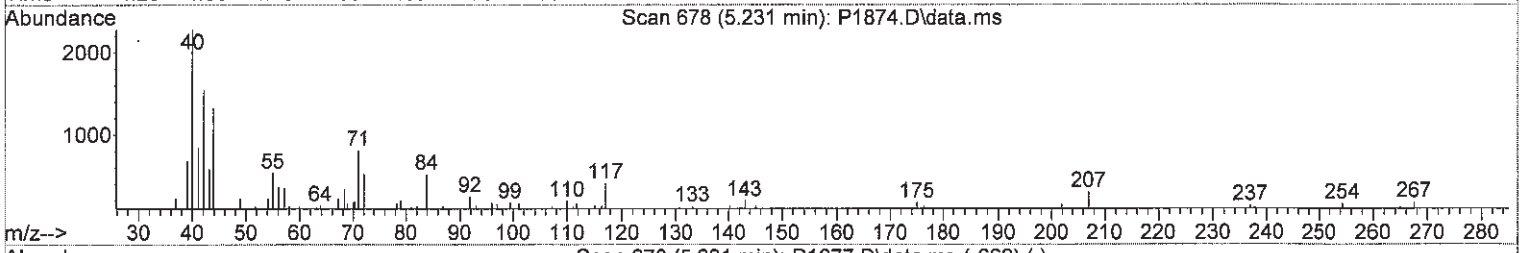
Quantitation Report (Qedit)

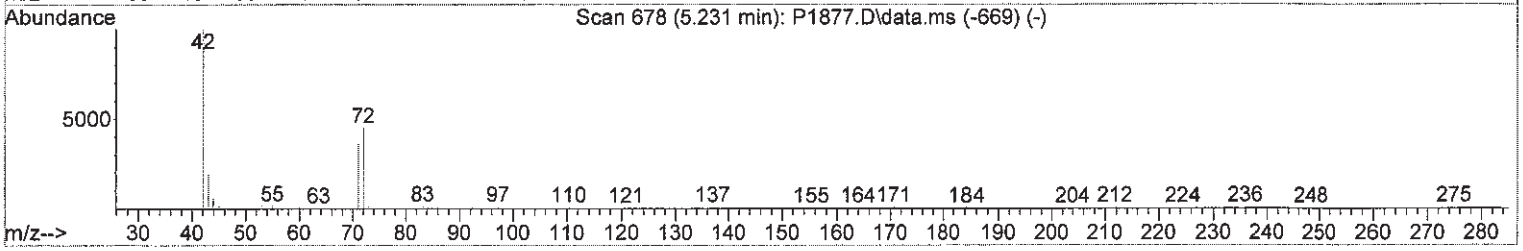
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

(1) SP 5/10/16
DL 5/11/16







TIC: P1874.D\data.ms

(39) Tetrahydrofuran

5.231min (-0.000) 2.15 ppb m

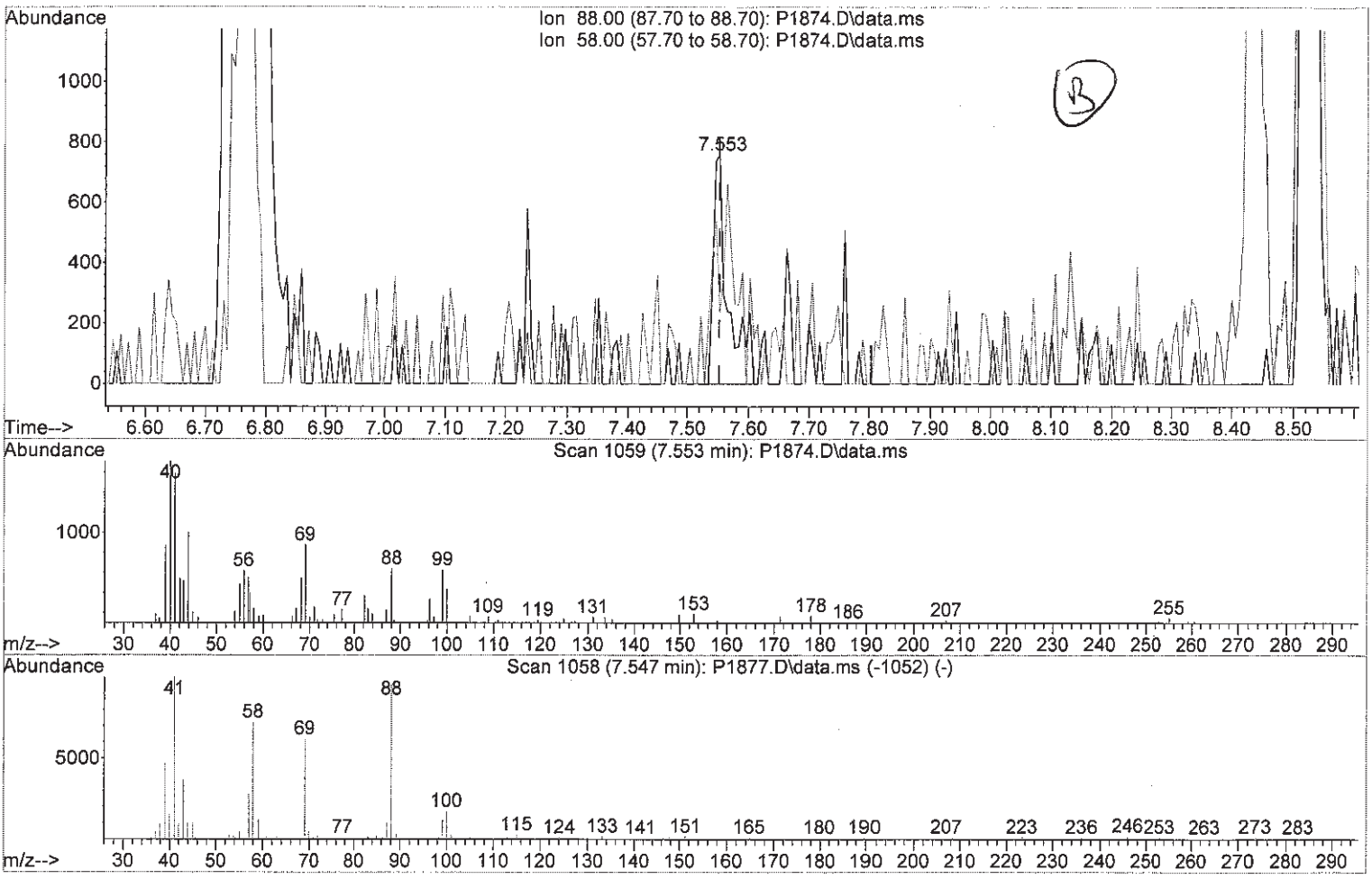
response 3303

Ion	Exp%	Act%
42.00	100	100
72.00	44.00	33.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 27.95 ppb

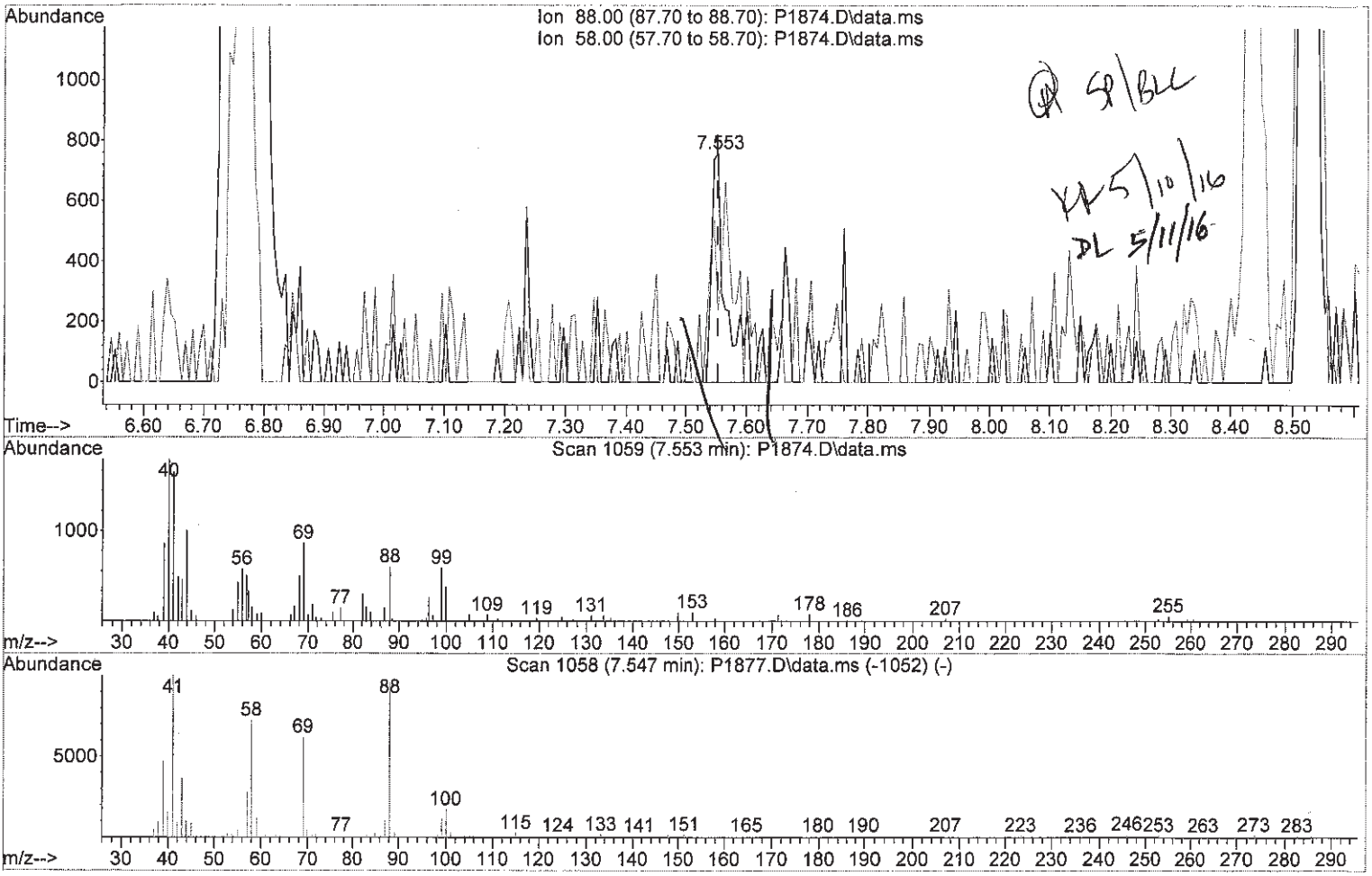
response 1245

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	31.57#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 30.45 ppb m

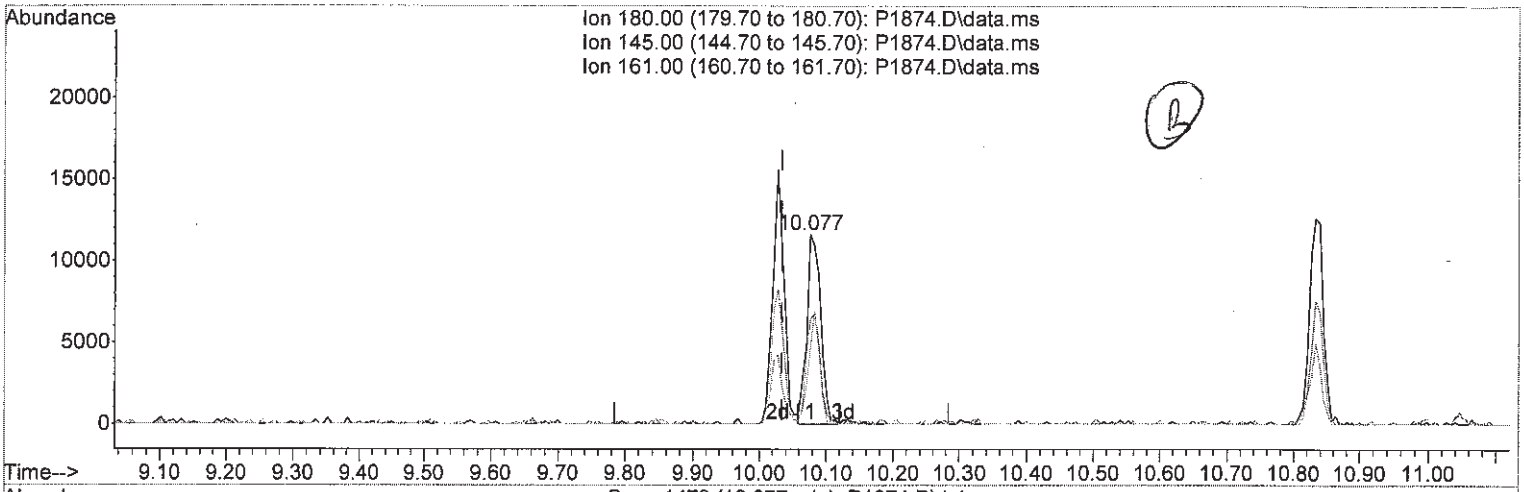
response 1356

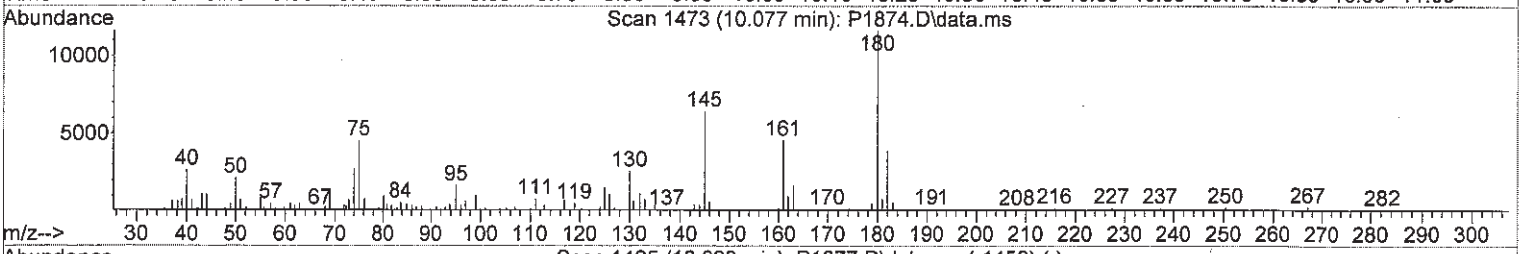
Ion	Exp%	Act%
88.00	100	100
58.00	76.70	37.52#
0.00	0.00	0.00
0.00	0.00	0.00

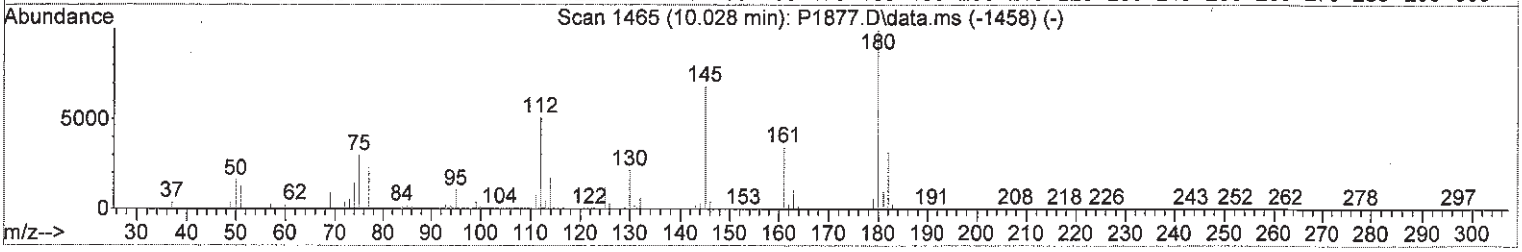
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(79) 3-CBTF

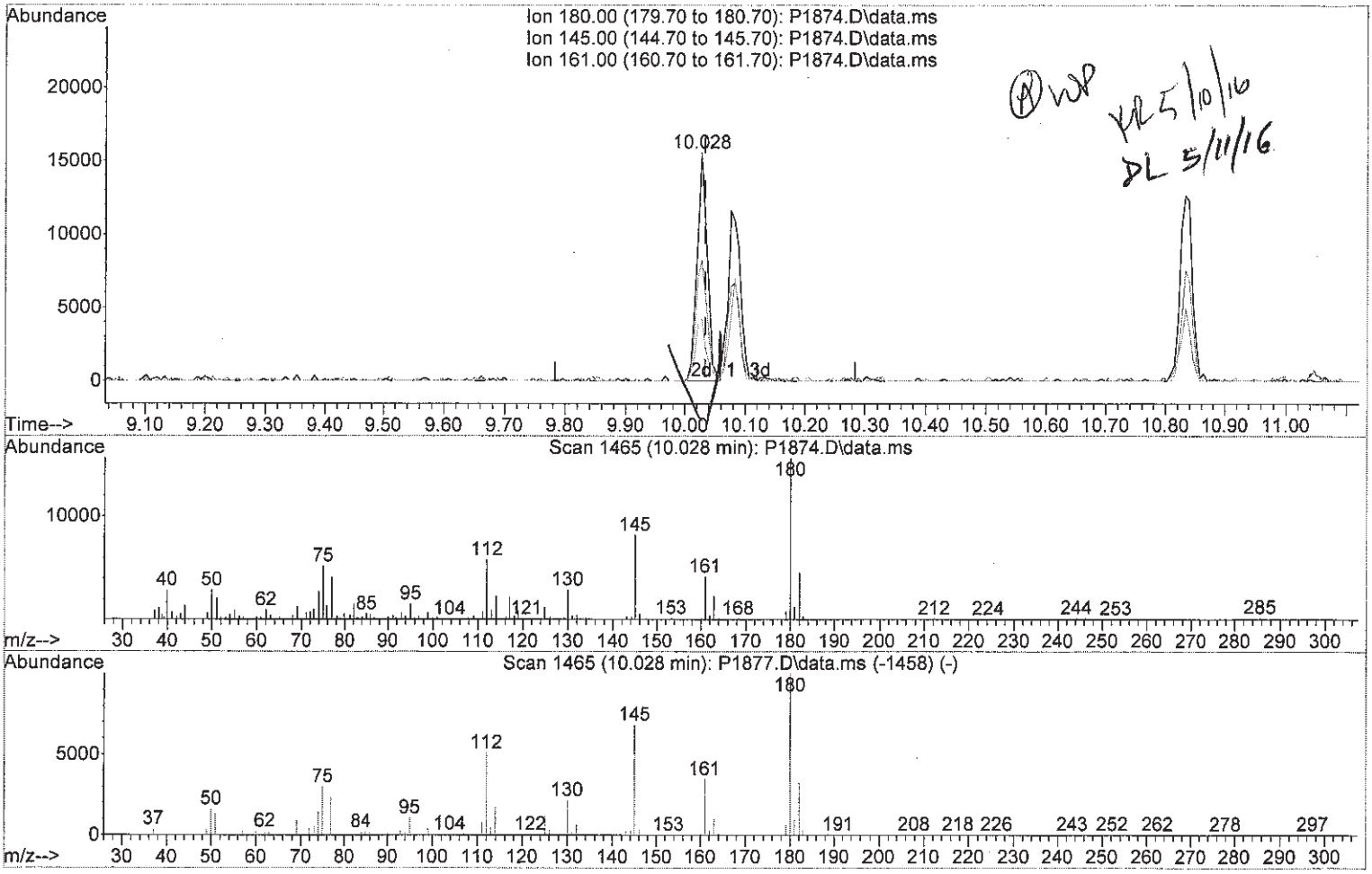
10.077min (+0.043) 1.80 ppb

response 16540

Ion	Exp%	Act%
180.00	100	100
145.00	68.30	55.29
161.00	34.50	39.27
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(79) 3-CBTF

10.028min (-0.006) 1.96 ppb m

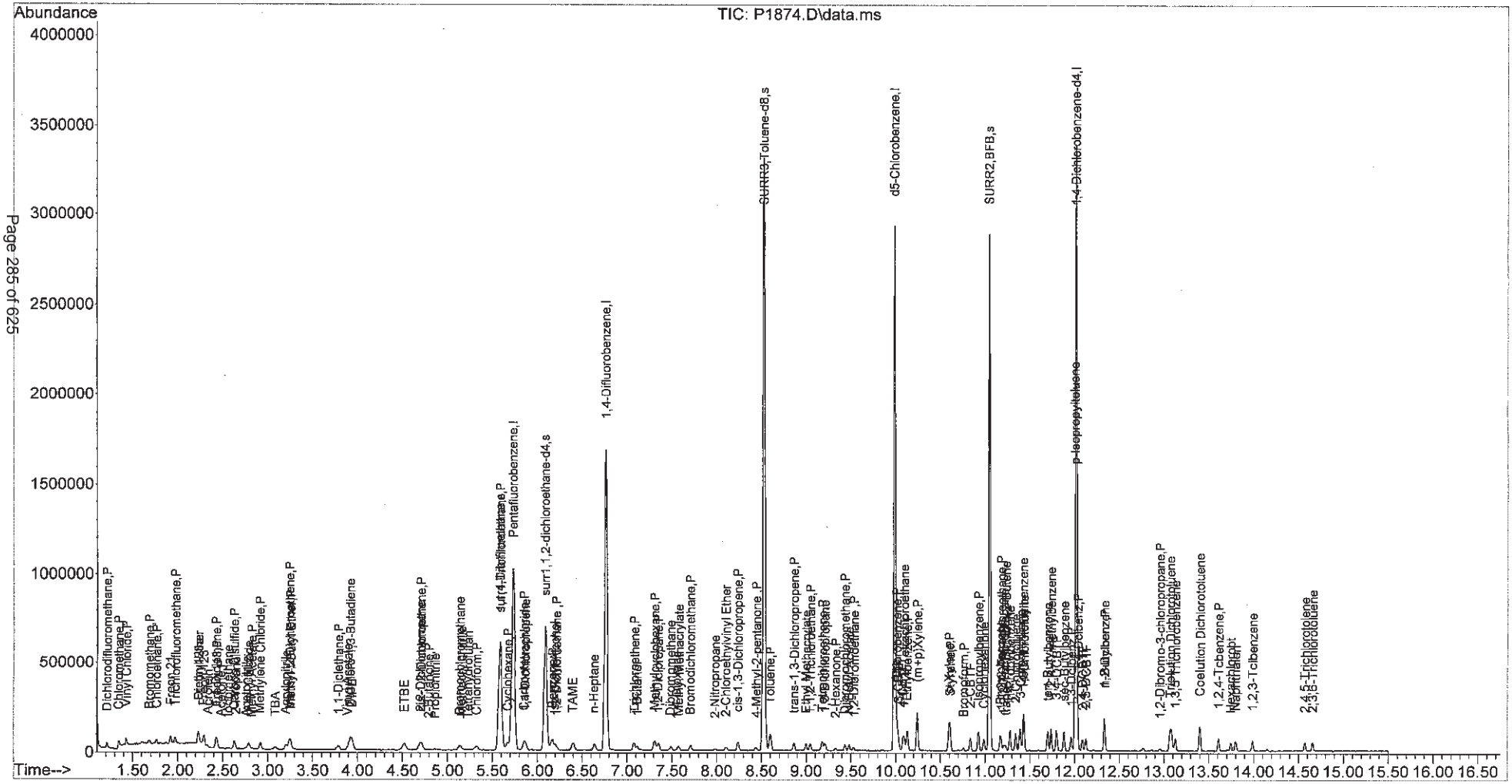
response 17979

Ion	Exp%	Act%
180.00	100	100
145.00	68.30	52.61#
161.00	34.50	26.99#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	813526	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1366279	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1261216	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	633883	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	511180	70.41	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 140.82%#				
48) surr1,1,2-dichloroetha...	6.090	65	591805	68.84	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 137.68%#				
65) SURR3,Toluene-d8	8.529	98	2238736	71.17	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 142.34%#				
70) SURR2,BFB	11.047	95	848301	69.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 139.60%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	40186	4.19	ppb		97
3) Chloromethane	1.341	50	50679	4.87	ppb		98
4) Vinyl Chloride	1.427	62	56929	4.88	ppb		99
5) Bromomethane	1.677	94	21376	4.51	ppb		94
6) Chloroethane	1.762	64	29829	4.78	ppb		89
7) Freon 21	1.920	67	66130	4.92	ppb		96
8) Trichlorofluoromethane	1.975	101	46859	4.68	ppb		95
9) Diethyl Ether	2.225	59	28733	4.82	ppb		94
10) Freon 123a	2.231	67	41881	4.73	ppb		91
11) Freon 123	2.286	83	50381	4.93	ppb		97
12) Acrolein	2.329	56	17238	21.51	ppb		100
13) 1,1-Diclethene	2.420	96	32029	5.20	ppb		90
14) Freon 113	2.433	101	30020	5.01	ppb		83
15) Acetone	2.487	43	8935	5.62	ppb		92
16) 2-Propanol	2.646	45	29456	95.46	ppb		93
17) Iodomethane	2.561	142	17242	3.03	ppb		89
18) Carbon Disulfide	2.628	76	102505	5.00	ppb		98
19) Acetonitrile	2.756	40	6903	26.91	ppb	#	48
20) Allyl Chloride	2.792	76	17831	5.14	ppb		95
21) Methyl Acetate	2.823	43	17909	4.66	ppb		83
22) Methylene Chloride	2.920	84	33418	4.87	ppb		93
23) TBA	3.085	59	46558	94.97	ppb		87
24) Acrylonitrile	3.201	53	44935	24.12	ppb		99
25) Methyl-t-Butyl Ether	3.262	73	93116	5.13	ppb		98
26) trans-1,2-Dichloroethene	3.237	96	33876	4.82	ppb	#	85
28) 1,1-Diclethane	3.786	63	59358	4.85	ppb		98
29) Vinyl Acetate	3.902	86	6401m	4.87	ppb		
30) DIPE	3.944	45	124065	4.93	ppb		95
31) 2-Chloro-1,3-Butadiene	3.914	53	67947	4.98	ppb		81
32) ETBE	4.524	59	111716	5.01	ppb		96
33) 2,2-Dichloropropane	4.700	77	51471	4.91	ppb		93
34) cis-1,2-Dichloroethene	4.706	96	34897	4.70	ppb		94
35) 2-Butanone	4.767	43	12583	5.25	ppb		88
36) Propionitrile	4.865	54	16459	23.67	ppb		83

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.127	130	21096	5.45	ppb		91
38) Methacrylonitrile	5.152	67	11056	5.29	ppb		86
39) Tetrahydrofuran	5.231	42	7665	5.04	ppb	#	61
40) Chloroform	5.328	83	57115	4.81	ppb		94
41) 1,1,1-Trichloroethane	5.584	97	51787	5.12	ppb		90
42) TAME	6.395	73	93344	4.80	ppb		96
44) Cyclohexane	5.670	41	36482	4.79	ppb		92
46) Carbontetrachloride	5.853	121	13016	4.98	ppb		91
47) 1,1-Dichloropropene	5.865	75	45488	4.86	ppb		93
49) Benzene	6.170	78	141721	5.15	ppb		97
50) 1,2-Dichloroethane	6.200	62	41162	5.01	ppb		93
51) Iso-Butyl Alcohol	6.200	43	23843	92.98	ppb		99
52) n-Heptane	6.639	43	41240	4.92	ppb		94
53) 1-Butanol	7.115	56	32441	217.83	ppb		97
54) Trichloroethene	7.078	130	33542	4.98	ppb		94
55) Methylcyclohexane	7.310	55	45479	5.08	ppb		92
56) 1,2-Diclpropane	7.352	63	36587	4.92	ppb		96
57) Dibromomethane	7.493	93	17350	4.95	ppb		97
58) 1,4-Dioxane	7.560	88	4679	104.82	ppb		91
59) Methyl Methacrylate	7.572	69	21056	4.85	ppb		98
60) Bromodichloromethane	7.706	83	46831	5.16	ppb		92
61) 2-Nitropropane	7.986	41	14894	10.11	ppb		91
62) 2-Chloroethylvinyl Ether	8.108	63	18995	4.79	ppb		98
63) cis-1,3-Dichloropropene	8.236	75	56958	4.93	ppb		97
64) 4-Methyl-2-pentanone	8.437	43	24836	4.72	ppb		91
66) Toluene	8.602	91	152044	5.24	ppb		99
67) trans-1,3-Dichloropropene	8.864	75	47739	4.96	ppb		93
68) Ethyl Methacrylate	8.998	69	41923	4.80	ppb		99
69) 1,1,2-Trichloroethane	9.041	97	26157	4.87	ppb		99
72) Tetrachloroethene	9.175	164	23819	4.90	ppb		97
73) 2-Hexanone	9.328	43	16406	4.49	ppb		92
74) 1,3-Dichloropropane	9.212	76	44176	4.68	ppb		84
75) Dibromochloromethane	9.431	129	28345	4.53	ppb		85
76) N-Butyl Acetate	9.480	43	45478	4.77	ppb		95
77) 1,2-Dibromoethane	9.529	107	25793	5.04	ppb		100
78) Chlorobenzene	10.016	112	95973	5.19	ppb		95
79) 3-CBTF	10.029	180	44727	4.87	ppb		97
80) 4-CBTF	10.083	180	42392	5.23	ppb		97
81) 1,1,1,2-Tetrachloroethane	10.102	131	31977	4.94	ppb		96
82) Ethylbenzene	10.132	106	53910	5.23	ppb	#	88
83) (m+p)Xylene	10.242	106	125680	10.35	ppb		90
84) o-Xylene	10.596	106	58985	4.88	ppb		95
85) Styrene	10.608	104	105847	5.24	ppb		97
87) Bromoform	10.754	173	15645	5.18	ppb		98
88) 2-CBTF	10.833	180	41017	4.91	ppb		97
89) Isopropylbenzene	10.925	105	150526	5.42	ppb		97
90) Cyclohexanone	10.986	55	54119	98.10	ppb		89
91) trans-1,4-Dichloro-2-B...	11.224	53	10710	4.96	ppb		81
92) 1,1,2,2-Tetrachloroethane	11.181	83	31533	4.85	ppb		98
93) Bromobenzene	11.169	156	36930	5.24	ppb		96
94) 1,2,3-Trichloropropane	11.211	110	9642	5.03	ppb	#	68

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

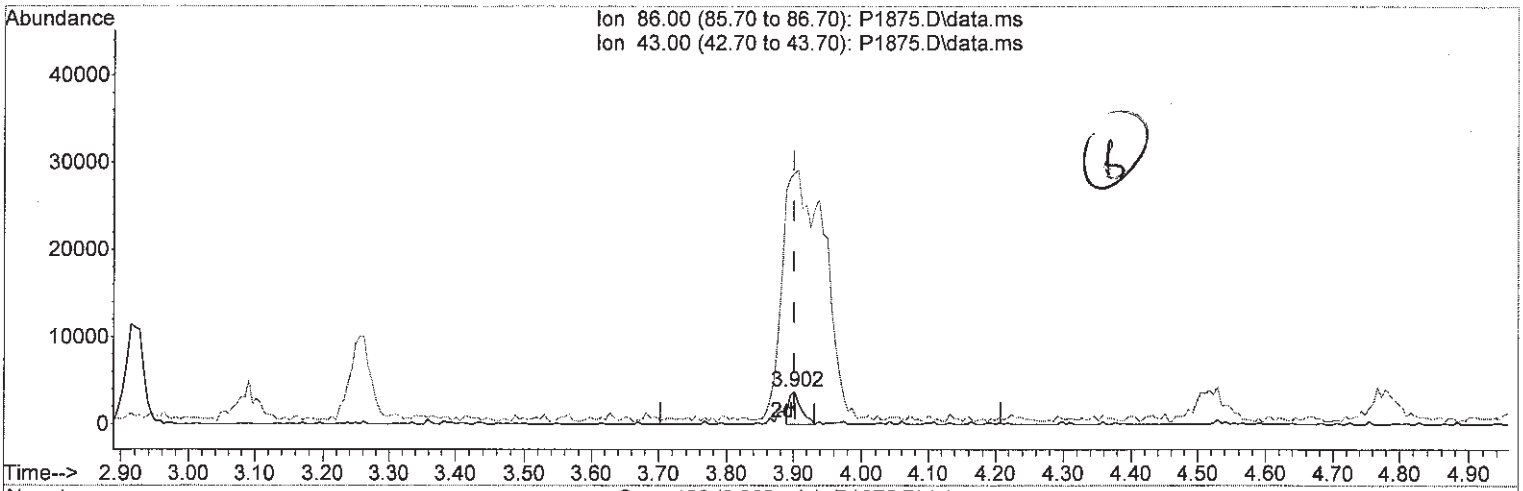
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	182954	5.68	ppb		97
96)	2-Chlorotoluene	11.339	91	108183	5.21	ppb		100
97)	3-Chlorotoluene	11.394	91	116539	5.50	ppb		97
98)	4-Chlorotoluene	11.431	91	127179	5.25	ppb		97
99)	1,3,5-Trimethylbenzene	11.425	105	124284	5.18	ppb		96
100)	tert-Butylbenzene	11.699	119	102151	5.36	ppb		94
101)	1,2,4-Trimethylbenzene	11.736	105	131074	5.32	ppb		97
102)	3,4-DCBTF	11.797	214	29137	4.91	ppb		92
103)	sec-Butylbenzene	11.876	105	147139	5.41	ppb		97
104)	p-Isopropyltoluene	11.998	119	123094	5.25	ppb		95
105)	1,3-Dclbenz	11.961	146	67403	5.04	ppb		96
106)	1,4-Dclbenz	12.034	146	70184	5.05	ppb		97
107)	2,4-DCBTF	12.083	214	26299	4.67	ppb		97
108)	2,5-DCBTF	12.126	214	28786	4.82	ppb	#	88
109)	n-Butylbenzene	12.333	91	110056	5.19	ppb		97
110)	1,2-Dclbenz	12.333	146	62019	4.90	ppb		93
111)	1,2-Dibromo-3-chloropr...	12.955	157	5491	4.60	ppb	#	81
112)	Trielution Dichlorotol...	13.071	125	163894	15.57	ppb		98
113)	1,3,5 Trichlorobenzene	13.126	180	43226	5.12	ppb		93
114)	Coelution Dichlorotoluene	13.400	125	117042	10.49	ppb		97
115)	1,2,4-Tcbenzene	13.607	180	35661	4.75	ppb		85
116)	Hexachlorobt	13.747	225	15815	5.12	ppb		88
117)	Naphthalen	13.796	128	80676	5.01	ppb		98
118)	1,2,3-Tclbenzene	13.985	180	30050	4.72	ppb		92
119)	2,4,5-Trichlorotolene	14.570	159	21884	4.83	ppb	#	93
120)	2,3,6-Trichlorotoluene	14.656	159	20995	4.98	ppb		90

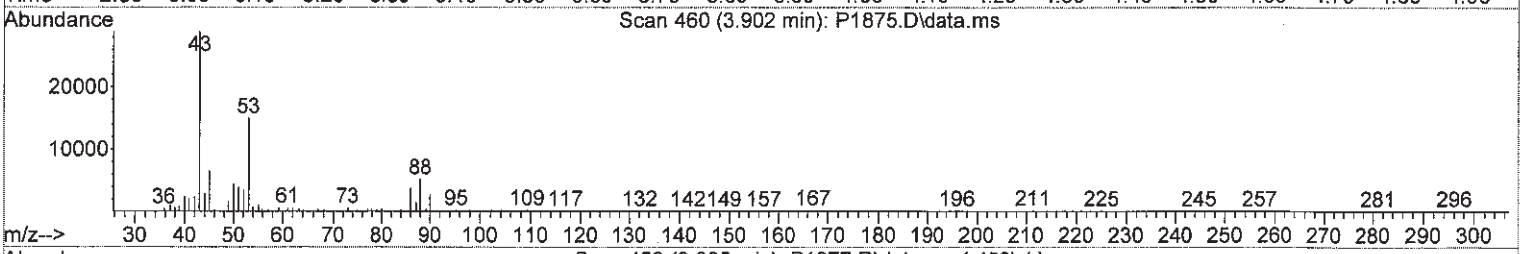
(#) = qualifier out of range (m) = manual integration (+) = signals summed

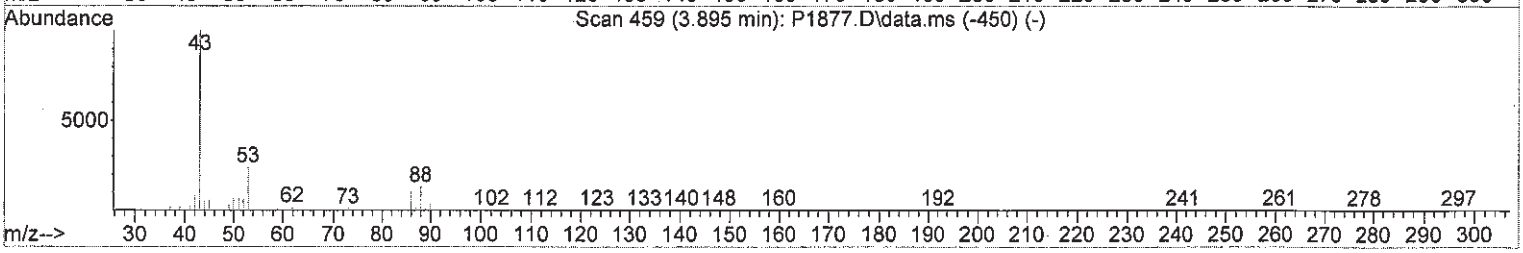
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 10:35:39 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1875.D\data.ms

(29) Vinyl Acetate

3.902min (+0.000) 3.40 ppb

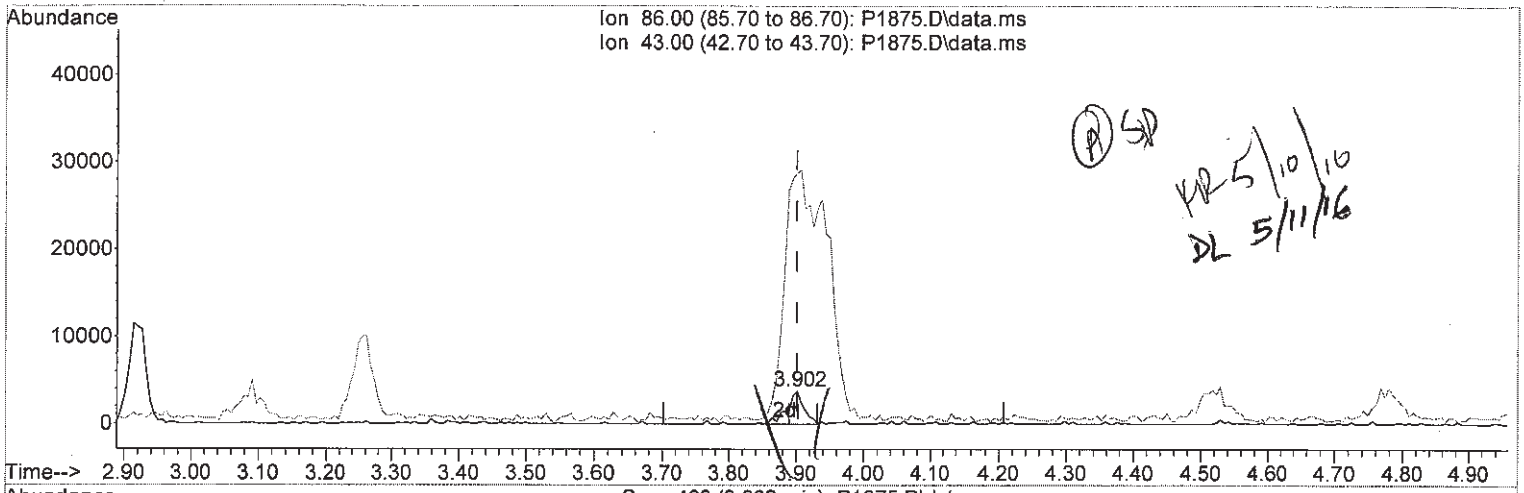
response 4461

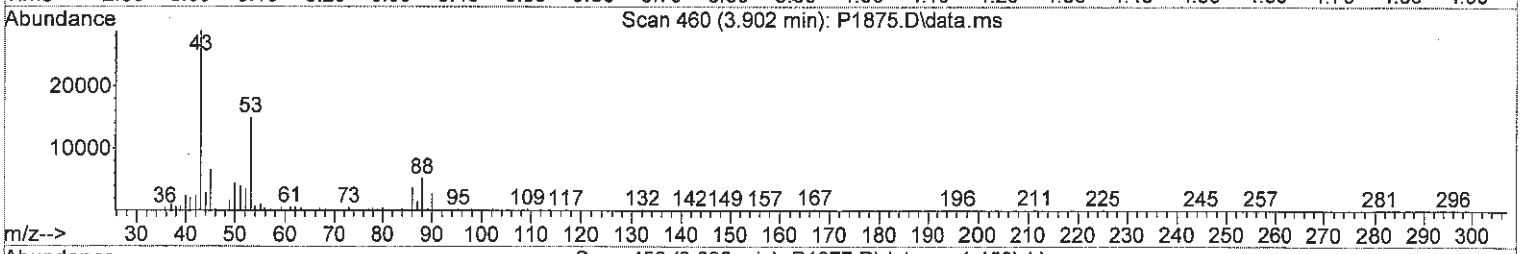
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	764.69#
0.00	0.00	0.00
0.00	0.00	0.00

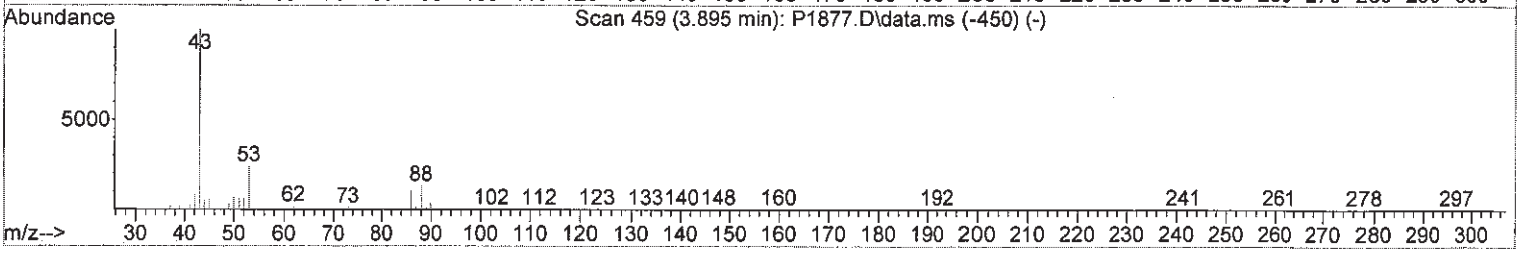
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 10:35:39 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1875.D\data.ms

(29) Vinyl Acetate

3.902min (+0.000) 4.87 ppb m

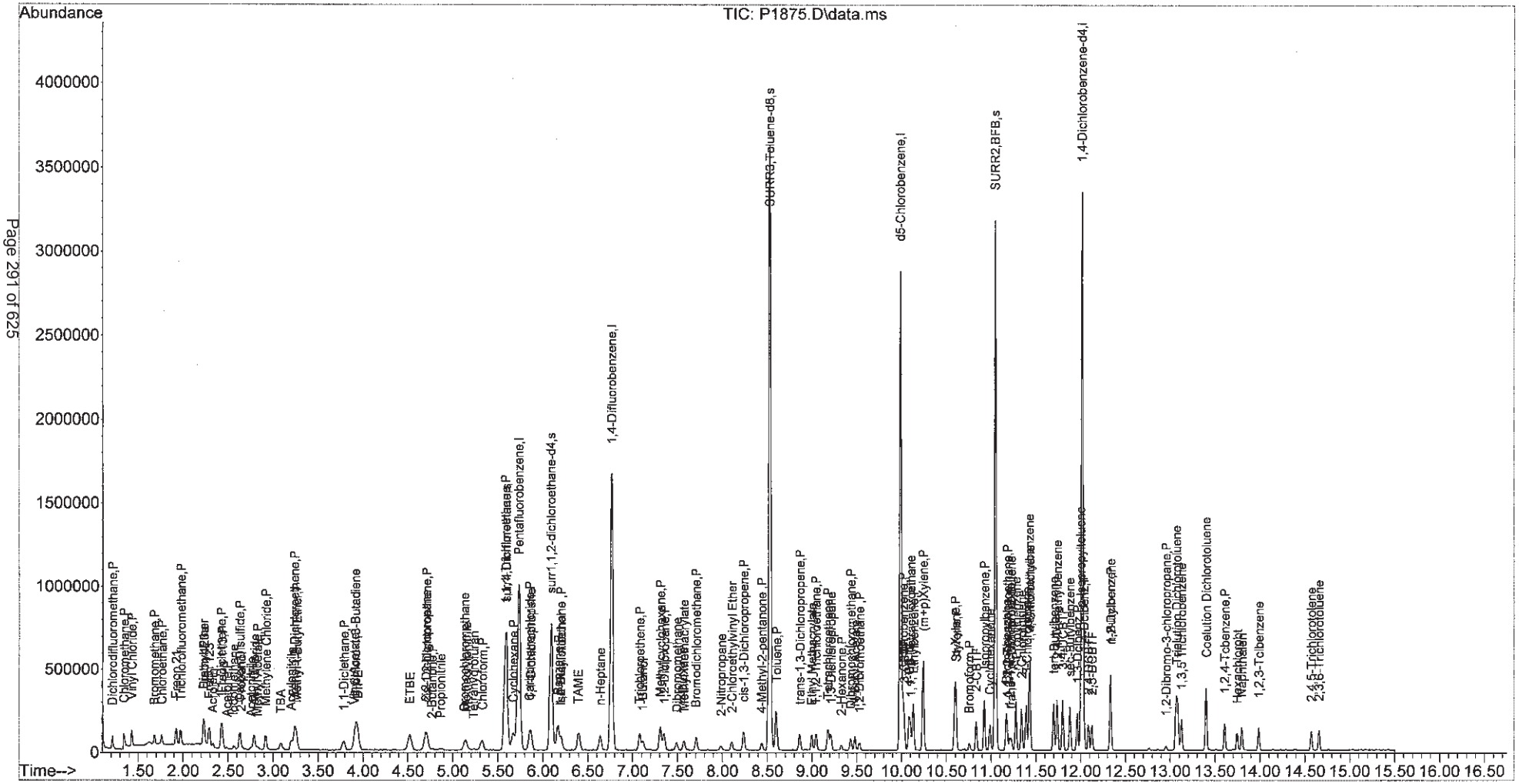
response 6401

Ion	Exp%	Act%
86.00	100	100
43.00	938.30	764.69#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	811858	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1360575	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1254082	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	645021	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.591	113	672625	99.60	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 199.20%#				
48) surr1,1,2-dichloroetha...	6.090	65	800092	101.40	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 202.80%#				
65) SURR3,Toluene-d8	8.529	98	2849051	100.71	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 201.42%#				
70) SURR2,BFB	11.047	95	1119803	99.64	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 199.28%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	207242	21.63	ppb		100
3) Chloromethane	1.347	50	218956	21.10	ppb		95
4) Vinyl Chloride	1.427	62	247482	21.28	ppb		99
5) Bromomethane	1.683	94	89877	19.02	ppb		96
6) Chloroethane	1.762	64	127090	20.39	ppb		98
7) Freon 21	1.921	67	254502	18.97	ppb		99
8) Trichlorofluoromethane	1.969	101	202337	20.23	ppb		96
9) Diethyl Ether	2.225	59	120886	20.32	ppb		96
10) Freon 123a	2.231	67	157980	17.86	ppb		96
11) Freon 123	2.292	83	181821	17.82	ppb		99
12) Acrolein	2.335	56	75859	94.85	ppb		95
13) 1,1-Diclethene	2.426	96	128017	20.84	ppb		97
14) Freon 113	2.433	101	125559	20.98	ppb		94
15) Acetone	2.481	43	31745	19.99	ppb		85
16) 2-Propanol	2.640	45	116406	378.04	ppb		98
17) Iodomethane	2.567	142	103104	18.15	ppb		99
18) Carbon Disulfide	2.628	76	414300	20.23	ppb		98
19) Acetonitrile	2.762	40	23612	92.23	ppb	#	77
20) Allyl Chloride	2.792	76	74220	21.44	ppb		97
21) Methyl Acetate	2.829	43	77037	20.07	ppb		98
22) Methylene Chloride	2.920	84	141755	20.71	ppb		96
23) TBA	3.085	59	207718	424.57	ppb		95
24) Acrylonitrile	3.207	53	196605	105.76	ppb		99
25) Methyl-t-Butyl Ether	3.256	73	393027	21.69	ppb		98
26) trans-1,2-Dichloroethene	3.237	96	142917	20.38	ppb		91
28) 1,1-Diclethane	3.786	63	257765	21.12	ppb		96
29) Vinyl Acetate	3.896	86	23844	18.18	ppb	#	72
30) DIPE	3.938	45	545854	21.75	ppb		97
31) 2-Chloro-1,3-Butadiene	3.920	53	265185	19.47	ppb		96
32) ETBE	4.524	59	480369	21.61	ppb		96
33) 2,2-Dichloropropane	4.694	77	219818	21.00	ppb		99
34) cis-1,2-Dichloroethene	4.707	96	151263	20.43	ppb		88
35) 2-Butanone	4.774	43	43273	18.09	ppb		92
36) Propionitrile	4.859	54	68382	98.56	ppb		95

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.145	130	81570	21.10	ppb		89
38) Methacrylonitrile	5.158	67	45863	21.99	ppb		90
39) Tetrahydrofuran	5.237	42	32756	21.56	ppb		84
40) Chloroform	5.322	83	243241	20.55	ppb		95
41) 1,1,1-Trichloroethane	5.591	97	202183	20.03	ppb		99
42) TAME	6.401	73	429970	22.18	ppb		99
44) Cyclohexane	5.670	41	138021	18.21	ppb		99
46) Carbontetrachloride	5.859	121	52524	20.19	ppb		87
47) 1,1-Dichloropropene	5.865	75	195614	20.97	ppb		98
49) Benzene	6.170	78	594791	21.71	ppb		98
50) 1,2-Dichloroethane	6.206	62	172217	21.07	ppb		96
51) Iso-Butyl Alcohol	6.200	43	99243	388.63	ppb		97
52) n-Heptane	6.639	43	171994	20.60	ppb		97
53) 1-Butanol	7.109	56	146886	990.41	ppb		97
54) Trichloroethene	7.078	130	140149	20.90	ppb		95
55) Methylcyclohexane	7.310	55	166569	18.69	ppb		95
56) 1,2-Diclpropane	7.352	63	151796	20.50	ppb		97
57) Dibromomethane	7.486	93	72852	20.85	ppb		95
58) 1,4-Dioxane	7.547	88	17526m	394.26	ppb		
59) Methyl Methacrylate	7.572	69	86969	20.13	ppb	#	82
60) Bromodichloromethane	7.712	83	186061	20.58	ppb		99
61) 2-Nitropropane	7.980	41	62474	42.59	ppb		97
62) 2-Chloroethylvinyl Ether	8.102	63	76058	19.24	ppb		98
63) cis-1,3-Dichloropropene	8.236	75	247262	21.48	ppb		97
64) 4-Methyl-2-pentanone	8.438	43	103613	19.78	ppb		95
66) Toluene	8.596	91	623444	21.56	ppb		100
67) trans-1,3-Dichloropropene	8.858	75	208968	21.80	ppb		95
68) Ethyl Methacrylate	8.998	69	181768	20.90	ppb		99
69) 1,1,2-Trichloroethane	9.041	97	106736	19.97	ppb		97
72) Tetrachloroethene	9.181	164	105181	21.75	ppb		93
73) 2-Hexanone	9.328	43	72543	19.98	ppb		97
74) 1,3-Dichloropropane	9.212	76	199075	21.20	ppb		98
75) Dibromochloromethane	9.431	129	126428	20.30	ppb		99
76) N-Butyl Acetate	9.480	43	200348	21.14	ppb		97
77) 1,2-Dibromoethane	9.529	107	110277	21.67	ppb		90
78) Chlorobenzene	10.010	112	391406	21.28	ppb		98
79) 3-CBTF	10.029	180	181796	19.92	ppb		96
80) 4-CBTF	10.084	180	165211	20.49	ppb		95
81) 1,1,1,2-Tetrachloroethane	10.096	131	136300	21.18	ppb		98
82) Ethylbenzene	10.132	106	214129	20.87	ppb		97
83) (m+p)Xylene	10.242	106	516478	42.79	ppb		91
84) o-Xylene	10.596	106	258003	21.47	ppb		99
85) Styrene	10.608	104	440723	21.96	ppb		98
87) Bromoform	10.754	173	64469	20.96	ppb		96
88) 2-CBTF	10.833	180	178529	21.02	ppb		98
89) Isopropylbenzene	10.925	105	627359	22.22	ppb		97
90) Cyclohexanone	10.986	55	235995	420.39	ppb		98
91) trans-1,4-Dichloro-2-B...	11.230	53	44824	20.38	ppb		98
92) 1,1,2,2-Tetrachloroethane	11.181	83	138961	21.02	ppb		99
93) Bromobenzene	11.169	156	150538	20.99	ppb		93
94) 1,2,3-Trichloropropane	11.211	110	38355	19.67	ppb		96

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

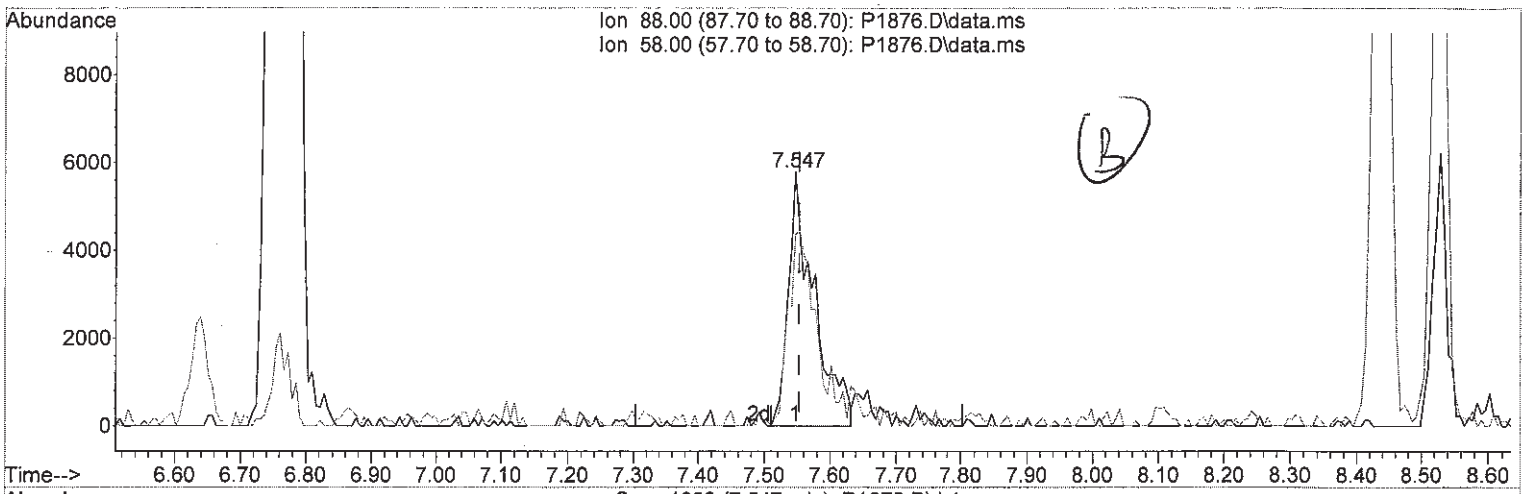
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	752378	22.97	ppb	96
96)	2-Chlorotoluene	11.339	91	464779	21.98	ppb	99
97)	3-Chlorotoluene	11.394	91	472006	21.89	ppb	95
98)	4-Chlorotoluene	11.431	91	541995	21.98	ppb	98
99)	1,3,5-Trimethylbenzene	11.425	105	540665	22.13	ppb	94
100)	tert-Butylbenzene	11.699	119	418916	21.60	ppb	96
101)	1,2,4-Trimethylbenzene	11.736	105	545039	21.74	ppb	99
102)	3,4-DCBTF	11.797	214	122939	20.35	ppb	92
103)	sec-Butylbenzene	11.882	105	597954	21.62	ppb	99
104)	p-Isopropyltoluene	11.998	119	527891	22.11	ppb	98
105)	1,3-Dclbenz	11.961	146	288562	21.21	ppb	98
106)	1,4-Dclbenz	12.034	146	297593	21.03	ppb	96
107)	2,4-DCBTF	12.083	214	117816	20.56	ppb	96
108)	2,5-DCBTF	12.126	214	121800	20.04	ppb	98
109)	n-Butylbenzene	12.327	91	470213	21.78	ppb	99
110)	1,2-Dclbenz	12.333	146	273378	21.23	ppb	99
111)	1,2-Dibromo-3-chloropr...	12.955	157	25729	21.19	ppb	96
112)	Trielution Dichlorotol...	13.071	125	689612	64.37	ppb	97
113)	1,3,5 Trichlorobenzene	13.126	180	179942	20.96	ppb	97
114)	Coelution Dichlorotoluene	13.400	125	500807	44.10	ppb	96
115)	1,2,4-Tcbenzene	13.607	180	162714	21.29	ppb	98
116)	Hexachlorobt	13.747	225	65278	20.77	ppb	96
117)	Naphthalen	13.796	128	366821	22.40	ppb	98
118)	1,2,3-Tclbenzene	13.985	180	141676	21.88	ppb	93
119)	2,4,5-Trichlorotolene	14.570	159	95017	20.59	ppb	95
120)	2,3,6-Trichlorotoluene	14.656	159	83132	19.37	ppb	98

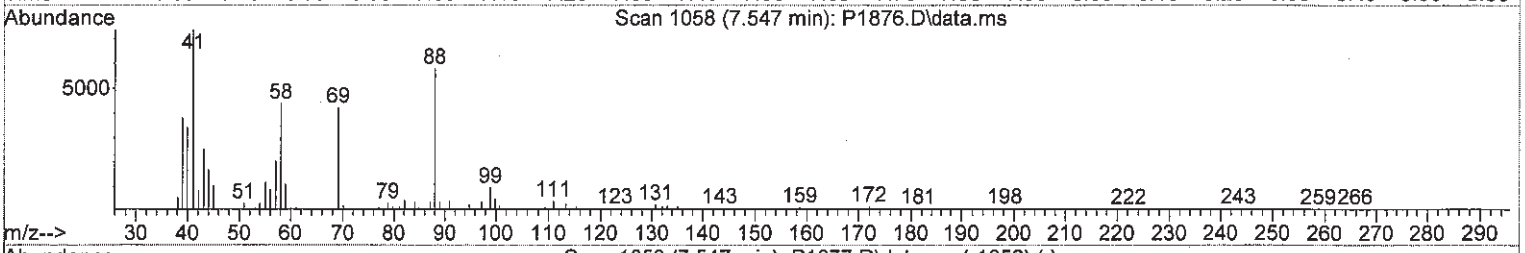
(#) = qualifier out of range (m) = manual integration (+) = signals summed

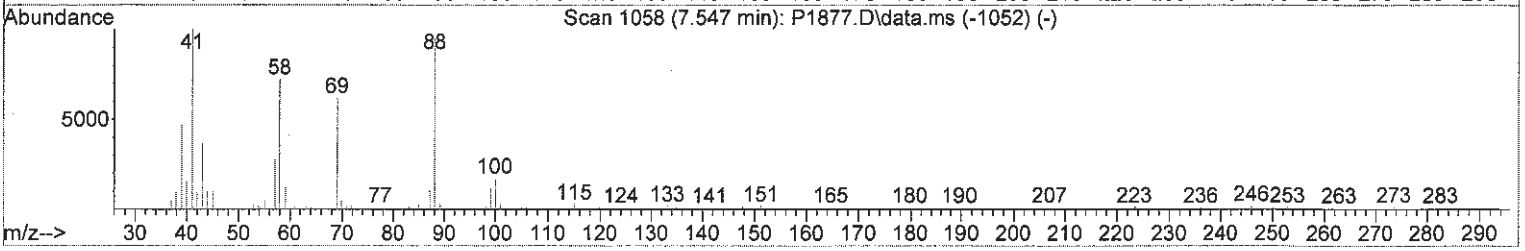
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 10:35:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1876.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 354.00 ppb

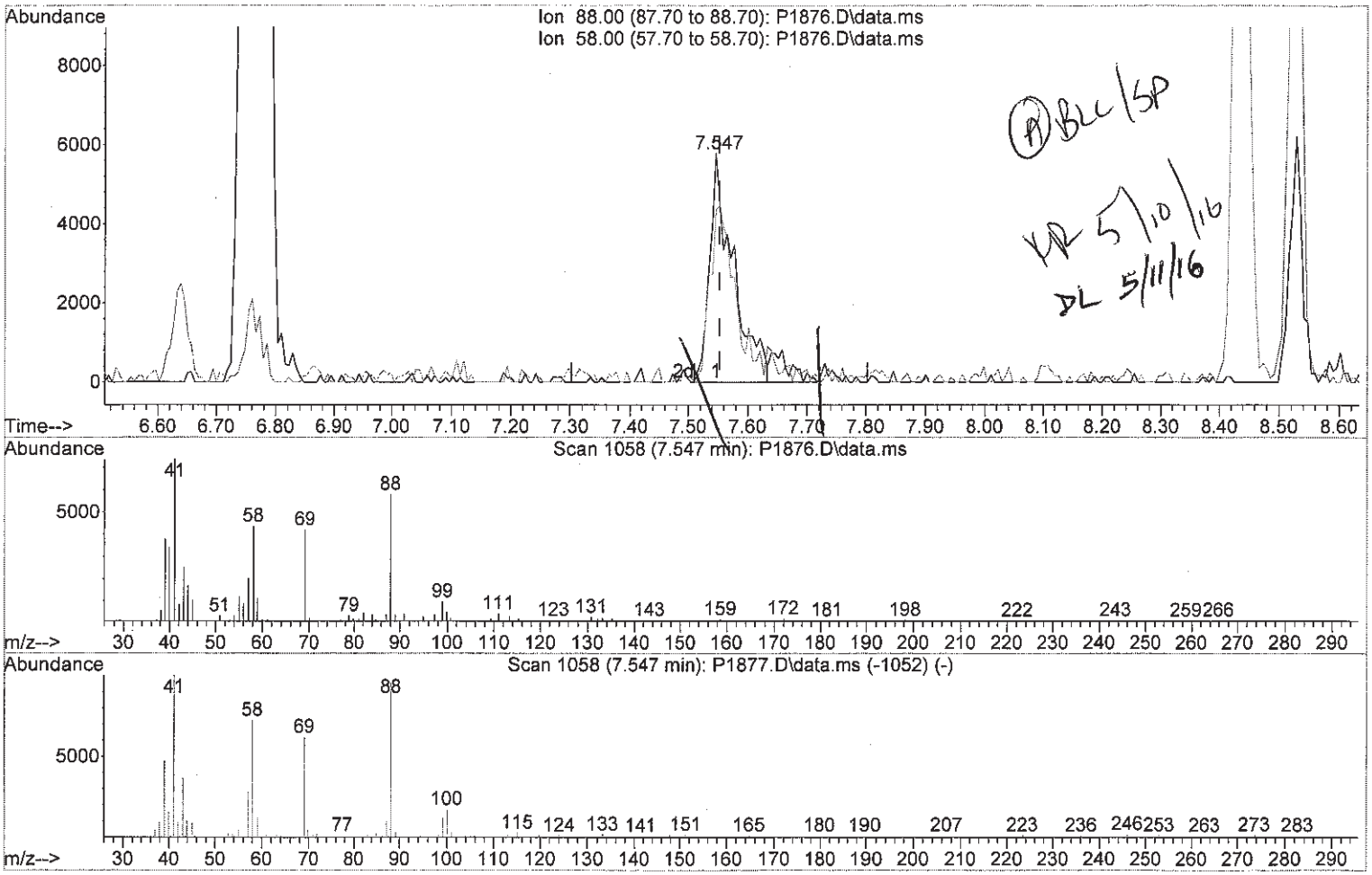
response 15736

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	75.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 10:35:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1876.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 394.26 ppb m

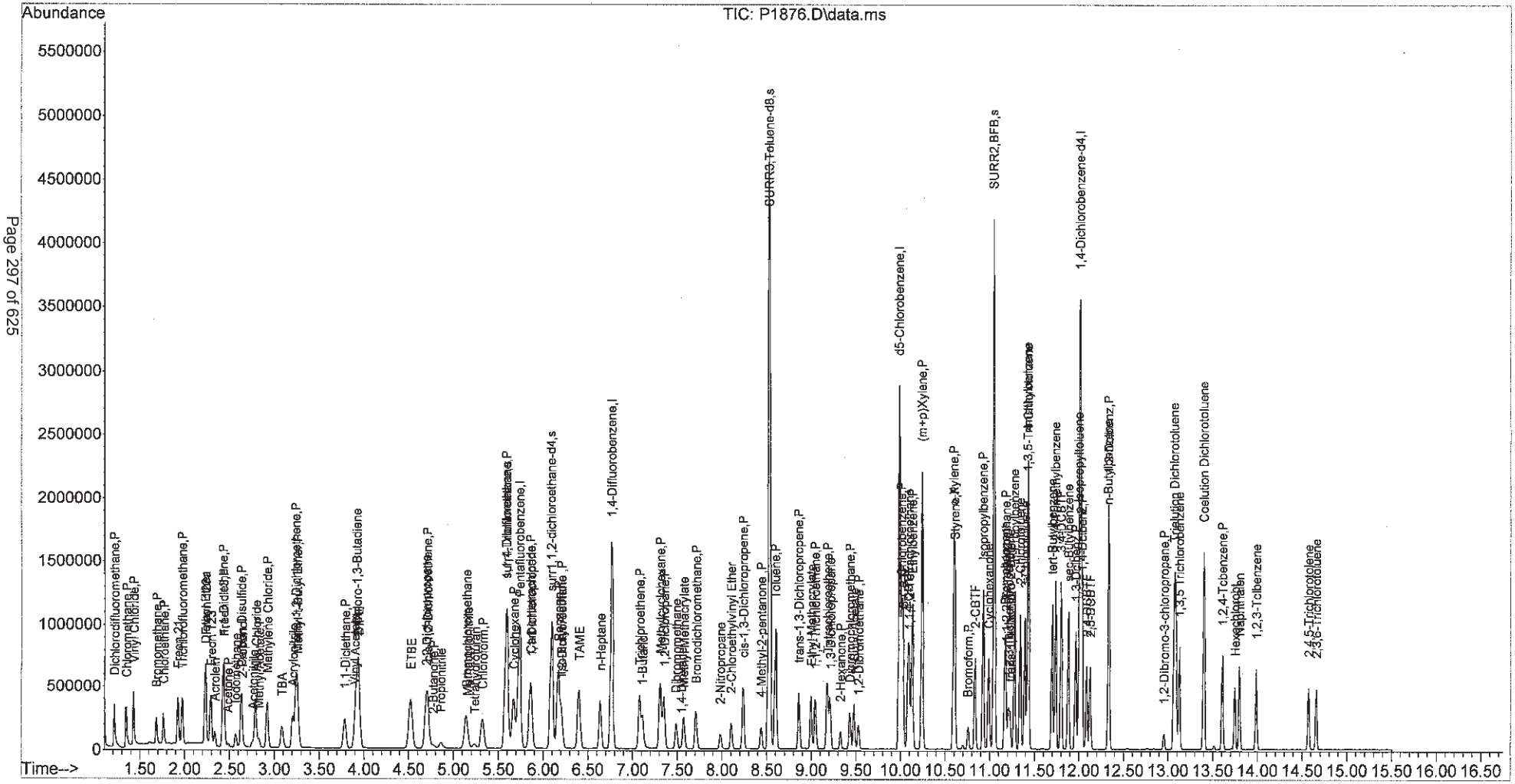
response 17526

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	75.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.737	168	825425	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.767	114	1369974	50.00	ppb	0.00
71) d5-Chlorobenzene	9.986	117	1263459	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	660485	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.590	113	392824	49.18	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.36%			
48) surr1,1,2-dichloroetha...	6.090	65	467752	49.56	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.12%			
65) SURR3,Toluene-d8	8.529	98	1748405	47.67	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.34%			
70) SURR2,BFB	11.047	95	665661	49.87	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.74%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.213	85	529370	54.34	ppb	100
3) Chloromethane	1.347	50	544790	51.63	ppb	100
4) Vinyl Chloride	1.426	62	622702	52.66	ppb	100
5) Bromomethane	1.683	94	237610	49.46	ppb	100
6) Chloroethane	1.762	64	325709	51.40	ppb	100
7) Freon 21	1.920	67	704710	51.65	ppb	100
8) Trichlorofluoromethane	1.975	101	509307	50.08	ppb	100
9) Diethyl Ether	2.225	59	301048	49.78	ppb	100
10) Freon 123a	2.231	67	447614	49.78	ppb	100
11) Freon 123	2.292	83	503414	48.51	ppb	100
12) Acrolein	2.335	56	213599	262.68	ppb	100
13) 1,1-Diclethene	2.426	96	317915	50.91	ppb	100
14) Freon 113	2.438	101	310257	50.99	ppb	100
15) Acetone	2.481	43	76341	47.28	ppb	100
16) 2-Propanol	2.640	45	313300	1000.74	ppb	100
17) Iodomethane	2.566	142	351009	60.76	ppb	100
18) Carbon Disulfide	2.627	76	1073214	51.55	ppb	100
19) Acetonitrile	2.755	40	51764	198.86	ppb	100
20) Allyl Chloride	2.792	76	183017	52.00	ppb	100
21) Methyl Acetate	2.823	43	200609	51.41	ppb	100
22) Methylene Chloride	2.920	84	347975	49.99	ppb	100
23) TBA	3.085	59	518580	1042.53	ppb	100
24) Acrylonitrile	3.200	53	469162	248.23	ppb	100
25) Methyl-t-Butyl Ether	3.261	73	920000	49.93	ppb	100
26) trans-1,2-Dichloroethene	3.237	96	355359	49.84	ppb	100
28) 1,1-Diclethane	3.786	63	622553	50.17	ppb	100
29) Vinyl Acetate	3.895	86	69372	52.04	ppb	100
30) DIPE	3.938	45	1264600	49.56	ppb	100
31) 2-Chloro-1,3-Butadiene	3.920	53	682829	49.30	ppb	100
32) ETBE	4.523	59	1150512	50.90	ppb	100
33) 2,2-Dichloropropane	4.700	77	533253	50.10	ppb	100
34) cis-1,2-Dichloroethene	4.712	96	379344	50.40	ppb	100
35) 2-Butanone	4.767	43	117738	48.41	ppb	100
36) Propionitrile	4.865	54	167962	238.11	ppb	100

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.139	130	197404	50.22	ppb	100
38) Methacrylonitrile	5.151	67	112760	53.19	ppb	100
39) Tetrahydrofuran	5.231	42	81349	52.67	ppb	100
40) Chloroform	5.322	83	593910	49.34	ppb	100
41) 1,1,1-Trichloroethane	5.590	97	502305	48.95	ppb	100
42) TAME	6.401	73	1020371	51.76	ppb	100
44) Cyclohexane	5.670	41	386598	50.67	ppb	100
46) Carbontetrachloride	5.852	121	137884	52.63	ppb	100
47) 1,1-Dichloropropene	5.865	75	491360	52.31	ppb	100
49) Benzene	6.169	78	1424348	51.64	ppb	100
50) 1,2-Dichloroethane	6.206	62	421777	51.25	ppb	100
51) Iso-Butyl Alcohol	6.200	43	263726	1025.65	ppb	100
52) n-Heptane	6.639	43	426791	50.76	ppb	100
53) 1-Butanol	7.114	56	390917	2617.77	ppb	100
54) Trichloroethene	7.078	130	347223	51.43	ppb	100
55) Methylcyclohexane	7.309	55	474413	52.86	ppb	100
56) 1,2-Diclpropane	7.352	63	372839	50.00	ppb	100
57) Dibromomethane	7.486	93	174448	49.59	ppb	100
58) 1,4-Dioxane	7.547	88	46686m	1043.04	ppb	
59) Methyl Methacrylate	7.572	69	212042	48.75	ppb	100
60) Bromodichloromethane	7.712	83	456215	50.11	ppb	100
61) 2-Nitropropane	7.980	41	150779	102.09	ppb	100
62) 2-Chloroethylvinyl Ether	8.102	63	208395	52.36	ppb	100
63) cis-1,3-Dichloropropene	8.236	75	599071	51.70	ppb	100
64) 4-Methyl-2-pentanone	8.437	43	270423	51.27	ppb	100
66) Toluene	8.602	91	1525962	52.41	ppb	100
67) trans-1,3-Dichloropropene	8.864	75	510247	52.88	ppb	100
68) Ethyl Methacrylate	8.998	69	437602	49.97	ppb	100
69) 1,1,2-Trichloroethane	9.047	97	262044	48.70	ppb	100
72) Tetrachloroethene	9.181	164	254860	52.31	ppb	100
73) 2-Hexanone	9.327	43	197509	54.00	ppb	100
74) 1,3-Dichloropropane	9.212	76	493173	52.14	ppb	100
75) Dibromochloromethane	9.431	129	318704	50.80	ppb	100
76) N-Butyl Acetate	9.480	43	521410	54.62	ppb	100
77) 1,2-Dibromoethane	9.529	107	264193	51.52	ppb	100
78) Chlorobenzene	10.016	112	963945	52.02	ppb	100
79) 3-CBTF	10.028	180	444385	48.33	ppb	100
80) 4-CBTF	10.083	180	398935	49.12	ppb	100
81) 1,1,1,2-Tetrachloroethane	10.095	131	334317	51.57	ppb	100
82) Ethylbenzene	10.132	106	548736	53.09	ppb	100
83) (m+p)Xylene	10.242	106	1297500	106.70	ppb	100
84) o-Xylene	10.595	106	634006	52.37	ppb	100
85) Styrene	10.608	104	1091689	53.99	ppb	100
87) Bromoform	10.760	173	162714	51.67	ppb	100
88) 2-CBTF	10.833	180	428294	49.24	ppb	100
89) Isopropylbenzene	10.925	105	1552550	53.70	ppb	100
90) Cyclohexanone	10.986	55	564567	982.14	ppb	100
91) trans-1,4-Dichloro-2-B...	11.229	53	104921	46.60	ppb	100
92) 1,1,2,2-Tetrachloroethane	11.181	83	338303	49.98	ppb	100
93) Bromobenzene	11.168	156	381518	51.95	ppb	100
94) 1,2,3-Trichloropropane	11.211	110	93620	46.88	ppb	100

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

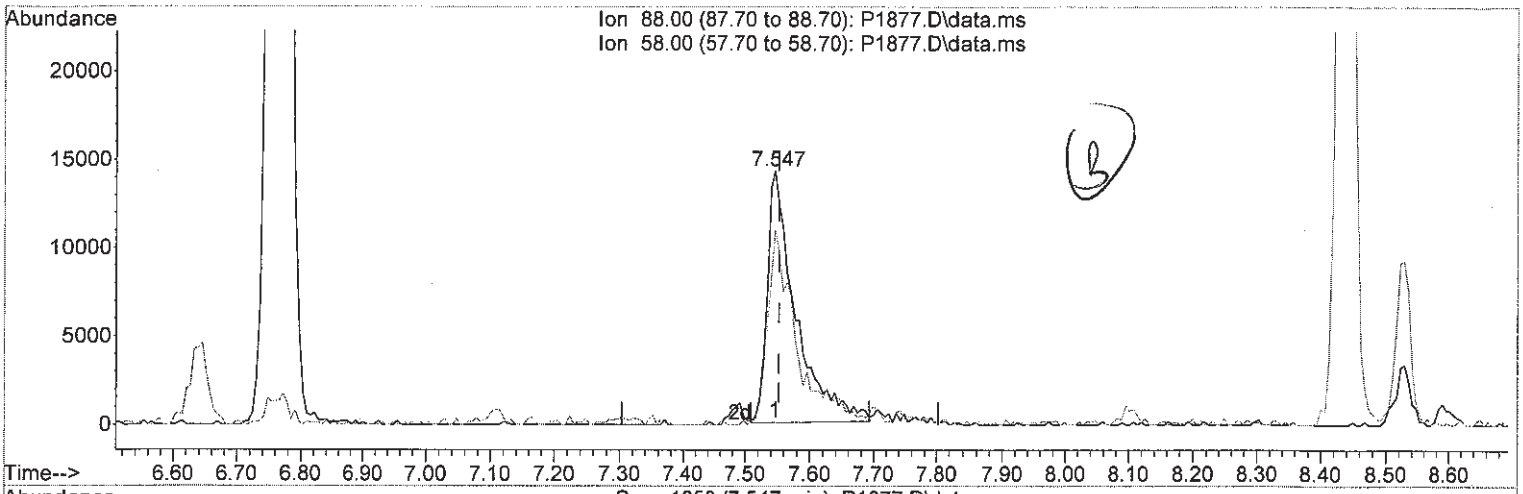
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	1824584	54.39	ppb	100
96)	2-Chlorotoluene	11.339	91	1133511	52.35	ppb	100
97)	3-Chlorotoluene	11.394	91	1130269	51.20	ppb	100
98)	4-Chlorotoluene	11.431	91	1335632	52.90	ppb	100
99)	1,3,5-Trimethylbenzene	11.431	105	1315580	52.60	ppb	100
100)	tert-Butylbenzene	11.699	119	1055788	53.17	ppb	100
101)	1,2,4-Trimethylbenzene	11.735	105	1368697	53.31	ppb	100
102)	3,4-DCBTF	11.796	214	301974	48.82	ppb	100
103)	sec-Butylbenzene	11.882	105	1503068	53.06	ppb	100
104)	p-Isopropyltoluene	12.004	119	1325689	54.22	ppb	100
105)	1,3-Dclbenz	11.961	146	717323	51.49	ppb	100
106)	1,4-Dclbenz	12.034	146	732724	50.56	ppb	100
107)	2,4-DCBTF	12.089	214	277350	47.28	ppb	100
108)	2,5-DCBTF	12.126	214	295840	47.55	ppb	100
109)	n-Butylbenzene	12.333	91	1193100	53.98	ppb	100
110)	1,2-Dclbenz	12.333	146	676629	51.31	ppb	100
111)	1,2-Dibromo-3-chloropr...	12.955	157	63343	50.95	ppb	100
112)	Trielution Dichlorotol...	13.071	125	1697180	154.71	ppb	100
113)	1,3,5 Trichlorobenzene	13.125	180	440003	50.05	ppb	100
114)	Coelution Dichlorotoluene	13.400	125	1233209	106.06	ppb	100
115)	1,2,4-Tcbenzene	13.607	180	417371	53.34	ppb	100
116)	Hexachlorobt	13.747	225	160981	50.03	ppb	100
117)	Naphthalen	13.796	128	927126	55.29	ppb	100
118)	1,2,3-Tclbenzene	13.985	180	358397	54.06	ppb	100
119)	2,4,5-Trichlorotolene	14.570	159	243071	51.45	ppb	100
120)	2,3,6-Trichlorotoluene	14.656	159	222097	50.54	ppb	100

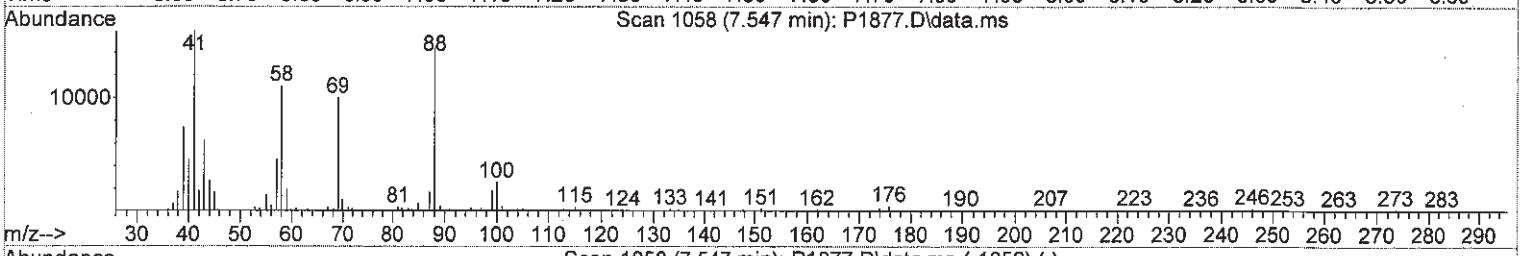
(#) = qualifier out of range (m) = manual integration (+) = signals summed

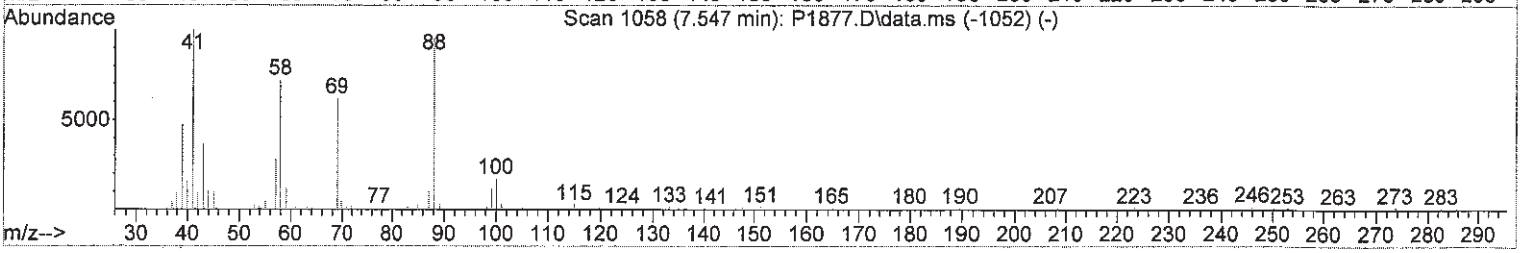
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 10:35:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1877.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 967.17 ppb

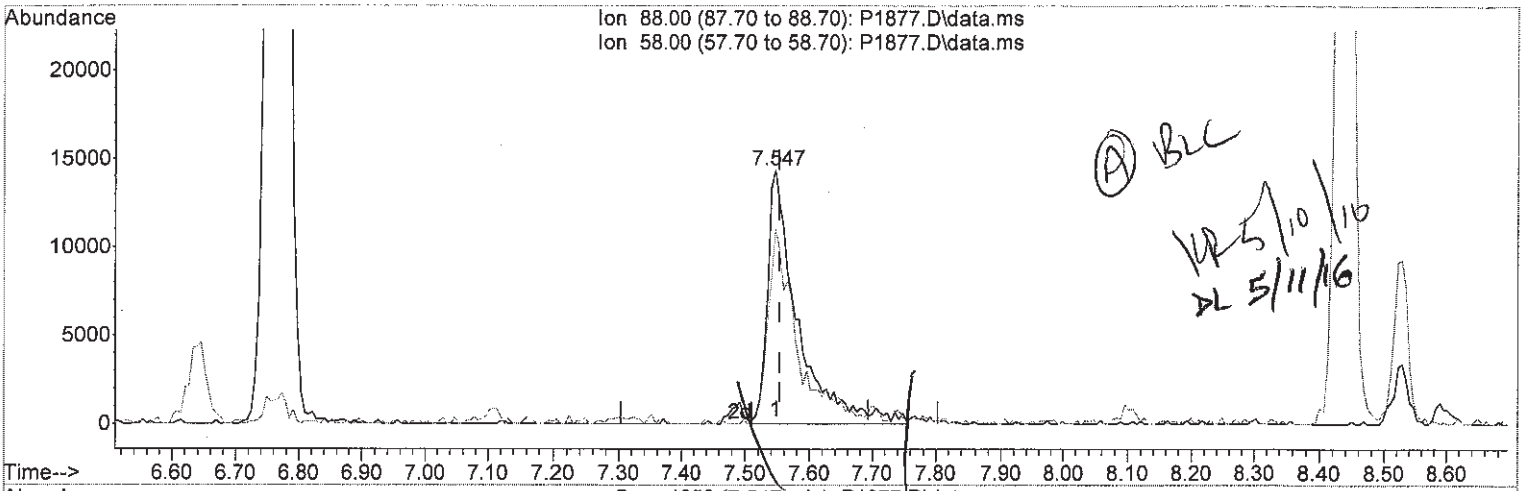
response 43290

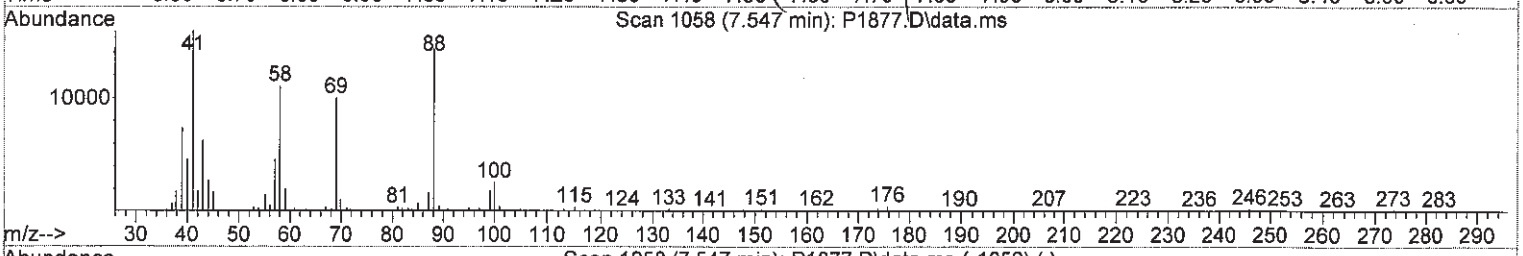
Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.75
0.00	0.00	0.00
0.00	0.00	0.00

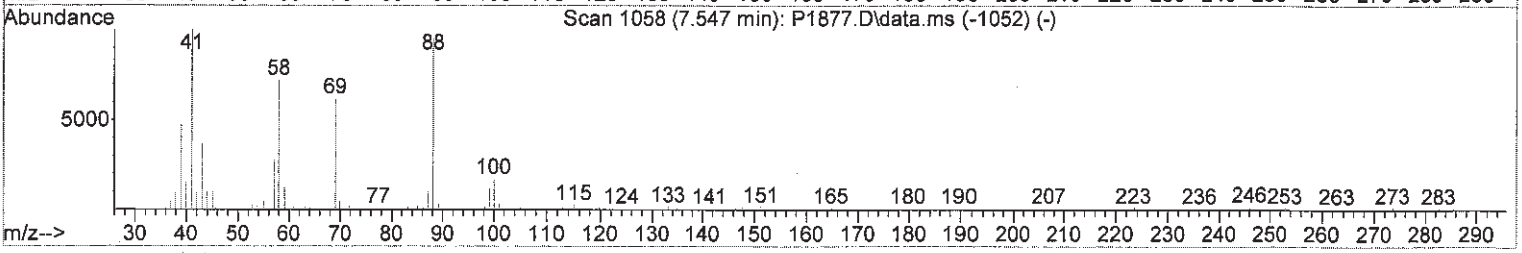
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 10:35:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1877.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 1043.04 ppb m

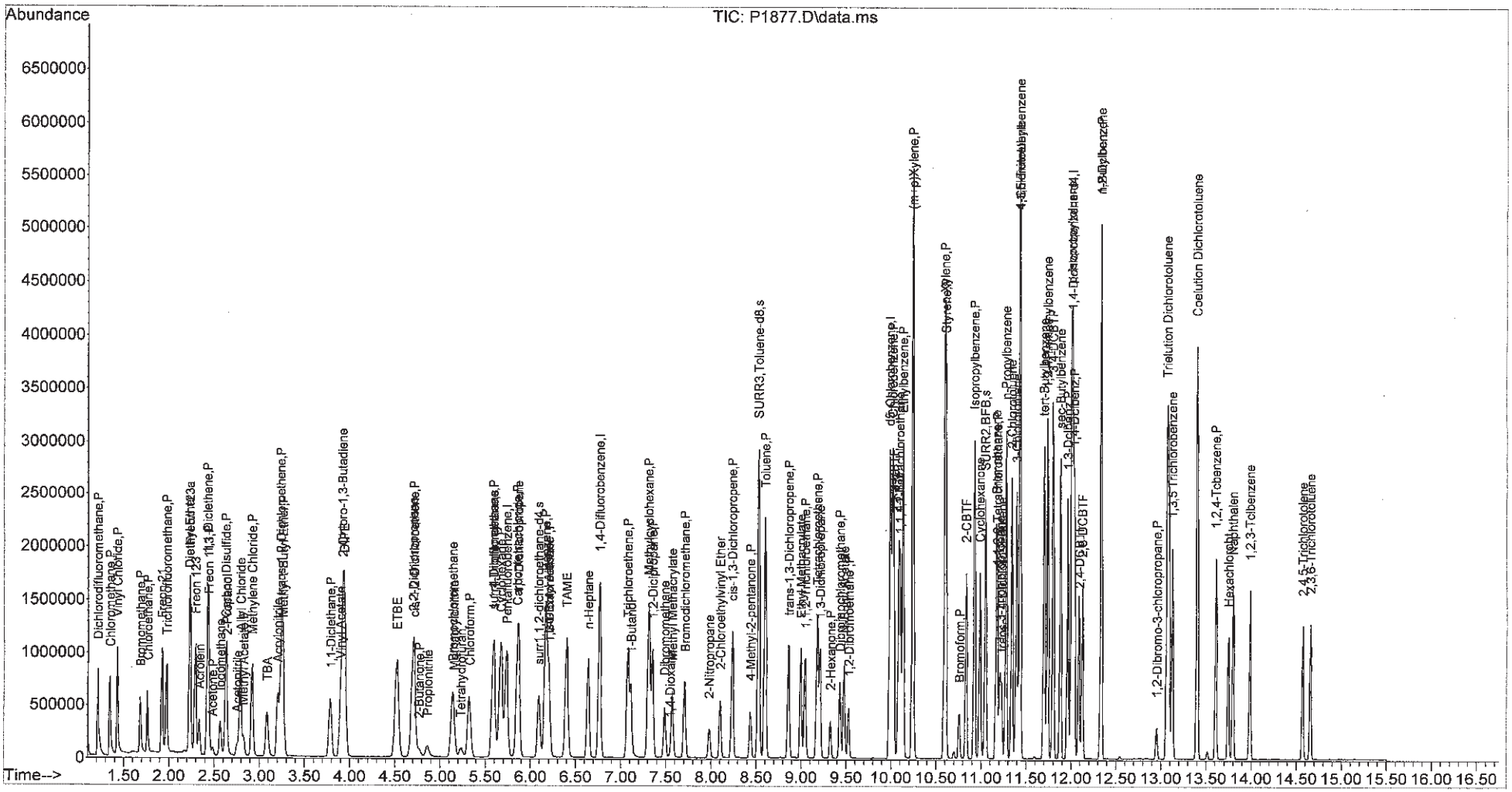
response 46686

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	819303	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1387671	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1289450	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	680588	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.591	113	840449	126.63	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 253.26%#				
48) surr1,1,2-dichloroetha...	6.090	65	986778	127.27	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 254.54%#				
65) SURR3,Toluene-d8	8.529	98	3470934	127.12	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 254.24%#				
70) SURR2,BFB	11.047	95	1392142	126.23	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 252.46%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	1012729	104.73	ppb		99
3) Chloromethane	1.341	50	1053133	100.56	ppb		100
4) Vinyl Chloride	1.427	62	1195280	101.84	ppb		99
5) Bromomethane	1.683	94	486740	102.07	ppb		100
6) Chloroethane	1.762	64	617485	98.18	ppb		99
7) Freon 21	1.921	67	1305163	96.38	ppb		99
8) Trichlorofluoromethane	1.969	101	979871	97.08	ppb		99
9) Diethyl Ether	2.225	59	586101	97.63	ppb		97
10) Freon 123a	2.231	67	843621	94.53	ppb		96
11) Freon 123	2.292	83	961956	93.40	ppb		98
12) Acrolein	2.335	56	417563	517.34	ppb		99
13) 1,1-Diclethene	2.427	96	620845	100.16	ppb		98
14) Freon 113	2.439	101	598861	99.16	ppb		99
15) Acetone	2.481	43	146642	91.51	ppb		94
16) 2-Propanol	2.640	45	605628	1948.95	ppb		100
17) Iodomethane	2.567	142	724205	126.30	ppb		98
18) Carbon Disulfide	2.628	76	2023696	97.92	ppb		98
19) Acetonitrile	2.756	40	119949	464.25	ppb	#	84
20) Allyl Chloride	2.792	76	332160	95.08	ppb		98
21) Methyl Acetate	2.823	43	390696	100.86	ppb		96
22) Methylene Chloride	2.920	84	675576	97.78	ppb		96
23) TBA	3.085	59	961289	1946.98	ppb		97
24) Acrylonitrile	3.201	53	910545	485.37	ppb		98
25) Methyl-t-Butyl Ether	3.256	73	1772633	96.92	ppb		97
26) trans-1,2-Dichloroethene	3.237	96	684686	96.75	ppb		96
28) 1,1-Diclethane	3.786	63	1208163	98.09	ppb		99
29) Vinyl Acetate	3.902	86	127643	96.46	ppb	#	92
30) DIPE	3.938	45	2521162	99.55	ppb		99
31) 2-Chloro-1,3-Butadiene	3.920	53	1332548	96.94	ppb		96
32) ETBE	4.518	59	2283838	101.79	ppb		99
33) 2,2-Dichloropropane	4.700	77	1069344	101.21	ppb		99
34) cis-1,2-Dichloroethene	4.707	96	730082	97.72	ppb		98
35) 2-Butanone	4.768	43	225714	93.49	ppb		89
36) Propionitrile	4.859	54	317527	453.49	ppb		97

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.139	130	371998	95.35	ppb		92
38) Methacrylonitrile	5.146	67	212573	101.01	ppb		91
39) Tetrahydrofuran	5.225	42	143141	93.37	ppb		96
40) Chloroform	5.322	83	1156630	96.81	ppb		97
41) 1,1,1-Trichloroethane	5.591	97	976242	95.85	ppb		98
42) TAME	6.401	73	1971378	100.76	ppb		100
44) Cyclohexane	5.670	41	744484	96.32	ppb		99
46) Carbontetrachloride	5.853	121	261766	98.64	ppb		96
47) 1,1-Dichloropropene	5.865	75	948163	99.66	ppb		96
49) Benzene	6.170	78	2716827	97.24	ppb		97
50) 1,2-Dichloroethane	6.206	62	808482	96.98	ppb		98
51) Iso-Butyl Alcohol	6.200	43	488917	1877.18	ppb		97
52) n-Heptane	6.639	43	821510	96.45	ppb		98
53) 1-Butanol	7.115	56	746556	4935.54	ppb		98
54) Trichloroethene	7.078	130	694164	101.50	ppb		98
55) Methylcyclohexane	7.310	55	914188	100.55	ppb		97
56) 1,2-Diclpropane	7.352	63	732876	97.04	ppb		99
57) Dibromomethane	7.487	93	342322	96.08	ppb		96
58) 1,4-Dioxane	7.554	88	88551	1953.14	ppb		89
59) Methyl Methacrylate	7.572	69	401258	91.08	ppb		98
60) Bromodichloromethane	7.706	83	876672	95.06	ppb		100
61) 2-Nitropropane	7.980	41	273924	183.10	ppb		86
62) 2-Chloroethylvinyl Ether	8.102	63	407159	100.99	ppb		100
63) cis-1,3-Dichloropropene	8.236	75	1174585	100.07	ppb		98
64) 4-Methyl-2-pentanone	8.438	43	522542	97.80	ppb		97
66) Toluene	8.602	91	2849543	96.63	ppb		94
67) trans-1,3-Dichloropropene	8.864	75	981883	100.45	ppb		99
68) Ethyl Methacrylate	8.998	69	842863	95.02	ppb		97
69) 1,1,2-Trichloroethane	9.047	97	492138	90.30	ppb		95
72) Tetrachloroethene	9.181	164	514910	103.56	ppb		98
73) 2-Hexanone	9.328	43	369864	99.09	ppb		94
74) 1,3-Dichloropropane	9.212	76	939602	97.34	ppb		97
75) Dibromochloromethane	9.431	129	598314	93.45	ppb		98
76) N-Butyl Acetate	9.480	43	989114	101.53	ppb		98
77) 1,2-Dibromoethane	9.529	107	497353	95.04	ppb		98
78) Chlorobenzene	10.017	112	1853301	98.00	ppb		96
79) 3-CBTF	10.029	180	922738	98.34	ppb		99
80) 4-CBTF	10.084	180	818313	98.72	ppb		96
81) 1,1,1,2-Tetrachloroethane	10.102	131	657285	99.35	ppb		99
82) Ethylbenzene	10.132	106	1046521	99.22	ppb	#	83
83) (m+p)Xylene	10.242	106	2450880	197.49	ppb	#	81
84) o-Xylene	10.596	106	1249932	101.16	ppb		92
85) Styrene	10.608	104	2078663	100.73	ppb		96
87) Bromoform	10.754	173	312927	96.44	ppb		98
88) 2-CBTF	10.833	180	876011	97.74	ppb		98
89) Isopropylbenzene	10.925	105	2838805	95.28	ppb		96
90) Cyclohexanone	10.986	55	1057993	1786.16	ppb		99
91) trans-1,4-Dichloro-2-B...	11.230	53	208209	89.74	ppb		99
92) 1,1,2,2-Tetrachloroethane	11.181	83	631995	90.61	ppb		99
93) Bromobenzene	11.169	156	737665	97.48	ppb		95
94) 1,2,3-Trichloropropane	11.211	110	179166	87.07	ppb		98

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

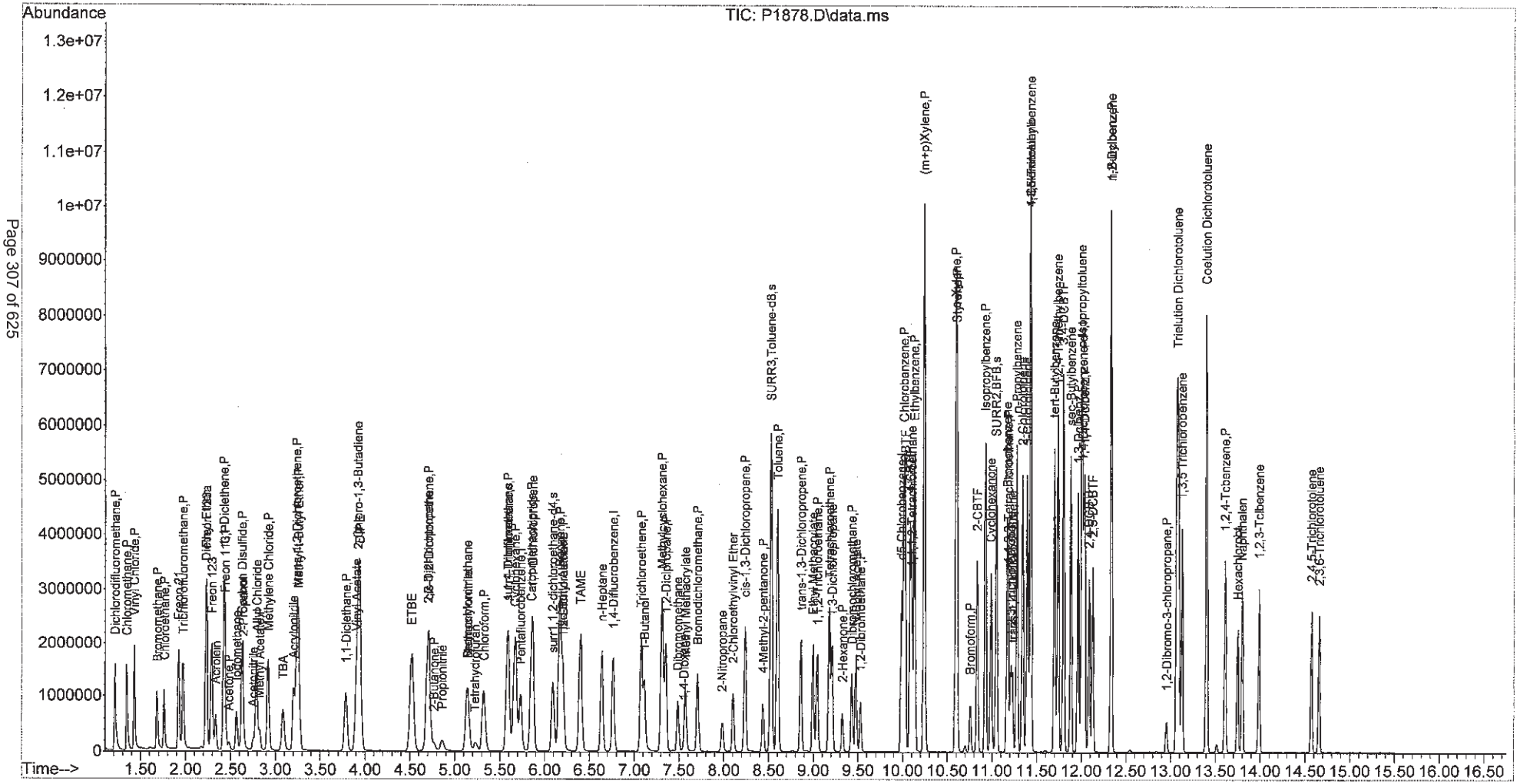
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	3262780	94.39	ppb	92
96)	2-Chlorotoluene	11.339	91	2125861	95.27	ppb	95
97)	3-Chlorotoluene	11.394	91	2209334	97.13	ppb	99
98)	4-Chlorotoluene	11.431	91	2515184	96.68	ppb	94
99)	1,3,5-Trimethylbenzene	11.431	105	2497329	96.89	ppb	96
100)	tert-Butylbenzene	11.699	119	2014421	98.44	ppb	98
101)	1,2,4-Trimethylbenzene	11.736	105	2529167	95.61	ppb	94
102)	3,4-DCBTF	11.797	214	635614	99.73	ppb	97
103)	sec-Butylbenzene	11.882	105	2773481	95.02	ppb	96
104)	p-Isopropyltoluene	12.004	119	2467147	97.93	ppb	95
105)	1,3-Dclbenz	11.961	146	1395375	97.19	ppb	98
106)	1,4-Dclbenz	12.034	146	1419730	95.07	ppb	99
107)	2,4-DCBTF	12.083	214	579182	95.81	ppb	96
108)	2,5-DCBTF	12.126	214	618038	96.39	ppb	96
109)	n-Butylbenzene	12.333	91	2262716	99.35	ppb	96
110)	1,2-Dclbenz	12.333	146	1326376	97.61	ppb	99
111)	1,2-Dibromo-3-chloropr...	12.955	157	119005	92.89	ppb	92
112)	Trielution Dichlorotol...	13.077	125	3369904	298.12	ppb	93
113)	1,3,5 Trichlorobenzene	13.126	180	903169	99.70	ppb	97
114)	Coelution Dichlorotoluene	13.400	125	2419489	201.94	ppb	96
115)	1,2,4-Tcbenzene	13.607	180	797142	98.86	ppb	99
116)	Hexachlorobt	13.747	225	314243	94.77	ppb	93
117)	Naphthalen	13.796	128	1732214	100.26	ppb	98
118)	1,2,3-Tclbenzene	13.985	180	684476	100.19	ppb	97
119)	2,4,5-Trichlorotolene	14.570	159	499100	102.52	ppb	98
120)	2,3,6-Trichlorotoluene	14.656	159	448218	98.99	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	819885	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1383451	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1303888	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	690231	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	964570	148.86	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 297.72%#				
48) surr1,1,2-dichloroetha...	6.090	65	1119065	147.82	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 295.64%#				
65) SURR3,Toluene-d8	8.529	98	3900644	147.76	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 295.52%#				
70) SURR2,BFB	11.047	95	1603906	149.28	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 298.56%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	1430226	147.80	ppb		99
3) Chloromethane	1.341	50	1538924	146.83	ppb		98
4) Vinyl Chloride	1.426	62	1668599	142.07	ppb		98
5) Bromomethane	1.676	94	737944	154.63	ppb		96
6) Chloroethane	1.762	64	893292	141.94	ppb		97
7) Freon 21	1.920	67	1924739	142.03	ppb		100
8) Trichlorofluoromethane	1.969	101	1381056	136.73	ppb		99
9) Diethyl Ether	2.225	59	881178	146.68	ppb		98
10) Freon 123a	2.231	67	1235180	138.30	ppb		96
11) Freon 123	2.292	83	1403673	136.19	ppb		98
12) Acrolein	2.335	56	655470	811.52	ppb		99
13) 1,1-Diclethene	2.426	96	896831	144.58	ppb		99
14) Freon 113	2.432	101	840935	139.14	ppb		98
15) Acetone	2.481	43	237839	148.31	ppb		94
16) 2-Propanol	2.640	45	901635	2899.45	ppb		99
17) Iodomethane	2.566	142	1089100	189.81	ppb		100
18) Carbon Disulfide	2.627	76	3006261	145.36	ppb		96
19) Acetonitrile	2.755	40	188577	729.35	ppb		94
20) Allyl Chloride	2.792	76	420133	120.18	ppb		97
21) Methyl Acetate	2.823	43	566817	146.23	ppb		94
22) Methylene Chloride	2.920	84	1010088	146.10	ppb		97
23) TBA	3.085	59	1462452	2959.93	ppb		99
24) Acrylonitrile	3.201	53	1406952	749.45	ppb		97
25) Methyl-t-Butyl Ether	3.255	73	2656084	145.12	ppb		97
26) trans-1,2-Dichloroethene	3.237	96	986179	139.25	ppb		96
28) 1,1-Diclethane	3.786	63	1780149	144.43	ppb		99
29) Vinyl Acetate	3.902	86	193432	146.07	ppb	#	91
30) DIPE	3.938	45	3540856	139.71	ppb		99
31) 2-Chloro-1,3-Butadiene	3.920	53	2012403	146.29	ppb		98
32) ETBE	4.523	59	3194567	142.29	ppb		99
33) 2,2-Dichloropropane	4.700	77	1512749	143.08	ppb		98
34) cis-1,2-Dichloroethene	4.706	96	1081855	144.70	ppb		94
35) 2-Butanone	4.767	43	352285	145.81	ppb		92
36) Propionitrile	4.859	54	504515	720.04	ppb		100

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.139	130	548035	140.37	ppb		91
38) Methacrylonitrile	5.145	67	320689	152.28	ppb		95
39) Tetrahydrofuran	5.224	42	211912	138.14	ppb		88
40) Chloroform	5.322	83	1715278	143.47	ppb		97
41) 1,1,1-Trichloroethane	5.590	97	1400091	137.37	ppb		99
42) TAME	6.401	73	2810002	143.52	ppb		98
44) Cyclohexane	5.670	41	1092519	141.78	ppb		99
46) Carbontetrachloride	5.859	121	366324	138.47	ppb		95
47) 1,1-Dichloropropene	5.865	75	1350256	142.35	ppb		97
49) Benzene	6.169	78	3877501	139.21	ppb		96
50) 1,2-Dichloroethane	6.206	62	1218569	146.61	ppb		97
51) Iso-Butyl Alcohol	6.200	43	756655	2914.01	ppb		100
52) n-Heptane	6.639	43	1166922	137.43	ppb		99
53) 1-Butanol	7.114	56	1111899	7373.27	ppb		100
54) Trichloroethene	7.078	130	975427	143.06	ppb		99
55) Methylcyclohexane	7.309	55	1331533	146.90	ppb		98
56) 1,2-Diclpropane	7.352	63	1091133	144.91	ppb		100
57) Dibromomethane	7.486	93	520116	146.42	ppb		94
58) 1,4-Dioxane	7.547	88	140687m	3112.56	ppb		
59) Methyl Methacrylate	7.572	69	611989	139.34	ppb		96
60) Bromodichloromethane	7.706	83	1301404	141.55	ppb		100
61) 2-Nitropropane	7.980	41	432037	289.66	ppb		88
62) 2-Chloroethylvinyl Ether	8.102	63	613978	152.75	ppb		99
63) cis-1,3-Dichloropropene	8.236	75	1740371	148.72	ppb		99
64) 4-Methyl-2-pentanone	8.437	43	810410	152.14	ppb		96
66) Toluene	8.602	91	3909438	132.97	ppb		90
67) trans-1,3-Dichloropropene	8.864	75	1478774	151.75	ppb		97
68) Ethyl Methacrylate	8.998	69	1283126	145.10	ppb		97
69) 1,1,2-Trichloroethane	9.047	97	752993	138.58	ppb		97
72) Tetrachloroethene	9.181	164	726689	144.54	ppb		97
73) 2-Hexanone	9.327	43	572341	151.63	ppb		95
74) 1,3-Dichloropropane	9.212	76	1429715	146.47	ppb		96
75) Dibromochloromethane	9.431	129	910883	140.70	ppb		97
76) N-Butyl Acetate	9.480	43	1468023	149.02	ppb		99
77) 1,2-Dibromoethane	9.529	107	769048	145.33	ppb		99
78) Chlorobenzene	10.016	112	2659182	139.06	ppb		92
79) 3-CBTF	10.028	180	1364702	143.83	ppb		99
80) 4-CBTF	10.083	180	1228429	146.55	ppb		96
81) 1,1,1,2-Tetrachloroethane	10.102	131	983752	147.05	ppb		98
82) Ethylbenzene	10.132	106	1503483	140.96	ppb	#	68
83) (m+p)Xylene	10.242	106	3403497	271.21	ppb	#	67
84) o-Xylene	10.595	106	1815157	145.27	ppb	#	80
85) Styrene	10.608	104	2970633	142.37	ppb		91
87) Bromoform	10.760	173	476101	144.68	ppb		96
88) 2-CBTF	10.833	180	1311932	144.34	ppb		98
89) Isopropylbenzene	10.925	105	3800809	125.79	ppb		90
90) Cyclohexanone	10.986	55	1638836	2728.12	ppb		99
91) trans-1,4-Dichloro-2-B...	11.229	53	325623	138.39	ppb		99
92) 1,1,2,2-Tetrachloroethane	11.181	83	970854	137.24	ppb		97
93) Bromobenzene	11.168	156	1095521	142.75	ppb		95
94) 1,2,3-Trichloropropane	11.211	110	274505	131.53	ppb		94

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

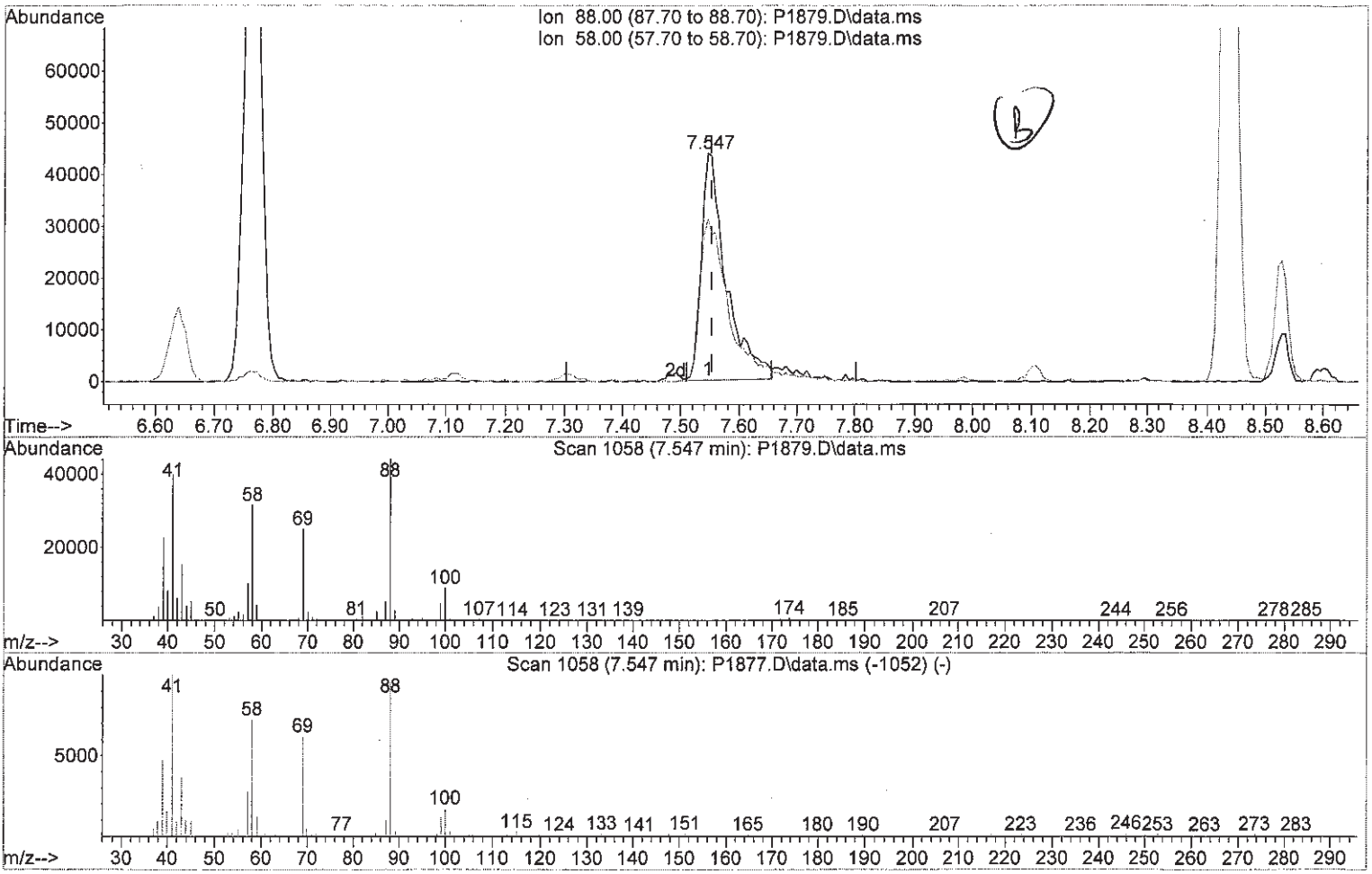
Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	4203038	119.89	ppb		83
96)	2-Chlorotoluene	11.345	91	2977701	131.58	ppb		91
97)	3-Chlorotoluene	11.394	91	3130391	135.70	ppb	#	93
98)	4-Chlorotoluene	11.437	91	3492930	132.39	ppb		86
99)	1,3,5-Trimethylbenzene	11.431	105	3441681	131.66	ppb		89
100)	tert-Butylbenzene	11.699	119	2831196	136.42	ppb		95
101)	1,2,4-Trimethylbenzene	11.742	105	3474347	129.50	ppb		87
102)	3,4-DCBTF	11.796	214	952121	147.30	ppb		96
103)	sec-Butylbenzene	11.882	105	3710220	125.34	ppb		90
104)	p-Isopropyltoluene	12.004	119	3354159	131.28	ppb		90
105)	1,3-Dclbenz	11.961	146	2042840	140.31	ppb		96
106)	1,4-Dclbenz	12.034	146	2085041	137.67	ppb		97
107)	2,4-DCBTF	12.089	214	868520	141.67	ppb		97
108)	2,5-DCBTF	12.126	214	959178	147.51	ppb		97
109)	n-Butylbenzene	12.333	91	3091525	133.85	ppb		89
110)	1,2-Dclbenz	12.339	146	1972900	143.16	ppb		98
111)	1,2-Dibromo-3-chloropr...	12.955	157	177791	136.83	ppb		89
112)	Trielution Dichlorotol...	13.077	125	4874598	425.21	ppb		89
113)	1,3,5 Trichlorobenzene	13.132	180	1331927	144.98	ppb		98
114)	Coelution Dichlorotoluene	13.400	125	3420785	281.52	ppb	#	88
115)	1,2,4-Tcbenzene	13.607	180	1185770	145.01	ppb		99
116)	Hexachlorobt	13.747	225	456773	135.83	ppb		94
117)	Naphthalen	13.796	128	2510552	143.27	ppb		96
118)	1,2,3-Tclbenzene	13.985	180	1023322	147.70	ppb		96
119)	2,4,5-Trichlorotolene	14.570	159	745880	151.08	ppb		99
120)	2,3,6-Trichlorotoluene	14.656	159	678249	147.70	ppb		100

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

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 10:36:00 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1879.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 2842.18 ppb

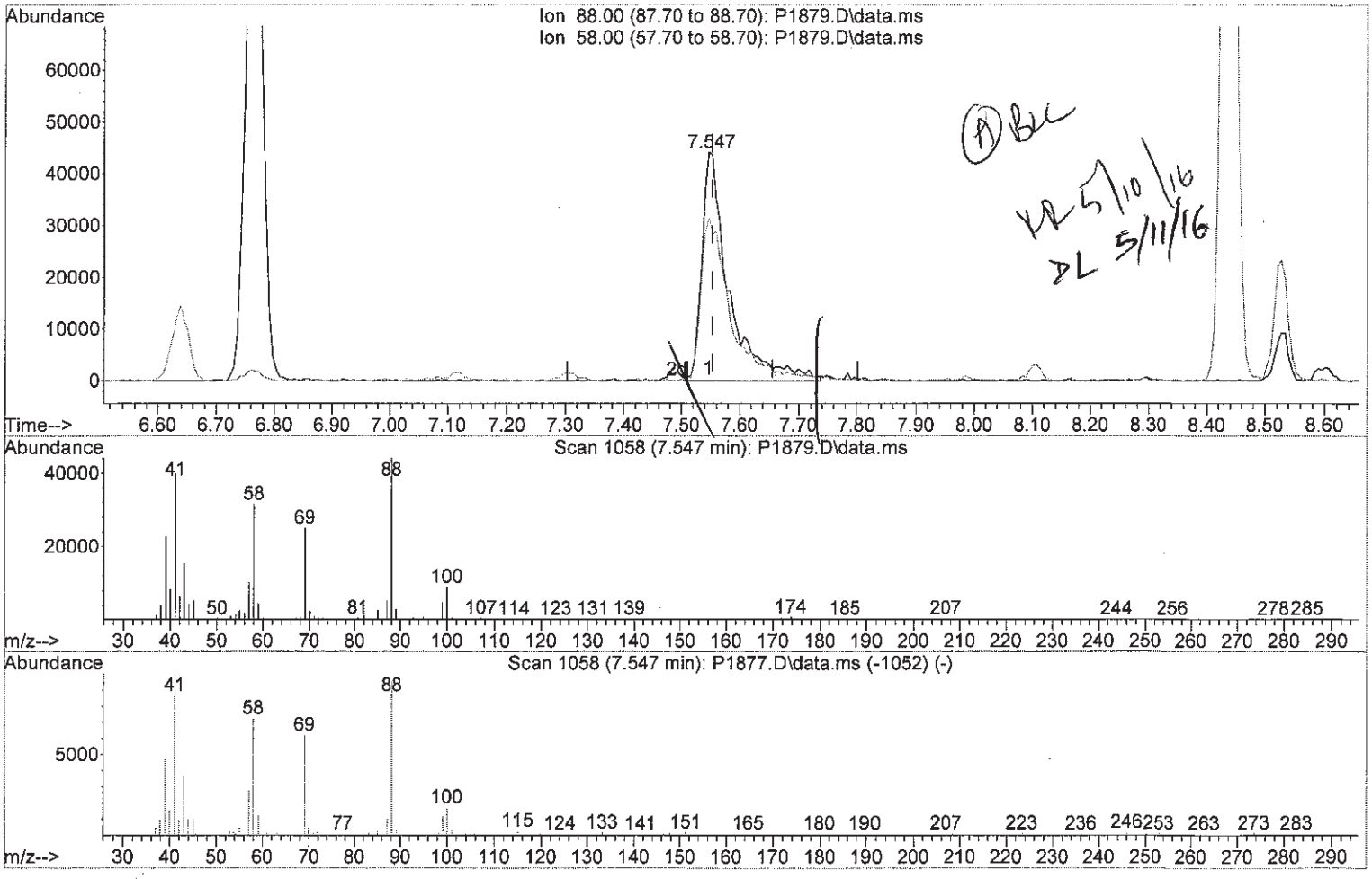
response 128466

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	71.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 10:36:00 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1879.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 3112.56 ppb m

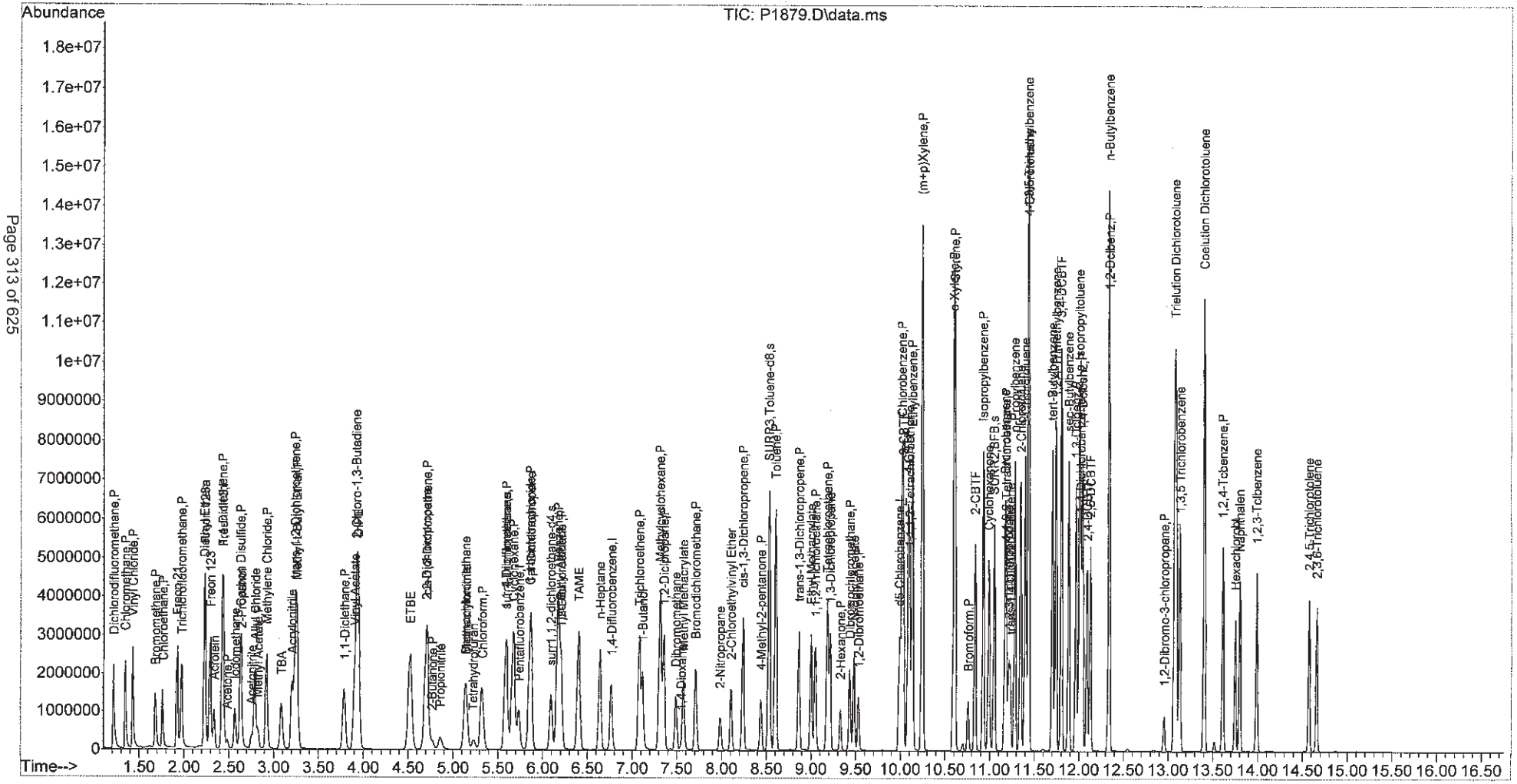
response 140687

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	71.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	812568	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1375883	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1286158	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	682735	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	395965	49.44	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.88%				
48) surr1,1,2-dichloroetha...	6.090	65	463291	48.57	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.14%				
65) SURR3,Toluene-d8	8.529	98	1752996	47.53	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.06%				
70) SURR2,BFB	11.047	95	678099	50.90	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	1946159	202.93	ppb		98
3) Chloromethane	1.341	50	2103107	202.47	ppb		95
4) Vinyl Chloride	1.427	62	2265192	194.60	ppb		96
5) Bromomethane	1.676	94	1031016	217.99	ppb		93
6) Chloroethane	1.762	64	1220921	195.74	ppb		100
7) Freon 21	1.920	67	2581046	192.18	ppb		98
8) Trichlorofluoromethane	1.969	101	1920914	191.89	ppb		99
9) Diethyl Ether	2.225	59	1190683	199.98	ppb		99
10) Freon 123a	2.231	67	1678489	189.64	ppb		96
11) Freon 123	2.292	83	1937046	189.63	ppb		98
12) Acrolein	2.335	56	903728	1128.96	ppb		97
13) 1,1-Diclethene	2.426	96	1224486	199.18	ppb		99
14) Freon 113	2.432	101	1180824	197.14	ppb		95
15) Acetone	2.487	43	323889	203.79	ppb		99
16) 2-Propanol	2.646	45	1359775	4412.10	ppb		100
17) Iodomethane	2.567	142	1431455	251.72	ppb		100
18) Carbon Disulfide	2.628	76	3869910	188.81	ppb		94
19) Acetonitrile	2.756	40	255478	997.00	ppb		94
20) Allyl Chloride	2.792	76	591444	170.71	ppb		96
21) Methyl Acetate	2.823	43	814558	212.03	ppb		96
22) Methylene Chloride	2.920	84	1363331	198.97	ppb		96
23) TBA	3.091	59	2142751	4375.87	ppb		99
24) Acrylonitrile	3.207	53	1942785	1044.19	ppb		96
25) Methyl-t-Butyl Ether	3.262	73	3552614	195.85	ppb		97
26) trans-1,2-Dichloroethene	3.243	96	1344856	191.61	ppb		96
28) 1,1-Diclethane	3.786	63	2366684	193.75	ppb		99
29) Vinyl Acetate	3.902	86	246045	187.48	ppb	#	81
30) DIPE	3.938	45	4905947	195.31	ppb		95
31) 2-Chloro-1,3-Butadiene	3.920	53	2718287	199.38	ppb		98
32) ETBE	4.523	59	4498270	202.16	ppb		97
33) 2,2-Dichloropropane	4.700	77	2067787	197.34	ppb		99
34) cis-1,2-Dichloroethene	4.712	96	1471910	198.65	ppb		99
35) 2-Butanone	4.767	43	495622	206.99	ppb		91
36) Propionitrile	4.859	54	696608	1003.15	ppb		94

KR 5/10/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.139	130	743646	192.19	ppb		95
38) Methacrylonitrile	5.151	67	450426	215.82	ppb		98
39) Tetrahydrofuran	5.231	42	309730	203.72	ppb		89
40) Chloroform	5.322	83	2302036	194.28	ppb		96
41) 1,1,1-Trichloroethane	5.590	97	1922950	190.37	ppb		99
42) TAME	6.401	73	3956905	203.92	ppb		98
44) Cyclohexane	5.670	41	1504117	196.27	ppb		98
46) Carbontetrachloride	5.859	121	519297	197.37	ppb		100
47) 1,1-Dichloropropene	5.865	75	1872609	198.51	ppb		96
49) Benzene	6.170	78	5097936	184.04	ppb		92
50) 1,2-Dichloroethane	6.206	62	1644144	198.90	ppb		97
51) Iso-Butyl Alcohol	6.206	43	1106237	4283.75	ppb		94
52) n-Heptane	6.639	43	1583611	187.53	ppb		99
53) 1-Butanol	7.121	56	1686626	11245.94	ppb		98
54) Trichloroethene	7.078	130	1352001	199.38	ppb		98
55) Methylcyclohexane	7.310	55	1808778	200.65	ppb		97
56) 1,2-Diclpropane	7.352	63	1482517	197.97	ppb		98
57) Dibromomethane	7.486	93	715474	202.53	ppb		95
58) 1,4-Dioxane	7.553	88	212162m	4719.69	ppb		
59) Methyl Methacrylate	7.572	69	852713	195.22	ppb		99
60) Bromodichloromethane	7.706	83	1771341	193.73	ppb		99
61) 2-Nitropropane	7.986	41	596011	401.80	ppb		92
62) 2-Chloroethylvinyl Ether	8.108	63	863599	216.04	ppb		96
63) cis-1,3-Dichloropropene	8.236	75	2327350	199.97	ppb		100
64) 4-Methyl-2-pentanone	8.437	43	1138819	214.97	ppb		97
66) Toluene	8.602	91	4911804	167.98	ppb		82
67) trans-1,3-Dichloropropene	8.864	75	1967459	203.01	ppb		97
68) Ethyl Methacrylate	8.998	69	1754249	199.47	ppb		99
69) 1,1,2-Trichloroethane	9.047	97	1017574	188.30	ppb		94
72) Tetrachloroethene	9.181	164	1005458	202.75	ppb		95
73) 2-Hexanone	9.327	43	802649	215.58	ppb		94
74) 1,3-Dichloropropane	9.212	76	1922011	199.62	ppb		97
75) Dibromochloromethane	9.431	129	1244682	194.91	ppb		97
76) N-Butyl Acetate	9.480	43	2026091	208.50	ppb		98
77) 1,2-Dibromoethane	9.529	107	1031425	197.59	ppb		98
78) Chlorobenzene	10.016	112	3460231	183.44	ppb		86
79) 3-CBTF	10.035	180	1873738	200.20	ppb		99
80) 4-CBTF	10.083	180	1699179	205.51	ppb		92
81) 1,1,1,2-Tetrachloroethane	10.102	131	1345681	203.92	ppb		99
82) Ethylbenzene	10.132	106	2067887	196.55	ppb	#	51
83) (m+p)Xylene	10.242	106	4317997	348.83	ppb	#	58
84) o-Xylene	10.595	106	2442665	198.19	ppb	#	72
85) Styrene	10.608	104	3767709	183.06	ppb		80
87) Bromoform	10.760	173	661109	203.10	ppb		98
88) 2-CBTF	10.833	180	1814469	201.82	ppb		95
89) Isopropylbenzene	10.925	105	4685883	156.78	ppb		79
90) Cyclohexanone	10.992	55	2348293	3952.05	ppb		100
91) trans-1,4-Dichloro-2-B...	11.230	53	453158	194.70	ppb		97
92) 1,1,2,2-Tetrachloroethane	11.181	83	1346477	192.43	ppb		97
93) Bromobenzene	11.175	156	1483643	195.45	ppb		91
94) 1,2,3-Trichloropropane	11.211	110	382098	185.10	ppb		94

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

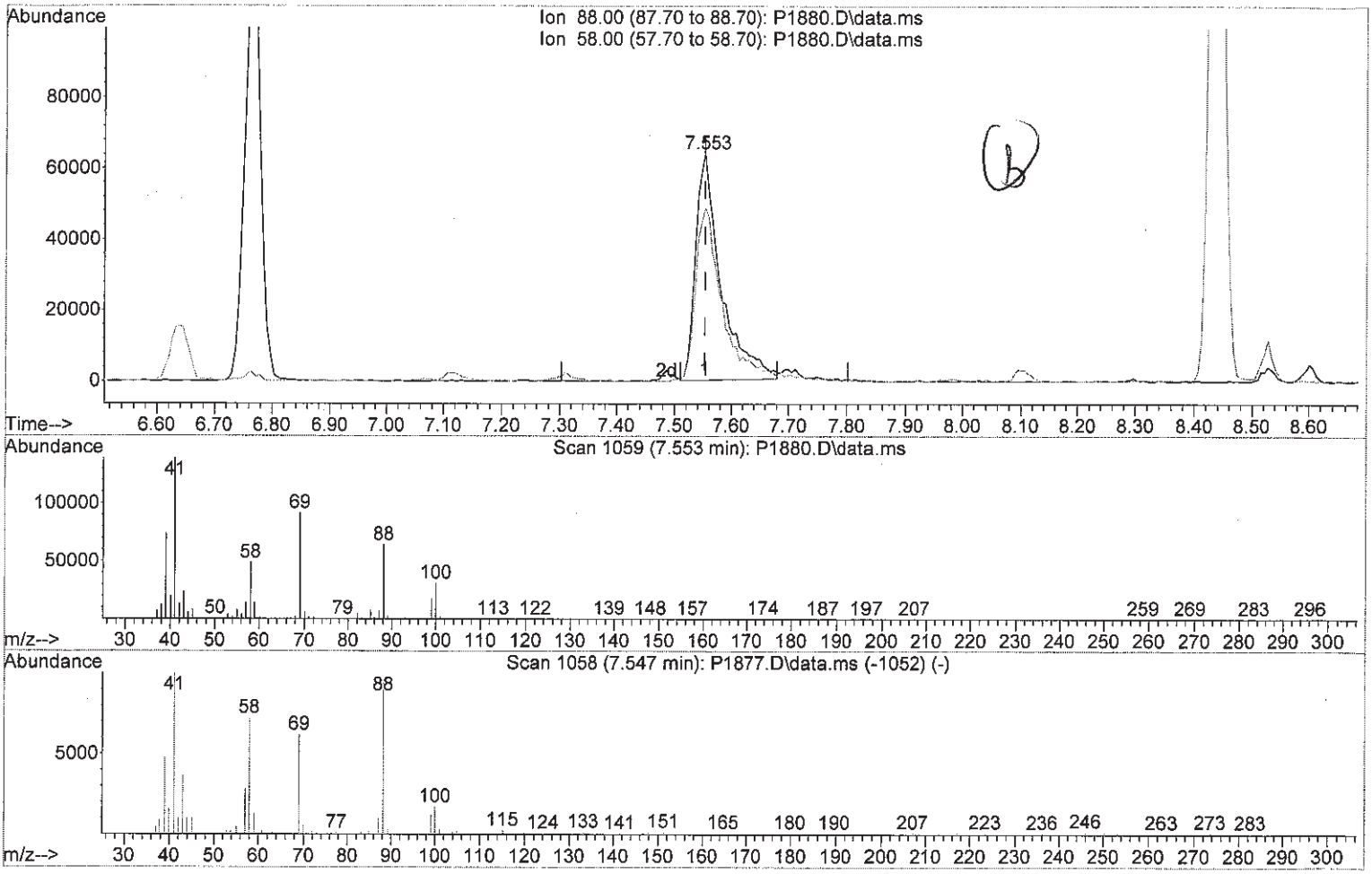
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	5034856	145.19	ppb		69
96)	2-Chlorotoluene	11.345	91	3800358	169.78	ppb		83
97)	3-Chlorotoluene	11.394	91	3967193	173.86	ppb	#	85
98)	4-Chlorotoluene	11.437	91	4354603	166.86	ppb		74
99)	1,3,5-Trimethylbenzene	11.431	105	4274730	165.33	ppb		75
100)	tert-Butylbenzene	11.699	119	3626295	176.66	ppb		90
101)	1,2,4-Trimethylbenzene	11.742	105	4318259	162.72	ppb		75
102)	3,4-DCBTF	11.803	214	1309926	204.88	ppb		98
103)	sec-Butylbenzene	11.882	105	4561283	155.78	ppb		80
104)	p-Isopropyltoluene	12.004	119	4165231	164.81	ppb		77
105)	1,3-Dclbenz	11.967	146	2697388	187.30	ppb		95
106)	1,4-Dclbenz	12.040	146	2759438	184.21	ppb		96
107)	2,4-DCBTF	12.089	214	1186441	195.65	ppb		97
108)	2,5-DCBTF	12.126	214	1307403	203.27	ppb		97
109)	n-Butylbenzene	12.333	91	3877834	169.73	ppb		78
110)	1,2-Dclbenz	12.339	146	2629054	192.87	ppb		97
111)	1,2-Dibromo-3-chloropr...	12.955	157	260349	202.57	ppb		92
112)	Trielution Dichlorotol...	13.077	125	6178451	544.87	ppb	#	82
113)	1,3,5 Trichlorobenzene	13.132	180	1811960	199.39	ppb		100
114)	Coelution Dichlorotoluene	13.406	125	4290929	357.01	ppb	#	79
115)	1,2,4-Tcbenzene	13.607	180	1604038	198.31	ppb		99
116)	Hexachlorobt	13.747	225	629260	189.18	ppb		94
117)	Naphthalen	13.802	128	3339768	192.69	ppb		92
118)	1,2,3-Tclbenzene	13.985	180	1424090	207.80	ppb		98
119)	2,4,5-Trichlorotolene	14.570	159	1063915	217.86	ppb		98
120)	2,3,6-Trichlorotoluene	14.656	159	966792	212.85	ppb		97

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

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 10:36:04 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1880.D\data.ms

(58) 1,4-Dioxane

7.553min (0.000) 4416.81 ppb

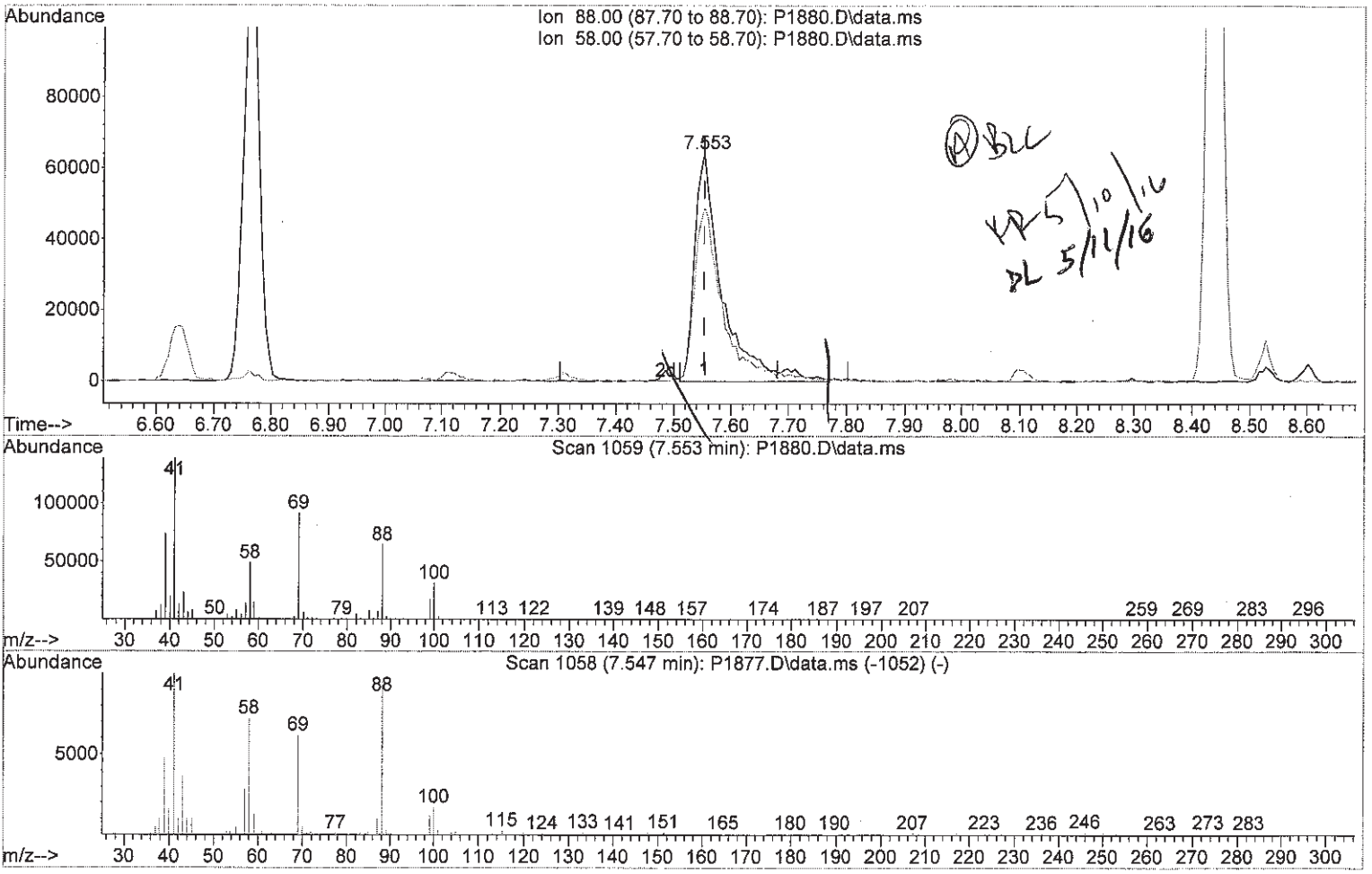
response 198547

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 10:36:04 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1880.D\data.ms

(58) 1,4-Dioxane

7.553min (0.000) 4719.69 ppb m

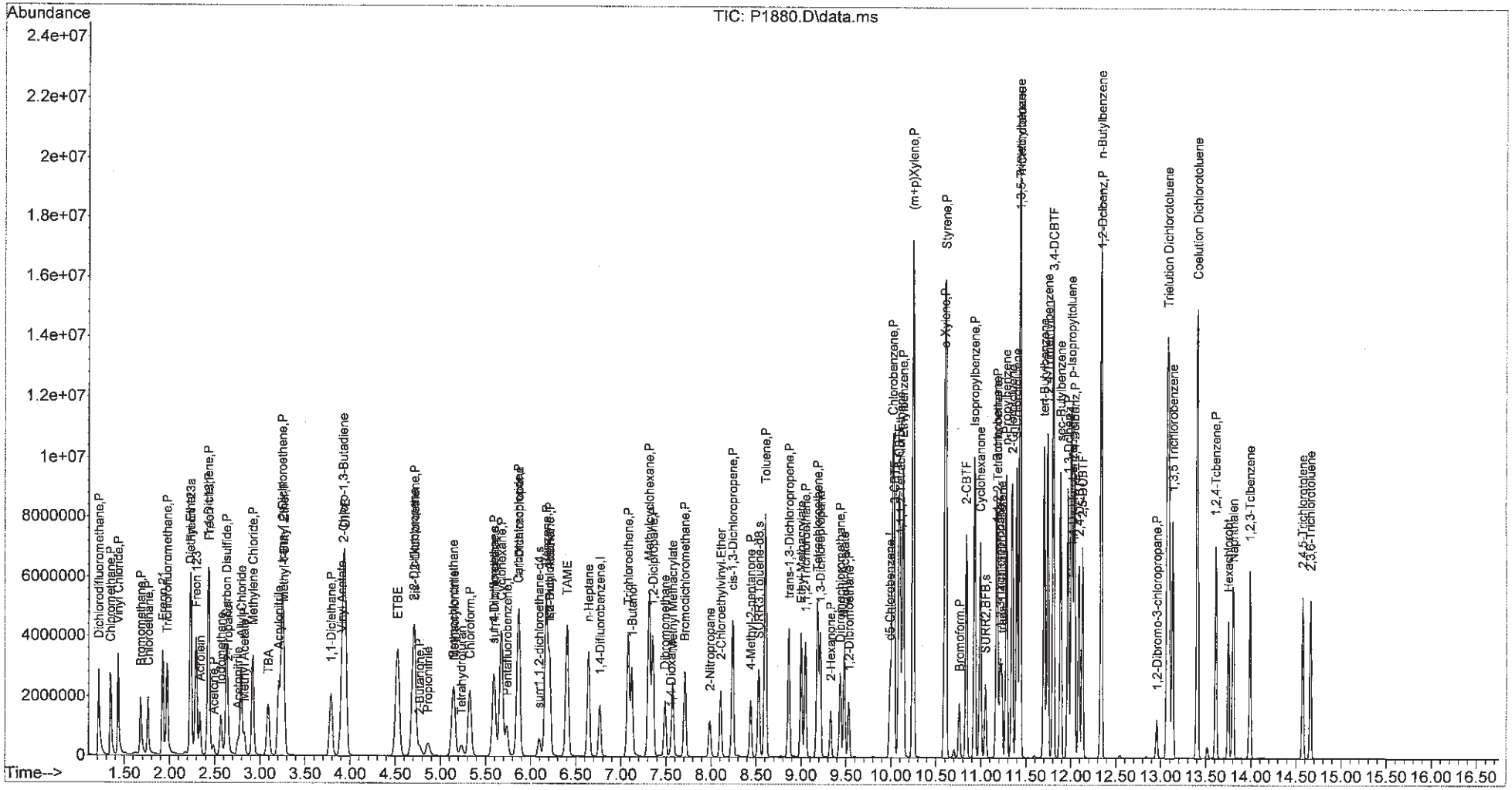
response 212162

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Initial Calibration Verification Summary Report

14-5/10/16

Calibration ID: RC1600048
8760 waters W050916

Instrument ID: R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1600048-10	T	Average RF	50	52.18	ppm	4.4	<=30
1,1,1-Trichloroethane (TCA)	RC1600048-10	T	Average RF	50	49.88	ppm	-0.2	<=30
1,1,2,2-Tetrachloroethane	RC1600048-10	T	Average RF	50	49.33	ppm	-1.3	<=30
1,1,2-Trichloroethane	RC1600048-10	T	Average RF	50	48.99	ppm	-2.0	<=30
1,1,2-Trichlorotrifluoroethane	RC1600048-10	T	Average RF	50	52.30	ppm	4.6	<=30
1,1-Dichloroethane (1,1-DCA)	RC1600048-10	T	Average RF	50	52.72	ppm	5.4	<=30
1,1-Dichloroethene (1,1-DCE)	RC1600048-10	T	Average RF	50	51.25	ppm	2.5	<=30
1,1-Dichloropropene	RC1600048-10	T	Average RF	50	55.52	ppm	11.0	<=30
1,2,3-Trichlorobenzene	RC1600048-10	T	Average RF	50	53.81	ppm	7.6	<=30
1,2,3-Trichloropropane	RC1600048-10	T	Average RF	50	44.95	ppm	-10.1	<=30
1,2,4-Trichlorobenzene	RC1600048-10	T	Average RF	50	54.51	ppm	9.0	<=30
1,2,4-Trimethylbenzene	RC1600048-10	T	Average RF	50	53.86	ppm	7.7	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1600048-10	T	Average RF	50	50.19	ppm	0.4	<=30
1,2-Dibromoethane	RC1600048-10	T	Average RF	50	48.82	ppm	-2.4	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1600048-10	T	Average RF	50	49.30	ppm	-1.4	<=30
1,2-Dichlorobenzene	RC1600048-10	T	Average RF	50	53.21	ppm	6.4	<=30
1,2-Dichloroethane	RC1600048-10	T	Average RF	50	51.65	ppm	3.3	<=30
1,2-Dichloropropane	RC1600048-10	T	Average RF	50	52.19	ppm	4.4	<=30
1,3,5-Trichlorobenzene	RC1600048-10	T	Average RF	50	52.84	ppm	5.7	<=30
1,3,5-Trimethylbenzene	RC1600048-10	T	Average RF	50	53.94	ppm	7.9	<=30
1,3-Dichlorobenzene	RC1600048-10	T	Average RF	50	52.92	ppm	5.8	<=30
1,3-Dichloropropane	RC1600048-10	T	Average RF	50	51.91	ppm	3.8	<=30
1,4-Dichlorobenzene	RC1600048-10	T	Average RF	50	51.36	ppm	2.7	<=30
1,4-Dioxane	RC1600048-10	T	Average RF	1000	1151	ppm	15.1	<=30
1-Butanol	RC1600048-10	T	Average RF	2500	2633	ppm	5.3	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1600048-10	T	Average RF	50	52.16	ppm	4.3	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1600048-10	T	Average RF	50	46.92	ppm	-6.2	<=30
2,2-Dichloropropane	RC1600048-10	T	Average RF	50	53.31	ppm	6.6	<=30
2,3,6-Trichlorotoluene	RC1600048-10	T	Average RF	50	50.19	ppm	0.4	<=30
2,4,5-Trichlorotoluene	RC1600048-10	T	Average RF	50	57.39	ppm	14.8	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1600048-10	T	Average RF	150	165.4	ppm	10.3	<=30
2,4-Dichlorobenzotrifluoride	RC1600048-10	T	Average RF	50	52.58	ppm	5.2	<=30
2,5-Dichlorobenzotrifluoride	RC1600048-10	T	Average RF	50	52.14	ppm	4.3	<=30
2-Butanone (MEK)	RC1600048-10	T	Average RF	50	45.94	ppm	-8.1	<=30
2-Chloro-1,3-butadiene	RC1600048-10	T	Average RF	50	43.40	ppm	-13.2	<=30
2-Chlorobenzotrifluoride	RC1600048-10	T	Average RF	50	54.32	ppm	8.6	<=30
2-Chloroethyl Vinyl Ether	RC1600048-10	T	Average RF	50	48.96	ppm	-2.1	<=30
2-Chlorotoluene	RC1600048-10	T	Average RF	50	53.39	ppm	6.8	<=30
2-Hexanone	RC1600048-10	T	Average RF	50	47.52	ppm	-5.0	<=30
2-Methyl-1-propanol	RC1600048-10	T	Average RF	1000	1021	ppm	2.1	<=30
2-Methyl-2-propanol	RC1600048-10	T	Average RF	1000	1074	ppm	7.4	<=30
2-Nitropropane	RC1600048-10	T	Average RF	100	99.78	ppm	-0.2	<=30
2-Propanol	RC1600048-10	T	Average RF	1000	995.5	ppm	-0.4	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1600048-10	T	Average RF	100	110.2	ppm	10.2	<=30
3,4-Dichlorobenzotrifluoride	RC1600048-10	T	Average RF	50	52.90	ppm	5.8	<=30
3-Chloro-1-propene	RC1600048-10	T	Average RF	50	58.00	ppm	16.0	<=30
3-Chlorobenzotrifluoride	RC1600048-10	T	Average RF	50	50.61	ppm	1.2	<=30
3-Chlorotoluene	RC1600048-10	T	Average RF	50	55.23	ppm	10.5	<=30
4-Chlorotoluene	RC1600048-10	T	Average RF	50	53.80	ppm	7.6	<=30
4-Isopropyltoluene	RC1600048-10	T	Average RF	50	55.19	ppm	10.4	<=30
4-Methyl-2-pentanone	RC1600048-10	T	Average RF	50	49.04	ppm	-1.9	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1600048-10	T	Average RF	50	42.06	ppm	-15.9	<=30
Acetonitrile	RC1600048-10	T	Linear	250	249.0	ppm	-0.4	<=30
Acrolein	RC1600048-10	T	Average RF	100	92.20	ppm	-7.8	<=30
Acrylonitrile	RC1600048-10	T	Average RF	250	246.4	ppm	-1.4	<=30
Benzene	RC1600048-10	T	Average RF	50	53.34	ppm	6.7	<=30
Bromobenzene	RC1600048-10	T	Average RF	50	51.93	ppm	3.9	<=30
Bromochloromethane	RC1600048-10	T	Average RF	50	48.31	ppm	-3.4	<=30
Bromodichloromethane	RC1600048-10	T	Average RF	50	49.76	ppm	-0.5	<=30
Bromoform	RC1600048-10	T	Average RF	50	56.51	ppm	13.0	<=30
Bromomethane	RC1600048-10	T	Average RF	50	51.35	ppm	2.7	<=30
Carbon Disulfide	RC1600048-10	T	Average RF	50	51.29	ppm	2.6	<=30
Carbon Tetrachloride	RC1600048-10	T	Average RF	50	52.45	ppm	4.9	<=30
Chlorobenzene	RC1600048-10	T	Average RF	50	51.92	ppm	3.8	<=30
Chloroethane	RC1600048-10	T	Average RF	50	49.09	ppm	-1.8	<=30
Chloroform	RC1600048-10	T	Average RF	50	49.58	ppm	-0.8	<=30
Chloromethane	RC1600048-10	T	Average RF	50	49.71	ppm	-0.6	<=30
Cyclohexane	RC1600048-10	T	Average RF	50	45.03	ppm	-9.9	<=30
Cyclohexanone	RC1600048-10	T	Average RF	1000	1007	ppm	0.7	<=30
Dibromochloromethane	RC1600048-10	T	Average RF	50	47.23	ppm	-5.5	<=30
Dibromomethane	RC1600048-10	T	Average RF	50	49.83	ppm	-0.3	<=30
Dichlorodifluoromethane (CFC 12)	RC1600048-10	T	Average RF	50	44.32	ppm	-11.4	<=30
Dichlorofluoromethane (CFC 21)	RC1600048-10	T	Average RF	50	49.05	ppm	-1.9	<=30
Dichloromethane	RC1600048-10	T	Average RF	50	49.64	ppm	-0.7	<=30
Diethyl Ether	RC1600048-10	T	Average RF	50	49.74	ppm	-0.5	<=30
Diisopropyl Ether	RC1600048-10	T	Average RF	50	47.10	ppm	-5.8	<=30
Ethyl Methacrylate	RC1600048-10	T	Average RF	50	50.58	ppm	1.2	<=30
Ethyl tert-Butyl Ether	RC1600048-10	T	Average RF	50	46.84	ppm	-6.3	<=30
Ethylbenzene	RC1600048-10	T	Average RF	50	51.79	ppm	3.6	<=30
Hexachlorobutadiene	RC1600048-10	T	Average RF	50	54.28	ppm	8.6	<=30
Iodomethane	RC1600048-10	T	Quadratic	50	56.39	ppm	12.8	<=30
Isopropylbenzene (Cumene)	RC1600048-10	T	Average RF	50	55.92	ppm	11.8	<=30
Methacrylonitrile	RC1600048-10	T	Average RF	50	50.38	ppm	0.8	<=30
Methyl Acetate	RC1600048-10	T	Average RF	50	46.30	ppm	-7.4	<=30
Methyl Methacrylate	RC1600048-10	T	Average RF	50	51.25	ppm	2.5	<=30
Methyl tert-Butyl Ether	RC1600048-10	T	Average RF	50	51.50	ppm	3.0	<=30
Methylcyclohexane	RC1600048-10	T	Average RF	50	47.71	ppm	-4.6	<=30
Naphthalene	RC1600048-10	T	Average RF	50	52.90	ppm	5.8	<=30
Propionitrile	RC1600048-10	T	Average RF	250	256.3	ppm	2.5	<=30
Styrene	RC1600048-10	T	Average RF	50	53.58	ppm	7.2	<=30
Tetrachloroethene (PCE)	RC1600048-10	T	Average RF	50	55.19	ppm	10.4	<=30
Tetrahydrofuran (THF)	RC1600048-10	T	Average RF	50	50.04	ppm	0.1	<=30
Toluene	RC1600048-10	T	Average RF	50	53.19	ppm	6.4	<=30
Trichloroethene (TCE)	RC1600048-10	T	Average RF	50	53.57	ppm	7.1	<=30
Trichlorofluoromethane (CFC 11)	RC1600048-10	T	Average RF	50	51.03	ppm	2.1	<=30
Vinyl Acetate	RC1600048-10	T	Average RF	50	53.52	ppm	7.0	<=30
Vinyl Chloride	RC1600048-10	T	Average RF	50	48.28	ppm	-3.4	<=30
cis-1,2-Dichloroethene	RC1600048-10	T	Average RF	50	51.27	ppm	2.5	<=30
cis-1,3-Dichloropropene	RC1600048-10	T	Average RF	50	52.67	ppm	5.3	<=30
m,p-Xylenes	RC1600048-10	T	Average RF	100	107.5	ppm	7.5	<=30
n-Butyl Acetate	RC1600048-10	T	Average RF	50	46.92	ppm	-6.2	<=30
n-Butylbenzene	RC1600048-10	T	Average RF	50	56.50	ppm	13.0	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1600048-10	T	Average RF	50	54.14	ppm	8.3	<=30
n-Propylbenzene	RC1600048-10	T	Average RF	50	57.02	ppm	14.0	<=30
o-Xylene	RC1600048-10	T	Average RF	50	53.35	ppm	6.7	<=30
sec-Butylbenzene	RC1600048-10	T	Average RF	50	55.60	ppm	11.2	<=30
tert-Amyl Methyl Ether	RC1600048-10	T	Average RF	50	48.09	ppm	-3.8	<=30
tert-Butylbenzene	RC1600048-10	T	Average RF	50	56.27	ppm	12.5	<=30
trans-1,2-Dichloroethene	RC1600048-10	T	Average RF	50	50.88	ppm	1.8	<=30
trans-1,3-Dichloropropene	RC1600048-10	T	Average RF	50	53.71	ppm	7.4	<=30
trans-1,4-Dichloro-2-butene	RC1600048-10	T	Average RF	50	43.85	ppm	-12.3	<=30
1,2-Dichloroethane-d4	RC1600048-10	S	Average RF	50	54.55	ppm	9.1	<=30
4-Bromofluorobenzene	RC1600048-10	S	Average RF	50	57.18	ppm	14.4	<=30
Dibromofluoromethane	RC1600048-10	S	Average RF	50	55.86	ppm	11.7	<=30
Toluene-d8	RC1600048-10	S	Average RF	50	57.41	ppm	14.8	<=30

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	810794	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.761	114	1354595	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1272990	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	646705	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.584	113	391715	55.86	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.72%				
48) surr1,1,2-dichloroetha...	6.090	65	449629	54.55	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 109.10%				
65) SURR3,Toluene-d8	8.529	98	1727346	57.41	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.82%				
70) SURR2,BFB	11.047	95	669194	57.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 114.36%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	423883	44.32	ppb		97
3) Chloromethane	1.341	50	515317	49.71	ppb		99
4) Vinyl Chloride	1.427	62	559456	48.28	ppb		99
5) Bromomethane	1.683	94	240968	51.35	ppb		96
6) Chloroethane	1.762	64	305517	49.09	ppb		100
7) Freon 21	1.920	67	656802	49.05	ppb		97
8) Trichlorofluoromethane	1.969	101	509640	51.03	ppb		95
9) Diethyl Ether	2.225	59	295497	49.74	ppb		99
10) Freon 123a	2.231	67	417947	49.30	ppb		95
11) Freon 123	2.292	83	472502	46.92	ppb		99
12) Acrolein	2.335	56	72664	92.20	ppb		97
13) 1,1-Diclethene	2.426	96	313015	51.25	ppb		98
14) Freon 113	2.433	101	312579	52.30	ppb		96
15) Acetone	2.481	43	66603	42.06	ppb		96
16) 2-Propanol	2.640	45	306068	995.53	ppb		94
17) Iodomethane	2.567	142	345599	56.39	ppb		97
18) Carbon Disulfide	2.628	76	1048939	51.29	ppb		99
19) Acetonitrile	2.756	40	61176	249.00	ppb		93
20) Allyl Chloride	2.792	76	200523	58.00	ppb		96
21) Methyl Acetate	2.823	43	177471	46.30	ppb		95
22) Methylene Chloride	2.920	84	339414	49.64	ppb		98
23) TBA	3.085	59	524599	1073.67	ppb		99
24) Acrylonitrile	3.201	53	457425	246.39	ppb		93
25) Methyl-t-Butyl Ether	3.256	73	932072	51.50	ppb		100
26) trans-1,2-Dichloroethene	3.237	96	356358	50.88	ppb		99
28) 1,1-Diclethane	3.780	63	642617	52.72	ppb		96
29) Vinyl Acetate	3.896	86	68440	53.52	ppb	#	92
30) DIPE	3.938	45	1180381	47.10	ppb		99
31) 2-Chloro-1,3-Butadiene	3.920	53	589144	43.40	ppb		95
32) ETBE	4.517	59	1039989	46.84	ppb		98
33) 2,2-Dichloropropane	4.694	77	557369	53.31	ppb		99
34) cis-1,2-Dichloroethene	4.706	96	378400	51.27	ppb		93
35) 2-Butanone	4.774	43	107287	45.94	ppb		90
36) Propionitrile	4.853	54	172114	256.25	ppb		97

KB 5/10/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.139	130	186528	48.31	ppb	95
38) Methacrylonitrile	5.152	67	109969	50.38	ppb	94
39) Tetrahydrofuran	5.231	42	76857	50.04	ppb	91
40) Chloroform	5.322	83	586941	49.58	ppb	97
41) 1,1,1-Trichloroethane	5.590	97	503643	49.88	ppb	96
42) TAME	6.401	73	931178	48.09	ppb	99
44) Cyclohexane	5.670	41	339952	45.03	ppb	95
46) Carbontetrachloride	5.853	121	136287	52.45	ppb	96
47) 1,1-Dichloropropene	5.865	75	513675	55.52	ppb	99
49) Benzene	6.163	78	1454762	53.34	ppb	99
50) 1,2-Dichloroethane	6.206	62	420327	51.65	ppb	98
51) Iso-Butyl Alcohol	6.194	43	259710	1021.50	ppb	98
52) n-Heptane	6.639	43	449267	54.14	ppb	99
53) 1-Butanol	7.108	56	385000	2633.29	ppb	99
54) Trichloroethene	7.078	130	357671	53.57	ppb	98
55) Methylcyclohexane	7.310	55	423391	47.71	ppb	96
56) 1,2-Diclpropane	7.346	63	384773	52.19	ppb	99
57) Dibromomethane	7.486	93	173306	49.83	ppb	95
58) 1,4-Dioxane	7.553	88	51186	1151.29	ppb	91
59) Methyl Methacrylate	7.572	69	212912	51.25	ppb	100
60) Bromodichloromethane	7.706	83	446640	49.76	ppb	99
61) 2-Nitropropane	7.980	41	146673	99.78	ppb	95
62) 2-Chloroethylvinyl Ether	8.102	63	192574	48.96	ppb	100
63) cis-1,3-Dichloropropene	8.236	75	603527	52.67	ppb	99
64) 4-Methyl-2-pentanone	8.437	43	253914	49.04	ppb	99
66) Toluene	8.596	91	1531249	53.19	ppb	99
67) trans-1,3-Dichloropropene	8.858	75	512447	53.71	ppb	98
68) Ethyl Methacrylate	8.998	69	437966	50.58	ppb	96
69) 1,1,2-Trichloroethane	9.041	97	258795	48.99	ppb	89
72) Tetrachloroethene	9.181	164	270916	55.19	ppb	94
73) 2-Hexanone	9.328	43	175118	47.52	ppb	98
74) 1,3-Dichloropropane	9.212	76	494721	51.91	ppb	97
75) Dibromochloromethane	9.431	129	298530	47.23	ppb	99
76) N-Butyl Acetate	9.474	43	451537	46.92	ppb	98
77) 1,2-Dibromoethane	9.529	107	252209	48.82	ppb	98
78) Chlorobenzene	10.010	112	969265	51.92	ppb	96
79) 3-CBTF	10.029	180	468249	50.61	ppb	98
80) 4-CBTF	10.083	180	426868	52.16	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.096	131	340829	52.18	ppb	96
82) Ethylbenzene	10.132	106	539320	51.79	ppb	100
83) (m+p)Xylene	10.242	106	1317309	107.52	ppb	98
84) o-Xylene	10.596	106	650832	53.35	ppb	98
85) Styrene	10.608	104	1091575	53.58	ppb	98
87) Bromoform	10.754	173	174241	56.51	ppb	99
88) 2-CBTF	10.833	180	462582	54.32	ppb	98
89) Isopropylbenzene	10.925	105	1583248	55.92	ppb	99
90) Cyclohexanone	10.986	55	568112	1007.15	ppb	96
91) trans-1,4-Dichloro-2-B...	11.230	53	96671	43.85	ppb	96
92) 1,1,2,2-Tetrachloroethane	11.181	83	326927	49.33	ppb	98
93) Bromobenzene	11.169	156	373412	51.93	ppb	98
94) 1,2,3-Trichloropropane	11.205	110	86248	44.95	ppb	97

