



Transmittal

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Design with community in mind

**2014 Groundwater Monitoring Report
Former Lockheed Martin French Road Facility
West Lot – NYSDEC Site ID #633036
Utica, New York**

Prepared for:

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ACRONYMS

1,1,-DCA	1,1-dichloroethane
1,1,1-TCA	1,1,1-trichloroethane
ASP	analytical services protocol
Accutest	Accutest Laboratories
cis-1,2-DCE	cis-1,2-dichloroethene
COC	constituent(s) of concern
ConMed	ConMed Corporation
ft bgs	feet below ground surface
GHD	GHD Consulting Services, Inc.
Lockheed Martin	Lockheed Martin Corporation
LDPE	Low-density polyethylene
MEK	Methyl ethyl ketone (2-butanone)
mL	milliliter
MW	monitoring well
ND	non-detect
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PCE	tetrachloroethene
PDB	Passive Diffusion Bag
PZ	piezometer
QA/QC	quality assurance/quality control
SOPs	Standard Operating Procedures
Stantec	Stantec Consulting Services Inc.
SMP	Site Management Plan
TCE	trichloroethene
µg/L	microgram per liter
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

1.0 INTRODUCTION

On behalf of Lockheed Martin Corporation (Lockheed Martin), Stantec Consulting Services Inc.* (Stantec) has prepared the 2014 Annual Groundwater Monitoring Report (report) for the former Lockheed Martin French Road facility West Lot site ("the site") in Utica, New York (see Figure 1). The 2014 groundwater monitoring program was completed in accordance with the recommended approach stated in the *Report on Continued Investigation Activities, West Lot Site, Utica New York* (ARCADIS, 2013) and subsequently approved by the New York State Department of Environmental Conservation (NYSDEC). The recommended and approved monitoring approach included four quarterly rounds of groundwater monitoring beginning March 2014 to supplement previous sampling results and assess the suitability of the site for closure and delisting. The report is organized as follows:

Section 2 – Site History and Project Background: Briefly describes the history of the site and provides a project background.

Section 3 – Gauging and Sampling Activities: Presents the technical approach to the groundwater monitoring program, including well gauging, groundwater sampling, and laboratory analysis.

Section 4 – Discussion of Results: Discusses the results of well gauging, groundwater sampling, and data review.

Section 5 – Summary and Conclusions: Summarizes the 2014 West Lot groundwater monitoring results and discusses their implications for future site closure.

Section 6 – References: Lists the references used in this report.

*Note: At the beginning of 2014, Lockheed Martin retained Stantec to serve as performing contractor for the groundwater monitoring program at the West Lot site. The former contractor was ARCADIS.

2.0 SITE HISTORY AND PROJECT BACKGROUND

The Former Lockheed Martin French Road Facility was used to manufacture electrical components. ConMed Corporation (ConMed), a medical supplies manufacturer and distributor, now occupies the facility. The West Lot Site encompasses approximately two acres within the western portion of the larger 55-acre property. From the 1950s to the early 1960s, the West Lot was used as a waste disposal site and fire training area, and waste materials and spent solvents were burned in an 80-foot diameter pit now referred to as the Former Burn Pit. The site is mostly covered by pavement or mixed vegetation and contains no occupied buildings. Southwest of the site and adjoining the larger facility boundary is an active New York State Department of Transportation (NYSDOT) facility, including a building used for office space and a garage for trucks and other vehicles. The NYSDOT facility is on a former landfill site known as the New Hartford Village dump.

Site investigation activities, remedial actions, and historical monitoring results were summarized in a letter to NYSDEC from Lockheed Martin dated July 24, 2014 ("Summary of Conditions" letter). The extensive history of site activities is not repeated here, but the summary letter is attached to this report as Appendix A.

The West Lot Site is listed as a Class 4 site on the New York State Registry of Inactive Hazardous Waste Disposal Sites ("Registry"). Recent correspondence between Lockheed Martin, NYSDEC and the New York State Department of Health (NYSDOH) has been focused on the potential delisting of the site.

The West Lot property is located within both the City of Utica and the Town of New Hartford. The portions falling within New Hartford limits are currently zoned "M – Manufacturing," and the portion that falls within the City of Utica is zoned "Planned Development – Extraordinary (PDE)." Current land use at the site is industrial. Site use is also subject to a Restrictive Use Agreement attached to the 1996 deed which prohibits use of the site for residential purposes. Future land use at the site is expected to be consistent with current land use. Surrounding land use is a mixture of industrial, commercial, and residential properties, with isolated pockets of undeveloped land.

The site is underlain by four geologic units consisting of (from top to bottom) kame deposits, a silt unit, till deposits, and shale bedrock. Groundwater is typically encountered within a depth of 10 feet below ground surface (ft bgs). Groundwater flow direction in the area of the sampled wells is generally toward the south, in the direction of the NYSDOT facility and commercial/industrial properties on Chenango Road. Based on results of a groundwater use survey performed by Lockheed Martin in 2008 and later updated in 2012, no information was found that would suggest the presence of any private supply wells in the site vicinity (ARCADIS, 2012).

Site investigation activities began in the early 1990s, and volatile organic compounds (VOCs) were detected in soil and groundwater; the highest concentrations were generally in the Former

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Burn Pit area. Remedial actions (including source-area soil removal and groundwater pumping and treatment) commenced in the mid-1990s and continued until early 2007. Post-remedial investigations of soil, groundwater, and soil vapor continued between 2007 and 2013.

Based on the 2012 and 2013 groundwater sampling results, Lockheed Martin recommended that four quarters of groundwater monitoring be performed over a calendar year to better evaluate seasonal influences, the stability of the groundwater plume, and the feasibility of achieving closure. NYSDEC approved the proposed program and quarterly monitoring began in March 2014.

Written summaries of the gauging and sampling results were generated for quarters Q1 through Q3; copies of these summaries were provided to NYSDEC Region 6 personnel. This report provides the results of Q4 and a summary of all 2014 monitoring program data in order to present a comprehensive assessment of site conditions. Overall, the monitoring results indicate only low-level and stable VOC presence in groundwater. The data support moving forward toward site delisting and closure.

3.0 GAUGING AND SAMPLING ACTIVITIES

The gauging and sampling program included a total of 13 monitoring wells, located as shown on Figure 2. The 2014 sampling was accomplished using passive diffusion bags (PDBs). The use of PDBs is approved by NYSDEC and this method had been used in previous sampling events. The methodology for PDB deployment and retrieval is discussed below in Section 3.2.

Quarterly monitoring events were conducted on the following dates in 2014:

- Q1 - March 4-19
- Q2 - May 28-June 12
- Q3 - September 2-18
- Q4 - December 3-17

3.1 WELL GAUGING

Groundwater elevation measurements were collected during each event in each sampled well prior to PDB deployment. Two monitoring locations were not gauged during the Q1 event: PZ-1 and PZ-2 were inaccessible due to ice and snow. All 13 wells were gauged in quarters Q2 through Q4. Water level measurements were used to determine the depth of PDB placement as well as for groundwater contouring. Groundwater elevations are provided in Table 1 and on Figures 3a through 3d.

3.2 SAMPLING METHODOLOGY AND LABORATORY ANALYSIS

Groundwater sampling was performed using PDBs, which are semi-permeable, low-density polyethylene (LDPE) bags that contain deionized water. The PDBs are placed within a well's water column to passively obtain a sample of the groundwater. The semi-permeable nature of the PDB sampler allows VOCs in the groundwater to diffuse across the membrane until the PDB water is in equilibrium with the groundwater. In all cases, and as with the sampling events in 2012 and 2013, the PDBs were fully submerged below the water table and remained saturated; this is required to obtain representative groundwater samples (ITRC, 2004).

A minimum two-week equilibration period is recommended following PDB deployment (ITRC, 2006). For each event the PDBs were allowed to remain deployed for at least two weeks. Note that during the Q3 and Q4 events, PZ-2 did not contain a sufficient water column for PDB deployment; accordingly, this well was purged with a bailer and sampled following sufficient well recharge.

Samples were collected directly from the PDBs in 40-mL vials, placed on ice and shipped to Accutest Laboratories (Accutest) of Marlboro, Massachusetts under chain-of-custody protocol. The samples were analyzed for VOCs using USEPA Method 8260C. For QA/QC purposes a field duplicate sample and a trip blank were included in each sample delivery group.

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PDB Positioning

For the Q1 through Q3 sampling events, the top of each PDB sampler was positioned approximately one foot below the measured groundwater level, for consistency with previous sampling events.

As part of the correspondence between Lockheed Martin and NYSDEC during 2014 related to groundwater quality conditions and the potential for site closure, on August 7, 2014 ConMed's consultant, GHD Consulting Services, Inc. (GHD), provided comments on Lockheed Martin's July 24, 2014 Summary of Conditions letter. GHD raised a concern relative to the depth of placement of PDBs in the West Lot wells. Specifically, their letter indicated: *"....Stantec should review and evaluate the elevation of the passive diffusion bags (PDBs) in the wells with relation to the screened interval. The elevation should be consistent between sampling events. The elevation of the PDBs should also correspond to the interval of the screen that is representative of the formation's permeability."*

Prior to the Q4 sampling event, Stantec compared PDB deployment depths to well screen depths to determine the relationship between previous placement depth and screen interval. The attached Table 3 provides depth and elevation data relative to well casings, screen intervals and the placement of PDBs for quarters Q1 through Q4. The data indicated that for a limited number of wells, PDB placement had been above the screened interval during some Q1 through Q3 sampling events. Specifically the PDB in Well PW-1 (a former pumping well now used for monitoring) had been placed above the screened interval during quarters Q1 through Q3, and the same condition occurred in well MW-1-DOT during Q2. Other wells at times showed partial placement within the well screens: MW-E in Q1 and Q2, and MW-1-DOT in Q1 and Q3.

In response to the ConMed comment, and to address concern over this issue, Stantec revised PDB placement for those wells during the Q4 event to situate the bags within the screen intervals. Note that the PDB in well MW-1-DOT was slightly less than 100% contained within the screen interval during the Q4 event. This was not evident until data from a resurvey of the wells, which was performed concurrently with the PDB deployment, was received.

The contaminant levels in the three wells where the PDB depths were deepened in the fourth quarter still had contaminant levels below groundwater standards, with the exception of MW-1-DOT. This well showed a cis-1,2-DCE level of 5.8 micrograms per liter ($\mu\text{g/L}$) in Q4 versus the standard of 5 $\mu\text{g/L}$. However, the MW-1-DOT Q4 results are consistent with earlier data from this well, despite the Q4 adjustment to PDB depth. In summary, the adjustments to PDB depths did not appear to have material impact on the observed levels of VOCs in the affected wells. The analytical results are discussed in further detail in Section 4.2.

4.0 DISCUSSION OF RESULTS

4.1 GROUNDWATER LEVELS AND FLOW DIRECTION

Groundwater elevation measurements collected prior to sampling for each event are provided in Table 1. Groundwater contour drawings for each quarter are shown on Figures 3a through 3d.

Throughout the first three quarters of groundwater gauging, the gradient and direction of groundwater flow remained relatively consistent. Groundwater elevation variation ranged up to approximately 1.5 ft during the year. The maximum groundwater elevations were observed during Q2 (May/June) and the minimum groundwater elevations at all but one well were observed during Q3 (September); these observations correspond with precipitation records indicating wet conditions in May and dry conditions in late August.

Groundwater flow is generally toward the south with some southeasterly or southwesterly variations. The contour drawings originally included in quarterly summaries for Q1 and Q3 showed a water table drop and steepening of the gradient in the southern portion of the site, between wells MW-F and MW-1-DOT. Based on concerns over the accuracy of the top-of-casing elevations, the wells were resurveyed by Stantec on December 3-5, 2014 concurrently with the Q4 PDB sampler deployment. Based on the resurvey data, the top-of-casing elevations for several wells were revised from the original values used by the previous site consultant. Table 4 provides a summary of the previous and revised elevations.

The most significant adjustment to casing elevations was for well MW-1-DOT, which was increased by approximately 2.5 ft. Several other (but not all) wells required lesser adjustments. When the new survey data were applied to the previous groundwater gauging data, the gradient increase previously depicted in the vicinity of wells MW-F and MW-1-DOT was no longer apparent. The quarterly groundwater contour maps included as Figures 3a through 3d herein reflect the results using updated survey data.

4.2 GROUNDWATER CONTAMINANT DISTRIBUTION

This section provides a discussion of the groundwater quality results for 2014. Table 2 provides a tabulation of the analytical data, and the results are depicted graphically in Figures 4a - 4d. Appendix A contains the laboratory reports for all sampling events.

Quarter 1 (March)

Of the eleven wells sampled during Q1, eight wells showed no detections of VOCs. The other three wells exhibited only one detected VOC and each was at a concentration below the NYSDEC groundwater standard of 5 micrograms per liter ($\mu\text{g/L}$): MW-24 (tetrachloroethene (PCE) at 1.2 $\mu\text{g/L}$); MW-F (TCE at 3.5 $\mu\text{g/L}$); and MW-1-DOT (cis-1,2-DCE at 4.2 $\mu\text{g/L}$).

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Quarter 2 (May/June)

All 13 wells were sampled during the Q2 event. Six wells showed no detections of VOCs. Of the remaining seven wells, four wells showed detections of one or more VOCs, but at concentrations below the groundwater standards. The remaining three wells (MW-23, MW-24, and MW-F) exhibited concentrations of one or more VOCs at concentrations that exceeded NYSDEC groundwater standards:

- Well MW-23 had two detections, the highest being vinyl chloride (VC) at 46.8 µg/L.
- Well MW-24 showed four VOCs, the highest concentration being TCE at 44.4 µg/L.
- Well MW-F showed only one compound at an exceedance level (TCE at 10.3 µg/L).

The timing of the higher detections observed in the Q2 event corresponds to the highest seasonal water levels observed during the 2014 monitoring program.

Quarter 3 (September)

All 13 wells were sampled during Q3. Five wells showed no detections of VOCs. Of the remaining eight wells, six wells showed detections of one or more VOCs, but at concentrations below groundwater standards. The remaining two wells (MW-F and MW-1-DOT) each exhibited detections of one VOC at concentrations exceeding the NYSDEC groundwater standard of 5 µg/L:

- MW-F exhibited TCE at 15.2 µg/L. This result is consistent with the results of previous sampling events at this location, and the observed TCE exceedance is well below the historic (five-year) high TCE concentration of 35 µg/L reported in August 2009. Historic and current results indicate that although TCE levels have shown exceedances in this well in the past, the levels have remained stable over the past five years.
- MW-1-DOT exhibited cis-1,2-DCE at 5.5 µg/L.

Wells MW-23 and MW-24 (located south of the former burn pit) did not exhibit exceedances in Q3; this was similar to the Q1 results.

Quarter 4 (December)

Of the 13 wells sampled, six wells showed no detections of VOCs. Of the remaining seven wells, five wells showed detections of one or more VOCs, but at concentrations below the NYSDEC groundwater standards. The remaining two wells (MW-F and MW-1-DOT) each exhibited concentrations of one VOC at concentrations that only slightly exceeded NYSDEC groundwater standard of 5 µg/L: MW-F (TCE, 6.4 µg/L); and MW-1-DOT (cis-1,2-DCE, 5.8 µg/L); this was similar to the Q3 results.

The results from MW-F are consistent with the results of previous sampling events at this location. Further, the reported TCE detection was less than that reported in the previous two quarters and well below the historic maximum TCE concentration.

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The only compound which had been detected in well MW-1-DOT during the sampling history (Table 2) was cis-1,2-DCE. During Q4, two other VOCs were detected, but at concentrations below their groundwater standards: 1,1,1-trichloroethane (1,1,1-TCA) and 1,1-dichloroethane (1,1-DCA). Both of these results were qualified by the lab as estimated. A data usability summary report (DUSR) prepared for the fourth quarter data further qualified these detections as estimated and only “tentatively identified” (see further discussion of the DUSRs below).

Wells MW-23 and MW-24, which had exhibited some VOC exceedances in Q2, again did not exhibit exceedances in Q4.

Overall Summary of 2014 Results

Although several samples throughout the year exhibited VOCs at detectable levels, the majority of the detections were below groundwater standards. Q1 results showed no exceedances sitewide. Q3 and Q4 results showed only minor exceedances in two wells (MW-F and MW-1-DOT). Q2 results exhibited the highest VOC levels, most notably in wells MW-23 and MW-24, where VOCs were observed at levels up to 46.8 µg/L (VC in monitoring well MW-23). These levels corresponded to the highest water table elevations for the year. VOC levels in both wells returned to “non-detect” (ND) or levels below groundwater standards in Q3 and Q4.

Monitoring well MW-1-DOT is the most downgradient well, and is located offsite. The concentration of cis-1,2-DCE (the only VOC with significant detections in this well) has remained within a narrow range (4.2 to 8 µg/L, vs. the standard of 5 µg/L) throughout the five-year sampling period.

Taken as a whole, the 2014 groundwater quality data indicate stable VOC conditions in groundwater across the site. Stantec’s November 7, 2014 letter to NYSDEC, submitted in advance of the Q4 event, summarized the lines of evidence in support of a stable groundwater plume at the West Lot. These consist of the age of the release (over 40 years), past episodes of source area removal (soil removal and groundwater extraction), attenuation (presence of cis-1,2-DCE and VC as breakdown products of reductive dechlorination of TCE), low groundwater velocity (resulting from a low hydraulic gradient), and retardation (resulting from constituent affinity to organic carbon present in the subsurface). These lines of evidence are further supported by the Q4 data.

4.3 DATA USABILITY SUMMARY REPORTS

Data usability summary reports (DUSRs) were prepared for each of the quarterly laboratory reports received from Accutest. Copies of the DUSRs are included in Appendix B. The data usability reviews were performed in accordance with *USEPA National Functional Guidelines* (USEPA, 1999), *USEPA Region II Standard Operating Procedures (SOPs)*, NYSDEC’s 2005 Analytical Services Protocol (ASP), and the *Quality Assurance Project Plan, Solvent Deck Area, Former Lockheed Martin French Road Facility, Utica, NY* (ARCADIS, 2011). The results summarized in Table 2 and depicted on Figures 4a through 4d reflect any changes made to the data as a result of data usability review.

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In summary, the laboratory data were found to be usable as reported by the lab or usable with qualification due to typical processing or matrix effects, with the following exceptions:

- Results for acetone and 2-butanone (MEK) for all Q1 samples were rejected; and
- Results for MEK for all Q3 samples were rejected.

Acetone is a common laboratory contaminant and is not a COC for the site. MEK is also not considered a COC at the site. These rejected data are not considered to materially impact the analytical results or the conclusions made from the sampling data.

5.0 SUMMARY AND CONCLUSIONS

The 2014 monitoring results are indicative of stable groundwater quality conditions in the West Lot. Several rounds of data over a five-year period, including quarterly sampling during 2014 have demonstrated stable conditions with only minor seasonal variation occurring in a limited number of wells. The downgradient sampling data do not indicate significant offsite migration of VOCs. Stantec's November 7, 2014 letter to NYSDEC, submitted in advance of the Q4 event, summarized the lines of evidence in support of a stable groundwater plume at the West Lot. These consist of the age of the release (over 40 years), past episodes of source area removal (soil removal and groundwater extraction), attenuation (presence of cis-1,2-DCE and VC as breakdown products of reductive dechlorination of TCE), low groundwater velocity (resulting from a low hydraulic gradient), and retardation (resulting from constituent affinity to organic carbon present in the subsurface). These lines of evidence are further supported by the Q4 data.

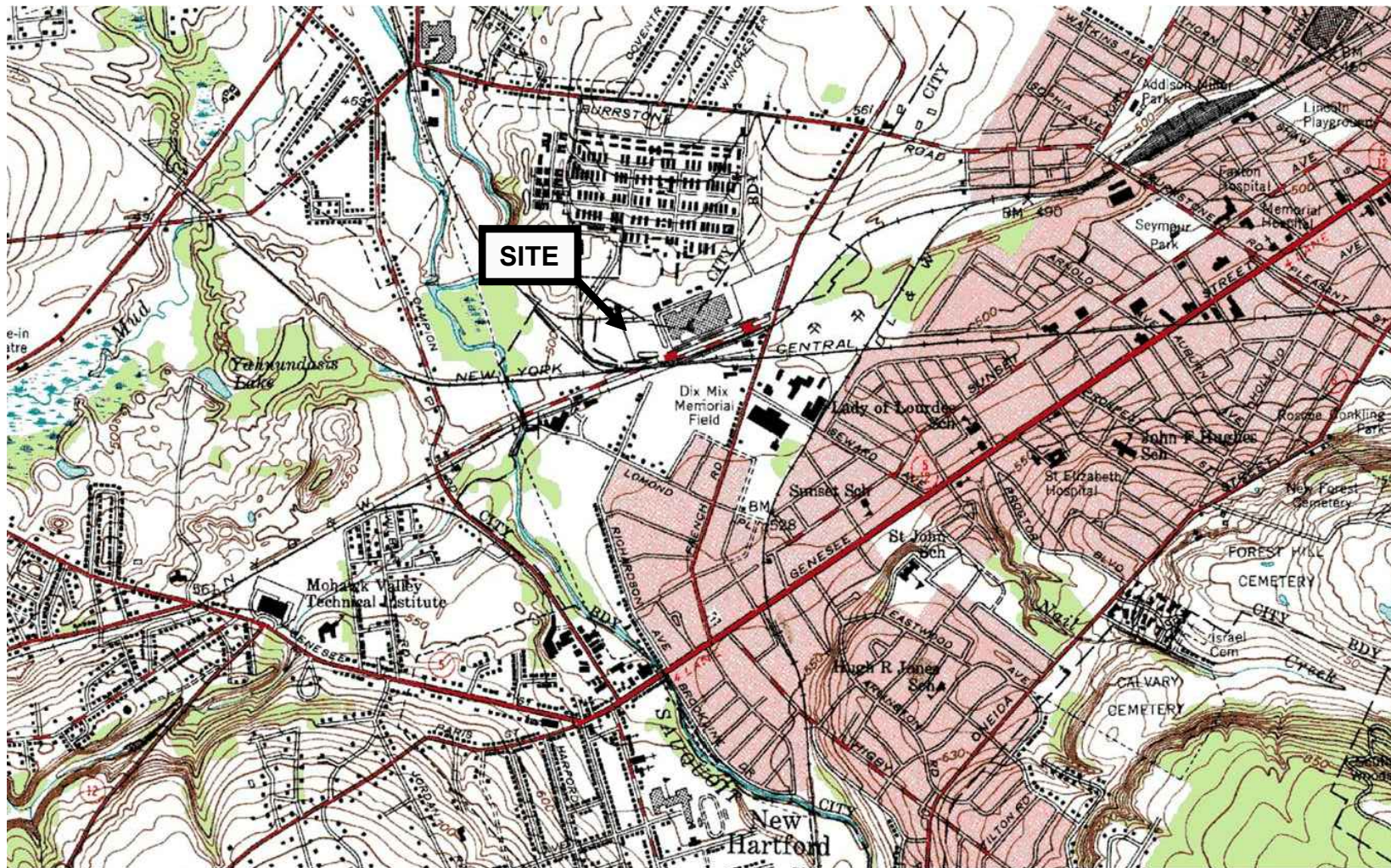
Based on these results Lockheed Martin respectfully requests that the West Lot site be moved toward closure and delisting from NYSDEC's Registry. In accordance with recent discussions with NYSDEC, Lockheed Martin acknowledges that NYSDEC will require the closure of the West Lot to be tied to closure of the Solvent Dock portion of the property, and as such, actual West Lot delisting and closure would be deferred until additional remedial measures are completed for the Solvent Dock. Further, and in accordance with NYSDEC requirements, site closure will include development and filing of an Environmental Easement for the site, including a Site Management Plan (SMP). A Draft of the SMP has been developed for the overall French Road site. This document will be updated as appropriate once when further remedial measures are performed in the Solvent Dock area.

In the interim, Lockheed Martin proposes to perform no further monitoring or investigation at the West Lot site pending advancement of further investigation or remediation in the Solvent Dock area.

6.0 REFERENCES

1. ARCADIS, 2013. *Report on Continued Investigation Activities, West Lot Site, Utica, New York (Site No. 6-33-036)*. October 16.
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5. Interstate Technology & Regulatory Council (ITRC), 2004. *Technical and Regulatory Guidance for Using Polyethylene Diffusion Bag Samplers to Monitor Volatile Organic Compounds in Groundwater*. February.
6. GHD Consulting Services, 2014. Letter response to: *Summary of Conditions, West Lot Site (Lockheed Martin Corporation, July 24, 2014)* and *West Lot Site Summary of Second Quarter 2014 Groundwater Sampling (Stantec, July 23, 2014)*. August 7.
7. United States Environmental Protection Agency (USEPA), 2009. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*. October.

Figures

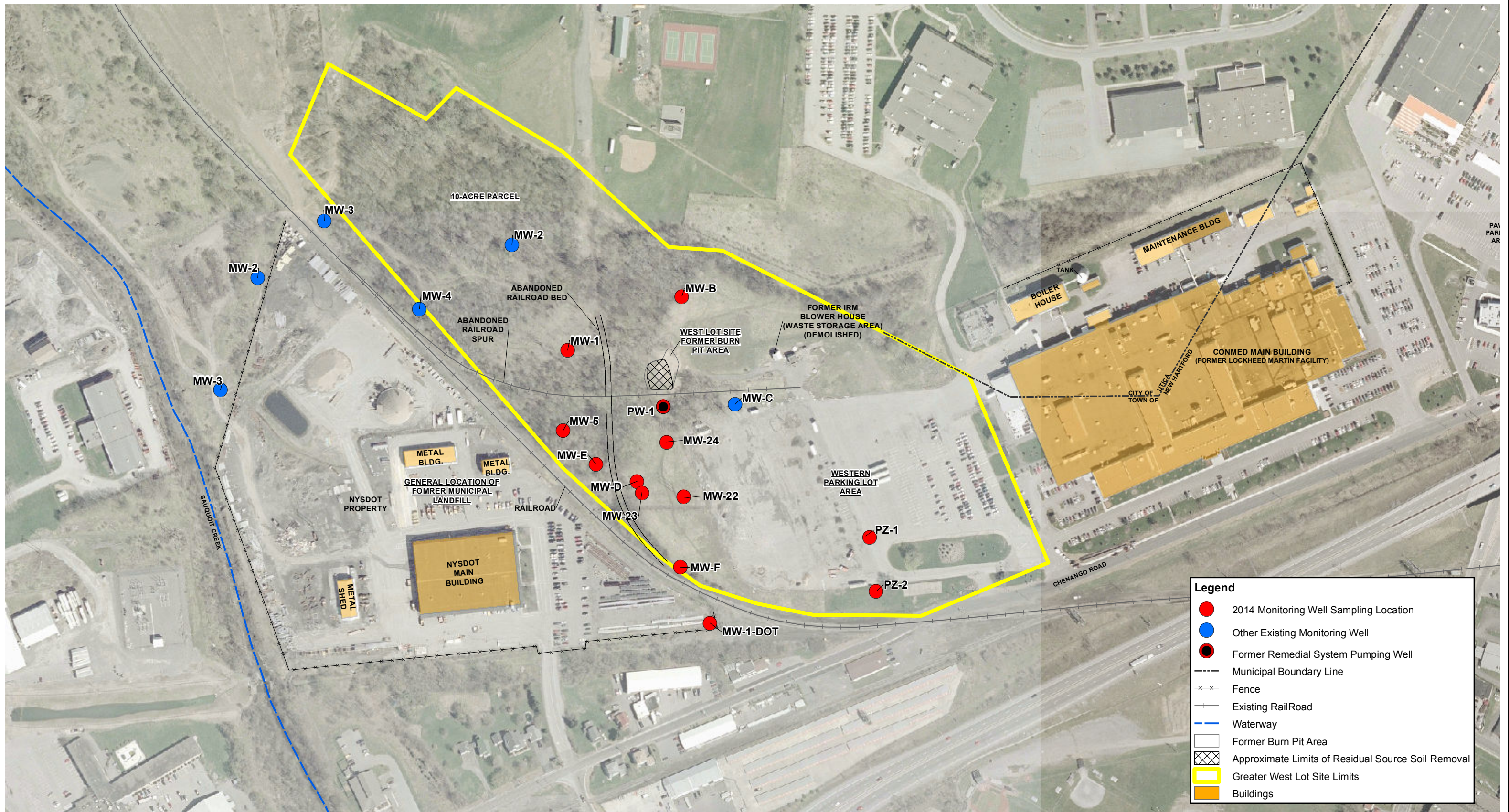


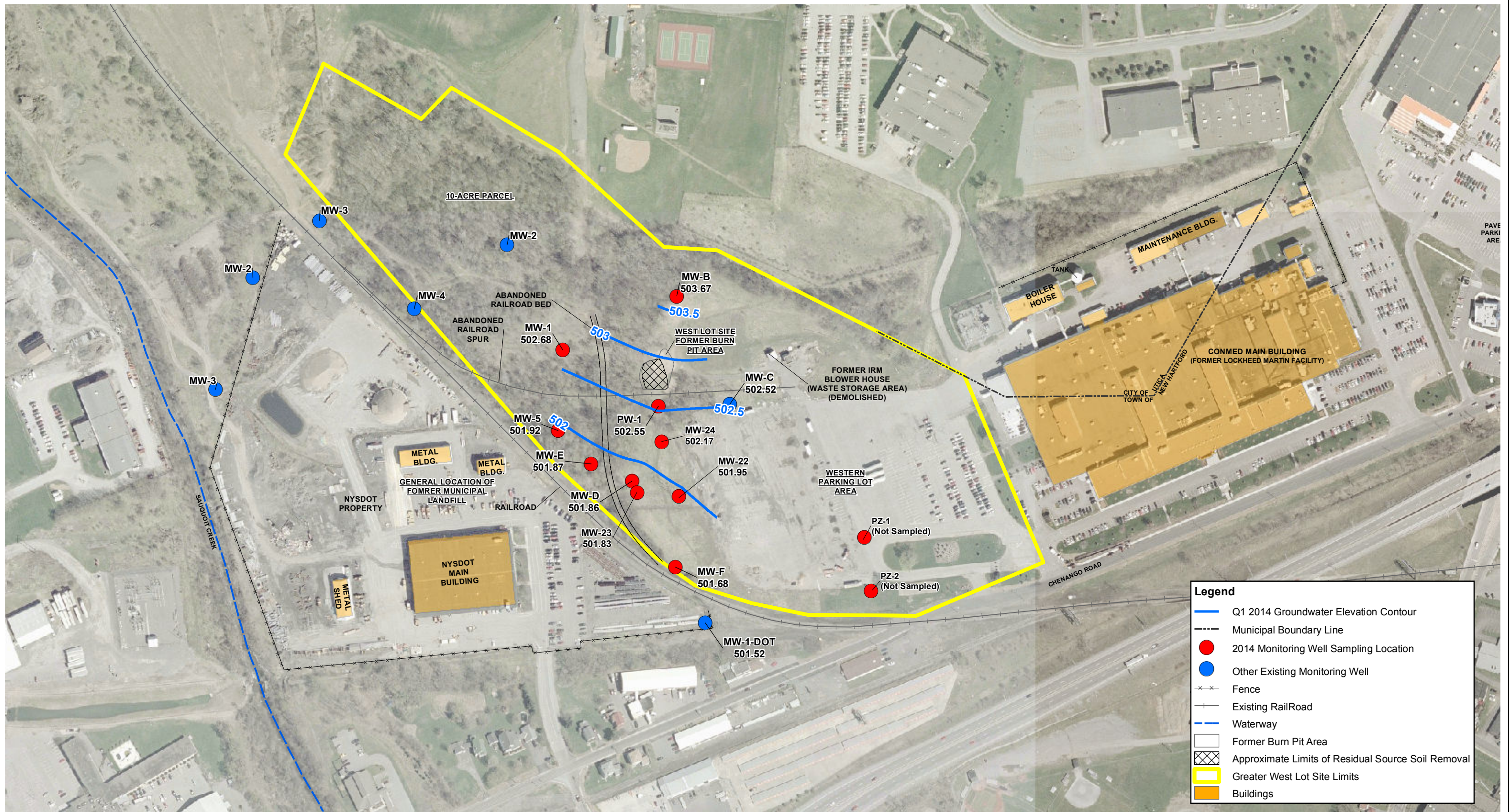
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**2014 ANNUAL GROUNDWATER
MONITORING REPORT**
WEST LOT SITE
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

SITE LOCATION MAP







Notes:

1.) Base map adapted from drawing entitled: "Monitoring Well Network, West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York," by ARCADIS, dated Sept. 19, 2013

2.) Groundwater levels measured on March 4, 2014

3.) Wells PZ-1 and PZ-2 not sampled due to being buried by ice and snow.

4.) This figure has been modified to reflect new well survey data (Stantec Survey, December 3-5, 2014).

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Last Edited By: lbest

Checked By: B. Mahoney

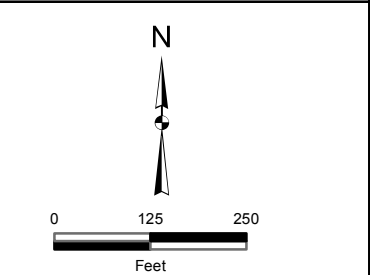
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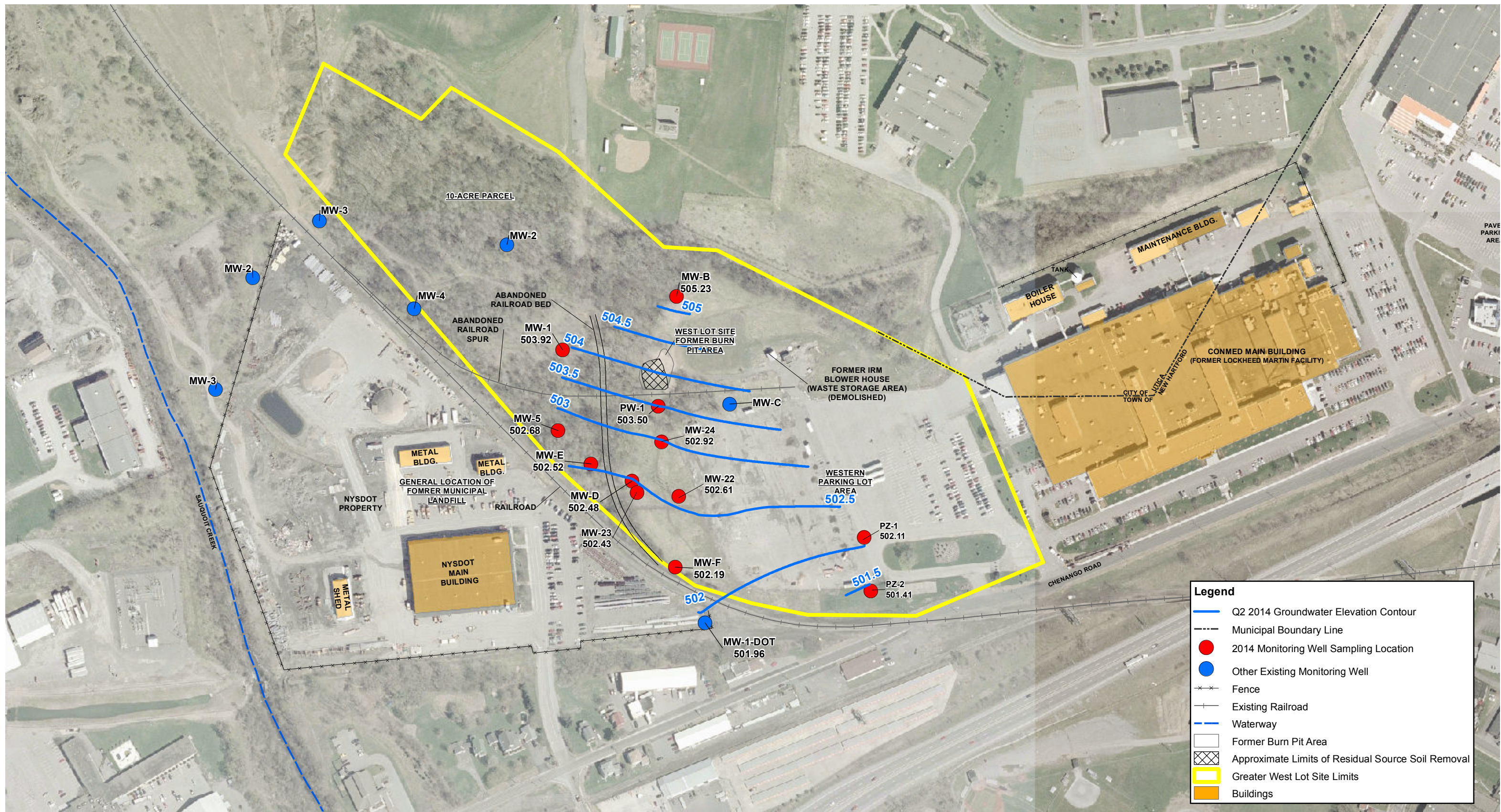
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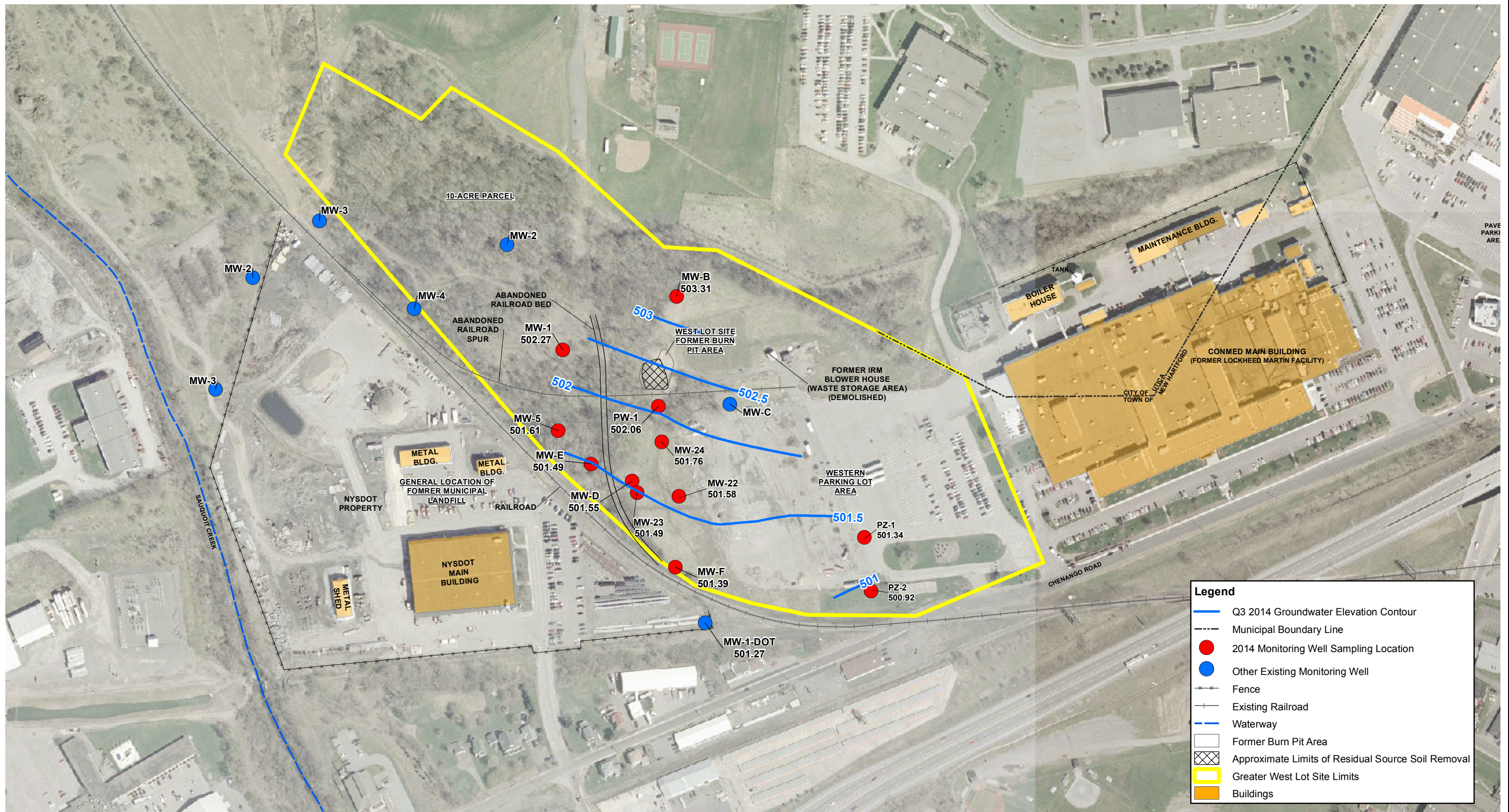
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Groundwater Contours
March 2014
2014 Annual Groundwater Monitoring Report
West Lot Site / Former Lockheed Martin French Road Facility
Utica, New York

Figure: **3a**







Notes:

1.) Base map adapted from drawing entitled: "Monitoring Well Network, West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York," by ARCADIS, dated Sept. 19, 2013

2.) Groundwater levels measured on September 2, 2014

3.) This figure has been modified to reflect new well survey data (Stantec survey, December 3-5, 2014).

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lbest

Checked By:
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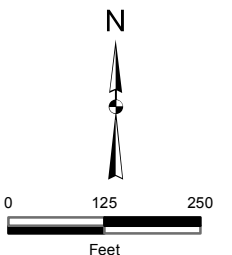
Groundwater Contours

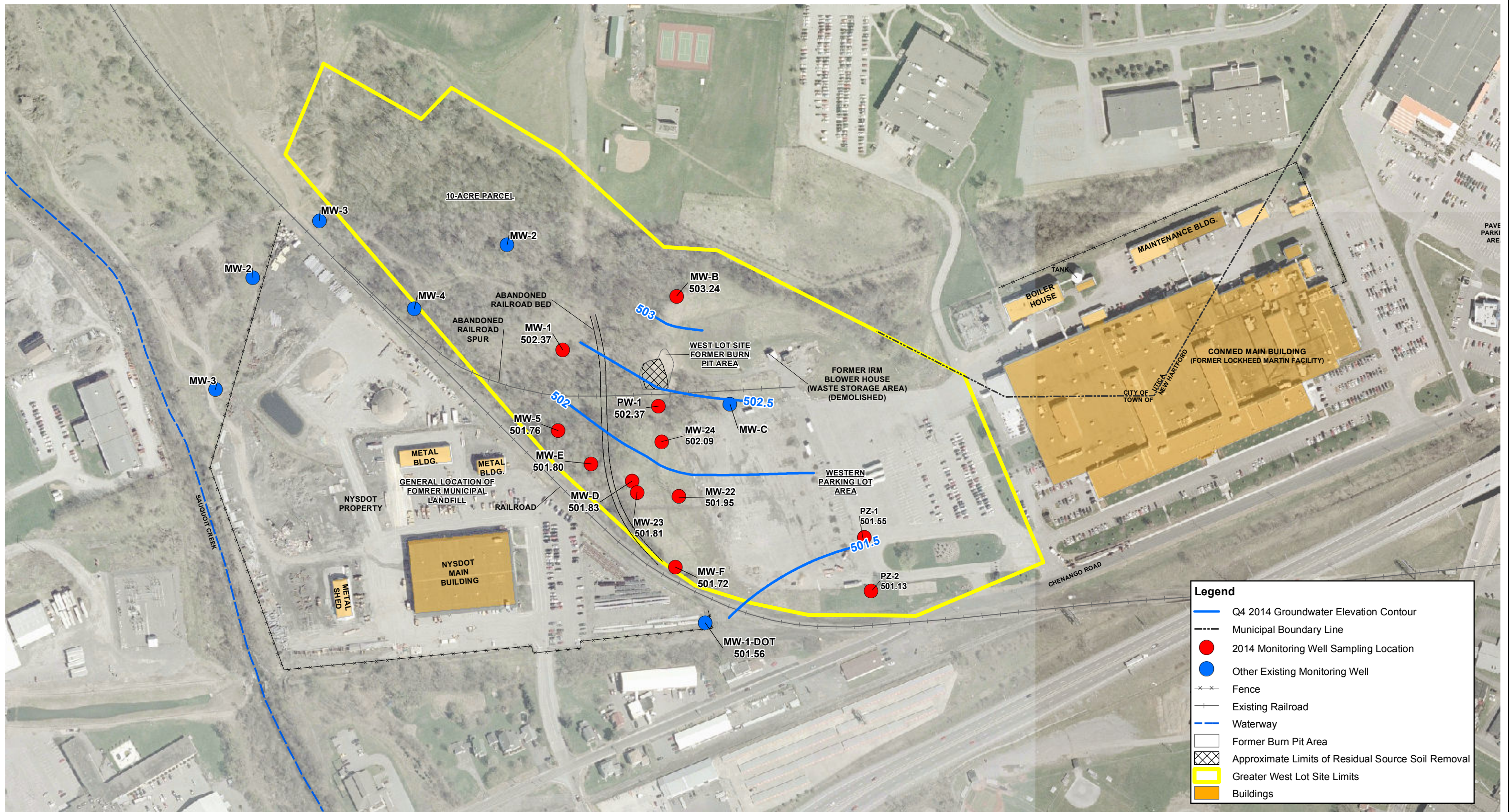
September 2014

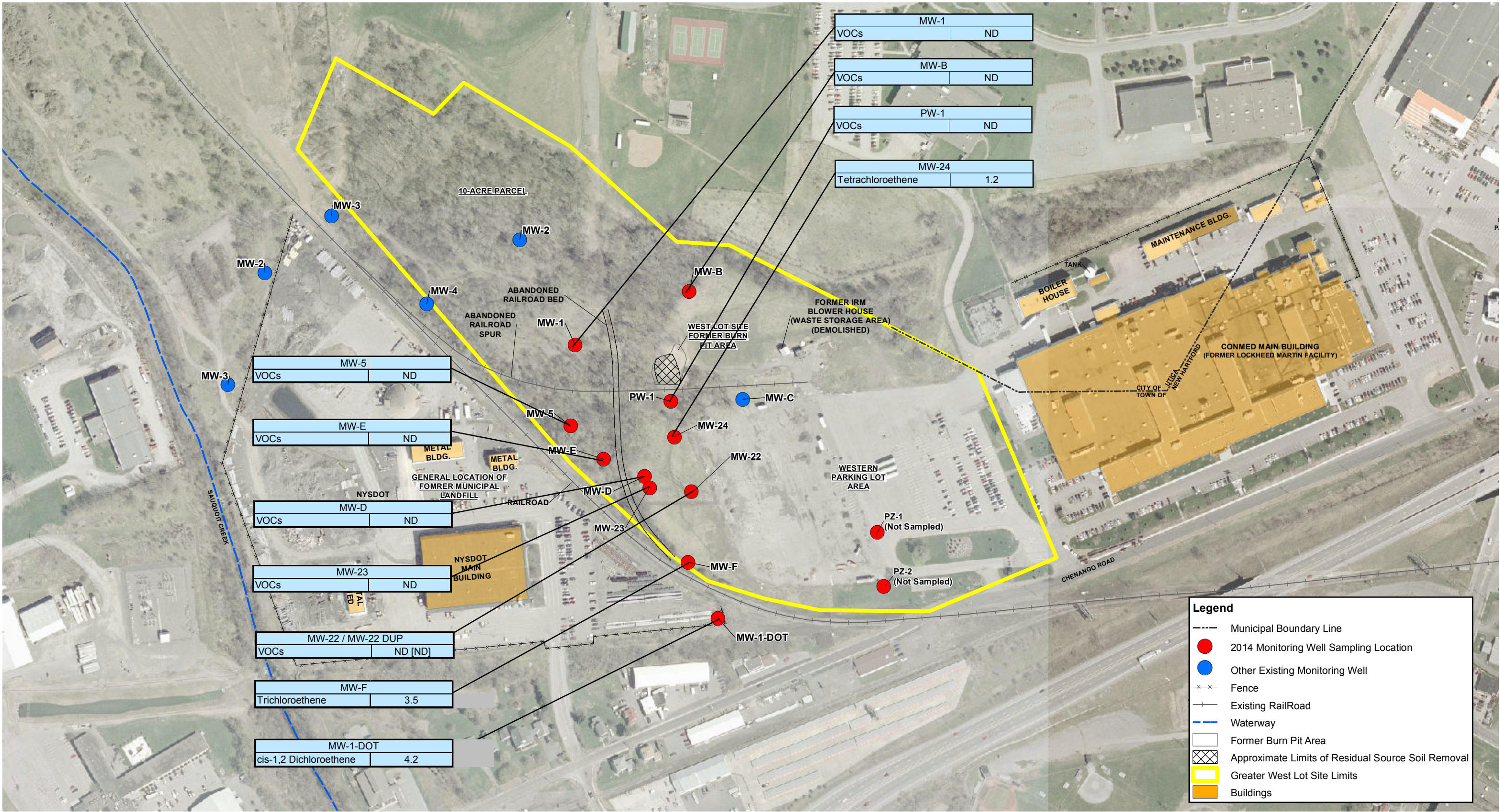
2014 Annual Groundwater Monitoring Report

West Lot Site / Former Lockheed Martin French Road Facility

Utica, New York







Notes:

1.) Base map adapted from drawing entitled: "Monitoring Well Network, West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York," by ARCADIS, dated Sept. 19, 2013

2.) All samples were analyzed for TCL VOCs
ND = no analytes detected
[ND] = indicates results of field duplicate.
Analytical results given in µg/L (Micrograms per Liter)
Bold type indicates value exceeds groundwater standards.

ArcGIS Version: ArcInfo 10.1

Map Date: 2/13/2015 11:07:21 AM

Server: Rochester

Document Path: U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\6-West Lot\GIS\Q1\MXD\2014_Fig4_GroundwaterContaminantsMap_rev.mxd

Last Edited By: lbest

Checked By: B. Mahoney

Project Manager: P. Nielsen

Data: 2014_Fig4_GroundwaterContaminantsMap_rev

Project Number: 190500800

Groundwater Monitoring Data
March 2014
2014 Annual Groundwater Monitoring Report
West Lot Site / Former Lockheed Martin French Road Facility
Utica, New York



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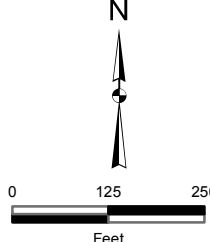
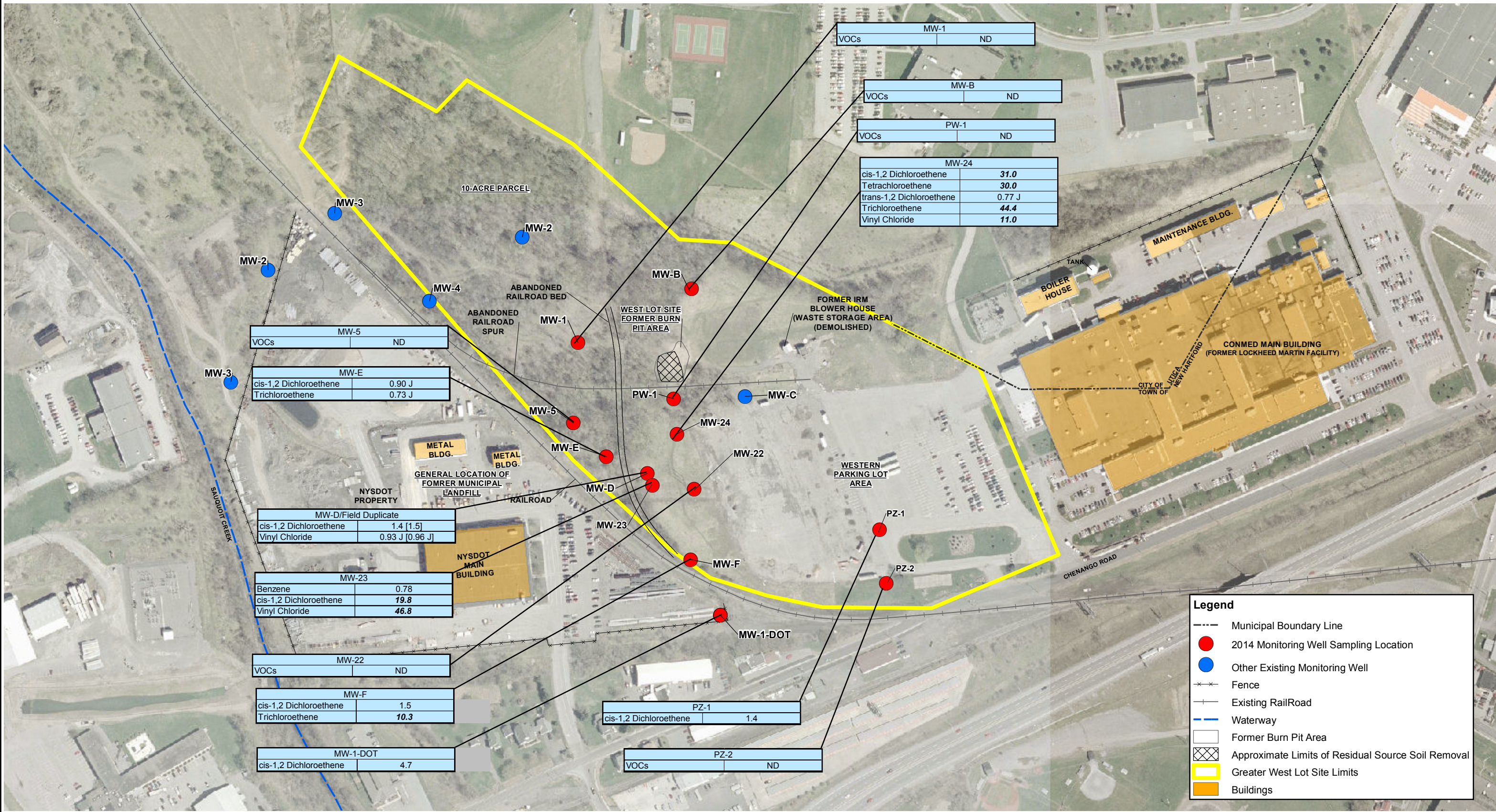
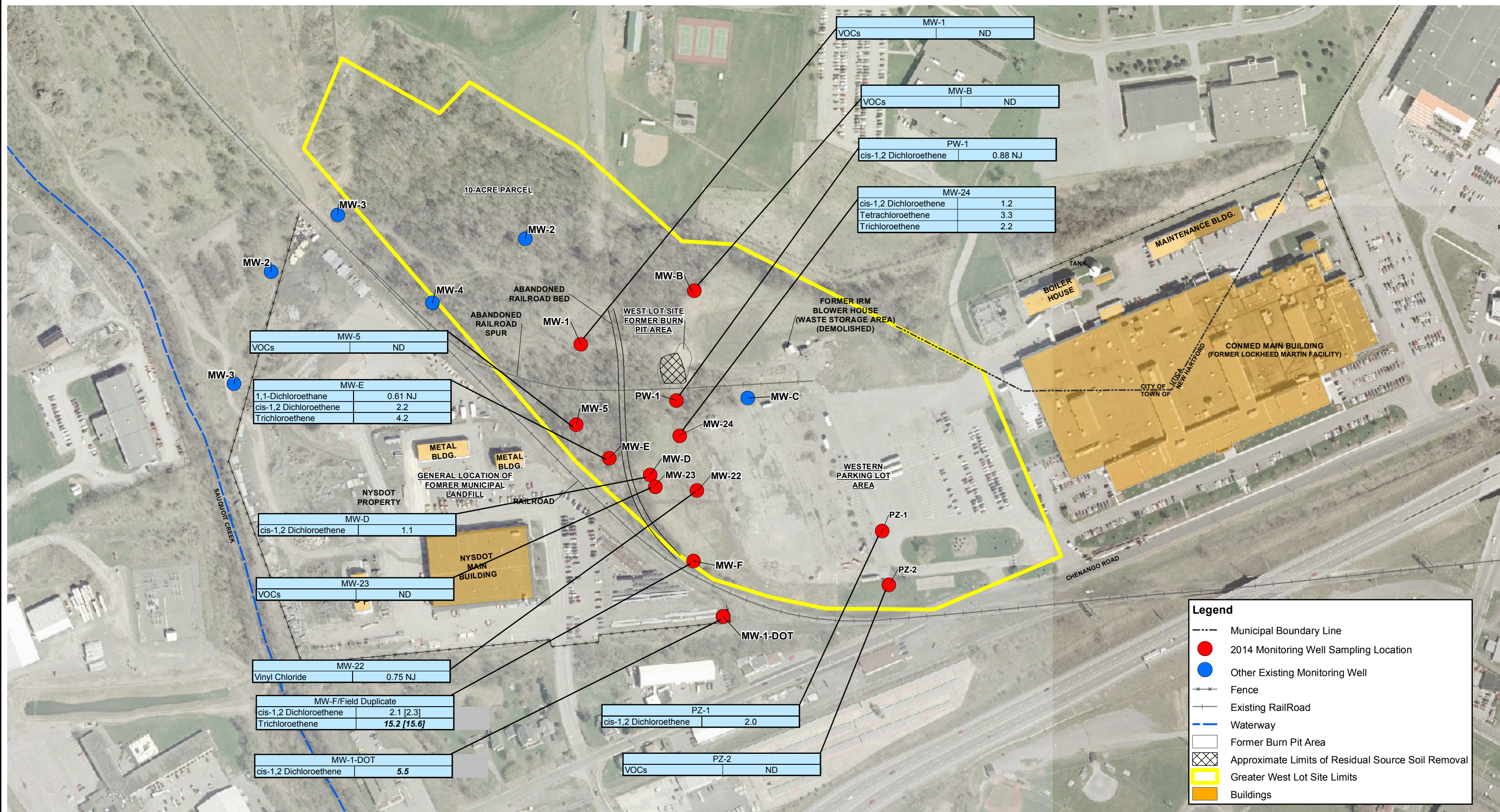
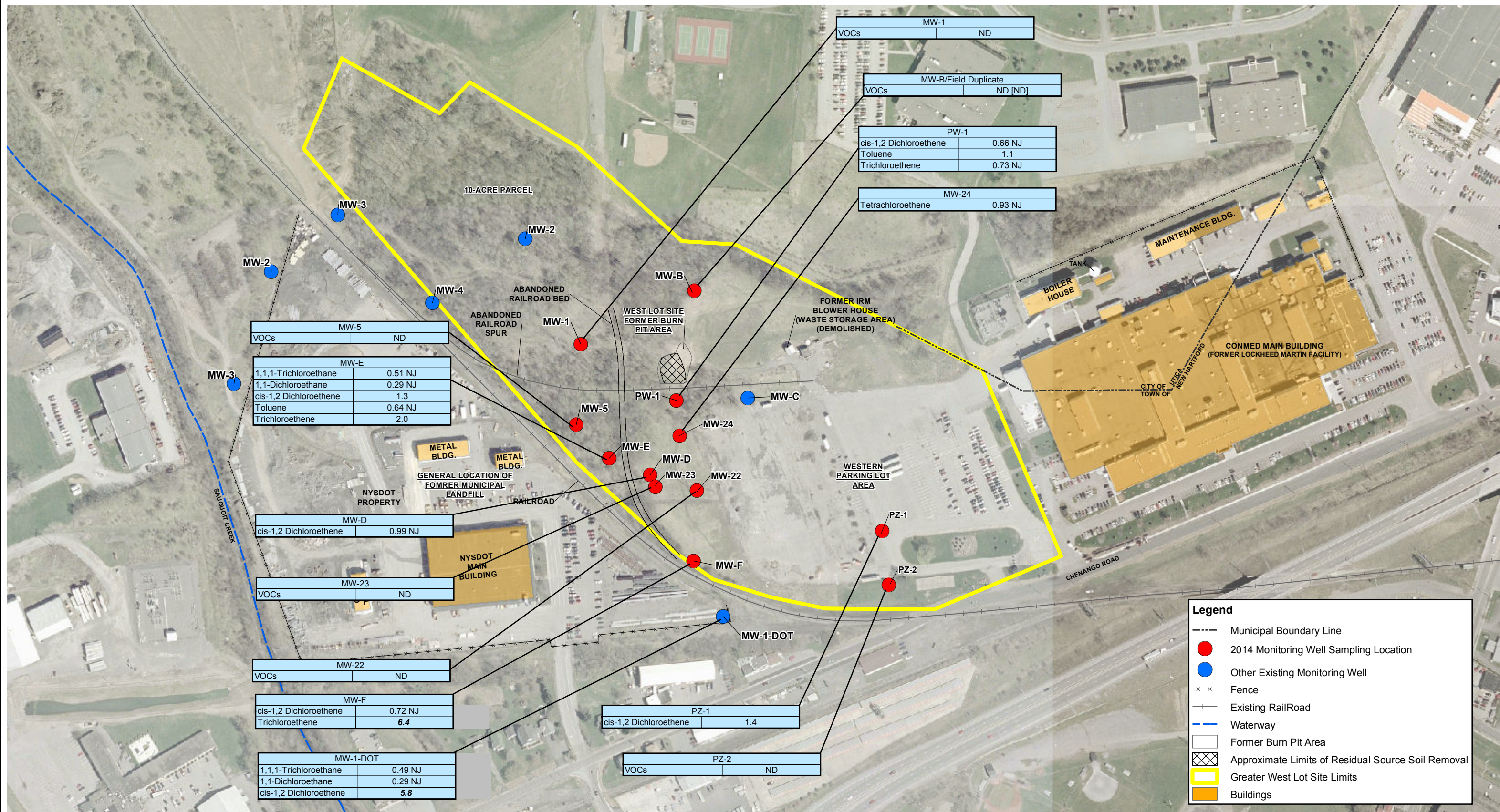


Figure: **4a**







Tables

Table 1. Groundwater Elevation Measurements
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Monitoring Well	Top of PVC Riser Elevation	Depth to Water (from top of PVC riser)	Groundwater Elevation (ft)	Depth to Water (from top of PVC riser)	Groundwater Elevation (ft)	Depth to Water (from top of PVC riser)	Groundwater Elevation (ft)	Depth to Water (from top of PVC riser)	Groundwater Elevation (ft)
		March 4, 2014		May 28, 2014		September 2, 2014		December 3, 2014	
West Lot Site									
MW-1-DOT	511.24	9.72	501.52	9.28	501.96	9.97	501.27	9.68	501.56
MW-22	509.34	7.39	501.95	6.73	502.61	7.76	501.58	7.39	501.95
MW-23	508.73	6.90	501.83	6.30	502.43	7.24	501.49	6.92	501.81
MW-24	508.95	6.78	502.17	6.03	502.92	7.19	501.76	6.86	502.09
MW-B	509.66	5.99	503.67	4.43	505.23	6.35	503.31	6.42	503.24
MW-C	508.93	6.41	502.52	NG	--	NG	--	NG	--
MW-D	508.52	6.66	501.86	6.04	502.48	6.97	501.55	6.69	501.83
MW-E	508.43	6.56	501.87	5.91	502.52	6.94	501.49	6.63	501.80
MW-F	509.50	7.82	501.68	7.31	502.19	8.11	501.39	7.78	501.72
PW-1	504.30	1.75	502.55	0.80	503.50	2.24	502.06	1.93	502.37
10-Acre Parcel									
MW-1	508.52	5.84	502.68	4.60	503.92	6.25	502.27	6.15	502.37
MW-5	509.67	7.75	501.92	6.99	502.68	8.06	501.61	7.91	501.76
Western Parking Lot									
PZ-1	508.80	NG	--	6.69	502.11	7.46	501.34	7.25	501.55
PZ-2	509.01	NG	--	7.60	501.41	8.09	500.92	7.88	501.13

Notes:

1. All elevations are reported as feet mean sea level (ft msl).
2. Survey data are referenced horizontally to the NAD83 and projected on the New York State Plane Coordinate System (Central Zone).
3. The reference vertical benchmark is the finished floor elevation of the southeasterly corner of the Boiler House Building (Elevation 506.50 feet).
4. The top of PVC elevations provided are results of a Stantec survey performed December 4-5, 2014.
5. NG = Not Gaged



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-1-DOT							
		08/24/09	10/26/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	0.51	< 0.40	< 1.0	< 0.94 [< 0.94]	< 1.0	< 1.0	< 1.0	0.49 NJ
1,1-DICHLOROETHANE	5	< 0.75	< 0.75	< 1.0	< 0.37 [< 0.37]	< 1.0	< 1.0	< 1.0	0.29 NJ
1,2-DICHLOROBENZENE	3	< 0.50	< 0.50	< 1.0	< 0.35 [< 0.35]	< 1.0	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.30 [< 0.30]	< 1.0	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.26 [< 0.26]	< 1.0	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.41	< 0.41	< 0.50	< 0.45 [< 0.45]	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.48 [< 0.48]	< 1.0	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 0.40	< 0.40	< 2.0	< 0.84 [< 0.84]	< 2.0	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	8.0	7.9	6.1	6.5 [6.4]	4.2	4.7	5.5	5.8
ETHYLBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.38 [< 0.38]	< 1.0	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 1.0	< 0.70 [< 0.70]	< 1.0	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	NA	< 0.41 [< 0.41]	< 2.0	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 0.40	< 0.40	< 1.0	< 0.41 [< 0.41]	< 1.0	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 0.40	< 0.40	< 1.0	< 0.61 [< 0.61]	< 1.0	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 0.60	< 0.60	< 1.0 J	< 0.45 [< 0.45]	< 1.0	< 1.0	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 0.42	< 1.0	< 0.54 [< 0.54]	< 1.0	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	< 0.46	< 0.46	< 1.0	< 0.45 [< 0.45]	< 1.0	< 1.0	< 1.0	< 1.0
VINYL CHLORIDE	2	< 1.0	< 1.0	< 1.0	< 0.61 [< 0.61]	< 1.0	< 1.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 1.0	< 0.41 [< 0.41]	< 1.0	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-1							MW-2 08/25/09	MW-3 08/24/09
		08/24/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14		
1,1,1-TRICHLOROETHANE	5	< 0.40	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
1,1-DICHLOROETHANE	5	< 0.75	< 1.0	< 0.37	< 1.0	< 1.0	< 1.0	< 1.0	< 0.75	< 0.75
1,2-DICHLOROBENZENE	3	< 0.50	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50
1,3-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
1,4-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
BENZENE	1	< 0.41	< 0.50	< 0.45	< 0.50	< 0.50	< 0.50	< 0.50	< 0.41	< 0.41
CHLOROBENZENE	5	< 0.40	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
CHLOROETHANE	5	< 0.40	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0	< 2.0	< 0.40	< 0.40
CIS-1,2-DICHLOROETHENE	5	< 0.40	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
ETHYLBENZENE	5	< 0.40	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	< 0.41	< 2.0	< 2.0	< 2.0	< 2.0	NA	NA
O-XYLENE	NS	< 0.40	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
TETRACHLOROETHENE	5	< 0.40	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 0.40
TOLUENE	5	< 0.60	< 1.0 J	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0	< 0.60	< 0.60
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0	< 0.42	< 0.42
TRICHLOROETHENE	5	< 0.46	< 1.0	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0	< 0.46	< 0.46
VINYL CHLORIDE	2	< 1.0	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-4 08/24/09	MW-5						
			08/24/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 0.40	< 0.40	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 0.75	< 0.75	< 1.0	< 0.37	< 1.0	< 1.0	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 0.50	< 0.50	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.41	< 0.41	< 0.50	< 0.45	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 0.40	< 0.40	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	< 0.40	< 0.40	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0
ETHYLBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	NA	< 0.41	< 2.0	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 0.40	< 0.40	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 0.40	< 0.40	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 0.60	< 0.60	< 1.0 J	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 0.42	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	< 0.46	< 0.46	< 1.0	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0
VINYL CHLORIDE	2	< 1.0	< 1.0	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-22					
		05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 1.0	< 0.94	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 1.0	< 0.37	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 1.0	< 0.35	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 1.0	< 0.30	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 1.0	< 0.26	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.50	< 0.45	< 0.50 [< 0.50]	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 1.0	< 0.48	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 2.0	< 0.84	< 2.0 [< 2.0]	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	< 1.0	< 0.54	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
ETHYLBENZENE	5	< 1.0	< 0.38	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 0.70	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	< 0.41	< 2.0 [< 2.0]	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 1.0	< 0.41	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 1.0	< 0.61	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 1.0 J	< 0.45	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 1.0	< 0.54	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	< 1.0	< 0.45	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0
VINYL CHLORIDE	2	< 1.0	< 0.61	< 1.0 [< 1.0]	< 1.0	0.75 NJ	< 1.0
XYLENES, TOTAL	5	< 1.0	< 0.41	< 1.0 [< 1.0]	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-23					
		05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 1.0	< 0.37	< 1.0	< 1.0	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.50	< 0.45	< 0.50	0.78	< 0.50	< 0.50
CHLOROBENZENE	5	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	< 1.0	7.3	< 1.0	19.8	< 1.0	< 1.0
ETHYLBENZENE	5	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	< 0.41	< 2.0	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 1.0 J	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	< 1.0	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0
VINYL CHLORIDE	2	< 1.0	10.6	< 1.0	46.8	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0

- Notes:**
- 1. All units are ug/L.
 - 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 - 3. NS - No Standard
 - 4. NA - Data Not Available
 - 5. **BOLD** - Detected Compound
 - 6. Exceedances noted as shaded
 - 7. J - Estimated Value
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 - 9. [] - Duplicate sample result.
 - 10. < - Reporting Limit presented when results were non-detect.
 - 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-24					
		05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 1.0	< 0.37	< 1.0	< 1.0	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.50	< 0.45	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	< 1.0	20.4	< 1.0	31.0	1.2	< 1.0
ETHYLBENZENE	5	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	< 0.41	< 2.0	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 1.0	15.7	1.2	30.0	3.3	0.93 NJ
TOLUENE	5	< 1.0 J	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 1.0	< 0.54	< 1.0	0.77 J	< 1.0	< 1.0
TRICHLOROETHENE	5	< 1.0	23.5	< 1.0	44.4	2.2	< 1.0
VINYL CHLORIDE	2	< 1.0	7.6	< 1.0	11.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0

- Notes:**
- 1. All units are ug/L.
 - 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 - 3. NS - No Standard
 - 4. NA - Data Not Available
 - 5. **BOLD** - Detected Compound
 - 6. Exceedances noted as shaded
 - 7. J - Estimated Value
 - 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 - 9. [] - Duplicate sample result.
 - 10. < - Reporting Limit presented when results were non-detect.
 - 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-B							MW-C
		08/24/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14	
1,1,1-TRICHLOROETHANE	5	< 0.40	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
1,1-DICHLOROETHANE	5	< 0.75	< 1.0	< 0.37	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.75
1,2-DICHLOROBENZENE	3	< 0.50	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.50
1,3-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
1,4-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
BENZENE	1	< 0.41	< 0.50	< 0.45	< 0.50	< 0.50	< 0.50	< 0.50 [< 0.50]	< 0.41
CHLOROBENZENE	5	< 0.40	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
CHLOROETHANE	5	< 0.40	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0	< 2.0 [< 2.0]	< 0.40
CIS-1,2-DICHLOROETHENE	5	< 0.40	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
ETHYLBENZENE	5	< 0.40	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
METHYLENE CHLORIDE	5	NA	NA	< 0.41	< 2.0	< 2.0	< 2.0	< 2.0 [< 2.0]	NA
O-XYLENE	NS	< 0.40	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
TETRACHLOROETHENE	5	< 0.40	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.40
TOLUENE	5	5.0	< 1.0 J	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.60
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.42
TRICHLOROETHENE	5	< 0.46	< 1.0	< 0.45	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 0.46
VINYL CHLORIDE	2	< 1.0	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-D							
		08/25/09	10/26/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 0.40	< 0.40	< 1.0	< 0.94	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 0.75	< 0.75	< 1.0	< 0.37	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 0.50	< 0.50	< 1.0	< 0.35	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.30	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.26	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
BENZENE	1	< 0.41	< 0.41	< 0.50	< 0.45	< 0.50	< 0.50 [< 0.50]	< 0.50	< 0.50
CHLOROBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.48	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
CHLOROETHANE	5	< 0.40	< 0.40	< 2.0	< 0.84	< 2.0	< 2.0 [< 2.0]	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	48	56	1.4	2.3	< 1.0	1.4 [1.5]	1.1	0.99 NJ
ETHYLBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.38	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 1.0	< 0.70	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	NA	< 0.41	< 2.0	< 2.0 [< 2.0]	< 2.0	< 2.0
O-XYLENE	NS	< 0.40	< 0.40	< 1.0	< 0.41	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
TETRACHLOROETHENE	5	0.59	< 0.40	< 1.0	< 0.61	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
TOLUENE	5	< 0.60	< 0.60	< 1.0 J	< 0.45	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 0.42	0.81	< 1.0	< 0.54	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
TRICHLOROETHENE	5	3.9	3.3	< 1.0	< 0.45	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0
VINYL CHLORIDE	2	15	18	< 1.0	< 0.61	< 1.0	0.93 J [0.96 J]	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 1.0	< 0.41	< 1.0	< 1.0 [< 1.0]	< 1.0	< 1.0

- Notes:
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-E							
		08/24/09	10/26/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	10	7.1	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0	0.51 NJ
1,1-DICHLOROETHANE	5	4.4	2.5	< 1.0	< 0.37	< 1.0	< 1.0	0.61 NJ	0.29 NJ
1,2-DICHLOROBENZENE	3	< 0.50	< 0.50	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.41	< 0.41	< 0.50	< 0.45	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 0.40	< 0.40	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	14	9	4.9	1.5	< 1.0	0.90 J	2.2	1.3
ETHYLBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	NA	< 0.41	< 2.0	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 0.40	< 0.40	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 0.40	< 0.40	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 0.60	< 0.60	< 1.0 J	< 0.45	< 1.0	< 1.0	< 1.0	0.64 NJ
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 0.42	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	26	23	< 1.0	< 0.45	< 1.0	0.73 J	4.2	2.0
VINYL CHLORIDE	2	< 1.0	< 1.0	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	MW-F							
		08/24/09	10/26/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	1.3	1.2	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
1,1-DICHLOROETHANE	5	< 0.75	< 0.75	< 1.0	< 0.37	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
1,2-DICHLOROBENZENE	3	< 0.50	< 0.50	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
BENZENE	1	< 0.41	< 0.41	< 0.50	< 0.45	< 0.50	< 0.50	< 0.50 [< 0.50]	< 0.50
CHLOROBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
CHLOROETHANE	5	< 0.40	< 0.40	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0 [< 2.0]	< 2.0
CIS-1,2-DICHLOROETHENE	5	3.3	3.2	1.8	1.8	< 1.0	1.5	2.1 [2.3]	0.72 NJ
ETHYLBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
METHYLENE CHLORIDE	5	NA	NA	NA	0.81 J	< 2.0	< 2.0	< 2.0 [< 2.0]	< 2.0
O-XYLENE	NS	< 0.40	< 0.40	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
TETRACHLOROETHENE	5	< 0.40	< 0.40	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
TOLUENE	5	< 0.60	< 0.60	< 1.0 J	< 0.45	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 0.42	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
TRICHLOROETHENE	5	35	30	18.7	13.0	3.5	10.3	15.2 [15.6]	6.4
VINYL CHLORIDE	2	< 1.0	0.54 J	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 1.0	0.42 J	< 1.0	< 1.0	< 1.0 [< 1.0]	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
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 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	PW-1							
		08/24/09	10/26/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 0.40	< 0.40	< 1.0	< 0.94	< 1.0	< 1.0	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 0.75	< 0.75	< 1.0	< 0.37	< 1.0	< 1.0	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 0.50	0.51	< 1.0	< 0.35	< 1.0	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.30	< 1.0	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 0.40	< 1.0	< 0.26	< 1.0	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.41	< 0.41	< 0.50	< 0.45	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.48	< 1.0	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 0.40	< 0.40	< 2.0	< 0.84	< 2.0	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	2.4	1.5	0.88	< 0.54	< 1.0	< 1.0	0.88 NJ	0.66 NJ
ETHYLBENZENE	5	< 0.40	< 0.40	< 1.0	< 0.38	< 1.0	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 1.0	< 0.70	< 1.0	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	NA	< 0.41	< 2.0	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 0.40	< 0.40	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 0.40	< 0.40	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 0.60	< 0.60	< 1.0 J	0.47	< 1.0	< 1.0	< 1.0	1.1
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 0.42	< 1.0	< 0.54	< 1.0	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	1.1	2.5	< 1.0	< 0.45	< 1.0	< 1.0	< 1.0	0.73 NJ
VINYL CHLORIDE	2	< 1.0	< 1.0	< 1.0	< 0.61	< 1.0	< 1.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 1.0	< 0.41	< 1.0	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	PZ-1						
		08/24/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 0.40	< 1.0	< 0.94	not sampled	< 1.0	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 0.75	< 1.0	< 0.37	not sampled	< 1.0	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 0.50	< 1.0	< 0.35	not sampled	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.30	not sampled	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.26	not sampled	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.41	< 0.50	< 0.45	not sampled	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 0.40	< 1.0	< 0.48	not sampled	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 0.40	< 2.0	< 0.84	not sampled	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	1.8	1.2	1.7	not sampled	1.4	2.0	1.4
ETHYLBENZENE	5	< 0.40	< 1.0	< 0.38	not sampled	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 0.70	not sampled	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	< 0.41	not sampled	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 0.40	< 1.0	< 0.41	not sampled	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 0.40	< 1.0	< 0.61	not sampled	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 0.60	< 1.0 J	< 0.45	not sampled	< 1.0	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 1.0	< 0.54	not sampled	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	< 0.46	< 1.0	< 0.45	not sampled	< 1.0	< 1.0	< 1.0
VINYL CHLORIDE	2	< 1.0	< 1.0	< 0.61	not sampled	< 1.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 0.41	not sampled	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 2. Summary of Volatile Organic Compounds in Groundwater Samples
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Constituent	NYSDEC TOGS 1.1.1 Water Guidance Values	PZ-2						
		08/25/09	05/08/12	08/14/13	03/19/14	06/12/14	09/18/14	12/17/14
1,1,1-TRICHLOROETHANE	5	< 0.40	< 1.0	< 0.94	not sampled	< 1.0	< 1.0	< 1.0
1,1-DICHLOROETHANE	5	< 0.75	< 1.0	< 0.37	not sampled	< 1.0	< 1.0	< 1.0
1,2-DICHLOROBENZENE	3	< 0.50	< 1.0	< 0.35	not sampled	< 1.0	< 1.0	< 1.0
1,3-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.30	not sampled	< 1.0	< 1.0	< 1.0
1,4-DICHLOROBENZENE	3	< 0.40	< 1.0	< 0.26	not sampled	< 1.0	< 1.0	< 1.0
BENZENE	1	< 0.41	< 0.50	< 0.45	not sampled	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	5	< 0.40	< 1.0	< 0.48	not sampled	< 1.0	< 1.0	< 1.0
CHLOROETHANE	5	< 0.40	< 2.0	< 0.84	not sampled	< 2.0	< 2.0	< 2.0
CIS-1,2-DICHLOROETHENE	5	< 0.40	< 1.0	< 0.54	not sampled	< 1.0	< 1.0	< 1.0
ETHYLBENZENE	5	< 0.40	< 1.0	< 0.38	not sampled	< 1.0	< 1.0	< 1.0
M-XYLENE & P-XYLENE	5	< 1.0	< 1.0	< 0.70	not sampled	< 1.0	< 1.0	< 1.0
METHYLENE CHLORIDE	5	NA	NA	< 0.41	not sampled	< 2.0	< 2.0	< 2.0
O-XYLENE	NS	< 0.40	< 1.0	< 0.41	not sampled	< 1.0	< 1.0	< 1.0
TETRACHLOROETHENE	5	< 0.40	< 1.0	< 0.61	not sampled	< 1.0	< 1.0	< 1.0
TOLUENE	5	< 0.60	< 1.0 J	< 0.45	not sampled	< 1.0	< 1.0	< 1.0
TRANS-1,2-DICHLOROETHENE	5	< 0.42	< 1.0	< 0.54	not sampled	< 1.0	< 1.0	< 1.0
TRICHLOROETHENE	5	< 0.46	< 1.0	< 0.45	not sampled	< 1.0	< 1.0	< 1.0
VINYL CHLORIDE	2	< 1.0	< 1.0	< 0.61	not sampled	< 1.0	< 1.0	< 1.0
XYLENES, TOTAL	5	< 1.0	< 1.0	< 0.41	not sampled	< 1.0	< 1.0	< 1.0

- Notes:**
1. All units are ug/L.
 2. Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.
 3. NS - No Standard
 4. NA - Data Not Available
 5. **BOLD** - Detected Compound
 6. Exceedances noted as shaded
 7. J - Estimated Value
 8. NJ - Indicates the compound was "tentatively identified" and the associated value represents its approximate concentration.
 9. [] - Duplicate sample result.
 10. < - Reporting Limit presented when results were non-detect.
 11. These data are validated as per the attached DUSR.



Table 3. Summary of Well Screens and PDB Depths
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Monitoring Well	Ground surface elevation (ft) ⁽¹⁾	Screen Depth (ft bgs)		Screen Elevation (ft)		Top of PVC Riser Elevation (ft) ⁽¹⁾	Depth to Water (from top of PVC riser)	Approximate PDB Elevation (ft)		Is PDB Top below Screen Top?	Is any portion of the PDB below Screen Top?	PDB below screen top		Groundwater Elevation (ft)			
												Length (ft)	Fraction of Total (%)				
		Top	Bottom	Top	Bottom			Top	Bottom						March 4, 2014		
West Lot Site																	
MW-1-DOT	508.94	10.0	20.0	498.9	488.9	511.24	9.72	500.52	498.72	No	Yes	0.22	12%	501.52			
MW-22	506.49	3.7	8.5	502.8	498.0	509.34	7.39	500.95	499.15	Yes				501.95			
MW-23	505.70	3.8	8.4	501.9	497.3	508.73	6.90	500.83	499.03	Yes				501.83			
MW-24	505.96	3.5	8.3	502.5	497.7	508.95	6.78	501.17	499.37	Yes				502.17			
MW-B	507.93	4.0	14.0	503.9	493.9	509.66	5.99	502.67	500.87	Yes				503.67			
MW-D	506.82	4.1	14.1	502.7	492.7	508.52	6.66	500.86	499.06	Yes				501.86			
MW-E	506.66	6.0	14.0	500.7	492.7	508.43	6.56	500.87	499.07	No	Yes	1.59	88%	501.87			
MW-F	507.14	3.5	14.5	503.6	492.6	509.50	7.82	500.68	498.88	Yes				501.68			
PW-1	505.18	16.0	26.0	489.2	479.2	504.30	1.75	501.55	499.75	No	No			502.55			
10-Acre Parcel																	
MW-1	506.68	3.5	13.5	503.2	493.2	508.52	5.84	501.68	499.88	Yes				502.68			
MW-5	508.05	4.0	14.0	504.1	494.1	509.67	7.75	500.92	499.12	Yes				501.92			
Western Parking Lot																	
PZ-1	508.89	5.0	15.0	503.9	493.9	508.80	NG	NS	NS	NS	NS	NS	NS	-			
PZ-2	509.04	4.0	9.0	505.0	500.0	509.01	NG	NS	NS	NS	NS	NS	NS	-			

- Notes:**
- 1. All elevations are reported as feet mean sea level (ft msl). Well casing and ground surface elevations reflect resurvey performed by Stantec in December 2014.
 - 2. Survey data are referenced horizontally to the NAD83 and projected on the New York State Plane Coordinate System (Central Zone).
 - 3. The reference vertical benchmark is the finished floor elevation of the southeasterly corner of the Boiler House Building (Elevation 506.50 feet).
 - 4. NG = Not Gaged
 - 5. NS = Not Sampled



Table 3. Summary of Well Screens and PDB Depths
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Monitoring Well	Ground surface elevation (ft) ⁽¹⁾	Screen Depth (ft bgs)		Screen Elevation (ft)		Top of PVC Riser Elevation (ft) ⁽¹⁾	Depth to Water (from top of PVC riser)	Approximate PDB Elevation (ft)		Is PDB Top below Screen Top?	Is any portion of the PDB below Screen Top?	PDB below screen top		Groundwater Elevation (ft)			
												Length (ft)	Fraction of Total (%)				
		Top	Bottom	Top	Bottom			Top	Bottom						May 28, 2014		
West Lot Site																	
MW-1-DOT	508.94	10.0	20.0	498.9	488.9	511.24	9.28	500.91	499.11	No	No			501.96			
MW-22	506.49	3.7	8.5	502.8	498.0	509.34	6.73	501.59	499.79	Yes				502.61			
MW-23	505.70	3.8	8.4	501.9	497.3	508.73	6.30	501.40	499.60	Yes				502.43			
MW-24	505.96	3.5	8.3	502.5	497.7	508.95	6.03	501.87	500.07	Yes				502.92			
MW-B	507.93	4.0	14.0	503.9	493.9	509.66	4.43	504.16	502.36	No				505.23			
MW-D	506.82	4.1	14.1	502.7	492.7	508.52	6.04	501.44	499.64	Yes				502.48			
MW-E	506.66	6.0	14.0	500.7	492.7	508.43	5.91	501.51	499.71	No	Yes	0.95	53%	502.52			
MW-F	507.14	3.5	14.5	503.6	492.6	509.50	7.31	501.17	499.37	Yes				502.19			
PW-1	505.18	16.0	26.0	489.2	479.2	504.30	0.80	502.47	500.67	No	No			503.50			
10-Acre Parcel																	
MW-1	506.68	3.5	13.5	503.2	493.2	508.52	4.60	502.90	501.10	Yes				503.92			
MW-5	508.05	4.0	14.0	504.1	494.1	509.67	6.99	501.67	499.87	Yes				502.68			
Western Parking Lot																	
PZ-1	508.89	5.0	15.0	503.9	493.9	508.80	6.69	501.05	497.65	Yes				502.11			
PZ-2	509.04	4.0	9.0	505.0	500.0	509.01	7.60	500.39	496.99	Yes				501.41			

- Notes:**
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 - 2. Survey data are referenced horizontally to the NAD83 and projected on the New York State Plane Coordinate System (Central Zone).
 - 3. The reference vertical benchmark is the finished floor elevation of the southeasterly corner of the Boiler House Building (Elevation 506.50 feet).
 - 4. NG = Not Gaged
 - 5. NS = Not Sampled



Table 3. Summary of Well Screens and PDB Depths
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Monitoring Well	Ground surface elevation (ft) ⁽¹⁾	Screen Depth (ft bgs)		Screen Elevation (ft)		Top of PVC Riser Elevation (ft) ⁽¹⁾	Depth to Water (from top of PVC riser)	Approximate PDB Elevation (ft)		Is PDB Top below Screen Top?	Is any portion of the PDB below Screen Top?	PDB below screen top		Groundwater Elevation (ft)			
												Length (ft)	Fraction of Total (%)				
		Top	Bottom	Top	Bottom			Top	Bottom						September 2, 2014		
West Lot Site																	
MW-1-DOT	508.94	10.0	20.0	498.9	488.9	511.24	9.97	500.24	498.44	No	Yes	0.50	28%	501.27			
MW-22	506.49	3.7	8.5	502.8	498.0	509.34	7.76	500.59	498.79	Yes				501.58			
MW-23	505.70	3.8	8.4	501.9	497.3	508.73	7.24	500.48	498.68	Yes				501.49			
MW-24	505.96	3.5	8.3	502.5	497.7	508.95	7.19	500.75	498.95	Yes				501.76			
MW-B	507.93	4.0	14.0	503.9	493.9	509.66	6.35	502.31	500.51	Yes				503.31			
MW-D	506.82	4.1	14.1	502.7	492.7	508.52	6.97	500.52	498.72	Yes				501.55			
MW-E	506.66	6.0	14.0	500.7	492.7	508.43	6.94	500.48	498.68	Yes				501.49			
MW-F	507.14	3.5	14.5	503.6	492.6	509.50	8.11	500.40	498.60	Yes				501.39			
PW-1	505.18	16.0	26.0	489.2	479.2	504.30	2.24	501.05	499.25	No	No			502.06			
10-Acre Parcel																	
MW-1	506.68	3.5	13.5	503.2	493.2	508.52	6.25	501.27	499.47	Yes				502.27			
MW-5	508.05	4.0	14.0	504.1	494.1	509.67	8.06	500.57	498.77	Yes				501.61			
Western Parking Lot																	
PZ-1	508.89	5.0	15.0	503.9	493.9	508.80	7.46	500.35	496.95	Yes				501.34			
PZ-2	509.04	4.0	9.0	505.0	500.0	509.01	8.09	N/A	N/A	N/A				500.92			

- Notes:**
- 1. All elevations are reported as feet mean sea level (ft msl). Well casing and ground surface elevations reflect resurvey performed by Stantec in December 2014.
 - 2. Survey data are referenced horizontally to the NAD83 and projected on the New York State Plane Coordinate System (Central Zone).
 - 3. The reference vertical benchmark is the finished floor elevation of the southeasterly corner of the Boiler House Building (Elevation 506.50 feet).
 - 4. NG = Not Gaged
 - 5. NS = Not Sampled



Table 3. Summary of Well Screens and PDB Depths
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Monitoring Well	Ground surface elevation (ft) ⁽¹⁾	Screen Depth (ft bgs)		Screen Elevation (ft)		Top of PVC Riser Elevation (ft) ⁽¹⁾	Depth to Water (from top of PVC riser)	Approximate PDB Elevation (ft)		Is PDB Top below Screen Top?	Is any portion of the PDB below Screen Top?	PDB below screen top		Groundwater Elevation (ft)
												Length (ft)	Fraction of Total (%)	
		Top	Bottom	Top	Bottom			December 3, 2014						
West Lot Site														
MW-1-DOT	508.94	10.0	20.0	498.9	488.9	511.24	9.69	498.99	497.19	No	Yes	1.75	97%	501.55
MW-22	506.49	3.7	8.5	502.8	498.0	509.34	7.39	501.95	500.15	Yes				501.95
MW-23	505.70	3.8	8.4	501.9	497.3	508.73	6.92	500.81	499.01	Yes				501.81
MW-24	505.96	3.5	8.3	502.5	497.7	508.95	6.86	501.09	499.29	Yes				502.09
MW-B	507.93	4.0	14.0	503.9	493.9	509.66	6.42	502.24	500.44	Yes				503.24
MW-D	506.82	4.1	14.1	502.7	492.7	508.52	6.69	500.83	499.03	Yes				501.83
MW-E	506.66	6.0	14.0	500.7	492.7	508.43	6.63	499.93	498.13	Yes				501.80
MW-F	507.14	3.5	14.5	503.6	492.6	509.50	7.78	500.72	498.92	Yes				501.72
PW-1	505.18	16.0	26.0	489.2	479.2	504.30	1.93	489.05	487.25	Yes				502.37
10-Acre Parcel														
MW-1	506.68	3.5	13.5	503.2	493.2	508.52	6.15	501.37	499.57	Yes				502.37
MW-5	508.05	4.0	14.0	504.1	494.1	509.67	7.91	500.76	498.96	Yes				501.76
Western Parking Lot														
PZ-1	508.89	5.0	15.0	503.9	493.9	508.80	7.25	500.55	497.15	Yes				501.55
PZ-2	509.04	4.0	9.0	505.0	500.0	509.01	7.88	N/A	N/A	N/A				501.13

- Notes:**
- 1. All elevations are reported as feet mean sea level (ft msl). Well casing and ground surface elevations reflect resurvey performed by Stantec in December 2014.
 - 2. Survey data are referenced horizontally to the NAD83 and projected on the New York State Plane Coordinate System (Central Zone).
 - 3. The reference vertical benchmark is the finished floor elevation of the southeasterly corner of the Boiler House Building (Elevation 506.50 feet).
 - 4. NG = Not Gaged
 - 5. NS = Not Sampled



Table 4. Summary of West Lot Well Resurvey Data
West Lot Site, Former Lockheed Martin French Road Facility, Utica, New York.

Stantec Resurvey						
Description	ID	Northing	Easting	Elevation	Previously Reported Elevation	Variation (ft.)
FF Benchmark	BM Held ⁽¹⁾	1127715.9640	1166952.6320	506.50		
MW-1-DOT	Top of PVC Casing	1126884.2480	1166101.8540	511.24	508.70	2.54
PZ-2	Top of PVC Casing	1126868.0280	1166240.3120	509.01	508.95	0.06
PZ-1	Top of PVC Casing	1127205.8410	1166534.9130	508.80	508.56	0.24
MW-C	Top of PVC Casing	1127480.7160	1166168.5510	508.93	509.10	-0.17
MW-24	Top of PVC Casing	1127371.5630	1165981.8030	508.95	508.80	0.15
MW-D	Top of PVC Casing	1127270.6960	1165901.5150	508.52	508.95	-0.43
MW-23	Top of PVC Casing	1127233.4740	1165914.6040	508.73	508.70	0.03
MW-22	Top of PVC Casing	1127223.6210	1166028.0740	509.34	509.30	0.04
MW-F	Top of PVC Casing	1127036.1470	1166020.3220	509.50	509.75	-0.25
PW-1	Top of PVC Casing	1127476.4860	1165958.8620	504.30	503.26	1.04
MW-B	Top of PVC Casing	1127773.7580	1166022.5120	509.66	509.85	-0.19
MW-1	Top of PVC Casing	1127627.4870	1165712.1030	508.52	508.65	-0.13
MW-E	Top of PVC Casing	1127316.6620	1165789.9910	508.43	508.50	-0.07
MW-5	Top of PVC Casing	1127408.0890	1165700.1650	509.67	509.75	-0.08

Notes:

1. Benchmark on finished floor at SE corner Boilerhouse.
2. Survey performed on December 4-5, 2014.
3. Csng = casing
4. FF = finished floor
5. TOC = top of casing

Appendix A

Summary of Conditions Letter, July 24, 2014

Lockheed Martin Corporation
7000 Calmont Ave. Suite 300 MS2010
Fort Worth, TX 76116
Telephone 817-495-0246



July 24, 2014

Peter S. Ouderkirk, P.E.
Project Manager
New York State Department of Environmental Conservation
Dulles State Office Building
317 Washington Street
Watertown, NY 13601-3787

Subject: Summary of Conditions
 West Lot Site
 Former Lockheed Martin French Road Facility
 Utica, New York
 Site No. 633036

Dear Mr. Ouderkirk:

In accordance with our conference call of May 15, 2014 conducted with personnel from the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), this letter summarizes conditions at the West Lot Site (Site No. 633036, or the site) of the Former Lockheed Martin French Road Facility (the facility) in Utica, New York. Our conference call addressed recent groundwater monitoring results and the potential for delisting the site. This letter provides further information regarding those results in the form of a summary of the site's background and history of characterization, remediation, monitoring, and regulatory compliance.

Site Background

The Former Lockheed Martin French Road Facility was used to manufacture electrical components. Lockheed Martin is a prior owner and successor to prior owners of the site. ConMed Corporation, a medical supplies manufacturer and distributor, now occupies the facility. The West Lot Site encompasses approximately two acres within the western portion of the larger 55-acre facility. From the 1950s to the early 1960s, the site operated as a waste disposal site and fire training area burning waste materials and spent solvents in an 80-foot diameter pit known as the former burn pit. The site is mostly covered by mixed vegetation and contains no occupied buildings. A small storage shed and a blower house were constructed during Interim Remedial Measures (IRMs) performed for soil cleanup in 1993 and 1994, but they are no longer in use. Southwest of the site and adjoining the larger facility boundary is an active New York State Department of Transportation (NYSDOT)

facility, including a building used for office space and a garage for trucks and other vehicles. The NYSDOT facility is on a former landfill site known as the New Hartford Village dump. The West Lot Site is listed as a Class 4 site on the New York State Registry of Inactive Hazardous Waste Disposal Sites.

The site is zoned for industrial and commercial uses. Furthermore, site use is subject to a Restrictive Use Agreement attached to the 1996 deed delivered by Martin Marietta Corporation, a predecessor to Lockheed Martin, to Pinnacle Park, Inc. pursuant to which Martin Marietta transferred its entire Utica facility then comprised of 67.72 acres to Pinnacle Park (Lockheed Martin 1996). The Restrictive Use Agreement prohibits use of the former Martin Marietta land, which includes the site, for residential purposes. Current land use at the site is industrial. Although the eastern portion of the facility is fenced, the fencing does not extend around its entire perimeter and as such, does not entirely preclude site access. Future land use at the site is expected to be consistent with current land use. Surrounding land use is a mixture of industrial, commercial, and residential properties, with isolated pockets of undeveloped land.

The site is underlain by four geologic units consisting of, from top to bottom, kame deposits, a silt unit, till deposits, and shale bedrock. Groundwater is typically encountered within a depth of 10 feet. Groundwater flow direction from the burn pit area is toward the south-southwest, meaning the NYSDOT facility and commercial/industrial properties on Chenango Road. Based on results of a groundwater use survey performed by Lockheed Martin in 2008 and later updated in 2012, there is no available information to suggest the presence of a private supply well within the site vicinity (ARCADIS 2012).

Response Action History

Investigations beginning in the early 1990s have identified cis-1,2 dichloroethene (DCE), trichloroethene (TCE), 1,1,1-trichloroethane, vinyl chloride (VC), benzene, toluene, ethylbenzene, and xylene (BTEX) as the primary site-related constituents in soil and groundwater. In general, highest concentrations have been detected in the area of the former burn pit. During the IRMs, approximately 2,200 cubic yards of soil from the former burn pit area were excavated and placed in an on-site containment cell (O'Brien & Gere Engineers, Inc., 1994). Following Lockheed Martin's completion of a Feasibility Study Report (Blasland, Bouk, and Lee, Inc., 1998), NYSDEC issued a Record of Decision (ROD) dated March 1998 to Lockheed Martin requiring the removal of impacted soil in excess of cleanup goals from the containment cell and the burn pit area (NYSDEC 1998). NYSDEC later issued an Order on Consent dated March 1999 to Lockheed Martin (NYSDEC 1999).

Excavations in 1999 removed additional contaminated soils from the former burn pit area, satisfying the soil remedy requirement in the ROD and Order on Consent as determined by NYSDEC (NYSDEC 1999A). However, continued groundwater monitoring identified a residual source of groundwater contamination. As a result, supplemental soil removal in the former burn pit area was completed in 2005 to enhance groundwater cleanup. Following the 2005 soil removal, a significant decline in groundwater volatile organic compound (VOC) concentrations associated with the West Lot Site was observed.

In compliance with the ROD, a hydraulic control system was installed in 2001 and became operational in 2002. The system consisted of a single extraction well that pumped recovered groundwater from the former burn pit area to the groundwater collection and treatment unit associated with the Solvent Dock Area at the east end of the facility. The extraction well operated from 2002 through 2006. The extraction well was shut down in January 2007 in accordance with NYSDEC's approval (NYSDEC 2007) because, although groundwater impacts had been reduced from its operation and from soil removal events, continued pumping was no longer anticipated to greatly decrease or influence downgradient groundwater concentrations.

In 2008, Lockheed Martin expanded its zone of investigation beyond the roughly two-acre limits of the West Lot Site to conduct soil and groundwater sampling over a broader, largely undeveloped area at the west end of the facility termed the greater West Lot site. Results of this investigation were reported to NYSDEC/NYSDOH in a report dated April 2009 (ARCADIS 2009). Among soil samples collected from 12 test pits and two test borings and submitted to the laboratory for a multiple-parameter suite of analyses, only one soil sample result exceeded commercial use Soil Cleanup Objectives (SCOs). This result consisted of the detection of PCBs (Aroclor 1254) at 1.3 mg/kg in a soil sample collected from a test pit within the former burn pit area at a depth of 3.0 to 3.5 ft. No soil results exceeded current industrial use SCOs. Groundwater results presented in the 2009 report identified a continued reduction in VOC levels throughout the monitoring network, the majority of which were below NYSDEC Groundwater Standards and Guidance Values (SGVs). In order to confirm VOC levels in groundwater, additional groundwater monitoring was performed in August and October 2009. These results identified a slight increase in VOC concentrations that in some instances exceeded SGVs in selected wells, specifically among chloroethenes (ARCADIS 2009A).

In response to the 2009 groundwater monitoring results, additional test borings were completed at the West Lot site in 2010 to evaluate residual soil impacts downgradient of the burn pit area and their potential influence on VOC levels in groundwater. Specifically, use of a hydraulic-profiling tool (HPT) was designed to identify low permeability units under the assumption that these intervals may contain VOCs that are preferentially sorbed to fine-grained soils and may contribute to groundwater contamination. HPT results were designed to provide target intervals for follow-on groundwater sampling with a Hydropunch tool. Although the HPT results were inconclusive, groundwater profiling with the Hydropunch tool indicated that highest VOC levels in groundwater are at or near the water table and that groundwater impacts decrease with depth. This condition is consistent with the identified fining-downward stratigraphy, suggesting decreasing transmissivity and groundwater flow with depth. Although this work helped to further define the nature and extent of groundwater impacts, some of the Hydropunch results for selected VOCs (DCE, TCE, VC, xylenes, and ethylbenzene) were an order of magnitude higher than historical levels detected in nearby monitoring wells. These results were provided to NYSDEC/NYSDOH in a report dated June 2011 (ARCADIS 2011).

In response to the increased VOC levels detected in the Hydropunch samples, and as directed by NYSDEC/NYSDOH, a soil vapor investigation was performed in conjunction with additional groundwater monitoring in 2012. The soil vapor investigation included the installation and sampling of six soil vapor points at the West Lot Site in the vicinity of Chenango Road to evaluate the potential migration of soil vapor to off-site properties. Analytical results of soil vapor samples did not exceed United States Environmental Protection Agency Industrial Air Regional Screening

Levels. These results are consistent with previous soil vapor monitoring data reported in a 2008 Vapor Intrusion Study that indicated that soil vapor is not migrating off-site at levels in excess of applicable criteria (ARCADIS 2008). The information included in the 2008 Vapor Intrusion Study resulted in Lockheed Martin receiving a No Further Action Soil Vapor Intrusion Evaluation Determination from NYSDEC dated May 13, 2009 (NYSDEC 2009). Groundwater monitoring was performed in three new monitoring wells installed proximate to earlier Hydropunch groundwater sampling locations. Groundwater results from these new monitoring wells, plus other monitoring locations within the site's monitoring network, were below SGVs. Results of the 2012 monitoring were submitted to NYSDEC/NYSDOH in a report dated August 2012 (ARCADIS 2012A). Subsequent groundwater monitoring was performed within the same monitoring network 15 months later in August 2013. The 2013 monitoring detected a slight increase in VOC levels in selected wells above SGVs. Results of the 2013 monitoring were submitted to NYSDEC/NYSDOH in a report dated October 2013 (ARCADIS 2013).

Recent Results

As a result of the 2013 monitoring, Lockheed Martin recommended that four quarters of groundwater monitoring be performed over a calendar year to better evaluate seasonal influences, the stability of the groundwater plume, and the feasibility of achieving closure. This more recent monitoring was initiated in March 2014, the results of which were reported to NYSDEC/NYSDOH as summary materials in April 2014 (Stantec 2014). During the March 2014 event, a total of 13 monitoring wells were sampled for VOCs. VOCs were undetected in all but three wells, where only a single VOC was detected in each well at concentrations below SGVs. The second groundwater quarterly event was completed in June 2014. During this monitoring, selected VOCs were detected above SGVs in three wells. Variation between the two monitoring events may be related to seasonal fluctuation in the water table, but do not necessarily indicate contaminant migration or plume instability. Additional monitoring is planned for September 2014 and December 2014.

In conjunction with the Solvent Dock Area of the facility and as requested by NYSDEC, Lockheed Martin performed a facility-wide surface soil sampling event consisting of the collection of 30 soil samples from both paved and unpaved areas in October 2013. This sampling included the West Lot Site. The sampling was performed to assist with remedial alternative selection at the Solvent Dock Area, and to assess exposure potential and the need for protective covers at the facility. Results of the surface soil sampling program are summarized in a December 2013 report submitted to NYSDEC/NYSDOH (ARCADIS 2013A). At and in the vicinity of the West Lot Site, surface soil sampling detected constituents in excess of commercial use SCOs at two locations. One of these locations is proximate to the previously noted 2009 test pit location at which PCBs (Aroclor 1254) were detected at 1.3 mg/kg in soil at a depth of 3.0 to 3.5 ft. The commercial use SCO for PCBs is 1.0 mg/kg. In the proximate surface soil location, PCBs (Aroclor 1254) were detected at 2.4 mg/kg. As with the test pit location, this surface soil sampling location is within the West Lot boundaries of the Restrictive Use Agreement. At the second surface soil sample location, this one within a grass covered island near an entrance to a parking lot west of the main facility building, lead was detected in two analyses performed for the same sample at 1,090 mg/kg and 37.7 mg/kg. Both results are estimated concentrations. The commercial use SCO for lead is 1,000 mg/kg. This sample location is outside the West Lot Site and the boundaries of the Restrictive Use Agreement. At both surface soil sample locations, and at other locations within the vicinity of the West Lot Site, all surface soil

results meet criteria of industrial use SCOs. NYSDEC's review of the related summary report concluded that surface soil sample results in excess of commercial SCOs will need to be factored into future decisions regarding institutional controls and site management (NYSDEC 2013).

We trust that this summary provides suitable information for review of the West Lot Site and an evaluation of a potential path for its delisting. Please contact Glenda Smith of Lockheed Martin if you should have any questions. As in the past, we look forward to working with NYSDEC/NYSDOH toward closure of the West Lot Site.

Sincerely,

A handwritten signature in black ink that reads "Glenda B. Smith". The signature is written in a cursive, flowing style.

Glenda B. Smith
Project Lead, Environmental Remediation
Lockheed Martin

cc:

Mr. Peter Taylor, NYSDEC
Mr. Nathan Freeman, NYSDOH
Mr. Richard Zigenfus, ConMed
Ms. Mary Morningstar, Lockheed Martin
Ms. Jann Richardson, Lockheed Martin
Mr. James Zigmont, CDM Smith
Ms. Kay Armstrong, Armstrong & Associates
Mr. Peter Nielsen, Stantec

REFERENCES

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- New York State Department of Environmental Conservation 1999A. Letter to ARCADIS on Soil-Removal Report, November.
- New York State Department of Environmental Conservation 2007. Letter to ARCADIS on Petition for Shutdown of Groundwater Extraction Well PW-1, January.
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- New York State Department of Environmental Conservation 2013. Letter to Lockheed Martin on Summary Report on Surface Soil Sampling Activities, February.
- O'Brien & Gere Engineers, Inc., 1994, Interim Remedial Measure Program, June.
- Stantec Consulting Services Inc. 2014, Summary of First Quarter 2014 Groundwater Sampling, April.

Appendix B

Analytical Data Reports



04/01/14

Technical Report for

Stantec Consulting Corporation

LMC - Utica West Lot

Accutest Job Number: MC29101

Sampling Date: 03/19/14

Report to:

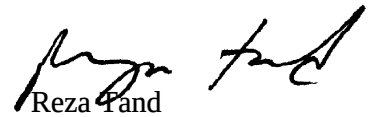
Stantec Consulting Corporation
61 Commercial Street
Rochester, NY 14614
bob.mahoney@stantec.com

ATTN: Bob Mahoney

Total number of pages in report: **219**



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


Reza Fand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

Stantec Consulting Corporation

Job No: MC29101

LMC - Utica West Lot

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC29101-1	03/19/14	11:45 BH	03/21/14	AQ	Ground Water	MW-1
MC29101-2	03/19/14	14:30 BH	03/21/14	AQ	Ground Water	MW-1(DOT)
MC29101-3	03/19/14	12:15 BH	03/21/14	AQ	Ground Water	MW-5
MC29101-4	03/19/14	13:30 BH	03/21/14	AQ	Ground Water	MW-22
MC29101-5	03/19/14	13:35 BH	03/21/14	AQ	Ground Water	MW-22FD
MC29101-6	03/19/14	13:15 BH	03/21/14	AQ	Ground Water	MW-23
MC29101-7	03/19/14	12:45 BH	03/21/14	AQ	Ground Water	MW-24
MC29101-8	03/19/14	11:30 BH	03/21/14	AQ	Ground Water	MW-B
MC29101-9	03/19/14	13:00 BH	03/21/14	AQ	Ground Water	MW-D
MC29101-10	03/19/14	12:30 BH	03/21/14	AQ	Ground Water	MW-E
MC29101-11	03/19/14	14:15 BH	03/21/14	AQ	Ground Water	MW-F
MC29101-12	03/19/14	12:00 BH	03/21/14	AQ	Ground Water	PW-1
MC29101-13	03/19/14	16:00 BH	03/21/14	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Stantec Consulting Corporation

Job No MC29101

Site: LMC - Utica West Lot

Report Date 4/1/2014 11:35:15 AM

12 Sample(s) and 1 Trip Blank(s) were collected on 03/19/2014 and were received at Accutest on 03/21/2014 properly preserved, at 1 Deg. C and intact. These Samples received an Accutest job number of MC29101. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ

Batch ID: MSV1088

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC29163-1MS, MC29163-1MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Acetone, Dichlorodifluoromethane are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 2-Butanone (MEK), 2-Hexanone, Acetone, Dichlorodifluoromethane, Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Butanone (MEK), 2-Hexanone, Acetone, Dichlorodifluoromethane are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD(s) for MSD for 1,2,3-Trichlorobenzene, Naphthalene are outside control limits for sample MC29163-1MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (MC29101).

Summary of Hits

Job Number: MC29101
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 03/19/14



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

MC29101-1 **MW-1**

No hits reported in this sample.

MC29101-2 **MW-1(DOT)**

cis-1,2-Dichloroethene	4.2	1.0	0.54	ug/l	SW846 8260C

MC29101-3 **MW-5**

No hits reported in this sample.

MC29101-4 **MW-22**

No hits reported in this sample.

MC29101-5 **MW-22FD**

No hits reported in this sample.

MC29101-6 **MW-23**

No hits reported in this sample.

MC29101-7 **MW-24**

Tetrachloroethene	1.2	1.0	0.61	ug/l	SW846 8260C

MC29101-8 **MW-B**

No hits reported in this sample.

MC29101-9 **MW-D**

No hits reported in this sample.

MC29101-10 **MW-E**

No hits reported in this sample.

MC29101-11 **MW-F**

Trichloroethene	3.5	1.0	0.45	ug/l	SW846 8260C

Summary of Hits

Job Number: MC29101
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 03/19/14



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

MC29101-12 PW-1

No hits reported in this sample.

MC29101-13 TRIP BLANK

No hits reported in this sample.

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-1	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-1	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29038.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-1	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1
Lab Sample ID: MC29101-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14
Date Received: 03/21/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	87%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%

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

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

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-1(DOT)	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-2	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29039.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	4.2	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1(DOT)	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-2	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1(DOT)	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-2	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	86%		70-130%
460-00-4	4-Bromofluorobenzene	93%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-5	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-3	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29040.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-3	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-3	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	86%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-22	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-4	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29041.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-4	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22
Lab Sample ID: MC29101-4
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14
Date Received: 03/21/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	88%		70-130%
460-00-4	4-Bromofluorobenzene	93%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-22FD	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-5	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29042.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22FD	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-5	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22FD
Lab Sample ID: MC29101-5
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14
Date Received: 03/21/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	88%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-23	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-6	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29043.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-6	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-23
Lab Sample ID: MC29101-6
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14
Date Received: 03/21/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	86%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-24	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-7	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29044.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-7	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	1.2	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-24
Lab Sample ID: MC29101-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14
Date Received: 03/21/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	86%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-B	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-8	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29045.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-B	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-8	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-B	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-8	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	87%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-D	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-9	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29046.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-D
Lab Sample ID: MC29101-9
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14

Date Received: 03/21/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-D	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-9	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	86%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-E	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-10	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29047.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-E	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-10	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-E	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-10	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	87%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-F	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-11	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29048.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-11	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	3.5	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-F
Lab Sample ID: MC29101-11
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14
Date Received: 03/21/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	86%		70-130%
460-00-4	4-Bromofluorobenzene	93%		70-130%

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

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

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Report of Analysis

Page 1 of 3

Client Sample ID:	PW-1	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-12	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29049.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PW-1	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-12	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PW-1	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-12	Date Received:	03/21/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	87%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

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

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

Accutest Laboratories

Report of Analysis

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Client Sample ID:	TRIP BLANK	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-13	Date Received:	03/21/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29030.D	1	03/25/14	AMY	n/a	n/a	MSV1088
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	03/19/14
Lab Sample ID:	MC29101-13	Date Received:	03/21/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	77%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: MC29101-13
Matrix: AQ - Trip Blank Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 03/19/14

Date Received: 03/21/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	84%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

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

ACCUTEST LABORATORIES		495 Technology Center East, Building One TEL: 508-481-6200 FAX: 508-481-7753 www.accutest.com				FED-EX Tracking # _____ Bottle Order Control # _____		Accutest Quote # _____ Accutest Job # mc29101			
Client / Reporting Information		Project Information				Requested Analysis (see TEST CODE sheet)				Matrix Codes	
Company Name Stantec		Project Name LMC - Utica West Lot				VOC 8260				DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Street Address 61 Commercial St.		Street: 		Billing Information (If different from Report to)							
City State Zip Rochester NY 14614		City: 		Company Name 							
Project Contact Bob Mahoney		Project# 		Street Address 							
Phone # 585 413 5301		Client PO# 190500800		City State Zip 							
Sampler(s) Name(s) Ben Haravitch		Project Manager Peter Nielsen		PO# Ben Haravitch							
Field ID / Point of Collection 		MECH/ID Vial # 		Collection 							
Date 		Time 		Sampled by 							
Matrix 		# of bottles 		Number of preserved Bottles 							
HCl 		NaOH 		HNO3 							
H2SO4 		NONE 		DI Water 							
MECH 		ENCORE 		Biocide 							
Accutest Sample # 		Field ID / Point of Collection 		MECH/ID Vial # 		Date 		Time 		Sampled by 	
Matrix 		# of bottles 		Number of preserved Bottles 		HCl 		NaOH 		HNO3 	
H2SO4 		NONE 		DI Water 		MECH 		ENCORE 		Biocide 	
Accutest Sample # 		Field ID / Point of Collection 		MECH/ID Vial # 		Date 		Time 		Sampled by 	
Matrix 		# of bottles 		Number of preserved Bottles 		HCl 		NaOH 		HNO3 	
H2SO4 		NONE 		DI Water 		MECH 		ENCORE 		Biocide 	
Accutest Sample # 		Field ID / Point of Collection 		MECH/ID Vial # 		Date 		Time 		Sampled by 	
Matrix 		# of bottles 		Number of preserved Bottles 		HCl 		NaOH 		HNO3 	
H2SO4 		NONE 		DI Water 		MECH 		ENCORE 		Biocide 	
Accutest Sample # 		Field ID / Point of Collection 		MECH/ID Vial # 		Date 		Time 		Sampled by 	
Matrix 		# of bottles 		Number of preserved Bottles 		HCl 		NaOH 		HNO3 	
H2SO4 		NONE 		DI Water 		MECH 		ENCORE 		Biocide 	
Accutest Sample # 		Field ID / Point of Collection 		MECH/ID Vial # 		Date 		Time 		Sampled by 	
Matrix 		# of bottles 		Number of preserved Bottles 		HCl 		NaOH 		HNO3 	
H2SO4 		NONE 		DI Water 		MECH 		ENCORE 		Biocide 	
Accutest Sample # 		Field ID / Point of Collection 		MECH/ID Vial # 		Date 		Time 		Sampled by 	
Matrix 		# of bottles 		Number of preserved Bottles 		HCl 		NaOH 		HNO3 	
H2SO4 		NONE 		DI Water 		MECH 		ENCORE 		Biocide 	
Accutest Sample # 		Field ID / Point of Collection 		MECH/ID Vial # 		Date 		Time 		Sampled by 	
Matrix 		# of bottles 		Number of preserved Bottles 		HCl 		NaOH 			

5.1

MC29101: Chain of Custody

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Client / Reporting Information Company Name: <u>Stantec</u> Street Address: <u>61 Commercial St</u> City: <u>Rochester NY</u> State: <u>14614</u> Zip: <u></u> Project Contact: <u>Bob Mahoney</u> E-mail: <u>bob.mahoney@stantec.com</u> Phone #: <u>585-413-5301</u> Fax #: <u></u> Sampler(s) Name(s): <u>Ben Haravitch</u> Phone #: <u>585-9785-248</u>		Project Information Project Name: <u>LMC - Utica West Lot</u> Street: <u></u> Billing Information (If different from Report to): Company Name: <u></u> Street Address: <u></u> City: <u></u> State: <u></u> Zip: <u></u> Project #: <u>1905-00800</u> Client PO#: <u></u> Project Manager: <u>Peter Nielsen</u> Attention: <u>Ben Haravitch</u> PO#: <u></u>		Requested Analysis (see TEST CODE sheet) FED-EX Tracking #: <u></u> Bottle Order Control #: <u></u> Accutest Quote #: <u></u> Accutest Job #: <u>mc29101</u> Matrix Codes: DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Accutest Sample # Field ID / Point of Collection: <u>-13 Trip Blank</u> MECH/DI Vial # <u></u>	Collection Date: <u>3/19/14</u> Time: <u>1600</u> Sampled by: <u>BH</u> Matrix: <u>TB</u> # of bottles: <u>3</u>		Number of preserved bottles: HCl <u>3</u> NH4 <u>3</u> NH3 <u></u> H2SO4 <u></u> NONE <u></u> DI Water <u></u> MECH <u></u> ENCORE <u></u> Beutline <u></u> VOC <u>8260</u>		LAB USE ONLY
	Data Deliverable Information ☒ Commercial "A" (Level 1) ☐ NYASP Category A ☐ Commercial "B" (Level 2) ☒ NYASP Category B ☐ FULLT1 (Level 3+4) ☐ State Forms ☐ CT RCP ☒ EDD Format <u>NYSPEC</u> ☐ MA MCP ☐ Other <u>Comphible</u> Commercial "A" = Results Only Commercial "B" = Results + QC Summary				
Turnaround Time (Business days) ☒ Std. 10 Business Days ☐ Std. 5 Business Days (By Contract only) ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY Approved By (Accutest PM): / Date: _____ Emergency & Rush T/A data available VIA Lablink					
Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished by Sampler: <u>Ben Haravitch</u> Date Time: <u>3/20 11:30</u> Relinquished by Sampler: <u></u> Date Time: <u></u> Relinquished by: <u></u> Date Time: <u></u>	Received By: <u>Fey</u> Date Time: <u>3/20 11:30</u> Received By: <u></u> Date Time: <u></u> Received By: <u></u> Date Time: <u></u>	Relinquished By: <u>Fey</u> Date Time: <u>3/20 11:30</u> Relinquished By: <u></u> Date Time: <u></u> Relinquished By: <u></u> Date Time: <u></u>	Received By: <u></u> Date Time: <u></u> Received By: <u></u> Date Time: <u></u> Received By: <u></u> Date Time: <u></u>	Custody Seal # <u></u> ☐ Intact ☐ Not intact Preserved where applicable ☐ On Ice ☒ Cooler Temp. <u>1-0 c</u>	

MC29101: Chain of Custody

Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC29101 **Client:** STANTEC **Immediate Client Services Action Required:** No
Date / Time Received: 3/21/2014 **Delivery Method:** **Client Service Action Required at Login:** No
Project: LMC UTICA WEST LOT **No. Coolers:** 1 **Airbill #'s:**

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

Cooler Temperature **Y or N**
1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: Infrared gun
3. Cooler media: Ice (bag)

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

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

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

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

Comments

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC29101

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC29101-1 Collected: 19-MAR-14 11:45 By: BH Received: 21-MAR-14 By: MW-1						
MC29101-1	SW846 8260C	25-MAR-14 15:27	AMY			V8260STD
MC29101-2 Collected: 19-MAR-14 14:30 By: BH Received: 21-MAR-14 By: MW-1(DOT)						
MC29101-2	SW846 8260C	25-MAR-14 15:53	AMY			V8260STD
MC29101-3 Collected: 19-MAR-14 12:15 By: BH Received: 21-MAR-14 By: MW-5						
MC29101-3	SW846 8260C	25-MAR-14 16:20	AMY			V8260STD
MC29101-4 Collected: 19-MAR-14 13:30 By: BH Received: 21-MAR-14 By: MW-22						
MC29101-4	SW846 8260C	25-MAR-14 16:46	AMY			V8260STD
MC29101-5 Collected: 19-MAR-14 13:35 By: BH Received: 21-MAR-14 By: MW-22FD						
MC29101-5	SW846 8260C	25-MAR-14 17:12	AMY			V8260STD
MC29101-6 Collected: 19-MAR-14 13:15 By: BH Received: 21-MAR-14 By: MW-23						
MC29101-6	SW846 8260C	25-MAR-14 17:38	AMY			V8260STD
MC29101-7 Collected: 19-MAR-14 12:45 By: BH Received: 21-MAR-14 By: MW-24						
MC29101-7	SW846 8260C	25-MAR-14 18:04	AMY			V8260STD
MC29101-8 Collected: 19-MAR-14 11:30 By: BH Received: 21-MAR-14 By: MW-B						
MC29101-8	SW846 8260C	25-MAR-14 18:30	AMY			V8260STD

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC29101

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC29101-9 Collected: 19-MAR-14 13:00 By: BH Received: 21-MAR-14 By: MW-D						
MC29101-9	SW846 8260C	25-MAR-14 18:56	AMY			V8260STD
MC29101-10 Collected: 19-MAR-14 12:30 By: BH Received: 21-MAR-14 By: MW-E						
MC29101-10	SW846 8260C	25-MAR-14 19:22	AMY			V8260STD
MC29101-11 Collected: 19-MAR-14 14:15 By: BH Received: 21-MAR-14 By: MW-F						
MC29101-11	SW846 8260C	25-MAR-14 19:48	AMY			V8260STD
MC29101-12 Collected: 19-MAR-14 12:00 By: BH Received: 21-MAR-14 By: PW-1						
MC29101-12	SW846 8260C	25-MAR-14 20:14	AMY			V8260STD
MC29101-13 Collected: 19-MAR-14 16:00 By: BH Received: 21-MAR-14 By: TRIP BLANK						
MC29101-13	SW846 8260C	25-MAR-14 11:56	AMY			V8260STD

Accutest Internal Chain of Custody

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Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 03/21/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC29101-1.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-1.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-1.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-1.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-2.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-2.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-2.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-2.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-3.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-3.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-3.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-3.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-4.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-4.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-4.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-4.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-5.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-5.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-5.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-5.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-6.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-6.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-6.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-6.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-7.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-7.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-7.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-7.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-8.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-8.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-8.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-8.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-9.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-9.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-9.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-9.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage

Accutest Internal Chain of Custody

Page 2 of 2

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 03/21/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC29101-10.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-10.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-10.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-10.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-11.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-11.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-11.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-11.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-12.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-12.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-12.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-12.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage
MC29101-13.1	VOC Ref #2	Amy Min Yang	03/25/14 11:11	Retrieve from Storage
MC29101-13.1	Amy Min Yang	GCMSV	03/25/14 11:11	Load on Instrument
MC29101-13.1	GCMSV	Amy Min Yang	03/26/14 12:26	Unload from Instrument
MC29101-13.1	Amy Min Yang	VOC Ref #2	03/26/14 12:26	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

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Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1088-MB	V29029.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/l	
71-43-2	Benzene	ND	0.50	0.45	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.64	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.33	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
74-83-9	Bromomethane	ND	2.0	1.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	4.6	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.54	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.58	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.87	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.77	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.62	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.48	ug/l	
75-00-3	Chloroethane	ND	2.0	0.84	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	2.0	1.4	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.48	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	4.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.33	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.35	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.2	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.37	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.97	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.63	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l	

Method Blank Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1088-MB	V29029.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.29	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.9	ug/l	
74-88-4	Iodomethane	ND	5.0	1.3	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.64	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.55	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.43	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.43	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.41	ug/l	
91-20-3	Naphthalene	ND	5.0	0.79	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.59	ug/l	
100-42-5	Styrene	ND	5.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.42	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.61	ug/l	
108-88-3	Toluene	ND	1.0	0.46	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.76	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.45	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.94	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.49	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.45	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.61	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.47	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.61	ug/l	
	m,p-Xylene	ND	1.0	0.91	ug/l	
95-47-6	o-Xylene	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.41	ug/l	

Method Blank Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1088-MB	V29029.D	1	03/25/14	AMY	n/a	n/a	MSV1088

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

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	76% 70-130%
2037-26-5	Toluene-D8	88% 70-130%
460-00-4	4-Bromofluorobenzene	89% 70-130%

Blank Spike Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1088-B5	V29026.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	32.5	65* a	70-130
71-43-2	Benzene	50	46.1	92	70-130
108-86-1	Bromobenzene	50	52.8	106	70-130
74-97-5	Bromochloromethane	50	44.1	88	70-130
75-27-4	Bromodichloromethane	50	44.4	89	70-130
75-25-2	Bromoform	50	42.8	86	70-130
74-83-9	Bromomethane	50	38.3	77	70-130
78-93-3	2-Butanone (MEK)	50	40.2	80	70-130
104-51-8	n-Butylbenzene	50	52.4	105	70-130
135-98-8	sec-Butylbenzene	50	54.5	109	70-130
98-06-6	tert-Butylbenzene	50	50.6	101	70-130
75-15-0	Carbon disulfide	50	43.0	86	70-130
56-23-5	Carbon tetrachloride	50	47.8	96	70-130
108-90-7	Chlorobenzene	50	48.7	97	70-130
75-00-3	Chloroethane	50	41.8	84	70-130
67-66-3	Chloroform	50	41.4	83	70-130
74-87-3	Chloromethane	50	38.7	77	70-130
95-49-8	o-Chlorotoluene	50	50.3	101	70-130
106-43-4	p-Chlorotoluene	50	50.4	101	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	37.7	75	70-130
124-48-1	Dibromochloromethane	50	45.0	90	70-130
106-93-4	1,2-Dibromoethane	50	49.0	98	70-130
95-50-1	1,2-Dichlorobenzene	50	47.5	95	70-130
541-73-1	1,3-Dichlorobenzene	50	50.0	100	70-130
106-46-7	1,4-Dichlorobenzene	50	49.4	99	70-130
75-71-8	Dichlorodifluoromethane	50	29.8	60* a	70-130
75-34-3	1,1-Dichloroethane	50	44.3	89	70-130
107-06-2	1,2-Dichloroethane	50	40.7	81	70-130
75-35-4	1,1-Dichloroethene	50	48.5	97	70-130
156-59-2	cis-1,2-Dichloroethene	50	45.4	91	70-130
156-60-5	trans-1,2-Dichloroethene	50	45.8	92	70-130
78-87-5	1,2-Dichloropropane	50	48.1	96	70-130
142-28-9	1,3-Dichloropropane	50	47.4	95	70-130
594-20-7	2,2-Dichloropropane	50	43.7	87	70-130
563-58-6	1,1-Dichloropropene	50	47.6	95	70-130
10061-01-5	cis-1,3-Dichloropropene	50	43.2	86	70-130

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1088-B5	V29026.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	54.4	109	70-130
100-41-4	Ethylbenzene	50	52.2	104	70-130
87-68-3	Hexachlorobutadiene	50	47.1	94	70-130
591-78-6	2-Hexanone	50	39.2	78	70-130
74-88-4	Iodomethane	50	41.1	82	70-130
98-82-8	Isopropylbenzene	50	54.7	109	70-130
99-87-6	p-Isopropyltoluene	50	54.6	109	70-130
1634-04-4	Methyl Tert Butyl Ether	50	42.9	86	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	42.0	84	70-130
74-95-3	Methylene bromide	50	44.0	88	70-130
75-09-2	Methylene chloride	50	43.6	87	70-130
91-20-3	Naphthalene	50	50.4	101	70-130
103-65-1	n-Propylbenzene	50	51.8	104	70-130
100-42-5	Styrene	50	53.3	107	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	51.4	103	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	50.4	101	70-130
127-18-4	Tetrachloroethene	50	53.6	107	70-130
108-88-3	Toluene	50	51.0	102	70-130
87-61-6	1,2,3-Trichlorobenzene	50	50.5	101	70-130
120-82-1	1,2,4-Trichlorobenzene	50	46.7	93	70-130
71-55-6	1,1,1-Trichloroethane	50	45.2	90	70-130
79-00-5	1,1,2-Trichloroethane	50	47.6	95	70-130
79-01-6	Trichloroethene	50	45.7	91	70-130
75-69-4	Trichlorofluoromethane	50	40.9	82	70-130
96-18-4	1,2,3-Trichloropropane	50	58.4	117	70-130
95-63-6	1,2,4-Trimethylbenzene	50	52.1	104	70-130
108-67-8	1,3,5-Trimethylbenzene	50	54.0	108	70-130
108-05-4	Vinyl Acetate	50	40.6	81	70-130
75-01-4	Vinyl chloride	50	38.4	77	70-130
	m,p-Xylene	100	105	105	70-130
95-47-6	o-Xylene	50	52.4	105	70-130
1330-20-7	Xylene (total)	150	157	105	70-130

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1088-BS	V29026.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	76%	70-130%
2037-26-5	Toluene-D8	89%	70-130%
460-00-4	4-Bromofluorobenzene	91%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC29163-1MS	V29050.D	5	03/25/14	AMY	n/a	n/a	MSV1088
MC29163-1MSD	V29051.D	5	03/25/14	AMY	n/a	n/a	MSV1088
MC29163-1	V29035.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Compound	MC29163-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	104	42* a	113	45* a	8	70-130/30
71-43-2	Benzene	ND	250	211	84	216	86	2	70-130/30
108-86-1	Bromobenzene	ND	250	236	94	248	99	5	70-130/30
74-97-5	Bromochloromethane	ND	250	203	81	209	84	3	70-130/30
75-27-4	Bromodichloromethane	ND	250	244	98	243	97	0	70-130/30
75-25-2	Bromoform	ND	250	216	86	217	87	0	70-130/30
74-83-9	Bromomethane	ND	250	203	81	209	84	3	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	160	64* a	159	64* a	1	70-130/30
104-51-8	n-Butylbenzene	ND	250	245	98	256	102	4	70-130/30
135-98-8	sec-Butylbenzene	ND	250	250	100	264	106	5	70-130/30
98-06-6	tert-Butylbenzene	ND	250	260	104	271	108	4	70-130/30
75-15-0	Carbon disulfide	ND	250	196	78	201	80	3	70-130/30
56-23-5	Carbon tetrachloride	ND	250	288	115	280	112	3	70-130/30
108-90-7	Chlorobenzene	ND	250	222	89	229	92	3	70-130/30
75-00-3	Chloroethane	ND	250	212	85	225	90	6	70-130/30
67-66-3	Chloroform	ND	250	215	86	221	88	3	70-130/30
74-87-3	Chloromethane	ND	250	203	81	208	83	2	70-130/30
95-49-8	o-Chlorotoluene	ND	250	236	94	246	98	4	70-130/30
106-43-4	p-Chlorotoluene	ND	250	243	97	251	100	3	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	181	72	208	83	14	70-130/30
124-48-1	Dibromochloromethane	ND	250	229	92	231	92	1	70-130/30
106-93-4	1,2-Dibromoethane	ND	250	221	88	230	92	4	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	250	212	85	225	90	6	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	250	221	88	235	94	6	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	250	221	88	232	93	5	70-130/30
75-71-8	Dichlorodifluoromethane	ND	250	145	58* a	146	58* a	1	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	210	84	218	87	4	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	241	96	240	96	0	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	225	90	225	90	0	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	250	207	83	213	85	3	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	207	83	216	86	4	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	222	89	220	88	1	70-130/30
142-28-9	1,3-Dichloropropane	ND	250	220	88	227	91	3	70-130/30
594-20-7	2,2-Dichloropropane	ND	250	210	84	212	85	1	70-130/30
563-58-6	1,1-Dichloropropene	ND	250	242	97	240	96	1	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	194	78	199	80	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC29163-1MS	V29050.D	5	03/25/14	AMY	n/a	n/a	MSV1088
MC29163-1MSD	V29051.D	5	03/25/14	AMY	n/a	n/a	MSV1088
MC29163-1	V29035.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Compound	MC29163-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	250	265	106	269	108	1	70-130/30
100-41-4	Ethylbenzene	ND	250	249	100	251	100	1	70-130/30
87-68-3	Hexachlorobutadiene	ND	250	208	83	228	91	9	70-130/30
591-78-6	2-Hexanone	ND	250	160	64* a	166	66* a	4	70-130/30
74-88-4	Iodomethane	ND	250	193	77	199	80	3	70-130/30
98-82-8	Isopropylbenzene	ND	250	255	102	265	106	4	70-130/30
99-87-6	p-Isopropyltoluene	ND	250	256	102	267	107	4	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	250	204	82	208	83	2	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	196	78	194	78	1	70-130/30
74-95-3	Methylene bromide	ND	250	232	93	231	92	0	70-130/30
75-09-2	Methylene chloride	ND	250	197	79	204	82	3	70-130/30
91-20-3	Naphthalene	ND	250	144	58* a	230	92	46* b	70-130/30
103-65-1	n-Propylbenzene	ND	250	240	96	251	100	4	70-130/30
100-42-5	Styrene	ND	250	237	95	241	96	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	262	105	268	107	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	221	88	234	94	6	70-130/30
127-18-4	Tetrachloroethene	1.9	250	249	99	249	99	0	70-130/30
108-88-3	Toluene	ND	250	239	96	239	96	0	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	250	159	64* a	241	96	41* b	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	250	171	68* a	218	87	24	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	254	102	254	102	0	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	225	90	225	90	0	70-130/30
79-01-6	Trichloroethene	ND	250	230	92	230	92	0	70-130/30
75-69-4	Trichlorofluoromethane	ND	250	245	98	241	96	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	250	211	84	228	91	8	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	250	248	99	258	103	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	250	257	103	266	106	3	70-130/30
108-05-4	Vinyl Acetate	ND	250	194	78	201	80	4	70-130/30
75-01-4	Vinyl chloride	ND	250	189	76	196	78	4	70-130/30
	m,p-Xylene	ND	500	479	96	483	97	1	70-130/30
95-47-6	o-Xylene	ND	250	236	94	243	97	3	70-130/30
1330-20-7	Xylene (total)	ND	750	716	95	726	97	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC29163-1MS	V29050.D	5	03/25/14	AMY	n/a	n/a	MSV1088
MC29163-1MSD	V29051.D	5	03/25/14	AMY	n/a	n/a	MSV1088
MC29163-1	V29035.D	1	03/25/14	AMY	n/a	n/a	MSV1088

The QC reported here applies to the following samples:

Method: SW846 8260C

MC29101-1, MC29101-2, MC29101-3, MC29101-4, MC29101-5, MC29101-6, MC29101-7, MC29101-8, MC29101-9, MC29101-10, MC29101-11, MC29101-12, MC29101-13

CAS No.	Surrogate Recoveries	MS	MSD	MC29163-1	Limits
1868-53-7	Dibromofluoromethane	83%	83%	81%	70-130%
2037-26-5	Toluene-D8	90%	88%	88%	70-130%
460-00-4	4-Bromofluorobenzene	92%	93%	92%	70-130%

- (a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-BFB	Injection Date: 02/26/14
Lab File ID: V28201.D	Injection Time: 13:50
Instrument ID: GCMSV	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	43757	19.6	Pass
75	30.0 - 60.0% of mass 95	112859	50.6	Pass
95	Base peak, 100% relative abundance	223104	100.0	Pass
96	5.0 - 9.0% of mass 95	14499	6.50	Pass
173	Less than 2.0% of mass 174	1929	0.86 (1.04) ^a	Pass
174	50.0 - 100.0% of mass 95	185195	83.0	Pass
175	5.0 - 9.0% of mass 174	13798	6.18 (7.45) ^a	Pass
176	95.0 - 101.0% of mass 174	178539	80.0 (96.4) ^a	Pass
177	5.0 - 9.0% of mass 176	11776	5.28 (6.60) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSV1058-IC1058	V28203.D	02/26/14	14:42	00:52	Initial cal 0.25
MSV1058-IC1058	V28204.D	02/26/14	15:08	01:18	Initial cal 0.5
MSV1058-IC1058	V28205.D	02/26/14	15:34	01:44	Initial cal 1
MSV1058-IC1058	V28206.D	02/26/14	16:01	02:11	Initial cal 2
MSV1058-IC1058	V28207.D	02/26/14	16:27	02:37	Initial cal 5
MSV1058-IC1058	V28208.D	02/26/14	16:53	03:03	Initial cal 10
MSV1058-ICC1058	V28209.D	02/26/14	17:20	03:30	Initial cal 50
MSV1058-IC1058	V28210.D	02/26/14	17:46	03:56	Initial cal 100
MSV1058-IC1058	V28211.D	02/26/14	18:12	04:22	Initial cal 200
MSV1058-IC1058	V28212.D	02/26/14	18:37	04:47	Initial cal 400

Instrument Performance Check (BFB)

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-BFB
Lab File ID: V28221.D
Instrument ID: GCMSV
Injection Date: 02/27/14
Injection Time: 11:01

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	30301	21.5	Pass
75	30.0 - 60.0% of mass 95	76773	54.5	Pass
95	Base peak, 100% relative abundance	140800	100.0	Pass
96	5.0 - 9.0% of mass 95	9892	7.03	Pass
173	Less than 2.0% of mass 174	531	0.38 (0.47) ^a	Pass
174	50.0 - 100.0% of mass 95	111797	79.4	Pass
175	5.0 - 9.0% of mass 174	8164	5.80 (7.30) ^a	Pass
176	95.0 - 101.0% of mass 174	106939	76.0 (95.7) ^a	Pass
177	5.0 - 9.0% of mass 176	6783	4.82 (6.34) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSV1058-CC1058	V28222.D	02/27/14	11:27	00:26	Continuing cal 50
MSV1058-ICV1058	V28222.D	02/27/14	11:27	00:26	Initial cal verification 50
MSV1058-BS	V28223.D	02/27/14	11:53	00:52	Blank Spike
MSV1058-MB	V28226.D	02/27/14	13:11	02:10	Method Blank
ZZZZZZ	V28227.D	02/27/14	13:37	02:36	(unrelated sample)
ZZZZZZ	V28228.D	02/27/14	14:03	03:02	(unrelated sample)
ZZZZZZ	V28229.D	02/27/14	14:29	03:28	(unrelated sample)
ZZZZZZ	V28230.D	02/27/14	14:56	03:55	(unrelated sample)
ZZZZZZ	V28231.D	02/27/14	15:22	04:21	(unrelated sample)
ZZZZZZ	V28232.D	02/27/14	15:48	04:47	(unrelated sample)
ZZZZZZ	V28233.D	02/27/14	16:14	05:13	(unrelated sample)
ZZZZZZ	V28234.D	02/27/14	16:40	05:39	(unrelated sample)
ZZZZZZ	V28235.D	02/27/14	17:06	06:05	(unrelated sample)
ZZZZZZ	V28236.D	02/27/14	17:32	06:31	(unrelated sample)
ZZZZZZ	V28237.D	02/27/14	17:58	06:57	(unrelated sample)
ZZZZZZ	V28238.D	02/27/14	18:24	07:23	(unrelated sample)
ZZZZZZ	V28239.D	02/27/14	18:49	07:48	(unrelated sample)
ZZZZZZ	V28240.D	02/27/14	19:15	08:14	(unrelated sample)
ZZZZZZ	V28241.D	02/27/14	19:41	08:40	(unrelated sample)
ZZZZZZ	V28242.D	02/27/14	20:08	09:07	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1088-BFB
Lab File ID: V29025.D
Instrument ID: GCMSV
Injection Date: 03/25/14
Injection Time: 09:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	28171	19.2	Pass
75	30.0 - 60.0% of mass 95	72443	49.2	Pass
95	Base peak, 100% relative abundance	147093	100.0	Pass
96	5.0 - 9.0% of mass 95	9678	6.58	Pass
173	Less than 2.0% of mass 174	1087	0.74 (0.84) ^a	Pass
174	50.0 - 100.0% of mass 95	129371	88.0	Pass
175	5.0 - 9.0% of mass 174	9549	6.49 (7.38) ^a	Pass
176	95.0 - 101.0% of mass 174	125507	85.3 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	8058	5.48 (6.42) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSV1088-CC1058	V29025.D	03/25/14	09:38	00:00	Continuing cal 50
MSV1088-BS	V29026.D	03/25/14	10:04	00:26	Blank Spike
MSV1088-MB	V29029.D	03/25/14	11:23	01:45	Method Blank
MC29101-13	V29030.D	03/25/14	11:56	02:18	TRIP BLANK
ZZZZZZ	V29031.D	03/25/14	12:23	02:45	(unrelated sample)
ZZZZZZ	V29032.D	03/25/14	12:49	03:11	(unrelated sample)
ZZZZZZ	V29033.D	03/25/14	13:15	03:37	(unrelated sample)
ZZZZZZ	V29034.D	03/25/14	13:41	04:03	(unrelated sample)
MC29163-1	V29035.D	03/25/14	14:08	04:30	(used for QC only; not part of job MC29101)
ZZZZZZ	V29036.D	03/25/14	14:34	04:56	(unrelated sample)
MC29101-1	V29038.D	03/25/14	15:27	05:49	MW-1
MC29101-2	V29039.D	03/25/14	15:53	06:15	MW-1(DOT)
MC29101-3	V29040.D	03/25/14	16:20	06:42	MW-5
MC29101-4	V29041.D	03/25/14	16:46	07:08	MW-22
MC29101-5	V29042.D	03/25/14	17:12	07:34	MW-22FD
MC29101-6	V29043.D	03/25/14	17:38	08:00	MW-23
MC29101-7	V29044.D	03/25/14	18:04	08:26	MW-24
MC29101-8	V29045.D	03/25/14	18:30	08:52	MW-B
MC29101-9	V29046.D	03/25/14	18:56	09:18	MW-D
MC29101-10	V29047.D	03/25/14	19:22	09:44	MW-E
MC29101-11	V29048.D	03/25/14	19:48	10:10	MW-F
MC29101-12	V29049.D	03/25/14	20:14	10:36	PW-1
MC29163-1MS	V29050.D	03/25/14	20:40	11:02	Matrix Spike
MC29163-1MSD	V29051.D	03/25/14	21:06	11:28	Matrix Spike Duplicate

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Check Std:	MSV1088-CC1058	Injection Date:	03/25/14
Lab File ID:	V29025.D	Injection Time:	09:38
Instrument ID:	GCMSV	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	429248	6.54	578528	7.73	267427	11.07	271362	13.28	55829	3.49
Upper Limit ^a	858496	7.04	1157056	8.23	534854	11.57	542724	13.78	111658	3.99
Lower Limit ^b	214624	6.04	289264	7.23	133714	10.57	135681	12.78	27915	2.99

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1088-BS	440413	6.54	601475	7.73	279607	11.07	282677	13.28	60510	3.49
MSV1088-MB	372112	6.54	507664	7.73	236689	11.07	238496	13.29	45928	3.49
MC29101-13	370155	6.54	509610	7.73	230107	11.07	224991	13.29	45052	3.49
ZZZZZZ	341257	6.54	468512	7.73	216736	11.07	215415	13.29	40563	3.49
ZZZZZZ	333312	6.55	453260	7.73	217503	11.07	213345	13.29	40090	3.49
ZZZZZZ	313179	6.54	437986	7.73	208619	11.07	207619	13.29	40113	3.49
ZZZZZZ	321330	6.55	435149	7.73	206260	11.07	208841	13.29	41657	3.49
MC29163-1	298136	6.55	409883	7.73	197486	11.07	196303	13.29	37082	3.49
ZZZZZZ	284765	6.54	396264	7.73	187520	11.07	187266	13.29	37966	3.49
MC29101-1	273181	6.55	375973	7.73	181238	11.08	178571	13.29	35788	3.49
MC29101-2	282094	6.55	381106	7.73	184216	11.08	177950	13.29	36043	3.50
MC29101-3	265038	6.55	364878	7.73	174851	11.08	174513	13.29	35724	3.50
MC29101-4	269992	6.55	368210	7.74	181117	11.08	171860	13.29	34735	3.50
MC29101-5	255971	6.55	347853	7.73	170428	11.08	165623	13.29	34218	3.50
MC29101-6	248124	6.55	341789	7.73	163835	11.08	162339	13.29	32066	3.50
MC29101-7	243103	6.55	333527	7.73	161095	11.08	157728	13.29	31063	3.49
MC29101-8	244797	6.55	332312	7.74	163520	11.08	160422	13.29	32299	3.50
MC29101-9	231782	6.55	317721	7.73	156306	11.08	153594	13.29	31431	3.49
MC29101-10	233607	6.55	323355	7.74	158923	11.08	157591	13.29	33378	3.50
MC29101-11	237019	6.56	324215	7.74	158365	11.08	152955	13.29	30839	3.50
MC29101-12	222778	6.55	300494	7.74	149629	11.08	149548	13.29	31630	3.49
MC29163-1MS	275947	6.55	366276	7.74	178057	11.08	186023	13.29	37181	3.50
MC29163-1MSD	285241	6.55	383766	7.74	182688	11.08	184852	13.29	36969	3.50

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC29101-1	V29038.D	83	87	90
MC29101-2	V29039.D	82	86	93
MC29101-3	V29040.D	84	86	90
MC29101-4	V29041.D	84	88	93
MC29101-5	V29042.D	84	88	92
MC29101-6	V29043.D	85	86	91
MC29101-7	V29044.D	84	86	91
MC29101-8	V29045.D	85	87	92
MC29101-9	V29046.D	86	86	92
MC29101-10	V29047.D	86	87	91
MC29101-11	V29048.D	86	86	93
MC29101-12	V29049.D	87	87	91
MC29101-13	V29030.D	77	84	91
MC29163-1MS	V29050.D	83	90	92
MC29163-1MSD	V29051.D	83	88	93
MSV1088-BS	V29026.D	76	89	91
MSV1088-MB	V29029.D	76	88	89

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane
S2 = Toluene-D8
S3 = 4-Bromofluorobenzene

70-130%
70-130%
70-130%

6.6.1

6

Initial Calibration Summary

Page 1 of 5

Job Number: MC29101

Account: STANNYR Stantec Consulting Corporation

Project: LMC - Utica West Lot

Sample:

Lab FileID: MSV1058-ICC1058
V28209.D

Response Factor Report MSV												
Method : C:\msdchem\1\METHODS\140226w.m (RTE Integrator)												
Title : SW-846 Method 8260												
Last Update : Thu Feb 27 09:00:59 2014												
Response via : Initial Calibration												
Calibration Files												
0.25=v28203.D 0.5 =v28204.D 1 =v28205.D 2 =v28206.D												
5 =v28207.D 10 =v28208.D 50 =v28209.D 100 =v28210.D												
200 =v28211.D 400 =v28212.D = =												
Compound	0.25	0.5	1	2	5	10	50	100	200	400	Avg	%RSD

1) I tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol												
			1.056	1.255	1.159	1.207	1.265	1.354	1.410	1.244		9.51
3) Ethanol												
			0.270	0.238	0.204	0.195	0.185	0.190	0.184	0.209		15.49
---- Linear regression ---- Coefficient = 0.9998												
Response Ratio = 0.03976 + 0.18551 *A												
4) I pentafluorobenzene -----ISTD-----												
5) dichlorodifluoromethane												
			1.027	1.337	1.191	1.463	1.569	1.512	1.431	1.359	1.361	13.08
6) chloromethane												
			0.944	0.987	1.055	0.993	1.088	1.130	1.075	1.052	1.040	5.88
7) vinyl chloride												
			0.832	0.875	0.945	0.961	1.038	1.067	1.018	1.012	0.968	8.44
8) bromomethane												
			0.732	0.821	0.865	0.800	0.851	0.863	0.811	0.767	0.814	5.78
9) chloroethane												
			0.574	0.490	0.497	0.444	0.463	0.468	0.444	0.435	0.477	9.47
10) ethyl ether												
			0.407	0.356	0.371	0.361	0.345	0.347	0.351	0.347	0.361	5.72
11) acetonitrile												
			0.882	0.823	0.811	0.825	0.889	0.911	0.946	0.959	0.881	6.47
12) trichlorofluoromethane												
			1.191	1.475	1.448	1.613	1.736	1.730	1.638	1.541	1.547	11.56
13) freon-113												
			0.875	0.691	0.706	0.711	0.862	0.844	0.874	0.836	0.800	10.25
14) acrolein												
				0.030	0.027	0.032	0.033	0.032	0.033	0.031#		7.24
15) 1,1-dichloroethene												
			0.647	0.627	0.629	0.616	0.641	0.642	0.659	0.642	0.638	2.08
16) acetone												
					0.037	0.037	0.042	0.036	0.029	0.036#		12.34
17) Methyl Acetate												
				0.210	0.195	0.208	0.203	0.211	0.213	0.207		3.19
18) methylene chloride												
			0.771	0.637	0.681	0.627	0.623	0.608	0.622	0.633	0.650	8.19
19) methyl tert butyl ether												
			1.115	1.079	1.137	1.116	1.162	1.190	1.254	1.322	1.172	6.92
20) acrylonitrile												
				0.104	0.112	0.109	0.108	0.113	0.114	0.110		3.52
21) allyl chloride												
			0.882	0.823	0.811	0.825	0.889	0.911	0.946	0.960	0.881	6.48

Initial Calibration Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-ICC1058
Lab FileID: V28209.D

22)	trans-1,2-dichloroethene	0.708	0.689	0.676	0.641	0.631	0.630	0.649	0.654	0.660	4.30
23)	iodomethane	1.797	1.740	1.671	1.635	1.598	1.594	1.620	1.630	1.661	4.36
24)	carbon disulfide	2.285	2.160	2.120	2.060	2.167	2.166	2.231	2.265	2.182	3.45
25)	propionitrile	0.008	0.024	0.031	0.032	0.035	0.036	0.028#			38.24
	---- Linear regression ----	Coefficient = 0.9990									
	Response Ratio =	-0.00282 + 0.03547 *A									
26)	vinyl acetate	1.401	1.414	1.385	1.443	1.472	1.534	1.566	1.459		4.72
27)	chloroprene	0.835	0.744	0.761	0.777	0.850	0.855	0.891	0.881	0.824	6.82
28)	di-isopropyl ether	1.679	1.603	1.682	1.673	1.699	1.721	1.780	1.824	1.708	3.99
29)	methacrylonitrile	0.137	0.180	0.173	0.180	0.183	0.192	0.196	0.177		10.97
30)	2-butanone	0.025	0.032	0.034	0.037	0.035	0.034	0.033#			12.30
31)	Hexane	0.417	0.403	0.558	0.560	0.588	0.559	0.514			15.86
	---- Linear regression ----	Coefficient = 0.9992									
	Response Ratio =	-0.00370 + 0.56543 *A									
32)	1,1-dichloroethane	1.241	1.135	1.127	1.077	1.089	1.090	1.135	1.146	1.130	4.56
33)	tert-butyl ethyl ether	1.191	1.105	1.159	1.157	1.258	1.299	1.390	1.461	1.252	9.92
34)	isobutyl alcohol	0.280	0.280	0.283	0.277	0.289	0.294	0.307	0.313	0.290	4.63
35)	2,2-dichloropropane	0.675	0.699	0.822	0.914	0.990	1.029	0.855			17.35
	---- Linear regression ----	Coefficient = 0.9972									
	Response Ratio =	-0.05331 + 1.00465 *A									
36)	cis-1,2-dichloroethene	0.629	0.620	0.619	0.596	0.601	0.612	0.642	0.654	0.622	3.14
37)	ethyl acetate	1.414	1.385	1.444	1.470	1.533	1.563	1.468			4.69
38)	bromochloromethane	0.299	0.296	0.288	0.279	0.284	0.279	0.300	0.306	0.291	3.47
39)	chloroform	1.387	1.287	1.254	1.205	1.204	1.199	1.238	1.241	1.252	4.97
40)	dibromofluoromethane (s)	0.673	0.685	0.672	0.681	0.674	0.707	0.715	0.687		2.53
41)	Tetrahydrofuran	0.047	0.054	0.061	0.061	0.066	0.068	0.060			12.82
42)	1,1,1-trichloroethane	1.178	1.075	1.086	1.135	1.263	1.304	1.353	1.354	1.219	9.44
43) I	1,4-difluorobenzene	-----ISTD-----									
44)	Cyclohexane	0.769	0.585	0.544	0.619	0.609	0.636	0.618	0.626		11.19
45)	carbon tetrachloride	0.703	0.705	0.698	0.745	0.874	0.890	0.932	0.885	0.804	12.44
46)	1,1-dichloropropene	0.545	0.534	0.505	0.501	0.533	0.535	0.561	0.551	0.533	3.92
47)	benzene										

Initial Calibration Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-ICC1058
Lab FileID: V28209.D

	1.387	1.481	1.364	1.313	1.278	1.246	1.263	1.329	1.362	1.336	5.46
48)	1,2-dichloroethane										
		0.612	0.558	0.553	0.549	0.530	0.518	0.525	0.502	0.543	6.20
49)	tert-amyl methyl ether										
		0.527	0.507	0.551	0.545	0.602	0.628	0.687	0.716	0.595	12.85
50)	heptane										
				0.264	0.267	0.362	0.376	0.390	0.365	0.337	16.76
	---- Linear regression ----										

Initial Calibration Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-ICC1058
Lab FileID: V28209.D

	0.801	0.718	0.715	0.694	0.713	0.714	0.750	0.758	0.733	4.72	
69) dibromochloromethane	0.536	0.530	0.551	0.563	0.608	0.671	0.715	0.769	0.785	0.636	15.92
	---- Quadratic regression ---- Coefficient = 0.9992										
	Response Ratio = -0.00370 + 0.69454 *A + 0.01213 *A^2										
70) 1,2-dibromoethane	0.419	0.391	0.447	0.429	0.448	0.459	0.485	0.490	0.446	7.40	
71) 2-hexanone	0.265	0.233	0.222	0.220	0.267	0.241	0.227	0.239		8.20	
72) chlorobenzene	2.319	2.248	2.131	2.122	2.073	2.119	2.241	2.289	2.193	4.19	
73) 1,1,1,2-tetrachloroethane	0.814	0.766	0.806	0.817	0.893	0.952	1.009	1.042	0.887	11.65	
74) ethylbenzene	3.620	3.833	3.688	3.570	3.546	3.627	3.721	3.912	3.997	3.724	4.23
75) m,p-xylene	1.218	1.364	1.295	1.271	1.259	1.318	1.360	1.447	1.511	1.338	7.00
76) o-xylene	1.291	1.288	1.243	1.275	1.344	1.366	1.431	1.525	1.621	1.376	9.24
77) styrene	1.760	1.855	1.964	1.942	2.018	2.071	2.204	2.334	2.019	9.15	
78) bromoform	0.261	0.234	0.278	0.291	0.328	0.354	0.391	0.421	0.320	20.51	
	---- Quadratic regression ---- Coefficient = 0.9994										
	Response Ratio = -0.00322 + 0.33543 *A + 0.01111 *A^2										
79) trans-1,4-dichloro-2-butene	0.110	0.125	0.132	0.147	0.160	0.164	0.140			15.16	
	---- Linear regression ---- Coefficient = 0.9975										
	Response Ratio = -0.00749 + 0.16063 *A										
80) I 1,4-dichlorobenzene-d -----ISTD-----											
81) isopropylbenzene	3.491	3.323	3.278	3.534	3.924	4.076	4.260	3.905	3.724	9.81	
82) bromofluorobenzene (s)	1.034	0.998	1.004	0.990	1.005	1.024	0.948	1.000		2.77	
83) bromobenzene	0.856	0.824	0.819	0.838	0.841	0.867	0.886	0.849	0.847	2.60	
84) 1,1,2,2-tetrachloroethane	0.491	0.494	0.457	0.458	0.463	0.470	0.479	0.493	0.463	0.474	3.27
85) 1,2,3-trichloropropane	0.487	0.415	0.546	0.463	0.589	0.472	0.475	0.463	0.489	11.06	
86) n-propylbenzene	4.037	3.984	3.894	4.083	4.373	4.521	4.620	4.066	4.197	6.42	
87) 2-chlorotoluene	2.935	2.736	2.701	2.749	2.757	2.788	2.881	2.749	2.787	2.87	
88) 4-chlorotoluene	3.106	3.116	3.073	3.061	3.040	3.109	3.180	3.051	3.092	1.47	
89) 1,3,5-trimethylbenzene	2.861	2.872	2.930	3.048	3.321	3.489	3.670	3.546	3.217	10.21	
90) tert-butylbenzene	1.662	1.611	1.550	1.687	1.948	2.045	2.169	2.139	1.851	13.58	
91) 1,2,4-trimethylbenzene	2.970	2.968	3.050	3.182	3.324	3.436	3.608	3.568	3.263	7.95	
92) sec-butylbenzene	3.261	3.213	3.140	3.332	3.929	4.130	4.434	4.062	3.688	13.69	
93) 1,3-dichlorobenzene	1.988	1.809	1.788	1.770	1.743	1.800	1.891	1.898	1.836	4.47	

Initial Calibration Summary

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Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-ICC1058
Lab FileID: V28209.D

94)	p-isopropyltoluene	2.970	2.920	2.886	3.103	3.453	3.622	3.888	3.794	3.330	12.30
95)	1,4-dichlorobenzene	2.036	1.855	1.756	1.710	1.636	1.689	1.788	1.846	1.789	6.99
96)	1,2-dichlorobenzene	2.020	1.697	1.667	1.641	1.626	1.657	1.770	1.816	1.737	7.59
97)	n-butylbenzene	2.831	2.632	2.454	2.644	2.995	3.146	3.283	3.273	2.907	10.84
98)	1,2-dibromo-3-chloropropane	0.057	0.063	0.070	0.077	0.084	0.086	0.073			15.74
	---- Linear regression ----	Coefficient = 0.9976									
	Response Ratio =	-0.00408 + 0.08441 *A									
99)	1,3,5-trichlorobenzene	1.470	1.397	1.227	1.181	1.217	1.275	1.375	1.431	1.322	8.31
100)	1,2,4-trichlorobenzene	1.530	1.127	0.969	0.968	0.935	1.005	1.083	1.126	1.093	17.52
	---- Linear regression ----	Coefficient = 0.9967									
	Response Ratio =	0.00080 + 1.08373 *A									
101)	hexachlorobutadiene	0.603	0.499	0.421	0.378	0.425	0.434	0.463	0.473	0.462	14.66
102)	naphthalene	1.372	1.153	1.197	1.186	1.381	1.530	1.613	1.348		13.28
103)	1,2,3-trichlorobenzene	0.796	0.751	0.655	0.751	0.800	0.839	0.765			8.28
104)	2-Methylnaphthalene	0.417	0.269	0.453	0.561	0.614	0.463				28.99
	---- Linear regression ----	Coefficient = 0.9951									
	Response Ratio =	-0.12859 + 0.63786 *A									
105)	1-Methylnaphthalene	0.383	0.222	0.346	0.413	0.426	0.358				22.87
	---- Linear regression ----	Coefficient = 0.9966									
	Response Ratio =	-0.06447 + 0.44061 *A									

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

v140226w.m Fri Feb 28 10:16:56 2014

6.7.1
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Initial Calibration Verification

Page 1 of 4

Job Number: MC29101
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSV1058-ICV1058
 Lab FileID: V28222.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V140227\v28222.D Vial: 6
 Acq On : 27 Feb 2014 11:27 am Operator: amym
 Sample : icv1058-50 Inst : MSV
 Misc : MS31132,MSV1058,,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\v140226w.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Thu Feb 27 09:00:59 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	104	0.01	3.52
2 p	tertiary butyl alcohol	1.244	1.337	-7.5	115	0.00	3.63
----- Amount Calc. %Drift -----							
3 p	Ethanol	5000.000	4442.260	11.2	90	0.00	2.50
----- AvgRF CCRF %Dev -----							
4 I	pentafluorobenzene	1.000	1.000	0.0	109	0.01	6.58
5 p	dichlorodifluoromethane	1.361	1.611	-18.4	112	0.00	1.51
6 P	chloromethane	1.040	1.084	-4.2	108	0.00	1.62
7 p	vinyl chloride	0.968	0.974	-0.6	102	0.00	1.73
8 p	bromomethane	0.814	0.802	1.5	102	0.00	2.02
9 p	chloroethane	0.477	0.506	-6.1	119	0.00	2.11
10 p	ethyl ether	0.361	0.343	5.0	108	0.00	2.61
11 p	acetonitrile	0.881	0.920	-4.4	112	0.00	3.31
12 p	trichlorofluoromethane	1.547	1.719	-11.1	108	0.00	2.35
13 p	freon-113	0.800	0.849	-6.1	107	0.00	2.91
14 p	acrolein	0.031	0.030	3.2	95	0.00	2.76
15 p	1,1-dichloroethene	0.638	0.656	-2.8	111	0.00	2.88
16 p	acetone	0.036	0.043#	-19.4	126	0.00	2.91
17 p	Methyl Acetate	0.207	0.231	-11.6	120	0.00	3.29
18 p	methylene chloride	0.650	0.625	3.8	109	0.00	3.48
19 p	methyl tert butyl ether	1.172	1.155	1.5	108	0.01	3.85
20 p	acrylonitrile	0.110	0.086	21.8#	86	0.00	3.79
21 p	allyl chloride	0.881	0.921	-4.5	113	0.00	3.31
22 p	trans-1,2-dichloroethene	0.660	0.664	-0.6	114	0.00	3.85
23 p	iodomethane	1.661	1.458	12.2	99	0.00	3.04
24 p	carbon disulfide	2.182	1.988	8.9	100	0.00	3.13
----- Amount Calc. %Drift -----							
25 p	propionitrile	50.000	49.713	0.6	112	0.02	5.67
----- AvgRF CCRF %Dev -----							
26 p	vinyl acetate	1.459	1.367	6.3	103	0.01	4.60
27 p	chloroprene	0.824	1.035	-25.6#	132	0.01	4.64
28 p	di-isopropyl ether	1.708	1.688	1.2	108	0.01	4.63
29 p	methacrylonitrile	0.177	0.181	-2.3	109	0.01	5.94
30 p	2-butanone	0.033	0.039#	-18.2	126	0.01	5.55
----- Amount Calc. %Drift -----							
31 p	Hexane	50.000	48.049	3.9	105	0.01	4.27

Initial Calibration Verification

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-ICV1058
Lab FileID: V28222.D

		AvgRF	CCRF	%Dev			
32 P	1,1-dichloroethane	1.130	1.122	0.7	112	0.01	4.53
33 p	tert-butyl ethyl ether	1.252	1.301	-3.9	112	0.01	5.29
34 p	isobutyl alcohol	0.290	0.273	5.9	103	0.01	4.60
		Amount	Calc.	%Drift			
35 p	2,2-dichloropropane	50.000	46.589	6.8	117	0.01	5.57
		AvgRF	CCRF	%Dev			
36 p	cis-1,2-dichloroethene	0.622	0.615	1.1	111	0.01	5.55
37 p	ethyl acetate	1.468	1.367	6.9	103	0.01	4.60
38 p	bromochloromethane	0.291	0.293	-0.7	112	0.01	5.97
39 p	chloroform	1.252	1.200	4.2	108	0.01	6.19
40 S	dibromofluoromethane (s)	0.687	0.574	16.4	91	0.01	6.46
41 p	Tetrahydrofuran	0.060	0.059	1.7	104	0.01	5.98
42 p	1,1,1-trichloroethane	1.219	1.272	-4.3	109	0.01	6.43
43 I	1,4-difluorobenzene	1.000	1.000	0.0	108	0.00	7.76
44 p	Cyclohexane	0.626	0.602	3.8	105	0.01	6.54
45 p	carbon tetrachloride	0.804	0.890	-10.7	110	0.01	6.69
46 p	1,1-dichloropropene	0.533	0.544	-2.1	110	0.01	6.70
47 p	benzene	1.336	1.282	4.0	111	0.01	7.02
48 p	1,2-dichloroethane	0.543	0.548	-0.9	111	0.01	7.14
49 p	tert-amyl methyl ether	0.595	0.603	-1.3	108	0.00	7.31
		Amount	Calc.	%Drift			
50 p	heptane	50.000	50.028	-0.1	108	0.00	7.58
		AvgRF	CCRF	%Dev			
51 p	trichloroethene	0.433	0.427	1.4	111	0.00	8.05
52 p	1,2-dichloropropane	0.317	0.317	0.0	108	0.00	8.40
53 p	dibromomethane	0.196	0.201	-2.6	110	0.00	8.50
54 p	bromodichloromethane	0.509	0.534	-4.9	113	0.00	8.75
		Amount	Calc.	%Drift			
55 p	Methylcyclohexane	50.000	50.407	-0.8	110	0.00	8.35
56 p	2-chloroethyl vinyl ether	50.000	45.902	8.2	111	0.00	9.13
		AvgRF	CCRF	%Dev			
57 p	methyl methacrylate	0.103	0.101	1.9	106	0.00	8.53
		Amount	Calc.	%Drift			
58 p	1,4-dioxane	250.000	220.799	11.7	103	0.00	8.51
59 p	cis-1,3-dichloropropene	50.000	47.430	5.1	109	0.00	9.28
		AvgRF	CCRF	%Dev			
60 S	toluene-d8 (s)	1.265	1.097	13.3	95	0.00	9.57
61 p	4-methyl-2-pentanone	0.158	0.161	-1.9	108	0.00	9.46
62 p	toluene	0.817	0.839	-2.7	112	0.00	9.64
		Amount	Calc.	%Drift			
63 p	trans-1,3-dichloropropene	50.000	60.048	-20.1#	121	0.00	9.93
		AvgRF	CCRF	%Dev			
64 p	1,1,2-trichloroethane	0.180	0.183	-1.7	110	0.00	10.13
65 p	ethyl methacrylate	0.237	0.237	0.0	106	0.00	10.01
66 I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	11.09
67 p	tetrachloroethene	0.873	0.920	-5.4	111	0.00	10.19

Initial Calibration Verification

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-ICV1058
Lab FileID: V28222.D

68 p	1,3-dichloropropane	0.733	0.759	-3.5	110	0.00	10.30
----- Amount Calc. %Drift -----							
69 p	dibromochloromethane	50.000	52.290	-4.6	113	0.00	10.52
----- AvgRF CCRF %Dev -----							
70 p	1,2-dibromoethane	0.446	0.481	-7.8	111	0.00	10.63
71 p	2-hexanone	0.239	0.300	-25.5#	141	0.00	10.36
72 P	chlorobenzene	2.193	2.148	2.1	107	0.00	11.12
73 p	1,1,1,2-tetrachloroethane	0.887	0.989	-11.5	115	0.00	11.22
74 p	ethylbenzene	3.724	3.952	-6.1	113	0.00	11.23
75 p	m,p-xylene	1.338	1.391	-4.0	109	0.00	11.36
76 p	o-xylene	1.376	1.444	-4.9	109	0.00	11.72
77 p	styrene	2.019	2.172	-7.6	111	0.00	11.74
----- Amount Calc. %Drift -----							
78 P	bromoform	50.000	51.468	-2.9	112	0.00	11.92
79 p	trans-1,4-dichloro-2-bute	50.000	47.175	5.7	113	0.00	12.13
----- AvgRF CCRF %Dev -----							
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	13.30
81 p	isopropylbenzene	3.724	4.185	-12.4	108	0.00	12.07
82 S	bromofluorobenzene (s)	1.000	0.936	6.4	96	0.00	12.24
83 p	bromobenzene	0.847	0.930	-9.8	112	0.00	12.37
84 P	1,1,2,2-tetrachloroethane	0.474	0.522	-10.1	113	0.00	12.37
85 p	1,2,3-trichloropropane	0.489	0.531	-8.6	91	0.00	12.42
86 p	n-propylbenzene	4.197	4.527	-7.9	105	0.00	12.46
87 p	2-chlorotoluene	2.787	2.905	-4.2	107	0.00	12.54
88 p	4-chlorotoluene	3.092	3.292	-6.5	110	0.00	12.65
89 p	1,3,5-trimethylbenzene	3.217	3.632	-12.9	111	0.00	12.63
90 p	tert-butylbenzene	1.851	2.109	-13.9	110	0.00	12.92
91 p	1,2,4-trimethylbenzene	3.263	3.579	-9.7	109	0.00	12.97
92 p	sec-butylbenzene	3.688	4.200	-13.9	108	0.00	13.12
93 p	1,3-dichlorobenzene	1.836	1.897	-3.3	110	0.00	13.23
94 p	p-isopropyltoluene	3.330	3.839	-15.3	113	0.00	13.26
95 p	1,4-dichlorobenzene	1.789	1.823	-1.9	113	0.00	13.32
96 p	1,2-dichlorobenzene	1.737	1.715	1.3	107	0.00	13.64
97 p	n-butylbenzene	2.907	3.297	-13.4	112	0.00	13.63
----- Amount Calc. %Drift -----							
98 p	1,2-dibromo-3-chloropropa	50.000	44.344	11.3	103	0.00	14.34
----- AvgRF CCRF %Dev -----							
99 p	1,3,5-trichlorobenzene	1.322	1.335	-1.0	111	0.00	14.51
----- Amount Calc. %Drift -----							
100 p	1,2,4-trichlorobenzene	50.000	45.379	9.2	107	0.00	15.06
----- AvgRF CCRF %Dev -----							
101 p	hexachlorobutadiene	0.462	0.457	1.1	109	0.00	15.18
102 p	naphthalene	1.348	1.189	11.8	102	0.00	15.30
103 p	1,2,3-trichlorobenzene	0.765	0.657	14.1	102	0.00	15.49
----- Amount Calc. %Drift -----							
104 p	2-Methylnaphthalene	25.000	18.004	28.0#	76	0.00	16.30
105 p	1-Methylnaphthalene	25.000	16.110	35.6#	71	0.00	16.47

Initial Calibration Verification

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1058-ICV1058
Lab FileID: V28222.D

(#) = Out of Range SPCC's out = 3 CCC's out = 0
v28209.D v140226w.m Fri Feb 28 10:06:29 2014

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Continuing Calibration Summary

Page 1 of 4

Job Number: MC29101
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSV1088-CC1058
 Lab FileID: V29025.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V140325\v29025.D Vial: 1
 Acq On : 25 Mar 2014 9:38 am Operator: amym
 Sample : cc1058-50 Inst : MSV
 Misc : MS31383,MSV1088,,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\v140226w.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Thu Feb 27 09:00:59 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	99	-0.02	3.49
2 p	tertiary butyl alcohol	1.244	1.322	-6.3	108	-0.02	3.60
----- Amount Calc. %Drift -----							
3 p	Ethanol	5000.000	4502.291	10.0	87	-0.02	2.49
----- AvgRF CCRF %Dev -----							
4 I	pentafluorobenzene	1.000	1.000	0.0	114	-0.03	6.54
5 p	dichlorodifluoromethane	1.361	1.024	24.8#	75	-0.02	1.49
6 P	chloromethane	1.040	0.828	20.4#	87	0.00	1.61
7 p	vinyl chloride	0.968	0.856	11.6	94	0.00	1.72
8 p	bromomethane	0.814	0.700	14.0	94	0.00	2.00
9 p	chloroethane	0.477	0.385	19.3	95	-0.01	2.09
10 p	ethyl ether	0.361	0.291	19.4	96	-0.02	2.59
11 p	acetonitrile	0.881	0.750	14.9	97	-0.02	3.28
12 p	trichlorofluoromethane	1.547	1.326	14.3	87	-0.01	2.33
13 p	freon-113	0.800	0.781	2.4	104	-0.01	2.88
14 p	acrolein	0.031	0.043#	-38.7#	153	-0.02	2.74
15 p	1,1-dichloroethene	0.638	0.595	6.7	106	-0.02	2.85
16 p	acetone	0.036	0.033#	8.3	103	-0.02	2.89
17 p	Methyl Acetate	0.207	0.158	23.7#	87	-0.02	3.26
18 p	methylene chloride	0.650	0.560	13.8	103	-0.02	3.45
19 p	methyl tert butyl ether	1.172	1.013	13.6	100	-0.02	3.82
20 p	acrylonitrile	0.110	0.090	18.2	94	-0.02	3.76
21 p	allyl chloride	0.881	0.750	14.9	97	-0.02	3.28
22 p	trans-1,2-dichloroethene	0.660	0.567	14.1	103	-0.02	3.82
23 p	iodomethane	1.661	1.431	13.8	102	-0.02	3.02
24 p	carbon disulfide	2.182	1.853	15.1	98	-0.02	3.10
----- Amount Calc. %Drift -----							
25 p	propionitrile	50.000	40.646	18.7	95	-0.03	5.62
----- AvgRF CCRF %Dev -----							
26 p	vinyl acetate	1.459	1.242	14.9	99	-0.02	4.56
27 p	chloroprene	0.824	0.712	13.6	96	-0.03	4.60
28 p	di-isopropyl ether	1.708	1.553	9.1	105	-0.03	4.59
29 p	methacrylonitrile	0.177	0.143	19.2	91	-0.03	5.90
30 p	2-butanone	0.033	0.031#	6.1	104	-0.03	5.51
----- Amount Calc. %Drift -----							
31 p	Hexane	50.000	40.698	18.6	94	-0.02	4.24

Continuing Calibration Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1088-CC1058
Lab FileID: V29025.D

		AvgRF	CCRF	%Dev			
32 P	1,1-dichloroethane	1.130	0.958	15.2	101	-0.03	4.49
33 p	tert-butyl ethyl ether	1.252	1.155	7.7	105	-0.03	5.25
34 p	isobutyl alcohol	0.290	0.248	14.5	98	-0.02	4.56
		Amount	Calc.	%Drift			
35 p	2,2-dichloropropane	50.000	43.363	13.3	114	-0.03	5.53
		AvgRF	CCRF	%Dev			
36 p	cis-1,2-dichloroethene	0.622	0.550	11.6	105	-0.03	5.51
37 p	ethyl acetate	1.468	1.242	15.4	99	-0.02	4.56
38 p	bromochloromethane	0.291	0.246	15.5	99	-0.03	5.93
39 p	chloroform	1.252	1.040	16.9	99	-0.03	6.15
40 S	dibromofluoromethane (s)	0.687	0.509	25.9#	86	-0.03	6.42
41 p	Tetrahydrofuran	0.060	0.048#	20.0	90	-0.03	5.94
42 p	1,1,1-trichloroethane	1.219	1.113	8.7	101	-0.03	6.40
43 I	1,4-difluorobenzene	1.000	1.000	0.0	110	-0.02	7.73
44 p	Cyclohexane	0.626	0.595	5.0	105	-0.03	6.50
45 p	carbon tetrachloride	0.804	0.793	1.4	100	-0.03	6.65
46 p	1,1-dichloropropene	0.533	0.489	8.3	101	-0.03	6.66
47 p	benzene	1.336	1.214	9.1	107	-0.03	6.98
48 p	1,2-dichloroethane	0.543	0.443	18.4	92	-0.02	7.11
49 p	tert-amyl methyl ether	0.595	0.600	-0.8	109	-0.02	7.27
		Amount	Calc.	%Drift			
50 p	heptane	50.000	45.526	8.9	100	-0.02	7.54
		AvgRF	CCRF	%Dev			
51 p	trichloroethene	0.433	0.391	9.7	104	-0.02	8.02
52 p	1,2-dichloropropane	0.317	0.306	3.5	106	-0.02	8.37
53 p	dibromomethane	0.196	0.168	14.3	94	-0.02	8.47
54 p	bromodichloromethane	0.509	0.443	13.0	96	-0.02	8.72
		Amount	Calc.	%Drift			
55 p	Methylcyclohexane	50.000	48.947	2.1	109	-0.02	8.32
56 p	2-chloroethyl vinyl ether	50.000	33.748	32.5#	81	-0.02	9.10
		AvgRF	CCRF	%Dev			
57 p	methyl methacrylate	0.103	0.091	11.7	97	-0.02	8.50
		Amount	Calc.	%Drift			
58 p	1,4-dioxane	250.000	203.523	18.6	96	-0.02	8.48
59 p	cis-1,3-dichloropropene	50.000	44.327	11.3	103	-0.02	9.25
		AvgRF	CCRF	%Dev			
60 S	toluene-d8 (s)	1.265	1.125	11.1	99	-0.02	9.54
61 p	4-methyl-2-pentanone	0.158	0.136	13.9	93	-0.02	9.44
62 p	toluene	0.817	0.815	0.2	111	-0.02	9.62
		Amount	Calc.	%Drift			
63 p	trans-1,3-dichloropropene	50.000	51.502	-3.0	103	-0.02	9.91
		AvgRF	CCRF	%Dev			
64 p	1,1,2-trichloroethane	0.180	0.166	7.8	101	-0.02	10.11
65 p	ethyl methacrylate	0.237	0.222	6.3	101	-0.01	9.99
66 I	chlorobenzene-d5	1.000	1.000	0.0	103	-0.01	11.07
67 p	tetrachloroethene	0.873	0.929	-6.4	111	-0.02	10.17

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Continuing Calibration Summary

Page 3 of 4

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1088-CC1058
Lab FileID: V29025.D

68 p	1,3-dichloropropane	0.733	0.694	5.3	100	-0.02	10.27
----- Amount Calc. %Drift -----							
69 p	dibromochloromethane	50.000	44.574	10.9	96	-0.02	10.49
----- AvgRF CCRF %Dev -----							
70 p	1,2-dibromoethane	0.446	0.427	4.3	98	-0.02	10.60
71 p	2-hexanone	0.239	0.229	4.2	107	-0.02	10.35
72 P	chlorobenzene	2.193	2.188	0.2	109	-0.01	11.10
73 p	1,1,1,2-tetrachloroethane	0.887	0.901	-1.6	104	-0.01	11.20
74 p	ethylbenzene	3.724	3.845	-3.2	109	-0.01	11.21
75 p	m,p-xylene	1.338	1.412	-5.5	110	-0.01	11.34
76 p	o-xylene	1.376	1.463	-6.3	110	-0.01	11.70
77 p	styrene	2.019	2.077	-2.9	106	-0.01	11.72
----- Amount Calc. %Drift -----							
78 P	bromoform	50.000	41.489	17.0	89	-0.01	11.90
79 p	trans-1,4-dichloro-2-bute	50.000	33.913	32.2#	79	-0.01	12.12
----- AvgRF CCRF %Dev -----							
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	-0.01	13.28
81 p	isopropylbenzene	3.724	4.179	-12.2	108	-0.01	12.06
82 S	bromofluorobenzene (s)	1.000	0.892	10.8	91	-0.01	12.22
83 p	bromobenzene	0.847	0.877	-3.5	106	-0.01	12.35
84 P	1,1,2,2-tetrachloroethane	0.474	0.451	4.9	97	-0.01	12.35
85 p	1,2,3-trichloropropane	0.489	0.561	-14.7	97	-0.02	12.39
86 p	n-propylbenzene	4.197	4.591	-9.4	106	-0.01	12.44
87 p	2-chlorotoluene	2.787	2.881	-3.4	106	-0.01	12.52
88 p	4-chlorotoluene	3.092	3.131	-1.3	104	-0.01	12.63
89 p	1,3,5-trimethylbenzene	3.217	3.466	-7.7	106	-0.01	12.61
90 p	tert-butylbenzene	1.851	1.933	-4.4	101	-0.01	12.90
91 p	1,2,4-trimethylbenzene	3.263	3.462	-6.1	106	-0.01	12.95
92 p	sec-butylbenzene	3.688	4.085	-10.8	105	-0.01	13.10
93 p	1,3-dichlorobenzene	1.836	1.819	0.9	106	-0.01	13.21
94 p	p-isopropyltoluene	3.330	3.619	-8.7	106	-0.01	13.24
95 p	1,4-dichlorobenzene	1.789	1.700	5.0	105	-0.01	13.31
96 p	1,2-dichlorobenzene	1.737	1.610	7.3	100	-0.01	13.62
97 p	n-butylbenzene	2.907	3.033	-4.3	103	-0.01	13.61
----- Amount Calc. %Drift -----							
98 p	1,2-dibromo-3-chloropropa	50.000	33.909	32.2#	77	-0.01	14.33
----- AvgRF CCRF %Dev -----							
99 p	1,3,5-trichlorobenzene	1.322	1.220	7.7	102	-0.01	14.49
----- Amount Calc. %Drift -----							
100 p	1,2,4-trichlorobenzene	50.000	37.289	25.4#	88	-0.01	15.05
----- AvgRF CCRF %Dev -----							
101 p	hexachlorobutadiene	0.462	0.402	13.0	96	-0.01	15.17
102 p	naphthalene	1.348	0.859	36.3#	73	-0.01	15.28
103 p	1,2,3-trichlorobenzene	0.765	0.509	33.5#	79	-0.01	15.47
----- Amount Calc. %Drift -----							
104 p	2-Methylnaphthalene	25.000	15.000	40.0#	47	-0.01	16.28
105 p	1-Methylnaphthalene	25.000	13.326	46.7#	48	-0.01	16.45

6.7.3
6

Continuing Calibration Summary

Job Number: MC29101
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSV1088-CC1058
Lab FileID: V29025.D

(#) = Out of Range SPCC's out = 4 CCC's out = 0
v28209.D v140226w.m Wed Mar 26 08:58:45 2014

GC/MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29038.D
Acq On : 25 Mar 2014 3:27 pm
Operator : amym
Sample : mc29101-1
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 26 08:51:26 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.492	65	35788	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.547	168	273181	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.731	114	375973	50.00	ug/L	-0.02
66) chlorobenzene-d5	11.075	82	181238	50.00	ug/L	-0.01
80) 1,4-dichlorobenzene-d4	13.289	152	178571	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.424	113	155838	41.54	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	83.08%		
60) toluene-d8 (s)	9.547	98	413564	43.48	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.96%		
82) bromofluorobenzene (s)	12.225	95	161117	45.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.18%		

Target Compounds	Qvalue

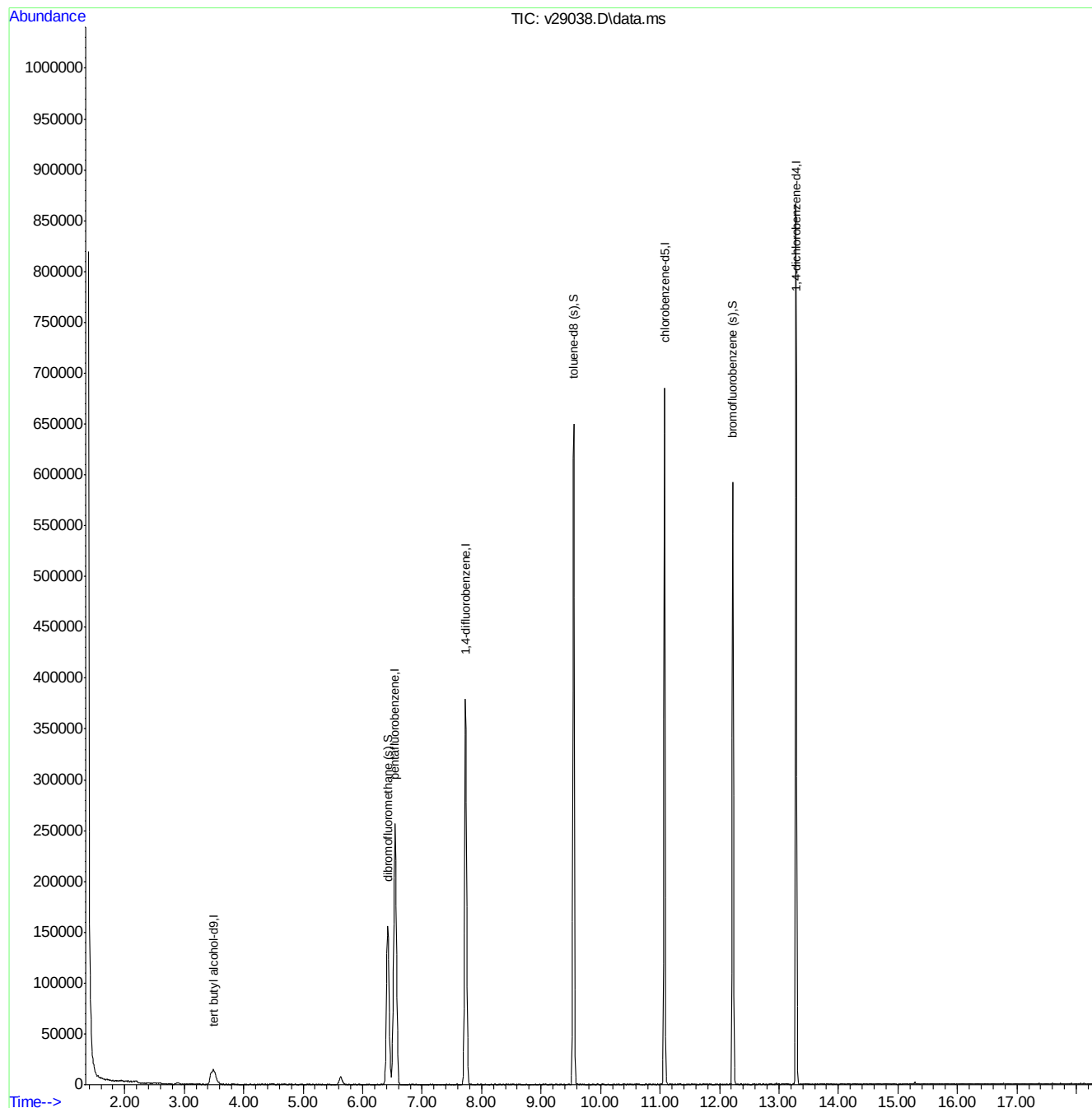
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29038.D
Acq On : 25 Mar 2014 3:27 pm
Operator : amym
Sample : mc29101-1
Misc : MS31386,MSV1088,,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 26 08:51:26 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29039.D
 Acq On : 25 Mar 2014 3:53 pm
 Operator : amym
 Sample : mc29101-2
 Misc : MS31386,MSV1088,,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 26 08:51:48 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) tert butyl alcohol-d9	3.496	65	36043	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.550	168	282094	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.734	114	381106	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.076	82	184216	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.289	152	177950	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.427	113	159446	41.16	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	82.32%		
60) toluene-d8 (s)	9.548	98	416296	43.18	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.36%		
82) bromofluorobenzene (s)	12.226	95	165710	46.54	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.08%		
Target Compounds						
36) cis-1,2-dichloroethene	5.518	96	14875	4.24	ug/L	98
42) 1,1,1-trichloroethane	6.402	97	2223	0.32	ug/L	90

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

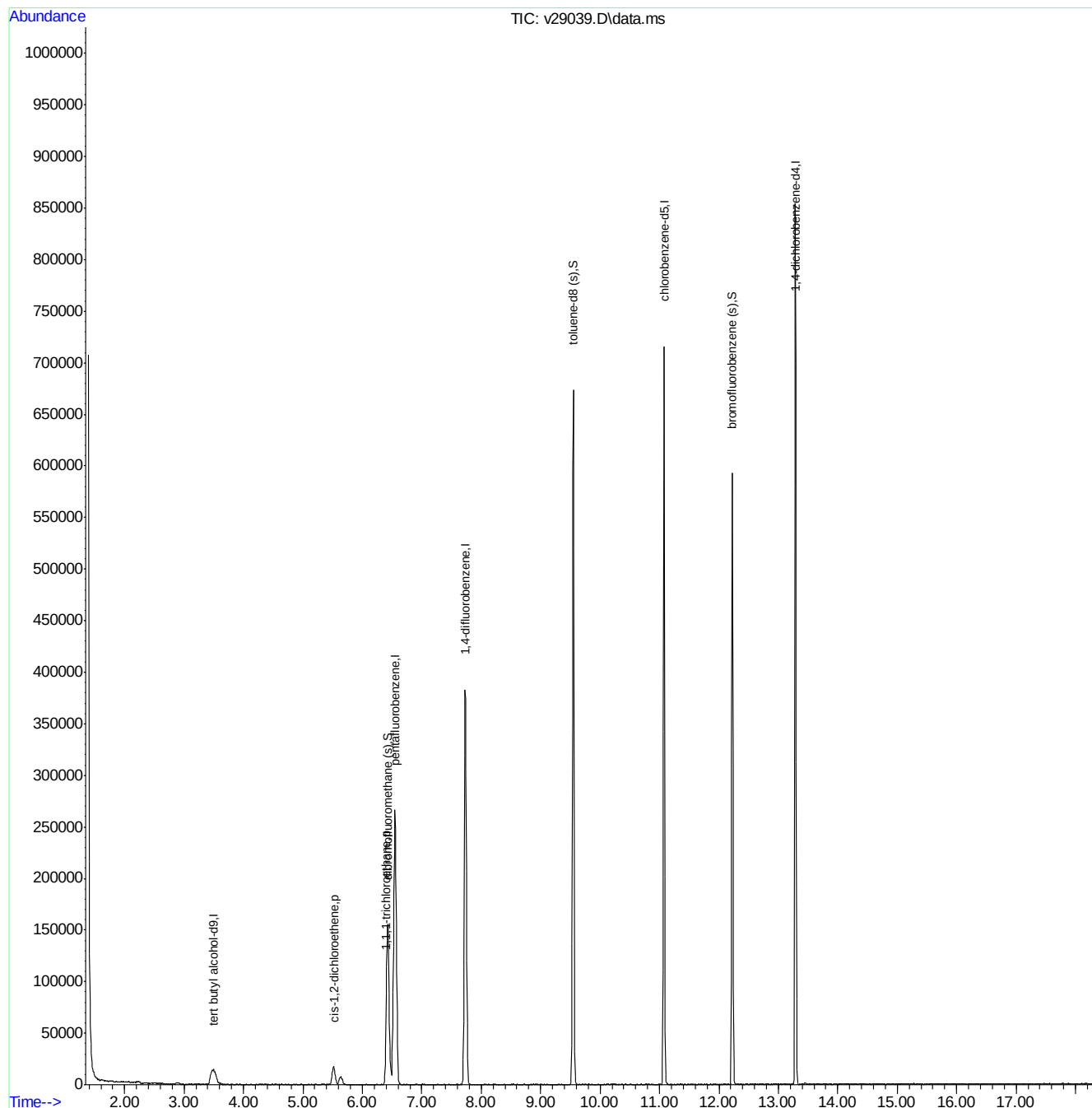
7.1.2

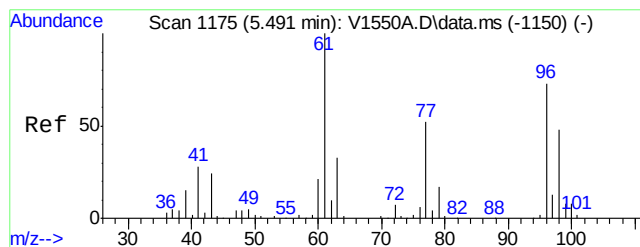
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29039.D
 Acq On : 25 Mar 2014 3:53 pm
 Operator : amym
 Sample : mc29101-2
 Misc : MS31386,MSV1088,,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

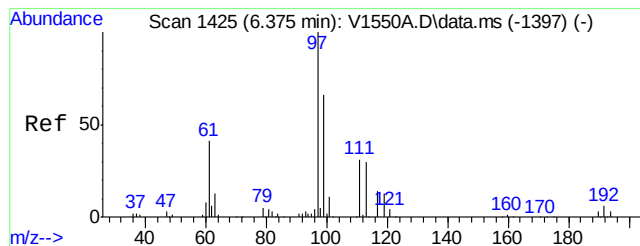
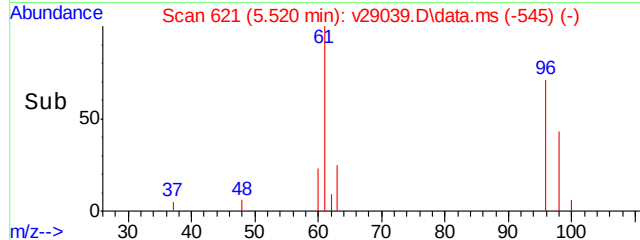
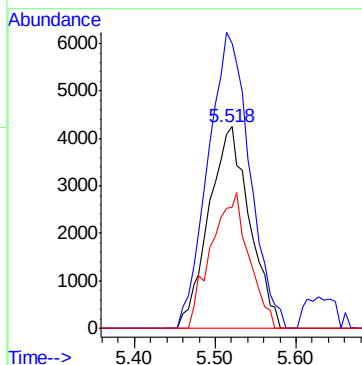
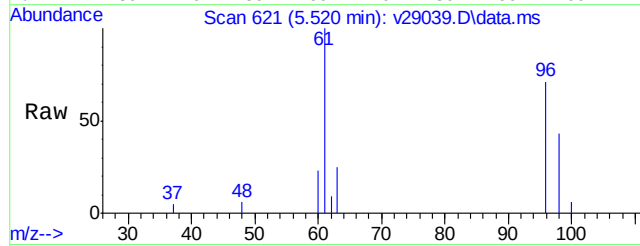
Quant Time: Mar 26 08:51:48 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration





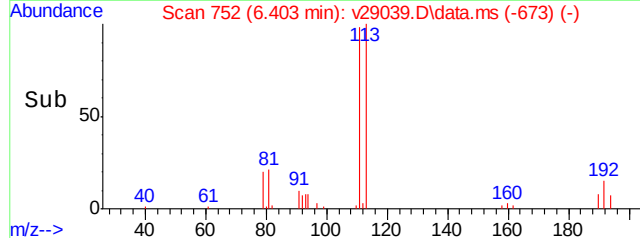
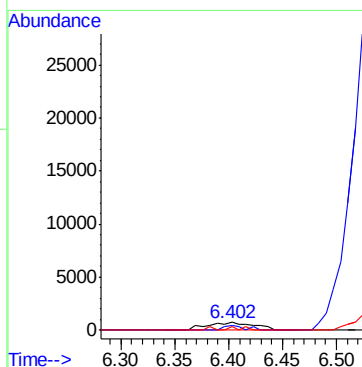
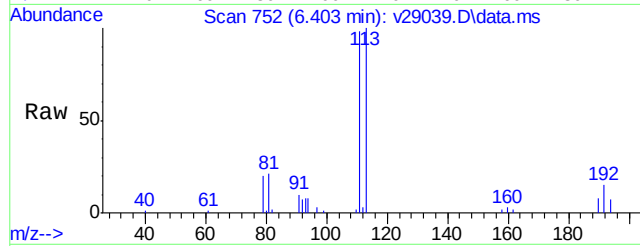
#36
 cis-1,2-dichloroethene
 Concen: 4.24 ug/L
 RT: 5.518 min Scan# 621
 Delta R.T. -0.021 min
 Lab File: v29039.D
 Acq: 25 Mar 2014 3:53 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	141.6	112.2	172.2
98	60.3	33.6	93.6



#42
 1,1,1-trichloroethane
 Concen: 0.32 ug/L
 RT: 6.402 min Scan# 752
 Delta R.T. -0.020 min
 Lab File: v29039.D
 Acq: 25 Mar 2014 3:53 pm

Tgt Ion	Ratio	Lower	Upper
97	100		
99	57.4	34.7	94.7
61	46.2	8.7	68.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29040.D
Acq On : 25 Mar 2014 4:20 pm
Operator : amym
Sample : mc29101-3
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 26 08:52:07 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.497	65	35724	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.552	168	265038	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.734	114	364878	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.076	82	174851	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.290	152	174513	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.428	113	153497	42.18	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	84.36%		
60) toluene-d8 (s)	9.549	98	399120	43.24	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.48%		
82) bromofluorobenzene (s)	12.226	95	157652	45.15	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.30%		

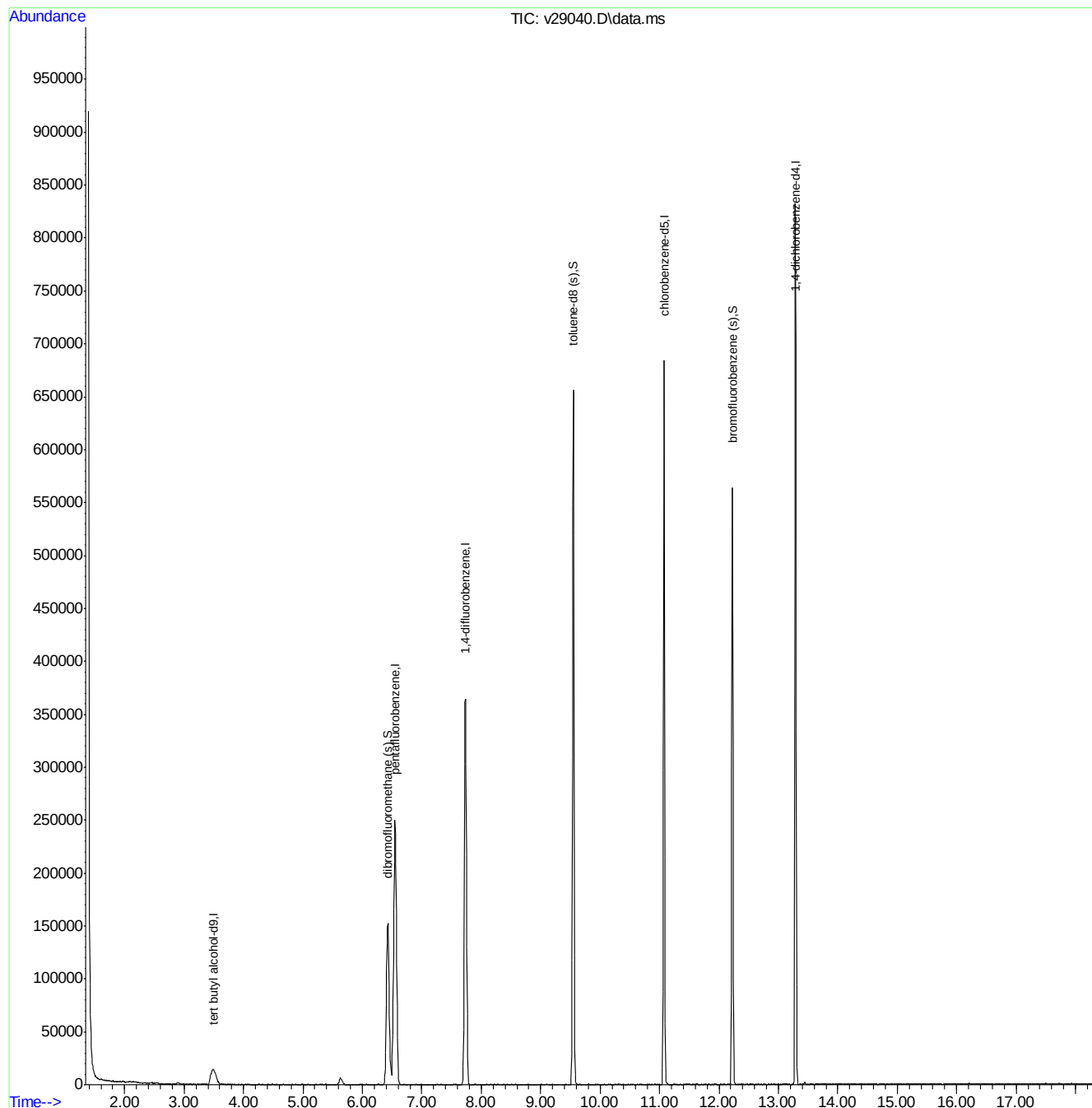
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29040.D
Acq On : 25 Mar 2014 4:20 pm
Operator : amym
Sample : mc29101-3
Misc : MS31386,MSV1088,,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 26 08:52:07 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29041.D
Acq On : 25 Mar 2014 4:46 pm
Operator : amym
Sample : mc29101-4
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 26 08:52:25 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.499	65	34735	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.553	168	269992	50.00	ug/L	-0.01
43) 1,4-difluorobenzene	7.736	114	368210	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.077	82	181117	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.290	152	171860	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.429	113	155583	41.96	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	83.92%		
60) toluene-d8 (s)	9.549	98	409231	43.93	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	87.86%		
82) bromofluorobenzene (s)	12.227	95	159060	46.25	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.50%		

Target Compounds	Qvalue

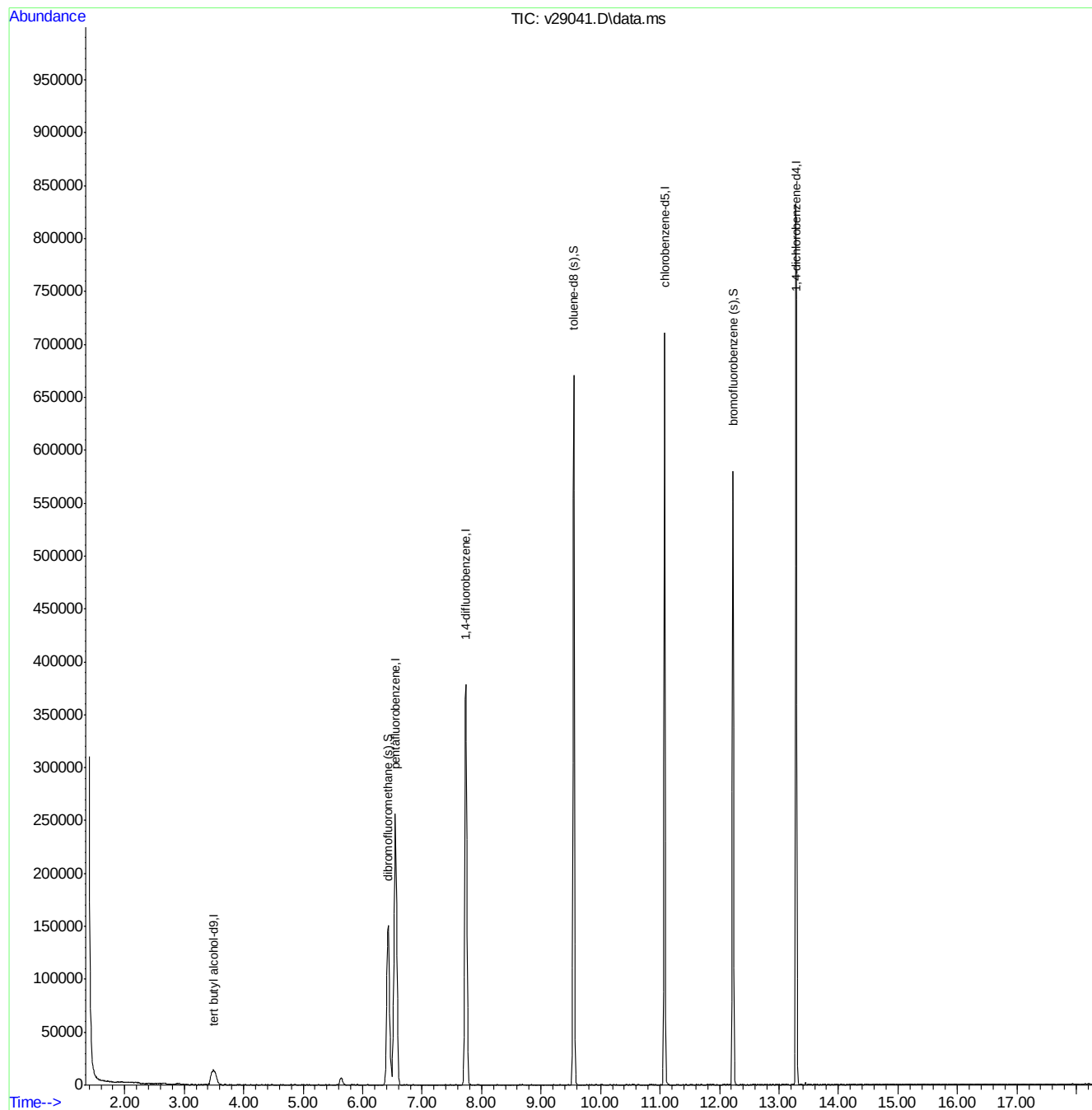
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29041.D
Acq On : 25 Mar 2014 4:46 pm
Operator : amym
Sample : mc29101-4
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 26 08:52:25 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29042.D
 Acq On : 25 Mar 2014 5:12 pm
 Operator : amym
 Sample : mc29101-5
 Misc : MS31386,MSV1088,,,,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 26 08:52:43 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.497	65	34218	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.552	168	255971	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.735	114	347853	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.077	82	170428	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.290	152	165623	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.429	113	147360	41.92	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	83.84%		
60) toluene-d8 (s)	9.549	98	388554	44.15	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	88.30%		
82) bromofluorobenzene (s)	12.227	95	152730	46.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.18%		

Target Compounds Qvalue

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

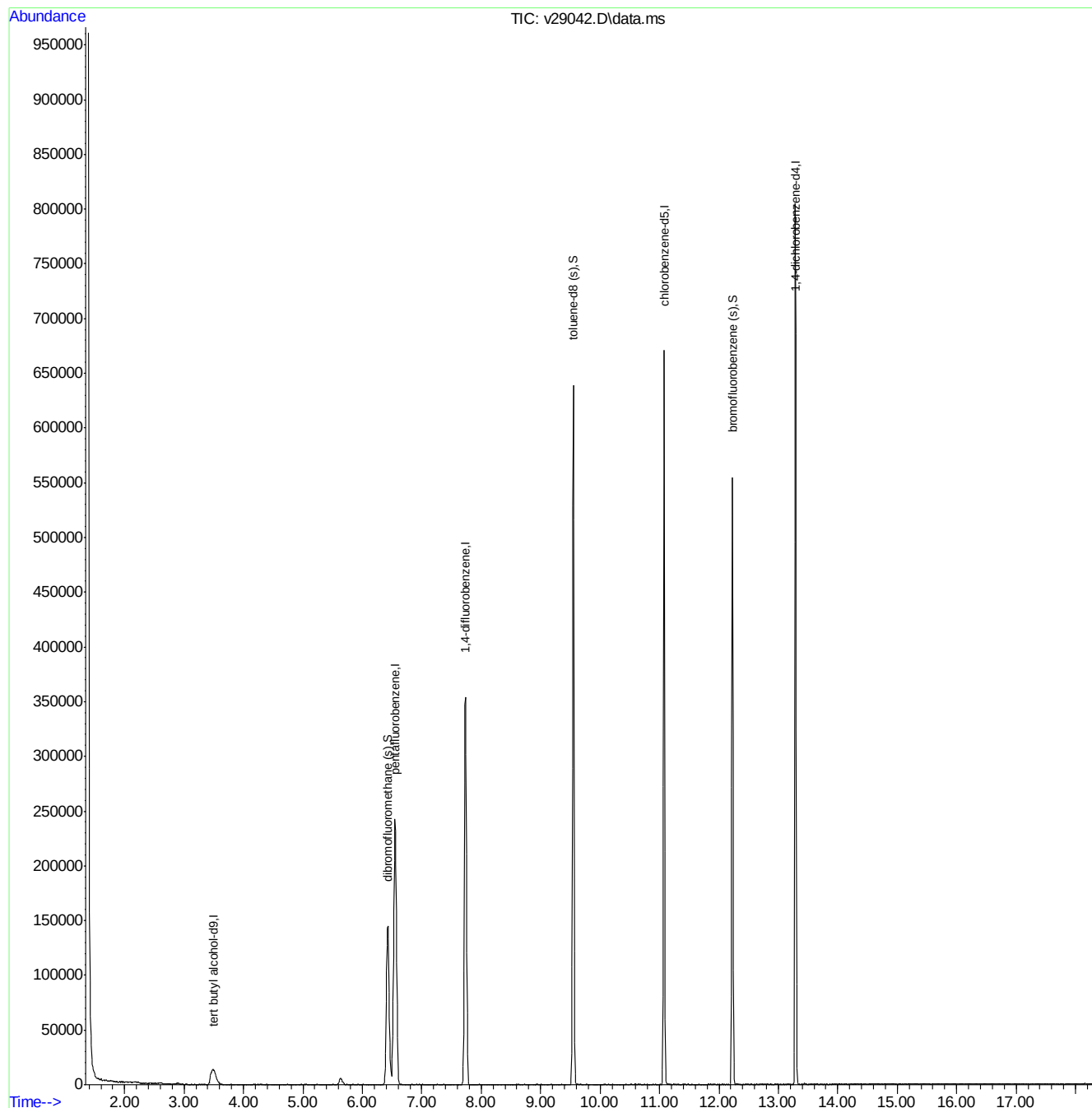
7.1.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29042.D
Acq On : 25 Mar 2014 5:12 pm
Operator : amym
Sample : mc29101-5
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 26 08:52:43 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29043.D
Acq On : 25 Mar 2014 5:38 pm
Operator : amym
Sample : mc29101-6
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 26 08:53:02 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.495	65	32066	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.551	168	248124	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.735	114	341789	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.077	82	163835	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.290	152	162339	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.428	113	145362	42.66	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.32%		
60) toluene-d8 (s)	9.549	98	372776	43.11	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.22%		
82) bromofluorobenzene (s)	12.227	95	148344	45.67	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.34%		

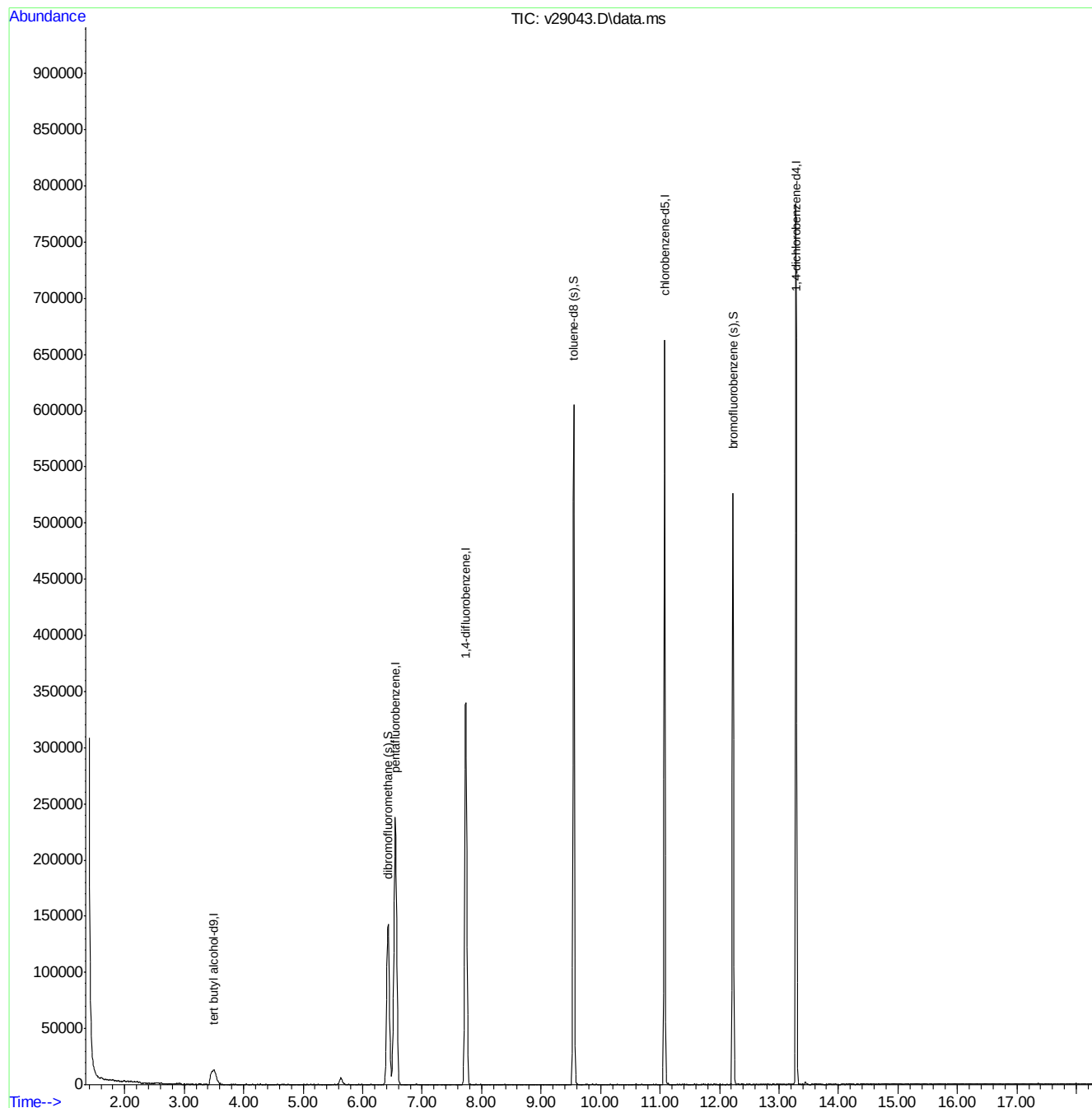
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29043.D
Acq On : 25 Mar 2014 5:38 pm
Operator : amym
Sample : mc29101-6
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 26 08:53:02 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29044.D
Acq On : 25 Mar 2014 6:04 pm
Operator : amym
Sample : mc29101-7
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 26 08:53:26 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.494	65	31063	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.552	168	243103	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.735	114	333527	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.077	82	161095	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.290	152	157728	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.428	113	139685	41.84	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	83.68%		
60) toluene-d8 (s)	9.550	98	364689	43.22	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.44%		
82) bromofluorobenzene (s)	12.227	95	144180	45.68	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.36%		
Target Compounds						
51) trichloroethene	8.026	95	1247	0.43	ug/L	78
67) tetrachloroethene	10.178	166	3504	1.25	ug/L	90

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

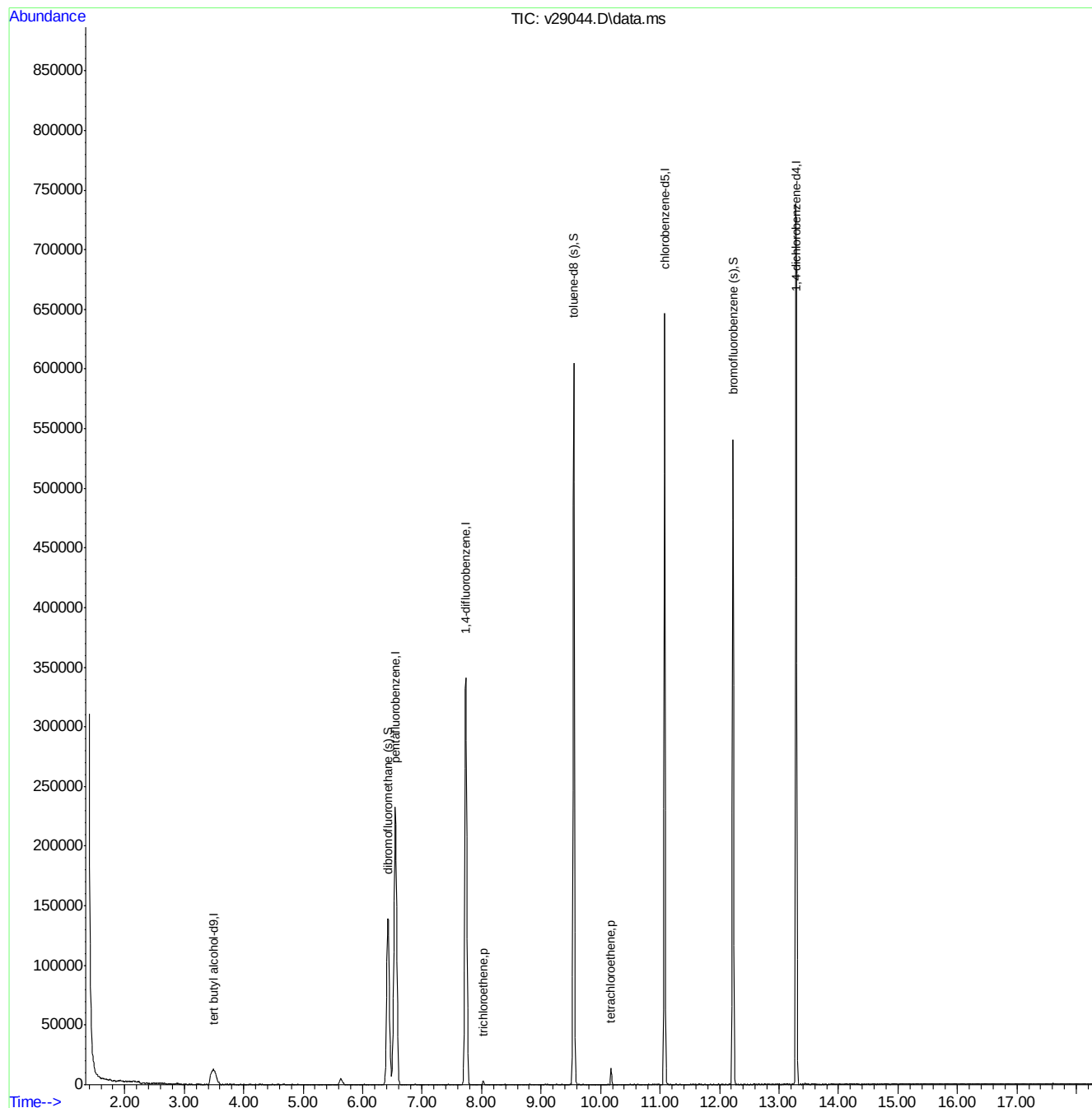
7.1.7

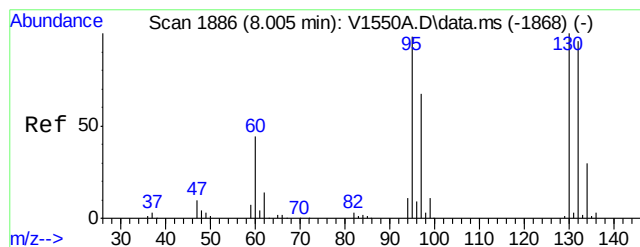
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29044.D
Acq On : 25 Mar 2014 6:04 pm
Operator : amym
Sample : mc29101-7
Misc : MS31386,MSV1088,,,5,1
ALS Vial : 20 Sample Multiplier: 1

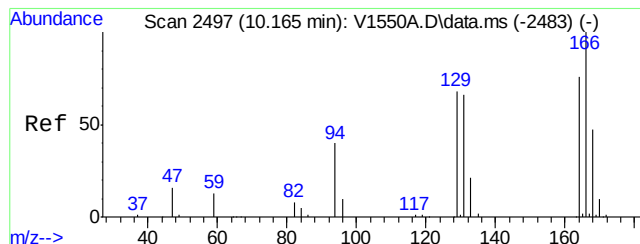
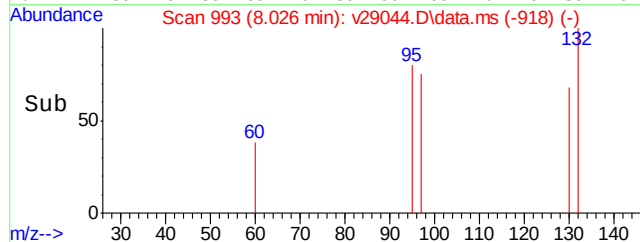
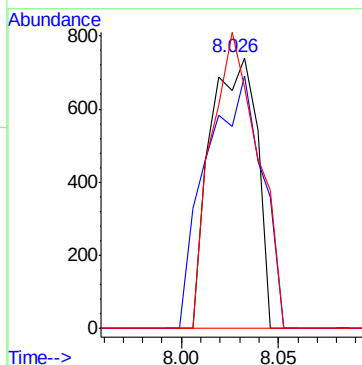
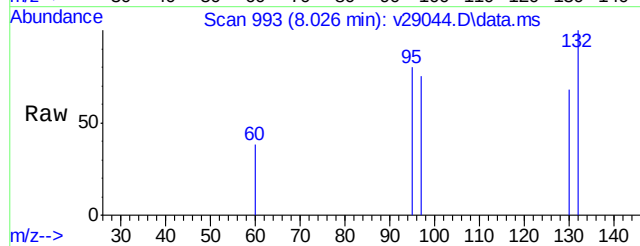
Quant Time: Mar 26 08:53:26 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration





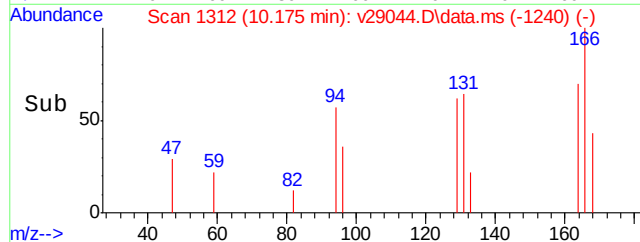
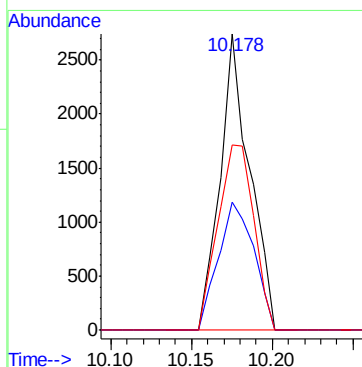
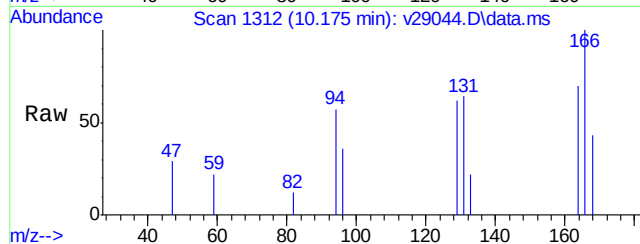
#51
trichloroethene
Concen: 0.43 ug/L
RT: 8.026 min Scan# 993
Delta R.T. -0.014 min
Lab File: v29044.D
Acq: 25 Mar 2014 6:04 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	84.7	74.4	134.4
132	124.2	69.6	129.6



#67
tetrachloroethene
Concen: 1.25 ug/L
RT: 10.178 min Scan# 1312
Delta R.T. -0.010 min
Lab File: v29044.D
Acq: 25 Mar 2014 6:04 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
168	43.2	17.6	77.6
129	62.5	42.6	102.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29045.D
Acq On : 25 Mar 2014 6:30 pm
Operator : amym
Sample : mc29101-8
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 26 08:53:43 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.499	65	32299	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.554	168	244797	50.00	ug/L	-0.01
43) 1,4-difluorobenzene	7.736	114	332312	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.077	82	163520	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.291	152	160422	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.430	113	142050	42.26	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	84.52%		
60) toluene-d8 (s)	9.550	98	365725	43.50	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	87.00%		
82) bromofluorobenzene (s)	12.228	95	147260	45.88	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.76%		

Target Compounds	Qvalue

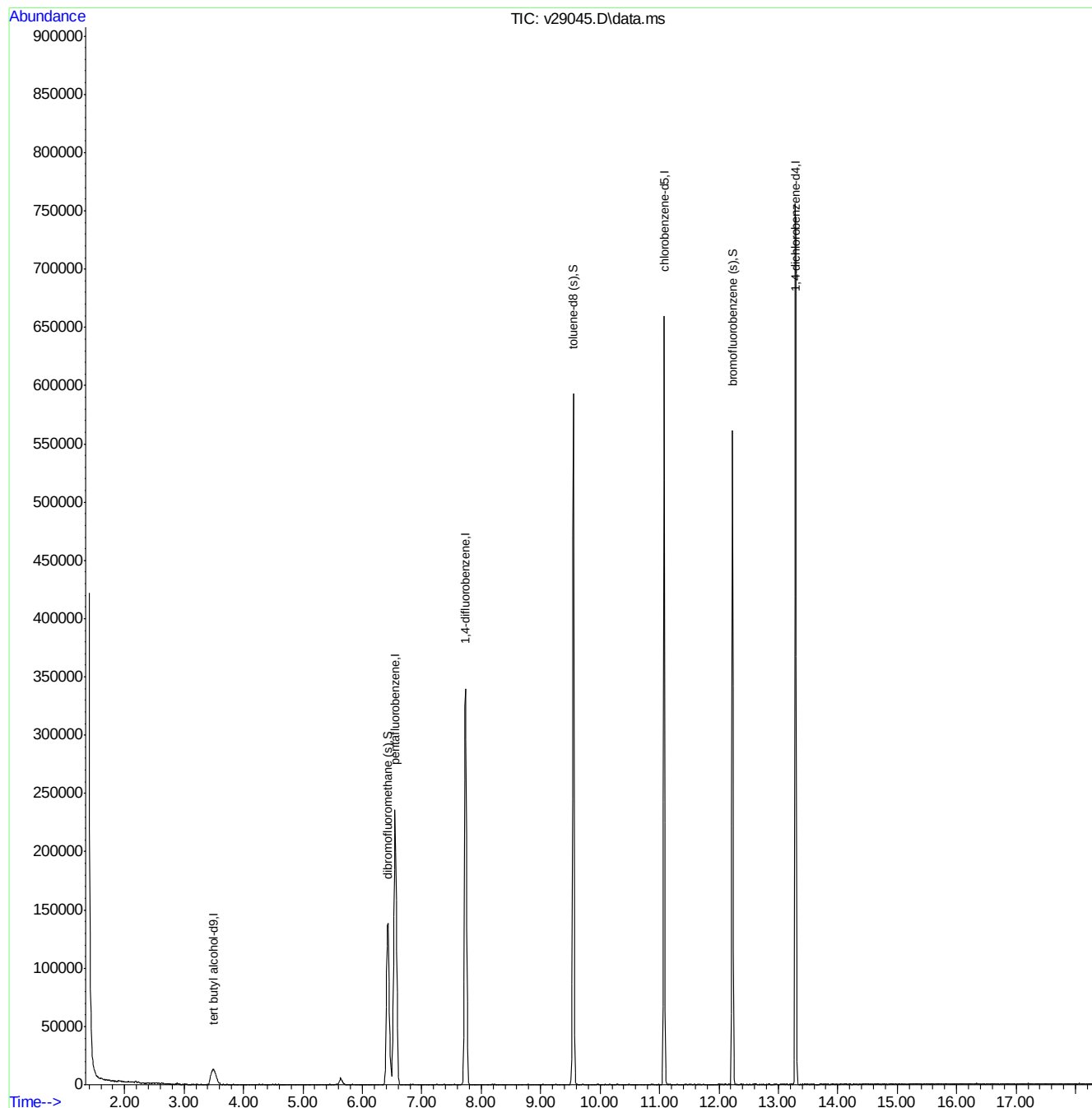
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29045.D
Acq On : 25 Mar 2014 6:30 pm
Operator : amym
Sample : mc29101-8
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 26 08:53:43 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29046.D
Acq On : 25 Mar 2014 6:56 pm
Operator : amym
Sample : mc29101-9
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 26 08:54:02 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.490	65	31431	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.548	168	231782	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.733	114	317721	50.00	ug/L	-0.02
66) chlorobenzene-d5	11.077	82	156306	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.291	152	153594	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.424	113	136073	42.75	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.50%		
60) toluene-d8 (s)	9.549	98	345527	42.99	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.98%		
82) bromofluorobenzene (s)	12.227	95	141687	46.10	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	92.20%		

Target Compounds	Qvalue

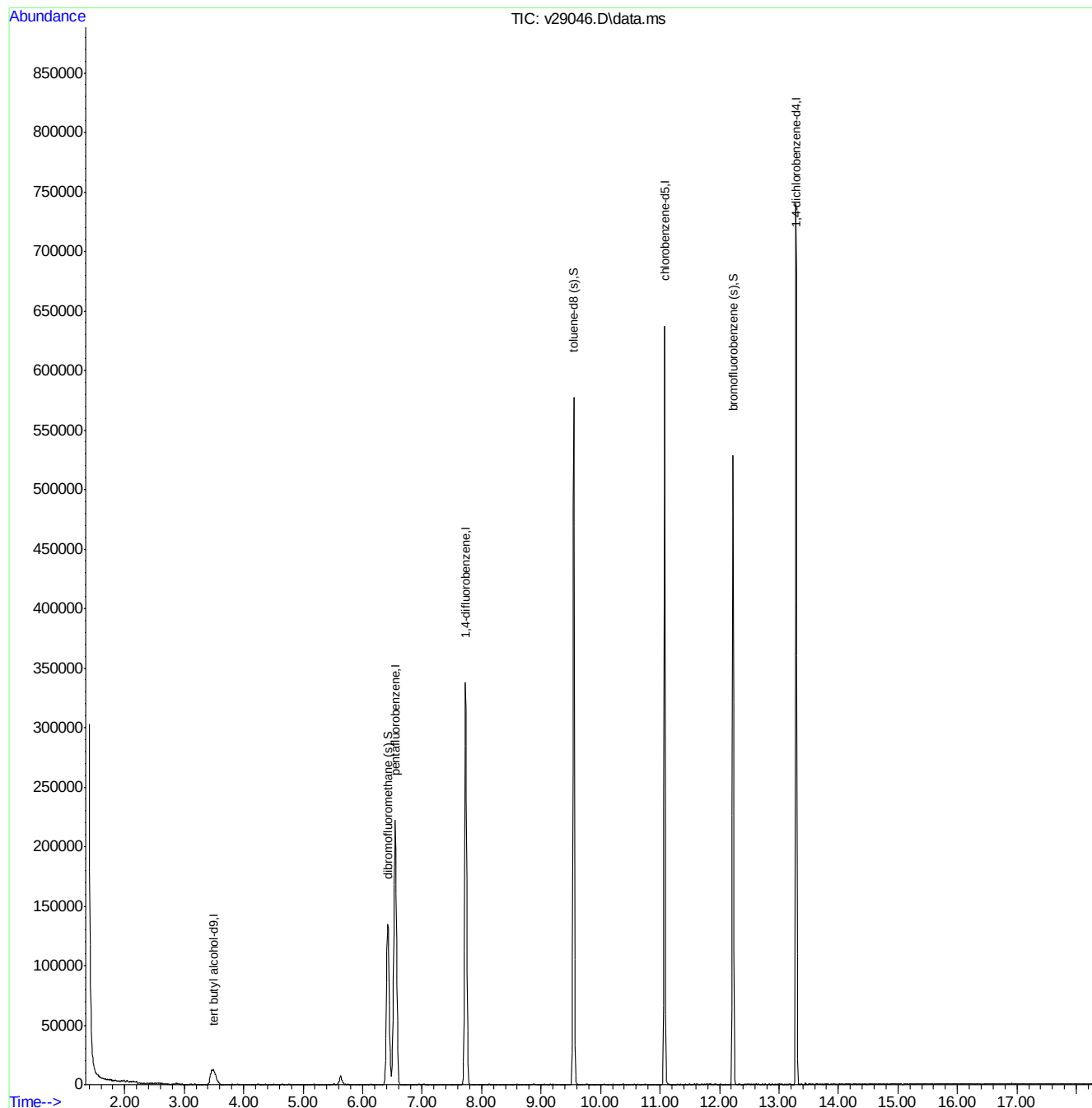
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29046.D
Acq On : 25 Mar 2014 6:56 pm
Operator : amym
Sample : mc29101-9
Misc : MS31386,MSV1088,,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 26 08:54:02 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29047.D
Acq On : 25 Mar 2014 7:22 pm
Operator : amym
Sample : mc29101-10
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 26 08:54:21 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.499	65	33378	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.554	168	233607	50.00	ug/L	-0.01
43) 1,4-difluorobenzene	7.737	114	323355	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.079	82	158923	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.292	152	157591	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.430	113	137365	42.82	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.64%		
60) toluene-d8 (s)	9.551	98	356269	43.55	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	87.10%		
82) bromofluorobenzene (s)	12.228	95	144150	45.71	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.42%		

Target Compounds	Qvalue

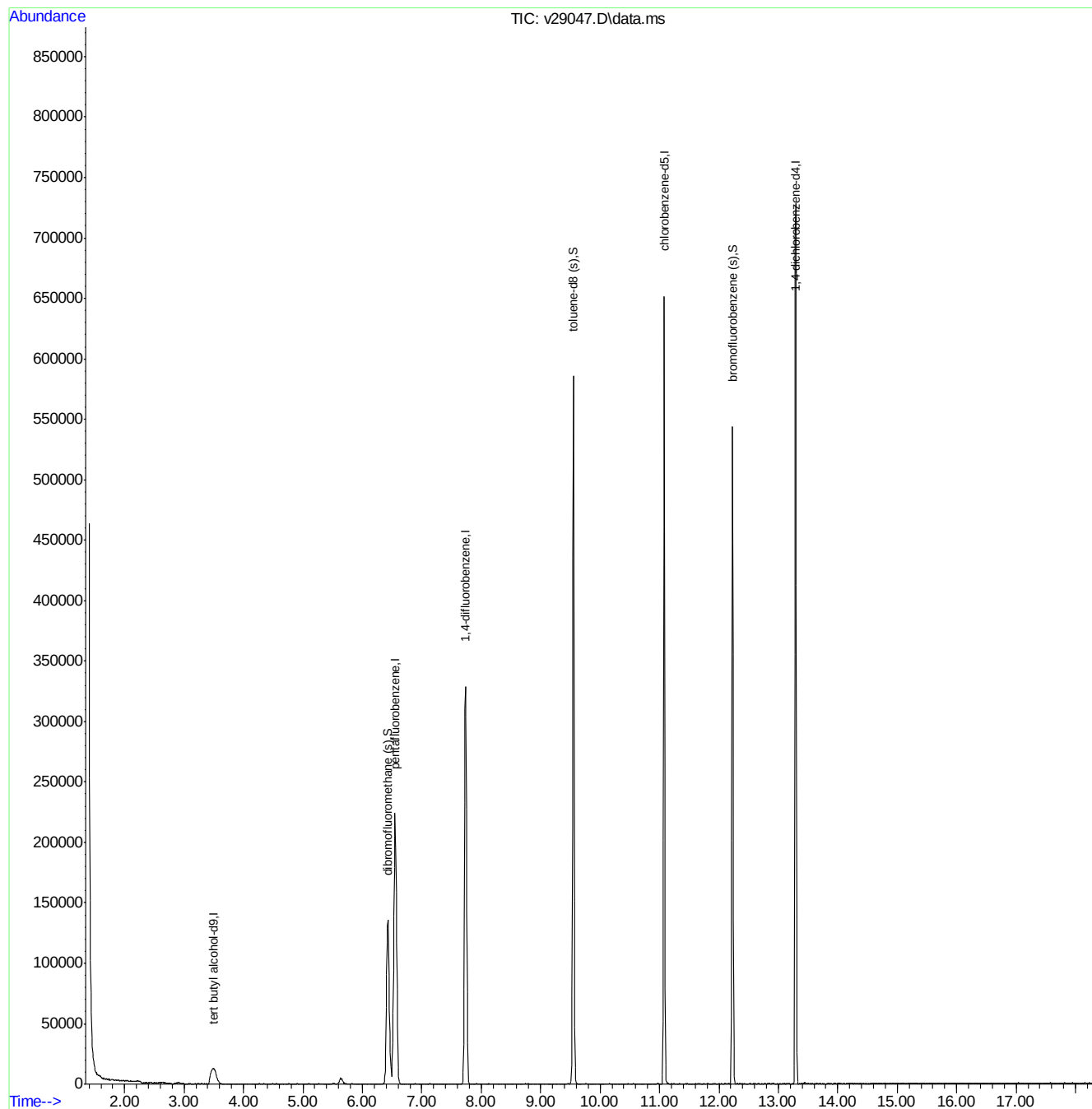
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29047.D
Acq On : 25 Mar 2014 7:22 pm
Operator : amym
Sample : mc29101-10
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 26 08:54:21 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29048.D
 Acq On : 25 Mar 2014 7:48 pm
 Operator : amym
 Sample : mc29101-11
 Misc : MS31386,MSV1088,,,,,5,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Mar 26 08:54:42 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.501	65	30839	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.556	168	237019	50.00	ug/L	-0.01
43) 1,4-difluorobenzene	7.738	114	324215	50.00	ug/L	0.00
66) chlorobenzene-d5	11.078	82	158365	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.291	152	152955	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.432	113	140567	43.19	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.38%		
60) toluene-d8 (s)	9.551	98	353750	43.13	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.26%		
82) bromofluorobenzene (s)	12.228	95	143061	46.74	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.48%		
Target Compounds						
51) trichloroethene	8.029	95	9710	3.45	ug/L	Qvalue 88

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

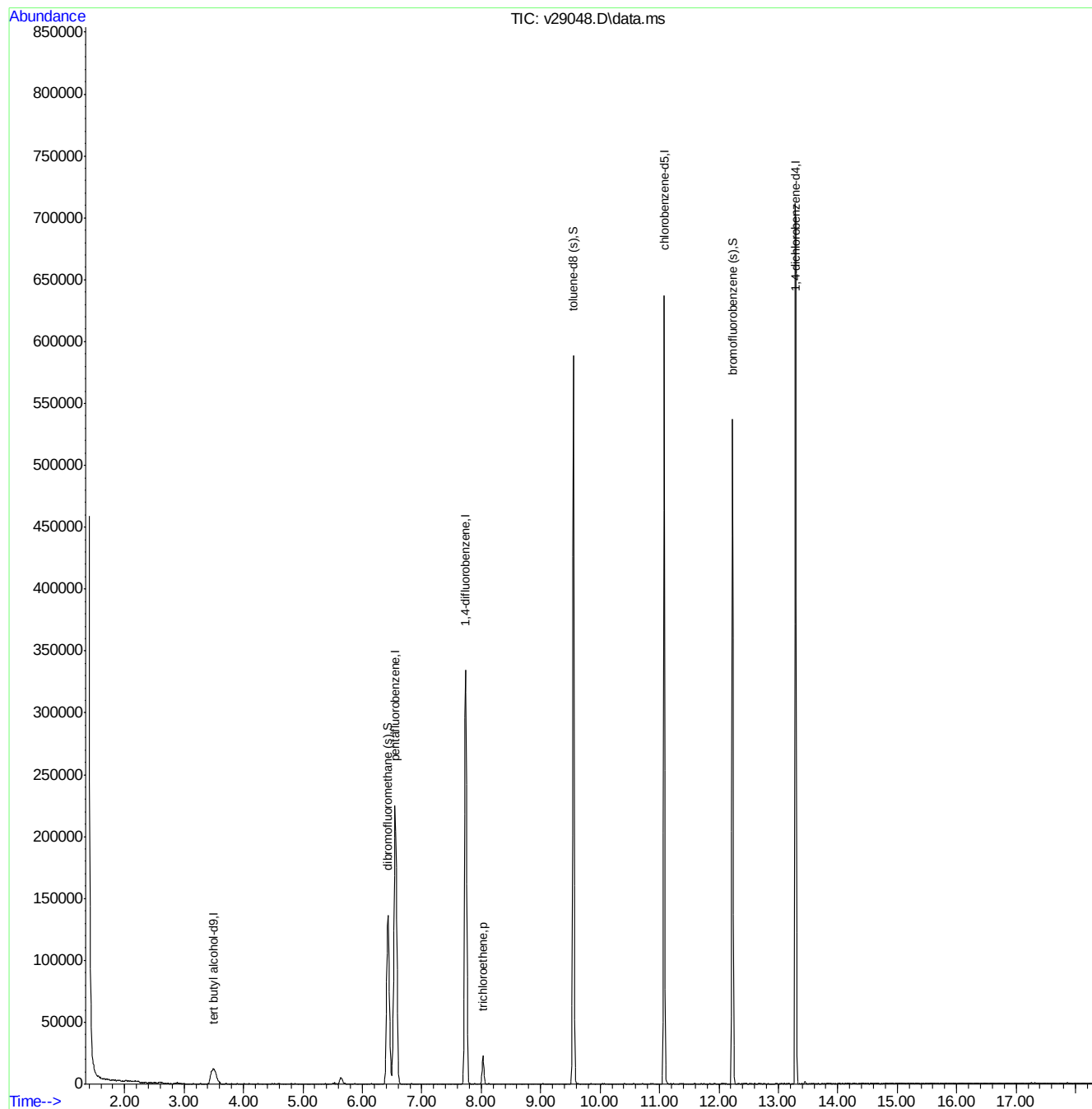
7.1.11

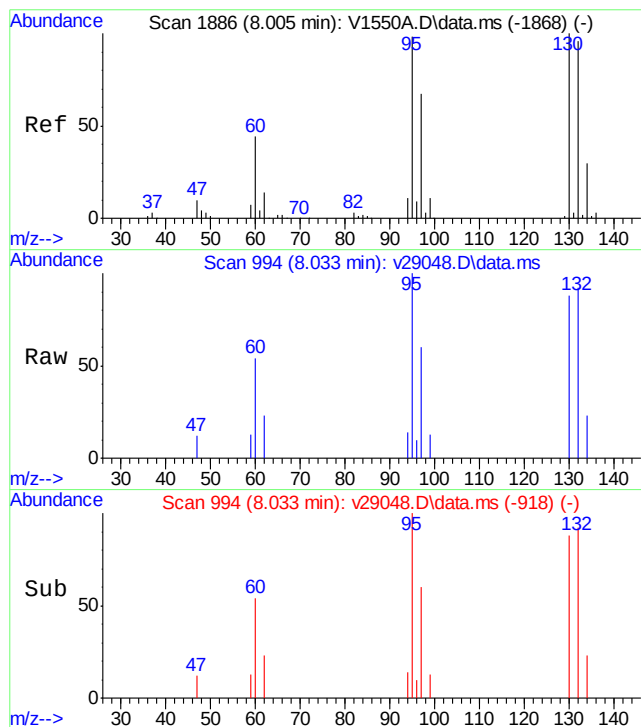
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29048.D
Acq On : 25 Mar 2014 7:48 pm
Operator : amym
Sample : mc29101-11
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

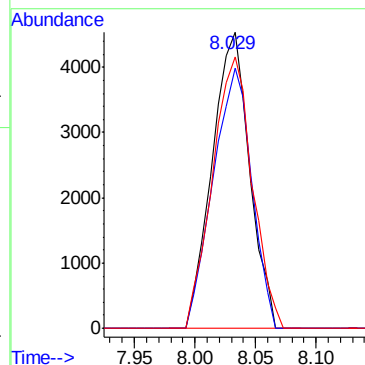
Quant Time: Mar 26 08:54:42 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration





#51
trichloroethene
Concen: 3.45 ug/L
RT: 8.029 min Scan# 994
Delta R.T. -0.011 min
Lab File: v29048.D
Acq: 25 Mar 2014 7:48 pm

Tgt Ion:	95	Resp:	9710
Ion Ratio	Lower	Upper	
95	100		
130	88.0	74.4	134.4
132	91.8	69.6	129.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29049.D
Acq On : 25 Mar 2014 8:14 pm
Operator : amym
Sample : mc29101-12
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 26 08:55:00 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.494	65	31630	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.552	168	222778	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.736	114	300494	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.078	82	149629	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.291	152	149548	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.428	113	132665	43.37	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.74%		
60) toluene-d8 (s)	9.550	98	332166	43.69	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	87.38%		
82) bromofluorobenzene (s)	12.228	95	135892	45.41	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.82%		