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

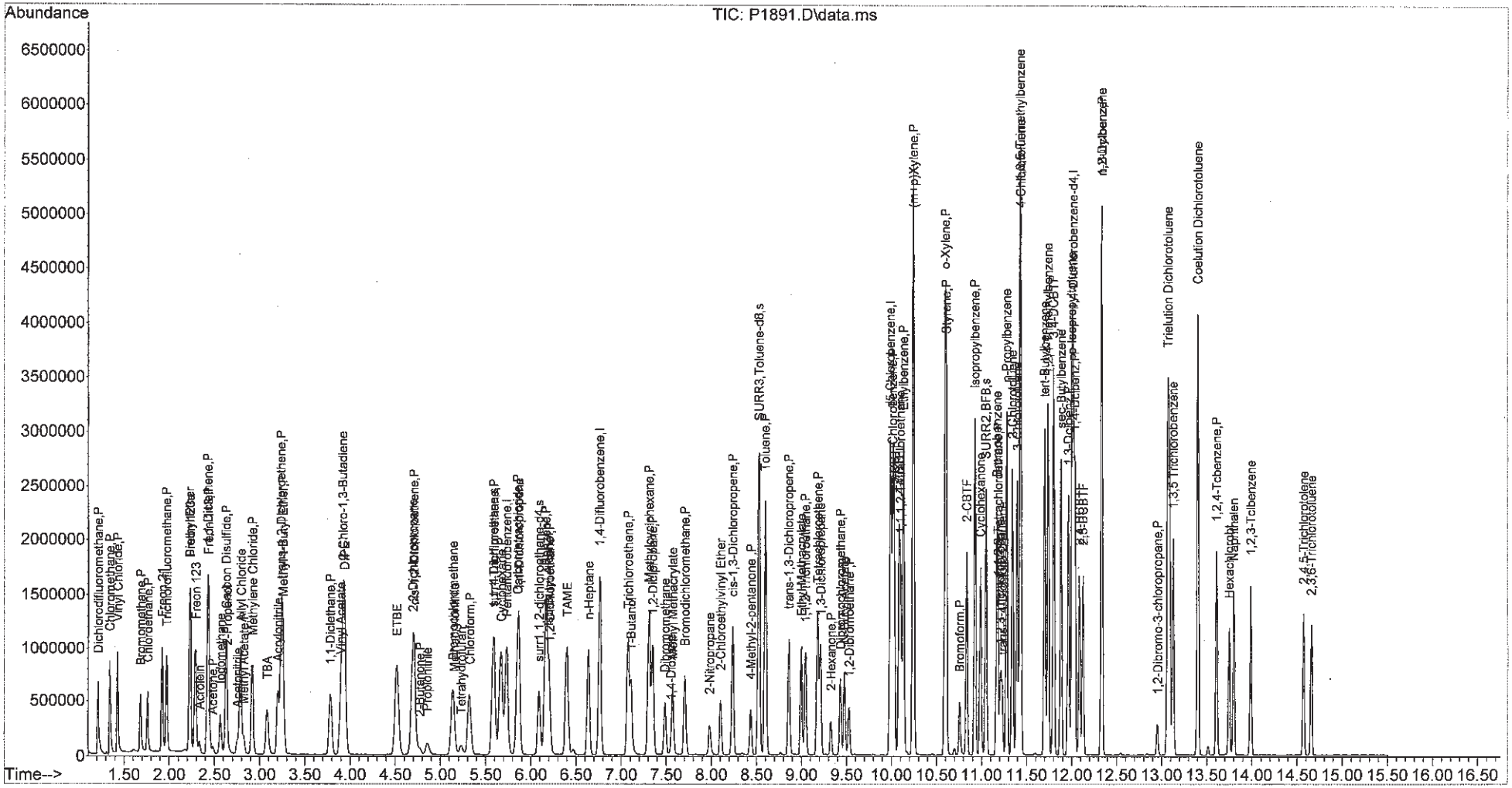
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	1872993	57.02	ppb	99
96)	2-Chlorotoluene	11.339	91	1131964	53.39	ppb	99
97)	3-Chlorotoluene	11.394	91	1193821	55.23	ppb	98
98)	4-Chlorotoluene	11.431	91	1329784	53.80	ppb	98
99)	1,3,5-Trimethylbenzene	11.425	105	1321075	53.94	ppb	99
100)	tert-Butylbenzene	11.699	119	1094087	56.27	ppb	99
101)	1,2,4-Trimethylbenzene	11.736	105	1353849	53.86	ppb	99
102)	3,4-DCBTF	11.797	214	320352	52.90	ppb	96
103)	sec-Butylbenzene	11.882	105	1542102	55.60	ppb	99
104)	p-Isopropyltoluene	11.998	119	1321095	55.19	ppb	99
105)	1,3-Dclbenz	11.961	146	721917	52.92	ppb	97
106)	1,4-Dclbenz	12.034	146	728784	51.36	ppb	99
107)	2,4-DCBTF	12.083	214	302005	52.58	ppb	98
108)	2,5-DCBTF	12.126	214	317642	52.14	ppb	97
109)	n-Butylbenzene	12.333	91	1222701	56.50	ppb	99
110)	1,2-Dclbenz	12.333	146	687078	53.21	ppb	96
111)	1,2-Dibromo-3-chloropr...	12.955	157	61106	50.19	ppb	96
112)	Trielution Dichlorotol...	13.071	125	1776464	165.39	ppb	98
113)	1,3,5 Trichlorobenzene	13.126	180	454844	52.84	ppb	99
114)	Coelution Dichlorotoluene	13.400	125	1254133	110.16	ppb	99
115)	1,2,4-Tcbenzene	13.607	180	417648	54.51	ppb	98
116)	Hexachlorobt	13.747	225	171022	54.28	ppb	92
117)	Naphthalen	13.796	128	868445	52.90	ppb	98
118)	1,2,3-Tclbenzene	13.985	180	349319	53.81	ppb	96
119)	2,4,5-Trichlorotolene	14.570	159	265493	57.39	ppb	97
120)	2,3,6-Trichlorotoluene	14.656	159	215945	50.19	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

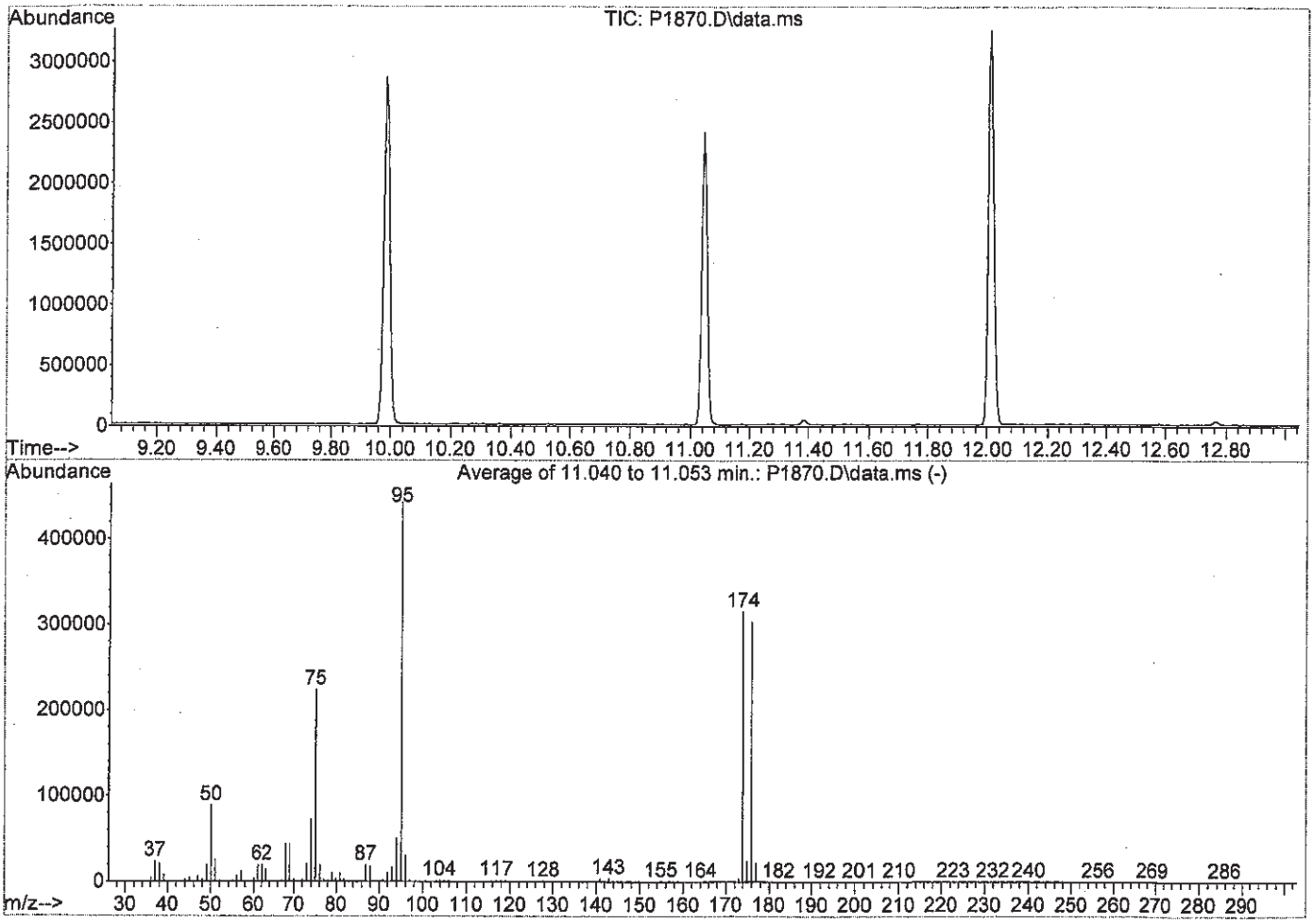

Abundance
TIC: P1891.D\data.ms
Time-->
Dichlorodifluoromethane,P
Chloromethane,P
Vinyl Chloride,P
Bromomethane,P
Chloroethane,P
Trichlorofluoromethane,P
Freon 21
Freon 123
Acrolein
Acetone,P
Freon 113
Carbon Disulfide,P
Allyl Chloride
Methylene Chloride,P
Methyl Acetate,P
Acrylonitrile
TBA
Methyl-t-Butyl Ether
trans-1,2-Dichloroethene,P
1,1-Dichloroethane,P
Vinyl Acetate
2,2-Dichloropropane,P
cis-1,2-Dichloroethene,P
2-Butanone,P
Propionitrile
Bromochloromethane
Tetrahydrofuran
Chloroform,P
1,1,1-Trichloroethane,P
Cyclohexane
Carbon Tetrachloride,P
Dibromofluoromethane,s
1,1-Dichloropropene,P
Benzene,P
1,2-Dichloroethane-d4,s
Trichloroethene,P
1,2-Dichloropropane,P
Dibromomethane,P
1,4-Dioxane
Bromodichloromethane,P
2-Nitropropane
2-Chloroethylvinyl Ether
cis-1,3-Dichloropropene,P
4-Methyl-2-pentanone,P
Toluene,P
SURR3,Toluene-d8,s
trans-1,3-Dichloropropene,P
Ethyl Methacrylate
1,1,2-Trichloroethane,P
Tetrachloroethene,P
2-Hexanone,P
1,3-Dichloropropane,P
Dibromochloromethane,P
1,2-Dibromoethane,P
Chlorobenzene-d5,s
1,1,1,2-Tetrachloroethane,P
Ethylbenzene,P
(m+p)Xylene,P
o-Xylene,P
Styrene,P
Bromoform,P
2-CBTF
Cyclohexanone,S
SURR2,BFB,s
Isopropylbenzene,P
Cumene
Bromobenzene,P
n-Propylbenzene
4-Chlorotoluene,P
1,3,5-Trimethylbenzene
tert-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene,P
1,4-Dichlorobenzene-d4,I
p-Isopropyltoluene
1,4-Dichlorobenzene,P
n-Butylbenzene
1,2-Dichlorobenzene,P
1,2-Dibromo-3-chloropropane,P
1,2,4-Trichlorobenzene,P
Hexachlorobutadiene,P
Naphthalen
1,2,3-Trichlorobenzene
1,3,5-Trichlorotoluene
Coelution Dichlorotoluene
Trielution Dichlorotoluene
2,3,6-Trichlorotoluene
2,4,5-Trichlorotoluene
1,3-Dibromobenzene
1,4-Dibromobenzene
1,2-Dibromobenz

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1870.D
Acq On : 9 May 2016 1:11 pm
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Nov 19 11:34:31 2015

KR 5/9/16



AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.0	88653	PASS
75	95	30	60	50.6	223893	PASS
95	95	100	100	100.0	442722	PASS
96	95	5	9	6.8	29997	PASS
173	174	0.00	2	1.1	3475	PASS
174	95	50	120	71.3	315819	PASS
175	174	5	9	7.4	23469	PASS
176	174	95	101	96.2	303808	PASS
177	176	5	9	7.0	21323	PASS

Analysis: 8260 Waters | Analyst: K. Quest | Tune Method: W0509116

Date: 5/9/16 | Data Path: j:\acqudata\msvoa12\0509116 | Run Method: ↓

Instr. 12 | LIMS Run#: -ICAL ——— VP5557 (LOD/LOQ)

Pos.	Sample	Diln.	Diln. Prep.			RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK									P1862		
2	↓									P1863		
3										P1864		(W0509116)
4										P1865		
5										P1866		
6										P1867		
7										P1868		
8	↓									P1869		
9	TUNE									P1870	YT	(auto) 13:11
1	IBLK		(5ppm) 5uL	(500ppm) —	(5500ppm) —	FV 5Dmes				P1871	YB	
2	0.5 ppb		5uL	—	—					P1872	Y	
3	1.0		10uL	—	—					P1873	Y	
4	2.0		20uL	—	1uL					P1874	Y	
5	5.0		50uL	—	2uL					P1875	Y	
6	20		—	2uL	5uL					P1876	Y	
7	50		—	5uL	—					P1877	Y	
8	100		—	10uL	7.5uL					P1878	Y	
9	150		—	15uL	10uL					P1879	Y	
10	200		—	20uL	—	↓				P1880	Y	
11	BLK									P1881	—	
12	↓									P1882	—	
13										P1883	—	
14	↓									P1884	—	
15	LOD 1.0 ppb		RQ1604343-012 + RQ1605159-01 (LOQV)							P1885		(10uL-5ppm / 5Dmes)
16	LOQ 5.0 ppb		RQ1605159-02							P1886		(50uL-5ppm / 5Dmes)
17	BLK									P1887	—	

LOD
JLS 5/9/16

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 ↓

Primary OCC : 172255

Primary HBO : 172246

Primary Gt : 172250 (10uL → 1.0mL MeOH = 5ppm)

Primary Tb : 172251

Primary HSL : 172145

Secondary :

Secondary :

Secondary :

Secondary :

Secondary :

Combined IS/Surr 500 : 172199

Surrogate :

Internal Std :

Analysis: 8260 Waters | Analyst: K. Ruest | Tune Method: W050916

Date: 5/10/16 | Data Path: j:\acqudata\msvoa12\050716 | Run Method: ↓

Instr. 12 | LIMS Run#:

Pos.	Sample	Diln.	Diln. Prep.	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							P15685		
2	TUNE							P15689	YT	(auto) 9:43
3	CCV							P15690	YC	
4	LCS/ICV - 50ppb							P15691	YQ	
5	VBLK							P15692	(N)	wpfc10
6	↓							P15693	YR	
7	R1604692-001	1.0		6691	1	1		P15694		
8	002	1.0		↓	↓	1		P15695		
9	↓ 003	1.0		↓	↓	1		P15696		
10	R1604585-001	10	5.0mls	59775	4	1		P15697		Foamy
11	R1604575-006	1.0		59775	4	1		P15698		

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary OCC : 172235
Primary HBO : 172246
Primary Fr+ : 172250 5mL → 50mls
Primary TB : 172251 = CCV
Primary HSL : 172145

200 Secondary Fr+ : 172033 - 12.5mL
500 Secondary NBO : 172283
Secondary OCC : 171586 5mL
Secondary HSL : 171991
Secondary TB : 171584
50mls = ICV/LCS

Combined IS/Surr 500 : 172199
Surrogate :
Internal Std :

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton **Calibration Date:** 5/9/2016

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1600048 **Signal ID:** 1
Instrument ID: R-MS-12

#	Lab Code	Sample Name	File Location	Aquisition Date
01	RC1600048-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\050916\P1872.D	05/09/2016 14:19
02	RC1600048-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1873.D	05/09/2016 14:50
03	RC1600048-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1874.D	05/09/2016 15:21
04	RC1600048-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1875.D	05/09/2016 15:51
05	RC1600048-05	20ppb	I:\ACQUDATA\msvoa12\Data\050916\P1876.D	05/09/2016 16:22
06	RC1600048-06	50ppb	I:\ACQUDATA\msvoa12\Data\050916\P1877.D	05/09/2016 16:52
07	RC1600048-07	100ppb	I:\ACQUDATA\msvoa12\Data\050916\P1878.D	05/09/2016 17:23
08	RC1600048-08	150ppb	I:\ACQUDATA\msvoa12\Data\050916\P1879.D	05/09/2016 17:54
09	RC1600048-09	200ppb	I:\ACQUDATA\msvoa12\Data\050916\P1880.D	05/09/2016 18:24

Analyte

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.736	01	0.500	0.736	02	1.000	0.6161	02	1.000	0.6161
03	2.000	0.628	03	2.000	0.628	04	5.000	0.6366	04	5.000	0.6366
05	20.000	0.6226	05	20.000	0.6226	06	50.000	0.6085	06	50.000	0.6085
07	100.000	0.5958	07	100.000	0.5958	08	150.000	0.5692	08	150.000	0.5692
09	200.000	0.5916	09	200.000	0.5916						

1,1-Dichloroethane (1,1-DCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8076	01	0.500	0.8076	02	1.000	0.7351	02	1.000	0.7351
03	2.000	0.7552	03	2.000	0.7552	04	5.000	0.7296	04	5.000	0.7296
05	20.000	0.7938	05	20.000	0.7938	06	50.000	0.7542	06	50.000	0.7542
07	100.000	0.7373	07	100.000	0.7373	08	150.000	0.7237	08	150.000	0.7237
09	200.000	0.7281	09	200.000	0.7281						

1,1-Dichloroethene (1,1-DCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3778	01	0.500	0.3778	02	1.000	0.3633	02	1.000	0.3633
03	2.000	0.3551	03	2.000	0.3551	04	5.000	0.3937	04	5.000	0.3937
05	20.000	0.3942	05	20.000	0.3942	06	50.000	0.3852	06	50.000	0.3852
07	100.000	0.3789	07	100.000	0.3789	08	150.000	0.3646	08	150.000	0.3646
09	200.000	0.3767	09	200.000	0.3767						

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1801	01	0.500	0.1801	02	1.000	0.1936	02	1.000	0.1936
03	2.000	0.1803	03	2.000	0.1803	04	5.000	0.1889	04	5.000	0.1889
05	20.000	0.2097	05	20.000	0.2097	06	50.000	0.2017	06	50.000	0.2017
07	100.000	0.1997	07	100.000	0.1997	08	150.000	0.1858	08	150.000	0.1858
09	200.000	0.1954	09	200.000	0.1954						

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2473	01	0.500	0.2473	02	1.000	0.2542	02	1.000	0.2542

Client: Verina Consulting Group, LLC **Service Request:** R1609820
Project: Dover - Binghamton **Calibration Date:** 5/9/2016

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1600048 **Signal ID:** 1
Instrument ID: R-MS-12

Analyte

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2292	03	2.000	0.2292	04	5.000	0.2455	04	5.000	0.2455
05	20.000	0.2575	05	20.000	0.2575	06	50.000	0.2535	06	50.000	0.2535
07	100.000	0.2501	07	100.000	0.2501	08	150.000	0.235	08	150.000	0.235
09	200.000	0.2457	09	200.000	0.2457						

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7563	01	0.500	0.7563	02	1.000	0.711	02	1.000	0.711
03	2.000	0.6429	03	2.000	0.6429	04	5.000	0.6998	04	5.000	0.6998
05	20.000	0.7621	05	20.000	0.7621	06	50.000	0.7544	06	50.000	0.7544
07	100.000	0.7294	07	100.000	0.7294	08	150.000	0.6784	08	150.000	0.6784
09	200.000	0.6969	09	200.000	0.6969						

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5179	01	0.500	0.5179	02	1.000	0.4843	02	1.000	0.4843
03	2.000	0.4012	03	2.000	0.4012	04	5.000	0.429	04	5.000	0.429
05	20.000	0.4658	05	20.000	0.4658	06	50.000	0.4596	06	50.000	0.4596
07	100.000	0.4456	07	100.000	0.4456	08	150.000	0.4398	08	150.000	0.4398
09	200.000	0.4529	09	200.000	0.4529						

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4292	01	0.500	0.4292	02	1.000	0.4876	02	1.000	0.4876
03	2.000	0.4506	03	2.000	0.4506	04	5.000	0.4164	04	5.000	0.4164
05	20.000	0.4401	05	20.000	0.4401	06	50.000	0.4305	06	50.000	0.4305
07	100.000	0.4178	07	100.000	0.4178	08	150.000	0.4009	08	150.000	0.4009
09	200.000	0.4138	09	200.000	0.4138						

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4859	06	50.000	0.4859	03	60.000	0.4631	03	60.000	0.4631
04	70.000	0.4435	04	70.000	0.4435	05	100.000	0.4115	05	100.000	0.4115
07	125.000	0.4013	07	125.000	0.4013	08	150.000	0.3865	08	150.000	0.3865

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.2867	06	50.000	0.2867	03	60.000	0.2772	03	60.000	0.2772
04	70.000	0.2672	04	70.000	0.2672	05	100.000	0.2472	05	100.000	0.2472
07	125.000	0.2423	07	125.000	0.2423	08	150.000	0.2324	08	150.000	0.2324

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.276	06	50.000	1.276	03	60.000	1.229	03	60.000	1.229
04	70.000	1.17	04	70.000	1.17	05	100.000	1.047	05	100.000	1.047
07	125.000	1.001	07	125.000	1.001	08	150.000	0.9398	08	150.000	0.9398

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton

Service Request: R1609820
Calibration Date: 5/9/2016

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1600048
Instrument ID: R-MS-12

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,1,1-Trichloroethane (TCA)	TRG	Average RF	% RSD	7.6	≤20	0.6227	0.100
1,1-Dichloroethane (1,1-DCA)	TRG	Average RF	% RSD	4.0	≤20	0.7516	0.200
1,1-Dichloroethene (1,1-DCE)	TRG	Average RF	% RSD	3.6	≤20	0.3766	0.100
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	5.2	≤20	0.1928	0.200
Trichloroethene (TCE)	TRG	Average RF	% RSD	3.7	≤20	0.2464	0.200
Vinyl Chloride	TRG	Average RF	% RSD	5.6	≤20	0.7146	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	7.3	≤20	0.4551	0.100
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	5.9	≤20	0.4319	0.100
4-Bromofluorobenzene	SURR	Average RF	% RSD	8.9	≤20	0.4320	
Dibromofluoromethane	SURR	Average RF	% RSD	8.3	≤20	0.2588	
Toluene-d8	SURR	Average RF	% RSD	12.1	≤20	1.111	

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton/5101.0003

Service Request: R1609820
Calibration Date: 5/9/16

Initial Calibration Verfication Summary
Volatile Organic Compounds by GC/MS

Calibration ID: RC1600048
Instrument ID: R-MS-12

Signal ID: 1

#	File Location	Acquisition Date
10	I:\ACQUDATA\msvoa12\Data\051016\P1891.D	5/10/16 10:44

Analyte Name	Expected	Result	Average RF	SSV RF	%D	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	49.9	0.6227	0.6212	-0.25	±30	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	52.7	0.7516	0.7926	5.45	±30	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	51.3	0.3766	0.3861	2.51	±30	Average RF
Tetrachloroethene (PCE)	50.0	55.2	0.1928	0.2128	10.39	±30	Average RF
Trichloroethene (TCE)	50.0	53.6	0.2464	0.2640	7.14	±30	Average RF
Vinyl Chloride	50.0	48.3	0.7146	0.6900	-3.44	±30	Average RF
cis-1,2-Dichloroethene	50.0	51.3	0.4551	0.4667	2.55	±30	Average RF
trans-1,2-Dichloroethene	50.0	50.9	0.4319	0.4395	1.77	±30	Average RF
4-Bromofluorobenzene	50.0	57.2	0.4320	0.4940	14.37	±30	Average RF
Dibromofluoromethane	50.0	55.9	0.2588	0.2892	11.72	±30	Average RF
Toluene-d8	50.0	57.4	1.111	1.275	14.83	±30	Average RF

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton/5101.0003

Service Request: R1609820
Date Analyzed: 09/19/16 11:18

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\091916\P5135.D\

Calibration Date: 5/9/2016
Calibration ID: RC1600048
Analysis Lot: 514674
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	43.5	0.6	0.5	-13.0	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	47.0	0.8	0.7	-6.1	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.5	0.4	0.4	-1.1	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	53.0	0.2	0.2	5.9	NA	±20	Average RF
Trichloroethene (TCE)	50.0	47.9	0.2	0.2	-4.3	NA	±20	Average RF
Vinyl Chloride	50.0	45.9	0.7	0.7	-8.1	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	50.9	0.5	0.5	1.8	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	48.6	0.4	0.4	-2.9	NA	±20	Average RF
4-Bromofluorobenzene	50.0	54.0	0.4	0.5	8.0	NA	±20	Average RF
Dibromofluoromethane	50.0	55.9	0.3	0.3	11.8	NA	±20	Average RF
Toluene-d8	50.0	57.9	1.1	1.3	15.9	NA	±20	Average RF

Client: Verina Consulting Group, LLC
Project: Dover - Binghamton/5101.0003

Service Request: R1609820
Date Analyzed: 09/20/16 10:06

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\msvoa12\Data\092016\P5179.D\

Calibration Date: 5/9/2016
Calibration ID: RC1600048
Analysis Lot: 514854
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1-Trichloroethane (TCA)	50.0	47.4	0.6	0.6	-5.1	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	52.6	0.8	0.8	5.3	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	55.3	0.4	0.4	10.6	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	55.4	0.2	0.2	10.8	NA	±20	Average RF
Trichloroethene (TCE)	50.0	51.8	0.2	0.3	3.6	NA	±20	Average RF
Vinyl Chloride	50.0	51.0	0.7	0.7	2.0	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	54.3	0.5	0.5	8.6	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	53.9	0.4	0.5	7.7	NA	±20	Average RF
4-Bromofluorobenzene	50.0	54.5	0.4	0.5	9.1	NA	±20	Average RF
Dibromofluoromethane	50.0	55.2	0.3	0.3	10.5	NA	±20	Average RF
Toluene-d8	50.0	57.2	1.1	1.3	14.4	NA	±20	Average RF

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C **Analysis Lot:**514674
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\091916\P5134.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	10:47:00	
I:\ACQUDATA\msvoa12\Data\091916\P5135.D\	Continuing Calibration Verification	RQ1611053-02	9/19/2016	11:18:00	
I:\ACQUDATA\msvoa12\Data\091916\P5136.D\	Lab Control Sample	RQ1611053-03	9/19/2016	11:49:00	
I:\ACQUDATA\msvoa12\Data\091916\P5138.D\	Method Blank	RQ1611053-04	9/19/2016	12:50:00	
I:\ACQUDATA\msvoa12\Data\091916\P5139.D\	FB-091516	R1609820-011	9/19/2016	13:21:00	
I:\ACQUDATA\msvoa12\Data\091916\P5140.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	13:52:00	
I:\ACQUDATA\msvoa12\Data\091916\P5141.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	14:23:00	
I:\ACQUDATA\msvoa12\Data\091916\P5144.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	15:55:00	
I:\ACQUDATA\msvoa12\Data\091916\P5145.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	16:25:00	
I:\ACQUDATA\msvoa12\Data\091916\P5146.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	16:56:00	
I:\ACQUDATA\msvoa12\Data\091916\P5147.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	17:27:00	
I:\ACQUDATA\msvoa12\Data\091916\P5148.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	17:58:00	
I:\ACQUDATA\msvoa12\Data\091916\P5149.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	18:28:00	
I:\ACQUDATA\msvoa12\Data\091916\P5150.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	18:59:00	
I:\ACQUDATA\msvoa12\Data\091916\P5151.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	19:30:00	
I:\ACQUDATA\msvoa12\Data\091916\P5152.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	20:01:00	
I:\ACQUDATA\msvoa12\Data\091916\P5153.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	20:31:00	
I:\ACQUDATA\msvoa12\Data\091916\P5154.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	21:02:00	
I:\ACQUDATA\msvoa12\Data\091916\P5155.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	21:32:00	
I:\ACQUDATA\msvoa12\Data\091916\P5156.D\	ZZZZZZZ	ZZZZZZZ	9/19/2016	22:03:00	
I:\ACQUDATA\msvoa12\Data\092016\P5178.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	09:36:00	
I:\ACQUDATA\msvoa12\Data\092016\P5184.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	12:40:00	
I:\ACQUDATA\msvoa12\Data\092016\P5185.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	13:10:00	

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C **Analysis Lot:**514674
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\092016\P5186.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	13:41:00	
I:\ACQUDATA\msvoa12\Data\092016\P5187.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	14:12:00	
I:\ACQUDATA\msvoa12\Data\092016\P5188.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	14:43:00	
I:\ACQUDATA\msvoa12\Data\092016\P5189.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	15:14:00	
I:\ACQUDATA\msvoa12\Data\092016\P5194.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	17:46:00	
I:\ACQUDATA\msvoa12\Data\092016\P5195.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	18:17:00	
I:\ACQUDATA\msvoa12\Data\092016\P5196.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	18:48:00	
I:\ACQUDATA\msvoa12\Data\092016\P5197.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	19:18:00	
I:\ACQUDATA\msvoa12\Data\092016\P5198.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	20:02:00	
I:\ACQUDATA\msvoa12\Data\092016\P5199.D\	ZZZZZZZ	ZZZZZZZ	9/20/2016	20:32:00	

Client: Verina Consulting Group, LLC **Service Request:**R1609820
Project: Dover - Binghamton/5101.0003

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C **Analysis Lot:**514854
Instrument ID:R-MS-12

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
I:\ACQUDATA\msvoa12\Data\092016\P5179.D\	Continuing Calibration Verification	RQ1611116-02	9/20/2016	10:06:00	
I:\ACQUDATA\msvoa12\Data\092016\P5181.D\	Lab Control Sample	RQ1611116-03	9/20/2016	11:08:00	
I:\ACQUDATA\msvoa12\Data\092016\P5183.D\	Method Blank	RQ1611116-04	9/20/2016	12:09:00	
I:\ACQUDATA\msvoa12\Data\092016\P5190.D\	MW-13	R1609820-009	9/20/2016	15:44:00	
I:\ACQUDATA\msvoa12\Data\092016\P5191.D\	MW-10	R1609820-002	9/20/2016	16:15:00	
I:\ACQUDATA\msvoa12\Data\092016\P5192.D\	DMW-3	R1609820-007	9/20/2016	16:45:00	
I:\ACQUDATA\msvoa12\Data\092016\P5193.D\	TMP-A	R1609820-010	9/20/2016	17:16:00	
I:\ACQUDATA\msvoa12\Data\092016\P5200.D\	MW-13 MS	RQ1611116-05	9/20/2016	21:03:00	
I:\ACQUDATA\msvoa12\Data\092016\P5201.D\	MW-13 DMS	RQ1611116-06	9/20/2016	21:34:00	

Analysis: 8260 waters | Analyst: K. Priest | Tune Method: W0509W16

Date: 9/20/16 | Data Path: j:\acqudata\msvoa\2\092016 | Run Method: ↓

Instr. 12 | LIMS Run#: 514854

Pos.	Sample	Diln.	Diln. Prep.	RL	Tier	Vial	pH	File#	OK?	Comments
1	MW6HSTD							P5177		
2	TUNE		RQ1611116-01					P5178	YT	(auto) 9:36
3	CCV		02					P5179	YC	
4	LCS		—					P5180	(N)	↑shoot? apt
5	LCS		03					P5181	YL	
6	VBLK		—					P5182	(N)	apt 4/0
7	↓		↓ 04					P5183	YB	
8	R1609765-017	1.0		66446	4	1	12	P5184	Y	
9	015	5.0	10/50mls			1	(5)	P5185	Y	-dil for sediment
10	016	1.0				1	12	P5186	Y	
11	↓ 018	5.0	10/50mls	↓	↓	1	(5)	P5187	Y	-dil for sediment
12	R1609820-004	10	5/50mls (66446)	7979	4	1	—	P5188	Y	-dil for color - pH not possible
13	012	1.0				1	(5)	P5189	Y	
14	009	1.0				1	12	P5190	Y	
15	002	1.0				1	12	P5191	Y	
16	007	1.0				1	12	P5192	Y	
17	↓ 010	1.0		↓	↓	1	12	P5193	Y	
18	R1609822-013	1.0		66775	2	1	12	P5194	Y	
19	014	1.0				1	12	P5195	Y	
20	016	1.0				1	12	P5196	Y	
21	017	1.0				1	12	P5197	Y	
22	018	1.0				1	12	P5198	(Y)	apt 2.5
23	↓ 015	2.0	25/50mls	↓	↓	1	12	P5199	Y	
24	R1609820-009	1.0	ms RQ1611116-05	7979	4	2	12	P5200	YB	
25	↓ 009	1.0	msD ↓ 06	↓	↓	3	12	P5201	YB	21:34 ✓
26	MW6HSTD					—	—	P5202	—	

KR 9/20/16

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary OCC+ : 175327
Primary FR+ : 175326 — 5ul → 50mls = CCV
Primary TB : 175681
Primary HSL : 175325
Primary

O-944

200 Secondary FR+ : 175452 - 5ul
500 Secondary OCC+ : 175463
Secondary HSL : 175403 — 2ul
Secondary TB : 175767
Secondary

50mls = LCS

- 10.6uL Combined IS/Surr 500 : 175680
Surrogate :
Internal Std :
41.2uL

42mL vial = msD

Runlog-MSVOAr3 3/29/16
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Analysis: 8260 Waters | Analyst: K. Ruest | Tune Method: W0509116

Date: 9/19/16 | Data Path: j:\acqudata\msvoa12\091916 | Run Method: ↓

Instr. 12 | LIMS Run#: 514674

Pos.	Sample	Diln.	Diln. Prep.	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							P5131		
2	HIGH STD							P5132		
3	JUNE							P5133	(N)	176 ↓ not (mixture)
4	JUNE		PQ1611053-01					P5134	YT	(auto) 10:47
5	CCV		02					P5135	YC	
6	LCS		03					P5136	YQ	
7	VBLK		—					P5137	(N)	not ↓D
8	↓		↓ 04					P5138	YB	
9	R1609520-011	1.0		66446	4	1	CL	P5139	Y	
10	R1609652-005	1.0				2	CL	P5140	Y	
11	↓ 015	2.5	20/50mls			1	(5)	P5141	Y	
12	R1609765-013	25	2/50mls			1	(2)	P5142	(N)	not (10)
13	002	25	↓			1	(5)	P5143	(N)	not (10)
14	004	1.0				1	CL	P5144	Y	
15	005	1.0				1	CL	P5145	Y	
16	008	1.0				1	CL	P5146	Y	
17	010	1.0				1	CL	P5147	Y	
18	013	10	5/50mls			2	(5)	P5148	Y	
19	↓ 002	10	↓	↓	↓	2	(6)	P5149	Y	
20	R1609860-001	1.0	(CBT)	66493	2	1	CL	P5150	Y	
21	R1609520-003	1.0		7979	4	1	(8)	P5151	Y	
22	↓ 005	1.0				1	(8)	P5152	Y	
23	006	1.0				1	(2)	P5153	Y	
24	↓ 008	1.0		↓	↓	1	(8)	P5154	Y	
25	R1609765-011	1.0	MS PQ1611053-05	66446	4	4	CL	P5155	YQ	
26	↓ 011	10	MSD ↓ 06	↓	4	5	CL	P5156	YQ	
27	HIGH STD					—	—	P5157	—	

KR 9/19/16

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary Occ+ : 075327
Primary Fr+ : 075326 — 5uL → 50mls
Primary TG : 075051 — = CCV
Primary HSL : 075325
Primary : —

200 Secondary Fr+ : 075152 - 5uL
500 Secondary Occ+ : 075163
Secondary TG : 075302 — 2uL
Secondary HSL : 075103
Secondary : — — 50mls = LCS

-10.6uL Combined IS/Surr 500 : 175680
Surrogate :
Internal Std :

4.2uL
47mL vial = msD

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 11:23
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-17	**Units:**	ug/L
Lab Code:	R1609820-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**3.4**	1.0	0.36	1	09/19/16 19:30	
1,1-Dichloroethane (1,1-DCA)	**23**	1.0	0.20	1	09/19/16 19:30	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 19:30	
Tetrachloroethene (PCE)	**0.30 J**	1.0	0.30	1	09/19/16 19:30	
Trichloroethene (TCE)	**1.7**	1.0	0.22	1	09/19/16 19:30	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 19:30	
cis-1,2-Dichloroethene	**1.4**	1.0	0.30	1	09/19/16 19:30	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 19:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85 - 122	09/19/16 19:30	
Dibromofluoromethane	113	89 - 119	09/19/16 19:30	
Toluene-d8	114	87 - 121	09/19/16 19:30	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 12:25
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1609820-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**10**	10	3.6	10	09/20/16 14:43	
1,1-Dichloroethane (1,1-DCA)	10 U	10	2.0	10	09/20/16 14:43	
1,1-Dichloroethene (1,1-DCE)	10 U	10	5.7	10	09/20/16 14:43	
Tetrachloroethene (PCE)	10 U	10	3.0	10	09/20/16 14:43	
Trichloroethene (TCE)	10 U	10	2.2	10	09/20/16 14:43	
Vinyl Chloride	10 U	10	3.2	10	09/20/16 14:43	
cis-1,2-Dichloroethene	10 U	10	3.0	10	09/20/16 14:43	
trans-1,2-Dichloroethene	10 U	10	3.3	10	09/20/16 14:43	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	09/20/16 14:43	
Dibromofluoromethane	111	89 - 119	09/20/16 14:43	
Toluene-d8	114	87 - 121	09/20/16 14:43	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 12:46
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-16	**Units:**	ug/L
Lab Code:	R1609820-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**9.7**	1.0	0.36	1	09/19/16 20:01	
1,1-Dichloroethane (1,1-DCA)	**59**	1.0	0.20	1	09/19/16 20:01	
1,1-Dichloroethene (1,1-DCE)	**1.0**	1.0	0.57	1	09/19/16 20:01	
Tetrachloroethene (PCE)	**0.61**	1.0	0.30	1	09/19/16 20:01	J
Trichloroethene (TCE)	**26**	1.0	0.22	1	09/19/16 20:01	
Vinyl Chloride	**4.9**	1.0	0.32	1	09/19/16 20:01	
cis-1,2-Dichloroethene	**83**	1.0	0.30	1	09/19/16 20:01	
trans-1,2-Dichloroethene	**0.87**	1.0	0.33	1	09/19/16 20:01	J

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	85 - 122	09/19/16 20:01	
Dibromofluoromethane	113	89 - 119	09/19/16 20:01	
Toluene-d8	114	87 - 121	09/19/16 20:01	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 15:35
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-8	**Units:**	ug/L
Lab Code:	R1609820-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**2.4**	1.0	0.36	1	09/19/16 20:31	
1,1-Dichloroethane (1,1-DCA)	**3.7**	1.0	0.20	1	09/19/16 20:31	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 20:31	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 20:31	
Trichloroethene (TCE)	**120**	1.0	0.22	1	09/19/16 20:31	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 20:31	
cis-1,2-Dichloroethene	**71**	1.0	0.30	1	09/19/16 20:31	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 20:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	85 - 122	09/19/16 20:31	
Dibromofluoromethane	111	89 - 119	09/19/16 20:31	
Toluene-d8	114	87 - 121	09/19/16 20:31	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16 17:05
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1609820-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**0.45 J**	1.0	0.36	1	09/19/16 21:02	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/19/16 21:02	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/19/16 21:02	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/19/16 21:02	
Trichloroethene (TCE)	**0.95 J**	1.0	0.22	1	09/19/16 21:02	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/19/16 21:02	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/19/16 21:02	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/19/16 21:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/19/16 21:02	
Dibromofluoromethane	114	89 - 119	09/19/16 21:02	
Toluene-d8	114	87 - 121	09/19/16 21:02	

Analytical Report

Client:	Verina Consulting Group, LLC	**Service Request:**	R1609820
Project:	Dover - Binghamton/5101.0003	**Date Collected:**	09/15/16
Sample Matrix:	Water	**Date Received:**	09/16/16 09:35
Sample Name:	DUP-091516	**Units:**	ug/L
Lab Code:	R1609820-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 8260C
Prep Method: EPA 5030C

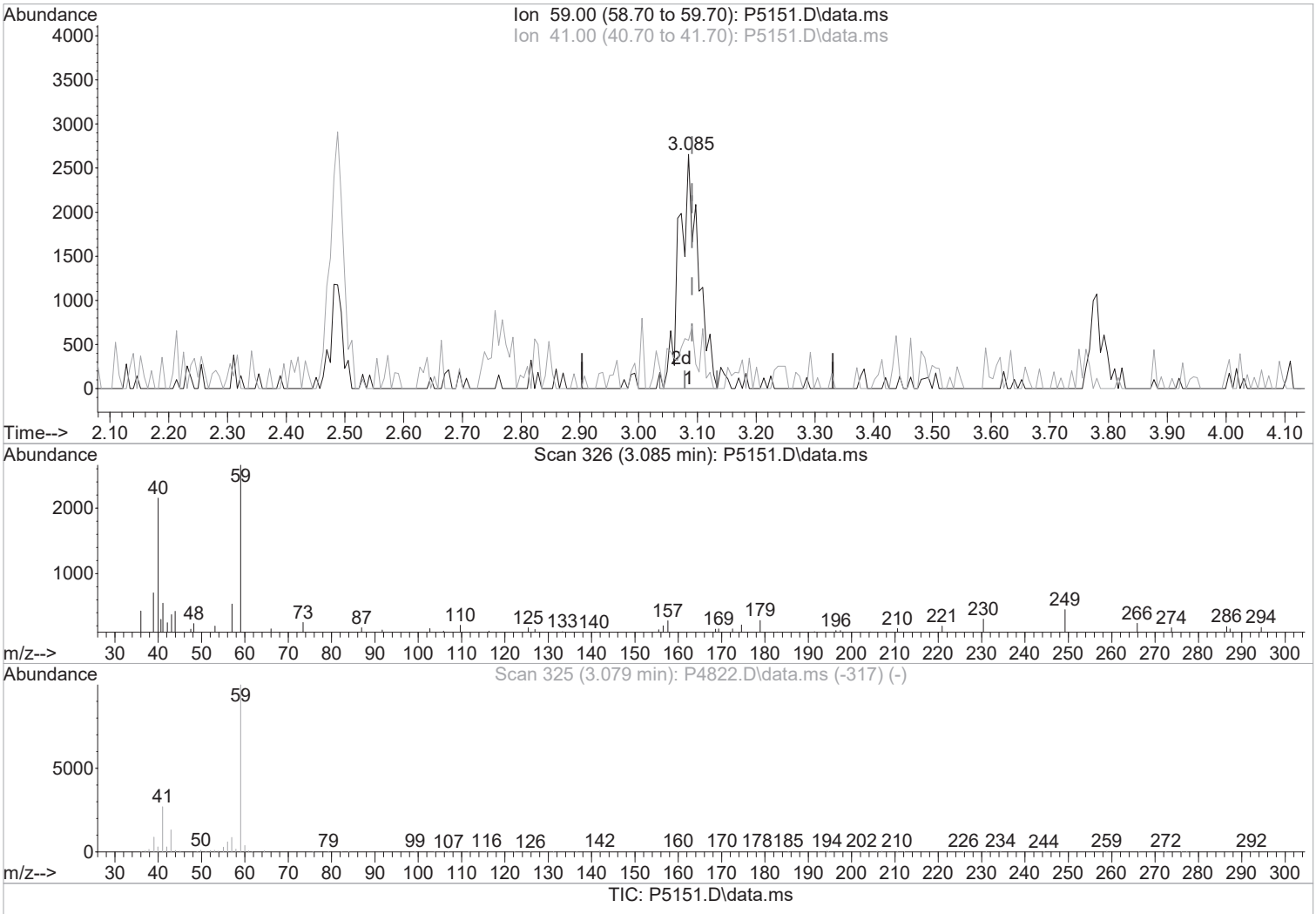
Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**0.47 J**	1.0	0.36	1	09/20/16 15:14	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	09/20/16 15:14	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	09/20/16 15:14	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	09/20/16 15:14	
Trichloroethene (TCE)	**0.91 J**	1.0	0.22	1	09/20/16 15:14	
Vinyl Chloride	1.0 U	1.0	0.32	1	09/20/16 15:14	
cis-1,2-Dichloroethene	1.0 U	1.0	0.30	1	09/20/16 15:14	
trans-1,2-Dichloroethene	1.0 U	1.0	0.33	1	09/20/16 15:14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	85 - 122	09/20/16 15:14	
Dibromofluoromethane	111	89 - 119	09/20/16 15:14	
Toluene-d8	114	87 - 121	09/20/16 15:14	

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5151.D
Acq On : 19 Sep 2016 7:30 pm
Operator : K.Ruest
Sample : R1609820-003|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 20 08:51:58 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



TIC: P5151.D\data.ms

(23) TBA

3.085min (-0.006) 11.64 ppb m

response 5997

Ion	Exp%	Act%
59.00	100	100
41.00	20.90	20.62
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

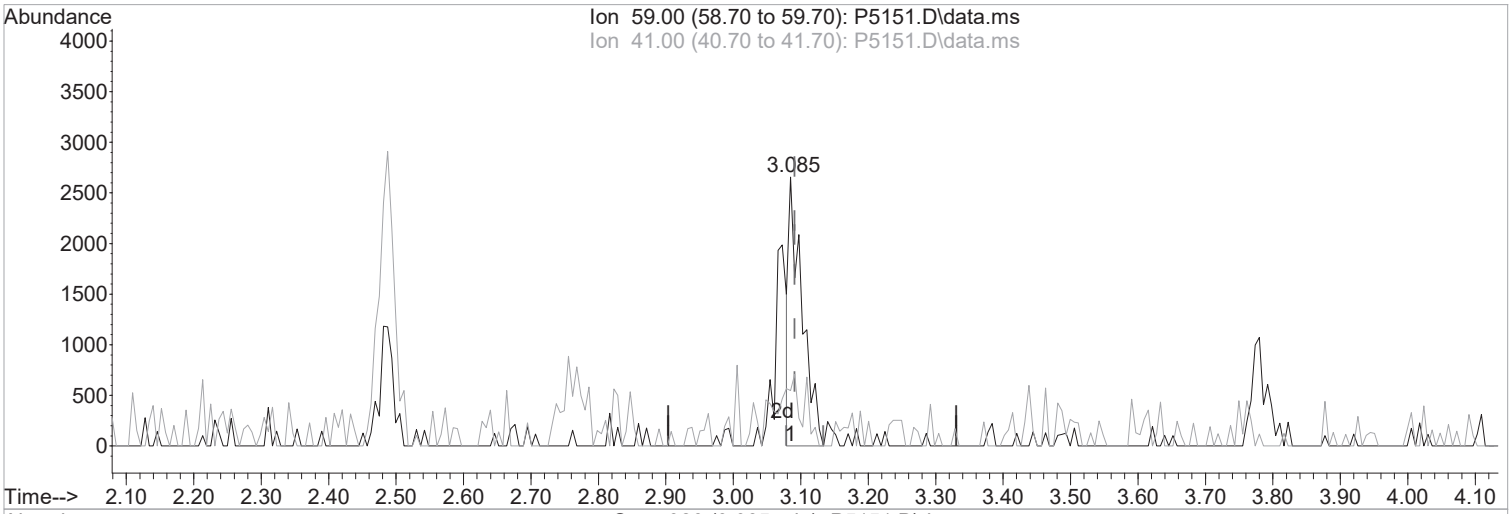
Split Peak

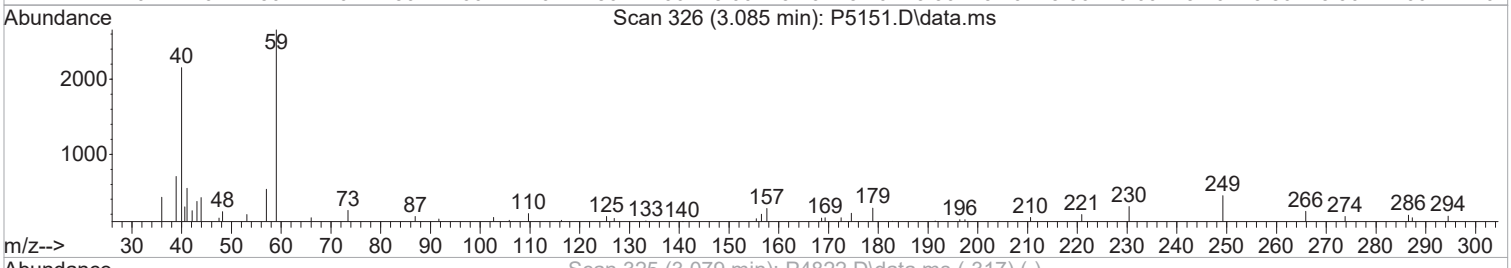
09/20/16

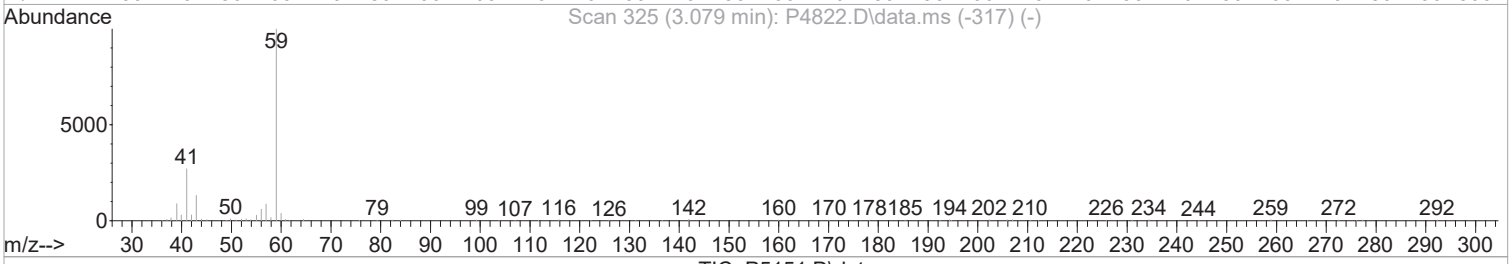
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5151.D
Acq On : 19 Sep 2016 7:30 pm
Operator : K.Ruest
Sample : R1609820-003|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 20 08:51:58 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5151.D\data.ms

(23) TBA

3.085min (-0.006) 7.01 ppb

response 3608

Ion	Exp%	Act%
59.00	100	100
41.00	20.90	20.62
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

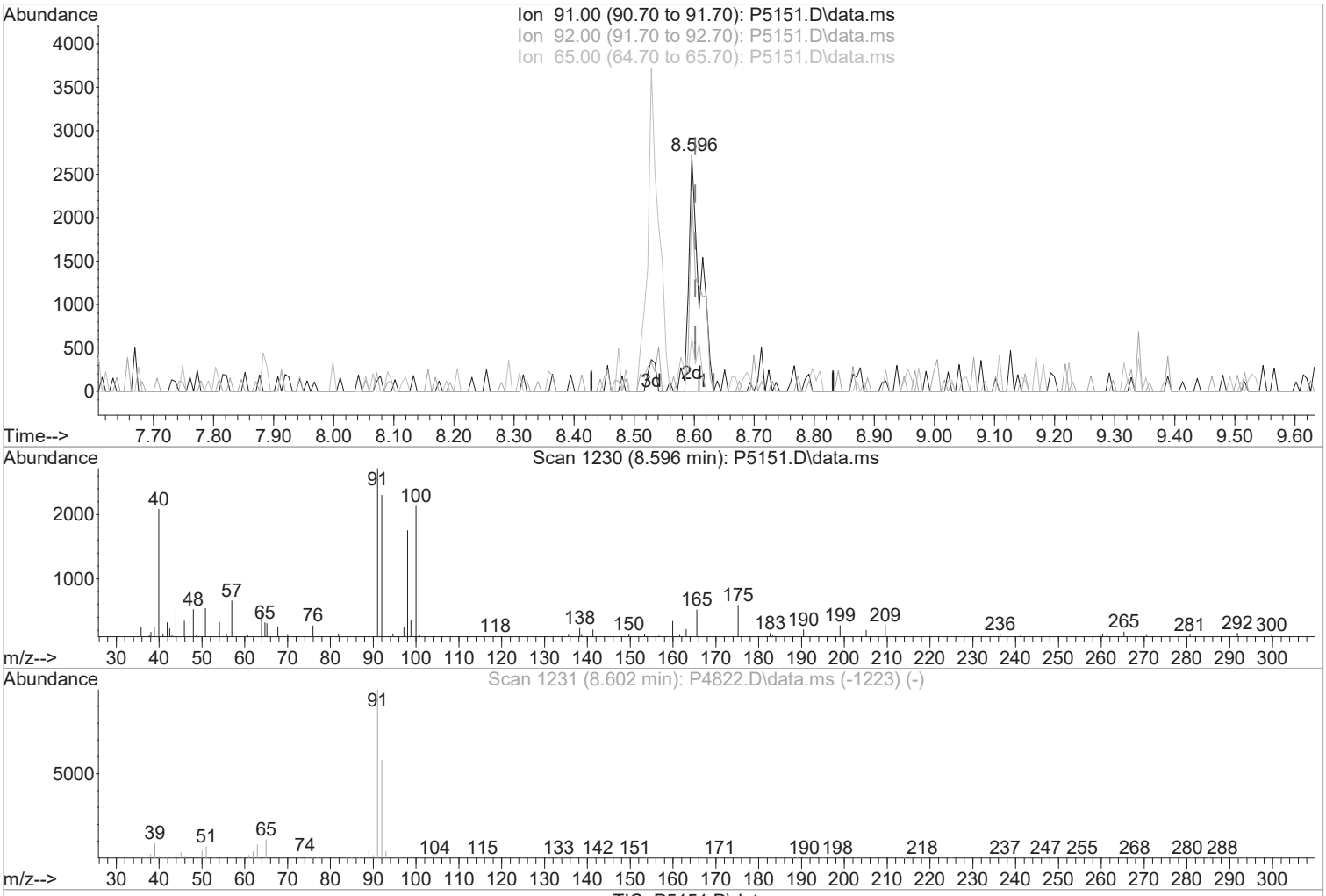
Before

09/20/16

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5151.D
Acq On : 19 Sep 2016 7:30 pm
Operator : K.Ruest
Sample : R1609820-003|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 20 08:51:58 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



TIC: P5151.D\data.ms

(66) Toluene (P)

8.596min (-0.006) 0.12 ppb m

response 3651

Ion	Exp%	Act%
91.00	100	100
92.00	59.30	84.65#
65.00	10.90	11.71
0.00	0.00	0.00

Manual Integration:

After

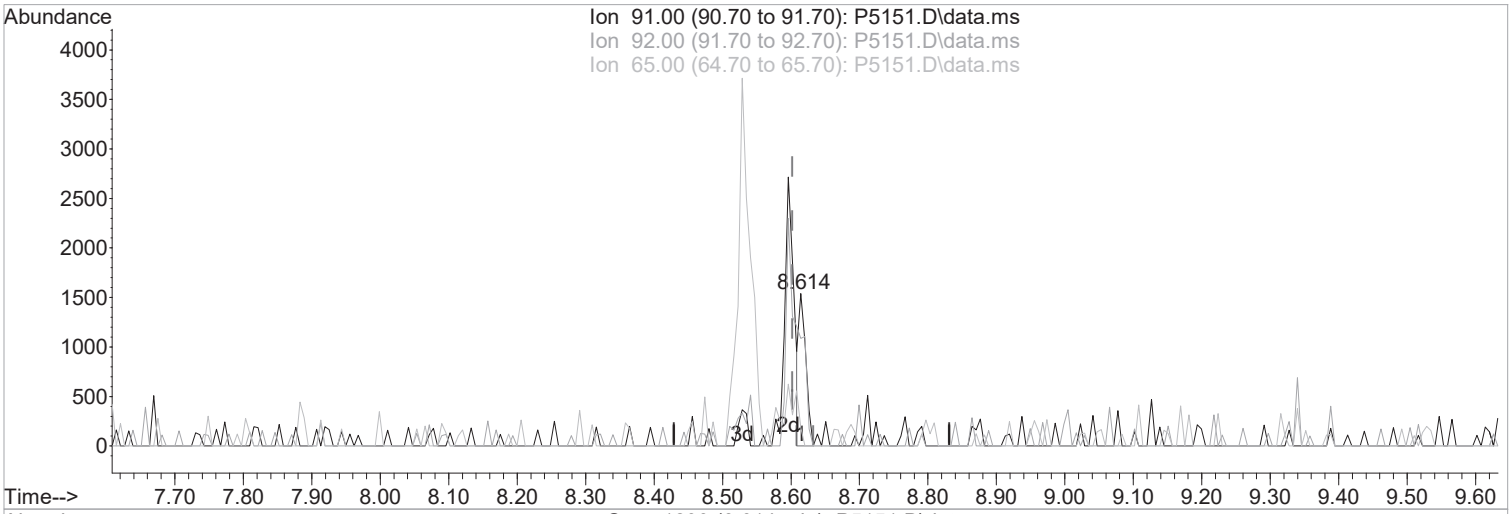
Split Peak

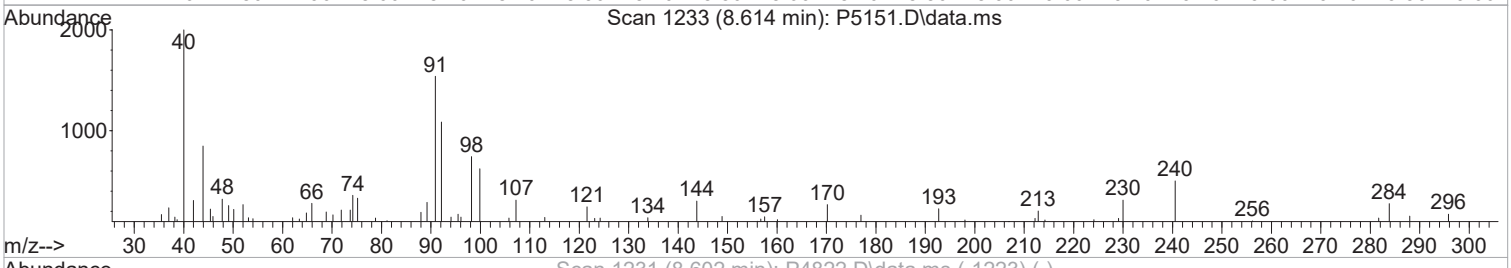
09/20/16

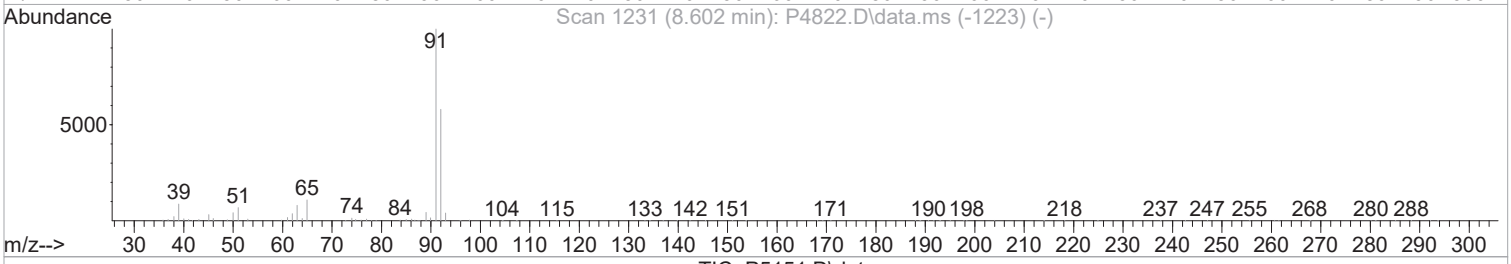
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5151.D
Acq On : 19 Sep 2016 7:30 pm
Operator : K.Ruest
Sample : R1609820-003|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 20 08:51:58 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5151.D\data.ms

(66) Toluene (P)

8.614min (+0.012) 0.04 ppb

response 1079

Ion	Exp%	Act%
91.00	100	100
92.00	59.30	70.57
65.00	10.90	11.96
0.00	0.00	0.00

Manual Integration:

Before

09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5151.D
Acq On : 19 Sep 2016 7:30 pm
Operator : K.Ruest
Sample : R1609820-003|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 20 10:43:54 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

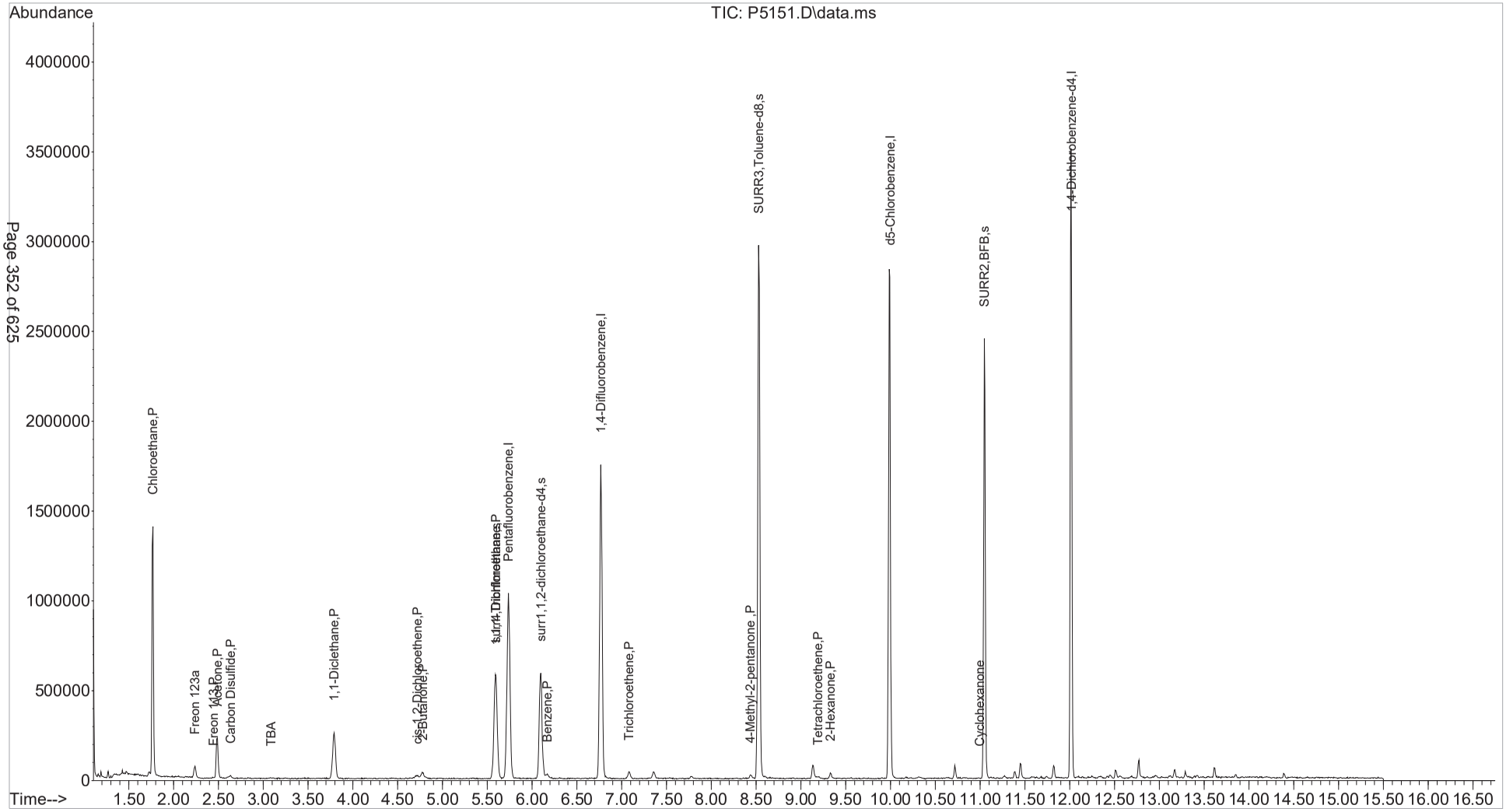
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	854572	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1445983	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1351015	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	700514	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	421985	56.37	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.74%				
48) surr1,1,2-dichloroetha...	6.096	65	449312	51.07	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.14%				
65) SURR3,Toluene-d8	8.529	98	1824530	56.81	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 113.62%				
70) SURR2,BFB	11.047	95	673666	53.93	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.86%				
Target Compounds							Qvalue
6) Chloroethane	1.768	64	831183	126.71	ppb		99
10) Freon 123a	2.237	67	26616	2.98	ppb		96
14) Freon 113	2.439	101	1775	0.28	ppb		82
15) Acetone	2.487	43	228534	136.93	ppb		98
18) Carbon Disulfide	2.634	76	9968	0.46	ppb		78
23) TBA	3.085	59	5997m	11.64	ppb		
28) 1,1-Diclethane	3.792	63	290547	22.62	ppb		98
34) cis-1,2-Dichloroethene	4.719	96	10850	1.39	ppb	#	55
35) 2-Butanone	4.774	43	56119	22.80	ppb		82
41) 1,1,1-Trichloroethane	5.597	97	35864	3.37	ppb		95
49) Benzene	6.170	78	21981	0.76	ppb		94
54) Trichloroethene	7.078	130	11830	1.66	ppb		87
64) 4-Methyl-2-pentanone	8.437	43	13406	2.43	ppb		94
72) Tetrachloroethene	9.187	164	1572	0.30	ppb	#	43
73) 2-Hexanone	9.328	43	18910	4.84	ppb		86
90) Cyclohexanone	10.992	55	1474	2.41	ppb	#	19

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

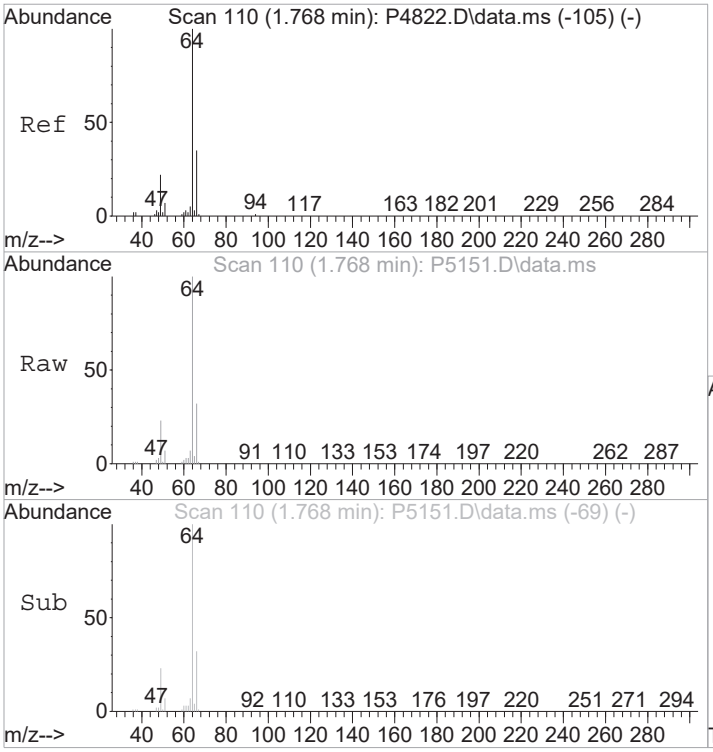
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5151.D
Acq On : 19 Sep 2016 7:30 pm
Operator : K.Ruest
Sample : R1609820-003|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 20 10:43:54 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



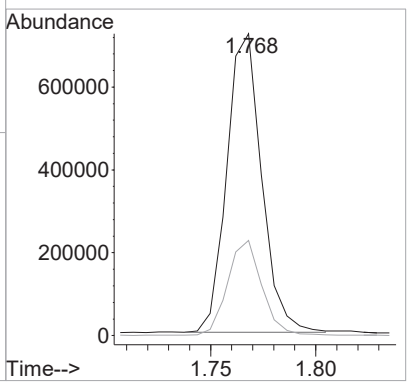
1st 09/20/16
2nd 09/20/16

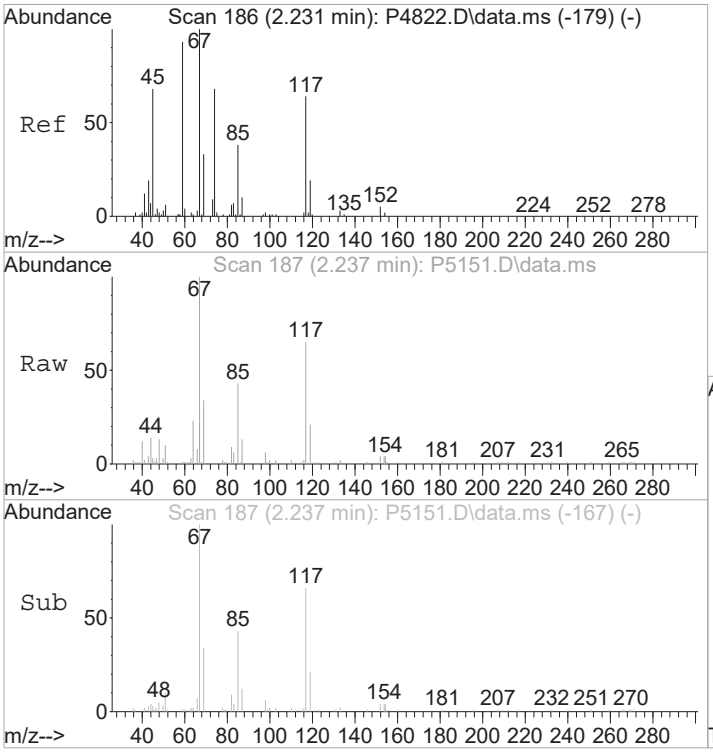


#6
Chloroethane
Concen: 126.71 ppb
RT: 1.768 min Scan# 110
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 64 Resp: 831183

Ion	Ratio	Lower	Upper
64	100		
66	31.5	12.0	52.0

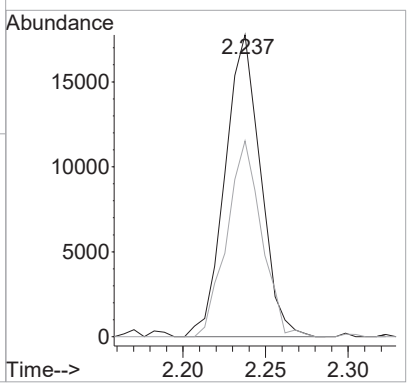


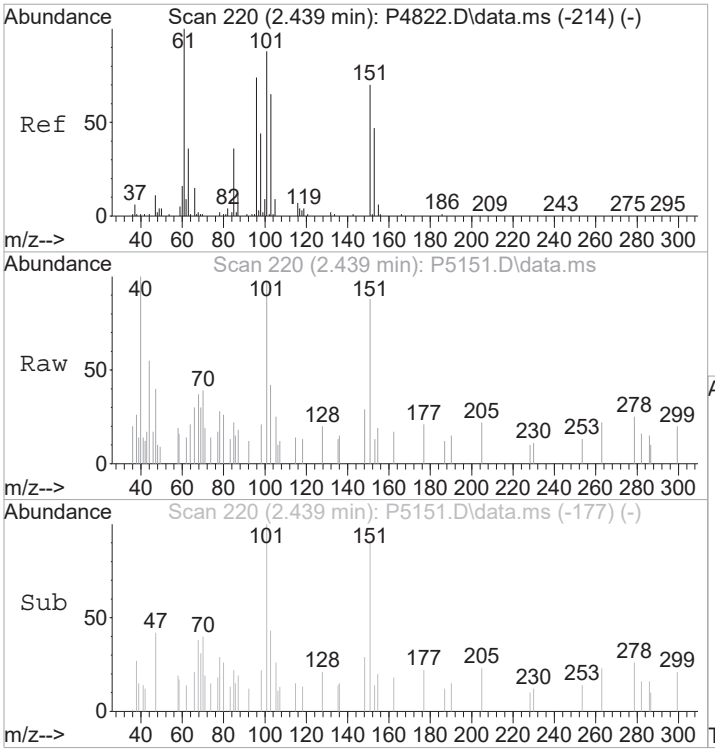


#10
Freon 123a
Concen: 2.98 ppb
RT: 2.237 min Scan# 187
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 67 Resp: 26616

Ion	Ratio	Lower	Upper
67	100		
117	64.9	41.5	81.5

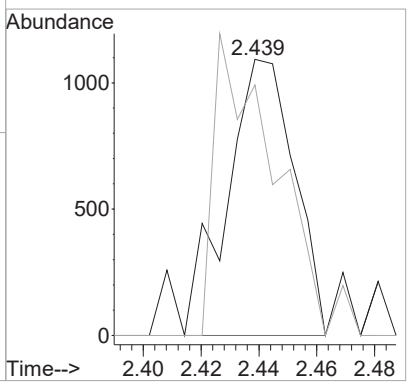


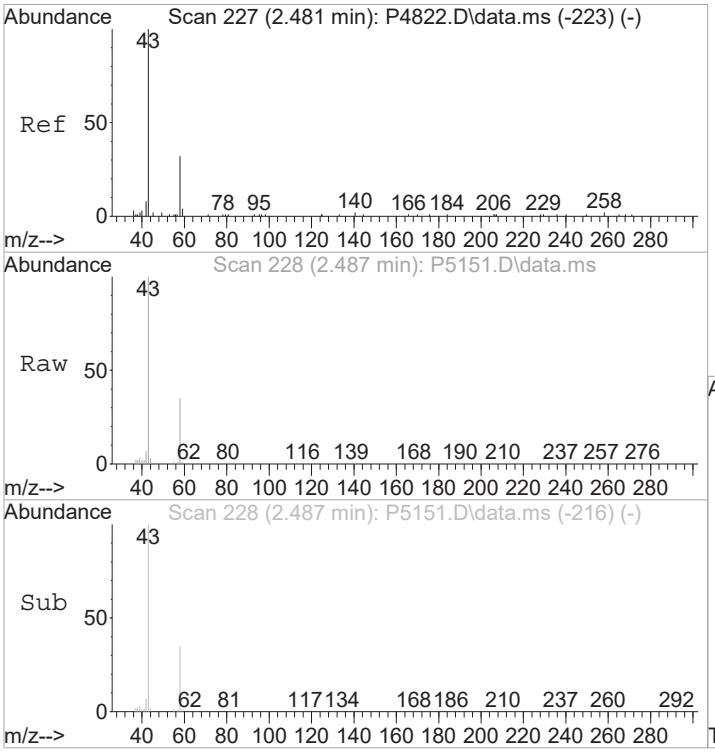


#14
Freon 113
Concen: 0.28 ppb
RT: 2.439 min Scan# 220
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion:101 Resp: 1775

Ion	Ratio	Lower	Upper
101	100		
151	90.8	55.4	95.4

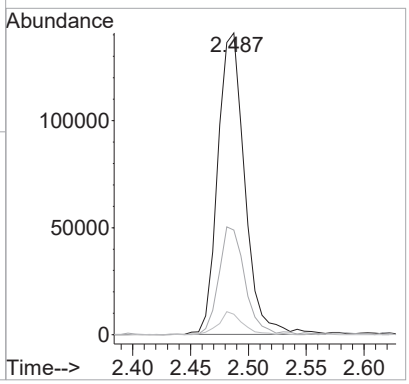


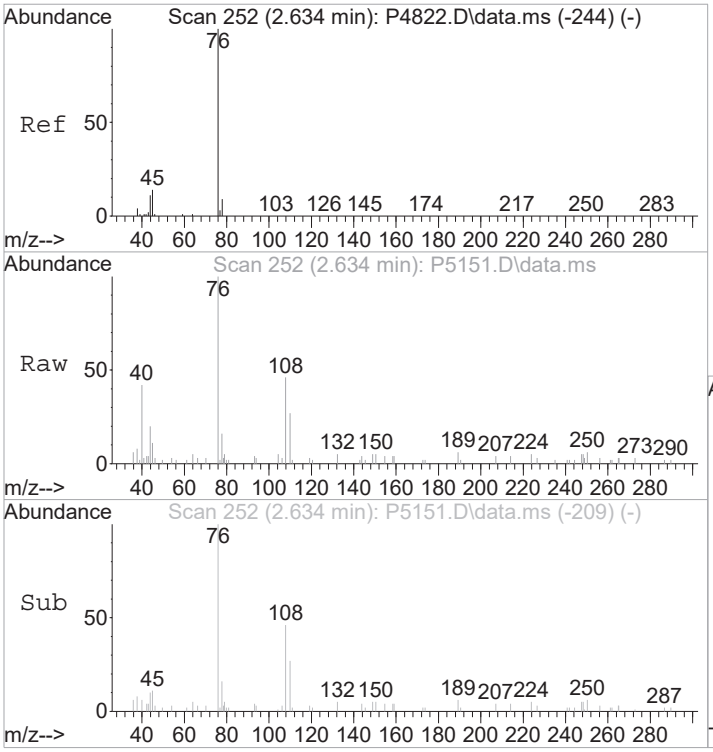


#15
Acetone
Concen: 136.93 ppb
RT: 2.487 min Scan# 228
Delta R.T. 0.000 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 43 Resp: 228534

Ion	Ratio	Lower	Upper
43	100		
58	34.7	13.2	53.2
42	6.8	0.0	26.9

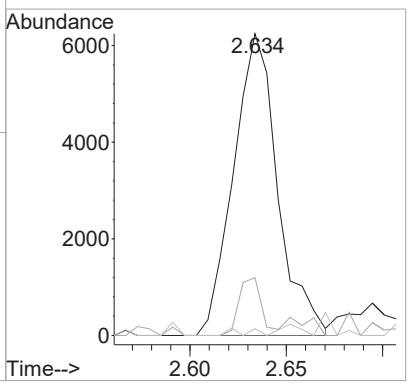


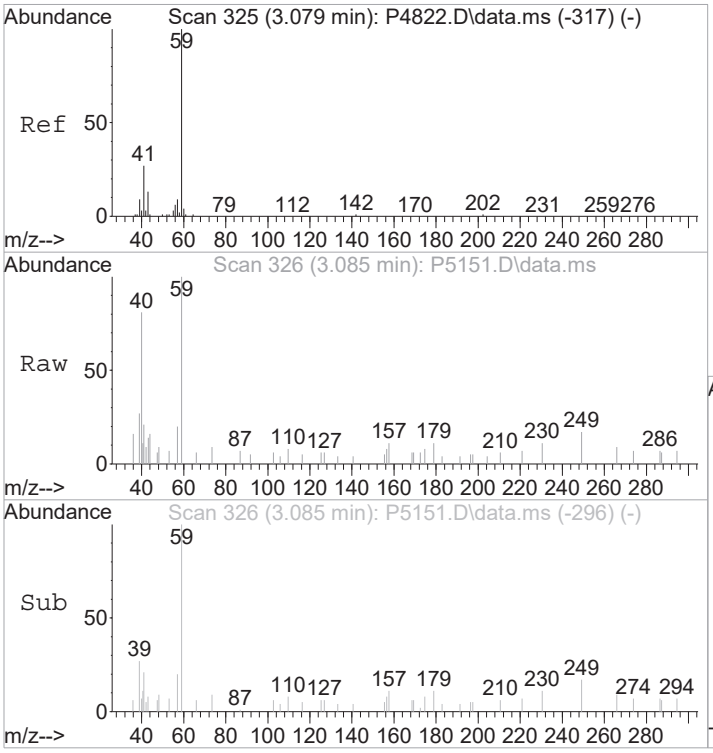


#18
Carbon Disulfide
Concen: 0.46 ppb
RT: 2.634 min Scan# 252
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 76 Resp: 9968

Ion	Ratio	Lower	Upper
76	100		
78	19.2	0.0	29.0
77	2.2	0.0	22.9

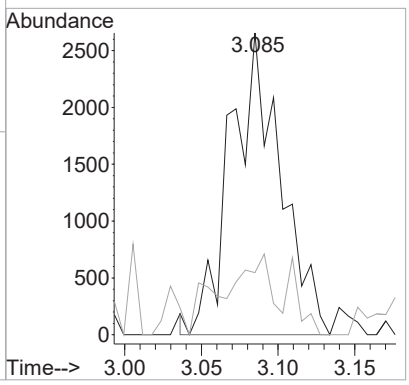


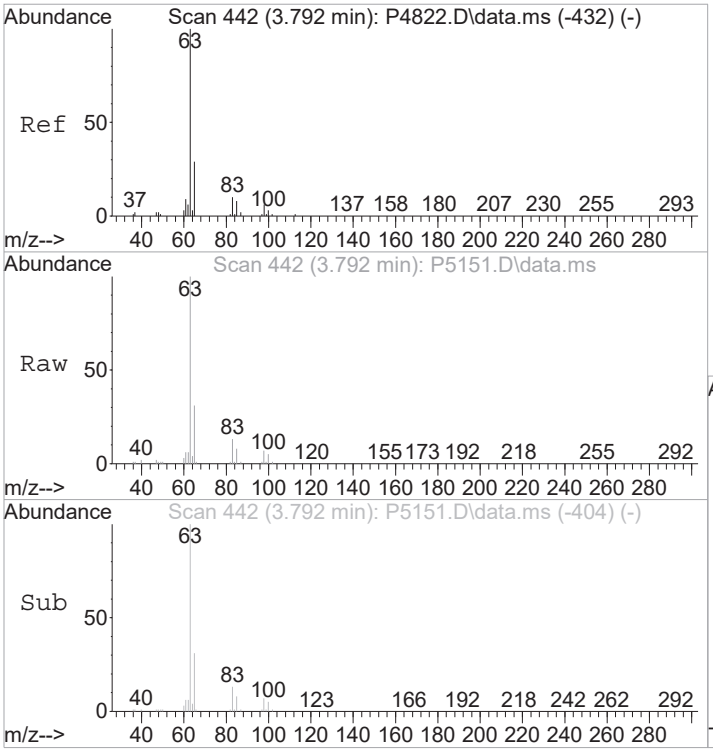


#23
TBA
Concen: 11.64 ppb m
RT: 3.085 min Scan# 326
Delta R.T. -0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 59 Resp: 5997

Ion	Ratio	Lower	Upper
59	100		
41	20.6	0.9	40.9

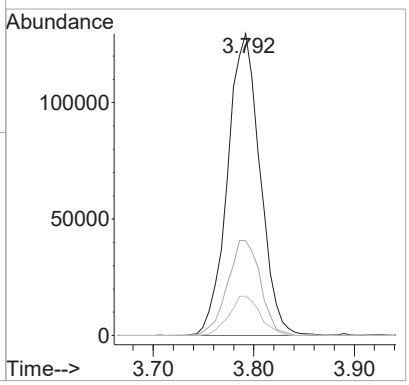


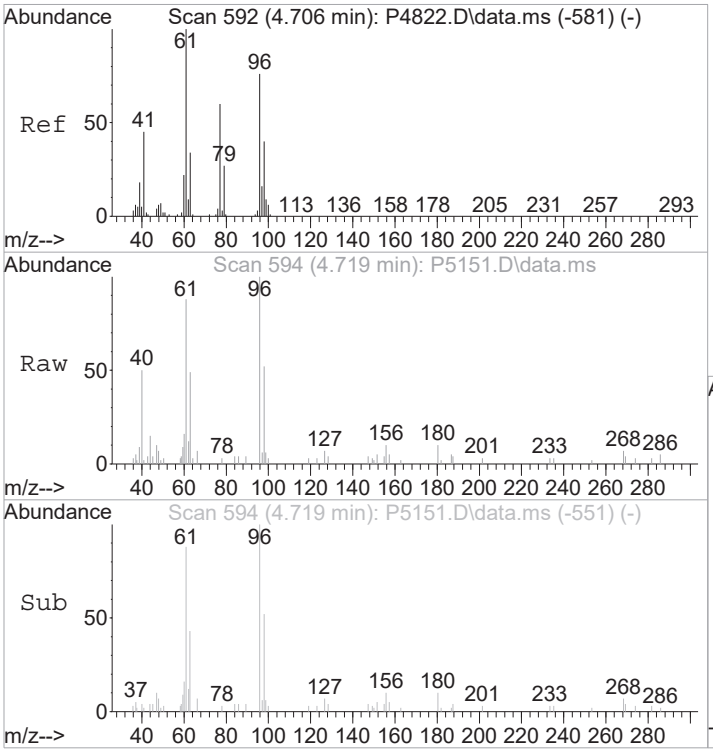


#28
1,1-Diclethane
Concen: 22.62 ppb
RT: 3.792 min Scan# 442
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 63 Resp: 290547

Ion	Ratio	Lower	Upper
63	100		
65	31.4	12.6	52.6
83	13.1	0.0	32.9

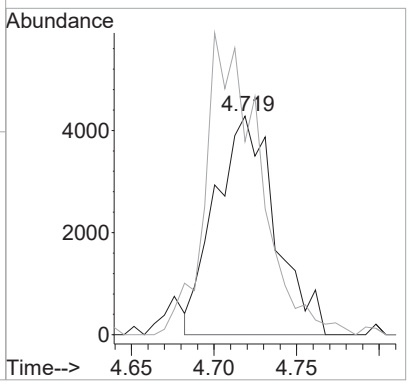


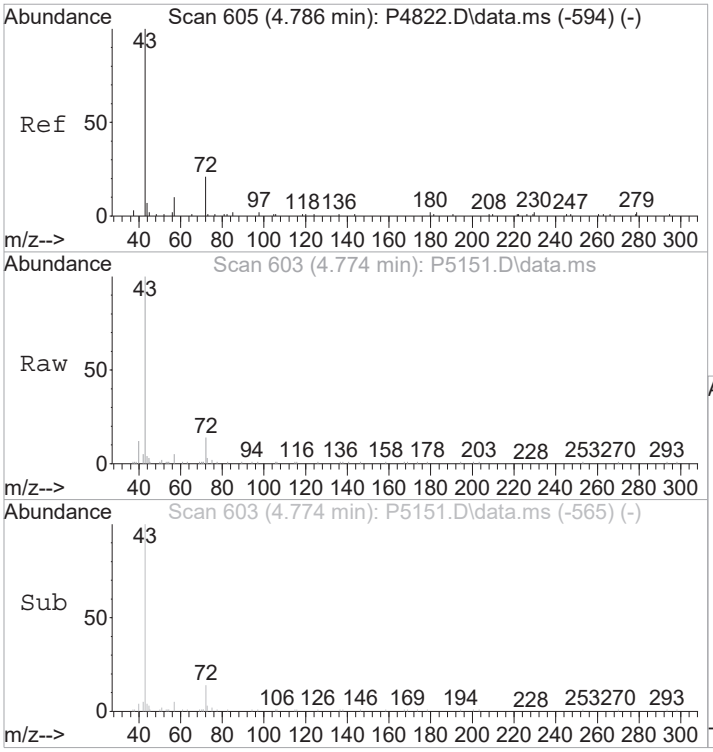


#34
cis-1,2-Dichloroethene
Concen: 1.39 ppb
RT: 4.719 min Scan# 594
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 96 Resp: 10850

Ion	Ratio	Lower	Upper
96	100		
61	88.3	124.4	164.4#

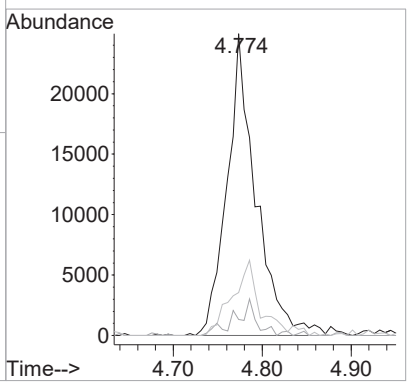


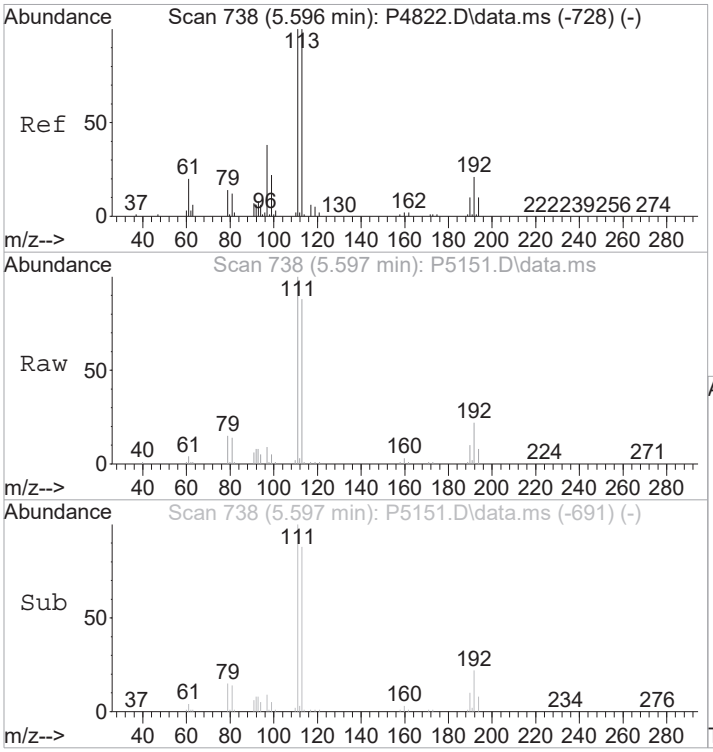


#35
2-Butanone
Concen: 22.80 ppb
RT: 4.774 min Scan# 603
Delta R.T. 0.007 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 43 Resp: 56119

Ion	Ratio	Lower	Upper
43	100		
57	5.4	0.0	28.5
72	17.3	8.1	48.1

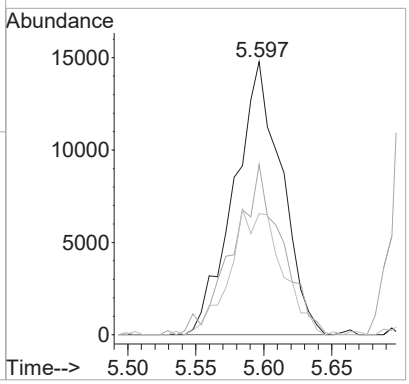


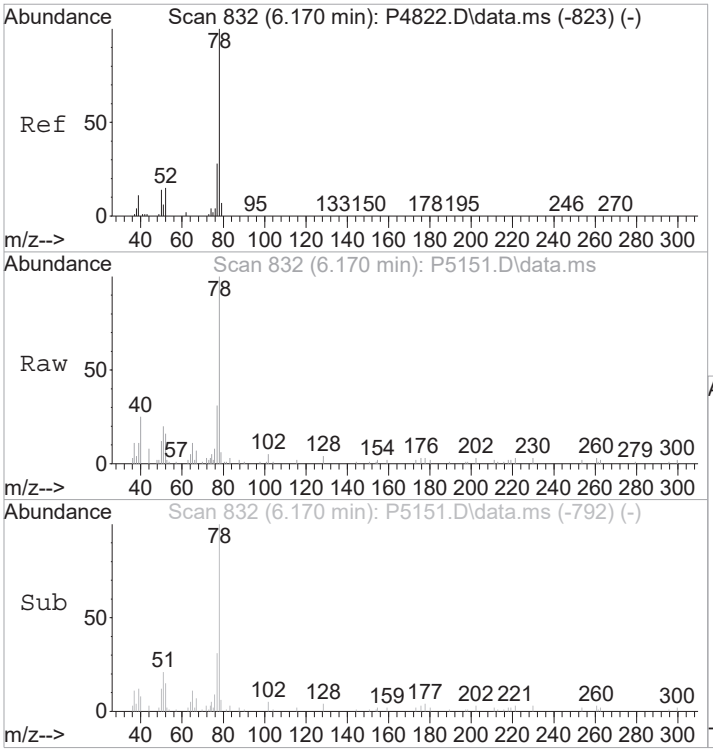


#41
1,1,1-Trichloroethane
Concen: 3.37 ppb
RT: 5.597 min Scan# 738
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 97 Resp: 35864

Ion	Ratio	Lower	Upper
97	100		
99	58.7	42.8	82.8
61	41.7	25.5	65.5

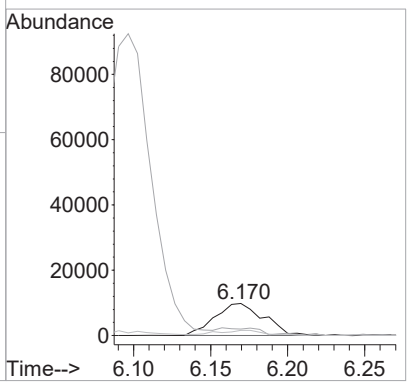


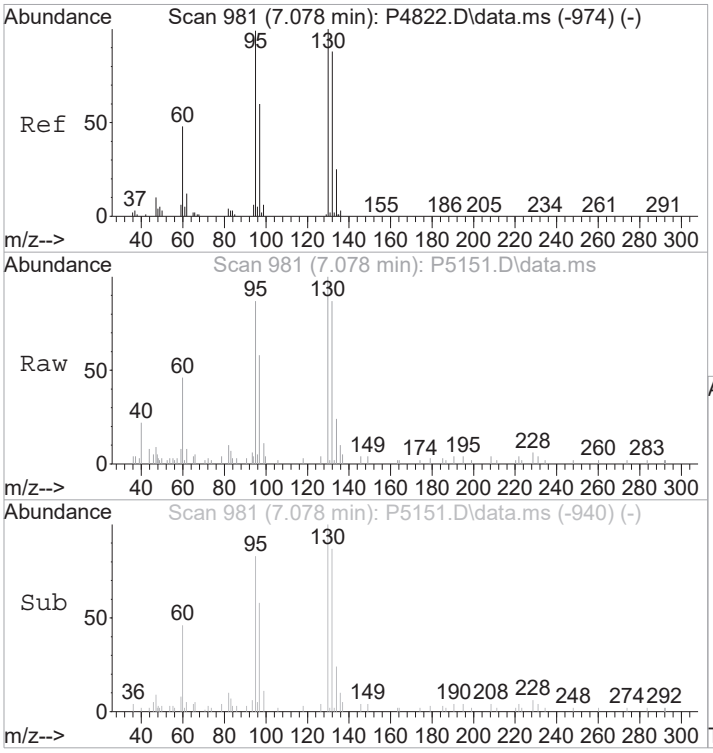


#49
Benzene
Concen: 0.76 ppb
RT: 6.170 min Scan# 832
Delta R.T. 0.000 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 78 Resp: 21981

Ion	Ratio	Lower	Upper
78	100		
51	20.5	0.0	36.8
52	18.0	0.0	36.8

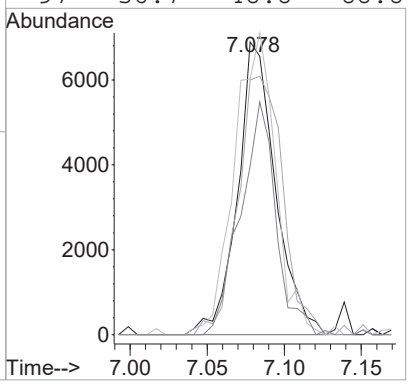


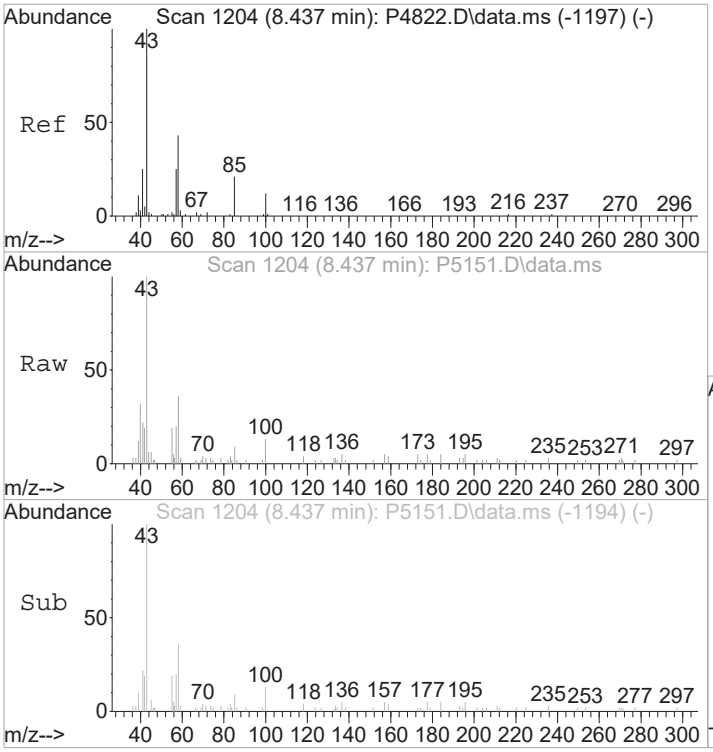


#54
Trichloroethene
Concen: 1.66 ppb
RT: 7.078 min Scan# 981
Delta R.T. 0.000 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion:130 Resp: 11830

Ion	Ratio	Lower	Upper
130	100		
132	85.5	76.6	116.6
95	85.7	80.2	120.2
97	56.7	48.8	88.8

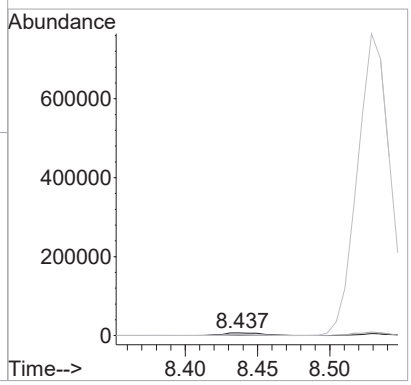


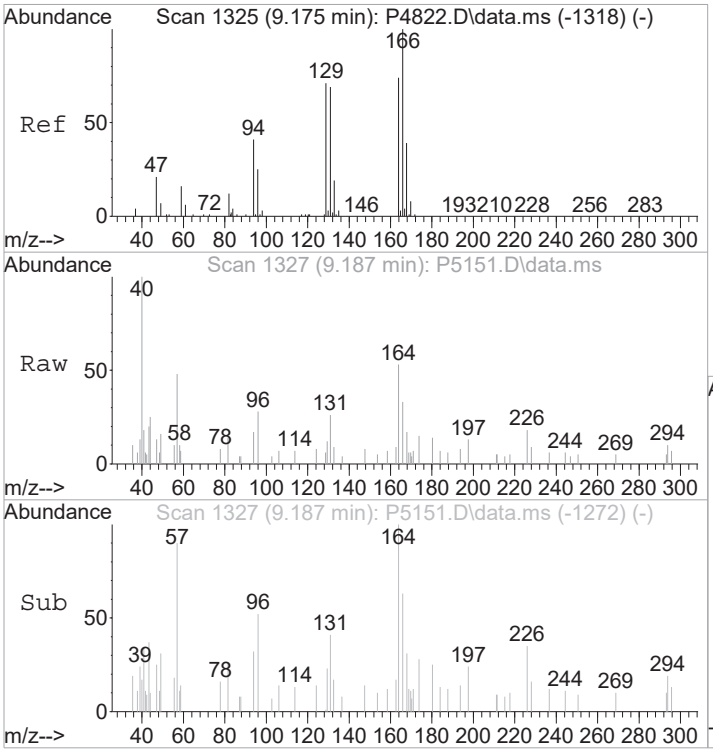


#64
4-Methyl-2-pentanone
Concen: 2.43 ppb
RT: 8.437 min Scan# 1204
Delta R.T. 0.000 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 43 Resp: 13406

Ion	Ratio	Lower	Upper
43	100		
58	36.2	19.4	59.4
100	12.9	0.0	35.7

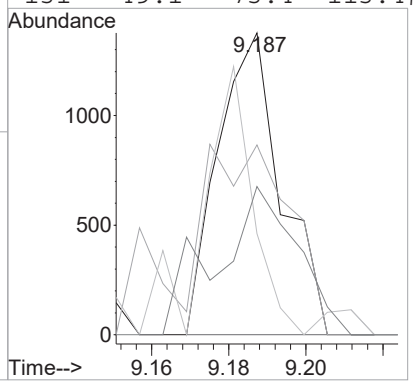


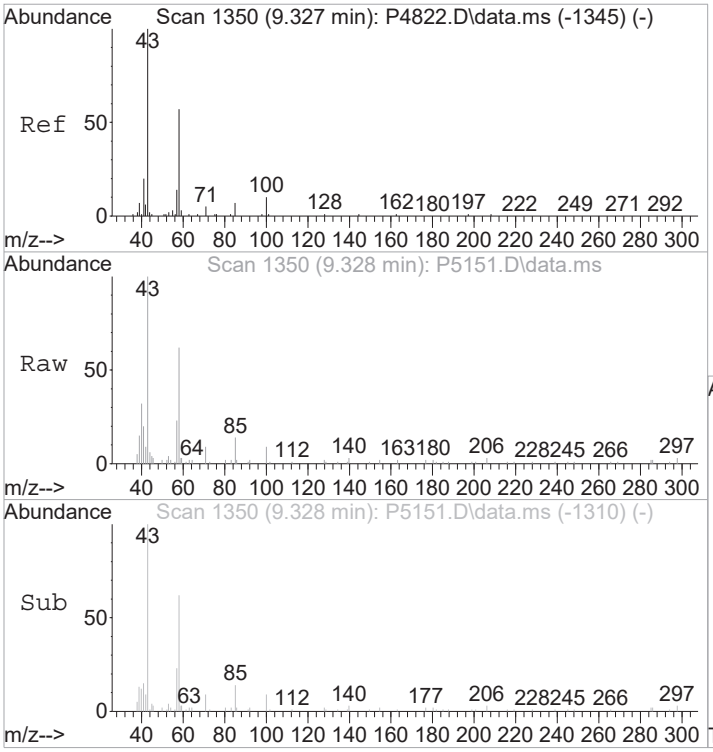


#72
Tetrachloroethene
Concen: 0.30 ppb
RT: 9.187 min Scan# 1327
Delta R.T. 0.006 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion:164 Resp: 1572

Ion	Ratio	Lower	Upper
164	100		
166	62.8	114.3	154.3#
129	33.6	77.3	117.3#
131	49.1	73.4	113.4#

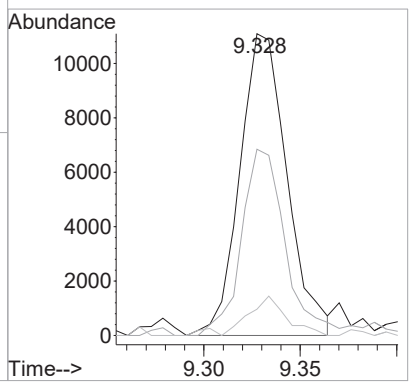


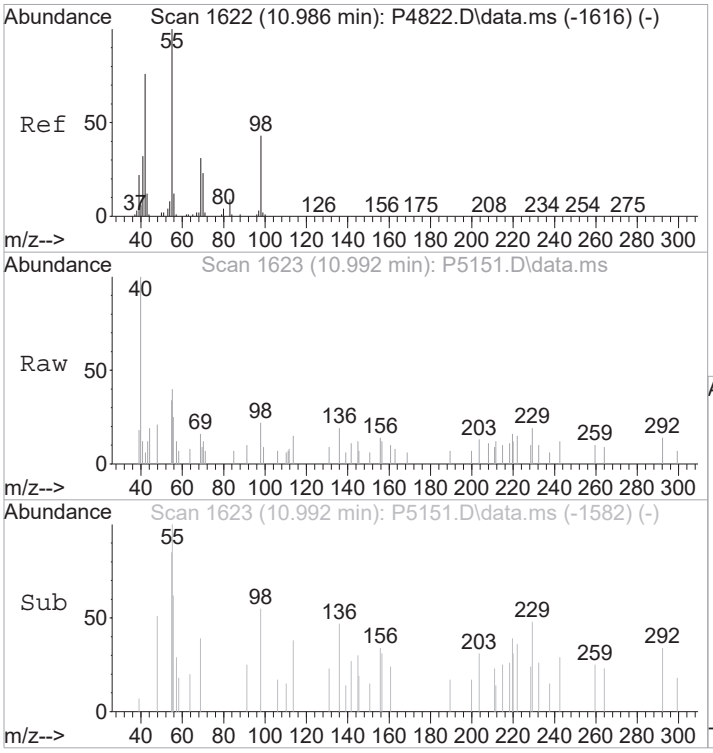


#73
2-Hexanone
Concen: 4.84 ppb
RT: 9.328 min Scan# 1350
Delta R.T. 0.000 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 43 Resp: 18910

Ion	Ratio	Lower	Upper
43	100		
58	61.7	30.4	70.4
100	8.8	0.0	30.5

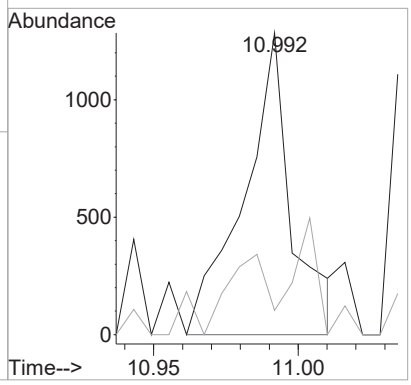




#90
Cyclohexanone
Concen: 2.41 ppb
RT: 10.992 min Scan# 1623
Delta R.T. 0.000 min
Lab File: P5151.D
Acq: 19 Sep 2016 7:30 pm

Tgt Ion: 55 Resp: 1474

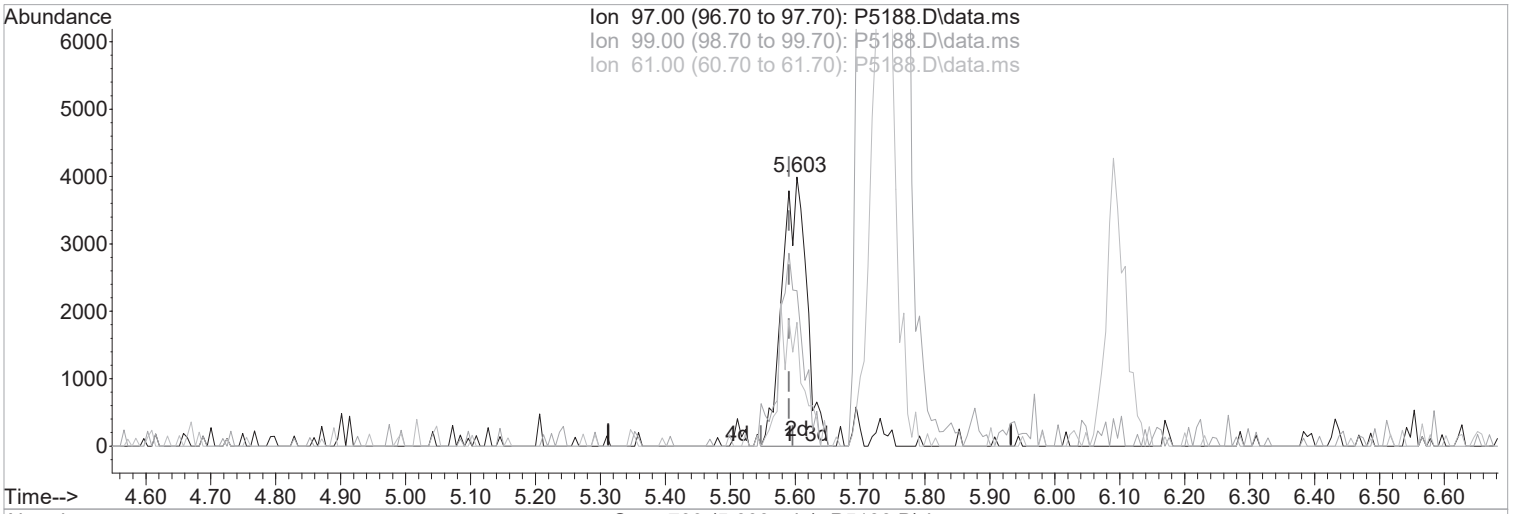
Ion	Ratio	Lower	Upper
55	100		
42	6.0	54.2	94.2#

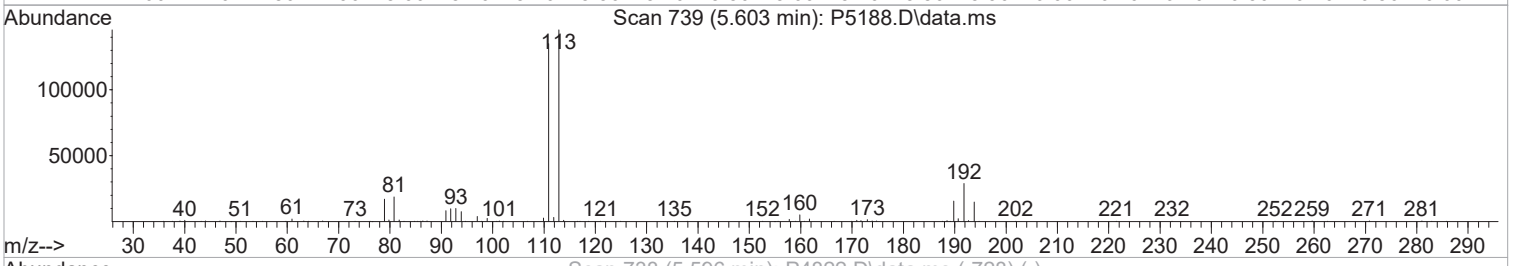


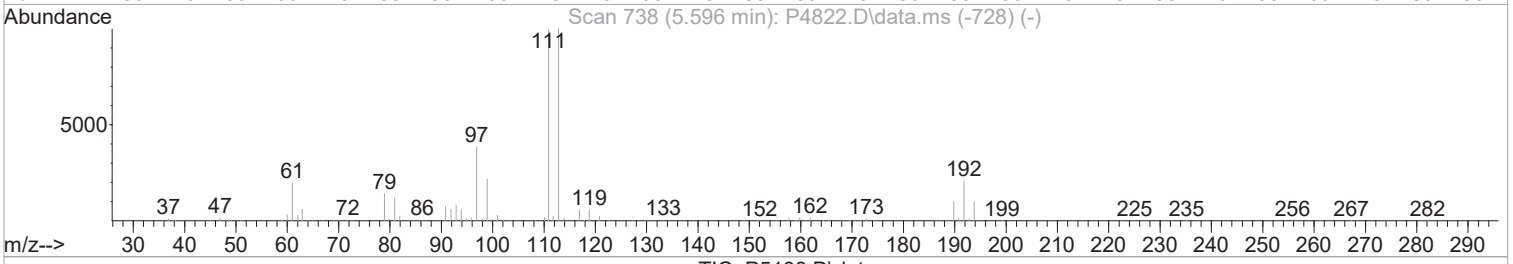
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5188.D
Acq On : 20 Sep 2016 2:43 pm
Operator : K.Ruest
Sample : R1609820-004|10 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 15:00:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5188.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.603min (+0.012) 1.04 ppb m

response 10477

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	57.77
61.00	45.50	46.02
0.00	0.00	0.00

Manual Integration:

After

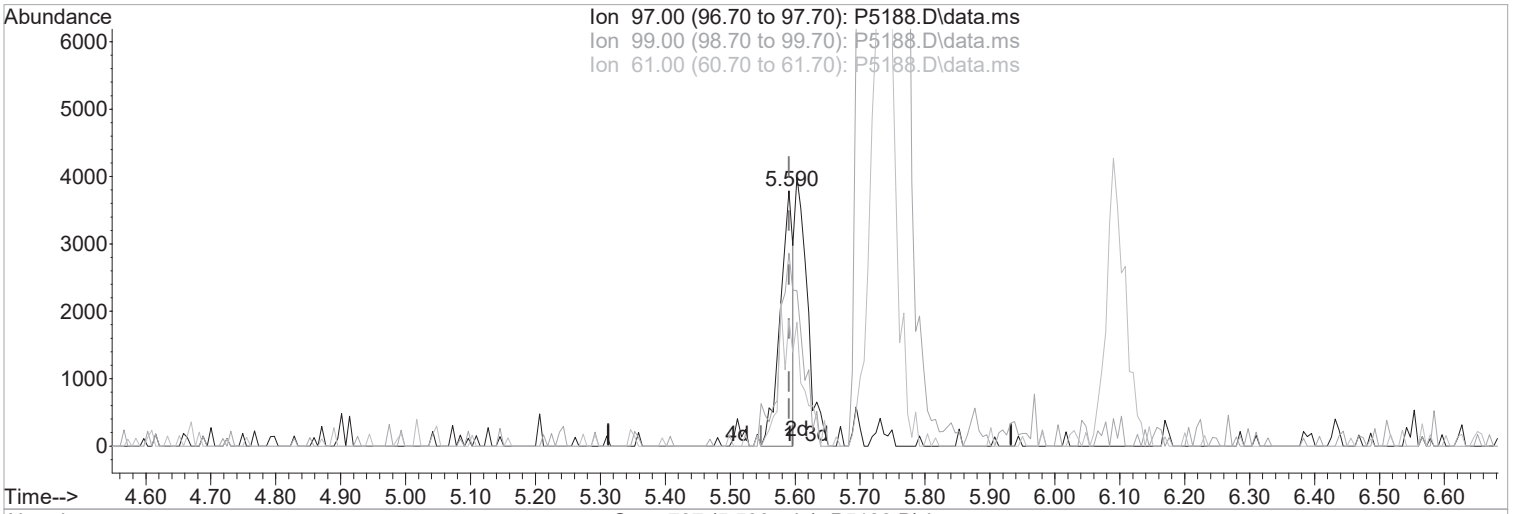
Split Peak

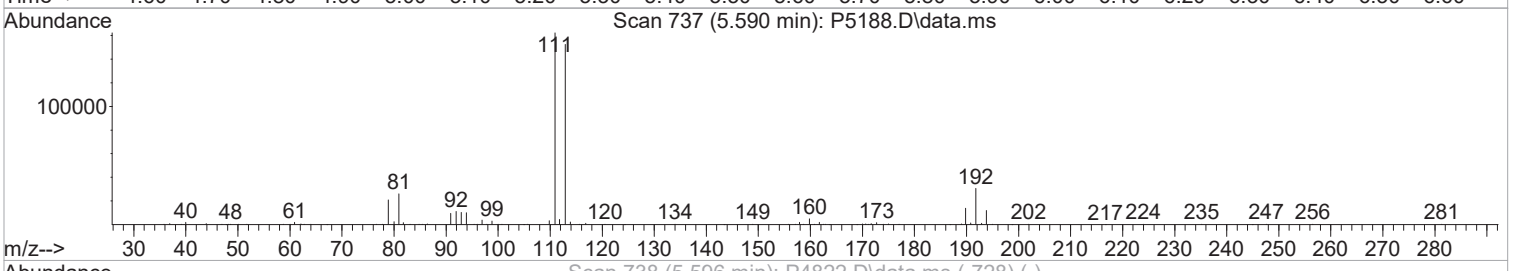
09/20/16

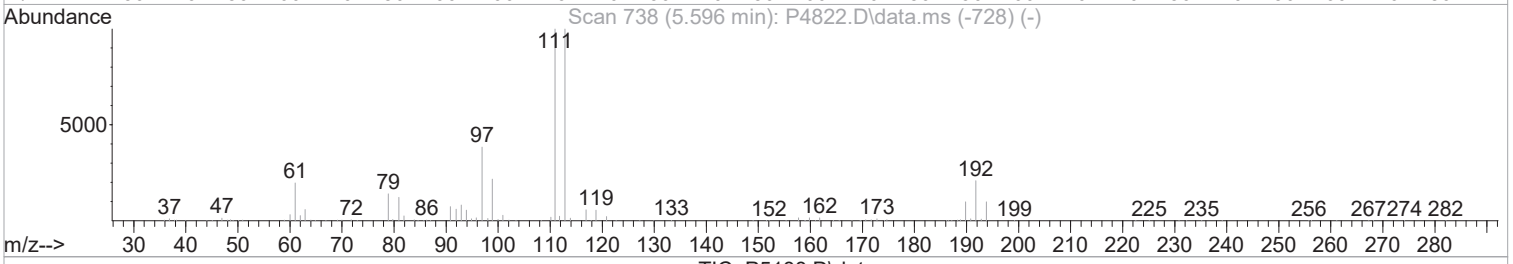
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5188.D
Acq On : 20 Sep 2016 2:43 pm
Operator : K.Ruest
Sample : R1609820-004|10 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 15:00:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5188.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.590min (+0.000) 0.53 ppb

response 5303

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	75.54
61.00	45.50	49.45
0.00	0.00	0.00

Manual Integration:

Before

09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5188.D
Acq On : 20 Sep 2016 2:43 pm
Operator : K.Ruest
Sample : R1609820-004|10 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 17:35:33 2016 dil for color
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

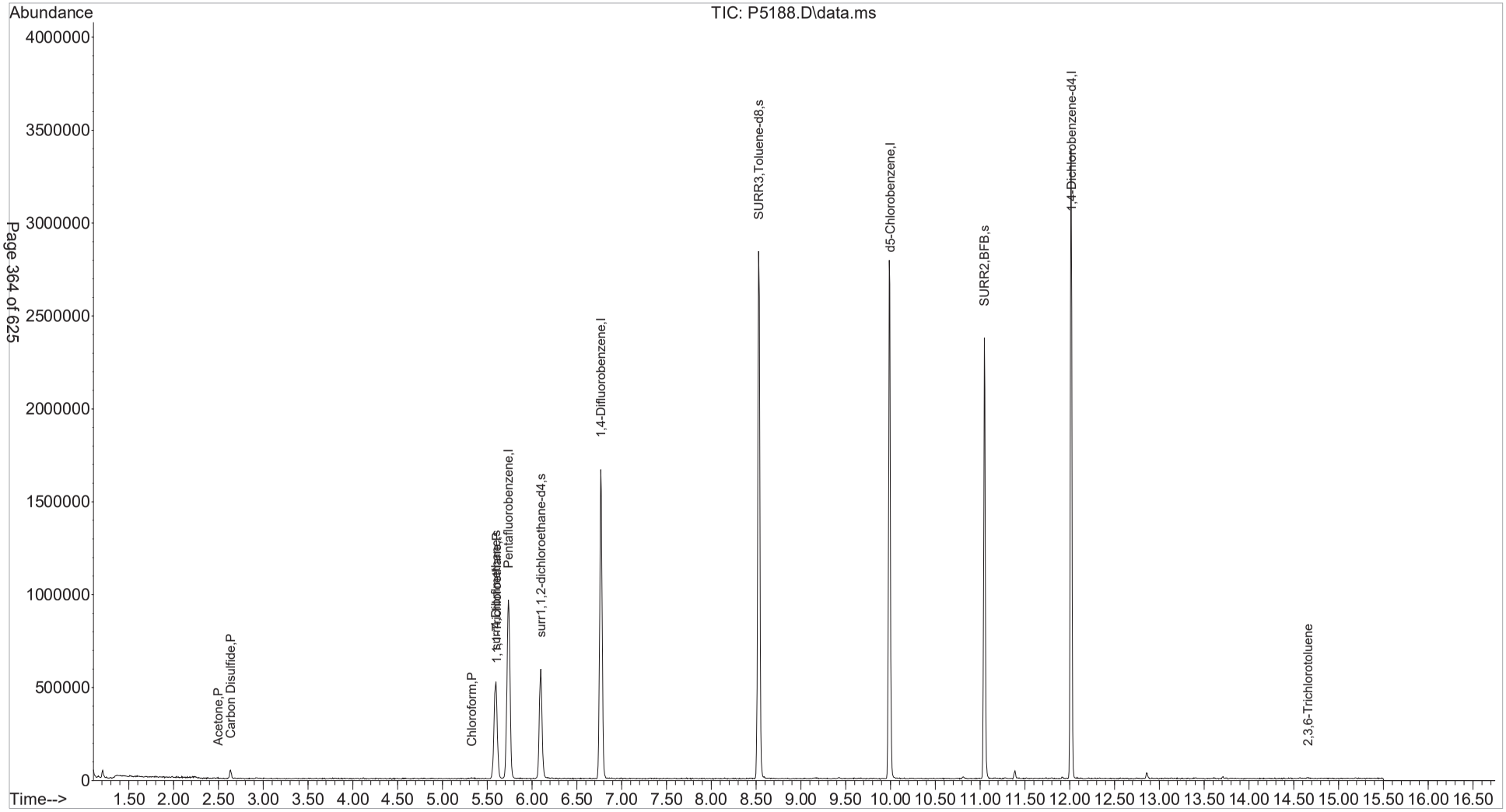
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	805801	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1377750	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1288984	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	667571	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.596	113	395944	55.52	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.04%				
48) surr1,1,2-dichloroetha...	6.096	65	437230	52.16	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 104.32%				
65) SURR3,Toluene-d8	8.529	98	1745102	57.03	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.06%				
70) SURR2,BFB	11.047	95	630376	52.96	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.92%				
Target Compounds							Qvalue
15) Acetone	2.493	43	4928	3.13	ppb		90
18) Carbon Disulfide	2.634	76	49036	2.41	ppb		97
40) Chloroform	5.328	83	2570	0.22	ppb		85
41) 1,1,1-Trichloroethane	5.603	97	10477m	1.04	ppb		
120) 2,3,6-Trichlorotoluene	14.656	159	1127	0.25	ppb	#	55

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

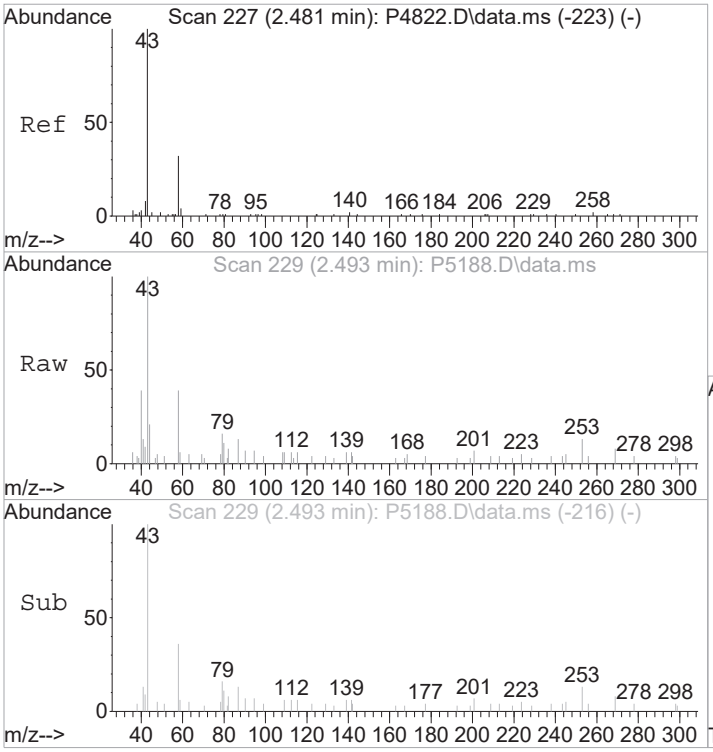
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5188.D
Acq On : 20 Sep 2016 2:43 pm
Operator : K.Ruest
Sample : R1609820-004|10 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 20 17:35:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



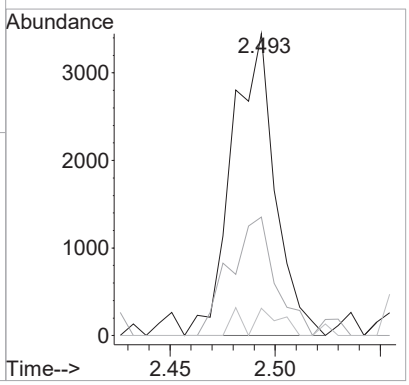
1st 09/20/16
2nd 09/22/16

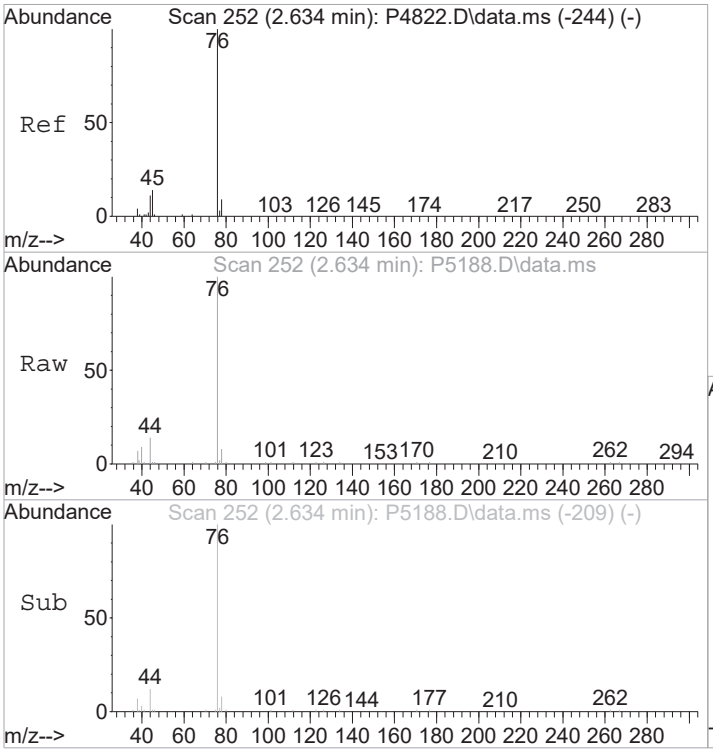


#15
Acetone
Concen: 3.13 ppb
RT: 2.493 min Scan# 229
Delta R.T. 0.006 min
Lab File: P5188.D
Acq: 20 Sep 2016 2:43 pm

Tgt Ion: 43 Resp: 4928

Ion	Ratio	Lower	Upper
43	100		
58	39.2	13.2	53.2
42	9.1	0.0	26.9

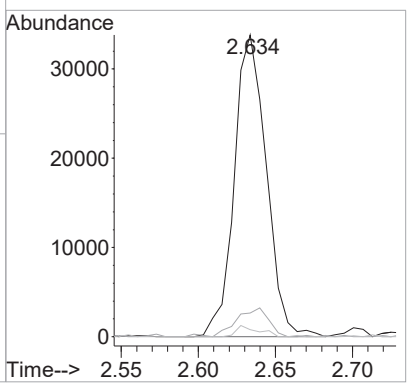


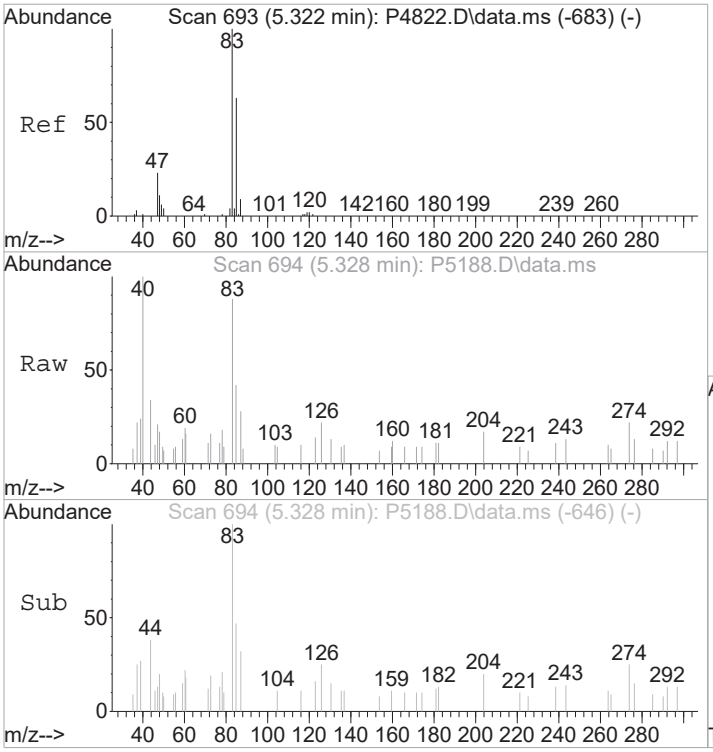


#18
Carbon Disulfide
Concen: 2.41 ppb
RT: 2.634 min Scan# 252
Delta R.T. 0.006 min
Lab File: P5188.D
Acq: 20 Sep 2016 2:43 pm

Tgt Ion: 76 Resp: 49036

Ion	Ratio	Lower	Upper
76	100		
78	7.9	0.0	29.0
77	2.4	0.0	22.9

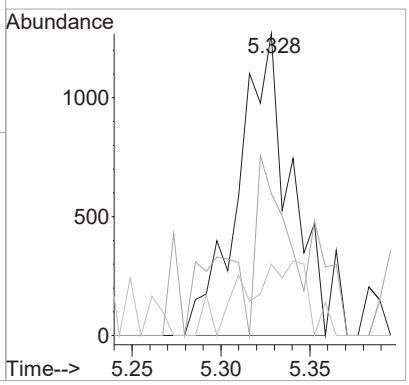


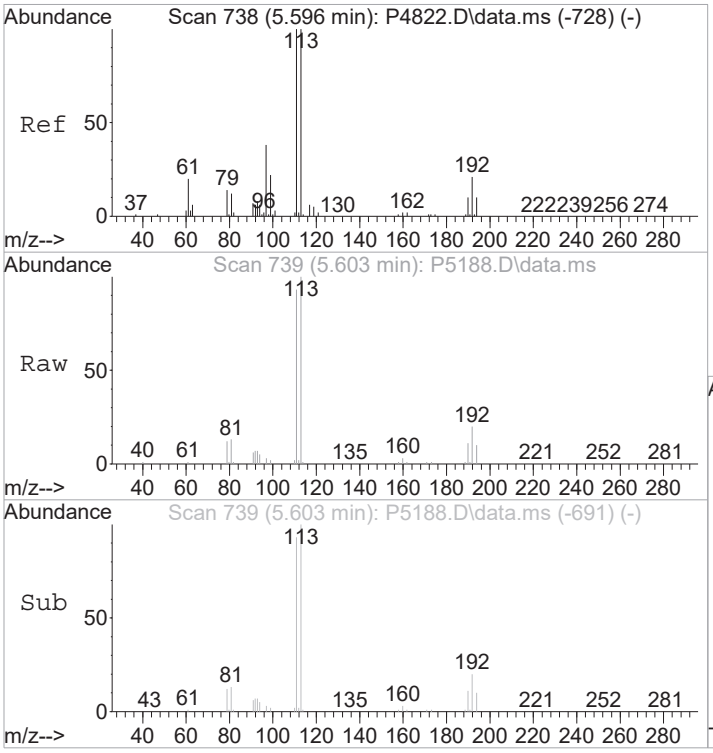


#40
Chloroform
Concen: 0.22 ppb
RT: 5.328 min Scan# 694
Delta R.T. 0.006 min
Lab File: P5188.D
Acq: 20 Sep 2016 2:43 pm

Tgt Ion: 83 Resp: 2570

Ion	Ratio	Lower	Upper
83	100		
85	47.1	42.5	82.5
47	23.6	5.9	45.9

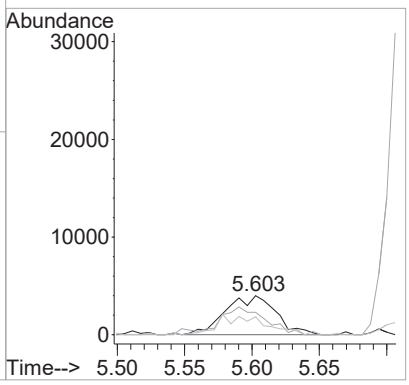


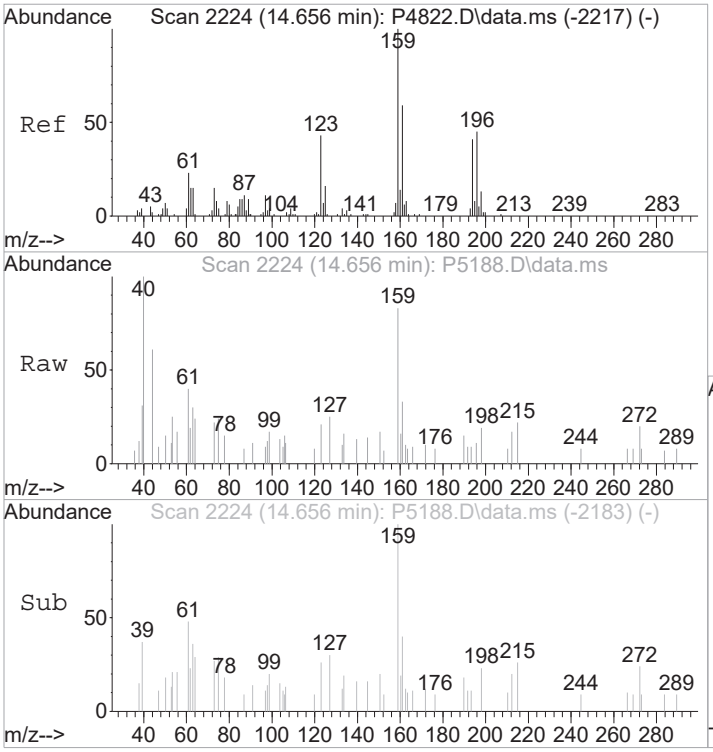


#41
1,1,1-Trichloroethane
Concen: 1.04 ppb m
RT: 5.603 min Scan# 739
Delta R.T. 0.012 min
Lab File: P5188.D
Acq: 20 Sep 2016 2:43 pm

Tgt Ion: 97 Resp: 10477

Ion	Ratio	Lower	Upper
97	100		
99	57.8	42.8	82.8
61	46.0	25.5	65.5

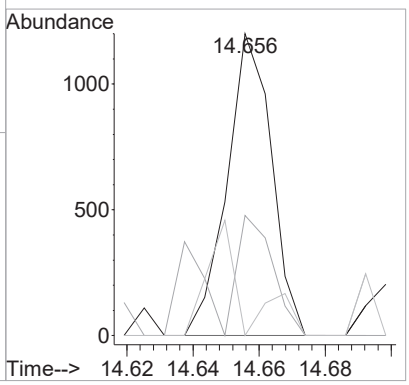




#120
2,3,6-Trichlorotoluene
Concen: 0.25 ppb
RT: 14.656 min Scan# 2224
Delta R.T. 0.000 min
Lab File: P5188.D
Acq: 20 Sep 2016 2:43 pm

Tgt Ion:159 Resp: 1127

Ion	Ratio	Lower	Upper
159	100		
161	39.8	49.3	73.9#
194	0.0	35.2	52.8#



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5152.D
Acq On : 19 Sep 2016 8:01 pm
Operator : K.Ruest
Sample : R1609820-005|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 20 10:51:11 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

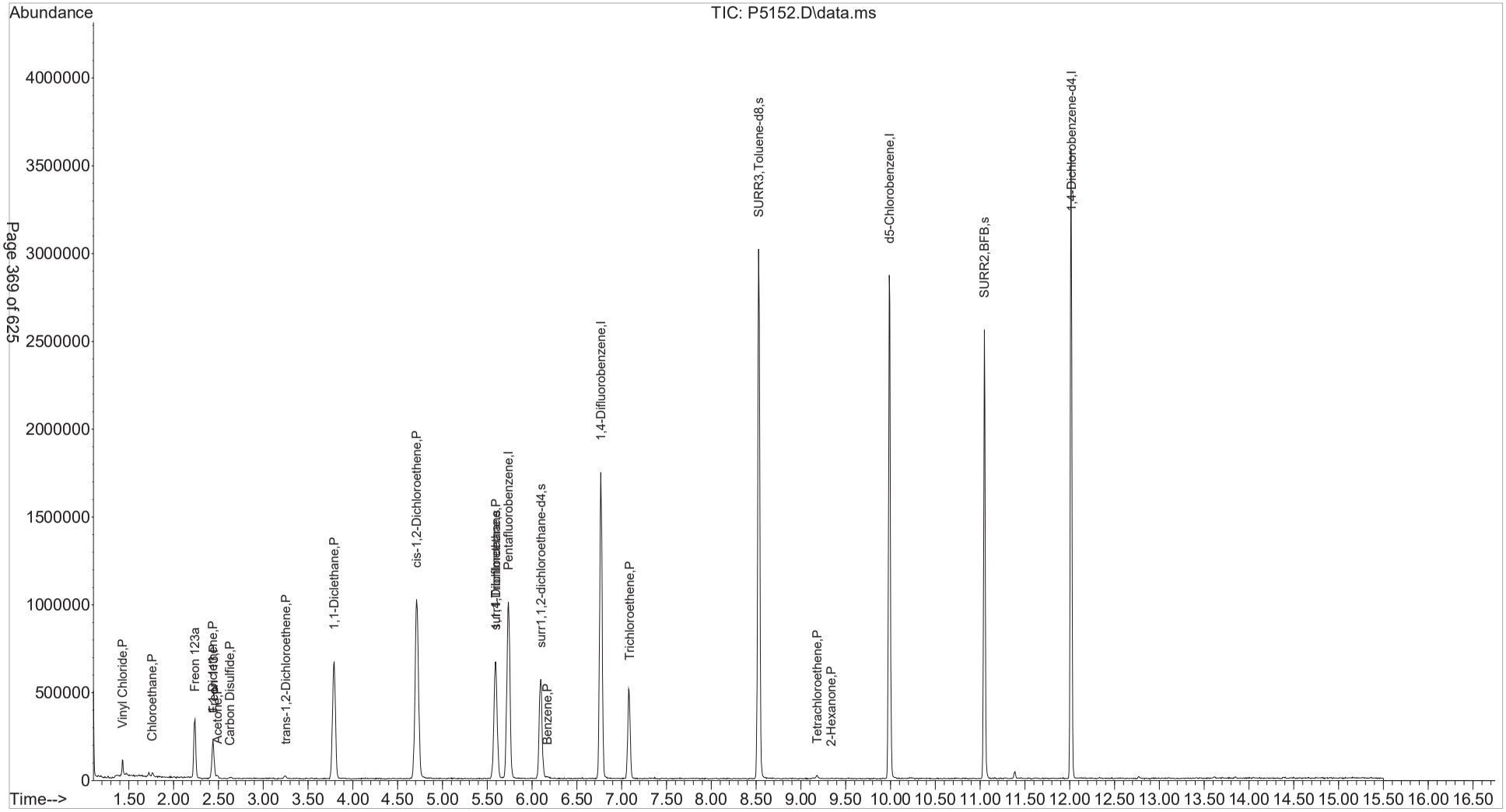
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	865445	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1445197	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1352572	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	692325	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.591	113	421535	56.35	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.70%				
48) surr1,1,2-dichloroetha...	6.097	65	441888	50.25	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.50%				
65) SURR3,Toluene-d8	8.529	98	1823933	56.82	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 113.64%				
70) SURR2,BFB	11.047	95	672784	53.89	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.78%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.427	62	60663	4.90	ppb		75
6) Chloroethane	1.762	64	19064	2.87	ppb		74
10) Freon 123a	2.231	67	149053	16.47	ppb		95
13) 1,1-Diclethene	2.433	96	6615	1.01	ppb	#	62
14) Freon 113	2.445	101	77477	12.14	ppb		92
15) Acetone	2.487	43	19428	11.49	ppb		96
18) Carbon Disulfide	2.628	76	9400	0.43	ppb		88
26) trans-1,2-Dichloroethene	3.250	96	6497	0.87	ppb	#	75
28) 1,1-Diclethane	3.792	63	773958	59.49	ppb		99
34) cis-1,2-Dichloroethene	4.713	96	655787	83.25	ppb		86
41) 1,1,1-Trichloroethane	5.591	97	104959	9.74	ppb		94
49) Benzene	6.170	78	7709	0.26	ppb		86
54) Trichloroethene	7.084	130	184923	25.96	ppb		96
72) Tetrachloroethene	9.181	164	3181	0.61	ppb	#	78
73) 2-Hexanone	9.340	43	1535	0.39	ppb		75

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

Quantitation Report (QT Reviewed)

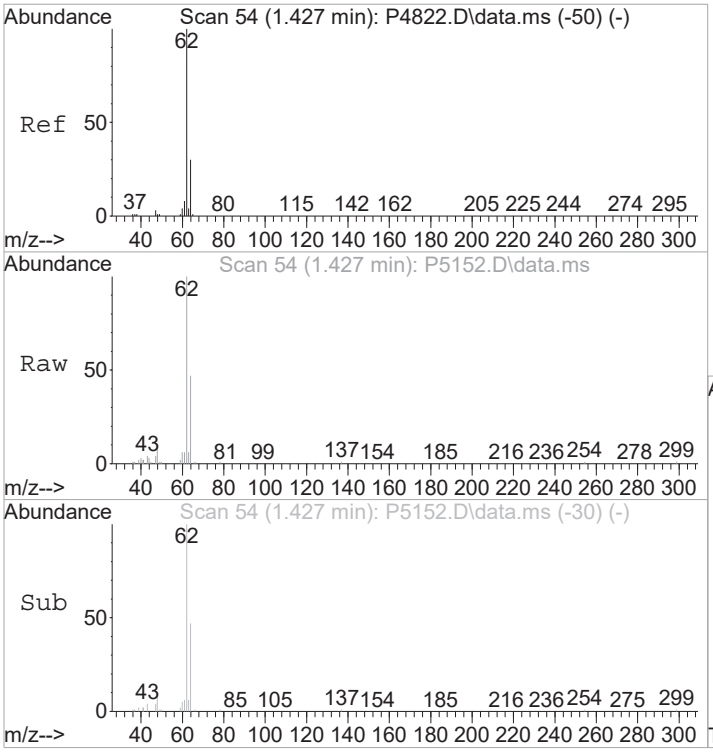
Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5152.D
Acq On : 19 Sep 2016 8:01 pm
Operator : K.Ruest
Sample : R1609820-005|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 20 10:51:11 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



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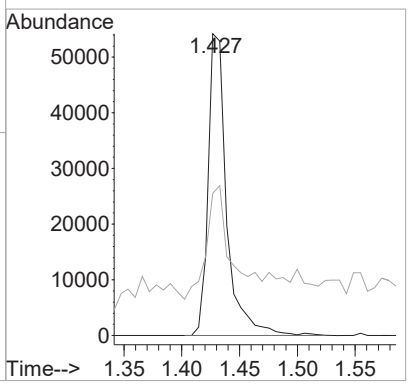
1st 09/20/16
2nd 09/20/16

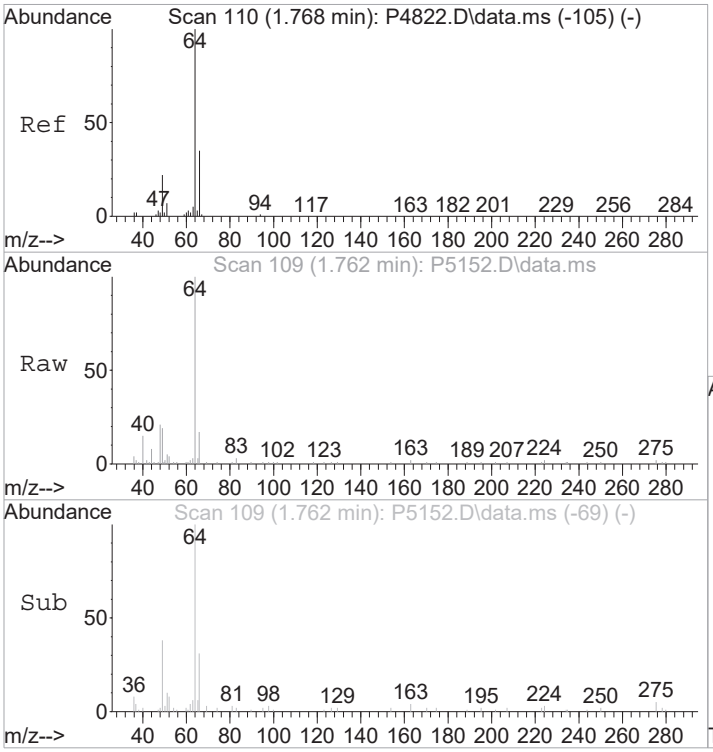


#4
Vinyl Chloride
Concen: 4.90 ppb
RT: 1.427 min Scan# 54
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 62 Resp: 60663

Ion	Ratio	Lower	Upper
62	100		
64	47.1	12.9	52.9

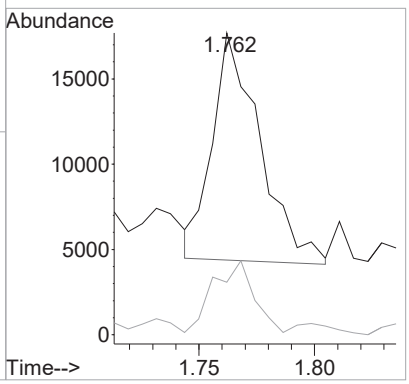


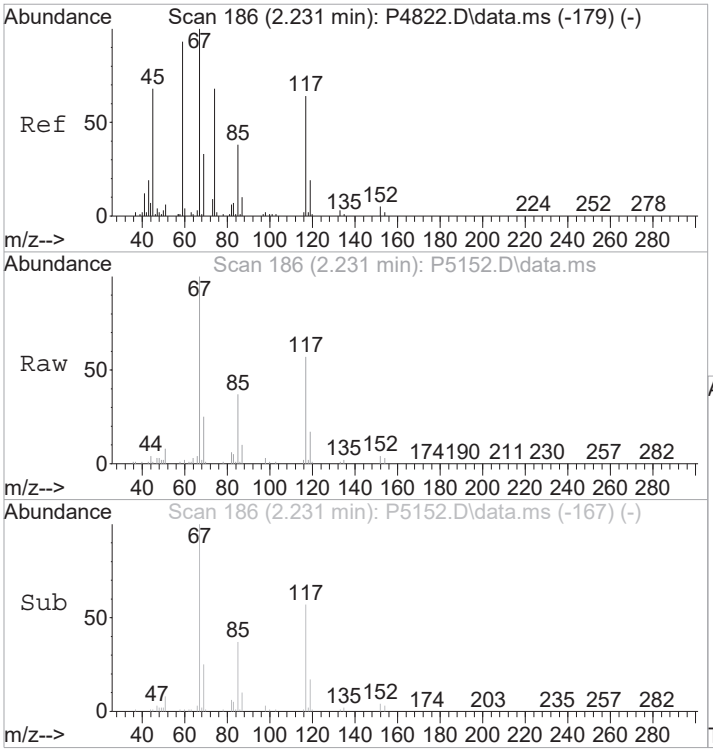


#6
Chloroethane
Concen: 2.87 ppb
RT: 1.762 min Scan# 109
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 64 Resp: 19064

Ion	Ratio	Lower	Upper
64	100		
66	17.4	12.0	52.0

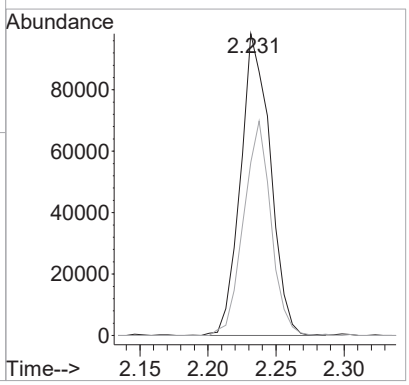


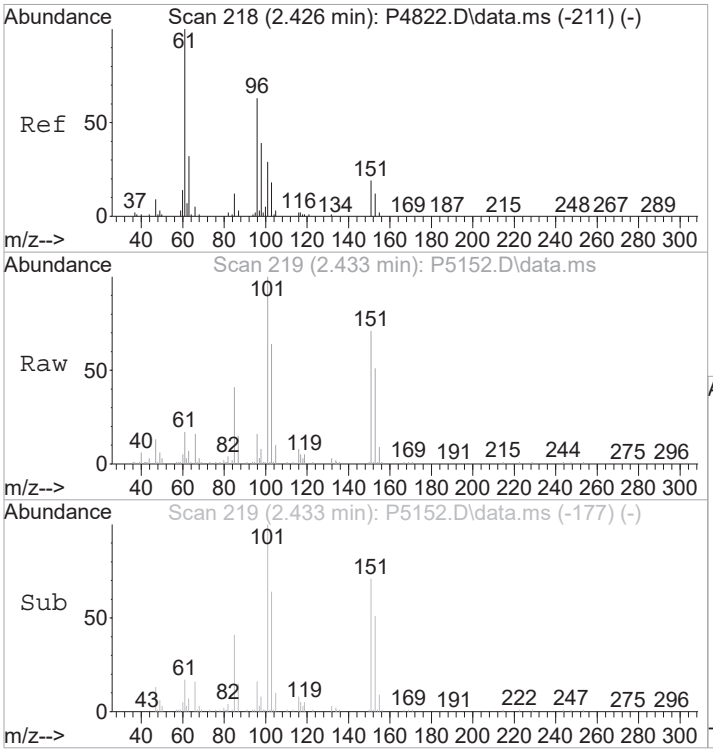


#10
Freon 123a
Concen: 16.47 ppb
RT: 2.231 min Scan# 186
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 67 Resp: 149053

Ion	Ratio	Lower	Upper
67	100		
117	57.4	41.5	81.5

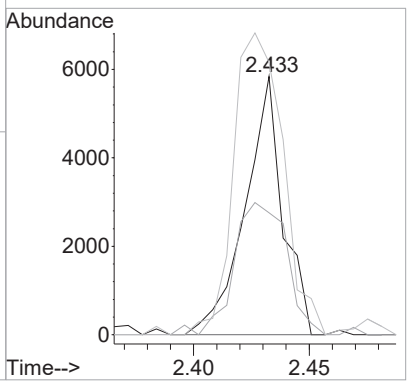


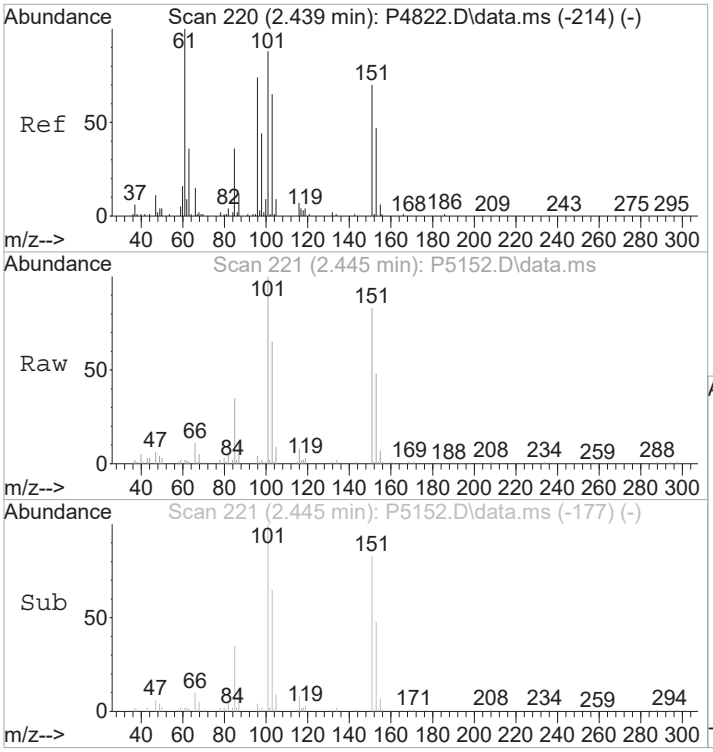


#13
1,1-Diclethene
Concen: 1.01 ppb
RT: 2.433 min Scan# 219
Delta R.T. 0.006 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 96 Resp: 6615

Ion	Ratio	Lower	Upper
96	100		
98	47.2	43.0	83.0
61	105.4	145.9	185.9#

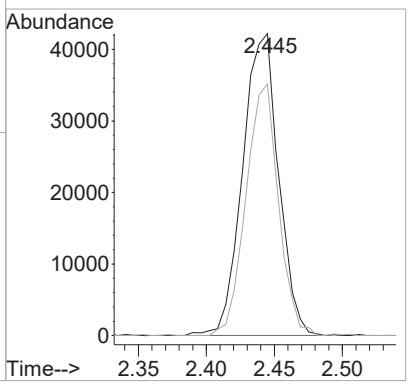


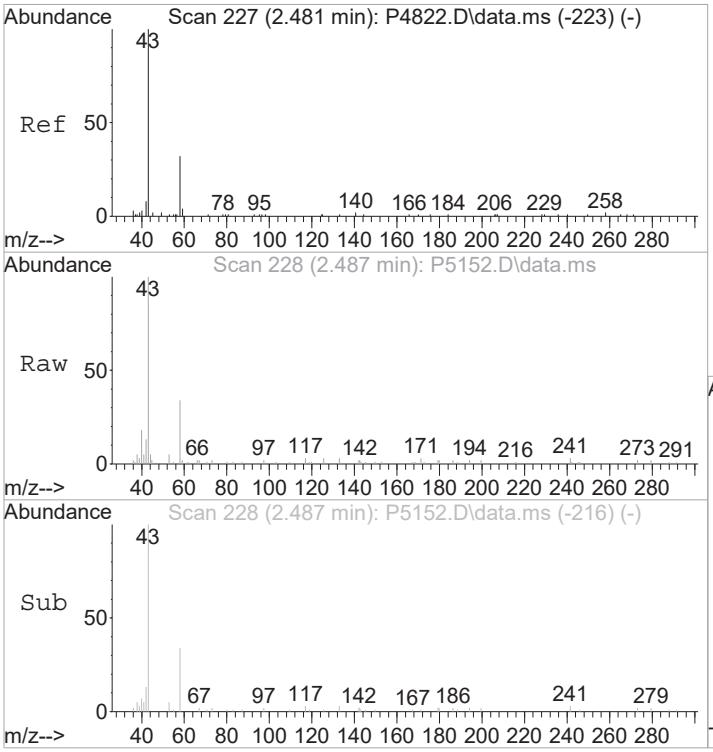


#14
Freon 113
Concen: 12.14 ppb
RT: 2.445 min Scan# 221
Delta R.T. 0.012 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion:101 Resp: 77477

Ion	Ratio	Lower	Upper
101	100		
151	81.8	55.4	95.4

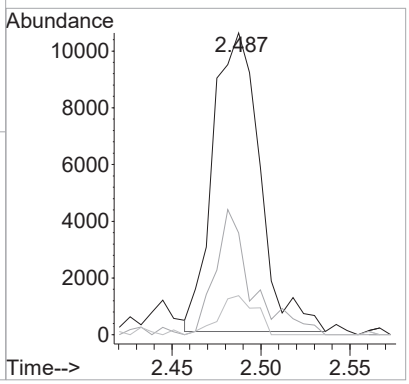


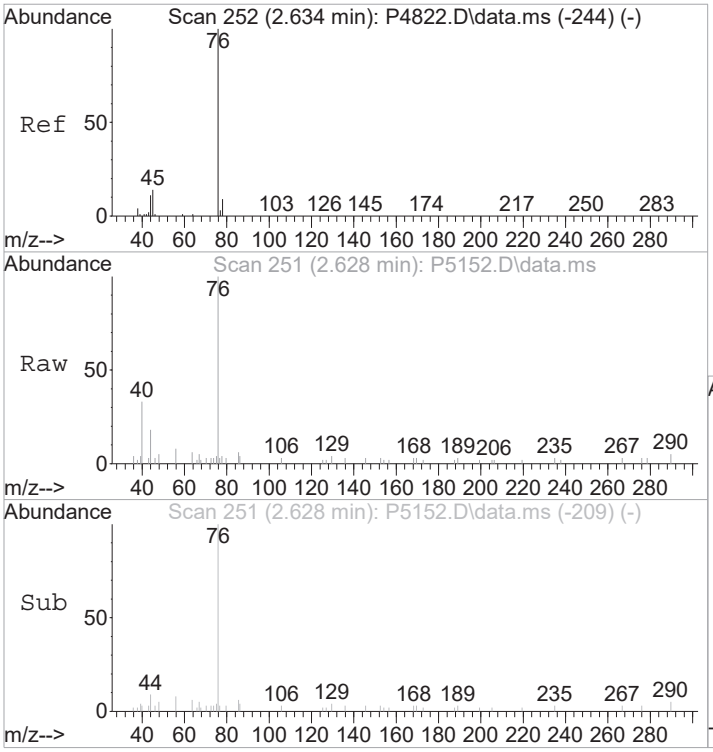


#15
Acetone
Concen: 11.49 ppb
RT: 2.487 min Scan# 228
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 43 Resp: 19428

Ion	Ratio	Lower	Upper
43	100		
58	33.7	13.2	53.2
42	13.0	0.0	26.9

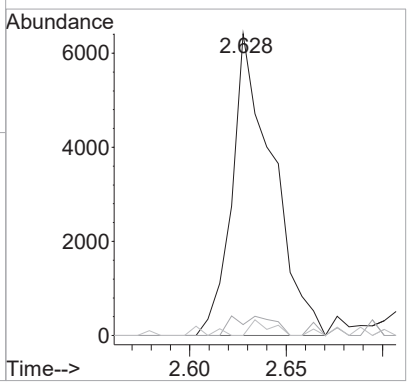


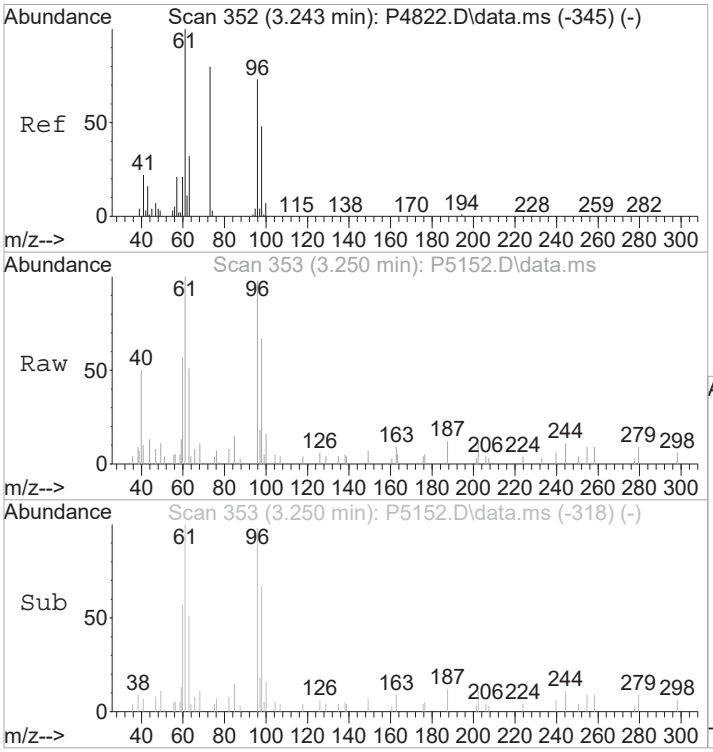


#18
Carbon Disulfide
Concen: 0.43 ppb
RT: 2.628 min Scan# 251
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 76 Resp: 9400

Ion	Ratio	Lower	Upper
76	100		
78	3.6	0.0	29.0
77	3.6	0.0	22.9

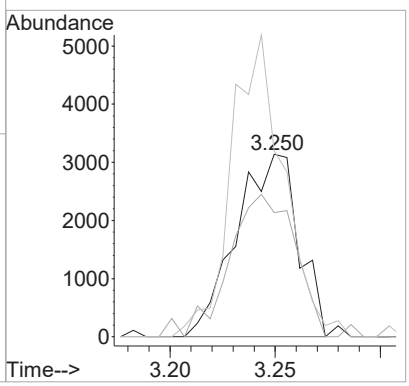


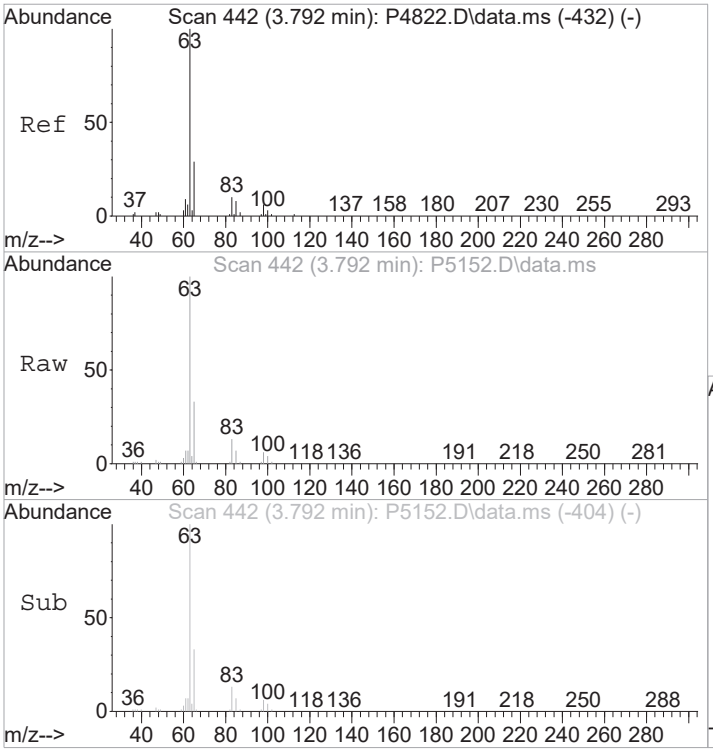


#26
trans-1,2-Dichloroethene
Concen: 0.87 ppb
RT: 3.250 min Scan# 353
Delta R.T. 0.006 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 96 Resp: 6497

Ion	Ratio	Lower	Upper
96	100		
98	68.1	43.0	83.0
61	101.9	122.0	162.0#

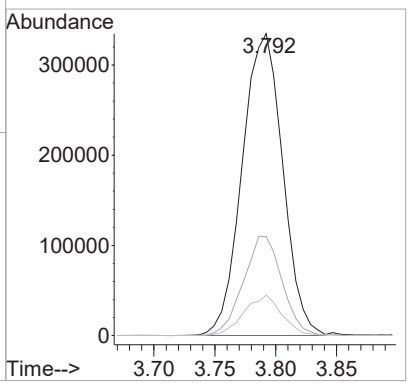


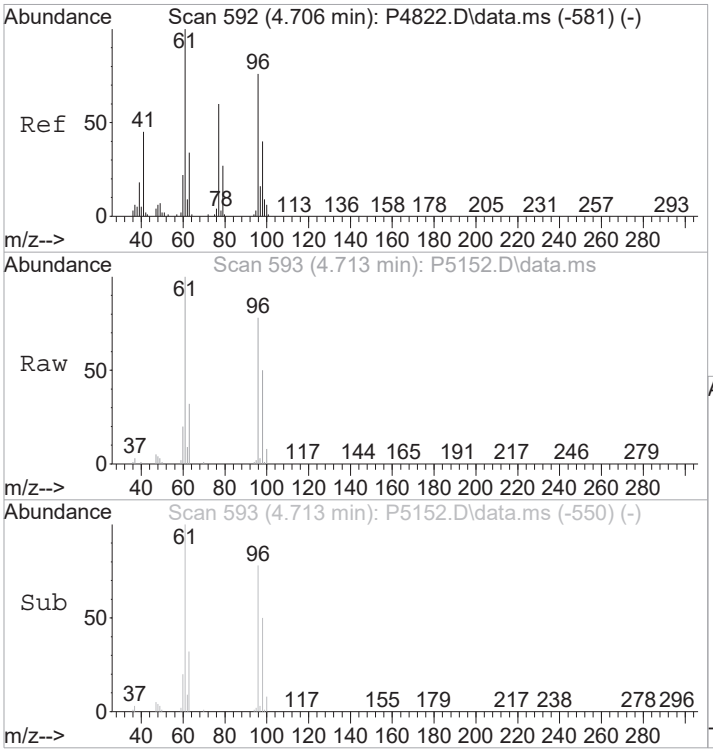


#28
1,1-Diclethane
Concen: 59.49 ppb
RT: 3.792 min Scan# 442
Delta R.T. 0.006 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 63 Resp: 773958

Ion	Ratio	Lower	Upper
63	100		
65	32.7	12.6	52.6
83	13.4	0.0	32.9

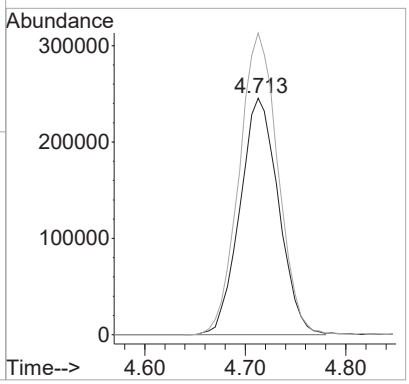


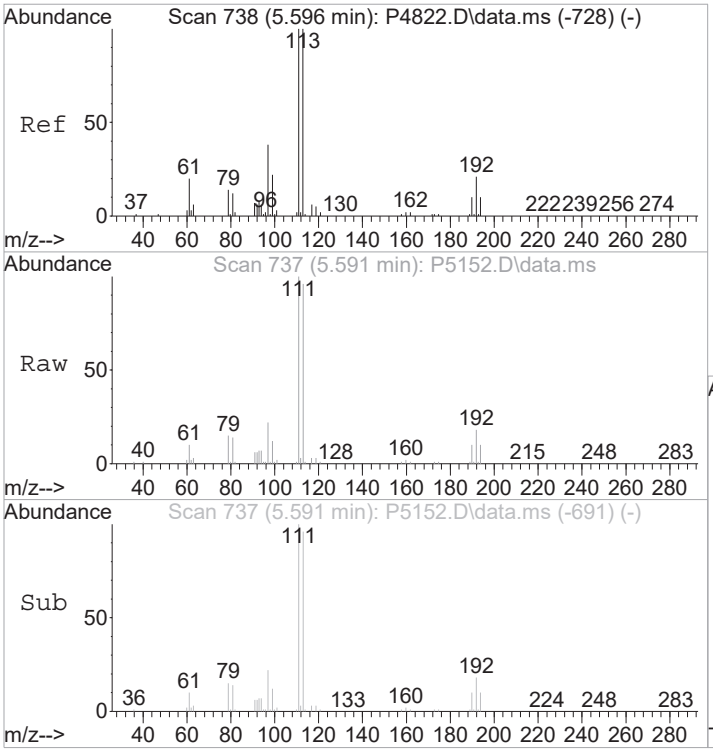


#34
cis-1,2-Dichloroethene
Concen: 83.25 ppb
RT: 4.713 min Scan# 593
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 96 Resp: 655787

Ion	Ratio	Lower	Upper
96	100		
61	127.6	124.4	164.4

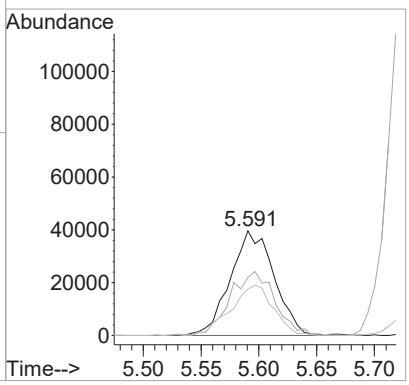


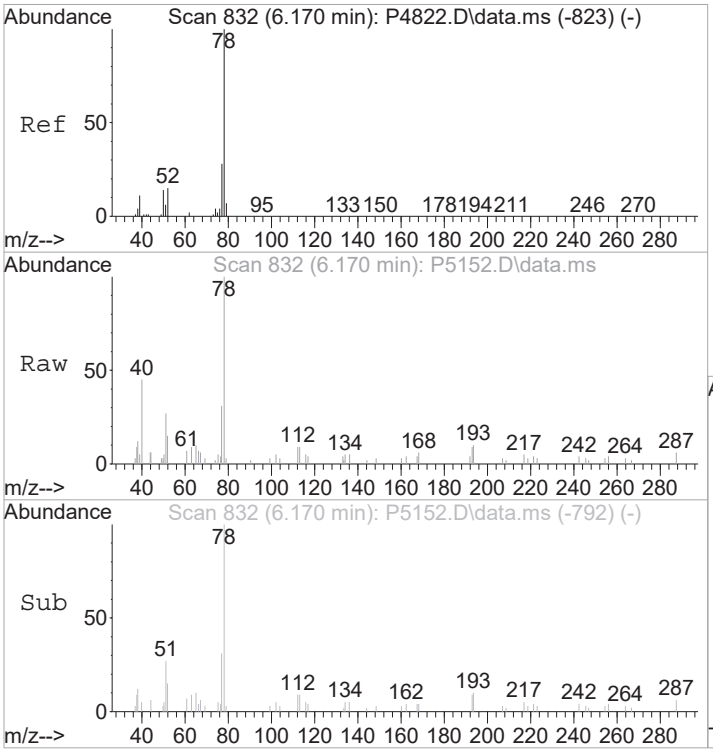


#41
1,1,1-Trichloroethane
Concen: 9.74 ppb
RT: 5.591 min Scan# 737
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 97 Resp: 104959

Ion	Ratio	Lower	Upper
97	100		
99	55.4	42.8	82.8
61	44.6	25.5	65.5

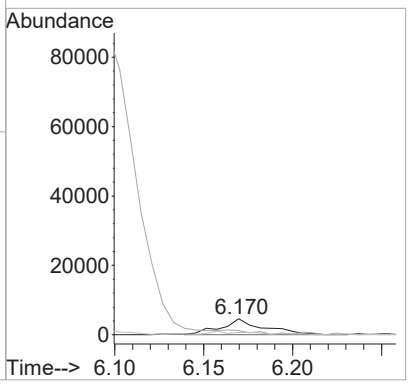


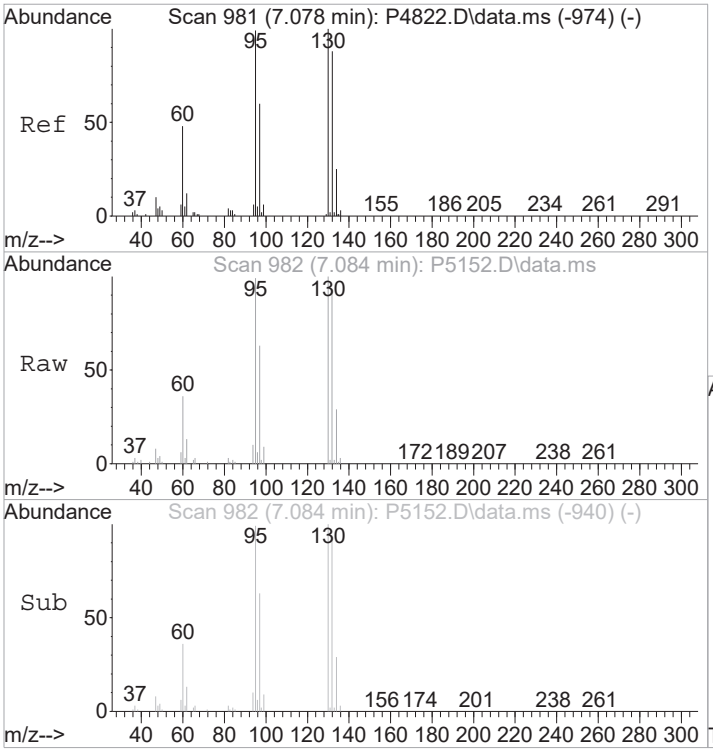


#49
Benzene
Concen: 0.26 ppb
RT: 6.170 min Scan# 832
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 78 Resp: 7709

Ion	Ratio	Lower	Upper
78	100		
51	27.3	0.0	36.8
52	15.3	0.0	36.8

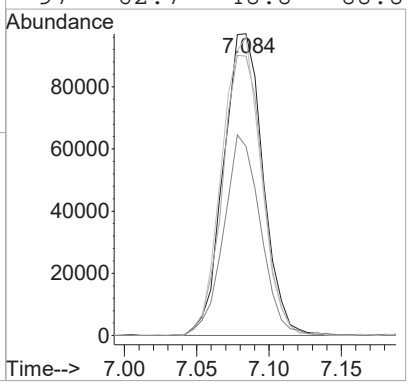


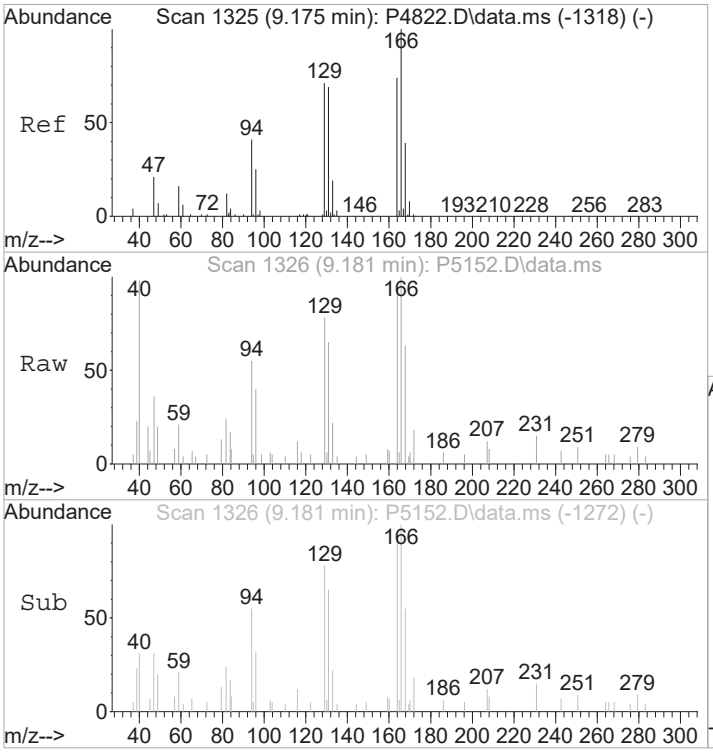


#54
Trichloroethene
Concen: 25.96 ppb
RT: 7.084 min Scan# 982
Delta R.T. 0.006 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion:130 Resp: 184923

Ion	Ratio	Lower	Upper
130	100		
132	92.6	76.6	116.6
95	99.0	80.2	120.2
97	62.7	48.8	88.8

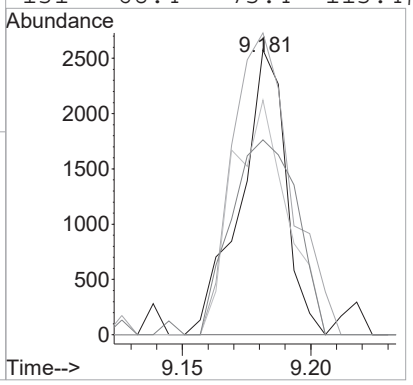


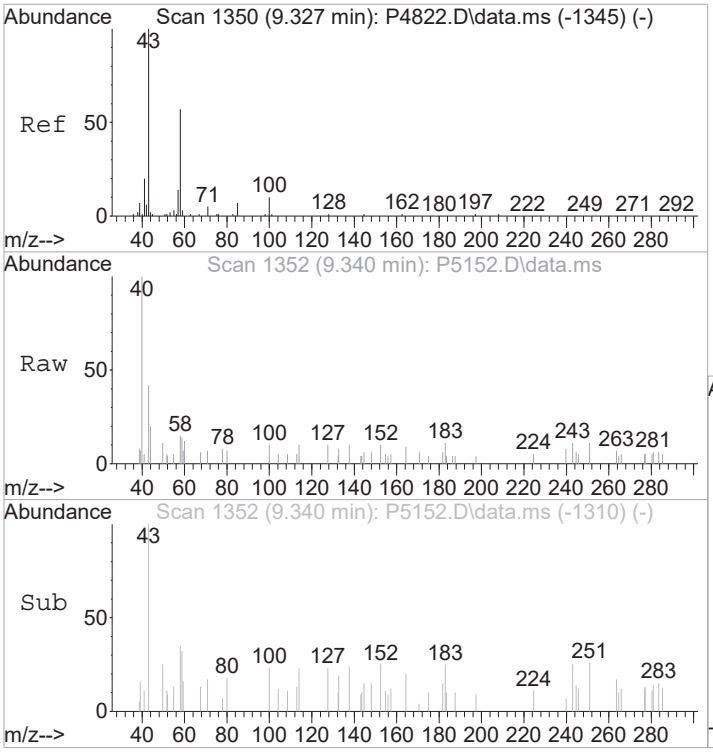


#72
Tetrachloroethene
Concen: 0.61 ppb
RT: 9.181 min Scan# 1326
Delta R.T. 0.000 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion:164 Resp: 3181

Ion	Ratio	Lower	Upper
164	100		
166	106.1	114.3	154.3#
129	82.4	77.3	117.3
131	68.4	73.4	113.4#

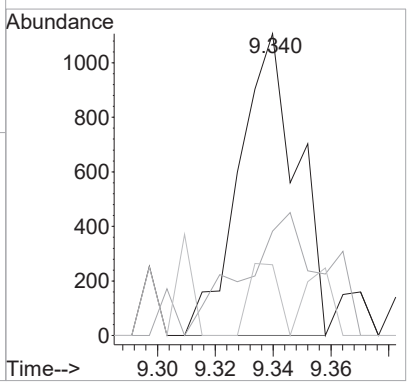




#73
2-Hexanone
Concen: 0.39 ppb
RT: 9.340 min Scan# 1352
Delta R.T. 0.012 min
Lab File: P5152.D
Acq: 19 Sep 2016 8:01 pm

Tgt Ion: 43 Resp: 1535

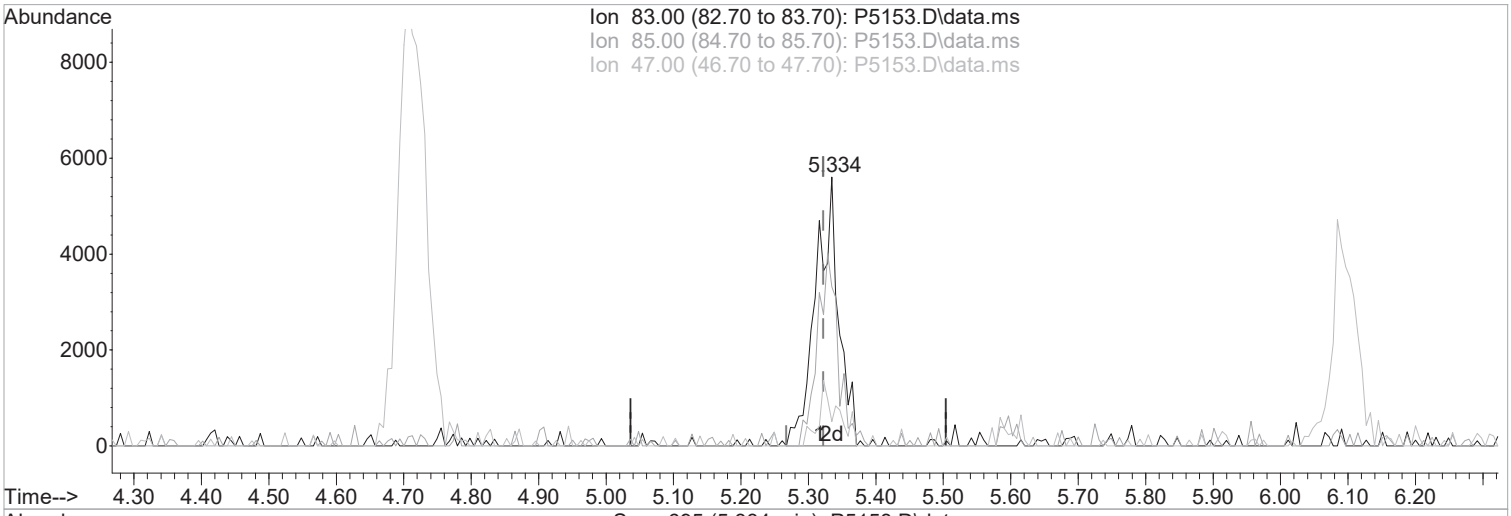
Ion	Ratio	Lower	Upper
43	100		
58	66.6	30.4	70.4
100	23.5	0.0	30.5

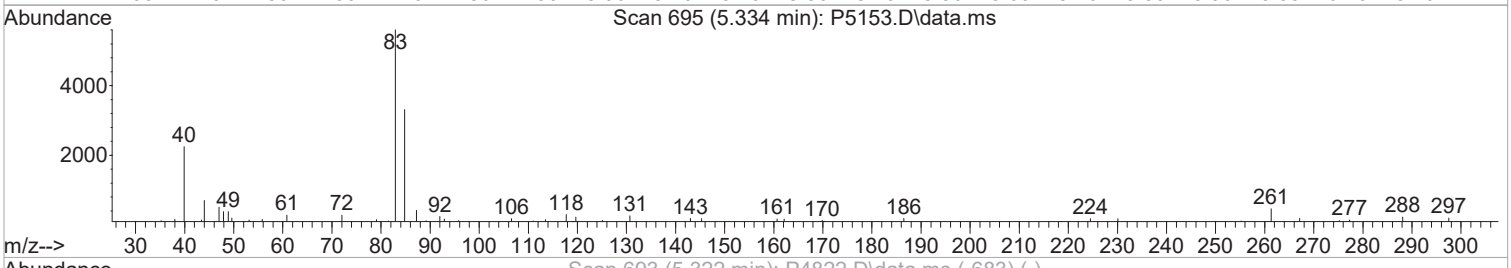


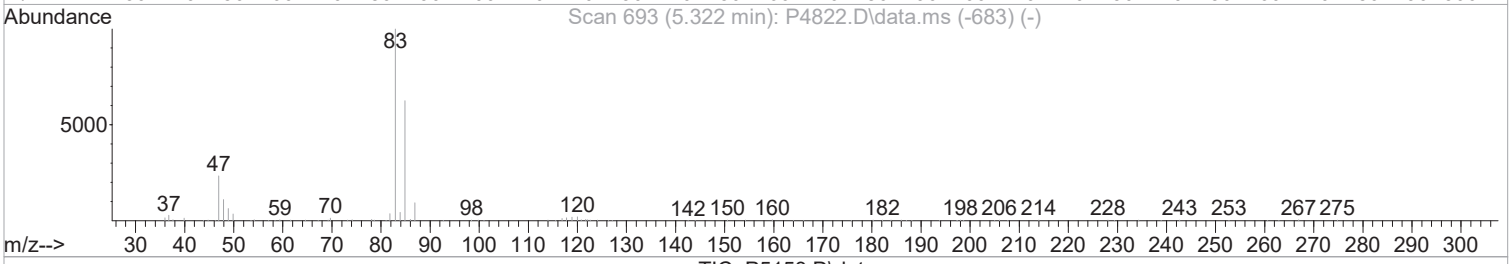
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5153.D
Acq On : 19 Sep 2016 8:31 pm
Operator : K.Ruest
Sample : R1609820-006|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 20 08:52:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5153.D\data.ms

(40) Chloroform (P)

5.334min (+0.012) 1.06 ppb m

response 13245

Ion	Exp%	Act%
83.00	100	100
85.00	62.50	59.14
47.00	25.90	9.10
0.00	0.00	0.00

Manual Integration:

After

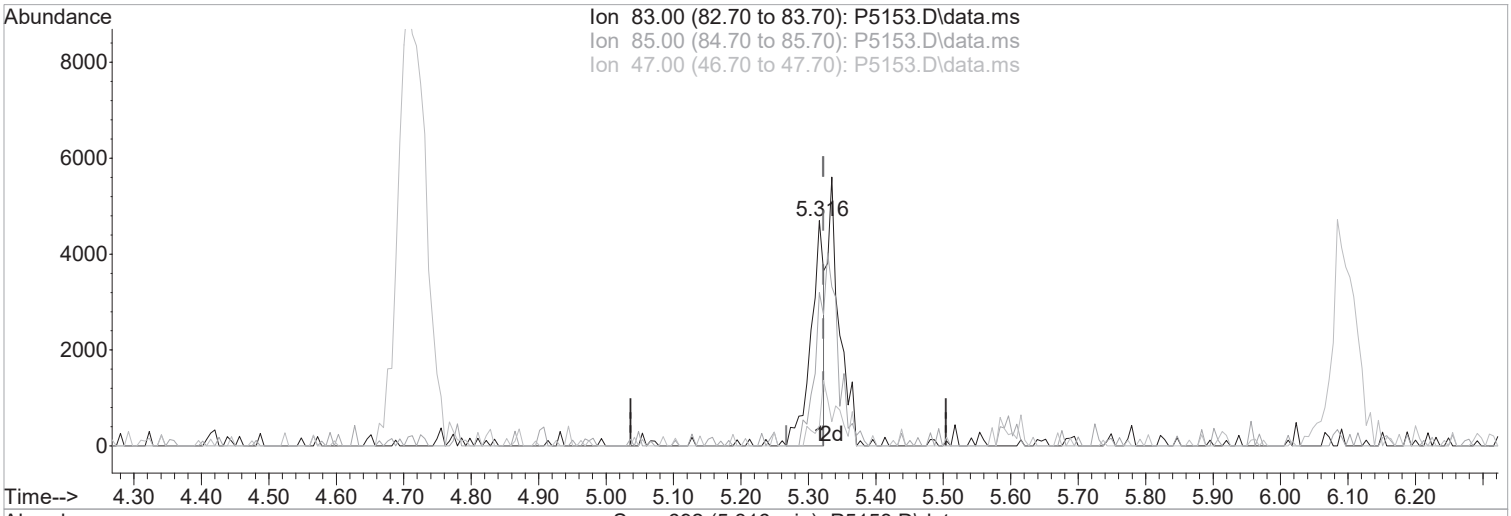
Split Peak

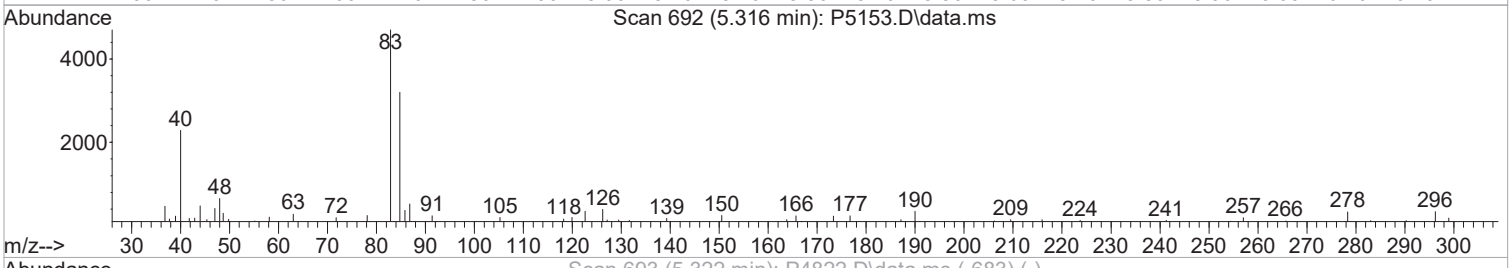
09/20/16

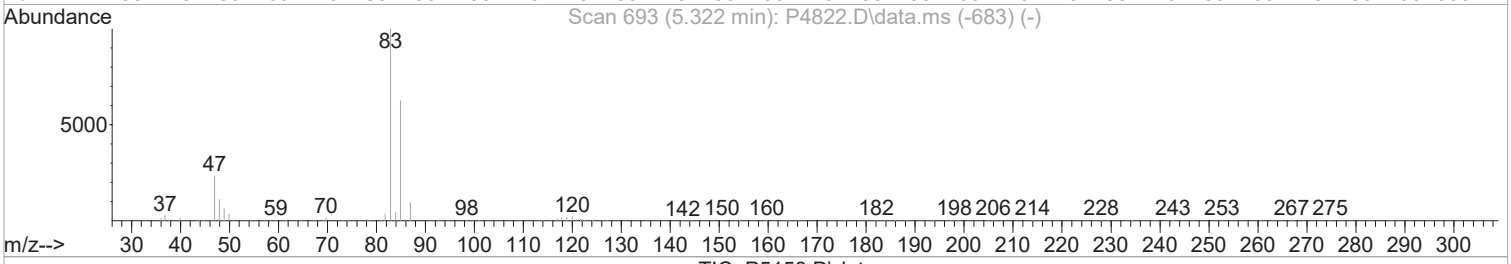
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5153.D
Acq On : 19 Sep 2016 8:31 pm
Operator : K.Ruest
Sample : R1609820-006|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 20 08:52:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5153.D\data.ms

(40) Chloroform (P)

5.316min (-0.006) 0.50 ppb

response 6293

Ion	Exp%	Act%
83.00	100	100
85.00	62.50	68.06
47.00	25.90	8.79
0.00	0.00	0.00

Manual Integration:

Before

09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5153.D
Acq On : 19 Sep 2016 8:31 pm
Operator : K.Ruest
Sample : R1609820-006|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 20 10:54:06 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

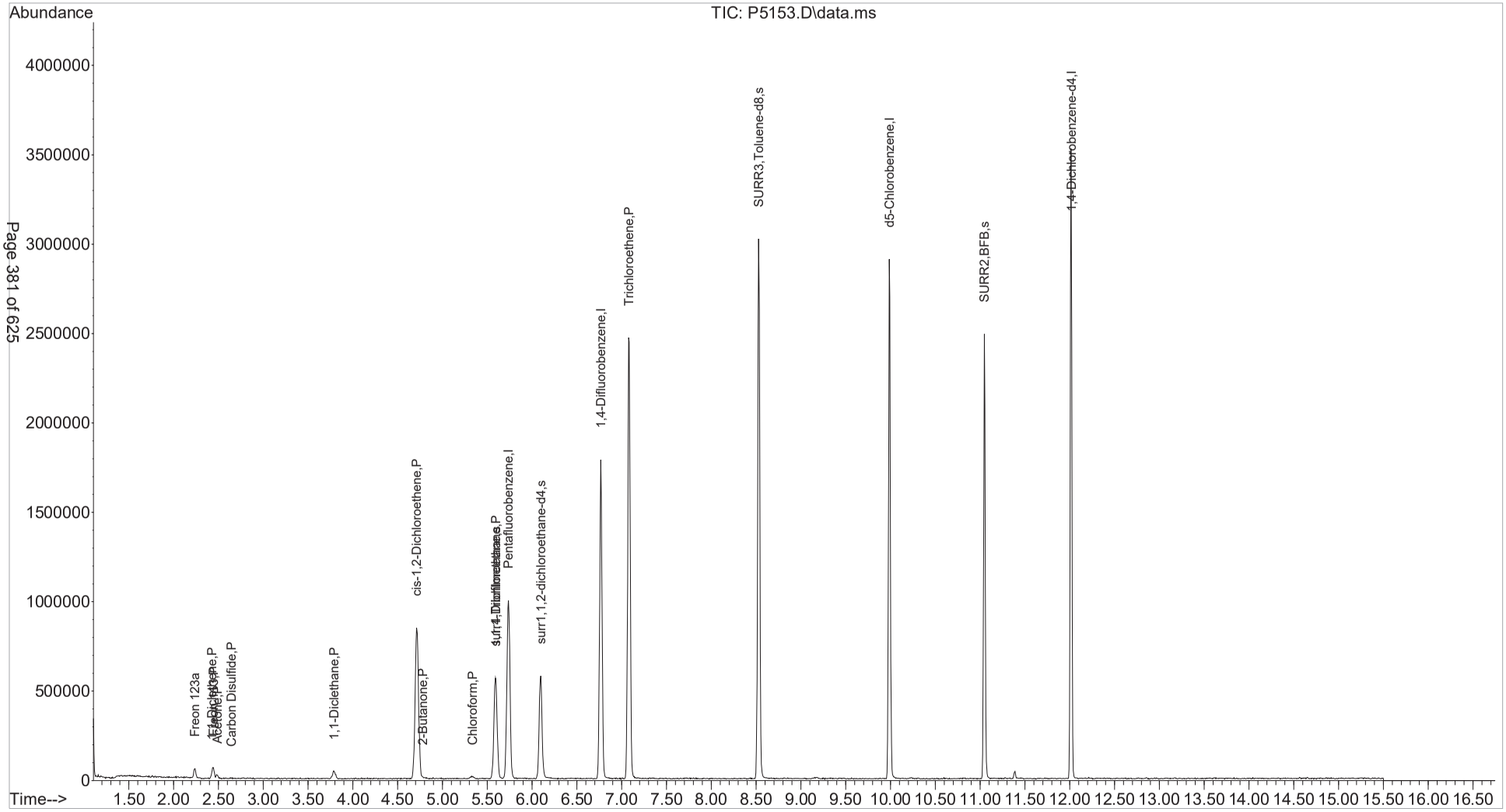
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	855156	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1450750	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1352457	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	688433	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	415333	55.30	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 110.60%				
48) surr1,1,2-dichloroetha...	6.096	65	451602	51.16	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.32%				
65) SURR3,Toluene-d8	8.529	98	1835482	56.96	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 113.92%				
70) SURR2,BFB	11.047	95	665990	53.14	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.28%				
Target Compounds							Qvalue
10) Freon 123a	2.237	67	22608	2.53	ppb		95
13) 1,1-Diclethene	2.426	96	3531	0.55	ppb	#	84
14) Freon 113	2.445	101	22843	3.62	ppb		86
15) Acetone	2.487	43	18922	11.33	ppb		96
18) Carbon Disulfide	2.640	76	5319	0.25	ppb		76
28) 1,1-Diclethane	3.792	63	47514	3.70	ppb		87
34) cis-1,2-Dichloroethene	4.713	96	552136	70.94	ppb	#	80
35) 2-Butanone	4.780	43	5018	2.04	ppb		70
40) Chloroform	5.334	83	13245m	1.06	ppb		
41) 1,1,1-Trichloroethane	5.590	97	26014	2.44	ppb		97
54) Trichloroethene	7.078	130	871169	121.84	ppb		96

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

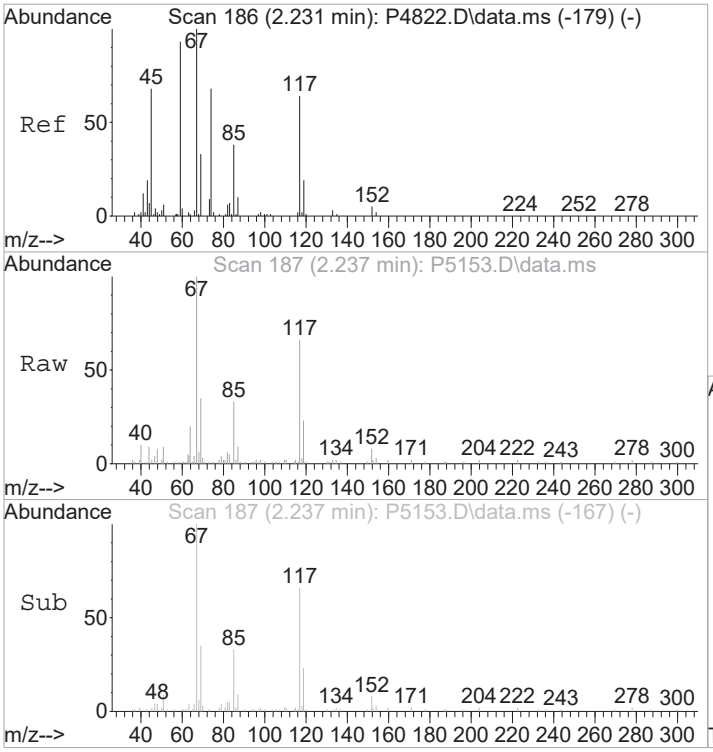
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5153.D
Acq On : 19 Sep 2016 8:31 pm
Operator : K.Ruest
Sample : R1609820-006|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 20 10:54:06 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



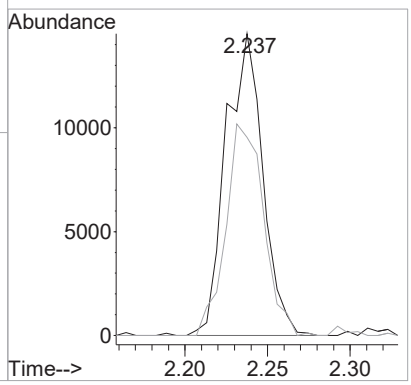
1st 09/20/16
2nd 09/20/16

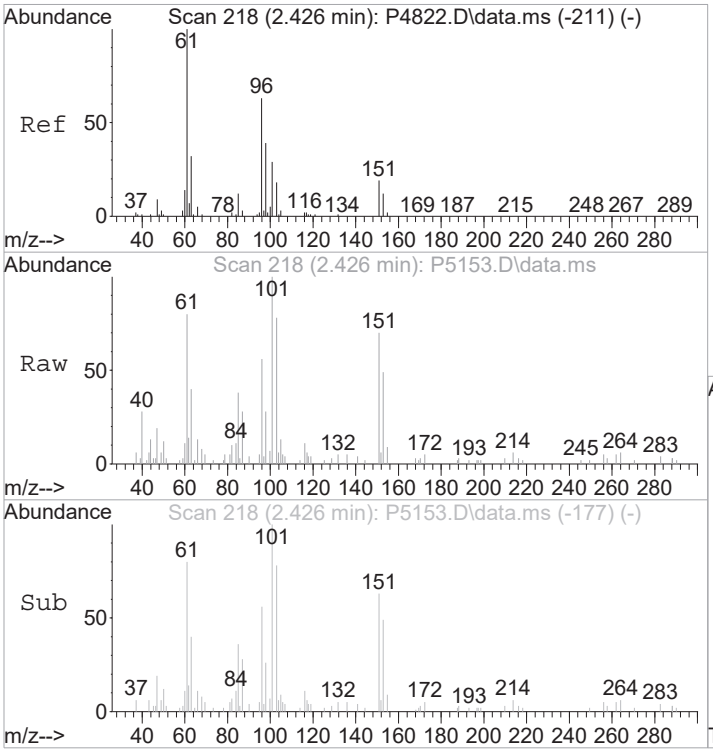


#10
Freon 123a
Concen: 2.53 ppb
RT: 2.237 min Scan# 187
Delta R.T. 0.006 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 67 Resp: 22608

Ion	Ratio	Lower	Upper
67	100		
117	65.6	41.5	81.5

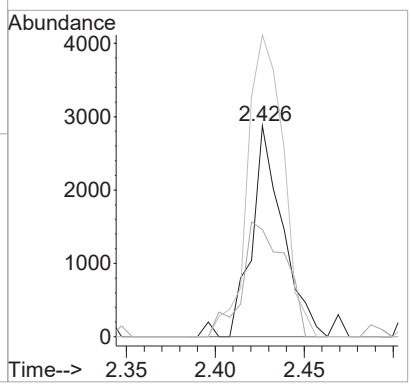


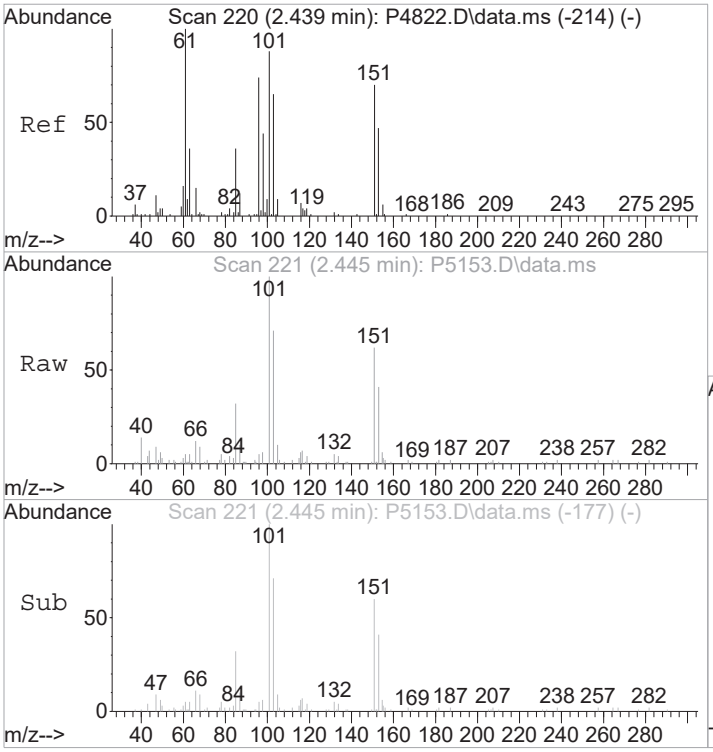


#13
1,1-Diclethene
Concen: 0.55 ppb
RT: 2.426 min Scan# 218
Delta R.T. 0.000 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 96 Resp: 3531

Ion	Ratio	Lower	Upper
96	100		
98	50.8	43.0	83.0
61	143.2	145.9	185.9#

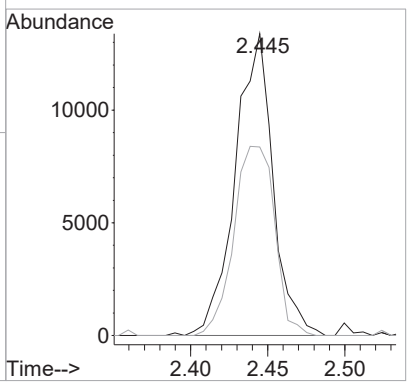


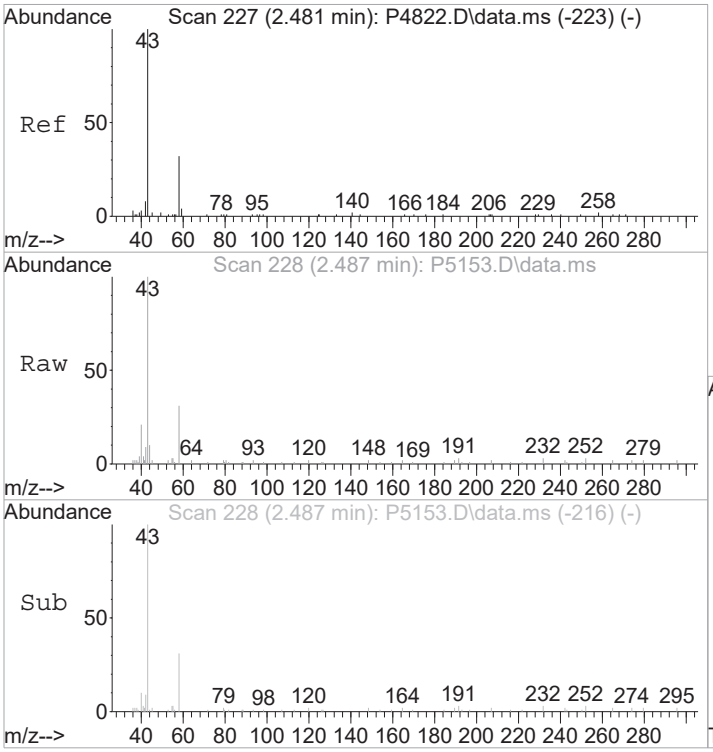


#14
Freon 113
Concen: 3.62 ppb
RT: 2.445 min Scan# 221
Delta R.T. 0.012 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion:101 Resp: 22843

Ion	Ratio	Lower	Upper
101	100		
151	63.7	55.4	95.4

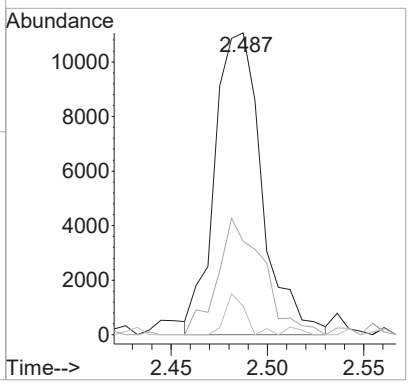


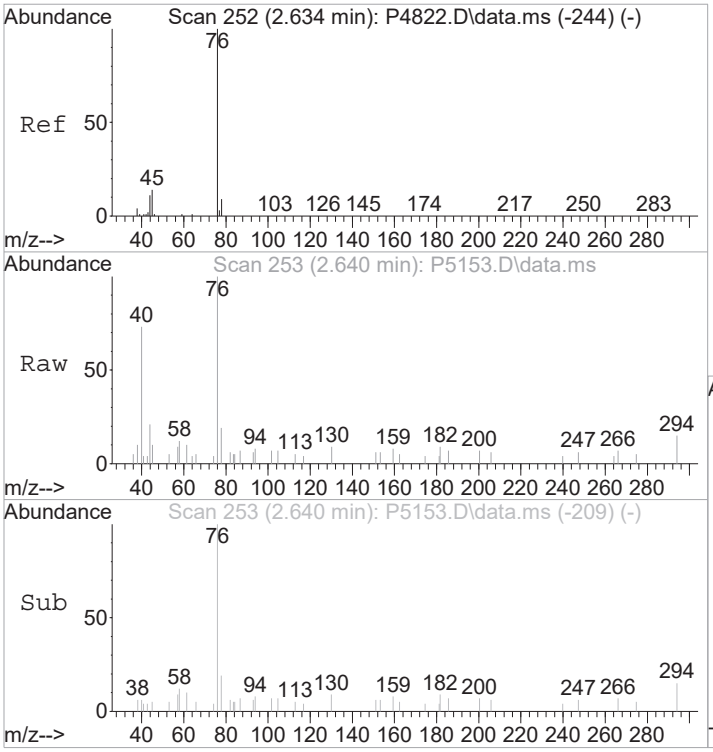


#15
Acetone
Concen: 11.33 ppb
RT: 2.487 min Scan# 228
Delta R.T. 0.000 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 43 Resp: 18922

Ion	Ratio	Lower	Upper
43	100		
58	31.0	13.2	53.2
42	9.4	0.0	26.9

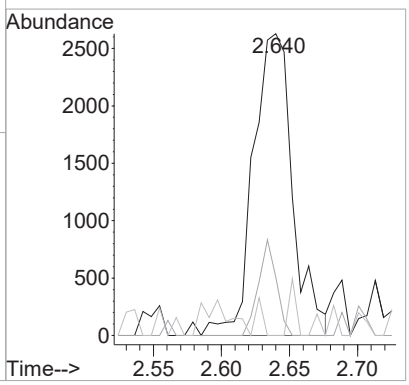


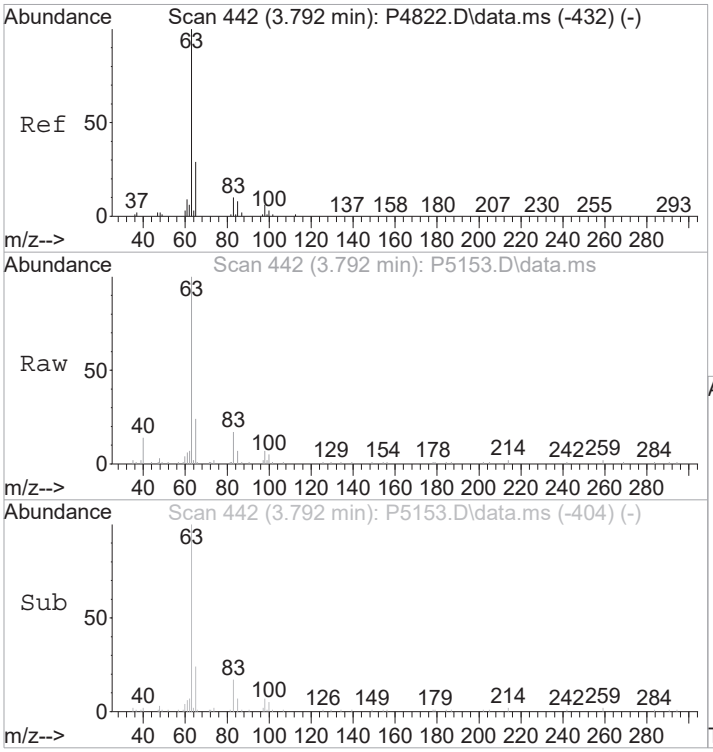


#18
Carbon Disulfide
Concen: 0.25 ppb
RT: 2.640 min Scan# 253
Delta R.T. 0.012 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 76 Resp: 5319

Ion	Ratio	Lower	Upper
76	100		
78	19.4	0.0	29.0
77	0.0	0.0	22.9

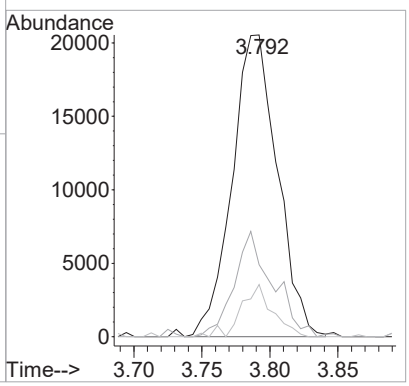


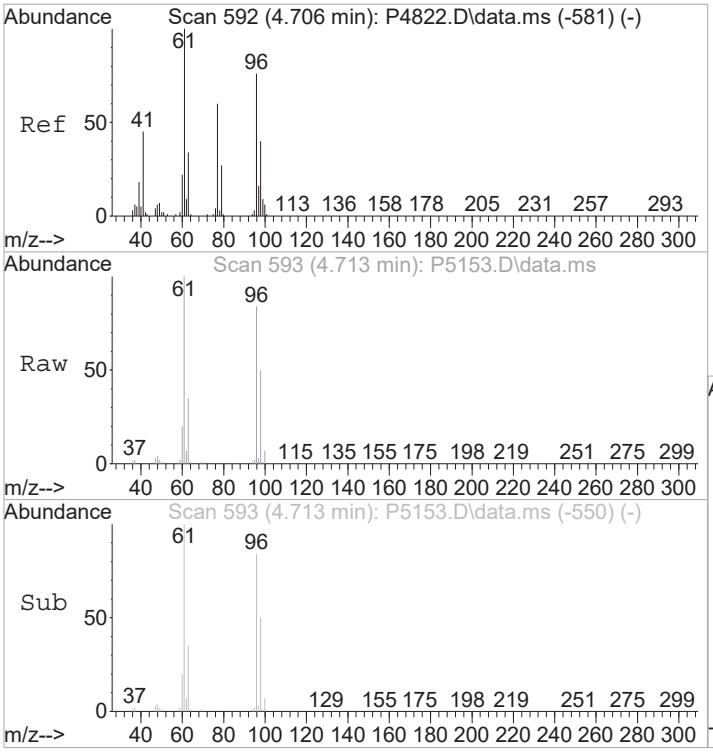


#28
1,1-Diclethane
Concen: 3.70 ppb
RT: 3.792 min Scan# 442
Delta R.T. 0.006 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 63 Resp: 47514

Ion	Ratio	Lower	Upper
63	100		
65	24.7	12.6	52.6
83	17.3	0.0	32.9

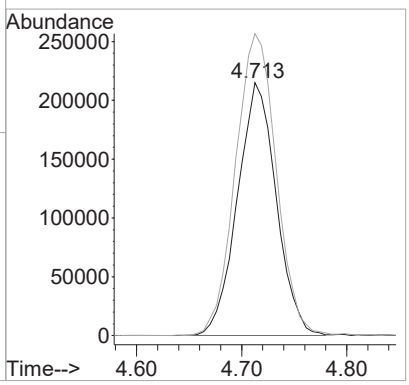


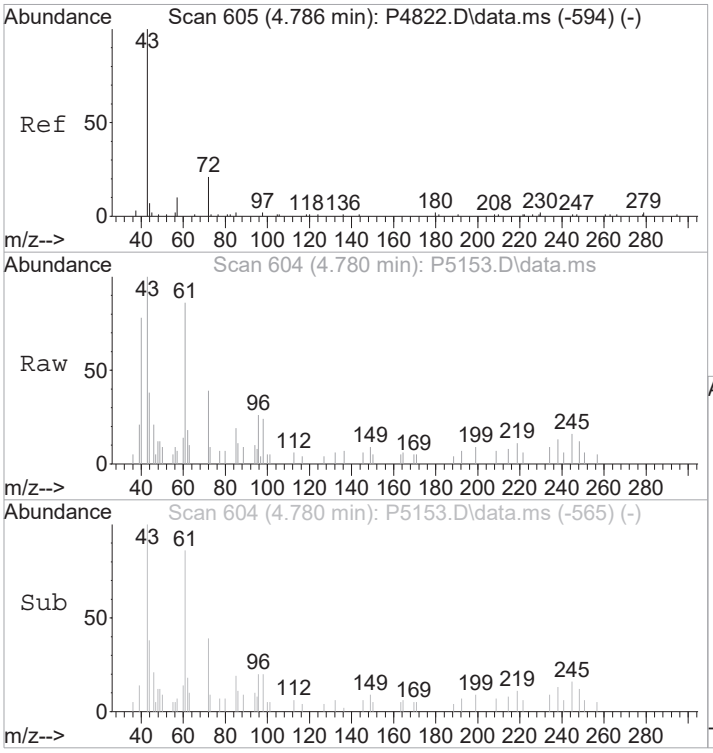


#34
cis-1,2-Dichloroethene
Concen: 70.94 ppb
RT: 4.713 min Scan# 593
Delta R.T. 0.000 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 96 Resp: 552136

Ion	Ratio	Lower	Upper
96	100		
61	119.5	124.4	164.4#

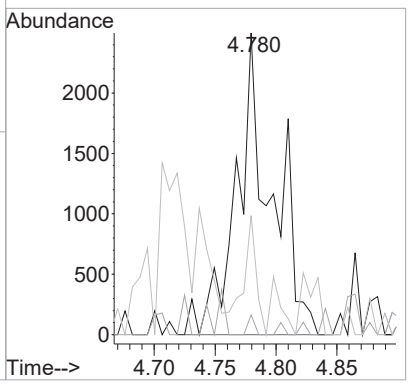


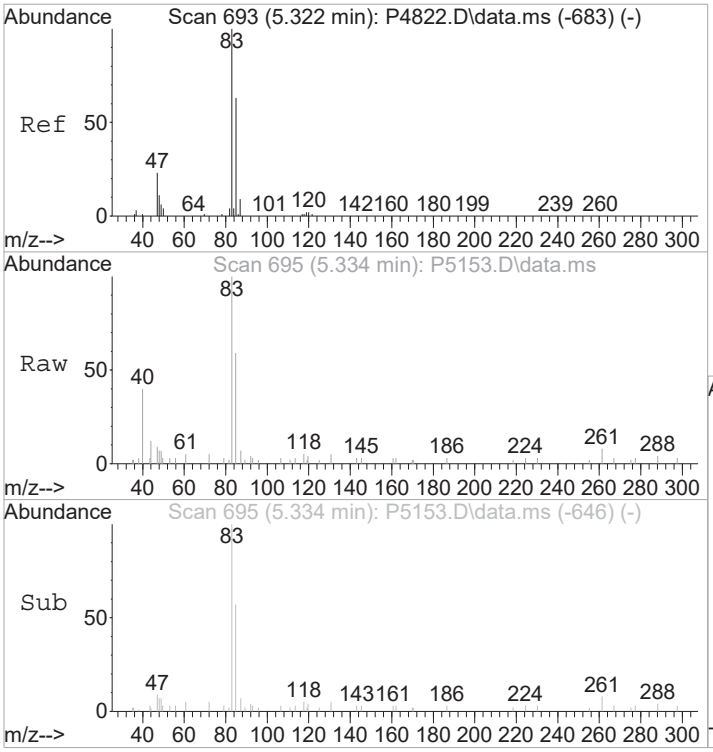


#35
2-Butanone
Concen: 2.04 ppb
RT: 4.780 min Scan# 604
Delta R.T. 0.013 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 43 Resp: 5018

Ion	Ratio	Lower	Upper
43	100		
57	6.6	0.0	28.5
72	48.0	8.1	48.1

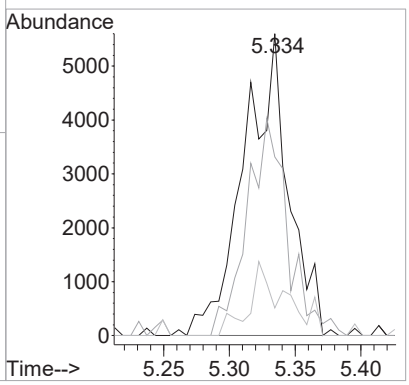


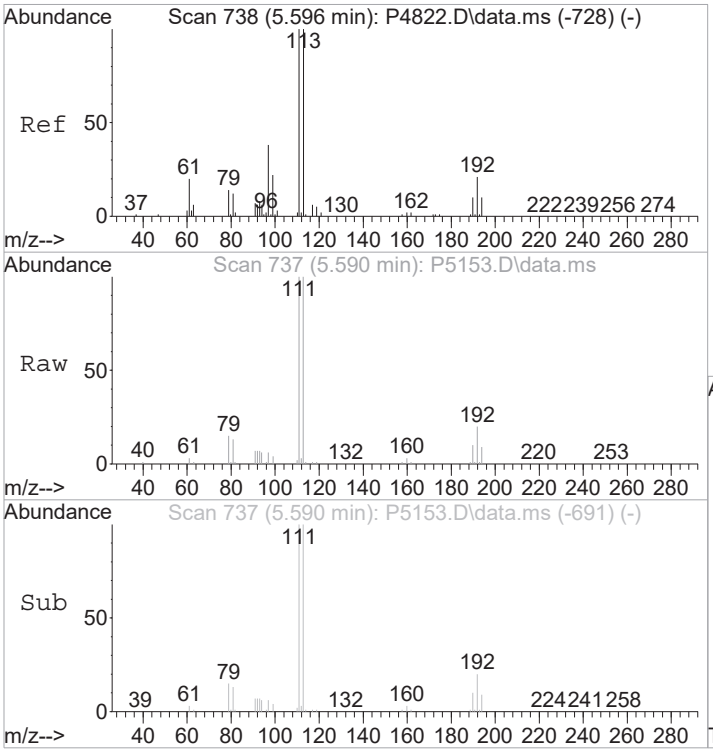


#40
Chloroform
Concen: 1.06 ppb m
RT: 5.334 min Scan# 695
Delta R.T. 0.012 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 83 Resp: 13245

Ion	Ratio	Lower	Upper
83	100		
85	59.1	42.5	82.5
47	9.1	5.9	45.9

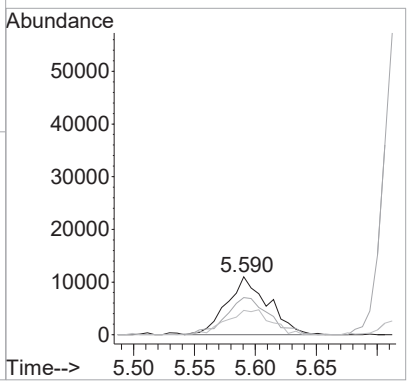


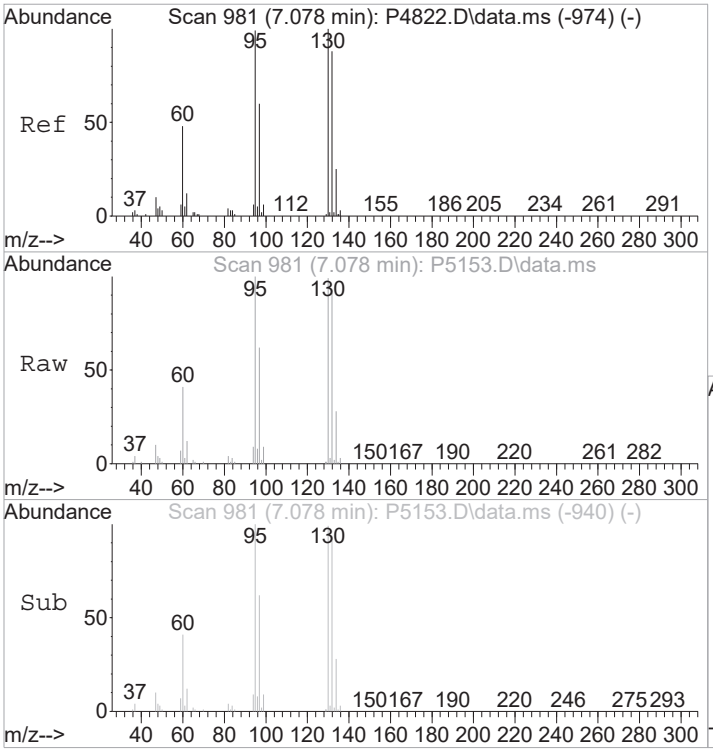


#41
1,1,1-Trichloroethane
Concen: 2.44 ppb
RT: 5.590 min Scan# 737
Delta R.T. 0.000 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion: 97 Resp: 26014

Ion	Ratio	Lower	Upper
97	100		
99	64.2	42.8	82.8
61	42.1	25.5	65.5

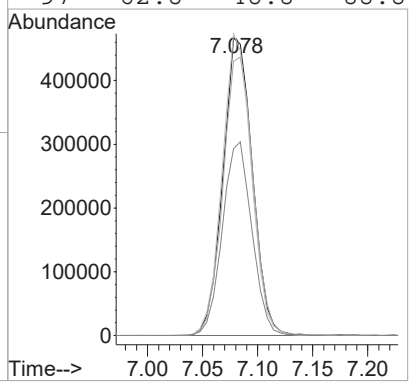




#54
Trichloroethene
Concen: 121.84 ppb
RT: 7.078 min Scan# 981
Delta R.T. 0.000 min
Lab File: P5153.D
Acq: 19 Sep 2016 8:31 pm

Tgt Ion:130 Resp: 871169

Ion	Ratio	Lower	Upper
130	100		
132	92.2	76.6	116.6
95	101.5	80.2	120.2
97	62.8	48.8	88.8

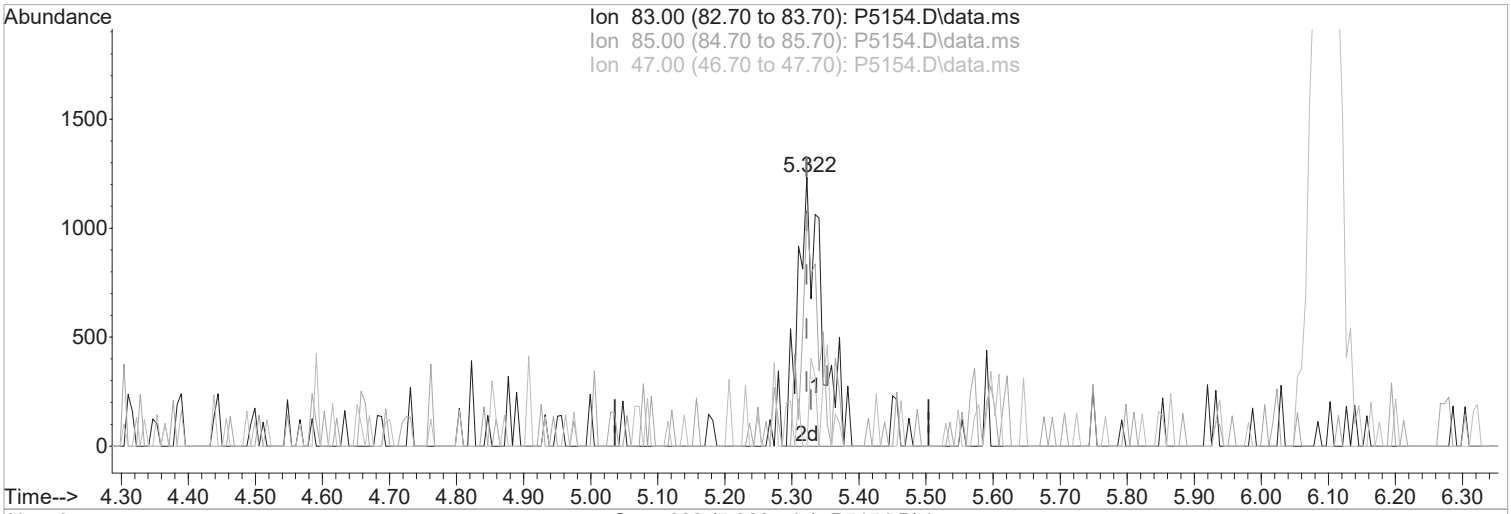


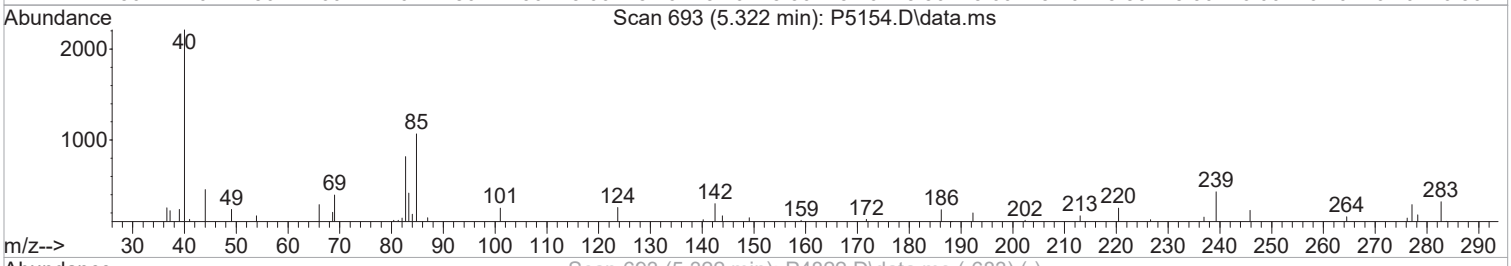
1st 09/20/16
2nd 09/20/16

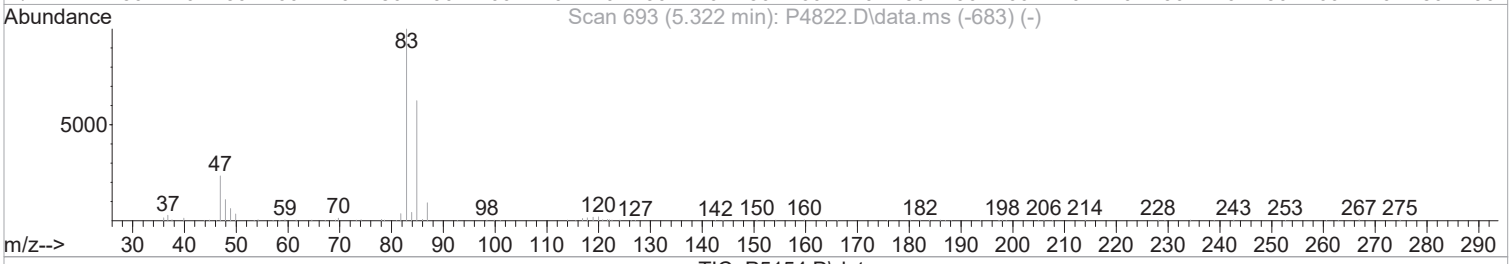
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5154.D
Acq On : 19 Sep 2016 9:02 pm
Operator : K.Ruest
Sample : R1609820-008|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 08:53:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5154.D\data.ms

(40) Chloroform (P)

5.322min (+0.000) 0.25 ppb m

response 3075

Ion	Exp%	Act%
83.00	100	100
85.00	62.50	130.16#
47.00	25.90	0.00#
0.00	0.00	0.00

Manual Integration:

After

Split Peak

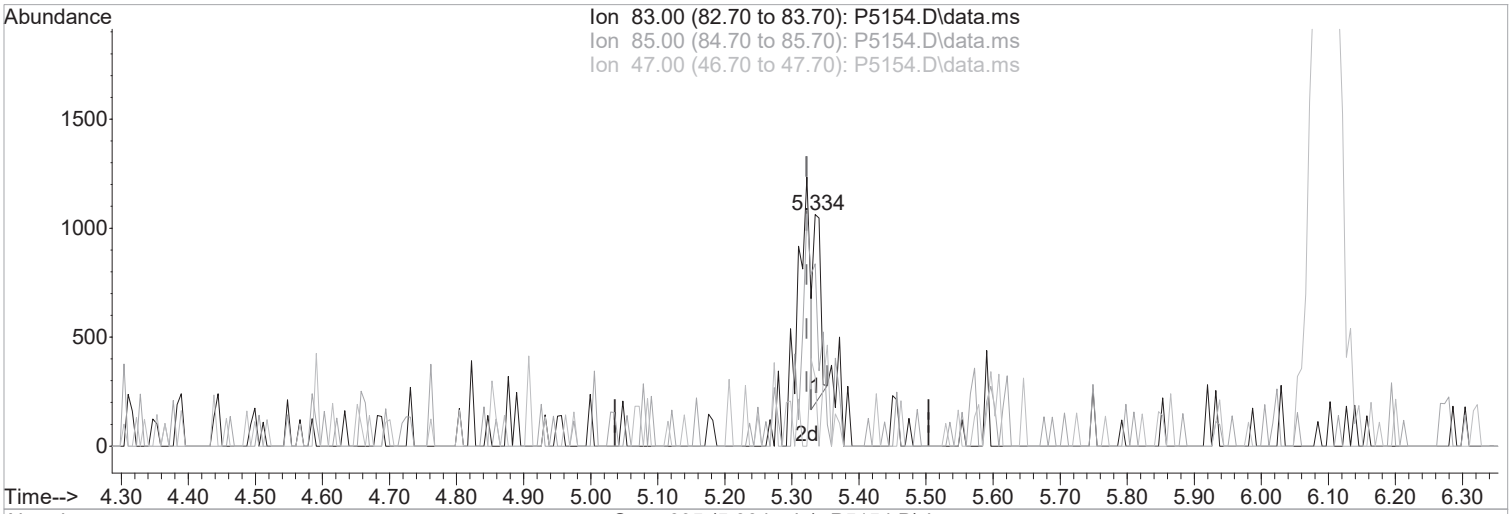
09/20/16

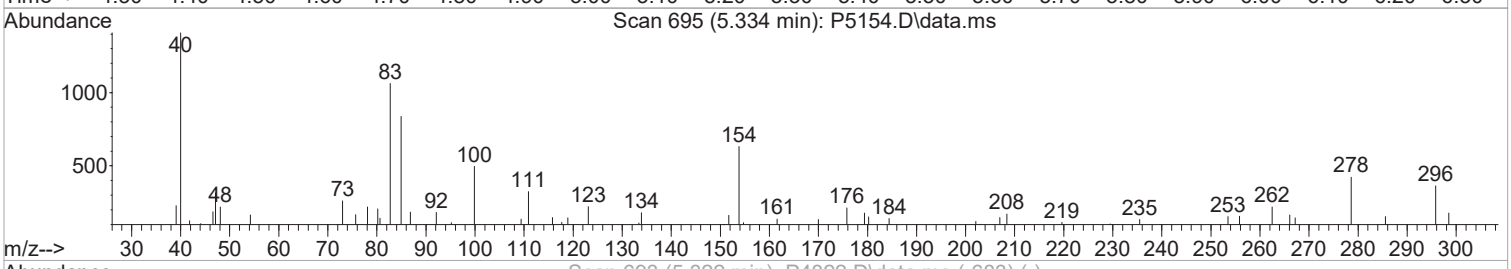
1st 09/20/16
2nd 09/20/16

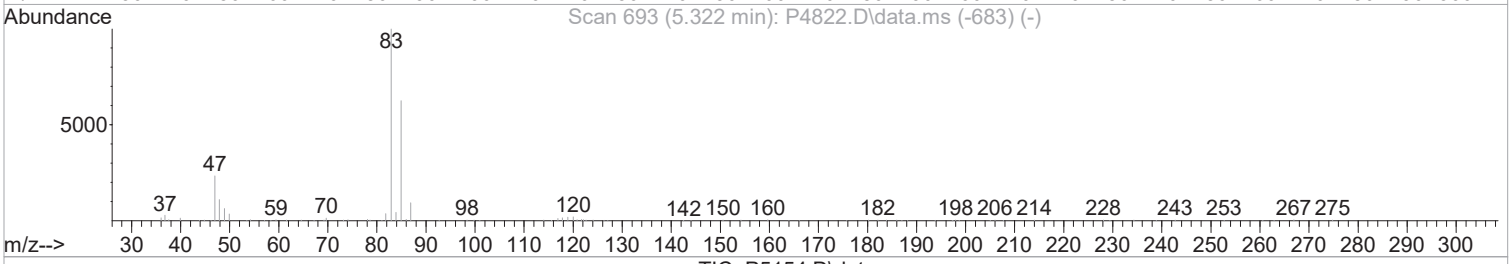
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5154.D
Acq On : 19 Sep 2016 9:02 pm
Operator : K.Ruest
Sample : R1609820-008|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 08:53:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5154.D\data.ms

(40) Chloroform (P)

5.334min (+0.012) 0.05 ppb

response 650

Ion	Exp%	Act%
83.00	100	100
85.00	62.50	78.81
47.00	25.90	29.76
0.00	0.00	0.00

Manual Integration:

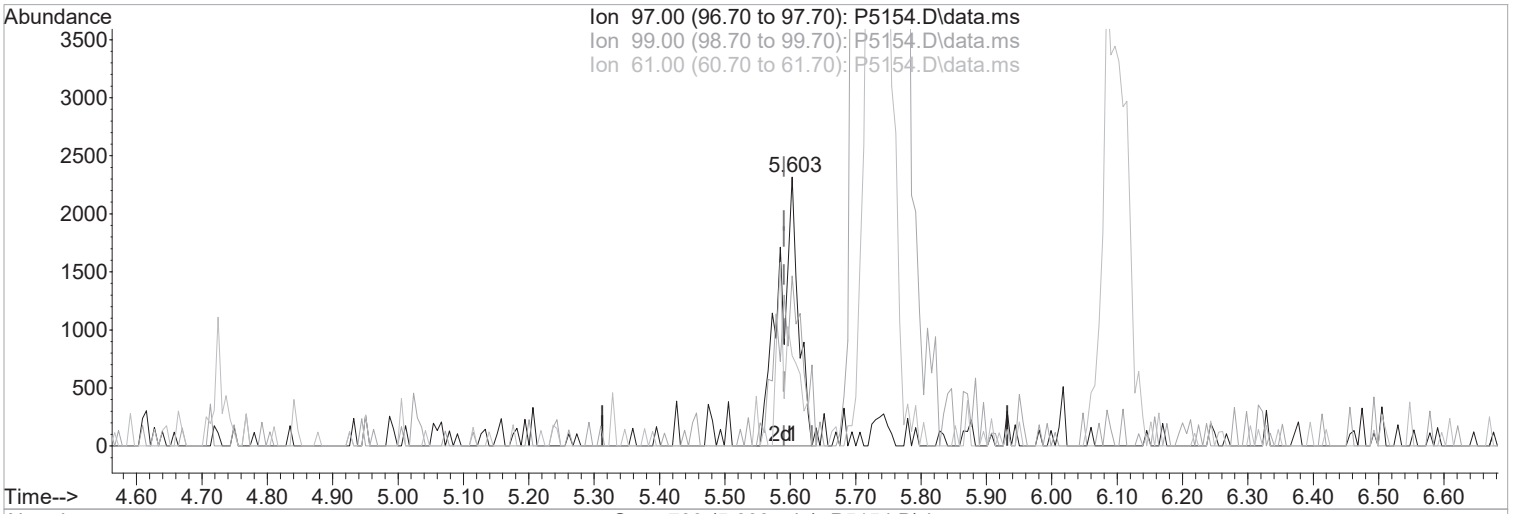
Before

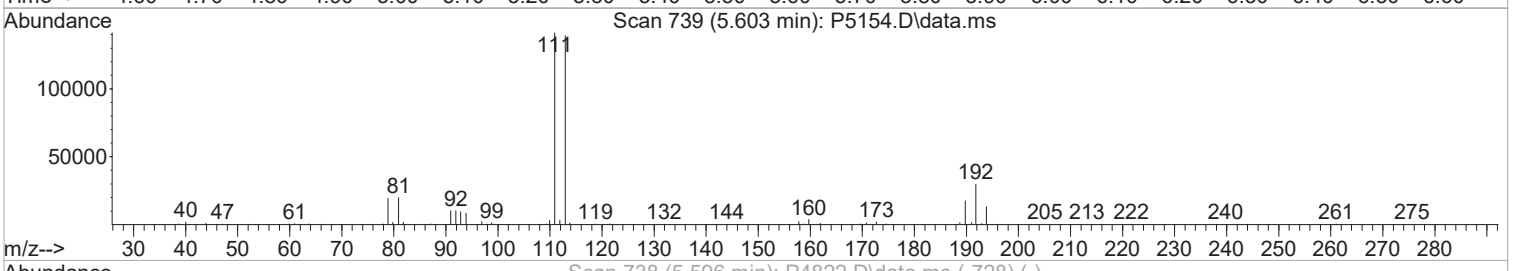
09/20/16

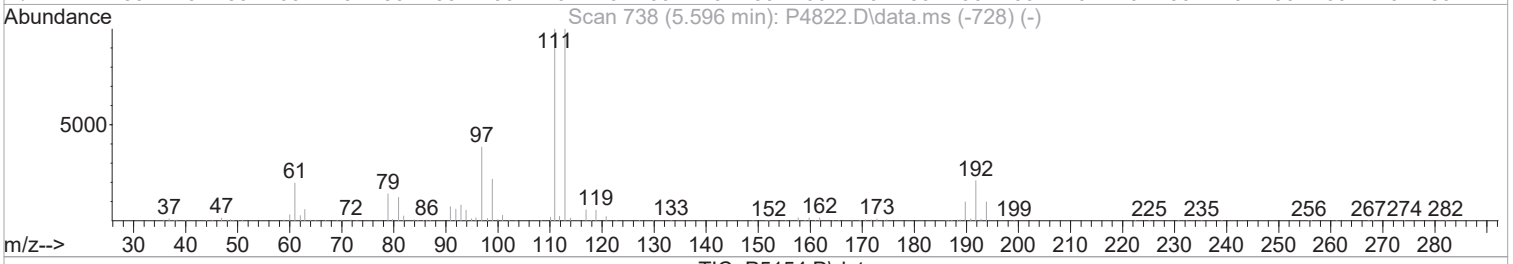
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5154.D
Acq On : 19 Sep 2016 9:02 pm
Operator : K.Ruest
Sample : R1609820-008|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 08:53:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5154.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.603min (+0.012) 0.45 ppb m

response 4781

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	66.80
61.00	45.50	35.52
0.00	0.00	0.00

Manual Integration:

After

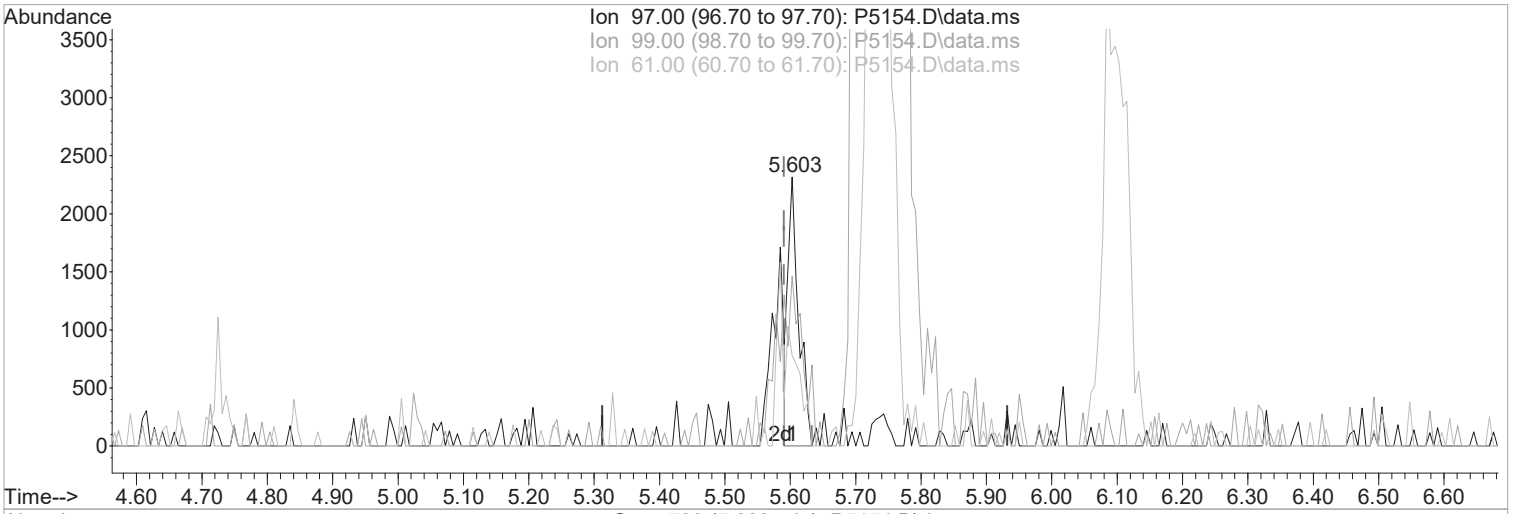
Split Peak

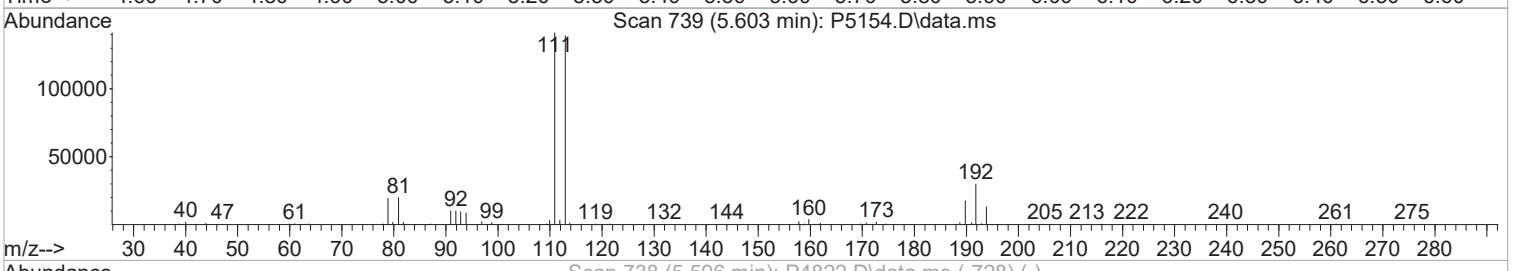
09/20/16

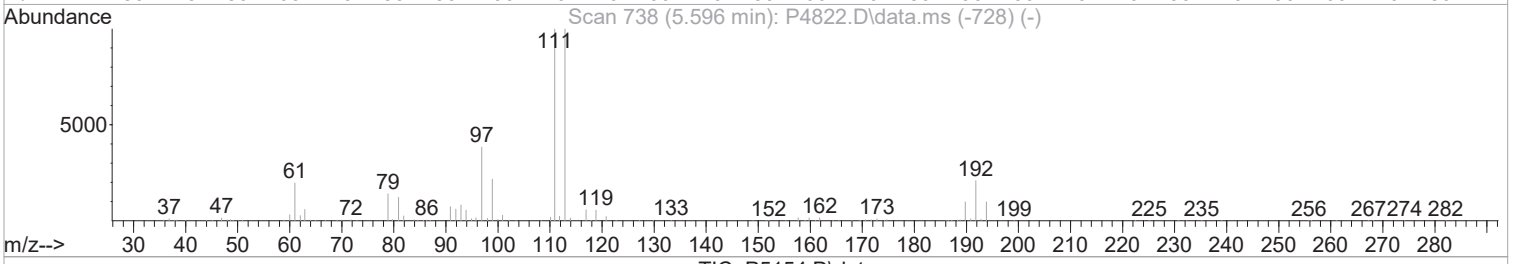
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5154.D
Acq On : 19 Sep 2016 9:02 pm
Operator : K.Ruest
Sample : R1609820-008|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 08:53:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5154.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.603min (+0.012) 0.25 ppb

response 2644

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	63.23
61.00	45.50	33.62
0.00	0.00	0.00

Manual Integration:

Before

09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5154.D
Acq On : 19 Sep 2016 9:02 pm
Operator : K.Ruest
Sample : R1609820-008|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 10:56:41 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

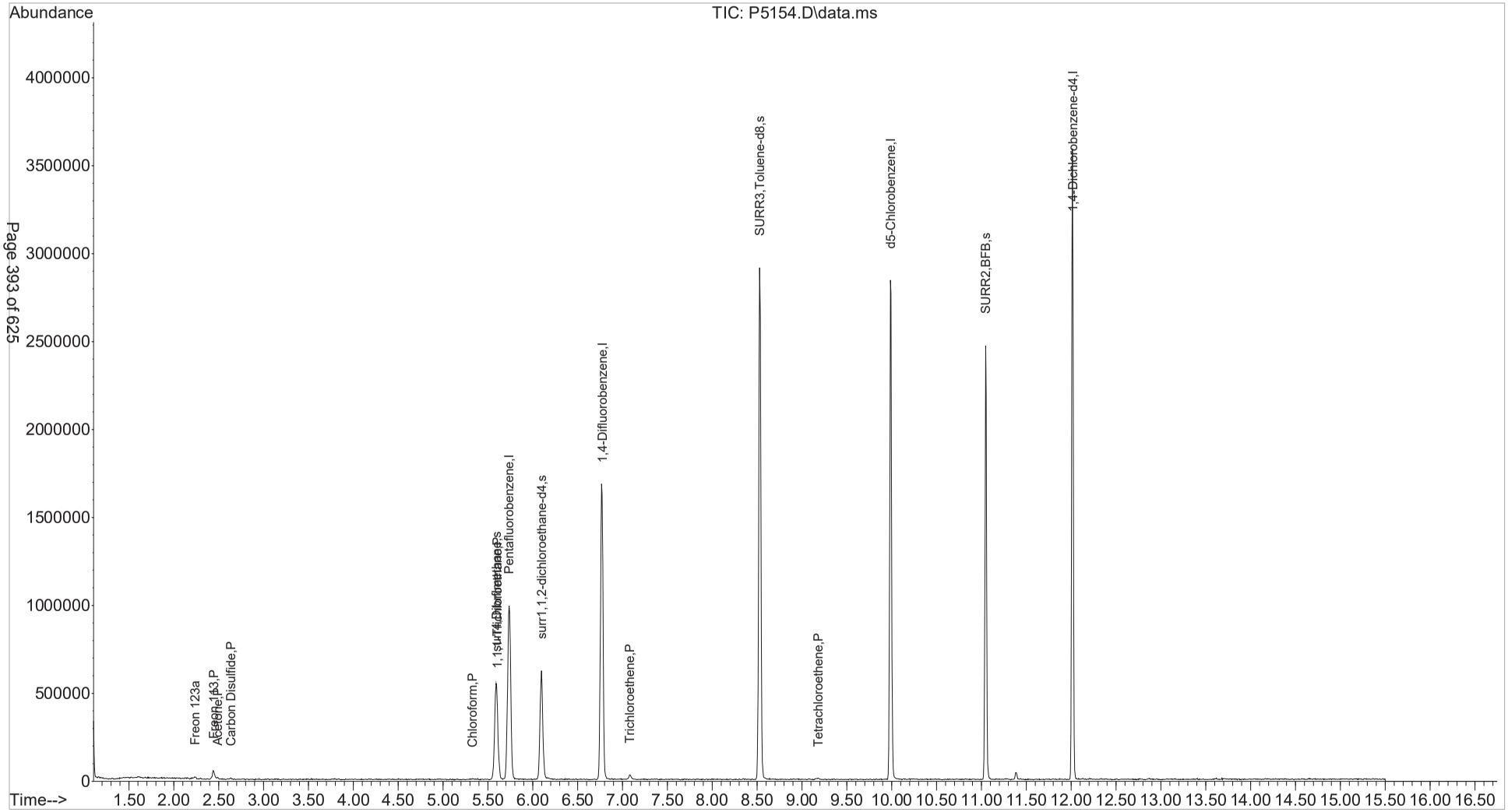
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.737	168	854590	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.773	114	1431596	50.00	ppb	0.00
71) d5-Chlorobenzene	9.986	117	1344786	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	693223	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.591	113	423615	57.16	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 114.32%			
48) surr1,1,2-dichloroetha...	6.097	65	464784	53.36	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 106.72%			
65) SURR3,Toluene-d8	8.529	98	1813007	57.02	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.04%			
70) SURR2,BFB	11.047	95	659096	53.29	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.58%			
Target Compounds						Qvalue
10) Freon 123a	2.231	67	2602	0.29	ppb	# 68
14) Freon 113	2.439	101	16529	2.62	ppb	81
15) Acetone	2.487	43	10818	6.48	ppb	99
18) Carbon Disulfide	2.634	76	6860	0.32	ppb	98
40) Chloroform	5.322	83	3075m	0.25	ppb	
41) 1,1,1-Trichloroethane	5.603	97	4781m	0.45	ppb	
54) Trichloroethene	7.078	130	6708	0.95	ppb	89
72) Tetrachloroethene	9.175	164	1073	0.21	ppb	# 31

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

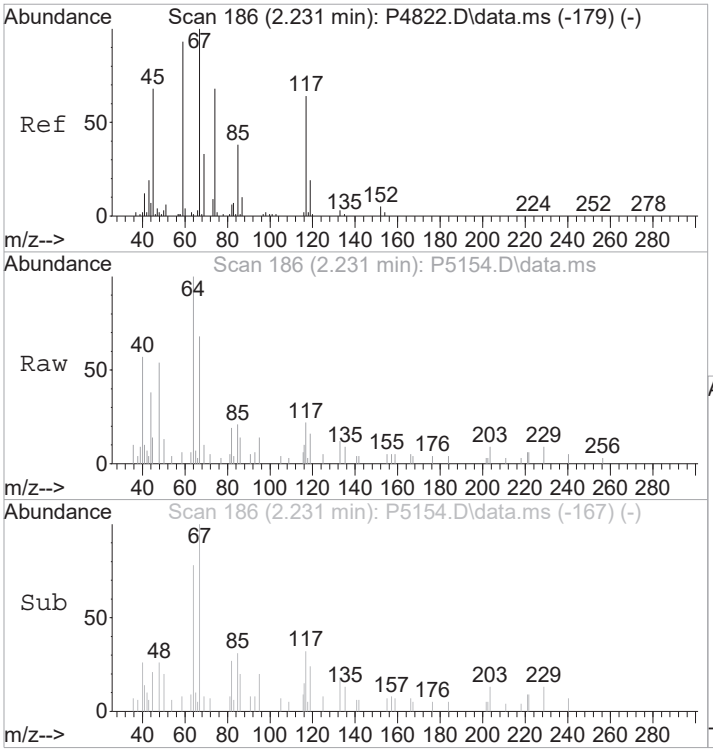
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5154.D
Acq On : 19 Sep 2016 9:02 pm
Operator : K.Ruest
Sample : R1609820-008|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 20 10:56:41 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



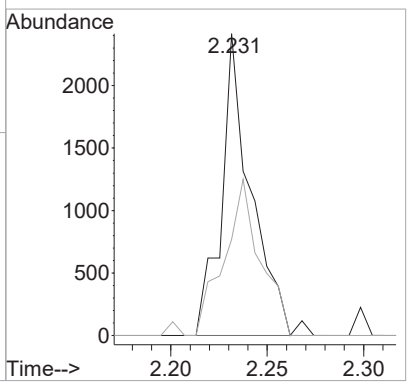
1st 09/20/16
2nd 09/20/16

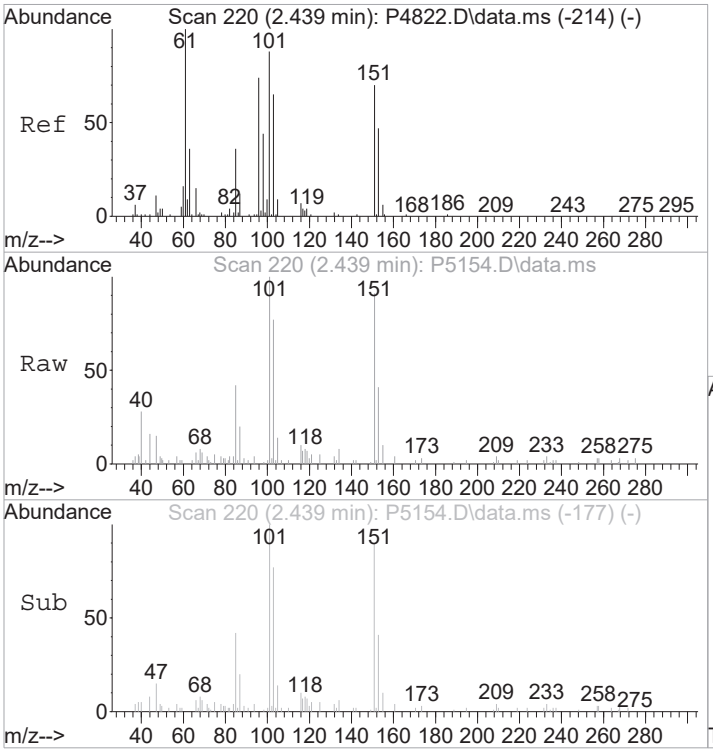


#10
Freon 123a
Concen: 0.29 ppb
RT: 2.231 min Scan# 186
Delta R.T. 0.000 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion: 67 Resp: 2602

Ion	Ratio	Lower	Upper
67	100		
117	37.0	41.5	81.5#

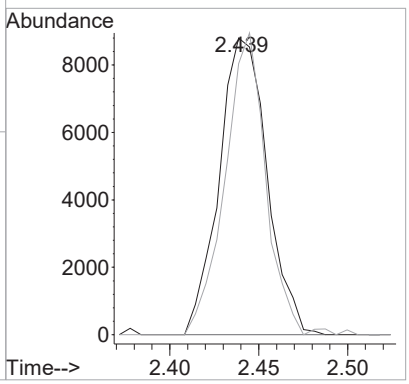


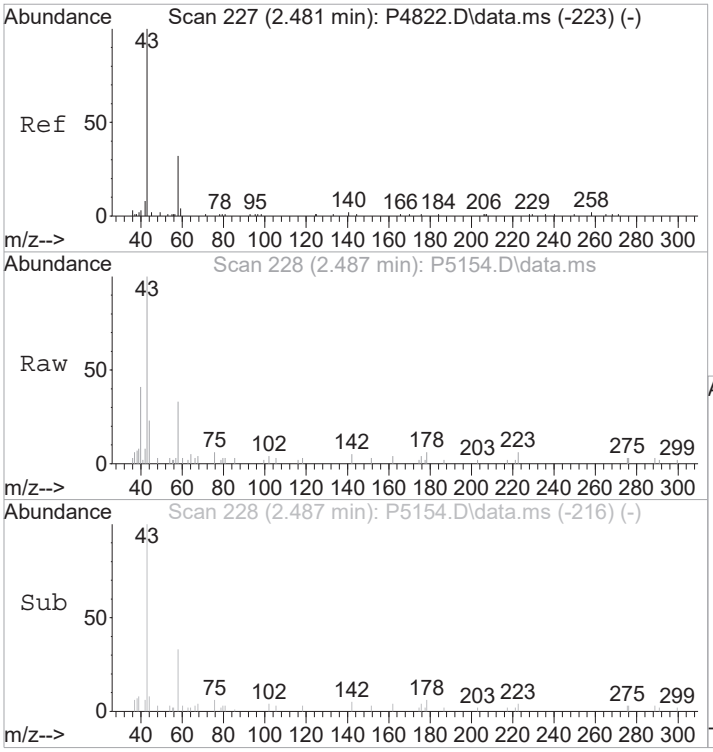


#14
Freon 113
Concen: 2.62 ppb
RT: 2.439 min Scan# 220
Delta R.T. 0.006 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion:101 Resp: 16529

Ion	Ratio	Lower	Upper
101	100		
151	91.3	55.4	95.4

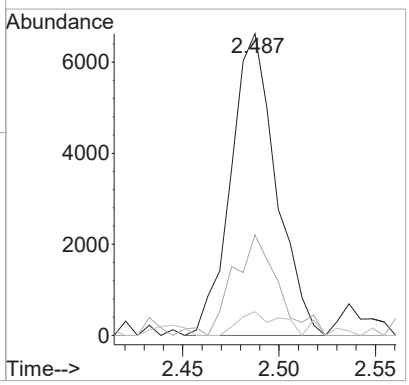


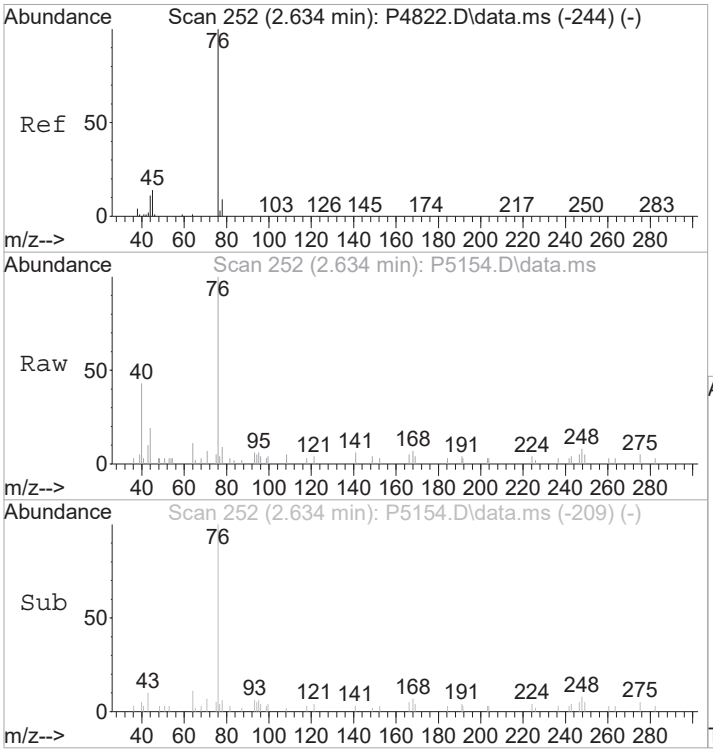


#15
Acetone
Concen: 6.48 ppb
RT: 2.487 min Scan# 228
Delta R.T. 0.000 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion: 43 Resp: 10818

Ion	Ratio	Lower	Upper
43	100		
58	33.3	13.2	53.2
42	7.8	0.0	26.9

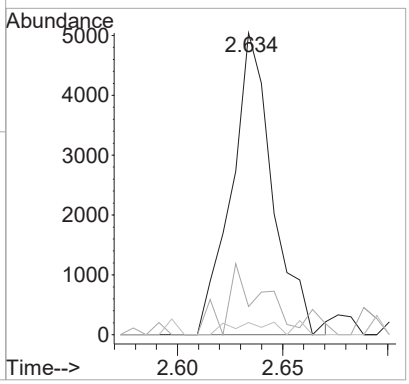


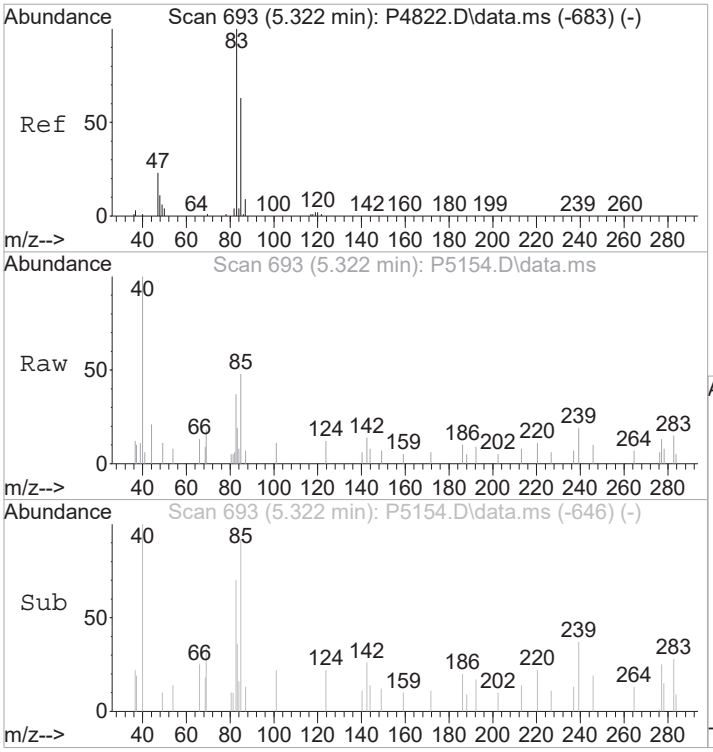


#18
Carbon Disulfide
Concen: 0.32 ppb
RT: 2.634 min Scan# 252
Delta R.T. 0.006 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion: 76 Resp: 6860

Ion	Ratio	Lower	Upper
76	100		
78	9.3	0.0	29.0
77	4.1	0.0	22.9

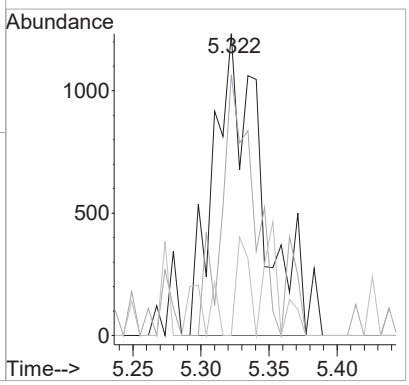


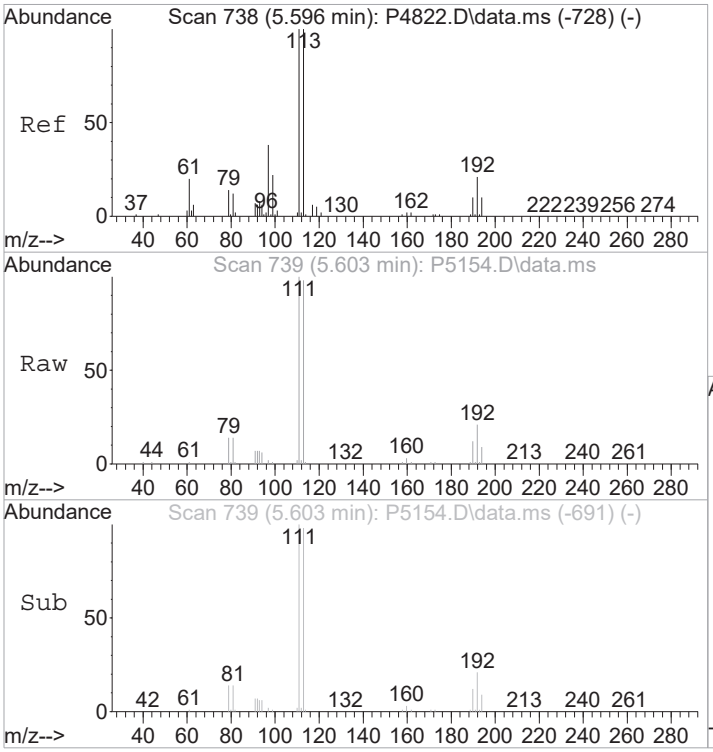


#40
Chloroform
Concen: 0.25 ppb m
RT: 5.322 min Scan# 693
Delta R.T. 0.000 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion: 83 Resp: 3075

Ion	Ratio	Lower	Upper
83	100		
85	130.2	42.5	82.5#
47	0.0	5.9	45.9#

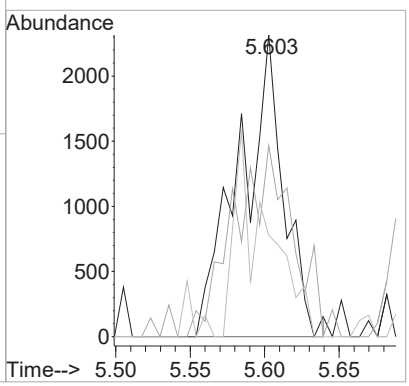


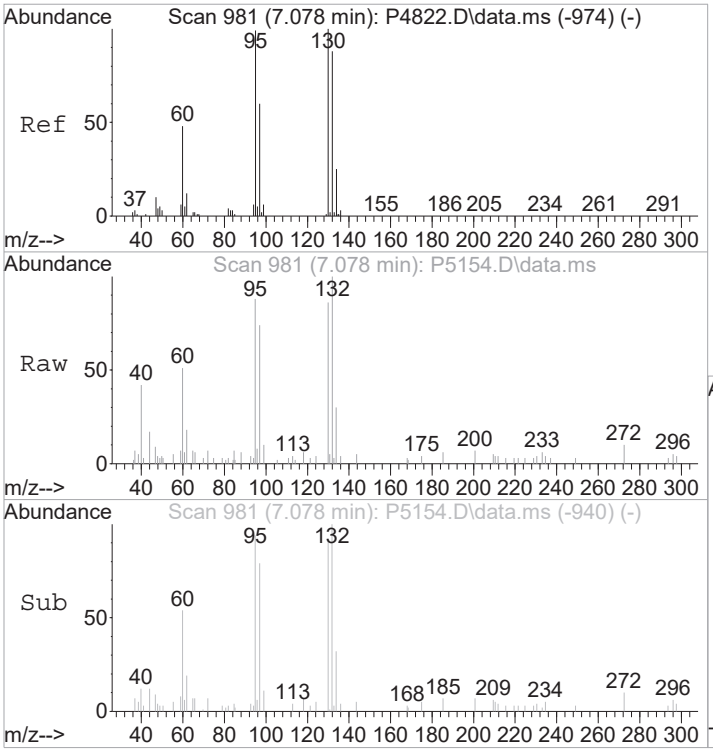


#41
1,1,1-Trichloroethane
Concen: 0.45 ppb m
RT: 5.603 min Scan# 739
Delta R.T. 0.012 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion: 97 Resp: 4781

Ion	Ratio	Lower	Upper
97	100		
99	66.8	42.8	82.8
61	35.5	25.5	65.5

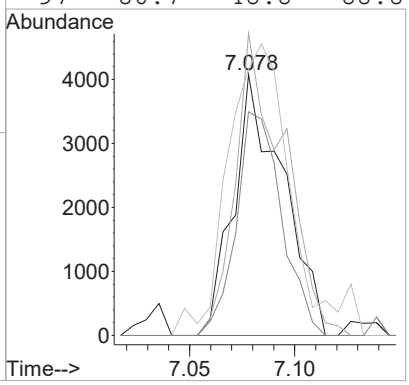


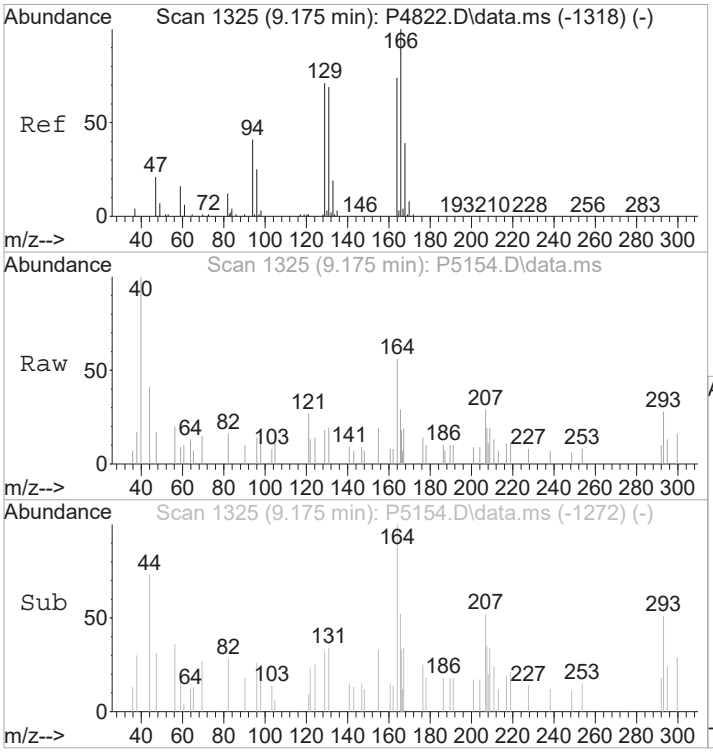


#54
Trichloroethene
Concen: 0.95 ppb
RT: 7.078 min Scan# 981
Delta R.T. 0.000 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion:130 Resp: 6708

Ion	Ratio	Lower	Upper
130	100		
132	112.0	76.6	116.6
95	96.1	80.2	120.2
97	80.7	48.8	88.8

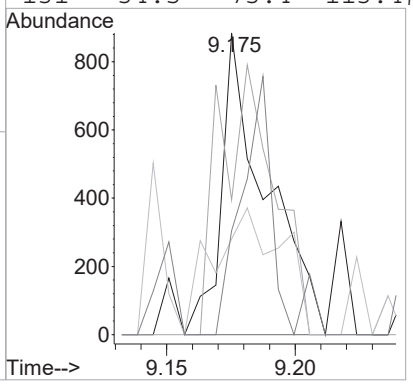




#72
Tetrachloroethene
Concen: 0.21 ppb
RT: 9.175 min Scan# 1325
Delta R.T. -0.006 min
Lab File: P5154.D
Acq: 19 Sep 2016 9:02 pm

Tgt Ion:164 Resp: 1073

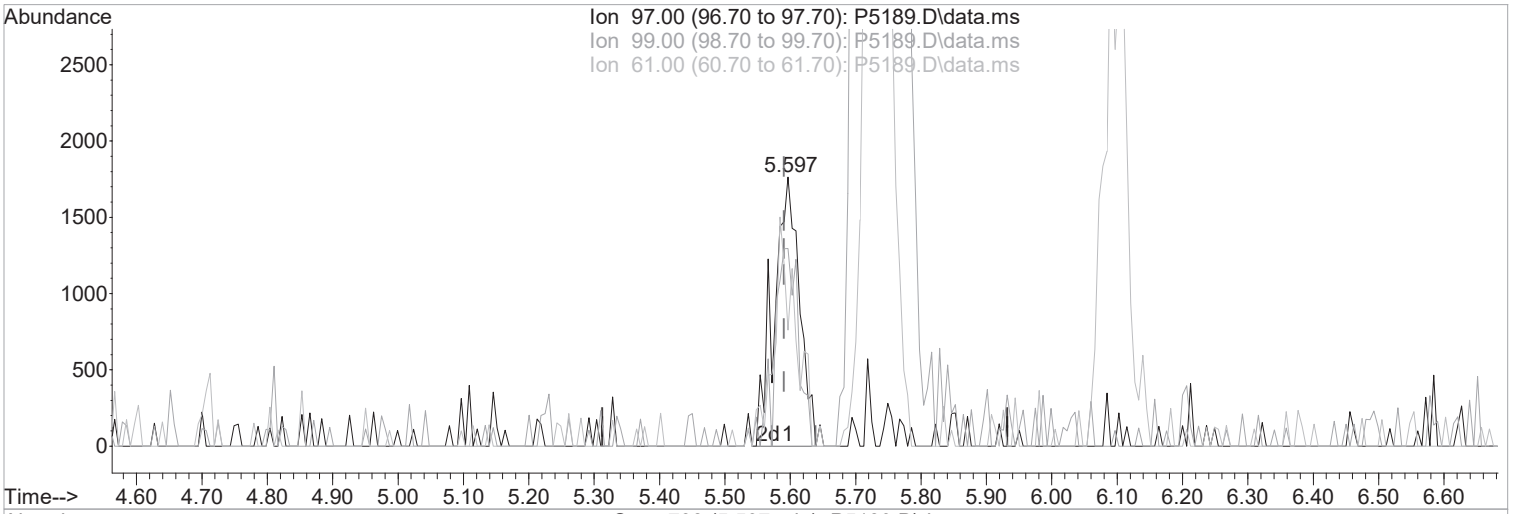
Ion	Ratio	Lower	Upper
164	100		
166	44.6	114.3	154.3#
129	31.6	77.3	117.3#
131	34.5	73.4	113.4#

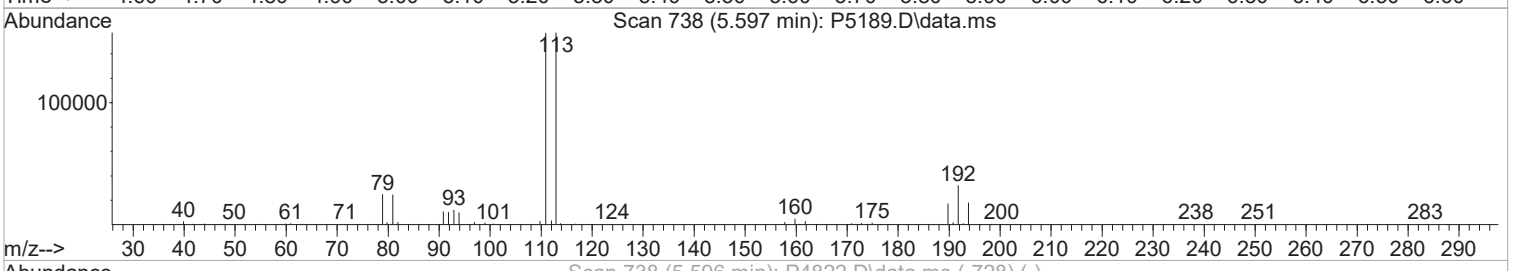


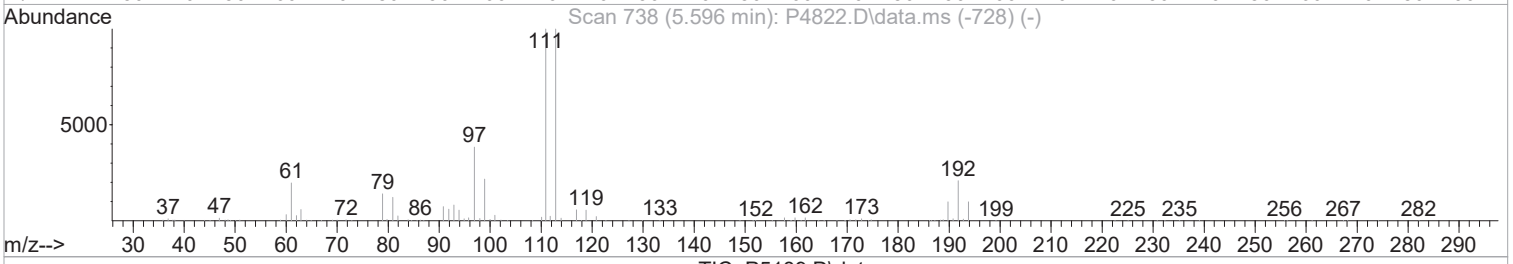
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5189.D
Acq On : 20 Sep 2016 3:14 pm
Operator : K.Ruest
Sample : R1609820-012|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 15:30:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5189.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.597min (+0.006) 0.47 ppb m

response 4769

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	73.47
61.00	45.50	43.14
0.00	0.00	0.00

Manual Integration:

After

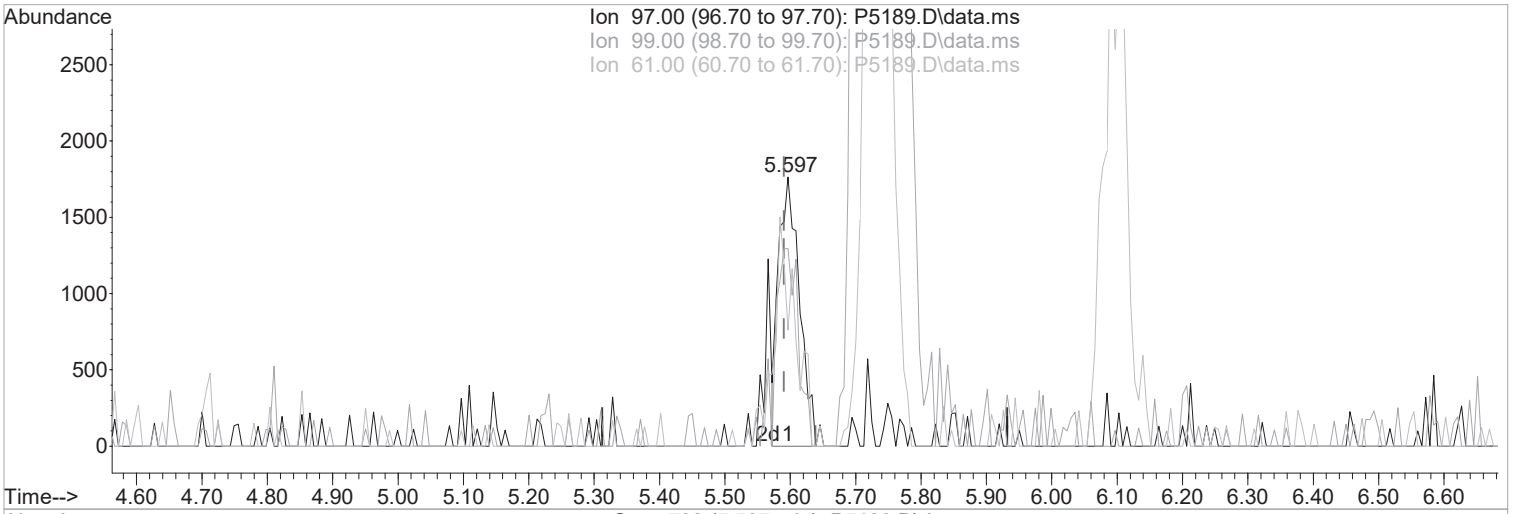
Split Peak

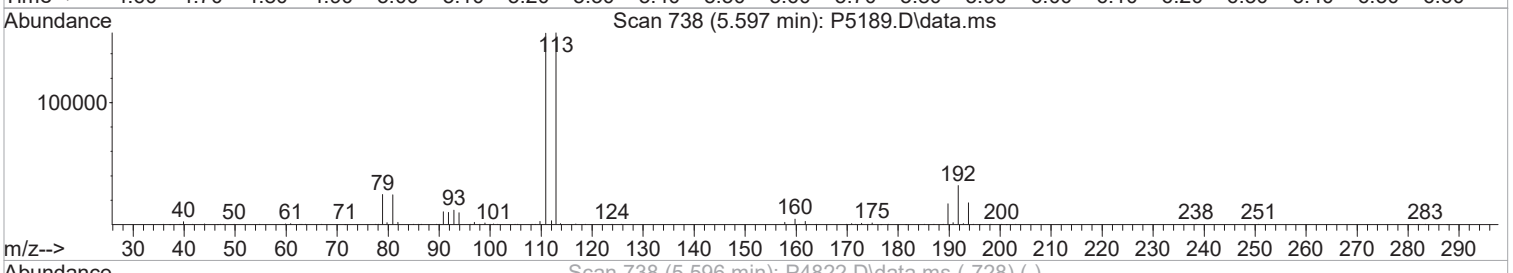
09/20/16

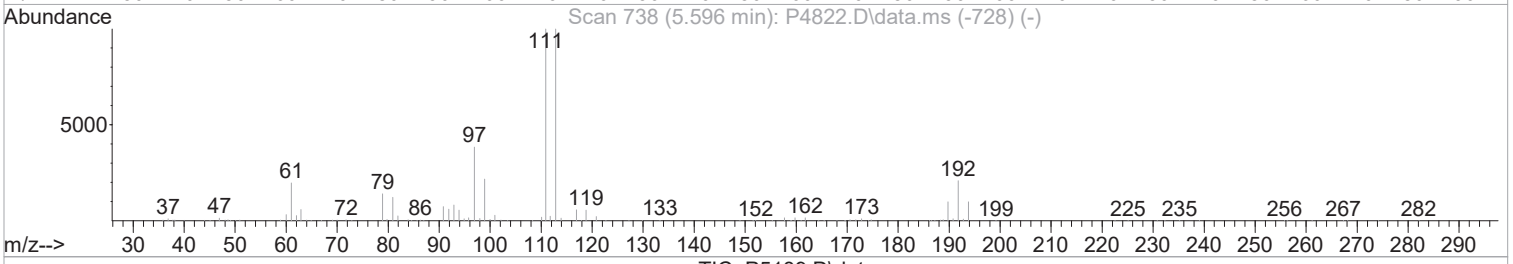
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5189.D
Acq On : 20 Sep 2016 3:14 pm
Operator : K.Ruest
Sample : R1609820-012|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 15:30:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5189.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.597min (+0.006) 0.38 ppb

response 3917

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	73.47
61.00	45.50	43.14
0.00	0.00	0.00

Manual Integration:

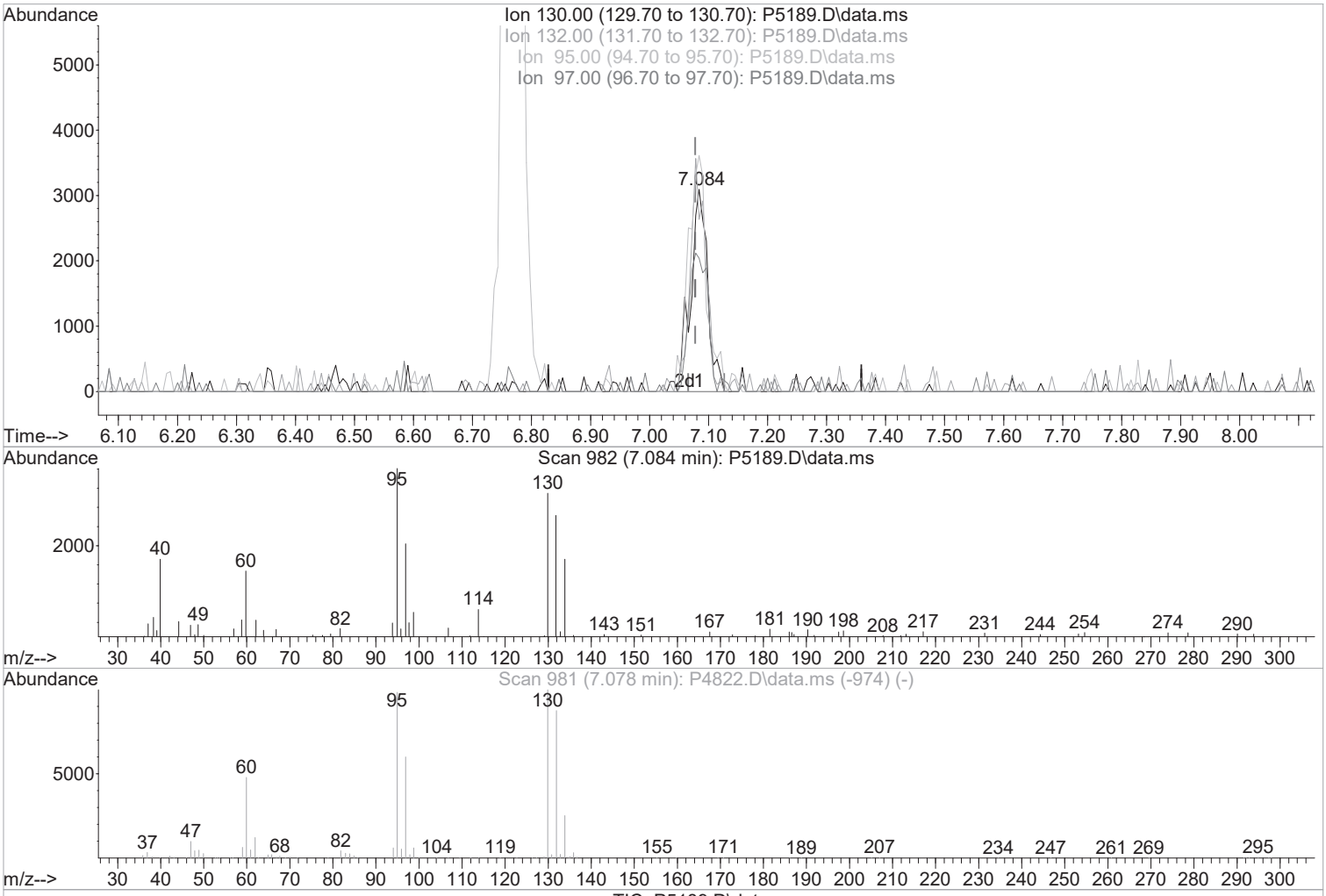
Before

09/20/16

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5189.D
Acq On : 20 Sep 2016 3:14 pm
Operator : K.Ruest
Sample : R1609820-012|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 15:30:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



TIC: P5189.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.006) 0.91 ppb m

response 6207

Ion	Exp%	Act%
130.00	100	100
132.00	96.60	85.13
95.00	100.20	116.81
97.00	68.80	66.00

Manual Integration:

After

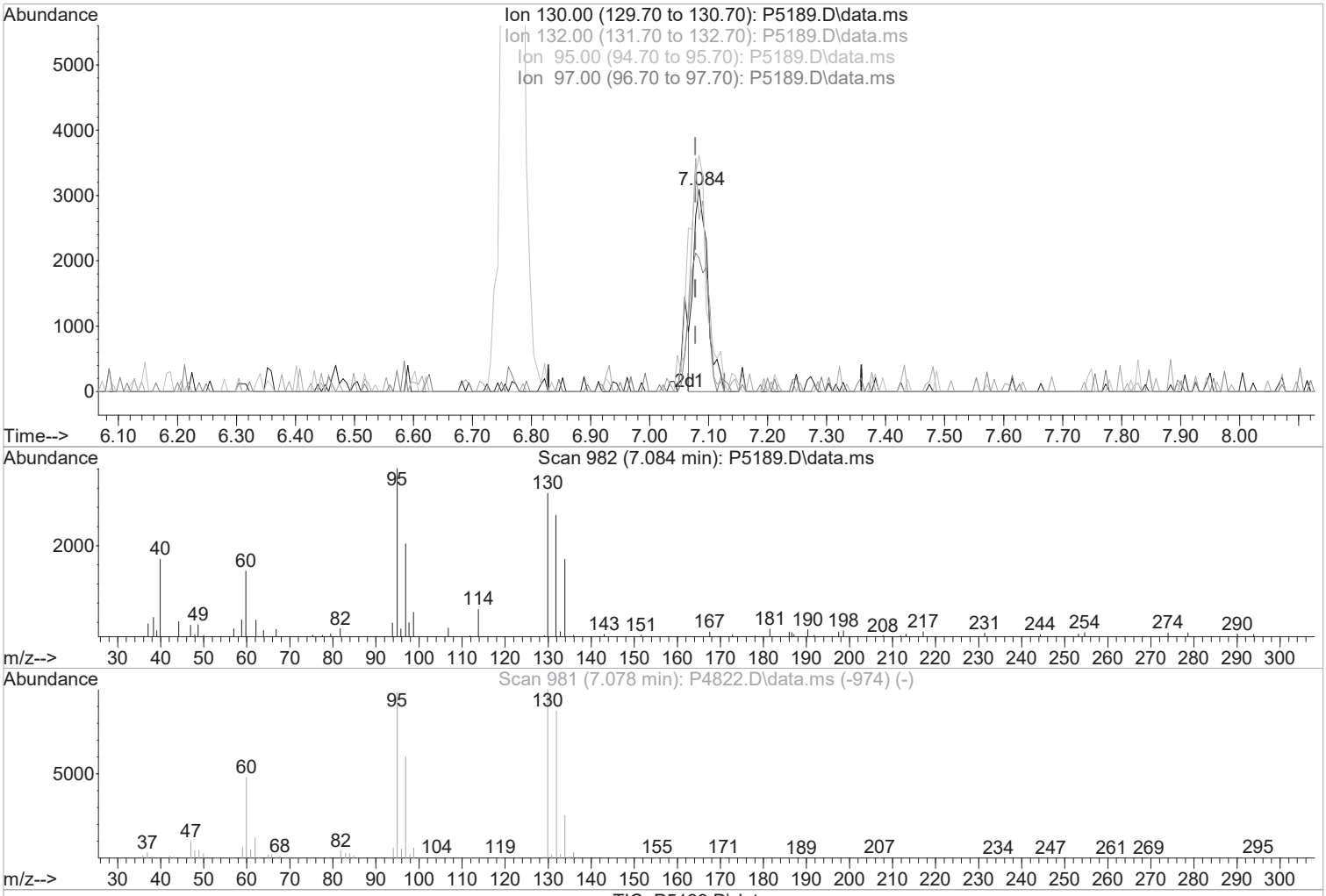
Split Peak

09/20/16

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5189.D
Acq On : 20 Sep 2016 3:14 pm
Operator : K.Ruest
Sample : R1609820-012|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 15:30:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



TIC: P5189.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.006) 0.76 ppb

response 5179

Ion	Exp%	Act%
130.00	100	100
132.00	96.60	85.13
95.00	100.20	116.81
97.00	68.80	78.57

Manual Integration:

Before

09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5189.D
Acq On : 20 Sep 2016 3:14 pm
Operator : K.Ruest
Sample : R1609820-012|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 15:34:00 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

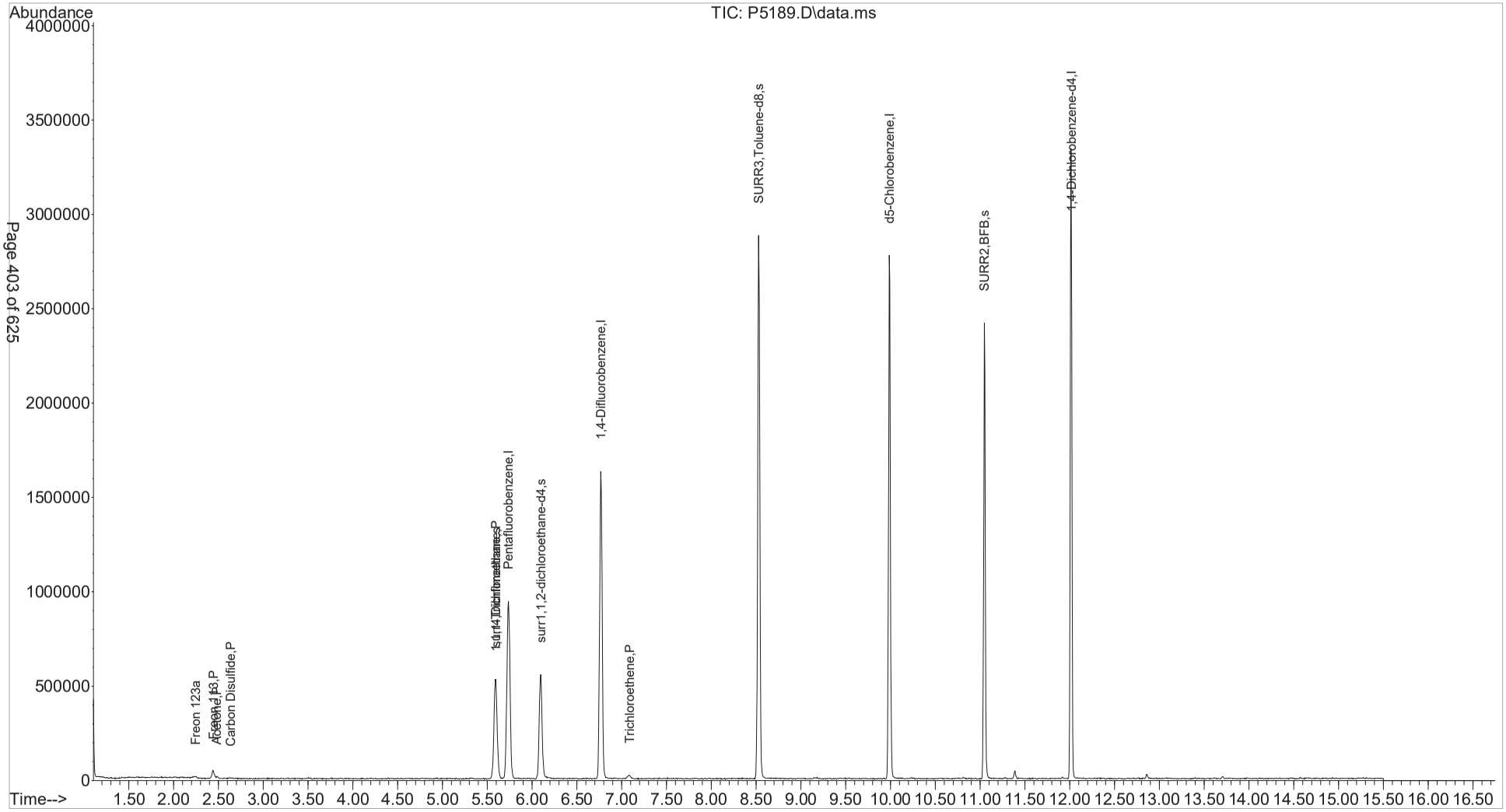
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.737	168	818408	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.767	114	1390494	50.00	ppb	0.00
71) d5-Chlorobenzene	9.986	117	1299884	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	665685	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.590	113	400077	55.58	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.16%			
48) surr1,1,2-dichloroetha...	6.096	65	422308	49.92	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.84%			
65) SURR3,Toluene-d8	8.529	98	1765147	57.16	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.32%			
70) SURR2,BFB	11.047	95	639974	53.27	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.54%			
Target Compounds						Qvalue
10) Freon 123a	2.244	67	2529	0.30	ppb	# 62
14) Freon 113	2.445	101	16355	2.71	ppb	95
15) Acetone	2.481	43	11694	7.32	ppb	92
18) Carbon Disulfide	2.634	76	5097	0.25	ppb	91
41) 1,1,1-Trichloroethane	5.597	97	4769m	0.47	ppb	
54) Trichloroethene	7.084	130	6207m	0.91	ppb	

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

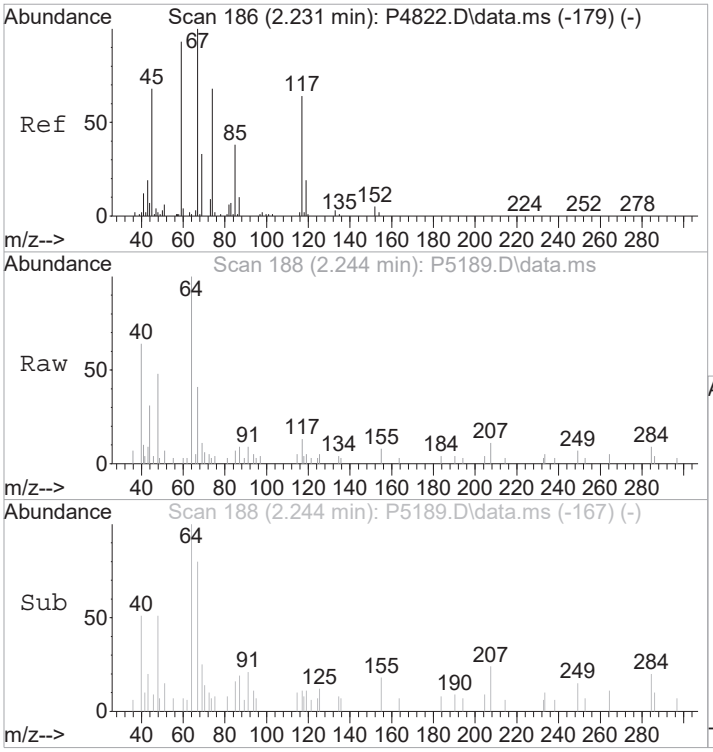
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5189.D
Acq On : 20 Sep 2016 3:14 pm
Operator : K.Ruest
Sample : R1609820-012|1.0 Inst : MSVOA-12
Misc : VERINA 8260 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 20 15:34:00 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



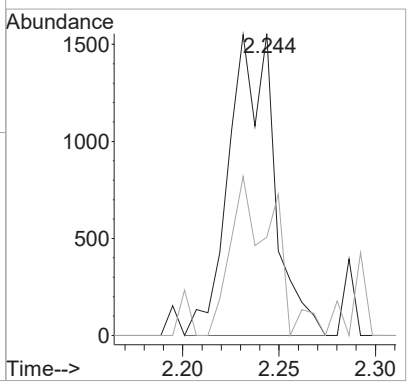
1st 09/20/16
2nd 09/22/16

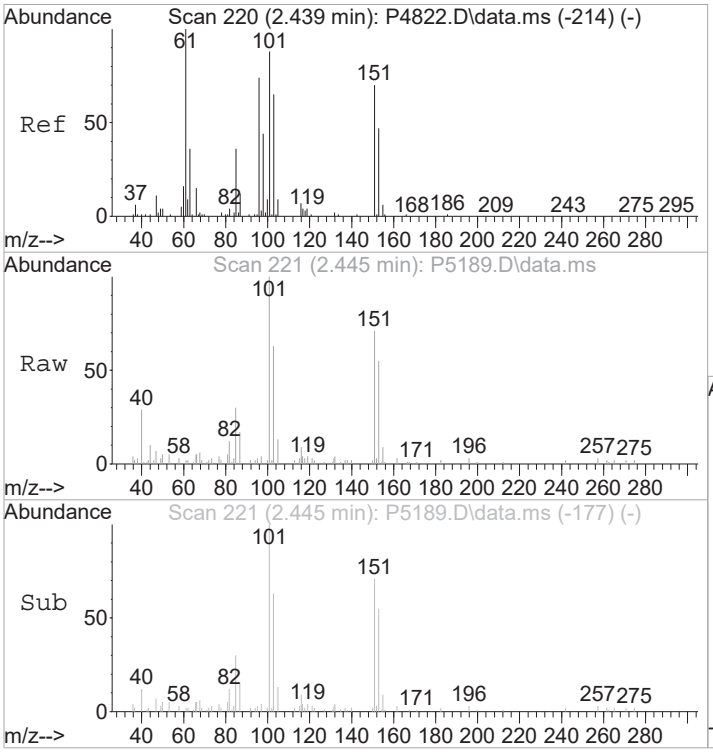


#10
Freon 123a
Concen: 0.30 ppb
RT: 2.244 min Scan# 188
Delta R.T. 0.012 min
Lab File: P5189.D
Acq: 20 Sep 2016 3:14 pm

Tgt Ion: 67 Resp: 2529

Ion	Ratio	Lower	Upper
67	100		
117	32.6	41.5	81.5#

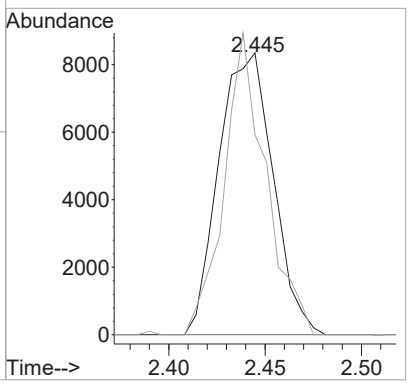


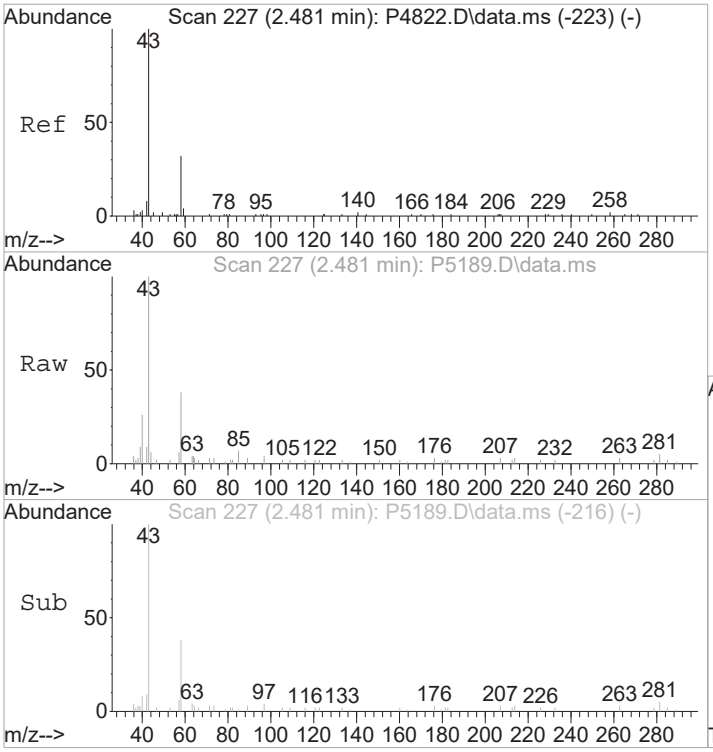


#14
Freon 113
Concen: 2.71 ppb
RT: 2.445 min Scan# 221
Delta R.T. 0.012 min
Lab File: P5189.D
Acq: 20 Sep 2016 3:14 pm

Tgt Ion:101 Resp: 16355

Ion	Ratio	Lower	Upper
101	100		
151	71.0	55.4	95.4

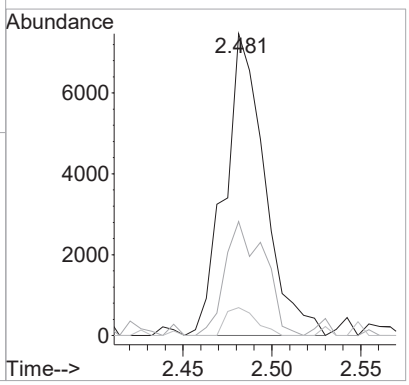


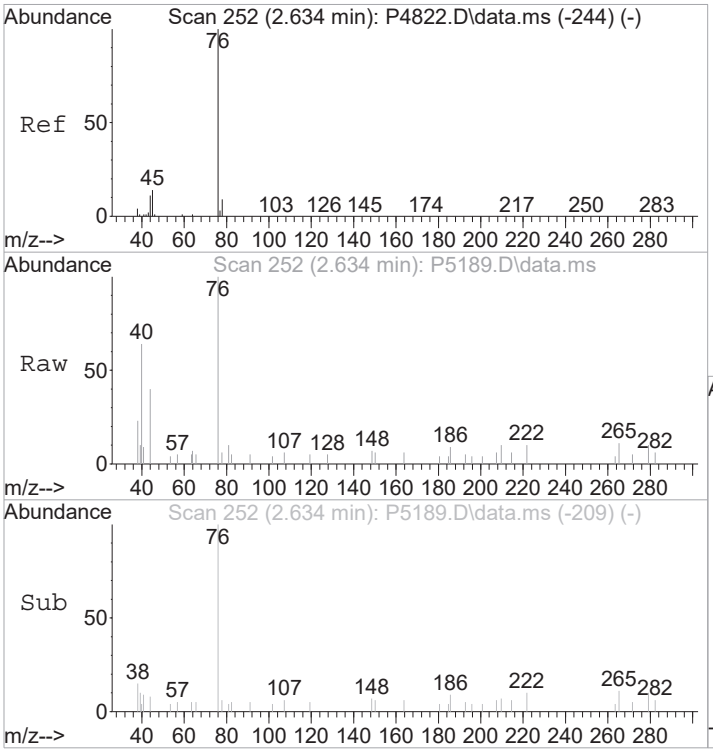


#15
Acetone
Concen: 7.32 ppb
RT: 2.481 min Scan# 227
Delta R.T. -0.006 min
Lab File: P5189.D
Acq: 20 Sep 2016 3:14 pm

Tgt Ion: 43 Resp: 11694

Ion	Ratio	Lower	Upper
43	100		
58	37.8	13.2	53.2
42	9.2	0.0	26.9

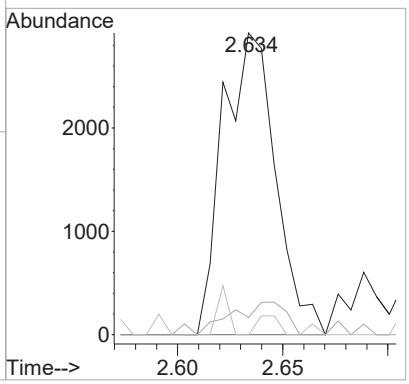


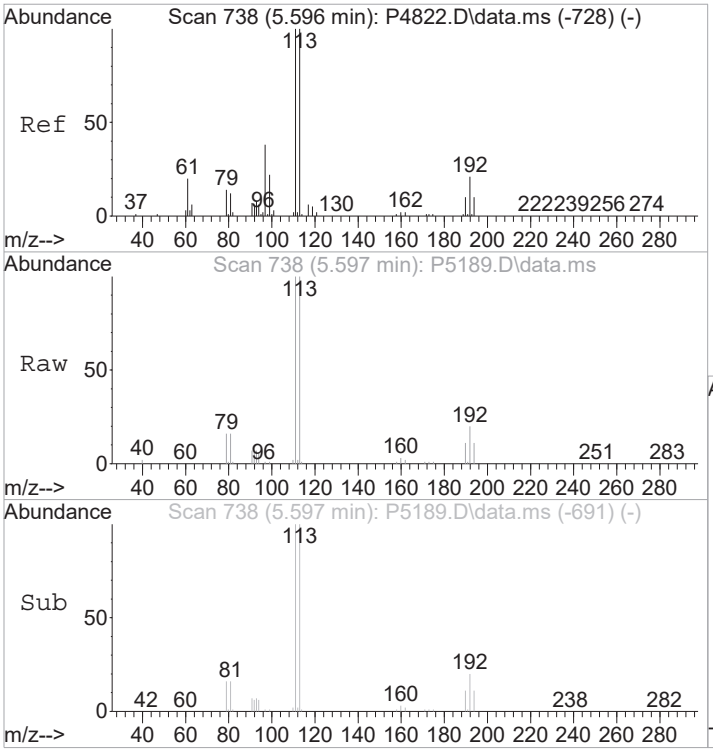


#18
Carbon Disulfide
Concen: 0.25 ppb
RT: 2.634 min Scan# 252
Delta R.T. 0.006 min
Lab File: P5189.D
Acq: 20 Sep 2016 3:14 pm

Tgt Ion: 76 Resp: 5097

Ion	Ratio	Lower	Upper
76	100		
78	5.8	0.0	29.0
77	0.0	0.0	22.9

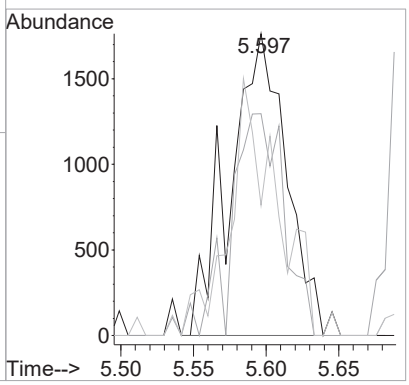


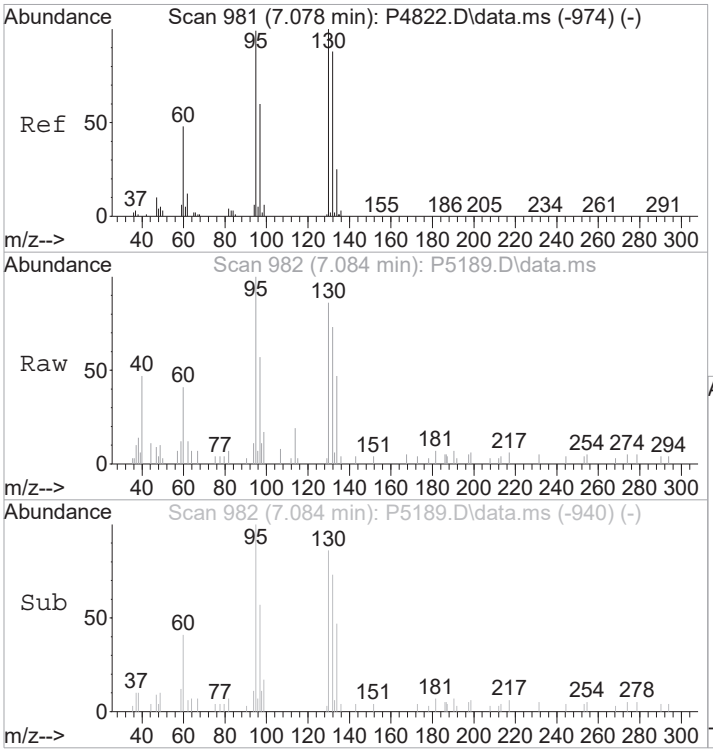


#41
1,1,1-Trichloroethane
Concen: 0.47 ppb m
RT: 5.597 min Scan# 738
Delta R.T. 0.006 min
Lab File: P5189.D
Acq: 20 Sep 2016 3:14 pm

Tgt Ion: 97 Resp: 4769

Ion	Ratio	Lower	Upper
97	100		
99	73.5	42.8	82.8
61	43.1	25.5	65.5

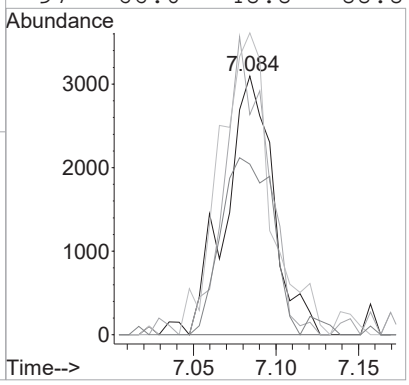




#54
Trichloroethene
Concen: 0.91 ppb m
RT: 7.084 min Scan# 982
Delta R.T. 0.006 min
Lab File: P5189.D
Acq: 20 Sep 2016 3:14 pm

Tgt Ion:130 Resp: 6207

Ion	Ratio	Lower	Upper
130	100		
132	85.1	76.6	116.6
95	116.8	80.2	120.2
97	66.0	48.8	88.8



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5138.D
Acq On : 19 Sep 2016 12:50 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 13:42:44 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

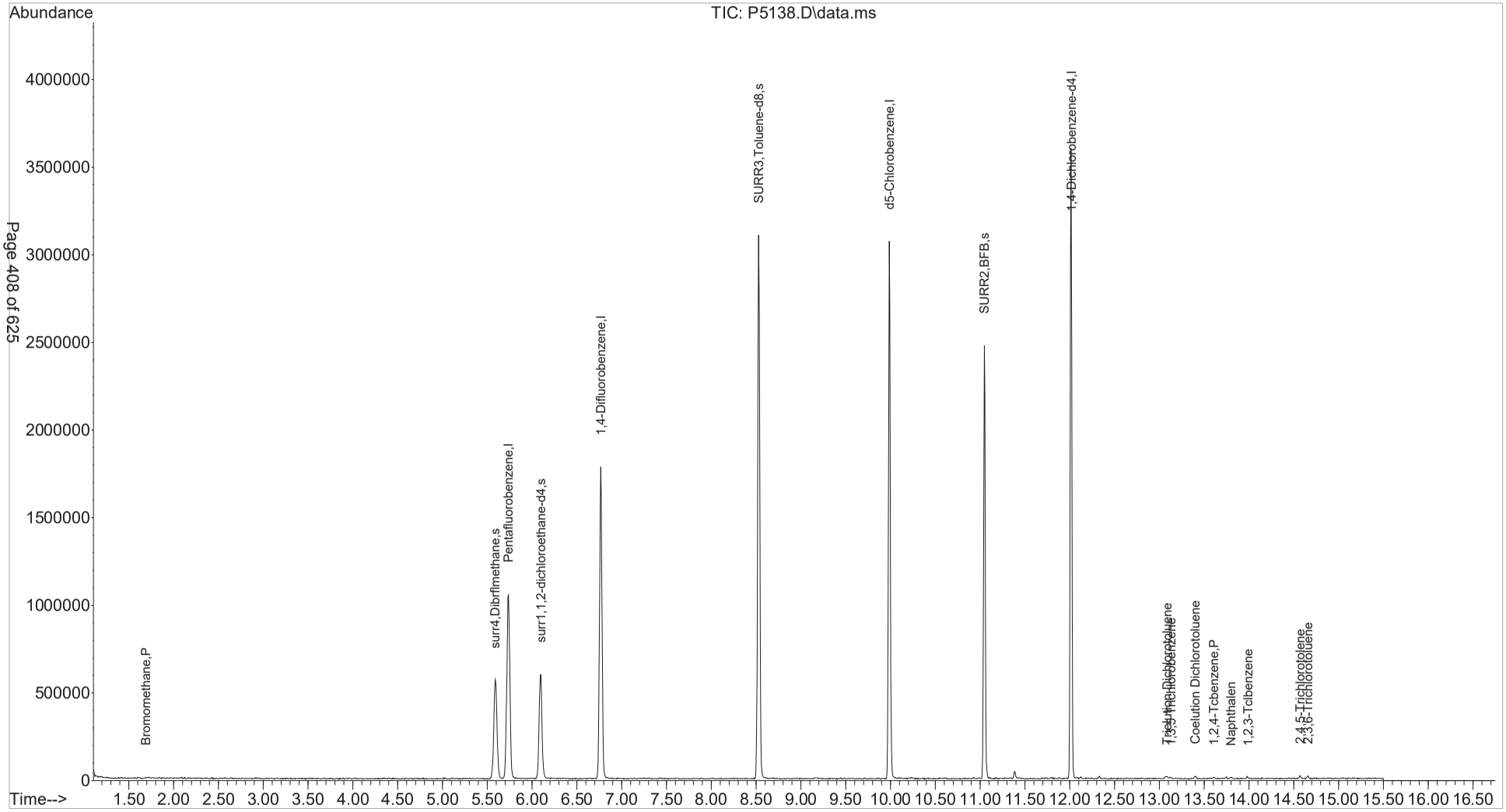
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	888935	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1485491	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1383566	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	708111	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	427462	55.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.18%				
48) surr1,1,2-dichloroetha...	6.096	65	463051	51.23	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.46%				
65) SURR3,Toluene-d8	8.529	98	1884314	57.11	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.22%				
70) SURR2,BFB	11.047	95	669593	52.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.36%				
Target Compounds							Qvalue
5) Bromomethane	1.689	94	2367	0.46	ppb		100
19) Acetonitrile	2.786	40	619	Below Cal		#	1
112) Trielution Dichlorotol...	13.089	125	5564	0.47	ppb		94
113) 1,3,5 Trichlorobenzene	13.132	180	2184	0.23	ppb		89
114) Coelution Dichlorotoluene	13.400	125	4223	0.34	ppb	#	81
115) 1,2,4-Tcbenzene	13.607	180	1881	0.22	ppb	#	73
117) Naphthalen	13.796	128	4266	0.24	ppb		74
118) 1,2,3-Tclbenzene	13.991	180	1953	0.27	ppb	#	66
119) 2,4,5-Trichlorotolene	14.570	159	3379	0.67	ppb	#	63
120) 2,3,6-Trichlorotoluene	14.656	159	2922	0.62	ppb	#	65

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

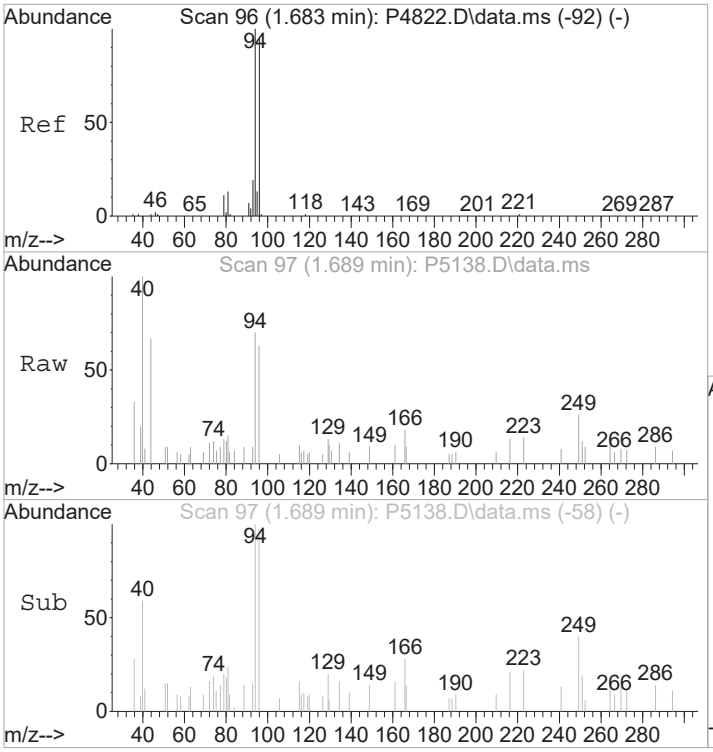
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5138.D
Acq On : 19 Sep 2016 12:50 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 13:42:44 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



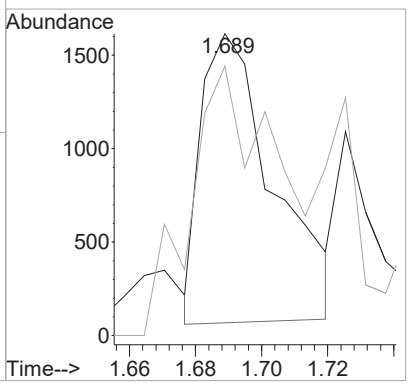
1st 09/19/16
2nd 09/20/16

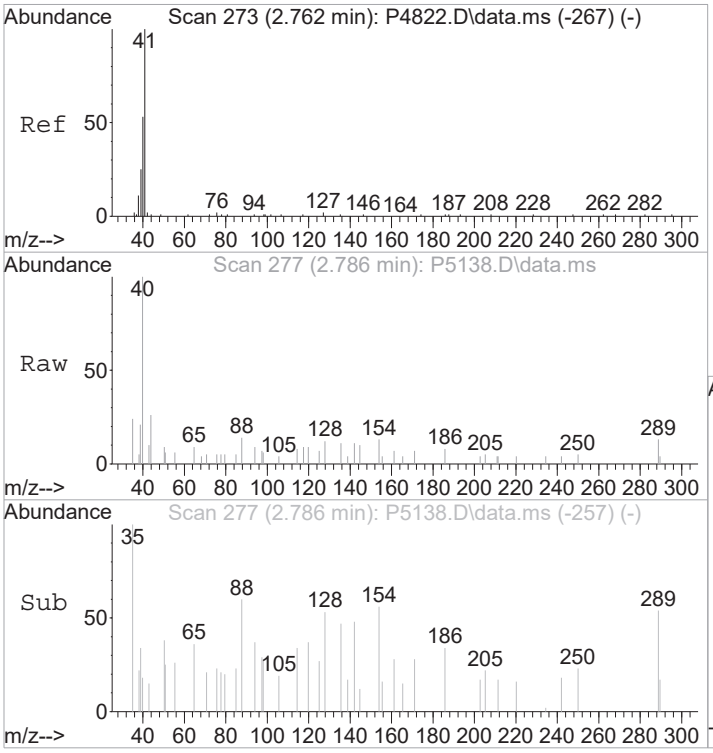


#5
Bromomethane
Concen: 0.46 ppb
RT: 1.689 min Scan# 97
Delta R.T. 0.012 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion: 94 Resp: 2367

Ion	Ratio	Lower	Upper
94	100		
96	89.2	69.2	109.2

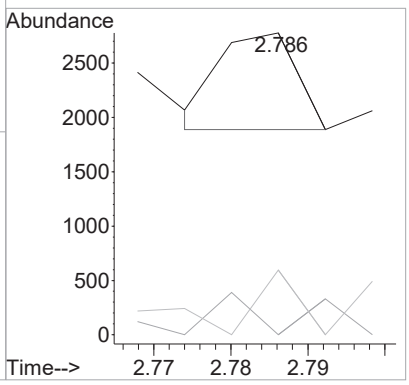


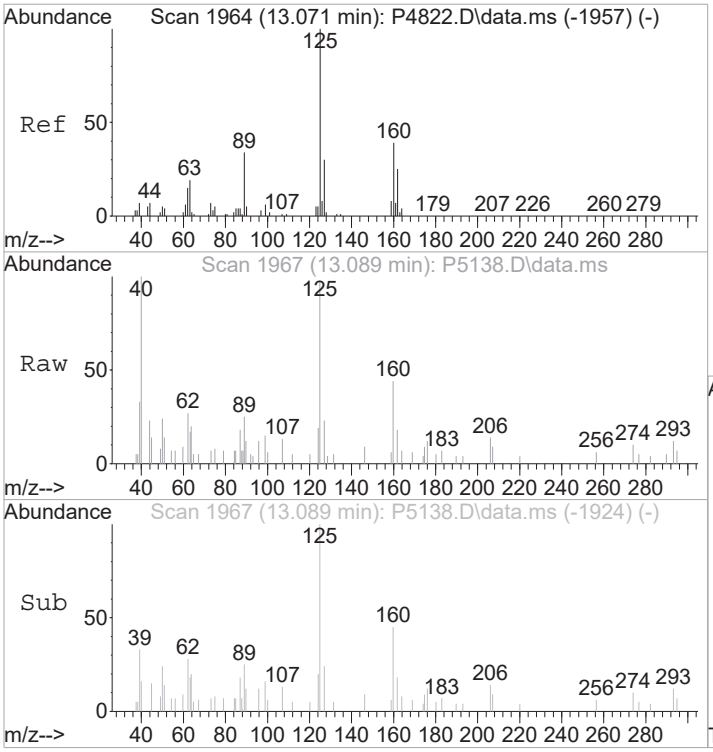


#19
Acetonitrile
Concen: Below Cal
RT: 2.786 min Scan# 277
Delta R.T. 0.031 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion: 40 Resp: 619

Ion	Ratio	Lower	Upper
40	100		
41	0.0	183.8	223.8#
39	21.4	19.1	59.1

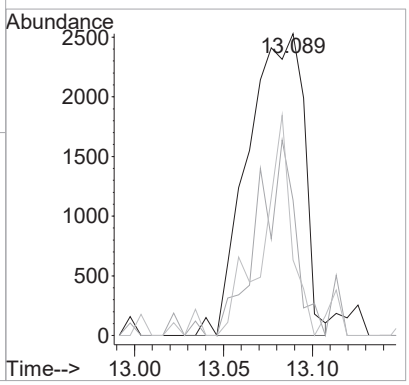


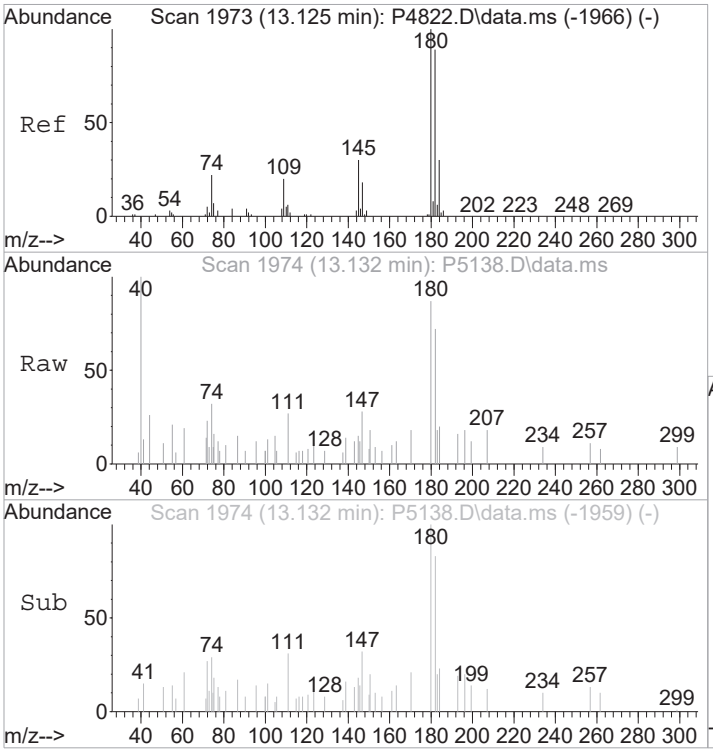


#112
Trielution Dichlorotoluene
Concen: 0.47 ppb
RT: 13.089 min Scan# 1967
Delta R.T. 0.012 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:125 Resp: 5564

Ion	Ratio	Lower	Upper
125	100		
160	44.9	31.5	47.3
89	37.4	29.0	43.4

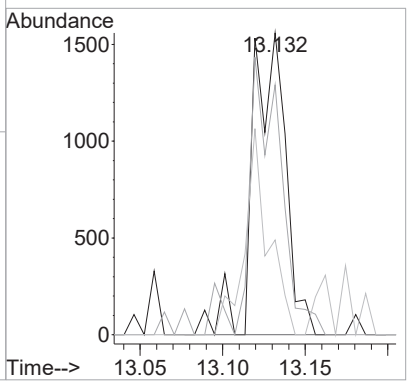


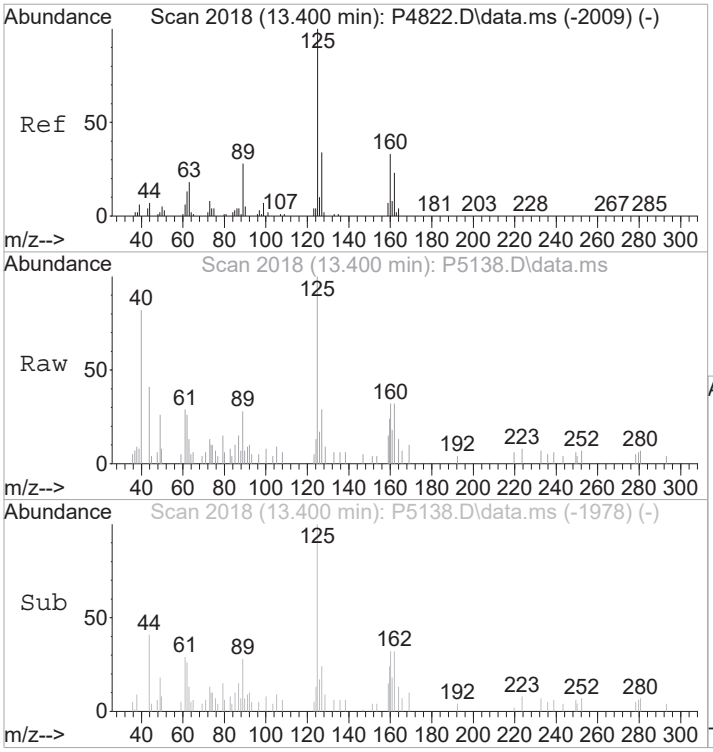


#113
1,3,5 Trichlorobenzene
Concen: 0.23 ppb
RT: 13.132 min Scan# 1974
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:180 Resp: 2184