Target Compounds	Qvalue

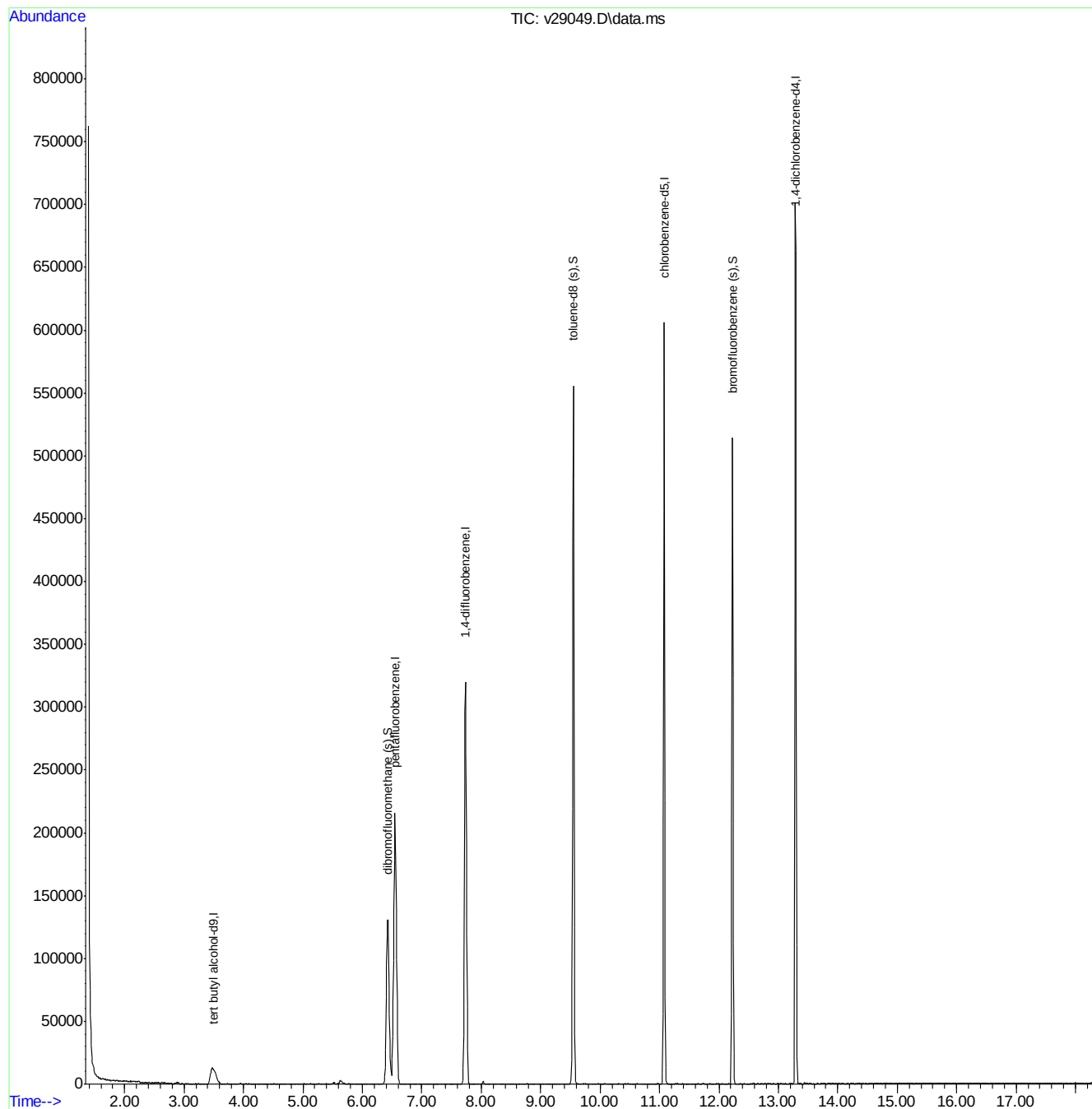
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29049.D
Acq On : 25 Mar 2014 8:14 pm
Operator : amym
Sample : mc29101-12
Misc : MS31386,MSV1088,,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Mar 26 08:55:00 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29030.D
Acq On : 25 Mar 2014 11:56 am
Operator : amym
Sample : mc29101-13
Misc : MS31386,MSV1088,,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 26 08:48:38 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.491	65	45052	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.543	168	370155	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.728	114	509610	50.00	ug/L	-0.02
66) chlorobenzene-d5	11.072	82	230107	50.00	ug/L	-0.01
80) 1,4-dichlorobenzene-d4	13.286	152	224991	50.00	ug/L	-0.01
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.420	113	195429	38.45	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery =	76.90%		
60) toluene-d8 (s)	9.544	98	542543	42.08	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	84.16%		
82) bromofluorobenzene (s)	12.223	95	204535	45.43	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.86%		

Target Compounds	Qvalue

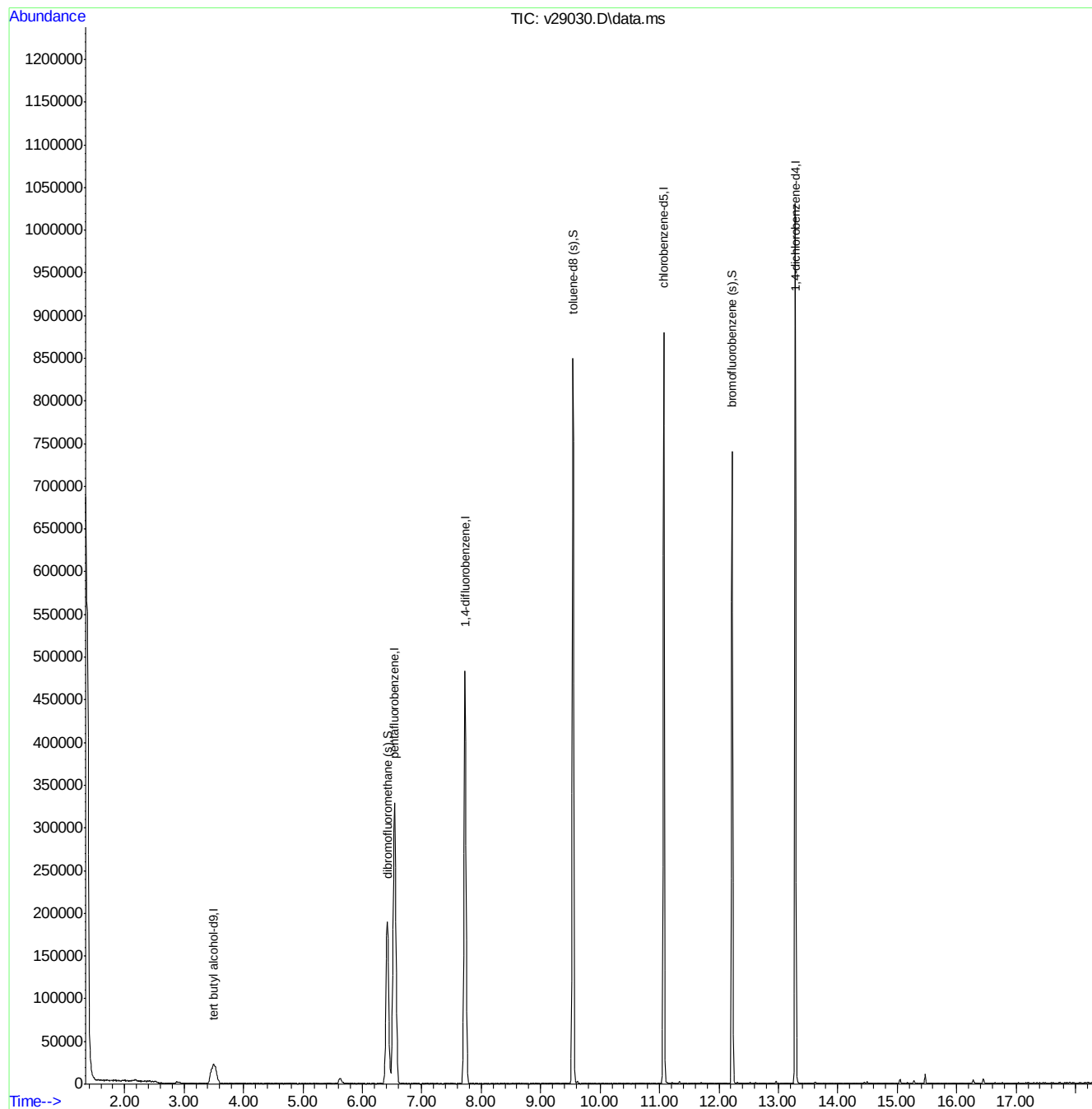
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29030.D
Acq On : 25 Mar 2014 11:56 am
Operator : amym
Sample : mc29101-13
Misc : MS31386,MSV1088,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 26 08:48:38 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29029.D
Acq On : 25 Mar 2014 11:23 am
Operator : amym
Sample : mb
Misc : MS31373,MSV1088,,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 26 08:48:13 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.487	65	45928	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.540	168	372112	50.00	ug/L	-0.03
43) 1,4-difluorobenzene	7.726	114	507664	50.00	ug/L	-0.02
66) chlorobenzene-d5	11.072	82	236689	50.00	ug/L	-0.01
80) 1,4-dichlorobenzene-d4	13.285	152	238496	50.00	ug/L	-0.01
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.417	113	195398	38.24	ug/L	-0.03
Spiked Amount	50.000	Range	70 - 130	Recovery	=	76.48%
60) toluene-d8 (s)	9.543	98	562440	43.79	ug/L	-0.02
Spiked Amount	50.000	Range	70 - 130	Recovery	=	87.58%
82) bromofluorobenzene (s)	12.222	95	212426	44.51	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 130	Recovery	=	89.02%

Target Compounds Qvalue

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

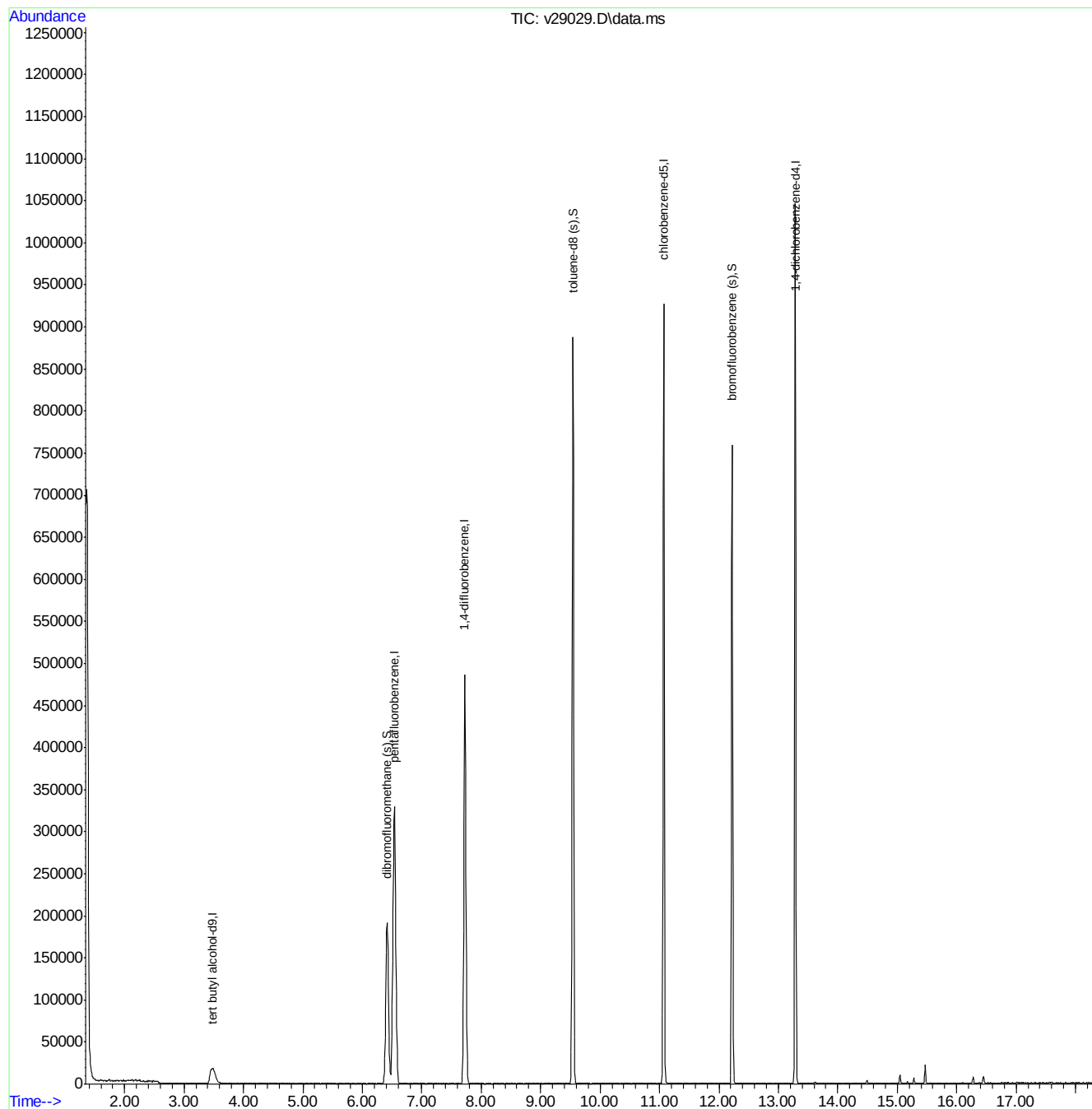
7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29029.D
Acq On : 25 Mar 2014 11:23 am
Operator : amym
Sample : mb
Misc : MS31373,MSV1088,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 26 08:48:13 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29026.D
 Acq On : 25 Mar 2014 10:04 am
 Operator : amym
 Sample : bs
 Misc : MS31373,MSV1088,,,,5,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 26 08:47:12 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.493	65	60510	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.543	168	440413	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.727	114	601475	50.00	ug/L	-0.02
66) chlorobenzene-d5	11.071	82	279607	50.00	ug/L	-0.01
80) 1,4-dichlorobenzene-d4	13.285	152	282677	50.00	ug/L	-0.01
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.420	113	228703	37.82	ug/L	-0.03
Spiked Amount 50.000	Range 70	- 130	Recovery	=	75.64%	
60) toluene-d8 (s)	9.543	98	675041	44.36	ug/L	-0.02
Spiked Amount 50.000	Range 70	- 130	Recovery	=	88.72%	
82) bromofluorobenzene (s)	12.221	95	258231	45.65	ug/L	-0.01
Spiked Amount 50.000	Range 70	- 130	Recovery	=	91.30%	
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.604	59	76018	505.04	ug/L	# 61
3) Ethanol	2.486	45	90300	3915.02	ug/L	# 100
5) dichlorodifluoromethane	1.485	85	357216	29.80	ug/L	98
6) chloromethane	1.609	50	354943	38.73	ug/L	96
7) vinyl chloride	1.716	62	327565	38.40	ug/L	100
8) bromomethane	2.004	96	274217	38.25	ug/L	95
9) chloroethane	2.095	64	175596	41.80	ug/L	99
10) ethyl ether	2.592	59	129831	40.86	ug/L	99
11) acetonitrile	3.280	41	351724	45.33	ug/L	87
12) trichlorofluoromethane	2.330	101	557850	40.95	ug/L	97
13) freon-113	2.883	101	335488	47.62	ug/L	94
14) acrolein	2.743	56	83259	303.46	ug/L	100
15) 1,1-dichloroethene	2.855	96	272411	48.48	ug/L	95
16) acetone	2.889	58	10346	32.48	ug/L	# 70
17) Methyl Acetate	3.264	43	76248	41.87	ug/L	93
18) methylene chloride	3.449	84	249670	43.60	ug/L	89
19) methyl tert butyl ether	3.822	73	442705	42.89	ug/L	96
20) acrylonitrile	3.764	53	37957	39.17	ug/L	94
21) allyl chloride	3.280	41	351724	45.33	ug/L	94
22) trans-1,2-dichloroethene	3.819	96	265906	45.76	ug/L	94
23) iodomethane	3.020	142	601061	41.09	ug/L	95
24) carbon disulfide	3.105	76	825562	42.96	ug/L	99
25) propionitrile	5.624	54	11166	39.71	ug/L	100
26) vinyl acetate	4.562	43	522204	40.63	ug/L	89
27) chloroprene	4.602	53	381561	52.55	ug/L	93
28) di-isopropyl ether	4.590	45	654822	43.53	ug/L	94
29) methacrylonitrile	5.898	41	62683	40.19	ug/L	92
30) 2-butanone	5.512	72	11652	40.18	ug/L	94
31) Hexane	4.236	41	205045	41.50	ug/L	# 76
32) 1,1-dichloroethane	4.492	63	440739	44.28	ug/L	99
33) tert-butyl ethyl ether	5.255	59	509381	46.17	ug/L	99
34) isobutyl alcohol	4.562	43	522204	204.19	ug/L	64
35) 2,2-dichloropropane	5.528	77	363635	43.75	ug/L	94
36) cis-1,2-dichloroethene	5.511	96	248366	45.36	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29026.D
 Acq On : 25 Mar 2014 10:04 am
 Operator : amym
 Sample : bs
 Misc : MS31373,MSV1088,,,,,5,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 26 08:47:12 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.564	43	522213m	40.38	ug/L	
38) bromochloromethane	5.931	128	113274	44.13	ug/L	98
39) chloroform	6.150	83	456755	41.42	ug/L	99
41) Tetrahydrofuran	5.938	42	20765	39.58	ug/L	82
42) 1,1,1-trichloroethane	6.397	97	485187	45.20	ug/L	97
44) Cyclohexane	6.504	56	350994	46.63	ug/L	97
45) carbon tetrachloride	6.653	117	462423	47.81	ug/L	98
46) 1,1-dichloropropene	6.665	75	304999	47.56	ug/L	95
47) benzene	6.984	78	740783	46.10	ug/L	100
48) 1,2-dichloroethane	7.109	62	265822	40.66	ug/L	99
49) tert-amyl methyl ether	7.276	73	341150	47.64	ug/L	95
50) heptane	7.546	43	195703	45.07	ug/L	93
51) trichloroethene	8.020	95	238117	45.67	ug/L	98
52) 1,2-dichloropropane	8.370	63	183237	48.06	ug/L	100
53) dibromomethane	8.473	93	103733	44.02	ug/L	92
54) bromodichloromethane	8.725	83	271717	44.40	ug/L	99
55) Methylcyclohexane	8.325	83	331667	48.82	ug/L	97
56) 2-chloroethyl vinyl ether	9.102	63	28416	39.37	ug/L	98
57) methyl methacrylate	8.504	69	54630	44.20	ug/L	85
58) 1,4-dioxane	8.480	88	3942	209.81	ug/L	87
59) cis-1,3-dichloropropene	9.254	75	241464	43.18	ug/L	95
61) 4-methyl-2-pentanone	9.438	43	79691	42.05	ug/L	90
62) toluene	9.619	92	501217	51.02	ug/L	96
63) trans-1,3-dichloropropene	9.907	75	190504	54.41	ug/L	92
64) 1,1,2-trichloroethane	10.113	83	103312	47.62	ug/L	99
65) ethyl methacrylate	9.988	69	127589	44.74	ug/L	86
67) tetrachloroethene	10.172	166	261548	53.60	ug/L	97
68) 1,3-dichloropropane	10.274	76	194302	47.42	ug/L	99
69) dibromochloromethane	10.495	129	176470	44.99	ug/L	100
70) 1,2-dibromoethane	10.604	107	122313	49.03	ug/L	97
71) 2-hexanone	10.347	43	52463	39.21	ug/L	84
72) chlorobenzene	11.101	112	597314	48.71	ug/L	99
73) 1,1,1,2-tetrachloroethane	11.201	131	255126	51.42	ug/L	96
74) ethylbenzene	11.206	91	1087716	52.23	ug/L	95
75) m,p-xylene	11.337	106	784897	104.90	ug/L	89
76) o-xylene	11.704	106	402811	52.35	ug/L	92
77) styrene	11.725	104	601636	53.29	ug/L	94
78) bromoform	11.899	173	81616	42.78	ug/L	100
79) trans-1,4-dichloro-2-b...	12.116	53	28724	34.31	ug/L #	69
81) isopropylbenzene	12.056	105	1152530	54.74	ug/L	98
83) bromobenzene	12.347	156	252701	52.75	ug/L	91
84) 1,1,2,2-tetrachloroethane	12.352	83	135126	50.40	ug/L	98
85) 1,2,3-trichloropropane	12.390	75	161421	58.44	ug/L	100
86) n-propylbenzene	12.445	91	1229492	51.81	ug/L	98
87) 2-chlorotoluene	12.524	91	792121	50.27	ug/L	98
88) 4-chlorotoluene	12.635	91	880554	50.37	ug/L	97
89) 1,3,5-trimethylbenzene	12.615	105	981728	53.97	ug/L	97
90) tert-butylbenzene	12.901	91	529552	50.59	ug/L	100
91) 1,2,4-trimethylbenzene	12.954	105	961070	52.09	ug/L	100
92) sec-butylbenzene	13.104	105	1136472	54.51	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29026.D
Acq On : 25 Mar 2014 10:04 am
Operator : amym
Sample : bs
Misc : MS31373,MSV1088,,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 26 08:47:12 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

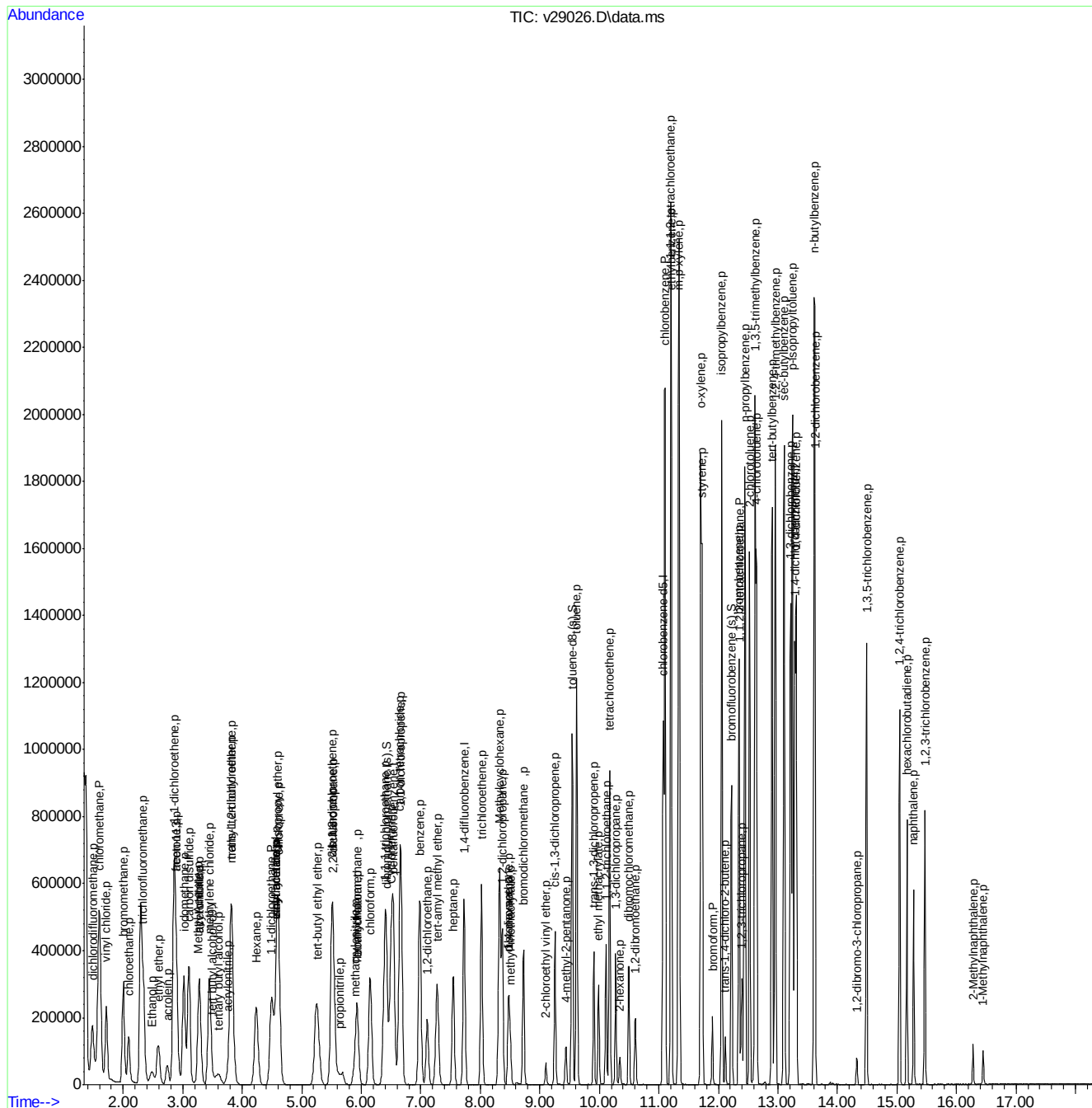
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	13.212	146	519073	50.01	ug/L	99
94)	p-isopropyltoluene	13.245	119	1027290	54.57	ug/L	99
95)	1,4-dichlorobenzene	13.307	146	499732	49.40	ug/L	99
96)	1,2-dichlorobenzene	13.624	146	466452	47.50	ug/L	99
97)	n-butylbenzene	13.610	91	861904	52.44	ug/L	99
98)	1,2-dibromo-3-chloropr...	14.326	75	16846	37.72	ug/L	86
99)	1,3,5-trichlorobenzene	14.490	180	367890	49.24	ug/L	98
100)	1,2,4-trichlorobenzene	15.046	180	286353	46.70	ug/L	98
101)	hexachlorobutadiene	15.167	225	123174	47.15	ug/L	93
102)	naphthalene	15.280	128	383783	50.38	ug/L	100
103)	1,2,3-trichlorobenzene	15.469	180	218619	50.53	ug/L	99
104)	2-Methylnaphthalene	16.280	142	52356	24.60	ug/L	100
105)	1-Methylnaphthalene	16.449	142	44678	25.25	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29026.D
Acq On : 25 Mar 2014 10:04 am
Operator : amym
Sample : bs
Misc : MS31373,MSV1088,,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

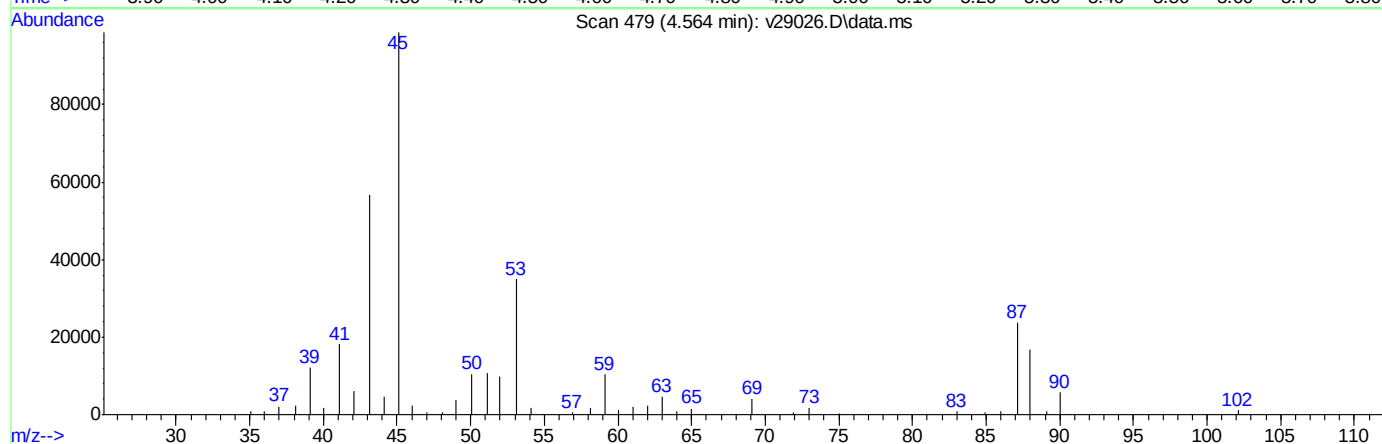
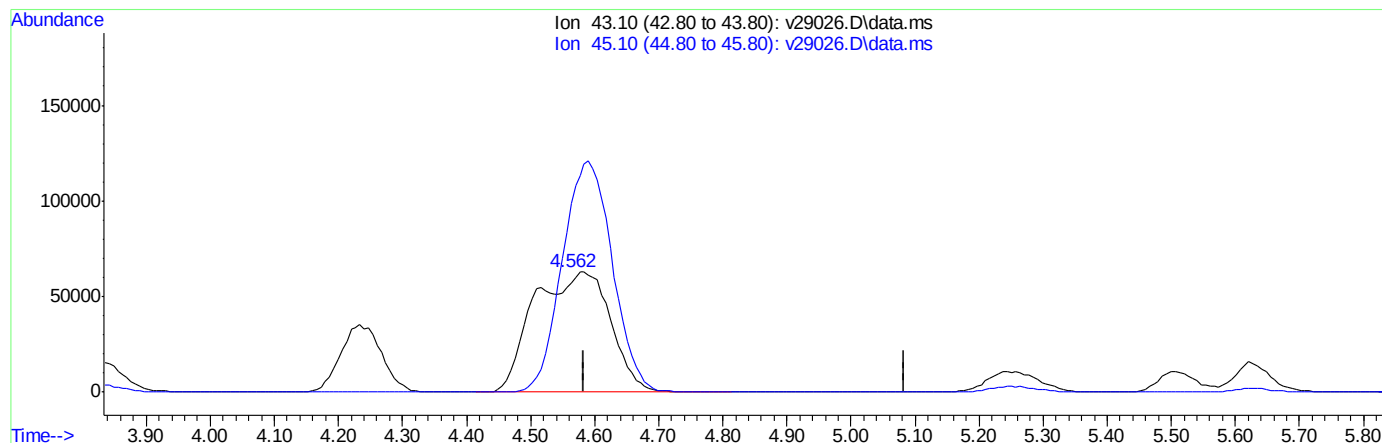
Quant Time: Mar 26 08:47:12 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29026.D
Acq On : 25 Mar 2014 10:04 am
Operator : amym
Sample : bs
Misc : MS31373,MSV1088,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 25 10:24:31 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



TIC: v29026.D\data.ms

(37) ethyl acetate (p)

4.564min (-0.020) 40.38ug/L m

response 522213

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29050.D
 Acq On : 25 Mar 2014 8:40 pm
 Operator : amym
 Sample : mc29163-1ms
 Misc : MS31386,MSV1088,,,,5,5
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 26 08:55:49 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.498	65	37181	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.552	168	275947	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.736	114	366276	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.077	82	178057	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.289	152	186023	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.429	113	157170	41.48	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	82.96%		
60) toluene-d8 (s)	9.549	98	417141	45.02	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	90.04%		
82) bromofluorobenzene (s)	12.226	95	170557	45.82	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.64%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.609	59	44924	485.73	ug/L	# 58
3) Ethanol	2.487	45	53985	3806.23	ug/L	# 100
5) dichlorodifluoromethane	1.486	85	217370	28.94	ug/L	99
6) chloromethane	1.609	50	233186	40.61	ug/L	90
7) vinyl chloride	1.717	62	202185	37.83	ug/L	99
8) bromomethane	2.006	96	182773	40.69	ug/L	97
9) chloroethane	2.097	64	111810	42.48	ug/L	99
10) ethyl ether	2.596	59	79742	40.05	ug/L	93
11) acetonitrile	3.286	41	200891	41.33	ug/L	78
12) trichlorofluoromethane	2.335	101	418687	49.05	ug/L	96
13) freon-113	2.888	101	203622	46.13	ug/L	96
14) acrolein	2.746	56	45274	263.37	ug/L	95
15) 1,1-dichloroethene	2.860	96	158608	45.05	ug/L	82
16) acetone	2.893	58	4170	20.89	ug/L	# 46
17) Methyl Acetate	3.269	43	43753	38.35	ug/L	96
18) methylene chloride	3.455	84	141060	39.32	ug/L	87
19) methyl tert butyl ether	3.828	73	263559	40.75	ug/L	93
20) acrylonitrile	3.773	53	21986	36.21	ug/L	96
21) allyl chloride	3.286	41	200891	41.32	ug/L	88
22) trans-1,2-dichloroethene	3.826	96	150713	41.39	ug/L	89
23) iodomethane	3.025	142	353454	38.57	ug/L	78
24) carbon disulfide	3.110	76	472606	39.25	ug/L	100
25) propionitrile	5.635	54	5941	34.32	ug/L	100
26) vinyl acetate	4.574	43	312840	38.85	ug/L	87
27) chloroprene	4.611	53	254986	56.05	ug/L	80
28) di-isopropyl ether	4.598	45	373953	39.68	ug/L	86
29) methacrylonitrile	5.907	41	36266	37.11	ug/L	85
30) 2-butanone	5.520	72	5802	31.93	ug/L	# 85
31) Hexane	4.245	41	117050	37.84	ug/L	# 69
32) 1,1-dichloroethane	4.501	63	261385	41.91	ug/L	98
33) tert-butyl ethyl ether	5.265	59	288273	41.70	ug/L	95
34) isobutyl alcohol	4.574	43	312840	195.23	ug/L	54
35) 2,2-dichloropropane	5.538	77	218645	42.09	ug/L	91
36) cis-1,2-dichloroethene	5.520	96	141700	41.30	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29050.D
 Acq On : 25 Mar 2014 8:40 pm
 Operator : amym
 Sample : mc29163-1ms
 Misc : MS31386,MSV1088,,,,5,5
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 26 08:55:49 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.577	43	312854m	38.61	ug/L	
38) bromochloromethane	5.941	128	65357	40.64	ug/L	97
39) chloroform	6.159	83	297129	43.01	ug/L	97
41) Tetrahydrofuran	5.949	42	10716	32.60	ug/L	80
42) 1,1,1-trichloroethane	6.407	97	341205	50.74	ug/L	96
44) Cyclohexane	6.514	56	191214	41.72	ug/L	97
45) carbon tetrachloride	6.662	117	339780	57.69	ug/L	100
46) 1,1-dichloropropene	6.674	75	188737	48.33	ug/L	94
47) benzene	6.994	78	412898	42.20	ug/L	99
48) 1,2-dichloroethane	7.118	62	191687	48.15	ug/L	94
49) tert-amyl methyl ether	7.284	73	189711	43.50	ug/L	90
50) heptane	7.554	43	100796	38.40	ug/L	88
51) trichloroethene	8.028	95	145858	45.94	ug/L	94
52) 1,2-dichloropropane	8.376	63	103006	44.36	ug/L	100
53) dibromomethane	8.480	93	66714	46.49	ug/L	86
54) bromodichloromethane	8.732	83	182132	48.87	ug/L	99
55) Methylcyclohexane	8.333	83	176632	43.03	ug/L	94
57) methyl methacrylate	8.510	69	29255	38.87	ug/L #	73
58) 1,4-dioxane	8.489	88	1771	160.81	ug/L	86
59) cis-1,3-dichloropropene	9.261	75	131934	38.85	ug/L	93
61) 4-methyl-2-pentanone	9.444	43	45259	39.21	ug/L	86
62) toluene	9.625	92	286243	47.84	ug/L	98
63) trans-1,3-dichloropropene	9.912	75	112406	52.96	ug/L	93
64) 1,1,2-trichloroethane	10.119	83	59500	45.04	ug/L	97
65) ethyl methacrylate	9.993	69	68932	39.69	ug/L	82
67) tetrachloroethene	10.178	166	154694	49.78	ug/L	91
68) 1,3-dichloropropane	10.280	76	114920	44.04	ug/L	98
69) dibromochloromethane	10.500	129	114237	45.72	ug/L	99
70) 1,2-dibromoethane	10.610	107	70241	44.22	ug/L	100
71) 2-hexanone	10.352	43	27285	32.02	ug/L	82
72) chlorobenzene	11.106	112	347422	44.49	ug/L	97
73) 1,1,1,2-tetrachloroethane	11.206	131	165409	52.35	ug/L	94
74) ethylbenzene	11.211	91	660202	49.79	ug/L	93
75) m,p-xylene	11.342	106	456643	95.83	ug/L	84
76) o-xylene	11.709	106	231760	47.30	ug/L	82
77) styrene	11.730	104	340598	47.38	ug/L	85
78) bromoform	11.904	173	52573	43.25	ug/L	96
79) trans-1,4-dichloro-2-b...	12.122	53	19932m	37.18	ug/L	
81) isopropylbenzene	12.061	105	706623	51.00	ug/L	98
83) bromobenzene	12.351	156	148859	47.22	ug/L	90
84) 1,1,2,2-tetrachloroethane	12.356	83	78068	44.25	ug/L	97
85) 1,2,3-trichloropropane	12.407	75	76876	42.29	ug/L	100
86) n-propylbenzene	12.450	91	749431	47.99	ug/L	97
87) 2-chlorotoluene	12.529	91	489589	47.22	ug/L	95
88) 4-chlorotoluene	12.639	91	560017	48.68	ug/L	94
89) 1,3,5-trimethylbenzene	12.619	105	614260	51.32	ug/L	95
90) tert-butylbenzene	12.906	91	358191	52.00	ug/L	88
91) 1,2,4-trimethylbenzene	12.959	105	602794	49.65	ug/L	95
92) sec-butylbenzene	13.108	105	686024	50.00	ug/L	99
93) 1,3-dichlorobenzene	13.216	146	302204	44.25	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29050.D
Acq On : 25 Mar 2014 8:40 pm
Operator : amym
Sample : mc29163-1ms
Misc : MS31386,MSV1088,,,,,5,5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 26 08:55:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	13.249	119	634849	51.25	ug/L	95
95)	1,4-dichlorobenzene	13.312	146	294201	44.19	ug/L	98
96)	1,2-dichlorobenzene	13.628	146	273506	42.33	ug/L	99
97)	n-butylbenzene	13.614	91	530414	49.04	ug/L	100
98)	1,2-dibromo-3-chloropr...	14.330	75	10581	36.11	ug/L	79
99)	1,3,5-trichlorobenzene	14.495	180	202832	41.25	ug/L	100
100)	1,2,4-trichlorobenzene	15.050	180	137819	34.14	ug/L	99
101)	hexachlorobutadiene	15.172	225	71351	41.50	ug/L	96
102)	naphthalene	15.285	128	144832	28.89	ug/L	100
103)	1,2,3-trichlorobenzene	15.473	180	90631	31.83	ug/L	98
104)	2-Methylnaphthalene	16.282	142	6328	12.75	ug/L	97
105)	1-Methylnaphthalene	16.452	142	4207	9.88	ug/L	100

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

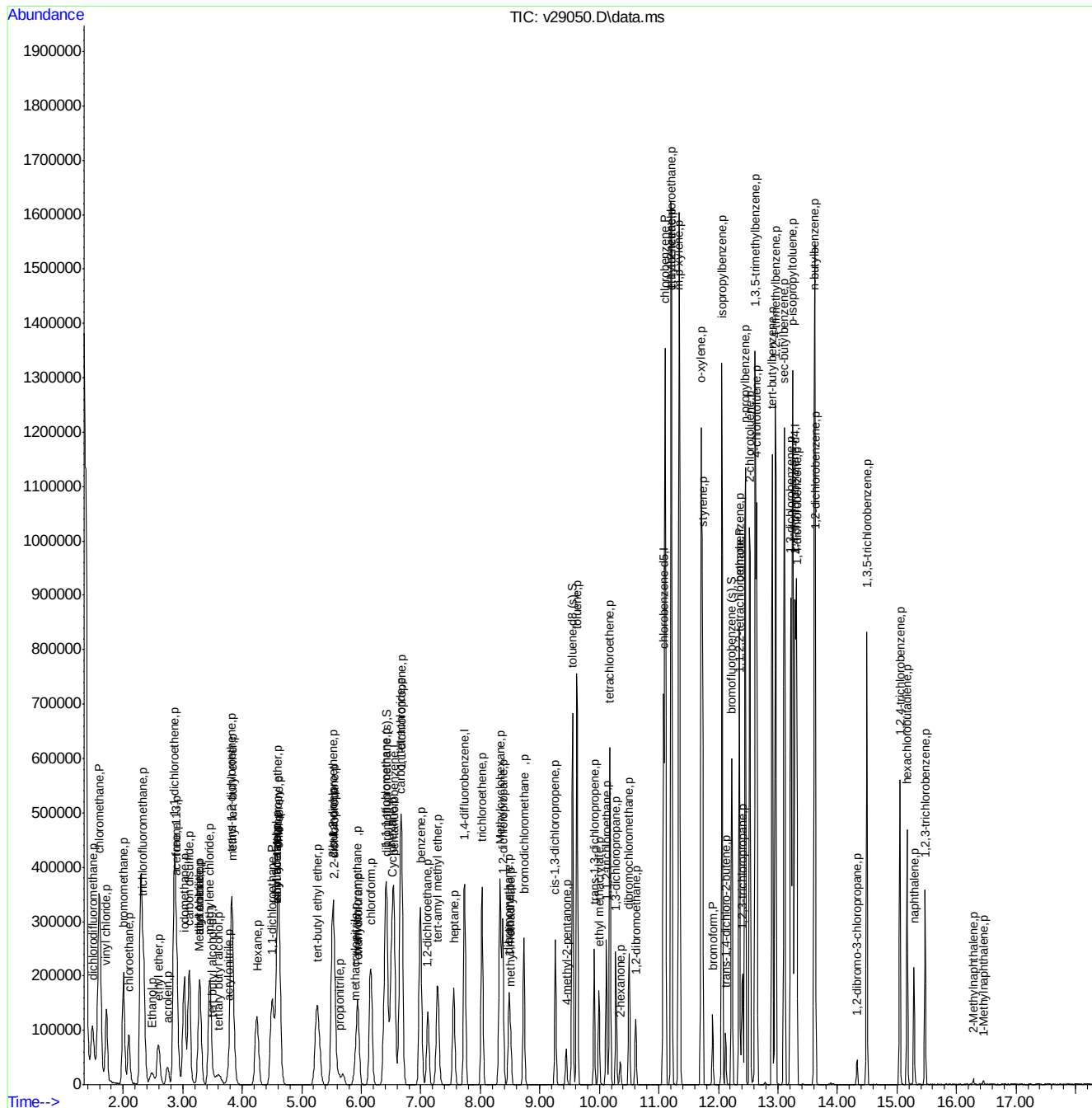
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7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29050.D
Acq On : 25 Mar 2014 8:40 pm
Operator : amym
Sample : mc29163-1ms
Misc : MS31386,MSV1088,,,,,5,5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 26 08:55:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



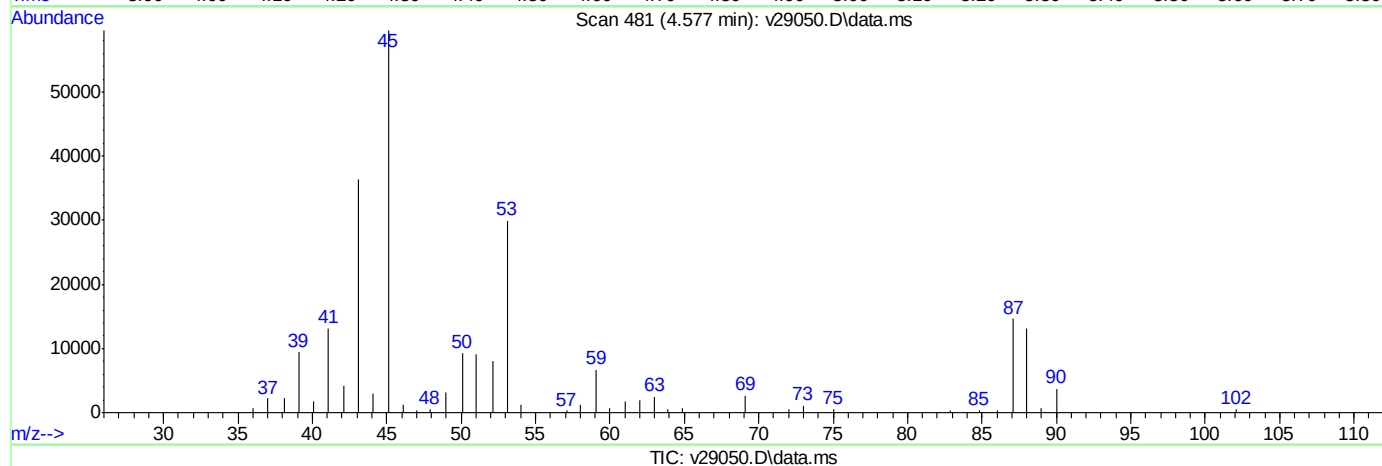
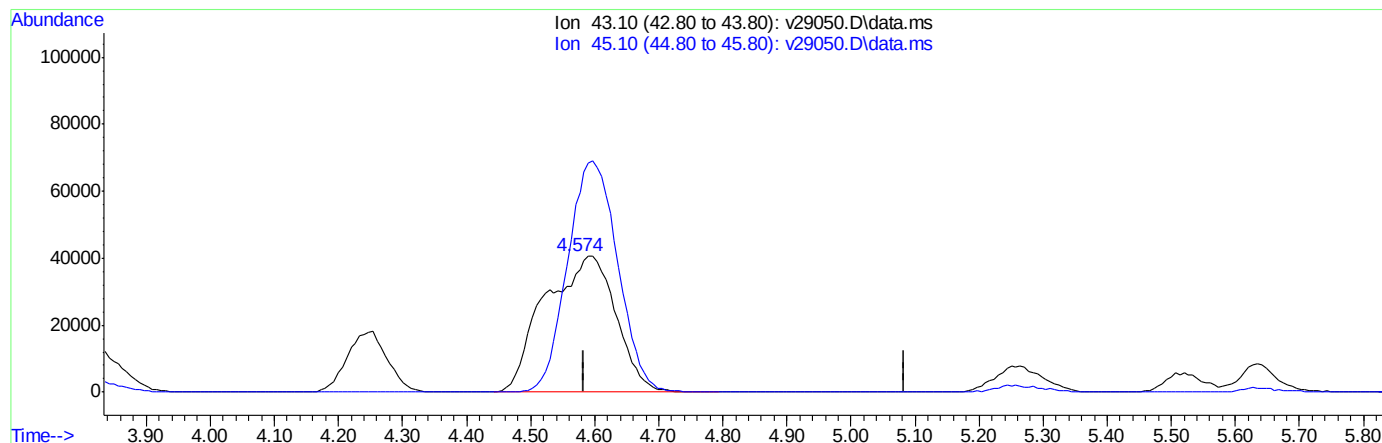
7.4.1



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29050.D
Acq On : 25 Mar 2014 8:40 pm
Operator : amym
Sample : mc29163-1ms
Misc : MS31386,MSV1088,,,,,5,5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 26 08:39:14 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.577min (-0.007) 38.61ug/L m

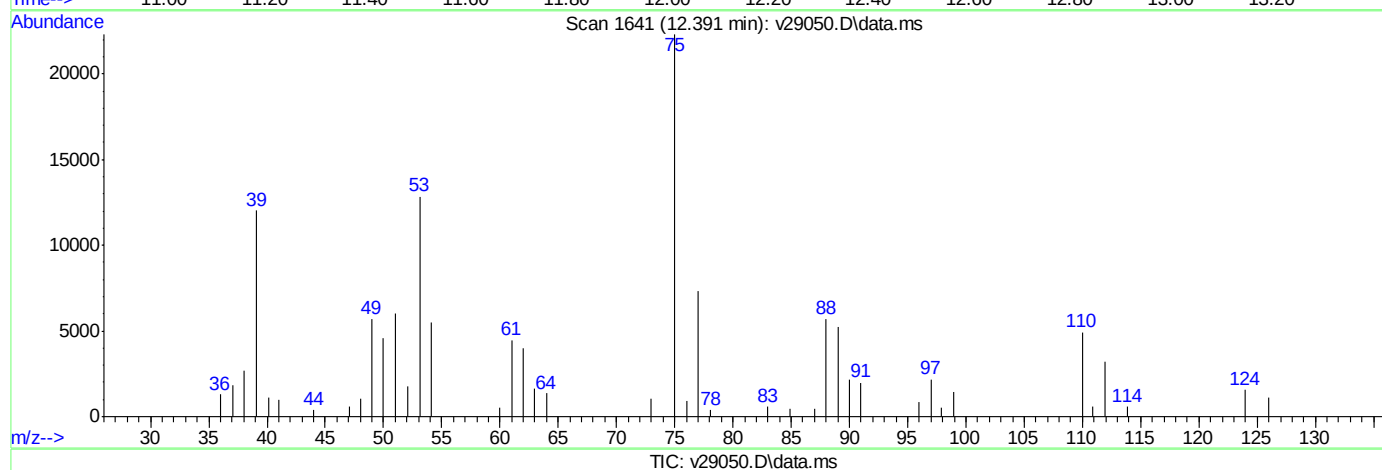
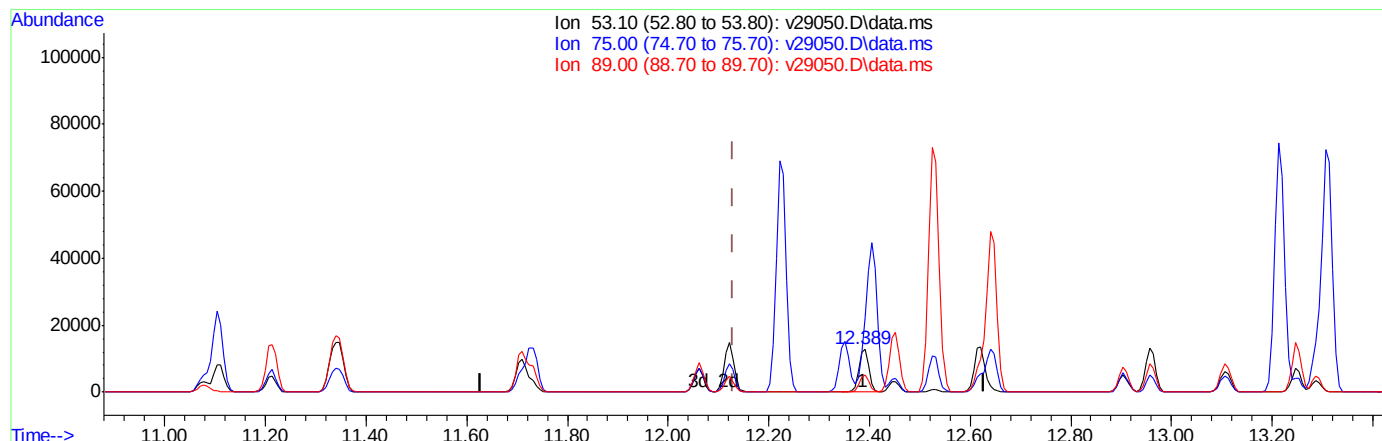
response 312854

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29050.D
Acq On : 25 Mar 2014 8:40 pm
Operator : amym
Sample : mc29163-1ms
Misc : MS31386,MSV1088,,,,,5,5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 26 08:39:14 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.389min (+0.260) 33.74ug/L

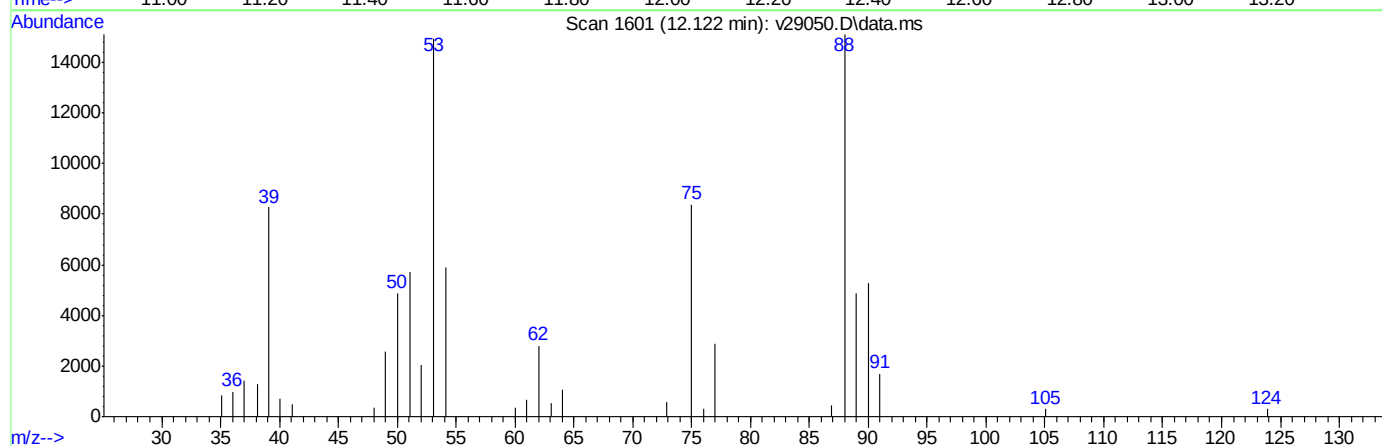
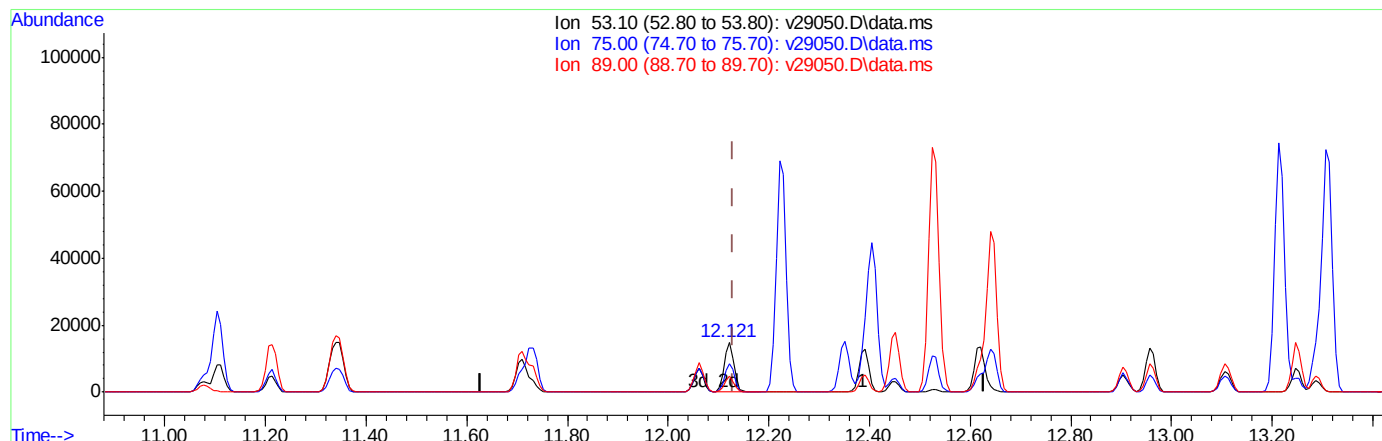
response 17967

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	131.68
89.00	51.30	40.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29050.D
Acq On : 25 Mar 2014 8:40 pm
Operator : amym
Sample : mc29163-1ms
Misc : MS31386,MSV1088,,,,5,5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Mar 26 08:39:14 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.122min (-0.007) 37.18ug/L m

response 19932

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	56.17#
89.00	51.30	32.71
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29051.D
 Acq On : 25 Mar 2014 9:06 pm
 Operator : amym
 Sample : mc29163-1msd
 Misc : MS31386,MSV1088,,,,,5,5
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 26 08:56:47 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.495	65	36969	500.00	ug/L	#-0.01
4) pentafluorobenzene	6.551	168	285241	50.00	ug/L	-0.02
43) 1,4-difluorobenzene	7.735	114	383766	50.00	ug/L	-0.01
66) chlorobenzene-d5	11.077	82	182688	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.289	152	184852	50.00	ug/L	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	6.429	113	161580	41.25	ug/L	-0.02
Spiked Amount	50.000	Range	70 - 130	Recovery	=	82.50%
60) toluene-d8 (s)	9.549	98	428536	44.14	ug/L	-0.01
Spiked Amount	50.000	Range	70 - 130	Recovery	=	88.28%
82) bromofluorobenzene (s)	12.226	95	172259	46.57	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	93.14%

Target Compounds						Qvalue
2) tertiary butyl alcohol	3.607	59	46173	502.09	ug/L	# 56
3) Ethanol	2.488	45	59366	4220.98	ug/L	# 100
5) dichlorodifluoromethane	1.486	85	226067	29.11	ug/L	98
6) chloromethane	1.609	50	246344	41.50	ug/L	94
7) vinyl chloride	1.717	62	216017	39.10	ug/L	100
8) bromomethane	2.006	96	193856	41.75	ug/L	100
9) chloroethane	2.098	64	122647	45.08	ug/L	97
10) ethyl ether	2.595	59	85262	41.43	ug/L	97
11) acetonitrile	3.286	41	216281	43.04	ug/L	77
12) trichlorofluoromethane	2.334	101	424428	48.10	ug/L	97
13) freon-113	2.887	101	211782	46.42	ug/L	94
14) acrolein	2.746	56	48439	272.60	ug/L	95
15) 1,1-dichloroethene	2.859	96	163678	44.98	ug/L	83
16) acetone	2.892	58	4680	22.68	ug/L	# 32
17) Methyl Acetate	3.268	43	46200	39.17	ug/L	95
18) methylene chloride	3.454	84	151681	40.90	ug/L	88
19) methyl tert butyl ether	3.828	73	278211	41.62	ug/L	93
20) acrylonitrile	3.773	53	23576	37.56	ug/L	99
21) allyl chloride	3.286	41	216281	43.04	ug/L	90
22) trans-1,2-dichloroethene	3.825	96	162455	43.16	ug/L	88
23) iodomethane	3.025	142	377741	39.88	ug/L	81
24) carbon disulfide	3.109	76	501326	40.28	ug/L	99
25) propionitrile	5.629	54	6131	34.27	ug/L	100
26) vinyl acetate	4.572	43	335256	40.27	ug/L	88
27) chloroprene	4.610	53	266918	56.76	ug/L	80
28) di-isopropyl ether	4.597	45	397604	40.81	ug/L	90
29) methacrylonitrile	5.908	41	38811	38.42	ug/L	79
30) 2-butanone	5.521	72	5973	31.80	ug/L	# 85
31) Hexane	4.243	41	121773	38.08	ug/L	# 71
32) 1,1-dichloroethane	4.500	63	281598	43.68	ug/L	97
33) tert-butyl ethyl ether	5.264	59	312847	43.79	ug/L	97
34) isobutyl alcohol	4.572	43	335256	202.41	ug/L	59
35) 2,2-dichloropropane	5.537	77	228348	42.50	ug/L	91
36) cis-1,2-dichloroethene	5.520	96	151285	42.66	ug/L	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29051.D
 Acq On : 25 Mar 2014 9:06 pm
 Operator : amym
 Sample : mc29163-1msd
 Misc : MS31386,MSV1088,,,,,5,5
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 26 08:56:47 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.570	43	335260m	40.03	ug/L	
38) bromochloromethane	5.940	128	69409	41.75	ug/L	94
39) chloroform	6.159	83	315099	44.12	ug/L	100
41) Tetrahydrofuran	5.947	42	11267	33.16	ug/L	94
42) 1,1,1-trichloroethane	6.406	97	352854	50.76	ug/L	97
44) Cyclohexane	6.512	56	199697	41.58	ug/L	97
45) carbon tetrachloride	6.661	117	345851	56.04	ug/L	98
46) 1,1-dichloropropene	6.674	75	196780	48.09	ug/L	94
47) benzene	6.993	78	442702	43.18	ug/L	97
48) 1,2-dichloroethane	7.118	62	199857	47.91	ug/L	95
49) tert-amyl methyl ether	7.284	73	202852	44.40	ug/L	91
50) heptane	7.553	43	102828	37.44	ug/L	91
51) trichloroethene	8.028	95	153092	46.02	ug/L	95
52) 1,2-dichloropropane	8.376	63	106981	43.97	ug/L	100
53) dibromomethane	8.480	93	69457	46.19	ug/L	85
54) bromodichloromethane	8.732	83	190078	48.68	ug/L	100
55) Methylcyclohexane	8.332	83	180960	42.13	ug/L	90
57) methyl methacrylate	8.510	69	31207	39.57	ug/L #	79
58) 1,4-dioxane	8.488	88	2210	187.14	ug/L	76
59) cis-1,3-dichloropropene	9.260	75	141579	39.76	ug/L	95
61) 4-methyl-2-pentanone	9.444	43	46960	38.83	ug/L	88
62) toluene	9.625	92	300008	47.86	ug/L	97
63) trans-1,3-dichloropropene	9.912	75	119996	53.81	ug/L	90
64) 1,1,2-trichloroethane	10.119	83	62179	44.92	ug/L	99
65) ethyl methacrylate	9.994	69	72836	40.03	ug/L	82
67) tetrachloroethene	10.178	166	159015	49.87	ug/L	92
68) 1,3-dichloropropane	10.280	76	121378	45.34	ug/L	96
69) dibromochloromethane	10.500	129	118241	46.12	ug/L	98
70) 1,2-dibromoethane	10.609	107	74871	45.94	ug/L	100
71) 2-hexanone	10.352	43	29040	33.21	ug/L	79
72) chlorobenzene	11.106	112	367649	45.89	ug/L	97
73) 1,1,1,2-tetrachloroethane	11.206	131	173473	53.51	ug/L	93
74) ethylbenzene	11.211	91	684007	50.27	ug/L	94
75) m,p-xylene	11.342	106	472408	96.63	ug/L #	80
76) o-xylene	11.710	106	243871	48.51	ug/L #	80
77) styrene	11.730	104	355724	48.23	ug/L	85
78) bromoform	11.904	173	54141	43.41	ug/L	99
79) trans-1,4-dichloro-2-b...	12.122	53	20087m	36.56	ug/L	
81) isopropylbenzene	12.062	105	730727	53.08	ug/L	96
83) bromobenzene	12.352	156	155514	49.64	ug/L	93
84) 1,1,2,2-tetrachloroethane	12.357	83	82169	46.87	ug/L	98
85) 1,2,3-trichloropropane	12.407	75	82435	45.64	ug/L	100
86) n-propylbenzene	12.450	91	777891	50.13	ug/L	97
87) 2-chlorotoluene	12.529	91	507115	49.22	ug/L	97
88) 4-chlorotoluene	12.640	91	574544	50.26	ug/L	94
89) 1,3,5-trimethylbenzene	12.620	105	633714	53.28	ug/L	94
90) tert-butylbenzene	12.906	91	371390	54.26	ug/L	87
91) 1,2,4-trimethylbenzene	12.960	105	622690	51.61	ug/L	96
92) sec-butylbenzene	13.109	105	719954	52.81	ug/L	98
93) 1,3-dichlorobenzene	13.217	146	319421	47.06	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29051.D
Acq On : 25 Mar 2014 9:06 pm
Operator : amym
Sample : mc29163-1msd
Misc : MS31386,MSV1088,,,,,5,5
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 26 08:56:47 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	13.250	119	658265	53.48	ug/L	95
95) 1,4-dichlorobenzene	13.312	146	307406	46.47	ug/L	98
96) 1,2-dichlorobenzene	13.629	146	289260	45.05	ug/L	100
97) n-butylbenzene	13.614	91	550534	51.22	ug/L	99
98) 1,2-dibromo-3-chloropr...	14.331	75	12245	41.66	ug/L	85
99) 1,3,5-trichlorobenzene	14.496	180	225051	46.06	ug/L	98
100) 1,2,4-trichlorobenzene	15.051	180	175014	43.64	ug/L	99
101) hexachlorobutadiene	15.172	225	78020	45.67	ug/L	92
102) naphthalene	15.285	128	229511	46.07	ug/L	100
103) 1,2,3-trichlorobenzene	15.474	180	136480	48.24	ug/L	97
104) 2-Methylnaphthalene	16.284	142	26210	21.19	ug/L	99
105) 1-Methylnaphthalene	16.454	142	23406	21.68	ug/L	99

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

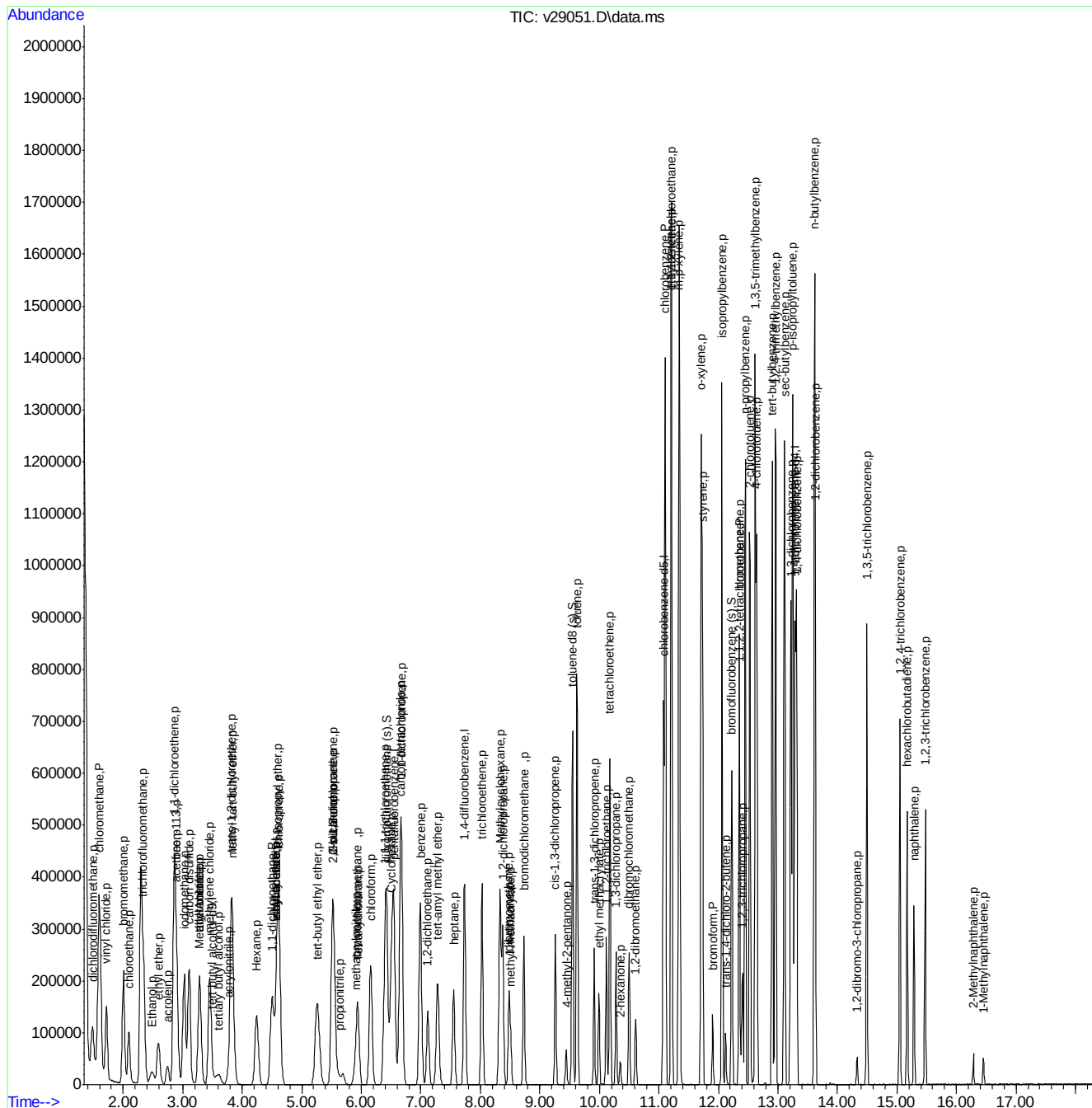
Quantitation Report (QT Reviewed)