Ion	Ratio	Lower	Upper
180	100		
182	82.8	76.7	115.1
145	31.4	24.2	36.4

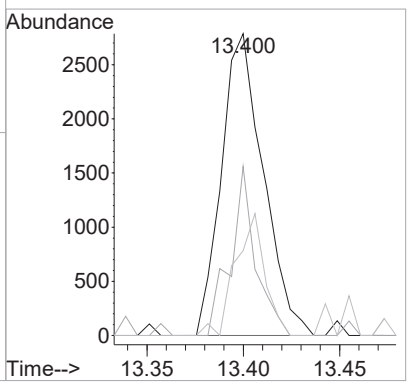


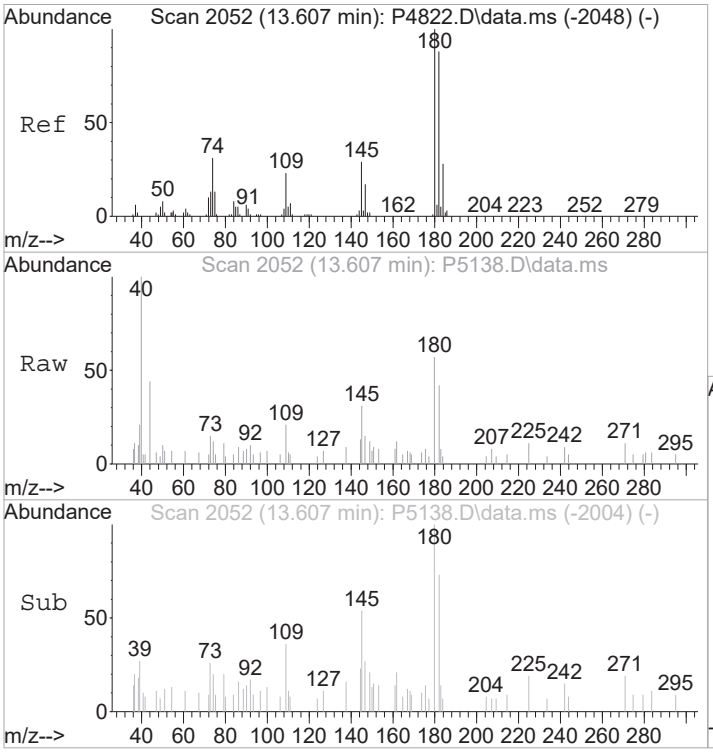


#114
Coelution Dichlorotoluene
Concen: 0.34 ppb
RT: 13.400 min Scan# 2018
Delta R.T. -0.006 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:125 Resp: 4223

Ion	Ratio	Lower	Upper
125	100		
160	56.0	29.1	43.7#
89	28.1	23.3	34.9

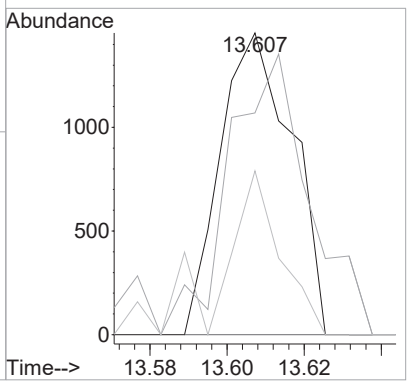


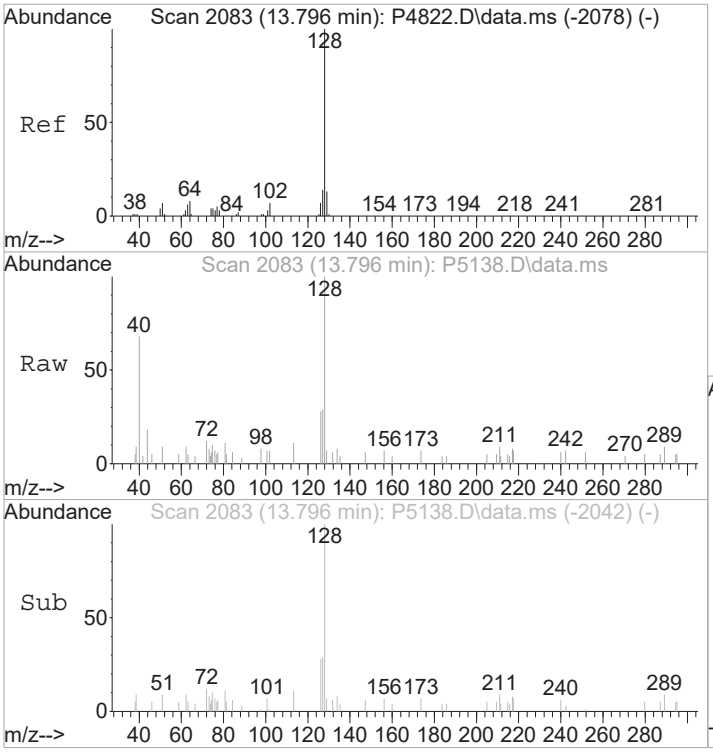


#115
1,2,4-Tcbenzene
Concen: 0.22 ppb
RT: 13.607 min Scan# 2052
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:180 Resp: 1881

Ion	Ratio	Lower	Upper
180	100		
182	73.4	75.4	115.4#
145	54.3	12.4	52.4#

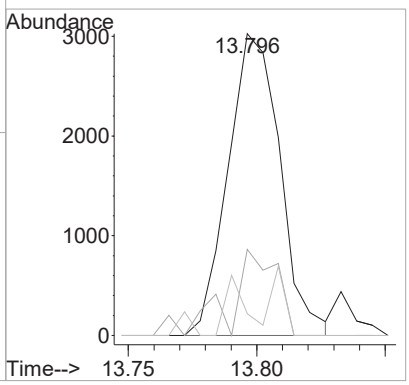


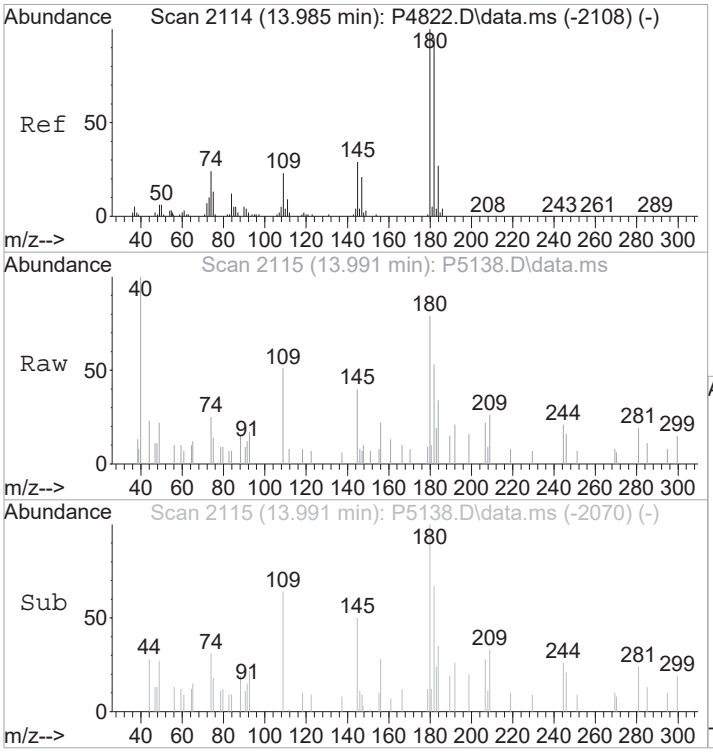


#117
Naphthalen
Concen: 0.24 ppb
RT: 13.796 min Scan# 2083
Delta R.T. -0.006 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:128 Resp: 4266

Ion	Ratio	Lower	Upper
128	100		
127	28.6	0.0	32.6
102	7.3	0.0	28.5

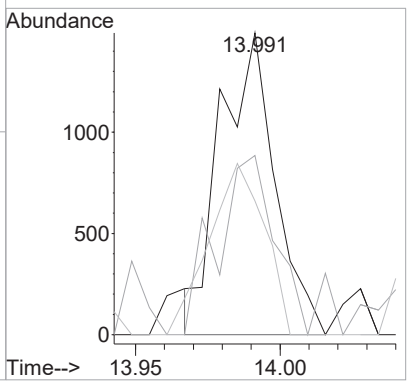


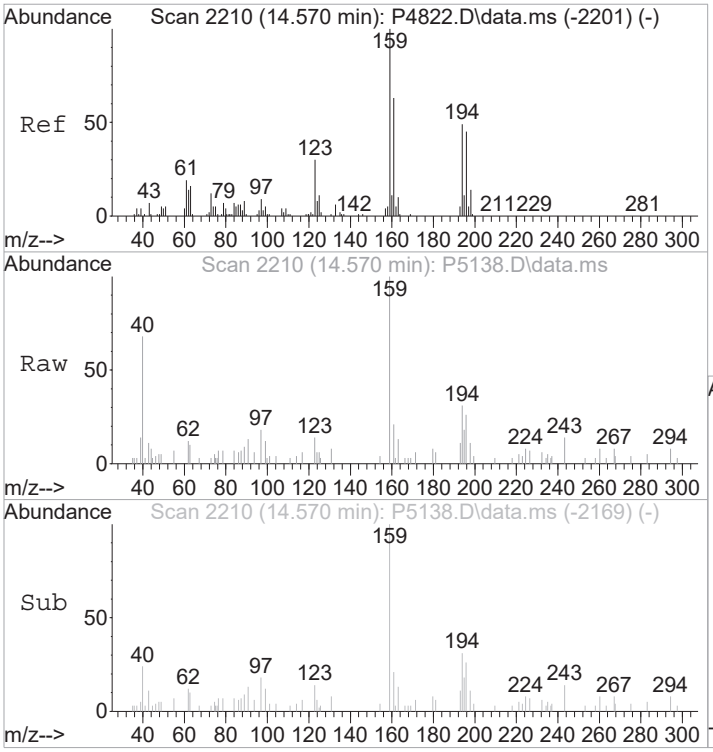


#118
1,2,3-Tclbenzene
Concen: 0.27 ppb
RT: 13.991 min Scan# 2115
Delta R.T. 0.006 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:180 Resp: 1953

Ion	Ratio	Lower	Upper
180	100		
182	59.4	79.1	119.1#
145	44.3	13.9	53.9

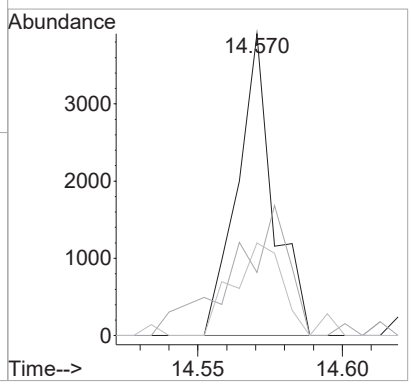


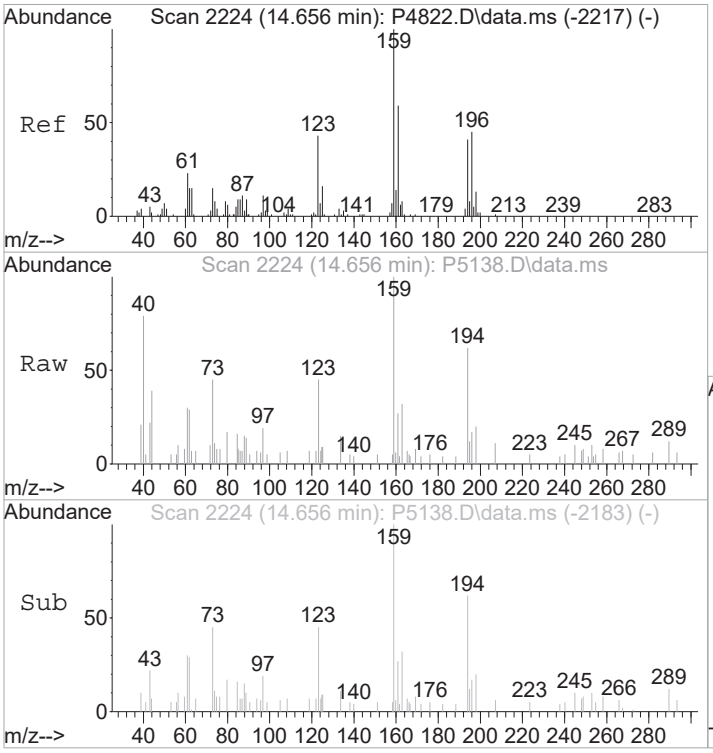


#119
2,4,5-Trichlorotolene
Concen: 0.67 ppb
RT: 14.570 min Scan# 2210
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:159 Resp: 3379

Ion	Ratio	Lower	Upper
159	100		
161	24.2	50.6	76.0#
194	30.7	33.6	50.4#

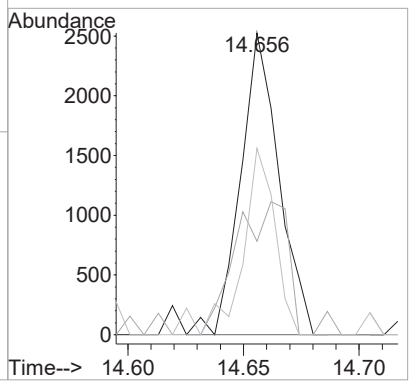




#120
2,3,6-Trichlorotoluene
Concen: 0.62 ppb
RT: 14.656 min Scan# 2224
Delta R.T. 0.000 min
Lab File: P5138.D
Acq: 19 Sep 2016 12:50 pm

Tgt Ion:159 Resp: 2922

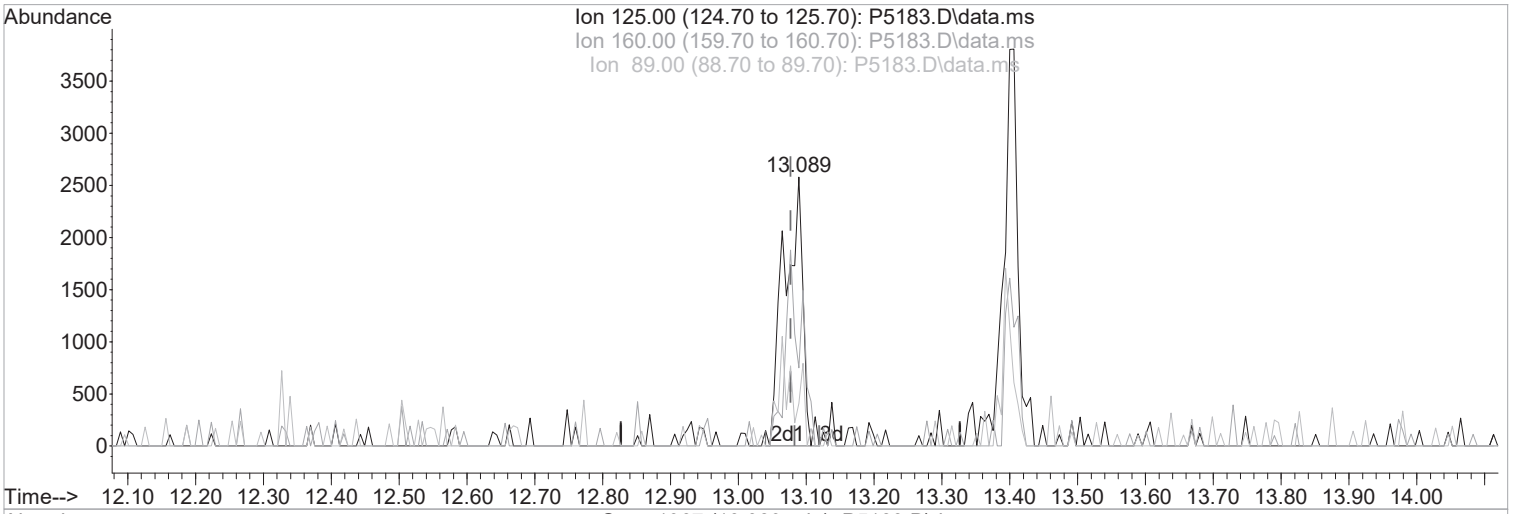
Ion	Ratio	Lower	Upper
159	100		
161	30.9	49.3	73.9#
194	61.7	35.2	52.8#

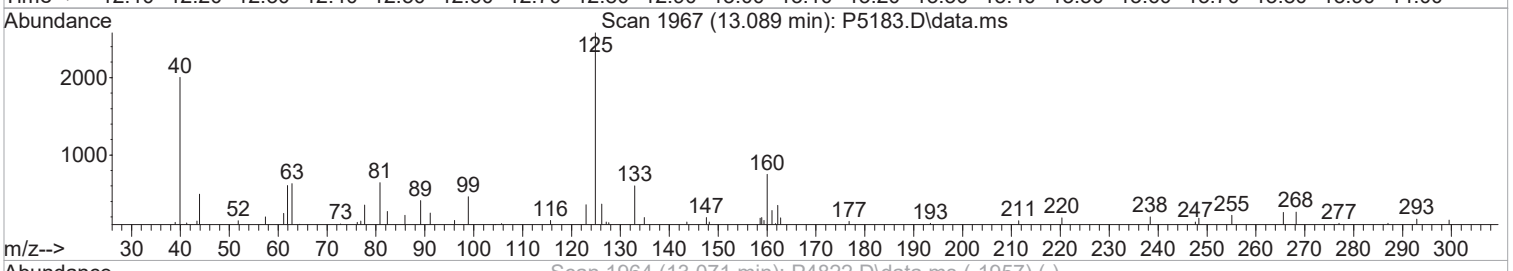


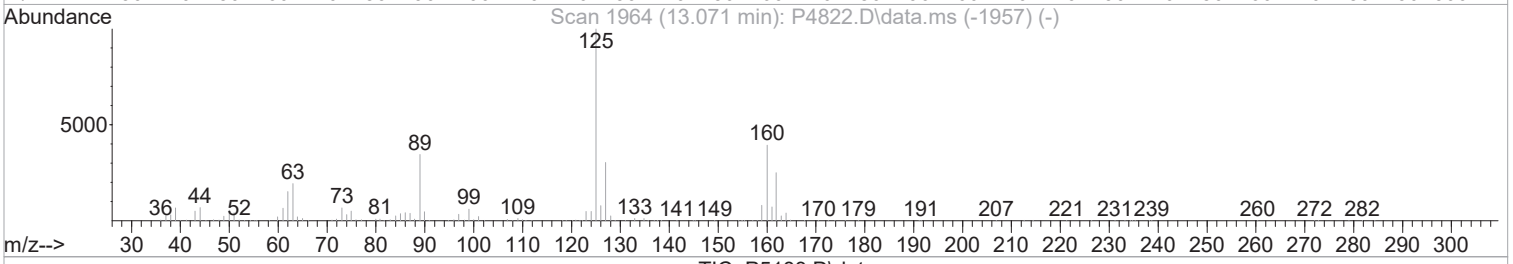
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(112) Trielution Dichlorotoluene

13.089min (+0.012) 0.45 ppb m

response 4948

Ion	Exp%	Act%
125.00	100	100
160.00	39.40	29.03#
89.00	36.20	15.93#
0.00	0.00	0.00

Manual Integration:

After

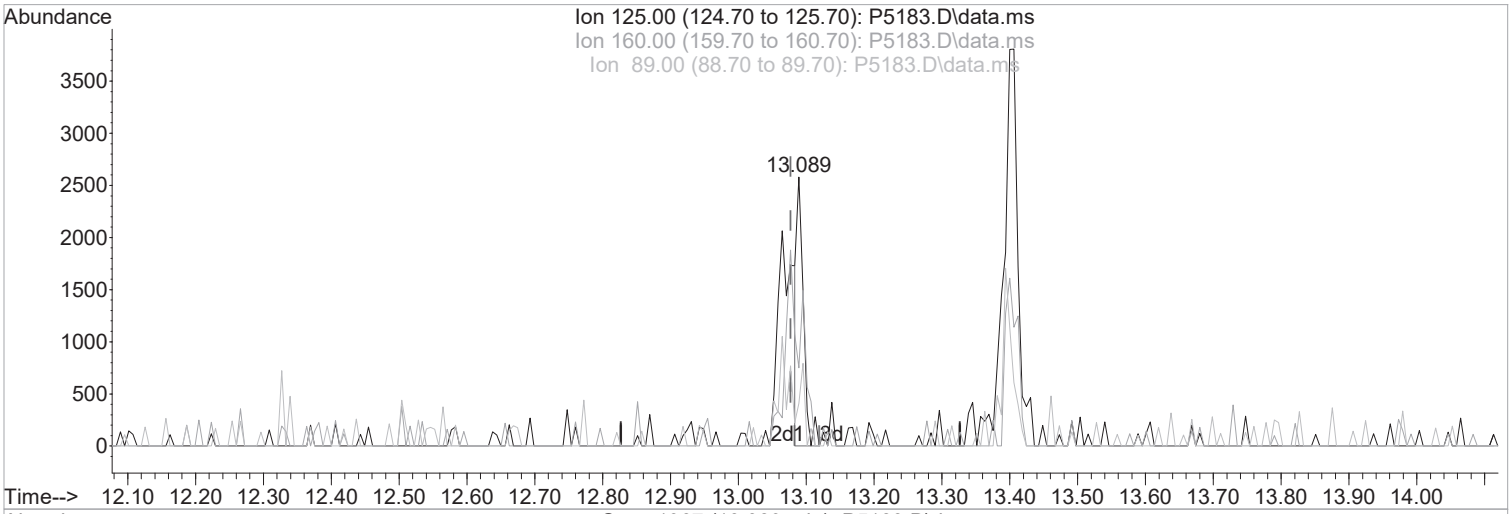
Split Peak

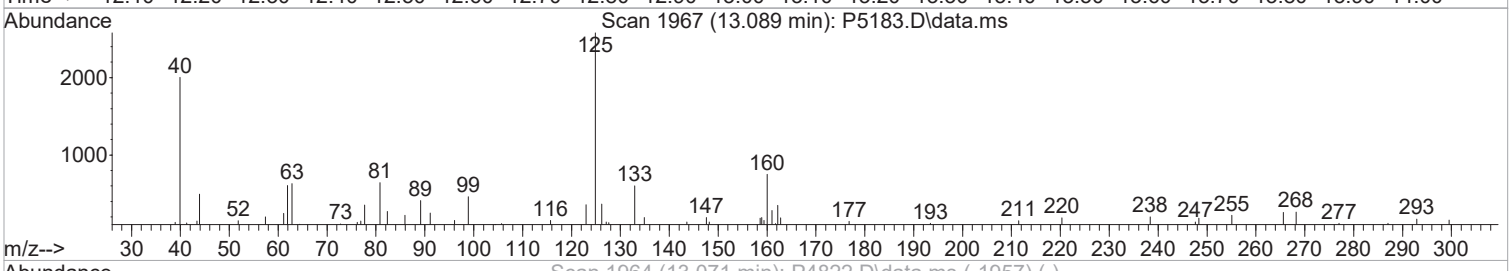
09/20/16

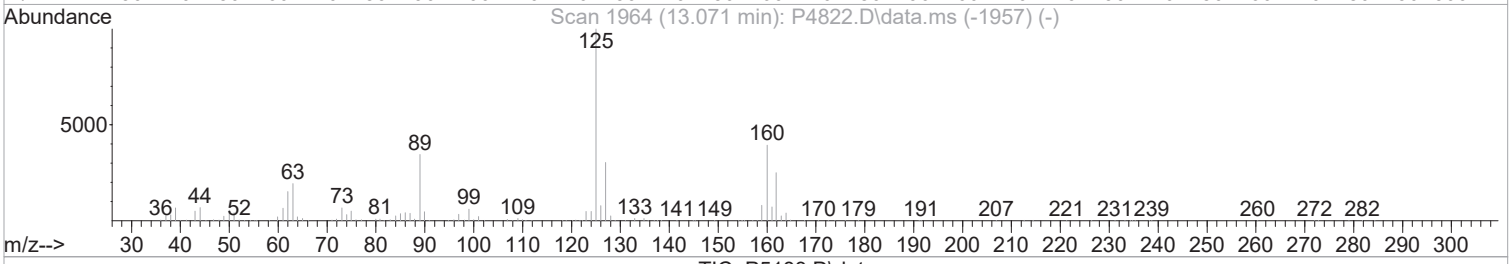
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(112) Trielution Dichlorotoluene

13.089min (+0.012) 0.15 ppb

response 1712

Ion	Exp%	Act%
125.00	100	100
160.00	39.40	29.03#
89.00	36.20	15.93#
0.00	0.00	0.00

Manual Integration:

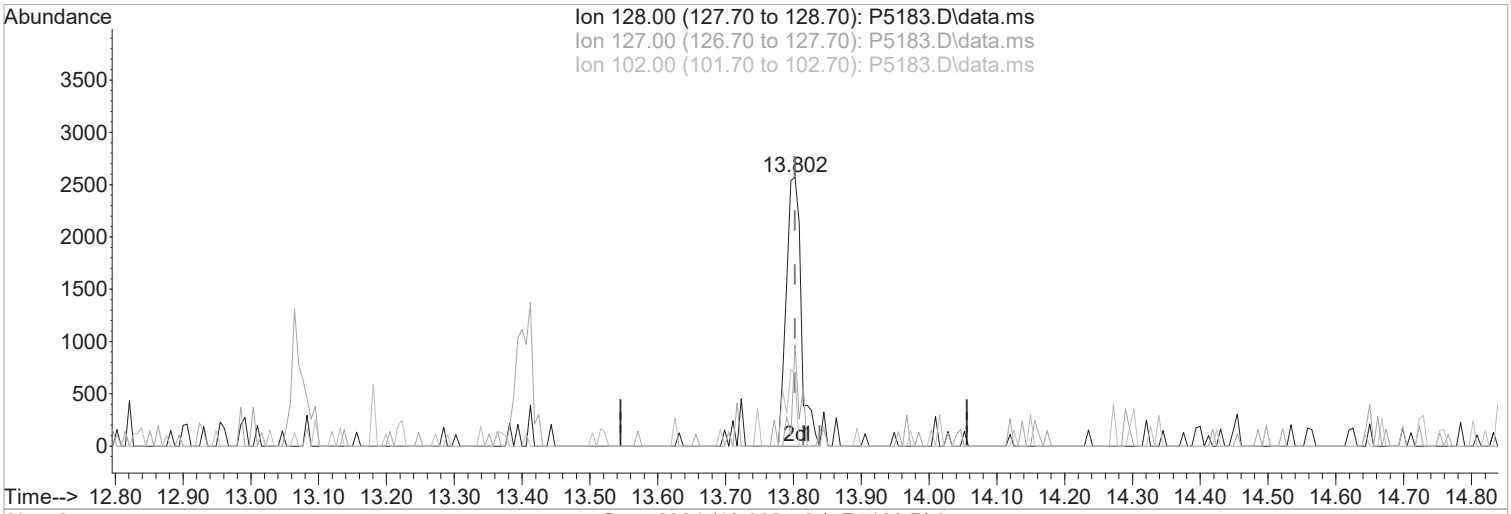
Before

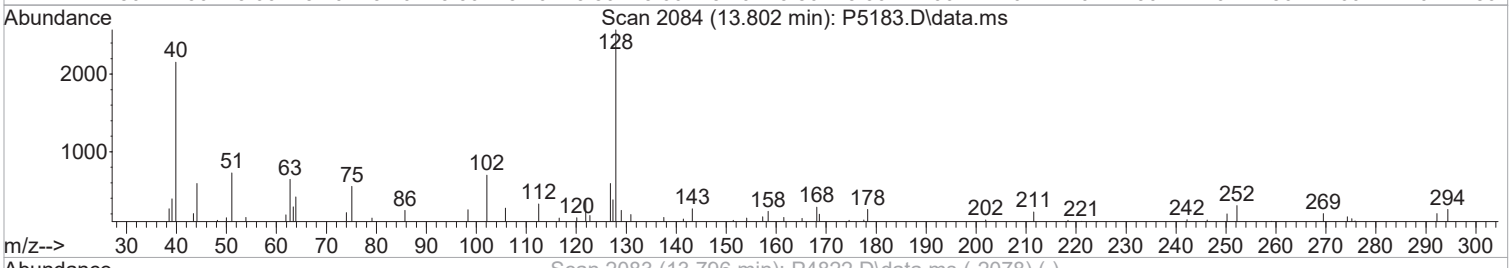
09/20/16

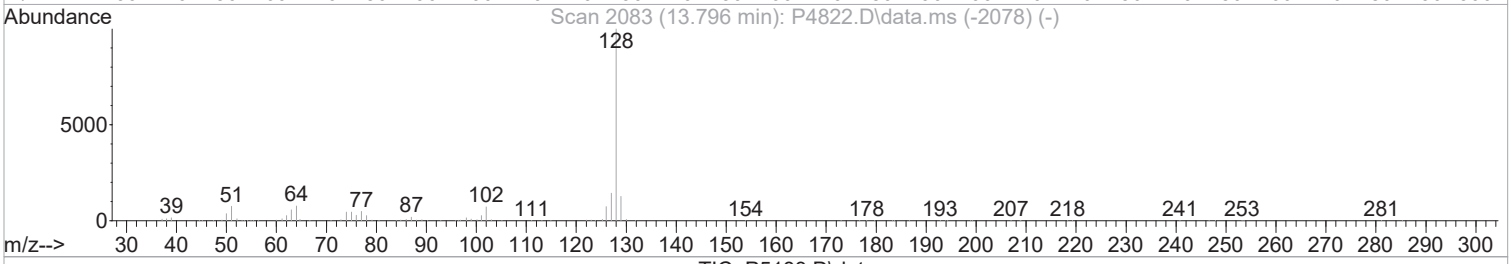
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(117) Naphthalen

13.802min (+0.000) 0.23 ppb m

response 3911

Ion	Exp%	Act%
128.00	100	100
127.00	12.60	22.98
102.00	8.50	27.10
0.00	0.00	0.00

Manual Integration:

After

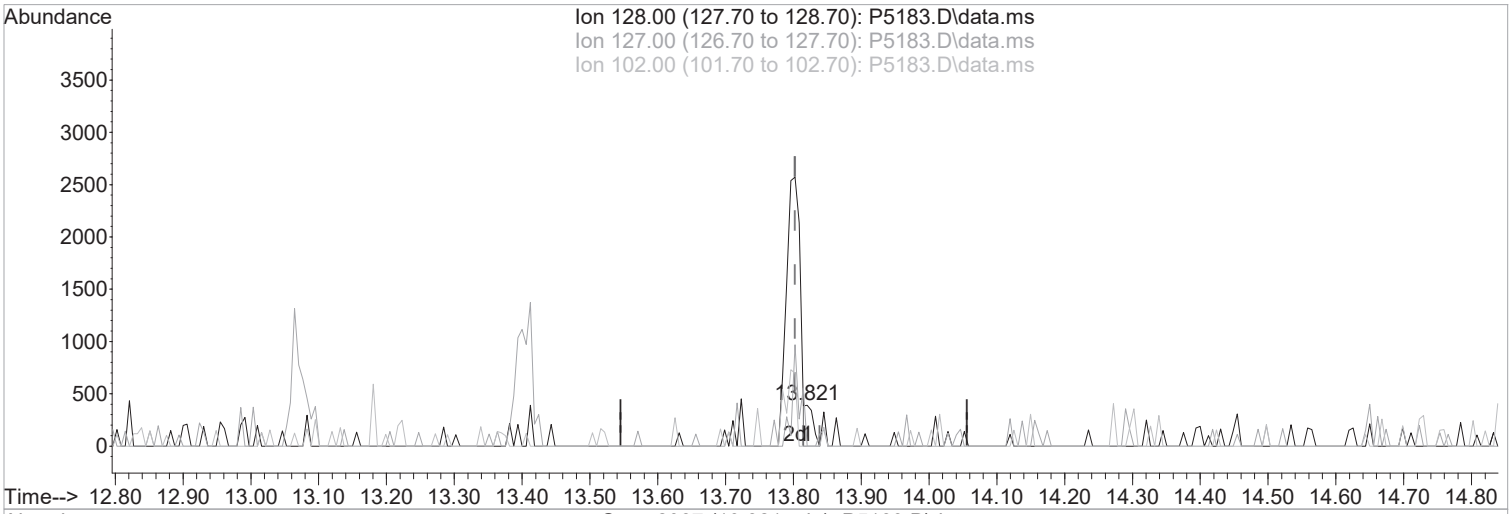
Peak not found.

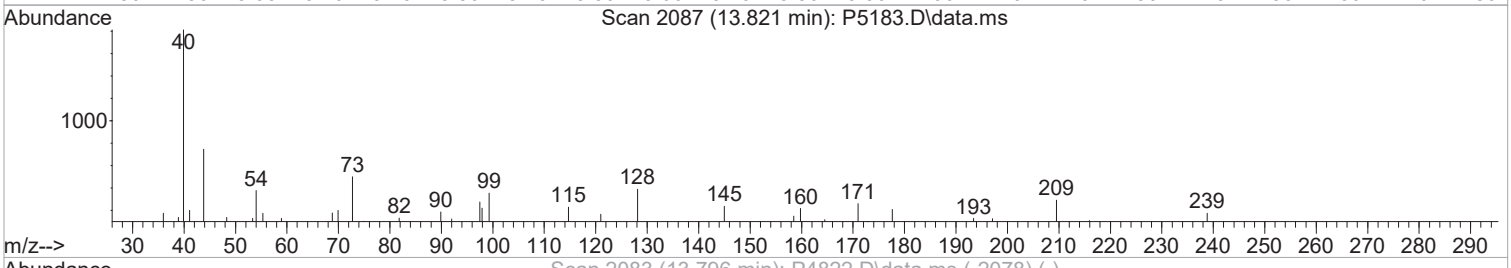
09/20/16

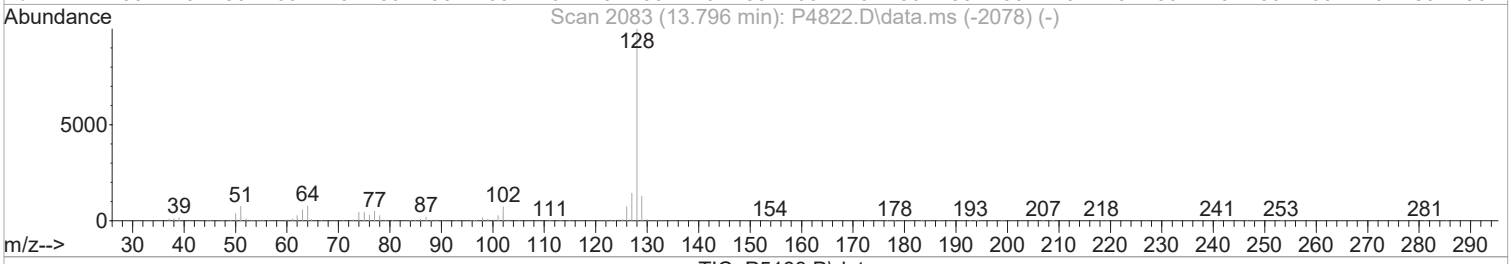
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(117) Naphthalen

13.821min (+0.018) 0.02 ppb

response 310

Ion	Exp%	Act%
128.00	100	100
127.00	12.60	0.00
102.00	8.50	0.00
0.00	0.00	0.00

Manual Integration:

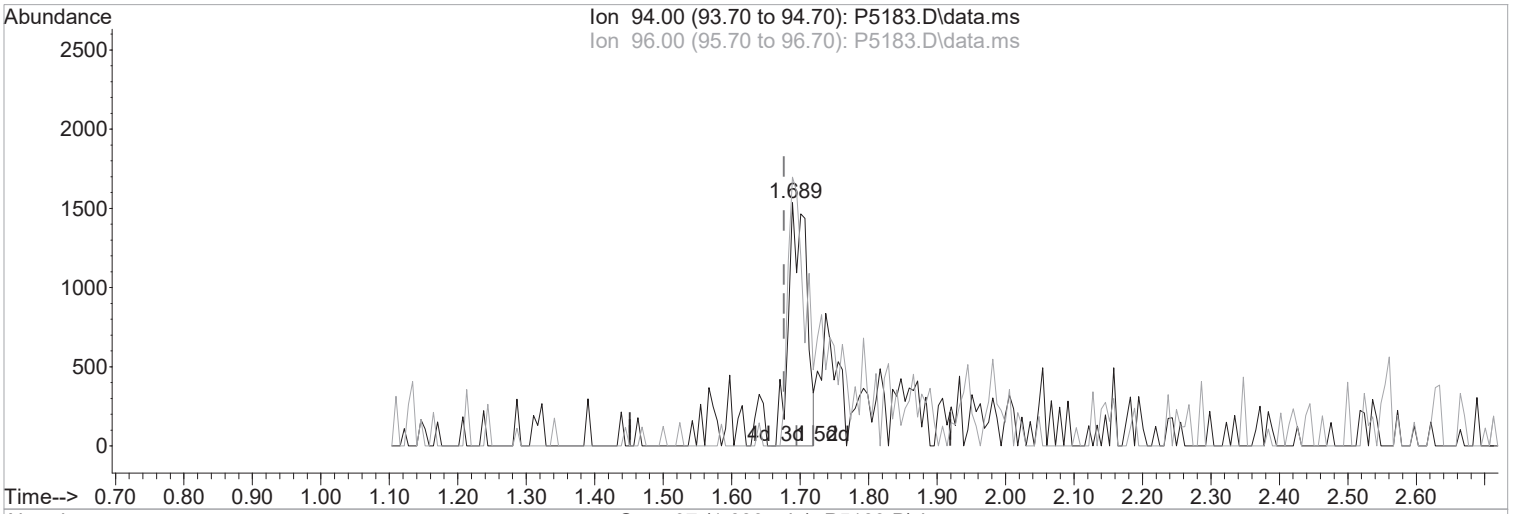
Before

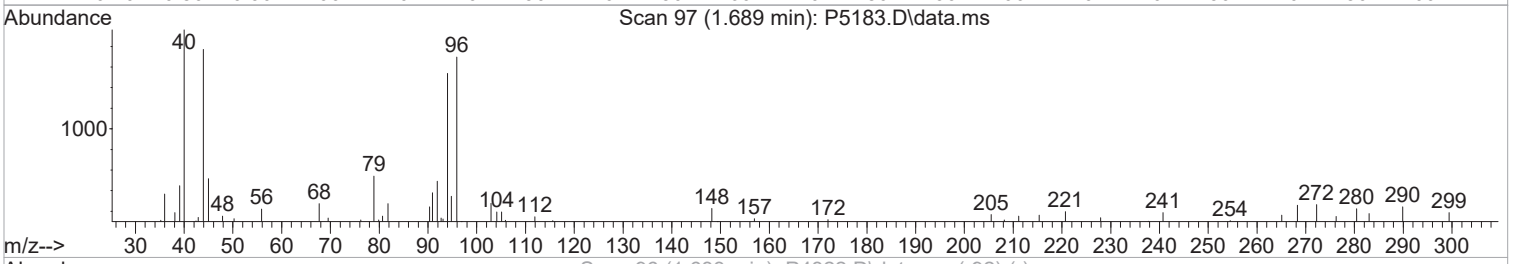
09/20/16

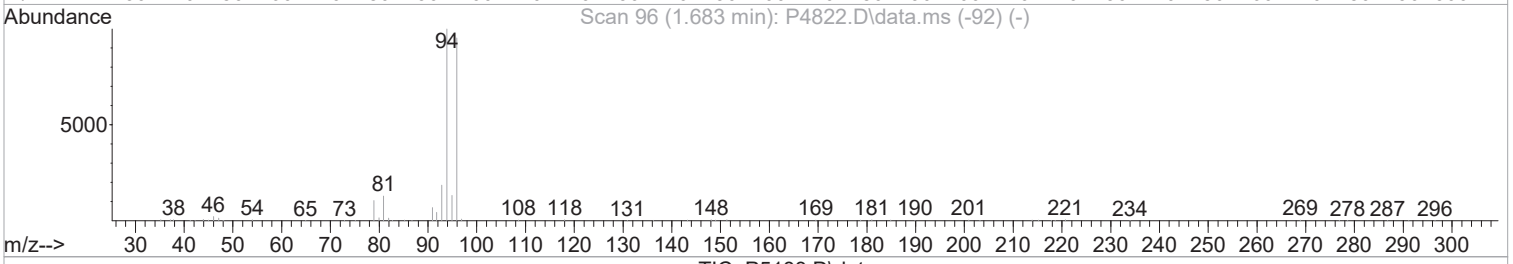
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(5) Bromomethane (P)

1.689min (+0.012) 0.61 ppb m

response 2863

Ion	Exp%	Act%
94.00	100	100
96.00	89.20	110.47#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

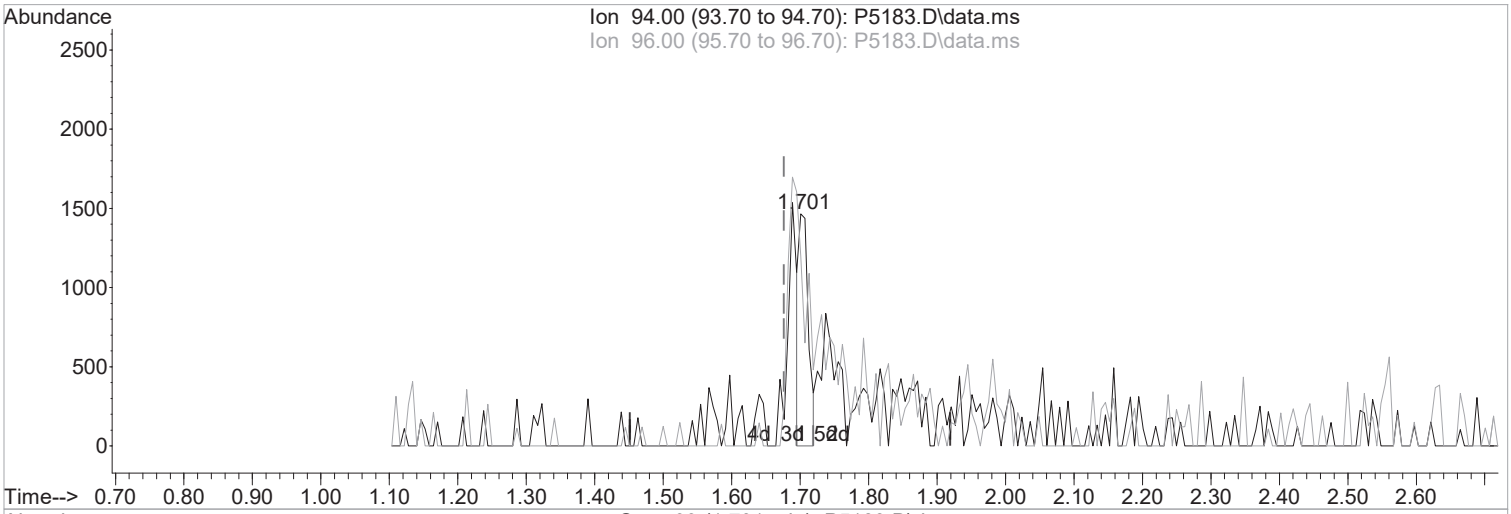
Split Peak

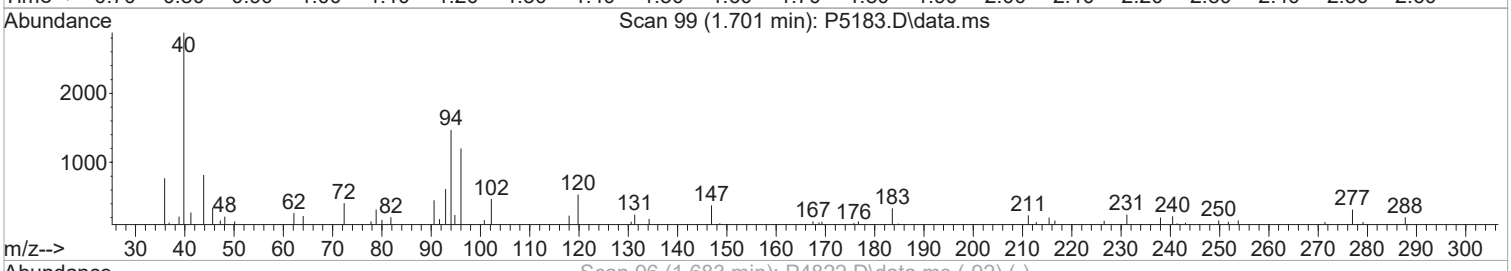
09/20/16

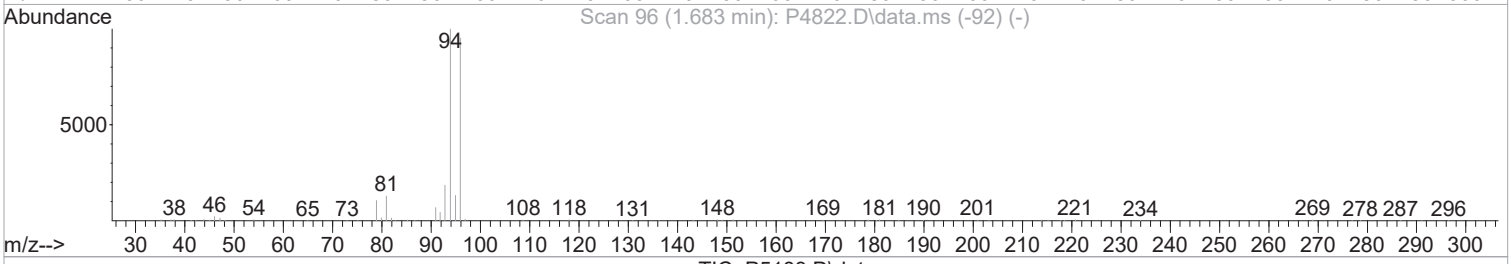
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 12:26:16 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5183.D\data.ms

(5) Bromomethane (P)

1.701min (+0.024) 0.30 ppb

response 1407

Ion	Exp%	Act%
94.00	100	100
96.00	89.20	81.71
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 17:25:14 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

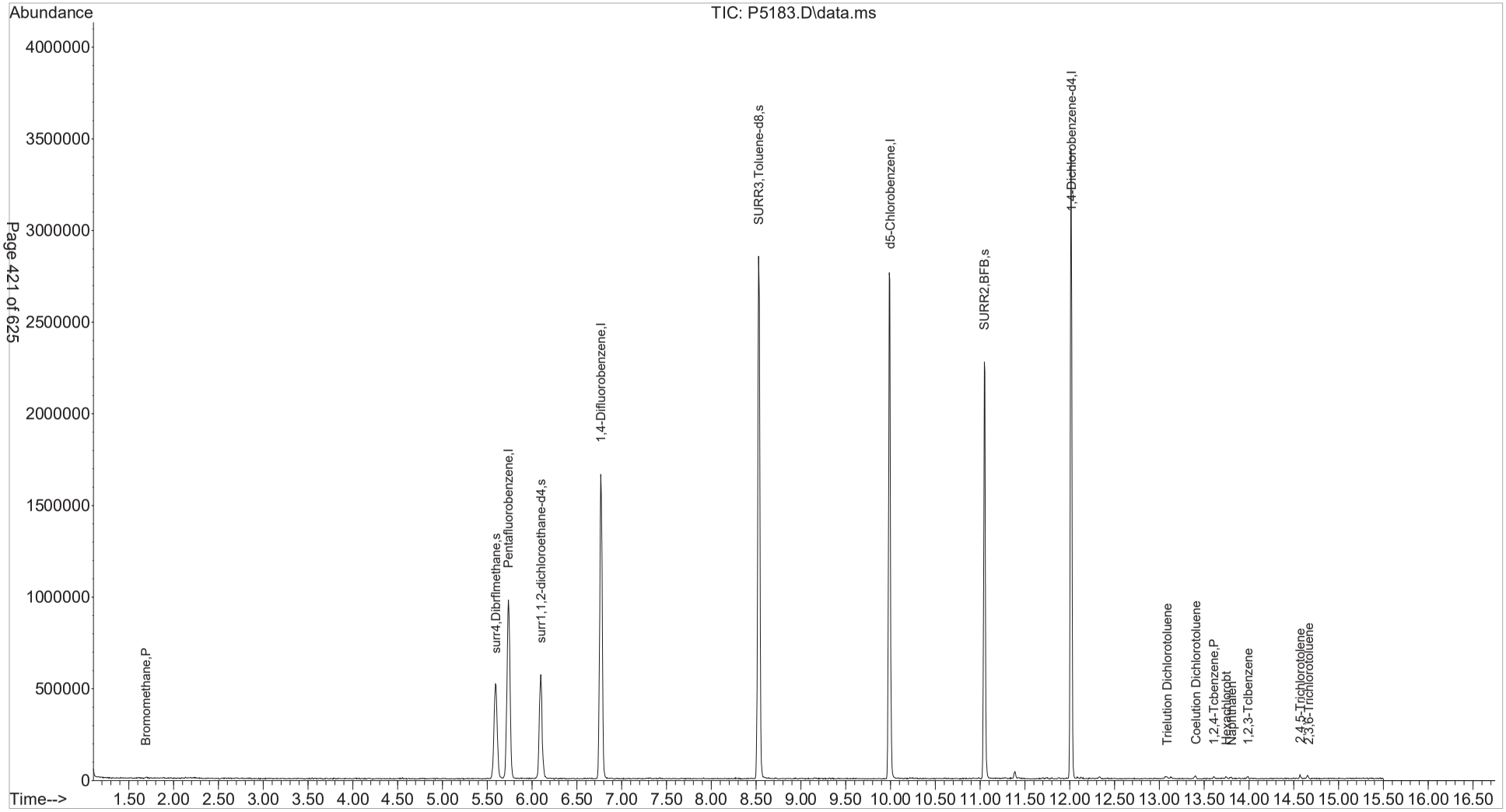
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	811986	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1398394	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1310115	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	665378	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.597	113	408078	56.37	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 112.74%				
48) surr1,1,2-dichloroetha...	6.096	65	428105	50.32	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.64%				
65) SURR3,Toluene-d8	8.529	98	1784918	57.47	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.94%				
70) SURR2,BFB	11.047	95	635849	52.63	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.26%				
Target Compounds							Qvalue
5) Bromomethane	1.689	94	2863m	0.61	ppb		
112) Trielution Dichlorotol...	13.089	125	4948m	0.45	ppb		
114) Coelution Dichlorotoluene	13.406	125	5750	0.49	ppb	#	83
115) 1,2,4-Tcbenzene	13.607	180	2671	0.34	ppb		94
116) Hexachlorobt	13.747	225	1029	0.32	ppb	#	66
117) Naphthalen	13.802	128	3911m	0.23	ppb		
118) 1,2,3-Tclbenzene	13.991	180	2587	0.39	ppb		81
119) 2,4,5-Trichlorotolene	14.570	159	3785	0.80	ppb	#	68
120) 2,3,6-Trichlorotoluene	14.662	159	3096	0.70	ppb	#	59

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

Quantitation Report (QT Reviewed)

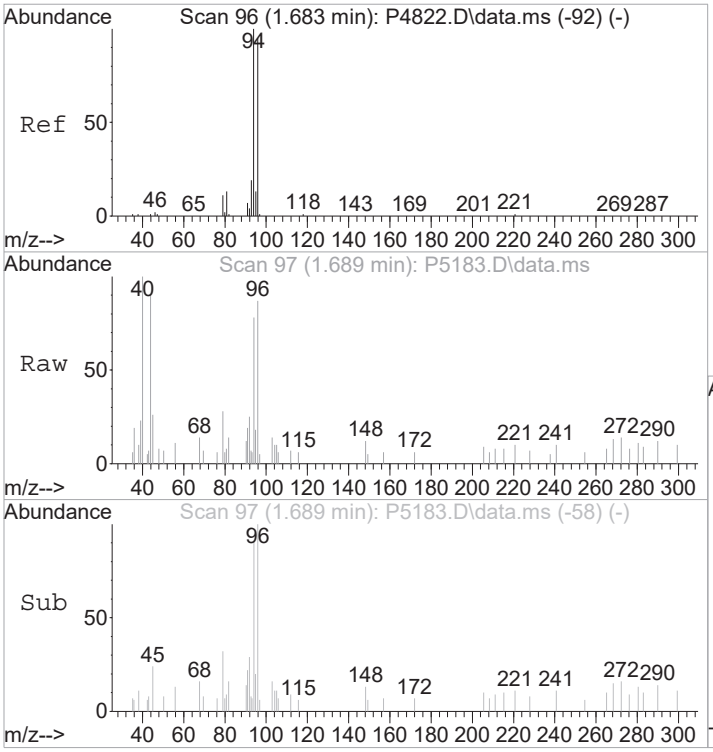
Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5183.D
Acq On : 20 Sep 2016 12:09 pm
Operator : K.Ruest
Sample : VBLK Inst : MSVOA-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 20 17:25:14 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Page 421 of 625

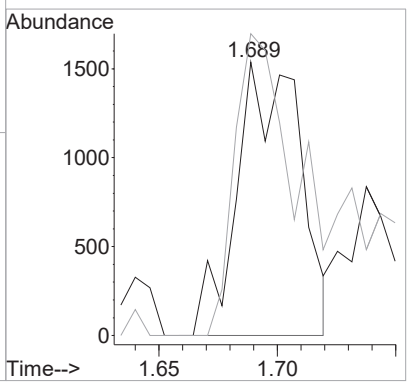
1st 09/20/16
2nd 09/22/16

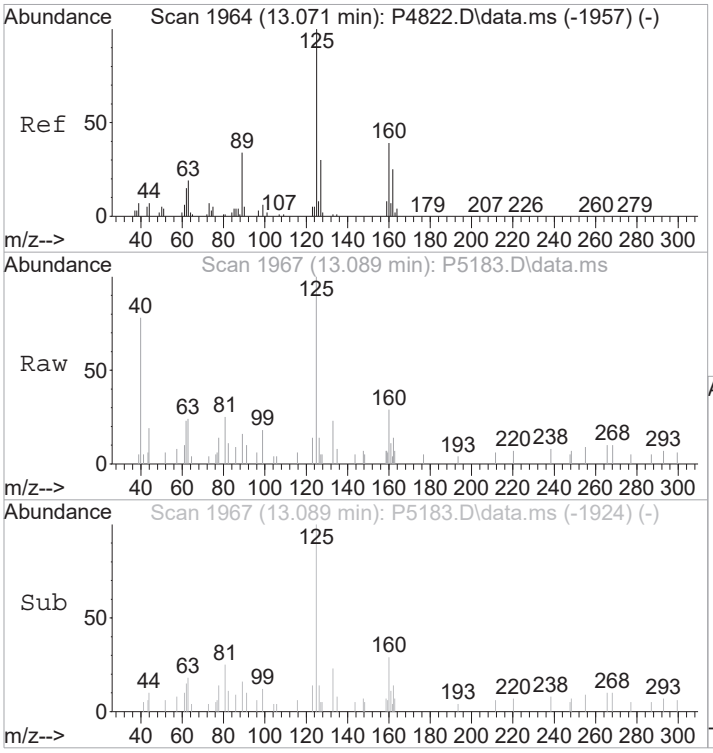


#5
Bromomethane
Concen: 0.61 ppb m
RT: 1.689 min Scan# 97
Delta R.T. 0.012 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion: 94 Resp: 2863

Ion	Ratio	Lower	Upper
94	100		
96	110.5	69.2	109.2#

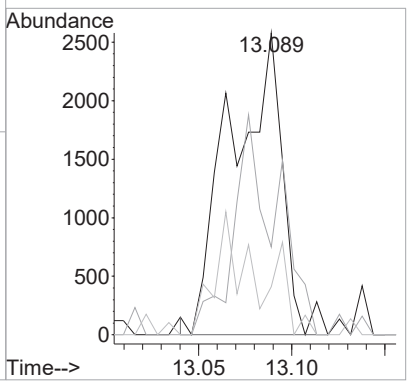


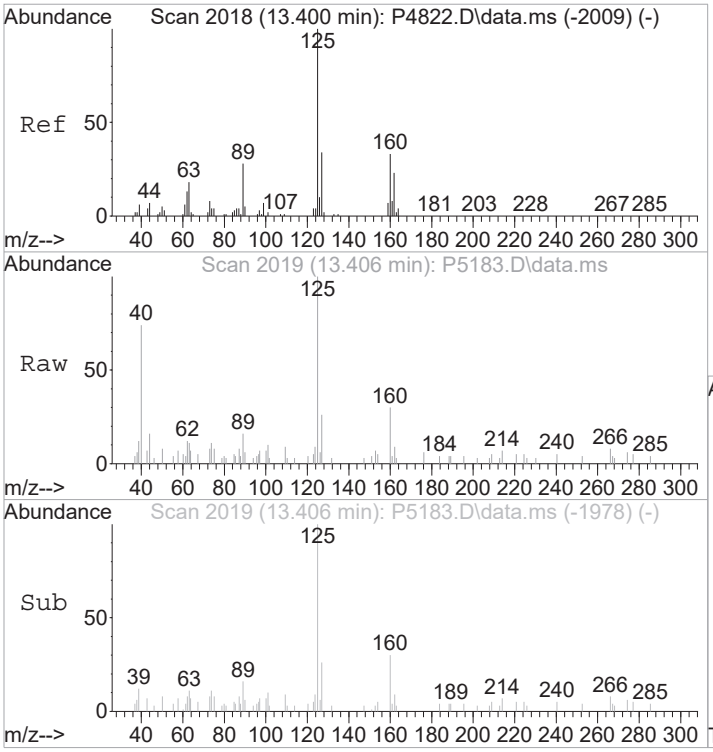


#112
Trielution Dichlorotoluene
Concen: 0.45 ppb m
RT: 13.089 min Scan# 1967
Delta R.T. 0.012 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:125 Resp: 4948

Ion	Ratio	Lower	Upper
125	100		
160	29.0	31.5	47.3#
89	15.9	29.0	43.4#

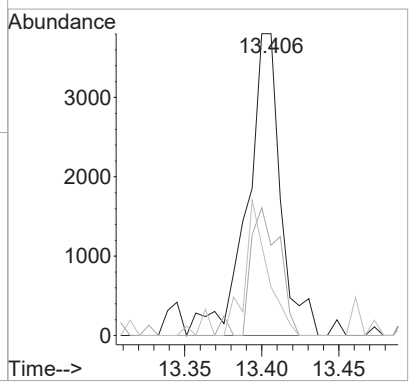


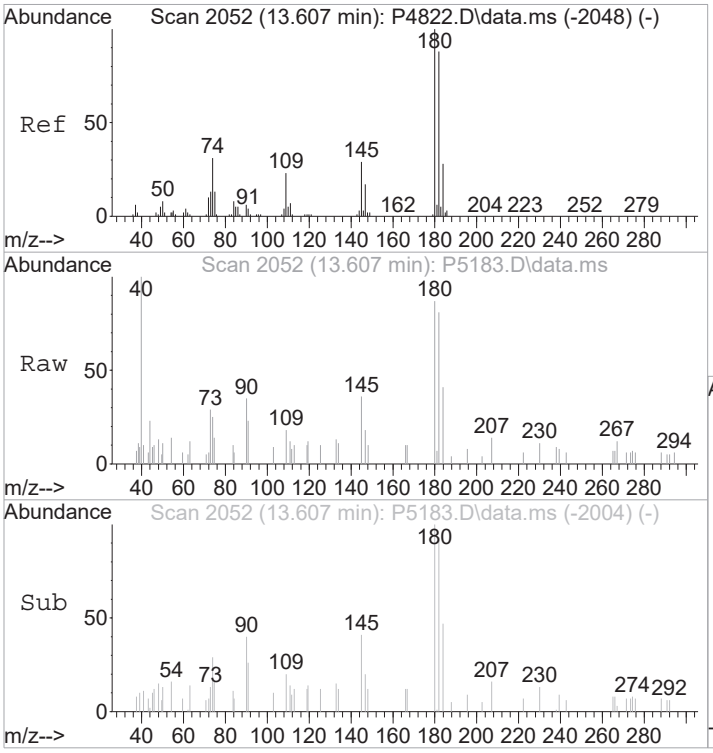


#114
Coelution Dichlorotoluene
Concen: 0.49 ppb
RT: 13.406 min Scan# 2019
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:125 Resp: 5750

Ion	Ratio	Lower	Upper
125	100		
160	30.0	29.1	43.7
89	16.0	23.3	34.9#

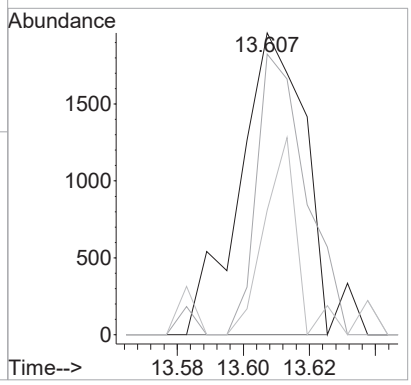


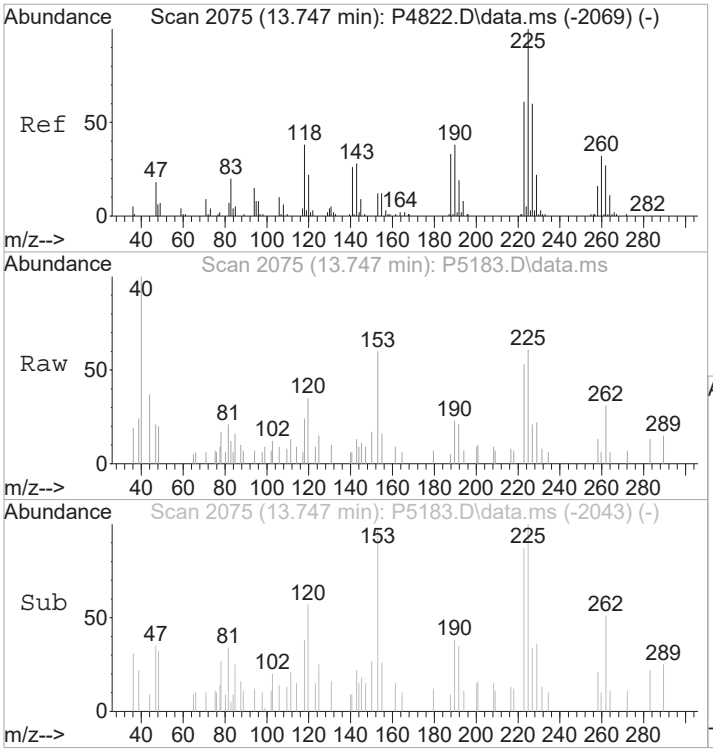


#115
1,2,4-Tcbenzene
Concen: 0.34 ppb
RT: 13.607 min Scan# 2052
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:180 Resp: 2671

Ion	Ratio	Lower	Upper
180	100		
182	92.9	75.4	115.4
145	41.3	12.4	52.4

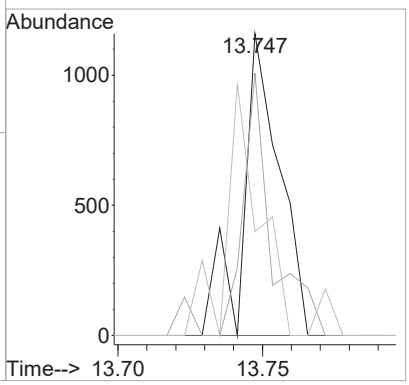


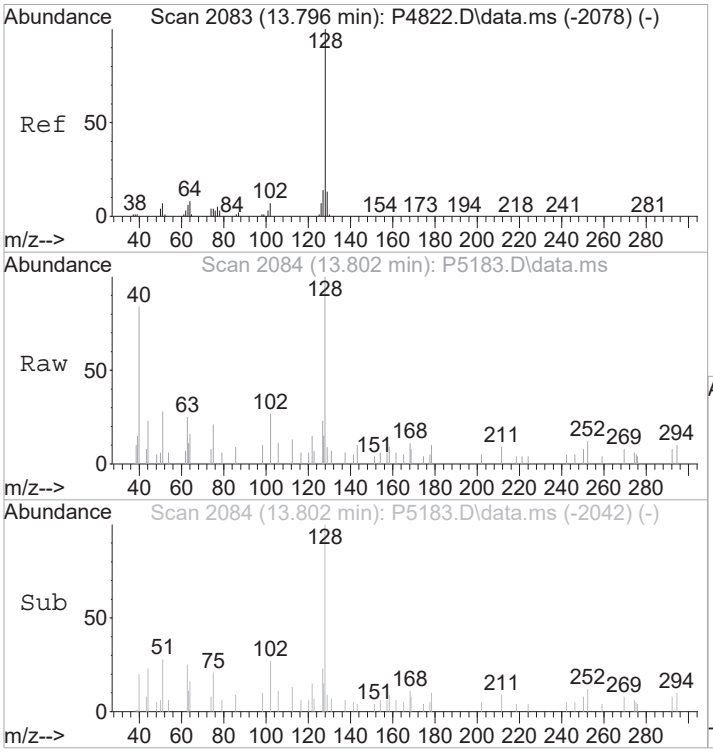


#116
Hexachlorobt
Concen: 0.32 ppb
RT: 13.747 min Scan# 2075
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:225 Resp: 1029

Ion	Ratio	Lower	Upper
225	100		
223	86.9	46.9	86.9
227	34.4	49.7	89.7#

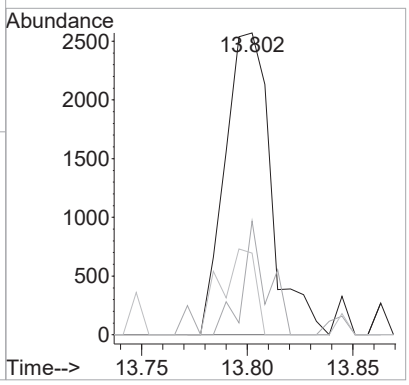


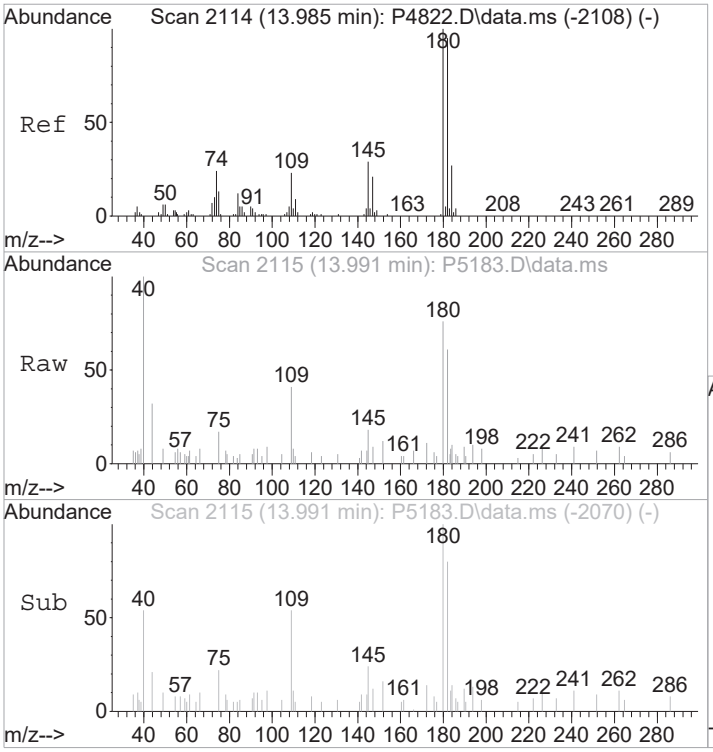


#117
Naphthalen
Concen: 0.23 ppb m
RT: 13.802 min Scan# 2084
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:128 Resp: 3911

Ion	Ratio	Lower	Upper
128	100		
127	23.0	0.0	32.6
102	27.1	0.0	28.5

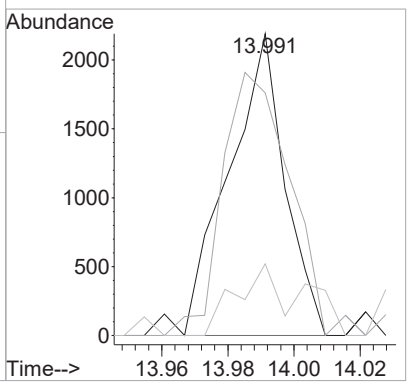


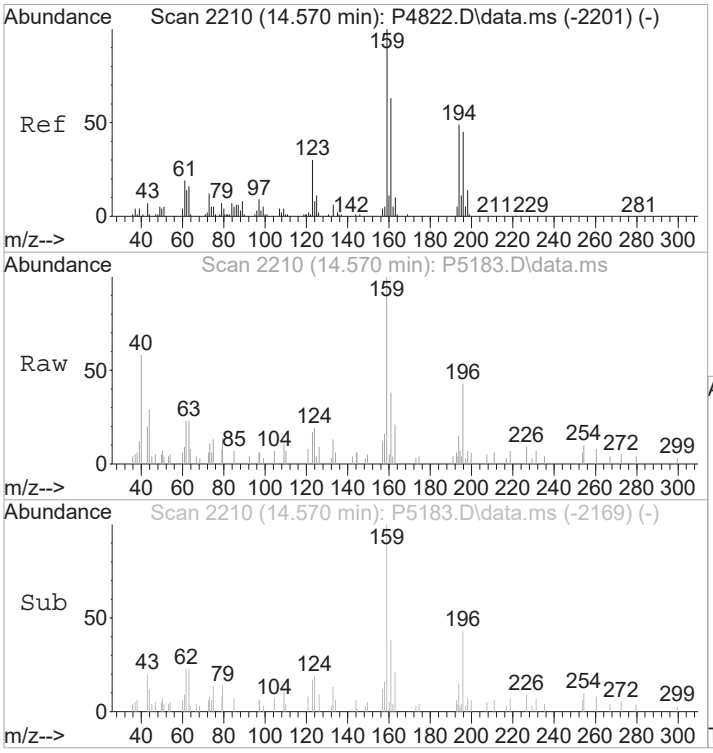


#118
1,2,3-Tclbenzene
Concen: 0.39 ppb
RT: 13.991 min Scan# 2115
Delta R.T. 0.006 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:180 Resp: 2587

Ion	Ratio	Lower	Upper
180	100		
182	80.3	79.1	119.1
145	23.8	13.9	53.9

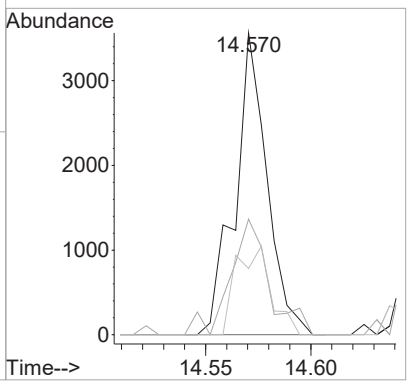


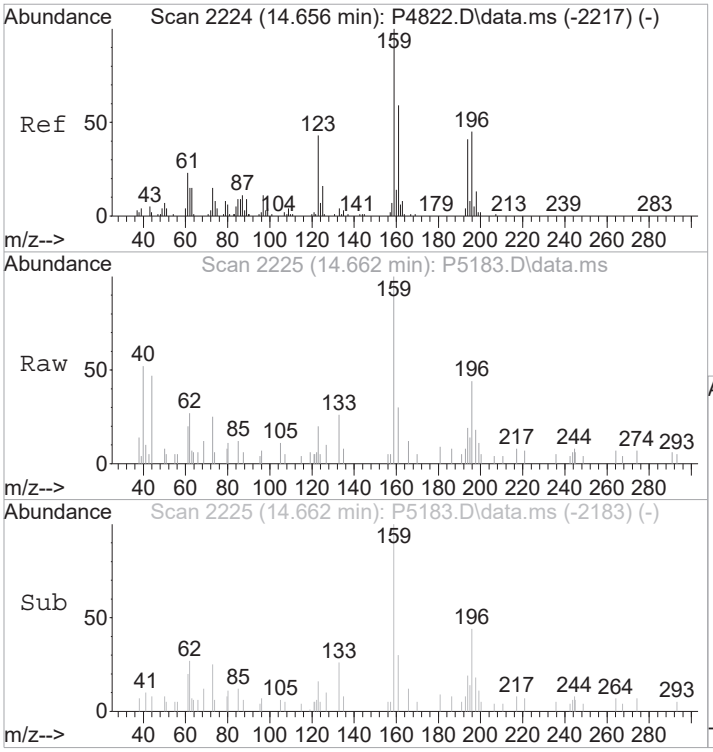


#119
2,4,5-Trichlorotolene
Concen: 0.80 ppb
RT: 14.570 min Scan# 2210
Delta R.T. 0.000 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:159 Resp: 3785

Ion	Ratio	Lower	Upper
159	100		
161	38.3	50.6	76.0#
194	22.0	33.6	50.4#

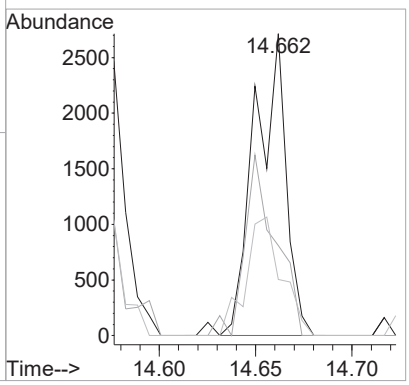




#120
2,3,6-Trichlorotoluene
Concen: 0.70 ppb
RT: 14.662 min Scan# 2225
Delta R.T. 0.006 min
Lab File: P5183.D
Acq: 20 Sep 2016 12:09 pm

Tgt Ion:159 Resp: 3096

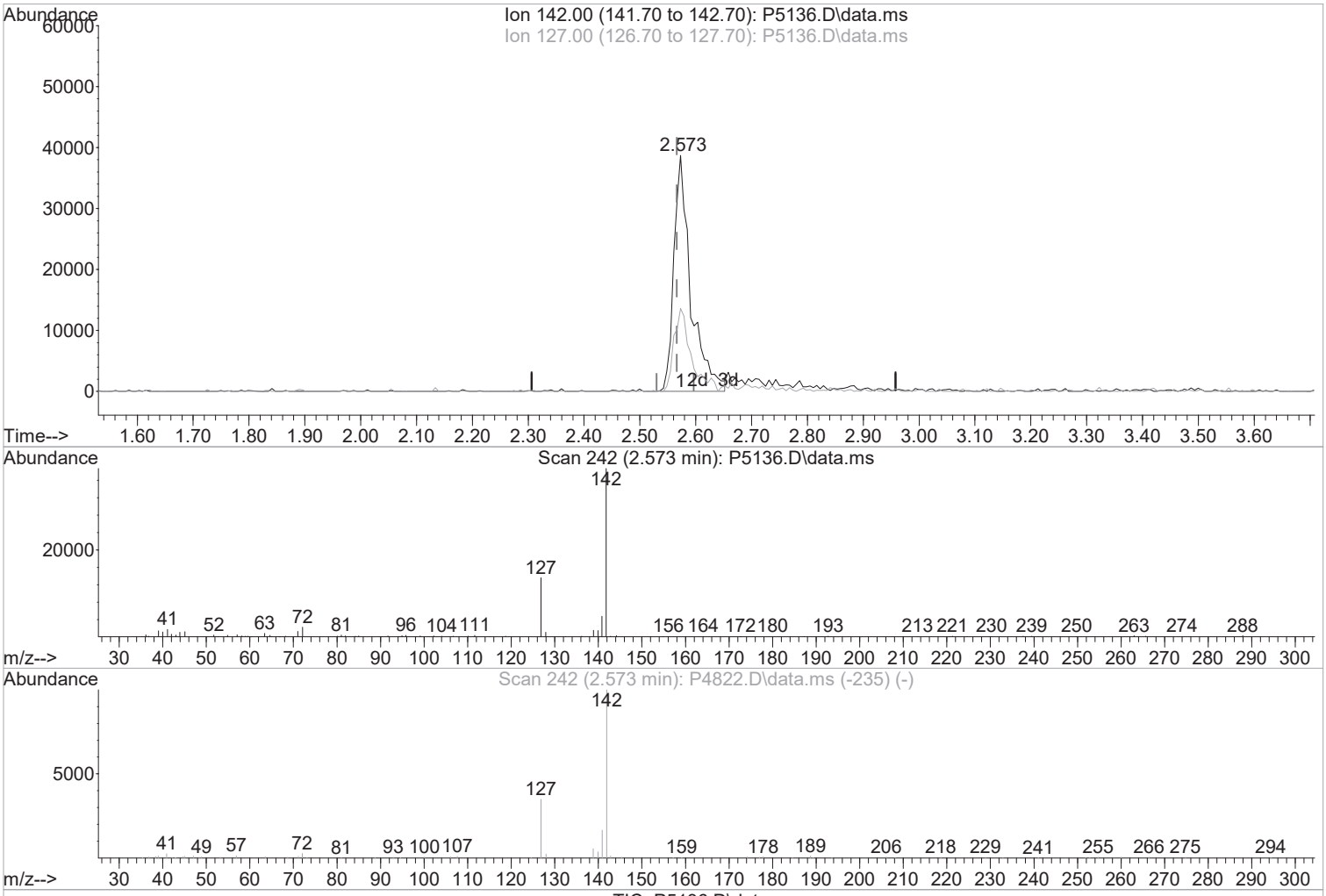
Ion	Ratio	Lower	Upper
159	100		
161	29.8	49.3	73.9#
194	18.6	35.2	52.8#



Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



TIC: P5136.D\data.ms

(17) Iodomethane

2.573min (+0.007) 14.04 ppb m

response 82098

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	35.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

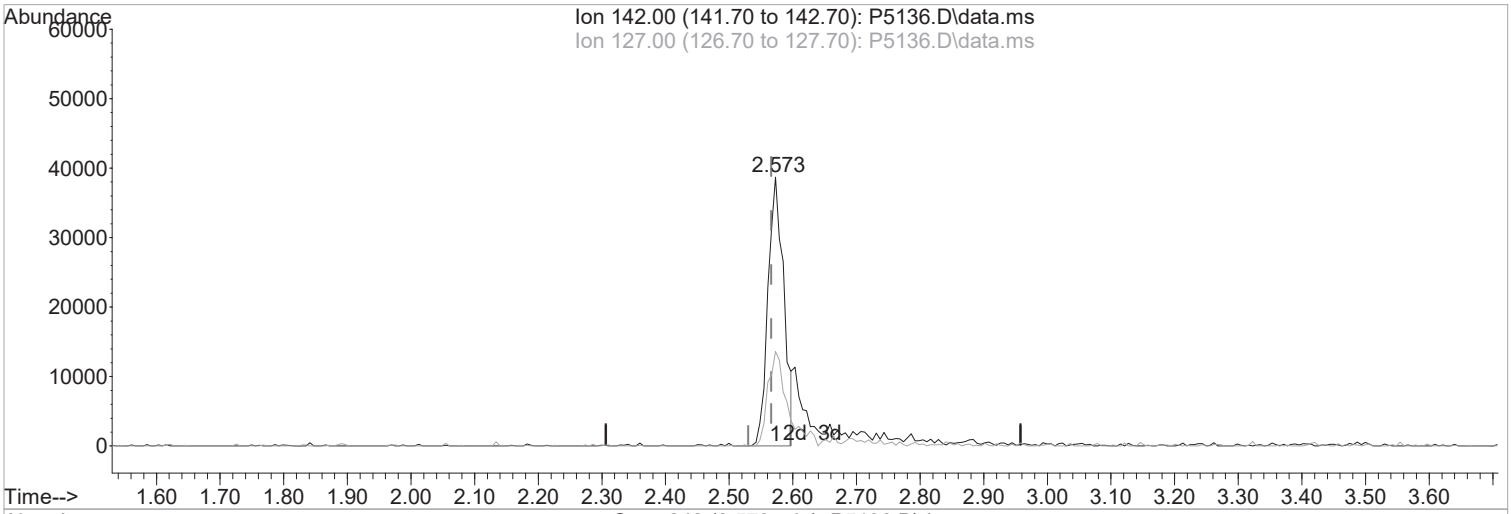
Split Peak

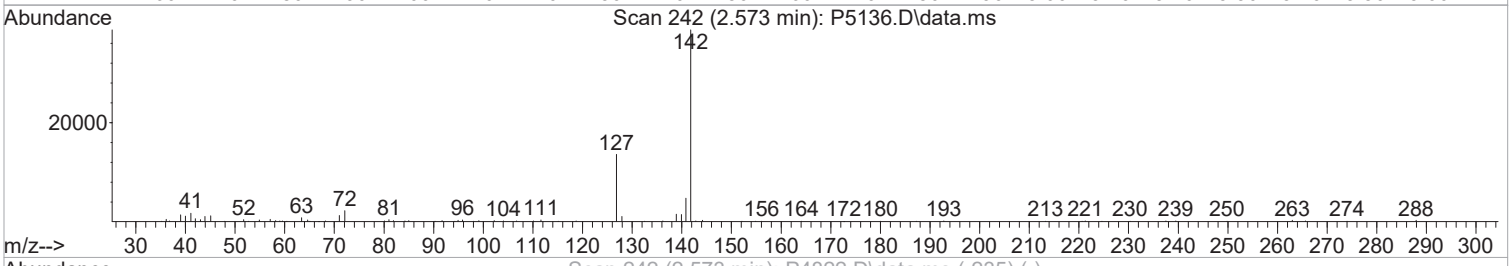
09/19/16

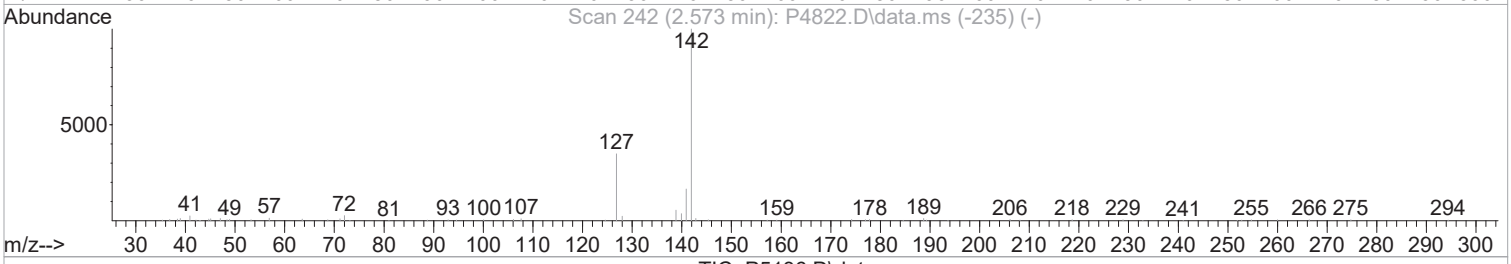
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5136.D\data.ms

(17) Iodomethane

2.573min (+0.007) 11.79 ppb

response 67489

Ion	Exp%	Act%
142.00	100	100
127.00	39.30	35.17
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

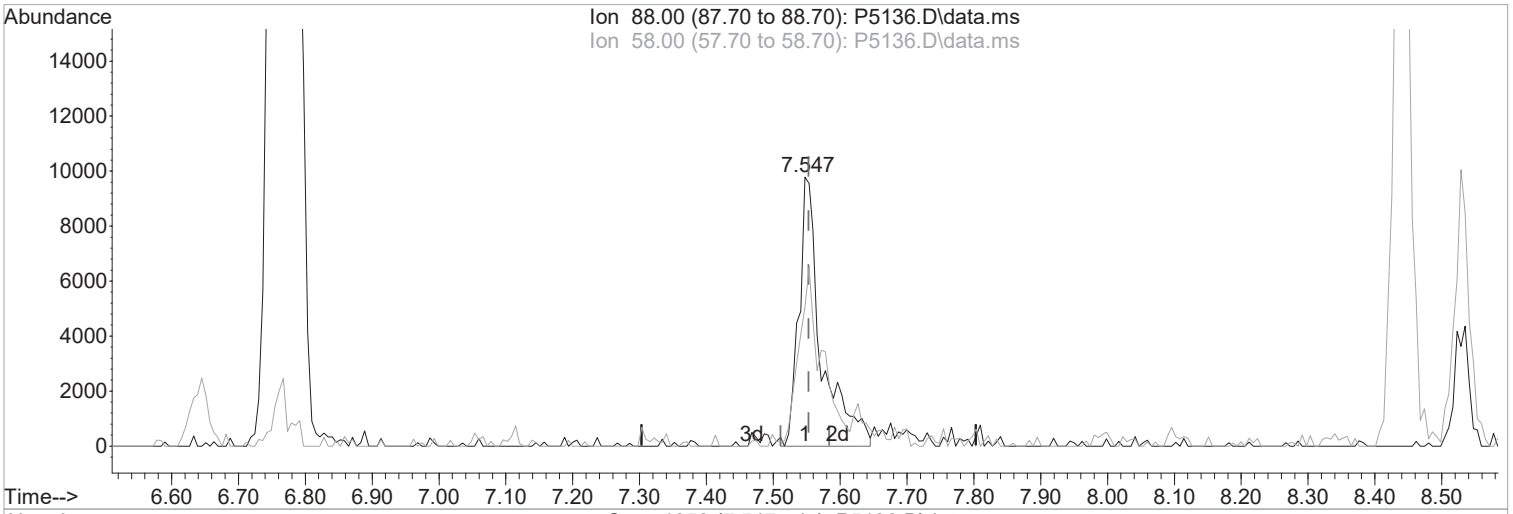
Before

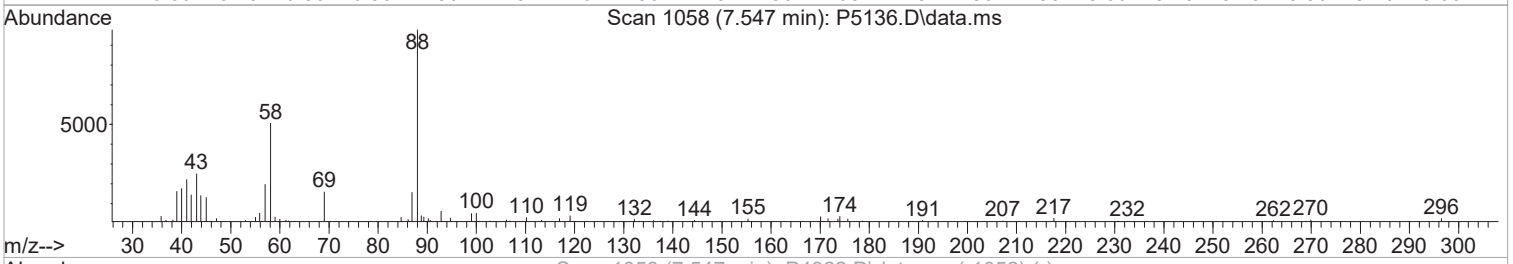
09/19/16

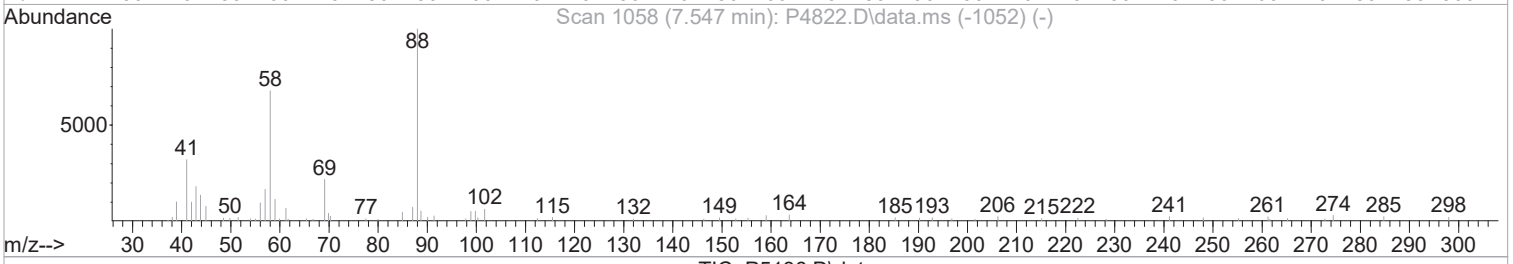
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5136.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 475.10 ppb m

response 22880

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	51.63#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

After

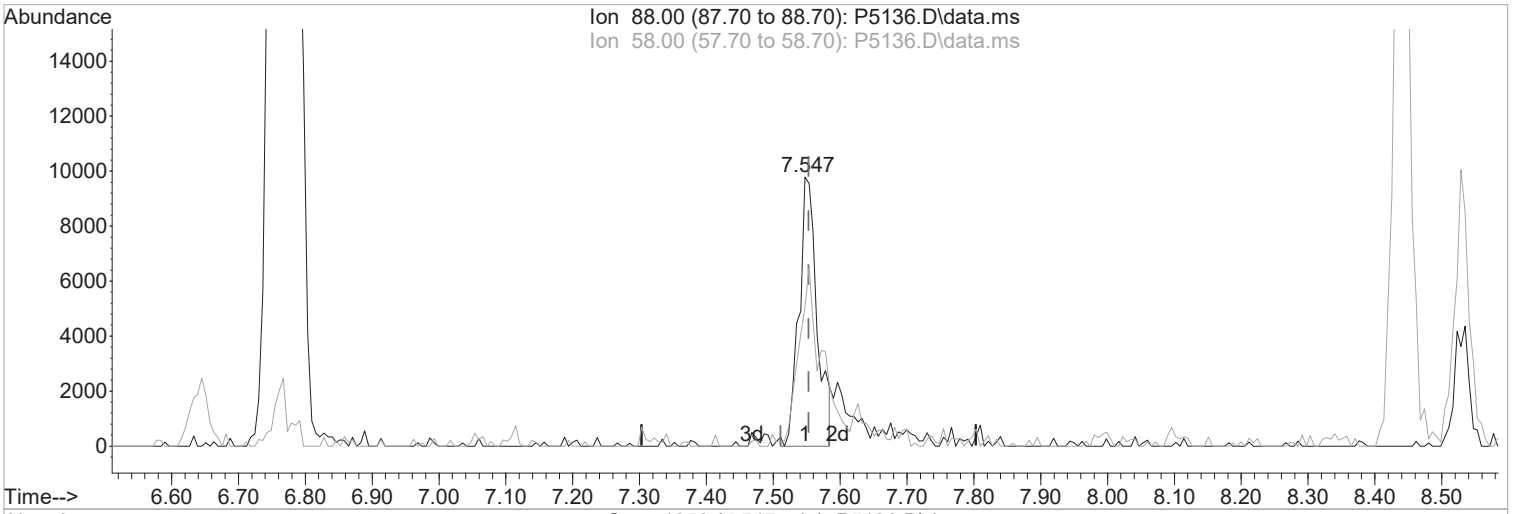
Split Peak

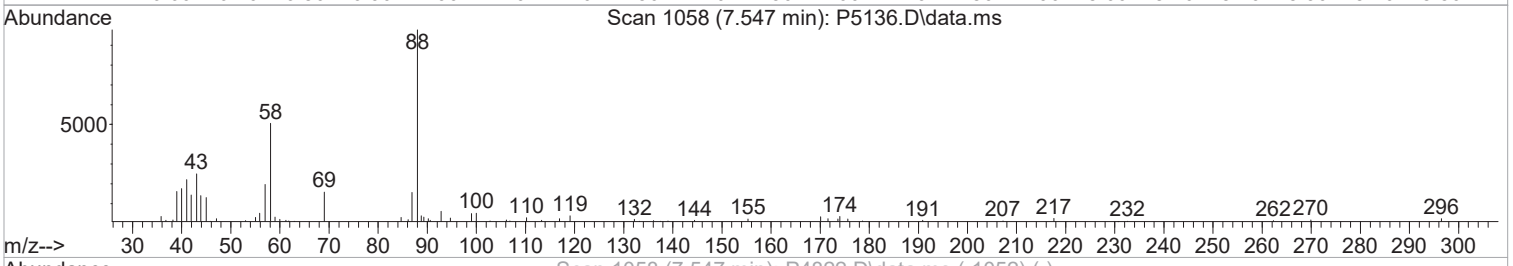
09/19/16

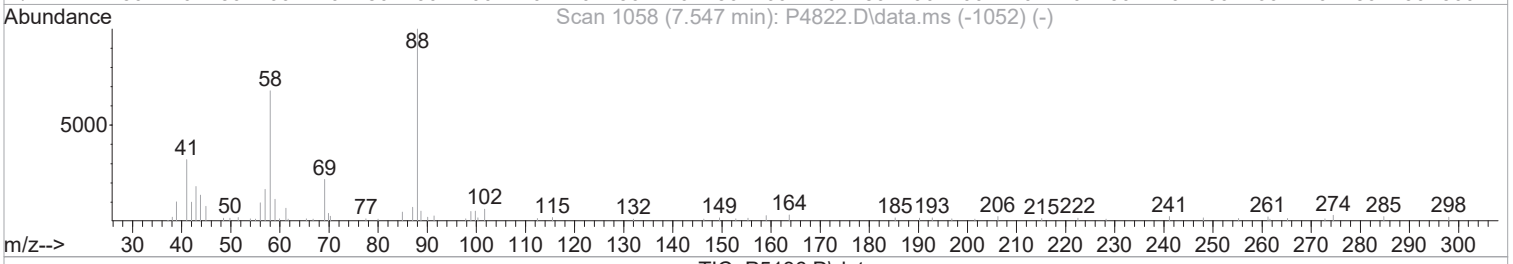
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:06:29 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration







TIC: P5136.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 382.91 ppb

response 18440

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	51.63#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integration:

Before

09/19/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	885159	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1467269	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1386548	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	723272	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	421616	55.51	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.02%				
48) surr1,1,2-dichloroetha...	6.096	65	462243	51.78	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 103.56%				
65) SURR3,Toluene-d8	8.529	98	1862355	57.15	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.30%				
70) SURR2,BFB	11.047	95	679311	53.59	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	150655	14.43	ppb		95
3) Chloromethane	1.347	50	196182	17.34	ppb		98
4) Vinyl Chloride	1.433	62	229746	18.16	ppb		97
5) Bromomethane	1.689	94	76601	14.95	ppb		97
6) Chloroethane	1.768	64	120354	17.71	ppb		100
7) Freon 21	1.927	67	310073	21.21	ppb		98
8) Trichlorofluoromethane	1.975	101	197187	18.08	ppb		99
9) Diethyl Ether	2.231	59	123624	19.06	ppb		91
10) Freon 123a	2.237	67	190495	20.58	ppb		91
11) Freon 123	2.292	83	236679	21.53	ppb		97
12) Acrolein	2.341	56	30288	35.20	ppb		78
13) 1,1-Diclethene	2.433	96	129258	19.39	ppb		88
14) Freon 113	2.439	101	128457	19.69	ppb		87
15) Acetone	2.487	43	33527	19.39	ppb		79
16) 2-Propanol	2.646	45	125188	372.98	ppb		97
17) Iodomethane	2.573	142	82098m	14.04	ppb		
18) Carbon Disulfide	2.634	76	514878	23.06	ppb		98
19) Acetonitrile	2.756	40	29658	109.01	ppb	#	66
20) Allyl Chloride	2.798	76	82658	21.90	ppb	#	80
21) Methyl Acetate	2.829	43	93105	22.25	ppb		95
22) Methylene Chloride	2.926	84	146534	19.63	ppb		95
23) TBA	3.091	59	203478	381.46	ppb		98
24) Acrylonitrile	3.213	53	212480	104.84	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	365317	18.49	ppb		97
26) trans-1,2-Dichloroethene	3.243	96	149042	19.49	ppb		94
28) 1,1-Diclethane	3.786	63	258565	19.43	ppb		92
29) Vinyl Acetate	3.896	86	27210	19.49	ppb	#	70
30) DIPE	3.944	45	577406	21.10	ppb		94
31) 2-Chloro-1,3-Butadiene	3.926	53	251587	16.98	ppb		92
32) ETBE	4.524	59	444157	18.32	ppb		96
33) 2,2-Dichloropropane	4.700	77	182250	15.97	ppb		95
34) cis-1,2-Dichloroethene	4.713	96	166146	20.62	ppb		92
35) 2-Butanone	4.780	43	55897	21.93	ppb		95
36) Propionitrile	4.865	54	81128	110.64	ppb		90
37) Bromochloromethane	5.139	130	84789	20.12	ppb		99
38) Methacrylonitrile	5.158	67	49066	20.59	ppb		91
39) Tetrahydrofuran	5.237	42	37825	22.56	ppb		80
40) Chloroform	5.328	83	238159	18.43	ppb		94
41) 1,1,1-Trichloroethane	5.597	97	189978	17.23	ppb		99

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.401	73	408127	19.31	ppb		97
44)	Cyclohexane	5.682	41	163338	19.98	ppb		82
46)	Carbontetrachloride	5.859	121	49668	17.65	ppb		94
47)	1,1-Dichloropropene	5.871	75	201252	20.08	ppb		94
49)	Benzene	6.170	78	610445	20.66	ppb		100
50)	1,2-Dichloroethane	6.212	62	168949	19.17	ppb		96
51)	Iso-Butyl Alcohol	6.194	43	104681	380.12	ppb		77
52)	n-Heptane	6.639	43	212954	23.69	ppb		94
53)	1-Butanol	7.115	56	158591	1001.42	ppb		96
54)	Trichloroethene	7.078	130	146712	20.29	ppb		94
55)	Methylcyclohexane	7.310	55	224581	23.36	ppb		94
56)	1,2-Diclpropane	7.352	63	169104	21.18	ppb		100
57)	Dibromomethane	7.492	93	79412	21.08	ppb		91
58)	1,4-Dioxane	7.547	88	22880m	475.10	ppb		
59)	Methyl Methacrylate	7.578	69	91018	20.22	ppb		93
60)	Bromodichloromethane	7.712	83	188495	19.39	ppb		99
61)	2-Nitropropane	7.986	41	52455	32.94	ppb		93
62)	2-Chloroethylvinyl Ether	8.108	63	93598	21.97	ppb		94
63)	cis-1,3-Dichloropropene	8.236	75	241319	19.44	ppb		95
64)	4-Methyl-2-pentanone	8.437	43	115519	20.60	ppb		94
66)	Toluene	8.602	91	657349	21.08	ppb		99
67)	trans-1,3-Dichloropropene	8.864	75	201123	19.46	ppb		97
68)	Ethyl Methacrylate	8.998	69	180272	19.22	ppb		89
69)	1,1,2-Trichloroethane	9.047	97	119014	20.80	ppb		98
72)	Tetrachloroethene	9.181	164	112726	21.08	ppb		93
73)	2-Hexanone	9.328	43	82767	20.62	ppb		87
74)	1,3-Dichloropropane	9.212	76	219652	21.16	ppb		96
75)	Dibromochloromethane	9.431	129	134047	19.47	ppb		96
76)	N-Butyl Acetate	9.480	43	198609	18.95	ppb		93
77)	1,2-Dibromoethane	9.529	107	115143	20.46	ppb		99
78)	Chlorobenzene	10.016	112	408625	20.09	ppb		99
79)	3-CBTF	10.029	180	226751	22.50	ppb		98
80)	4-CBTF	10.083	180	207040	23.23	ppb		97
81)	1,1,1,2-Tetrachloroethane	10.096	131	143641	20.19	ppb		92
82)	Ethylbenzene	10.132	106	233706	20.61	ppb		96
83)	(m+p)Xylene	10.242	106	553694	41.49	ppb		88
84)	o-Xylene	10.596	106	264329	19.89	ppb		88
85)	Styrene	10.608	104	466887	21.04	ppb		98
87)	Bromoform	10.760	173	78910	22.88	ppb		99
88)	2-CBTF	10.833	180	216430	22.72	ppb		95
89)	Isopropylbenzene	10.925	105	690178	21.80	ppb		99
90)	Cyclohexanone	10.986	55	230356	365.14	ppb		93
91)	trans-1,4-Dichloro-2-B...	11.230	53	37109	15.05	ppb		90
92)	1,1,2,2-Tetrachloroethane	11.181	83	154882	20.89	ppb		93
93)	Bromobenzene	11.169	156	170066	21.15	ppb		96
94)	1,2,3-Trichloropropane	11.211	110	43725	20.38	ppb	#	74
95)	n-Propylbenzene	11.278	91	865080	23.55	ppb		96
96)	2-Chlorotoluene	11.339	91	490017	20.66	ppb		99
97)	3-Chlorotoluene	11.394	91	558173	23.09	ppb		93
98)	4-Chlorotoluene	11.431	91	593302	21.46	ppb		98
99)	1,3,5-Trimethylbenzene	11.431	105	589602	21.53	ppb		97
100)	tert-Butylbenzene	11.699	119	484617	22.29	ppb		98
101)	1,2,4-Trimethylbenzene	11.736	105	608256	21.64	ppb		97
102)	3,4-DCBTF	11.797	214	172822	25.52	ppb		98
103)	sec-Butylbenzene	11.882	105	757544	24.42	ppb		96
104)	p-Isopropyltoluene	11.998	119	623214	23.28	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	337751	22.14	ppb	97
106) 1,4-Dclbenz	12.034	146	340318	21.44	ppb	100
107) 2,4-DCBTF	12.089	214	160916	25.05	ppb	97
108) 2,5-DCBTF	12.126	214	175948	25.82	ppb	97
109) n-Butylbenzene	12.333	91	624774	25.81	ppb	99
110) 1,2-Dclbenz	12.333	146	324299	22.46	ppb	94
111) 1,2-Dibromo-3-chloropr...	12.955	157	27646	20.30	ppb	96
112) Trielution Dichlorotol...	13.071	125	918580	76.47	ppb	97
113) 1,3,5 Trichlorobenzene	13.126	180	262378	27.25	ppb	97
114) Coelution Dichlorotoluene	13.400	125	664664	52.20	ppb	99
115) 1,2,4-Tcbenzene	13.607	180	238128	27.79	ppb	94
116) Hexachlorobt	13.747	225	94309	26.76	ppb	90
117) Naphthalen	13.796	128	478257	26.05	ppb	97
118) 1,2,3-Tclbenzene	13.985	180	207682	28.61	ppb	94
119) 2,4,5-Trichlorotolene	14.570	159	167241	32.33	ppb	99
120) 2,3,6-Trichlorotoluene	14.656	159	146604	30.47	ppb	90

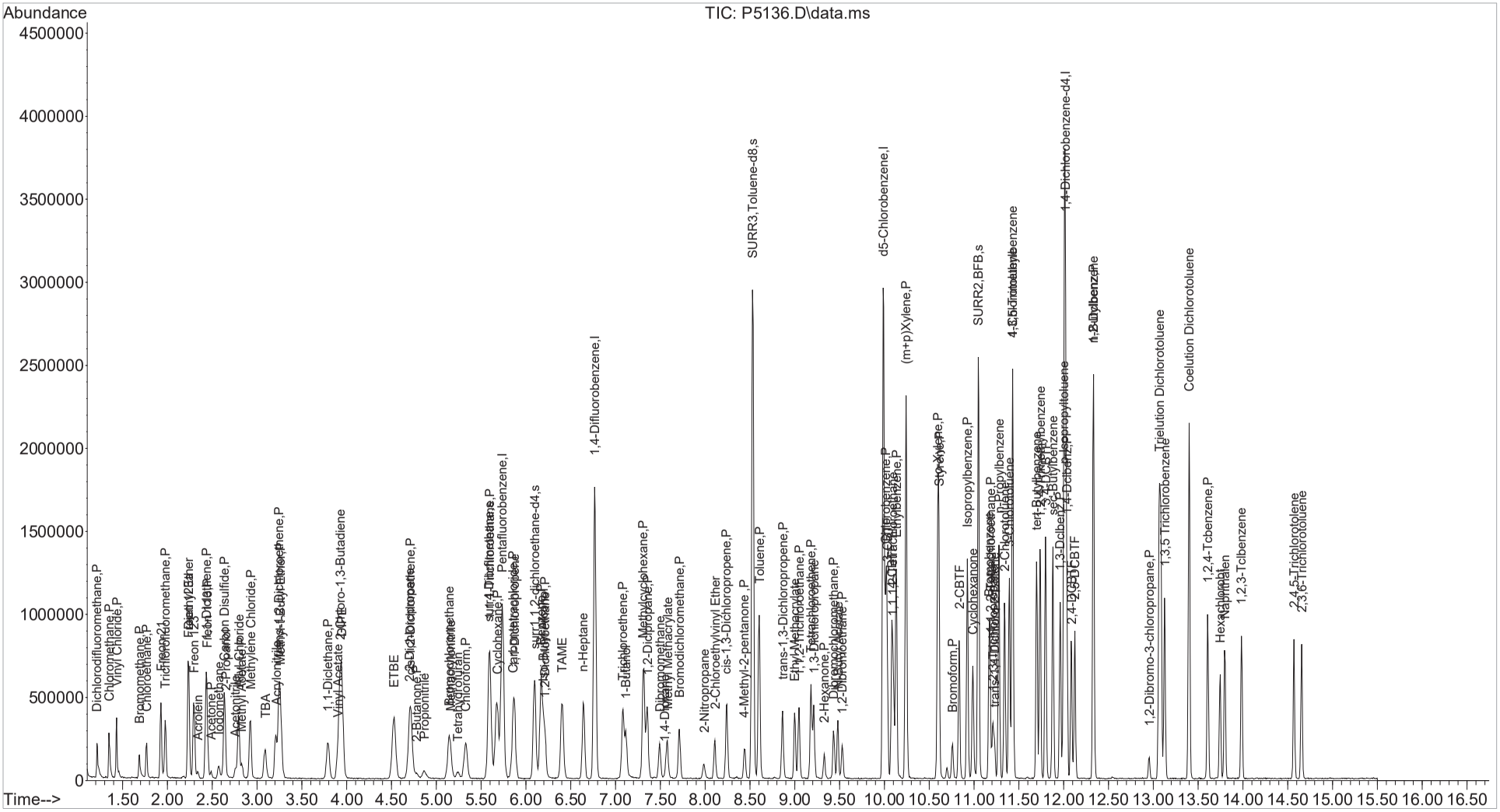
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/19/16
2nd 09/20/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5136.D
Acq On : 19 Sep 2016 11:49 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 12:07:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	843034	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1399587	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1313472	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	692951	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.597	113	412340	56.91	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 113.82%				
48) surr1,1,2-dichloroetha...	6.097	65	436287	51.23	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 102.46%				
65) SURR3,Toluene-d8	8.529	98	1784047	57.39	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.78%				
70) SURR2,BFB	11.047	95	654057	54.09	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	212826	21.40	ppb		98
3) Chloromethane	1.347	50	214647	19.92	ppb		98
4) Vinyl Chloride	1.433	62	266328	22.11	ppb		95
5) Bromomethane	1.689	94	73912	15.15	ppb		96
6) Chloroethane	1.768	64	125425	19.38	ppb		92
7) Freon 21	1.927	67	271891	19.53	ppb		96
8) Trichlorofluoromethane	1.975	101	207441	19.98	ppb		98
9) Diethyl Ether	2.231	59	131270	21.25	ppb		95
10) Freon 123a	2.237	67	173252	19.65	ppb		89
11) Freon 123	2.298	83	206052	19.68	ppb		96
12) Acrolein	2.341	56	24496	29.89	ppb		89
13) 1,1-Diclethene	2.433	96	137682	21.68	ppb		97
14) Freon 113	2.439	101	135605	21.82	ppb		96
15) Acetone	2.487	43	36039	21.89	ppb		93
16) 2-Propanol	2.646	45	123848	387.43	ppb		97
17) Iodomethane	2.573	142	61215	11.29	ppb		92
18) Carbon Disulfide	2.634	76	421718	19.83	ppb		100
19) Acetonitrile	2.762	40	37392	145.22	ppb	#	86
20) Allyl Chloride	2.798	76	87073	24.22	ppb	#	83
21) Methyl Acetate	2.829	43	84426	21.18	ppb		96
22) Methylene Chloride	2.926	84	157673	22.18	ppb		97
23) TBA	3.085	59	193238	380.36	ppb		89
24) Acrylonitrile	3.207	53	228046	118.14	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	376124	19.99	ppb		99
26) trans-1,2-Dichloroethene	3.243	96	160504	22.04	ppb		92
28) 1,1-Diclethane	3.792	63	278015	21.94	ppb		98
29) Vinyl Acetate	3.896	86	24541	18.46	ppb	#	81
30) DIPE	3.945	45	527104	20.23	ppb		96
31) 2-Chloro-1,3-Butadiene	3.926	53	206985	14.67	ppb		96
32) ETBE	4.530	59	408592	17.70	ppb		95
33) 2,2-Dichloropropane	4.700	77	185893	17.10	ppb		98
34) cis-1,2-Dichloroethene	4.713	96	173006	22.55	ppb		93
35) 2-Butanone	4.780	43	51754	21.32	ppb		89
36) Propionitrile	4.865	54	78020	111.72	ppb		91
37) Bromochloromethane	5.145	130	87494	21.80	ppb		98
38) Methacrylonitrile	5.158	67	49810	21.95	ppb		98
39) Tetrahydrofuran	5.237	42	35802	22.42	ppb		82
40) Chloroform	5.334	83	244516	19.87	ppb		95
41) 1,1,1-Trichloroethane	5.597	97	201882	19.23	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) TAME	6.407	73	366840	18.22	ppb		94
44) Cyclohexane	5.676	41	147300	18.89	ppb		91
46) Carbontetrachloride	5.865	121	52440	19.53	ppb		85
47) 1,1-Dichloropropene	5.871	75	210526	22.02	ppb		93
49) Benzene	6.176	78	634590	22.52	ppb		96
50) 1,2-Dichloroethane	6.212	62	170975	20.33	ppb		97
51) Iso-Butyl Alcohol	6.206	43	107209	408.12	ppb		83
52) n-Heptane	6.645	43	226745	26.45	ppb		96
53) 1-Butanol	7.115	56	153119	1013.62	ppb		98
54) Trichloroethene	7.084	130	156368	22.67	ppb		92
55) Methylcyclohexane	7.310	55	200114	21.82	ppb		93
56) 1,2-Diclpropane	7.352	63	169281	22.22	ppb		97
57) Dibromomethane	7.486	93	78756	21.92	ppb		91
58) 1,4-Dioxane	7.554	88	25143	547.34	ppb		99
59) Methyl Methacrylate	7.578	69	95135	22.16	ppb		86
60) Bromodichloromethane	7.712	83	192364	20.74	ppb		100
61) 2-Nitropropane	7.986	41	50441	33.21	ppb		100
62) 2-Chloroethylvinyl Ether	8.108	63	73536	18.10	ppb		98
63) cis-1,3-Dichloropropene	8.242	75	253782	21.44	ppb		99
64) 4-Methyl-2-pentanone	8.438	43	106905	19.98	ppb		95
66) Toluene	8.602	91	682388	22.94	ppb		99
67) trans-1,3-Dichloropropene	8.864	75	199374	20.22	ppb		98
68) Ethyl Methacrylate	8.998	69	185008	20.68	ppb		99
69) 1,1,2-Trichloroethane	9.047	97	116138	21.28	ppb		98
72) Tetrachloroethene	9.181	164	120351	23.76	ppb		85
73) 2-Hexanone	9.334	43	81561	21.45	ppb		96
74) 1,3-Dichloropropane	9.212	76	225712	22.95	ppb		98
75) Dibromochloromethane	9.431	129	128027	19.63	ppb		95
76) N-Butyl Acetate	9.480	43	191040	19.24	ppb		96
77) 1,2-Dibromoethane	9.529	107	116803	21.91	ppb		94
78) Chlorobenzene	10.016	112	414249	21.50	ppb		98
79) 3-CBTF	10.029	180	200544	21.01	ppb		91
80) 4-CBTF	10.084	180	174506	20.67	ppb		96
81) 1,1,1,2-Tetrachloroethane	10.102	131	137210	20.36	ppb		94
82) Ethylbenzene	10.132	106	233868	21.77	ppb	#	87
83) (m+p)Xylene	10.242	106	577345	45.67	ppb		90
84) o-Xylene	10.596	106	283123	22.49	ppb		89
85) Styrene	10.608	104	498953	23.74	ppb		97
87) Bromoform	10.760	173	81687	24.73	ppb		96
88) 2-CBTF	10.833	180	187913	20.59	ppb		97
89) Isopropylbenzene	10.925	105	724203	23.87	ppb		96
90) Cyclohexanone	10.986	55	348565	576.70	ppb		93
91) trans-1,4-Dichloro-2-B...	11.230	53	34371	14.55	ppb		95
92) 1,1,2,2-Tetrachloroethane	11.181	83	150769	21.23	ppb		96
93) Bromobenzene	11.175	156	173949	22.58	ppb	#	89
94) 1,2,3-Trichloropropane	11.211	110	42516	20.68	ppb	#	83
95) n-Propylbenzene	11.278	91	910143	25.86	ppb		95
96) 2-Chlorotoluene	11.339	91	507224	22.33	ppb		100
97) 3-Chlorotoluene	11.394	91	498697	21.53	ppb		96
98) 4-Chlorotoluene	11.431	91	610742	23.06	ppb		98
99) 1,3,5-Trimethylbenzene	11.431	105	615359	23.45	ppb		97
100) tert-Butylbenzene	11.699	119	500459	24.02	ppb		97
101) 1,2,4-Trimethylbenzene	11.742	105	618366	22.96	ppb		99
102) 3,4-DCBTF	11.797	214	150250	23.15	ppb		96
103) sec-Butylbenzene	11.882	105	773616	26.03	ppb		96
104) p-Isopropyltoluene	12.004	119	638481	24.89	ppb		98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

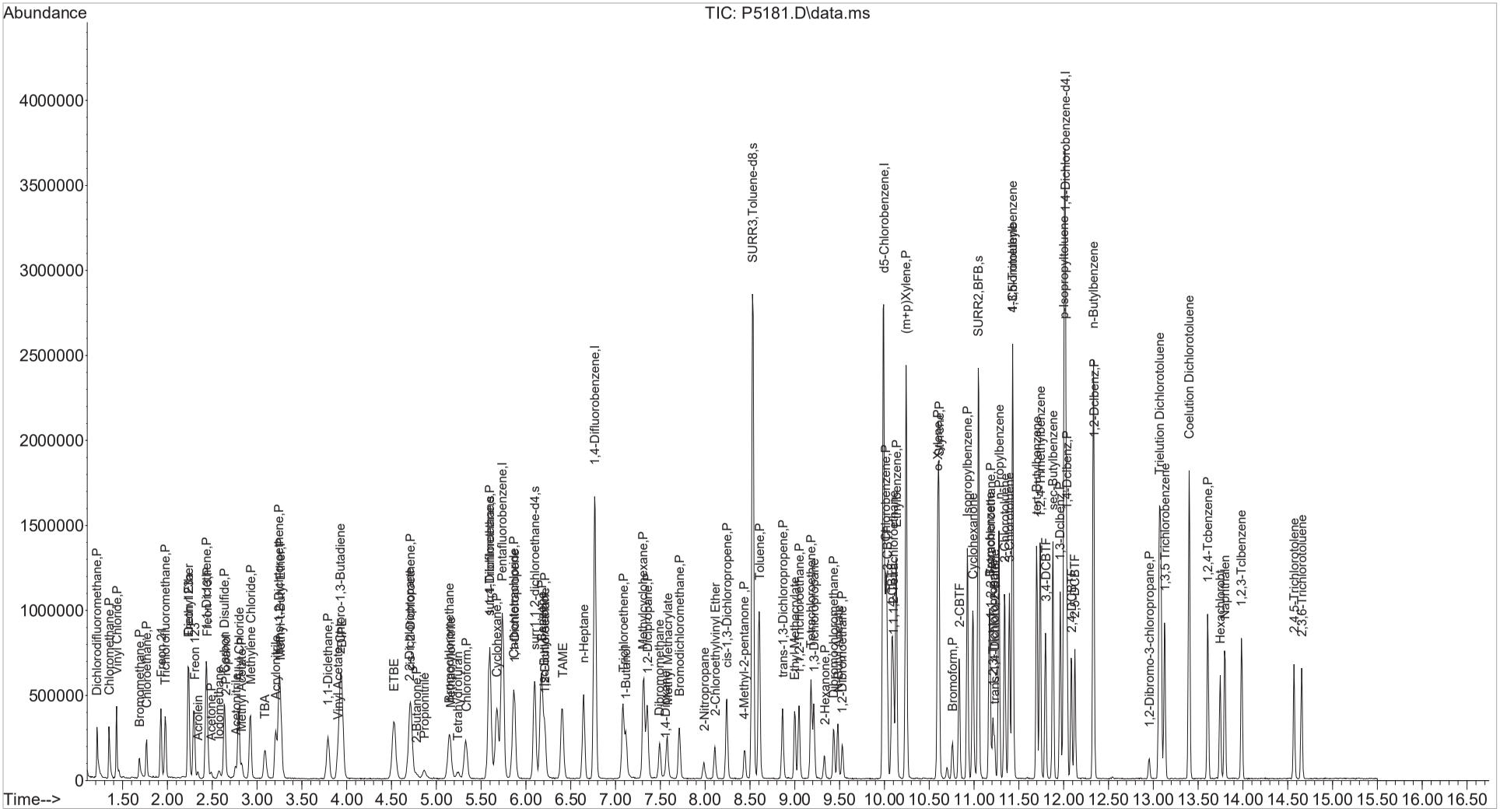
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	348012	23.81	ppb	95
106) 1,4-Dclbenz	12.034	146	346685	22.80	ppb	98
107) 2,4-DCBTF	12.089	214	138546	22.51	ppb	97
108) 2,5-DCBTF	12.126	214	152161	23.31	ppb	100
109) n-Butylbenzene	12.333	91	624311	26.92	ppb	99
110) 1,2-Dclbenz	12.339	146	328302	23.73	ppb	91
111) 1,2-Dibromo-3-chloropr...	12.955	157	26756	20.51	ppb	94
112) Trielution Dichlorotol...	13.071	125	806822	70.10	ppb	97
113) 1,3,5 Trichlorobenzene	13.126	180	220757	23.93	ppb	99
114) Coelution Dichlorotoluene	13.400	125	576912	47.29	ppb	98
115) 1,2,4-Tcbenzene	13.607	180	233417	28.43	ppb	98
116) Hexachlorobt	13.747	225	86198	25.53	ppb	88
117) Naphthalen	13.796	128	466245	26.50	ppb	99
118) 1,2,3-Tclbenzene	13.985	180	197235	28.36	ppb	98
119) 2,4,5-Trichlorotolene	14.570	159	137516	27.74	ppb	96
120) 2,3,6-Trichlorotoluene	14.656	159	124421	26.99	ppb	98

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5181.D
Acq On : 20 Sep 2016 11:08 am
Operator : K.Ruest
Sample : LCS Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 20 11:31:33 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	108	0.00
2	P	Dichlorodifluoromethane	0.5899	0.6305	-6.9	107	0.00
3	P	Chloromethane	0.6392	0.6153	3.7	101	0.00
4	P	Vinyl Chloride	0.7146	0.6566	8.1	94	0.00
5	P	Bromomethane	0.2894	0.2603	10.1	98	0.01
6	P	Chloroethane	0.3838	0.3409	11.2	94	0.00
7		Freon 21	0.8258	0.8206	0.6	104	0.00
8	P	Trichlorofluoromethane	0.6159	0.5708	7.3	100	0.00
9		Diethyl Ether	0.3664	0.3358	8.4	100	0.00
10		Freon 123a	0.5228	0.5251	-0.4	105	0.00
11		Freon 123	0.6210	0.6195	0.2	110	0.00
12		Acrolein	0.0486	0.0390	19.8	82	0.00
13	P	1,1-Diclethene	0.3766	0.3726	1.1	105	0.00
14	P	Freon 113	0.3686	0.3830	-3.9	111	0.00
15	P	Acetone	0.0977	0.0945	3.3	111	0.00
16		2-Propanol	0.0190	0.0179	5.8	102	0.00
17		Iodomethane	0.3499	0.2133	NT 40.0 ~~39.0#~~	54	0.00
18	P	Carbon Disulfide	1.2612	1.3255	-5.1	111	0.00
19		Acetonitrile	0.0159	0.0152	-0.7 ~~4.4~~	132	0.00
20		Allyl Chloride	0.2132	0.2539	-19.1	124	0.00
21	P	Methyl Acetate	0.2364	0.2402	-1.6	107	0.00
22	P	Methylene Chloride	0.4216	0.4154	1.5	107	0.00
23		TBA	0.0301	0.0252	16.3	87	0.00
24		Acrylonitrile	0.1145	0.1166	-1.8	111	0.00
25	P	Methyl-t-Butyl Ether	1.1162	0.9821	12.0	96	0.00
26	P	trans-1,2-Dichloroethene	0.4319	0.4195	2.9	106	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-0.04
28	P	1,1-Diclethane	0.7516	0.7057	6.1	102	0.00
29		Vinyl Acetate	0.0789	0.0736	6.7	95	0.00
30		DIPE	1.5456	1.6080	-4.0	114	0.00
31		2-Chloro-1,3-Butadiene	0.8371	0.6896	17.6	90	0.00
32		ETBE	1.3692	1.2322	10.0	96	0.00
33		2,2-Dichloropropane	0.6448	0.5239	18.8	88	0.00
34	P	cis-1,2-Dichloroethene	0.4551	0.4631	-1.8	109	0.00
35	P	2-Butanone	0.1440	0.1432	0.6	109	0.01
36		Propionitrile	0.0414	0.0399	3.6	106	0.00
37		Bromochloromethane	0.2381	0.2342	1.6	106	0.00
38		Methacrylonitrile	0.1346	0.1296	3.7	103	0.00
39		Tetrahydrofuran	0.0947	0.0909	4.0	100	0.01
40	P	Chloroform	0.7300	0.6780	7.1	102	0.00
41	P	1,1,1-Trichloroethane	0.6227	0.5418	13.0	97	0.00
42		TAME	1.1940	1.1101	7.0	97	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	108	0.00
44	P	Cyclohexane	0.2786	0.2954	-6.0	113	0.00
45	s	surr4,Dibrflmethane	0.2588	0.2894	-11.8	109	0.00
46	P	Carbontetrachloride	0.0959	0.0860	10.3	92	0.00
47		1,1-Dichloropropene	0.3415	0.3554	-4.1	107	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3042	0.3038	0.1	96	0.00
49	P	Benzene	1.0067	1.0297	-2.3	107	0.00
50	P	1,2-Dichloroethane	0.3004	0.2660	11.5	93	0.00
51		Iso-Butyl Alcohol	0.0094	0.0085	9.6	95	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
52		n-Heptane	0.3063	0.3694	NT	-20.6#	128	0.00
53		1-Butanol	0.0054	0.0052		3.7	98	0.00
54	P	Trichloroethene	0.2464	0.2358		4.3	100	0.00
55	P	Methylcyclohexane	0.3276	0.3867		-18.0	120	0.00
56	P	1,2-Diclpropane	0.2721	0.2843		-4.5	112	0.00
57		Dibromomethane	0.1284	0.1248		2.8	106	0.00
58		1,4-Dioxane	0.0016	0.0019		-18.7	118	0.00
59		Methyl Methacrylate	0.1534	0.1410		8.1	98	0.00
60	P	Bromodichloromethane	0.3313	0.3125		5.7	101	0.00
61		2-Nitropropane	0.0543	0.0399	NT	26.5#	78	0.00
62		2-Chloroethylvinyl Ether	0.1452	0.1406		3.2	100	0.00
63	P	cis-1,3-Dichloropropene	0.4229	0.4186		1.0	103	0.00
64	P	4-Methyl-2-pentanone	0.1911	0.1886		1.3	103	0.00
65	s	SURR3,Toluene-d8	1.1105	1.2866		-15.9	109	0.00
66	P	Toluene	1.0626	1.0997		-3.5	106	0.00
67	P	trans-1,3-Dichloropropene	0.3522	0.3237		8.1	94	0.00
68		Ethyl Methacrylate	0.3196	0.2882		9.8	97	0.00
69	P	1,1,2-Trichloroethane	0.1950	0.1900		2.6	107	0.00
70	s	SURR2,BFB	0.4320	0.4664		-8.0	103	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000		0.0	109	0.00
72	P	Tetrachloroethene	0.1928	0.2042		-5.9	110	0.00
73	P	2-Hexanone	0.1447	0.1473		-1.8	103	0.00
74		1,3-Dichloropropane	0.3743	0.3890		-3.9	109	0.00
75	P	Dibromochloromethane	0.2483	0.2226		10.4	96	0.00
76		N-Butyl Acetate	0.3780	0.3592		5.0	95	0.00
77	P	1,2-Dibromoethane	0.2029	0.1921		5.3	100	0.00
78	P	Chlorobenzene	0.7333	0.7243		1.2	104	0.00
79		3-CBTF	0.3634	0.4003		-10.2	124	0.00
80		4-CBTF	0.3214	0.3666		-14.1	127	0.00
81		1,1,1,2-Tetrachloroethane	0.2565	0.2475		3.5	102	0.00
82	P	Ethylbenzene	0.4090	0.4119		-0.7	103	0.00
83	P	(m+p)Xylene	0.4812	0.4961		-3.1	105	0.00
84	P	o-Xylene	0.4791	0.4873		-1.7	106	0.00
85	P	Styrene	0.8001	0.8409		-5.1	106	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000		0.0	113	0.00
87	P	Bromoform	0.2384	0.2374		0.4	109	0.00
88		2-CBTF	0.6584	0.7234		-9.9	126	0.00
89	P	Isopropylbenzene	2.1888	2.2819		-4.3	109	0.00
90		Cyclohexanone	0.0436	0.0386		11.5	102	0.00
91		trans-1,4-Dichloro-2-Butene	0.1705	0.1205		29.3#	85	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5124	0.4745		7.4	104	0.00
93		Bromobenzene	0.5559	0.5481		1.4	107	0.00
94		1,2,3-Trichloropropane	0.1483	0.1328		10.5	105	0.00
95		n-Propylbenzene	2.5395	2.8210		-11.1	115	0.00
96		2-Chlorotoluene	1.6393	1.6029		2.2	105	0.00
97		3-Chlorotoluene	1.6711	1.7753		-6.2	117	0.00
98		4-Chlorotoluene	1.9112	1.9295		-1.0	107	0.00
99		1,3,5-Trimethylbenzene	1.8936	1.9134		-1.0	108	0.00
100		tert-Butylbenzene	1.5033	1.6037		-6.7	113	0.00
101		1,2,4-Trimethylbenzene	1.9435	1.9796		-1.9	108	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
102		3,4-DCBTF	0.4682	0.5778	NT	-23.4#	142	0.00
103		sec-Butylbenzene	2.1443	2.4276		-13.2	120	0.00
104		p-Isopropyltoluene	1.8509	1.9949		-7.8	112	0.00
105	P	1,3-Dclbenz	1.0547	1.1046		-4.7	115	0.00
106	P	1,4-Dclbenz	1.0971	1.1273		-2.8	114	0.00
107		2,4-DCBTF	0.4441	0.5369	NT	-20.9#	144	0.00
108		2,5-DCBTF	0.4710	0.5734	NT	-21.7#	144	0.00
109		n-Butylbenzene	1.6732	2.0066		-19.9	125	0.00
110	P	1,2-Dclbenz	0.9983	1.0408		-4.3	114	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0941	0.0819		13.0	96	0.00
112		Trielution Dichlorotoluene	0.8304	0.9652		-16.2	127	0.00
113		1,3,5 Trichlorobenzene	0.6655	0.8350		-25.5#	141	0.00
114		Coelution Dichlorotoluene	0.8802	1.0390		-18.0	125	0.00
115	P	1,2,4-Tcbenzene	0.5924	0.7105		-19.9	127	0.00
116		Hexachlorobt	0.2436	0.2881		-18.3	133	0.00
117		Naphthalen	1.2693	1.3793		-8.7	111	0.00
118		1,2,3-Tclbenzene	0.5019	0.6112		-21.8#	127	0.00
119		2,4,5-Trichlorotolene	0.3576	0.4550	NT	-27.2#	139	0.00
120		2,3,6-Trichlorotoluene	0.3326	0.4131	NT	-24.2#	138	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	895426	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1474756	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1378260	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	743732	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	426855	55.91	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.82%				
48) surr1,1,2-dichloroetha...	6.096	65	448062	49.93	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.86%				
65) SURR3,Toluene-d8	8.529	98	1897482	57.93	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.86%				
70) SURR2,BFB	11.047	95	687783	53.98	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.96%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	564608	53.45	ppb		99
3) Chloromethane	1.347	50	550932	48.13	ppb		99
4) Vinyl Chloride	1.433	62	587933	45.94	ppb		98
5) Bromomethane	1.689	94	233103	44.98	ppb		97
6) Chloroethane	1.768	64	305224	44.41	ppb		98
7) Freon 21	1.926	67	734808	49.69	ppb		98
8) Trichlorofluoromethane	1.975	101	511066	46.33	ppb		96
9) Diethyl Ether	2.231	59	300722	45.83	ppb		97
10) Freon 123a	2.237	67	470180	50.22	ppb		88
11) Freon 123	2.292	83	554682	49.87	ppb		98
12) Acrolein	2.341	56	174712	200.73	ppb		93
13) 1,1-Diclethene	2.432	96	333623	49.46	ppb		92
14) Freon 113	2.439	101	342975	51.96	ppb		97
15) Acetone	2.487	43	84652	48.41	ppb		98
16) 2-Propanol	2.646	45	320404	943.66	ppb		100
17) Iodomethane	2.573	142	190963	29.99	ppb		99
18) Carbon Disulfide	2.634	76	1186847	52.55	ppb		99
19) Acetonitrile	2.762	40	68275	251.66	ppb	#	81
20) Allyl Chloride	2.798	76	227378	59.56	ppb	#	89
21) Methyl Acetate	2.829	43	215089	50.81	ppb		100
22) Methylene Chloride	2.926	84	371983	49.26	ppb		93
23) TBA	3.091	59	451640	836.98	ppb		86
24) Acrylonitrile	3.207	53	521976	254.59	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	879419	43.99	ppb		100
26) trans-1,2-Dichloroethene	3.243	96	375635	48.57	ppb		99
28) 1,1-Diclethane	3.792	63	631946	46.95	ppb		98
29) Vinyl Acetate	3.908	86	65913	46.68	ppb	#	85
30) DIPE	3.944	45	1439847	52.02	ppb		94
31) 2-Chloro-1,3-Butadiene	3.926	53	617468	41.19	ppb		95
32) ETBE	4.530	59	1103301	45.00	ppb		96
33) 2,2-Dichloropropane	4.706	77	469152	40.63	ppb		96
34) cis-1,2-Dichloroethene	4.719	96	414690	50.88	ppb		92
35) 2-Butanone	4.780	43	128197	49.71	ppb		89
36) Propionitrile	4.865	54	178574	240.74	ppb		97
37) Bromochloromethane	5.145	130	209720	49.19	ppb		98
38) Methacrylonitrile	5.157	67	116011	48.12	ppb		90
39) Tetrahydrofuran	5.243	42	81426	48.00	ppb		86
40) Chloroform	5.328	83	607129	46.44	ppb		94
41) 1,1,1-Trichloroethane	5.596	97	485175	43.51	ppb		97

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.401	73	994042	46.49	ppb		93
44)	Cyclohexane	5.676	41	435619	53.00	ppb		96
46)	Carbontetrachloride	5.859	121	126832	44.84	ppb		100
47)	1,1-Dichloropropene	5.871	75	524195	52.04	ppb		97
49)	Benzene	6.176	78	1518580	51.15	ppb		97
50)	1,2-Dichloroethane	6.212	62	392302	44.28	ppb		98
51)	Iso-Butyl Alcohol	6.200	43	249505	901.40	ppb		91
52)	n-Heptane	6.645	43	544731	60.30	ppb		99
53)	1-Butanol	7.114	56	382478	2402.89	ppb		97
54)	Trichloroethene	7.084	130	347821	47.85	ppb		94
55)	Methylcyclohexane	7.310	55	570219	59.02	ppb		99
56)	1,2-Diclpropane	7.352	63	419312	52.24	ppb		97
57)	Dibromomethane	7.492	93	184066	48.61	ppb		96
58)	1,4-Dioxane	7.547	88	55199	1140.39	ppb		94
59)	Methyl Methacrylate	7.578	69	207978	45.98	ppb		94
60)	Bromodichloromethane	7.712	83	460825	47.16	ppb		98
61)	2-Nitropropane	7.980	41	117606	73.49	ppb		95
62)	2-Chloroethylvinyl Ether	8.108	63	207361	48.43	ppb		100
63)	cis-1,3-Dichloropropene	8.242	75	617365	49.49	ppb		98
64)	4-Methyl-2-pentanone	8.437	43	278195	49.35	ppb		96
66)	Toluene	8.602	91	1621838	51.75	ppb		96
67)	trans-1,3-Dichloropropene	8.864	75	477319	45.95	ppb		99
68)	Ethyl Methacrylate	8.998	69	424975	45.08	ppb		92
69)	1,1,2-Trichloroethane	9.047	97	280232	48.73	ppb		92
72)	Tetrachloroethene	9.181	164	281396	52.95	ppb		94
73)	2-Hexanone	9.327	43	203040	50.89	ppb		99
74)	1,3-Dichloropropane	9.212	76	536149	51.96	ppb		99
75)	Dibromochloromethane	9.437	129	306794	44.83	ppb		97
76)	N-Butyl Acetate	9.480	43	495057	47.51	ppb		99
77)	1,2-Dibromoethane	9.529	107	264735	47.33	ppb		98
78)	Chlorobenzene	10.016	112	998297	49.39	ppb		98
79)	3-CBTF	10.028	180	551673	55.07	ppb		98
80)	4-CBTF	10.083	180	505293	57.03	ppb		99
81)	1,1,1,2-Tetrachloroethane	10.102	131	341096	48.23	ppb		98
82)	Ethylbenzene	10.132	106	567667	50.35	ppb		98
83)	(m+p)Xylene	10.242	106	1367484	103.09	ppb		98
84)	o-Xylene	10.595	106	671569	50.85	ppb		99
85)	Styrene	10.608	104	1159015	52.55	ppb		97
87)	Bromoform	10.760	173	176557	49.79	ppb		100
88)	2-CBTF	10.839	180	537989	54.93	ppb		90
89)	Isopropylbenzene	10.925	105	1697086	52.12	ppb		99
90)	Cyclohexanone	10.986	55	573916	884.70	ppb		91
91)	trans-1,4-Dichloro-2-B...	11.229	53	89647	35.36	ppb		81
92)	1,1,2,2-Tetrachloroethane	11.181	83	352867	46.29	ppb		99
93)	Bromobenzene	11.169	156	407643	49.30	ppb		95
94)	1,2,3-Trichloropropane	11.211	110	98754	44.76	ppb	#	85
95)	n-Propylbenzene	11.278	91	2098086	55.54	ppb		97
96)	2-Chlorotoluene	11.339	91	1192144	48.89	ppb		99
97)	3-Chlorotoluene	11.394	91	1320318	53.12	ppb		97
98)	4-Chlorotoluene	11.431	91	1434999	50.48	ppb		99
99)	1,3,5-Trimethylbenzene	11.431	105	1423053	50.52	ppb		97
100)	tert-Butylbenzene	11.699	119	1192750	53.34	ppb		98
101)	1,2,4-Trimethylbenzene	11.735	105	1472292	50.93	ppb		98
102)	3,4-DCBTF	11.796	214	429745	61.70	ppb		97
103)	sec-Butylbenzene	11.882	105	1805474	56.61	ppb		100
104)	p-Isopropyltoluene	12.004	119	1483702	53.89	ppb		100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	821513	52.36	ppb	96
106) 1,4-Dclbenz	12.034	146	838375	51.38	ppb	98
107) 2,4-DCBTF	12.089	214	399317	60.45	ppb	96
108) 2,5-DCBTF	12.126	214	426482	60.87	ppb	97
109) n-Butylbenzene	12.333	91	1492386	59.96	ppb	98
110) 1,2-Dclbenz	12.333	146	774040	52.13	ppb	96
111) 1,2-Dibromo-3-chloropr...	12.955	157	60930	43.52	ppb	95
112) Trielution Dichlorotol...	13.071	125	2153634	174.35	ppb	95
113) 1,3,5 Trichlorobenzene	13.125	180	620980	62.73	ppb	97
114) Coelution Dichlorotoluene	13.400	125	1545408	118.03	ppb	98
115) 1,2,4-Tcbenzene	13.607	180	528407	59.97	ppb	97
116) Hexachlorobt	13.747	225	214273	59.13	ppb	95
117) Naphthalen	13.796	128	1025815	54.33	ppb	99
118) 1,2,3-Tclbenzene	13.985	180	454597	60.89	ppb	94
119) 2,4,5-Trichlorotolene	14.570	159	338361	63.60	ppb	99
120) 2,3,6-Trichlorotoluene	14.656	159	307231	62.09	ppb	96

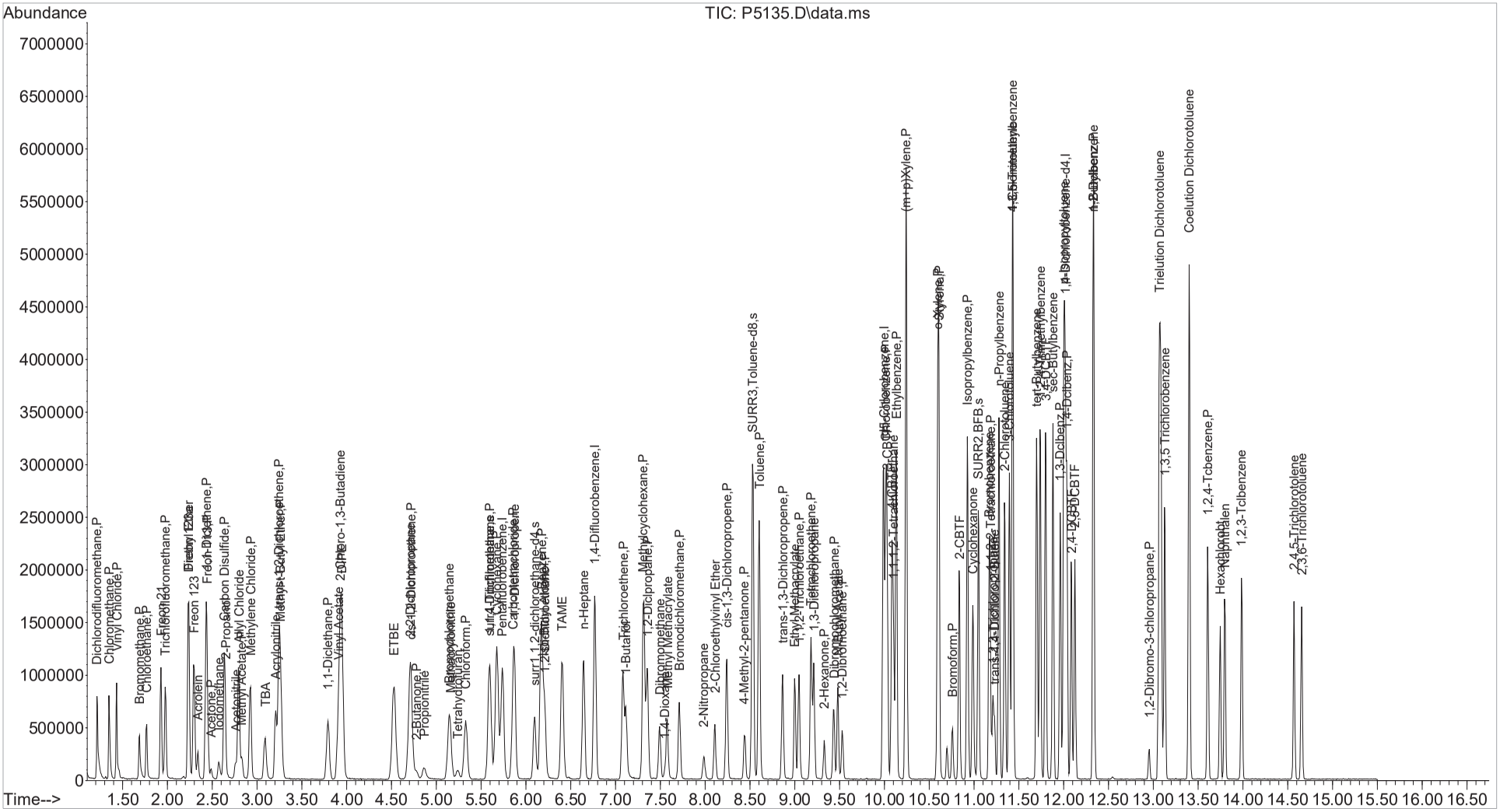
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

1st 09/19/16
2nd 09/20/16

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5135.D
Acq On : 19 Sep 2016 11:18 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 11:38:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	102	0.00
2	P	Dichlorodifluoromethane	0.5899	0.6985	-18.4	112	0.00
3	P	Chloromethane	0.6392	0.6760	-5.8	105	0.00
4	P	Vinyl Chloride	0.7146	0.7290	-2.0	99	0.00
5	P	Bromomethane	0.2894	0.2820	2.6	100	0.01
6	P	Chloroethane	0.3838	0.3835	0.1	100	0.00
7		Freon 21	0.8258	0.8334	-0.9	100	0.00
8	P	Trichlorofluoromethane	0.6159	0.6316	-2.5	105	0.00
9		Diethyl Ether	0.3664	0.3452	5.8	97	0.00
10		Freon 123a	0.5228	0.5418	-3.6	102	0.00
11		Freon 123	0.6210	0.6337	-2.0	106	0.00
12		Acrolein	0.0486	0.0399	17.9	79	0.00
13	P	1,1-Diclethene	0.3766	0.4164	-10.6	111	0.00
14	P	Freon 113	0.3686	0.4205	-14.1	115	0.00
15	P	Acetone	0.0977	0.0999	-2.3	111	0.00
16		2-Propanol	0.0190	0.0185	2.6	100	0.00
17		Iodomethane	0.3499	0.2166	39.2 ~~-38.1#~~	52	0.00
18	P	Carbon Disulfide	1.2612	1.3447	-6.6	106	0.00
19		Acetonitrile	0.0159	0.0178	-18.0 ~~-11.9~~	146	0.00
20		Allyl Chloride	0.2132	0.2738	-28.4#	127	0.00
21	P	Methyl Acetate	0.2364	0.2472	-4.6	104	0.00
22	P	Methylene Chloride	0.4216	0.4523	-7.3	110	0.00
23		TBA	0.0301	0.0279	7.3	91	0.00
24		Acrylonitrile	0.1145	0.1266	-10.6	114	0.00
25	P	Methyl-t-Butyl Ether	1.1162	1.0723	3.9	99	0.00
26	P	trans-1,2-Dichloroethene	0.4319	0.4653	-7.7	111	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-4.16#
28	P	1,1-Diclethane	0.7516	0.7914	-5.3	108	0.00
29		Vinyl Acetate	0.0789	0.0849	-7.6	103	0.00
30		DIPE	1.5456	1.7108	-10.7	114	0.00
31		2-Chloro-1,3-Butadiene	0.8371	0.7031	16.0	87	0.00
32		ETBE	1.3692	1.3059	4.6	96	0.00
33		2,2-Dichloropropane	0.6448	0.5677	12.0	90	0.00
34	P	cis-1,2-Dichloroethene	0.4551	0.4941	-8.6	110	0.00
35	P	2-Butanone	0.1440	0.1551	-7.7	111	0.00
36		Propionitrile	0.0414	0.0451	-8.9	113	0.00
37		Bromochloromethane	0.2381	0.2502	-5.1	107	0.00
38		Methacrylonitrile	0.1346	0.1381	-2.6	104	0.00
39		Tetrahydrofuran	0.0947	0.0993	-4.9	103	0.01
40	P	Chloroform	0.7300	0.7387	-1.2	105	0.00
41	P	1,1,1-Trichloroethane	0.6227	0.5908	5.1	99	0.00
42		TAME	1.1940	1.1742	1.7	97	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	104	0.00
44	P	Cyclohexane	0.2786	0.2979	-6.9	110	0.00
45	s	surr4,Dibrflmethane	0.2588	0.2859	-10.5	104	0.00
46	P	Carbontetrachloride	0.0959	0.0926	3.4	96	0.00
47		1,1-Dichloropropene	0.3415	0.3789	-11.0	110	0.00
48	s	surr1,1,2-dichloroethane-d4	0.3042	0.3046	-0.1	93	0.00
49	P	Benzene	1.0067	1.1043	-9.7	111	0.00
50	P	1,2-Dichloroethane	0.3004	0.2874	4.3	97	0.00
51		Iso-Butyl Alcohol	0.0094	0.0093	1.1	100	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
52		n-Heptane	0.3063	0.3953	NT	-29.1#	132	0.00
53		1-Butanol	0.0054	0.0057		-5.6	104	0.00
54	P	Trichloroethene	0.2464	0.2553		-3.6	105	0.00
55	P	Methylcyclohexane	0.3276	0.3918		-19.6	118	0.00
56	P	1,2-Diclpropane	0.2721	0.3010		-10.6	115	0.00
57		Dibromomethane	0.1284	0.1315		-2.4	108	0.00
58		1,4-Dioxane	0.0016	0.0020		-25.0#	122	0.00
59		Methyl Methacrylate	0.1534	0.1508		1.7	102	0.00
60	P	Bromodichloromethane	0.3313	0.3350		-1.1	105	0.00
61		2-Nitropropane	0.0543	0.0416	NT	23.4#	79	0.00
62		2-Chloroethylvinyl Ether	0.1452	0.1403		3.4	96	0.00
63	P	cis-1,3-Dichloropropene	0.4229	0.4512		-6.7	108	0.00
64	P	4-Methyl-2-pentanone	0.1911	0.1903		0.4	100	0.00
65	s	SURR3,Toluene-d8	1.1105	1.2703		-14.4	104	0.00
66	P	Toluene	1.0626	1.1745		-10.5	110	0.00
67	P	trans-1,3-Dichloropropene	0.3522	0.3545		-0.7	99	0.00
68		Ethyl Methacrylate	0.3196	0.3153		1.3	103	0.00
69	P	1,1,2-Trichloroethane	0.1950	0.1986		-1.8	108	0.00
70	s	SURR2,BFB	0.4320	0.4711		-9.1	101	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000		0.0	106	0.00
72	P	Tetrachloroethene	0.1928	0.2135		-10.7	112	0.00
73	P	2-Hexanone	0.1447	0.1491		-3.0	101	0.00
74		1,3-Dichloropropane	0.3743	0.4092		-9.3	111	0.00
75	P	Dibromochloromethane	0.2483	0.2457		1.0	103	0.00
76		N-Butyl Acetate	0.3780	0.3692		2.3	95	0.00
77	P	1,2-Dibromoethane	0.2029	0.2034		-0.2	103	0.00
78	P	Chlorobenzene	0.7333	0.7667		-4.6	107	0.00
79		3-CBTF	0.3634	0.4123		-13.5	124	0.00
80		4-CBTF	0.3214	0.3730		-16.1	125	0.00
81		1,1,1,2-Tetrachloroethane	0.2565	0.2610		-1.8	105	0.00
82	P	Ethylbenzene	0.4090	0.4431		-8.3	108	0.00
83	P	(m+p)Xylene	0.4812	0.5267		-9.5	109	0.00
84	P	o-Xylene	0.4791	0.5229		-9.1	111	0.00
85	P	Styrene	0.8001	0.9000		-12.5	111	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000		0.0	109	0.00
87	P	Bromoform	0.2384	0.2573		-7.9	113	0.00
88		2-CBTF	0.6584	0.7327		-11.3	123	0.00
89	P	Isopropylbenzene	2.1888	2.4421		-11.6	113	0.00
90		Cyclohexanone	0.0436	0.0589	NT	-35.1#	150	0.00
91		trans-1,4-Dichloro-2-Butene	0.1705	0.1233		27.7#	84	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5124	0.5175		-1.0	110	0.00
93		Bromobenzene	0.5559	0.5894		-6.0	111	0.00
94		1,2,3-Trichloropropane	0.1483	0.1420		4.2	109	0.00
95		n-Propylbenzene	2.5395	3.0382		-19.6	119	0.00
96		2-Chlorotoluene	1.6393	1.7454		-6.5	110	0.00
97		3-Chlorotoluene	1.6711	1.8509		-10.8	117	0.00
98		4-Chlorotoluene	1.9112	2.0646		-8.0	111	0.00
99		1,3,5-Trimethylbenzene	1.8936	2.0509		-8.3	112	0.00
100		tert-Butylbenzene	1.5033	1.6932		-12.6	115	0.00
101		1,2,4-Trimethylbenzene	1.9435	2.1087		-8.5	111	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial 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)
102		3,4-DCBTF	0.4682	0.5967	NT	-27.4#	142	0.00
103		sec-Butylbenzene	2.1443	2.6179	NT	-22.1#	125	0.00
104		p-Isopropyltoluene	1.8509	2.0839		-12.6	113	0.00
105	P	1,3-Dclbenz	1.0547	1.1755		-11.5	118	0.00
106	P	1,4-Dclbenz	1.0971	1.1642		-6.1	114	0.00
107		2,4-DCBTF	0.4441	0.5429	NT	-22.2#	140	0.00
108		2,5-DCBTF	0.4710	0.5870	NT	-24.6#	142	0.00
109		n-Butylbenzene	1.6732	2.0775	NT	-24.2#	125	0.00
110	P	1,2-Dclbenz	0.9983	1.0957		-9.8	116	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0941	0.0875		7.0	99	0.00
112		Trielution Dichlorotoluene	0.8304	1.0042	NT	-20.9#	127	0.00
113		1,3,5 Trichlorobenzene	0.6655	0.8543	NT	-28.4#	139	0.00
114		Coelution Dichlorotoluene	0.8802	1.0729	NT	-21.9#	125	0.00
115	P	1,2,4-Tcbenzene	0.5924	0.7246		-22.3#	125	0.00
116		Hexachlorobt	0.2436	0.2930		-20.3#	131	0.00
117		Naphthalen	1.2693	1.4582		-14.9	113	0.00
118		1,2,3-Tclbenzene	0.5019	0.6295	NT	-25.4#	126	0.00
119		2,4,5-Trichlorotolene	0.3576	0.4555	NT	-27.4#	134	0.00
120		2,3,6-Trichlorotoluene	0.3326	0.4238	NT	-27.4#	137	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	845710	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1427842	50.00	ppb		0.00
71) d5-Chlorobenzene	9.992	117	1340525	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	717263	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.596	113	408289	55.24	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 110.48%				
48) surr1,1,2-dichloroetha...	6.096	65	434978	50.07	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 100.14%				
65) SURR3,Toluene-d8	8.529	98	1813833	57.20	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.40%				
70) SURR2,BFB	11.047	95	672648	54.53	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 109.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	590688	59.20	ppb		97
3) Chloromethane	1.347	50	571723	52.88	ppb		97
4) Vinyl Chloride	1.433	62	616547	51.01	ppb		97
5) Bromomethane	1.689	94	238496	48.72	ppb		99
6) Chloroethane	1.768	64	324290	49.95	ppb		94
7) Freon 21	1.926	67	704849	50.46	ppb		98
8) Trichlorofluoromethane	1.975	101	534171	51.28	ppb		100
9) Diethyl Ether	2.231	59	291956	47.11	ppb		93
10) Freon 123a	2.237	67	458192	51.81	ppb		92
11) Freon 123	2.292	83	535906	51.02	ppb		99
12) Acrolein	2.341	56	168762	205.29	ppb		97
13) 1,1-Diclethene	2.432	96	352124	55.28	ppb		92
14) Freon 113	2.439	101	355663	57.05	ppb		99
15) Acetone	2.487	43	84483	51.15	ppb		93
16) 2-Propanol	2.640	45	313689	978.19	ppb		99
17) Iodomethane	2.573	142	183162	30.41	ppb		93
18) Carbon Disulfide	2.634	76	1137237	53.31	ppb		99
19) Acetonitrile	2.756	40	75478	295.04	ppb	#	82
20) Allyl Chloride	2.792	76	231536	64.21	ppb		92
21) Methyl Acetate	2.829	43	209034	52.28	ppb		97
22) Methylene Chloride	2.926	84	382535	53.64	ppb		93
23) TBA	3.085	59	472287	926.69	ppb		91
24) Acrylonitrile	3.207	53	535371	276.47	ppb		97
25) Methyl-t-Butyl Ether	3.262	73	906857	48.03	ppb		98
26) trans-1,2-Dichloroethene	3.243	96	393484	53.86	ppb		98
28) 1,1-Diclethane	3.792	63	669260	52.64	ppb		100
29) Vinyl Acetate	3.896	86	71763	53.81	ppb	#	92
30) DIPE	3.944	45	1446827	55.34	ppb		94
31) 2-Chloro-1,3-Butadiene	3.926	53	594635	42.00	ppb		99
32) ETBE	4.524	59	1104384	47.69	ppb		99
33) 2,2-Dichloropropane	4.706	77	480087	44.02	ppb		97
34) cis-1,2-Dichloroethene	4.712	96	417890	54.29	ppb		98
35) 2-Butanone	4.773	43	131190	53.86	ppb		89
36) Propionitrile	4.865	54	190629	272.10	ppb		97
37) Bromochloromethane	5.145	130	211560	52.53	ppb		89
38) Methacrylonitrile	5.151	67	116815	51.31	ppb		93
39) Tetrahydrofuran	5.243	42	83943	52.39	ppb	#	69
40) Chloroform	5.328	83	624707	50.60	ppb		95
41) 1,1,1-Trichloroethane	5.596	97	499677	47.44	ppb		98

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.407	73	993022	49.17	ppb		95
44)	Cyclohexane	5.676	41	425396	53.46	ppb		90
46)	Carbontetrachloride	5.859	121	132276	48.30	ppb		98
47)	1,1-Dichloropropene	5.871	75	541039	55.48	ppb		92
49)	Benzene	6.170	78	1576783	54.85	ppb		99
50)	1,2-Dichloroethane	6.212	62	410409	47.84	ppb		93
51)	Iso-Butyl Alcohol	6.200	43	264713	987.76	ppb		95
52)	n-Heptane	6.645	43	564414	64.53	ppb		98
53)	1-Butanol	7.114	56	407789	2646.08	ppb		97
54)	Trichloroethene	7.078	130	364468	51.79	ppb		92
55)	Methylcyclohexane	7.316	55	559467	59.81	ppb		95
56)	1,2-Diclpropane	7.352	63	429719	55.30	ppb		95
57)	Dibromomethane	7.492	93	187761	51.21	ppb		97
58)	1,4-Dioxane	7.553	88	57044	1217.23	ppb		88
59)	Methyl Methacrylate	7.578	69	215264	49.15	ppb		93
60)	Bromodichloromethane	7.712	83	478396	50.57	ppb		99
61)	2-Nitropropane	7.986	41	118827	76.69	ppb		91
62)	2-Chloroethylvinyl Ether	8.108	63	200389	48.34	ppb		97
63)	cis-1,3-Dichloropropene	8.242	75	644225	53.34	ppb		98
64)	4-Methyl-2-pentanone	8.443	43	271680	49.78	ppb		96
66)	Toluene	8.602	91	1677006	55.27	ppb		98
67)	trans-1,3-Dichloropropene	8.864	75	506179	50.33	ppb		98
68)	Ethyl Methacrylate	8.998	69	450194	49.33	ppb		95
69)	1,1,2-Trichloroethane	9.047	97	283518	50.92	ppb		94
72)	Tetrachloroethene	9.181	164	286267	55.38	ppb		97
73)	2-Hexanone	9.327	43	199889	51.51	ppb		96
74)	1,3-Dichloropropane	9.212	76	548595	54.67	ppb		98
75)	Dibromochloromethane	9.431	129	329419	49.49	ppb		99
76)	N-Butyl Acetate	9.480	43	494897	48.83	ppb		99
77)	1,2-Dibromoethane	9.529	107	272725	50.13	ppb		94
78)	Chlorobenzene	10.016	112	1027732	52.27	ppb		99
79)	3-CBTF	10.029	180	552723	56.73	ppb		99
80)	4-CBTF	10.083	180	499993	58.02	ppb		97
81)	1,1,1,2-Tetrachloroethane	10.102	131	349890	50.87	ppb		98
82)	Ethylbenzene	10.132	106	593926	54.16	ppb		99
83)	(m+p)Xylene	10.242	106	1412085	109.45	ppb		99
84)	o-Xylene	10.595	106	700897	54.56	ppb		97
85)	Styrene	10.608	104	1206479	56.24	ppb		99
87)	Bromoform	10.760	173	184572	53.97	ppb		91
88)	2-CBTF	10.839	180	525524	55.64	ppb		89
89)	Isopropylbenzene	10.925	105	1751597	55.78	ppb		99
90)	Cyclohexanone	10.986	55	844681	1350.14	ppb		93
91)	trans-1,4-Dichloro-2-B...	11.230	53	88449	36.17	ppb		90
92)	1,1,2,2-Tetrachloroethane	11.181	83	371205	50.50	ppb		97
93)	Bromobenzene	11.169	156	422764	53.01	ppb		96
94)	1,2,3-Trichloropropane	11.211	110	101885	47.88	ppb	#	81
95)	n-Propylbenzene	11.278	91	2179189	59.82	ppb		97
96)	2-Chlorotoluene	11.339	91	1251921	53.24	ppb		98
97)	3-Chlorotoluene	11.394	91	1327586	55.38	ppb		96
98)	4-Chlorotoluene	11.431	91	1480897	54.02	ppb		100
99)	1,3,5-Trimethylbenzene	11.431	105	1471030	54.15	ppb		99
100)	tert-Butylbenzene	11.699	119	1214459	56.31	ppb		98
101)	1,2,4-Trimethylbenzene	11.736	105	1512495	54.25	ppb		97
102)	3,4-DCBTF	11.796	214	427988	63.72	ppb		96
103)	sec-Butylbenzene	11.882	105	1877688	61.04	ppb		97
104)	p-Isopropyltoluene	12.004	119	1494681	56.29	ppb		99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	11.961	146	843176	55.73	ppb	99
106) 1,4-Dclbenz	12.034	146	835052	53.06	ppb	97
107) 2,4-DCBTF	12.089	214	389435	61.13	ppb	95
108) 2,5-DCBTF	12.126	214	421020	62.31	ppb	96
109) n-Butylbenzene	12.333	91	1490095	62.08	ppb	98
110) 1,2-Dclbenz	12.339	146	785914	54.88	ppb	95
111) 1,2-Dibromo-3-chloropr...	12.955	157	62773	46.49	ppb	87
112) Trielution Dichlorotol...	13.077	125	2160778	181.38	ppb	97
113) 1,3,5 Trichlorobenzene	13.132	180	612764	64.18	ppb	97
114) Coelution Dichlorotoluene	13.400	125	1539039	121.89	ppb	99
115) 1,2,4-Tcbenzene	13.607	180	519705	61.16	ppb	98
116) Hexachlorobt	13.747	225	210128	60.13	ppb	91
117) Naphthalen	13.802	128	1045898	57.44	ppb	98
118) 1,2,3-Tclbenzene	13.985	180	451487	62.71	ppb	100
119) 2,4,5-Trichlorotolene	14.570	159	326733	63.68	ppb	95
120) 2,3,6-Trichlorotoluene	14.656	159	303942	63.70	ppb	97

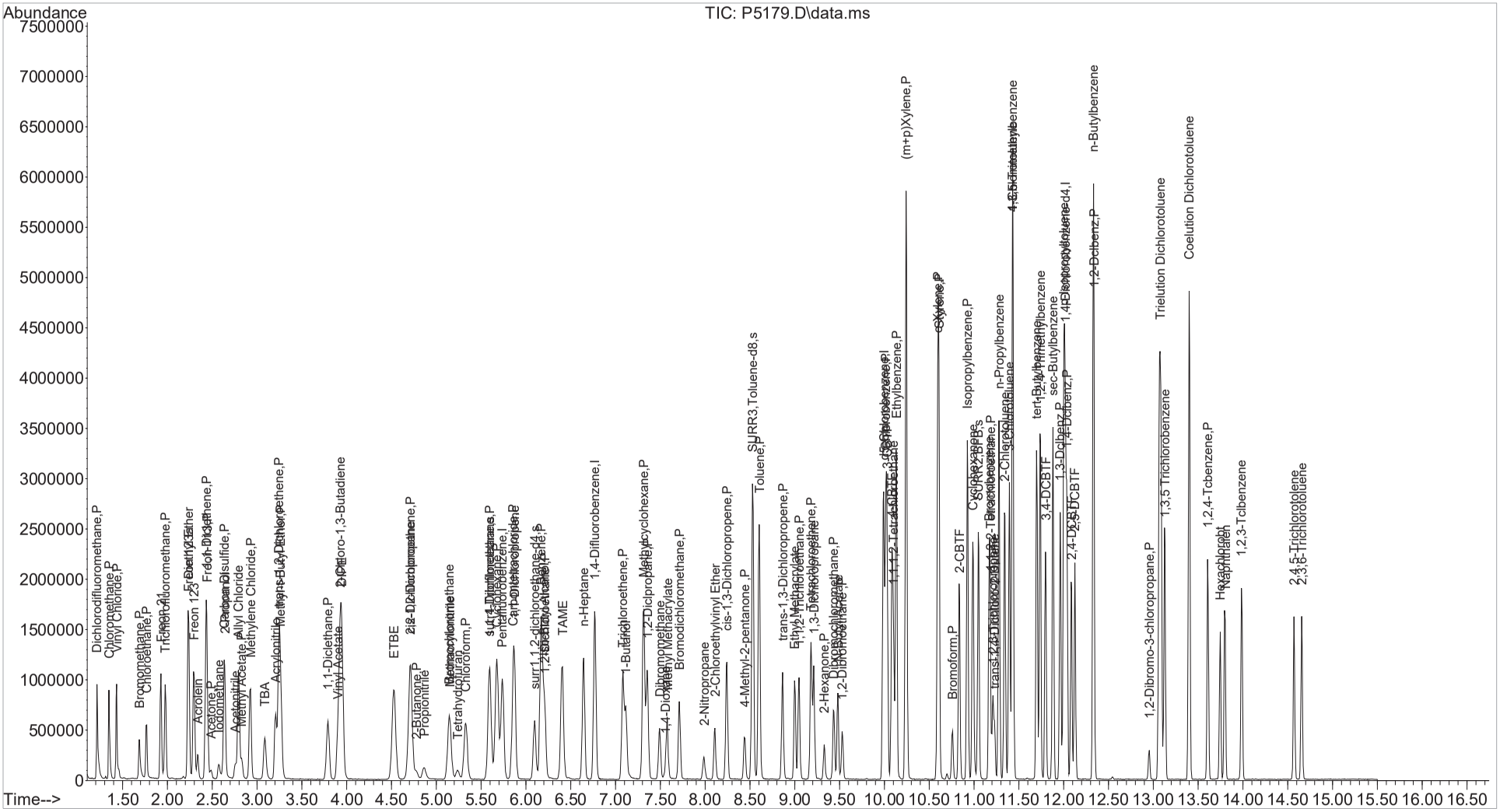
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1st 09/20/16 2nd 09/22/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5179.D
Acq On : 20 Sep 2016 10:06 am
Operator : K.Ruest
Sample : CCV Inst : MSVOA-12
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 20 10:25:08 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

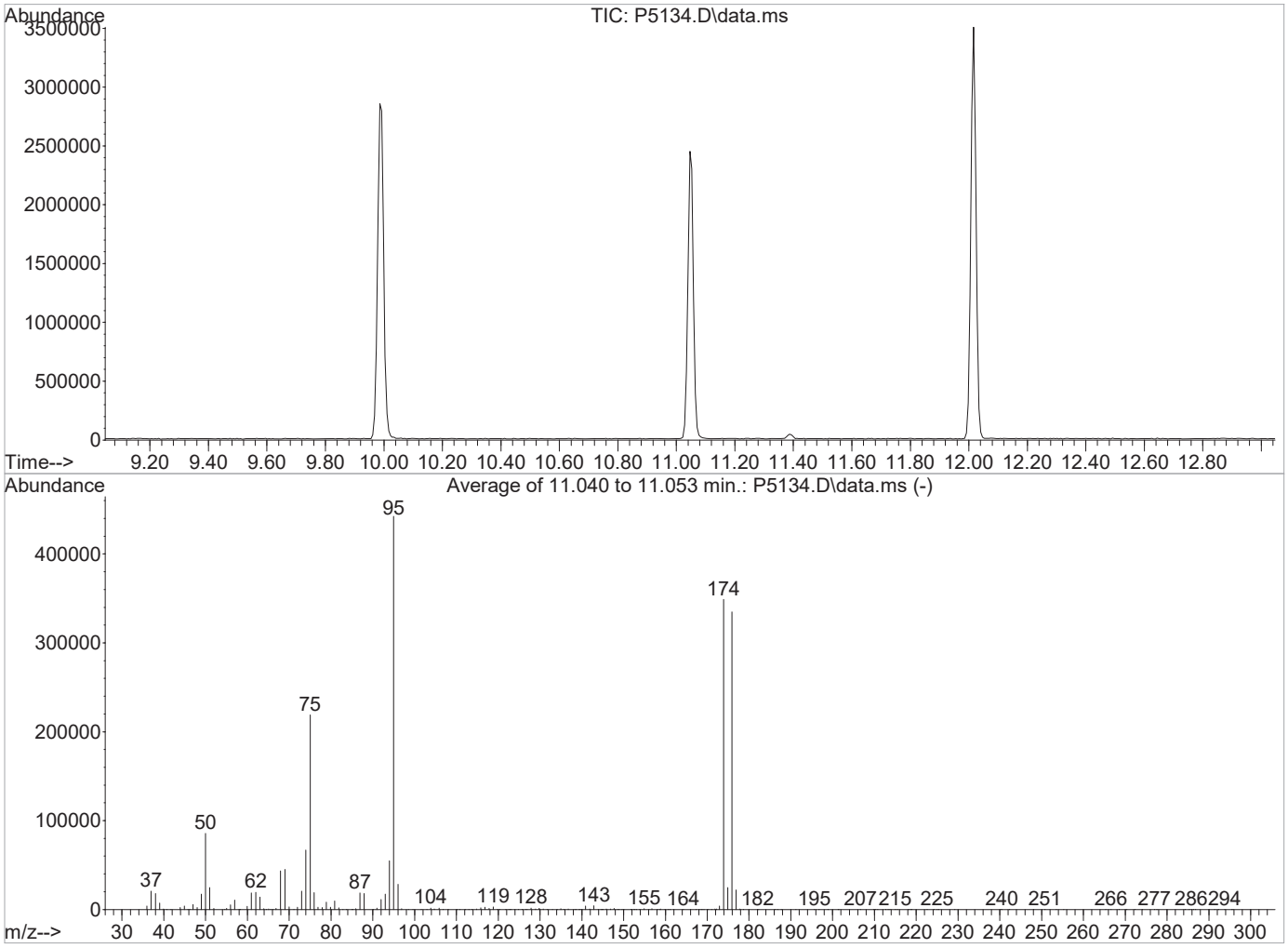


1st 09/19/16
2nd 09/20/16

Data Path : I:\ACQUDATA\msvoa12\Data\091916\
Data File : P5134.D
Acq On : 19 Sep 2016 10:47 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue May 10 12:23:15 2016



AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

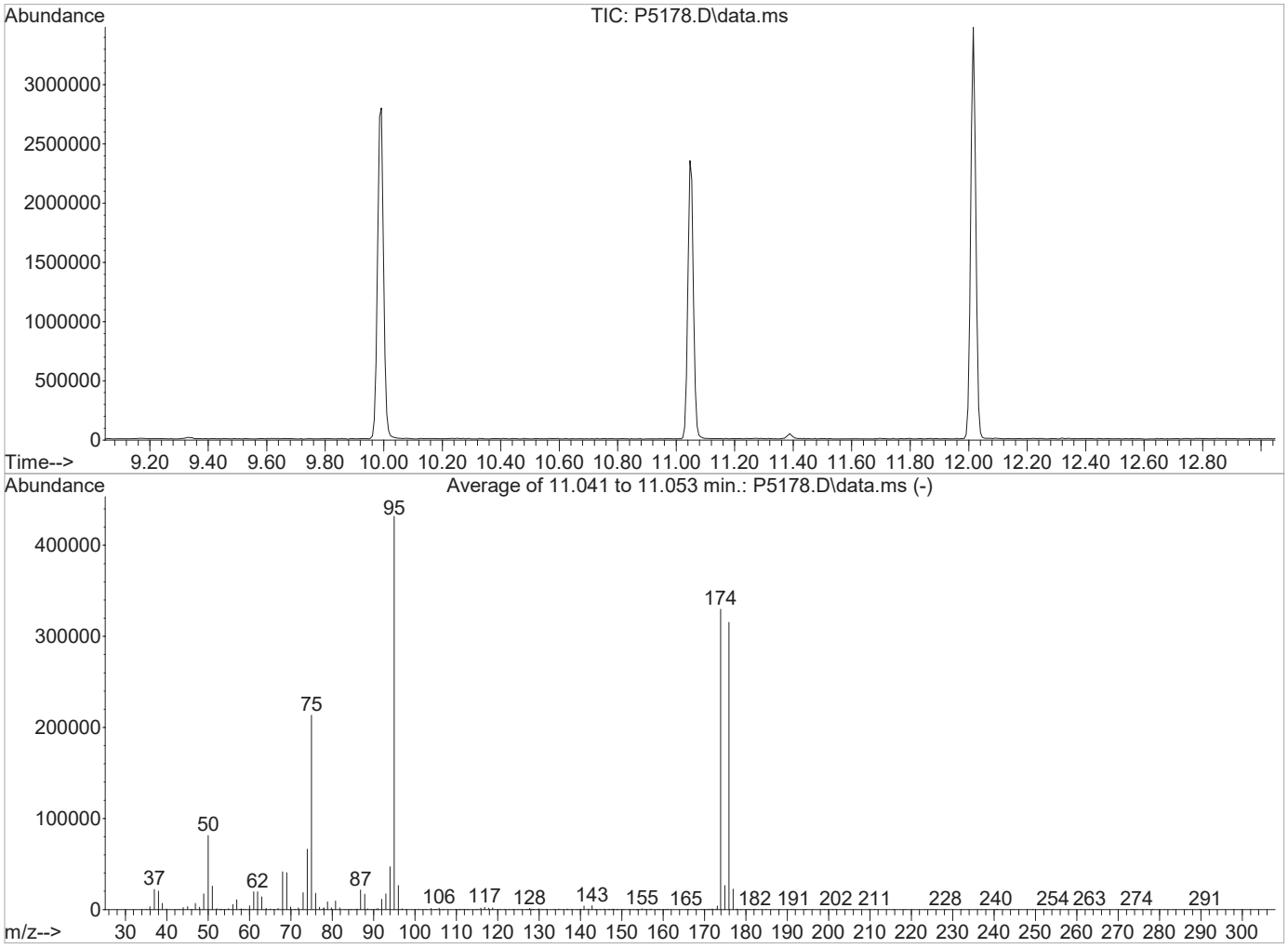
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	85686	PASS
75	95	30	60	49.5	218880	PASS
95	95	100	100	100.0	442525	PASS
96	95	5	9	6.4	28179	PASS
173	174	0.00	2	1.1	3979	PASS
174	95	50	120	78.8	348800	PASS
175	174	5	9	7.0	24552	PASS
176	174	95	101	96.0	334933	PASS
177	176	5	9	6.6	21946	PASS

BFB

Data Path : I:\ACQUDATA\msvoa12\Data\092016\
Data File : P5178.D
Acq On : 20 Sep 2016 9:36 am
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue May 10 12:23:15 2016



AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	81232	PASS
75	95	30	60	49.4	213376	PASS
95	95	100	100	100.0	432021	PASS
96	95	5	9	6.1	26213	PASS
173	174	0.00	2	1.1	3643	PASS
174	95	50	120	76.3	329734	PASS
175	174	5	9	8.0	26262	PASS
176	174	95	101	95.7	315584	PASS
177	176	5	9	7.1	22558	PASS

Initial Calibration - Summary Report

KR 5/10/16

Calibration ID: RC1600048
8260 waters W050916

Instrument ID: R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.2565	<=20	5.2
1,1,1,2-Tetrachloroethane	T	Average RF			0.2565	<=35	5.2
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.6227	<=20	7.6
1,1,1-Trichloroethane (TCA)	T	Average RF			0.6227	<=35	7.6
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5124	<=20	6.8
1,1,2,2-Tetrachloroethane	T	Average RF			0.5124	<=35	6.8
1,1,2-Trichloroethane	T	Average RF		0.100	0.1950	<=20	11.7
1,1,2-Trichloroethane	T	Average RF			0.1950	<=35	11.7
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3686	<=20	4.9
1,1,2-Trichlorotrifluoroethane	T	Average RF			0.3686	<=35	4.9
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.7516	<=20	4.0
1,1-Dichloroethane (1,1-DCA)	T	Average RF			0.7516	<=35	4.0
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3766	<=20	3.6
1,1-Dichloroethene (1,1-DCE)	T	Average RF			0.3766	<=35	3.6
1,1-Dichloropropene	T	Average RF			0.3415	<=20	3.5
1,1-Dichloropropene	T	Average RF			0.3415	<=35	3.5
1,2,3-Trichlorobenzene	T	Average RF			0.5019	<=20	5.9
1,2,3-Trichlorobenzene	T	Average RF			0.5019	<=35	5.9
1,2,3-Trichloropropane	T	Average RF			0.1483	<=20	10.0
1,2,3-Trichloropropane	T	Average RF			0.1483	<=35	10.0
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.5924	<=20	4.2
1,2,4-Trichlorobenzene	T	Average RF			0.5924	<=35	4.2
1,2,4-Trimethylbenzene	T	Average RF			1.943	<=20	9.9
1,2,4-Trimethylbenzene	T	Average RF			1.943	<=35	9.9
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.09412	<=20	10.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF			0.09412	<=35	10.0
1,2-Dibromoethane	T	Average RF		0.100	0.2029	<=20	4.9
1,2-Dibromoethane	T	Average RF			0.2029	<=35	4.9
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5228	<=20	5.0
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5228	<=35	5.0
1,2-Dichlorobenzene	T	Average RF		0.400	0.9983	<=20	4.7
1,2-Dichlorobenzene	T	Average RF			0.9983	<=35	4.7
1,2-Dichloroethane	T	Average RF		0.100	0.3004	<=20	2.9
1,2-Dichloroethane	T	Average RF			0.3004	<=35	2.9
1,2-Dichloropropane	T	Average RF		0.100	0.2721	<=20	3.6
1,2-Dichloropropane	T	Average RF			0.2721	<=35	3.6
1,3,5-Trichlorobenzene	T	Average RF			0.6655	<=20	3.8
1,3,5-Trichlorobenzene	T	Average RF			0.6655	<=35	3.8
1,3,5-Trimethylbenzene	T	Average RF			1.894	<=20	9.2
1,3,5-Trimethylbenzene	T	Average RF			1.894	<=35	9.2
1,3-Dichlorobenzene	T	Average RF		0.600	1.055	<=20	5.2
1,3-Dichlorobenzene	T	Average RF			1.055	<=35	5.2
1,3-Dichloropropane	T	Average RF			0.3743	<=20	3.7
1,3-Dichloropropane	T	Average RF			0.3743	<=35	3.7
1,4-Dichlorobenzene	T	Average RF		0.500	1.097	<=20	8.1
1,4-Dichlorobenzene	T	Average RF			1.097	<=35	8.1
1,4-Dioxane	T	Average RF			0.001641	<=20	12.6
1,4-Dioxane	T	Average RF			0.001641	<=35	12.6
1-Butanol	T	Average RF			0.005397	<=20	7.8
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3214	<=20	5.4
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3214	<=35	5.4
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6210	<=20	10.0

Initial Calibration - Summary Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6210	<=35	10.0
2,2-Dichloropropane	T	Average RF			0.6448	<=20	4.0
2,2-Dichloropropane	T	Average RF			0.6448	<=35	4.0
2,3,6-Trichlorotoluene	T	Average RF			0.3326	<=20	2.9
2,3,6-Trichlorotoluene	T	Average RF			0.3326	<=35	2.9
2,4,5-Trichlorotoluene	T	Average RF			0.3576	<=20	7.2
2,4,5-Trichlorotoluene	T	Average RF			0.3576	<=35	7.2
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.8304	<=20	5.3
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.8304	<=35	5.3
2,4-Dichlorobenzotrifluoride	T	Average RF			0.4441	<=20	8.7
2,4-Dichlorobenzotrifluoride	T	Average RF			0.4441	<=35	8.7
2,5-Dichlorobenzotrifluoride	T	Average RF			0.4710	<=20	7.1
2,5-Dichlorobenzotrifluoride	T	Average RF			0.4710	<=35	7.1
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1440	<=20	5.8
2-Butanone (MEK)	T	Average RF			0.1440	<=35	5.8
2-Chloro-1,3-butadiene	T	Average RF			0.8371	<=20	2.5
2-Chlorobenzotrifluoride	T	Average RF			0.6584	<=20	4.5
2-Chlorobenzotrifluoride	T	Average RF			0.6584	<=35	4.5
2-Chloroethyl Vinyl Ether	T	Average RF			0.1452	<=20	8.4
2-Chloroethyl Vinyl Ether	T	Average RF			0.1452	<=35	8.4
2-Chlorotoluene	T	Average RF			1.639	<=20	9.2
2-Chlorotoluene	T	Average RF			1.639	<=35	9.2
2-Hexanone	T	Average RF		0.05	0.1447	<=20	6.6
2-Hexanone	T	Average RF			0.1447	<=35	6.6
2-Methyl-1-propanol	T	Average RF			0.009385	<=20	5.9
2-Methyl-1-propanol	T	Average RF			0.009385	<=35	5.9
2-Methyl-2-propanol	T	Average RF			0.03013	<=20	6.9
2-Methyl-2-propanol	T	Average RF			0.03013	<=35	6.9
2-Nitropropane	T	Average RF			0.05426	<=20	4.7
2-Propanol	T	Average RF			0.01896	<=20	9.0
2-Propanol	T	Average RF			0.01896	<=35	9.0
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			0.8802	<=20	6.4
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			0.8802	<=35	6.4
3,4-Dichlorobenzotrifluoride	T	Average RF			0.4682	<=20	5.9
3,4-Dichlorobenzotrifluoride	T	Average RF			0.4682	<=35	5.9
3-Chloro-1-propene	T	Average RF			0.2132	<=20	11.4
3-Chloro-1-propene	T	Average RF			0.2132	<=35	11.4
3-Chlorobenzotrifluoride	T	Average RF			0.3634	<=20	4.3
3-Chlorobenzotrifluoride	T	Average RF			0.3634	<=35	4.3
3-Chlorotoluene	T	Average RF			1.671	<=20	7.8
3-Chlorotoluene	T	Average RF			1.671	<=35	7.8
4-Chlorotoluene	T	Average RF			1.911	<=20	8.8
4-Chlorotoluene	T	Average RF			1.911	<=35	8.8
4-Isopropyltoluene	T	Average RF			1.851	<=20	9.6
4-Isopropyltoluene	T	Average RF			1.851	<=35	9.6
4-Methyl-2-pentanone	T	Average RF		0.05	0.1911	<=20	5.1
4-Methyl-2-pentanone	T	Average RF			0.1911	<=35	5.1
Acetone	T	Average RF		0.05	0.09765	<=20	7.2
Acetone	T	Average RF			0.09765	<=35	7.2
Acetonitrile	T	Linear	1/X		0.01593	>=0.99	0.9953
Acrolein	T	Average RF			0.04860	<=20	10.3

Initial Calibration - Summary Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acrolein	T	Average RF			0.04860	<=35	10.3
Acrylonitrile	T	Average RF			0.1145	<=20	4.5
Acrylonitrile	T	Average RF			0.1145	<=35	4.5
Benzene	T	Average RF		0.500	1.007	<=20	5.3
Benzene	T	Average RF			1.007	<=35	5.3
Bromobenzene	T	Average RF			0.5559	<=20	5.5
Bromobenzene	T	Average RF			0.5559	<=35	5.5
Bromochloromethane	T	Average RF			0.2381	<=20	6.3
Bromochloromethane	T	Average RF			0.2381	<=35	6.3
Bromodichloromethane	T	Average RF		0.200	0.3313	<=20	7.9
Bromodichloromethane	T	Average RF			0.3313	<=35	7.9
Bromoform	T	Average RF		0.100	0.2384	<=20	5.9
Bromoform	T	Average RF			0.2384	<=35	5.9
Bromomethane	T	Average RF		0.100	0.2894	<=20	6.4
Bromomethane	T	Average RF			0.2894	<=35	6.4
Carbon Disulfide	T	Average RF		0.100	1.261	<=20	3.6
Carbon Disulfide	T	Average RF			1.261	<=35	3.6
Carbon Tetrachloride	T	Average RF		0.05	0.09590	<=20	4.9
Carbon Tetrachloride	T	Average RF			0.09590	<=35	4.9
Chlorobenzene	T	Average RF		0.500	0.7333	<=20	5.7
Chlorobenzene	T	Average RF			0.7333	<=35	5.7
Chloroethane	T	Average RF		0.100	0.3838	<=20	7.1
Chloroethane	T	Average RF			0.3838	<=35	7.1
Chloroform	T	Average RF		0.200	0.7300	<=20	5.9
Chloroform	T	Average RF			0.7300	<=35	5.9
Chloromethane	T	Average RF		0.100	0.6392	<=20	4.5
Chloromethane	T	Average RF			0.6392	<=35	4.5
Cyclohexane	T	Average RF		0.100	0.2786	<=20	7.8
Cyclohexane	T	Average RF			0.2786	<=35	7.8
Cyclohexanone	T	Average RF			0.04361	<=20	8.5
Cyclohexanone	T	Average RF			0.04361	<=35	8.5
Dibromochloromethane	T	Average RF		0.100	0.2483	<=20	9.2
Dibromochloromethane	T	Average RF			0.2483	<=35	9.2
Dibromomethane	T	Average RF			0.1284	<=20	5.0
Dibromomethane	T	Average RF			0.1284	<=35	5.0
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5899	<=20	8.9
Dichlorodifluoromethane (CFC 12)	T	Average RF			0.5899	<=35	8.9
Dichlorofluoromethane (CFC 21)	T	Average RF			0.8258	<=20	6.0
Dichloromethane	T	Average RF		0.100	0.4216	<=20	2.7
Dichloromethane	T	Average RF			0.4216	<=35	2.7
Diethyl Ether	T	Average RF			0.3664	<=20	4.4
Diethyl Ether	T	Average RF			0.3664	<=35	4.4
Diisopropyl Ether	T	Average RF			1.546	<=20	4.7
Diisopropyl Ether	T	Average RF			1.546	<=35	4.7
Ethyl Methacrylate	T	Average RF			0.3196	<=20	5.2
Ethyl Methacrylate	T	Average RF			0.3196	<=35	5.2
Ethyl tert-Butyl Ether	T	Average RF			1.369	<=20	3.9
Ethylbenzene	T	Average RF		0.100	0.4090	<=20	4.8
Ethylbenzene	T	Average RF			0.4090	<=35	4.8
Hexachlorobutadiene	T	Average RF			0.2436	<=20	8.5
Hexachlorobutadiene	T	Average RF			0.2436	<=35	8.5
Iodomethane	T	Quadratic	1/X2		0.3499	>=0.99	0.9910

Initial Calibration - Summary Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.189	<=20	12.2
Isopropylbenzene (Cumene)	T	Average RF			2.189	<=35	12.2
Methacrylonitrile	T	Average RF			0.1346	<=20	3.5
Methacrylonitrile	T	Average RF			0.1346	<=35	3.5
Methyl Acetate	T	Average RF		0.100	0.2364	<=20	4.1
Methyl Methacrylate	T	Average RF			0.1534	<=20	6.4
Methyl Methacrylate	T	Average RF			0.1534	<=35	6.4
Methyl tert-Butyl Ether	T	Average RF		0.100	1.116	<=20	3.6
Methyl tert-Butyl Ether	T	Average RF			1.116	<=35	3.6
Methylcyclohexane	T	Average RF		0.100	0.3276	<=20	5.2
Naphthalene	T	Average RF			1.269	<=20	7.5
Naphthalene	T	Average RF			1.269	<=35	7.5
Propionitrile	T	Average RF			0.04142	<=20	7.0
Propionitrile	T	Average RF			0.04142	<=35	7.0
Styrene	T	Average RF		0.300	0.8001	<=20	6.5
Styrene	T	Average RF			0.8001	<=35	6.5
Tetrachloroethene (PCE)	T	Average RF		0.200	0.1928	<=20	5.2
Tetrachloroethene (PCE)	T	Average RF			0.1928	<=35	5.2
Tetrahydrofuran (THF)	T	Average RF			0.09472	<=20	6.3
Tetrahydrofuran (THF)	T	Average RF			0.09472	<=35	6.3
Toluene	T	Average RF		0.400	1.063	<=20	8.5
Toluene	T	Average RF			1.063	<=35	8.5
Trichloroethene (TCE)	T	Average RF		0.200	0.2464	<=20	3.7
Trichloroethene (TCE)	T	Average RF			0.2464	<=35	3.7
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.6159	<=20	6.5
Trichlorofluoromethane (CFC 11)	T	Average RF			0.6159	<=35	6.5
Vinyl Acetate	T	Average RF			0.07885	<=20	4.2
Vinyl Acetate	T	Average RF			0.07885	<=35	4.2
Vinyl Chloride	T	Average RF		0.100	0.7146	<=20	5.6
Vinyl Chloride	T	Average RF			0.7146	<=35	5.6
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4551	<=20	7.3
cis-1,2-Dichloroethene	T	Average RF			0.4551	<=35	7.3
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4229	<=20	6.8
cis-1,3-Dichloropropene	T	Average RF			0.4229	<=35	6.8
m,p-Xylenes	T	Average RF		0.100	0.4812	<=20	7.1
m,p-Xylenes	T	Average RF			0.4812	<=35	7.1
n-Butyl Acetate	T	Average RF			0.3780	<=20	6.0
n-Butyl Acetate	T	Average RF			0.3780	<=35	6.0
n-Butylbenzene	T	Average RF			1.673	<=20	8.9
n-Butylbenzene	T	Average RF			1.673	<=35	8.9
n-Heptane	T	Average RF			0.3063	<=20	7.3
n-Heptane	T	Average RF			0.3063	<=35	7.3
n-Propylbenzene	T	Average RF			2.540	<=20	14.9
n-Propylbenzene	T	Average RF			2.540	<=35	14.9
o-Xylene	T	Average RF		0.300	0.4791	<=20	4.2
o-Xylene	T	Average RF			0.4791	<=35	4.2
sec-Butylbenzene	T	Average RF			2.144	<=20	11.7
sec-Butylbenzene	T	Average RF			2.144	<=35	11.7
tert-Amyl Methyl Ether	T	Average RF			1.194	<=20	5.6
tert-Butylbenzene	T	Average RF			1.503	<=20	7.7
tert-Butylbenzene	T	Average RF			1.503	<=35	7.7
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4319	<=20	5.9

Initial Calibration - Summary Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
trans-1,2-Dichloroethene	T	Average RF			0.4319	<=35	5.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3522	<=20	6.5
trans-1,3-Dichloropropene	T	Average RF			0.3522	<=35	6.5
trans-1,4-Dichloro-2-butene	T	Average RF			0.1705	<=20	11.7
trans-1,4-Dichloro-2-butene	T	Average RF			0.1705	<=35	11.7
1,2-Dichloroethane-d4	S	Average RF			0.3042	<=20	8.8
1,2-Dichloroethane-d4	S	Average RF			0.3042	<=35	8.8
4-Bromofluorobenzene	S	Average RF			0.4320	<=20	8.9
4-Bromofluorobenzene	S	Average RF			0.4320	<=35	8.9
Dibromofluoromethane	S	Average RF			0.2588	<=20	8.3
Dibromofluoromethane	S	Average RF			0.2588	<=35	8.3
Toluene-d8	S	Average RF			1.111	<=20	12.1
Toluene-d8	S	Average RF			1.111	<=35	12.1

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
Tetrachloroethene (PCE)	Minimum RF	>= 0.200	

Initial Calibration - Detailed Report

KR 5/10/16

Calibration ID: RC1600048 5960 waters W050916 **Instrument ID:** R-MS-12
Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1600048-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\050916\P1872.D	5/9/16 14:19
02	RC1600048-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1873.D	5/9/16 14:50
03	RC1600048-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1874.D	5/9/16 15:21
04	RC1600048-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\050916\P1875.D	5/9/16 15:51
05	RC1600048-05	20ppb	I:\ACQUDATA\msvoa12\Data\050916\P1876.D	5/9/16 16:22
06	RC1600048-06	50ppb	I:\ACQUDATA\msvoa12\Data\050916\P1877.D	5/9/16 16:52
07	RC1600048-07	100ppb	I:\ACQUDATA\msvoa12\Data\050916\P1878.D	5/9/16 17:23
08	RC1600048-08	150ppb	I:\ACQUDATA\msvoa12\Data\050916\P1879.D	5/9/16 17:54
09	RC1600048-09	200ppb	I:\ACQUDATA\msvoa12\Data\050916\P1880.D	5/9/16 18:24

Analyte **Curve Fit** Average RF **Weighting** Weighting

1,1,1,2-Tetrachloroethane Average RF RSD = 5.2 Average RF = 0.2565

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2303	02	1.000	0.2735	03	2.000	0.2472	04	5.000	0.2535
05	20.000	0.2717	06	50.000	0.2646	07	100.000	0.2549	08	150.000	0.2515
09	200.000	0.2616									

1,1,1-Trichloroethane (TCA) Average RF RSD = 7.6 Average RF = 0.6227

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7360	02	1.000	0.6161	03	2.000	0.6280	04	5.000	0.6366
05	20.000	0.6226	06	50.000	0.6085	07	100.000	0.5958	08	150.000	0.5692
09	200.000	0.5916									

1,1,2,2-Tetrachloroethane Average RF RSD = 6.8 Average RF = 0.5124

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5692	02	1.000	0.5351	03	2.000	0.5332	04	5.000	0.4975
05	20.000	0.5386	06	50.000	0.5122	07	100.000	0.4643	08	150.000	0.4689
09	200.000	0.4930									

1,1,2-Trichloroethane Average RF RSD = 11.7 Average RF = 0.1950

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2510	02	1.000	0.2038	03	2.000	0.1776	04	5.000	0.1914
05	20.000	0.1961	06	50.000	0.1913	07	100.000	0.1773	08	150.000	0.1814
09	200.000	0.1849									

1,1,2-Trichlorotrifluoroethane Average RF RSD = 4.9 Average RF = 0.3686

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3749	02	1.000	0.3968	03	2.000	0.3433	04	5.000	0.3690
05	20.000	0.3866	06	50.000	0.3759	07	100.000	0.3655	08	150.000	0.3419
09	200.000	0.3633									

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 4.0 Average RF = 0.7516

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8076	02	1.000	0.7351	03	2.000	0.7552	04	5.000	0.7296
05	20.000	0.7938	06	50.000	0.7542	07	100.000	0.7373	08	150.000	0.7237
09	200.000	0.7281									

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 3.6 Average RF = 0.3766

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3778	02	1.000	0.3633	03	2.000	0.3551	04	5.000	0.3937
05	20.000	0.3942	06	50.000	0.3852	07	100.000	0.3789	08	150.000	0.3646
09	200.000	0.3767									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,1-Dichloropropene Average RF RSD = 3.5 Average RF = 0.3415

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3316	02	1.000	0.3482	03	2.000	0.3354	04	5.000	0.3329
05	20.000	0.3594	06	50.000	0.3587	07	100.000	0.3416	08	150.000	0.3253
09	200.000	0.3403									

1,2,3-Trichlorobenzene Average RF RSD = 5.9 Average RF = 0.5019

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4701	02	1.000	0.4774	03	2.000	0.4852	04	5.000	0.4741
05	20.000	0.5491	06	50.000	0.5426	07	100.000	0.5029	08	150.000	0.4942
09	200.000	0.5215									

1,2,3-Trichloropropane Average RF RSD = 10.0 Average RF = 0.1483

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1797	02	1.000	0.1585	03	2.000	0.1502	04	5.000	0.1521
05	20.000	0.1487	06	50.000	0.1417	07	100.000	0.1316	08	150.000	0.1326
09	200.000	0.1399									

1,2,4-Trichlorobenzene Average RF RSD = 4.2 Average RF = 0.5924

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5752	02	1.000	0.6044	03	2.000	0.5810	04	5.000	0.5626
05	20.000	0.6307	06	50.000	0.6319	07	100.000	0.5856	08	150.000	0.5726
09	200.000	0.5874									

1,2,4-Trimethylbenzene Average RF RSD = 9.9 Average RF = 1.943

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.035	02	1.000	2.036	03	2.000	2.051	04	5.000	2.068
05	20.000	2.112	06	50.000	2.072	07	100.000	1.858	08	150.000	1.678
09	200.000	1.581									

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 10.0 Average RF = 0.09412

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08839	03	2.000	0.1137	04	5.000	0.08662	05	20.000	0.09972
06	50.000	0.09590	07	100.000	0.08743	08	150.000	0.08586	09	200.000	0.09533

1,2-Dibromoethane Average RF RSD = 4.9 Average RF = 0.2029

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2150	02	1.000	0.1971	03	2.000	0.1909	04	5.000	0.2045
05	20.000	0.2198	06	50.000	0.2091	07	100.000	0.1929	08	150.000	0.1966
09	200.000	0.2005									

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 5.0 Average RF = 0.5228

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5633	02	1.000	0.5064	03	2.000	0.5589	04	5.000	0.5148
05	20.000	0.4865	06	50.000	0.5423	07	100.000	0.5148	08	150.000	0.5022
09	200.000	0.5164									

1,2-Dichlorobenzene Average RF RSD = 4.7 Average RF = 0.9983

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9694	02	1.000	1.087	03	2.000	0.9761	04	5.000	0.9784
05	20.000	1.060	06	50.000	1.024	07	100.000	0.9744	08	150.000	0.9528
09	200.000	0.9627									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,2-Dichloroethane Average RF RSD = 2.9 Average RF = 0.3004

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2920	02	1.000	0.3078	03	2.000	0.2946	04	5.000	0.3013
05	20.000	0.3164	06	50.000	0.3079	07	100.000	0.2913	08	150.000	0.2936
09	200.000	0.2987									

1,2-Dichloroethane-d4 Average RF RSD = 8.8 Average RF = 0.3042

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3414	03	60.000	0.3264	04	70.000	0.3094	05	100.000	0.2940
07	125.000	0.2844	08	150.000	0.2696						

1,2-Dichloropropane Average RF RSD = 3.6 Average RF = 0.2721

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2935	02	1.000	0.2770	03	2.000	0.2635	04	5.000	0.2678
05	20.000	0.2789	06	50.000	0.2722	07	100.000	0.2641	08	150.000	0.2629
09	200.000	0.2694									

1,3,5-Trichlorobenzene Average RF RSD = 3.8 Average RF = 0.6655

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6807	02	1.000	0.6131	03	2.000	0.6800	04	5.000	0.6819
05	20.000	0.6974	06	50.000	0.6662	07	100.000	0.6635	08	150.000	0.6432
09	200.000	0.6635									

1,3,5-Trimethylbenzene Average RF RSD = 9.2 Average RF = 1.894

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.994	02	1.000	1.987	03	2.000	1.950	04	5.000	1.961
05	20.000	2.096	06	50.000	1.992	07	100.000	1.835	08	150.000	1.662
09	200.000	1.565									

1,3-Dichlorobenzene Average RF RSD = 5.2 Average RF = 1.055

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.138	02	1.000	1.072	03	2.000	1.015	04	5.000	1.063
05	20.000	1.118	06	50.000	1.086	07	100.000	1.025	08	150.000	0.9865
09	200.000	0.9877									

1,3-Dichloropropane Average RF RSD = 3.7 Average RF = 0.3743

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3745	02	1.000	0.3740	03	2.000	0.3794	04	5.000	0.3503
05	20.000	0.3969	06	50.000	0.3903	07	100.000	0.3643	08	150.000	0.3655
09	200.000	0.3736									

1,4-Dichlorobenzene Average RF RSD = 8.1 Average RF = 1.097

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.298	02	1.000	1.078	03	2.000	1.067	04	5.000	1.107
05	20.000	1.153	06	50.000	1.109	07	100.000	1.043	08	150.000	1.007
09	200.000	1.010									

1,4-Dioxane Average RF RSD = 12.6 Average RF = 0.001641

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.001243	04	100.000	0.001712	05	400.000	0.001610	06	1000.000	0.001704
07	2000.000	0.001595	08	3000.000	0.001695	09	4000.000	0.001928			

1-Butanol Average RF RSD = 7.8 Average RF = 0.005397

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.005490	03	100.000	0.004962	04	250.000	0.004749	05	1000.000	0.005398
06	2500.000	0.005707	07	5000.000	0.005380	08	7500.000	0.005358	09	10000.000	0.006129

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 5.4 Average RF = 0.3214

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3407	02	1.000	0.2820	03	2.000	0.3273	04	5.000	0.3361
05	20.000	0.3293	06	50.000	0.3157	07	100.000	0.3173	08	150.000	0.3140
09	200.000	0.3303									

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 10.0 Average RF = 0.6210

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7559	02	1.000	0.6858	03	2.000	0.6047	04	5.000	0.6193
05	20.000	0.5599	06	50.000	0.6099	07	100.000	0.5871	08	150.000	0.5707
09	200.000	0.5960									

2,2-Dichloropropane Average RF RSD = 4.0 Average RF = 0.6448

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.6845	03	2.000	0.6143	04	5.000	0.6327	05	20.000	0.6769
06	50.000	0.6460	07	100.000	0.6526	08	150.000	0.6150	09	200.000	0.6362

2,3,6-Trichlorotoluene Average RF RSD = 2.9 Average RF = 0.3326

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3293	03	2.000	0.3313	04	5.000	0.3312	05	20.000	0.3222
06	50.000	0.3363	07	100.000	0.3293	08	150.000	0.3275	09	200.000	0.3540

2,4,5-Trichlorotoluene Average RF RSD = 7.2 Average RF = 0.3576

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3016	03	2.000	0.3615	04	5.000	0.3452	05	20.000	0.3683
06	50.000	0.3680	07	100.000	0.3667	08	150.000	0.3602	09	200.000	0.3896

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 5.3 Average RF = 0.8304

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.8361	02	3.000	0.8632	03	6.000	0.8012	04	15.000	0.8619
05	60.000	0.8909	06	150.000	0.8565	07	300.000	0.8252	08	450.000	0.7847
09	600.000	0.7541									

2,4-Dichlorobenzotrifluoride Average RF RSD = 8.7 Average RF = 0.4441

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5331	02	1.000	0.4721	03	2.000	0.4207	04	5.000	0.4149
05	20.000	0.4566	06	50.000	0.4199	07	100.000	0.4255	08	150.000	0.4194
09	200.000	0.4344									

2,5-Dichlorobenzotrifluoride Average RF RSD = 7.1 Average RF = 0.4710

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4558	02	1.000	0.5566	03	2.000	0.4568	04	5.000	0.4541
05	20.000	0.4721	06	50.000	0.4479	07	100.000	0.4540	08	150.000	0.4632
09	200.000	0.4787									

2-Butanone (MEK) Average RF RSD = 5.8 Average RF = 0.1440

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1547	05	20.000	0.1333	06	50.000	0.1426	07	100.000	0.1377
08	150.000	0.1432	09	200.000	0.1525						

2-Chloro-1,3-butadiene Average RF RSD = 2.5 Average RF = 0.8371

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8632	02	1.000	0.8543	03	2.000	0.8696	04	5.000	0.8352
05	20.000	0.8166	06	50.000	0.8272	07	100.000	0.8132	08	150.000	0.8182
09	200.000	0.8363									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2-Chlorobenzotrifluoride Average RF RSD = 4.5 Average RF = 0.6584

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6164	02	1.000	0.6687	03	2.000	0.7117	04	5.000	0.6471
05	20.000	0.6920	06	50.000	0.6485	07	100.000	0.6436	08	150.000	0.6336
09	200.000	0.6644									

2-Chloroethyl Vinyl Ether Average RF RSD = 8.4 Average RF = 0.1452

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1584	03	2.000	0.1205	04	5.000	0.1390	05	20.000	0.1398
06	50.000	0.1521	07	100.000	0.1467	08	150.000	0.1479	09	200.000	0.1569

2-Chlorotoluene Average RF RSD = 9.2 Average RF = 1.639

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.817	02	1.000	1.712	03	2.000	1.609	04	5.000	1.707
05	20.000	1.801	06	50.000	1.716	07	100.000	1.562	08	150.000	1.438
09	200.000	1.392									

2-Hexanone Average RF RSD = 6.6 Average RF = 0.1447

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1364	04	5.000	0.1301	05	20.000	0.1446	06	50.000	0.1563
07	100.000	0.1434	08	150.000	0.1463	09	200.000	0.1560			

2-Methyl-1-propanol Average RF RSD = 5.9 Average RF = 0.009385

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01025	03	40.000	0.009383	04	100.000	0.008726	05	400.000	0.009118
06	1000.000	0.009625	07	2000.000	0.008808	08	3000.000	0.009116	09	4000.000	0.01005

2-Methyl-2-propanol Average RF RSD = 6.9 Average RF = 0.03013

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.03061	03	40.000	0.02641	04	100.000	0.02861	05	400.000	0.03198
06	1000.000	0.03141	07	2000.000	0.02933	08	3000.000	0.02973	09	4000.000	0.03296

2-Nitropropane Average RF RSD = 4.7 Average RF = 0.05426

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.05638	03	4.000	0.05520	04	10.000	0.05451	05	40.000	0.05740
06	100.000	0.05503	07	200.000	0.04935	08	300.000	0.05205	09	400.000	0.05415

2-Propanol Average RF RSD = 9.0 Average RF = 0.01896

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.02208	03	40.000	0.01686	04	100.000	0.01810	05	400.000	0.01792
06	1000.000	0.01898	07	2000.000	0.01848	08	3000.000	0.01833	09	4000.000	0.02092

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 6.4 Average RF = 0.8802

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8639	02	2.000	0.8556	03	4.000	0.8747	04	10.000	0.9232
05	40.000	0.9705	06	100.000	0.9336	07	200.000	0.8887	08	300.000	0.8260
09	400.000	0.7856									

3,4-Dichlorobenzotrifluoride Average RF RSD = 5.9 Average RF = 0.4682

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5023	02	1.000	0.4108	03	2.000	0.5012	04	5.000	0.4597
05	20.000	0.4765	06	50.000	0.4572	07	100.000	0.4670	08	150.000	0.4598
09	200.000	0.4797									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
3-Chloro-1-propene	Average RF		RSD = 11.4		Average RF = 0.2132						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2485	02	1.000	0.2300	03	2.000	0.2152	04	5.000	0.2192
05	20.000	0.2285	06	50.000	0.2217	07	100.000	0.2027	08	150.000	0.1708
09	200.000	0.1820									
3-Chlorobenzotrifluoride	Average RF		RSD = 4.3		Average RF = 0.3634						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3989	02	1.000	0.3764	03	2.000	0.3557	04	5.000	0.3546
05	20.000	0.3624	06	50.000	0.3517	07	100.000	0.3578	08	150.000	0.3489
09	200.000	0.3642									
3-Chlorotoluene	Average RF		RSD = 7.8		Average RF = 1.671						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.749	02	1.000	1.642	03	2.000	1.682	04	5.000	1.838
05	20.000	1.829	06	50.000	1.711	07	100.000	1.623	08	150.000	1.512
09	200.000	1.453									
4-Bromofluorobenzene	Average RF		RSD = 8.9		Average RF = 0.4320						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4859	03	60.000	0.4631	04	70.000	0.4435	05	100.000	0.4115
07	125.000	0.4013	08	150.000	0.3865						
4-Chlorotoluene	Average RF		RSD = 8.8		Average RF = 1.911						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.990	02	1.000	2.007	03	2.000	1.945	04	5.000	2.006
05	20.000	2.101	06	50.000	2.022	07	100.000	1.848	08	150.000	1.687
09	200.000	1.595									
4-Isopropyltoluene	Average RF		RSD = 9.6		Average RF = 1.851						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.818	02	1.000	1.950	03	2.000	1.938	04	5.000	1.942
05	20.000	2.046	06	50.000	2.007	07	100.000	1.813	08	150.000	1.620
09	200.000	1.525									
4-Methyl-2-pentanone	Average RF		RSD = 5.1		Average RF = 0.1911						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1778	04	5.000	0.1818	05	20.000	0.1904	06	50.000	0.1974
07	100.000	0.1883	08	150.000	0.1953	09	200.000	0.2069			
Acetone	Average RF		RSD = 7.2		Average RF = 0.09765						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1098	05	20.000	0.09775	06	50.000	0.09249	07	100.000	0.08949
08	150.000	0.09670	09	200.000	0.09965						
Acetonitrile	Linear	1/X	R2 = 0.9953		Y = 0.01498 X + 8.398E-4						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.02178	04	25.000	0.01697	05	100.000	0.01454	06	250.000	0.01254
07	500.000	0.01464	08	750.000	0.01533	09	1000.000	0.01572			
Acrolein	Average RF		RSD = 10.3		Average RF = 0.04860						
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.04577	03	10.000	0.04232	04	25.000	0.04238	05	100.000	0.04672
06	250.000	0.05175	07	500.000	0.05097	08	750.000	0.05330	09	1000.000	0.05561

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** 1/X

Acrylonitrile Average RF RSD = 4.5 Average RF = 0.1145

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1196	02	5.000	0.1154	03	10.000	0.1051	04	25.000	0.1105
05	100.000	0.1211	06	250.000	0.1137	07	500.000	0.1111	08	750.000	0.1144
09	1000.000	0.1195									

Benzene Average RF RSD = 5.3 Average RF = 1.007

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.018	02	1.000	1.004	03	2.000	1.029	04	5.000	1.037
05	20.000	1.093	06	50.000	1.040	07	100.000	0.9789	08	150.000	0.9343
09	200.000	0.9263									

Bromobenzene Average RF RSD = 5.5 Average RF = 0.5559

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5970	02	1.000	0.5433	03	2.000	0.5051	04	5.000	0.5826
05	20.000	0.5835	06	50.000	0.5776	07	100.000	0.5419	08	150.000	0.5291
09	200.000	0.5433									

Bromochloromethane Average RF RSD = 6.3 Average RF = 0.2381

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2469	02	1.000	0.2159	03	2.000	0.2517	04	5.000	0.2593
05	20.000	0.2512	06	50.000	0.2392	07	100.000	0.2270	08	150.000	0.2228
09	200.000	0.2288									

Bromodichloromethane Average RF RSD = 7.9 Average RF = 0.3313

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3042	02	1.000	0.3917	03	2.000	0.3169	04	5.000	0.3428
05	20.000	0.3419	06	50.000	0.3330	07	100.000	0.3159	08	150.000	0.3136
09	200.000	0.3219									

Bromoform Average RF RSD = 5.9 Average RF = 0.2384

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2282	02	1.000	0.2591	03	2.000	0.2132	04	5.000	0.2468
05	20.000	0.2499	06	50.000	0.2464	07	100.000	0.2299	08	150.000	0.2299
09	200.000	0.2421									

Bromomethane Average RF RSD = 6.4 Average RF = 0.2894

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3012	02	1.000	0.2991	03	2.000	0.2627	04	5.000	0.2628
05	20.000	0.2768	06	50.000	0.2879	07	100.000	0.2970	08	150.000	0.3000
09	200.000	0.3172									

Carbon Disulfide Average RF RSD = 3.6 Average RF = 1.261

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.339	02	1.000	1.288	03	2.000	1.240	04	5.000	1.260
05	20.000	1.276	06	50.000	1.300	07	100.000	1.235	08	150.000	1.222
09	200.000	1.191									

Carbon Tetrachloride Average RF RSD = 4.9 Average RF = 0.09590

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1008	02	1.000	0.09074	03	2.000	0.1022	04	5.000	0.09527
05	20.000	0.09651	06	50.000	0.1006	07	100.000	0.09432	08	150.000	0.08826
09	200.000	0.09436									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Chlorobenzene Average RF RSD = 5.7 Average RF = 0.7333

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7321	02	1.000	0.7836	03	2.000	0.7089	04	5.000	0.7610
05	20.000	0.7803	06	50.000	0.7629	07	100.000	0.7186	08	150.000	0.6798
09	200.000	0.6726									

Chloroethane Average RF RSD = 7.1 Average RF = 0.3838

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4496	02	1.000	0.3617	03	2.000	0.3747	04	5.000	0.3667
05	20.000	0.3914	06	50.000	0.3946	07	100.000	0.3768	08	150.000	0.3632
09	200.000	0.3756									

Chloroform Average RF RSD = 5.9 Average RF = 0.7300

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8084	02	1.000	0.7897	03	2.000	0.6896	04	5.000	0.7021
05	20.000	0.7490	06	50.000	0.7195	07	100.000	0.7059	08	150.000	0.6974
09	200.000	0.7083									

Chloromethane Average RF RSD = 4.5 Average RF = 0.6392

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5759	02	1.000	0.6520	03	2.000	0.6524	04	5.000	0.6230
05	20.000	0.6742	06	50.000	0.6600	07	100.000	0.6427	08	150.000	0.6257
09	200.000	0.6471									

Cyclohexane Average RF RSD = 7.8 Average RF = 0.2786

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3170	03	2.000	0.3045	04	5.000	0.2670	05	20.000	0.2536
06	50.000	0.2822	07	100.000	0.2682	08	150.000	0.2632	09	200.000	0.2733

Cyclohexanone Average RF RSD = 8.5 Average RF = 0.04361

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.05029	03	40.000	0.04601	04	100.000	0.04269	05	400.000	0.04573
06	1000.000	0.04274	07	2000.000	0.03886	08	3000.000	0.03957	09	4000.000	0.04299

Dibromochloromethane Average RF RSD = 9.2 Average RF = 0.2483

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2997	02	1.000	0.2628	03	2.000	0.2360	04	5.000	0.2247
05	20.000	0.2520	06	50.000	0.2522	07	100.000	0.2320	08	150.000	0.2329
09	200.000	0.2419									

Dibromofluoromethane Average RF RSD = 8.3 Average RF = 0.2588

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.2867	03	60.000	0.2772	04	70.000	0.2672	05	100.000	0.2472
07	125.000	0.2423	08	150.000	0.2324						

Dibromomethane Average RF RSD = 5.0 Average RF = 0.1284

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1408	02	1.000	0.1298	03	2.000	0.1180	04	5.000	0.1270
05	20.000	0.1339	06	50.000	0.1273	07	100.000	0.1233	08	150.000	0.1253
09	200.000	0.1300									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 8.9 Average RF = 0.5899

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6441	02	1.000	0.5416	03	2.000	0.5513	04	5.000	0.4940
05	20.000	0.6382	06	50.000	0.6413	07	100.000	0.6180	08	150.000	0.5815
09	200.000	0.5988									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dichlorofluoromethane (CFC 21) Average RF RSD = 6.0 Average RF = 0.8258

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8601	02	1.000	0.9351	03	2.000	0.8132	04	5.000	0.8129
05	20.000	0.7837	06	50.000	0.8538	07	100.000	0.7965	08	150.000	0.7825
09	200.000	0.7941									

Dichloromethane Average RF RSD = 2.7 Average RF = 0.4216

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4298	02	1.000	0.4405	03	2.000	0.4130	04	5.000	0.4108
05	20.000	0.4365	06	50.000	0.4216	07	100.000	0.4123	08	150.000	0.4107
09	200.000	0.4195									

Diethyl Ether Average RF RSD = 4.4 Average RF = 0.3664

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3553	03	2.000	0.4031	04	5.000	0.3532	05	20.000	0.3723
06	50.000	0.3647	07	100.000	0.3577	08	150.000	0.3583	09	200.000	0.3663

Diisopropyl Ether Average RF RSD = 4.7 Average RF = 1.546

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.645	02	1.000	1.523	03	2.000	1.517	04	5.000	1.525
05	20.000	1.681	06	50.000	1.532	07	100.000	1.539	08	150.000	1.440
09	200.000	1.509									

Ethyl Methacrylate Average RF RSD = 5.2 Average RF = 0.3196

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3490	02	1.000	0.3349	03	2.000	0.3006	04	5.000	0.3068
05	20.000	0.3340	06	50.000	0.3194	07	100.000	0.3037	08	150.000	0.3092
09	200.000	0.3187									

Ethyl tert-Butyl Ether Average RF RSD = 3.9 Average RF = 1.369

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.328	02	1.000	1.356	03	2.000	1.316	04	5.000	1.373
05	20.000	1.479	06	50.000	1.394	07	100.000	1.394	08	150.000	1.299
09	200.000	1.384									

Ethylbenzene Average RF RSD = 4.8 Average RF = 0.4090

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4218	02	1.000	0.3967	03	2.000	0.3817	04	5.000	0.4274
05	20.000	0.4269	06	50.000	0.4343	07	100.000	0.4058	08	150.000	0.3844
09	200.000	0.4020									

Hexachlorobutadiene Average RF RSD = 8.5 Average RF = 0.2436

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2920	02	1.000	0.2338	03	2.000	0.2385	04	5.000	0.2495
05	20.000	0.2530	06	50.000	0.2437	07	100.000	0.2309	08	150.000	0.2206
09	200.000	0.2304									

Iodomethane Quadratic 1/X2 COD = 0.9910 $Y = 0.03013 X^2 + 0.3513 X + -0.008272$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1696	04	5.000	0.2119	05	20.000	0.3175	06	50.000	0.4252
07	100.000	0.4420	08	150.000	0.4428	09	200.000	0.4404			

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Isopropylbenzene (Cumene) Average RF RSD = 12.2 Average RF = 2.189

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.488	02	1.000	2.206	03	2.000	2.211	04	5.000	2.375
05	20.000	2.432	06	50.000	2.351	07	100.000	2.086	08	150.000	1.836
09	200.000	1.716									

Methacrylonitrile Average RF RSD = 3.5 Average RF = 0.1346

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1298	04	5.000	0.1359	05	20.000	0.1412	06	50.000	0.1366
07	100.000	0.1297	08	150.000	0.1304	09	200.000	0.1386			

Methyl Acetate Average RF RSD = 4.1 Average RF = 0.2364

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2348	04	5.000	0.2201	05	20.000	0.2372	06	50.000	0.2430
07	100.000	0.2384	08	150.000	0.2304	09	200.000	0.2506			

Methyl Methacrylate Average RF RSD = 6.4 Average RF = 0.1534

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1713	02	1.000	0.1369	03	2.000	0.1564	04	5.000	0.1541
05	20.000	0.1598	06	50.000	0.1548	07	100.000	0.1446	08	150.000	0.1475
09	200.000	0.1549									

Methyl tert-Butyl Ether Average RF RSD = 3.6 Average RF = 1.116

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.096	02	1.000	1.112	03	2.000	1.113	04	5.000	1.145
05	20.000	1.210	06	50.000	1.115	07	100.000	1.082	08	150.000	1.080
09	200.000	1.093									

Methylcyclohexane Average RF RSD = 5.2 Average RF = 0.3276

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3525	03	2.000	0.3041	04	5.000	0.3329	05	20.000	0.3061
06	50.000	0.3463	07	100.000	0.3294	08	150.000	0.3208	09	200.000	0.3287

Naphthalene Average RF RSD = 7.5 Average RF = 1.269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.128	02	1.000	1.297	03	2.000	1.192	04	5.000	1.273
05	20.000	1.422	06	50.000	1.404	07	100.000	1.273	08	150.000	1.212
09	200.000	1.223									

Propionitrile Average RF RSD = 7.0 Average RF = 0.04142

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.03803	03	10.000	0.04741	04	25.000	0.04046	05	100.000	0.04211
06	250.000	0.04070	07	500.000	0.03876	08	750.000	0.04102	09	1000.000	0.04286

Styrene Average RF RSD = 6.5 Average RF = 0.8001

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7641	02	1.000	0.7557	03	2.000	0.8019	04	5.000	0.8392
05	20.000	0.8786	06	50.000	0.8640	07	100.000	0.8060	08	150.000	0.7594
09	200.000	0.7324									

Tetrachloroethene (PCE) Average RF RSD = 5.2 Average RF = 0.1928

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1801	02	1.000	0.1936	03	2.000	0.1803	04	5.000	0.1889
05	20.000	0.2097	06	50.000	0.2017	07	100.000	0.1997	08	150.000	0.1858
09	200.000	0.1954									

Initial Calibration - Detailed Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

Tetrahydrofuran (THF) Average RF RSD = 6.3 Average RF = 0.09472

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1006	04	5.000	0.09422	05	20.000	0.1009	06	50.000	0.09855
07	100.000	0.08736	08	150.000	0.08616	09	200.000	0.09529			

Toluene Average RF RSD = 8.5 Average RF = 1.063

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.128	02	1.000	1.079	03	2.000	1.123	04	5.000	1.113
05	20.000	1.146	06	50.000	1.114	07	100.000	1.027	08	150.000	0.9420
09	200.000	0.8925									

Toluene-d8 Average RF RSD = 12.1 Average RF = 1.111

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.276	03	60.000	1.229	04	70.000	1.170	05	100.000	1.047
07	125.000	1.001	08	150.000	0.9398						

Trichloroethene (TCE) Average RF RSD = 3.7 Average RF = 0.2464

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2473	02	1.000	0.2542	03	2.000	0.2292	04	5.000	0.2455
05	20.000	0.2575	06	50.000	0.2535	07	100.000	0.2501	08	150.000	0.2350
09	200.000	0.2457									

Trichlorofluoromethane (CFC 11) Average RF RSD = 6.5 Average RF = 0.6159

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6926	02	1.000	0.6456	03	2.000	0.6383	04	5.000	0.5760
05	20.000	0.6231	06	50.000	0.6170	07	100.000	0.5980	08	150.000	0.5615
09	200.000	0.5910									

Vinyl Acetate Average RF RSD = 4.2 Average RF = 0.07885

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08118	03	2.000	0.08125	04	5.000	0.07868	05	20.000	0.07342
06	50.000	0.08404	07	100.000	0.07790	08	150.000	0.07864	09	200.000	0.07570

Vinyl Chloride Average RF RSD = 5.6 Average RF = 0.7146

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7563	02	1.000	0.7110	03	2.000	0.6429	04	5.000	0.6998
05	20.000	0.7621	06	50.000	0.7544	07	100.000	0.7294	08	150.000	0.6784
09	200.000	0.6969									

cis-1,2-Dichloroethene Average RF RSD = 7.3 Average RF = 0.4551

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5179	02	1.000	0.4843	03	2.000	0.4012	04	5.000	0.4290
05	20.000	0.4658	06	50.000	0.4596	07	100.000	0.4456	08	150.000	0.4398
09	200.000	0.4529									

cis-1,3-Dichloropropene Average RF RSD = 6.8 Average RF = 0.4229

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3538	02	1.000	0.4468	03	2.000	0.4319	04	5.000	0.4169
05	20.000	0.4543	06	50.000	0.4373	07	100.000	0.4232	08	150.000	0.4193
09	200.000	0.4229									

m,p-Xylenes Average RF RSD = 7.1 Average RF = 0.4812

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5134	02	2.000	0.4783	03	4.000	0.4829	04	10.000	0.4982
05	40.000	0.5148	06	100.000	0.5135	07	200.000	0.4752	08	300.000	0.4350
09	400.000	0.4197									

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte **Curve Fit** **Weighting**

n-Butyl Acetate Average RF RSD = 6.0 Average RF = 0.3780

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3377	02	1.000	0.3776	03	2.000	0.3614	04	5.000	0.3606
05	20.000	0.3994	06	50.000	0.4127	07	100.000	0.3835	08	150.000	0.3753
09	200.000	0.3938									

n-Butylbenzene Average RF RSD = 8.9 Average RF = 1.673

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.858	02	1.000	1.637	03	2.000	1.623	04	5.000	1.736
05	20.000	1.822	06	50.000	1.806	07	100.000	1.662	08	150.000	1.493
09	200.000	1.420									

n-Heptane Average RF RSD = 7.3 Average RF = 0.3063

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3539	03	2.000	0.3021	04	5.000	0.3018	05	20.000	0.3160
06	50.000	0.3115	07	100.000	0.2960	08	150.000	0.2812	09	200.000	0.2877

n-Propylbenzene Average RF RSD = 14.9 Average RF = 2.540

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.600	02	1.000	2.748	03	2.000	2.673	04	5.000	2.886
05	20.000	2.916	06	50.000	2.762	07	100.000	2.397	08	150.000	2.030
09	200.000	1.844									

o-Xylene Average RF RSD = 4.2 Average RF = 0.4791

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4551	02	1.000	0.4595	03	2.000	0.4903	04	5.000	0.4677
05	20.000	0.5143	06	50.000	0.5018	07	100.000	0.4847	08	150.000	0.4640
09	200.000	0.4748									

sec-Butylbenzene Average RF RSD = 11.7 Average RF = 2.144

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.294	02	1.000	2.315	03	2.000	2.276	04	5.000	2.321
05	20.000	2.318	06	50.000	2.276	07	100.000	2.038	08	150.000	1.792
09	200.000	1.670									

tert-Amyl Methyl Ether Average RF RSD = 5.6 Average RF = 1.194

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.138	02	1.000	1.228	03	2.000	1.109	04	5.000	1.147
05	20.000	1.324	06	50.000	1.236	07	100.000	1.203	08	150.000	1.142
09	200.000	1.217									

tert-Butylbenzene Average RF RSD = 7.7 Average RF = 1.503

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.628	02	1.000	1.423	03	2.000	1.470	04	5.000	1.612
05	20.000	1.624	06	50.000	1.599	07	100.000	1.480	08	150.000	1.367
09	200.000	1.328									

trans-1,2-Dichloroethene Average RF RSD = 5.9 Average RF = 0.4319

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4292	02	1.000	0.4876	03	2.000	0.4506	04	5.000	0.4164
05	20.000	0.4401	06	50.000	0.4305	07	100.000	0.4178	08	150.000	0.4009
09	200.000	0.4138									

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte	**Curve Fit**	**Weighting**

trans-1,3-Dichloropropene — Average RF — RSD = 6.5 — Average RF = 0.3522

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3189	02	1.000	0.3135	03	2.000	0.3639	04	5.000	0.3494
05	20.000	0.3840	06	50.000	0.3725	07	100.000	0.3538	08	150.000	0.3563
09	200.000	0.3575									

trans-1,4-Dichloro-2-butene — Average RF — RSD = 11.7 — Average RF = 0.1705

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2206	02	1.000	0.1703	03	2.000	0.1654	04	5.000	0.1690
05	20.000	0.1737	06	50.000	0.1589	07	100.000	0.1530	08	150.000	0.1573
09	200.000	0.1659									

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.2	02	1.000	1.07	6.6	03	2.000	1.93	-3.6
04	5.000	4.94	-1.2	05	20.000	21.18	5.9	06	50.000	51.57	3.1
07	100.000	99.35	-0.7	08	150.000	147.05	-2.0	09	200.000	203.92	2.0

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.2	02	1.000	0.99	-1.1	03	2.000	2.02	0.8
04	5.000	5.11	2.2	05	20.000	20.00	0.0	06	50.000	48.86	-2.3
07	100.000	95.67	-4.3	08	150.000	137.11	-8.6	09	200.000	190.02	-5.0

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.1	02	1.000	1.04	4.4	03	2.000	2.08	4.0
04	5.000	4.85	-2.9	05	20.000	21.02	5.1	06	50.000	49.98	0.0
07	100.000	90.61	-9.4	08	150.000	137.24	-8.5	09	200.000	192.43	-3.8

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.64	28.7	02	1.000	1.05	4.5	03	2.000	1.82	-8.9
04	5.000	4.91	-1.8	05	20.000	20.12	0.6	06	50.000	49.05	-1.9
07	100.000	90.94	-9.1	08	150.000	139.57	-7.0	09	200.000	189.65	-5.2

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	1.08	7.7	03	2.000	1.86	-6.9
04	5.000	5.01	0.1	05	20.000	20.98	4.9	06	50.000	50.99	2.0
07	100.000	99.16	-0.8	08	150.000	139.14	-7.2	09	200.000	197.14	-1.4

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.4	02	1.000	0.98	-2.2	03	2.000	2.01	0.5
04	5.000	4.85	-2.9	05	20.000	21.12	5.6	06	50.000	50.17	0.3
07	100.000	98.09	-1.9	08	150.000	144.43	-3.7	09	200.000	193.75	-3.1

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.3	02	1.000	0.96	-3.5	03	2.000	1.89	-5.7
04	5.000	5.23	4.5	05	20.000	20.93	4.7	06	50.000	51.13	2.3
07	100.000	100.60	0.6	08	150.000	145.22	-3.2	09	200.000	200.06	0.0

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.9	02	1.000	1.02	2.0	03	2.000	1.96	-1.8
04	5.000	4.87	-2.5	05	20.000	21.05	5.3	06	50.000	52.51	5.0
07	100.000	100.04	0.0	08	150.000	142.90	-4.7	09	200.000	199.28	-0.4

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.3	02	1.000	0.95	-4.9	03	2.000	1.93	-3.3
04	5.000	4.72	-5.5	05	20.000	21.88	9.4	06	50.000	54.06	8.1
07	100.000	100.19	0.2	08	150.000	147.70	-1.5	09	200.000	207.80	3.9

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.61	21.1	02	1.000	1.07	6.9	03	2.000	2.02	1.2
04	5.000	5.13	2.5	05	20.000	20.04	0.2	06	50.000	47.78	-4.4
07	100.000	88.74	-11.3	08	150.000	134.06	-10.6	09	200.000	188.65	-5.7

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.9	02	1.000	1.02	2.0	03	2.000	1.96	-1.9
04	5.000	4.75	-5.0	05	20.000	21.29	6.5	06	50.000	53.34	6.7
07	100.000	98.86	-1.1	08	150.000	145.01	-3.3	09	200.000	198.31	-0.8

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	1.05	4.8	03	2.000	2.11	5.5
04	5.000	5.32	6.4	05	20.000	21.74	8.7	06	50.000	53.31	6.6
07	100.000	95.61	-4.4	08	150.000	129.50	-13.7	09	200.000	162.72	-18.6

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.1	03	2.000	2.42	20.8	04	5.000	4.60	-8.0
05	20.000	21.19	5.9	06	50.000	50.95	1.9	07	100.000	92.89	-7.1
08	150.000	136.83	-8.8	09	200.000	202.57	1.3				

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.9	02	1.000	0.97	-2.9	03	2.000	1.88	-5.9
04	5.000	5.04	0.8	05	20.000	21.67	8.3	06	50.000	51.52	3.0
07	100.000	95.04	-5.0	08	150.000	145.33	-3.1	09	200.000	197.59	-1.2

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.7	02	1.000	0.97	-3.2	03	2.000	2.14	6.9
04	5.000	4.92	-1.5	05	20.000	18.61	-7.0	06	50.000	51.86	3.7
07	100.000	98.47	-1.5	08	150.000	144.07	-4.0	09	200.000	197.54	-1.2

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.9	02	1.000	1.09	8.9	03	2.000	1.96	-2.2
04	5.000	4.90	-2.0	05	20.000	21.23	6.1	06	50.000	51.31	2.6
07	100.000	97.61	-2.4	08	150.000	143.16	-4.6	09	200.000	192.87	-3.6

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.8	02	1.000	1.02	2.5	03	2.000	1.96	-1.9
04	5.000	5.01	0.3	05	20.000	21.07	5.3	06	50.000	51.25	2.5
07	100.000	96.98	-3.0	08	150.000	146.61	-2.3	09	200.000	198.90	-0.5

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	56.12	12.2	03	60.000	64.37	7.3	04	70.000	71.19	1.7
05	100.000	96.65	-3.4	07	125.000	116.87	-6.5	08	150.000	132.95	-11.4

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.8	02	1.000	1.02	1.8	03	2.000	1.94	-3.2
04	5.000	4.92	-1.6	05	20.000	20.50	2.5	06	50.000	50.00	0.0
07	100.000	97.04	-3.0	08	150.000	144.91	-3.4	09	200.000	197.97	-1.0

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.3	02	1.000	0.92	-7.9	03	2.000	2.04	2.2
04	5.000	5.12	2.5	05	20.000	20.96	4.8	06	50.000	50.05	0.1
07	100.000	99.70	-0.3	08	150.000	144.98	-3.3	09	200.000	199.39	-0.3

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.3	02	1.000	1.05	4.9	03	2.000	2.06	3.0
04	5.000	5.18	3.5	05	20.000	22.13	10.7	06	50.000	52.60	5.2
07	100.000	96.89	-3.1	08	150.000	131.66	-12.2	09	200.000	165.33	-17.3

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.9	02	1.000	1.02	1.6	03	2.000	1.92	-3.8
04	5.000	5.04	0.8	05	20.000	21.21	6.0	06	50.000	51.49	3.0
07	100.000	97.19	-2.8	08	150.000	140.31	-6.5	09	200.000	187.30	-6.4

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.0	02	1.000	1.00	-0.1	03	2.000	2.03	1.4
04	5.000	4.68	-6.4	05	20.000	21.20	6.0	06	50.000	52.14	4.3
07	100.000	97.34	-2.7	08	150.000	146.47	-2.4	09	200.000	199.62	-0.2

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.3	02	1.000	0.98	-1.7	03	2.000	1.95	-2.7
04	5.000	5.05	0.9	05	20.000	21.03	5.1	06	50.000	50.56	1.1
07	100.000	95.07	-4.9	08	150.000	137.67	-8.2	09	200.000	184.21	-7.9

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	30.31	-24.2	04	100.000	104.34	4.3	05	400.000	392.47	-1.9
06	1000.000	1,038.28	3.8	07	2000.000	1,944.24	-2.8	08	3000.000	3,098.36	3.3
09	4000.000	4,698.17	17.5								

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	50.87	1.7	03	100.000	91.95	-8.1	04	250.000	219.99	-12.0
05	1000.000	1,000.24	0.0	06	2500.000	2,643.75	5.7	07	5000.000	4,984.52	-0.3
08	7500.000	7,446.45	-0.7	09	10000.000	11,357.56	13.6				

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.0	02	1.000	0.88	-12.3	03	2.000	2.04	1.8
04	5.000	5.23	4.6	05	20.000	20.49	2.5	06	50.000	49.12	-1.8
07	100.000	98.72	-1.3	08	150.000	146.55	-2.3	09	200.000	205.51	2.8

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.61	21.7	02	1.000	1.10	10.4	03	2.000	1.95	-2.6
04	5.000	4.99	-0.3	05	20.000	18.03	-9.8	06	50.000	49.10	-1.8
07	100.000	94.53	-5.5	08	150.000	137.84	-8.1	09	200.000	191.93	-4.0

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.06	6.2	03	2.000	1.91	-4.7	04	5.000	4.91	-1.9
05	20.000	21.00	5.0	06	50.000	50.10	0.2	07	100.000	101.21	1.2
08	150.000	143.08	-4.6	09	200.000	197.34	-1.3				

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.99	-1.0	03	2.000	1.99	-0.4	04	5.000	4.98	-0.4
05	20.000	19.37	-3.1	06	50.000	50.54	1.1	07	100.000	98.99	-1.0
08	150.000	147.70	-1.5	09	200.000	212.85	6.4				

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.84	-15.7	03	2.000	2.02	1.1	04	5.000	4.83	-3.5
05	20.000	20.59	3.0	06	50.000	51.45	2.9	07	100.000	102.52	2.5
08	150.000	151.08	0.7	09	200.000	217.86	8.9				

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.51	0.7	02	3.000	3.12	3.9	03	6.000	5.79	-3.5
04	15.000	15.57	3.8	05	60.000	64.37	7.3	06	150.000	154.71	3.1
07	300.000	298.12	-0.6	08	450.000	425.21	-5.5	09	600.000	544.87	-9.2

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.1	02	1.000	1.06	6.3	03	2.000	1.89	-5.3
04	5.000	4.67	-6.6	05	20.000	20.57	2.8	06	50.000	47.28	-5.4
07	100.000	95.82	-4.2	08	150.000	141.67	-5.6	09	200.000	195.66	-2.2

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.2	02	1.000	1.18	18.2	03	2.000	1.94	-3.0
04	5.000	4.82	-3.6	05	20.000	20.04	0.2	06	50.000	47.55	-4.9
07	100.000	96.39	-3.6	08	150.000	147.51	-1.7	09	200.000	203.27	1.6

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.37	7.4	05	20.000	18.51	-7.5	06	50.000	49.53	-0.9
07	100.000	95.66	-4.3	08	150.000	149.19	-0.5	09	200.000	211.78	5.9

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	1.02	2.1	03	2.000	2.08	3.9
04	5.000	4.99	-0.2	05	20.000	19.51	-2.4	06	50.000	49.41	-1.2
07	100.000	97.15	-2.9	08	150.000	146.61	-2.3	09	200.000	199.81	-0.1

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.4	02	1.000	1.02	1.6	03	2.000	2.16	8.1
04	5.000	4.91	-1.7	05	20.000	21.02	5.1	06	50.000	49.24	-1.5
07	100.000	97.74	-2.3	08	150.000	144.34	-3.8	09	200.000	201.82	0.9

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.09	9.1	03	2.000	1.66	-17.0	04	5.000	4.79	-4.2
05	20.000	19.25	-3.7	06	50.000	52.39	4.8	07	100.000	101.05	1.1
08	150.000	152.85	1.9	09	200.000	216.18	8.1				

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.8	02	1.000	1.04	4.4	03	2.000	1.96	-1.8
04	5.000	5.21	4.1	05	20.000	21.98	9.9	06	50.000	52.35	4.7
07	100.000	95.27	-4.7	08	150.000	131.58	-12.3	09	200.000	169.78	-15.1

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.88	-5.8	04	5.000	4.49	-10.1	05	20.000	19.98	-0.1
06	50.000	54.00	8.0	07	100.000	99.09	-0.9	08	150.000	151.63	1.1
09	200.000	215.58	7.8								

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	21.85	9.2	03	40.000	40.00	0.0	04	100.000	92.98	-7.0
05	400.000	388.63	-2.8	06	1000.000	1,025.65	2.6	07	2000.000	1,877.18	-6.1
08	3000.000	2,914.01	-2.9	09	4000.000	4,283.75	7.1				

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	20.32	1.6	03	40.000	35.06	-12.4	04	100.000	94.97	-5.0
05	400.000	424.57	6.1	06	1000.000	1,042.53	4.3	07	2000.000	1,946.98	-2.7
08	3000.000	2,959.93	-1.3	09	4000.000	4,375.87	9.4				

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	2.08	3.9	03	4.000	4.07	1.7	04	10.000	10.05	0.5
05	40.000	42.31	5.8	06	100.000	101.42	1.4	07	200.000	181.91	-9.0
08	300.000	287.79	-4.1	09	400.000	399.19	-0.2				

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	23.30	16.5	03	40.000	35.57	-11.1	04	100.000	95.49	-4.5
05	400.000	378.13	-5.5	06	1000.000	1,000.99	0.1	07	2000.000	1,949.43	-2.5
08	3000.000	2,900.17	-3.3	09	4000.000	4,413.20	10.3				

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.98	-1.8	02	2.000	1.94	-2.8	03	4.000	3.98	-0.6
04	10.000	10.49	4.9	05	40.000	44.10	10.3	06	100.000	106.06	6.1
07	200.000	201.94	1.0	08	300.000	281.52	-6.2	09	400.000	357.01	-10.7

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.3	02	1.000	0.88	-12.3	03	2.000	2.14	7.0
04	5.000	4.91	-1.8	05	20.000	20.35	1.8	06	50.000	48.82	-2.4
07	100.000	99.73	-0.3	08	150.000	147.30	-1.8	09	200.000	204.88	2.4

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.6	02	1.000	1.08	7.9	03	2.000	2.02	0.9
04	5.000	5.14	2.8	05	20.000	21.44	7.2	06	50.000	52.00	4.0
07	100.000	95.08	-4.9	08	150.000	120.18	-19.9	09	200.000	170.71	-14.6

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.8	02	1.000	1.04	3.6	03	2.000	1.96	-2.1
04	5.000	4.88	-2.4	05	20.000	19.94	-0.3	06	50.000	48.39	-3.2
07	100.000	98.46	-1.5	08	150.000	144.00	-4.0	09	200.000	200.44	0.2

Initial Calibration - Detailed Report

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Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	0.98	-1.8	03	2.000	2.01	0.7
04	5.000	5.50	10.0	05	20.000	21.89	9.5	06	50.000	51.20	2.4
07	100.000	97.13	-2.9	08	150.000	135.70	-9.5	09	200.000	173.86	-13.1

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	56.24	12.5	03	60.000	64.33	7.2	04	70.000	71.87	2.7
05	100.000	95.27	-4.7	07	125.000	116.12	-7.1	08	150.000	134.20	-10.5

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	1.05	5.0	03	2.000	2.04	1.8
04	5.000	5.25	5.0	05	20.000	21.98	9.9	06	50.000	52.90	5.8
07	100.000	96.68	-3.3	08	150.000	132.39	-11.7	09	200.000	166.87	-16.6

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.8	02	1.000	1.05	5.3	03	2.000	2.09	4.7
04	5.000	5.25	4.9	05	20.000	22.11	10.5	06	50.000	54.22	8.4
07	100.000	97.93	-2.1	08	150.000	131.28	-12.5	09	200.000	164.81	-17.6

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.86	-7.0	04	5.000	4.76	-4.9	05	20.000	19.92	-0.4
06	50.000	51.64	3.3	07	100.000	98.52	-1.5	08	150.000	153.26	2.2
09	200.000	216.55	8.3								

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.62	12.5	05	20.000	20.02	0.1	06	50.000	47.36	-5.3
07	100.000	91.64	-8.4	08	150.000	148.53	-1.0	09	200.000	204.09	2.0

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	11.73	17.3	04	25.000	25.51	2.1	05	100.000	94.26	-5.7
06	250.000	206.48	-17.4	07	500.000	485.78	-2.8	08	750.000	764.78	2.0
09	1000.000	1,046.45	4.6								

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.71	-5.8	03	10.000	8.71	-12.9	04	25.000	21.80	-12.8
05	100.000	96.13	-3.9	06	250.000	266.22	6.5	07	500.000	524.31	4.9
08	750.000	822.46	9.7	09	1000.000	1,144.17	14.4				

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.61	4.4	02	5.000	5.04	0.8	03	10.000	9.18	-8.2
04	25.000	24.12	-3.5	05	100.000	105.76	5.8	06	250.000	248.23	-0.7
07	500.000	485.37	-2.9	08	750.000	749.45	-0.1	09	1000.000	1,044.19	4.4

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.1	02	1.000	1.00	-0.3	03	2.000	2.04	2.2
04	5.000	5.15	3.0	05	20.000	21.71	8.6	06	50.000	51.64	3.3
07	100.000	97.24	-2.8	08	150.000	139.21	-7.2	09	200.000	184.04	-8.0

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.4	02	1.000	0.98	-2.3	03	2.000	1.82	-9.1
04	5.000	5.24	4.8	05	20.000	20.99	5.0	06	50.000	51.95	3.9
07	100.000	97.48	-2.5	08	150.000	142.75	-4.8	09	200.000	195.45	-2.3

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	0.91	-9.3	03	2.000	2.11	5.7
04	5.000	5.45	8.9	05	20.000	21.10	5.5	06	50.000	50.22	0.4
07	100.000	95.35	-4.6	08	150.000	140.37	-6.4	09	200.000	192.19	-3.9

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.2	02	1.000	1.18	18.2	03	2.000	1.91	-4.4
04	5.000	5.17	3.5	05	20.000	20.64	3.2	06	50.000	50.26	0.5
07	100.000	95.34	-4.7	08	150.000	141.97	-5.4	09	200.000	194.30	-2.9

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.3	02	1.000	1.09	8.7	03	2.000	1.79	-10.6
04	5.000	5.18	3.5	05	20.000	20.96	4.8	06	50.000	51.67	3.3
07	100.000	96.44	-3.6	08	150.000	144.68	-3.5	09	200.000	203.10	1.6

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	1.03	3.3	03	2.000	1.82	-9.2
04	5.000	4.54	-9.2	05	20.000	19.13	-4.4	06	50.000	49.73	-0.5
07	100.000	102.64	2.6	08	150.000	155.50	3.7	09	200.000	219.21	9.6

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	1.02	2.1	03	2.000	1.97	-1.7
04	5.000	5.00	-0.1	05	20.000	20.23	1.2	06	50.000	51.55	3.1
07	100.000	97.92	-2.1	08	150.000	145.36	-3.1	09	200.000	188.81	-5.6

Initial Calibration - Detailed Report

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Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.1	02	1.000	0.95	-5.4	03	2.000	2.13	6.6
04	5.000	4.97	-0.7	05	20.000	20.13	0.6	06	50.000	52.47	4.9
07	100.000	98.35	-1.7	08	150.000	138.05	-8.0	09	200.000	196.77	-1.6

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.2	02	1.000	1.07	6.9	03	2.000	1.93	-3.3
04	5.000	5.19	3.8	05	20.000	21.28	6.4	06	50.000	52.02	4.0
07	100.000	98.00	-2.0	08	150.000	139.06	-7.3	09	200.000	183.44	-8.3

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.1	02	1.000	0.94	-5.8	03	2.000	1.95	-2.4
04	5.000	4.78	-4.5	05	20.000	20.39	2.0	06	50.000	51.40	2.8
07	100.000	98.18	-1.8	08	150.000	141.94	-5.4	09	200.000	195.74	-2.1

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.7	02	1.000	1.08	8.2	03	2.000	1.89	-5.5
04	5.000	4.81	-3.8	05	20.000	20.52	2.6	06	50.000	49.28	-1.4
07	100.000	96.70	-3.3	08	150.000	143.30	-4.5	09	200.000	194.05	-3.0

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.9	02	1.000	1.02	2.0	03	2.000	2.04	2.1
04	5.000	4.87	-2.5	05	20.000	21.10	5.5	06	50.000	51.63	3.3
07	100.000	100.54	0.5	08	150.000	146.82	-2.1	09	200.000	202.45	1.2

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.14	13.8	03	2.000	2.19	9.3	04	5.000	4.79	-4.2
05	20.000	18.20	-9.0	06	50.000	50.64	1.3	07	100.000	96.27	-3.7
08	150.000	141.71	-5.5	09	200.000	196.17	-1.9				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	23.06	15.3	03	40.000	42.20	5.5	04	100.000	97.88	-2.1
05	400.000	419.46	4.9	06	1000.000	979.98	-2.0	07	2000.000	1,782.23	-10.9
08	3000.000	2,722.12	-9.3	09	4000.000	3,943.36	-1.4				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.7	02	1.000	1.06	5.9	03	2.000	1.90	-4.9
04	5.000	4.53	-9.5	05	20.000	20.30	1.5	06	50.000	50.80	1.6
07	100.000	93.45	-6.5	08	150.000	140.70	-6.2	09	200.000	194.91	-2.5

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	55.39	10.8	03	60.000	64.25	7.1	04	70.000	72.27	3.2
05	100.000	95.50	-4.5	07	125.000	117.00	-6.4	08	150.000	134.69	-10.2

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.7	02	1.000	1.01	1.1	03	2.000	1.84	-8.1
04	5.000	4.95	-1.1	05	20.000	20.85	4.3	06	50.000	49.59	-0.8
07	100.000	96.07	-3.9	08	150.000	146.42	-2.4	09	200.000	202.52	1.3

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	0.92	-8.2	03	2.000	1.87	-6.5
04	5.000	4.19	-16.3	05	20.000	21.64	8.2	06	50.000	54.36	8.7
07	100.000	104.78	4.8	08	150.000	147.87	-1.4	09	200.000	203.02	1.5

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.2	02	1.000	1.13	13.2	03	2.000	1.97	-1.5
04	5.000	4.92	-1.6	05	20.000	18.98	-5.1	06	50.000	51.69	3.4
07	100.000	96.46	-3.5	08	150.000	142.14	-5.2	09	200.000	192.33	-3.8

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.9	02	1.000	1.04	4.5	03	2.000	1.96	-2.0
04	5.000	4.87	-2.6	05	20.000	20.71	3.5	06	50.000	49.99	0.0
07	100.000	97.78	-2.2	08	150.000	146.10	-2.6	09	200.000	198.97	-0.5

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.97	-3.0	03	2.000	2.20	10.0	04	5.000	4.82	-3.6
05	20.000	20.32	1.6	06	50.000	49.78	-0.4	07	100.000	97.63	-2.4
08	150.000	146.68	-2.2	09	200.000	199.98	0.0				

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.4	02	1.000	0.99	-1.4	03	2.000	1.96	-1.8
04	5.000	4.93	-1.3	05	20.000	21.75	8.8	06	50.000	49.56	-0.9
07	100.000	99.55	-0.5	08	150.000	139.71	-6.9	09	200.000	195.31	-2.3

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	1.05	4.8	03	2.000	1.88	-5.9
04	5.000	4.80	-4.0	05	20.000	20.90	4.5	06	50.000	49.97	-0.1
07	100.000	95.02	-5.0	08	150.000	145.10	-3.3	09	200.000	199.47	-0.3

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-3.0	02	1.000	0.99	-1.0	03	2.000	1.92	-3.9
04	5.000	5.01	0.3	05	20.000	21.61	8.0	06	50.000	50.90	1.8
07	100.000	101.79	1.8	08	150.000	142.29	-5.1	09	200.000	202.16	1.1

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	0.97	-3.0	03	2.000	1.87	-6.7
04	5.000	5.23	4.5	05	20.000	20.87	4.4	06	50.000	53.09	6.2
07	100.000	99.22	-0.8	08	150.000	140.96	-6.0	09	200.000	196.55	-1.7

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	19.9	02	1.000	0.96	-4.0	03	2.000	1.96	-2.1
04	5.000	5.12	2.4	05	20.000	20.77	3.9	06	50.000	50.03	0.1
07	100.000	94.77	-5.2	08	150.000	135.83	-9.4	09	200.000	189.18	-5.4

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.13	6.7	04	5.000	4.16	-16.7	05	20.000	18.65	-6.7
06	50.000	56.27	12.5	07	100.000	107.25	7.2	08	150.000	151.08	0.7
09	200.000	189.98	-5.0								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.7	02	1.000	1.01	0.8	03	2.000	2.02	1.0
04	5.000	5.42	8.5	05	20.000	22.22	11.1	06	50.000	53.70	7.4
07	100.000	95.28	-4.7	08	150.000	125.79	-16.1	09	200.000	156.78	-21.6

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.93	-3.5	04	5.000	5.05	1.0	05	20.000	20.98	4.9
06	50.000	50.74	1.5	07	100.000	96.37	-3.6	08	150.000	145.29	-3.1
09	200.000	205.90	3.0								

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.99	-0.7	04	5.000	4.66	-6.9	05	20.000	20.07	0.4
06	50.000	51.41	2.8	07	100.000	100.86	0.9	08	150.000	146.23	-2.5
09	200.000	212.03	6.0								

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.7	02	1.000	0.89	-10.7	03	2.000	2.04	2.0
04	5.000	5.02	0.5	05	20.000	20.84	4.2	06	50.000	50.46	0.9
07	100.000	94.28	-5.7	08	150.000	144.23	-3.8	09	200.000	202.06	1.0

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.8	02	1.000	1.00	-0.3	03	2.000	1.99	-0.3
04	5.000	5.13	2.5	05	20.000	21.69	8.4	06	50.000	49.93	-0.1
07	100.000	96.92	-3.1	08	150.000	145.12	-3.3	09	200.000	195.85	-2.1

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.08	7.6	03	2.000	1.86	-7.2	04	5.000	5.08	1.6
05	20.000	18.69	-6.6	06	50.000	52.86	5.7	07	100.000	100.55	0.6
08	150.000	146.90	-2.1	09	200.000	200.65	0.3				

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.1	02	1.000	1.02	2.2	03	2.000	1.88	-6.1
04	5.000	5.01	0.3	05	20.000	22.40	12.0	06	50.000	55.29	10.6
07	100.000	100.26	0.3	08	150.000	143.27	-4.5	09	200.000	192.69	-3.7

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.59	-8.2	03	10.000	11.45	14.5	04	25.000	24.42	-2.3
05	100.000	101.68	1.7	06	250.000	245.64	-1.7	07	500.000	467.84	-6.4
08	750.000	742.82	-1.0	09	1000.000	1,034.88	3.5				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.5	02	1.000	0.94	-5.6	03	2.000	2.00	0.2
04	5.000	5.24	4.9	05	20.000	21.96	9.8	06	50.000	53.99	8.0
07	100.000	100.73	0.7	08	150.000	142.37	-5.1	09	200.000	183.06	-8.5

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.6	02	1.000	1.00	0.4	03	2.000	1.87	-6.5
04	5.000	4.90	-2.0	05	20.000	21.75	8.8	06	50.000	52.31	4.6
07	100.000	103.56	3.6	08	150.000	144.54	-3.6	09	200.000	202.75	1.4

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.12	6.2	04	5.000	4.97	-0.5	05	20.000	21.30	6.5
06	50.000	52.02	4.0	07	100.000	92.22	-7.8	08	150.000	136.43	-9.0
09	200.000	201.20	0.6								

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	1.02	1.6	03	2.000	2.11	5.7
04	5.000	5.24	4.7	05	20.000	21.56	7.8	06	50.000	52.41	4.8
07	100.000	96.63	-3.4	08	150.000	132.97	-11.4	09	200.000	167.98	-16.0

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	57.46	14.9	03	60.000	66.41	10.7	04	70.000	73.77	5.4
05	100.000	94.28	-5.7	07	125.000	112.62	-9.9	08	150.000	126.95	-15.4

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	1.03	3.1	03	2.000	1.86	-7.0
04	5.000	4.98	-0.4	05	20.000	20.90	4.5	06	50.000	51.42	2.8
07	100.000	101.49	1.5	08	150.000	143.05	-4.6	09	200.000	199.37	-0.3

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.5	02	1.000	1.05	4.8	03	2.000	2.07	3.6
04	5.000	4.68	-6.5	05	20.000	20.23	1.2	06	50.000	50.09	0.2
07	100.000	97.09	-2.9	08	150.000	136.75	-8.8	09	200.000	191.91	-4.0

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.03	3.0	03	2.000	2.06	3.0	04	5.000	4.99	-0.2
05	20.000	18.62	-6.9	06	50.000	53.29	6.6	07	100.000	98.79	-1.2
08	150.000	149.60	-0.3	09	200.000	192.00	-4.0				

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.8	02	1.000	0.99	-0.5	03	2.000	1.80	-10.0
04	5.000	4.90	-2.1	05	20.000	21.33	6.6	06	50.000	52.79	5.6
07	100.000	102.08	2.1	08	150.000	142.40	-5.1	09	200.000	195.06	-2.5

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.8	02	1.000	1.06	6.4	03	2.000	1.76	-11.9
04	5.000	4.71	-5.7	05	20.000	20.47	2.3	06	50.000	50.49	1.0
07	100.000	97.90	-2.1	08	150.000	144.97	-3.4	09	200.000	199.01	-0.5

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.3	02	1.000	1.06	5.6	03	2.000	2.04	2.1
04	5.000	4.93	-1.4	05	20.000	21.48	7.4	06	50.000	51.70	3.4
07	100.000	100.07	0.1	08	150.000	148.72	-0.9	09	200.000	199.97	0.0

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.07	6.7	02	2.000	1.99	-0.6	03	4.000	4.01	0.4
04	10.000	10.35	3.5	05	40.000	42.79	7.0	06	100.000	106.70	6.7
07	200.000	197.49	-1.3	08	300.000	271.21	-9.6	09	400.000	348.83	-12.8

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.7	02	1.000	1.00	-0.1	03	2.000	1.91	-4.4
04	5.000	4.77	-4.6	05	20.000	21.13	5.7	06	50.000	54.59	9.2
07	100.000	101.46	1.5	08	150.000	148.92	-0.7	09	200.000	208.37	4.2

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.0	02	1.000	0.98	-2.2	03	2.000	1.94	-3.0
04	5.000	5.19	3.8	05	20.000	21.78	8.9	06	50.000	53.98	8.0
07	100.000	99.35	-0.6	08	150.000	133.85	-10.8	09	200.000	169.73	-15.1

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.16	15.5	03	2.000	1.97	-1.4	04	5.000	4.93	-1.4
05	20.000	20.64	3.2	06	50.000	50.86	1.7	07	100.000	96.64	-3.4
08	150.000	137.70	-8.2	09	200.000	187.90	-6.1				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.4	02	1.000	1.08	8.2	03	2.000	2.11	5.3
04	5.000	5.68	13.7	05	20.000	22.97	14.8	06	50.000	54.39	8.8
07	100.000	94.39	-5.6	08	150.000	119.89	-20.1	09	200.000	145.19	-27.4

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.0	02	1.000	0.96	-4.1	03	2.000	2.05	2.3
04	5.000	4.88	-2.4	05	20.000	21.47	7.3	06	50.000	52.37	4.7
07	100.000	101.16	1.2	08	150.000	145.27	-3.2	09	200.000	198.19	-0.9

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	7.0	02	1.000	1.08	7.9	03	2.000	2.12	6.1
04	5.000	5.41	8.3	05	20.000	21.62	8.1	06	50.000	53.06	6.1
07	100.000	95.02	-5.0	08	150.000	125.34	-16.4	09	200.000	155.78	-22.1

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.03	2.9	03	2.000	1.86	-7.1
04	5.000	4.80	-3.9	05	20.000	22.18	10.9	06	50.000	51.76	3.5
07	100.000	100.76	0.8	08	150.000	143.52	-4.3	09	200.000	203.92	2.0

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.3	02	1.000	0.95	-5.3	03	2.000	1.96	-2.2
04	5.000	5.36	7.2	05	20.000	21.60	8.0	06	50.000	53.17	6.3
07	100.000	98.44	-1.6	08	150.000	136.42	-9.1	09	200.000	176.66	-11.7

Initial Calibration - Detailed Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	1.13	12.9	03	2.000	2.09	4.3
04	5.000	4.82	-3.6	05	20.000	20.38	1.9	06	50.000	49.84	-0.3
07	100.000	96.75	-3.3	08	150.000	139.25	-7.2	09	200.000	191.61	-4.2

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.4	02	1.000	0.89	-11.0	03	2.000	2.07	3.3
04	5.000	4.96	-0.8	05	20.000	21.80	9.0	06	50.000	52.88	5.8
07	100.000	100.45	0.5	08	150.000	151.75	1.2	09	200.000	203.01	1.5

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.65	29.4	02	1.000	1.00	-0.1	03	2.000	1.94	-2.9
04	5.000	4.96	-0.9	05	20.000	20.38	1.9	06	50.000	46.60	-6.8
07	100.000	89.74	-10.3	08	150.000	138.39	-7.7	09	200.000	194.70	-2.6

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	820055	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1375536	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1269431	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	637721	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	393438	49.01	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.02%				
48) surr1,1,2-dichloroetha...	6.090	65	453168	47.04	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 94.08%				
65) SURR3,Toluene-d8	8.529	98	1756937	47.74	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.48%				
70) SURR2,BFB	11.047	95	658651	48.83	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.66%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	5282	0.55	ppb		96
3) Chloromethane	1.341	50	4723	0.45	ppb		77
4) Vinyl Chloride	1.427	62	6202	0.53	ppb		98
5) Bromomethane	1.683	94	2470m	0.52	ppb		
6) Chloroethane	1.762	64	3687	0.59	ppb		73
7) Freon 21	1.920	67	7053m	0.52	ppb		
8) Trichlorofluoromethane	1.969	101	5680	0.56	ppb		92
9) Diethyl Ether	2.225	59	3432	0.57	ppb	#	73
10) Freon 123a	2.231	67	4619m	0.52	ppb		
11) Freon 123	2.292	83	6199	0.60	ppb		94
13) 1,1-Diclethene	2.432	96	3098m	0.50	ppb		
14) Freon 113	2.432	101	3074	0.51	ppb		93
18) Carbon Disulfide	2.628	76	10983	0.53	ppb		88
20) Allyl Chloride	2.786	76	2038	0.58	ppb	#	77
22) Methylene Chloride	2.926	84	3525	0.51	ppb	#	80
23) TBA	3.085	59	4622m	9.35	ppb		
24) Acrylonitrile	3.207	53	4903	2.61	ppb		85
25) Methyl-t-Butyl Ether	3.262	73	8991	0.49	ppb	#	86
26) trans-1,2-Dichloroethene	3.231	96	3520	0.50	ppb	#	55
28) 1,1-Diclethane	3.780	63	6623	0.54	ppb		81
29) Vinyl Acetate	3.889	86	948m	0.72	ppb		
30) DIPE	3.938	45	13487	0.53	ppb		87
31) 2-Chloro-1,3-Butadiene	3.926	53	7079	0.51	ppb		96
32) ETBE	4.517	59	10893	0.49	ppb		88
33) 2,2-Dichloropropane	4.694	77	6768	0.64	ppb		89
34) cis-1,2-Dichloroethene	4.713	96	4247m	0.57	ppb		
37) Bromochloromethane	5.151	130	2025m	0.52	ppb		
40) Chloroform	5.328	83	6629	0.55	ppb		98
41) 1,1,1-Trichloroethane	5.584	97	6036m	0.59	ppb		
42) TAME	6.401	73	9336	0.48	ppb		80
46) Carbontetrachloride	5.859	121	1387m	0.53	ppb		
47) 1,1-Dichloropropene	5.865	75	4561m	0.48	ppb		
49) Benzene	6.170	78	14002	0.51	ppb		77
50) 1,2-Dichloroethane	6.206	62	4016	0.49	ppb		88

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52)	n-Heptane	6.639	43	6130	0.73	ppb		93
53)	1-Butanol	7.121	56	3735m	24.91	ppb		
54)	Trichloroethene	7.084	130	3402m	0.50	ppb		
55)	Methylcyclohexane	7.303	55	5179	0.57	ppb		85
56)	1,2-Diclpropane	7.364	63	4037m	0.54	ppb		
57)	Dibromomethane	7.486	93	1937	0.55	ppb		81
59)	Methyl Methacrylate	7.572	69	2356m	0.54	ppb		
60)	Bromodichloromethane	7.706	83	4184m	0.46	ppb		
61)	2-Nitropropane	7.968	41	2953m	1.99	ppb		
62)	2-Chloroethylvinyl Ether	8.114	63	1517	0.38	ppb		77
63)	cis-1,3-Dichloropropene	8.236	75	4867	0.42	ppb		99
66)	Toluene	8.602	91	15516	0.53	ppb		93
67)	trans-1,3-Dichloropropene	8.858	75	4387	0.45	ppb		99
68)	Ethyl Methacrylate	8.998	69	4801	0.55	ppb		78
69)	1,1,2-Trichloroethane	9.047	97	3452	0.64	ppb	#	74
72)	Tetrachloroethene	9.175	164	2286	0.47	ppb	#	83
74)	1,3-Dichloropropane	9.212	76	4754	0.50	ppb		84
75)	Dibromochloromethane	9.437	129	3804	0.60	ppb	#	75
76)	N-Butyl Acetate	9.474	43	4287	0.45	ppb		97
77)	1,2-Dibromoethane	9.529	107	2729	0.53	ppb	#	77
78)	Chlorobenzene	10.010	112	9293	0.50	ppb	#	82
79)	3-CBTF	10.022	180	5064	0.55	ppb	#	80
80)	4-CBTF	10.083	180	4325	0.53	ppb		87
81)	1,1,1,2-Tetrachloroethane	10.102	131	2924	0.45	ppb	#	84
82)	Ethylbenzene	10.132	106	5355	0.52	ppb	#	87
83)	(m+p)Xylene	10.242	106	13034	1.07	ppb	#	73
84)	o-Xylene	10.595	106	5777	0.47	ppb	#	82
85)	Styrene	10.608	104	9700	0.48	ppb		94
87)	Bromoform	10.760	173	1455m	0.48	ppb		
88)	2-CBTF	10.833	180	3931	0.47	ppb		98
89)	Isopropylbenzene	10.925	105	15868	0.57	ppb		82
90)	Cyclohexanone	10.986	55	6412	11.55	ppb		90
91)	trans-1,4-Dichloro-2-B...	11.223	53	1407	0.65	ppb	#	68
92)	1,1,2,2-Tetrachloroethane	11.181	83	3630m	0.56	ppb		
93)	Bromobenzene	11.175	156	3807	0.54	ppb	#	40
94)	1,2,3-Trichloropropane	11.199	110	1146	0.59	ppb	#	1
95)	n-Propylbenzene	11.272	91	16578	0.51	ppb		96
96)	2-Chlorotoluene	11.339	91	11586	0.55	ppb		81
97)	3-Chlorotoluene	11.394	91	11153	0.52	ppb		98
98)	4-Chlorotoluene	11.431	91	12693	0.52	ppb		91
99)	1,3,5-Trimethylbenzene	11.431	105	12719	0.53	ppb		86
100)	tert-Butylbenzene	11.699	119	10384	0.54	ppb		91
101)	1,2,4-Trimethylbenzene	11.736	105	12977	0.52	ppb		87
102)	3,4-DCBTF	11.796	214	3203	0.54	ppb		87
103)	sec-Butylbenzene	11.876	105	14629	0.53	ppb		90
104)	p-Isopropyltoluene	12.004	119	11591	0.49	ppb		93
105)	1,3-Dclbenz	11.961	146	7260	0.54	ppb		83
106)	1,4-Dclbenz	12.034	146	8276	0.59	ppb	#	81
107)	2,4-DCBTF	12.083	214	3400	0.60	ppb	#	67
108)	2,5-DCBTF	12.126	214	2907	0.48	ppb		93
109)	n-Butylbenzene	12.333	91	11848	0.56	ppb		97

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

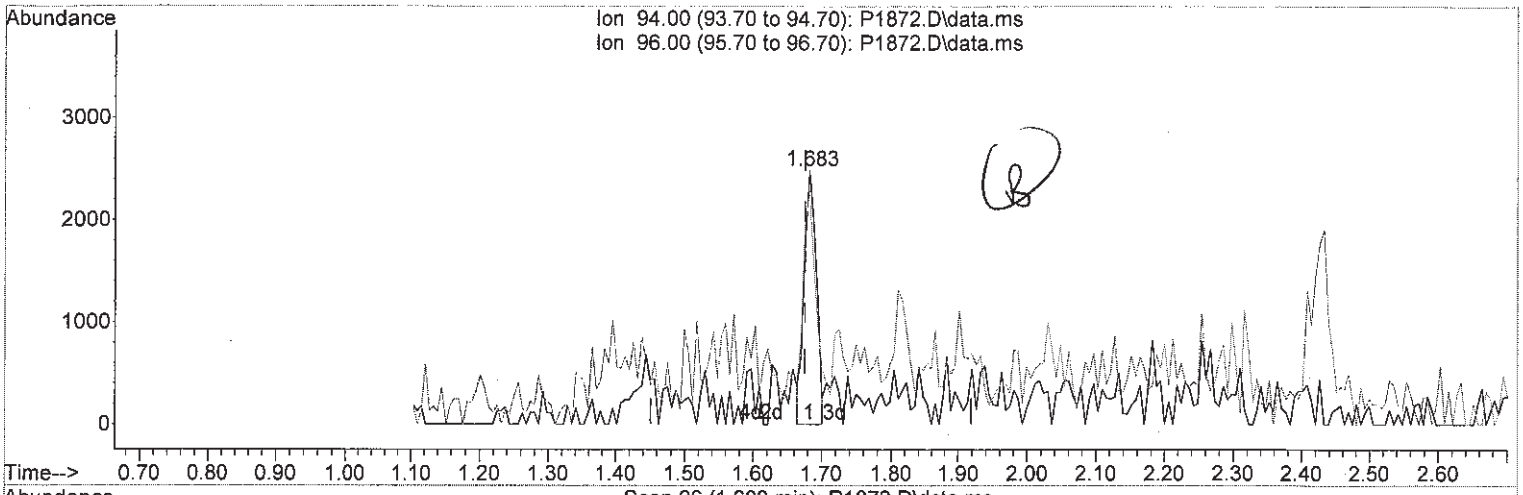
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
110) 1,2-Dclbenz	12.333	146	6182	0.49	ppb		78
111) 1,2-Dibromo-3-chloropr...	12.955	157	1030	0.86	ppb	#	80
112) Trielution Dichlorotol...	13.071	125	15996	1.51	ppb	#	88
113) 1,3,5 Trichlorobenzene	13.132	180	4341	0.51	ppb		95
114) Coelution Dichlorotoluene	13.400	125	11019	0.98	ppb		97
115) 1,2,4-Tcbenzene	13.607	180	3668	0.49	ppb	#	77
116) Hexachlorobt	13.741	225	1862	0.60	ppb	#	59
117) Naphthalen	13.802	128	7195	0.44	ppb		96
118) 1,2,3-Tclbenzene	13.985	180	2998	0.47	ppb		85
119) 2,4,5-Trichlorotolene	14.570	159	2532	0.56	ppb	#	85
120) 2,3,6-Trichlorotoluene	14.656	159	1979	0.47	ppb	#	60

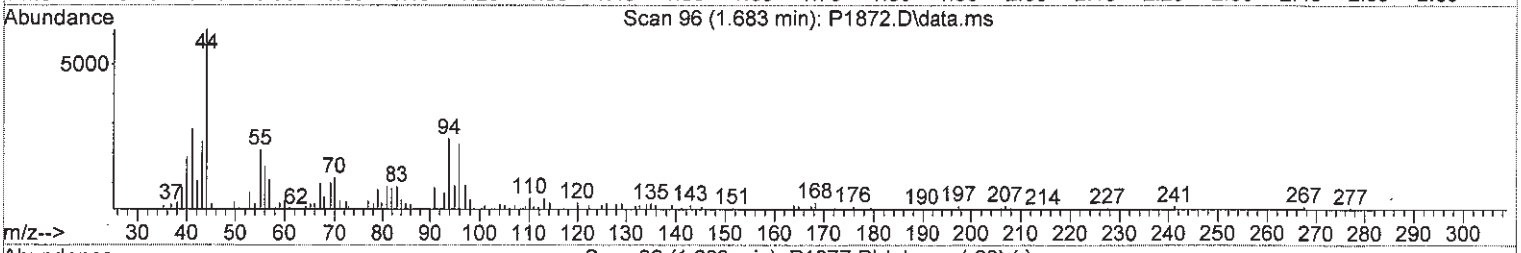
(#) = qualifier out of range (m) = manual integration (+) = signals summed

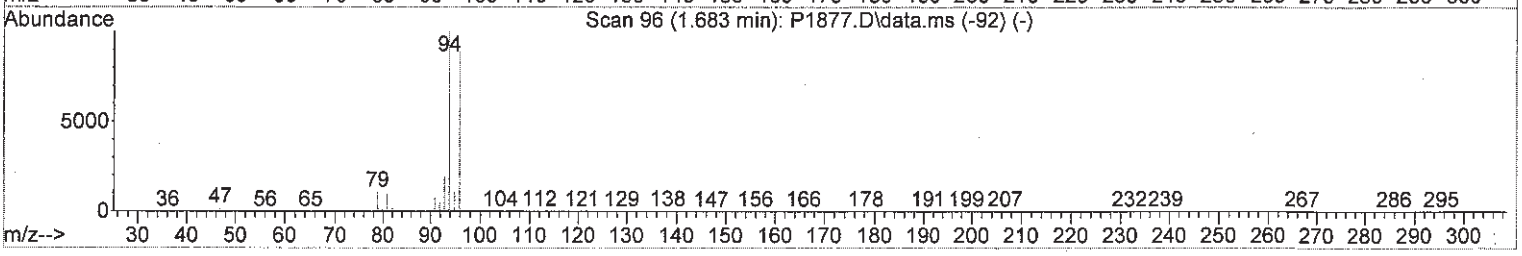
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(5) Bromomethane (P)

1.683min (+0.006) 0.63 ppb

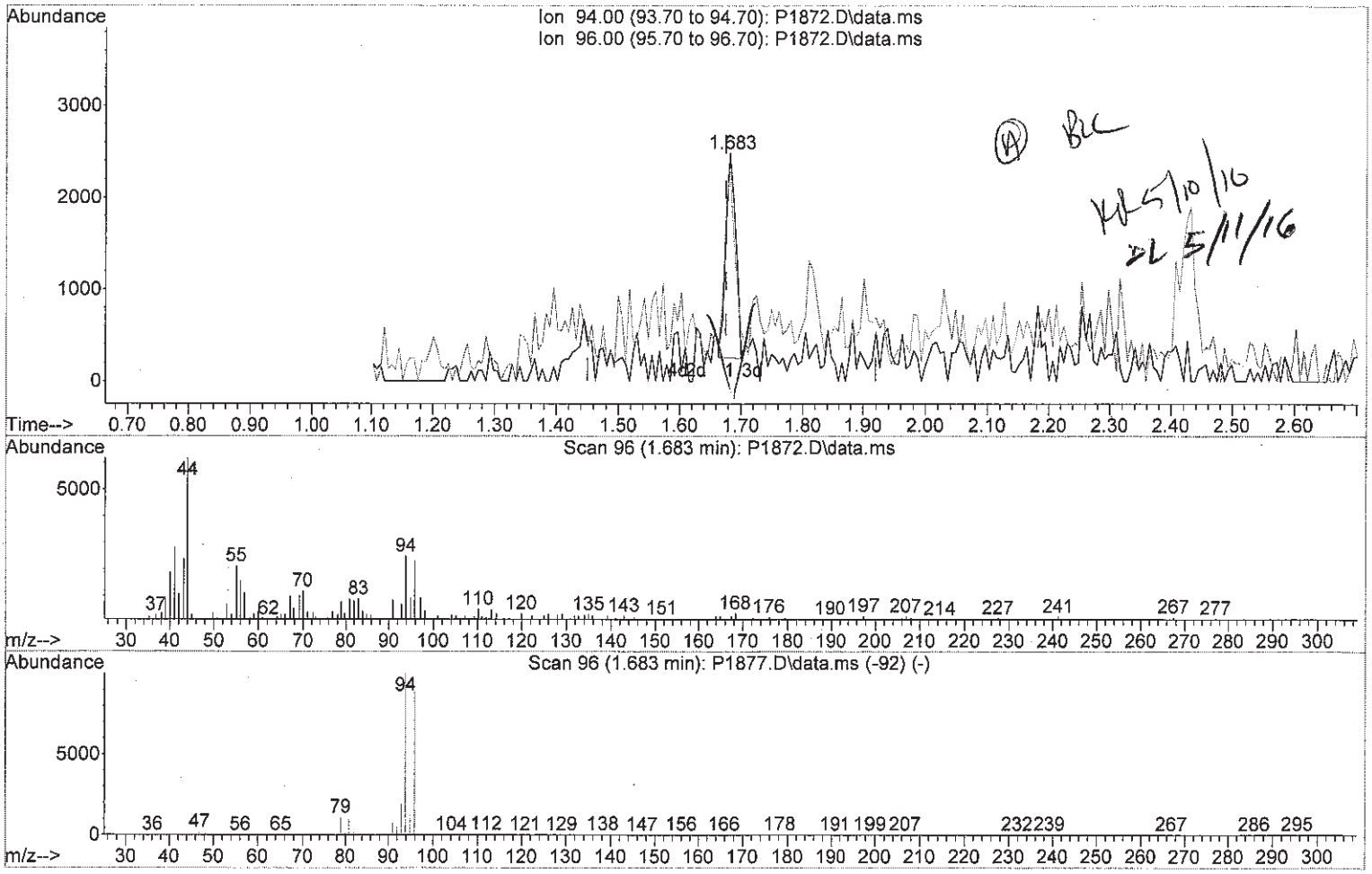
response 3027

Ion	Exp%	Act%
94.00	100	100
96.00	89.20	92.02
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(5) Bromomethane (P)

1.683min (+0.006) 0.52 ppb m

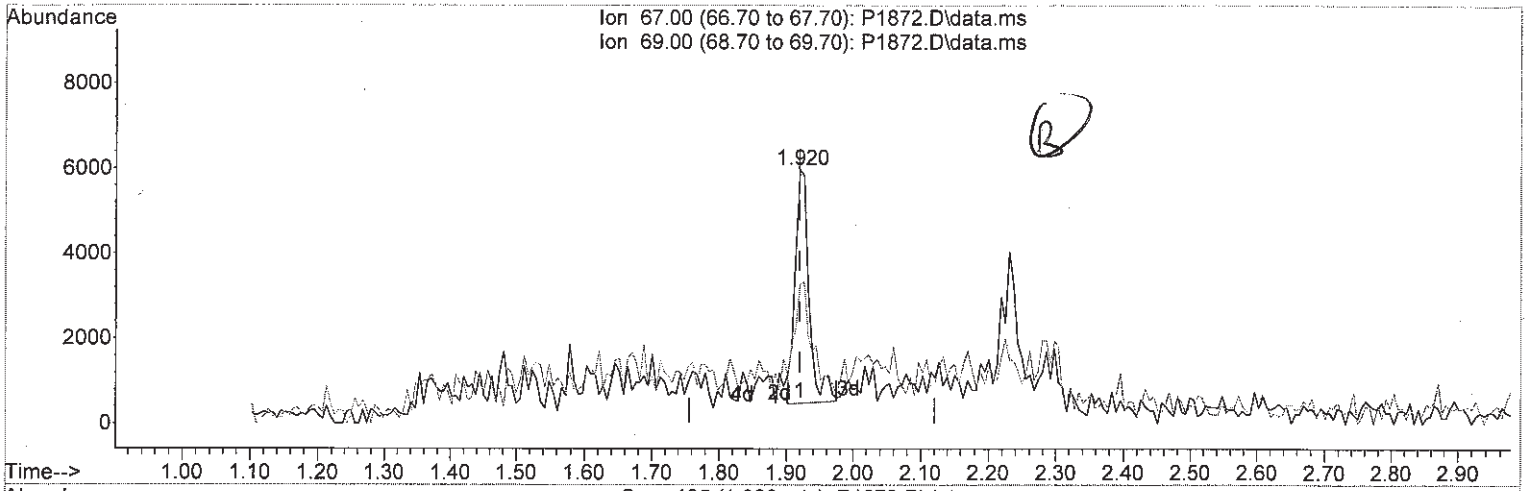
response 2470

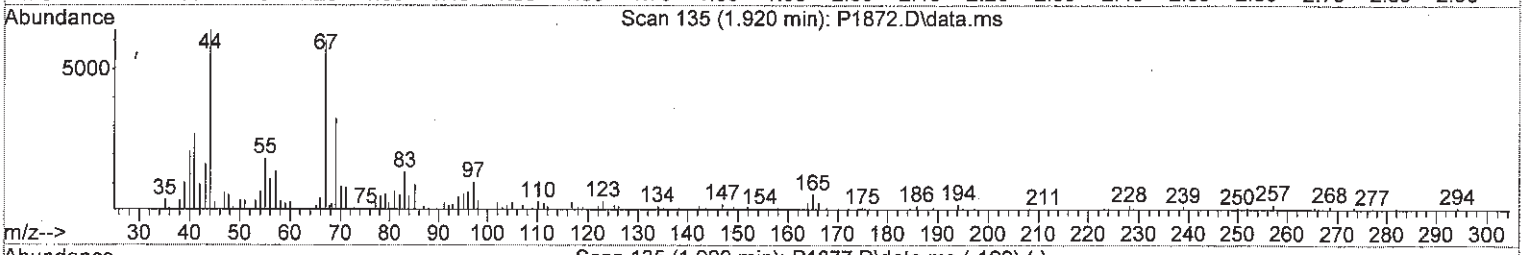
Ion	Exp%	Act%
94.00	100	100
96.00	89.20	92.02
0.00	0.00	0.00
0.00	0.00	0.00

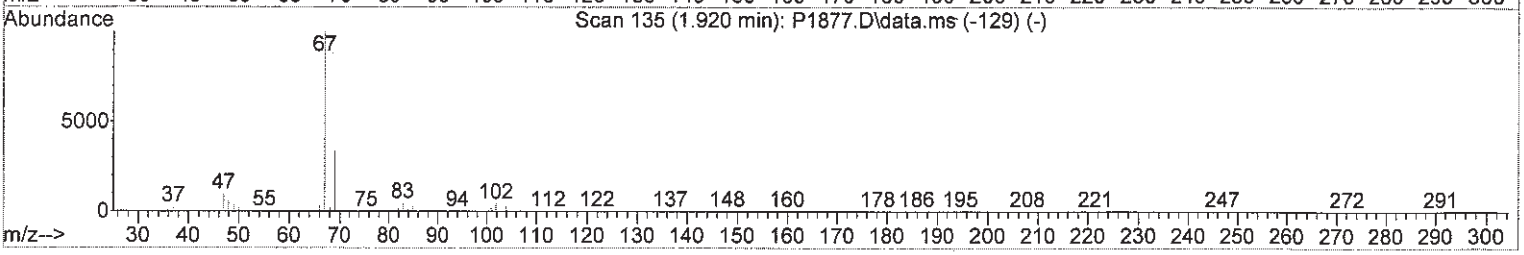
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(7) Freon 21

1.920min (+0.000) 0.59 ppb

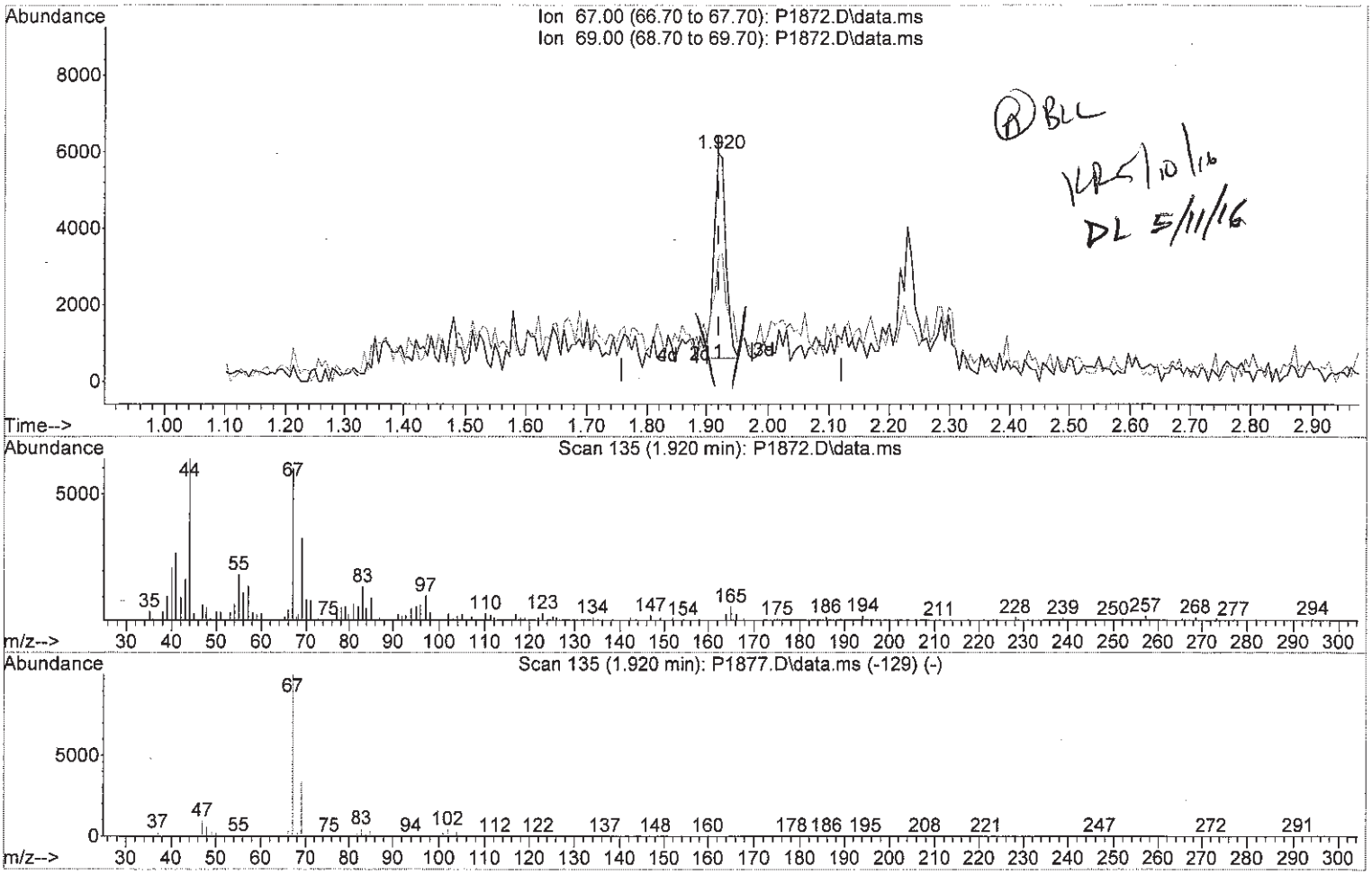
response 7948

Ion	Exp%	Act%
67.00	100	100
69.00	34.20	54.64#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(7) Freon 21

1.920min (+0.000) 0.52 ppb m

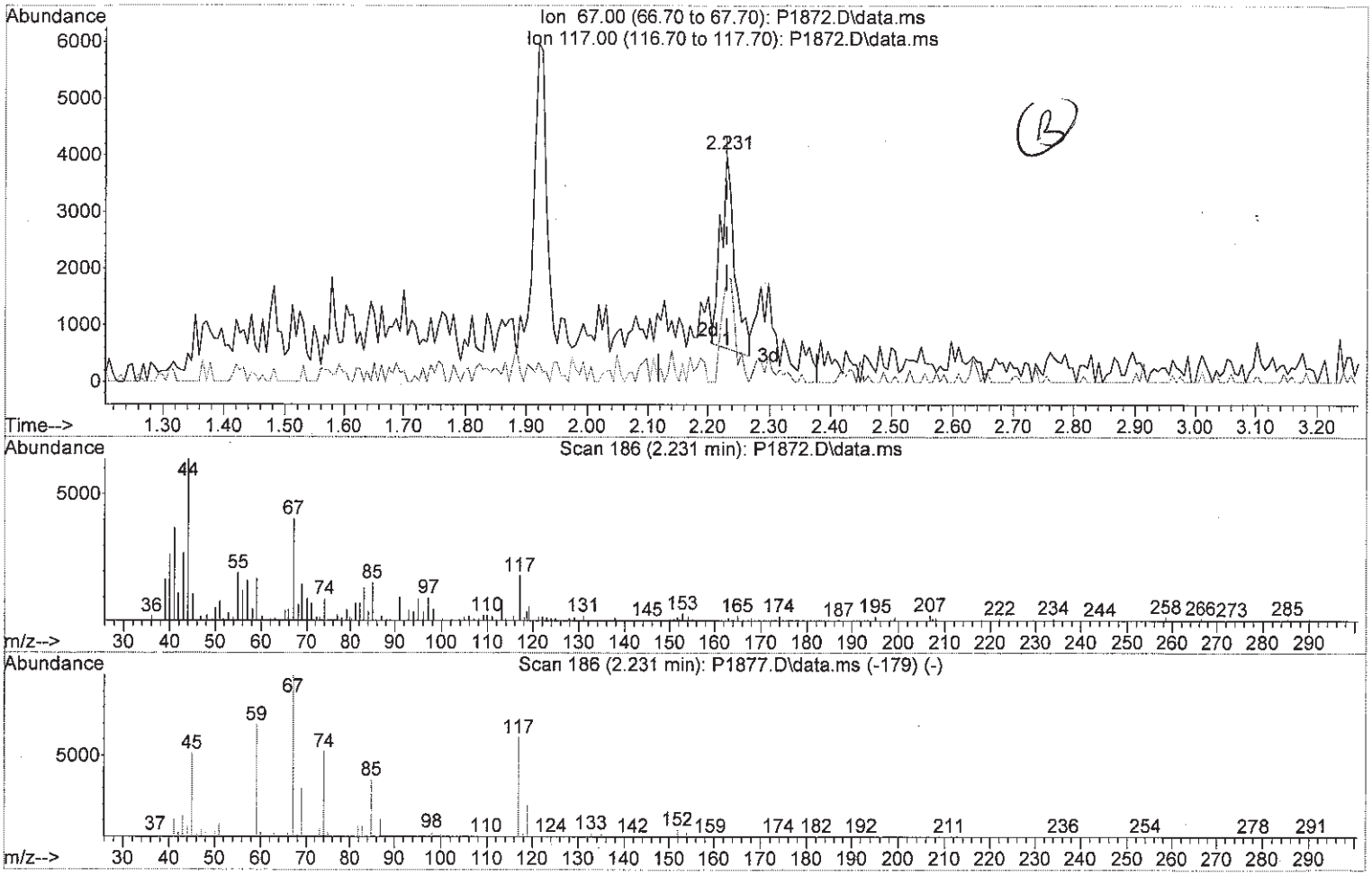
response 7053

Ion	Exp%	Act%
67.00	100	100
69.00	34.20	54.64#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(10) Freon 123a

2.231min (+0.000) 0.60 ppb

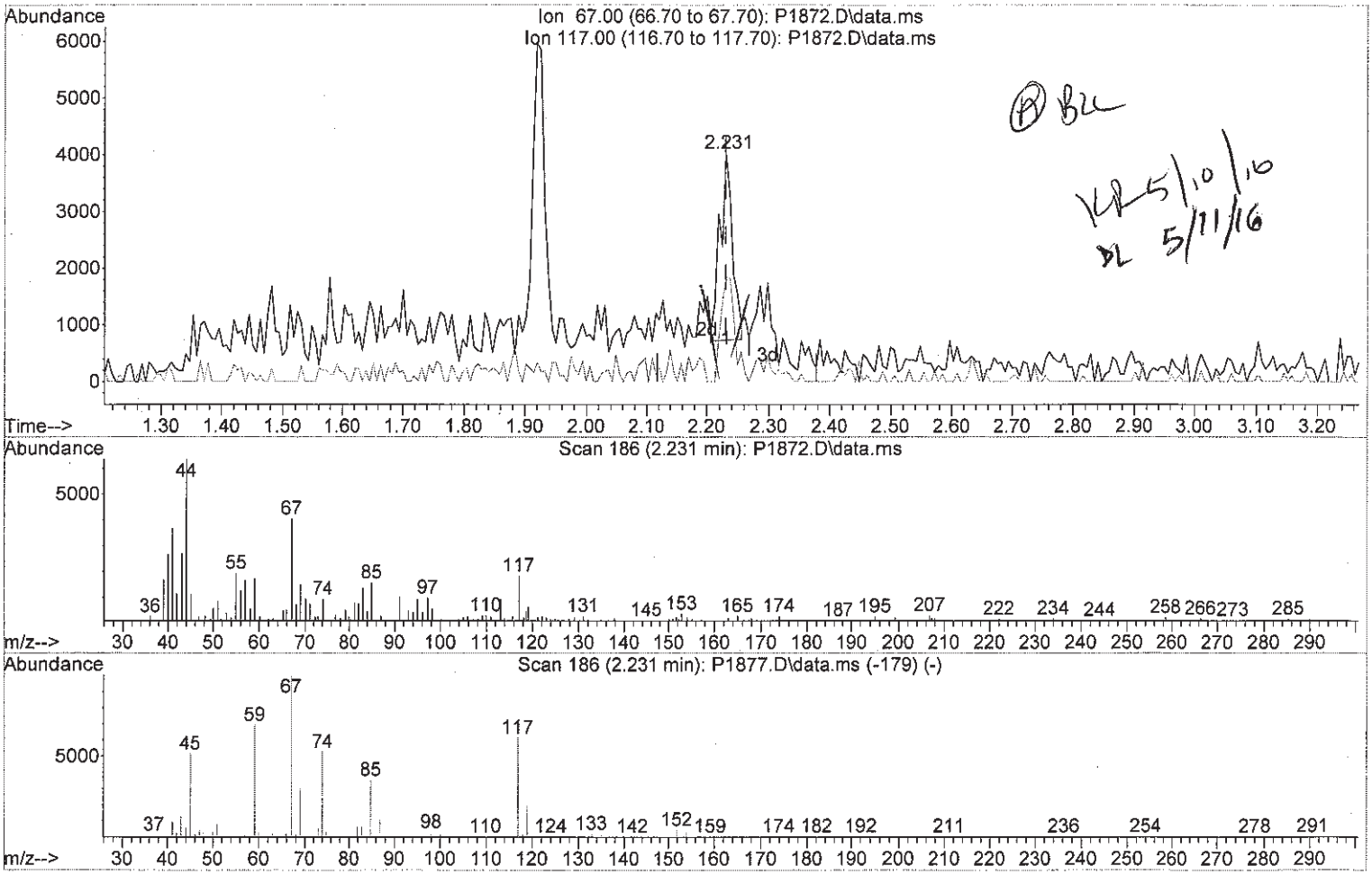
response 5386

Ion	Exp%	Act%
67.00	100	100
117.00	61.50	45.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(10) Freon 123a

2.231min (+0.000) 0.52 ppb m

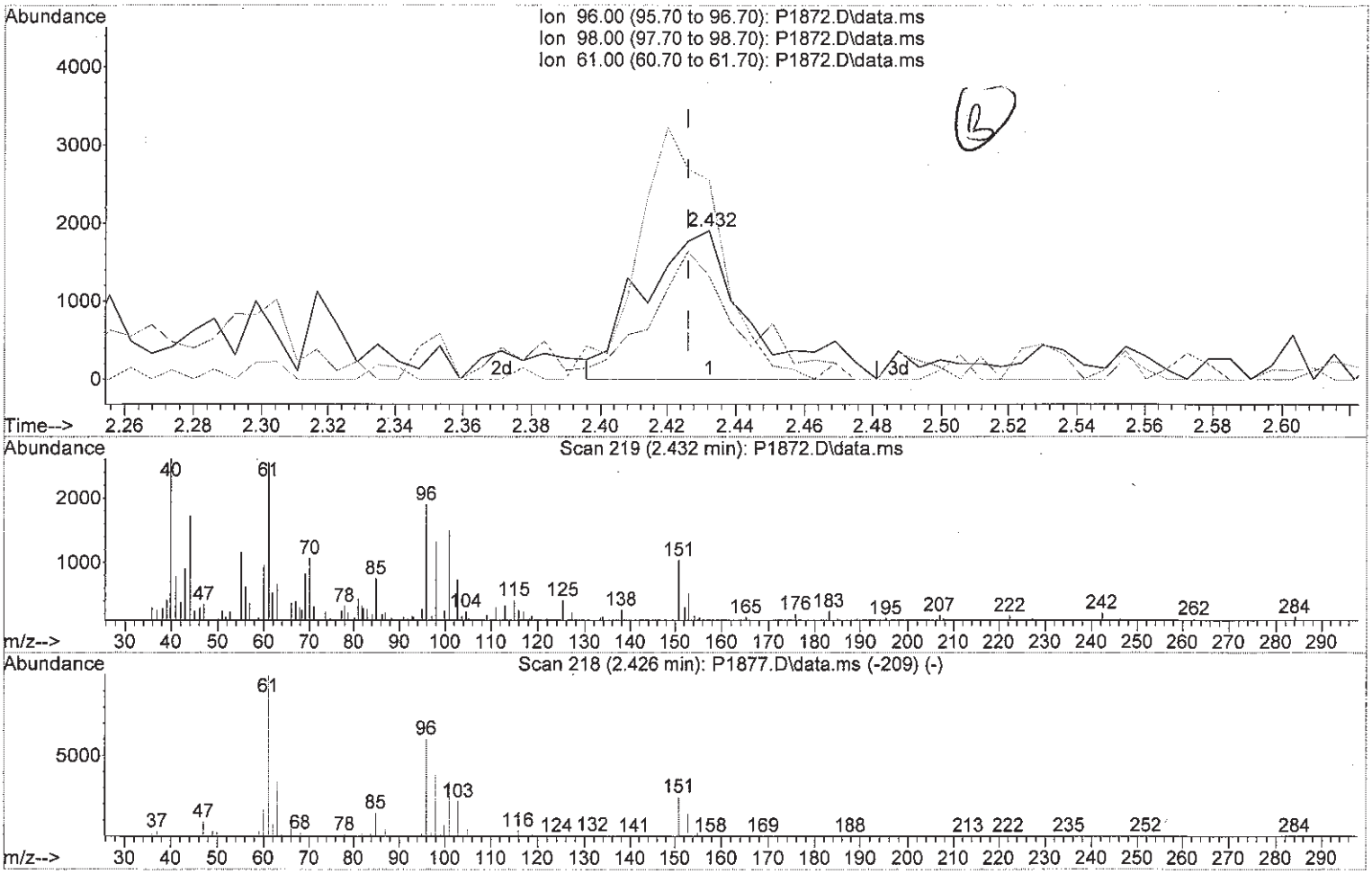
response 4619

Ion	Exp%	Act%
67.00	100	100
117.00	61.50	45.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(13) 1,1-Diclethene (P)

2.432min (+0.006) 0.66 ppb

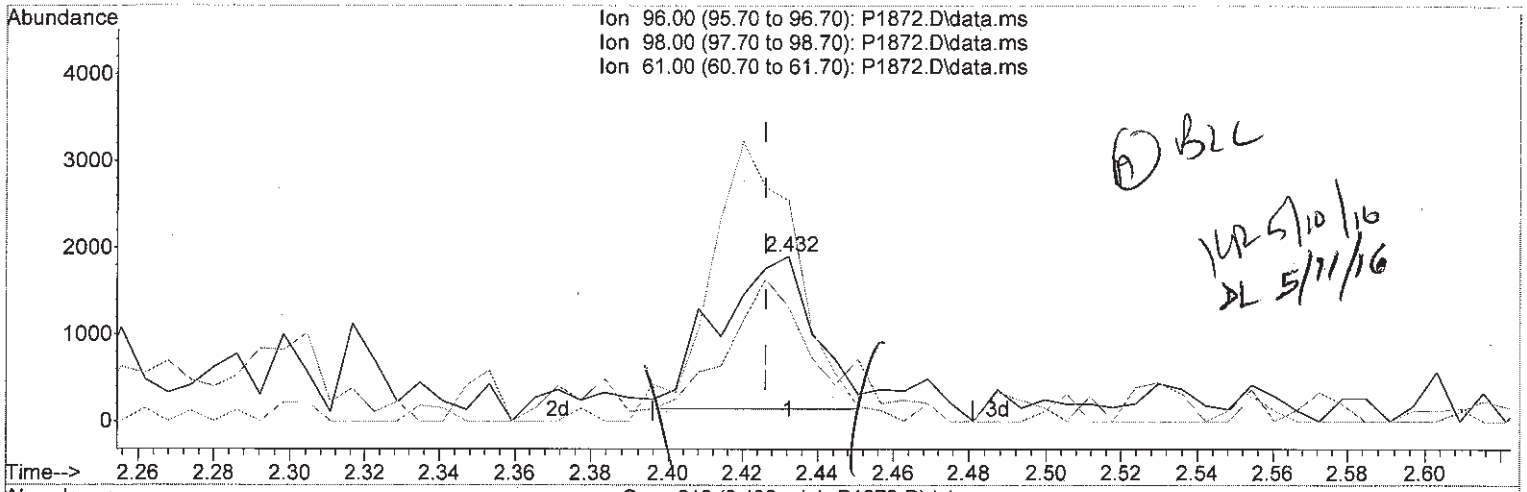
response 4096

Ion	Exp%	Act%
96.00	100	100
98.00	63.00	69.25
61.00	165.90	133.97#
0.00	0.00	0.00

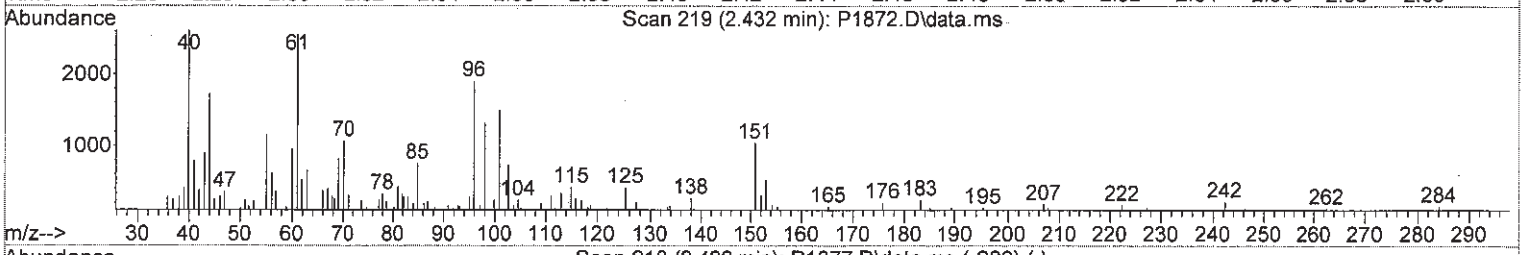
Quantitation Report (Qedit)

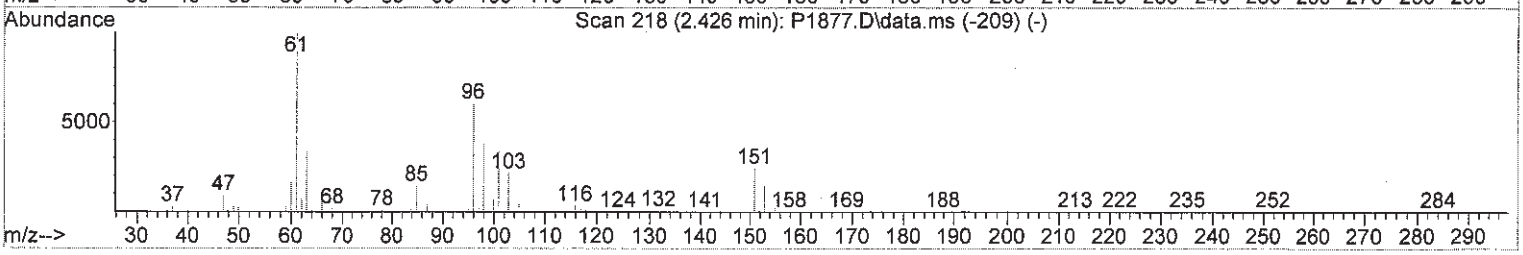
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



BLC 5/10/16 DL 5/11/16





TIC: P1872.D\data.ms

(13) 1,1-Diclethene (P)

2.432min (+0.006) 0.50 ppb m

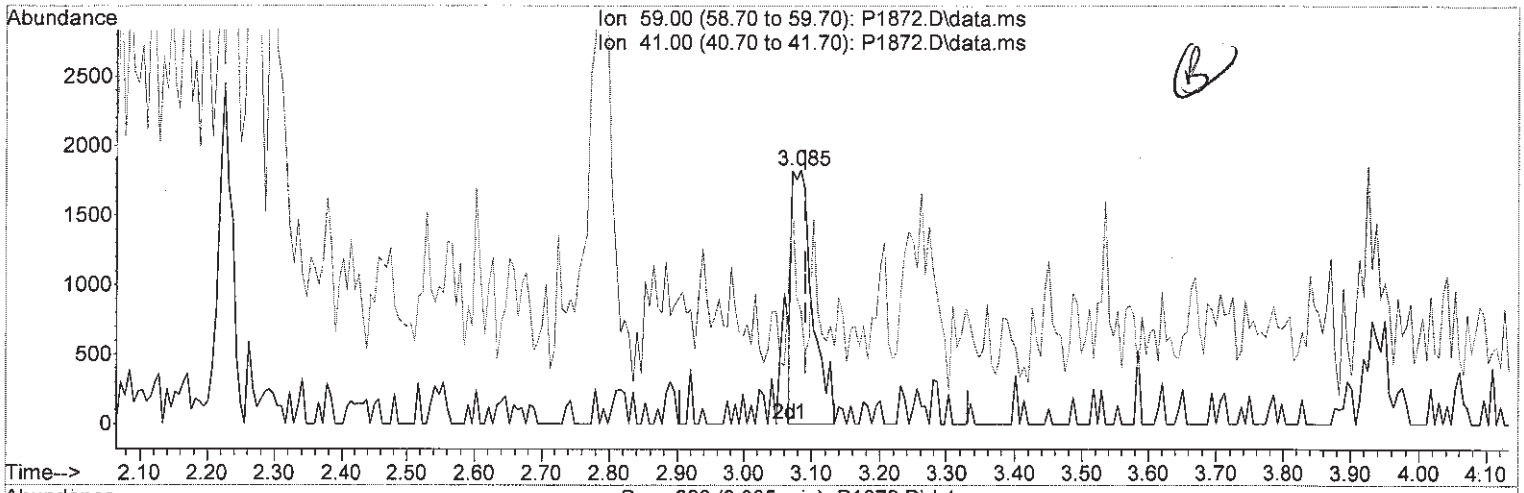
response 3098

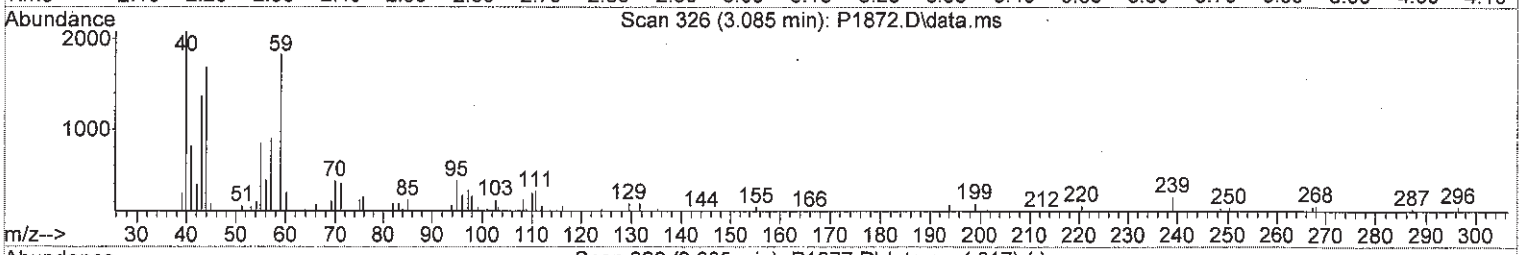
Ion	Exp%	Act%
96.00	100	100
98.00	63.00	69.25
61.00	165.90	133.97#
0.00	0.00	0.00

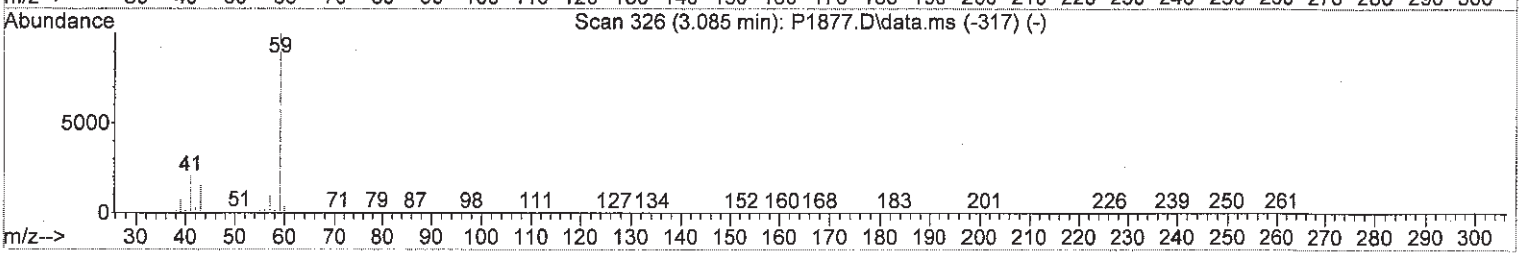
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(23) TBA

3.085min (-0.006) 7.77 ppb

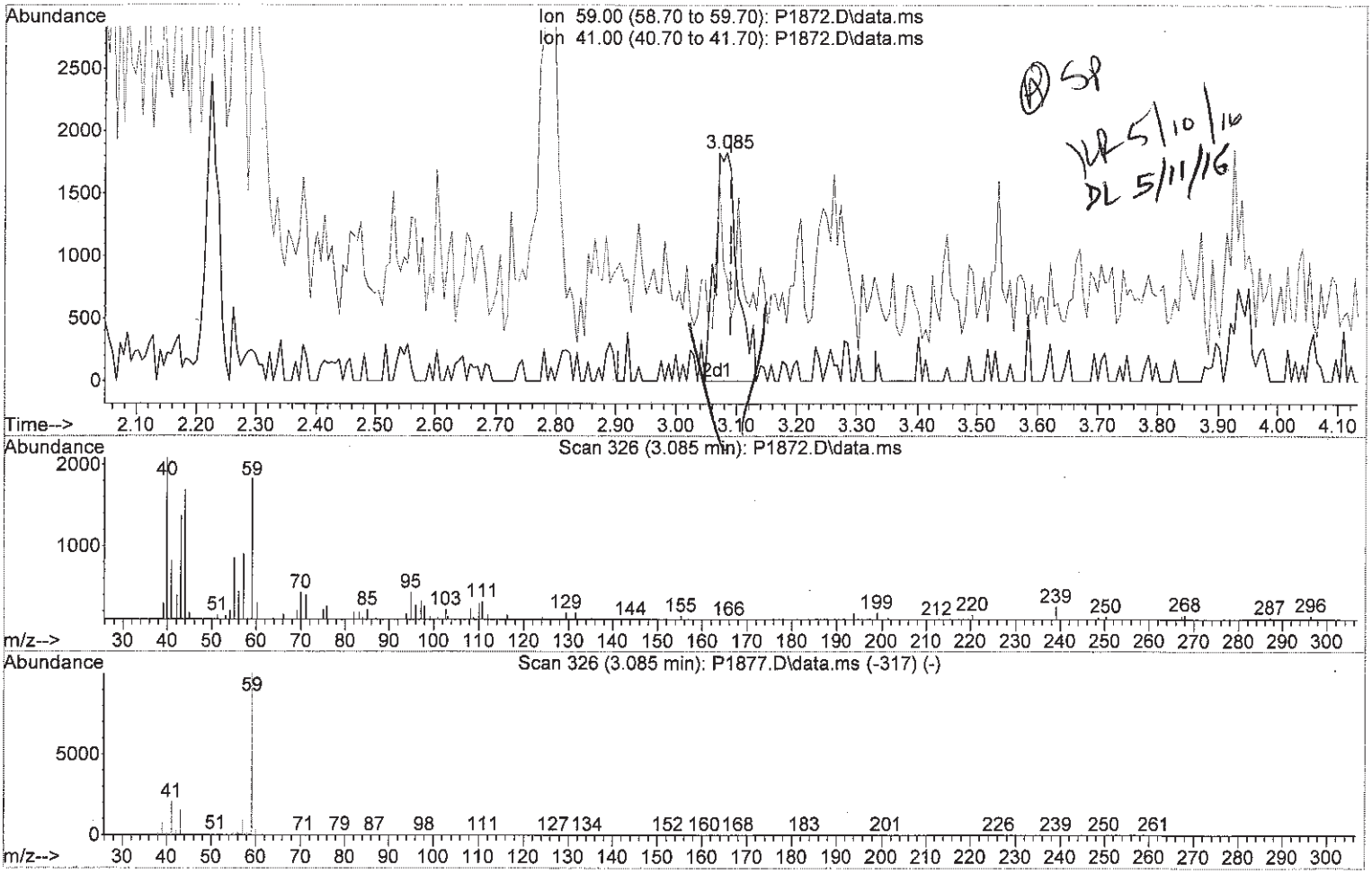
response 3838

Ion	Exp%	Act%
59.00	100	100
41.00	20.90	44.60#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(23) TBA

3.085min (-0.006) 9.35 ppb m

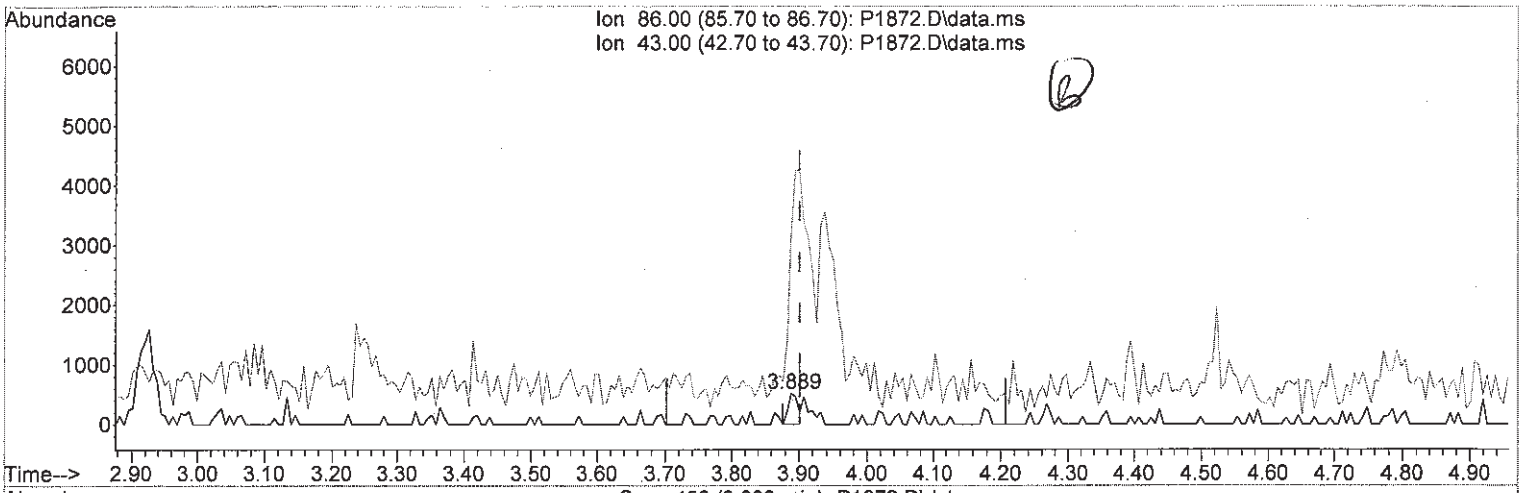
response 4622

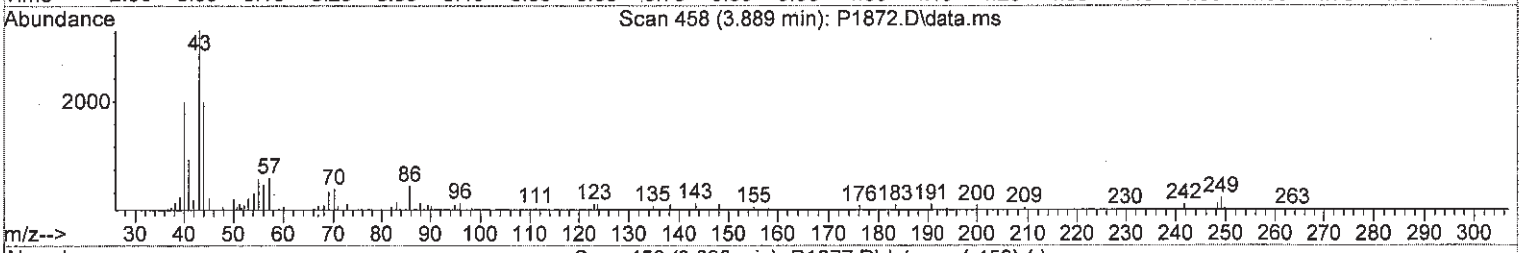
Ion	Exp%	Act%
59.00	100	100
41.00	20.90	44.60#
0.00	0.00	0.00
0.00	0.00	0.00

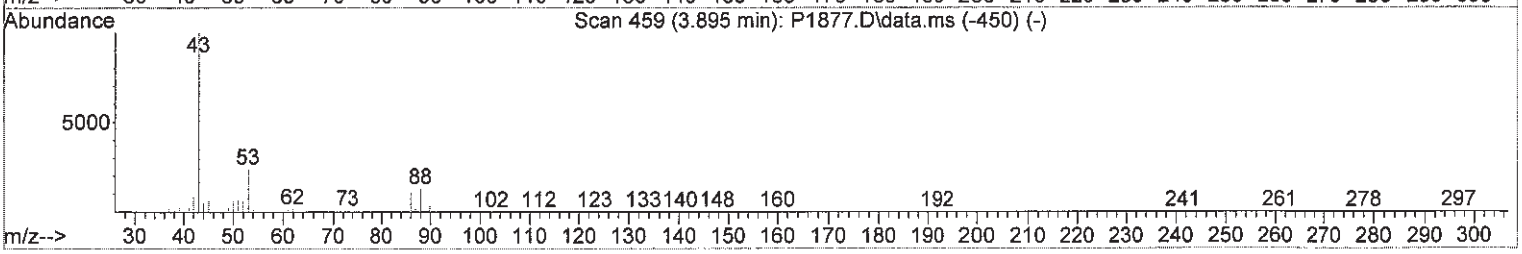
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(29) Vinyl Acetate

3.889min (-0.012) 0.38 ppb

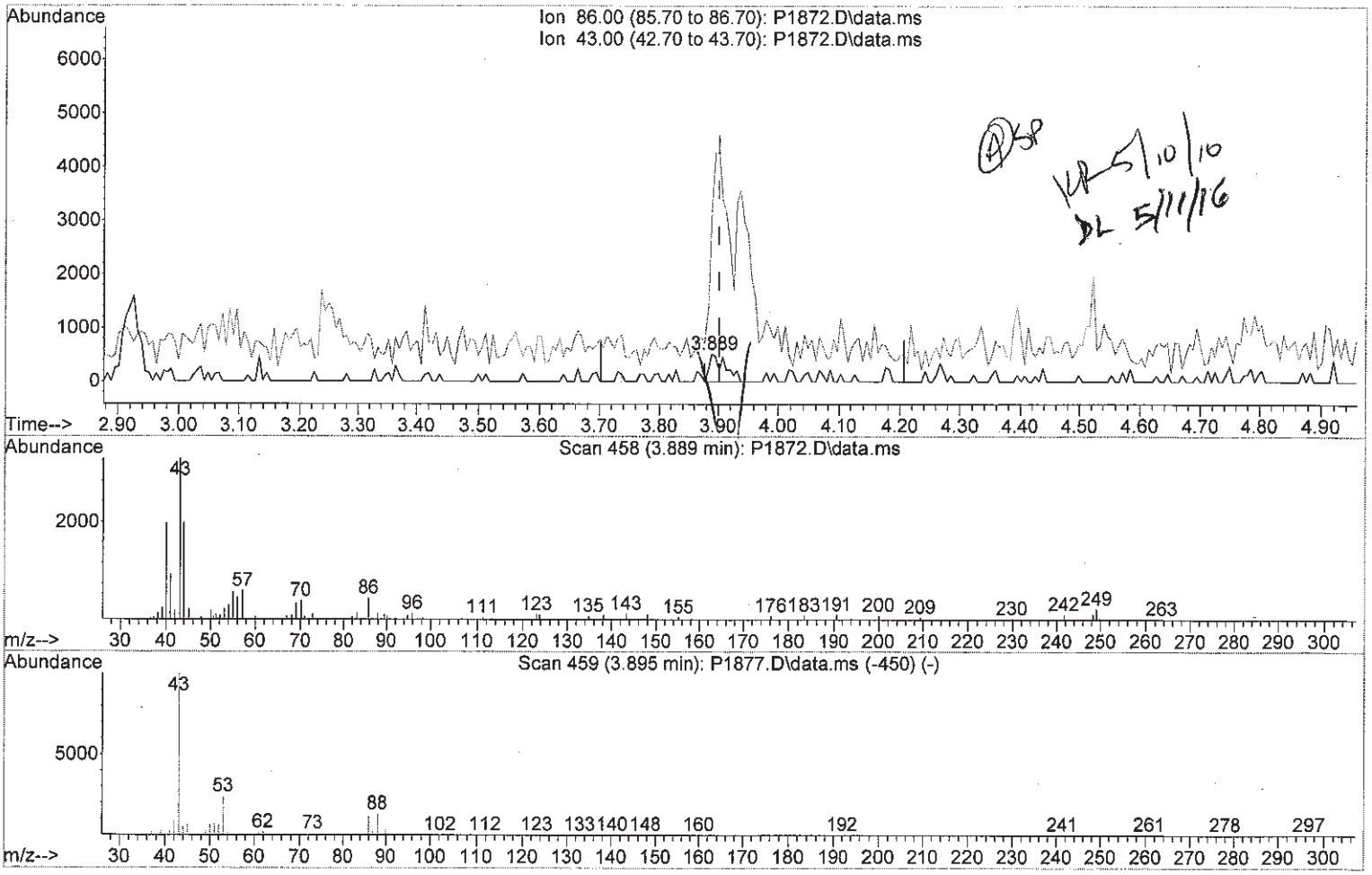
response 509

Ion	Exp%	Act%
86.00	100	100
43.00	938.30	630.02#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(29) Vinyl Acetate

3.889min (-0.012) 0.72 ppb m

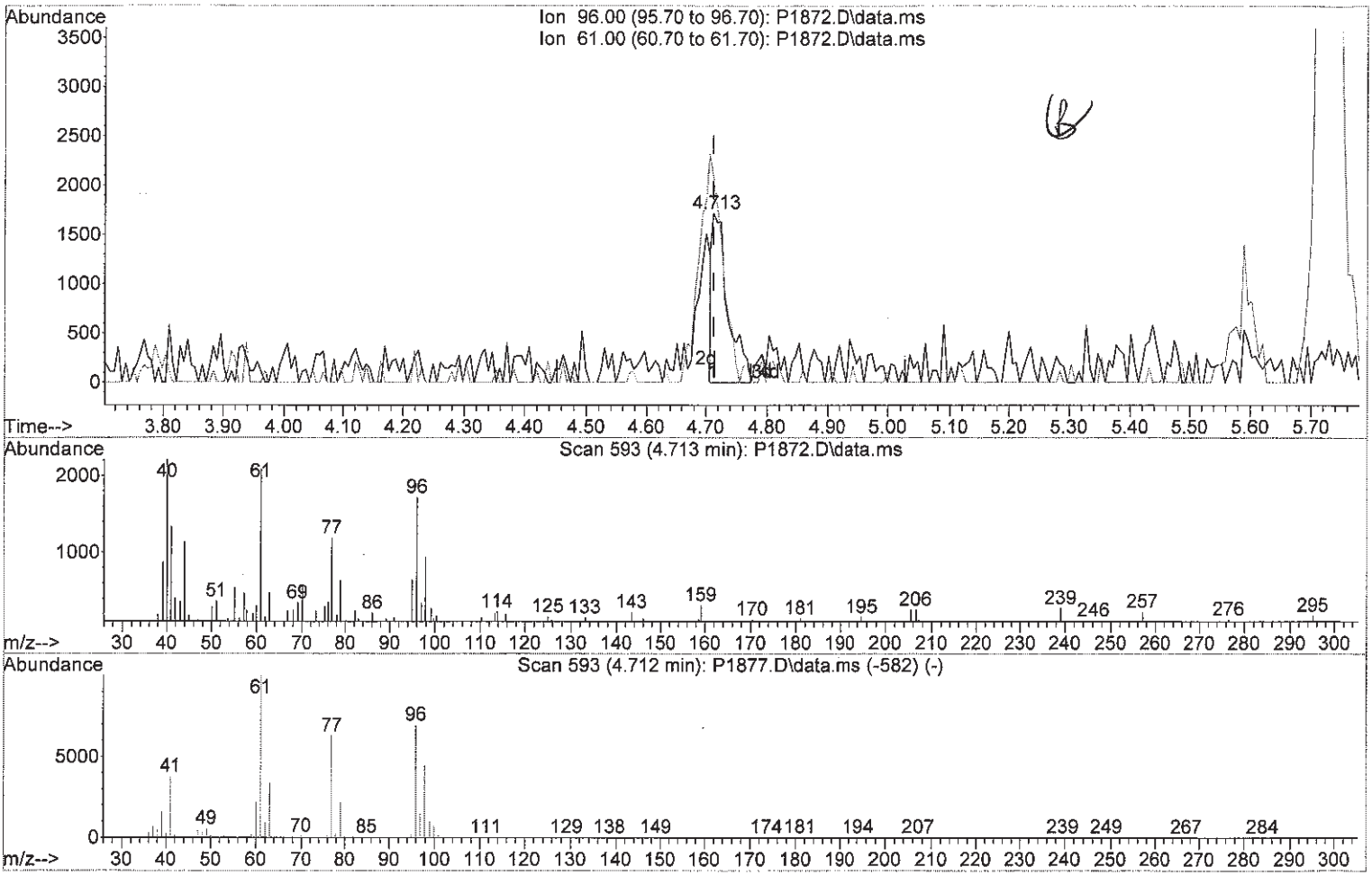
response 948

Ion	Exp%	Act%
86.00	100	100
43.00	938.30	630.02#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.713min (+0.000) 0.41 ppb

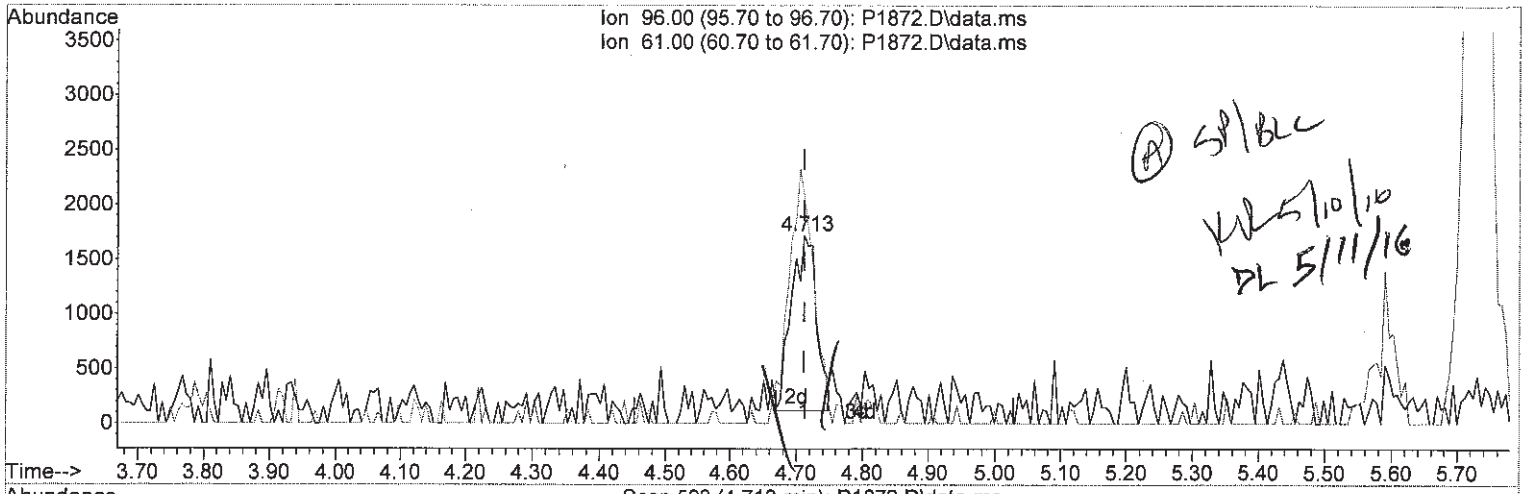
response 3042

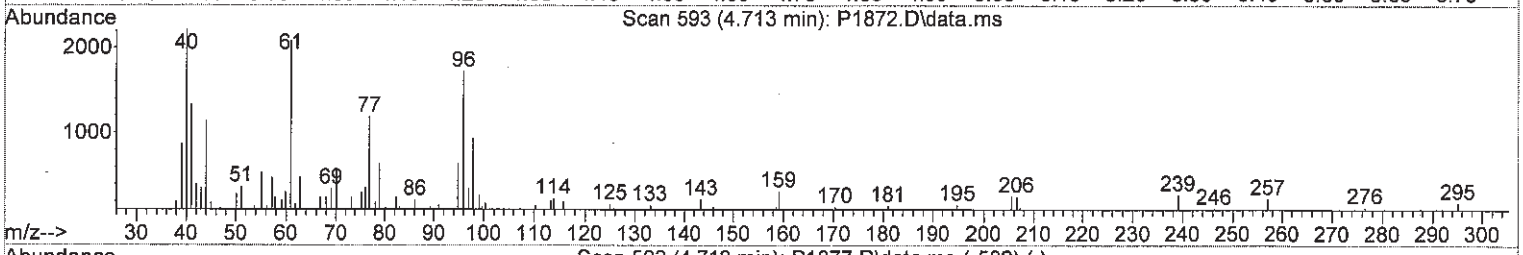
Ion	Exp%	Act%
96.00	100	100
61.00	144.40	121.25#
0.00	0.00	0.00
0.00	0.00	0.00

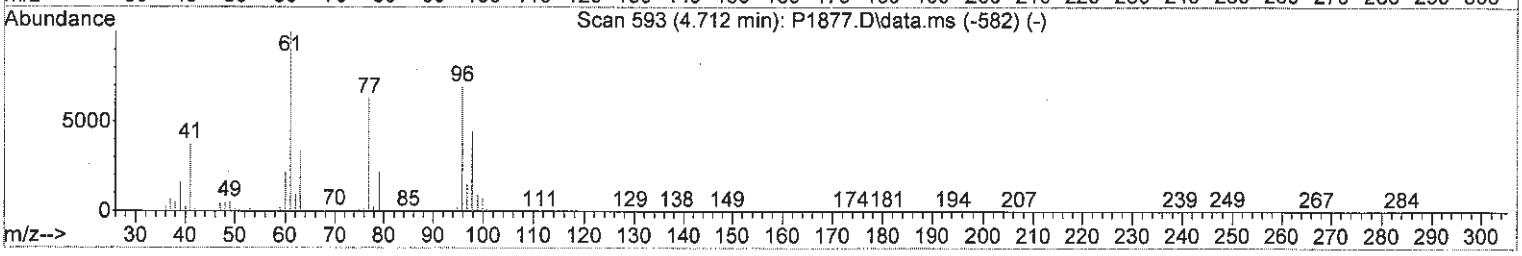
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.713min (+0.000) 0.57 ppb m