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Data Path   : C:\msdchem\1\DATA\V140325\
Data File   : v29051.D
Acq On      : 25 Mar 2014    9:06 pm
Operator    : amym
Sample      : mc29163-1msd
Misc        : MS31386,MSV1088,,,,,5,5
ALS Vial    : 27      Sample Multiplier: 1

```

Quant Time: Mar 26 08:56:47 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



v140226w.m Wed Mar 26 08:57:05 2014

Page: 4

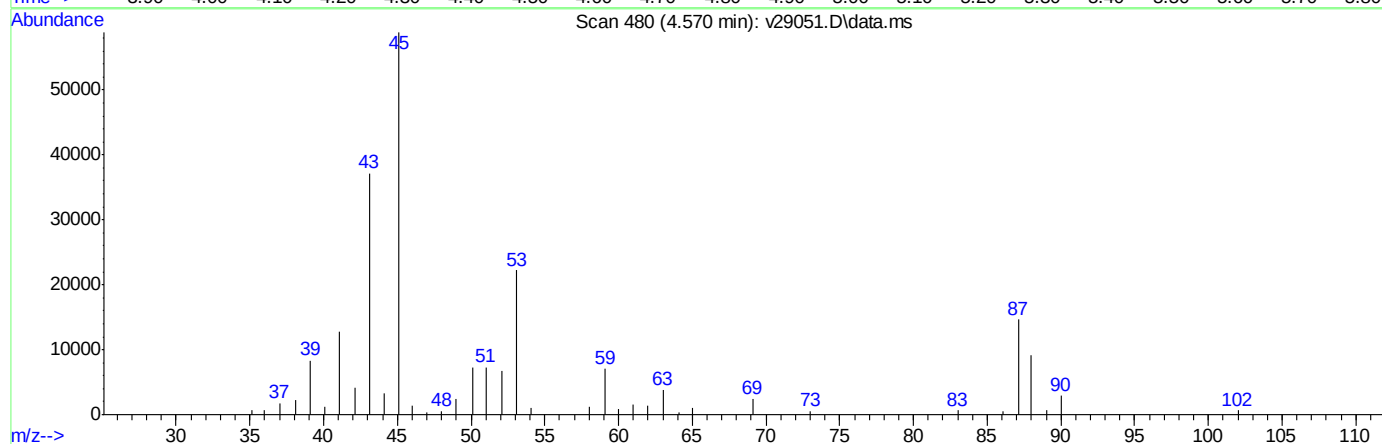
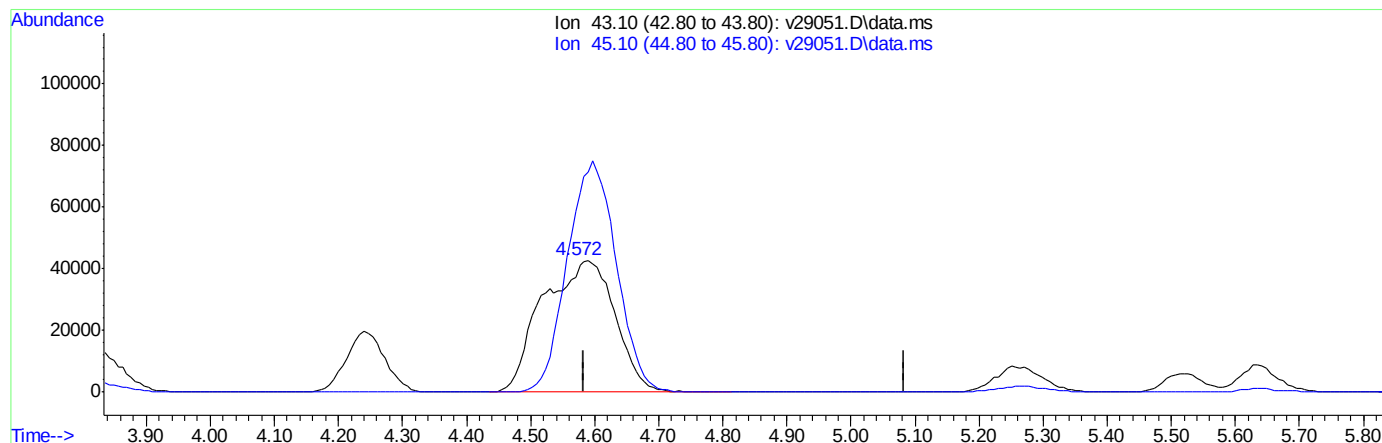
7.4.2



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29051.D
Acq On : 25 Mar 2014 9:06 pm
Operator : amym
Sample : mc29163-1msd
Misc : MS31386,MSV1088,,,,,5,5
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 26 08:39:17 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.570min (-0.014) 40.03ug/L m

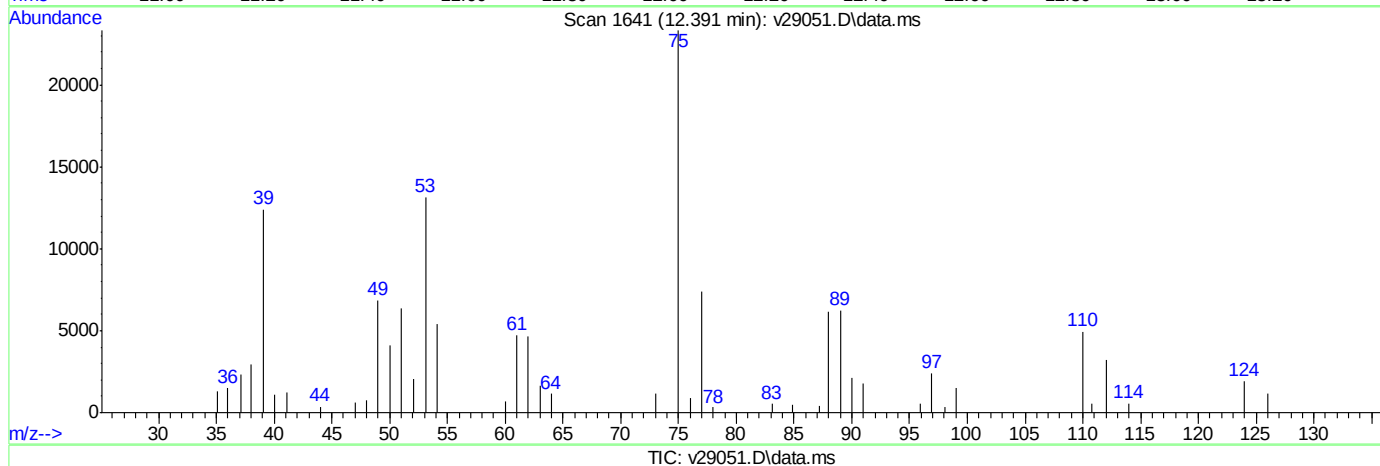
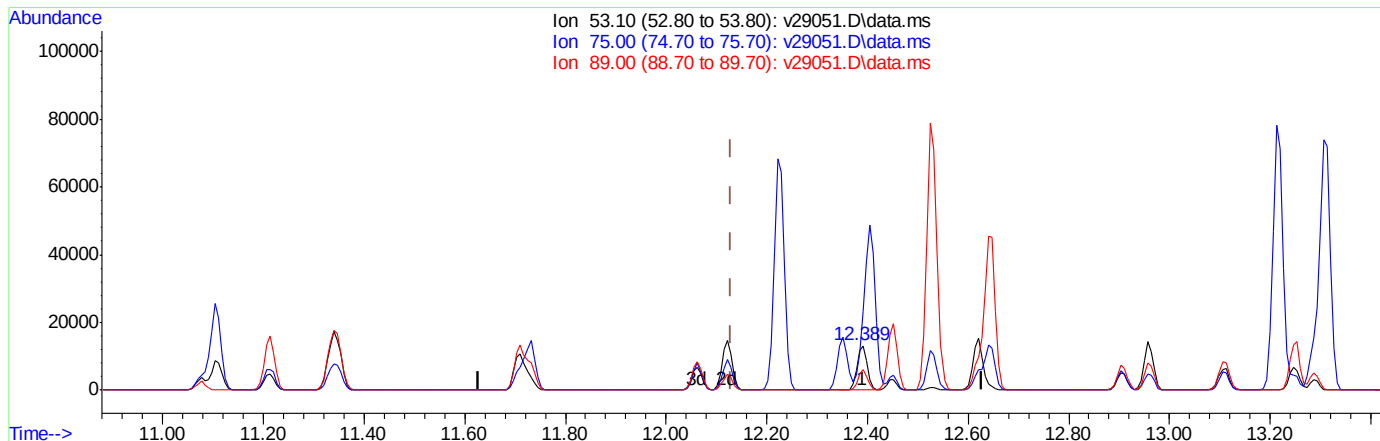
response 335260

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29051.D
Acq On : 25 Mar 2014 9:06 pm
Operator : amym
Sample : mc29163-1msd
Misc : MS31386,MSV1088,,,,5,5
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 26 08:39:17 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.389min (+0.260) 33.20ug/L

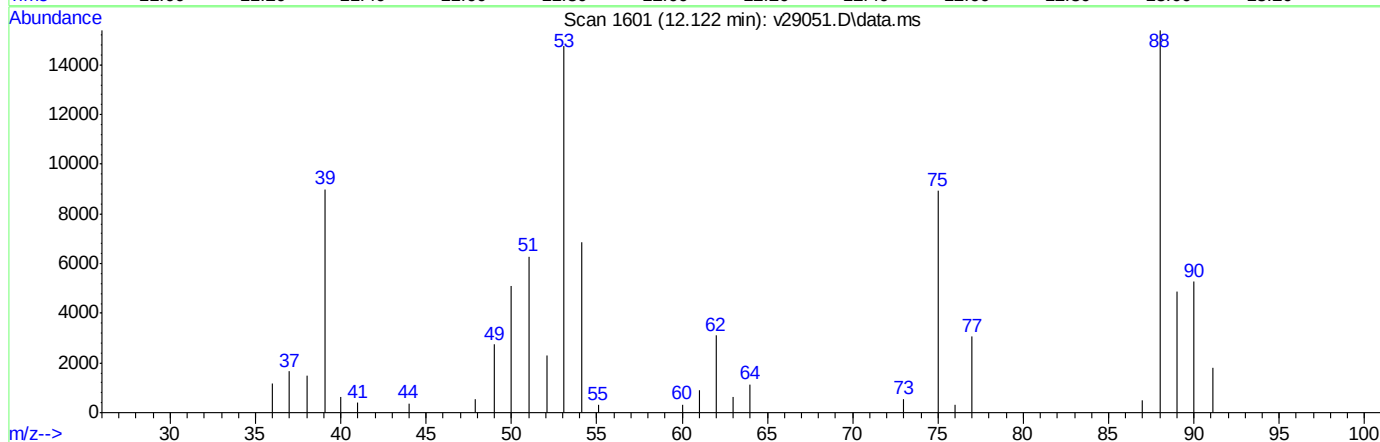
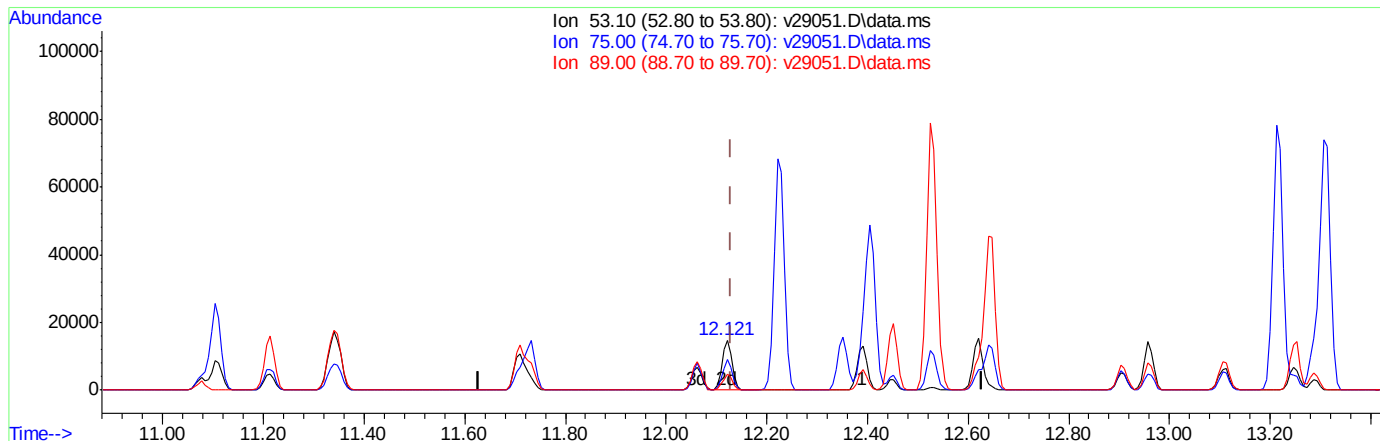
response 18118

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	134.06
89.00	51.30	47.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29051.D
Acq On : 25 Mar 2014 9:06 pm
Operator : amym
Sample : mc29163-1msd
Misc : MS31386,MSV1088,,,,,5,5
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 26 08:39:17 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.122min (-0.007) 36.56ug/L m

response 20087

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	60.53#
89.00	51.30	32.96
0.00	0.00	0.00

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\V140226\v28201.D

Vial: 11

Acq On : 26 Feb 2014 1:50 pm

Operator: amym

Sample : bfb

Inst : MSV

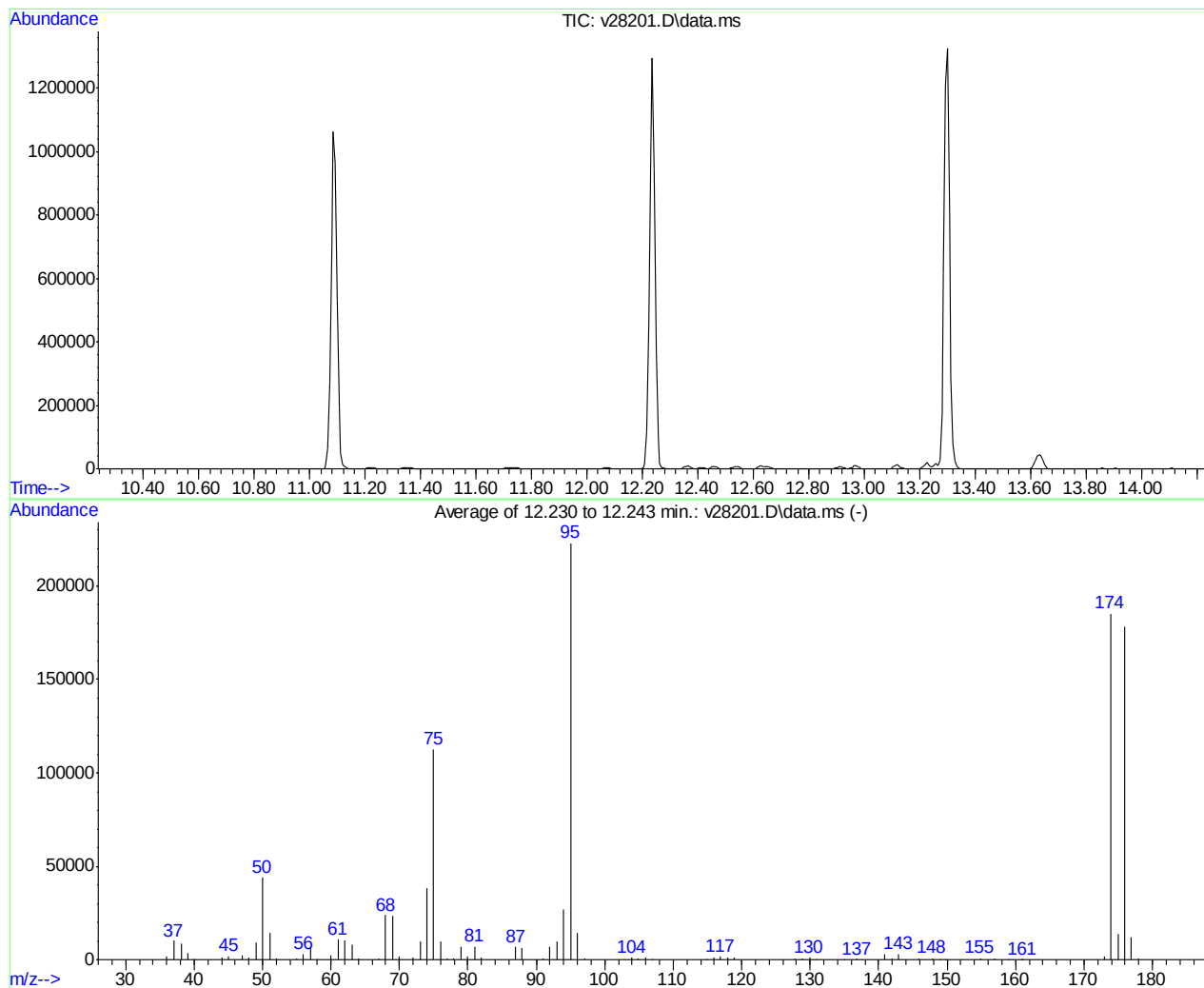
Misc : MS31132,MSV1058,,,,,5,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\v140226w.m (RTE Integrator)

Title : SW-846 Method 8260



Spectrum Information: Average of 12.230 to 12.243 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	43757	PASS
75	95	30	60	50.6	112859	PASS
95	95	100	100	100.0	223104	PASS
96	95	5	9	6.5	14499	PASS
173	174	0.00	2	1.0	1929	PASS
174	95	50	100	83.0	185195	PASS
175	174	5	9	7.5	13798	PASS
176	174	95	101	96.4	178539	PASS
177	176	5	9	6.6	11776	PASS

v28201.D v140226w.m Fri Feb 28 09:47:17 2014

Average of 12.230 to 12.243 min.: v28201.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1862	51.05	14154	67.00	556	79.00	6616
37.05	10276	52.05	529	68.00	23885	79.95	1697
38.10	8850	55.05	645	69.00	23707	80.95	6906
39.10	3679	56.00	3145	70.00	1884	82.00	1314
39.90	221	57.00	6168	72.00	1212	86.95	6600
44.00	1118	58.00	110	73.00	9978	87.95	6038
45.05	1972	60.05	2063	74.00	38565	90.95	794
47.00	2240	61.00	10656	75.00	112859	92.00	6824
48.00	1340	62.05	10380	76.05	9894	93.00	9886
49.05	9189	63.05	7741	77.00	875	94.00	26941
50.00	43757	64.00	695	77.90	649	95.00	223104

Average of 12.230 to 12.243 min.: v28201.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	14499	127.85	856	148.90	108	176.95	11776
97.05	405	128.85	402	149.80	138	177.95	391
103.95	1085	129.90	1057	154.90	710		
104.85	403	130.90	275	156.90	467		
105.95	1077	134.95	290	158.90	113		
106.90	107	136.85	371	160.80	100		
114.90	145	140.85	2653	161.00	160		
115.90	978	141.95	366	173.05	1929		
116.90	1573	142.95	2865	173.90	185195		
117.95	904	145.85	342	174.95	13798		
118.90	1256	147.85	587	175.90	178539		

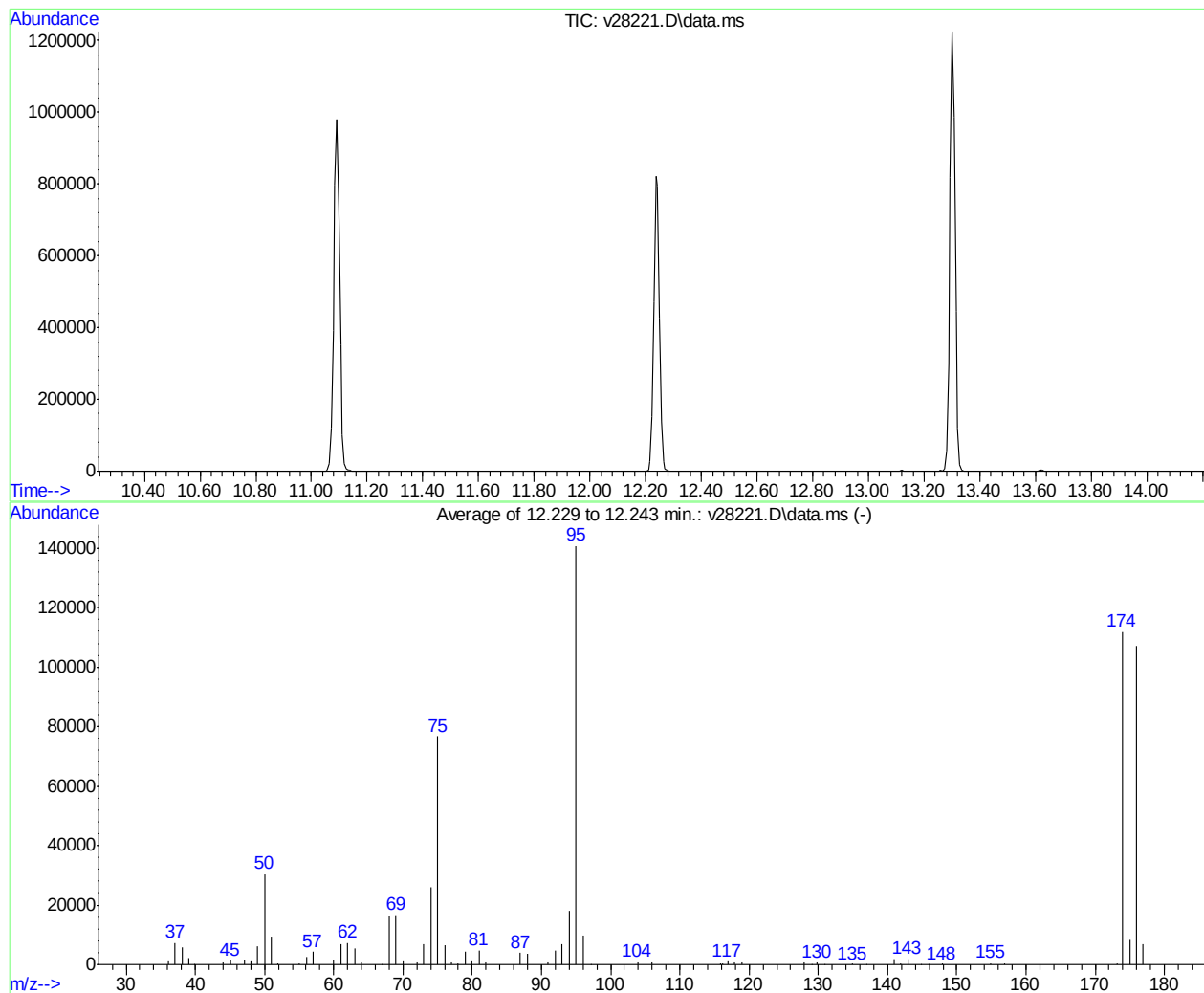
7.5.1

7

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\V140227\v28221.D Vial: 5
Acq On : 27 Feb 2014 11:01 am Operator: amym
Sample : bfb Inst : MSV
Misc : MS31132,MSV1058,,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\v140226w.m (RTE Integrator)
Title : SW-846 Method 8260



Spectrum Information: Average of 12.229 to 12.243 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	30301	PASS
75	95	30	60	54.5	76773	PASS
95	95	100	100	100.0	140800	PASS
96	95	5	9	7.0	9892	PASS
173	174	0.00	2	0.5	531	PASS
174	95	50	100	79.4	111797	PASS
175	174	5	9	7.3	8164	PASS
176	174	95	101	95.7	106939	PASS
177	176	5	9	6.3	6783	PASS

v28221.D v140226w.m Fri Feb 28 10:05:06 2014

Average of 12.229 to 12.243 min.: v28221.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1230	51.05	9335	68.00	16276	79.95	1146
37.05	7339	51.95	421	69.00	16724	80.95	4834
38.10	5891	55.05	421	70.00	1213	82.00	777
39.05	2201	56.05	2544	72.05	790	86.95	3878
39.90	159	57.00	4285	73.00	6856	87.95	3569
44.00	859	60.00	1434	74.00	25835	90.95	633
45.05	1338	61.00	7035	75.00	76773	92.00	4798
47.05	1598	62.00	7362	76.05	6428	93.00	6693
48.00	972	63.05	5553	77.00	719	94.00	17890
49.00	6310	64.05	563	77.90	313	95.00	140800
50.00	30301	66.90	154	78.95	4492	96.00	9892

Average of 12.229 to 12.243 min.: v28221.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.10	123	130.90	101	173.10	531		
103.90	802	134.95	230	173.90	111797		
105.95	731	136.90	110	175.00	8164		
115.90	379	140.95	1832	175.95	106939		
116.10	212	141.95	266	176.95	6783		
116.95	1020	142.95	1951				
117.90	637	144.90	115				
118.95	875	145.90	117				
127.95	576	147.90	357				
129.00	103	154.95	412				
129.85	591	156.95	271				

7.5.2

7

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\V140325\v29025.D

Vial: 1

Acq On : 25 Mar 2014 9:38 am

Operator: amym

Sample : bfb

Inst : MSV

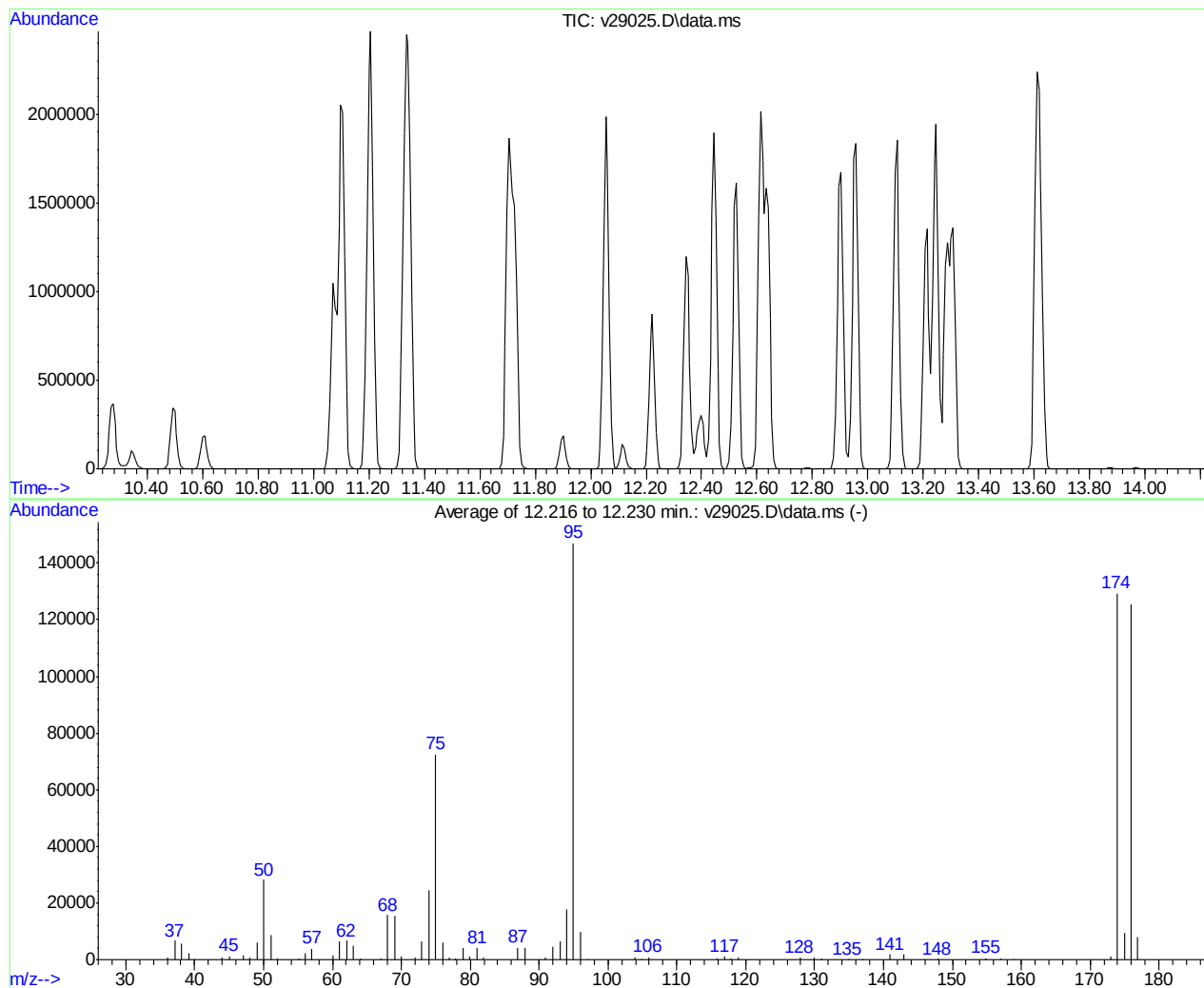
Misc : MS31383,MSV1088,,,,,5,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\v140226w.m (RTE Integrator)

Title : SW-846 Method 8260



Spectrum Information: Average of 12.216 to 12.230 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.2	28171	PASS
75	95	30	60	49.2	72443	PASS
95	95	100	100	100.0	147093	PASS
96	95	5	9	6.6	9678	PASS
173	174	0.00	2	0.8	1087	PASS
174	95	50	100	88.0	129371	PASS
175	174	5	9	7.4	9549	PASS
176	174	95	101	97.0	125507	PASS
177	176	5	9	6.4	8058	PASS

v29025.D v140226w.m Tue Mar 25 10:26:00 2014

Average of 12.216 to 12.230 min.: v29025.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	884	51.05	8807	68.00	15678	79.00	4099
37.10	6654	52.00	308	69.00	15456	79.95	1093
38.10	5785	55.05	418	70.00	985	81.00	4013
39.10	2189	56.05	2110	72.00	747	81.90	825
39.95	29	57.05	3954	73.00	6595	86.95	4250
44.00	890	60.00	1457	74.00	24464	87.95	4105
45.00	1296	61.00	6431	75.00	72443	90.95	590
47.05	1370	62.05	6647	76.00	6219	92.00	4607
48.00	852	63.00	4973	76.95	817	93.00	6587
49.00	6161	64.05	325	77.80	141	94.00	17750
50.05	28171	67.00	274	77.95	308	95.00	147093

Average of 12.216 to 12.230 min.: v29025.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	9678	130.95	266	173.00	1087		
97.00	151	134.90	178	173.90	129371		
103.90	744	136.90	120	174.95	9549		
104.90	148	140.95	1720	175.90	125507		
105.90	792	142.95	1714	176.95	8058		
115.90	565	145.90	126				
116.95	1021	147.90	341				
117.90	583	154.80	116				
118.95	833	154.95	391				
127.90	686	157.00	223				
129.90	648	158.90	110				

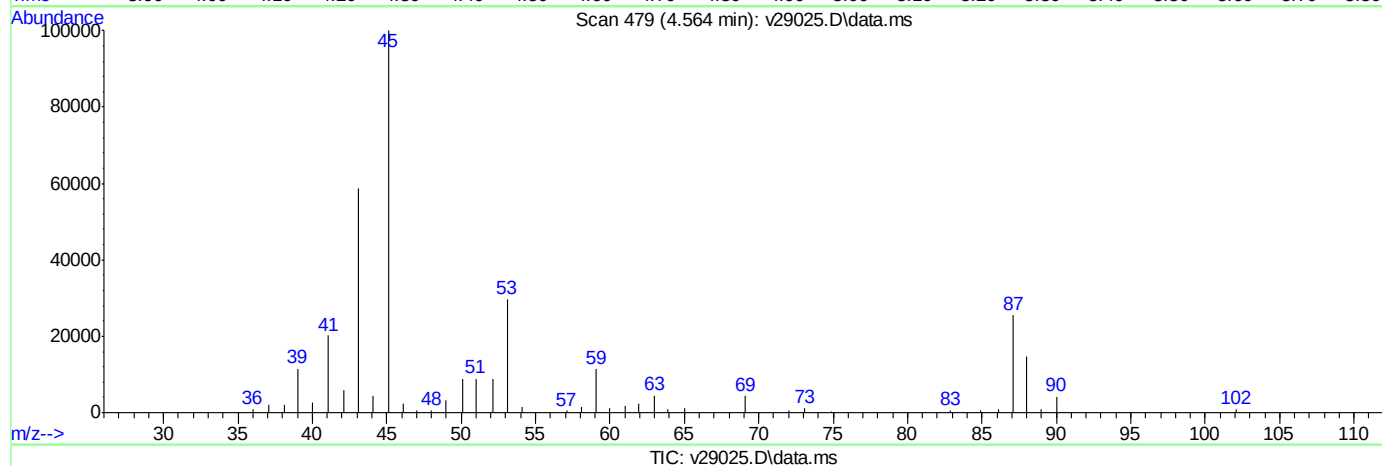
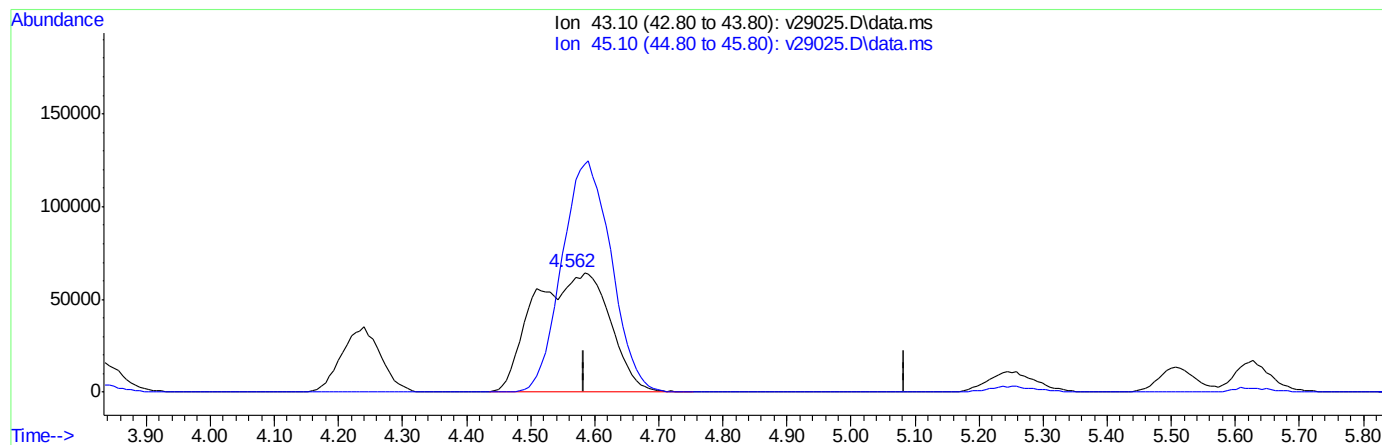
7.5.3

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29025.D
Acq On : 25 Mar 2014 9:38 am
Operator : amym
Sample : bfb
Misc : MS31383,MSV1088,,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 25 10:08:36 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.564min (-0.020) 42.30ug/L m

response 533247

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28203.D
 Acq On : 26 Feb 2014 2:42 pm
 Operator : amym
 Sample : ic1058-0.25
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 27 08:00:39 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.515	65	64815	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.572	168	424956	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.751	114	583644	50.00	ug/L	0.00
66) chlorobenzene-d5	11.087	82	286890	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.299	152	303870	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
60) toluene-d8 (s)	0.000	98	0d	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
82) bromofluorobenzene (s)	0.000	95	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
Target Compounds						
51) trichloroethene	8.045	95	1234	0.26	ug/L	Qvalue 87
67) tetrachloroethene	10.188	166	1197	0.24	ug/L	# 73

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

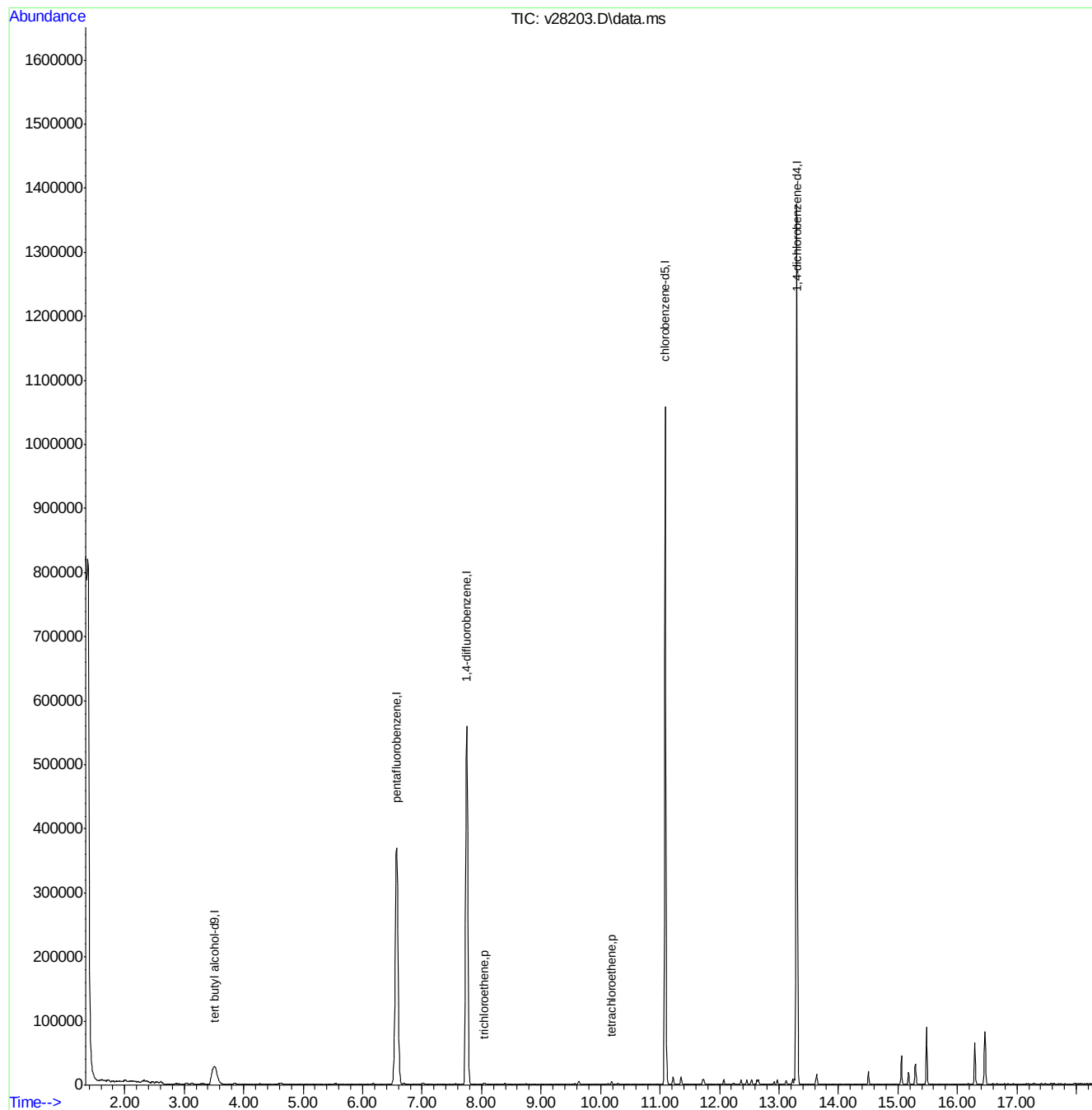
7.6.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28203.D
Acq On : 26 Feb 2014 2:42 pm
Operator : amym
Sample : ic1058-0.25
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 27 08:00:39 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28204.D
 Acq On : 26 Feb 2014 3:08 pm
 Operator : amym
 Sample : ic1058-0.5
 Misc : MS31132,MSV1058,,,,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 08:02:01 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

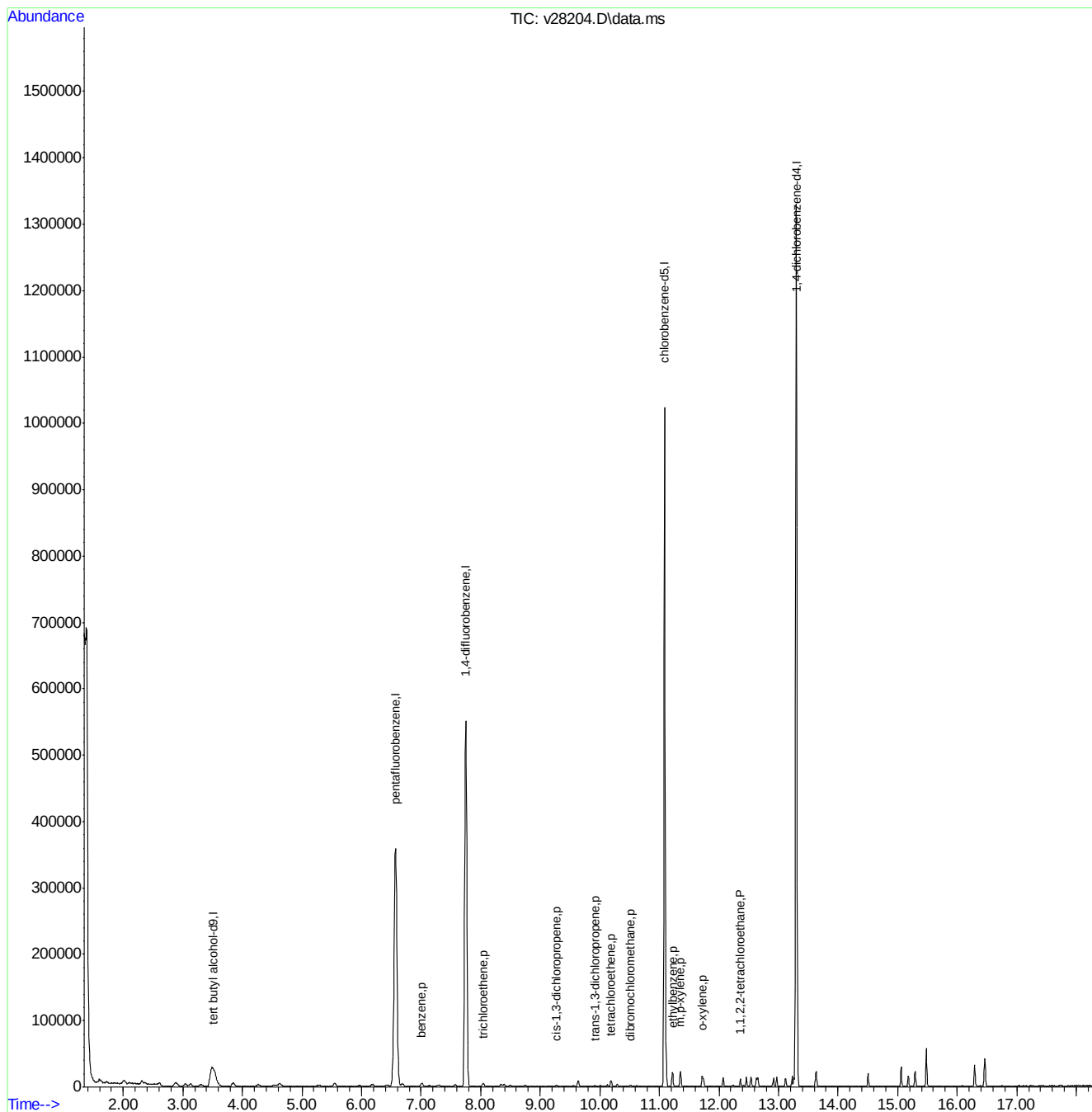
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.515	65	63696	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.571	168	409115	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.751	114	561114	50.00	ug/L	0.00
66) chlorobenzene-d5	11.087	82	274316	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.299	152	289237	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
60) toluene-d8 (s)	0.000	98	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
82) bromofluorobenzene (s)	0.000	95	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
Target Compounds						
47) benzene	7.011	78	7780	0.56	ug/L	Qvalue 93
51) trichloroethene	8.043	95	2671	0.58	ug/L	89
59) cis-1,3-dichloropropene	9.270	75	1481	0.30	ug/L	50
63) trans-1,3-dichloropropene	9.923	75	1017	0.29	ug/L	50
67) tetrachloroethene	10.190	166	2490	0.53	ug/L	90
69) dibromochloromethane	10.512	129	1469	0.40	ug/L	94
74) ethylbenzene	11.222	91	9929	0.50	ug/L	99
75) m,p-xylene	11.352	106	6682	0.92	ug/L	85
76) o-xylene	11.719	106	3542	0.47	ug/L	91
84) 1,1,2,2-tetrachloroethane	12.365	83	1420	0.52	ug/L	63

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28204.D
Acq On : 26 Feb 2014 3:08 pm
Operator : amym
Sample : ic1058-0.5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 08:02:01 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28205.D
 Acq On : 26 Feb 2014 3:34 pm
 Operator : amym
 Sample : ic1058-1
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 27 08:04:52 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.514	65	55446	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.571	168	397401	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.751	114	549258	50.00	ug/L	0.00
66) chlorobenzene-d5	11.087	82	261298	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.299	152	272100	50.00	ug/L	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
60) toluene-d8 (s)	0.000	98	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
82) bromofluorobenzene (s)	0.000	95	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#

Target Compounds				Qvalue		
5) dichlorodifluoromethane	1.519	85	8165m	0.67	ug/L	
6) chloromethane	1.607	50	7500	0.87	ug/L	87
7) vinyl chloride	1.719	62	6616	0.80	ug/L	73
8) bromomethane	2.011	96	5819	0.86	ug/L	82
9) chloroethane	2.118	64	4566	1.24	ug/L	91
10) ethyl ether	2.610	59	3236	1.18	ug/L	83
11) acetonitrile	3.306	41	7011	0.99	ug/L	82
12) trichlorofluoromethane	2.347	101	9467	0.69	ug/L	80
13) freon-113	2.900	101	6951	1.01	ug/L	84
15) 1,1-dichloroethene	2.872	96	5144	1.01	ug/L	92
18) methylene chloride	3.474	84	6126	1.24	ug/L	# 80
19) methyl tert butyl ether	3.844	73	8859	0.96	ug/L	94
21) allyl chloride	3.306	41	7011	0.99	ug/L	92
22) trans-1,2-dichloroethene	3.849	96	5624	1.12	ug/L	82
23) iodomethane	3.041	142	14280	1.12	ug/L	83
24) carbon disulfide	3.125	76	18162	1.05	ug/L	100
27) chloroprene	4.633	53	6633	0.98	ug/L	94
28) di-isopropyl ether	4.618	45	13345	0.99	ug/L	83
31) Hexane	4.262	41	4700	1.06	ug/L	# 68
32) 1,1-dichloroethane	4.523	63	9860	1.14	ug/L	95
33) tert-butyl ethyl ether	5.283	59	9467	0.95	ug/L	96
34) isobutyl alcohol	4.593	43	11115	4.85	ug/L	45
35) 2,2-dichloropropane	5.553	77	4657	0.71	ug/L	89
36) cis-1,2-dichloroethene	5.545	96	4997	1.05	ug/L	# 81
38) bromochloromethane	5.966	128	2379	1.05	ug/L	97
39) chloroform	6.181	83	11024	1.15	ug/L	97
42) 1,1,1-trichloroethane	6.424	97	9362	0.93	ug/L	85
45) carbon tetrachloride	6.678	117	7723	0.80	ug/L	94
46) 1,1-dichloropropene	6.694	75	5983	1.02	ug/L	88
47) benzene	7.012	78	16271	1.19	ug/L	99
48) 1,2-dichloroethane	7.137	62	6725	1.16	ug/L	79
49) tert-amyl methyl ether	7.300	73	5792	0.88	ug/L	89
50) heptane	7.567	43	4003	1.01	ug/L	81
51) trichloroethene	8.044	95	4996	1.10	ug/L	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28205.D
 Acq On : 26 Feb 2014 3:34 pm
 Operator : amym
 Sample : ic1058-1
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 27 08:04:52 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

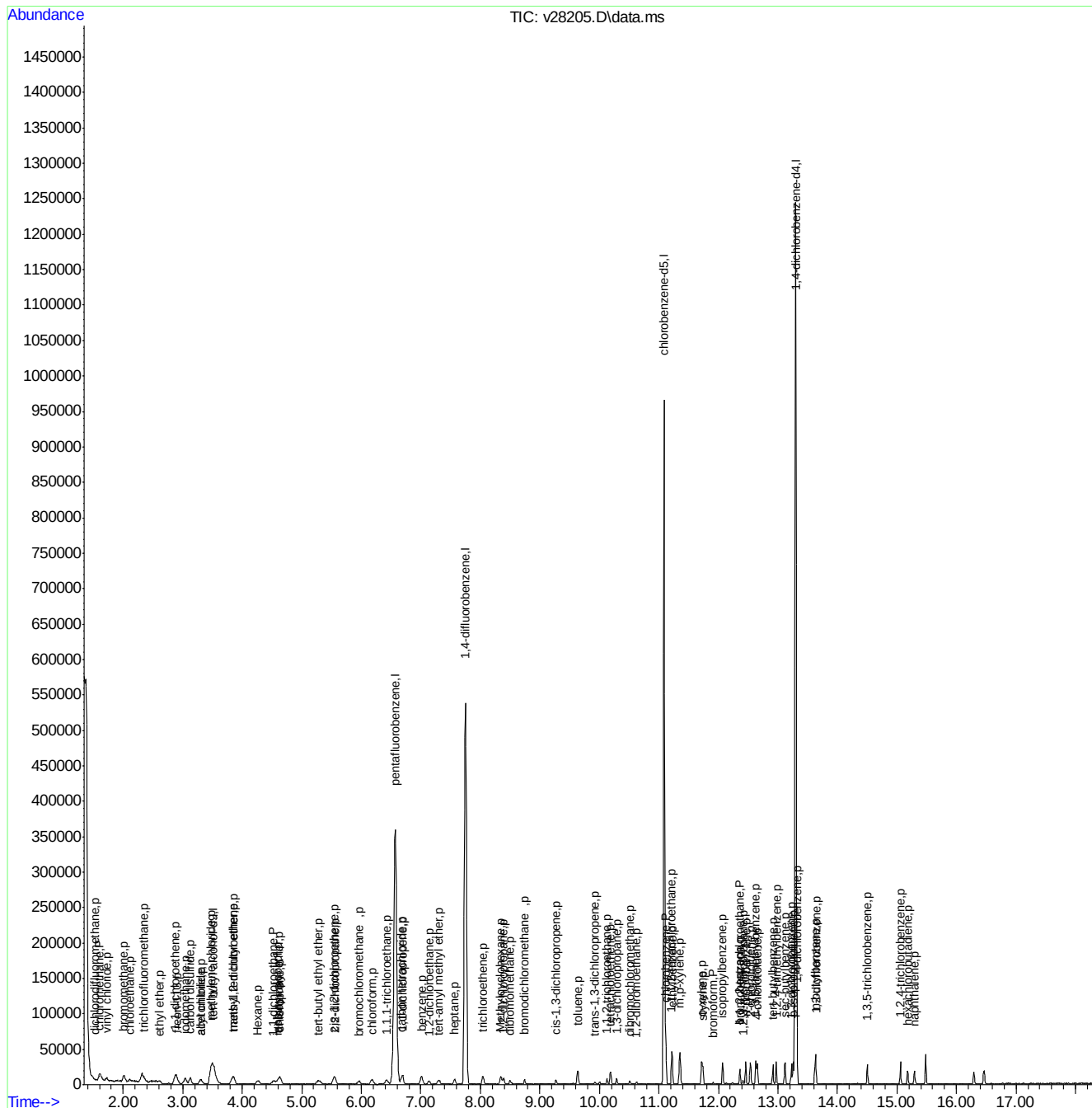
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) 1,2-dichloropropane	8.392	63	3330	0.96	ug/L	89
53) dibromomethane	8.495	93	2095	0.97	ug/L	90
54) bromodichloromethane	8.744	83	5516	0.99	ug/L	85
55) Methylcyclohexane	8.345	83	5341	0.87	ug/L	94
59) cis-1,3-dichloropropene	9.272	75	3939	0.82	ug/L	87
62) toluene	9.637	92	8417	0.95	ug/L	96
63) trans-1,3-dichloropropene	9.923	75	2241	0.65	ug/L	50
64) 1,1,2-trichloroethane	10.128	83	1716	0.87	ug/L #	67
67) tetrachloroethene	10.189	166	4778	1.06	ug/L	90
68) 1,3-dichloropropane	10.290	76	4186	1.12	ug/L	99
69) dibromochloromethane	10.511	129	2772	0.79	ug/L	99
70) 1,2-dibromoethane	10.622	107	2188	0.93	ug/L	93
72) chlorobenzene	11.116	112	12118	1.12	ug/L	99
73) 1,1,1,2-tetrachloroethane	11.215	131	4252	0.91	ug/L	87
74) ethylbenzene	11.221	91	20032	1.06	ug/L	91
75) m,p-xylene	11.352	106	14257	2.07	ug/L	87
76) o-xylene	11.720	106	6729	0.94	ug/L	81
77) styrene	11.740	104	9200	0.87	ug/L	91
78) bromoform	11.913	173	1365	0.80	ug/L	90
81) isopropylbenzene	12.071	105	18996	0.89	ug/L	93
83) bromobenzene	12.361	156	4659	1.02	ug/L	89
84) 1,1,2,2-tetrachloroethane	12.364	83	2691	1.05	ug/L	94
85) 1,2,3-trichloropropane	12.414	75	2648	1.04	ug/L	96
86) n-propylbenzene	12.459	91	21967	0.92	ug/L	95
87) 2-chlorotoluene	12.538	91	15973	1.06	ug/L	95
88) 4-chlorotoluene	12.650	91	16905	1.02	ug/L	91
89) 1,3,5-trimethylbenzene	12.628	105	15568	0.86	ug/L	93
90) tert-butylbenzene	12.914	91	9044	0.85	ug/L	89
91) 1,2,4-trimethylbenzene	12.969	105	16161	0.89	ug/L	98
92) sec-butylbenzene	13.117	105	17748	0.83	ug/L	98
93) 1,3-dichlorobenzene	13.226	146	10816	1.14	ug/L	98
94) p-isopropyltoluene	13.258	119	16163	0.86	ug/L	98
95) 1,4-dichlorobenzene	13.321	146	11079	1.24	ug/L	99
96) 1,2-dichlorobenzene	13.638	146	10993	1.24	ug/L	98
97) n-butylbenzene	13.623	91	15404	0.95	ug/L	94
99) 1,3,5-trichlorobenzene	14.504	180	7998	1.21	ug/L	87
100) 1,2,4-trichlorobenzene	15.060	180	8324	1.64	ug/L	98
101) hexachlorobutadiene	15.182	225	3281	1.42	ug/L	95
102) naphthalene	15.294	128	12101	1.87	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28205.D
Acq On : 26 Feb 2014 3:34 pm
Operator : amym
Sample : ic1058-1
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 27 08:04:52 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



v140226w.m Fri Feb 28 09:54:40 2014

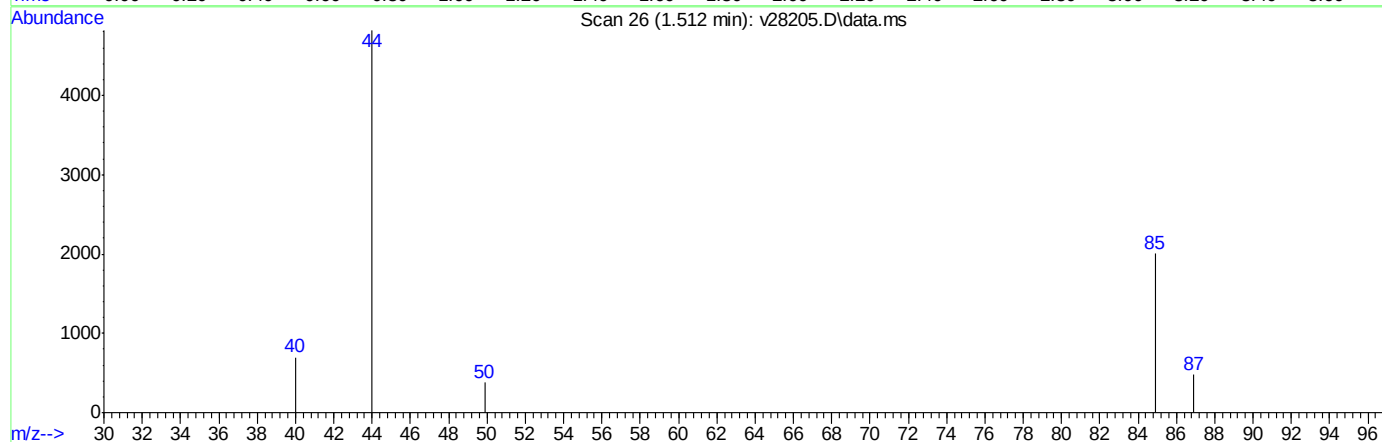
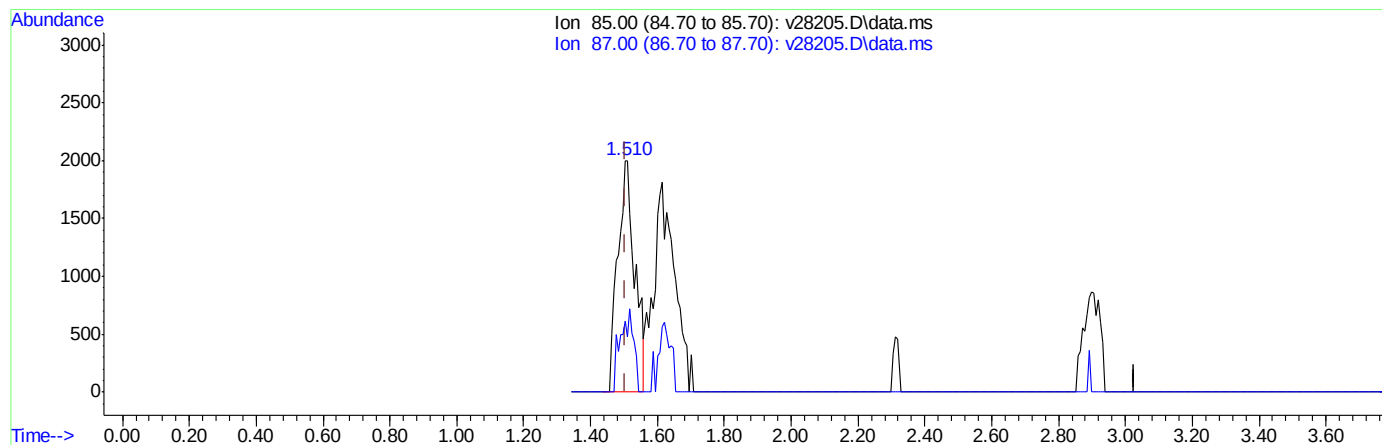
Page: 3

7.6.3

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28205.D
Acq On : 26 Feb 2014 3:34 pm
Operator : amym
Sample : ic1058-1
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 27 07:59:28 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(5) dichlorodifluoromethane (p)

1.510min (+0.004) 0.58ug/L

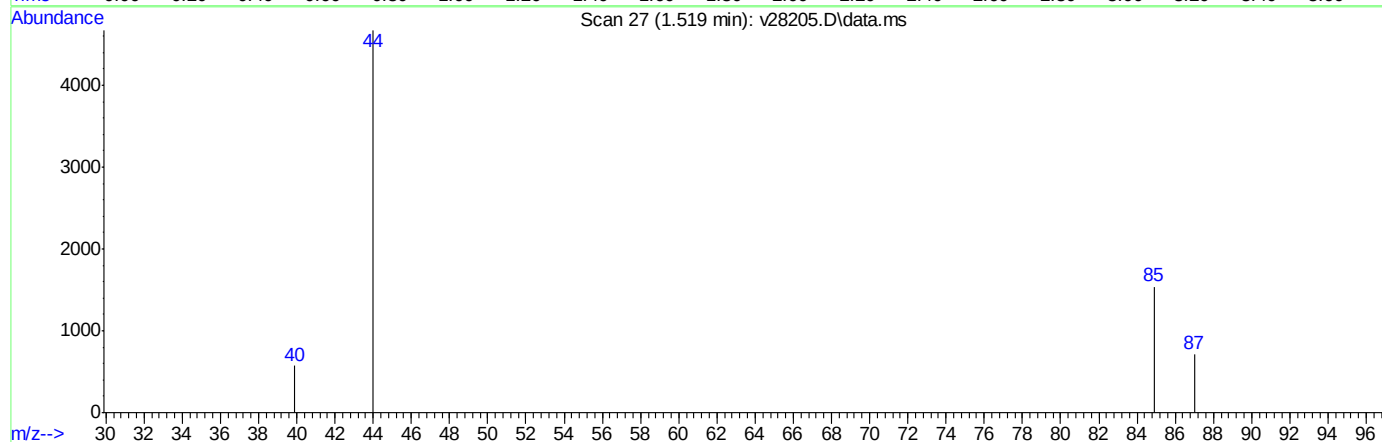
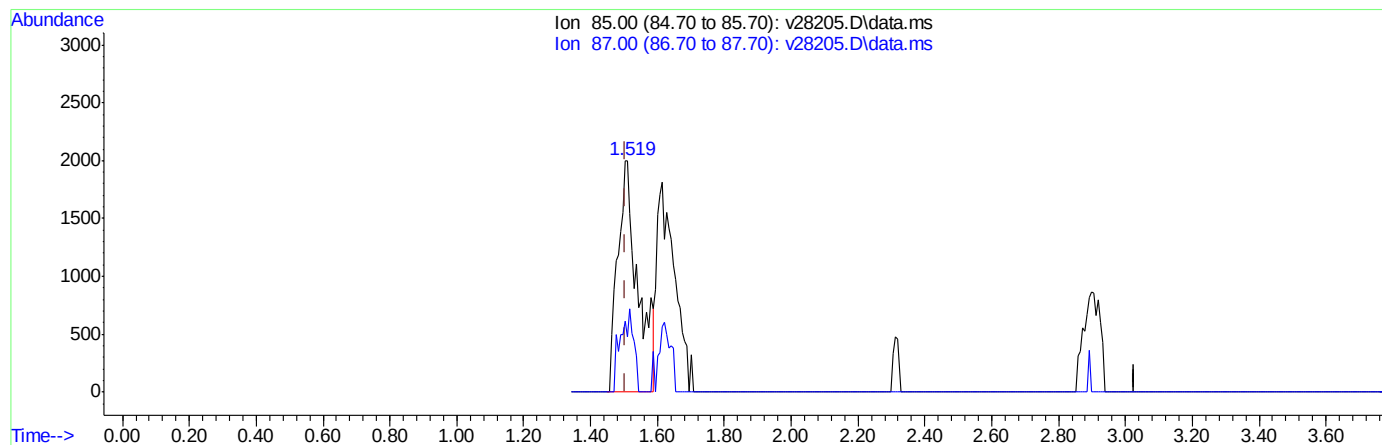
response 7040

Ion	Exp%	Act%
85.00	100	100
87.00	31.90	23.89
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28205.D
Acq On : 26 Feb 2014 3:34 pm
Operator : amym
Sample : ic1058-1
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 27 07:59:28 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(5) dichlorodifluoromethane (p)

1.519min (+0.013) 0.67ug/L m

response 8165

Ion	Exp%	Act%
85.00	100	100
87.00	31.90	46.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28206.D
 Acq On : 26 Feb 2014 4:01 pm
 Operator : amym
 Sample : ic1058-2
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 08:06:36 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.512	65	51532	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.570	168	391195	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.749	114	532779	50.00	ug/L	0.00
66) chlorobenzene-d5	11.087	82	260985	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.299	152	268544	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.447	113	10527	1.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	3.94%#		
60) toluene-d8 (s)	9.560	98	25077	1.89	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	3.78%#		
82) bromofluorobenzene (s)	12.236	95	11103	2.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	4.18%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.616	59	2177	17.50	ug/L	# 53
3) Ethanol	2.497	45	5560	277.34	ug/L	# 100
5) dichlorodifluoromethane	1.511	85	20918	1.75	ug/L	98
6) chloromethane	1.608	50	15449	1.81	ug/L	97
7) vinyl chloride	1.718	62	13691	1.69	ug/L	78
8) bromomethane	2.014	96	12852	1.93	ug/L	98
9) chloroethane	2.111	64	7663	2.12	ug/L	82
10) ethyl ether	2.609	59	5564	2.06	ug/L	98
11) acetonitrile	3.300	41	12876	1.85	ug/L	83
12) trichlorofluoromethane	2.343	101	23079	1.70	ug/L	88
13) freon-113	2.898	101	10805	1.60	ug/L	95
15) 1,1-dichloroethene	2.871	96	9809	1.96	ug/L	90
18) methylene chloride	3.470	84	9961	2.04	ug/L	# 61
19) methyl tert butyl ether	3.842	73	16889	1.86	ug/L	98
20) acrylonitrile	3.784	53	1047	1.22	ug/L	76
21) allyl chloride	3.300	41	12876	1.85	ug/L	78
22) trans-1,2-dichloroethene	3.842	96	10784	2.19	ug/L	81
23) iodomethane	3.037	142	27232	2.18	ug/L	86
24) carbon disulfide	3.122	76	33802	1.99	ug/L	97
26) vinyl acetate	4.591	43	21916	1.94	ug/L	84
27) chloroprene	4.630	53	11640	1.75	ug/L	78
28) di-isopropyl ether	4.616	45	25091	1.89	ug/L	92
29) methacrylonitrile	5.920	41	2138	1.52	ug/L	# 66
31) Hexane	4.260	41	7107	1.63	ug/L	# 61
32) 1,1-dichloroethane	4.518	63	17760	2.08	ug/L	86
33) tert-butyl ethyl ether	5.282	59	17286	1.76	ug/L	85
34) isobutyl alcohol	4.591	43	21915	9.71	ug/L	62
35) 2,2-dichloropropane	5.553	77	10531	1.64	ug/L	90
36) cis-1,2-dichloroethene	5.541	96	9694	2.06	ug/L	82
38) bromochloromethane	5.962	128	4626	2.08	ug/L	87
39) chloroform	6.178	83	20134	2.14	ug/L	95
42) 1,1,1-trichloroethane	6.424	97	16815	1.70	ug/L	86
44) Cyclohexane	6.546	56	16387	2.48	ug/L	# 55
45) carbon tetrachloride	6.678	117	15029	1.61	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28206.D
 Acq On : 26 Feb 2014 4:01 pm
 Operator : amym
 Sample : ic1058-2
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 08:06:36 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) 1,1-dichloropropene	6.692	75	11380	2.00	ug/L	87
47) benzene	7.011	78	29059	2.19	ug/L	98
48) 1,2-dichloroethane	7.135	62	11900	2.11	ug/L	79
49) tert-amyl methyl ether	7.298	73	10797	1.68	ug/L	88
50) heptane	7.571	43	6104	1.58	ug/L	80
51) trichloroethene	8.041	95	9672	2.20	ug/L	82
52) 1,2-dichloropropane	8.390	63	6319	1.88	ug/L	89
53) dibromomethane	8.494	93	4226	2.02	ug/L	86
54) bromodichloromethane	8.744	83	10248	1.89	ug/L	95
55) Methylcyclohexane	8.344	83	8132	1.37	ug/L #	92
57) methyl methacrylate	8.525	69	1579	1.44	ug/L #	57
59) cis-1,3-dichloropropene	9.270	75	6893	1.48	ug/L	99
61) 4-methyl-2-pentanone	9.455	43	2893	1.69	ug/L #	41
62) toluene	9.636	92	16087	1.87	ug/L	91
63) trans-1,3-dichloropropene	9.923	75	4263	1.27	ug/L	96
64) 1,1,2-trichloroethane	10.128	83	3917	2.04	ug/L	89
65) ethyl methacrylate	10.004	69	3275	1.28	ug/L #	66
67) tetrachloroethene	10.188	166	8566	1.91	ug/L	98
68) 1,3-dichloropropane	10.290	76	7491	2.01	ug/L	87
69) dibromochloromethane	10.511	129	5747	1.64	ug/L	87
70) 1,2-dibromoethane	10.620	107	4087	1.75	ug/L	93
71) 2-hexanone	10.362	43	2767	2.41	ug/L #	21
72) chlorobenzene	11.116	112	23464	2.17	ug/L	98
73) 1,1,1,2-tetrachloroethane	11.215	131	7992	1.71	ug/L	94
74) ethylbenzene	11.221	91	38501	2.03	ug/L	97
75) m,p-xylene	11.353	106	27031	3.93	ug/L	81
76) o-xylene	11.719	106	12976	1.82	ug/L #	78
77) styrene	11.740	104	19369	1.84	ug/L	88
78) bromoform	11.913	173	2438	1.42	ug/L	99
81) isopropylbenzene	12.071	105	35694	1.69	ug/L	97
83) bromobenzene	12.362	156	8847	1.96	ug/L	98
84) 1,1,2,2-tetrachloroethane	12.365	83	4904	1.94	ug/L	90
85) 1,2,3-trichloropropane	12.412	75	4461m	1.78	ug/L	
86) n-propylbenzene	12.460	91	42792	1.82	ug/L	93
87) 2-chlorotoluene	12.538	91	29385	1.98	ug/L	97
88) 4-chlorotoluene	12.650	91	33470	2.05	ug/L	90
89) 1,3,5-trimethylbenzene	12.629	105	30853	1.73	ug/L	95
90) tert-butylbenzene	12.914	91	17306	1.64	ug/L	93
91) 1,2,4-trimethylbenzene	12.969	105	31881	1.79	ug/L	94
92) sec-butylbenzene	13.117	105	34512	1.64	ug/L	98
93) 1,3-dichlorobenzene	13.226	146	19434	2.08	ug/L	99
94) p-isopropyltoluene	13.259	119	31361	1.69	ug/L	97
95) 1,4-dichlorobenzene	13.321	146	19923	2.27	ug/L	97
96) 1,2-dichlorobenzene	13.638	146	18229	2.09	ug/L	94
97) n-butylbenzene	13.623	91	28277	1.76	ug/L	99
98) 1,2-dibromo-3-chloropr...	14.338	75	564m	1.50	ug/L	
99) 1,3,5-trichlorobenzene	14.504	180	15010	2.30	ug/L	98
100) 1,2,4-trichlorobenzene	15.059	180	12109	2.41	ug/L	94
101) hexachlorobutadiene	15.180	225	5359	2.35	ug/L	96
102) naphthalene	15.294	128	14742	2.31	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28206.D
Acq On : 26 Feb 2014 4:01 pm
Operator : amym
Sample : ic1058-2
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 08:06:36 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) 1,2,3-trichlorobenzene	15.482	180	12382	3.52	ug/L	92
104) 2-Methylnaphthalene	16.292	142	6367	4.40	ug/L	98
105) 1-Methylnaphthalene	16.463	142	7291	6.10	ug/L	97

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

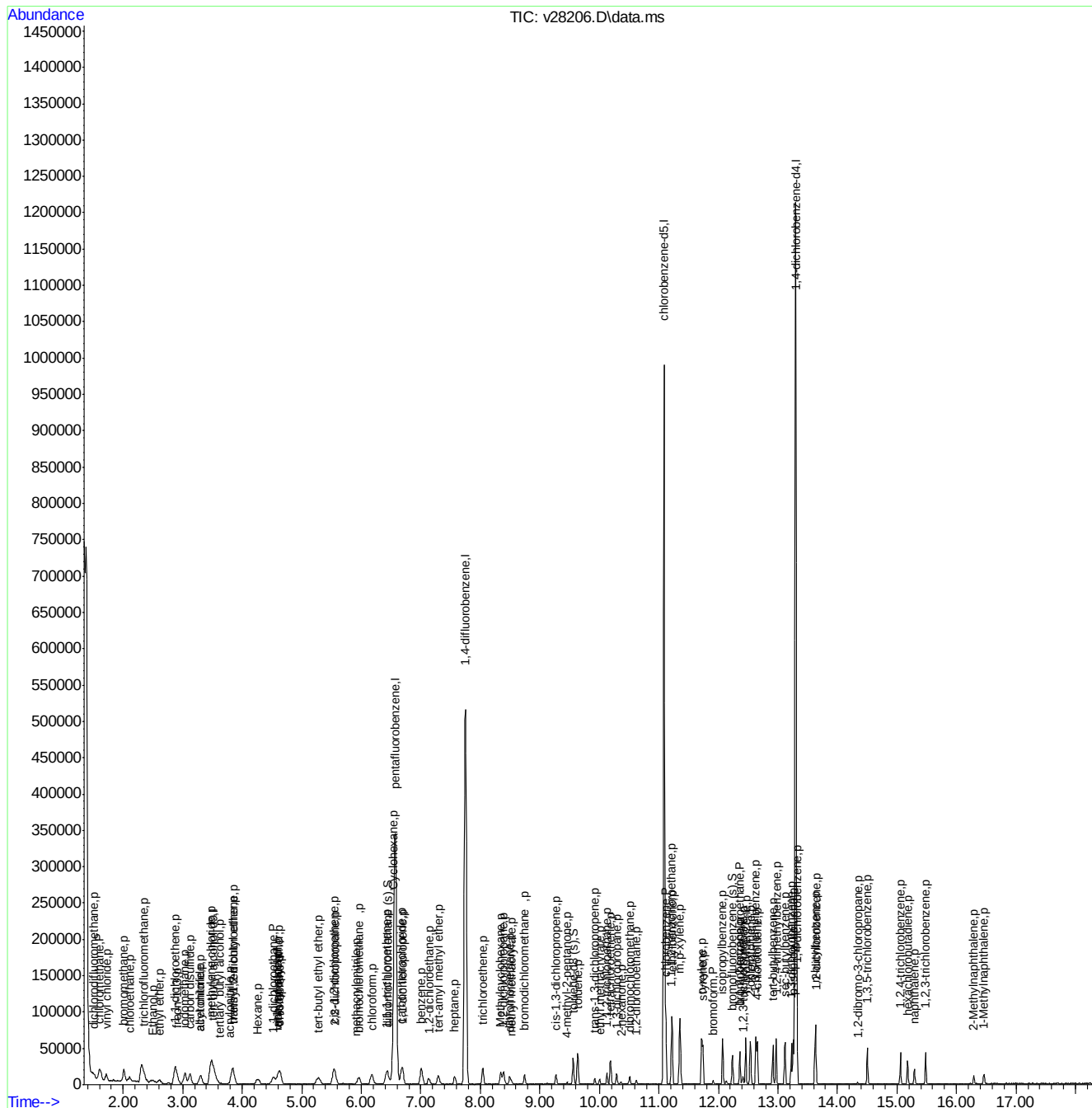
7.6.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28206.D
Acq On : 26 Feb 2014 4:01 pm
Operator : amym
Sample : ic1058-2
Misc : MS31132,MSV1058,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 08:06:36 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



v140226w.m Fri Feb 28 09:54:47 2014

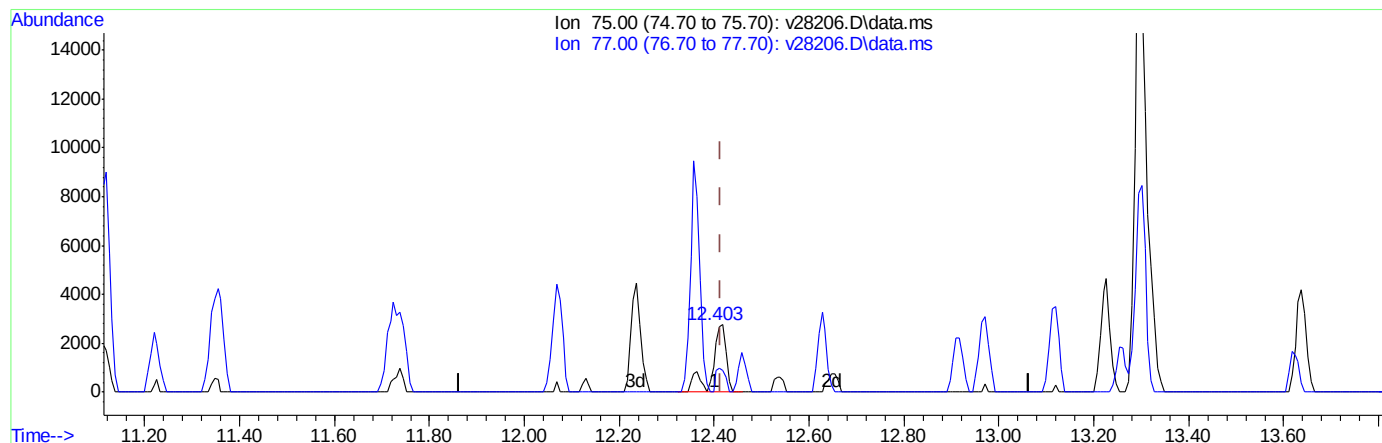
Page: 4

7.6.4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28206.D
Acq On : 26 Feb 2014 4:01 pm
Operator : amym
Sample : ic1058-2
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 07:59:31 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(85) 1,2,3-trichloropropane (p)

12.403min (-0.011) 2.24ug/L

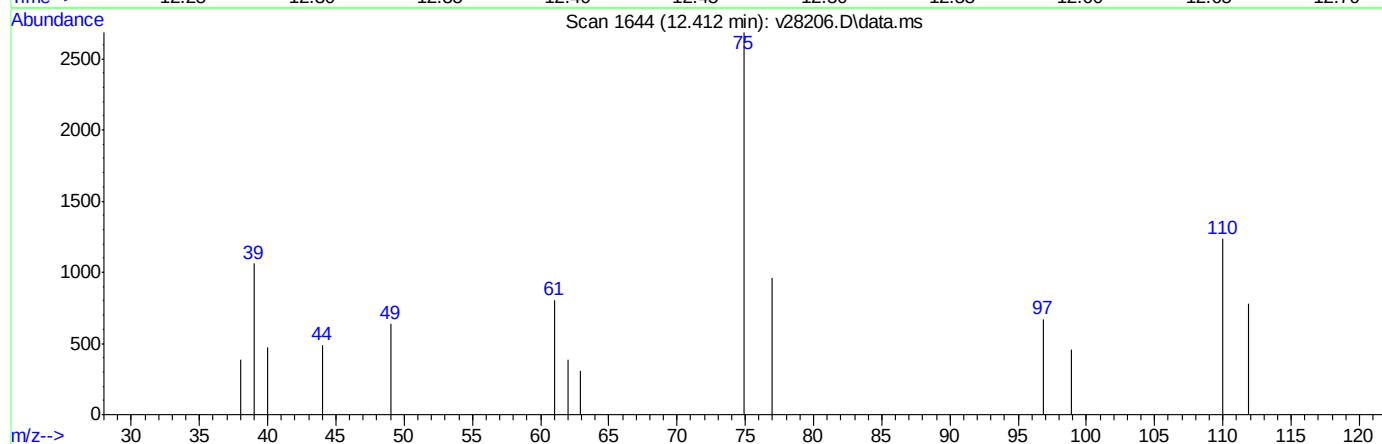
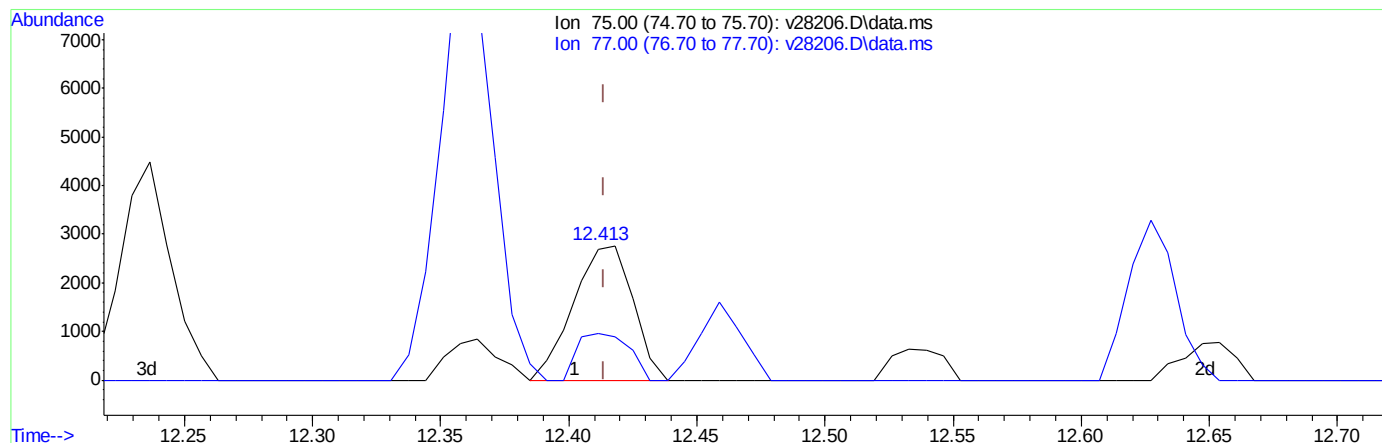
response 5612

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	43.45
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28206.D
Acq On : 26 Feb 2014 4:01 pm
Operator : amym
Sample : ic1058-2
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 07:59:31 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



TIC: v28206.D\data.ms

(85) 1,2,3-trichloropropane (p)

12.412min (-0.002) 1.78ug/L m

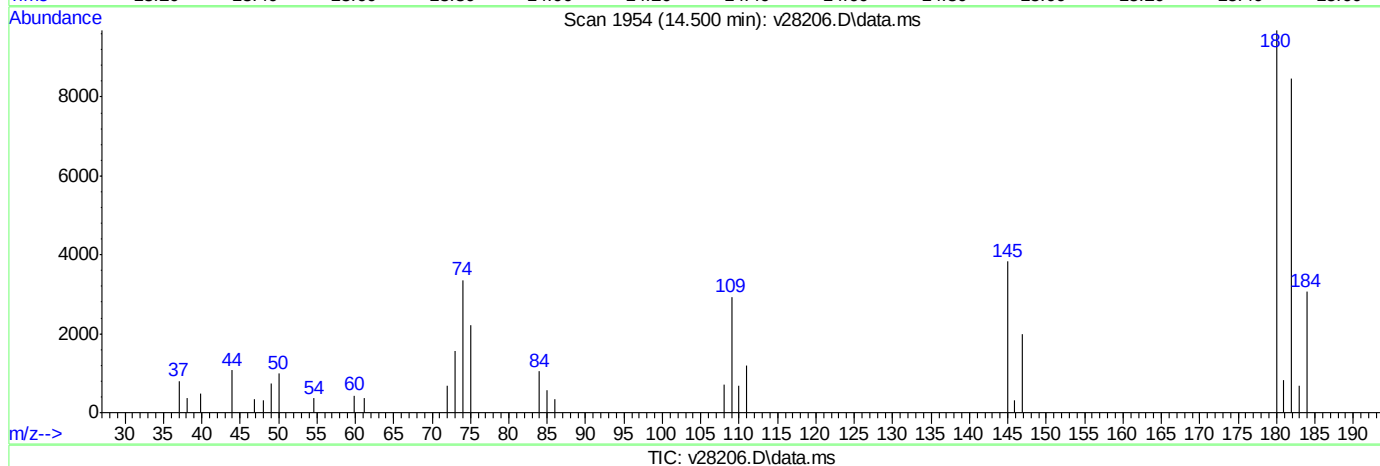
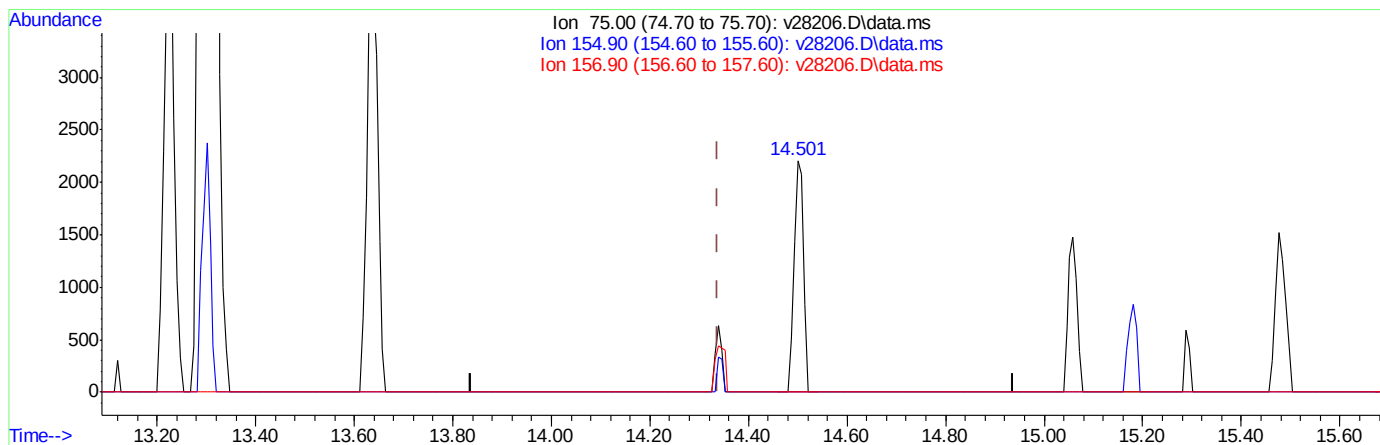
response 4461

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	35.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28206.D
Acq On : 26 Feb 2014 4:01 pm
Operator : amym
Sample : ic1058-2
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 07:59:31 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(98) 1,2-dibromo-3-chloropropane (p)

14.501min (+0.163) 7.61ug/L

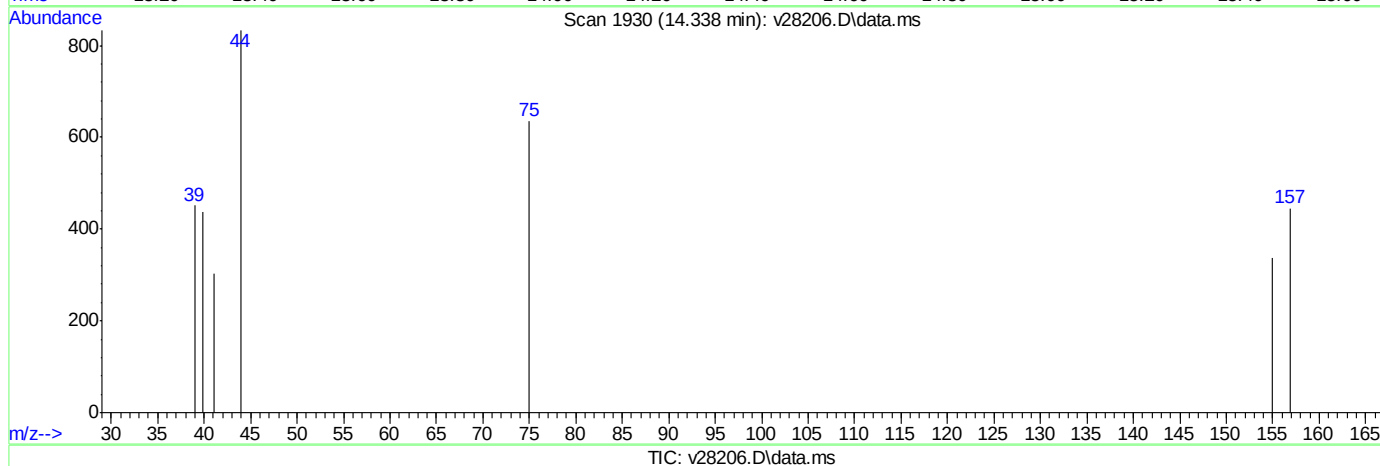
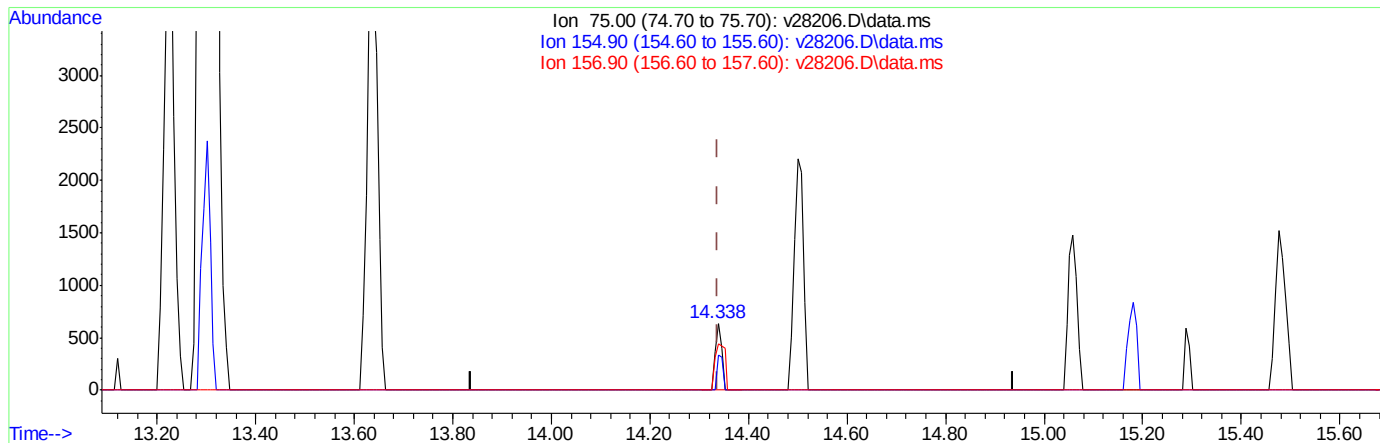
response 2857

Ion	Exp%	Act%
75.00	100	100
154.90	95.90	0.00#
156.90	122.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28206.D
Acq On : 26 Feb 2014 4:01 pm
Operator : amym
Sample : ic1058-2
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 27 07:59:31 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(98) 1,2-dibromo-3-chloropropane (p)

14.338min (+0.000) 1.50ug/L m

response 564

Ion	Exp%	Act%
75.00	100	100
154.90	95.90	52.99#
156.90	122.80	69.97#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28207.D
 Acq On : 26 Feb 2014 4:27 pm
 Operator : amym
 Sample : ic1058-5
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 08:08:25 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.511	65	54861	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.569	168	372554	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.749	114	514692	50.00	ug/L	0.00
66) chlorobenzene-d5	11.086	82	255093	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.298	152	270975	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.447	113	25508	5.02	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	10.04%#		
60) toluene-d8 (s)	9.560	98	61442	4.79	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	9.58%#		
82) bromofluorobenzene (s)	12.235	95	27050	5.04	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	10.08%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.619	59	6886	52.01	ug/L	93
3) Ethanol	2.499	45	13037	610.84	ug/L	# 100
5) dichlorodifluoromethane	1.506	85	44381	3.90	ug/L	89
6) chloromethane	1.610	50	39317	4.85	ug/L	98
7) vinyl chloride	1.718	62	35191	4.55	ug/L	90
8) bromomethane	2.013	96	32222	5.08	ug/L	97
9) chloroethane	2.108	64	18525	5.37	ug/L	90
10) ethyl ether	2.608	59	13836	5.38	ug/L	82
11) acetonitrile	3.298	41	30206	4.56	ug/L	69
12) trichlorofluoromethane	2.343	101	53947	4.17	ug/L	99
13) freon-113	2.898	101	26286	4.09	ug/L	96
14) acrolein	2.758	56	5557	23.38	ug/L	94
15) 1,1-dichloroethene	2.870	96	23429	4.90	ug/L	79
16) acetone	2.906	58	1619m	5.90	ug/L	
17) Methyl Acetate	3.283	43	7840	5.05	ug/L	# 80
18) methylene chloride	3.469	84	25358	5.47	ug/L	85
19) methyl tert butyl ether	3.841	73	42350	4.89	ug/L	91
20) acrylonitrile	3.775	53	3856	4.73	ug/L	71
21) allyl chloride	3.298	41	30206	4.56	ug/L	90
22) trans-1,2-dichloroethene	3.842	96	25189	5.36	ug/L	98
23) iodomethane	3.037	142	62261	5.23	ug/L	90
24) carbon disulfide	3.122	76	78970	4.89	ug/L	97
25) propionitrile	5.628	54	293m	1.25	ug/L	
26) vinyl acetate	4.589	43	52669	4.90	ug/L	84
27) chloroprene	4.630	53	28358	4.47	ug/L	80
28) di-isopropyl ether	4.614	45	62680	4.95	ug/L	92
29) methacrylonitrile	5.927	41	6709	5.00	ug/L	87
30) 2-butanone	5.534	72	946m	3.75	ug/L	
31) Hexane	4.261	41	15546	3.74	ug/L	# 66
32) 1,1-dichloroethane	4.518	63	41993	5.17	ug/L	99
33) tert-butyl ethyl ether	5.280	59	43170	4.61	ug/L	92
34) isobutyl alcohol	4.589	43	52669	24.50	ug/L	64
35) 2,2-dichloropropane	5.553	77	25154	4.11	ug/L	89
36) cis-1,2-dichloroethene	5.540	96	23071	5.15	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28207.D
 Acq On : 26 Feb 2014 4:27 pm
 Operator : amym
 Sample : ic1058-5
 Misc : MS31132,MSV1058,,,,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 08:08:25 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.591	43	52672m	4.90	ug/L	
38) bromochloromethane	5.959	128	10723	5.07	ug/L	84
39) chloroform	6.177	83	46727	5.21	ug/L	98
41) Tetrahydrofuran	5.964	42	1758	3.86	ug/L #	53
42) 1,1,1-trichloroethane	6.422	97	40471	4.30	ug/L	94
44) Cyclohexane	6.539	56	30102	4.72	ug/L #	85
45) carbon tetrachloride	6.678	117	35929	3.99	ug/L	98
46) 1,1-dichloropropene	6.690	75	25978	4.73	ug/L	94
47) benzene	7.010	78	67557	5.27	ug/L	100
48) 1,2-dichloroethane	7.134	62	28442	5.21	ug/L	96
49) tert-amyl methyl ether	7.297	73	28335	4.57	ug/L	98
50) heptane	7.567	43	13580	3.64	ug/L	83
51) trichloroethene	8.041	95	21161	4.97	ug/L	94
52) 1,2-dichloropropane	8.390	63	15959	4.92	ug/L	97
53) dibromomethane	8.493	93	10247	5.06	ug/L	85
54) bromodichloromethane	8.744	83	25008	4.78	ug/L	93
55) Methylcyclohexane	8.344	83	18948	3.31	ug/L	96
56) 2-chloroethyl vinyl ether	9.120	63	1976	3.54	ug/L	75
57) methyl methacrylate	8.523	69	4292	4.05	ug/L #	64
58) 1,4-dioxane	8.511	88	148m	9.90	ug/L	
59) cis-1,3-dichloropropene	9.271	75	19083	4.23	ug/L	92
61) 4-methyl-2-pentanone	9.455	43	7123	4.30	ug/L #	78
62) toluene	9.635	92	41880	5.04	ug/L	97
63) trans-1,3-dichloropropene	9.923	75	11643	3.58	ug/L	92
64) 1,1,2-trichloroethane	10.128	83	9282	5.01	ug/L	97
65) ethyl methacrylate	10.004	69	9797	3.95	ug/L	93
67) tetrachloroethene	10.188	166	20808	4.74	ug/L	97
68) 1,3-dichloropropane	10.290	76	18241	5.02	ug/L	92
69) dibromochloromethane	10.510	129	14365	4.20	ug/L	99
70) 1,2-dibromoethane	10.620	107	11397	4.98	ug/L	97
71) 2-hexanone	10.364	43	5946	5.30	ug/L	79
72) chlorobenzene	11.116	112	54360	5.14	ug/L	97
73) 1,1,1,2-tetrachloroethane	11.214	131	20560	4.51	ug/L	91
74) ethylbenzene	11.220	91	91071	4.92	ug/L	93
75) m,p-xylene	11.351	106	64836	9.64	ug/L	89
76) o-xylene	11.718	106	32513	4.67	ug/L #	73
77) styrene	11.739	104	50102	4.87	ug/L	89
78) bromoform	11.913	173	7080	4.23	ug/L	94
79) trans-1,4-dichloro-2-b...	12.129	53	2800m	4.17	ug/L	
81) isopropylbenzene	12.070	105	88837	4.18	ug/L	94
83) bromobenzene	12.360	156	22203	4.87	ug/L	89
84) 1,1,2,2-tetrachloroethane	12.364	83	12424	4.88	ug/L	93
85) 1,2,3-trichloropropane	12.405	75	14784	5.85	ug/L	99
86) n-propylbenzene	12.459	91	105514	4.45	ug/L	98
87) 2-chlorotoluene	12.538	91	73189	4.90	ug/L	98
88) 4-chlorotoluene	12.649	91	83271	5.05	ug/L	91
89) 1,3,5-trimethylbenzene	12.628	105	79392	4.41	ug/L	98
90) tert-butylbenzene	12.913	91	41996	3.94	ug/L	98
91) 1,2,4-trimethylbenzene	12.968	105	82649	4.59	ug/L	92
92) sec-butylbenzene	13.117	105	85099	4.00	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 08:08:25 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

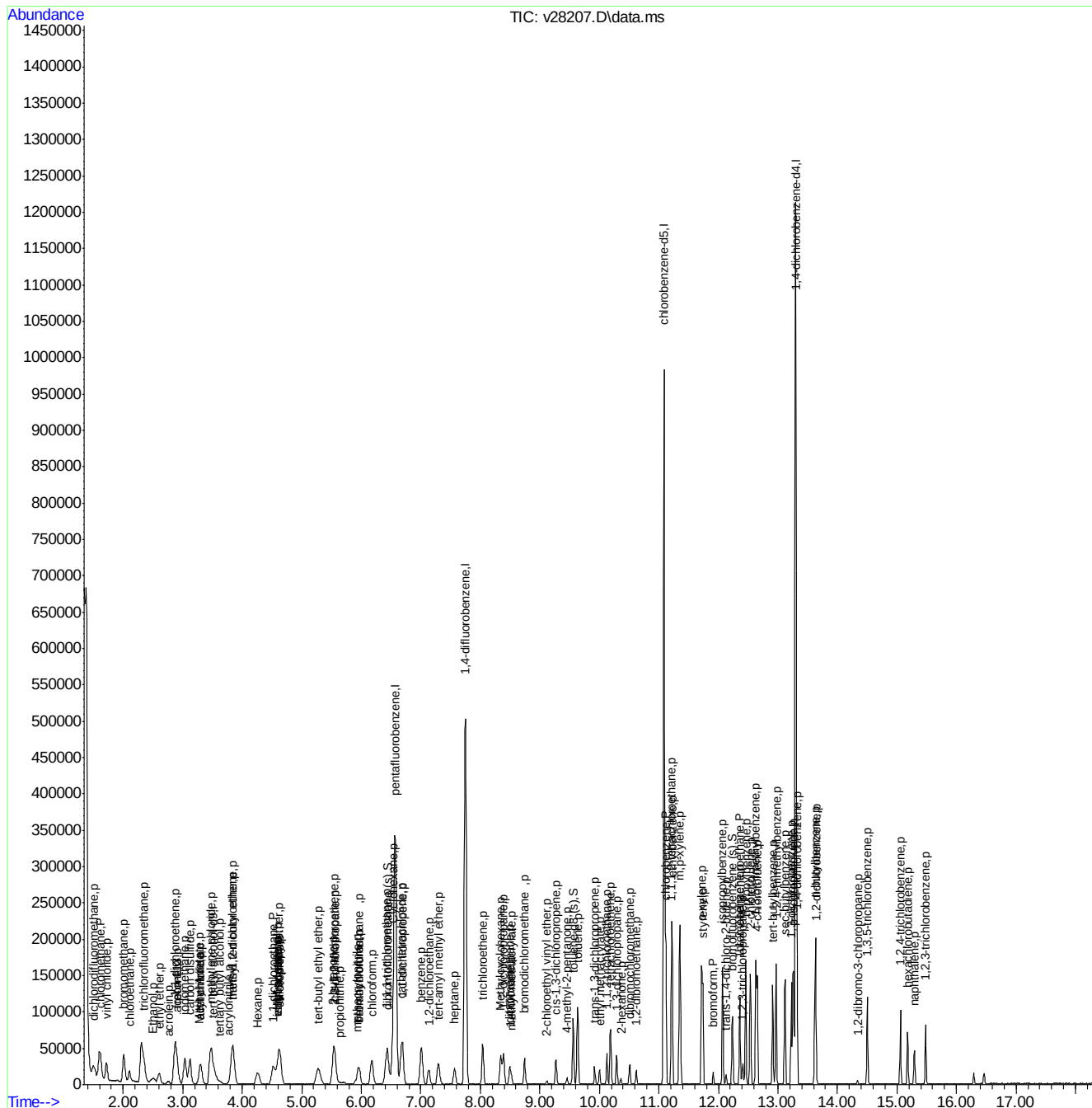
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	13.225	146	48443	5.13	ug/L	98
94) p-isopropyltoluene	13.258	119	78205	4.18	ug/L	98
95) 1,4-dichlorobenzene	13.320	146	47577	5.37	ug/L	98
96) 1,2-dichlorobenzene	13.637	146	45175	5.13	ug/L	99
97) n-butylbenzene	13.623	91	66508	4.10	ug/L	92
98) 1,2-dibromo-3-chloropr...	14.338	75	1551	4.09	ug/L	88
99) 1,3,5-trichlorobenzene	14.504	180	33249	5.04	ug/L	98
100) 1,2,4-trichlorobenzene	15.059	180	26245	5.18	ug/L	99
101) hexachlorobutadiene	15.180	225	11411	4.95	ug/L	84
102) naphthalene	15.293	128	31241	4.86	ug/L	100
103) 1,2,3-trichlorobenzene	15.482	180	21570	6.07	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 08:08:25 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



v140226w.m Fri Feb 28 09:54:53 2014

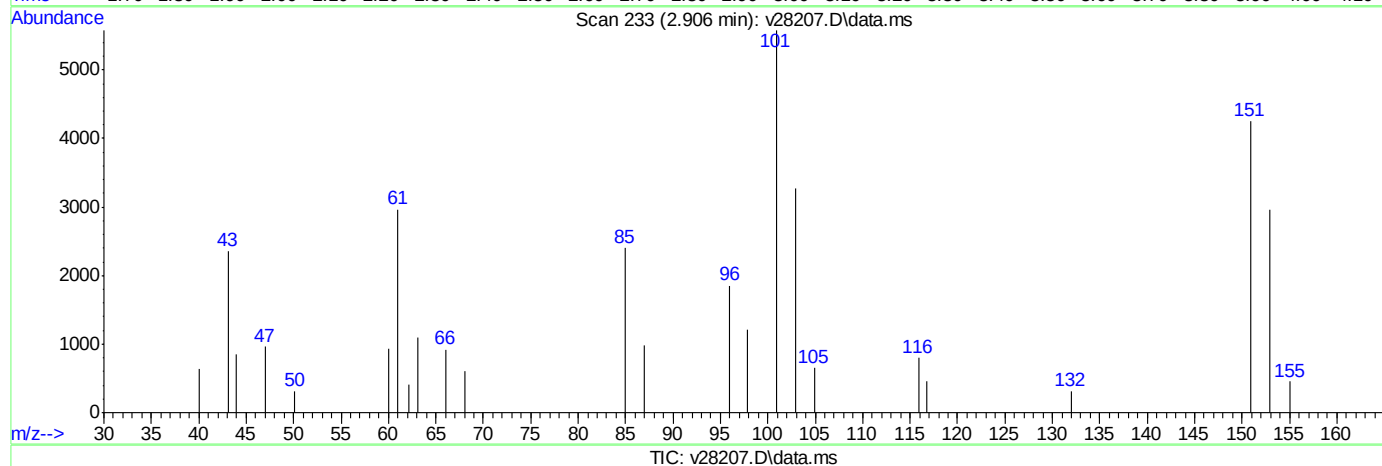
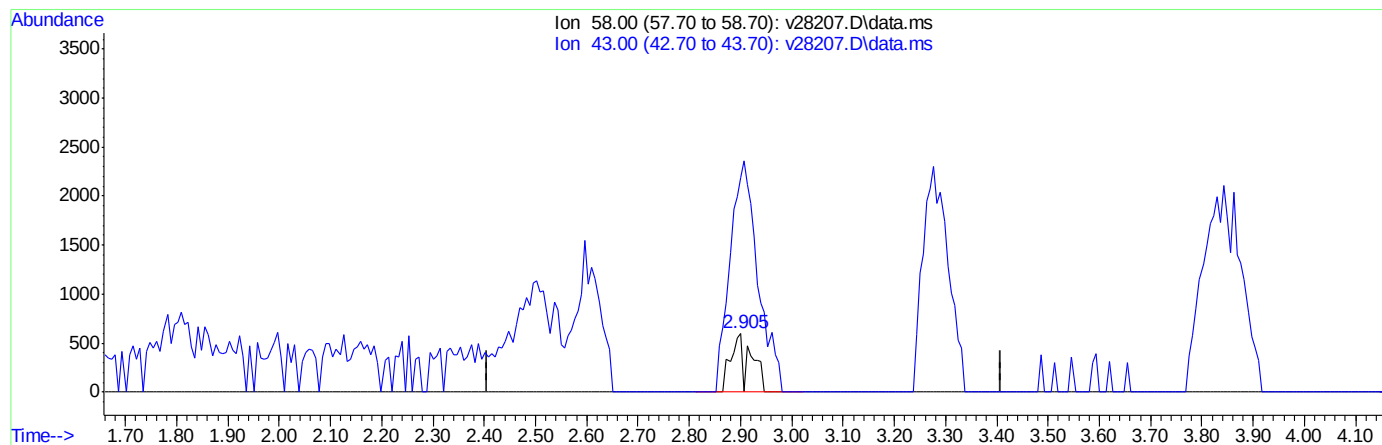
Page: 4

7.6.5

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 07:59:34 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(16) acetone (p)

2.906min (-0.001) 5.90ug/L m

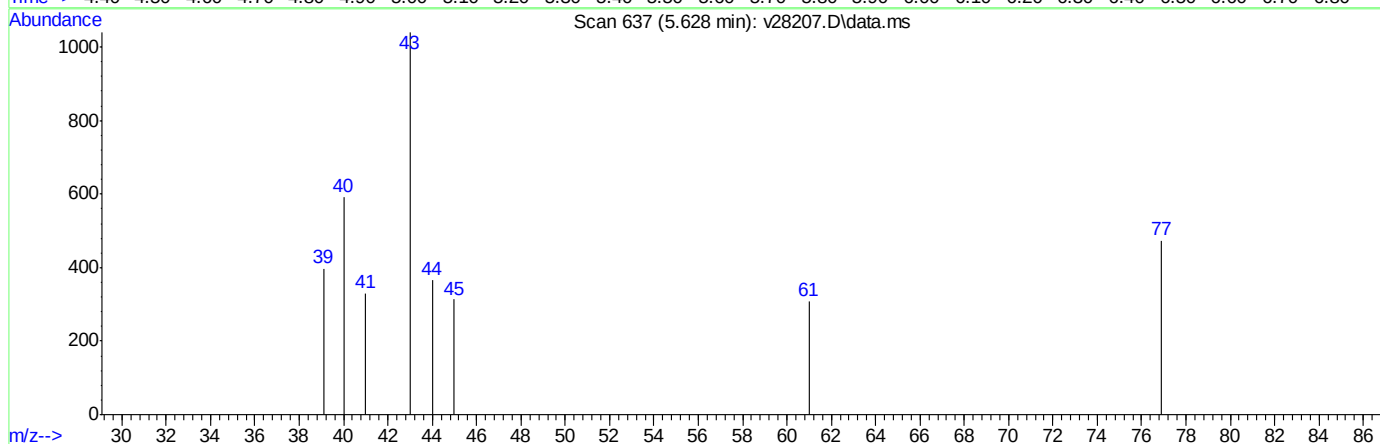
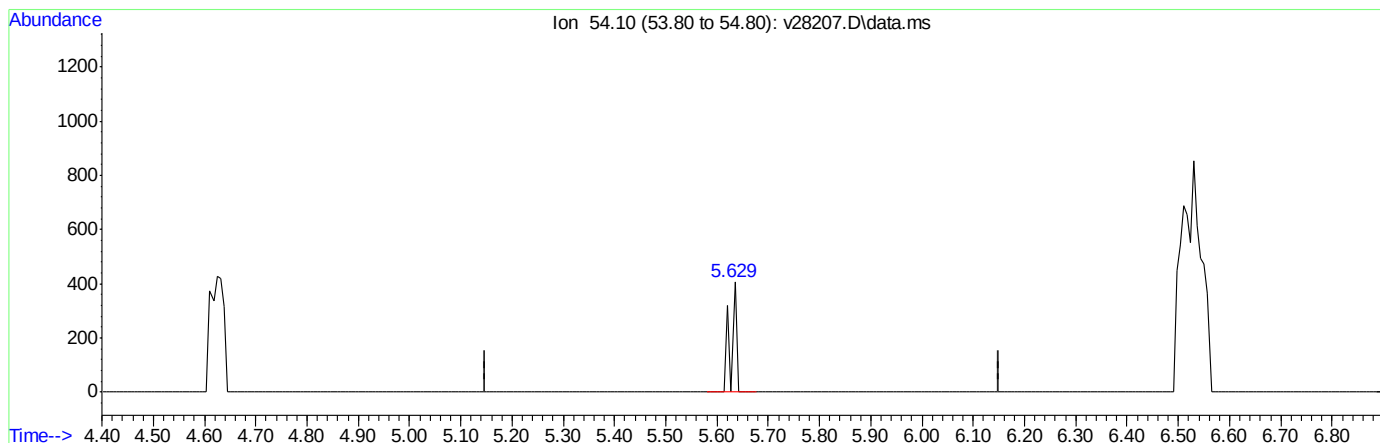
response 1619

Ion	Exp%	Act%
58.00	100	100
43.00	310.00	236300.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 07:59:34 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



TIC: v28207.D\data.ms

(25) propionitrile (p)

5.628min (-0.022) 1.25ug/L m

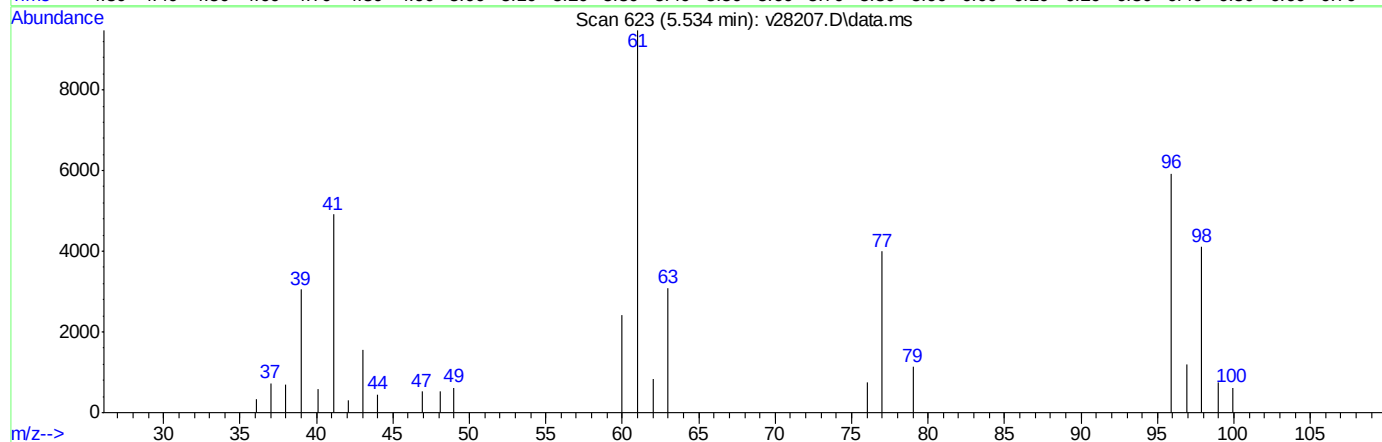
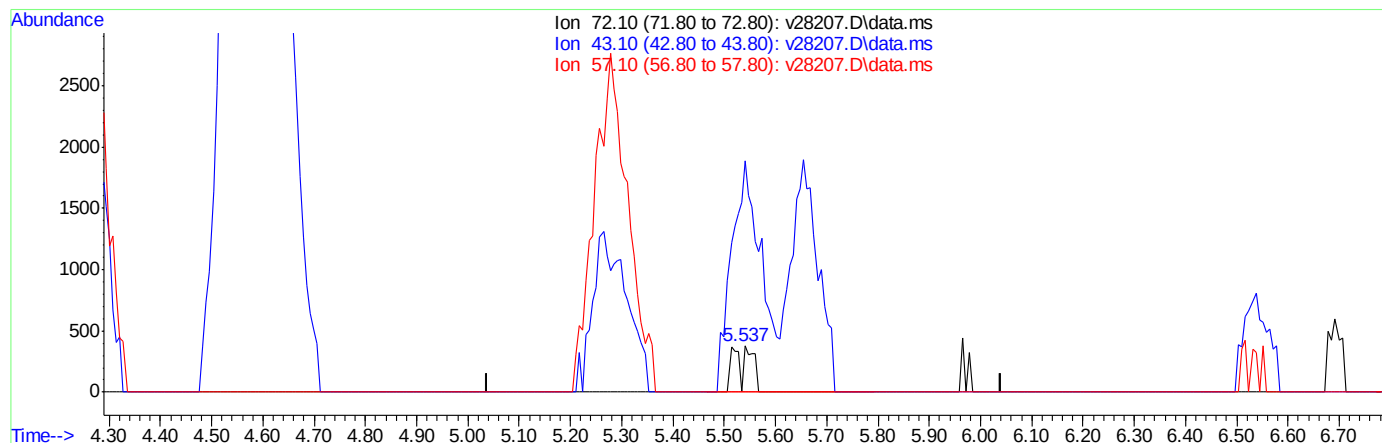
response 293

Ion	Exp%	Act%
54.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 07:59:34 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(30) 2-butanone (p)

5.534min (-0.006) 3.75ug/L m

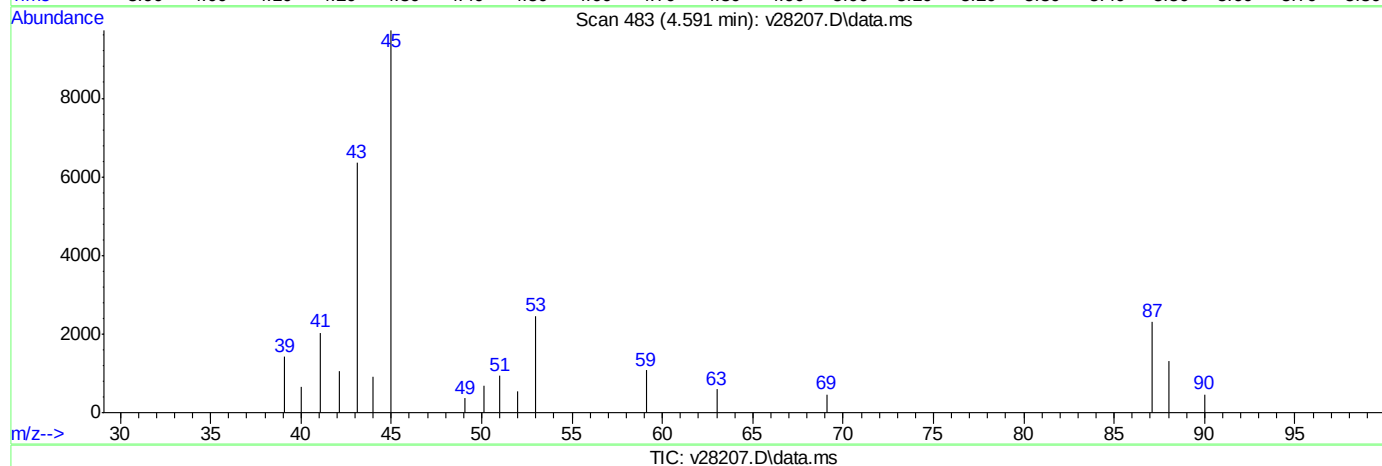
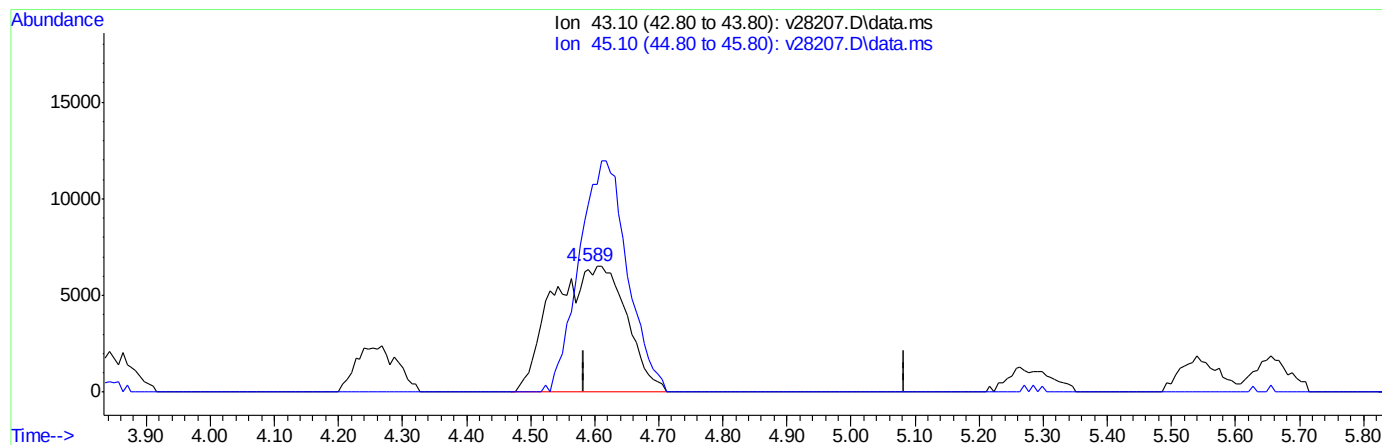
response 946

Ion	Exp%	Act%
72.10	100	100
43.10	342.00	155300.00#
57.10	31.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 07:59:34 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.591min (+0.007) 4.90ug/L m

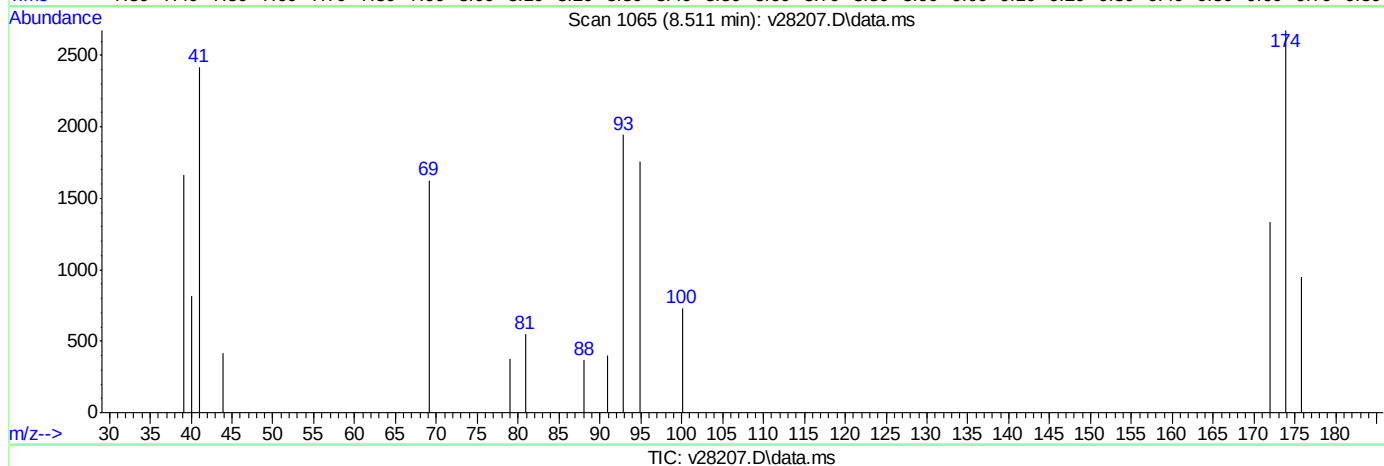
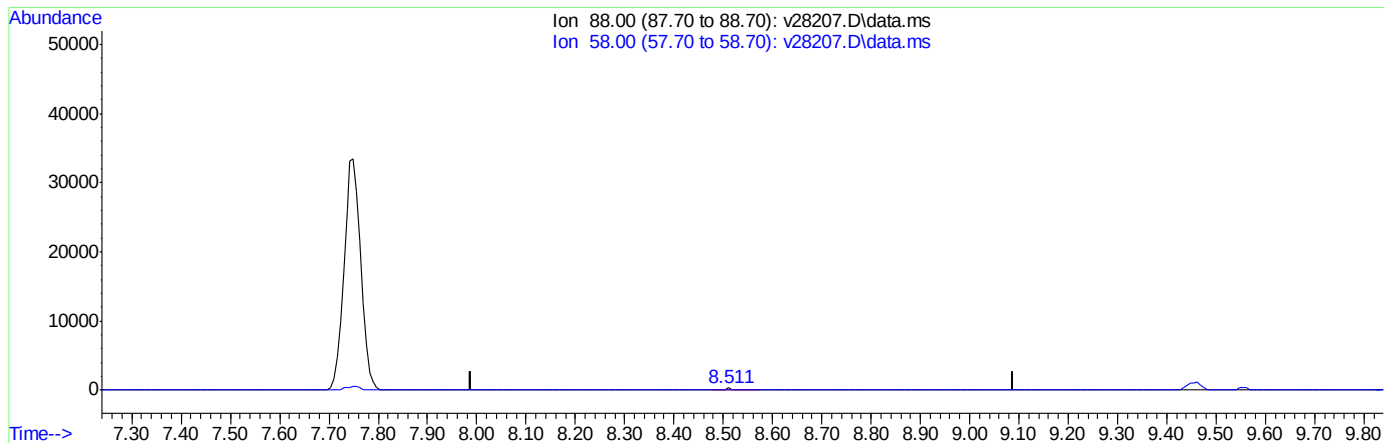
response 52672

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 07:59:34 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(58) 1,4-dioxane (p)

8.511min (+0.012) 9.90ug/L m

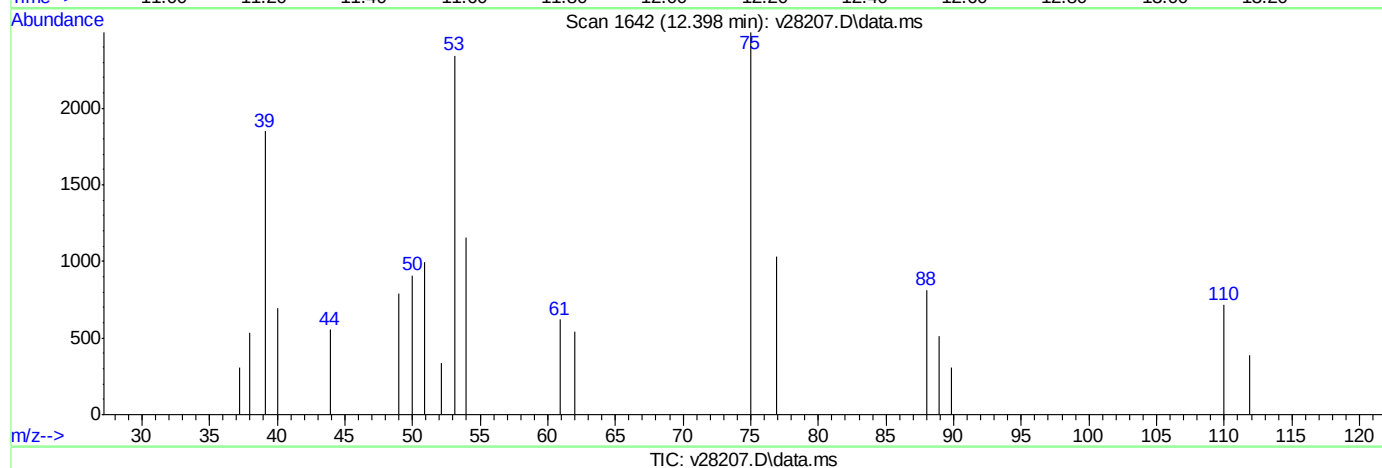
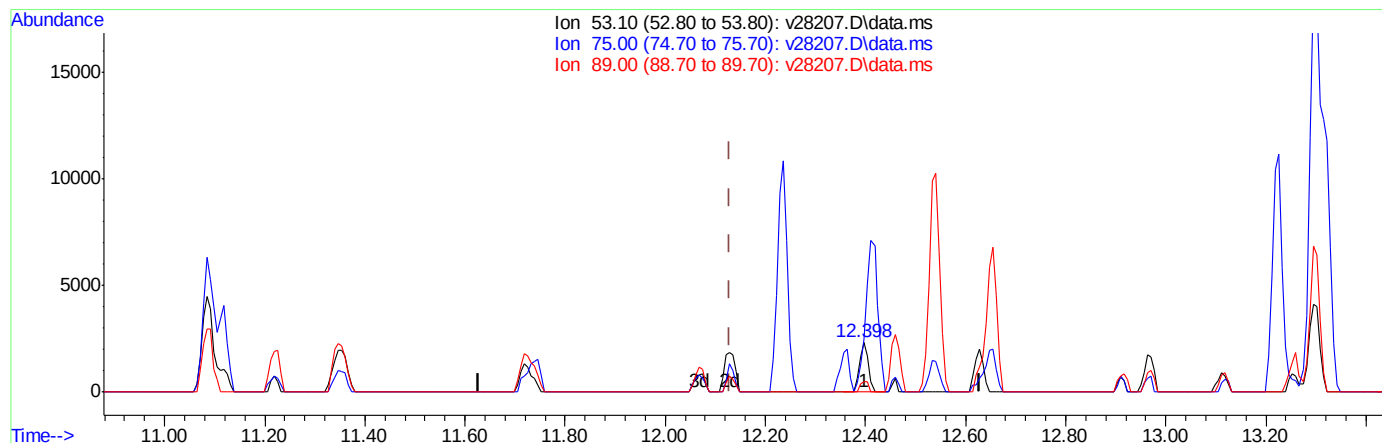
response 148

Ion	Exp%	Act%
88.00	100	100
58.00	76.50	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 07:59:34 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.398min (+0.269) 4.12ug/L

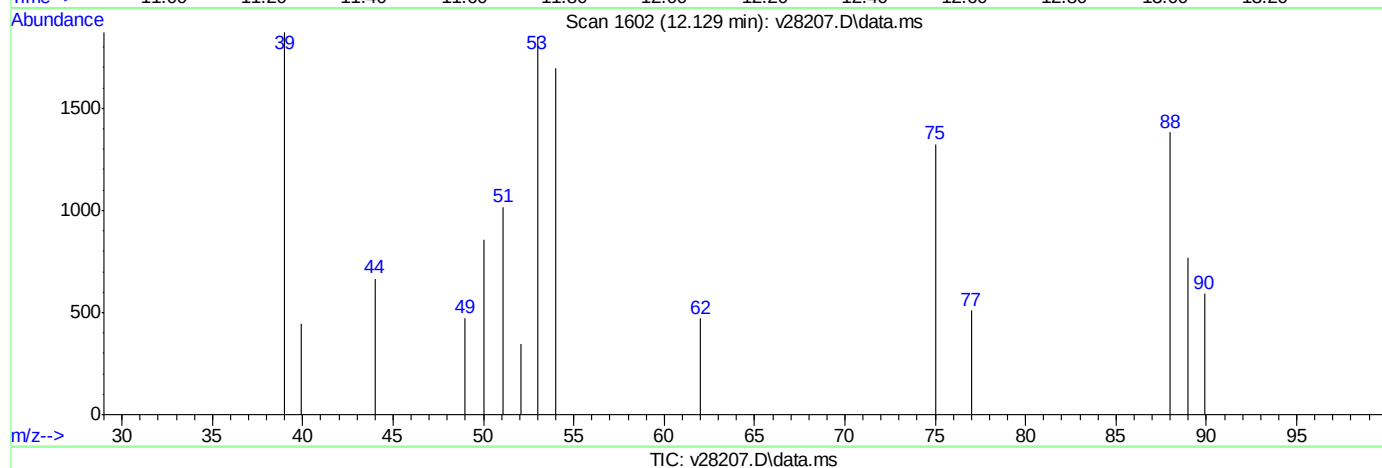
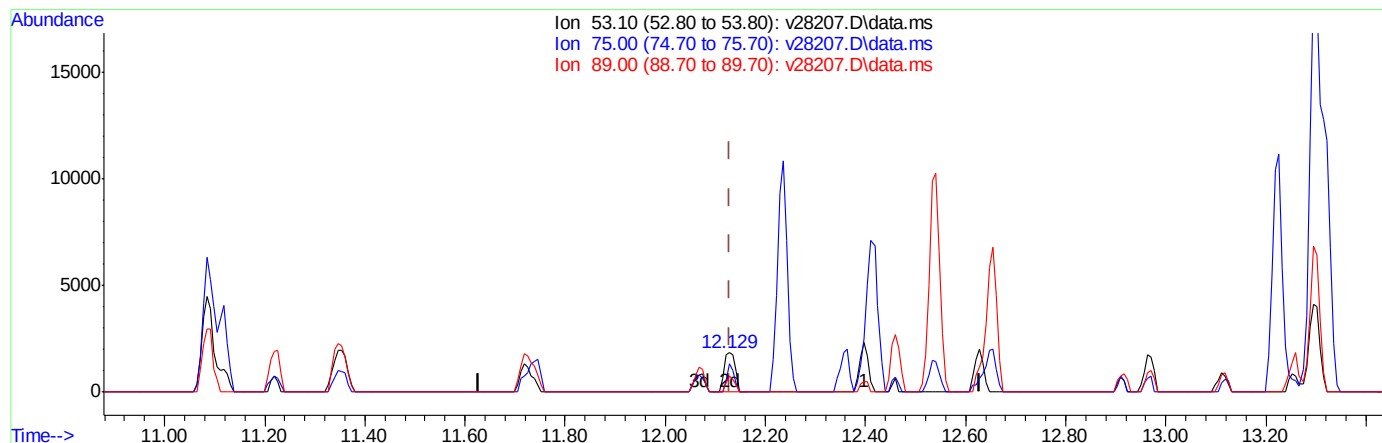
response 2764

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	106.44
89.00	51.30	21.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28207.D
Acq On : 26 Feb 2014 4:27 pm
Operator : amym
Sample : ic1058-5
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 27 07:59:34 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.129min (-0.000) 4.17ug/L m

response 2800

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	71.65#
89.00	51.30	41.72
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28208.D
 Acq On : 26 Feb 2014 4:53 pm
 Operator : amym
 Sample : ic1058-10
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 08:09:23 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.504	65	53942	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.564	168	368783	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.746	114	501801	50.00	ug/L	0.00
66) chlorobenzene-d5	11.086	82	250222	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.299	152	261013	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.442	113	49544	9.86	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	19.72%#		
60) toluene-d8 (s)	9.558	98	125379	10.02	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	20.04%#		
82) bromofluorobenzene (s)	12.235	95	52410	10.14	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	20.28%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.614	59	12509	96.09	ug/L	# 32
3) Ethanol	2.489	45	22044	1050.46	ug/L	# 100
5) dichlorodifluoromethane	1.501	85	107874	9.58	ug/L	98
6) chloromethane	1.602	50	73252	9.13	ug/L	99
7) vinyl chloride	1.711	62	70859	9.25	ug/L	99
8) bromomethane	2.005	96	59031	9.41	ug/L	99
9) chloroethane	2.100	64	32722	9.58	ug/L	99
10) ethyl ether	2.599	59	26605	10.44	ug/L	89
11) acetonitrile	3.291	41	60886	9.29	ug/L	76
12) trichlorofluoromethane	2.336	101	119005	9.29	ug/L	99
13) freon-113	2.890	101	52439	8.24	ug/L	92
14) acrolein	2.750	56	10018	42.58	ug/L	94
15) 1,1-dichloroethene	2.862	96	45462	9.61	ug/L	# 77
16) acetone	2.899	58	2714	9.99	ug/L	# 1
17) Methyl Acetate	3.277	43	14386	9.37	ug/L	# 91
18) methylene chloride	3.461	84	46236	10.07	ug/L	83
19) methyl tert butyl ether	3.835	73	82306	9.60	ug/L	96
20) acrylonitrile	3.779	53	8229	10.19	ug/L	100
21) allyl chloride	3.291	41	60882	9.29	ug/L	90
22) trans-1,2-dichloroethene	3.835	96	47290	10.16	ug/L	91
23) iodomethane	3.029	142	120557	10.23	ug/L	84
24) carbon disulfide	3.113	76	151910	9.50	ug/L	99
25) propionitrile	5.644	54	1746	7.53	ug/L	100
26) vinyl acetate	4.583	43	102186	9.60	ug/L	84
27) chloroprene	4.622	53	57322	9.14	ug/L	89
28) di-isopropyl ether	4.608	45	123360	9.84	ug/L	91
29) methacrylonitrile	5.922	41	12738	9.60	ug/L	91
30) 2-butanone	5.535	72	2388	9.56	ug/L	# 1
31) Hexane	4.253	41	29738	7.23	ug/L	# 73
32) 1,1-dichloroethane	4.511	63	79458	9.89	ug/L	98
33) tert-butyl ethyl ether	5.275	59	85355	9.20	ug/L	98
34) isobutyl alcohol	4.583	43	102186	48.01	ug/L	65
35) 2,2-dichloropropane	5.548	77	51527	8.50	ug/L	90
36) cis-1,2-dichloroethene	5.534	96	43987	9.92	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28208.D
 Acq On : 26 Feb 2014 4:53 pm
 Operator : amym
 Sample : ic1058-10
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 08:09:23 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.584	43	102184m	9.59	ug/L	
38) bromochloromethane	5.954	128	20614	9.85	ug/L	96
39) chloroform	6.172	83	88890	10.01	ug/L	99
41) Tetrahydrofuran	5.965	42	3996	8.86	ug/L	92
42) 1,1,1-trichloroethane	6.417	97	83710	8.98	ug/L	91
44) Cyclohexane	6.528	56	54547	8.78	ug/L #	89
45) carbon tetrachloride	6.673	117	74719	8.52	ug/L	98
46) 1,1-dichloropropene	6.686	75	50307	9.39	ug/L	96
47) benzene	7.006	78	128236	10.26	ug/L	98
48) 1,2-dichloroethane	7.130	62	55128	10.37	ug/L	92
49) tert-amyl methyl ether	7.294	73	54734	9.06	ug/L	91
50) heptane	7.564	43	26822	7.38	ug/L	84
51) trichloroethene	8.038	95	41221	9.94	ug/L	96
52) 1,2-dichloropropane	8.388	63	31849	10.06	ug/L	98
53) dibromomethane	8.491	93	19631	9.94	ug/L	88
54) bromodichloromethane	8.742	83	48198	9.44	ug/L	96
55) Methylcyclohexane	8.342	83	40980	7.34	ug/L	94
56) 2-chloroethyl vinyl ether	9.118	63	3754	6.91	ug/L	94
57) methyl methacrylate	8.520	69	8924	8.63	ug/L	81
58) 1,4-dioxane	8.491	88	331m	22.71	ug/L	
59) cis-1,3-dichloropropene	9.270	75	36455	8.29	ug/L	99
61) 4-methyl-2-pentanone	9.454	43	14192	8.78	ug/L	87
62) toluene	9.634	92	80294	9.92	ug/L	100
63) trans-1,3-dichloropropene	9.921	75	25319	7.99	ug/L	97
64) 1,1,2-trichloroethane	10.127	83	18193	10.08	ug/L	98
65) ethyl methacrylate	10.003	69	20188	8.35	ug/L	86
67) tetrachloroethene	10.187	166	39840	9.24	ug/L	94
68) 1,3-dichloropropane	10.289	76	34735	9.74	ug/L	98
69) dibromochloromethane	10.510	129	30404	9.06	ug/L	91
70) 1,2-dibromoethane	10.619	107	21492	9.58	ug/L	93
71) 2-hexanone	10.362	43	11096	10.09	ug/L	75
72) chlorobenzene	11.116	112	106189	10.23	ug/L	99
73) 1,1,1,2-tetrachloroethane	11.215	131	40882	9.14	ug/L	93
74) ethylbenzene	11.220	91	177443	9.78	ug/L	96
75) m,p-xylene	11.351	106	126058	19.12	ug/L	85
76) o-xylene	11.718	106	67260	9.84	ug/L	87
77) styrene	11.739	104	97206	9.63	ug/L	88
78) bromoform	11.913	173	14582	8.89	ug/L	95
79) trans-1,4-dichloro-2-b...	12.128	53	6254m	9.50	ug/L	
81) isopropylbenzene	12.070	105	184499	9.01	ug/L	96
83) bromobenzene	12.361	156	43740	9.97	ug/L	88
84) 1,1,2,2-tetrachloroethane	12.364	83	24152	9.85	ug/L	95
85) 1,2,3-trichloropropane	12.415	75	24150	9.92	ug/L	99
86) n-propylbenzene	12.459	91	213143	9.34	ug/L	98
87) 2-chlorotoluene	12.537	91	143529	9.97	ug/L	97
88) 4-chlorotoluene	12.649	91	159778	10.07	ug/L	93
89) 1,3,5-trimethylbenzene	12.628	105	159117	9.17	ug/L	98
90) tert-butylbenzene	12.914	91	88048	8.58	ug/L	95
91) 1,2,4-trimethylbenzene	12.968	105	166111	9.57	ug/L	100
92) sec-butylbenzene	13.117	105	173953	8.48	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28208.D
Acq On : 26 Feb 2014 4:53 pm
Operator : amym
Sample : ic1058-10
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 08:09:23 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

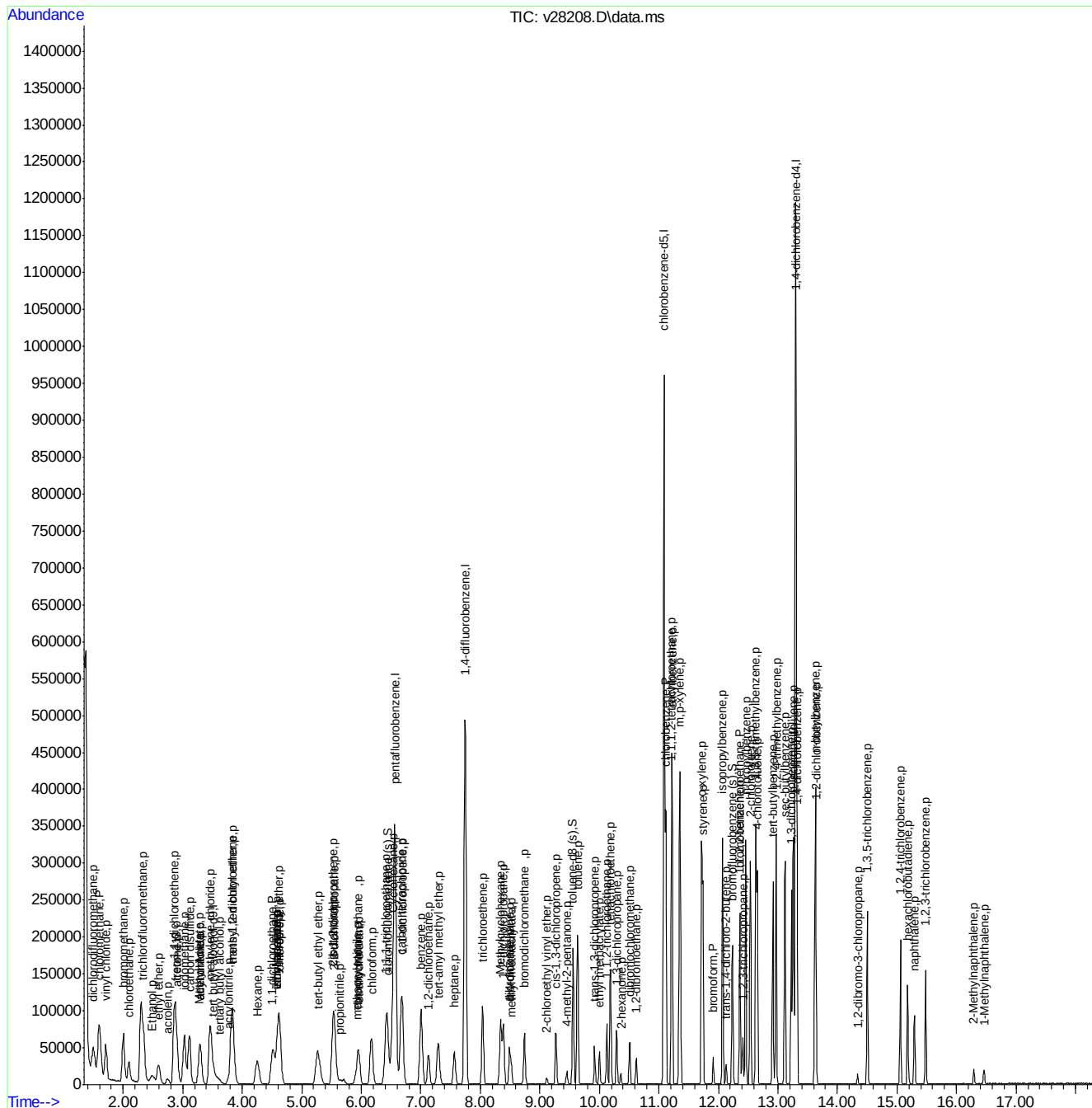
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	13.225	146	92409	10.16	ug/L	99
94)	p-isopropyltoluene	13.258	119	162005	8.99	ug/L	97
95)	1,4-dichlorobenzene	13.320	146	89251	10.45	ug/L	98
96)	1,2-dichlorobenzene	13.638	146	85675	10.09	ug/L	97
97)	n-butylbenzene	13.623	91	138019	8.83	ug/L	96
98)	1,2-dibromo-3-chloropr...	14.339	75	3311	9.07	ug/L	80
99)	1,3,5-trichlorobenzene	14.504	180	61656	9.71	ug/L	100
100)	1,2,4-trichlorobenzene	15.059	180	50551	10.35	ug/L	99
101)	hexachlorobutadiene	15.180	225	19758	8.90	ug/L	90
102)	naphthalene	15.294	128	62497	10.09	ug/L	100
103)	1,2,3-trichlorobenzene	15.483	180	39225	11.47	ug/L	98
104)	2-Methylnaphthalene	16.293	142	10890	7.75	ug/L	99
105)	1-Methylnaphthalene	16.464	142	9996	8.61	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28208.D
Acq On : 26 Feb 2014 4:53 pm
Operator : amym
Sample : ic1058-10
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 08:09:23 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



v140226w.m Fri Feb 28 09:54:59 2014

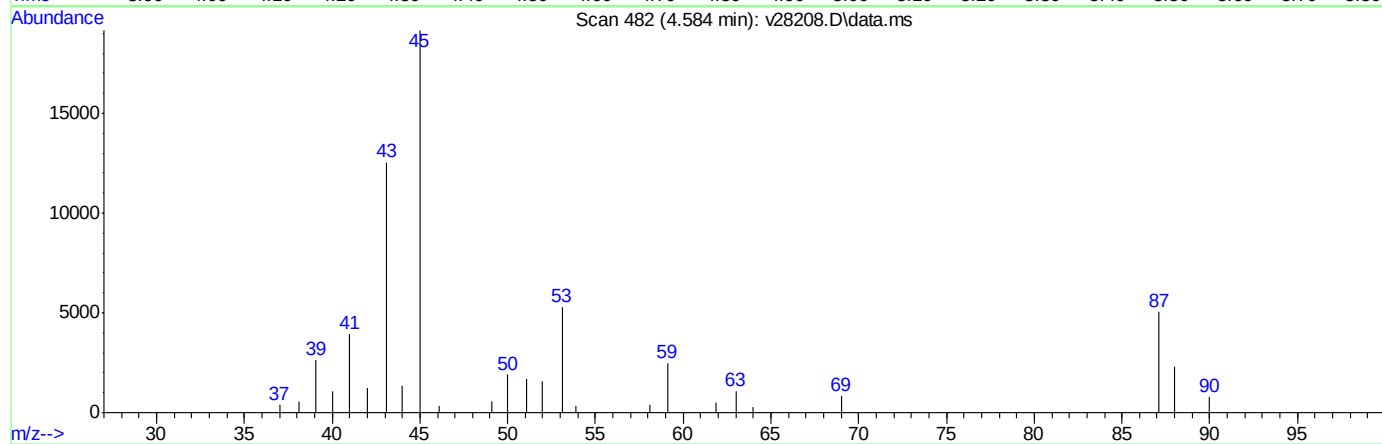
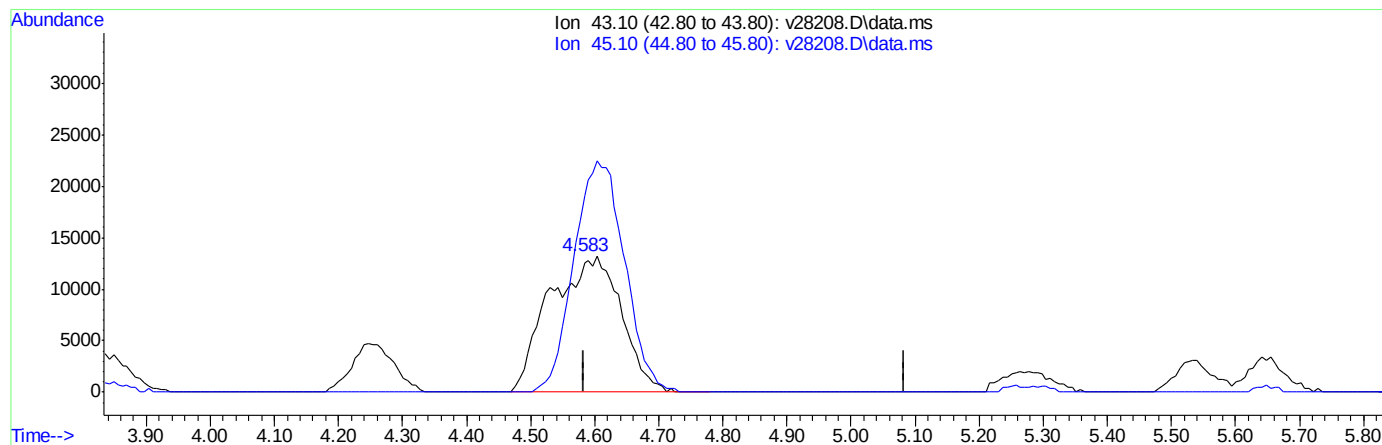
Page: 4

7.6.6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28208.D
Acq On : 26 Feb 2014 4:53 pm
Operator : amym
Sample : ic1058-10
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 07:59:37 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.584min (-0.000) 9.59ug/L m

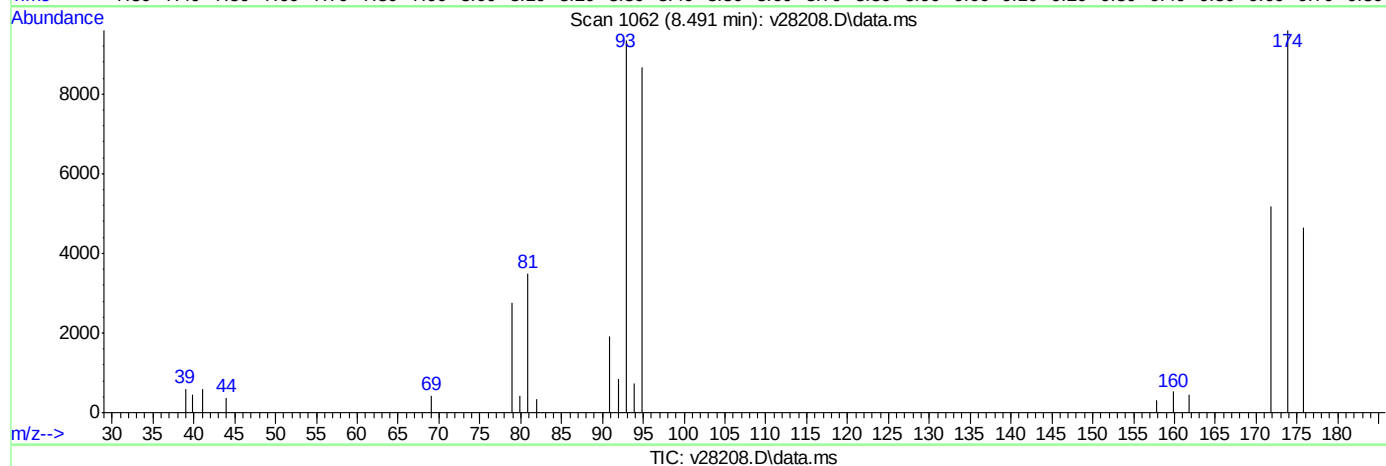
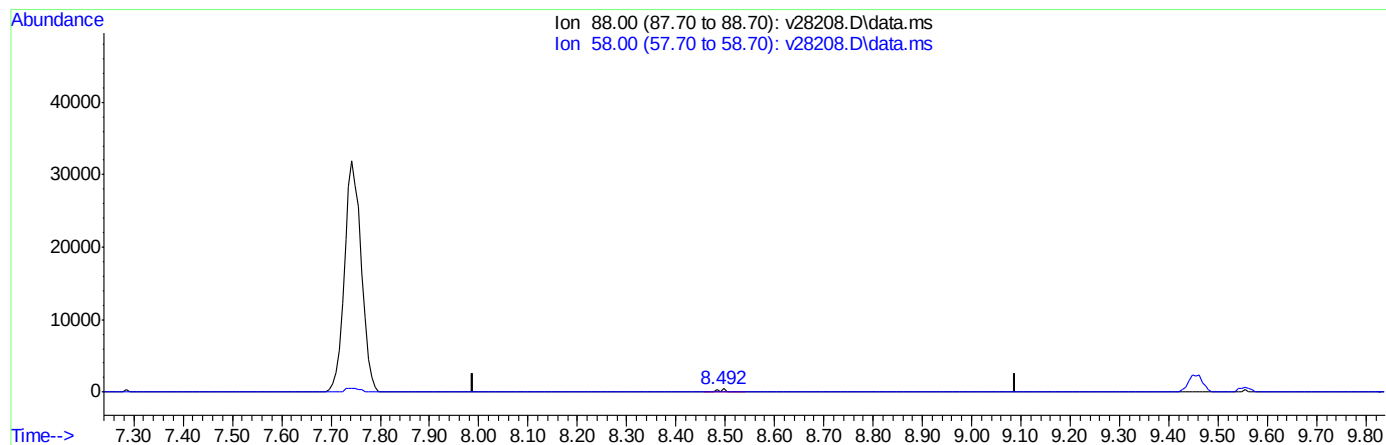
response 102184

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28208.D
Acq On : 26 Feb 2014 4:53 pm
Operator : amym
Sample : ic1058-10
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 07:59:37 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(58) 1,4-dioxane (p)

8.491min (-0.009) 22.71ug/L m

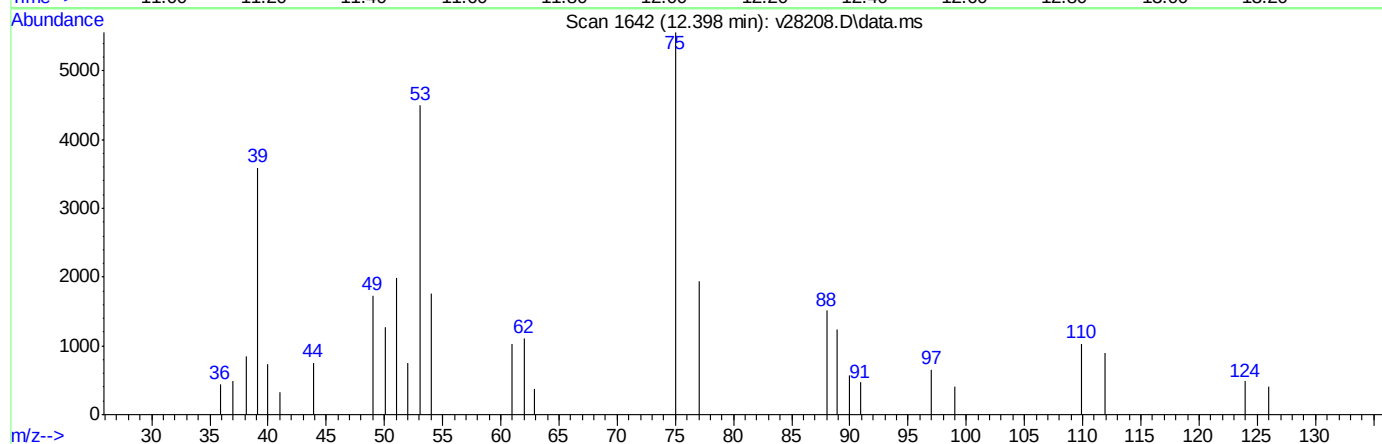
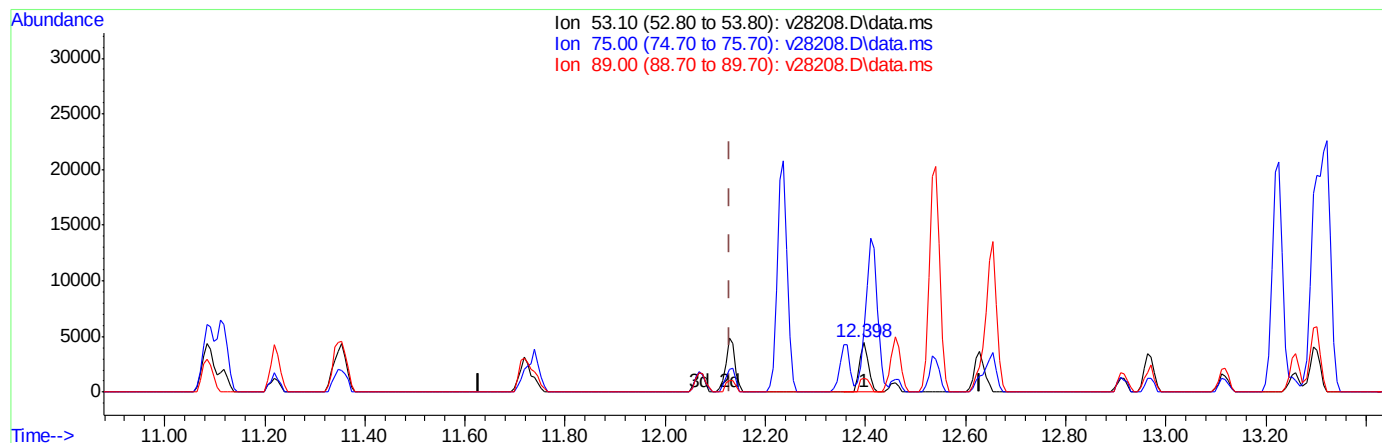
response 331

Ion	Exp%	Act%
88.00	100	100
58.00	76.50	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28208.D
Acq On : 26 Feb 2014 4:53 pm
Operator : amym
Sample : ic1058-10
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 07:59:37 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.398min (+0.270) 8.46ug/L

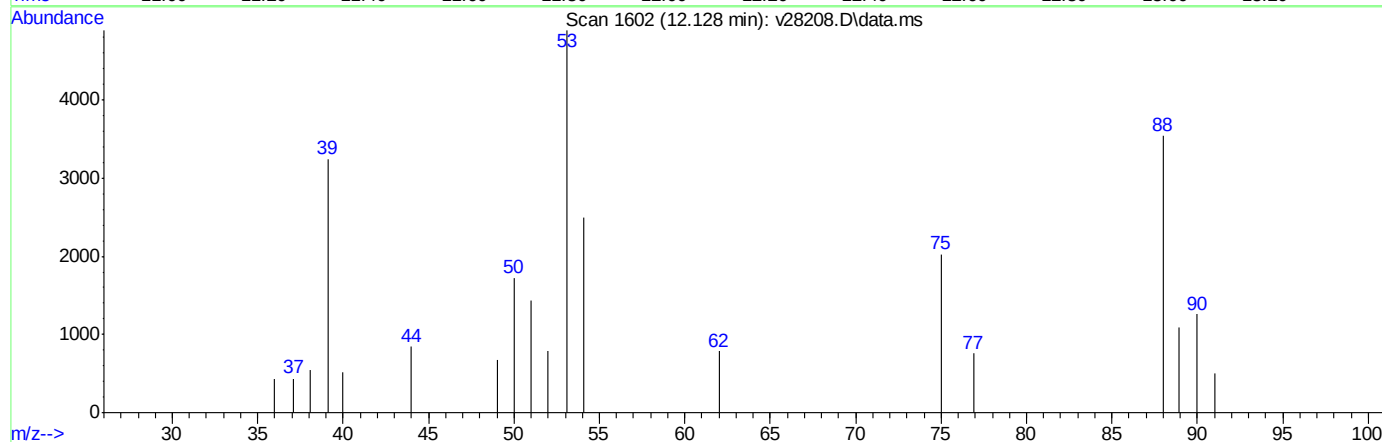
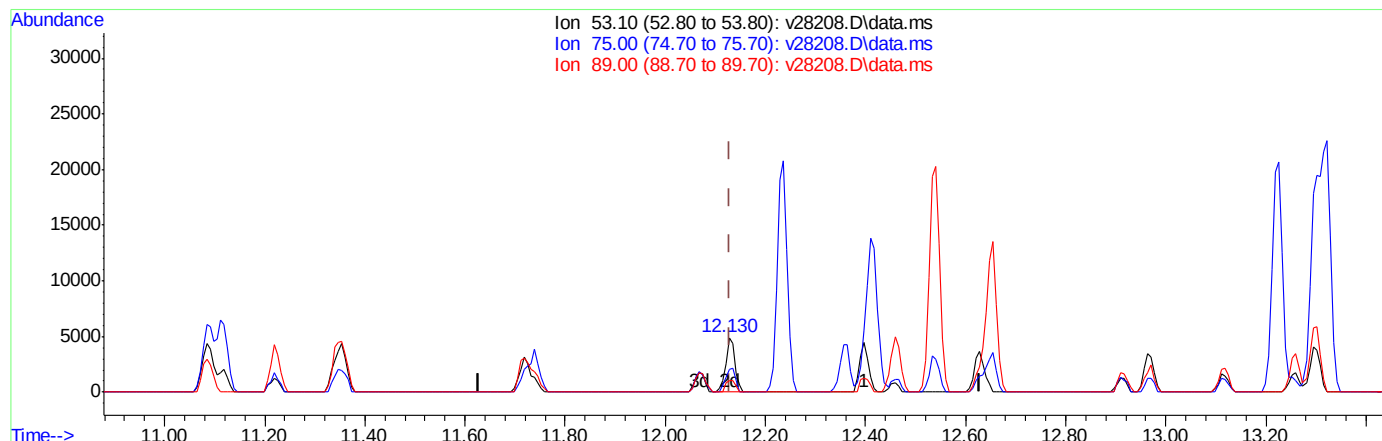
response 5571

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	105.31
89.00	51.30	27.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28208.D
Acq On : 26 Feb 2014 4:53 pm
Operator : amym
Sample : ic1058-10
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 27 07:59:37 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.128min (-0.000) 9.50ug/L m

response 6254

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	41.47#
89.00	51.30	22.25
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28209.D
 Acq On : 26 Feb 2014 5:20 pm
 Operator : amym
 Sample : icc1058-50
 Misc : MS31132,MSV1058,,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 27 08:10:37 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.510	65	56617	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.567	168	375018	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.748	114	527185	50.00	ug/L	0.00
66) chlorobenzene-d5	11.086	82	259891	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.298	152	267794	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.446	113	255536	50.00	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.00%		
60) toluene-d8 (s)	9.559	98	657494	50.01	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.02%		
82) bromofluorobenzene (s)	12.234	95	265173	50.00	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.00%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.621	59	68318	499.99	ug/L	# 39
3) Ethanol	2.499	45	110121	4999.64	ug/L	# 100
5) dichlorodifluoromethane	1.508	85	588249	51.37	ug/L	100
6) chloromethane	1.613	50	408058	50.00	ug/L	96
7) vinyl chloride	1.721	62	389318	50.00	ug/L	100
8) bromomethane	2.012	96	318962	49.99	ug/L	97
9) chloroethane	2.106	64	173606	49.99	ug/L	99
10) ethyl ether	2.607	59	129547	50.00	ug/L	95
11) acetonitrile	3.298	41	333302	50.03	ug/L	83
12) trichlorofluoromethane	2.342	101	651127	50.00	ug/L	99
13) freon-113	2.896	101	323407	50.00	ug/L	98
14) acrolein	2.758	56	59808	249.98	ug/L	99
15) 1,1-dichloroethene	2.869	96	240472	50.00	ug/L	# 80
16) acetone	2.908	58	13813	50.00	ug/L	# 78
17) Methyl Acetate	3.284	43	78081	50.00	ug/L	95
18) methylene chloride	3.468	84	233505	50.00	ug/L	88
19) methyl tert butyl ether	3.843	73	435743	50.00	ug/L	97
20) acrylonitrile	3.786	53	41038	50.00	ug/L	89
21) allyl chloride	3.298	41	333302	50.00	ug/L	90
22) trans-1,2-dichloroethene	3.841	96	236558	50.00	ug/L	94
23) iodomethane	3.035	142	599332	50.00	ug/L	87
24) carbon disulfide	3.120	76	812545	49.97	ug/L	100
25) propionitrile	5.650	54	11793	50.00	ug/L	100
26) vinyl acetate	4.586	43	541025	50.00	ug/L	89
27) chloroprene	4.629	53	318941	50.00	ug/L	84
28) di-isopropyl ether	4.614	45	637319	50.00	ug/L	91
29) methacrylonitrile	5.924	41	67464	50.00	ug/L	89
30) 2-butanone	5.540	72	12702	50.00	ug/L	# 54
31) Hexane	4.260	41	209198	49.99	ug/L	# 73
32) 1,1-dichloroethane	4.518	63	408486	50.00	ug/L	100
33) tert-butyl ethyl ether	5.281	59	471757	50.00	ug/L	97
34) isobutyl alcohol	4.586	43	541461	250.18	ug/L	65
35) 2,2-dichloropropane	5.554	77	308089	50.00	ug/L	94
36) cis-1,2-dichloroethene	5.539	96	225537	50.00	ug/L	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28209.D
 Acq On : 26 Feb 2014 5:20 pm
 Operator : amym
 Sample : icc1058-50
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 27 08:10:37 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.584	43	541354m	49.99	ug/L	
38) bromochloromethane	5.959	128	106427	50.00	ug/L	95
39) chloroform	6.177	83	451406	50.00	ug/L	100
41) Tetrahydrofuran	5.965	42	22925	50.00	ug/L	94
42) 1,1,1-trichloroethane	6.422	97	473793	50.00	ug/L	95
44) Cyclohexane	6.528	56	326499	50.01	ug/L	96
45) carbon tetrachloride	6.677	117	460905	50.01	ug/L	100
46) 1,1-dichloropropene	6.690	75	281195	49.94	ug/L	94
47) benzene	7.009	78	656713	50.01	ug/L	99
48) 1,2-dichloroethane	7.133	62	279403	50.01	ug/L	95
49) tert-amyl methyl ether	7.298	73	317428	50.01	ug/L	94
50) heptane	7.566	43	191028	50.01	ug/L	86
51) trichloroethene	8.040	95	217863	50.01	ug/L	96
52) 1,2-dichloropropane	8.388	63	166289	50.01	ug/L	100
53) dibromomethane	8.492	93	103742	50.01	ug/L	87
54) bromodichloromethane	8.743	83	268246	50.01	ug/L	100
55) Methylcyclohexane	8.344	83	293492	50.01	ug/L	95
56) 2-chloroethyl vinyl ether	9.118	63	28551	50.01	ug/L	96
57) methyl methacrylate	8.522	69	54321	50.01	ug/L #	76
58) 1,4-dioxane	8.499	88	3828	250.03	ug/L	89
59) cis-1,3-dichloropropene	9.271	75	230890	50.01	ug/L	97
61) 4-methyl-2-pentanone	9.455	43	84901	50.01	ug/L	88
62) toluene	9.635	92	425333	50.01	ug/L	99
63) trans-1,3-dichloropropene	9.922	75	166382	50.01	ug/L	93
64) 1,1,2-trichloroethane	10.128	83	94840	50.01	ug/L	98
65) ethyl methacrylate	10.001	69	127064	50.01	ug/L	84
67) tetrachloroethene	10.188	166	223846	50.00	ug/L	97
68) 1,3-dichloropropane	10.290	76	185256	50.00	ug/L	99
69) dibromochloromethane	10.510	129	174350	50.00	ug/L	100
70) 1,2-dibromoethane	10.619	107	116543	50.00	ug/L	97
71) 2-hexanone	10.362	43	57117	50.00	ug/L	82
72) chlorobenzene	11.115	112	538816	50.00	ug/L	99
73) 1,1,1,2-tetrachloroethane	11.215	131	232167	50.00	ug/L	96
74) ethylbenzene	11.220	91	942608	50.00	ug/L	94
75) m,p-xylene	11.351	106	684929	100.01	ug/L	89
76) o-xylene	11.718	106	354948	50.00	ug/L	84
77) styrene	11.738	104	524424	50.00	ug/L	90
78) bromoform	11.913	173	85227	50.00	ug/L	96
79) trans-1,4-dichloro-2-b...	12.129	53	34199m	50.00	ug/L	
81) isopropylbenzene	12.070	105	1050728	50.00	ug/L	97
83) bromobenzene	12.360	156	225130	50.00	ug/L	90
84) 1,1,2,2-tetrachloroethane	12.364	83	125764	50.00	ug/L	98
85) 1,2,3-trichloropropane	12.403	75	157668	63.14	ug/L	99
86) n-propylbenzene	12.458	91	1170950	50.00	ug/L	96
87) 2-chlorotoluene	12.537	91	738176	50.00	ug/L	98
88) 4-chlorotoluene	12.648	91	814114	50.00	ug/L	95
89) 1,3,5-trimethylbenzene	12.627	105	889474	49.99	ug/L	97
90) tert-butylbenzene	12.913	91	521778	49.57	ug/L	91
91) 1,2,4-trimethylbenzene	12.967	105	890162	50.00	ug/L	98
92) sec-butylbenzene	13.116	105	1052151	50.00	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28209.D
Acq On : 26 Feb 2014 5:20 pm
Operator : amym
Sample : icc1058-50
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 27 08:10:37 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

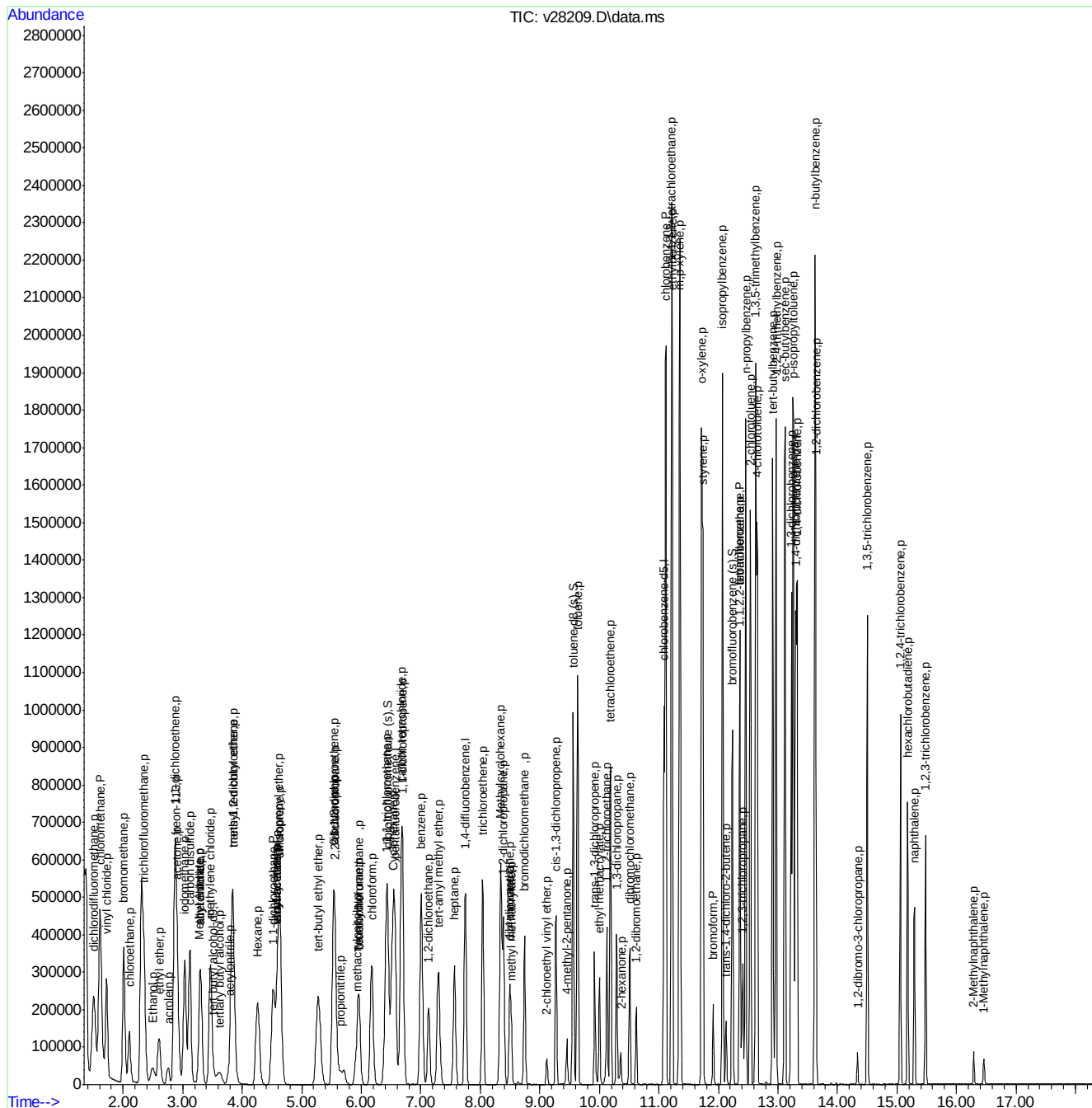
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	13.224	146	466743	50.00	ug/L	99
94)	p-isopropyltoluene	13.257	119	924650	50.00	ug/L	98
95)	1,4-dichlorobenzene	13.320	146	437997	50.00	ug/L	100
96)	1,2-dichlorobenzene	13.637	146	435522	50.00	ug/L	100
97)	n-butylbenzene	13.622	91	801927	50.00	ug/L	99
98)	1,2-dibromo-3-chloropr...	14.338	75	18721	50.00	ug/L	80
99)	1,3,5-trichlorobenzene	14.503	180	325795	50.00	ug/L	98
100)	1,2,4-trichlorobenzene	15.058	180	250452	50.00	ug/L	100
101)	hexachlorobutadiene	15.180	225	113841	50.00	ug/L	93
102)	naphthalene	15.293	128	317659	50.00	ug/L	100
103)	1,2,3-trichlorobenzene	15.481	180	175455	50.00	ug/L	98
104)	2-Methylnaphthalene	16.292	142	36050	25.00	ug/L	93
105)	1-Methylnaphthalene	16.462	142	29786	25.00	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28209.D
 Acq On : 26 Feb 2014 5:20 pm
 Operator : amym
 Sample : icc1058-50
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

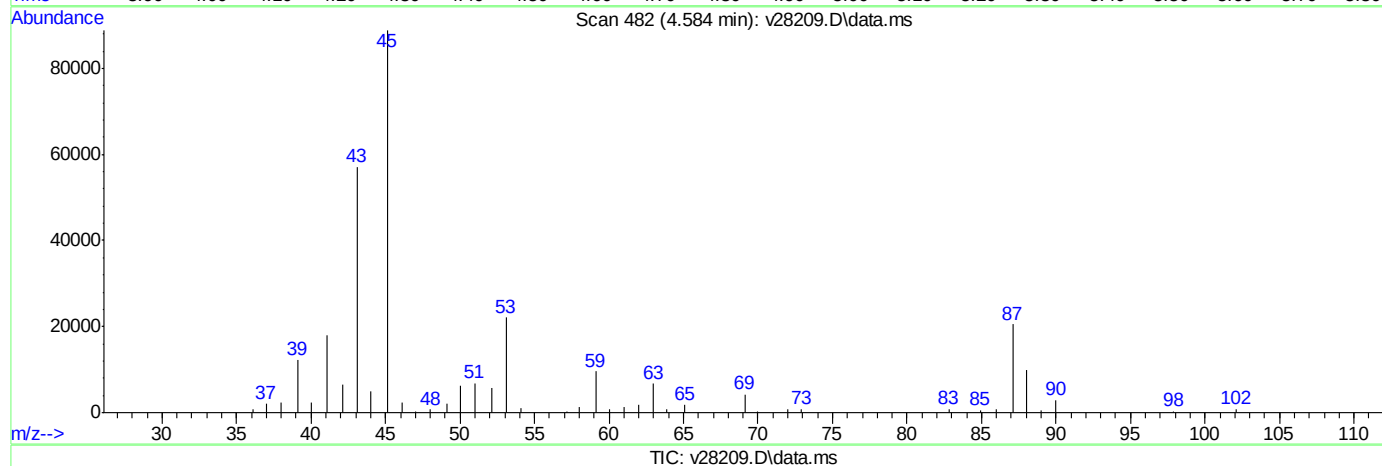
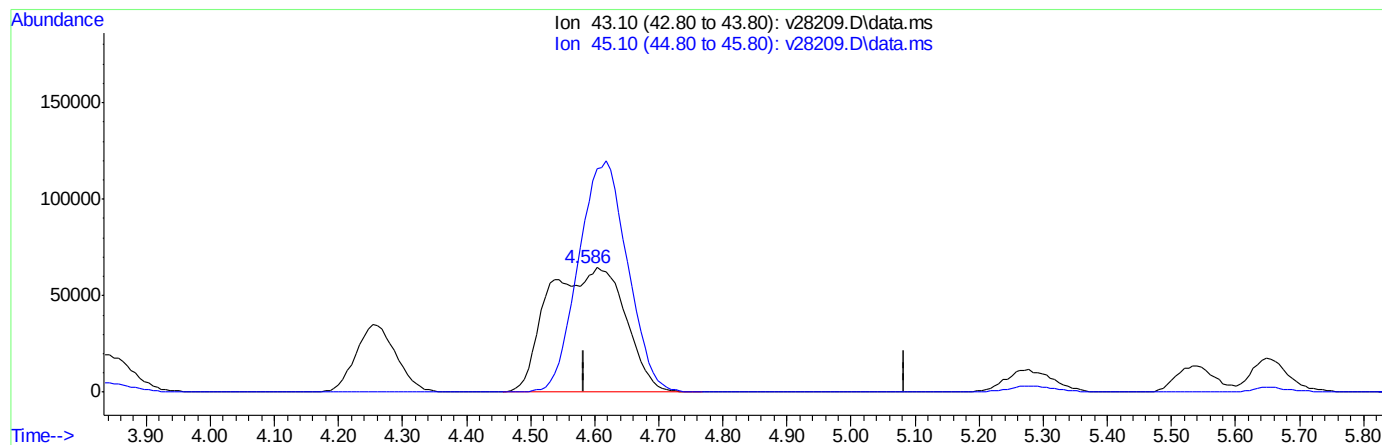
Quant Time: Feb 27 08:10:37 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28209.D
Acq On : 26 Feb 2014 5:20 pm
Operator : amym
Sample : icc1058-50
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 27 07:59:40 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.584min (0.000) 49.99ug/L m

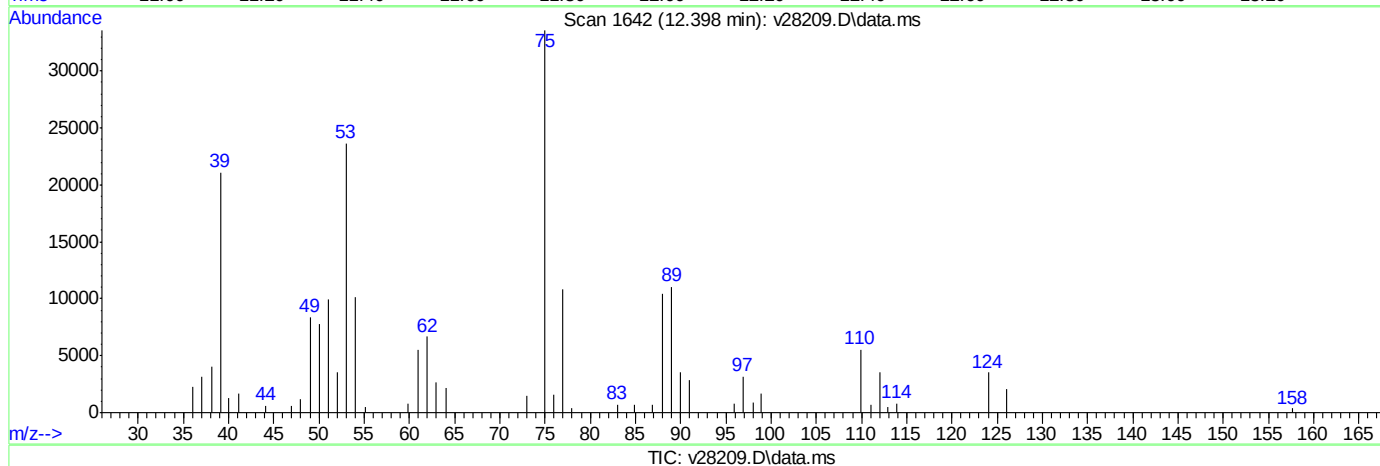
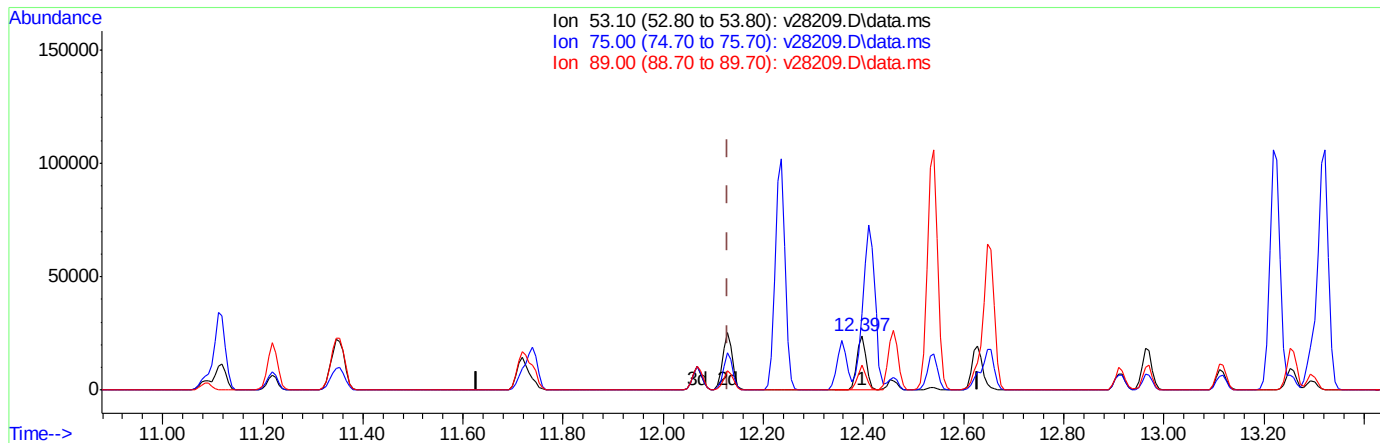
response 541354

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28209.D
Acq On : 26 Feb 2014 5:20 pm
Operator : amym
Sample : icc1058-50
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 27 07:59:40 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.397min (+0.269) 45.97ug/L

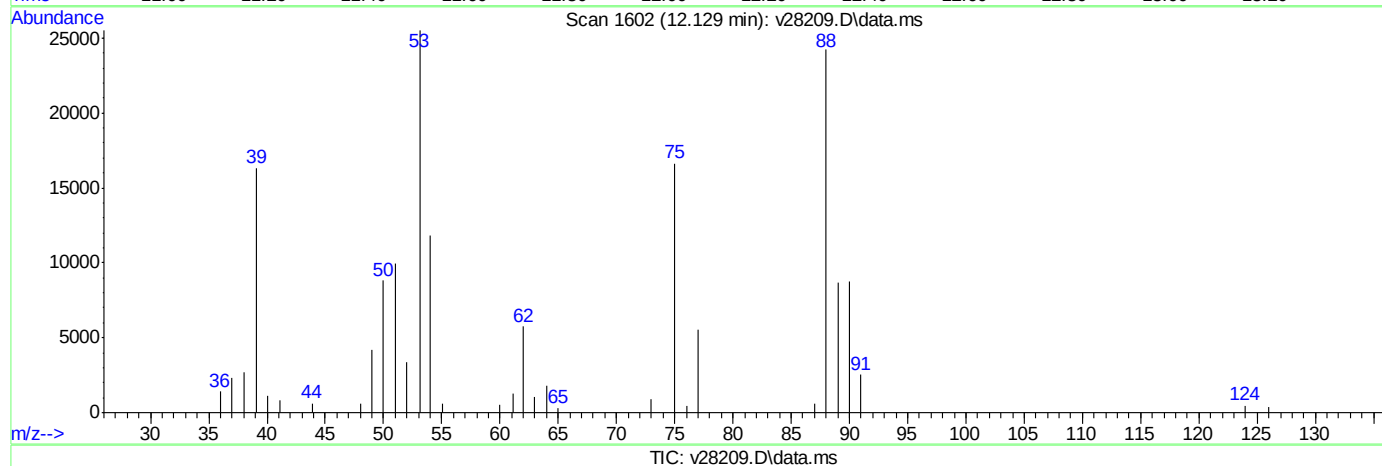
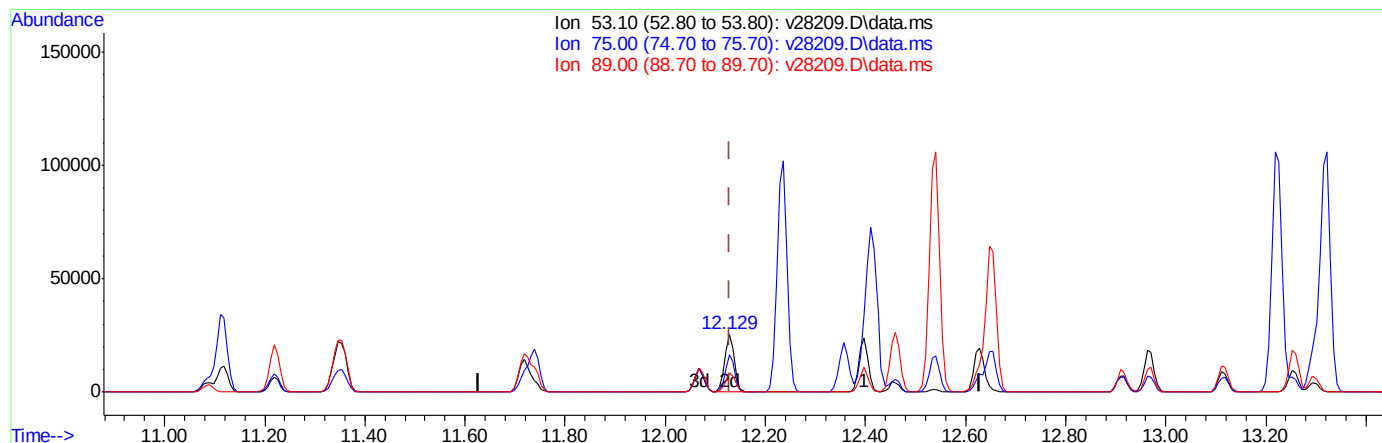
response 31441

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	129.83
89.00	51.30	46.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28209.D
Acq On : 26 Feb 2014 5:20 pm
Operator : amym
Sample : icc1058-50
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 27 07:59:40 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(79) trans-1,4-dichloro-2-butene (p)

12.129min (0.000) 50.00ug/L m

response 34199

Ion	Exp%	Act%
53.10	100	100
75.00	105.50	65.19#
89.00	51.30	33.99
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28210.D
 Acq On : 26 Feb 2014 5:46 pm
 Operator : amym
 Sample : ic1058-100
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 27 08:11:49 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.515	65	63276	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.570	168	414239	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.749	114	588179	50.00	ug/L	0.00
66) chlorobenzene-d5	11.085	82	288927	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.297	152	298643	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.448	113	558442	98.91	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	197.82%#		
60) toluene-d8 (s)	9.559	98	1507704	102.78	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	205.56%#		
82) bromofluorobenzene (s)	12.234	95	600487	101.53	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	203.06%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.626	59	160124	1048.56	ug/L	# 51
3) Ethanol	2.501	45	233924	9502.79	ug/L	# 100
5) dichlorodifluoromethane	1.512	85	1252629	99.03	ug/L	100
6) chloromethane	1.620	50	935836	103.80	ug/L	96
7) vinyl chloride	1.727	62	883642	102.73	ug/L	100
8) bromomethane	2.017	96	715247	101.49	ug/L	98
9) chloroethane	2.109	64	387660	101.07	ug/L	100
10) ethyl ether	2.610	59	287764	100.55	ug/L	96
11) acetonitrile	3.301	41	754858	102.58	ug/L	85
12) trichlorofluoromethane	2.345	101	1433101	99.62	ug/L	99
13) freon-113	2.901	101	698872	97.81	ug/L	98
14) acrolein	2.760	56	135694	513.46	ug/L	96
15) 1,1-dichloroethene	2.872	96	532086	100.15	ug/L	84
16) acetone	2.910	58	34793	114.01	ug/L	# 35
17) Methyl Acetate	3.286	43	168326	97.58	ug/L	95
18) methylene chloride	3.470	84	503747	97.65	ug/L	89
19) methyl tert butyl ether	3.849	73	985561	102.37	ug/L	96
20) acrylonitrile	3.789	53	89732	98.97	ug/L	100
21) allyl chloride	3.301	41	754858	102.51	ug/L	90
22) trans-1,2-dichloroethene	3.844	96	522047	99.89	ug/L	91
23) iodomethane	3.038	142	1320601	99.74	ug/L	88
24) carbon disulfide	3.123	76	1794249	99.90	ug/L	100
25) propionitrile	5.653	54	26370	101.21	ug/L	100
26) vinyl acetate	4.588	43	1219262	102.00	ug/L	90
27) chloroprene	4.633	53	708604	100.56	ug/L	84
28) di-isopropyl ether	4.618	45	1425618	101.25	ug/L	92
29) methacrylonitrile	5.926	41	151471	101.62	ug/L	89
30) 2-butanone	5.540	72	30947	110.28	ug/L	# 69
31) Hexane	4.264	41	463859	100.36	ug/L	# 74
32) 1,1-dichloroethane	4.522	63	902856	100.04	ug/L	99
33) tert-butyl ethyl ether	5.284	59	1076238	103.26	ug/L	98
34) isobutyl alcohol	4.588	43	1219095	509.95	ug/L	65
35) 2,2-dichloropropane	5.558	77	756827	111.19	ug/L	91
36) cis-1,2-dichloroethene	5.542	96	506924	101.73	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28210.D
 Acq On : 26 Feb 2014 5:46 pm
 Operator : amym
 Sample : ic1058-100
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 27 08:11:49 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.591	43	1218235m	101.83	ug/L	
38) bromochloromethane	5.961	128	231532	98.47	ug/L	96
39) chloroform	6.179	83	992962	99.56	ug/L	98
41) Tetrahydrofuran	5.967	42	50882	100.46	ug/L	94
42) 1,1,1-trichloroethane	6.424	97	1080656	103.24	ug/L	96
44) Cyclohexane	6.530	56	716419	98.35	ug/L	98
45) carbon tetrachloride	6.679	117	1047192	101.83	ug/L	99
46) 1,1-dichloropropene	6.692	75	628798	100.10	ug/L	95
47) benzene	7.011	78	1485498	101.38	ug/L	99
48) 1,2-dichloroethane	7.135	62	609352	97.75	ug/L	95
49) tert-amyl methyl ether	7.299	73	738820	104.32	ug/L	93
50) heptane	7.568	43	442135	103.75	ug/L	88
51) trichloroethene	8.041	95	490942	101.00	ug/L	96
52) 1,2-dichloropropane	8.389	63	376594	101.50	ug/L	100
53) dibromomethane	8.493	93	225951	97.62	ug/L	94
54) bromodichloromethane	8.743	83	613831	102.56	ug/L	100
55) Methylcyclohexane	8.345	83	663256	101.29	ug/L	95
56) 2-chloroethyl vinyl ether	9.118	63	70095	110.04	ug/L	98
57) methyl methacrylate	8.522	69	127013	104.80	ug/L	81
58) 1,4-dioxane	8.501	88	9693	567.45	ug/L	99
59) cis-1,3-dichloropropene	9.271	75	558457	108.41	ug/L	95
61) 4-methyl-2-pentanone	9.454	43	199757	105.45	ug/L	89
62) toluene	9.635	92	977109	102.96	ug/L	97
63) trans-1,3-dichloropropene	9.922	75	419834	113.09	ug/L	91
64) 1,1,2-trichloroethane	10.128	83	214805	101.51	ug/L	99
65) ethyl methacrylate	10.001	69	296353	104.53	ug/L	83
67) tetrachloroethene	10.187	166	507666	102.00	ug/L	96
68) 1,3-dichloropropane	10.289	76	412367	100.11	ug/L	99
69) dibromochloromethane	10.509	129	413105	106.56	ug/L	98
70) 1,2-dibromoethane	10.618	107	265087	102.30	ug/L	98
71) 2-hexanone	10.360	43	154355	121.55	ug/L	84
72) chlorobenzene	11.115	112	1224686	102.23	ug/L	100
73) 1,1,1,2-tetrachloroethane	11.214	131	550209	106.59	ug/L	97
74) ethylbenzene	11.220	91	2150330	102.60	ug/L	94
75) m,p-xylene	11.350	106	1572176	206.49	ug/L	87
76) o-xylene	11.717	106	826971	104.78	ug/L	87
77) styrene	11.738	104	1196904	102.65	ug/L	91
78) bromoform	11.912	173	204418	107.87	ug/L	99
79) trans-1,4-dichloro-2-b...	12.129	53	84921	111.68	ug/L #	70
81) isopropylbenzene	12.069	105	2434811	103.89	ug/L	98
83) bromobenzene	12.359	156	517840	103.13	ug/L	93
84) 1,1,2,2-tetrachloroethane	12.364	83	286082	101.99	ug/L	98
85) 1,2,3-trichloropropane	12.411	75	281704m	101.15	ug/L	
86) n-propylbenzene	12.457	91	2700297	103.39	ug/L	97
87) 2-chlorotoluene	12.537	91	1665319	101.15	ug/L	99
88) 4-chlorotoluene	12.648	91	1856882	102.26	ug/L	95
89) 1,3,5-trimethylbenzene	12.627	105	2084092	105.03	ug/L	96
90) tert-butylbenzene	12.913	91	1221441	104.05	ug/L	91
91) 1,2,4-trimethylbenzene	12.967	105	2052153	103.36	ug/L	97
92) sec-butylbenzene	13.116	105	2467012	105.13	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28210.D
Acq On : 26 Feb 2014 5:46 pm
Operator : amym
Sample : ic1058-100
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 27 08:11:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

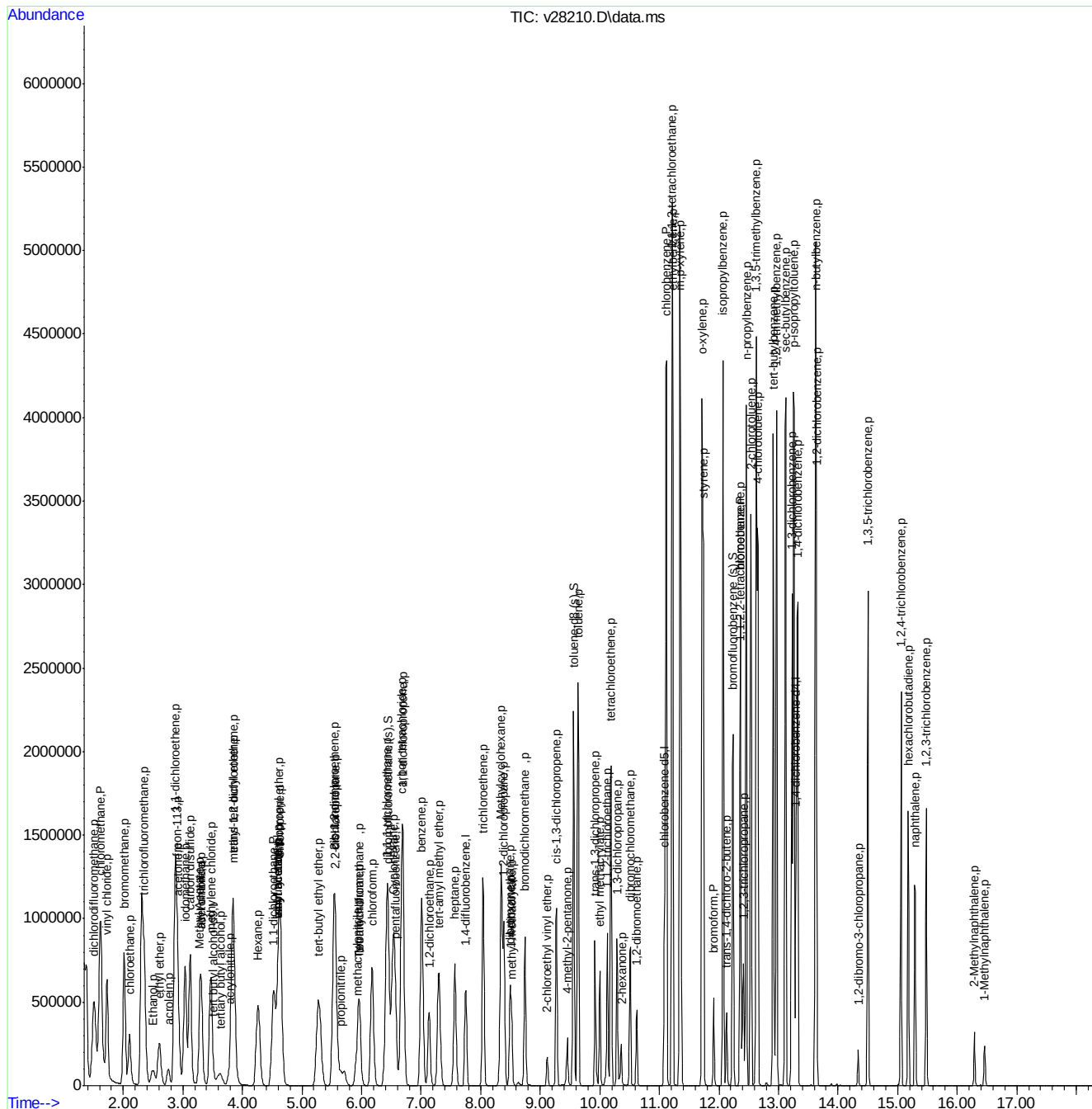
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	13.224	146	1074819	103.24	ug/L	99
94) p-isopropyltoluene	13.257	119	2163618	104.92	ug/L	98
95) 1,4-dichlorobenzene	13.319	146	1008895	103.27	ug/L	100
96) 1,2-dichlorobenzene	13.636	146	989927	101.91	ug/L	99
97) n-butylbenzene	13.621	91	1879008	105.06	ug/L	100
98) 1,2-dibromo-3-chloropr...	14.338	75	45862	109.84	ug/L	80
99) 1,3,5-trichlorobenzene	14.502	180	761511	104.80	ug/L	98
100) 1,2,4-trichlorobenzene	15.058	180	600556	107.51	ug/L	98
101) hexachlorobutadiene	15.179	225	259406	102.16	ug/L	93
102) naphthalene	15.291	128	824764	116.41	ug/L	100
103) 1,2,3-trichlorobenzene	15.481	180	448276	114.55	ug/L	98
104) 2-Methylnaphthalene	16.291	142	135245	84.10	ug/L	99
105) 1-Methylnaphthalene	16.461	142	103239	77.70	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28210.D
Acq On : 26 Feb 2014 5:46 pm
Operator : amym
Sample : ic1058-100
Misc : MS31132,MSV1058,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 27 08:11:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



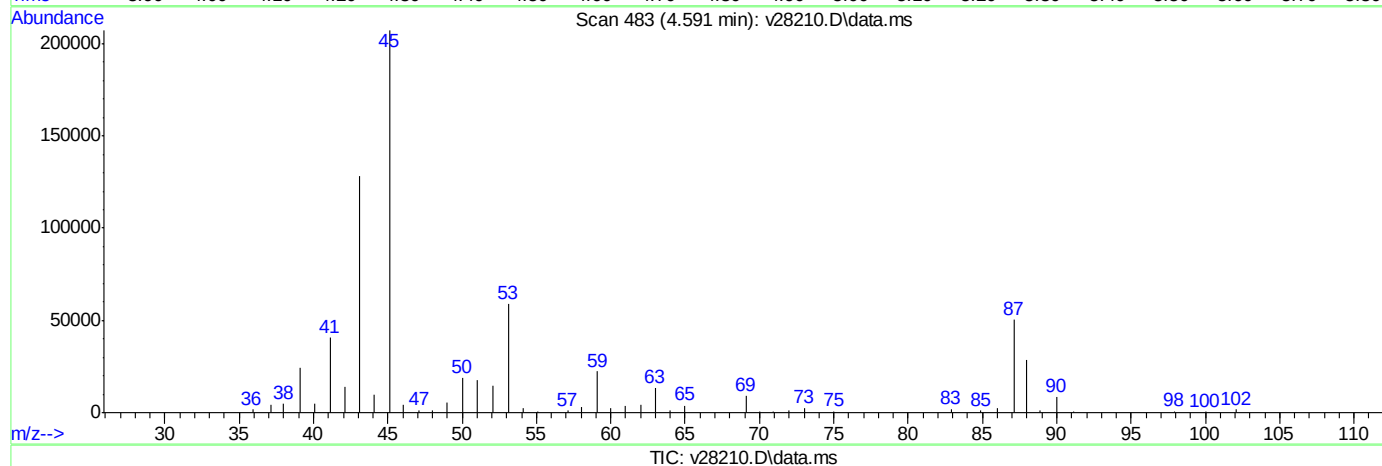
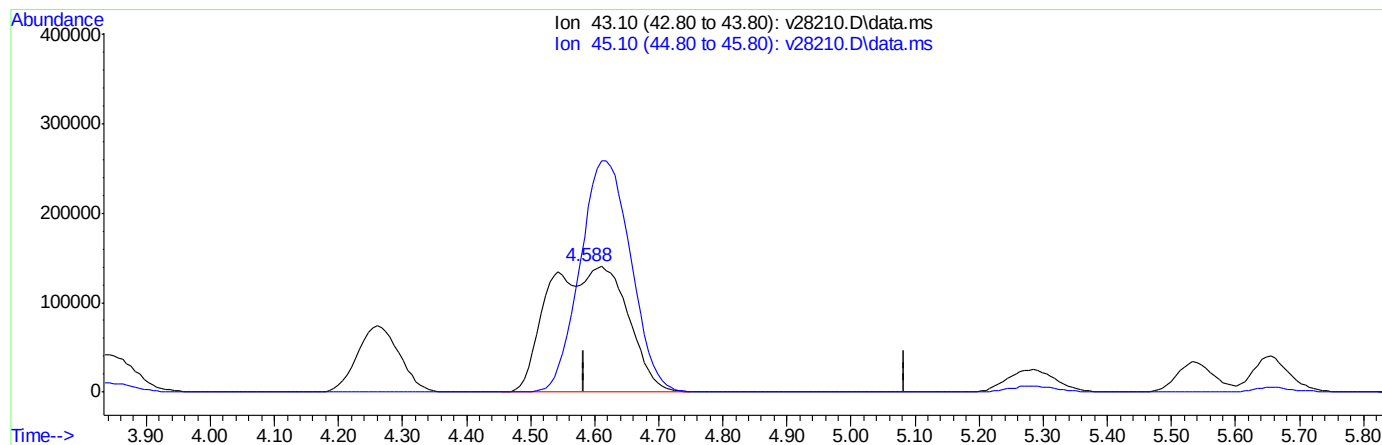
v140226w.m Fri Feb 28 09:55:09 2014

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28210.D
Acq On : 26 Feb 2014 5:46 pm
Operator : amym
Sample : ic1058-100
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 27 07:59:43 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.591min (+0.007) 101.83ug/L m

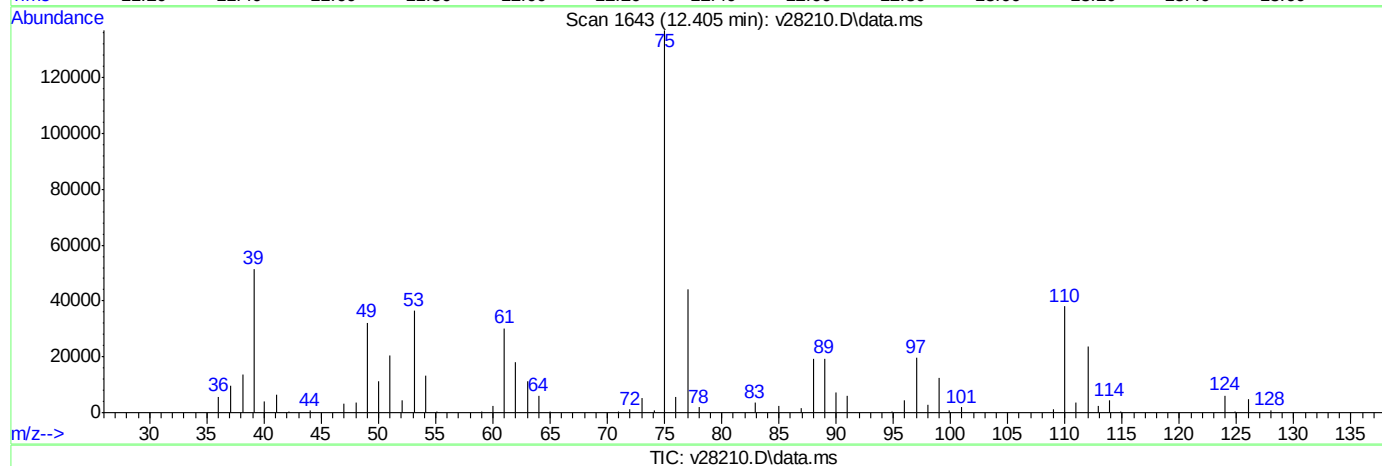
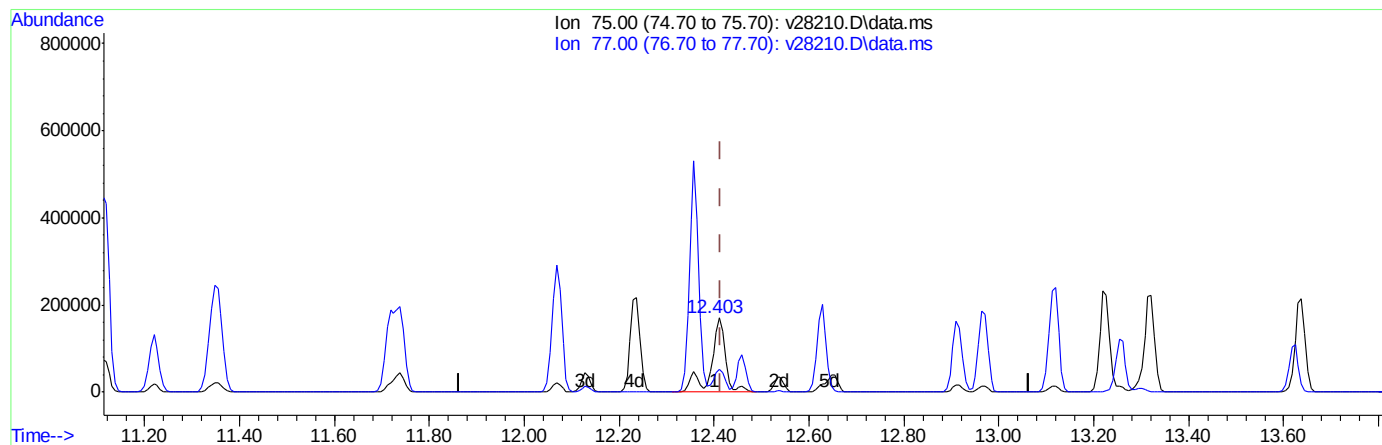
response 1218235

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28210.D
Acq On : 26 Feb 2014 5:46 pm
Operator : amym
Sample : ic1058-100
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 27 07:59:43 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(85) 1,2,3-trichloropropane (p)

12.403min (-0.011) 131.40ug/L

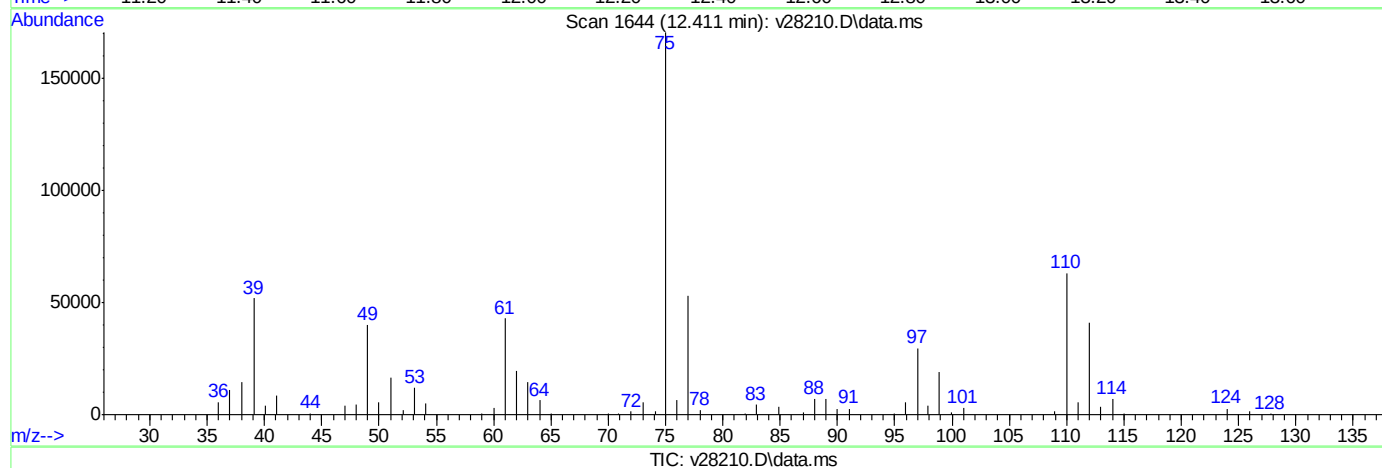
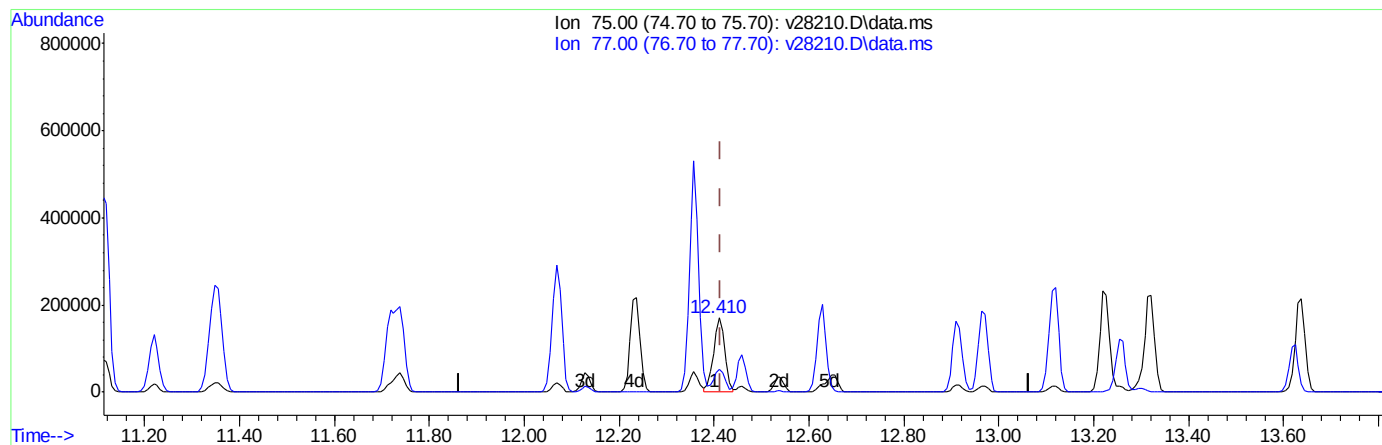
response 365936

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	32.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28210.D
Acq On : 26 Feb 2014 5:46 pm
Operator : amym
Sample : ic1058-100
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 27 07:59:43 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(85) 1,2,3-trichloropropane (p)

12.411min (-0.003) 101.15ug/L m

response 281704

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	31.06
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28211.D
 Acq On : 26 Feb 2014 6:12 pm
 Operator : amym
 Sample : ic1058-200
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 27 08:13:06 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.514	65	69118	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.569	168	457001	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.749	114	652442	50.00	ug/L	0.00
66) chlorobenzene-d5	11.085	82	317432	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.297	152	336215	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.449	113	1291928	207.42	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	414.84%#		
60) toluene-d8 (s)	9.559	98	3528122	216.81	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	433.62%#		
82) bromofluorobenzene (s)	12.233	95	1377437	206.87	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	413.74%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.626	59	374328	2244.06	ug/L	# 55
3) Ethanol	2.501	45	524095	19491.00	ug/L	# 100
5) dichlorodifluoromethane	1.511	85	2616193	187.48	ug/L	99
6) chloromethane	1.621	50	1964795	197.54	ug/L	95
7) vinyl chloride	1.727	62	1861746	196.19	ug/L	99
8) bromomethane	2.015	96	1482051	190.63	ug/L	99
9) chloroethane	2.108	64	812509	192.01	ug/L	100
10) ethyl ether	2.610	59	641978	203.32	ug/L	95
11) acetonitrile	3.300	41	1729542	213.03	ug/L	88
12) trichlorofluoromethane	2.344	101	2994627	188.69	ug/L	97
13) freon-113	2.899	101	1598404	202.78	ug/L	98
14) acrolein	2.758	56	294337	1009.54	ug/L	98
15) 1,1-dichloroethene	2.870	96	1204072	205.43	ug/L	91
16) acetone	2.909	58	65280	193.89	ug/L	# 46
17) Methyl Acetate	3.286	43	385831	202.73	ug/L	95
18) methylene chloride	3.468	84	1136568	199.70	ug/L	89
19) methyl tert butyl ether	3.851	73	2292460	215.84	ug/L	98
20) acrylonitrile	3.787	53	206898	206.84	ug/L	99
21) allyl chloride	3.300	41	1729542	212.89	ug/L	90
22) trans-1,2-dichloroethene	3.842	96	1186966	205.87	ug/L	93
23) iodomethane	3.037	142	2961322	202.73	ug/L	91
24) carbon disulfide	3.121	76	4077645	205.80	ug/L	100
25) propionitrile	5.652	54	63342	220.36	ug/L	100
26) vinyl acetate	4.587	43	2804260	212.65	ug/L	91
27) chloroprene	4.633	53	1629619	209.63	ug/L	85
28) di-isopropyl ether	4.617	45	3254505	209.51	ug/L	91
29) methacrylonitrile	5.926	41	350576	213.20	ug/L	89
30) 2-butanone	5.542	72	63794	206.05	ug/L	# 71
31) Hexane	4.263	41	1075710	210.96	ug/L	# 76
32) 1,1-dichloroethane	4.521	63	2074051	208.31	ug/L	99
33) tert-butyl ethyl ether	5.284	59	2541041	220.98	ug/L	98
34) isobutyl alcohol	4.587	43	2804510	1063.36	ug/L	72
35) 2,2-dichloropropane	5.558	77	1809941	241.03	ug/L	92
36) cis-1,2-dichloroethene	5.542	96	1174308	213.62	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28211.D
 Acq On : 26 Feb 2014 6:12 pm
 Operator : amym
 Sample : ic1058-200
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 27 08:13:06 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.584	43	2803221m	212.40	ug/L	
38) bromochloromethane	5.961	128	548219	211.33	ug/L	97
39) chloroform	6.179	83	2262760	205.66	ug/L	100
41) Tetrahydrofuran	5.968	42	120423	215.51	ug/L	89
42) 1,1,1-trichloroethane	6.424	97	2472464	214.10	ug/L	98
44) Cyclohexane	6.529	56	1660791	205.53	ug/L	99
45) carbon tetrachloride	6.677	117	2432190	213.22	ug/L	100
46) 1,1-dichloropropene	6.693	75	1464490	210.17	ug/L	97
47) benzene	7.011	78	3468797	213.42	ug/L	99
48) 1,2-dichloroethane	7.134	62	1371111	198.28	ug/L	96
49) tert-amyl methyl ether	7.299	73	1792602	228.18	ug/L	94
50) heptane	7.567	43	1018693	215.49	ug/L	90
51) trichloroethene	8.041	95	1143102	212.00	ug/L	97
52) 1,2-dichloropropane	8.389	63	876274	212.92	ug/L	100
53) dibromomethane	8.492	93	520856	202.86	ug/L	90
54) bromodichloromethane	8.743	83	1437129	216.47	ug/L	99
55) Methylcyclohexane	8.345	83	1577819	217.22	ug/L	96
56) 2-chloroethyl vinyl ether	9.118	63	164288	232.50	ug/L	99
57) methyl methacrylate	8.521	69	302930	225.33	ug/L	81
58) 1,4-dioxane	8.502	88	22243	1173.89	ug/L	94
59) cis-1,3-dichloropropene	9.270	75	1356315	237.35	ug/L	96
61) 4-methyl-2-pentanone	9.453	43	464294	220.96	ug/L	89
62) toluene	9.635	92	2295828	218.10	ug/L	97
63) trans-1,3-dichloropropene	9.921	75	1037491	251.95	ug/L	93
64) 1,1,2-trichloroethane	10.128	83	495641	211.16	ug/L	99
65) ethyl methacrylate	10.000	69	704996	224.18	ug/L	87
67) tetrachloroethene	10.187	166	1196229	218.76	ug/L	96
68) 1,3-dichloropropane	10.289	76	952576	210.49	ug/L	99
69) dibromochloromethane	10.509	129	976583	229.30	ug/L	99
70) 1,2-dibromoethane	10.618	107	615474	216.19	ug/L	99
71) 2-hexanone	10.359	43	305990	219.32	ug/L	84
72) chlorobenzene	11.115	112	2845997	216.22	ug/L	99
73) 1,1,1,2-tetrachloroethane	11.215	131	1281139	225.89	ug/L	96
74) ethylbenzene	11.220	91	4967743	215.74	ug/L	95
75) m,p-xylene	11.350	106	3673773	439.18	ug/L	89
76) o-xylene	11.717	106	1936673	223.36	ug/L	88
77) styrene	11.738	104	2798616	218.46	ug/L	92
78) bromoform	11.912	173	496919	238.68	ug/L	100
79) trans-1,4-dichloro-2-b...	12.128	53	203771	243.92	ug/L	77
81) isopropylbenzene	12.069	105	5729230	217.15	ug/L	98
83) bromobenzene	12.359	156	1190884	210.66	ug/L	92
84) 1,1,2,2-tetrachloroethane	12.364	83	663618	210.14	ug/L	99
85) 1,2,3-trichloropropane	12.411	75	639447m	203.95	ug/L	
86) n-propylbenzene	12.458	91	6213639	211.33	ug/L	97
87) 2-chlorotoluene	12.537	91	3874935	209.05	ug/L	100
88) 4-chlorotoluene	12.647	91	4276724	209.21	ug/L	96
89) 1,3,5-trimethylbenzene	12.627	105	4935314	220.92	ug/L	98
90) tert-butylbenzene	12.912	91	2916446	220.67	ug/L	95
91) 1,2,4-trimethylbenzene	12.967	105	4852524	217.10	ug/L	96
92) sec-butylbenzene	13.116	105	5962575	225.69	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28211.D
Acq On : 26 Feb 2014 6:12 pm
Operator : amym
Sample : ic1058-200
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 27 08:13:06 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

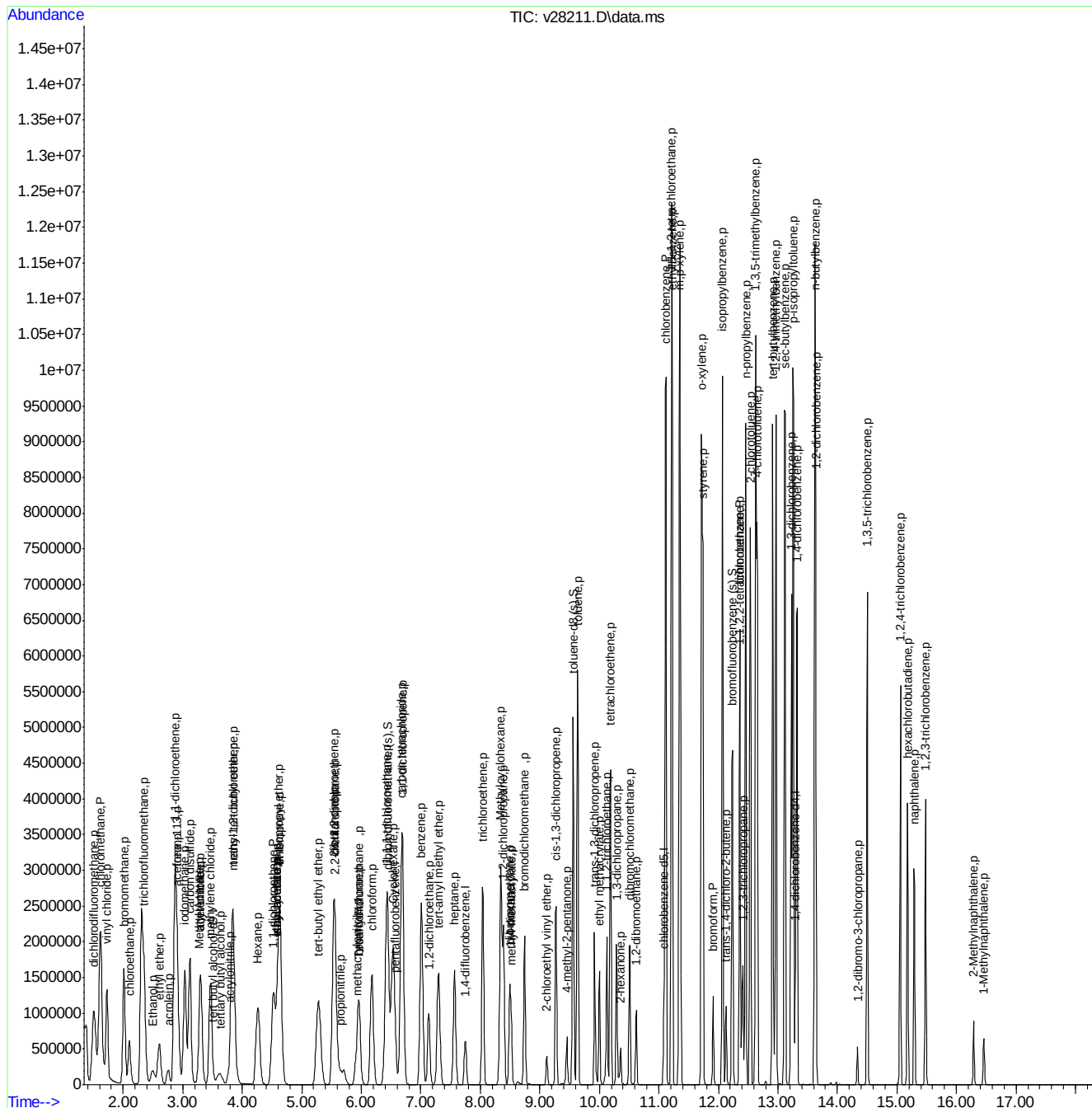
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	13.224	146	2543134	216.98	ug/L	99
94)	p-isopropyltoluene	13.256	119	5229455	225.25	ug/L	98
95)	1,4-dichlorobenzene	13.319	146	2404403	218.62	ug/L	99
96)	1,2-dichlorobenzene	13.636	146	2380392	217.67	ug/L	98
97)	n-butylbenzene	13.621	91	4415708	219.31	ug/L	98
98)	1,2-dibromo-3-chloropr...	14.337	75	113119	240.64	ug/L	86
99)	1,3,5-trichlorobenzene	14.502	180	1849782	226.12	ug/L	100
100)	1,2,4-trichlorobenzene	15.057	180	1456928	231.67	ug/L	99
101)	hexachlorobutadiene	15.179	225	622369	217.72	ug/L	94
102)	naphthalene	15.291	128	2057972	258.01	ug/L	100
103)	1,2,3-trichlorobenzene	15.480	180	1075298	244.07	ug/L	100
104)	2-Methylnaphthalene	16.290	142	377084	208.28	ug/L	98
105)	1-Methylnaphthalene	16.461	142	277716	185.66	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28211.D
Acq On : 26 Feb 2014 6:12 pm
Operator : amym
Sample : ic1058-200
Misc : MS31132,MSV1058,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 27 08:13:06 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



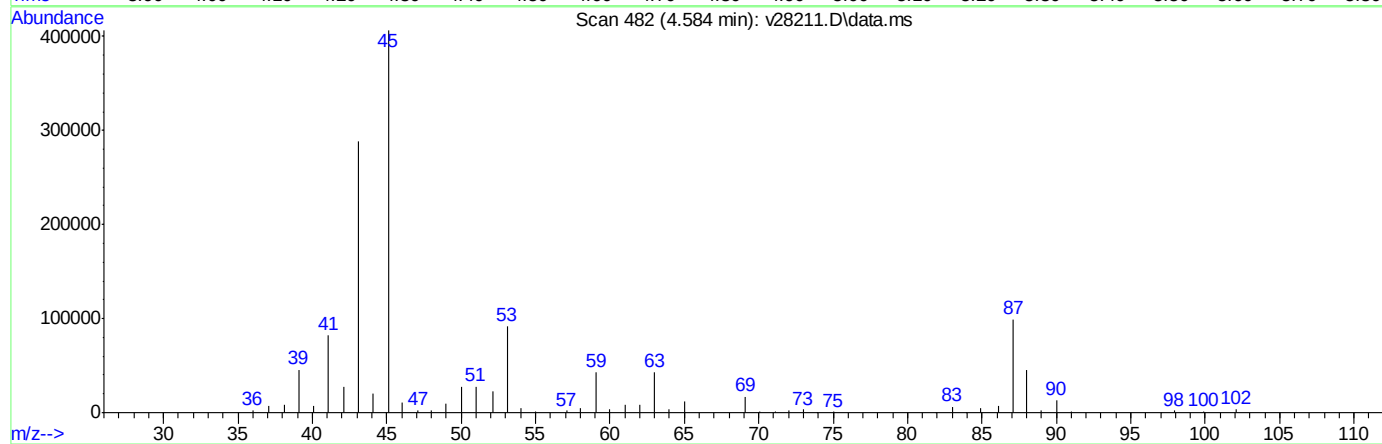
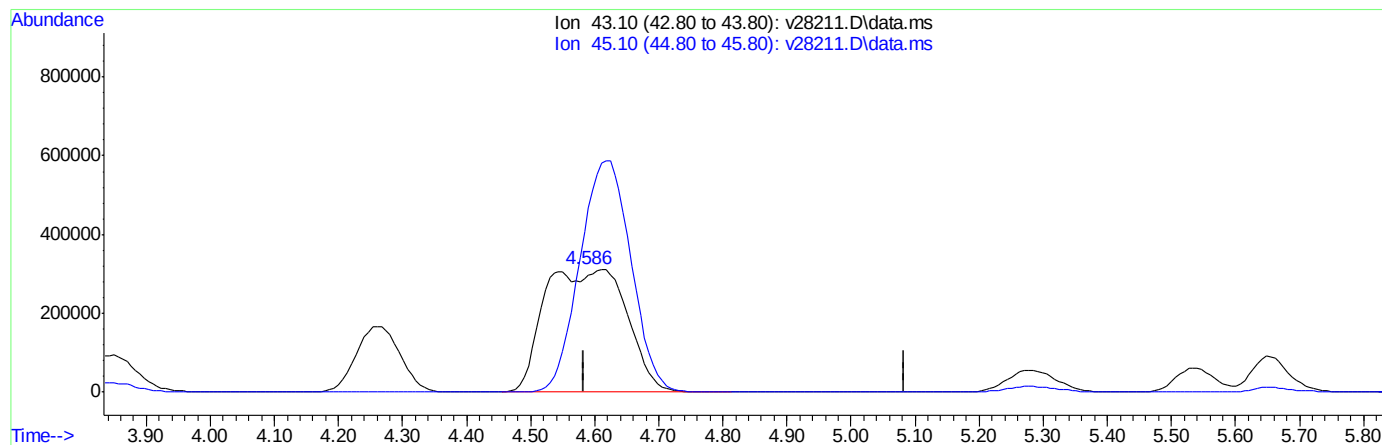
v140226w.m Fri Feb 28 09:55:12 2014

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28211.D
Acq On : 26 Feb 2014 6:12 pm
Operator : amym
Sample : ic1058-200
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 27 07:59:46 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.584min (-0.000) 212.40ug/L m

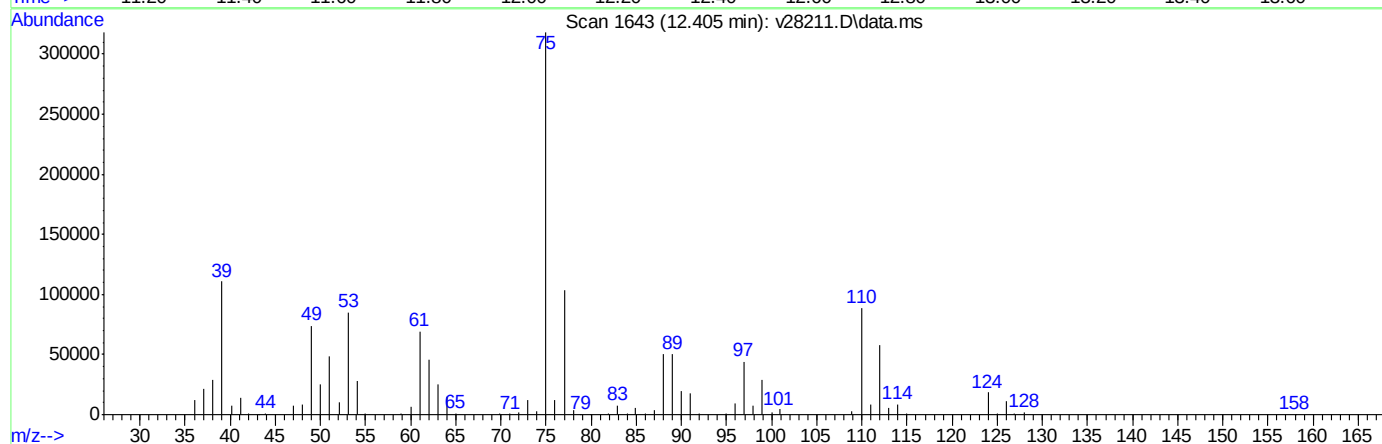
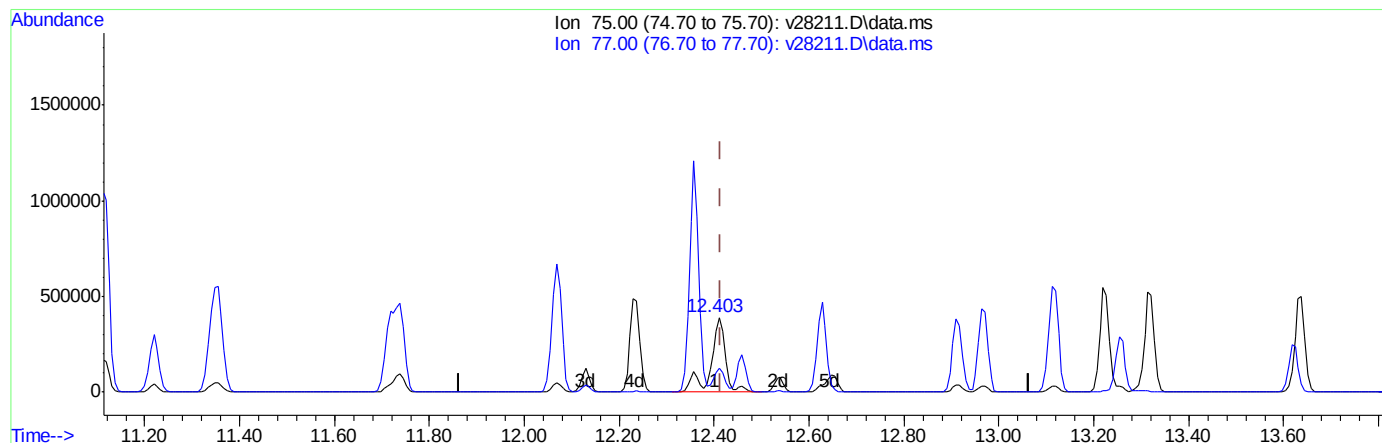
response 2803221

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28211.D
Acq On : 26 Feb 2014 6:12 pm
Operator : amym
Sample : ic1058-200
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 27 07:59:46 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(85) 1,2,3-trichloropropane (p)

12.403min (-0.011) 270.00ug/L

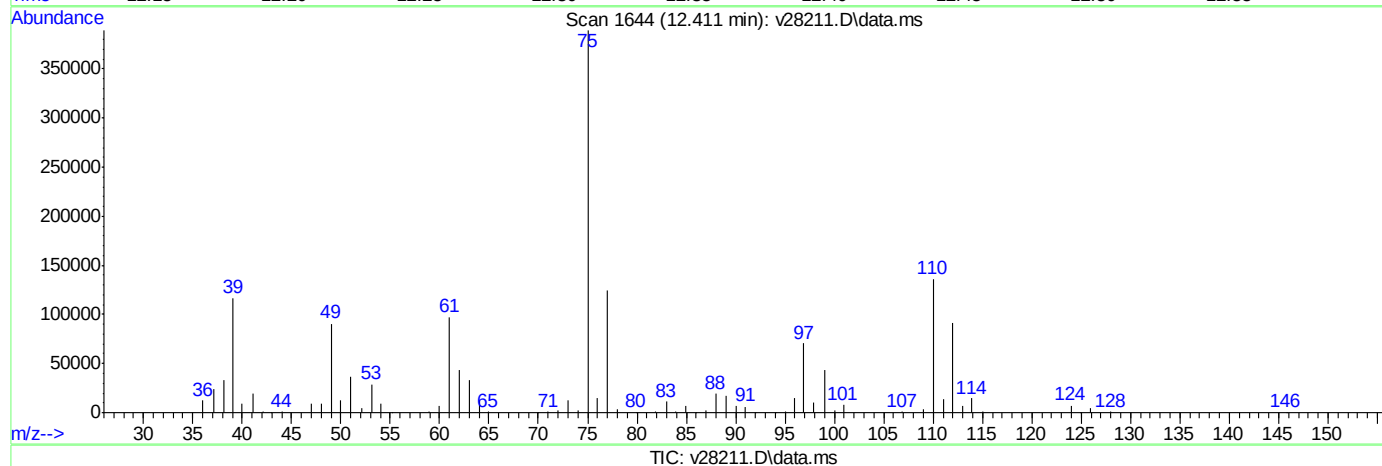
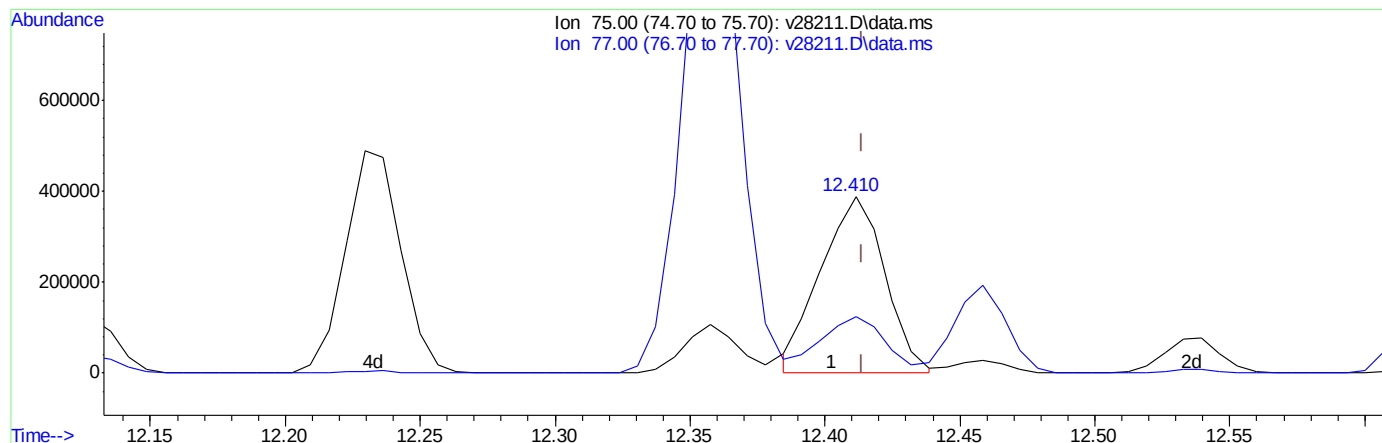
response 846539

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	32.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28211.D
Acq On : 26 Feb 2014 6:12 pm
Operator : amym
Sample : ic1058-200
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 27 07:59:46 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(85) 1,2,3-trichloropropane (p)

12.411min (-0.003) 203.95ug/L m

response 639447

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	32.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28212.D
 Acq On : 26 Feb 2014 6:37 pm
 Operator : amym
 Sample : ic1058-400
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 08:14:44 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.511	65	77061	500.00	ug/L	# 0.00
4) pentafluorobenzene	6.564	168	490488	50.00	ug/L	0.00
43) 1,4-difluorobenzene	7.746	114	720236	50.00	ug/L	0.00
66) chlorobenzene-d5	11.085	82	344484	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.297	152	406320	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.444	113	2804942	419.59	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	839.18%#		
60) toluene-d8 (s)	9.558	98	7800718	434.26	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	868.52%#		
82) bromofluorobenzene (s)	12.233	95	3080189	382.78	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	765.56%#		
Target Compounds						
2) tertiary butyl alcohol	3.622	59	868998	4672.60	ug/L	# 63
3) Ethanol	2.495	45	1137182m	37932.43	ug/L	
5) dichlorodifluoromethane	1.499	85	5332094	356.02	ug/L	98
6) chloromethane	1.612	50	4127605	386.66	ug/L	96
7) vinyl chloride	1.717	62	3969371	389.74	ug/L	99
8) bromomethane	2.002	96	3010849	360.83	ug/L	99
9) chloroethane	2.095	64	1707082	375.87	ug/L	100
10) ethyl ether	2.601	59	1361849	401.87	ug/L	96
11) acetonitrile	3.290	41	3763755	431.94	ug/L	88
12) trichlorofluoromethane	2.333	101	6048163	355.07	ug/L	99
13) freon-113	2.888	101	3280504	387.76	ug/L	97
14) acrolein	2.748	56	648140	2071.27	ug/L	99
15) 1,1-dichloroethene	2.858	96	2518186	400.30	ug/L	92
16) acetone	2.899	58	115703	320.19	ug/L	# 49
17) Methyl Acetate	3.277	43	833833	408.22	ug/L	97
18) methylene chloride	3.458	84	2485345	406.86	ug/L	92
19) methyl tert butyl ether	3.848	73	5188936	455.20	ug/L	97
20) acrylonitrile	3.778	53	447860	417.17	ug/L	96
21) allyl chloride	3.290	41	3765667	431.88	ug/L	92
22) trans-1,2-dichloroethene	3.833	96	2564558	414.44	ug/L	96
23) iodomethane	3.025	142	6394198	407.86	ug/L	96
24) carbon disulfide	3.109	76	8887229	417.91	ug/L	100
25) propionitrile	5.645	54	140532	455.52	ug/L	100
26) vinyl acetate	4.578	43	6145210	434.19	ug/L	91
27) chloroprene	4.625	53	3455232	414.12	ug/L	90
28) di-isopropyl ether	4.609	45	7156614	429.25	ug/L	92
29) methacrylonitrile	5.920	41	767613	434.94	ug/L	89
30) 2-butanone	5.536	72	131972	397.16	ug/L	95
31) Hexane	4.254	41	2194923	401.06	ug/L	# 77
32) 1,1-dichloroethane	4.512	63	4498709	420.99	ug/L	99
33) tert-butyl ethyl ether	5.278	59	5731931	464.45	ug/L	99
34) isobutyl alcohol	4.578	43	6145210	2170.94	ug/L	76
35) 2,2-dichloropropane	5.551	77	4039152	501.17	ug/L	94
36) cis-1,2-dichloroethene	5.535	96	2565001	434.74	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
 Data File : v28212.D
 Acq On : 26 Feb 2014 6:37 pm
 Operator : amym
 Sample : ic1058-400
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 08:14:44 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 07:59:03 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.577	43	6132910m	432.96	ug/L	
38) bromochloromethane	5.954	128	1199900	430.97	ug/L	97
39) chloroform	6.173	83	4870990	412.48	ug/L	99
41) Tetrahydrofuran	5.961	42	265019	441.90	ug/L	89
42) 1,1,1-trichloroethane	6.418	97	5313619	428.71	ug/L	99
44) Cyclohexane	6.523	56	3561374	399.24	ug/L	98
45) carbon tetrachloride	6.672	117	5097895	404.84	ug/L	99
46) 1,1-dichloropropene	6.689	75	3174355	412.68	ug/L	97
47) benzene	7.007	78	7847668	437.39	ug/L	99
48) 1,2-dichloroethane	7.130	62	2892503	378.92	ug/L	97
49) tert-amyl methyl ether	7.295	73	4122874	475.40	ug/L	95
50) heptane	7.564	43	2102224	402.84	ug/L	91
51) trichloroethene	8.038	95	2514390	422.43	ug/L	97
52) 1,2-dichloropropane	8.387	63	1943727	427.83	ug/L	100
53) dibromomethane	8.490	93	1123690	396.46	ug/L	93
54) bromodichloromethane	8.741	83	3108319	424.13	ug/L	100
55) Methylcyclohexane	8.342	83	3399043	423.90	ug/L	98
56) 2-chloroethyl vinyl ether	9.116	63	388673	498.27	ug/L	99
57) methyl methacrylate	8.518	69	674756	454.66	ug/L	84
58) 1,4-dioxane	8.500	88	50819	2429.56	ug/L	97
59) cis-1,3-dichloropropene	9.269	75	3021560	478.99	ug/L	95
61) 4-methyl-2-pentanone	9.451	43	1028716	443.49	ug/L	91
62) toluene	9.634	92	5080747	437.22	ug/L	97
63) trans-1,3-dichloropropene	9.920	75	2332457	513.11	ug/L	94
64) 1,1,2-trichloroethane	10.127	83	1087356	419.65	ug/L	100
65) ethyl methacrylate	9.999	69	1542833	444.43	ug/L	87
67) tetrachloroethene	10.186	166	2634340	443.93	ug/L	98
68) 1,3-dichloropropane	10.288	76	2087726	425.10	ug/L	99
69) dibromochloromethane	10.508	129	2163517	468.09	ug/L	99
70) 1,2-dibromoethane	10.617	107	1351052	437.30	ug/L	99
71) 2-hexanone	10.358	43	626409	413.73	ug/L	86
72) chlorobenzene	11.114	112	6308867	441.68	ug/L	100
73) 1,1,1,2-tetrachloroethane	11.215	131	2871684	466.58	ug/L	98
74) ethylbenzene	11.220	91	11014211	440.77	ug/L	96
75) m,p-xylene	11.351	106	8326820	917.26	ug/L	89
76) o-xylene	11.718	106	4466823	474.71	ug/L	90
77) styrene	11.738	104	6433037	462.73	ug/L	96
78) bromoform	11.911	173	1160990	513.86	ug/L	99
79) trans-1,4-dichloro-2-b...	12.128	53	451021	497.48	ug/L	83
81) isopropylbenzene	12.069	105	12692381	398.07	ug/L	96
83) bromobenzene	12.359	156	2758326	403.75	ug/L	94
84) 1,1,2,2-tetrachloroethane	12.364	83	1504646	394.26	ug/L	99
85) 1,2,3-trichloropropane	12.411	75	1504522m	397.06	ug/L	
86) n-propylbenzene	12.458	91	13217340	371.97	ug/L	91
87) 2-chlorotoluene	12.537	91	8934441	398.85	ug/L	99
88) 4-chlorotoluene	12.647	91	9917501	401.44	ug/L	97
89) 1,3,5-trimethylbenzene	12.627	105	11527411	426.97	ug/L	100
90) tert-butylbenzene	12.913	91	6954424	435.41	ug/L	97
91) 1,2,4-trimethylbenzene	12.967	105	11599148	429.40	ug/L	100
92) sec-butylbenzene	13.116	105	13203770	413.54	ug/L	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28212.D
Acq On : 26 Feb 2014 6:37 pm
Operator : amym
Sample : ic1058-400
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 08:14:44 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

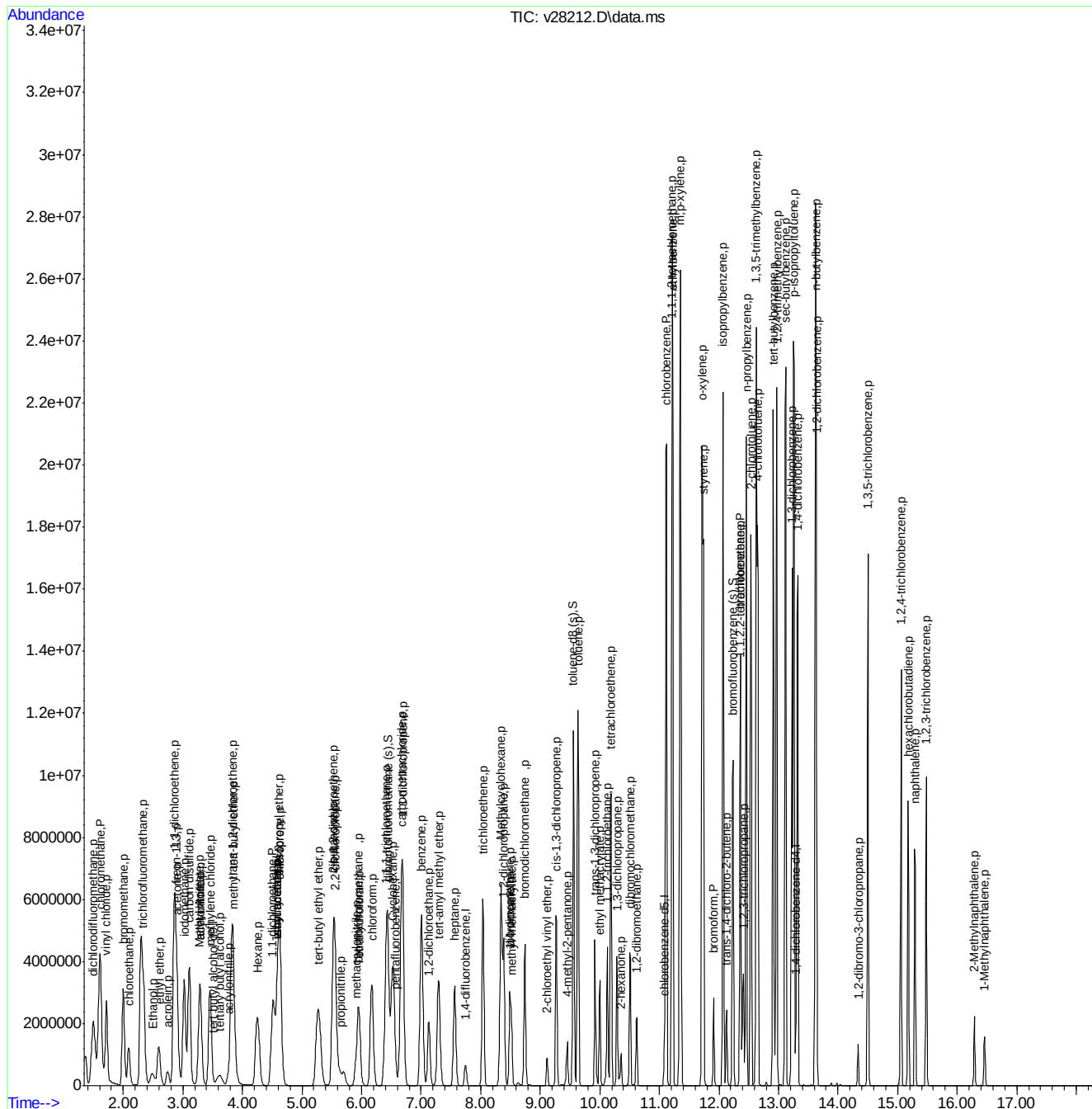
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	13.224	146	6169911	435.59	ug/L	99
94)	p-isopropyltoluene	13.257	119	12332970	439.56	ug/L	95
95)	1,4-dichlorobenzene	13.319	146	5999372	451.37	ug/L	98
96)	1,2-dichlorobenzene	13.636	146	5901786	446.56	ug/L	99
97)	n-butylbenzene	13.621	91	10638505	437.20	ug/L	98
98)	1,2-dibromo-3-chloropr...	14.336	75	279803	492.52	ug/L	91
99)	1,3,5-trichlorobenzene	14.502	180	4651383	470.48	ug/L	100
100)	1,2,4-trichlorobenzene	15.057	180	3659644	481.52	ug/L	98
101)	hexachlorobutadiene	15.178	225	1537914	445.18	ug/L	95
102)	naphthalene	15.291	128	5242813	543.88	ug/L	100
103)	1,2,3-trichlorobenzene	15.480	180	2727499	512.27	ug/L	99
104)	2-Methylnaphthalene	16.290	142	997133	455.74	ug/L	99
105)	1-Methylnaphthalene	16.460	142	692807	383.24	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28212.D
Acq On : 26 Feb 2014 6:37 pm
Operator : amym
Sample : ic1058-400
Misc : MS31132,MSV1058,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 08:14:44 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



v140226w.m Fri Feb 28 09:55:18 2014

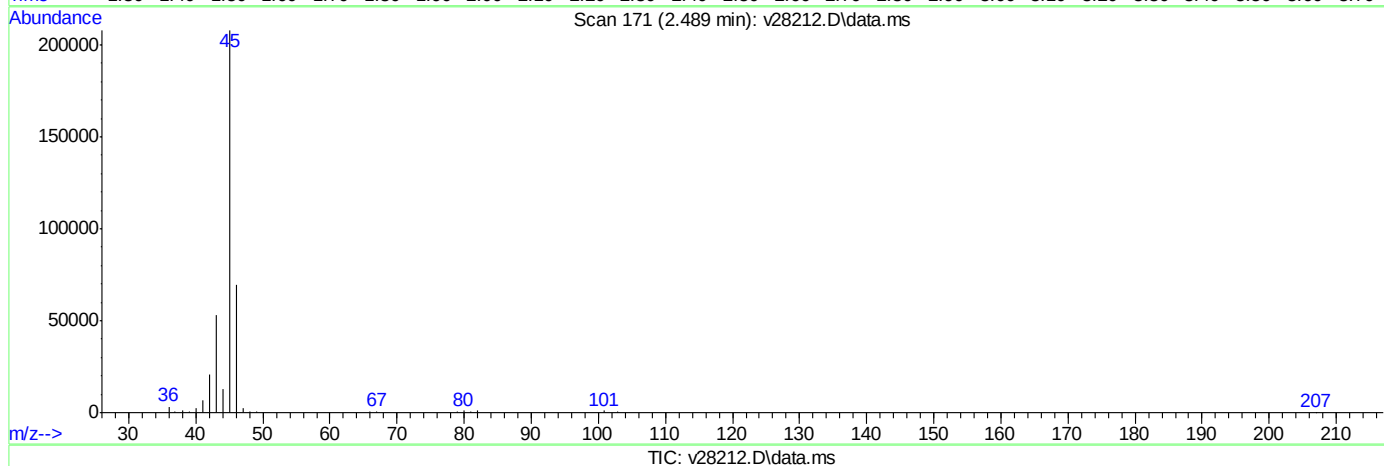
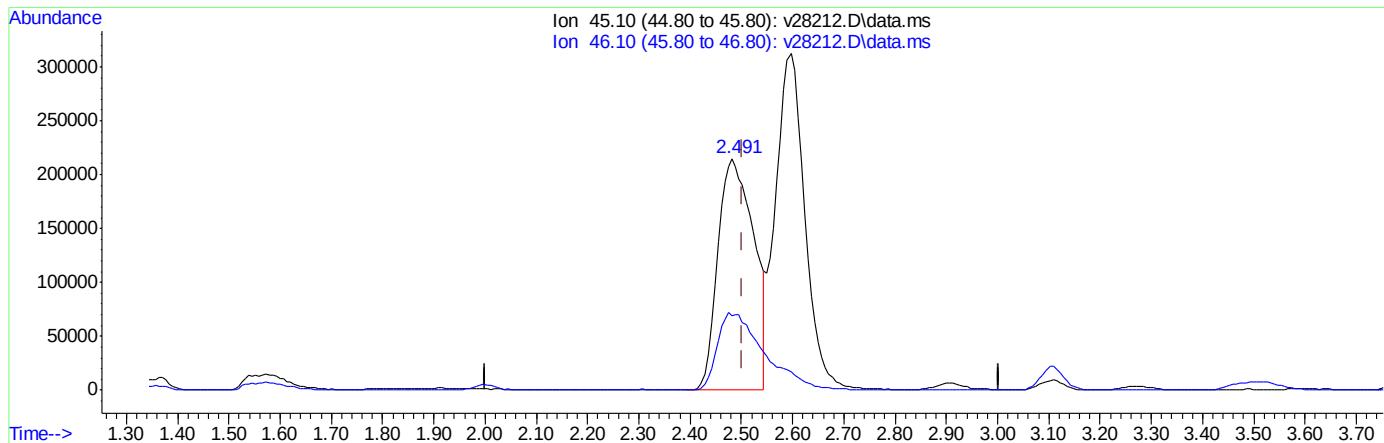
Page: 4

7.6.10

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28212.D
Acq On : 26 Feb 2014 6:37 pm
Operator : amym
Sample : ic1058-400
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 07:59:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(3) Ethanol (p)

2.491min (-0.011) 34816.67ug/L

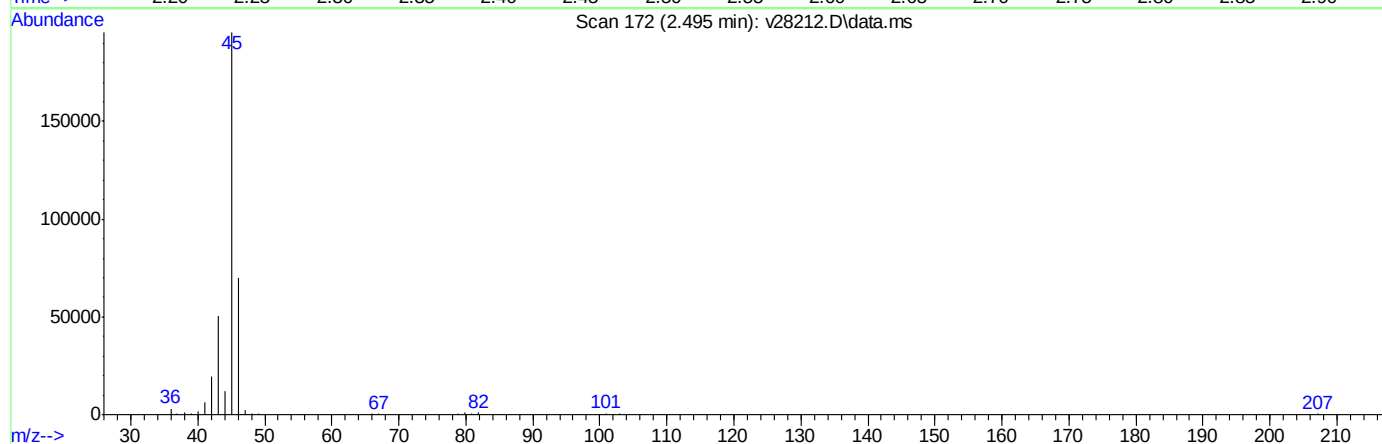
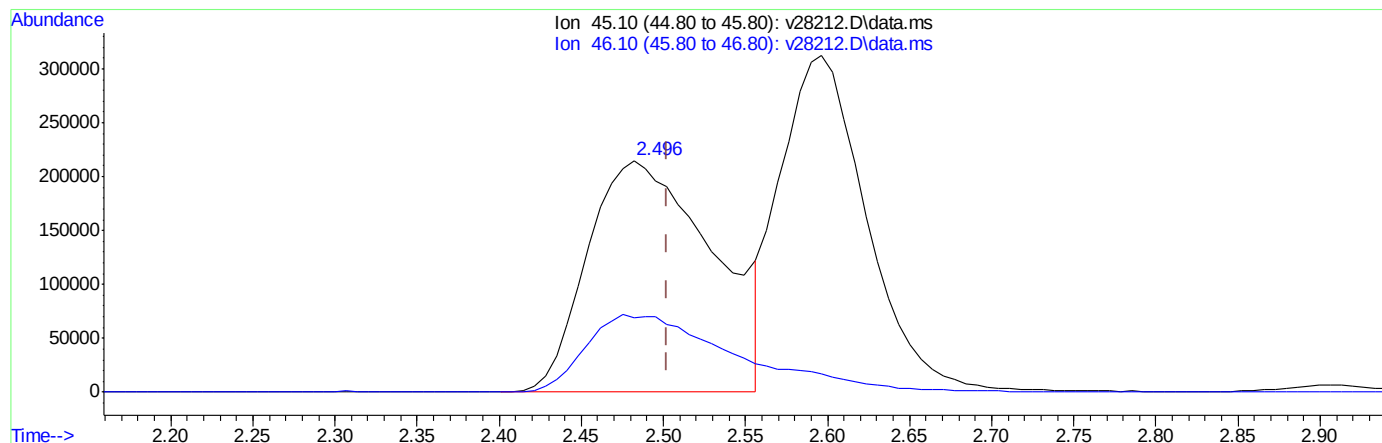
response 1043774

Ion	Exp%	Act%
45.10	100	100
46.10	0.00	44.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28212.D
Acq On : 26 Feb 2014 6:37 pm
Operator : amym
Sample : ic1058-400
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 07:59:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(3) Ethanol (p)

2.495min (-0.007) 37932.43ug/L m

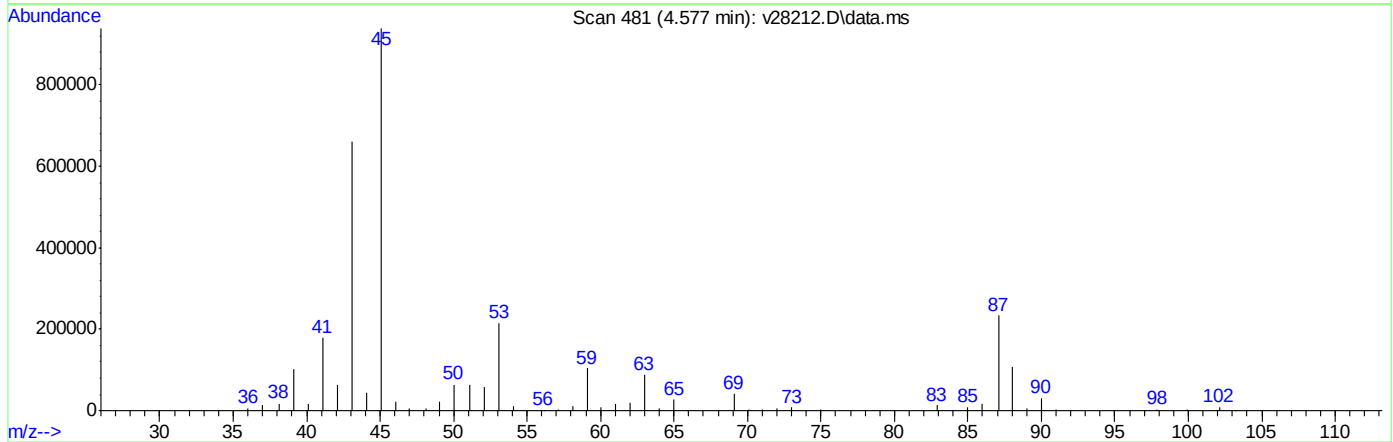
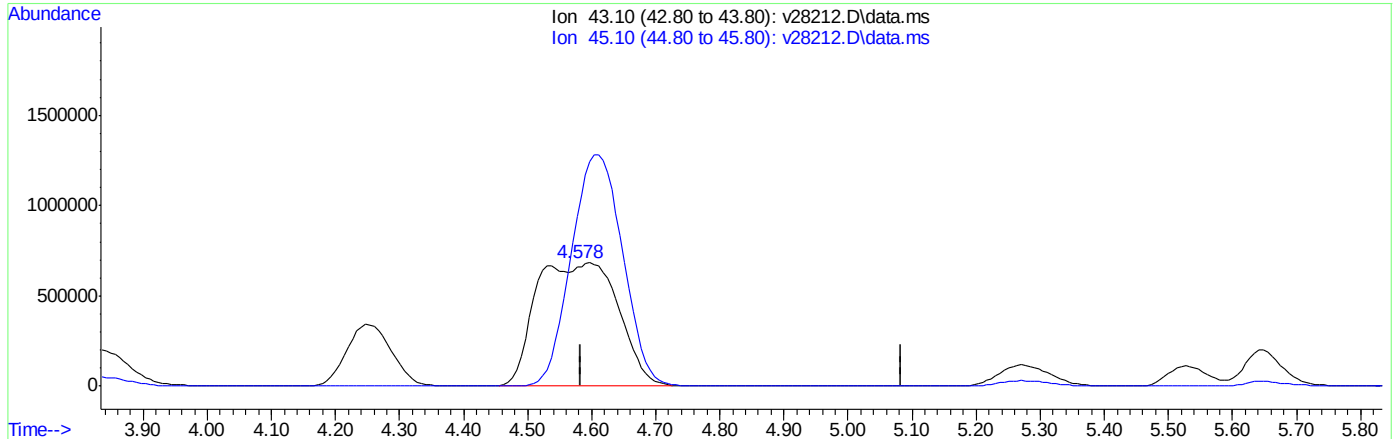
response 1137182

Ion	Exp%	Act%
45.10	100	100
46.10	0.00	40.38#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28212.D
Acq On : 26 Feb 2014 6:37 pm
Operator : amym
Sample : ic1058-400
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 07:59:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



TIC: v28212.D\data.ms

(37) ethyl acetate (p)

4.577min (-0.007) 432.96ug/L m

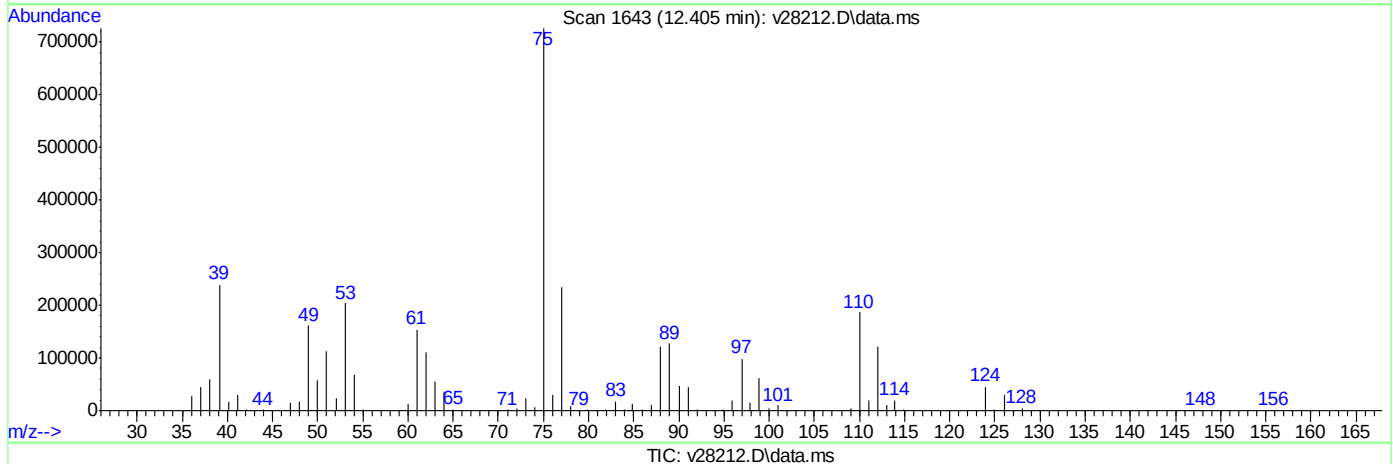
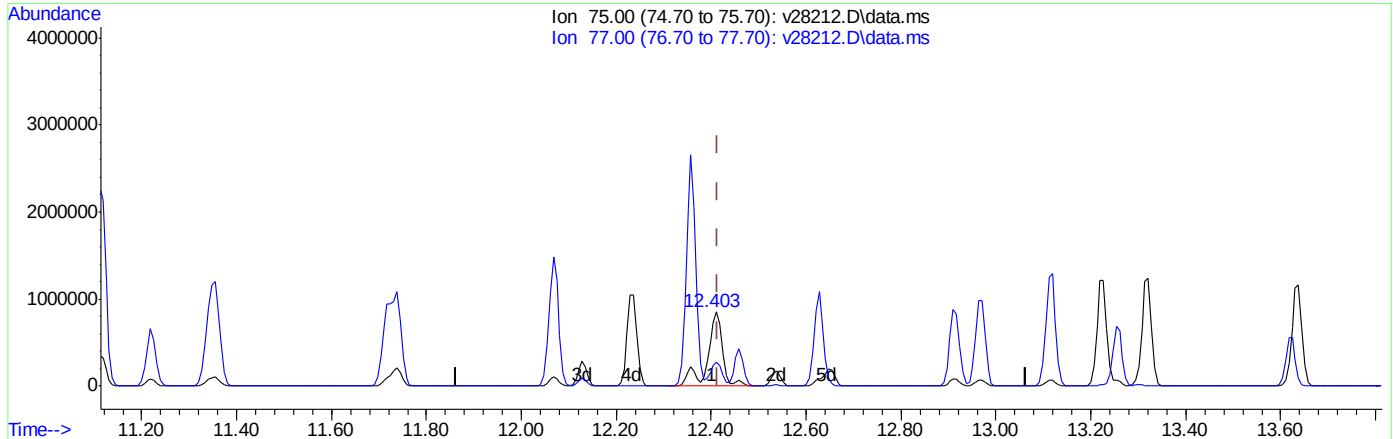
response 6132910

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28212.D
Acq On : 26 Feb 2014 6:37 pm
Operator : amym
Sample : ic1058-400
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 07:59:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(85) 1,2,3-trichloropropane (p)

12.403min (-0.011) 504.24ug/L

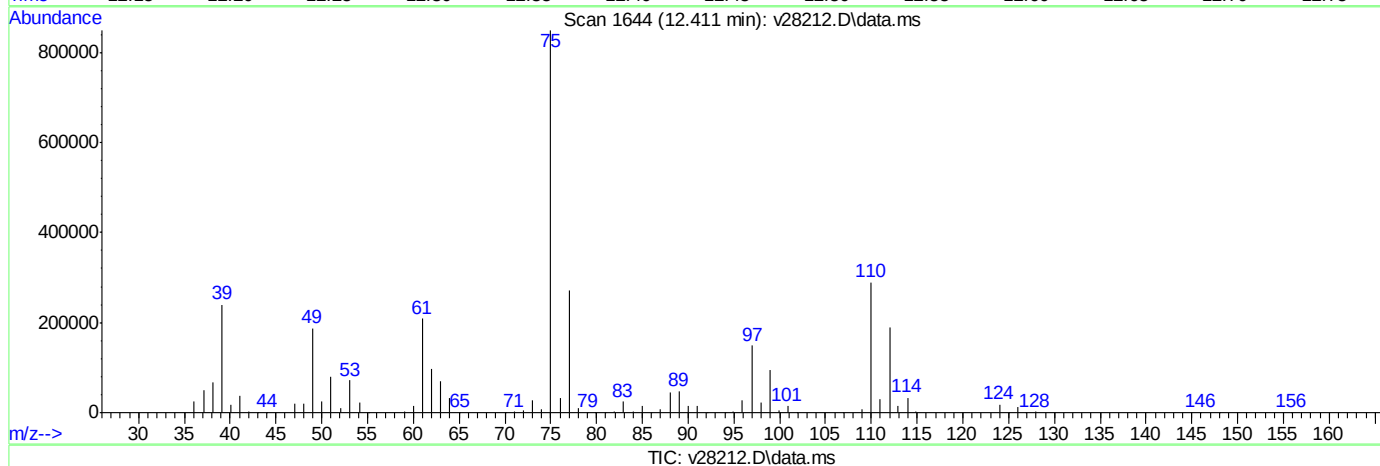
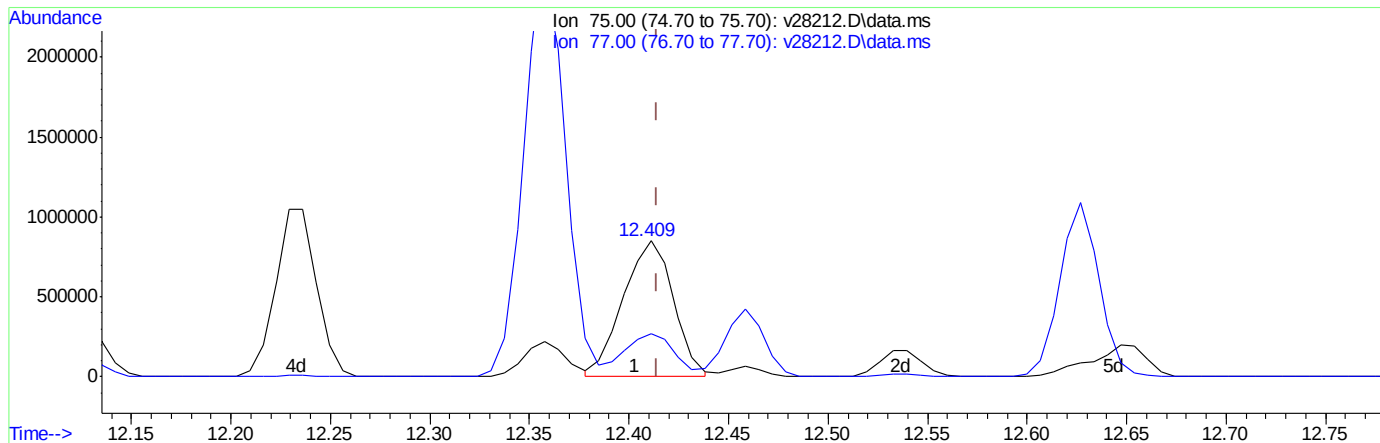
response 1910630

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	32.26
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140226\
Data File : v28212.D
Acq On : 26 Feb 2014 6:37 pm
Operator : amym
Sample : ic1058-400
Misc : MS31132,MSV1058,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 27 07:59:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



(85) 1,2,3-trichloropropane (p)

12.411min (-0.003) 397.06ug/L m

response 1504522

Ion	Exp%	Act%
75.00	100	100
77.00	32.20	31.92
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140227\
 Data File : v28222.D
 Acq On : 27 Feb 2014 11:27 am
 Operator : amym
 Sample : cc1058-50
 Misc : MS31132,MSV1058,,,,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 27 12:16:53 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.521	65	58782	500.00	ug/L	# 0.01
4) pentafluorobenzene	6.578	168	407341	50.00	ug/L	0.01
43) 1,4-difluorobenzene	7.757	114	567923	50.00	ug/L	0.00
66) chlorobenzene-d5	11.092	82	268846	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	13.303	152	271652	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.458	113	233718	41.78	ug/L	0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	83.56%		
60) toluene-d8 (s)	9.566	98	623017	43.36	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	86.72%		
82) bromofluorobenzene (s)	12.239	95	254177	46.76	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.52%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.631	59	78597	537.52	ug/L	# 44
3) Ethanol	2.504	45	99220	4442.26	ug/L	# 100
5) dichlorodifluoromethane	1.511	85	656388	59.20	ug/L	98
6) chloromethane	1.619	50	441672	52.10	ug/L	95
7) vinyl chloride	1.727	62	396687	50.28	ug/L	99
8) bromomethane	2.019	96	326740	49.28	ug/L	100
9) chloroethane	2.114	64	206024	53.02	ug/L	97
10) ethyl ether	2.614	59	139578	47.49	ug/L	95
11) acetonitrile	3.307	41	374893	52.24	ug/L	84
12) trichlorofluoromethane	2.349	101	700184	55.57	ug/L	99
13) freon-113	2.905	101	345659	53.05	ug/L	97
14) acrolein	2.764	56	11498	45.31	ug/L	94
15) 1,1-dichloroethene	2.877	96	267101	51.40	ug/L	85
16) acetone	2.914	58	17451	59.23	ug/L	# 46
17) Methyl Acetate	3.292	43	93978	55.80	ug/L	96
18) methylene chloride	3.477	84	254720	48.10	ug/L	83
19) methyl tert butyl ether	3.853	73	470658	49.30	ug/L	96
20) acrylonitrile	3.791	53	70570	78.73	ug/L	90
21) allyl chloride	3.308	41	375069	52.27	ug/L	87
22) trans-1,2-dichloroethene	3.851	96	270504	50.33	ug/L	93
23) iodomethane	3.044	142	593900	43.90	ug/L	90
24) carbon disulfide	3.129	76	809595	45.55	ug/L	99
25) propionitrile	5.666	54	13217	49.71	ug/L	100
26) vinyl acetate	4.600	43	556880	46.85	ug/L	89
27) chloroprene	4.641	53	421546	62.77	ug/L	83
28) di-isopropyl ether	4.626	45	687621	49.42	ug/L	89
29) methacrylonitrile	5.937	41	73645	51.05	ug/L	94
30) 2-butanone	5.551	72	16017	59.72	ug/L	# 58
31) Hexane	4.271	41	219824	48.05	ug/L	# 73
32) 1,1-dichloroethane	4.530	63	457020	49.64	ug/L	99
33) tert-butyl ethyl ether	5.293	59	529910	51.93	ug/L	97
34) isobutyl alcohol	4.600	43	556880	235.43	ug/L	66
35) 2,2-dichloropropane	5.566	77	359605	46.59	ug/L	91
36) cis-1,2-dichloroethene	5.551	96	250620	49.49	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140227\
 Data File : v28222.D
 Acq On : 27 Feb 2014 11:27 am
 Operator : amym
 Sample : cc1058-50
 Misc : MS31132,MSV1058,,,,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 27 12:16:53 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.597	43	556718m	46.54	ug/L	
38) bromochloromethane	5.971	128	119334	50.27	ug/L	96
39) chloroform	6.188	83	488716	47.92	ug/L	99
41) Tetrahydrofuran	5.977	42	23886	49.23	ug/L	92
42) 1,1,1-trichloroethane	6.433	97	518202	52.20	ug/L	96
44) Cyclohexane	6.539	56	342130	48.14	ug/L	95
45) carbon tetrachloride	6.688	117	505269	55.33	ug/L	100
46) 1,1-dichloropropene	6.702	75	308860	51.01	ug/L	94
47) benzene	7.020	78	727861	47.98	ug/L	100
48) 1,2-dichloroethane	7.144	62	311189	50.41	ug/L	95
49) tert-amyl methyl ether	7.308	73	342467	50.65	ug/L	92
50) heptane	7.576	43	205965	50.03	ug/L	88
51) trichloroethene	8.049	95	242781	49.31	ug/L	94
52) 1,2-dichloropropane	8.396	63	179834	49.95	ug/L	99
53) dibromomethane	8.500	93	114085	51.27	ug/L	89
54) bromodichloromethane	8.750	83	303173	52.47	ug/L	99
55) Methylcyclohexane	8.352	83	323888	50.41	ug/L	93
56) 2-chloroethyl vinyl ether	9.125	63	31690	45.90	ug/L	97
57) methyl methacrylate	8.529	69	57608	49.36	ug/L #	76
58) 1,4-dioxane	8.507	88	3941	220.80	ug/L	100
59) cis-1,3-dichloropropene	9.278	75	250996	47.43	ug/L	94
61) 4-methyl-2-pentanone	9.462	43	91289	51.01	ug/L	89
62) toluene	9.642	92	476256	51.34	ug/L	96
63) trans-1,3-dichloropropene	9.929	75	201865	60.05	ug/L	92
64) 1,1,2-trichloroethane	10.135	83	104102	50.82	ug/L	96
65) ethyl methacrylate	10.009	69	134673	50.02	ug/L	81
67) tetrachloroethene	10.194	166	247470	52.74	ug/L	95
68) 1,3-dichloropropane	10.296	76	204013	51.78	ug/L	97
69) dibromochloromethane	10.516	129	197848	52.29	ug/L	100
70) 1,2-dibromoethane	10.625	107	129298	53.91	ug/L	99
71) 2-hexanone	10.363	43	80596m	62.64	ug/L	
72) chlorobenzene	11.121	112	577527	48.98	ug/L	97
73) 1,1,1,2-tetrachloroethane	11.221	131	265907	55.73	ug/L	96
74) ethylbenzene	11.226	91	1062434	53.06	ug/L	94
75) m,p-xylene	11.356	106	748190	103.99	ug/L	85
76) o-xylene	11.723	106	388274	52.48	ug/L	87
77) styrene	11.744	104	583869	53.79	ug/L	89
78) bromoform	11.918	173	95126	51.47	ug/L	99
79) trans-1,4-dichloro-2-b...	12.135	53	38731	47.17	ug/L #	66
81) isopropylbenzene	12.075	105	1136747	56.19	ug/L	98
83) bromobenzene	12.366	156	252546	54.86	ug/L	91
84) 1,1,2,2-tetrachloroethane	12.369	83	141826	55.05	ug/L	99
85) 1,2,3-trichloropropane	12.418	75	144126	54.29	ug/L	99
86) n-propylbenzene	12.463	91	1229640	53.92	ug/L	96
87) 2-chlorotoluene	12.542	91	789150	52.12	ug/L	97
88) 4-chlorotoluene	12.653	91	894371	53.24	ug/L	96
89) 1,3,5-trimethylbenzene	12.632	105	986742	56.45	ug/L	96
90) tert-butylbenzene	12.919	91	572797	56.95	ug/L	90
91) 1,2,4-trimethylbenzene	12.972	105	972161	54.83	ug/L	96
92) sec-butylbenzene	13.122	105	1140860	56.94	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140227\
 Data File : v28222.D
 Acq On : 27 Feb 2014 11:27 am
 Operator : amym
 Sample : cc1058-50
 Misc : MS31132,MSV1058,,,,,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 27 12:16:53 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	13.230	146	515295	51.66	ug/L	99
94) p-isopropyltoluene	13.262	119	1042938	57.65	ug/L	97
95) 1,4-dichlorobenzene	13.325	146	495313	50.95	ug/L	99
96) 1,2-dichlorobenzene	13.642	146	465781	49.36	ug/L	99
97) n-butylbenzene	13.627	91	895701	56.71	ug/L	97
98) 1,2-dibromo-3-chloropr...	14.343	75	19227	44.34	ug/L	90
99) 1,3,5-trichlorobenzene	14.508	180	362523	50.49	ug/L	98
100) 1,2,4-trichlorobenzene	15.063	180	267408	45.38	ug/L	97
101) hexachlorobutadiene	15.185	225	124217	49.48	ug/L	94
102) naphthalene	15.298	128	322995	44.12	ug/L	100
103) 1,2,3-trichlorobenzene	15.487	180	178597	42.95	ug/L	100
104) 2-Methylnaphthalene	16.297	142	27464	18.00	ug/L	95
105) 1-Methylnaphthalene	16.468	142	21051	16.11	ug/L	95

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

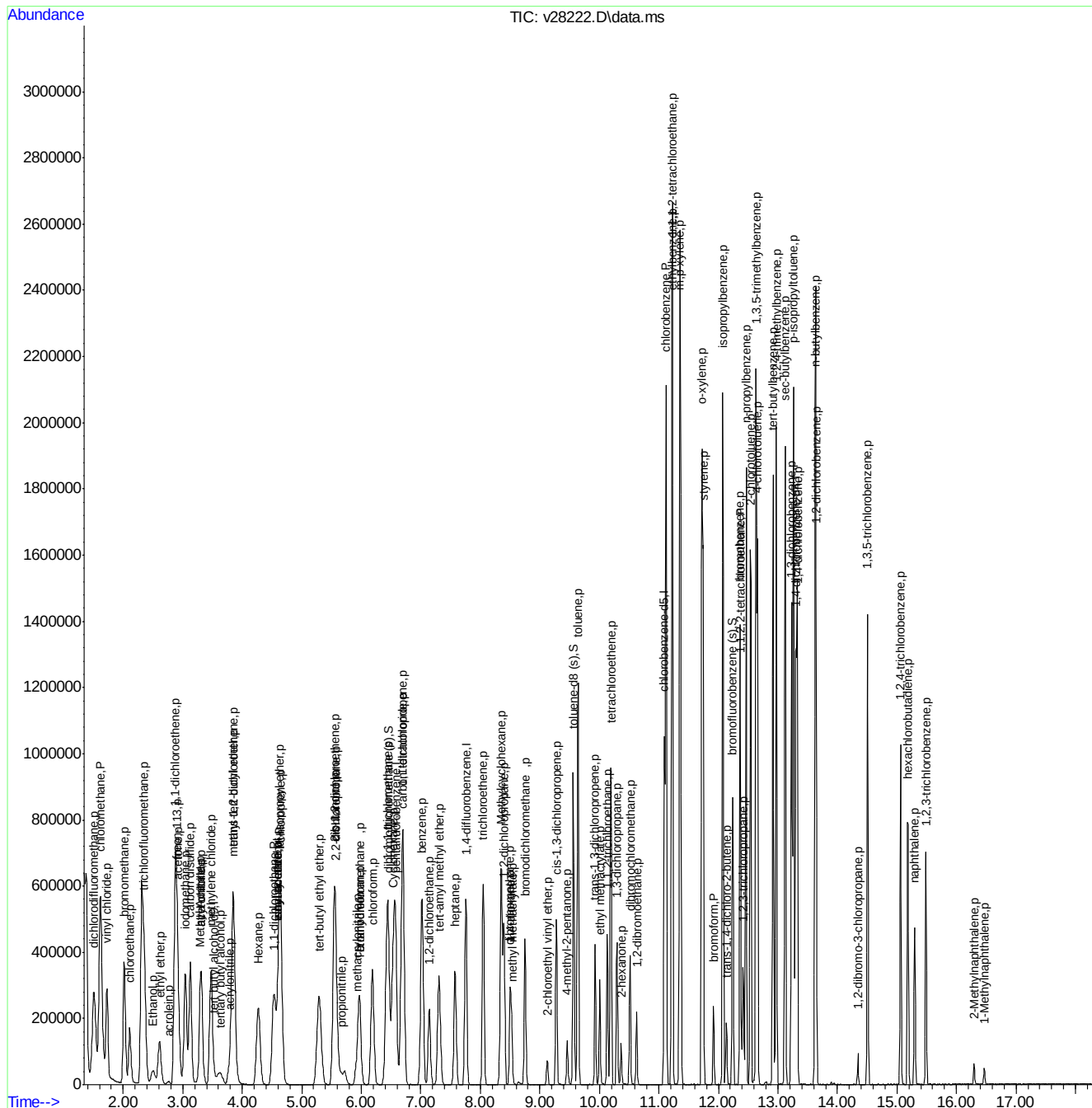
7.6.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140227\
Data File : v28222.D
Acq On : 27 Feb 2014 11:27 am
Operator : amym
Sample : cc1058-50
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 27 12:16:53 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



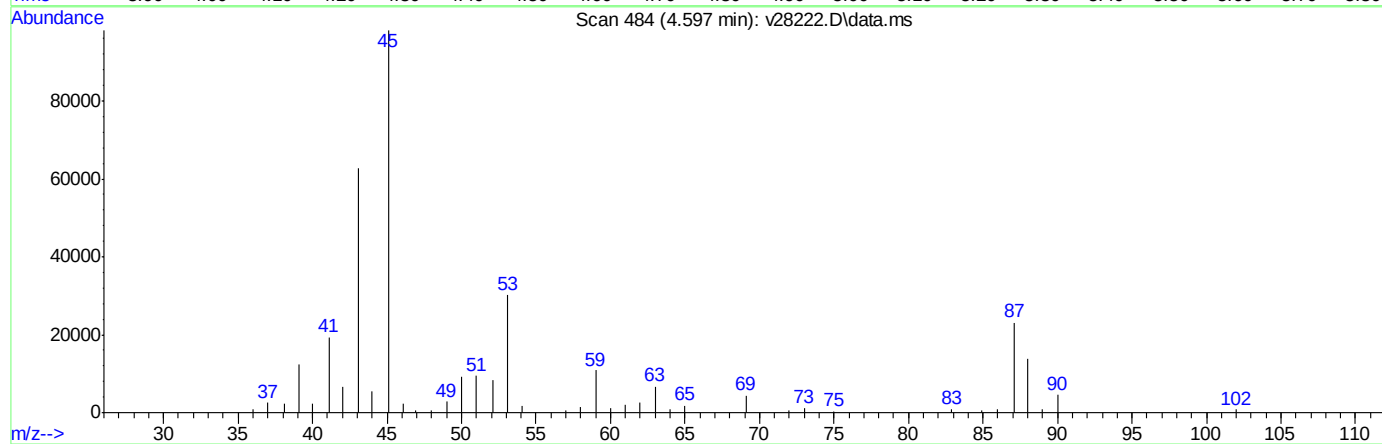
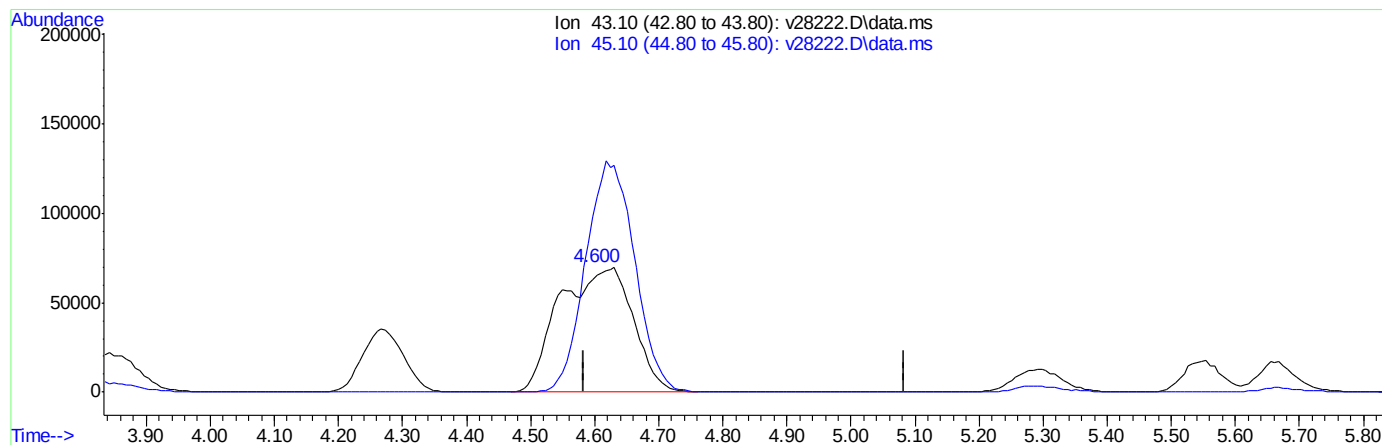
v140226w.m Fri Feb 28 10:06:42 2014

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140227\
Data File : v28222.D
Acq On : 27 Feb 2014 11:27 am
Operator : amym
Sample : bs
Misc : MS31132,MSV1058,,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 27 12:03:08 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.597min (+0.013) 46.54ug/L m

response 556718

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29025.D
 Acq On : 25 Mar 2014 9:38 am
 Operator : amym
 Sample : cc1058-50
 Misc : MS31383,MSV1088,,,,5,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 26 08:46:00 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.492	65	55829	500.00	ug/L	#-0.02
4) pentafluorobenzene	6.542	168	429248	50.00	ug/L	-0.03
43) 1,4-difluorobenzene	7.727	114	578528	50.00	ug/L	-0.02
66) chlorobenzene-d5	11.071	82	267427	50.00	ug/L	-0.01
80) 1,4-dichlorobenzene-d4	13.285	152	271362	50.00	ug/L	-0.01
System Monitoring Compounds						
40) dibromofluoromethane (s)	6.419	113	218629	37.09	ug/L	-0.03
Spiked Amount 50.000	Range 70 - 130		Recovery =	74.18%		
60) toluene-d8 (s)	9.542	98	651033	44.48	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 130		Recovery =	88.96%		
82) bromofluorobenzene (s)	12.221	95	242140	44.60	ug/L	-0.01
Spiked Amount 50.000	Range 70 - 130		Recovery =	89.20%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	3.603	59	73797	531.39	ug/L	# 56
3) Ethanol	2.485	45	95479	4502.29	ug/L	# 100
5) dichlorodifluoromethane	1.487	85	439346	37.60	ug/L	98
6) chloromethane	1.606	50	355532	39.80	ug/L	99
7) vinyl chloride	1.715	62	367292	44.18	ug/L	98
8) bromomethane	2.003	96	300606	43.03	ug/L	99
9) chloroethane	2.095	64	165119	40.33	ug/L	100
10) ethyl ether	2.592	59	124726	40.27	ug/L	97
11) acetonitrile	3.279	41	321910	42.57	ug/L	88
12) trichlorofluoromethane	2.330	101	569060	42.86	ug/L	100
13) freon-113	2.882	101	335233	48.83	ug/L	96
14) acrolein	2.742	56	91419	341.87	ug/L	94
15) 1,1-dichloroethene	2.854	96	255362	46.63	ug/L	96
16) acetone	2.889	58	14262	45.94	ug/L	# 47
17) Methyl Acetate	3.264	43	67974	38.30	ug/L	99
18) methylene chloride	3.448	84	240561	43.10	ug/L	93
19) methyl tert butyl ether	3.821	73	434990	43.24	ug/L	94
20) acrylonitrile	3.764	53	38645	40.91	ug/L	92
21) allyl chloride	3.279	41	321910	42.57	ug/L	93
22) trans-1,2-dichloroethene	3.818	96	243597	43.01	ug/L	98
23) iodomethane	3.019	142	614082	43.08	ug/L	95
24) carbon disulfide	3.104	76	795592	42.48	ug/L	100
25) propionitrile	5.621	54	11167	40.65	ug/L	100
26) vinyl acetate	4.562	43	533231	42.57	ug/L	88
27) chloroprene	4.601	53	305571	43.18	ug/L	89
28) di-isopropyl ether	4.589	45	666641	45.47	ug/L	94
29) methacrylonitrile	5.897	41	61492	40.45	ug/L	85
30) 2-butanone	5.510	72	13193	46.68	ug/L	# 71
31) Hexane	4.235	41	195965	40.70	ug/L	# 75
32) 1,1-dichloroethane	4.491	63	411136	42.38	ug/L	99
33) tert-butyl ethyl ether	5.254	59	495671	46.10	ug/L	98
34) isobutyl alcohol	4.562	43	533231	213.93	ug/L	58
35) 2,2-dichloropropane	5.527	77	351121	43.36	ug/L	92
36) cis-1,2-dichloroethene	5.510	96	236109	44.24	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
 Data File : v29025.D
 Acq On : 25 Mar 2014 9:38 am
 Operator : amym
 Sample : cc1058-50
 Misc : MS31383,MSV1088,,,,,5,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 26 08:46:00 2014
 Quant Method : C:\msdchem\1\METHODS\v140226w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Thu Feb 27 09:00:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	4.564	43	533247m	42.30	ug/L	
38) bromochloromethane	5.931	128	105557	42.19	ug/L	95
39) chloroform	6.149	83	446565	41.55	ug/L	100
41) Tetrahydrofuran	5.937	42	20572	40.24	ug/L	99
42) 1,1,1-trichloroethane	6.396	97	477859	45.68	ug/L	96
44) Cyclohexane	6.503	56	344165	47.54	ug/L	97
45) carbon tetrachloride	6.651	117	458758	49.31	ug/L	99
46) 1,1-dichloropropene	6.664	75	283000	45.88	ug/L	98
47) benzene	6.983	78	702204	45.44	ug/L	97
48) 1,2-dichloroethane	7.108	62	256155	40.73	ug/L	97
49) tert-amyl methyl ether	7.274	73	347235	50.41	ug/L	95
50) heptane	7.545	43	190212	45.53	ug/L	92
51) trichloroethene	8.020	95	226402	45.14	ug/L	97
52) 1,2-dichloropropane	8.369	63	176973	48.25	ug/L	99
53) dibromomethane	8.473	93	97289	42.92	ug/L	91
54) bromodichloromethane	8.725	83	256211	43.53	ug/L	100
55) Methylcyclohexane	8.324	83	319861	48.95	ug/L	99
56) 2-chloroethyl vinyl ether	9.102	63	23071	33.75	ug/L	98
57) methyl methacrylate	8.503	69	52424	44.10	ug/L	86
58) 1,4-dioxane	8.481	88	3664	203.52	ug/L	78
59) cis-1,3-dichloropropene	9.254	75	238554	44.33	ug/L	94
61) 4-methyl-2-pentanone	9.438	43	78784	43.22	ug/L	91
62) toluene	9.618	92	471451	49.89	ug/L	99
63) trans-1,3-dichloropropene	9.907	75	171912	51.50	ug/L	95
64) 1,1,2-trichloroethane	10.111	83	95799	45.91	ug/L	98
65) ethyl methacrylate	9.986	69	128308	46.78	ug/L	89
67) tetrachloroethene	10.172	166	248542	53.25	ug/L	98
68) 1,3-dichloropropane	10.274	76	185717	47.39	ug/L	97
69) dibromochloromethane	10.495	129	167171	44.57	ug/L	98
70) 1,2-dibromoethane	10.604	107	114324	47.92	ug/L	94
71) 2-hexanone	10.346	43	61192	47.81	ug/L	87
72) chlorobenzene	11.101	112	585201	49.90	ug/L	99
73) 1,1,1,2-tetrachloroethane	11.201	131	240928	50.77	ug/L	97
74) ethylbenzene	11.206	91	1028365	51.63	ug/L	96
75) m,p-xylene	11.337	106	755056	105.50	ug/L	91
76) o-xylene	11.704	106	391309	53.17	ug/L	89
77) styrene	11.725	104	555486	51.45	ug/L	95
78) bromoform	11.899	173	75617	41.49	ug/L	100
79) trans-1,4-dichloro-2-b...	12.116	53	27133	33.91	ug/L #	66
81) isopropylbenzene	12.056	105	1133916	56.11	ug/L	97
83) bromobenzene	12.346	156	238118	51.78	ug/L	93
84) 1,1,2,2-tetrachloroethane	12.351	83	122495	47.59	ug/L	98
85) 1,2,3-trichloropropane	12.390	75	152202	57.40	ug/L	99
86) n-propylbenzene	12.445	91	1245957	54.70	ug/L	98
87) 2-chlorotoluene	12.524	91	781688	51.68	ug/L	99
88) 4-chlorotoluene	12.635	91	849766	50.64	ug/L	98
89) 1,3,5-trimethylbenzene	12.614	105	940646	53.87	ug/L	97
90) tert-butylbenzene	12.900	91	524501	52.20	ug/L	100
91) 1,2,4-trimethylbenzene	12.954	105	939573	53.05	ug/L	99
92) sec-butylbenzene	13.103	105	1108642	55.39	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29025.D
Acq On : 25 Mar 2014 9:38 am
Operator : amym
Sample : cc1058-50
Misc : MS31383,MSV1088,,,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 26 08:46:00 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	13.211	146	493635	49.55	ug/L	99
94)	p-isopropyltoluene	13.245	119	982036	54.34	ug/L	99
95)	1,4-dichlorobenzene	13.307	146	461212	47.49	ug/L	98
96)	1,2-dichlorobenzene	13.624	146	436912	46.35	ug/L	98
97)	n-butylbenzene	13.610	91	823092	52.17	ug/L	100
98)	1,2-dibromo-3-chloropr...	14.325	75	14426	33.91	ug/L	79
99)	1,3,5-trichlorobenzene	14.490	180	331195	46.17	ug/L	98
100)	1,2,4-trichlorobenzene	15.046	180	219540	37.29	ug/L	98
101)	hexachlorobutadiene	15.167	225	109113	43.51	ug/L	98
102)	naphthalene	15.280	128	233196	31.89	ug/L	100
103)	1,2,3-trichlorobenzene	15.469	180	138073	33.24	ug/L	100
104)	2-Methylnaphthalene	16.278	142	17033	15.00	ug/L	100
105)	1-Methylnaphthalene	16.449	142	14372	13.33	ug/L	99

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

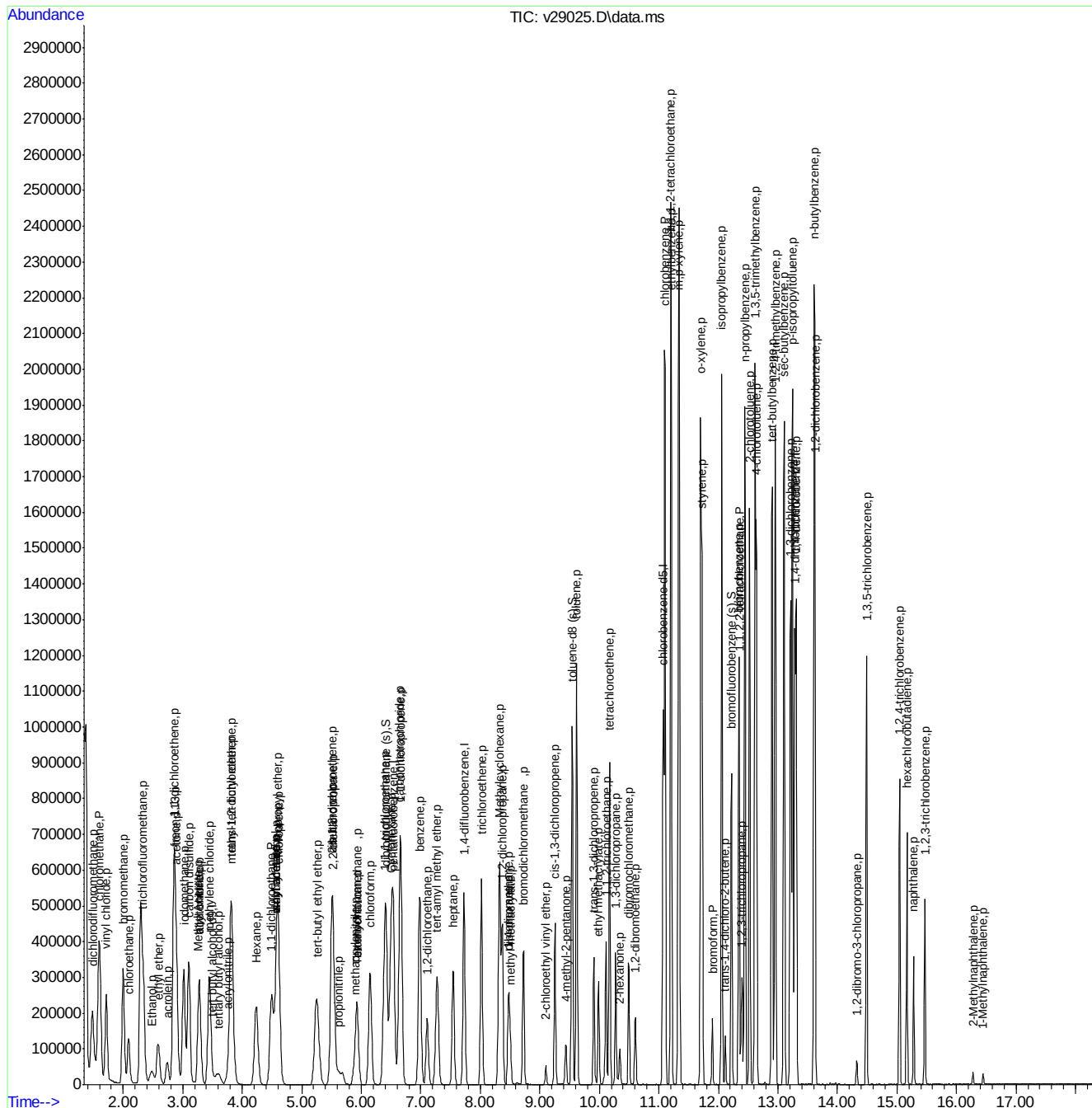
7.6.12

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29025.D
Acq On : 25 Mar 2014 9:38 am
Operator : amym
Sample : cc1058-50
Misc : MS31383,MSV1088,,,,5,1
ALS Vial : 1 Sample Multiplier: 1

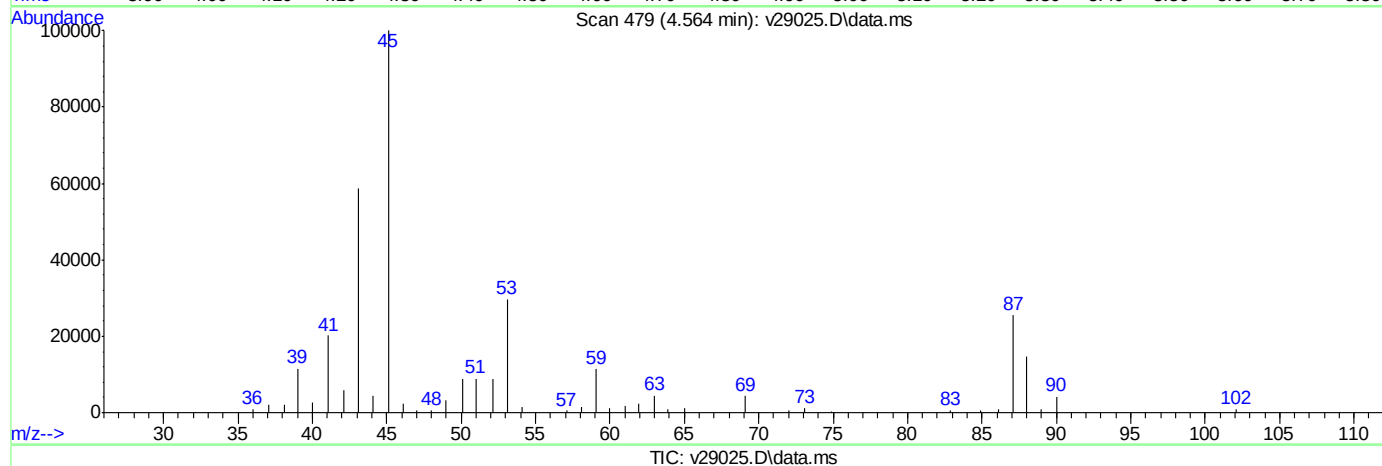
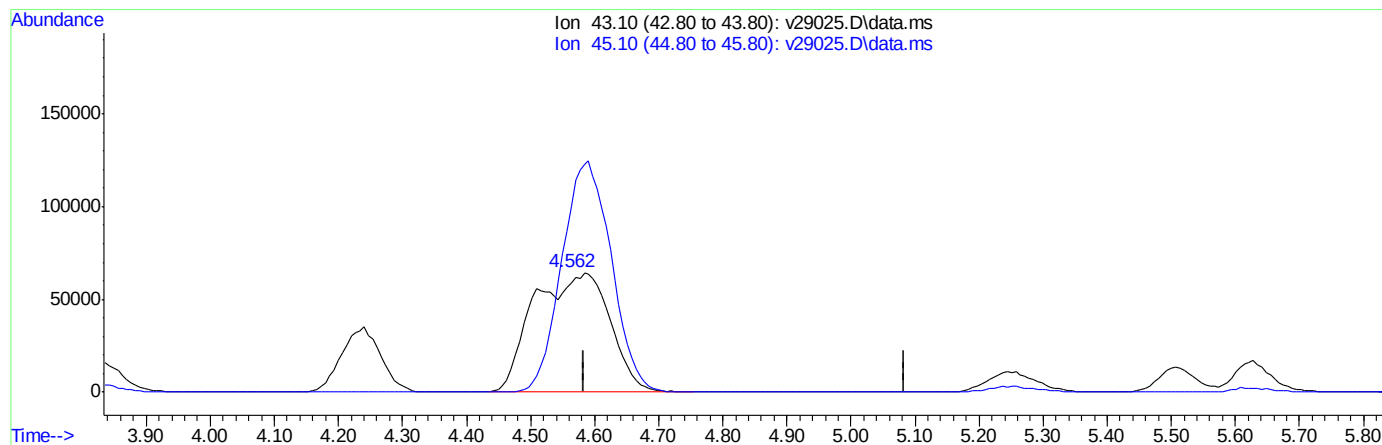
Quant Time: Mar 26 08:46:00 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\V140325\
Data File : v29025.D
Acq On : 25 Mar 2014 9:38 am
Operator : amym
Sample : bfb
Misc : MS31383,MSV1088,,,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 25 10:08:36 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration



(37) ethyl acetate (p)

4.564min (-0.020) 42.30ug/L m

response 533247

Ion	Exp%	Act%
43.10	100	100
45.10	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS 9617	V286 Cal STD	200 ug/L
9604	Cal Gas	
9587	BS STD	
9588	BS Gas	
9524	SS	
9558	SS	200 ug/L

Daily Saved File

Tune file 1:	V28201
Tune file 2:	NA
Initial Cal:	02/26/14
ID File:	V190226W
ICAL Verified:	V28222
Sequence verified:	2

Date: 2/26/14

Batch ID: MSV1058

Analysts: Ag Yang

Signature: [Signature]

*Note: If sample matrix is soil -- method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
V28191	NA	NA	NA	NA	1	NA	NA	NA	1:	NA	
92					2						
93					3						
94	test 0.5				4						
95	5				5						
96	400				6						
97	NA				7						
98	test 5				8						
99	400				9						
V28200	NA				10						
01	BFB				11						
02	NA				12						
03	IC1058-0.25	2.2	MS 9617/NA		13						
04	-0.5				14						
05	-1				15						
06	-2				16						
07	-5				17						
08	-10				18						
09	IC1058-50				19						
10	IC1058-400				20						
11	-200				21						
12	-400				22						
13	NA	NA	NA		23						
14					24						
15	IC1058-50	2.2	MS 9587/NA		25						
16					26						
2/27/14											

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: [Signature]

Standards Data

Daily Saved File

Lot #	Description	Conc
MS 9617	1/26 Cal STD	200.44/100
9604	Cal Gas	
9587	BS STD	
9588	BS Gas	
9559	25/55	210.44/100

Tune file 1:	V-2822
Tune file 2:	NA
Initial Cal:	02626/14
ID File:	V140256W
ICAL Verified:	V-28222
Sequence verified:	✓

Date: 2/27/14
 Batch ID: MSV 1058(1)
 Analysts: Am Yang
 Signature: [Signature]

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
V-28217	NA	NA	NA	NA	1	NA	NA	NA	1:	NA	
18					2						
19					3						
20					4						
21					5						
22	MCW 1058-50	2, 2	MS 9587/1058		6						
23	HS				7						
24	NA	NA	NA		8						
25					9						
26	MB				10						
27	MCW 7845-7	NA	MS 9617/7845	200/200	11						
28					12						
29					13						
30					14						
31					15						
32					16						
33					17						
34					18						
35	MCW 7845-14				19						
36					20						
37					21						
38					22						
39					23						
40					24						
41					25						
42					26						

2/28/14 [Signature]

= Matrix: Designate W for water, S for soil, O for oil.
 Sample amount is reported in grams (wet) for soil and oil, mls for water.

11-05 Date: 07/22/13

Review: [Signature]

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS 9640	V B60 Cal STD	200 ug/ml
9625	Cal Gas	
9626	BS STD	
9627	BS Gas	
9638	25/55	250 ug/ml

Daily Saved File

Tune file 1:	V29025
Tune file 2:	NA
Initial Cal:	02/26/14
ID File:	V140226W
ICAL Verified:	25
Sequence verified:	6K

Date: 3/25/14

Batch ID: MSV1088

Analysts: Amy Yang

Signature: [Signature]

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
V29025	CC/058-10	1.2	MS9640/9625	NA	1		5ml	NA	1:1	1.1	
	26	2.2	MS9626/9627		2						
	27	NA	NA		3						
	28				4						
	29				5						
	30	1	MS31386	V B60 STD	6	WFB					
	31	1			7						
	32	5			8	MFB					
	33	2	MS31373	V B60 STAR	9	AW					
	34	2			10						
	35	4	MS31386	V B60 STD	11						
	36	4			12						
X	37	2	MS31373	V B60 STAR	13						
	38	1	MS31386	V B60 STD	14				1:100	NA	RR = 1:20
	39				15				1:1	<2	SJ'
	40				16						
	41				17						
	42				18						
	43				19						
	44				20						
	45				21						
	46				22						
	47				23						
	48				24						
	49				25						
	50	3			26				1:5		
	51				27						
	52	NA	NA	NA	28				1:1	NA	
	53				29						

3/26/14

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: [Signature]



06/30/14

Technical Report for

Stantec Consulting Corporation

LMC - Utica West Lot

Accutest Job Number: MC31396

Sampling Date: 06/12/14

Report to:

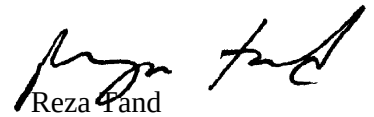
Stantec Consulting Corporation
61 Commercial Street
Rochester, NY 14614
bob.mahoney@stantec.com

ATTN: Bob Mahoney

Total number of pages in report: **200**



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


Reza Fand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

Stantec Consulting Corporation

Job No: MC31396

LMC - Utica West Lot

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC31396-1	06/12/14	14:00 BH	06/14/14	AQ	Ground Water	MW-1(DOT)
MC31396-2	06/12/14	17:10 BH	06/14/14	AQ	Ground Water	MW-1
MC31396-3	06/12/14	16:30 BH	06/14/14	AQ	Ground Water	MW-5
MC31396-4	06/12/14	15:45 BH	06/14/14	AQ	Ground Water	MW-22
MC31396-5	06/12/14	16:00 BH	06/14/14	AQ	Ground Water	MW-23
MC31396-6	06/12/14	17:05 BH	06/14/14	AQ	Ground Water	MW-24
MC31396-7	06/12/14	17:25 BH	06/14/14	AQ	Ground Water	MW-B
MC31396-8	06/12/14	16:10 BH	06/14/14	AQ	Ground Water	MW-D
MC31396-9	06/12/14	16:45 BH	06/14/14	AQ	Ground Water	MW-E
MC31396-10	06/12/14	15:30 BH	06/14/14	AQ	Ground Water	MW-F
MC31396-11	06/12/14	17:00 BH	06/14/14	AQ	Ground Water	PW-1
MC31396-12	06/12/14	15:05 BH	06/14/14	AQ	Ground Water	PZ-1
MC31396-13	06/12/14	15:20 BH	06/14/14	AQ	Ground Water	PZ-2



Sample Summary
(continued)

Stantec Consulting Corporation
LMC - Utica West Lot

Job No: MC31396

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC31396-14	06/12/14	17:55 BH	06/14/14	AQ	Trip Blank Water	TRIP BLANK
MC31396-15	06/12/14	16:15 BH	06/14/14	AQ	Ground Water	FIELD DUPLICATE



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Stantec Consulting Corporation

Job No MC31396

Site: LMC - Utica West Lot

Report Date 6/30/2014 2:56:58 PM

14 Sample(s) and 1 Trip Blank were collected on 06/12/2014 and were received at Accutest on 06/14/2014 properly preserved, at 1.4 Deg. C and intact. These Samples received an Accutest job number of MC31396. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ

Batch ID: MSU924

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC31396-1MS, MC31396-1MSD were used as the QC samples indicated.
- Initial calibration verification standard MSU915-ICV915 for dichlorodifluoromethane exceed 30% difference (response bias high). Associated samples are non-detect for this compound.
- Blank Spike Recovery(s) for 2-Hexanone, Acetone, Vinyl Acetate are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for 2-Butanone (MEK), 2-Hexanone, Acetone, Vinyl Acetate are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 2-Butanone (MEK), 2-Hexanone, Acetone are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- MC31396-14 for Acetone: Results confirmed
- Calibration check standard MSU924-CC915 for vinyl acetate vinyl acetate exceed 40% difference (response bias high). Associated samples are non-detect for this compound.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (MC31396).

Summary of Hits

Page 1 of 2

Job Number: MC31396
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 06/12/14



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

MC31396-1 MW-1(DOT)

cis-1,2-Dichloroethene	4.7	1.0	0.84	ug/l	SW846 8260C

MC31396-2 MW-1

No hits reported in this sample.

MC31396-3 MW-5

No hits reported in this sample.

MC31396-4 MW-22

No hits reported in this sample.

MC31396-5 MW-23

Benzene	0.78	0.50	0.32	ug/l	SW846 8260C
cis-1,2-Dichloroethene	19.8	1.0	0.84	ug/l	SW846 8260C
Vinyl chloride	46.8	1.0	0.58	ug/l	SW846 8260C

MC31396-6 MW-24

1,1-Dichloroethene	0.77 J	1.0	0.61	ug/l	SW846 8260C
cis-1,2-Dichloroethene	31.0	1.0	0.84	ug/l	SW846 8260C
trans-1,2-Dichloroethene	0.77 J	1.0	0.51	ug/l	SW846 8260C
Tetrachloroethene	30.0	1.0	0.59	ug/l	SW846 8260C
Trichloroethene	44.4	1.0	0.47	ug/l	SW846 8260C
Vinyl chloride	11.0	1.0	0.58	ug/l	SW846 8260C

MC31396-7 MW-B

No hits reported in this sample.

MC31396-8 MW-D

cis-1,2-Dichloroethene	1.4	1.0	0.84	ug/l	SW846 8260C
Vinyl chloride	0.93 J	1.0	0.58	ug/l	SW846 8260C

MC31396-9 MW-E

cis-1,2-Dichloroethene	0.90 J	1.0	0.84	ug/l	SW846 8260C
Trichloroethene	0.73 J	1.0	0.47	ug/l	SW846 8260C

Summary of Hits

Page 2 of 2

Job Number: MC31396
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 06/12/14



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

MC31396-10 MW-F

cis-1,2-Dichloroethene	1.5	1.0	0.84	ug/l	SW846 8260C
Trichloroethene	10.3	1.0	0.47	ug/l	SW846 8260C

MC31396-11 PW-1

No hits reported in this sample.

MC31396-12 PZ-1

cis-1,2-Dichloroethene	1.4	1.0	0.84	ug/l	SW846 8260C

MC31396-13 PZ-2

No hits reported in this sample.

MC31396-14 TRIP BLANK

Acetone ^a	22.8	10	2.5	ug/l	SW846 8260C

MC31396-15 FIELD DUPLICATE

cis-1,2-Dichloroethene	1.5	1.0	0.84	ug/l	SW846 8260C
Vinyl chloride	0.96 J	1.0	0.58	ug/l	SW846 8260C

(a) Results confirmed

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-1(DOT)	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-1	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20584.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	4.7	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1(DOT)	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-1	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1(DOT)
Lab Sample ID: MC31396-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-1	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-2	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20588.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-2	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	121%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1
Lab Sample ID: MC31396-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-5	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-3	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20589.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-3	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	120%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-5
Lab Sample ID: MC31396-3
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-22	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-4	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20590.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-4	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	120%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22
Lab Sample ID: MC31396-4
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14

Date Received: 06/14/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	MW-23	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-5	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20591.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	0.78	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	19.8	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-5	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	46.8	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	123%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-23
Lab Sample ID: MC31396-5
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14

Date Received: 06/14/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	MW-24	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-6	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20592.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	0.77	1.0	0.61	ug/l	J
156-59-2	cis-1,2-Dichloroethene	31.0	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.77	1.0	0.51	ug/l	J
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-6	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	30.0	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	44.4	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	11.0	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	118%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-24
Lab Sample ID: MC31396-6
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-B	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-7	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20593.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-B
Lab Sample ID: MC31396-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14

Date Received: 06/14/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	125%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-B
Lab Sample ID: MC31396-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-D	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-8	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20594.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.4	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-D
Lab Sample ID: MC31396-8
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14

Date Received: 06/14/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	0.93	1.0	0.58	ug/l	J
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	123%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-D	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-8	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-E	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-9	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20595.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.90	1.0	0.84	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-E	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-9	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	0.73	1.0	0.47	ug/l	J
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	127%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-E
Lab Sample ID: MC31396-9
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-F	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-10	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20596.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.5	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-10	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	10.3	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	121%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-F
Lab Sample ID: MC31396-10
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PW-1	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-11	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20597.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PW-1	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-11	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	120%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PW-1	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-11	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	110%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

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

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Report of Analysis

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Client Sample ID:	PZ-1	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-12	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20599.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.4	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-1	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-12	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	124%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PZ-1
Lab Sample ID: MC31396-12
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PZ-2	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-13	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20600.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-2	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-13	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-2	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-13	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

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

4.13
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Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	TRIP BLANK	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-14	Date Received:	06/14/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20583.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	22.8	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-14	Date Received:	06/14/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: MC31396-14
Matrix: AQ - Trip Blank Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

(a) Results confirmed

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

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

Accutest Laboratories

Report of Analysis

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Client Sample ID:	FIELD DUPLICATE	Date Sampled:	06/12/14
Lab Sample ID:	MC31396-15	Date Received:	06/14/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U20598.D	1	06/19/14	GK	n/a	n/a	MSU924
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.5	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FIELD DUPLICATE
Lab Sample ID: MC31396-15
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14

Date Received: 06/14/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	0.96	1.0	0.58	ug/l	J
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	123%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FIELD DUPLICATE
Lab Sample ID: MC31396-15
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 06/12/14
Date Received: 06/14/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

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

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

Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

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

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC31396 **Client:** STANTEC **Immediate Client Services Action Required:** No
Date / Time Received: 6/14/2014 **Delivery Method:** **Client Service Action Required at Login:** No
Project: LMC-UTICA WEST LOT **No. Coolers:** 1 **Airbill #'s:**

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

Cooler Temperature **Y or N**
1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: Infrared gun
3. Cooler media: Ice (bag)

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

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

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

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

Comments

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC31396

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC31396-1 Collected: 12-JUN-14 14:00 By: BH Received: 14-JUN-14 By: MW-1(DOT)						
MC31396-1	SW846 8260C	19-JUN-14 11:18	GK			V8260STD
MC31396-2 Collected: 12-JUN-14 17:10 By: BH Received: 14-JUN-14 By: MW-1						
MC31396-2	SW846 8260C	19-JUN-14 13:07	GK			V8260STD
MC31396-3 Collected: 12-JUN-14 16:30 By: BH Received: 14-JUN-14 By: MW-5						
MC31396-3	SW846 8260C	19-JUN-14 13:34	GK			V8260STD
MC31396-4 Collected: 12-JUN-14 15:45 By: BH Received: 14-JUN-14 By: MW-22						
MC31396-4	SW846 8260C	19-JUN-14 14:02	GK			V8260STD
MC31396-5 Collected: 12-JUN-14 16:00 By: BH Received: 14-JUN-14 By: MW-23						
MC31396-5	SW846 8260C	19-JUN-14 14:29	GK			V8260STD
MC31396-6 Collected: 12-JUN-14 17:05 By: BH Received: 14-JUN-14 By: MW-24						
MC31396-6	SW846 8260C	19-JUN-14 14:57	GK			V8260STD
MC31396-7 Collected: 12-JUN-14 17:25 By: BH Received: 14-JUN-14 By: MW-B						
MC31396-7	SW846 8260C	19-JUN-14 15:24	GK			V8260STD
MC31396-8 Collected: 12-JUN-14 16:10 By: BH Received: 14-JUN-14 By: MW-D						
MC31396-8	SW846 8260C	19-JUN-14 15:52	GK			V8260STD

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC31396

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC31396-9 Collected: 12-JUN-14 16:45 By: BH Received: 14-JUN-14 By: MW-E						
MC31396-9	SW846 8260C	19-JUN-14 16:19	GK			V8260STD
MC31396-10 Collected: 12-JUN-14 15:30 By: BH Received: 14-JUN-14 By: MW-F						
MC31396-10	SW846 8260C	19-JUN-14 16:46	GK			V8260STD
MC31396-11 Collected: 12-JUN-14 17:00 By: BH Received: 14-JUN-14 By: PW-1						
MC31396-11	SW846 8260C	19-JUN-14 17:13	GK			V8260STD
MC31396-12 Collected: 12-JUN-14 15:05 By: BH Received: 14-JUN-14 By: PZ-1						
MC31396-12	SW846 8260C	19-JUN-14 18:08	GK			V8260STD
MC31396-13 Collected: 12-JUN-14 15:20 By: BH Received: 14-JUN-14 By: PZ-2						
MC31396-13	SW846 8260C	19-JUN-14 18:35	GK			V8260STD
MC31396-14 Collected: 12-JUN-14 17:55 By: BH Received: 14-JUN-14 By: TRIP BLANK						
MC31396-14	SW846 8260C	19-JUN-14 10:50	GK			V8260STD
MC31396-15 Collected: 12-JUN-14 16:15 By: BH Received: 14-JUN-14 By: FIELD DUPLICATE						
MC31396-15	SW846 8260C	19-JUN-14 17:40	GK			V8260STD

Accutest Internal Chain of Custody

Page 1 of 2

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 06/14/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC31396-1.1	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-1.1	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-1.1	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-1.1	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-1.2	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-1.2	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-1.2	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-1.2	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-2.3	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-2.3	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-2.3	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-2.3	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-3.3	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-3.3	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-3.3	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-3.3	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-4.2	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-4.2	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-4.2	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-4.2	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-5.3	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-5.3	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-5.3	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-5.3	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-6.1	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-6.1	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-6.1	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-6.1	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-7.2	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-7.2	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-7.2	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-7.2	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-8.3	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-8.3	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-8.3	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-8.3	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage

Accutest Internal Chain of Custody

Page 2 of 2

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 06/14/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC31396-9.2	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-9.2	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-9.2	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-9.2	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-10.3	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-10.3	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-10.3	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-10.3	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-11.2	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-11.2	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-11.2	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-11.2	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-12.2	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-12.2	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-12.2	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-12.2	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-13.2	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-13.2	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-13.2	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-13.2	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-14.1	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-14.1	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-14.1	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-14.1	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage
MC31396-14.2	VOC Ref #2	Gary Krasinski	06/24/14 11:33	Retrieve from Storage
MC31396-14.2	Gary Krasinski	GCMSU	06/24/14 11:33	Load on Instrument
MC31396-14.2	GCMSU	Gary Krasinski	06/25/14 08:34	Unload from Instrument
MC31396-14.2	Gary Krasinski	VOC Ref #2	06/25/14 08:34	Return to Storage
MC31396-15.3	VOC Ref #1	Gary Krasinski	06/19/14 10:07	Retrieve from Storage
MC31396-15.3	Gary Krasinski	GCMSU	06/19/14 10:07	Load on Instrument
MC31396-15.3	GCMSU	Gary Krasinski	06/20/14 09:02	Unload from Instrument
MC31396-15.3	Gary Krasinski	VOC Ref #1	06/20/14 09:02	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

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Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU924-MB	U20582.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.70	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU924-MB	U20582.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

6.1.1

6

Method Blank Summary

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU924-MB	U20582.D	1	06/19/14	GK	n/a	n/a	MSU924

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

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	123% 70-130%
2037-26-5	Toluene-D8	107% 70-130%
460-00-4	4-Bromofluorobenzene	104% 70-130%

Blank Spike Summary

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU924-BS	U20579.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	26.2	52* a	70-130
71-43-2	Benzene	50	53.1	106	70-130
108-86-1	Bromobenzene	50	47.5	95	70-130
74-97-5	Bromochloromethane	50	57.6	115	70-130
75-27-4	Bromodichloromethane	50	54.4	109	70-130
75-25-2	Bromoform	50	47.5	95	70-130
74-83-9	Bromomethane	50	58.0	116	70-130
78-93-3	2-Butanone (MEK)	50	36.1	72	70-130
104-51-8	n-Butylbenzene	50	54.9	110	70-130
135-98-8	sec-Butylbenzene	50	56.7	113	70-130
98-06-6	tert-Butylbenzene	50	55.2	110	70-130
75-15-0	Carbon disulfide	50	54.5	109	70-130
56-23-5	Carbon tetrachloride	50	53.7	107	70-130
108-90-7	Chlorobenzene	50	50.0	100	70-130
75-00-3	Chloroethane	50	55.4	111	70-130
67-66-3	Chloroform	50	56.4	113	70-130
74-87-3	Chloromethane	50	59.5	119	70-130
95-49-8	o-Chlorotoluene	50	52.2	104	70-130
106-43-4	p-Chlorotoluene	50	47.5	95	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	49.2	98	70-130
124-48-1	Dibromochloromethane	50	51.5	103	70-130
106-93-4	1,2-Dibromoethane	50	45.6	91	70-130
95-50-1	1,2-Dichlorobenzene	50	54.0	108	70-130
541-73-1	1,3-Dichlorobenzene	50	52.0	104	70-130
106-46-7	1,4-Dichlorobenzene	50	50.9	102	70-130
75-71-8	Dichlorodifluoromethane	50	56.3	113	70-130
75-34-3	1,1-Dichloroethane	50	58.7	117	70-130
107-06-2	1,2-Dichloroethane	50	53.1	106	70-130
75-35-4	1,1-Dichloroethene	50	56.3	113	70-130
156-59-2	cis-1,2-Dichloroethene	50	55.0	110	70-130
156-60-5	trans-1,2-Dichloroethene	50	54.4	109	70-130
78-87-5	1,2-Dichloropropane	50	50.3	101	70-130
142-28-9	1,3-Dichloropropane	50	45.5	91	70-130
594-20-7	2,2-Dichloropropane	50	61.7	123	70-130
563-58-6	1,1-Dichloropropene	50	55.4	111	70-130
10061-01-5	cis-1,3-Dichloropropene	50	45.8	92	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU924-BS	U20579.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	43.2	86	70-130
100-41-4	Ethylbenzene	50	52.3	105	70-130
87-68-3	Hexachlorobutadiene	50	62.0	124	70-130
591-78-6	2-Hexanone	50	30.1	60* a	70-130
74-88-4	Iodomethane	50	52.4	105	70-130
98-82-8	Isopropylbenzene	50	56.4	113	70-130
99-87-6	p-Isopropyltoluene	50	54.9	110	70-130
1634-04-4	Methyl Tert Butyl Ether	50	51.4	103	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	47.2	94	70-130
74-95-3	Methylene bromide	50	52.8	106	70-130
75-09-2	Methylene chloride	50	55.6	111	70-130
91-20-3	Naphthalene	50	57.7	115	70-130
103-65-1	n-Propylbenzene	50	50.6	101	70-130
100-42-5	Styrene	50	49.0	98	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	57.4	115	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	57.1	114	70-130
127-18-4	Tetrachloroethene	50	52.6	105	70-130
108-88-3	Toluene	50	47.9	96	70-130
87-61-6	1,2,3-Trichlorobenzene	50	59.8	120	70-130
120-82-1	1,2,4-Trichlorobenzene	50	61.2	122	70-130
71-55-6	1,1,1-Trichloroethane	50	55.5	111	70-130
79-00-5	1,1,2-Trichloroethane	50	41.8	84	70-130
79-01-6	Trichloroethene	50	50.7	101	70-130
75-69-4	Trichlorofluoromethane	50	51.7	103	70-130
96-18-4	1,2,3-Trichloropropane	50	41.7	83	70-130
95-63-6	1,2,4-Trimethylbenzene	50	52.0	104	70-130
108-67-8	1,3,5-Trimethylbenzene	50	52.7	105	70-130
108-05-4	Vinyl Acetate	50	71.8	144* a	70-130
75-01-4	Vinyl chloride	50	54.7	109	70-130
	m,p-Xylene	100	105	105	70-130
95-47-6	o-Xylene	50	56.3	113	70-130
1330-20-7	Xylene (total)	150	161	107	70-130

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU924-BS	U20579.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	129%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC31396-1MS	U20586.D	5	06/19/14	GK	n/a	n/a	MSU924
MC31396-1MSD	U20587.D	5	06/19/14	GK	n/a	n/a	MSU924
MC31396-1	U20584.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Compound	MC31396-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	113	45* a	250	116	46* a	3	70-130/30
71-43-2	Benzene	ND	250	241	96	250	249	100	3	70-130/30
108-86-1	Bromobenzene	ND	250	260	104	250	252	101	3	70-130/30
74-97-5	Bromochloromethane	ND	250	260	104	250	258	103	1	70-130/30
75-27-4	Bromodichloromethane	ND	250	251	100	250	253	101	1	70-130/30
75-25-2	Bromoform	ND	250	212	85	250	223	89	5	70-130/30
74-83-9	Bromomethane	ND	250	249	100	250	255	102	2	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	163	65* a	250	156	62* a	4	70-130/30
104-51-8	n-Butylbenzene	ND	250	252	101	250	256	102	2	70-130/30
135-98-8	sec-Butylbenzene	ND	250	271	108	250	267	107	1	70-130/30
98-06-6	tert-Butylbenzene	ND	250	265	106	250	263	105	1	70-130/30
75-15-0	Carbon disulfide	ND	250	205	82	250	216	86	5	70-130/30
56-23-5	Carbon tetrachloride	ND	250	246	98	250	248	99	1	70-130/30
108-90-7	Chlorobenzene	ND	250	250	100	250	252	101	1	70-130/30
75-00-3	Chloroethane	ND	250	242	97	250	247	99	2	70-130/30
67-66-3	Chloroform	ND	250	246	98	250	251	100	2	70-130/30
74-87-3	Chloromethane	ND	250	251	100	250	257	103	2	70-130/30
95-49-8	o-Chlorotoluene	ND	250	265	106	250	261	104	2	70-130/30
106-43-4	p-Chlorotoluene	ND	250	251	100	250	247	99	2	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	233	93	250	239	96	3	70-130/30
124-48-1	Dibromochloromethane	ND	250	253	101	250	249	100	2	70-130/30
106-93-4	1,2-Dibromoethane	ND	250	251	100	250	234	94	7	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	250	257	103	250	257	103	0	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	250	253	101	250	254	102	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	250	246	98	250	248	99	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND	250	240	96	250	240	96	0	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	258	103	250	265	106	3	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	248	99	250	243	97	2	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	245	98	250	257	103	5	70-130/30
156-59-2	cis-1,2-Dichloroethene	4.7	250	241	95	250	249	98	3	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	238	95	250	246	98	3	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	249	100	250	246	98	1	70-130/30
142-28-9	1,3-Dichloropropane	ND	250	253	101	250	236	94	7	70-130/30
594-20-7	2,2-Dichloropropane	ND	250	273	109	250	277	111	1	70-130/30
563-58-6	1,1-Dichloropropene	ND	250	244	98	250	259	104	6	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	249	100	250	236	94	5	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC31396-1MS	U20586.D	5	06/19/14	GK	n/a	n/a	MSU924
MC31396-1MSD	U20587.D	5	06/19/14	GK	n/a	n/a	MSU924
MC31396-1	U20584.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Compound	MC31396-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	250	273	109	250	239	96	13	70-130/30
100-41-4	Ethylbenzene	ND	250	248	99	250	257	103	4	70-130/30
87-68-3	Hexachlorobutadiene	ND	250	265	106	250	271	108	2	70-130/30
591-78-6	2-Hexanone	ND	250	167	67* a	250	155	62* a	7	70-130/30
74-88-4	Iodomethane	ND	250	231	92	250	238	95	3	70-130/30
98-82-8	Isopropylbenzene	ND	250	285	114	250	282	113	1	70-130/30
99-87-6	p-Isopropyltoluene	ND	250	263	105	250	262	105	0	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	250	235	94	250	236	94	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	251	100	250	232	93	8	70-130/30
74-95-3	Methylene bromide	ND	250	253	101	250	243	97	4	70-130/30
75-09-2	Methylene chloride	ND	250	246	98	250	249	100	1	70-130/30
91-20-3	Naphthalene	ND	250	269	108	250	267	107	1	70-130/30
103-65-1	n-Propylbenzene	ND	250	260	104	250	253	101	3	70-130/30
100-42-5	Styrene	ND	250	232	93	250	242	97	4	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	249	100	250	261	104	5	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	310	124	250	293	117	6	70-130/30
127-18-4	Tetrachloroethene	ND	250	252	101	250	260	104	3	70-130/30
108-88-3	Toluene	ND	250	255	102	250	248	99	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	250	257	103	250	268	107	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	250	266	106	250	272	109	2	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	246	98	250	250	100	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	246	98	250	223	89	10	70-130/30
79-01-6	Trichloroethene	ND	250	226	90	250	237	95	5	70-130/30
75-69-4	Trichlorofluoromethane	ND	250	222	89	250	228	91	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	250	224	90	250	216	86	4	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	250	258	103	250	256	102	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	250	263	105	250	260	104	1	70-130/30
108-05-4	Vinyl Acetate	ND	250	338	135* a	250	313	125	8	70-130/30
75-01-4	Vinyl chloride	ND	250	230	92	250	235	94	2	70-130/30
	m,p-Xylene	ND	500	494	99	500	511	102	3	70-130/30
95-47-6	o-Xylene	ND	250	246	98	250	260	104	6	70-130/30
1330-20-7	Xylene (total)	ND	750	740	99	750	771	103	4	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC31396-1MS	U20586.D	5	06/19/14	GK	n/a	n/a	MSU924
MC31396-1MSD	U20587.D	5	06/19/14	GK	n/a	n/a	MSU924
MC31396-1	U20584.D	1	06/19/14	GK	n/a	n/a	MSU924

The QC reported here applies to the following samples:

Method: SW846 8260C

MC31396-1, MC31396-2, MC31396-3, MC31396-4, MC31396-5, MC31396-6, MC31396-7, MC31396-8, MC31396-9, MC31396-10, MC31396-11, MC31396-12, MC31396-13, MC31396-14, MC31396-15

CAS No.	Surrogate Recoveries	MS	MSD	MC31396-1	Limits
1868-53-7	Dibromofluoromethane	119%	120%	122%	70-130%
2037-26-5	Toluene-D8	113%	110%	104%	70-130%
460-00-4	4-Bromofluorobenzene	113%	107%	104%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU915-BFB	Injection Date: 06/06/14
Lab File ID: U20297.D	Injection Time: 16:42
Instrument ID: GCMSU	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	36309	23.8	Pass
75	30.0 - 60.0% of mass 95	68549	44.9	Pass
95	Base peak, 100% relative abundance	152691	100.0	Pass
96	5.0 - 9.0% of mass 95	10624	6.96	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	134904	88.4	Pass
175	5.0 - 9.0% of mass 174	10440	6.84 (7.74) ^a	Pass
176	95.0 - 101.0% of mass 174	129139	84.6 (95.7) ^a	Pass
177	5.0 - 9.0% of mass 176	8438	5.53 (6.53) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSU915-IC915	U20298.D	06/06/14	17:09	00:27	Initial cal 0.5
MSU915-IC915	U20299.D	06/06/14	17:37	00:55	Initial cal 1
MSU915-IC915	U20300.D	06/06/14	18:04	01:22	Initial cal 2
MSU915-IC915	U20301.D	06/06/14	18:32	01:50	Initial cal 5
MSU915-IC915	U20302.D	06/06/14	18:59	02:17	Initial cal 10
MSU915-IC915	U20303.D	06/06/14	19:26	02:44	Initial cal 25
MSU915-ICC915	U20304.D	06/06/14	19:53	03:11	Initial cal 50
MSU915-IC915	U20305.D	06/06/14	20:20	03:38	Initial cal 100
MSU915-IC915	U20306.D	06/06/14	20:48	04:06	Initial cal 200
MSU915-IC915	U20307.D	06/06/14	21:15	04:33	Initial cal 400
MSU915-ICV915	U20311.D	06/06/14	23:04	06:22	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU924-BFB **Injection Date:** 06/19/14
Lab File ID: U20578.D **Injection Time:** 08:34
Instrument ID: GCMSU

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	33176	24.6	Pass
75	30.0 - 60.0% of mass 95	59624	44.2	Pass
95	Base peak, 100% relative abundance	134976	100.0	Pass
96	5.0 - 9.0% of mass 95	9597	7.11	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	125936	93.3	Pass
175	5.0 - 9.0% of mass 174	9260	6.86 (7.35) ^a	Pass
176	95.0 - 101.0% of mass 174	123896	91.8 (98.4) ^a	Pass
177	5.0 - 9.0% of mass 176	7748	5.74 (6.25) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSU924-CC915	U20578.D	06/19/14	08:34	00:00	Continuing cal 50
MSU924-BS	U20579.D	06/19/14	09:02	00:28	Blank Spike
MSU924-MB	U20582.D	06/19/14	10:23	01:49	Method Blank
MC31396-14	U20583.D	06/19/14	10:50	02:16	TRIP BLANK
MC31396-1	U20584.D	06/19/14	11:18	02:44	MW-1(DOT)
ZZZZZZ	U20585.D	06/19/14	11:45	03:11	(unrelated sample)
MC31396-1MS	U20586.D	06/19/14	12:13	03:39	Matrix Spike
MC31396-1MSD	U20587.D	06/19/14	12:40	04:06	Matrix Spike Duplicate
MC31396-2	U20588.D	06/19/14	13:07	04:33	MW-1
MC31396-3	U20589.D	06/19/14	13:34	05:00	MW-5
MC31396-4	U20590.D	06/19/14	14:02	05:28	MW-22
MC31396-5	U20591.D	06/19/14	14:29	05:55	MW-23
MC31396-6	U20592.D	06/19/14	14:57	06:23	MW-24
MC31396-7	U20593.D	06/19/14	15:24	06:50	MW-B
MC31396-8	U20594.D	06/19/14	15:52	07:18	MW-D
MC31396-9	U20595.D	06/19/14	16:19	07:45	MW-E
MC31396-10	U20596.D	06/19/14	16:46	08:12	MW-F
MC31396-11	U20597.D	06/19/14	17:13	08:39	PW-1
MC31396-15	U20598.D	06/19/14	17:40	09:06	FIELD DUPLICATE
MC31396-12	U20599.D	06/19/14	18:08	09:34	PZ-1
MC31396-13	U20600.D	06/19/14	18:35	10:01	PZ-2
ZZZZZZ	U20601.D	06/19/14	19:03	10:29	(unrelated sample)
ZZZZZZ	U20602.D	06/19/14	19:30	10:56	(unrelated sample)
ZZZZZZ	U20603.D	06/19/14	19:57	11:23	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample:	MSU924-BFB	Injection Date:	06/19/14
Lab File ID:	U20578.D	Injection Time:	08:34
Instrument ID:	GCMSU		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	U20604.D	06/19/14	20:24	11:50	(unrelated sample)

6.4.2
6

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Check Std: MSU924-CC915
Lab File ID: U20578.D
Instrument ID: GCMSU
Injection Date: 06/19/14
Injection Time: 08:34
Method: SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	356737	8.97	637122	9.84	291981	13.10	407580	15.66	187781	6.59
Upper Limit ^a	713474	9.47	1274244	10.34	583962	13.60	815160	16.16	375562	7.09
Lower Limit ^b	178369	8.47	318561	9.34	145991	12.60	203790	15.16	93891	6.09

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSU924-BS	349404	8.97	626192	9.84	247819	13.10	379984	15.66	185484	6.59
MSU924-MB	342040	8.98	585356	9.85	235772	13.11	363835	15.67	192064	6.60
MC31396-14	324962	8.98	564274	9.85	231774	13.10	355353	15.67	148689	6.59
MC31396-1	343174	8.98	591476	9.85	238940	13.10	360064	15.67	162282	6.61
ZZZZZZ	353522	8.98	581447	9.84	238908	13.10	360886	15.66	163038	6.60
MC31396-1MS	402348	8.97	693862	9.84	303684	13.10	395166	15.66	188596	6.60
MC31396-1MSD	403593	8.98	688328	9.84	287798	13.10	406456	15.66	191902	6.61
MC31396-2	382565	8.98	627715	9.85	244742	13.10	368546	15.67	186345	6.62
MC31396-3	381240	8.98	623995	9.85	237393	13.11	361731	15.67	177789	6.62
MC31396-4	345176	8.98	548005	9.85	213808	13.11	349260	15.67	162906	6.60
MC31396-5	356433	8.98	587381	9.85	227160	13.10	347232	15.67	166155	6.59
MC31396-6	372570	8.98	607397	9.85	228408	13.11	336029	15.67	145208	6.59
MC31396-7	325727	8.98	526563	9.85	201871	13.11	326814	15.67	163566	6.60
MC31396-8	337956	8.98	554884	9.85	216777	13.10	337582	15.67	158288	6.60
MC31396-9	326774	8.98	537293	9.85	211192	13.11	320331	15.67	166624	6.60
MC31396-10	349569	8.98	562543	9.85	213448	13.11	324809	15.67	160972	6.61
MC31396-11	331364	8.98	561659	9.85	227960	13.10	324017	15.67	168017	6.60
MC31396-15	329591	8.98	537670	9.85	203900	13.11	319368	15.67	161196	6.60
MC31396-12	337633	8.98	555319	9.85	210691	13.11	324387	15.67	167198	6.61
MC31396-13	343519	8.98	555420	9.85	207216	13.11	318798	15.67	164787	6.59
ZZZZZZ	328394	8.98	536433	9.85	199299	13.10	308064	15.67	159911	6.61
ZZZZZZ	303194	8.98	499509	9.84	220739	13.10	354878	15.67	173567	6.60
ZZZZZZ	415598	8.98	662863	9.85	237718	13.10	374740	15.67	220702	6.60
ZZZZZZ	381980	8.98	625620	9.85	242857	13.10	382833	15.66	259168	6.59

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC31396-1	U20584.D	122	104	104
MC31396-2	U20588.D	121	107	106
MC31396-3	U20589.D	120	106	105
MC31396-4	U20590.D	120	107	102
MC31396-5	U20591.D	123	108	106
MC31396-6	U20592.D	118	105	108
MC31396-7	U20593.D	125	105	103
MC31396-8	U20594.D	123	105	106
MC31396-9	U20595.D	127	106	107
MC31396-10	U20596.D	121	105	102
MC31396-11	U20597.D	120	110	109
MC31396-12	U20599.D	124	103	106
MC31396-13	U20600.D	122	104	105
MC31396-14	U20583.D	122	107	104
MC31396-15	U20598.D	123	105	104
MC31396-1MS	U20586.D	119	113	113
MC31396-1MSD	U20587.D	120	110	107
MSU924-BS	U20579.D	129	101	97
MSU924-MB	U20582.D	123	107	104

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane
S2 = Toluene-D8
S3 = 4-Bromofluorobenzene

70-130%
70-130%
70-130%

6.6.1

6

Initial Calibration Summary

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU915-ICC915
Lab FileID: U20304.D

Response Factor Report MSU

Method : D:\msdchem\1\methods\U140606W.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Jun 09 11:34:35 2014
Response via : Initial Calibration

Calibration Files

0.5 =U20298.D 1 =U20299.D 2 =U20300.D 5 =U20301.D
10 =U20302.D 25 =U20303.D 50 =U20304.D 100 =U20305.D
200 =U20306.D 400 =U20307.D = =

Compound	0.5	1	2	5	10	25	50	100	200	400	Avg	%RSD
1) I tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol												
	0.108	0.110	0.106	0.100	0.105	0.109	0.106	0.104	0.106			2.96
3) Ethanol												
	0.026	0.020	0.018	0.015	0.014	0.015	0.014	0.016	0.017#			23.96
---- Linear regression ---- Coefficient = 0.9983												
Response Ratio = -0.04963 + 0.01554 *A												
4) I pentafluorobenzene -----ISTD-----												
5) dichlorodifluoromethane												
	0.534	0.509	0.526	0.538	0.547	0.445	0.480	0.464	0.505			7.52
6) chloromethane												
	1.562	1.498	1.423	1.392	1.372	1.179	1.155	1.071	1.331			13.22
7) vinyl chloride												
	1.086	1.035	1.056	1.004	0.988	0.983	0.824	0.826	0.746	0.950		12.63
8) bromomethane												
	0.599	0.539	0.526	0.516	0.509	0.458	0.448	0.427	0.503			11.22
9) chloroethane												
	0.477	0.447	0.447	0.447	0.449	0.407	0.406	0.384	0.433			7.08
10) ethyl ether												
	0.543	0.537	0.512	0.524	0.485	0.476	0.467	0.506				6.00
11) acetonitrile												
	0.094	0.098	0.094	0.093	0.077	0.074	0.075	0.086				12.20
12) trichlorofluoromethane												
	1.127	1.100	1.113	1.084	1.050	1.068	0.966	0.961	0.917	1.043		7.28
13) freon-113												
	0.689	0.707	0.685	0.711	0.620	0.616	0.594	0.660				7.37
14) acrolein												
	0.094	0.097	0.095	0.092	0.084	0.084	0.081	0.090				7.16
15) 1,1-dichloroethene												
	0.603	0.639	0.648	0.600	0.576	0.571	0.493	0.488	0.473	0.566		11.66
16) acetone												
	0.135	0.153	0.145	0.140	0.144	0.131	0.141					5.57
17) Methyl Acetate												
	0.552	0.518	0.547	0.558	0.516	0.521	0.514	0.532				3.57
18) methylene chloride												
	0.739	0.675	0.646	0.603	0.635	0.539	0.536	0.524	0.612			12.46
19) methyl tert butyl ether												
	1.704	1.646	1.530	1.527	1.466	1.528	1.334	1.344	1.313	1.488		9.27
20) acrylonitrile												
	0.291	0.287	0.283	0.283	0.257	0.258	0.252	0.273				6.10
21) allyl chloride												
	1.370	1.347	1.282	1.358	1.133	1.127	1.077	1.242				10.12

Initial Calibration Summary

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU915-ICC915
Lab FileID: U20304.D

22)	trans-1,2-dichloroethene	0.740	0.802	0.682	0.654	0.613	0.631	0.541	0.537	0.650	14.08			
23)	iodomethane			1.224	1.211	1.179	1.221	1.056	1.052	1.025	1.138	7.87		
24)	carbon disulfide			1.840	1.814	1.756	1.806	1.538	1.515	1.475	1.678	9.57		
25)	propionitrile			0.053	0.063	0.055	0.057	0.051	0.051	0.048	0.054	9.23		
26)	vinyl acetate			0.908	0.796	0.881	0.882	0.914	0.861	0.910	0.879	4.67		
27)	chloroprene			1.041	1.052	1.022	1.047	0.950	0.932	0.906	0.993	6.20		
28)	di-isopropyl ether			2.561	2.540	2.475	2.415	2.512	2.253	2.201	2.109	2.383	7.23	
29)	methacrylonitrile			0.369	0.367	0.342	0.351	0.348	0.351	0.354	0.355	2.86		
30)	2-butanone			0.067	0.070	0.072	0.078	0.077	0.080	0.077	0.074#	6.44		
31)	Ethyl Acetate			2.187	2.155	2.107	2.183	2.021	1.984	1.889	2.075	5.47		
32)	Hexane			1.072	1.081	1.036	1.070	0.981	0.943	0.906	1.013	6.91		
33)	1,1-dichloroethane			1.118	1.304	1.280	1.260	1.192	1.240	1.101	1.081	1.055	1.181	7.96
34)	tert-butyl ethyl ether			2.239	2.173	2.138	2.119	2.196	1.966	1.958	1.923	2.089	5.85	
35)	isobutyl alcohol			0.162	0.082	0.078	0.080	0.070	0.072	0.072	0.088	37.19		
	---- Linear regression ----													
	Response Ratio = 0.02238 + 0.07131 *A													
36)	2,2-dichloropropane			0.803	0.776	0.763	0.782	0.637	0.631	0.603	0.714	11.98		
37)	cis-1,2-dichloroethene			0.813	0.819	0.724	0.709	0.664	0.679	0.596	0.591	0.586	0.687	12.99
38)	bromochloromethane			0.374	0.365	0.357	0.366	0.331	0.330	0.328	0.350	5.66		
39)	chloroform			1.067	1.113	1.063	1.048	1.017	1.042	0.938	0.926	0.906	1.014	7.16
40)	dibromofluoromethane (s)			0.564	0.569	0.544	0.546	0.520	0.526	0.519	0.541	3.80		
41)	Tetrahydrofuran			0.243	0.220	0.197	0.191	0.178	0.178	0.180	0.198	12.46		
42)	1,1,1-trichloroethane			0.852	1.054	0.997	0.973	0.960	0.991	0.856	0.860	0.842	0.932	8.52
43)	I 1,4-difluorobenzene			-----ISTD-----										
44)	Cyclohexane			0.813	0.826	0.776	0.788	0.694	0.666	0.638	0.743	10.18		
45)	carbon tetrachloride			0.439	0.582	0.516	0.542	0.523	0.542	0.476	0.464	0.448	0.504	9.74
46)	1,1-dichloropropene			0.402	0.426	0.396	0.404	0.384	0.372	0.365	0.393	5.32		
47)	benzene			1.299	1.260	1.282	1.179	1.178	1.113	1.133	1.066	1.045	1.030	8.48
48)	1,2-dichloroethane			0.468	0.521	0.486	0.465	0.446	0.450	0.433	0.423	0.414	0.456	7.31
49)	tert-amyl methyl ether			0.912	0.881	0.942	0.885	0.886	0.803	0.779	0.760	0.856	7.73	
50)	heptane													

Initial Calibration Summary

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU915-ICC915
Lab FileID: U20304.D

				0.521	0.531	0.490	0.495	0.474	0.444	0.436	0.485	7.44
51)	trichloroethene	0.351	0.359	0.377	0.359	0.366	0.342	0.350	0.331	0.335	0.330	4.48
52)	1,2-dichloropropane		0.357	0.349	0.337	0.328	0.338	0.329	0.326	0.334	0.337	3.17
53)	dibromomethane		0.207	0.203	0.202	0.189	0.193	0.185	0.180	0.180	0.192	5.46
54)	bromodichloromethane	0.401	0.408	0.392	0.399	0.382	0.400	0.379	0.378	0.382	0.391	2.85
55)	Methylcyclohexane			0.551	0.579	0.550	0.561	0.491	0.476	0.464	0.525	8.79
56)	2-chloroethyl vinyl ether			0.149	0.143	0.144	0.146	0.154	0.147	0.160	0.149	4.13
57)	methyl methacrylate			0.127	0.122	0.119	0.123	0.127	0.124	0.133	0.125	3.56
58)	1,4-dioxane			0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.002#	18.27
	---- Linear regression ----											
	Response Ratio = -0.00064 + 0.00225 *A											
59)	cis-1,3-dichloropropene	0.323	0.409	0.412	0.410	0.396	0.383	0.406	0.403	0.392	0.411	6.82
60)	toluene-d8 (s)			0.980	0.973	0.943	0.948	0.929	0.945	0.957	0.954	1.87
61)	4-methyl-2-pentanone			0.351	0.342	0.338	0.348	0.326	0.330	0.338	0.339	2.67
62)	toluene	0.553	0.652	0.639	0.631	0.618	0.646	0.622	0.618	0.649	0.625	4.84
63)	trans-1,3-dichloropropene	0.231	0.284	0.312	0.329	0.313	0.304	0.318	0.318	0.307	0.328	9.49
64)	1,1,2-trichloroethane	0.192	0.182	0.194	0.180	0.179	0.184	0.182	0.176	0.186	0.184	3.16
65)	ethyl methacrylate			0.271	0.251	0.258	0.265	0.257	0.237	0.262	0.258	4.22
66)	I chlorobenzene-d5											
67)	tetrachloroethene	0.574	0.621	0.802	0.763	0.756	0.667	0.686	0.685	0.688	0.671	9.80
68)	1,3-dichloropropane			0.799	0.768	0.714	0.719	0.754	0.735	0.726	0.745	4.10
69)	dibromochloromethane	0.687	0.788	0.805	0.776	0.756	0.697	0.720	0.744	0.742	0.727	5.14
70)	1,2-dibromoethane			0.609	0.615	0.579	0.544	0.540	0.563	0.549	0.542	5.31
71)	2-hexanone			0.612	0.594	0.606	0.619	0.635	0.629	0.616	0.616	2.23
72)	chlorobenzene	1.726	1.978	1.933	1.865	1.739	1.767	1.800	1.805	1.774	1.821	4.79
73)	1,1,1,2-tetrachloroethane			0.994	0.966	0.936	0.869	0.885	0.850	0.867	0.827	6.57
74)	ethylbenzene	2.825	3.217	2.993	2.998	2.796	2.801	2.755	2.756	2.654	2.866	6.00
75)	m,p-xylene	1.199	1.141	1.290	1.262	1.263	1.171	1.192	1.185	1.190	1.145	4.26
76)	o-xylene	1.292	1.342	1.520	1.428	1.397	1.336	1.329	1.294	1.309	1.254	5.80
77)	styrene			1.969	1.944	1.780	1.830	1.842	1.866	1.865	1.871	3.50
78)	bromoform	0.566	0.543	0.513	0.521	0.487	0.501	0.507	0.509	0.507	0.517	4.61

Initial Calibration Summary

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Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU915-ICC915
Lab FileID: U20304.D

79)	trans-1,4-dichloro-2-butene	0.263	0.238	0.243	0.241	0.241	0.244	0.239	0.244	3.53
80)	I 1,4-dichlorobenzene-d -----ISTD-----									
81)	isopropylbenzene	2.410	2.463	2.375	2.482	2.425	2.441	2.362	2.423	1.81
82)	bromofluorobenzene (s)	0.639	0.636	0.602	0.597	0.631	0.641	0.686	0.633	4.64
83)	bromobenzene	0.631	0.628	0.618	0.643	0.657	0.648	0.686	0.644	3.53
84)	1,1,2,2-tetrachloroethane	0.520	0.476	0.517	0.503	0.489	0.472	0.483	0.492	3.57
85)	1,2,3-trichloropropane	0.576	0.578	0.550	0.571	0.568	0.565	0.591	0.571	2.20
86)	n-propylbenzene	2.685	2.690	2.601	2.673	2.624	2.607	2.516	2.628	2.35
87)	2-chlorotoluene	1.711	1.704	1.639	1.687	1.656	1.663	1.679	1.677	1.55
88)	4-chlorotoluene	1.736	1.686	1.593	1.679	1.687	1.678	1.736	1.685	2.85
89)	1,3,5-trimethylbenzene	2.128	2.473	2.391	2.464	2.334	2.477	2.429	2.453	4.76
90)	tert-butylbenzene	1.217	1.264	1.241	1.330	1.332	1.377	1.336	1.300	4.51
91)	1,2,4-trimethylbenzene	2.277	2.599	2.424	2.444	2.377	2.496	2.424	2.409	4.11
92)	sec-butylbenzene	3.033	3.098	3.013	3.173	3.062	3.075	2.727	3.026	4.67
93)	1,3-dichlorobenzene	1.414	1.457	1.443	1.418	1.389	1.450	1.413	1.397	1.63
94)	p-isopropyltoluene	2.753	2.841	2.703	2.857	2.779	2.733	2.418	2.726	5.38
95)	1,4-dichlorobenzene	1.504	1.673	1.551	1.510	1.458	1.501	1.467	1.432	5.95
96)	1,2-dichlorobenzene	1.511	1.703	1.579	1.574	1.516	1.564	1.508	1.488	4.88
97)	n-butylbenzene	2.520	2.502	2.378	2.460	2.341	2.299	2.129	2.376	5.75
98)	1,2-dibromo-3-chloropropane	0.184	0.175	0.158	0.154	0.147	0.149	0.140	0.158	10.07
99)	1,3,5-trichlorobenzene	1.242	1.279	1.227	1.250	1.189	1.145	1.042	1.196	6.76
100)	1,2,4-trichlorobenzene	1.174	1.195	1.129	1.176	1.135	1.095	0.990	1.128	6.18
101)	hexachlorobutadiene	0.581	0.584	0.537	0.527	0.506	0.477	0.432	0.521	10.50
102)	naphthalene	3.196	3.109	2.965	2.972	2.872	2.955	2.848	2.801	7.53
103)	2-Methylnaphthalene	1.510	1.452	1.487	1.556	1.442	1.002	1.408	14.43	
104)	1-Methylnaphthalene	1.225	1.129	1.143	1.210	1.073	1.156	5.39		
105)	1,2,3-trichlorobenzene	1.081	1.090	1.036	1.059	1.034	1.002	0.896	1.028	6.38

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

U140606W.m

Mon Jun 09 11:41:03 2014

Initial Calibration Verification

Page 1 of 3

Job Number: MC31396
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSU915-ICV915
 Lab FileID: U20311.D

Evaluate Continuing Calibration Report

Data File : D:\msdchem\1\data\U140606\U20311.D Vial: 26
 Acq On : 6 Jun 2014 11:04 pm Operator: garyk
 Sample : icv915-50 Inst : MSU
 Misc : ms31928,msu915,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : D:\msdchem\1\methods\U140606W.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Mon Jun 09 11:51:52 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	101	0.00	6.60
2 P	tertiary butyl alcohol	0.106	0.102	3.8	98	0.00	6.29
----- Amount Calc. %Drift -----							
3 P	Ethanol	5000.000	4563.494	8.7	101	0.02	5.59
----- AvgRF CCRF %Dev -----							
4 I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	8.97
5 P	dichlorodifluoromethane	0.505	0.707	-40.0#	133	0.00	4.32
6 P	chloromethane	1.331	1.594	-19.8	119	0.00	4.54
7 P	vinyl chloride	0.950	1.128	-18.7	118	0.00	4.80
8 P	bromomethane	0.503	0.570	-13.3	115	0.00	5.27
9 P	chloroethane	0.433	0.491	-13.4	112	0.00	5.42
10 P	ethyl ether	0.506	0.501	1.0	98	0.00	6.29
11 P	acetonitrile	0.086	0.102	-18.6	112	0.00	6.09
12 P	trichlorofluoromethane	1.043	1.107	-6.1	106	0.00	6.07
13 P	freon-113	0.660	0.665	-0.8	96	0.00	6.83
14 P	acrolein	0.090	0.079	12.2	89	0.00	6.06
15 P	1,1-dichloroethene	0.566	0.570	-0.7	103	0.00	6.63
16 P	acetone	0.141	0.132	6.4	94	0.01	6.19
17 P	Methyl Acetate	0.532	0.534	-0.4	98	0.00	6.82
18 P	methylene chloride	0.612	0.623	-1.8	101	0.00	6.78
19 P	methyl tert butyl ether	1.488	1.481	0.5	100	0.00	7.57
20 P	acrylonitrile	0.273	0.266	2.6	97	0.00	6.70
21 P	allyl chloride	1.242	1.289	-3.8	98	0.00	6.88
22 P	trans-1,2-dichloroethene	0.650	0.638	1.8	104	0.00	7.47
23 P	iodomethane	1.138	1.118	1.8	94	0.00	6.69
24 P	carbon disulfide	1.678	1.642	2.1	93	0.00	7.05
25 P	propionitrile	0.054	0.052	3.7	94	0.00	8.08
26 P	vinyl acetate	0.879	0.750	14.7	87	0.00	7.82
27 P	chloroprene	0.993	0.963	3.0	94	0.00	8.08
28 P	di-isopropyl ether	2.383	2.416	-1.4	99	0.00	8.12
29 P	methacrylonitrile	0.355	0.329	7.3	96	0.00	8.24
30 P	2-butanone	0.074	0.073#	1.4	97	0.00	8.13
31 P	Ethyl Acetate	2.075	2.031	2.1	96	0.00	8.12
32 P	Hexane	1.013	0.954	5.8	92	0.00	8.11
33 P	1,1-dichloroethane	1.181	1.202	-1.8	100	0.00	7.72
34 P	tert-butyl ethyl ether	2.089	2.148	-2.8	100	0.00	8.52
----- Amount Calc. %Drift -----							
35 P	isobutyl alcohol	250.000	252.738	-1.1	99	0.00	8.54

Initial Calibration Verification

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU915-ICV915
Lab FileID: U20311.D

		AvgRF	CCRF	%Dev			
36 P	2,2-dichloropropane	0.714	0.701	1.8	92	0.00	8.58
37 P	cis-1,2-dichloroethene	0.687	0.659	4.1	100	0.00	8.29
38 P	bromochloromethane	0.350	0.353	-0.9	99	0.00	8.45
39 P	chloroform	1.014	0.981	3.3	97	0.00	8.49
40 S	dibromofluoromethane (s)	0.541	0.556	-2.8	105	0.00	8.61
41 P	Tetrahydrofuran	0.198	0.176	11.1	95	0.00	8.84
42 P	1,1,1-trichloroethane	0.932	0.942	-1.1	98	0.00	9.24
43 I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00	9.84
44 P	Cyclohexane	0.743	0.725	2.4	96	0.00	9.53
45 P	carbon tetrachloride	0.504	0.500	0.8	97	0.00	9.61
46 P	1,1-dichloropropene	0.393	0.364	7.4	94	0.00	9.42
47 P	benzene	1.159	1.073	7.4	99	0.00	9.64
48 P	1,2-dichloroethane	0.456	0.417	8.6	97	0.00	9.14
49 P	tert-amyl methyl ether	0.856	0.857	-0.1	101	0.00	9.76
50 P	heptane	0.485	0.427	12.0	90	0.00	10.12
51 P	trichloroethene	0.350	0.335	4.3	100	0.00	10.26
52 P	1,2-dichloropropane	0.337	0.322	4.5	100	0.00	10.23
53 P	dibromomethane	0.192	0.186	3.1	101	0.00	10.20
54 P	bromodichloromethane	0.391	0.391	0.0	103	0.00	10.32
55 P	Methylcyclohexane	0.525	0.517	1.5	97	0.00	10.78
56 P	2-chloroethyl vinyl ether	0.149	0.155	-4.0	112	0.00	10.70
57 P	methyl methacrylate	0.125	0.118	5.6	100	0.00	10.42
58 P	1,4-dioxane	250.000	321.221	-28.5#	113	0.00	10.45
59 P	cis-1,3-dichloropropene	0.394	0.391	0.8	101	0.00	10.94
60 S	toluene-d8 (s)	0.954	0.970	-1.7	107	0.00	11.64
61 P	4-methyl-2-pentanone	0.339	0.326	3.8	98	0.00	11.04
62 P	toluene	0.625	0.644	-3.0	104	0.00	11.71
63 P	trans-1,3-dichloropropene	0.305	0.342	-12.1	113	0.00	11.36
64 P	1,1,2-trichloroethane	0.184	0.182	1.1	104	0.00	11.53
65 P	ethyl methacrylate	0.258	0.257	0.4	102	0.00	11.74
66 I	chlorobenzene-d5	1.000	1.000	0.0	107	0.00	13.10
67 P	tetrachloroethene	0.691	0.627	9.3	98	0.00	12.46
68 P	1,3-dichloropropane	0.745	0.700	6.0	104	0.00	11.76
69 P	dibromochloromethane	0.744	0.718	3.5	107	0.00	12.06
70 P	1,2-dibromoethane	0.568	0.523	7.9	104	0.00	12.31
71 P	2-hexanone	0.616	0.643	-4.4	112	0.00	11.91
72 P	chlorobenzene	1.821	1.736	4.7	105	0.00	13.13
73 P	1,1,1,2-tetrachloroethane	0.899	0.866	3.7	105	0.00	13.05
74 P	ethylbenzene	2.866	2.751	4.0	105	0.00	13.31
75 P	m,p-xylene	1.204	1.166	3.2	105	0.00	13.49
76 P	o-xylene	1.350	1.305	3.3	105	0.00	13.91
77 P	styrene	1.871	1.826	2.4	107	0.00	13.83
78 P	bromoform	0.517	0.489	5.4	105	0.00	13.66
79 P	trans-1,4-dichloro-2-bute	0.244	0.235	3.7	105	0.00	14.06
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	15.66
81 P	isopropylbenzene	2.423	2.479	-2.3	107	0.00	14.27
82 S	bromofluorobenzene (s)	0.633	0.626	1.1	112	0.00	14.33
83 P	bromobenzene	0.644	0.639	0.8	106	0.00	14.56
84 P	1,1,2,2-tetrachloroethane	0.491	0.478	2.6	106	0.00	13.91
85 P	1,2,3-trichloropropane	0.571	0.550	3.7	103	0.00	14.06
86 P	n-propylbenzene	2.628	2.526	3.9	101	0.00	14.72

Initial Calibration Verification

Page 3 of 3

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU915-ICV915
Lab FileID: U20311.D

87	P	2-chlorotoluene	1.677	1.659	1.1	105	0.00	14.83
88	P	4-chlorotoluene	1.685	1.648	2.2	105	0.00	14.91
89	P	1,3,5-trimethylbenzene	2.384	2.352	1.3	102	0.00	14.99
90	P	tert-butylbenzene	1.300	1.263	2.8	102	0.00	15.30
91	P	1,2,4-trimethylbenzene	2.415	2.353	2.6	101	0.00	15.40
92	P	sec-butylbenzene	3.026	3.059	-1.1	103	0.00	15.52
93	P	1,3-dichlorobenzene	1.422	1.432	-0.7	106	0.00	15.62
94	P	p-isopropyltoluene	2.726	2.712	0.5	102	0.00	15.70
95	P	1,4-dichlorobenzene	1.494	1.471	1.5	105	0.00	15.69
96	P	1,2-dichlorobenzene	1.542	1.537	0.3	105	0.00	16.06
97	P	n-butylbenzene	2.376	2.303	3.1	100	0.00	16.11
98	P	1,2-dibromo-3-chloropropa	0.158	0.137	13.3	95	0.00	16.55
99	P	1,3,5-trichlorobenzene	1.196	1.142	4.5	98	0.00	17.35
100	P	1,2,4-trichlorobenzene	1.128	1.146	-1.6	104	0.00	17.89
101	P	hexachlorobutadiene	0.521	0.518	0.6	105	0.00	18.18
102	P	naphthalene	2.905	2.842	2.2	103	0.00	18.16
103	P	2-Methylnaphthalene	1.408	1.532	-8.8	110	0.00	19.53
104	P	1-Methylnaphthalene	1.156	1.243	-7.5	116	0.00	19.78
105	P	1,2,3-trichlorobenzene	1.028	1.044	-1.6	106	0.00	18.37

(#) = Out of Range

U20304.D U140606W.m

SPCC's out = 1 CCC's out = 0

Mon Jun 09 11:59:51 2014

Continuing Calibration Summary

Page 1 of 3

Job Number: MC31396
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSU924-CC915
 Lab FileID: U20578.D

Evaluate Continuing Calibration Report

Data File : D:\msdchem\1\data\U140619\U20578.D Vial: 2
 Acq On : 19 Jun 2014 8:34 am Operator: garyk
 Sample : cc915-50 Inst : MSU
 Misc : ms32098,msu924,,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : D:\msdchem\1\methods\U140606W.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Mon Jun 09 11:51:52 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	76	0.00	6.59
2 P	tertiary butyl alcohol	0.106	0.109	-2.8	78	0.00	6.29
----- Amount Calc. %Drift -----							
3 P	Ethanol	5000.000	5779.442	-15.6	94	0.00	5.57
----- AvgRF CCRF %Dev -----							
4 I	pentafluorobenzene	1.000	1.000	0.0	71	0.00	8.97
5 P	dichlorodifluoromethane	0.505	0.693	-37.2#	90	0.03	4.35
6 P	chloromethane	1.331	1.552	-16.6	81	0.00	4.56
7 P	vinyl chloride	0.950	1.044	-9.9	76	0.01	4.81
8 P	bromomethane	0.503	0.557	-10.7	78	0.00	5.28
9 P	chloroethane	0.433	0.481	-11.1	76	0.00	5.42
10 P	ethyl ether	0.506	0.576	-13.8	78	0.00	6.29
11 P	acetonitrile	0.086	0.097	-12.8	74	0.00	6.09
12 P	trichlorofluoromethane	1.043	1.100	-5.5	73	0.00	6.07
13 P	freon-113	0.660	0.743	-12.6	75	0.00	6.83
14 P	acrolein	0.090	0.000#	100.0#	0#	0.00	6.05
15 P	1,1-dichloroethene	0.566	0.592	-4.6	74	0.00	6.63
16 P	acetone	0.141	0.157	-11.3	77	0.01	6.19
17 P	Methyl Acetate	0.532	0.657	-23.5#	84	0.00	6.82
18 P	methylene chloride	0.612	0.654	-6.9	74	0.00	6.78
19 P	methyl tert butyl ether	1.488	1.554	-4.4	73	0.00	7.56
20 P	acrylonitrile	0.273	0.285	-4.4	72	0.00	6.69
21 P	allyl chloride	1.242	1.445	-16.3	76	0.00	6.87
22 P	trans-1,2-dichloroethene	0.650	0.655	-0.8	74	0.00	7.47
23 P	iodomethane	1.138	1.244	-9.3	73	0.00	6.69
24 P	carbon disulfide	1.678	1.821	-8.5	72	0.00	7.05
25 P	propionitrile	0.054	0.060	-11.1	75	0.00	8.08
26 P	vinyl acetate	0.879	1.347	-53.2#	109	0.00	7.82
27 P	chloroprene	0.993	1.131	-13.9	77	0.00	8.08
28 P	di-isopropyl ether	2.383	2.815	-18.1	80	0.00	8.12
29 P	methacrylonitrile	0.355	0.424	-19.4	86	0.00	8.24
30 P	2-butanone	0.074	0.087#	-17.6	80	0.00	8.13
31 P	Ethyl Acetate	2.075	2.479	-19.5	81	0.00	8.11
32 P	Hexane	1.013	1.211	-19.5	81	0.00	8.10
33 P	1,1-dichloroethane	1.181	1.321	-11.9	76	0.00	7.72
34 P	tert-butyl ethyl ether	2.089	2.306	-10.4	75	0.00	8.52
----- Amount Calc. %Drift -----							
35 P	isobutyl alcohol	250.000	293.623	-17.4	79	0.00	8.53

Continuing Calibration Summary

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU924-CC915
Lab FileID: U20578.D

		AvgRF	CCRF	%Dev			
36 P	2,2-dichloropropane	0.714	0.856	-19.9	78	0.00	8.58
37 P	cis-1,2-dichloroethene	0.687	0.714	-3.9	75	0.00	8.29
38 P	bromochloromethane	0.350	0.389	-11.1	76	0.00	8.45
39 P	chloroform	1.014	1.115	-10.0	76	0.00	8.49
40 S	dibromofluoromethane (s)	0.541	0.644	-19.0	84	0.00	8.61
41 P	Tetrahydrofuran	0.198	0.218	-10.1	82	0.00	8.83
42 P	1,1,1-trichloroethane	0.932	1.011	-8.5	73	0.00	9.24
43 I	1,4-difluorobenzene	1.000	1.000	0.0	74	0.00	9.84
44 P	Cyclohexane	0.743	0.786	-5.8	73	0.00	9.53
45 P	carbon tetrachloride	0.504	0.535	-6.2	73	0.00	9.61
46 P	1,1-dichloropropene	0.393	0.408	-3.8	74	0.00	9.42
47 P	benzene	1.159	1.158	0.1	75	0.00	9.64
48 P	1,2-dichloroethane	0.456	0.482	-5.7	79	0.00	9.14
49 P	tert-amyl methyl ether	0.856	0.882	-3.0	73	0.00	9.76
50 P	heptane	0.485	0.556	-14.6	83	0.00	10.12
51 P	trichloroethene	0.350	0.340	2.9	71	0.00	10.26
52 P	1,2-dichloropropane	0.337	0.359	-6.5	78	0.00	10.23
53 P	dibromomethane	0.192	0.208	-8.3	79	0.00	10.20
54 P	bromodichloromethane	0.391	0.415	-6.1	76	0.00	10.32
55 P	Methylcyclohexane	0.525	0.543	-3.4	71	0.00	10.78
56 P	2-chloroethyl vinyl ether	0.149	0.147	1.3	74	0.00	10.70
57 P	methyl methacrylate	0.125	0.130	-4.0	78	0.00	10.42
58 P	1,4-dioxane	250.000	301.995	-20.8#	74	0.00	10.45
59 P	cis-1,3-dichloropropene	0.394	0.419	-6.3	76	0.00	10.94
60 S	toluene-d8 (s)	0.954	1.062	-11.3	82	0.00	11.64
61 P	4-methyl-2-pentanone	0.339	0.389	-14.7	82	0.00	11.04
62 P	toluene	0.625	0.654	-4.6	74	0.00	11.71
63 P	trans-1,3-dichloropropene	0.305	0.321	-5.2	74	0.00	11.36
64 P	1,1,2-trichloroethane	0.184	0.197	-7.1	79	0.00	11.53
65 P	ethyl methacrylate	0.258	0.263	-1.9	73	0.00	11.74
66 I	chlorobenzene-d5	1.000	1.000	0.0	71	0.00	13.10
67 P	tetrachloroethene	0.691	0.689	0.3	72	0.00	12.46
68 P	1,3-dichloropropane	0.745	0.759	-1.9	75	0.00	11.76
69 P	dibromochloromethane	0.744	0.755	-1.5	75	0.00	12.05
70 P	1,2-dibromoethane	0.568	0.569	-0.2	75	0.00	12.31
71 P	2-hexanone	0.616	0.710	-15.3	82	0.00	11.91
72 P	chlorobenzene	1.821	1.802	1.0	73	0.00	13.13
73 P	1,1,1,2-tetrachloroethane	0.899	0.884	1.7	71	0.00	13.05
74 P	ethylbenzene	2.866	2.821	1.6	72	0.00	13.31
75 P	m,p-xylene	1.204	1.178	2.2	71	0.00	13.49
76 P	o-xylene	1.350	1.326	1.8	71	0.00	13.91
77 P	styrene	1.871	1.775	5.1	69	0.00	13.84
78 P	bromoform	0.517	0.499	3.5	71	0.00	13.66
79 P	trans-1,4-dichloro-2-bute	0.244	0.192	21.3#	57	0.00	14.06
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	69	0.00	15.66
81 P	isopropylbenzene	2.423	2.506	-3.4	70	0.00	14.27
82 S	bromofluorobenzene (s)	0.633	0.666	-5.2	77	0.00	14.33
83 P	bromobenzene	0.644	0.642	0.3	69	0.00	14.56
84 P	1,1,2,2-tetrachloroethane	0.491	0.562	-14.5	81	0.00	13.91
85 P	1,2,3-trichloropropane	0.571	0.531	7.0	65	0.00	14.06
86 P	n-propylbenzene	2.628	2.665	-1.4	69	0.00	14.72

Continuing Calibration Summary

Page 3 of 3

Job Number: MC31396
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSU924-CC915
Lab FileID: U20578.D

87	P	2-chlorotoluene	1.677	1.682	-0.3	69	0.00	14.83
88	P	4-chlorotoluene	1.685	1.638	2.8	68	0.00	14.91
89	P	1,3,5-trimethylbenzene	2.384	2.464	-3.4	69	0.00	14.99
90	P	tert-butylbenzene	1.300	1.327	-2.1	69	0.00	15.30
91	P	1,2,4-trimethylbenzene	2.415	2.434	-0.8	68	0.00	15.40
92	P	sec-butylbenzene	3.026	3.185	-5.3	70	0.00	15.52
93	P	1,3-dichlorobenzene	1.422	1.401	1.5	67	0.00	15.63
94	P	p-isopropyltoluene	2.726	2.846	-4.4	69	0.00	15.70
95	P	1,4-dichlorobenzene	1.494	1.459	2.3	67	0.00	15.69
96	P	1,2-dichlorobenzene	1.542	1.542	0.0	68	0.00	16.06
97	P	n-butylbenzene	2.376	2.436	-2.5	69	0.00	16.11
98	P	1,2-dibromo-3-chloropropa	0.158	0.152	3.8	69	0.00	16.54
99	P	1,3,5-trichlorobenzene	1.196	1.229	-2.8	68	0.00	17.35
100	P	1,2,4-trichlorobenzene	1.128	1.164	-3.2	69	0.00	17.89
101	P	hexachlorobutadiene	0.521	0.520	0.2	69	0.00	18.18
102	P	naphthalene	2.905	2.879	0.9	68	0.00	18.16
103	P	2-Methylnaphthalene	1.408	1.289	8.5	60	0.00	19.53
104	P	1-Methylnaphthalene	1.156	0.995	13.9	60	0.00	19.77
105	P	1,2,3-trichlorobenzene	1.028	1.018	1.0	67	0.00	18.37

(#) = Out of Range

U20304.D U140606W.m

SPCC's out = 2 CCC's out = 0

Thu Jun 19 10:46:02 2014

GC/MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20584.D
 Acq On : 19 Jun 2014 11:18 am
 Operator : garyk
 Sample : mc31396-1
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 19 15:48:12 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.609	65	162282	50.00	ppb	0.01
4) pentafluorobenzene	8.979	168	343174	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	591476	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	238940	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	360064	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.616	113	226378	60.95	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	121.90%		
60) toluene-d8 (s)	11.645	98	586512	51.99	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.98%		
82) bromofluorobenzene (s)	14.334	95	236304	51.81	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.62%		
Target Compounds						Qvalue
33) 1,1-dichloroethane	7.716	63	2135	0.26	ppb	79
37) cis-1,2-dichloroethene	8.292	96	21953	4.66	ppb	93
42) 1,1,1-trichloroethane	9.241	97	2361	0.37	ppb	75
44) Cyclohexane	9.523	56	2634	0.30	ppb	# 73

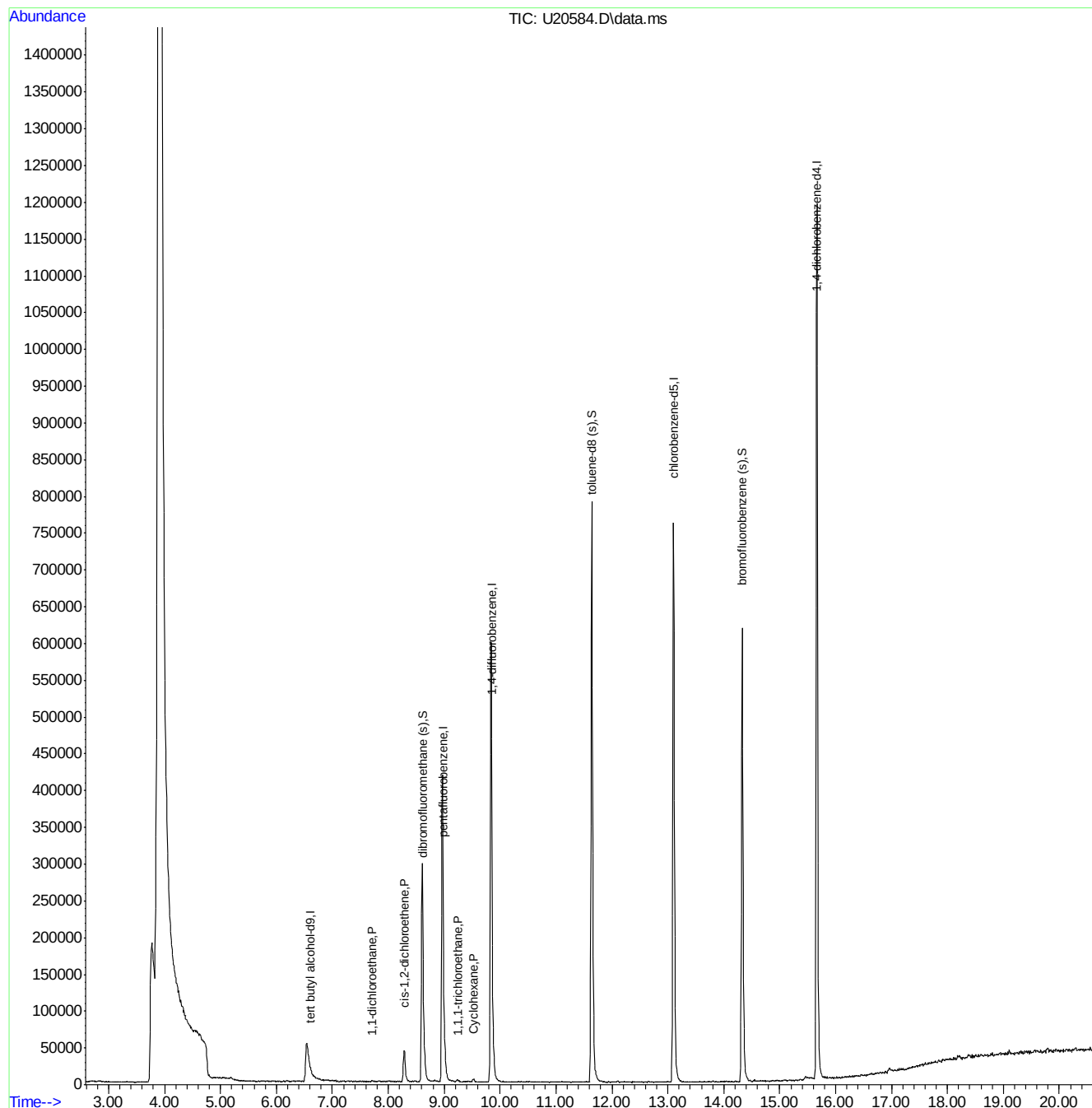
(#) = qualifier out of range (m) = manual integration (+) = signals summed

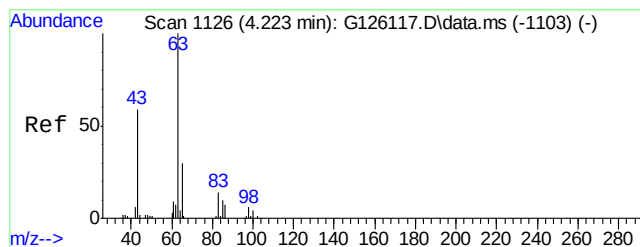
7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20584.D
Acq On : 19 Jun 2014 11:18 am
Operator : garyk
Sample : mc31396-1
Misc : ms32105,msu924,,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

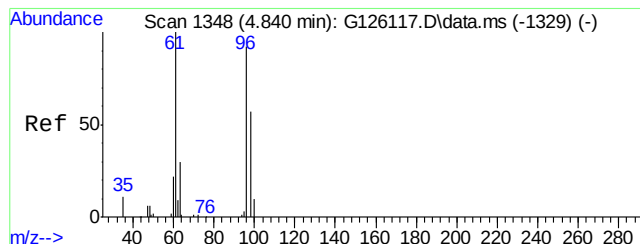
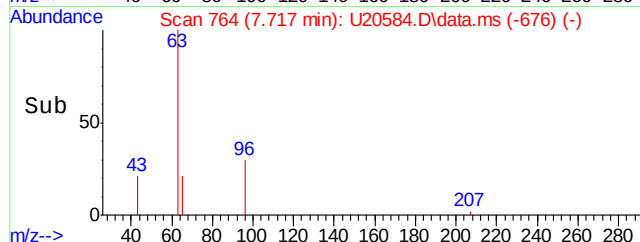
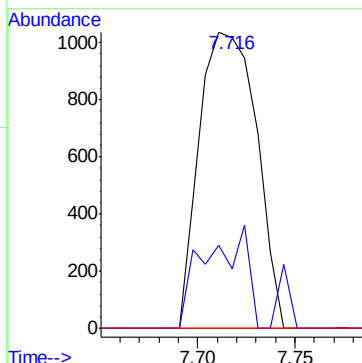
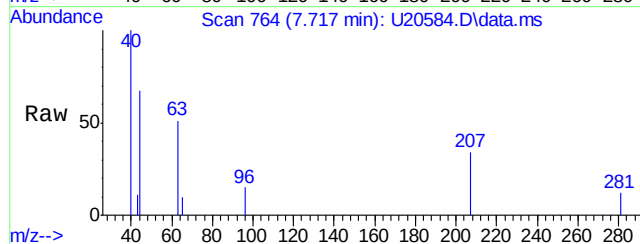
Quant Time: Jun 19 15:48:12 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





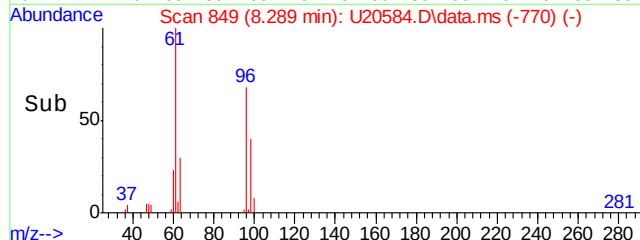
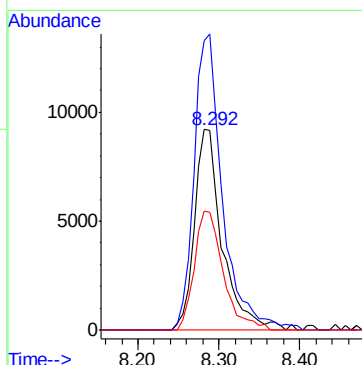
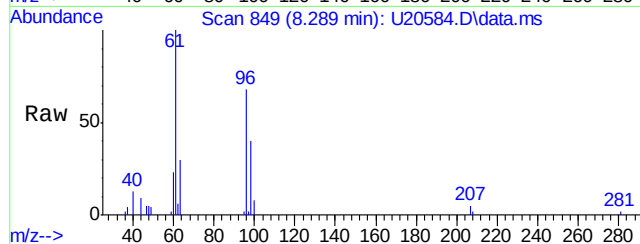
#33
1,1-dichloroethane
Concen: 0.26 ppb
RT: 7.716 min Scan# 764
Delta R.T. -0.002 min
Lab File: U20584.D
Acq: 19 Jun 2014 11:18 am

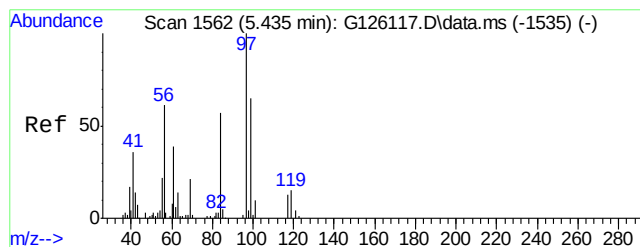
Tgt Ion:	63	Resp:	2135
Ion Ratio	Lower	Upper	
63	100		
65	20.6	0.0	59.7
83	0.0	0.0	41.8



#37
cis-1,2-dichloroethene
Concen: 4.66 ppb
RT: 8.292 min Scan# 849
Delta R.T. 0.003 min
Lab File: U20584.D
Acq: 19 Jun 2014 11:18 am

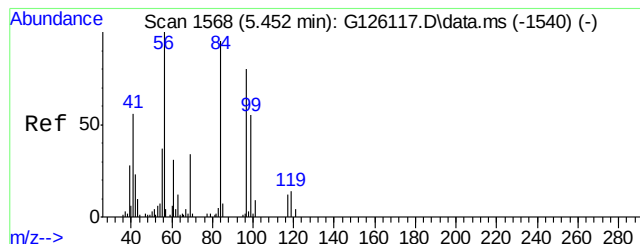
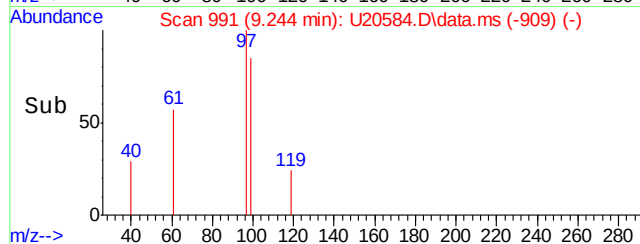
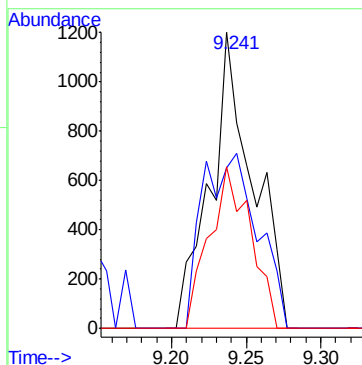
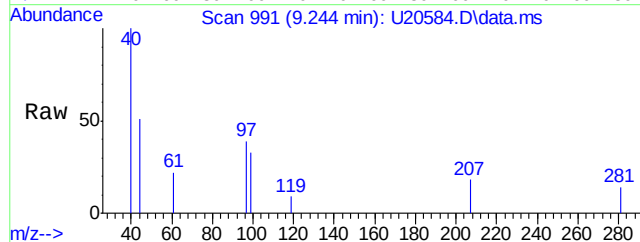
Tgt Ion:	96	Resp:	21953
Ion Ratio	Lower	Upper	
96	100		
61	147.9	126.3	186.3
98	59.1	36.2	96.2





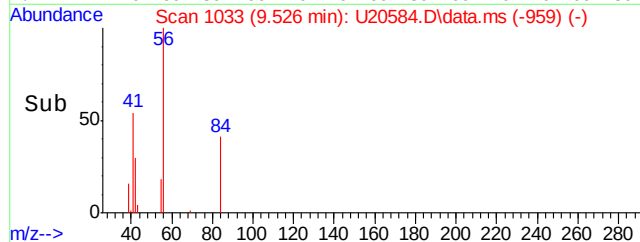
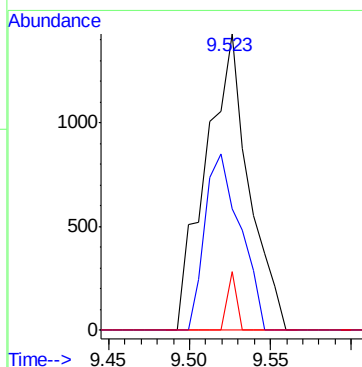
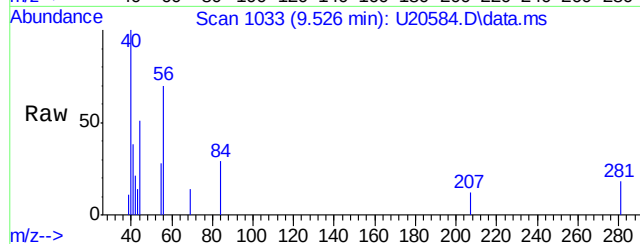
#42
1,1,1-trichloroethane
Concen: 0.37 ppb
RT: 9.241 min Scan# 991
Delta R.T. -0.002 min
Lab File: U20584.D
Acq: 19 Jun 2014 11:18 am

Tgt Ion	Ratio	Lower	Upper
97	100		
99	85.1	33.0	93.0
61	56.8	14.2	74.2



#44
Cyclohexane
Concen: 0.30 ppb
RT: 9.523 min Scan# 1033
Delta R.T. -0.003 min
Lab File: U20584.D
Acq: 19 Jun 2014 11:18 am

Tgt Ion	Ratio	Lower	Upper
56	100		
84	41.0	54.2	81.2#
69	19.5	18.3	27.5



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20588.D
Acq On : 19 Jun 2014 1:07 pm
Operator : garyk
Sample : mc31396-2
Misc : ms32105,msu924,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 19 16:05:26 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.617	65	186345	50.00	ppb	0.02
4) pentafluorobenzene	8.979	168	382565	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	627715	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	244742	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.667	152	368546	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	250041	60.39	ppb	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	120.78%
60) toluene-d8 (s)	11.644	98	640414	53.49	ppb	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	106.98%
82) bromofluorobenzene (s)	14.334	95	246825	52.87	ppb	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	105.74%

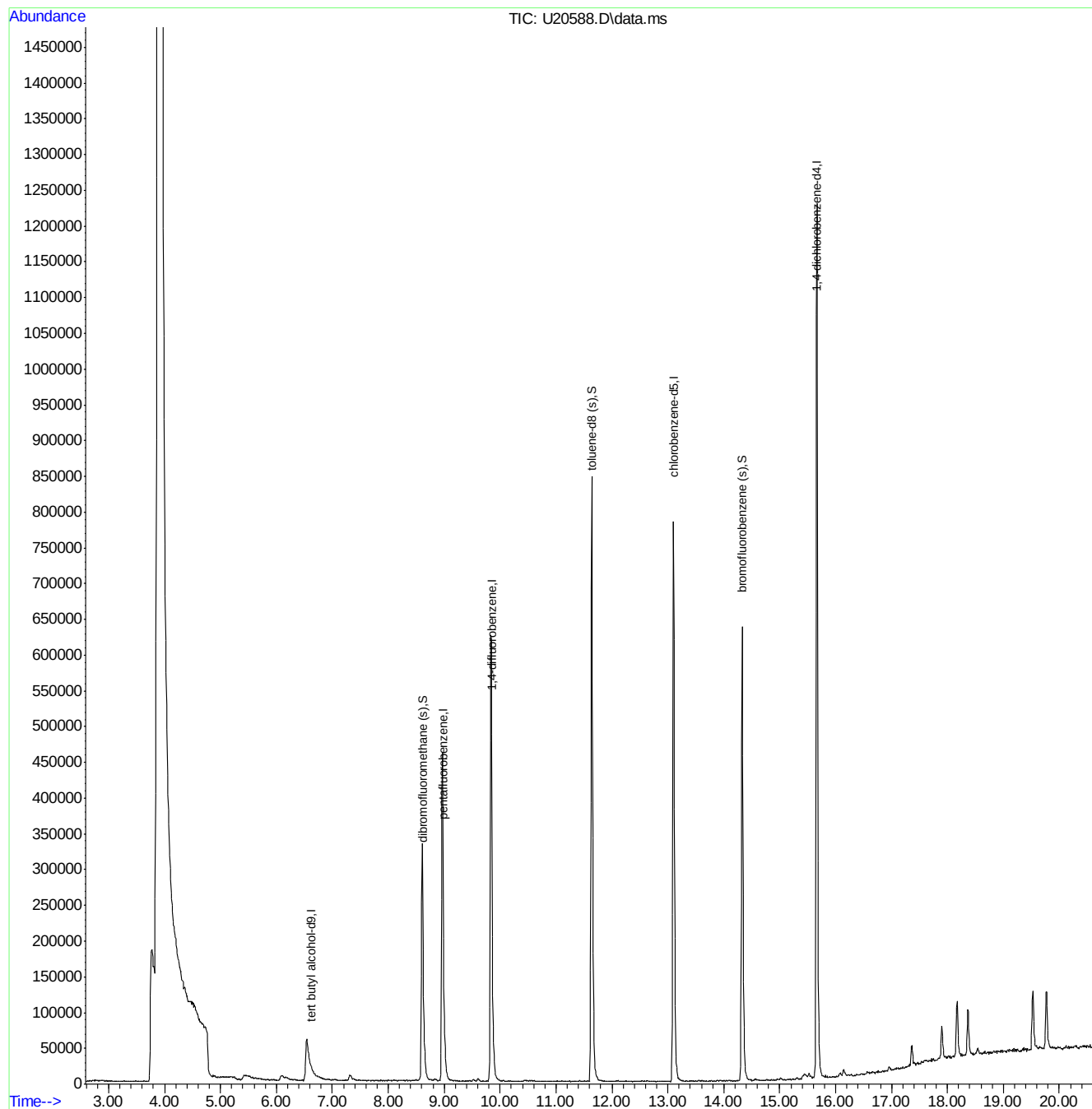
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20588.D
Acq On : 19 Jun 2014 1:07 pm
Operator : garyk
Sample : mc31396-2
Misc : ms32105,msu924,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 19 16:05:26 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20589.D
 Acq On : 19 Jun 2014 1:34 pm
 Operator : garyk
 Sample : mc31396-3
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 19 16:00:28 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.619	65	177789	50.00	ppb	0.02
4) pentafluorobenzene	8.979	168	381240	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	623995	50.00	ppb	0.00
66) chlorobenzene-d5	13.106	82	237393	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	361731	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	247767	60.05	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	120.10%		
60) toluene-d8 (s)	11.645	98	630224	52.95	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.90%		
82) bromofluorobenzene (s)	14.335	95	240788	52.55	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.10%		

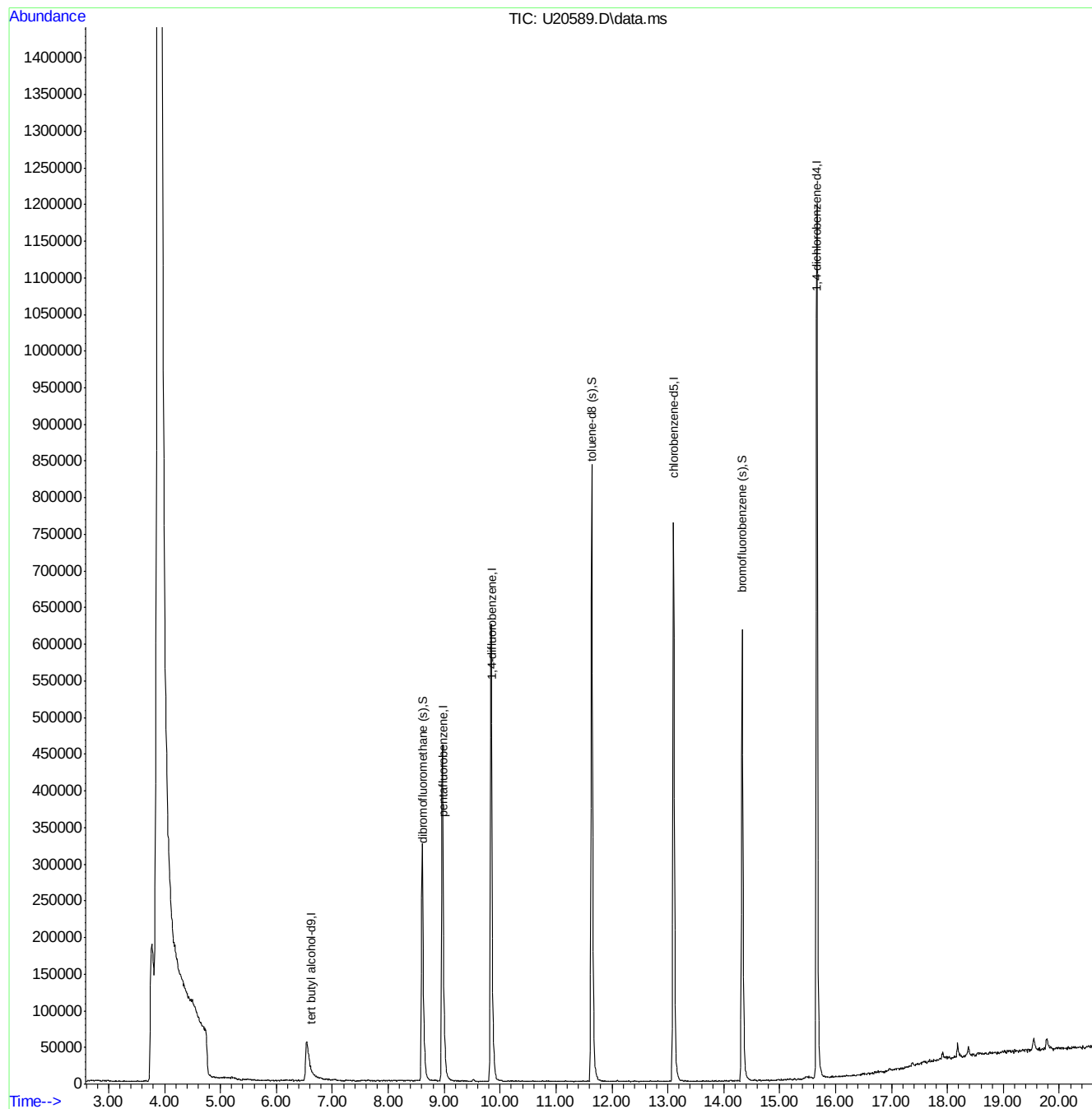
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20589.D
Acq On : 19 Jun 2014 1:34 pm
Operator : garyk
Sample : mc31396-3
Misc : ms32105,msu924,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 19 16:00:28 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20590.D
 Acq On : 19 Jun 2014 2:02 pm
 Operator : garyk
 Sample : mc31396-4
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 19 16:01:12 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.602	65	162906	50.00	ppb	0.00
4) pentafluorobenzene	8.979	168	345176	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	548005	50.00	ppb	0.00
66) chlorobenzene-d5	13.106	82	213808	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	349260	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.616	113	224896	60.20	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	120.40%		
60) toluene-d8 (s)	11.645	98	561051	53.67	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	107.34%		
82) bromofluorobenzene (s)	14.334	95	226378	51.17	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.34%		

Target Compounds Qvalue

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

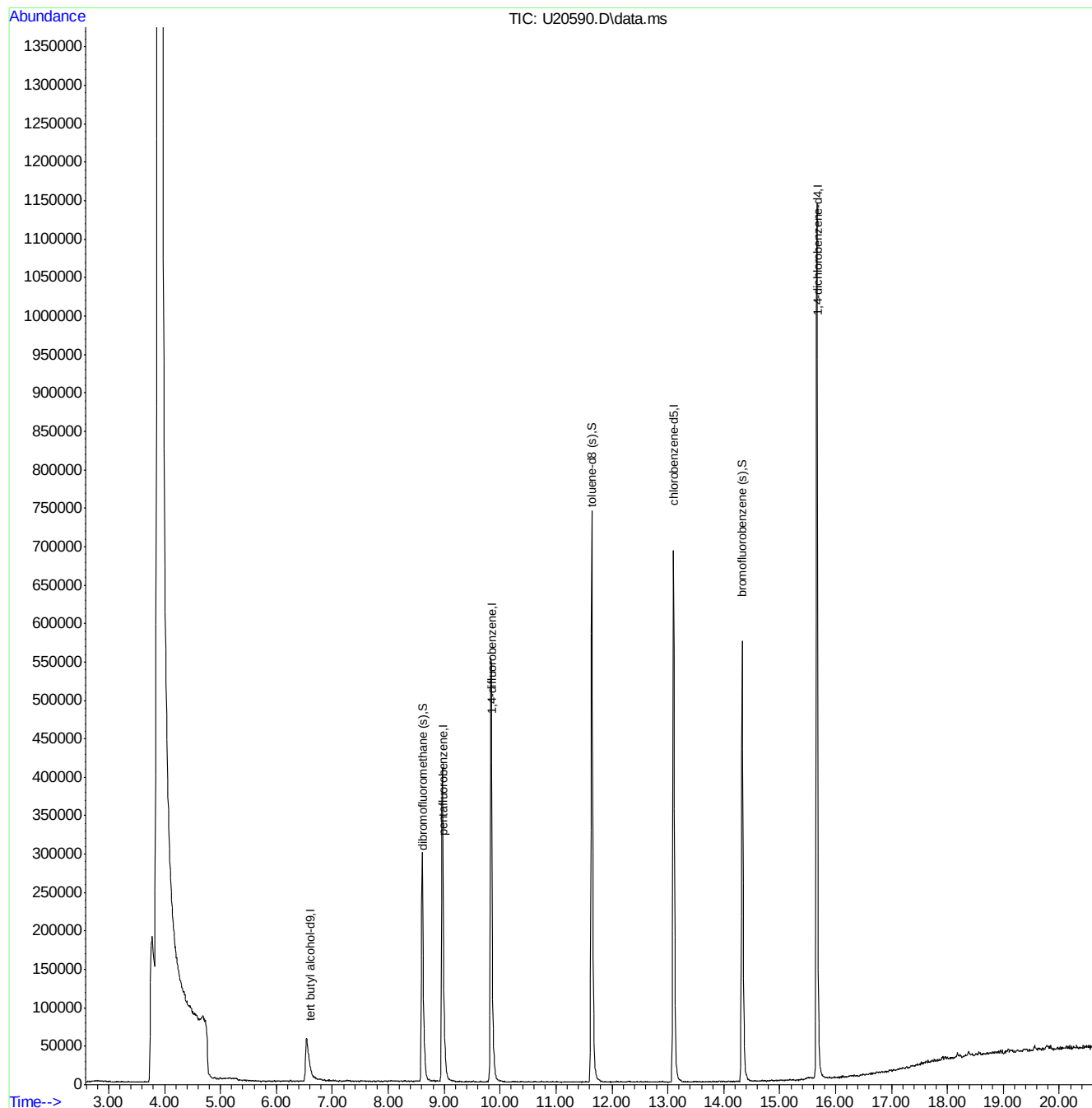
7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20590.D
Acq On : 19 Jun 2014 2:02 pm
Operator : garyk
Sample : mc31396-4
Misc : ms32105,msu924,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 19 16:01:12 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20591.D
 Acq On : 19 Jun 2014 2:29 pm
 Operator : garyk
 Sample : mc31396-5
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 19 16:02:04 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

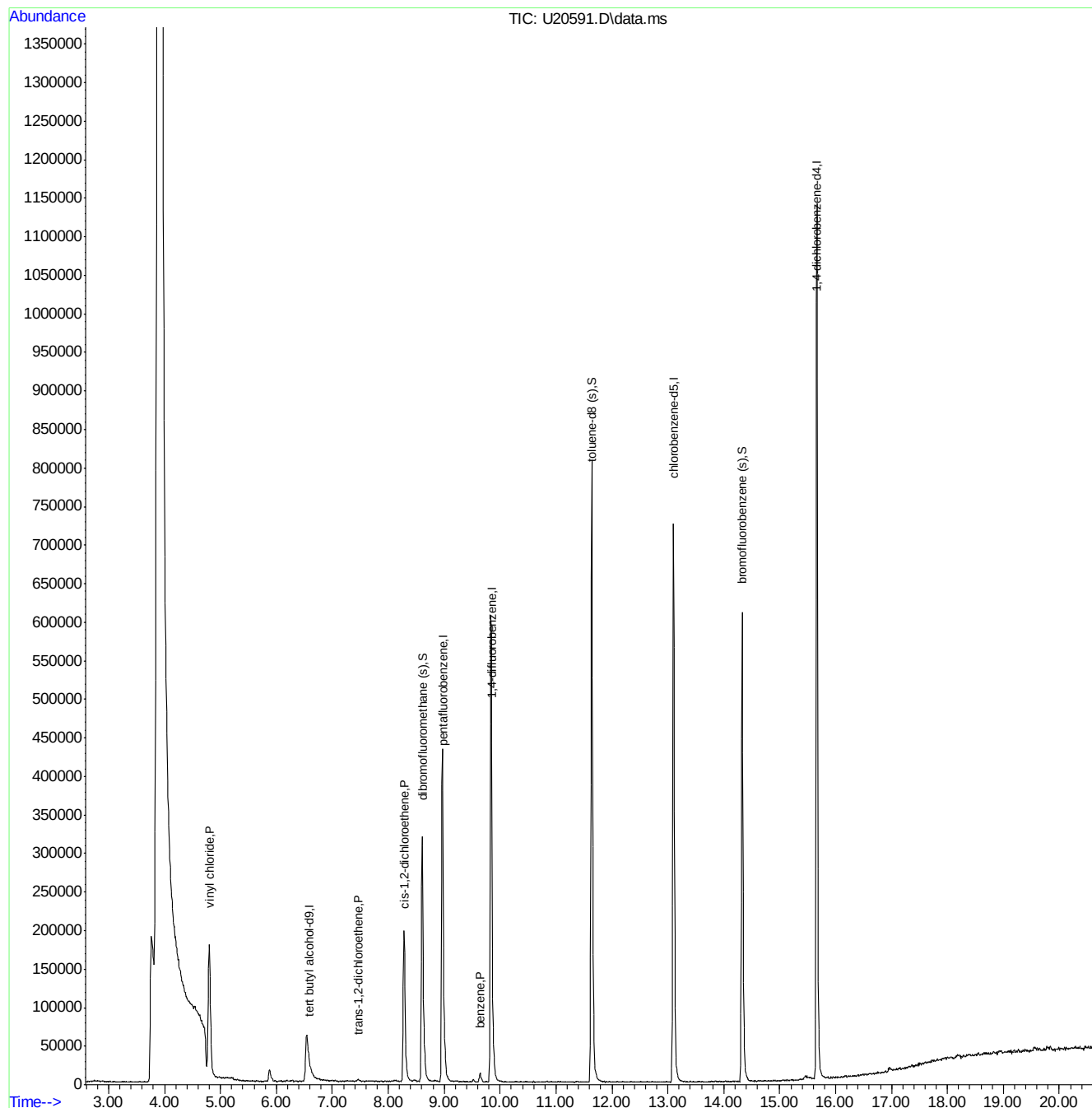
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.590	65	166155	50.00	ppb	0.00
4) pentafluorobenzene	8.978	168	356433	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.846	114	587381	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	227160	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	347232	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.615	113	237386	61.54	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	123.08%		
60) toluene-d8 (s)	11.644	98	605091	54.01	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	108.02%		
82) bromofluorobenzene (s)	14.334	95	233170	53.01	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	106.02%		
Target Compounds						
7) vinyl chloride	4.804	62	316858	46.80	ppb	Qvalue 96
22) trans-1,2-dichloroethene	7.460	96	1971	0.43	ppb	# 65
37) cis-1,2-dichloroethene	8.289	96	96877	19.79	ppb	92
47) benzene	9.646	78	10644	0.78	ppb	94

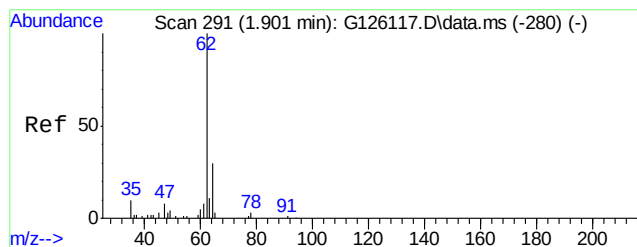
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20591.D
Acq On : 19 Jun 2014 2:29 pm
Operator : garyk
Sample : mc31396-5
Misc : ms32105,msu924,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

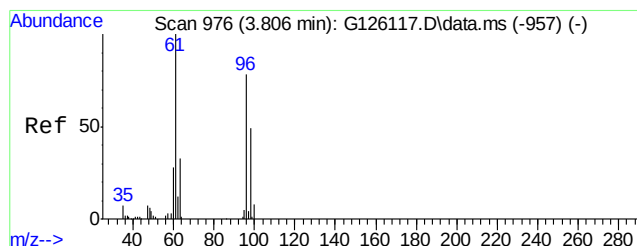
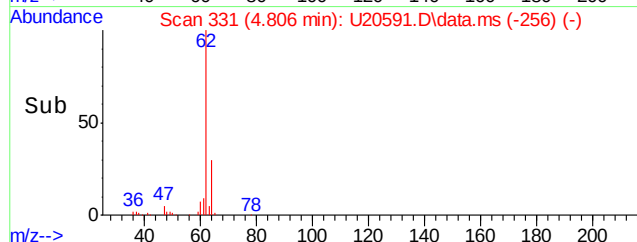
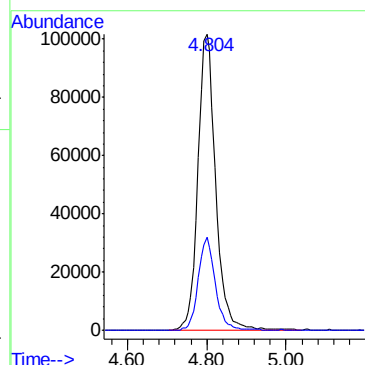
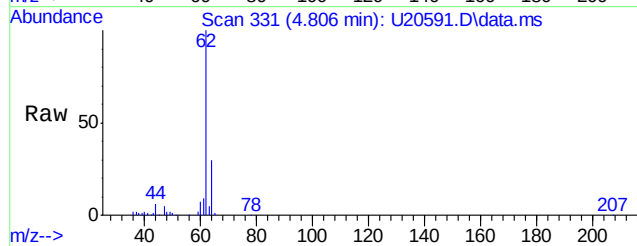
Quant Time: Jun 19 16:02:04 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





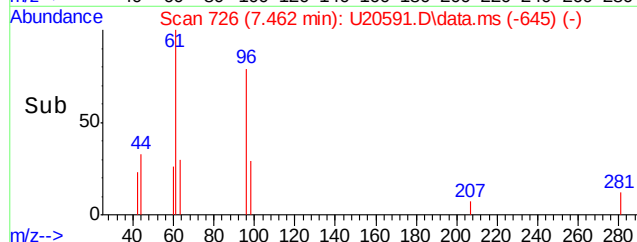
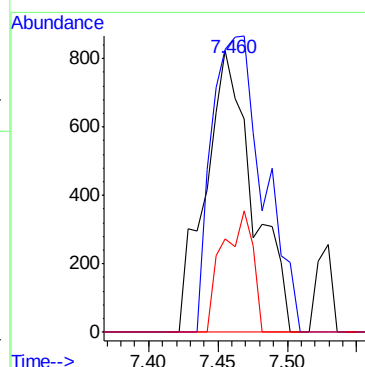
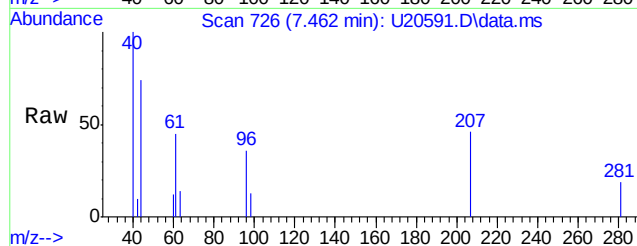
#7
vinyl chloride
Concen: 46.80 ppb
RT: 4.804 min Scan# 331
Delta R.T. 0.005 min
Lab File: U20591.D
Acq: 19 Jun 2014 2:29 pm

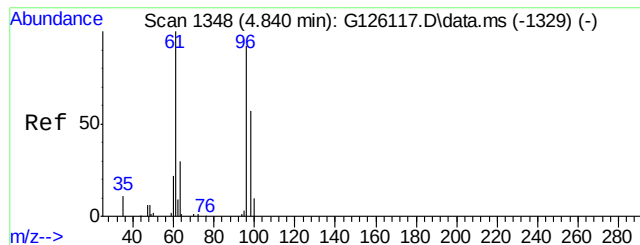
Tgt Ion	Ratio	Lower	Upper
62	100		
64	29.7	1.8	61.8



#22
trans-1,2-dichloroethene
Concen: 0.43 ppb
RT: 7.460 min Scan# 726
Delta R.T. -0.007 min
Lab File: U20591.D
Acq: 19 Jun 2014 2:29 pm

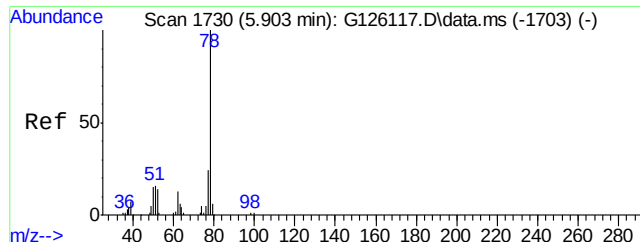
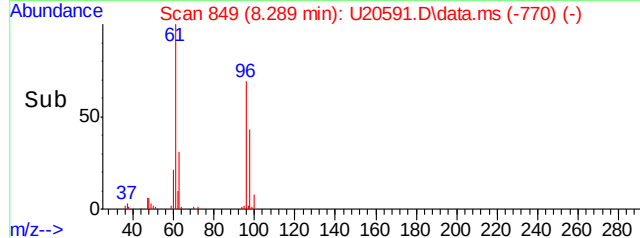
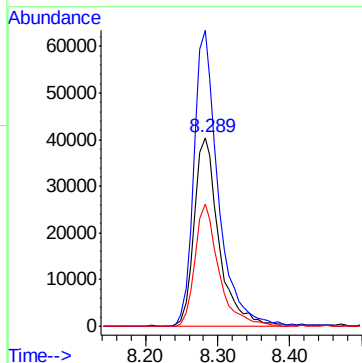
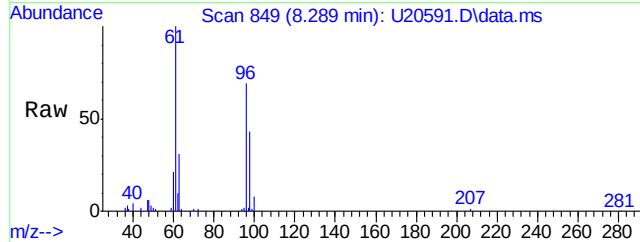
Tgt Ion	Ratio	Lower	Upper
96	100		
61	126.5	145.5	205.5#
98	36.4	35.2	95.2





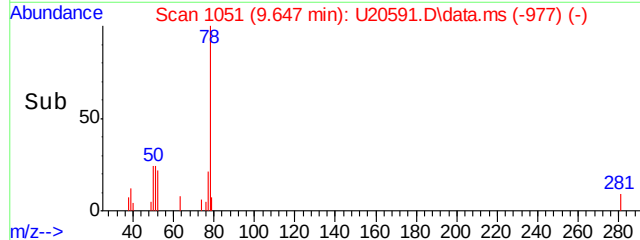
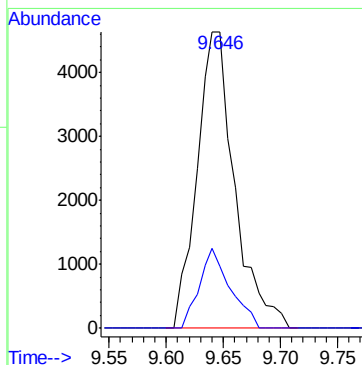
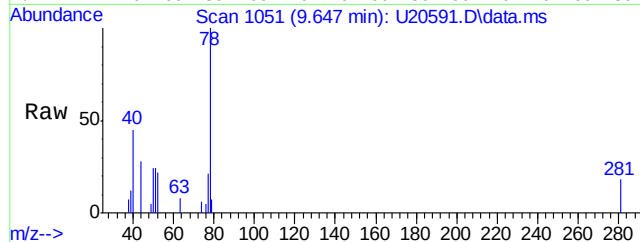
#37
 cis-1,2-dichloroethene
 Concen: 19.79 ppb
 RT: 8.289 min Scan# 849
 Delta R.T. 0.000 min
 Lab File: U20591.D
 Acq: 19 Jun 2014 2:29 pm

Tgt Ion:	96	Resp:	96877
Ion Ratio	Lower	Upper	
96	100		
61	144.3	126.3	186.3
98	62.7	36.2	96.2



#47
 benzene
 Concen: 0.78 ppb
 RT: 9.646 min Scan# 1051
 Delta R.T. 0.005 min
 Lab File: U20591.D
 Acq: 19 Jun 2014 2:29 pm

Tgt Ion:	78	Resp:	10644
Ion Ratio	Lower	Upper	
78	100		
77	20.9	0.0	53.9



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20592.D
 Acq On : 19 Jun 2014 2:57 pm
 Operator : garyk
 Sample : mc31396-6
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 19 16:03:18 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

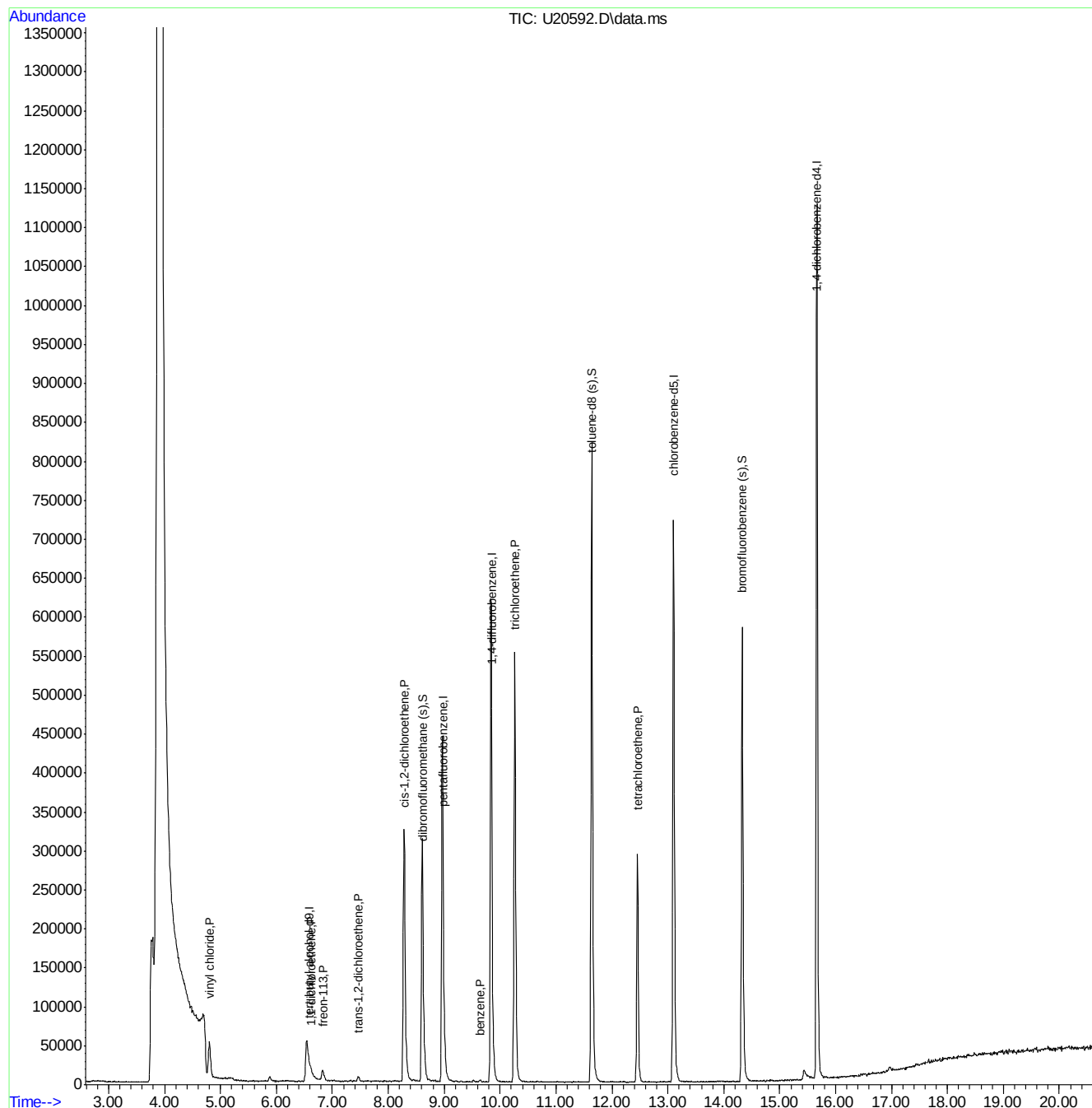
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.591	65	145208	50.00	ppb	0.00
4) pentafluorobenzene	8.979	168	372570	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.846	114	607397	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	228408	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	336029	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	238038	59.03	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	118.06%		
60) toluene-d8 (s)	11.644	98	607423	52.43	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.86%		
82) bromofluorobenzene (s)	14.334	95	228918	53.78	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	107.56%		
Target Compounds						
7) vinyl chloride	4.805	62	77848	11.00	ppb	Qvalue 95
13) freon-113	6.833	101	9112	1.85	ppb	91
15) 1,1-dichloroethene	6.631	96	3247	0.77	ppb	# 71
22) trans-1,2-dichloroethene	7.470	96	3720	0.77	ppb	79
37) cis-1,2-dichloroethene	8.291	96	158394	30.95	ppb	97
47) benzene	9.650	78	2862	0.20	ppb	51
51) trichloroethene	10.266	95	188826	44.43	ppb	72
67) tetrachloroethene	12.459	166	94761	30.00	ppb	96

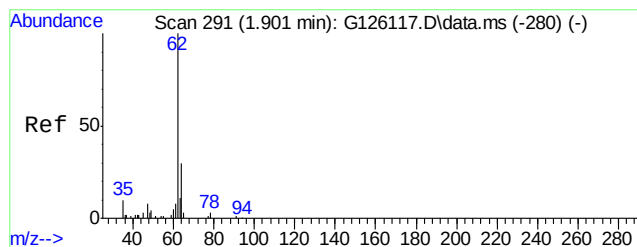
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20592.D
Acq On : 19 Jun 2014 2:57 pm
Operator : garyk
Sample : mc31396-6
Misc : ms32105,msu924,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

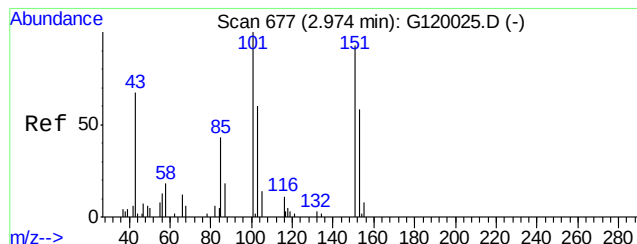
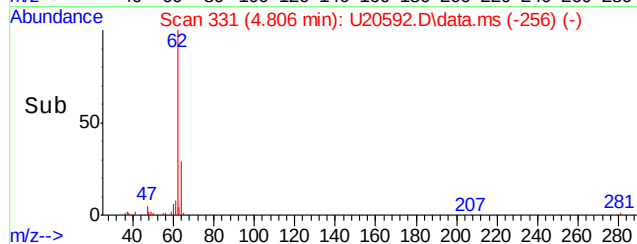
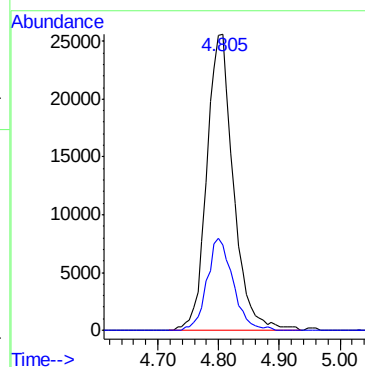
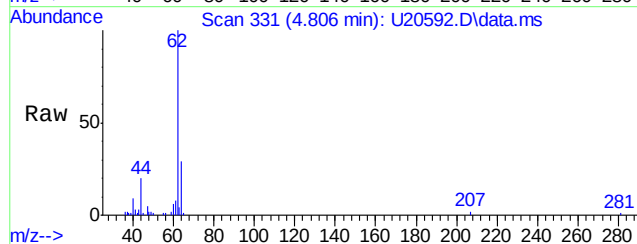
Quant Time: Jun 19 16:03:18 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





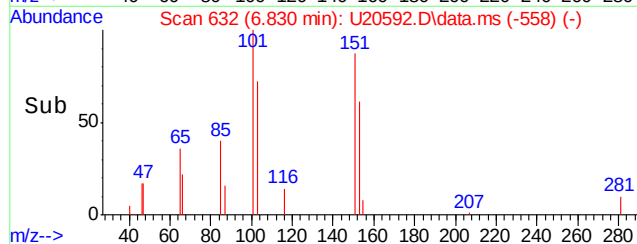
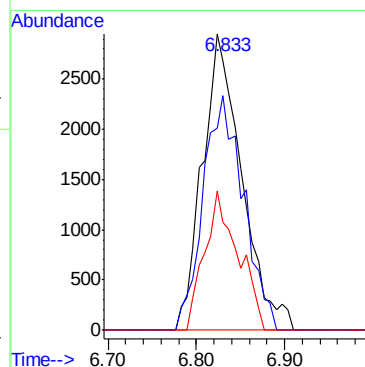
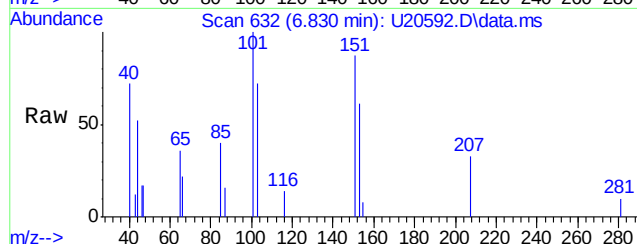
#7
vinyl chloride
Concen: 11.00 ppb
RT: 4.805 min Scan# 331
Delta R.T. 0.006 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

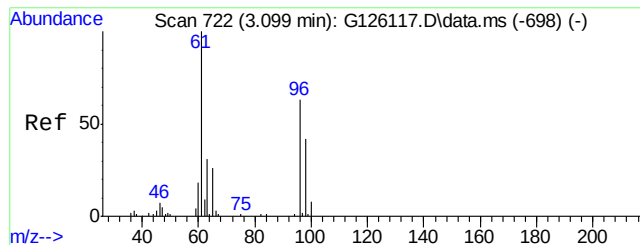
Tgt Ion	Ratio	Lower	Upper
62	100		
64	29.0	1.8	61.8



#13
freon-113
Concen: 1.85 ppb
RT: 6.833 min Scan# 632
Delta R.T. 0.003 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

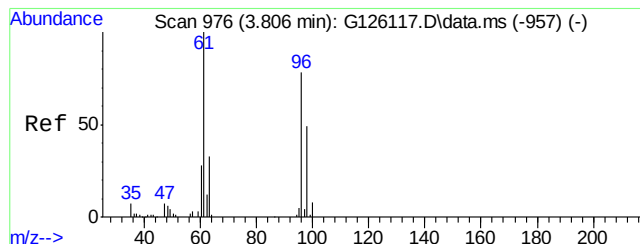
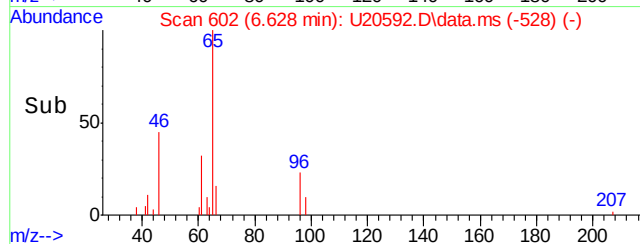
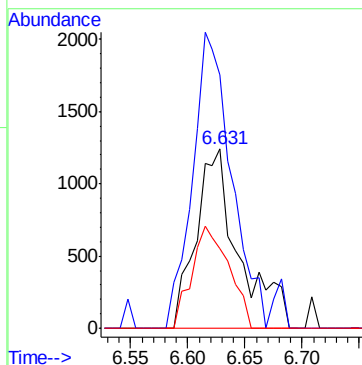
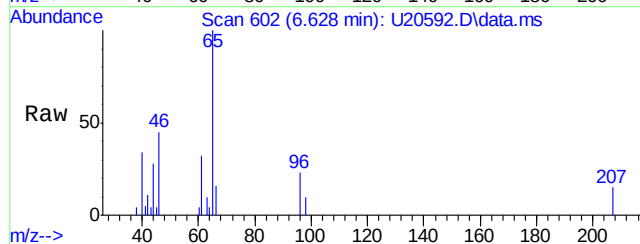
Tgt Ion	Ratio	Lower	Upper
101	100		
151	87.2	49.4	109.4
85	39.9	15.0	75.0





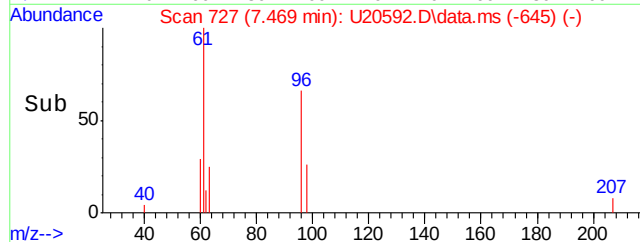
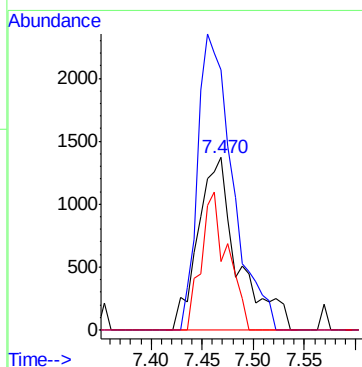
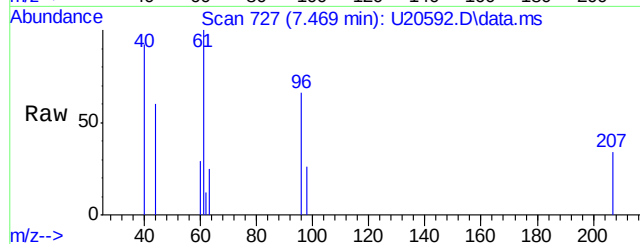
#15
1,1-dichloroethene
Concen: 0.77 ppb
RT: 6.631 min Scan# 602
Delta R.T. 0.002 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

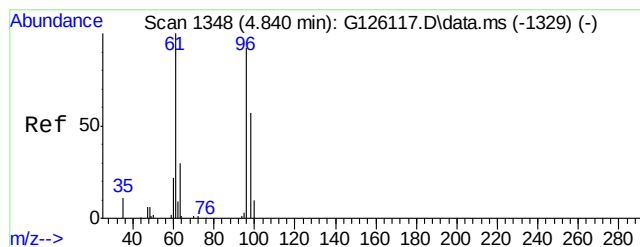
Tgt Ion	Ratio	Lower	Upper
96	100		
61	141.4	158.7	218.7#
63	44.6	27.6	87.6



#22
trans-1,2-dichloroethene
Concen: 0.77 ppb
RT: 7.470 min Scan# 727
Delta R.T. 0.003 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

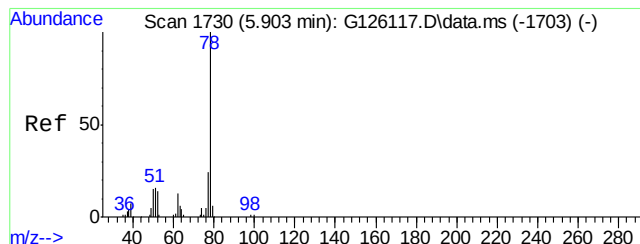
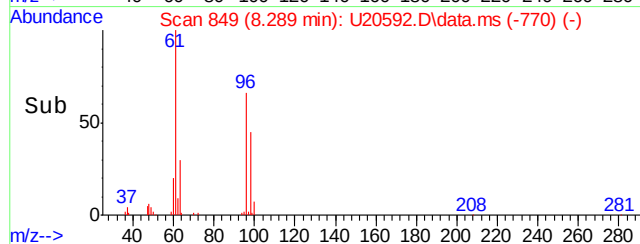
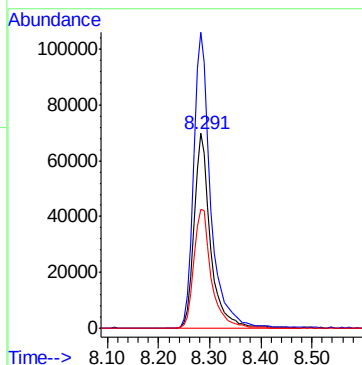
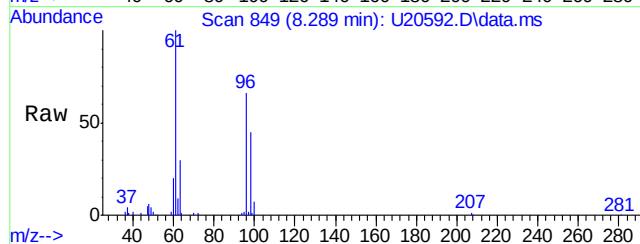
Tgt Ion	Ratio	Lower	Upper
96	100		
61	151.0	145.5	205.5
98	40.0	35.2	95.2





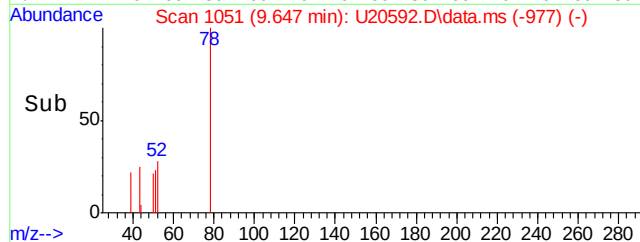
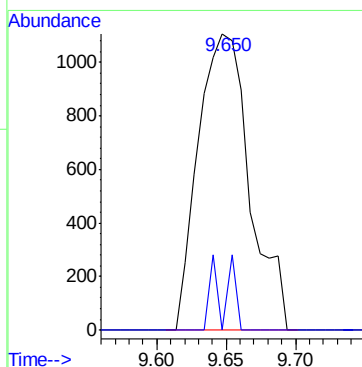
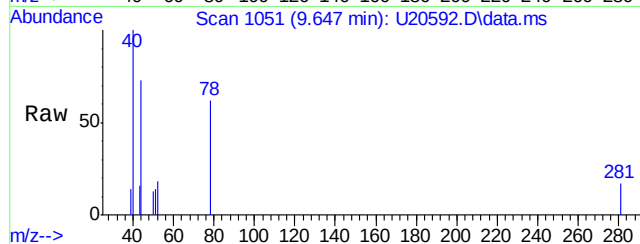
#37
cis-1,2-dichloroethene
Concen: 30.95 ppb
RT: 8.291 min Scan# 849
Delta R.T. 0.002 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

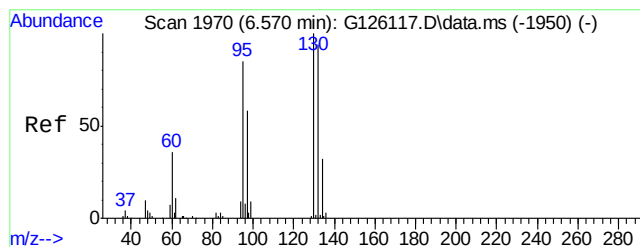
Tgt Ion	Ratio	Lower	Upper
96	100		
61	152.1	126.3	186.3
98	67.7	36.2	96.2



#47
benzene
Concen: 0.20 ppb
RT: 9.650 min Scan# 1051
Delta R.T. 0.009 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

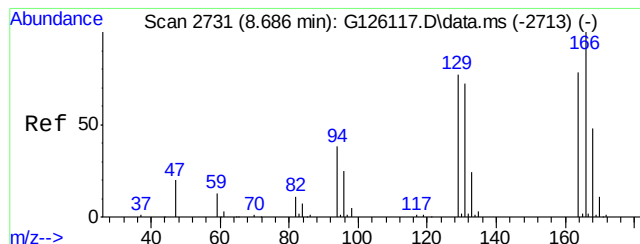
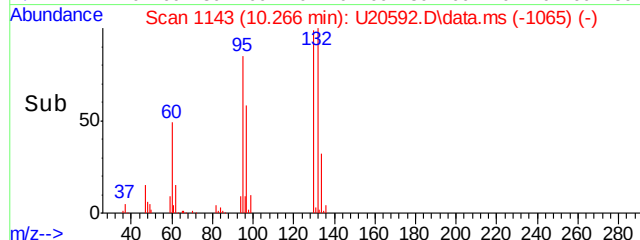
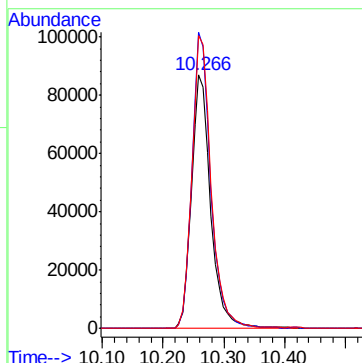
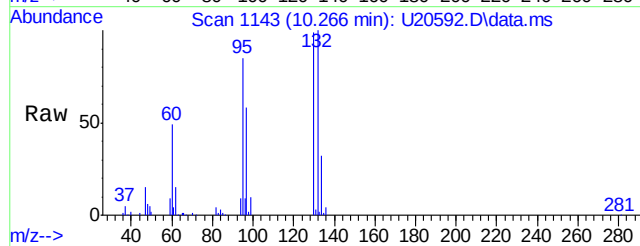
Tgt Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.9





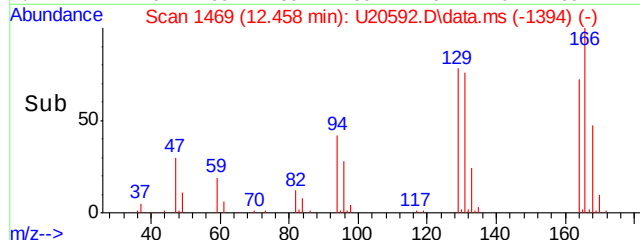
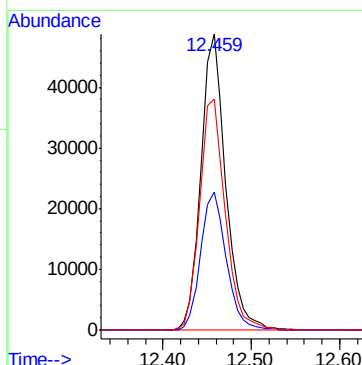
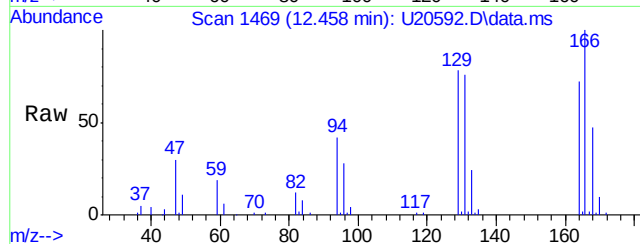
#51
trichloroethene
Concen: 44.43 ppb
RT: 10.266 min Scan# 1143
Delta R.T. 0.005 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	117.0	58.8	118.8
132	117.7	62.5	122.5



#67
tetrachloroethene
Concen: 30.00 ppb
RT: 12.459 min Scan# 1469
Delta R.T. 0.004 min
Lab File: U20592.D
Acq: 19 Jun 2014 2:57 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
168	46.8	19.2	79.2
129	78.1	43.8	103.8



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20593.D
 Acq On : 19 Jun 2014 3:24 pm
 Operator : garyk
 Sample : mc31396-7
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 19 16:03:58 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.599	65	163566	50.00	ppb	0.00
4) pentafluorobenzene	8.979	168	325727	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	526563	50.00	ppb	0.00
66) chlorobenzene-d5	13.106	82	201871	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.669	152	326814	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.616	113	220668	62.60	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	125.20%		
60) toluene-d8 (s)	11.645	98	527867	52.55	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.10%		
82) bromofluorobenzene (s)	14.335	95	212505	51.33	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.66%		
Target Compounds						
44) Cyclohexane	9.524	56	2362	0.30	ppb	# 88

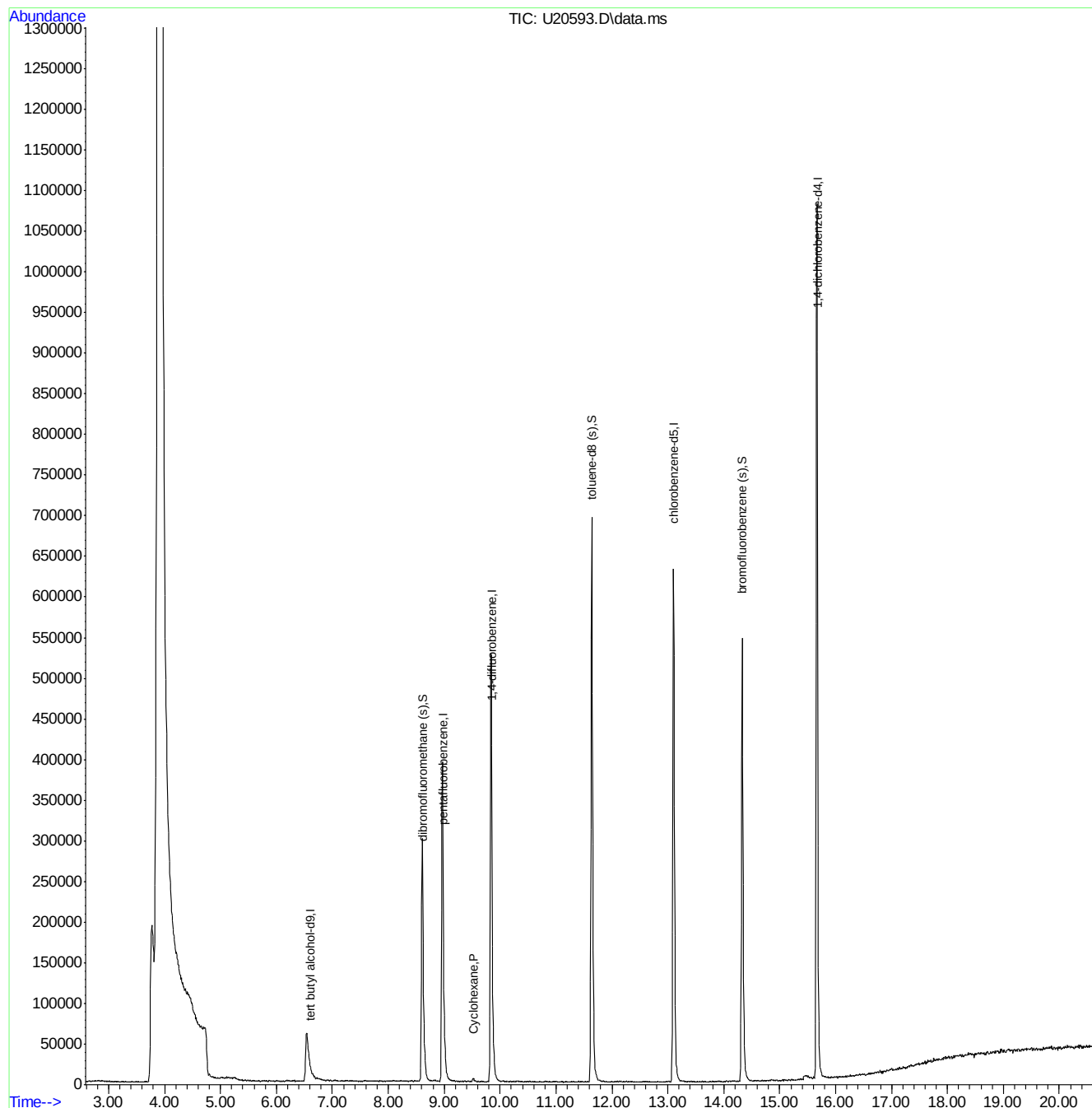
(#) = qualifier out of range (m) = manual integration (+) = signals summed

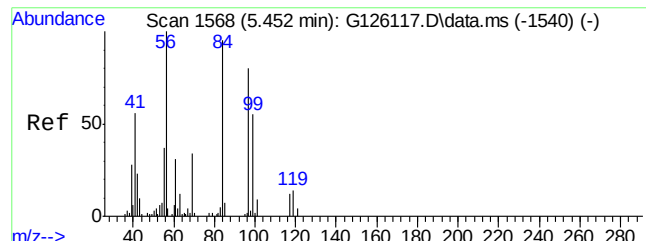
7.1.7
7

Quantitation Report (QT Reviewed)

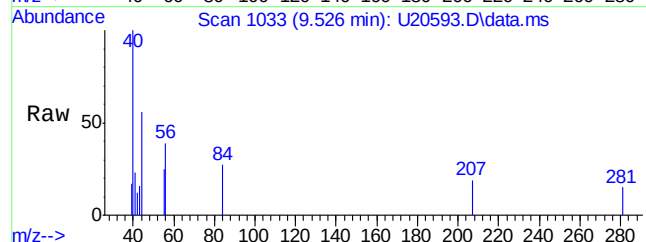
Data Path : D:\msdchem\1\data\U140619\
Data File : U20593.D
Acq On : 19 Jun 2014 3:24 pm
Operator : garyk
Sample : mc31396-7
Misc : ms32105,msu924,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 19 16:03:58 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

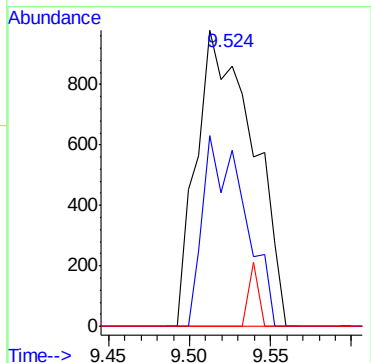
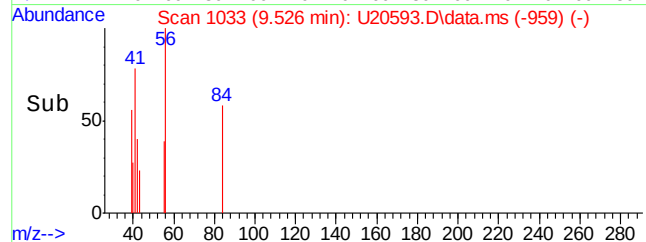




#44
Cyclohexane
Concen: 0.30 ppb
RT: 9.524 min Scan# 1033
Delta R.T. -0.002 min
Lab File: U20593.D
Acq: 19 Jun 2014 3:24 pm



Tgt Ion:	56	Resp:	2362
Ion Ratio	Lower	Upper	
56	100		
84	67.4	54.2	81.2
69	0.0	18.3	27.5#



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20594.D
 Acq On : 19 Jun 2014 3:52 pm
 Operator : garyk
 Sample : mc31396-8
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 20 08:34:23 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

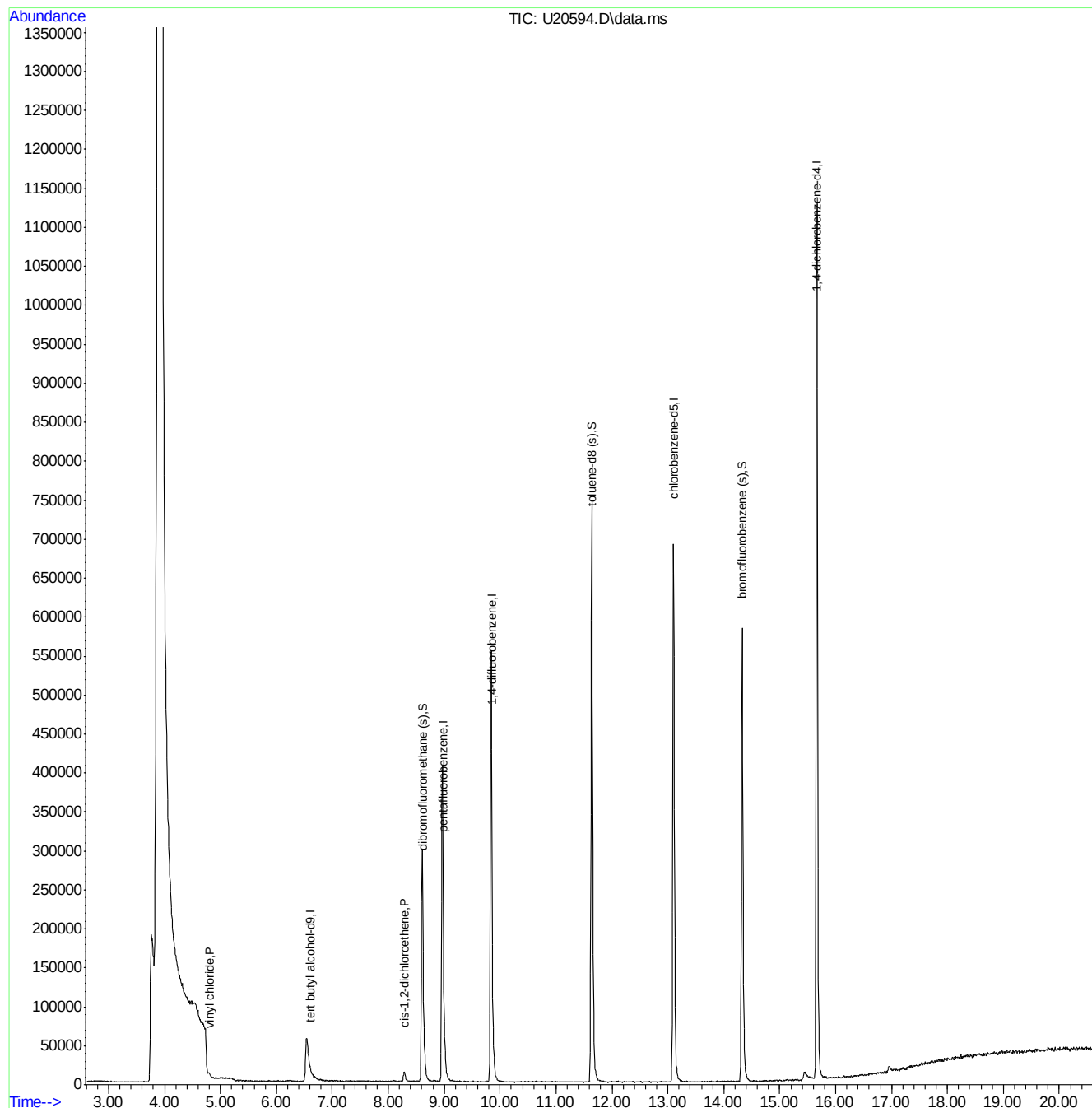
Internal Standards						
1) tert butyl alcohol-d9	6.599	65	158288	50.00	ppb	0.00
4) pentafluorobenzene	8.979	168	337956	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	554884	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	216777	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	337582	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	224820	61.47	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	122.94%		
60) toluene-d8 (s)	11.645	98	558183	52.74	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.48%		
82) bromofluorobenzene (s)	14.334	95	227176	53.12	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	106.24%		
Target Compounds						
						Qvalue
7) vinyl chloride	4.797	62	5987	0.93	ppb	98
37) cis-1,2-dichloroethene	8.292	96	6704	1.44	ppb	96

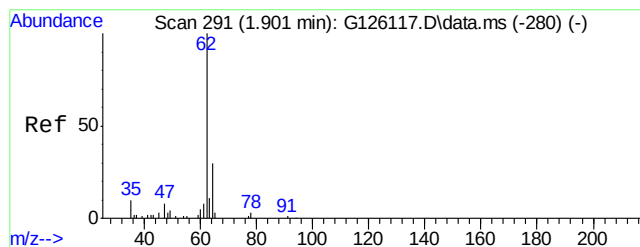
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20594.D
Acq On : 19 Jun 2014 3:52 pm
Operator : garyk
Sample : mc31396-8
Misc : ms32105,msu924,,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

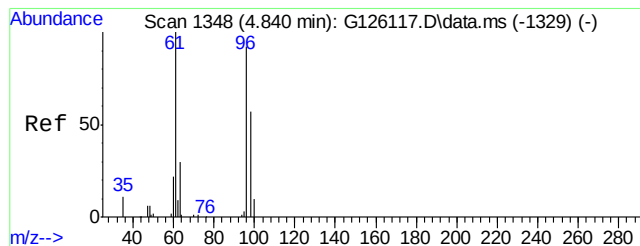
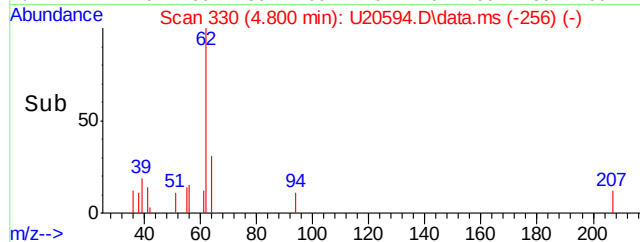
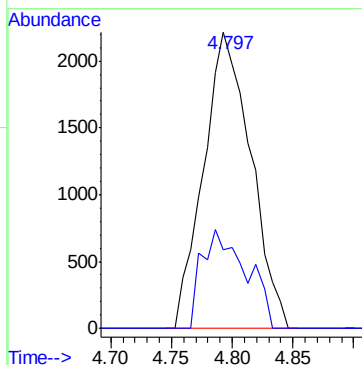
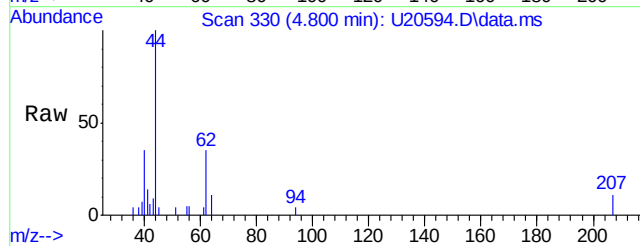
Quant Time: Jun 20 08:34:23 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





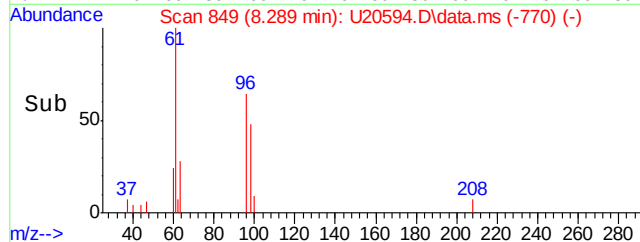
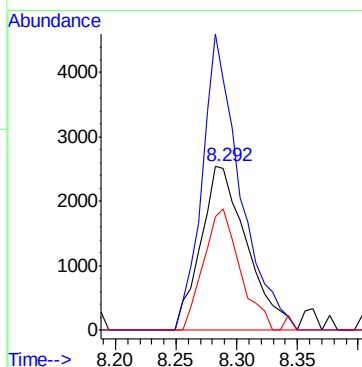
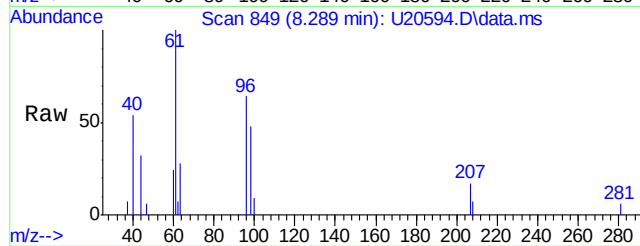
#7
vinyl chloride
Concen: 0.93 ppb
RT: 4.797 min Scan# 330
Delta R.T. -0.002 min
Lab File: U20594.D
Acq: 19 Jun 2014 3:52 pm

Tgt Ion: 62 Resp: 5987
Ion Ratio Lower Upper
62 100
64 30.7 1.8 61.8



#37
cis-1,2-dichloroethene
Concen: 1.44 ppb
RT: 8.292 min Scan# 849
Delta R.T. 0.003 min
Lab File: U20594.D
Acq: 19 Jun 2014 3:52 pm

Tgt Ion: 96 Resp: 6704
Ion Ratio Lower Upper
96 100
61 155.0 126.3 186.3
98 75.2 36.2 96.2



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20595.D
 Acq On : 19 Jun 2014 4:19 pm
 Operator : garyk
 Sample : mc31396-9
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 08:37:22 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.599	65	166624	50.00	ppb	0.00
4) pentafluorobenzene	8.979	168	326774	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	537293	50.00	ppb	0.00
66) chlorobenzene-d5	13.106	82	211192	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.669	152	320331	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.616	113	224721	63.54	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	127.08%		
60) toluene-d8 (s)	11.644	98	541108	52.80	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.60%		
82) bromofluorobenzene (s)	14.335	95	217280	53.55	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	107.10%		
Target Compounds						Qvalue
33) 1,1-dichloroethane	7.717	63	1609	0.21	ppb	88
37) cis-1,2-dichloroethene	8.292	96	4052	0.90	ppb	87
42) 1,1,1-trichloroethane	9.240	97	1674	0.27	ppb	92
51) trichloroethene	10.269	95	2735	0.73	ppb	# 79

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

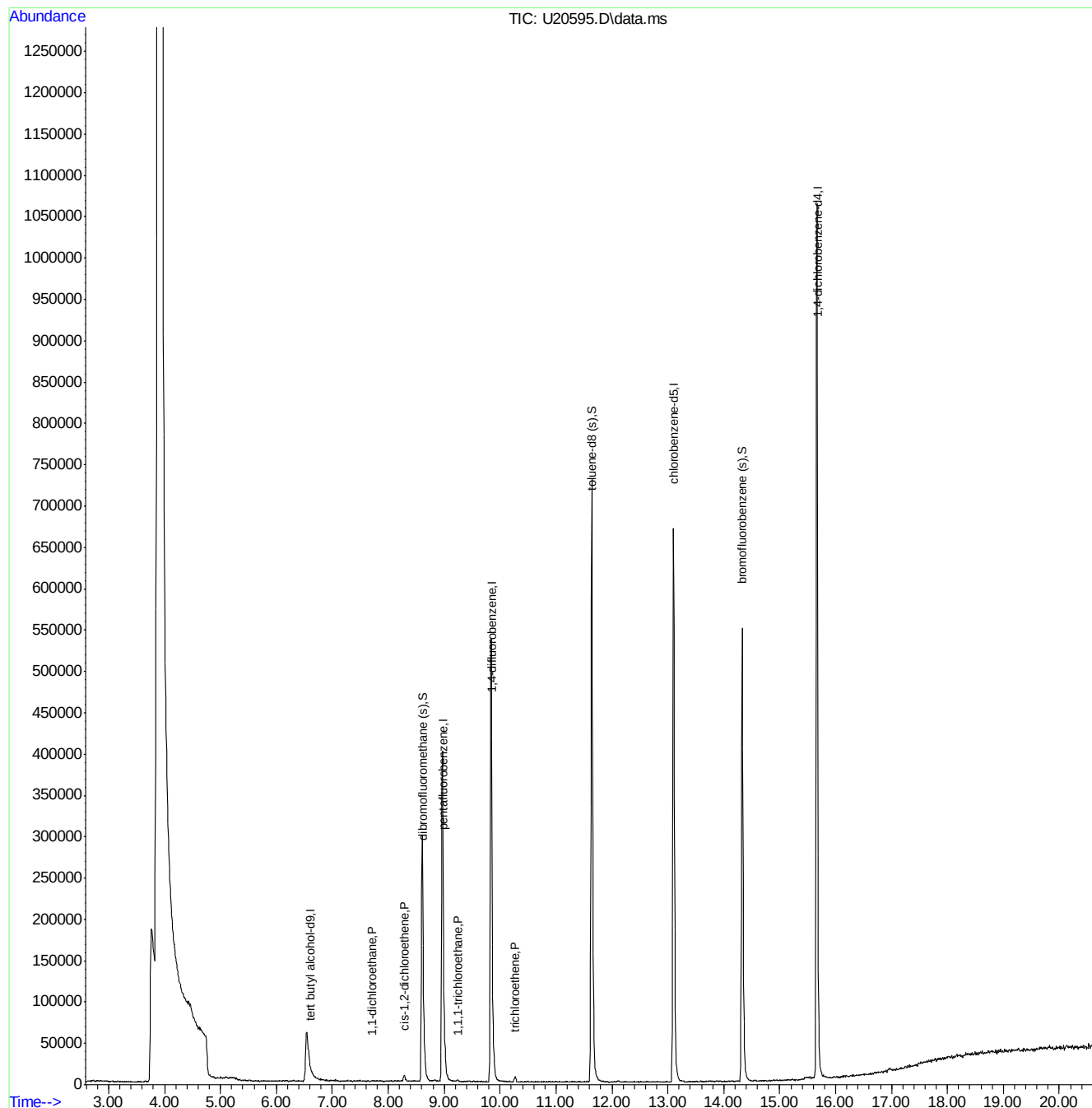
7.1.9

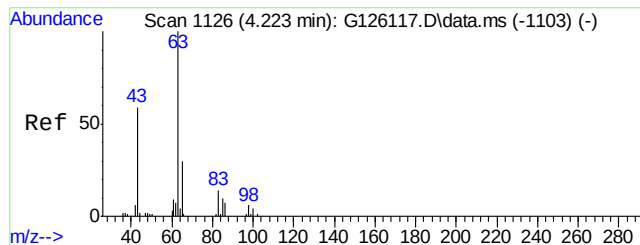
7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20595.D
Acq On : 19 Jun 2014 4:19 pm
Operator : garyk
Sample : mc31396-9
Misc : ms32105,msu924,,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

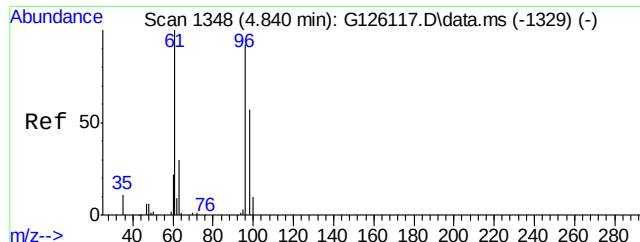
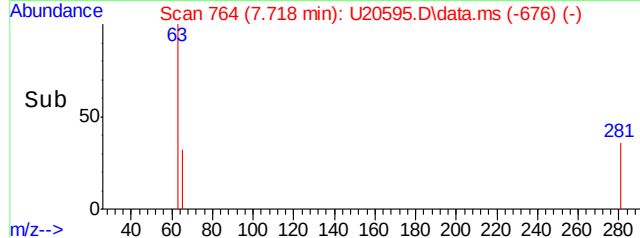
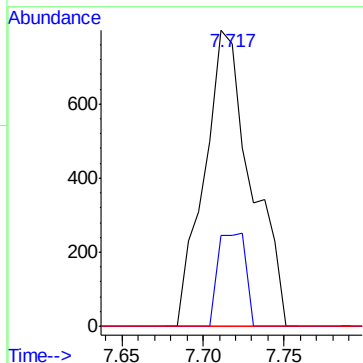
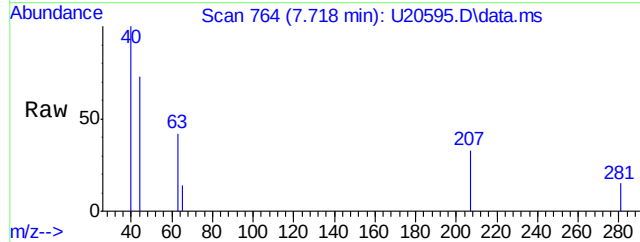
Quant Time: Jun 20 08:37:22 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





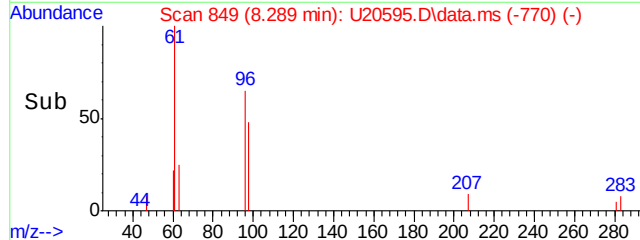
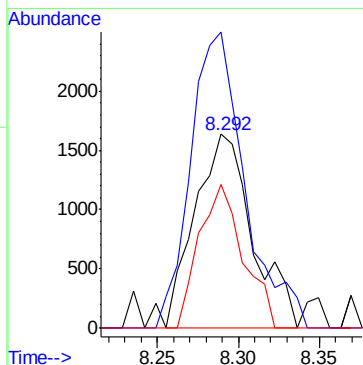
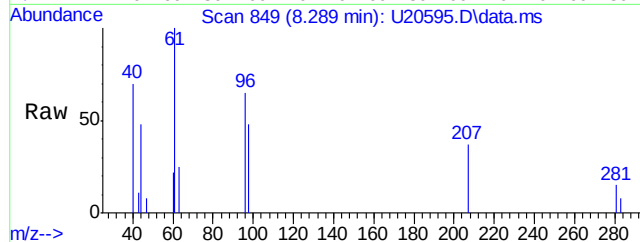
#33
1,1-dichloroethane
Concen: 0.21 ppb
RT: 7.717 min Scan# 764
Delta R.T. -0.001 min
Lab File: U20595.D
Acq: 19 Jun 2014 4:19 pm

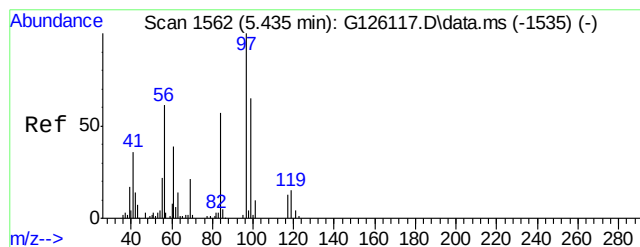
Tgt Ion:	63	Resp:	1609
Ion Ratio	Lower	Upper	
63	100		
65	32.1	0.0	59.7
83	0.0	0.0	41.8



#37
cis-1,2-dichloroethene
Concen: 0.90 ppb
RT: 8.292 min Scan# 849
Delta R.T. 0.003 min
Lab File: U20595.D
Acq: 19 Jun 2014 4:19 pm

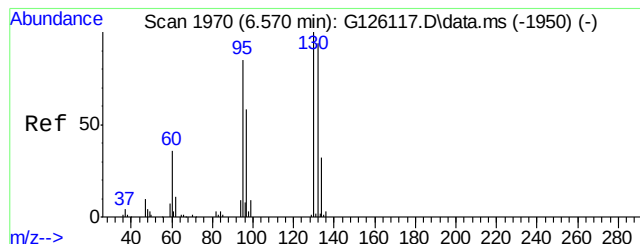
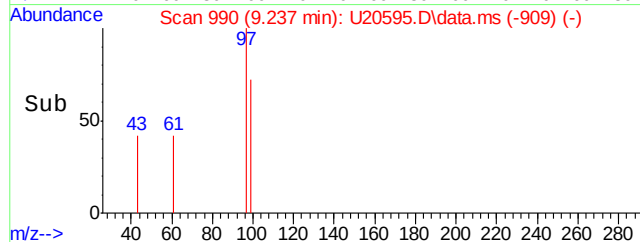
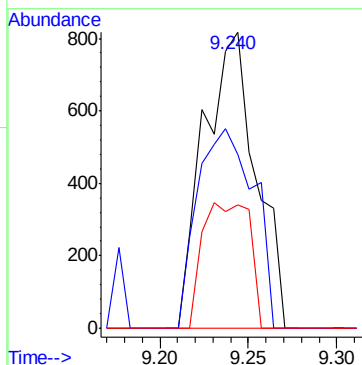
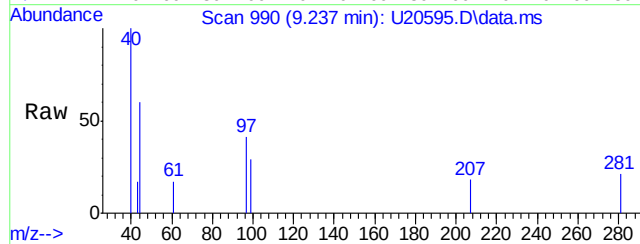
Tgt Ion:	96	Resp:	4052
Ion Ratio	Lower	Upper	
96	100		
61	137.0	126.3	186.3
98	74.0	36.2	96.2





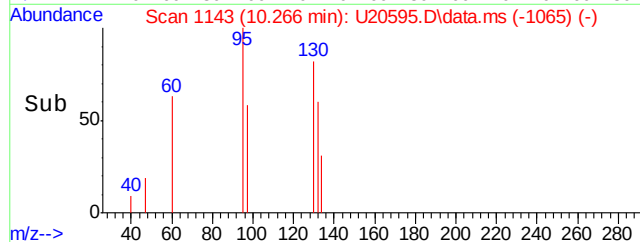
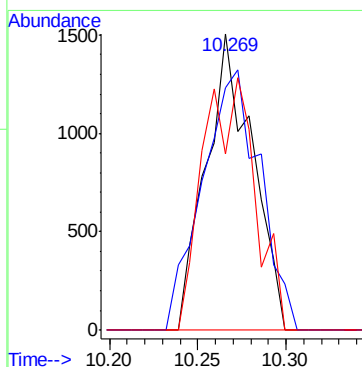
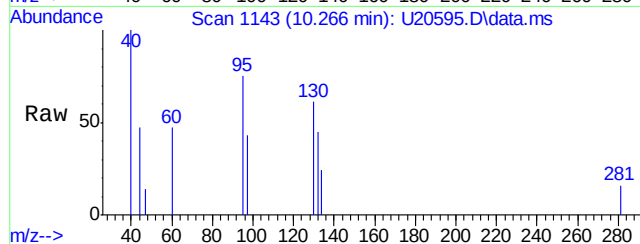
#42
1,1,1-trichloroethane
Concen: 0.27 ppb
RT: 9.240 min Scan# 990
Delta R.T. -0.003 min
Lab File: U20595.D
Acq: 19 Jun 2014 4:19 pm

Tgt Ion:	97	Resp:	1674
Ion Ratio	Lower	Upper	
97	100		
99	72.1	33.0	93.0
61	42.1	14.2	74.2



#51
trichloroethene
Concen: 0.73 ppb
RT: 10.269 min Scan# 1143
Delta R.T. 0.008 min
Lab File: U20595.D
Acq: 19 Jun 2014 4:19 pm

Tgt Ion:	95	Resp:	2735
Ion Ratio	Lower	Upper	
95	100		
130	82.0	58.8	118.8
132	59.5	62.5	122.5#



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20596.D
 Acq On : 19 Jun 2014 4:46 pm
 Operator : garyk
 Sample : mc31396-10
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 20 08:39:03 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

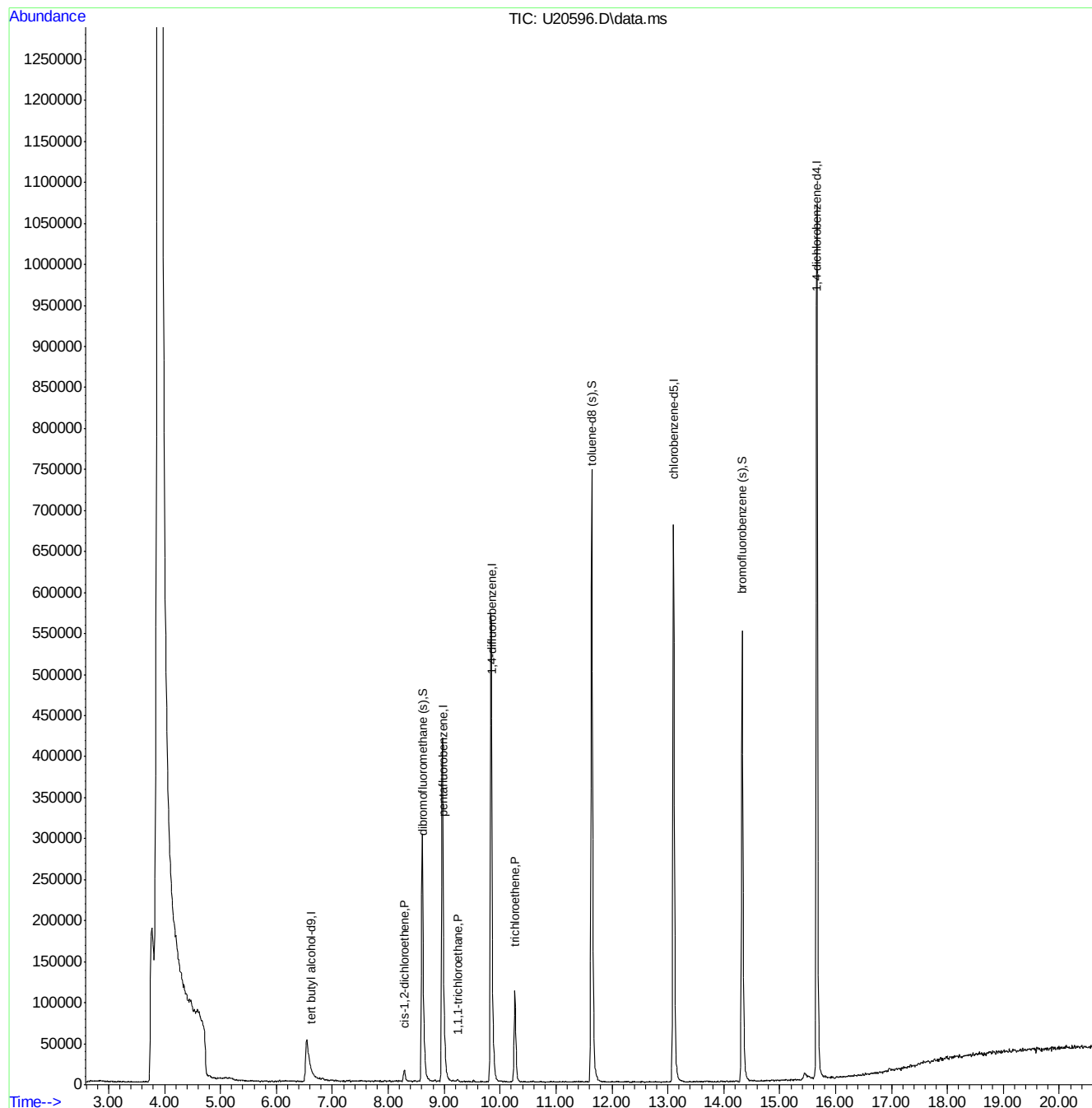
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.612	65	160972	50.00	ppb	0.02
4) pentafluorobenzene	8.978	168	349569	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.846	114	562543	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	213448	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	324809	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	228078	60.29	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	120.58%		
60) toluene-d8 (s)	11.644	98	565785	52.73	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.46%		
82) bromofluorobenzene (s)	14.334	95	210327	51.12	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.24%		
Target Compounds						Qvalue
37) cis-1,2-dichloroethene	8.293	96	7252	1.51	ppb	93
42) 1,1,1-trichloroethane	9.238	97	1740	0.27	ppb	93
51) trichloroethene	10.267	95	40621	10.32	ppb	79

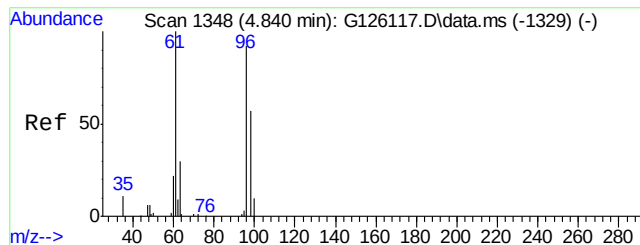
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20596.D
Acq On : 19 Jun 2014 4:46 pm
Operator : garyk
Sample : mc31396-10
Misc : ms32105,msu924,,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

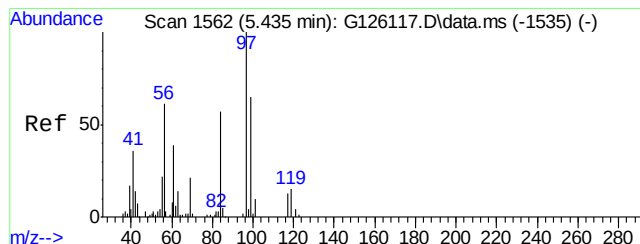
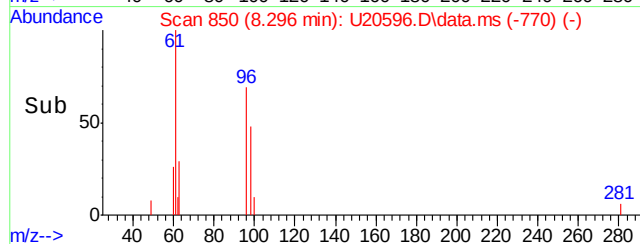
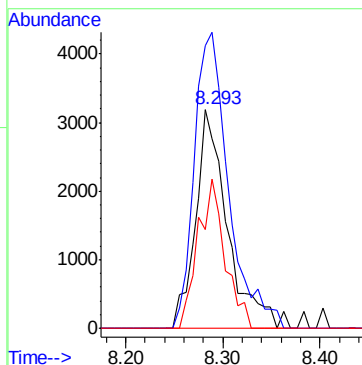
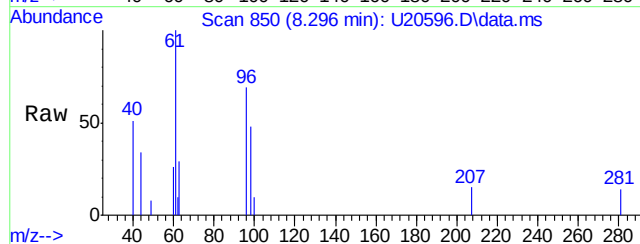
Quant Time: Jun 20 08:39:03 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





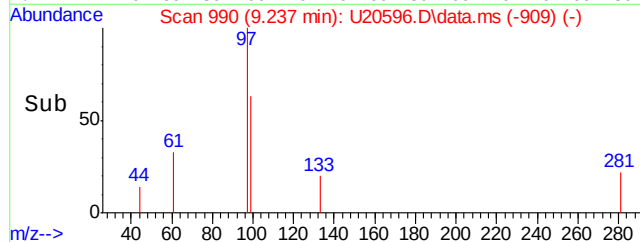
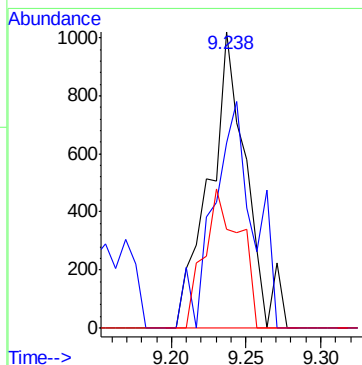
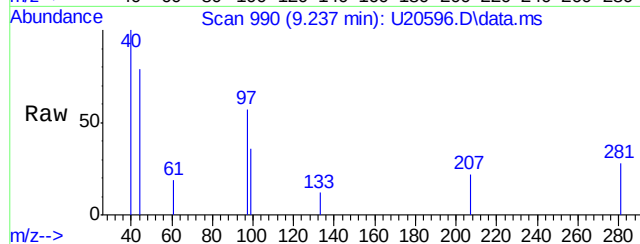
#37
 cis-1,2-dichloroethene
 Concen: 1.51 ppb
 RT: 8.293 min Scan# 850
 Delta R.T. 0.004 min
 Lab File: U20596.D
 Acq: 19 Jun 2014 4:46 pm

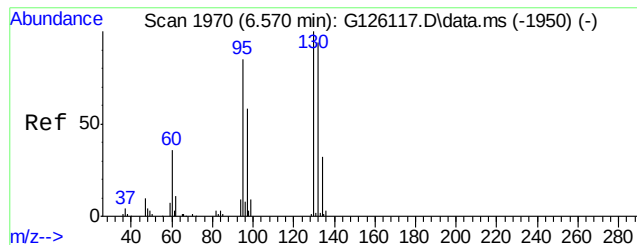
Tgt Ion	Ratio	Lower	Upper
96	100		
61	144.0	126.3	186.3
98	68.5	36.2	96.2



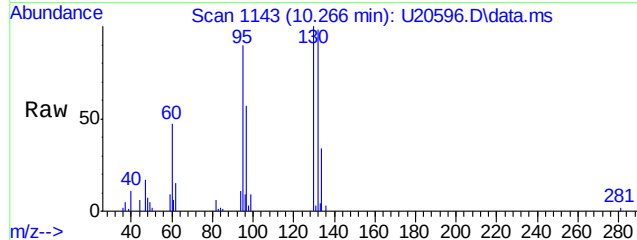
#42
 1,1,1-trichloroethane
 Concen: 0.27 ppb
 RT: 9.238 min Scan# 990
 Delta R.T. -0.005 min
 Lab File: U20596.D
 Acq: 19 Jun 2014 4:46 pm

Tgt Ion	Ratio	Lower	Upper
97	100		
99	62.6	33.0	93.0
61	33.3	14.2	74.2

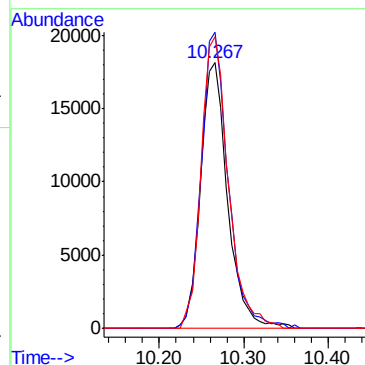
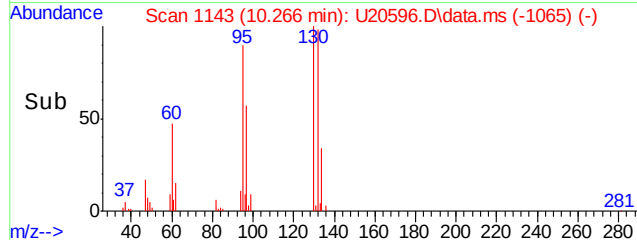




#51
trichloroethene
Concen: 10.32 ppb
RT: 10.267 min Scan# 1143
Delta R.T. 0.006 min
Lab File: U20596.D
Acq: 19 Jun 2014 4:46 pm



Tgt Ion	Ratio	Lower	Upper
95	100		
130	111.5	58.8	118.8
132	109.7	62.5	122.5



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20597.D
Acq On : 19 Jun 2014 5:13 pm
Operator : garyk
Sample : mc31396-11
Misc : ms32105,msu924,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 20 08:39:36 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.605	65	168017	50.00	ppb	0.00
4) pentafluorobenzene	8.979	168	331364	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	561659	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	227960	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	324017	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.616	113	215476	60.08	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	120.16%		
60) toluene-d8 (s)	11.644	98	591701	55.23	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	110.46%		
82) bromofluorobenzene (s)	14.334	95	224654	54.73	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	109.46%		
Target Compounds						Qvalue
37) cis-1,2-dichloroethene	8.291	96	2467	0.54	ppb	87

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

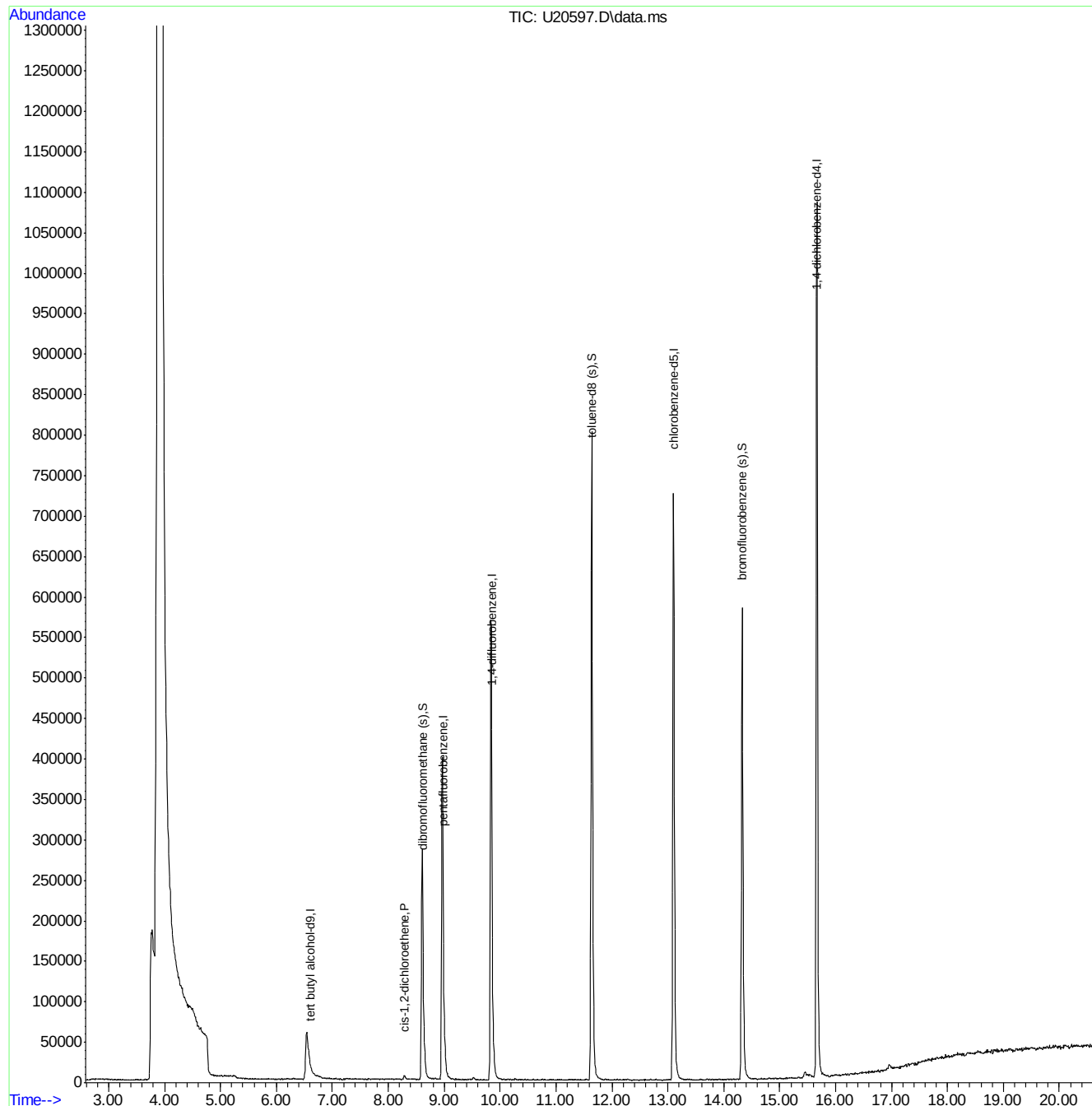
7.1.11

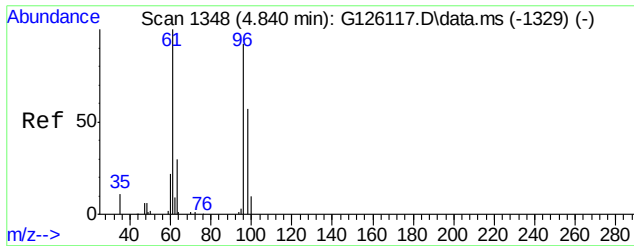
7

Quantitation Report (QT Reviewed)

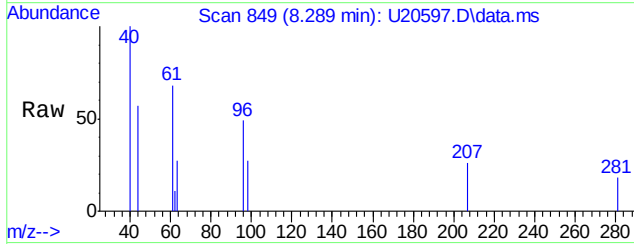
Data Path : D:\msdchem\1\data\U140619\
Data File : U20597.D
Acq On : 19 Jun 2014 5:13 pm
Operator : garyk
Sample : mc31396-11
Misc : ms32105,msu924,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 20 08:39:36 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

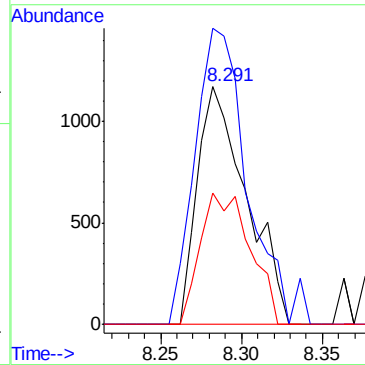
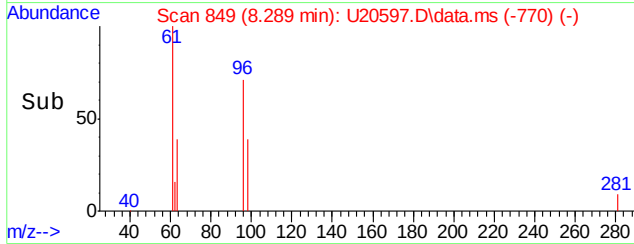




#37
 cis-1,2-dichloroethene
 Concen: 0.54 ppb
 RT: 8.291 min Scan# 849
 Delta R.T. 0.002 min
 Lab File: U20597.D
 Acq: 19 Jun 2014 5:13 pm



Tgt Ion:	96	Resp:	2467
Ion Ratio	Lower	Upper	
96	100		
61	140.0	126.3	186.3
98	54.7	36.2	96.2



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20599.D
 Acq On : 19 Jun 2014 6:08 pm
 Operator : garyk
 Sample : mc31396-12
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 20 08:41:33 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.609	65	167198	50.00	ppb	0.01
4) pentafluorobenzene	8.978	168	337633	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	555319	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	210691	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.669	152	324387	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.616	113	226419	61.96	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	123.92%		
60) toluene-d8 (s)	11.644	98	546713	51.61	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.22%		
82) bromofluorobenzene (s)	14.335	95	218566	53.19	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	106.38%		
Target Compounds						
37) cis-1,2-dichloroethene	8.289	96	6645	1.43	ppb	Qvalue 92

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

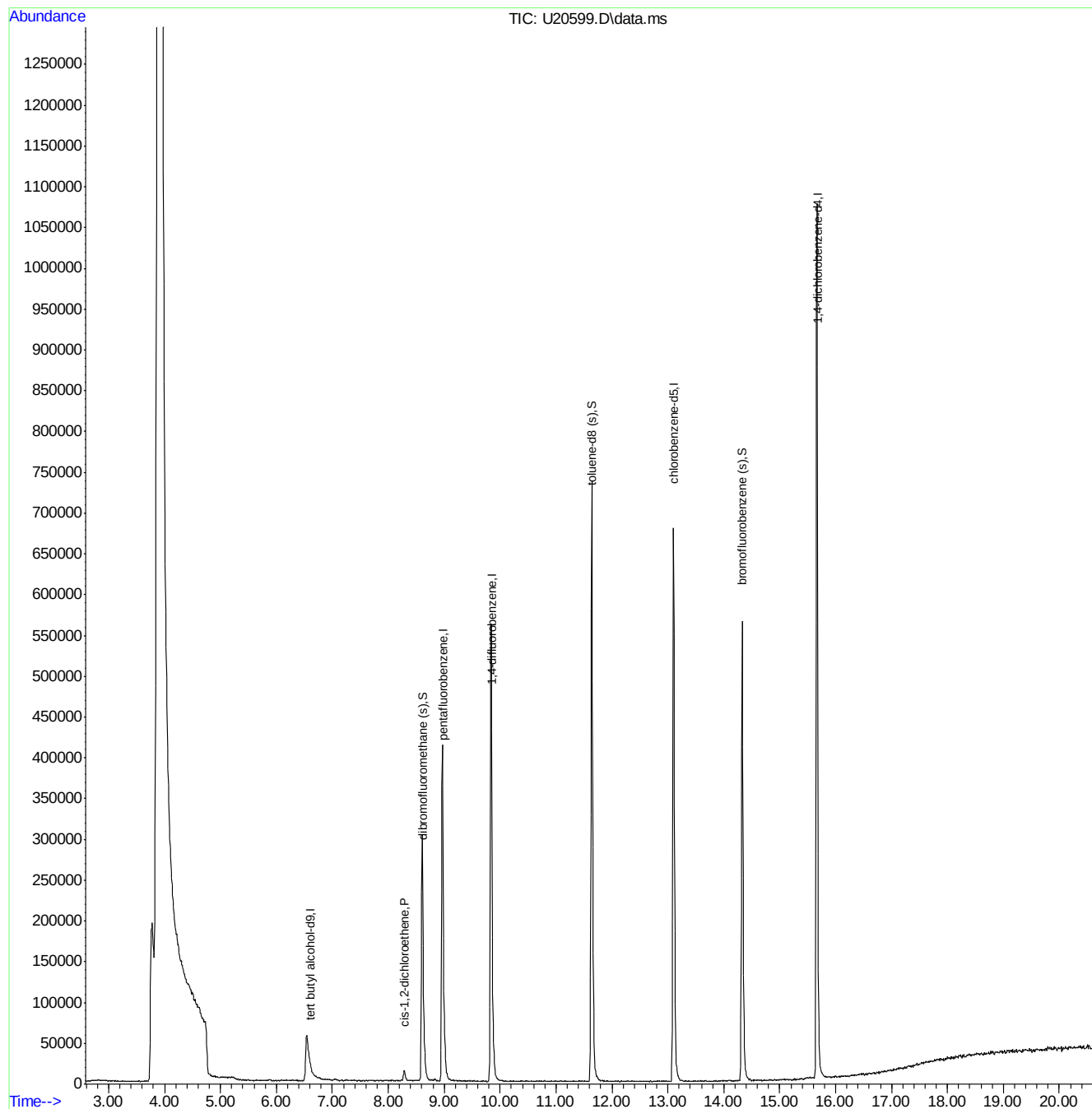
7.1.12

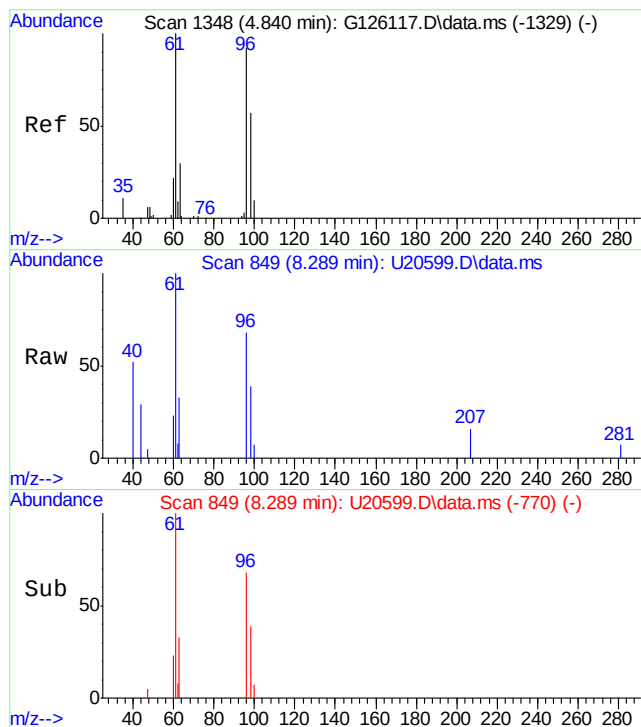
7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20599.D
Acq On : 19 Jun 2014 6:08 pm
Operator : garyk
Sample : mc31396-12
Misc : ms32105,msu924,,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

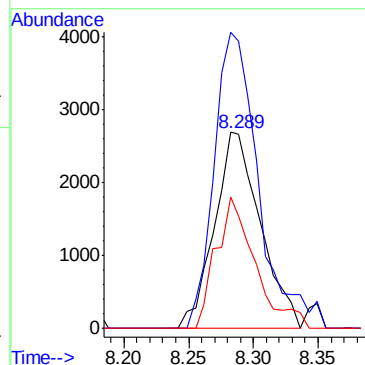
Quant Time: Jun 20 08:41:33 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





#37
 cis-1,2-dichloroethene
 Concen: 1.43 ppb
 RT: 8.289 min Scan# 849
 Delta R.T. 0.000 min
 Lab File: U20599.D
 Acq: 19 Jun 2014 6:08 pm

Tgt Ion:	96	Resp:	6645
Ion Ratio	Lower	Upper	
96	100		
61	147.9	126.3	186.3
98	57.6	36.2	96.2



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20600.D
 Acq On : 19 Jun 2014 6:35 pm
 Operator : garyk
 Sample : mc31396-13
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 20 08:42:04 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.593	65	164787	50.00	ppb	0.00
4) pentafluorobenzene	8.978	168	343519	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.846	114	555420	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	207216	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	318798	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.616	113	227452	61.18	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	122.36%		
60) toluene-d8 (s)	11.644	98	548829	51.80	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.60%		
82) bromofluorobenzene (s)	14.335	95	212240	52.56	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.12%		

Target Compounds Qvalue

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

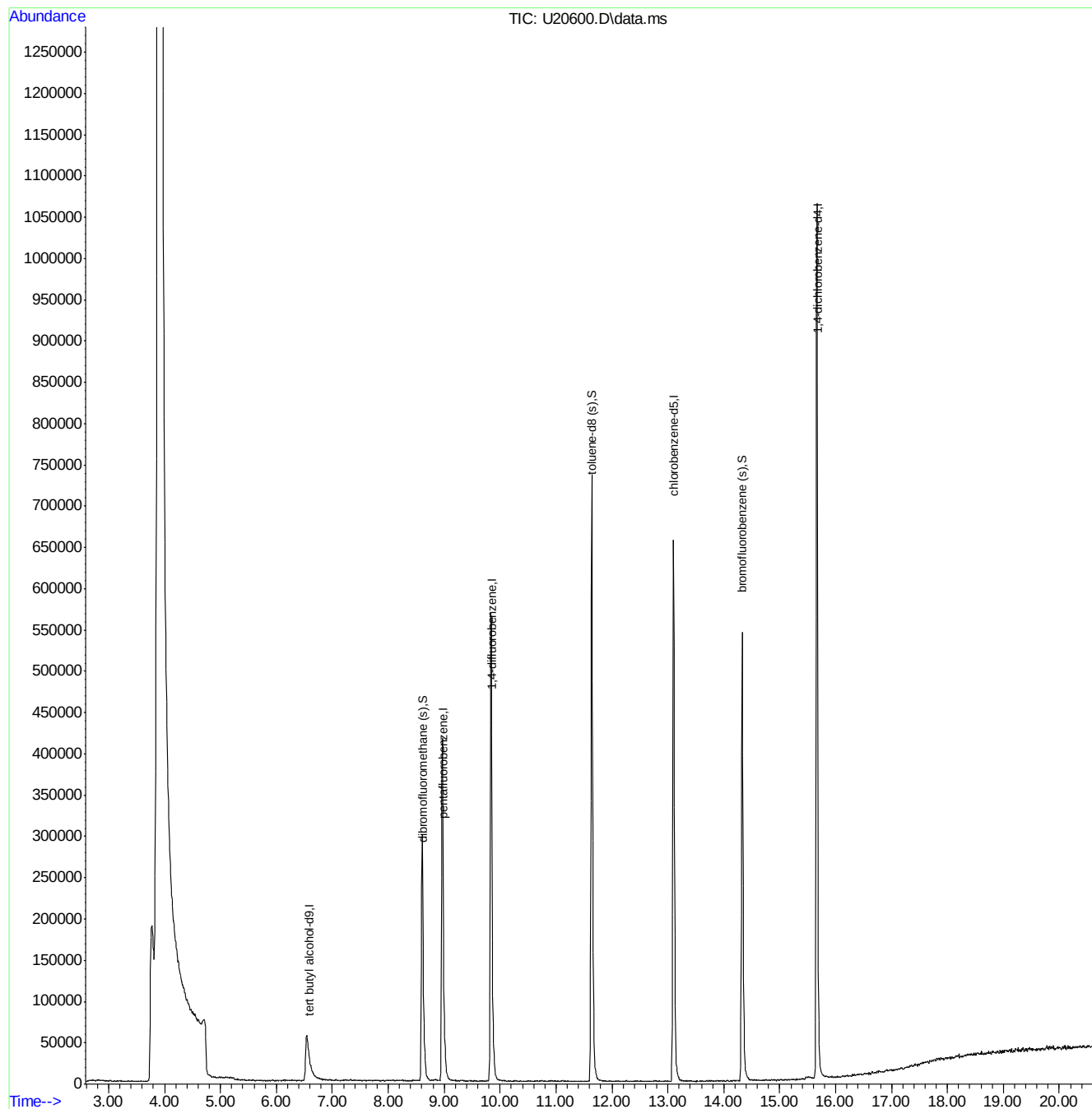
7.1.13

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20600.D
Acq On : 19 Jun 2014 6:35 pm
Operator : garyk
Sample : mc31396-13
Misc : ms32105,msu924,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 20 08:42:04 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20583.D
Acq On : 19 Jun 2014 10:50 am
Operator : garyk
Sample : mc31396-14
Misc : ms32105,msu924,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 19 11:28:01 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.590	65	148689	50.00	ppb	0.00
4) pentafluorobenzene	8.980	168	324962	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	564274	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	231774	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.667	152	355353	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	214244	60.92	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	121.84%		
60) toluene-d8 (s)	11.644	98	575006	53.42	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	106.84%		
82) bromofluorobenzene (s)	14.334	95	234290	52.05	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.10%		
Target Compounds						
16) acetone	6.198	58	20932	22.83	ppb	# 72
41) Tetrahydrofuran	8.832	42	2256	1.75	ppb	99

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

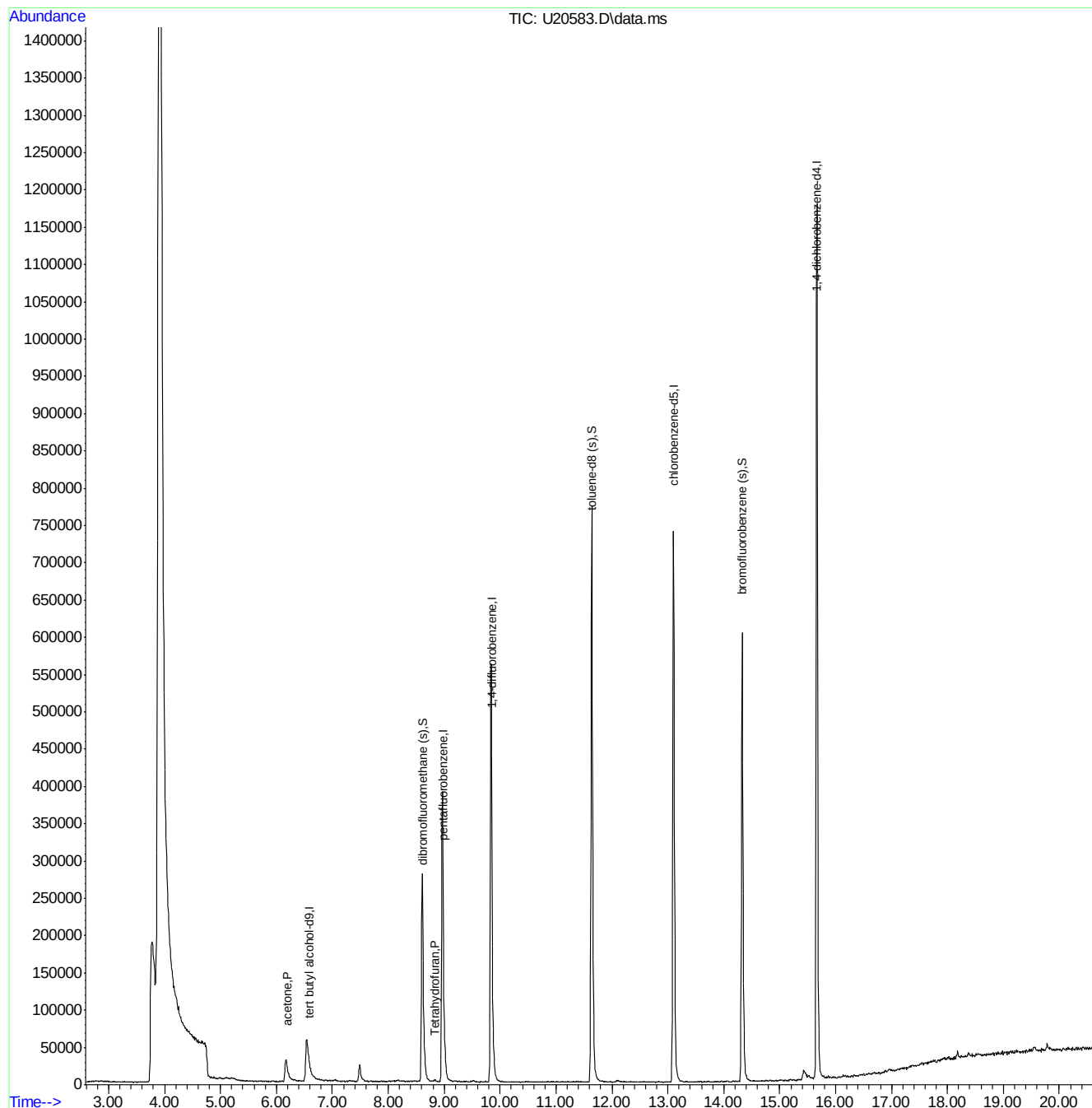
7.1.14

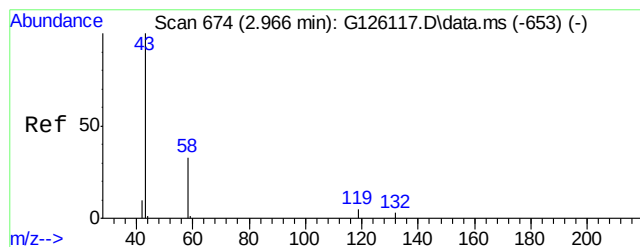
7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20583.D
 Acq On : 19 Jun 2014 10:50 am
 Operator : garyk
 Sample : mc31396-14
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 7 Sample Multiplier: 1

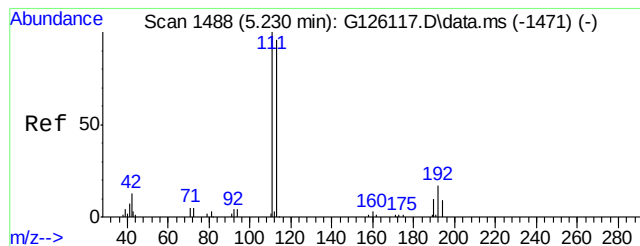
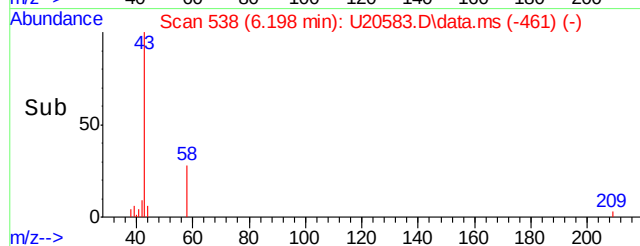
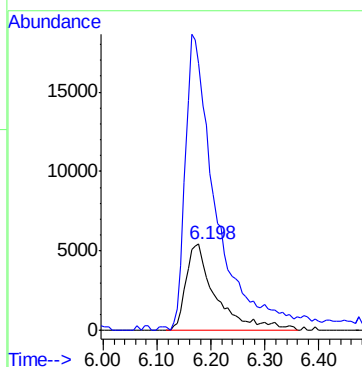
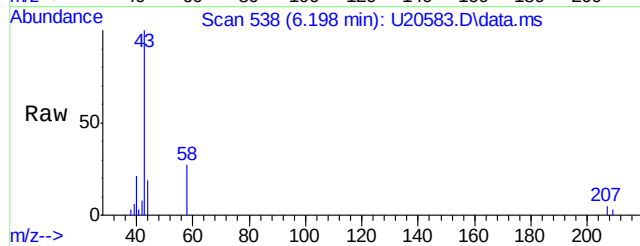
Quant Time: Jun 19 11:28:01 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration





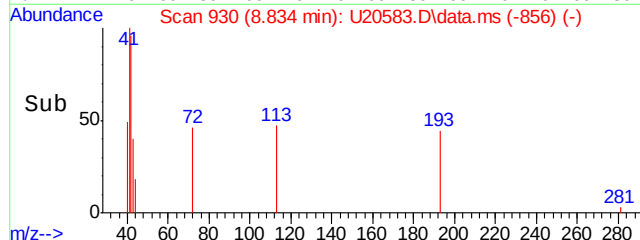
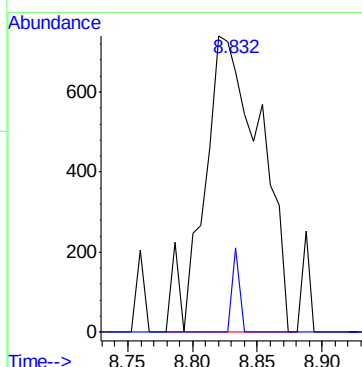
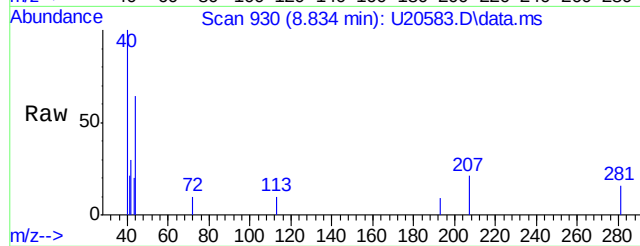
#16
acetone
Concen: 22.83 ppb
RT: 6.198 min Scan# 538
Delta R.T. 0.020 min
Lab File: U20583.D
Acq: 19 Jun 2014 10:50 am

Tgt Ion: 58 Resp: 20932
Ion Ratio Lower Upper
58 100
43 363.8 278.8 338.8#



#41
Tetrahydrofuran
Concen: 1.75 ppb
RT: 8.832 min Scan# 930
Delta R.T. -0.002 min
Lab File: U20583.D
Acq: 19 Jun 2014 10:50 am

Tgt Ion: 42 Resp: 2256
Ion Ratio Lower Upper
42 100
72 32.4 2.9 62.9



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20598.D
 Acq On : 19 Jun 2014 5:40 pm
 Operator : garyk
 Sample : mc31396-15
 Misc : ms32105,msu924,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 20 08:41:02 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.601	65	161196	50.00	ppb	0.00
4) pentafluorobenzene	8.979	168	329591	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.846	114	537670	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	203900	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	319368	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	219574	61.56	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	123.12%		
60) toluene-d8 (s)	11.644	98	536967	52.36	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.72%		
82) bromofluorobenzene (s)	14.334	95	209416	51.76	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.52%		
Target Compounds						
7) vinyl chloride	4.794	62	6020	0.96	ppb	95
37) cis-1,2-dichloroethene	8.293	96	6889	1.52	ppb	94

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

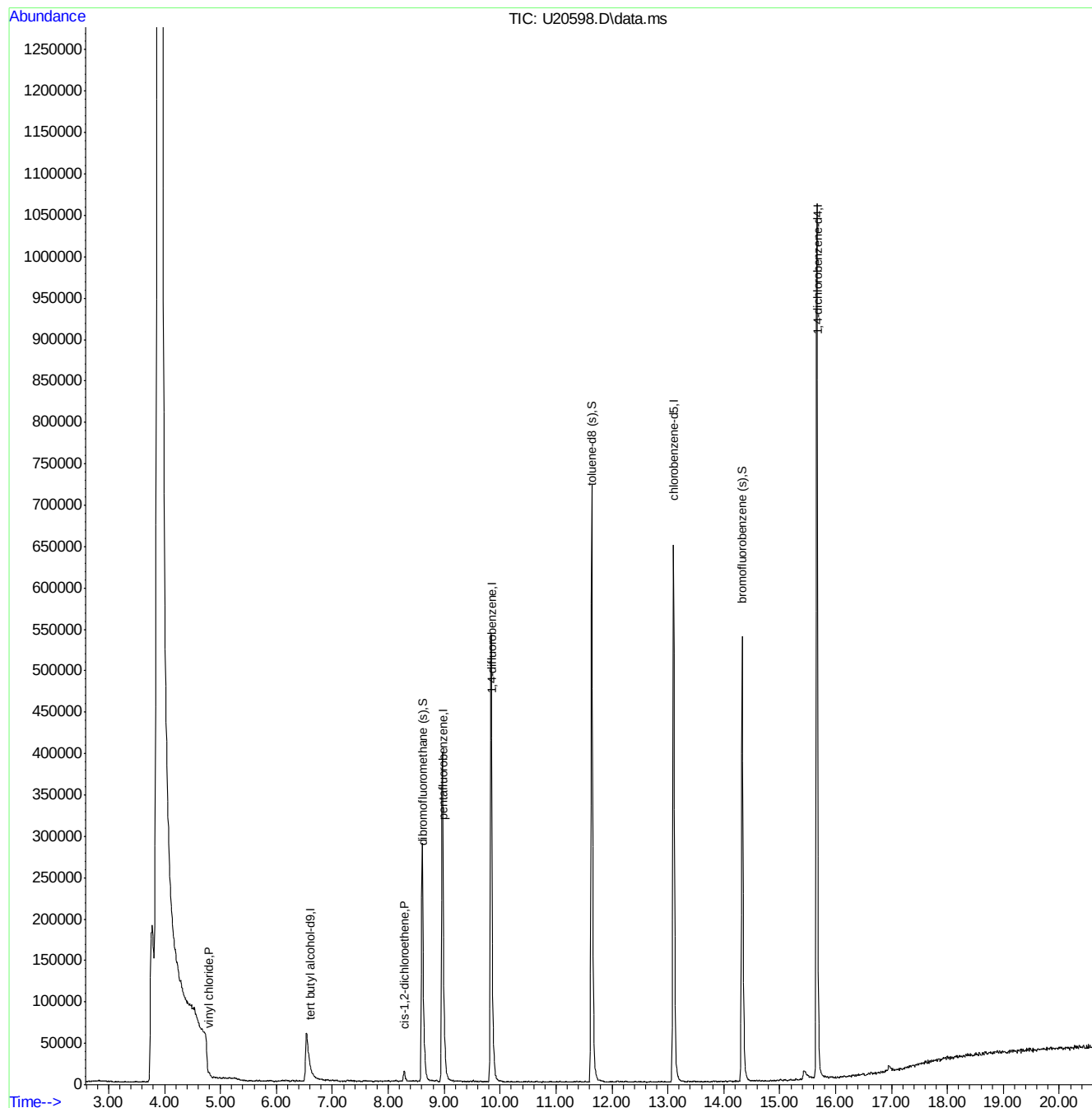
7.1.15

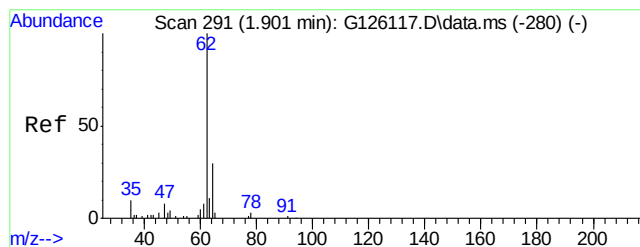
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Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20598.D
Acq On : 19 Jun 2014 5:40 pm
Operator : garyk
Sample : mc31396-15
Misc : ms32105,msu924,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

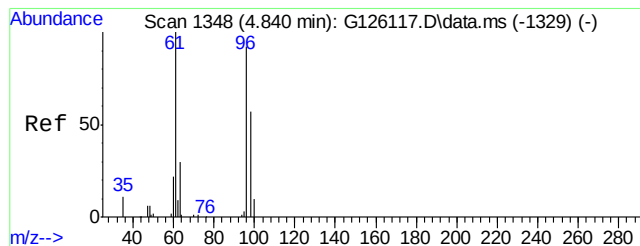
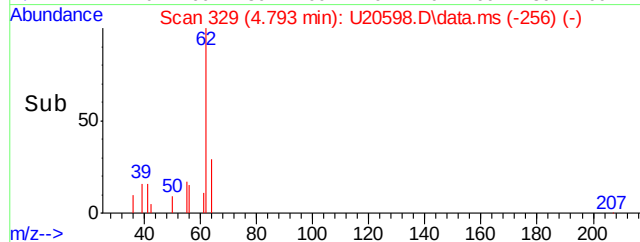
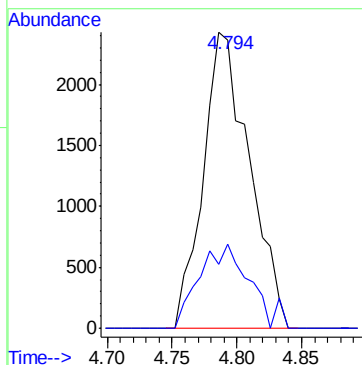
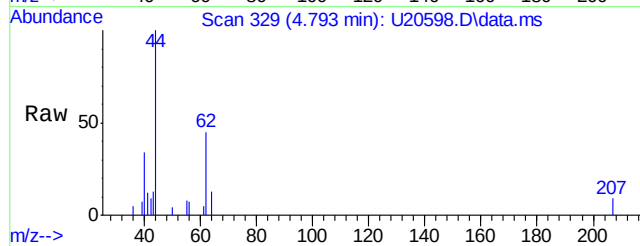
Quant Time: Jun 20 08:41:02 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration





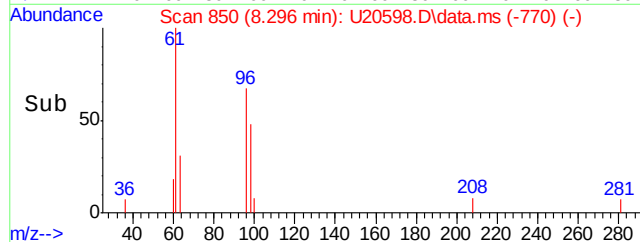
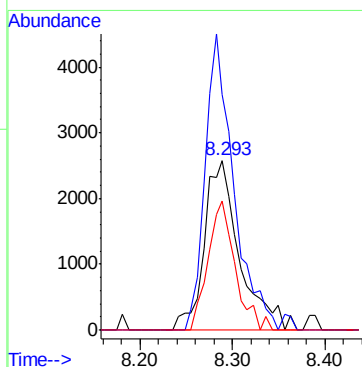
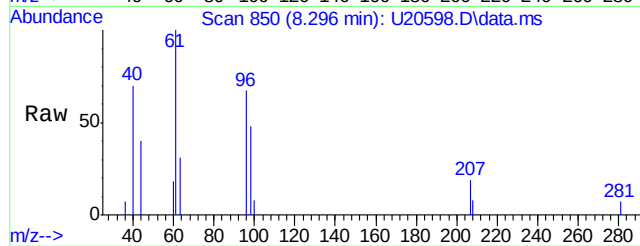
#7
vinyl chloride
Concen: 0.96 ppb
RT: 4.794 min Scan# 329
Delta R.T. -0.005 min
Lab File: U20598.D
Acq: 19 Jun 2014 5:40 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
64	29.3	1.8	61.8



#37
cis-1,2-dichloroethene
Concen: 1.52 ppb
RT: 8.293 min Scan# 850
Delta R.T. 0.004 min
Lab File: U20598.D
Acq: 19 Jun 2014 5:40 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	149.0	126.3	186.3
98	71.1	36.2	96.2



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20582.D
 Acq On : 19 Jun 2014 10:23 am
 Operator : garyk
 Sample : mb
 Misc : ms32098,msu924,,,,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 19 10:47:26 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.604	65	192064	50.00	ppb	0.00
4) pentafluorobenzene	8.980	168	342040	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	585356	50.00	ppb	0.00
66) chlorobenzene-d5	13.106	82	235772	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	363835	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	228067	61.61	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	123.22%		
60) toluene-d8 (s)	11.645	98	595982	53.38	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	106.76%		
82) bromofluorobenzene (s)	14.335	95	240329	52.15	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.30%		

Target Compounds Qvalue

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

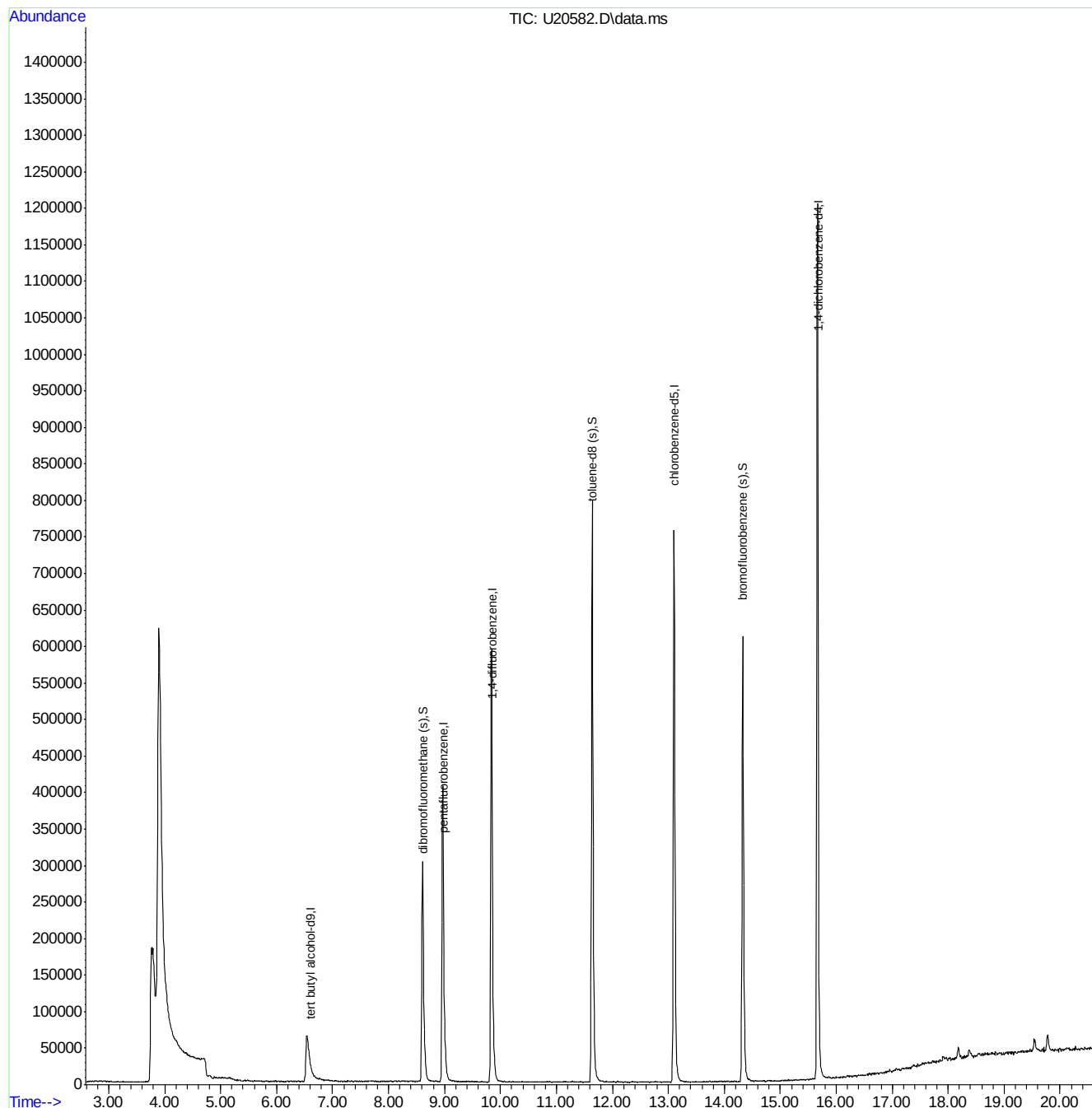
7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20582.D
Acq On : 19 Jun 2014 10:23 am
Operator : garyk
Sample : mb
Misc : ms32098,msu924,,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 19 10:47:26 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20579.D
 Acq On : 19 Jun 2014 9:02 am
 Operator : garyk
 Sample : bs
 Misc : ms32098,msu924,,,,5,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 19 09:51:24 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.593	65	185484	50.00	ppb	0.00
4) pentafluorobenzene	8.975	168	349404	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.843	114	626192	50.00	ppb	0.00
66) chlorobenzene-d5	13.098	82	247819	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.663	152	379984	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.613	113	243292	64.34	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	128.68%		
60) toluene-d8 (s)	11.640	98	601915	50.39	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.78%		
82) bromofluorobenzene (s)	14.328	95	234192	48.65	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.30%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.289	59	205211	522.19	ppb	94
3) Ethanol	5.570	45	305535	5322.56	ppb	98
5) dichlorodifluoromethane	4.345	85	198696	56.25	ppb	92
6) chloromethane	4.553	50	553286	59.47	ppb	97
7) vinyl chloride	4.805	62	363098	54.71	ppb	98
8) bromomethane	5.275	96	203721	58.00	ppb	89
9) chloroethane	5.419	64	167630	55.39	ppb	98
10) ethyl ether	6.289	59	205218	58.04	ppb	85
11) acetonitrile	6.090	41	32378m	53.63	ppb	
12) trichlorofluoromethane	6.069	101	377105	51.75	ppb	99
13) freon-113	6.834	101	268817	58.27	ppb	91
14) acrolein	6.043	56	239m	0.38	ppb	
15) 1,1-dichloroethene	6.632	96	222667	56.33	ppb	98
16) acetone	6.205	58	25824	26.20	ppb	91
17) Methyl Acetate	6.819	43	230974	62.09	ppb	# 91
18) methylene chloride	6.780	84	237675	55.59	ppb	# 80
19) methyl tert butyl ether	7.564	73	534199	51.37	ppb	88
20) acrylonitrile	6.696	53	98693	51.74	ppb	95
21) allyl chloride	6.874	41	532820	61.39	ppb	92
22) trans-1,2-dichloroethene	7.467	96	246860	54.35	ppb	96
23) iodomethane	6.689	142	416803	52.40	ppb	97
24) carbon disulfide	7.054	76	639461	54.54	ppb	97
25) propionitrile	8.082	54	25053	66.26	ppb	100
26) vinyl acetate	7.820	43	440919	71.79	ppb	99
27) chloroprene	8.083	53	494746	71.31	ppb	92
28) di-isopropyl ether	8.123	45	979319	58.80	ppb	96
29) methacrylonitrile	8.239	41	141079	56.93	ppb	95
30) 2-butanone	8.132	72	18810	36.14	ppb	# 1
31) Ethyl Acetate	8.117	43	798319	55.05	ug/L	93
32) Hexane	8.106	41	420074	59.35	ppb	# 83
33) 1,1-dichloroethane	7.719	63	484907	58.75	ppb	100
34) tert-butyl ethyl ether	8.519	59	831462	56.95	ppb	98
35) isobutyl alcohol	8.539	43	160107	305.59	ppb	87
36) 2,2-dichloropropane	8.577	77	307580	61.67	ppb	93

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20579.D
 Acq On : 19 Jun 2014 9:02 am
 Operator : garyk
 Sample : bs
 Misc : ms32098,msu924,,,,5,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 19 09:51:24 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.289	96	264028	55.02	ppb	98
38) bromochloromethane	8.453	128	140905	57.58	ppb	90
39) chloroform	8.492	83	399483	56.40	ppb	99
41) Tetrahydrofuran	8.830	42	72235	52.14	ppb	89
42) 1,1,1-trichloroethane	9.242	97	361419	55.52	ppb	97
44) Cyclohexane	9.527	56	507864	54.56	ppb	90
45) carbon tetrachloride	9.606	117	338803	53.73	ppb	99
46) 1,1-dichloropropene	9.418	75	272517	55.39	ppb	90
47) benzene	9.641	78	770022	53.07	ppb	96
48) 1,2-dichloroethane	9.142	62	303270	53.06	ppb	99
49) tert-amyl methyl ether	9.764	73	540169	50.38	ppb	89
50) heptane	10.125	43	332979m	54.88	ppb	
51) trichloroethene	10.261	95	222020	50.68	ppb	77
52) 1,2-dichloropropane	10.229	63	212482	50.32	ppb	100
53) dibromomethane	10.204	93	127310	52.83	ppb	91
54) bromodichloromethane	10.316	83	266888	54.45	ppb	95
55) Methylcyclohexane	10.780	83	368280	56.06	ppb	86
56) 2-chloroethyl vinyl ether	10.702	63	66199	35.47	ppb	94
57) methyl methacrylate	10.420	69	60472	38.67	ppb	# 78
58) 1,4-dioxane	10.450	88	9089	337.38	ppb	83
59) cis-1,3-dichloropropene	10.937	75	226099	45.79	ppb	91
61) 4-methyl-2-pentanone	11.046	43	200504	47.21	ppb	92
62) toluene	11.713	92	374916	47.86	ppb	97
63) trans-1,3-dichloropropene	11.358	75	164612	43.16	ppb	98
64) 1,1,2-trichloroethane	11.529	83	96274	41.83	ppb	92
65) ethyl methacrylate	11.741	69	124076	38.47	ppb	76
67) tetrachloroethene	12.456	166	180345	52.63	ppb	96
68) 1,3-dichloropropane	11.765	76	168152	45.54	ppb	95
69) dibromochloromethane	12.056	129	189930	51.49	ppb	96
70) 1,2-dibromoethane	12.308	107	128398	45.64	ppb	99
71) 2-hexanone	11.927	43	91941m	30.12	ppb	
72) chlorobenzene	13.135	112	450850	49.96	ppb	87
73) 1,1,1,2-tetrachloroethane	13.054	131	255875	57.41	ppb	94
74) ethylbenzene	13.311	91	742399	52.26	ppb	93
75) m,p-xylene	13.495	106	625074	104.75	ppb	84
76) o-xylene	13.908	106	376899	56.32	ppb	85
77) styrene	13.835	104	454183	48.98	ppb	96
78) bromoform	13.662	173	121791	47.53	ppb	99
79) trans-1,4-dichloro-2-b...	14.063	53	42877	35.45	ppb	# 61
81) isopropylbenzene	14.271	105	1037782	56.37	ppb	98
83) bromobenzene	14.559	156	232592	47.49	ppb	# 77
84) 1,1,2,2-tetrachloroethane	13.913	83	213102	57.08	ppb	98
85) 1,2,3-trichloropropane	14.062	75	181103	41.72	ppb	99
86) n-propylbenzene	14.717	91	1009778	50.56	ppb	92
87) 2-chlorotoluene	14.834	91	665846	52.24	ppb	86
88) 4-chlorotoluene	14.911	91	608154	47.49	ppb	83
89) 1,3,5-trimethylbenzene	14.994	105	955414	52.73	ppb	93
90) tert-butylbenzene	15.299	91	545119	55.19	ppb	84
91) 1,2,4-trimethylbenzene	15.403	105	954800	52.02	ppb	99
92) sec-butylbenzene	15.522	105	1303458	56.68	ppb	93

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20579.D
 Acq On : 19 Jun 2014 9:02 am
 Operator : garyk
 Sample : bs
 Misc : ms32098,msu924,,,,5,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 19 09:51:24 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

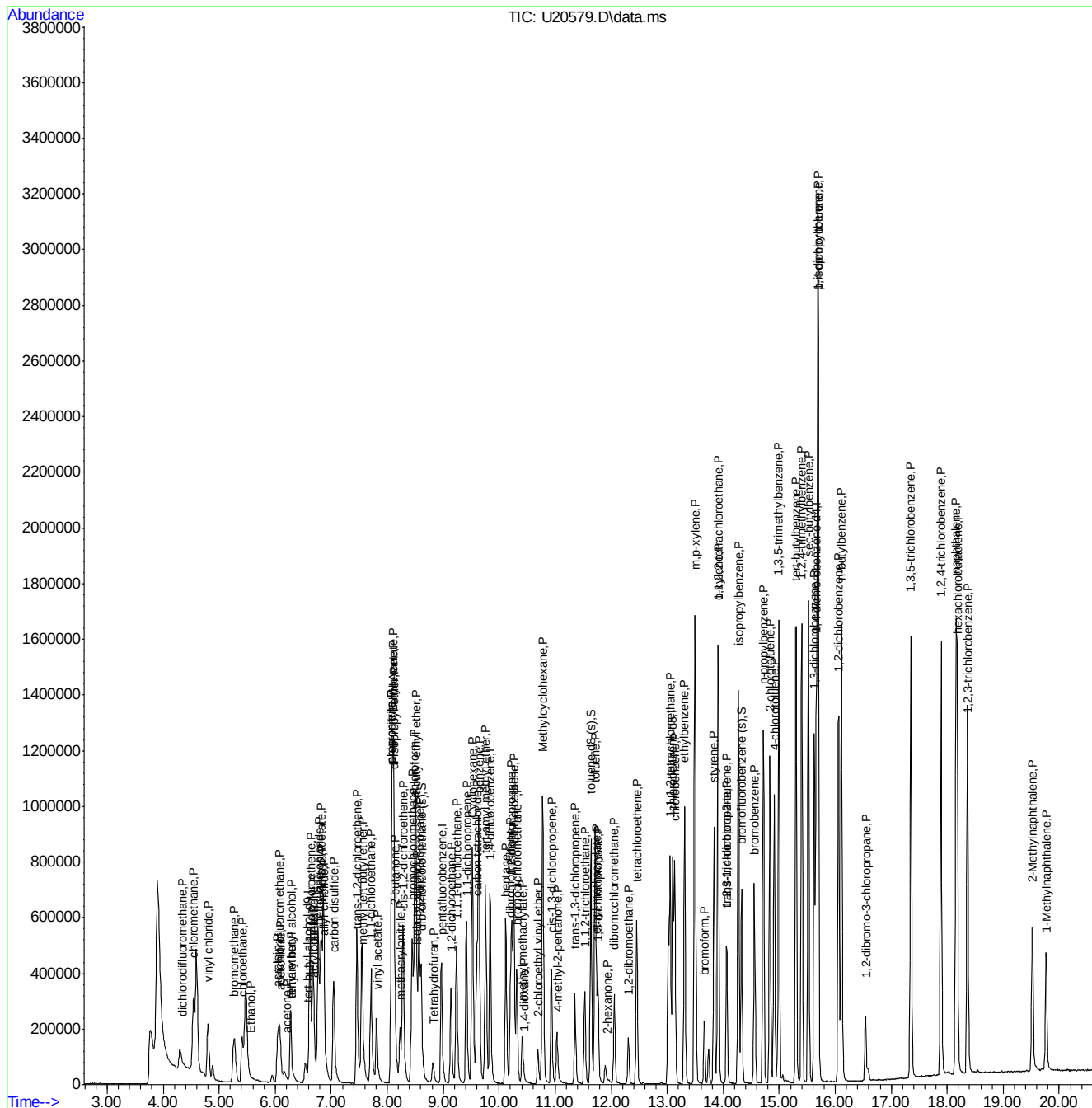
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.625	146	561932	52.01	ppb	97
94) p-isopropyltoluene	15.695	119	1136775	54.86	ppb	94
95) 1,4-dichlorobenzene	15.692	146	577941	50.92	ppb	100
96) 1,2-dichlorobenzene	16.061	146	632652	53.98	ppb	97
97) n-butylbenzene	16.114	91	990376	54.86	ppb	86
98) 1,2-dibromo-3-chloropr...	16.544	75	59070	49.15	ppb	73
99) 1,3,5-trichlorobenzene	17.353	180	546078	60.06	ug/L	95
100) 1,2,4-trichlorobenzene	17.892	180	524157	61.16	ppb	94
101) hexachlorobutadiene	18.181	225	245087	61.95	ppb	97
102) naphthalene	18.158	128	1272912	57.66	ppb	100
103) 2-Methylnaphthalene	19.526	142	342874	32.04	ug/L	98
104) 1-Methylnaphthalene	19.774	142	279957	31.87	ug/L	98
105) 1,2,3-trichlorobenzene	18.365	180	467062	59.77	ppb	96

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

Quantitation Report (QT Reviewed)

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Data Path   : D:\msdchem\1\data\U140619\
Data File   : U20579.D
Acq On      : 19 Jun 2014    9:02 am
Operator    : garyk
Sample      : bs
Misc        : ms32098,msu924,,,,,5,1
ALS Vial    : 3      Sample Multiplier: 1
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Quant Time: Jun 19 09:51:24 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



U140606W.m Thu Jun 19 10:46:18 2014

Page: 4

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20586.D
 Acq On : 19 Jun 2014 12:13 pm
 Operator : garyk
 Sample : mc31396-1ms
 Misc : ms32105,msu924,,,,5,5
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 19 15:56:59 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.597	65	188596	50.00	ppb	0.00
4) pentafluorobenzene	8.974	168	402348	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.842	114	693862	50.00	ppb	0.00
66) chlorobenzene-d5	13.098	82	303684	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.663	152	395166	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.613	113	258896	59.46	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	118.92%		
60) toluene-d8 (s)	11.639	98	748991	56.59	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	113.18%		
82) bromofluorobenzene (s)	14.327	95	282548	56.44	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	112.88%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.287	59	217766	545.00	ppb	95
3) Ethanol	5.567	45	256223	4365.22	ppb	97
5) dichlorodifluoromethane	4.334	85	195425	48.05	ppb	89
6) chloromethane	4.554	50	537042	50.13	ppb	96
7) vinyl chloride	4.809	62	351973	46.05	ppb	97
8) bromomethane	5.280	96	201473	49.82	ppb	95
9) chloroethane	5.420	64	168631	48.39	ppb	98
10) ethyl ether	6.288	59	217988	53.54	ppb	87
11) acetonitrile	6.084	41	34917m	50.22	ppb	
12) trichlorofluoromethane	6.070	101	371805	44.31	ppb	100
13) freon-113	6.837	101	270587	50.93	ppb	90
15) 1,1-dichloroethene	6.631	96	222800	48.95	ppb	99
16) acetone	6.191	58	25686m	22.63	ppb	
17) Methyl Acetate	6.813	43	230746	53.87	ppb	# 93
18) methylene chloride	6.778	84	242195	49.19	ppb	# 80
19) methyl tert butyl ether	7.564	73	563284	47.04	ppb	89
20) acrylonitrile	6.696	53	99423	45.27	ppb	98
21) allyl chloride	6.872	41	500137	50.04	ppb	91
22) trans-1,2-dichloroethene	7.467	96	248995	47.61	ppb	94
23) iodomethane	6.687	142	423337	46.22	ppb	99
24) carbon disulfide	7.053	76	552951	40.96	ppb	97
25) propionitrile	8.081	54	25953	59.60	ppb	100
26) vinyl acetate	7.818	43	478395	67.65	ppb	97
27) chloroprene	8.081	53	487290	60.99	ppb	94
28) di-isopropyl ether	8.122	45	1012872	52.81	ppb	98
29) methacrylonitrile	8.237	41	148149	51.92	ppb	93
30) 2-butanone	8.130	72	19501	32.53	ppb	# 1
31) Ethyl Acetate	8.115	43	813992	48.74	ug/L	92
32) Hexane	8.104	41	423344	51.94	ppb	# 75
33) 1,1-dichloroethane	7.717	63	491365	51.70	ppb	99
34) tert-butyl ethyl ether	8.519	59	875157	52.06	ppb	99
35) isobutyl alcohol	8.537	43	163385	269.03	ppb	76
36) 2,2-dichloropropane	8.577	77	313806	54.64	ppb	91
37) cis-1,2-dichloroethene	8.286	96	266081	48.15	ppb	99

7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20586.D
 Acq On : 19 Jun 2014 12:13 pm
 Operator : garyk
 Sample : mc31396-1ms
 Misc : ms32105,msu924,,,,,5,5
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 19 15:56:59 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.453	128	146392	51.95	ppb	88
39) chloroform	8.491	83	401958	49.29	ppb	100
41) Tetrahydrofuran	8.828	42	77578	48.63	ppb	88
42) 1,1,1-trichloroethane	9.241	97	369532	49.29	ppb	98
44) Cyclohexane	9.526	56	511073	49.55	ppb	89
45) carbon tetrachloride	9.605	117	343352	49.14	ppb	100
46) 1,1-dichloropropene	9.416	75	266553	48.89	ppb	90
47) benzene	9.640	78	773877	48.13	ppb	98
48) 1,2-dichloroethane	9.141	62	313649	49.53	ppb	100
49) tert-amyl methyl ether	9.763	73	568220	47.83	ppb	91
50) heptane	10.118	43	351097m	52.22	ppb	
51) trichloroethene	10.261	95	219108	45.13	ppb	74
52) 1,2-dichloropropane	10.227	63	232863	49.77	ppb	99
53) dibromomethane	10.202	93	134996	50.55	ppb	93
54) bromodichloromethane	10.315	83	273200	50.30	ppb	97
55) Methylcyclohexane	10.779	83	362141	49.75	ppb	88
57) methyl methacrylate	10.419	69	84508	48.77	ppb	83
58) 1,4-dioxane	10.449	88	7359	250.35	ppb	99
59) cis-1,3-dichloropropene	10.936	75	272444	49.80	ppb	90
61) 4-methyl-2-pentanone	11.046	43	235921	50.13	ppb	93
62) toluene	11.712	92	441906	50.92	ppb	98
63) trans-1,3-dichloropropene	11.357	75	230325	54.50	ppb	98
64) 1,1,2-trichloroethane	11.529	83	125344	49.15	ppb	95
65) ethyl methacrylate	11.738	69	166076	46.47	ppb #	69
67) tetrachloroethene	12.455	166	211553	50.38	ppb	96
68) 1,3-dichloropropane	11.764	76	229302	50.67	ppb	90
69) dibromochloromethane	12.054	129	228597	50.57	ppb	96
70) 1,2-dibromoethane	12.307	107	172880	50.14	ppb	96
71) 2-hexanone	11.917	43	124571	33.30	ppb	100
72) chlorobenzene	13.134	112	553146	50.02	ppb	87
73) 1,1,1,2-tetrachloroethane	13.053	131	271930	49.78	ppb	98
74) ethylbenzene	13.310	91	861864	49.51	ppb	93
75) m,p-xylene	13.494	106	722665	98.83	ppb	85
76) o-xylene	13.907	106	403122	49.16	ppb	88
77) styrene	13.834	104	526944	46.38	ppb	96
78) bromoform	13.662	173	133190	42.41	ppb	99
79) trans-1,4-dichloro-2-b...	14.062	53	40916	27.61	ppb #	34
81) isopropylbenzene	14.271	105	1090639	56.96	ppb	96
83) bromobenzene	14.559	156	264987	52.02	ppb #	80
84) 1,1,2,2-tetrachloroethane	13.913	83	240711	62.00	ppb	99
85) 1,2,3-trichloropropane	14.062	75	202477	44.85	ppb	98
86) n-propylbenzene	14.716	91	1080326	52.01	ppb	93
87) 2-chlorotoluene	14.834	91	702575	53.01	ppb	85
88) 4-chlorotoluene	14.911	91	668236	50.18	ppb	83
89) 1,3,5-trimethylbenzene	14.993	105	990143	52.55	ppb	96
90) tert-butylbenzene	15.299	91	544783	53.04	ppb	84
91) 1,2,4-trimethylbenzene	15.402	105	984797	51.60	ppb	100
92) sec-butylbenzene	15.522	105	1294177	54.12	ppb	92
93) 1,3-dichlorobenzene	15.624	146	568373	50.58	ppb	98
94) p-isopropyltoluene	15.695	119	1133701	52.61	ppb	94

7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20586.D
Acq On : 19 Jun 2014 12:13 pm
Operator : garyk
Sample : mc31396-1ms
Misc : ms32105,msu924,,,,5,5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 19 15:56:59 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 1,4-dichlorobenzene	15.691	146	581163	49.24	ppb	99
96) 1,2-dichlorobenzene	16.060	146	627649	51.49	ppb	96
97) n-butylbenzene	16.113	91	946273	50.40	ppb	86
98) 1,2-dibromo-3-chloropr...	16.544	75	58282	46.64	ppb #	67
99) 1,3,5-trichlorobenzene	17.352	180	496849	52.55	ug/L	96
100) 1,2,4-trichlorobenzene	17.891	180	473590	53.13	ppb	94
101) hexachlorobutadiene	18.180	225	217828	52.95	ppb	94
102) naphthalene	18.158	128	1237046	53.88	ppb	100
103) 2-Methylnaphthalene	19.525	142	318397	28.61	ug/L	98
104) 1-Methylnaphthalene	19.771	142	257842	28.22	ug/L	98
105) 1,2,3-trichlorobenzene	18.364	180	418383	51.49	ppb	96

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

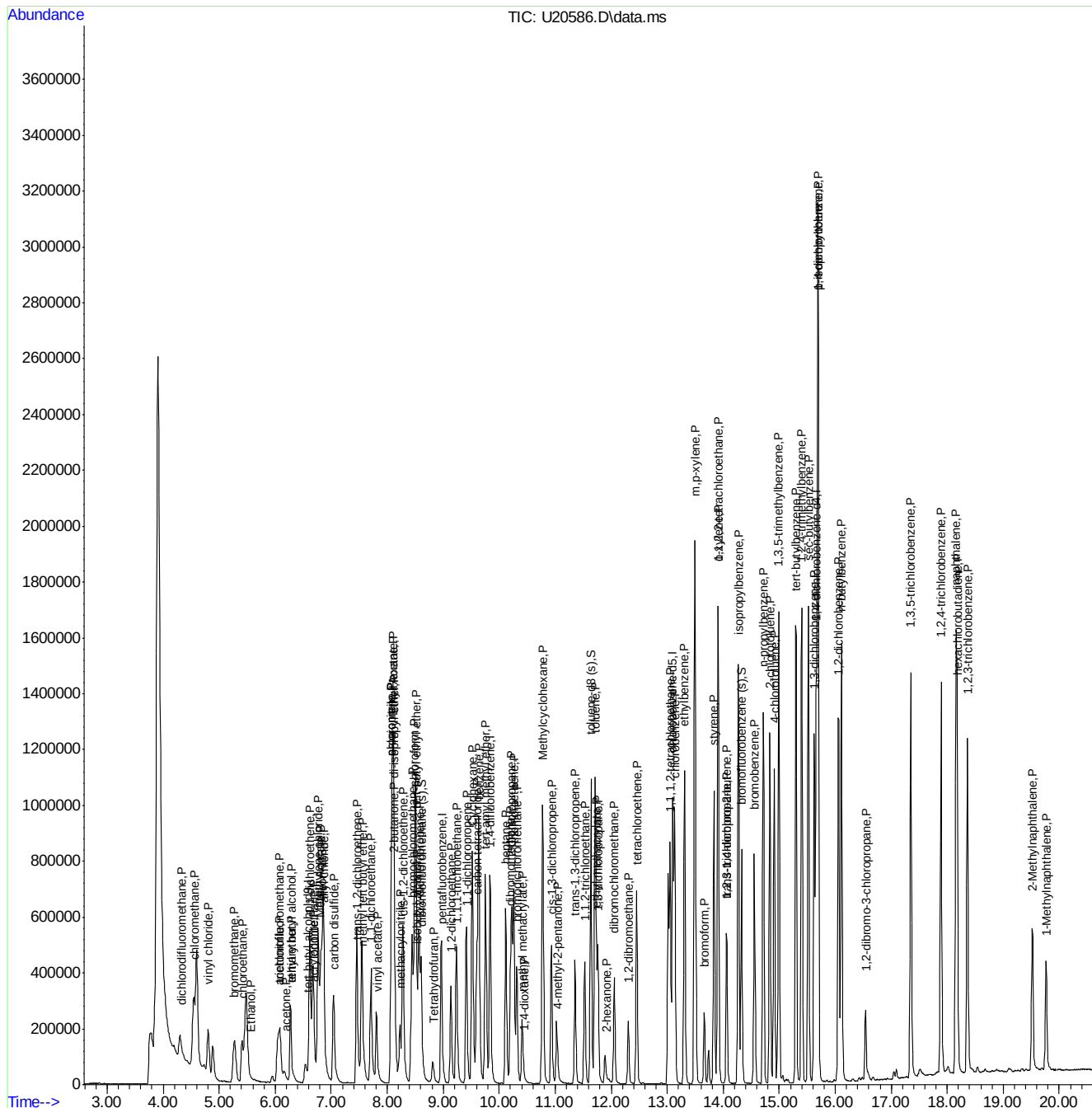
7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20586.D
Acq On : 19 Jun 2014 12:13 pm
Operator : garyk
Sample : mc31396-1ms
Misc : ms32105,msu924,,,,5,5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 19 15:56:59 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20587.D
 Acq On : 19 Jun 2014 12:40 pm
 Operator : garyk
 Sample : mc31396-1msd
 Misc : ms32105,msu924,,,,5,5
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 19 15:57:58 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.608	65	191902	50.00	ppb	0.01
4) pentafluorobenzene	8.975	168	403593	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.844	114	688328	50.00	ppb	0.00
66) chlorobenzene-d5	13.098	82	287798	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.663	152	406456	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.614	113	261330	59.83	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	119.66%		
60) toluene-d8 (s)	11.640	98	719333	54.79	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	109.58%		
82) bromofluorobenzene (s)	14.328	95	275884	53.58	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	107.16%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.290	59	210874	518.66	ppb	95
3) Ethanol	5.581	45	299991	5044.03	ppb	97
5) dichlorodifluoromethane	4.331	85	195978	48.03	ppb	87
6) chloromethane	4.556	50	551593	51.33	ppb	99
7) vinyl chloride	4.807	62	359955	46.95	ppb	95
8) bromomethane	5.280	96	206808	50.98	ppb	95
9) chloroethane	5.421	64	172394	49.31	ppb	98
10) ethyl ether	6.290	59	210874	51.63	ppb	83
11) acetonitrile	6.090	41	33791m	48.45	ppb	
12) trichlorofluoromethane	6.071	101	383195	45.52	ppb	97
13) freon-113	6.837	101	278356	52.23	ppb	92
15) 1,1-dichloroethene	6.635	96	234476	51.36	ppb	100
16) acetone	6.205	58	26446	23.23	ppb	98
17) Methyl Acetate	6.822	43	221213	51.48	ppb	# 85
18) methylene chloride	6.781	84	245536	49.71	ppb	83
19) methyl tert butyl ether	7.565	73	567236	47.23	ppb	89
20) acrylonitrile	6.705	53	99026	44.95	ppb	94
21) allyl chloride	6.875	41	526670	52.53	ppb	92
22) trans-1,2-dichloroethene	7.468	96	257794	49.14	ppb	97
23) iodomethane	6.689	142	436693	47.53	ppb	98
24) carbon disulfide	7.055	76	585264	43.22	ppb	98
25) propionitrile	8.084	54	26153	59.88	ppb	100
26) vinyl acetate	7.821	43	444748	62.69	ppb	98
27) chloroprene	8.083	53	505880	63.12	ppb	92
28) di-isopropyl ether	8.123	45	1011928	52.60	ppb	97
29) methacrylonitrile	8.240	41	139285	48.66	ppb	93
30) 2-butanone	8.131	72	18813	31.29	ppb	# 1
31) Ethyl Acetate	8.117	43	815672	48.69	ug/L	92
32) Hexane	8.106	41	430461	52.65	ppb	# 82
33) 1,1-dichloroethane	7.719	63	505340	53.00	ppb	99
34) tert-butyl ethyl ether	8.519	59	867749	51.46	ppb	99
35) isobutyl alcohol	8.539	43	160870	263.78	ppb	# 69
36) 2,2-dichloropropane	8.577	77	318728	55.33	ppb	92
37) cis-1,2-dichloroethene	8.289	96	276612	49.90	ppb	96

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20587.D
 Acq On : 19 Jun 2014 12:40 pm
 Operator : garyk
 Sample : mc31396-1msd
 Misc : ms32105,msu924,,,,,5,5
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 19 15:57:58 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.455	128	146066	51.68	ppb	# 87
39) chloroform	8.493	83	410564	50.19	ppb	99
41) Tetrahydrofuran	8.837	42	74894	46.80	ppb	96
42) 1,1,1-trichloroethane	9.243	97	376606	50.08	ppb	97
44) Cyclohexane	9.527	56	515760	50.41	ppb	89
45) carbon tetrachloride	9.606	117	344222	49.66	ppb	97
46) 1,1-dichloropropene	9.418	75	279925	51.76	ppb	92
47) benzene	9.642	78	793861	49.77	ppb	97
48) 1,2-dichloroethane	9.143	62	305399	48.61	ppb	99
49) tert-amyl methyl ether	9.765	73	562456	47.73	ppb	91
50) heptane	10.123	43	347264	52.06	ppb	# 58
51) trichloroethene	10.262	95	228468	47.44	ppb	80
52) 1,2-dichloropropane	10.229	63	228773	49.28	ppb	98
53) dibromomethane	10.204	93	128952	48.68	ppb	93
54) bromodichloromethane	10.316	83	272572	50.59	ppb	98
55) Methylcyclohexane	10.780	83	368294	51.00	ppb	87
57) methyl methacrylate	10.421	69	73876	42.98	ppb	87
58) 1,4-dioxane	10.456	88	8477	288.41	ppb	82
59) cis-1,3-dichloropropene	10.937	75	256419	47.24	ppb	85
61) 4-methyl-2-pentanone	11.044	43	216265	46.32	ppb	94
62) toluene	11.713	92	427502	49.65	ppb	96
63) trans-1,3-dichloropropene	11.358	75	200379	47.80	ppb	96
64) 1,1,2-trichloroethane	11.530	83	112809	44.59	ppb	98
65) ethyl methacrylate	11.740	69	150349	42.41	ppb	76
67) tetrachloroethene	12.455	166	207202	52.07	ppb	94
68) 1,3-dichloropropane	11.765	76	202552	47.23	ppb	91
69) dibromochloromethane	12.055	129	213558	49.85	ppb	99
70) 1,2-dibromoethane	12.307	107	152872	46.79	ppb	99
71) 2-hexanone	11.924	43	109566	30.91	ppb	99
72) chlorobenzene	13.135	112	528453	50.42	ppb	88
73) 1,1,1,2-tetrachloroethane	13.054	131	270328	52.22	ppb	96
74) ethylbenzene	13.310	91	848825	51.45	ppb	92
75) m,p-xylene	13.494	106	708760	102.28	ppb	85
76) o-xylene	13.907	106	404048	51.99	ppb	88
77) styrene	13.835	104	521955	48.47	ppb	98
78) bromoform	13.662	173	132855	44.64	ppb	100
79) trans-1,4-dichloro-2-b...	14.062	53	43417	30.91	ppb	# 46
81) isopropylbenzene	14.271	105	1108937	56.31	ppb	96
83) bromobenzene	14.559	156	263730	50.34	ppb	# 76
84) 1,1,2,2-tetrachloroethane	13.913	83	234343	58.68	ppb	99
85) 1,2,3-trichloropropane	14.062	75	200276	43.13	ppb	97
86) n-propylbenzene	14.716	91	1082103	50.65	ppb	91
87) 2-chlorotoluene	14.834	91	711318	52.18	ppb	82
88) 4-chlorotoluene	14.910	91	676667	49.40	ppb	83
89) 1,3,5-trimethylbenzene	14.994	105	1007301	51.97	ppb	95
90) tert-butylbenzene	15.299	91	554816	52.52	ppb	81
91) 1,2,4-trimethylbenzene	15.403	105	1004096	51.15	ppb	98
92) sec-butylbenzene	15.522	105	1314918	53.46	ppb	92
93) 1,3-dichlorobenzene	15.624	146	587954	50.87	ppb	97
94) p-isopropyltoluene	15.695	119	1162005	52.43	ppb	94

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20587.D
Acq On : 19 Jun 2014 12:40 pm
Operator : garyk
Sample : mc31396-1msd
Misc : ms32105,msu924,,,,,5,5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 19 15:57:58 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

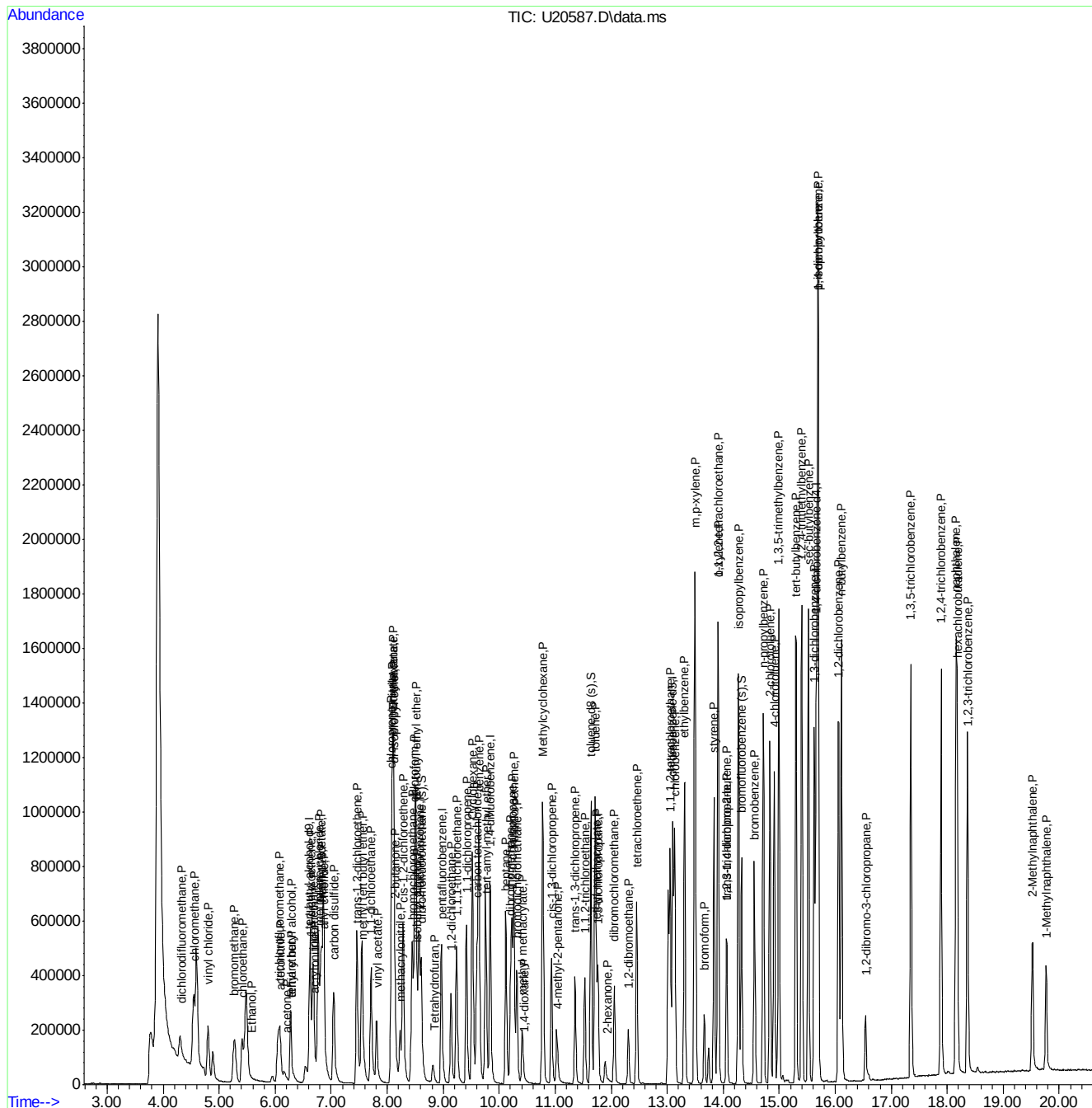
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95)	1,4-dichlorobenzene	15.692	146	603288	49.69	ppb	98
96)	1,2-dichlorobenzene	16.060	146	645316	51.47	ppb	97
97)	n-butylbenzene	16.114	91	988530	51.19	ppb	86
98)	1,2-dibromo-3-chloropr...	16.544	75	61366	47.74	ppb	74
99)	1,3,5-trichlorobenzene	17.353	180	522101	53.69	ug/L	95
100)	1,2,4-trichlorobenzene	17.892	180	499139	54.44	ppb	94
101)	hexachlorobutadiene	18.181	225	229525	54.24	ppb	95
102)	naphthalene	18.158	128	1258967	53.32	ppb	100
103)	2-Methylnaphthalene	19.526	142	314306	27.46	ug/L	99
104)	1-Methylnaphthalene	19.774	142	258311	27.49	ug/L	97
105)	1,2,3-trichlorobenzene	18.365	180	447820	53.58	ppb	94

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20587.D
Acq On : 19 Jun 2014 12:40 pm
Operator : garyk
Sample : mc31396-1msd
Misc : ms32105,msu924,,,,,5,5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 19 15:57:58 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



U140606W.m Thu Jun 19 16:05:04 2014

Page: 4

SW-846 Method 8260

Data File : D:\msdchem\1\data\U140606\U20297.D

Vial: 12

Acq On : 6 Jun 2014 4:42 pm

Operator: garyk

Sample : bfb

Inst : MSU

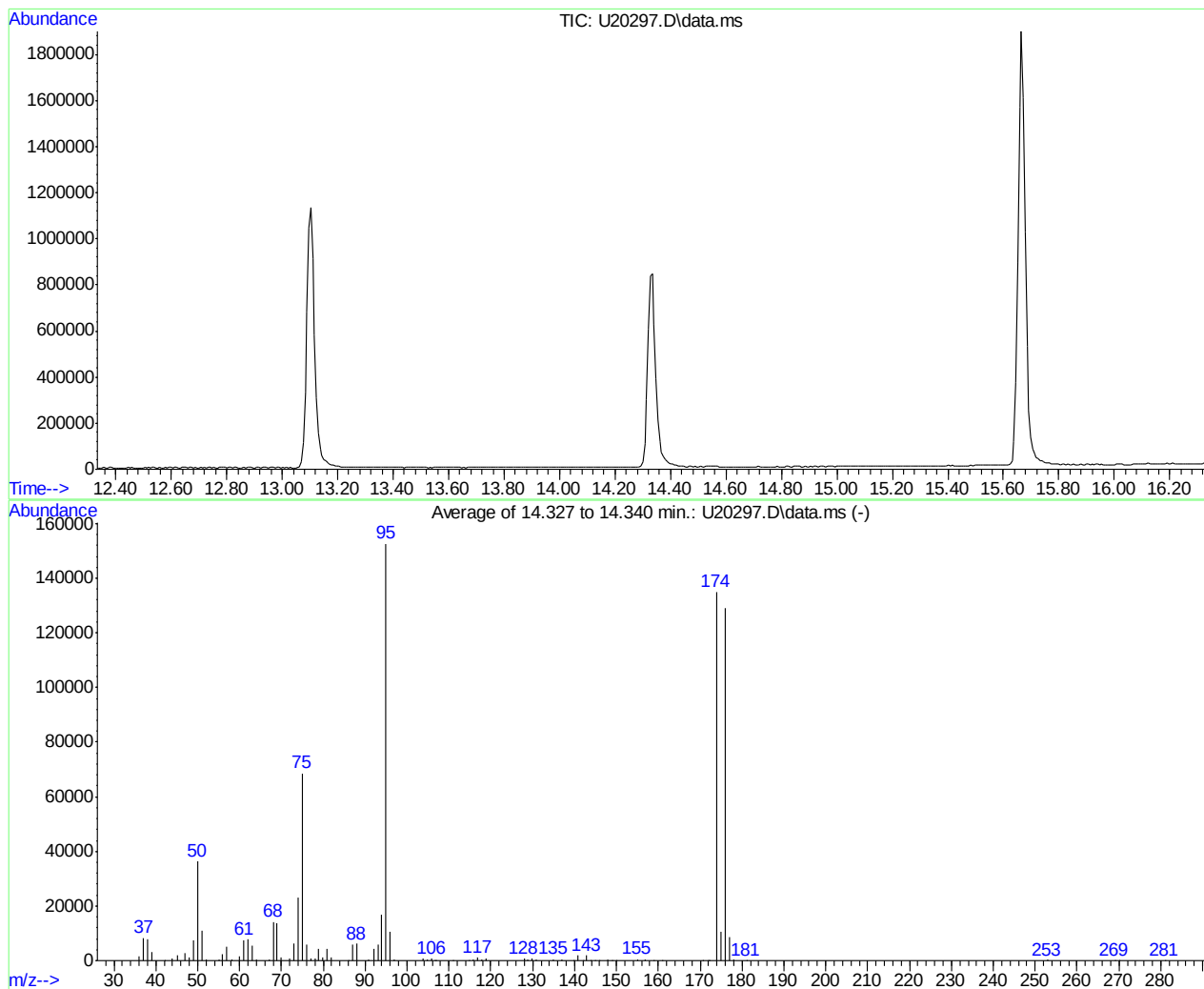
Misc : ms31928,msu915,,,5,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : D:\msdchem\1\methods\U140606W.m (RTE Integrator)

Title : SW-846 Method 8260



Spectrum Information: Average of 14.327 to 14.340 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.8	36309	PASS
75	95	30	60	44.9	68549	PASS
95	95	100	100	100.0	152691	PASS
96	95	5	9	7.0	10624	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	88.4	134904	PASS
175	174	5	9	7.7	10440	PASS
176	174	95	101	95.7	129139	PASS
177	176	5	9	6.5	8438	PASS

U20297.D U140606W.m Mon Jun 09 11:36:19 2014

Average of 14.327 to 14.340 min.: U20297.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1680	51.05	11102	67.00	517	78.90	4368
37.05	8382	52.00	460	68.00	14119	79.95	1238
38.05	7785	55.00	461	69.00	13850	80.90	4422
39.05	3110	56.00	2360	70.00	1011	81.90	992
42.10	90	57.00	5005	72.05	786	86.00	83
44.00	888	58.05	322	73.00	6374	86.95	6065
45.05	1840	60.00	1426	74.00	22907	88.00	6240
47.05	2611	61.00	7574	75.00	68549	90.90	574
47.95	1135	62.00	7722	76.05	5888	92.00	4315
49.00	7414	63.00	5611	76.95	785	93.00	5812
50.00	36309	64.00	545	78.00	666	94.00	16908

Average of 14.327 to 14.340 min.: U20297.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	152691	116.85	1032	141.95	198	160.90	159
95.95	10624	117.85	523	142.90	1911	170.70	67
97.05	379	118.90	865	143.90	70	171.90	88
103.90	630	127.95	728	145.00	141	172.20	130
104.90	306	128.85	312	145.85	172	173.90	134904
105.90	762	129.90	704	147.85	411	174.90	10440
106.70	98	130.95	239	148.85	174	175.90	129139
106.90	85	135.00	472	149.90	202	176.90	8438
110.90	67	136.90	351	154.95	498	177.95	282
114.90	155	139.80	76	156.90	356	181.00	92
115.90	564	140.90	1878	158.85	198	252.95	289

Average of 14.327 to 14.340 min.: U20297.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
268.95	142						
270.10	81						
281.00	92						

SW-846 Method 8260

Data File : D:\msdchem\1\data\U140619\U20578.D

Acq On : 19 Jun 2014 8:34 am

Sample : bfb

Misc : ms32098,msu924,,,5,1

MS Integration Params: RTEINT.P

Vial: 2

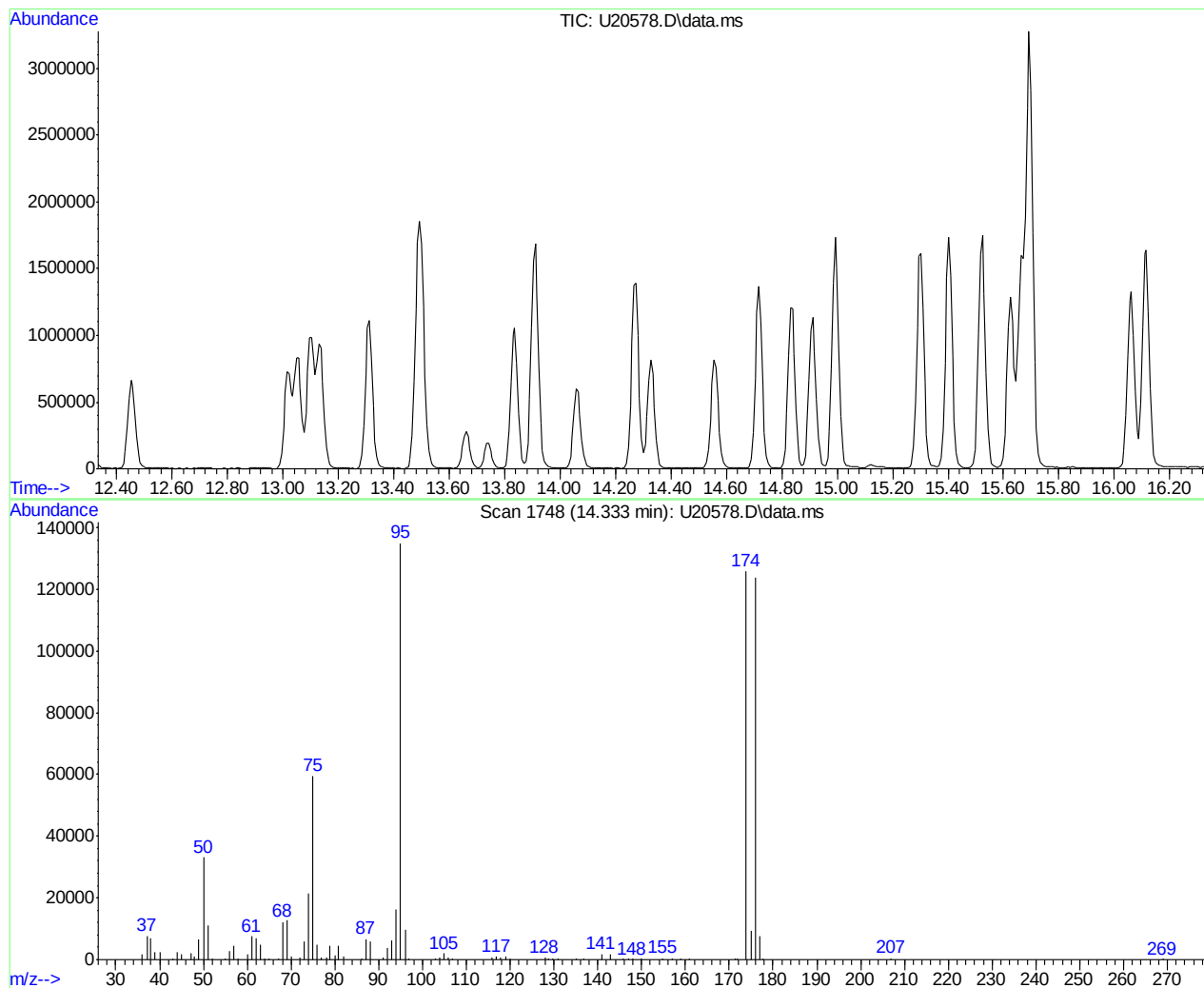
Operator: garyk

Inst : MSU

Multiplr: 1.00

Method : D:\msdchem\1\methods\U140606W.m (RTE Integrator)

Title : SW-846 Method 8260



Spectrum Information: Scan 1748

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.6	33176	PASS
75	95	30	60	44.2	59624	PASS
95	95	100	100	100.0	134976	PASS
96	95	5	9	7.1	9597	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	93.3	125936	PASS
175	174	5	9	7.4	9260	PASS
176	174	95	101	98.4	123896	PASS
177	176	5	9	6.3	7748	PASS

U20578.D U140606W.m Thu Jun 19 10:45:40 2014

Scan 1748 (14.333 min): U20578.D\data.ms
bfb

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1676	50.00	33176	64.00	394	77.00	820
37.10	7765	51.00	11022	65.00	203	78.00	635
38.00	6973	52.00	472	67.10	331	78.90	4352
39.00	2527	55.00	482	68.00	12143	80.00	1298
40.00	2293	56.00	2670	69.00	12706	80.90	4606
43.00	391	57.00	4560	70.00	943	81.90	1018
44.00	2283	58.00	278	72.00	738	86.10	206
45.00	1717	60.00	1597	73.00	5777	87.00	6655
47.10	2112	61.00	7452	74.00	21464	88.00	5737
48.00	989	62.00	6764	75.00	59624	90.90	641
49.00	6747	63.00	4828	76.00	5019	92.00	3883

Scan 1748 (14.333 min): U20578.D\data.ms
bfb

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	6271	116.90	1032	142.90	1772	173.90	125936
94.00	16416	117.90	552	145.70	257	174.90	9260
95.00	134976	118.90	905	146.90	214	175.90	123896
96.00	9597	120.10	472	147.90	299	176.90	7748
96.90	248	127.90	570	149.90	286	177.80	304
103.00	336	128.80	219	154.90	453	207.00	515
103.80	764	129.80	430	156.90	305	269.00	324
105.00	2047	130.90	227	158.90	276		
105.90	753	135.00	403	160.90	209		
106.80	206	136.80	406	171.40	208		
115.90	698	140.90	1837	171.90	342		

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20298.D
 Acq On : 6 Jun 2014 5:09 pm
 Operator : garyk
 Sample : ic915-0.5
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 09 10:24:30 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.610	65	257723	500.00	ppb	0.01
4) pentafluorobenzene	8.979	168	505755	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	828541	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	344683	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	563093	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0d	0.00	ppb	
Spiked Amount 50.000	Range 70 - 130		Recovery =	0.00%	#	
60) toluene-d8 (s)	0.000	98	0d	0.00	ppb	
Spiked Amount 50.000	Range 70 - 130		Recovery =	0.00%	#	
82) bromofluorobenzene (s)	0.000	95	0d	0.00	ppb	
Spiked Amount 50.000	Range 70 - 130		Recovery =	0.00%	#	
Target Compounds						
47) benzene	9.649	78	10765	0.57	ppb	Qvalue 97
51) trichloroethene	10.266	95	2906m	0.50	ppb	
59) cis-1,3-dichloropropene	10.954	75	2673	0.40	ppb	86
63) trans-1,3-dichloropropene	11.386	75	1912	0.36	ppb	87
67) tetrachloroethene	12.466	166	1978	0.42	ppb	80
69) dibromochloromethane	12.069	129	2367	0.48	ppb	99
75) m,p-xylene	13.532	106	8266	1.01	ppb	97
76) o-xylene	13.932	106	4453	0.49	ppb	93
84) 1,1,2,2-tetrachloroethane	13.935	83	2930	0.54	ppb	85

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

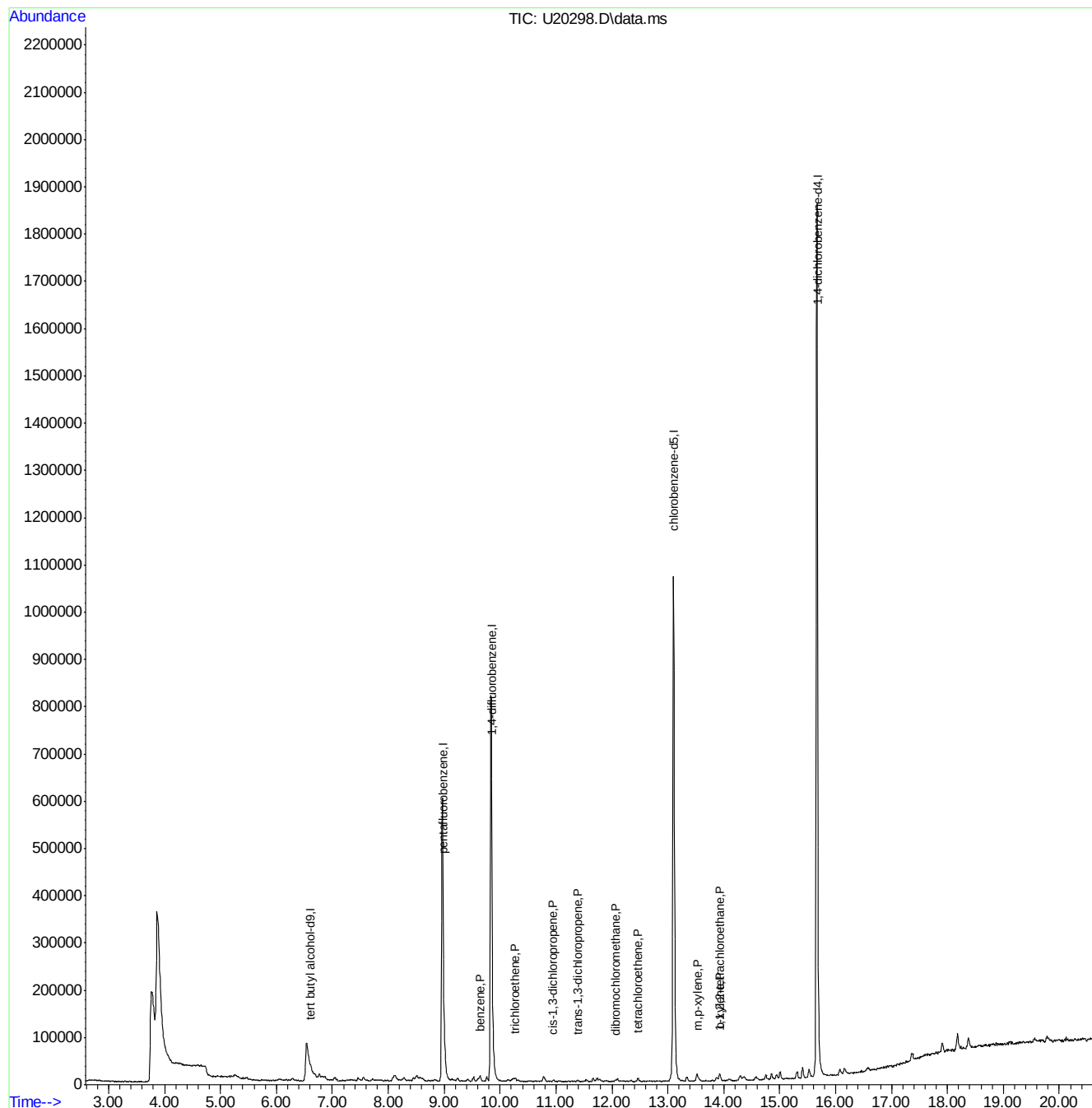
7.6.1

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20298.D
Acq On : 6 Jun 2014 5:09 pm
Operator : garyk
Sample : ic915-0.5
Misc : ms31928,msu915,,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 09 10:24:30 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20299.D
 Acq On : 6 Jun 2014 5:37 pm
 Operator : garyk
 Sample : ic915-1
 Misc : ms31928,msu915,,,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 09 10:30:54 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.604	65	241806	500.00	ppb	0.00
4) pentafluorobenzene	8.980	168	515055	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.847	114	839231	50.00	ppb	0.00
66) chlorobenzene-d5	13.105	82	343853	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.668	152	550974	50.00	ppb	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0d	0.00	ppb	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
60) toluene-d8 (s)	0.000	98	0d	0.00	ppb	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
82) bromofluorobenzene (s)	0.000	95	0d	0.00	ppb	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#

Target Compounds						Qvalue
7) vinyl chloride	4.801	62	11183	1.10	ppb	96
12) trichlorofluoromethane	6.073	101	11613	1.06	ppb	92
15) 1,1-dichloroethene	6.630	96	6211	1.06	ppb	# 77
19) methyl tert butyl ether	7.569	73	17550	1.12	ppb	89
22) trans-1,2-dichloroethene	7.474	96	7625	1.17	ppb	89
33) 1,1-dichloroethane	7.720	63	11520	0.90	ppb	91
37) cis-1,2-dichloroethene	8.292	96	8379	1.20	ppb	83
39) chloroform	8.497	83	10995	1.02	ppb	91
42) 1,1,1-trichloroethane	9.242	97	8780	0.86	ppb	96
45) carbon tetrachloride	9.606	117	7367	0.81	ppb	95
47) benzene	9.648	78	21149	1.11	ppb	92
48) 1,2-dichloroethane	9.148	62	7853	1.04	ppb	88
51) trichloroethene	10.269	95	6020	1.02	ppb	80
54) bromodichloromethane	10.322	83	6739	1.00	ppb	93
59) cis-1,3-dichloropropene	10.953	75	6861	1.01	ppb	86
62) toluene	11.734	92	9276	0.86	ppb	80
63) trans-1,3-dichloropropene	11.382	75	4773	0.89	ppb	94
64) 1,1,2-trichloroethane	11.544	83	3217	1.04	ppb	94
67) tetrachloroethene	12.466	166	4273	0.91	ppb	84
69) dibromochloromethane	12.067	129	5418	1.09	ppb	88
72) chlorobenzene	13.140	112	11870	0.98	ppb	91
74) ethylbenzene	13.337	91	19428	1.01	ppb	90
75) m,p-xylene	13.522	106	15700	1.91	ppb	96
76) o-xylene	13.925	106	9228	1.01	ppb	97
78) bromoform	13.674	173	3893	1.13	ppb	98
84) 1,1,2,2-tetrachloroethane	13.931	83	5241	0.98	ppb	80
89) 1,3,5-trimethylbenzene	15.013	105	23450m	0.86	ppb	
91) 1,2,4-trimethylbenzene	15.409	105	25093m	0.91	ppb	
93) 1,3-dichlorobenzene	15.631	146	15580	0.98	ppb	99
95) 1,4-dichlorobenzene	15.695	146	16569	1.00	ppb	92
96) 1,2-dichlorobenzene	16.078	146	16651	0.97	ppb	83
102) naphthalene	18.179	128	35218m	1.08	ppb	

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20299.D
Acq On : 6 Jun 2014 5:37 pm
Operator : garyk
Sample : ic915-1
Misc : ms31928,msu915,,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 09 10:30:54 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

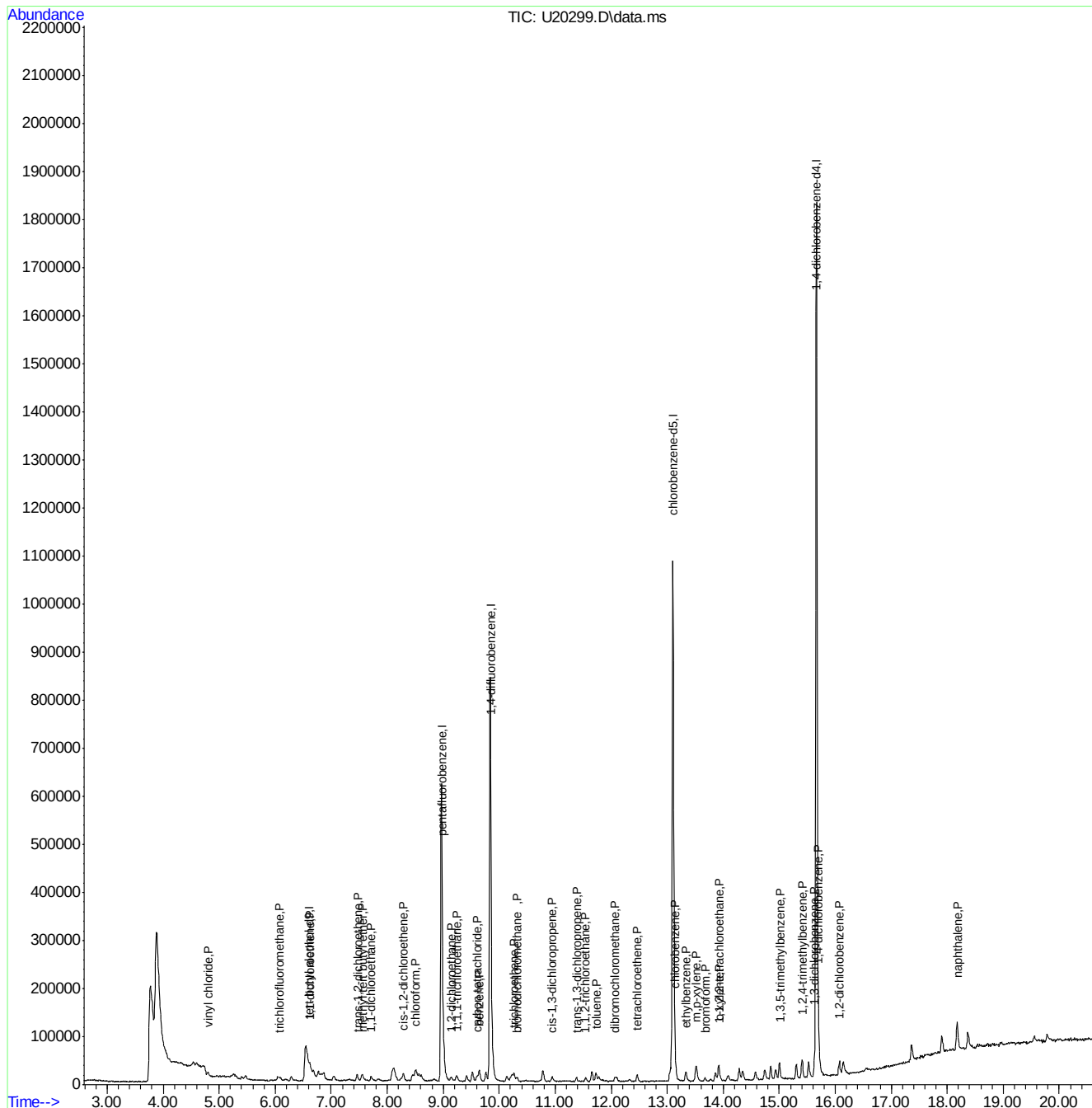
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20299.D
Acq On : 6 Jun 2014 5:37 pm
Operator : garyk
Sample : ic915-1
Misc : ms31928,msu915,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 09 10:30:54 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20300.D
 Acq On : 6 Jun 2014 6:04 pm
 Operator : garyk
 Sample : ic915-2
 Misc : ms31928,msu915,,,5,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 09 11:01:23 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.607	65	255758	500.00	ppb	0.01
4) pentafluorobenzene	8.978	168	506182	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.846	114	843500	50.00	ppb	0.00
66) chlorobenzene-d5	13.104	82	349422	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.667	152	545650	50.00	ppb	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0d	0.00	ppb	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
60) toluene-d8 (s)	0.000	98	0d	0.00	ppb	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
82) bromofluorobenzene (s)	0.000	95	0d	0.00	ppb	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#

Target Compounds						Qvalue
2) tertiary butyl alcohol	6.292	59	11002	20.41	ppb	66
3) Ethanol	5.613	45	27018m	376.27	ppb	
5) dichlorodifluoromethane	4.314	85	10819	1.95	ppb	95
6) chloromethane	4.540	50	31622	2.28	ppb	94
7) vinyl chloride	4.795	62	20963	2.11	ppb	97
8) bromomethane	5.263	96	12136	2.36	ppb	99
9) chloroethane	5.412	64	9660	2.12	ppb	96
12) trichlorofluoromethane	6.067	101	22262	2.06	ppb	95
15) 1,1-dichloroethene	6.628	96	12933	2.24	ppb	90
18) methylene chloride	6.780	84	14959	2.33	ppb	90
19) methyl tert butyl ether	7.567	73	33336	2.16	ppb	71
22) trans-1,2-dichloroethene	7.476	96	16231	2.54	ppb	88
28) di-isopropyl ether	8.136	45	51861	2.04	ppb	97
33) 1,1-dichloroethane	7.720	63	26394	2.10	ppb	97
34) tert-butyl ethyl ether	8.523	59	45336	2.04	ppb	95
37) cis-1,2-dichloroethene	8.296	96	16586	2.41	ppb	79
39) chloroform	8.496	83	22536	2.14	ppb	100
42) 1,1,1-trichloroethane	9.241	97	21334	2.13	ppb	97
45) carbon tetrachloride	9.606	117	19630	2.15	ppb	98
47) benzene	9.646	78	43253	2.26	ppb	95
48) 1,2-dichloroethane	9.155	62	17595	2.32	ppb	97
49) tert-amyl methyl ether	9.762	73	30778	2.06	ppb	95
51) trichloroethene	10.266	95	12722	2.15	ppb	85
52) 1,2-dichloropropane	10.236	63	12033	2.11	ppb	91
53) dibromomethane	10.207	93	6986	2.15	ppb	95
54) bromodichloromethane	10.320	83	13761	2.04	ppb	99
59) cis-1,3-dichloropropene	10.947	75	13898	2.03	ppb	96