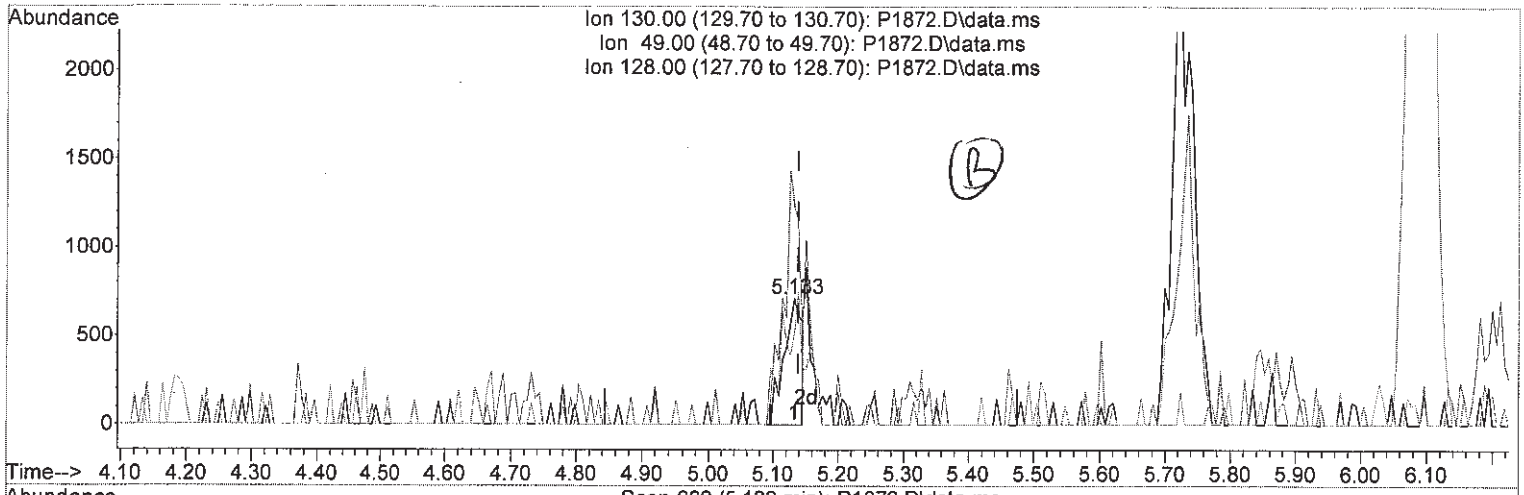
response 4247

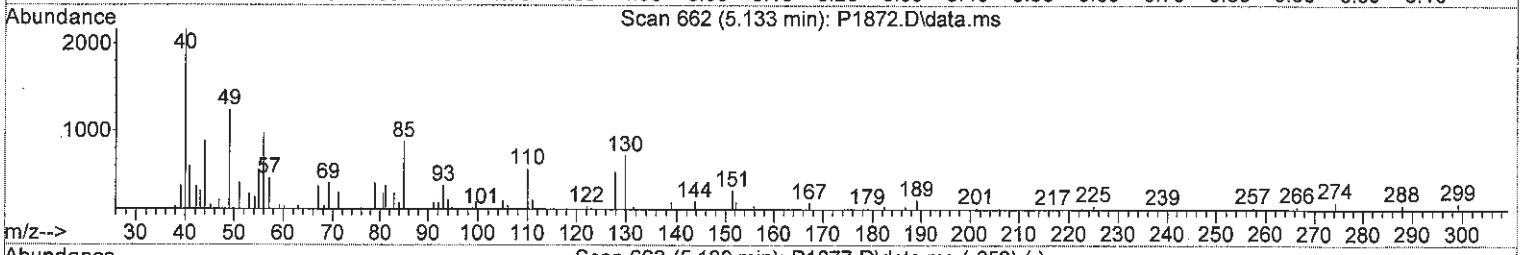
Ion	Exp%	Act%
96.00	100	100
61.00	144.40	121.25#
0.00	0.00	0.00
0.00	0.00	0.00

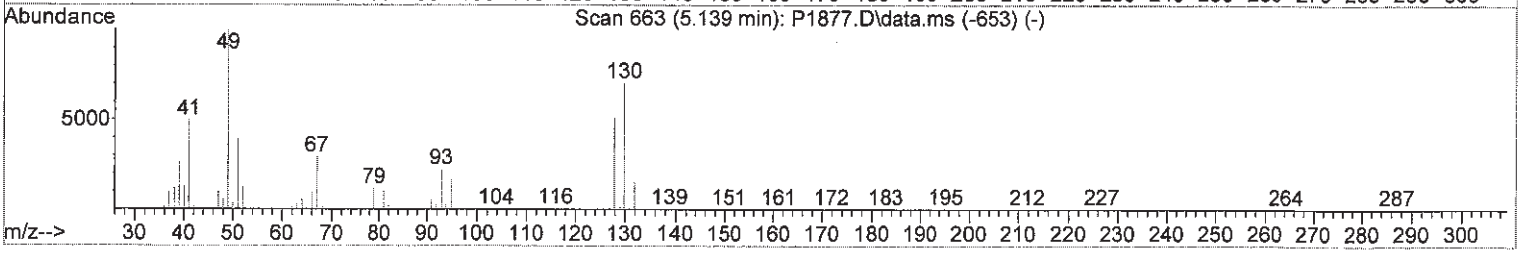
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(37) Bromochloromethane

5.133min (-0.006) 0.35 ppb

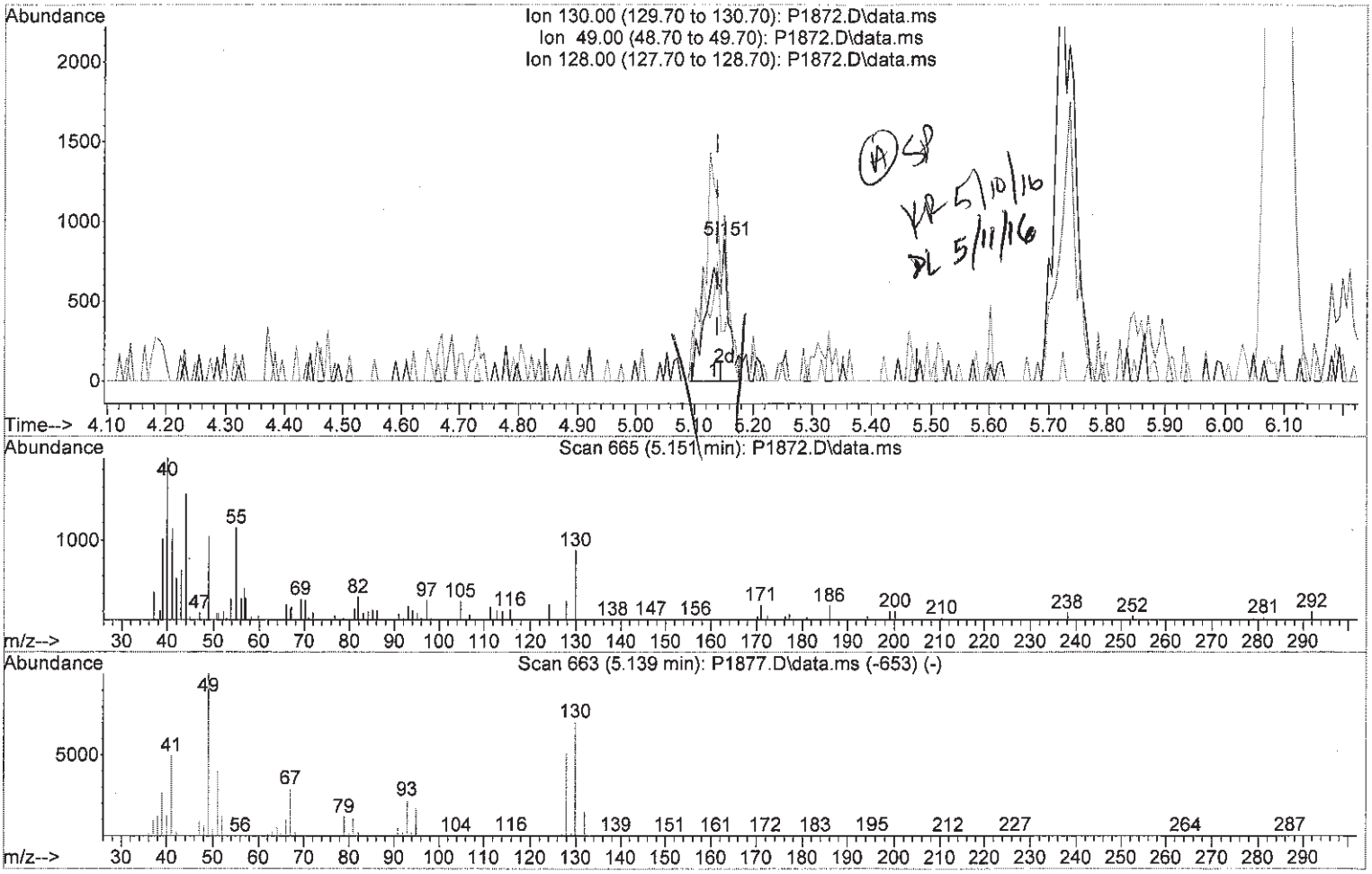
response 1355

Ion	Exp%	Act%
130.00	100	100
49.00	142.20	173.98#
128.00	73.20	73.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(37) Bromochloromethane

5.151min (+0.012) 0.52 ppb m

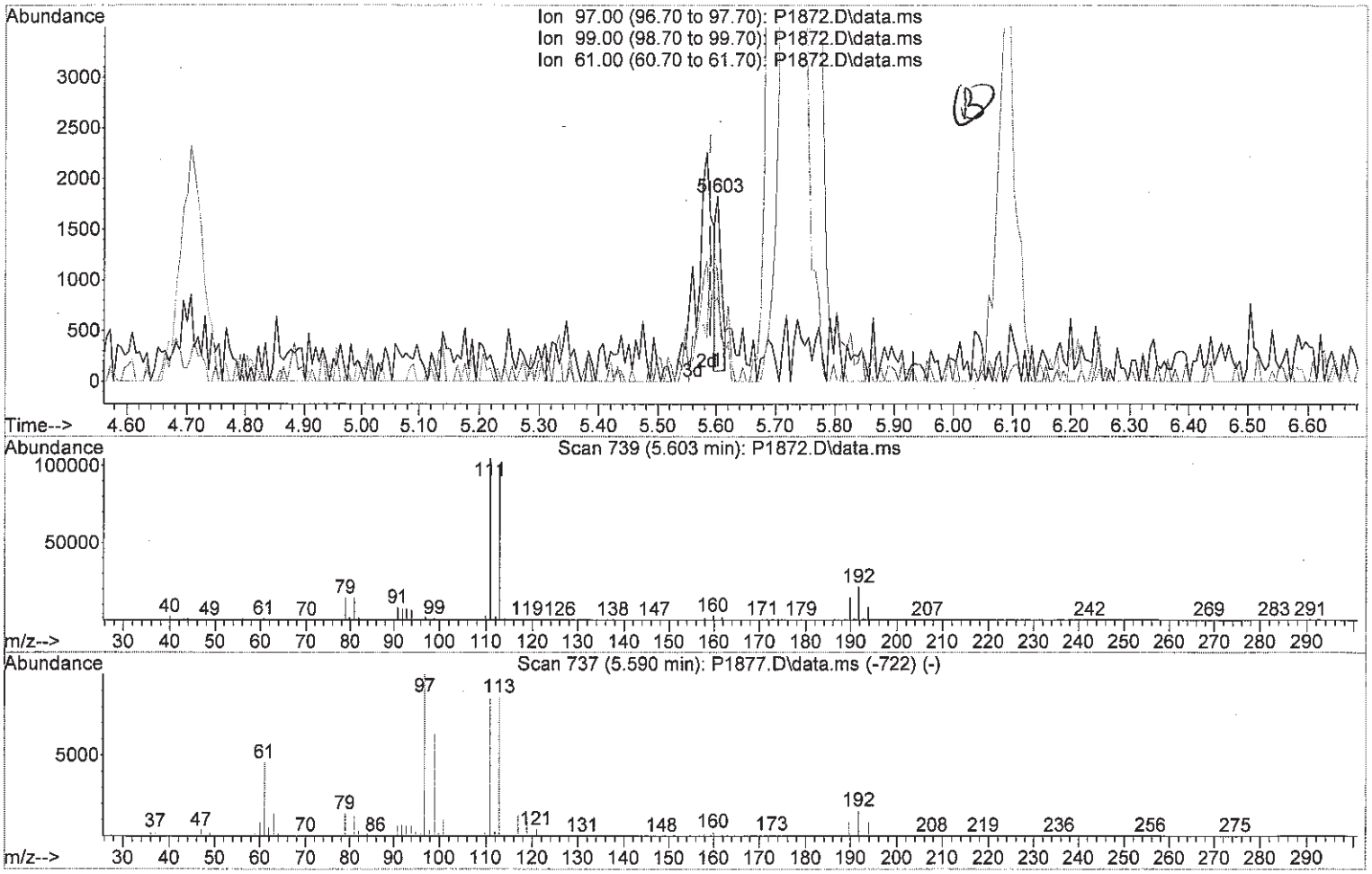
response 2025

Ion	Exp%	Act%
130.00	100	100
49.00	142.20	117.42#
128.00	73.20	35.18#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.603min (+0.012) 0.11 ppb

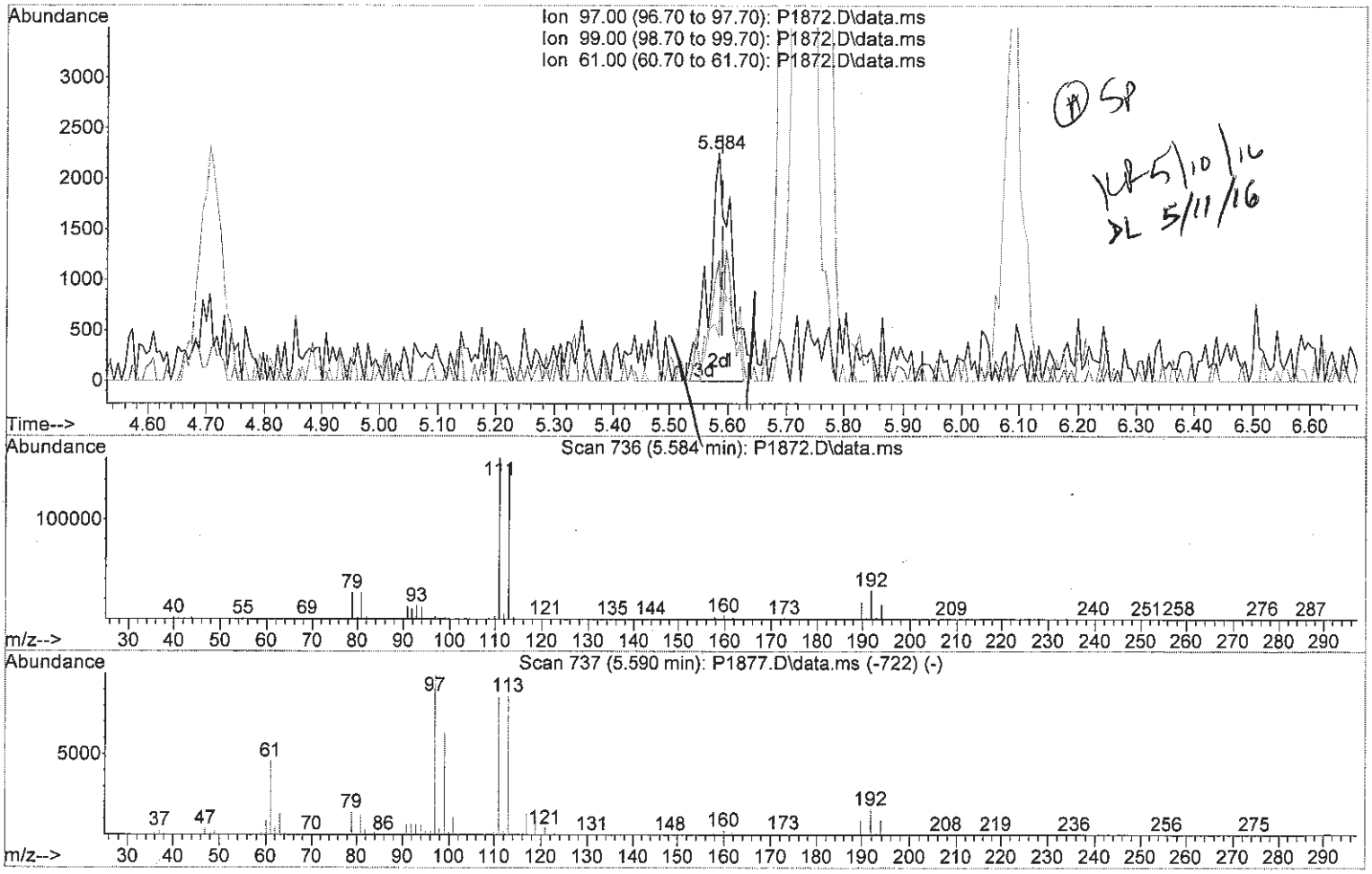
response 1116

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	57.10
61.00	45.50	45.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(41) 1,1,1-Trichloroethane (P)

5.584min (-0.006) 0.59 ppb m

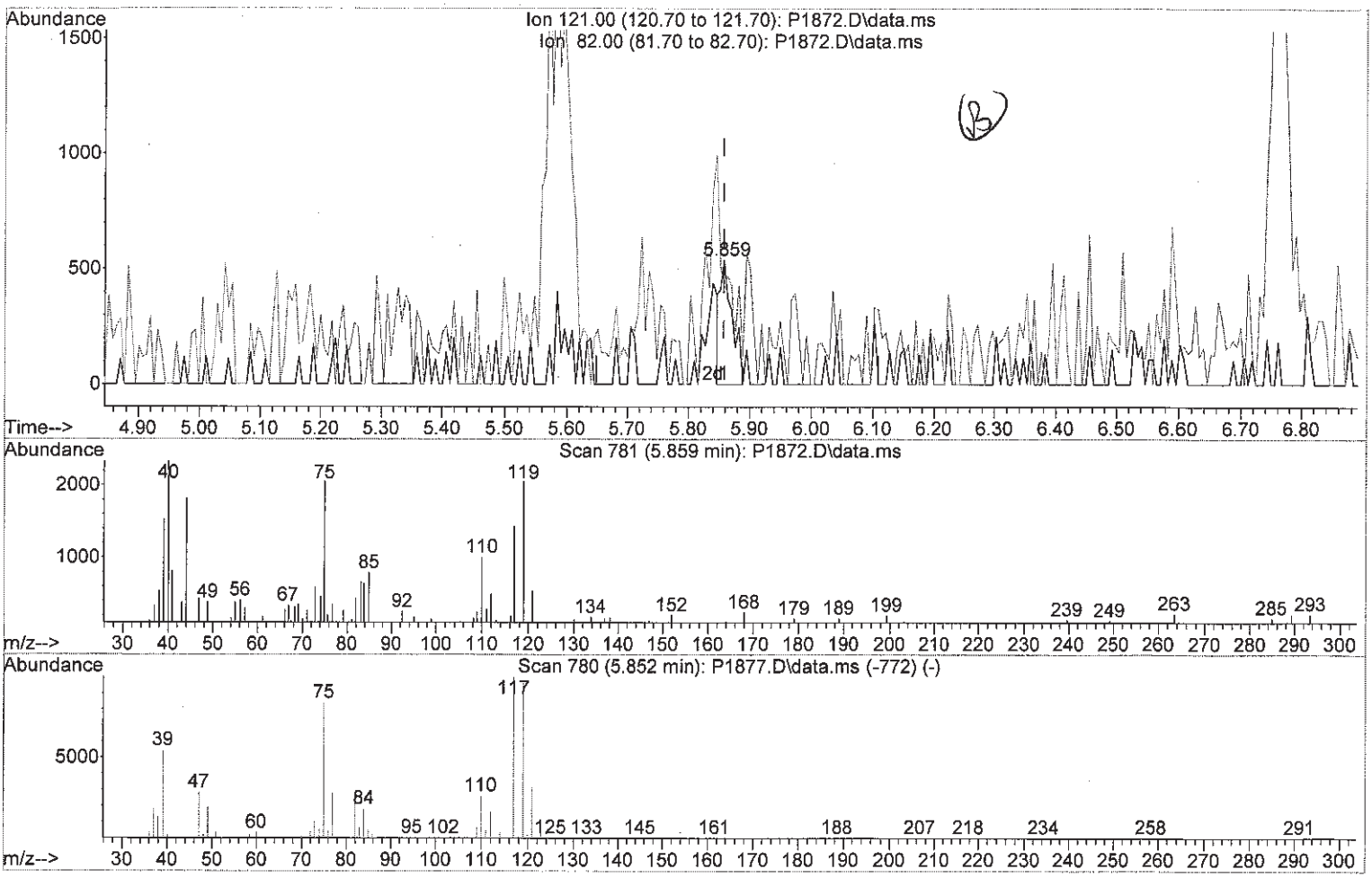
response 6036

Ion	Exp%	Act%
97.00	100	100
99.00	62.80	52.71
61.00	45.50	19.27#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(46) Carbontetrachloride (P)

5.859min (+0.000) 0.28 ppb

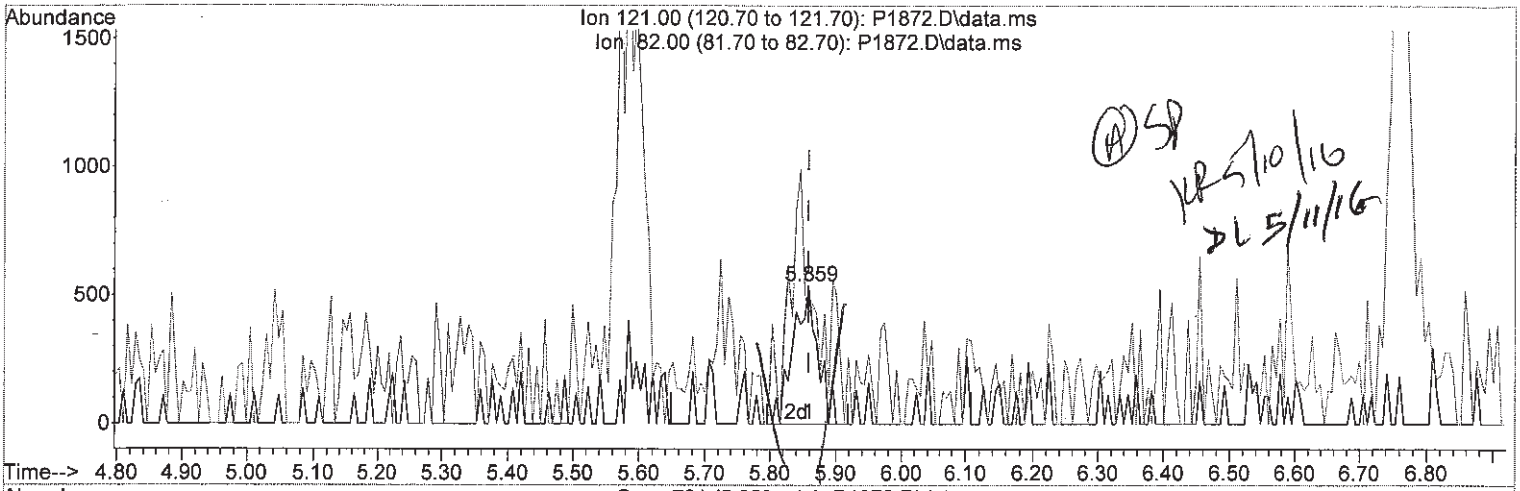
response 747

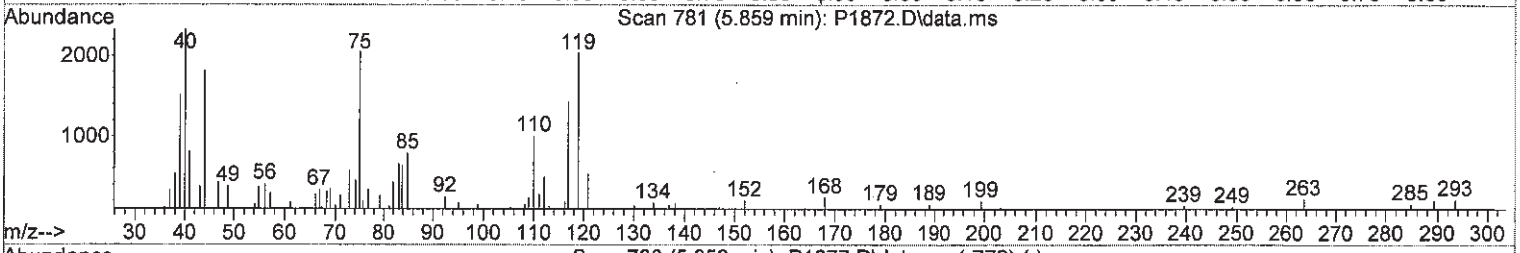
Ion	Exp%	Act%
121.00	100	100
82.00	86.70	79.89
0.00	0.00	0.00
0.00	0.00	0.00

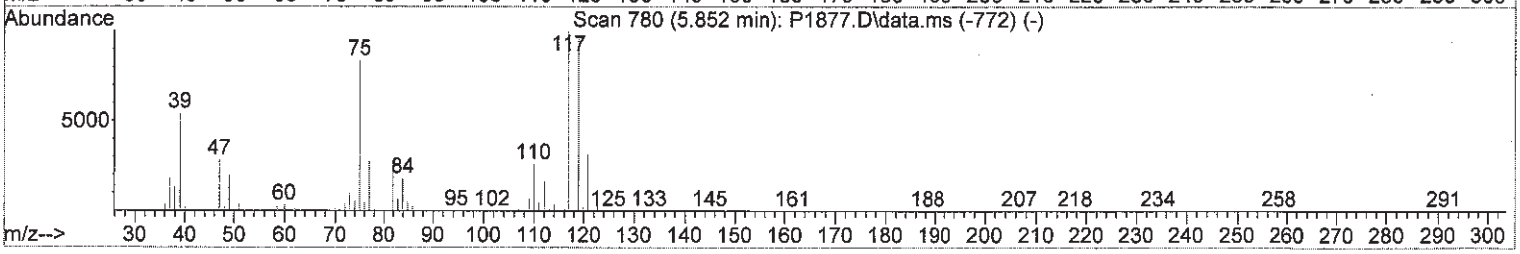
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(46) Carbontetrachloride (P)

5.859min (+0.000) 0.53 ppb m

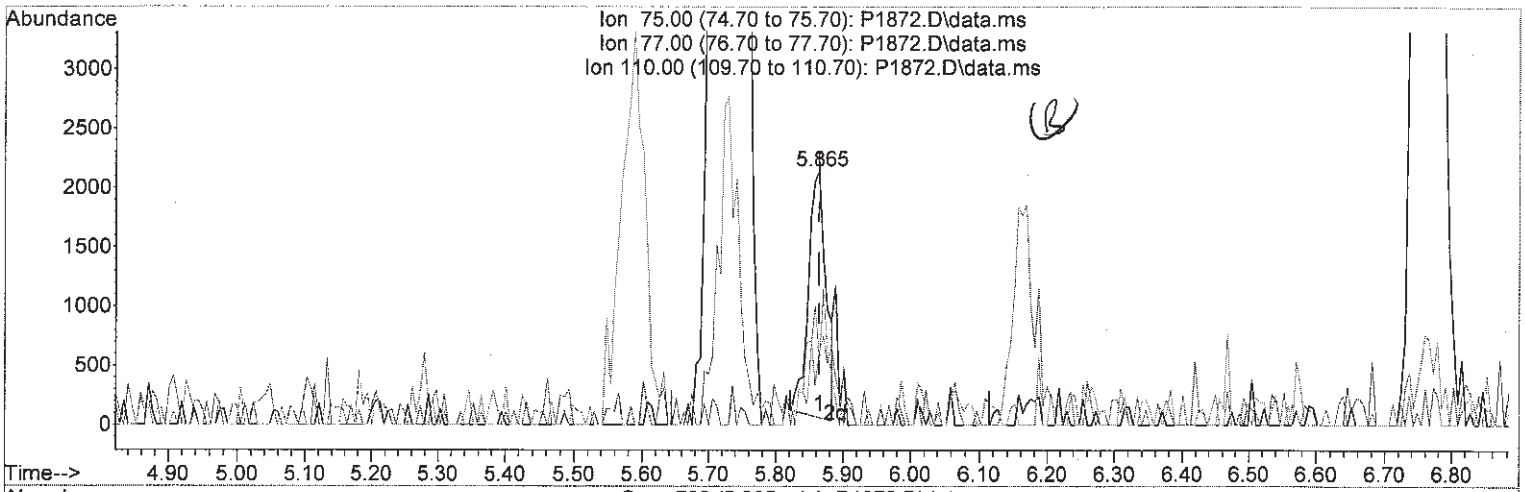
response 1387

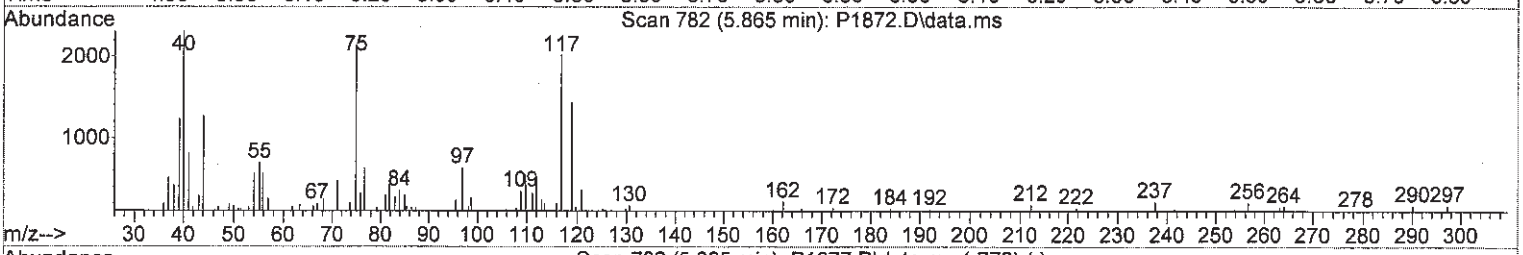
Ion	Exp%	Act%
121.00	100	100
82.00	86.70	79.89
0.00	0.00	0.00
0.00	0.00	0.00

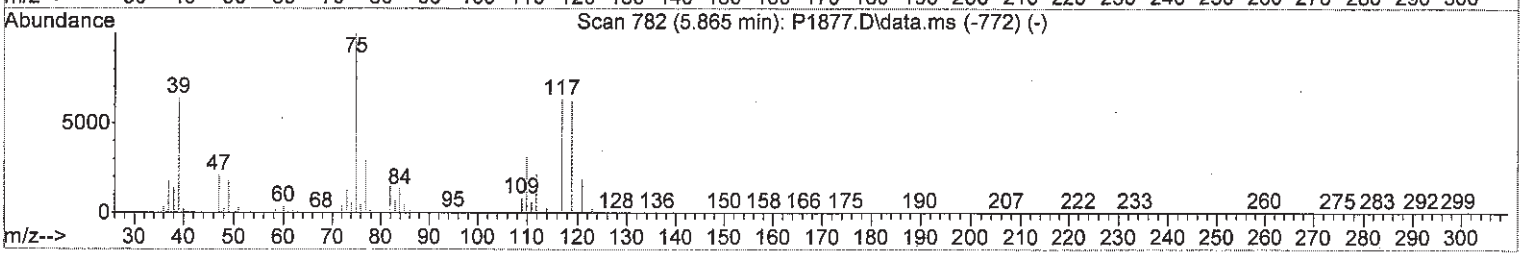
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(47) 1,1-Dichloropropene

5.865min (+0.000) 0.40 ppb

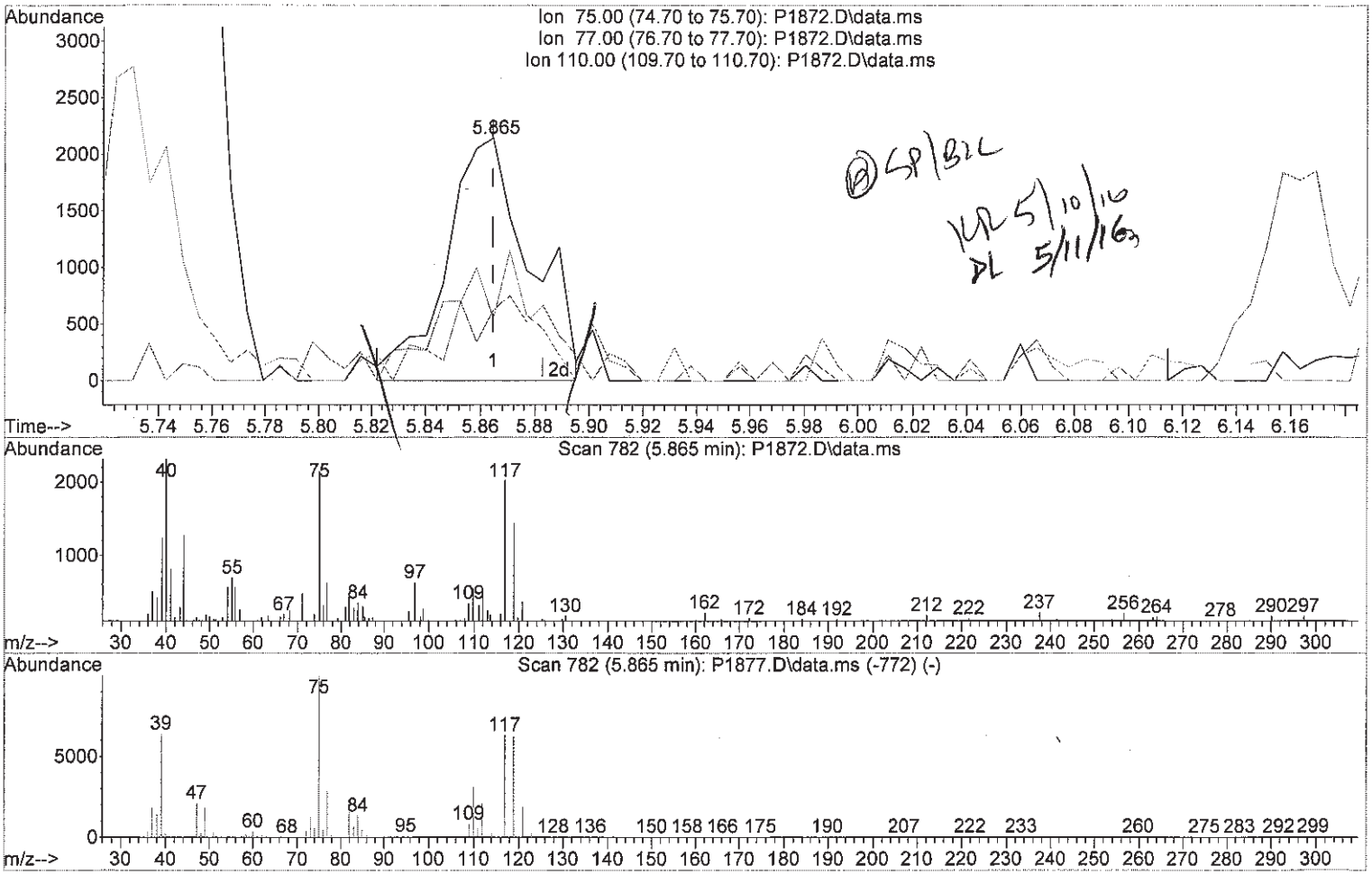
response 3782

Ion	Exp%	Act%
75.00	100	100
77.00	28.70	29.16
110.00	31.50	25.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(47) 1,1-Dichloropropene

5.865min (+0.000) 0.48 ppb m

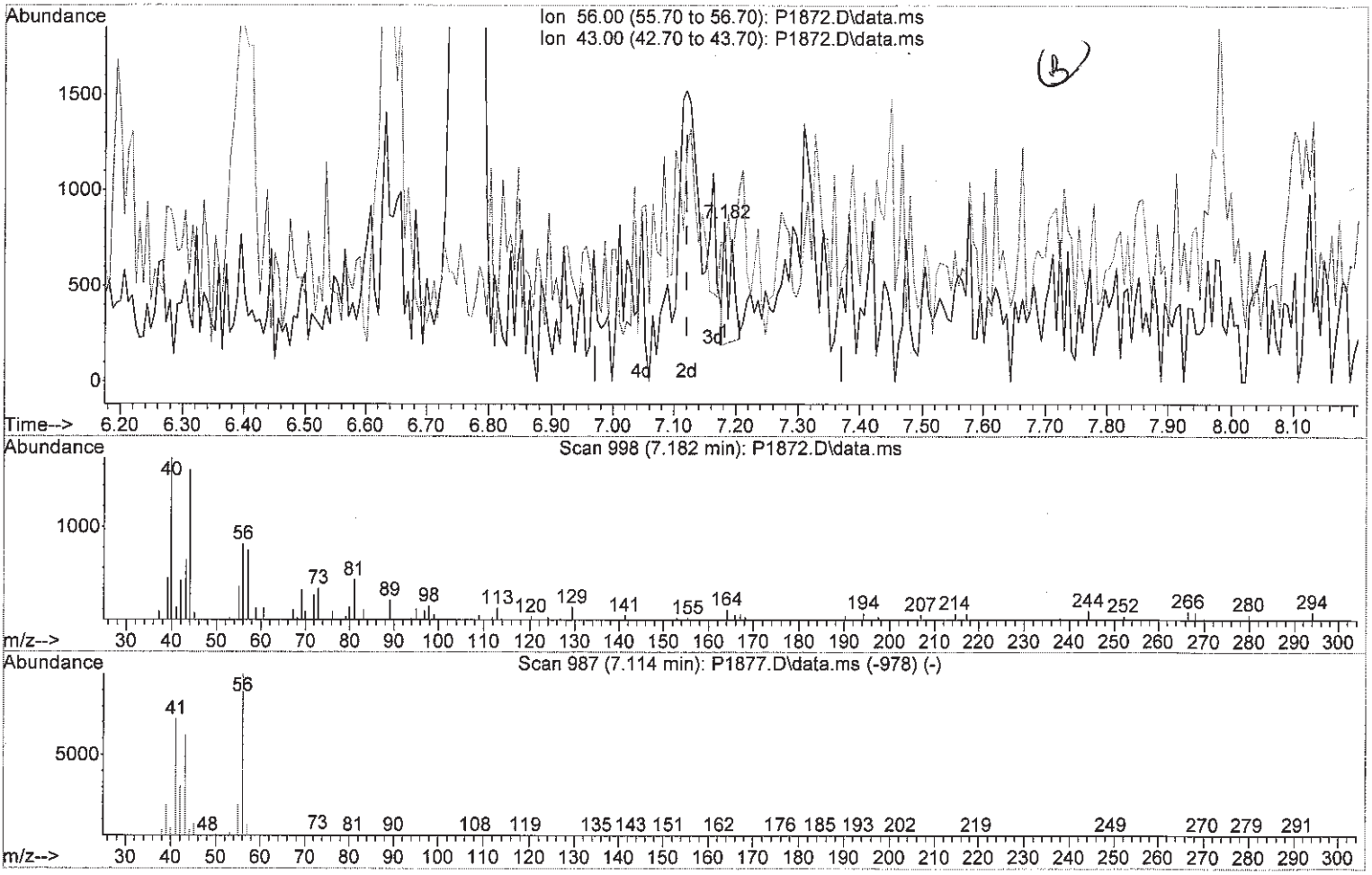
response 4561

Ion	Exp%	Act%
75.00	100	100
77.00	28.70	29.16
110.00	31.50	25.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(53) 1-Butanol

7.182min (+0.061) 3.81 ppb

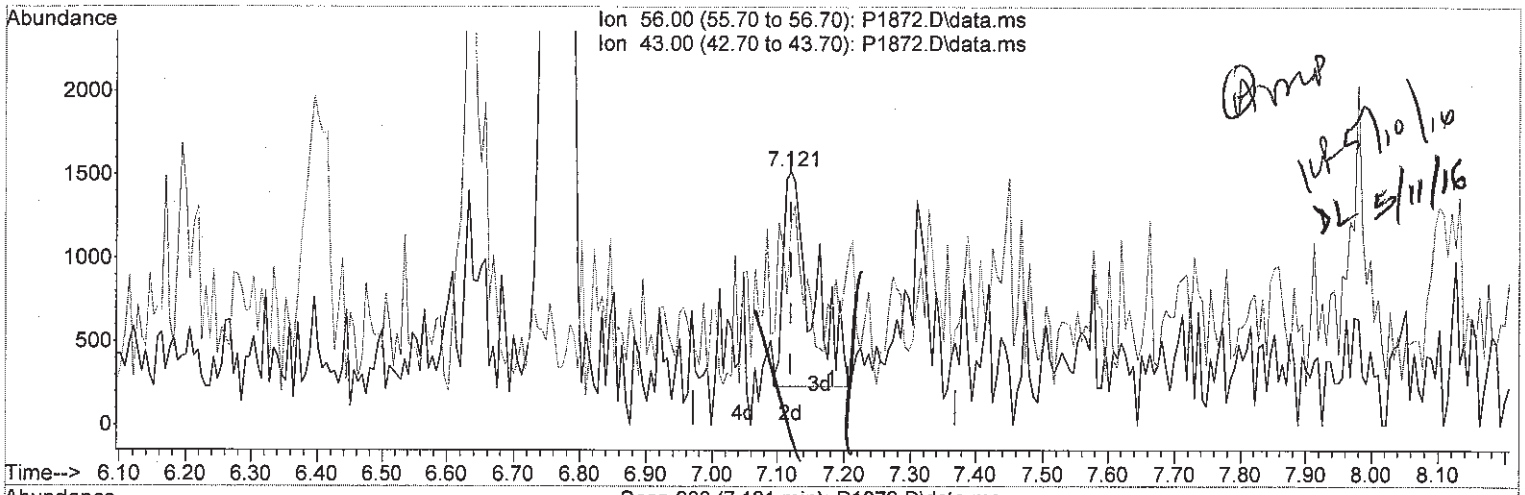
response 572

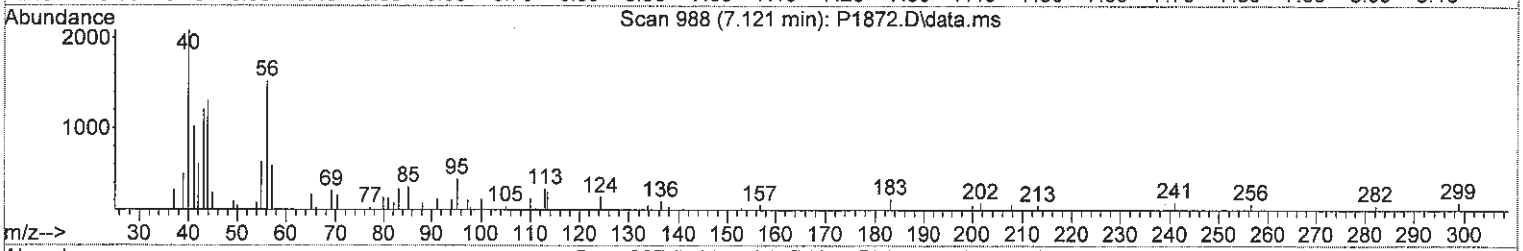
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	72.73
0.00	0.00	0.00
0.00	0.00	0.00

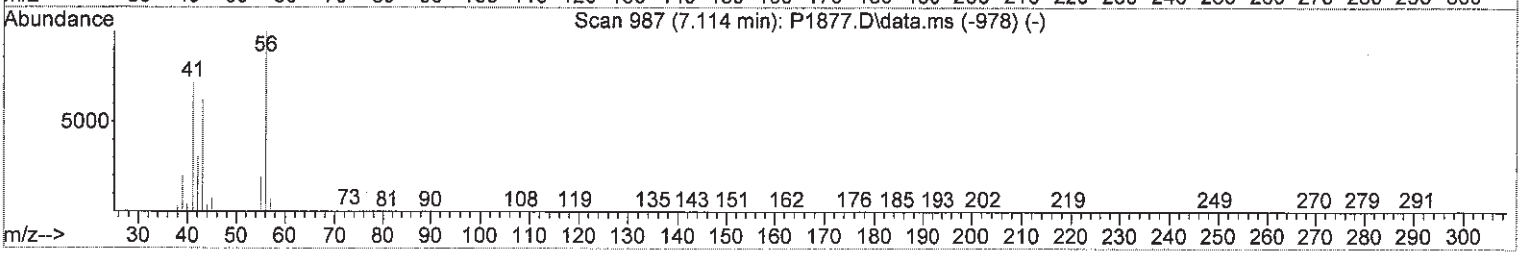
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(53) 1-Butanol

7.121min (+0.000) 24.91 ppb m

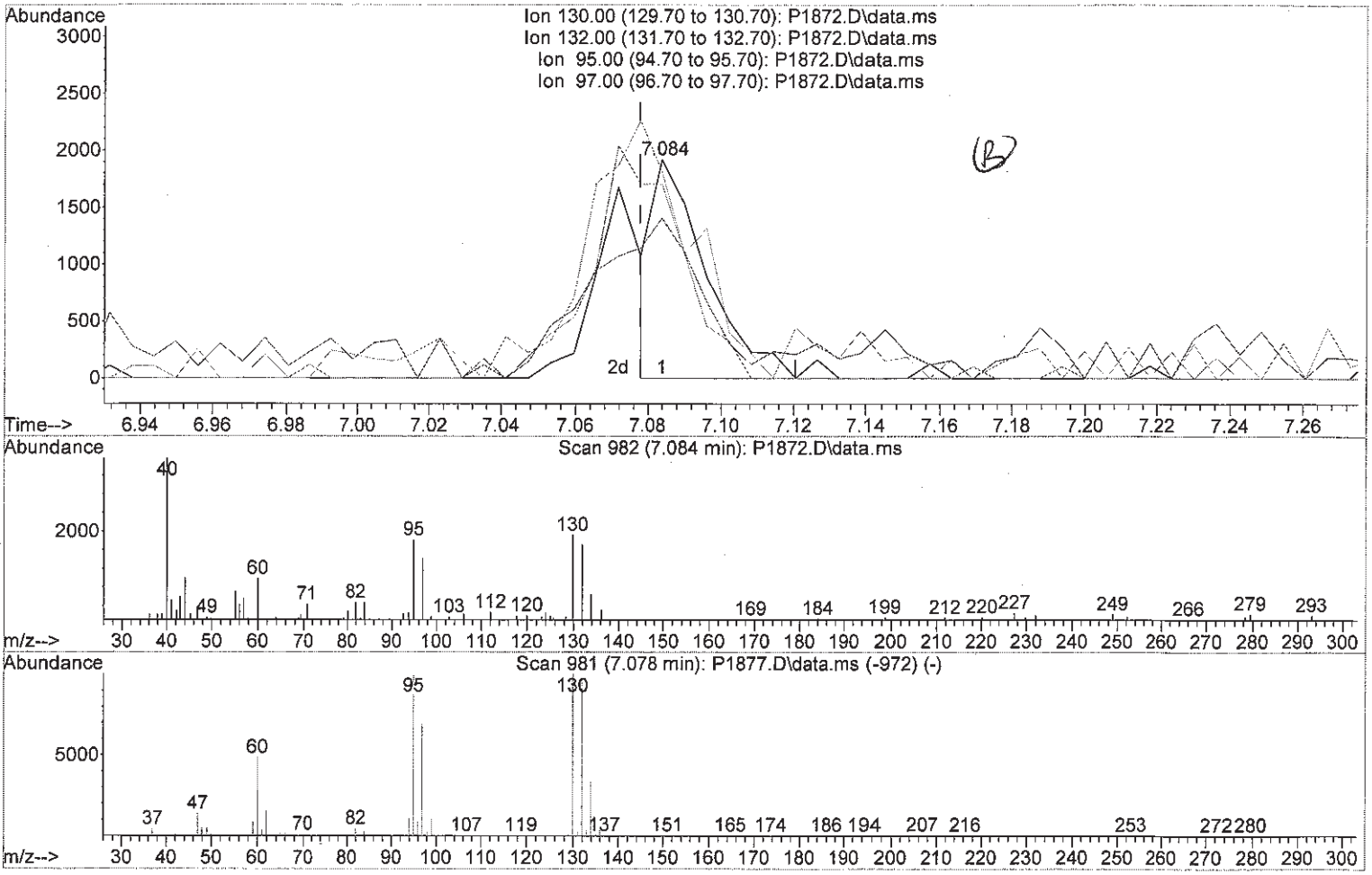
response 3735

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	11.14#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.006) 0.28 ppb

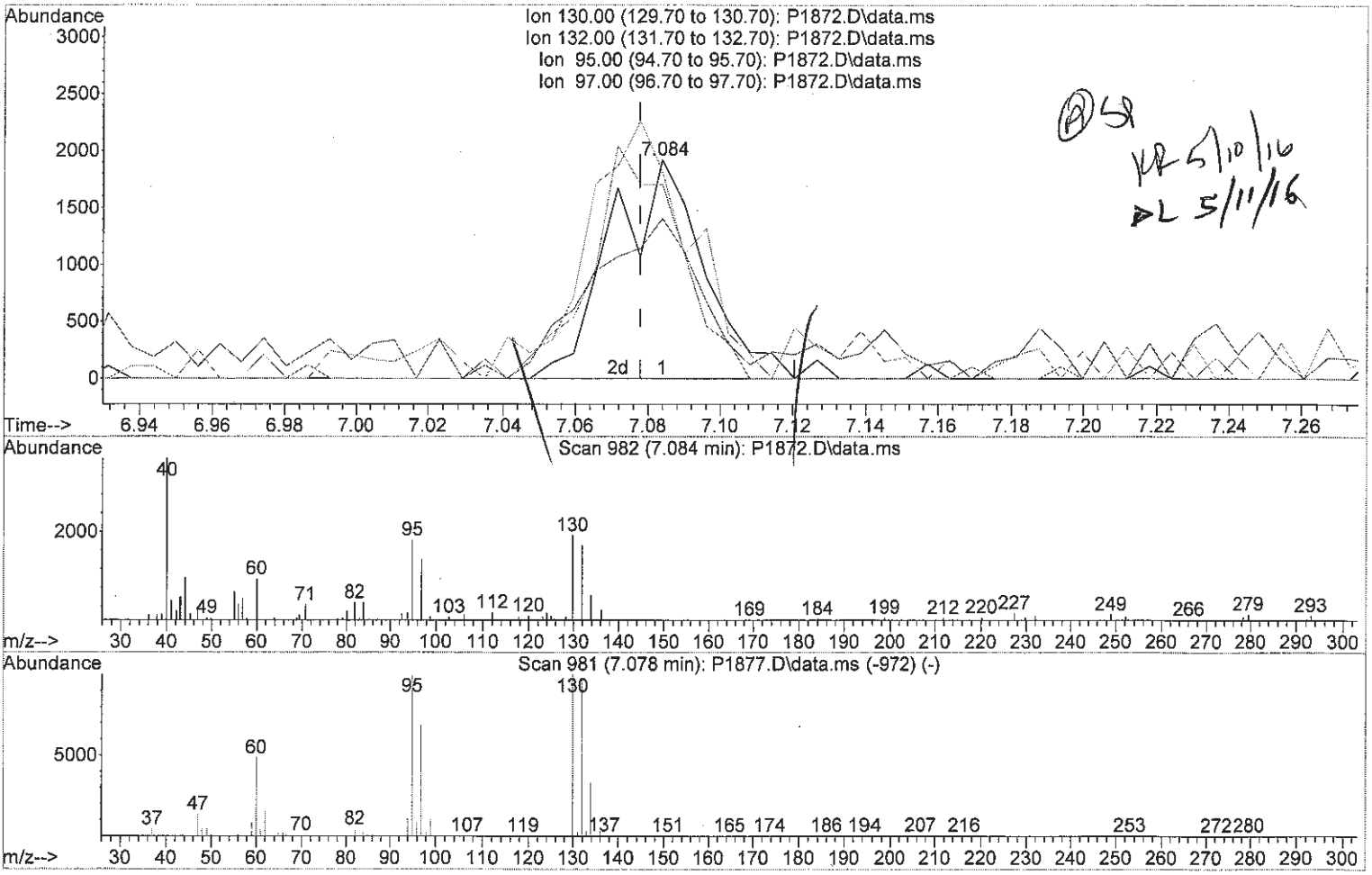
response 1931

Ion	Exp%	Act%
130.00	100	100
132.00	96.60	88.89
95.00	100.20	94.53
97.00	68.80	73.10

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(54) Trichloroethene (P)

7.084min (+0.006) 0.50 ppb m

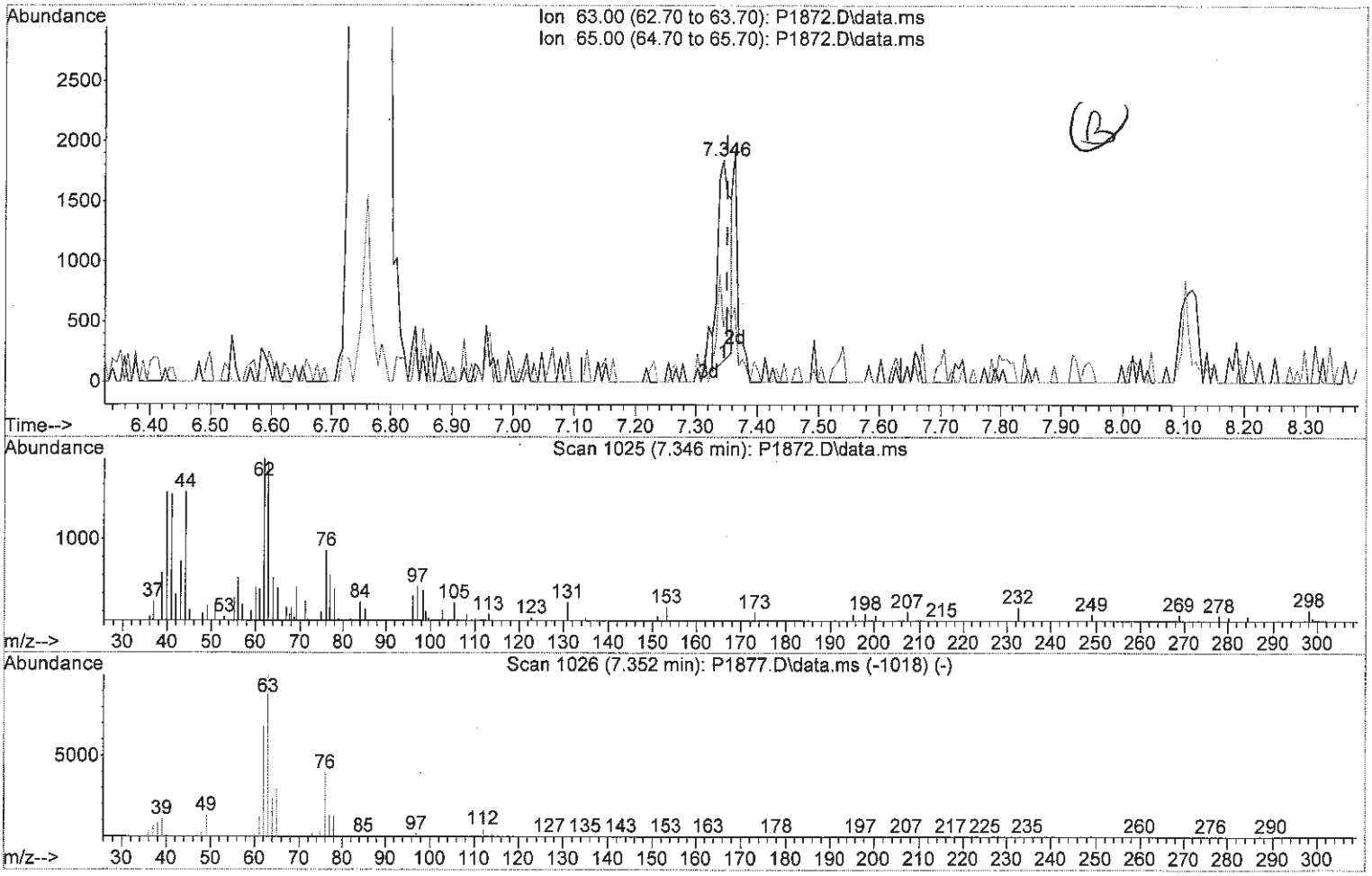
response 3402

Ion	Exp%	Act%
130.00	100	100
132.00	96.60	88.89
95.00	100.20	94.53
97.00	68.80	73.10

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(56) 1,2-Dichlpropane (P)

7.346min (-0.006) 0.31 ppb

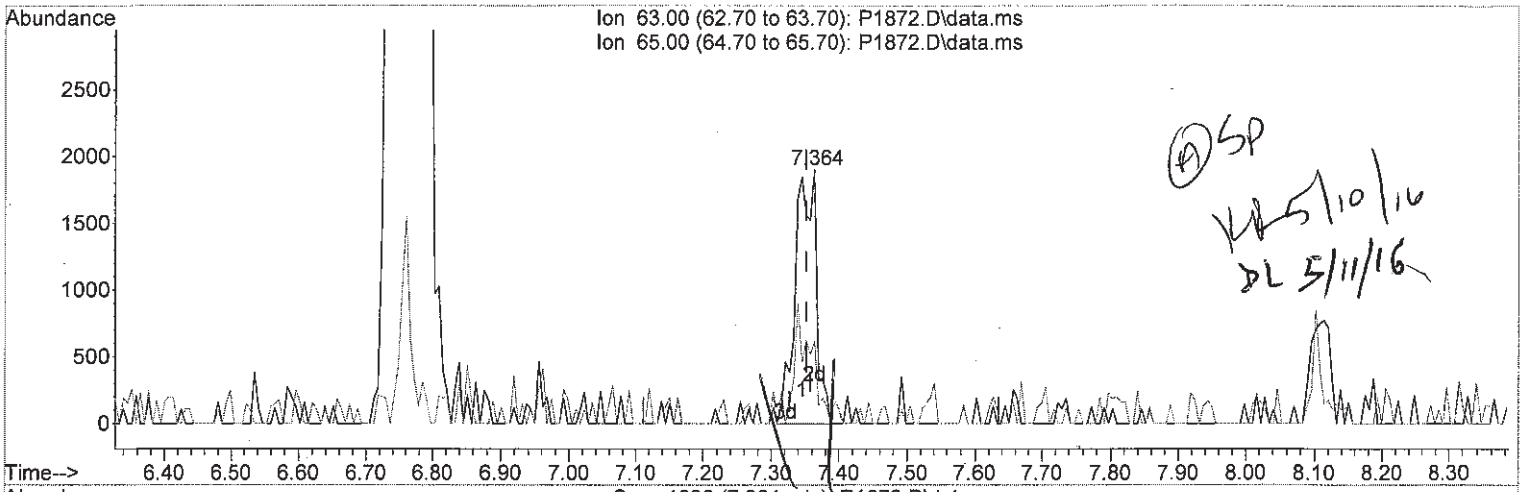
response 2356

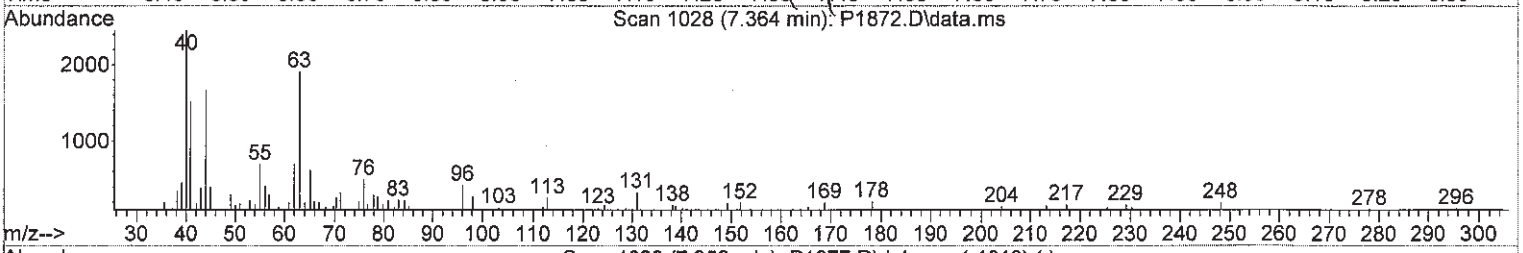
Ion	Exp%	Act%
63.00	100	100
65.00	31.10	24.69
0.00	0.00	0.00
0.00	0.00	0.00

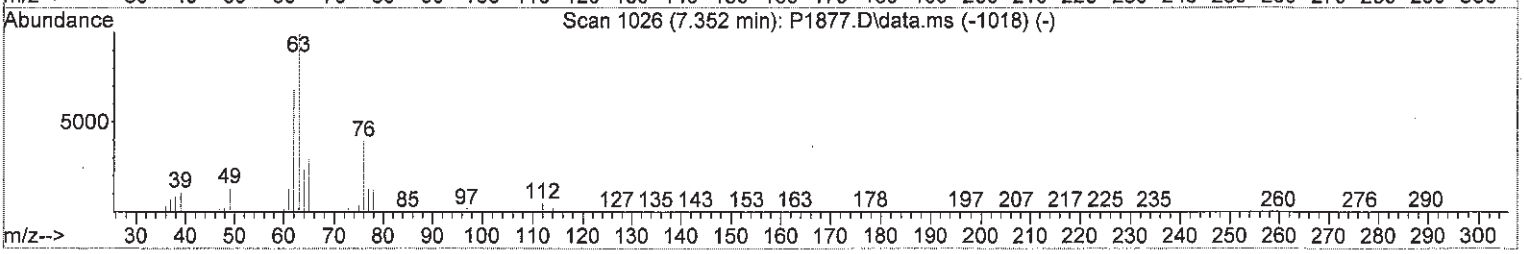
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(56) 1,2-Dichloropane (P)

7.364min (+0.012) 0.54 ppb m

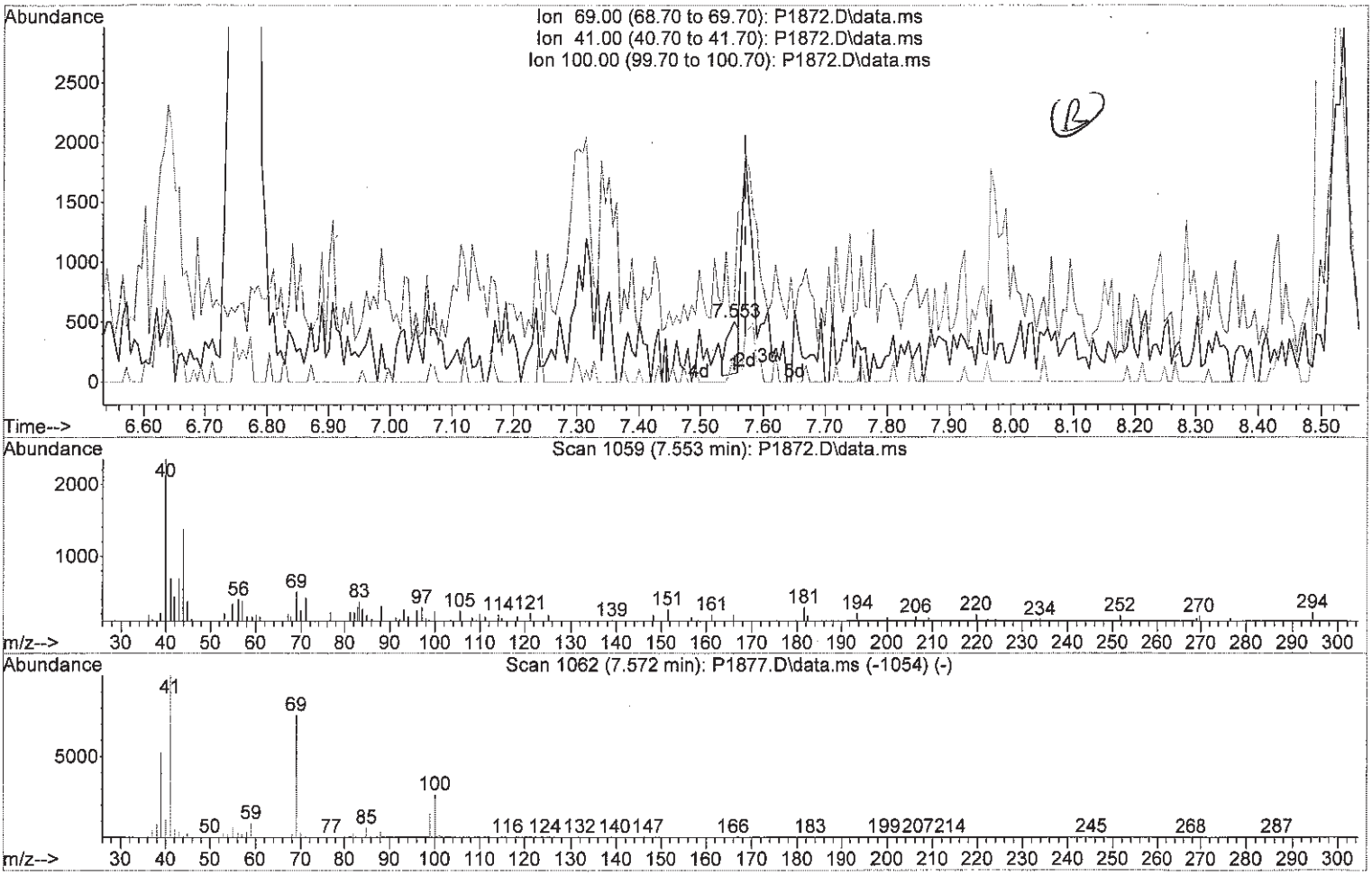
response 4037

Ion	Exp%	Act%
63.00	100	100
65.00	31.10	32.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(59) Methyl Methacrylate

7.553min (-0.018) 0.12 ppb

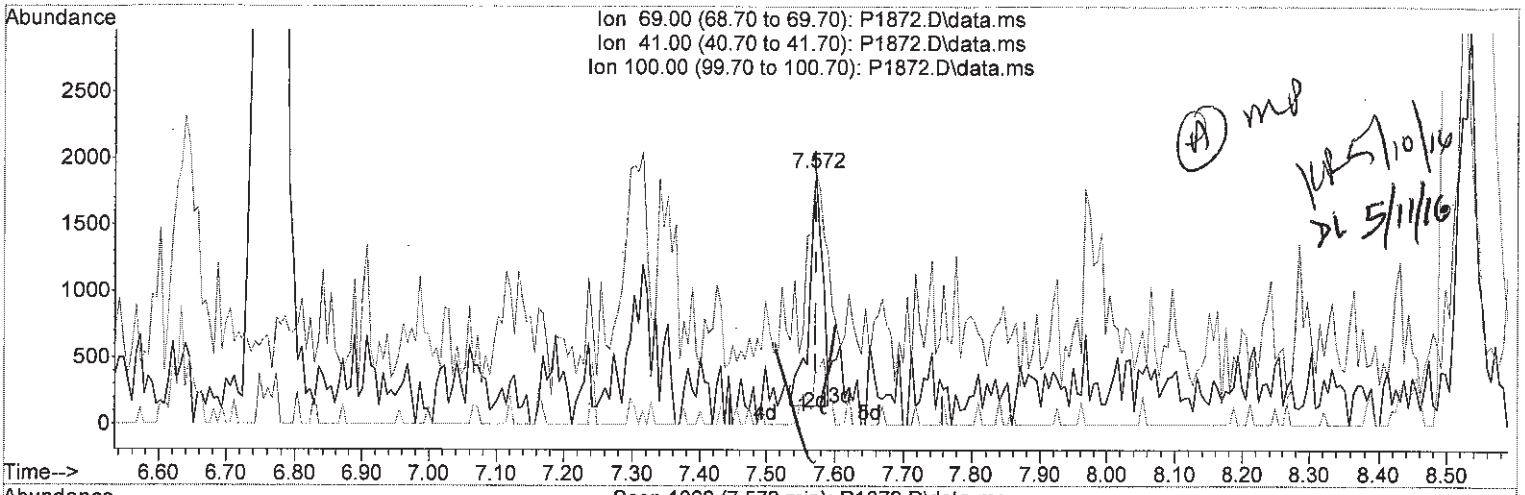
response 542

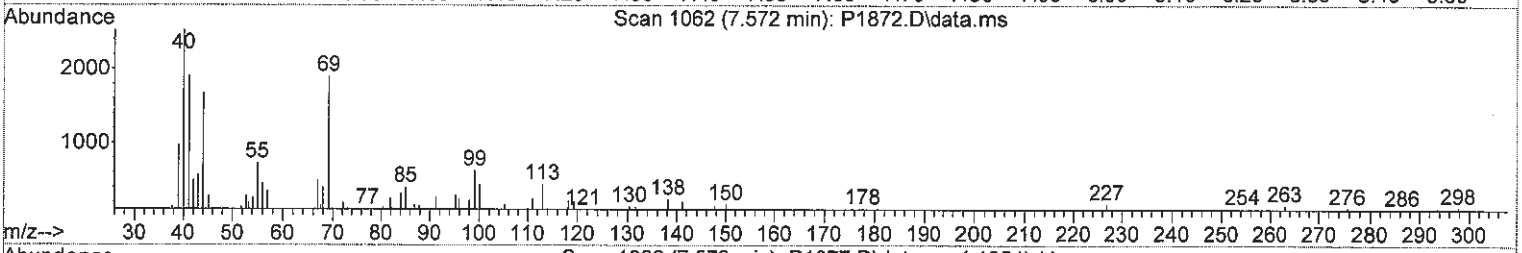
Ion	Exp%	Act%
69.00	100	100
41.00	132.90	138.12
100.00	35.00	45.31
0.00	0.00	0.00

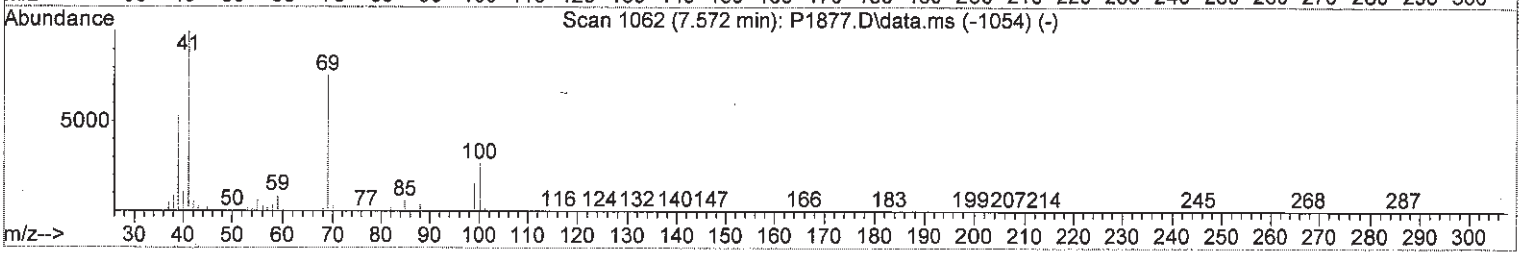
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(59) Methyl Methacrylate

7.572min (+0.000) 0.54 ppb m

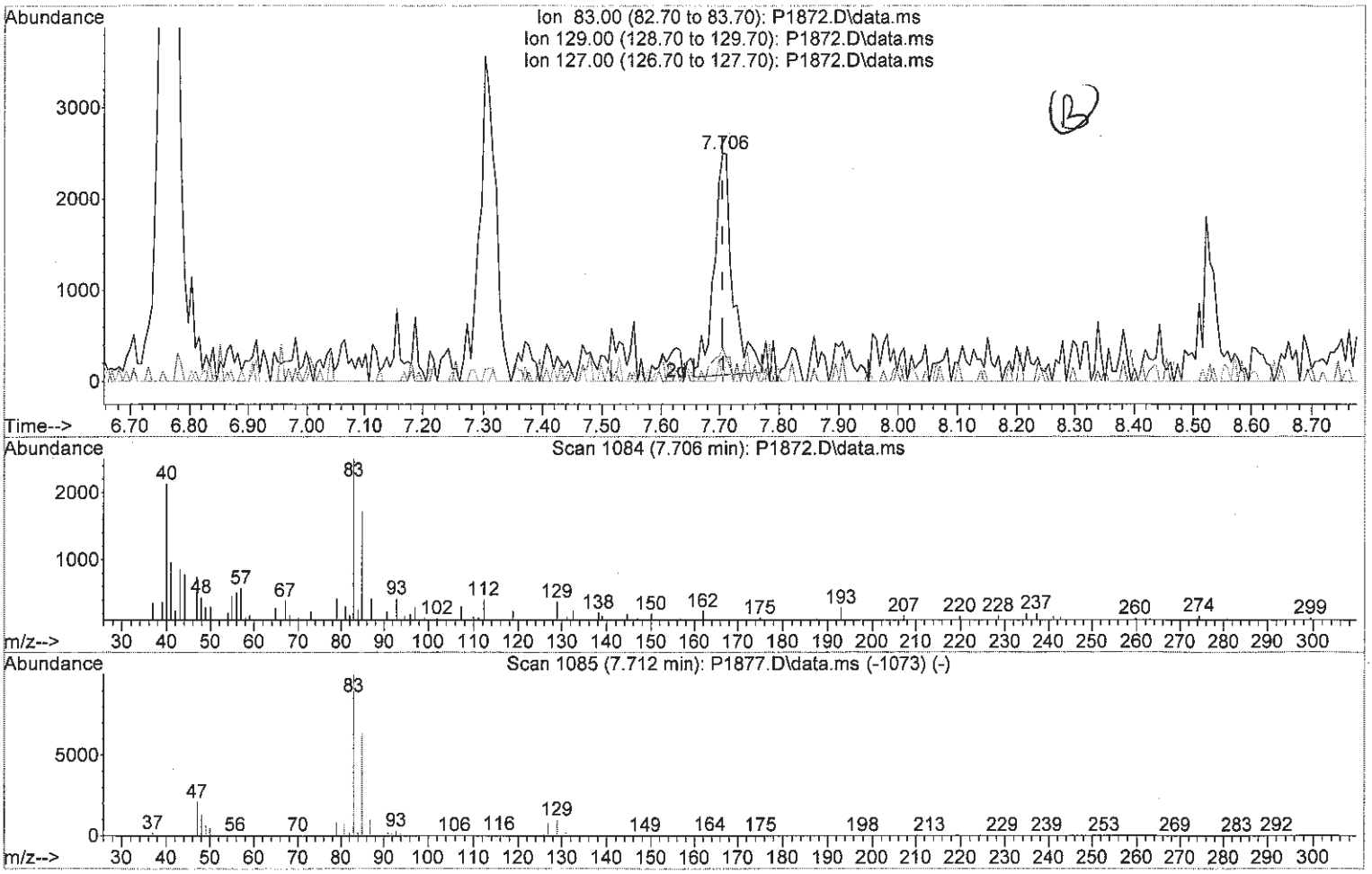
response 2356

Ion	Exp%	Act%
69.00	100	100
41.00	132.90	100.69#
100.00	35.00	22.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(60) Bromodichloromethane (P)

7.706min (+0.000) 0.59 ppb

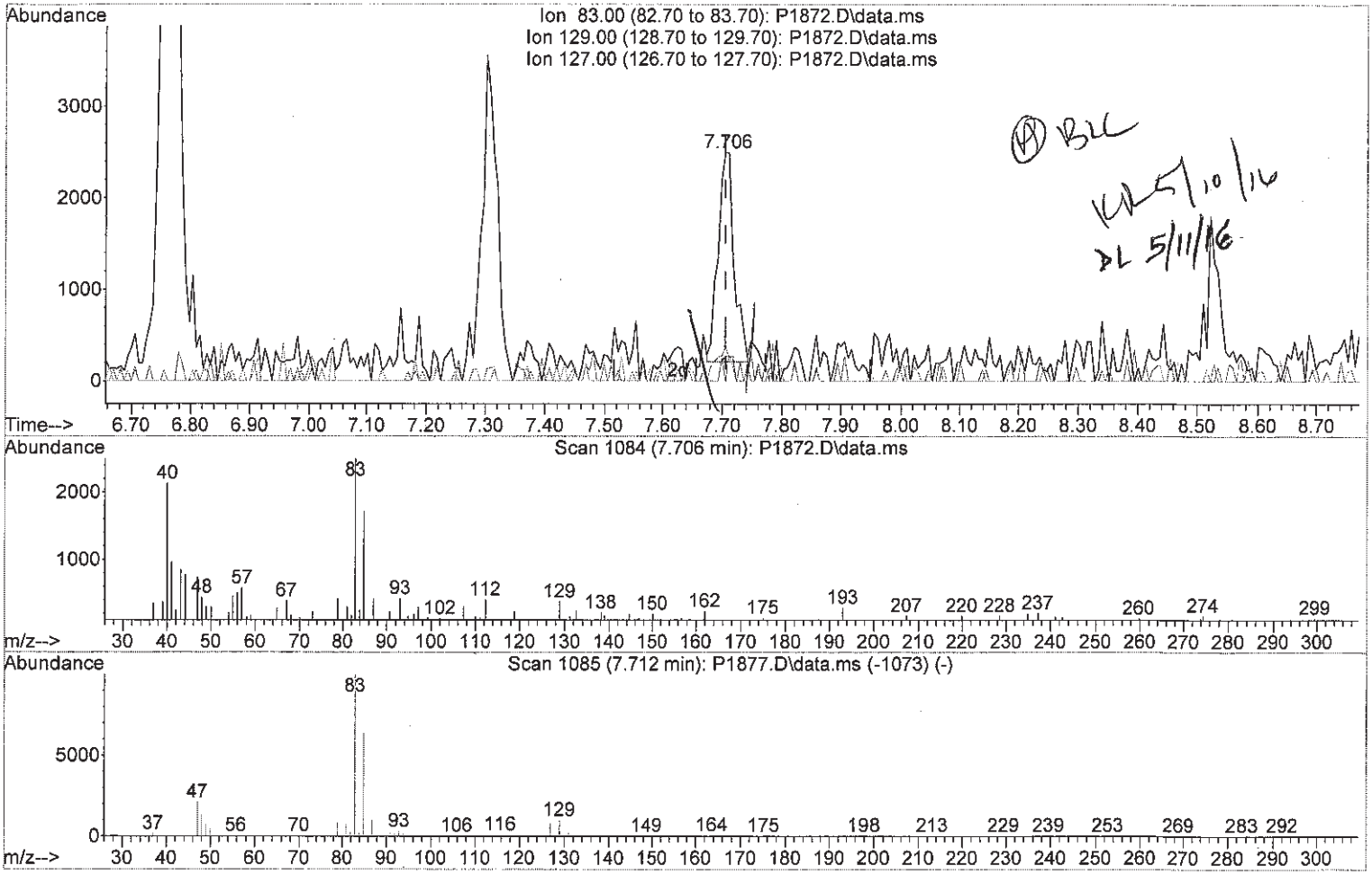
response 5409

Ion	Exp%	Act%
83.00	100	100
129.00	9.90	14.93
127.00	7.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(60) Bromodichloromethane (P)

7.706min (+0.000) 0.46 ppb m

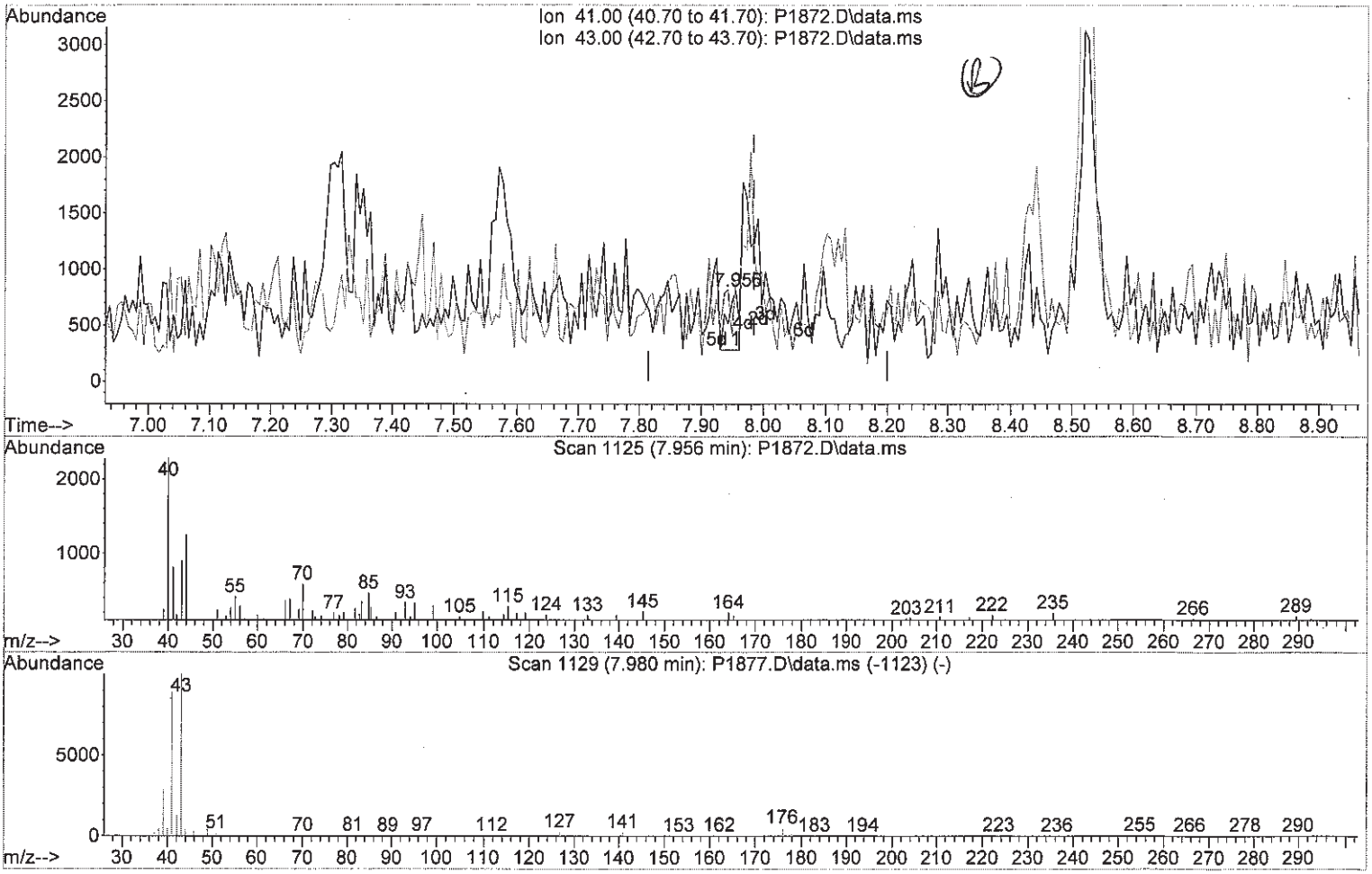
response 4184

Ion	Exp%	Act%
83.00	100	100
129.00	9.90	14.93
127.00	7.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(61) 2-Nitropropane

7.956min (-0.030) 0.43 ppb

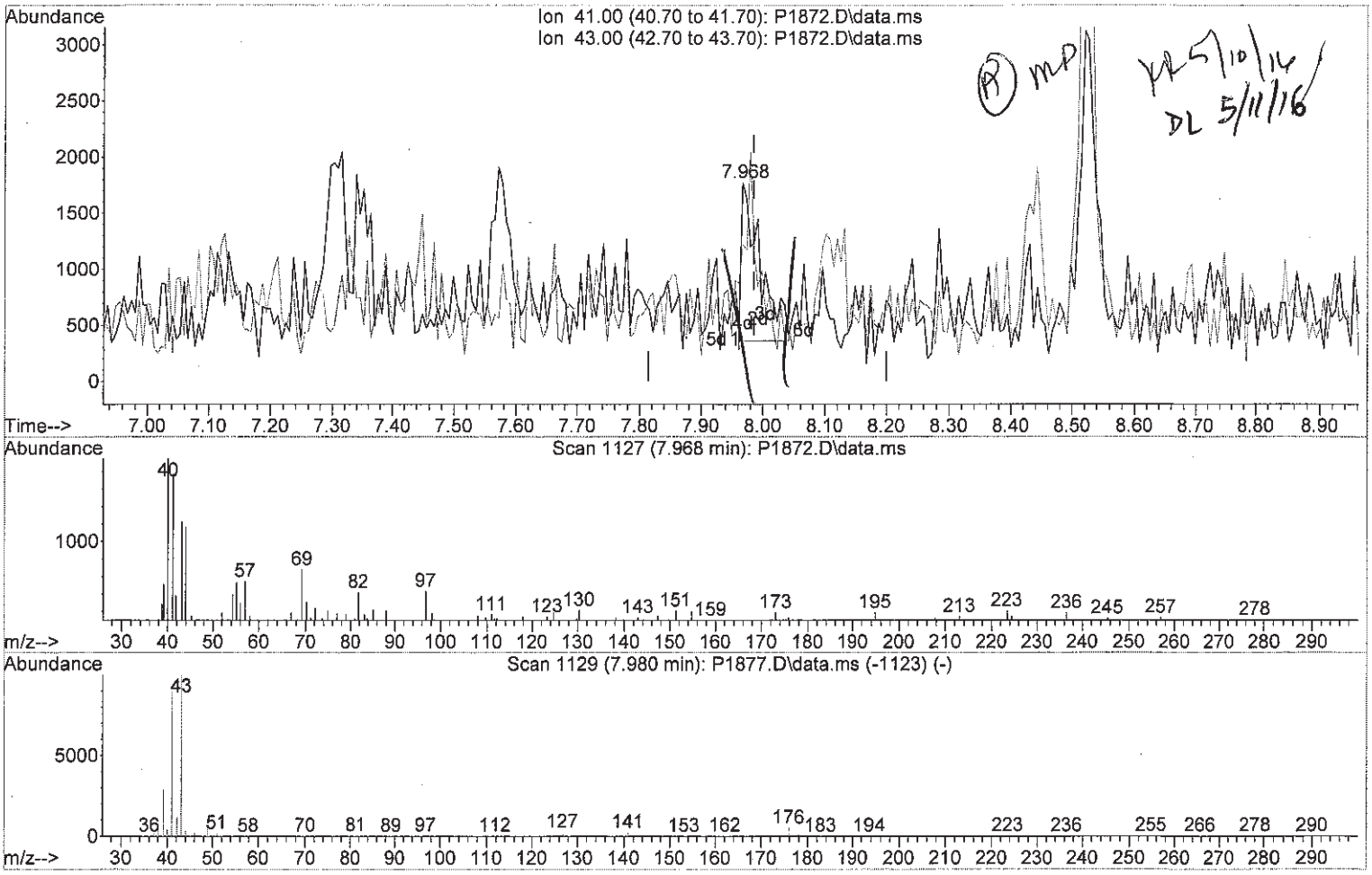
response 639

Ion	Exp%	Act%
41.00	100	100
43.00	112.20	111.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(61) 2-Nitropropane

7.968min (-0.018) 1.99 ppb m

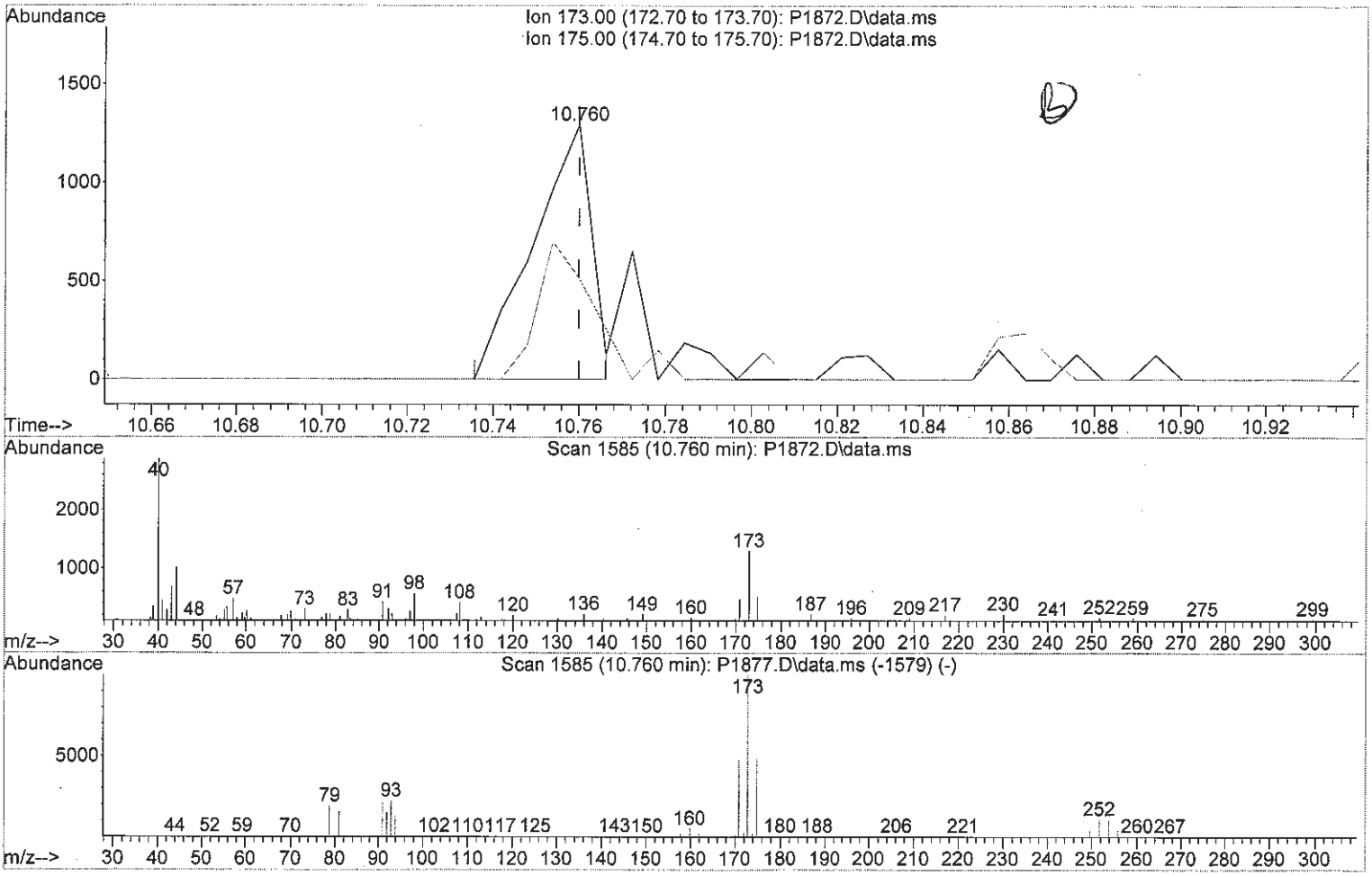
response 2953

Ion	Exp%	Act%
41.00	100	100
43.00	112.20	68.94#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(87) Bromoform (P)

10.760min (+0.000) 0.40 ppb

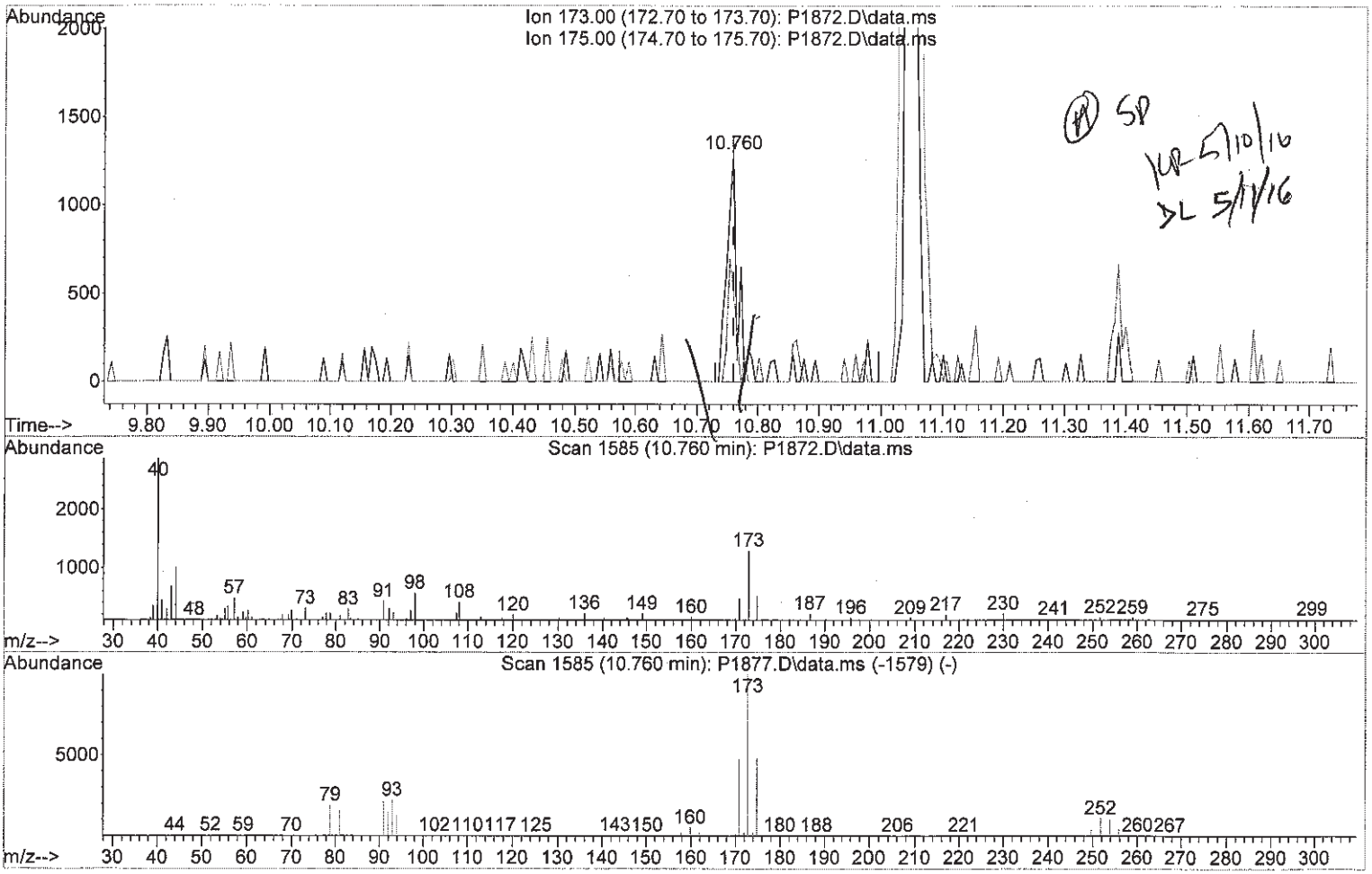
response 1217

Ion	Exp%	Act%
173.00	100	100
175.00	48.00	39.55
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1872.D\data.ms

(87) Bromoform (P)

10.760min (+0.000) 0.48 ppb m

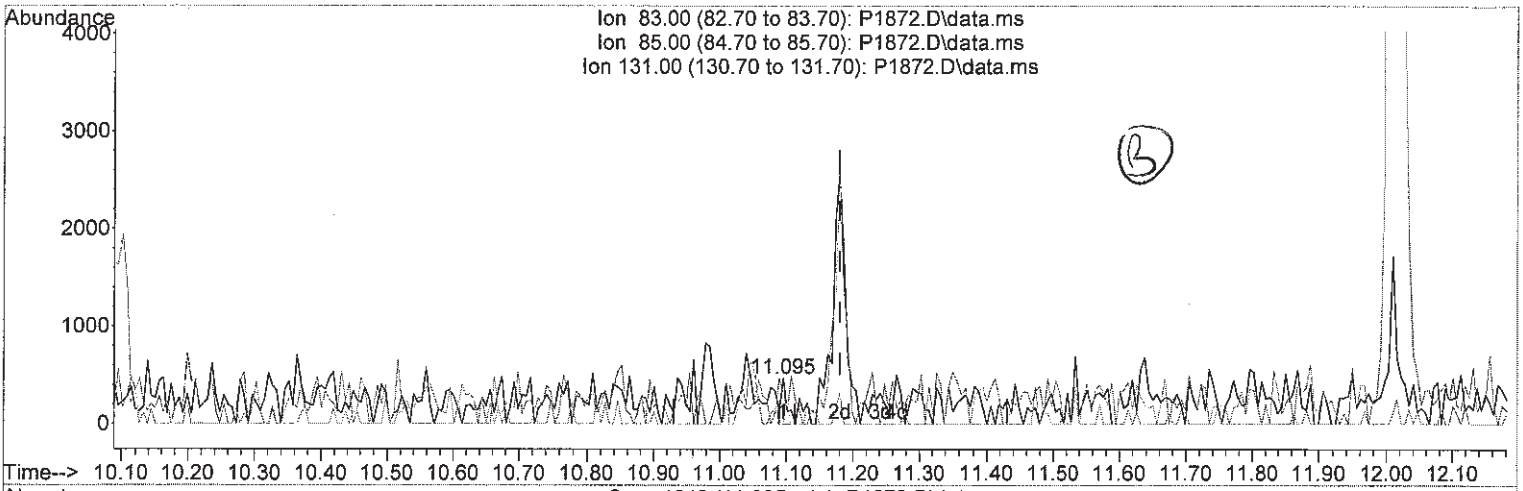
response 1455

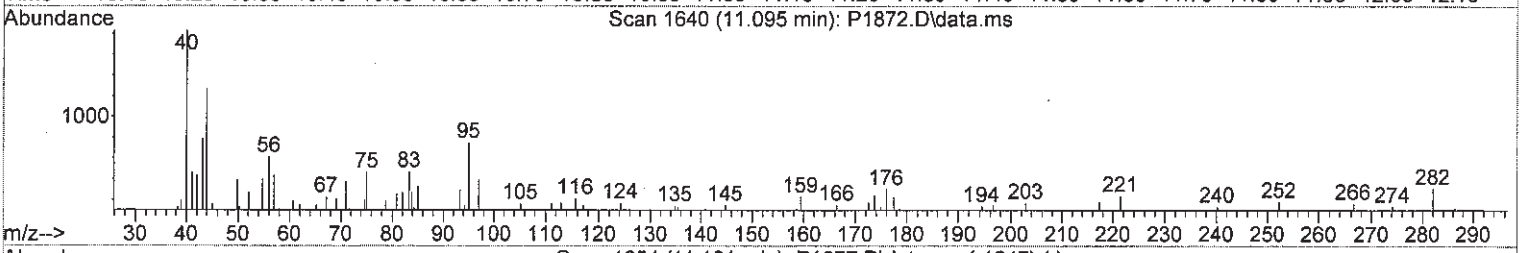
Ion	Exp%	Act%
173.00	100	100
175.00	48.00	39.55
0.00	0.00	0.00
0.00	0.00	0.00

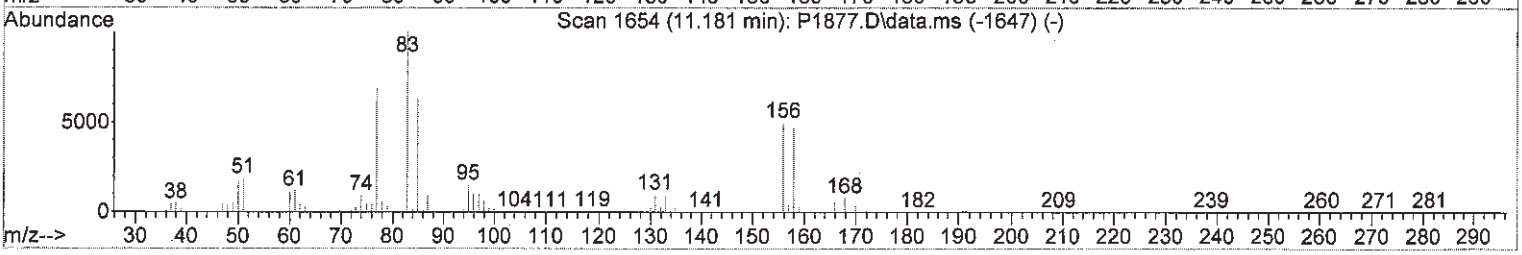
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(92) 1,1,2,2-Tetrachloroethane (P)

11.095min (-0.085) 0.04 ppb

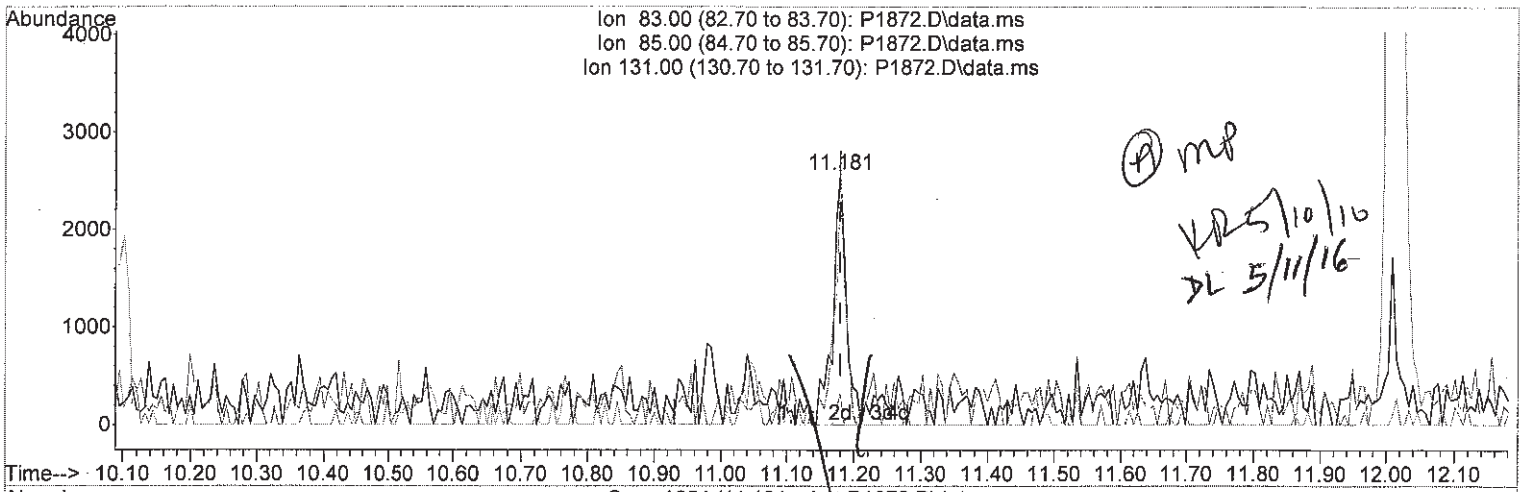
response 269

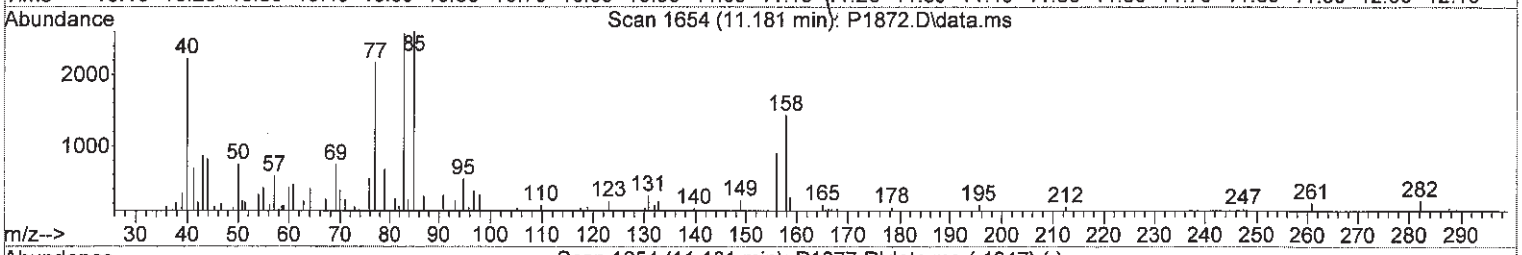
Ion	Exp%	Act%
83.00	100	100
85.00	63.50	69.25
131.00	10.00	0.00
0.00	0.00	0.00

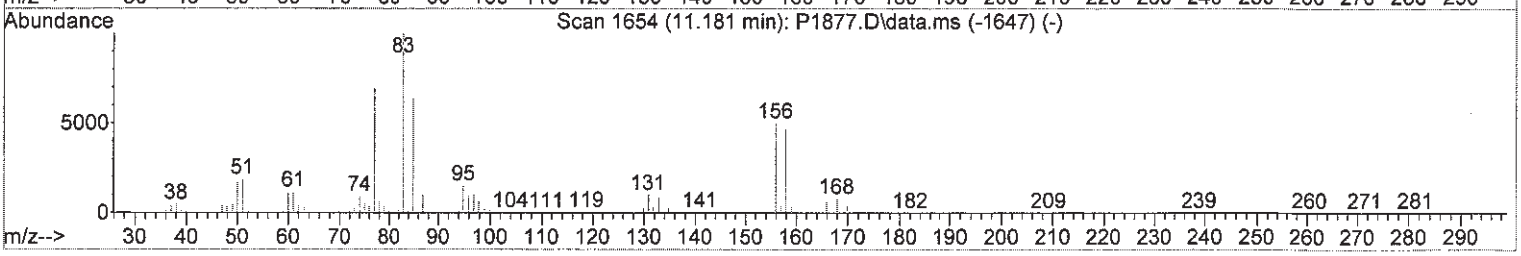
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:35:25 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1872.D\data.ms

(92) 1,1,2,2-Tetrachloroethane (P)

11.181min (+0.000) 0.56 ppb m

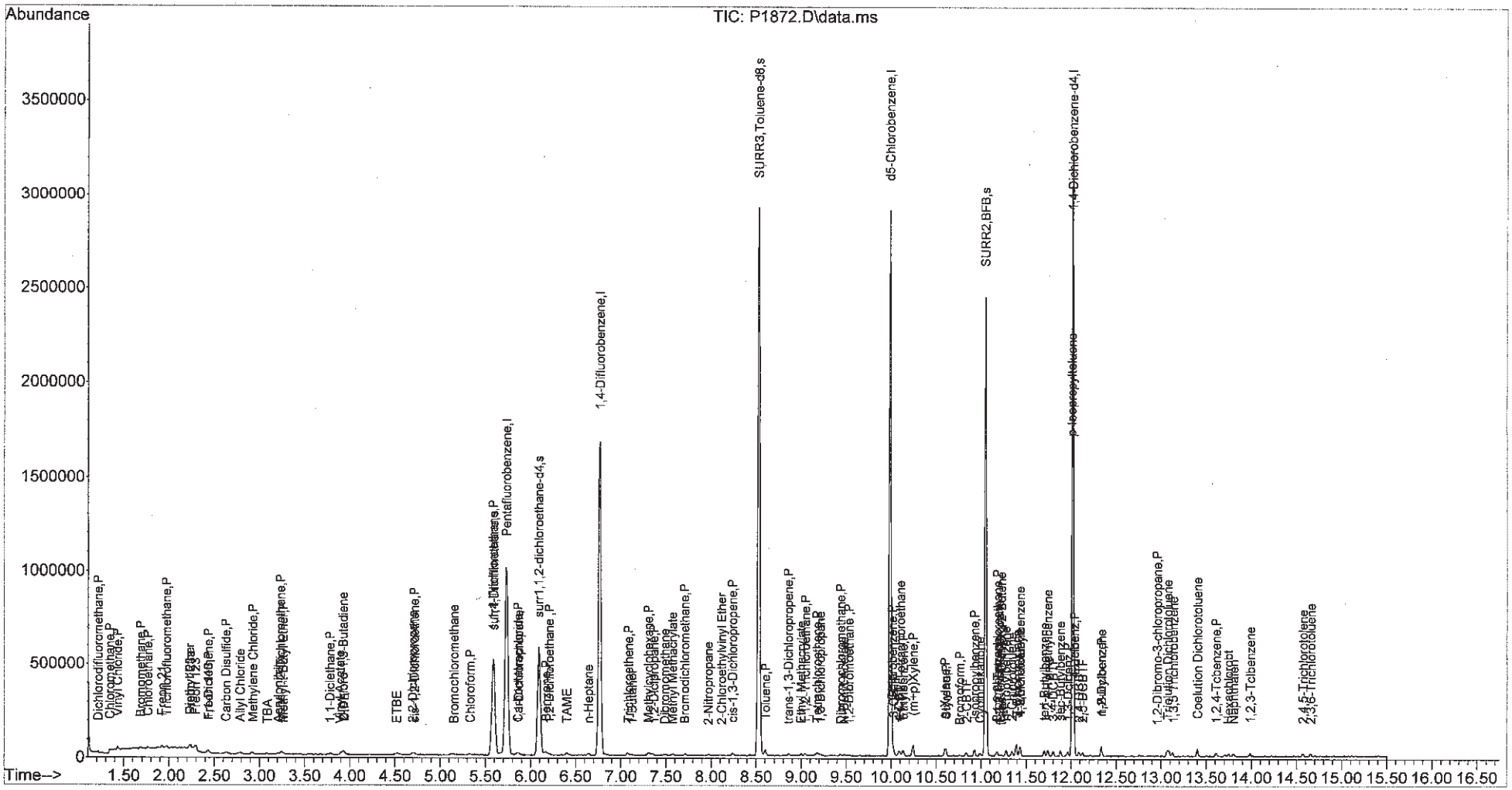
response 3630

Ion	Exp%	Act%
83.00	100	100
85.00	63.50	101.29#
131.00	10.00	11.96
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1872.D
Acq On : 9 May 2016 2:19 pm
Operator : K.Ruest
Sample : 0.5ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 10:48:59 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	803776	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1360448	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1250027	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	626776	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	390129	49.19	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.38%				
48) surr1,1,2-dichloroetha...	6.090	65	457305	48.45	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 96.90%				
65) SURR3,Toluene-d8	8.529	98	1722251	47.01	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.02%				
70) SURR2,BFB	11.047	95	654486	49.16	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	8706	0.92	ppb		91
3) Chloromethane	1.347	50	10482	1.02	ppb		100
4) Vinyl Chloride	1.427	62	11429	0.99	ppb		96
5) Bromomethane	1.683	94	4808	1.03	ppb		88
6) Chloroethane	1.762	64	5815	0.94	ppb		74
7) Freon 21	1.920	67	15033	1.13	ppb		97
8) Trichlorofluoromethane	1.975	101	10378	1.05	ppb		95
9) Diethyl Ether	2.225	59	5712	0.97	ppb		86
10) Freon 123a	2.231	67	8140m	0.93	ppb		
11) Freon 123	2.292	83	11024m	1.09	ppb		
12) Acrolein	2.341	56	3679m	4.65	ppb		
13) 1,1-Diclethene	2.426	96	5841	0.96	ppb	#	79
14) Freon 113	2.438	101	6379	1.08	ppb		95
16) 2-Propanol	2.646	45	7100	23.29	ppb		70
17) Iodomethane	2.567	142	1953	0.35	ppb		92
18) Carbon Disulfide	2.634	76	20703	1.02	ppb		97
19) Acetonitrile	2.762	40	1438	5.67	ppb	#	28
20) Allyl Chloride	2.798	76	3698m	1.08	ppb		
22) Methylene Chloride	2.920	84	7082	1.04	ppb	#	83
23) TBA	3.085	59	9841	20.32	ppb		94
24) Acrylonitrile	3.207	53	9274	5.04	ppb		97
25) Methyl-t-Butyl Ether	3.255	73	17882	1.00	ppb		98
26) trans-1,2-Dichloroethene	3.243	96	7838	1.13	ppb	#	75
28) 1,1-Diclethane	3.786	63	11817	0.98	ppb		73
29) Vinyl Acetate	3.908	86	1305m	1.01	ppb		
30) DIPE	3.938	45	24489	0.99	ppb		98
31) 2-Chloro-1,3-Butadiene	3.926	53	13733	1.02	ppb		85
32) ETBE	4.517	59	21796	0.99	ppb		96
33) 2,2-Dichloropropane	4.694	77	11004	1.06	ppb	#	78
34) cis-1,2-Dichloroethene	4.700	96	7785m	1.06	ppb		
36) Propionitrile	4.871	54	3057	4.45	ppb	#	1
37) Bromochloromethane	5.127	130	3470	0.91	ppb	#	75
40) Chloroform	5.310	83	12695m	1.08	ppb		
41) 1,1,1-Trichloroethane	5.590	97	9904	0.99	ppb		98

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	6.395	73	19744	1.03	ppb		93
44)	Cyclohexane	5.670	41	8625	1.14	ppb		97
46)	Carbontetrachloride	5.840	121	2469m	0.95	ppb		
47)	1,1-Dichloropropene	5.871	75	9473	1.02	ppb		90
49)	Benzene	6.163	78	27318	1.00	ppb		93
50)	1,2-Dichloroethane	6.200	62	8374	1.02	ppb		88
51)	Iso-Butyl Alcohol	6.206	43	5578	21.85	ppb		97
52)	n-Heptane	6.639	43	9628m	1.15	ppb		
53)	1-Butanol	7.114	56	7469m	50.37	ppb		
54)	Trichloroethene	7.072	130	6916	1.03	ppb	#	74
55)	Methylcyclohexane	7.309	55	9591	1.08	ppb	#	76
56)	1,2-Diclpropane	7.352	63	7536	1.02	ppb		98
57)	Dibromomethane	7.492	93	3532m	1.01	ppb		
59)	Methyl Methacrylate	7.572	69	3725	0.86	ppb		88
60)	Bromodichloromethane	7.706	83	10658	1.18	ppb		89
61)	2-Nitropropane	7.974	41	3068m	2.09	ppb		
62)	2-Chloroethylvinyl Ether	8.108	63	4311	1.09	ppb		92
63)	cis-1,3-Dichloropropene	8.236	75	12158	1.06	ppb		96
64)	4-Methyl-2-pentanone	8.437	43	5433	1.04	ppb	#	74
66)	Toluene	8.596	91	29365	1.02	ppb		92
67)	trans-1,3-Dichloropropene	8.864	75	8530	0.89	ppb		89
68)	Ethyl Methacrylate	8.998	69	9112	1.05	ppb		90
69)	1,1,2-Trichloroethane	9.041	97	5546m	1.04	ppb		
72)	Tetrachloroethene	9.181	164	4840	1.00	ppb	#	70
73)	2-Hexanone	9.327	43	3515	0.97	ppb		97
74)	1,3-Dichloropropane	9.212	76	9350	1.00	ppb	#	76
75)	Dibromochloromethane	9.425	129	6571	1.06	ppb	#	78
76)	N-Butyl Acetate	9.480	43	9441	1.00	ppb		90
77)	1,2-Dibromoethane	9.529	107	4928	0.97	ppb	#	76
78)	Chlorobenzene	10.010	112	19591	1.07	ppb		95
79)	3-CBTF	10.035	180	9410	1.03	ppb	#	61
80)	4-CBTF	10.083	180	7051	0.88	ppb		87
81)	1,1,1,2-Tetrachloroethane	10.102	131	6838	1.07	ppb		91
82)	Ethylbenzene	10.132	106	9917	0.97	ppb	#	90
83)	(m+p)Xylene	10.242	106	23914	1.99	ppb		96
84)	o-Xylene	10.595	106	11488	0.96	ppb		100
85)	Styrene	10.608	104	18892	0.94	ppb		91
87)	Bromoform	10.754	173	3248	1.09	ppb		88
88)	2-CBTF	10.833	180	8382	1.02	ppb	#	84
89)	Isopropylbenzene	10.925	105	27657	1.01	ppb		94
90)	Cyclohexanone	10.986	55	12608	23.11	ppb		93
91)	trans-1,4-Dichloro-2-B...	11.229	53	2135	1.00	ppb		91
92)	1,1,2,2-Tetrachloroethane	11.181	83	6708	1.04	ppb		96
93)	Bromobenzene	11.169	156	6810	0.98	ppb	#	83
94)	1,2,3-Trichloropropane	11.205	110	1987m	1.05	ppb		
95)	n-Propylbenzene	11.278	91	34444	1.08	ppb		96
96)	2-Chlorotoluene	11.339	91	21460	1.04	ppb		94
97)	3-Chlorotoluene	11.394	91	20581	0.98	ppb		94
98)	4-Chlorotoluene	11.431	91	25159	1.05	ppb		95
99)	1,3,5-Trimethylbenzene	11.425	105	24908	1.05	ppb		97
100)	tert-Butylbenzene	11.699	119	17841	0.95	ppb		92

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

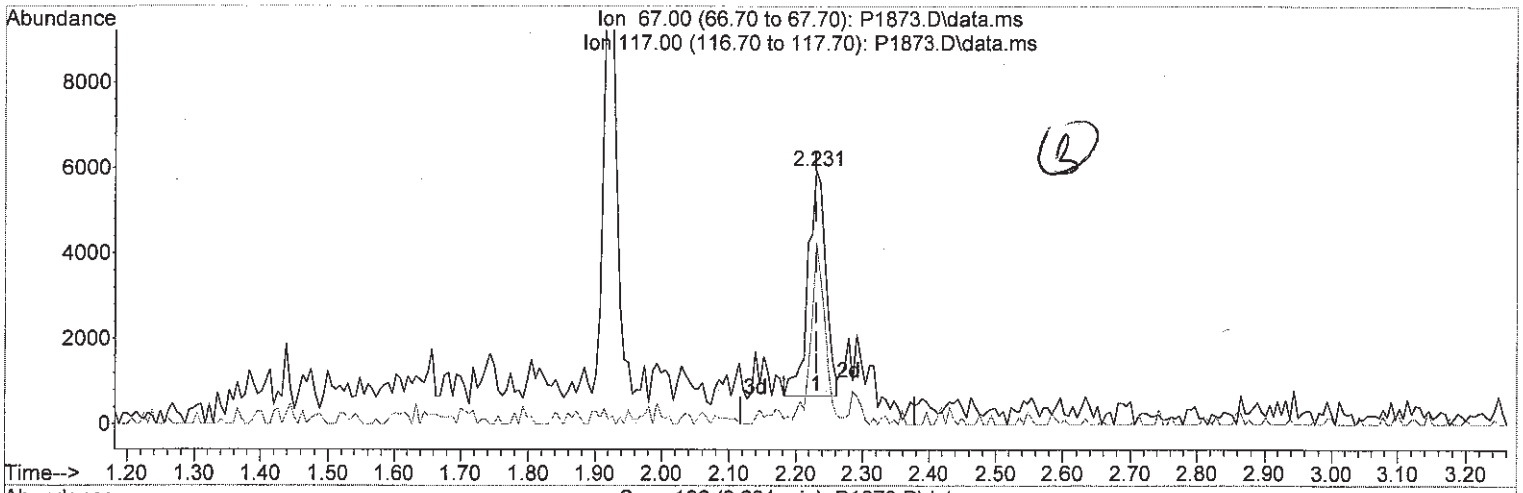
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 1,2,4-Trimethylbenzene	11.735	105	25523	1.05	ppb		96
102) 3,4-DCBTF	11.803	214	5150	0.88	ppb		95
103) sec-Butylbenzene	11.882	105	29015	1.08	ppb		97
104) p-Isopropyltoluene	11.998	119	24441	1.05	ppb		93
105) 1,3-Dclbenz	11.961	146	13435	1.02	ppb		91
106) 1,4-Dclbenz	12.034	146	13516	0.98	ppb		92
107) 2,4-DCBTF	12.089	214	5918	1.06	ppb		90
108) 2,5-DCBTF	12.126	214	6977	1.18	ppb	#	89
109) n-Butylbenzene	12.333	91	20520	0.98	ppb		95
110) 1,2-Dclbenz	12.333	146	13624	1.09	ppb		82
111) 1,2-Dibromo-3-chloropr...	12.955	157	1108	0.94	ppb	#	70
112) Trielution Dichlorotol...	13.071	125	32463	3.12	ppb	#	90
113) 1,3,5 Trichlorobenzene	13.125	180	7685	0.92	ppb	#	71
114) Coelution Dichlorotoluene	13.400	125	21450	1.94	ppb		97
115) 1,2,4-Tcbenzene	13.607	180	7576	1.02	ppb		98
116) Hexachlorobt	13.747	225	2931	0.96	ppb	#	73
117) Naphthalen	13.796	128	16264	1.02	ppb		97
118) 1,2,3-Tclbenzene	13.985	180	5985	0.95	ppb	#	76
119) 2,4,5-Trichlorotolene	14.570	159	3781m	0.84	ppb		
120) 2,3,6-Trichlorotoluene	14.656	159	4128	0.99	ppb		88

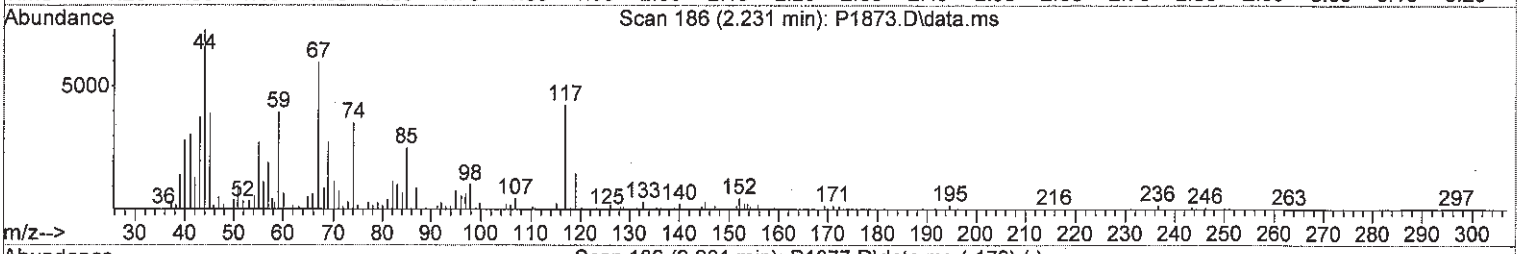
(#) = qualifier out of range (m) = manual integration (+) = signals summed

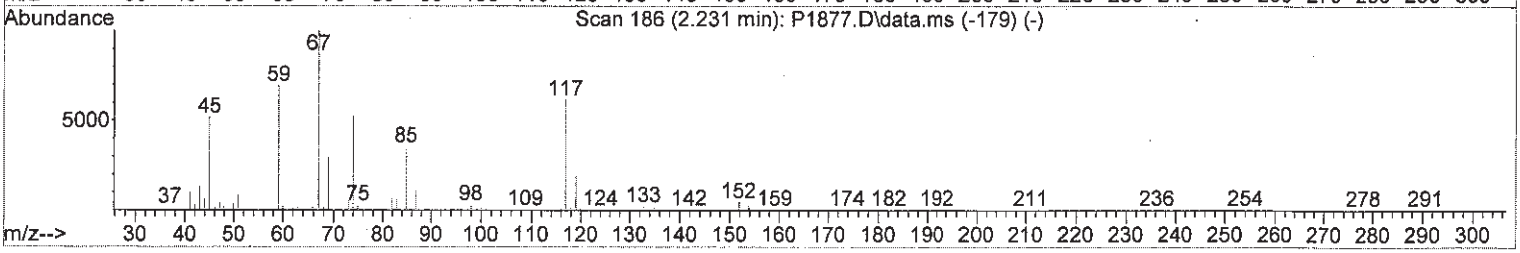
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(10) Freon 123a

2.231min (-0.000) 1.13 ppb

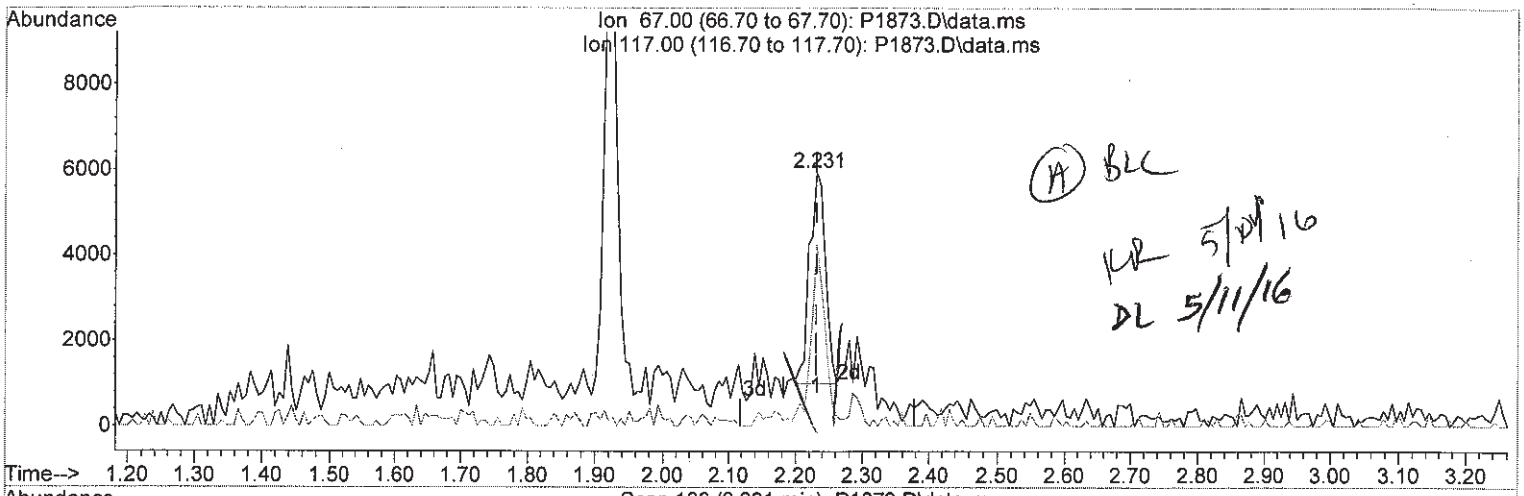
response 9850

Ion	Exp%	Act%
67.00	100	100
117.00	61.50	71.32
0.00	0.00	0.00
0.00	0.00	0.00

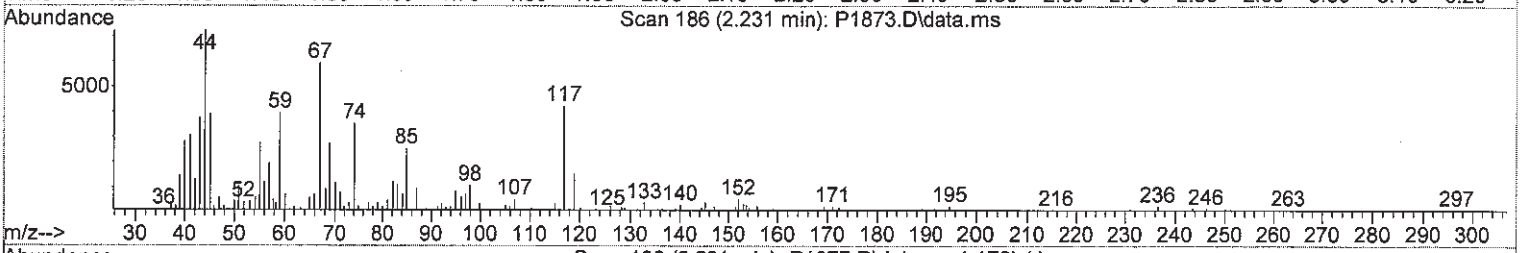
Quantitation Report (Qedit)

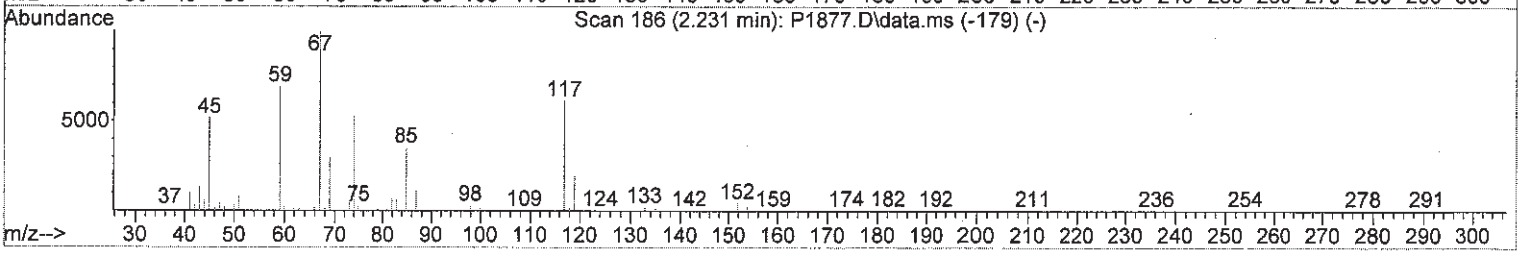
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



(A) BLC
KR 5/11/16
DL 5/11/16





TIC: P1873.D\data.ms

(10) Freon 123a

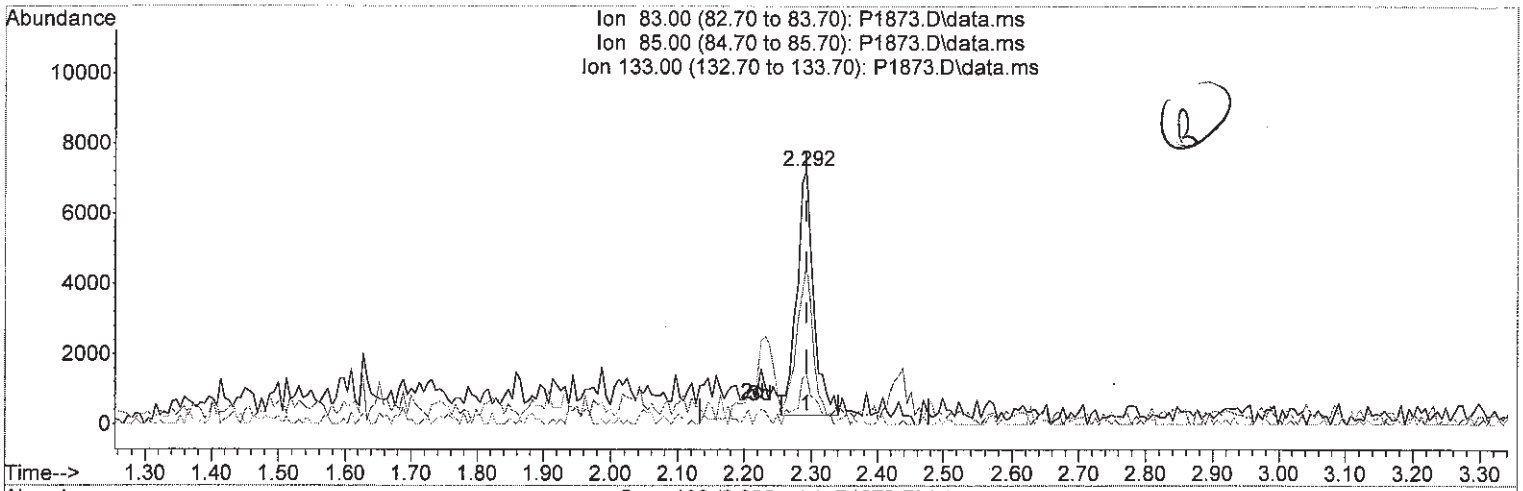
2.231min (-0.000) 0.93 ppb m

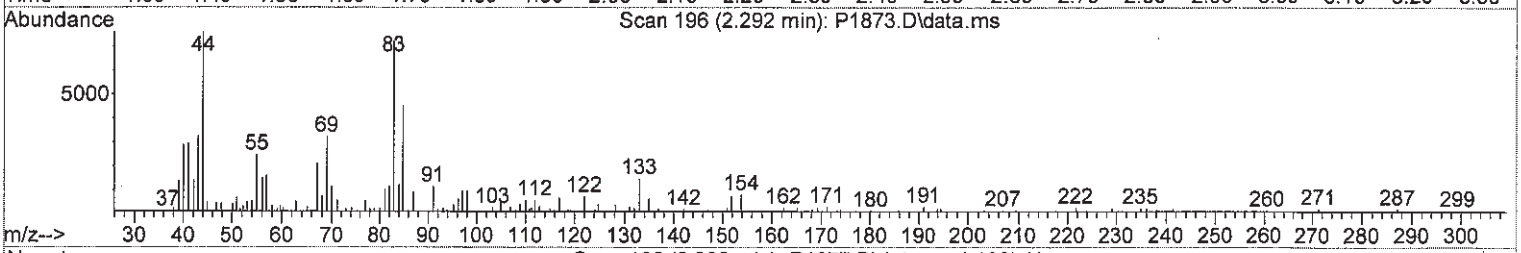
response 8140

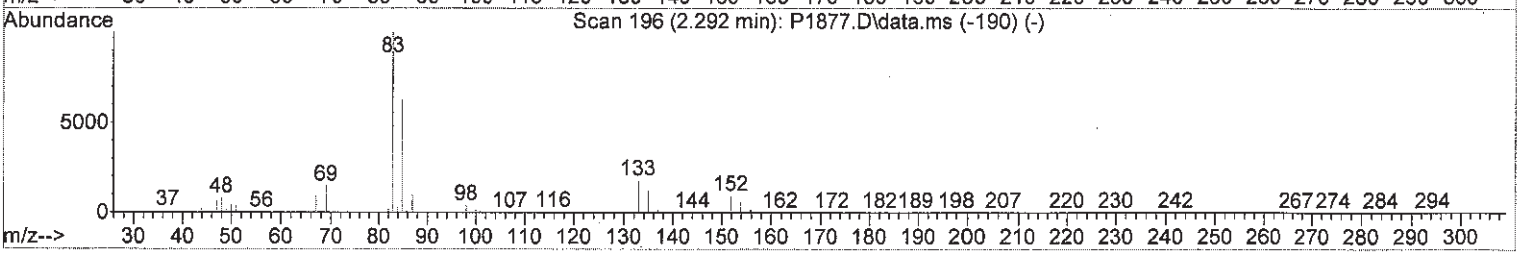
Ion	Exp%	Act%
67.00	100	100
117.00	61.50	71.32
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(11) Freon 123

2.292min (-0.000) 1.20 ppb

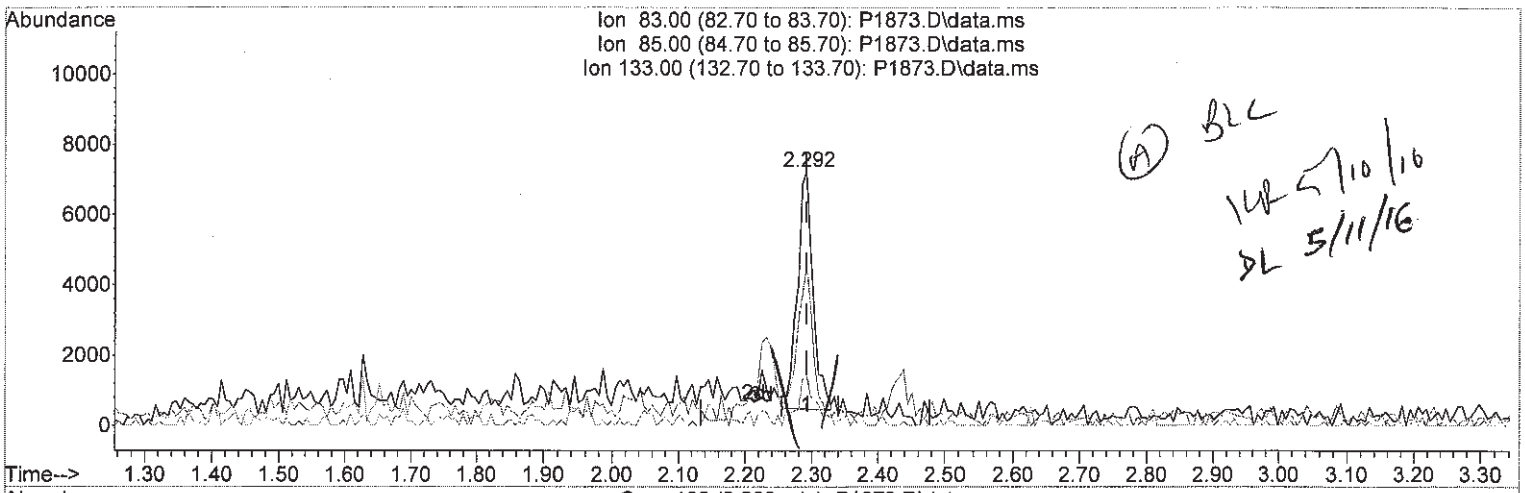
response 12114

Ion	Exp%	Act%
83.00	100	100
85.00	65.30	62.66
133.00	18.00	20.20
0.00	0.00	0.00

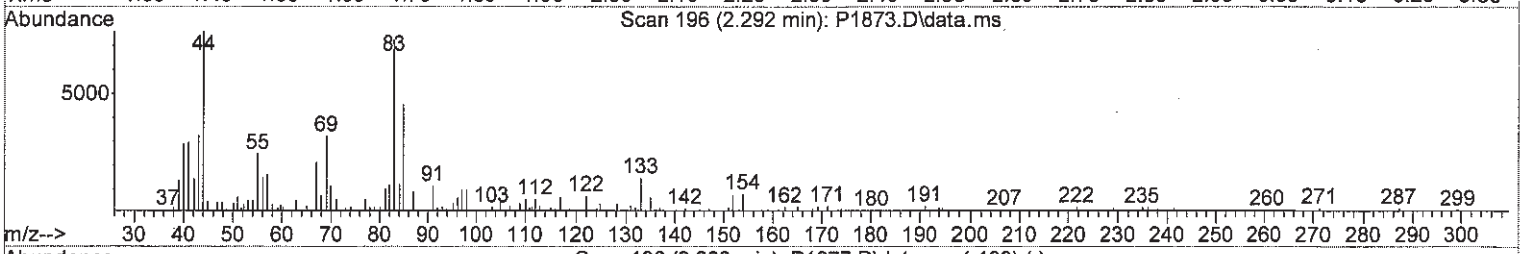
Quantitation Report (Qedit)

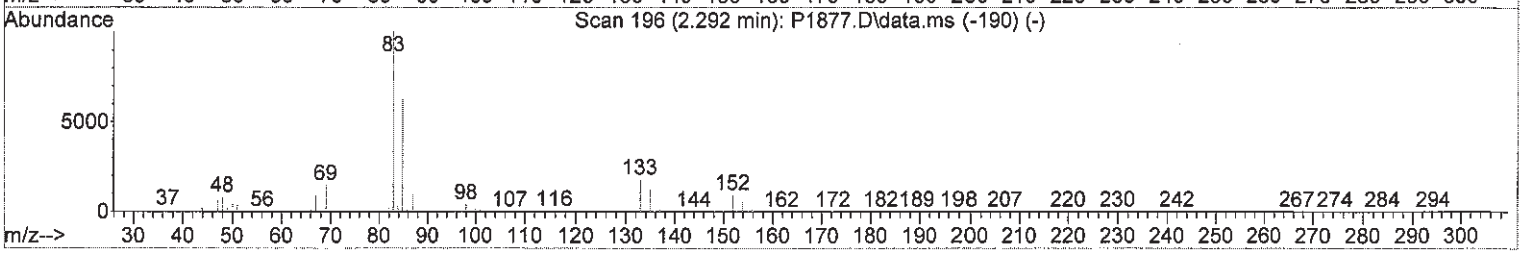
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



(A) BLC 5/10/16 SL 5/11/16





TIC: P1873.D\data.ms

(11) Freon 123

2.292min (-0.000) 1.09 ppb m

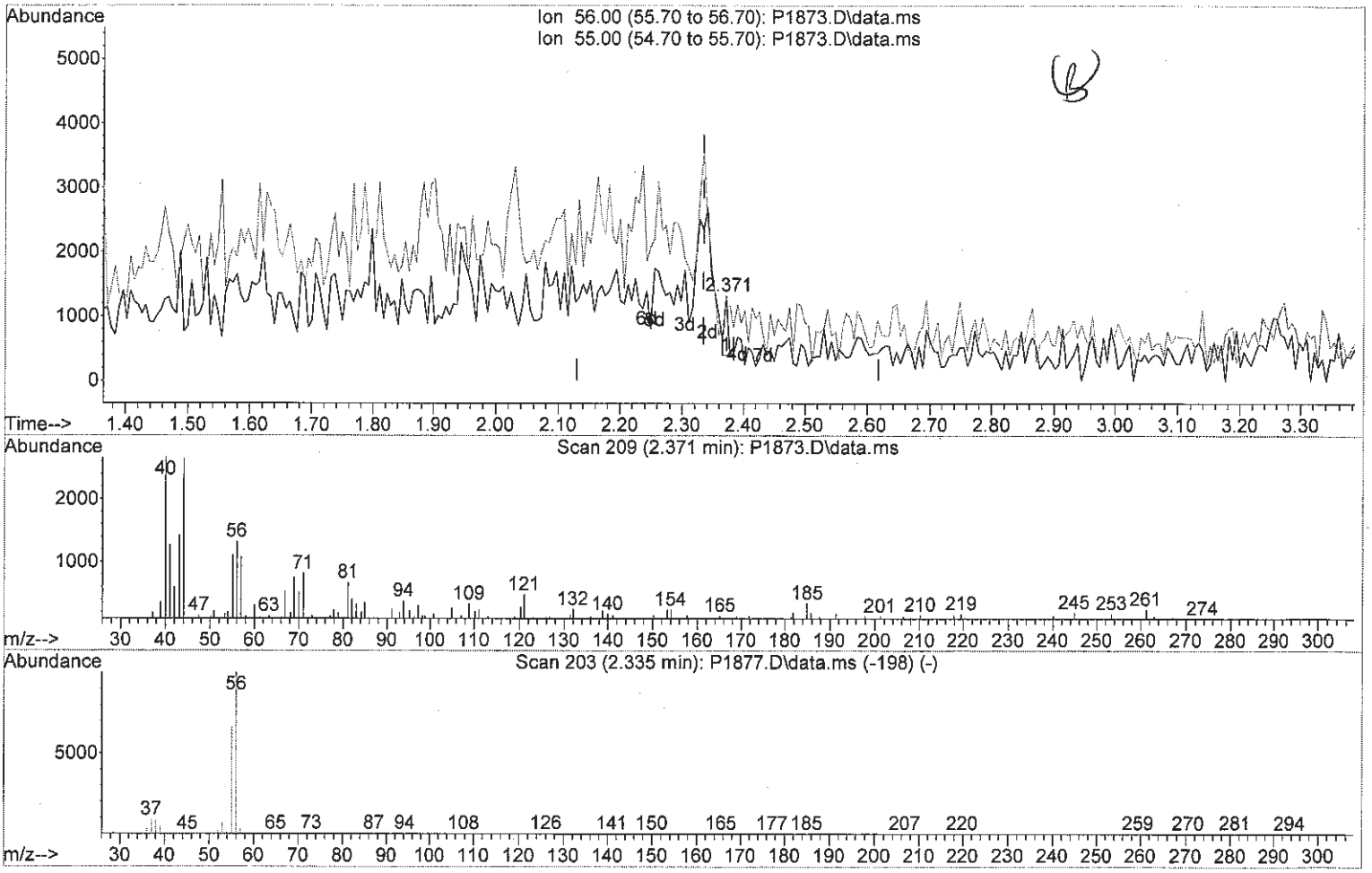
response 11024

Ion	Exp%	Act%
83.00	100	100
85.00	65.30	62.66
133.00	18.00	20.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(12) Acrolein

2.371min (+0.037) 0.44 ppb

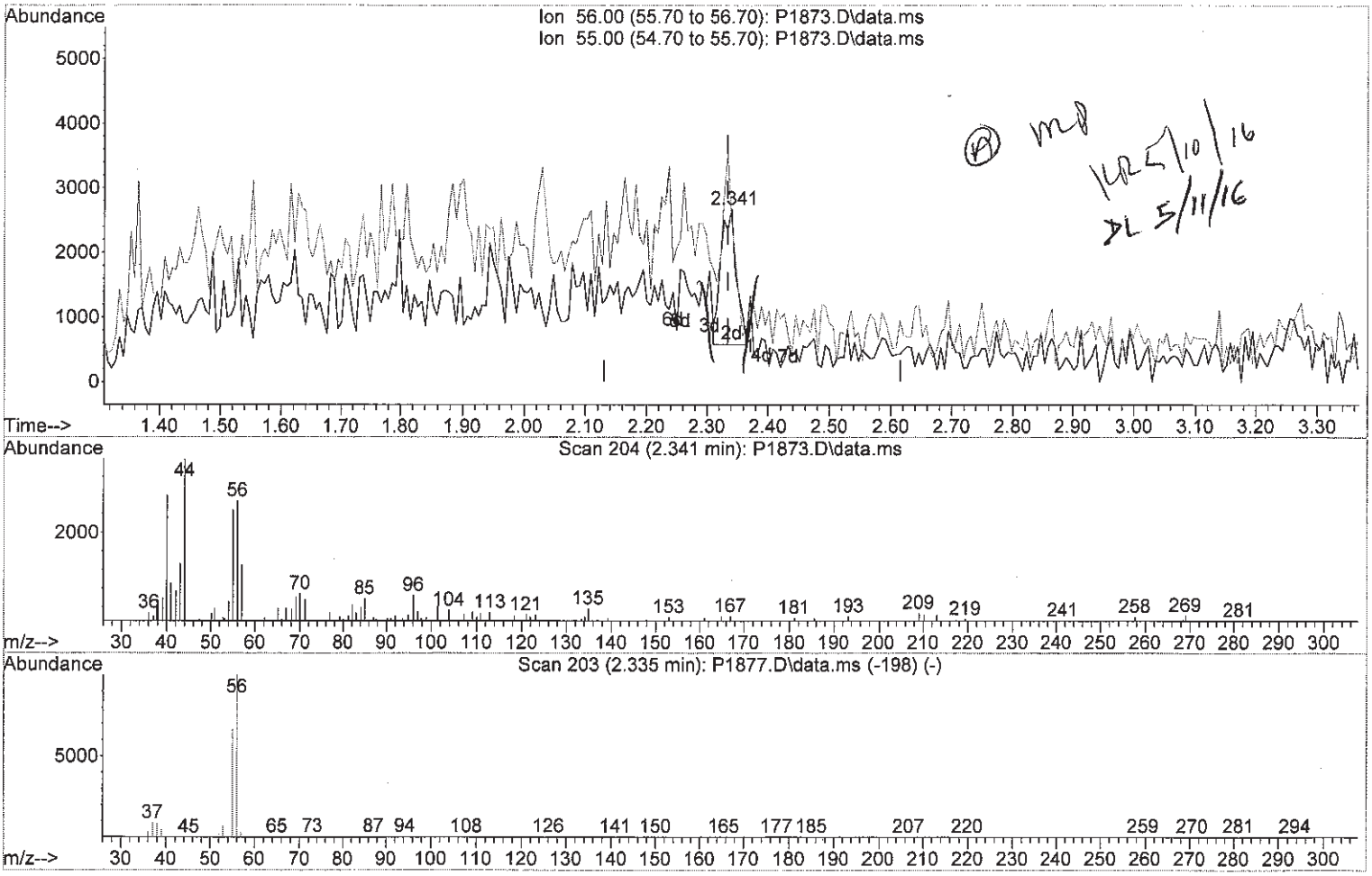
response 348

Ion	Exp%	Act%
56.00	100	100
55.00	68.60	83.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(12) Acrolein

2.341min (+0.006) 4.65 ppb m

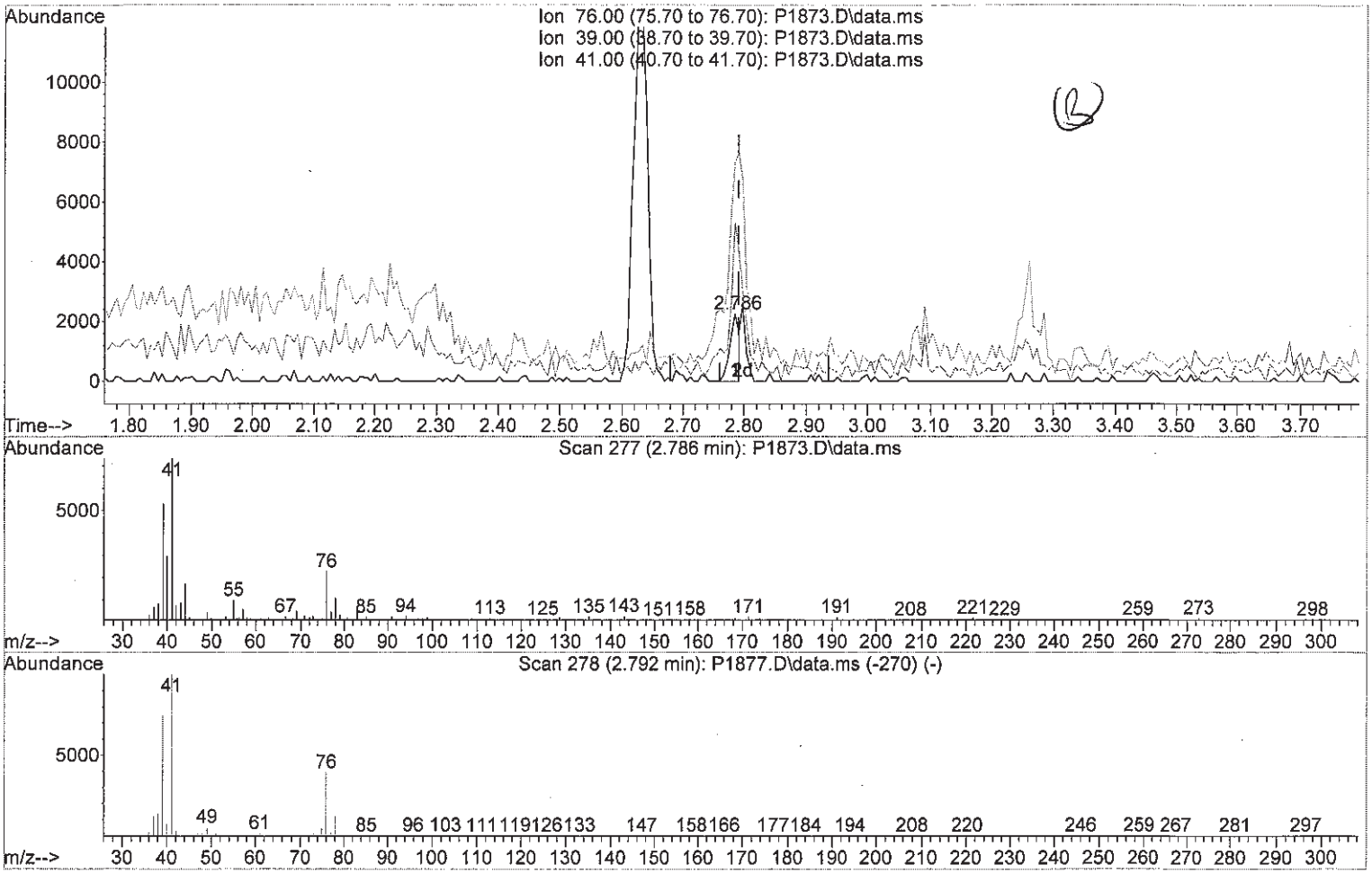
response 3679

Ion	Exp%	Act%
56.00	100	100
55.00	68.60	92.45#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(20) Allyl Chloride

2.786min (-0.006) 0.67 ppb

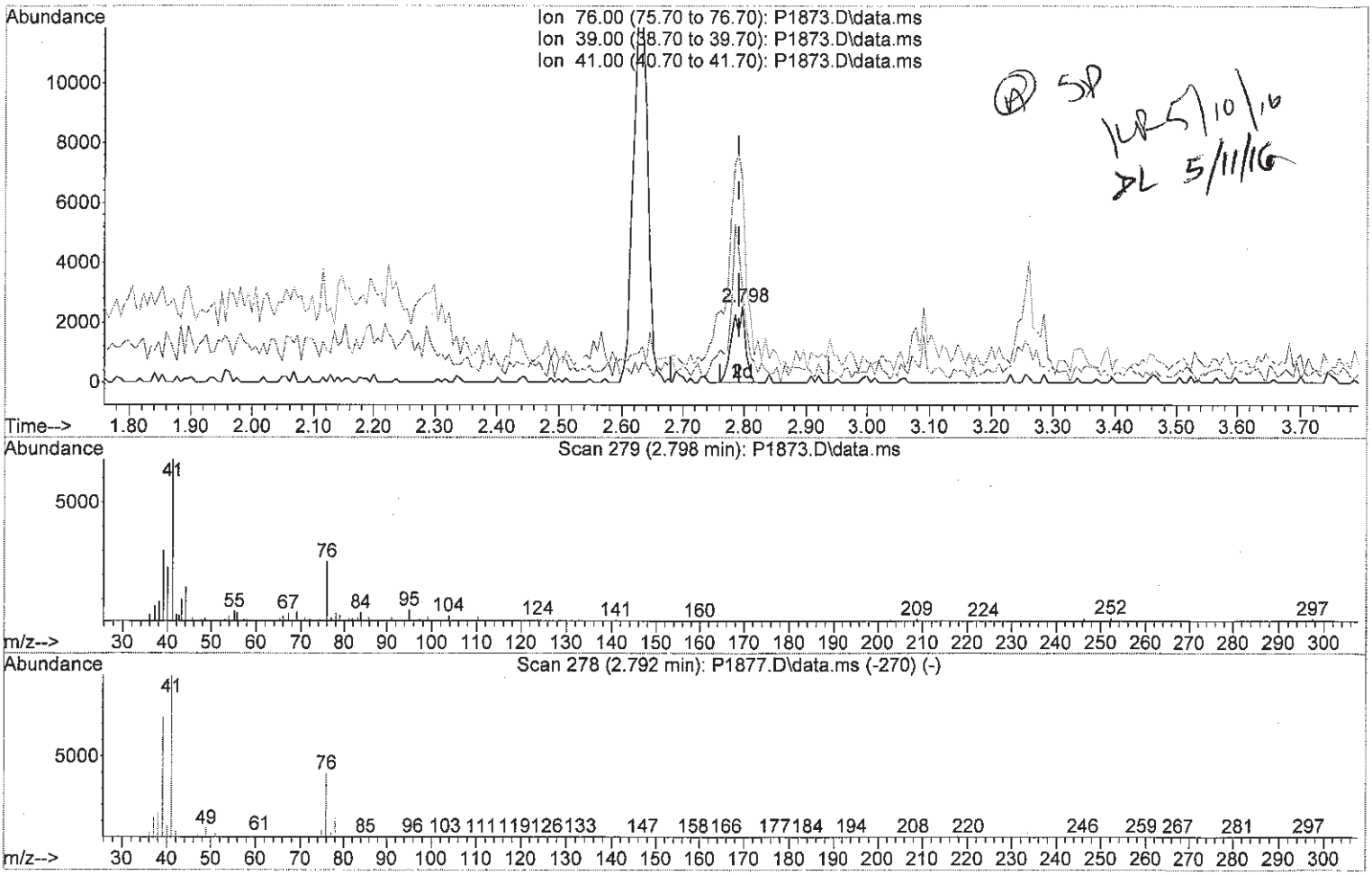
response 2305

Ion	Exp%	Act%
76.00	100	100
39.00	197.20	235.03#
41.00	290.60	324.35#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(20) Allyl Chloride

2.798min (+0.006) 1.08 ppb m

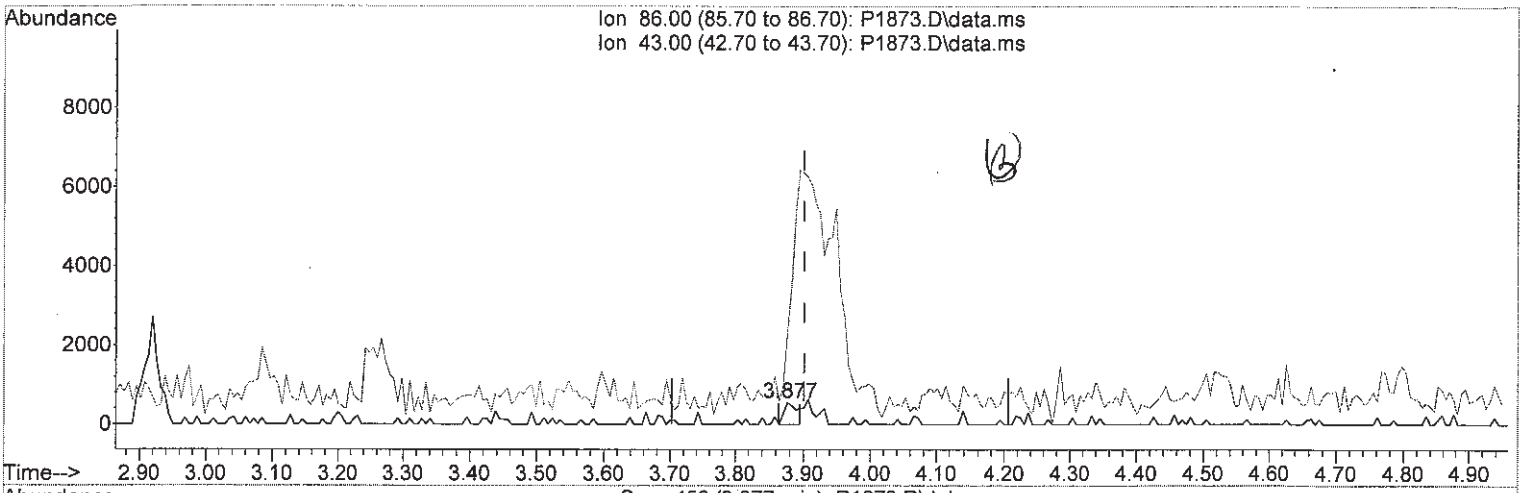
response 3698

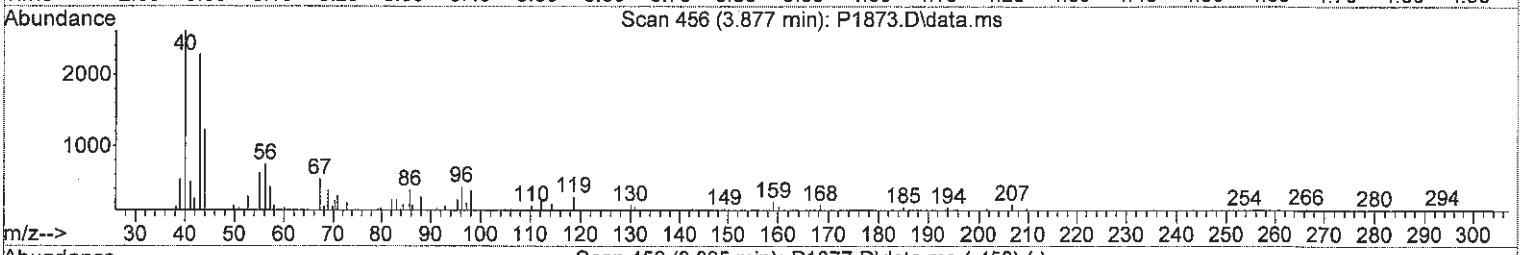
Ion	Exp%	Act%
76.00	100	100
39.00	197.20	118.21#
41.00	290.60	266.30#
0.00	0.00	0.00

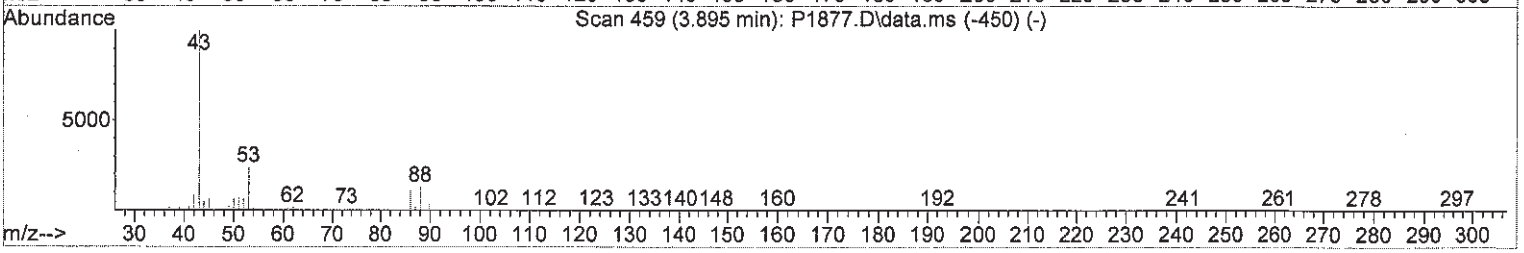
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(29) Vinyl Acetate

3.877min (-0.024) 0.57 ppb

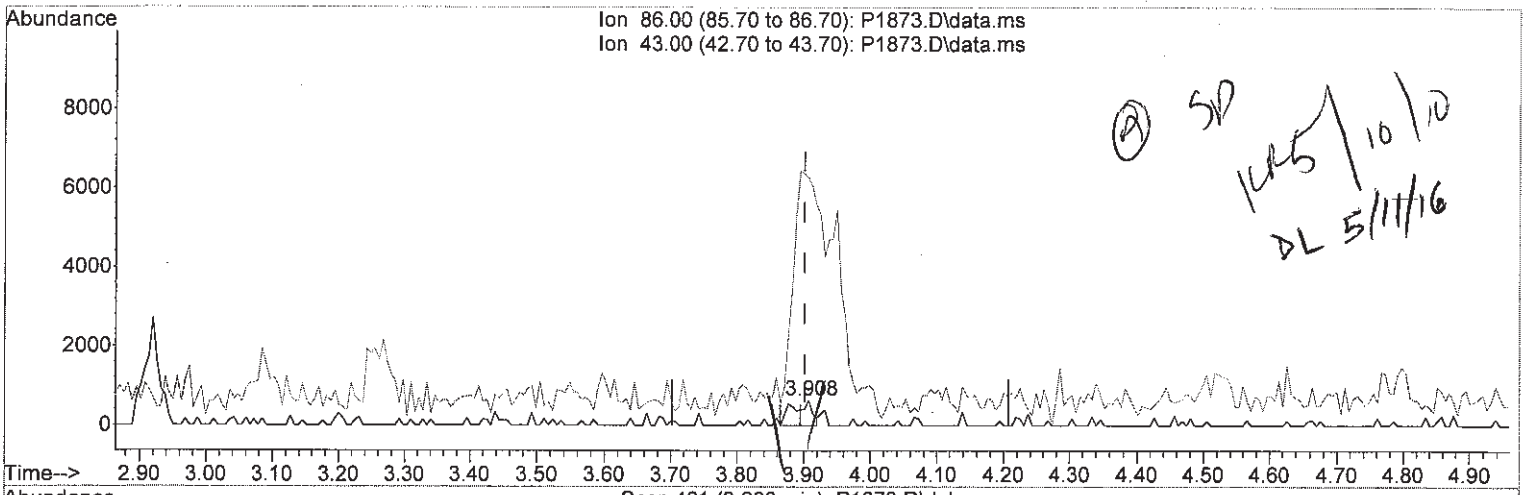
response 745

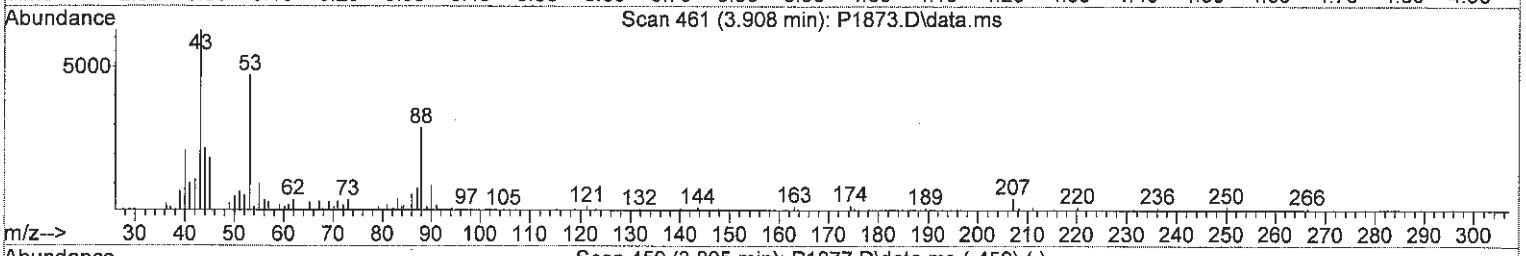
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	418.93#
0.00	0.00	0.00
0.00	0.00	0.00