62) toluene	11.728	92	22008	2.02	ppb	91
63) trans-1,3-dichloropropene	11.375	75	10524	1.96	ppb	98
64) 1,1,2-trichloroethane	11.538	83	6147	1.98	ppb	88
67) tetrachloroethene	12.462	166	11207	2.34	ppb	94
69) dibromochloromethane	12.064	129	11253	2.24	ppb	99
70) 1,2-dibromoethane	12.323	107	8505	2.25	ppb	90
72) chlorobenzene	13.139	112	27653	2.24	ppb	90

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20300.D
Acq On : 6 Jun 2014 6:04 pm
Operator : garyk
Sample : ic915-2
Misc : ms31928,msu915,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 09 11:01:23 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

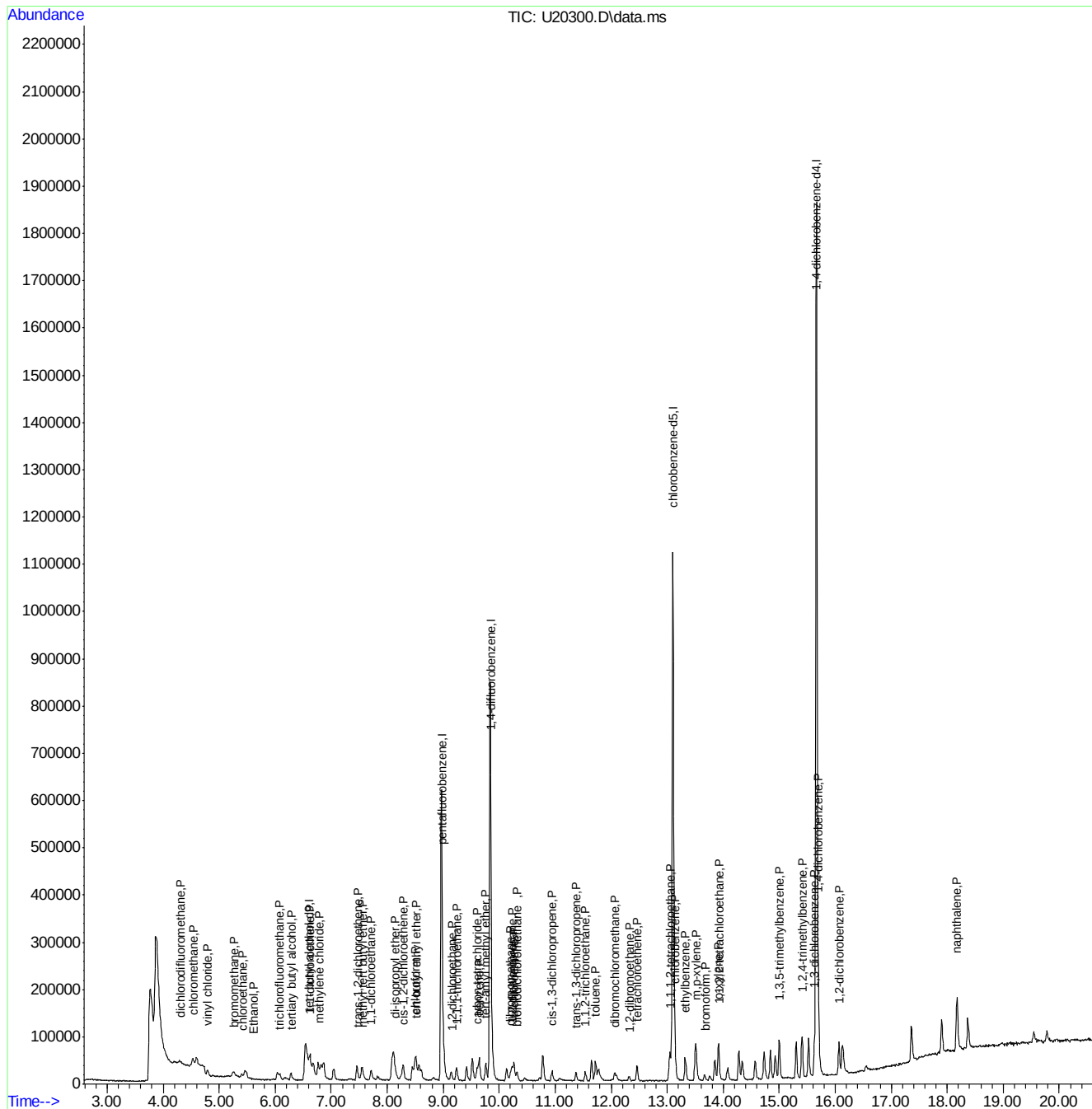
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73)	1,1,1,2-tetrachloroethane	13.056	131	13888	2.25	ppb	91
74)	ethylbenzene	13.328	91	44964	2.30	ppb	94
75)	m,p-xylene	13.512	106	36074	4.33	ppb	93
76)	o-xylene	13.920	106	21243	2.29	ppb	83
78)	bromoform	13.671	173	7588	2.17	ppb	96
84)	1,1,2,2-tetrachloroethane	13.924	83	11284	2.14	ppb	94
89)	1,3,5-trimethylbenzene	15.005	105	53966	2.00	ppb	84
91)	1,2,4-trimethylbenzene	15.409	105	56720	2.08	ppb	98
93)	1,3-dichlorobenzene	15.630	146	31798	2.01	ppb	97
95)	1,4-dichlorobenzene	15.694	146	36514	2.23	ppb	94
96)	1,2-dichlorobenzene	16.073	146	37169	2.18	ppb	94
102)	naphthalene	18.173	128	67862m	2.10	ppb	

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20300.D
Acq On : 6 Jun 2014 6:04 pm
Operator : garyk
Sample : ic915-2
Misc : ms31928,msu915,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 09 11:01:23 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20301.D
Acq On : 6 Jun 2014 6:32 pm
Operator : garyk
Sample : ic915-5
Misc : ms31928,msu915,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 09 11:03:12 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.606	65	252422	500.00	ppb	0.00
4) pentafluorobenzene	8.979	168	511603	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.846	114	865559	50.00	ppb	0.00
66) chlorobenzene-d5	13.103	82	369240	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.666	152	564411	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.617	113	28858	5.16	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	=	10.32%#	
60) toluene-d8 (s)	11.649	98	84864	5.17	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery	=	10.34%#	
82) bromofluorobenzene (s)	14.338	95	36087	5.35	ppb	0.01
Spiked Amount 50.000	Range 70 - 130		Recovery	=	10.70%#	
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.294	59	27755	52.16	ppb	94
3) Ethanol	5.626	45	51111m	721.22	ppb	
5) dichlorodifluoromethane	4.320	85	26059	4.66	ppb	99
6) chloromethane	4.553	50	76628	5.46	ppb	93
7) vinyl chloride	4.802	62	54014	5.37	ppb	93
8) bromomethane	5.266	96	27587	5.30	ppb	87
9) chloroethane	5.416	64	22876	4.98	ppb	95
10) ethyl ether	6.294	59	27755	5.18	ppb	95
11) acetonitrile	6.075	41	4793	5.50	ppb	# 38
12) trichlorofluoromethane	6.071	101	56927	5.21	ppb	99
13) freon-113	6.830	101	35235	4.84	ppb	88
14) acrolein	6.064	56	24112	25.66	ppb	92
15) 1,1-dichloroethene	6.640	96	33174	5.68	ppb	86
17) Methyl Acetate	6.827	43	28227	4.94	ppb	# 81
18) methylene chloride	6.781	84	34509	5.32	ppb	94
19) methyl tert butyl ether	7.569	73	78271	5.01	ppb	85
20) acrylonitrile	6.706	53	14870	5.13	ppb	100
21) allyl chloride	6.880	41	70094	5.04	ppb	92
22) trans-1,2-dichloroethene	7.473	96	34882	5.40	ppb	95
23) iodomethane	6.690	142	62604	5.01	ppb	99
24) carbon disulfide	7.056	76	94124	5.09	ppb	96
25) propionitrile	8.086	54	2721	4.66	ppb	100
26) vinyl acetate	7.838	43	46446m	5.15	ppb	
27) chloroprene	8.089	53	53253	4.97	ppb	97
28) di-isopropyl ether	8.133	45	129972	5.06	ppb	98
29) methacrylonitrile	8.253	41	18900	5.27	ppb	98
30) 2-butanone	8.152	72	3430	4.29	ppb	# 39
31) Ethyl Acetate	8.132	43	111905	5.01	ug/L	98
32) Hexane	8.113	41	54869	5.01	ppb	# 88
33) 1,1-dichloroethane	7.722	63	65462	5.16	ppb	91
34) tert-butyl ethyl ether	8.524	59	111187	4.95	ppb	98
35) isobutyl alcohol	8.505	43	41378	50.70	ppb	91
36) 2,2-dichloropropane	8.578	77	41064	5.13	ppb	90
37) cis-1,2-dichloroethene	8.297	96	37045	5.33	ppb	99

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20301.D
 Acq On : 6 Jun 2014 6:32 pm
 Operator : garyk
 Sample : ic915-5
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 09 11:03:12 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.457	128	19133	5.11	ppb	# 81
39) chloroform	8.495	83	54403	5.10	ppb	100
41) Tetrahydrofuran	8.842	42	12437	6.36	ppb	90
42) 1,1,1-trichloroethane	9.243	97	50988	5.03	ppb	97
44) Cyclohexane	9.529	56	70412	5.16	ppb	88
45) carbon tetrachloride	9.607	117	44664	4.76	ppb	95
46) 1,1-dichloropropene	9.421	75	34831	4.98	ppb	88
47) benzene	9.646	78	102049	5.20	ppb	99
48) 1,2-dichloroethane	9.146	62	42048	5.39	ppb	99
49) tert-amyl methyl ether	9.764	73	76221	4.97	ppb	91
50) heptane	10.136	43	45099	5.26	ppb	# 56
51) trichloroethene	10.266	95	31043	5.12	ppb	77
52) 1,2-dichloropropane	10.235	63	30174	5.16	ppb	98
53) dibromomethane	10.207	93	17572	5.27	ppb	95
54) bromodichloromethane	10.321	83	33938	4.90	ppb	93
55) Methylcyclohexane	10.782	83	47652	4.91	ppb	94
56) 2-chloroethyl vinyl ether	10.719	63	12864	5.11	ppb	96
57) methyl methacrylate	10.457	69	10980	5.15	ppb	87
58) 1,4-dioxane	10.440	88	724m	16.35	ppb	
59) cis-1,3-dichloropropene	10.944	75	35478	5.05	ppb	92
61) 4-methyl-2-pentanone	11.093	43	30423m	5.05	ppb	
62) toluene	11.722	92	55295	4.94	ppb	100
63) trans-1,3-dichloropropene	11.369	75	28494	5.18	ppb	95
64) 1,1,2-trichloroethane	11.536	83	16751	5.26	ppb	99
65) ethyl methacrylate	11.781	69	23473	5.11	ppb	# 1
67) tetrachloroethene	12.460	166	28178	5.56	ppb	96
68) 1,3-dichloropropane	11.774	76	29494	5.55	ppb	93
69) dibromochloromethane	12.062	129	28635	5.39	ppb	96
70) 1,2-dibromoethane	12.315	107	22710	5.69	ppb	96
71) 2-hexanone	11.994	43	22613m	4.95	ppb	
72) chlorobenzene	13.138	112	71379	5.47	ppb	87
73) 1,1,1,2-tetrachloroethane	13.056	131	35681	5.46	ppb	94
74) ethylbenzene	13.321	91	110498	5.34	ppb	89
75) m,p-xylene	13.504	106	93211	10.59	ppb	84
76) o-xylene	13.914	106	52726	5.37	ppb	95
77) styrene	13.848	104	72689	5.38	ppb	95
78) bromoform	13.668	173	18934	5.12	ppb	98
79) trans-1,4-dichloro-2-b...	14.077	53	9713	5.46	ppb	96
81) isopropylbenzene	14.280	105	135998	4.85	ppb	97
83) bromobenzene	14.569	156	35593	4.90	ppb	# 78
84) 1,1,2,2-tetrachloroethane	13.920	83	28400	5.21	ppb	96
85) 1,2,3-trichloropropane	14.073	75	32511	5.04	ppb	96
86) n-propylbenzene	14.727	91	151558	5.02	ppb	94
87) 2-chlorotoluene	14.840	91	96572	5.07	ppb	82
88) 4-chlorotoluene	14.921	91	97989	5.17	ppb	89
89) 1,3,5-trimethylbenzene	15.001	105	134955	4.83	ppb	95
90) tert-butylbenzene	15.303	91	68711	4.58	ppb	84
91) 1,2,4-trimethylbenzene	15.406	105	136830	4.86	ppb	100
92) sec-butylbenzene	15.527	105	171193	4.78	ppb	95
93) 1,3-dichlorobenzene	15.628	146	81426	4.98	ppb	94

7.6.4

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20301.D
Acq On : 6 Jun 2014 6:32 pm
Operator : garyk
Sample : ic915-5
Misc : ms31928,msu915,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 09 11:03:12 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

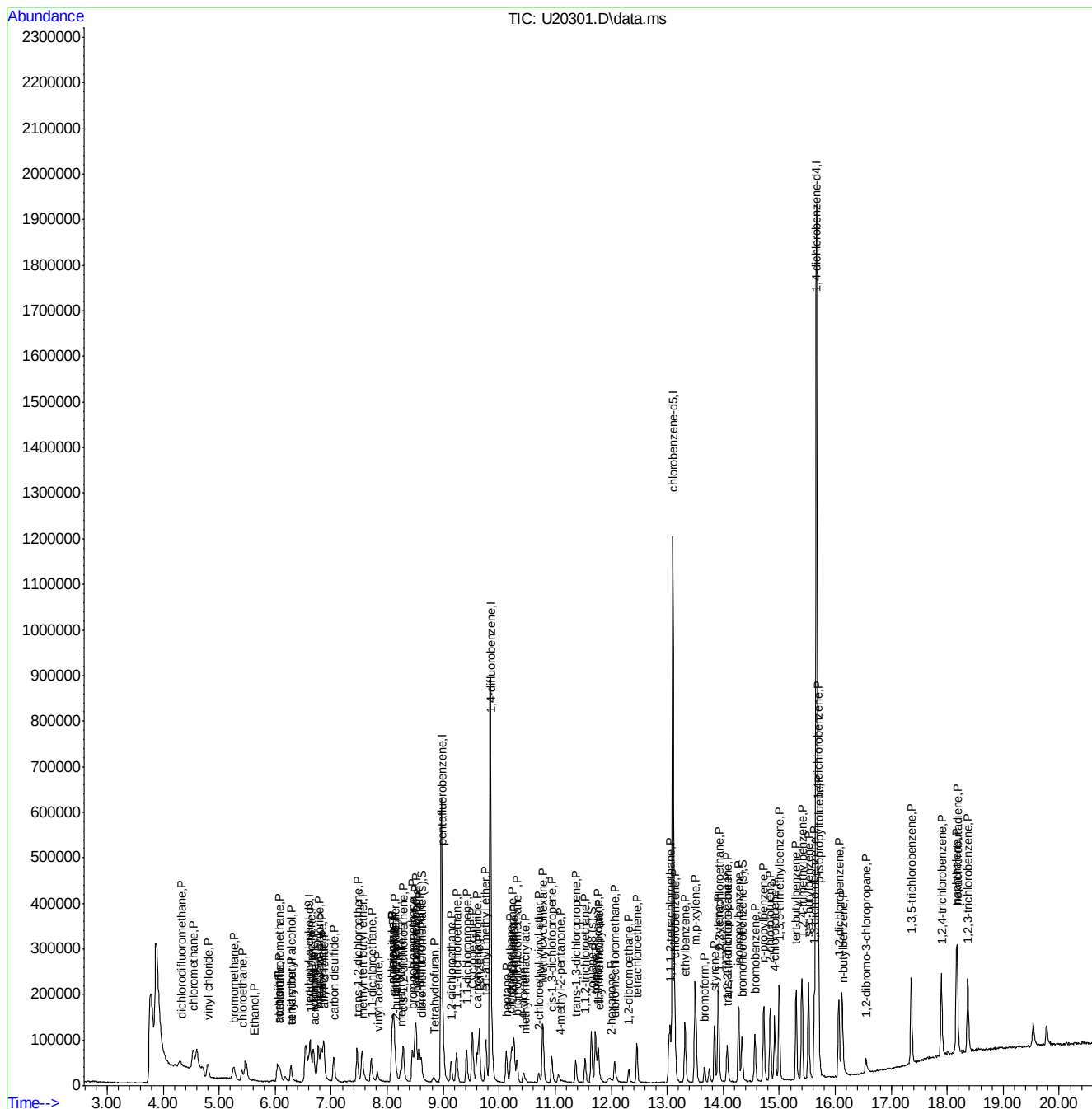
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	15.704	119	155397	4.82	ppb	93
95) 1,4-dichlorobenzene	15.694	146	87514	5.17	ppb	100
96) 1,2-dichlorobenzene	16.068	146	89132	5.05	ppb	98
97) n-butylbenzene	16.135	91	142225	5.12	ppb	86
98) 1,2-dibromo-3-chloropr...	16.557	75	10405	5.99	ppb	77
99) 1,3,5-trichlorobenzene	17.361	180	70093	4.97	ug/L	98
100) 1,2,4-trichlorobenzene	17.901	180	66240	4.99	ppb	93
101) hexachlorobutadiene	18.183	225	32767	5.51	ppb	96
102) naphthalene	18.168	128	167331	5.02	ppb	100
105) 1,2,3-trichlorobenzene	18.371	180	61005	5.10	ppb	94

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20301.D
Acq On : 6 Jun 2014 6:32 pm
Operator : garyk
Sample : ic915-5
Misc : ms31928,msu915,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 09 11:03:12 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20302.D
 Acq On : 6 Jun 2014 6:59 pm
 Operator : garyk
 Sample : ic915-10
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 09 11:04:38 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.608	65	263542	500.00	ppb	0.01
4) pentafluorobenzene	8.977	168	519049	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.845	114	860274	50.00	ppb	0.00
66) chlorobenzene-d5	13.102	82	369102	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.665	152	560509	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.615	113	59093	10.42	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	20.84%#		
60) toluene-d8 (s)	11.645	98	167383	10.27	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	20.54%#		
82) bromofluorobenzene (s)	14.334	95	71289	10.65	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	21.30%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.291	59	55713	100.29	ppb	94
3) Ethanol	5.626	45	94595m	1278.49	ppb	
5) dichlorodifluoromethane	4.324	85	54563	9.61	ppb	88
6) chloromethane	4.550	50	147747	10.37	ppb	99
7) vinyl chloride	4.803	62	104178	10.21	ppb	98
8) bromomethane	5.270	96	54568	10.34	ppb	98
9) chloroethane	5.416	64	46388	9.95	ppb	91
10) ethyl ether	6.291	59	55713	10.25	ppb	85
11) acetonitrile	6.096	41	10137	11.48	ppb	# 41
12) trichlorofluoromethane	6.070	101	112557	10.15	ppb	95
13) freon-113	6.831	101	73444	9.95	ppb	91
14) acrolein	6.066	56	50409	52.87	ppb	92
15) 1,1-dichloroethene	6.633	96	62308	10.51	ppb	94
16) acetone	6.184	58	13968m	10.33	ppb	
17) Methyl Acetate	6.816	43	53781m	9.28	ppb	
18) methylene chloride	6.780	84	67049	10.18	ppb	89
19) methyl tert butyl ether	7.567	73	158545	10.00	ppb	89
20) acrylonitrile	6.701	53	29814	10.14	ppb	79
21) allyl chloride	6.878	41	139831	9.92	ppb	96
22) trans-1,2-dichloroethene	7.472	96	67871	10.35	ppb	98
23) iodomethane	6.688	142	125745	9.92	ppb	97
24) carbon disulfide	7.054	76	188356	10.05	ppb	99
25) propionitrile	8.086	54	6574	11.09	ppb	100
26) vinyl acetate	7.832	43	82678m	9.03	ppb	
27) chloroprene	8.086	53	109219	10.05	ppb	95
28) di-isopropyl ether	8.129	45	256914	9.85	ppb	94
29) methacrylonitrile	8.252	41	38126	10.47	ppb	96
30) 2-butanone	8.145	72	7277	8.98	ppb	# 65
31) Ethyl Acetate	8.125	43	223755	9.87	ug/L	99
32) Hexane	8.109	41	112249	10.10	ppb	# 92
33) 1,1-dichloroethane	7.720	63	130759	10.16	ppb	97
34) tert-butyl ethyl ether	8.522	59	221996	9.74	ppb	97
35) isobutyl alcohol	8.547	43	42643	51.50	ppb	# 34
36) 2,2-dichloropropane	8.576	77	80601	9.92	ppb	89

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20302.D
 Acq On : 6 Jun 2014 6:59 pm
 Operator : garyk
 Sample : ic915-10
 Misc : ms31928,msu915,,,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 09 11:04:38 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.294	96	73562	10.44	ppb	95
38) bromochloromethane	8.455	128	37911	9.97	ppb #	83
39) chloroform	8.494	83	108797	10.06	ppb	98
41) Tetrahydrofuran	8.842	42	22804	11.50	ppb	95
42) 1,1,1-trichloroethane	9.243	97	100990	9.82	ppb	96
44) Cyclohexane	9.527	56	142169	10.48	ppb	89
45) carbon tetrachloride	9.607	117	93212	9.99	ppb	100
46) 1,1-dichloropropene	9.420	75	73291	10.54	ppb	92
47) benzene	9.644	78	202644	10.39	ppb	100
48) 1,2-dichloroethane	9.145	62	80066	10.33	ppb	99
49) tert-amyl methyl ether	9.772	73	162011	10.63	ppb	90
50) heptane	10.129	43	91420	10.73	ppb #	61
51) trichloroethene	10.265	95	62895	10.43	ppb	78
52) 1,2-dichloropropane	10.232	63	58044	9.99	ppb	99
53) dibromomethane	10.206	93	34712	10.47	ppb	98
54) bromodichloromethane	10.319	83	68699	9.98	ppb	96
55) Methylcyclohexane	10.781	83	99627	10.33	ppb	94
56) 2-chloroethyl vinyl ether	10.711	63	24555	9.81	ppb	94
57) methyl methacrylate	10.439	69	20974	9.89	ppb	83
58) 1,4-dioxane	10.454	88	2472m	56.18	ppb	
59) cis-1,3-dichloropropene	10.941	75	68056	9.75	ppb	89
61) 4-methyl-2-pentanone	11.066	43	58821m	9.82	ppb	
62) toluene	11.718	92	108592	9.76	ppb	92
63) trans-1,3-dichloropropene	11.366	75	53873	9.85	ppb	97
64) 1,1,2-trichloroethane	11.533	83	30892	9.75	ppb	90
65) ethyl methacrylate	11.762	69	43237	9.48	ppb #	1
67) tetrachloroethene	12.459	166	55822	11.02	ppb	92
68) 1,3-dichloropropane	11.770	76	56695	10.68	ppb	85
69) dibromochloromethane	12.060	129	55825	10.51	ppb	91
70) 1,2-dibromoethane	12.312	107	42720	10.71	ppb	97
71) 2-hexanone	11.960	43	43865m	9.61	ppb	
72) chlorobenzene	13.137	112	137648	10.55	ppb	89
73) 1,1,1,2-tetrachloroethane	13.056	131	69074	10.58	ppb	97
74) ethylbenzene	13.317	91	221307	10.70	ppb	92
75) m,p-xylene	13.500	106	186519	21.19	ppb	85
76) o-xylene	13.911	106	103118	10.51	ppb	86
77) styrene	13.844	104	143530	10.63	ppb	98
78) bromoform	13.666	173	38455	10.39	ppb	100
79) trans-1,4-dichloro-2-b...	14.072	53	17576	9.88	ppb #	82
81) isopropylbenzene	14.277	105	276070	9.92	ppb	98
83) bromobenzene	14.565	156	70416	9.77	ppb #	82
84) 1,1,2,2-tetrachloroethane	13.918	83	54843	10.12	ppb	98
85) 1,2,3-trichloropropane	14.069	75	64803	10.12	ppb	98
86) n-propylbenzene	14.722	91	301592	10.06	ppb	92
87) 2-chlorotoluene	14.837	91	190996	10.10	ppb	84
88) 4-chlorotoluene	14.917	91	189053	10.05	ppb	86
89) 1,3,5-trimethylbenzene	14.998	105	276222	9.95	ppb	97
90) tert-butylbenzene	15.302	91	141682	9.50	ppb	90
91) 1,2,4-trimethylbenzene	15.405	105	273975	9.79	ppb	98
92) sec-butylbenzene	15.525	105	347300	9.77	ppb	93

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20302.D
Acq On : 6 Jun 2014 6:59 pm
Operator : garyk
Sample : ic915-10
Misc : ms31928,msu915,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 09 11:04:38 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

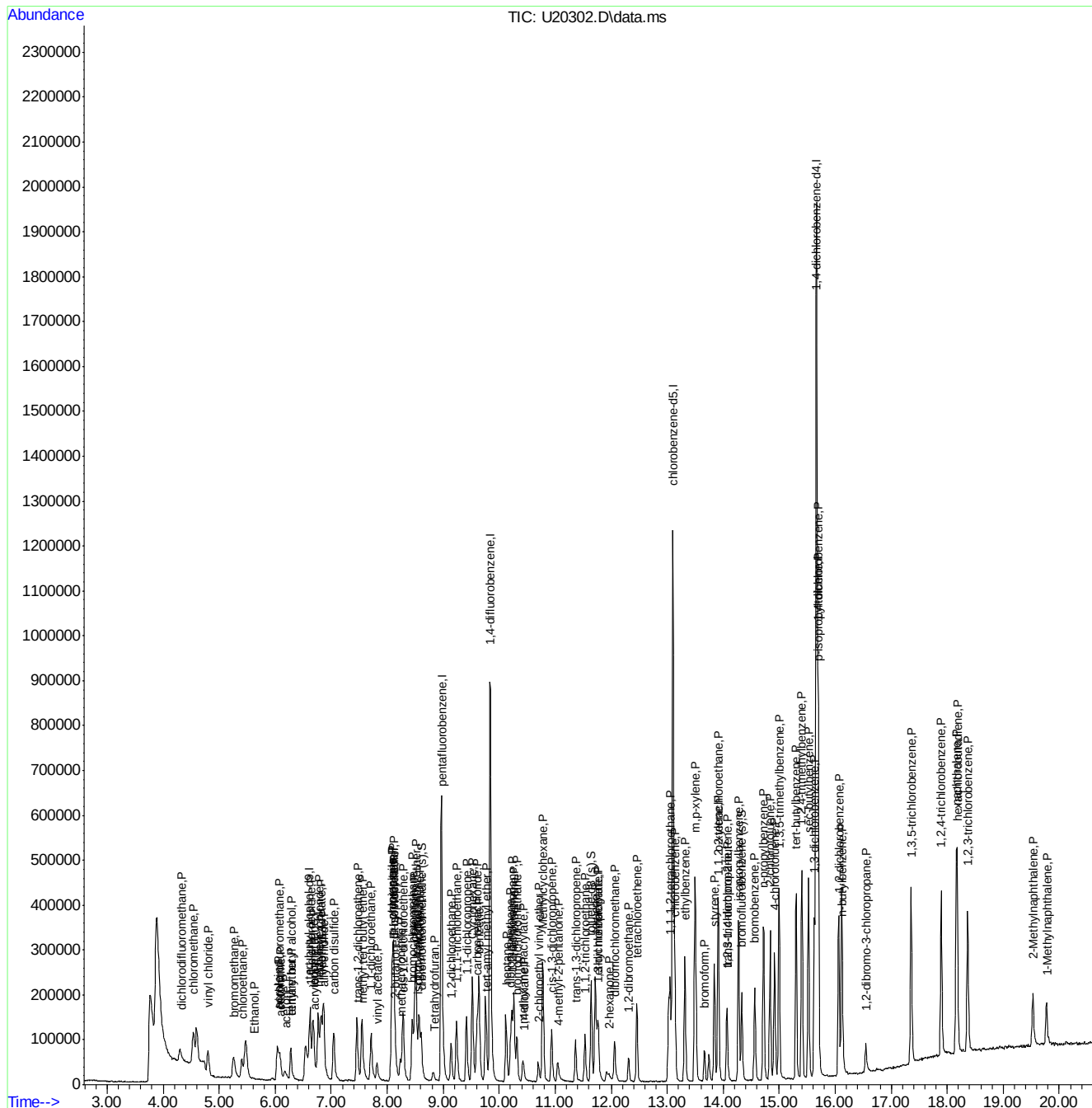
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.627	146	158982	9.78	ppb	97
94) p-isopropyltoluene	15.701	119	318512	9.95	ppb	93
95) 1,4-dichlorobenzene	15.693	146	169311	10.06	ppb	98
96) 1,2-dichlorobenzene	16.065	146	176429	10.06	ppb	95
97) n-butylbenzene	16.126	91	280513	10.17	ppb	83
98) 1,2-dibromo-3-chloropr...	16.559	75	19604	11.36	ppb #	77
99) 1,3,5-trichlorobenzene	17.358	180	143401	10.23	ug/L	95
100) 1,2,4-trichlorobenzene	17.898	180	133919	10.15	ppb	94
101) hexachlorobutadiene	18.182	225	65489	11.08	ppb	98
102) naphthalene	18.164	128	333171	10.06	ppb	100
103) 2-Methylnaphthalene	19.541	142	84653	5.08	ug/L	98
104) 1-Methylnaphthalene	19.783	142	68664	5.36	ug/L	98
105) 1,2,3-trichlorobenzene	18.370	180	122156	10.29	ppb	94

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20302.D
Acq On : 6 Jun 2014 6:59 pm
Operator : garyk
Sample : ic915-10
Misc : ms31928,msu915,,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 09 11:04:38 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



U140606W.m Mon Jun 09 11:36:51 2014

Page: 4

7.6.5

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20303.D
 Acq On : 6 Jun 2014 7:26 pm
 Operator : garyk
 Sample : ic915-25
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 09 11:05:36 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.608	65	257726	500.00	ppb	0.01
4) pentafluorobenzene	8.977	168	504288	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.844	114	856336	50.00	ppb	0.00
66) chlorobenzene-d5	13.100	82	386923	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.664	152	571549	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.615	113	137051	24.87	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	49.74%#		
60) toluene-d8 (s)	11.642	98	403951	24.89	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	49.78%#		
82) bromofluorobenzene (s)	14.330	95	172142	25.22	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	50.44%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.292	59	129074	237.60	ppb	92
3) Ethanol	5.620	45	195935m	2707.91	ppb	
5) dichlorodifluoromethane	4.324	85	135765	24.61	ppb	94
6) chloromethane	4.556	50	350894	25.36	ppb	99
7) vinyl chloride	4.807	62	249231	25.14	ppb	93
8) bromomethane	5.273	96	130070	25.36	ppb	91
9) chloroethane	5.420	64	112794	24.90	ppb	94
10) ethyl ether	6.292	59	129074	24.44	ppb	91
11) acetonitrile	6.097	41	23783m	27.71	ppb	
12) trichlorofluoromethane	6.072	101	264716	24.58	ppb	99
13) freon-113	6.833	101	172609	24.07	ppb	90
14) acrolein	6.071	56	119319	128.82	ppb	98
15) 1,1-dichloroethene	6.638	96	145126	25.21	ppb	95
16) acetone	6.206	58	38466	29.29	ppb	# 85
17) Methyl Acetate	6.825	43	137828	24.48	ppb	# 89
18) methylene chloride	6.781	84	152002	23.75	ppb	89
19) methyl tert butyl ether	7.566	73	369736	23.99	ppb	92
20) acrylonitrile	6.705	53	71364	24.97	ppb	93
21) allyl chloride	6.874	41	323244	23.60	ppb	94
22) trans-1,2-dichloroethene	7.469	96	154543	24.27	ppb	96
23) iodomethane	6.691	142	297264	24.14	ppb	96
24) carbon disulfide	7.056	76	442709	24.30	ppb	97
25) propionitrile	8.085	54	13891	24.12	ppb	100
26) vinyl acetate	7.827	43	222064	24.96	ppb	98
27) chloroprene	8.086	53	257749	24.41	ppb	91
28) di-isopropyl ether	8.126	45	608871	24.03	ppb	91
29) methacrylonitrile	8.244	41	86142	24.36	ppb	98
30) 2-butanone	8.139	72	18165	23.07	ppb	# 75
31) Ethyl Acetate	8.122	43	531298	24.13	ug/L	98
32) Hexane	8.108	41	261149	24.19	ppb	# 86
33) 1,1-dichloroethane	7.720	63	300561	24.03	ppb	98
34) tert-butyl ethyl ether	8.522	59	534322	24.12	ppb	98
35) isobutyl alcohol	8.540	43	98775	122.78	ppb	92
36) 2,2-dichloropropane	8.578	77	192393	24.38	ppb	90

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20303.D
 Acq On : 6 Jun 2014 7:26 pm
 Operator : garyk
 Sample : ic915-25
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 09 11:05:36 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.291	96	167386	24.45	ppb	97
38) bromochloromethane	8.455	128	89923	24.35	ppb	88
39) chloroform	8.494	83	256443	24.40	ppb	98
41) Tetrahydrofuran	8.842	42	49792	25.84	ppb	93
42) 1,1,1-trichloroethane	9.244	97	242057	24.22	ppb	95
44) Cyclohexane	9.527	56	332185	24.60	ppb	89
45) carbon tetrachloride	9.607	117	224026	24.12	ppb	97
46) 1,1-dichloropropene	9.419	75	169733	24.53	ppb	91
47) benzene	9.643	78	476732	24.56	ppb	94
48) 1,2-dichloroethane	9.144	62	190873	24.74	ppb	99
49) tert-amyl methyl ether	9.768	73	378931	24.97	ppb	93
50) heptane	10.125	43	209819	24.73	ppb	# 56
51) trichloroethene	10.263	95	146587	24.43	ppb	72
52) 1,2-dichloropropane	10.231	63	140311	24.25	ppb	100
53) dibromomethane	10.205	93	81026	24.56	ppb	95
54) bromodichloromethane	10.317	83	163627	23.89	ppb	98
55) Methylcyclohexane	10.780	83	235658	24.55	ppb	93
56) 2-chloroethyl vinyl ether	10.704	63	61831	24.81	ppb	96
57) methyl methacrylate	10.428	69	50811	24.08	ppb	94
58) 1,4-dioxane	10.454	88	4414m	100.78	ppb	
59) cis-1,3-dichloropropene	10.938	75	163880	23.59	ppb	89
61) 4-methyl-2-pentanone	11.057	43	144809	24.29	ppb	95
62) toluene	11.714	92	264728	23.91	ppb	99
63) trans-1,3-dichloropropene	11.361	75	130253	23.92	ppb	96
64) 1,1,2-trichloroethane	11.532	83	76559	24.28	ppb	96
65) ethyl methacrylate	11.749	69	110307	24.29	ppb	# 1
67) tetrachloroethene	12.456	166	128972	24.30	ppb	96
68) 1,3-dichloropropane	11.767	76	138158	24.83	ppb	90
69) dibromochloromethane	12.057	129	134872	24.22	ppb	99
70) 1,2-dibromoethane	12.309	107	105286	25.19	ppb	98
71) 2-hexanone	11.929	43	117164	24.48	ppb	92
72) chlorobenzene	13.136	112	336396	24.60	ppb	87
73) 1,1,1,2-tetrachloroethane	13.055	131	168167	24.57	ppb	97
74) ethylbenzene	13.312	91	540929	24.95	ppb	93
75) m,p-xylene	13.496	106	452965	49.10	ppb	84
76) o-xylene	13.909	106	258540	25.13	ppb	85
77) styrene	13.836	104	344394	24.32	ppb	99
78) bromoform	13.663	173	94190	24.28	ppb	100
79) trans-1,4-dichloro-2-b...	14.065	53	46946	25.18	ppb	96
81) isopropylbenzene	14.272	105	678794	23.92	ppb	97
83) bromobenzene	14.561	156	176539	24.02	ppb	# 80
84) 1,1,2,2-tetrachloroethane	13.915	83	134992	24.43	ppb	96
85) 1,2,3-trichloropropane	14.065	75	157198	24.07	ppb	98
86) n-propylbenzene	14.718	91	743318	24.32	ppb	91
87) 2-chlorotoluene	14.835	91	468419	24.29	ppb	83
88) 4-chlorotoluene	14.912	91	455208	23.72	ppb	86
89) 1,3,5-trimethylbenzene	14.995	105	667036	23.56	ppb	96
90) tert-butylbenzene	15.300	91	354779	23.33	ppb	84
91) 1,2,4-trimethylbenzene	15.403	105	679382	23.82	ppb	98
92) sec-butylbenzene	15.523	105	861037	23.74	ppb	92

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20303.D
Acq On : 6 Jun 2014 7:26 pm
Operator : garyk
Sample : ic915-25
Misc : ms31928,msu915,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 09 11:05:36 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

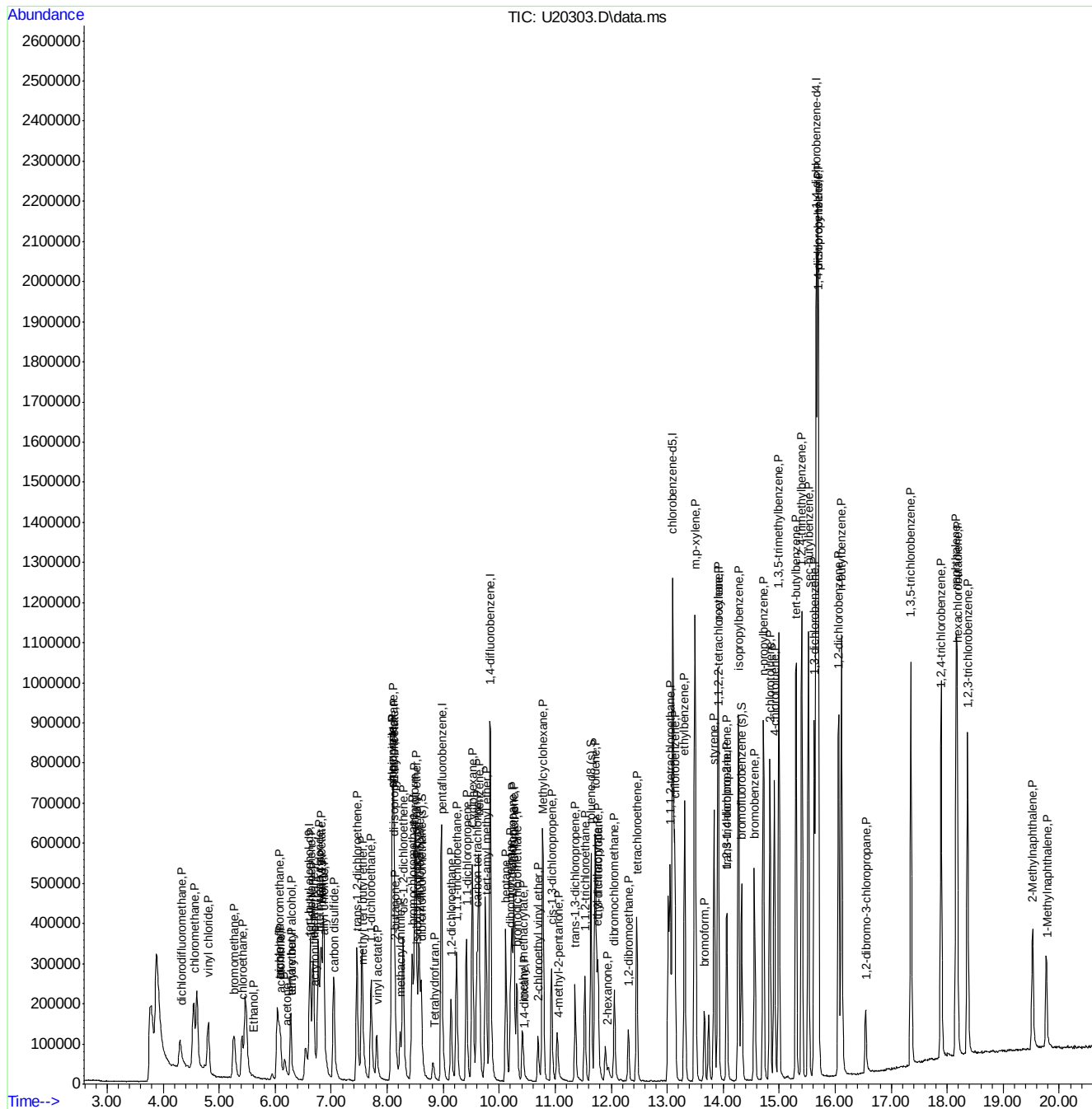
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.625	146	396936	23.95	ppb	99
94) p-isopropyltoluene	15.696	119	772577	23.66	ppb	93
95) 1,4-dichlorobenzene	15.693	146	416609	24.28	ppb	99
96) 1,2-dichlorobenzene	16.062	146	433157	24.23	ppb	97
97) n-butylbenzene	16.117	91	679437	24.16	ppb	84
98) 1,2-dibromo-3-chloropr...	16.550	75	45046	25.59	ppb #	64
99) 1,3,5-trichlorobenzene	17.355	180	350728	24.55	ug/L	95
100) 1,2,4-trichlorobenzene	17.894	180	322770	24.00	ppb	92
101) hexachlorobutadiene	18.182	225	153565	25.48	ppb	97
102) naphthalene	18.161	128	820773	24.30	ppb	100
103) 2-Methylnaphthalene	19.532	142	207530	12.21	ug/L	97
104) 1-Methylnaphthalene	19.778	142	161252	12.34	ug/L	99
105) 1,2,3-trichlorobenzene	18.367	180	295999	24.45	ppb	96

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20303.D
Acq On : 6 Jun 2014 7:26 pm
Operator : garyk
Sample : ic915-25
Misc : ms31928,msu915,,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 09 11:05:36 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



U140606W.m Mon Jun 09 11:36:55 2014

Page: 4

7.6.6

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20304.D
 Acq On : 6 Jun 2014 7:53 pm
 Operator : garyk
 Sample : icc915-50
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 11:06:17 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.596	65	248501	500.00	ppb	0.00
4) pentafluorobenzene	8.974	168	500192	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.843	114	866492	50.00	ppb	0.00
66) chlorobenzene-d5	13.098	82	408429	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.664	152	586937	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.613	113	273270	50.00	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.00%		
60) toluene-d8 (s)	11.640	98	821057	50.00	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.00%		
82) bromofluorobenzene (s)	14.328	95	350528	50.00	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.00%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.288	59	261903	500.00	ppb	89
3) Ethanol	5.573	45	355286	5092.49	ppb	97
5) dichlorodifluoromethane	4.315	85	273642	50.00	ppb	96
6) chloromethane	4.548	50	686220	50.00	ppb	100
7) vinyl chloride	4.799	62	491724	50.00	ppb	98
8) bromomethane	5.271	96	254402	50.00	ppb	96
9) chloroethane	5.417	64	224632	50.00	ppb	97
10) ethyl ether	6.288	59	261903	50.00	ppb	91
11) acetonitrile	6.084	41	46682m	54.84	ppb	
12) trichlorofluoromethane	6.067	101	534197	50.00	ppb	99
13) freon-113	6.830	101	355574	50.00	ppb	91
14) acrolein	6.059	56	229684	250.00	ppb	92
15) 1,1-dichloroethene	6.629	96	285551	50.00	ppb	98
16) acetone	6.191	58	72603m	55.74	ppb	
17) Methyl Acetate	6.817	43	279210	50.00	ppb	# 90
18) methylene chloride	6.780	84	317373	50.00	ppb	91
19) methyl tert butyl ether	7.564	73	764201	50.00	ppb	89
20) acrylonitrile	6.694	53	141717	50.00	ppb	96
21) allyl chloride	6.876	41	679349	50.00	ppb	94
22) trans-1,2-dichloroethene	7.467	96	315837	50.00	ppb	97
23) iodomethane	6.688	142	610590	50.00	ppb	98
24) carbon disulfide	7.053	76	903410	50.00	ppb	98
25) propionitrile	8.084	54	28562	50.00	ppb	100
26) vinyl acetate	7.819	43	441272	50.00	ppb	99
27) chloroprene	8.082	53	523731	50.00	ppb	95
28) di-isopropyl ether	8.122	45	1256594	50.00	ppb	93
29) methacrylonitrile	8.236	41	175377	50.00	ppb	94
30) 2-butanone	8.132	72	39042	50.00	ppb	# 72
31) Ethyl Acetate	8.118	43	1091834	50.00	ug/L	98
32) Hexane	8.105	41	535407	50.00	ppb	# 81
33) 1,1-dichloroethane	7.718	63	620418	50.00	ppb	100
34) tert-butyl ethyl ether	8.519	59	1098593	50.00	ppb	99
35) isobutyl alcohol	8.537	43	199486	250.00	ppb	79
36) 2,2-dichloropropane	8.577	77	391372	50.00	ppb	93

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20304.D
 Acq On : 6 Jun 2014 7:53 pm
 Operator : garyk
 Sample : icc915-50
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 11:06:17 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.289	96	339535	50.00	ppb	96
38) bromochloromethane	8.454	128	183181	50.00	ppb	# 80
39) chloroform	8.492	83	521282	50.00	ppb	98
41) Tetrahydrofuran	8.834	42	95573	50.00	ppb	94
42) 1,1,1-trichloroethane	9.243	97	495745	50.00	ppb	96
44) Cyclohexane	9.526	56	683132	50.00	ppb	90
45) carbon tetrachloride	9.606	117	469902	50.00	ppb	97
46) 1,1-dichloropropene	9.417	75	350138	50.00	ppb	92
47) benzene	9.641	78	982142	50.00	ppb	96
48) 1,2-dichloroethane	9.142	62	390288	50.00	ppb	99
49) tert-amyl methyl ether	9.764	73	767714	50.00	ppb	90
50) heptane	10.122	43	429255	50.00	ppb	# 58
51) trichloroethene	10.261	95	303600	50.00	ppb	76
52) 1,2-dichloropropane	10.228	63	292744	50.00	ppb	99
53) dibromomethane	10.203	93	166941	50.00	ppb	91
54) bromodichloromethane	10.316	83	346530	50.00	ppb	97
55) Methylcyclohexane	10.779	83	485738	50.00	ppb	89
56) 2-chloroethyl vinyl ether	10.698	63	126077	50.00	ppb	97
57) methyl methacrylate	10.419	69	106768	50.00	ppb	89
58) 1,4-dioxane	10.450	88	11079	250.00	ppb	82
59) cis-1,3-dichloropropene	10.936	75	351492	50.00	ppb	90
61) 4-methyl-2-pentanone	11.039	43	301673	50.00	ppb	97
62) toluene	11.712	92	560072	50.00	ppb	98
63) trans-1,3-dichloropropene	11.357	75	275490	50.00	ppb	97
64) 1,1,2-trichloroethane	11.530	83	159538	50.00	ppb	92
65) ethyl methacrylate	11.741	69	229781	50.00	ppb	79
67) tetrachloroethene	12.455	166	280166	50.00	ppb	97
68) 1,3-dichloropropane	11.764	76	293715	50.00	ppb	91
69) dibromochloromethane	12.055	129	293939	50.00	ppb	98
70) 1,2-dibromoethane	12.307	107	220641	50.00	ppb	100
71) 2-hexanone	11.910	43	252658	50.00	ppb	94
72) chlorobenzene	13.135	112	721641	50.00	ppb	89
73) 1,1,1,2-tetrachloroethane	13.054	131	361269	50.00	ppb	96
74) ethylbenzene	13.310	91	1144185	50.00	ppb	92
75) m,p-xylene	13.494	106	973858	100.00	ppb	85
76) o-xylene	13.908	106	542944	50.00	ppb	85
77) styrene	13.835	104	747291	50.00	ppb	99
78) bromoform	13.662	173	204718	50.00	ppb	99
79) trans-1,4-dichloro-2-b...	14.061	53	98421	50.00	ppb	91
81) isopropylbenzene	14.271	105	1457071	50.00	ppb	97
83) bromobenzene	14.559	156	377416	50.00	ppb	# 77
84) 1,1,2,2-tetrachloroethane	13.913	83	283693	50.00	ppb	99
85) 1,2,3-trichloropropane	14.062	75	335325	50.00	ppb	100
86) n-propylbenzene	14.716	91	1569058	50.00	ppb	93
87) 2-chlorotoluene	14.834	91	990299	50.00	ppb	85
88) 4-chlorotoluene	14.911	91	985199	50.00	ppb	84
89) 1,3,5-trimethylbenzene	14.994	105	1453819	50.00	ppb	95
90) tert-butylbenzene	15.299	91	780759	50.00	ppb	84
91) 1,2,4-trimethylbenzene	15.403	105	1464734	50.00	ppb	99
92) sec-butylbenzene	15.522	105	1862073	50.00	ppb	93

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20304.D
Acq On : 6 Jun 2014 7:53 pm
Operator : garyk
Sample : icc915-50
Misc : ms31928,msu915,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 11:06:17 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.625	146	850961	50.00	ppb	98
94) p-isopropyltoluene	15.695	119	1676743	50.00	ppb	93
95) 1,4-dichlorobenzene	15.692	146	880883	50.00	ppb	99
96) 1,2-dichlorobenzene	16.061	146	917947	50.00	ppb	97
97) n-butylbenzene	16.115	91	1443912	50.00	ppb	84
98) 1,2-dibromo-3-chloropr...	16.545	75	90391	50.00	ppb	73
99) 1,3,5-trichlorobenzene	17.353	180	733644	50.00	ug/L	95
100) 1,2,4-trichlorobenzene	17.892	180	690507	50.00	ppb	95
101) hexachlorobutadiene	18.181	225	309451	50.00	ppb	93
102) naphthalene	18.159	128	1734651	50.00	ppb	100
103) 2-Methylnaphthalene	19.527	142	436351	25.00	ug/L	97
104) 1-Methylnaphthalene	19.777	142	335561	25.00	ug/L	97
105) 1,2,3-trichlorobenzene	18.366	180	621618	50.00	ppb	94

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

7.6.7

7

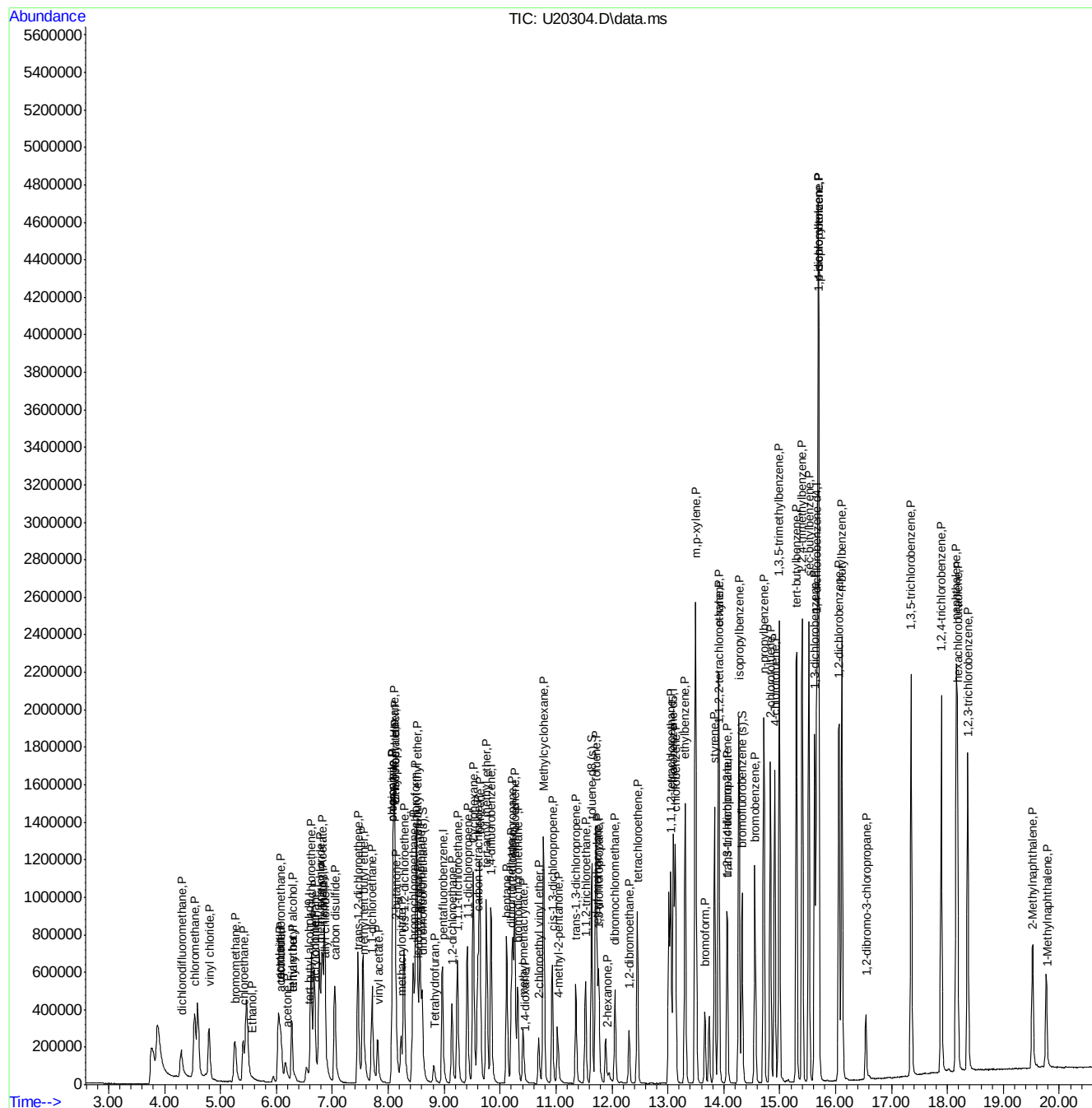
Quantitation Report (QT Reviewed)

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Data Path   : D:\msdchem\1\data\U140606\
Data File   : U20304.D
Acq On      : 6 Jun 2014   7:53 pm
Operator    : garyk
Sample      : icc915-50
Misc        : ms31928,msu915,,,,,5,1
ALS Vial    : 19      Sample Multiplier: 1

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Quant Time: Jun 09 11:06:17 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



U140606W.m Mon Jun 09 11:36:59 2014

Page: 4

7.6.7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20305.D
 Acq On : 6 Jun 2014 8:20 pm
 Operator : garyk
 Sample : ic915-100
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 09 11:07:29 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.595	65	265141	500.00	ppb	0.00
4) pentafluorobenzene	8.974	168	596822	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.842	114	1019242	50.00	ppb	0.00
66) chlorobenzene-d5	13.099	82	451741	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.664	152	631564	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.614	113	620430	95.14	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	190.28%#		
60) toluene-d8 (s)	11.639	98	1894158	98.06	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	196.12%#		
82) bromofluorobenzene (s)	14.328	95	797224	105.68	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	211.36%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.287	59	579763	1037.36	ppb	93
3) Ethanol	5.586	45	789121m	10601.01	ppb	
5) dichlorodifluoromethane	4.327	85	531177	81.34	ppb	94
6) chloromethane	4.563	50	1407037	85.92	ppb	100
7) vinyl chloride	4.818	62	983980	83.85	ppb	97
8) bromomethane	5.286	96	546253	89.98	ppb	93
9) chloroethane	5.422	64	485297	90.53	ppb	100
10) ethyl ether	6.287	59	578396	92.54	ppb	92
11) acetonitrile	6.084	41	91886m	90.46	ppb	
12) trichlorofluoromethane	6.077	101	1152815	90.43	ppb	99
13) freon-113	6.839	101	739645	87.17	ppb	91
14) acrolein	6.053	56	498486	454.73	ppb	99
15) 1,1-dichloroethene	6.635	96	587918	86.28	ppb	99
16) acetone	6.206	58	167240	107.61	ppb	92
17) Methyl Acetate	6.816	43	615668	92.40	ppb	# 89
18) methylene chloride	6.781	84	643005	84.90	ppb	89
19) methyl tert butyl ether	7.565	73	1592196	87.31	ppb	91
20) acrylonitrile	6.694	53	306747	90.70	ppb	94
21) allyl chloride	6.872	41	1352616	83.43	ppb	95
22) trans-1,2-dichloroethene	7.467	96	645462	85.64	ppb	96
23) iodomethane	6.691	142	1260980	86.54	ppb	100
24) carbon disulfide	7.057	76	1835923	85.16	ppb	97
25) propionitrile	8.083	54	60364	88.56	ppb	100
26) vinyl acetate	7.816	43	1090611	103.57	ppb	98
27) chloroprene	8.083	53	1133932	90.73	ppb	95
28) di-isopropyl ether	8.122	45	2689380	89.68	ppb	92
29) methacrylonitrile	8.236	41	415903	99.38	ppb	93
30) 2-butanone	8.130	72	91652	98.37	ppb	# 22
31) Ethyl Acetate	8.117	43	2412437	92.59	ug/L	99
32) Hexane	8.105	41	1170731	91.63	ppb	# 84
33) 1,1-dichloroethane	7.719	63	1313803	88.74	ppb	100
34) tert-butyl ethyl ether	8.520	59	2346527	89.51	ppb	98
35) isobutyl alcohol	8.536	43	420562	441.72	ppb	91
36) 2,2-dichloropropane	8.577	77	759983	81.37	ppb	90

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20305.D
 Acq On : 6 Jun 2014 8:20 pm
 Operator : garyk
 Sample : ic915-100
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 09 11:07:29 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.288	96	711548	87.82	ppb	97
38) bromochloromethane	8.454	128	394638	90.28	ppb	# 82
39) chloroform	8.492	83	1119985	90.03	ppb	98
41) Tetrahydrofuran	8.832	42	212102	93.00	ppb	90
42) 1,1,1-trichloroethane	9.243	97	1021549	86.35	ppb	96
44) Cyclohexane	9.527	56	1415452	88.07	ppb	90
45) carbon tetrachloride	9.606	117	970023	87.75	ppb	99
46) 1,1-dichloropropene	9.417	75	783658	95.14	ppb	91
47) benzene	9.640	78	2172667	94.03	ppb	96
48) 1,2-dichloroethane	9.142	62	883645	96.24	ppb	100
49) tert-amyl methyl ether	9.763	73	1637752	90.68	ppb	91
50) heptane	10.120	43	965867	95.64	ppb	# 58
51) trichloroethene	10.261	95	674273	94.40	ppb	75
52) 1,2-dichloropropane	10.228	63	669793	97.25	ppb	100
53) dibromomethane	10.203	93	377470	96.11	ppb	92
54) bromodichloromethane	10.316	83	773296	94.86	ppb	97
55) Methylcyclohexane	10.779	83	1001181	87.61	ppb	90
56) 2-chloroethyl vinyl ether	10.695	63	314903	106.17	ppb	97
57) methyl methacrylate	10.414	69	258267	102.82	ppb	81
58) 1,4-dioxane	10.447	88	20330	390.00	ppb	100
59) cis-1,3-dichloropropene	10.935	75	821060	99.29	ppb	89
61) 4-methyl-2-pentanone	11.032	43	665260	93.74	ppb	97
62) toluene	11.712	92	1268147	96.25	ppb	99
63) trans-1,3-dichloropropene	11.356	75	648372	100.04	ppb	98
64) 1,1,2-trichloroethane	11.529	83	370407	98.69	ppb	95
65) ethyl methacrylate	11.736	69	524751	97.07	ppb	75
67) tetrachloroethene	12.455	166	618966	99.87	ppb	96
68) 1,3-dichloropropane	11.763	76	681497	104.89	ppb	93
69) dibromochloromethane	12.054	129	672571	103.44	ppb	98
70) 1,2-dibromoethane	12.306	107	508844	104.25	ppb	99
71) 2-hexanone	11.893	43	573646	102.64	ppb	95
72) chlorobenzene	13.134	112	1626370	101.88	ppb	88
73) 1,1,1,2-tetrachloroethane	13.054	131	768393	96.15	ppb	97
74) ethylbenzene	13.310	91	2489286	98.35	ppb	91
75) m,p-xylene	13.494	106	2140912	198.76	ppb	83
76) o-xylene	13.907	106	1169493	97.37	ppb	84
77) styrene	13.834	104	1664303	100.68	ppb	99
78) bromoform	13.661	173	458059	101.15	ppb	98
79) trans-1,4-dichloro-2-b...	14.060	53	217467	99.89	ppb	93
81) isopropylbenzene	14.271	105	3063043	97.68	ppb	95
83) bromobenzene	14.559	156	830379	102.24	ppb	# 81
84) 1,1,2,2-tetrachloroethane	13.913	83	622020	101.88	ppb	98
85) 1,2,3-trichloropropane	14.061	75	717026	99.36	ppb	98
86) n-propylbenzene	14.717	91	3314659	98.16	ppb	91
87) 2-chlorotoluene	14.835	91	2091800	98.15	ppb	81
88) 4-chlorotoluene	14.910	91	2131021	100.51	ppb	85
89) 1,3,5-trimethylbenzene	14.994	105	3068422	98.07	ppb	95
90) tert-butylbenzene	15.299	91	1682105	100.11	ppb	85
91) 1,2,4-trimethylbenzene	15.403	105	3061340	97.12	ppb	98
92) sec-butylbenzene	15.523	105	3867297	96.51	ppb	93

7.6.8

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20305.D
Acq On : 6 Jun 2014 8:20 pm
Operator : garyk
Sample : ic915-100
Misc : ms31928,msu915,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 09 11:07:29 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.625	146	1784228	97.43	ppb	99
94)	p-isopropyltoluene	15.695	119	3510623	97.29	ppb	95
95)	1,4-dichlorobenzene	15.692	146	1852489	97.72	ppb	99
96)	1,2-dichlorobenzene	16.061	146	1905239	96.44	ppb	97
97)	n-butylbenzene	16.113	91	2957283	95.17	ppb	84
98)	1,2-dibromo-3-chloropr...	16.543	75	186068	95.65	ppb	74
99)	1,3,5-trichlorobenzene	17.353	180	1501432	95.10	ug/L	96
100)	1,2,4-trichlorobenzene	17.893	180	1433972	96.50	ppb	93
101)	hexachlorobutadiene	18.182	225	638795	95.92	ppb	97
102)	naphthalene	18.159	128	3598016	96.38	ppb	100
103)	2-Methylnaphthalene	19.525	142	982888	52.33	ug/L	97
104)	1-Methylnaphthalene	19.774	142	764056	52.90	ug/L	97
105)	1,2,3-trichlorobenzene	18.365	180	1306455	97.66	ppb	94

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

(QT Reviewed)

Quant Time: Jun 09 11:07:29 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20306.D
 Acq On : 6 Jun 2014 8:48 pm
 Operator : garyk
 Sample : ic915-200
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 09 11:08:28 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.580	65	273367	500.00	ppb	-0.02
4) pentafluorobenzene	8.973	168	607343	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.842	114	1075245	50.00	ppb	0.00
66) chlorobenzene-d5	13.099	82	471962	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.664	152	666099	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.613	113	1278520	192.66	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	385.32%#		
60) toluene-d8 (s)	11.638	98	4065416	199.51	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	399.02%#		
82) bromofluorobenzene (s)	14.327	95	1708438	214.73	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	429.46%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.284	59	1155569	2005.43	ppb	95
3) Ethanol	5.599	45	1583396m	20631.18	ppb	
5) dichlorodifluoromethane	4.322	85	1166870	175.60	ppb	94
6) chloromethane	4.562	50	2805080	168.33	ppb	100
7) vinyl chloride	4.816	62	2005482	167.95	ppb	98
8) bromomethane	5.282	96	1088123	176.13	ppb	93
9) chloroethane	5.421	64	987110	180.95	ppb	99
10) ethyl ether	6.285	59	1155747	181.72	ppb	91
11) acetonitrile	6.084	41	180235m	174.37	ppb	
12) trichlorofluoromethane	6.074	101	2333694	179.89	ppb	98
13) freon-113	6.836	101	1497343	173.41	ppb	91
14) acrolein	6.051	56	1017249	911.88	ppb	99
15) 1,1-dichloroethene	6.633	96	1186331	171.08	ppb	98
16) acetone	6.203	58	348641	220.44	ppb	# 82
17) Methyl Acetate	6.811	43	1266890	186.84	ppb	# 92
18) methylene chloride	6.781	84	1301728	168.90	ppb	91
19) methyl tert butyl ether	7.564	73	3265468	175.96	ppb	90
20) acrylonitrile	6.692	53	626625	182.08	ppb	95
21) allyl chloride	6.871	41	2736805	165.89	ppb	95
22) trans-1,2-dichloroethene	7.465	96	1304070	170.02	ppb	95
23) iodomethane	6.689	142	2555567	172.35	ppb	99
24) carbon disulfide	7.054	76	3681018	167.79	ppb	97
25) propionitrile	8.084	54	123957	178.71	ppb	100
26) vinyl acetate	7.813	43	2092497	195.27	ppb	99
27) chloroprene	8.082	53	2263985	178.01	ppb	95
28) di-isopropyl ether	8.121	45	5347914	175.25	ppb	92
29) methacrylonitrile	8.233	41	852906	200.26	ppb	96
30) 2-butanone	8.128	72	194685	205.34	ppb	# 47
31) Ethyl Acetate	8.116	43	4820847	181.82	ug/L	98
32) Hexane	8.104	41	2290043	176.13	ppb	98
33) 1,1-dichloroethane	7.717	63	2626214	174.31	ppb	99
34) tert-butyl ethyl ether	8.520	59	4756912	178.30	ppb	99
35) isobutyl alcohol	8.536	43	878504	906.72	ppb	95
36) 2,2-dichloropropane	8.577	77	1533824	161.38	ppb	89

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20306.D
 Acq On : 6 Jun 2014 8:48 pm
 Operator : garyk
 Sample : ic915-200
 Misc : ms31928,msu915,,,5,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 09 11:08:28 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.287	96	1436158	174.18	ppb	97
38) bromochloromethane	8.454	128	801606	180.20	ppb	# 81
39) chloroform	8.492	83	2250082	177.75	ppb	96
41) Tetrahydrofuran	8.825	42	433430	186.75	ppb	96
42) 1,1,1-trichloroethane	9.243	97	2089786	173.59	ppb	97
44) Cyclohexane	9.527	56	2865608	169.02	ppb	91
45) carbon tetrachloride	9.606	117	1995106	171.07	ppb	98
46) 1,1-dichloropropene	9.415	75	1600183	184.14	ppb	90
47) benzene	9.640	78	4492696	184.31	ppb	97
48) 1,2-dichloroethane	9.141	62	1819590	187.85	ppb	100
49) tert-amyl methyl ether	9.763	73	3352060	175.93	ppb	92
50) heptane	10.119	43	1908605	179.15	ppb	# 56
51) trichloroethene	10.261	95	1439115	190.99	ppb	74
52) 1,2-dichloropropane	10.227	63	1403884	193.23	ppb	100
53) dibromomethane	10.202	93	774973	187.05	ppb	92
54) bromodichloromethane	10.315	83	1626105	189.08	ppb	97
55) Methylcyclohexane	10.779	83	2048703	169.94	ppb	91
56) 2-chloroethyl vinyl ether	10.692	63	633780	202.55	ppb	97
57) methyl methacrylate	10.411	69	533350	201.28	ppb	82
58) 1,4-dioxane	10.448	88	42731	777.03	ppb	76
59) cis-1,3-dichloropropene	10.934	75	1685815	193.25	ppb	90
61) 4-methyl-2-pentanone	11.028	43	1419203	189.55	ppb	98
62) toluene	11.711	92	2658809	191.28	ppb	99
63) trans-1,3-dichloropropene	11.354	75	1321893	193.34	ppb	97
64) 1,1,2-trichloroethane	11.528	83	757948	191.43	ppb	94
65) ethyl methacrylate	11.730	69	1021396	179.10	ppb	91
67) tetrachloroethene	12.454	166	1299203	200.65	ppb	92
68) 1,3-dichloropropane	11.762	76	1387326	204.38	ppb	91
69) dibromochloromethane	12.054	129	1401545	206.31	ppb	98
70) 1,2-dibromoethane	12.305	107	1037241	203.41	ppb	99
71) 2-hexanone	11.886	43	1187624	203.39	ppb	95
72) chlorobenzene	13.134	112	3406996	204.28	ppb	88
73) 1,1,1,2-tetrachloroethane	13.054	131	1636807	196.04	ppb	97
74) ethylbenzene	13.309	91	5203754	196.79	ppb	91
75) m,p-xylene	13.494	106	4494802	399.42	ppb	83
76) o-xylene	13.907	106	2471753	196.98	ppb	85
77) styrene	13.834	104	3522002	203.93	ppb	98
78) bromoform	13.661	173	960732	203.06	ppb	100
79) trans-1,4-dichloro-2-b...	14.058	53	459814	202.15	ppb	94
81) isopropylbenzene	14.271	105	6503940	196.66	ppb	95
83) bromobenzene	14.558	156	1726319	201.52	ppb	# 82
84) 1,1,2,2-tetrachloroethane	13.913	83	1252481	194.51	ppb	98
85) 1,2,3-trichloropropane	14.060	75	1505303	197.78	ppb	99
86) n-propylbenzene	14.716	91	6946423	195.05	ppb	90
87) 2-chlorotoluene	14.835	91	4430503	197.11	ppb	81
88) 4-chlorotoluene	14.910	91	4471966	199.98	ppb	84
89) 1,3,5-trimethylbenzene	14.993	105	6534879	198.04	ppb	94
90) tert-butylbenzene	15.300	91	3667667	206.96	ppb	86
91) 1,2,4-trimethylbenzene	15.404	105	6418657	193.07	ppb	97
92) sec-butylbenzene	15.523	105	8193324	193.86	ppb	92

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20306.D
Acq On : 6 Jun 2014 8:48 pm
Operator : garyk
Sample : ic915-200
Misc : ms31928,msu915,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 09 11:08:28 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration

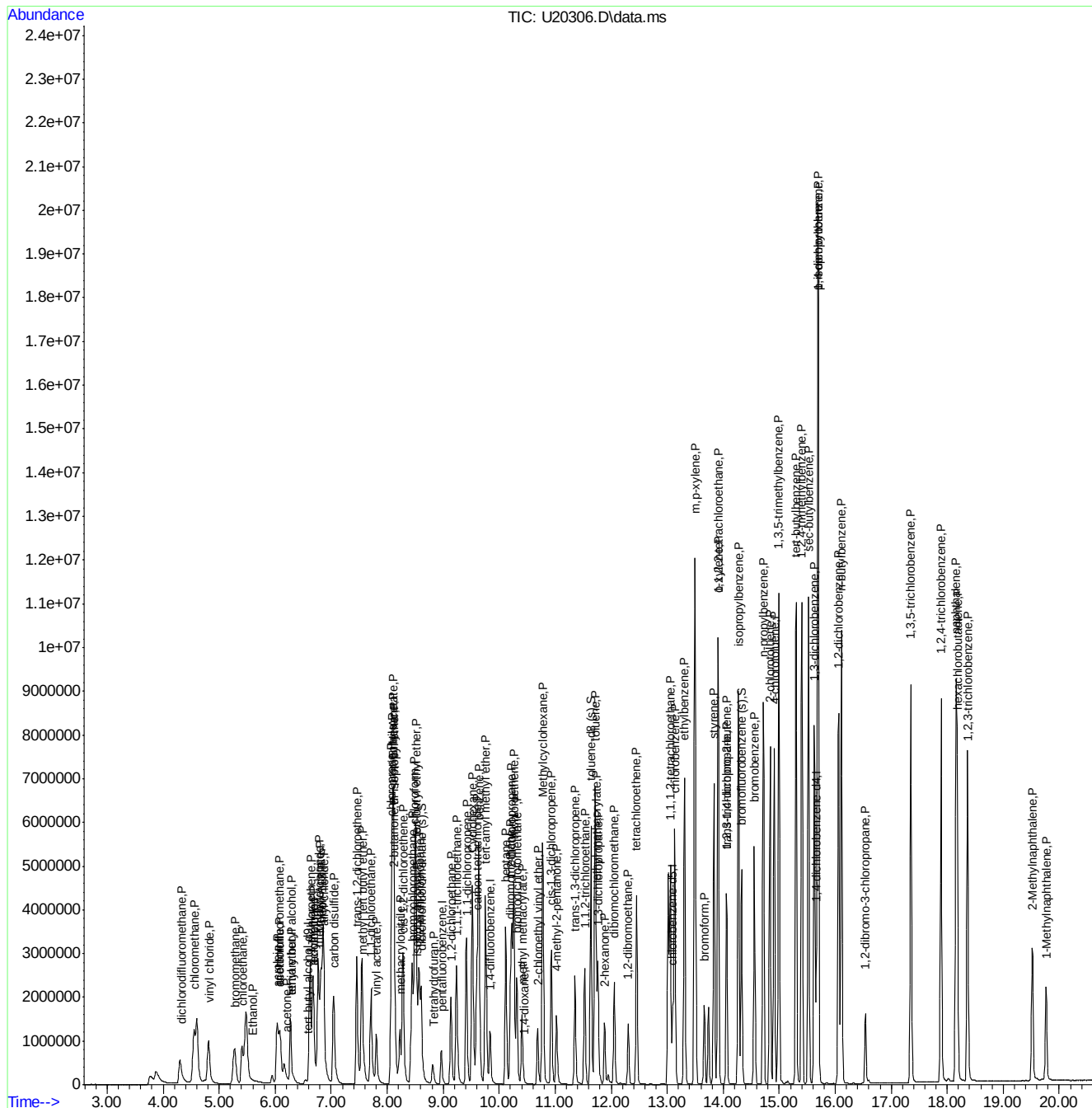
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.626	146	3723252	192.77	ppb	99
94) p-isopropyltoluene	15.695	119	7281893	191.34	ppb	95
95) 1,4-dichlorobenzene	15.693	146	3816568	190.89	ppb	98
96) 1,2-dichlorobenzene	16.060	146	3963445	190.23	ppb	97
97) n-butylbenzene	16.113	91	6125119	186.89	ppb	83
98) 1,2-dibromo-3-chloropr...	16.541	75	396493	193.26	ppb	82
99) 1,3,5-trichlorobenzene	17.353	180	3049974	183.16	ug/L	95
100) 1,2,4-trichlorobenzene	17.892	180	2918681	186.23	ppb	93
101) hexachlorobutadiene	18.182	225	1270105	180.83	ppb	97
102) naphthalene	18.158	128	7461913	189.52	ppb	100
103) 2-Methylnaphthalene	19.523	142	1920438	96.95	ug/L	97
104) 1-Methylnaphthalene	19.770	142	1428916	93.81	ug/L	98
105) 1,2,3-trichlorobenzene	18.365	180	2669116	189.18	ppb	94

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20306.D
Acq On : 6 Jun 2014 8:48 pm
Operator : garyk
Sample : ic915-200
Misc : ms31928,msu915,,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 09 11:08:28 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20307.D
 Acq On : 6 Jun 2014 9:15 pm
 Operator : garyk
 Sample : ic915-400
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 09 11:09:32 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.584	65	291099	500.00	ppb	-0.01
4) pentafluorobenzene	8.973	168	646731	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.842	114	1163714	50.00	ppb	0.00
66) chlorobenzene-d5	13.099	82	558656	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.667	152	735249	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.614	113	2683502	379.75	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	759.50%#		
60) toluene-d8 (s)	11.639	98	8913648	404.18	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	808.36%#		
82) bromofluorobenzene (s)	14.329	95	4037057	459.69	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	919.38%#		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.285	59	2415034	3935.87	ppb	92
3) Ethanol	5.606	45	3666019m	44857.45	ppb	
5) dichlorodifluoromethane	4.321	85	2398214	338.91	ppb	96
6) chloromethane	4.564	50	5541429	312.28	ppb	100
7) vinyl chloride	4.815	62	3860406	303.60	ppb	97
8) bromomethane	5.282	96	2206856	335.46	ppb	92
9) chloroethane	5.420	64	1988582	342.34	ppb	99
10) ethyl ether	6.285	59	2415544	356.66	ppb	93
11) acetonitrile	6.084	41	386226m	350.91	ppb	
12) trichlorofluoromethane	6.073	101	4745709	343.54	ppb	98
13) freon-113	6.835	101	3072055	334.10	ppb	89
14) acrolein	6.054	56	2107205	1773.90	ppb	92
15) 1,1-dichloroethene	6.632	96	2447041	331.39	ppb	97
16) acetone	6.203	58	675297	400.97	ppb	87
17) Methyl Acetate	6.814	43	2661357	368.60	ppb	# 88
18) methylene chloride	6.781	84	2710473	330.26	ppb	90
19) methyl tert butyl ether	7.565	73	6791772	343.68	ppb	89
20) acrylonitrile	6.693	53	1301422	355.12	ppb	96
21) allyl chloride	6.872	41	5574541	317.32	ppb	96
22) trans-1,2-dichloroethene	7.467	96	2705044	331.20	ppb	94
23) iodomethane	6.690	142	5301834	335.78	ppb	98
24) carbon disulfide	7.054	76	7629570	326.59	ppb	96
25) propionitrile	8.084	54	250765	339.52	ppb	100
26) vinyl acetate	7.813	43	4706751	412.48	ppb	99
27) chloroprene	8.082	53	4686214	346.02	ppb	95
28) di-isopropyl ether	8.122	45	10909232	335.72	ppb	94
29) methacrylonitrile	8.234	41	1831130	403.77	ppb	96
30) 2-butanone	8.128	72	399673	395.87	ppb	# 38
31) Ethyl Acetate	8.117	43	9774814	346.21	ug/L	99
32) Hexane	8.105	41	4689148	338.68	ppb	# 85
33) 1,1-dichloroethane	7.718	63	5459169	340.27	ppb	100
34) tert-butyl ethyl ether	8.521	59	9948586	350.19	ppb	98
35) isobutyl alcohol	8.538	43	1863534	1806.25	ppb	99
36) 2,2-dichloropropane	8.578	77	3121699	308.45	ppb	88

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20307.D
 Acq On : 6 Jun 2014 9:15 pm
 Operator : garyk
 Sample : ic915-400
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 09 11:09:32 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.288	96	3029537	345.04	ppb	96
38) bromochloromethane	8.455	128	1699534	358.78	ppb	# 80
39) chloroform	8.493	83	4687394	347.73	ppb	97
41) Tetrahydrofuran	8.824	42	932976	377.50	ppb	92
42) 1,1,1-trichloroethane	9.244	97	4354902	339.71	ppb	97
44) Cyclohexane	9.528	56	5938725	323.65	ppb	92
45) carbon tetrachloride	9.606	117	4170159	330.40	ppb	99
46) 1,1-dichloropropene	9.416	75	3396294	361.12	ppb	91
47) benzene	9.640	78	9591200	363.57	ppb	98
48) 1,2-dichloroethane	9.142	62	3853537	367.59	ppb	100
49) tert-amyl methyl ether	9.764	73	7076305	343.16	ppb	92
50) heptane	10.119	43	4060375	352.16	ppb	# 55
51) trichloroethene	10.261	95	3067990	376.22	ppb	76
52) 1,2-dichloropropane	10.228	63	3112843	395.87	ppb	100
53) dibromomethane	10.202	93	1678921	374.42	ppb	93
54) bromodichloromethane	10.316	83	3560464	382.52	ppb	97
55) Methylcyclohexane	10.780	83	4317435	330.91	ppb	91
56) 2-chloroethyl vinyl ether	10.691	63	1489757	439.91	ppb	97
57) methyl methacrylate	10.409	69	1234995	430.64	ppb	84
58) 1,4-dioxane	10.445	88	106603	1791.13	ppb	86
59) cis-1,3-dichloropropene	10.934	75	3822840	404.91	ppb	90
61) 4-methyl-2-pentanone	11.026	43	3146269	388.28	ppb	99
62) toluene	11.711	92	6042276	401.65	ppb	97
63) trans-1,3-dichloropropene	11.354	75	3055807	412.96	ppb	95
64) 1,1,2-trichloroethane	11.528	83	1732028	404.18	ppb	95
65) ethyl methacrylate	11.730	69	2442751	395.78	ppb	94
67) tetrachloroethene	12.454	166	3000975	391.55	ppb	91
68) 1,3-dichloropropane	11.763	76	3245487	403.92	ppb	91
69) dibromochloromethane	12.054	129	3250403	404.22	ppb	98
70) 1,2-dibromoethane	12.306	107	2421086	401.11	ppb	98
71) 2-hexanone	11.883	43	2753857	398.43	ppb	95
72) chlorobenzene	13.135	112	7930092	401.70	ppb	89
73) 1,1,1,2-tetrachloroethane	13.055	131	3698179	374.20	ppb	98
74) ethylbenzene	13.309	91	11860018	378.91	ppb	87
75) m,p-xylene	13.496	106	10230815	768.05	ppb	# 74
76) o-xylene	13.909	106	5602602	377.20	ppb	82
77) styrene	13.835	104	8335496	407.74	ppb	99
78) bromoform	13.663	173	2264396	404.33	ppb	100
79) trans-1,4-dichloro-2-b...	14.059	53	1068402	396.82	ppb	95
81) isopropylbenzene	14.273	105	13895847	380.65	ppb	90
83) bromobenzene	14.559	156	4037600	427.00	ppb	# 77
84) 1,1,2,2-tetrachloroethane	13.916	83	2875113	404.51	ppb	99
85) 1,2,3-trichloropropane	14.060	75	3474608	413.59	ppb	100
86) n-propylbenzene	14.718	91	14800599	376.50	ppb	83
87) 2-chlorotoluene	14.837	91	9877944	398.13	ppb	81
88) 4-chlorotoluene	14.911	91	10212283	413.74	ppb	82
89) 1,3,5-trimethylbenzene	14.995	105	13586252	373.01	ppb	88
90) tert-butylbenzene	15.301	91	7856926	401.66	ppb	96
91) 1,2,4-trimethylbenzene	15.406	105	13438795	366.21	ppb	91
92) sec-butylbenzene	15.526	105	16042404	343.87	ppb	84

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20307.D
 Acq On : 6 Jun 2014 9:15 pm
 Operator : garyk
 Sample : ic915-400
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 09 11:09:32 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 10:21:48 2014
 Response via : Initial Calibration

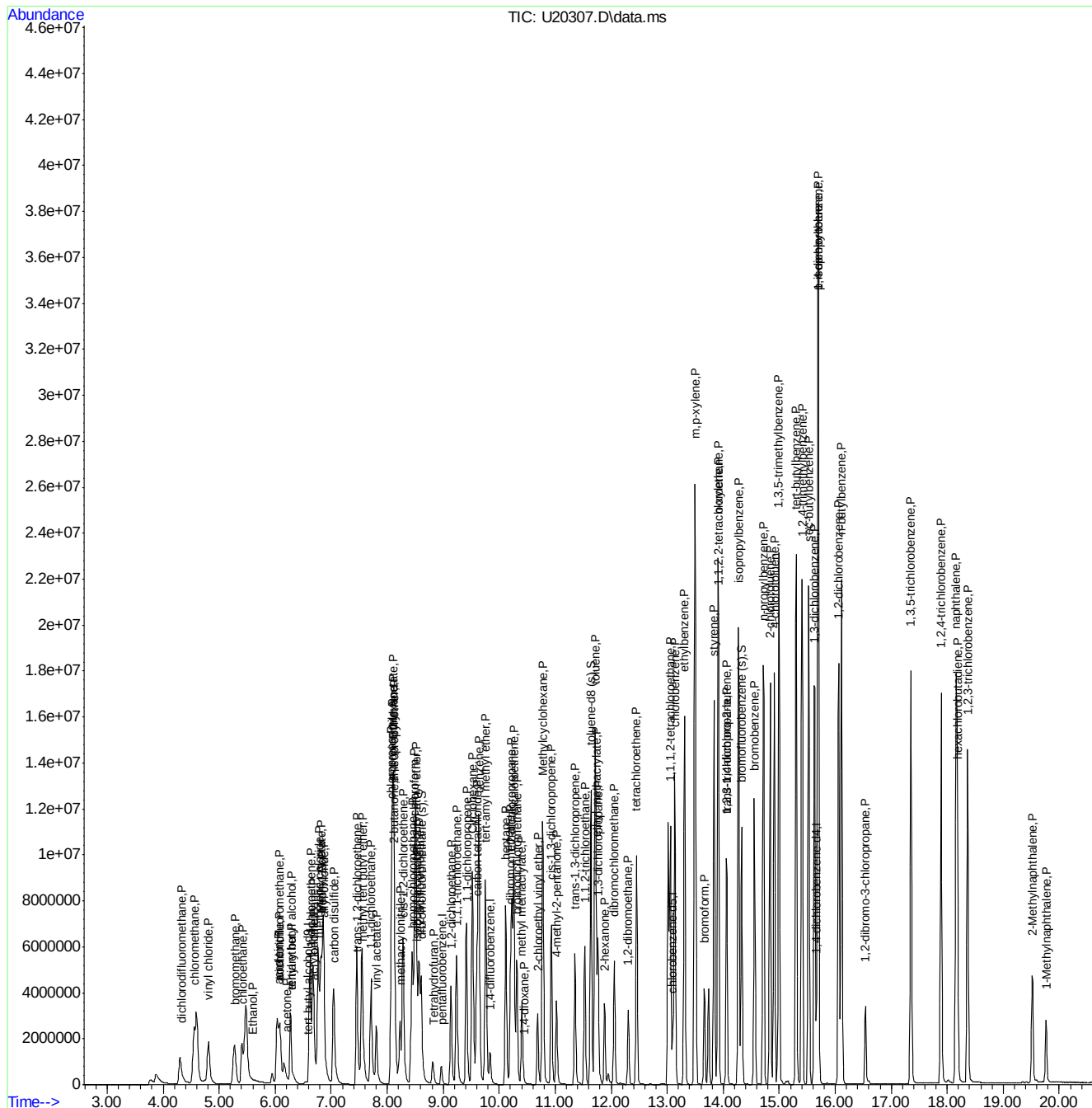
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.629	146	8327378	390.59	ppb	99
94) p-isopropyltoluene	15.697	119	14223319	338.58	ppb	92
95) 1,4-dichlorobenzene	15.695	146	7920002	358.87	ppb	98
96) 1,2-dichlorobenzene	16.062	146	8458190	367.78	ppb	95
97) n-butylbenzene	16.113	91	12524287	346.21	ppb	79
98) 1,2-dibromo-3-chloropr...	16.540	75	823030	363.43	ppb	80
99) 1,3,5-trichlorobenzene	17.354	180	6131485	333.59	ug/L	95
100) 1,2,4-trichlorobenzene	17.893	180	5820655	336.46	ppb	93
101) hexachlorobutadiene	18.183	225	2541731	327.84	ppb	95
102) naphthalene	18.159	128	14263342	328.20	ppb	100
103) 2-Methylnaphthalene	19.523	142	2947560	134.81	ug/L	97
104) 1-Methylnaphthalene	19.770	142	1769171	105.22	ug/L	98
105) 1,2,3-trichlorobenzene	18.366	180	5268562	338.29	ppb	93

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20307.D
Acq On : 6 Jun 2014 9:15 pm
Operator : garyk
Sample : ic915-400
Misc : ms31928,msu915,,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 09 11:09:32 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 10:21:48 2014
Response via : Initial Calibration



U140606W.m Mon Jun 09 11:37:11 2014

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Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20311.D
 Acq On : 6 Jun 2014 11:04 pm
 Operator : garyk
 Sample : icv915-50
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 09 11:59:31 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.603	65	251817	50.00	ppb	0.00
4) pentafluorobenzene	8.975	168	513879	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.843	114	908414	50.00	ppb	0.00
66) chlorobenzene-d5	13.098	82	438212	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.664	152	628718	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.613	113	285770	51.38	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.76%		
60) toluene-d8 (s)	11.640	98	881318	50.86	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.72%		
82) bromofluorobenzene (s)	14.328	95	393689	49.43	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.86%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.288	59	257417	482.49	ppb	89
3) Ethanol	5.587	45	357168	4563.49	ppb	96
5) dichlorodifluoromethane	4.315	85	363153m	69.91	ppb	
6) chloromethane	4.544	50	819067m	59.86	ppb	
7) vinyl chloride	4.799	62	579639	59.38	ppb	96
8) bromomethane	5.270	96	293104	56.74	ppb	93
9) chloroethane	5.418	64	252248	56.67	ppb	98
10) ethyl ether	6.288	59	257417	49.50	ppb	95
11) acetonitrile	6.090	41	52222m	58.81	ppb	
12) trichlorofluoromethane	6.066	101	568733	53.07	ppb	99
13) freon-113	6.832	101	341516	50.33	ppb	90
14) acrolein	6.061	56	203601	221.31	ppb	92
15) 1,1-dichloroethene	6.631	96	292879	50.38	ppb	100
16) acetone	6.191	58	67893m	46.83	ppb	
17) Methyl Acetate	6.818	43	274574	50.19	ppb	# 88
18) methylene chloride	6.779	84	320305	50.93	ppb	89
19) methyl tert butyl ether	7.565	73	760975	49.76	ppb	91
20) acrylonitrile	6.700	53	136798	48.76	ppb	93
21) allyl chloride	6.876	41	662390	51.89	ppb	96
22) trans-1,2-dichloroethene	7.468	96	328013	49.11	ppb	95
23) iodomethane	6.688	142	574681	49.12	ppb	100
24) carbon disulfide	7.053	76	844028	48.95	ppb	98
25) propionitrile	8.083	54	26773	48.14	ppb	100
26) vinyl acetate	7.820	43	385408	42.67	ppb	100
27) chloroprene	8.083	53	494785	48.49	ppb	95
28) di-isopropyl ether	8.122	45	1241387	50.68	ppb	94
29) methacrylonitrile	8.237	41	168950	46.35	ppb	97
30) 2-butanone	8.135	72	37746	49.31	ppb	# 63
31) Ethyl Acetate	8.119	43	1043756	48.93	ug/L	94
32) Hexane	8.106	41	490353	47.11	ppb	# 79
33) 1,1-dichloroethane	7.718	63	617669	50.88	ppb	98
34) tert-butyl ethyl ether	8.519	59	1103899	51.41	ppb	98
35) isobutyl alcohol	8.538	43	196738	252.74	ppb	78
36) 2,2-dichloropropane	8.575	77	360298	49.12	ppb	92

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20311.D
 Acq On : 6 Jun 2014 11:04 pm
 Operator : garyk
 Sample : icv915-50
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 09 11:59:31 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.289	96	338686	47.98	ppb	96
38) bromochloromethane	8.454	128	181446	50.42	ppb	# 82
39) chloroform	8.492	83	503859	48.37	ppb	98
41) Tetrahydrofuran	8.838	42	90505	44.42	ppb	89
42) 1,1,1-trichloroethane	9.242	97	484014	50.55	ppb	99
44) Cyclohexane	9.526	56	658638	48.78	ppb	92
45) carbon tetrachloride	9.606	117	453756	49.60	ppb	100
46) 1,1-dichloropropene	9.417	75	330772	46.34	ppb	90
47) benzene	9.641	78	974804	46.31	ppb	97
48) 1,2-dichloroethane	9.142	62	379113	45.72	ppb	100
49) tert-amyl methyl ether	9.765	73	778058	50.03	ppb	92
50) heptane	10.122	43	388229	44.10	ppb	# 56
51) trichloroethene	10.262	95	303991	47.83	ppb	77
52) 1,2-dichloropropane	10.228	63	292132	47.69	ppb	100
53) dibromomethane	10.203	93	168849	48.30	ppb	91
54) bromodichloromethane	10.316	83	355450	49.98	ppb	95
55) Methylcyclohexane	10.779	83	469717	49.29	ppb	91
56) 2-chloroethyl vinyl ether	10.699	63	140676	51.96	ppb	96
57) methyl methacrylate	10.419	69	107213	47.26	ppb	80
58) 1,4-dioxane	10.455	88	12526	321.22	ppb	81
59) cis-1,3-dichloropropene	10.936	75	355090	49.57	ppb	90
61) 4-methyl-2-pentanone	11.041	43	296036	48.05	ppb	97
62) toluene	11.712	92	585177	51.50	ppb	100
63) trans-1,3-dichloropropene	11.357	75	310455	56.11	ppb	97
64) 1,1,2-trichloroethane	11.530	83	165259	49.50	ppb	96
65) ethyl methacrylate	11.737	69	233825	49.98	ppb	82
67) tetrachloroethene	12.455	166	274677	45.33	ppb	95
68) 1,3-dichloropropane	11.764	76	306621	46.96	ppb	92
69) dibromochloromethane	12.055	129	314821	48.27	ppb	98
70) 1,2-dibromoethane	12.307	107	229253	46.08	ppb	97
71) 2-hexanone	11.907	43	281755	52.20	ppb	93
72) chlorobenzene	13.135	112	760654	47.67	ppb	88
73) 1,1,1,2-tetrachloroethane	13.054	131	379616	48.16	ppb	99
74) ethylbenzene	13.310	91	1205500	47.99	ppb	92
75) m,p-xylene	13.495	106	1021907	96.85	ppb	88
76) o-xylene	13.907	106	571731	48.32	ppb	86
77) styrene	13.835	104	800166	48.80	ppb	98
78) bromoform	13.662	173	214361	47.31	ppb	99
79) trans-1,4-dichloro-2-b...	14.062	53	102877	48.10	ppb	93
81) isopropylbenzene	14.271	105	1558357	51.16	ppb	96
83) bromobenzene	14.559	156	401811	49.58	ppb	# 77
84) 1,1,2,2-tetrachloroethane	13.913	83	300455	48.64	ppb	99
85) 1,2,3-trichloropropane	14.062	75	346031	48.17	ppb	100
86) n-propylbenzene	14.717	91	1588038	48.05	ppb	91
87) 2-chlorotoluene	14.835	91	1043261	49.47	ppb	80
88) 4-chlorotoluene	14.911	91	1035863	48.89	ppb	83
89) 1,3,5-trimethylbenzene	14.994	105	1478781	49.32	ppb	93
90) tert-butylbenzene	15.299	91	794303	48.61	ppb	81
91) 1,2,4-trimethylbenzene	15.403	105	1479231	48.71	ppb	97
92) sec-butylbenzene	15.522	105	1923046	50.54	ppb	94

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
 Data File : U20311.D
 Acq On : 6 Jun 2014 11:04 pm
 Operator : garyk
 Sample : icv915-50
 Misc : ms31928,msu915,,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 09 11:59:31 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.625	146	900013	50.34	ppb	98
94) p-isopropyltoluene	15.695	119	1704819	49.73	ppb	93
95) 1,4-dichlorobenzene	15.692	146	924649	49.24	ppb	99
96) 1,2-dichlorobenzene	16.061	146	966577	49.84	ppb	98
97) n-butylbenzene	16.114	91	1448093	48.48	ppb	85
98) 1,2-dibromo-3-chloropr...	16.547	75	86291	43.40	ppb #	75
99) 1,3,5-trichlorobenzene	17.353	180	717738	47.71	ug/L	95
100) 1,2,4-trichlorobenzene	17.893	180	720733	50.82	ppb	94
101) hexachlorobutadiene	18.182	225	325477	49.72	ppb	95
102) naphthalene	18.159	128	1787103	48.93	ppb	100
103) 2-Methylnaphthalene	19.528	142	481487	27.19	ug/L	98
104) 1-Methylnaphthalene	19.777	142	390825	26.89	ug/L	96
105) 1,2,3-trichlorobenzene	18.366	180	656581	50.79	ppb	93

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

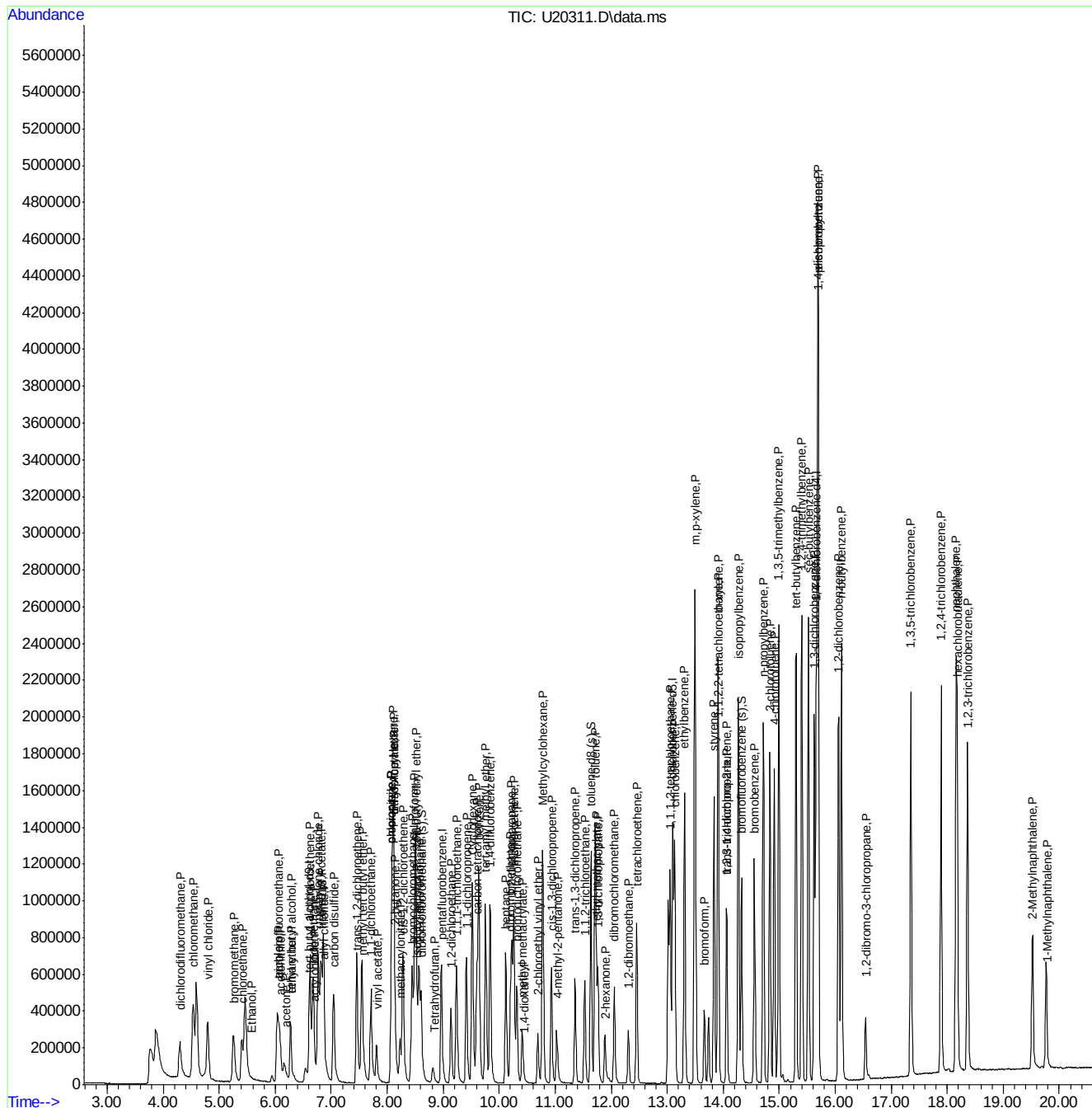
7.6.11

7

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140606\
Data File : U20311.D
Acq On : 6 Jun 2014 11:04 pm
Operator : garyk
Sample : icv915-50
Misc : ms31928,msu915,,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jun 09 11:59:31 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



U140606W.m Mon Jun 09 11:59:59 2014

Page: 4

7.6.11



Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20578.D
 Acq On : 19 Jun 2014 8:34 am
 Operator : garyk
 Sample : cc915-50
 Misc : ms32098,msu924,,,,5,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 19 09:48:46 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.589	65	187781	50.00	ppb	0.00
4) pentafluorobenzene	8.974	168	356737	50.00	ppb	0.00
43) 1,4-difluorobenzene	9.842	114	637122	50.00	ppb	0.00
66) chlorobenzene-d5	13.098	82	291981	50.00	ppb	# 0.00
80) 1,4-dichlorobenzene-d4	15.664	152	407580	50.00	ppb	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.612	113	229736m	59.50	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	119.00%		
60) toluene-d8 (s)	11.640	98	676434	55.66	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	111.32%		
82) bromofluorobenzene (s)	14.328	95	271386	52.56	ppb	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.12%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.287	59	205335	516.12	ppb	93
3) Ethanol	5.568	45	335187	5779.44	ppb	97
5) dichlorodifluoromethane	4.347	85	247356	68.59	ppb	99
6) chloromethane	4.558	50	553613	58.28	ppb	97
7) vinyl chloride	4.811	62	372353	54.95	ppb	98
8) bromomethane	5.280	96	198878	55.46	ppb	95
9) chloroethane	5.421	64	171660	55.55	ppb	99
10) ethyl ether	6.287	59	205335	56.88	ppb	93
11) acetonitrile	6.090	41	34641m	56.19	ppb	
12) trichlorofluoromethane	6.071	101	392295	52.73	ppb	99
13) freon-113	6.835	101	264957	56.25	ppb	92
14) acrolein	6.050	56	403m	0.63	ppb	
15) 1,1-dichloroethene	6.632	96	211046	52.30	ppb	97
16) acetone	6.191	58	55853m	55.49	ppb	
17) Methyl Acetate	6.820	43	234305	61.69	ppb	# 89
18) methylene chloride	6.779	84	233479	53.48	ppb	# 80
19) methyl tert butyl ether	7.563	73	554488	52.23	ppb	86
20) acrylonitrile	6.694	53	101531	52.14	ppb	90
21) allyl chloride	6.872	41	515648	58.19	ppb	91
22) trans-1,2-dichloroethene	7.467	96	233713	50.40	ppb	95
23) iodomethane	6.687	142	443700	54.64	ppb	95
24) carbon disulfide	7.053	76	649597	54.27	ppb	98
25) propionitrile	8.082	54	21309	55.20	ppb	100
26) vinyl acetate	7.818	43	480503	76.63	ppb	99
27) chloroprene	8.082	53	403326	56.94	ppb	91
28) di-isopropyl ether	8.121	45	1004340	59.06	ppb	92
29) methacrylonitrile	8.238	41	151402	59.84	ppb	92
30) 2-butanone	8.132	72	31066	58.46	ppb	# 58
31) Ethyl Acetate	8.114	43	884343m	59.72	ug/L	
32) Hexane	8.105	41	432023	59.79	ppb	# 79
33) 1,1-dichloroethane	7.718	63	471134	55.91	ppb	99
34) tert-butyl ethyl ether	8.518	59	822630	55.19	ppb	99
35) isobutyl alcohol	8.531	43	157378m	293.62	ppb	
36) 2,2-dichloropropane	8.576	77	305353	59.97	ppb	89

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
 Data File : U20578.D
 Acq On : 19 Jun 2014 8:34 am
 Operator : garyk
 Sample : cc915-50
 Misc : ms32098,msu924,,,,5,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 19 09:48:46 2014
 Quant Method : D:\msdchem\1\methods\U140606W.m
 Quant Title : SW-846 Method 8260
 QLast Update : Mon Jun 09 11:51:52 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) cis-1,2-dichloroethene	8.288	96	254669	51.98	ppb	94
38) bromochloromethane	8.453	128	138662	55.50	ppb	91
39) chloroform	8.491	83	397846	55.02	ppb	96
41) Tetrahydrofuran	8.831	42	77910	55.08	ppb	90
42) 1,1,1-trichloroethane	9.241	97	360723	54.27	ppb	96
44) Cyclohexane	9.526	56	500809	52.88	ppb	90
45) carbon tetrachloride	9.605	117	340683	53.10	ppb	99
46) 1,1-dichloropropene	9.416	75	259694	51.87	ppb	89
47) benzene	9.640	78	737720	49.97	ppb	98
48) 1,2-dichloroethane	9.142	62	306863	52.77	ppb	100
49) tert-amyl methyl ether	9.763	73	561785	51.50	ppb	89
50) heptane	10.122	43	354179	57.37	ppb	# 61
51) trichloroethene	10.261	95	216629	48.60	ppb	76
52) 1,2-dichloropropane	10.227	63	228986	53.29	ppb	99
53) dibromomethane	10.203	93	132276	53.95	ppb	94
54) bromodichloromethane	10.315	83	264133	52.96	ppb	94
55) Methylcyclohexane	10.779	83	346225	51.80	ppb	88
56) 2-chloroethyl vinyl ether	10.698	63	93487	49.23	ppb	97
57) methyl methacrylate	10.417	69	82852	52.08	ppb	# 76
58) 1,4-dioxane	10.450	88	8235	301.99	ppb	86
59) cis-1,3-dichloropropene	10.936	75	266640	53.08	ppb	89
61) 4-methyl-2-pentanone	11.042	43	247709	57.32	ppb	93
62) toluene	11.712	92	416405	52.25	ppb	100
63) trans-1,3-dichloropropene	11.357	75	204695	52.75	ppb	94
64) 1,1,2-trichloroethane	11.529	83	125239	53.49	ppb	97
65) ethyl methacrylate	11.739	69	167456	51.03	ppb	# 72
67) tetrachloroethene	12.455	166	201318	49.86	ppb	96
68) 1,3-dichloropropane	11.764	76	221585	50.93	ppb	94
69) dibromochloromethane	12.055	129	220513	50.74	ppb	96
70) 1,2-dibromoethane	12.307	107	166249	50.15	ppb	99
71) 2-hexanone	11.913	43	207323	57.65	ppb	98
72) chlorobenzene	13.135	112	526222	49.49	ppb	87
73) 1,1,1,2-tetrachloroethane	13.054	131	258109	49.15	ppb	96
74) ethylbenzene	13.311	91	823761	49.22	ppb	92
75) m,p-xylene	13.495	106	687638	97.81	ppb	86
76) o-xylene	13.908	106	387205	49.11	ppb	86
77) styrene	13.835	104	518376	47.45	ppb	98
78) bromoform	13.662	173	145664	48.24	ppb	97
79) trans-1,4-dichloro-2-b...	14.062	53	56206	39.44	ppb	# 80
81) isopropylbenzene	14.271	105	1021534	51.73	ppb	97
83) bromobenzene	14.560	156	261696	49.81	ppb	# 75
84) 1,1,2,2-tetrachloroethane	13.913	83	229239	57.25	ppb	99
85) 1,2,3-trichloropropane	14.062	75	216501	46.49	ppb	99
86) n-propylbenzene	14.717	91	1086382	50.71	ppb	91
87) 2-chlorotoluene	14.835	91	685374	50.13	ppb	81
88) 4-chlorotoluene	14.911	91	667659	48.61	ppb	83
89) 1,3,5-trimethylbenzene	14.994	105	1004316	51.67	ppb	95
90) tert-butylbenzene	15.300	91	541054	51.07	ppb	84
91) 1,2,4-trimethylbenzene	15.403	105	992102	50.40	ppb	99
92) sec-butylbenzene	15.523	105	1298331	52.64	ppb	93

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20578.D
Acq On : 19 Jun 2014 8:34 am
Operator : garyk
Sample : cc915-50
Misc : ms32098,msu924,,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 19 09:48:46 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration

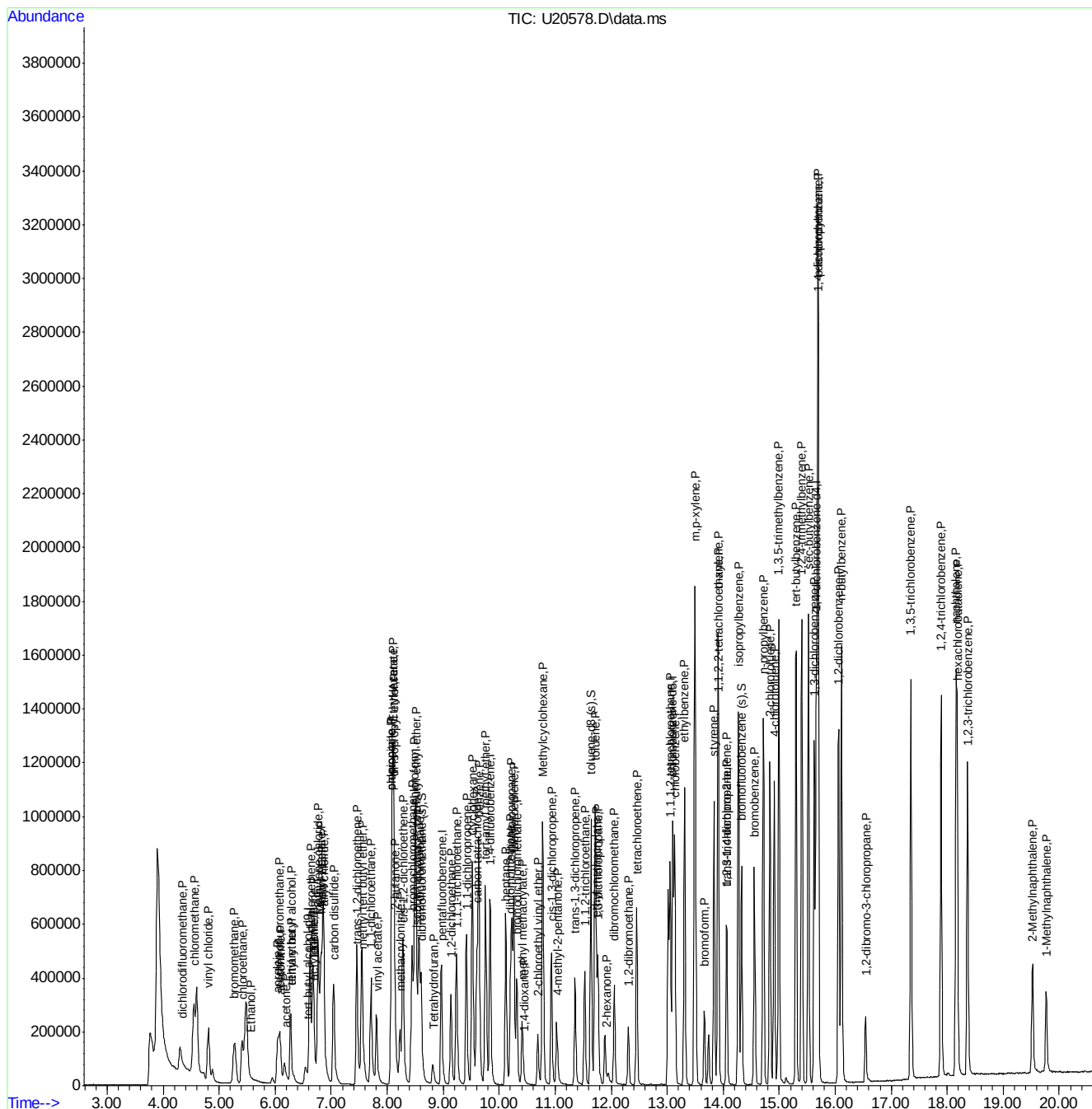
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.626	146	570948	49.26	ppb	97
94) p-isopropyltoluene	15.696	119	1159929	52.19	ppb	94
95) 1,4-dichlorobenzene	15.692	146	594577	48.84	ppb	99
96) 1,2-dichlorobenzene	16.061	146	628600	50.00	ppb	97
97) n-butylbenzene	16.115	91	992809	51.27	ppb	86
98) 1,2-dibromo-3-chloropr...	16.543	75	62007	48.10	ppb	78
99) 1,3,5-trichlorobenzene	17.354	180	500839	51.36	ug/L	95
100) 1,2,4-trichlorobenzene	17.893	180	474265	51.59	ppb	95
101) hexachlorobutadiene	18.181	225	212041	49.97	ppb	97
102) naphthalene	18.160	128	1173249	49.55	ppb	100
103) 2-Methylnaphthalene	19.528	142	262733	22.89	ug/L	98
104) 1-Methylnaphthalene	19.774	142	202744	21.52	ug/L	99
105) 1,2,3-trichlorobenzene	18.366	180	414813	49.49	ppb	96

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

Quantitation Report (QT Reviewed)

Data Path : D:\msdchem\1\data\U140619\
Data File : U20578.D
Acq On : 19 Jun 2014 8:34 am
Operator : garyk
Sample : cc915-50
Misc : ms32098,msu924,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 19 09:48:46 2014
Quant Method : D:\msdchem\1\methods\U140606W.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Jun 09 11:51:52 2014
Response via : Initial Calibration



VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS9766	V8260 IS	2500ug/ml
9719	SS	2000ug/ml
9758	CC mix	
9725	CC GAS	
9741	BS mix	
9751	BS GAS	

Daily Saved File

Tune file 1: U20294
Tune file 2: U20297
Initial Cal: 6-6-14
ID File: U140606 W.m
ICAL Verified: U20311
Sequence verified: GK

Date: 6-6-14

Batch ID: MSU915

Analysts GK

Signature: *[Signature]*

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
U20285	blk	—	—	V8260	1	W	5ml	NA	IX	NA	
	86	↓			2						
	87	2,1			3						
	88	—			4						
	89 test 0.5	3,1			5						
	90 5	↓			6						
	91 400	↓			7						
	92 blk	—			8						
	93 Acetonitrile	↓			9						
	94 BFB	↓			10						
	95 test 5	2,1			11						
	96 test 5	↓			12						
	97 BFB tune	—			13						
	98 IC915-0.5	2,1	MS9758 9725		14						✓ 4:42pm
	99 -1				15						✓
300	-2				16						✓
01	-5				17						✓
02	-10				18						✓
03	-25				19						✓
04 icc	-50				20						✓
05	-100				21						✓
06	-200				22						✓
07	-400	↓	↓		23						✓
08 blk	—	—	—		24						✓
09 ↓	↓	↓	↓		25						✓
10 ICV915-50	32	MS9741 9751			26						✓
11 ↓	↓	↓	↓		27						✓
12 blk	—	—	—		28						✓ 11:04pm
GK 6-9-14											

TX = Matrix: Designate W for water, S for soil, O for oil.
ample amount is reported in grams (wet) for soil and oil, mls for water.

IS001-05 Date: 07/22/13

Review: *[Signature]*

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS9760	V8260 IS/SS	250 ug/ml
9758	cc mix	200 ug/ml
9775	cc gas	
9741	bs mix	
9751	bs gas	

Daily Saved File

Tune file 1:	U20315
Tune file 2:	
Initial Cal:	6-6-14
ID File:	U140606w,m
ICAL Verified:	U20311
Sequence verified:	JMM

Date: 6-9-14

Batch ID: MSU915

Analysts GK

Signature:

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
U20313	blk	—	—	V8260	1	W	5ml	NA	IX	NA	✓
14	↓	↓	↓		2						✓
15	66380 CC915-502,1	MS9758 9775			3						✓ Tune 11:10am
16	bs	3,2	MS9741 9751		4						✓
17	bsd	↓	↓		5						
18	blk	—	—		6						
19	MB	↓	↓		7						
20	MC30919-4	2	MS32010	SL DOD	8					42	✓
21	↓ 3	6			9						✓
22	MC30946-5	1			10						✓
23	MC31095-3	↓			11						✓
24	MC30919-1	17			12						✓
25	↓ 3	7			13						✓
26	↓ 5	2			14						✓
27	↓ 6	↓			15						✓
28	↓ 7	5			16						✓
29	↓ 1 MS	202425			17						✓
30	↓ 1 MS	512			18						✓
31	blk	—	—		19						✓
32	MC31095-1	5	MS32010	SL DOD	20					NA	✓
23	↓ 2	↓			21					42	✓
34	↓ 4	7			22						✓
35	↓ 5	5			23						✓
36	↓ 6	7			24						✓
37	MC30946-4	↓			25						✓
38	EC915-50	2,1		V8260	26						✓
39	blk	—	—		27						✓ 9:45pm
40										NA	✓
GK 6-10-14											

X = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

001-05 Date: 07/22/13

Review:

42

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS9782	V8260 IS/SS	2500µg/ml
9758	cc mix	2000µg/ml
9775	cc gas	
9783	bs mix	
9787	bs gas	

Daily Saved File

Tune file 1:	U20578
Tune file 2:	
Initial Cal:	6-6-14
ID File:	U140606w.m
ICAL Verified:	U20311
Sequence verified:	<i>JKM</i>

Date: 6-19-14Batch ID: MSU924Analysts GKSignature: *[Signature]*

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water.

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
U20577	blk	—	—	V8260	1	W	5ml	NA	1X	NA	Tune
78	cc 15-50	3, 2	MS 9758		2						✓ 8:34AM
79	BS	2, 1	MS 9775		2						✓
80	BS	↓	↓		4						
81	blk	—	—		5						
82	MB	↓	↓		6						
83	MC31396-14	1	MS 32105	STD MTBE	7					✓	RR HAS TB!
84	↓ -1	2			8						✓
85	MC31307-14	↓			9						✓
86	MC31396-1	MS 1			10				5X		✓
87	↓ -1 MSU	↓			11				↓		✓
88	↓ -2	3			12						✓
89	↓ -3	↓			13				1X		✓
90	↓ -4	2			14						✓
91	↓ -5	3			15						✓
92	↓ -6	1			16						✓
93	↓ -7	2			17						✓
94	↓ -8	3			18						✓
95	↓ -9	2			19						✓
96	↓ -10	3			20						✓
97	↓ -11	2			21						✓
98	↓ -15	3			22						✓
99	↓ -12	2			23						✓
600	↓ -13	↓			24						✓
01	MC31448-4	4		TCL/STAR	25						✓
02	↓ -5	5			26						✓
03	↓ -6	↓			27						✓
04	MC31447-3	4		STD MTBE	28						✓
05	blk	—	—	—	29						✓ 8:24pm
06	↓	↓	↓	↓	30	↓	↓	↓	↓	NA	↓

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: *[Signature]*



10/01/14

Technical Report for

Stantec Consulting Corporation

LMC - Utica West Lot

Accutest Job Number: MC33777

Sampling Date: 09/18/14

Report to:

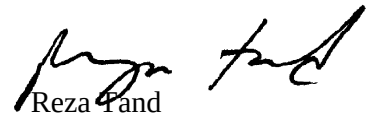
Stantec Consulting Corporation
61 Commercial Street
Rochester, NY 14614
bob.mahoney@stantec.com

ATTN: Bob Mahoney

Total number of pages in report: **235**



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


Reza Fand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

Stantec Consulting Corporation

Job No: MC33777

LMC - Utica West Lot

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC33777-1	09/18/14	10:55 BH	09/20/14	AQ	Ground Water	MW-1(DOT)
MC33777-2	09/18/14	11:50 BH	09/20/14	AQ	Ground Water	MW-1
MC33777-3	09/18/14	11:30 BH	09/20/14	AQ	Ground Water	MW-5
MC33777-4	09/18/14	13:00 BH	09/20/14	AQ	Ground Water	MW-22
MC33777-5	09/18/14	12:50 BH	09/20/14	AQ	Ground Water	MW-23
MC33777-6	09/18/14	12:30 BH	09/20/14	AQ	Ground Water	MW-24
MC33777-7	09/18/14	12:00 BH	09/20/14	AQ	Ground Water	MW-B
MC33777-8	09/18/14	12:40 BH	09/20/14	AQ	Ground Water	MW-D
MC33777-9	09/18/14	11:40 BH	09/20/14	AQ	Ground Water	MW-E
MC33777-10	09/18/14	11:10 BH	09/20/14	AQ	Ground Water	MW-F
MC33777-11	09/18/14	12:20 BH	09/20/14	AQ	Ground Water	PW-1
MC33777-12	09/18/14	10:40 BH	09/20/14	AQ	Ground Water	PZ-1
MC33777-13	09/18/14	15:20 BH	09/20/14	AQ	Ground Water	PZ-2



Sample Summary
(continued)

Stantec Consulting Corporation
LMC - Utica West Lot

Job No: MC33777

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC33777-14	09/18/14	11:15 BH	09/20/14	AQ	Ground Water	FIELD DUPLICATE
MC33777-15	09/18/14	16:00 BH	09/20/14	AQ	Trip Blank Water	TRIP BLANK



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Stantec Consulting Corporation

Job No MC33777

Site: LMC - Utica West Lot

Report Date 10/1/2014 11:13:26 AM

14 Sample(s) and 1 Trip Blank were collected on 09/18/2014 and were received at Accutest on 09/20/2014 properly preserved, at 1.4 Deg. C and intact. These Samples received an Accutest job number of MC33777. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix AQ

Batch ID: MSN3355

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC33777-1MS, MC33777-1MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for 2-Butanone (MEK), 2-Hexanone, Naphthalene are outside control limits. Blank Spike meets program technical requirements.
- MC33777-1MS/MSD Recovery(s) for Acetone, Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- MC33777-13: The pH of the sample aliquot for VOA analysis was >2 at time of analysis.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (MC33777).

Summary of Hits

Job Number: MC33777
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 09/18/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC33777-1 MW-1(DOT)						
cis-1,2-Dichloroethene		5.5	1.0	0.84	ug/l	SW846 8260C
MC33777-2 MW-1						
Carbon tetrachloride		0.66 J	1.0	0.53	ug/l	SW846 8260C
MC33777-3 MW-5						
No hits reported in this sample.						
MC33777-4 MW-22						
Vinyl chloride		0.75 J	1.0	0.58	ug/l	SW846 8260C
MC33777-5 MW-23						
No hits reported in this sample.						
MC33777-6 MW-24						
cis-1,2-Dichloroethene		1.2	1.0	0.84	ug/l	SW846 8260C
Tetrachloroethene		3.3	1.0	0.59	ug/l	SW846 8260C
Trichloroethene		2.2	1.0	0.47	ug/l	SW846 8260C
MC33777-7 MW-B						
No hits reported in this sample.						
MC33777-8 MW-D						
cis-1,2-Dichloroethene		1.1	1.0	0.84	ug/l	SW846 8260C
MC33777-9 MW-E						
1,1-Dichloroethane		0.61 J	1.0	0.36	ug/l	SW846 8260C
cis-1,2-Dichloroethene		2.2	1.0	0.84	ug/l	SW846 8260C
Trichloroethene		4.2	1.0	0.47	ug/l	SW846 8260C
MC33777-10 MW-F						
cis-1,2-Dichloroethene		2.1	1.0	0.84	ug/l	SW846 8260C
Trichloroethene		15.2	1.0	0.47	ug/l	SW846 8260C

Summary of Hits

Page 2 of 2

Job Number: MC33777
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 09/18/14



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

MC33777-11 PW-1

cis-1,2-Dichloroethene	0.88 J	1.0	0.84	ug/l	SW846 8260C

MC33777-12 PZ-1

cis-1,2-Dichloroethene	2.0	1.0	0.84	ug/l	SW846 8260C

MC33777-13 PZ-2

No hits reported in this sample.

MC33777-14 FIELD DUPLICATE

cis-1,2-Dichloroethene	2.3	1.0	0.84	ug/l	SW846 8260C
Trichloroethene	15.6	1.0	0.47	ug/l	SW846 8260C

MC33777-15 TRIP BLANK

No hits reported in this sample.

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-1(DOT)	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-1	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90687.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	5.5	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1(DOT)	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-1	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1(DOT)	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-1	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-1	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-2	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90688.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.66	1.0	0.53	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-2	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1
Lab Sample ID: MC33777-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-5	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-3	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90689.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-3	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-3	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-22	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-4	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90690.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22
Lab Sample ID: MC33777-4
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14

Date Received: 09/20/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	0.75	1.0	0.58	ug/l	J
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22
Lab Sample ID: MC33777-4
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-23	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-5	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90691.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-5	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-23
Lab Sample ID: MC33777-5
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-24	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-6	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90692.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.2	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-6	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	3.3	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	2.2	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-24
Lab Sample ID: MC33777-6
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-B	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-7	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90693.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-B
Lab Sample ID: MC33777-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14

Date Received: 09/20/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-B
Lab Sample ID: MC33777-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-D	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-8	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90694.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.1	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-D	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-8	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-D
Lab Sample ID: MC33777-8
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-E	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-9	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90695.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	0.61	1.0	0.36	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.2	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-E	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-9	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	4.2	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-E	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-9	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-F	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-10	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90696.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.1	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-10	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	15.2	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-10	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PW-1	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-11	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90697.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.88	1.0	0.84	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PW-1
Lab Sample ID: MC33777-11
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14

Date Received: 09/20/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PW-1
Lab Sample ID: MC33777-11
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PZ-1	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-12	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90698.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.0	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-1	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-12	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PZ-1
Lab Sample ID: MC33777-12
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 09/18/14
Date Received: 09/20/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PZ-2	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-13	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	N90699.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-2	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-13	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-2	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-13	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

(a) The pH of the sample aliquot for VOA analysis was > 2 at time of analysis.

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

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

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	FIELD DUPLICATE	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-14	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90700.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.3	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD DUPLICATE	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-14	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	15.6	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD DUPLICATE	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-14	Date Received:	09/20/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

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

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

Accutest Laboratories

Report of Analysis

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Client Sample ID:	TRIP BLANK	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-15	Date Received:	09/20/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N90686.D	1	09/29/14	JB	n/a	n/a	MSN3355
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-15	Date Received:	09/20/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	09/18/14
Lab Sample ID:	MC33777-15	Date Received:	09/20/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

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

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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

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

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC33777 **Client:** STANTEC **Project:** LMC UTICA WEST LOT
Date / Time Received: 9/20/2014 10:00:00 AM **Delivery Method:** _____ **Airbill #s:** _____
Cooler Temps (Initial/Adjusted): #1: (1.4/1.4); _____

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☒		☐	3. COC Present:	☒		☐
2. Custody Seals Intact:	☒		☐	4. Smpl Dates/Time OK	☒		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☒		☐
2. Thermometer ID:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	☒		☐	☐
2. Trip Blank listed on COC:	☒		☐	☐
3. Samples preserved properly:	☒		☐	
4. VOCs headspace free:	☒		☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☒		☐
2. Container labeling complete:	☒		☐
3. Sample container label / COC agree:	☒		☐

Sample Integrity - Condition

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

Sample Integrity - Instructions

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

Comments

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC33777

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC33777-1 Collected: 18-SEP-14 10:55 By: BH Received: 20-SEP-14 By: MW-1(DOT)						
MC33777-1	SW846 8260C	29-SEP-14 11:15	JB			V8260STD
MC33777-2 Collected: 18-SEP-14 11:50 By: BH Received: 20-SEP-14 By: MW-1						
MC33777-2	SW846 8260C	29-SEP-14 11:43	JB			V8260STD
MC33777-3 Collected: 18-SEP-14 11:30 By: BH Received: 20-SEP-14 By: MW-5						
MC33777-3	SW846 8260C	29-SEP-14 12:12	JB			V8260STD
MC33777-4 Collected: 18-SEP-14 13:00 By: BH Received: 20-SEP-14 By: MW-22						
MC33777-4	SW846 8260C	29-SEP-14 12:40	JB			V8260STD
MC33777-5 Collected: 18-SEP-14 12:50 By: BH Received: 20-SEP-14 By: MW-23						
MC33777-5	SW846 8260C	29-SEP-14 13:08	JB			V8260STD
MC33777-6 Collected: 18-SEP-14 12:30 By: BH Received: 20-SEP-14 By: MW-24						
MC33777-6	SW846 8260C	29-SEP-14 13:37	JB			V8260STD
MC33777-7 Collected: 18-SEP-14 12:00 By: BH Received: 20-SEP-14 By: MW-B						
MC33777-7	SW846 8260C	29-SEP-14 14:05	JB			V8260STD
MC33777-8 Collected: 18-SEP-14 12:40 By: BH Received: 20-SEP-14 By: MW-D						
MC33777-8	SW846 8260C	29-SEP-14 14:33	JB			V8260STD

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC33777

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC33777-9 Collected: 18-SEP-14 11:40 By: BH Received: 20-SEP-14 By: MW-E						
MC33777-9	SW846 8260C	29-SEP-14 15:01	JB			V8260STD
MC33777-10 Collected: 18-SEP-14 11:10 By: BH Received: 20-SEP-14 By: MW-F						
MC33777-10	SW846 8260C	29-SEP-14 15:30	JB			V8260STD
MC33777-11 Collected: 18-SEP-14 12:20 By: BH Received: 20-SEP-14 By: PW-1						
MC33777-11	SW846 8260C	29-SEP-14 15:58	JB			V8260STD
MC33777-12 Collected: 18-SEP-14 10:40 By: BH Received: 20-SEP-14 By: PZ-1						
MC33777-12	SW846 8260C	29-SEP-14 16:26	JB			V8260STD
MC33777-13 Collected: 18-SEP-14 15:20 By: BH Received: 20-SEP-14 By: PZ-2						
MC33777-13	SW846 8260C	29-SEP-14 16:55	JB			V8260STD
MC33777-14 Collected: 18-SEP-14 11:15 By: BH Received: 20-SEP-14 By: FIELD DUPLICATE						
MC33777-14	SW846 8260C	29-SEP-14 17:23	JB			V8260STD
MC33777-15 Collected: 18-SEP-14 16:00 By: BH Received: 20-SEP-14 By: TRIP BLANK						
MC33777-15	SW846 8260C	29-SEP-14 10:47	JB			V8260STD

Accutest Internal Chain of Custody

Page 1 of 2

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 09/20/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33777-1.1	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-1.1	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-1.1	GCMSN	Jaclyn Bergeron	09/29/14 15:44	Unload from Instrument
MC33777-1.1	Jaclyn Bergeron	VOC Ref #5	09/29/14 15:44	Return to Storage
MC33777-1.2	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-1.2	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-1.2	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-1.2	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-2.3	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-2.3	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-2.3	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-2.3	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-3.1	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-3.1	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-3.1	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-3.1	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-4.1	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-4.1	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-4.1	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-4.1	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-5.3	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-5.3	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-5.3	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-5.3	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-6.2	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-6.2	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-6.2	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-6.2	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-7.1	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-7.1	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-7.1	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-7.1	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-8.1	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-8.1	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-8.1	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-8.1	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage

Accutest Internal Chain of Custody

Page 2 of 2

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 09/20/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33777-9.2	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-9.2	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-9.2	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-9.2	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-10.2	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-10.2	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-10.2	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-10.2	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-11.2	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-11.2	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-11.2	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-11.2	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-12.1	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-12.1	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-12.1	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-12.1	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-13.1	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-13.1	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-13.1	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-13.1	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-14.2	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-14.2	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-14.2	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-14.2	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage
MC33777-15.2	VOC Ref #5	Jaclyn Bergeron	09/29/14 09:33	Retrieve from Storage
MC33777-15.2	Jaclyn Bergeron	GCMSN	09/29/14 09:33	Load on Instrument
MC33777-15.2	GCMSN	Jaclyn Bergeron	09/30/14 10:31	Unload from Instrument
MC33777-15.2	Jaclyn Bergeron	VOC Ref #5	09/30/14 10:31	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 3

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3355-MB	N90685.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.87	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3355-MB	N90685.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3355-MB	N90685.D	1	09/29/14	JB	n/a	n/a	MSN3355

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

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	95% 70-130%
2037-26-5	Toluene-D8	98% 70-130%
460-00-4	4-Bromofluorobenzene	99% 70-130%

6.1.1
9

Blank Spike Summary

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3355-BS	N90682.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	51.5	103	70-130
71-43-2	Benzene	50	48.6	97	70-130
108-86-1	Bromobenzene	50	52.4	105	70-130
74-97-5	Bromochloromethane	50	53.8	108	70-130
75-27-4	Bromodichloromethane	50	53.2	106	70-130
75-25-2	Bromoform	50	54.7	109	70-130
74-83-9	Bromomethane	50	49.7	99	70-130
78-93-3	2-Butanone (MEK)	50	68.3	137* a	70-130
104-51-8	n-Butylbenzene	50	57.4	115	70-130
135-98-8	sec-Butylbenzene	50	54.6	109	70-130
98-06-6	tert-Butylbenzene	50	53.3	107	70-130
75-15-0	Carbon disulfide	50	61.6	123	70-130
56-23-5	Carbon tetrachloride	50	54.3	109	70-130
108-90-7	Chlorobenzene	50	49.7	99	70-130
75-00-3	Chloroethane	50	57.6	115	70-130
67-66-3	Chloroform	50	48.1	96	70-130
74-87-3	Chloromethane	50	45.6	91	70-130
95-49-8	o-Chlorotoluene	50	52.2	104	70-130
106-43-4	p-Chlorotoluene	50	51.5	103	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	61.8	124	70-130
124-48-1	Dibromochloromethane	50	54.6	109	70-130
106-93-4	1,2-Dibromoethane	50	55.0	110	70-130
95-50-1	1,2-Dichlorobenzene	50	55.9	112	70-130
541-73-1	1,3-Dichlorobenzene	50	53.2	106	70-130
106-46-7	1,4-Dichlorobenzene	50	56.4	113	70-130
75-71-8	Dichlorodifluoromethane	50	42.3	85	70-130
75-34-3	1,1-Dichloroethane	50	51.4	103	70-130
107-06-2	1,2-Dichloroethane	50	48.4	97	70-130
75-35-4	1,1-Dichloroethene	50	62.2	124	70-130
156-59-2	cis-1,2-Dichloroethene	50	50.6	101	70-130
156-60-5	trans-1,2-Dichloroethene	50	51.4	103	70-130
78-87-5	1,2-Dichloropropane	50	56.4	113	70-130
142-28-9	1,3-Dichloropropane	50	55.0	110	70-130
594-20-7	2,2-Dichloropropane	50	57.9	116	70-130
563-58-6	1,1-Dichloropropene	50	59.8	120	70-130
10061-01-5	cis-1,3-Dichloropropene	50	56.5	113	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3355-B5	N90682.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	59.5	119	70-130
100-41-4	Ethylbenzene	50	51.5	103	70-130
87-68-3	Hexachlorobutadiene	50	59.9	120	70-130
591-78-6	2-Hexanone	50	69.0	138* a	70-130
74-88-4	Iodomethane	50	50.8	102	70-130
98-82-8	Isopropylbenzene	50	52.9	106	70-130
99-87-6	p-Isopropyltoluene	50	55.5	111	70-130
1634-04-4	Methyl Tert Butyl Ether	50	50.1	100	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	57.5	115	70-130
74-95-3	Methylene bromide	50	53.2	106	70-130
75-09-2	Methylene chloride	50	50.7	101	70-130
91-20-3	Naphthalene	50	67.1	134* a	70-130
103-65-1	n-Propylbenzene	50	54.8	110	70-130
100-42-5	Styrene	50	56.4	113	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	51.8	104	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	57.1	114	70-130
127-18-4	Tetrachloroethene	50	52.1	104	70-130
108-88-3	Toluene	50	50.1	100	70-130
87-61-6	1,2,3-Trichlorobenzene	50	62.6	125	70-130
120-82-1	1,2,4-Trichlorobenzene	50	62.1	124	70-130
71-55-6	1,1,1-Trichloroethane	50	58.2	116	70-130
79-00-5	1,1,2-Trichloroethane	50	49.6	99	70-130
79-01-6	Trichloroethene	50	48.2	96	70-130
75-69-4	Trichlorofluoromethane	50	48.6	97	70-130
96-18-4	1,2,3-Trichloropropane	50	54.0	108	70-130
95-63-6	1,2,4-Trimethylbenzene	50	48.6	97	70-130
108-67-8	1,3,5-Trimethylbenzene	50	46.7	93	70-130
108-05-4	Vinyl Acetate	50	43.9	88	70-130
75-01-4	Vinyl chloride	50	52.8	106	70-130
	m,p-Xylene	100	97.2	97	70-130
95-47-6	o-Xylene	50	49.8	100	70-130
1330-20-7	Xylene (total)	150	147	98	70-130

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3355-BS	N90682.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
2037-26-5	Toluene-D8	105%	70-130%
460-00-4	4-Bromofluorobenzene	92%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: MC33777

Account: STANNYR Stantec Consulting Corporation

Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33777-1MS	N90705.D	5	09/29/14	JB	n/a	n/a	MSN3355
MC33777-1MSD	N90706.D	5	09/29/14	JB	n/a	n/a	MSN3355
MC33777-1	N90687.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Compound	MC33777-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	119	48* a	250	115	46* a	3	70-130/30
71-43-2	Benzene	ND	250	236	94	250	239	96	1	70-130/30
108-86-1	Bromobenzene	ND	250	253	101	250	255	102	1	70-130/30
74-97-5	Bromochloromethane	ND	250	268	107	250	269	108	0	70-130/30
75-27-4	Bromodichloromethane	ND	250	254	102	250	257	103	1	70-130/30
75-25-2	Bromoform	ND	250	260	104	250	266	106	2	70-130/30
74-83-9	Bromomethane	ND	250	216	86	250	239	96	10	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	230	92	250	234	94	2	70-130/30
104-51-8	n-Butylbenzene	ND	250	269	108	250	275	110	2	70-130/30
135-98-8	sec-Butylbenzene	ND	250	262	105	250	270	108	3	70-130/30
98-06-6	tert-Butylbenzene	ND	250	253	101	250	259	104	2	70-130/30
75-15-0	Carbon disulfide	ND	250	298	119	250	300	120	1	70-130/30
56-23-5	Carbon tetrachloride	ND	250	267	107	250	276	110	3	70-130/30
108-90-7	Chlorobenzene	ND	250	235	94	250	246	98	5	70-130/30
75-00-3	Chloroethane	ND	250	293	117	250	292	117	0	70-130/30
67-66-3	Chloroform	ND	250	239	96	250	235	94	2	70-130/30
74-87-3	Chloromethane	ND	250	220	88	250	231	92	5	70-130/30
95-49-8	o-Chlorotoluene	ND	250	251	100	250	256	102	2	70-130/30
106-43-4	p-Chlorotoluene	ND	250	246	98	250	252	101	2	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	296	118	250	288	115	3	70-130/30
124-48-1	Dibromochloromethane	ND	250	259	104	250	264	106	2	70-130/30
106-93-4	1,2-Dibromoethane	ND	250	267	107	250	272	109	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	250	268	107	250	272	109	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	250	254	102	250	258	103	2	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	250	271	108	250	274	110	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND	250	226	90	250	232	93	3	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	257	103	250	252	101	2	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	236	94	250	238	95	1	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	315	126	250	308	123	2	70-130/30
156-59-2	cis-1,2-Dichloroethene	5.5	250	254	99	250	251	98	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	262	105	250	256	102	2	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	275	110	250	281	112	2	70-130/30
142-28-9	1,3-Dichloropropane	ND	250	262	105	250	270	108	3	70-130/30
594-20-7	2,2-Dichloropropane	ND	250	280	112	250	273	109	3	70-130/30
563-58-6	1,1-Dichloropropene	ND	250	294	118	250	300	120	2	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	281	112	250	281	112	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33777-1MS	N90705.D	5	09/29/14	JB	n/a	n/a	MSN3355
MC33777-1MSD	N90706.D	5	09/29/14	JB	n/a	n/a	MSN3355
MC33777-1	N90687.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Compound	MC33777-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	250	292	117	250	298	119	2	70-130/30
100-41-4	Ethylbenzene	ND	250	243	97	250	252	101	4	70-130/30
87-68-3	Hexachlorobutadiene	ND	250	270	108	250	292	117	8	70-130/30
591-78-6	2-Hexanone	ND	250	215	86	250	220	88	2	70-130/30
74-88-4	Iodomethane	ND	250	254	102	250	257	103	1	70-130/30
98-82-8	Isopropylbenzene	ND	250	259	104	250	259	104	0	70-130/30
99-87-6	p-Isopropyltoluene	ND	250	264	106	250	268	107	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	250	255	102	250	249	100	2	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	262	105	250	264	106	1	70-130/30
74-95-3	Methylene bromide	ND	250	258	103	250	268	107	4	70-130/30
75-09-2	Methylene chloride	ND	250	255	102	250	250	100	2	70-130/30
91-20-3	Naphthalene	ND	250	334	134* a	250	339	136* a	1	70-130/30
103-65-1	n-Propylbenzene	ND	250	265	106	250	268	107	1	70-130/30
100-42-5	Styrene	ND	250	263	105	250	274	110	4	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	248	99	250	256	102	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	280	112	250	281	112	0	70-130/30
127-18-4	Tetrachloroethene	ND	250	245	98	250	253	101	3	70-130/30
108-88-3	Toluene	ND	250	243	97	250	250	100	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	250	293	117	250	312	125	6	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	250	286	114	250	305	122	6	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	295	118	250	290	116	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	243	97	250	245	98	1	70-130/30
79-01-6	Trichloroethene	ND	250	234	94	250	240	96	3	70-130/30
75-69-4	Trichlorofluoromethane	ND	250	241	96	250	238	95	1	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	250	271	108	250	272	109	0	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	250	240	96	250	246	98	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	250	229	92	250	232	93	1	70-130/30
108-05-4	Vinyl Acetate	ND	250	218	87	250	215	86	1	70-130/30
75-01-4	Vinyl chloride	ND	250	265	106	250	270	108	2	70-130/30
	m,p-Xylene	ND	500	455	91	500	468	94	3	70-130/30
95-47-6	o-Xylene	ND	250	234	94	250	243	97	4	70-130/30
1330-20-7	Xylene (total)	ND	750	689	92	750	711	95	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: MC33777

Account: STANNYR Stantec Consulting Corporation

Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33777-1MS	N90705.D	5	09/29/14	JB	n/a	n/a	MSN3355
MC33777-1MSD	N90706.D	5	09/29/14	JB	n/a	n/a	MSN3355
MC33777-1	N90687.D	1	09/29/14	JB	n/a	n/a	MSN3355

The QC reported here applies to the following samples:

Method: SW846 8260C

MC33777-1, MC33777-2, MC33777-3, MC33777-4, MC33777-5, MC33777-6, MC33777-7, MC33777-8, MC33777-9, MC33777-10, MC33777-11, MC33777-12, MC33777-13, MC33777-14, MC33777-15

CAS No.	Surrogate Recoveries	MS	MSD	MC33777-1	Limits
1868-53-7	Dibromofluoromethane	97%	94%	96%	70-130%
2037-26-5	Toluene-D8	103%	104%	100%	70-130%
460-00-4	4-Bromofluorobenzene	93%	94%	97%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-BFB	Injection Date: 09/18/14
Lab File ID: N90385.D	Injection Time: 13:17
Instrument ID: GCMSN	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	27584	25.4	Pass
75	30.0 - 60.0% of mass 95	54529	50.3	Pass
95	Base peak, 100% relative abundance	108414	100.0	Pass
96	5.0 - 9.0% of mass 95	7647	7.05	Pass
173	Less than 2.0% of mass 174	581	0.54 (0.79) ^a	Pass
174	50.0 - 150.0% of mass 95	73592	67.9	Pass
175	5.0 - 9.0% of mass 174	5197	4.79 (7.06) ^a	Pass
176	95.0 - 101.0% of mass 174	71013	65.5 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	4495	4.15 (6.33) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSN3345-IC3345	N90391.D	09/18/14	16:07	02:50	Initial cal 0.5
MSN3345-IC3345	N90392.D	09/18/14	16:35	03:18	Initial cal 1
MSN3345-IC3345	N90393.D	09/18/14	17:03	03:46	Initial cal 2
MSN3345-IC3345	N90394.D	09/18/14	17:32	04:15	Initial cal 5
MSN3345-IC3345	N90395.D	09/18/14	18:00	04:43	Initial cal 10
MSN3345-IC3345	N90396.D	09/18/14	18:30	05:13	Initial cal 25
MSN3345-ICC3345	N90397.D	09/18/14	18:59	05:42	Initial cal 50
MSN3345-IC3345	N90398.D	09/18/14	19:27	06:10	Initial cal 100
MSN3345-IC3345	N90399.D	09/18/14	19:55	06:38	Initial cal 200
MSN3345-IC3345	N90400.D	09/18/14	20:23	07:06	Initial cal 400

Instrument Performance Check (BFB)

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-BFB	Injection Date: 09/19/14
Lab File ID: N90407.D	Injection Time: 13:04
Instrument ID: GCMSN	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	31008	23.4	Pass
75	30.0 - 60.0% of mass 95	66272	49.9	Pass
95	Base peak, 100% relative abundance	132736	100.0	Pass
96	5.0 - 9.0% of mass 95	8223	6.20	Pass
173	Less than 2.0% of mass 174	660	0.50 (0.72) ^a	Pass
174	50.0 - 150.0% of mass 95	91480	68.9	Pass
175	5.0 - 9.0% of mass 174	5584	4.21 (6.10) ^a	Pass
176	95.0 - 101.0% of mass 174	88016	66.3 (96.2) ^a	Pass
177	5.0 - 9.0% of mass 176	5211	3.93 (5.92) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSN3345-ICV3345	N90407.D	09/19/14	13:04	00:00	Initial cal verification 50
MSN3345-BS	N90407.D	09/19/14	13:04	00:00	Blank Spike
MSN3345-CC3345	N90407.D	09/19/14	13:04	00:00	Continuing cal 50
MSN3345-MB	N90410.D	09/19/14	14:28	01:24	Method Blank
ZZZZZZ	N90411.D	09/19/14	15:09	02:05	(unrelated sample)
ZZZZZZ	N90412.D	09/19/14	15:37	02:33	(unrelated sample)
ZZZZZZ	N90413.D	09/19/14	16:05	03:01	(unrelated sample)
ZZZZZZ	N90414.D	09/19/14	16:33	03:29	(unrelated sample)
ZZZZZZ	N90415.D	09/19/14	17:02	03:58	(unrelated sample)
ZZZZZZ	N90416.D	09/19/14	17:30	04:26	(unrelated sample)
ZZZZZZ	N90417.D	09/19/14	17:58	04:54	(unrelated sample)
ZZZZZZ	N90418.D	09/19/14	18:26	05:22	(unrelated sample)
ZZZZZZ	N90422.D	09/19/14	20:19	07:15	(unrelated sample)
ZZZZZZ	N90423.D	09/19/14	20:47	07:43	(unrelated sample)
ZZZZZZ	N90424.D	09/19/14	21:16	08:12	(unrelated sample)
ZZZZZZ	N90425.D	09/19/14	21:44	08:40	(unrelated sample)
ZZZZZZ	N90426.D	09/19/14	22:12	09:08	(unrelated sample)
ZZZZZZ	N90427.D	09/19/14	22:40	09:36	(unrelated sample)
ZZZZZZ	N90428.D	09/19/14	23:09	10:05	(unrelated sample)
ZZZZZZ	N90429.D	09/19/14	23:37	10:33	(unrelated sample)
ZZZZZZ	N90430.D	09/20/14	00:05	11:01	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3355-BFB
Lab File ID: N90681.D
Instrument ID: GCMSN
Injection Date: 09/29/14
Injection Time: 08:26

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	32728	24.6	Pass
75	30.0 - 60.0% of mass 95	66328	49.8	Pass
95	Base peak, 100% relative abundance	133056	100.0	Pass
96	5.0 - 9.0% of mass 95	8924	6.71	Pass
173	Less than 2.0% of mass 174	797	0.60 (0.87) ^a	Pass
174	50.0 - 150.0% of mass 95	91920	69.1	Pass
175	5.0 - 9.0% of mass 174	6562	4.93 (7.14) ^a	Pass
176	95.0 - 101.0% of mass 174	89544	67.3 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	6231	4.68 (6.96) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSN3355-CC3345	N90681.D	09/29/14	08:26	00:00	Continuing cal 50
MSN3355-BS	N90682.D	09/29/14	08:54	00:28	Blank Spike
MSN3355-MB	N90685.D	09/29/14	10:18	01:52	Method Blank
MC33777-15	N90686.D	09/29/14	10:47	02:21	TRIP BLANK
MC33777-1	N90687.D	09/29/14	11:15	02:49	MW-1(DOT)
MC33777-2	N90688.D	09/29/14	11:43	03:17	MW-1
MC33777-3	N90689.D	09/29/14	12:12	03:46	MW-5
MC33777-4	N90690.D	09/29/14	12:40	04:14	MW-22
MC33777-5	N90691.D	09/29/14	13:08	04:42	MW-23
MC33777-6	N90692.D	09/29/14	13:37	05:11	MW-24
MC33777-7	N90693.D	09/29/14	14:05	05:39	MW-B
MC33777-8	N90694.D	09/29/14	14:33	06:07	MW-D
MC33777-9	N90695.D	09/29/14	15:01	06:35	MW-E
MC33777-10	N90696.D	09/29/14	15:30	07:04	MW-F
MC33777-11	N90697.D	09/29/14	15:58	07:32	PW-1
MC33777-12	N90698.D	09/29/14	16:26	08:00	PZ-1
MC33777-13	N90699.D	09/29/14	16:55	08:29	PZ-2
MC33777-14	N90700.D	09/29/14	17:23	08:57	FIELD DUPLICATE
ZZZZZZ	N90701.D	09/29/14	17:51	09:25	(unrelated sample)
ZZZZZZ	N90702.D	09/29/14	18:20	09:54	(unrelated sample)
ZZZZZZ	N90704.D	09/29/14	19:16	10:50	(unrelated sample)
MC33777-1MS	N90705.D	09/29/14	19:44	11:18	Matrix Spike
MC33777-1MSD	N90706.D	09/29/14	20:13	11:47	Matrix Spike Duplicate

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Check Std: MSN3355-CC3345	Injection Date: 09/29/14
Lab File ID: N90681.D	Injection Time: 08:26
Instrument ID: GCMSN	Method: SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	309070	9.11	478600	9.99	252687	13.24	209144	15.79	111912	6.69
Upper Limit ^a	618140	9.61	957200	10.49	505374	13.74	418288	16.29	223824	7.19
Lower Limit ^b	154535	8.61	239300	9.49	126344	12.74	104572	15.29	55956	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN3355-BS	313745	9.12	487480	9.99	260206	13.24	215375	15.80	122333	6.69
MSN3355-MB	292440	9.12	462061	9.98	228778	13.24	172210	15.80	97945	6.71
MC33777-15	289272	9.12	453340	9.99	232527	13.24	170691	15.80	89761	6.72
MC33777-1	281384	9.12	438112	9.99	224895	13.24	165662	15.80	108562	6.71
MC33777-2	275233	9.12	428916	9.99	217310	13.24	157320	15.80	98479	6.71
MC33777-3	273652	9.12	428674	9.99	222753	13.24	162983	15.80	125067	6.71
MC33777-4	270309	9.12	416095	9.99	212255	13.24	156141	15.80	98029	6.71
MC33777-5	265318	9.11	414408	9.99	212852	13.24	153000	15.80	103680	6.72
MC33777-6	265378	9.12	411474	9.99	214192	13.24	157249	15.80	118335	6.71
MC33777-7	257597	9.12	399280	9.99	205812	13.24	151141	15.80	91288	6.71
MC33777-8	258408	9.11	402704	9.99	206154	13.24	151033	15.80	99461	6.72
MC33777-9	256852	9.12	396822	9.99	208189	13.24	149254	15.80	102954	6.71
MC33777-10	258425	9.12	402663	9.99	208512	13.24	154944	15.80	101312	6.71
MC33777-11	255274	9.12	399475	9.99	209711	13.24	152614	15.80	116272	6.72
MC33777-12	255759	9.11	397688	9.98	205119	13.24	154455	15.80	104333	6.70
MC33777-13 ^c	255597	9.12	400350	9.98	206619	13.24	145395	15.80	88448	6.71
MC33777-14	252564	9.12	394031	9.99	203846	13.24	151904	15.80	109954	6.72
ZZZZZZ	258625	9.11	419634	9.99	215529	13.24	166947	15.80	97857	6.71
ZZZZZZ	271735	9.12	421585	9.99	218156	13.24	176994	15.80	95588	6.71
ZZZZZZ	278070	9.12	449297	9.99	231909	13.24	189510	15.80	97974	6.71
MC33777-1MS	312180	9.12	499936	9.99	270838	13.24	214916	15.80	119935	6.70
MC33777-1MSD	319054	9.12	494303	9.99	264962	13.24	214276	15.80	114340	6.70

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

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

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

(c) The pH of the sample aliquot for VOA analysis was > 2 at time of analysis.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC33777

Account: STANNYR Stantec Consulting Corporation

Project: LMC - Utica West Lot

Method: SW846 8260C

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33777-1	N90687.D	96	100	97
MC33777-2	N90688.D	97	100	102
MC33777-3	N90689.D	98	101	101
MC33777-4	N90690.D	96	101	100
MC33777-5	N90691.D	97	101	100
MC33777-6	N90692.D	98	100	100
MC33777-7	N90693.D	98	101	101
MC33777-8	N90694.D	97	100	100
MC33777-9	N90695.D	97	103	102
MC33777-10	N90696.D	97	102	98
MC33777-11	N90697.D	100	101	100
MC33777-12	N90698.D	98	101	98
MC33777-13	N90699.D	100	100	102
MC33777-14	N90700.D	98	101	98
MC33777-15	N90686.D	97	100	99
MC33777-1MS	N90705.D	97	103	93
MC33777-1MSD	N90706.D	94	104	94
MSN3355-BS	N90682.D	96	105	92
MSN3355-MB	N90685.D	95	98	99

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%

6.6.1

6

Initial Calibration Summary

Page 1 of 5

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICC3345
Lab FileID: N90397.D

Response Factor Report MSN

Method : C:\msdchem\1\methods\n140918w.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration

Calibration Files

0.5 =N90391.D 1 =N90392.D 2 =N90393.D 5 =N90394.D
10 =N90395.D 25 =N90396.D 50 =N90397.D 100 =N90398.D
200 =N90399.D 400 =N90400.D = =

Compound	0.5	1	2	5	10	25	50	100	200	400	Avg	%RSD

1) p tert butyl alcohol-d9	-----ISTD-----											
2) tertiary butyl alcohol												
	2.116	1.627	1.612	1.771	1.676	1.849	1.793	1.619	1.758			9.68
3) Ethanol												
	0.328	0.262	0.247	0.238	0.240	0.268	0.252	0.213	0.256			13.14
4) I pentafluorobenzene	-----ISTD-----											
5) dichlorodifluoromethane												
	0.516	0.577	0.615	0.804	0.734	0.755	0.682	0.584	0.658			15.30
6) chloromethane												
	0.767	0.747	0.841	0.869	0.752	0.851	0.895	0.733	0.807			7.86
7) vinyl chloride												
	1.342	0.494	0.598	0.649	0.644	0.566	0.574	0.499		0.671		41.33
---- Linear regression ---- Coefficient = 0.9910												
Response Ratio = 0.01192 + 0.53102 *A												
8) bromomethane												
	0.110	0.137	0.189	0.216	0.234	0.300	0.320		0.215			36.20
---- Quadratic regression ---- Coefficient = 0.9971												
Response Ratio = -0.00728 + 0.23503 *A + 0.02290 *A^2												
9) chloroethane												
	0.291	0.341	0.380	0.377	0.315	0.315	0.300	0.266	0.323			12.46
10) ethyl ether												
	0.547	0.531	0.530	0.499	0.465	0.450	0.404	0.489				10.63
11) acetonitrile												
	0.081	0.086	0.096	0.083	0.070	0.068	0.059	0.078				16.51
12) trichlorofluoromethane												
	1.604	0.647	0.741	0.827	1.023	0.937	0.953		0.962			32.39
---- Linear regression ---- Coefficient = 0.9926												
Response Ratio = 0.00133 + 0.94402 *A												
13) freon-113												
	0.308	0.360	0.495	0.466	0.451	0.457	0.390	0.418				16.06
14) acrolein												
	0.066	0.066	0.066	0.062	0.050	0.048	0.041	0.057				18.10
15) 1,1-dichloroethene												
	0.705	0.558	0.360	0.365	0.444	0.399	0.407	0.401	0.355	0.444		26.16
---- Linear regression ---- Coefficient = 0.9952												
Response Ratio = 0.00648 + 0.37622 *A												
16) acetone												
	0.129	0.136	0.126	0.099	0.085			0.115				18.91
17) Methyl Acetate												

6.7.1

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Initial Calibration Summary

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICC3345
Lab FileID: N90397.D

		0.486	0.501	0.512	0.429	0.379	0.340		0.441	16.01			
18)	methylene chloride												
		0.687	0.546	0.552	0.553	0.471	0.469	0.461	0.418	0.520	16.20		
19)	methyl tert butyl ether												
		1.122	0.965	0.910	0.696	0.601	1.488	1.264	1.271	1.292	1.197	1.080	26.10
	----	Linear regression ---- Coefficient = 0.9931											
		Response Ratio = -0.00807 + 1.23694 *A											
20)	acrylonitrile												
		0.226	0.256	0.258	0.225	0.201	0.183	0.169	0.217			15.81	
21)	allyl chloride												
		0.926	0.937	1.042	0.942	0.952	0.925	0.773	0.928			8.55	
22)	trans-1,2-dichloroethene												
		0.720	0.570	0.439	0.439	0.494	0.467	0.475	0.479	0.435	0.502	18.22	
23)	iodomethane												
		0.079	0.127	0.198	0.260	0.345	0.377	0.322	0.244			46.56	
	----	Linear regression ---- Coefficient = 0.9910											
		Response Ratio = -0.01973 + 0.33574 *A											
24)	carbon disulfide												
		1.276	1.336	1.599	1.453	1.506	1.545	1.400	1.445			7.99	
25)	propionitrile												
		0.002	0.005	0.007	0.008	0.008	0.007		0.006#			39.82	
	----	Linear regression ---- Coefficient = 0.9963											
		Response Ratio = -0.00052 + 0.00771 *A											
26)	vinyl acetate												
		0.478	0.688	0.779	0.738	0.775	0.752	0.707	0.702			14.90	
27)	chloroprene												
		0.769	0.848	1.045	0.979	0.972	0.944	0.750	0.901			12.54	
28)	di-isopropyl ether												
		2.977	2.567	2.526	2.687	2.402	2.305	2.085	1.618	2.396		17.12	
29)	methacrylonitrile												
		0.378	0.408	0.383	0.347	0.339	0.330	0.289	0.353			11.14	
30)	2-butanone												
		0.046	0.063	0.070	0.063	0.057	0.052	0.043	0.056#			17.20	
31)	Hexane												
		0.885	0.850	1.061	0.958	0.916	0.851	0.648	0.881			14.34	
32)	1,1-dichloroethane												
		1.637	1.395	1.116	1.176	1.246	1.129	1.161	1.162	1.056	1.231	14.61	
33)	tert-butyl ethyl ether												
		0.263	0.258	0.249	1.348	1.155	1.271	1.514	1.383	0.930		60.92	
	----	Quadratic regression ---- Coefficient = 0.9907											
		Response Ratio = -0.08188 + 1.36516 *A + 0.00714 *A^2											
34)	isobutyl alcohol												
		0.397	0.397	0.426	0.383	0.359	0.328	0.253	0.363			15.91	
35)	2,2-dichloropropane												
		0.150	0.271	0.870	0.827	0.874	0.890	0.779	0.666			47.34	
	----	Linear regression ---- Coefficient = 0.9920											
		Response Ratio = -0.06601 + 0.84378 *A											
36)	cis-1,2-dichloroethene												
		0.745	0.638	0.543	0.539	0.563	0.523	0.545	0.553	0.496	0.572	13.19	
37)	ethyl acetate												
		1.867	1.939	2.101	1.913	1.795	1.643	1.264	1.789			15.11	
38)	bromochloromethane												
		0.244	0.238	0.254	0.236	0.244	0.237	0.186	0.234			9.38	
39)	chloroform												
		1.557	1.259	1.045	1.049	1.096	1.005	1.027	1.004	0.854	1.099	18.31	

Initial Calibration Summary

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICC3345
Lab FileID: N90397.D