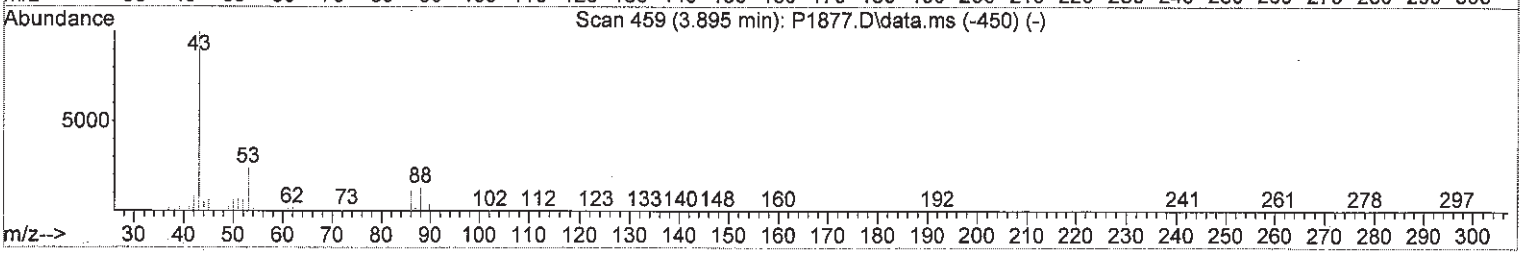
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(29) Vinyl Acetate

3.908min (+0.006) 1.01 ppb m

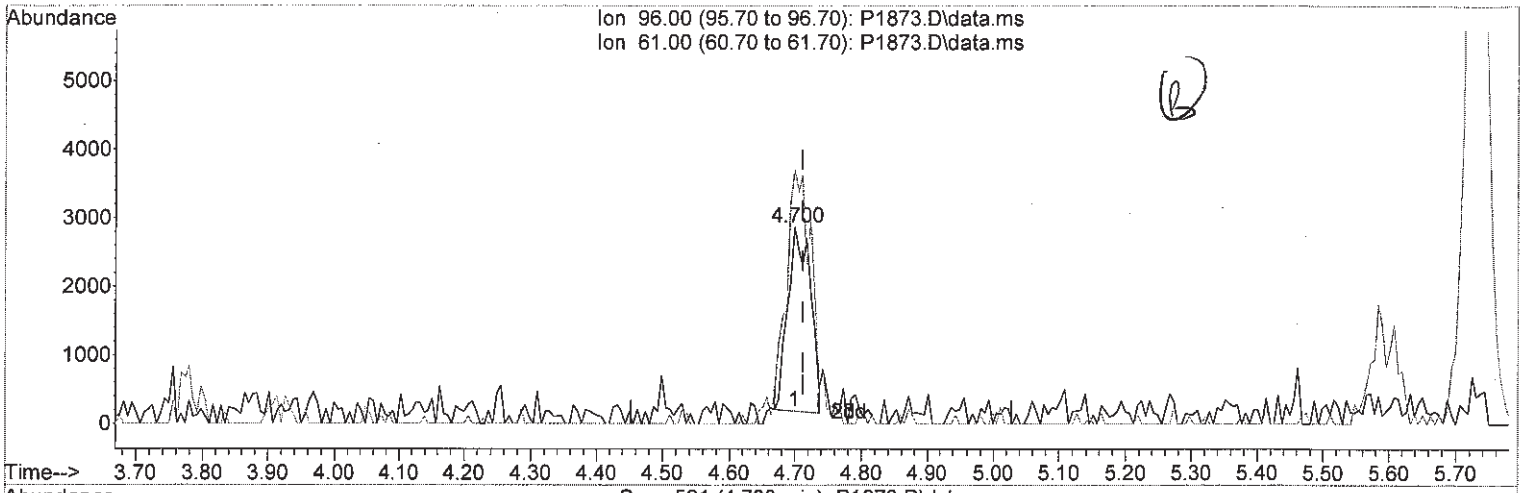
response 1305

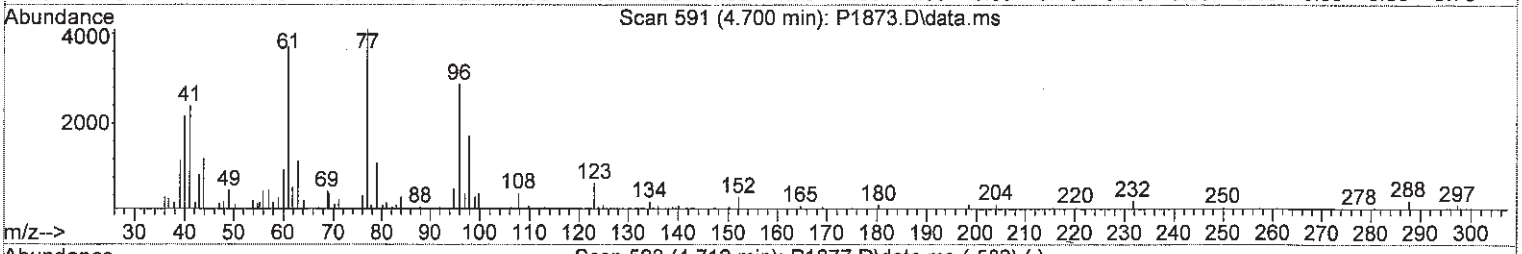
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	983.12#
0.00	0.00	0.00
0.00	0.00	0.00

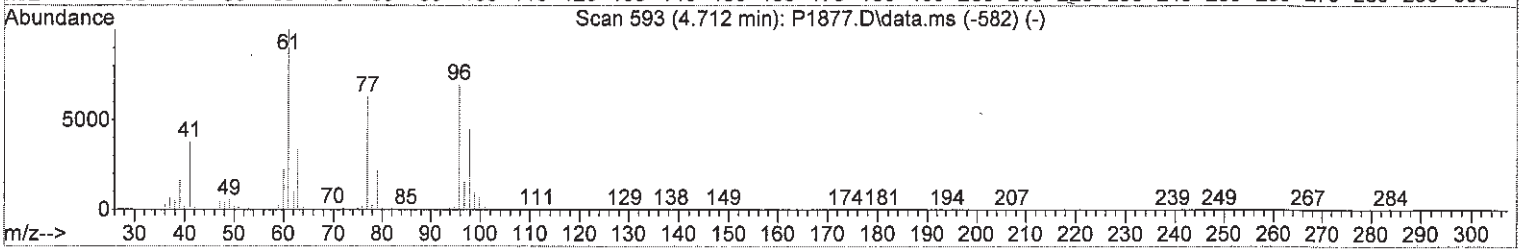
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(34) cis-1,2-Dichloroethene (P)

4.700min (-0.012) 0.87 ppb

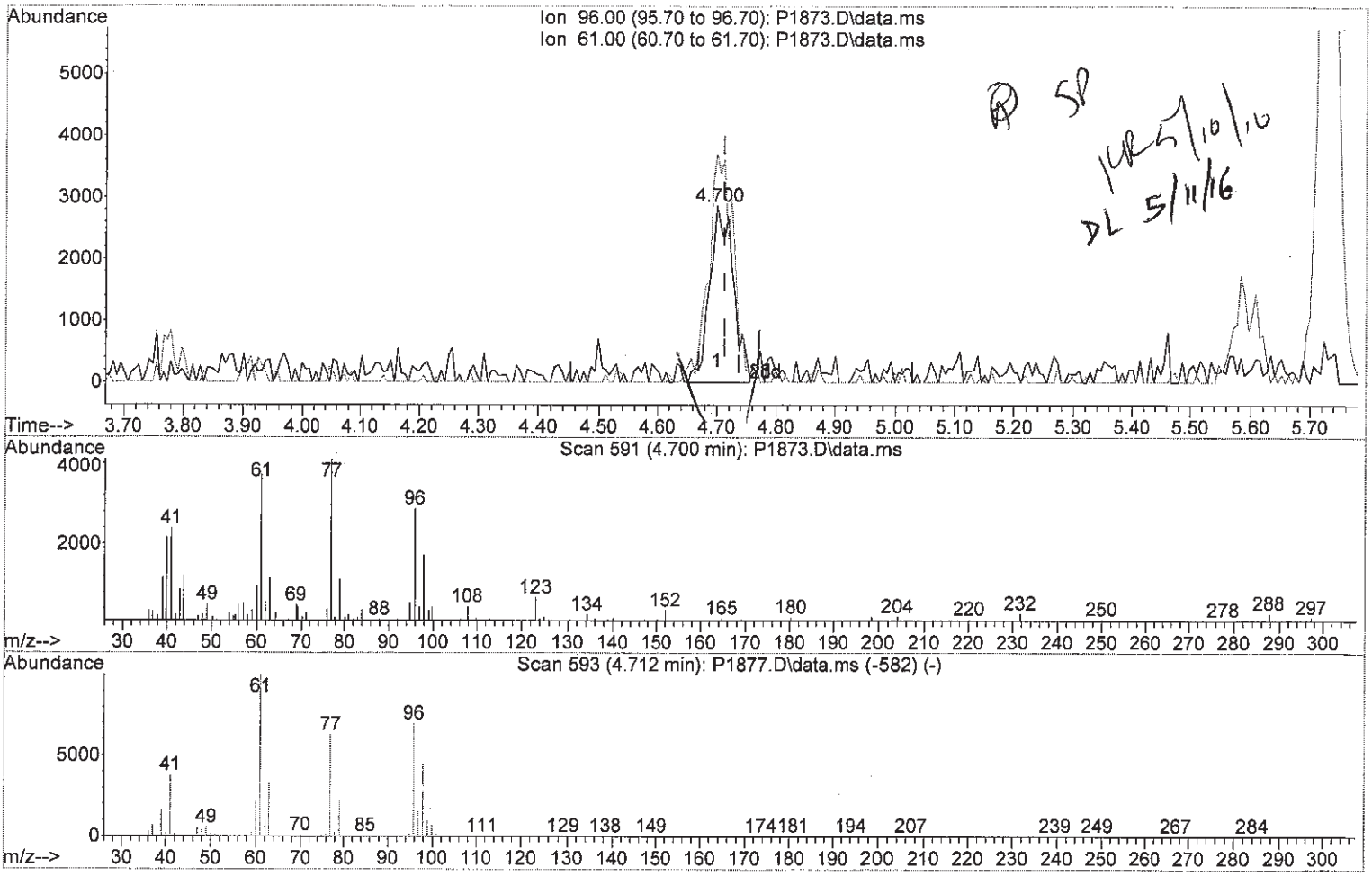
response 6352

Ion	Exp%	Act%
96.00	100	100
61.00	144.40	129.29
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(34) cis-1,2-Dichloroethene (P)

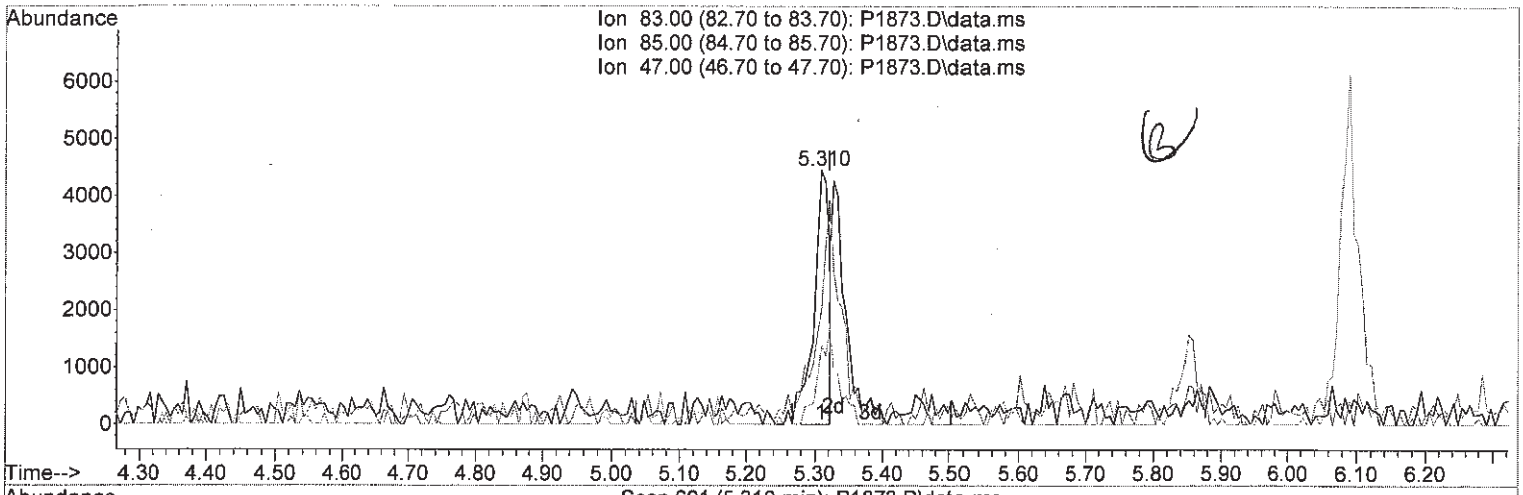
4.700min (-0.012) 1.06 ppb m

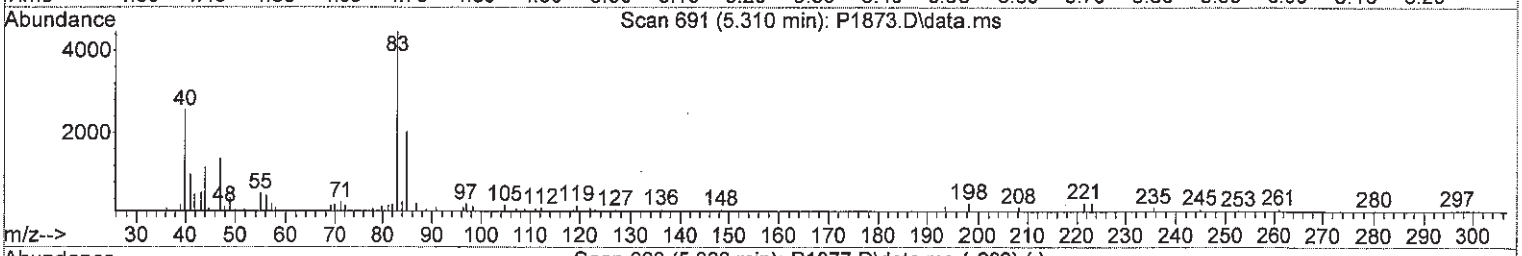
response 7785

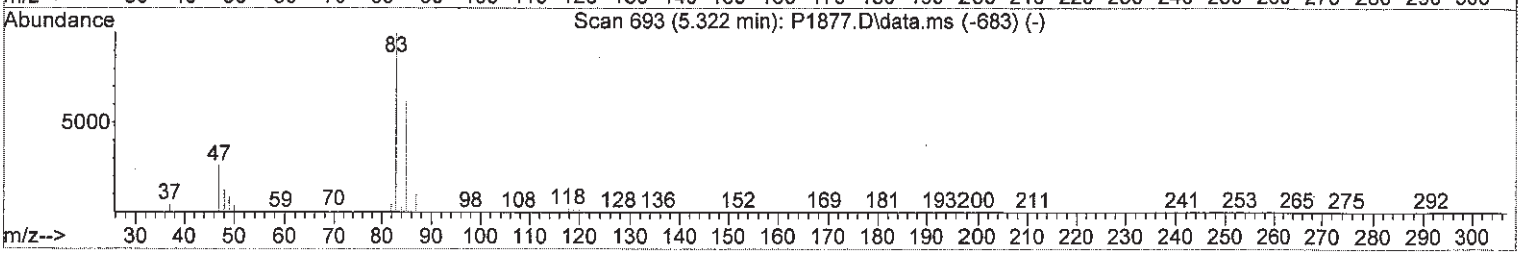
Ion	Exp%	Act%
96.00	100	100
61.00	144.40	129.29
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(40) Chloroform (P)

5.310min (-0.012) 0.60 ppb

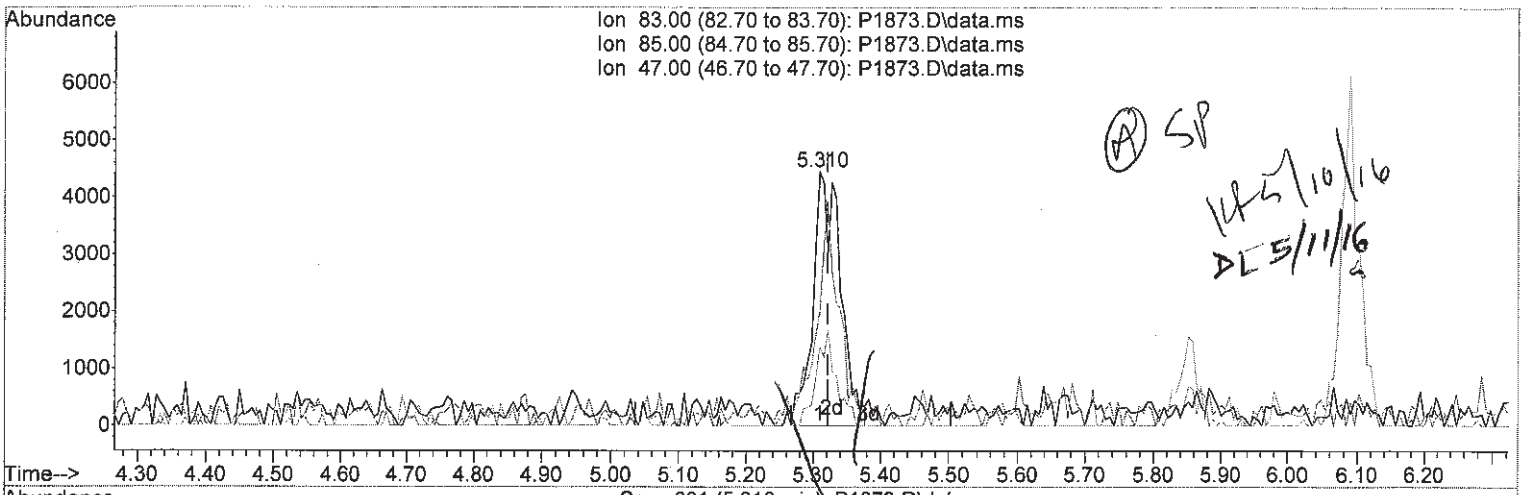
response 7034

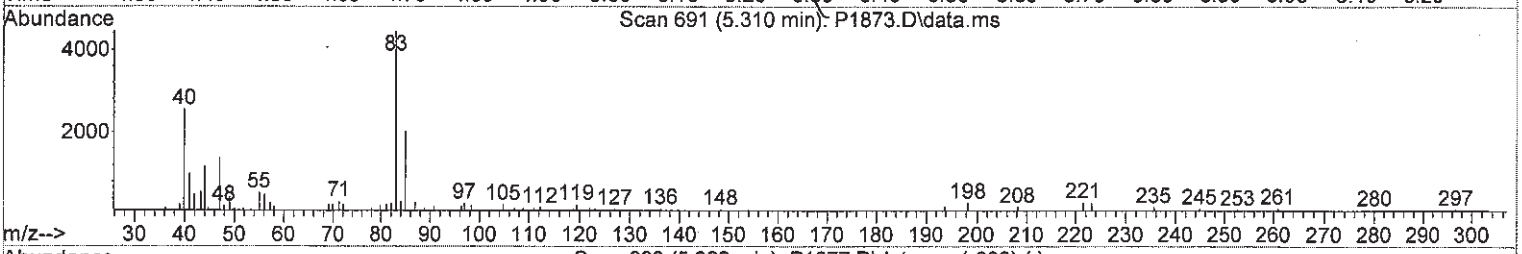
Ion	Exp%	Act%
83.00	100	100
85.00	62.50	45.38
47.00	25.90	31.00
0.00	0.00	0.00

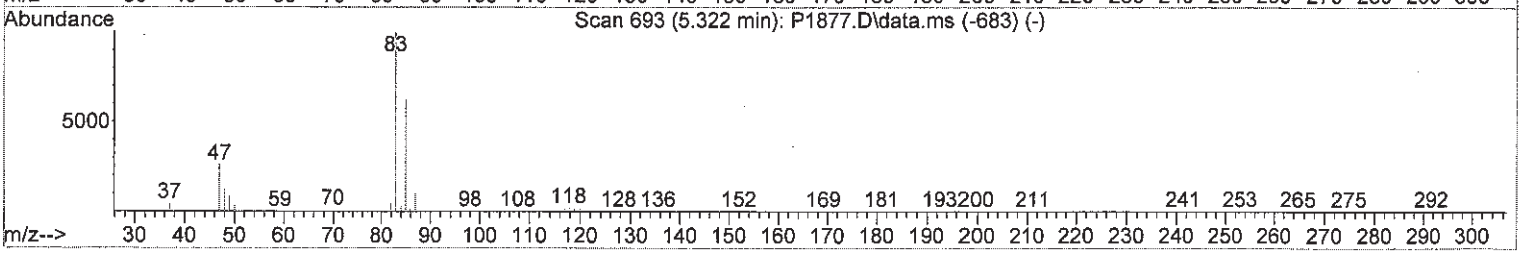
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(40) Chloroform (P)

5.310min (-0.012) 1.08 ppb m

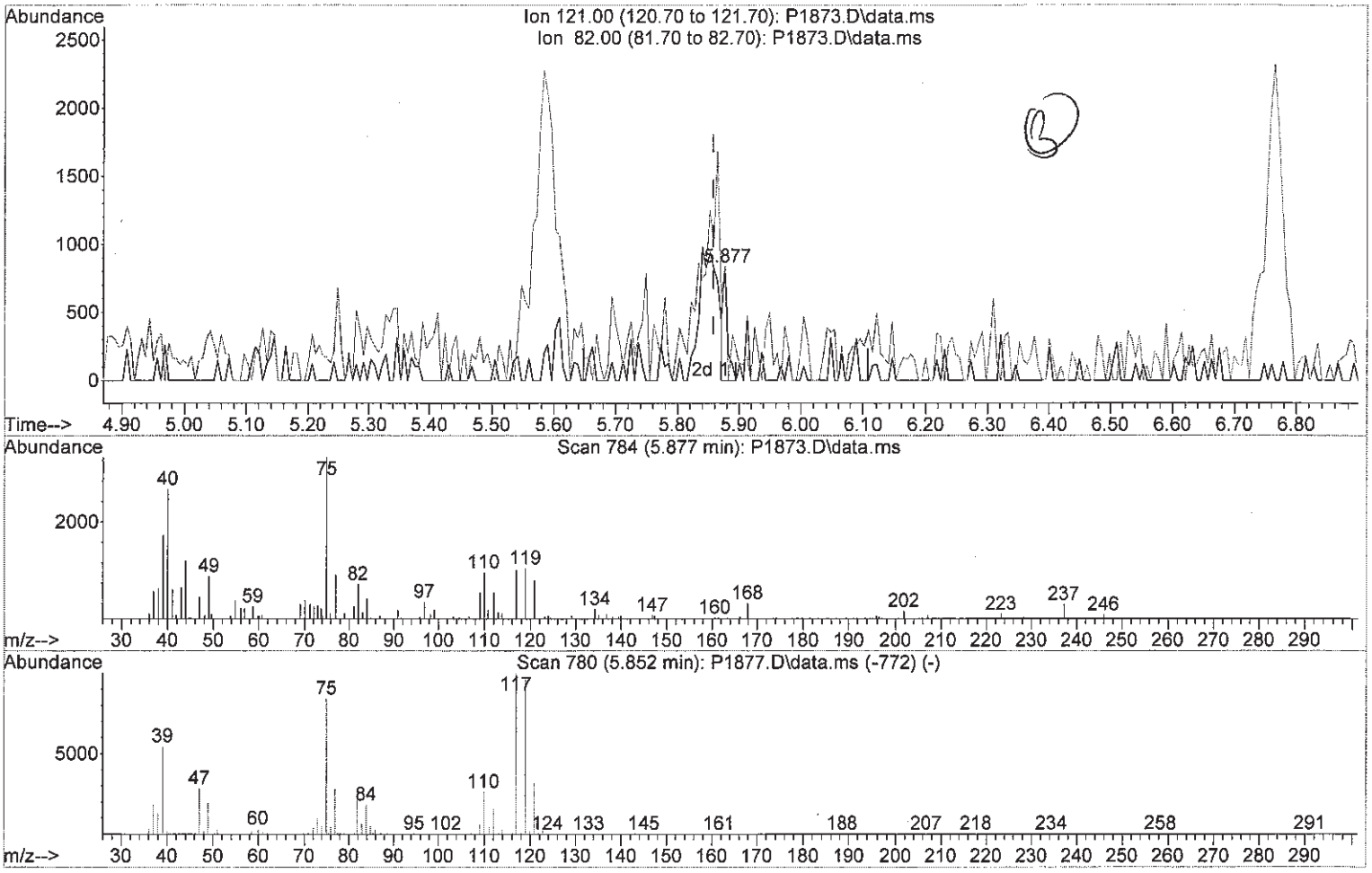
response 12695

Ion	Exp%	Act%
83.00	100	100
85.00	62.50	45.38
47.00	25.90	31.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(46) Carbontetrachloride (P)

5.877min (+0.018) 0.16 ppb

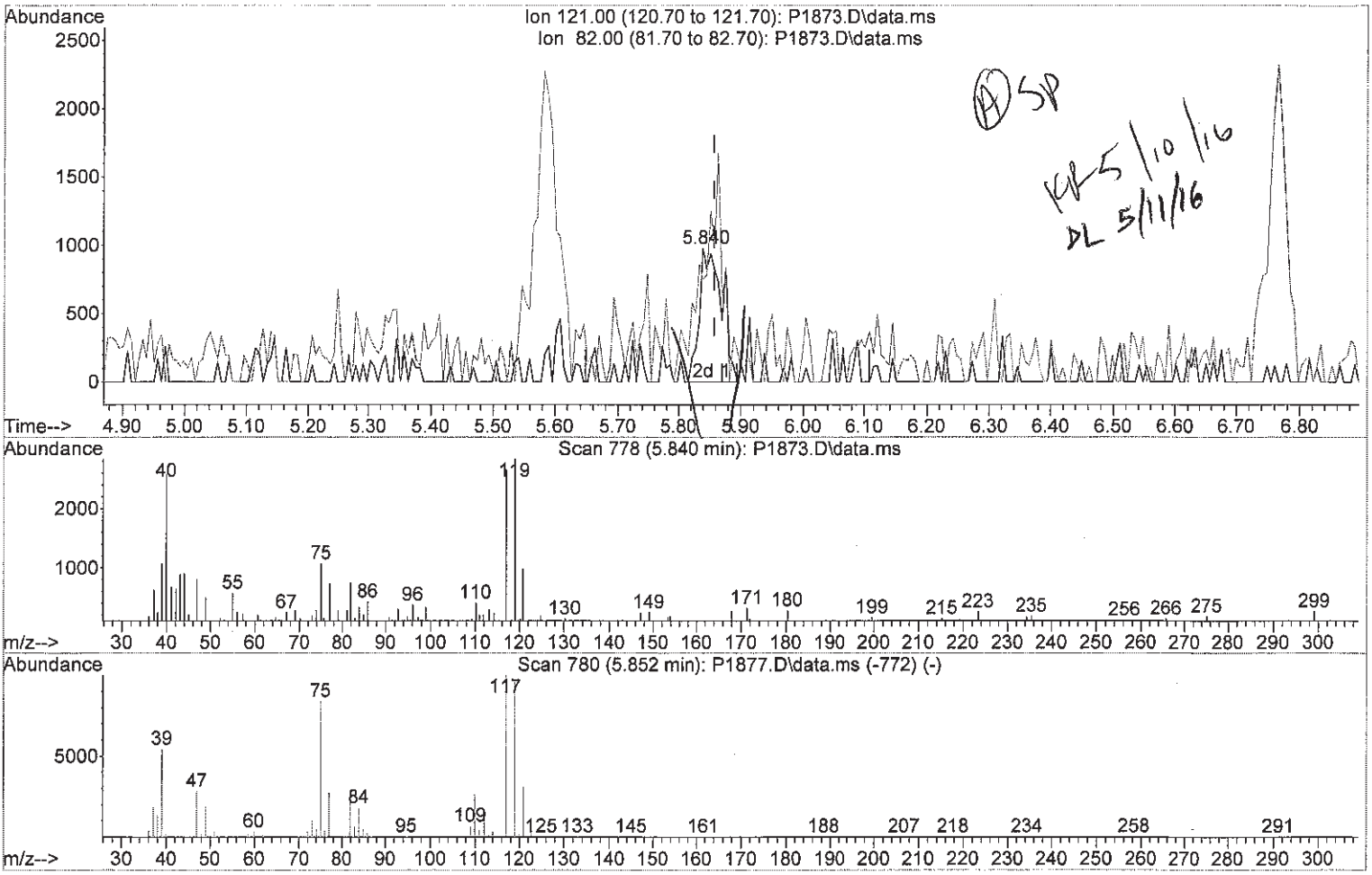
response 416

Ion	Exp%	Act%
121.00	100	100
82.00	86.70	92.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(46) Carbontetrachloride (P)

5.840min (-0.018) 0.95 ppb m

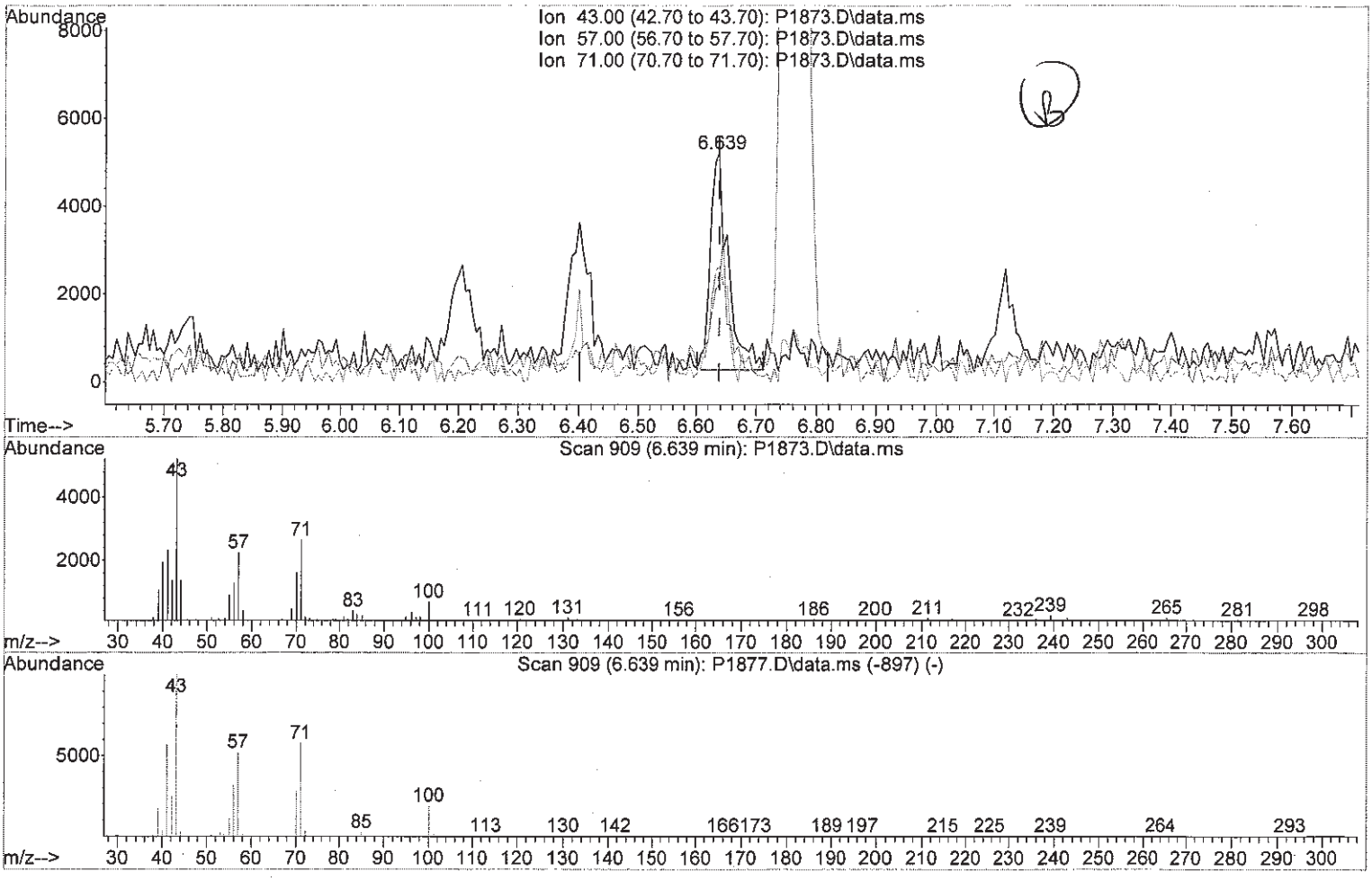
response 2469

Ion	Exp%	Act%
121.00	100	100
82.00	86.70	76.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(52) n-Heptane

6.639min (-0.000) 1.21 ppb

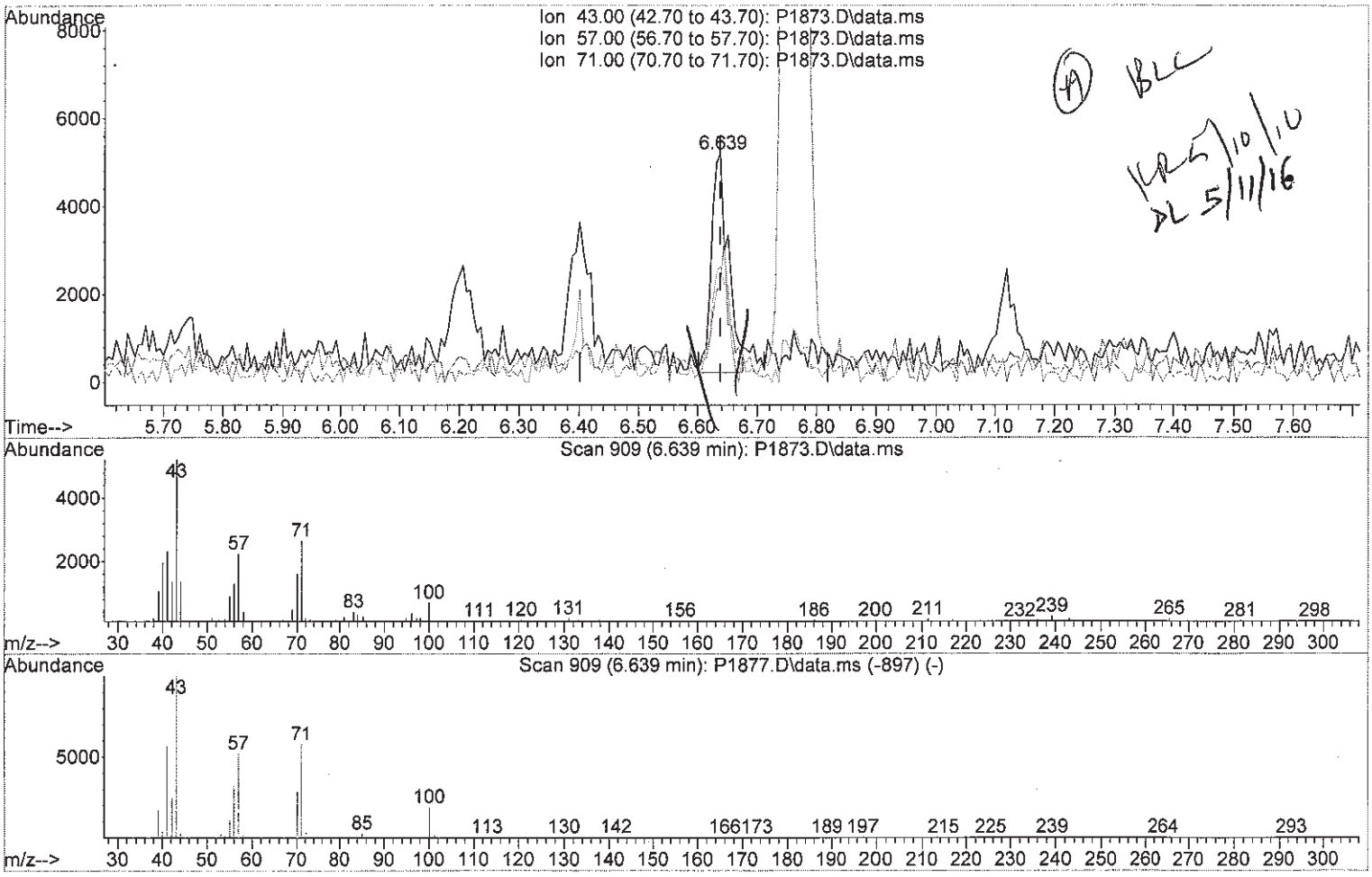
response 10115

Ion	Exp%	Act%
43.00	100	100
57.00	52.20	42.98
71.00	57.70	50.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(52) n-Heptane

6.639min (-0.000) 1.15 ppb m

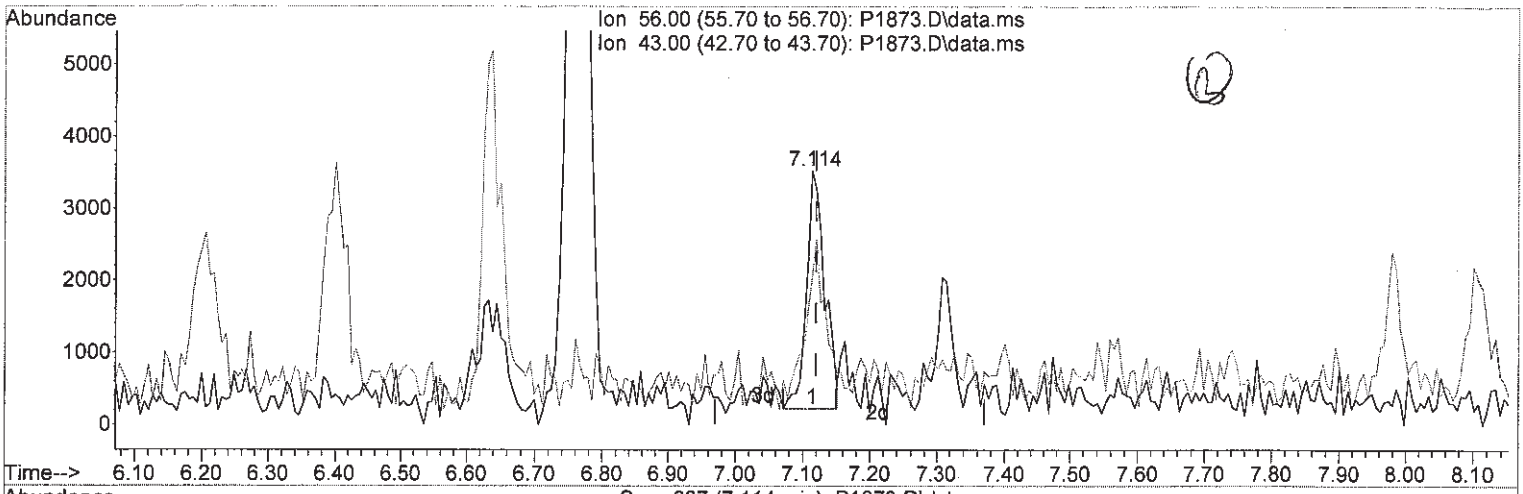
response 9628

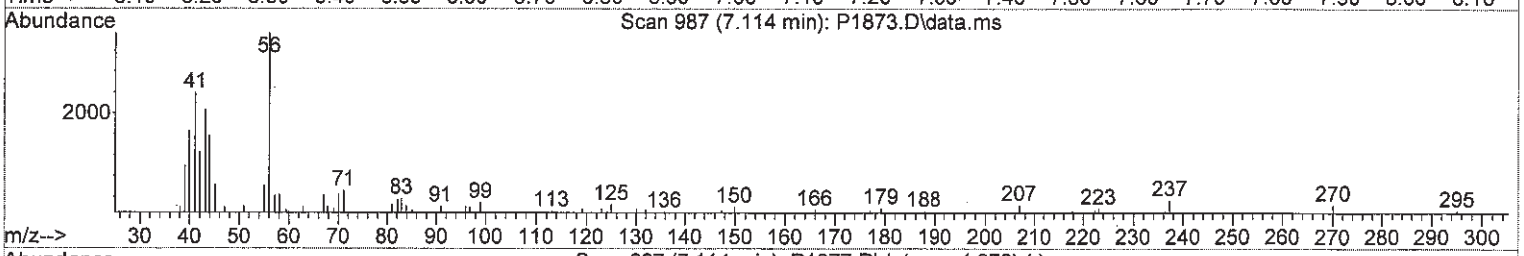
Ion	Exp%	Act%
43.00	100	100
57.00	52.20	42.98
71.00	57.70	50.75
0.00	0.00	0.00

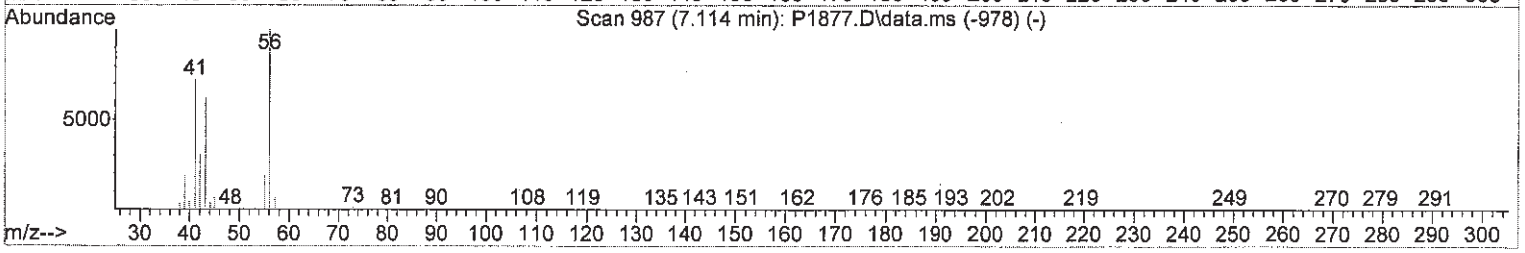
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(53) 1-Butanol

7.114min (-0.006) 42.09 ppb

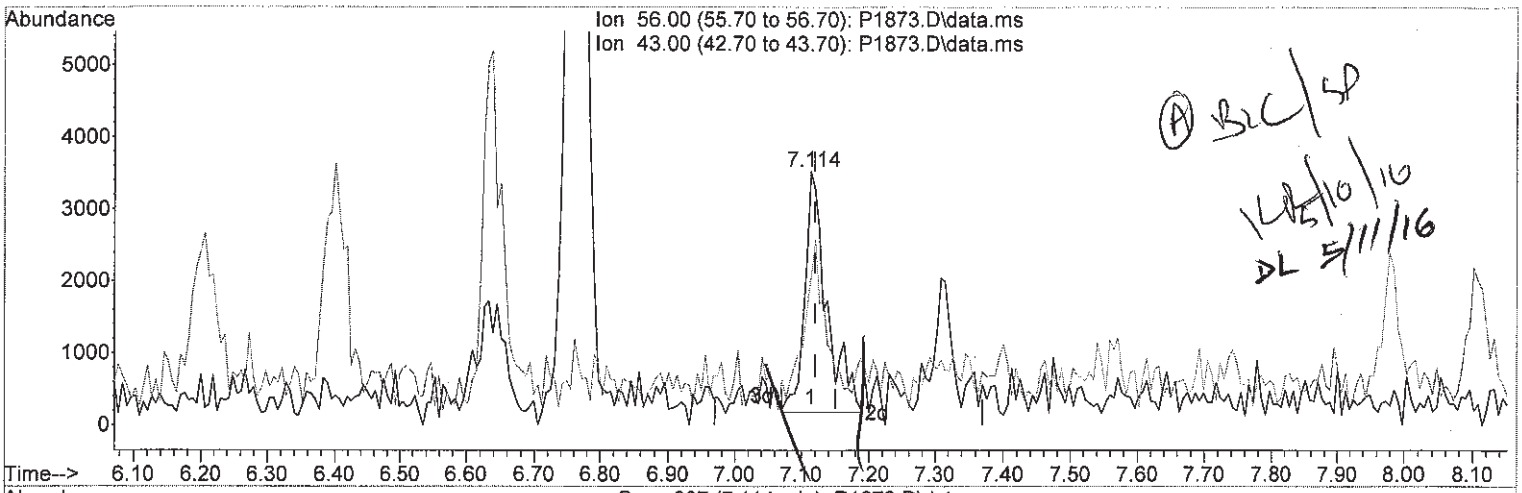
response 6241

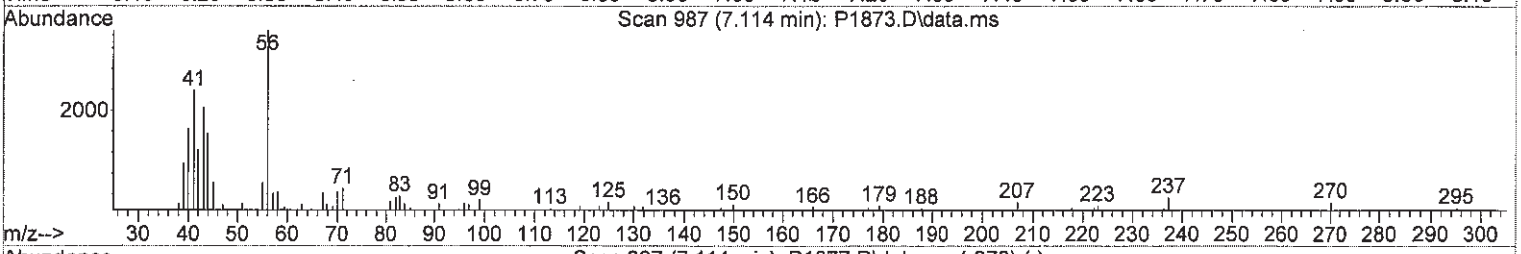
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	89.60#
0.00	0.00	0.00
0.00	0.00	0.00

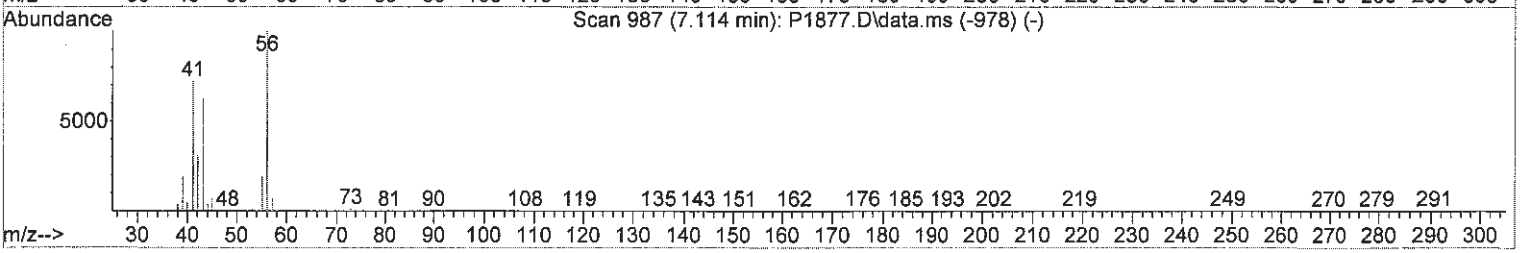
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(53) 1-Butanol

7.114min (-0.006) 50.37 ppb m

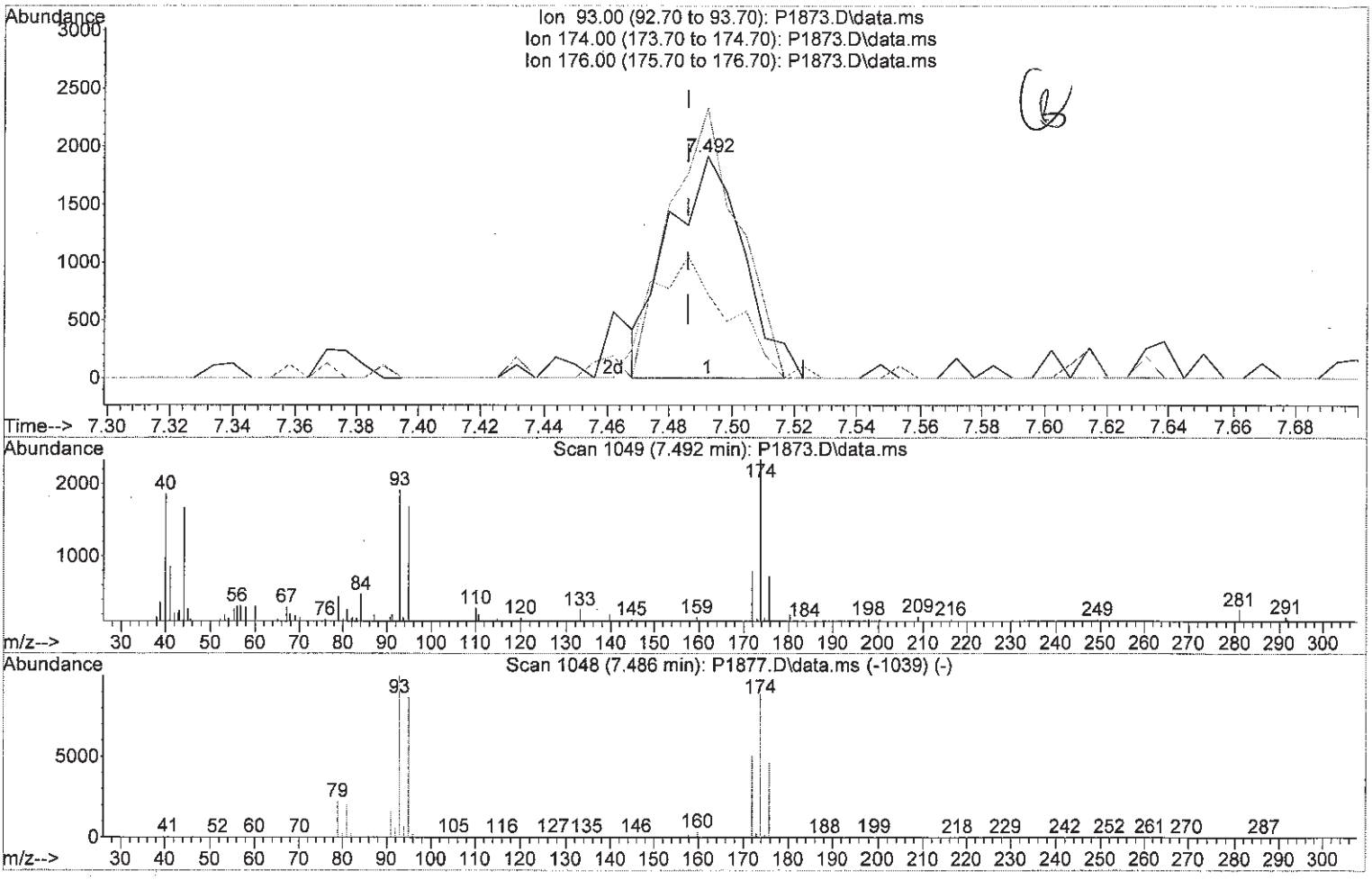
response 7469

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	74.87
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(57) Dibromomethane

7.492min (+0.006) 0.91 ppb

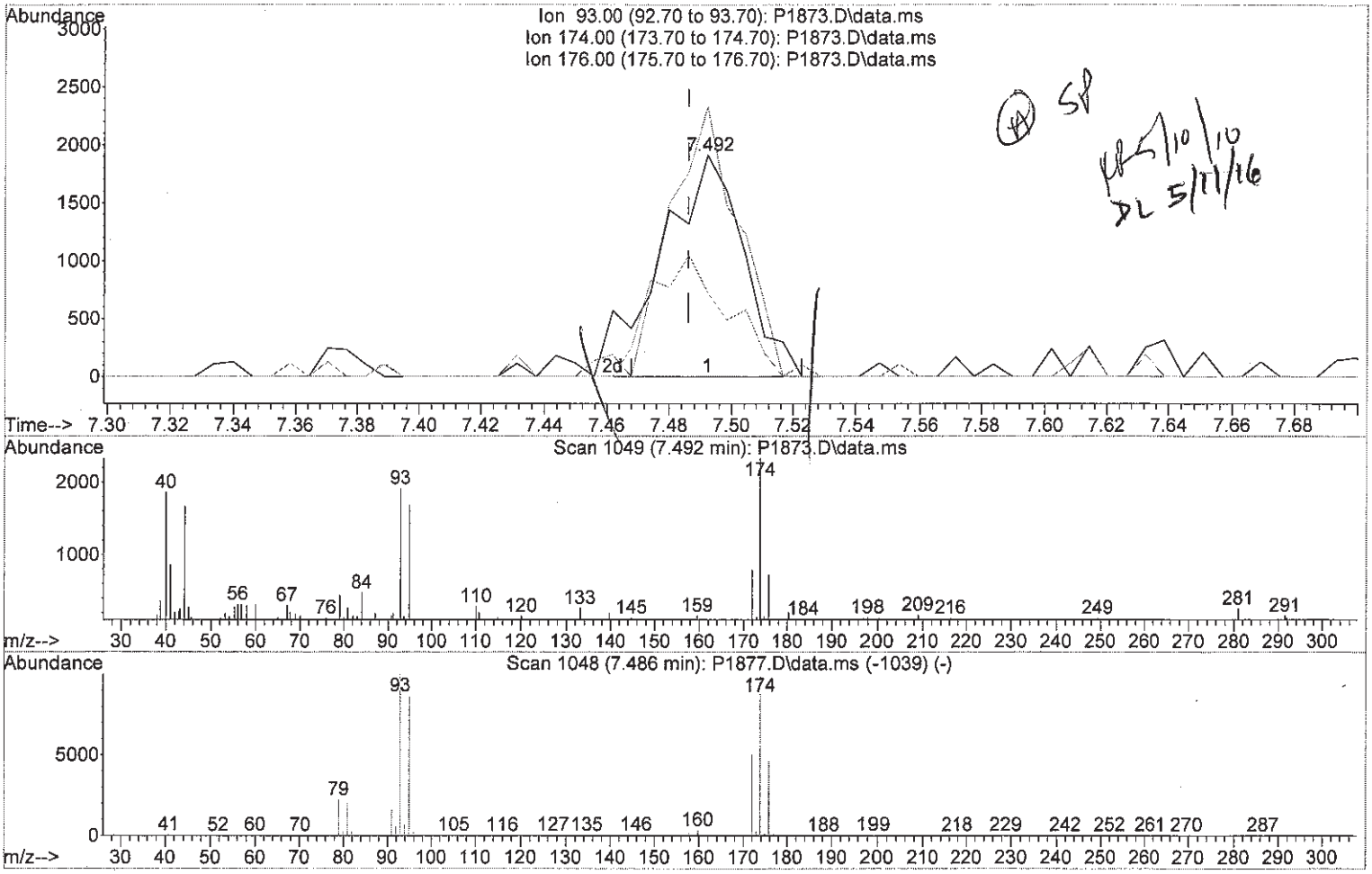
response 3171

Ion	Exp%	Act%
93.00	100	100
174.00	98.50	119.98#
176.00	46.10	35.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



SP 5/10/16 DL 5/11/16

TIC: P1873.D\data.ms

(57) Dibromomethane

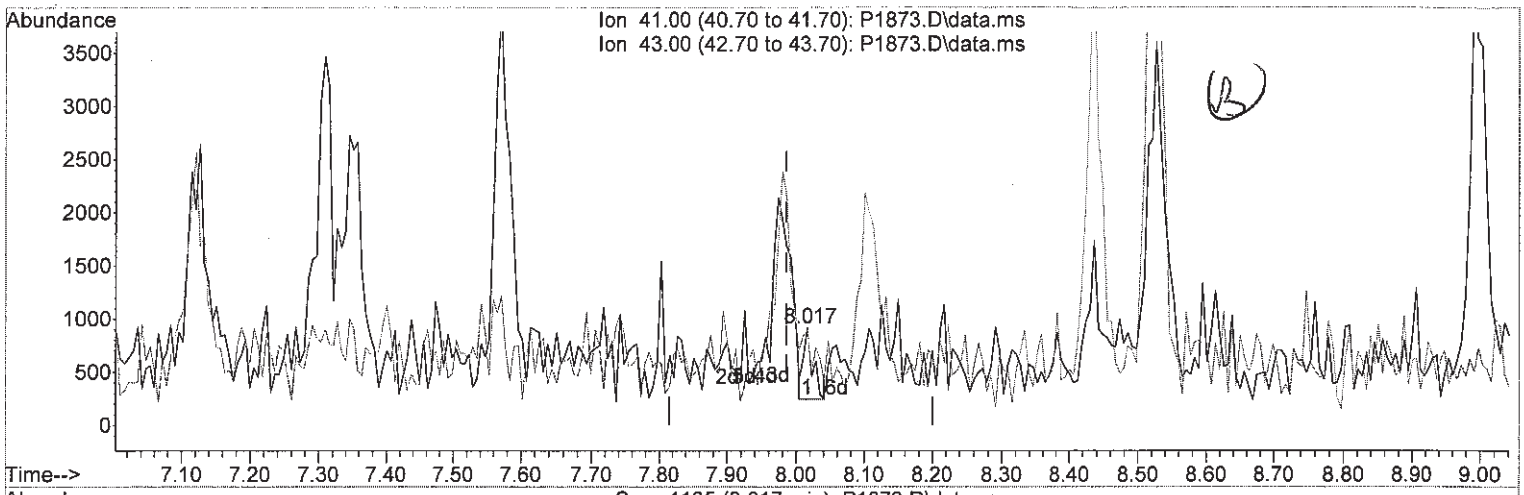
7.492min (+0.006) 1.01 ppb m

response 3532

Ion	Exp%	Act%
93.00	100	100
174.00	98.50	121.84#
176.00	46.10	37.82
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(61) 2-Nitropropane

8.017min (+0.030) 0.42 ppb

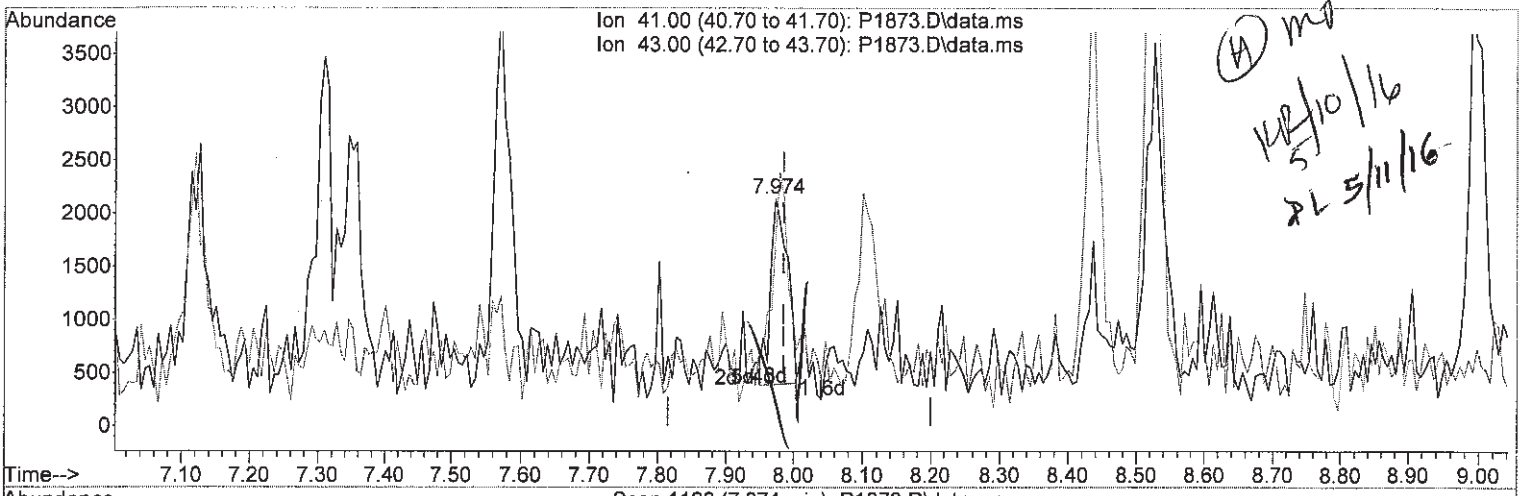
response 613

Ion	Exp%	Act%
41.00	100	100
43.00	112.20	98.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(61) 2-Nitropropane

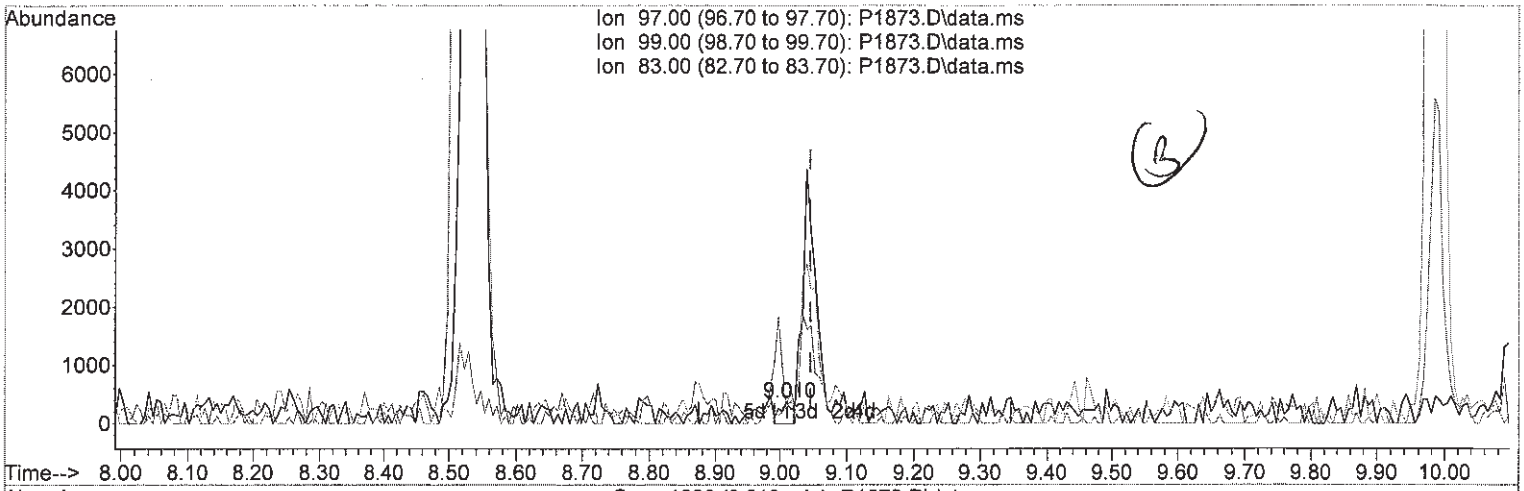
7.974min (-0.012) 2.09 ppb m

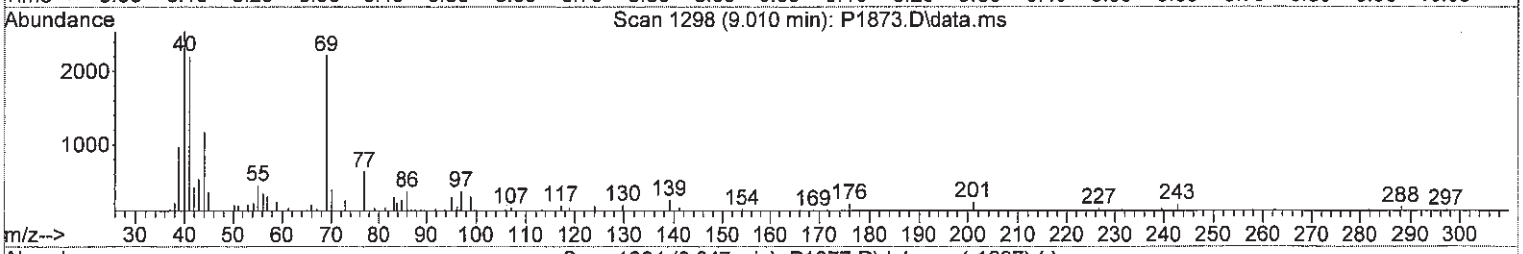
response 3068

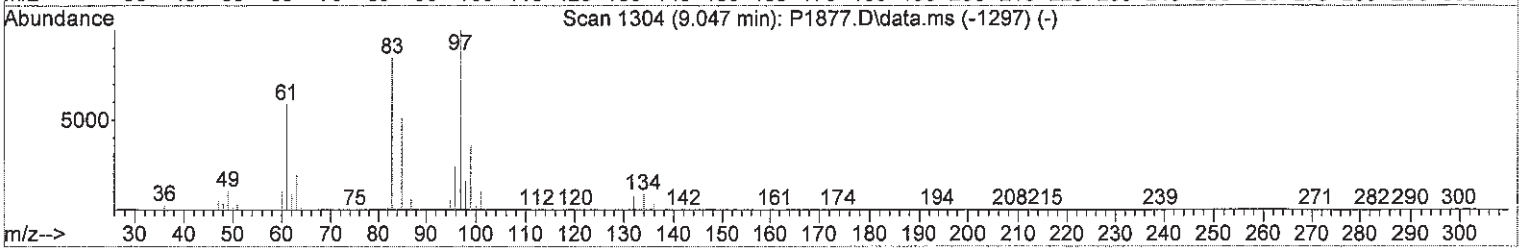
Ion	Exp%	Act%
41.00	100	100
43.00	112.20	83.67#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(69) 1,1,2-Trichloroethane (P)

9.010min (-0.037) 0.09 ppb

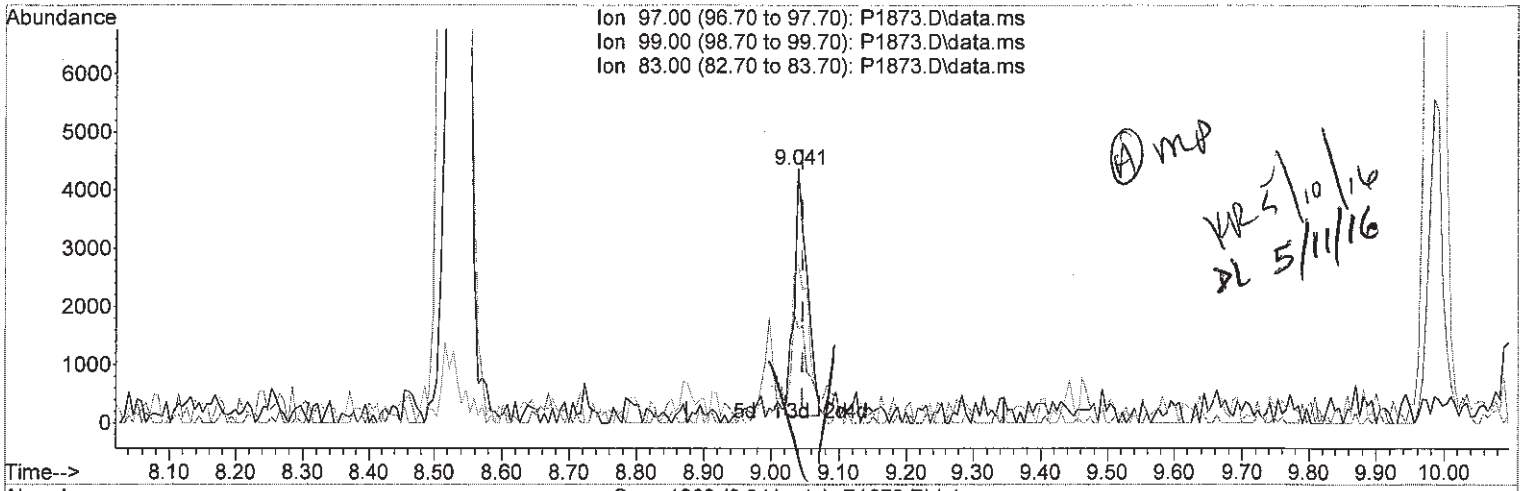
response 479

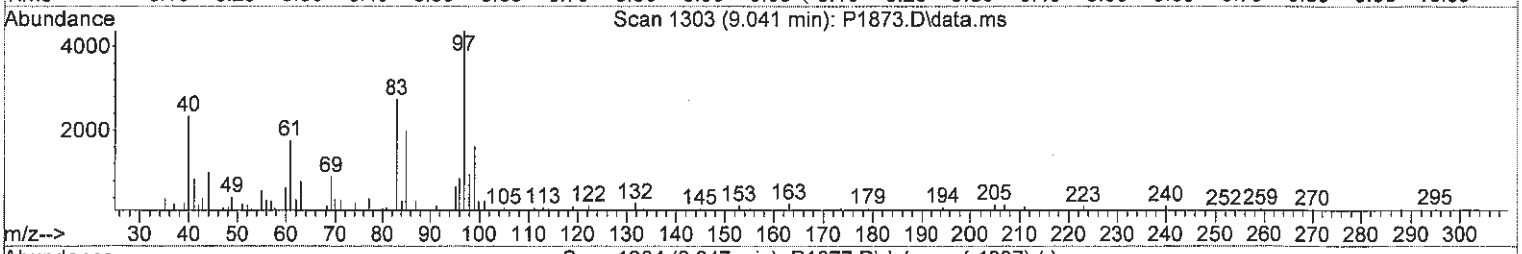
Ion	Exp%	Act%
97.00	100	100
99.00	59.60	79.50
83.00	84.40	76.18
0.00	0.00	0.00

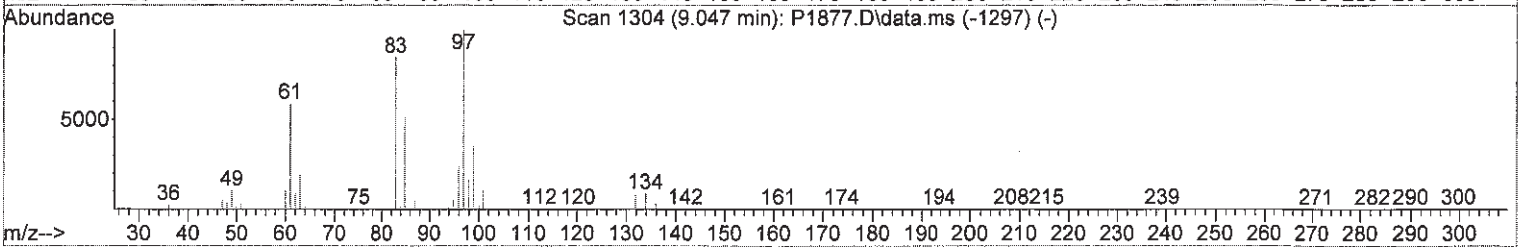
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(69) 1,1,2-Trichloroethane (P)

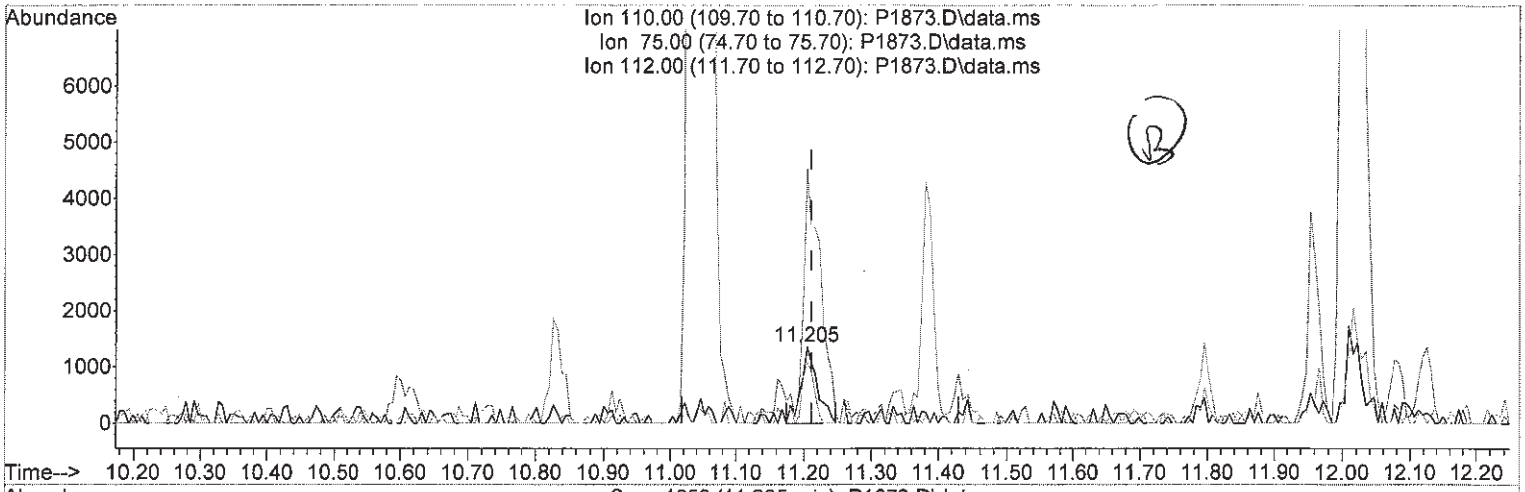
9.041min (-0.006) 1.04 ppb m

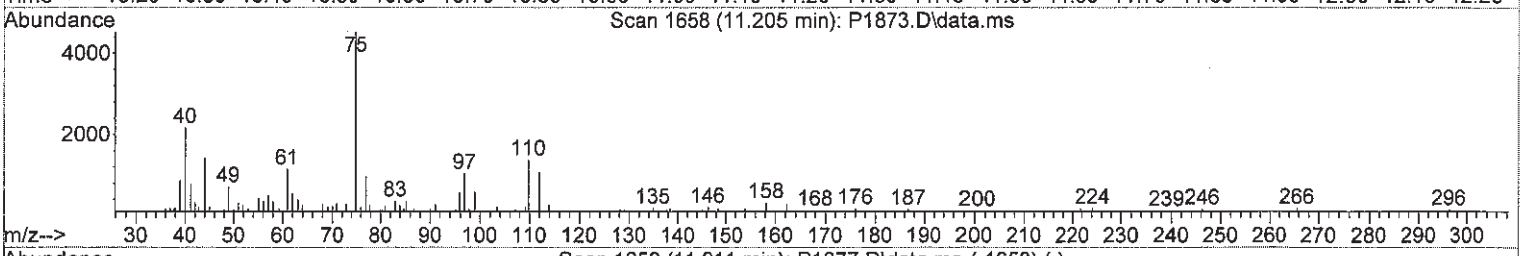
response 5546

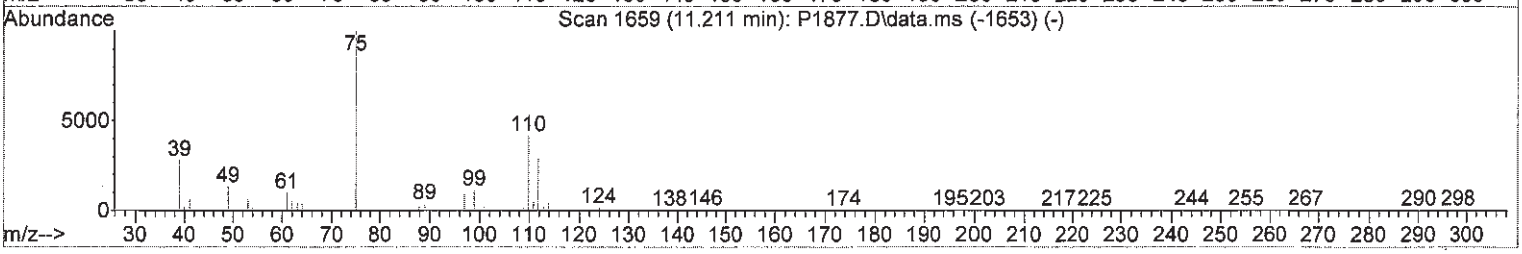
Ion	Exp%	Act%
97.00	100	100
99.00	59.60	37.03#
83.00	84.40	62.65#
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(94) 1,2,3-Trichloropropane

11.205min (-0.006) 1.22 ppb

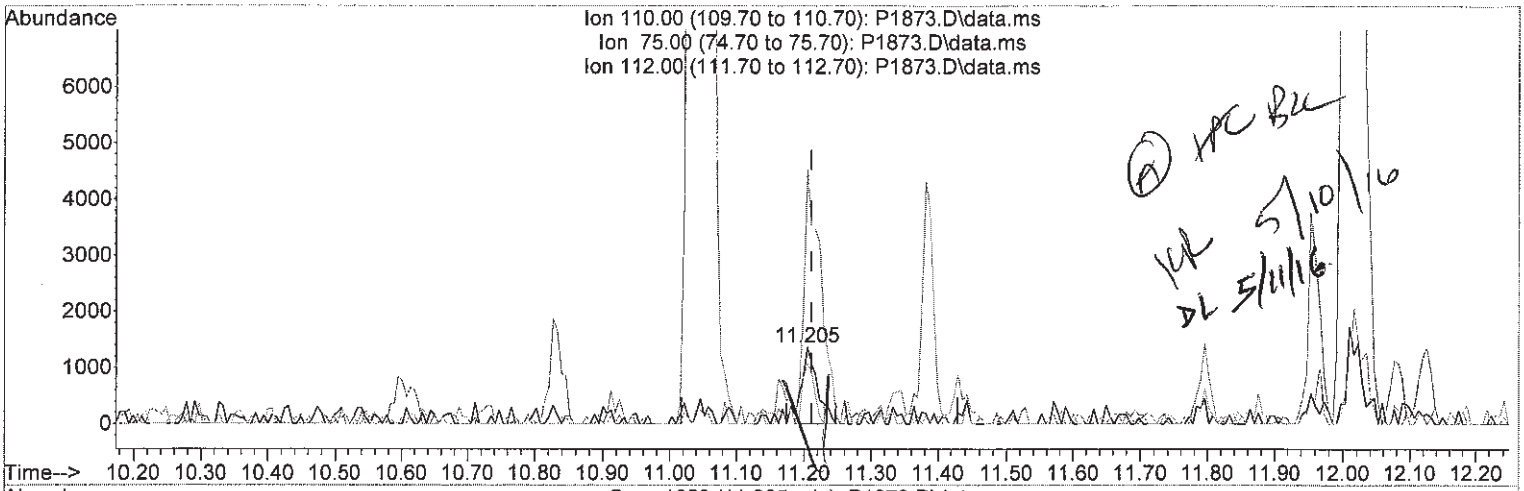
response 2308

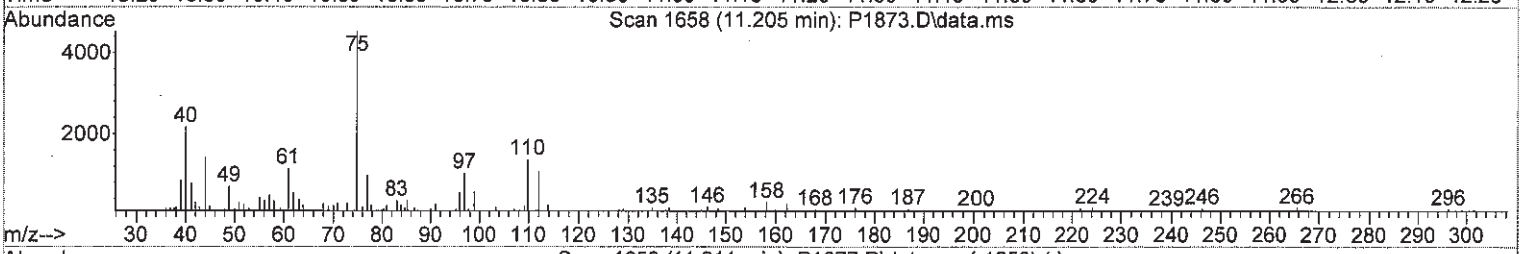
Ion	Exp%	Act%
110.00	100	100
75.00	286.70	331.74#
112.00	68.90	78.18
0.00	0.00	0.00

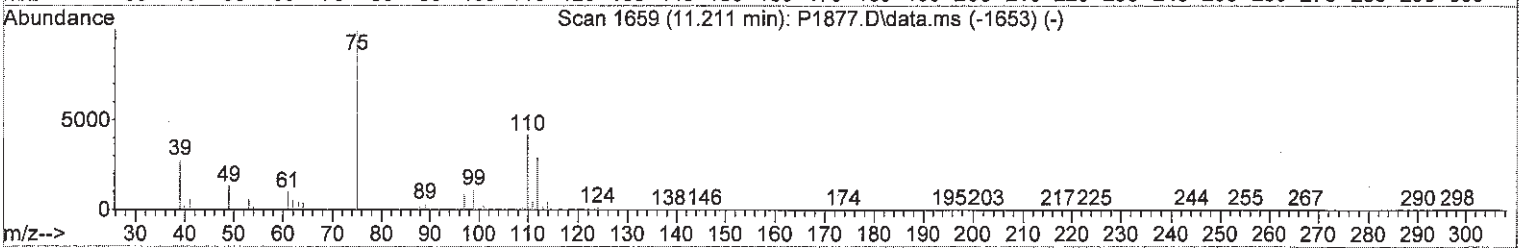
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1873.D\data.ms

(94) 1,2,3-Trichloropropane

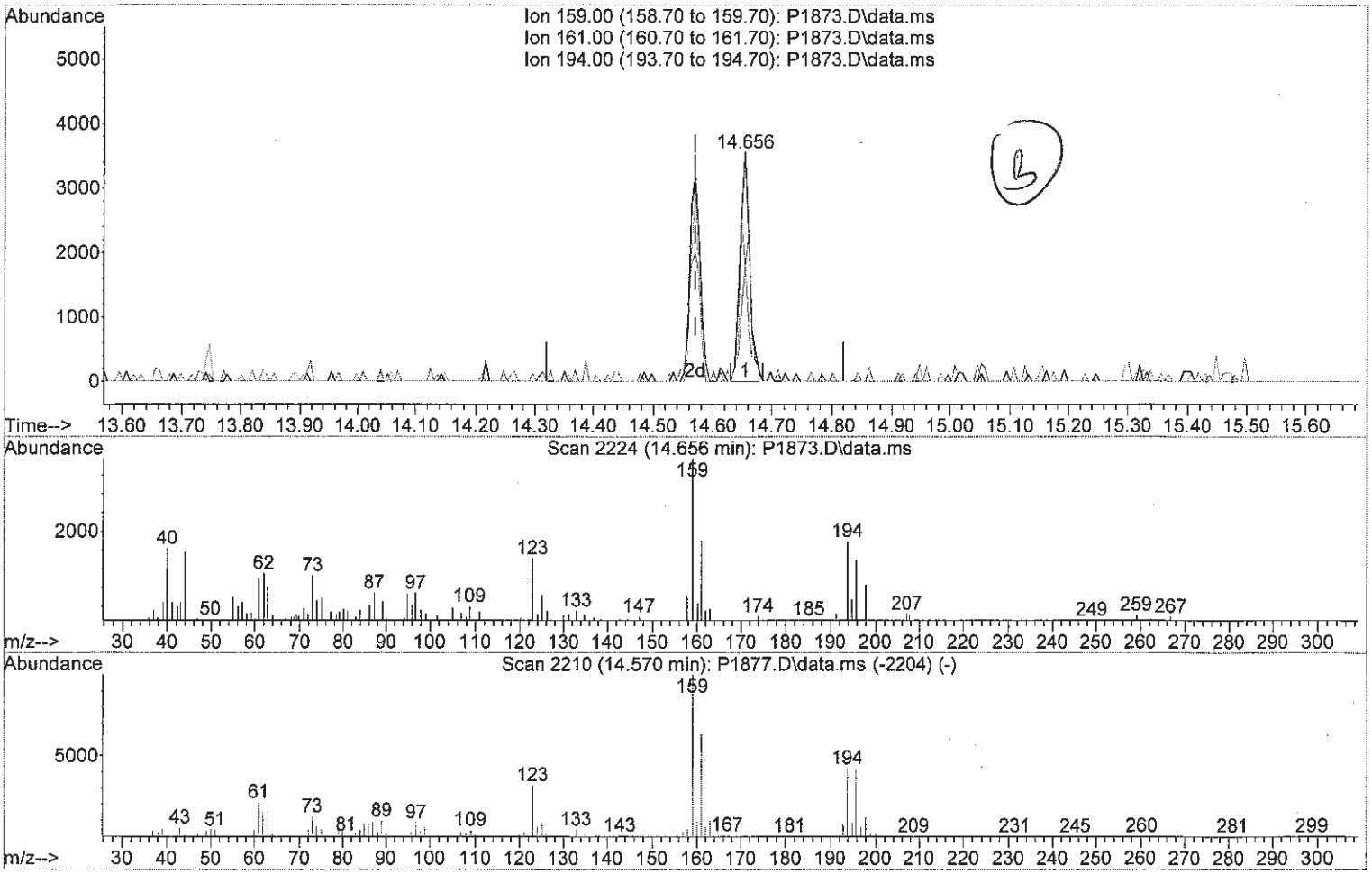
11.205min (-0.006) 1.05 ppb m

response 1987

Ion	Exp%	Act%
110.00	100	100
75.00	286.70	331.74#
112.00	68.90	78.18
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(119) 2,4,5-Trichlorotolene

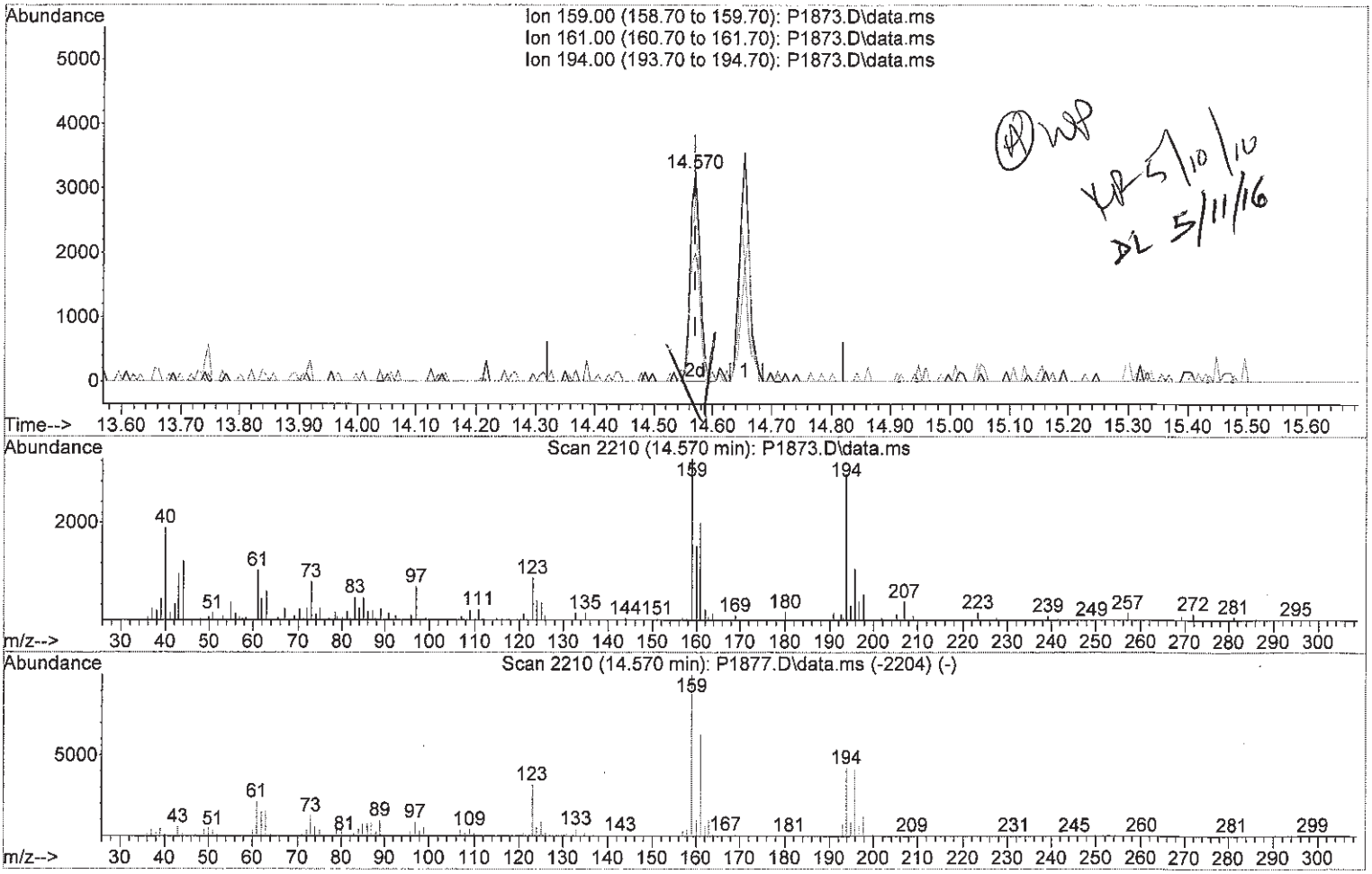
14.656min (+0.085) 0.92 ppb

response 4128

Ion	Exp%	Act%
159.00	100	100
161.00	63.30	50.94
194.00	42.00	50.27
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:56:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1873.D\data.ms

(119) 2,4,5-Trichlorotolene

14.570min (-0.000) 0.84 ppb m

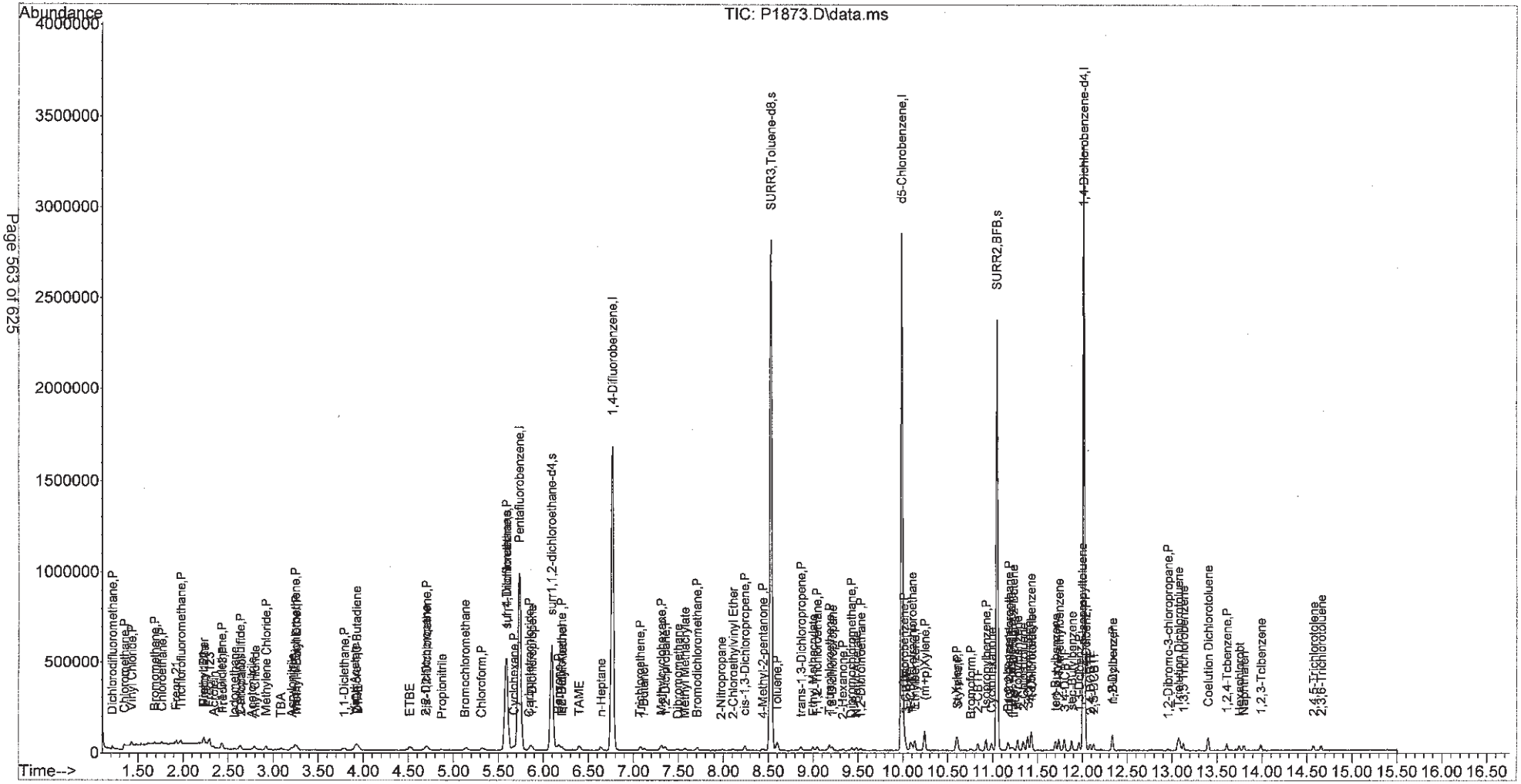
response 3781

Ion	Exp%	Act%
159.00	100	100
161.00	63.30	61.48
194.00	42.00	90.52#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1873.D
Acq On : 9 May 2016 2:50 pm
Operator : K.Ruest
Sample : 1.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 11:03:43 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	820631	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1363173	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1263494	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	637002	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.584	113	453376	60.32	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	120.64%#			
48) surr1,1,2-dichloroetha...	6.090	65	533911	60.12	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	120.24%			
65) SURR3,Toluene-d8	8.529	98	2010601	60.56	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	121.12%#			
70) SURR2,BFB	11.047	95	757589	60.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	120.36%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	18097	1.87	ppb		96
3) Chloromethane	1.341	50	21416	2.04	ppb		95
4) Vinyl Chloride	1.426	62	21103	1.80	ppb		80
5) Bromomethane	1.683	94	8624m	1.81	ppb		
6) Chloroethane	1.762	64	12300	1.95	ppb		98
7) Freon 21	1.920	67	26694	1.97	ppb		82
8) Trichlorofluoromethane	1.975	101	20953	2.07	ppb		99
9) Diethyl Ether	2.231	59	13233	2.20	ppb		88
10) Freon 123a	2.231	67	18346	2.05	ppb		82
11) Freon 123	2.286	83	19850	1.92	ppb		90
12) Acrolein	2.335	56	6946	8.59	ppb		95
13) 1,1-Diclethene	2.426	96	11657	1.88	ppb	#	87
14) Freon 113	2.432	101	11269	1.86	ppb		97
15) Acetone	2.481	43	4396	2.74	ppb		71
16) 2-Propanol	2.646	45	11069	35.56	ppb		79
17) Iodomethane	2.560	142	5567	0.97	ppb		93
18) Carbon Disulfide	2.627	76	40701	1.97	ppb		96
19) Acetonitrile	2.762	40	3574m	13.81	ppb		
20) Allyl Chloride	2.786	76	7064	2.02	ppb	#	82
21) Methyl Acetate	2.823	43	7709	1.99	ppb		94
22) Methylene Chloride	2.914	84	13558	1.96	ppb		82
23) TBA	3.085	59	17337	35.06	ppb		89
24) Acrylonitrile	3.201	53	17251	9.18	ppb		95
25) Methyl-t-Butyl Ether	3.255	73	36529	1.99	ppb		99
26) trans-1,2-Dichloroethene	3.243	96	14791	2.09	ppb		85
28) 1,1-Diclethane	3.786	63	24791	2.01	ppb		89
29) Vinyl Acetate	3.889	86	2667m	2.01	ppb		
30) DIPE	3.938	45	49800	1.96	ppb		91
31) 2-Chloro-1,3-Butadiene	3.920	53	28546	2.07	ppb	#	71
32) ETBE	4.523	59	43193	1.92	ppb		85
33) 2,2-Dichloropropane	4.700	77	20163m	1.91	ppb		
34) cis-1,2-Dichloroethene	4.706	96	13168	1.76	ppb		87
35) 2-Butanone	4.792	43	6560	2.71	ppb		86
36) Propionitrile	4.865	54	7781	11.09	ppb	#	43

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.139	130	8263	2.11	ppb	#	80
38) Methacrylonitrile	5.157	67	4262	2.02	ppb	#	60
39) Tetrahydrofuran	5.231	42	3303m	2.15	ppb		
40) Chloroform	5.322	83	22637	1.89	ppb		88
41) 1,1,1-Trichloroethane	5.590	97	20613	2.02	ppb		98
42) TAME	6.395	73	36405	1.86	ppb		97
44) Cyclohexane	5.670	41	16606	2.19	ppb		90
46) Carbontetrachloride	5.852	121	5573	2.14	ppb		84
47) 1,1-Dichloropropene	5.865	75	18290	1.96	ppb		96
49) Benzene	6.169	78	56088	2.04	ppb		98
50) 1,2-Dichloroethane	6.212	62	16061	1.96	ppb		88
51) Iso-Butyl Alcohol	6.194	43	10233	40.00	ppb		82
52) n-Heptane	6.633	43	16471	1.97	ppb		95
53) 1-Butanol	7.114	56	13528	91.04	ppb		97
54) Trichloroethene	7.084	130	12495	1.86	ppb		91
55) Methylcyclohexane	7.309	55	16581	1.86	ppb		90
56) 1,2-Diclpropane	7.346	63	14370	1.94	ppb		92
57) Dibromomethane	7.486	93	6433	1.84	ppb		82
58) 1,4-Dioxane	7.553	88	1356m	30.45	ppb		
59) Methyl Methacrylate	7.578	69	8527	1.97	ppb		88
60) Bromodichloromethane	7.706	83	17279	1.91	ppb		98
61) 2-Nitropropane	7.980	41	6020	4.10	ppb		95
62) 2-Chloroethylvinyl Ether	8.102	63	6571	1.66	ppb		95
63) cis-1,3-Dichloropropene	8.236	75	23551	2.04	ppb		97
64) 4-Methyl-2-pentanone	8.443	43	9693	1.85	ppb		86
66) Toluene	8.596	91	61219	2.11	ppb		97
67) trans-1,3-Dichloropropene	8.864	75	19844	2.07	ppb		94
68) Ethyl Methacrylate	8.998	69	16392	1.88	ppb		97
69) 1,1,2-Trichloroethane	9.047	97	9684	1.81	ppb		94
72) Tetrachloroethene	9.181	164	9113	1.87	ppb		98
73) 2-Hexanone	9.327	43	6894	1.88	ppb		98
74) 1,3-Dichloropropane	9.205	76	19176	2.03	ppb		99
75) Dibromochloromethane	9.431	129	11927	1.90	ppb		88
76) N-Butyl Acetate	9.480	43	18267	1.91	ppb		92
77) 1,2-Dibromoethane	9.535	107	9646	1.88	ppb		94
78) Chlorobenzene	10.010	112	35826	1.93	ppb		94
79) 3-CBTF	10.028	180	17979m	1.96	ppb		
80) 4-CBTF	10.077	180	16540	2.04	ppb		92
81) 1,1,1,2-Tetrachloroethane	10.096	131	12495	1.93	ppb		86
82) Ethylbenzene	10.126	106	19293	1.87	ppb		99
83) (m+p)Xylene	10.242	106	48816	4.01	ppb		96
84) o-Xylene	10.595	106	24780	2.05	ppb		98
85) Styrene	10.608	104	40526	2.00	ppb		96
87) Bromoform	10.760	173	5433	1.79	ppb		92
88) 2-CBTF	10.833	180	18135	2.16	ppb		88
89) Isopropylbenzene	10.925	105	56342	2.02	ppb		93
90) Cyclohexanone	10.986	55	23449	42.30	ppb		99
91) trans-1,4-Dichloro-2-B...	11.229	53	4215	1.94	ppb	#	68
92) 1,1,2,2-Tetrachloroethane	11.181	83	13585	2.08	ppb		92
93) Bromobenzene	11.168	156	12869	1.82	ppb	#	71
94) 1,2,3-Trichloropropane	11.211	110	3826	1.99	ppb	#	65

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

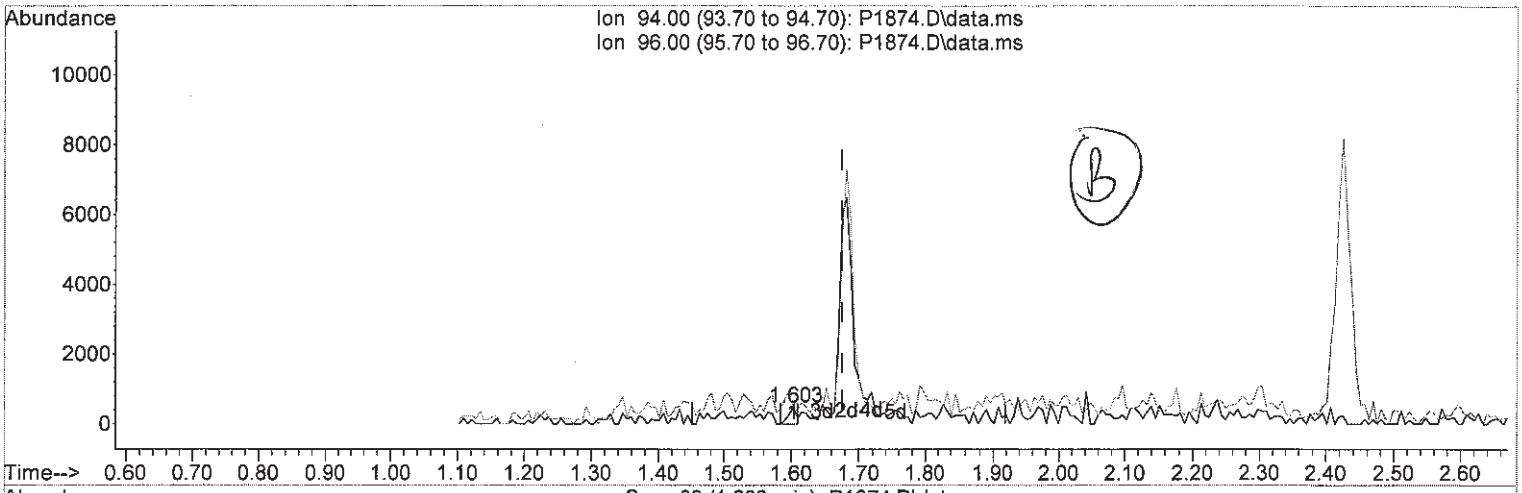
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	68116	2.11	ppb		95
96)	2-Chlorotoluene	11.339	91	41000	1.96	ppb		94
97)	3-Chlorotoluene	11.394	91	42870	2.01	ppb		98
98)	4-Chlorotoluene	11.431	91	49553	2.04	ppb		91
99)	1,3,5-Trimethylbenzene	11.425	105	49697	2.06	ppb		95
100)	tert-Butylbenzene	11.699	119	37448	1.96	ppb		85
101)	1,2,4-Trimethylbenzene	11.735	105	52251	2.11	ppb		98
102)	3,4-DCBTF	11.796	214	12770	2.14	ppb	#	85
103)	sec-Butylbenzene	11.882	105	57987	2.12	ppb		96
104)	p-Isopropyltoluene	12.004	119	49377	2.09	ppb		94
105)	1,3-Dclbenz	11.961	146	25863	1.92	ppb		91
106)	1,4-Dclbenz	12.034	146	27195	1.95	ppb		92
107)	2,4-DCBTF	12.089	214	10719	1.89	ppb	#	93
108)	2,5-DCBTF	12.126	214	11640	1.94	ppb		93
109)	n-Butylbenzene	12.333	91	41361	1.94	ppb		91
110)	1,2-Dclbenz	12.333	146	24872	1.96	ppb		92
111)	1,2-Dibromo-3-chloropr...	12.955	157	2898	2.42	ppb		90
112)	Trielution Dichlorotol...	13.071	125	61246	5.79	ppb		95
113)	1,3,5 Trichlorobenzene	13.125	180	17327	2.04	ppb		86
114)	Coelution Dichlorotoluene	13.400	125	44576	3.98	ppb		95
115)	1,2,4-Tcbenzene	13.607	180	14803	1.96	ppb		90
116)	Hexachlorobt	13.741	225	6078	1.96	ppb		97
117)	Naphthalen	13.796	128	30377	1.88	ppb		98
118)	1,2,3-Tclbenzene	13.985	180	12362	1.93	ppb		91
119)	2,4,5-Trichlorotolene	14.570	159	9212	2.02	ppb		94
120)	2,3,6-Trichlorotoluene	14.656	159	8441	1.99	ppb		95

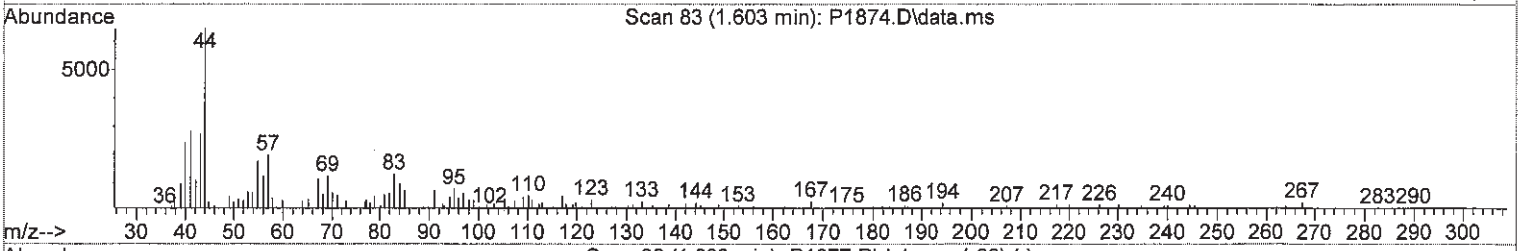
(#) = qualifier out of range (m) = manual integration (+) = signals summed

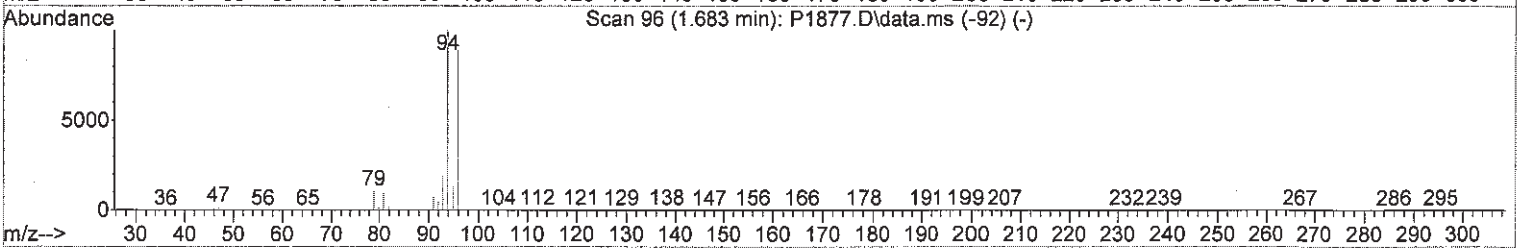
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(5) Bromomethane (P)

1.603min (-0.073) 0.08 ppb

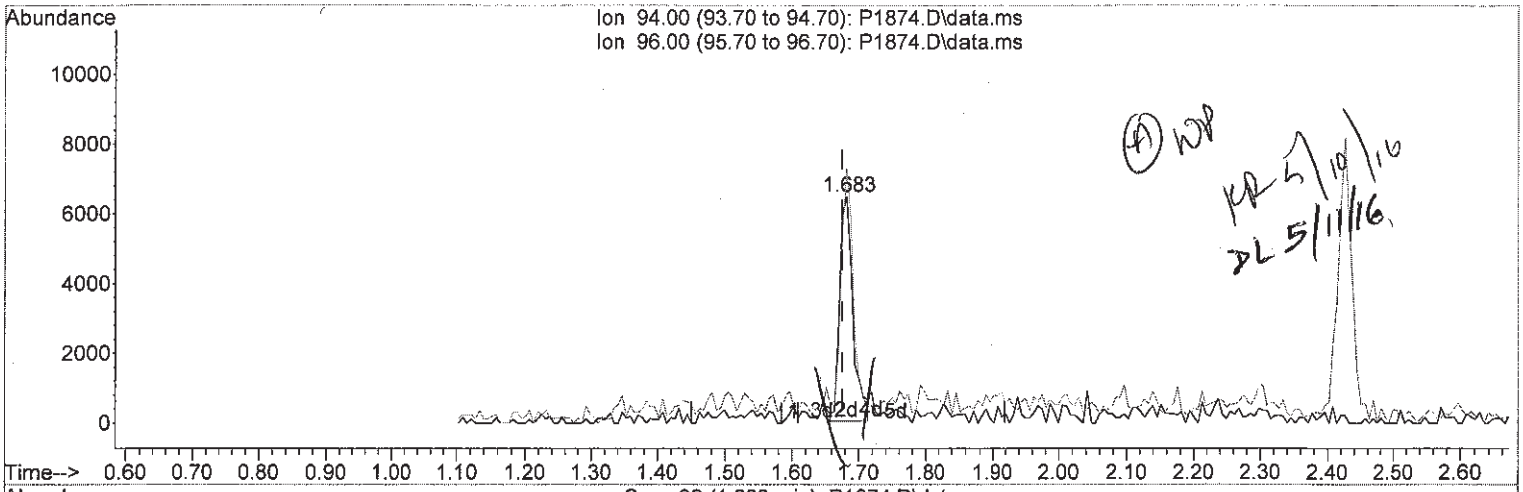
response 378

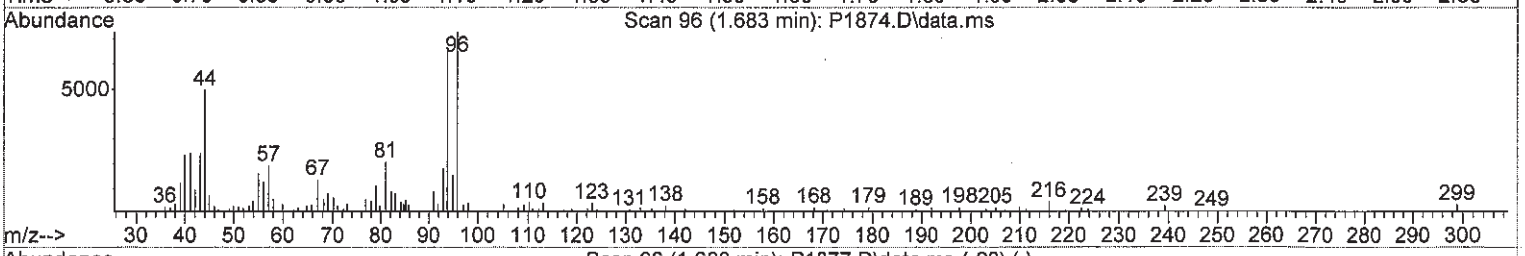
Ion	Exp%	Act%
94.00	100	100
96.00	89.20	92.78
0.00	0.00	0.00
0.00	0.00	0.00

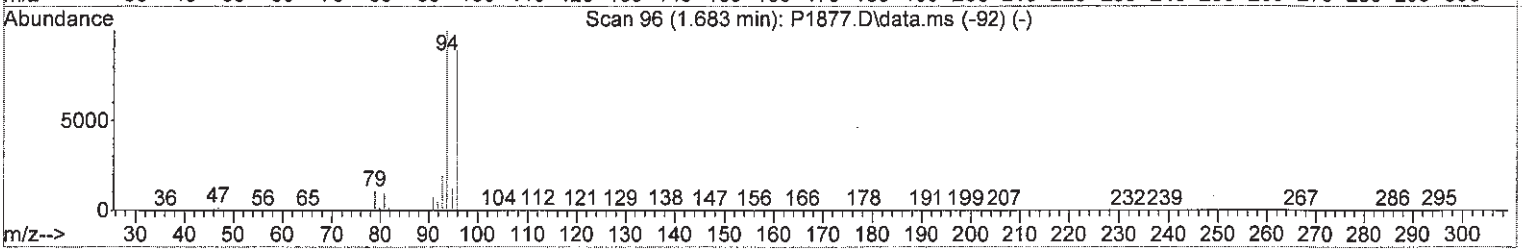
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(5) Bromomethane (P)

1.683min (+0.006) 1.81 ppb m

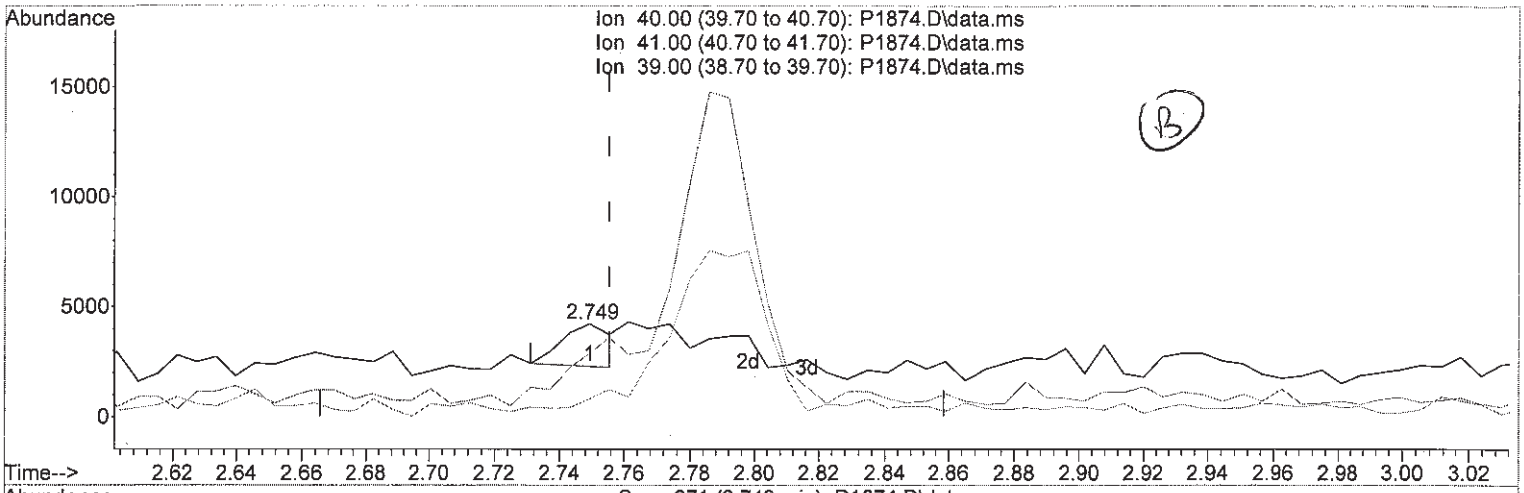
response 8624

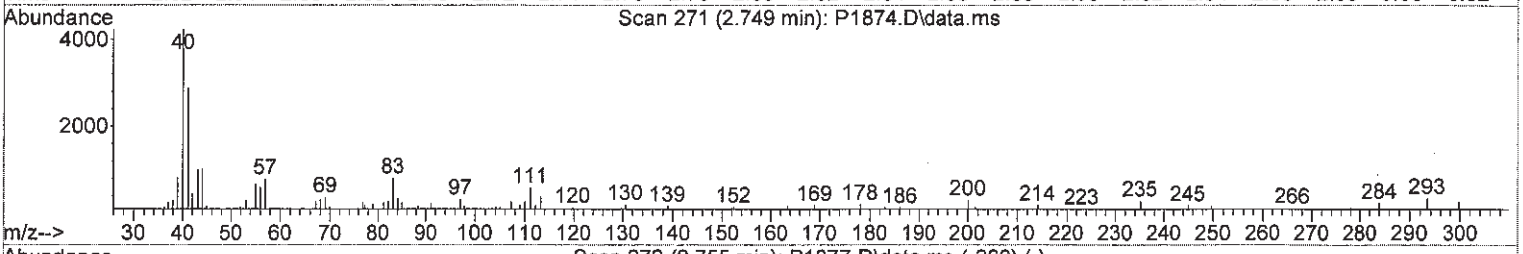
Ion	Exp%	Act%
94.00	100	100
96.00	89.20	112.12#
0.00	0.00	0.00
0.00	0.00	0.00

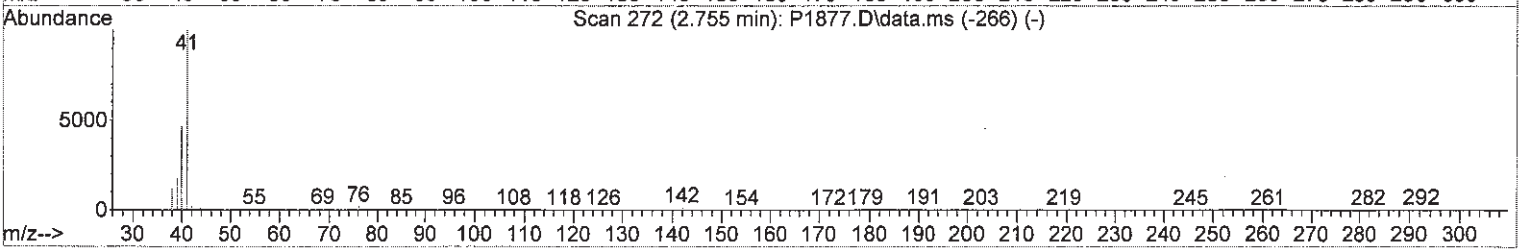
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(19) Acetonitrile

2.749min (-0.006) 7.70 ppb

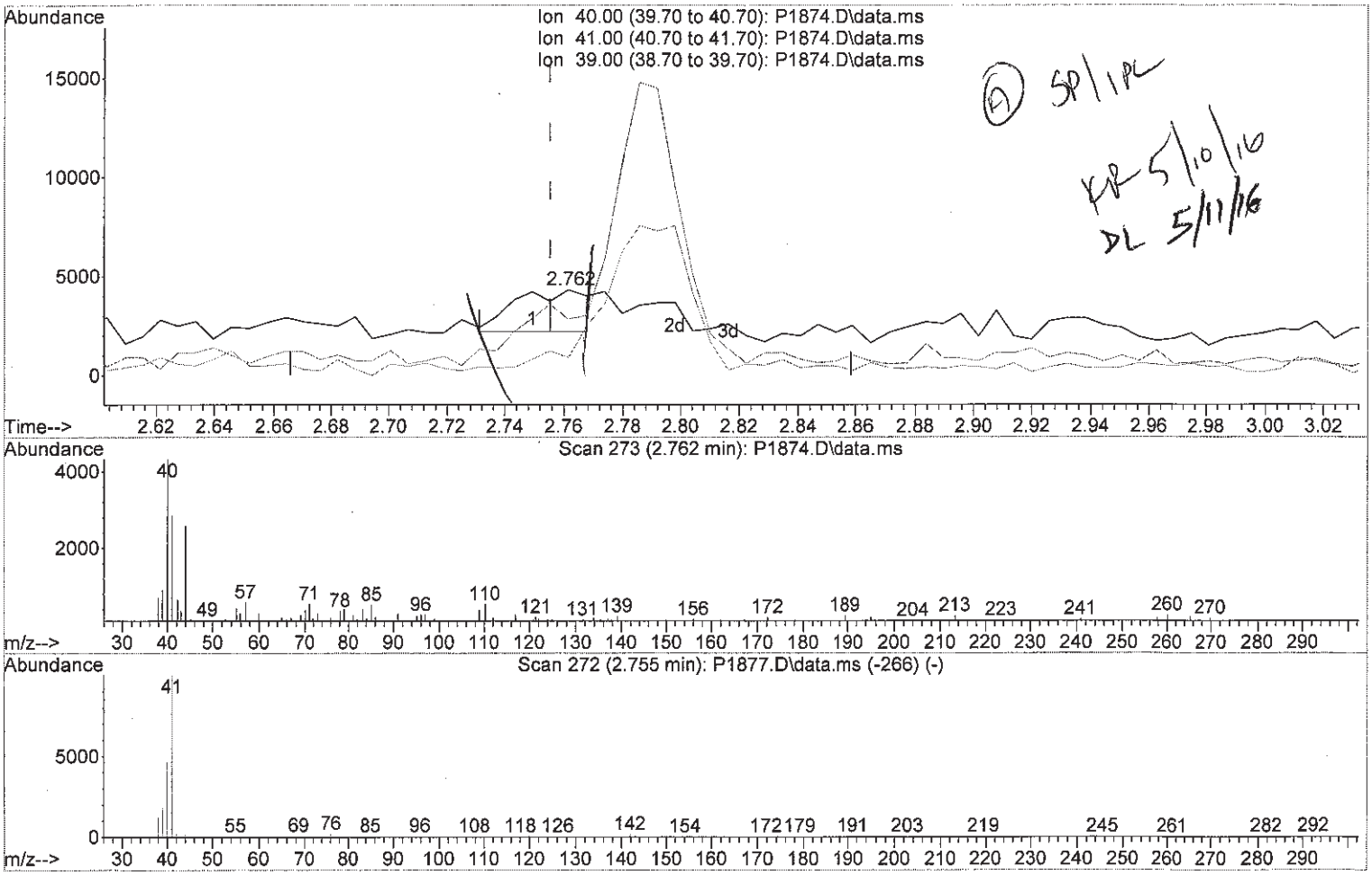
response 1993

Ion	Exp%	Act%
40.00	100	100
41.00	203.80	68.40#
39.00	39.10	19.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(19) Acetonitrile

2.762min (+0.006) 13.81 ppb m

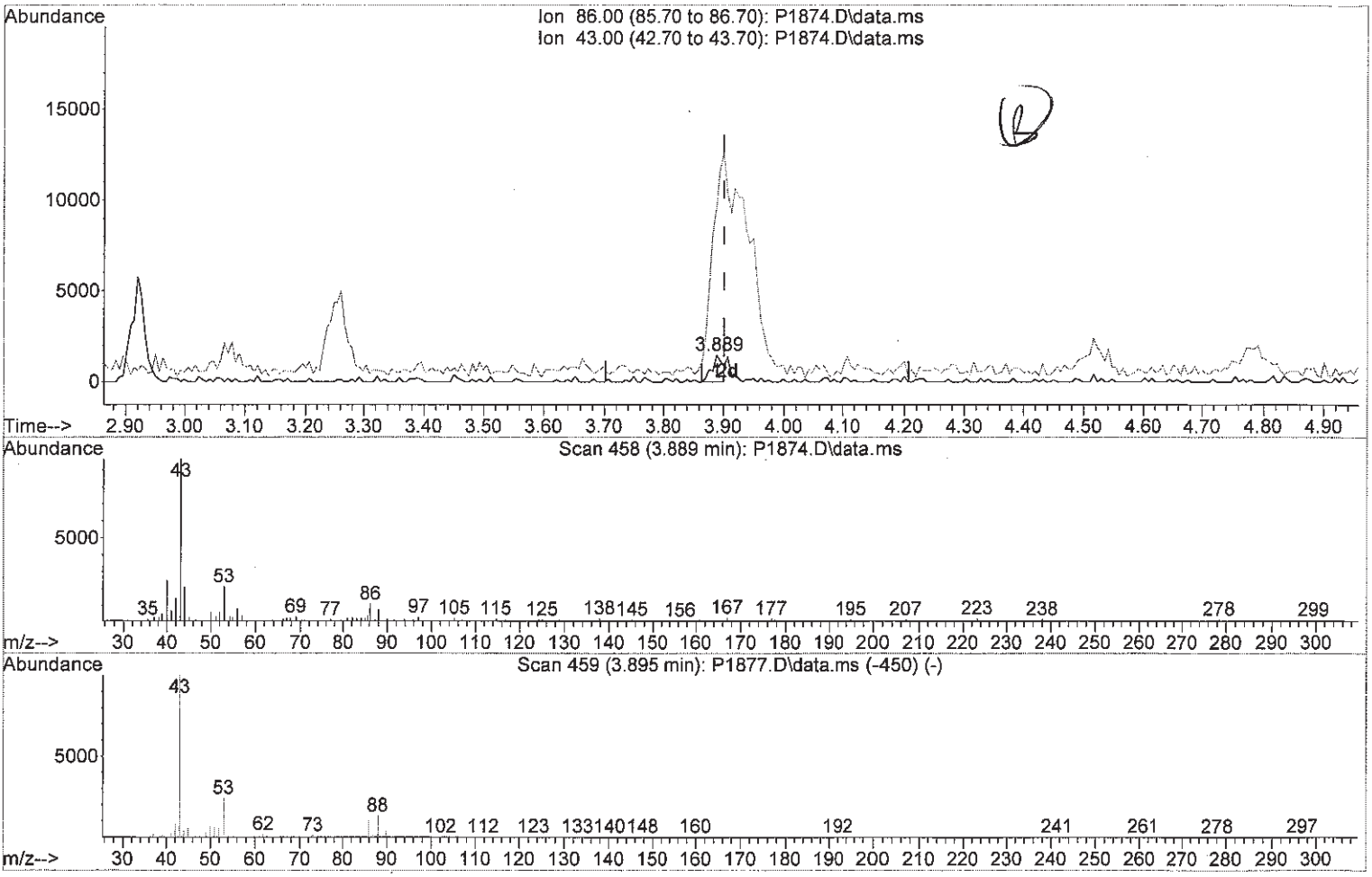
response 3574

Ion	Exp%	Act%
40.00	100	100
41.00	203.80	65.94#
39.00	39.10	20.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(29) Vinyl Acetate

3.889min (-0.012) 1.36 ppb

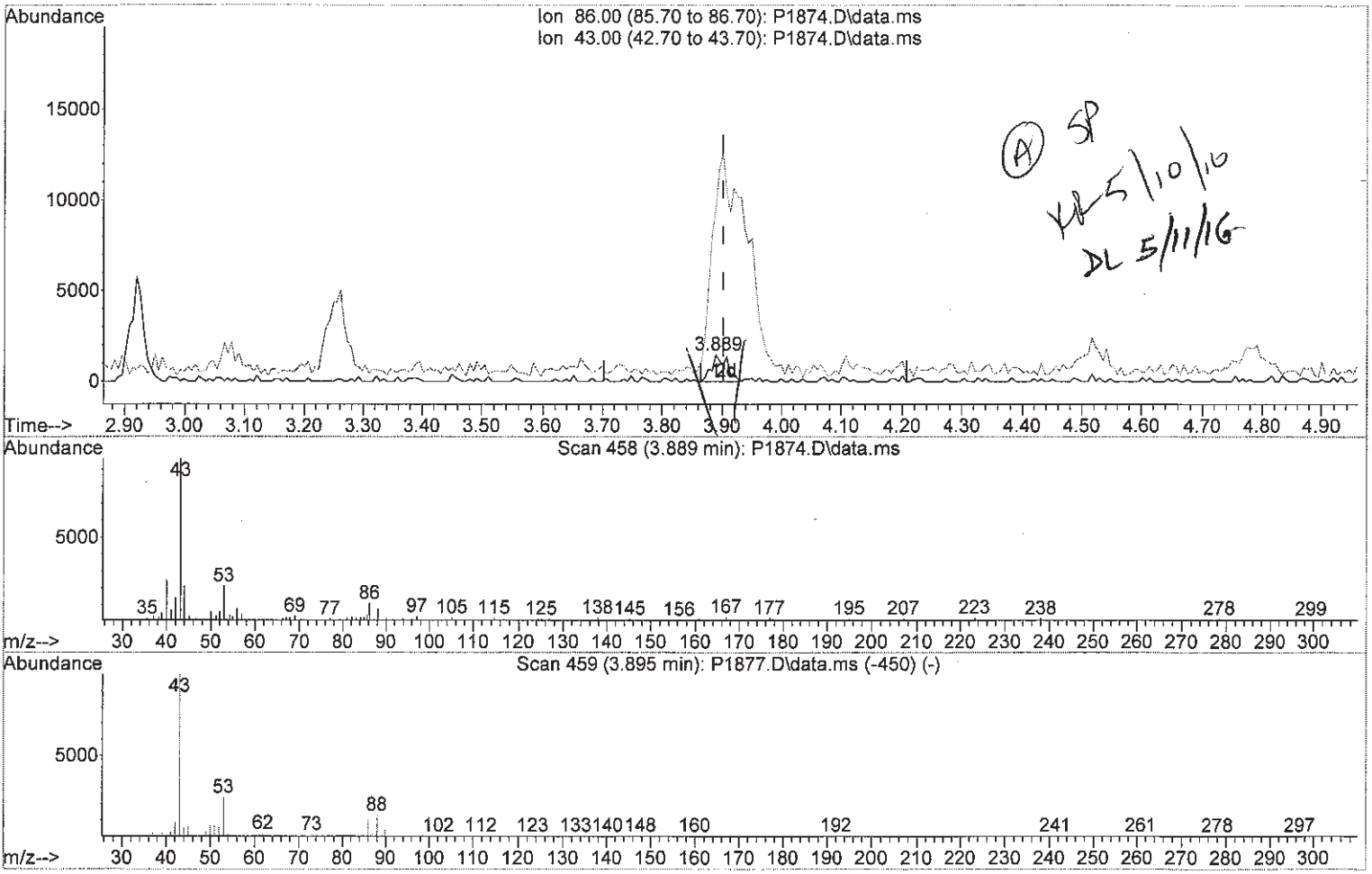
response 1806

Ion	Exp%	Act%
86.00	100	100
43.00	938.30	658.04#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(29) Vinyl Acetate

3.889min (-0.012) 2.01 ppb m

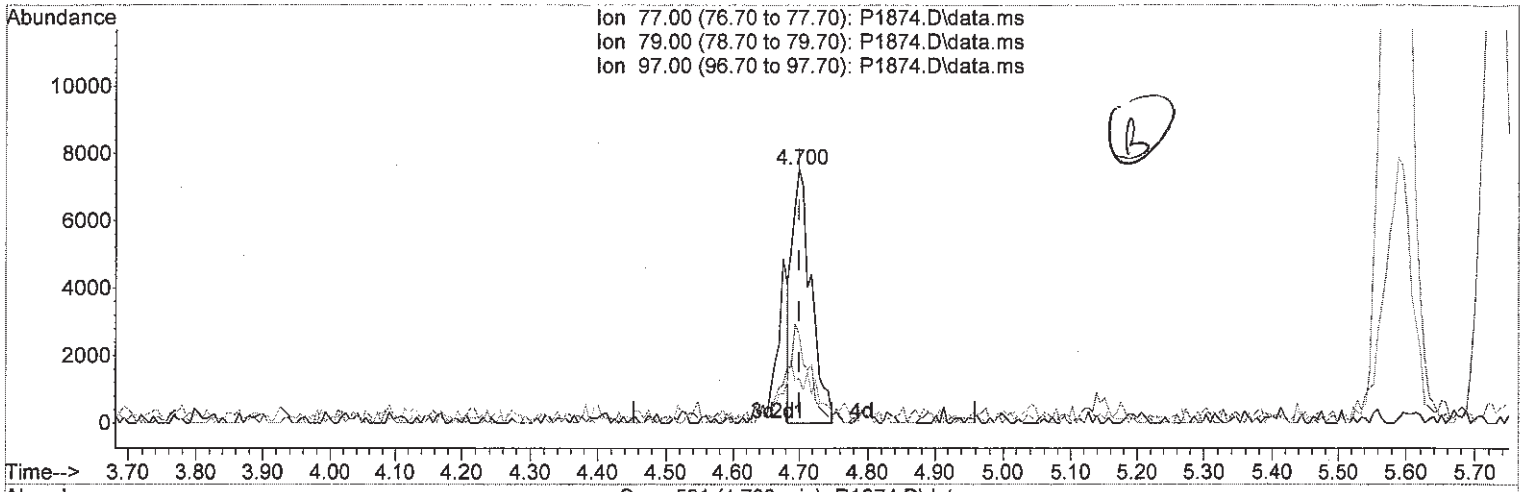
response 2667

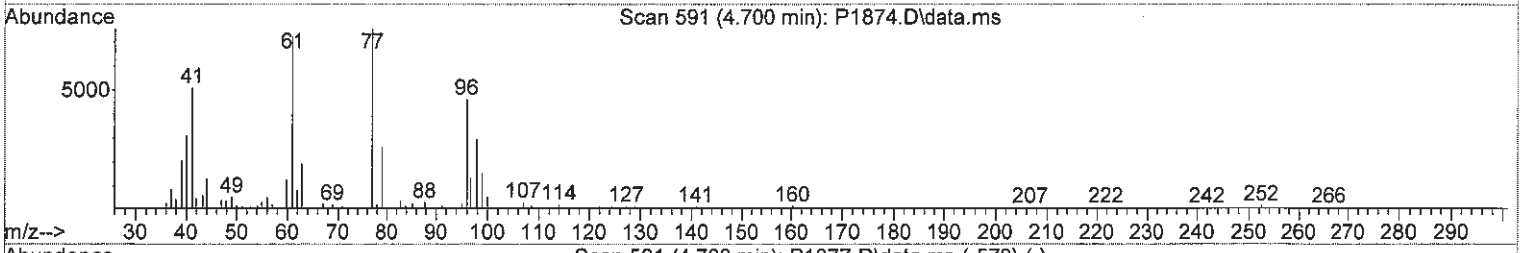
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	886.08#
0.00	0.00	0.00
0.00	0.00	0.00

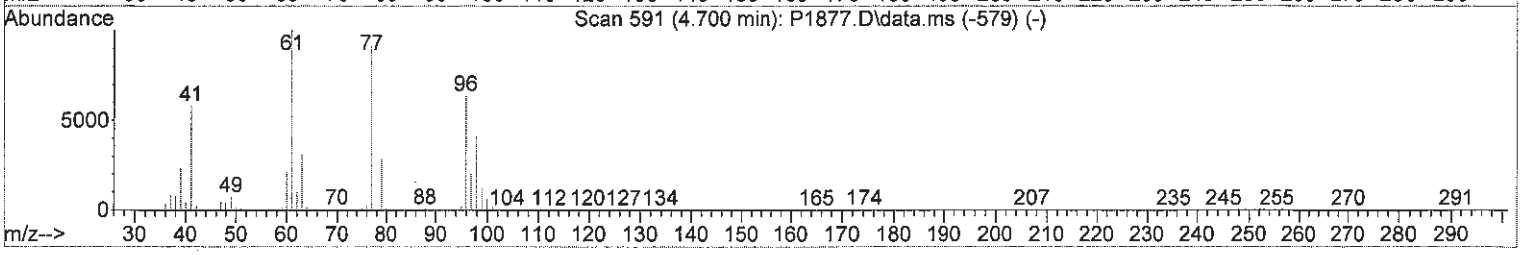
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(33) 2,2-Dichloropropane

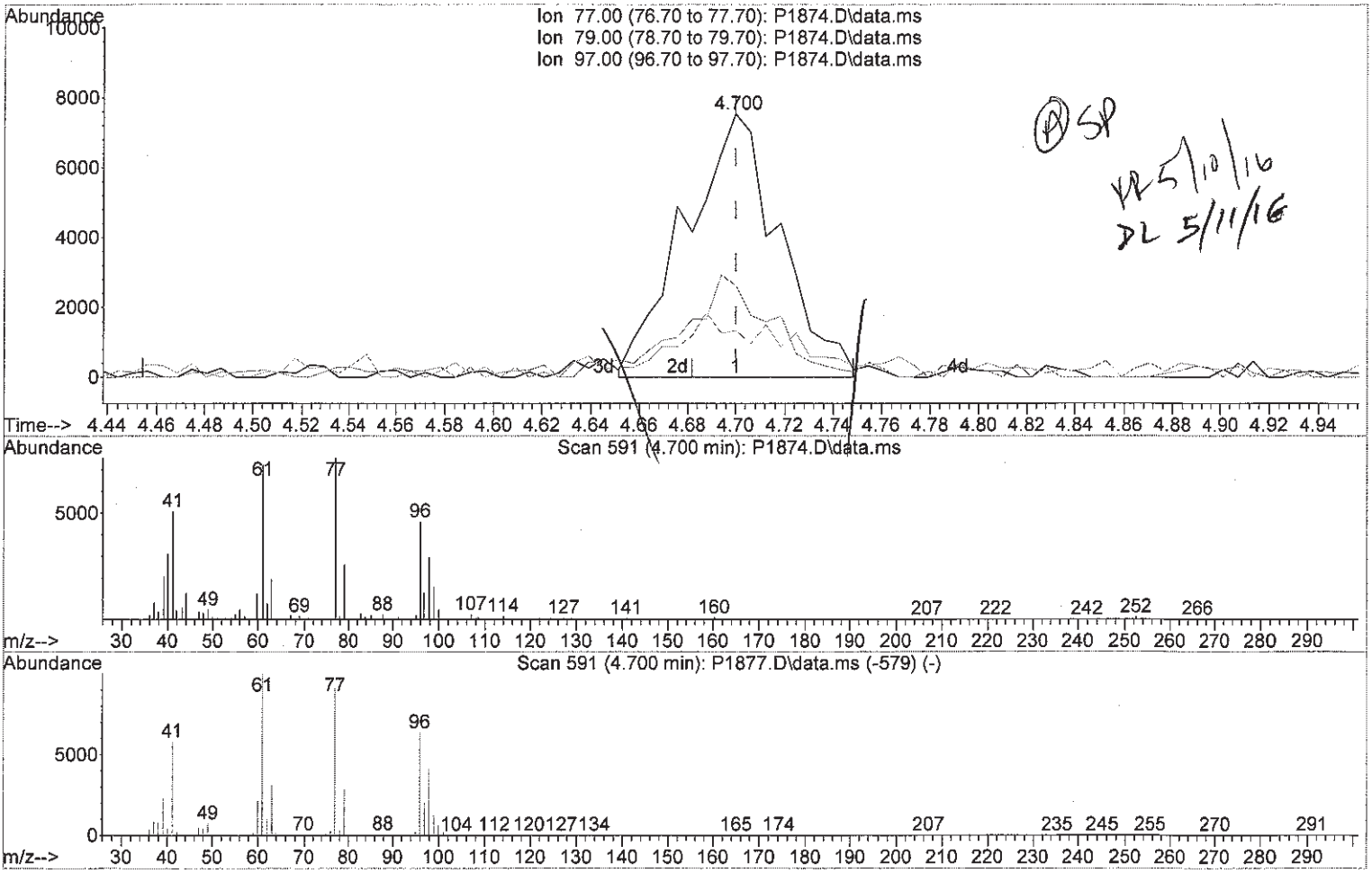
4.700min (-0.000) 1.41 ppb

response 14959

Ion	Exp%	Act%
77.00	100	100
79.00	31.60	34.82
97.00	21.90	17.60
0.00	0.00	0.00

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(33) 2,2-Dichloropropane

4.700min (-0.000) 1.91 ppb m

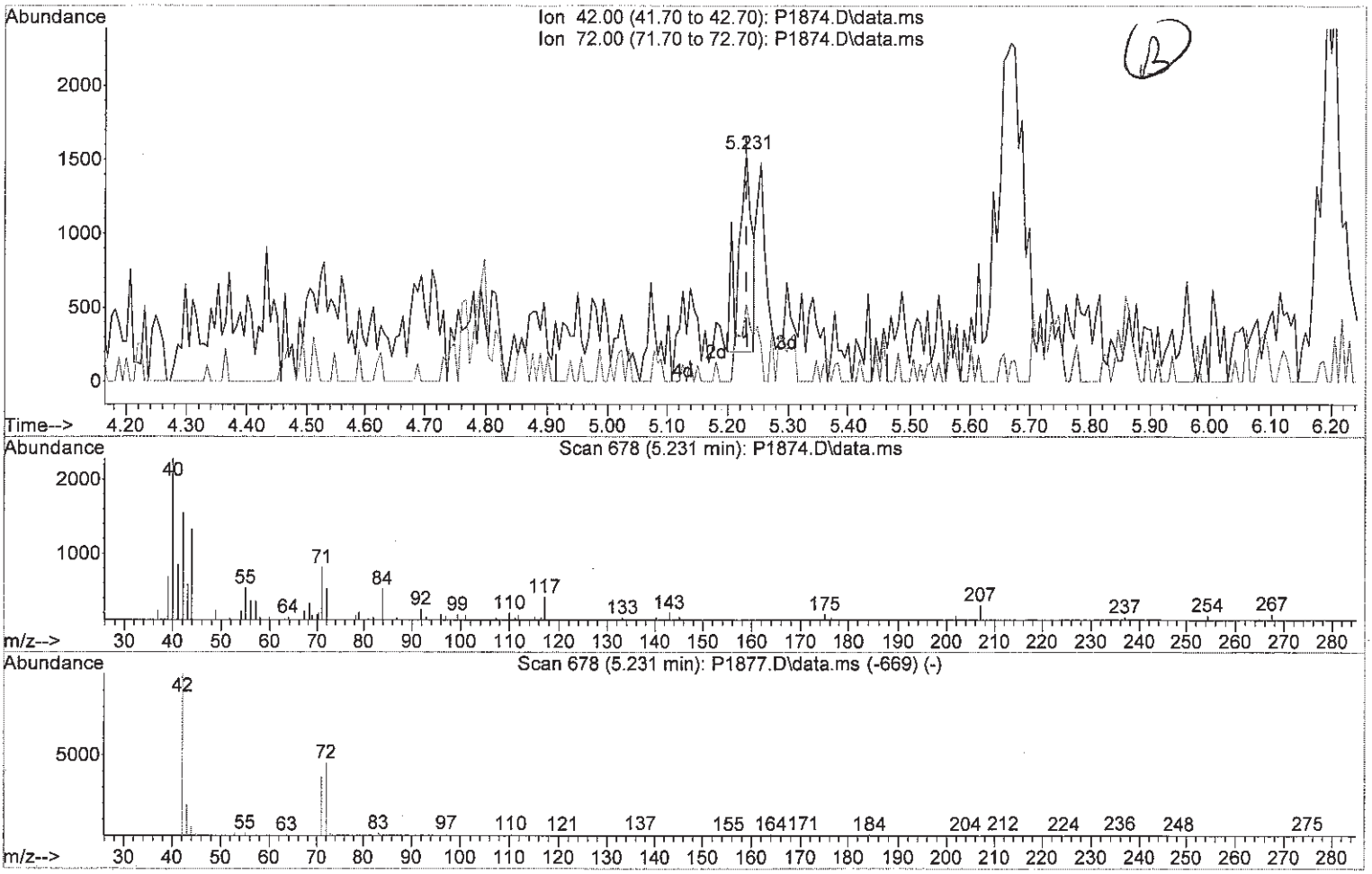
response 20163

Ion	Exp%	Act%
77.00	100	100
79.00	31.60	34.82
97.00	21.90	17.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(39) Tetrahydrofuran

5.231min (-0.000) 1.34 ppb

response 2054

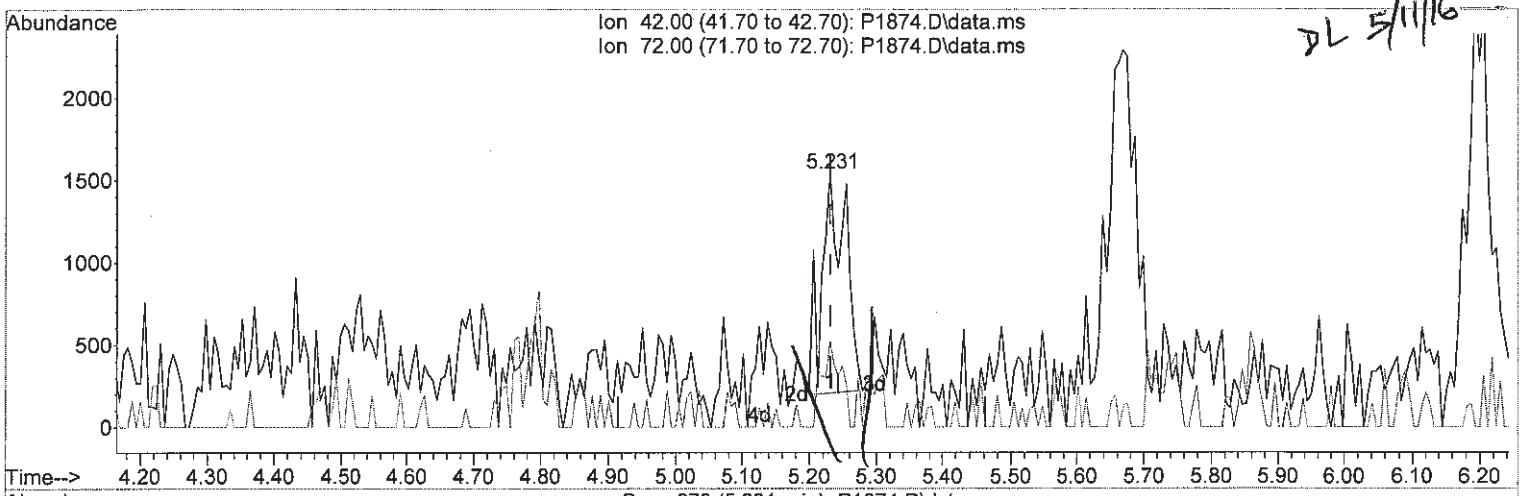
Ion	Exp%	Act%
42.00	100	100
72.00	44.00	33.90
0.00	0.00	0.00
0.00	0.00	0.00

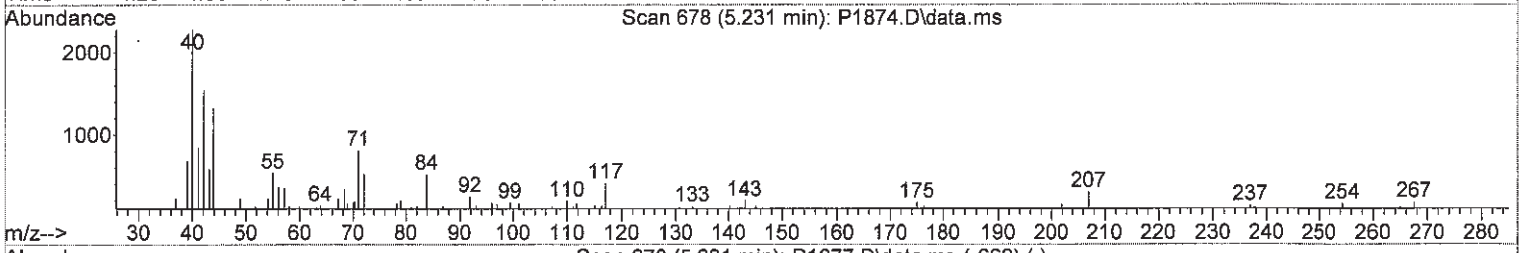
Quantitation Report (Qedit)

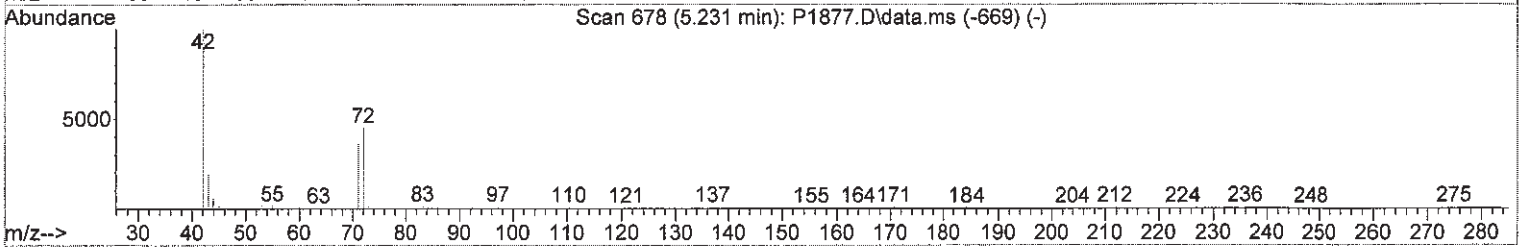
Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

(1) SP 5/10/16
DL 5/11/16







TIC: P1874.D\data.ms

(39) Tetrahydrofuran

5.231min (-0.000) 2.15 ppb m

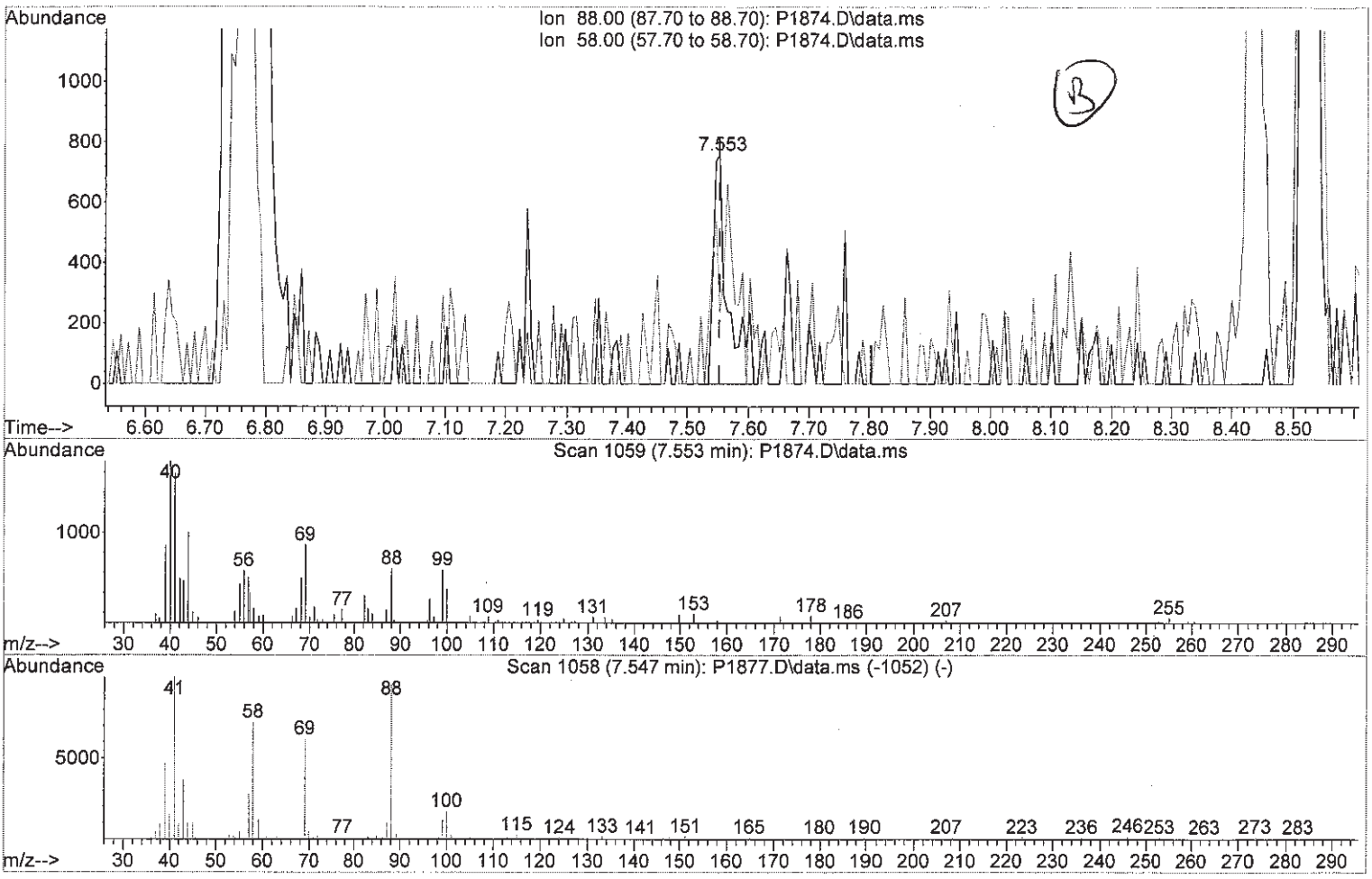
response 3303

Ion	Exp%	Act%
42.00	100	100
72.00	44.00	33.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 27.95 ppb

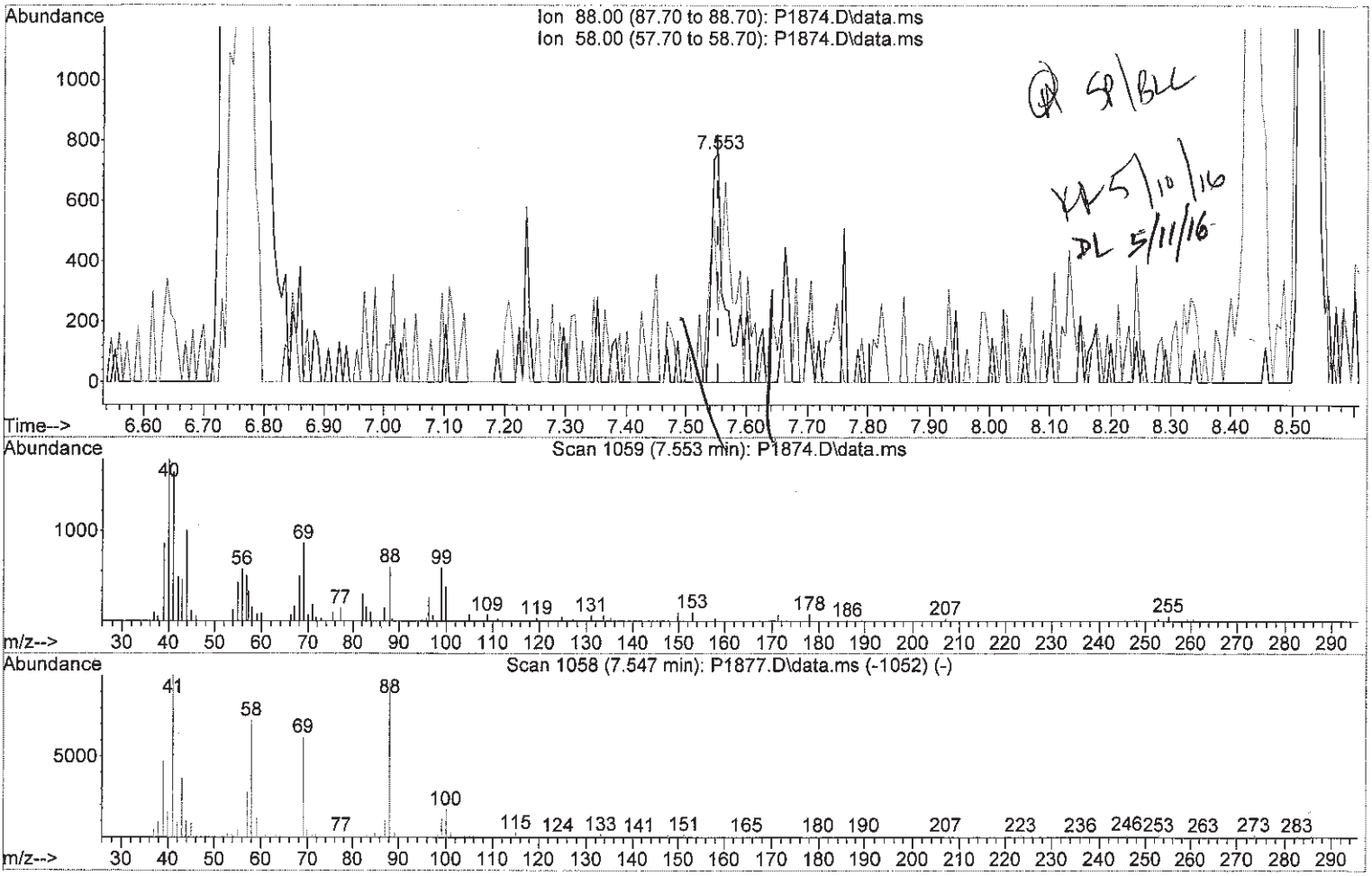
response 1245

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	31.57#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(58) 1,4-Dioxane

7.553min (-0.000) 30.45 ppb m

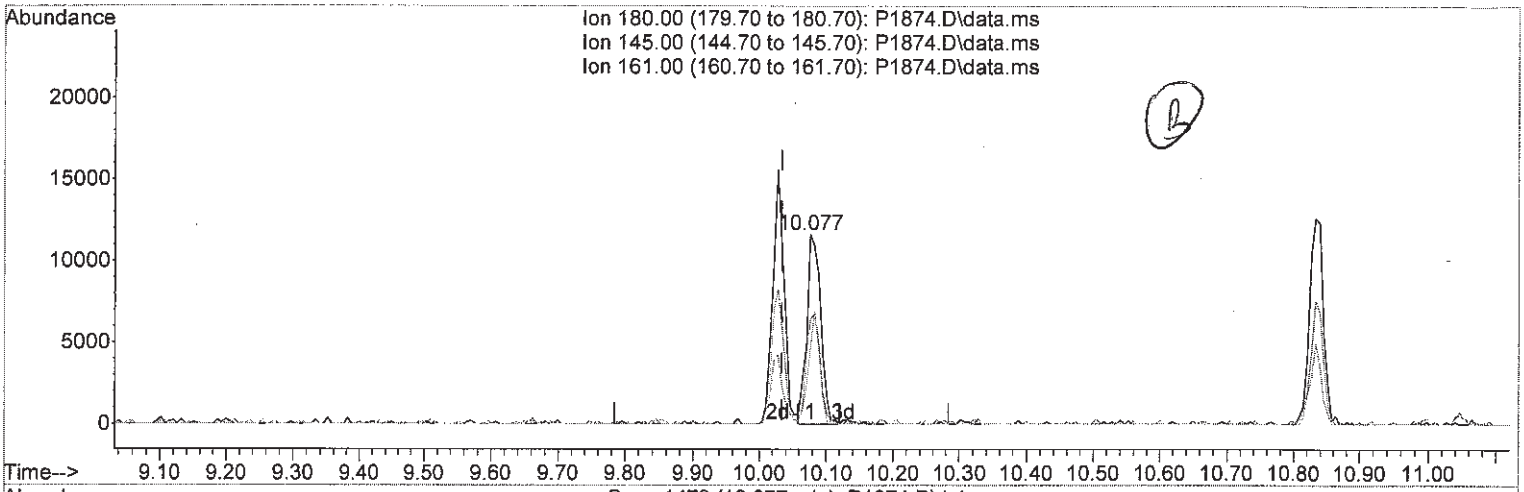
response 1356

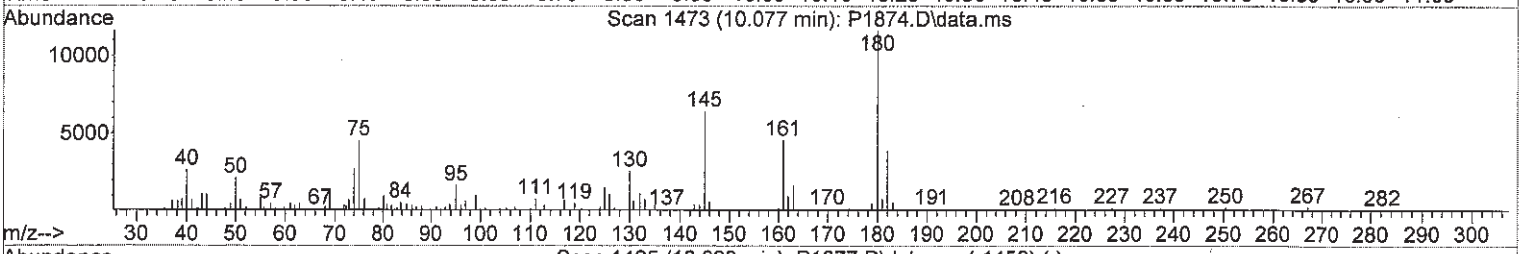
Ion	Exp%	Act%
88.00	100	100
58.00	76.70	37.52#
0.00	0.00	0.00
0.00	0.00	0.00

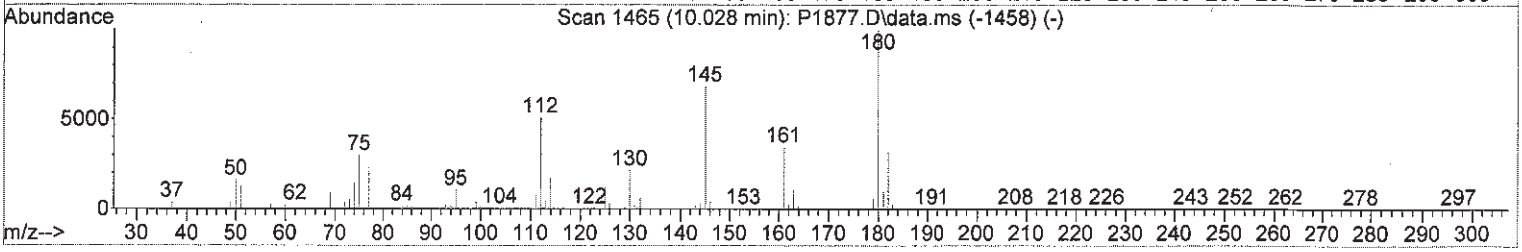
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1874.D\data.ms

(79) 3-CBTF

10.077min (+0.043) 1.80 ppb

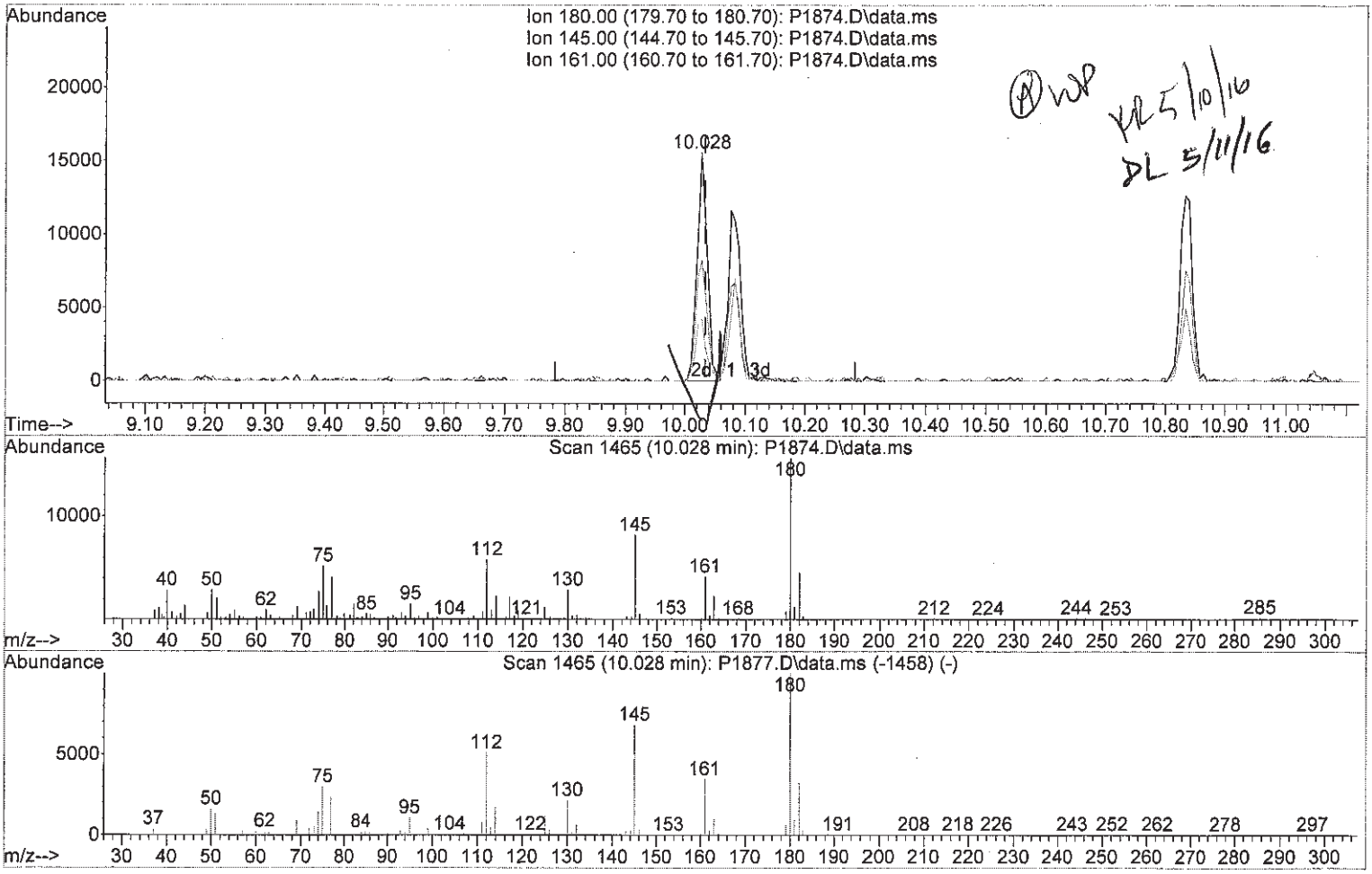
response 16540

Ion	Exp%	Act%
180.00	100	100
145.00	68.30	55.29
161.00	34.50	39.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 10:35:34 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1874.D\data.ms