40)	dibromofluoromethane (s)	0.507	0.527	0.506	0.532	0.531	0.523	0.466	0.513	4.58			
41)	Tetrahydrofuran	0.155	0.189	0.184	0.164	0.153	0.140	0.121	0.158	15.17			
42)	1,1,1-trichloroethane	0.625	0.687	0.662	0.805	0.999	0.960	1.000	0.992	0.856	0.843	18.31	
43) I	1,4-difluorobenzene	-----ISTD-----											
44)	Cyclohexane	0.508	0.568	0.797	0.763	0.778	0.731	0.602	0.679	17.12			
45)	carbon tetrachloride	0.577	0.490	0.355	0.402	0.544	0.517	0.545	0.523	0.449	0.489	14.98	
46)	1,1-dichloropropene	0.359	0.403	0.495	0.472	0.483	0.460	0.404	0.439	11.59			
47)	benzene	1.840	1.953	1.639	1.307	1.321	1.388	1.256	1.315	1.227	1.089	1.433	19.65
48)	1,2-dichloroethane	0.959	0.799	0.623	0.616	0.666	0.616	0.640	0.589	0.531	0.671	19.38	
49)	tert-amyl methyl ether	0.203	0.137	0.146	0.472	0.416	0.419	0.529	0.578	0.363	48.41		
	---- Quadratic regression ----	Coefficient = 0.9954											
	Response Ratio =	-0.01811 + 0.42102 *A + 0.02063 *A^2											
50)	heptane	0.339	0.327	0.473	0.448	0.464	0.442	0.379	0.410	14.87			
51)	trichloroethene	0.541	0.583	0.496	0.379	0.390	0.418	0.387	0.395	0.368	0.323	0.428	19.51
52)	1,2-dichloropropane	0.445	0.402	0.411	0.449	0.412	0.427	0.387	0.331	0.408	9.20		
53)	dibromomethane	0.260	0.199	0.206	0.226	0.201	0.207	0.193	0.174	0.208	12.26		
54)	bromodichloromethane	0.677	0.579	0.479	0.499	0.545	0.509	0.552	0.520	0.472	0.537	11.75	
55)	Methylcyclohexane	0.374	0.404	0.584	0.566	0.573	0.547	0.471	0.503	17.23			
56)	2-chloroethyl vinyl ether	0.402	0.411	0.449	0.412	0.427	0.387	0.331	0.403	9.23			
57)	methyl methacrylate	0.172	0.191	0.210	0.197	0.196	0.178	0.163	0.187	8.81			
58)	1,4-dioxane	0.002	0.003	0.003	0.003	0.003	0.002	0.003#	24.96				
	---- Quadratic regression ----	Coefficient = 0.9959											
	Response Ratio =	-0.00071 + 0.00349 *A + -0.00006 *A^2											
59)	cis-1,3-dichloropropene	0.251	0.328	0.359	0.354	0.422	0.569	0.532	0.567	0.544	0.497	0.442	25.91
	---- Linear regression ----	Coefficient = 0.9961											
	Response Ratio =	-0.00412 + 0.52238 *A											
60)	toluene-d8 (s)	1.146	1.244	1.256	1.297	1.252	1.154	1.045	1.199	7.33			
61)	4-methyl-2-pentanone	0.379	0.434	0.450	0.404	0.373	0.333	0.300	0.382	13.96			
62)	toluene	1.213	0.978	0.799	0.809	0.895	0.811	0.832	0.753	0.658	0.861	18.45	
63)	trans-1,3-dichloropropene	0.362	0.443	0.389	0.329	0.349	0.485	0.447	0.477	0.458	0.430	0.417	13.35
64)	1,1,2-trichloroethane	0.397	0.310	0.248	0.261	0.274	0.251	0.251	0.227	0.277	19.46		
65)	ethyl methacrylate												

Initial Calibration Summary

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICC3345
Lab FileID: N90397.D

		0.332	0.366	0.416	0.381	0.378	0.326	0.285	0.355	12.23	
66)	I chlorobenzene-d5	-----ISTD-----									
67)	tetrachloroethene	0.842	0.876	0.722	0.541	0.558	0.611	0.590	0.637	0.596	18.74
68)	1,3-dichloropropane	0.995	0.954	0.999	0.941	0.986	0.912	0.808	0.942	7.14	
69)	dibromochloromethane	0.699	0.774	0.746	0.609	0.628	0.656	0.644	0.705	0.666	8.41
70)	1,2-dibromoethane	0.640	0.501	0.526	0.554	0.505	0.543	0.501	0.453	0.528	10.42
71)	2-hexanone	0.557	0.650	0.661	0.616	0.585	0.521	0.453	0.577	12.79	
72)	chlorobenzene	2.540	2.055	1.668	1.578	1.684	1.541	1.653	1.569	1.405	19.89
73)	1,1,1,2-tetrachloroethane	0.819	0.686	0.594	0.596	0.629	0.593	0.637	0.605	0.555	12.32
74)	ethylbenzene	4.620	3.654	2.927	2.958	3.193	2.994	3.220	3.025	2.660	17.87
75)	m,p-xylene	1.485	1.631	1.323	1.058	1.037	1.109	0.999	1.070	0.983	19.74
76)	o-xylene	1.376	1.583	1.374	1.064	1.060	1.089	1.015	1.090	1.003	18.73
77)	styrene	1.561	1.639	1.756	1.666	1.810	1.736	1.552	1.674	5.89	
78)	bromoform	0.531	0.384	0.337	0.355	0.382	0.374	0.412	0.392	0.359	14.47
79)	trans-1,4-dichloro-2-butene	0.095	0.124	0.173	0.170	0.183	0.183	0.175	0.157	21.77	
	---- Linear regression ----	Coefficient = 0.9990									
	Response Ratio =	-0.00840 + 0.18004 *A									
80)	I 1,4-dichlorobenzene-d	-----ISTD-----									
81)	isopropylbenzene	3.339	3.416	3.795	3.596	3.680	3.592	3.395	3.544	4.71	
82)	bromofluorobenzene (s)	1.264	1.244	1.169	1.248	1.236	1.205	1.167	1.219	3.20	
83)	bromobenzene	0.861	0.819	0.858	0.808	0.860	0.842	0.823	0.839	2.64	
84)	1,1,1,2-tetrachloroethane	1.268	1.484	1.115	0.911	0.876	0.878	0.783	1.045	24.37	
	---- Quadratic regression ----	Coefficient = 0.9972									
	Response Ratio =	0.00619 + 0.90872 *A + -0.12790 *A^2									
85)	1,2,3-trichloropropane	0.838	0.857	0.931	0.874	0.868	0.832	0.802	0.857	4.72	
86)	n-propylbenzene	4.328	4.375	4.903	4.552	4.704	4.616	4.288	4.538	4.93	
87)	2-chlorotoluene	2.936	2.880	2.999	2.796	2.924	2.911	2.754	2.886	2.93	
88)	4-chlorotoluene	3.058	3.031	3.171	2.962	3.116	3.103	2.899	3.049	3.08	
89)	1,3,5-trimethylbenzene	5.065	4.012	3.251	3.233	3.475	3.266	3.394	3.276	3.053	17.58
90)	tert-butylbenzene	1.926	1.988	2.250	2.152	2.203	2.146	1.959	2.089	6.17	
91)	1,2,4-trimethylbenzene	4.967	3.993	3.209	3.277	3.416	3.258	3.357	3.241	3.029	17.06
92)	sec-butylbenzene										

Initial Calibration Summary

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Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICC3345
Lab FileID: N90397.D

		3.728	3.740	4.344	4.122	4.217	4.053	3.706	3.987	6.55		
93)	1,3-dichlorobenzene	2.816	2.133	1.697	1.622	1.668	1.597	1.677	1.631	1.558	1.822	22.48
	---- Linear regression ----	Coefficient = 0.9992										
	Response Ratio =	0.02230 + 1.58947 *A										
94)	p-isopropyltoluene	3.149	3.245	3.581	3.385	3.435	3.247	2.764	3.258	8.01		
95)	1,4-dichlorobenzene	2.996	2.124	1.705	1.601	1.633	1.523	1.547	1.454	1.333	1.768	28.84
	---- Linear regression ----	Coefficient = 0.9964										
	Response Ratio =	0.03514 + 1.40180 *A										
96)	1,2-dichlorobenzene	2.549	1.951	1.550	1.521	1.650	1.583	1.602	1.523	1.431	1.707	20.38
	---- Linear regression ----	Coefficient = 0.9979										
	Response Ratio =	0.02128 + 1.48476 *A										
97)	n-butylbenzene	3.054	3.132	3.712	3.557	3.630	3.457	3.115	3.380	8.08		
98)	1,2-dibromo-3-chloropropane	0.124	0.127	0.158	0.144	0.136	0.130	0.127	0.135	9.05		
99)	1,2,4-trichlorobenzene	0.446	0.573	0.776	0.777	0.750	0.733	0.669	0.675	18.39		
100)	1,3,5-trichlorobenzene	1.075	1.052	1.152	1.096	1.062	0.984	0.895	1.045	7.95		
101)	hexachlorobutadiene	0.525	0.520	0.595	0.559	0.528	0.506	0.471	0.529	7.40		
102)	naphthalene	0.313	0.398	0.895	1.024	0.995	1.037	0.993	0.808	38.81		
	---- Linear regression ----	Coefficient = 0.9982										
	Response Ratio =	-0.08156 + 1.02758 *A										
103)	1,2,3-trichlorobenzene	0.248	0.332	0.533	0.553	0.513	0.522	0.474	0.453	25.81		
	---- Linear regression ----	Coefficient = 0.9947										
	Response Ratio =	-0.01826 + 0.50273 *A										
104)	2-methylnaphthalene	0.271	0.248	0.304	0.297	0.282	0.274	0.252	0.276	7.62		
105)	1-methylnaphthalene	0.206	0.221	0.213	0.225	0.205	0.197	0.174	0.206	8.34		

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

n140918w.m Fri Sep 19 12:07:17 2014

6.7.1
6

Initial Calibration Verification

Job Number: MC33777
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSN3345-ICV3345
 Lab FileID: N90407.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\N140919\N90407.D Vial: 16
 Acq On : 19 Sep 2014 1:04 pm Operator: krystend
 Sample : cc3345-50 Inst : MSN
 Misc : ms32746,MSN3345,,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\n140918w.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Fri Sep 19 12:01:33 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 p	tert butyl alcohol-d9	1.000	1.000	0.0	103	0.00	6.70
2 P	tertiary butyl alcohol	1.758	1.894	-7.7	116	0.00	6.78
3 p	Ethanol	0.256	0.299	-16.8	128	0.01	5.56
4 I	pentafluorobenzene	1.000	1.000	0.0	108	0.00	9.12
5 p	dichlorodifluoromethane	0.658	0.844	-28.3#	124	0.00	4.39
6 P	chloromethane	0.807	0.815	-1.0	117	0.00	4.66
	----- Amount Calc. %Drift -----						
7 p	vinyl chloride	50.000	59.685	-19.4	123	0.00	4.90
8 p	bromomethane	50.000	50.545	-1.1	117	0.00	5.40
	----- AvgRF CCRF %Dev -----						
9 p	chloroethane	0.323	0.388	-20.1#	133	0.00	5.56
10 p	ethyl ether	0.489	0.551	-12.7	119	0.00	6.43
11 p	acetonitrile	0.078	0.089	-14.1	116	0.00	6.43
	----- Amount Calc. %Drift -----						
12 p	trichlorofluoromethane	50.000	55.869	-11.7	122	0.00	6.21
	----- AvgRF CCRF %Dev -----						
13 p	freon-113	0.418	0.430	-2.9	100	0.00	6.96
14 p	acrolein	0.057	0.058	-1.8	100	0.00	6.20
	----- Amount Calc. %Drift -----						
15 p	1,1-dichloroethene	50.000	52.865	-5.7	109	0.00	6.79
	----- AvgRF CCRF %Dev -----						
16 p	acetone	0.115	0.100	13.0	109	0.00	6.34
17 M	Methyl Acetate	0.441	0.605	-37.2#	152	0.00	6.96
18 p	methylene chloride	0.520	0.485	6.7	111	0.00	6.94
	----- Amount Calc. %Drift -----						
19 p	methyl tert butyl ether	50.000	54.924	-9.8	115	0.00	7.70
	----- AvgRF CCRF %Dev -----						
20 p	acrylonitrile	0.217	0.221	-1.8	106	0.00	6.85
21 p	allyl chloride	0.928	1.042	-12.3	119	0.00	7.03
22 p	trans-1,2-dichloroethene	0.502	0.491	2.2	113	0.00	7.62
	----- Amount Calc. %Drift -----						
23 p	iodomethane	50.000	38.452	23.1#	99	0.00	6.86

Initial Calibration Verification

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICV3345
Lab FileID: N90407.D

24 p	carbon disulfide	AvgRF 1.445	CCRF 1.333	%Dev 7.8	99	0.00	7.22
25 p	propionitrile	Amount 50.000	Calc. 56.235	%Drift -12.5	111	0.00	6.85
26 p	vinyl acetate	AvgRF 0.702	CCRF 0.564	%Dev 19.7	82	0.00	7.97
27 p	chloroprene	0.901	1.156	-28.3#	127	0.00	8.23
28 p	di-isopropyl ether	2.396	2.580	-7.7	116	0.00	8.26
29 p	methacrylonitrile	0.353	0.360	-2.0	112	0.00	8.39
30 p	2-butanone	0.056	0.065#	-16.1	112	0.00	8.28
31 p	Hexane	0.881	0.948	-7.6	107	0.00	8.25
32 P	1,1-dichloroethane	1.231	1.260	-2.4	120	0.00	7.88
33 p	tert-butyl ethyl ether	Amount 50.000	Calc. 46.992	%Drift 6.0	113	0.00	8.66
34 p	isobutyl alcohol	AvgRF 0.363	CCRF 0.396	%Dev -9.1	112	0.00	8.26
35 p	2,2-dichloropropane	Amount 50.000	Calc. 58.647	%Drift -17.3	120	0.00	8.73
36 p	cis-1,2-dichloroethene	AvgRF 0.572	CCRF 0.567	%Dev 0.9	117	0.00	8.44
37 p	ethyl acetate	1.789	1.981	-10.7	112	0.00	8.26
38 p	bromochloromethane	0.234	0.250	-6.8	114	0.00	8.61
39 p	chloroform	1.099	1.099	0.0	118	0.00	8.64
40 S	dibromofluoromethane (s)	0.513	0.498	2.9	101	0.00	8.77
41 p	Tetrahydrofuran	0.158	0.165	-4.4	109	0.00	8.97
42 p	1,1,1-trichloroethane	0.843	1.001	-18.7	112	0.00	9.39
43 I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00	9.99
44 p	Cyclohexane	0.679	0.765	-12.7	107	0.00	9.67
45 p	carbon tetrachloride	0.489	0.545	-11.5	113	0.00	9.75
46 p	1,1-dichloropropene	0.439	0.515	-17.3	117	0.00	9.57
47 p	benzene	1.433	1.379	3.8	118	0.00	9.79
48 p	1,2-dichloroethane	0.671	0.688	-2.5	120	0.00	9.30
49 p	tert-amyl methyl ether	Amount 50.000	Calc. 49.536	%Drift 0.9	108	0.00	9.90
50 p	heptane	AvgRF 0.410	CCRF 0.453	%Dev -10.5	108	0.00	10.25
51 p	trichloroethene	0.428	0.417	2.6	115	0.00	10.41
52 p	1,2-dichloropropane	0.408	0.478	-17.2	124	0.00	10.38
53 p	dibromomethane	0.208	0.222	-6.7	119	0.00	10.36
54 p	bromodichloromethane	0.537	0.608	-13.2	128	0.00	10.46
55 p	Methylcyclohexane	0.503	0.563	-11.9	107	0.00	10.92
56 p	2-chloroethyl vinyl ether	0.403	0.478	-18.6	124	0.00	10.38
57 p	methyl methacrylate	0.187	0.211	-12.8	115	0.00	10.55
58 p	1,4-dioxane	Amount 250.000	Calc. 243.850	%Drift 2.5	100	0.00	10.56
59 p	cis-1,3-dichloropropene	50.000	59.102	-18.2	123	0.00	11.08
60 S	toluene-d8 (s)	AvgRF 1.199	CCRF 1.261	%Dev -5.2	104	0.00	11.78

Initial Calibration Verification

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICV3345
Lab FileID: N90407.D

61 p	4-methyl-2-pentanone	0.382	0.416	-8.9	110	0.00	11.17
62 p	toluene	0.861	0.861	0.0	114	0.00	11.85
63 p	trans-1,3-dichloropropene	0.417	0.524	-25.7#	125	0.00	11.49
64 p	1,1,2-trichloroethane	0.277	0.287	-3.6	122	0.00	11.67
65 p	ethyl methacrylate	0.355	0.380	-7.0	107	0.00	11.86
66 I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	13.24
67 p	tetrachloroethene	0.651	0.667	-2.5	118	0.00	12.59
68 p	1,3-dichloropropane	0.942	1.045	-10.9	116	0.00	11.90
69 p	dibromochloromethane	0.673	0.758	-12.6	122	0.00	12.19
70 p	1,2-dibromoethane	0.528	0.577	-9.3	119	0.00	12.45
71 p	2-hexanone	0.577	0.657	-13.9	111	0.00	12.02
72 P	chlorobenzene	1.744	1.707	2.1	115	0.00	13.28
73 p	1,1,1,2-tetrachloroethane	0.635	0.696	-9.6	122	0.00	13.19
74 p	ethylbenzene	3.250	3.247	0.1	113	0.00	13.45
75 p	m,p-xylene	1.188	1.103	7.2	115	0.00	13.63
76 p	o-xylene	1.154	1.113	3.6	114	0.00	14.04
77 p	styrene	1.674	1.816	-8.5	113	0.00	13.97
78 P	bromoform	0.392	0.434	-10.7	121	0.00	13.80
----- Amount Calc. %Drift -----							
79 p	trans-1,4-dichloro-2-bute	50.000	50.549	-1.1	106	0.00	14.19
----- AvgRF CCRF %Dev -----							
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	15.80
81 p	isopropylbenzene	3.544	3.702	-4.5	108	0.00	14.40
82 S	bromofluorobenzene (s)	1.219	1.162	4.7	97	0.00	14.46
83 p	bromobenzene	0.839	0.901	-7.4	117	0.00	14.69
----- Amount Calc. %Drift -----							
84 P	1,1,2,2-tetrachloroethane	50.000	57.874	-15.7	118	0.00	14.05
----- AvgRF CCRF %Dev -----							
85 p	1,2,3-trichloropropane	0.857	0.957	-11.7	115	0.00	14.19
86 p	n-propylbenzene	4.538	4.825	-6.3	111	0.00	14.85
87 p	2-chlorotoluene	2.886	3.017	-4.5	113	0.00	14.97
88 p	4-chlorotoluene	3.049	3.161	-3.7	112	0.00	15.04
89 p	1,3,5-trimethylbenzene	3.558	3.303	7.2	106	0.00	15.12
90 p	tert-butylbenzene	2.089	2.180	-4.4	106	0.00	15.43
91 p	1,2,4-trimethylbenzene	3.527	3.468	1.7	111	0.00	15.54
92 M	sec-butylbenzene	3.987	4.179	-4.8	106	0.00	15.65
----- Amount Calc. %Drift -----							
93 p	1,3-dichlorobenzene	50.000	54.075	-8.2	114	0.00	15.76
----- AvgRF CCRF %Dev -----							
94 p	p-isopropyltoluene	3.258	3.465	-6.4	107	0.00	15.82
----- Amount Calc. %Drift -----							
95 p	1,4-dichlorobenzene	50.000	57.928	-15.9	114	0.00	15.83
96 p	1,2-dichlorobenzene	50.000	57.489	-15.0	114	0.00	16.19
----- AvgRF CCRF %Dev -----							
97 p	n-butylbenzene	3.380	3.685	-9.0	108	0.00	16.24
98 p	1,2-dibromo-3-chloropropa	0.135	0.169	-25.2#	122	0.00	16.66
99 p	1,2,4-trichlorobenzene	0.675	0.809	-19.9	109	0.00	18.02
100 p	1,3,5-trichlorobenzene	1.045	1.153	-10.3	110	0.00	17.47
101 p	hexachlorobutadiene	0.529	0.576	-8.9	108	0.00	18.30

Initial Calibration Verification

Page 4 of 4

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3345-ICV3345
Lab FileID: N90407.D

		Amount	Calc.	%Drift			
102 p	naphthalene	50.000	62.845	-25.7#	124	0.00	18.29
103 p	1,2,3-trichlorobenzene	50.000	58.201	-16.4	107	0.00	18.49
		AvgRF	CCRF	%Dev			
104 p	2-methylnaphthalene	0.276	0.250	9.4	88	0.00	19.67
105 p	1-methylnaphthalene	0.206	0.188	8.7	87	0.00	19.92

(#) = Out of Range
 N90397.D n140918w.m SPCC's out = 1 CCC's out = 0
 Fri Sep 19 15:32:19 2014

6.7.2
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Continuing Calibration Summary

Page 1 of 4

Job Number: MC33777
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSN3355-CC3345
 Lab FileID: N90681.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\N140929\N90681.D Vial: 16
 Acq On : 29 Sep 2014 8:26 am Operator: jaclynb
 Sample : cc3345-50 Inst : MSN
 Misc : ms32833,MSN3355,,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\n140918w.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Fri Sep 19 12:01:33 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 p	tert butyl alcohol-d9	1.000	1.000	0.0	105	0.00	6.69
2 P	tertiary butyl alcohol	1.758	1.866	-6.1	117	0.00	6.78
3 p	Ethanol	0.256	0.291	-13.7	127	0.01	5.56
4 I	pentafluorobenzene	1.000	1.000	0.0	110	0.00	9.11
5 p	dichlorodifluoromethane	0.658	0.615	6.5	92	0.00	4.39
6 P	chloromethane	0.807	0.672	16.7	98	0.00	4.66
	----- Amount	Calc.	%Drift	-----			
7 p	vinyl chloride	50.000	51.307	-2.6	108	0.00	4.90
8 p	bromomethane	50.000	44.744	10.5	104	0.00	5.40
	----- AvgRF	CCRF	%Dev	-----			
9 p	chloroethane	0.323	0.316	2.2	110	0.00	5.57
10 p	ethyl ether	0.489	0.473	3.3	104	0.00	6.43
11 p	acetonitrile			-----NA-----			
	----- Amount	Calc.	%Drift	-----			
12 p	trichlorofluoromethane	50.000	47.540	4.9	105	0.00	6.21
	----- AvgRF	CCRF	%Dev	-----			
13 p	freon-113	0.418	0.455	-8.9	107	0.00	6.96
14 p	acrolein	0.057	0.061	-7.0	108	0.00	6.20
	----- Amount	Calc.	%Drift	-----			
15 p	1,1-dichloroethene	50.000	50.508	-1.0	106	0.00	6.79
	----- AvgRF	CCRF	%Dev	-----			
16 p	acetone	0.115	0.101	12.2	112	0.00	6.33
17 M	Methyl Acetate	0.441	0.435	1.4	111	0.00	6.96
18 p	methylene chloride	0.520	0.476	8.5	111	0.00	6.94
	----- Amount	Calc.	%Drift	-----			
19 p	methyl tert butyl ether	50.000	44.985	10.0	96	0.00	7.70
	----- AvgRF	CCRF	%Dev	-----			
20 p	acrylonitrile	0.217	0.237	-9.2	116	0.00	6.85
21 p	allyl chloride	0.928	0.929	-0.1	108	0.00	7.03
22 p	trans-1,2-dichloroethene	0.502	0.465	7.4	109	0.00	7.62
	----- Amount	Calc.	%Drift	-----			
23 p	iodomethane	50.000	41.418	17.2	109	0.00	6.86

Continuing Calibration Summary

Page 2 of 4

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3355-CC3345
Lab FileID: N90681.D

24 p	carbon disulfide	AvgRF 1.445	CCRF 1.305	%Dev 9.7	99	0.00	7.22
25 p	propionitrile	Amount 50.000	Calc. 50.128	%Drift -0.3	100	0.00	6.84
26 p	vinyl acetate	AvgRF 0.702	CCRF 0.935	%Dev -33.2#	139	0.00	7.97
27 p	chloroprene	0.901	0.974	-8.1	109	0.00	8.23
28 p	di-isopropyl ether	2.396	2.525	-5.4	115	0.00	8.26
29 p	methacrylonitrile	0.353	0.346	2.0	109	0.00	8.40
30 p	2-butanone	0.056	0.066#	-17.9	116	0.01	8.29
31 p	Hexane	0.881	0.962	-9.2	110	0.00	8.25
32 P	1,1-dichloroethane	1.231	1.157	6.0	113	0.00	7.88
33 p	tert-butyl ethyl ether	Amount 50.000	Calc. 30.220	%Drift 39.6#	71	0.00	8.66
34 p	isobutyl alcohol	AvgRF 0.363	CCRF 0.395	%Dev -8.8	113	0.00	8.26
35 p	2,2-dichloropropane	Amount 50.000	Calc. 54.858	%Drift -9.7	114	0.00	8.73
36 p	cis-1,2-dichloroethene	AvgRF 0.572	CCRF 0.541	%Dev 5.4	114	0.00	8.44
37 p	ethyl acetate	1.789	1.976	-10.5	113	0.00	8.26
38 p	bromochloromethane	0.234	0.241	-3.0	112	0.00	8.61
39 p	chloroform	1.099	1.047	4.7	114	0.00	8.64
40 S	dibromofluoromethane (s)	0.513	0.490	4.5	101	0.00	8.77
41 p	Tetrahydrofuran	0.158	0.171	-8.2	115	0.00	8.98
42 p	1,1,1-trichloroethane	0.843	0.955	-13.3	109	0.00	9.39
43 I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	9.99
44 p	Cyclohexane	0.679	0.754	-11.0	108	0.00	9.67
45 p	carbon tetrachloride	0.489	0.513	-4.9	108	0.00	9.75
46 p	1,1-dichloropropene	0.439	0.474	-8.0	110	0.00	9.57
47 p	benzene	1.433	1.331	7.1	115	0.00	9.79
48 p	1,2-dichloroethane	0.671	0.625	6.9	111	0.00	9.30
49 p	tert-amyl methyl ether	Amount 50.000	Calc. 32.158	%Drift 35.7#	68	0.00	9.90
50 p	heptane	AvgRF 0.410	CCRF 0.490	%Dev -19.5	119	0.00	10.25
51 p	trichloroethene	0.428	0.398	7.0	112	0.00	10.41
52 p	1,2-dichloropropane	0.408	0.457	-12.0	121	0.00	10.37
53 p	dibromomethane	0.208	0.219	-5.3	119	0.00	10.36
54 p	bromodichloromethane	0.537	0.551	-2.6	118	0.00	10.46
55 p	Methylcyclohexane	0.503	0.591	-17.5	114	0.00	10.92
56 p	2-chloroethyl vinyl ether	0.403	0.457	-13.4	121	0.00	10.37
57 p	methyl methacrylate	0.187	0.205	-9.6	113	0.00	10.55
58 p	1,4-dioxane	Amount 250.000	Calc. 261.893	%Drift -4.8	110	0.00	10.56
59 p	cis-1,3-dichloropropene	50.000	56.617	-13.2	120	0.00	11.08
60 S	toluene-d8 (s)	AvgRF 1.199	CCRF 1.263	%Dev -5.3	106	0.00	11.78

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Continuing Calibration Summary

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Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3355-CC3345
Lab FileID: N90681.D

61 p	4-methyl-2-pentanone	0.382	0.462	-20.9#	124	0.00	11.17
62 p	toluene	0.861	0.852	1.0	114	0.00	11.85
63 p	trans-1,3-dichloropropene	0.417	0.484	-16.1	118	0.00	11.49
64 p	1,1,2-trichloroethane	0.277	0.287	-3.6	125	0.00	11.67
65 p	ethyl methacrylate	0.355	0.419	-18.0	120	0.00	11.87
66 I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	13.24
67 p	tetrachloroethene	0.651	0.682	-4.8	119	0.00	12.59
68 p	1,3-dichloropropane	0.942	1.083	-15.0	118	0.00	11.90
69 p	dibromochloromethane	0.673	0.750	-11.4	120	0.00	12.19
70 p	1,2-dibromoethane	0.528	0.579	-9.7	118	0.00	12.45
71 p	2-hexanone	0.577	0.732	-26.9#	122	0.00	12.02
72 P	chlorobenzene	1.744	1.771	-1.5	118	0.00	13.28
73 p	1,1,1,2-tetrachloroethane	0.635	0.705	-11.0	122	0.00	13.19
74 p	ethylbenzene	3.250	3.458	-6.4	119	0.00	13.45
75 p	m,p-xylene	1.188	1.177	0.9	121	0.00	13.63
76 p	o-xylene	1.154	1.206	-4.5	122	0.00	14.04
77 p	styrene	1.674	1.940	-15.9	120	0.00	13.97
78 P	bromoform	0.392	0.462	-17.9	127	0.00	13.80
----- Amount Calc. %Drift -----							
79 p	trans-1,4-dichloro-2-bute	50.000	58.142	-16.3	122	0.00	14.19
----- AvgRF CCRF %Dev -----							
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	15.79
81 p	isopropylbenzene	3.544	3.891	-9.8	118	0.00	14.40
82 S	bromofluorobenzene (s)	1.219	1.154	5.3	101	0.00	14.46
83 p	bromobenzene	0.839	0.922	-9.9	124	0.00	14.70
----- Amount Calc. %Drift -----							
84 P	1,1,2,2-tetrachloroethane	50.000	62.372	-24.7#	131	0.00	14.05
----- AvgRF CCRF %Dev -----							
85 p	1,2,3-trichloropropane	0.857	0.984	-14.8	123	0.00	14.19
86 p	n-propylbenzene	4.538	5.087	-12.1	122	0.00	14.85
87 p	2-chlorotoluene	2.886	3.097	-7.3	121	0.00	14.97
88 p	4-chlorotoluene	3.049	3.321	-8.9	122	0.00	15.05
89 p	1,3,5-trimethylbenzene	3.558	3.601	-1.2	120	0.00	15.12
90 p	tert-butylbenzene	2.089	2.332	-11.6	118	0.00	15.43
91 p	1,2,4-trimethylbenzene	3.527	3.563	-1.0	119	0.00	15.54
92 M	sec-butylbenzene	3.987	4.553	-14.2	120	0.00	15.65
----- Amount Calc. %Drift -----							
93 p	1,3-dichlorobenzene	50.000	56.554	-13.1	124	0.00	15.76
----- AvgRF CCRF %Dev -----							
94 p	p-isopropyltoluene	3.258	3.733	-14.6	120	0.00	15.82
----- Amount Calc. %Drift -----							
95 p	1,4-dichlorobenzene	50.000	61.281	-22.6#	125	0.00	15.82
96 p	1,2-dichlorobenzene	50.000	59.873	-19.7	124	0.00	16.19
----- AvgRF CCRF %Dev -----							
97 p	n-butylbenzene	3.380	4.045	-19.7	124	0.00	16.24
98 p	1,2-dibromo-3-chloropropa	0.135	0.165	-22.2#	124	0.00	16.67
99 p	1,2,4-trichlorobenzene	0.675	0.843	-24.9#	118	0.00	18.02
100 p	1,3,5-trichlorobenzene	1.045	1.218	-16.6	121	0.00	17.48
101 p	hexachlorobutadiene	0.529	0.627	-18.5	122	0.00	18.30

6.7.3
6

Continuing Calibration Summary

Page 4 of 4

Job Number: MC33777
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3355-CC3345
Lab FileID: N90681.D

		Amount	Calc.	%Drift			
102 p	naphthalene	50.000	58.741	-17.5	120	0.00	18.29
103 p	1,2,3-trichlorobenzene	50.000	60.676	-21.4#	116	0.00	18.49
		AvgRF	CCRF	%Dev			
104 p	2-methylnaphthalene	0.276	0.334	-21.0#	122	0.00	19.67
105 p	1-methylnaphthalene	0.206	0.258	-25.2#	124	0.00	19.92

(#) = Out of Range SPCC's out = 2 CCC's out = 0
 N90397.D n140918w.m Mon Sep 29 09:26:14 2014

6.7.3

6

GC/MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90687.D
 Acq On : 29 Sep 2014 11:15 am
 Operator : jaclynb
 Sample : mc33777-1
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 29 11:40:32 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.715	65	108562	500.00	ug/L	0.02
4) pentafluorobenzene	9.115	168	281384	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	438112	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	224895	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.800	152	165662	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	139085	48.18	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.36%		
60) toluene-d8 (s)	11.784	98	524009	49.87	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.74%		
82) bromofluorobenzene (s)	14.464	95	196832	48.73	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.46%		
Target Compounds						
36) cis-1,2-dichloroethene	8.451	96	17770	5.52	ug/L	Qvalue 87

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

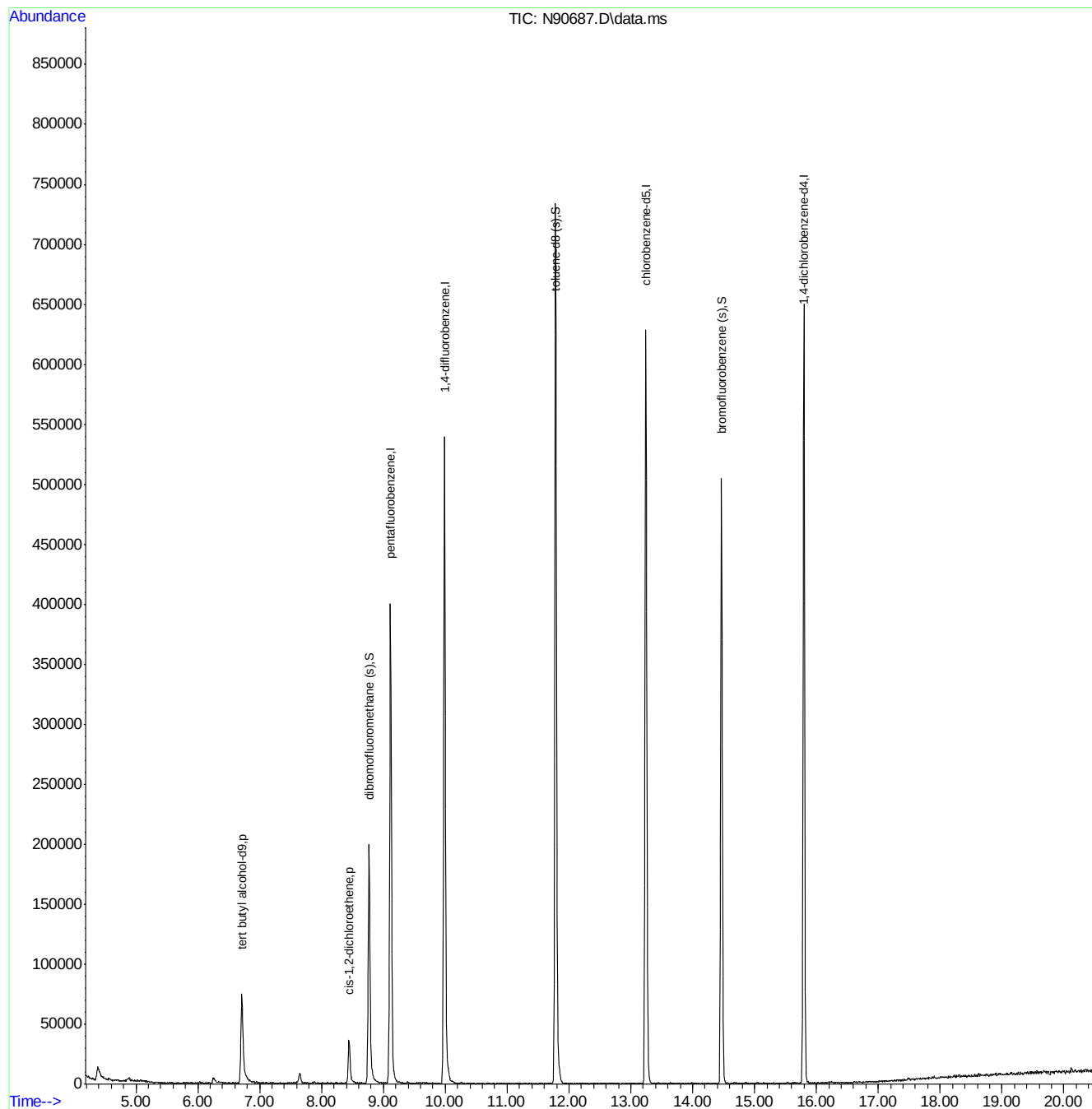
7.1.1

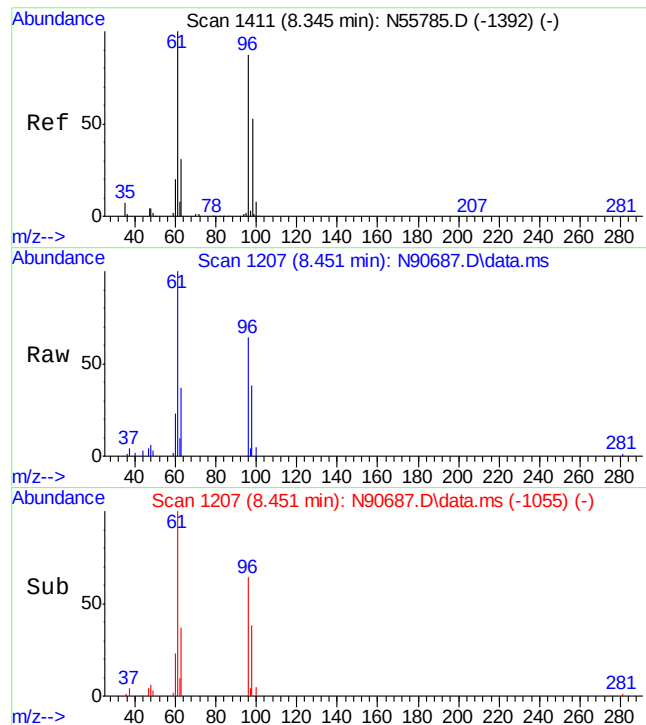
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90687.D
Acq On : 29 Sep 2014 11:15 am
Operator : jaclynb
Sample : mc33777-1
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

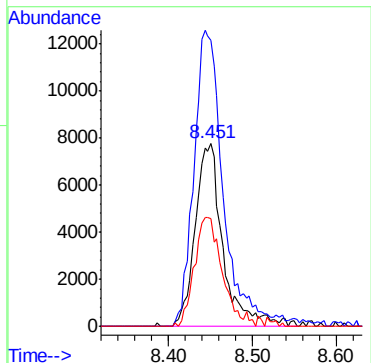
Quant Time: Sep 29 11:40:32 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





#36
cis-1,2-dichloroethene
Concen: 5.52 ug/L
RT: 8.451 min Scan# 1207
Delta R.T. 0.008 min
Lab File: N90687.D
Acq: 29 Sep 2014 11:15 am

Tgt Ion:	96	Resp:	17770
Ion Ratio	Lower	Upper	
96	100		
61	156.0	148.4	208.4
98	58.8	32.3	92.3



7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90688.D
 Acq On : 29 Sep 2014 11:43 am
 Operator : jaclynb
 Sample : mc33777-2
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 29 12:10:41 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.715	65	98479	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.115	168	275233	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	428916	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	217310	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	157320	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	137128	48.56	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.12%		
60) toluene-d8 (s)	11.784	98	515093	50.07	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.14%		
82) bromofluorobenzene (s)	14.467	95	194717	50.76	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.52%		
Target Compounds						
39) chloroform	8.645	83	1312	0.22	ug/L	89
45) carbon tetrachloride	9.751	117	2752	0.66	ug/L	94

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

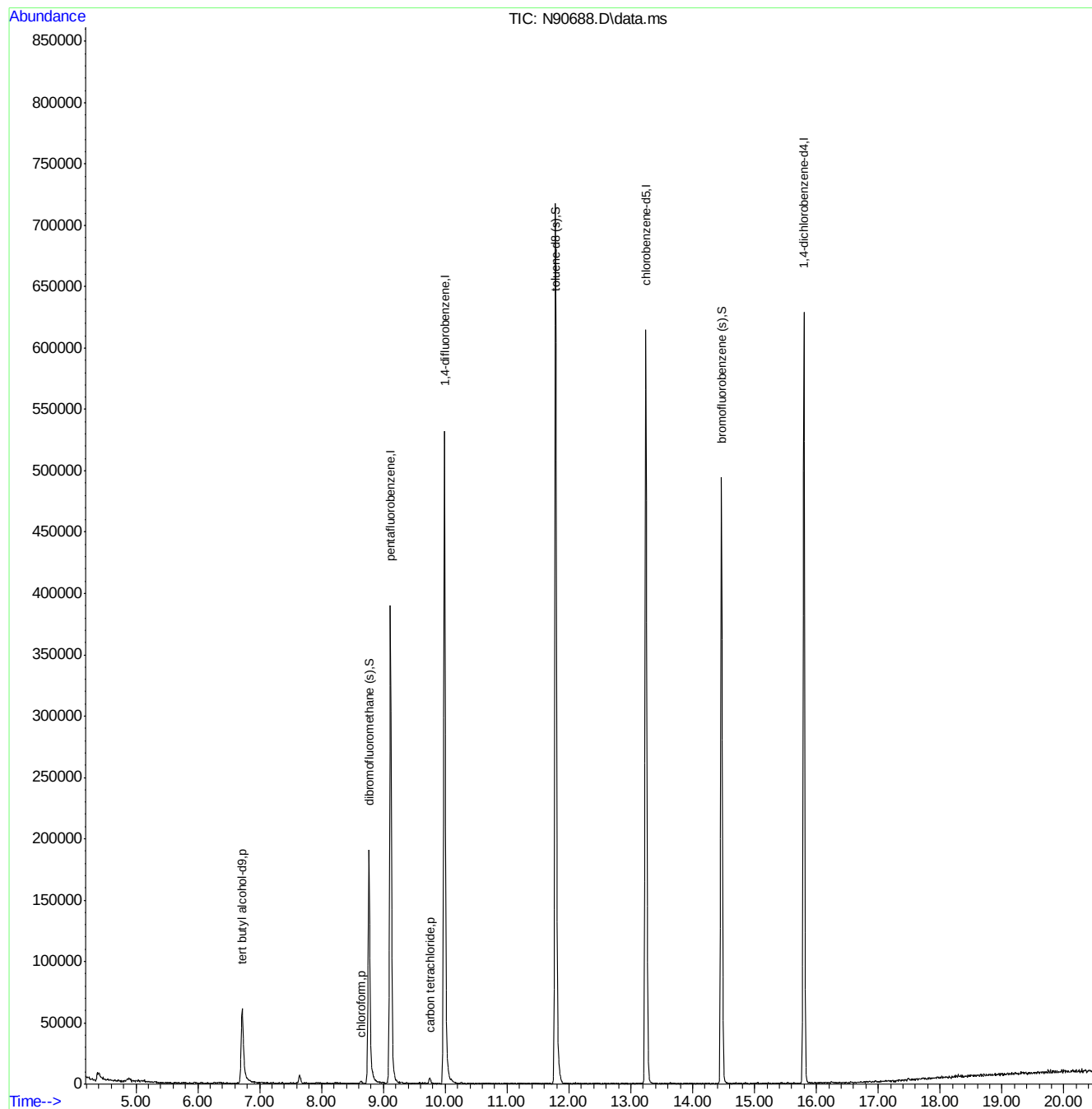
7.1.2

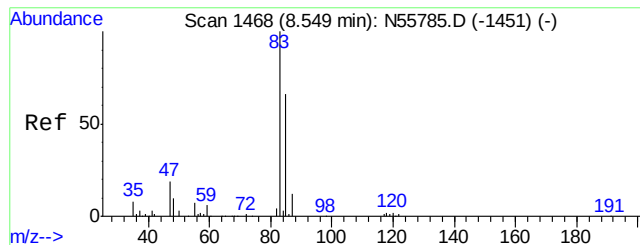
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90688.D
Acq On : 29 Sep 2014 11:43 am
Operator : jaclynb
Sample : mc33777-2
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

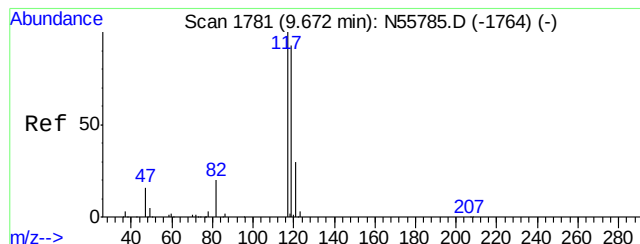
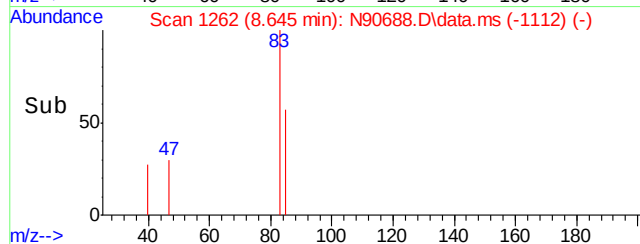
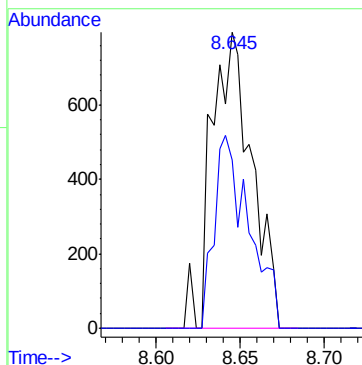
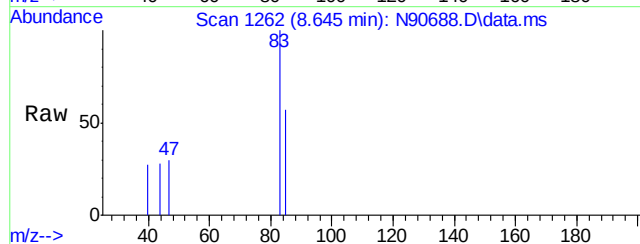
Quant Time: Sep 29 12:10:41 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





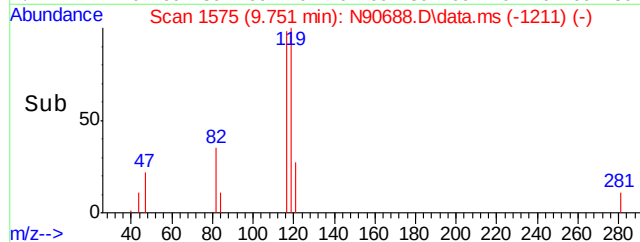
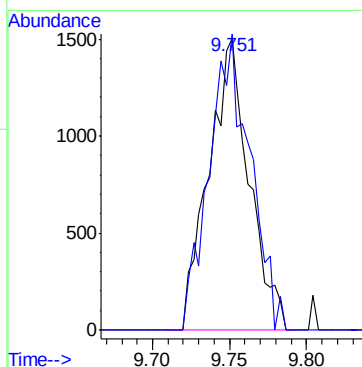
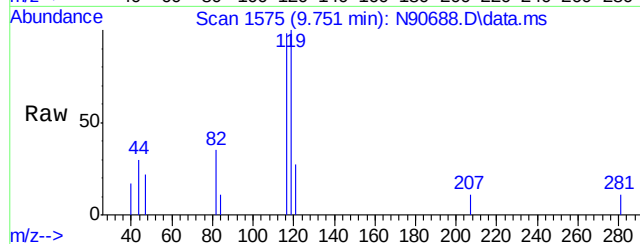
#39
chloroform
Concen: 0.22 ug/L
RT: 8.645 min Scan# 1262
Delta R.T. -0.000 min
Lab File: N90688.D
Acq: 29 Sep 2014 11:43 am

Tgt Ion: 83 Resp: 1312
Ion Ratio Lower Upper
83 100
85 56.7 35.4 95.4



#45
carbon tetrachloride
Concen: 0.66 ug/L
RT: 9.751 min Scan# 1575
Delta R.T. -0.004 min
Lab File: N90688.D
Acq: 29 Sep 2014 11:43 am

Tgt Ion: 117 Resp: 2752
Ion Ratio Lower Upper
117 100
119 101.7 65.9 125.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90689.D
 Acq On : 29 Sep 2014 12:12 pm
 Operator : jaclynb
 Sample : mc33777-3
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 29 12:39:55 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

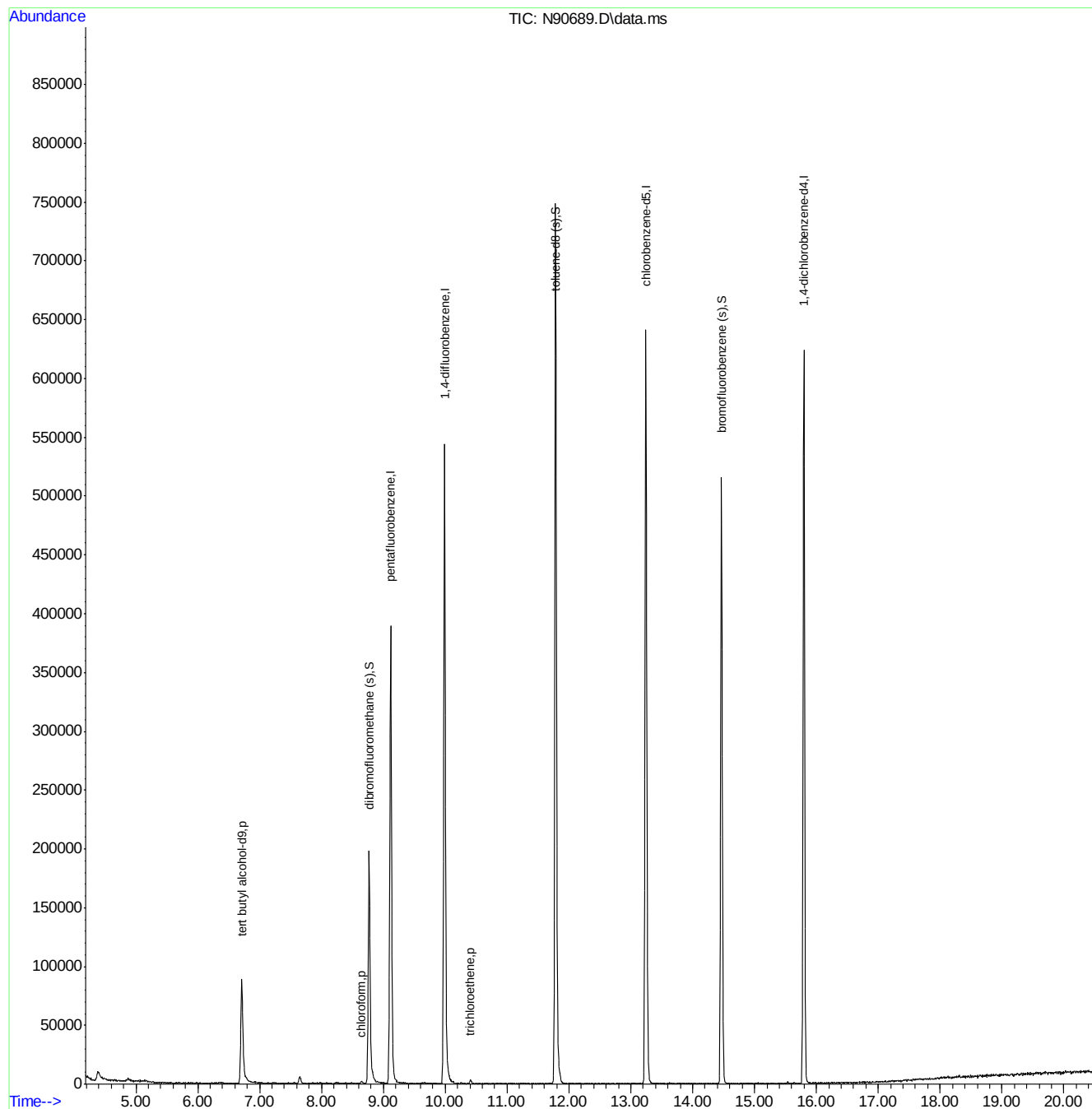
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.715	65	125067	500.00	ug/L	0.02
4) pentafluorobenzene	9.119	168	273652	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	428674	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	222753	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	162983	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.772	113	137020	48.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.60%		
60) toluene-d8 (s)	11.784	98	518375	50.42	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.84%		
82) bromofluorobenzene (s)	14.464	95	200369	50.42	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.84%		
Target Compounds						
39) chloroform	8.645	83	1321	0.22	ug/L	84
51) trichloroethene	10.402	95	1345	0.37	ug/L #	67

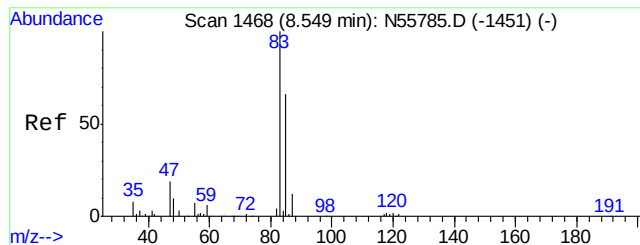
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90689.D
Acq On : 29 Sep 2014 12:12 pm
Operator : jaclynb
Sample : mc33777-3
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

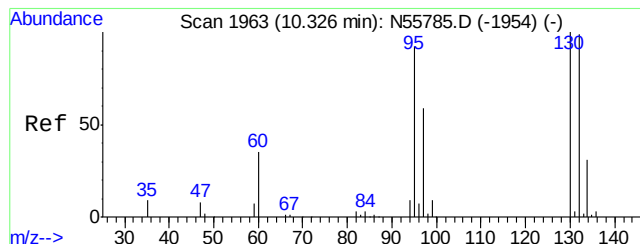
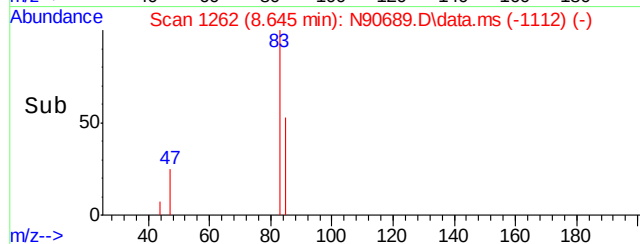
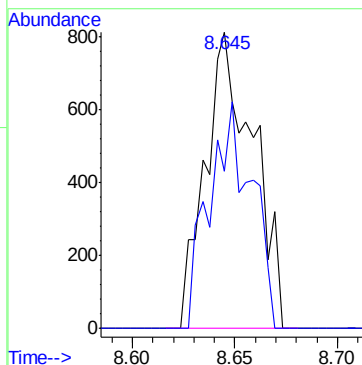
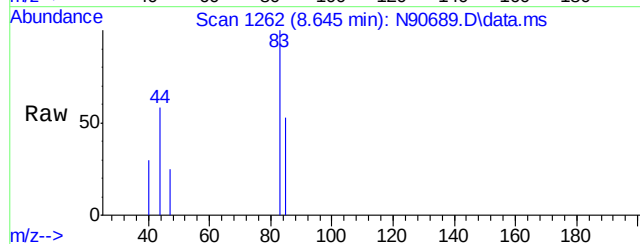
Quant Time: Sep 29 12:39:55 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





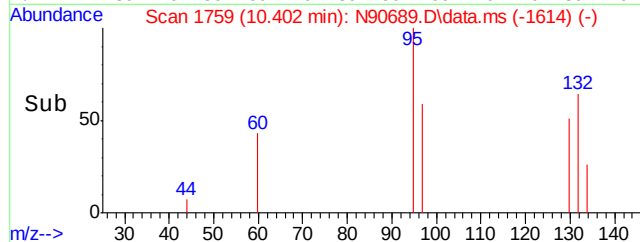
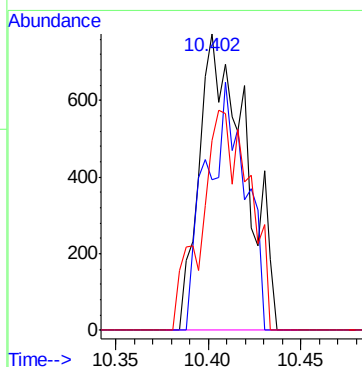
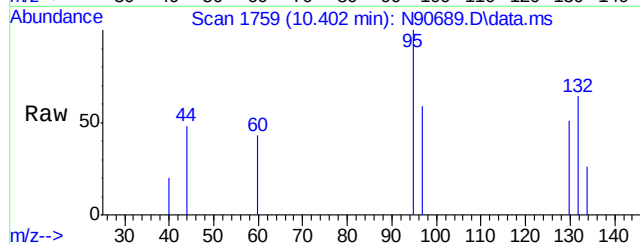
#39
chloroform
Concen: 0.22 ug/L
RT: 8.645 min Scan# 1262
Delta R.T. -0.000 min
Lab File: N90689.D
Acq: 29 Sep 2014 12:12 pm

Tgt Ion: 83 Resp: 1321
Ion Ratio Lower Upper
83 100
85 53.1 35.4 95.4



#51
trichloroethene
Concen: 0.37 ug/L
RT: 10.402 min Scan# 1759
Delta R.T. -0.007 min
Lab File: N90689.D
Acq: 29 Sep 2014 12:12 pm

Tgt Ion: 95 Resp: 1345
Ion Ratio Lower Upper
95 100
130 50.9 59.1 119.1#
132 64.1 56.3 116.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90690.D
 Acq On : 29 Sep 2014 12:40 pm
 Operator : jaclynb
 Sample : mc33777-4
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 29 15:28:54 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

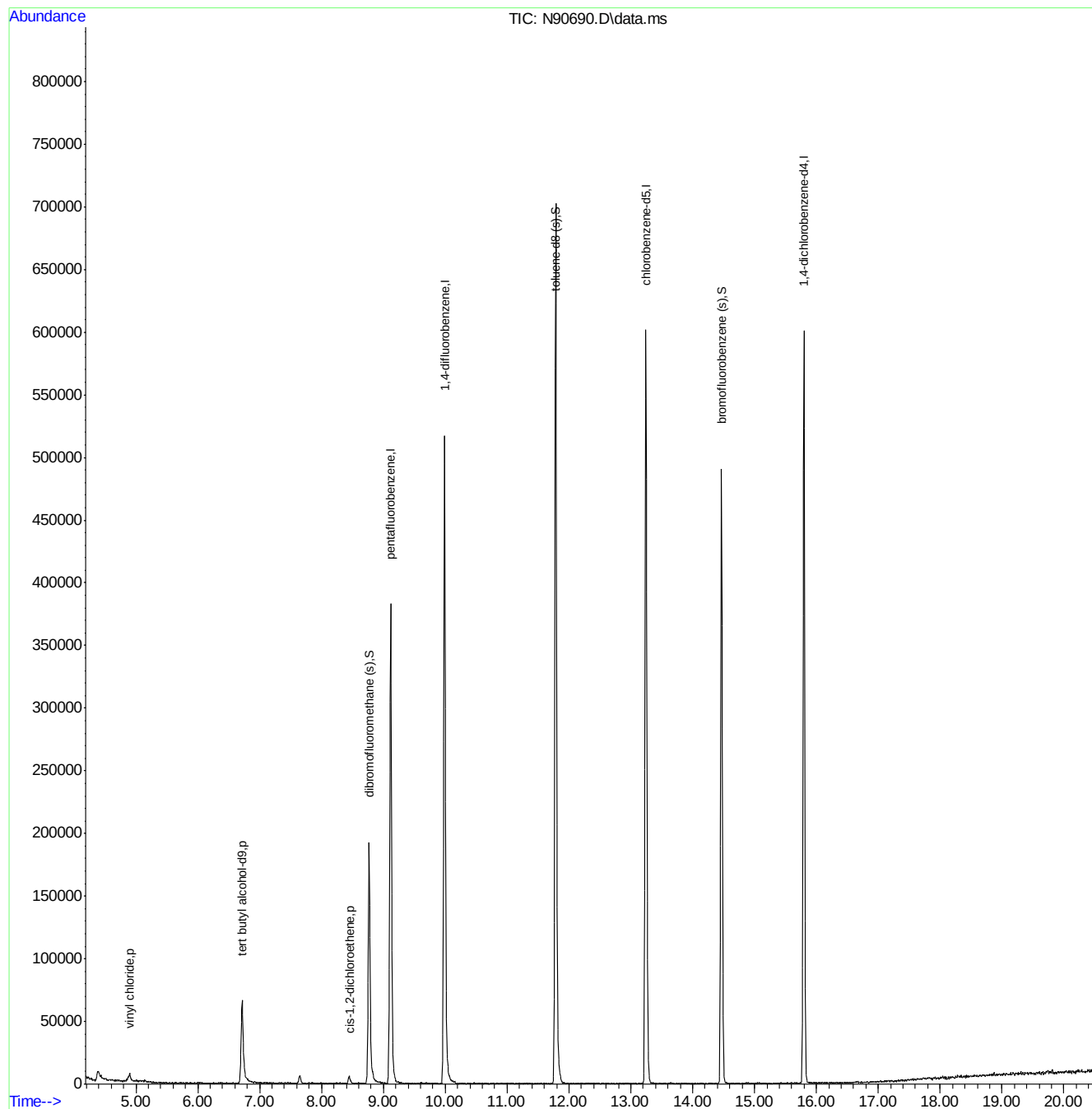
Internal Standards						
1) tert butyl alcohol-d9	6.715	65	98029	500.00	ug/L	0.02
4) pentafluorobenzene	9.118	168	270309	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	416095	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	212255	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	156141	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	133675	48.20	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.40%		
60) toluene-d8 (s)	11.784	98	502502	50.35	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.70%		
82) bromofluorobenzene (s)	14.464	95	191019	50.18	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.36%		
Target Compounds						
7) vinyl chloride	4.897	62	5387	0.75	ug/L	84
36) cis-1,2-dichloroethene	8.454	96	2472	0.80	ug/L	90

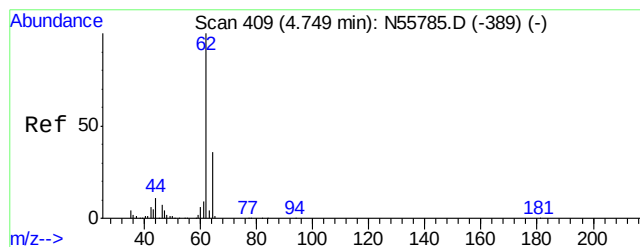
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90690.D
Acq On : 29 Sep 2014 12:40 pm
Operator : jaclynb
Sample : mc33777-4
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

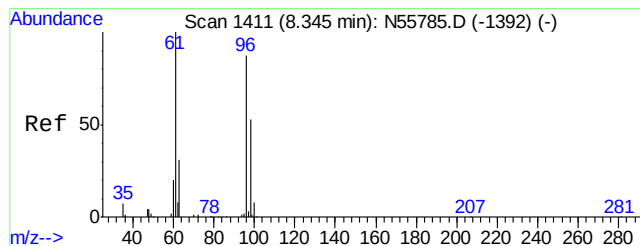
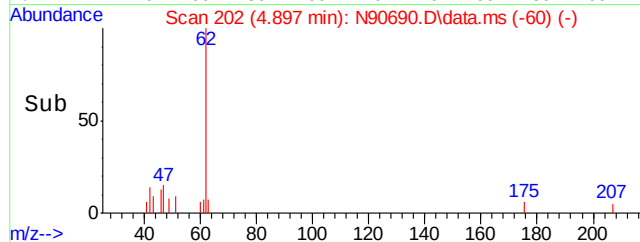
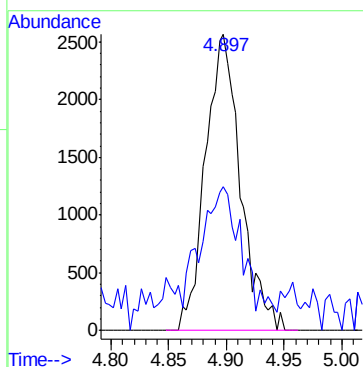
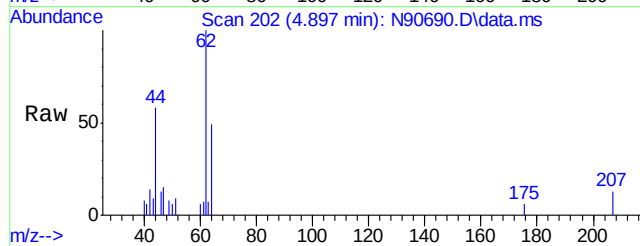
Quant Time: Sep 29 15:28:54 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





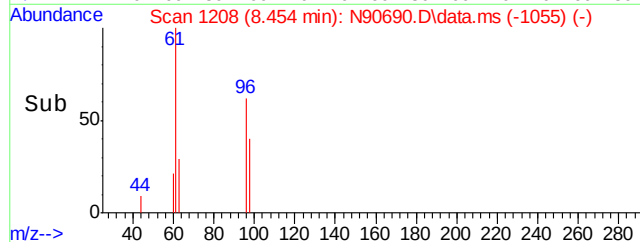
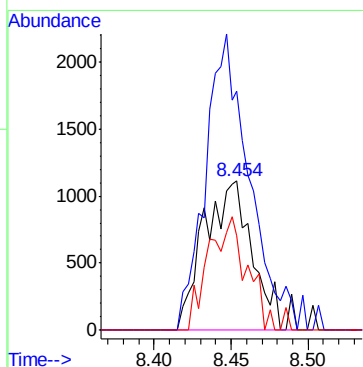
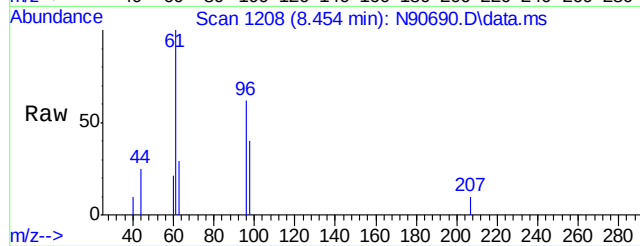
#7
vinyl chloride
Concen: 0.75 ug/L
RT: 4.897 min Scan# 202
Delta R.T. 0.003 min
Lab File: N90690.D
Acq: 29 Sep 2014 12:40 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
64	40.0	1.0	61.0



#36
cis-1,2-dichloroethene
Concen: 0.80 ug/L
RT: 8.454 min Scan# 1208
Delta R.T. 0.011 min
Lab File: N90690.D
Acq: 29 Sep 2014 12:40 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	160.3	148.4	208.4
98	63.5	32.3	92.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90691.D
 Acq On : 29 Sep 2014 1:08 pm
 Operator : jaclynb
 Sample : mc33777-5
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 29 15:29:11 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

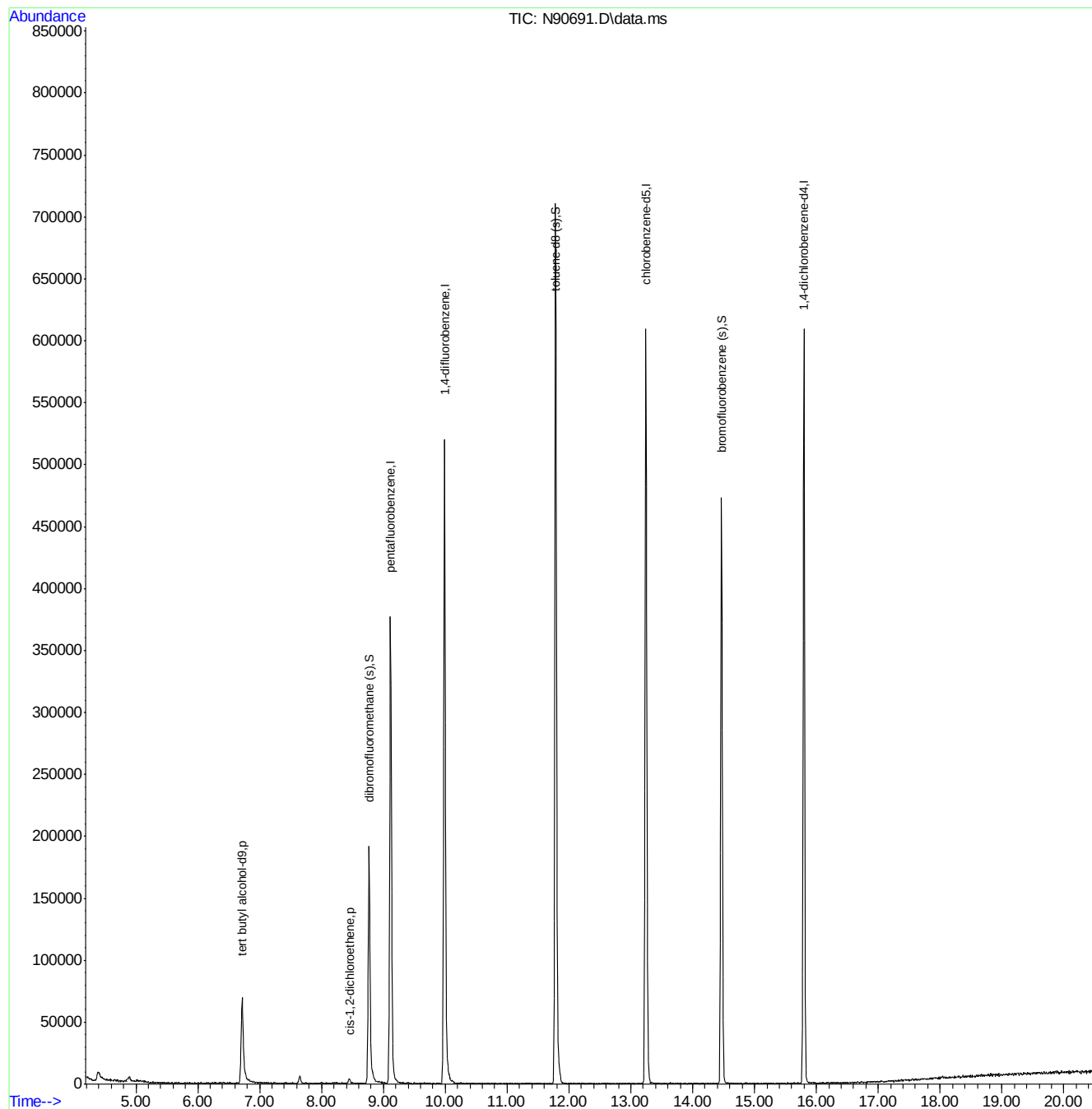
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.718	65	103680	500.00	ug/L	0.03
4) pentafluorobenzene	9.115	168	265318	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	414408	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	212852	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.800	152	153000	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	131649	48.36	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.72%		
60) toluene-d8 (s)	11.784	98	503826	50.69	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.38%		
82) bromofluorobenzene (s)	14.464	95	187260	50.20	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.40%		
Target Compounds						
7) vinyl chloride	4.894	62	1296	Below Cal	#	27
36) cis-1,2-dichloroethene	8.454	96	1893	0.62 ug/L	#	49

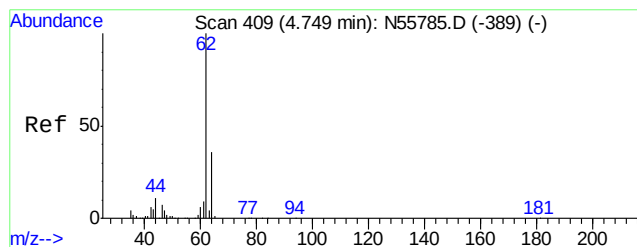
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90691.D
Acq On : 29 Sep 2014 1:08 pm
Operator : jaclynb
Sample : mc33777-5
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

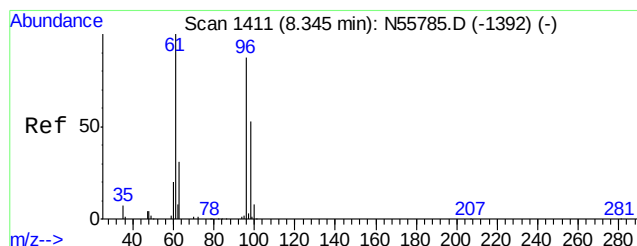
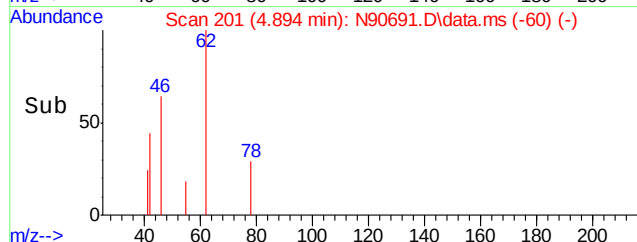
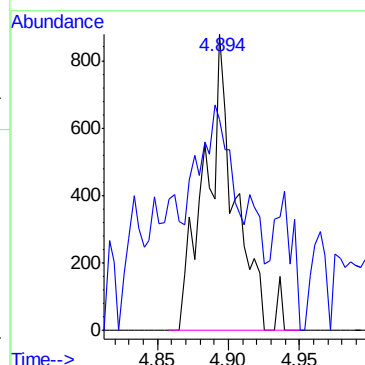
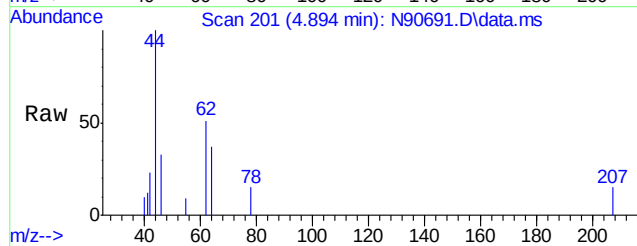
Quant Time: Sep 29 15:29:11 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





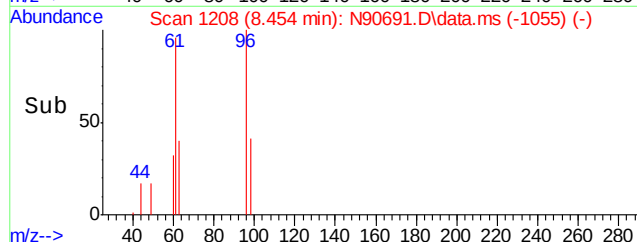
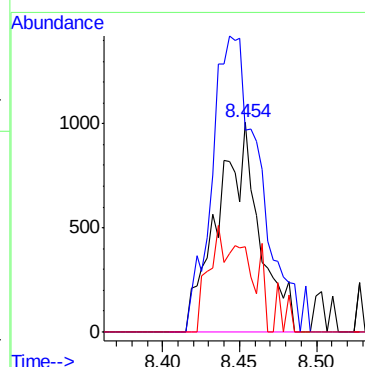
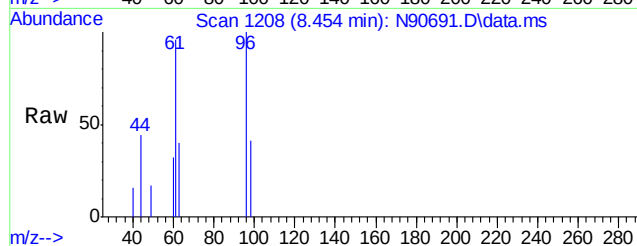
#7
vinyl chloride
Concen: Below Cal
RT: 4.894 min Scan# 201
Delta R.T. -0.000 min
Lab File: N90691.D
Acq: 29 Sep 2014 1:08 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
64	71.3	1.0	61.0#



#36
cis-1,2-dichloroethene
Concen: 0.62 ug/L
RT: 8.454 min Scan# 1208
Delta R.T. 0.011 min
Lab File: N90691.D
Acq: 29 Sep 2014 1:08 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	96.0	148.4	208.4#
98	40.7	32.3	92.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90692.D
 Acq On : 29 Sep 2014 1:37 pm
 Operator : jaclynb
 Sample : mc33777-6
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 29 15:30:18 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.715	65	118335	500.00	ug/L	0.02
4) pentafluorobenzene	9.119	168	265378	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	411474	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	214192	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	157249	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	133143	48.90	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.80%		
60) toluene-d8 (s)	11.784	98	495656	50.22	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.44%		
82) bromofluorobenzene (s)	14.464	95	191679	49.99	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.98%		
Target Compounds						
36) cis-1,2-dichloroethene	8.450	96	3576	1.18	ug/L	Qvalue # 76
51) trichloroethene	10.409	95	7584	2.15	ug/L	96
67) tetrachloroethene	12.594	166	9328	3.34	ug/L	96

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

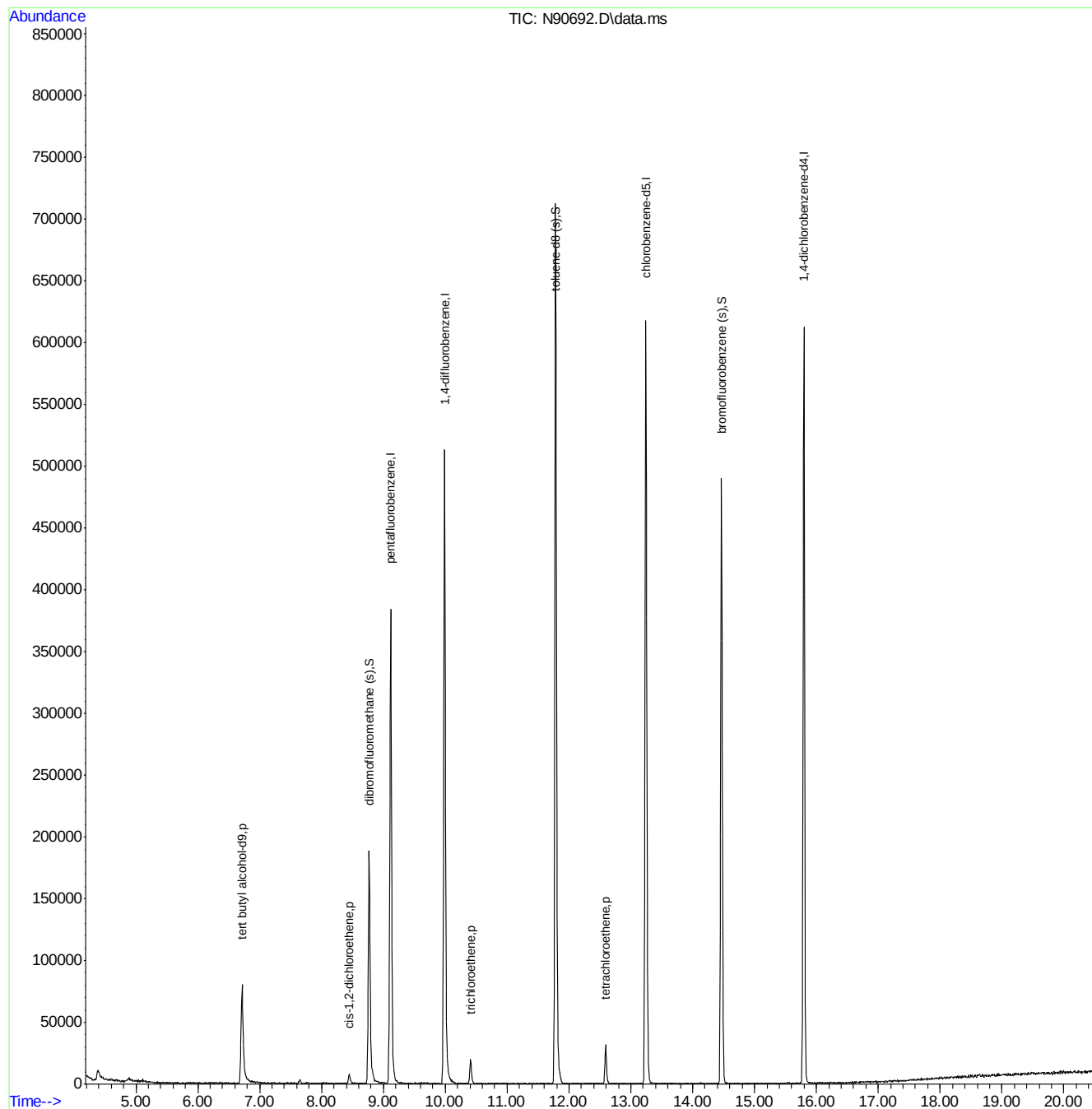
7.1.6

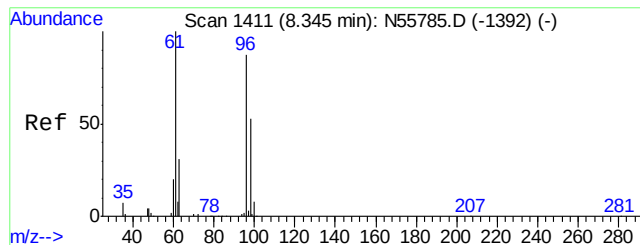
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90692.D
Acq On : 29 Sep 2014 1:37 pm
Operator : jaclynb
Sample : mc33777-6
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

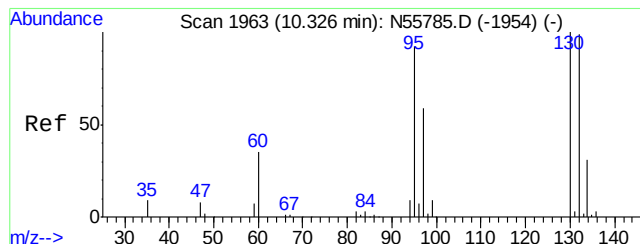
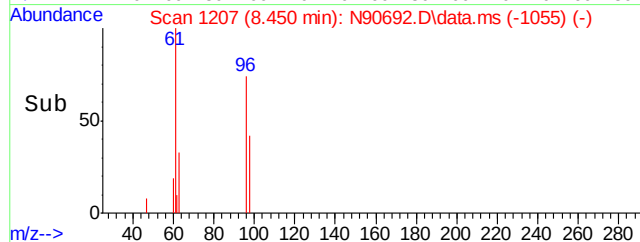
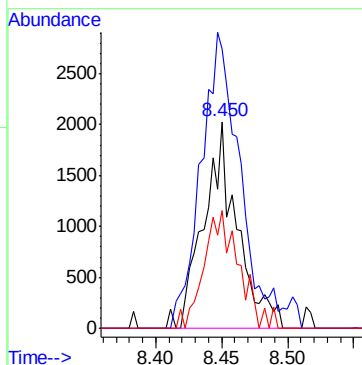
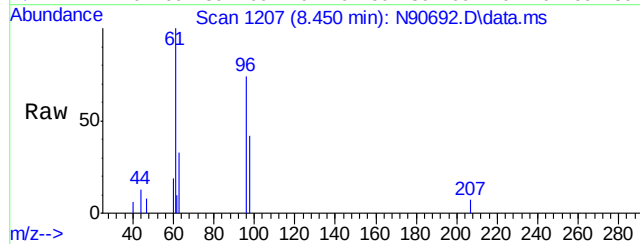
Quant Time: Sep 29 15:30:18 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





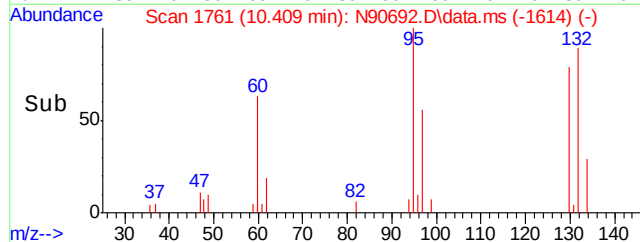
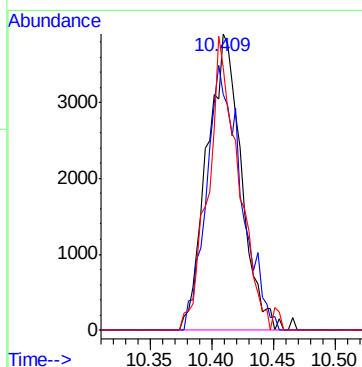
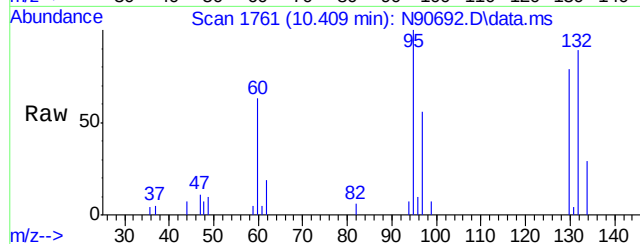
#36
cis-1,2-dichloroethene
Concen: 1.18 ug/L
RT: 8.450 min Scan# 1207
Delta R.T. 0.007 min
Lab File: N90692.D
Acq: 29 Sep 2014 1:37 pm

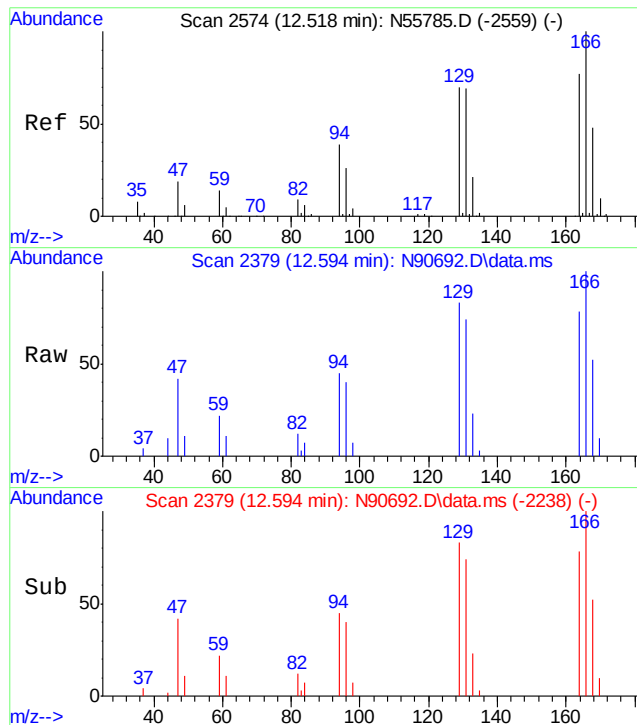
Tgt Ion:	96	Resp:	3576
Ion Ratio	Lower	Upper	
96	100		
61	135.3	148.4	208.4#
98	57.1	32.3	92.3



#51
trichloroethene
Concen: 2.15 ug/L
RT: 10.409 min Scan# 1761
Delta R.T. -0.000 min
Lab File: N90692.D
Acq: 29 Sep 2014 1:37 pm

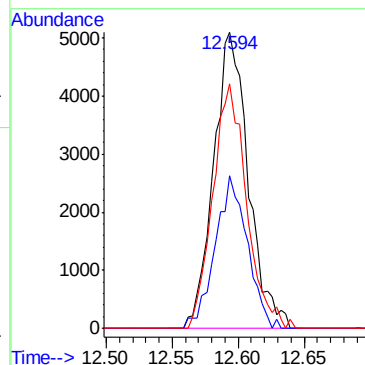
Tgt Ion:	95	Resp:	7584
Ion Ratio	Lower	Upper	
95	100		
130	83.7	59.1	119.1
132	88.6	56.3	116.3





#67
 tetrachloroethene
 Concen: 3.34 ug/L
 RT: 12.594 min Scan# 2379
 Delta R.T. -0.000 min
 Lab File: N90692.D
 Acq: 29 Sep 2014 1:37 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
168	51.6	18.0	78.0
129	82.8	50.2	110.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90693.D
 Acq On : 29 Sep 2014 2:05 pm
 Operator : jaclynb
 Sample : mc33777-7
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 29 15:30:39 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.714	65	91288	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.118	168	257597	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	399280	50.00	ug/L	0.00
66) chlorobenzene-d5	13.244	82	205812	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.796	152	151141	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	130125	49.24	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.48%		
60) toluene-d8 (s)	11.784	98	483051	50.44	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.88%		
82) bromofluorobenzene (s)	14.467	95	185811	50.42	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.84%		

Target Compounds Qvalue

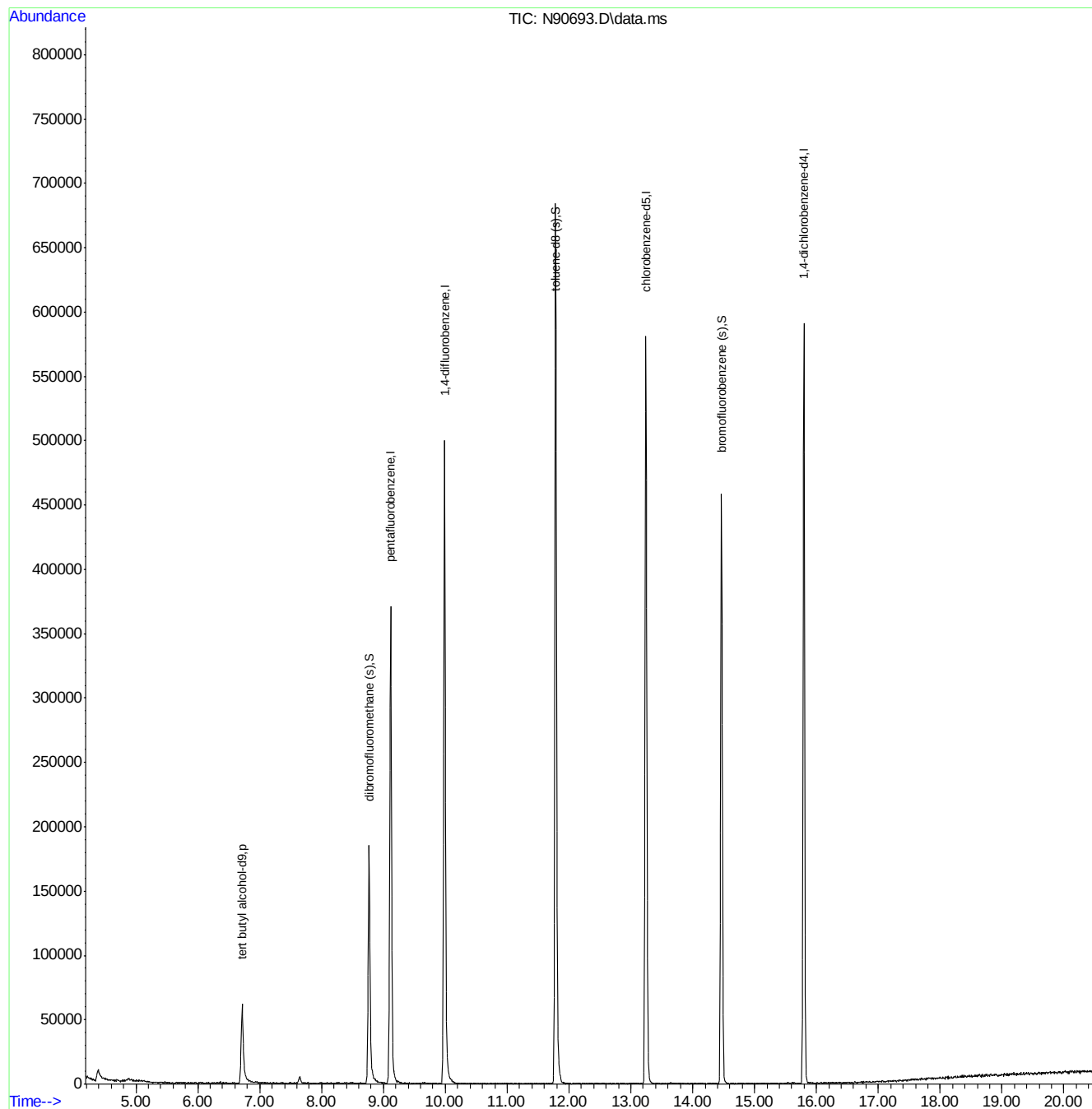
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90693.D
Acq On : 29 Sep 2014 2:05 pm
Operator : jaclynb
Sample : mc33777-7
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 29 15:30:39 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90694.D
 Acq On : 29 Sep 2014 2:33 pm
 Operator : jaclynb
 Sample : mc33777-8
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 29 15:30:55 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

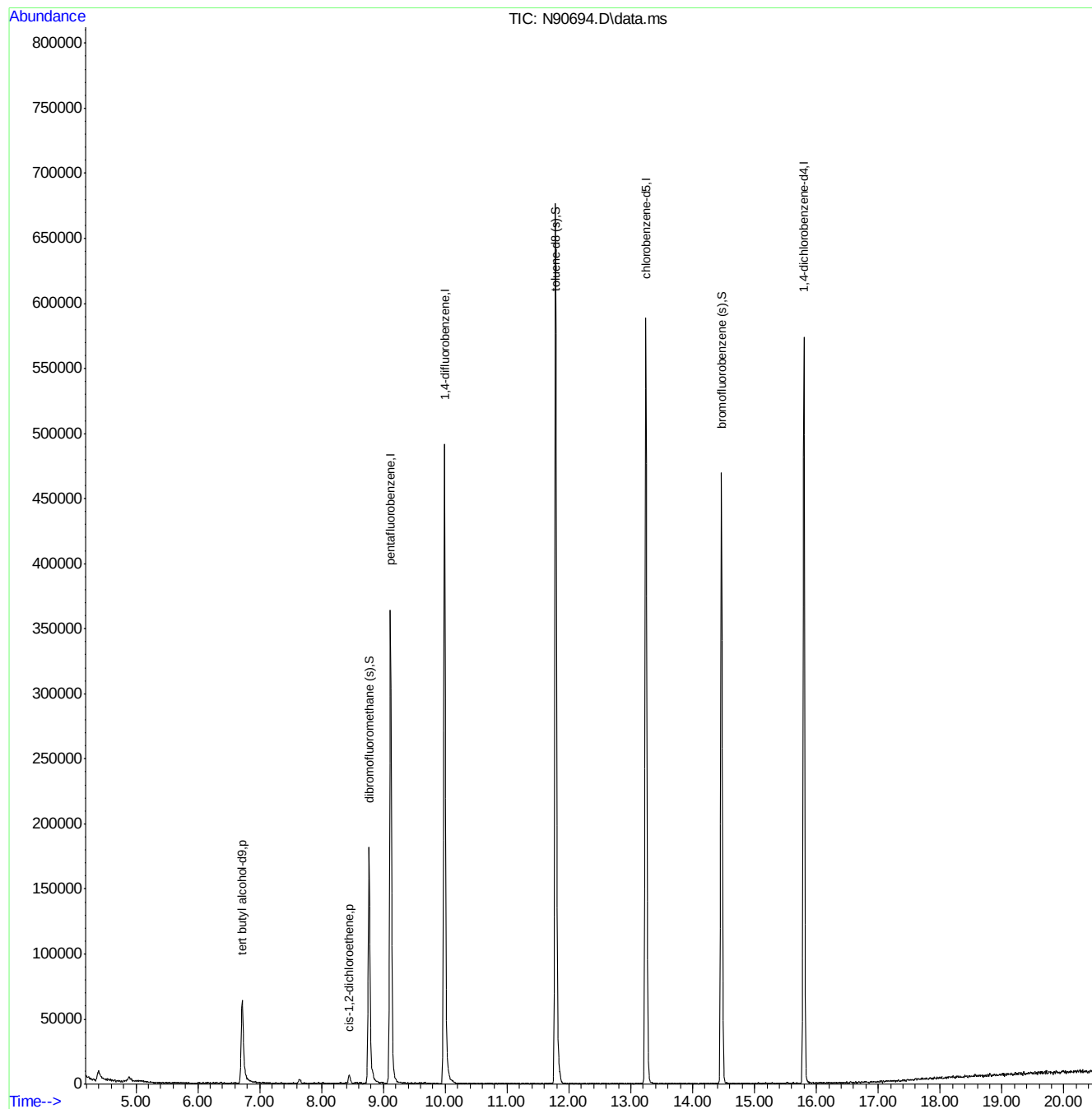
Internal Standards						
1) tert butyl alcohol-d9	6.722	65	99461	500.00	ug/L	# 0.03
4) pentafluorobenzene	9.115	168	258408	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	402704	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	206154	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	151033	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	128441	48.45	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.90%		
60) toluene-d8 (s)	11.784	98	484130	50.12	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.24%		
82) bromofluorobenzene (s)	14.464	95	183687	49.88	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.76%		
Target Compounds						
7) vinyl chloride	4.894	62	1372	Below Cal		Qvalue 60
36) cis-1,2-dichloroethene	8.443	96	3260	1.10 ug/L		86

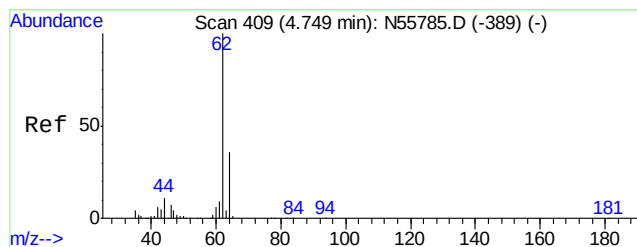
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90694.D
Acq On : 29 Sep 2014 2:33 pm
Operator : jaclynb
Sample : mc33777-8
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

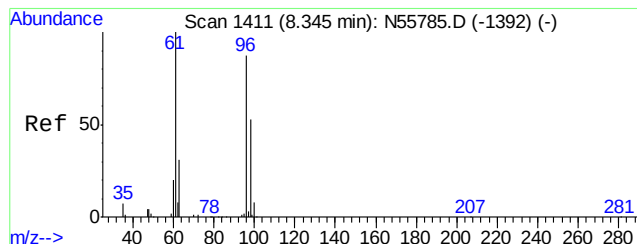
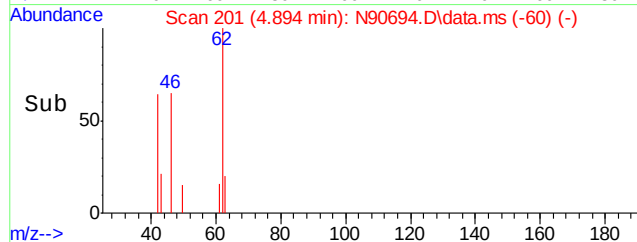
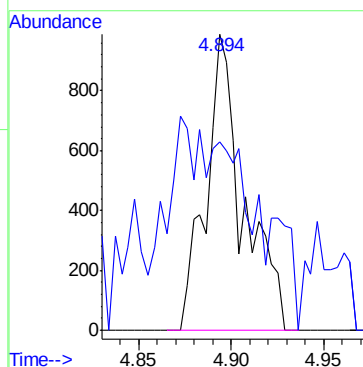
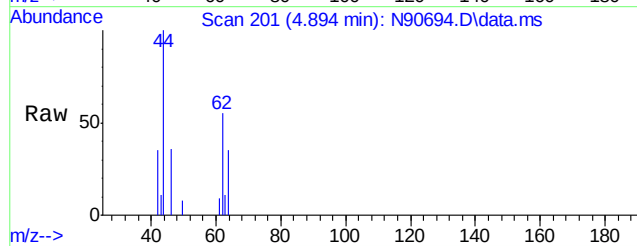
Quant Time: Sep 29 15:30:55 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





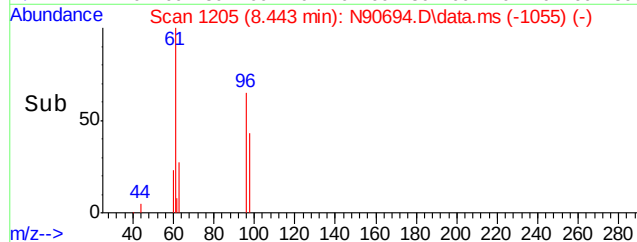
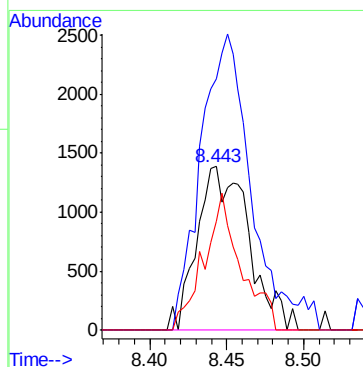
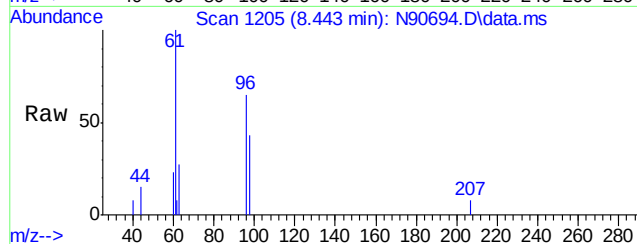
#7
vinyl chloride
Concen: Below Cal
RT: 4.894 min Scan# 201
Delta R.T. -0.000 min
Lab File: N90694.D
Acq: 29 Sep 2014 2:33 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
64	53.1	1.0	61.0



#36
cis-1,2-dichloroethene
Concen: 1.10 ug/L
RT: 8.443 min Scan# 1205
Delta R.T. 0.000 min
Lab File: N90694.D
Acq: 29 Sep 2014 2:33 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	153.7	148.4	208.4
98	66.5	32.3	92.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90695.D
 Acq On : 29 Sep 2014 3:01 pm
 Operator : jaclynb
 Sample : mc33777-9
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 29 15:31:14 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.714	65	102954	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.118	168	256852	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	396822	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	208189	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	149254	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	127757	48.48	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.96%		
60) toluene-d8 (s)	11.784	98	488384	51.31	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.62%		
82) bromofluorobenzene (s)	14.467	95	186062	51.13	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.26%		
Target Compounds						
32) 1,1-dichloroethane	7.878	63	3848	0.61	ug/L	90
36) cis-1,2-dichloroethene	8.447	96	6447	2.20	ug/L	95
42) 1,1,1-trichloroethane	9.391	97	1779	0.41	ug/L	86
51) trichloroethene	10.409	95	14418	4.24	ug/L	90

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

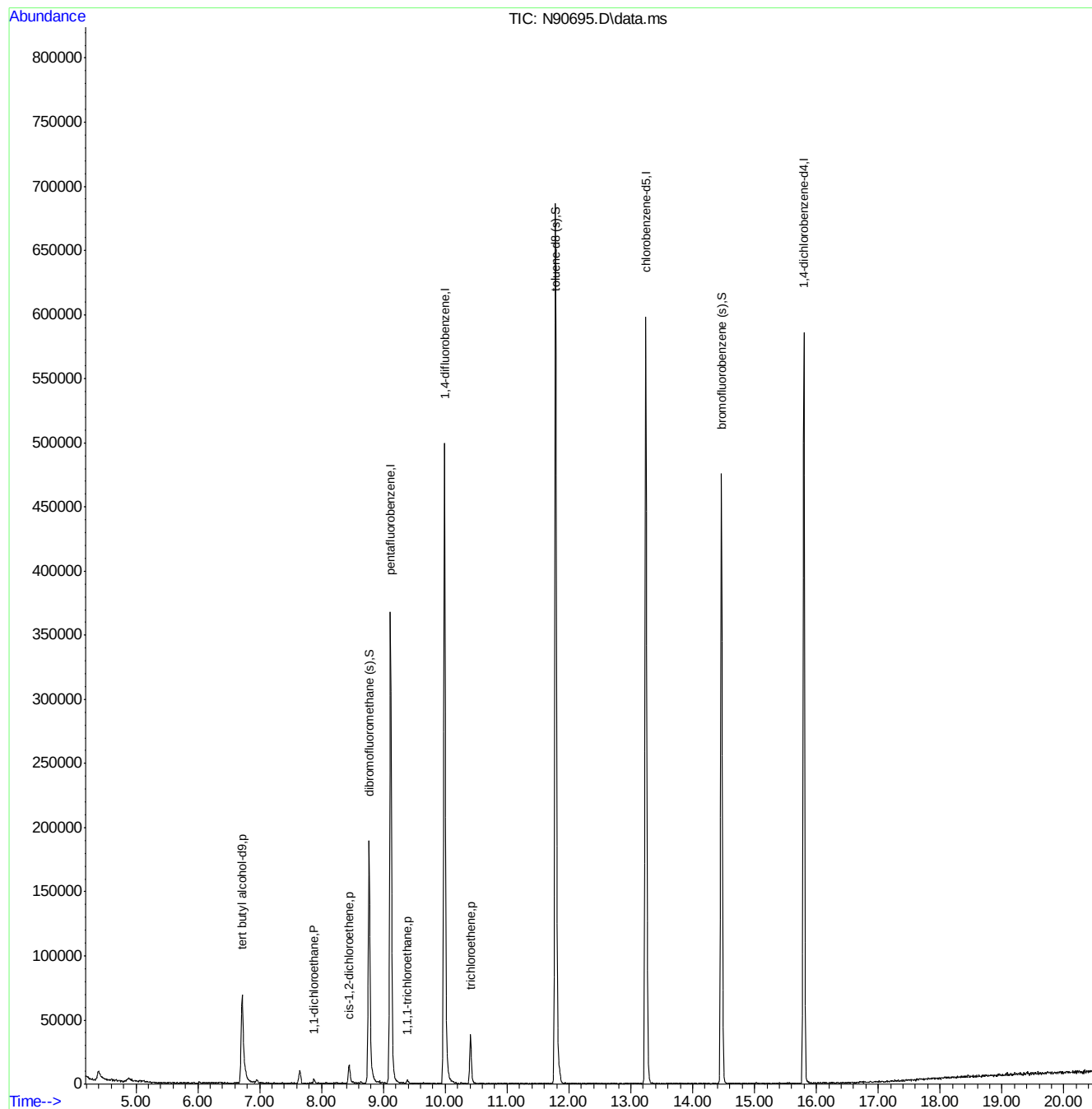
7.1.9

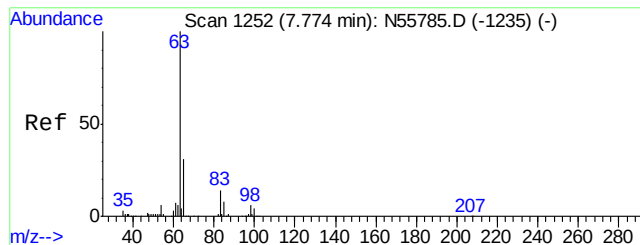
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90695.D
Acq On : 29 Sep 2014 3:01 pm
Operator : jaclynb
Sample : mc33777-9
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

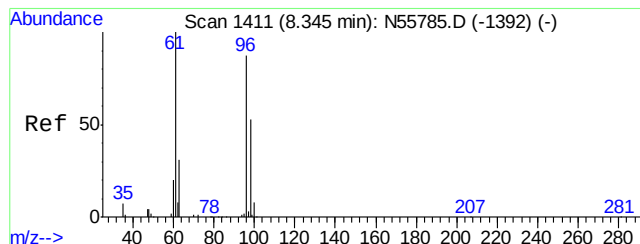
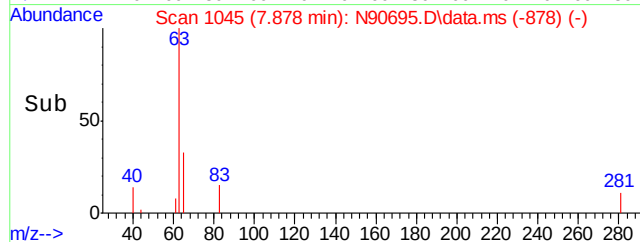
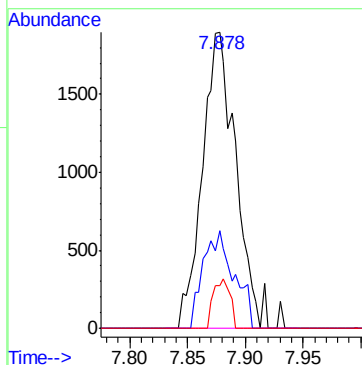
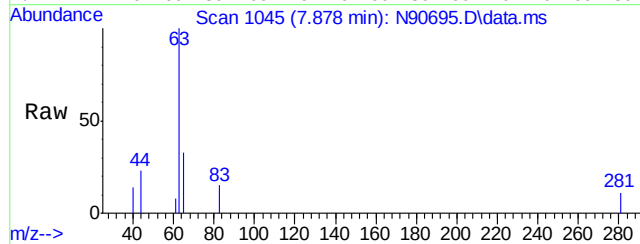
Quant Time: Sep 29 15:31:14 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





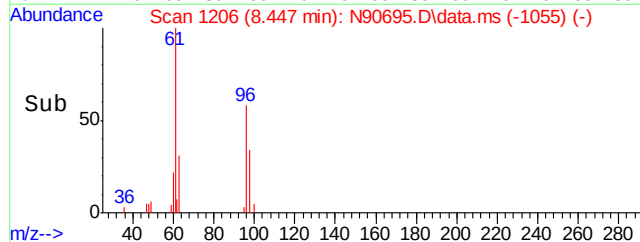
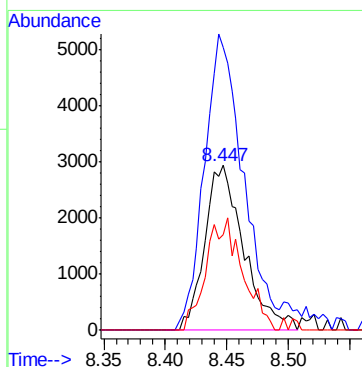
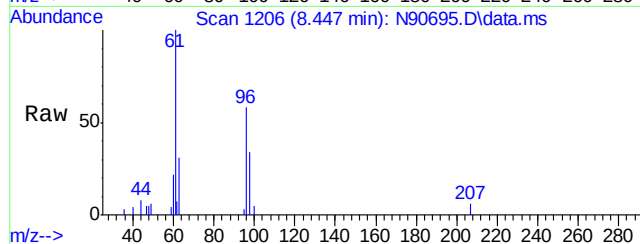
#32
1,1-dichloroethane
Concen: 0.61 ug/L
RT: 7.878 min Scan# 1045
Delta R.T. -0.000 min
Lab File: N90695.D
Acq: 29 Sep 2014 3:01 pm

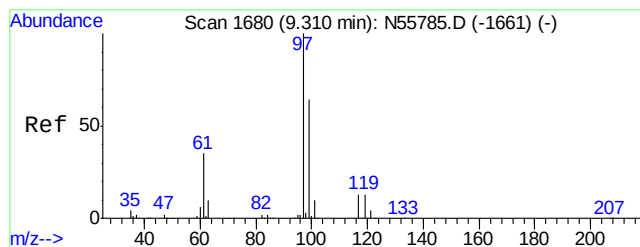
Tgt Ion:	63	Resp:	3848
Ion Ratio	Lower	Upper	
63	100		
65	33.1	0.0	58.3
83	14.5	0.0	39.9



#36
cis-1,2-dichloroethene
Concen: 2.20 ug/L
RT: 8.447 min Scan# 1206
Delta R.T. 0.004 min
Lab File: N90695.D
Acq: 29 Sep 2014 3:01 pm

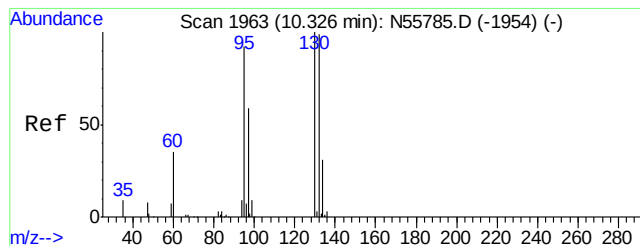
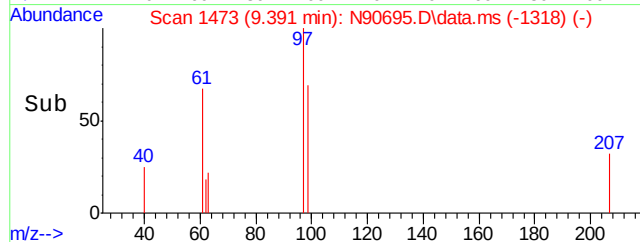
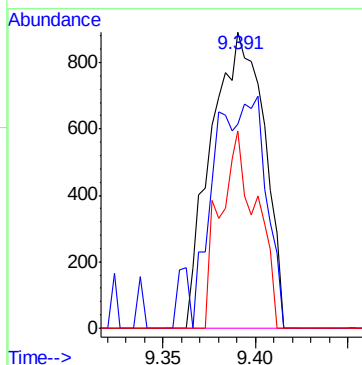
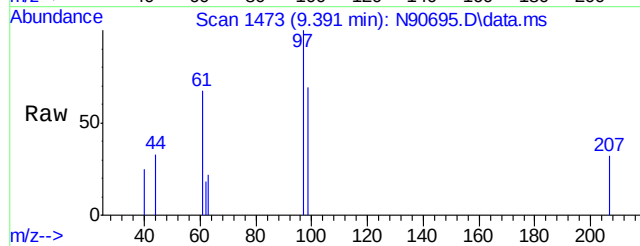
Tgt Ion:	96	Resp:	6447
Ion Ratio	Lower	Upper	
96	100		
61	171.9	148.4	208.4
98	57.9	32.3	92.3





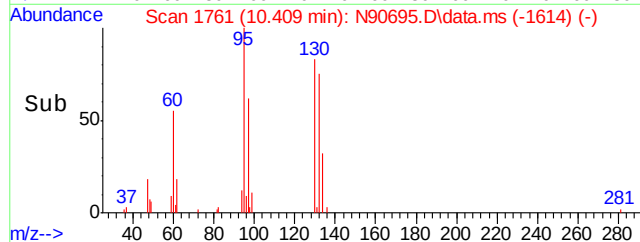
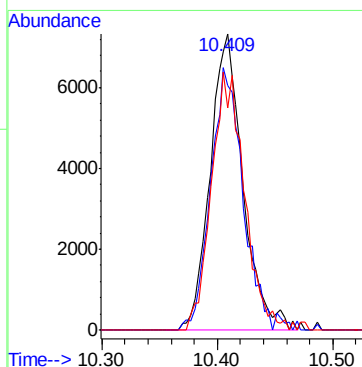
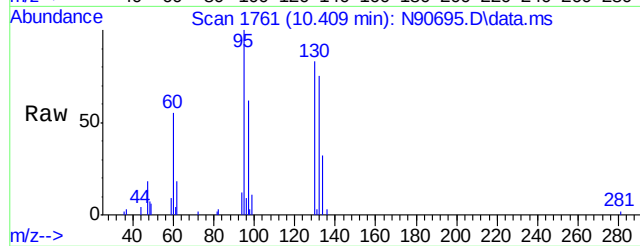
#42
1,1,1-trichloroethane
Concen: 0.41 ug/L
RT: 9.391 min Scan# 1473
Delta R.T. -0.003 min
Lab File: N90695.D
Acq: 29 Sep 2014 3:01 pm

Tgt Ion:	97	Resp:	1779
Ion Ratio	Lower	Upper	
97	100		
99	68.9	34.7	94.7
61	66.8	19.0	79.0



#51
trichloroethene
Concen: 4.24 ug/L
RT: 10.409 min Scan# 1761
Delta R.T. -0.000 min
Lab File: N90695.D
Acq: 29 Sep 2014 3:01 pm

Tgt Ion:	95	Resp:	14418
Ion Ratio	Lower	Upper	
95	100		
130	82.7	59.1	119.1
132	75.0	56.3	116.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90696.D
 Acq On : 29 Sep 2014 3:30 pm
 Operator : jaclynb
 Sample : mc33777-10
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 29 16:40:49 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

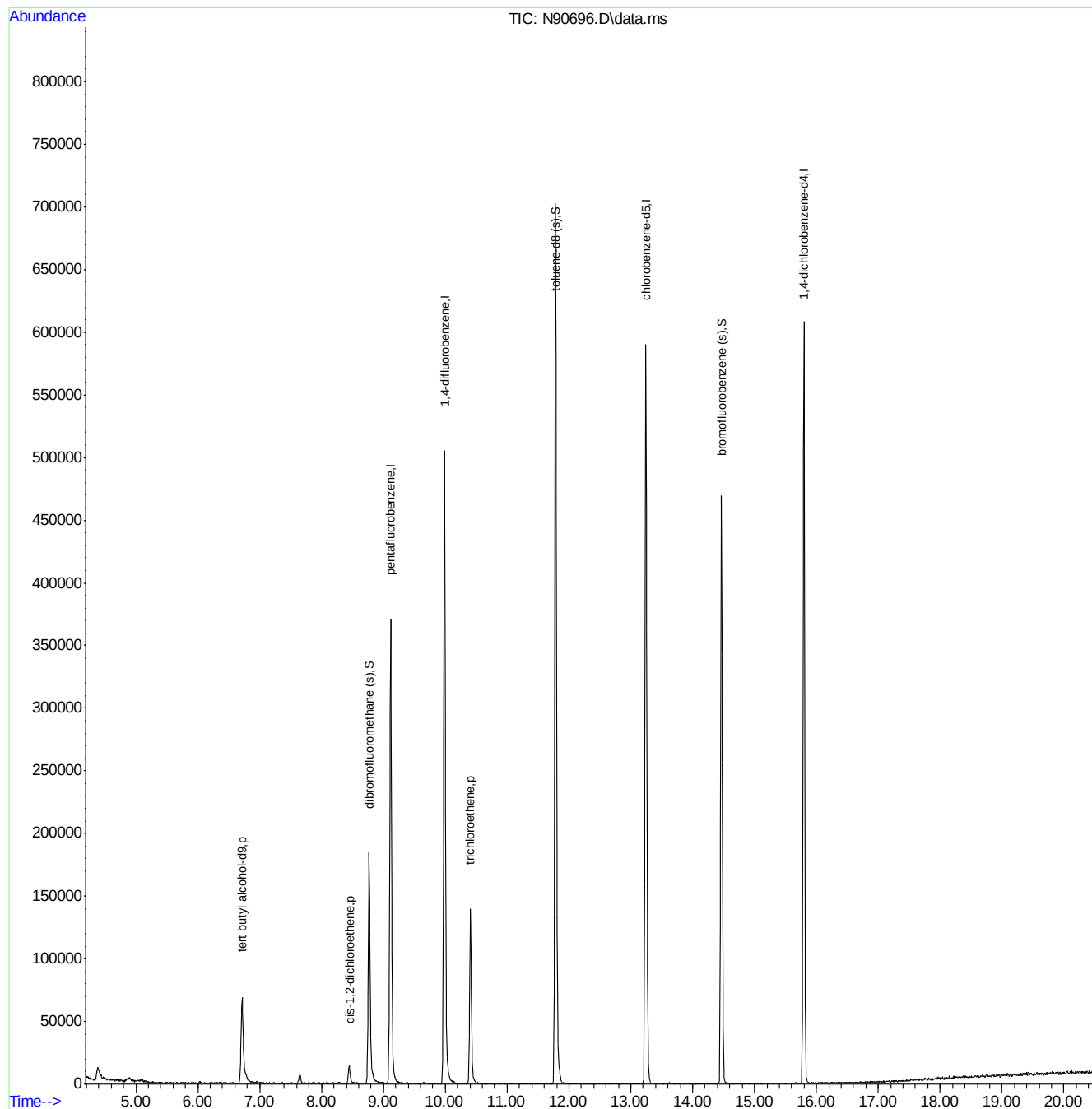
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.715	65	101312	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.119	168	258425	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	402663	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	208512	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.800	152	154944	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	129006	48.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.32%		
60) toluene-d8 (s)	11.784	98	493616	51.11	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.22%		
82) bromofluorobenzene (s)	14.467	95	185035	48.98	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.96%		
Target Compounds						
7) vinyl chloride	4.901	62	1018	Below Cal		Qvalue 67
15) 1,1-dichloroethene	6.778	96	1055	Below Cal	#	61
36) cis-1,2-dichloroethene	8.454	96	6115	2.07	ug/L	# 78
51) trichloroethene	10.405	95	52322	15.18	ug/L	96

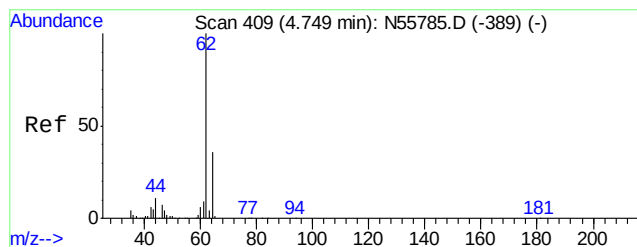
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90696.D
Acq On : 29 Sep 2014 3:30 pm
Operator : jaclynb
Sample : mc33777-10
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 31 Sample Multiplier: 1

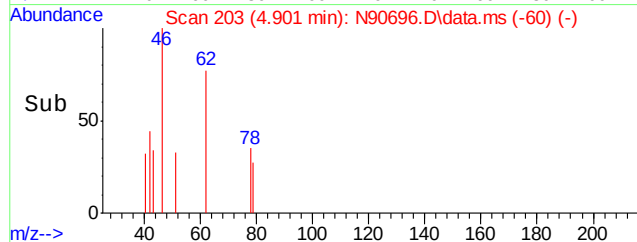
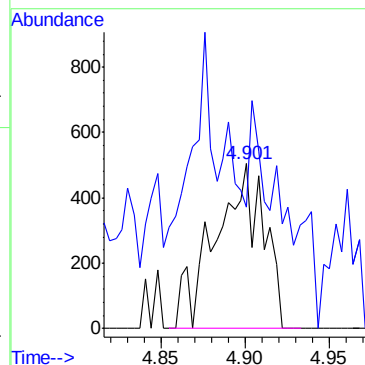
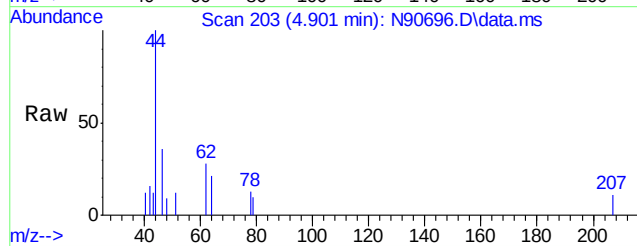
Quant Time: Sep 29 16:40:49 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





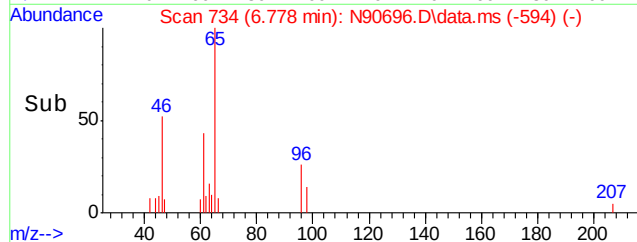
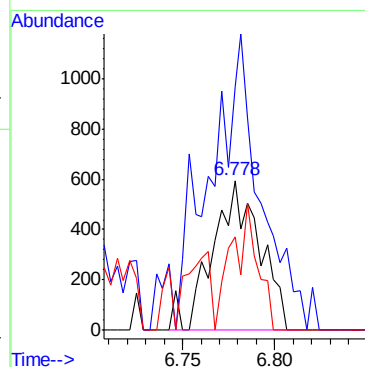
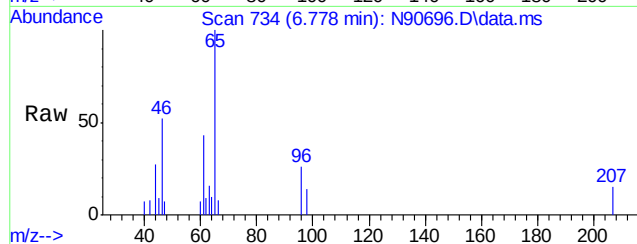
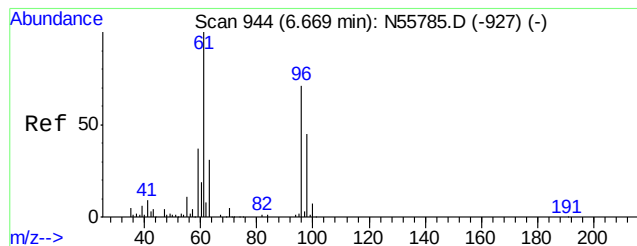
#7
vinyl chloride
Concen: Below Cal
RT: 4.901 min Scan# 203
Delta R.T. 0.007 min
Lab File: N90696.D
Acq: 29 Sep 2014 3:30 pm

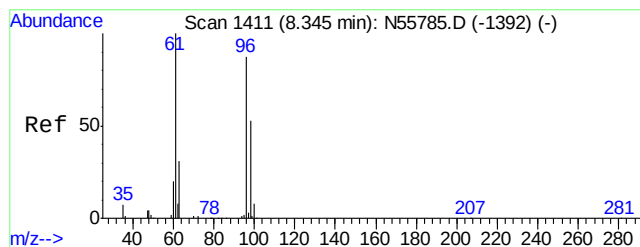
Tgt Ion:	62	Resp:	1018
Ion Ratio	Lower	Upper	
62	100		
64	12.7	1.0	61.0



#15
1,1-dichloroethene
Concen: Below Cal
RT: 6.778 min Scan# 734
Delta R.T. -0.007 min
Lab File: N90696.D
Acq: 29 Sep 2014 3:30 pm

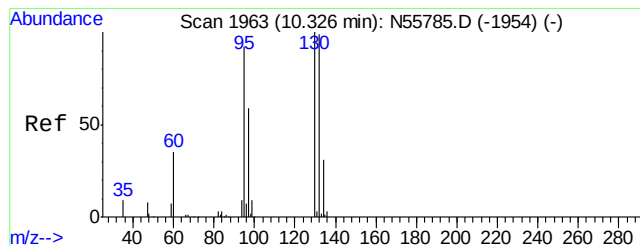
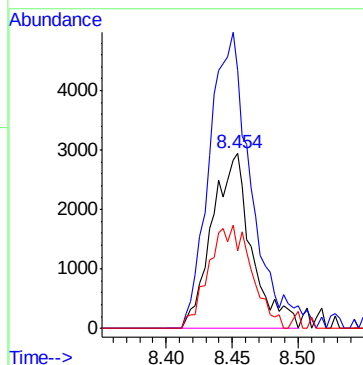
Tgt Ion:	96	Resp:	1055
Ion Ratio	Lower	Upper	
96	100		
61	136.5	186.8	246.8#
63	62.5	34.9	94.9





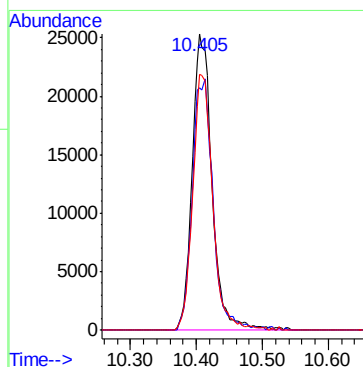
#36
cis-1,2-dichloroethene
Concen: 2.07 ug/L
RT: 8.454 min Scan# 1208
Delta R.T. 0.011 min
Lab File: N90696.D
Acq: 29 Sep 2014 3:30 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	147.1	148.4	208.4#
98	44.3	32.3	92.3



#51
trichloroethene
Concen: 15.18 ug/L
RT: 10.405 min Scan# 1760
Delta R.T. -0.004 min
Lab File: N90696.D
Acq: 29 Sep 2014 3:30 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	82.0	59.1	119.1
132	86.4	56.3	116.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90697.D
 Acq On : 29 Sep 2014 3:58 pm
 Operator : jaclynb
 Sample : mc33777-11
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 29 16:41:09 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.718	65	116272	500.00	ug/L	0.03
4) pentafluorobenzene	9.119	168	255274	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	399475	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	209711	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	152614	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	130839	49.96	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.92%		
60) toluene-d8 (s)	11.784	98	484434	50.56	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.12%		
82) bromofluorobenzene (s)	14.464	95	186225	50.05	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.10%		
Target Compounds						
36) cis-1,2-dichloroethene	8.443	96	2581	0.88	ug/L #	77
51) trichloroethene	10.413	95	1159	0.34	ug/L #	73

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

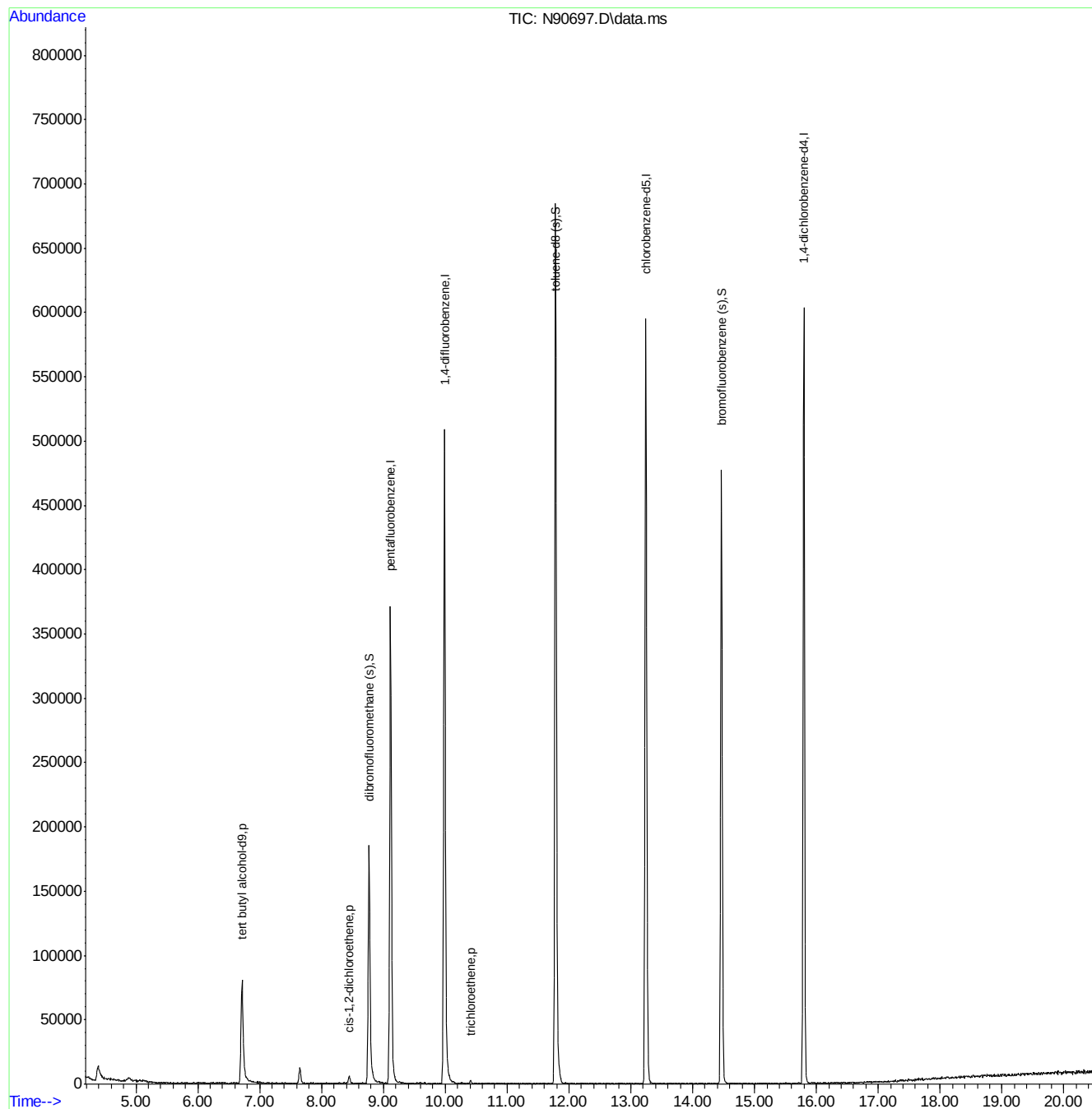
7.1.11

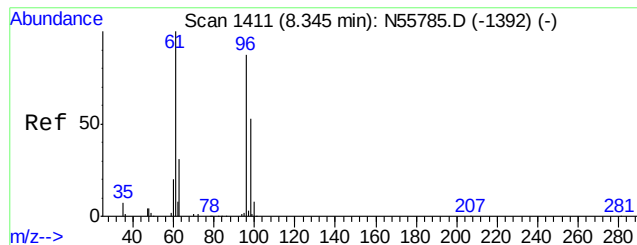
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90697.D
Acq On : 29 Sep 2014 3:58 pm
Operator : jaclynb
Sample : mc33777-11
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 32 Sample Multiplier: 1

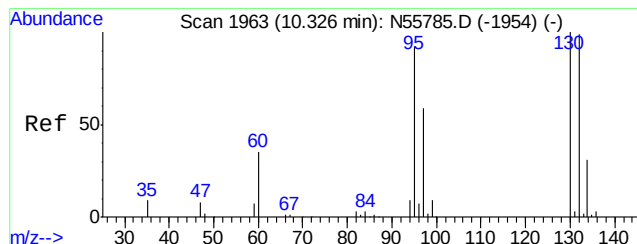
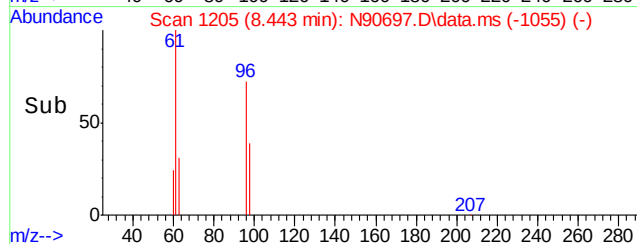
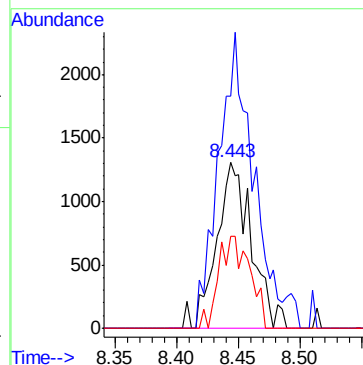
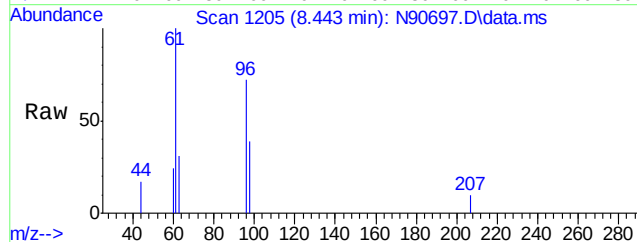
Quant Time: Sep 29 16:41:09 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





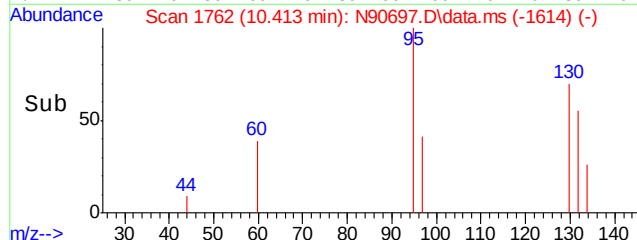
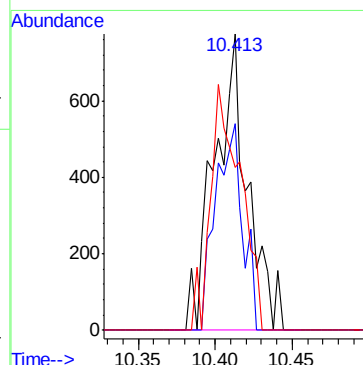
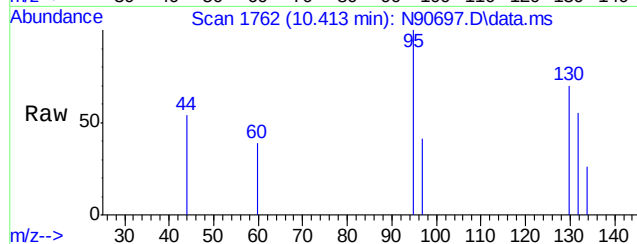
#36
cis-1,2-dichloroethene
Concen: 0.88 ug/L
RT: 8.443 min Scan# 1205
Delta R.T. 0.000 min
Lab File: N90697.D
Acq: 29 Sep 2014 3:58 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	139.7	148.4	208.4#
98	55.1	32.3	92.3



#51
trichloroethene
Concen: 0.34 ug/L
RT: 10.413 min Scan# 1762
Delta R.T. 0.004 min
Lab File: N90697.D
Acq: 29 Sep 2014 3:58 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	69.8	59.1	119.1
132	54.8	56.3	116.3#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90698.D
 Acq On : 29 Sep 2014 4:26 pm
 Operator : jaclynb
 Sample : mc33777-12
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 30 07:45:45 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) tert butyl alcohol-d9	6.704	65	104333	500.00	ug/L	# 0.01
4) pentafluorobenzene	9.112	168	255759	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	397688	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	205119	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.800	152	154455	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	128688	49.04	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.08%		
60) toluene-d8 (s)	11.781	98	481683	50.50	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.00%		
82) bromofluorobenzene (s)	14.464	95	185079	49.15	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.30%		
Target Compounds						
36) cis-1,2-dichloroethene	8.440	96	5735	1.96	ug/L	Qvalue 92

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

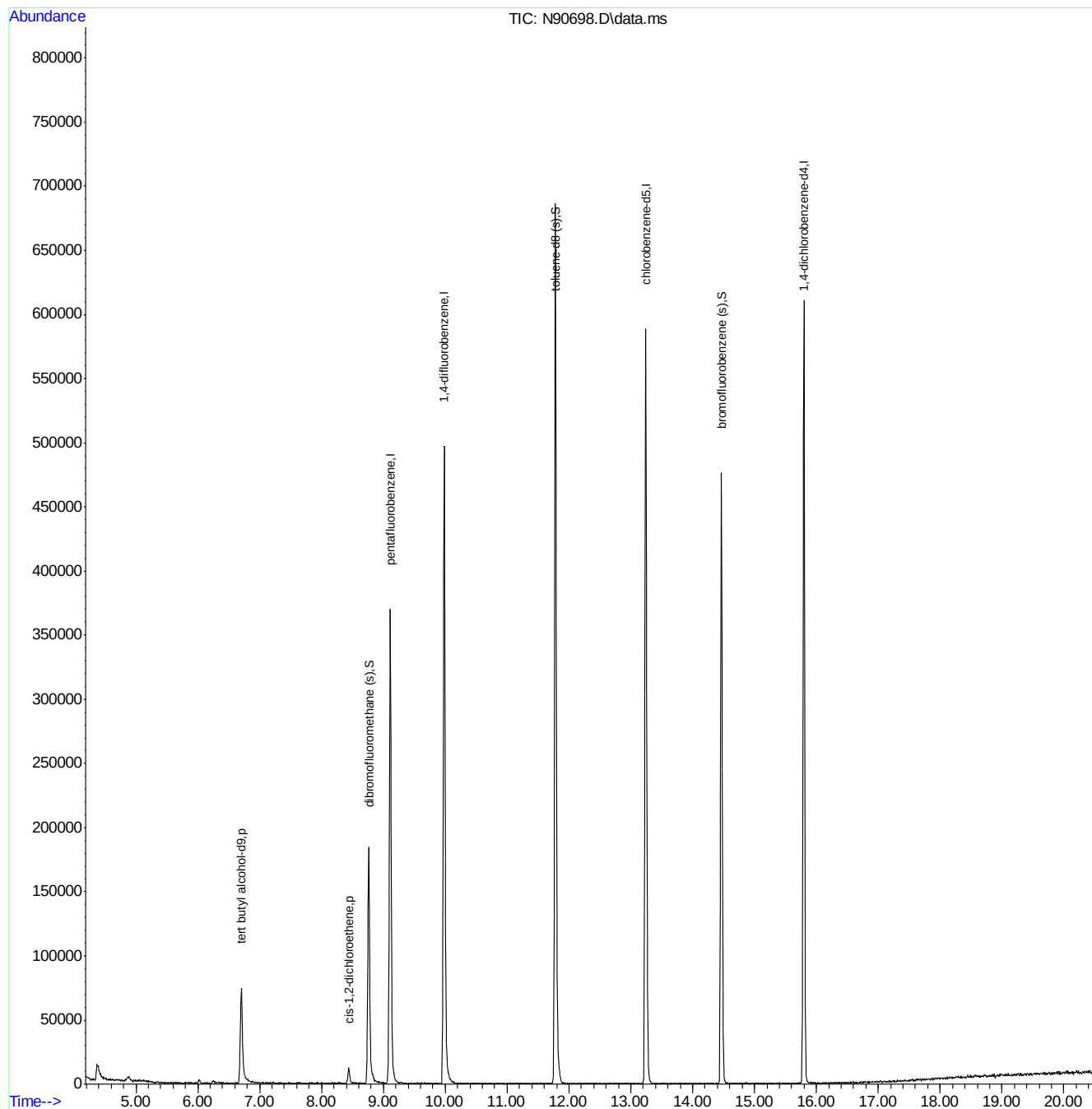
7.1.12

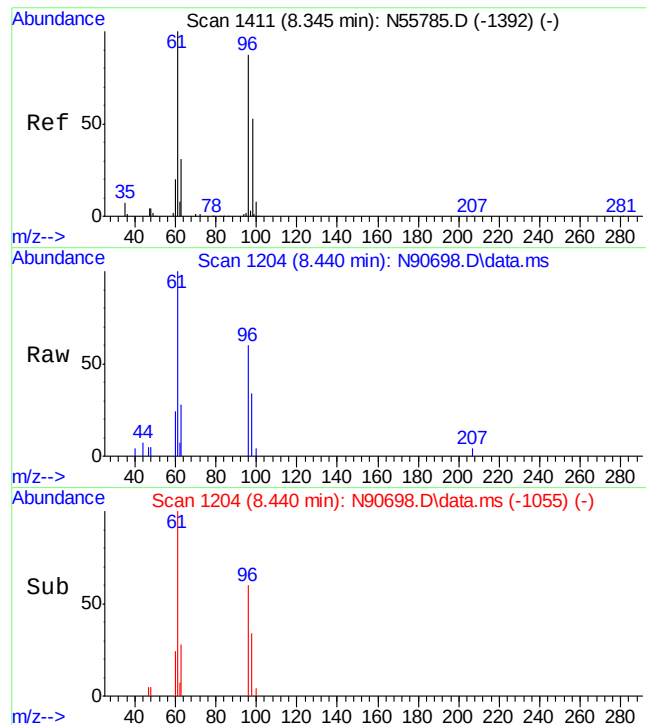
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90698.D
Acq On : 29 Sep 2014 4:26 pm
Operator : jaclynb
Sample : mc33777-12
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 33 Sample Multiplier: 1

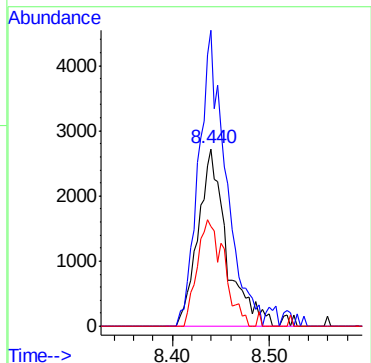
Quant Time: Sep 30 07:45:45 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





#36
cis-1,2-dichloroethene
Concen: 1.96 ug/L
RT: 8.440 min Scan# 1204
Delta R.T. -0.003 min
Lab File: N90698.D
Acq: 29 Sep 2014 4:26 pm

Tgt Ion:	96	Resp:	5735
Ion Ratio	Lower	Upper	
96	100		
61	166.9	148.4	208.4
98	56.1	32.3	92.3



7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90699.D
Acq On : 29 Sep 2014 4:55 pm
Operator : jaclynb
Sample : mc33777-13
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 30 07:46:02 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.711	65	88448	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.115	168	255597	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	400350	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	206619	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	145395	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.762	113	131343	50.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.18%		
60) toluene-d8 (s)	11.784	98	478012	49.78	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.56%		
82) bromofluorobenzene (s)	14.464	95	180844	51.01	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.02%		

Target Compounds Qvalue

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

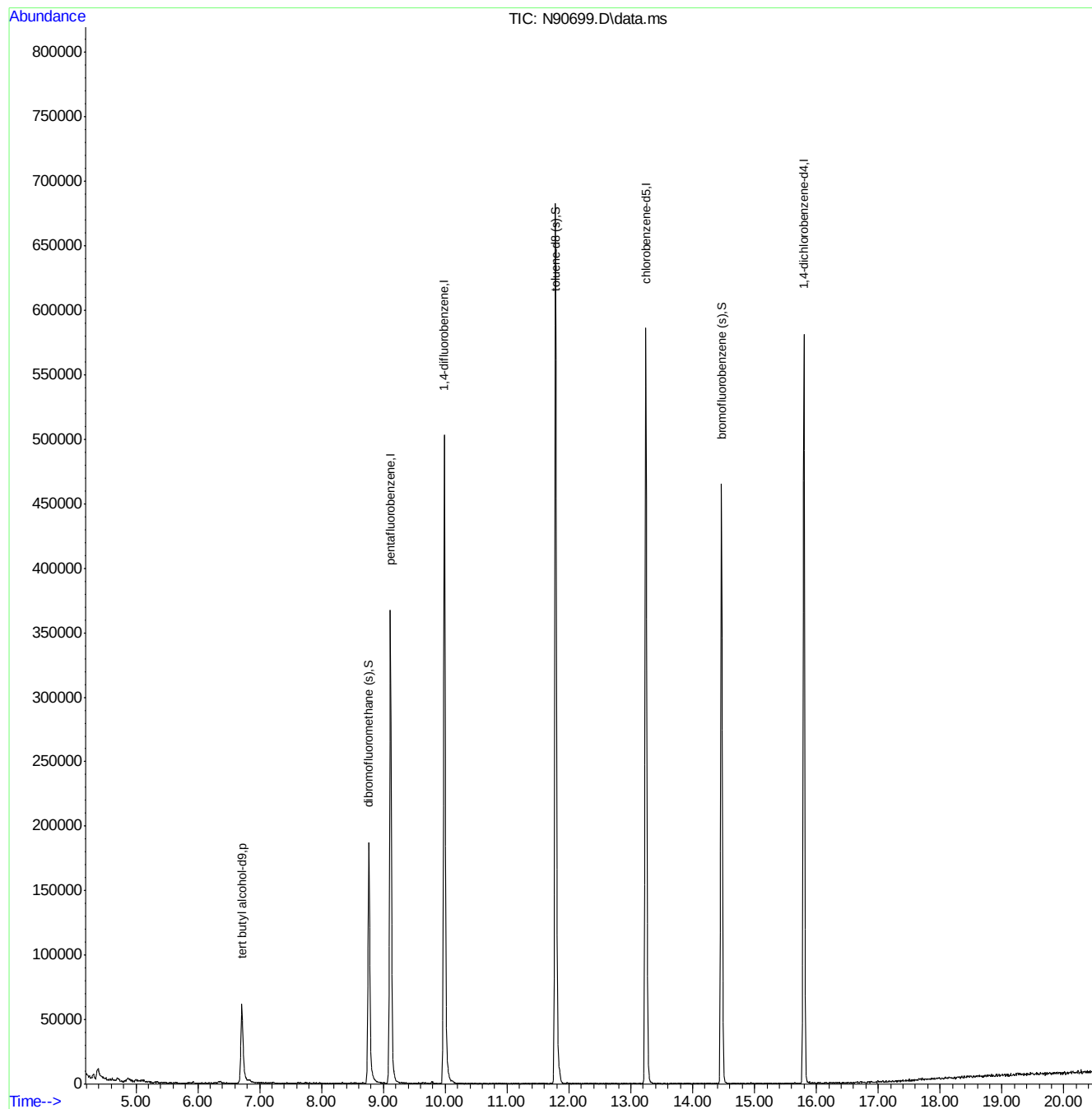
7.1.13

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90699.D
Acq On : 29 Sep 2014 4:55 pm
Operator : jaclynb
Sample : mc33777-13
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 30 07:46:02 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90700.D
 Acq On : 29 Sep 2014 5:23 pm
 Operator : jaclynb
 Sample : mc33777-14
 Misc : ms32835,MSN3355,,,,5,1
 ALS Vial : 35 Sample Multiplier: 1

Quant Time: Sep 30 07:46:17 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.718	65	109954	500.00	ug/L	# 0.03
4) pentafluorobenzene	9.119	168	252564	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	394031	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	203846	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	151904	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	126517	48.83	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.66%		
60) toluene-d8 (s)	11.784	98	479477	50.74	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.48%		
82) bromofluorobenzene (s)	14.464	95	180655	48.78	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.56%		
Target Compounds						
7) vinyl chloride	4.890	62	1001	Below Cal	#	29
36) cis-1,2-dichloroethene	8.450	96	6560	2.27	ug/L	88
51) trichloroethene	10.409	95	52547	15.58	ug/L	93

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

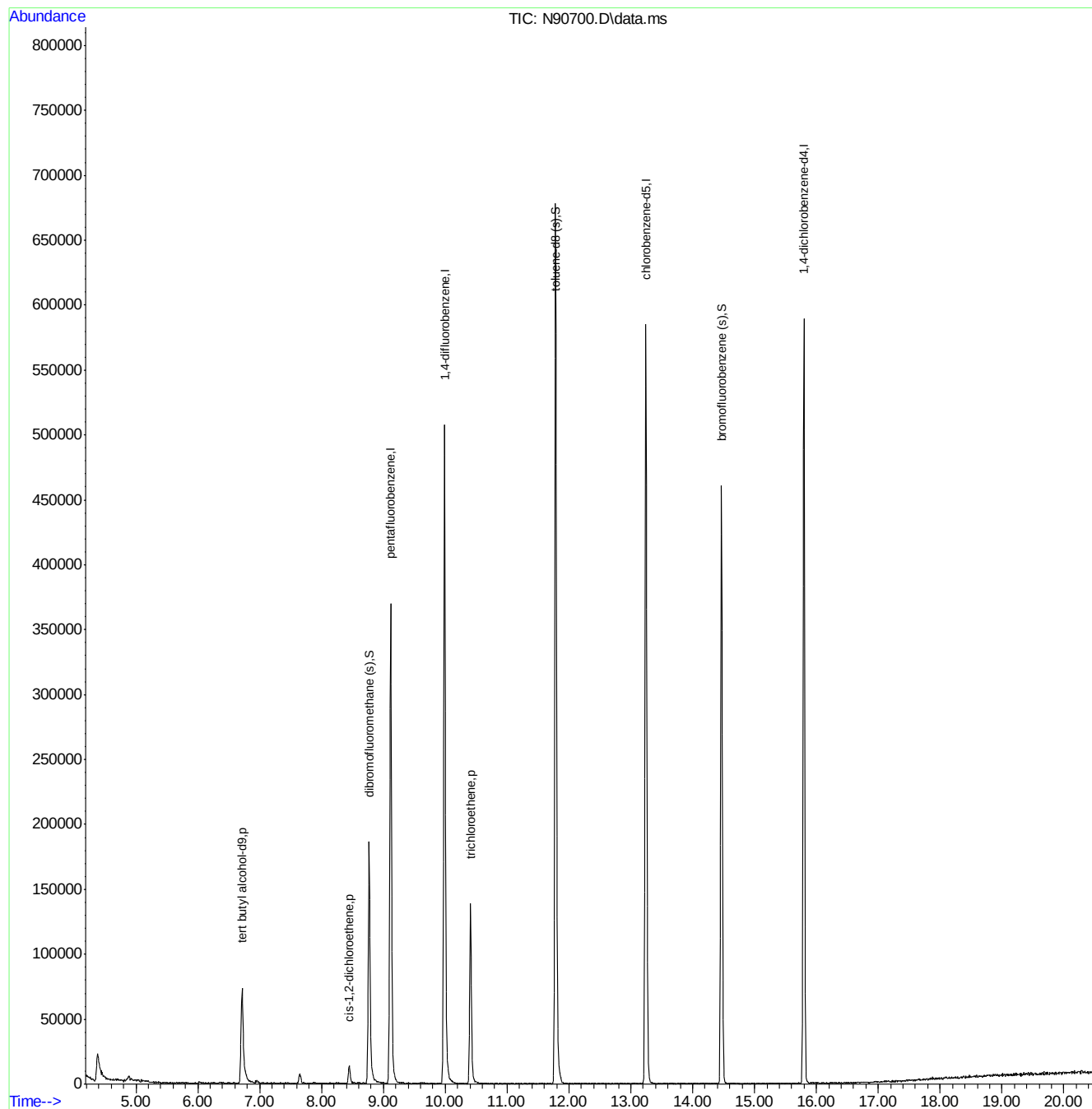
7.1.14

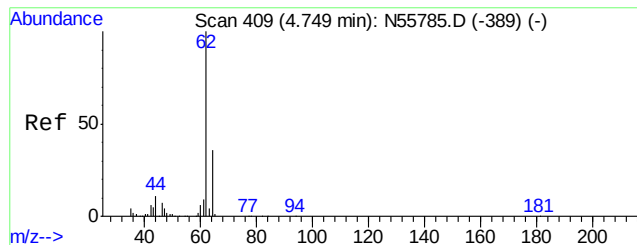
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90700.D
Acq On : 29 Sep 2014 5:23 pm
Operator : jaclynb
Sample : mc33777-14
Misc : ms32835,MSN3355,,,,5,1
ALS Vial : 35 Sample Multiplier: 1

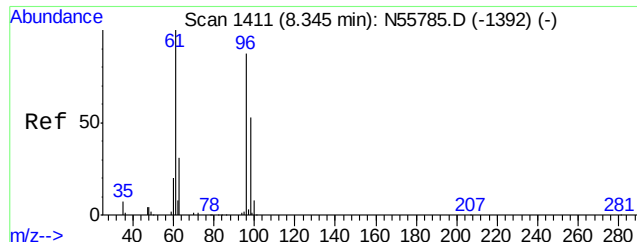
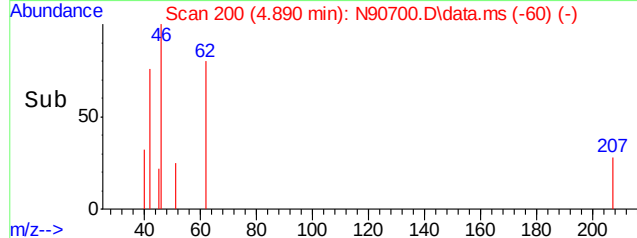
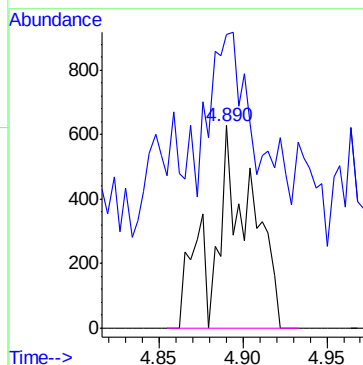
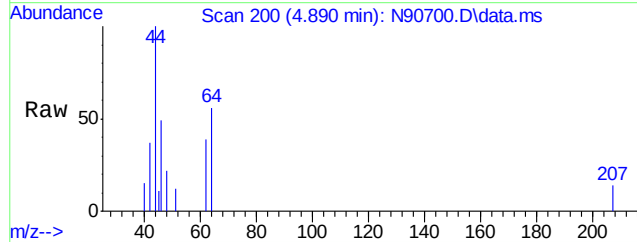
Quant Time: Sep 30 07:46:17 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration





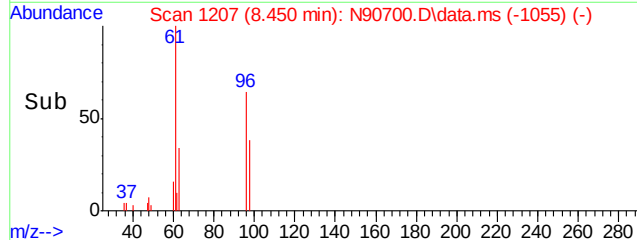
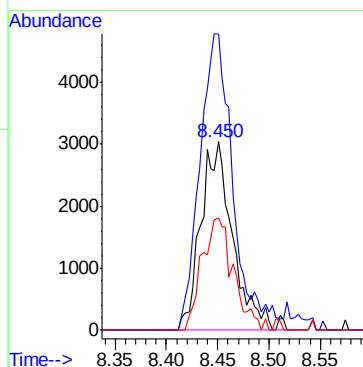
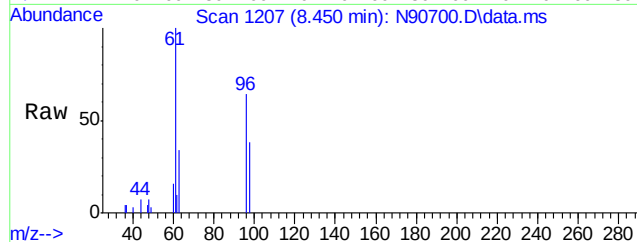
#7
vinyl chloride
Concen: Below Cal
RT: 4.890 min Scan# 200
Delta R.T. -0.004 min
Lab File: N90700.D
Acq: 29 Sep 2014 5:23 pm

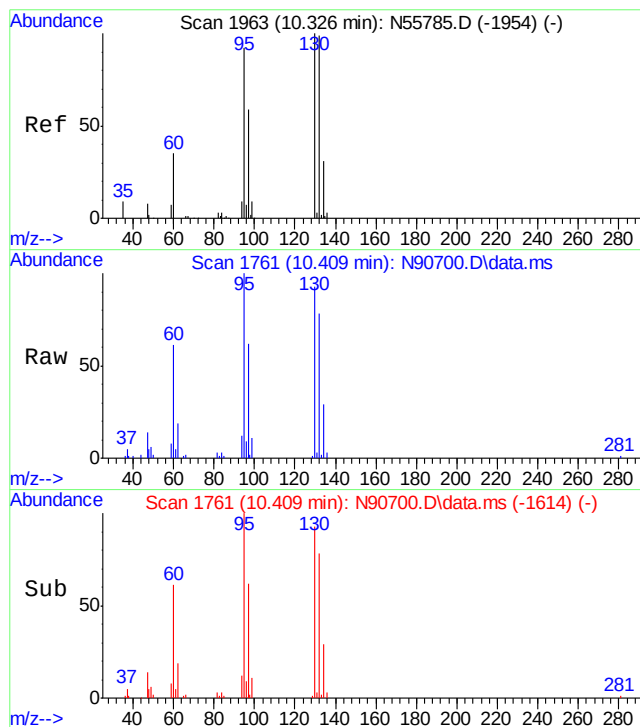
Tgt Ion	Ratio	Lower	Upper
62	100		
64	69.9	1.0	61.0#



#36
cis-1,2-dichloroethene
Concen: 2.27 ug/L
RT: 8.450 min Scan# 1207
Delta R.T. 0.007 min
Lab File: N90700.D
Acq: 29 Sep 2014 5:23 pm

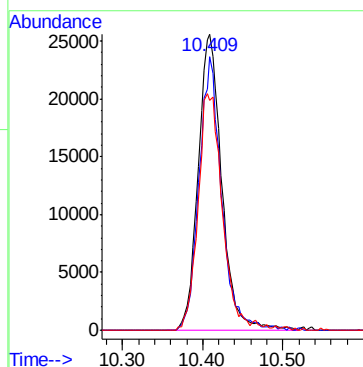
Tgt Ion	Ratio	Lower	Upper
96	100		
61	157.1	148.4	208.4
98	59.6	32.3	92.3





#51
trichloroethene
Concen: 15.58 ug/L
RT: 10.409 min Scan# 1761
Delta R.T. -0.000 min
Lab File: N90700.D
Acq: 29 Sep 2014 5:23 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	92.6	59.1	119.1
132	77.6	56.3	116.3



7.1.14

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90686.D
 Acq On : 29 Sep 2014 10:47 am
 Operator : jaclynb
 Sample : mc33777-15
 Misc : ms32835,MSN3355,,,,,5,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 29 11:40:13 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.718	65	89761	500.00	ug/L	0.03
4) pentafluorobenzene	9.119	168	289272	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	453340	50.00	ug/L	0.00
66) chlorobenzene-d5	13.244	82	232527	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	170691	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	144407	48.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.32%		
60) toluene-d8 (s)	11.784	98	545954	50.21	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.42%		
82) bromofluorobenzene (s)	14.464	95	204979	49.25	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.50%		

Target Compounds Qvalue

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

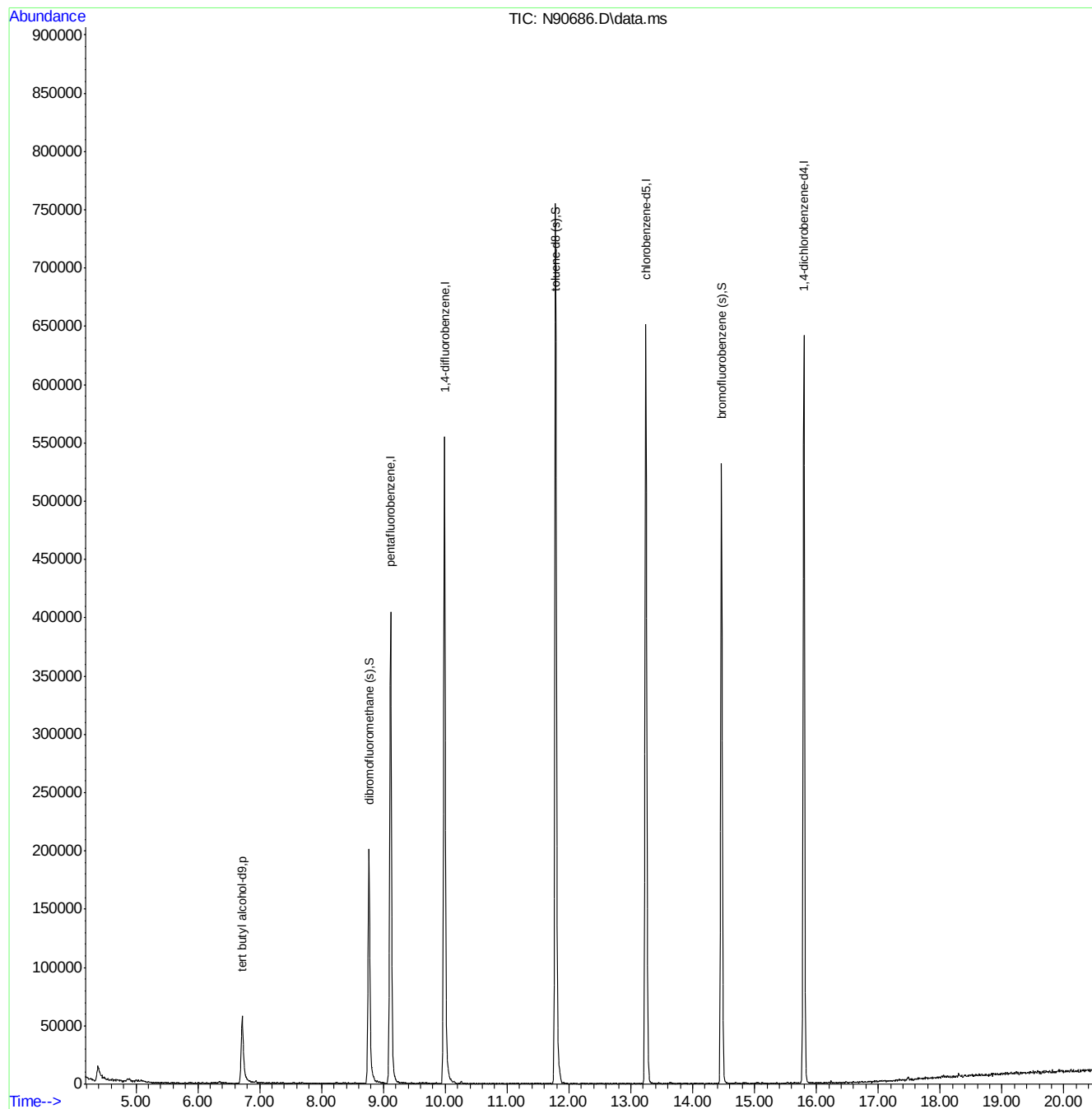
7.1.15

7

(QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90686.D
Acq On : 29 Sep 2014 10:47 am
Operator : jaclynb
Sample : mc33777-15
Misc : ms32835,MSN3355,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 29 11:40:13 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



n140918w.m Mon Sep 29 11:40:17 2014

Page: 2

7.1.15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90685.D
Acq On : 29 Sep 2014 10:18 am
Operator : jaclynb
Sample : mb
Misc : ms32833,MSN3355,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 29 11:39:45 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.715	65	97945	500.00	ug/L	0.02
4) pentafluorobenzene	9.115	168	292440	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	462061	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	228778	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	172210	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	142944	47.64	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.28%		
60) toluene-d8 (s)	11.784	98	544065	49.09	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.18%		
82) bromofluorobenzene (s)	14.464	95	207147	49.34	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.68%		
Target Compounds						Qvalue
93) 1,3-dichlorobenzene	15.758	146	1122	Below Cal		93
95) 1,4-dichlorobenzene	15.829	146	1259	Below Cal		90
96) 1,2-dichlorobenzene	15.829	146	1259	Below Cal		92

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

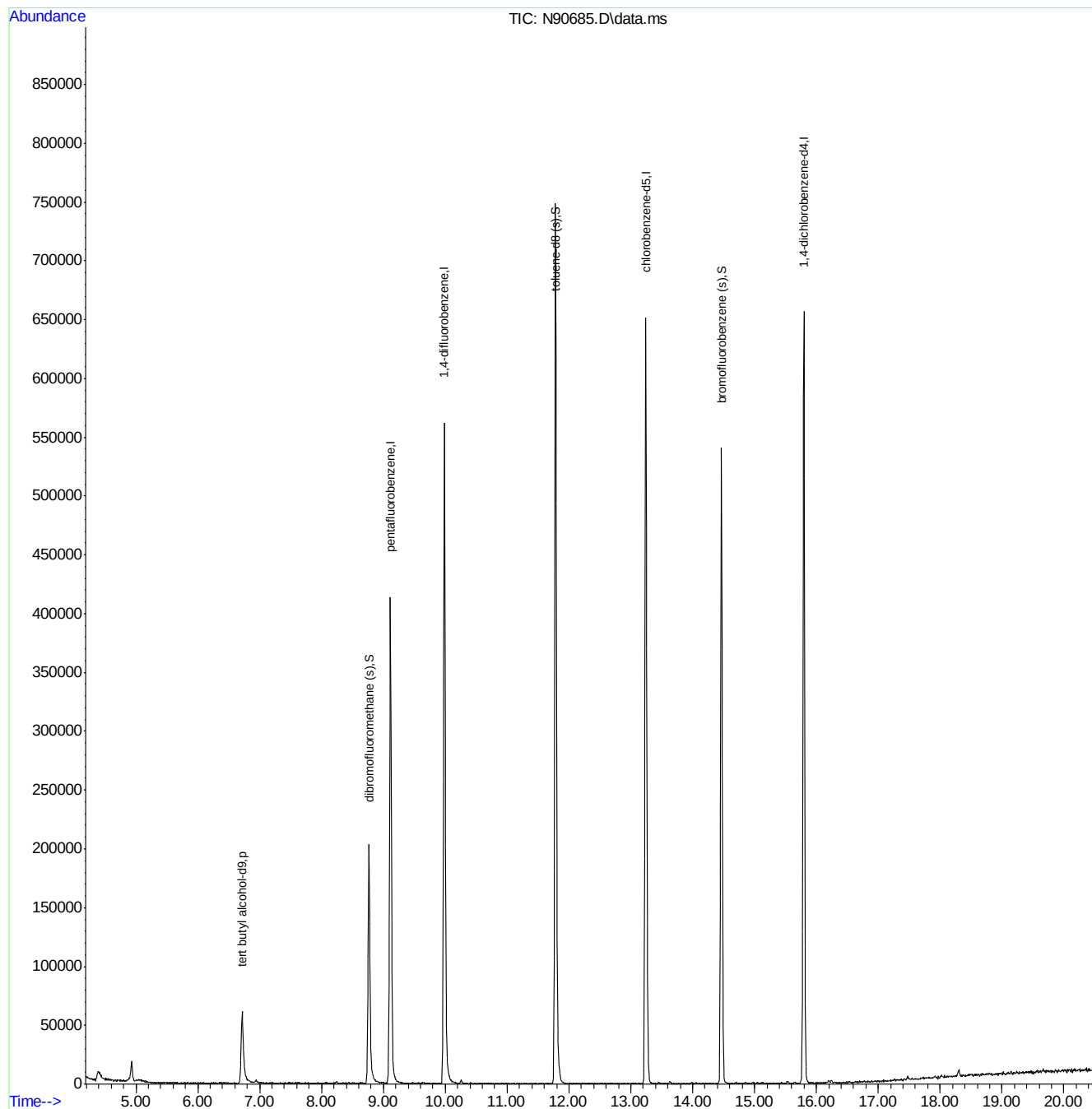
7.2.1

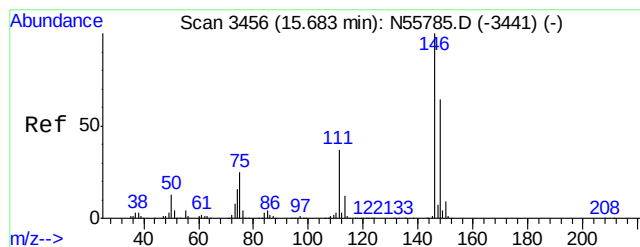
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Quantitation Report (QT Reviewed)

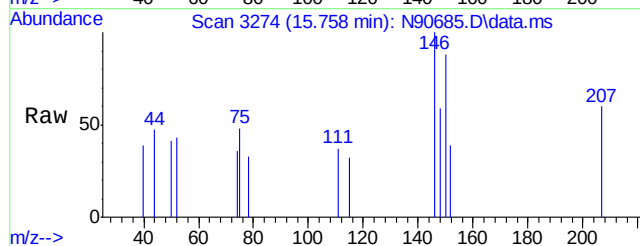
Data Path : C:\msdchem\1\data\N140929\
Data File : N90685.D
Acq On : 29 Sep 2014 10:18 am
Operator : jaclynb
Sample : mb
Misc : ms32833,MSN3355,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 29 11:39:45 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration

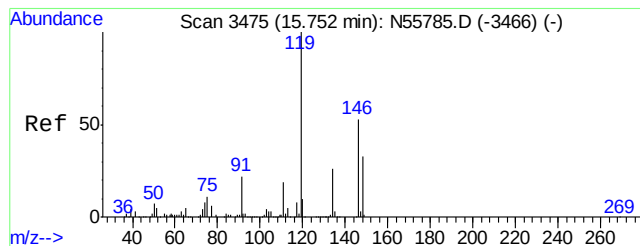
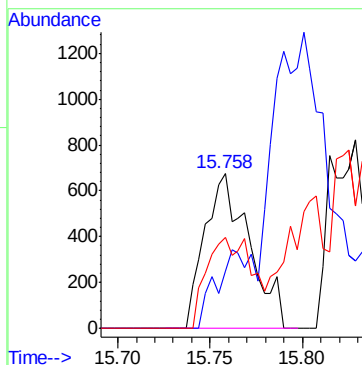
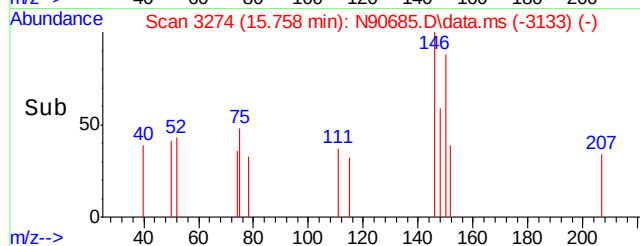




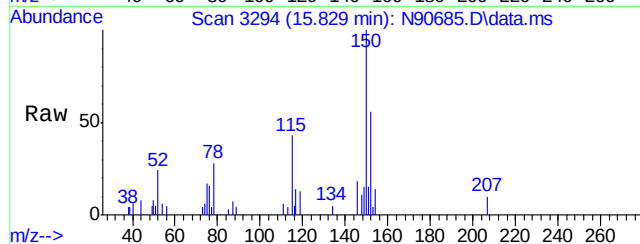
#93
1,3-dichlorobenzene
Concen: Below Cal
RT: 15.758 min Scan# 3274
Delta R.T. 0.000 min
Lab File: N90685.D
Acq: 29 Sep 2014 10:18 am



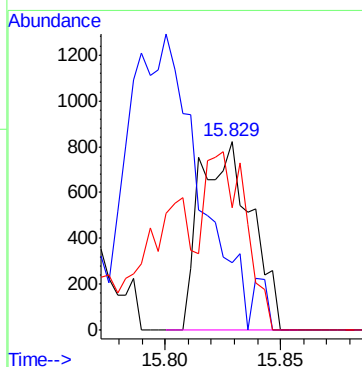
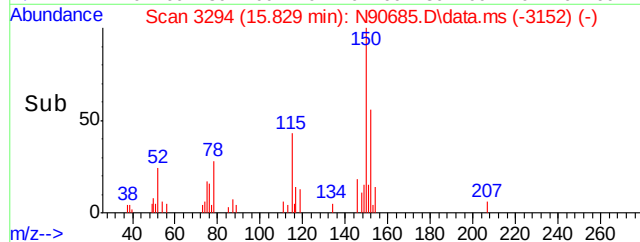
Tgt Ion	Ratio	Lower	Upper
146	100		
111	37.2	15.6	75.6
148	58.9	31.5	91.5

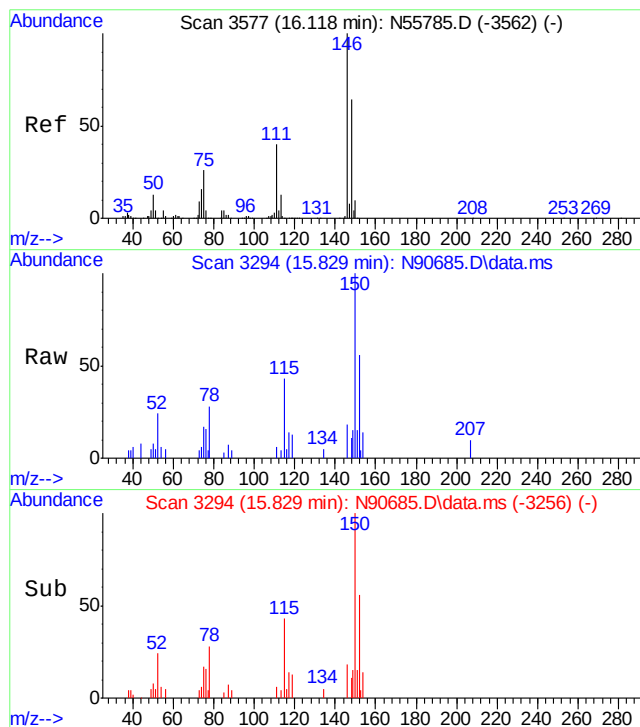


#95
1,4-dichlorobenzene
Concen: Below Cal
RT: 15.829 min Scan# 3294
Delta R.T. 0.004 min
Lab File: N90685.D
Acq: 29 Sep 2014 10:18 am



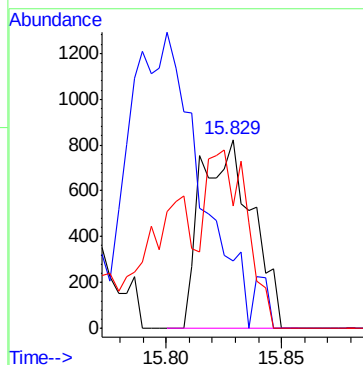
Tgt Ion	Ratio	Lower	Upper
146	100		
111	35.4	16.9	76.9
148	64.8	31.6	91.6





#96
1,2-dichlorobenzene
Concen: Below Cal
RT: 15.829 min Scan# 3294
Delta R.T. -0.364 min
Lab File: N90685.D
Acq: 29 Sep 2014 10:18 am

Tgt Ion	Ratio	Lower	Upper
146	100		
111	35.4	15.3	75.3
148	64.8	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90682.D
 Acq On : 29 Sep 2014 8:54 am
 Operator : jaclynb
 Sample : bs
 Misc : ms32833,MSN3355,,,,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 29 09:23:58 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.693	65	122333	500.00	ug/L	0.00
4) pentafluorobenzene	9.119	168	313745	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	487480	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	260206	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	215375	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	154010	47.85	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.70%		
60) toluene-d8 (s)	11.781	98	613225	52.45	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.90%		
82) bromofluorobenzene (s)	14.464	95	240732	45.84	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	91.68%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.782	59	114737	266.77	ug/L	# 100
3) Ethanol	5.558	45	368520	5883.18	ug/L	99
5) dichlorodifluoromethane	4.392	85	174750	42.30	ug/L	100
6) chloromethane	4.653	50	230885	45.60	ug/L	95
7) vinyl chloride	4.894	62	179588	52.77	ug/L	99
8) bromomethane	5.396	96	78049	49.66	ug/L	99
9) chloroethane	5.562	64	116707	57.56	ug/L	97
10) ethyl ether	6.428	59	172033	56.01	ug/L	91
11) acetonitrile	6.439	41	26566	54.50	ug/L	97
12) trichlorofluoromethane	6.205	101	288046	48.56	ug/L	99
13) freon-113	6.962	101	160943	61.32	ug/L	96
14) acrolein	6.202	56	88578	247.42	ug/L	92
15) 1,1-dichloroethene	6.785	96	148813	62.17	ug/L	97
16) acetone	6.333	58	37140	51.46	ug/L	# 75
17) Methyl Acetate	6.962	43	203255	73.41	ug/L	# 94
18) methylene chloride	6.944	84	165296	50.70	ug/L	90
19) methyl tert butyl ether	7.704	73	386375	50.11	ug/L	100
20) acrylonitrile	6.849	53	75532	55.54	ug/L	92
21) allyl chloride	7.029	41	348520	59.84	ug/L	94
22) trans-1,2-dichloroethene	7.623	96	162008	51.43	ug/L	97
23) iodomethane	6.856	142	100826	50.80	ug/L	96
24) carbon disulfide	7.224	76	558927	61.64	ug/L	99
25) propionitrile	6.849	54	2683	58.79	ug/L	100
26) vinyl acetate	7.970	43	193350	43.87	ug/L	100
27) chloroprene	8.235	53	370677	65.57	ug/L	92
28) di-isopropyl ether	8.263	45	771290	51.30	ug/L	98
29) methacrylonitrile	8.397	41	117402	52.95	ug/L	96
30) 2-butanone	8.284	72	24166	68.32	ug/L	# 32
31) Hexane	8.249	41	333896	60.37	ug/L	99
32) 1,1-dichloroethane	7.878	63	396852	51.39	ug/L	96
33) tert-butyl ethyl ether	8.662	59	310889	39.13	ug/L	92
34) isobutyl alcohol	8.259	43	663067	290.94	ug/L	98
35) 2,2-dichloropropane	8.730	77	285599	57.85	ug/L	99
36) cis-1,2-dichloroethene	8.443	96	181663	50.65	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90682.D
 Acq On : 29 Sep 2014 8:54 am
 Operator : jaclynb
 Sample : bs
 Misc : ms32833,MSN3355,,,,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 29 09:23:58 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.259	43	668179	59.53	ug/L	93
38) bromochloromethane	8.613	128	78981	53.79	ug/L #	86
39) chloroform	8.648	83	331799	48.10	ug/L	97
41) Tetrahydrofuran	8.977	42	59113	59.57	ug/L	97
42) 1,1,1-trichloroethane	9.394	97	307674	58.17	ug/L	99
44) Cyclohexane	9.674	56	423672	64.04	ug/L	96
45) carbon tetrachloride	9.755	117	258799	54.28	ug/L	98
46) 1,1-dichloropropene	9.564	75	256357	59.85	ug/L	99
47) benzene	9.794	78	679698	48.64	ug/L	99
48) 1,2-dichloroethane	9.299	62	316548	48.38	ug/L	98
49) tert-amyl methyl ether	9.907	73	161865	40.01	ug/L	96
50) heptane	10.257	43	263153	65.82	ug/L	91
51) trichloroethene	10.409	95	201043	48.18	ug/L	94
52) 1,2-dichloropropane	10.377	63	224574	56.43	ug/L	99
53) dibromomethane	10.352	93	108003	53.18	ug/L	98
54) bromodichloromethane	10.462	83	278524	53.22	ug/L	96
55) Methylcyclohexane	10.918	83	316965	64.67	ug/L	98
56) 2-chloroethyl vinyl ether	10.377	63	224574	57.17	ug/L #	100
57) methyl methacrylate	10.550	69	104903	57.65	ug/L #	79
58) 1,4-dioxane	10.557	88	4536	151.04	ug/L	95
59) cis-1,3-dichloropropene	11.077	75	285908	56.53	ug/L	98
61) 4-methyl-2-pentanone	11.169	43	214221	57.52	ug/L	95
62) toluene	11.855	92	420323	50.08	ug/L	95
63) trans-1,3-dichloropropene	11.494	75	241818	59.50	ug/L	98
64) 1,1,2-trichloroethane	11.667	83	134145	49.60	ug/L	97
65) ethyl methacrylate	11.865	69	191012	55.17	ug/L	91
67) tetrachloroethene	12.594	166	176603	52.12	ug/L	94
68) 1,3-dichloropropane	11.904	76	269768	55.02	ug/L	100
69) dibromochloromethane	12.198	129	191508	54.64	ug/L	100
70) 1,2-dibromoethane	12.452	107	151010	54.98	ug/L	96
71) 2-hexanone	12.021	43	207452	69.03	ug/L	94
72) chlorobenzene	13.276	112	450614	49.66	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	171256	51.84	ug/L	96
74) ethylbenzene	13.446	91	870644	51.47	ug/L	100
75) m,p-xylene	13.630	106	601232	97.22	ug/L	95
76) o-xylene	14.043	106	299275	49.82	ug/L	96
77) styrene	13.973	104	491703	56.43	ug/L	100
78) bromoform	13.799	173	111608	54.74	ug/L	97
79) trans-1,4-dichloro-2-b...	14.188	53	48234	53.81	ug/L #	86
81) isopropylbenzene	14.400	105	806899	52.85	ug/L	99
83) bromobenzene	14.697	156	189417	52.43	ug/L	95
84) 1,1,2,2-tetrachloroethane	14.047	83	188995	57.13	ug/L	99
85) 1,2,3-trichloropropane	14.192	75	199366	53.98	ug/L	97
86) n-propylbenzene	14.846	91	1070699	54.77	ug/L	99
87) 2-chlorotoluene	14.969	91	648500	52.17	ug/L	98
88) 4-chlorotoluene	15.044	91	676322	51.50	ug/L	99
89) 1,3,5-trimethylbenzene	15.121	105	715531	46.68	ug/L	99
90) tert-butylbenzene	15.429	91	479778	53.32	ug/L	100
91) 1,2,4-trimethylbenzene	15.535	105	738872	48.63	ug/L	99
92) sec-butylbenzene	15.648	105	937266	54.57	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90682.D
Acq On : 29 Sep 2014 8:54 am
Operator : jaclynb
Sample : bs
Misc : ms32833,MSN3355,,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 29 09:23:58 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.758	146	369139	53.21	ug/L	100
94)	p-isopropyltoluene	15.821	119	779482	55.54	ug/L	98
95)	1,4-dichlorobenzene	15.825	146	348053	56.39	ug/L	98
96)	1,2-dichlorobenzene	16.189	146	362181	55.91	ug/L	98
97)	n-butylbenzene	16.235	91	835711	57.41	ug/L	99
98)	1,2-dibromo-3-chloropr...	16.670	75	35980	61.82	ug/L	95
99)	1,2,4-trichlorobenzene	18.017	180	180598	62.13	ug/L	95
100)	1,3,5-trichlorobenzene	17.476	180	253272	56.26	ug/L	97
101)	hexachlorobutadiene	18.303	225	136582	59.93	ug/L	96
102)	naphthalene	18.289	128	279322m	67.07	ug/L	
103)	1,2,3-trichlorobenzene	18.498	180	131525	62.55	ug/L	95
104)	2-methylnaphthalene	19.668	142	57812	48.70	ug/L #	100
105)	1-methylnaphthalene	19.919	142	43681	49.24	ug/L	97

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

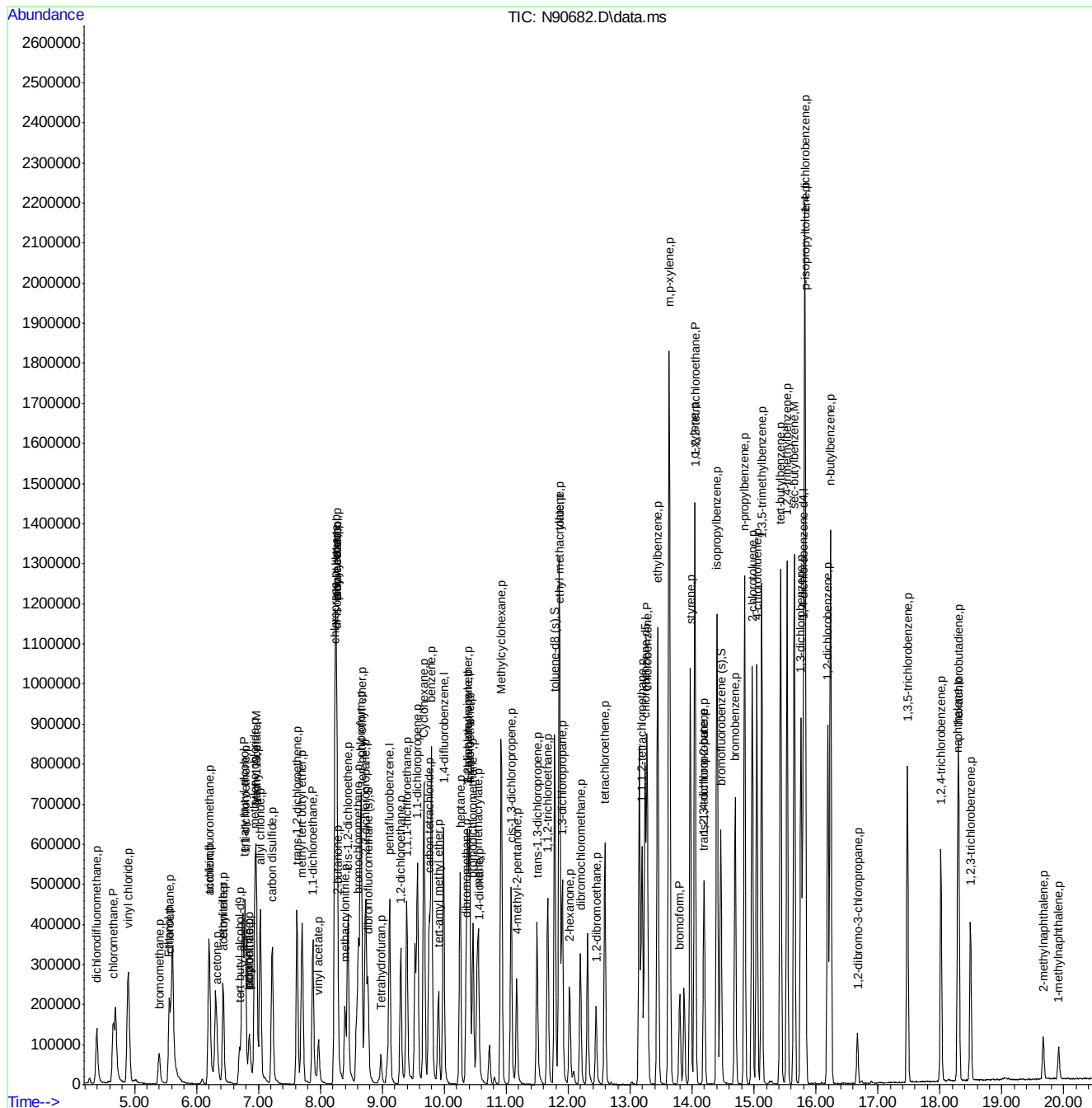
7.3.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90682.D
Acq On : 29 Sep 2014 8:54 am
Operator : jaclynb
Sample : bs
Misc : ms32833,MSN3355,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 29 09:23:58 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



n140918w.m Mon Sep 29 09:26:21 2014

Page: 4

7.3.1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90705.D
 Acq On : 29 Sep 2014 7:44 pm
 Operator : jaclynb
 Sample : mc33777-1ms
 Misc : ms32835,MSN3355,,,,,5,5
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 30 07:52:43 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.697	65	119935	500.00	ug/L	0.00
4) pentafluorobenzene	9.119	168	312180	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	499936	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	270838	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	214916	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	155787	48.64	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.28%		
60) toluene-d8 (s)	11.784	98	618815	51.61	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.22%		
82) bromofluorobenzene (s)	14.464	95	244634	46.69	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.38%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.785	59	114409	271.33	ug/L	# 100
3) Ethanol	5.562	45	350423m	5706.13	ug/L	
5) dichlorodifluoromethane	4.392	85	185857	45.21	ug/L	100
6) chloromethane	4.653	50	222080	44.08	ug/L	99
7) vinyl chloride	4.894	62	179177	52.92	ug/L	95
8) bromomethane	5.396	96	66295	43.10	ug/L	99
9) chloroethane	5.566	64	118094	58.54	ug/L	98
10) ethyl ether	6.435	59	182262	59.64	ug/L	91
11) acetonitrile	6.432	41	26388	54.41	ug/L	99
12) trichlorofluoromethane	6.205	101	284081	48.13	ug/L	98
13) freon-113	6.969	101	158592	60.73	ug/L	99
14) acrolein	6.198	56	86385	242.50	ug/L	98
15) 1,1-dichloroethene	6.789	96	150053	63.02	ug/L	90
16) acetone	6.340	58	17077	23.78	ug/L	96
17) Methyl Acetate	6.962	43	206136	74.83	ug/L	# 94
18) methylene chloride	6.944	84	165593	51.05	ug/L	89
19) methyl tert butyl ether	7.708	73	390622	50.91	ug/L	98
20) acrylonitrile	6.852	53	73905	54.62	ug/L	99
21) allyl chloride	7.033	41	341229	58.88	ug/L	93
22) trans-1,2-dichloroethene	7.623	96	164263	52.41	ug/L	99
23) iodomethane	6.856	142	100236	50.76	ug/L	97
24) carbon disulfide	7.224	76	536925	59.51	ug/L	99
25) propionitrile	6.852	54	2720	59.84	ug/L	100
26) vinyl acetate	7.973	43	191021	43.55	ug/L	97
27) chloroprene	8.238	53	373470	66.39	ug/L	96
28) di-isopropyl ether	8.263	45	776839	51.93	ug/L	98
29) methacrylonitrile	8.397	41	113105	51.27	ug/L	94
30) 2-butanone	8.284	72	16183	45.98	ug/L	# 82
31) Hexane	8.249	41	324763	59.02	ug/L	97
32) 1,1-dichloroethane	7.878	63	394664	51.36	ug/L	98
33) tert-butyl ethyl ether	8.659	59	312824	39.54	ug/L	93
34) isobutyl alcohol	8.259	43	608597	268.38	ug/L	95
35) 2,2-dichloropropane	8.730	77	274408	56.00	ug/L	99
36) cis-1,2-dichloroethene	8.447	96	181178	50.76	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90705.D
 Acq On : 29 Sep 2014 7:44 pm
 Operator : jaclynb
 Sample : mc33777-1ms
 Misc : ms32835,MSN3355,,,,,5,5
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 30 07:52:43 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.259	43	607648	54.41	ug/L	97
38) bromochloromethane	8.613	128	78423	53.68	ug/L	90
39) chloroform	8.648	83	327529	47.72	ug/L	99
41) Tetrahydrofuran	8.981	42	53032	53.71	ug/L	99
42) 1,1,1-trichloroethane	9.394	97	310521	59.00	ug/L	98
44) Cyclohexane	9.674	56	428847	63.21	ug/L	97
45) carbon tetrachloride	9.758	117	261264	53.43	ug/L	98
46) 1,1-dichloropropene	9.568	75	258273	58.79	ug/L	99
47) benzene	9.794	78	676401	47.19	ug/L	98
48) 1,2-dichloroethane	9.299	62	316866	47.23	ug/L	99
49) tert-amyl methyl ether	9.907	73	166548	40.14	ug/L	93
50) heptane	10.253	43	238856	58.25	ug/L	93
51) trichloroethene	10.409	95	199956	46.72	ug/L	98
52) 1,2-dichloropropane	10.381	63	224359	54.97	ug/L	100
53) dibromomethane	10.356	93	107607	51.67	ug/L	97
54) bromodichloromethane	10.465	83	272749	50.82	ug/L	97
55) Methylcyclohexane	10.922	83	312275	62.12	ug/L	98
56) 2-chloroethyl vinyl ether	10.381	63	224359	55.69	ug/L #	100
57) methyl methacrylate	10.550	69	105166	56.35	ug/L #	77
58) 1,4-dioxane	10.564	88	3871	126.41	ug/L #	72
59) cis-1,3-dichloropropene	11.077	75	291042	56.12	ug/L	98
61) 4-methyl-2-pentanone	11.169	43	200315	52.44	ug/L	95
62) toluene	11.855	92	417971	48.56	ug/L	97
63) trans-1,3-dichloropropene	11.498	75	243700	58.47	ug/L	97
64) 1,1,2-trichloroethane	11.671	83	134779	48.59	ug/L	98
65) ethyl methacrylate	11.865	69	189675	53.42	ug/L	97
67) tetrachloroethene	12.594	166	173064	49.07	ug/L	97
68) 1,3-dichloropropane	11.908	76	267117	52.34	ug/L	98
69) dibromochloromethane	12.198	129	188730	51.73	ug/L	93
70) 1,2-dibromoethane	12.449	107	152645	53.39	ug/L	97
71) 2-hexanone	12.025	43	134367	42.96	ug/L	96
72) chlorobenzene	13.276	112	444245	47.04	ug/L	98
73) 1,1,1,2-tetrachloroethane	13.191	131	170518	49.59	ug/L	97
74) ethylbenzene	13.446	91	856603	48.66	ug/L	99
75) m,p-xylene	13.630	106	585731	90.99	ug/L	96
76) o-xylene	14.043	106	293057	46.87	ug/L	99
77) styrene	13.969	104	477082	52.60	ug/L	99
78) bromoform	13.799	173	110337	51.99	ug/L	97
79) trans-1,4-dichloro-2-b...	14.192	53	46311	49.82	ug/L	96
81) isopropylbenzene	14.400	105	790220	51.87	ug/L	99
83) bromobenzene	14.694	156	182753	50.70	ug/L	98
84) 1,1,2,2-tetrachloroethane	14.047	83	185338	55.91	ug/L	98
85) 1,2,3-trichloropropane	14.192	75	199434	54.11	ug/L	98
86) n-propylbenzene	14.846	91	1031947	52.91	ug/L	99
87) 2-chlorotoluene	14.969	91	623078	50.23	ug/L	98
88) 4-chlorotoluene	15.044	91	644132	49.16	ug/L	98
89) 1,3,5-trimethylbenzene	15.125	105	699371	45.73	ug/L	98
90) tert-butylbenzene	15.429	91	454260	50.59	ug/L	99
91) 1,2,4-trimethylbenzene	15.532	105	726647	47.93	ug/L	100
92) sec-butylbenzene	15.648	105	898191	52.41	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90705.D
 Acq On : 29 Sep 2014 7:44 pm
 Operator : jaclynb
 Sample : mc33777-1ms
 Misc : ms32835,MSN3355,,,,5,5
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 30 07:52:43 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.758	146	351445	50.74	ug/L	98
94) p-isopropyltoluene	15.818	119	739818	52.83	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	334355	54.24	ug/L	97
96) 1,2-dichlorobenzene	16.189	146	346556	53.59	ug/L	99
97) n-butylbenzene	16.235	91	782303	53.85	ug/L	99
98) 1,2-dibromo-3-chloropr...	16.670	75	34349	59.15	ug/L	98
99) 1,2,4-trichlorobenzene	18.013	180	165943	57.21	ug/L	98
100) 1,3,5-trichlorobenzene	17.476	180	239474	53.31	ug/L	99
101) hexachlorobutadiene	18.303	225	122685	53.95	ug/L	98
102) naphthalene	18.289	128	277601	66.82	ug/L	100
103) 1,2,3-trichlorobenzene	18.494	180	122731	58.61	ug/L	97
104) 2-methylnaphthalene	19.668	142	51854	43.78	ug/L #	100
105) 1-methylnaphthalene	19.915	142	38992	44.05	ug/L	97

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

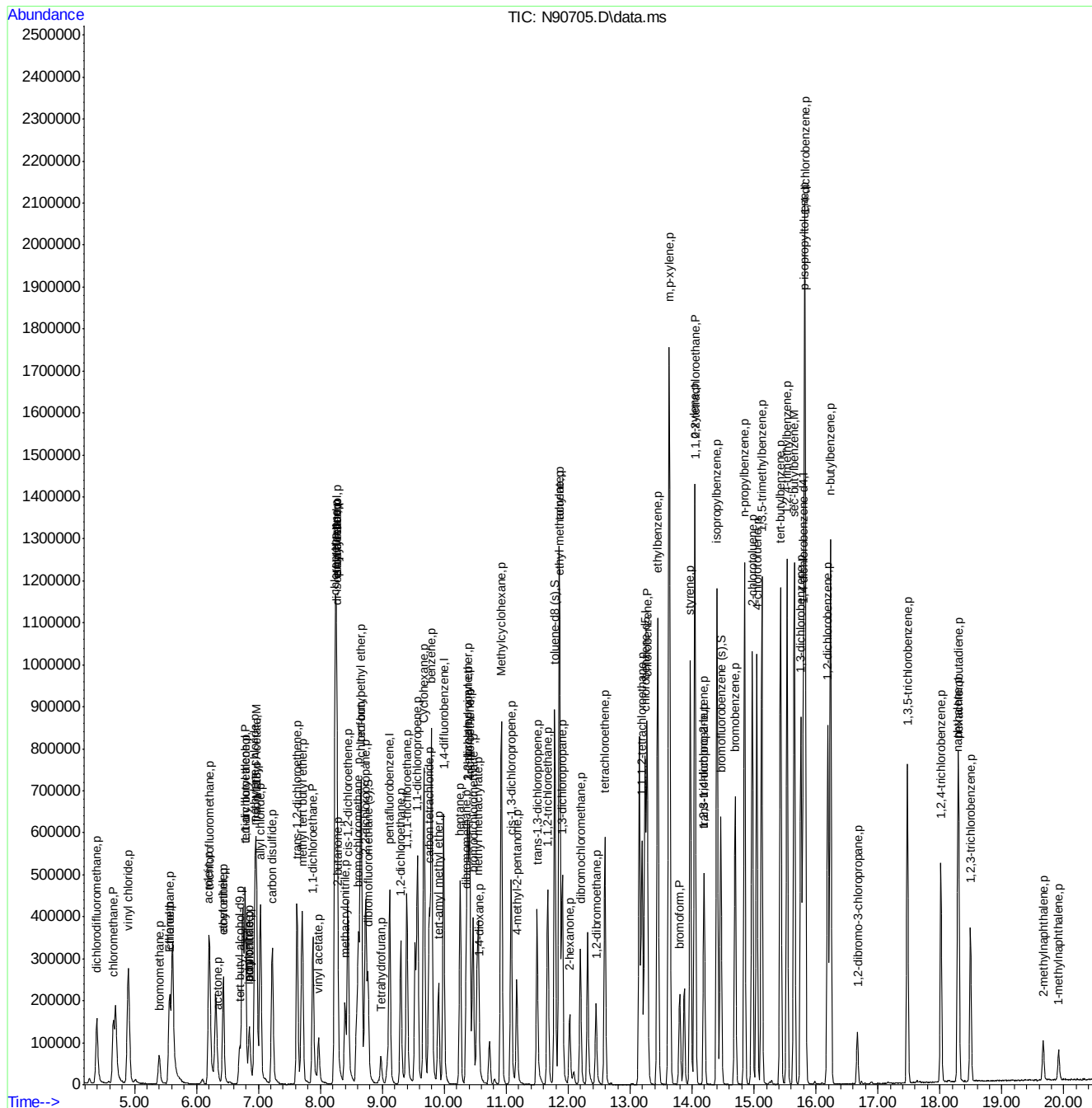
7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90705.D
Acq On : 29 Sep 2014 7:44 pm
Operator : jaclynb
Sample : mc33777-1ms
Misc : ms32835,MSN3355,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

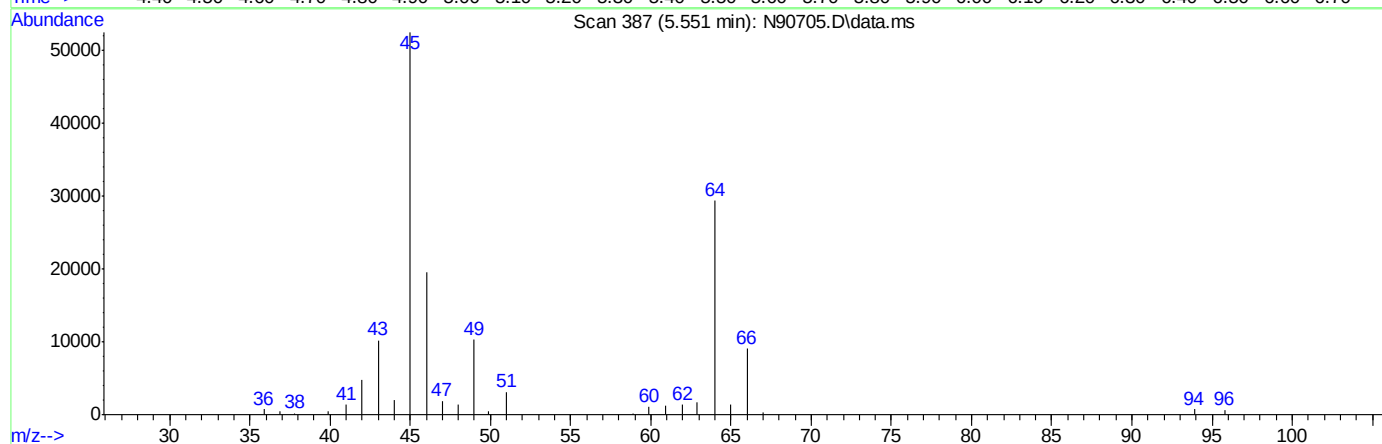
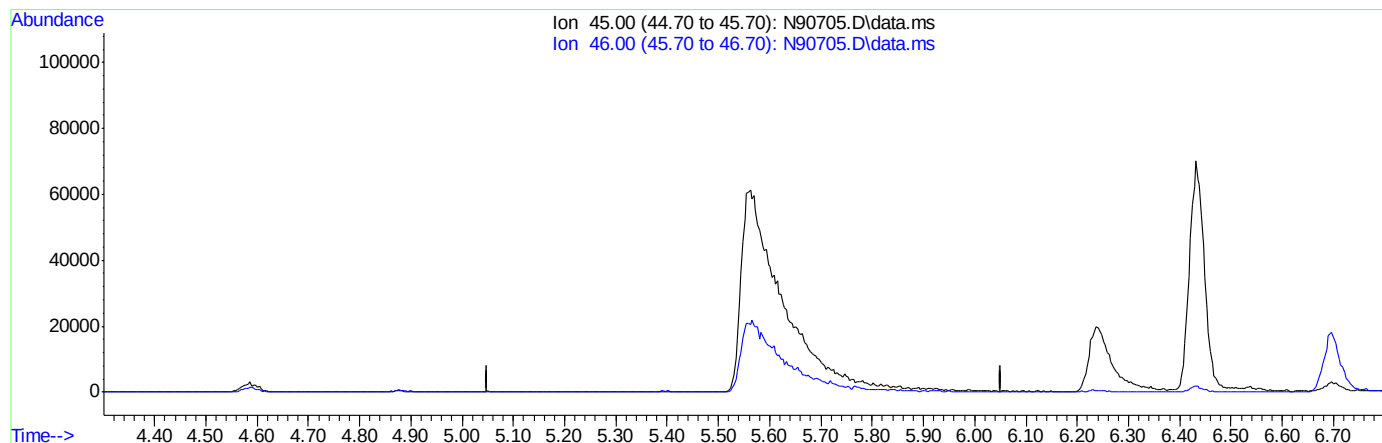
Quant Time: Sep 30 07:52:43 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90705.D
Acq On : 29 Sep 2014 7:44 pm
Operator : jaclynb
Sample : mc33777-1ms
Misc : ms32835,MSN3355,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 30 07:52:37 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.551min (-5.551) 0.00ug/L

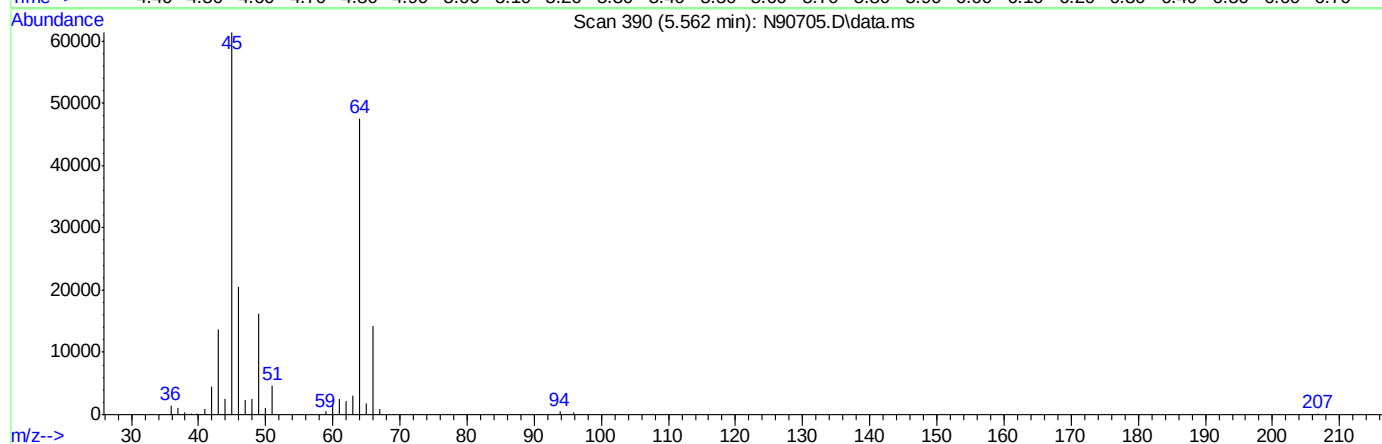
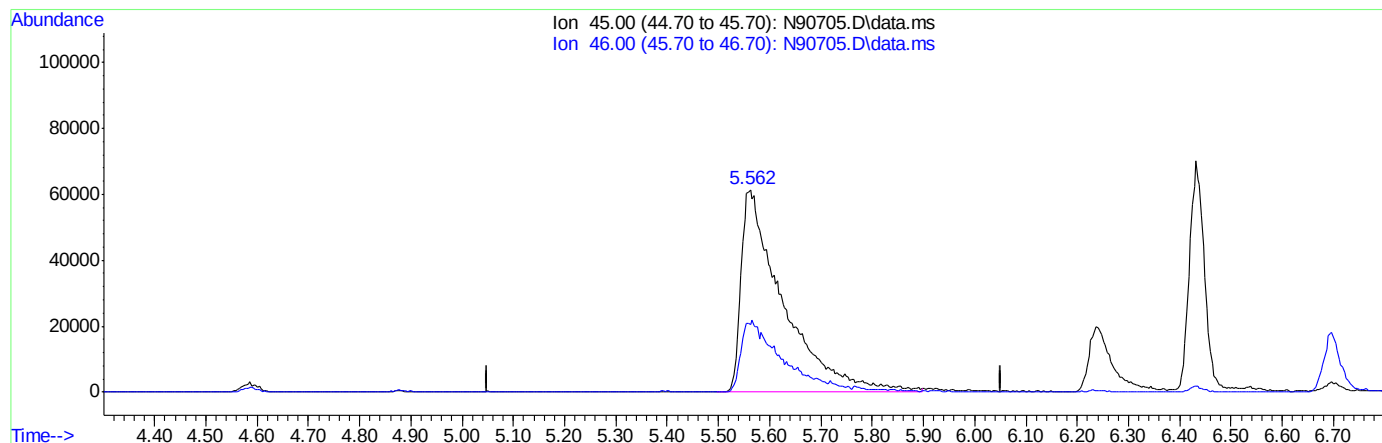
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90705.D
Acq On : 29 Sep 2014 7:44 pm
Operator : jaclynb
Sample : mc33777-1ms
Misc : ms32835,MSN3355,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 30 07:52:37 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



TIC: N90705.D\data.ms

(3) Ethanol (p)

5.562min (+0.011) 5706.13ug/L m

response 350423

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90706.D
 Acq On : 29 Sep 2014 8:13 pm
 Operator : jaclynb
 Sample : mc33777-1msd
 Misc : ms32835,MSN3355,,,,5,5
 ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 30 07:53:00 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.697	65	114340	500.00	ug/L	0.00
4) pentafluorobenzene	9.115	168	319054	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	494303	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	264962	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	214276	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	153943	47.03	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.06%		
60) toluene-d8 (s)	11.784	98	618566	52.18	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.36%		
82) bromofluorobenzene (s)	14.461	95	244644	46.83	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	93.66%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.782	59	113739	282.94	ug/L	# 100
3) Ethanol	5.562	45	350240m	5982.22	ug/L	
5) dichlorodifluoromethane	4.392	85	195093	46.44	ug/L	100
6) chloromethane	4.654	50	237977	46.21	ug/L	96
7) vinyl chloride	4.894	62	186979	54.06	ug/L	97
8) bromomethane	5.396	96	76168	47.87	ug/L	99
9) chloroethane	5.569	64	120522	58.46	ug/L	95
10) ethyl ether	6.428	59	176046	56.37	ug/L	97
12) trichlorofluoromethane	6.206	101	287243	47.61	ug/L	100
13) freon-113	6.966	101	164141	61.50	ug/L	96
14) acrolein	6.198	56	86361	237.21	ug/L	98
15) 1,1-dichloroethene	6.789	96	149840	61.55	ug/L	94
16) acetone	6.336	58	16949	23.10	ug/L	# 73
17) Methyl Acetate	6.962	43	202644	71.97	ug/L	# 96
18) methylene chloride	6.944	84	165464	49.91	ug/L	90
19) methyl tert butyl ether	7.708	73	391130	49.88	ug/L	97
20) acrylonitrile	6.845	53	73992	53.51	ug/L	97
21) allyl chloride	7.029	41	351369	59.33	ug/L	94
22) trans-1,2-dichloroethene	7.623	96	164054	51.21	ug/L	94
23) iodomethane	6.856	142	103770	51.37	ug/L	99
24) carbon disulfide	7.224	76	552660	59.93	ug/L	98
25) propionitrile	6.849	54	2812	60.49	ug/L	100
26) vinyl acetate	7.970	43	192608	42.97	ug/L	96
27) chloroprene	8.231	53	367194	63.87	ug/L	94
28) di-isopropyl ether	8.263	45	772895	50.56	ug/L	99
29) methacrylonitrile	8.397	41	112036	49.69	ug/L	94
30) 2-butanone	8.288	72	16828	46.79	ug/L	# 46
31) Hexane	8.245	41	324839	57.76	ug/L	93
32) 1,1-dichloroethane	7.878	63	395682	50.39	ug/L	97
33) tert-butyl ethyl ether	8.659	59	317974	39.34	ug/L	96
34) isobutyl alcohol	8.256	43	606753	261.80	ug/L	88
35) 2,2-dichloropropane	8.730	77	273273	54.67	ug/L	99
36) cis-1,2-dichloroethene	8.443	96	183425	50.29	ug/L	96
37) ethyl acetate	8.256	43	606956	53.17	ug/L	87

7.4.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90706.D
 Acq On : 29 Sep 2014 8:13 pm
 Operator : jaclynb
 Sample : mc33777-1msd
 Misc : ms32835,MSN3355,,,5,5
 ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 30 07:53:00 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.610	128	80218	53.72	ug/L	93
39) chloroform	8.648	83	329562	46.98	ug/L	99
41) Tetrahydrofuran	8.977	42	52015	51.54	ug/L	90
42) 1,1,1-trichloroethane	9.394	97	311770	57.96	ug/L	99
44) Cyclohexane	9.674	56	428782	63.92	ug/L	99
45) carbon tetrachloride	9.759	117	266935	55.21	ug/L	96
46) 1,1-dichloropropene	9.568	75	260381	59.95	ug/L	99
47) benzene	9.790	78	677581	47.81	ug/L	98
48) 1,2-dichloroethane	9.295	62	316081	47.65	ug/L	99
49) tert-amyl methyl ether	9.903	73	166953	40.64	ug/L	97
50) heptane	10.253	43	244957	60.42	ug/L	93
51) trichloroethene	10.409	95	202746	47.92	ug/L	95
52) 1,2-dichloropropane	10.377	63	226489	56.12	ug/L	100
53) dibromomethane	10.356	93	110232	53.53	ug/L	96
54) bromodichloromethane	10.466	83	273099	51.46	ug/L	99
55) Methylcyclohexane	10.922	83	315212	63.42	ug/L	98
56) 2-chloroethyl vinyl ether	10.377	63	226489	56.86	ug/L #	100
57) methyl methacrylate	10.550	69	103293	55.98	ug/L #	72
58) 1,4-dioxane	10.568	88	4054	133.60	ug/L #	72
59) cis-1,3-dichloropropene	11.077	75	287977	56.16	ug/L	99
61) 4-methyl-2-pentanone	11.169	43	199620	52.86	ug/L	94
62) toluene	11.855	92	425349	49.98	ug/L	94
63) trans-1,3-dichloropropene	11.494	75	245822	59.65	ug/L	98
64) 1,1,2-trichloroethane	11.668	83	134294	48.97	ug/L	98
65) ethyl methacrylate	11.862	69	188877	53.80	ug/L	92
67) tetrachloroethene	12.594	166	174297	50.52	ug/L	100
68) 1,3-dichloropropane	11.904	76	269700	54.02	ug/L	100
69) dibromochloromethane	12.194	129	188741	52.88	ug/L	99
70) 1,2-dibromoethane	12.449	107	152070	54.37	ug/L	100
71) 2-hexanone	12.021	43	134908	44.09	ug/L	95
72) chlorobenzene	13.276	112	455368	49.28	ug/L	96
73) 1,1,1,2-tetrachloroethane	13.191	131	172343	51.23	ug/L	93
74) ethylbenzene	13.446	91	867245	50.35	ug/L	100
75) m,p-xylene	13.630	106	589503	93.61	ug/L	98
76) o-xylene	14.043	106	296962	48.55	ug/L	100
77) styrene	13.969	104	485713	54.74	ug/L	100
78) bromoform	13.799	173	110357	53.15	ug/L	99
79) trans-1,4-dichloro-2-b...	14.192	53	45675	50.21	ug/L	96
81) isopropylbenzene	14.400	105	786875	51.80	ug/L	100
83) bromobenzene	14.697	156	183352	51.01	ug/L	96
84) 1,1,2,2-tetrachloroethane	14.047	83	185592	56.21	ug/L	99
85) 1,2,3-trichloropropane	14.192	75	199828	54.38	ug/L	99
86) n-propylbenzene	14.846	91	1041485	53.55	ug/L	100
87) 2-chlorotoluene	14.970	91	632425	51.14	ug/L	94
88) 4-chlorotoluene	15.044	91	657348	50.32	ug/L	99
89) 1,3,5-trimethylbenzene	15.125	105	708116	46.44	ug/L	99
90) tert-butylbenzene	15.429	91	463876	51.82	ug/L	100
91) 1,2,4-trimethylbenzene	15.532	105	744193	49.23	ug/L	99
92) sec-butylbenzene	15.648	105	921873	53.95	ug/L	99
93) 1,3-dichlorobenzene	15.758	146	355851	51.54	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90706.D
Acq On : 29 Sep 2014 8:13 pm
Operator : jaclynb
Sample : mc33777-1msd
Misc : ms32835,MSN3355,,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 30 07:53:00 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration

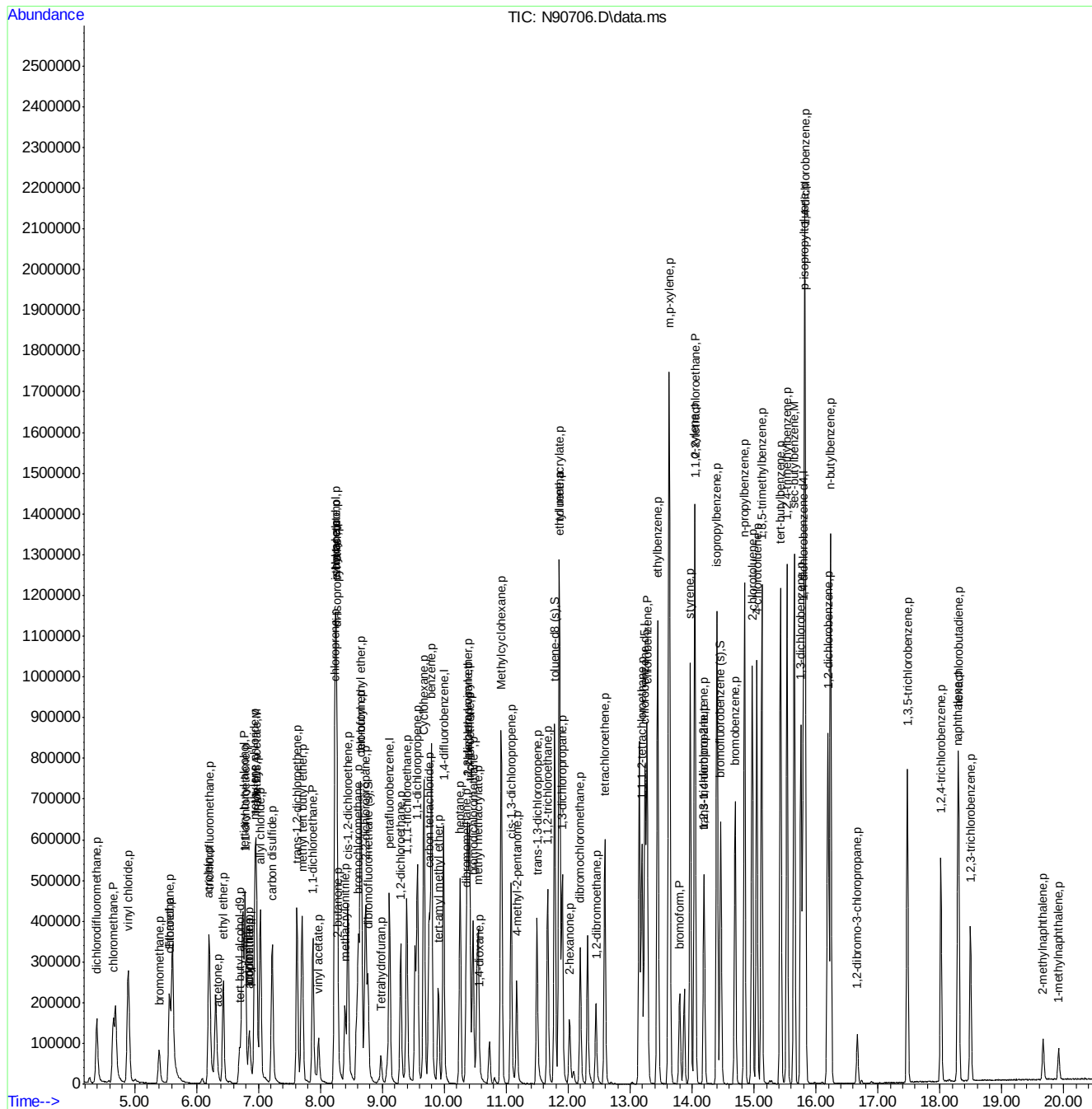
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	15.818	119	748747	53.63	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	337008	54.84	ug/L	95
96) 1,2-dichlorobenzene	16.193	146	350580	54.38	ug/L	96
97) n-butylbenzene	16.235	91	797048	55.03	ug/L	99
98) 1,2-dibromo-3-chloropr...	16.667	75	33397	57.68	ug/L	91
99) 1,2,4-trichlorobenzene	18.017	180	176185	60.92	ug/L	98
100) 1,3,5-trichlorobenzene	17.476	180	245711	54.86	ug/L	99
101) hexachlorobutadiene	18.300	225	132526	58.45	ug/L	97
102) naphthalene	18.289	128	281381	67.86	ug/L	100
103) 1,2,3-trichlorobenzene	18.494	180	130722	62.49	ug/L	97
104) 2-methylnaphthalene	19.664	142	54838	46.44	ug/L #	100
105) 1-methylnaphthalene	19.915	142	42617	48.29	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90706.D
Acq On : 29 Sep 2014 8:13 pm
Operator : jaclynb
Sample : mc33777-1msd
Misc : ms32835,MSN3355,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 30 07:53:00 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



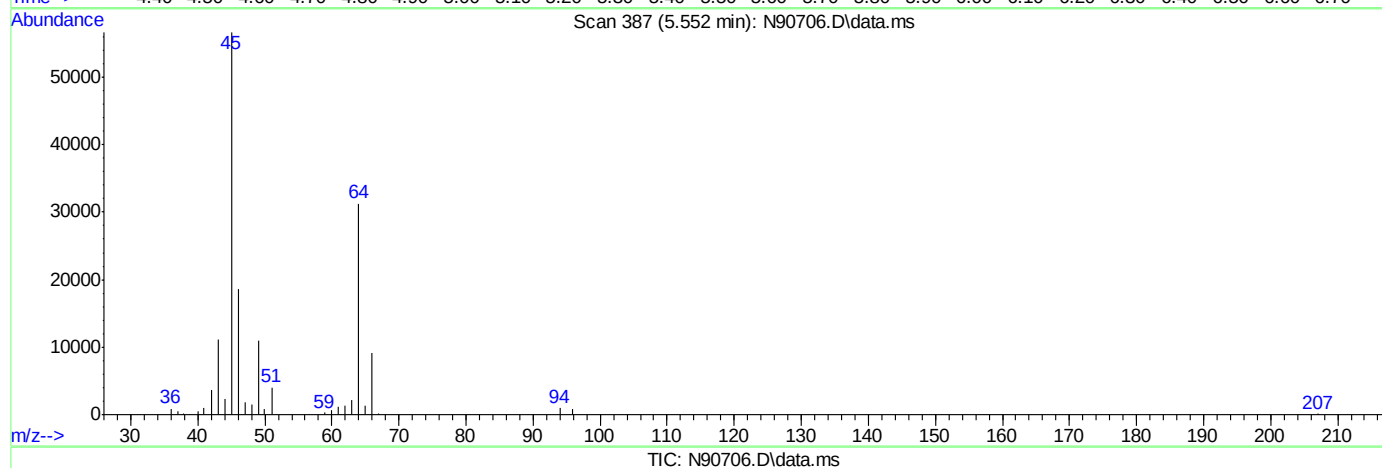
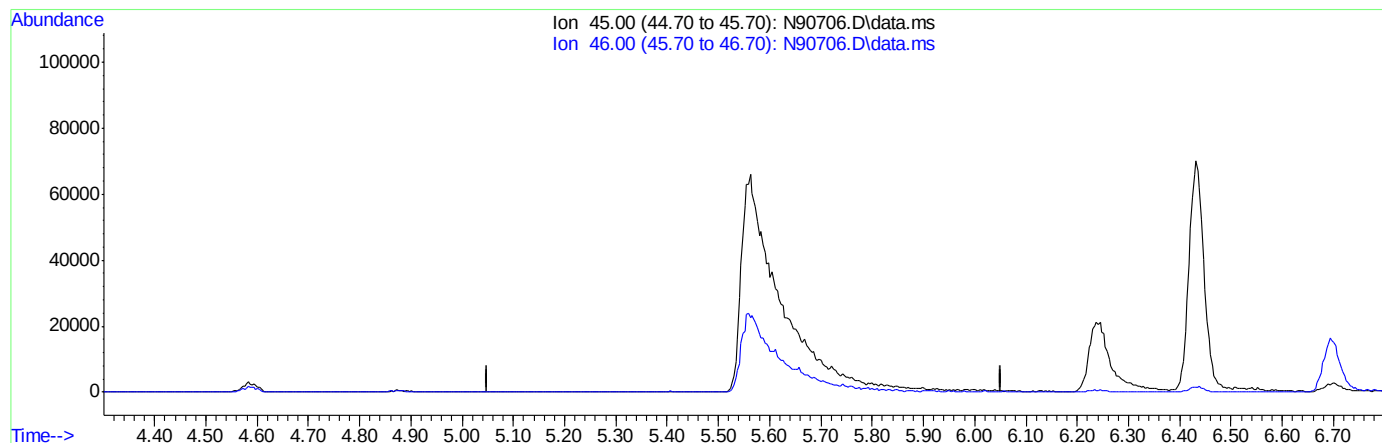
n140918w.m Tue Sep 30 07:53:09 2014

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90706.D
Acq On : 29 Sep 2014 8:13 pm
Operator : jaclynb
Sample : mc33777-1msd
Misc : ms32835,MSN3355,,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 30 07:52:54 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.551min (-5.551) 0.00ug/L

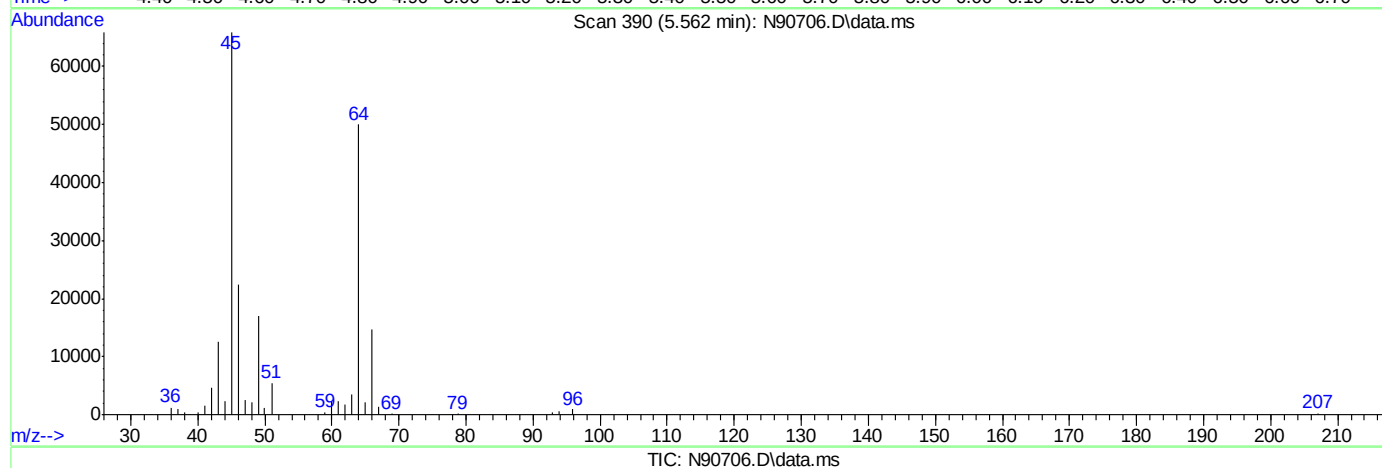
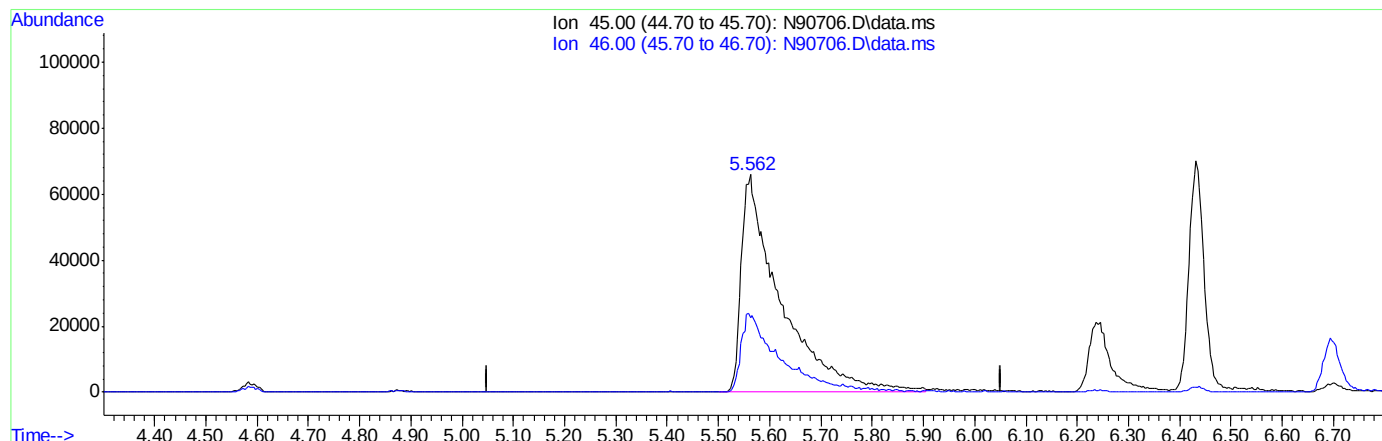
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90706.D
Acq On : 29 Sep 2014 8:13 pm
Operator : jaclynb
Sample : mc33777-1msd
Misc : ms32835,MSN3355,,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 30 07:52:54 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.562min (+0.011) 5982.22ug/L m

response 350240

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8260

Data File : C:\msdchem\1\data\N140918\N90385.D

Vial: 1

Acq On : 18 Sep 2014 1:17 pm

Operator: krystend

Sample : bfb

Inst : MSN

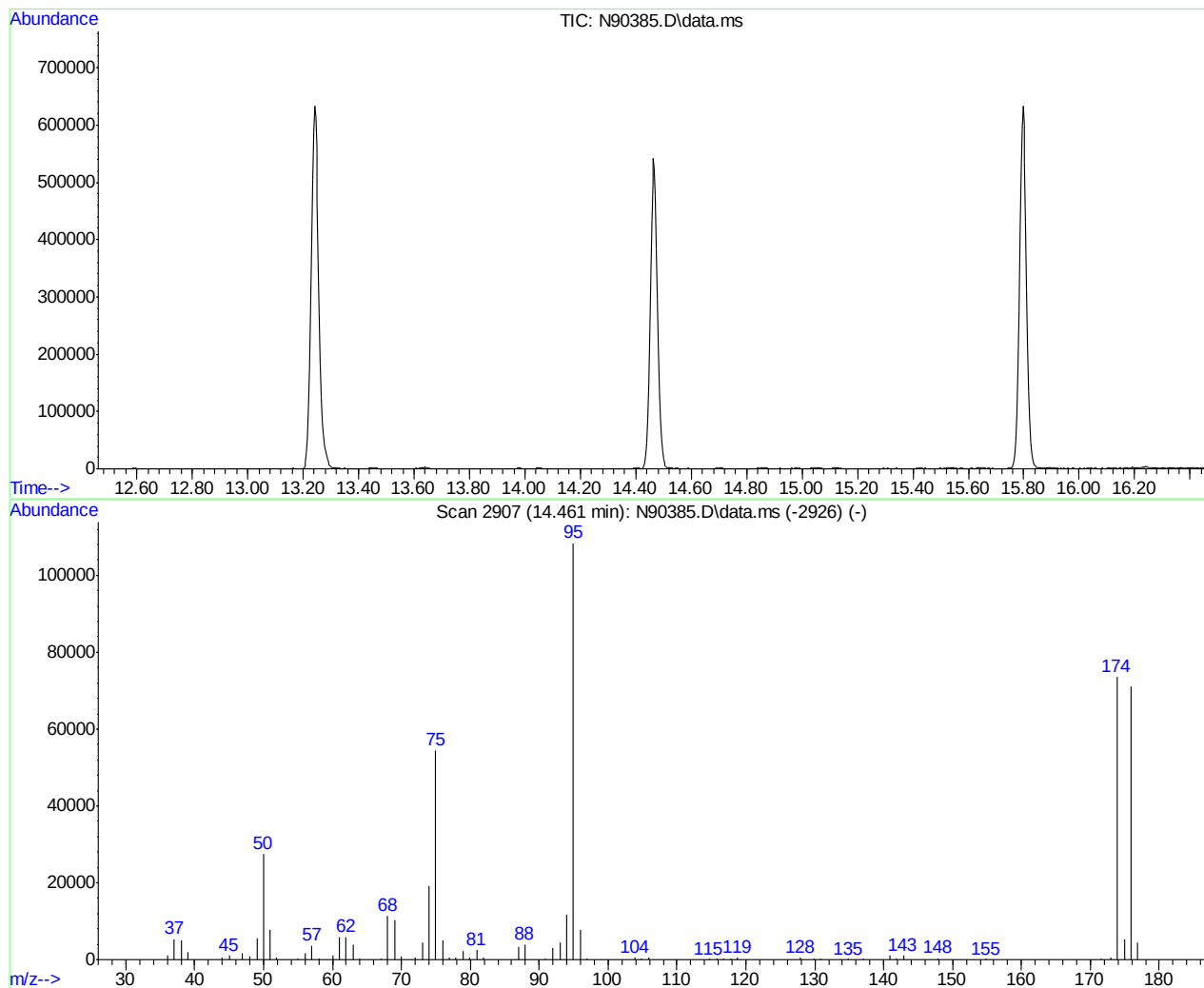
Misc : ms32746,MSN3345,,,,5,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\n140918w.m (RTE Integrator)

Title : SW-846 Method 8260



Spectrum Information: Scan 2907

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.4	27584	PASS
75	95	30	60	50.3	54529	PASS
95	95	100	100	100.0	108414	PASS
96	95	5	9	7.1	7647	PASS
173	174	0.00	2	0.8	581	PASS
174	95	50	150	67.9	73592	PASS
175	174	5	9	7.1	5197	PASS
176	174	95	101	96.5	71013	PASS
177	176	5	9	6.3	4495	PASS

N90385.D n140918w.m Fri Sep 19 12:05:43 2014

Scan 2907 (14.461 min): N90385.D\data.ms (-2926)

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1109	51.90	434	68.00	11486	79.90	614
37.00	5353	54.90	360	69.00	10366	80.90	2579
38.00	5006	56.00	1599	70.00	915	81.90	489
39.00	1935	57.00	3672	72.00	648	87.00	3260
43.95	527	58.00	255	73.00	4505	87.90	3962
45.00	1050	60.00	1022	74.00	19096	90.90	234
46.90	1577	61.00	5721	75.00	54529	92.00	3006
48.00	770	62.00	5839	76.00	5024	93.00	4463
49.00	5584	63.00	3927	77.00	614	94.00	11768
50.00	27584	63.90	373	77.90	480	94.95	108414
51.00	7835	67.00	227	78.90	2332	96.00	7647

Scan 2907 (14.461 min): N90385.D\data.ms (-2926)

bfb

Modified:subtracted

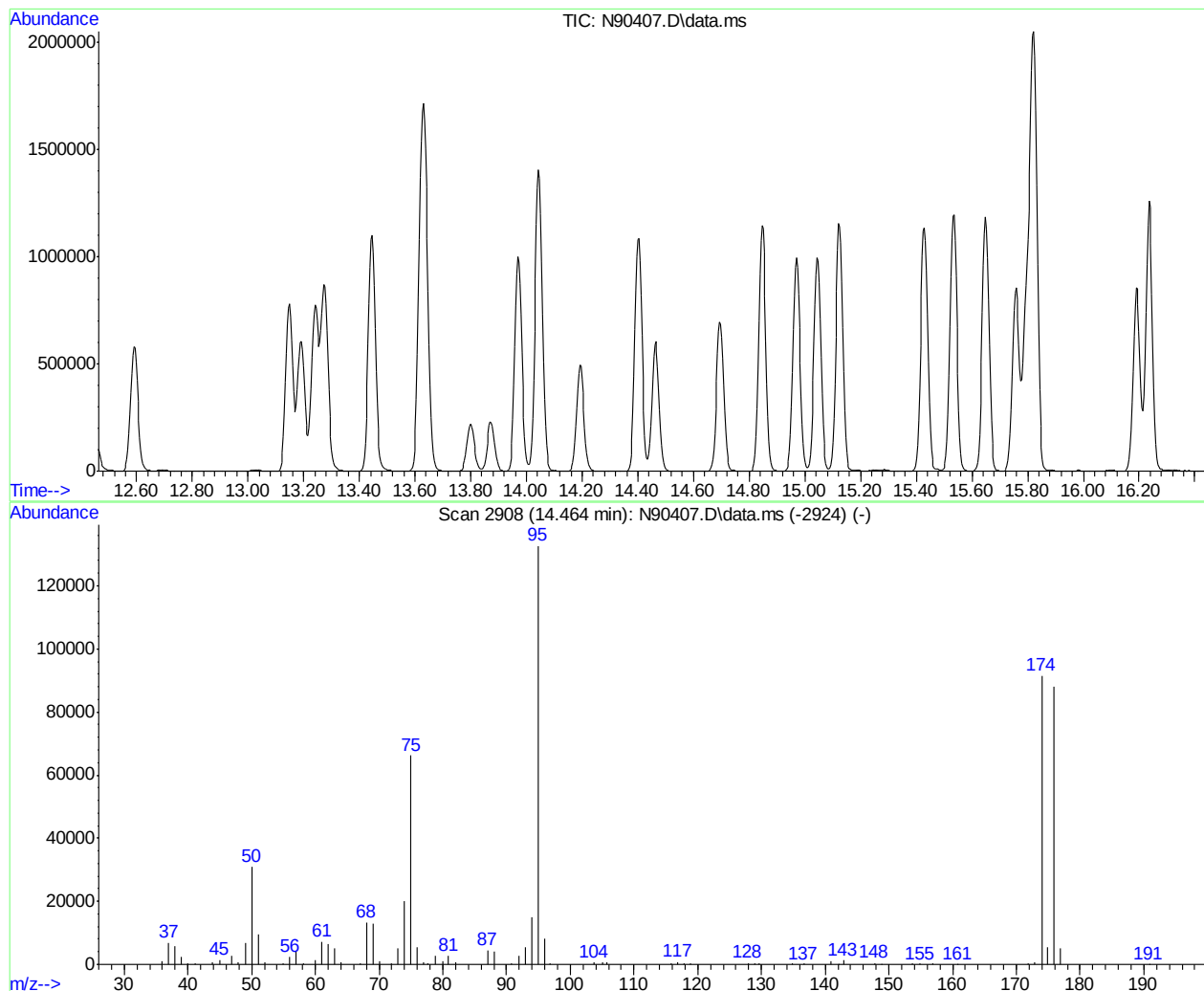
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.90	239	130.90	200	174.90	5197		
103.90	533	134.90	211	175.85	71013		
104.80	202	137.00	154	176.90	4495		
105.90	441	140.90	1031				
114.70	201	141.90	157				
115.80	373	142.90	1040				
116.70	371	147.90	304				
117.90	247	154.90	211				
118.80	486	171.50	172				
127.90	462	172.90	581				
129.90	348	173.85	73592				

SW-846 Method 8260

Data File : C:\msdchem\1\data\N140919\N90407.D
Acq On : 19 Sep 2014 1:04 pm
Sample : bfb
Misc : ms32746,MSN3345,,,,5,1
MS Integration Params: RTEINT.P

Vial: 16
Operator: krystend
Inst : MSN
Multiplr: 1.00

Method : C:\msdchem\1\methods\n140918w.m (RTE Integrator)
Title : SW-846 Method 8260



Spectrum Information: Scan 2908

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.4	31008	PASS
75	95	30	60	49.9	66272	PASS
95	95	100	100	100.0	132736	PASS
96	95	5	9	6.2	8223	PASS
173	174	0.00	2	0.7	660	PASS
174	95	50	150	68.9	91480	PASS
175	174	5	9	6.1	5584	PASS
176	174	95	101	96.2	88016	PASS
177	176	5	9	5.9	5211	PASS

Scan 2908 (14.464 min): N90407.D\data.ms (-2924)

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1163	50.00	31008	64.00	620	77.70	433
37.00	6912	51.00	9648	67.00	509	78.90	2614
38.00	5948	52.00	558	68.00	13330	80.00	1046
39.00	2409	54.90	471	69.00	12916	80.90	2774
40.00	185	56.00	2388	70.00	1053	82.00	861
41.20	188	57.00	3990	72.00	508	87.00	4533
43.90	610	58.10	207	73.00	5014	88.00	4031
45.00	1437	60.00	1472	74.00	20120	90.80	466
46.90	2625	61.00	7154	75.00	66272	92.00	2892
47.90	758	62.00	6425	76.00	5455	93.00	5404
49.00	6644	63.00	5163	77.00	703	94.00	14983

Scan 2908 (14.464 min): N90407.D\data.ms (-2924)

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.95	132736	128.90	234	156.90	186		
96.00	8223	129.70	389	160.80	180		
96.90	193	134.80	225	171.90	189		
103.80	620	136.70	233	172.90	660		
105.00	557	140.90	1171	174.00	91480		
105.80	560	142.00	158	174.90	5584		
115.90	364	142.90	1229	175.90	88016		
116.90	736	147.80	458	176.90	5211		
117.80	319	148.80	155	190.80	164		
118.80	502	153.70	186				
127.90	494	154.90	187				

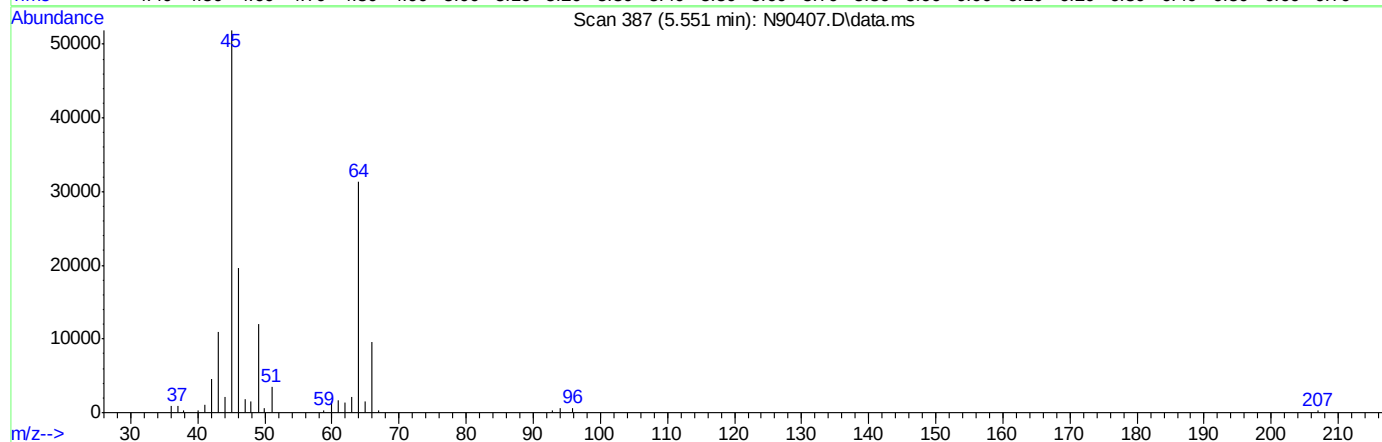
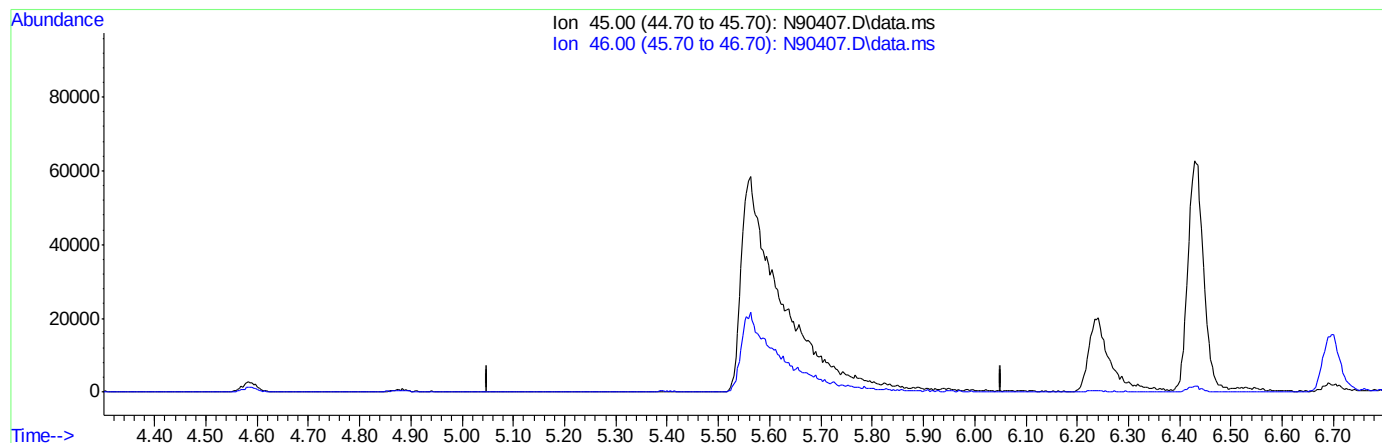
7.5.2

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140919\
Data File : N90407.D
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : bs
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 14:39:56 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.551min (-5.551) 0.00ug/L

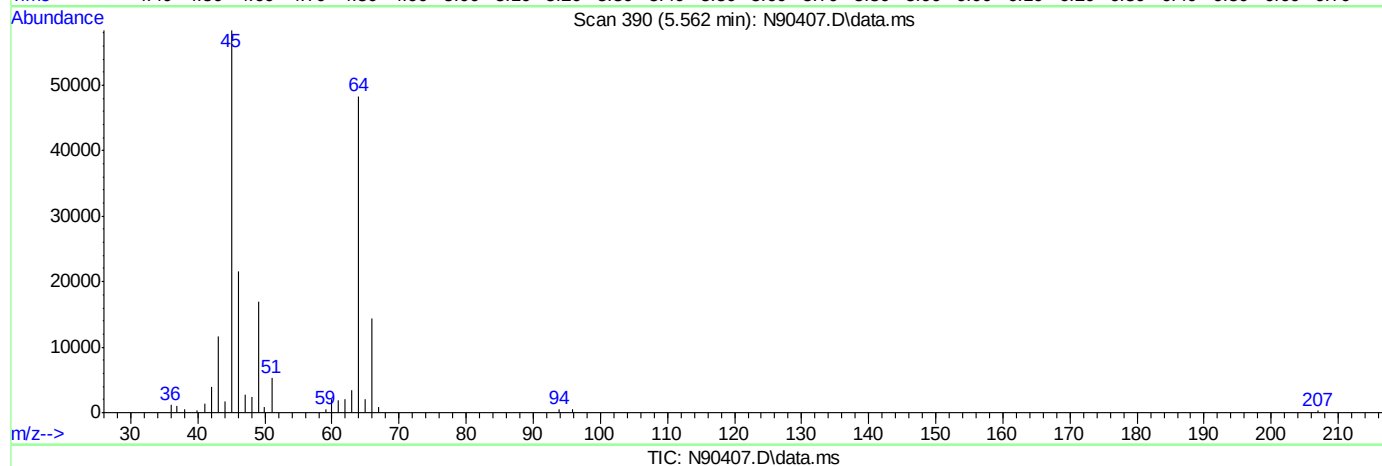
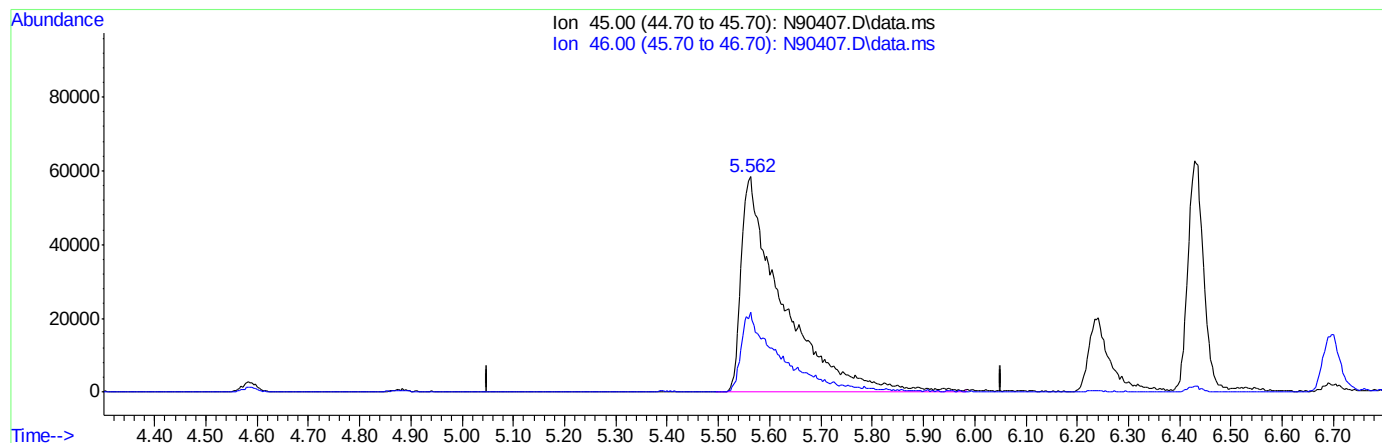
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140919\
Data File : N90407.D
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : bs
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 14:39:56 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.562min (+0.011) 5845.90ug/L m

response 328301

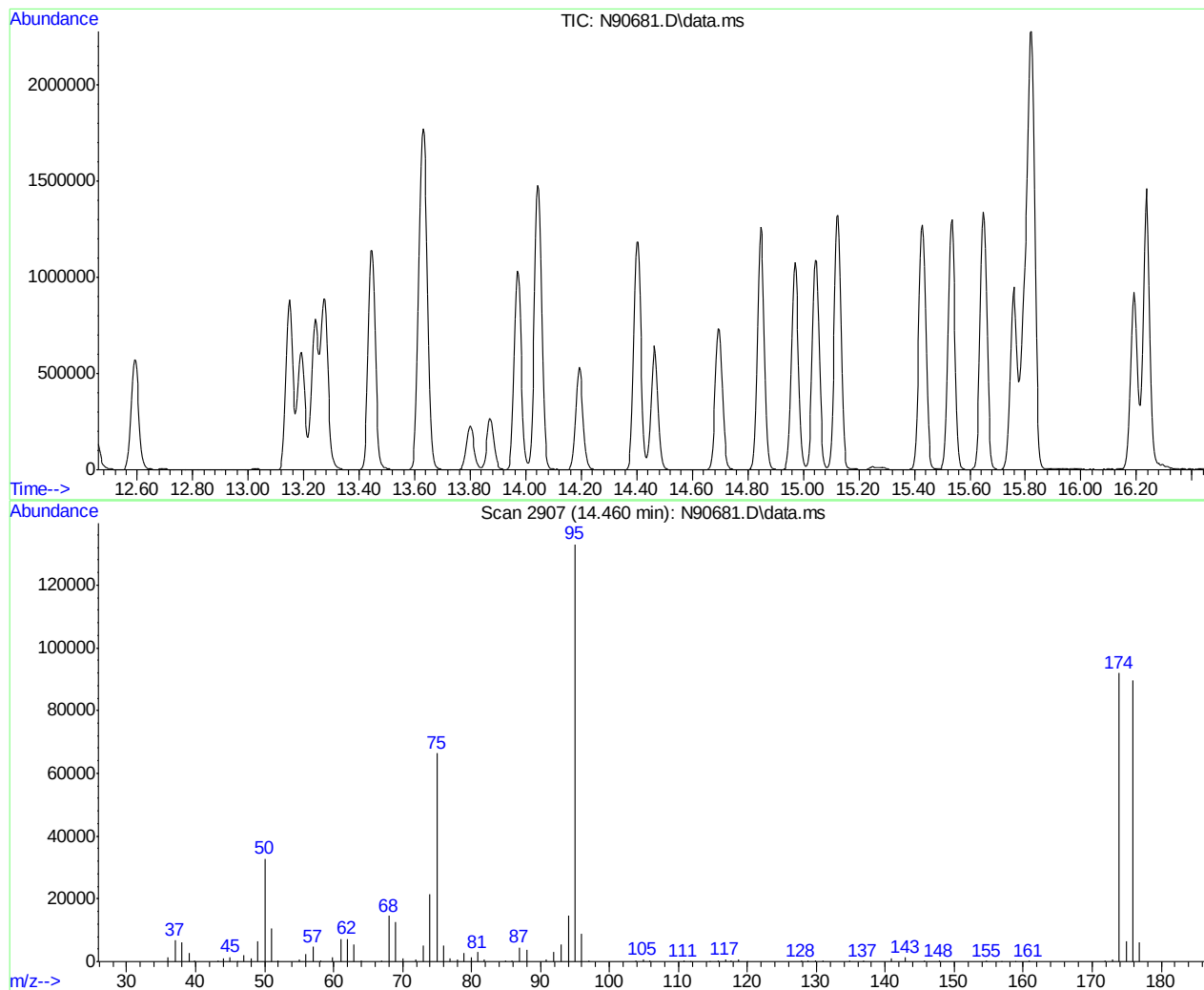
Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8260

Data File : C:\msdchem\1\data\N140929\N90681.D
Acq On : 29 Sep 2014 8:26 am
Sample : bfb
Misc : ms32833,MSN3355,,,5,1
MS Integration Params: RTEINT.P

Vial: 16
Operator: jaclynb
Inst : MSN
Multiplr: 1.00

Method : C:\msdchem\1\methods\n140918w.m (RTE Integrator)
Title : SW-846 Method 8260



Spectrum Information: Scan 2907

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.6	32728	PASS
75	95	30	60	49.8	66328	PASS
95	95	100	100	100.0	133056	PASS
96	95	5	9	6.7	8924	PASS
173	174	0.00	2	0.9	797	PASS
174	95	50	150	69.1	91920	PASS
175	174	5	9	7.1	6562	PASS
176	174	95	101	97.4	89544	PASS
177	176	5	9	7.0	6231	PASS

Scan 2907 (14.460 min): N90681.D\data.ms
cc3345-50

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	1490	49.00	6466	63.00	5300	76.90	1088
37.00	6814	50.00	32728	64.00	442	78.00	561
38.00	6259	51.00	10645	67.00	412	78.90	2729
39.00	2657	51.90	398	68.00	14633	79.90	1336
39.90	222	55.00	615	69.00	12785	80.90	3015
43.20	270	56.00	2454	70.00	1140	81.90	564
44.00	1077	57.00	4723	71.90	660	85.00	187
45.00	1407	58.10	365	73.00	5154	85.90	359
46.00	174	59.90	1535	74.00	21400	86.90	4543
46.90	2050	61.00	7141	75.00	66328	88.00	3804
48.00	921	62.00	7275	76.00	5145	90.80	575

Scan 2907 (14.460 min): N90681.D\data.ms
cc3345-50

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.90	3018	114.60	158	136.80	334	173.90	91920
93.00	5629	115.70	377	140.80	1174	174.90	6562
94.00	14703	116.80	679	142.90	1213	175.90	89544
95.00	133056	117.70	327	145.70	277	176.90	6231
96.00	8924	118.70	602	147.80	209		
97.00	317	120.00	173	154.70	242		
103.90	414	127.80	328	156.90	170		
104.90	587	128.80	225	158.80	151		
105.90	464	129.90	304	160.80	197		
110.80	242	130.90	222	171.90	231		
111.70	163	134.80	190	172.90	797		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90391.D
 Acq On : 18 Sep 2014 4:07 pm
 Operator : krystend
 Sample : IC3345-0.5
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 19 11:55:14 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:12:51 2014
 Response via : Initial Calibration

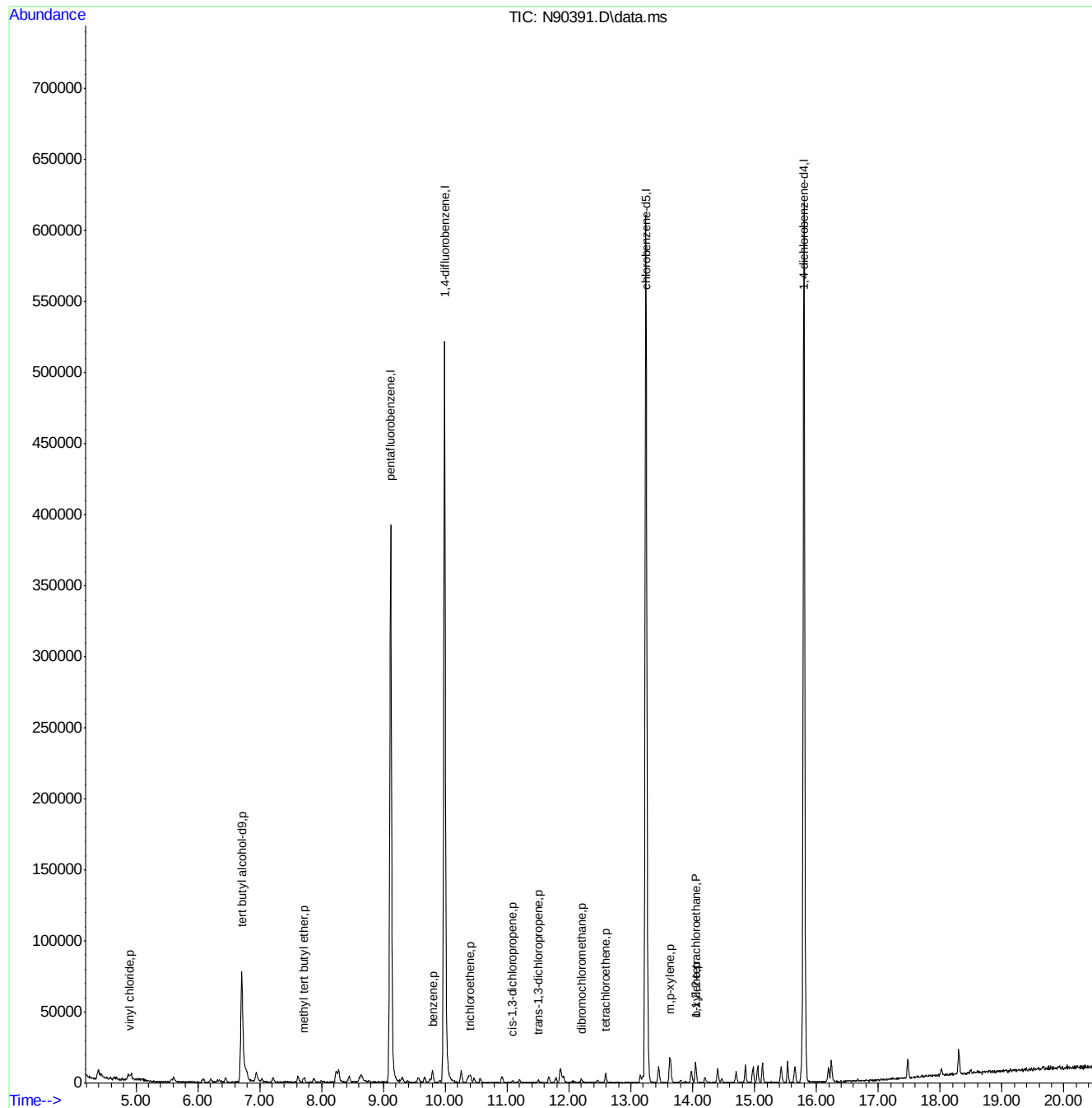
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.708	65	120097	500.00	ug/L	0.01
4) pentafluorobenzene	9.119	168	275131	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	415480	50.00	ug/L	0.00
66) chlorobenzene-d5	13.244	82	219528	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	162408	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0	0.00	ug/L	
Spiked Amount 50.000	Range 70 - 130		Recovery	=	0.00%#	
60) toluene-d8 (s)	0.000	98	0d	0.00	ug/L	
Spiked Amount 50.000	Range 70 - 130		Recovery	=	0.00%#	
82) bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 70 - 130		Recovery	=	0.00%#	
Target Compounds						
7) vinyl chloride	4.898	62	1639m	0.53	ug/L	
19) methyl tert butyl ether	7.719	73	3086m	0.44	ug/L	
47) benzene	9.797	78	7643	0.73	ug/L	99
51) trichloroethene	10.406	95	2246	0.70	ug/L	86
59) cis-1,3-dichloropropene	11.077	75	1041	0.24	ug/L	56
63) trans-1,3-dichloropropene	11.505	75	1504	0.40	ug/L	87
67) tetrachloroethene	12.587	166	1848	0.71	ug/L #	58
69) dibromochloromethane	12.198	129	1535	0.54	ug/L	84
75) m,p-xylene	13.633	106	6519	1.49	ug/L	84
76) o-xylene	14.047	106	3021	0.68	ug/L	85
84) 1,1,2,2-tetrachloroethane	14.050	83	2059	0.81	ug/L	83

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90391.D
Acq On : 18 Sep 2014 4:07 pm
Operator : krystend
Sample : IC3345-0.5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 19 11:55:14 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:12:51 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90392.D
 Acq On : 18 Sep 2014 4:35 pm
 Operator : krystend
 Sample : IC3345-1
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 10:04:28 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 10:01:48 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.708	65	115293	500.00	ug/L	0.01
4) pentafluorobenzene	9.119	168	271362	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	419952	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	219703	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	167035	50.00	ug/L	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
60) toluene-d8 (s)	0.000	98	0d	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
82) bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#

Target Compounds						Qvalue
7) vinyl chloride	4.890	62	7283	1.62	ug/L	97
12) trichlorofluoromethane	6.198	101	8704	1.59	ug/L	84
15) 1,1-dichloroethene	6.785	96	3828	1.01	ug/L	93
19) methyl tert butyl ether	7.719	73	5236m	Below Cal		
22) trans-1,2-dichloroethene	7.623	96	3906	1.43	ug/L	# 76
32) 1,1-dichloroethane	7.885	63	8882	1.33	ug/L	99
36) cis-1,2-dichloroethene	8.450	96	4043	1.30	ug/L	84
39) chloroform	8.648	83	8452	1.42	ug/L	89
42) 1,1,1-trichloroethane	9.398	97	3394	0.74	ug/L	87
45) carbon tetrachloride	9.758	117	4847	1.18	ug/L	90
47) benzene	9.794	78	16400	1.36	ug/L	93
48) 1,2-dichloroethane	9.302	62	8058	1.43	ug/L	100
51) trichloroethene	10.409	95	4897	1.36	ug/L	91
54) bromodichloromethane	10.469	83	5684	1.26	ug/L	88
59) cis-1,3-dichloropropene	11.088	75	2757	1.02	ug/L	99
62) toluene	11.855	92	10192	1.41	ug/L	95
63) trans-1,3-dichloropropene	11.501	75	3719	1.06	ug/L	95
64) 1,1,2-trichloroethane	11.664	83	3333	1.43	ug/L	# 58
67) tetrachloroethene	12.594	166	3847	1.34	ug/L	95
69) dibromochloromethane	12.198	129	3400	1.15	ug/L	100
72) chlorobenzene	13.276	112	11161	1.46	ug/L	92
73) 1,1,1,2-tetrachloroethane	13.195	131	3600	1.29	ug/L	78
74) ethylbenzene	13.449	91	20302	1.42	ug/L	95
75) m,p-xylene	13.633	106	14337	2.75	ug/L	91
76) o-xylene	14.043	106	6957	1.37	ug/L	91
78) bromoform	13.803	173	2334	1.36	ug/L	86
84) 1,1,2,2-tetrachloroethane	14.047	83	4956	1.30	ug/L	86
89) 1,3,5-trimethylbenzene	15.129	105	16921	1.42	ug/L	84
91) 1,2,4-trimethylbenzene	15.539	105	16592	1.41	ug/L	94
93) 1,3-dichlorobenzene	15.761	146	9407	1.07	ug/L	95
95) 1,4-dichlorobenzene	15.822	146	10009	0.88	ug/L	89
96) 1,2-dichlorobenzene	16.196	146	8517	1.00	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90392.D
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 10:04:28 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 10:01:48 2014
Response via : Initial Calibration

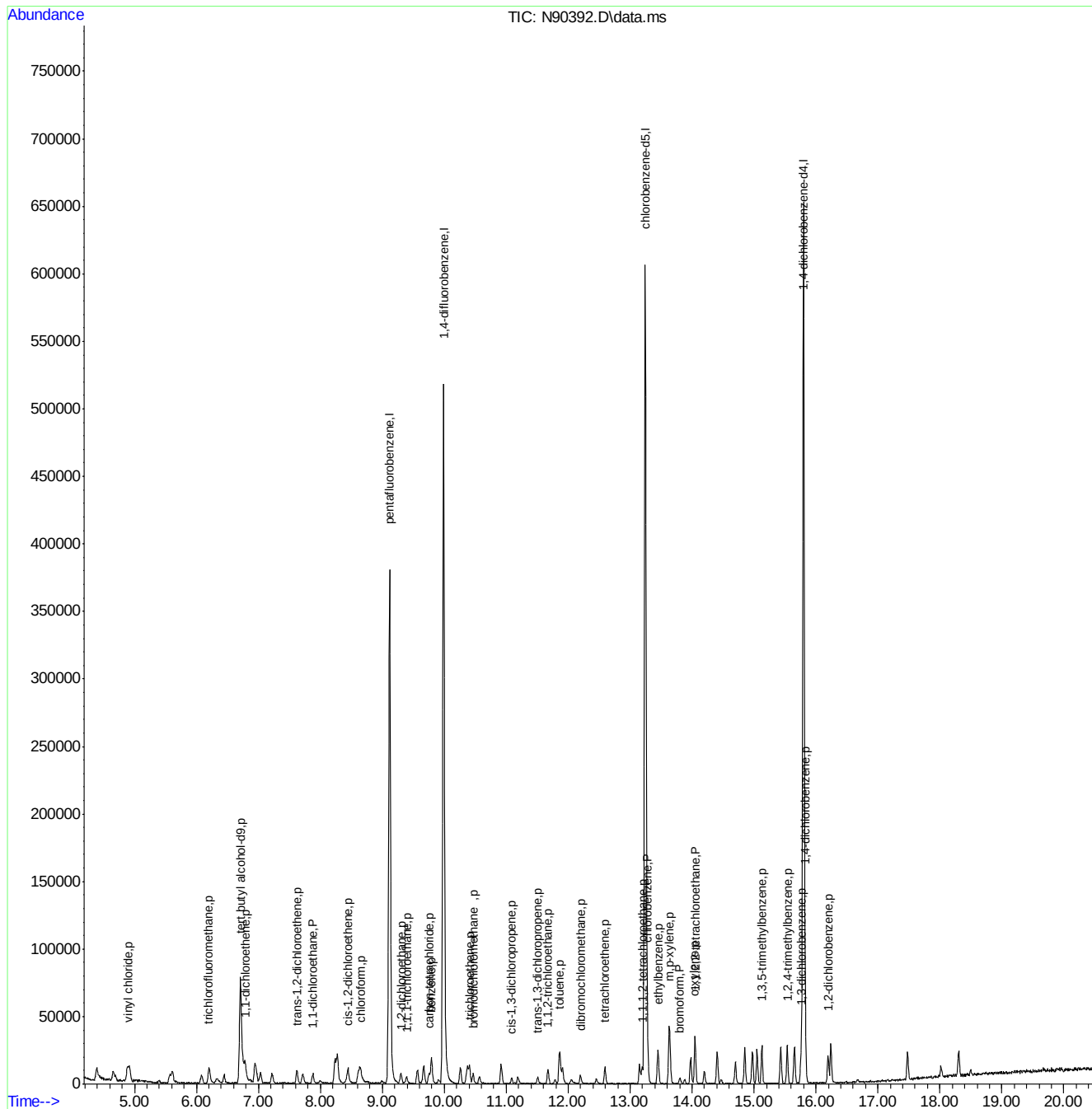
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90392.D
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 10:04:28 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 10:01:48 2014
Response via : Initial Calibration



n140918w.m Fri Sep 19 12:06:26 2014

Page: 3

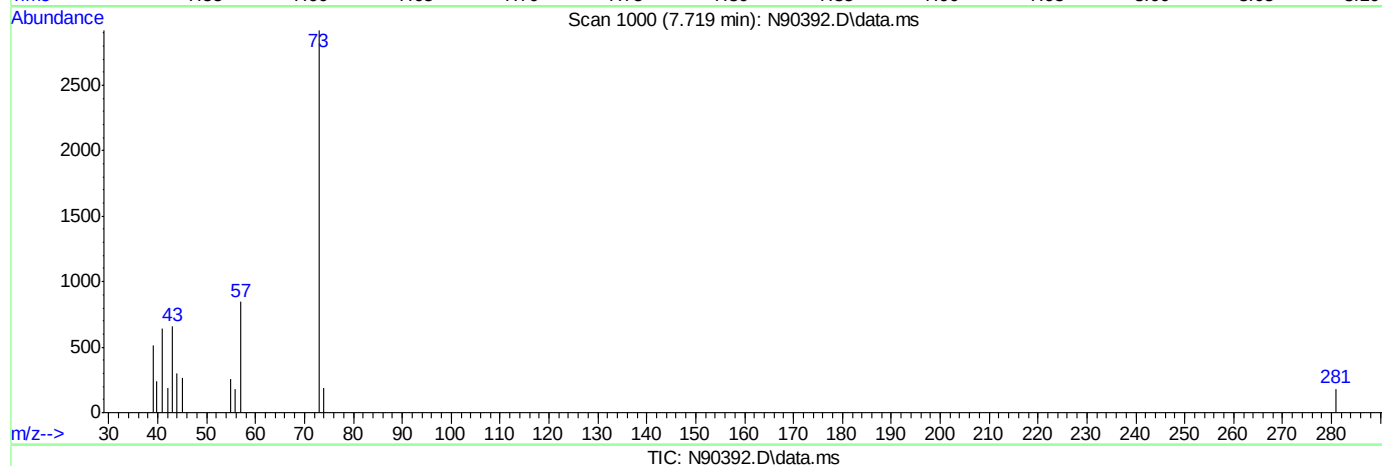
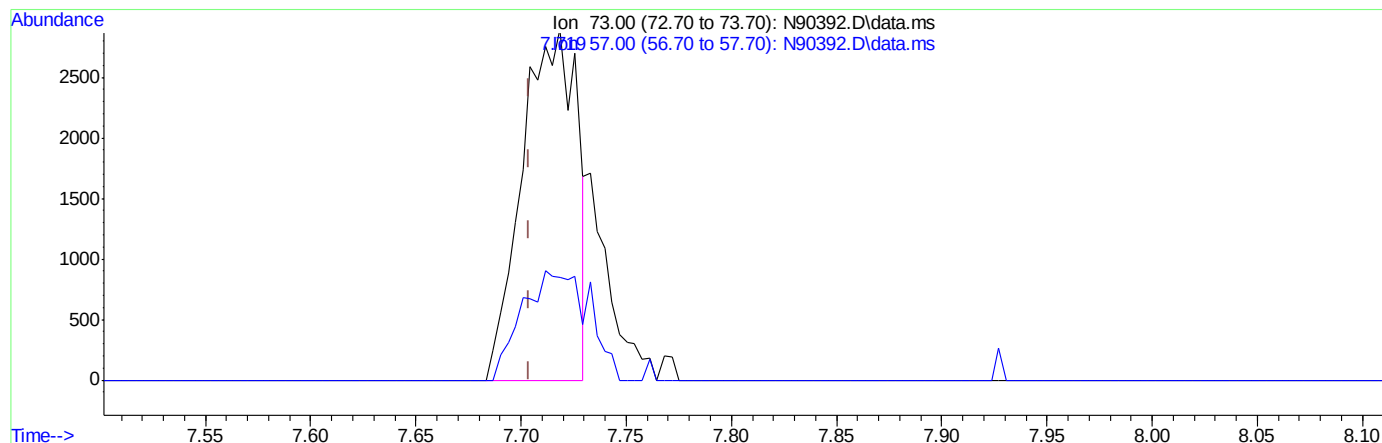
7.6.2



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90392.D
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 19 09:16:03 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:14:20 2014
Response via : Initial Calibration



(19) methyl tert butyl ether (p)

7.719min (+0.015) 0.76ug/L m

response 5236

Ion	Exp%	Act%
73.00	100	100
57.00	28.40	28.96
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90393.D
 Acq On : 18 Sep 2014 5:03 pm
 Operator : krystend
 Sample : IC3345-2
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 09:18:54 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:17:10 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.707	65	112920	500.00	ug/L	0.01
4) pentafluorobenzene	9.119	168	263657	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	403108	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	215261	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	164137	50.00	ug/L	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	0.000	113	0	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
60) toluene-d8 (s)	0.000	98	0d	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#
82) bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L	
Spiked Amount	50.000	Range	70 - 130	Recovery	=	0.00%#

Target Compounds						Qvalue
2) tertiary butyl alcohol	6.792	59	9557	25.25	ug/L	# 100
3) Ethanol	5.576	45	14818	272.84	ug/L	# 78
5) dichlorodifluoromethane	4.395	85	5443	1.41	ug/L	85
6) chloromethane	4.660	50	8094	2.04	ug/L	79
7) vinyl chloride	4.897	62	5215	1.04	ug/L	85
8) bromomethane	5.392	96	1165	0.95	ug/L	# 64
9) chloroethane	5.569	64	3070	1.85	ug/L	92
12) trichlorofluoromethane	6.198	101	6827	1.02	ug/L	93
15) 1,1-dichloroethene	6.785	96	5890	2.02	ug/L	95
18) methylene chloride	6.937	84	7249	2.92	ug/L	81
19) methyl tert butyl ether	7.715	73	9597	1.47	ug/L	99
22) trans-1,2-dichloroethene	7.620	96	6008	1.92	ug/L	# 82
28) di-isopropyl ether	8.274	45	31392	2.48	ug/L	85
32) 1,1-dichloroethane	7.871	63	14708	2.02	ug/L	90
33) tert-butyl ethyl ether	8.677	59	2769	0.45	ug/L	97
36) cis-1,2-dichloroethene	8.454	96	6725	2.01	ug/L	93
39) chloroform	8.645	83	13274	1.96	ug/L	83
42) 1,1,1-trichloroethane	9.391	97	7250	1.73	ug/L	93
45) carbon tetrachloride	9.751	117	7899	1.79	ug/L	93
47) benzene	9.797	78	26423	1.95	ug/L	95
48) 1,2-dichloroethane	9.299	62	12882	2.03	ug/L	99
49) tert-amyl methyl ether	9.910	73	3280	0.98	ug/L	93
51) trichloroethene	10.409	95	8004	1.97	ug/L	84
52) 1,2-dichloropropane	10.381	63	7182	2.16	ug/L	92
53) dibromomethane	10.352	93	4198	2.60	ug/L	84
54) bromodichloromethane	10.462	83	9343	1.96	ug/L	96
59) cis-1,3-dichloropropene	11.084	75	5783	1.94	ug/L	94
62) toluene	11.855	92	15764	1.93	ug/L	96
63) trans-1,3-dichloropropene	11.505	75	6265	1.86	ug/L	86
64) 1,1,2-trichloroethane	11.678	83	5003	1.92	ug/L	96
67) tetrachloroethene	12.594	166	6221	1.88	ug/L	93
69) dibromochloromethane	12.198	129	6427	2.12	ug/L	84
70) 1,2-dibromoethane	12.452	107	5514	2.54	ug/L	72
72) chlorobenzene	13.280	112	17695	2.01	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90393.D
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 09:18:54 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:17:10 2014
Response via : Initial Calibration

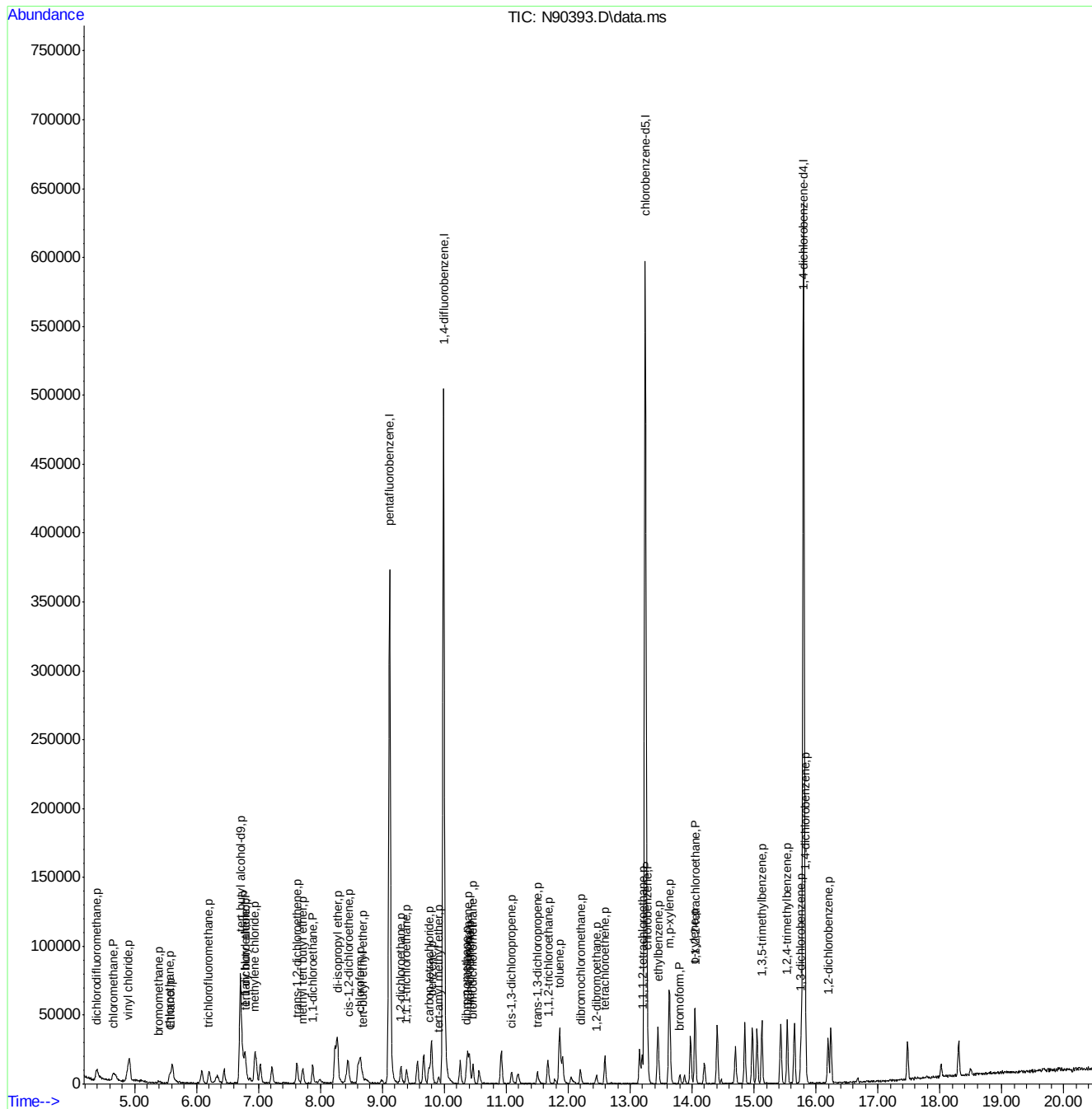
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73) 1,1,1,2-tetrachloroethane	13.195	131	5905	1.94	ug/L	96
74) ethylbenzene	13.449	91	31464	1.92	ug/L	97
75) m,p-xylene	13.637	106	22784	3.86	ug/L	89
76) o-xylene	14.043	106	11834	2.07	ug/L	92
78) bromoform	13.796	173	3307	1.70	ug/L	79
84) 1,1,2,2-tetrachloroethane	14.047	83	7319	1.89	ug/L	96
89) 1,3,5-trimethylbenzene	15.125	105	26341	1.93	ug/L	98
91) 1,2,4-trimethylbenzene	15.535	105	26213	1.94	ug/L	98
93) 1,3-dichlorobenzene	15.758	146	14005	1.93	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	13942	1.88	ug/L	90
96) 1,2-dichlorobenzene	16.196	146	12806	1.89	ug/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90393.D
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 19 09:18:54 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:17:10 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90394.D
 Acq On : 18 Sep 2014 5:32 pm
 Operator : krystend
 Sample : IC3345-5
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:21:12 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:20:13 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.707	65	115311	500.00	ug/L	0.01
4) pentafluorobenzene	9.118	168	257045	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	404691	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	212989	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	162164	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	13026	4.76	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	9.52%#		
60) toluene-d8 (s)	11.784	98	46384	4.42	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	8.84%#		
82) bromofluorobenzene (s)	14.467	95	20500	5.07	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	10.14%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.796	59	18756	42.89	ug/L	# 100
3) Ethanol	5.576	45	30201	460.66	ug/L	95
5) dichlorodifluoromethane	4.388	85	14822	4.61	ug/L	96
6) chloromethane	4.657	50	19212	4.92	ug/L	91
7) vinyl chloride	4.897	62	15363	3.73	ug/L	97
8) bromomethane	5.392	96	3523	3.98	ug/L	83
9) chloroethane	5.562	64	8770	5.63	ug/L	95
10) ethyl ether	6.439	59	14068	5.48	ug/L	88
11) acetonitrile	6.435	41	2094	4.92	ug/L	85
12) trichlorofluoromethane	6.205	101	19036	3.48	ug/L	96
13) freon-113	6.965	101	7927	3.31	ug/L	93
14) acrolein	6.205	56	8493	26.69	ug/L	92
15) 1,1-dichloroethene	6.785	96	9242	3.24	ug/L	96
16) acetone	6.343	58	3316	6.52	ug/L	# 80
17) Methyl Acetate	6.973	43	12498	5.67	ug/L	# 89
18) methylene chloride	6.941	84	14027	4.71	ug/L	# 82
19) methyl tert butyl ether	7.711	73	17899	3.08	ug/L	98
20) acrylonitrile	6.859	53	5811	5.03	ug/L	92
21) allyl chloride	7.036	41	23791	4.91	ug/L	92
22) trans-1,2-dichloroethene	7.619	96	11294	3.75	ug/L	91
23) iodomethane	6.863	142	2022	1.28	ug/L	82
24) carbon disulfide	7.220	76	32790	4.39	ug/L	95
25) propionitrile	6.789	54	47m	1.16	ug/L	
26) vinyl acetate	7.984	43	12276	3.24	ug/L	93
27) chloroprene	8.231	53	19763	3.93	ug/L	86
28) di-isopropyl ether	8.266	45	65977	4.77	ug/L	87
29) methacrylonitrile	8.411	41	9719	5.45	ug/L	94
30) 2-butanone	8.302	72	1194	3.71	ug/L	# 1
31) Hexane	8.252	41	22755	4.62	ug/L	# 64
32) 1,1-dichloroethane	7.878	63	28678	4.02	ug/L	98
33) tert-butyl ethyl ether	8.662	59	6641	1.82	ug/L	81
34) isobutyl alcohol	8.266	43	51083	25.96	ug/L	85
35) 2,2-dichloropropane	8.733	77	3847	0.90	ug/L	91
36) cis-1,2-dichloroethene	8.450	96	13951	4.27	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90394.D
 Acq On : 18 Sep 2014 5:32 pm
 Operator : krystend
 Sample : IC3345-5
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:21:12 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:20:13 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.266	43	47978	4.88	ug/L #	70
38) bromochloromethane	8.613	128	6266	5.18	ug/L	97
39) chloroform	8.641	83	26857	4.10	ug/L	95
41) Tetrahydrofuran	8.991	42	3997	4.74	ug/L	93
42) 1,1,1-trichloroethane	9.394	97	17023	4.37	ug/L	97
44) Cyclohexane	9.670	56	20575	3.33	ug/L #	88
45) carbon tetrachloride	9.748	117	14363	3.36	ug/L	90
46) 1,1-dichloropropene	9.567	75	14512	3.80	ug/L	86
47) benzene	9.790	78	52890	3.91	ug/L	97
48) 1,2-dichloroethane	9.302	62	25221	3.94	ug/L	97
49) tert-amyl methyl ether	9.907	73	5540	2.21	ug/L	73
50) heptane	10.257	43	13703	3.78	ug/L	98
51) trichloroethene	10.409	95	15353	3.78	ug/L	94
52) 1,2-dichloropropane	10.377	63	16284	4.69	ug/L	98
53) dibromomethane	10.363	93	8062	4.32	ug/L	98
54) bromodichloromethane	10.458	83	19383	4.07	ug/L	95
55) Methylcyclohexane	10.914	83	15134	3.30	ug/L	97
56) 2-chloroethyl vinyl ether	10.377	63	16284	4.88	ug/L #	97
57) methyl methacrylate	10.564	69	6956	4.35	ug/L	81
58) 1,4-dioxane	10.575	88	305m	11.91	ug/L	
59) cis-1,3-dichloropropene	11.081	75	14326	4.82	ug/L	94
61) 4-methyl-2-pentanone	11.187	43	15348	4.69	ug/L	93
62) toluene	11.858	92	32323	3.99	ug/L	100
63) trans-1,3-dichloropropene	11.505	75	13309	4.01	ug/L	90
64) 1,1,2-trichloroethane	11.671	83	10052	3.89	ug/L	97
65) ethyl methacrylate	11.872	69	13448	4.36	ug/L	95
67) tetrachloroethene	12.594	166	11517	3.57	ug/L	96
68) 1,3-dichloropropane	11.908	76	21203	5.29	ug/L	94
69) dibromochloromethane	12.201	129	12977	4.26	ug/L	95
70) 1,2-dibromoethane	12.449	107	10672	4.37	ug/L	97
71) 2-hexanone	12.042	43	11863	4.52	ug/L	97
72) chlorobenzene	13.276	112	35521	4.08	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	12646	4.24	ug/L	93
74) ethylbenzene	13.446	91	62342	3.90	ug/L	97
75) m,p-xylene	13.633	106	45068	7.78	ug/L	91
76) o-xylene	14.047	106	22661	3.98	ug/L	96
77) styrene	13.972	104	33240	4.68	ug/L	100
78) bromoform	13.810	173	7181	3.92	ug/L	89
79) trans-1,4-dichloro-2-b...	14.195	53	2021	2.79	ug/L #	72
81) isopropylbenzene	14.404	105	54139	4.64	ug/L	96
83) bromobenzene	14.697	156	13958	5.33	ug/L	94
84) 1,1,2,2-tetrachloroethane	14.047	83	14779	3.92	ug/L	92
85) 1,2,3-trichloropropane	14.192	75	13586	4.79	ug/L	95
86) n-propylbenzene	14.849	91	70187	4.75	ug/L	99
87) 2-chlorotoluene	14.973	91	47616	5.25	ug/L	92
88) 4-chlorotoluene	15.047	91	49594	5.16	ug/L	98
89) 1,3,5-trimethylbenzene	15.128	105	52715	3.95	ug/L	99
90) tert-butylbenzene	15.429	91	31228	4.47	ug/L	98
91) 1,2,4-trimethylbenzene	15.539	105	52034	3.94	ug/L	97
92) sec-butylbenzene	15.652	105	60459	4.52	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90394.D
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:21:12 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:20:13 2014
Response via : Initial Calibration

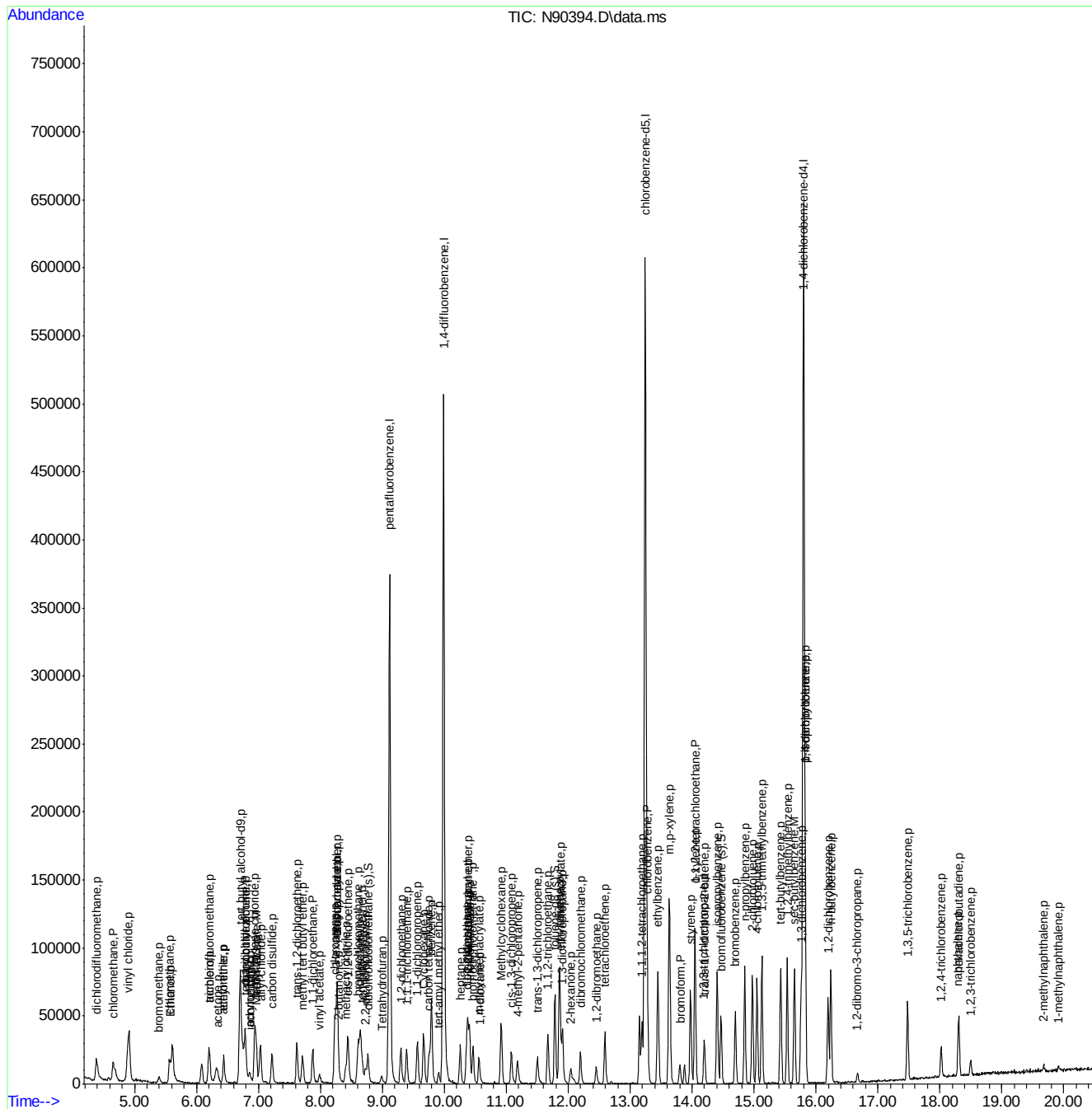
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.761	146	27513	3.89	ug/L	99
94) p-isopropyltoluene	15.825	119	51068	4.65	ug/L	98
95) 1,4-dichlorobenzene	15.825	146	27643	3.85	ug/L	95
96) 1,2-dichlorobenzene	16.196	146	25142	3.82	ug/L	95
97) n-butylbenzene	16.239	91	49528	4.29	ug/L	93
98) 1,2-dibromo-3-chloropr...	16.663	75	2015	4.30	ug/L #	73
99) 1,2,4-trichlorobenzene	18.020	180	7236	2.87	ug/L	85
100) 1,3,5-trichlorobenzene	17.476	180	17439	4.91	ug/L	97
101) hexachlorobutadiene	18.300	225	8509	4.69	ug/L	94
102) naphthalene	18.293	128	5069	1.53	ug/L	100
103) 1,2,3-trichlorobenzene	18.498	180	4017	2.24	ug/L	74
104) 2-methylnaphthalene	19.678	142	2198	2.28	ug/L #	100
105) 1-methylnaphthalene	19.919	142	1667	2.28	ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90394.D
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:21:12 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:20:13 2014
Response via : Initial Calibration



n140918w.m Fri Sep 19 12:06:36 2014

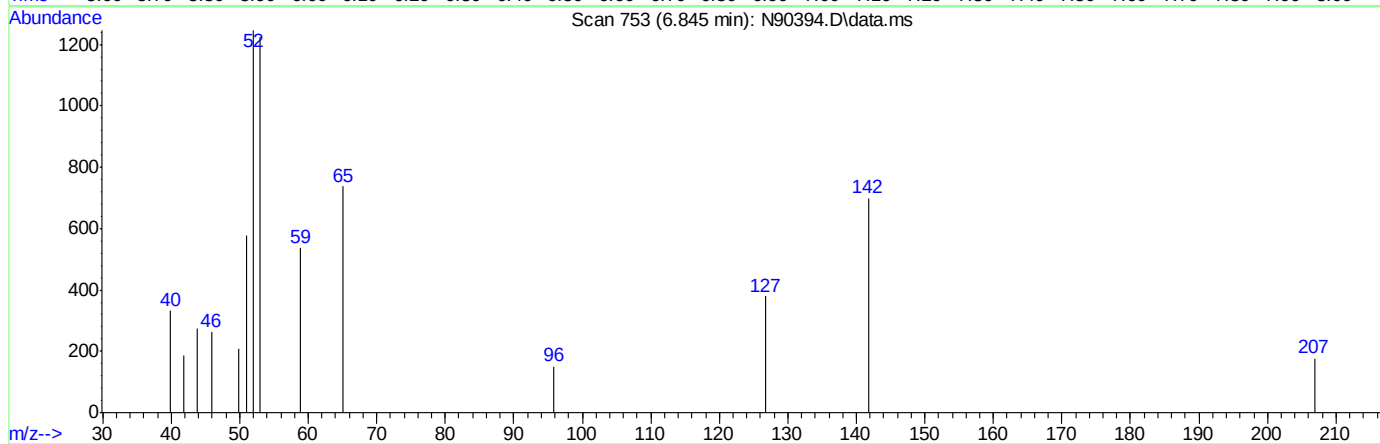
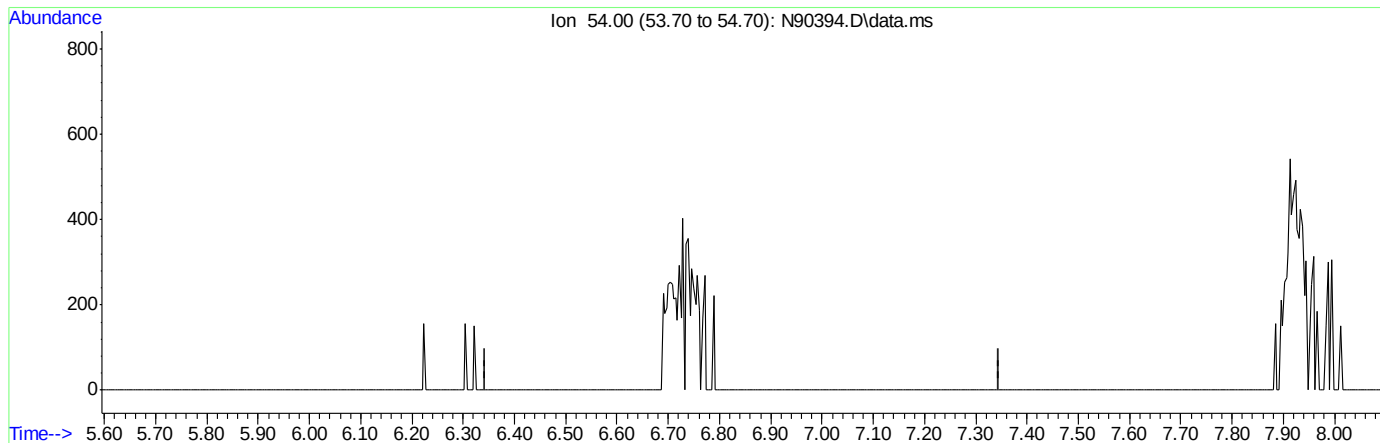
Page: 4

7.6.4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90394.D
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:20:26 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:20:13 2014
Response via : Initial Calibration



TIC: N90394.D\data.ms

(25) propionitrile (p)

6.845min (-6.845) 0.00ug/L

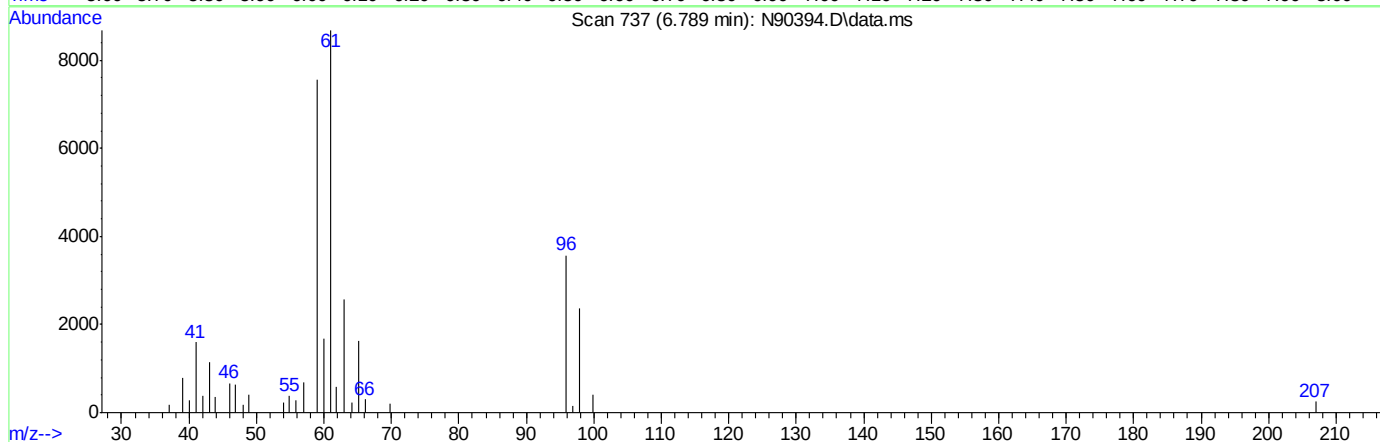
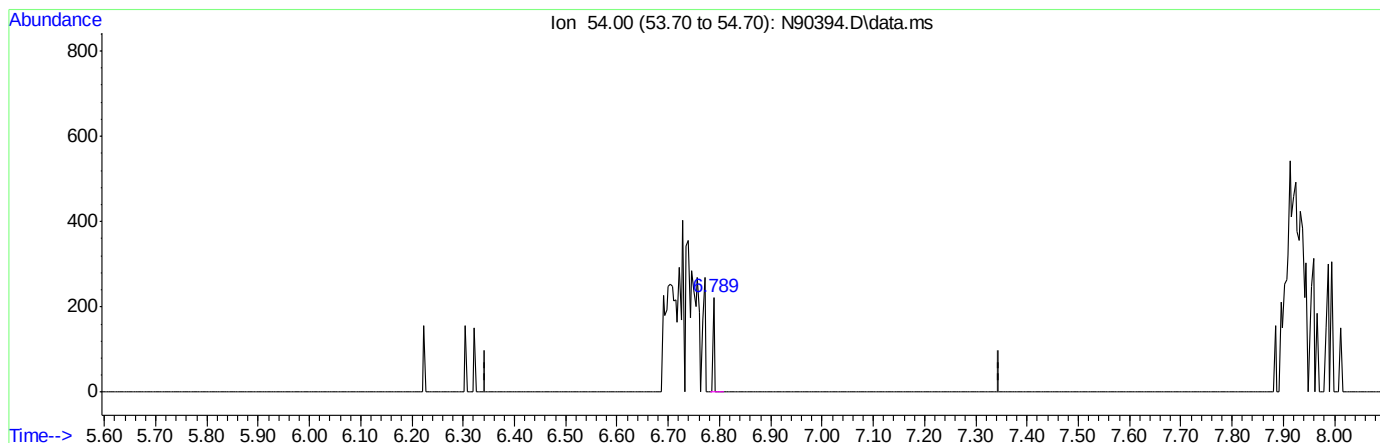
response 0

Ion	Exp%	Act%
54.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90394.D
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:20:26 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:20:13 2014
Response via : Initial Calibration



TIC: N90394.D\data.ms

(25) propionitrile (p)

6.789min (-0.056) 1.16ug/L m

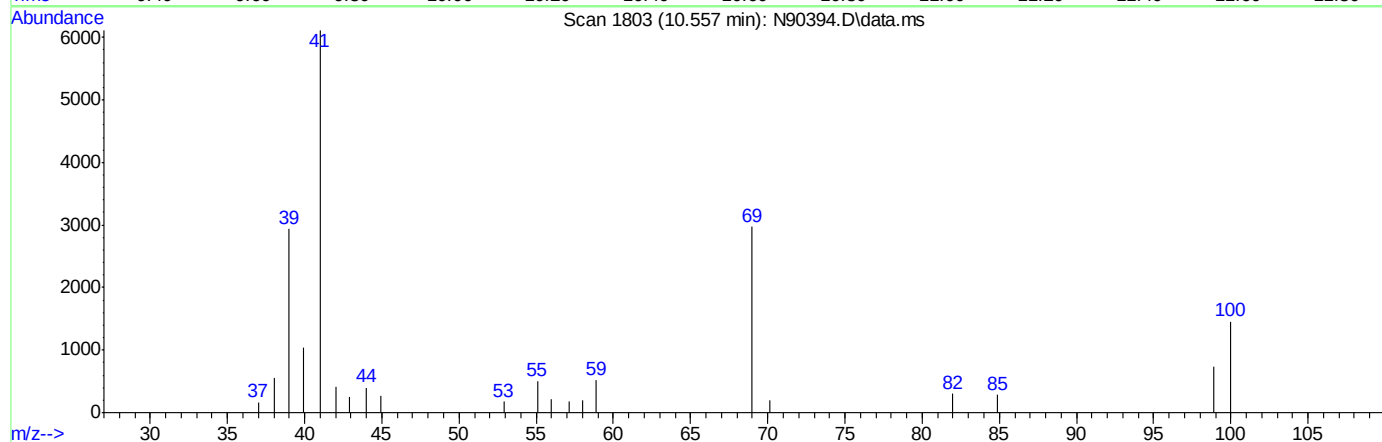
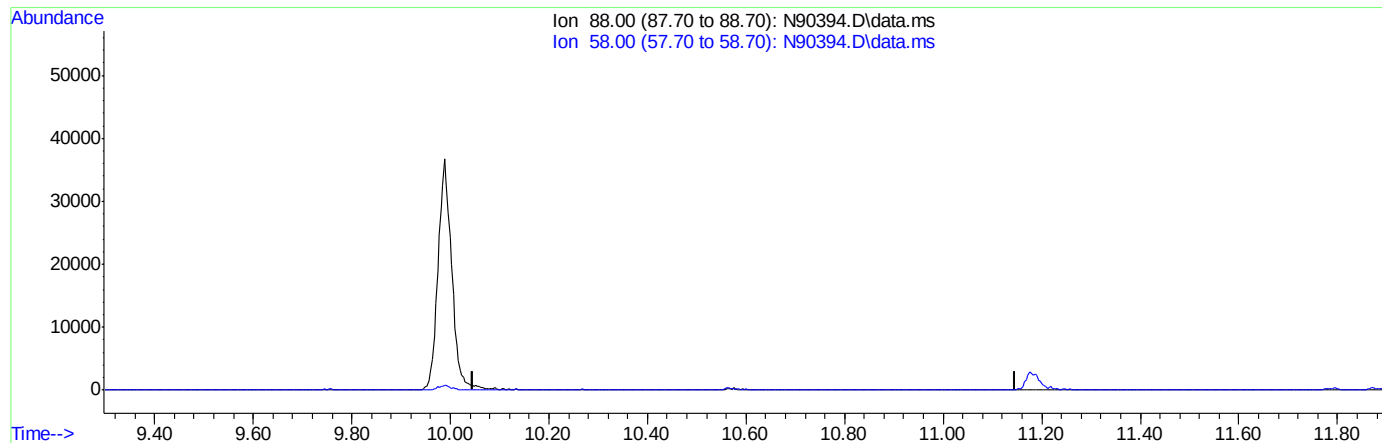
response 47

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90394.D
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:20:26 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:20:13 2014
Response via : Initial Calibration



TIC: N90394.D\data.ms

(58) 1,4-dioxane (p)

10.557min (-10.557) 0.00ug/L

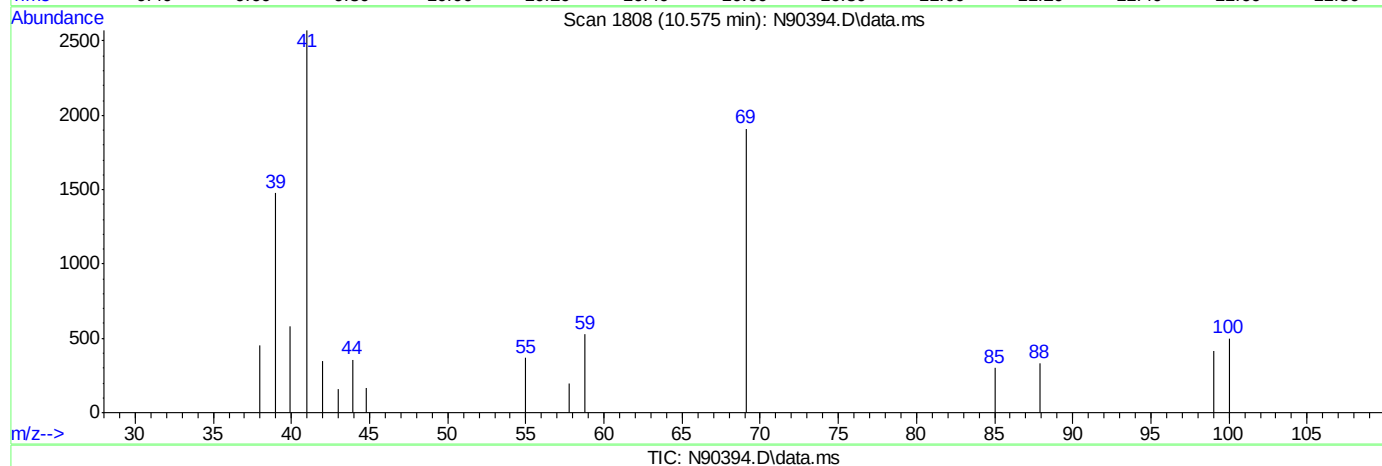
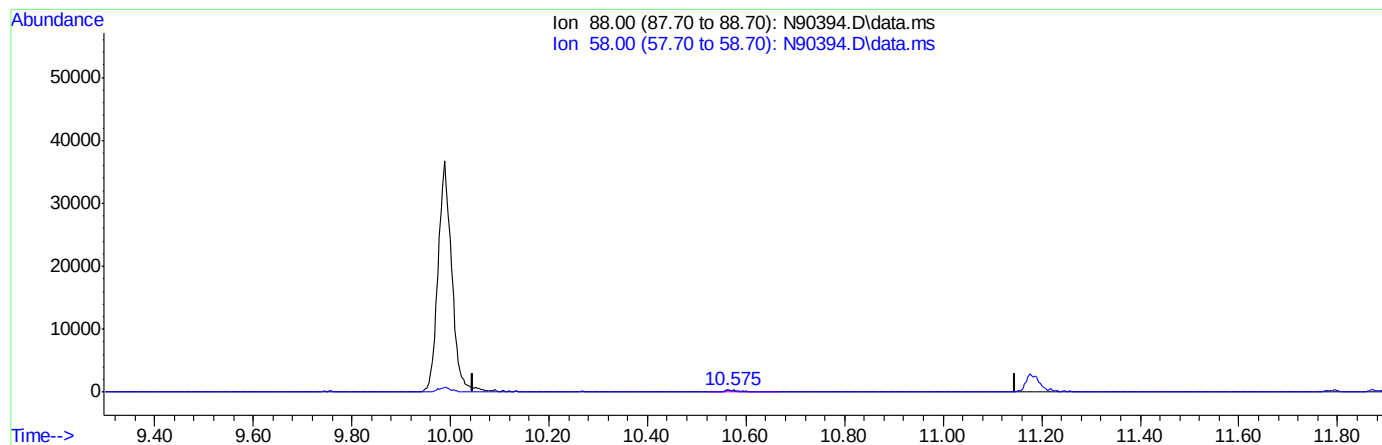
response 0

Ion	Exp%	Act%
88.00	100	0.00
58.00	134.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90394.D
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 19 09:20:26 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:20:13 2014
Response via : Initial Calibration



(58) 1,4-dioxane (p)

10.575min (+0.018) 11.91ug/L m

response 305

Ion	Exp%	Act%
88.00	100	100
58.00	134.00	59.28#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90395.D
 Acq On : 18 Sep 2014 6:00 pm
 Operator : krystend
 Sample : IC3345-10
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:22:13 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:21:41 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.704	65	126512	500.00	ug/L	0.01
4) pentafluorobenzene	9.119	168	258191	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	407845	50.00	ug/L	0.00
66) chlorobenzene-d5	13.244	82	221249	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	172320	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	27210	10.14	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	20.28%#		
60) toluene-d8 (s)	11.784	98	101486	10.19	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	20.38%#		
82) bromofluorobenzene (s)	14.464	95	42884	9.91	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	19.82%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.789	59	40778	89.23	ug/L	# 100
3) Ethanol	5.566	45	62418	891.15	ug/L	97
5) dichlorodifluoromethane	4.385	85	31777	10.11	ug/L	87
6) chloromethane	4.654	50	43406	11.12	ug/L	97
7) vinyl chloride	4.897	62	33509	8.65	ug/L	96
8) bromomethane	5.392	96	9737	11.76	ug/L	74
9) chloroethane	5.569	64	19605	12.03	ug/L	91
10) ethyl ether	6.439	59	27414	10.15	ug/L	97
11) acetonitrile	6.435	41	4465	10.53	ug/L	87
12) trichlorofluoromethane	6.206	101	42717	8.42	ug/L	99
13) freon-113	6.969	101	18580	9.29	ug/L	86
14) acrolein	6.206	56	17077	51.68	ug/L	92
15) 1,1-dichloroethene	6.785	96	18873	7.23	ug/L	91
16) acetone	6.336	58	7023	11.93	ug/L	# 80
17) Methyl Acetate	6.969	43	25886	10.96	ug/L	# 91
18) methylene chloride	6.944	84	28490	9.71	ug/L	99
19) methyl tert butyl ether	7.712	73	31021	5.88	ug/L	96
20) acrylonitrile	6.856	53	13194	11.34	ug/L	97
21) allyl chloride	7.033	41	48398	10.04	ug/L	94
22) trans-1,2-dichloroethene	7.627	96	22666	8.00	ug/L	90
23) iodomethane	6.860	142	6549	6.59	ug/L	84
24) carbon disulfide	7.224	76	68989	9.79	ug/L	98
25) propionitrile	6.867	54	233m	9.28	ug/L	
26) vinyl acetate	7.980	43	35528	11.32	ug/L	97
27) chloroprene	8.231	53	43807	9.71	ug/L	96
28) di-isopropyl ether	8.270	45	130436	9.54	ug/L	91
29) methacrylonitrile	8.405	41	21048	11.24	ug/L	85
30) 2-butanone	8.295	72	3279	11.65	ug/L	# 1
31) Hexane	8.256	41	43898	9.22	ug/L	# 69
32) 1,1-dichloroethane	7.878	63	60716	8.92	ug/L	100
33) tert-butyl ethyl ether	8.666	59	12883	4.46	ug/L	96
34) isobutyl alcohol	8.267	43	102422	50.85	ug/L	88
35) 2,2-dichloropropane	8.733	77	14007	5.55	ug/L	100
36) cis-1,2-dichloroethene	8.443	96	27812	8.80	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90395.D
 Acq On : 18 Sep 2014 6:00 pm
 Operator : krystend
 Sample : IC3345-10
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:22:13 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:21:41 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.267	43	100144	10.26	ug/L	85
38) bromochloromethane	8.613	128	12292	9.93	ug/L	88
39) chloroform	8.645	83	54158	8.62	ug/L	99
41) Tetrahydrofuran	8.984	42	9778	11.85	ug/L	82
42) 1,1,1-trichloroethane	9.391	97	41591	10.98	ug/L	97
44) Cyclohexane	9.670	56	46371	8.94	ug/L	93
45) carbon tetrachloride	9.755	117	32807	8.30	ug/L	97
46) 1,1-dichloropropene	9.564	75	32906	9.72	ug/L	93
47) benzene	9.794	78	107734	8.26	ug/L	98
48) 1,2-dichloroethane	9.299	62	50274	8.23	ug/L	98
49) tert-amyl methyl ether	9.911	73	11881	5.78	ug/L	88
50) heptane	10.257	43	26634	8.30	ug/L	97
51) trichloroethene	10.409	95	31842	8.18	ug/L	90
52) 1,2-dichloropropane	10.377	63	33512	9.78	ug/L	98
53) dibromomethane	10.360	93	16811	9.37	ug/L	93
54) bromodichloromethane	10.462	83	40713	8.90	ug/L	95
55) Methylcyclohexane	10.918	83	32926	8.59	ug/L	99
56) 2-chloroethyl vinyl ether	10.377	63	33512	10.09	ug/L #	100
57) methyl methacrylate	10.554	69	15574	10.34	ug/L	81
58) 1,4-dioxane	10.558	88	1262	66.24	ug/L #	61
59) cis-1,3-dichloropropene	11.081	75	34438	11.58	ug/L	94
61) 4-methyl-2-pentanone	11.176	43	35384	11.07	ug/L	95
62) toluene	11.858	92	65958	8.51	ug/L	100
63) trans-1,3-dichloropropene	11.501	75	28470	8.86	ug/L	98
64) 1,1,2-trichloroethane	11.671	83	21305	8.66	ug/L	92
65) ethyl methacrylate	11.873	69	29881	10.27	ug/L	96
67) tetrachloroethene	12.590	166	24673	7.81	ug/L	87
68) 1,3-dichloropropane	11.904	76	42223	9.86	ug/L	94
69) dibromochloromethane	12.194	129	27781	9.04	ug/L	92
70) 1,2-dibromoethane	12.449	107	23274	9.58	ug/L	91
71) 2-hexanone	12.035	43	28753	11.08	ug/L	97
72) chlorobenzene	13.276	112	69810	8.09	ug/L	97
73) 1,1,1,2-tetrachloroethane	13.195	131	26388	8.86	ug/L	94
74) ethylbenzene	13.446	91	130881	8.33	ug/L	98
75) m,p-xylene	13.630	106	91775	15.96	ug/L	96
76) o-xylene	14.047	106	46892	8.26	ug/L	91
77) styrene	13.973	104	72509	10.16	ug/L	97
78) bromoform	13.803	173	15696	8.72	ug/L	95
79) trans-1,4-dichloro-2-b...	14.192	53	5470	9.33	ug/L #	62
81) isopropylbenzene	14.404	105	117713	9.85	ug/L	99
83) bromobenzene	14.697	156	28241	9.82	ug/L	98
84) 1,1,2,2-tetrachloroethane	14.050	83	30205	7.88	ug/L	93
85) 1,2,3-trichloropropane	14.195	75	29533	10.01	ug/L	100
86) n-propylbenzene	14.849	91	150782	9.85	ug/L	99
87) 2-chlorotoluene	14.970	91	99253	10.05	ug/L	98
88) 4-chlorotoluene	15.047	91	104462	10.07	ug/L	95
89) 1,3,5-trimethylbenzene	15.125	105	111408	8.29	ug/L	97
90) tert-butylbenzene	15.433	91	68511	9.75	ug/L	91
91) 1,2,4-trimethylbenzene	15.535	105	112937	8.50	ug/L	96
92) sec-butylbenzene	15.652	105	128895	9.53	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90395.D
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:22:13 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:21:41 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.761	146	55907	7.87	ug/L	98
94)	p-isopropyltoluene	15.822	119	111832	9.93	ug/L	98
95)	1,4-dichlorobenzene	15.825	146	55167	7.67	ug/L	96
96)	1,2-dichlorobenzene	16.196	146	52420	7.97	ug/L	99
97)	n-butylbenzene	16.235	91	107958	9.48	ug/L	98
98)	1,2-dibromo-3-chloropr...	16.670	75	4379	9.46	ug/L	87
99)	1,2,4-trichlorobenzene	18.021	180	19744	9.37	ug/L	94
100)	1,3,5-trichlorobenzene	17.476	180	36268	9.69	ug/L	100
101)	hexachlorobutadiene	18.300	225	17924	9.60	ug/L	94
102)	naphthalene	18.293	128	13706	5.95	ug/L	100
103)	1,2,3-trichlorobenzene	18.491	180	11426	8.28	ug/L	84
104)	2-methylnaphthalene	19.668	142	4279	4.37	ug/L #	100
105)	1-methylnaphthalene	19.919	142	3816	5.14	ug/L	90

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

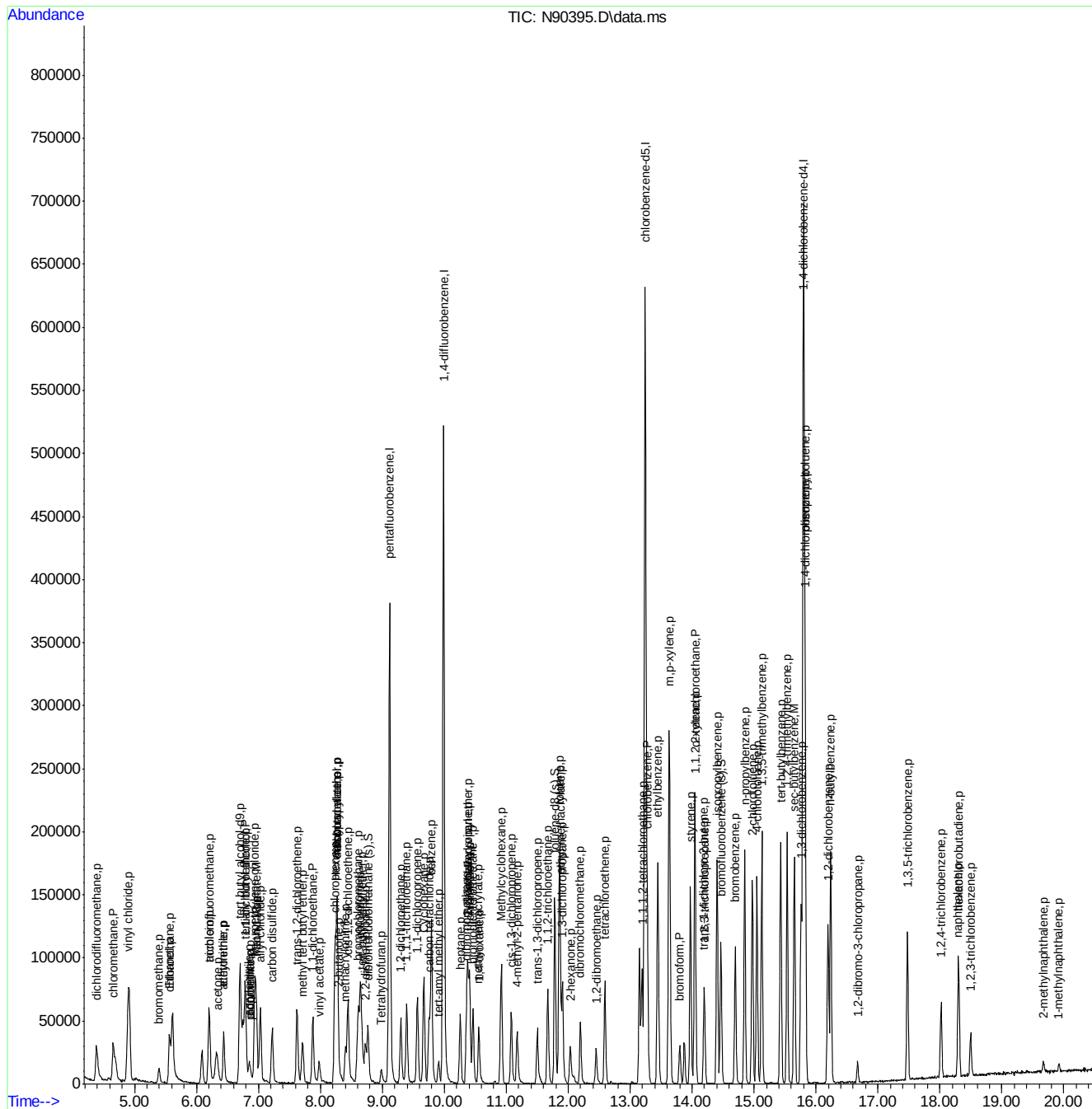
7.6.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90395.D
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:22:13 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:21:41 2014
Response via : Initial Calibration



n140918w.m Fri Sep 19 12:06:42 2014

Page: 4

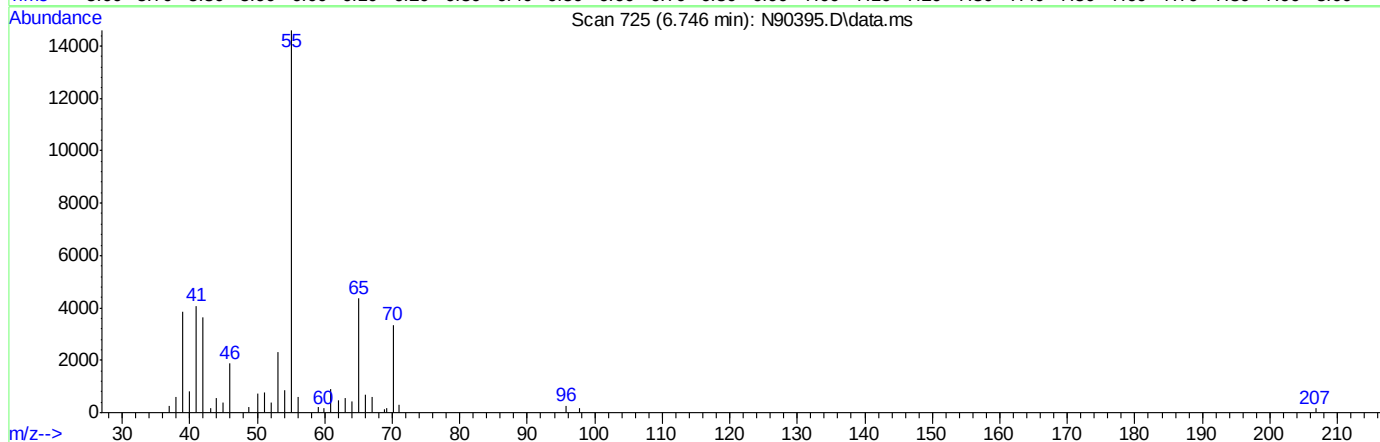
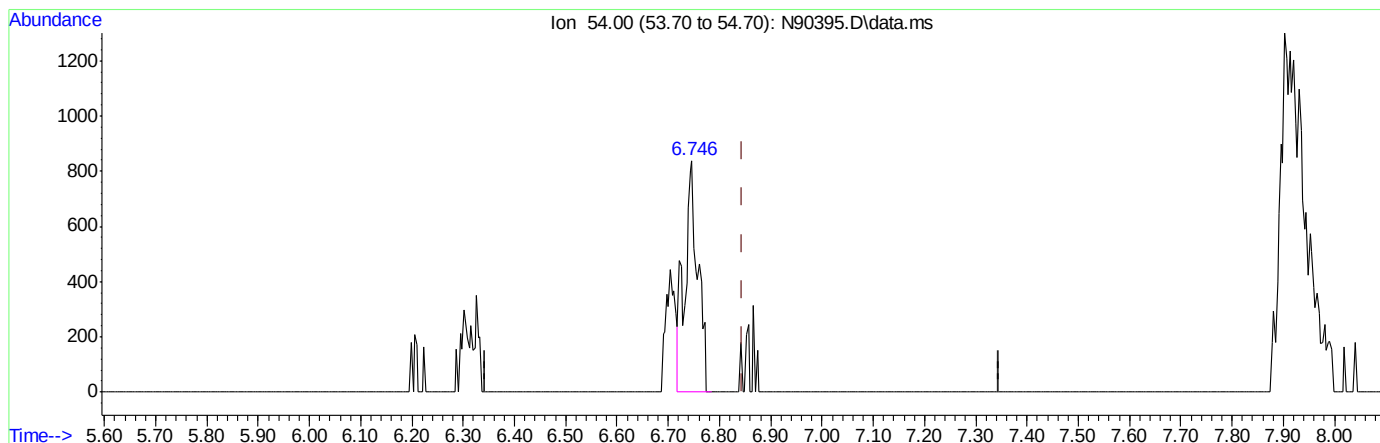
7.6.5



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90395.D
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:21:52 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:21:41 2014
Response via : Initial Calibration



TIC: N90395.D\data.ms

(25) propionitrile (p)

6.746min (-0.099) 58.32ug/L

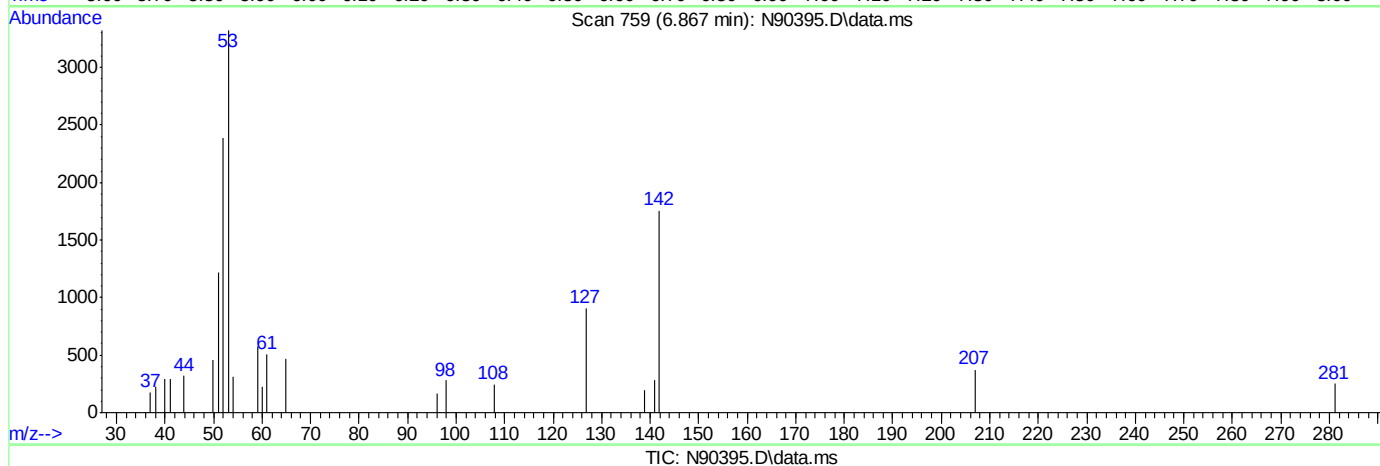
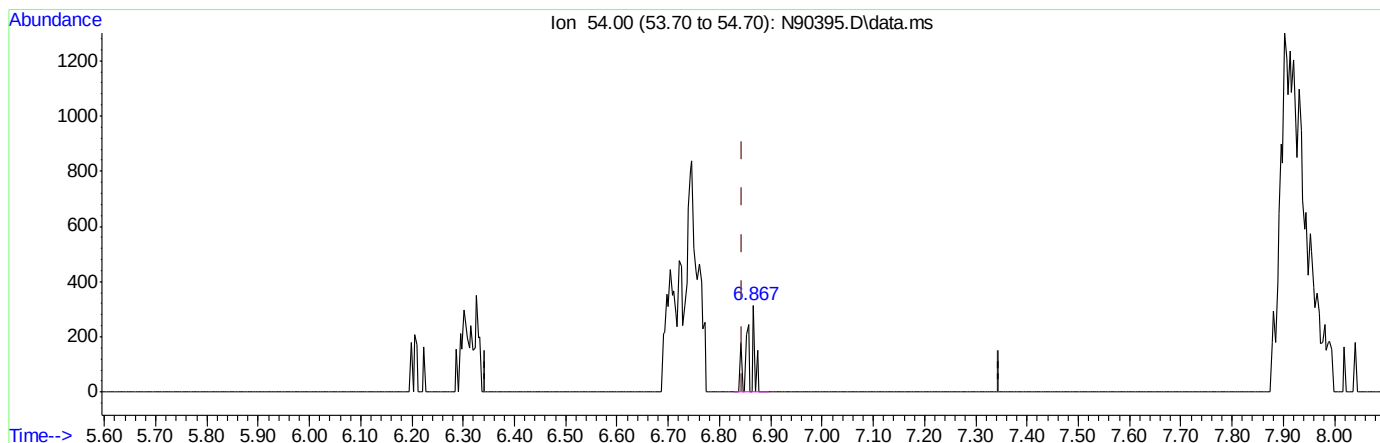
response 1464

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90395.D
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 19 09:21:52 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:21:41 2014
Response via : Initial Calibration



(25) propionitrile (p)

6.867min (+0.022) 9.28ug/L m

response 233

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90396.D
 Acq On : 18 Sep 2014 6:30 pm
 Operator : krystend
 Sample : IC3345-25
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 11:45:04 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:22:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.701	65	120614	500.00	ug/L	0.00
4) pentafluorobenzene	9.115	168	269555	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	416772	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	236720	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	182873	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.772	113	68146	24.21	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	48.42%#		
60) toluene-d8 (s)	11.784	98	261827	25.56	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	51.12%#		
82) bromofluorobenzene (s)	14.464	95	106932	23.35	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	46.70%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.782	59	106832	251.98	ug/L	# 100
3) Ethanol	5.569	45	143564	2210.06	ug/L	99
5) dichlorodifluoromethane	4.392	85	108337	32.92	ug/L	99
6) chloromethane	4.654	50	117106	27.96	ug/L	97
7) vinyl chloride	4.894	62	86744m	22.05	ug/L	
8) bromomethane	5.392	96	29142	32.29	ug/L	91
9) chloroethane	5.566	64	50784	28.40	ug/L	98
10) ethyl ether	6.432	59	71425	25.20	ug/L	95
11) acetonitrile	6.428	41	13004	28.86	ug/L	95
12) trichlorofluoromethane	6.206	101	137908	26.89	ug/L	96
13) freon-113	6.966	101	66715	32.73	ug/L	95
14) acrolein	6.202	56	44259	126.88	ug/L	92
15) 1,1-dichloroethene	6.785	96	59783	23.22	ug/L	97
16) acetone	6.333	58	16952	25.92	ug/L	# 71
17) Methyl Acetate	6.966	43	69044	27.13	ug/L	# 94
18) methylene chloride	6.944	84	74505	24.50	ug/L	89
19) methyl tert butyl ether	7.705	73	200510	39.68	ug/L	96
20) acrylonitrile	6.849	53	34793	27.42	ug/L	90
21) allyl chloride	7.029	41	140420	27.86	ug/L	94
22) trans-1,2-dichloroethene	7.623	96	66641	23.46	ug/L	93
23) iodomethane	6.856	142	26748	29.08	ug/L	95
24) carbon disulfide	7.224	76	215554	29.51	ug/L	98
25) propionitrile	6.842	54	1003m	39.21	ug/L	
26) vinyl acetate	7.970	43	105054	30.71	ug/L	98
27) chloroprene	8.235	53	140800	30.18	ug/L	96
28) di-isopropyl ether	8.263	45	362119	25.66	ug/L	96
29) methacrylonitrile	8.401	41	51556	25.33	ug/L	97
30) 2-butanone	8.291	72	9414	30.37	ug/L	# 12
31) Hexane	8.249	41	143049	29.55	ug/L	87
32) 1,1-dichloroethane	7.878	63	167870	24.13	ug/L	94
33) tert-butyl ethyl ether	8.659	59	181704m	70.00	ug/L	
34) isobutyl alcohol	8.260	43	286914	135.67	ug/L	100
35) 2,2-dichloropropane	8.726	77	117204	52.25	ug/L	99
36) cis-1,2-dichloroethene	8.443	96	75927	23.58	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90396.D
 Acq On : 18 Sep 2014 6:30 pm
 Operator : krystend
 Sample : IC3345-25
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 11:45:04 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:22:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.260	43	283186	27.56	ug/L	98
38) bromochloromethane	8.613	128	34175	26.51	ug/L	92
39) chloroform	8.645	83	147660	23.15	ug/L	98
41) Tetrahydrofuran	8.977	42	24818	27.13	ug/L	98
42) 1,1,1-trichloroethane	9.394	97	134617	33.38	ug/L	97
44) Cyclohexane	9.670	56	166174	32.50	ug/L	96
45) carbon tetrachloride	9.759	117	113386	29.06	ug/L	98
46) 1,1-dichloropropene	9.568	75	103088	30.07	ug/L	98
47) benzene	9.794	78	289268	22.35	ug/L	100
48) 1,2-dichloroethane	9.299	62	138871	23.05	ug/L	97
49) tert-amyl methyl ether	9.903	73	98393	52.35	ug/L	96
50) heptane	10.257	43	98465	31.84	ug/L	90
51) trichloroethene	10.409	95	87170	22.60	ug/L	97
52) 1,2-dichloropropane	10.374	63	93646	26.90	ug/L	100
53) dibromomethane	10.356	93	47095	26.09	ug/L	98
54) bromodichloromethane	10.462	83	113562	24.84	ug/L	97
55) Methylcyclohexane	10.922	83	121705	32.60	ug/L	95
56) 2-chloroethyl vinyl ether	10.374	63	93646	27.51	ug/L #	98
57) methyl methacrylate	10.554	69	43779	28.13	ug/L #	77
58) 1,4-dioxane	10.554	88	3404	157.76	ug/L	82
59) cis-1,3-dichloropropene	11.081	75	118669	38.04	ug/L	100
61) 4-methyl-2-pentanone	11.173	43	93859	27.75	ug/L	95
62) toluene	11.859	92	186586	24.28	ug/L	94
63) trans-1,3-dichloropropene	11.498	75	100993	31.36	ug/L	97
64) 1,1,2-trichloroethane	11.671	83	57148	23.36	ug/L	99
65) ethyl methacrylate	11.869	69	86783	28.93	ug/L	88
67) tetrachloroethene	12.590	166	72359	22.21	ug/L	98
68) 1,3-dichloropropane	11.904	76	118265	25.92	ug/L	100
69) dibromochloromethane	12.198	129	77666	24.01	ug/L	96
70) 1,2-dibromoethane	12.449	107	65527	25.48	ug/L	93
71) 2-hexanone	12.025	43	78190	27.18	ug/L	95
72) chlorobenzene	13.276	112	199271	22.43	ug/L	96
73) 1,1,1,2-tetrachloroethane	13.191	131	74429	23.90	ug/L	95
74) ethylbenzene	13.446	91	377929	23.27	ug/L	99
75) m,p-xylene	13.633	106	262473	44.16	ug/L	97
76) o-xylene	14.047	106	128847	21.85	ug/L	98
77) styrene	13.973	104	207891	27.07	ug/L	99
78) bromoform	13.799	173	45255	24.13	ug/L	97
79) trans-1,4-dichloro-2-b...	14.195	53	20420	33.29	ug/L #	83
81) isopropylbenzene	14.404	105	346975	27.50	ug/L	99
83) bromobenzene	14.697	156	78466	25.87	ug/L	94
84) 1,1,2,2-tetrachloroethane	14.047	83	80326	20.47	ug/L	93
85) 1,2,3-trichloropropane	14.195	75	85102	27.17	ug/L	99
86) n-propylbenzene	14.846	91	448308	27.74	ug/L	99
87) 2-chlorotoluene	14.973	91	274255	26.12	ug/L	100
88) 4-chlorotoluene	15.047	91	289963	26.28	ug/L	98
89) 1,3,5-trimethylbenzene	15.125	105	317710	23.07	ug/L	98
90) tert-butylbenzene	15.429	91	205705	27.82	ug/L	99
91) 1,2,4-trimethylbenzene	15.535	105	312329	22.83	ug/L	99
92) sec-butylbenzene	15.648	105	397173	28.11	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90396.D
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 11:45:04 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:22:58 2014
Response via : Initial Calibration

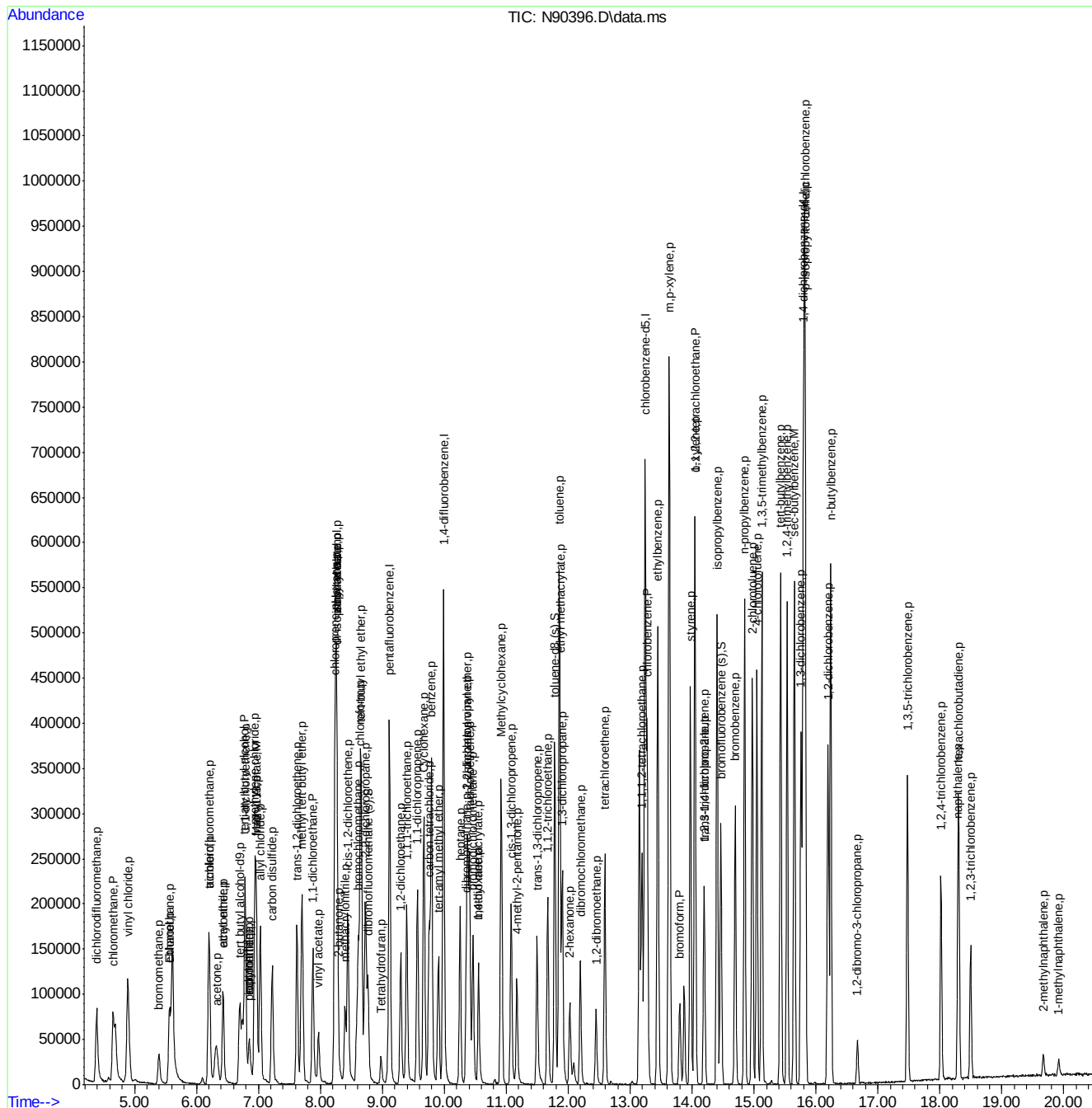
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.758	146	152517	21.14	ug/L	97
94) p-isopropyltoluene	15.822	119	327476	27.47	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	149300	20.52	ug/L	97
96) 1,2-dichlorobenzene	16.193	146	150865	22.53	ug/L	98
97) n-butylbenzene	16.239	91	339391	28.57	ug/L	99
98) 1,2-dibromo-3-chloropr...	16.667	75	14448	29.95	ug/L	92
99) 1,2,4-trichlorobenzene	18.017	180	70970	32.41	ug/L	99
100) 1,3,5-trichlorobenzene	17.476	180	105304	26.79	ug/L	98
101) hexachlorobutadiene	18.303	225	54373	27.80	ug/L	96
102) naphthalene	18.289	128	81792	38.69	ug/L	100
103) 1,2,3-trichlorobenzene	18.498	180	48696	35.26	ug/L	93
104) 2-methylnaphthalene	19.672	142	13906	13.97	ug/L #	100
105) 1-methylnaphthalene	19.919	142	9742	12.25	ug/L	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90396.D
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 11:45:04 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:22:58 2014
Response via : Initial Calibration



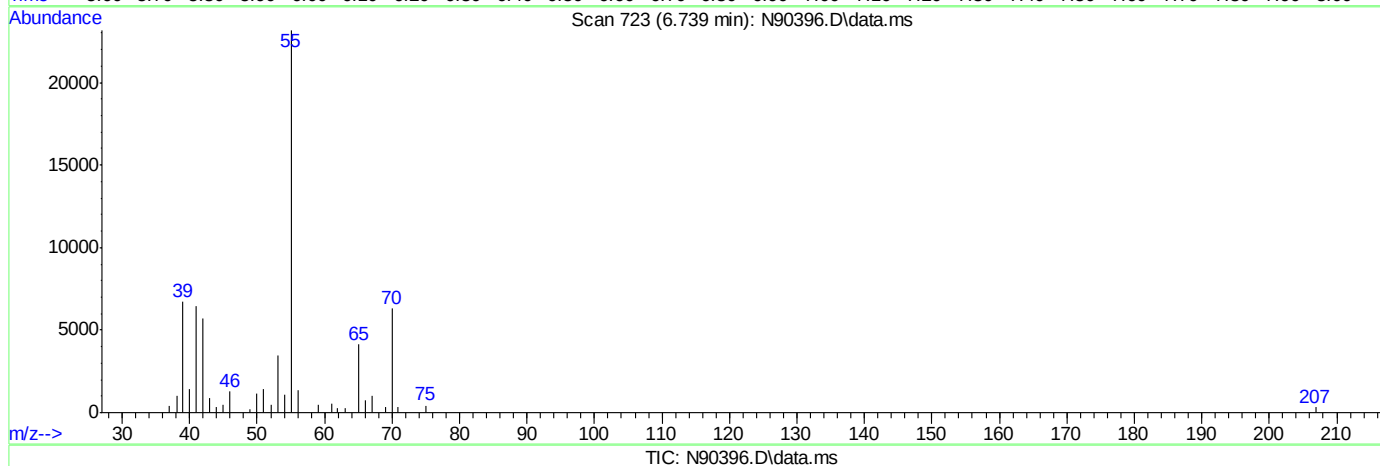
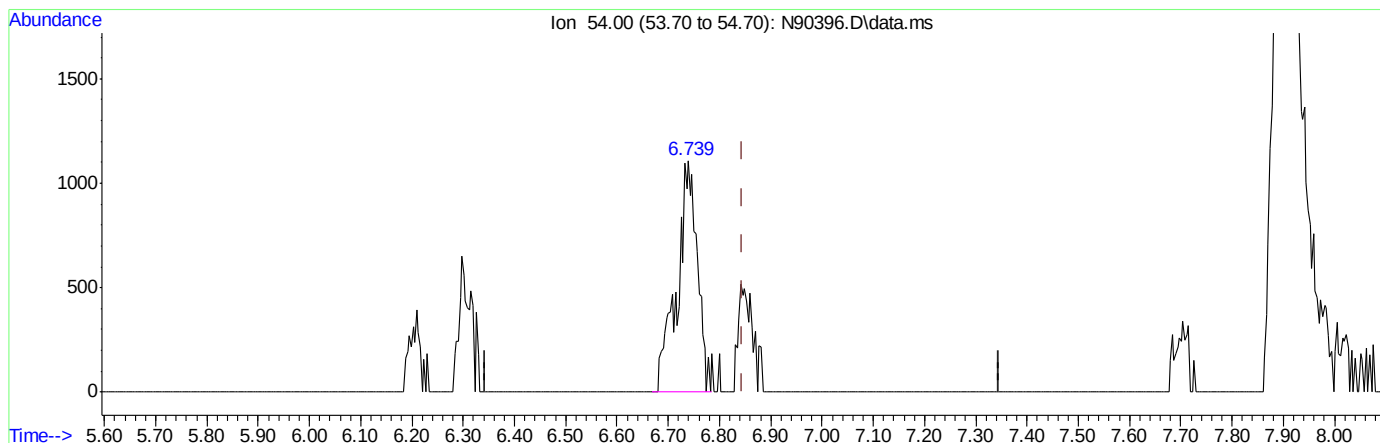
n140918w.m Fri Sep 19 12:06:46 2014

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90396.D
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:23:10 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:22:58 2014
Response via : Initial Calibration



(25) propionitrile (p)

6.739min (-0.106) 118.92ug/L

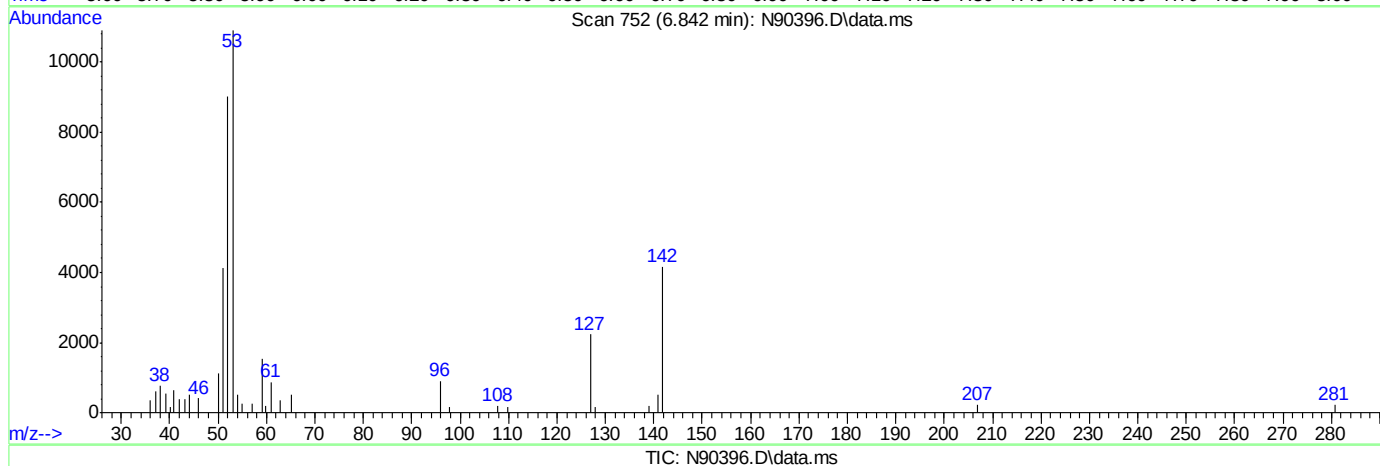
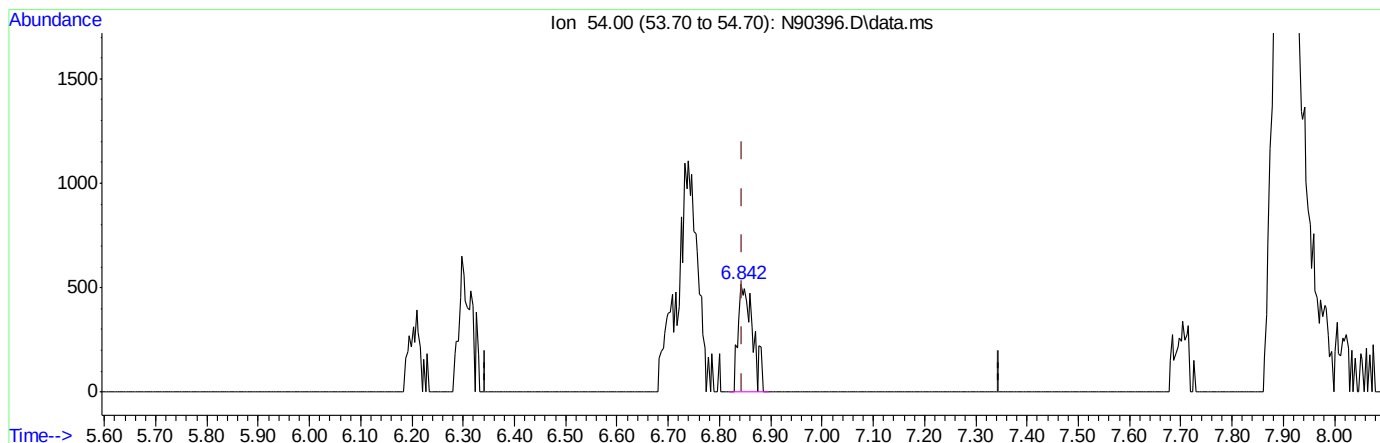
response 3042

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90396.D
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:23:10 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:22:58 2014
Response via : Initial Calibration



(25) propionitrile (p)

6.842min (-0.003) 39.21ug/L m

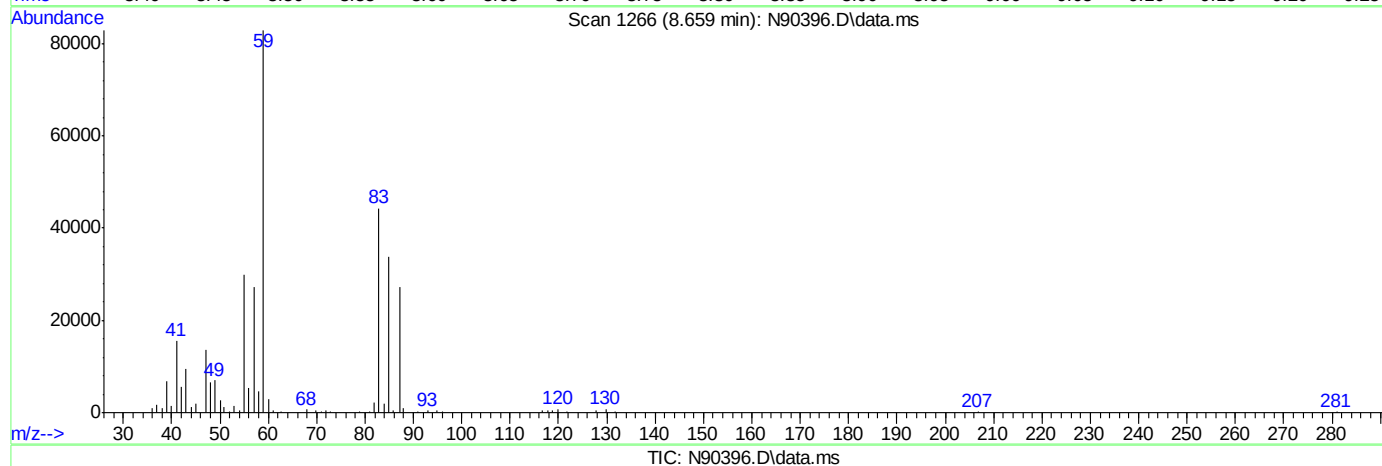
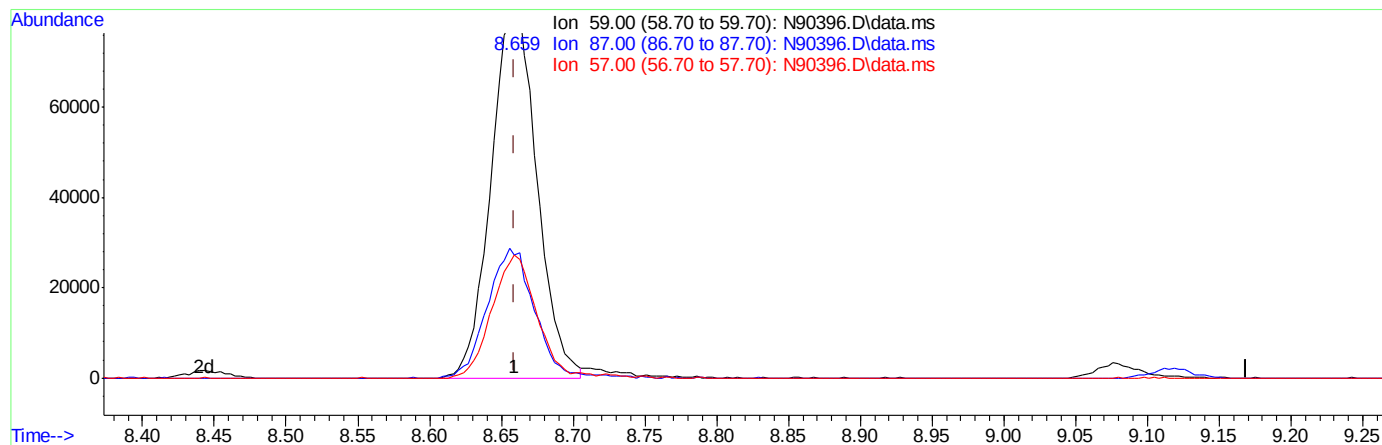
response 1003

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90396.D
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 19 09:54:37 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:22:58 2014
Response via : Initial Calibration



(33) tert-butyl ethyl ether (p)

8.659min (+0.000) 70.00ug/L m

response 181704

Ion	Exp%	Act%
59.00	100	100
87.00	36.60	32.97
57.00	28.30	32.73
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90397.D
 Acq On : 18 Sep 2014 6:59 pm
 Operator : krystend
 Sample : ICC3345-50
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 19 09:35:43 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:29:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.693	65	106714	500.00	ug/L	0.00
4) pentafluorobenzene	9.115	168	281457	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	439257	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	245477	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	192160	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	149849	51.89	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.78%		
60) toluene-d8 (s)	11.784	98	569513	54.06	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	108.12%		
82) bromofluorobenzene (s)	14.460	95	239740	51.17	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.34%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.778	59	178874	476.77	ug/L	# 100
3) Ethanol	5.562	45	256631	4696.59	ug/L	100
5) dichlorodifluoromethane	4.392	85	206560	55.73	ug/L	98
6) chloromethane	4.650	50	211740	46.61	ug/L	98
7) vinyl chloride	4.890	62	159184	44.39	ug/L	100
8) bromomethane	5.389	96	65724	51.61	ug/L	97
9) chloroethane	5.566	64	88569	48.70	ug/L	99
10) ethyl ether	6.432	59	140520	51.00	ug/L	93
11) acetonitrile	6.432	41	23300	53.28	ug/L	97
12) trichlorofluoromethane	6.205	101	263802	49.79	ug/L	99
13) freon-113	6.962	101	131158	55.71	ug/L	95
14) acrolein	6.202	56	87100	271.20	ug/L	98
15) 1,1-dichloroethene	6.785	96	112259	44.93	ug/L	91
16) acetone	6.336	58	27850	47.66	ug/L	90
17) Methyl Acetate	6.958	43	120617	51.27	ug/L	95
18) methylene chloride	6.941	84	132628	45.35	ug/L	88
19) methyl tert butyl ether	7.704	73	355716	57.25	ug/L	94
20) acrylonitrile	6.845	53	63219	51.82	ug/L	93
21) allyl chloride	7.029	41	265155	50.75	ug/L	92
22) trans-1,2-dichloroethene	7.620	96	131390	46.50	ug/L	94
23) iodomethane	6.859	142	73206m	46.09	ug/L	
24) carbon disulfide	7.220	76	409043	50.28	ug/L	99
25) propionitrile	6.845	54	2222	64.56	ug/L	100
26) vinyl acetate	7.970	43	207683	52.52	ug/L	99
27) chloroprene	8.235	53	275545	54.33	ug/L	92
28) di-isopropyl ether	8.263	45	676008	50.12	ug/L	98
29) methacrylonitrile	8.397	41	97653	49.10	ug/L	92
30) 2-butanone	8.288	72	17611	55.50	ug/L	# 34
31) Hexane	8.249	41	269705	54.36	ug/L	93
32) 1,1-dichloroethane	7.874	63	317674	45.86	ug/L	98
33) tert-butyl ethyl ether	8.659	59	325210	61.83	ug/L	94
34) isobutyl alcohol	8.259	43	538584	263.43	ug/L	99
35) 2,2-dichloropropane	8.730	77	232879	62.14	ug/L	98
36) cis-1,2-dichloroethene	8.443	96	147082	45.71	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90397.D
 Acq On : 18 Sep 2014 6:59 pm
 Operator : krystend
 Sample : ICC3345-50
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 19 09:35:43 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:29:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.259	43	538334	53.46	ug/L	97
38) bromochloromethane	8.613	128	66289	50.33	ug/L	94
39) chloroform	8.645	83	282850	45.70	ug/L	100
41) Tetrahydrofuran	8.977	42	46189	51.89	ug/L	93
42) 1,1,1-trichloroethane	9.394	97	270114	56.93	ug/L	98
44) Cyclohexane	9.674	56	335346	56.26	ug/L	98
45) carbon tetrachloride	9.755	117	226988	52.83	ug/L	98
46) 1,1-dichloropropene	9.568	75	207260	53.70	ug/L	100
47) benzene	9.794	78	551800	43.82	ug/L	97
48) 1,2-dichloroethane	9.299	62	270470	45.88	ug/L	100
49) tert-amyl methyl ether	9.903	73	182725	57.37	ug/L	97
50) heptane	10.257	43	196771	54.62	ug/L	93
51) trichloroethene	10.409	95	169855	45.17	ug/L	95
52) 1,2-dichloropropane	10.377	63	181006	50.47	ug/L	100
53) dibromomethane	10.356	93	88125	48.16	ug/L	98
54) bromodichloromethane	10.462	83	223382	47.37	ug/L	98
55) Methylcyclohexane	10.922	83	248696	56.31	ug/L	96
56) 2-chloroethyl vinyl ether	10.377	63	181006	51.14	ug/L #	99
57) methyl methacrylate	10.550	69	86698	52.87	ug/L	80
58) 1,4-dioxane	10.557	88	6949	303.99	ug/L #	75
59) cis-1,3-dichloropropene	11.077	75	233756	60.14	ug/L	99
61) 4-methyl-2-pentanone	11.169	43	177530	52.90	ug/L	94
62) toluene	11.855	92	356132	47.09	ug/L	99
63) trans-1,3-dichloropropene	11.498	75	196378	53.62	ug/L	97
64) 1,1,2-trichloroethane	11.671	83	110046	46.53	ug/L	99
65) ethyl methacrylate	11.865	69	167344	53.64	ug/L	94
67) tetrachloroethene	12.594	166	144901	45.33	ug/L	96
68) 1,3-dichloropropane	11.904	76	230986	49.93	ug/L	97
69) dibromochloromethane	12.194	129	158011	47.79	ug/L	99
70) 1,2-dibromoethane	12.449	107	124011	47.86	ug/L	98
71) 2-hexanone	12.021	43	151222	53.34	ug/L	94
72) chlorobenzene	13.276	112	378269	44.19	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	145634	46.73	ug/L	97
74) ethylbenzene	13.446	91	734987	46.06	ug/L	100
75) m,p-xylene	13.633	106	490378	86.48	ug/L	98
76) o-xylene	14.047	106	249121	43.96	ug/L	98
77) styrene	13.972	104	409033	49.76	ug/L	99
78) bromoform	13.799	173	91775	47.71	ug/L	93
79) trans-1,4-dichloro-2-b...	14.192	53	41766	54.05	ug/L	99
81) isopropylbenzene	14.404	105	691045	50.73	ug/L	99
83) bromobenzene	14.697	156	155170	48.14	ug/L	98
84) 1,1,2,2-tetrachloroethane	14.047	83	150552	42.35	ug/L	93
85) 1,2,3-trichloropropane	14.192	75	167959	50.97	ug/L	97
86) n-propylbenzene	14.849	91	874622	50.15	ug/L	100
87) 2-chlorotoluene	14.969	91	537322	48.45	ug/L	98
88) 4-chlorotoluene	15.044	91	569106	48.57	ug/L	99
89) 1,3,5-trimethylbenzene	15.125	105	627680	45.90	ug/L	98
90) tert-butylbenzene	15.429	91	413466	51.50	ug/L	98
91) 1,2,4-trimethylbenzene	15.535	105	625962	46.18	ug/L	99
92) sec-butylbenzene	15.652	105	792099	51.69	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90397.D
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 19 09:35:43 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:29:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.758	146	306812	43.81	ug/L	98
94) p-isopropyltoluene	15.821	119	650478	51.95	ug/L	100
95) 1,4-dichlorobenzene	15.825	146	292741	43.07	ug/L	97
96) 1,2-dichlorobenzene	16.193	146	304149	46.37	ug/L	98
97) n-butylbenzene	16.235	91	683495	52.62	ug/L	98
98) 1,2-dibromo-3-chloropr...	16.666	75	27754	53.45	ug/L	91
99) 1,2,4-trichlorobenzene	18.017	180	149343	57.58	ug/L	99
100) 1,3,5-trichlorobenzene	17.476	180	210588	52.43	ug/L	99
101) hexachlorobutadiene	18.307	225	107474	52.85	ug/L	99
102) naphthalene	18.289	128	196686	63.37	ug/L	100
103) 1,2,3-trichlorobenzene	18.494	180	106358	61.02	ug/L	90
104) 2-methylnaphthalene	19.668	142	28564	26.97	ug/L #	100
105) 1-methylnaphthalene	19.915	142	21661	27.37	ug/L	99

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

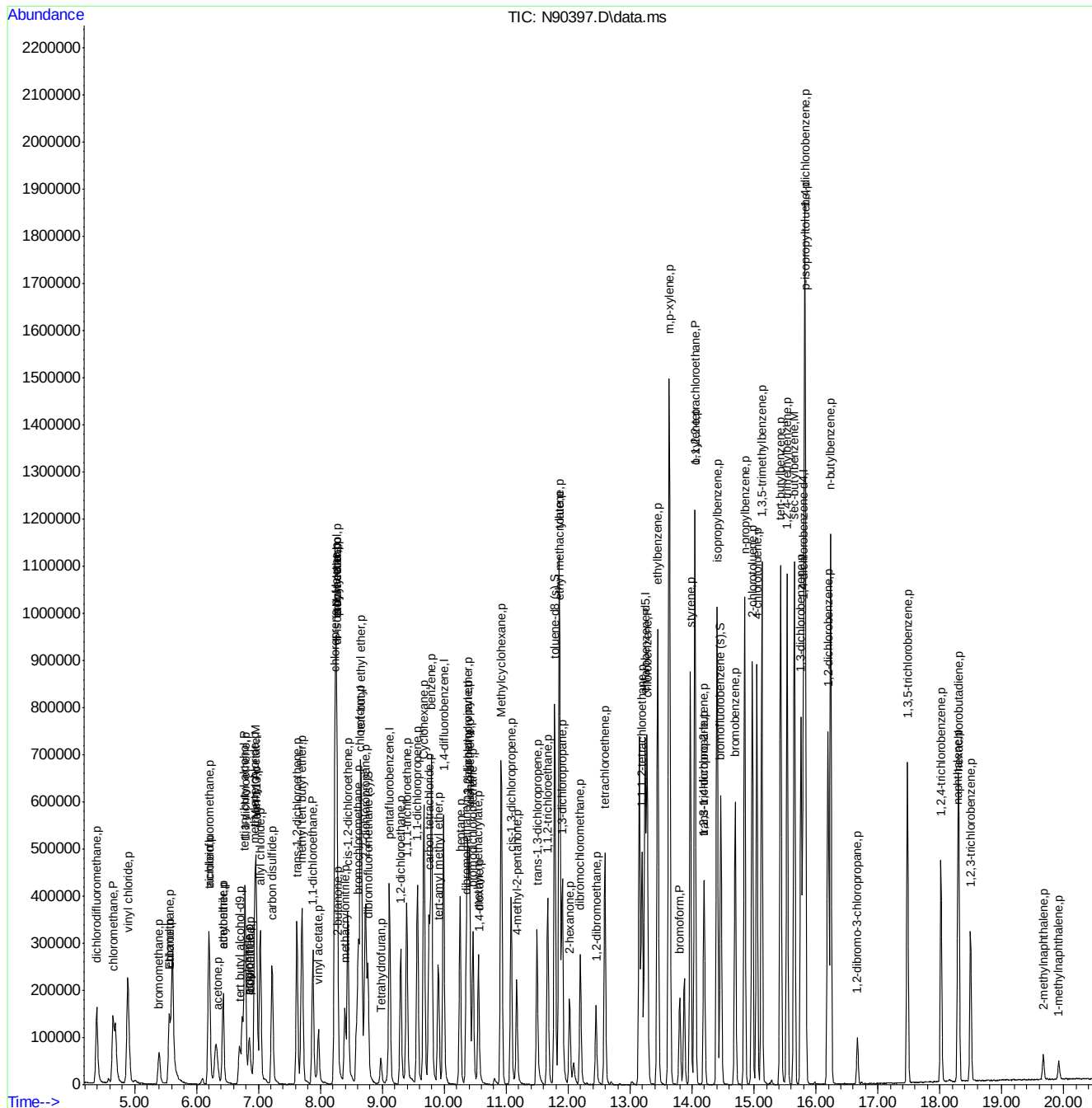
7.6.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90397.D
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 19 09:35:43 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:29:04 2014
Response via : Initial Calibration



n140918w.m Fri Sep 19 12:06:51 2014

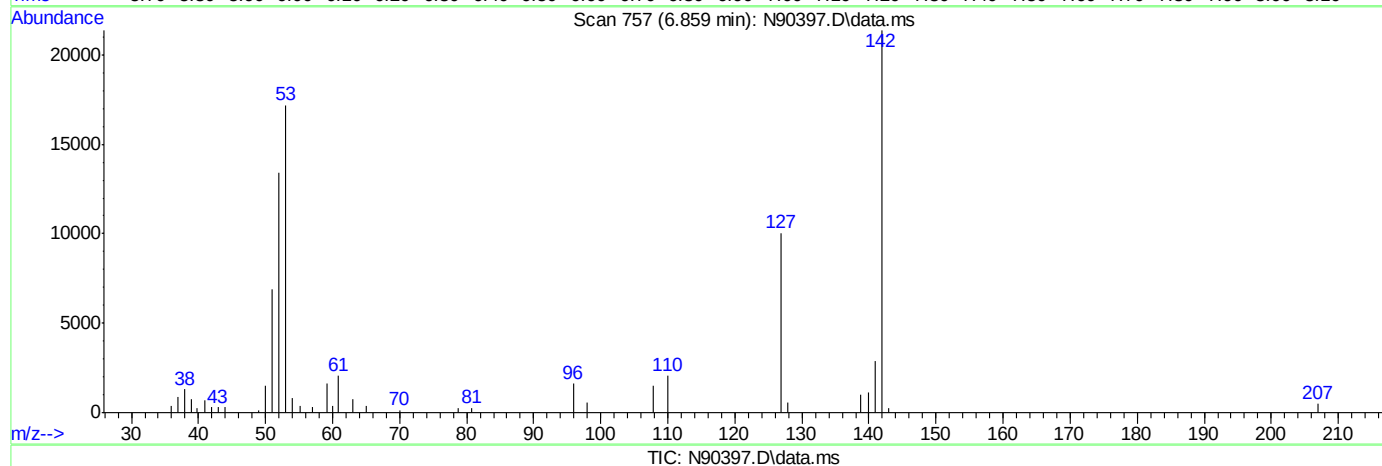
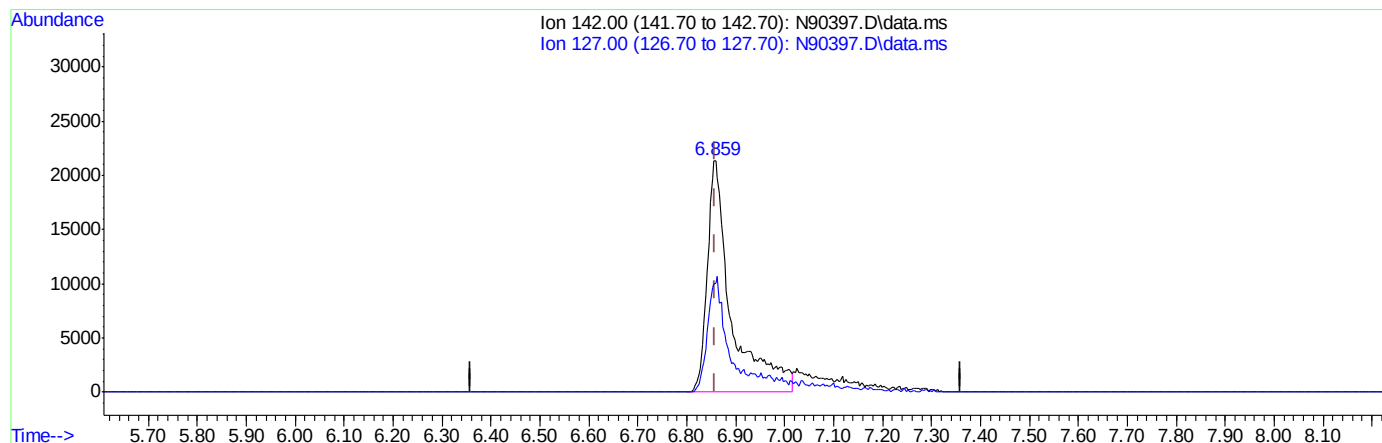
Page: 4

7.6.7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90397.D
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 19 09:29:16 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:29:04 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.859min (+0.000) 46.09ug/L m

response 73206

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	47.07
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90398.D
 Acq On : 18 Sep 2014 7:27 pm
 Operator : krystend
 Sample : IC3345-100
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 19 09:36:06 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:24:14 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.690	65	86941	500.00	ug/L	0.00
4) pentafluorobenzene	9.111	168	321164	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	503335	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	272919	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	222509	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	340784	102.44	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	204.88%#		
60) toluene-d8 (s)	11.781	98	1260602	101.33	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	202.66%#		
82) bromofluorobenzene (s)	14.464	95	550022	100.37	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	200.74%#		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.775	59	321546	1050.49	ug/L #	100
3) Ethanol	5.555	45	466743	10204.72	ug/L	99
5) dichlorodifluoromethane	4.388	85	484826	116.27	ug/L	95
6) chloromethane	4.650	50	546668	107.01	ug/L	94
7) vinyl chloride	4.890	62	369002	80.03	ug/L	98
8) bromomethane	5.396	96	192798	169.42	ug/L	99
9) chloroethane	5.562	64	202535	92.55	ug/L	99
10) ethyl ether	6.428	59	298590	88.23	ug/L	93
11) acetonitrile	6.428	41	45145	80.97	ug/L	98
12) trichlorofluoromethane	6.198	101	612431	98.98	ug/L	98
13) freon-113	6.962	101	289946	110.83	ug/L	99
14) acrolein	6.195	56	161817	387.88	ug/L	99
15) 1,1-dichloroethene	6.785	96	261306	86.21	ug/L	89
16) acetone	6.329	58	54794	69.67	ug/L #	80
17) Methyl Acetate	6.955	43	243399	78.60	ug/L	96
18) methylene chloride	6.937	84	301121	83.45	ug/L	96
19) methyl tert butyl ether	7.701	73	816114	123.48	ug/L	97
20) acrylonitrile	6.842	53	128825	83.19	ug/L	97
21) allyl chloride	7.029	41	611548	99.00	ug/L	96
22) trans-1,2-dichloroethene	7.620	96	304835	91.00	ug/L	95
23) iodomethane	6.859	142	221764m	194.44	ug/L	
24) carbon disulfide	7.220	76	967448	106.36	ug/L	99
25) propionitrile	6.838	54	4877	140.10	ug/L	100
26) vinyl acetate	7.966	43	497804	115.54	ug/L	97
27) chloroprene	8.231	53	624373	106.79	ug/L	92
28) di-isopropyl ether	8.259	45	1480791	87.60	ug/L	97
29) methacrylonitrile	8.390	41	217812	89.52	ug/L	93
30) 2-butanone	8.274	72	36852	94.69	ug/L #	37
31) Hexane	8.245	41	588275	97.56	ug/L	97
32) 1,1-dichloroethane	7.874	63	746004	90.54	ug/L	97
33) tert-butyl ethyl ether	8.655	59	816527	192.21	ug/L	95
34) isobutyl alcohol	8.256	43	1152942	448.00	ug/L	96
35) 2,2-dichloropropane	8.730	77	561197	165.01	ug/L	99
36) cis-1,2-dichloroethene	8.443	96	350075	92.12	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90398.D
 Acq On : 18 Sep 2014 7:27 pm
 Operator : krystend
 Sample : IC3345-100
 Misc : ms32746,MSN3345,,,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 19 09:36:06 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:24:14 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.256	43	1152942	91.82	ug/L	94
38) bromochloromethane	8.609	128	156904	100.64	ug/L	90
39) chloroform	8.645	83	659697	87.90	ug/L	98
41) Tetrahydrofuran	8.974	42	98393	88.40	ug/L	93
42) 1,1,1-trichloroethane	9.391	97	642494	126.64	ug/L	98
44) Cyclohexane	9.674	56	783611	118.04	ug/L	97
45) carbon tetrachloride	9.755	117	548283	113.27	ug/L	100
46) 1,1-dichloropropene	9.564	75	486561	111.85	ug/L	98
47) benzene	9.790	78	1323933	86.02	ug/L	98
48) 1,2-dichloroethane	9.295	62	643920	89.67	ug/L	99
49) tert-amyl methyl ether	9.903	73	421873	152.49	ug/L	95
50) heptane	10.253	43	467240	117.09	ug/L	93
51) trichloroethene	10.405	95	397347	86.49	ug/L	95
52) 1,2-dichloropropane	10.377	63	430101	100.76	ug/L	100
53) dibromomethane	10.352	93	208342	94.74	ug/L	97
54) bromodichloromethane	10.462	83	555698	100.74	ug/L	97
55) Methylcyclohexane	10.922	83	577325	118.99	ug/L	99
56) 2-chloroethyl vinyl ether	10.377	63	430101	102.05	ug/L #	99
57) methyl methacrylate	10.547	69	196817	101.53	ug/L	82
58) 1,4-dioxane	10.561	88	13407	482.86	ug/L	91
59) cis-1,3-dichloropropene	11.077	75	571283	141.10	ug/L	99
61) 4-methyl-2-pentanone	11.165	43	375940	89.58	ug/L	95
62) toluene	11.855	92	837499	90.68	ug/L	97
63) trans-1,3-dichloropropene	11.494	75	480193	119.13	ug/L	98
64) 1,1,2-trichloroethane	11.667	83	252218	86.32	ug/L	98
65) ethyl methacrylate	11.865	69	380759	101.13	ug/L	92
67) tetrachloroethene	12.594	166	347962	94.15	ug/L	99
68) 1,3-dichloropropane	11.904	76	538093	101.37	ug/L	100
69) dibromochloromethane	12.194	129	384775	103.74	ug/L	96
70) 1,2-dibromoethane	12.449	107	296302	99.56	ug/L	99
71) 2-hexanone	12.021	43	319069	94.15	ug/L	95
72) chlorobenzene	13.273	112	902383	89.65	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	347623	97.55	ug/L	97
74) ethylbenzene	13.446	91	1757690	94.96	ug/L	99
75) m,p-xylene	13.630	106	1168212	173.36	ug/L	99
76) o-xylene	14.043	106	595192	89.16	ug/L	99
77) styrene	13.969	104	988231	109.36	ug/L	96
78) bromoform	13.799	173	224773	104.55	ug/L	97
79) trans-1,4-dichloro-2-b...	14.188	53	99706	130.20	ug/L #	81
81) isopropylbenzene	14.400	105	1637531	104.06	ug/L	100
83) bromobenzene	14.694	156	382890	102.86	ug/L	98
84) 1,1,2,2-tetrachloroethane	14.047	83	321843	69.20	ug/L	98
85) 1,2,3-trichloropropane	14.192	75	386362	99.24	ug/L	98
86) n-propylbenzene	14.846	91	2093154	103.62	ug/L	100
87) 2-chlorotoluene	14.969	91	1301367	100.74	ug/L	98
88) 4-chlorotoluene	15.044	91	1386623	101.98	ug/L	99
89) 1,3,5-trimethylbenzene	15.121	105	1510453	91.32	ug/L	100
90) tert-butylbenzene	15.429	91	980280	105.97	ug/L	99
91) 1,2,4-trimethylbenzene	15.535	105	1493723	91.05	ug/L	97
92) sec-butylbenzene	15.648	105	1876508	105.85	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90398.D
 Acq On : 18 Sep 2014 7:27 pm
 Operator : krystend
 Sample : IC3345-100
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 19 09:36:06 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:24:14 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.758	146	746124	87.23	ug/L	98
94) p-isopropyltoluene	15.818	119	1528773	102.85	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	688495	80.15	ug/L	99
96) 1,2-dichlorobenzene	16.193	146	712980	88.97	ug/L	98
97) n-butylbenzene	16.235	91	1615624	107.93	ug/L	99
98) 1,2-dibromo-3-chloropr...	16.666	75	60415	98.06	ug/L	97
99) 1,2,4-trichlorobenzene	18.017	180	333607	116.57	ug/L	97
100) 1,3,5-trichlorobenzene	17.476	180	472545	97.08	ug/L	99
101) hexachlorobutadiene	18.300	225	234892	96.02	ug/L	97
102) naphthalene	18.289	128	442762	151.42	ug/L	100
103) 1,2,3-trichlorobenzene	18.494	180	228474	123.32	ug/L	98
104) 2-methylnaphthalene	19.668	142	62659	50.25	ug/L #	100
105) 1-methylnaphthalene	19.915	142	45593	47.35	ug/L	99

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

(QT Reviewed)

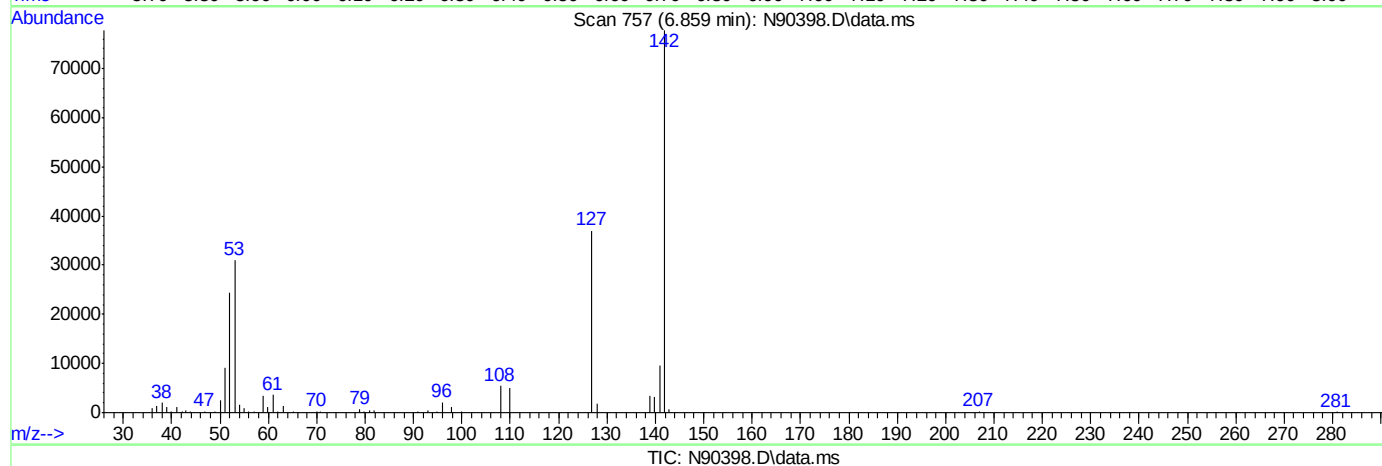
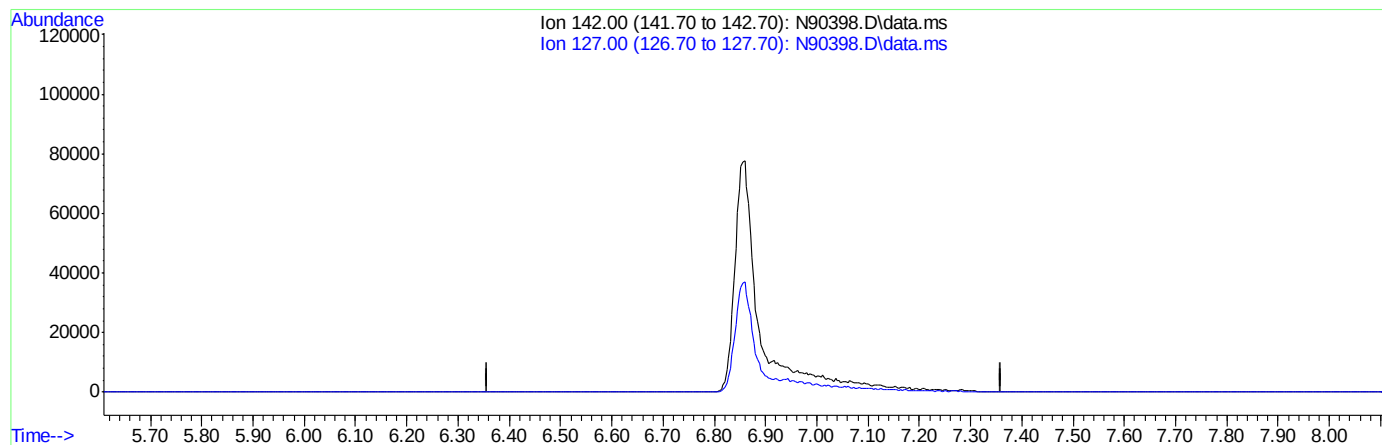
Quant Time: Sep 19 09:36:06 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:24:14 2014
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90398.D
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 19 09:24:29 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:24:14 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.859min (-6.859) 0.00ug/L

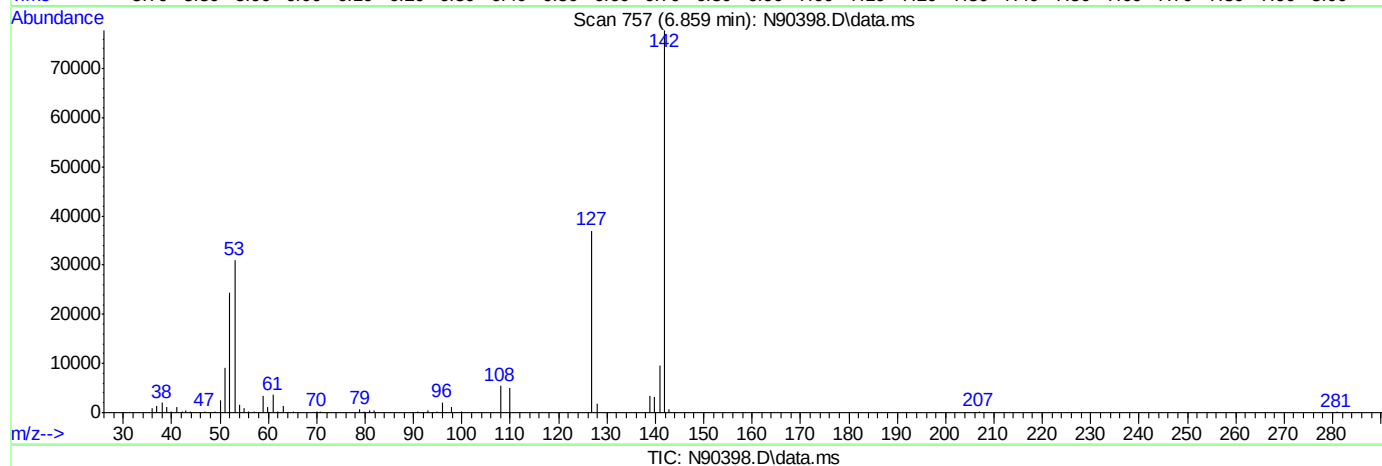
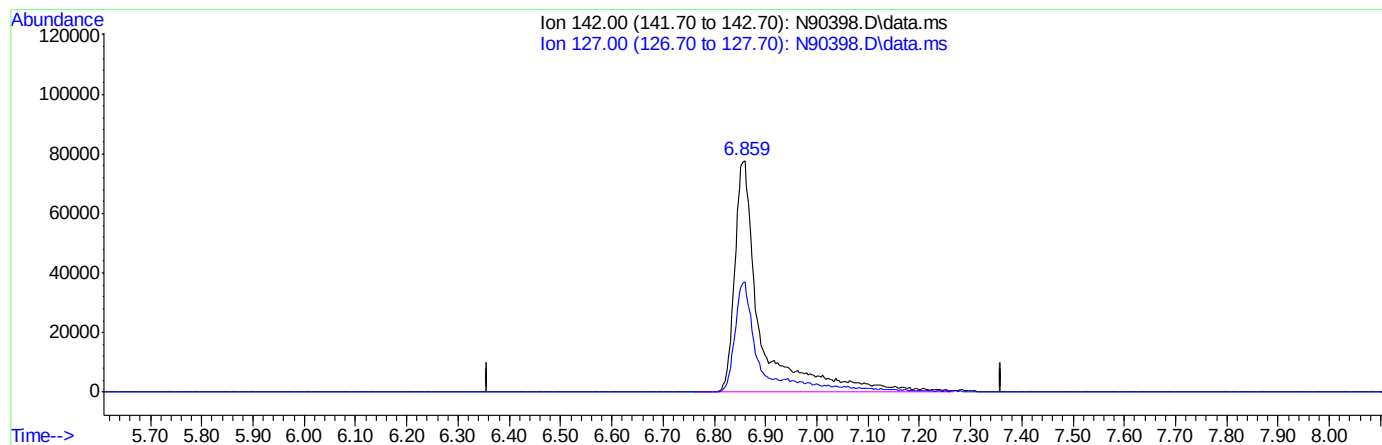
response 0

Ion	Exp%	Act%
142.00	100	0.00
127.00	47.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90398.D
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 19 09:24:29 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:24:14 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.859min (+0.000) 239.50ug/L m

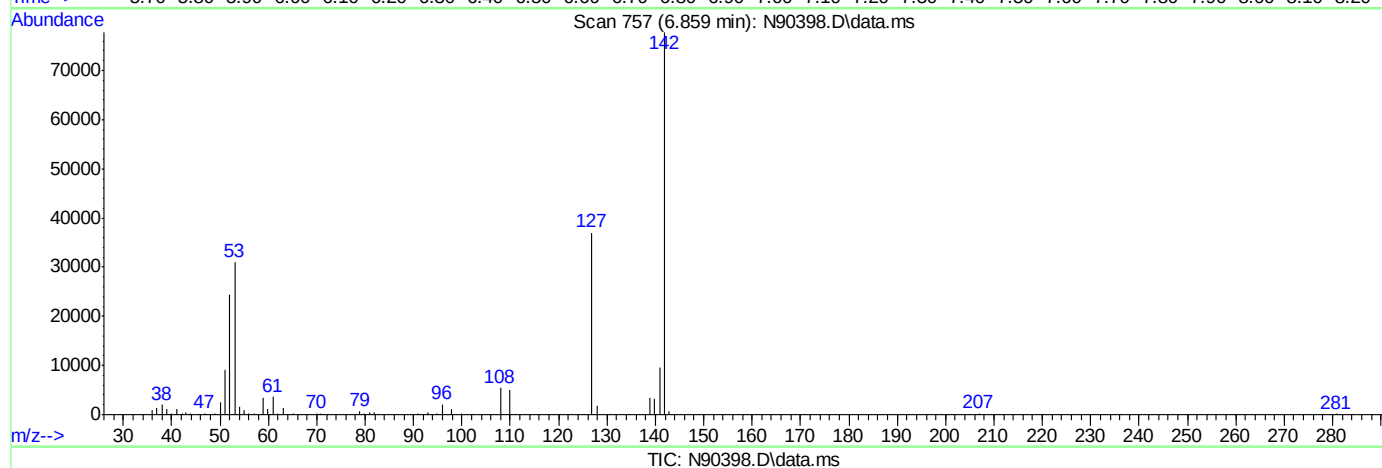
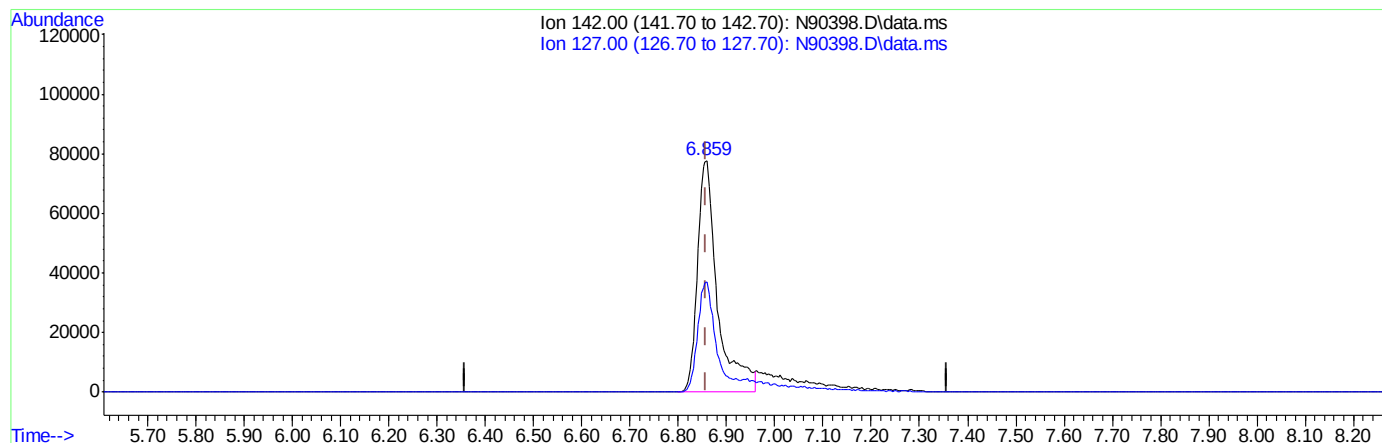
response 273157

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	47.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90398.D
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 19 09:24:47 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:24:14 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.859min (+0.000) 194.44ug/L m

response 221764

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	47.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90399.D
 Acq On : 18 Sep 2014 7:55 pm
 Operator : krystend
 Sample : IC3345-200
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 19 09:36:28 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:25:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.683	65	84015	500.00	ug/L	-0.01
4) pentafluorobenzene	9.115	168	355487	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	578959	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	310360	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	241599	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	743597	200.96	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	401.92%#		
60) toluene-d8 (s)	11.781	98	2673529	186.34	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	372.68%#		
82) bromofluorobenzene (s)	14.460	95	1164646	195.59	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	391.18%#		
Target Compounds						
2) tertiary butyl alcohol	6.771	59	602715	2020.64	ug/L	# 100
3) Ethanol	5.558	45	846290m	19082.31	ug/L	
5) dichlorodifluoromethane	4.388	85	970284	204.68	ug/L	96
6) chloromethane	4.650	50	1272600	222.46	ug/L	96
7) vinyl chloride	4.887	62	709805	143.16	ug/L	99
8) bromomethane	5.396	96	455659	324.24	ug/L	96
9) chloroethane	5.562	64	426436	178.27	ug/L	98
10) ethyl ether	6.428	59	639251	174.77	ug/L	94
11) acetonitrile	6.428	41	96008	161.73	ug/L	99
12) trichlorofluoromethane	6.202	101	1319586	192.97	ug/L	99
13) freon-113	6.965	101	650175	219.77	ug/L	98
14) acrolein	6.191	56	341330	773.89	ug/L	92
15) 1,1-dichloroethene	6.782	96	570550	173.48	ug/L	90
16) acetone	6.326	58	117334	143.50	ug/L	# 75
17) Methyl Acetate	6.955	43	483647	147.42	ug/L	96
18) methylene chloride	6.937	84	655037	168.66	ug/L	98
19) methyl tert butyl ether	7.701	73	1837835	243.07	ug/L	98
20) acrylonitrile	6.842	53	260284	157.14	ug/L	98
21) allyl chloride	7.026	41	1315057	192.72	ug/L	97
22) trans-1,2-dichloroethene	7.616	96	681775	186.28	ug/L	98
23) iodomethane	6.856	142	536598m	332.34	ug/L	
24) carbon disulfide	7.220	76	2196280	215.41	ug/L	99
25) propionitrile	6.842	54	10370	249.16	ug/L	100
26) vinyl acetate	7.962	43	1069138	217.44	ug/L	100
27) chloroprene	8.231	53	1341946	204.59	ug/L	94
28) di-isopropyl ether	8.259	45	2965340	161.83	ug/L	93
29) methacrylonitrile	8.390	41	468896	177.83	ug/L	95
30) 2-butanone	8.274	72	73236	171.83	ug/L	# 39
31) Hexane	8.249	41	1209556	182.12	ug/L	90
32) 1,1-dichloroethane	7.874	63	1651702	183.58	ug/L	97
33) tert-butyl ethyl ether	8.655	59	2152404	396.77	ug/L	95
34) isobutyl alcohol	8.259	43	2331503	835.87	ug/L	96
35) 2,2-dichloropropane	8.730	77	1265525	297.50	ug/L	99
36) cis-1,2-dichloroethene	8.440	96	786879	189.20	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90399.D
 Acq On : 18 Sep 2014 7:55 pm
 Operator : krystend
 Sample : IC3345-200
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 19 09:36:28 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:25:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.259	43	2336184	170.88	ug/L	91
38) bromochloromethane	8.609	128	336356	194.66	ug/L	95
39) chloroform	8.645	83	1427099	174.82	ug/L	97
41) Tetrahydrofuran	8.970	42	199285	165.61	ug/L	98
42) 1,1,1-trichloroethane	9.391	97	1409962	241.88	ug/L	99
44) Cyclohexane	9.673	56	1693487	214.06	ug/L	99
45) carbon tetrachloride	9.755	117	1210921	213.45	ug/L	98
46) 1,1-dichloropropene	9.567	75	1065050	207.92	ug/L	99
47) benzene	9.790	78	2841607	163.36	ug/L	99
48) 1,2-dichloroethane	9.295	62	1363371	167.53	ug/L	100
49) tert-amyl methyl ether	9.900	73	1224651	353.88	ug/L	96
50) heptane	10.253	43	1023267	215.57	ug/L	96
51) trichloroethene	10.409	95	851442	163.88	ug/L	97
52) 1,2-dichloropropane	10.377	63	896574	182.38	ug/L	100
53) dibromomethane	10.352	93	446422	178.04	ug/L	97
54) bromodichloromethane	10.462	83	1203112	189.42	ug/L	98
55) Methylcyclohexane	10.918	83	1267064	218.74	ug/L	99
56) 2-chloroethyl vinyl ether	10.377	63	896574	184.19	ug/L #	100
57) methyl methacrylate	10.547	69	411811	184.12	ug/L #	76
58) 1,4-dioxane	10.561	88	27286	860.26	ug/L	79
59) cis-1,3-dichloropropene	11.077	75	1260385	257.42	ug/L	99
61) 4-methyl-2-pentanone	11.165	43	771381	163.19	ug/L	96
62) toluene	11.851	92	1743267	166.32	ug/L	98
63) trans-1,3-dichloropropene	11.494	75	1061561	223.61	ug/L	99
64) 1,1,2-trichloroethane	11.667	83	526541	159.79	ug/L	98
65) ethyl methacrylate	11.862	69	754960	173.93	ug/L	98
67) tetrachloroethene	12.590	166	739689	177.29	ug/L	98
68) 1,3-dichloropropane	11.904	76	1132443	187.09	ug/L	100
69) dibromochloromethane	12.194	129	826797	195.12	ug/L	96
70) 1,2-dibromoethane	12.449	107	621384	183.74	ug/L	100
71) 2-hexanone	12.017	43	646866	169.84	ug/L	95
72) chlorobenzene	13.272	112	1947935	172.72	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	750738	185.90	ug/L	96
74) ethylbenzene	13.446	91	3755551	179.71	ug/L	98
75) m,p-xylene	13.629	106	2441778	324.04	ug/L	99
76) o-xylene	14.043	106	1245006	166.26	ug/L	99
77) styrene	13.972	104	2155006	205.86	ug/L	96
78) bromoform	13.799	173	486701	197.78	ug/L	99
79) trans-1,4-dichloro-2-b...	14.188	53	227506	246.37	ug/L #	70
81) isopropylbenzene	14.404	105	3470936	201.50	ug/L	99
83) bromobenzene	14.694	156	813544	200.14	ug/L	95
84) 1,1,2,2-tetrachloroethane	14.047	83	612897	126.23	ug/L	99
85) 1,2,3-trichloropropane	14.192	75	804171	190.52	ug/L	99
86) n-propylbenzene	14.846	91	4461050	201.92	ug/L	98
87) 2-chlorotoluene	14.969	91	2812983	200.25	ug/L	100
88) 4-chlorotoluene	15.044	91	2998397	202.29	ug/L	97
89) 1,3,5-trimethylbenzene	15.125	105	3166027	178.50	ug/L	99
90) tert-butylbenzene	15.429	91	2073714	204.02	ug/L	99
91) 1,2,4-trimethylbenzene	15.535	105	3132505	178.14	ug/L	98
92) sec-butylbenzene	15.648	105	3916792	201.13	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90399.D
 Acq On : 18 Sep 2014 7:55 pm
 Operator : krystend
 Sample : IC3345-200
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 19 09:36:28 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:25:33 2014
 Response via : Initial Calibration

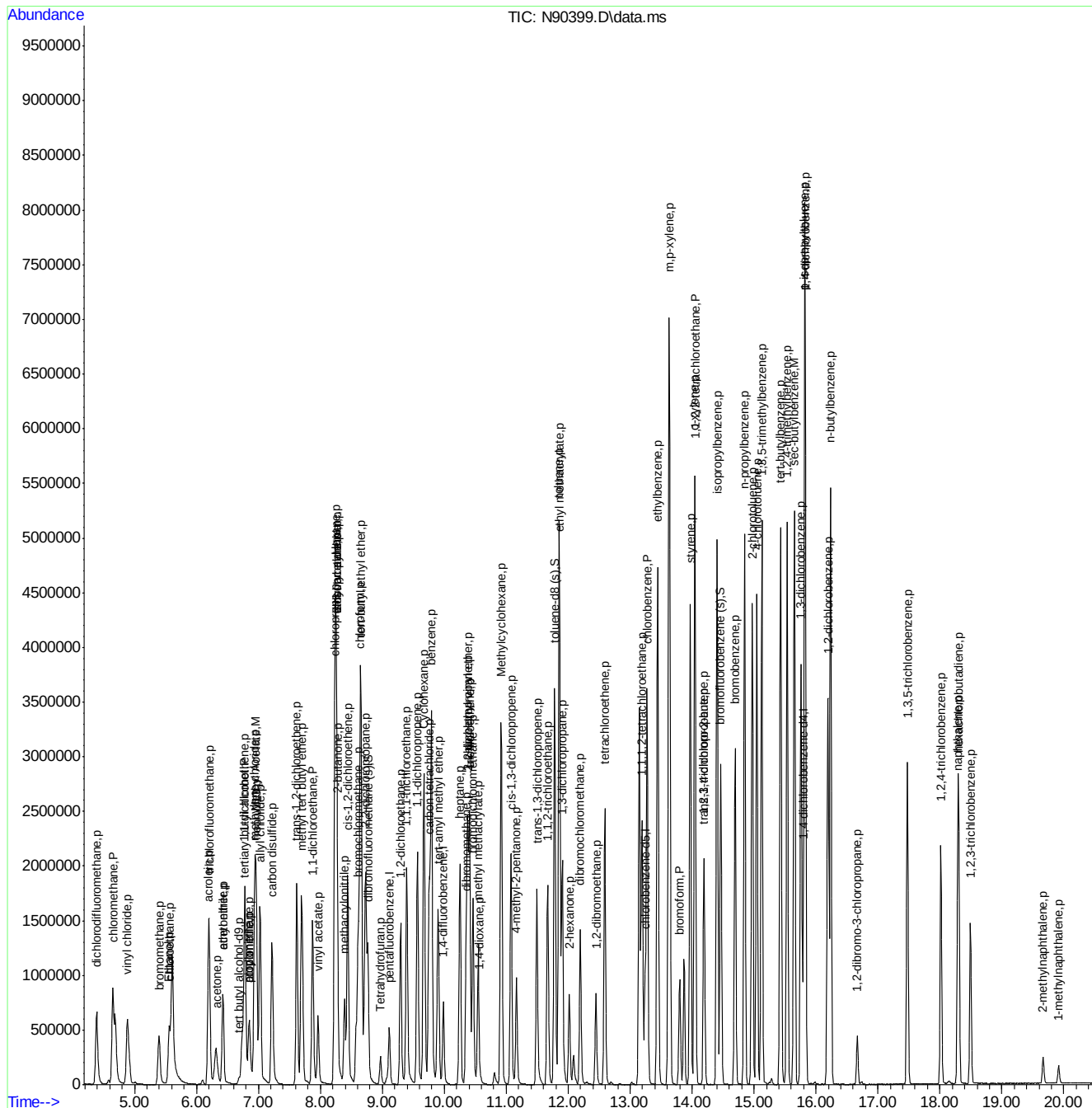
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.758	146	1576372	172.89	ug/L	99
94) p-isopropyltoluene	15.818	119	3137629	193.31	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	1404920	155.03	ug/L	98
96) 1,2-dichlorobenzene	16.193	146	1471866	171.87	ug/L	99
97) n-butylbenzene	16.235	91	3340819	202.33	ug/L	99
98) 1,2-dibromo-3-chloropr...	16.666	75	125191	187.88	ug/L	93
99) 1,2,4-trichlorobenzene	18.017	180	707934	220.51	ug/L	97
100) 1,3,5-trichlorobenzene	17.476	180	950650	180.92	ug/L	98
101) hexachlorobutadiene	18.303	225	488881	185.54	ug/L	99
102) naphthalene	18.289	128	1002390	286.27	ug/L	100
103) 1,2,3-trichlorobenzene	18.494	180	504633	239.67	ug/L	96
104) 2-methylnaphthalene	19.664	142	132620	97.85	ug/L #	100
105) 1-methylnaphthalene	19.919	142	95280	92.10	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90399.D
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 19 09:36:28 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:25:33 2014
Response via : Initial Calibration



n140918w.m Fri Sep 19 12:07:02 2014

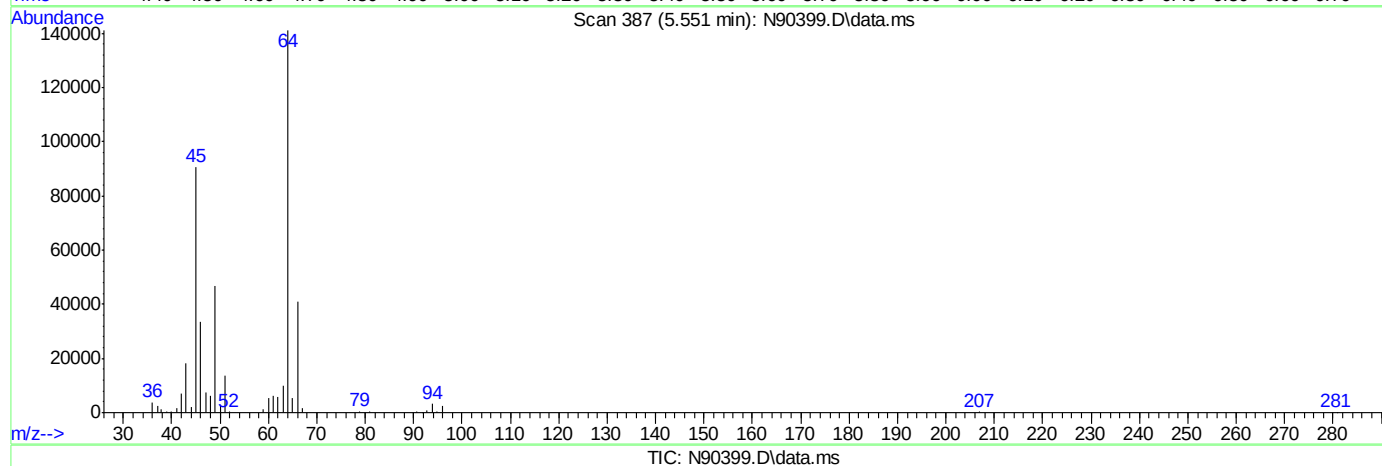
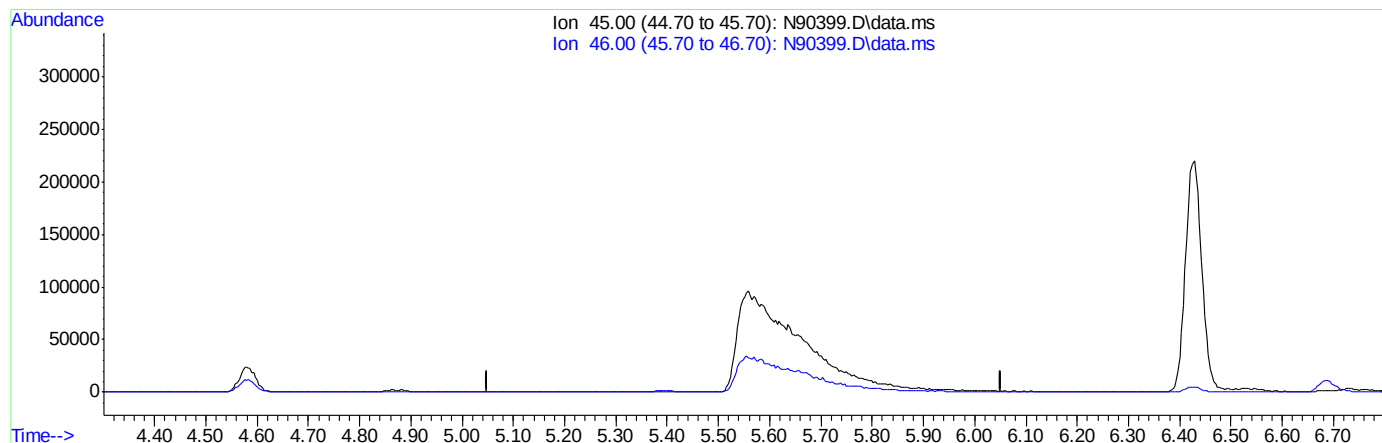
Page: 4

7.6.9

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90399.D
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 19 09:25:50 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:25:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.551min (-5.551) 0.00ug/L

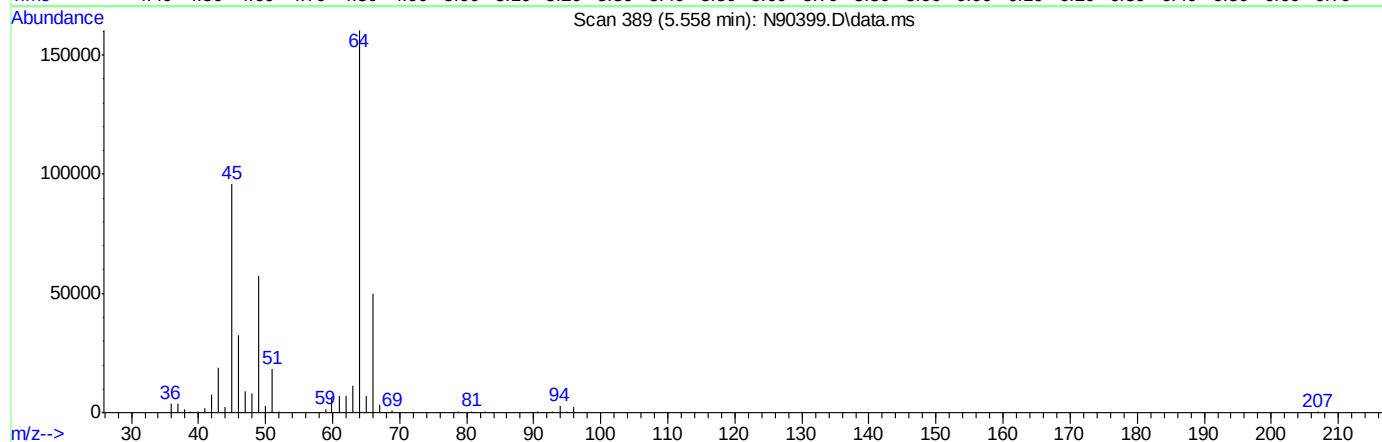
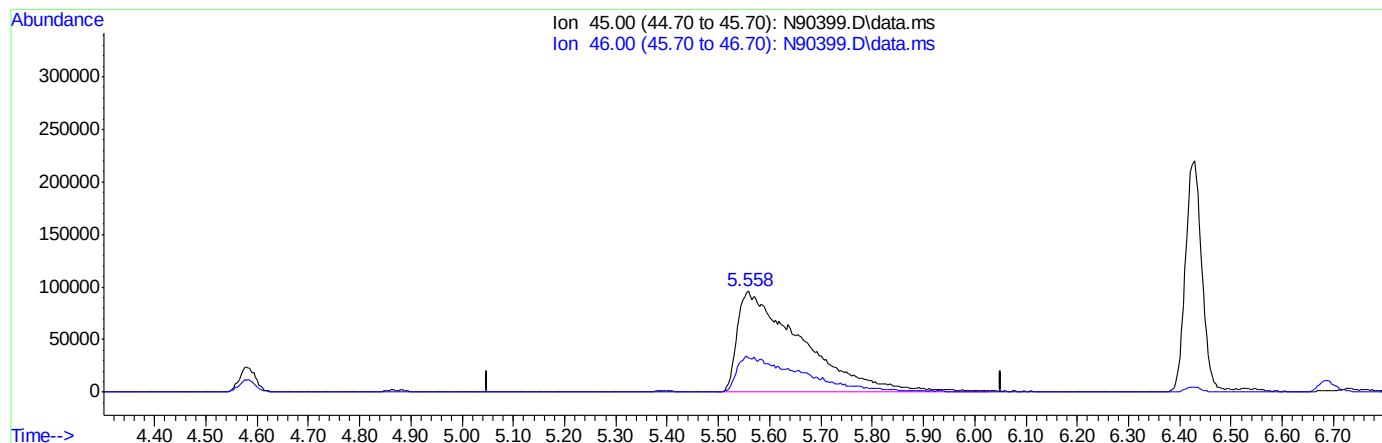
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90399.D
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 19 09:25:50 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:25:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.558min (+0.007) 19082.31ug/L m

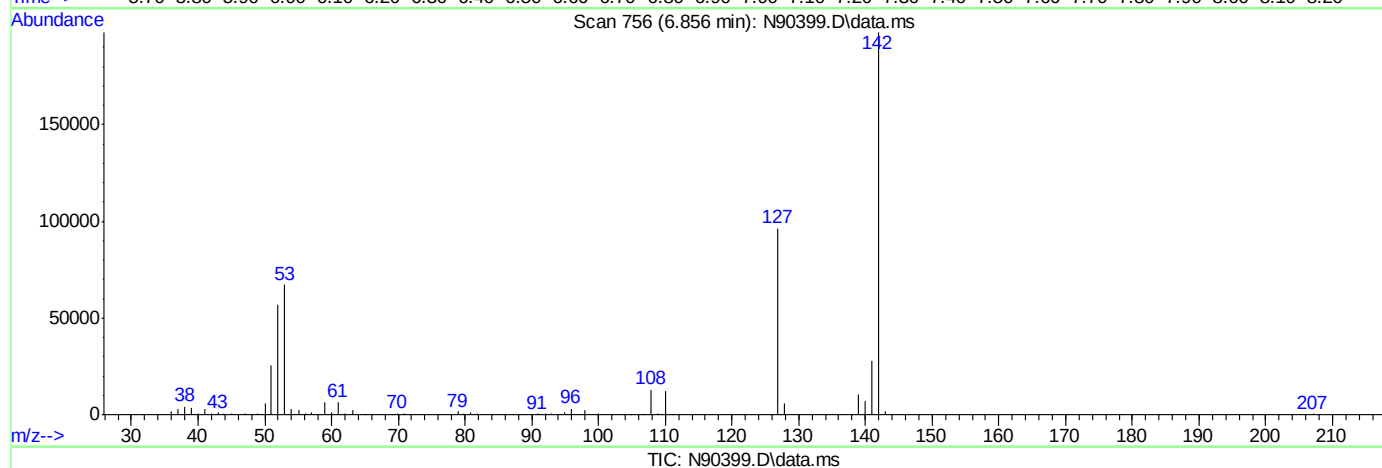
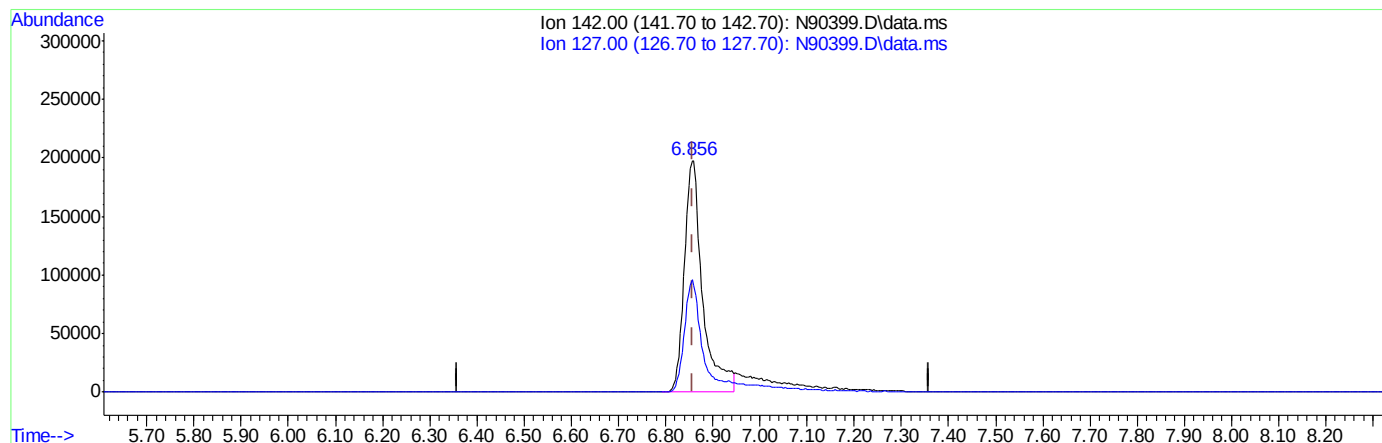
response 846290

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90399.D
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 19 09:25:59 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:25:33 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.856min (-0.003) 332.34ug/L m

response 536598

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	48.69
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90400.D
 Acq On : 18 Sep 2014 8:23 pm
 Operator : krystend
 Sample : IC3345-400
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:36:50 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:26:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.690	65	91817	500.00	ug/L	0.00
4) pentafluorobenzene	9.111	168	394186	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	630290	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	338772	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.800	152	244502	50.00	ug/L	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	1468431	357.60	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	715.20%#		
60) toluene-d8 (s)	11.784	98	5266774	341.06	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	682.12%#		
82) bromofluorobenzene (s)	14.467	95	2282447	380.16	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	760.32%#		

Target Compounds						Qvalue
2) tertiary butyl alcohol	6.775	59	1188886	3641.75	ug/L	# 100
3) Ethanol	5.576	45	1562443	32449.33	ug/L	99
5) dichlorodifluoromethane	4.388	85	1841997	349.25	ug/L	99
6) chloromethane	4.646	50	2312179	358.75	ug/L	97
7) vinyl chloride	4.880	62	1113616	210.01	ug/L	100
8) bromomethane	5.392	96	956856m	563.98	ug/L	
9) chloroethane	5.558	64	839384	321.44	ug/L	98
10) ethyl ether	6.428	59	1275138	321.15	ug/L	90
11) acetonitrile	6.432	41	185292	290.76	ug/L	99
12) trichlorofluoromethane	6.202	101	2554034	338.30	ug/L	98
13) freon-113	6.965	101	1229863	368.82	ug/L	96
14) acrolein	6.191	56	649467	1379.97	ug/L	100
15) 1,1-dichloroethene	6.785	96	1119679	312.20	ug/L	93
16) acetone	6.329	58	217918	252.22	ug/L	87
17) Methyl Acetate	6.958	43	877793	252.34	ug/L	97
18) methylene chloride	6.937	84	1319120	313.32	ug/L	97
19) methyl tert butyl ether	7.701	73	3774003	438.34	ug/L	99
20) acrylonitrile	6.842	53	533057	300.97	ug/L	100
21) allyl chloride	7.029	41	2438548	324.25	ug/L	100
22) trans-1,2-dichloroethene	7.619	96	1371526	340.86	ug/L	100
23) iodomethane	6.852	142	1014660m	482.90	ug/L	
24) carbon disulfide	7.220	76	4416422	385.68	ug/L	99
25) propionitrile	6.842	54	19665	409.33	ug/L	100
26) vinyl acetate	7.962	43	2230655	403.26	ug/L	99
27) chloroprene	8.235	53	2365560	324.00	ug/L	99
28) di-isopropyl ether	8.263	45	5102914	258.19	ug/L	93
29) methacrylonitrile	8.394	41	912486	317.97	ug/L	97
30) 2-butanone	8.281	72	136629	296.04	ug/L	# 93
31) Hexane	8.249	41	2043722	281.70	ug/L	96
32) 1,1-dichloroethane	7.878	63	3329344	337.18	ug/L	97
33) tert-butyl ethyl ether	8.659	59	4361829	635.76	ug/L	98
34) isobutyl alcohol	8.263	43	3986757	1325.23	ug/L	92
35) 2,2-dichloropropane	8.730	77	2456098	481.56	ug/L	99
36) cis-1,2-dichloroethene	8.443	96	1565191	341.69	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
 Data File : N90400.D
 Acq On : 18 Sep 2014 8:23 pm
 Operator : krystend
 Sample : IC3345-400
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:36:50 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 09:26:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.263	43	3986757	269.52	ug/L	94
38) bromochloromethane	8.613	128	587268	307.87	ug/L	98
39) chloroform	8.645	83	2692432	302.20	ug/L	97
41) Tetrahydrofuran	8.970	42	380248	293.37	ug/L	96
42) 1,1,1-trichloroethane	9.394	97	2698204	406.78	ug/L	99
44) Cyclohexane	9.673	56	3036585	348.49	ug/L	96
45) carbon tetrachloride	9.758	117	2263535	363.44	ug/L	99
46) 1,1-dichloropropene	9.567	75	2036048	362.72	ug/L	99
47) benzene	9.794	78	5492578	296.07	ug/L	99
48) 1,2-dichloroethane	9.299	62	2677170	308.44	ug/L	100
49) tert-amyl methyl ether	9.900	73	2916533	697.48	ug/L	99
50) heptane	10.253	43	1911708	365.19	ug/L	97
51) trichloroethene	10.409	95	1627935	293.72	ug/L	96
52) 1,2-dichloropropane	10.381	63	1669731	315.97	ug/L	99
53) dibromomethane	10.352	93	878959	327.13	ug/L	96
54) bromodichloromethane	10.465	83	2378054	346.20	ug/L	98
55) Methylcyclohexane	10.921	83	2373109	370.53	ug/L	93
56) 2-chloroethyl vinyl ether	10.381	63	1669731	319.29	ug/L #	99
57) methyl methacrylate	10.547	69	821385	341.86	ug/L	85
58) 1,4-dioxane	10.561	88	54498	1615.89	ug/L	80
59) cis-1,3-dichloropropene	11.077	75	2506516	455.70	ug/L	98
61) 4-methyl-2-pentanone	11.165	43	1512500	303.23	ug/L	98
62) toluene	11.855	92	3319976	297.20	ug/L	100
63) trans-1,3-dichloropropene	11.494	75	2170446	414.52	ug/L	98
64) 1,1,2-trichloroethane	11.671	83	1026098	293.41	ug/L	97
65) ethyl methacrylate	11.862	69	1439335	311.36	ug/L	86
67) tetrachloroethene	12.594	166	1458132	324.27	ug/L	98
68) 1,3-dichloropropane	11.908	76	2188787	334.89	ug/L	100
69) dibromochloromethane	12.198	129	1646207	356.88	ug/L	98
70) 1,2-dibromoethane	12.449	107	1226872	336.25	ug/L	100
71) 2-hexanone	12.017	43	1228361	303.08	ug/L	96
72) chlorobenzene	13.276	112	3807602	314.67	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	1503100	344.02	ug/L	95
74) ethylbenzene	13.446	91	7208304	320.07	ug/L	98
75) m,p-xylene	13.633	106	4628802	574.88	ug/L	88
76) o-xylene	14.043	106	2406472	300.03	ug/L	91
77) styrene	13.972	104	4206443	366.33	ug/L	98
78) bromoform	13.803	173	973399	362.89	ug/L	99
79) trans-1,4-dichloro-2-b...	14.192	53	473221	452.02	ug/L #	66
81) isopropylbenzene	14.404	105	6639975	380.42	ug/L	100
83) bromobenzene	14.697	156	1608930	391.07	ug/L	98
84) 1,1,2,2-tetrachloroethane	14.050	83	1129564	239.69	ug/L	98
85) 1,2,3-trichloropropane	14.195	75	1569124	370.26	ug/L	97
86) n-propylbenzene	14.849	91	8388125	374.57	ug/L	99
87) 2-chlorotoluene	14.973	91	5387353	378.87	ug/L	97
88) 4-chlorotoluene	15.047	91	5670780	377.32	ug/L	100
89) 1,3,5-trimethylbenzene	15.125	105	5971227	337.18	ug/L	97
90) tert-butylbenzene	15.429	91	3832246	371.31	ug/L	96
91) 1,2,4-trimethylbenzene	15.539	105	5924845	337.54	ug/L	98
92) sec-butylbenzene	15.655	105	7248458	367.45	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90400.D
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:36:50 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:26:59 2014
Response via : Initial Calibration

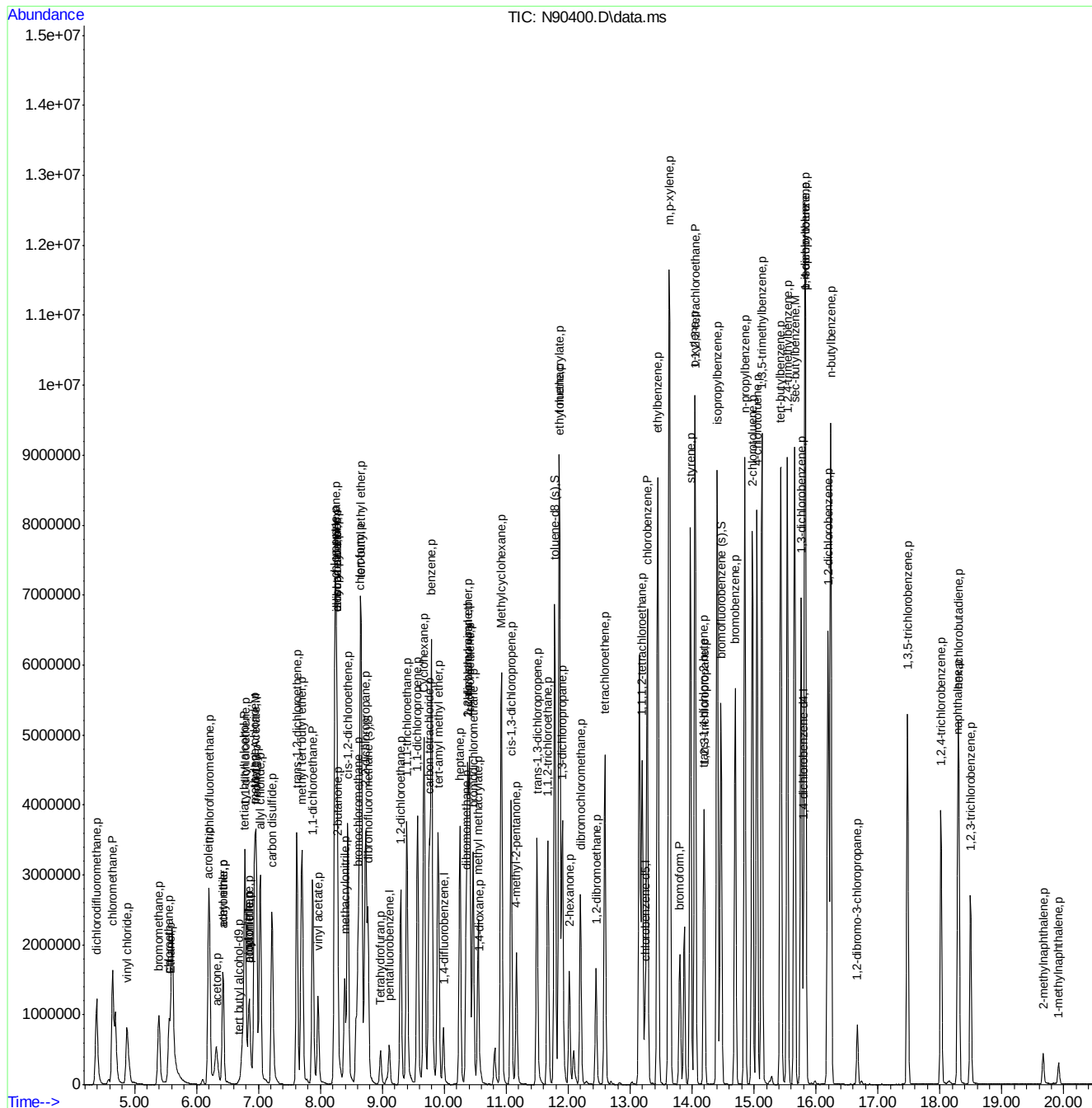
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.761	146	3047779	335.98	ug/L	98
94)	p-isopropyltoluene	15.821	119	5405618	330.92	ug/L	96
95)	1,4-dichlorobenzene	15.828	146	2607427	292.53	ug/L	96
96)	1,2-dichlorobenzene	16.193	146	2798884	328.73	ug/L	97
97)	n-butylbenzene	16.239	91	6092781	363.91	ug/L	99
98)	1,2-dibromo-3-chloropr...	16.666	75	247810	371.23	ug/L	95
99)	1,2,4-trichlorobenzene	18.017	180	1309025	396.13	ug/L	97
100)	1,3,5-trichlorobenzene	17.476	180	1751047	334.61	ug/L	98
101)	hexachlorobutadiene	18.303	225	921687	349.86	ug/L	99
102)	naphthalene	18.289	128	1942414	511.38	ug/L	100
103)	1,2,3-trichlorobenzene	18.494	180	926393	420.85	ug/L	90
104)	2-methylnaphthalene	19.668	142	246522	180.38	ug/L #	100
105)	1-methylnaphthalene	19.915	142	170161	164.70	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90400.D
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:36:50 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:26:59 2014
Response via : Initial Calibration



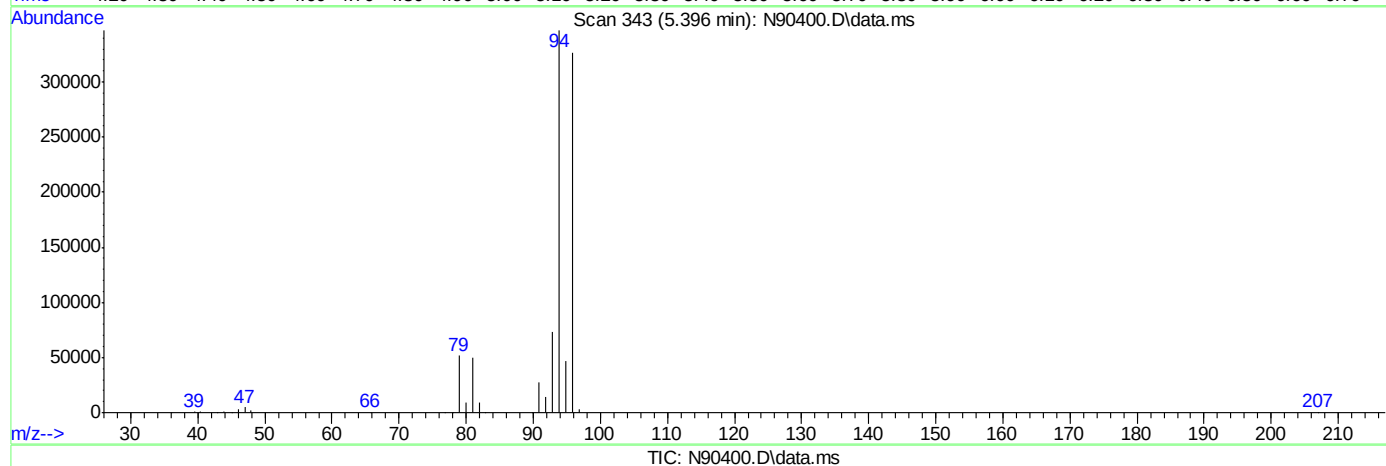
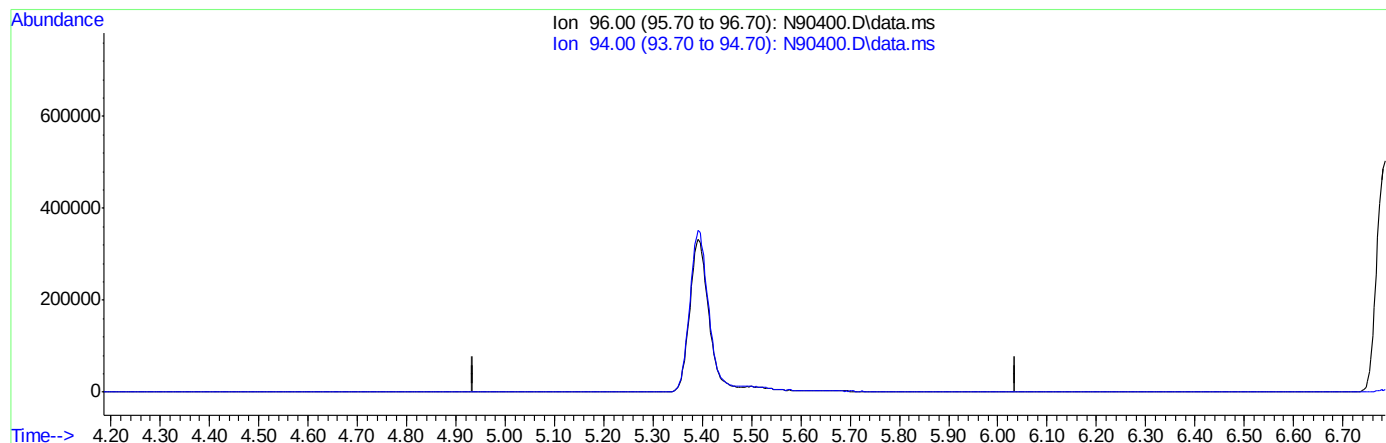
n140918w.m Fri Sep 19 12:07:06 2014

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90400.D
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:27:12 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:26:59 2014
Response via : Initial Calibration



(8) bromomethane (p)

5.396min (-5.396) 0.00ug/L

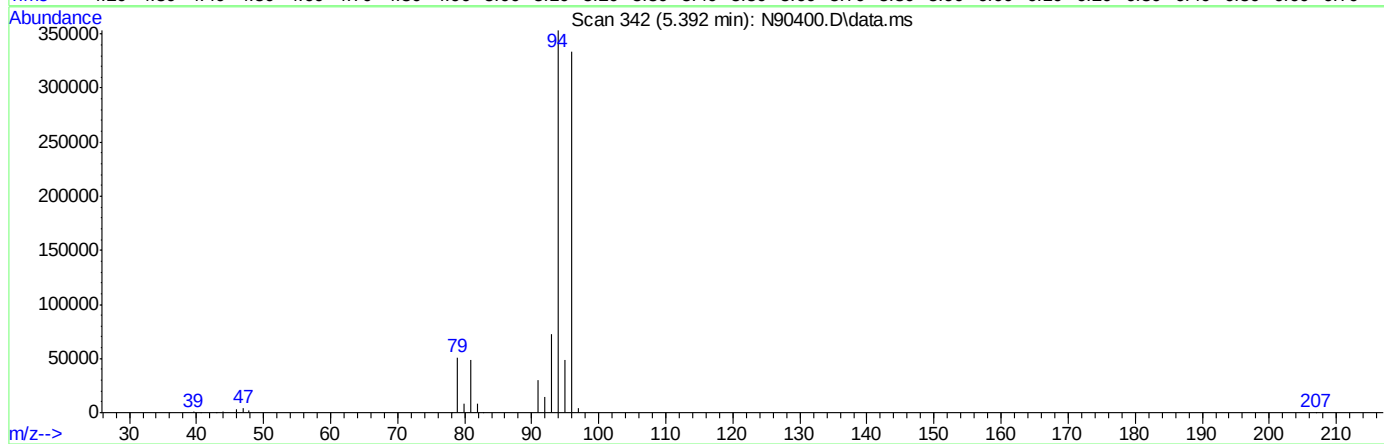
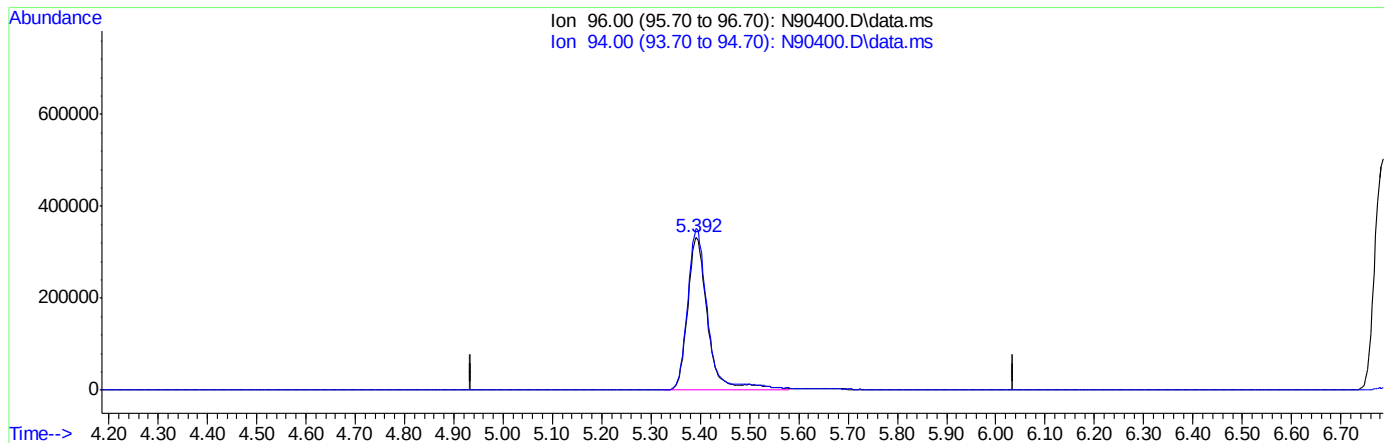
response 0

Ion	Exp%	Act%
96.00	100	0.00
94.00	103.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90400.D
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:27:12 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:26:59 2014
Response via : Initial Calibration



TIC: N90400.D\data.ms

(8) bromomethane (p)

5.392min (-0.004) 563.98ug/L m

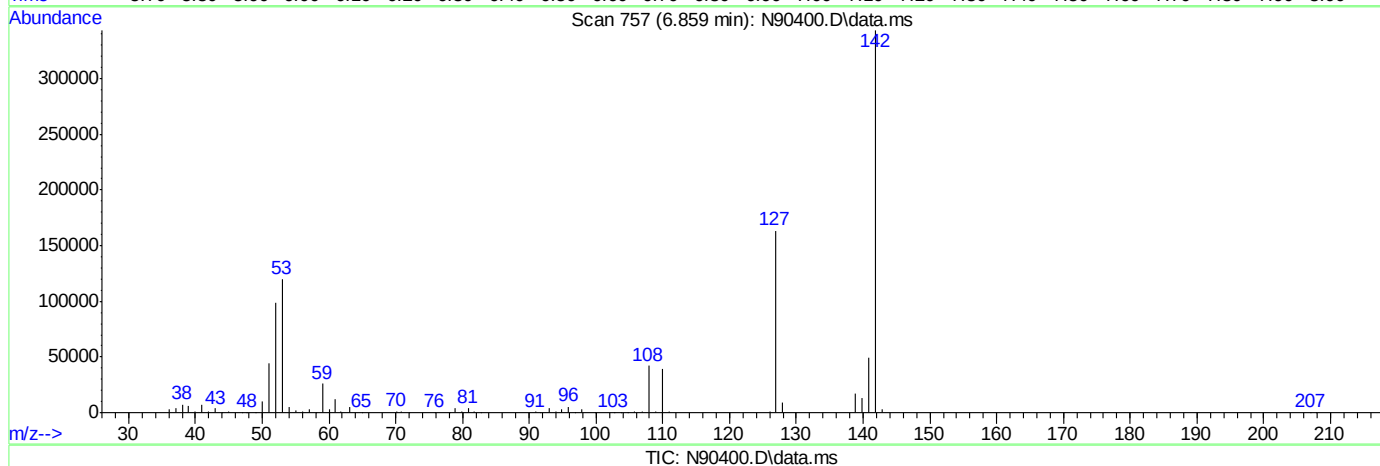
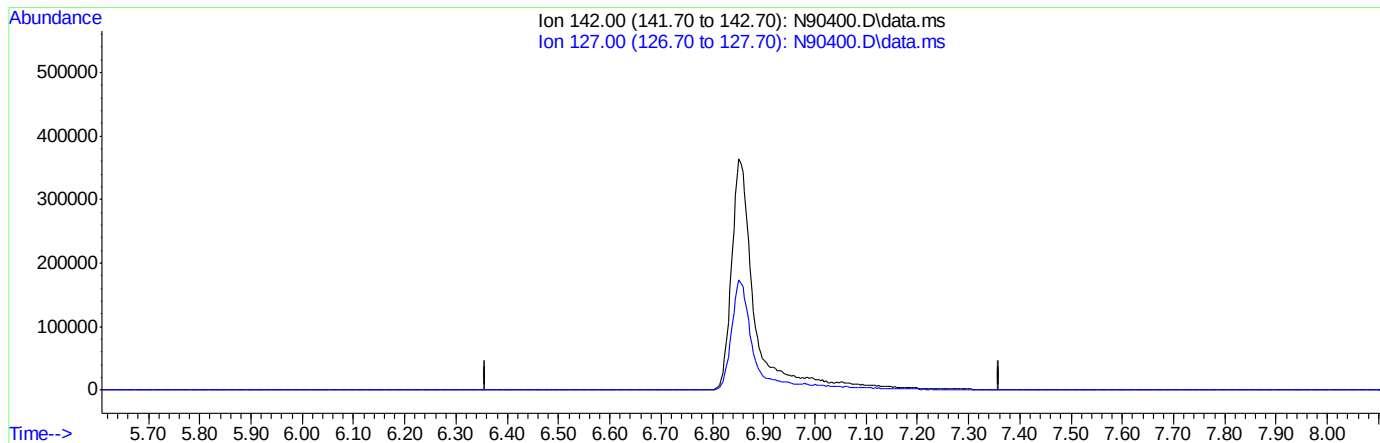
response 956856

Ion	Exp%	Act%
96.00	100	100
94.00	103.80	105.85
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90400.D
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:27:12 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:26:59 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.859min (-6.859) 0.00ug/L

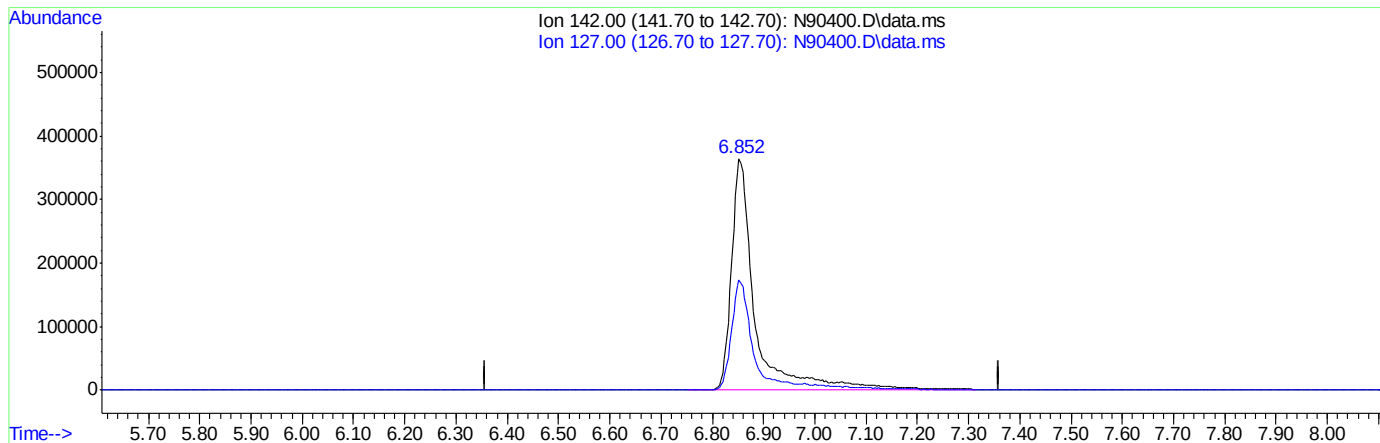
response 0

Ion	Exp%	Act%
142.00	100	0.00
127.00	47.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90400.D
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:27:12 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:26:59 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.852min (-0.007) 564.61ug/L m

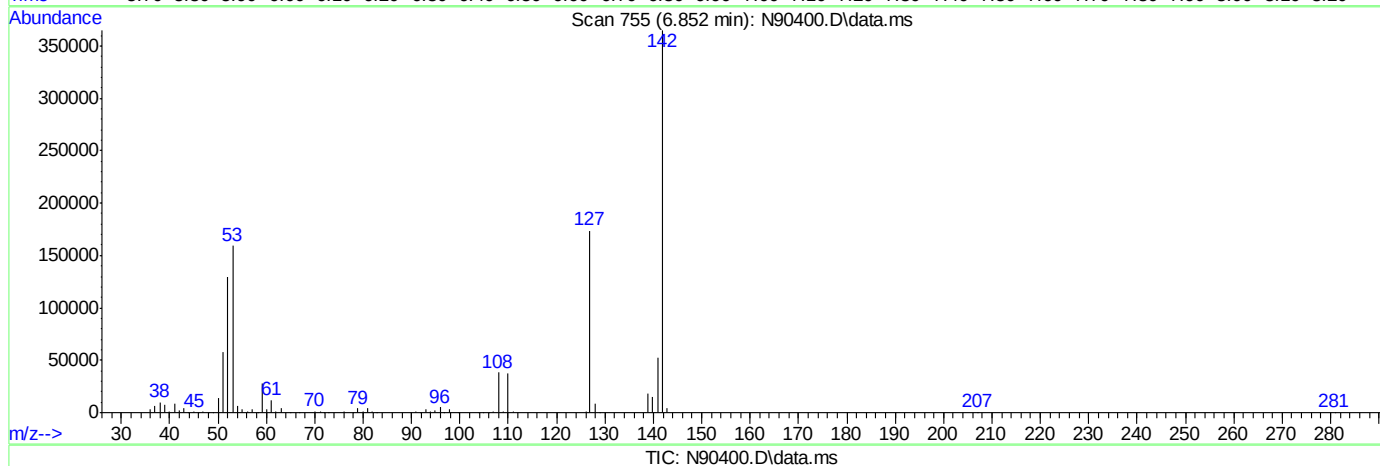
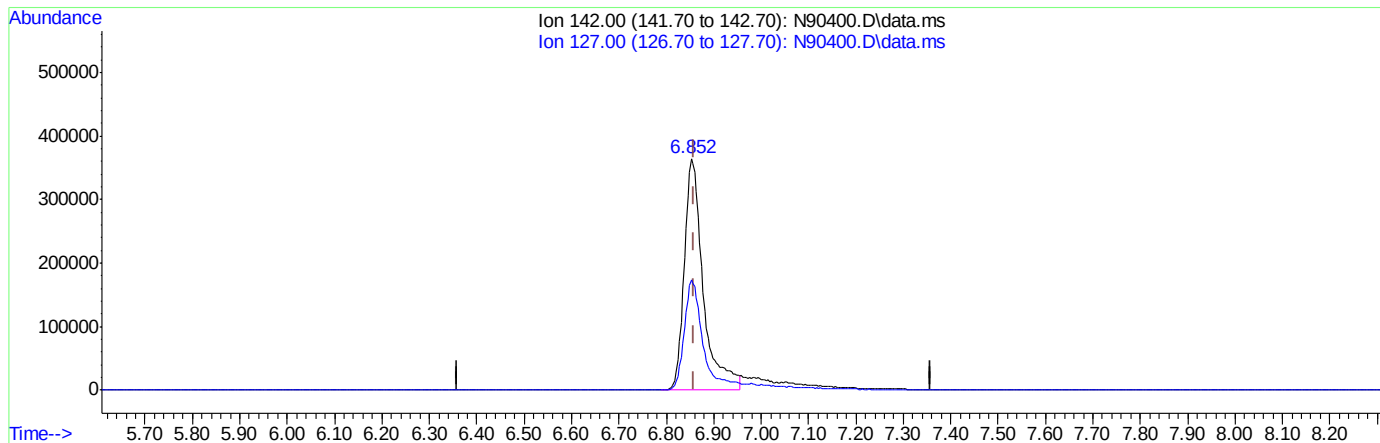
response 1186346

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	47.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140918\
Data File : N90400.D
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 19 09:28:16 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 09:26:59 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.852min (-0.007) 482.90ug/L m

response 1014660

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	47.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140919\
 Data File : N90407.D
 Acq On : 19 Sep 2014 1:04 pm
 Operator : krystend
 Sample : bs
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 15:24:39 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.697	65	109677	500.00	ug/L	0.00
4) pentafluorobenzene	9.115	168	303532	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	470411	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	255267	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.797	152	201040	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	151085	48.52	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.04%		
60) toluene-d8 (s)	11.781	98	592963	52.56	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.12%		
82) bromofluorobenzene (s)	14.464	95	233597	47.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.32%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.782	59	103894	269.44	ug/L	# 100
3) Ethanol	5.562	45	328301m	5845.90	ug/L	
5) dichlorodifluoromethane	4.392	85	256233	64.11	ug/L	97
6) chloromethane	4.657	50	247452	50.51	ug/L	98
7) vinyl chloride	4.897	62	196022	59.69	ug/L	94
8) bromomethane	5.399	96	77011	50.54	ug/L	98
9) chloroethane	5.562	64	117801	60.06	ug/L	95
10) ethyl ether	6.432	59	167151	56.26	ug/L	98
11) acetonitrile	6.432	41	27076	57.42	ug/L	96
12) trichlorofluoromethane	6.209	101	320581	55.87	ug/L	99
13) freon-113	6.962	101	130506	51.40	ug/L	99
14) acrolein	6.198	56	87506	252.65	ug/L	100
15) 1,1-dichloroethene	6.785	96	122707	52.87	ug/L	91
16) acetone	6.336	58	30439	43.60	ug/L	84
17) Methyl Acetate	6.962	43	183707	68.58	ug/L	# 92
18) methylene chloride	6.941	84	147063	46.63	ug/L	91
19) methyl tert butyl ether	7.705	73	409974	54.92	ug/L	98
20) acrylonitrile	6.845	53	67014	50.94	ug/L	94
21) allyl chloride	7.029	41	316359	56.15	ug/L	93
22) trans-1,2-dichloroethene	7.623	96	149104	48.93	ug/L	98
23) iodomethane	6.860	142	72383	38.45	ug/L	97
24) carbon disulfide	7.220	76	404653	46.13	ug/L	99
25) propionitrile	6.852	54	2476	56.23	ug/L	100
26) vinyl acetate	7.970	43	171062	40.11	ug/L	96
27) chloroprene	8.235	53	350980	64.17	ug/L	93
28) di-isopropyl ether	8.263	45	783247	53.85	ug/L	97
29) methacrylonitrile	8.394	41	109220	50.92	ug/L	93
30) 2-butanone	8.281	72	19790	57.83	ug/L	# 78
31) Hexane	8.249	41	287716	53.77	ug/L	86
32) 1,1-dichloroethane	7.878	63	382325	51.18	ug/L	99
33) tert-butyl ethyl ether	8.659	59	366503	46.99	ug/L	94
34) isobutyl alcohol	8.260	43	601650	272.88	ug/L	99
35) 2,2-dichloropropane	8.730	77	280369	58.65	ug/L	99
36) cis-1,2-dichloroethene	8.443	96	171953	49.55	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140919\
 Data File : N90407.D
 Acq On : 19 Sep 2014 1:04 pm
 Operator : krystend
 Sample : bs
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 15:24:39 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.260	43	601428	55.38	ug/L	98
38) bromochloromethane	8.613	128	75756	53.33	ug/L	90
39) chloroform	8.645	83	333542	49.98	ug/L	97
41) Tetrahydrofuran	8.974	42	50164	52.25	ug/L	95
42) 1,1,1-trichloroethane	9.394	97	303810	59.37	ug/L	100
44) Cyclohexane	9.670	56	359704	56.35	ug/L	97
45) carbon tetrachloride	9.755	117	256419	55.73	ug/L	95
46) 1,1-dichloropropene	9.568	75	242242	58.60	ug/L	98
47) benzene	9.794	78	648540	48.09	ug/L	100
48) 1,2-dichloroethane	9.295	62	323777	51.29	ug/L	99
49) tert-amyl methyl ether	9.903	73	197220	49.54	ug/L	95
50) heptane	10.253	43	213210	55.26	ug/L	91
51) trichloroethene	10.409	95	196165	48.72	ug/L	93
52) 1,2-dichloropropane	10.377	63	224809	58.54	ug/L	100
53) dibromomethane	10.356	93	104523	53.34	ug/L	96
54) bromodichloromethane	10.462	83	286031	56.64	ug/L	99
55) Methylcyclohexane	10.918	83	264884	56.00	ug/L	97
56) 2-chloroethyl vinyl ether	10.377	63	224809	59.31	ug/L #	99
57) methyl methacrylate	10.550	69	99350	56.58	ug/L #	79
58) 1,4-dioxane	10.561	88	3507	121.93	ug/L	81
59) cis-1,3-dichloropropene	11.077	75	288523	59.10	ug/L	99
61) 4-methyl-2-pentanone	11.169	43	195879	54.50	ug/L	93
62) toluene	11.855	92	405078	50.01	ug/L	96
63) trans-1,3-dichloropropene	11.494	75	246408	62.83	ug/L	99
64) 1,1,2-trichloroethane	11.668	83	134803	51.65	ug/L	99
65) ethyl methacrylate	11.862	69	178921	53.55	ug/L	91
67) tetrachloroethene	12.594	166	170304	51.23	ug/L	93
68) 1,3-dichloropropane	11.904	76	266851	55.47	ug/L	99
69) dibromochloromethane	12.194	129	193508	56.28	ug/L	95
70) 1,2-dibromoethane	12.449	107	147384	54.70	ug/L	98
71) 2-hexanone	12.021	43	167694	56.88	ug/L	96
72) chlorobenzene	13.276	112	435746	48.95	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	177699	54.83	ug/L	97
74) ethylbenzene	13.446	91	828883	49.95	ug/L	99
75) m,p-xylene	13.630	106	562899	92.78	ug/L	96
76) o-xylene	14.043	106	284187	48.23	ug/L	97
77) styrene	13.973	104	463567	54.23	ug/L	100
78) bromoform	13.799	173	110698	55.34	ug/L	97
79) trans-1,4-dichloro-2-b...	14.192	53	44319	50.55	ug/L	96
81) isopropylbenzene	14.404	105	744170	52.22	ug/L	99
83) bromobenzene	14.694	156	181227	53.74	ug/L	98
84) 1,1,2,2-tetrachloroethane	14.047	83	178255	57.87	ug/L	97
85) 1,2,3-trichloropropane	14.192	75	192325	55.79	ug/L	100
86) n-propylbenzene	14.846	91	969987	53.16	ug/L	100
87) 2-chlorotoluene	14.970	91	606503	52.27	ug/L	98
88) 4-chlorotoluene	15.044	91	635395	51.84	ug/L	98
89) 1,3,5-trimethylbenzene	15.122	105	664031	46.41	ug/L	100
90) tert-butylbenzene	15.429	91	438328	52.19	ug/L	98
91) 1,2,4-trimethylbenzene	15.535	105	697238	49.16	ug/L	99
92) sec-butylbenzene	15.648	105	840100	52.40	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140919\
 Data File : N90407.D
 Acq On : 19 Sep 2014 1:04 pm
 Operator : krystend
 Sample : bs
 Misc : ms32746,MSN3345,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 15:24:39 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.758	146	350072	54.07	ug/L	98
94) p-isopropyltoluene	15.822	119	696545	53.17	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	333567	57.93	ug/L	97
96) 1,2-dichlorobenzene	16.189	146	347482	57.49	ug/L	99
97) n-butylbenzene	16.235	91	740787	54.51	ug/L	99
98) 1,2-dibromo-3-chloropr...	16.663	75	33892	62.39	ug/L	89
99) 1,2,4-trichlorobenzene	18.017	180	162541	59.90	ug/L	98
100) 1,3,5-trichlorobenzene	17.473	180	231772	55.15	ug/L	99
101) hexachlorobutadiene	18.300	225	115864	54.46	ug/L	99
102) naphthalene	18.289	128	243260	62.85	ug/L	100
103) 1,2,3-trichlorobenzene	18.494	180	113975	58.20	ug/L	91
104) 2-methylnaphthalene	19.668	142	50146	45.26	ug/L #	100
105) 1-methylnaphthalene	19.915	142	37746	45.58	ug/L	95

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

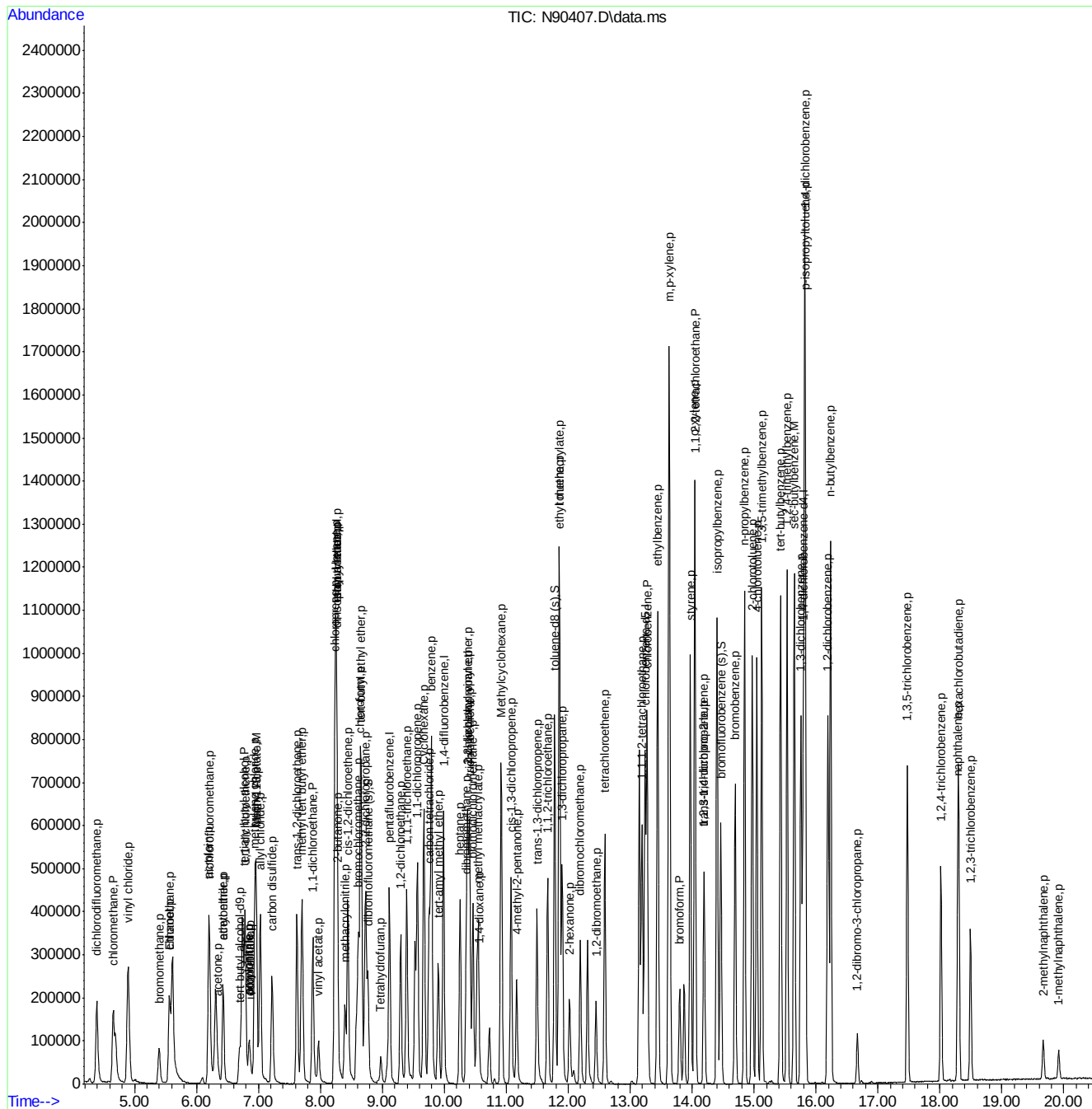
7.6.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140919\
Data File : N90407.D
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : bs
Misc : ms32746,MSN3345,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 15:24:39 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



n140918w.m Fri Sep 19 15:36:13 2014

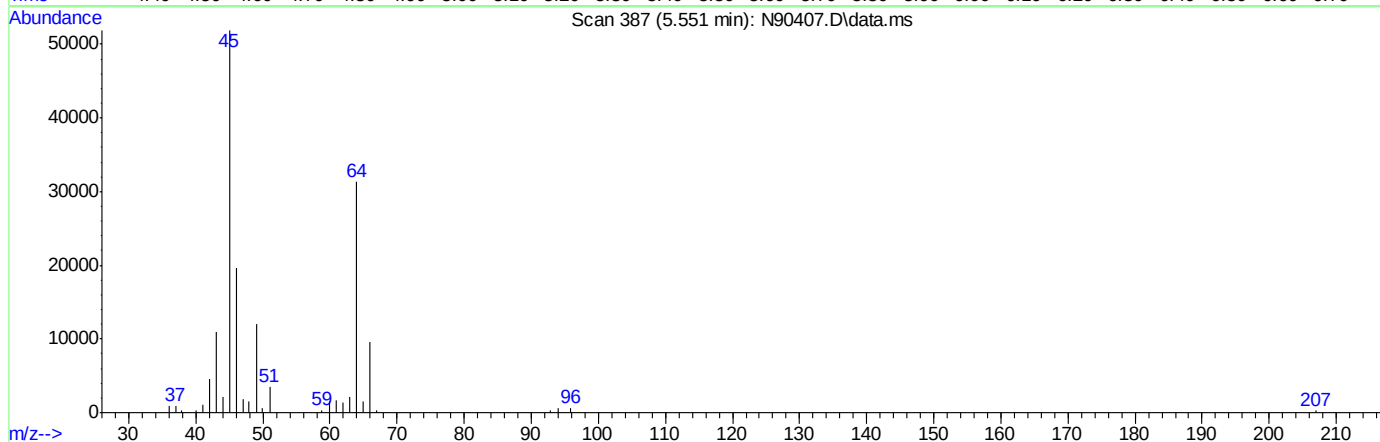
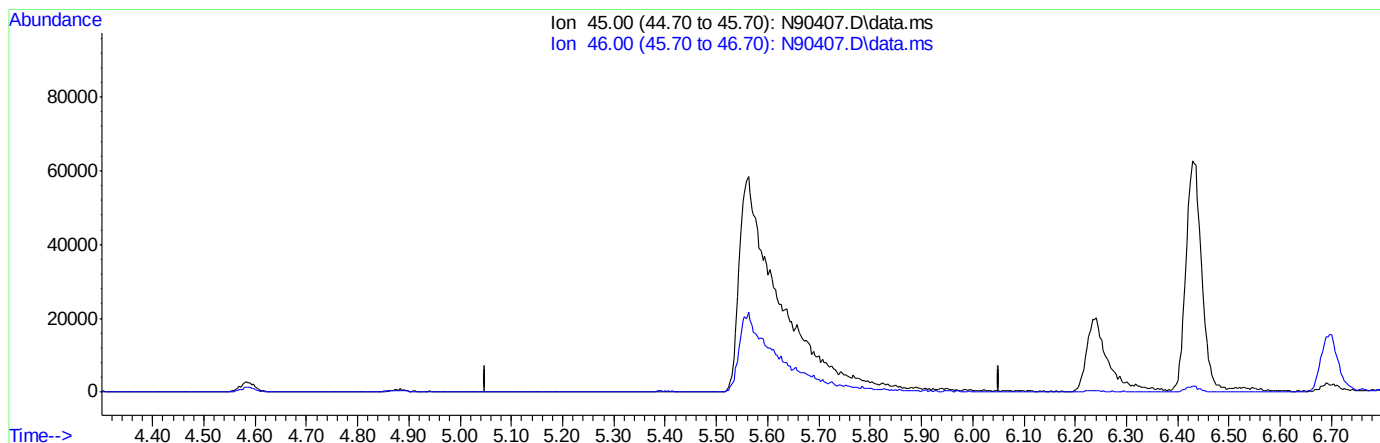
Page: 4

7.6.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140919\
Data File : N90407.D
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : bs
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 14:39:56 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.551min (-5.551) 0.00ug/L

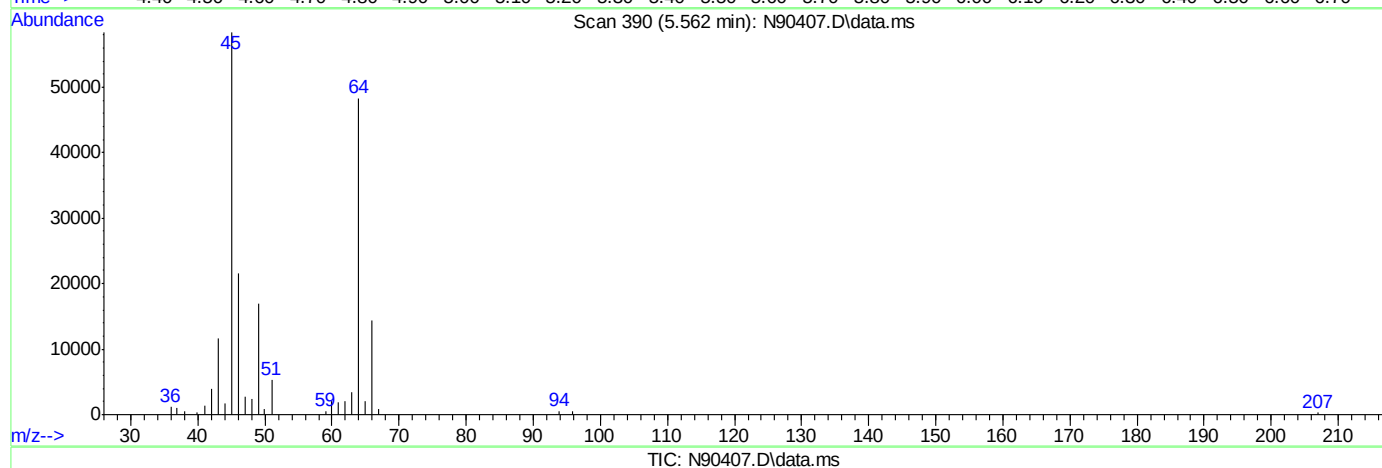
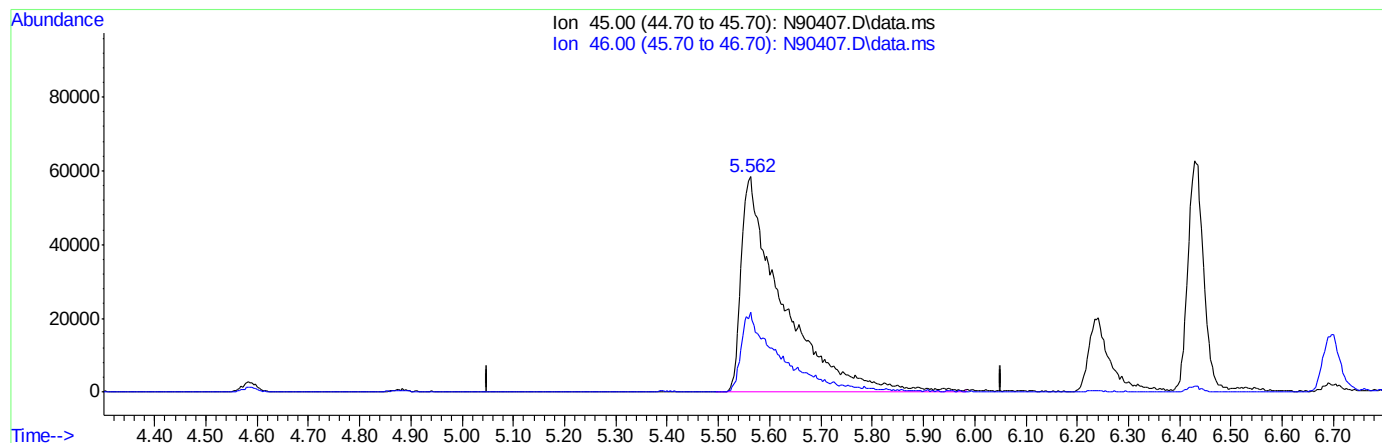
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N140919\
Data File : N90407.D
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : bs
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 19 14:39:56 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.562min (+0.011) 5845.90ug/L m

response 328301

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90681.D
 Acq On : 29 Sep 2014 8:26 am
 Operator : jaclynb
 Sample : cc3345-50
 Misc : ms32833,MSN3355,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 29 08:47:06 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.693	65	111912	500.00	ug/L	0.00
4) pentafluorobenzene	9.115	168	309070	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	478600	50.00	ug/L	0.00
66) chlorobenzene-d5	13.241	82	252687	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	209144	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	151546	47.79	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.58%		
60) toluene-d8 (s)	11.784	98	604452	52.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.32%		
82) bromofluorobenzene (s)	14.464	95	241308	47.32	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.64%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.782	59	208872	530.87	ug/L	# 100
3) Ethanol	5.562	45	325996	5688.93	ug/L	100
5) dichlorodifluoromethane	4.388	85	190004	46.69	ug/L	96
6) chloromethane	4.657	50	207816	41.66	ug/L	97
7) vinyl chloride	4.897	62	172097	51.31	ug/L	96
8) bromomethane	5.399	96	68424	44.74	ug/L	96
9) chloroethane	5.566	64	97630	48.88	ug/L	95
10) ethyl ether	6.432	59	146101	48.29	ug/L	94
12) trichlorofluoromethane	6.205	101	277824	47.54	ug/L	99
13) freon-113	6.962	101	140673	54.41	ug/L	99
14) acrolein	6.202	56	93842	266.09	ug/L	99
15) 1,1-dichloroethene	6.785	96	119464	50.51	ug/L	99
16) acetone	6.333	58	31197	43.88	ug/L	# 82
17) Methyl Acetate	6.962	43	134386	49.27	ug/L	# 91
18) methylene chloride	6.944	84	147185	45.83	ug/L	91
19) methyl tert butyl ether	7.704	73	341460	44.98	ug/L	97
20) acrylonitrile	6.849	53	73285	54.71	ug/L	92
21) allyl chloride	7.033	41	287237	50.07	ug/L	94
22) trans-1,2-dichloroethene	7.620	96	143643	46.29	ug/L	97
23) iodomethane	6.859	142	79858	41.42	ug/L	98
24) carbon disulfide	7.224	76	403464	45.17	ug/L	100
25) propionitrile	6.842	54	2230	50.13	ug/L	100
26) vinyl acetate	7.970	43	289028	66.56	ug/L	97
27) chloroprene	8.235	53	301030	54.05	ug/L	93
28) di-isopropyl ether	8.263	45	780455	52.70	ug/L	99
29) methacrylonitrile	8.397	41	106855	48.92	ug/L	95
30) 2-butanone	8.288	72	20489	58.80	ug/L	# 26
31) Hexane	8.245	41	297221	54.56	ug/L	99
32) 1,1-dichloroethane	7.878	63	357669	47.02	ug/L	96
33) tert-butyl ethyl ether	8.659	59	230517	30.22	ug/L	95
34) isobutyl alcohol	8.263	43	611010	272.16	ug/L	90
35) 2,2-dichloropropane	8.730	77	265724	54.86	ug/L	98
36) cis-1,2-dichloroethene	8.443	96	167336	47.36	ug/L	99
37) ethyl acetate	8.263	43	610748	55.23	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
 Data File : N90681.D
 Acq On : 29 Sep 2014 8:26 am
 Operator : jaclynb
 Sample : cc3345-50
 Misc : ms32833,MSN3355,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 29 08:47:06 2014
 Quant Method : C:\msdchem\1\methods\n140918w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Fri Sep 19 12:01:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.613	128	74554	51.54	ug/L	92
39) chloroform	8.645	83	323533	47.61	ug/L	100
41) Tetrahydrofuran	8.977	42	52918	54.13	ug/L	93
42) 1,1,1-trichloroethane	9.394	97	295021	56.62	ug/L	99
44) Cyclohexane	9.670	56	360630	55.53	ug/L	97
45) carbon tetrachloride	9.755	117	245314	52.40	ug/L	99
46) 1,1-dichloropropene	9.567	75	227038	53.98	ug/L	99
47) benzene	9.794	78	637089	46.43	ug/L	100
48) 1,2-dichloroethane	9.299	62	299217	46.58	ug/L	99
49) tert-amyl methyl ether	9.903	73	125017	32.16	ug/L	95
50) heptane	10.253	43	234464	59.73	ug/L	91
51) trichloroethene	10.409	95	190606	46.53	ug/L	97
52) 1,2-dichloropropane	10.374	63	218907	56.02	ug/L	100
53) dibromomethane	10.356	93	104734	52.53	ug/L	98
54) bromodichloromethane	10.462	83	263875	51.36	ug/L	97
55) Methylcyclohexane	10.918	83	282619	58.73	ug/L	98
56) 2-chloroethyl vinyl ether	10.374	63	218907	56.76	ug/L #	100
57) methyl methacrylate	10.550	69	98340	55.04	ug/L	82
58) 1,4-dioxane	10.561	88	7657	261.89	ug/L #	68
59) cis-1,3-dichloropropene	11.077	75	281124	56.62	ug/L	99
61) 4-methyl-2-pentanone	11.169	43	220961	60.43	ug/L	93
62) toluene	11.855	92	407533	49.46	ug/L	95
63) trans-1,3-dichloropropene	11.494	75	231498	58.01	ug/L	99
64) 1,1,2-trichloroethane	11.667	83	137388	51.74	ug/L	99
65) ethyl methacrylate	11.865	69	200705	59.05	ug/L	94
67) tetrachloroethene	12.590	166	172355	52.38	ug/L	98
68) 1,3-dichloropropane	11.904	76	273596	57.46	ug/L	100
69) dibromochloromethane	12.194	129	189539	55.69	ug/L	97
70) 1,2-dibromoethane	12.449	107	146288	54.85	ug/L	98
71) 2-hexanone	12.021	43	184860	63.34	ug/L	97
72) chlorobenzene	13.276	112	447549	50.79	ug/L	96
73) 1,1,1,2-tetrachloroethane	13.191	131	178210	55.55	ug/L	98
74) ethylbenzene	13.446	91	873811	53.20	ug/L	99
75) m,p-xylene	13.633	106	594738	99.03	ug/L	95
76) o-xylene	14.043	106	304643	52.23	ug/L	96
77) styrene	13.969	104	490281	57.94	ug/L	100
78) bromoform	13.799	173	116843	59.01	ug/L	99
79) trans-1,4-dichloro-2-b...	14.192	53	50780	58.14	ug/L	92
81) isopropylbenzene	14.404	105	813794	54.89	ug/L	99
83) bromobenzene	14.697	156	192740	54.94	ug/L	98
84) 1,1,2,2-tetrachloroethane	14.047	83	196750	62.37	ug/L	98
85) 1,2,3-trichloropropane	14.192	75	205882	57.40	ug/L	98
86) n-propylbenzene	14.846	91	1064017	56.05	ug/L	99
87) 2-chlorotoluene	14.969	91	647709	53.66	ug/L	96
88) 4-chlorotoluene	15.047	91	694491	54.46	ug/L	98
89) 1,3,5-trimethylbenzene	15.125	105	753128	50.60	ug/L	99
90) tert-butylbenzene	15.429	91	487635	55.81	ug/L	99
91) 1,2,4-trimethylbenzene	15.535	105	745134	50.50	ug/L	100
92) sec-butylbenzene	15.648	105	952328	57.10	ug/L	99
93) 1,3-dichlorobenzene	15.758	146	380663	56.55	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90681.D
Acq On : 29 Sep 2014 8:26 am
Operator : jaclynb
Sample : cc3345-50
Misc : ms32833,MSN3355,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 29 08:47:06 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration

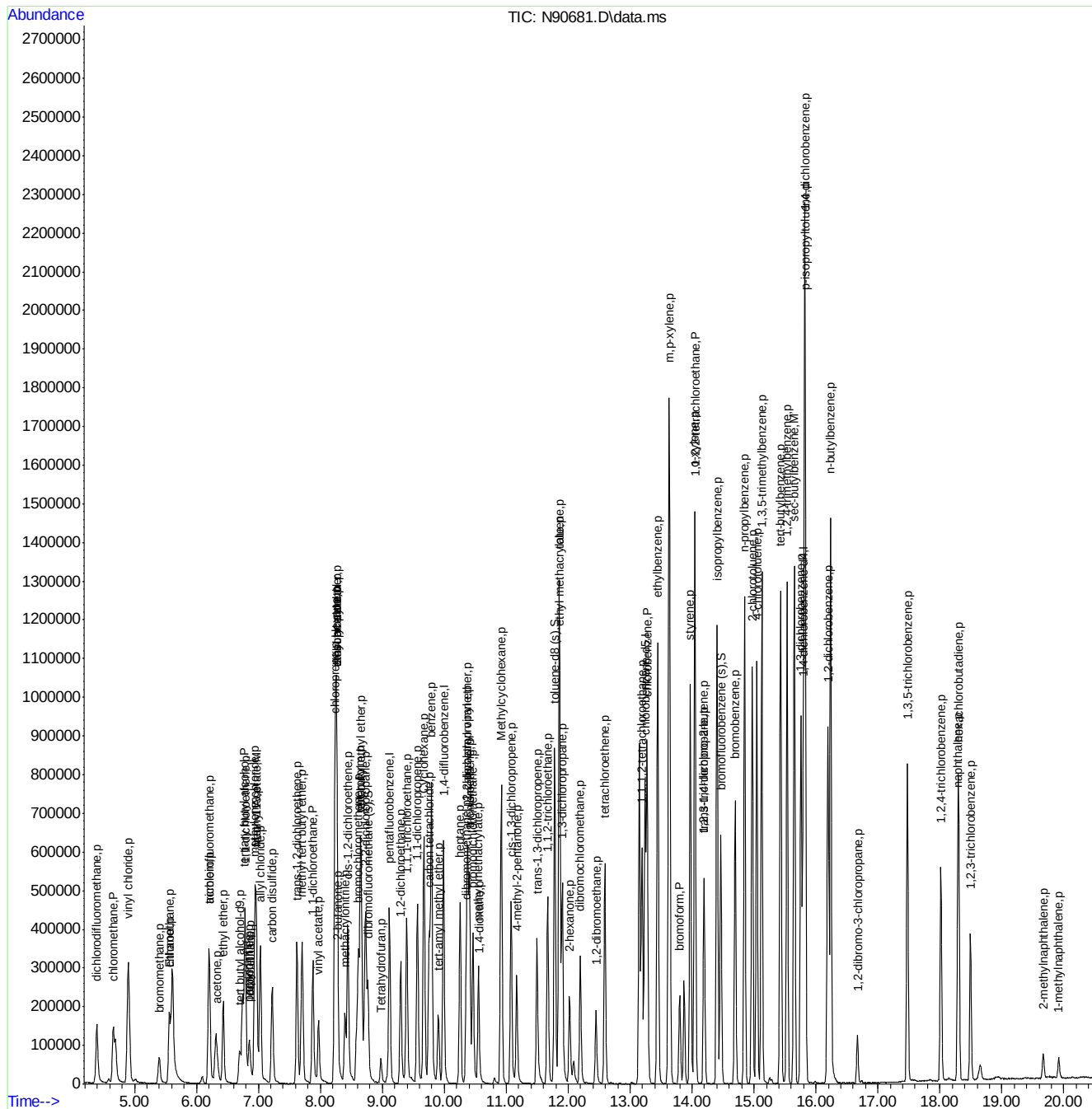
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	15.821	119	780666	57.28	ug/L	99
95) 1,4-dichlorobenzene	15.825	146	366677	61.28	ug/L	98
96) 1,2-dichlorobenzene	16.193	146	376294	59.87	ug/L	99
97) n-butylbenzene	16.235	91	845924	59.84	ug/L	98
98) 1,2-dibromo-3-chloropr...	16.670	75	34462	60.98	ug/L	95
99) 1,2,4-trichlorobenzene	18.017	180	176376	62.48	ug/L	97
100) 1,3,5-trichlorobenzene	17.476	180	254667	58.25	ug/L	99
101) hexachlorobutadiene	18.303	225	131170	59.27	ug/L	99
102) naphthalene	18.289	128	235426	58.74	ug/L	100
103) 1,2,3-trichlorobenzene	18.491	180	123774	60.68	ug/L	93
104) 2-methylnaphthalene	19.668	142	34933	30.31	ug/L #	100
105) 1-methylnaphthalene	19.915	142	26953	31.29	ug/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N140929\
Data File : N90681.D
Acq On : 29 Sep 2014 8:26 am
Operator : jaclynb
Sample : cc3345-50
Misc : ms32833,MSN3355,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 29 08:47:06 2014
Quant Method : C:\msdchem\1\methods\n140918w.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Sep 19 12:01:33 2014
Response via : Initial Calibration



n140918w.m Mon Sep 29 09:26:15 2014

Page: 4

7.6.12



Standards Data

Lot #	Description	Conc
MS9911	8260CC	200ug/mL
926	CCgas	200
910	BSU	200
904	BSgas	200
840	ISU	125
895	SS	200

Daily Saved File

Tune file 1: N90385
Tune file 2: NA
Initial Cal: 9/18/14
ID File: N140918W.M
ICAL Verified: KD
Sequence verified: KD

Date: 9/18/14

Batch ID: MSN3345

Analysts KD

Signature: *[Signature]*

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
N90385	bfb	NA	MS9895	Curve	15	W	5mL	NA	1:1	NA	✓✓
86	test 0.5	2,1	MS9911/926		16						OK
87	test 5	↓	↓		17						OK
88	test 400	↓	↓		18						OK
89	blank	NA	NA		19						-
90	blank	↓	↓		20						-
91	IC3345-0.52,1	MS9911/926			21						✓✓
92	-1				22						W
93	-2				23						✓✓
94	-5				24						✓✓
95	-10				25						✓✓
96	✓ -25				26						✓✓
97	IC3345-50				27						✓✓
98	IC3345-100				28						✓✓
99	↓ -200	↓	↓		29						✓✓
N90400	↓ -400	↓	↓		30						✓✓
01	Blank	NA	NA		31						ICC
02	↓	↓	↓		32						Stopped
03	ICV3345-50 2,2	MS9910/904			33						
04	↓	↓	↓		34						
05	Blank	NA	NA		35						
06	↓	↓	↓		36						

KD

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water

MS001-05 Date: 07/22/13

Review: *[Signature]*

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Standards Data

Lot #	Description	Conc
MS9911	8260CC	200ug/ml
926	CCgas	
910	BS	
904	BSgas	
905	IS+SS	125ug/ml

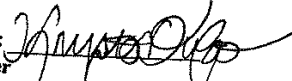
Daily Saved File

Tune file 1: N90407
Tune file 2: 9/18/14
Initial Cal: N140918W.M
ID File: (Tune file 2: NA)
ICAL Verified: KD
Sequence verified: GK

Date: 9/19/14

Batch ID: MSN3345

Analysts KD

Signature: 

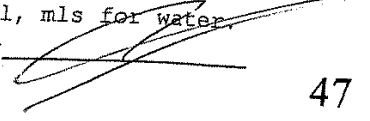
*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
N90406	blank	NA	NA	NA	15	NA	5mL	NA	1:1	NA	-
07	BS (CC)	2, 2	MS9910/904		16						ICV VV
08	BSD	↓	↓		17						-
09	ibik	NA	NA		18						-
10	mb	↓	↓		19	↓					VV
11	MC33464-9	2	MS32776	RCP	20	WTB				42	VV
12	MC33644-8	1			21	↓					VV
13	MC33645-1	1			22	↓					VV
14	MC33644-1	11			23	GW					VV
15	-4	10			24						VV
16	-5	12			25						VV
17	-7	12			26						VV
18	-3	9			27		↓		↓		VV
19	-2	11			28		500mL		1:10		RR1:5 od11
20	MC33645-2	1			29		↓		↓		RR1:1 od11
21	-4	2			30						RR1:2 od11
22	MC33464-1	2			31		5mL		1:1		VV
23	-2	2			32						VV
24	-3	2			33						VV
25	-4	1			34						VV
26	-5	2			35						VV
27	-6	2			36						VV
28	-7	1			37						VV
29	-8	1			38						VV
30	MC33646-1	6			39	↓					VV
31	BLANK	NA	NA	NA	40	NA				↓	VV
32					41					NA	-
33					42						-
34					43						-
35					44						-
36					45						-

= Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

1-05 Date: 07/22/13

Review: 

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VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Daily Saved File

Lot #	Description	Conc
MS9911	8260 CC	200ug/ml
926	cc gas	
910	bs	
904	bs gas	
929	TS/STC	125ug/ml

Tune file 1:	N90681
Tune file 2:	N/A
Initial Cal:	9/18/14
ID File:	N140918
ICAL Verified:	KD
Sequence verified:	MY

Date: 9/29/14

Batch ID: MSN3355

Analysts: J8B

Signature: J8B

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

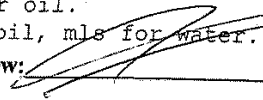
pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
N90680	1b1K	N/A	N/A	8260	15	N/A	5mL	N/A	1:1	N/A	✓
681	CC3345-50	2,1	MSM11 2 MS9926 1		16						bfbw
682	bs	3,2	MS9910 3 MS9904 2		17						✓
683	bsd	1			18						✓
684	1b1K	N/A	N/A		19						✓
685	mb	1			20						✓
686	MC3377-15	2	MS33835 4/14 MS33835 7/6 STD, MTB		21	WTB				<2	✓
687	-1	2	MS33835		22	SLW					✓
688	-2	3			23						✓
689	-3	1			24						✓
690	-4	1			25						✓
691	-5	3			26						✓
692	-6	2			27						✓
693	-7	1			28						✓
694	-8	1			29						✓
695	-9	2			30						✓
696	-10	2			31						✓
697	-11	2			32						✓
698	-12	1			33						✓
699	-13	1			34						✓
700	-14	2			35					72	✓
701	MC33826-2	4	MS33833	STAR	36		500ul		1:10		✓
702	MC33874-1	2		BTXMN	37		1		1		✓
703	-2	3			38		250ul		1:20		✓
704	-3	4			39		1mL		1:5		✓
705	MC3377-1ms	2	MS33835	STD, MTB	40						✓
706	-1mad	2			41						✓

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: 

7



01/05/15

Technical Report for

Stantec Consulting Corporation

LMC - Utica West Lot

Accutest Job Number: MC36014

Sampling Date: 12/17/14

Report to:

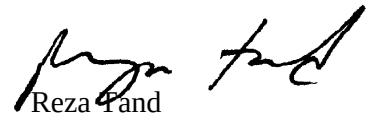
Stantec Consulting Corporation
61 Commercial Street
Rochester, NY 14614
bob.mahoney@stantec.com

ATTN: Bob Mahoney

Total number of pages in report: **256**



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


Reza Fand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

Stantec Consulting Corporation

Job No: MC36014

LMC - Utica West Lot

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC36014-1	12/17/14	11:30 BH	12/19/14	AQ	Ground Water	MW-1(DOT)
MC36014-2	12/17/14	12:15 BH	12/19/14	AQ	Ground Water	MW-1
MC36014-3	12/17/14	13:00 BH	12/19/14	AQ	Ground Water	MW-5
MC36014-4	12/17/14	13:50 BH	12/19/14	AQ	Ground Water	MW-22
MC36014-5	12/17/14	13:45 BH	12/19/14	AQ	Ground Water	MW-23
MC36014-6	12/17/14	12:45 BH	12/19/14	AQ	Ground Water	MW-24
MC36014-7	12/17/14	12:00 BH	12/19/14	AQ	Ground Water	MW-B
MC36014-8	12/17/14	13:30 BH	12/19/14	AQ	Ground Water	MW-D
MC36014-9	12/17/14	13:15 BH	12/19/14	AQ	Ground Water	MW-E
MC36014-10	12/17/14	14:00 BH	12/19/14	AQ	Ground Water	MW-F
MC36014-11	12/17/14	12:30 BH	12/19/14	AQ	Ground Water	PW-1
MC36014-12	12/17/14	14:15 BH	12/19/14	AQ	Ground Water	PZ-1
MC36014-13	12/17/14	14:30 BH	12/19/14	AQ	Ground Water	PZ-2



Sample Summary
(continued)

Stantec Consulting Corporation
LMC - Utica West Lot

Job No: MC36014

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC36014-14	12/17/14	12:05 BH	12/19/14	AQ	Ground Water	FIELD DUPLICATE
MC36014-15	12/17/14	00:00 BH	12/19/14	AQ	Trip Blank Water	TRIP BLANK



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Stantec Consulting Corporation

Job No MC36014

Site: LMC - Utica West Lot

Report Date 1/5/2015 10:18:15 AM

14 Sample(s) and 1 Trip Blank(s) were collected on 12/17/2014 and were received at Accutest on 12/19/2014 properly preserved, at 1.6 Deg. C and intact. These Samples received an Accutest job number of MC36014. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix AQ

Batch ID: MSN3454

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC36014-1MS, MC36014-1MSD were used as the QC samples indicated.
- MC36014-8 for Tert Butyl Alcohol-D9: Outside control limits. Target analytes not associated with this internal standard.
- MSN3454-BS Recovery(s) for Carbon disulfide are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for 4-Methyl-2-pentanone (MIBK) are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for 4-Methyl-2-pentanone (MIBK), Acetone, Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- MSN3454-BS for Vinyl Acetate: Outside control limits. Associated samples are non-detect for this compound.
- Continuing calibration check standard MSN3454-CC3452 for vinyl acetate exceed 40% Difference (response bias high). Associated samples are non-detect for this compound.
- Initial calibration verification standard MSN3452-ICV3452 for vinyl acetate exceed 30% Difference (response bias high). Associated samples are non-detect for this compound.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC36014).

Summary of Hits

Job Number: MC36014
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 12/17/14



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC36014-1	MW-1(DOT)					
Acetone		15.4	10	2.5	ug/l	SW846 8260C
1,1-Dichloroethane		0.29 J	1.0	0.20	ug/l	SW846 8260C
cis-1,2-Dichloroethene		5.8	1.0	0.44	ug/l	SW846 8260C
1,1,1-Trichloroethane		0.49 J	1.0	0.42	ug/l	SW846 8260C
MC36014-2	MW-1					
Acetone		8.6 J	10	2.5	ug/l	SW846 8260C
MC36014-3	MW-5					
Acetone		5.5 J	10	2.5	ug/l	SW846 8260C
MC36014-4	MW-22					
Acetone		19.0	10	2.5	ug/l	SW846 8260C
MC36014-5	MW-23					
Acetone		13.3	10	2.5	ug/l	SW846 8260C
MC36014-6	MW-24					
Acetone		27.6	10	2.5	ug/l	SW846 8260C
Tetrachloroethene		0.93 J	1.0	0.29	ug/l	SW846 8260C
MC36014-7	MW-B					
Acetone		11.3	10	2.5	ug/l	SW846 8260C
MC36014-8	MW-D					
Acetone		18.0	10	2.5	ug/l	SW846 8260C
cis-1,2-Dichloroethene		0.99 J	1.0	0.44	ug/l	SW846 8260C
MC36014-9	MW-E					
Acetone		12.3	10	2.5	ug/l	SW846 8260C
1,1-Dichloroethane		0.29 J	1.0	0.20	ug/l	SW846 8260C
cis-1,2-Dichloroethene		1.3	1.0	0.44	ug/l	SW846 8260C
Toluene		0.64 J	1.0	0.22	ug/l	SW846 8260C
1,1,1-Trichloroethane		0.51 J	1.0	0.42	ug/l	SW846 8260C
Trichloroethene		2.0	1.0	0.40	ug/l	SW846 8260C

Summary of Hits

Page 2 of 2

Job Number: MC36014
Account: Stantec Consulting Corporation
Project: LMC - Utica West Lot
Collected: 12/17/14



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

MC36014-10 MW-F

Acetone	21.5	10	2.5	ug/l	SW846 8260C
cis-1,2-Dichloroethene	0.72 J	1.0	0.44	ug/l	SW846 8260C
Trichloroethene	6.4	1.0	0.40	ug/l	SW846 8260C

MC36014-11 PW-1

Acetone	13.4	10	2.5	ug/l	SW846 8260C
cis-1,2-Dichloroethene	0.66 J	1.0	0.44	ug/l	SW846 8260C
Toluene	1.1	1.0	0.22	ug/l	SW846 8260C
Trichloroethene	0.73 J	1.0	0.40	ug/l	SW846 8260C

MC36014-12 PZ-1

cis-1,2-Dichloroethene	1.4	1.0	0.44	ug/l	SW846 8260C

MC36014-13 PZ-2

No hits reported in this sample.

MC36014-14 FIELD DUPLICATE

Acetone	15.1	10	2.5	ug/l	SW846 8260C

MC36014-15 TRIP BLANK

No hits reported in this sample.

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-1(DOT)	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-1	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93581.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	15.4	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	0.29	1.0	0.20	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	5.8	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1(DOT)	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-1	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	0.49	1.0	0.42	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1(DOT)
Lab Sample ID: MC36014-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14
Date Received: 12/19/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-1	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-2	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93582.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.6	10	2.5	ug/l	J
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1
Lab Sample ID: MC36014-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14

Date Received: 12/19/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-2	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-5	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-3	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93583.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.5	10	2.5	ug/l	J
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-5
Lab Sample ID: MC36014-3
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14

Date Received: 12/19/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-3	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-22	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-4	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93584.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.0	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-22	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-4	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-22
Lab Sample ID: MC36014-4
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14
Date Received: 12/19/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-23	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-5	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93585.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.3	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-23	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-5	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-23
Lab Sample ID: MC36014-5
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14
Date Received: 12/19/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-24	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-6	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93586.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	27.6	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-24	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-6	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	0.93	1.0	0.29	ug/l	J
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-24
Lab Sample ID: MC36014-6
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14
Date Received: 12/19/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

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

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

Accutest Laboratories

Report of Analysis

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Client Sample ID:	MW-B	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-7	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93587.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.3	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-B	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-7	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-B
Lab Sample ID: MC36014-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14

Date Received: 12/19/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	MW-D	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-8	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93588.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	18.0	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.99	1.0	0.44	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-D	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-8	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-D	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-8	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

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

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

Accutest Laboratories

Report of Analysis

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Client Sample ID:	MW-E	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-9	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93589.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.3	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	0.29	1.0	0.20	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.3	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-E
Lab Sample ID: MC36014-9
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14

Date Received: 12/19/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	0.64	1.0	0.22	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	0.51	1.0	0.42	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	2.0	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-E
Lab Sample ID: MC36014-9
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14
Date Received: 12/19/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	111%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	MW-F	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-10	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93590.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	21.5	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.72	1.0	0.44	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-10	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	6.4	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-F	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-10	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PW-1	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-11	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93591.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.4	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.66	1.0	0.44	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PW-1	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-11	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	1.1	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	0.73	1.0	0.40	ug/l	J
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PW-1
Lab Sample ID: MC36014-11
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14
Date Received: 12/19/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	112%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PZ-1	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-12	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93592.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.4	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-1	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-12	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PZ-1
Lab Sample ID: MC36014-12
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14
Date Received: 12/19/14
Percent Solids: n/a

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	PZ-2	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-13	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93593.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

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

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PZ-2
Lab Sample ID: MC36014-13
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: LMC - Utica West Lot

Date Sampled: 12/17/14

Date Received: 12/19/14

Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PZ-2	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-13	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	113%		70-130%

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

Accutest Laboratories

Report of Analysis

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Client Sample ID:	FIELD DUPLICATE	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-14	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93594.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	15.1	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD DUPLICATE	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-14	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD DUPLICATE	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-14	Date Received:	12/19/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

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

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

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Report of Analysis

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Client Sample ID:	TRIP BLANK	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-15	Date Received:	12/19/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N93580.D	1	12/31/14	JB	n/a	n/a	MSN3454
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-15	Date Received:	12/19/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	12/17/14
Lab Sample ID:	MC36014-15	Date Received:	12/19/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	LMC - Utica West Lot		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	110%		70-130%

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

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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

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

Client / Reporting Information			Project Information						Requested Analysis (see TEST CODE sheet)										Matrix Codes		
Company Name Stantec			Project Name LMC - Utica West Lot																DW - Drinking Water GW - Ground Water VW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB- Equipment Blank RB-Rinse Blank TB-Trip Blank		
Street Address 61 Commercial St			Street:																		
City State Zip Rochester NY 14614			Billing Information (If different from Report to) Company Name																		
Project Contact Bob Mahoney bob.mahoney@stantec.com			Project#																		
Phone # 585 413 5301			Client PO# 190500800																		
Sampler(s) Name(s) Ben Haravitch 585 978-5248			Project Manager Peter Nielsen						Attention: Ben Haravitch										PO#		
Field ID / Point of Collection			MECH/DI Val #		Collection Date Time		Sampled by	Matrix	# of Loides	Number of preserved Bottles HCL NaOH HNO3 H2O2 NOHE DI Water MEOH ENCORE Bristle										VOC 8260	
-1 MW-1 (DOT)					12/17/14 1130		BH	GW	3	X											
-2 MW-1					1215																
-3 MW-5					1300																
-4 MW-22					1350																
-5 MW-23					1345																
-6 MW-24					1245																
-7 MW-B					1200																
-8 MW-D					1330																
-9 MW-E					1315																
-10 MW-F					1400																
-11 PW-1					1230																
-12 PZ-1					1415																
Turnaround Time (Business days)			Approved By (Accutest PM): / Date:						Data Deliverable Information						Comments / Special Instructions						
☒ Std. 10 Business Days ☐ Std. 5 Business Days (By Contract only) ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY			☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ CT RCP ☐ MA MCP Commercial "A" = Results Only Commercial "B" = Results + QC Summary						☐ NYASP Category A ☒ NYASP Category B ☐ State Forms ☒ EDD Format NYSDEC ☐ Other						ACCUTEST SYRACUSE SC						
Emergency & Rush T/A data available VIA Lablink			Sample Custody must be documented below each time samples change possession, including courier delivery.																		
Relinquished by Sampler: Ben Haravitch			Date Time: 12/17 1830			Received By: [Signature]			Relinquished By: [Signature]			Date Time: 12/18/14 0830			Received By: FedEx						
Relinquished by Sampler: FedEx			Date Time: 12/19/14 1030			Received By: [Signature]			Relinquished By:			Date Time:			Received By:						
Relinquished by:			Date Time:			Received By:			Custody Seal #			Preserved where applicable ☒ In tact ☐ Not intact			On Ice ☒ Cooler Temp. 1.60						

MC36014: Chain of Custody

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[illegible]

MC36014: Chain of Custody

Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC36014 **Client:** STANTEC **Project:** UTICA WEST LOT LMC
Date / Time Received: 12/19/2014 10:30:00 AM **Delivery Method:** _____ **Airbill #s:** _____
Cooler Temps (Initial/Adjusted): #1: (1.6/1.6): _____

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☒		☐	3. COC Present:	☒		☐
2. Custody Seals Intact:	☒		☐	4. Smpl Dates/Time OK	☒		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☒		☐
2. Thermometer ID:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	☒		☐	☐
2. Trip Blank listed on COC:	☒		☐	☐
3. Samples preserved properly:	☒		☐	
4. VOCs headspace free:	☒		☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☒		☐
2. Container labeling complete:	☒		☐
3. Sample container label / COC agree:	☒		☐

Sample Integrity - Condition

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

Sample Integrity - Instructions

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

Comments

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC36014

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC36014-1 Collected: 17-DEC-14 11:30 By: BH Received: 19-DEC-14 By: MW-1(DOT)						
MC36014-1	SW846 8260C	31-DEC-14 11:42	JB			V8260STD
MC36014-2 Collected: 17-DEC-14 12:15 By: BH Received: 19-DEC-14 By: MW-1						
MC36014-2	SW846 8260C	31-DEC-14 12:09	JB			V8260STD
MC36014-3 Collected: 17-DEC-14 13:00 By: BH Received: 19-DEC-14 By: MW-5						
MC36014-3	SW846 8260C	31-DEC-14 12:38	JB			V8260STD
MC36014-4 Collected: 17-DEC-14 13:50 By: BH Received: 19-DEC-14 By: MW-22						
MC36014-4	SW846 8260C	31-DEC-14 13:06	JB			V8260STD
MC36014-5 Collected: 17-DEC-14 13:45 By: BH Received: 19-DEC-14 By: MW-23						
MC36014-5	SW846 8260C	31-DEC-14 13:33	JB			V8260STD
MC36014-6 Collected: 17-DEC-14 12:45 By: BH Received: 19-DEC-14 By: MW-24						
MC36014-6	SW846 8260C	31-DEC-14 14:01	JB			V8260STD
MC36014-7 Collected: 17-DEC-14 12:00 By: BH Received: 19-DEC-14 By: MW-B						
MC36014-7	SW846 8260C	31-DEC-14 14:29	JB			V8260STD
MC36014-8 Collected: 17-DEC-14 13:30 By: BH Received: 19-DEC-14 By: MW-D						
MC36014-8	SW846 8260C	31-DEC-14 14:57	JB			V8260STD

Internal Sample Tracking Chronicle

Stantec Consulting Corporation

Job No: MC36014

LMC - Utica West Lot

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC36014-9 Collected: 17-DEC-14 13:15 By: BH Received: 19-DEC-14 By: MW-E						
MC36014-9	SW846 8260C	31-DEC-14 15:25	JB			V8260STD
MC36014-10 Collected: 17-DEC-14 14:00 By: BH Received: 19-DEC-14 By: MW-F						
MC36014-10	SW846 8260C	31-DEC-14 15:54	JB			V8260STD
MC36014-11 Collected: 17-DEC-14 12:30 By: BH Received: 19-DEC-14 By: PW-1						
MC36014-11	SW846 8260C	31-DEC-14 16:21	JB			V8260STD
MC36014-12 Collected: 17-DEC-14 14:15 By: BH Received: 19-DEC-14 By: PZ-1						
MC36014-12	SW846 8260C	31-DEC-14 16:50	JB			V8260STD
MC36014-13 Collected: 17-DEC-14 14:30 By: BH Received: 19-DEC-14 By: PZ-2						
MC36014-13	SW846 8260C	31-DEC-14 17:18	JB			V8260STD
MC36014-14 Collected: 17-DEC-14 12:05 By: BH Received: 19-DEC-14 By: FIELD DUPLICATE						
MC36014-14	SW846 8260C	31-DEC-14 17:46	JB			V8260STD
MC36014-15 Collected: 17-DEC-14 00:00 By: BH Received: 19-DEC-14 By: TRIP BLANK						
MC36014-15	SW846 8260C	31-DEC-14 11:13	JB			V8260STD

Accutest Internal Chain of Custody

Page 1 of 2

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 12/19/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC36014-1.3	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-1.3	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-1.3	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-1.3	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-2.3	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-2.3	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-2.3	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-2.3	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-3.1	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-3.1	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-3.1	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-3.1	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-4.1	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-4.1	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-4.1	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-4.1	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-5.2	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-5.2	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-5.2	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-5.2	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-6.3	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-6.3	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-6.3	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-6.3	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-7.2	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-7.2	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-7.2	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-7.2	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-8.3	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-8.3	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-8.3	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-8.3	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-9.2	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-9.2	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-9.2	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-9.2	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage

Accutest Internal Chain of Custody

Page 2 of 2

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot
Received: 12/19/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC36014-10.1	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-10.1	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-10.1	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-10.1	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-11.1	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-11.1	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-11.1	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-11.1	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-12.2	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-12.2	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-12.2	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-12.2	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-13.3	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-13.3	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-13.3	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-13.3	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-14.1	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-14.1	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-14.1	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-14.1	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage
MC36014-15.2	VOC Ref #5	Jaclyn Bergeron	12/31/14 10:08	Retrieve from Storage
MC36014-15.2	Jaclyn Bergeron	GCMSN	12/31/14 10:08	Load on Instrument
MC36014-15.2	GCMSN	Jaclyn Bergeron	01/02/15 11:29	Unload from Instrument
MC36014-15.2	Jaclyn Bergeron	VOC Ref #5	01/02/15 11:29	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 3

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3454-MB	N93579.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.71	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.34	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	

Method Blank Summary

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3454-MB	N93579.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
74-88-4	Iodomethane	ND	5.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

Method Blank Summary

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3454-MB	N93579.D	1	12/31/14	JB	n/a	n/a	MSN3454

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

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 70-130%
2037-26-5	Toluene-D8	100% 70-130%
460-00-4	4-Bromofluorobenzene	102% 70-130%

Blank Spike Summary

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3454-BS	N93576.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	51.6	103	70-130
71-43-2	Benzene	50	50.8	102	70-130
108-86-1	Bromobenzene	50	51.1	102	70-130
74-97-5	Bromochloromethane	50	50.5	101	70-130
75-27-4	Bromodichloromethane	50	56.3	113	70-130
75-25-2	Bromoform	50	46.6	93	70-130
74-83-9	Bromomethane	50	54.3	109	70-130
78-93-3	2-Butanone (MEK)	50	49.5	99	70-130
104-51-8	n-Butylbenzene	50	60.0	120	70-130
135-98-8	sec-Butylbenzene	50	51.3	103	70-130
98-06-6	tert-Butylbenzene	50	50.9	102	70-130
75-15-0	Carbon disulfide	50	33.9	68* a	70-130
56-23-5	Carbon tetrachloride	50	53.7	107	70-130
108-90-7	Chlorobenzene	50	48.5	97	70-130
75-00-3	Chloroethane	50	48.5	97	70-130
67-66-3	Chloroform	50	53.8	108	70-130
74-87-3	Chloromethane	50	48.8	98	70-130
95-49-8	o-Chlorotoluene	50	49.5	99	70-130
106-43-4	p-Chlorotoluene	50	50.9	102	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	45.1	90	70-130
124-48-1	Dibromochloromethane	50	47.7	95	70-130
106-93-4	1,2-Dibromoethane	50	50.9	102	70-130
95-50-1	1,2-Dichlorobenzene	50	51.9	104	70-130
541-73-1	1,3-Dichlorobenzene	50	50.7	101	70-130
106-46-7	1,4-Dichlorobenzene	50	52.8	106	70-130
75-71-8	Dichlorodifluoromethane	50	44.5	89	70-130
75-34-3	1,1-Dichloroethane	50	48.8	98	70-130
107-06-2	1,2-Dichloroethane	50	50.1	100	70-130
75-35-4	1,1-Dichloroethene	50	41.6	83	70-130
156-59-2	cis-1,2-Dichloroethene	50	50.4	101	70-130
156-60-5	trans-1,2-Dichloroethene	50	47.3	95	70-130
78-87-5	1,2-Dichloropropane	50	55.1	110	70-130
142-28-9	1,3-Dichloropropane	50	52.1	104	70-130
594-20-7	2,2-Dichloropropane	50	53.6	107	70-130
563-58-6	1,1-Dichloropropene	50	47.4	95	70-130
10061-01-5	cis-1,3-Dichloropropene	50	61.4	123	70-130

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3454-BS	N93576.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	50.2	100	70-130
100-41-4	Ethylbenzene	50	51.2	102	70-130
87-68-3	Hexachlorobutadiene	50	57.8	116	70-130
591-78-6	2-Hexanone	50	49.8	100	70-130
74-88-4	Iodomethane	50	44.9	90	70-130
98-82-8	Isopropylbenzene	50	50.8	102	70-130
99-87-6	p-Isopropyltoluene	50	55.8	112	70-130
1634-04-4	Methyl Tert Butyl Ether	50	50.0	100	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	53.8	108	70-130
74-95-3	Methylene bromide	50	48.7	97	70-130
75-09-2	Methylene chloride	50	48.1	96	70-130
91-20-3	Naphthalene	50	43.8	88	70-130
103-65-1	n-Propylbenzene	50	50.6	101	70-130
100-42-5	Styrene	50	55.8	112	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	55.3	111	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	54.7	109	70-130
127-18-4	Tetrachloroethene	50	49.7	99	70-130
108-88-3	Toluene	50	53.1	106	70-130
87-61-6	1,2,3-Trichlorobenzene	50	41.0	82	70-130
120-82-1	1,2,4-Trichlorobenzene	50	45.0	90	70-130
71-55-6	1,1,1-Trichloroethane	50	52.1	104	70-130
79-00-5	1,1,2-Trichloroethane	50	55.3	111	70-130
79-01-6	Trichloroethene	50	52.9	106	70-130
75-69-4	Trichlorofluoromethane	50	57.8	116	70-130
96-18-4	1,2,3-Trichloropropane	50	53.1	106	70-130
95-63-6	1,2,4-Trimethylbenzene	50	52.4	105	70-130
108-67-8	1,3,5-Trimethylbenzene	50	54.1	108	70-130
108-05-4	Vinyl Acetate	50	101	202* b	70-130
75-01-4	Vinyl chloride	50	55.1	110	70-130
	m,p-Xylene	100	104	104	70-130
95-47-6	o-Xylene	50	51.1	102	70-130
1330-20-7	Xylene (total)	150	155	103	70-130

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3454-BS	N93576.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	96%	70-130%

- (a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: MC36014

Account: STANNYR Stantec Consulting Corporation

Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC36014-1MS	N93600.D	5	12/31/14	JB	n/a	n/a	MSN3454
MC36014-1MSD	N93601.D	5	12/31/14	JB	n/a	n/a	MSN3454
MC36014-1	N93581.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Compound	MC36014-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	15.4	250	194	71	250	184	67* a	5	70-130/30
71-43-2	Benzene	ND	250	264	106	250	260	104	2	70-130/30
108-86-1	Bromobenzene	ND	250	254	102	250	256	102	1	70-130/30
74-97-5	Bromochloromethane	ND	250	280	112	250	273	109	3	70-130/30
75-27-4	Bromodichloromethane	ND	250	290	116	250	285	114	2	70-130/30
75-25-2	Bromoform	ND	250	260	104	250	270	108	4	70-130/30
74-83-9	Bromomethane	ND	250	240	96	250	240	96	0	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	226	90	250	240	96	6	70-130/30
104-51-8	n-Butylbenzene	ND	250	289	116	250	291	116	1	70-130/30
135-98-8	sec-Butylbenzene	ND	250	257	103	250	259	104	1	70-130/30
98-06-6	tert-Butylbenzene	ND	250	257	103	250	255	102	1	70-130/30
75-15-0	Carbon disulfide	ND	250	215	86	250	212	85	1	70-130/30
56-23-5	Carbon tetrachloride	ND	250	267	107	250	262	105	2	70-130/30
108-90-7	Chlorobenzene	ND	250	252	101	250	252	101	0	70-130/30
75-00-3	Chloroethane	ND	250	276	110	250	268	107	3	70-130/30
67-66-3	Chloroform	ND	250	278	111	250	270	108	3	70-130/30
74-87-3	Chloromethane	ND	250	235	94	250	239	96	2	70-130/30
95-49-8	o-Chlorotoluene	ND	250	256	102	250	252	101	2	70-130/30
106-43-4	p-Chlorotoluene	ND	250	260	104	250	258	103	1	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	271	108	250	301	120	10	70-130/30
124-48-1	Dibromochloromethane	ND	250	245	98	250	246	98	0	70-130/30
106-93-4	1,2-Dibromoethane	ND	250	275	110	250	285	114	4	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	250	269	108	250	274	110	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	250	259	104	250	260	104	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	250	265	106	250	268	107	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND	250	238	95	250	228	91	4	70-130/30
75-34-3	1,1-Dichloroethane	0.29	J	250	104	250	259	103	0	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	269	108	250	269	108	0	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	225	90	250	219	88	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	5.8	250	261	102	250	256	100	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	240	96	250	236	94	2	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	280	112	250	274	110	2	70-130/30
142-28-9	1,3-Dichloropropane	ND	250	265	106	250	269	108	1	70-130/30
594-20-7	2,2-Dichloropropane	ND	250	248	99	250	245	98	1	70-130/30
563-58-6	1,1-Dichloropropene	ND	250	255	102	250	253	101	1	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	289	116	250	297	119	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC36014-1MS	N93600.D	5	12/31/14	JB	n/a	n/a	MSN3454
MC36014-1MSD	N93601.D	5	12/31/14	JB	n/a	n/a	MSN3454
MC36014-1	N93581.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Compound	MC36014-1	Spike	MS	MS	Spike	MSD	MSD	RPD	Limits	
		ug/l	Q	ug/l	ug/l	%	ug/l	ug/l		%	Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		250	249	100	250	262	105	5	70-130/30
100-41-4	Ethylbenzene	ND		250	253	101	250	251	100	1	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	271	108	250	287	115	6	70-130/30
591-78-6	2-Hexanone	ND		250	229	92	250	252	101	10	70-130/30
74-88-4	Iodomethane	ND		250	226	90	250	213	85	6	70-130/30
98-82-8	Isopropylbenzene	ND		250	256	102	250	253	101	1	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	268	107	250	268	107	0	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	286	114	250	295	118	3	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	329	132* a	250	346	138* a	5	70-130/30
74-95-3	Methylene bromide	ND		250	284	114	250	291	116	2	70-130/30
75-09-2	Methylene chloride	ND		250	250	100	250	246	98	2	70-130/30
91-20-3	Naphthalene	ND		250	271	108	250	332	133* a	20	70-130/30
103-65-1	n-Propylbenzene	ND		250	261	104	250	260	104	0	70-130/30
100-42-5	Styrene	ND		250	277	111	250	275	110	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	267	107	250	265	106	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	303	121	250	313	125	3	70-130/30
127-18-4	Tetrachloroethene	ND		250	247	99	250	244	98	1	70-130/30
108-88-3	Toluene	ND		250	273	109	250	266	106	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	236	94	250	283	113	18	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	242	97	250	270	108	11	70-130/30
71-55-6	1,1,1-Trichloroethane	0.49	J	250	266	106	250	261	104	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	292	117	250	298	119	2	70-130/30
79-01-6	Trichloroethene	ND		250	267	107	250	262	105	2	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	270	108	250	265	106	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	294	118	250	315	126	7	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	259	104	250	259	104	0	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	255	102	250	255	102	0	70-130/30
108-05-4	Vinyl Acetate	ND		250	277	111	250	297	119	7	70-130/30
75-01-4	Vinyl chloride	ND		250	235	94	250	220	88	7	70-130/30
	m,p-Xylene	ND		500	521	104	500	515	103	1	70-130/30
95-47-6	o-Xylene	ND		250	267	107	250	263	105	2	70-130/30
1330-20-7	Xylene (total)	ND		750	788	105	750	778	104	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC36014-1MS	N93600.D	5	12/31/14	JB	n/a	n/a	MSN3454
MC36014-1MSD	N93601.D	5	12/31/14	JB	n/a	n/a	MSN3454
MC36014-1	N93581.D	1	12/31/14	JB	n/a	n/a	MSN3454

The QC reported here applies to the following samples:

Method: SW846 8260C

MC36014-1, MC36014-2, MC36014-3, MC36014-4, MC36014-5, MC36014-6, MC36014-7, MC36014-8, MC36014-9, MC36014-10, MC36014-11, MC36014-12, MC36014-13, MC36014-14, MC36014-15

CAS No.	Surrogate Recoveries	MS	MSD	MC36014-1	Limits
1868-53-7	Dibromofluoromethane	104%	102%	100%	70-130%
2037-26-5	Toluene-D8	103%	102%	101%	70-130%
460-00-4	4-Bromofluorobenzene	95%	96%	103%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3452-BFB	Injection Date: 12/29/14
Lab File ID: N93504.D	Injection Time: 22:23
Instrument ID: GCMSN	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19168	15.6	Pass
75	30.0 - 60.0% of mass 95	55928	45.6	Pass
95	Base peak, 100% relative abundance	122680	100.0	Pass
96	5.0 - 9.0% of mass 95	7947	6.48	Pass
173	Less than 2.0% of mass 174	657	0.54 (0.62) ^a	Pass
174	50.0 - 150.0% of mass 95	106232	86.6	Pass
175	5.0 - 9.0% of mass 174	7242	5.90 (6.82) ^a	Pass
176	95.0 - 101.0% of mass 174	103512	84.4 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	6536	5.33 (6.31) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSN3452-IC3452	N93505.D	12/29/14	22:51	00:28	Initial cal 0.5
MSN3452-IC3452	N93506.D	12/29/14	23:19	00:56	Initial cal 1
MSN3452-IC3452	N93507.D	12/29/14	23:47	01:24	Initial cal 2
MSN3452-IC3452	N93508.D	12/30/14	00:14	01:51	Initial cal 5
MSN3452-IC3452	N93509.D	12/30/14	00:42	02:19	Initial cal 10
MSN3452-IC3452	N93510.D	12/30/14	01:10	02:47	Initial cal 25
MSN3452-ICC3452	N93511.D	12/30/14	01:38	03:15	Initial cal 50
MSN3452-IC3452	N93512.D	12/30/14	02:06	03:43	Initial cal 100
MSN3452-IC3452	N93513.D	12/30/14	02:34	04:11	Initial cal 200
MSN3452-IC3452	N93514.D	12/30/14	03:01	04:38	Initial cal 400
MSN3452-ICV3452	N93517.D	12/30/14	04:25	06:02	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3454-BFB
Lab File ID: N93576.D
Instrument ID: GCMSN
Injection Date: 12/31/14
Injection Time: 09:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	19384	15.7	Pass
75	30.0 - 60.0% of mass 95	56984	46.1	Pass
95	Base peak, 100% relative abundance	123584	100.0	Pass
96	5.0 - 9.0% of mass 95	8267	6.69	Pass
173	Less than 2.0% of mass 174	808	0.65 (0.74) ^a	Pass
174	50.0 - 150.0% of mass 95	108560	87.8	Pass
175	5.0 - 9.0% of mass 174	7565	6.12 (6.97) ^a	Pass
176	95.0 - 101.0% of mass 174	106368	86.1 (98.0) ^a	Pass
177	5.0 - 9.0% of mass 176	6540	5.29 (6.15) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MSN3454-BS	N93576.D	12/31/14	09:19	00:00	Blank Spike
MSN3454-CC3452	N93576.D	12/31/14	09:19	00:00	Continuing cal 50
MSN3454-MB	N93579.D	12/31/14	10:45	01:26	Method Blank
MC36014-15	N93580.D	12/31/14	11:13	01:54	TRIP BLANK
MC36014-1	N93581.D	12/31/14	11:42	02:23	MW-1(DOT)
MC36014-2	N93582.D	12/31/14	12:09	02:50	MW-1
MC36014-3	N93583.D	12/31/14	12:38	03:19	MW-5
MC36014-4	N93584.D	12/31/14	13:06	03:47	MW-22
MC36014-5	N93585.D	12/31/14	13:33	04:14	MW-23
MC36014-6	N93586.D	12/31/14	14:01	04:42	MW-24
MC36014-7	N93587.D	12/31/14	14:29	05:10	MW-B
MC36014-8	N93588.D	12/31/14	14:57	05:38	MW-D
MC36014-9	N93589.D	12/31/14	15:25	06:06	MW-E
MC36014-10	N93590.D	12/31/14	15:54	06:35	MW-F
MC36014-11	N93591.D	12/31/14	16:21	07:02	PW-1
MC36014-12	N93592.D	12/31/14	16:50	07:31	PZ-1
MC36014-13	N93593.D	12/31/14	17:18	07:59	PZ-2
MC36014-14	N93594.D	12/31/14	17:46	08:27	FIELD DUPLICATE
ZZZZZZ	N93595.D	12/31/14	18:14	08:55	(unrelated sample)
ZZZZZZ	N93596.D	12/31/14	18:42	09:23	(unrelated sample)
ZZZZZZ	N93597.D	12/31/14	19:10	09:51	(unrelated sample)
ZZZZZZ	N93598.D	12/31/14	19:38	10:19	(unrelated sample)
ZZZZZZ	N93599.D	12/31/14	20:06	10:47	(unrelated sample)
MC36014-1MS	N93600.D	12/31/14	20:34	11:15	Matrix Spike

Instrument Performance Check (BFB)

Page 2 of 2

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3454-BFB	Injection Date: 12/31/14
Lab File ID: N93576.D	Injection Time: 09:19
Instrument ID: GCMSN	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
MC36014-1MSD	N93601.D	12/31/14	21:02	11:43	Matrix Spike Duplicate

6.4.2

6

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Check Std:	MSN3454-CC3452	Injection Date:	12/31/14
Lab File ID:	N93576.D	Injection Time:	09:19
Instrument ID:	GCMSN	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	362590	9.11	533127	9.98	276438	13.23	230481	15.79	90153	6.71
Upper Limit ^a	725180	9.61	1066254	10.48	552876	13.73	460962	16.29	180306	7.21
Lower Limit ^b	181295	8.61	266564	9.48	138219	12.73	115241	15.29	45077	6.21

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN3454-BS	362590	9.11	533127	9.98	276438	13.23	230481	15.79	90153	6.71
MSN3454-MB	367260	9.12	540430	9.98	261904	13.24	207654	15.79	166211	6.73
MC36014-15	363896	9.12	537971	9.98	257139	13.24	183619	15.79	80103	6.75
MC36014-1	363744	9.12	536461	9.98	261113	13.24	205150	15.79	131472	6.73
MC36014-2	364142	9.11	531875	9.98	250866	13.24	180694	15.79	105605	6.75
MC36014-3	361359	9.11	534452	9.98	258785	13.24	197678	15.79	110098	6.73
MC36014-4	358127	9.11	524375	9.99	250934	13.24	183808	15.79	125218	6.74
MC36014-5	352575	9.12	515791	9.98	248634	13.24	185787	15.79	102241	6.74
MC36014-6	354076	9.12	525518	9.99	256908	13.24	190417	15.79	158103	6.74
MC36014-7	356290	9.12	526748	9.98	249710	13.24	180277	15.79	89996	6.75
MC36014-8	358077	9.12	533464	9.99	260690	13.24	200932	15.79	190934 ^c	6.73
MC36014-9	349507	9.12	514349	9.98	244715	13.24	174528	15.79	80741	6.75
MC36014-10	352577	9.12	519345	9.98	256140	13.24	201377	15.79	172859	6.73
MC36014-11	347157	9.12	514432	9.98	243551	13.24	170577	15.79	79086	6.75
MC36014-12	355661	9.11	526321	9.98	258774	13.24	199178	15.79	155785	6.73
MC36014-13	358298	9.12	530279	9.98	251824	13.24	172181	15.79	81188	6.75
MC36014-14	356044	9.12	534194	9.98	259911	13.24	198884	15.79	151948	6.73
ZZZZZZ	355486	9.11	526984	9.98	252243	13.24	177409	15.79	105090	6.75
ZZZZZZ	353841	9.12	526518	9.98	253541	13.24	190262	15.79	129887	6.74
ZZZZZZ	347850	9.12	512674	9.99	245765	13.24	186835	15.79	149539	6.74
ZZZZZZ	352483	9.12	520293	9.98	248379	13.24	186804	15.79	128079	6.74
ZZZZZZ	351038	9.12	520297	9.98	252018	13.24	190878	15.79	138340	6.74
MC36014-1MS	348766	9.12	516520	9.99	272505	13.23	231123	15.79	127299	6.71
MC36014-1MSD	358710	9.12	526579	9.98	275686	13.24	232635	15.79	148045	6.71

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

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

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

(c) Outside control limits. Target analytes not associated with this internal standard.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC36014

Account: STANNYR Stantec Consulting Corporation

Project: LMC - Utica West Lot

Method: SW846 8260C

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC36014-1	N93581.D	100	101	103
MC36014-2	N93582.D	97	99	109
MC36014-3	N93583.D	100	100	105
MC36014-4	N93584.D	98	100	108
MC36014-5	N93585.D	100	100	107
MC36014-6	N93586.D	100	101	107
MC36014-7	N93587.D	100	99	109
MC36014-8	N93588.D	101	101	104
MC36014-9	N93589.D	99	100	111
MC36014-10	N93590.D	101	101	102
MC36014-11	N93591.D	99	100	112
MC36014-12	N93592.D	101	101	104
MC36014-13	N93593.D	99	99	113
MC36014-14	N93594.D	101	100	103
MC36014-15	N93580.D	99	100	110
MC36014-1MS	N93600.D	104	103	95
MC36014-1MSD	N93601.D	102	102	96
MSN3454-BS	N93576.D	101	101	96
MSN3454-MB	N93579.D	99	100	102

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%

6.6.1

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Initial Calibration Summary

Page 1 of 5

Job Number: MC36014

Account: STANNYR Stantec Consulting Corporation

Project: LMC - Utica West Lot

Sample: MSN3452-ICC3452

Lab FileID: N93511.D

Response Factor Report MSN												
Method : C:\msdchem\1\methods\n141229w.m (RTE Integrator)												
Title : SW-846 Method 8260												
Last Update : Tue Dec 30 08:16:01 2014												
Response via : Initial Calibration												
Calibration Files												
0.5 =N93505.D	1 =N93506.D	2 =N93507.D	5 =N93508.D									
10 =N93509.D	25 =N93510.D	50 =N93511.D	100 =N93512.D									
200 =N93513.D	400 =N93514.D	=	=									
Compound												
0.5	1	2	5	10	25	50	100	200	400	Avg	%RSD	

1) p tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol												
	1.134	1.133	1.166	1.128	1.198	1.158	1.102	1.070	1.136	3.45		
3) Ethanol												
	0.168	0.181	0.183	0.177	0.177	0.162	0.142	0.130	0.165	11.76		
4) I pentafluorobenzene -----ISTD-----												
5) dichlorodifluoromethane												
	0.567	0.542	0.520	0.543	0.587	0.607	0.608	0.593	0.580	0.572	5.42	
6) chloromethane												
	0.542	0.501	0.485	0.484	0.519	0.536	0.509	0.515	0.506	0.511	3.93	
7) vinyl chloride												
	0.406	0.468	0.420	0.402	0.416	0.425	0.410	0.355	0.272	0.397	13.94	
8) bromomethane												
	0.412	0.366	0.340	0.329	0.351	0.367	0.366	0.369	0.359	0.362	6.39	
9) chloroethane												
	0.333	0.313	0.300	0.308	0.329	0.339	0.326	0.299	0.274	0.313	6.63	
10) ethyl ether												
	0.287	0.330	0.357	0.335	0.360	0.387	0.367	0.349	0.323	0.344	8.47	
11) acetonitrile												
	0.045	0.047	0.051	0.051	0.046	0.043	0.040	0.046#	8.58			
12) trichlorofluoromethane												
	0.738	0.691	0.658	0.709	0.759	0.784	0.777	0.755	0.730	0.733	5.63	
13) freon-113												
	0.436	0.445	0.444	0.429	0.446	0.480	0.456	0.439	0.403	0.442	4.65	
14) acrolein												
	0.027	0.032	0.035	0.034	0.038	0.032	0.033	0.033#	10.67			
15) 1,1-dichloroethene												
	0.399	0.467	0.416	0.434	0.403	0.421	0.452	0.435	0.413	0.391	0.423	5.66
16) acetone												
	0.059	0.064	0.058	0.069	0.046	0.055	0.058#	13.10				
17) Methyl Acetate												
	0.306	0.351	0.356	0.384	0.403	0.358	0.325	0.265	0.344	12.77		
18) methylene chloride												
	0.503	0.515	0.506	0.471	0.498	0.524	0.493	0.472	0.427	0.490	6.01	
19) methyl tert butyl ether												
	0.832	0.857	0.891	0.891	0.906	1.034	1.184	1.162	1.150	1.081	0.999	13.82
20) acrylonitrile												
	0.113	0.115	0.133	0.143	0.130	0.130	0.121	0.127	8.50			
21) allyl chloride												
	0.533	0.576	0.566	0.591	0.622	0.546	0.450	0.555	9.83			
22) trans-1,2-dichloroethene												
	0.461	0.461	0.460	0.467	0.447	0.464	0.496	0.485	0.469	0.441	0.465	3.43
23) iodomethane												

Initial Calibration Summary

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3452-ICC3452
Lab FileID: N93511.D

		0.401	0.421	0.512	0.584	0.574	0.549	0.456	0.499	14.84					
24)	carbon disulfide	1.570	1.561	1.545	1.473	1.580	1.693	1.662	1.571	1.461	1.568	4.83			
25)	propionitrile			0.025	0.023	0.021	0.019	0.014	0.010	0.008	0.017#	38.19			
	---- Quadratic regression ----										Coefficient =	0.9886			
	Response Ratio =			0.00343	+	0.01300	*A	+	-0.00074	*A^2					
26)	vinyl acetate			0.175	0.171	0.200	0.239	0.306	0.299	0.327	0.245	26.68			
	---- Quadratic regression ----										Coefficient =	0.9973			
	Response Ratio =			-0.01651	+	0.27388	*A	+	0.00704	*A^2					
27)	chloroprene			0.525	0.534	0.577	0.585	0.629	0.677	0.629	0.566	0.464	0.576	11.14	
28)	di-isopropyl ether			1.341	1.388	1.424	1.347	1.401	1.426	1.256	1.059		1.330	9.23	
29)	methacrylonitrile			0.142	0.174	0.180	0.184	0.215	0.188	0.194	0.180	0.182		11.37	
30)	2-butanone			0.033	0.042	0.053	0.060	0.050	0.052	0.043	0.047#		18.55		
	---- Quadratic regression ----										Coefficient =	0.9973			
	Response Ratio =			-0.00279	+	0.05972	*A	+	-0.00208	*A^2					
31)	Hexane			0.567	0.579	0.557	0.565	0.583	0.512	0.441		0.544		9.37	
32)	1,1-dichloroethane			0.757	0.848	0.840	0.856	0.824	0.862	0.927	0.900	0.846	0.765	0.843	6.21
33)	tert-butyl ethyl ether			0.548	0.540	0.622	0.800	1.042	1.097	1.084	0.885	0.827		28.58	
	---- Quadratic regression ----										Coefficient =	0.9940			
	Response Ratio =			-0.04783	+	1.14897	*A	+	-0.03006	*A^2					
34)	isobutyl alcohol			0.227	0.230	0.223	0.223	0.232	0.200	0.174		0.215		9.80	
35)	2,2-dichloropropane			0.251	0.410	0.532	0.633	0.637	0.616	0.578	0.522			27.45	
	---- Quadratic regression ----										Coefficient =	0.9996			
	Response Ratio =			-0.04725	+	0.67561	*A	+	-0.01142	*A^2					
36)	cis-1,2-dichloroethene			0.504	0.542	0.484	0.524	0.479	0.502	0.538	0.521	0.508	0.468	0.507	4.92
37)	ethyl acetate			1.133	1.147	1.108	1.116	1.158	0.998	0.871		1.076		9.74	
38)	bromochloromethane			0.186	0.210	0.222	0.218	0.232	0.257	0.252	0.232	0.201	0.223		10.28
39)	chloroform			0.761	0.781	0.812	0.812	0.777	0.810	0.868	0.825	0.761	0.627	0.783	8.15
40)	dibromofluoromethane (s)			0.435	0.446	0.446	0.452	0.449	0.450	0.450	0.449	0.452	0.446	0.448	1.09
41)	Tetrahydrofuran			0.065	0.076	0.079	0.093	0.103	0.097	0.095	0.092	0.087		14.78	
42)	1,1,1-trichloroethane			0.563	0.669	0.671	0.684	0.678	0.700	0.768	0.756	0.730	0.685	0.690	8.26
43) I	1,4-difluorobenzene			-----ISTD-----											
44)	Cyclohexane			0.575	0.573	0.581	0.571	0.586	0.624	0.595	0.539	0.459	0.567		8.17
45)	carbon tetrachloride			0.314	0.363	0.375	0.390	0.387	0.414	0.454	0.458	0.438	0.413	0.401	11.06

Initial Calibration Summary

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3452-ICC3452
Lab FileID: N93511.D

46)	1,1-dichloropropene	0.435	0.448	0.447	0.434	0.455	0.489	0.482	0.450	0.409	0.450	5.42	
47)	benzene	1.252	1.358	1.314	1.347	1.304	1.340	1.419	1.373	1.263	1.083	1.305	7.10
48)	1,2-dichloroethane	0.381	0.413	0.375	0.358	0.380	0.413	0.407	0.395	0.374	0.389	5.00	
49)	tert-amyl methyl ether	0.363	0.359	0.367	0.358	0.445	0.561	0.634	0.686	0.664	0.493	28.87	
	---- Quadratic regression ----	Coefficient = 0.9948											
	Response Ratio =	-0.01182 + 0.59881 *A + 0.00989 *A^2											
50)	heptane	0.235	0.242	0.247	0.242	0.256	0.275	0.261	0.243	0.220	0.247	6.45	
51)	trichloroethene	0.310	0.350	0.369	0.369	0.353	0.368	0.386	0.367	0.344	0.288	0.350	8.57
52)	1,2-dichloropropane	0.341	0.341	0.356	0.340	0.352	0.378	0.355	0.322	0.256	0.338	10.12	
53)	dibromomethane	0.156	0.176	0.186	0.181	0.189	0.208	0.203	0.199	0.181	0.187	8.48	
54)	bromodichloromethane	0.323	0.354	0.383	0.403	0.392	0.432	0.476	0.469	0.454	0.428	0.411	12.10
55)	Methylcyclohexane	0.538	0.563	0.572	0.558	0.588	0.641	0.608	0.567	0.504	0.571	6.89	
56)	2-chloroethyl vinyl ether	0.341	0.341	0.356	0.340	0.352	0.378	0.355	0.322	0.256	0.338	10.12	
57)	methyl methacrylate	0.137	0.153	0.159	0.176	0.197	0.191	0.185	0.174	0.171	11.87		
58)	1,4-dioxane	0.001	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003#	24.13	
	---- Quadratic regression ----	Coefficient = 0.9997											
	Response Ratio =	-0.00092 + 0.00315 *A + -0.00001 *A^2											
59)	cis-1,3-dichloropropene	0.343	0.385	0.434	0.459	0.453	0.500	0.560	0.548	0.535	0.493	0.471	15.00
60)	toluene-d8 (s)	1.194	1.190	1.204	1.197	1.188	1.209	1.192	1.196	1.194	1.211	1.197	0.67
61)	4-methyl-2-pentanone	0.160	0.172	0.186	0.208	0.235	0.223	0.215	0.204	0.200	12.91		
62)	toluene	0.775	0.851	0.836	0.826	0.804	0.842	0.895	0.839	0.755	0.592	0.802	10.42
63)	trans-1,3-dichloropropene	0.266	0.310	0.340	0.360	0.361	0.402	0.458	0.453	0.458	0.432	0.384	17.57
	---- Quadratic regression ----	Coefficient = 0.9988											
	Response Ratio =	-0.00347 + 0.45501 *A + -0.00236 *A^2											
64)	1,1,2-trichloroethane	0.186	0.215	0.226	0.237	0.229	0.246	0.265	0.257	0.247	0.229	0.234	9.69
65)	ethyl methacrylate	0.257	0.276	0.324	0.366	0.346	0.317	0.245	0.304	15.02			
66)	I chlorobenzene-d5	-----ISTD-----											
67)	tetrachloroethene	0.650	0.732	0.712	0.718	0.692	0.708	0.760	0.764	0.733	0.681	0.715	4.88
68)	1,3-dichloropropane	0.878	0.921	0.926	0.910	0.925	0.978	0.949	0.931	0.854	0.919	3.96	
69)	dibromochloromethane	0.455	0.518	0.563	0.575	0.617	0.690	0.708	0.719	0.695	0.616	15.31	
	---- Quadratic regression ----	Coefficient = 0.9991											
	Response Ratio =	-0.00831 + 0.70259 *A + -0.00017 *A^2											

Initial Calibration Summary

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3452-ICC3452
Lab FileID: N93511.D