(79) 3-CBTF

10.028min (-0.006) 1.96 ppb m

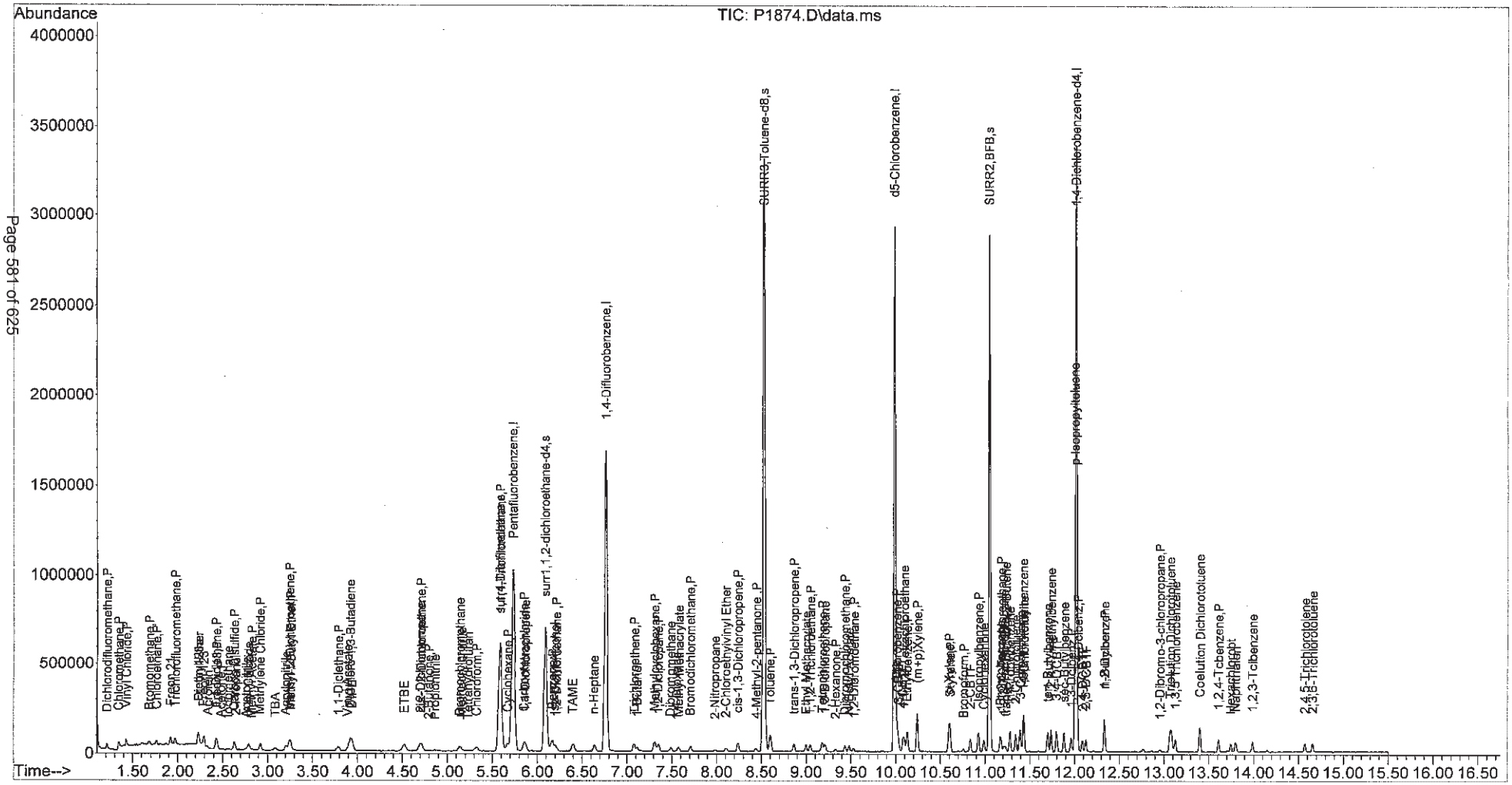
response 17979

Ion	Exp%	Act%
180.00	100	100
145.00	68.30	52.61#
161.00	34.50	26.99#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1874.D
Acq On : 9 May 2016 3:21 pm
Operator : K.Ruest
Sample : 2.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 11:08:38 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Page 584 of 625

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	813526	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1366279	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1261216	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	633883	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	511180	70.41	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 140.82%#				
48) surr1,1,2-dichloroetha...	6.090	65	591805	68.84	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 137.68%#				
65) SURR3,Toluene-d8	8.529	98	2238736	71.17	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 142.34%#				
70) SURR2,BFB	11.047	95	848301	69.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 139.60%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	40186	4.19	ppb		97
3) Chloromethane	1.341	50	50679	4.87	ppb		98
4) Vinyl Chloride	1.427	62	56929	4.88	ppb		99
5) Bromomethane	1.677	94	21376	4.51	ppb		94
6) Chloroethane	1.762	64	29829	4.78	ppb		89
7) Freon 21	1.920	67	66130	4.92	ppb		96
8) Trichlorofluoromethane	1.975	101	46859	4.68	ppb		95
9) Diethyl Ether	2.225	59	28733	4.82	ppb		94
10) Freon 123a	2.231	67	41881	4.73	ppb		91
11) Freon 123	2.286	83	50381	4.93	ppb		97
12) Acrolein	2.329	56	17238	21.51	ppb		100
13) 1,1-Diclethene	2.420	96	32029	5.20	ppb		90
14) Freon 113	2.433	101	30020	5.01	ppb		83
15) Acetone	2.487	43	8935	5.62	ppb		92
16) 2-Propanol	2.646	45	29456	95.46	ppb		93
17) Iodomethane	2.561	142	17242	3.03	ppb		89
18) Carbon Disulfide	2.628	76	102505	5.00	ppb		98
19) Acetonitrile	2.756	40	6903	26.91	ppb	#	48
20) Allyl Chloride	2.792	76	17831	5.14	ppb		95
21) Methyl Acetate	2.823	43	17909	4.66	ppb		83
22) Methylene Chloride	2.920	84	33418	4.87	ppb		93
23) TBA	3.085	59	46558	94.97	ppb		87
24) Acrylonitrile	3.201	53	44935	24.12	ppb		99
25) Methyl-t-Butyl Ether	3.262	73	93116	5.13	ppb		98
26) trans-1,2-Dichloroethene	3.237	96	33876	4.82	ppb	#	85
28) 1,1-Diclethane	3.786	63	59358	4.85	ppb		98
29) Vinyl Acetate	3.902	86	6401m	4.87	ppb		
30) DIPE	3.944	45	124065	4.93	ppb		95
31) 2-Chloro-1,3-Butadiene	3.914	53	67947	4.98	ppb		81
32) ETBE	4.524	59	111716	5.01	ppb		96
33) 2,2-Dichloropropane	4.700	77	51471	4.91	ppb		93
34) cis-1,2-Dichloroethene	4.706	96	34897	4.70	ppb		94
35) 2-Butanone	4.767	43	12583	5.25	ppb		88
36) Propionitrile	4.865	54	16459	23.67	ppb		83

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.127	130	21096	5.45	ppb		91
38) Methacrylonitrile	5.152	67	11056	5.29	ppb		86
39) Tetrahydrofuran	5.231	42	7665	5.04	ppb	#	61
40) Chloroform	5.328	83	57115	4.81	ppb		94
41) 1,1,1-Trichloroethane	5.584	97	51787	5.12	ppb		90
42) TAME	6.395	73	93344	4.80	ppb		96
44) Cyclohexane	5.670	41	36482	4.79	ppb		92
46) Carbontetrachloride	5.853	121	13016	4.98	ppb		91
47) 1,1-Dichloropropene	5.865	75	45488	4.86	ppb		93
49) Benzene	6.170	78	141721	5.15	ppb		97
50) 1,2-Dichloroethane	6.200	62	41162	5.01	ppb		93
51) Iso-Butyl Alcohol	6.200	43	23843	92.98	ppb		99
52) n-Heptane	6.639	43	41240	4.92	ppb		94
53) 1-Butanol	7.115	56	32441	217.83	ppb		97
54) Trichloroethene	7.078	130	33542	4.98	ppb		94
55) Methylcyclohexane	7.310	55	45479	5.08	ppb		92
56) 1,2-Diclpropane	7.352	63	36587	4.92	ppb		96
57) Dibromomethane	7.493	93	17350	4.95	ppb		97
58) 1,4-Dioxane	7.560	88	4679	104.82	ppb		91
59) Methyl Methacrylate	7.572	69	21056	4.85	ppb		98
60) Bromodichloromethane	7.706	83	46831	5.16	ppb		92
61) 2-Nitropropane	7.986	41	14894	10.11	ppb		91
62) 2-Chloroethylvinyl Ether	8.108	63	18995	4.79	ppb		98
63) cis-1,3-Dichloropropene	8.236	75	56958	4.93	ppb		97
64) 4-Methyl-2-pentanone	8.437	43	24836	4.72	ppb		91
66) Toluene	8.602	91	152044	5.24	ppb		99
67) trans-1,3-Dichloropropene	8.864	75	47739	4.96	ppb		93
68) Ethyl Methacrylate	8.998	69	41923	4.80	ppb		99
69) 1,1,2-Trichloroethane	9.041	97	26157	4.87	ppb		99
72) Tetrachloroethene	9.175	164	23819	4.90	ppb		97
73) 2-Hexanone	9.328	43	16406	4.49	ppb		92
74) 1,3-Dichloropropane	9.212	76	44176	4.68	ppb		84
75) Dibromochloromethane	9.431	129	28345	4.53	ppb		85
76) N-Butyl Acetate	9.480	43	45478	4.77	ppb		95
77) 1,2-Dibromoethane	9.529	107	25793	5.04	ppb		100
78) Chlorobenzene	10.016	112	95973	5.19	ppb		95
79) 3-CBTF	10.029	180	44727	4.87	ppb		97
80) 4-CBTF	10.083	180	42392	5.23	ppb		97
81) 1,1,1,2-Tetrachloroethane	10.102	131	31977	4.94	ppb		96
82) Ethylbenzene	10.132	106	53910	5.23	ppb	#	88
83) (m+p)Xylene	10.242	106	125680	10.35	ppb		90
84) o-Xylene	10.596	106	58985	4.88	ppb		95
85) Styrene	10.608	104	105847	5.24	ppb		97
87) Bromoform	10.754	173	15645	5.18	ppb		98
88) 2-CBTF	10.833	180	41017	4.91	ppb		97
89) Isopropylbenzene	10.925	105	150526	5.42	ppb		97
90) Cyclohexanone	10.986	55	54119	98.10	ppb		89
91) trans-1,4-Dichloro-2-B...	11.224	53	10710	4.96	ppb		81
92) 1,1,2,2-Tetrachloroethane	11.181	83	31533	4.85	ppb		98
93) Bromobenzene	11.169	156	36930	5.24	ppb		96
94) 1,2,3-Trichloropropane	11.211	110	9642	5.03	ppb	#	68

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

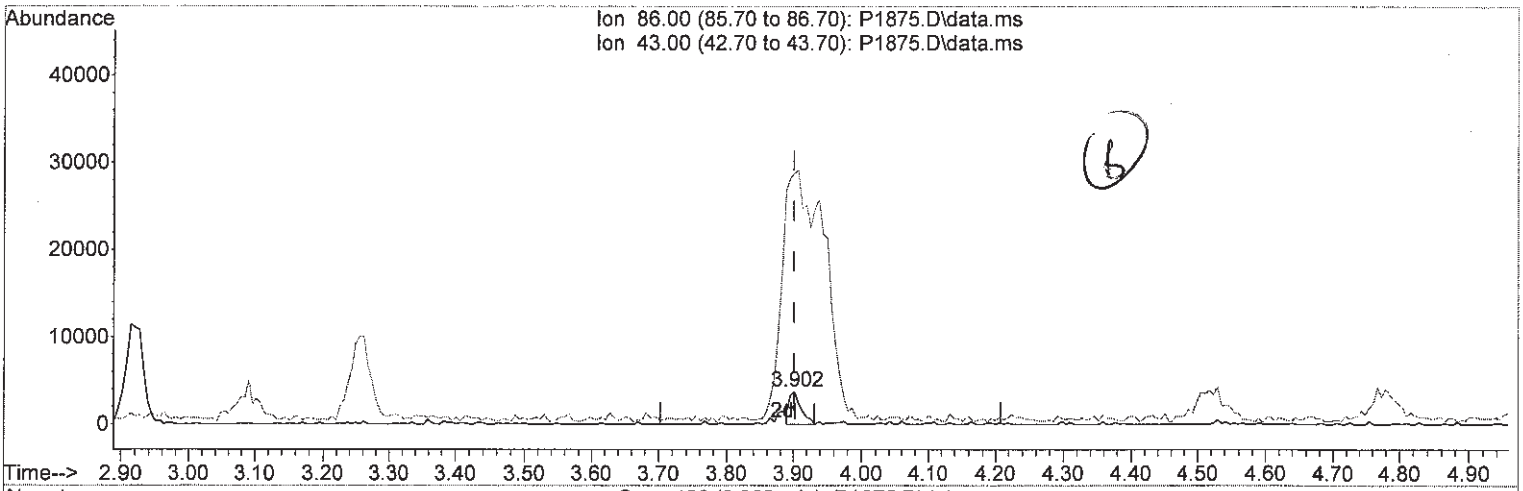
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	182954	5.68	ppb		97
96)	2-Chlorotoluene	11.339	91	108183	5.21	ppb		100
97)	3-Chlorotoluene	11.394	91	116539	5.50	ppb		97
98)	4-Chlorotoluene	11.431	91	127179	5.25	ppb		97
99)	1,3,5-Trimethylbenzene	11.425	105	124284	5.18	ppb		96
100)	tert-Butylbenzene	11.699	119	102151	5.36	ppb		94
101)	1,2,4-Trimethylbenzene	11.736	105	131074	5.32	ppb		97
102)	3,4-DCBTF	11.797	214	29137	4.91	ppb		92
103)	sec-Butylbenzene	11.876	105	147139	5.41	ppb		97
104)	p-Isopropyltoluene	11.998	119	123094	5.25	ppb		95
105)	1,3-Dclbenz	11.961	146	67403	5.04	ppb		96
106)	1,4-Dclbenz	12.034	146	70184	5.05	ppb		97
107)	2,4-DCBTF	12.083	214	26299	4.67	ppb		97
108)	2,5-DCBTF	12.126	214	28786	4.82	ppb	#	88
109)	n-Butylbenzene	12.333	91	110056	5.19	ppb		97
110)	1,2-Dclbenz	12.333	146	62019	4.90	ppb		93
111)	1,2-Dibromo-3-chloropr...	12.955	157	5491	4.60	ppb	#	81
112)	Trielution Dichlorotol...	13.071	125	163894	15.57	ppb		98
113)	1,3,5 Trichlorobenzene	13.126	180	43226	5.12	ppb		93
114)	Coelution Dichlorotoluene	13.400	125	117042	10.49	ppb		97
115)	1,2,4-Tcbenzene	13.607	180	35661	4.75	ppb		85
116)	Hexachlorobt	13.747	225	15815	5.12	ppb		88
117)	Naphthalen	13.796	128	80676	5.01	ppb		98
118)	1,2,3-Tclbenzene	13.985	180	30050	4.72	ppb		92
119)	2,4,5-Trichlorotolene	14.570	159	21884	4.83	ppb	#	93
120)	2,3,6-Trichlorotoluene	14.656	159	20995	4.98	ppb		90

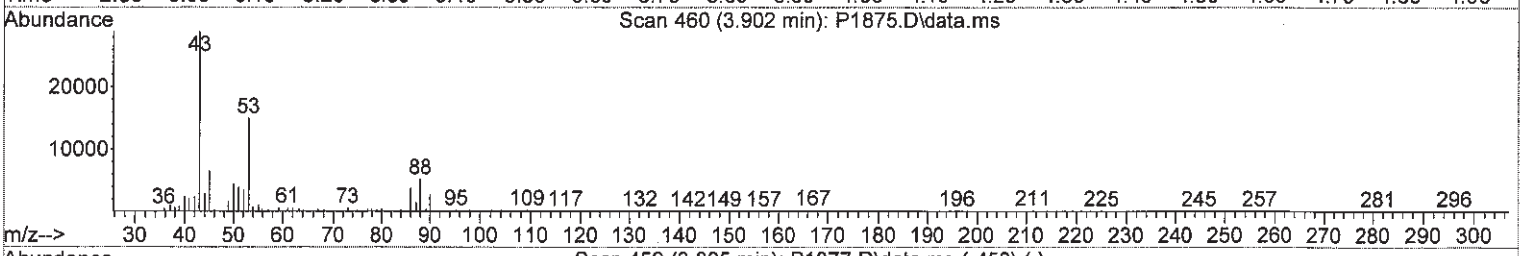
(#) = qualifier out of range (m) = manual integration (+) = signals summed

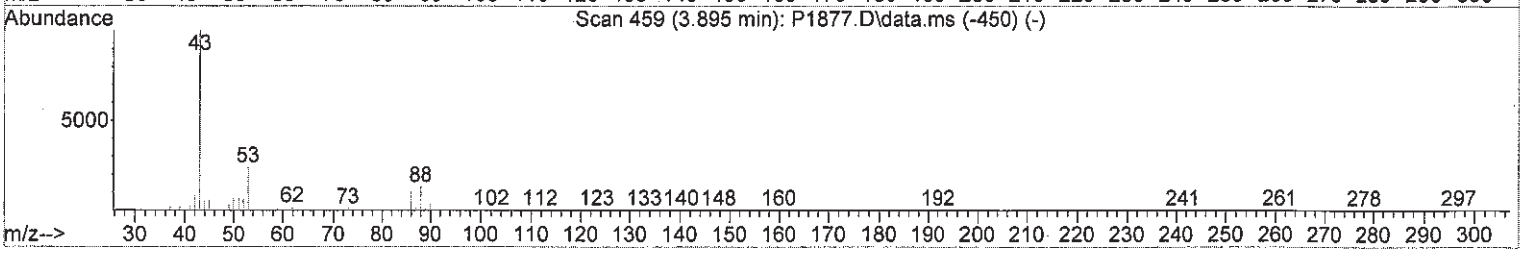
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 10:35:39 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1875.D\data.ms

(29) Vinyl Acetate

3.902min (+0.000) 3.40 ppb

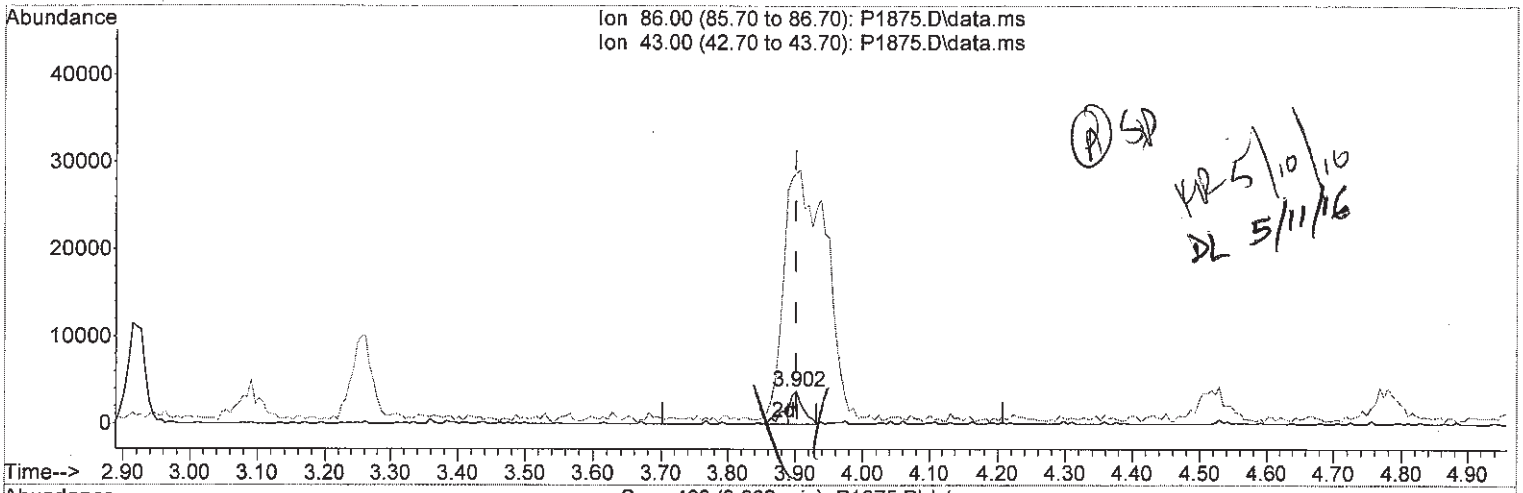
response 4461

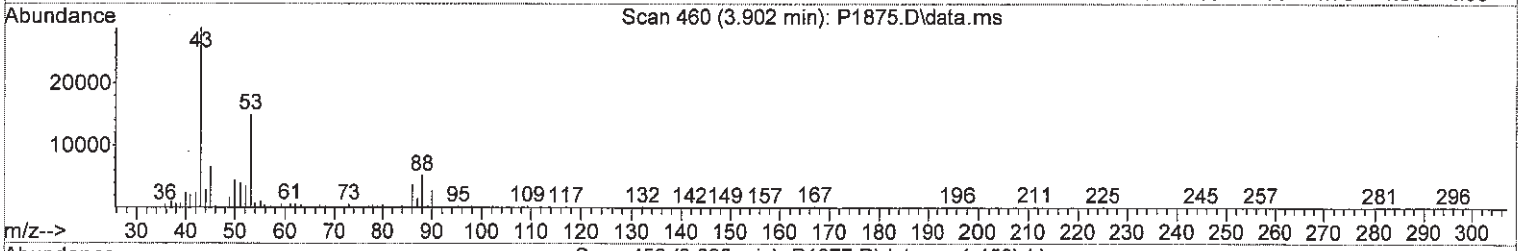
Ion	Exp%	Act%
86.00	100	100
43.00	938.30	764.69#
0.00	0.00	0.00
0.00	0.00	0.00

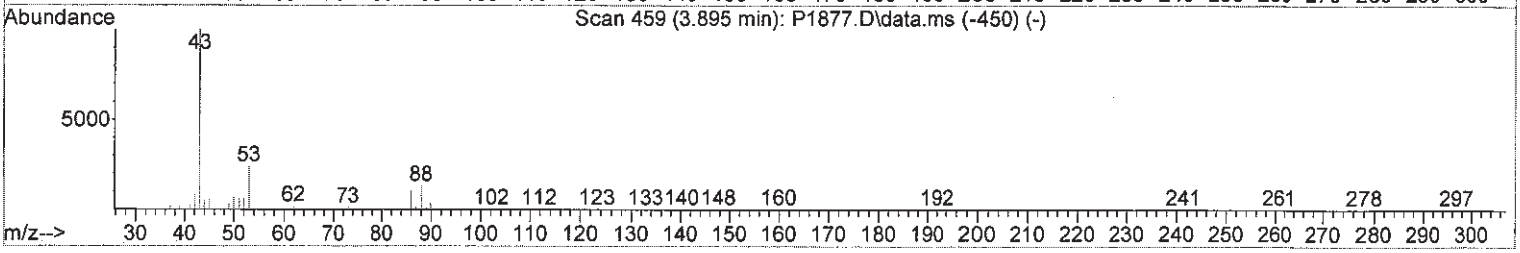
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 10:35:39 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1875.D\data.ms

(29) Vinyl Acetate

3.902min (+0.000) 4.87 ppb m

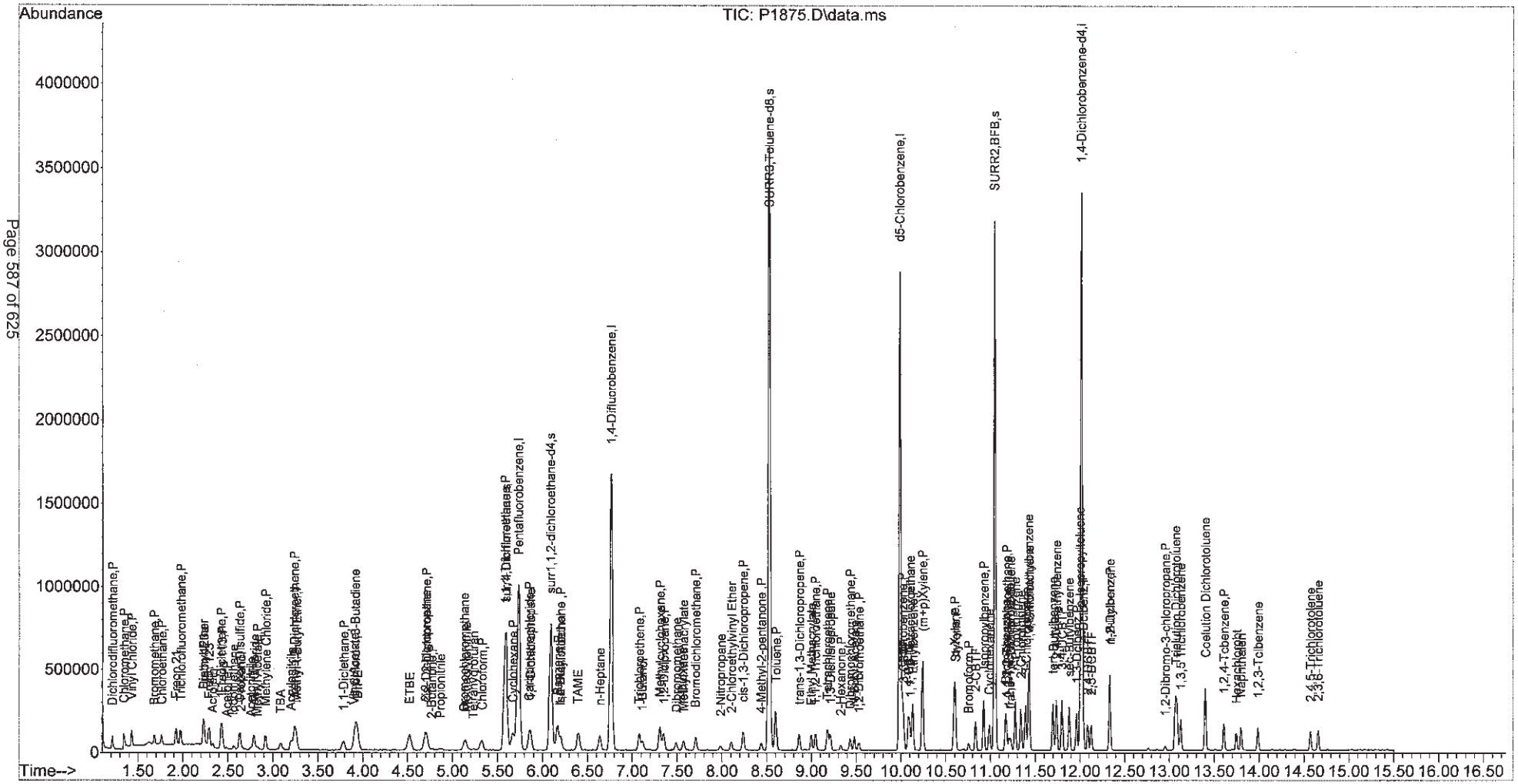
response 6401

Ion	Exp%	Act%
86.00	100	100
43.00	938.30	764.69#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1875.D
Acq On : 9 May 2016 3:51 pm
Operator : K.Ruest
Sample : 5.0ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 10 11:10:19 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	811858	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1360575	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1254082	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	645021	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.591	113	672625	99.60	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	199.20%#			
48) surr1,1,2-dichloroetha...	6.090	65	800092	101.40	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	202.80%#			
65) SURR3,Toluene-d8	8.529	98	2849051	100.71	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	201.42%#			
70) SURR2,BFB	11.047	95	1119803	99.64	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	199.28%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	207242	21.63	ppb		100
3) Chloromethane	1.347	50	218956	21.10	ppb		95
4) Vinyl Chloride	1.427	62	247482	21.28	ppb		99
5) Bromomethane	1.683	94	89877	19.02	ppb		96
6) Chloroethane	1.762	64	127090	20.39	ppb		98
7) Freon 21	1.921	67	254502	18.97	ppb		99
8) Trichlorofluoromethane	1.969	101	202337	20.23	ppb		96
9) Diethyl Ether	2.225	59	120886	20.32	ppb		96
10) Freon 123a	2.231	67	157980	17.86	ppb		96
11) Freon 123	2.292	83	181821	17.82	ppb		99
12) Acrolein	2.335	56	75859	94.85	ppb		95
13) 1,1-Diclethene	2.426	96	128017	20.84	ppb		97
14) Freon 113	2.433	101	125559	20.98	ppb		94
15) Acetone	2.481	43	31745	19.99	ppb		85
16) 2-Propanol	2.640	45	116406	378.04	ppb		98
17) Iodomethane	2.567	142	103104	18.15	ppb		99
18) Carbon Disulfide	2.628	76	414300	20.23	ppb		98
19) Acetonitrile	2.762	40	23612	92.23	ppb	#	77
20) Allyl Chloride	2.792	76	74220	21.44	ppb		97
21) Methyl Acetate	2.829	43	77037	20.07	ppb		98
22) Methylene Chloride	2.920	84	141755	20.71	ppb		96
23) TBA	3.085	59	207718	424.57	ppb		95
24) Acrylonitrile	3.207	53	196605	105.76	ppb		99
25) Methyl-t-Butyl Ether	3.256	73	393027	21.69	ppb		98
26) trans-1,2-Dichloroethene	3.237	96	142917	20.38	ppb		91
28) 1,1-Diclethane	3.786	63	257765	21.12	ppb		96
29) Vinyl Acetate	3.896	86	23844	18.18	ppb	#	72
30) DIPE	3.938	45	545854	21.75	ppb		97
31) 2-Chloro-1,3-Butadiene	3.920	53	265185	19.47	ppb		96
32) ETBE	4.524	59	480369	21.61	ppb		96
33) 2,2-Dichloropropane	4.694	77	219818	21.00	ppb		99
34) cis-1,2-Dichloroethene	4.707	96	151263	20.43	ppb		88
35) 2-Butanone	4.774	43	43273	18.09	ppb		92
36) Propionitrile	4.859	54	68382	98.56	ppb		95

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.145	130	81570	21.10	ppb		89
38) Methacrylonitrile	5.158	67	45863	21.99	ppb		90
39) Tetrahydrofuran	5.237	42	32756	21.56	ppb		84
40) Chloroform	5.322	83	243241	20.55	ppb		95
41) 1,1,1-Trichloroethane	5.591	97	202183	20.03	ppb		99
42) TAME	6.401	73	429970	22.18	ppb		99
44) Cyclohexane	5.670	41	138021	18.21	ppb		99
46) Carbontetrachloride	5.859	121	52524	20.19	ppb		87
47) 1,1-Dichloropropene	5.865	75	195614	20.97	ppb		98
49) Benzene	6.170	78	594791	21.71	ppb		98
50) 1,2-Dichloroethane	6.206	62	172217	21.07	ppb		96
51) Iso-Butyl Alcohol	6.200	43	99243	388.63	ppb		97
52) n-Heptane	6.639	43	171994	20.60	ppb		97
53) 1-Butanol	7.109	56	146886	990.41	ppb		97
54) Trichloroethene	7.078	130	140149	20.90	ppb		95
55) Methylcyclohexane	7.310	55	166569	18.69	ppb		95
56) 1,2-Diclpropane	7.352	63	151796	20.50	ppb		97
57) Dibromomethane	7.486	93	72852	20.85	ppb		95
58) 1,4-Dioxane	7.547	88	17526m	394.26	ppb		
59) Methyl Methacrylate	7.572	69	86969	20.13	ppb	#	82
60) Bromodichloromethane	7.712	83	186061	20.58	ppb		99
61) 2-Nitropropane	7.980	41	62474	42.59	ppb		97
62) 2-Chloroethylvinyl Ether	8.102	63	76058	19.24	ppb		98
63) cis-1,3-Dichloropropene	8.236	75	247262	21.48	ppb		97
64) 4-Methyl-2-pentanone	8.438	43	103613	19.78	ppb		95
66) Toluene	8.596	91	623444	21.56	ppb		100
67) trans-1,3-Dichloropropene	8.858	75	208968	21.80	ppb		95
68) Ethyl Methacrylate	8.998	69	181768	20.90	ppb		99
69) 1,1,2-Trichloroethane	9.041	97	106736	19.97	ppb		97
72) Tetrachloroethene	9.181	164	105181	21.75	ppb		93
73) 2-Hexanone	9.328	43	72543	19.98	ppb		97
74) 1,3-Dichloropropane	9.212	76	199075	21.20	ppb		98
75) Dibromochloromethane	9.431	129	126428	20.30	ppb		99
76) N-Butyl Acetate	9.480	43	200348	21.14	ppb		97
77) 1,2-Dibromoethane	9.529	107	110277	21.67	ppb		90
78) Chlorobenzene	10.010	112	391406	21.28	ppb		98
79) 3-CBTF	10.029	180	181796	19.92	ppb		96
80) 4-CBTF	10.084	180	165211	20.49	ppb		95
81) 1,1,1,2-Tetrachloroethane	10.096	131	136300	21.18	ppb		98
82) Ethylbenzene	10.132	106	214129	20.87	ppb		97
83) (m+p)Xylene	10.242	106	516478	42.79	ppb		91
84) o-Xylene	10.596	106	258003	21.47	ppb		99
85) Styrene	10.608	104	440723	21.96	ppb		98
87) Bromoform	10.754	173	64469	20.96	ppb		96
88) 2-CBTF	10.833	180	178529	21.02	ppb		98
89) Isopropylbenzene	10.925	105	627359	22.22	ppb		97
90) Cyclohexanone	10.986	55	235995	420.39	ppb		98
91) trans-1,4-Dichloro-2-B...	11.230	53	44824	20.38	ppb		98
92) 1,1,2,2-Tetrachloroethane	11.181	83	138961	21.02	ppb		99
93) Bromobenzene	11.169	156	150538	20.99	ppb		93
94) 1,2,3-Trichloropropane	11.211	110	38355	19.67	ppb		96

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

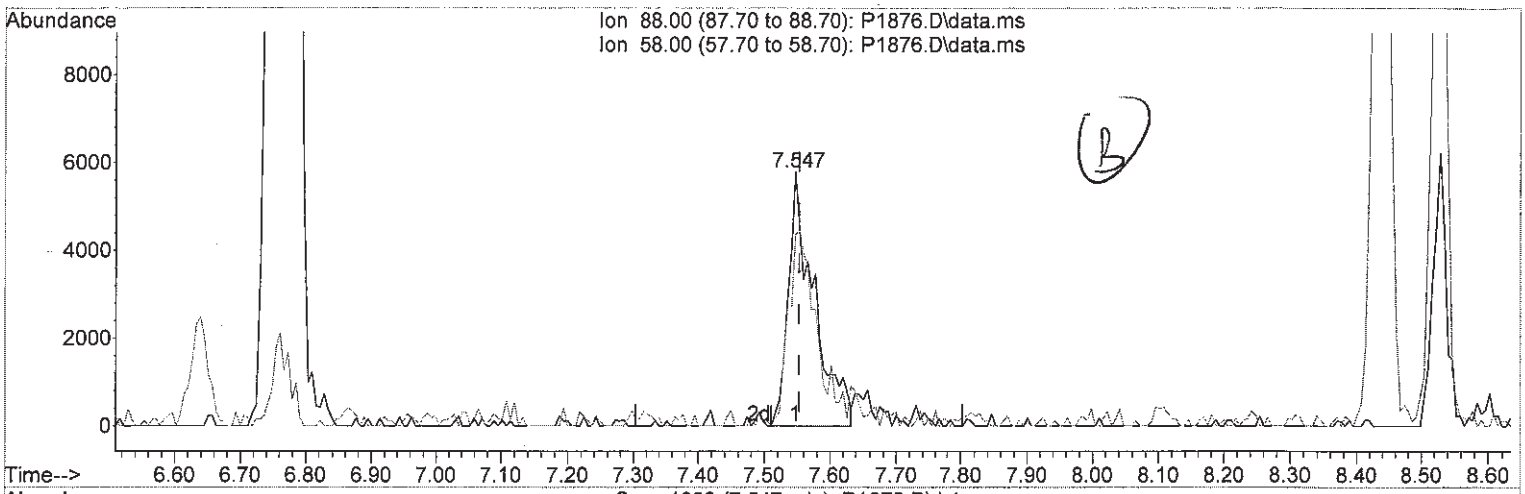
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	752378	22.97	ppb	96
96)	2-Chlorotoluene	11.339	91	464779	21.98	ppb	99
97)	3-Chlorotoluene	11.394	91	472006	21.89	ppb	95
98)	4-Chlorotoluene	11.431	91	541995	21.98	ppb	98
99)	1,3,5-Trimethylbenzene	11.425	105	540665	22.13	ppb	94
100)	tert-Butylbenzene	11.699	119	418916	21.60	ppb	96
101)	1,2,4-Trimethylbenzene	11.736	105	545039	21.74	ppb	99
102)	3,4-DCBTF	11.797	214	122939	20.35	ppb	92
103)	sec-Butylbenzene	11.882	105	597954	21.62	ppb	99
104)	p-Isopropyltoluene	11.998	119	527891	22.11	ppb	98
105)	1,3-Dclbenz	11.961	146	288562	21.21	ppb	98
106)	1,4-Dclbenz	12.034	146	297593	21.03	ppb	96
107)	2,4-DCBTF	12.083	214	117816	20.56	ppb	96
108)	2,5-DCBTF	12.126	214	121800	20.04	ppb	98
109)	n-Butylbenzene	12.327	91	470213	21.78	ppb	99
110)	1,2-Dclbenz	12.333	146	273378	21.23	ppb	99
111)	1,2-Dibromo-3-chloropr...	12.955	157	25729	21.19	ppb	96
112)	Trielution Dichlorotol...	13.071	125	689612	64.37	ppb	97
113)	1,3,5 Trichlorobenzene	13.126	180	179942	20.96	ppb	97
114)	Coelution Dichlorotoluene	13.400	125	500807	44.10	ppb	96
115)	1,2,4-Tcbenzene	13.607	180	162714	21.29	ppb	98
116)	Hexachlorobt	13.747	225	65278	20.77	ppb	96
117)	Naphthalen	13.796	128	366821	22.40	ppb	98
118)	1,2,3-Tclbenzene	13.985	180	141676	21.88	ppb	93
119)	2,4,5-Trichlorotolene	14.570	159	95017	20.59	ppb	95
120)	2,3,6-Trichlorotoluene	14.656	159	83132	19.37	ppb	98

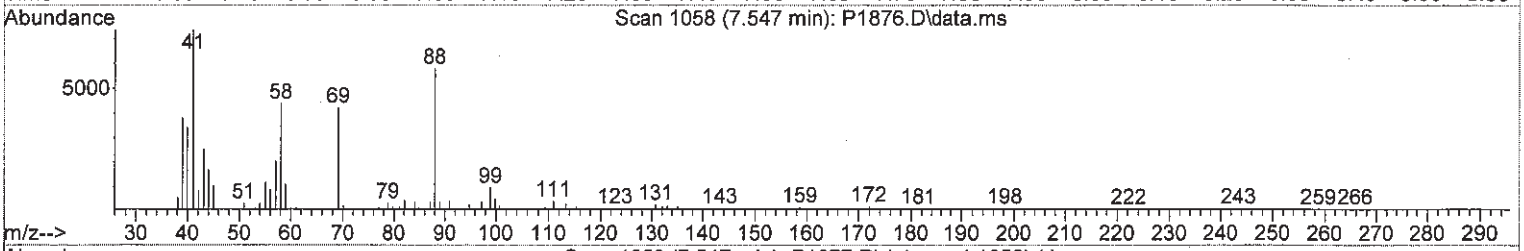
(#) = qualifier out of range (m) = manual integration (+) = signals summed

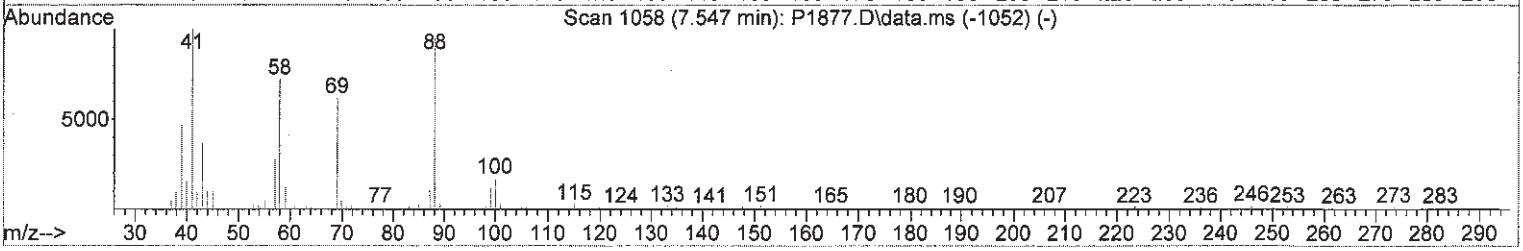
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 10:35:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1876.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 354.00 ppb

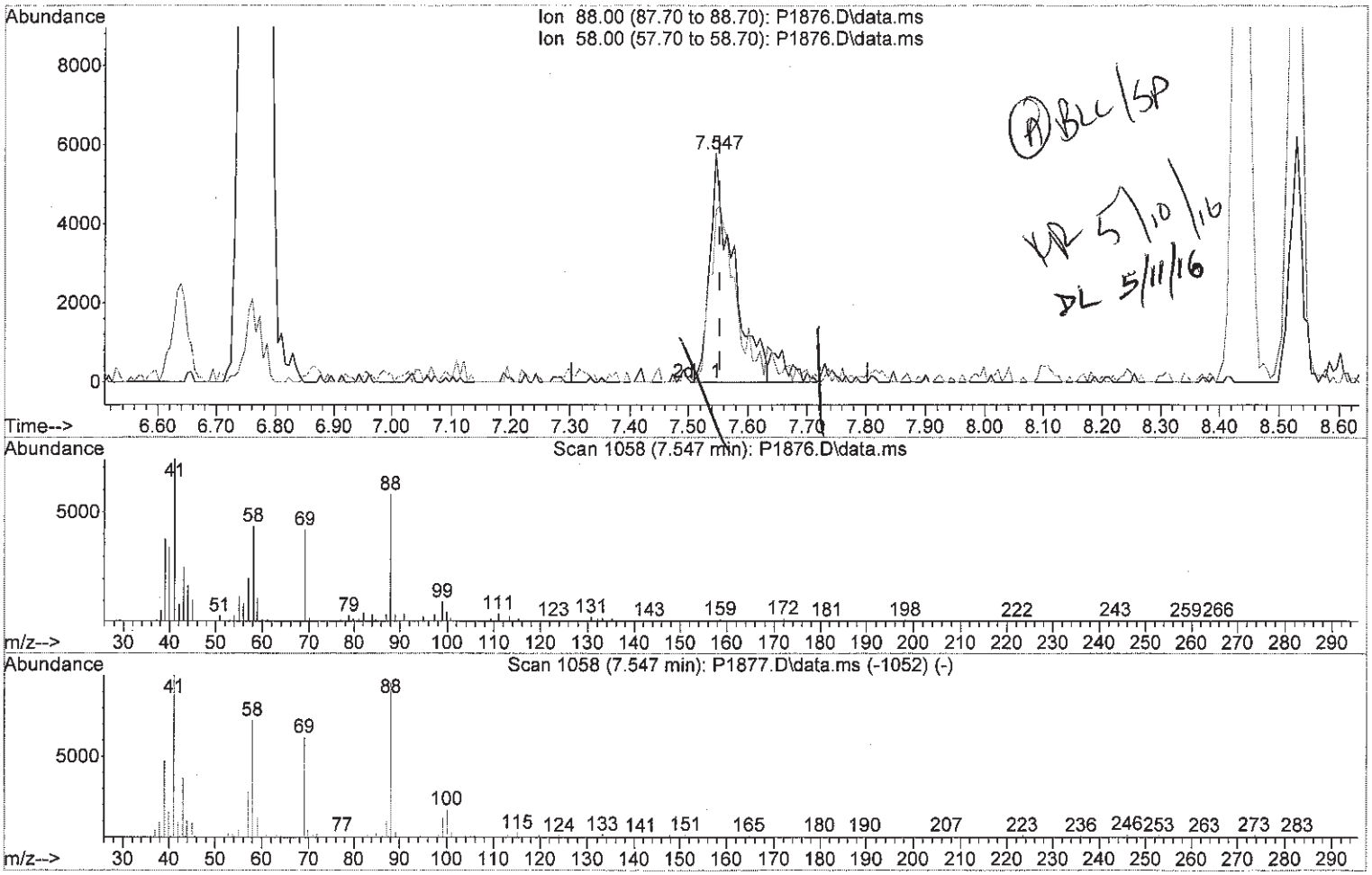
response 15736

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	75.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 10:35:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1876.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 394.26 ppb m

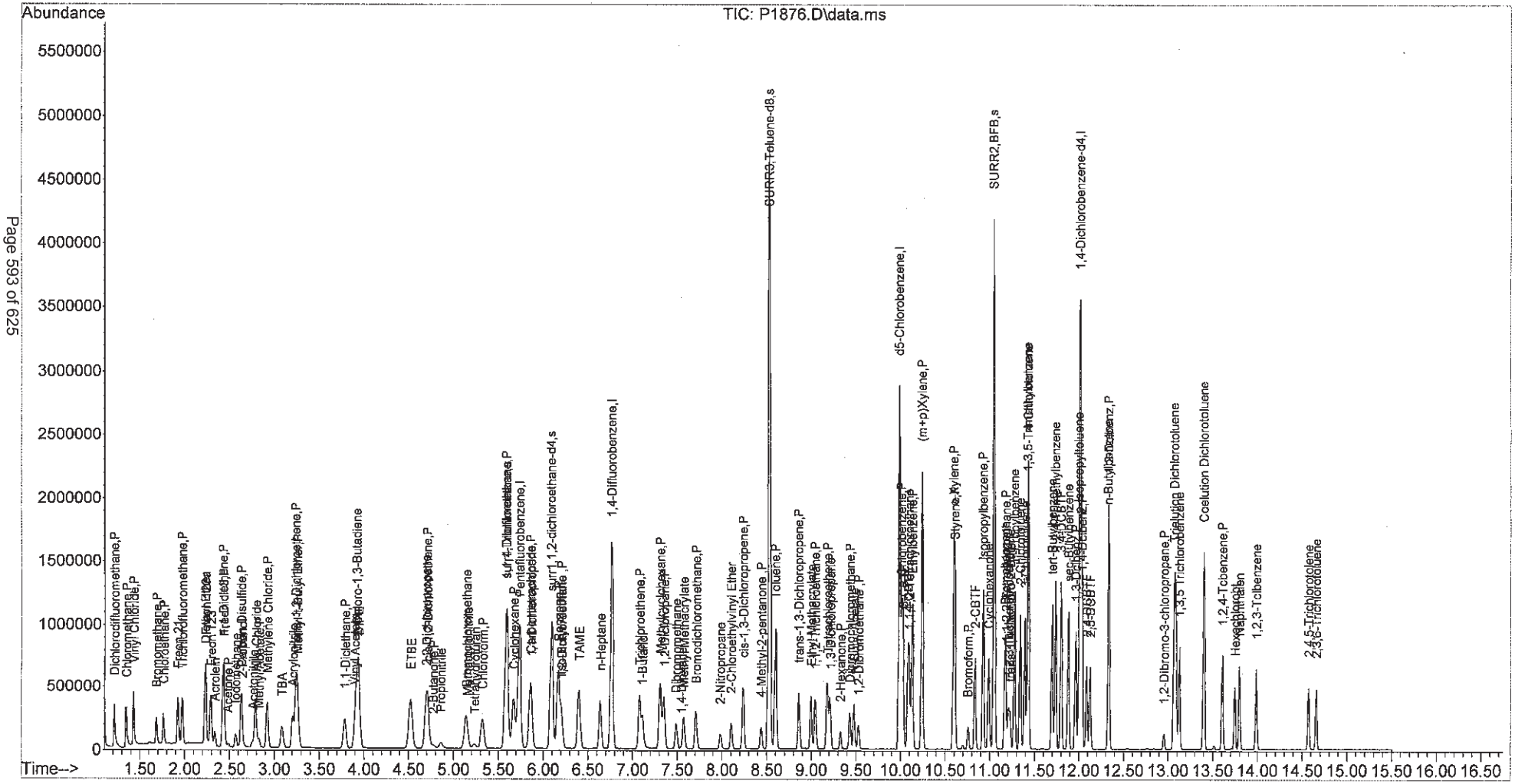
response 17526

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	75.44
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1876.D
Acq On : 9 May 2016 4:22 pm
Operator : K.Ruest
Sample : 20ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 11:12:23 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.737	168	825425	50.00	ppb	0.00
43) 1,4-Difluorobenzene	6.767	114	1369974	50.00	ppb	0.00
71) d5-Chlorobenzene	9.986	117	1263459	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	660485	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	5.590	113	392824	49.18	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.36%			
48) surr1,1,2-dichloroetha...	6.090	65	467752	49.56	ppb	0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 99.12%			
65) SURR3,Toluene-d8	8.529	98	1748405	47.67	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.34%			
70) SURR2,BFB	11.047	95	665661	49.87	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.74%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.213	85	529370	54.34	ppb	100
3) Chloromethane	1.347	50	544790	51.63	ppb	100
4) Vinyl Chloride	1.426	62	622702	52.66	ppb	100
5) Bromomethane	1.683	94	237610	49.46	ppb	100
6) Chloroethane	1.762	64	325709	51.40	ppb	100
7) Freon 21	1.920	67	704710	51.65	ppb	100
8) Trichlorofluoromethane	1.975	101	509307	50.08	ppb	100
9) Diethyl Ether	2.225	59	301048	49.78	ppb	100
10) Freon 123a	2.231	67	447614	49.78	ppb	100
11) Freon 123	2.292	83	503414	48.51	ppb	100
12) Acrolein	2.335	56	213599	262.68	ppb	100
13) 1,1-Diclethene	2.426	96	317915	50.91	ppb	100
14) Freon 113	2.438	101	310257	50.99	ppb	100
15) Acetone	2.481	43	76341	47.28	ppb	100
16) 2-Propanol	2.640	45	313300	1000.74	ppb	100
17) Iodomethane	2.566	142	351009	60.76	ppb	100
18) Carbon Disulfide	2.627	76	1073214	51.55	ppb	100
19) Acetonitrile	2.755	40	51764	198.86	ppb	100
20) Allyl Chloride	2.792	76	183017	52.00	ppb	100
21) Methyl Acetate	2.823	43	200609	51.41	ppb	100
22) Methylene Chloride	2.920	84	347975	49.99	ppb	100
23) TBA	3.085	59	518580	1042.53	ppb	100
24) Acrylonitrile	3.200	53	469162	248.23	ppb	100
25) Methyl-t-Butyl Ether	3.261	73	920000	49.93	ppb	100
26) trans-1,2-Dichloroethene	3.237	96	355359	49.84	ppb	100
28) 1,1-Diclethane	3.786	63	622553	50.17	ppb	100
29) Vinyl Acetate	3.895	86	69372	52.04	ppb	100
30) DIPE	3.938	45	1264600	49.56	ppb	100
31) 2-Chloro-1,3-Butadiene	3.920	53	682829	49.30	ppb	100
32) ETBE	4.523	59	1150512	50.90	ppb	100
33) 2,2-Dichloropropane	4.700	77	533253	50.10	ppb	100
34) cis-1,2-Dichloroethene	4.712	96	379344	50.40	ppb	100
35) 2-Butanone	4.767	43	117738	48.41	ppb	100
36) Propionitrile	4.865	54	167962	238.11	ppb	100

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.139	130	197404	50.22	ppb	100
38) Methacrylonitrile	5.151	67	112760	53.19	ppb	100
39) Tetrahydrofuran	5.231	42	81349	52.67	ppb	100
40) Chloroform	5.322	83	593910	49.34	ppb	100
41) 1,1,1-Trichloroethane	5.590	97	502305	48.95	ppb	100
42) TAME	6.401	73	1020371	51.76	ppb	100
44) Cyclohexane	5.670	41	386598	50.67	ppb	100
46) Carbontetrachloride	5.852	121	137884	52.63	ppb	100
47) 1,1-Dichloropropene	5.865	75	491360	52.31	ppb	100
49) Benzene	6.169	78	1424348	51.64	ppb	100
50) 1,2-Dichloroethane	6.206	62	421777	51.25	ppb	100
51) Iso-Butyl Alcohol	6.200	43	263726	1025.65	ppb	100
52) n-Heptane	6.639	43	426791	50.76	ppb	100
53) 1-Butanol	7.114	56	390917	2617.77	ppb	100
54) Trichloroethene	7.078	130	347223	51.43	ppb	100
55) Methylcyclohexane	7.309	55	474413	52.86	ppb	100
56) 1,2-Diclpropane	7.352	63	372839	50.00	ppb	100
57) Dibromomethane	7.486	93	174448	49.59	ppb	100
58) 1,4-Dioxane	7.547	88	46686m	1043.04	ppb	
59) Methyl Methacrylate	7.572	69	212042	48.75	ppb	100
60) Bromodichloromethane	7.712	83	456215	50.11	ppb	100
61) 2-Nitropropane	7.980	41	150779	102.09	ppb	100
62) 2-Chloroethylvinyl Ether	8.102	63	208395	52.36	ppb	100
63) cis-1,3-Dichloropropene	8.236	75	599071	51.70	ppb	100
64) 4-Methyl-2-pentanone	8.437	43	270423	51.27	ppb	100
66) Toluene	8.602	91	1525962	52.41	ppb	100
67) trans-1,3-Dichloropropene	8.864	75	510247	52.88	ppb	100
68) Ethyl Methacrylate	8.998	69	437602	49.97	ppb	100
69) 1,1,2-Trichloroethane	9.047	97	262044	48.70	ppb	100
72) Tetrachloroethene	9.181	164	254860	52.31	ppb	100
73) 2-Hexanone	9.327	43	197509	54.00	ppb	100
74) 1,3-Dichloropropane	9.212	76	493173	52.14	ppb	100
75) Dibromochloromethane	9.431	129	318704	50.80	ppb	100
76) N-Butyl Acetate	9.480	43	521410	54.62	ppb	100
77) 1,2-Dibromoethane	9.529	107	264193	51.52	ppb	100
78) Chlorobenzene	10.016	112	963945	52.02	ppb	100
79) 3-CBTF	10.028	180	444385	48.33	ppb	100
80) 4-CBTF	10.083	180	398935	49.12	ppb	100
81) 1,1,1,2-Tetrachloroethane	10.095	131	334317	51.57	ppb	100
82) Ethylbenzene	10.132	106	548736	53.09	ppb	100
83) (m+p)Xylene	10.242	106	1297500	106.70	ppb	100
84) o-Xylene	10.595	106	634006	52.37	ppb	100
85) Styrene	10.608	104	1091689	53.99	ppb	100
87) Bromoform	10.760	173	162714	51.67	ppb	100
88) 2-CBTF	10.833	180	428294	49.24	ppb	100
89) Isopropylbenzene	10.925	105	1552550	53.70	ppb	100
90) Cyclohexanone	10.986	55	564567	982.14	ppb	100
91) trans-1,4-Dichloro-2-B...	11.229	53	104921	46.60	ppb	100
92) 1,1,2,2-Tetrachloroethane	11.181	83	338303	49.98	ppb	100
93) Bromobenzene	11.168	156	381518	51.95	ppb	100
94) 1,2,3-Trichloropropane	11.211	110	93620	46.88	ppb	100

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

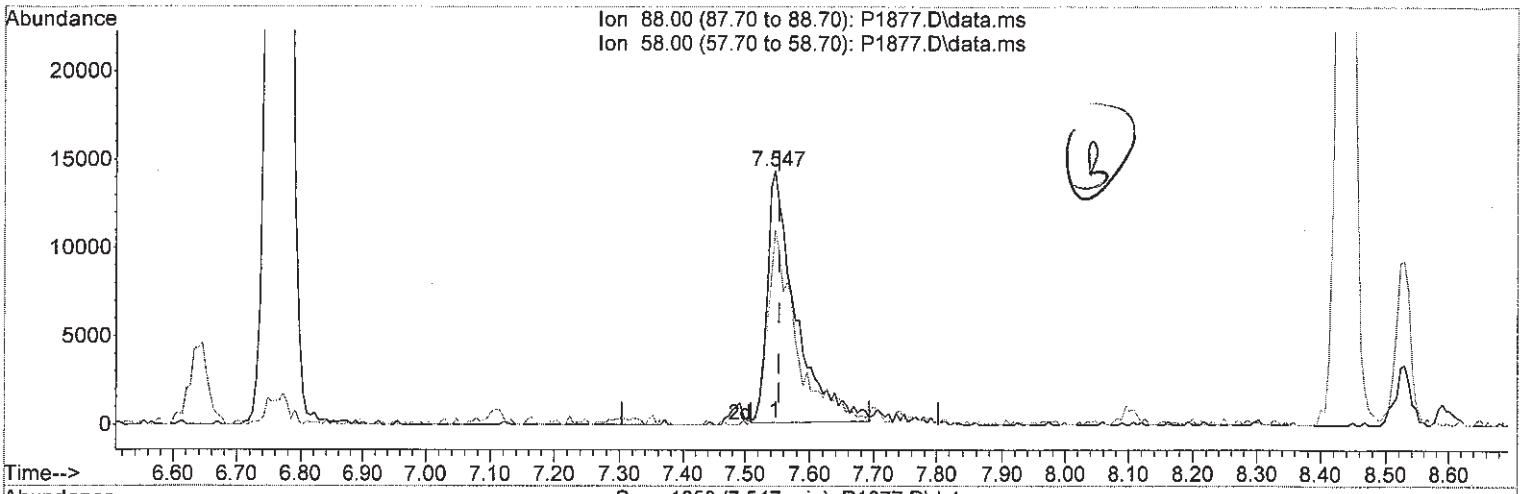
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	1824584	54.39	ppb	100
96)	2-Chlorotoluene	11.339	91	1133511	52.35	ppb	100
97)	3-Chlorotoluene	11.394	91	1130269	51.20	ppb	100
98)	4-Chlorotoluene	11.431	91	1335632	52.90	ppb	100
99)	1,3,5-Trimethylbenzene	11.431	105	1315580	52.60	ppb	100
100)	tert-Butylbenzene	11.699	119	1055788	53.17	ppb	100
101)	1,2,4-Trimethylbenzene	11.735	105	1368697	53.31	ppb	100
102)	3,4-DCBTF	11.796	214	301974	48.82	ppb	100
103)	sec-Butylbenzene	11.882	105	1503068	53.06	ppb	100
104)	p-Isopropyltoluene	12.004	119	1325689	54.22	ppb	100
105)	1,3-Dclbenz	11.961	146	717323	51.49	ppb	100
106)	1,4-Dclbenz	12.034	146	732724	50.56	ppb	100
107)	2,4-DCBTF	12.089	214	277350	47.28	ppb	100
108)	2,5-DCBTF	12.126	214	295840	47.55	ppb	100
109)	n-Butylbenzene	12.333	91	1193100	53.98	ppb	100
110)	1,2-Dclbenz	12.333	146	676629	51.31	ppb	100
111)	1,2-Dibromo-3-chloropr...	12.955	157	63343	50.95	ppb	100
112)	Trielution Dichlorotol...	13.071	125	1697180	154.71	ppb	100
113)	1,3,5 Trichlorobenzene	13.125	180	440003	50.05	ppb	100
114)	Coelution Dichlorotoluene	13.400	125	1233209	106.06	ppb	100
115)	1,2,4-Tcbenzene	13.607	180	417371	53.34	ppb	100
116)	Hexachlorobt	13.747	225	160981	50.03	ppb	100
117)	Naphthalen	13.796	128	927126	55.29	ppb	100
118)	1,2,3-Tclbenzene	13.985	180	358397	54.06	ppb	100
119)	2,4,5-Trichlorotolene	14.570	159	243071	51.45	ppb	100
120)	2,3,6-Trichlorotoluene	14.656	159	222097	50.54	ppb	100

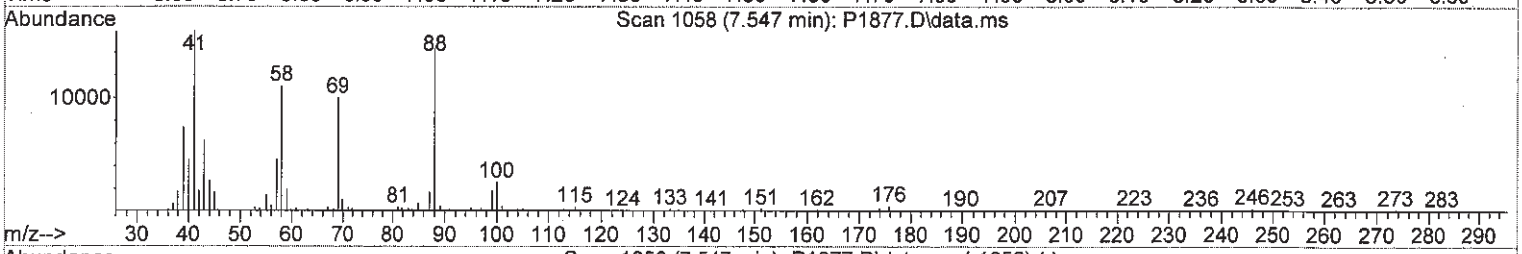
(#) = qualifier out of range (m) = manual integration (+) = signals summed

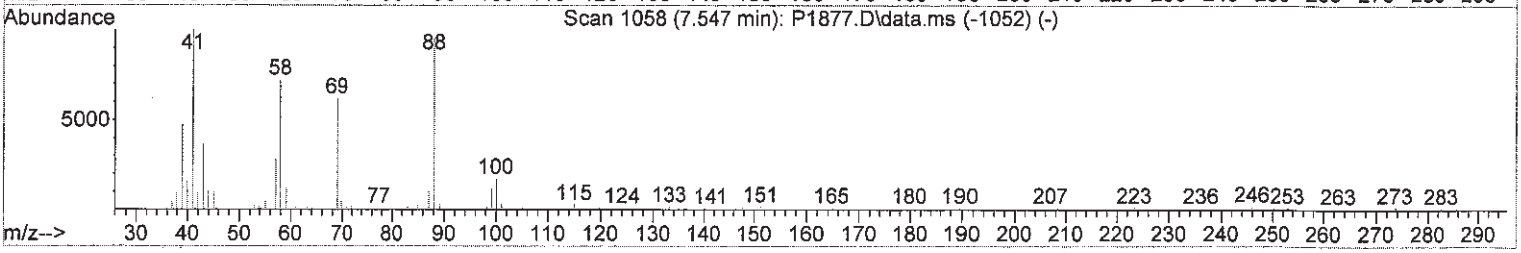
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 10:35:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1877.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 967.17 ppb

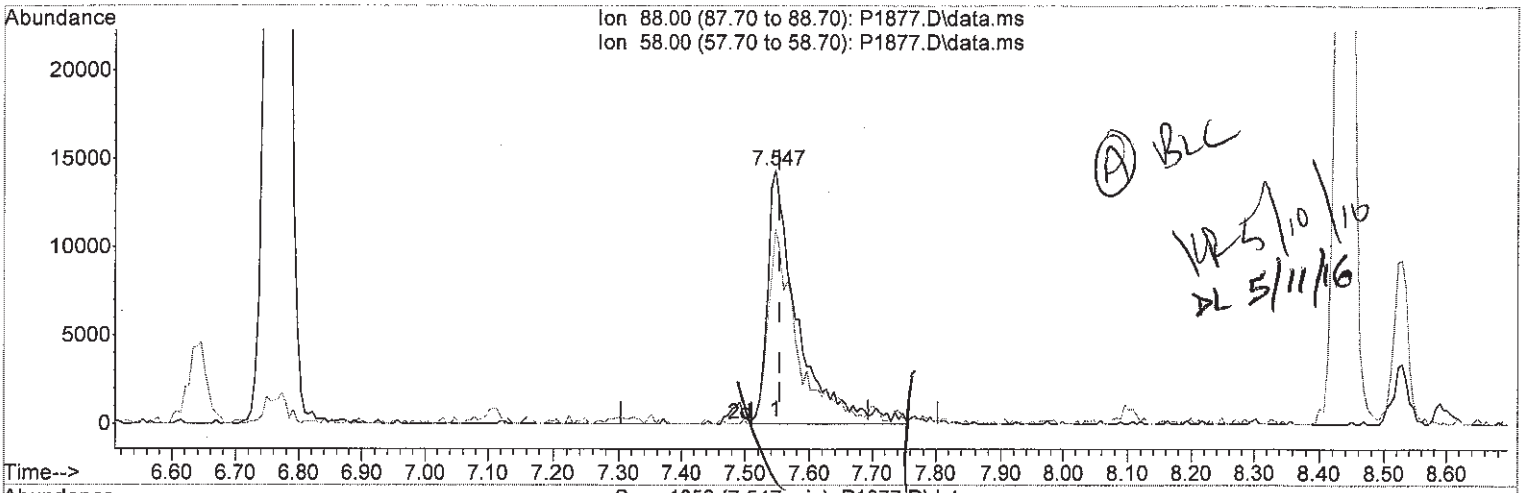
response 43290

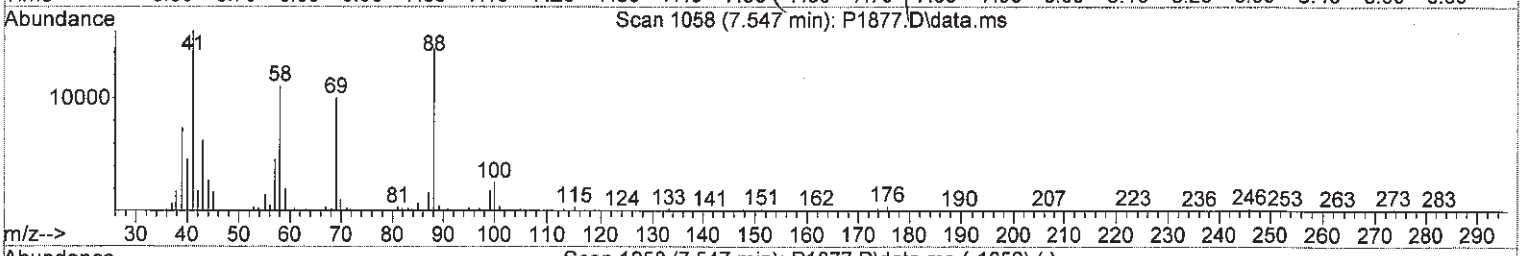
Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.75
0.00	0.00	0.00
0.00	0.00	0.00

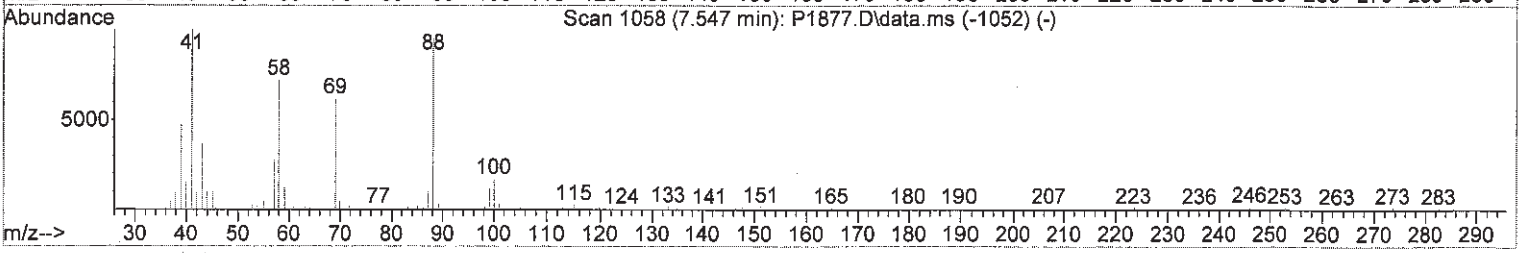
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 10:35:50 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration







TIC: P1877.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 1043.04 ppb m

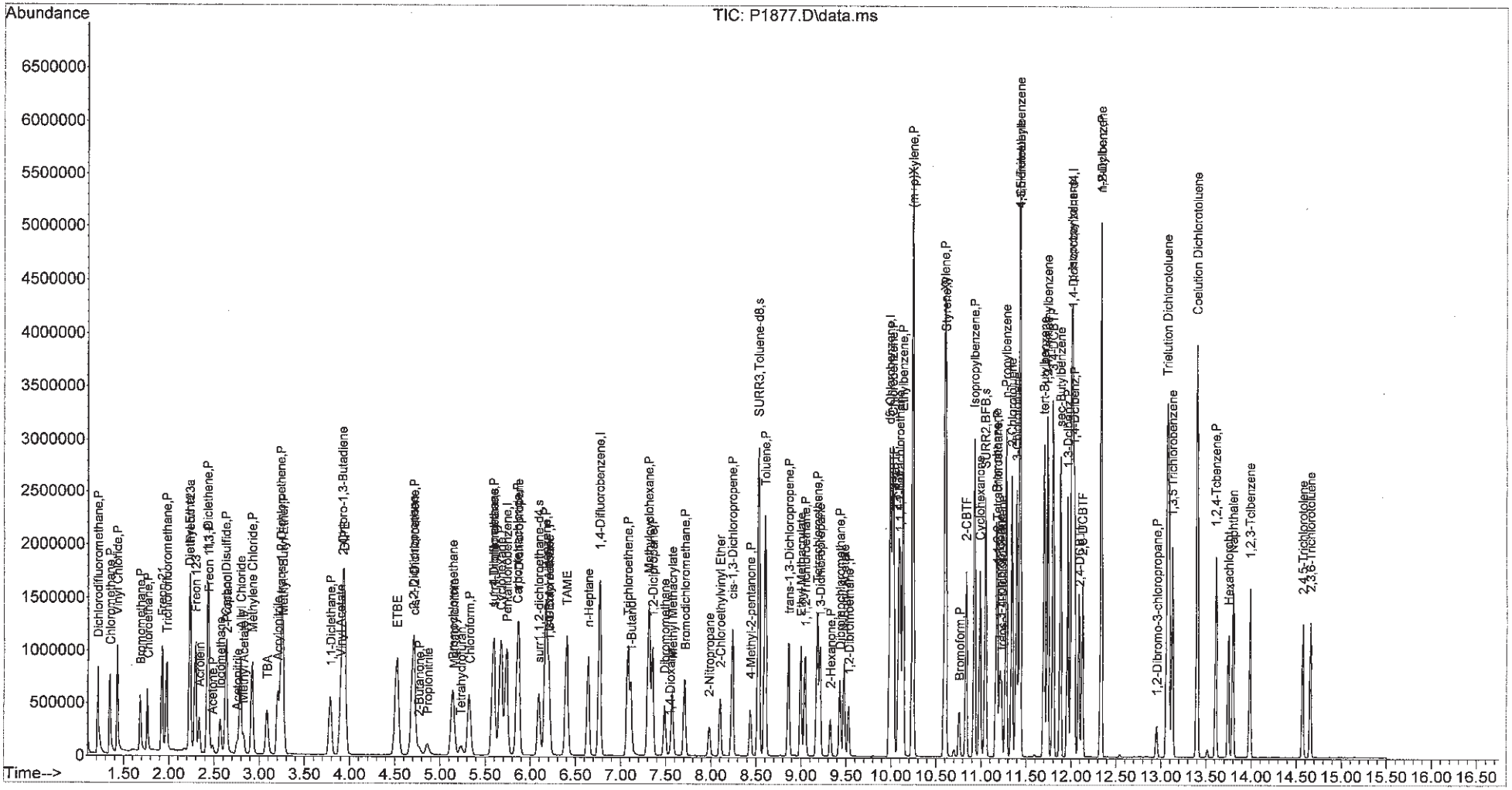
response 46686

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1877.D
Acq On : 9 May 2016 4:52 pm
Operator : K.Ruest
Sample : 50ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 11:14:31 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	819303	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1387671	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1289450	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	680588	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.591	113	840449	126.63	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	253.26%#			
48) surr1,1,2-dichloroetha...	6.090	65	986778	127.27	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery =	254.54%#			
65) SURR3,Toluene-d8	8.529	98	3470934	127.12	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	254.24%#			
70) SURR2,BFB	11.047	95	1392142	126.23	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	252.46%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	1012729	104.73	ppb		99
3) Chloromethane	1.341	50	1053133	100.56	ppb		100
4) Vinyl Chloride	1.427	62	1195280	101.84	ppb		99
5) Bromomethane	1.683	94	486740	102.07	ppb		100
6) Chloroethane	1.762	64	617485	98.18	ppb		99
7) Freon 21	1.921	67	1305163	96.38	ppb		99
8) Trichlorofluoromethane	1.969	101	979871	97.08	ppb		99
9) Diethyl Ether	2.225	59	586101	97.63	ppb		97
10) Freon 123a	2.231	67	843621	94.53	ppb		96
11) Freon 123	2.292	83	961956	93.40	ppb		98
12) Acrolein	2.335	56	417563	517.34	ppb		99
13) 1,1-Diclethene	2.427	96	620845	100.16	ppb		98
14) Freon 113	2.439	101	598861	99.16	ppb		99
15) Acetone	2.481	43	146642	91.51	ppb		94
16) 2-Propanol	2.640	45	605628	1948.95	ppb		100
17) Iodomethane	2.567	142	724205	126.30	ppb		98
18) Carbon Disulfide	2.628	76	2023696	97.92	ppb		98
19) Acetonitrile	2.756	40	119949	464.25	ppb	#	84
20) Allyl Chloride	2.792	76	332160	95.08	ppb		98
21) Methyl Acetate	2.823	43	390696	100.86	ppb		96
22) Methylene Chloride	2.920	84	675576	97.78	ppb		96
23) TBA	3.085	59	961289	1946.98	ppb		97
24) Acrylonitrile	3.201	53	910545	485.37	ppb		98
25) Methyl-t-Butyl Ether	3.256	73	1772633	96.92	ppb		97
26) trans-1,2-Dichloroethene	3.237	96	684686	96.75	ppb		96
28) 1,1-Diclethane	3.786	63	1208163	98.09	ppb		99
29) Vinyl Acetate	3.902	86	127643	96.46	ppb	#	92
30) DIPE	3.938	45	2521162	99.55	ppb		99
31) 2-Chloro-1,3-Butadiene	3.920	53	1332548	96.94	ppb		96
32) ETBE	4.518	59	2283838	101.79	ppb		99
33) 2,2-Dichloropropane	4.700	77	1069344	101.21	ppb		99
34) cis-1,2-Dichloroethene	4.707	96	730082	97.72	ppb		98
35) 2-Butanone	4.768	43	225714	93.49	ppb		89
36) Propionitrile	4.859	54	317527	453.49	ppb		97

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.139	130	371998	95.35	ppb		92
38) Methacrylonitrile	5.146	67	212573	101.01	ppb		91
39) Tetrahydrofuran	5.225	42	143141	93.37	ppb		96
40) Chloroform	5.322	83	1156630	96.81	ppb		97
41) 1,1,1-Trichloroethane	5.591	97	976242	95.85	ppb		98
42) TAME	6.401	73	1971378	100.76	ppb		100
44) Cyclohexane	5.670	41	744484	96.32	ppb		99
46) Carbontetrachloride	5.853	121	261766	98.64	ppb		96
47) 1,1-Dichloropropene	5.865	75	948163	99.66	ppb		96
49) Benzene	6.170	78	2716827	97.24	ppb		97
50) 1,2-Dichloroethane	6.206	62	808482	96.98	ppb		98
51) Iso-Butyl Alcohol	6.200	43	488917	1877.18	ppb		97
52) n-Heptane	6.639	43	821510	96.45	ppb		98
53) 1-Butanol	7.115	56	746556	4935.54	ppb		98
54) Trichloroethene	7.078	130	694164	101.50	ppb		98
55) Methylcyclohexane	7.310	55	914188	100.55	ppb		97
56) 1,2-Diclpropane	7.352	63	732876	97.04	ppb		99
57) Dibromomethane	7.487	93	342322	96.08	ppb		96
58) 1,4-Dioxane	7.554	88	88551	1953.14	ppb		89
59) Methyl Methacrylate	7.572	69	401258	91.08	ppb		98
60) Bromodichloromethane	7.706	83	876672	95.06	ppb		100
61) 2-Nitropropane	7.980	41	273924	183.10	ppb		86
62) 2-Chloroethylvinyl Ether	8.102	63	407159	100.99	ppb		100
63) cis-1,3-Dichloropropene	8.236	75	1174585	100.07	ppb		98
64) 4-Methyl-2-pentanone	8.438	43	522542	97.80	ppb		97
66) Toluene	8.602	91	2849543	96.63	ppb		94
67) trans-1,3-Dichloropropene	8.864	75	981883	100.45	ppb		99
68) Ethyl Methacrylate	8.998	69	842863	95.02	ppb		97
69) 1,1,2-Trichloroethane	9.047	97	492138	90.30	ppb		95
72) Tetrachloroethene	9.181	164	514910	103.56	ppb		98
73) 2-Hexanone	9.328	43	369864	99.09	ppb		94
74) 1,3-Dichloropropane	9.212	76	939602	97.34	ppb		97
75) Dibromochloromethane	9.431	129	598314	93.45	ppb		98
76) N-Butyl Acetate	9.480	43	989114	101.53	ppb		98
77) 1,2-Dibromoethane	9.529	107	497353	95.04	ppb		98
78) Chlorobenzene	10.017	112	1853301	98.00	ppb		96
79) 3-CBTF	10.029	180	922738	98.34	ppb		99
80) 4-CBTF	10.084	180	818313	98.72	ppb		96
81) 1,1,1,2-Tetrachloroethane	10.102	131	657285	99.35	ppb		99
82) Ethylbenzene	10.132	106	1046521	99.22	ppb	#	83
83) (m+p)Xylene	10.242	106	2450880	197.49	ppb	#	81
84) o-Xylene	10.596	106	1249932	101.16	ppb		92
85) Styrene	10.608	104	2078663	100.73	ppb		96
87) Bromoform	10.754	173	312927	96.44	ppb		98
88) 2-CBTF	10.833	180	876011	97.74	ppb		98
89) Isopropylbenzene	10.925	105	2838805	95.28	ppb		96
90) Cyclohexanone	10.986	55	1057993	1786.16	ppb		99
91) trans-1,4-Dichloro-2-B...	11.230	53	208209	89.74	ppb		99
92) 1,1,2,2-Tetrachloroethane	11.181	83	631995	90.61	ppb		99
93) Bromobenzene	11.169	156	737665	97.48	ppb		95
94) 1,2,3-Trichloropropane	11.211	110	179166	87.07	ppb		98

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

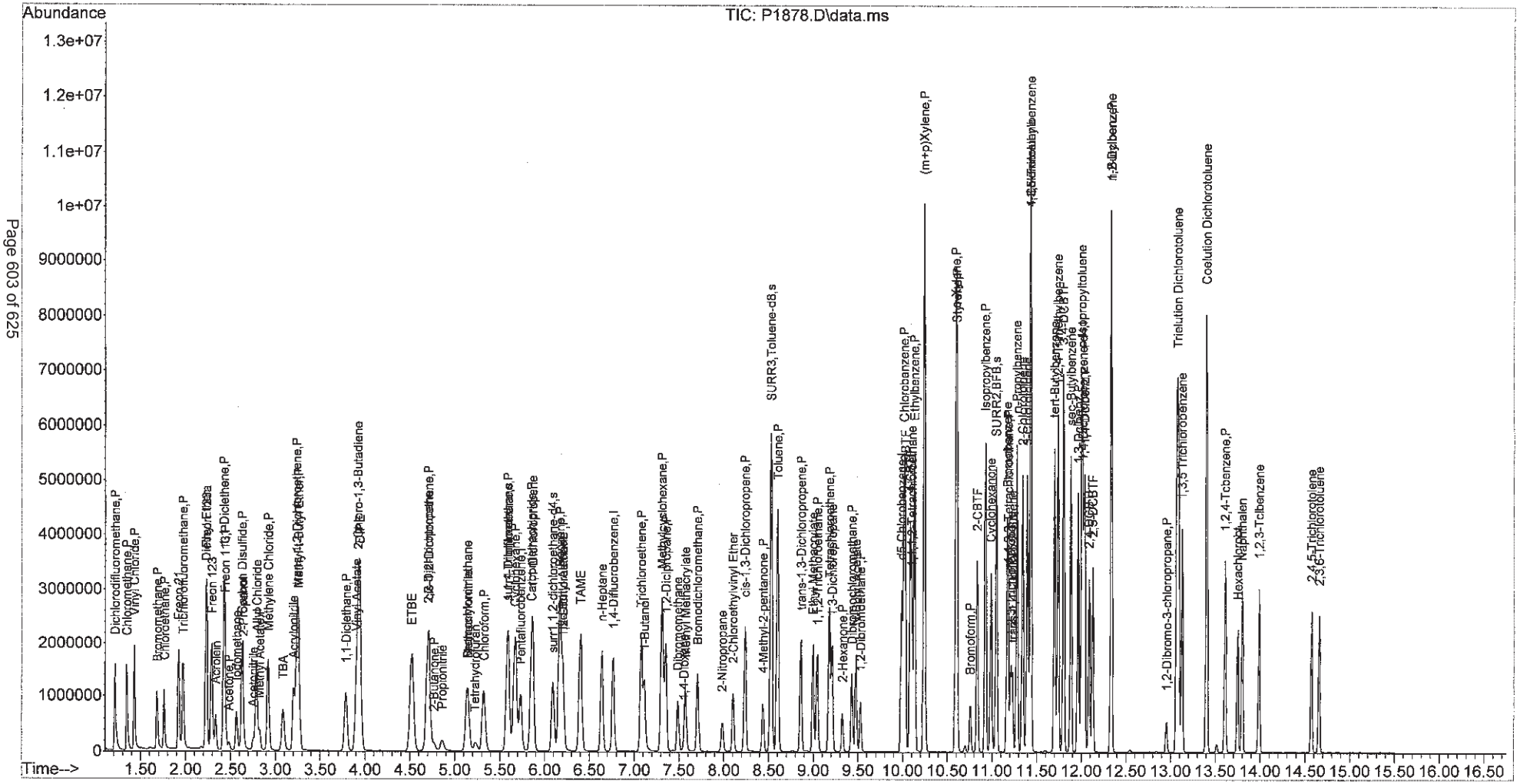
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	3262780	94.39	ppb	92
96)	2-Chlorotoluene	11.339	91	2125861	95.27	ppb	95
97)	3-Chlorotoluene	11.394	91	2209334	97.13	ppb	99
98)	4-Chlorotoluene	11.431	91	2515184	96.68	ppb	94
99)	1,3,5-Trimethylbenzene	11.431	105	2497329	96.89	ppb	96
100)	tert-Butylbenzene	11.699	119	2014421	98.44	ppb	98
101)	1,2,4-Trimethylbenzene	11.736	105	2529167	95.61	ppb	94
102)	3,4-DCBTF	11.797	214	635614	99.73	ppb	97
103)	sec-Butylbenzene	11.882	105	2773481	95.02	ppb	96
104)	p-Isopropyltoluene	12.004	119	2467147	97.93	ppb	95
105)	1,3-Dclbenz	11.961	146	1395375	97.19	ppb	98
106)	1,4-Dclbenz	12.034	146	1419730	95.07	ppb	99
107)	2,4-DCBTF	12.083	214	579182	95.81	ppb	96
108)	2,5-DCBTF	12.126	214	618038	96.39	ppb	96
109)	n-Butylbenzene	12.333	91	2262716	99.35	ppb	96
110)	1,2-Dclbenz	12.333	146	1326376	97.61	ppb	99
111)	1,2-Dibromo-3-chloropr...	12.955	157	119005	92.89	ppb	92
112)	Trielution Dichlorotol...	13.077	125	3369904	298.12	ppb	93
113)	1,3,5 Trichlorobenzene	13.126	180	903169	99.70	ppb	97
114)	Coelution Dichlorotoluene	13.400	125	2419489	201.94	ppb	96
115)	1,2,4-Tcbenzene	13.607	180	797142	98.86	ppb	99
116)	Hexachlorobt	13.747	225	314243	94.77	ppb	93
117)	Naphthalen	13.796	128	1732214	100.26	ppb	98
118)	1,2,3-Tclbenzene	13.985	180	684476	100.19	ppb	97
119)	2,4,5-Trichlorotolene	14.570	159	499100	102.52	ppb	98
120)	2,3,6-Trichlorotoluene	14.656	159	448218	98.99	ppb	97

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1878.D
Acq On : 9 May 2016 5:23 pm
Operator : K.Ruest
Sample : 100ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 10 10:35:55 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	819885	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1383451	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1303888	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	690231	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	964570	148.86	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 297.72%#				
48) surr1,1,2-dichloroetha...	6.090	65	1119065	147.82	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 295.64%#				
65) SURR3,Toluene-d8	8.529	98	3900644	147.76	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 295.52%#				
70) SURR2,BFB	11.047	95	1603906	149.28	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 298.56%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	1430226	147.80	ppb		99
3) Chloromethane	1.341	50	1538924	146.83	ppb		98
4) Vinyl Chloride	1.426	62	1668599	142.07	ppb		98
5) Bromomethane	1.676	94	737944	154.63	ppb		96
6) Chloroethane	1.762	64	893292	141.94	ppb		97
7) Freon 21	1.920	67	1924739	142.03	ppb		100
8) Trichlorofluoromethane	1.969	101	1381056	136.73	ppb		99
9) Diethyl Ether	2.225	59	881178	146.68	ppb		98
10) Freon 123a	2.231	67	1235180	138.30	ppb		96
11) Freon 123	2.292	83	1403673	136.19	ppb		98
12) Acrolein	2.335	56	655470	811.52	ppb		99
13) 1,1-Diclethene	2.426	96	896831	144.58	ppb		99
14) Freon 113	2.432	101	840935	139.14	ppb		98
15) Acetone	2.481	43	237839	148.31	ppb		94
16) 2-Propanol	2.640	45	901635	2899.45	ppb		99
17) Iodomethane	2.566	142	1089100	189.81	ppb		100
18) Carbon Disulfide	2.627	76	3006261	145.36	ppb		96
19) Acetonitrile	2.755	40	188577	729.35	ppb		94
20) Allyl Chloride	2.792	76	420133	120.18	ppb		97
21) Methyl Acetate	2.823	43	566817	146.23	ppb		94
22) Methylene Chloride	2.920	84	1010088	146.10	ppb		97
23) TBA	3.085	59	1462452	2959.93	ppb		99
24) Acrylonitrile	3.201	53	1406952	749.45	ppb		97
25) Methyl-t-Butyl Ether	3.255	73	2656084	145.12	ppb		97
26) trans-1,2-Dichloroethene	3.237	96	986179	139.25	ppb		96
28) 1,1-Diclethane	3.786	63	1780149	144.43	ppb		99
29) Vinyl Acetate	3.902	86	193432	146.07	ppb	#	91
30) DIPE	3.938	45	3540856	139.71	ppb		99
31) 2-Chloro-1,3-Butadiene	3.920	53	2012403	146.29	ppb		98
32) ETBE	4.523	59	3194567	142.29	ppb		99
33) 2,2-Dichloropropane	4.700	77	1512749	143.08	ppb		98
34) cis-1,2-Dichloroethene	4.706	96	1081855	144.70	ppb		94
35) 2-Butanone	4.767	43	352285	145.81	ppb		92
36) Propionitrile	4.859	54	504515	720.04	ppb		100

KR 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	Bromochloromethane	5.139	130	548035	140.37	ppb		91
38)	Methacrylonitrile	5.145	67	320689	152.28	ppb		95
39)	Tetrahydrofuran	5.224	42	211912	138.14	ppb		88
40)	Chloroform	5.322	83	1715278	143.47	ppb		97
41)	1,1,1-Trichloroethane	5.590	97	1400091	137.37	ppb		99
42)	TAME	6.401	73	2810002	143.52	ppb		98
44)	Cyclohexane	5.670	41	1092519	141.78	ppb		99
46)	Carbontetrachloride	5.859	121	366324	138.47	ppb		95
47)	1,1-Dichloropropene	5.865	75	1350256	142.35	ppb		97
49)	Benzene	6.169	78	3877501	139.21	ppb		96
50)	1,2-Dichloroethane	6.206	62	1218569	146.61	ppb		97
51)	Iso-Butyl Alcohol	6.200	43	756655	2914.01	ppb		100
52)	n-Heptane	6.639	43	1166922	137.43	ppb		99
53)	1-Butanol	7.114	56	1111899	7373.27	ppb		100
54)	Trichloroethene	7.078	130	975427	143.06	ppb		99
55)	Methylcyclohexane	7.309	55	1331533	146.90	ppb		98
56)	1,2-Diclpropane	7.352	63	1091133	144.91	ppb		100
57)	Dibromomethane	7.486	93	520116	146.42	ppb		94
58)	1,4-Dioxane	7.547	88	140687m	3112.56	ppb		
59)	Methyl Methacrylate	7.572	69	611989	139.34	ppb		96
60)	Bromodichloromethane	7.706	83	1301404	141.55	ppb		100
61)	2-Nitropropane	7.980	41	432037	289.66	ppb		88
62)	2-Chloroethylvinyl Ether	8.102	63	613978	152.75	ppb		99
63)	cis-1,3-Dichloropropene	8.236	75	1740371	148.72	ppb		99
64)	4-Methyl-2-pentanone	8.437	43	810410	152.14	ppb		96
66)	Toluene	8.602	91	3909438	132.97	ppb		90
67)	trans-1,3-Dichloropropene	8.864	75	1478774	151.75	ppb		97
68)	Ethyl Methacrylate	8.998	69	1283126	145.10	ppb		97
69)	1,1,2-Trichloroethane	9.047	97	752993	138.58	ppb		97
72)	Tetrachloroethene	9.181	164	726689	144.54	ppb		97
73)	2-Hexanone	9.327	43	572341	151.63	ppb		95
74)	1,3-Dichloropropane	9.212	76	1429715	146.47	ppb		96
75)	Dibromochloromethane	9.431	129	910883	140.70	ppb		97
76)	N-Butyl Acetate	9.480	43	1468023	149.02	ppb		99
77)	1,2-Dibromoethane	9.529	107	769048	145.33	ppb		99
78)	Chlorobenzene	10.016	112	2659182	139.06	ppb		92
79)	3-CBTF	10.028	180	1364702	143.83	ppb		99
80)	4-CBTF	10.083	180	1228429	146.55	ppb		96
81)	1,1,1,2-Tetrachloroethane	10.102	131	983752	147.05	ppb		98
82)	Ethylbenzene	10.132	106	1503483	140.96	ppb	#	68
83)	(m+p)Xylene	10.242	106	3403497	271.21	ppb	#	67
84)	o-Xylene	10.595	106	1815157	145.27	ppb	#	80
85)	Styrene	10.608	104	2970633	142.37	ppb		91
87)	Bromoform	10.760	173	476101	144.68	ppb		96
88)	2-CBTF	10.833	180	1311932	144.34	ppb		98
89)	Isopropylbenzene	10.925	105	3800809	125.79	ppb		90
90)	Cyclohexanone	10.986	55	1638836	2728.12	ppb		99
91)	trans-1,4-Dichloro-2-B...	11.229	53	325623	138.39	ppb		99
92)	1,1,2,2-Tetrachloroethane	11.181	83	970854	137.24	ppb		97
93)	Bromobenzene	11.168	156	1095521	142.75	ppb		95
94)	1,2,3-Trichloropropane	11.211	110	274505	131.53	ppb		94

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

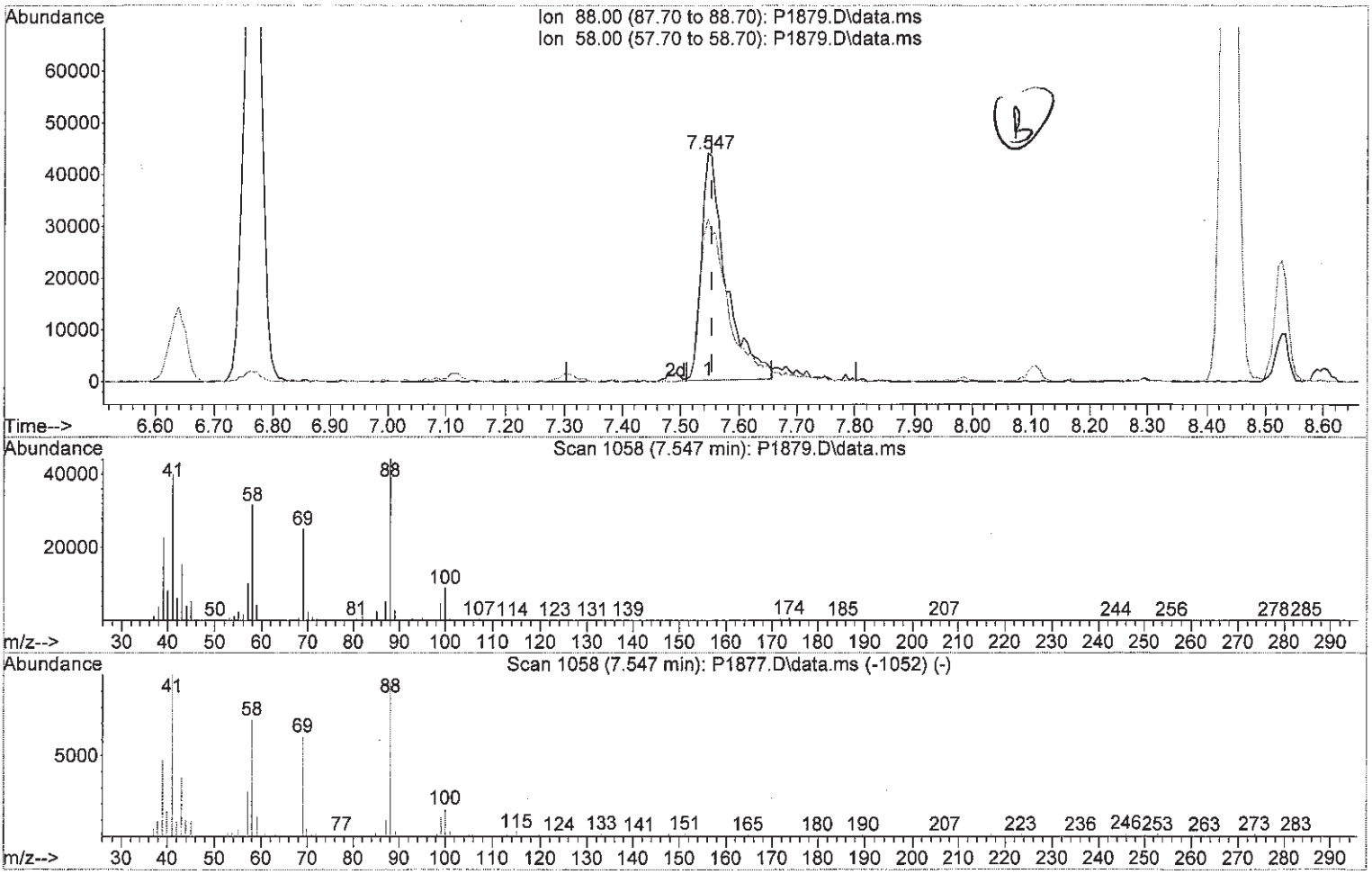
Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	4203038	119.89	ppb		83
96)	2-Chlorotoluene	11.345	91	2977701	131.58	ppb		91
97)	3-Chlorotoluene	11.394	91	3130391	135.70	ppb	#	93
98)	4-Chlorotoluene	11.437	91	3492930	132.39	ppb		86
99)	1,3,5-Trimethylbenzene	11.431	105	3441681	131.66	ppb		89
100)	tert-Butylbenzene	11.699	119	2831196	136.42	ppb		95
101)	1,2,4-Trimethylbenzene	11.742	105	3474347	129.50	ppb		87
102)	3,4-DCBTF	11.796	214	952121	147.30	ppb		96
103)	sec-Butylbenzene	11.882	105	3710220	125.34	ppb		90
104)	p-Isopropyltoluene	12.004	119	3354159	131.28	ppb		90
105)	1,3-Dclbenz	11.961	146	2042840	140.31	ppb		96
106)	1,4-Dclbenz	12.034	146	2085041	137.67	ppb		97
107)	2,4-DCBTF	12.089	214	868520	141.67	ppb		97
108)	2,5-DCBTF	12.126	214	959178	147.51	ppb		97
109)	n-Butylbenzene	12.333	91	3091525	133.85	ppb		89
110)	1,2-Dclbenz	12.339	146	1972900	143.16	ppb		98
111)	1,2-Dibromo-3-chloropr...	12.955	157	177791	136.83	ppb		89
112)	Trielution Dichlorotol...	13.077	125	4874598	425.21	ppb		89
113)	1,3,5 Trichlorobenzene	13.132	180	1331927	144.98	ppb		98
114)	Coelution Dichlorotoluene	13.400	125	3420785	281.52	ppb	#	88
115)	1,2,4-Tcbenzene	13.607	180	1185770	145.01	ppb		99
116)	Hexachlorobt	13.747	225	456773	135.83	ppb		94
117)	Naphthalen	13.796	128	2510552	143.27	ppb		96
118)	1,2,3-Tclbenzene	13.985	180	1023322	147.70	ppb		96
119)	2,4,5-Trichlorotolene	14.570	159	745880	151.08	ppb		99
120)	2,3,6-Trichlorotoluene	14.656	159	678249	147.70	ppb		100

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

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 10:36:00 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1879.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 2842.18 ppb

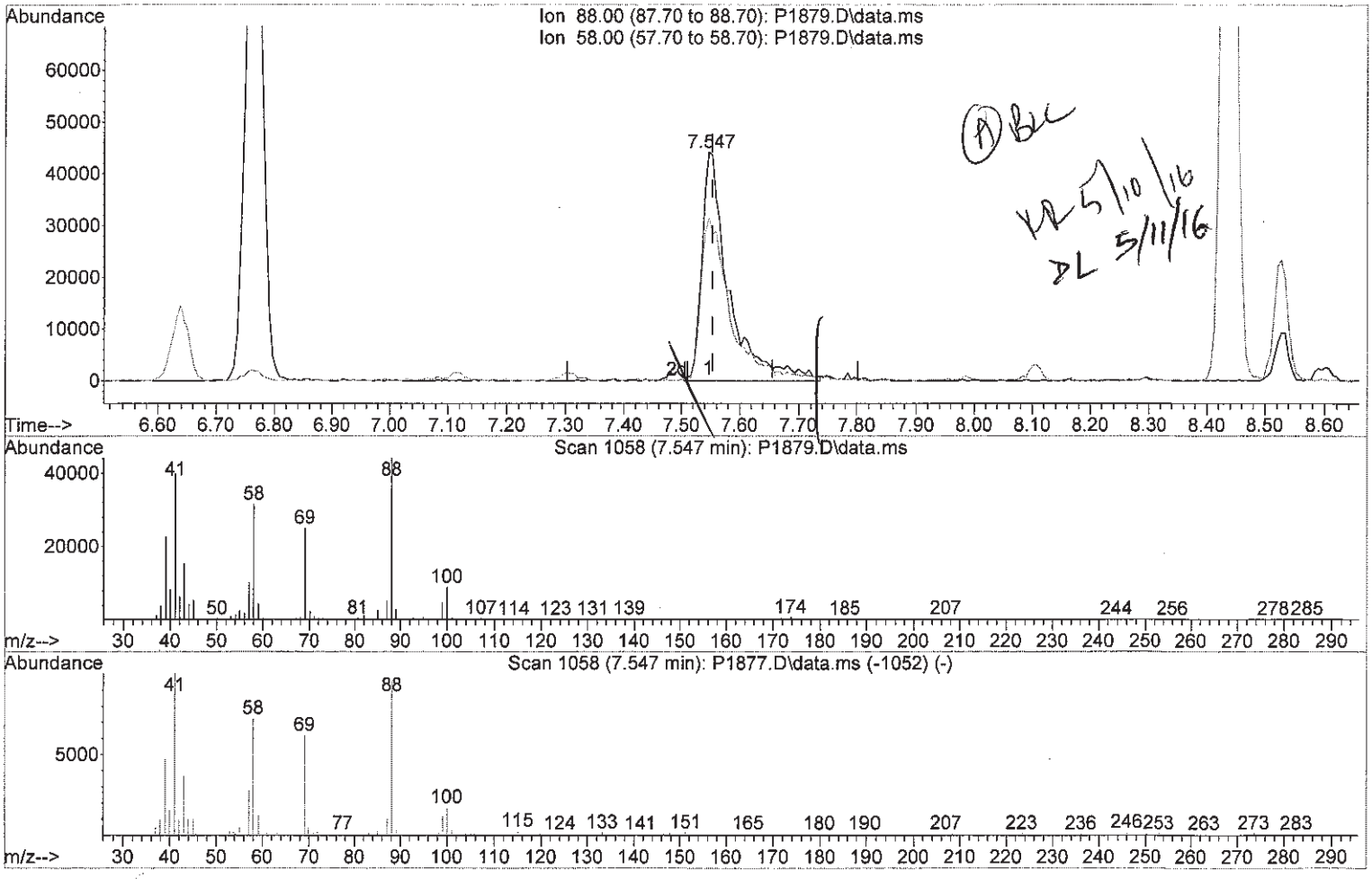
response 128466

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	71.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 10:36:00 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1879.D\data.ms

(58) 1,4-Dioxane

7.547min (-0.006) 3112.56 ppb m

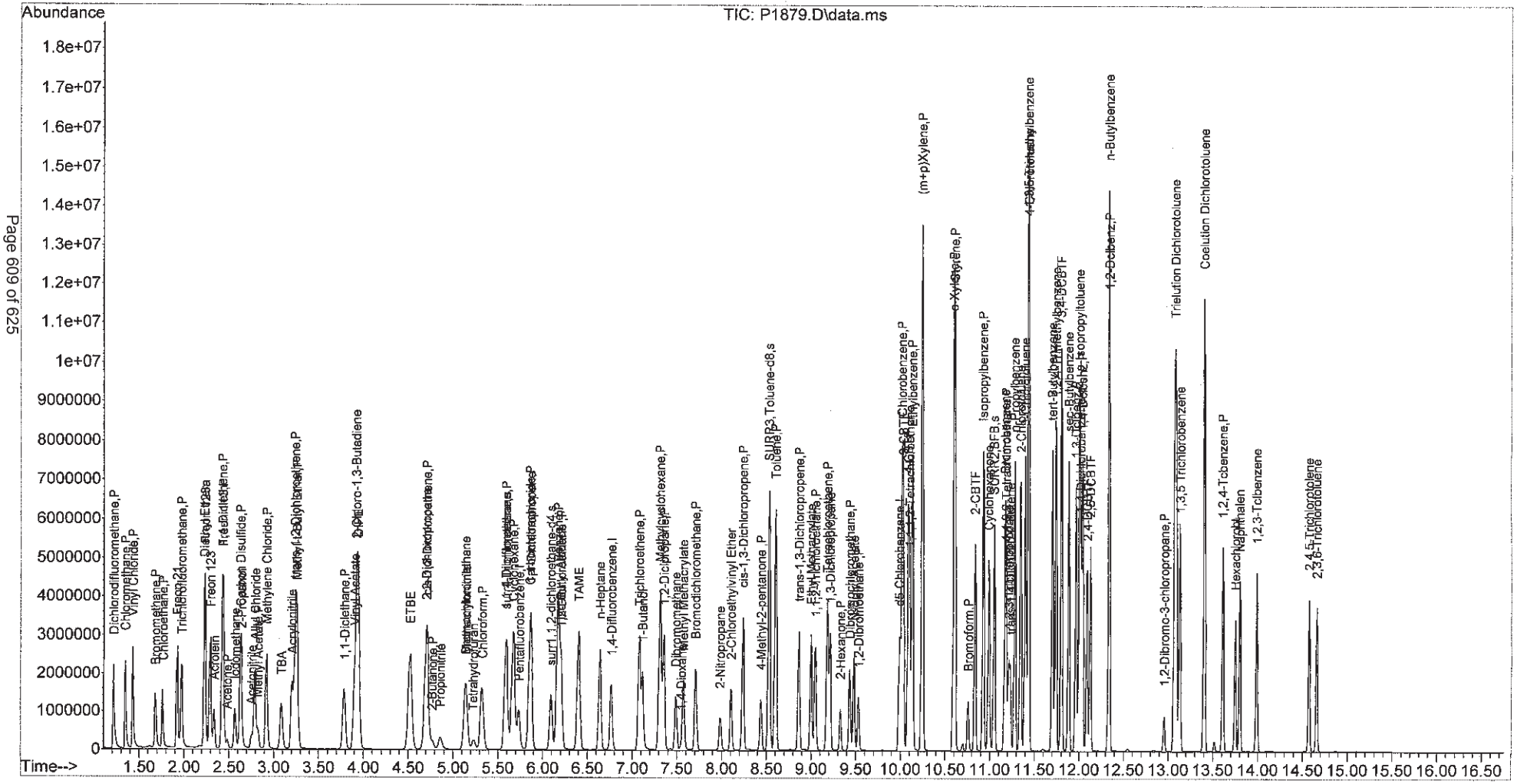
response 140687

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	71.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1879.D
Acq On : 9 May 2016 5:54 pm
Operator : K.Ruest
Sample : 150ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 10 11:17:45 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.737	168	812568	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.767	114	1375883	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1286158	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	682735	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.590	113	395965	49.44	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.88%				
48) surr1,1,2-dichloroetha...	6.090	65	463291	48.57	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 97.14%				
65) SURR3,Toluene-d8	8.529	98	1752996	47.53	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.06%				
70) SURR2,BFB	11.047	95	678099	50.90	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	1946159	202.93	ppb		98
3) Chloromethane	1.341	50	2103107	202.47	ppb		95
4) Vinyl Chloride	1.427	62	2265192	194.60	ppb		96
5) Bromomethane	1.676	94	1031016	217.99	ppb		93
6) Chloroethane	1.762	64	1220921	195.74	ppb		100
7) Freon 21	1.920	67	2581046	192.18	ppb		98
8) Trichlorofluoromethane	1.969	101	1920914	191.89	ppb		99
9) Diethyl Ether	2.225	59	1190683	199.98	ppb		99
10) Freon 123a	2.231	67	1678489	189.64	ppb		96
11) Freon 123	2.292	83	1937046	189.63	ppb		98
12) Acrolein	2.335	56	903728	1128.96	ppb		97
13) 1,1-Diclethene	2.426	96	1224486	199.18	ppb		99
14) Freon 113	2.432	101	1180824	197.14	ppb		95
15) Acetone	2.487	43	323889	203.79	ppb		99
16) 2-Propanol	2.646	45	1359775	4412.10	ppb		100
17) Iodomethane	2.567	142	1431455	251.72	ppb		100
18) Carbon Disulfide	2.628	76	3869910	188.81	ppb		94
19) Acetonitrile	2.756	40	255478	997.00	ppb		94
20) Allyl Chloride	2.792	76	591444	170.71	ppb		96
21) Methyl Acetate	2.823	43	814558	212.03	ppb		96
22) Methylene Chloride	2.920	84	1363331	198.97	ppb		96
23) TBA	3.091	59	2142751	4375.87	ppb		99
24) Acrylonitrile	3.207	53	1942785	1044.19	ppb		96
25) Methyl-t-Butyl Ether	3.262	73	3552614	195.85	ppb		97
26) trans-1,2-Dichloroethene	3.243	96	1344856	191.61	ppb		96
28) 1,1-Diclethane	3.786	63	2366684	193.75	ppb		99
29) Vinyl Acetate	3.902	86	246045	187.48	ppb	#	81
30) DIPE	3.938	45	4905947	195.31	ppb		95
31) 2-Chloro-1,3-Butadiene	3.920	53	2718287	199.38	ppb		98
32) ETBE	4.523	59	4498270	202.16	ppb		97
33) 2,2-Dichloropropane	4.700	77	2067787	197.34	ppb		99
34) cis-1,2-Dichloroethene	4.712	96	1471910	198.65	ppb		99
35) 2-Butanone	4.767	43	495622	206.99	ppb		91
36) Propionitrile	4.859	54	696608	1003.15	ppb		94

KR 5/10/16

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Bromochloromethane	5.139	130	743646	192.19	ppb		95
38) Methacrylonitrile	5.151	67	450426	215.82	ppb		98
39) Tetrahydrofuran	5.231	42	309730	203.72	ppb		89
40) Chloroform	5.322	83	2302036	194.28	ppb		96
41) 1,1,1-Trichloroethane	5.590	97	1922950	190.37	ppb		99
42) TAME	6.401	73	3956905	203.92	ppb		98
44) Cyclohexane	5.670	41	1504117	196.27	ppb		98
46) Carbontetrachloride	5.859	121	519297	197.37	ppb		100
47) 1,1-Dichloropropene	5.865	75	1872609	198.51	ppb		96
49) Benzene	6.170	78	5097936	184.04	ppb		92
50) 1,2-Dichloroethane	6.206	62	1644144	198.90	ppb		97
51) Iso-Butyl Alcohol	6.206	43	1106237	4283.75	ppb		94
52) n-Heptane	6.639	43	1583611	187.53	ppb		99
53) 1-Butanol	7.121	56	1686626	11245.94	ppb		98
54) Trichloroethene	7.078	130	1352001	199.38	ppb		98
55) Methylcyclohexane	7.310	55	1808778	200.65	ppb		97
56) 1,2-Diclpropane	7.352	63	1482517	197.97	ppb		98
57) Dibromomethane	7.486	93	715474	202.53	ppb		95
58) 1,4-Dioxane	7.553	88	212162m	4719.69	ppb		
59) Methyl Methacrylate	7.572	69	852713	195.22	ppb		99
60) Bromodichloromethane	7.706	83	1771341	193.73	ppb		99
61) 2-Nitropropane	7.986	41	596011	401.80	ppb		92
62) 2-Chloroethylvinyl Ether	8.108	63	863599	216.04	ppb		96
63) cis-1,3-Dichloropropene	8.236	75	2327350	199.97	ppb		100
64) 4-Methyl-2-pentanone	8.437	43	1138819	214.97	ppb		97
66) Toluene	8.602	91	4911804	167.98	ppb		82
67) trans-1,3-Dichloropropene	8.864	75	1967459	203.01	ppb		97
68) Ethyl Methacrylate	8.998	69	1754249	199.47	ppb		99
69) 1,1,2-Trichloroethane	9.047	97	1017574	188.30	ppb		94
72) Tetrachloroethene	9.181	164	1005458	202.75	ppb		95
73) 2-Hexanone	9.327	43	802649	215.58	ppb		94
74) 1,3-Dichloropropane	9.212	76	1922011	199.62	ppb		97
75) Dibromochloromethane	9.431	129	1244682	194.91	ppb		97
76) N-Butyl Acetate	9.480	43	2026091	208.50	ppb		98
77) 1,2-Dibromoethane	9.529	107	1031425	197.59	ppb		98
78) Chlorobenzene	10.016	112	3460231	183.44	ppb		86
79) 3-CBTF	10.035	180	1873738	200.20	ppb		99
80) 4-CBTF	10.083	180	1699179	205.51	ppb		92
81) 1,1,1,2-Tetrachloroethane	10.102	131	1345681	203.92	ppb		99
82) Ethylbenzene	10.132	106	2067887	196.55	ppb	#	51
83) (m+p)Xylene	10.242	106	4317997	348.83	ppb	#	58
84) o-Xylene	10.595	106	2442665	198.19	ppb	#	72
85) Styrene	10.608	104	3767709	183.06	ppb		80
87) Bromoform	10.760	173	661109	203.10	ppb		98
88) 2-CBTF	10.833	180	1814469	201.82	ppb		95
89) Isopropylbenzene	10.925	105	4685883	156.78	ppb		79
90) Cyclohexanone	10.992	55	2348293	3952.05	ppb		100
91) trans-1,4-Dichloro-2-B...	11.230	53	453158	194.70	ppb		97
92) 1,1,2,2-Tetrachloroethane	11.181	83	1346477	192.43	ppb		97
93) Bromobenzene	11.175	156	1483643	195.45	ppb		91
94) 1,2,3-Trichloropropane	11.211	110	382098	185.10	ppb		94

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration

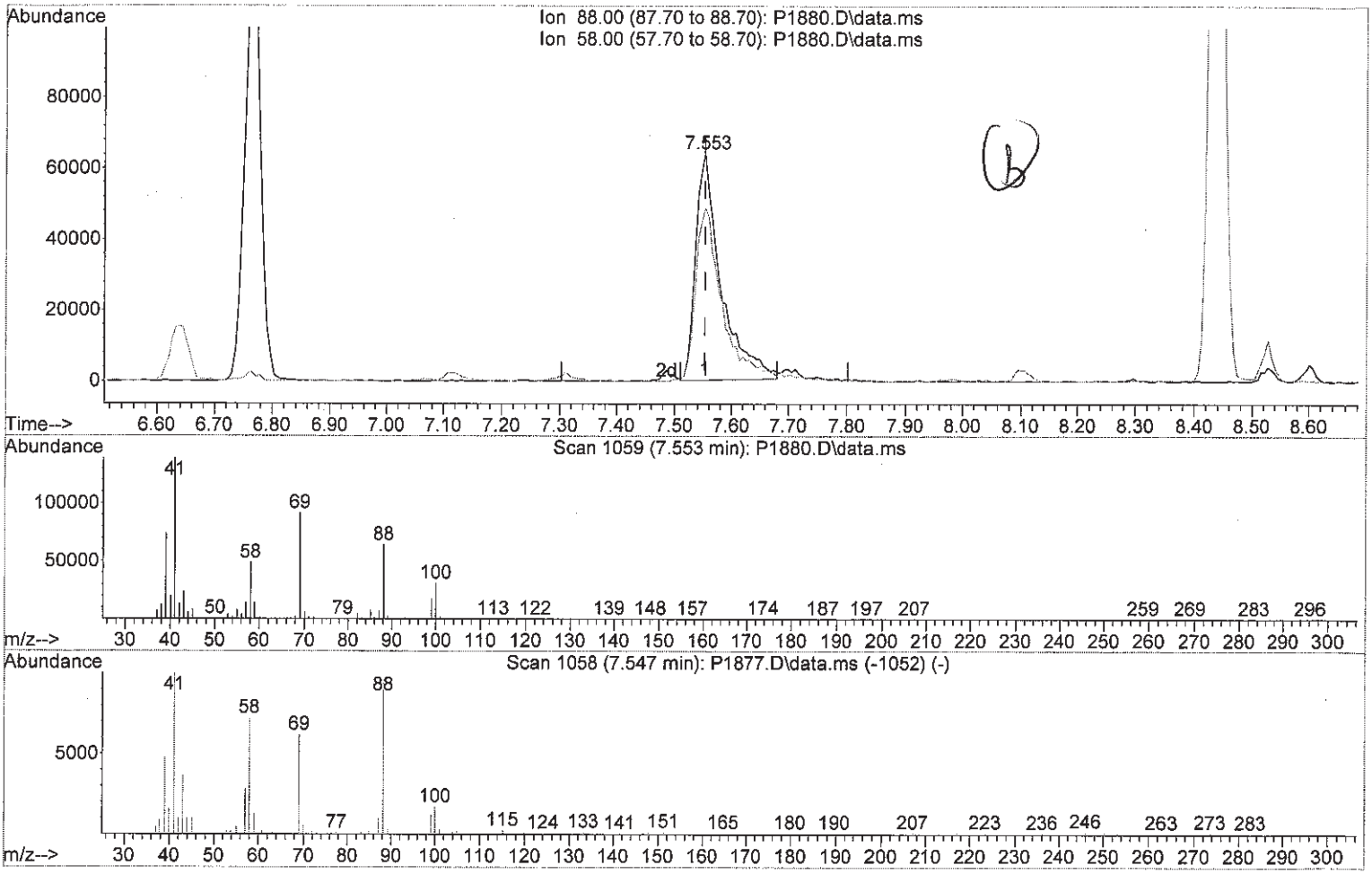
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
95)	n-Propylbenzene	11.278	91	5034856	145.19	ppb		69
96)	2-Chlorotoluene	11.345	91	3800358	169.78	ppb		83
97)	3-Chlorotoluene	11.394	91	3967193	173.86	ppb	#	85
98)	4-Chlorotoluene	11.437	91	4354603	166.86	ppb		74
99)	1,3,5-Trimethylbenzene	11.431	105	4274730	165.33	ppb		75
100)	tert-Butylbenzene	11.699	119	3626295	176.66	ppb		90
101)	1,2,4-Trimethylbenzene	11.742	105	4318259	162.72	ppb		75
102)	3,4-DCBTF	11.803	214	1309926	204.88	ppb		98
103)	sec-Butylbenzene	11.882	105	4561283	155.78	ppb		80
104)	p-Isopropyltoluene	12.004	119	4165231	164.81	ppb		77
105)	1,3-Dclbenz	11.967	146	2697388	187.30	ppb		95
106)	1,4-Dclbenz	12.040	146	2759438	184.21	ppb		96
107)	2,4-DCBTF	12.089	214	1186441	195.65	ppb		97
108)	2,5-DCBTF	12.126	214	1307403	203.27	ppb		97
109)	n-Butylbenzene	12.333	91	3877834	169.73	ppb		78
110)	1,2-Dclbenz	12.339	146	2629054	192.87	ppb		97
111)	1,2-Dibromo-3-chloropr...	12.955	157	260349	202.57	ppb		92
112)	Trielution Dichlorotol...	13.077	125	6178451	544.87	ppb	#	82
113)	1,3,5 Trichlorobenzene	13.132	180	1811960	199.39	ppb		100
114)	Coelution Dichlorotoluene	13.406	125	4290929	357.01	ppb	#	79
115)	1,2,4-Tcbenzene	13.607	180	1604038	198.31	ppb		99
116)	Hexachlorobt	13.747	225	629260	189.18	ppb		94
117)	Naphthalen	13.802	128	3339768	192.69	ppb		92
118)	1,2,3-Tclbenzene	13.985	180	1424090	207.80	ppb		98
119)	2,4,5-Trichlorotolene	14.570	159	1063915	217.86	ppb		98
120)	2,3,6-Trichlorotoluene	14.656	159	966792	212.85	ppb		97

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

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 10:36:04 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1880.D\data.ms

(58) 1,4-Dioxane

7.553min (0.000) 4416.81 ppb

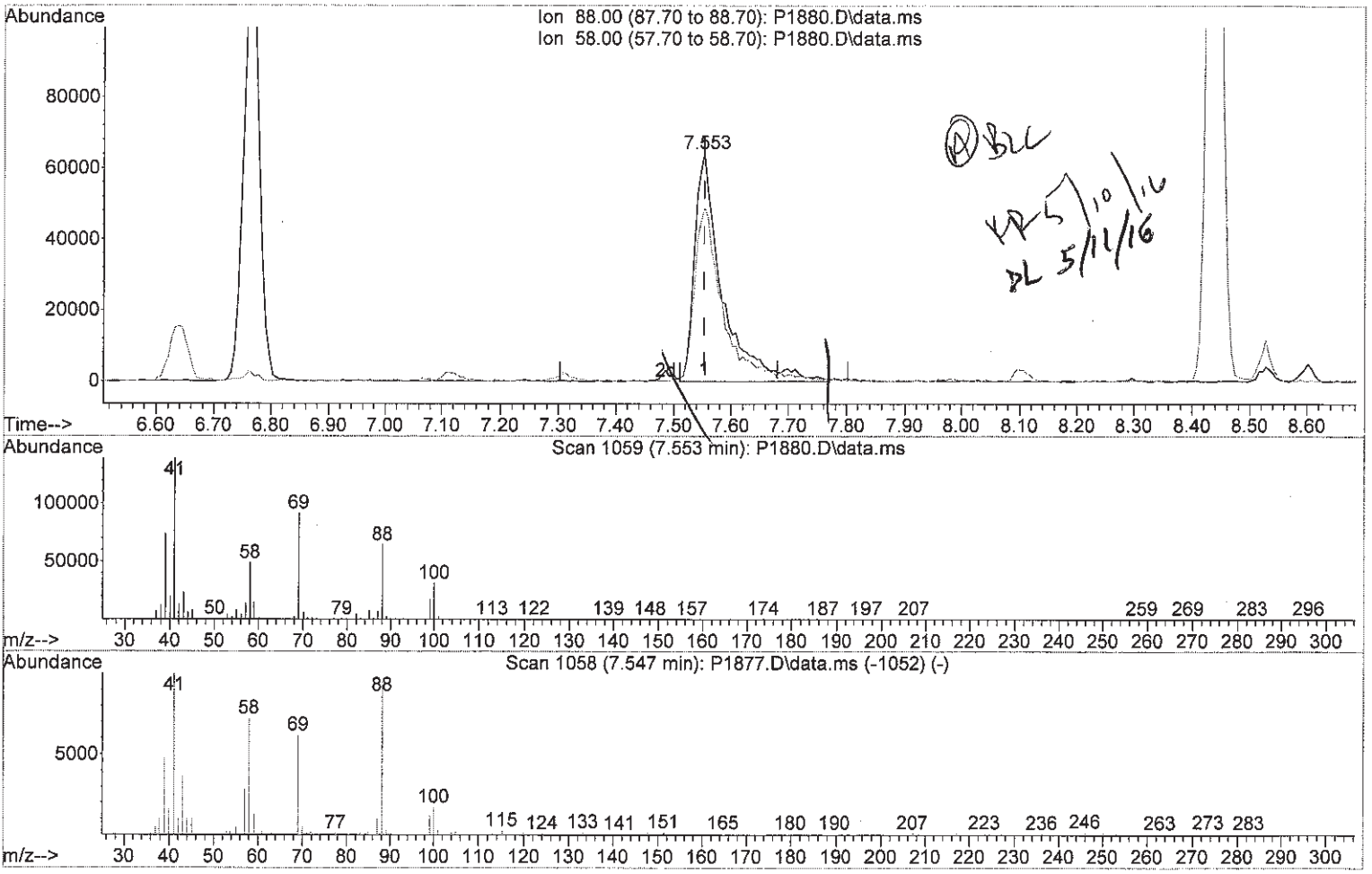
response 198547

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 10:36:04 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



TIC: P1880.D\data.ms

(58) 1,4-Dioxane

7.553min (0.000) 4719.69 ppb m

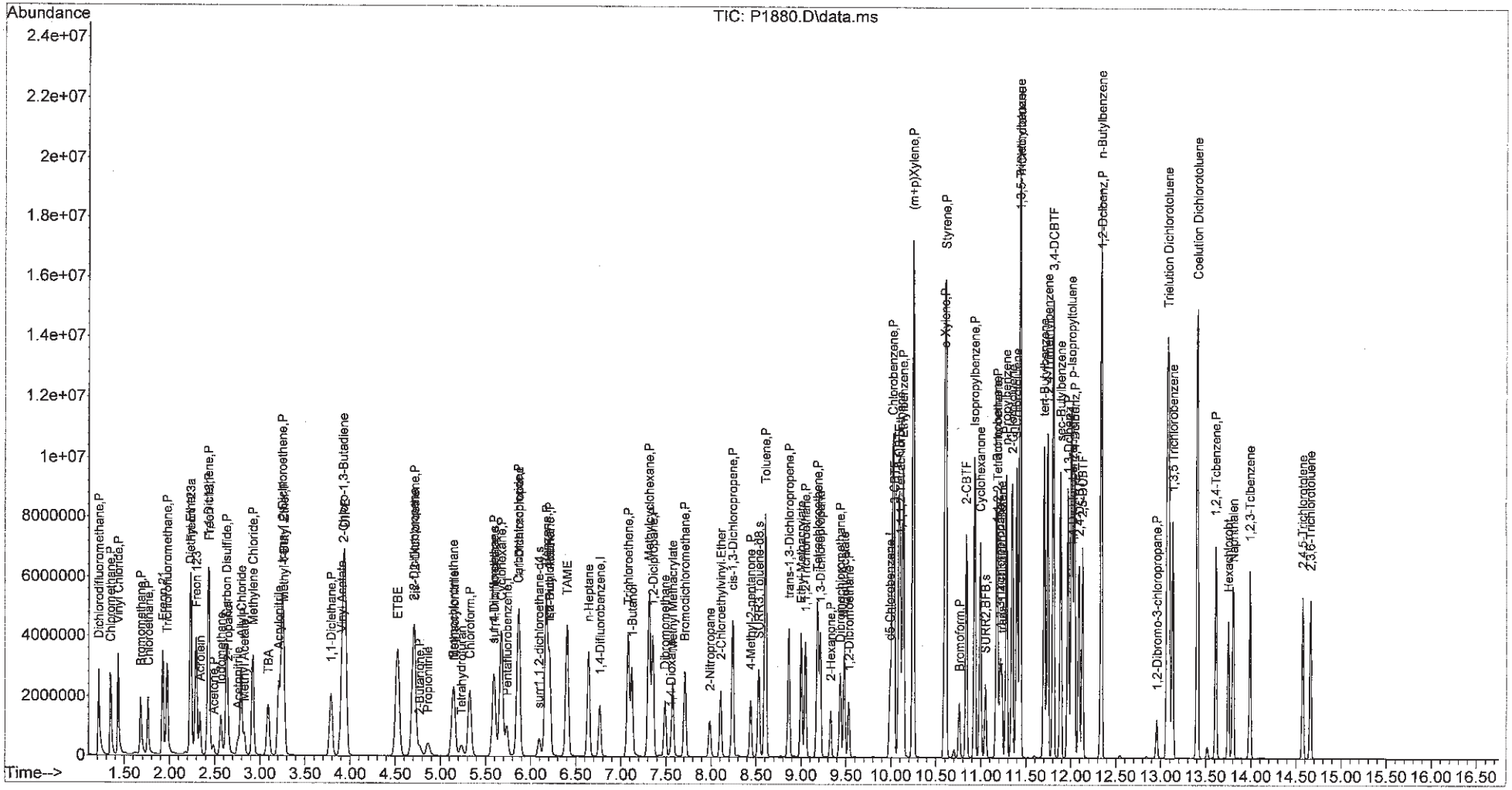
response 212162

Ion	Exp%	Act%
88.00	100	100
58.00	76.70	76.05
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1880.D
Acq On : 9 May 2016 6:24 pm
Operator : K.Ruest
Sample : 200ppb Inst : MSVOA-12
Misc : 8260 water ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 10 11:19:32 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 09:02:05 2016
Response via : Initial Calibration



Initial Calibration Verification Summary Report

14-5/10/16

Calibration ID: RC1600048
8760 waters W050916

Instrument ID: R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1600048-10	T	Average RF	50	52.18	ppm	4.4	<=30
1,1,1-Trichloroethane (TCA)	RC1600048-10	T	Average RF	50	49.88	ppm	-0.2	<=30
1,1,2,2-Tetrachloroethane	RC1600048-10	T	Average RF	50	49.33	ppm	-1.3	<=30
1,1,2-Trichloroethane	RC1600048-10	T	Average RF	50	48.99	ppm	-2.0	<=30
1,1,2-Trichlorotrifluoroethane	RC1600048-10	T	Average RF	50	52.30	ppm	4.6	<=30
1,1-Dichloroethane (1,1-DCA)	RC1600048-10	T	Average RF	50	52.72	ppm	5.4	<=30
1,1-Dichloroethene (1,1-DCE)	RC1600048-10	T	Average RF	50	51.25	ppm	2.5	<=30
1,1-Dichloropropene	RC1600048-10	T	Average RF	50	55.52	ppm	11.0	<=30
1,2,3-Trichlorobenzene	RC1600048-10	T	Average RF	50	53.81	ppm	7.6	<=30
1,2,3-Trichloropropane	RC1600048-10	T	Average RF	50	44.95	ppm	-10.1	<=30
1,2,4-Trichlorobenzene	RC1600048-10	T	Average RF	50	54.51	ppm	9.0	<=30
1,2,4-Trimethylbenzene	RC1600048-10	T	Average RF	50	53.86	ppm	7.7	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1600048-10	T	Average RF	50	50.19	ppm	0.4	<=30
1,2-Dibromoethane	RC1600048-10	T	Average RF	50	48.82	ppm	-2.4	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1600048-10	T	Average RF	50	49.30	ppm	-1.4	<=30
1,2-Dichlorobenzene	RC1600048-10	T	Average RF	50	53.21	ppm	6.4	<=30
1,2-Dichloroethane	RC1600048-10	T	Average RF	50	51.65	ppm	3.3	<=30
1,2-Dichloropropane	RC1600048-10	T	Average RF	50	52.19	ppm	4.4	<=30
1,3,5-Trichlorobenzene	RC1600048-10	T	Average RF	50	52.84	ppm	5.7	<=30
1,3,5-Trimethylbenzene	RC1600048-10	T	Average RF	50	53.94	ppm	7.9	<=30
1,3-Dichlorobenzene	RC1600048-10	T	Average RF	50	52.92	ppm	5.8	<=30
1,3-Dichloropropane	RC1600048-10	T	Average RF	50	51.91	ppm	3.8	<=30
1,4-Dichlorobenzene	RC1600048-10	T	Average RF	50	51.36	ppm	2.7	<=30
1,4-Dioxane	RC1600048-10	T	Average RF	1000	1151	ppm	15.1	<=30
1-Butanol	RC1600048-10	T	Average RF	2500	2633	ppm	5.3	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1600048-10	T	Average RF	50	52.16	ppm	4.3	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1600048-10	T	Average RF	50	46.92	ppm	-6.2	<=30
2,2-Dichloropropane	RC1600048-10	T	Average RF	50	53.31	ppm	6.6	<=30
2,3,6-Trichlorotoluene	RC1600048-10	T	Average RF	50	50.19	ppm	0.4	<=30
2,4,5-Trichlorotoluene	RC1600048-10	T	Average RF	50	57.39	ppm	14.8	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1600048-10	T	Average RF	150	165.4	ppm	10.3	<=30
2,4-Dichlorobenzotrifluoride	RC1600048-10	T	Average RF	50	52.58	ppm	5.2	<=30
2,5-Dichlorobenzotrifluoride	RC1600048-10	T	Average RF	50	52.14	ppm	4.3	<=30
2-Butanone (MEK)	RC1600048-10	T	Average RF	50	45.94	ppm	-8.1	<=30
2-Chloro-1,3-butadiene	RC1600048-10	T	Average RF	50	43.40	ppm	-13.2	<=30
2-Chlorobenzotrifluoride	RC1600048-10	T	Average RF	50	54.32	ppm	8.6	<=30
2-Chloroethyl Vinyl Ether	RC1600048-10	T	Average RF	50	48.96	ppm	-2.1	<=30
2-Chlorotoluene	RC1600048-10	T	Average RF	50	53.39	ppm	6.8	<=30
2-Hexanone	RC1600048-10	T	Average RF	50	47.52	ppm	-5.0	<=30
2-Methyl-1-propanol	RC1600048-10	T	Average RF	1000	1021	ppm	2.1	<=30
2-Methyl-2-propanol	RC1600048-10	T	Average RF	1000	1074	ppm	7.4	<=30
2-Nitropropane	RC1600048-10	T	Average RF	100	99.78	ppm	-0.2	<=30
2-Propanol	RC1600048-10	T	Average RF	1000	995.5	ppm	-0.4	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1600048-10	T	Average RF	100	110.2	ppm	10.2	<=30
3,4-Dichlorobenzotrifluoride	RC1600048-10	T	Average RF	50	52.90	ppm	5.8	<=30
3-Chloro-1-propene	RC1600048-10	T	Average RF	50	58.00	ppm	16.0	<=30
3-Chlorobenzotrifluoride	RC1600048-10	T	Average RF	50	50.61	ppm	1.2	<=30
3-Chlorotoluene	RC1600048-10	T	Average RF	50	55.23	ppm	10.5	<=30
4-Chlorotoluene	RC1600048-10	T	Average RF	50	53.80	ppm	7.6	<=30
4-Isopropyltoluene	RC1600048-10	T	Average RF	50	55.19	ppm	10.4	<=30
4-Methyl-2-pentanone	RC1600048-10	T	Average RF	50	49.04	ppm	-1.9	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1600048	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1600048-10	T	Average RF	50	42.06	ppm	-15.9	<=30
Acetonitrile	RC1600048-10	T	Linear	250	249.0	ppm	-0.4	<=30
Acrolein	RC1600048-10	T	Average RF	100	92.20	ppm	-7.8	<=30
Acrylonitrile	RC1600048-10	T	Average RF	250	246.4	ppm	-1.4	<=30
Benzene	RC1600048-10	T	Average RF	50	53.34	ppm	6.7	<=30
Bromobenzene	RC1600048-10	T	Average RF	50	51.93	ppm	3.9	<=30
Bromochloromethane	RC1600048-10	T	Average RF	50	48.31	ppm	-3.4	<=30
Bromodichloromethane	RC1600048-10	T	Average RF	50	49.76	ppm	-0.5	<=30
Bromoform	RC1600048-10	T	Average RF	50	56.51	ppm	13.0	<=30
Bromomethane	RC1600048-10	T	Average RF	50	51.35	ppm	2.7	<=30
Carbon Disulfide	RC1600048-10	T	Average RF	50	51.29	ppm	2.6	<=30
Carbon Tetrachloride	RC1600048-10	T	Average RF	50	52.45	ppm	4.9	<=30
Chlorobenzene	RC1600048-10	T	Average RF	50	51.92	ppm	3.8	<=30
Chloroethane	RC1600048-10	T	Average RF	50	49.09	ppm	-1.8	<=30
Chloroform	RC1600048-10	T	Average RF	50	49.58	ppm	-0.8	<=30
Chloromethane	RC1600048-10	T	Average RF	50	49.71	ppm	-0.6	<=30
Cyclohexane	RC1600048-10	T	Average RF	50	45.03	ppm	-9.9	<=30
Cyclohexanone	RC1600048-10	T	Average RF	1000	1007	ppm	0.7	<=30
Dibromochloromethane	RC1600048-10	T	Average RF	50	47.23	ppm	-5.5	<=30
Dibromomethane	RC1600048-10	T	Average RF	50	49.83	ppm	-0.3	<=30
Dichlorodifluoromethane (CFC 12)	RC1600048-10	T	Average RF	50	44.32	ppm	-11.4	<=30
Dichlorofluoromethane (CFC 21)	RC1600048-10	T	Average RF	50	49.05	ppm	-1.9	<=30
Dichloromethane	RC1600048-10	T	Average RF	50	49.64	ppm	-0.7	<=30
Diethyl Ether	RC1600048-10	T	Average RF	50	49.74	ppm	-0.5	<=30
Diisopropyl Ether	RC1600048-10	T	Average RF	50	47.10	ppm	-5.8	<=30
Ethyl Methacrylate	RC1600048-10	T	Average RF	50	50.58	ppm	1.2	<=30
Ethyl tert-Butyl Ether	RC1600048-10	T	Average RF	50	46.84	ppm	-6.3	<=30
Ethylbenzene	RC1600048-10	T	Average RF	50	51.79	ppm	3.6	<=30
Hexachlorobutadiene	RC1600048-10	T	Average RF	50	54.28	ppm	8.6	<=30
Iodomethane	RC1600048-10	T	Quadratic	50	56.39	ppm	12.8	<=30
Isopropylbenzene (Cumene)	RC1600048-10	T	Average RF	50	55.92	ppm	11.8	<=30
Methacrylonitrile	RC1600048-10	T	Average RF	50	50.38	ppm	0.8	<=30
Methyl Acetate	RC1600048-10	T	Average RF	50	46.30	ppm	-7.4	<=30
Methyl Methacrylate	RC1600048-10	T	Average RF	50	51.25	ppm	2.5	<=30
Methyl tert-Butyl Ether	RC1600048-10	T	Average RF	50	51.50	ppm	3.0	<=30
Methylcyclohexane	RC1600048-10	T	Average RF	50	47.71	ppm	-4.6	<=30
Naphthalene	RC1600048-10	T	Average RF	50	52.90	ppm	5.8	<=30
Propionitrile	RC1600048-10	T	Average RF	250	256.3	ppm	2.5	<=30
Styrene	RC1600048-10	T	Average RF	50	53.58	ppm	7.2	<=30
Tetrachloroethene (PCE)	RC1600048-10	T	Average RF	50	55.19	ppm	10.4	<=30
Tetrahydrofuran (THF)	RC1600048-10	T	Average RF	50	50.04	ppm	0.1	<=30
Toluene	RC1600048-10	T	Average RF	50	53.19	ppm	6.4	<=30
Trichloroethene (TCE)	RC1600048-10	T	Average RF	50	53.57	ppm	7.1	<=30
Trichlorofluoromethane (CFC 11)	RC1600048-10	T	Average RF	50	51.03	ppm	2.1	<=30
Vinyl Acetate	RC1600048-10	T	Average RF	50	53.52	ppm	7.0	<=30
Vinyl Chloride	RC1600048-10	T	Average RF	50	48.28	ppm	-3.4	<=30
cis-1,2-Dichloroethene	RC1600048-10	T	Average RF	50	51.27	ppm	2.5	<=30
cis-1,3-Dichloropropene	RC1600048-10	T	Average RF	50	52.67	ppm	5.3	<=30
m,p-Xylenes	RC1600048-10	T	Average RF	100	107.5	ppm	7.5	<=30
n-Butyl Acetate	RC1600048-10	T	Average RF	50	46.92	ppm	-6.2	<=30
n-Butylbenzene	RC1600048-10	T	Average RF	50	56.50	ppm	13.0	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1600048 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1600048-10	T	Average RF	50	54.14	ppm	8.3	<=30
n-Propylbenzene	RC1600048-10	T	Average RF	50	57.02	ppm	14.0	<=30
o-Xylene	RC1600048-10	T	Average RF	50	53.35	ppm	6.7	<=30
sec-Butylbenzene	RC1600048-10	T	Average RF	50	55.60	ppm	11.2	<=30
tert-Amyl Methyl Ether	RC1600048-10	T	Average RF	50	48.09	ppm	-3.8	<=30
tert-Butylbenzene	RC1600048-10	T	Average RF	50	56.27	ppm	12.5	<=30
trans-1,2-Dichloroethene	RC1600048-10	T	Average RF	50	50.88	ppm	1.8	<=30
trans-1,3-Dichloropropene	RC1600048-10	T	Average RF	50	53.71	ppm	7.4	<=30
trans-1,4-Dichloro-2-butene	RC1600048-10	T	Average RF	50	43.85	ppm	-12.3	<=30
1,2-Dichloroethane-d4	RC1600048-10	S	Average RF	50	54.55	ppm	9.1	<=30
4-Bromofluorobenzene	RC1600048-10	S	Average RF	50	57.18	ppm	14.4	<=30
Dibromofluoromethane	RC1600048-10	S	Average RF	50	55.86	ppm	11.7	<=30
Toluene-d8	RC1600048-10	S	Average RF	50	57.41	ppm	14.8	<=30

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.731	168	810794	50.00	ppb		0.00
43) 1,4-Difluorobenzene	6.761	114	1354595	50.00	ppb		0.00
71) d5-Chlorobenzene	9.986	117	1272990	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	12.016	152	646705	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	5.584	113	391715	55.86	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 111.72%				
48) surr1,1,2-dichloroetha...	6.090	65	449629	54.55	ppb		0.00
Spiked Amount 50.000	Range 73 - 125		Recovery = 109.10%				
65) SURR3,Toluene-d8	8.529	98	1727346	57.41	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 114.82%				
70) SURR2,BFB	11.047	95	669194	57.18	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 114.36%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.213	85	423883	44.32	ppb		97
3) Chloromethane	1.341	50	515317	49.71	ppb		99
4) Vinyl Chloride	1.427	62	559456	48.28	ppb		99
5) Bromomethane	1.683	94	240968	51.35	ppb		96
6) Chloroethane	1.762	64	305517	49.09	ppb		100
7) Freon 21	1.920	67	656802	49.05	ppb		97
8) Trichlorofluoromethane	1.969	101	509640	51.03	ppb		95
9) Diethyl Ether	2.225	59	295497	49.74	ppb		99
10) Freon 123a	2.231	67	417947	49.30	ppb		95
11) Freon 123	2.292	83	472502	46.92	ppb		99
12) Acrolein	2.335	56	72664	92.20	ppb		97
13) 1,1-Diclethene	2.426	96	313015	51.25	ppb		98
14) Freon 113	2.433	101	312579	52.30	ppb		96
15) Acetone	2.481	43	66603	42.06	ppb		96
16) 2-Propanol	2.640	45	306068	995.53	ppb		94
17) Iodomethane	2.567	142	345599	56.39	ppb		97
18) Carbon Disulfide	2.628	76	1048939	51.29	ppb		99
19) Acetonitrile	2.756	40	61176	249.00	ppb		93
20) Allyl Chloride	2.792	76	200523	58.00	ppb		96
21) Methyl Acetate	2.823	43	177471	46.30	ppb		95
22) Methylene Chloride	2.920	84	339414	49.64	ppb		98
23) TBA	3.085	59	524599	1073.67	ppb		99
24) Acrylonitrile	3.201	53	457425	246.39	ppb		93
25) Methyl-t-Butyl Ether	3.256	73	932072	51.50	ppb		100
26) trans-1,2-Dichloroethene	3.237	96	356358	50.88	ppb		99
28) 1,1-Diclethane	3.780	63	642617	52.72	ppb		96
29) Vinyl Acetate	3.896	86	68440	53.52	ppb	#	92
30) DIPE	3.938	45	1180381	47.10	ppb		99
31) 2-Chloro-1,3-Butadiene	3.920	53	589144	43.40	ppb		95
32) ETBE	4.517	59	1039989	46.84	ppb		98
33) 2,2-Dichloropropane	4.694	77	557369	53.31	ppb		99
34) cis-1,2-Dichloroethene	4.706	96	378400	51.27	ppb		93
35) 2-Butanone	4.774	43	107287	45.94	ppb		90
36) Propionitrile	4.853	54	172114	256.25	ppb		97

KB 5/10/16

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Bromochloromethane	5.139	130	186528	48.31	ppb	95
38) Methacrylonitrile	5.152	67	109969	50.38	ppb	94
39) Tetrahydrofuran	5.231	42	76857	50.04	ppb	91
40) Chloroform	5.322	83	586941	49.58	ppb	97
41) 1,1,1-Trichloroethane	5.590	97	503643	49.88	ppb	96
42) TAME	6.401	73	931178	48.09	ppb	99
44) Cyclohexane	5.670	41	339952	45.03	ppb	95
46) Carbontetrachloride	5.853	121	136287	52.45	ppb	96
47) 1,1-Dichloropropene	5.865	75	513675	55.52	ppb	99
49) Benzene	6.163	78	1454762	53.34	ppb	99
50) 1,2-Dichloroethane	6.206	62	420327	51.65	ppb	98
51) Iso-Butyl Alcohol	6.194	43	259710	1021.50	ppb	98
52) n-Heptane	6.639	43	449267	54.14	ppb	99
53) 1-Butanol	7.108	56	385000	2633.29	ppb	99
54) Trichloroethene	7.078	130	357671	53.57	ppb	98
55) Methylcyclohexane	7.310	55	423391	47.71	ppb	96
56) 1,2-Diclpropane	7.346	63	384773	52.19	ppb	99
57) Dibromomethane	7.486	93	173306	49.83	ppb	95
58) 1,4-Dioxane	7.553	88	51186	1151.29	ppb	91
59) Methyl Methacrylate	7.572	69	212912	51.25	ppb	100
60) Bromodichloromethane	7.706	83	446640	49.76	ppb	99
61) 2-Nitropropane	7.980	41	146673	99.78	ppb	95
62) 2-Chloroethylvinyl Ether	8.102	63	192574	48.96	ppb	100
63) cis-1,3-Dichloropropene	8.236	75	603527	52.67	ppb	99
64) 4-Methyl-2-pentanone	8.437	43	253914	49.04	ppb	99
66) Toluene	8.596	91	1531249	53.19	ppb	99
67) trans-1,3-Dichloropropene	8.858	75	512447	53.71	ppb	98
68) Ethyl Methacrylate	8.998	69	437966	50.58	ppb	96
69) 1,1,2-Trichloroethane	9.041	97	258795	48.99	ppb	89
72) Tetrachloroethene	9.181	164	270916	55.19	ppb	94
73) 2-Hexanone	9.328	43	175118	47.52	ppb	98
74) 1,3-Dichloropropane	9.212	76	494721	51.91	ppb	97
75) Dibromochloromethane	9.431	129	298530	47.23	ppb	99
76) N-Butyl Acetate	9.474	43	451537	46.92	ppb	98
77) 1,2-Dibromoethane	9.529	107	252209	48.82	ppb	98
78) Chlorobenzene	10.010	112	969265	51.92	ppb	96
79) 3-CBTF	10.029	180	468249	50.61	ppb	98
80) 4-CBTF	10.083	180	426868	52.16	ppb	98
81) 1,1,1,2-Tetrachloroethane	10.096	131	340829	52.18	ppb	96
82) Ethylbenzene	10.132	106	539320	51.79	ppb	100
83) (m+p)Xylene	10.242	106	1317309	107.52	ppb	98
84) o-Xylene	10.596	106	650832	53.35	ppb	98
85) Styrene	10.608	104	1091575	53.58	ppb	98
87) Bromoform	10.754	173	174241	56.51	ppb	99
88) 2-CBTF	10.833	180	462582	54.32	ppb	98
89) Isopropylbenzene	10.925	105	1583248	55.92	ppb	99
90) Cyclohexanone	10.986	55	568112	1007.15	ppb	96
91) trans-1,4-Dichloro-2-B...	11.230	53	96671	43.85	ppb	96
92) 1,1,2,2-Tetrachloroethane	11.181	83	326927	49.33	ppb	98
93) Bromobenzene	11.169	156	373412	51.93	ppb	98
94) 1,2,3-Trichloropropane	11.205	110	86248	44.95	ppb	97

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

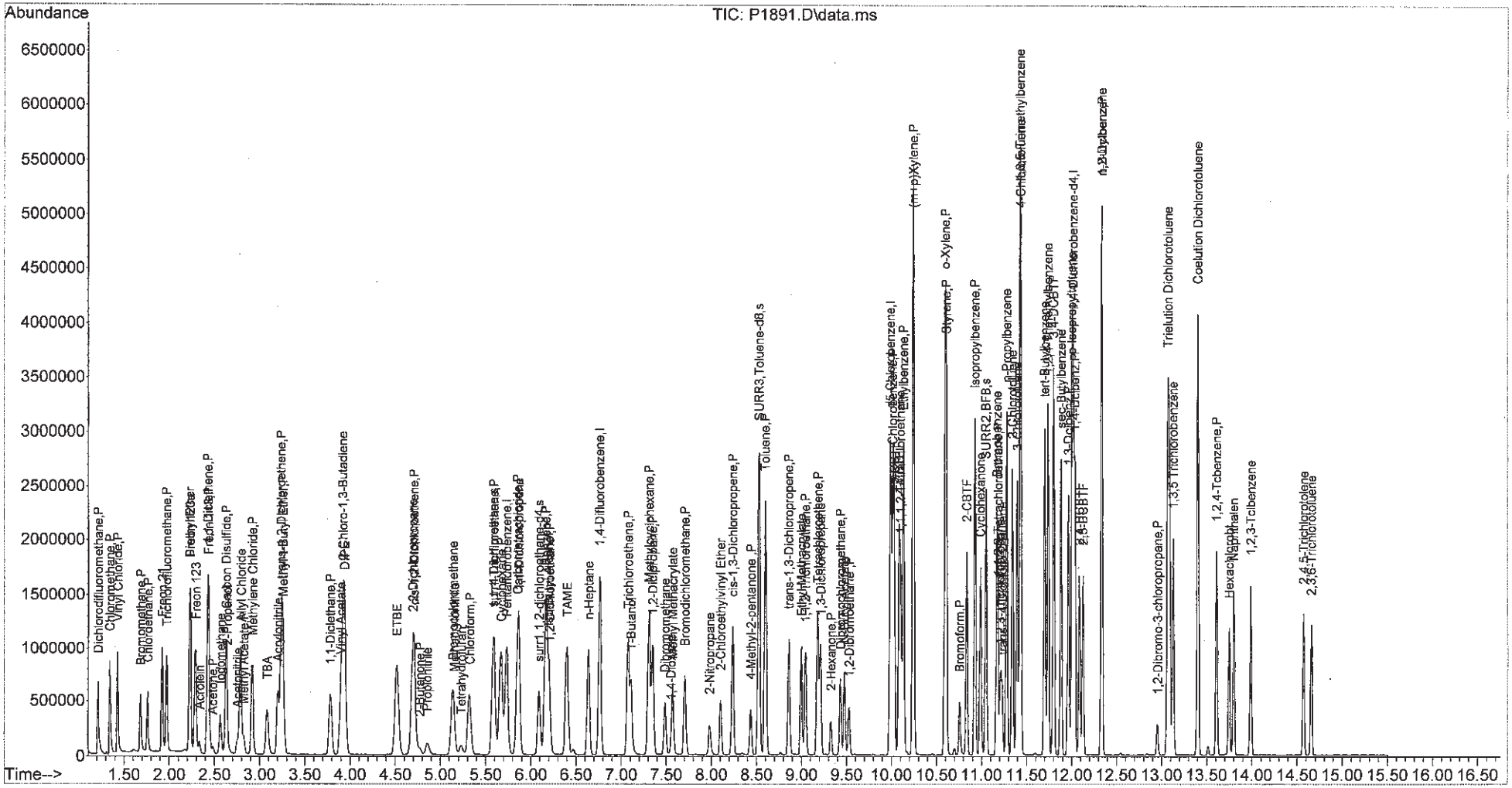
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	n-Propylbenzene	11.278	91	1872993	57.02	ppb	99
96)	2-Chlorotoluene	11.339	91	1131964	53.39	ppb	99
97)	3-Chlorotoluene	11.394	91	1193821	55.23	ppb	98
98)	4-Chlorotoluene	11.431	91	1329784	53.80	ppb	98
99)	1,3,5-Trimethylbenzene	11.425	105	1321075	53.94	ppb	99
100)	tert-Butylbenzene	11.699	119	1094087	56.27	ppb	99
101)	1,2,4-Trimethylbenzene	11.736	105	1353849	53.86	ppb	99
102)	3,4-DCBTF	11.797	214	320352	52.90	ppb	96
103)	sec-Butylbenzene	11.882	105	1542102	55.60	ppb	99
104)	p-Isopropyltoluene	11.998	119	1321095	55.19	ppb	99
105)	1,3-Dclbenz	11.961	146	721917	52.92	ppb	97
106)	1,4-Dclbenz	12.034	146	728784	51.36	ppb	99
107)	2,4-DCBTF	12.083	214	302005	52.58	ppb	98
108)	2,5-DCBTF	12.126	214	317642	52.14	ppb	97
109)	n-Butylbenzene	12.333	91	1222701	56.50	ppb	99
110)	1,2-Dclbenz	12.333	146	687078	53.21	ppb	96
111)	1,2-Dibromo-3-chloropr...	12.955	157	61106	50.19	ppb	96
112)	Trielution Dichlorotol...	13.071	125	1776464	165.39	ppb	98
113)	1,3,5 Trichlorobenzene	13.126	180	454844	52.84	ppb	99
114)	Coelution Dichlorotoluene	13.400	125	1254133	110.16	ppb	99
115)	1,2,4-Tcbenzene	13.607	180	417648	54.51	ppb	98
116)	Hexachlorobt	13.747	225	171022	54.28	ppb	92
117)	Naphthalen	13.796	128	868445	52.90	ppb	98
118)	1,2,3-Tclbenzene	13.985	180	349319	53.81	ppb	96
119)	2,4,5-Trichlorotolene	14.570	159	265493	57.39	ppb	97
120)	2,3,6-Trichlorotoluene	14.656	159	215945	50.19	ppb	99

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

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\051016\
Data File : P1891.D
Acq On : 10 May 2016 10:44 am
Operator : K.Ruest
Sample : ICV/LCS Inst : MSVOA-12
Misc : 50ppb
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 12:28:30 2016
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Tue May 10 12:23:15 2016
Response via : Initial Calibration

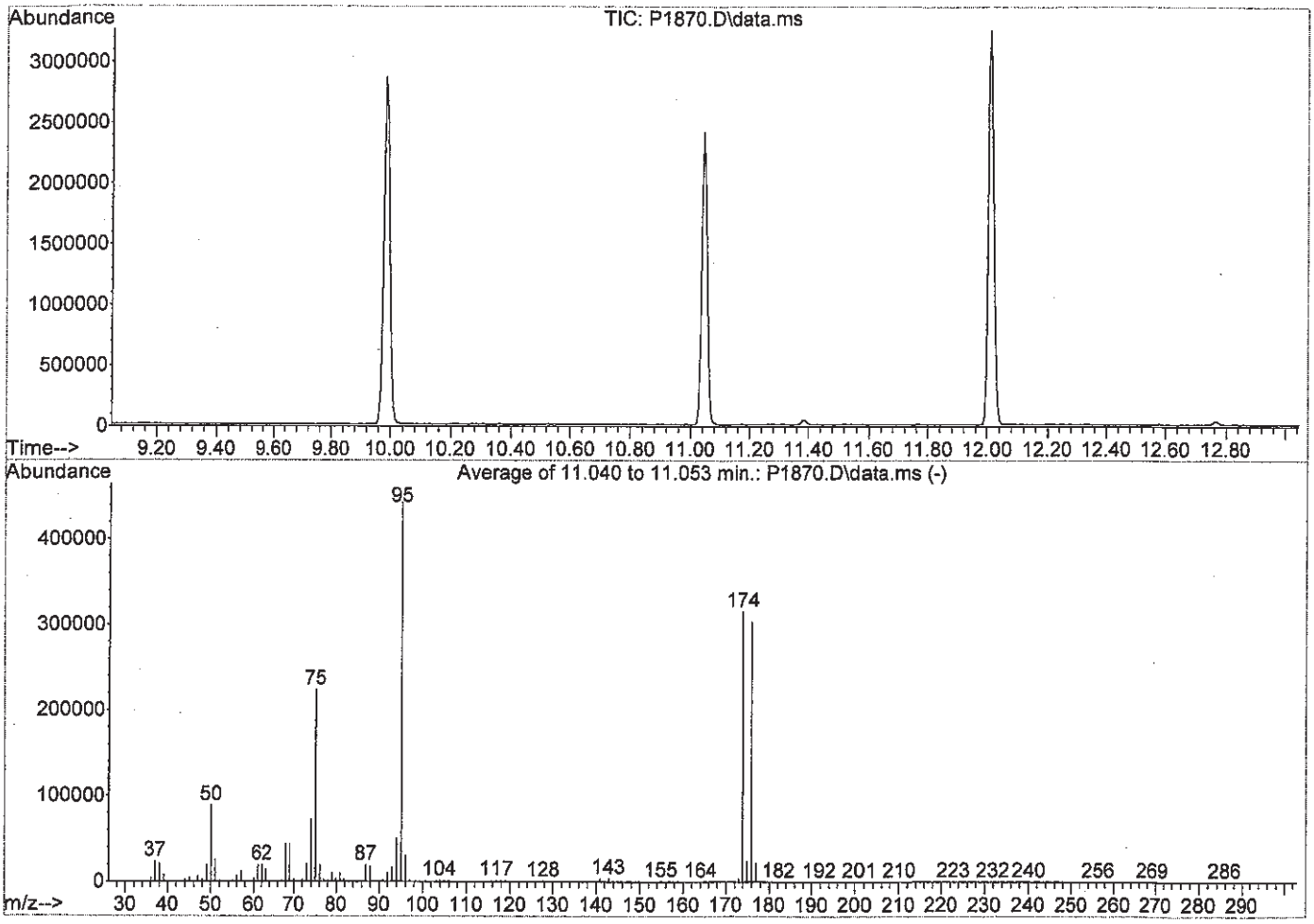


Data Path : I:\ACQUDATA\msvoa12\Data\050916\
Data File : P1870.D
Acq On : 9 May 2016 1:11 pm
Operator : K.Ruest
Sample : TUNE Inst : MSVOA-12
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W050916.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Thu Nov 19 11:34:31 2015

KR 5/9/16



AutoFind: Scans 1631, 1632, 1633; Background Corrected with Scan 1626

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.0	88653	PASS
75	95	30	60	50.6	223893	PASS
95	95	100	100	100.0	442722	PASS
96	95	5	9	6.8	29997	PASS
173	174	0.00	2	1.1	3475	PASS
174	95	50	120	71.3	315819	PASS
175	174	5	9	7.4	23469	PASS
176	174	95	101	96.2	303808	PASS
177	176	5	9	7.0	21323	PASS

Analysis: 8260 Waters | Analyst: K. Quest | Tune Method: W0509116

Date: 5/9/16 | Data Path: j:\acqudata\msvoa12\0509116 | Run Method: ↓

Instr. 12 | LIMS Run#: -ICAL- VP5557 (LOD/LOQ)

Pos.	Sample	Diln.	Diln. Prep.	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							P1862		
2	↓							P1863		
3								P1864		(W0509116)
4								P1865		
5								P1866		
6								P1867		
7								P1868		
8	↓							P1869		
9	TUNE							P1870	YT	(auto) 13:11
1	IBLK		(5ppm) (500ppm) (5+500ppm)	FV				P1871	YB	
2	0.5 ppb		5uL — —	5Dmes				P1872	Y	
3	1.0		10uL — —	↓				P1873	Y	
4	2.0		20uL — 1uL					P1874	Y	
5	5.0		50uL — 2uL					P1875	Y	
6	20		— 2uL 5uL					P1876	Y	
7	50		— 5uL —					P1877	Y	
8	100		— 10uL 7.5uL					P1878	Y	
9	150		— 15uL 10uL					P1879	Y	
10	200		— 20uL —	↓				P1880	Y	
11	BLK							P1881	—	
12	↓							P1882	—	
13								P1883	—	
14	↓							P1884	—	
15	LOD 1.0 ppb		R1604343-012 + R1605759-01 (LOQV)					P1885		(10uL-5ppm / 5Dmes)
16	LOQ 5.0 ppb		R1605759-02					P1886		(50uL-5ppm / 5Dmes)
17	BLK							P1887	—	

LOD JLS 5/9/16

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 ↓

Primary OCC : 172255

Primary HBO : 172246

Primary Gt : 172250 (10uL → 1.0mL MeOH = 5ppm)

Primary Tb : 172251

Primary HSL : 172145

Secondary :

Secondary :

Secondary :

Secondary :

Secondary :

Combined IS/Surr 500 : 172199

Surrogate :

Internal Std :

Analysis: 8260 Waters | Analyst: K. Ruest | Tune Method: W050916

Date: 5/10/16 | Data Path: j:\acqudata\msvoa12\050716 | Run Method: ↓

Instr. 12 | LIMS Run#:

Pos.	Sample	Diln.	Diln. Prep.	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK							P15685		
2	TUNE							P15689	YT	(auto) 9:43
3	CCV							P15690	YC	
4	LCS/ICV - 50ppb							P15691	YQ	
5	VBLK							P15692	(N)	wpfc10
6	↓							P15693	YR	
7	R1604692-001	1.0		0691	1	1		P15694		
8	002	1.0		↓	↓	1		P15695		
9	↓ 003	1.0		↓	↓	1		P15696		
10	R1604585-001	10	5/5 0mls	49775	4	1		P15697		Foamy
11	R1604575-006	1.0		49775	4	1		P15698		

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary OCC : 172255
Primary HBD : 172246
Primary Fr+ : 172250 5mL → 50mls = CCV
Primary TB : 172251
Primary HSL : 172145

200 Secondary Fr+ : 172033 - 12.5mL
500 Secondary NBD : 172283
Secondary OCC : 171586 5mL
Secondary HSL : 171991
Secondary TB : 171584
50mls = ICV/LCS

Combined IS/Surr 500 : 172199
Surrogate :
Internal Std :

Appendix C

VERINA Consulting Group, LLC

ACTIVE SUB-SLAB DEPRESSURIZATION (ASD) INSPECTION LOG
Former Dover Electronics Site, Binghamton, NY (5101.0003)

Date	Time	System On? (Y/N)	E-1	E-2	E-3	E-4	Comments
			Vacuum	Vacuum	Vacuum	Vacuum	
1/13/2015	10:45	Y	2.75	2.50	0.20	2.38	
2/25/2015	14:05	Y	3.28	3.02	0.18	2.76	
3/19/2015	15:10	Y	3.25	3.00	0.20	3.00	
4/20/2015	15:00	Y	3.25	3.00	0.20	2.75	
5/29/2015	14:00	Y	3.25	3.00	0.20	3.00	
6/26/2015	9:34	Y	3.23	3.38	0.21	3.00	
7/31/2015	8:07	Y	3.25	3.30	0.16	2.88	
8/27/2015	8:30	Y	3.18	3.25	0.18	2.92	
9/24/2015	11:10	Y	3.38	3.19	0.13	3.13	
10/8/2015	8:30	Y	3.25	3.05	0.22	2.80	
11/5/2015	8:30	Y	4.00	3.00	0.10	3.00	
12/17/2015	9:00	Y	3.38	3.25	0.11	3.00	
1/13/2016	8:10	Y	2.75	2.63	0.19	2.50	
2/9/2016	8:05	Y	3.13	3.00	0.25	3.00	
3/17/2016	8:02	Y	3.25	3.25	0.25	2.88	
4/14/2016	8:30	Y	3.25	3.25	0.38	3.00	
5/3/2016	8:28	Y	3.25	3.38	0.25	3.00	
6/23/2016	8:30	Y	3.38	3.25	0.25	3.00	
7/21/2016	8:30	Y	3.38	3.25	0.38	3.13	
8/18/2016	8:30	Y	3.50	3.13	0.25	2.88	
9/29/2016	8:30	Y	3.50	3.13	0.13	3.00	
10/20/2016	8:30	Y	3.50	3.38	0.13	3.00	
11/17/2016	8:30	Y	3.50	3.38	0.13	3.00	
12/16/2016	13:40	Y	3.00	2.75	0.13	1.50	