70)	1,2-dibromoethane	0.378	0.457	0.481	0.500	0.496	0.523	0.575	0.577	0.583	0.573	0.514	12.84
71)	2-hexanone	0.201	0.254	0.295	0.353	0.311	0.348	0.299	0.295	0.295	0.295	18.00	
	---- Quadratic regression ----	Coefficient = 0.9983											
	Response Ratio =	-0.03460 + 0.38447 *A + -0.01002 *A^2											
72)	chlorobenzene	1.736	1.848	1.841	1.785	1.702	1.755	1.863	1.841	1.773	1.578	1.772	4.90
73)	1,1,1,2-tetrachloroethane	0.483	0.551	0.569	0.603	0.589	0.607	0.656	0.661	0.644	0.606	0.597	8.99
74)	ethylbenzene	3.579	3.447	3.271	3.194	3.144	3.180	3.316	3.287	3.046	2.557	3.202	8.53
75)	m,p-xylene	1.205	1.303	1.232	1.231	1.206	1.226	1.273	1.224	1.066	0.786	1.175	12.75
76)	o-xylene	1.053	1.191	1.165	1.191	1.160	1.202	1.266	1.219	1.108	0.878	1.143	9.64
77)	styrene	1.466	1.515	1.661	1.728	1.881	2.061	2.073	1.970	1.700	1.784	12.58	
78)	bromoform	0.229	0.275	0.286	0.315	0.352	0.417	0.441	0.468	0.348	24.77		
	---- Quadratic regression ----	Coefficient = 0.9985											
	Response Ratio =	-0.00498 + 0.38469 *A + 0.02205 *A^2											
79)	trans-1,4-dichloro-2-butene	0.077	0.087	0.107	0.128	0.130	0.134	0.124	0.112	20.21			
	---- Quadratic regression ----	Coefficient = 0.9989											
	Response Ratio =	-0.00823 + 0.13783 *A + -0.00146 *A^2											
80)	I 1,4-dichlorobenzene-d -----ISTD-----												
81)	isopropylbenzene	4.098	3.934	3.888	3.688	3.722	3.915	3.714	3.386	2.967	3.701	9.22	
82)	bromofluorobenzene (s)	1.104	1.113	1.092	1.073	1.052	1.022	0.998	0.998	1.017	1.084	1.055	4.16
83)	bromobenzene	0.918	0.916	0.905	0.852	0.892	0.963	0.950	0.929	0.919	0.916	3.55	
84)	1,1,2,2-tetrachloroethane	0.662	0.724	0.764	0.767	0.739	0.753	0.786	0.737	0.654	0.531	0.712	10.78
85)	1,2,3-trichloropropane	0.674	0.716	0.735	0.739	0.787	0.866	0.836	0.827	0.802	0.776	8.17	
86)	n-propylbenzene	4.767	4.566	4.559	4.469	4.497	4.720	4.490	4.012	3.472	4.395	9.25	
87)	2-chlorotoluene	2.800	2.715	2.709	2.582	2.614	2.739	2.641	2.435	2.217	2.606	6.91	
88)	4-chlorotoluene	2.724	2.672	2.664	2.561	2.605	2.774	2.670	2.500	2.270	2.604	5.76	
89)	1,3,5-trimethylbenzene	3.252	3.183	3.193	3.086	3.127	3.279	3.132	2.873	2.522	3.072	7.73	
90)	tert-butylbenzene	1.995	1.943	1.941	1.842	1.865	1.951	1.861	1.703	1.516	1.846	8.17	
91)	1,2,4-trimethylbenzene	3.245	3.125	3.160	3.072	3.123	3.324	3.160	2.930	2.573	3.079	7.11	
92)	sec-butylbenzene	4.261	4.149	4.243	4.056	4.133	4.309	4.132	3.715	3.200	4.022	8.79	
93)	1,3-dichlorobenzene	1.545	1.521	1.527	1.487	1.551	1.689	1.688	1.629	1.565	1.578	4.66	
94)	p-isopropyltoluene	3.179	3.076	3.095	3.075	3.115	3.271	3.052	2.587	2.019	2.941	13.41	
95)	1,4-dichlorobenzene												

Initial Calibration Summary

Page 5 of 5

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3452-ICC3452
Lab FileID: N93511.D

	1.607	1.548	1.537	1.469	1.519	1.634	1.551	1.376	1.129	1.485	10.32
96)	1,2-dichlorobenzene										
	1.312	1.290	1.349	1.323	1.442	1.596	1.596	1.578	1.503	1.443	8.91
97)	n-butylbenzene										
	2.188	2.250	2.490	2.645	2.903	3.172	3.088	2.828	2.413	2.664	13.36
98)	1,2-dibromo-3-chloropropane										
	0.054	0.060	0.076	0.096	0.106	0.119	0.131	0.092			31.95
	---- Quadratic regression ---- Coefficient = 0.9990										
	Response Ratio = -0.00672 + 0.10087 *A + 0.00403 *A^2										
99)	1,2,4-trichlorobenzene										
	0.083	0.164	0.333	0.547	0.678	0.787	0.851	0.492			61.77
	---- Quadratic regression ---- Coefficient = 0.9962										
	Response Ratio = -0.08196 + 0.65020 *A + 0.02774 *A^2										
100)	1,3,5-trichlorobenzene										
	0.641	0.730	0.798	0.913	1.064	1.116	1.123	1.101	0.936	20.58	
	---- Quadratic regression ---- Coefficient = 0.9988										
	Response Ratio = -0.03058 + 1.10075 *A + 0.00138 *A^2										
101)	hexachlorobutadiene										
	0.316	0.363	0.375	0.381	0.405	0.451	0.478	0.478	0.486	0.415	14.70
102)	naphthalene										
	0.272	0.261	0.218	0.189	0.219	0.513	0.886	1.253	0.476	82.31	
	---- Quadratic regression ---- Coefficient = 0.9942										
	Response Ratio = -0.00426 + 0.28173 *A + 0.24884 *A^2										
103)	1,2,3-trichlorobenzene										
	0.042	0.059	0.130	0.275	0.409	0.536	0.627	0.297			78.80
	---- Quadratic regression ---- Coefficient = 0.9935										
	Response Ratio = -0.05176 + 0.35461 *A + 0.03626 *A^2										
104)	2-methylnaphthalene										
	0.194	0.197	0.214	0.248	0.263	0.260	0.269	0.235			13.85
105)	1-methylnaphthalene										
	0.180	0.165	0.177	0.192	0.198	0.188	0.196	0.185			6.29

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

n141229w.m Tue Dec 30 08:26:11 2014

6.7.1
6

Initial Calibration Verification

Job Number: MC36014
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSN3452-ICV3452
 Lab FileID: N93517.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\N141229\N93517.D Vial: 59
 Acq On : 30 Dec 2014 4:25 am Operator: jaclynb
 Sample : icv3452-50 Inst : MSN
 Misc : ms33603,MSN3452,,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\n141229w.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Tue Dec 30 08:16:01 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 p	tert butyl alcohol-d9	1.000	1.000	0.0	98	0.00	6.71
2 P	tertiary butyl alcohol	1.136	1.201	-5.7	98	0.00	6.80
3 p	Ethanol	0.165	0.157	4.8	87	0.00	5.58
4 I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	9.11
5 p	dichlorodifluoromethane	0.572	0.481	15.9	81	0.00	4.40
6 P	chloromethane	0.511	0.499	2.3	95	0.00	4.66
7 p	vinyl chloride	0.397	0.380	4.3	95	0.00	4.90
8 p	bromomethane	0.362	0.353	2.5	98	0.00	5.40
9 p	chloroethane	0.313	0.285	8.9	86	0.00	5.57
10 p	ethyl ether	0.344	0.337	2.0	89	0.00	6.44
11 p	acetonitrile	0.046	0.046#	0.0	93	0.00	6.44
12 p	trichlorofluoromethane	0.733	0.803	-9.5	105	0.00	6.21
13 p	freon-113	0.442	0.405	8.4	86	0.00	6.97
14 p	acrolein	0.033	0.041#	-24.2#	125	0.00	6.21
15 p	1,1-dichloroethene	0.423	0.371	12.3	84	0.00	6.79
16 p	acetone	0.058	0.067#	-15.5	99	0.00	6.34
17 M	Methyl Acetate	0.344	0.256	25.6#	65	0.00	6.97
18 p	methylene chloride	0.490	0.485	1.0	95	0.00	6.94
19 p	methyl tert butyl ether	0.999	1.126	-12.7	97	0.00	7.70
20 p	acrylonitrile	0.127	0.126	0.8	90	0.00	6.85
21 p	allyl chloride	0.555	0.540	2.7	89	0.00	7.03
22 p	trans-1,2-dichloroethene	0.465	0.453	2.6	93	0.00	7.62
23 p	iodomethane	0.499	0.495	0.8	87	0.00	6.86
24 p	carbon disulfide	1.568	1.184	24.5#	72	0.00	7.22
----- Amount Calc. %Drift -----							
25 p	propionitrile	50.000	16.379	67.2#	41	0.00	6.74
26 p	vinyl acetate	50.000	78.070	-56.1#	183	0.00	7.97
----- AvgRF CCRF %Dev -----							
27 p	chloroprene	0.576	0.548	4.9	83	0.00	8.23
28 p	di-isopropyl ether	1.330	1.361	-2.3	98	0.00	8.26
29 p	methacrylonitrile	0.182	0.191	-4.9	91	0.00	8.40
----- Amount Calc. %Drift -----							
30 p	2-butanone	50.000	55.459	-10.9	104	0.00	8.29
----- AvgRF CCRF %Dev -----							
31 p	Hexane	0.544	0.463	14.9	81	0.00	8.25
32 P	1,1-dichloroethane	0.843	0.829	1.7	91	0.00	7.88

Initial Calibration Verification

Job Number: MC36014
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSN3452-ICV3452
 Lab FileID: N93517.D

33 p	tert-butyl ethyl ether	Amount 50.000	Calc. 43.737	%Drift 12.5	92	0.00	8.66
34 p	isobutyl alcohol	AvgRF 0.215	CCRF 0.206	%Dev 4.2	91	0.00	8.26
35 p	2,2-dichloropropane	Amount 50.000	Calc. 47.192	%Drift 5.6	94	0.00	8.73
36 p	cis-1,2-dichloroethene	AvgRF 0.507	CCRF 0.536	%Dev -5.7	102	0.00	8.44
37 p	ethyl acetate	1.076	1.030	4.3	91	0.00	8.26
38 p	bromochloromethane	0.223	0.242	-8.5	96	0.00	8.61
39 p	chloroform	0.783	0.856	-9.3	101	0.00	8.64
40 S	dibromofluoromethane (s)	0.448	0.441	1.6	100	0.00	8.77
41 p	Tetrahydrofuran	0.087	0.087	0.0	87	0.00	8.98
42 p	1,1,1-trichloroethane	0.690	0.747	-8.3	99	0.00	9.39
43 I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00	9.98
44 p	Cyclohexane	0.567	0.526	7.2	85	0.00	9.67
45 p	carbon tetrachloride	0.401	0.450	-12.2	100	0.00	9.75
46 p	1,1-dichloropropene	0.450	0.439	2.4	90	0.00	9.56
47 p	benzene	1.305	1.374	-5.3	97	0.00	9.79
48 p	1,2-dichloroethane	0.389	0.404	-3.9	98	0.00	9.29
49 p	tert-amyl methyl ether	Amount 50.000	Calc. 44.388	%Drift 11.2	95	0.00	9.90
50 p	heptane	AvgRF 0.247	CCRF 0.239	%Dev 3.2	87	0.00	10.25
51 p	trichloroethene	0.350	0.407	-16.3	106	0.00	10.41
52 p	1,2-dichloropropane	0.338	0.375	-10.9	100	0.00	10.37
53 p	dibromomethane	0.187	0.194	-3.7	94	0.00	10.35
54 p	bromodichloromethane	0.411	0.477	-16.1	101	0.00	10.46
55 p	Methylcyclohexane	0.571	0.592	-3.7	93	0.00	10.91
56 p	2-chloroethyl vinyl ether	0.338	0.375	-10.9	100	0.00	10.37
57 p	methyl methacrylate	0.171	0.196	-14.6	100	0.00	10.55
58 p	1,4-dioxane	Amount 250.000	Calc. 245.324	%Drift 1.9	94	0.00	10.56
59 p	cis-1,3-dichloropropene	AvgRF 0.471	CCRF 0.590	%Dev -25.3#	106	0.00	11.07
60 S	toluene-d8 (s)	1.197	1.204	-0.6	102	0.00	11.78
61 p	4-methyl-2-pentanone	0.200	0.238	-19.0	102	0.00	11.17
62 p	toluene	0.802	0.912	-13.7	103	0.00	11.85
63 p	trans-1,3-dichloropropene	Amount 50.000	Calc. 52.319	%Drift -4.6	103	0.00	11.49
64 p	1,1,2-trichloroethane	AvgRF 0.234	CCRF 0.272	%Dev -16.2	103	0.00	11.66
65 p	ethyl methacrylate	0.304	0.385	-26.6#	106	0.00	11.86
66 I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	13.23
67 p	tetrachloroethene	0.715	0.778	-8.8	102	0.00	12.58
68 p	1,3-dichloropropene	0.919	1.033	-12.4	106	0.00	11.90
69 p	dibromochloromethane	Amount 50.000	Calc. 52.025	%Drift -4.0	105	0.00	12.19

Initial Calibration Verification

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Job Number: MC36014
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSN3452-ICV3452
 Lab FileID: N93517.D

		AvgRF	CCRF	%Dev			
70 p	1,2-dibromoethane	0.514	0.583	-13.4	102	0.00	12.44
		Amount	Calc.	%Drift			
71 p	2-hexanone	50.000	55.316	-10.6	107	0.00	12.02
		AvgRF	CCRF	%Dev			
72 P	chlorobenzene	1.772	1.867	-5.4	100	0.00	13.27
73 p	1,1,1,2-tetrachloroethane	0.597	0.712	-19.3	109	0.00	13.18
74 p	ethylbenzene	3.202	3.488	-8.9	105	0.00	13.44
75 p	m,p-xylene	1.175	1.308	-11.3	103	0.00	13.62
76 p	o-xylene	1.143	1.269	-11.0	100	0.00	14.04
77 p	styrene	1.784	2.135	-19.7	104	0.00	13.97
		Amount	Calc.	%Drift			
78 P	bromoform	50.000	53.351	-6.7	103	0.00	13.80
79 p	trans-1,4-dichloro-2-bute	50.000	49.114	1.8	99	0.00	14.18
		AvgRF	CCRF	%Dev			
80 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	15.79
81 p	isopropylbenzene	3.701	3.863	-4.4	101	0.00	14.39
82 S	bromofluorobenzene (s)	1.055	0.994	5.8	102	0.00	14.46
83 p	bromobenzene	0.916	0.982	-7.2	104	0.00	14.69
84 P	1,1,2,2-tetrachloroethane	0.712	0.806	-13.2	105	0.00	14.04
85 p	1,2,3-trichloropropane	0.776	0.886	-14.2	105	0.00	14.19
86 p	n-propylbenzene	4.395	4.497	-2.3	97	0.00	14.84
87 p	2-chlorotoluene	2.606	2.640	-1.3	99	0.00	14.96
88 p	4-chlorotoluene	2.604	2.718	-4.4	100	0.00	15.04
89 p	1,3,5-trimethylbenzene	3.072	3.421	-11.4	107	0.00	15.12
90 p	tert-butylbenzene	1.846	1.909	-3.4	100	0.00	15.42
91 p	1,2,4-trimethylbenzene	3.079	3.299	-7.1	102	0.00	15.53
92 M	sec-butylbenzene	4.022	4.183	-4.0	99	0.00	15.64
93 p	1,3-dichlorobenzene	1.578	1.667	-5.6	101	0.00	15.75
94 p	p-isopropyltoluene	2.941	3.301	-12.2	103	0.00	15.81
95 p	1,4-dichlorobenzene	1.485	1.618	-9.0	101	0.00	15.82
96 p	1,2-dichlorobenzene	1.443	1.553	-7.6	100	0.00	16.18
97 p	n-butylbenzene	2.664	3.130	-17.5	101	0.00	16.23
		Amount	Calc.	%Drift			
98 p	1,2-dibromo-3-chloropropa	50.000	50.761	-1.5	106	0.00	16.66
99 p	1,2,4-trichlorobenzene	50.000	47.413	5.2	105	0.00	18.01
100 p	1,3,5-trichlorobenzene	50.000	47.350	5.3	97	0.00	17.47
		AvgRF	CCRF	%Dev			
101 p	hexachlorobutadiene	0.415	0.492	-18.6	111	0.00	18.29
		Amount	Calc.	%Drift			
102 p	naphthalene	50.000	47.373	5.3	97	0.00	18.28
103 p	1,2,3-trichlorobenzene	50.000	44.445	11.1	109	0.00	18.49
		AvgRF	CCRF	%Dev			
104 p	2-methylnaphthalene	0.235	0.255	-8.5	105	0.00	19.66
105 p	1-methylnaphthalene	0.185	0.201	-8.6	107	0.00	19.91

(#) = Out of Range
 N93511.D n141229w.m

SPCC's out = 3 CCC's out = 0
 Tue Dec 30 08:40:43 2014

Continuing Calibration Summary

Page 1 of 3

Job Number: MC36014
 Account: STANNYR Stantec Consulting Corporation
 Project: LMC - Utica West Lot

Sample: MSN3454-CC3452
 Lab FileID: N93576.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\N141231\N93576.D Vial: 16
 Acq On : 31 Dec 2014 9:19 am Operator: jaclynb
 Sample : cc3452-50 Inst : MSN
 Misc : ms33623,MSN3454,,,,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\n141229w.m (RTE Integrator)
 Title : SW-846 Method 8260
 Last Update : Tue Dec 30 08:41:58 2014
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 p	tert butyl alcohol-d9	1.000	1.000	0.0	77	0.00	6.71
2 P	tertiary butyl alcohol	1.136	1.258	-10.7	80	0.00	6.79
3 p	Ethanol	0.165	0.178	-7.9	77	0.00	5.58
4 I	pentafluorobenzene	1.000	1.000	0.0	96	0.00	9.11
5 p	dichlorodifluoromethane	0.572	0.509	11.0	80	0.00	4.40
6 P	chloromethane	0.511	0.498	2.5	89	0.00	4.66
7 p	vinyl chloride	0.397	0.437	-10.1	102	0.00	4.90
8 p	bromomethane	0.362	0.393	-8.6	102	0.00	5.40
9 p	chloroethane	0.313	0.304	2.9	86	0.00	5.57
10 p	ethyl ether	0.344	0.330	4.1	82	0.00	6.44
11 p	acetonitrile	0.046	0.042#	8.7	80	0.00	6.44
12 p	trichlorofluoromethane	0.733	0.848	-15.7	104	0.00	6.21
13 p	freon-113	0.442	0.417	5.7	83	0.00	6.96
14 p	acrolein	0.033	0.041#	-24.2#	117	0.00	6.21
15 p	1,1-dichloroethene	0.423	0.352	16.8	75	0.00	6.79
16 p	acetone	0.058	0.060#	-3.4	84	0.00	6.34
17 M	Methyl Acetate	0.344	0.240	30.2#	57	0.00	6.97
18 p	methylene chloride	0.490	0.471	3.9	86	0.00	6.94
19 p	methyl tert butyl ether	0.999	0.999	0.0	81	0.00	7.71
20 p	acrylonitrile	0.127	0.116	8.7	77	0.00	6.85
21 p	allyl chloride	0.555	0.565	-1.8	87	0.00	7.03
22 p	trans-1,2-dichloroethene	0.465	0.440	5.4	85	0.00	7.62
23 p	iodomethane	0.499	0.449	10.0	74	0.00	6.86
24 p	carbon disulfide	1.568	1.064	32.1#	60	0.00	7.22
----- Amount Calc. %Drift -----							
25 p	propionitrile	50.000	0.000	100.0#	0	0.00	6.75
26 p	vinyl acetate	50.000	101.309	-102.6#	227	0.00	7.97
----- AvgRF CCRF %Dev -----							
27 p	chloroprene	0.576	0.553	4.0	78	0.00	8.23
28 p	di-isopropyl ether	1.330	1.422	-6.9	95	0.00	8.26
29 p	methacrylonitrile	0.182	0.181	0.5	80	0.00	8.40
----- Amount Calc. %Drift -----							
30 p	2-butanone	50.000	49.453	1.1	86	0.00	8.29
----- AvgRF CCRF %Dev -----							
31 p	Hexane	0.544	0.517	5.0	85	0.00	8.25
32 P	1,1-dichloroethane	0.843	0.822	2.5	85	0.00	7.87

Continuing Calibration Summary

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3454-CC3452
Lab FileID: N93576.D

33 p	tert-butyl ethyl ether	Amount 50.000	Calc. 36.954	%Drift 26.1#	72	0.00	8.66
34 p	isobutyl alcohol	AvgRF 0.215	CCRF 0.217	%Dev -0.9	90	0.00	8.26
35 p	2,2-dichloropropane	Amount 50.000	Calc. 53.591	%Drift -7.2	100	0.00	8.72
36 p	cis-1,2-dichloroethene	AvgRF 0.507	CCRF 0.511	%Dev -0.8	91	0.00	8.44
37 p	ethyl acetate	1.076	1.085	-0.8	90	0.00	8.26
38 p	bromochloromethane	0.223	0.225	-0.9	84	0.00	8.61
39 p	chloroform	0.783	0.842	-7.5	93	0.00	8.64
40 S	dibromofluoromethane (s)	0.448	0.453	-1.1	96	0.00	8.76
41 p	Tetrahydrofuran	0.087	0.079	9.2	73	0.00	8.98
42 p	1,1,1-trichloroethane	0.690	0.719	-4.2	90	0.00	9.39
43 I	1,4-difluorobenzene	1.000	1.000	0.0	95	0.00	9.98
44 p	Cyclohexane	0.567	0.534	5.8	82	0.00	9.67
45 p	carbon tetrachloride	0.401	0.431	-7.5	90	0.00	9.75
46 p	1,1-dichloropropene	0.450	0.427	5.1	83	0.00	9.56
47 p	benzene	1.305	1.326	-1.6	89	0.00	9.79
48 p	1,2-dichloroethane	0.389	0.389	0.0	90	0.00	9.29
49 p	tert-amyl methyl ether	Amount 50.000	Calc. 33.498	%Drift 33.0#	67	0.00	9.90
50 p	heptane	AvgRF 0.247	CCRF 0.301	%Dev -21.9#	104	0.00	10.25
51 p	trichloroethene	0.350	0.371	-6.0	92	0.00	10.40
52 p	1,2-dichloropropane	0.338	0.373	-10.4	94	0.00	10.37
53 p	dibromomethane	0.187	0.182	2.7	83	0.00	10.35
54 p	bromodichloromethane	0.411	0.463	-12.7	93	0.00	10.46
55 p	Methylcyclohexane	0.571	0.605	-6.0	90	0.00	10.91
56 p	2-chloroethyl vinyl ether	0.338	0.373	-10.4	94	0.00	10.37
57 p	methyl methacrylate	0.171	0.172	-0.6	83	0.00	10.55
58 p	1,4-dioxane	Amount 250.000	Calc. 205.574	%Drift 17.8	74	0.00	10.56
59 p	cis-1,3-dichloropropene	AvgRF 0.471	CCRF 0.578	%Dev -22.7#	98	0.00	11.07
60 S	toluene-d8 (s)	1.197	1.212	-1.3	97	0.00	11.78
61 p	4-methyl-2-pentanone	0.200	0.216	-8.0	87	0.00	11.17
62 p	toluene	0.802	0.852	-6.2	91	0.00	11.85
63 p	trans-1,3-dichloropropene	Amount 50.000	Calc. 50.170	%Drift -0.3	94	0.00	11.49
64 p	1,1,2-trichloroethane	AvgRF 0.234	CCRF 0.258	%Dev -10.3	93	0.00	11.66
65 p	ethyl methacrylate	0.304	0.342	-12.5	89	0.00	11.86
66 I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	13.23
67 p	tetrachloroethene	0.715	0.710	0.7	90	0.00	12.59
68 p	1,3-dichloropropene	0.919	0.958	-4.2	94	0.00	11.90
69 p	dibromochloromethane	Amount 50.000	Calc. 47.699	%Drift 4.6	92	0.00	12.19

Continuing Calibration Summary

Page 3 of 3

Job Number: MC36014
Account: STANNYR Stantec Consulting Corporation
Project: LMC - Utica West Lot

Sample: MSN3454-CC3452
Lab FileID: N93576.D

70 p	1,2-dibromoethane	AvgRF 0.514	CCRF 0.524	%Dev -1.9	88	0.00	12.44
71 p	2-hexanone	Amount 50.000	Calc. 49.760	%Drift 0.5	92	0.00	12.03
72 P	chlorobenzene	AvgRF 1.772	CCRF 1.721	%Dev 2.9	89	0.00	13.27
73 p	1,1,1,2-tetrachloroethane	0.597	0.660	-10.6	97	0.00	13.18
74 p	ethylbenzene	3.202	3.277	-2.3	95	0.00	13.44
75 p	m,p-xylene	1.175	1.218	-3.7	92	0.00	13.62
76 p	o-xylene	1.143	1.169	-2.3	89	0.00	14.04
77 p	styrene	1.784	1.990	-11.5	93	0.00	13.96
78 P	bromoform	Amount 50.000	Calc. 46.564	%Drift 6.9	86	0.00	13.79
79 p	trans-1,4-dichloro-2-bute	50.000	46.404	7.2	89	0.00	14.19
80 I	1,4-dichlorobenzene-d4	AvgRF 1.000	CCRF 1.000	%Dev 0.0	94	0.00	15.79
81 p	isopropylbenzene	3.701	3.760	-1.6	90	0.00	14.40
82 S	bromofluorobenzene (s)	1.055	1.012	4.1	95	0.00	14.46
83 p	bromobenzene	0.916	0.935	-2.1	91	0.00	14.69
84 P	1,1,2,2-tetrachloroethane	0.712	0.779	-9.4	93	0.00	14.04
85 p	1,2,3-trichloropropane	0.776	0.824	-6.2	90	0.00	14.19
86 p	n-propylbenzene	4.395	4.449	-1.2	89	0.00	14.84
87 p	2-chlorotoluene	2.606	2.582	0.9	89	0.00	14.96
88 p	4-chlorotoluene	2.604	2.650	-1.8	90	0.00	15.04
89 p	1,3,5-trimethylbenzene	3.072	3.326	-8.3	96	0.00	15.12
90 p	tert-butylbenzene	1.846	1.879	-1.8	91	0.00	15.42
91 p	1,2,4-trimethylbenzene	3.079	3.229	-4.9	91	0.00	15.53
92 M	sec-butylbenzene	4.022	4.129	-2.7	90	0.00	15.64
93 p	1,3-dichlorobenzene	1.578	1.601	-1.5	89	0.00	15.75
94 p	p-isopropyltoluene	2.941	3.281	-11.6	94	0.00	15.81
95 p	1,4-dichlorobenzene	1.485	1.567	-5.5	90	0.00	15.82
96 p	1,2-dichlorobenzene	1.443	1.498	-3.8	88	0.00	16.19
97 p	n-butylbenzene	2.664	3.199	-20.1#	95	0.00	16.23
98 p	1,2-dibromo-3-chloropropa	Amount 50.000	Calc. 45.114	%Drift 9.8	86	0.00	16.66
99 p	1,2,4-trichlorobenzene	50.000	44.997	10.0	90	0.00	18.01
100 p	1,3,5-trichlorobenzene	50.000	45.709	8.6	86	0.00	17.47
101 p	hexachlorobutadiene	AvgRF 0.415	CCRF 0.479	%Dev -15.4	100	0.00	18.30
102 p	naphthalene	Amount 50.000	Calc. 43.799	%Drift 12.4	80	0.00	18.28
103 p	1,2,3-trichlorobenzene	50.000	40.953	18.1	90	0.00	18.49
104 p	2-methylnaphthalene	AvgRF 0.235	CCRF 0.258	%Dev -9.8	98	0.00	19.66
105 p	1-methylnaphthalene	0.185	0.202	-9.2	99	0.00	19.91

(#) = Out of Range

N93511.D n141229w.m

SPCC's out = 3 CCC's out = 0
 Fri Jan 02 09:15:58 2015

GC/MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93581.D
 Acq On : 31 Dec 2014 11:42 am
 Operator : jaclynb
 Sample : mc36014-1
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 31 12:36:11 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

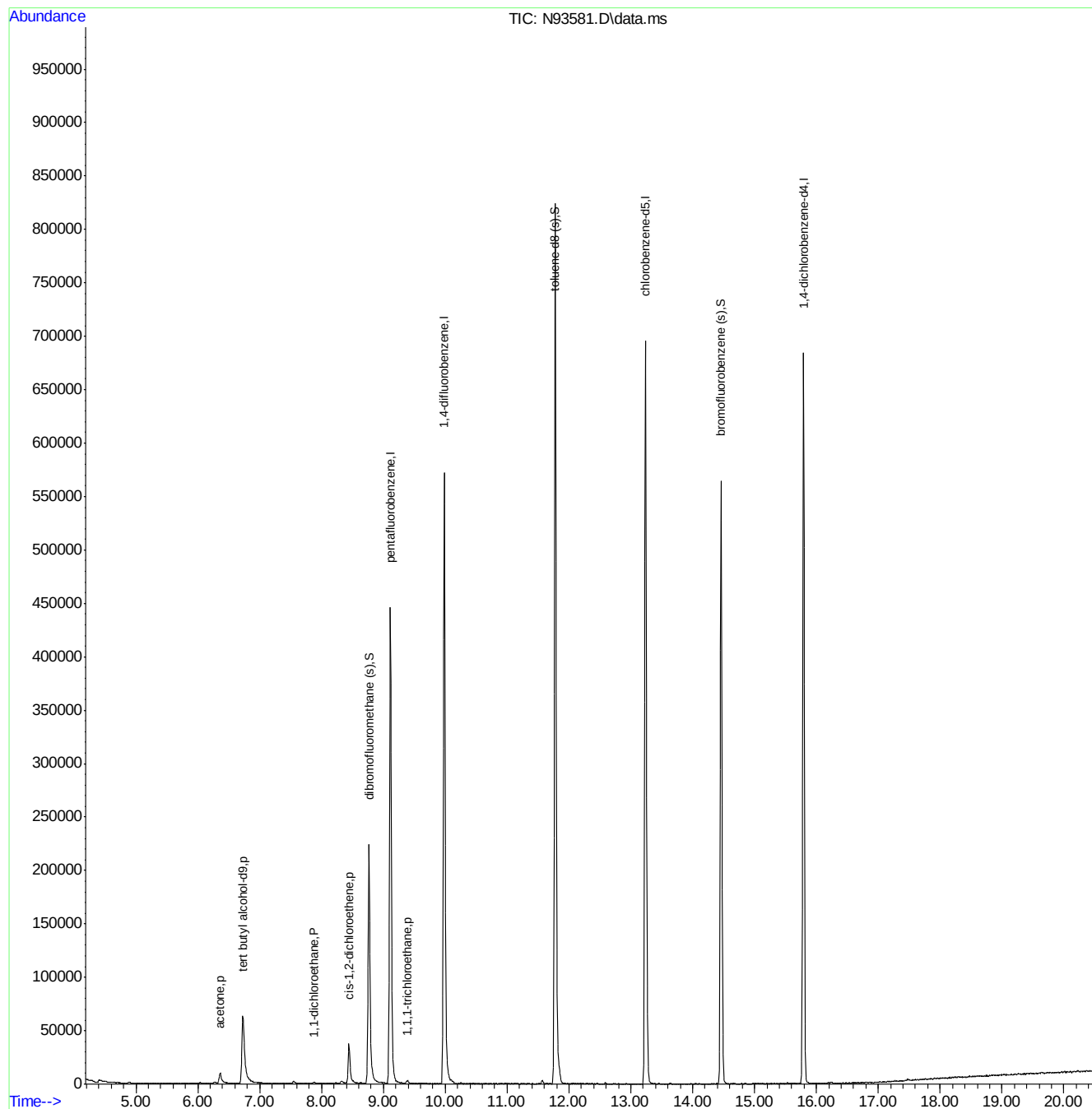
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.729	65	131472	500.00	ug/L	0.02
4) pentafluorobenzene	9.115	168	363744	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	536461	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	261113	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	205150	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	163057	50.08	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.16%			
60) toluene-d8 (s)	11.777	98	646679	50.34	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 100.68%			
82) bromofluorobenzene (s)	14.461	95	222210	51.32	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 102.64%			
Target Compounds						
16) acetone	6.354	58	6538	15.37	ug/L	86
32) 1,1-dichloroethane	7.878	63	1787	0.29	ug/L	83
36) cis-1,2-dichloroethene	8.443	96	21323	5.78	ug/L #	74
42) 1,1,1-trichloroethane	9.384	97	2473	0.49	ug/L	94

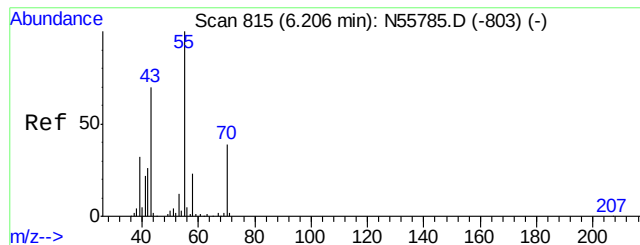
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93581.D
Acq On : 31 Dec 2014 11:42 am
Operator : jaclynb
Sample : mc36014-1
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

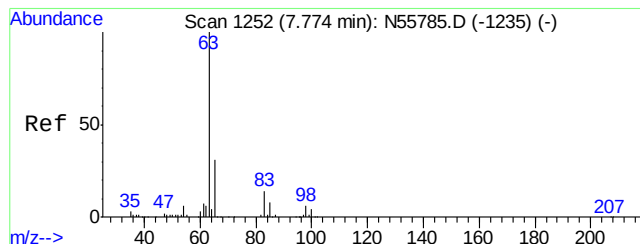
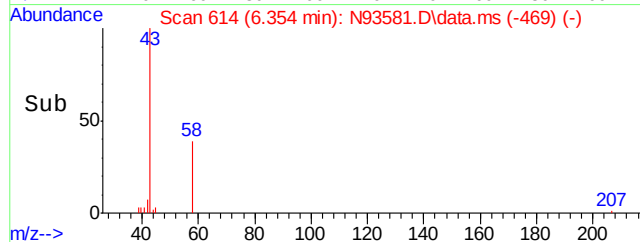
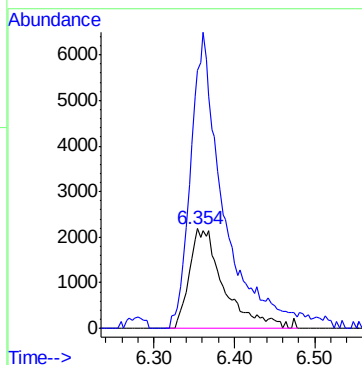
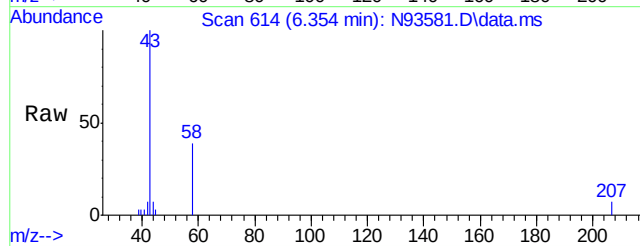
Quant Time: Dec 31 12:36:11 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





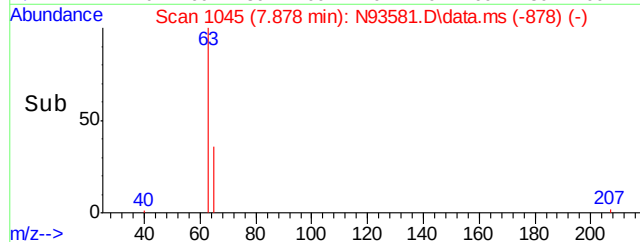
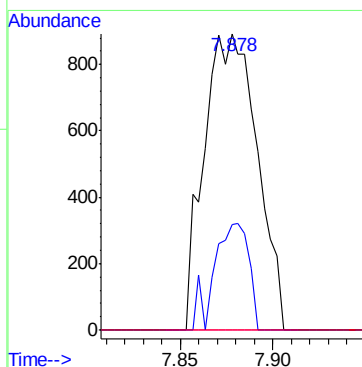
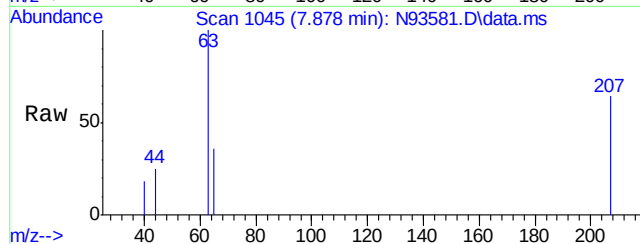
#16
acetone
Concen: 15.37 ug/L
RT: 6.354 min Scan# 614
Delta R.T. 0.014 min
Lab File: N93581.D
Acq: 31 Dec 2014 11:42 am

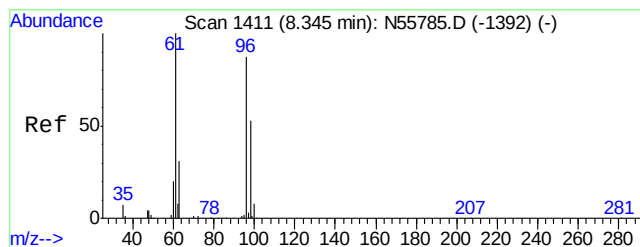
Tgt Ion: 58 Resp: 6538
Ion Ratio Lower Upper
58 100
43 259.1 256.2 316.2



#32
1,1-dichloroethane
Concen: 0.29 ug/L
RT: 7.878 min Scan# 1045
Delta R.T. -0.000 min
Lab File: N93581.D
Acq: 31 Dec 2014 11:42 am

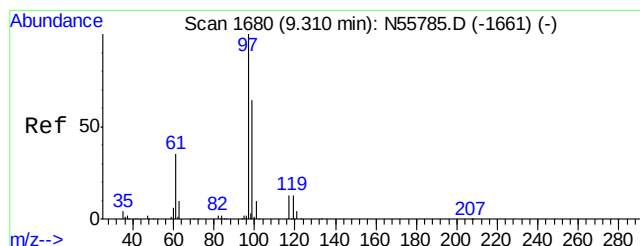
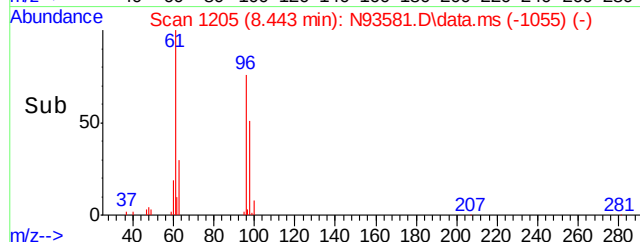
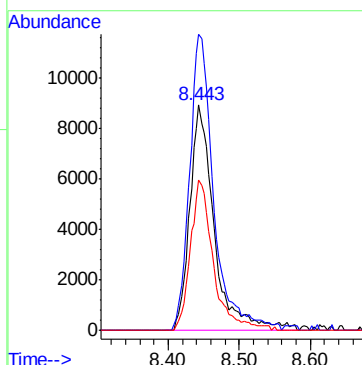
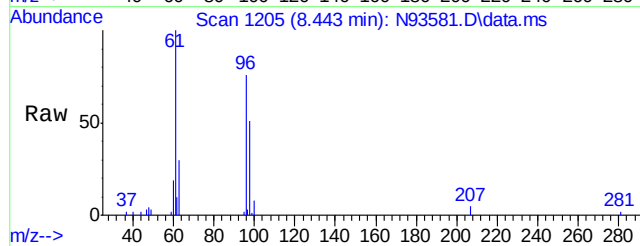
Tgt Ion: 63 Resp: 1787
Ion Ratio Lower Upper
63 100
65 35.5 0.0 58.3
83 0.0 0.0 39.9





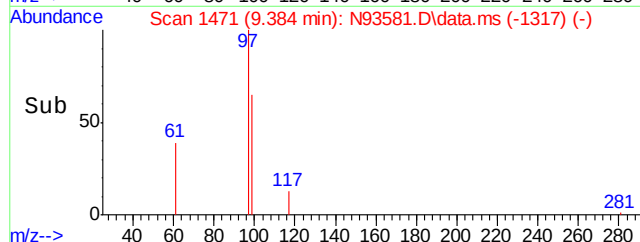
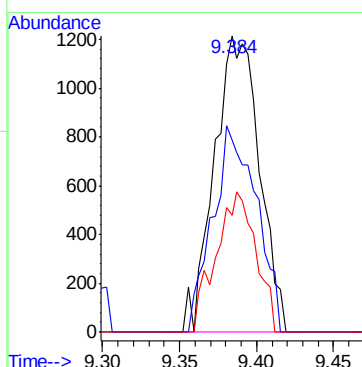
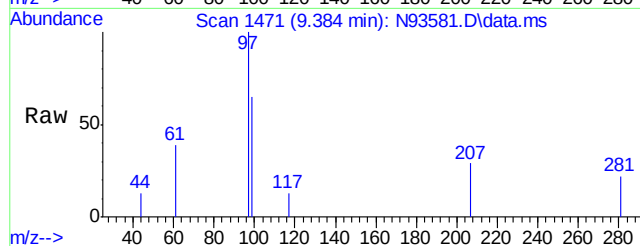
#36
 cis-1,2-dichloroethene
 Concen: 5.78 ug/L
 RT: 8.443 min Scan# 1205
 Delta R.T. 0.000 min
 Lab File: N93581.D
 Acq: 31 Dec 2014 11:42 am

Tgt Ion	Ratio	Lower	Upper
96	100		
61	131.6	148.4	208.4#
98	67.0	32.3	92.3



#42
 1,1,1-trichloroethane
 Concen: 0.49 ug/L
 RT: 9.384 min Scan# 1471
 Delta R.T. -0.007 min
 Lab File: N93581.D
 Acq: 31 Dec 2014 11:42 am

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.9	34.7	94.7
61	39.3	19.0	79.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93582.D
 Acq On : 31 Dec 2014 12:09 pm
 Operator : jaclynb
 Sample : mc36014-2
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 31 12:36:35 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.746	65	105605	500.00	ug/L	0.04
4) pentafluorobenzene	9.115	168	364142	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	531875	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	250866	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	180694	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	158616	48.67	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.34%		
60) toluene-d8 (s)	11.777	98	632389	49.65	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.30%		
82) bromofluorobenzene (s)	14.460	95	208223	54.60	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	109.20%		
Target Compounds						
16) acetone	6.372	58	3669	8.62	ug/L	Qvalue # 82

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

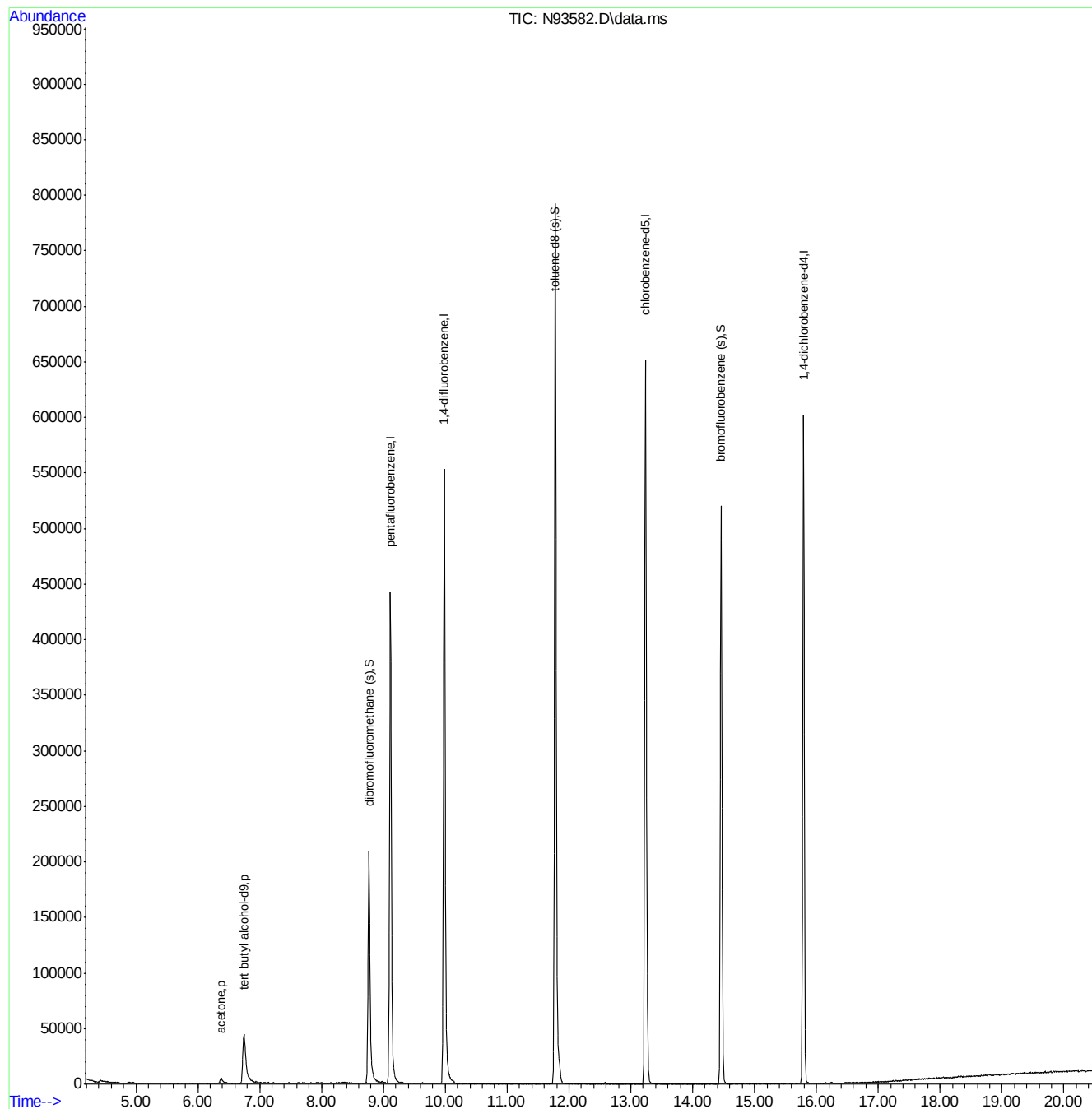
7.1.2

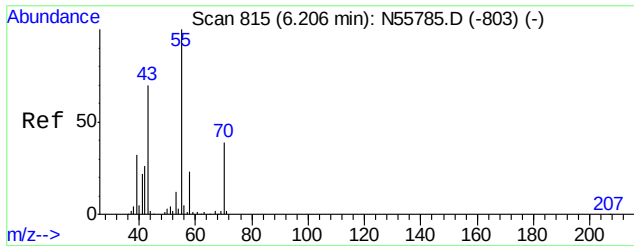
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93582.D
Acq On : 31 Dec 2014 12:09 pm
Operator : jaclynb
Sample : mc36014-2
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

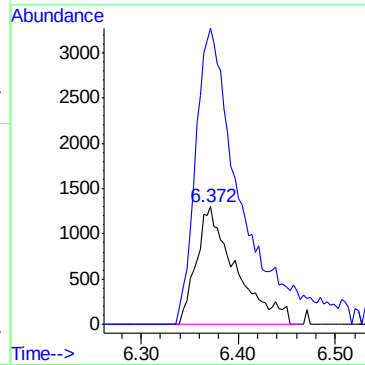
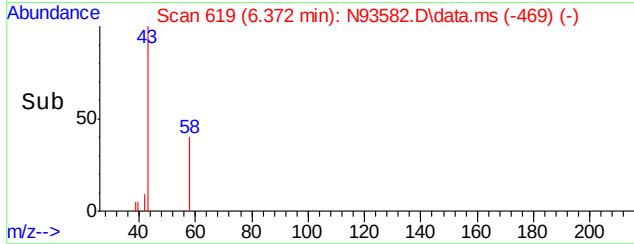
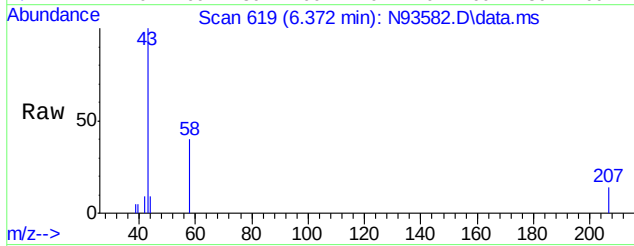
Quant Time: Dec 31 12:36:35 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





#16
acetone
Concen: 8.62 ug/L
RT: 6.372 min Scan# 619
Delta R.T. 0.032 min
Lab File: N93582.D
Acq: 31 Dec 2014 12:09 pm

Tgt Ion: 58 Resp: 3669
Ion Ratio Lower Upper
58 100
43 252.1 256.2 316.2#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93583.D
 Acq On : 31 Dec 2014 12:38 pm
 Operator : jaclynb
 Sample : mc36014-3
 Misc : ms33623,MSN3455,,,,5,1
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 02 09:05:21 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

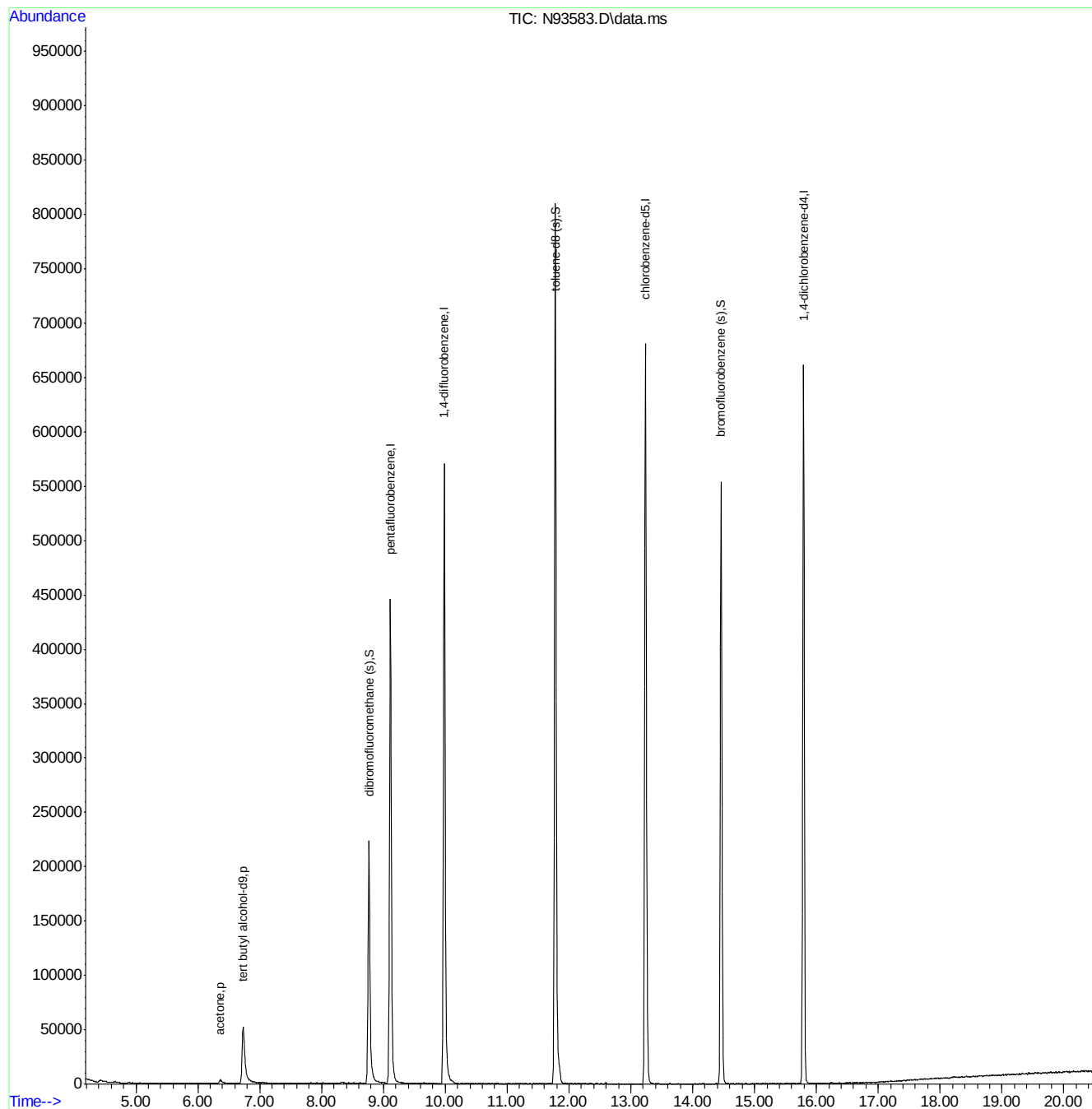
Internal Standards						
1) tert butyl alcohol-d9	6.732	65	110098	500.00	ug/L	0.02
4) pentafluorobenzene	9.112	168	361359	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	534452	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	258785	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	197678	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	162399	50.21	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.42%		
60) toluene-d8 (s)	11.781	98	639957	50.00	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.00%		
82) bromofluorobenzene (s)	14.460	95	220021	52.74	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	105.48%		
Target Compounds						
16) acetone	6.361	58	2303	5.45	ug/L	Qvalue # 84

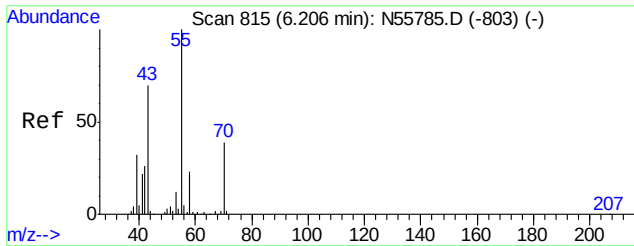
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93583.D
Acq On : 31 Dec 2014 12:38 pm
Operator : jaclynb
Sample : mc36014-3
Misc : ms33623,MSN3455,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

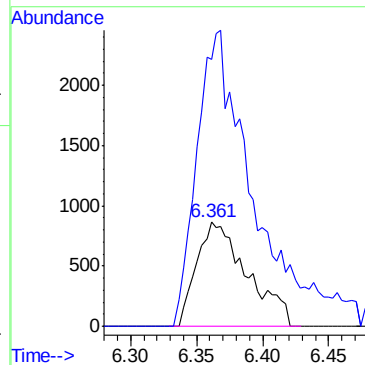
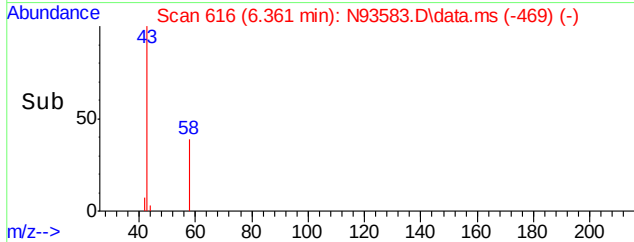
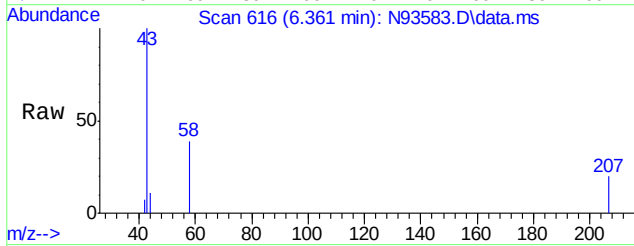
Quant Time: Jan 02 09:05:21 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





#16
acetone
Concen: 5.45 ug/L
RT: 6.361 min Scan# 616
Delta R.T. 0.021 min
Lab File: N93583.D
Acq: 31 Dec 2014 12:38 pm

Tgt Ion: 58 Resp: 2303
Ion Ratio Lower Upper
58 100
43 255.8 256.2 316.2#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93584.D
 Acq On : 31 Dec 2014 1:06 pm
 Operator : jaclynb
 Sample : mc36014-4
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 02 09:05:42 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

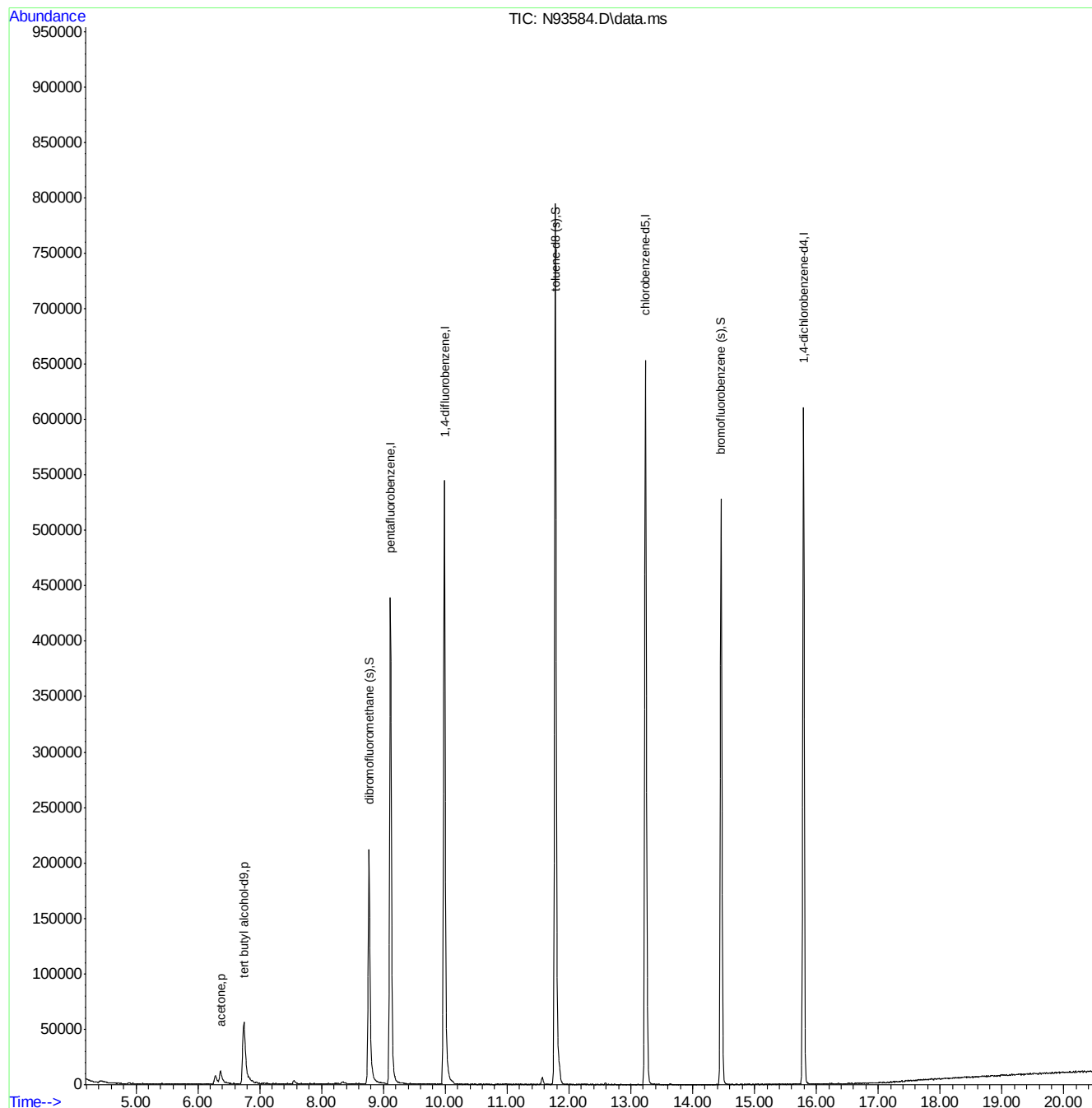
Internal Standards						
1) tert butyl alcohol-d9	6.743	65	125218	500.00	ug/L	0.03
4) pentafluorobenzene	9.115	168	358127	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	524375	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	250934	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	183808	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	157563	49.16	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.32%		
60) toluene-d8 (s)	11.781	98	630491	50.21	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.42%		
82) bromofluorobenzene (s)	14.460	95	210305	54.21	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	108.42%		
Target Compounds						
16) acetone	6.368	58	7943	18.97	ug/L	Qvalue # 72

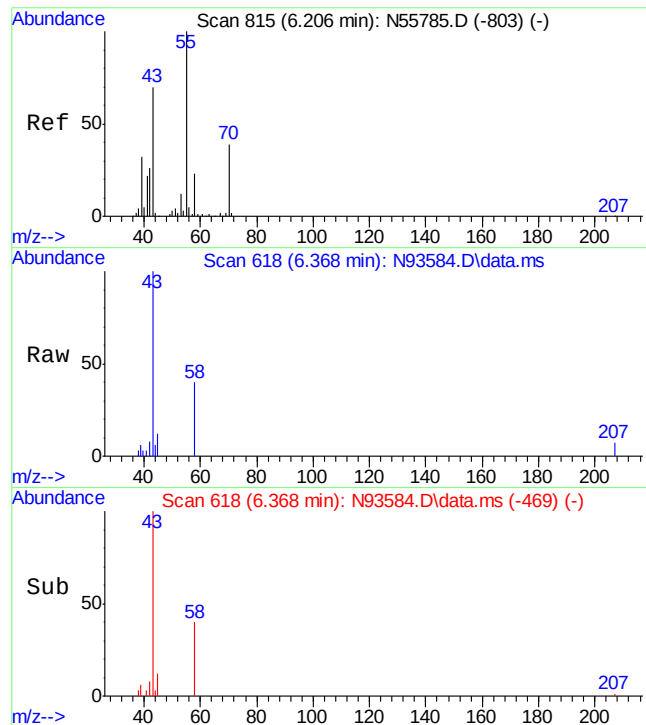
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93584.D
Acq On : 31 Dec 2014 1:06 pm
Operator : jaclynb
Sample : mc36014-4
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

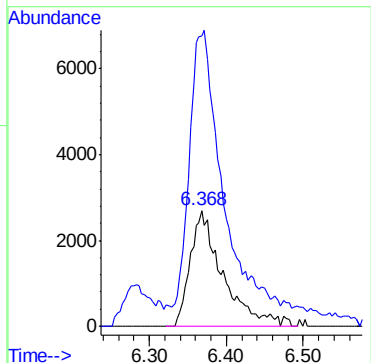
Quant Time: Jan 02 09:05:42 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





#16
acetone
Concen: 18.97 ug/L
RT: 6.368 min Scan# 618
Delta R.T. 0.028 min
Lab File: N93584.D
Acq: 31 Dec 2014 1:06 pm

Tgt Ion	58	43
Resp	7943	
Ratio	100	233.0
Lower		256.2
Upper		316.2#



7.1.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93585.D
 Acq On : 31 Dec 2014 1:33 pm
 Operator : jaclynb
 Sample : mc36014-5
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 02 09:06:03 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

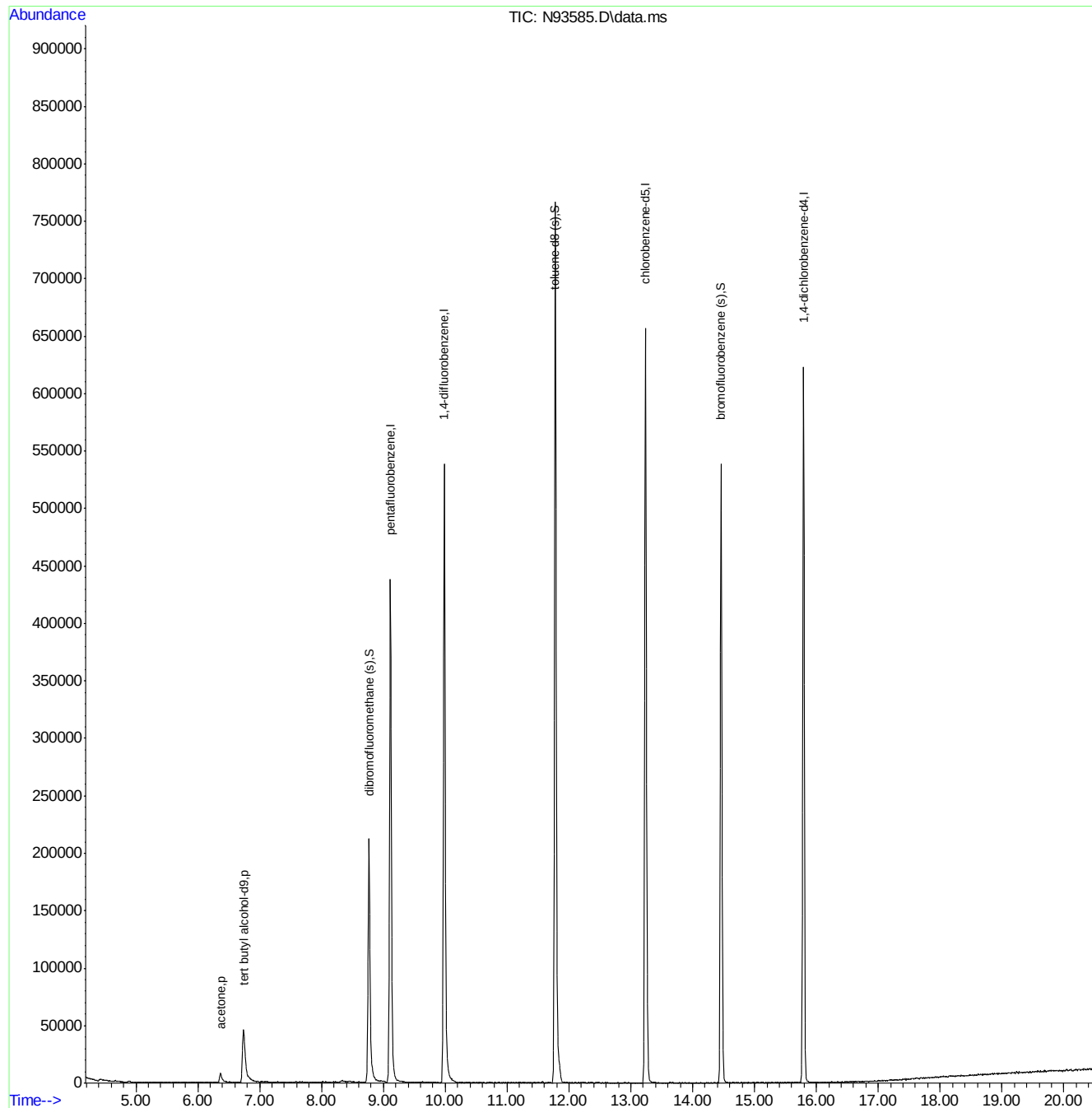
Internal Standards						
1) tert butyl alcohol-d9	6.739	65	102241	500.00	ug/L	0.03
4) pentafluorobenzene	9.115	168	352575	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	515791	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	248634	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	185787	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	157064	49.77	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.54%		
60) toluene-d8 (s)	11.777	98	615474	49.83	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.66%		
82) bromofluorobenzene (s)	14.461	95	209983	53.55	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	107.10%		
Target Compounds						
16) acetone	6.365	58	5495	13.33	ug/L	Qvalue 99

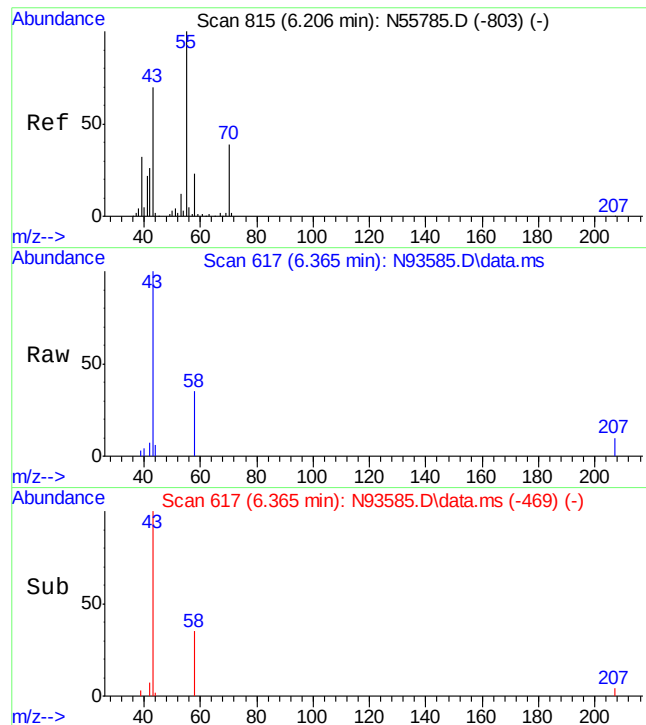
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93585.D
Acq On : 31 Dec 2014 1:33 pm
Operator : jaclynb
Sample : mc36014-5
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

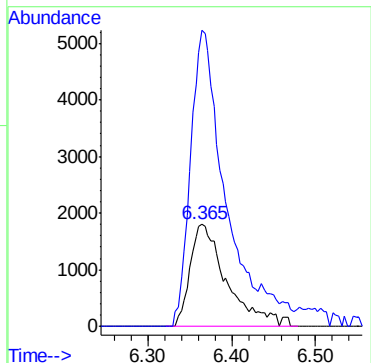
Quant Time: Jan 02 09:06:03 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





#16
acetone
Concen: 13.33 ug/L
RT: 6.365 min Scan# 617
Delta R.T. 0.025 min
Lab File: N93585.D
Acq: 31 Dec 2014 1:33 pm

Tgt Ion	Ratio	Lower	Upper
58	100		
43	289.0	256.2	316.2



7.1.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93586.D
 Acq On : 31 Dec 2014 2:01 pm
 Operator : jaclynb
 Sample : mc36014-6
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jan 02 09:06:21 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

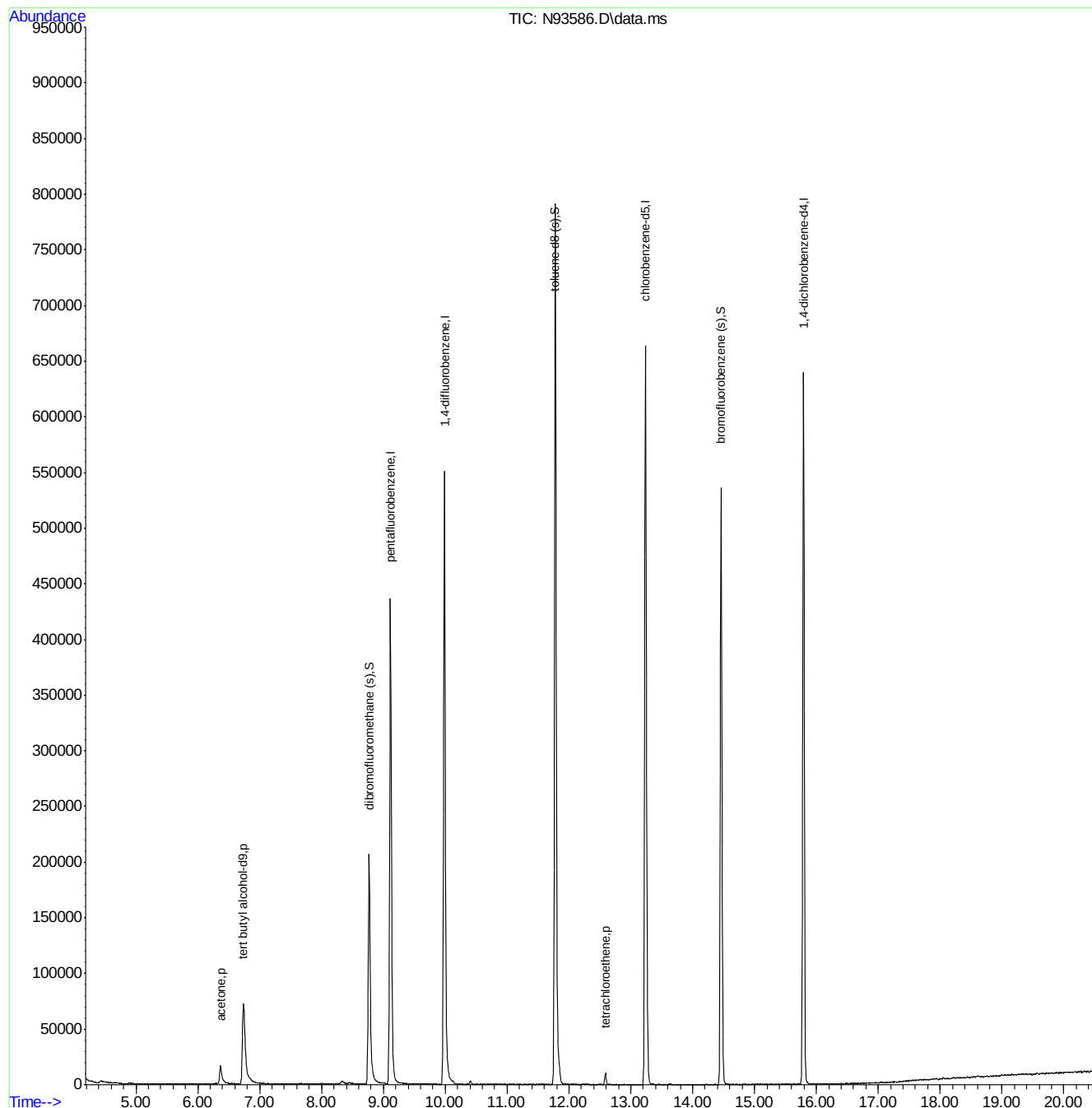
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.736	65	158103	500.00	ug/L	0.02
4) pentafluorobenzene	9.118	168	354076	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	525518	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	256908	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	190417	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	157737	49.77	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.54%		
60) toluene-d8 (s)	11.777	98	634325	50.40	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.80%		
82) bromofluorobenzene (s)	14.460	95	214177	53.29	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	106.58%		
Target Compounds						
16) acetone	6.368	58	11419	27.58	ug/L	86
67) tetrachloroethene	12.590	166	3425	0.93	ug/L	94

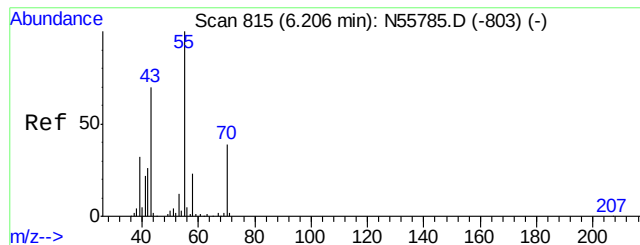
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93586.D
Acq On : 31 Dec 2014 2:01 pm
Operator : jaclynb
Sample : mc36014-6
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

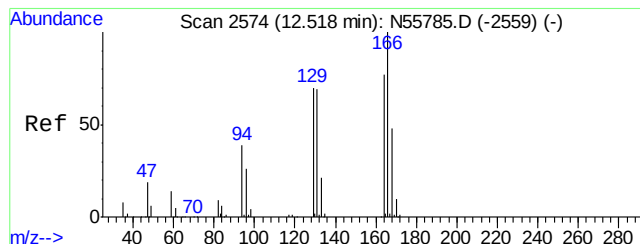
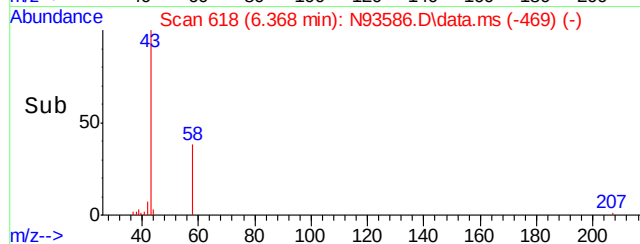
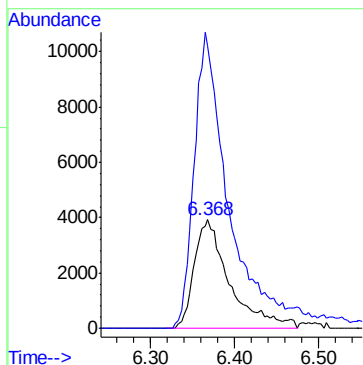
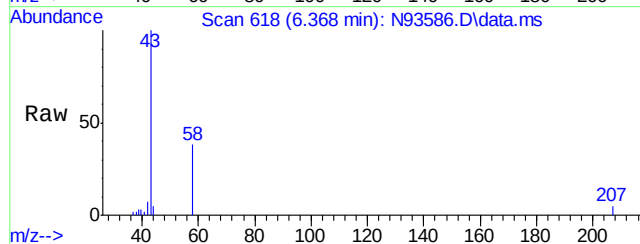
Quant Time: Jan 02 09:06:21 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





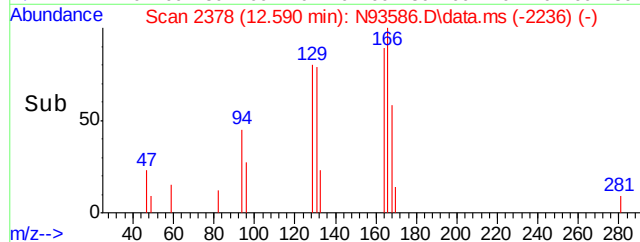
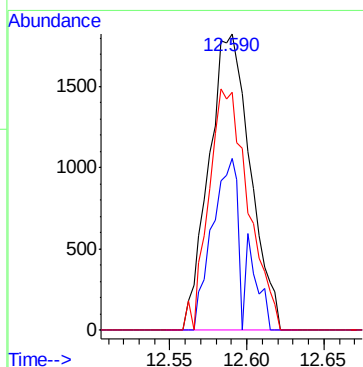
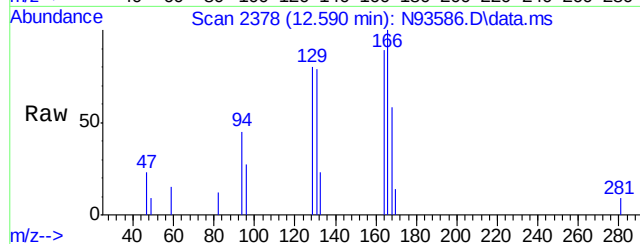
#16
acetone
Concen: 27.58 ug/L
RT: 6.368 min Scan# 618
Delta R.T. 0.028 min
Lab File: N93586.D
Acq: 31 Dec 2014 2:01 pm

Tgt Ion: 58 Resp: 11419
Ion Ratio Lower Upper
58 100
43 260.5 256.2 316.2



#67
tetrachloroethene
Concen: 0.93 ug/L
RT: 12.590 min Scan# 2378
Delta R.T. 0.003 min
Lab File: N93586.D
Acq: 31 Dec 2014 2:01 pm

Tgt Ion: 166 Resp: 3425
Ion Ratio Lower Upper
166 100
168 58.1 18.0 78.0
129 80.4 50.2 110.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93587.D
 Acq On : 31 Dec 2014 2:29 pm
 Operator : jaclynb
 Sample : mc36014-7
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 02 09:06:38 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.746	65	89996	500.00	ug/L	0.04
4) pentafluorobenzene	9.115	168	356290	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	526748	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	249710	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	180277	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	158959	49.85	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.70%		
60) toluene-d8 (s)	11.781	98	624187	49.48	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.96%		
82) bromofluorobenzene (s)	14.460	95	206931	54.39	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	108.78%		
Target Compounds						
16) acetone	6.368	58	4706	11.30	ug/L	Qvalue # 72

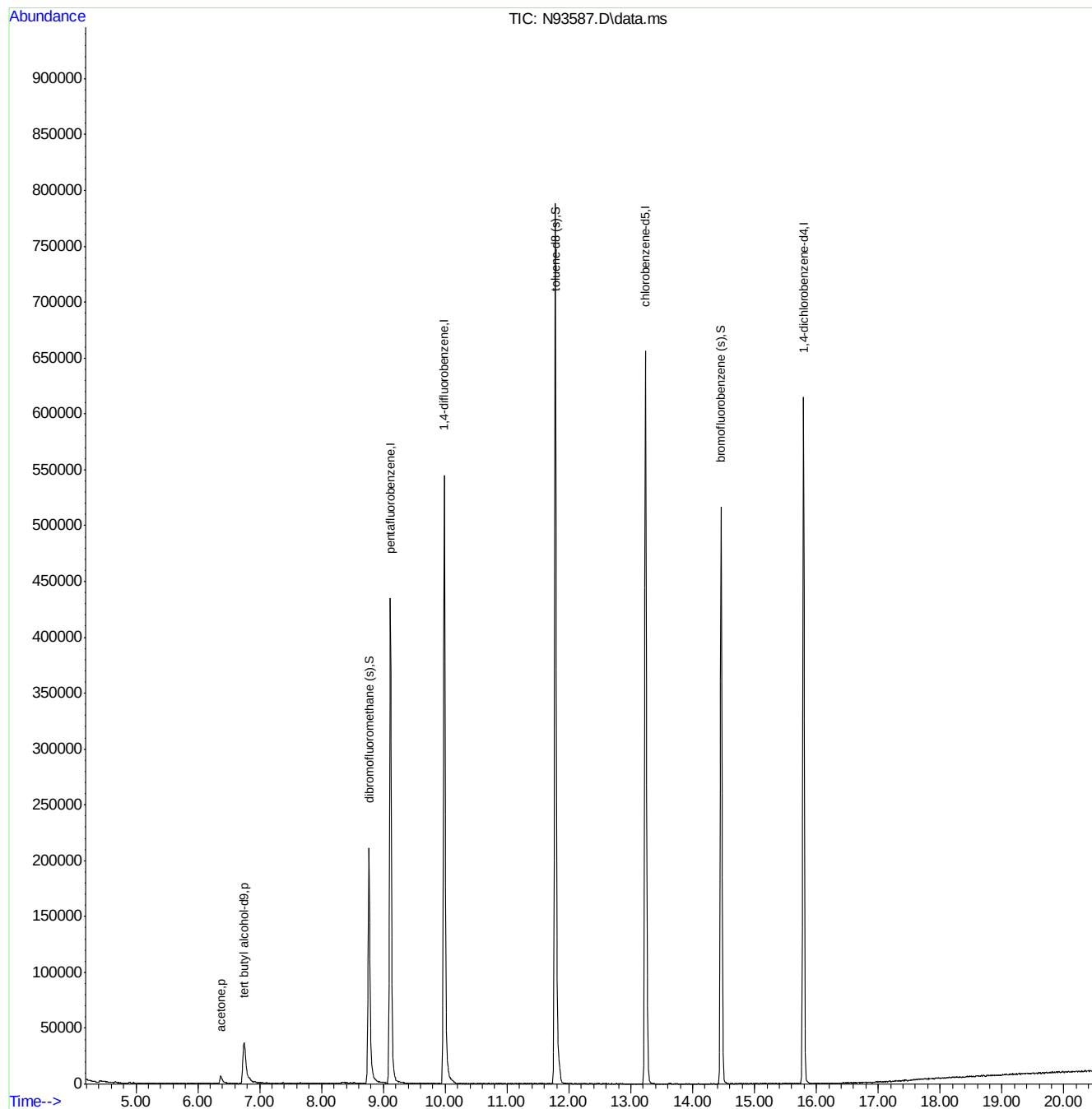
(#) = qualifier out of range (m) = manual integration (+) = signals summed

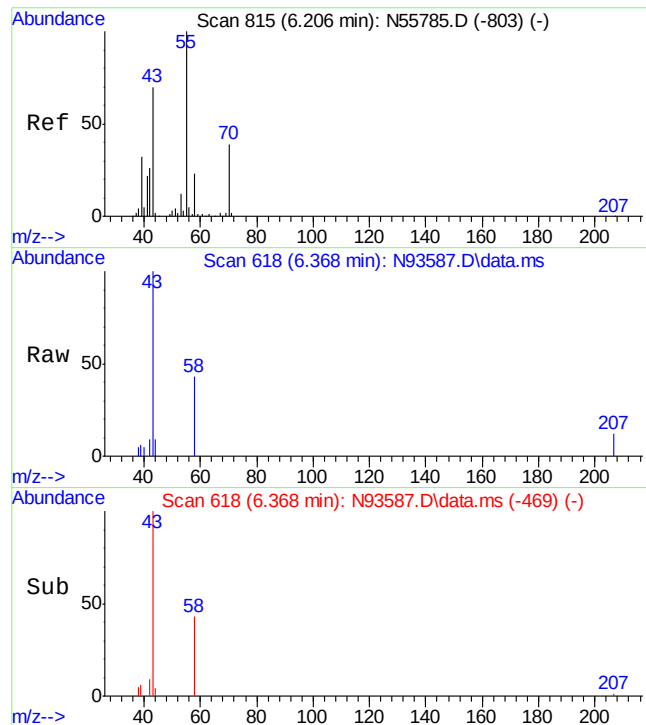
7.1.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93587.D
Acq On : 31 Dec 2014 2:29 pm
Operator : jaclynb
Sample : mc36014-7
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

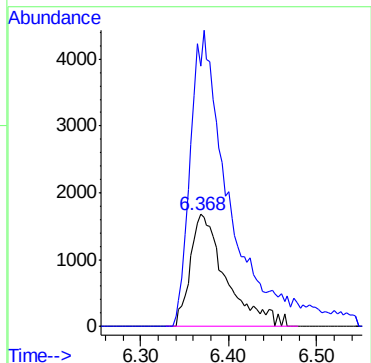
Quant Time: Jan 02 09:06:38 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





#16
acetone
Concen: 11.30 ug/L
RT: 6.368 min Scan# 618
Delta R.T. 0.028 min
Lab File: N93587.D
Acq: 31 Dec 2014 2:29 pm

Tgt Ion	Ratio	Lower	Upper
58	100		
43	233.1	256.2	316.2#



7.1.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93588.D
 Acq On : 31 Dec 2014 2:57 pm
 Operator : jaclynb
 Sample : mc36014-8
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 02 09:06:57 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

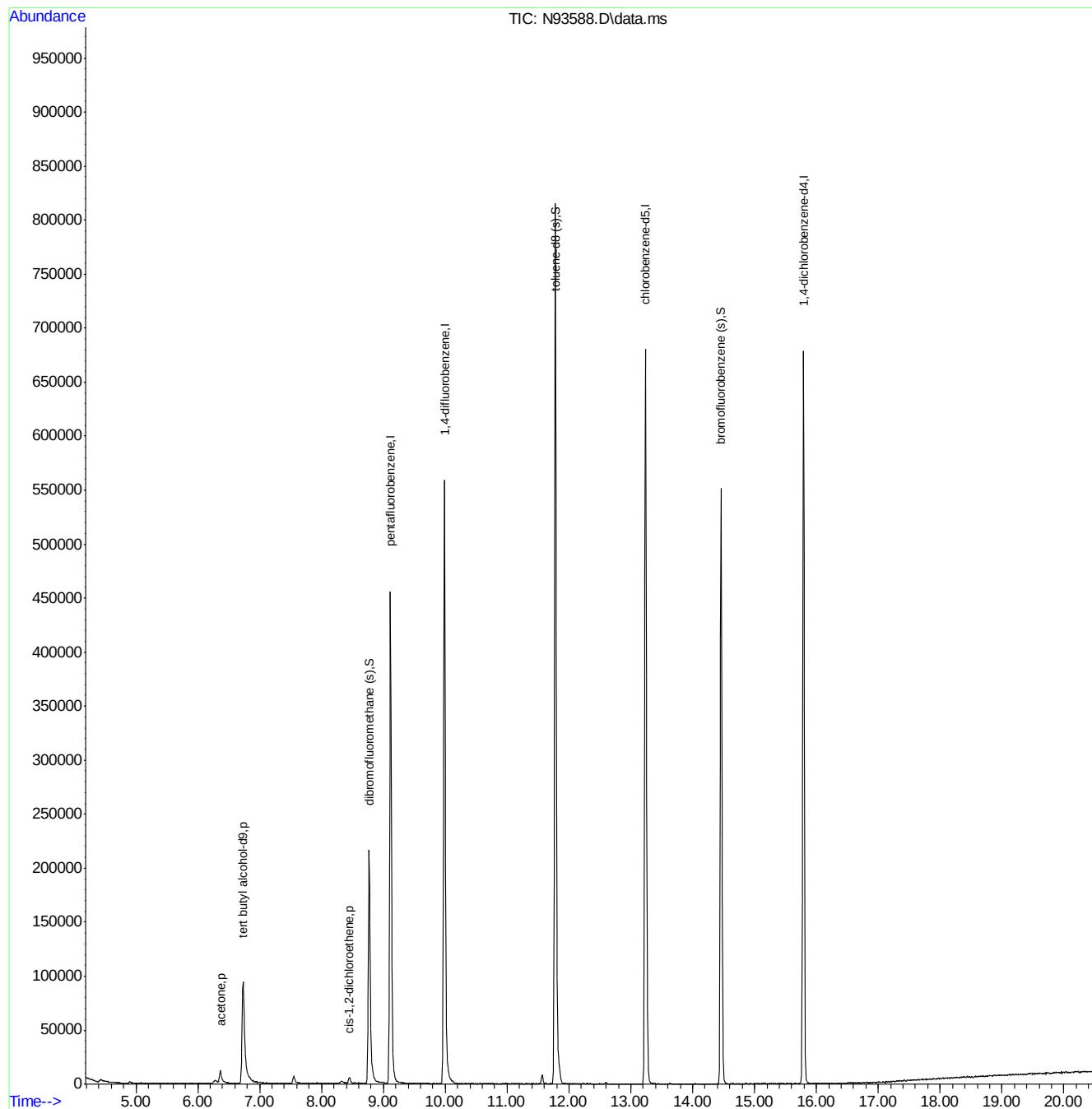
Internal Standards						
1) tert butyl alcohol-d9	6.729	65	190934	500.00	ug/L	0.02
4) pentafluorobenzene	9.115	168	358077	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	533464	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	260690	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	200932	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.772	113	161969	50.54	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.08%			
60) toluene-d8 (s)	11.781	98	645626	50.54	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 101.08%			
82) bromofluorobenzene (s)	14.457	95	220108	51.90	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery = 103.80%			
Target Compounds						
16) acetone	6.365	58	7520	17.96	ug/L	90
36) cis-1,2-dichloroethene	8.450	96	3578	0.99	ug/L #	66

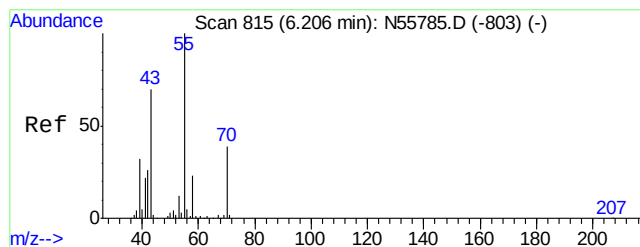
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93588.D
Acq On : 31 Dec 2014 2:57 pm
Operator : jaclynb
Sample : mc36014-8
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

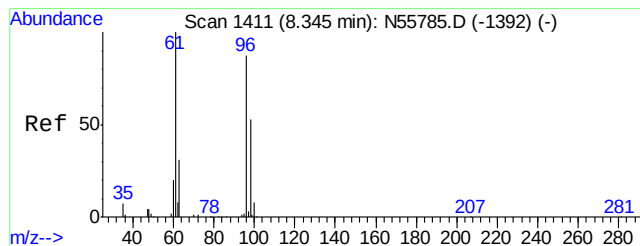
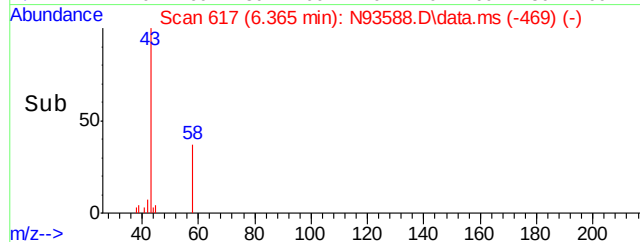
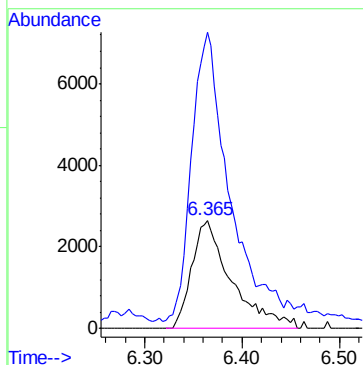
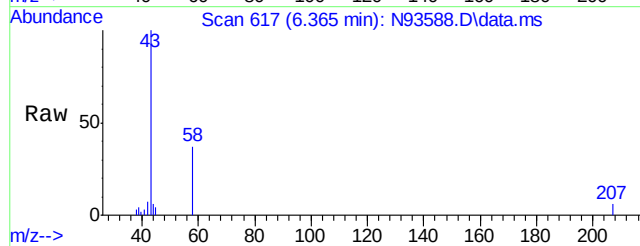
Quant Time: Jan 02 09:06:57 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





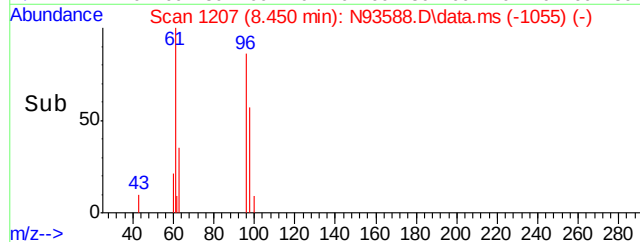
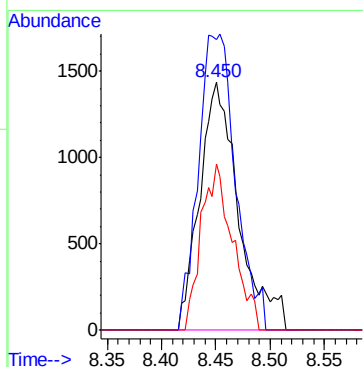
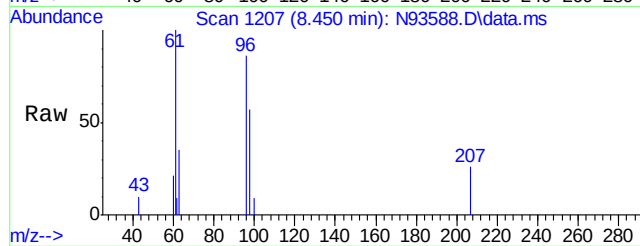
#16
acetone
Concen: 17.96 ug/L
RT: 6.365 min Scan# 617
Delta R.T. 0.025 min
Lab File: N93588.D
Acq: 31 Dec 2014 2:57 pm

Tgt Ion: 58 Resp: 7520
Ion Ratio Lower Upper
58 100
43 266.4 256.2 316.2



#36
cis-1,2-dichloroethene
Concen: 0.99 ug/L
RT: 8.450 min Scan# 1207
Delta R.T. 0.007 min
Lab File: N93588.D
Acq: 31 Dec 2014 2:57 pm

Tgt Ion: 96 Resp: 3578
Ion Ratio Lower Upper
96 100
61 116.8 148.4 208.4#
98 66.7 32.3 92.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93589.D
 Acq On : 31 Dec 2014 3:25 pm
 Operator : jaclynb
 Sample : mc36014-9
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 02 09:07:16 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.750	65	80741	500.00	ug/L	0.04
4) pentafluorobenzene	9.115	168	349507	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	514349	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	244715	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	174528	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	154860	49.50	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.00%		
60) toluene-d8 (s)	11.777	98	613935	49.84	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.68%		
82) bromofluorobenzene (s)	14.460	95	204349	55.48	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	110.96%		
Target Compounds						
16) acetone	6.372	58	5036	12.32	ug/L	91
32) 1,1-dichloroethane	7.878	63	1684	0.29	ug/L	93
36) cis-1,2-dichloroethene	8.443	96	4687	1.32	ug/L #	69
42) 1,1,1-trichloroethane	9.391	97	2447	0.51	ug/L	85
51) trichloroethene	10.402	95	7059	1.96	ug/L	91
62) toluene	11.851	92	5252	0.64	ug/L	92

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

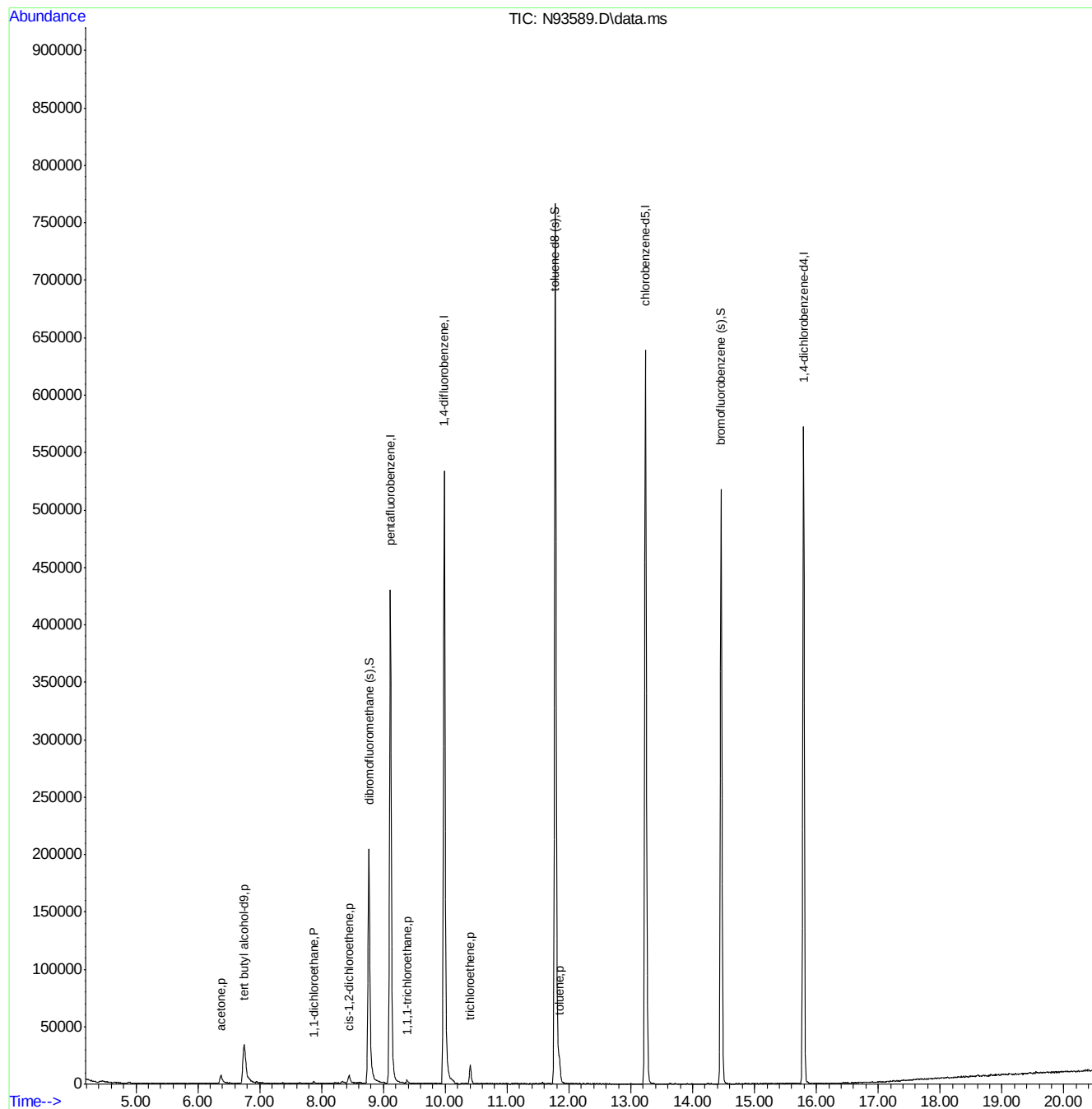
7.1.9

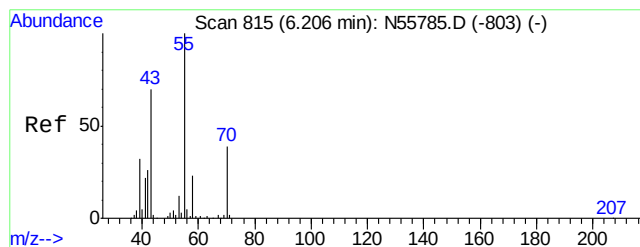
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93589.D
Acq On : 31 Dec 2014 3:25 pm
Operator : jaclynb
Sample : mc36014-9
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

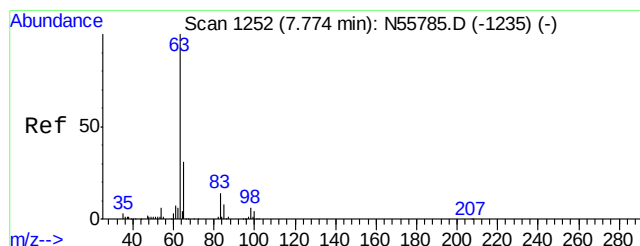
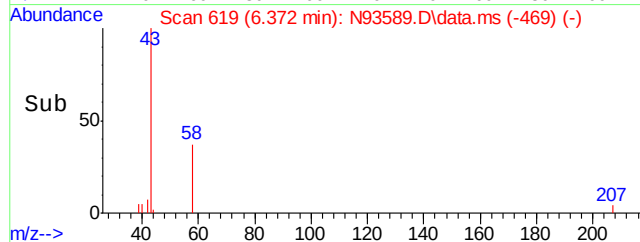
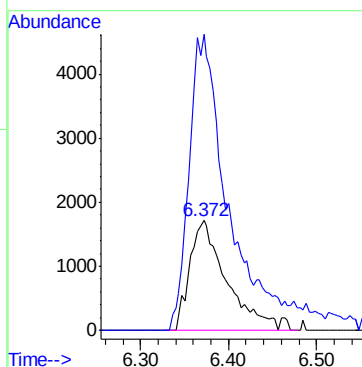
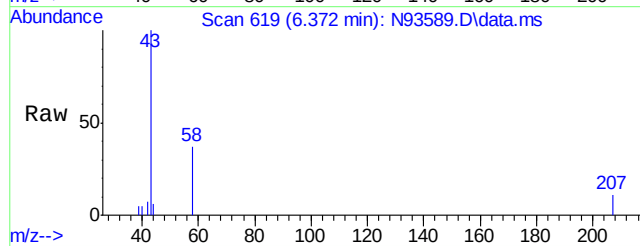
Quant Time: Jan 02 09:07:16 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





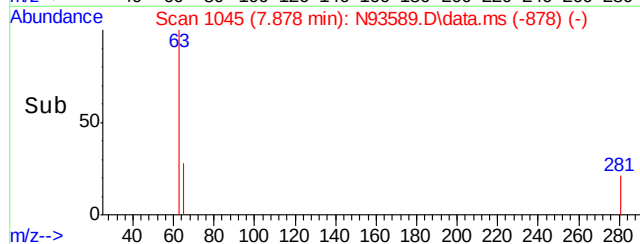
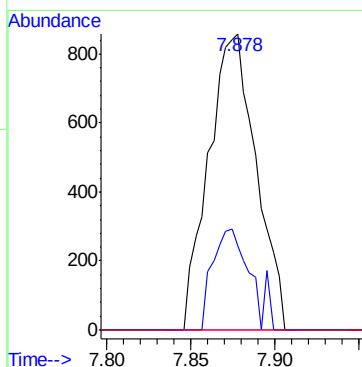
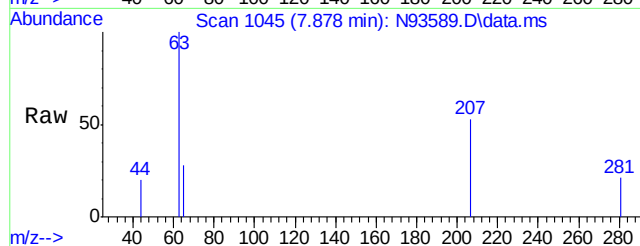
#16
acetone
Concen: 12.32 ug/L
RT: 6.372 min Scan# 619
Delta R.T. 0.032 min
Lab File: N93589.D
Acq: 31 Dec 2014 3:25 pm

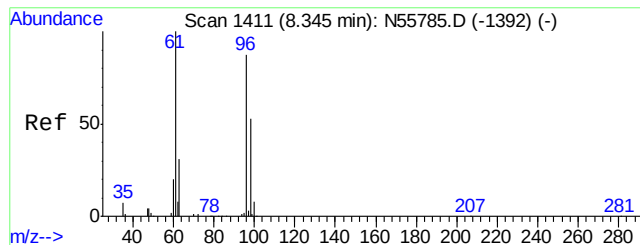
Tgt Ion: 58 Resp: 5036
Ion Ratio Lower Upper
58 100
43 269.3 256.2 316.2



#32
1,1-dichloroethane
Concen: 0.29 ug/L
RT: 7.878 min Scan# 1045
Delta R.T. -0.000 min
Lab File: N93589.D
Acq: 31 Dec 2014 3:25 pm

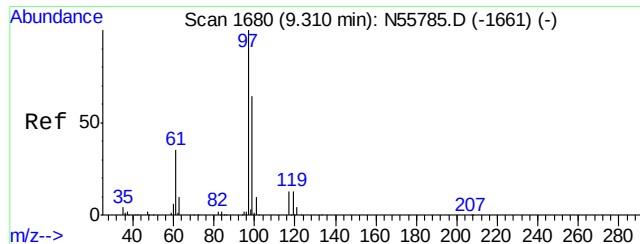
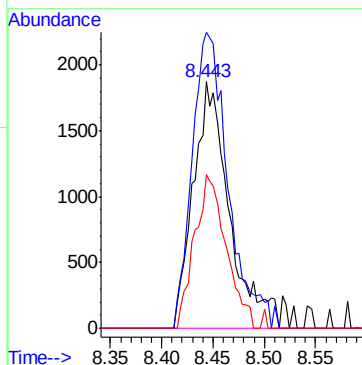
Tgt Ion: 63 Resp: 1684
Ion Ratio Lower Upper
63 100
65 28.3 0.0 58.3
83 0.0 0.0 39.9





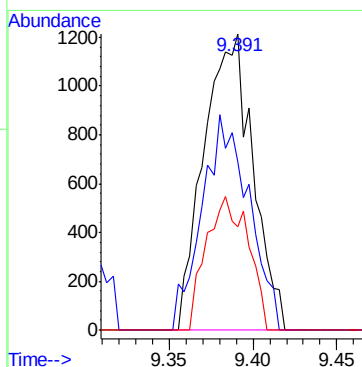
#36
cis-1,2-dichloroethene
Concen: 1.32 ug/L
RT: 8.443 min Scan# 1205
Delta R.T. 0.000 min
Lab File: N93589.D
Acq: 31 Dec 2014 3:25 pm

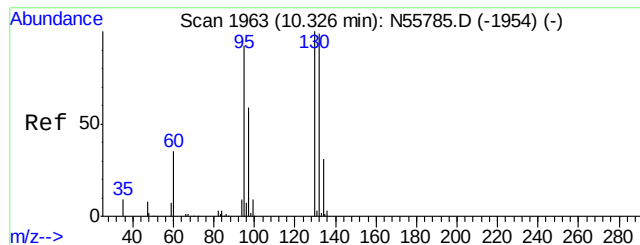
Tgt Ion	Ratio	Lower	Upper
96	100		
61	120.2	148.4	208.4
98	62.2	32.3	92.3



#42
1,1,1-trichloroethane
Concen: 0.51 ug/L
RT: 9.391 min Scan# 1473
Delta R.T. -0.000 min
Lab File: N93589.D
Acq: 31 Dec 2014 3:25 pm

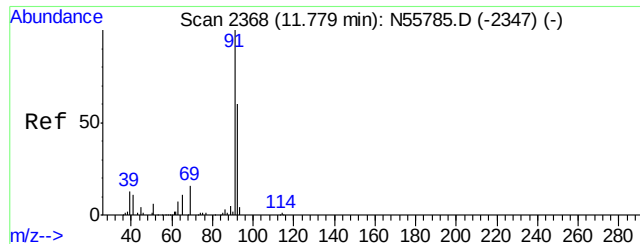
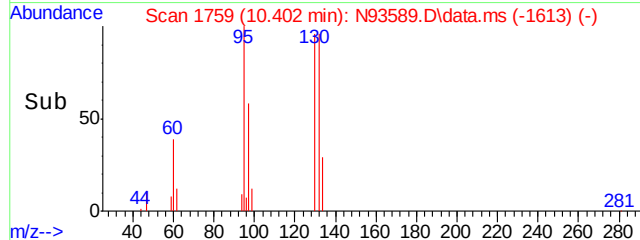
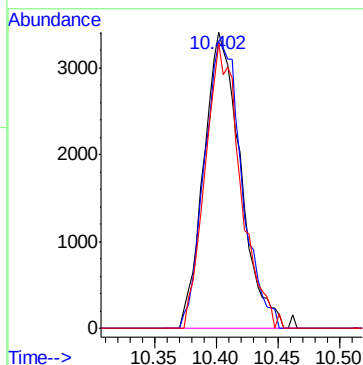
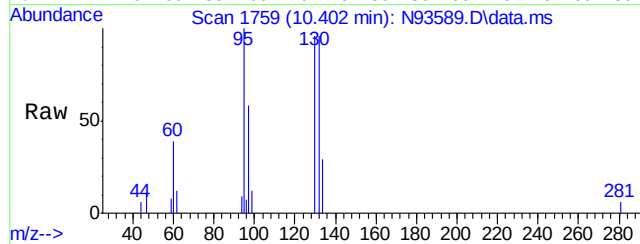
Tgt Ion	Ratio	Lower	Upper
97	100		
99	56.8	34.7	94.7
61	34.9	19.0	79.0





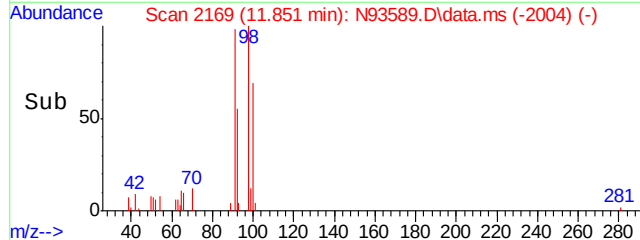
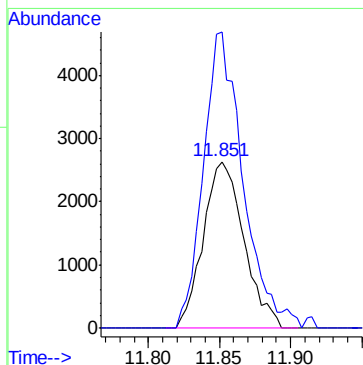
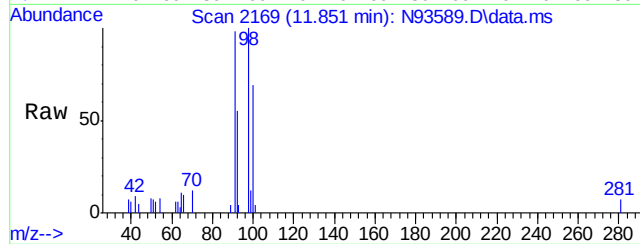
#51
trichloroethene
Concen: 1.96 ug/L
RT: 10.402 min Scan# 1759
Delta R.T. -0.003 min
Lab File: N93589.D
Acq: 31 Dec 2014 3:25 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	96.5	59.1	119.1
132	96.0	56.3	116.3



#62
toluene
Concen: 0.64 ug/L
RT: 11.851 min Scan# 2169
Delta R.T. 0.003 min
Lab File: N93589.D
Acq: 31 Dec 2014 3:25 pm

Tgt Ion	Ratio	Lower	Upper
92	100		
91	177.8	137.3	197.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93590.D
Acq On : 31 Dec 2014 3:54 pm
Operator : jaclynb
Sample : mc36014-10
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 02 09:07:35 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration

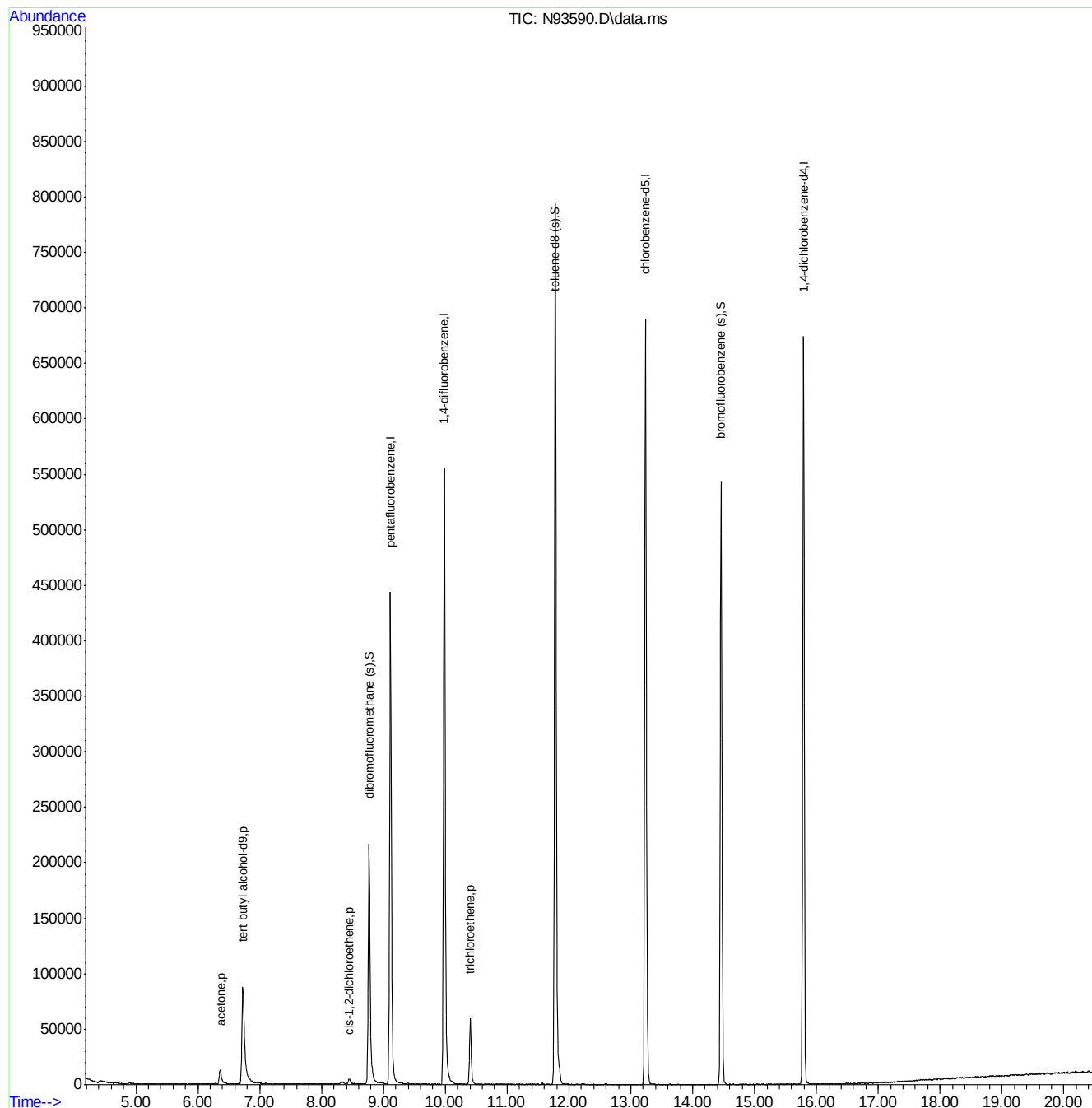
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.729	65	172859	500.00	ug/L	0.02
4) pentafluorobenzene	9.115	168	352577	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	519345	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	256140	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	201377	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	158768	50.31	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.62%		
60) toluene-d8 (s)	11.777	98	626738	50.39	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.78%		
82) bromofluorobenzene (s)	14.457	95	216637	50.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.94%		
Target Compounds						
16) acetone	6.365	58	8864	21.50	ug/L #	83
36) cis-1,2-dichloroethene	8.440	96	2562	0.72	ug/L #	68
51) trichloroethene	10.405	95	23375	6.42	ug/L	93

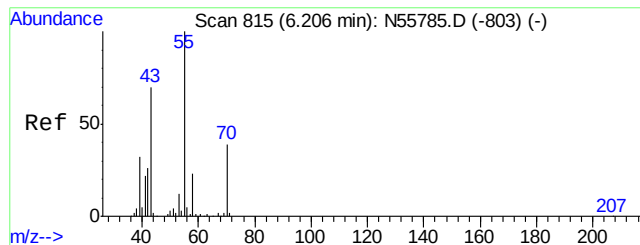
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93590.D
Acq On : 31 Dec 2014 3:54 pm
Operator : jaclynb
Sample : mc36014-10
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

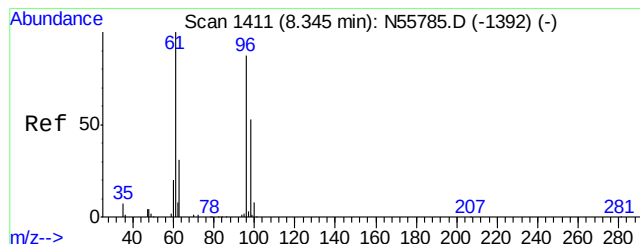
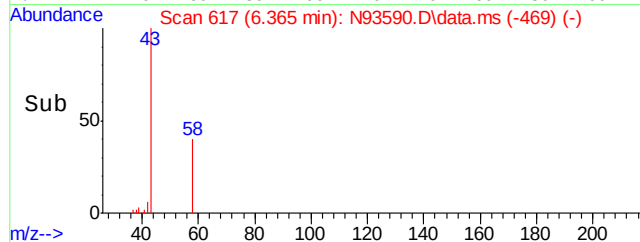
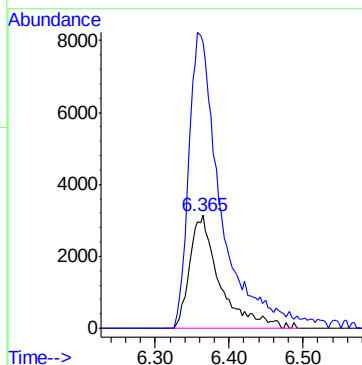
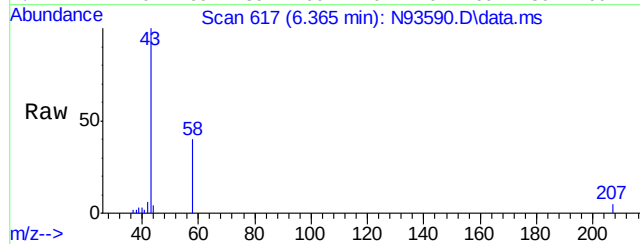
Quant Time: Jan 02 09:07:35 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





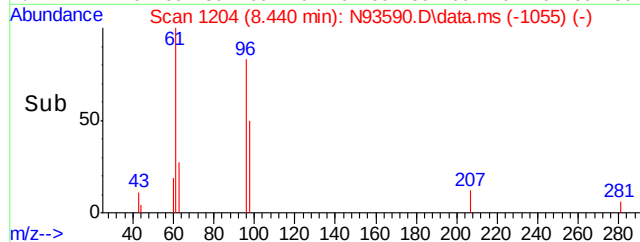
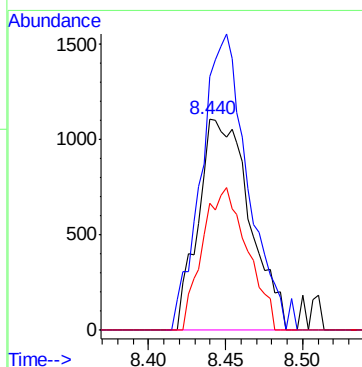
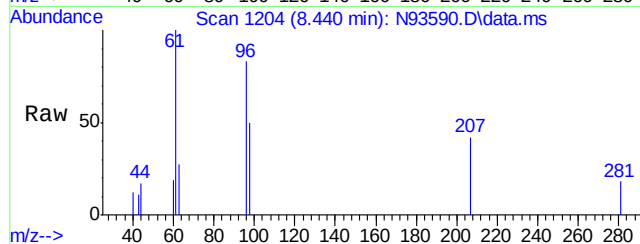
#16
acetone
Concen: 21.50 ug/L
RT: 6.365 min Scan# 617
Delta R.T. 0.025 min
Lab File: N93590.D
Acq: 31 Dec 2014 3:54 pm

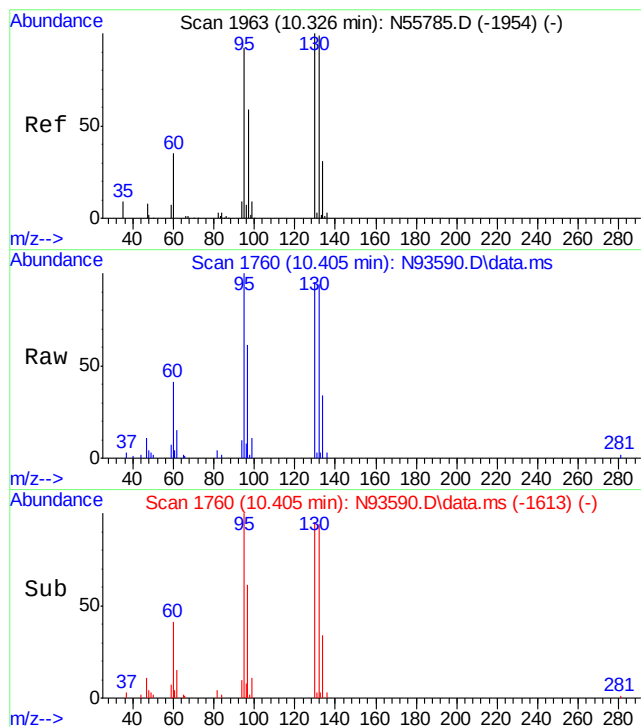
Tgt Ion: 58 Resp: 8864
Ion Ratio Lower Upper
58 100
43 253.1 256.2 316.2#



#36
cis-1,2-dichloroethene
Concen: 0.72 ug/L
RT: 8.440 min Scan# 1204
Delta R.T. -0.003 min
Lab File: N93590.D
Acq: 31 Dec 2014 3:54 pm

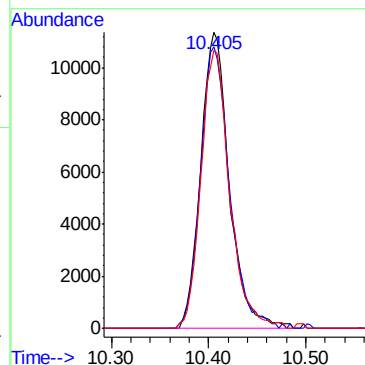
Tgt Ion: 96 Resp: 2562
Ion Ratio Lower Upper
96 100
61 119.9 148.4 208.4#
98 59.7 32.3 92.3





#51
trichloroethene
Concen: 6.42 ug/L
RT: 10.405 min Scan# 1760
Delta R.T. 0.000 min
Lab File: N93590.D
Acq: 31 Dec 2014 3:54 pm

Tgt Ion	Ratio	Resp	Lower	Upper
95	100	23375		
130	95.2	59.1	119.1	
132	94.1	56.3	116.3	



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93591.D
 Acq On : 31 Dec 2014 4:21 pm
 Operator : jaclynb
 Sample : mc36014-11
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 02 09:08:09 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.746	65	79086	500.00	ug/L	0.04
4) pentafluorobenzene	9.115	168	347157	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	514432	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	243551	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	170577	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	154543	49.74	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.48%		
60) toluene-d8 (s)	11.781	98	613149	49.77	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.54%		
82) bromofluorobenzene (s)	14.460	95	201834	56.06	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	112.12%		
Target Compounds						
16) acetone	6.368	58	5446	13.42	ug/L #	77
36) cis-1,2-dichloroethene	8.443	96	2341	0.66	ug/L #	58
44) Cyclohexane	9.667	56	7492	1.28	ug/L #	80
51) trichloroethene	10.402	95	2637	0.73	ug/L	95
62) toluene	11.851	92	8943	1.08	ug/L	96

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

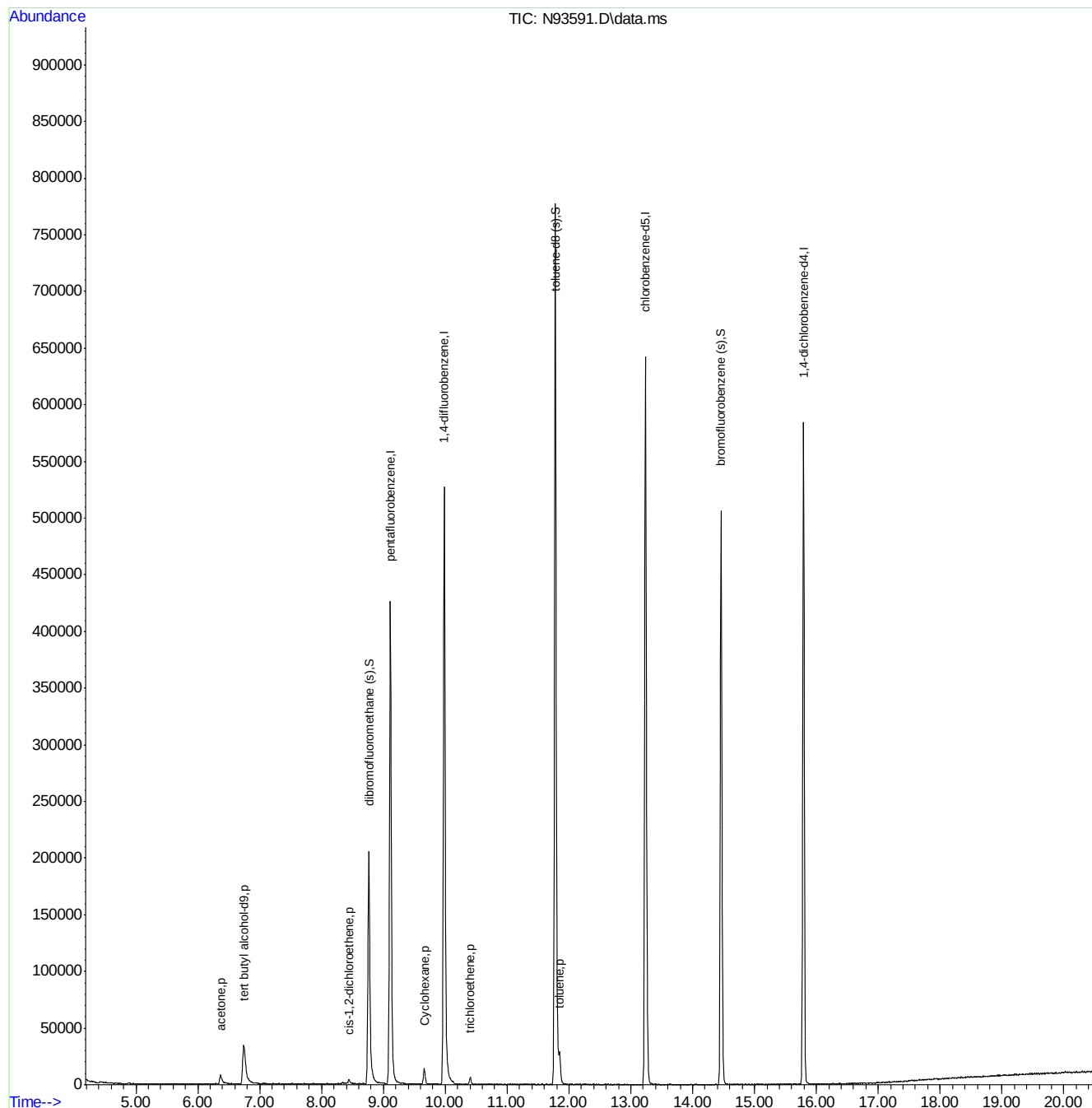
7.1.11

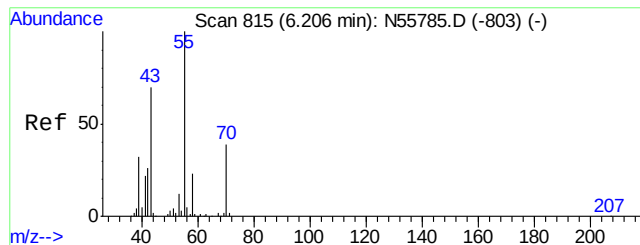
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93591.D
Acq On : 31 Dec 2014 4:21 pm
Operator : jaclynb
Sample : mc36014-11
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 31 Sample Multiplier: 1

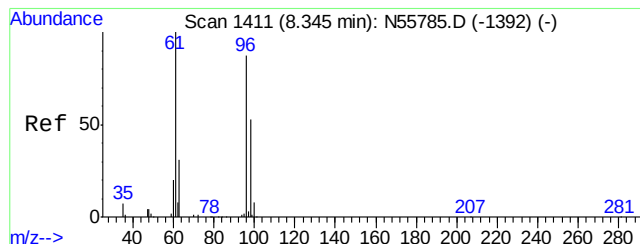
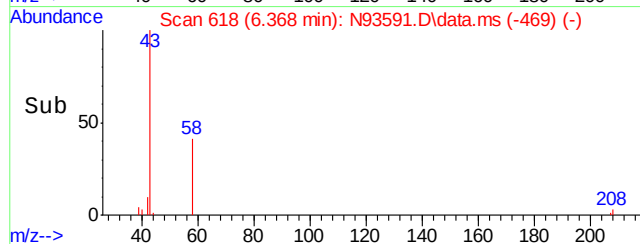
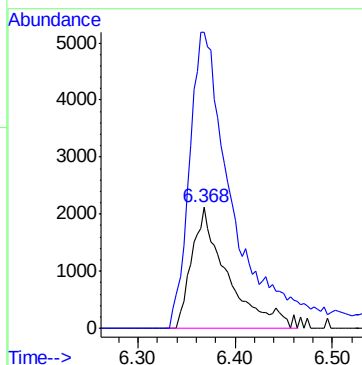
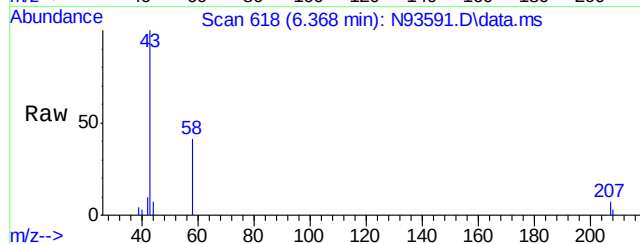
Quant Time: Jan 02 09:08:09 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





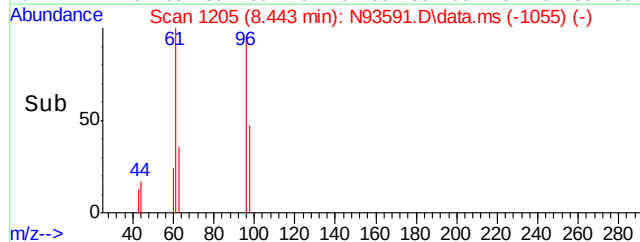
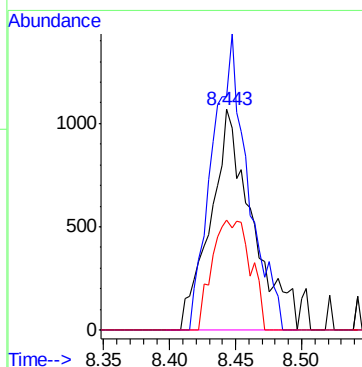
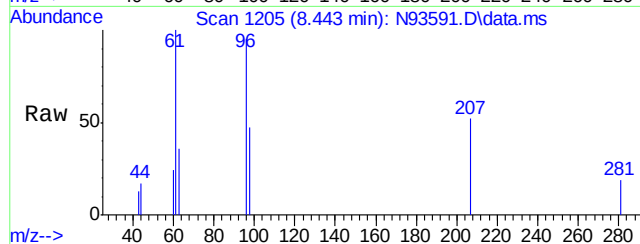
#16
acetone
Concen: 13.42 ug/L
RT: 6.368 min Scan# 618
Delta R.T. 0.028 min
Lab File: N93591.D
Acq: 31 Dec 2014 4:21 pm

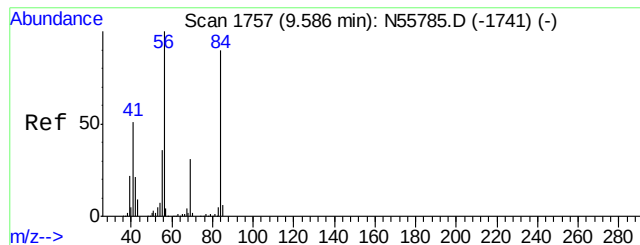
Tgt Ion: 58 Resp: 5446
Ion Ratio Lower Upper
58 100
43 243.3 256.2 316.2#



#36
cis-1,2-dichloroethene
Concen: 0.66 ug/L
RT: 8.443 min Scan# 1205
Delta R.T. 0.000 min
Lab File: N93591.D
Acq: 31 Dec 2014 4:21 pm

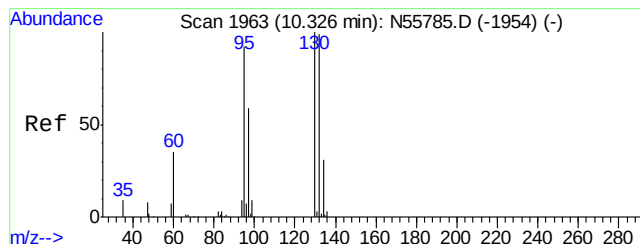
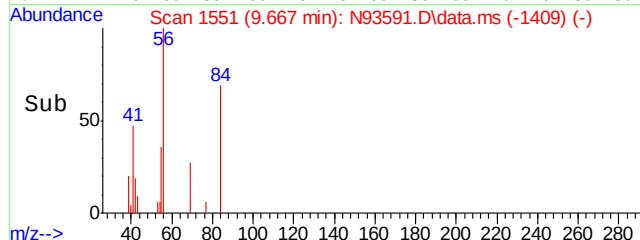
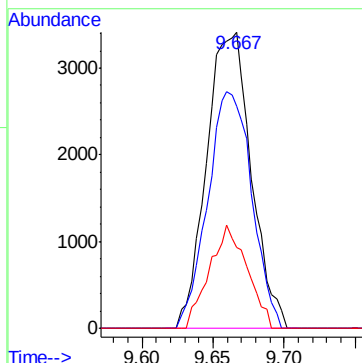
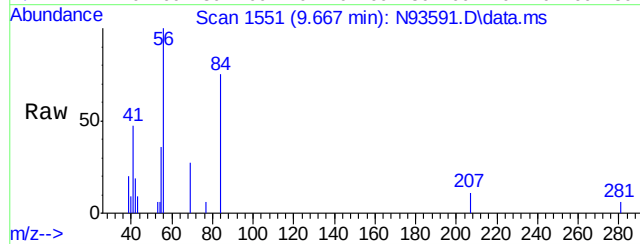
Tgt Ion: 96 Resp: 2341
Ion Ratio Lower Upper
96 100
61 105.7 148.4 208.4#
98 49.7 32.3 92.3





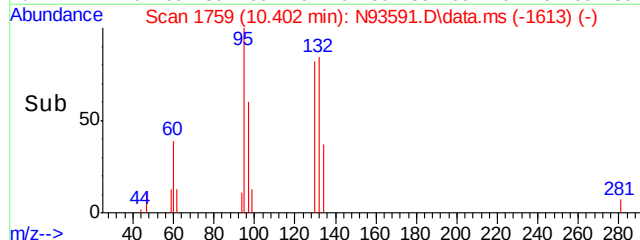
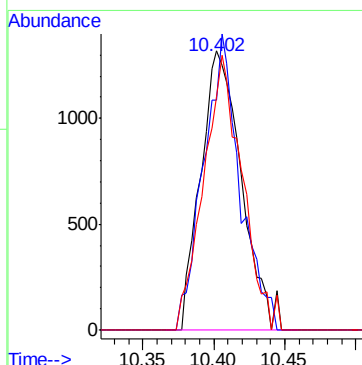
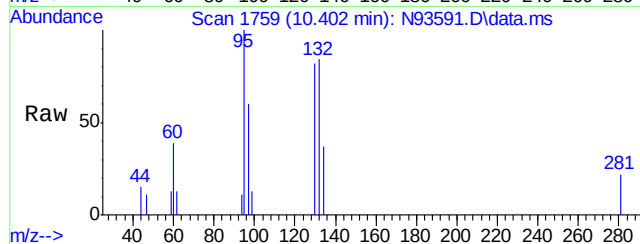
#44
Cyclohexane
Concen: 1.28 ug/L
RT: 9.667 min Scan# 1551
Delta R.T. 0.001 min
Lab File: N93591.D
Acq: 31 Dec 2014 4:21 pm

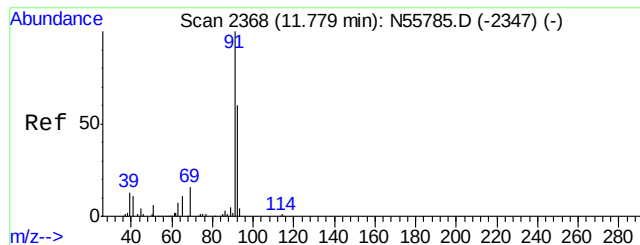
Tgt Ion:	56	Resp:	7492
Ion Ratio	Lower	Upper	
56	100		
84	75.0	46.8	70.2#
69	27.2	16.0	24.0#



#51
trichloroethene
Concen: 0.73 ug/L
RT: 10.402 min Scan# 1759
Delta R.T. -0.003 min
Lab File: N93591.D
Acq: 31 Dec 2014 4:21 pm

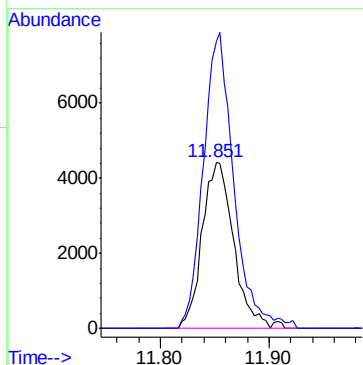
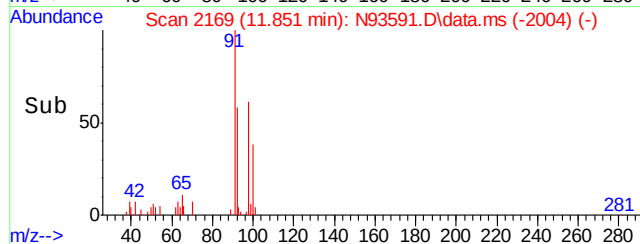
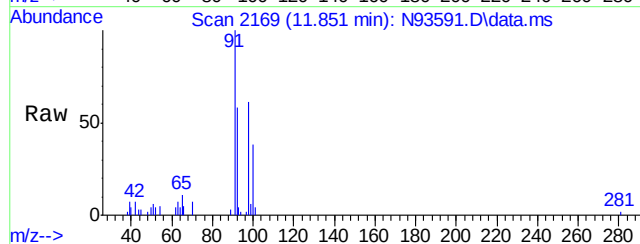
Tgt Ion:	95	Resp:	2637
Ion Ratio	Lower	Upper	
95	100		
130	82.4	59.1	119.1
132	83.6	56.3	116.3





#62
toluene
Concen: 1.08 ug/L
RT: 11.851 min Scan# 2169
Delta R.T. 0.003 min
Lab File: N93591.D
Acq: 31 Dec 2014 4:21 pm

Tgt Ion: 92 Resp: 8943
Ion Ratio Lower Upper
92 100
91 172.4 137.3 197.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93592.D
 Acq On : 31 Dec 2014 4:50 pm
 Operator : jaclynb
 Sample : mc36014-12
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 02 09:08:35 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) tert butyl alcohol-d9	6.729	65	155785	500.00	ug/L	0.02
4) pentafluorobenzene	9.115	168	355661	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	526321	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	258774	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	199178	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	160721	50.49	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.98%		
60) toluene-d8 (s)	11.781	98	634955	50.37	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.74%		
82) bromofluorobenzene (s)	14.460	95	218366	51.94	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.88%		
Target Compounds						
36) cis-1,2-dichloroethene	8.447	96	5205	1.44	ug/L	Qvalue # 65

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

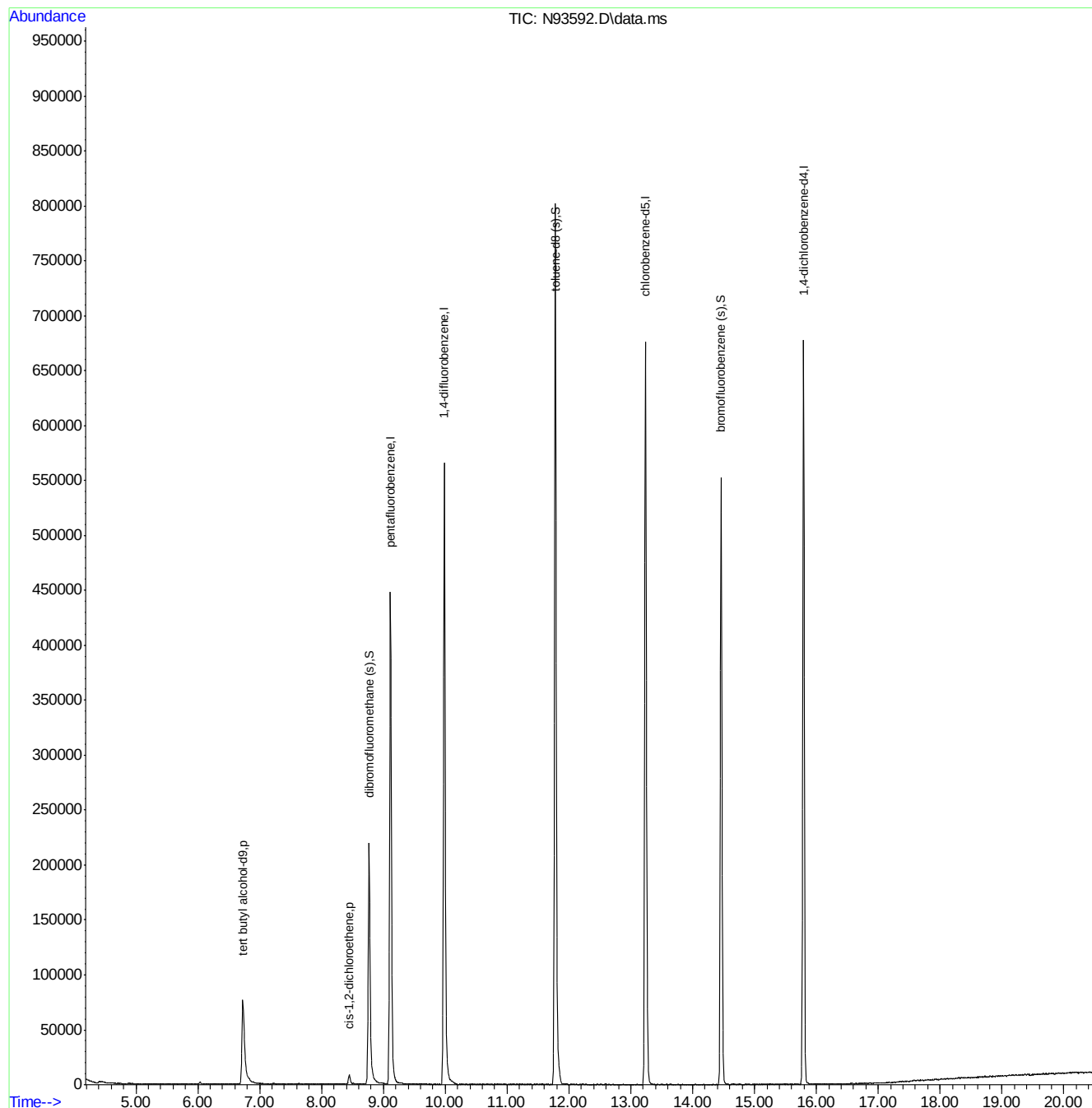
7.1.12

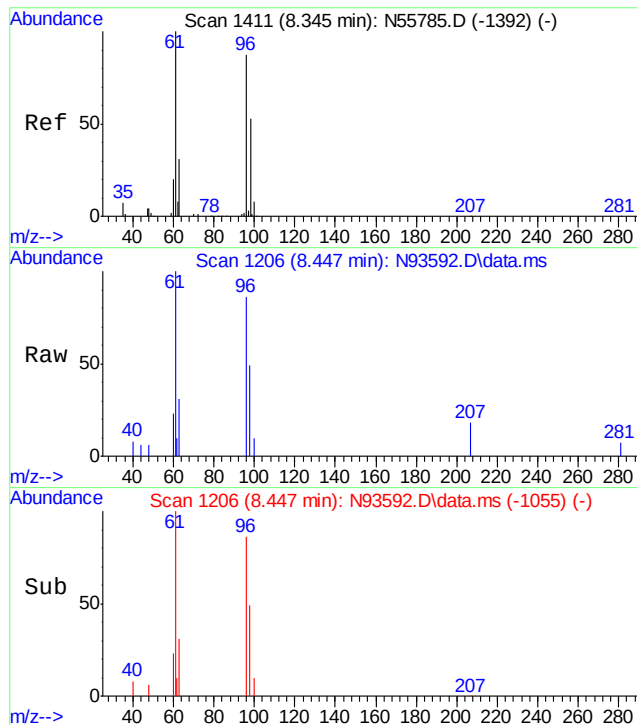
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93592.D
Acq On : 31 Dec 2014 4:50 pm
Operator : jaclynb
Sample : mc36014-12
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 32 Sample Multiplier: 1

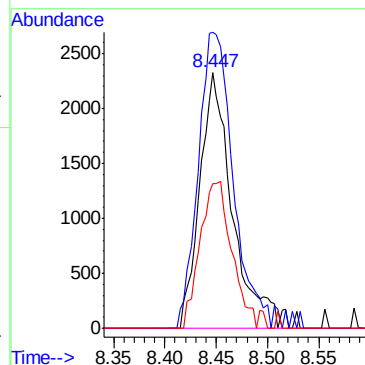
Quant Time: Jan 02 09:08:35 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





#36
 cis-1,2-dichloroethene
 Concen: 1.44 ug/L
 RT: 8.447 min Scan# 1206
 Delta R.T. 0.004 min
 Lab File: N93592.D
 Acq: 31 Dec 2014 4:50 pm

Tgt Ion:	96	Resp:	5205
Ion Ratio	Lower	Upper	
96	100		
61	115.8	148.4	208.4#
98	56.8	32.3	92.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93593.D
Acq On : 31 Dec 2014 5:18 pm
Operator : jaclynb
Sample : mc36014-13
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 02 09:08:48 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.746	65	81188	500.00	ug/L	0.04
4) pentafluorobenzene	9.115	168	358298	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	530279	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	251824	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	172181	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	159301	49.67	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.34%		
60) toluene-d8 (s)	11.777	98	629313	49.55	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.10%		
82) bromofluorobenzene (s)	14.457	95	206097	56.71	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	113.42%		

Target Compounds	Qvalue

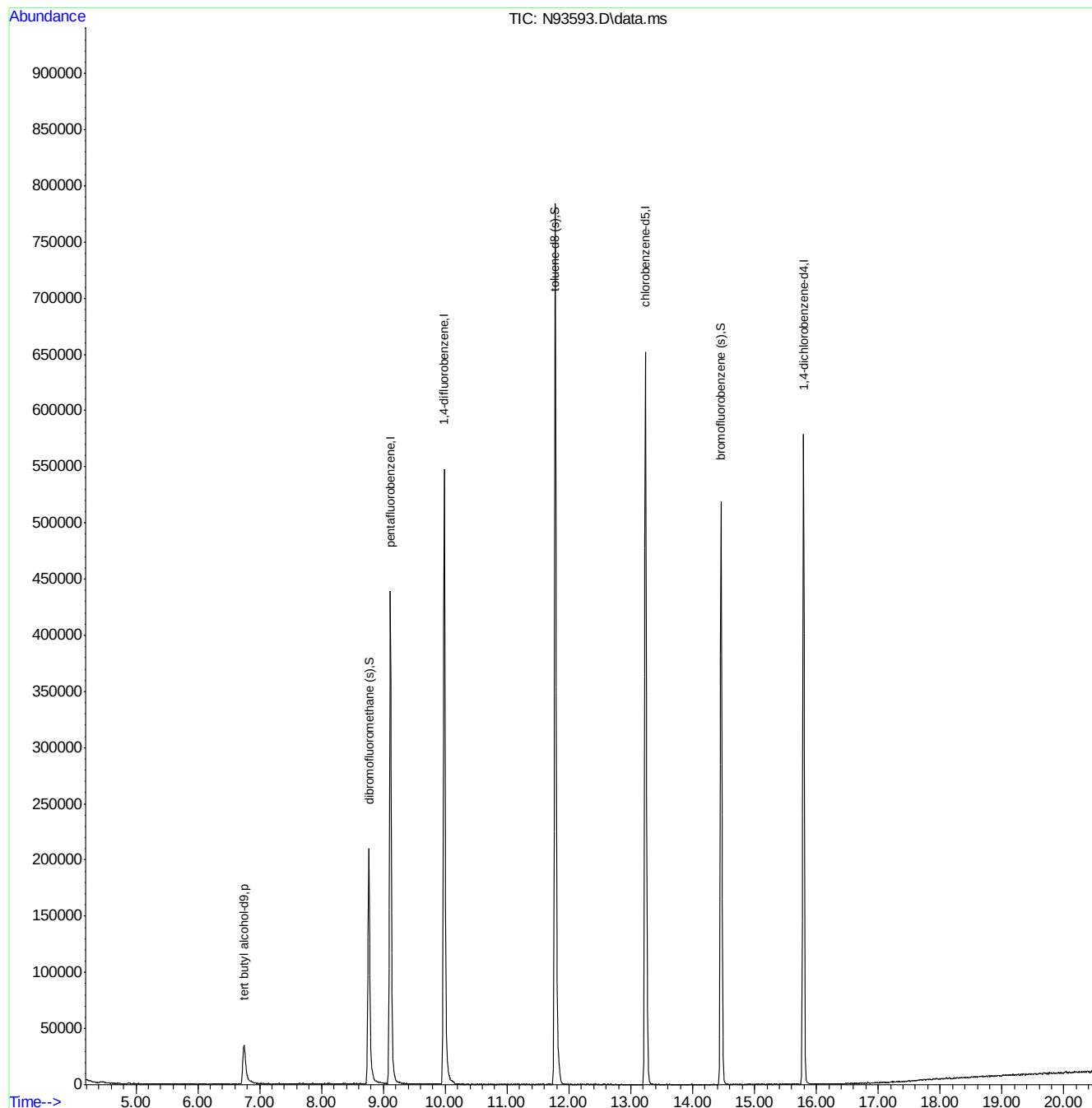
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93593.D
Acq On : 31 Dec 2014 5:18 pm
Operator : jaclynb
Sample : mc36014-13
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 02 09:08:48 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93594.D
Acq On : 31 Dec 2014 5:46 pm
Operator : jaclynb
Sample : mc36014-14
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 02 09:09:05 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.729	65	151948	500.00	ug/L	0.02
4) pentafluorobenzene	9.115	168	356044	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	534194	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	259911	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	198884	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	161136	50.56	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.12%		
60) toluene-d8 (s)	11.781	98	638958	49.95	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.90%		
82) bromofluorobenzene (s)	14.457	95	217025	51.70	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.40%		
Target Compounds						
16) acetone	6.361	58	6266	15.05	ug/L	Qvalue 98

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

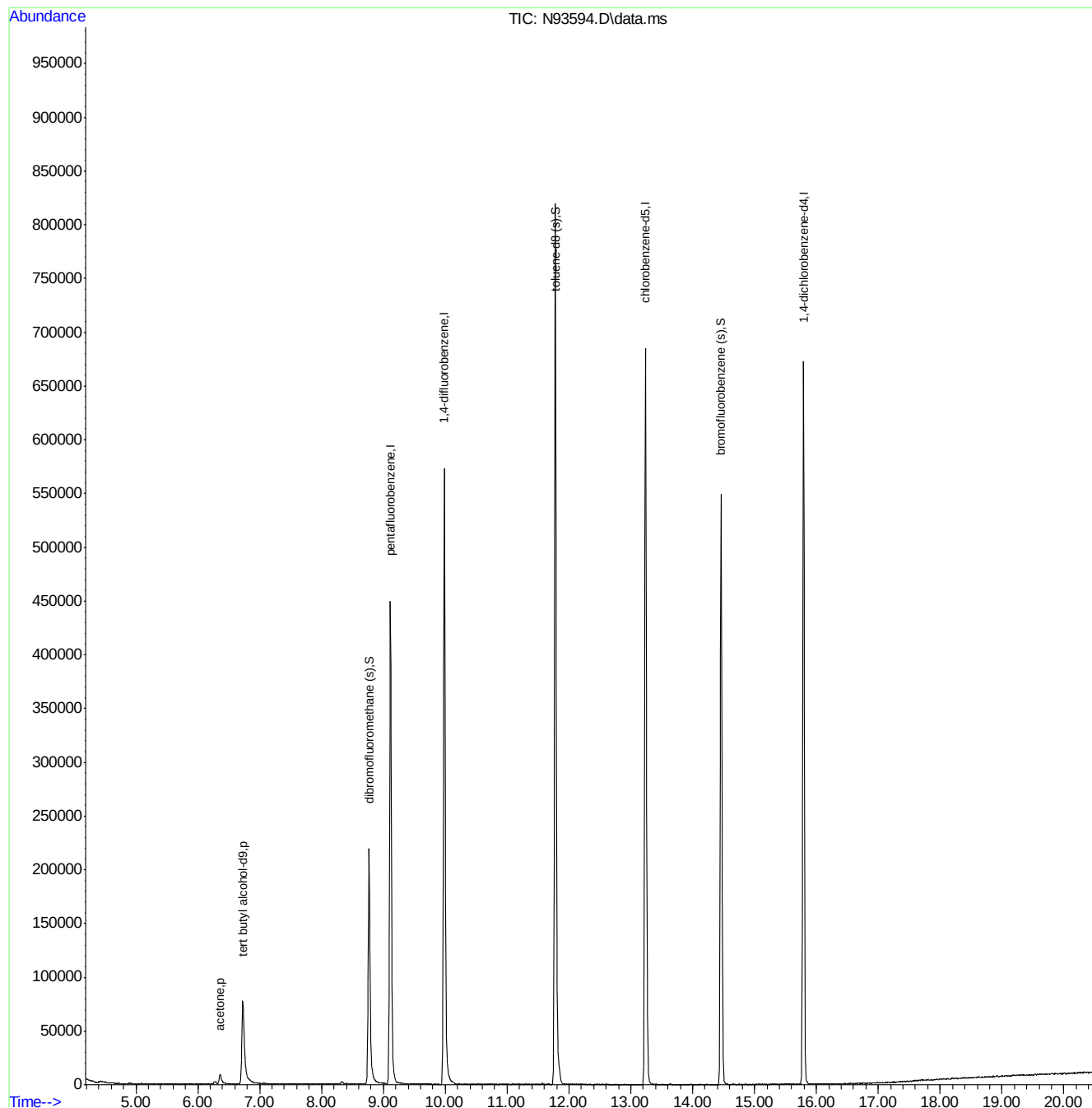
7.1.14

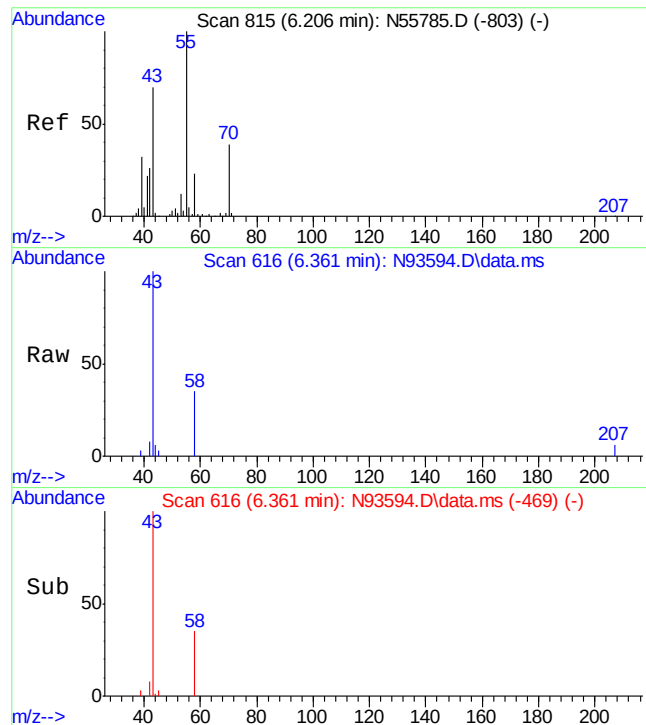
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93594.D
Acq On : 31 Dec 2014 5:46 pm
Operator : jaclynb
Sample : mc36014-14
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 34 Sample Multiplier: 1

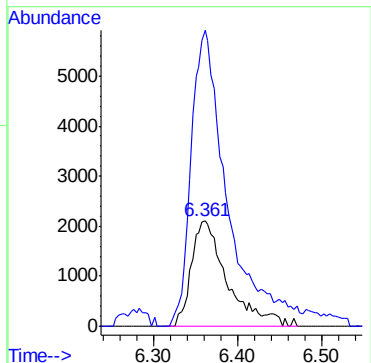
Quant Time: Jan 02 09:09:05 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration





#16
acetone
Concen: 15.05 ug/L
RT: 6.361 min Scan# 616
Delta R.T. 0.021 min
Lab File: N93594.D
Acq: 31 Dec 2014 5:46 pm

Tgt Ion	58	Ratio	Lower	Upper
58	100			
43	282.0	256.2	316.2	



7.1.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93580.D
Acq On : 31 Dec 2014 11:13 am
Operator : jaclynb
Sample : mc36014-15
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 12:22:14 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.750	65	80103	500.00	ug/L	# 0.04
4) pentafluorobenzene	9.115	168	363896	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	537971	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	257139	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	183619	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	160444	49.26	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.52%		
60) toluene-d8 (s)	11.777	98	646890	50.21	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.42%		
82) bromofluorobenzene (s)	14.457	95	212808	54.91	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	109.82%		

Target Compounds	Qvalue

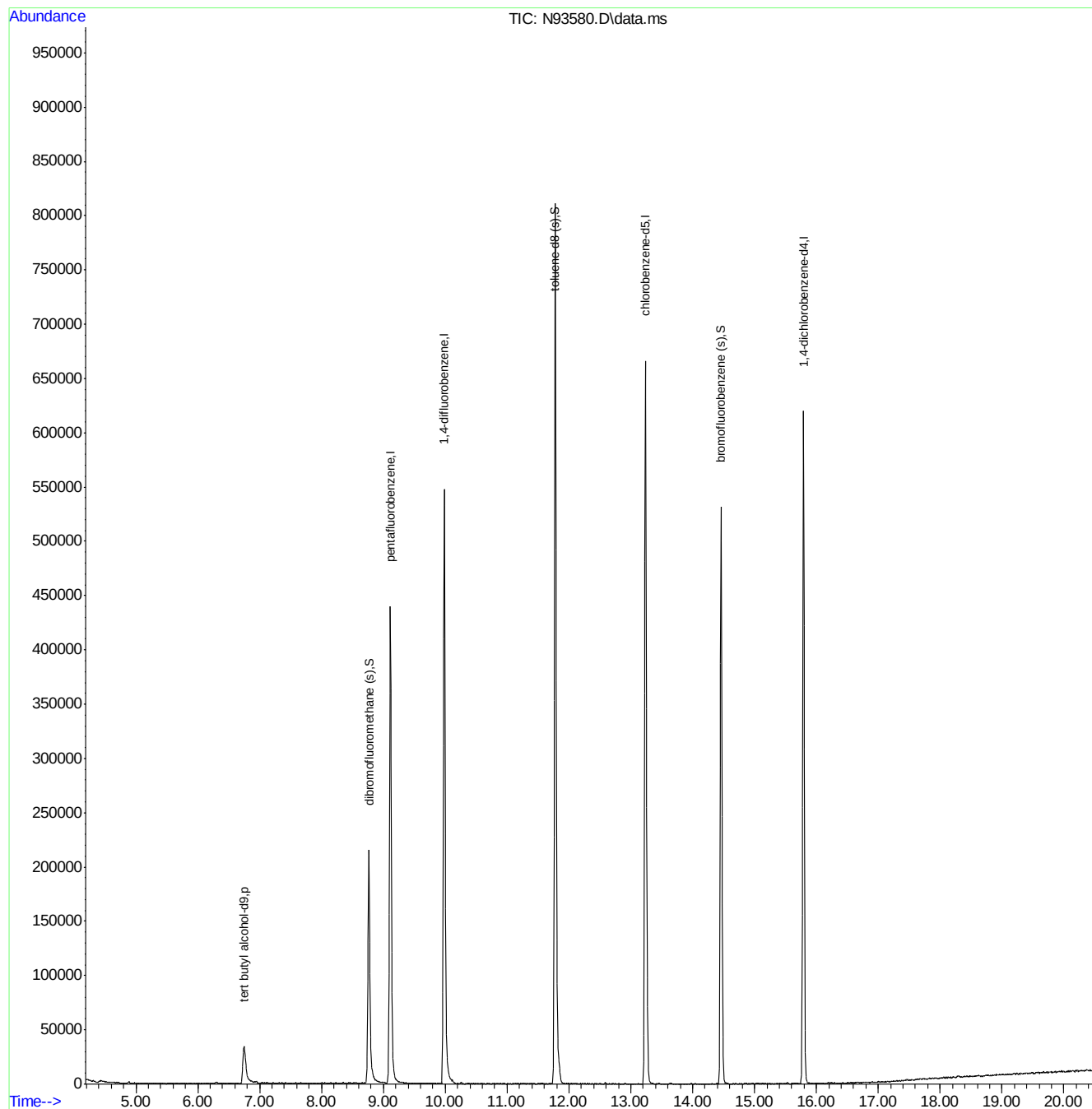
(#)=qualifier out of range (m)=manual integration (+)=signals summed	

7.1.15
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93580.D
Acq On : 31 Dec 2014 11:13 am
Operator : jaclynb
Sample : mc36014-15
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 31 12:22:14 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93579.D
Acq On : 31 Dec 2014 10:45 am
Operator : jaclynb
Sample : mb
Misc : ms33623,MSN3454,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 31 12:21:41 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.732	65	166211	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.115	168	367260	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	540430	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	261904	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	207654	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	161904	49.25	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.50%		
60) toluene-d8 (s)	11.777	98	644886	49.83	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.66%		
82) bromofluorobenzene (s)	14.460	95	223657	51.03	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.06%		

Target Compounds Qvalue

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

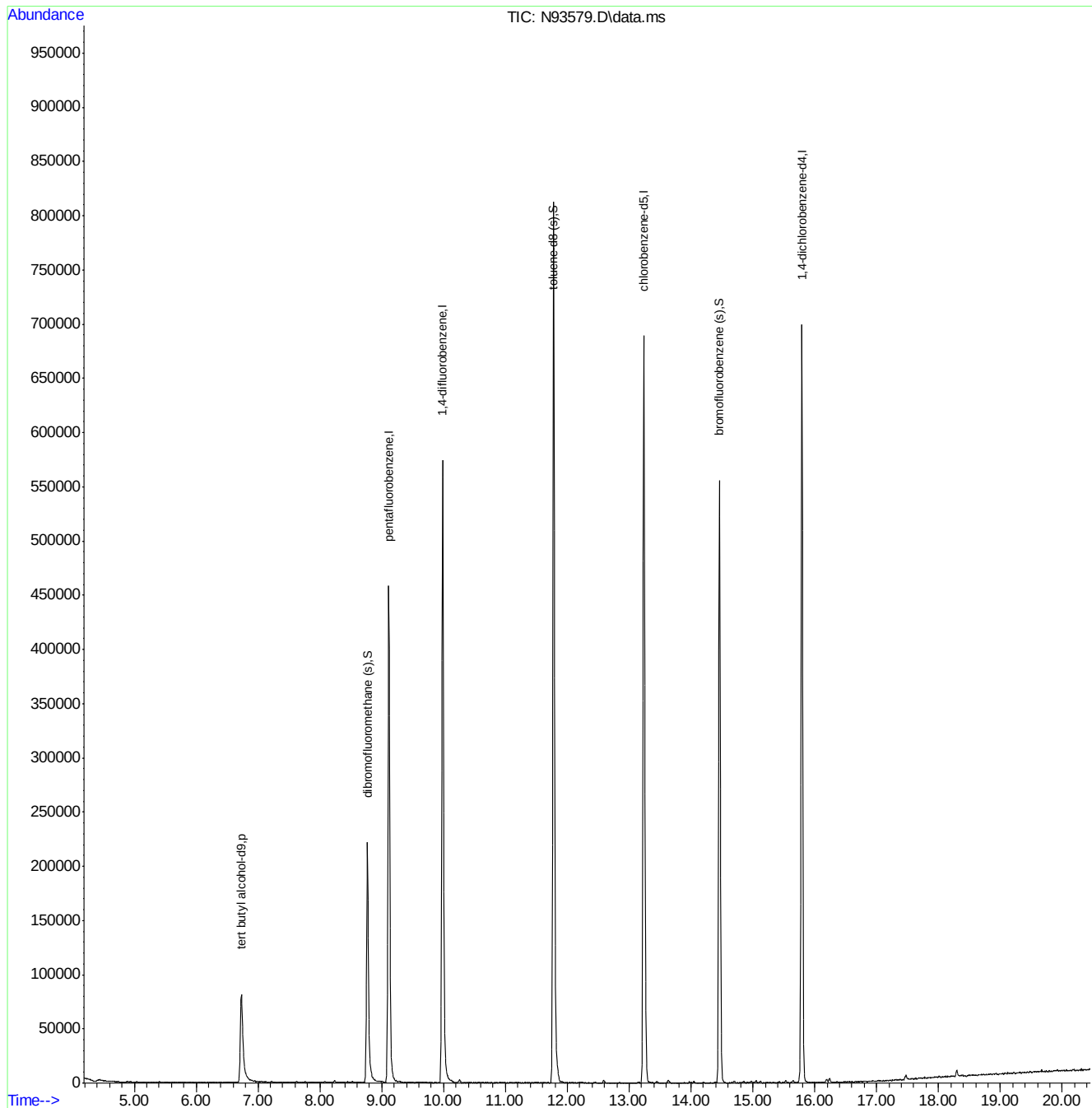
7.2.1

7

(QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93579.D
Acq On : 31 Dec 2014 10:45 am
Operator : jaclynb
Sample : mb
Misc : ms33623,MSN3454,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 31 12:21:41 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



n141229w.m Fri Jan 02 09:17:44 2015

Page: 2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93576.D
 Acq On : 31 Dec 2014 9:19 am
 Operator : jaclynb
 Sample : bs
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 12:20:44 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.714	65	90153	500.00	ug/L	# 0.00
4) pentafluorobenzene	9.111	168	362590	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	533127	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	276438	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	230481	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	164406	50.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.32%		
60) toluene-d8 (s)	11.777	98	646263	50.62	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.24%		
82) bromofluorobenzene (s)	14.457	95	233354	47.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.94%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.792	59	113380	553.44	ug/L	# 100
3) Ethanol	5.576	45	160728m	5403.05	ug/L	
5) dichlorodifluoromethane	4.395	85	184403	44.45	ug/L	99
6) chloromethane	4.660	50	180707	48.81	ug/L	97
7) vinyl chloride	4.897	62	158537	55.06	ug/L	99
8) bromomethane	5.403	96	142634	54.33	ug/L	99
9) chloroethane	5.565	64	110280	48.52	ug/L	99
10) ethyl ether	6.435	59	119699	48.01	ug/L	68
11) acetonitrile	6.439	41	15340	45.77	ug/L	98
12) trichlorofluoromethane	6.205	101	307500	57.81	ug/L	98
13) freon-113	6.962	101	151244	47.18	ug/L	92
14) acrolein	6.205	56	74085	310.84	ug/L	92
15) 1,1-dichloroethene	6.785	96	127683	41.62	ug/L	# 70
16) acetone	6.343	58	21878	51.61	ug/L	87
17) Methyl Acetate	6.973	43	87147	34.98	ug/L	# 88
18) methylene chloride	6.941	84	170804	48.09	ug/L	# 66
19) methyl tert butyl ether	7.708	73	362081	49.99	ug/L	86
20) acrylonitrile	6.852	53	41948	45.72	ug/L	95
21) allyl chloride	7.029	41	204985	50.95	ug/L	76
22) trans-1,2-dichloroethene	7.619	96	159482	47.29	ug/L	# 74
23) iodomethane	6.856	142	162794	44.94	ug/L	89
24) carbon disulfide	7.216	76	385844	33.92	ug/L	100
26) vinyl acetate	7.973	43	205703	101.31	ug/L	92
27) chloroprene	8.231	53	200623	48.00	ug/L	64
28) di-isopropyl ether	8.263	45	515521	53.45	ug/L	90
29) methacrylonitrile	8.401	41	65581	49.67	ug/L	77
30) 2-butanone	8.291	72	19665	49.45	ug/L	# 1
31) Hexane	8.245	41	187497	47.57	ug/L	# 84
32) 1,1-dichloroethane	7.874	63	298163	48.80	ug/L	93
33) tert-butyl ethyl ether	8.655	59	284604	36.95	ug/L	89
34) isobutyl alcohol	8.259	43	393353	251.78	ug/L	92
35) 2,2-dichloropropane	8.723	77	240675	53.59	ug/L	95
36) cis-1,2-dichloroethene	8.440	96	185145	50.35	ug/L	# 74
37) ethyl acetate	8.259	43	393353	50.43	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93576.D
 Acq On : 31 Dec 2014 9:19 am
 Operator : jaclynb
 Sample : bs
 Misc : ms33623,MSN3454,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 12:20:44 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.609	128	81740	50.46	ug/L #	68
39) chloroform	8.641	83	305441	53.76	ug/L	99
41) Tetrahydrofuran	8.977	42	28708	45.27	ug/L	67
42) 1,1,1-trichloroethane	9.387	97	260677	52.07	ug/L	94
44) Cyclohexane	9.666	56	284751	47.11	ug/L #	73
45) carbon tetrachloride	9.751	117	229513	53.73	ug/L	98
46) 1,1-dichloropropene	9.560	75	227420	47.42	ug/L	96
47) benzene	9.790	78	706726	50.78	ug/L	98
48) 1,2-dichloroethane	9.292	62	207487	50.08	ug/L	91
49) tert-amyl methyl ether	9.900	73	209943	33.50	ug/L	85
50) heptane	10.250	43	160477	61.03	ug/L	87
51) trichloroethene	10.402	95	197666	52.92	ug/L	93
52) 1,2-dichloropropane	10.374	63	198670	55.13	ug/L	98
53) dibromomethane	10.349	93	96857	48.68	ug/L	87
54) bromodichloromethane	10.458	83	247013	56.31	ug/L	99
55) Methylcyclohexane	10.914	83	322636	53.00	ug/L #	74
56) 2-chloroethyl vinyl ether	10.374	63	198670	55.13	ug/L #	95
57) methyl methacrylate	10.550	69	91859	50.25	ug/L #	75
58) 1,4-dioxane	10.557	88	6356	205.57	ug/L #	58
59) cis-1,3-dichloropropene	11.073	75	308364	61.42	ug/L	98
61) 4-methyl-2-pentanone	11.172	43	114999	53.84	ug/L	95
62) toluene	11.848	92	454200	53.14	ug/L	98
63) trans-1,3-dichloropropene	11.491	75	240284	50.17	ug/L	92
64) 1,1,2-trichloroethane	11.664	83	137746	55.28	ug/L	99
65) ethyl methacrylate	11.862	69	182262	56.18	ug/L	74
67) tetrachloroethene	12.587	166	196352	49.67	ug/L	94
68) 1,3-dichloropropane	11.897	76	264901	52.13	ug/L	100
69) dibromochloromethane	12.191	129	182946	47.70	ug/L	99
70) 1,2-dibromoethane	12.442	107	144782	50.92	ug/L	100
71) 2-hexanone	12.032	43	93461	49.76	ug/L	97
72) chlorobenzene	13.269	112	475659	48.55	ug/L	94
73) 1,1,1,2-tetrachloroethane	13.184	131	182380	55.27	ug/L	97
74) ethylbenzene	13.439	91	905963	51.18	ug/L	94
75) m,p-xylene	13.622	106	673416	103.64	ug/L #	80
76) o-xylene	14.036	106	323118	51.12	ug/L #	82
77) styrene	13.962	104	550050	55.77	ug/L	90
78) bromoform	13.792	173	102947	46.56	ug/L	98
79) trans-1,4-dichloro-2-b...	14.188	53	32739	46.40	ug/L #	35
81) isopropylbenzene	14.397	105	866602	50.79	ug/L	99
83) bromobenzene	14.690	156	215561	51.05	ug/L #	85
84) 1,1,2,2-tetrachloroethane	14.040	83	179613	54.74	ug/L	99
85) 1,2,3-trichloropropane	14.188	75	190026	53.14	ug/L	99
86) n-propylbenzene	14.839	91	1025318	50.61	ug/L	98
87) 2-chlorotoluene	14.962	91	595078	49.54	ug/L	92
88) 4-chlorotoluene	15.040	91	610772	50.87	ug/L	95
89) 1,3,5-trimethylbenzene	15.118	105	766508	54.13	ug/L	98
90) tert-butylbenzene	15.422	91	433143	50.89	ug/L	90
91) 1,2,4-trimethylbenzene	15.528	105	744216	52.44	ug/L	100
92) sec-butylbenzene	15.641	105	951555	51.33	ug/L	99
93) 1,3-dichlorobenzene	15.751	146	368971	50.73	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93576.D
 Acq On : 31 Dec 2014 9:19 am
 Operator : jaclynb
 Sample : bs
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 12:20:44 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

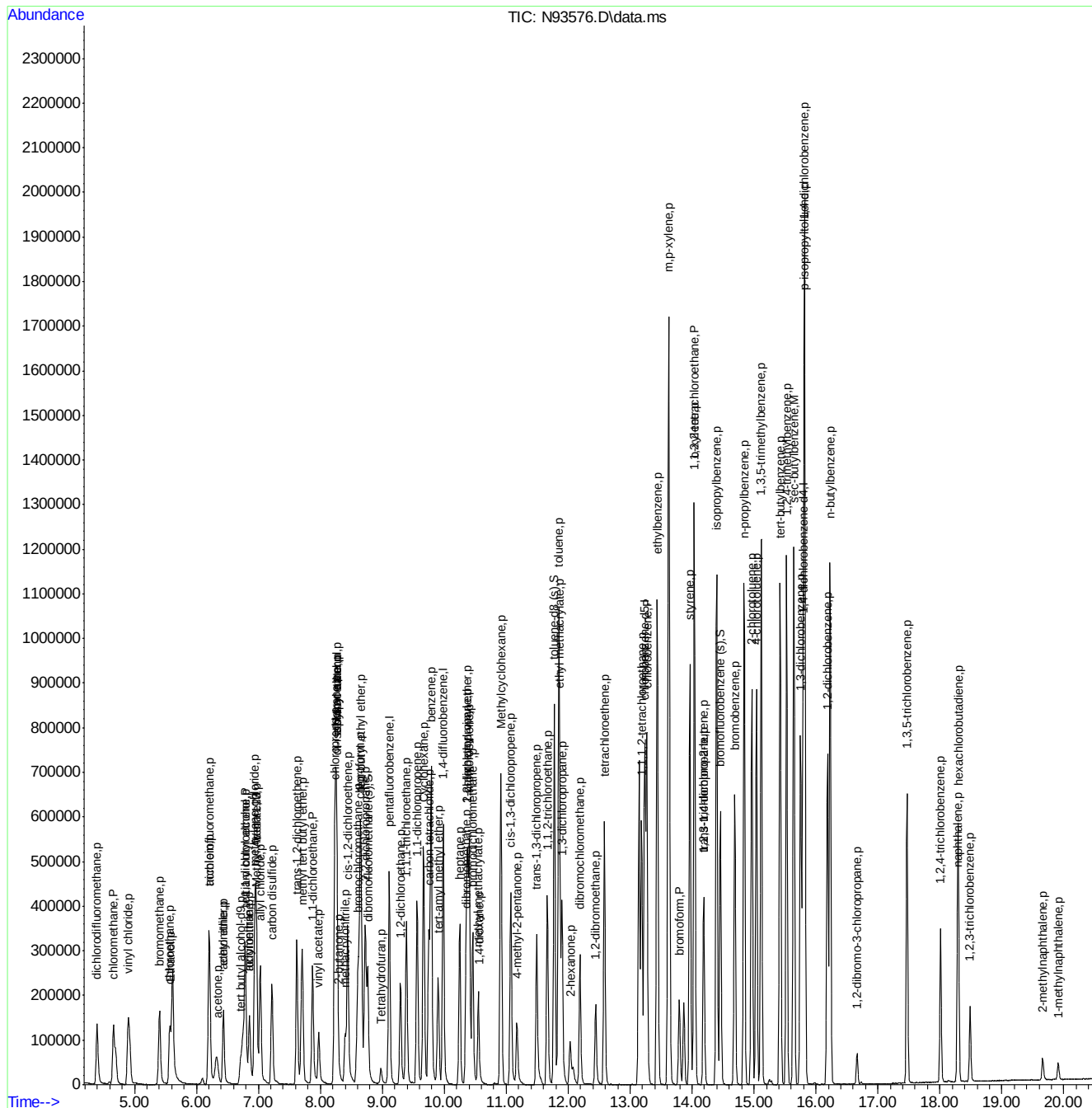
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	15.811	119	756296	55.78	ug/L	95
95)	1,4-dichlorobenzene	15.818	146	361234	52.75	ug/L	93
96)	1,2-dichlorobenzene	16.186	146	345335	51.91	ug/L	97
97)	n-butylbenzene	16.228	91	737334	60.04	ug/L	97
98)	1,2-dibromo-3-chloropr...	16.659	75	20183	45.11	ug/L	84
99)	1,2,4-trichlorobenzene	18.010	180	121152	45.00	ug/L	100
100)	1,3,5-trichlorobenzene	17.469	180	225150	45.71	ug/L	99
101)	hexachlorobutadiene	18.296	225	110452	57.78	ug/L	94
102)	naphthalene	18.282	128	99909	43.80	ug/L	100
103)	1,2,3-trichlorobenzene	18.487	180	60619	40.95	ug/L	96
104)	2-methylnaphthalene	19.657	142	29710	27.42	ug/L #	100
105)	1-methylnaphthalene	19.908	142	23328	27.32	ug/L	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bs
Misc : ms33623,MSN3454,,,5,1
ALS Vial : 16 Sample Multiplier: 1

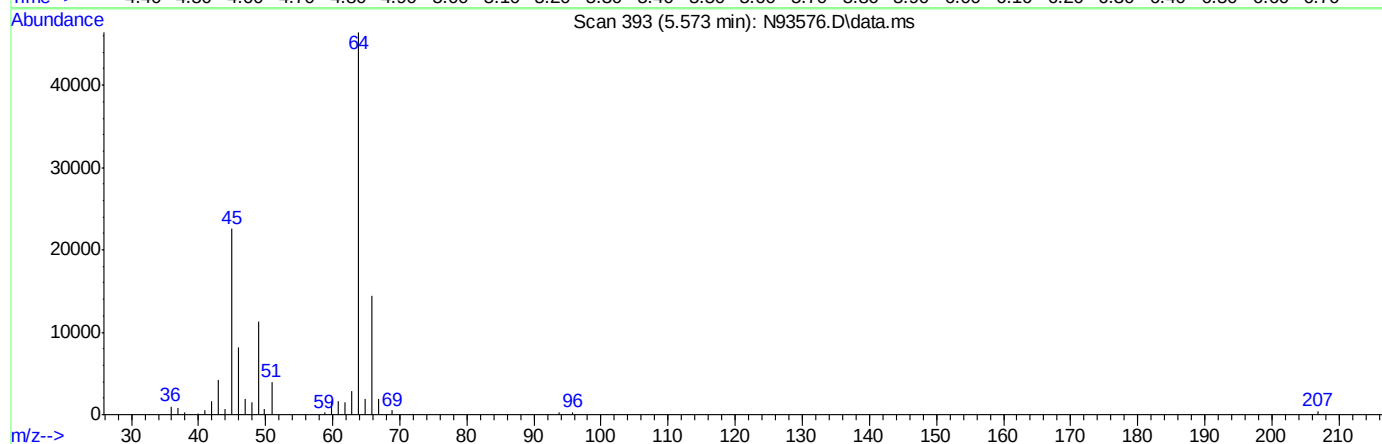
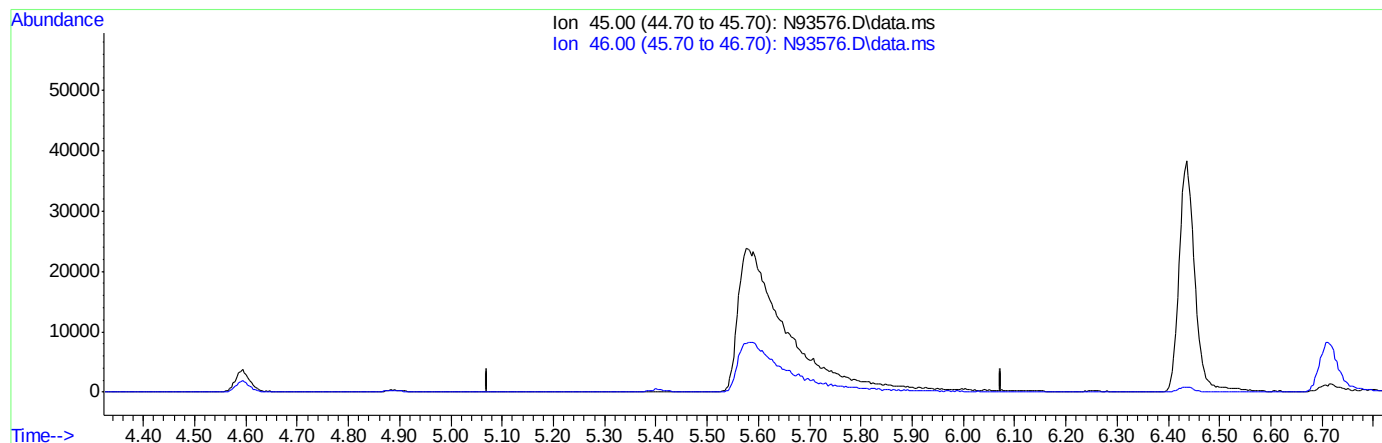
Quant Time: Dec 31 12:20:44 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bfb
Misc : ms33617,MSN3455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:54:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

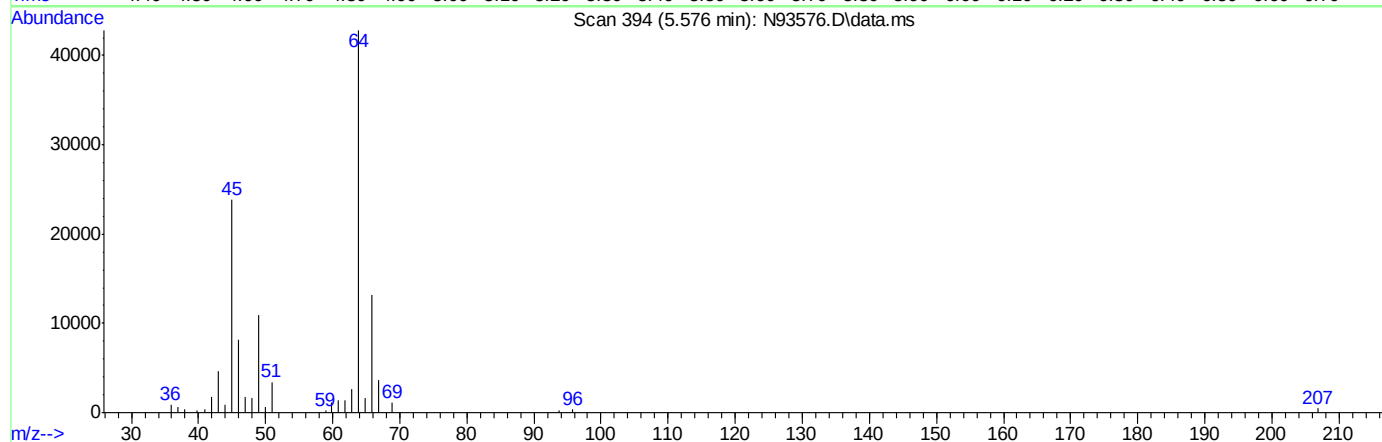
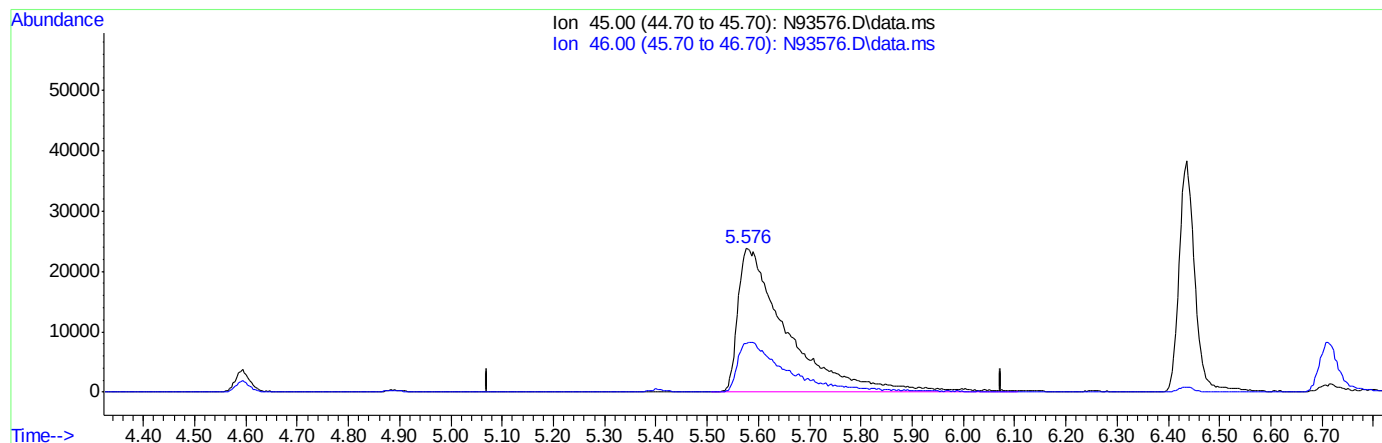
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bfb
Misc : ms33617,MSN3455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:54:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



TIC: N93576.D\data.ms

(3) Ethanol (p)

5.576min (+0.003) 5403.05ug/L m

response 160728

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93600.D
 Acq On : 31 Dec 2014 8:34 pm
 Operator : jaclynb
 Sample : mc36014-1ms
 Misc : ms33624,MSN3454,,,,,5,5
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 02 09:10:36 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.711	65	127299	500.00	ug/L	0.00
4) pentafluorobenzene	9.115	168	348766	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.988	114	516520	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	272505	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	231123	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	162681	52.11	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	104.22%		
60) toluene-d8 (s)	11.777	98	637589	51.54	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	103.08%		
82) bromofluorobenzene (s)	14.457	95	232750	47.71	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.42%		
Target Compounds						
					Qvalue	
2) tertiary butyl alcohol	6.796	59	151184	522.63	ug/L	# 100
3) Ethanol	5.580	45	226082m	5382.31	ug/L	
5) dichlorodifluoromethane	4.399	85	190121	47.65	ug/L	99
6) chloromethane	4.661	50	167159	46.94	ug/L	96
7) vinyl chloride	4.901	62	130084	46.97	ug/L	98
8) bromomethane	5.406	96	120995	47.91	ug/L	96
9) chloroethane	5.573	64	120718	55.21	ug/L	98
10) ethyl ether	6.439	59	127607	53.21	ug/L	67
11) acetonitrile	6.442	41	16444	51.01	ug/L	98
12) trichlorofluoromethane	6.209	101	276471	54.04	ug/L	97
13) freon-113	6.973	101	144084	46.73	ug/L	92
14) acrolein	6.209	56	70409	307.13	ug/L	99
15) 1,1-dichloroethene	6.789	96	132855	45.02	ug/L	# 71
16) acetone	6.343	58	15820	38.80	ug/L	90
17) Methyl Acetate	6.973	43	151344	63.16	ug/L	# 89
18) methylene chloride	6.944	84	170963	50.05	ug/L	# 70
19) methyl tert butyl ether	7.708	73	399060	57.28	ug/L	89
20) acrylonitrile	6.856	53	53976	61.16	ug/L	100
21) allyl chloride	7.033	41	215077	55.58	ug/L	78
22) trans-1,2-dichloroethene	7.623	96	155458	47.92	ug/L	# 76
23) iodomethane	6.859	142	157263	45.14	ug/L	88
24) carbon disulfide	7.224	76	470043	42.97	ug/L	99
26) vinyl acetate	7.980	43	103064	55.39	ug/L	95
27) chloroprene	8.235	53	220427	54.83	ug/L	67
28) di-isopropyl ether	8.267	45	513897	55.39	ug/L	92
29) methacrylonitrile	8.401	41	75654	59.57	ug/L	79
30) 2-butanone	8.295	72	17271	45.23	ug/L	# 1
31) Hexane	8.249	41	191214	50.44	ug/L	# 83
32) 1,1-dichloroethane	7.878	63	305876	52.05	ug/L	93
33) tert-butyl ethyl ether	8.659	59	323563	43.44	ug/L	91
34) isobutyl alcohol	8.263	43	387177	257.65	ug/L	95
35) 2,2-dichloropropane	8.726	77	212994	49.52	ug/L	93
36) cis-1,2-dichloroethene	8.443	96	184551	52.18	ug/L	# 76
37) ethyl acetate	8.263	43	386594	51.53	ug/L	90

7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93600.D
 Acq On : 31 Dec 2014 8:34 pm
 Operator : jaclynb
 Sample : mc36014-1ms
 Misc : ms33624,MSN3454,,,,5,5
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 02 09:10:36 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.613	128	87106	55.91	ug/L #	69
39) chloroform	8.645	83	303389	55.52	ug/L	98
41) Tetrahydrofuran	8.977	42	39583	64.90	ug/L	75
42) 1,1,1-trichloroethane	9.394	97	256297	53.22	ug/L	94
44) Cyclohexane	9.670	56	291645	49.80	ug/L #	74
45) carbon tetrachloride	9.755	117	220908	53.38	ug/L	95
46) 1,1-dichloropropene	9.564	75	237201	51.05	ug/L	96
47) benzene	9.790	78	710998	52.73	ug/L	99
48) 1,2-dichloroethane	9.295	62	216200	53.86	ug/L	91
49) tert-amyl methyl ether	9.903	73	256280	41.84	ug/L	85
50) heptane	10.253	43	135849	53.32	ug/L	86
51) trichloroethene	10.405	95	193360	53.43	ug/L	94
52) 1,2-dichloropropane	10.374	63	195215	55.92	ug/L	98
53) dibromomethane	10.352	93	109391	56.74	ug/L	88
54) bromodichloromethane	10.462	83	246119	57.91	ug/L	99
55) Methylcyclohexane	10.915	83	302010	51.21	ug/L #	75
56) 2-chloroethyl vinyl ether	10.374	63	195215	55.92	ug/L #	95
57) methyl methacrylate	10.550	69	107851	60.90	ug/L #	77
58) 1,4-dioxane	10.557	88	8833	289.53	ug/L #	60
59) cis-1,3-dichloropropene	11.074	75	281064	57.78	ug/L	97
61) 4-methyl-2-pentanone	11.173	43	136029	65.73	ug/L	96
62) toluene	11.851	92	452525	54.64	ug/L	98
63) trans-1,3-dichloropropene	11.494	75	231129	49.81	ug/L	91
64) 1,1,2-trichloroethane	11.664	83	141057	58.43	ug/L	98
65) ethyl methacrylate	11.862	69	198012	63.00	ug/L	75
67) tetrachloroethene	12.587	166	192431	49.38	ug/L	95
68) 1,3-dichloropropane	11.901	76	265623	53.03	ug/L	99
69) dibromochloromethane	12.191	129	185087	48.94	ug/L	97
70) 1,2-dibromoethane	12.445	107	154035	54.96	ug/L	99
71) 2-hexanone	12.028	43	84308	45.83	ug/L	97
72) chlorobenzene	13.269	112	486030	50.32	ug/L	94
73) 1,1,1,2-tetrachloroethane	13.188	131	173419	53.31	ug/L	98
74) ethylbenzene	13.439	91	884245	50.67	ug/L	94
75) m,p-xylene	13.623	106	667543	104.22	ug/L	82
76) o-xylene	14.036	106	332528	53.37	ug/L	83
77) styrene	13.965	104	539244	55.46	ug/L	87
78) bromoform	13.796	173	114129	51.98	ug/L	98
79) trans-1,4-dichloro-2-b...	14.188	53	38169	54.42	ug/L #	46
81) isopropylbenzene	14.397	105	874281	51.10	ug/L	99
83) bromobenzene	14.690	156	214812	50.74	ug/L #	84
84) 1,1,2,2-tetrachloroethane	14.040	83	199441	60.61	ug/L	99
85) 1,2,3-trichloropropane	14.188	75	211132	58.88	ug/L	99
86) n-propylbenzene	14.839	91	1059034	52.13	ug/L	98
87) 2-chlorotoluene	14.962	91	616658	51.20	ug/L	93
88) 4-chlorotoluene	15.040	91	626414	52.03	ug/L	96
89) 1,3,5-trimethylbenzene	15.118	105	724828	51.05	ug/L	98
90) tert-butylbenzene	15.422	91	439198	51.46	ug/L	89
91) 1,2,4-trimethylbenzene	15.525	105	738206	51.87	ug/L	100
92) sec-butylbenzene	15.641	105	956993	51.48	ug/L	99
93) 1,3-dichlorobenzene	15.751	146	378320	51.87	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93600.D
Acq On : 31 Dec 2014 8:34 pm
Operator : jaclynb
Sample : mc36014-1ms
Misc : ms33624,MSN3454,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 02 09:10:36 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	15.814	119	729185	53.64	ug/L	95
95) 1,4-dichlorobenzene	15.818	146	363951	53.00	ug/L	94
96) 1,2-dichlorobenzene	16.186	146	359118	53.83	ug/L	97
97) n-butylbenzene	16.228	91	711892	57.81	ug/L	97
98) 1,2-dibromo-3-chloropr...	16.666	75	24842	54.26	ug/L	76
99) 1,2,4-trichlorobenzene	18.010	180	132258	48.32	ug/L	97
100) 1,3,5-trichlorobenzene	17.469	180	243281	49.14	ug/L	99
101) hexachlorobutadiene	18.296	225	103791	54.15	ug/L	93
102) naphthalene	18.282	128	136985	54.15	ug/L	100
103) 1,2,3-trichlorobenzene	18.487	180	72736	47.13	ug/L	98
104) 2-methylnaphthalene	19.661	142	25911	23.85	ug/L #	100
105) 1-methylnaphthalene	19.908	142	20396	23.82	ug/L	94

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

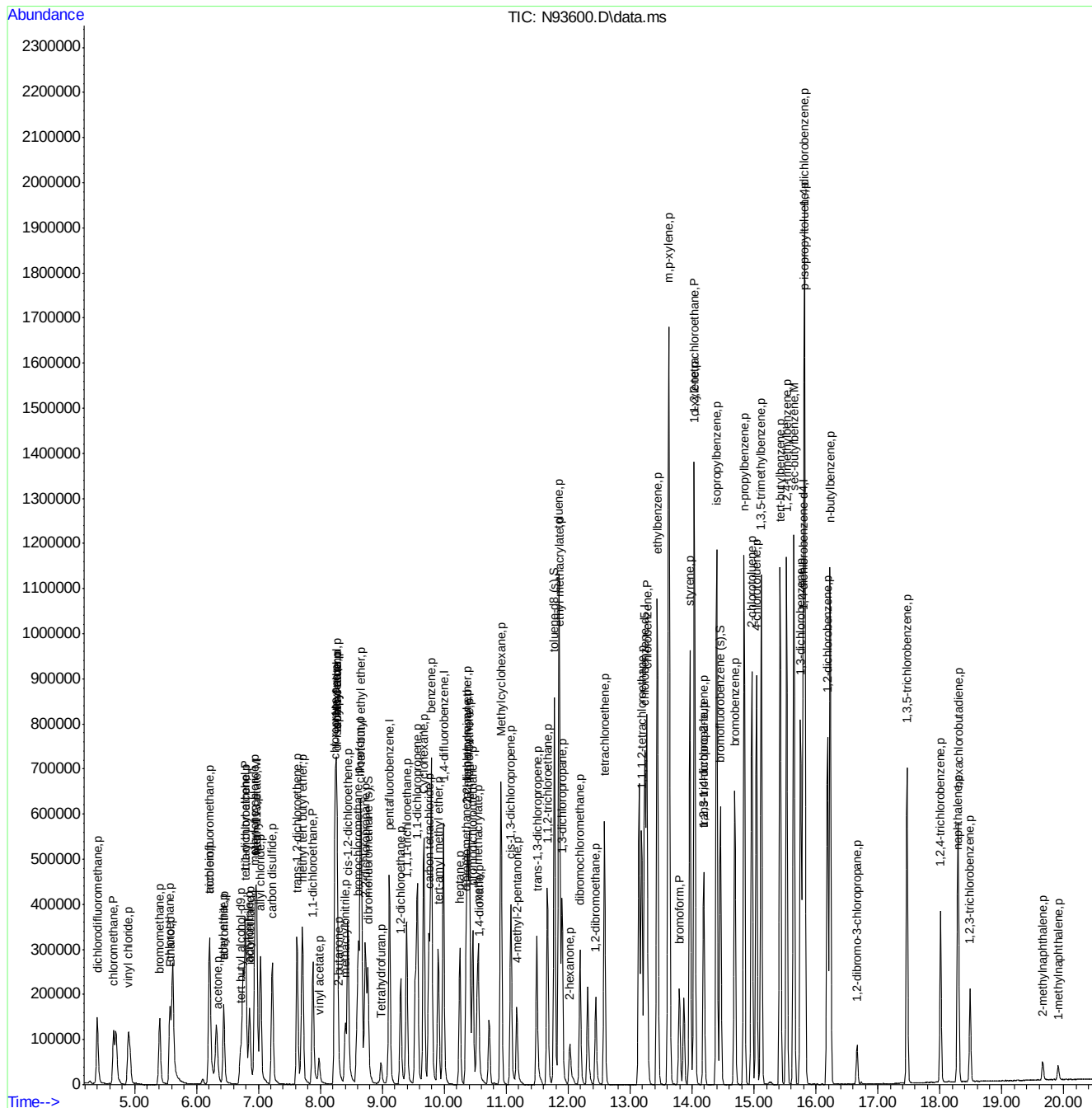
7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93600.D
Acq On : 31 Dec 2014 8:34 pm
Operator : jaclynb
Sample : mc36014-1ms
Misc : ms33624,MSN3454,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 02 09:10:36 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



n141229w.m Fri Jan 02 09:10:42 2015

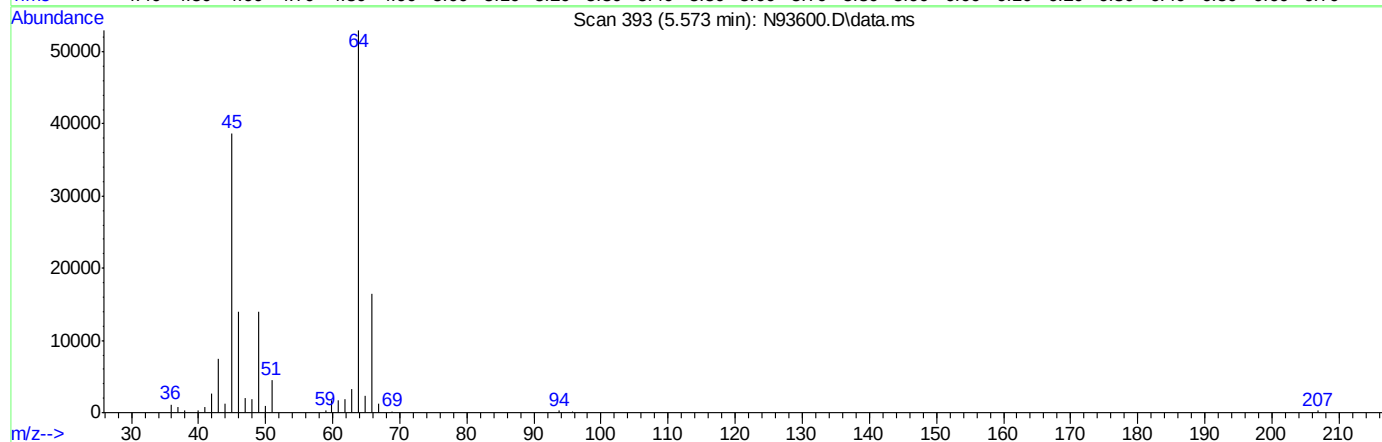
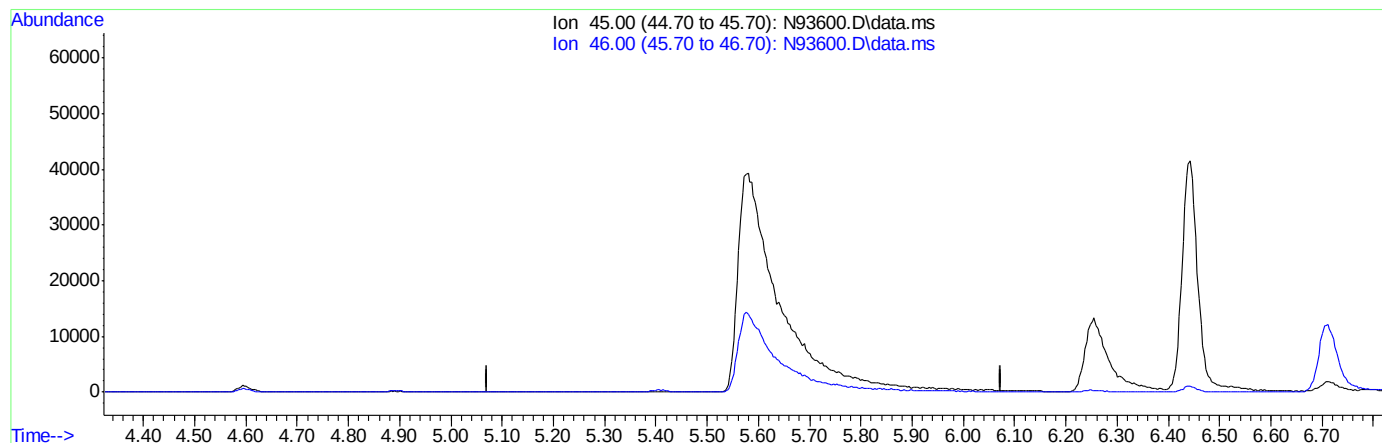
Page: 4

7.4.1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93600.D
Acq On : 31 Dec 2014 8:34 pm
Operator : jaclynb
Sample : mc36014-1ms
Misc : ms33624,MSN3454,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 02 09:10:31 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

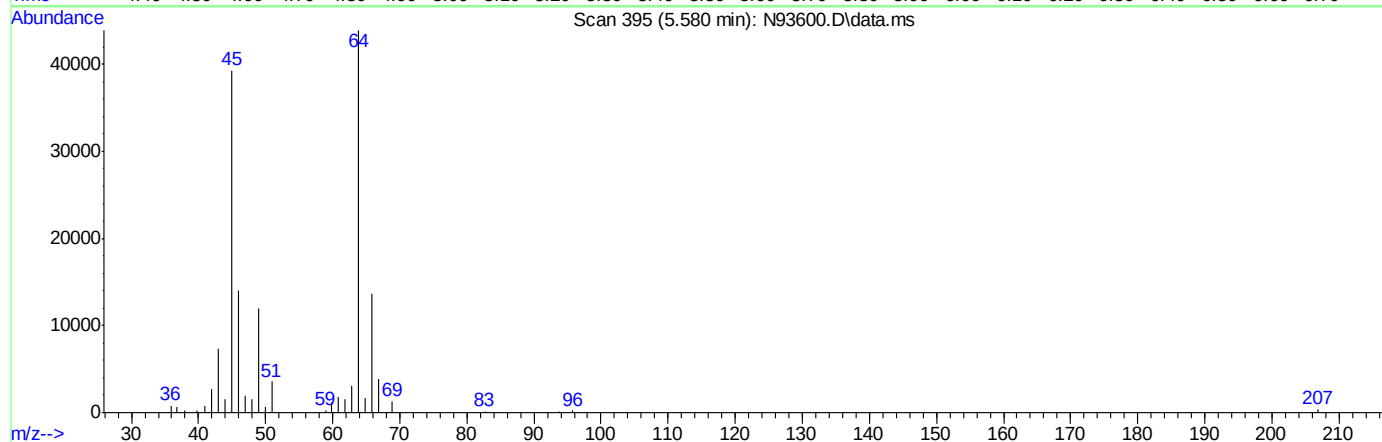
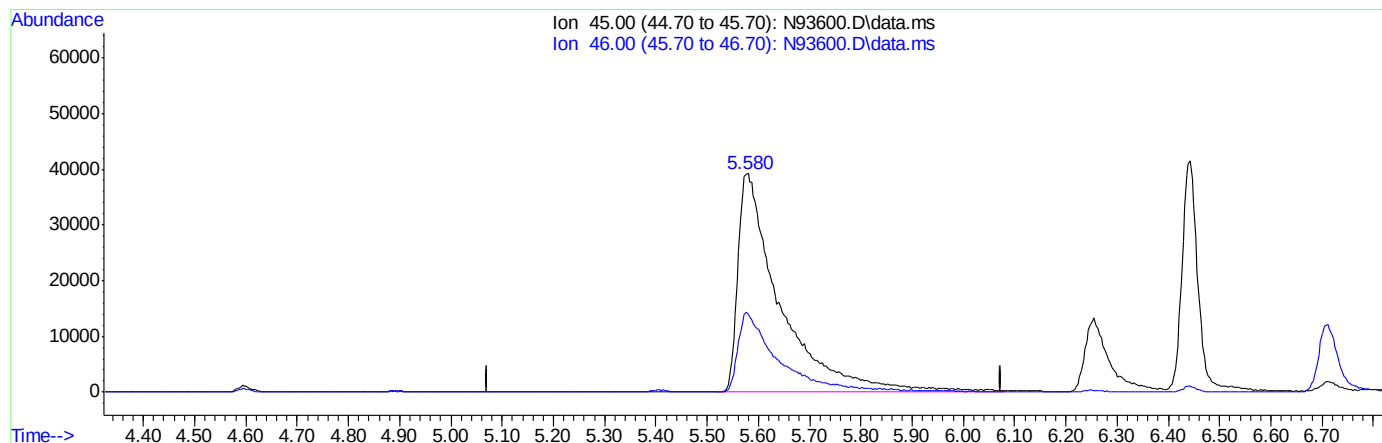
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93600.D
Acq On : 31 Dec 2014 8:34 pm
Operator : jaclynb
Sample : mc36014-1ms
Misc : ms33624,MSN3454,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jan 02 09:10:31 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



TIC: N93600.D\data.ms

(3) Ethanol (p)

5.580min (+0.007) 5382.31ug/L m

response 226082

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93601.D
 Acq On : 31 Dec 2014 9:02 pm
 Operator : jaclynb
 Sample : mc36014-1msd
 Misc : ms33624,MSN3454,,,,5,5
 ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 02 09:10:49 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.708	65	148045	500.00	ug/L	# 0.00
4) pentafluorobenzene	9.115	168	358710	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	526579	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	275686	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	232635	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	163188	50.83	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.66%		
60) toluene-d8 (s)	11.777	98	643997	51.07	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	102.14%		
82) bromofluorobenzene (s)	14.457	95	234873	47.84	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.68%		
Target Compounds						
2) tertiary butyl alcohol	6.796	59	171266	509.08	ug/L	# 100
3) Ethanol	5.583	45	237183m	4855.31	ug/L	
5) dichlorodifluoromethane	4.399	85	186822	45.53	ug/L	98
6) chloromethane	4.661	50	174985	47.77	ug/L	99
7) vinyl chloride	4.901	62	125242	43.97	ug/L	97
8) bromomethane	5.407	96	124774	48.04	ug/L	99
9) chloroethane	5.569	64	120499	53.59	ug/L	99
10) ethyl ether	6.442	59	130069	52.73	ug/L	65
11) acetonitrile	6.442	41	17551	52.94	ug/L	95
12) trichlorofluoromethane	6.213	101	278713	52.97	ug/L	98
13) freon-113	6.969	101	143199	45.16	ug/L	91
14) acrolein	6.209	56	75436	319.94	ug/L	92
15) 1,1-dichloroethene	6.789	96	133156	43.87	ug/L	# 70
16) acetone	6.347	58	15422	36.77	ug/L	85
17) Methyl Acetate	6.969	43	160034	64.94	ug/L	# 86
18) methylene chloride	6.944	84	172615	49.13	ug/L	# 67
19) methyl tert butyl ether	7.708	73	423439	59.09	ug/L	88
20) acrylonitrile	6.856	53	57375	63.21	ug/L	96
21) allyl chloride	7.033	41	214960	54.01	ug/L	74
22) trans-1,2-dichloroethene	7.627	96	157717	47.27	ug/L	# 74
23) iodomethane	6.860	142	152469	42.55	ug/L	88
24) carbon disulfide	7.224	76	476006	42.30	ug/L	100
26) vinyl acetate	7.977	43	114445	59.44	ug/L	93
27) chloroprene	8.235	53	217499	52.60	ug/L	64
28) di-isopropyl ether	8.267	45	509257	53.37	ug/L	91
29) methacrylonitrile	8.401	41	81723	62.56	ug/L	78
30) 2-butanone	8.291	72	18852	47.94	ug/L	# 1
31) Hexane	8.249	41	186849	47.92	ug/L	# 83
32) 1,1-dichloroethane	7.878	63	312927	51.77	ug/L	93
33) tert-butyl ethyl ether	8.659	59	353704	46.10	ug/L	90
34) isobutyl alcohol	8.263	43	386827	250.29	ug/L	94
35) 2,2-dichloropropane	8.730	77	216573	48.99	ug/L	93
36) cis-1,2-dichloroethene	8.443	96	186141	51.17	ug/L	# 76
37) ethyl acetate	8.263	43	388836	50.39	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93601.D
 Acq On : 31 Dec 2014 9:02 pm
 Operator : jaclynb
 Sample : mc36014-1msd
 Misc : ms33624,MSN3454,,,,5,5
 ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 02 09:10:49 2015
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.613	128	87557	54.64	ug/L #	68
39) chloroform	8.645	83	303980	54.08	ug/L	99
41) Tetrahydrofuran	8.977	42	43608	69.52	ug/L	64
42) 1,1,1-trichloroethane	9.391	97	258350	52.16	ug/L	95
44) Cyclohexane	9.670	56	290749	48.70	ug/L #	74
45) carbon tetrachloride	9.755	117	221403	52.48	ug/L	98
46) 1,1-dichloropropene	9.564	75	239662	50.60	ug/L	95
47) benzene	9.790	78	713449	51.90	ug/L	99
48) 1,2-dichloroethane	9.295	62	220075	53.78	ug/L	92
49) tert-amyl methyl ether	9.900	73	290499	46.34	ug/L	86
50) heptane	10.250	43	135041	51.99	ug/L	88
51) trichloroethene	10.406	95	193496	52.45	ug/L	93
52) 1,2-dichloropropane	10.377	63	195344	54.88	ug/L	99
53) dibromomethane	10.353	93	114512	58.27	ug/L	89
54) bromodichloromethane	10.462	83	246766	56.95	ug/L	99
55) Methylcyclohexane	10.915	83	304035	50.57	ug/L #	75
56) 2-chloroethyl vinyl ether	10.377	63	195344	54.88	ug/L #	95
57) methyl methacrylate	10.547	69	117438	65.04	ug/L #	77
58) 1,4-dioxane	10.558	88	9965	319.23	ug/L #	59
59) cis-1,3-dichloropropene	11.074	75	294195	59.33	ug/L	97
61) 4-methyl-2-pentanone	11.169	43	145916	69.16	ug/L	96
62) toluene	11.848	92	448603	53.14	ug/L	97
63) trans-1,3-dichloropropene	11.494	75	247608	52.34	ug/L	91
64) 1,1,2-trichloroethane	11.668	83	146919	59.70	ug/L	95
65) ethyl methacrylate	11.862	69	209170	65.28	ug/L	74
67) tetrachloroethene	12.587	166	192379	48.80	ug/L	94
68) 1,3-dichloropropane	11.901	76	272234	53.72	ug/L	99
69) dibromochloromethane	12.191	129	188299	49.21	ug/L	98
70) 1,2-dibromoethane	12.445	107	161482	56.95	ug/L	100
71) 2-hexanone	12.021	43	94642	50.47	ug/L	97
72) chlorobenzene	13.269	112	491866	50.34	ug/L	94
73) 1,1,1,2-tetrachloroethane	13.184	131	174643	53.07	ug/L	98
74) ethylbenzene	13.439	91	885184	50.14	ug/L	93
75) m,p-xylene	13.623	106	667124	102.95	ug/L #	82
76) o-xylene	14.036	106	331275	52.55	ug/L	83
77) styrene	13.966	104	541301	55.03	ug/L	90
78) bromoform	13.792	173	120116	53.94	ug/L	97
79) trans-1,4-dichloro-2-b...	14.185	53	41183	57.88	ug/L #	50
81) isopropylbenzene	14.397	105	872957	50.69	ug/L	100
83) bromobenzene	14.690	156	218299	51.22	ug/L #	85
84) 1,1,2,2-tetrachloroethane	14.040	83	207248	62.57	ug/L	98
85) 1,2,3-trichloropropane	14.188	75	227470	63.02	ug/L	98
86) n-propylbenzene	14.839	91	1063758	52.03	ug/L	97
87) 2-chlorotoluene	14.963	91	609947	50.31	ug/L	91
88) 4-chlorotoluene	15.040	91	626390	51.69	ug/L	96
89) 1,3,5-trimethylbenzene	15.118	105	729599	51.05	ug/L	97
90) tert-butylbenzene	15.422	91	438630	51.06	ug/L	89
91) 1,2,4-trimethylbenzene	15.528	105	742394	51.82	ug/L	99
92) sec-butylbenzene	15.641	105	968804	51.77	ug/L	99
93) 1,3-dichlorobenzene	15.751	146	381780	52.00	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93601.D
Acq On : 31 Dec 2014 9:02 pm
Operator : jaclynb
Sample : mc36014-1msd
Misc : ms33624,MSN3454,,,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 02 09:10:49 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration

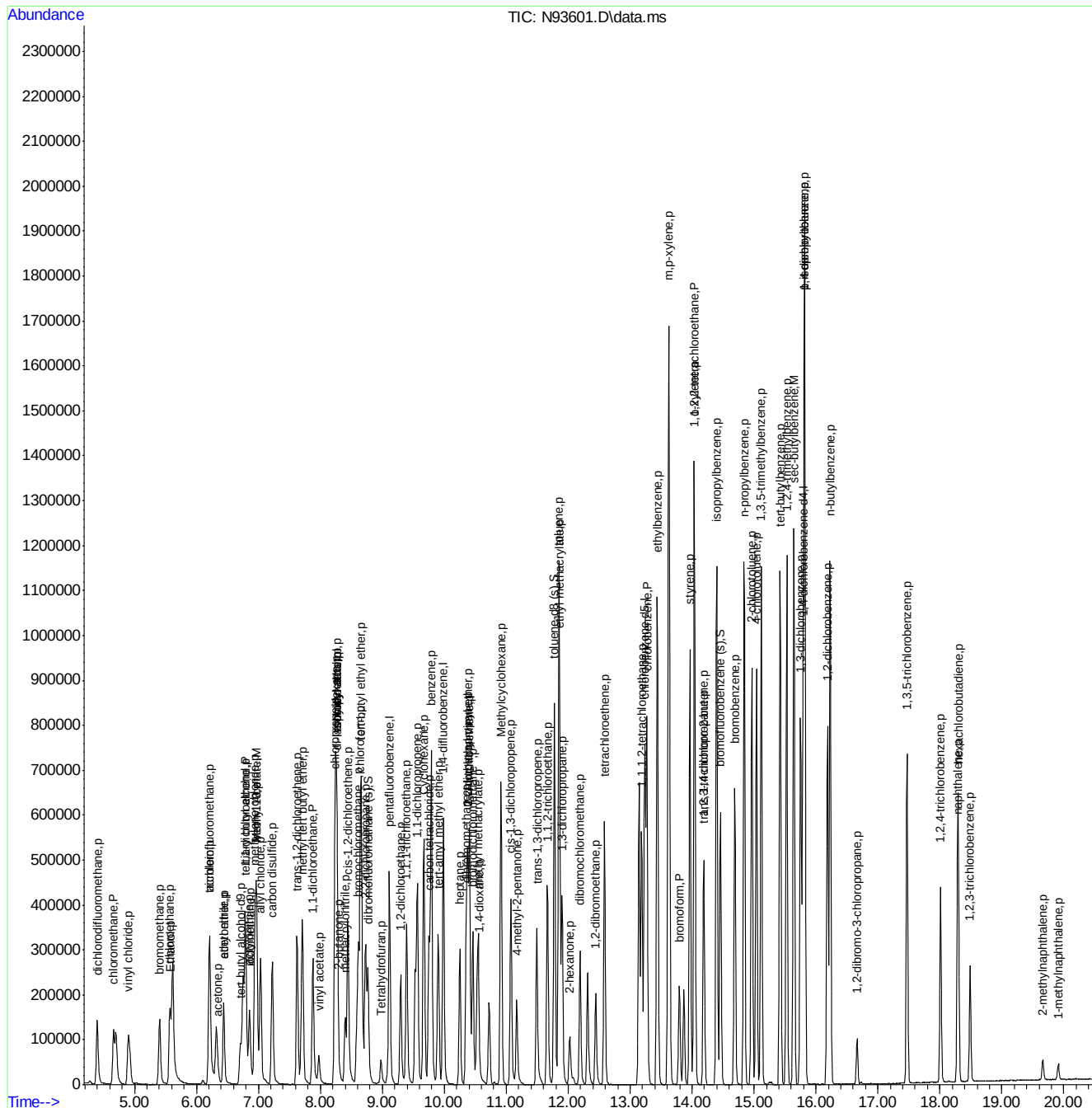
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	15.815	119	734269	53.66	ug/L	94
95)	1,4-dichlorobenzene	15.818	146	370905	53.67	ug/L	93
96)	1,2-dichlorobenzene	16.186	146	367621	54.75	ug/L	97
97)	n-butylbenzene	16.228	91	721856	58.24	ug/L	97
98)	1,2-dibromo-3-chloropr...	16.663	75	28009	60.13	ug/L	72
99)	1,2,4-trichlorobenzene	18.010	180	151894	54.02	ug/L	98
100)	1,3,5-trichlorobenzene	17.469	180	254873	51.09	ug/L	99
101)	hexachlorobutadiene	18.296	225	110841	57.45	ug/L	94
102)	naphthalene	18.282	128	187705	66.30	ug/L	100
103)	1,2,3-trichlorobenzene	18.487	180	92325	56.69	ug/L	91
104)	2-methylnaphthalene	19.657	142	28095	25.69	ug/L #	100
105)	1-methylnaphthalene	19.908	142	22193	25.75	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93601.D
Acq On : 31 Dec 2014 9:02 pm
Operator : jaclynb
Sample : mc36014-1msd
Misc : ms33624,MSN3454,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 02 09:10:49 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



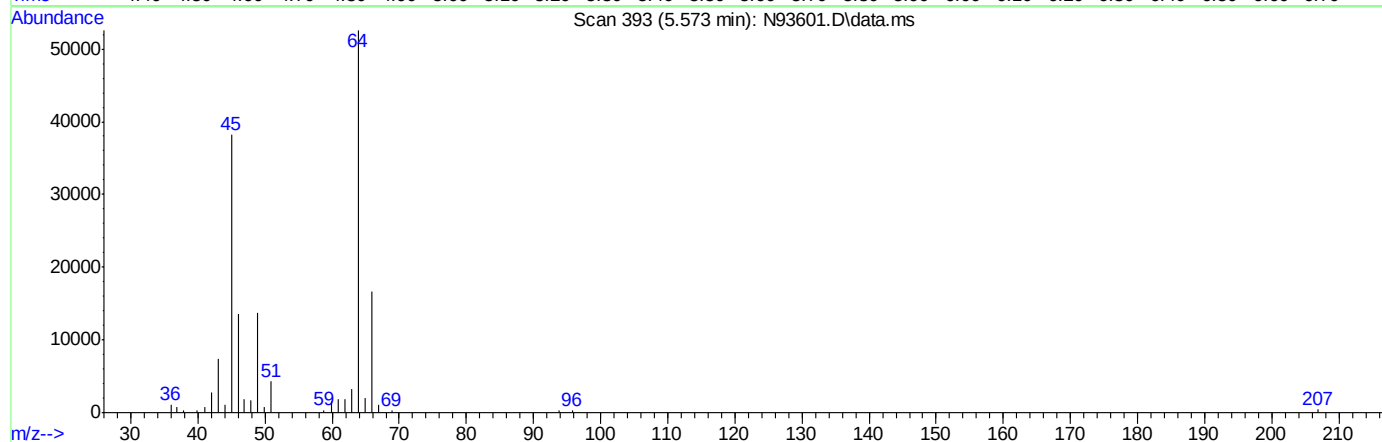
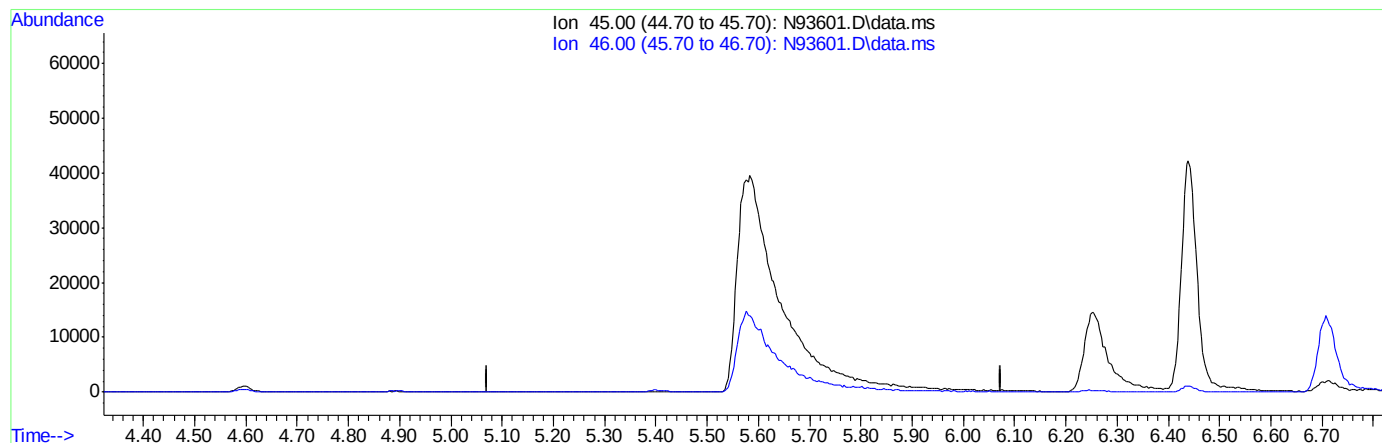
n141229w.m Fri Jan 02 09:10:55 2015

Page: 4

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93601.D
Acq On : 31 Dec 2014 9:02 pm
Operator : jaclynb
Sample : mc36014-1msd
Misc : ms33624,MSN3454,,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 01 12:09:09 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

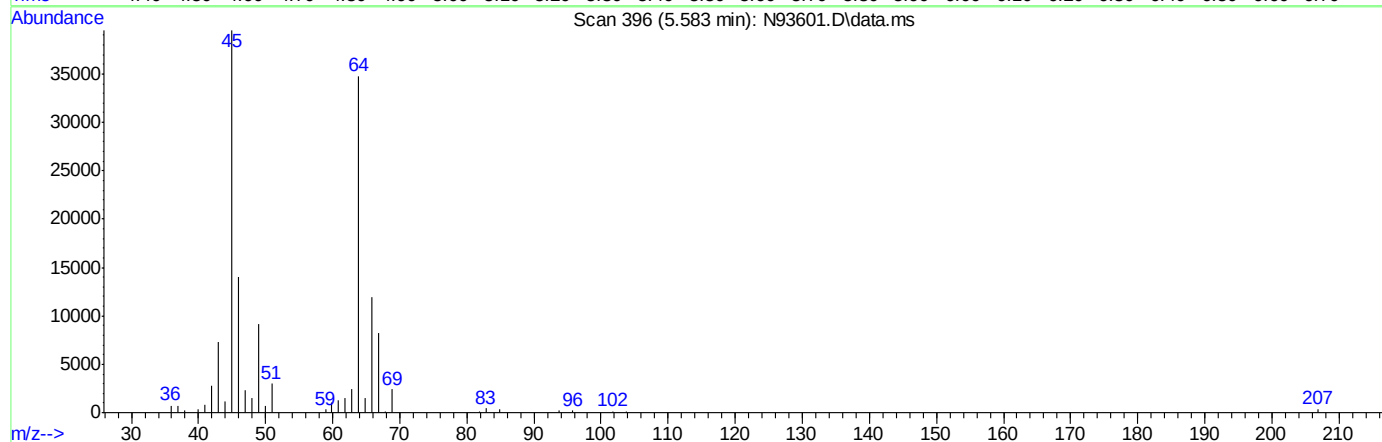
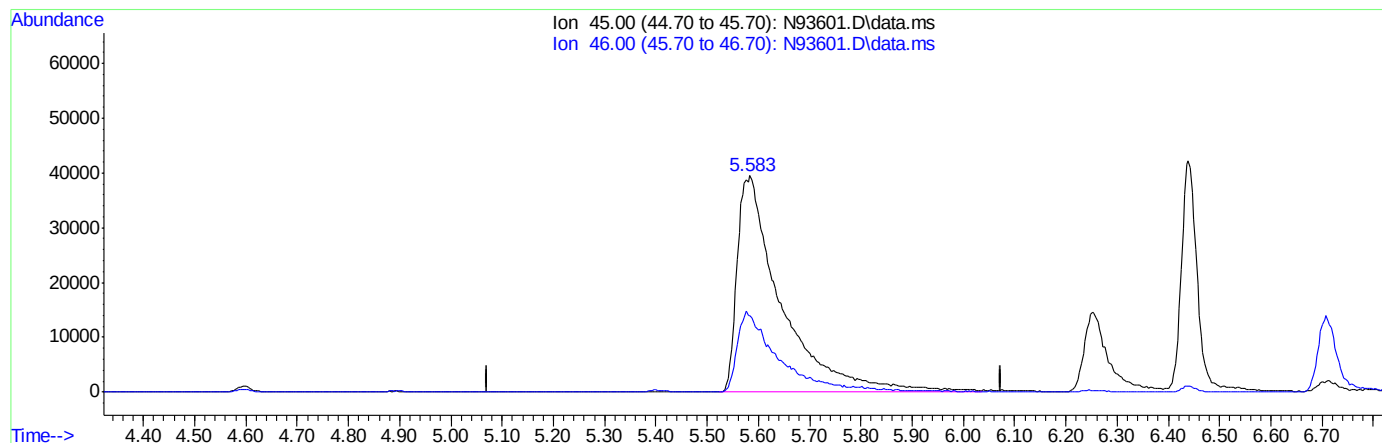
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93601.D
Acq On : 31 Dec 2014 9:02 pm
Operator : jaclynb
Sample : mc36014-1msd
Misc : ms33624,MSN3454,,,,5,5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jan 01 12:09:09 2015
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



TIC: N93601.D\data.ms

(3) Ethanol (p)

5.583min (+0.010) 4855.31ug/L m

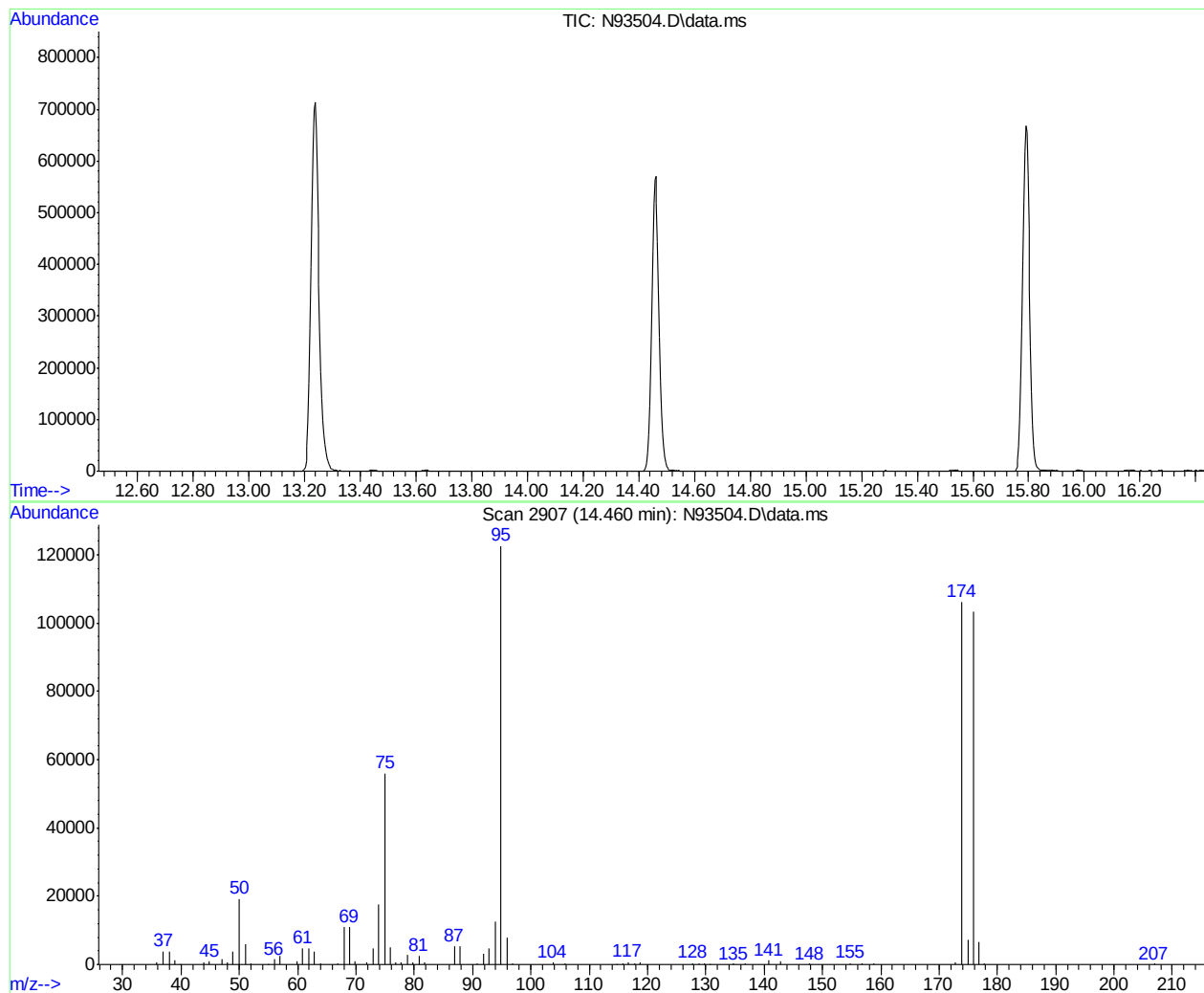
response 237183

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8260

Data File : C:\msdchem\1\data\N141229\N93504.D Vial: 46
Acq On : 29 Dec 2014 10:23 pm Operator: jaclynb
Sample : bfb Inst : MSN
Misc : ms33603,MSN3452,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\n141229w.m (RTE Integrator)
Title : SW-846 Method 8260



Spectrum Information: Scan 2907

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.6	19168	PASS
75	95	30	60	45.6	55928	PASS
95	95	100	100	100.0	122680	PASS
96	95	5	9	6.5	7947	PASS
173	174	0.00	2	0.6	657	PASS
174	95	50	150	86.6	106232	PASS
175	174	5	9	6.8	7242	PASS
176	174	95	101	97.4	103512	PASS
177	176	5	9	6.3	6536	PASS

Scan 2907 (14.460 min): N93504.D\data.ms
iblk

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	694	51.00	6101	67.90	10865	79.80	755
37.00	3794	52.00	279	68.90	10896	80.80	2648
38.00	3633	54.90	164	69.90	823	81.80	541
39.00	1420	56.00	1490	71.90	552	86.90	5374
39.90	164	57.00	2607	72.90	4582	87.90	5363
44.00	711	59.90	873	73.90	17472	90.80	323
44.90	915	60.90	4769	75.00	55928	91.90	3012
47.00	1560	61.90	4582	75.90	4916	92.90	4730
47.90	514	62.90	3642	76.90	548	93.90	12456
48.90	3742	63.90	326	77.80	523	94.90	122680
50.00	19168	66.90	246	78.90	2770	95.90	7947

Scan 2907 (14.460 min): N93504.D\data.ms
iblk

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.90	270	130.70	152	174.90	7242		
103.80	502	134.80	225	175.90	103512		
105.80	402	136.80	261	176.90	6536		
114.70	165	140.80	1149	177.80	252		
115.80	405	142.80	1065	206.90	169		
116.70	707	147.80	280				
117.80	342	154.80	328				
118.80	649	156.80	201				
127.80	415	158.80	237				
128.80	183	172.80	657				
129.80	376	173.90	106232				

SW-846 Method 8260

Data File : C:\msdchem\1\data\N141231\N93576.D

Vial: 16

Acq On : 31 Dec 2014 9:19 am

Operator: jaclynb

Sample : bfb

Inst : MSN

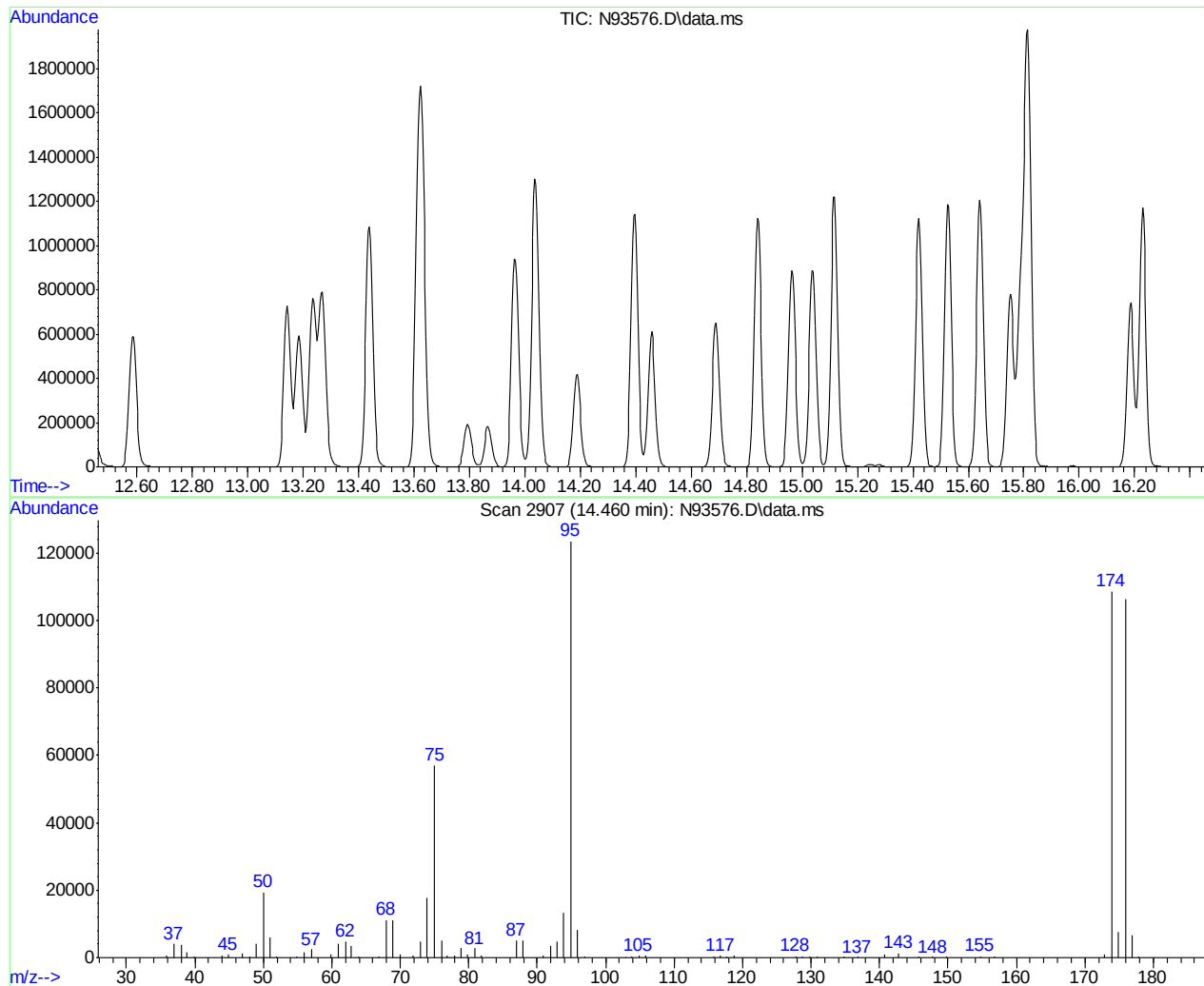
Misc : ms33617,MSN3454,,,5,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\n141229w.m (RTE Integrator)

Title : SW-846 Method 8260



Spectrum Information: Scan 2907

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.7	19384	PASS
75	95	30	60	46.1	56984	PASS
95	95	100	100	100.0	123584	PASS
96	95	5	9	6.7	8267	PASS
173	174	0.00	2	0.7	808	PASS
174	95	50	150	87.8	108560	PASS
175	174	5	9	7.0	7565	PASS
176	174	95	101	98.0	106368	PASS
177	176	5	9	6.1	6540	PASS

Scan 2907 (14.460 min): N93576.D\data.ms
bs

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	756	51.00	6079	67.90	11195	79.80	834
36.90	4029	51.90	253	68.90	11005	80.90	2742
38.00	3783	54.90	291	70.00	818	81.80	612
38.90	1493	56.00	1492	71.80	564	86.90	5188
39.90	306	57.00	2493	72.90	4889	87.90	5068
43.90	703	59.90	1027	73.90	17848	90.90	593
44.90	818	61.00	4224	75.00	56984	91.90	3433
47.00	1388	62.00	4873	76.00	5114	92.90	4823
48.00	469	62.90	3635	76.90	687	93.90	13457
49.00	4093	63.90	272	77.90	496	94.90	123584
50.00	19384	66.90	250	78.80	2736	95.90	8267

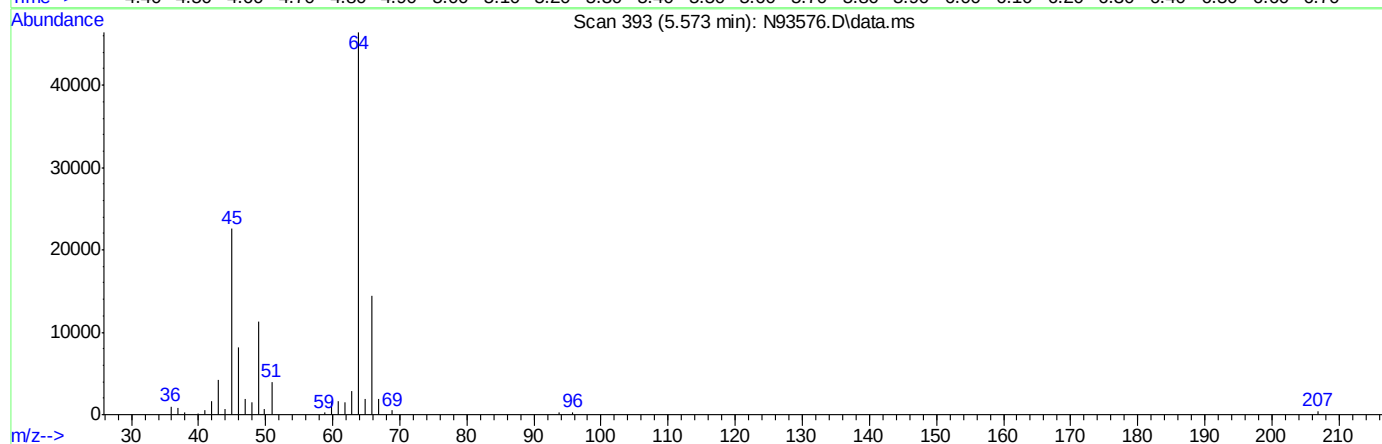
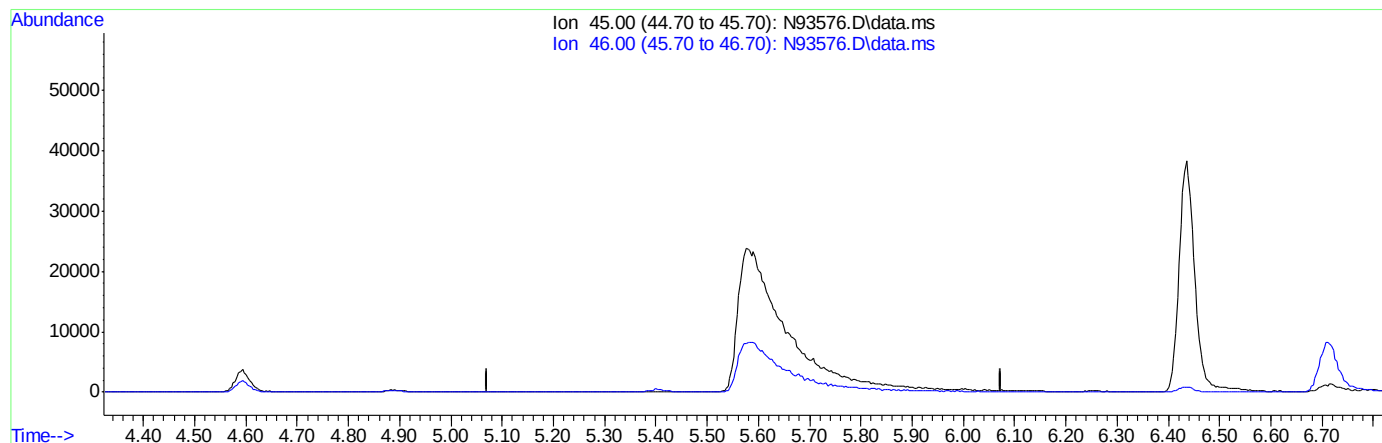
Scan 2907 (14.460 min): N93576.D\data.ms
bs

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.90	298	129.80	382	172.80	808		
102.80	159	130.90	202	173.90	108560		
103.80	476	134.80	183	174.90	7565		
104.90	548	136.80	187	175.90	106368		
105.80	516	140.80	1039	176.90	6540		
115.80	399	142.80	1313	177.80	241		
116.80	627	145.70	215				
117.70	419	147.80	280				
118.80	624	149.70	198				
127.80	426	154.70	346				
128.70	192	156.80	185				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bfb
Misc : ms33617,MSN3455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:54:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

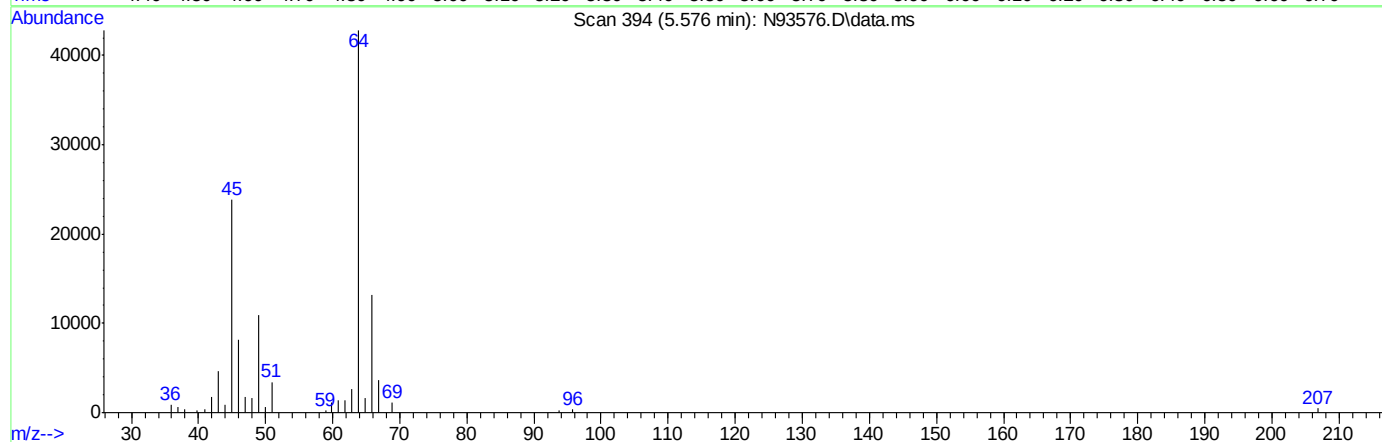
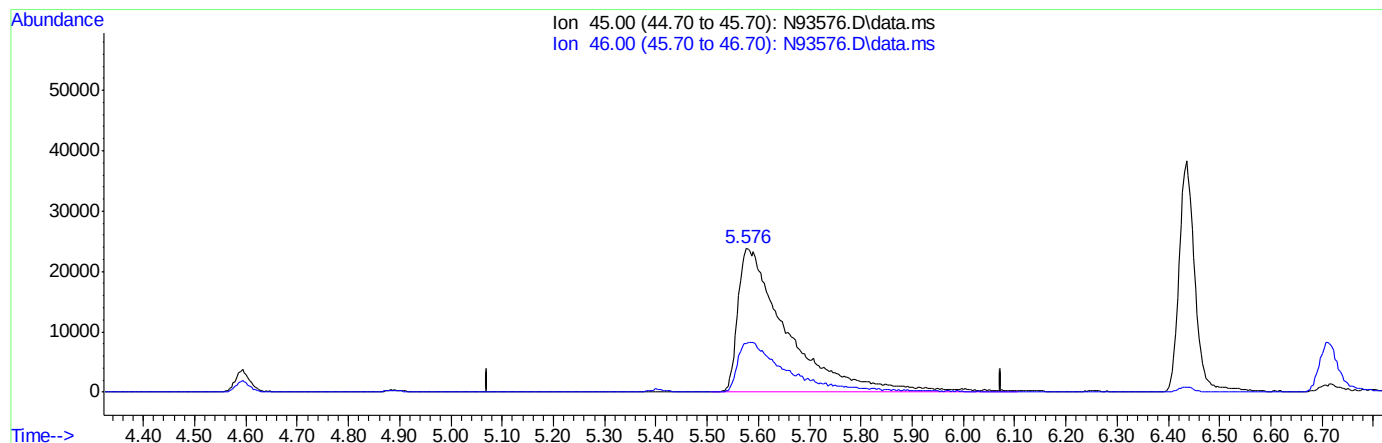
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bfb
Misc : ms33617,MSN3455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:54:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



TIC: N93576.D\data.ms

(3) Ethanol (p)

5.576min (+0.003) 5403.05ug/L m

response 160728

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93505.D
 Acq On : 29 Dec 2014 10:51 pm
 Operator : jaclynb
 Sample : ic3452-0.5
 Misc : ms33603,MSN3452,,,,,5,1
 ALS Vial : 47 Sample Multiplier: 1

Quant Time: Dec 30 07:43:51 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:42:13 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.743	65	116809	500.00	ug/L	# 0.03
4) pentafluorobenzene	9.115	168	380882	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	556741	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	267063	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.793	152	203720	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	165809	48.39	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	96.78%		
60) toluene-d8 (s)	11.777	98	664853	50.10	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.20%		
82) bromofluorobenzene (s)	14.460	95	224949	55.31	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	110.62%		
Target Compounds						
						Qvalue
7) vinyl chloride	4.901	62	1547	0.50	ug/L	93
15) 1,1-dichloroethene	6.785	96	1519	0.44	ug/L	# 43
19) methyl tert butyl ether	7.726	73	3169	0.35	ug/L	76
22) trans-1,2-dichloroethene	7.623	96	1755	0.46	ug/L	# 59
32) 1,1-dichloroethane	7.878	63	2885	0.41	ug/L	97
36) cis-1,2-dichloroethene	8.443	96	1918	0.47	ug/L	# 65
39) chloroform	8.645	83	2900	0.44	ug/L	95
42) 1,1,1-trichloroethane	9.384	97	2144	0.37	ug/L	90
45) carbon tetrachloride	9.744	117	1749	0.35	ug/L	77
47) benzene	9.794	78	6972	0.44	ug/L	99
51) trichloroethene	10.405	95	1725	0.40	ug/L	92
54) bromodichloromethane	10.462	83	1798m	0.34	ug/L	
59) cis-1,3-dichloropropene	11.081	75	1907	0.31	ug/L	96
62) toluene	11.855	92	4317	0.43	ug/L	90
63) trans-1,3-dichloropropene	11.505	75	1480	0.29	ug/L	98
64) 1,1,2-trichloroethane	11.667	83	1034	0.35	ug/L	94
67) tetrachloroethene	12.587	166	1736	0.43	ug/L	97
69) dibromochloromethane	12.198	129	1020	0.28	ug/L	92
70) 1,2-dibromoethane	12.449	107	1010	0.33	ug/L	92
72) chlorobenzene	13.273	112	4637	0.47	ug/L	90
73) 1,1,1,2-tetrachloroethane	13.188	131	1290	0.37	ug/L	96
74) ethylbenzene	13.442	91	9557	0.54	ug/L	100
75) m,p-xylene	13.633	106	6436	0.95	ug/L	83
76) o-xylene	14.040	106	2811	0.42	ug/L	# 76
84) 1,1,2,2-tetrachloroethane	14.047	83	1348	0.42	ug/L	78

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93506.D
 Acq On : 29 Dec 2014 11:19 pm
 Operator : jaclynb
 Sample : ic3452-1
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 48 Sample Multiplier: 1

Quant Time: Dec 30 07:44:43 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:43:59 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.746	65	109092	500.00	ug/L	# 0.04
4) pentafluorobenzene	9.115	168	379580	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	561258	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	270591	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	206702	50.00	ug/L	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	169392	50.42	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	100.84%
60) toluene-d8 (s)	11.781	98	667617	49.86	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	99.72%
82) bromofluorobenzene (s)	14.460	95	230014	52.93	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	105.86%

Target Compounds						Qvalue
5) dichlorodifluoromethane	4.399	85	4304	0.93	ug/L	97
6) chloromethane	4.660	50	4116	1.01	ug/L	92
7) vinyl chloride	4.901	62	3554	1.15	ug/L	98
8) bromomethane	5.403	96	3125	1.12	ug/L	90
9) chloroethane	5.576	64	2530	0.98	ug/L	92
10) ethyl ether	6.456	59	2181	0.74	ug/L	80
12) trichlorofluoromethane	6.205	101	5604	0.94	ug/L	91
13) freon-113	6.966	101	3310	0.91	ug/L	96
15) 1,1-dichloroethene	6.785	96	3543	1.10	ug/L	# 63
18) methylene chloride	6.948	84	3815	0.96	ug/L	# 59
19) methyl tert butyl ether	7.722	73	6508	0.85	ug/L	86
22) trans-1,2-dichloroethene	7.630	96	3497	0.96	ug/L	# 63
24) carbon disulfide	7.224	76	11922	0.93	ug/L	98
27) chloroprene	8.235	53	3988	0.78	ug/L	52
28) di-isopropyl ether	8.277	45	10178	0.94	ug/L	85
32) 1,1-dichloroethane	7.874	63	6439	1.01	ug/L	97
33) tert-butyl ethyl ether	8.666	59	3955	0.50	ug/L	94
36) cis-1,2-dichloroethene	8.447	96	4118	1.04	ug/L	# 64
38) bromochloromethane	8.609	128	1414	0.72	ug/L	# 64
39) chloroform	8.641	83	5932	0.96	ug/L	96
42) 1,1,1-trichloroethane	9.384	97	5078	1.01	ug/L	90
44) Cyclohexane	9.659	56	6452	0.92	ug/L	# 66
45) carbon tetrachloride	9.744	117	4078	0.95	ug/L	90
46) 1,1-dichloropropene	9.560	75	4881	0.89	ug/L	94
47) benzene	9.790	78	15239	1.02	ug/L	98
48) 1,2-dichloroethane	9.295	62	4280	0.92	ug/L	87
49) tert-amyl methyl ether	9.910	73	4071	0.65	ug/L	85
50) heptane	10.253	43	2637	0.85	ug/L	82
51) trichloroethene	10.405	95	3933	1.01	ug/L	97
52) 1,2-dichloropropane	10.370	63	3833	0.90	ug/L	92
53) dibromomethane	10.356	93	1753	0.75	ug/L	94
54) bromodichloromethane	10.462	83	3977	0.89	ug/L	89
55) Methylcyclohexane	10.914	83	6034	0.84	ug/L	# 74
56) 2-chloroethyl vinyl ether	10.370	63	3833	0.90	ug/L	# 95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93506.D
 Acq On : 29 Dec 2014 11:19 pm
 Operator : jaclynb
 Sample : ic3452-1
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 48 Sample Multiplier: 1

Quant Time: Dec 30 07:44:43 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:43:59 2014
 Response via : Initial Calibration

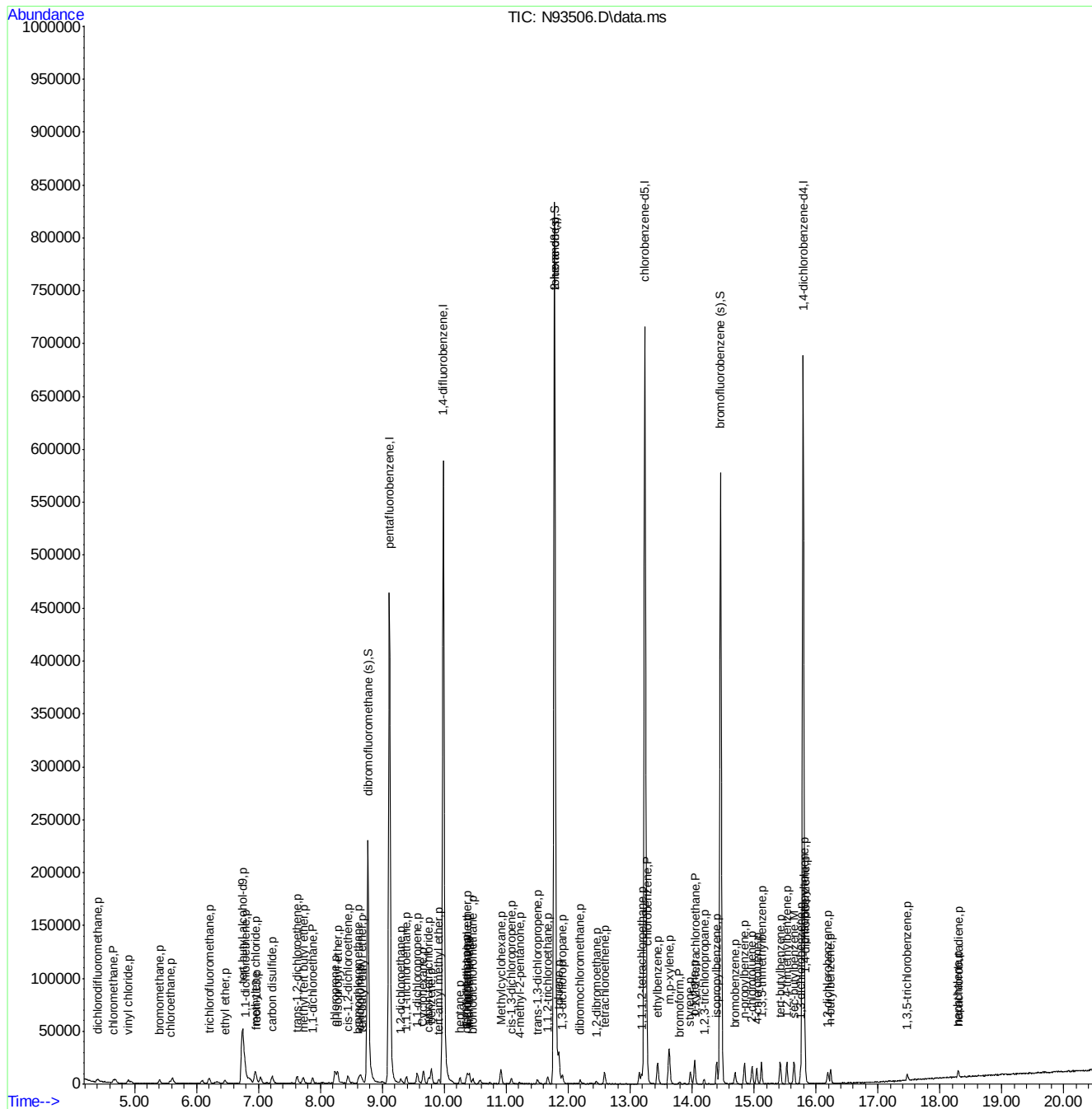
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
59) cis-1,3-dichloropropene	11.084	75	4327	0.85	ug/L	85
61) 4-methyl-2-pentanone	11.215	43	1498	0.57	ug/L #	41
62) toluene	11.851	92	9551	1.02	ug/L	95
63) trans-1,3-dichloropropene	11.501	75	3478	0.86	ug/L	92
64) 1,1,2-trichloroethane	11.667	83	2414	0.95	ug/L	95
67) tetrachloroethene	12.587	166	3961	1.04	ug/L	97
68) 1,3-dichloropropane	11.904	76	4751	0.90	ug/L	97
69) dibromochloromethane	12.194	129	2460	0.85	ug/L	97
70) 1,2-dibromoethane	12.452	107	2474	0.96	ug/L	84
71) 2-hexanone	11.781	43	2208	1.15	ug/L #	54
72) chlorobenzene	13.269	112	10001	1.03	ug/L	99
73) 1,1,1,2-tetrachloroethane	13.191	131	2983	0.97	ug/L	92
74) ethylbenzene	13.442	91	18656	1.00	ug/L	93
75) m,p-xylene	13.633	106	14106	2.10	ug/L #	73
76) o-xylene	14.040	106	6443	1.03	ug/L #	72
77) styrene	13.969	104	7936	0.71	ug/L	91
78) bromoform	13.796	173	1242	0.55	ug/L	89
81) isopropylbenzene	14.397	105	16942	1.05	ug/L	100
83) bromobenzene	14.697	156	3796	0.95	ug/L	87
84) 1,1,2,2-tetrachloroethane	14.047	83	2995	1.00	ug/L	94
85) 1,2,3-trichloropropane	14.195	75	2787	0.78	ug/L	100
86) n-propylbenzene	14.846	91	19708	1.01	ug/L	100
87) 2-chlorotoluene	14.966	91	11574	1.02	ug/L	96
88) 4-chlorotoluene	15.044	91	11261	0.98	ug/L	94
89) 1,3,5-trimethylbenzene	15.121	105	13442	0.99	ug/L	98
90) tert-butylbenzene	15.422	91	8249	1.02	ug/L	89
91) 1,2,4-trimethylbenzene	15.532	105	13416	0.98	ug/L	97
92) sec-butylbenzene	15.641	105	17616	0.99	ug/L	94
93) 1,3-dichlorobenzene	15.758	146	6388	0.92	ug/L	93
94) p-isopropyltoluene	15.818	119	13144	0.97	ug/L	98
95) 1,4-dichlorobenzene	15.821	146	6642	0.98	ug/L	92
96) 1,2-dichlorobenzene	16.189	146	5425	0.82	ug/L	94
97) n-butylbenzene	16.235	91	9044	0.69	ug/L	96
100) 1,3,5-trichlorobenzene	17.472	180	2501	0.57	ug/L	94
101) hexachlorobutadiene	18.300	225	1305	0.70	ug/L	98
102) naphthalene	18.293	128	1124	0.53	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93506.D
Acq On : 29 Dec 2014 11:19 pm
Operator : jaclynb
Sample : ic3452-1
Misc : ms33603,MSN3452,,,,,5,1
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Dec 30 07:44:43 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:43:59 2014
Response via : Initial Calibration



n141229w.m Tue Dec 30 08:25:07 2014

Page: 3

7.6.2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93507.D
 Acq On : 29 Dec 2014 11:47 pm
 Operator : jaclynb
 Sample : ic3452-2
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:46:49 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:45:09 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.736	65	112627	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.115	168	377051	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	556611	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	270755	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	209077	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	167995	50.20	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.40%		
60) toluene-d8 (s)	11.777	98	670352	50.53	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.06%		
82) bromofluorobenzene (s)	14.460	95	228407	50.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.94%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.817	59	5111	18.94	ug/L	# 100
3) Ethanol	5.601	45	7591	190.61	ug/L	# 84
5) dichlorodifluoromethane	4.399	85	8180	1.85	ug/L	96
6) chloromethane	4.664	50	7549	1.86	ug/L	98
7) vinyl chloride	4.901	62	6329	1.96	ug/L	99
8) bromomethane	5.407	96	5519	1.88	ug/L	94
9) chloroethane	5.576	64	4725	1.86	ug/L	97
10) ethyl ether	6.457	59	4980	1.96	ug/L	81
12) trichlorofluoromethane	6.206	101	10420	1.82	ug/L	87
13) freon-113	6.966	101	6704	1.94	ug/L	90
15) 1,1-dichloroethene	6.785	96	6279	1.90	ug/L	# 73
17) Methyl Acetate	6.990	43	4613	1.52	ug/L	98
18) methylene chloride	6.948	84	7760	2.01	ug/L	# 64
19) methyl tert butyl ether	7.719	73	13444	1.86	ug/L	92
20) acrylonitrile	6.881	53	1125	1.04	ug/L	71
21) allyl chloride	7.033	41	8032	1.71	ug/L	68
22) trans-1,2-dichloroethene	7.627	96	6938	1.95	ug/L	# 70
23) iodomethane	6.856	142	5844	1.33	ug/L	87
24) carbon disulfide	7.220	76	23547	1.91	ug/L	99
26) vinyl acetate	8.001	43	1885	1.05	ug/L	81
27) chloroprene	8.235	53	8050	1.78	ug/L	55
28) di-isopropyl ether	8.274	45	20927	2.01	ug/L	86
29) methacrylonitrile	8.433	41	2136	1.32	ug/L	92
31) Hexane	8.242	41	8559	1.95	ug/L	# 62
32) 1,1-dichloroethane	7.878	63	12670	1.99	ug/L	94
33) tert-butyl ethyl ether	8.663	59	8258	1.40	ug/L	93
34) isobutyl alcohol	8.274	43	17085	9.79	ug/L	86
35) 2,2-dichloropropane	8.726	77	1986	0.42	ug/L	95
36) cis-1,2-dichloroethene	8.443	96	7298	1.83	ug/L	# 67
37) ethyl acetate	8.274	43	17085	1.96	ug/L	# 76
38) bromochloromethane	8.613	128	3169	1.89	ug/L	# 70
39) chloroform	8.648	83	12250	2.02	ug/L	95
41) Tetrahydrofuran	8.988	42	974m	1.25	ug/L	
42) 1,1,1-trichloroethane	9.384	97	10126	2.01	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93507.D
 Acq On : 29 Dec 2014 11:47 pm
 Operator : jaclynb
 Sample : ic3452-2
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:46:49 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:45:09 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) Cyclohexane	9.663	56	12751	1.91	ug/L	# 79
45) carbon tetrachloride	9.748	117	8359	1.99	ug/L	85
46) 1,1-dichloropropene	9.564	75	9976	1.94	ug/L	98
47) benzene	9.787	78	29258	1.96	ug/L	97
48) 1,2-dichloroethane	9.299	62	9199	2.08	ug/L	91
49) tert-amyl methyl ether	9.907	73	8003	1.56	ug/L	82
50) heptane	10.253	43	5382	1.90	ug/L	86
51) trichloroethene	10.402	95	8209	2.12	ug/L	92
52) 1,2-dichloropropane	10.374	63	7582	1.89	ug/L	92
53) dibromomethane	10.356	93	3913	1.93	ug/L	97
54) bromodichloromethane	10.462	83	8521	1.99	ug/L	94
55) Methylcyclohexane	10.915	83	12545	1.91	ug/L	# 76
56) 2-chloroethyl vinyl ether	10.374	63	7582	1.89	ug/L	# 98
57) methyl methacrylate	10.565	69	3055	1.39	ug/L	86
59) cis-1,3-dichloropropene	11.081	75	9652	2.02	ug/L	90
61) 4-methyl-2-pentanone	11.211	43	3564	1.74	ug/L	# 94
62) toluene	11.851	92	18618	1.99	ug/L	96
63) trans-1,3-dichloropropene	11.498	75	7563	1.97	ug/L	92
64) 1,1,2-trichloroethane	11.668	83	5022	2.03	ug/L	94
65) ethyl methacrylate	11.887	69	4970	1.22	ug/L	82
67) tetrachloroethene	12.587	166	7707	1.99	ug/L	92
68) 1,3-dichloropropane	11.904	76	9973	1.98	ug/L	99
69) dibromochloromethane	12.194	129	5606	2.03	ug/L	99
70) 1,2-dibromoethane	12.452	107	5204	2.04	ug/L	91
72) chlorobenzene	13.273	112	19937	2.03	ug/L	92
73) 1,1,1,2-tetrachloroethane	13.184	131	6162	2.02	ug/L	96
74) ethylbenzene	13.446	91	35423	1.90	ug/L	95
75) m,p-xylene	13.630	106	26683	3.91	ug/L	# 80
76) o-xylene	14.036	106	12616	1.99	ug/L	# 82
77) styrene	13.973	104	16409	1.72	ug/L	82
78) bromoform	13.799	173	2983	1.70	ug/L	95
79) trans-1,4-dichloro-2-b...	14.195	53	657m	0.95	ug/L	
81) isopropylbenzene	14.397	105	32901	1.96	ug/L	97
83) bromobenzene	14.690	156	7664	1.95	ug/L	86
84) 1,1,2,2-tetrachloroethane	14.043	83	6391	2.11	ug/L	91
85) 1,2,3-trichloropropane	14.192	75	5987	1.86	ug/L	98
86) n-propylbenzene	14.846	91	38189	1.93	ug/L	99
87) 2-chlorotoluene	14.962	91	22702	1.96	ug/L	92
88) 4-chlorotoluene	15.040	91	22349	1.94	ug/L	96
89) 1,3,5-trimethylbenzene	15.122	105	26621	1.95	ug/L	100
90) tert-butylbenzene	15.422	91	16249	1.97	ug/L	91
91) 1,2,4-trimethylbenzene	15.528	105	26132	1.90	ug/L	97
92) sec-butylbenzene	15.641	105	34697	1.94	ug/L	98
93) 1,3-dichlorobenzene	15.754	146	12722	1.88	ug/L	95
94) p-isopropyltoluene	15.814	119	25724	1.91	ug/L	94
95) 1,4-dichlorobenzene	15.822	146	12943	1.91	ug/L	91
96) 1,2-dichlorobenzene	16.189	146	10791	1.77	ug/L	97
97) n-butylbenzene	16.235	91	18817	1.68	ug/L	96
98) 1,2-dibromo-3-chloropr...	16.666	75	282m	0.70	ug/L	
99) 1,2,4-trichlorobenzene	18.017	180	475m	0.21	ug/L	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:46:49 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration

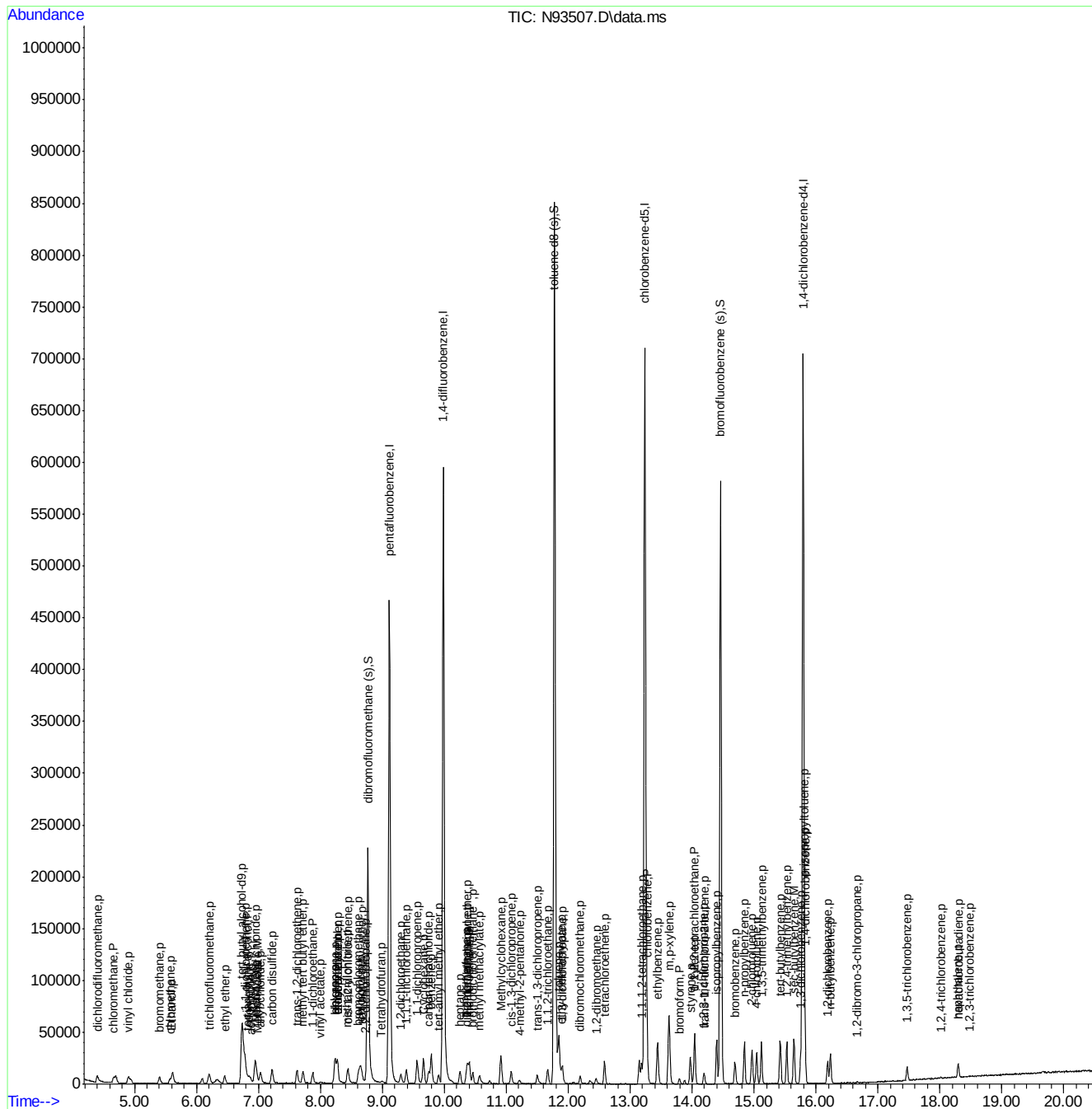
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) 1,3,5-trichlorobenzene	17.473	180	5361	1.54	ug/L	95
101) hexachlorobutadiene	18.300	225	3037	1.89	ug/L	93
102) naphthalene	18.293	128	2184	1.33	ug/L	100
103) 1,2,3-trichlorobenzene	18.487	180	346m	0.30	ug/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:46:49 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



n141229w.m Tue Dec 30 08:25:10 2014

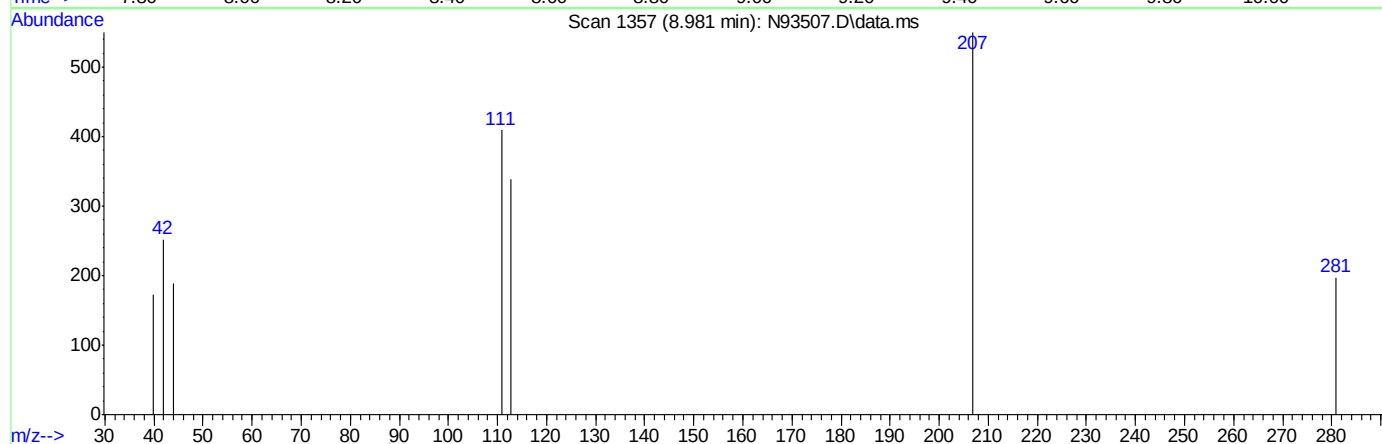
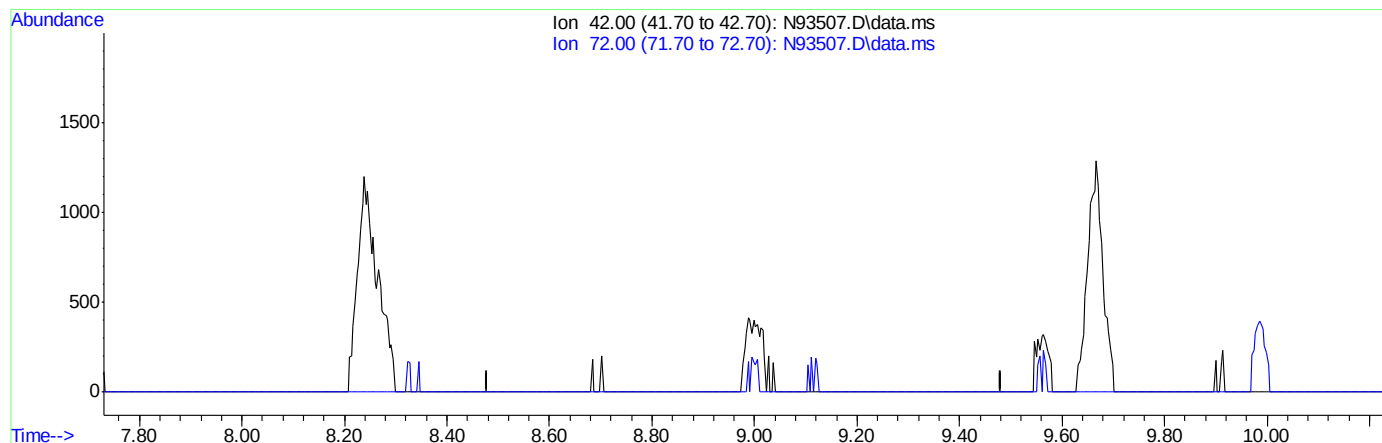
Page: 4

7.6.3

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



(41) Tetrahydrofuran (p)

8.981min (-8.981) 0.00ug/L

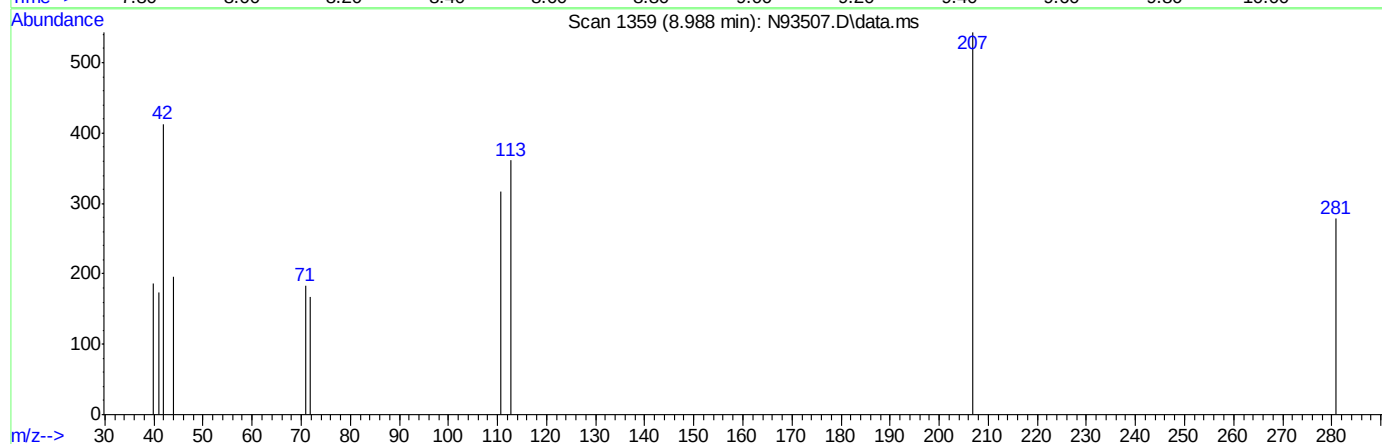
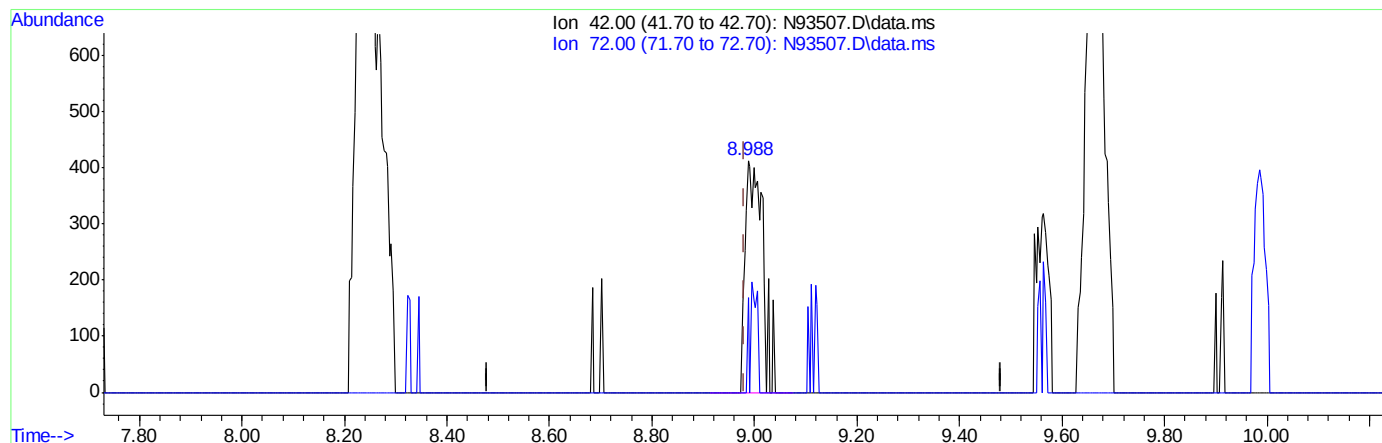
response 0

Ion	Exp%	Act%
42.00	100	0.00
72.00	29.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



TIC: N93507.D\data.ms

(41) Tetrahydrofuran (p)

8.988min (+0.007) 1.25ug/L m

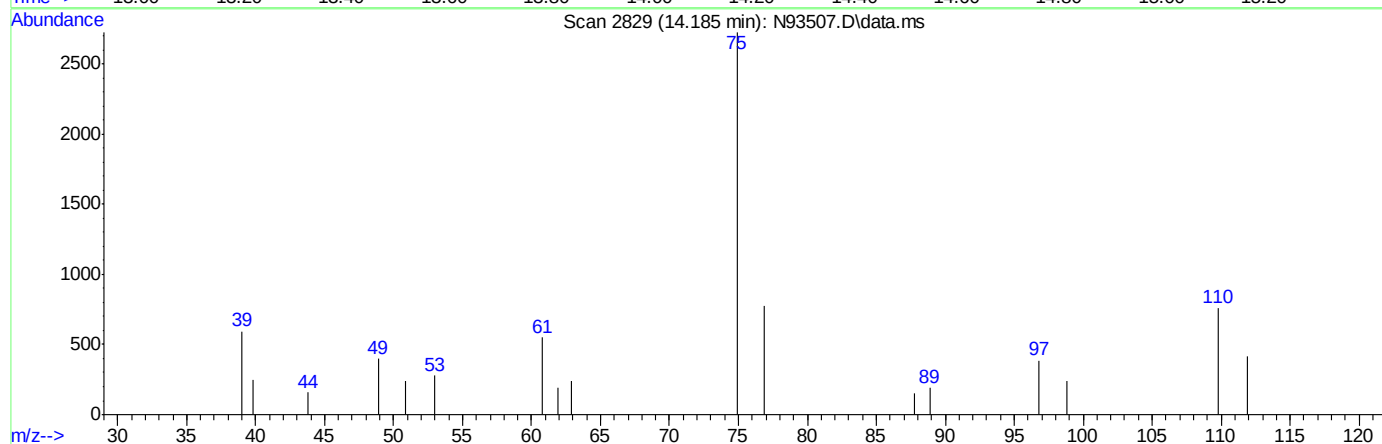
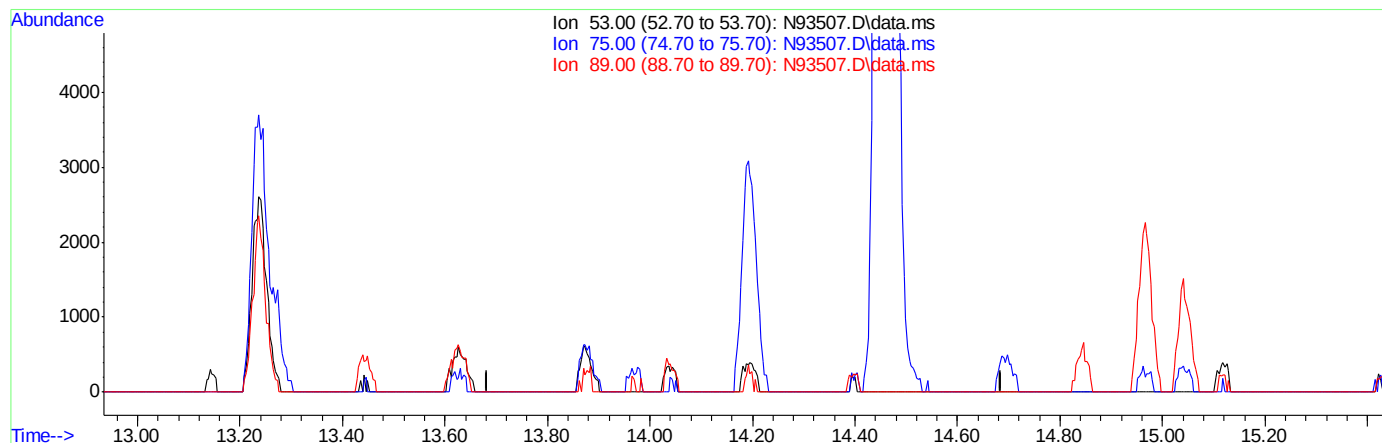
response 974

Ion	Exp%	Act%
42.00	100	100
72.00	29.00	40.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



TIC: N93507.D\data.ms

(79) trans-1,4-dichloro-2-butene (p)

14.185min (-14.185) 0.00ug/L

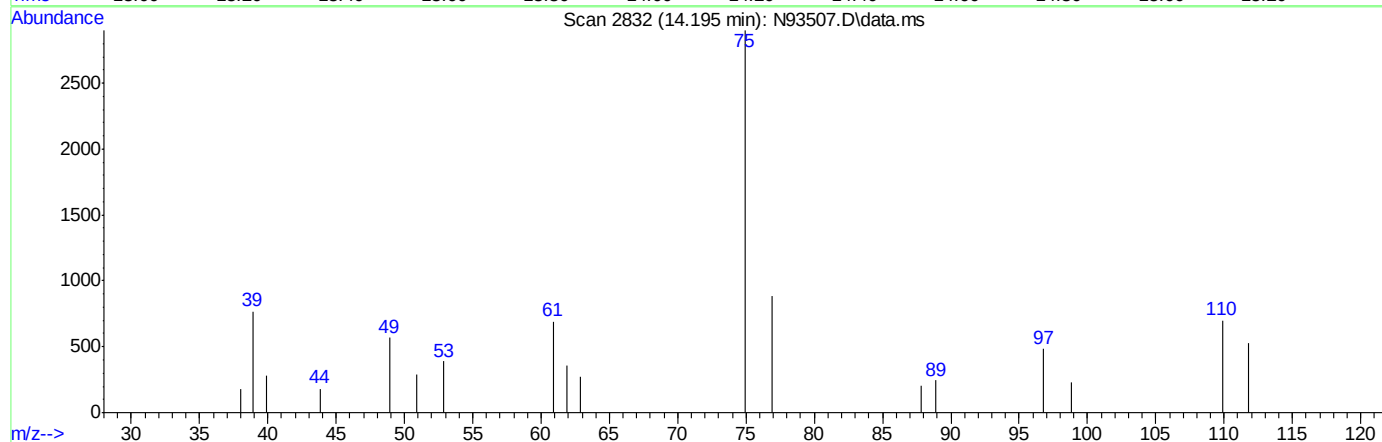
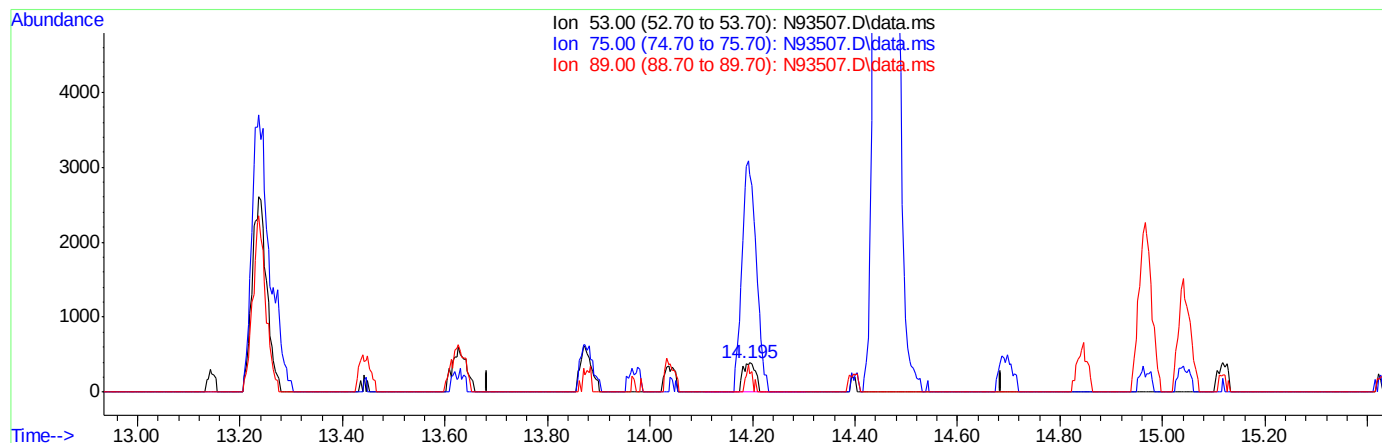
response 0

Ion	Exp%	Act%
53.00	100	0.00
75.00	406.30	0.00#
89.00	57.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



TIC: N93507.D\data.ms

(79) trans-1,4-dichloro-2-butene (p)

14.195min (+0.011) 0.95ug/L m

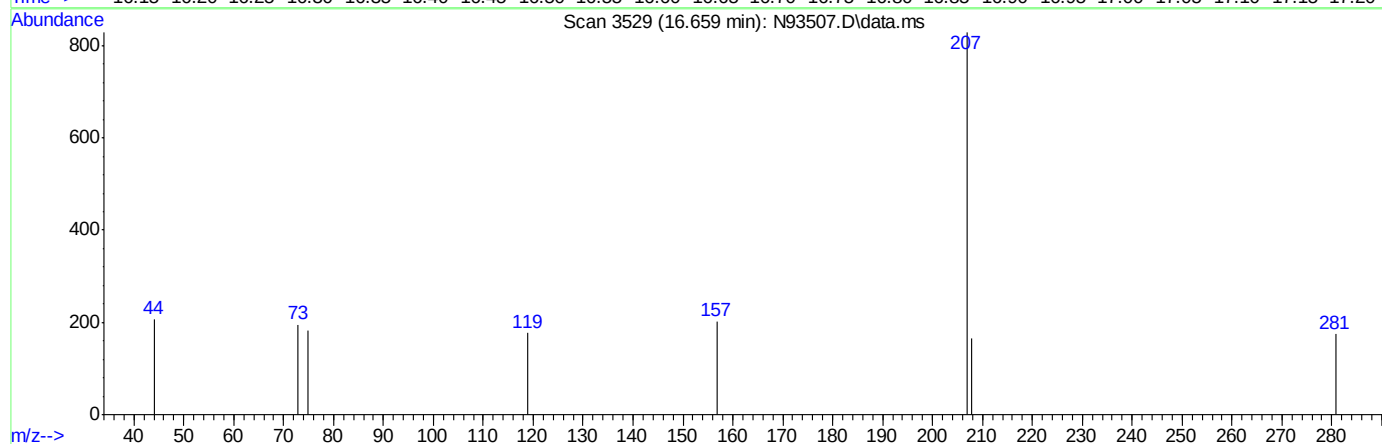
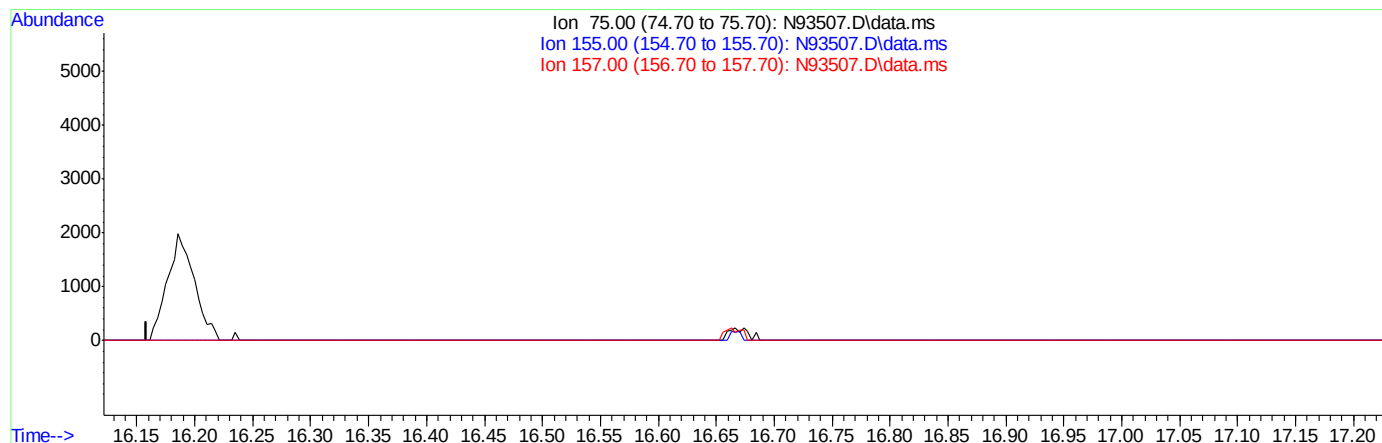
response 657

Ion	Exp%	Act%
53.00	100	100
75.00	406.30	741.69#
89.00	57.80	62.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



TIC: N93507.D\data.ms

(98) 1,2-dibromo-3-chloropropane (p)

16.659min (-16.659) 0.00ug/L

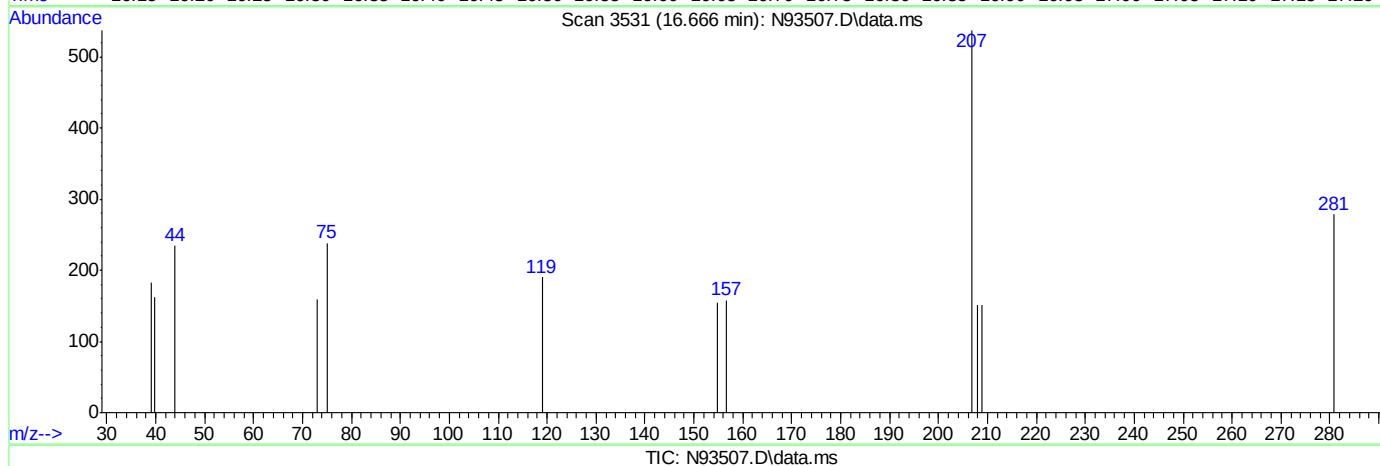
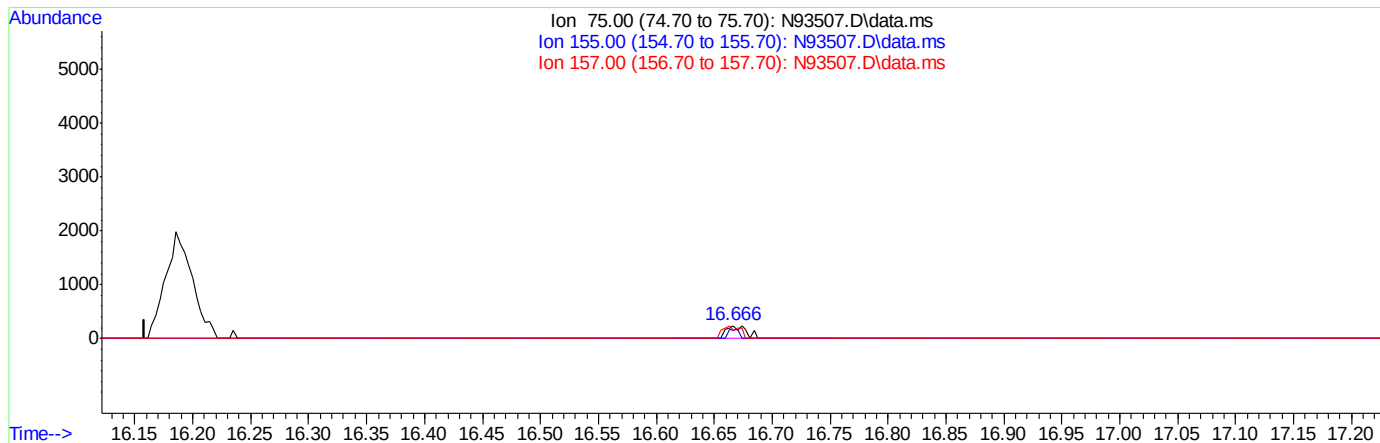
response 0

Ion	Exp%	Act%
75.00	100	0.00
155.00	64.40	0.00#
157.00	90.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



(98) 1,2-dibromo-3-chloropropane (p)

16.666min (+0.007) 0.70ug/L m

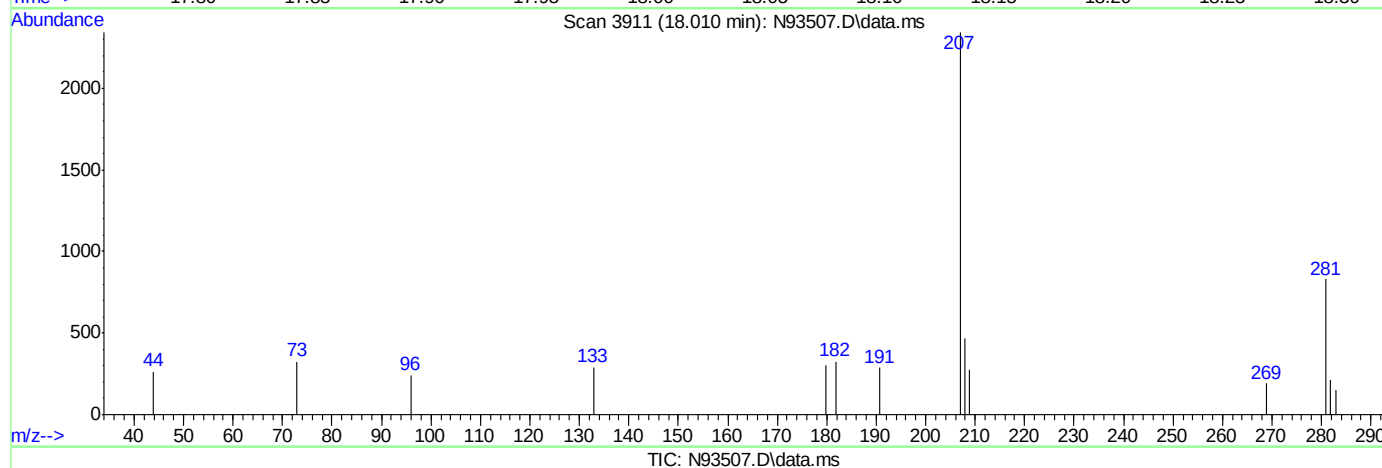
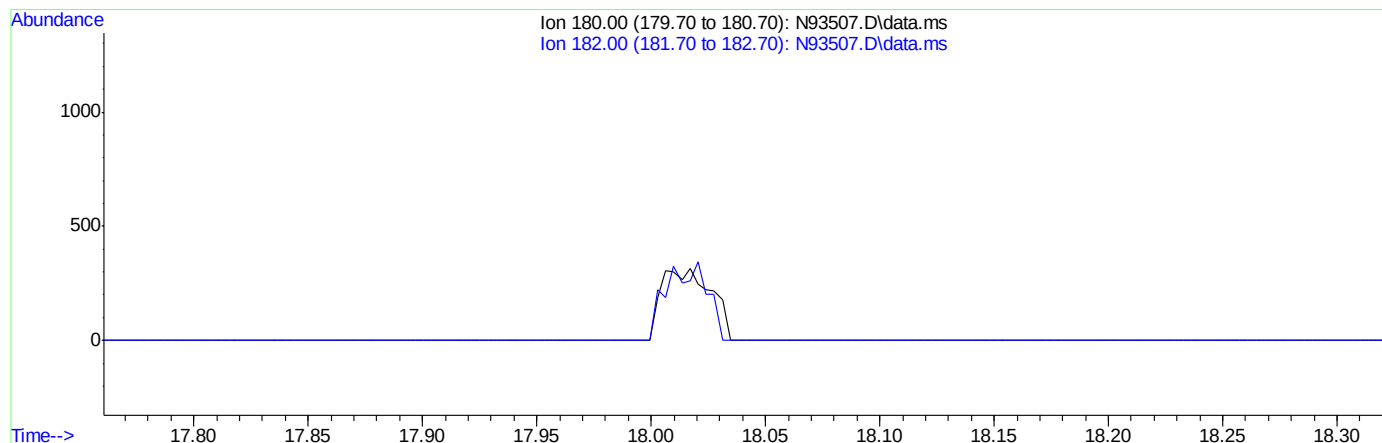
response 282

Ion	Exp%	Act%
75.00	100	100
155.00	64.40	64.71
157.00	90.10	66.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



(99) 1,2,4-trichlorobenzene (p)

18.010min (-18.010) 0.00ug/L

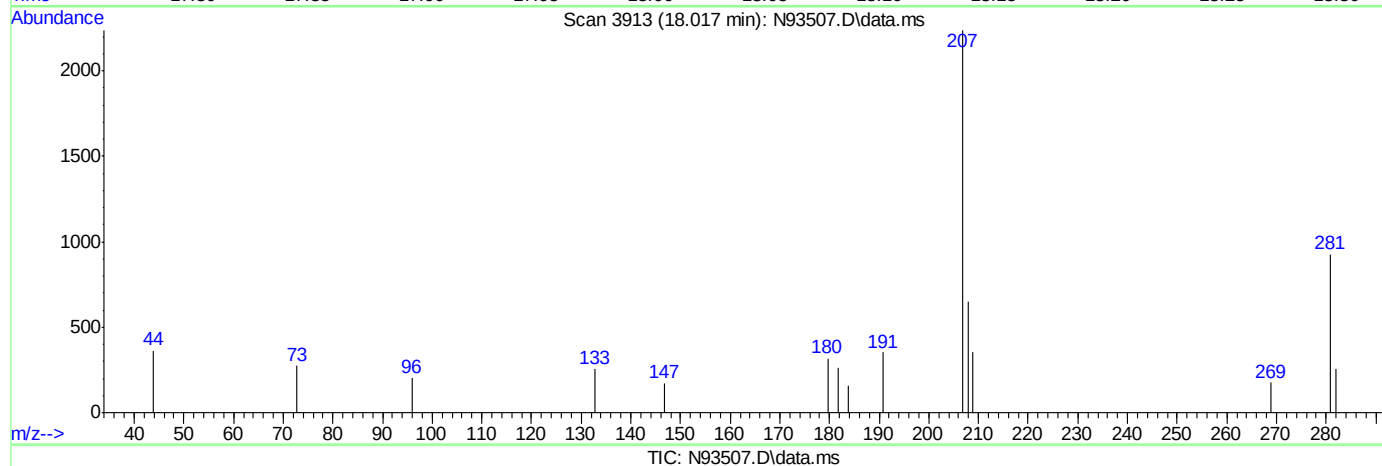
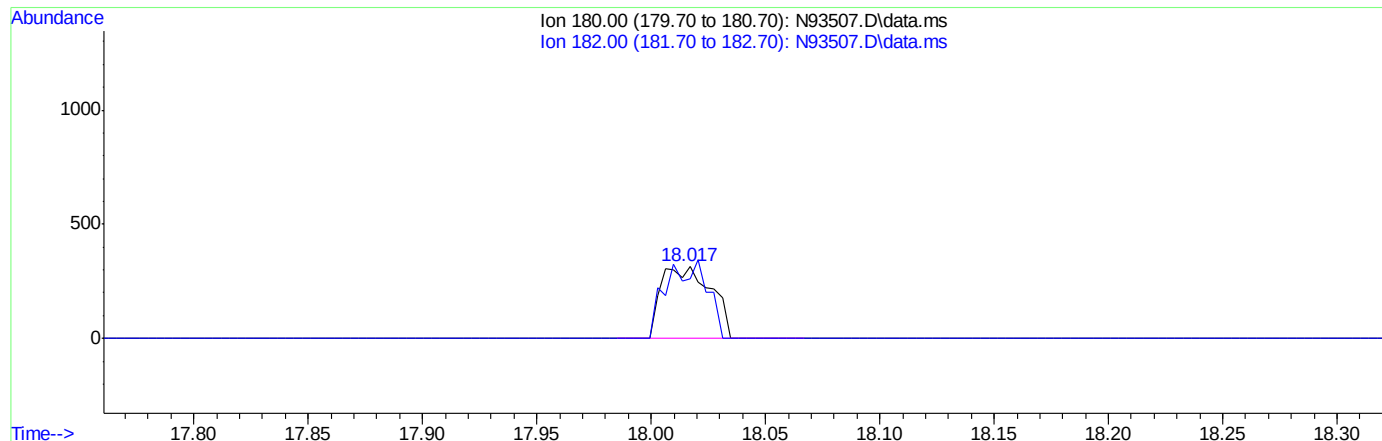
response 0

Ion	Exp%	Act%
180.00	100	0.00
182.00	94.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



(99) 1,2,4-trichlorobenzene (p)

18.017min (+0.007) 0.21ug/L m

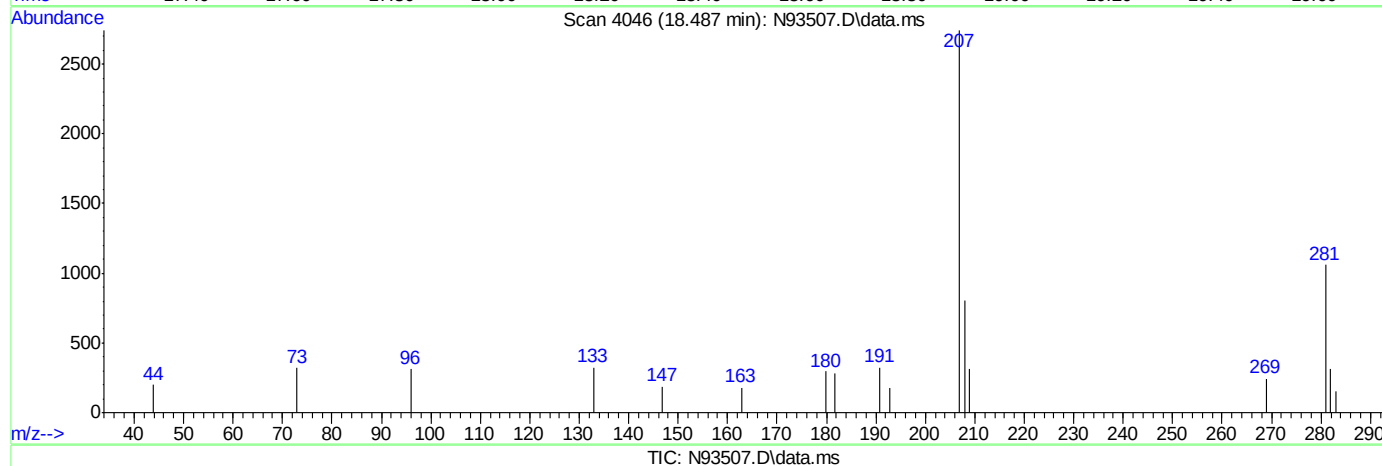
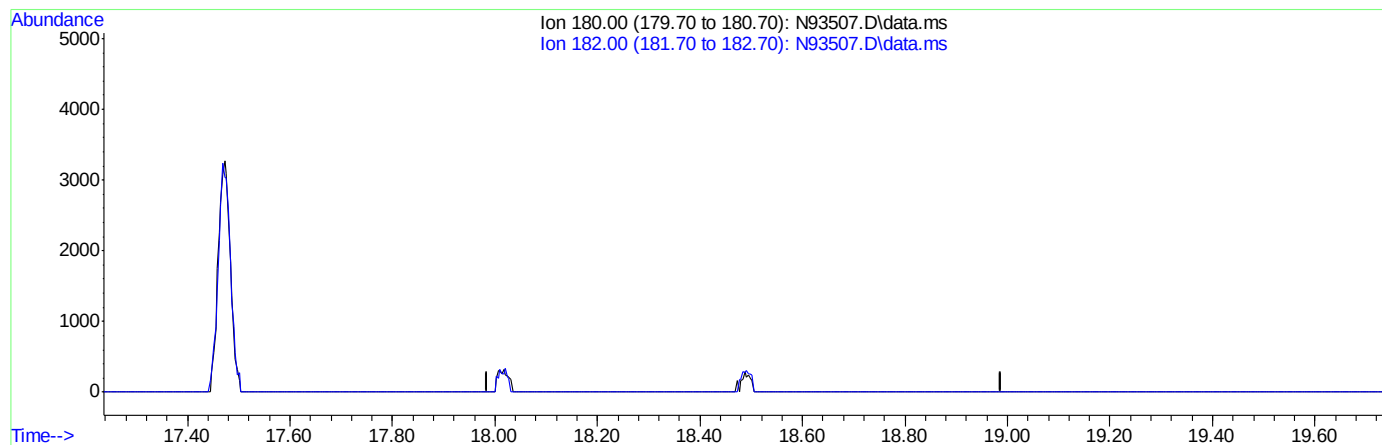
response 475

Ion	Exp%	Act%
180.00	100	100
182.00	94.30	82.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



(103) 1,2,3-trichlorobenzene (p)

18.487min (-18.487) 0.00ug/L

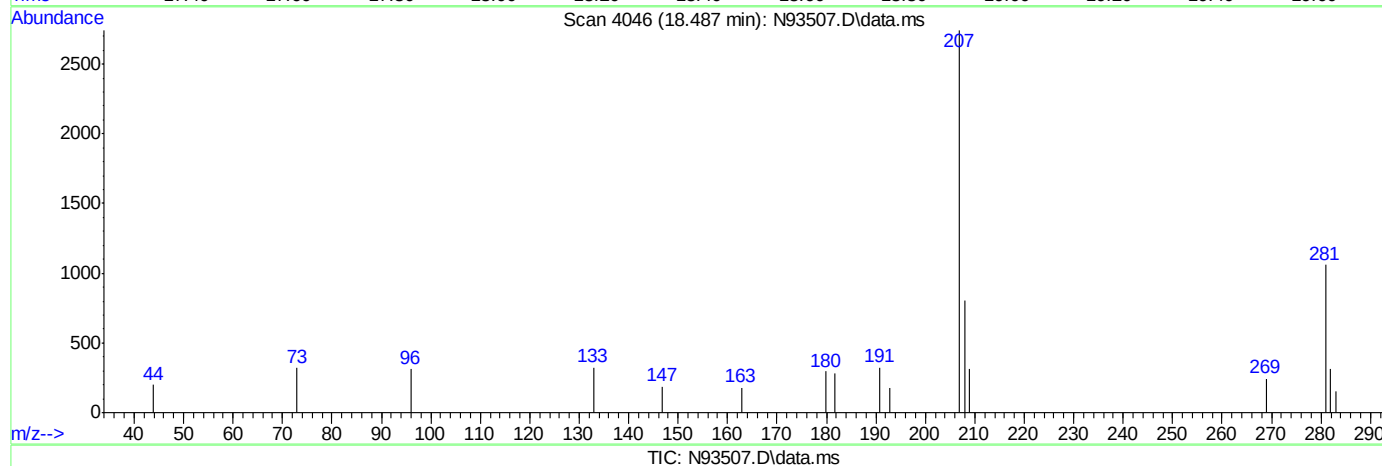
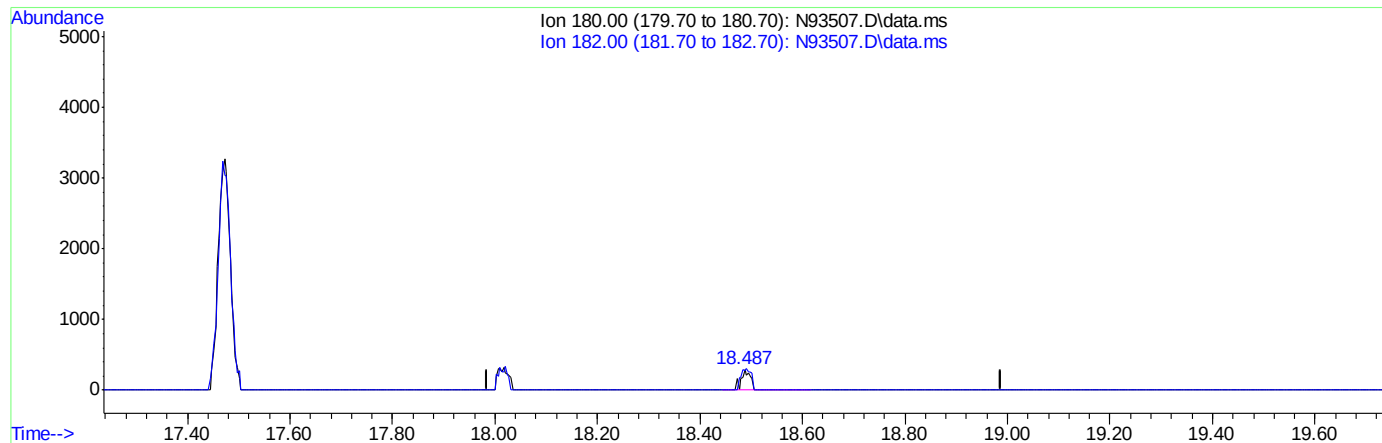
response 0

Ion	Exp%	Act%
180.00	100	0.00
182.00	91.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93507.D
Acq On : 29 Dec 2014 11:47 pm
Operator : jaclynb
Sample : ic3452-2
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 30 07:45:15 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:45:09 2014
Response via : Initial Calibration



(103) 1,2,3-trichlorobenzene (p)

18.487min (+0.000) 0.30ug/L m

response 346

Ion	Exp%	Act%
180.00	100	100
182.00	91.20	95.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93508.D
 Acq On : 30 Dec 2014 12:14 am
 Operator : jaclynb
 Sample : ic3452-5
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:52 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:46:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.739	65	113584	500.00	ug/L	# 0.03
4) pentafluorobenzene	9.115	168	374066	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	551378	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	270864	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	214689	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	169153	50.90	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.80%		
60) toluene-d8 (s)	11.777	98	659914	50.08	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.16%		
82) bromofluorobenzene (s)	14.457	95	230293	49.80	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.60%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.821	59	12866	48.56	ug/L	# 100
3) Ethanol	5.597	45	20607	525.42	ug/L	93
5) dichlorodifluoromethane	4.395	85	19458	4.55	ug/L	94
6) chloromethane	4.660	50	18135	4.61	ug/L	95
7) vinyl chloride	4.901	62	15040	4.72	ug/L	94
8) bromomethane	5.403	96	12725	4.46	ug/L	93
9) chloroethane	5.573	64	11215	4.56	ug/L	98
10) ethyl ether	6.453	59	13346	5.33	ug/L	69
11) acetonitrile	6.449	41	1701m	4.48	ug/L	
12) trichlorofluoromethane	6.205	101	24624	4.46	ug/L	92
13) freon-113	6.962	101	16626	4.90	ug/L	93
14) acrolein	6.227	56	4979	19.86	ug/L	92
15) 1,1-dichloroethene	6.785	96	16224	5.00	ug/L	# 68
16) acetone	6.357	58	2209	4.28	ug/L	# 72
17) Methyl Acetate	6.987	43	13122	4.95	ug/L	# 83
18) methylene chloride	6.944	84	18937	4.93	ug/L	# 65
19) methyl tert butyl ether	7.719	73	33319	4.73	ug/L	89
20) acrylonitrile	6.867	53	4221	5.18	ug/L	84
21) allyl chloride	7.033	41	21529	4.99	ug/L	75
22) trans-1,2-dichloroethene	7.623	96	17479	4.98	ug/L	# 70
23) iodomethane	6.856	142	14992	4.13	ug/L	92
24) carbon disulfide	7.224	76	57783	4.80	ug/L	100
25) propionitrile	6.757	54	920m	6.45	ug/L	
26) vinyl acetate	7.998	43	6559	4.82	ug/L	95
27) chloroprene	8.235	53	21601	4.99	ug/L	70
28) di-isopropyl ether	8.274	45	53252	5.14	ug/L	85
29) methacrylonitrile	8.422	41	6496	4.87	ug/L	85
30) 2-butanone	8.320	72	1242	2.76	ug/L	# 1
31) Hexane	8.242	41	21655	5.03	ug/L	# 61
32) 1,1-dichloroethane	7.874	63	32010	5.07	ug/L	92
33) tert-butyl ethyl ether	8.662	59	20193	3.84	ug/L	92
34) isobutyl alcohol	8.270	43	43060	25.13	ug/L	89
35) 2,2-dichloropropane	8.726	77	9395	3.29	ug/L	91
36) cis-1,2-dichloroethene	8.443	96	19612	5.07	ug/L	# 72

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93508.D
 Acq On : 30 Dec 2014 12:14 am
 Operator : jaclynb
 Sample : ic3452-5
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:52 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:46:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.270	43	42902	5.01	ug/L #	76
38) bromochloromethane	8.613	128	8303	5.09	ug/L #	65
39) chloroform	8.641	83	30366	5.04	ug/L	98
41) Tetrahydrofuran	8.995	42	2828	4.51	ug/L	81
42) 1,1,1-trichloroethane	9.387	97	25599	5.12	ug/L	92
44) Cyclohexane	9.663	56	32013	4.92	ug/L #	76
45) carbon tetrachloride	9.751	117	21483	5.17	ug/L	96
46) 1,1-dichloropropene	9.560	75	24634	4.89	ug/L	94
47) benzene	9.790	78	74290	5.04	ug/L	99
48) 1,2-dichloroethane	9.295	62	20693	4.66	ug/L	93
49) tert-amyl methyl ether	9.907	73	20247	4.29	ug/L	86
50) heptane	10.253	43	13594	4.92	ug/L	89
51) trichloroethene	10.405	95	20335	5.21	ug/L	92
52) 1,2-dichloropropane	10.377	63	19652	5.04	ug/L	98
53) dibromomethane	10.352	93	10249	5.16	ug/L	90
54) bromodichloromethane	10.462	83	22243	5.25	ug/L	92
55) Methylcyclohexane	10.914	83	31513	4.92	ug/L #	75
56) 2-chloroethyl vinyl ether	10.377	63	19652	5.04	ug/L #	94
57) methyl methacrylate	10.561	69	8432	4.58	ug/L	88
58) 1,4-dioxane	10.568	88	367m	10.83	ug/L	
59) cis-1,3-dichloropropene	11.077	75	25311	5.33	ug/L	100
61) 4-methyl-2-pentanone	11.197	43	9475	4.87	ug/L	97
62) toluene	11.851	92	45569	4.92	ug/L	94
63) trans-1,3-dichloropropene	11.501	75	19828	5.24	ug/L	93
64) 1,1,2-trichloroethane	11.667	83	13094	5.33	ug/L	93
65) ethyl methacrylate	11.880	69	14181	4.37	ug/L	90
67) tetrachloroethene	12.587	166	19454	5.03	ug/L	92
68) 1,3-dichloropropane	11.904	76	25080	5.00	ug/L	96
69) dibromochloromethane	12.194	129	15250	5.51	ug/L	95
70) 1,2-dibromoethane	12.449	107	13544	5.29	ug/L	99
71) 2-hexanone	12.070	43	5457	2.65	ug/L #	54
72) chlorobenzene	13.272	112	48358	4.90	ug/L	95
73) 1,1,1,2-tetrachloroethane	13.184	131	16322	5.34	ug/L	96
74) ethylbenzene	13.442	91	86527	4.69	ug/L	97
75) m,p-xylene	13.626	106	66706	9.83	ug/L #	78
76) o-xylene	14.040	106	32264	5.10	ug/L	83
77) styrene	13.969	104	45003	4.94	ug/L	93
78) bromoform	13.792	173	7753	4.66	ug/L	96
79) trans-1,4-dichloro-2-b...	14.192	53	2076	4.07	ug/L #	1
81) isopropylbenzene	14.397	105	83472	4.88	ug/L	96
83) bromobenzene	14.694	156	19428	4.85	ug/L #	84
84) 1,1,2,2-tetrachloroethane	14.040	83	16466	5.22	ug/L	98
85) 1,2,3-trichloropropane	14.192	75	15784	4.89	ug/L	99
86) n-propylbenzene	14.842	91	97874	4.87	ug/L	96
87) 2-chlorotoluene	14.966	91	58155	4.92	ug/L	90
88) 4-chlorotoluene	15.040	91	57201	4.89	ug/L	97
89) 1,3,5-trimethylbenzene	15.118	105	68551	4.93	ug/L	95
90) tert-butylbenzene	15.422	91	41670	4.94	ug/L	95
91) 1,2,4-trimethylbenzene	15.528	105	67834	4.89	ug/L	98
92) sec-butylbenzene	15.645	105	91095	5.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:52 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.751	146	32775	4.82	ug/L	93
94)	p-isopropyltoluene	15.814	119	66448	4.87	ug/L	93
95)	1,4-dichlorobenzene	15.818	146	32990	4.81	ug/L	94
96)	1,2-dichlorobenzene	16.189	146	28955	4.82	ug/L	96
97)	n-butylbenzene	16.232	91	53455	4.91	ug/L	97
98)	1,2-dibromo-3-chloropr...	16.659	75	1169	4.20	ug/L	86
99)	1,2,4-trichlorobenzene	18.013	180	1789	1.38	ug/L	85
100)	1,3,5-trichlorobenzene	17.472	180	15678	4.74	ug/L	99
101)	hexachlorobutadiene	18.293	225	8043	4.97	ug/L	100
102)	naphthalene	18.289	128	4682	3.13	ug/L	100
103)	1,2,3-trichlorobenzene	18.498	180	897m	1.32	ug/L	
104)	2-methylnaphthalene	19.661	142	2079	1.95	ug/L #	100
105)	1-methylnaphthalene	19.915	142	1933	2.35	ug/L	97

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

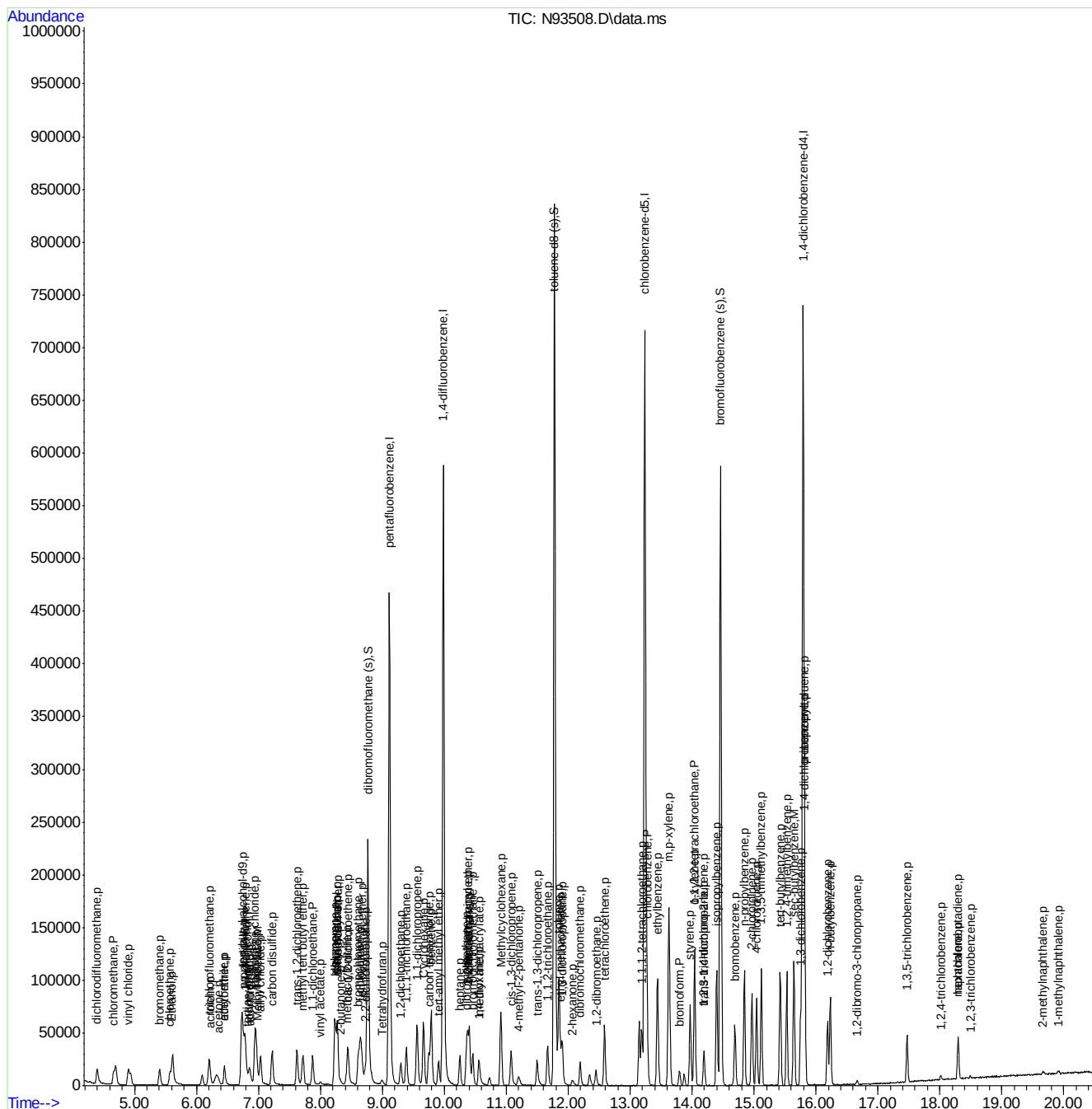
7.6.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

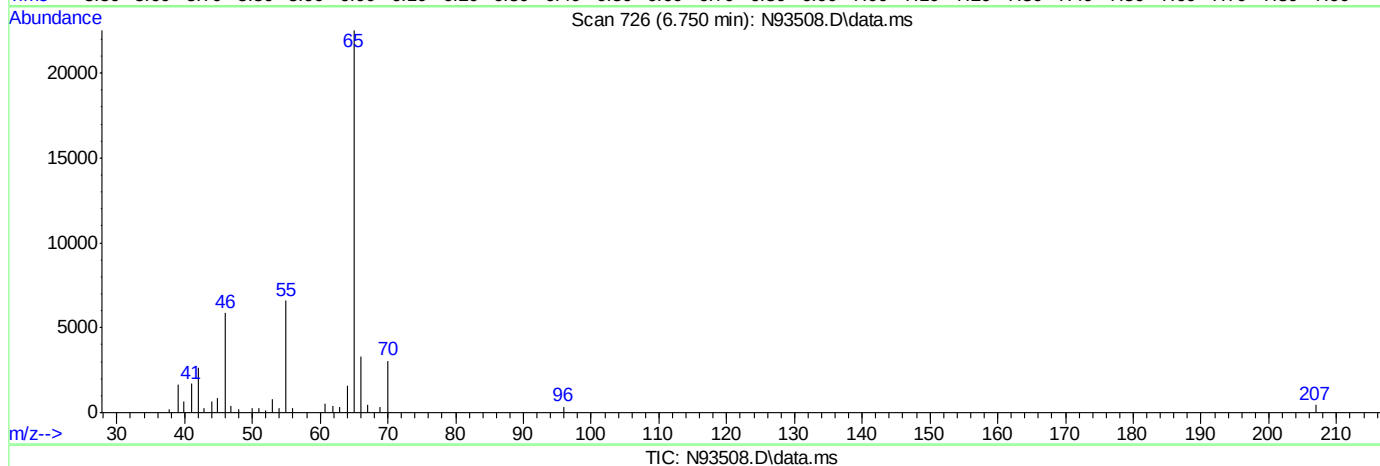
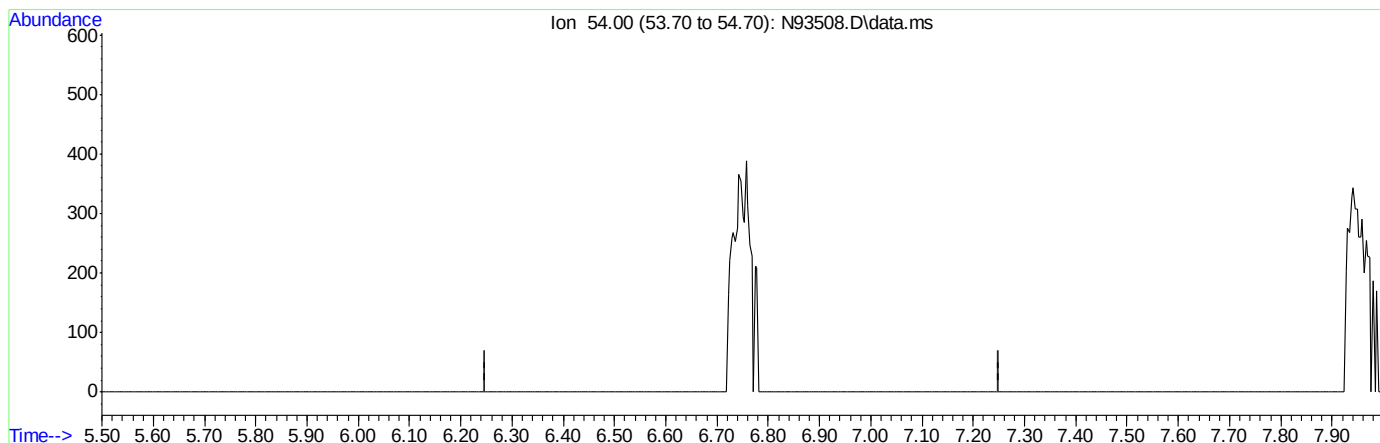
Quant Time: Dec 30 07:47:52 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration



(25) propionitrile (p)

6.750min (-6.750) 0.00ug/L

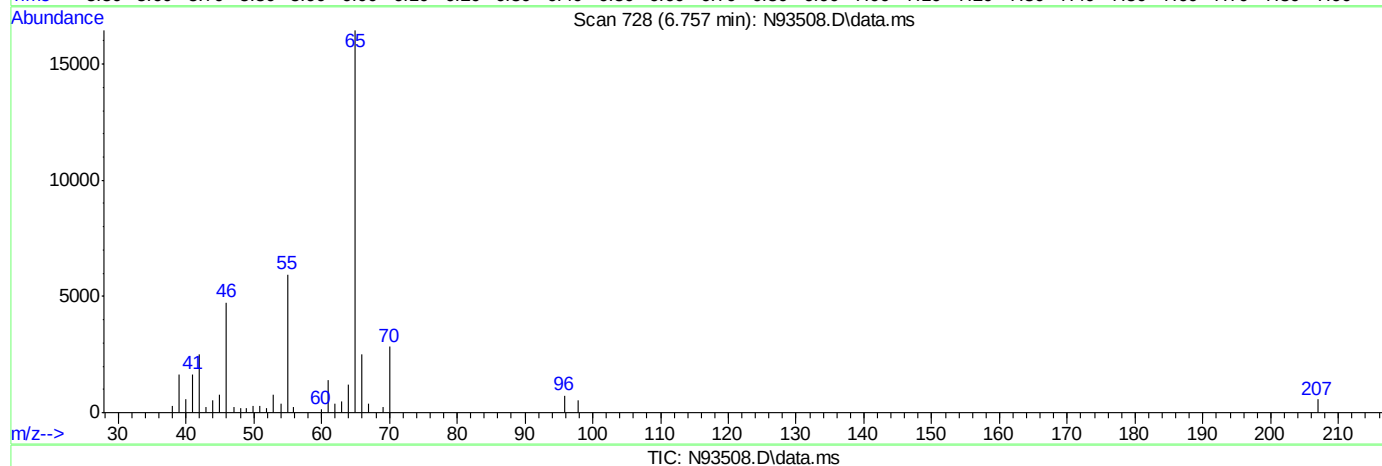
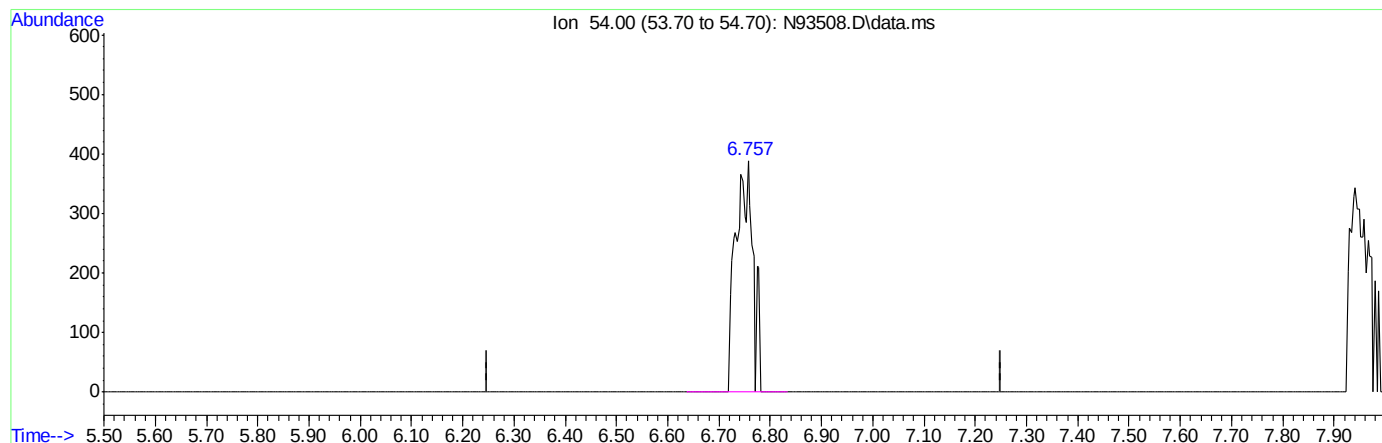
response 0

Ion	Exp%	Act%
54.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration



(25) propionitrile (p)

6.757min (+0.007) 6.45ug/L m

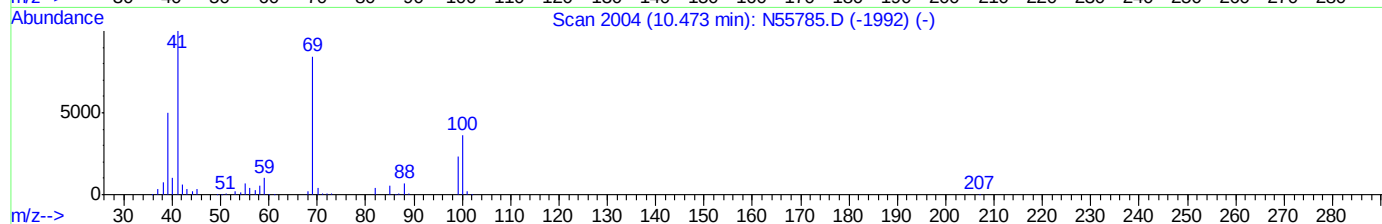
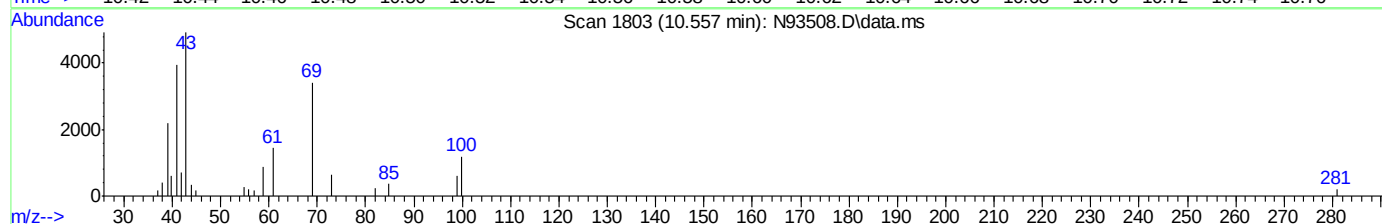
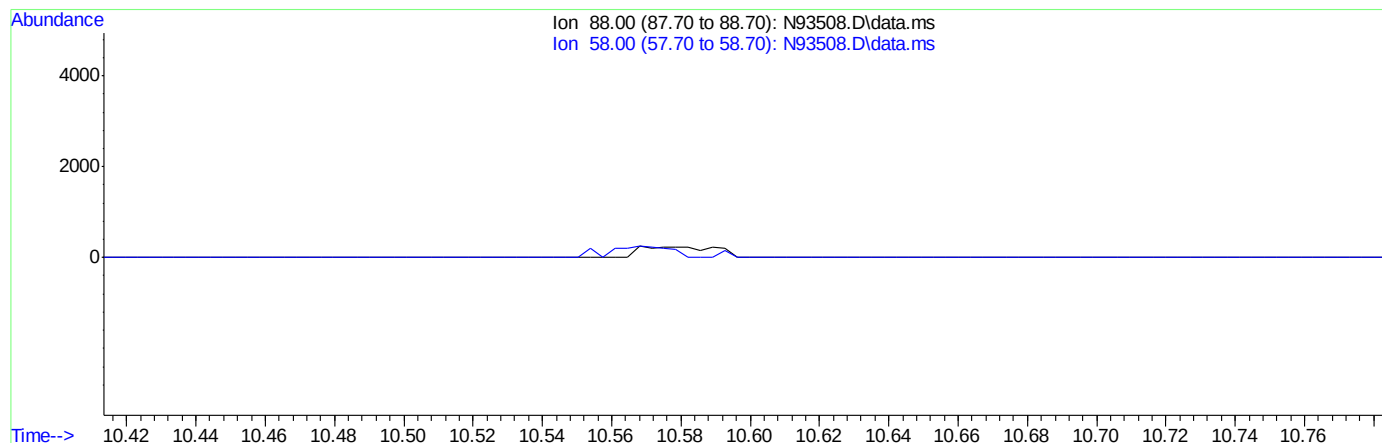
response 920

Ion	Exp%	Act%
54.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration



TIC: N93508.D\data.ms

(58) 1,4-dioxane (p)

10.557min (-10.557) 0.00ug/L

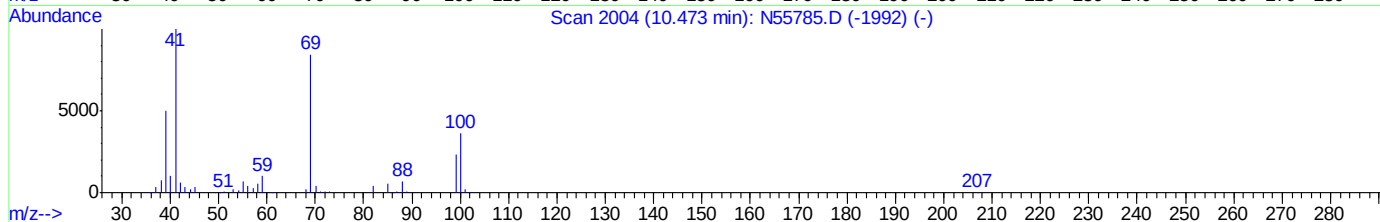
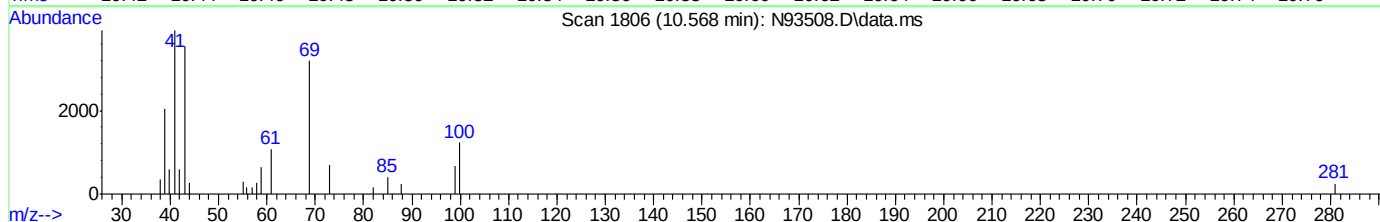
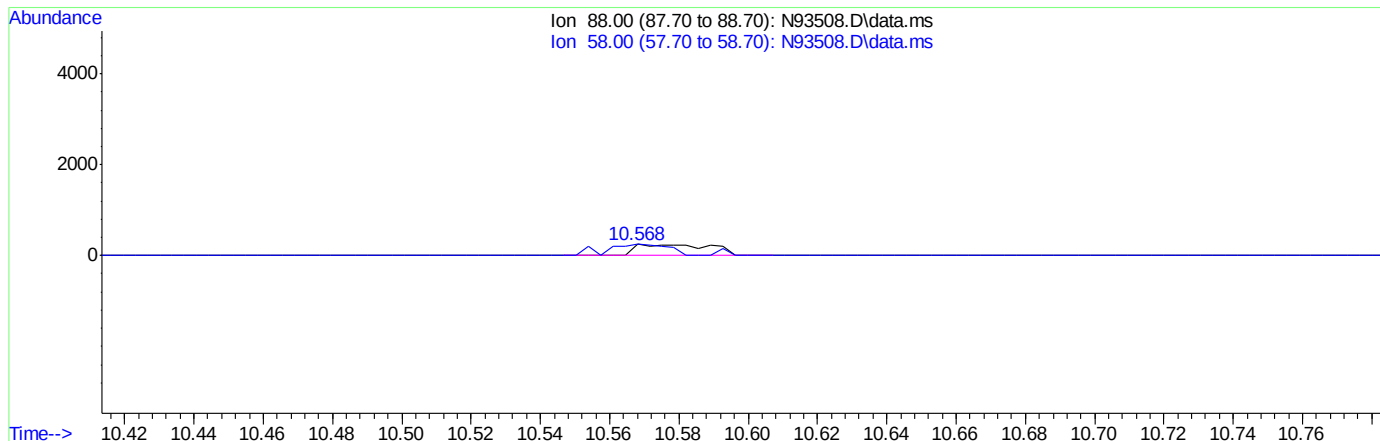
response 0

Ion	Exp%	Act%
88.00	100	0.00
58.00	134.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration



TIC: N93508.D\data.ms

(58) 1,4-dioxane (p)

10.568min (+0.011) 10.83ug/L m

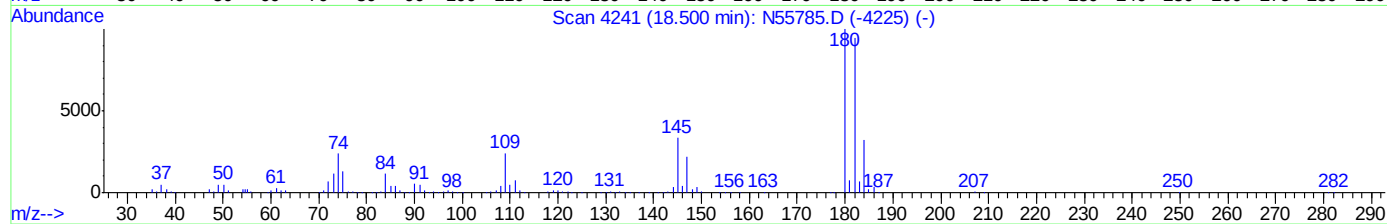
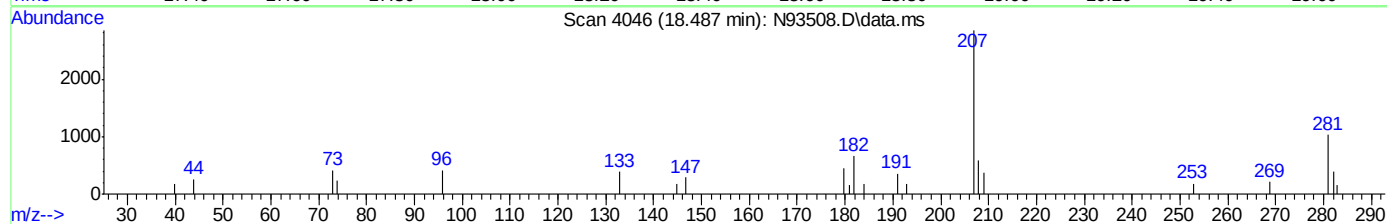
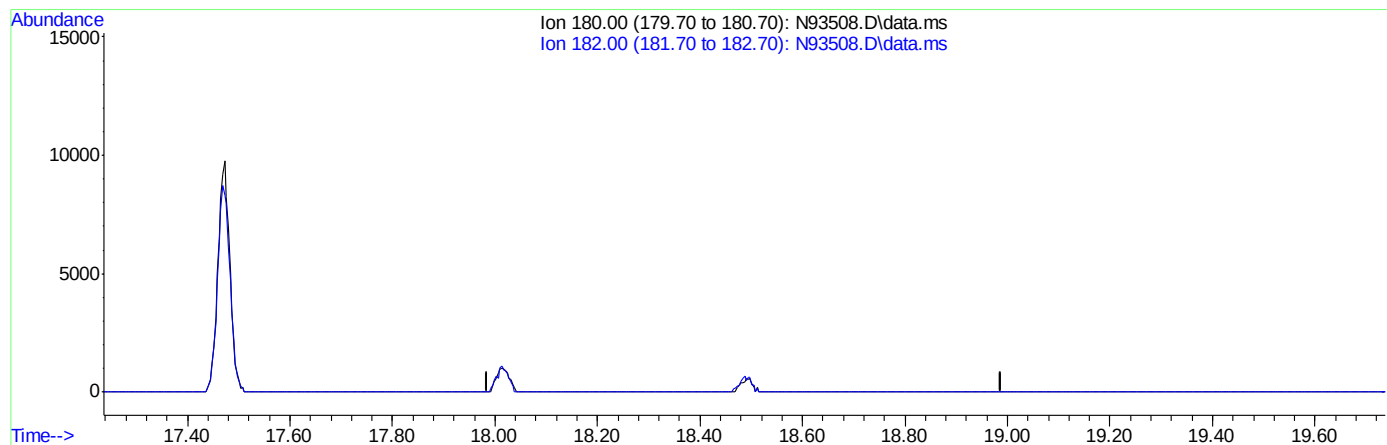
response 367

Ion	Exp%	Act%
88.00	100	100
58.00	134.00	109.50
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration



TIC: N93508.D\data.ms

(103) 1,2,3-trichlorobenzene (p)

18.487min (-18.487) 0.00ug/L

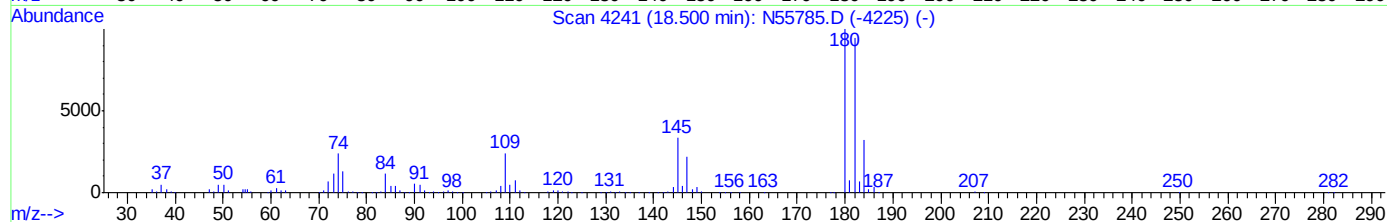
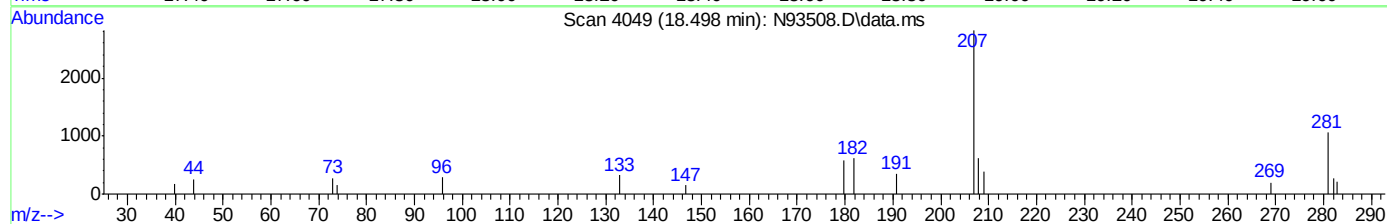
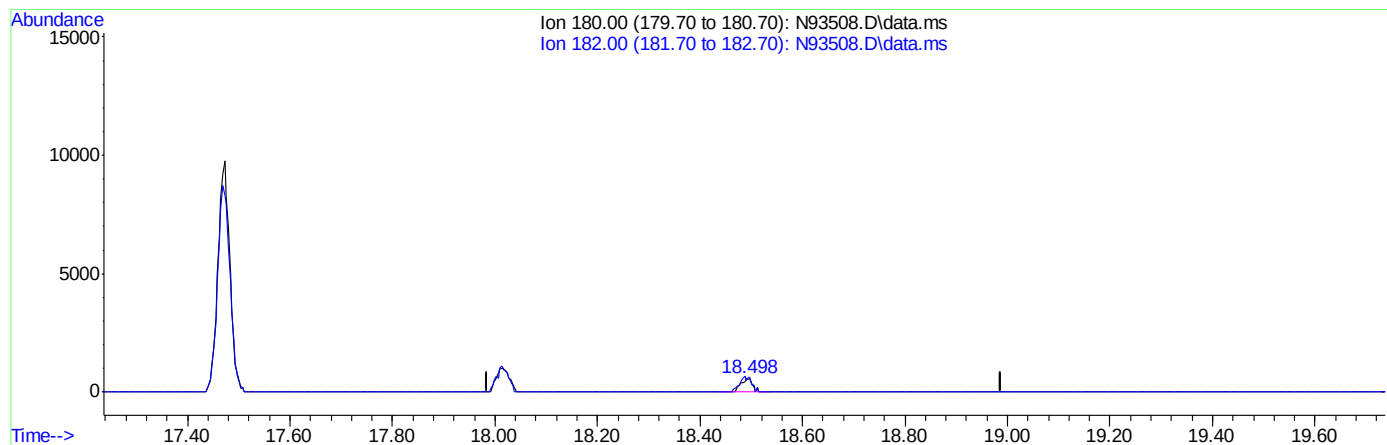
response 0

Ion	Exp%	Act%
180.00	100	0.00
182.00	91.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93508.D
Acq On : 30 Dec 2014 12:14 am
Operator : jaclynb
Sample : ic3452-5
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 30 07:47:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:46:57 2014
Response via : Initial Calibration



TIC: N93508.D\data.ms

(103) 1,2,3-trichlorobenzene (p)

18.498min (+0.011) 1.32ug/L m

response 897

Ion	Exp%	Act%
180.00	100	100
182.00	91.20	105.10
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93509.D
 Acq On : 30 Dec 2014 12:42 am
 Operator : jaclynb
 Sample : ic3452-10
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 51 Sample Multiplier: 1

Quant Time: Dec 30 07:48:06 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:48:00 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.729	65	114402	500.00	ug/L	# 0.02
4) pentafluorobenzene	9.115	168	379520	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	563084	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	271070	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	224162	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	170248	50.31	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.62%		
60) toluene-d8 (s)	11.777	98	668845	49.69	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	99.38%		
82) bromofluorobenzene (s)	14.457	95	235709	48.86	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	97.72%		
Target Compounds						
2) tertiary butyl alcohol	6.814	59	26669	100.91	ug/L	# 100
3) Ethanol	5.583	45	41779	1040.00	ug/L	95
5) dichlorodifluoromethane	4.396	85	41238	9.72	ug/L	99
6) chloromethane	4.661	50	36728	9.38	ug/L	99
7) vinyl chloride	4.905	62	31575	9.88	ug/L	98
8) bromomethane	5.400	96	24956	8.86	ug/L	99
9) chloroethane	5.569	64	23397	9.59	ug/L	96
10) ethyl ether	6.442	59	25410	9.83	ug/L	65
11) acetonitrile	6.446	41	3549	9.72	ug/L	85
12) trichlorofluoromethane	6.209	101	53797	9.87	ug/L	97
13) freon-113	6.962	101	32581	9.51	ug/L	90
14) acrolein	6.220	56	12059	52.83	ug/L	92
15) 1,1-dichloroethene	6.785	96	30594	9.30	ug/L	# 70
16) acetone	6.361	58	4826	9.94	ug/L	# 74
17) Methyl Acetate	6.983	43	27055	10.09	ug/L	# 94
18) methylene chloride	6.944	84	35753	9.20	ug/L	# 69
19) methyl tert butyl ether	7.712	73	68764	9.73	ug/L	89
20) acrylonitrile	6.867	53	8760	10.47	ug/L	95
21) allyl chloride	7.033	41	42927	9.81	ug/L	80
22) trans-1,2-dichloroethene	7.620	96	33959	9.54	ug/L	# 71
23) iodomethane	6.856	142	31954	9.20	ug/L	85
24) carbon disulfide	7.224	76	111771	9.25	ug/L	100
25) propionitrile	6.746	54	1734	10.47	ug/L	100
26) vinyl acetate	7.991	43	12956	9.50	ug/L	92
27) chloroprene	8.235	53	44408	10.12	ug/L	67
28) di-isopropyl ether	8.270	45	102222	9.66	ug/L	87
29) methacrylonitrile	8.412	41	13633	10.16	ug/L	76
30) 2-butanone	8.313	72	3212	9.08	ug/L	# 1
31) Hexane	8.242	41	42284	9.67	ug/L	# 48
32) 1,1-dichloroethane	7.878	63	62567	9.75	ug/L	96
33) tert-butyl ethyl ether	8.663	59	47235	9.39	ug/L	88
34) isobutyl alcohol	8.267	43	84695	48.63	ug/L	87
35) 2,2-dichloropropane	8.726	77	31135	12.12	ug/L	93
36) cis-1,2-dichloroethene	8.443	96	36336	9.23	ug/L	# 74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93509.D
 Acq On : 30 Dec 2014 12:42 am
 Operator : jaclynb
 Sample : ic3452-10
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 51 Sample Multiplier: 1

Quant Time: Dec 30 07:48:06 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:48:00 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.267	43	84111	9.67	ug/L	85
38) bromochloromethane	8.613	128	16549	9.96	ug/L #	66
39) chloroform	8.645	83	59001	9.63	ug/L	98
41) Tetrahydrofuran	8.991	42	6030	9.79	ug/L	67
42) 1,1,1-trichloroethane	9.387	97	51441	10.10	ug/L	95
44) Cyclohexane	9.667	56	64258	9.70	ug/L #	75
45) carbon tetrachloride	9.752	117	43563	10.20	ug/L	95
46) 1,1-dichloropropene	9.561	75	48889	9.55	ug/L	94
47) benzene	9.790	78	146898	9.75	ug/L	99
48) 1,2-dichloroethane	9.299	62	40333	9.05	ug/L	90
49) tert-amyl methyl ether	9.904	73	40287	8.67	ug/L	86
50) heptane	10.254	43	27277	9.71	ug/L	84
51) trichloroethene	10.406	95	39748	9.90	ug/L	95
52) 1,2-dichloropropane	10.374	63	38243	9.59	ug/L	98
53) dibromomethane	10.352	93	20377	9.97	ug/L	91
54) bromodichloromethane	10.459	83	44199	10.12	ug/L	99
55) Methylcyclohexane	10.911	83	62786	9.64	ug/L #	74
56) 2-chloroethyl vinyl ether	10.374	63	38243	9.59	ug/L #	95
57) methyl methacrylate	10.558	69	17918	9.80	ug/L #	79
58) 1,4-dioxane	10.575	88	1250	50.41	ug/L #	41
59) cis-1,3-dichloropropene	11.077	75	50999	10.39	ug/L	95
61) 4-methyl-2-pentanone	11.194	43	20897	10.59	ug/L	97
62) toluene	11.851	92	90551	9.61	ug/L	99
63) trans-1,3-dichloropropene	11.498	75	40603	10.40	ug/L	92
64) 1,1,2-trichloroethane	11.668	83	25762	10.13	ug/L	94
65) ethyl methacrylate	11.876	69	31059	9.78	ug/L	82
67) tetrachloroethene	12.587	166	37524	9.69	ug/L	94
68) 1,3-dichloropropane	11.901	76	49342	9.83	ug/L	95
69) dibromochloromethane	12.191	129	31193	11.03	ug/L	99
70) 1,2-dibromoethane	12.445	107	26915	10.38	ug/L	98
71) 2-hexanone	12.053	43	13788	7.92	ug/L	95
72) chlorobenzene	13.269	112	92272	9.38	ug/L	95
73) 1,1,1,2-tetrachloroethane	13.184	131	31937	10.29	ug/L	100
74) ethylbenzene	13.439	91	170426	9.35	ug/L	95
75) m,p-xylene	13.623	106	130712	19.31	ug/L	84
76) o-xylene	14.040	106	62915	9.89	ug/L #	81
77) styrene	13.969	104	93684	10.31	ug/L	89
78) bromoform	13.792	173	17059	10.42	ug/L	95
79) trans-1,4-dichloro-2-b...	14.188	53	4714	9.84	ug/L #	2
81) isopropylbenzene	14.397	105	165359	9.32	ug/L	98
83) bromobenzene	14.690	156	38175	9.20	ug/L	88
84) 1,1,2,2-tetrachloroethane	14.040	83	33139	9.98	ug/L	99
85) 1,2,3-trichloropropane	14.192	75	33112	9.88	ug/L	96
86) n-propylbenzene	14.839	91	200336	9.60	ug/L	99
87) 2-chlorotoluene	14.966	91	115742	9.42	ug/L	92
88) 4-chlorotoluene	15.040	91	114829	9.46	ug/L	97
89) 1,3,5-trimethylbenzene	15.118	105	138334	9.56	ug/L	98
90) tert-butylbenzene	15.422	91	82571	9.41	ug/L	89
91) 1,2,4-trimethylbenzene	15.528	105	137725	9.56	ug/L	100
92) sec-butylbenzene	15.641	105	181818	9.56	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93509.D
Acq On : 30 Dec 2014 12:42 am
Operator : jaclynb
Sample : ic3452-10
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Dec 30 07:48:06 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:48:00 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.751	146	66646	9.47	ug/L	96
94) p-isopropyltoluene	15.815	119	137865	9.75	ug/L	96
95) 1,4-dichlorobenzene	15.818	146	65849	9.29	ug/L	94
96) 1,2-dichlorobenzene	16.186	146	59297	9.54	ug/L	96
97) n-butylbenzene	16.232	91	118586	10.48	ug/L	100
98) 1,2-dibromo-3-chloropr...	16.659	75	2702	9.81	ug/L	95
99) 1,2,4-trichlorobenzene	18.014	180	7335	7.14	ug/L	97
100) 1,3,5-trichlorobenzene	17.469	180	35779	10.50	ug/L	99
101) hexachlorobutadiene	18.293	225	17074	10.12	ug/L	92
102) naphthalene	18.286	128	8472	5.98	ug/L	100
103) 1,2,3-trichlorobenzene	18.491	180	2659	4.97	ug/L	91
104) 2-methylnaphthalene	19.665	142	4411	4.45	ug/L #	100
105) 1-methylnaphthalene	19.912	142	3708	4.45	ug/L	93

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

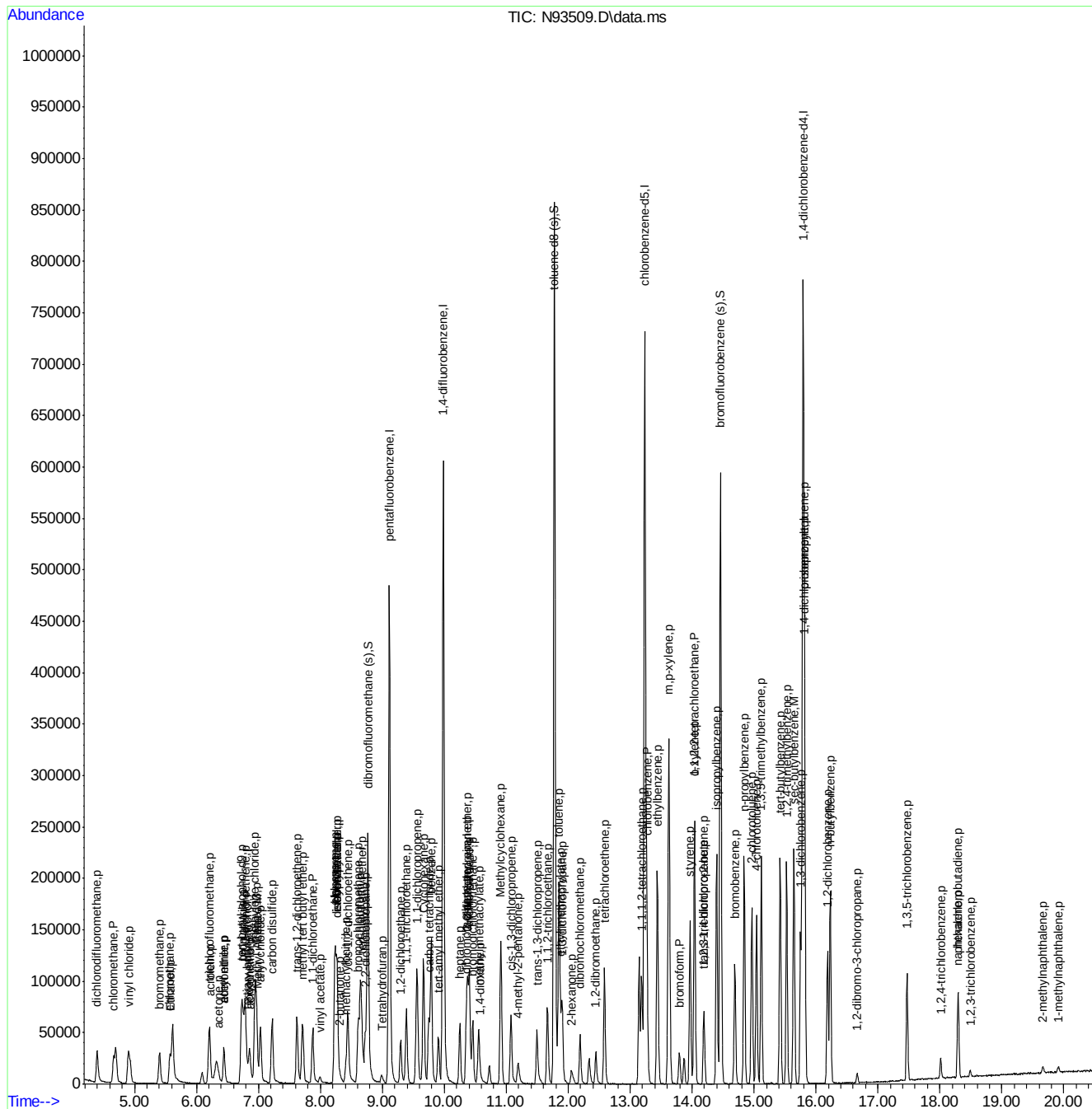
7.6.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93509.D
Acq On : 30 Dec 2014 12:42 am
Operator : jaclynb
Sample : ic3452-10
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Dec 30 07:48:06 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:48:00 2014
Response via : Initial Calibration



n141229w.m Tue Dec 30 08:25:17 2014

Page: 4

7.6.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93510.D
 Acq On : 30 Dec 2014 1:10 am
 Operator : jaclynb
 Sample : ic3452-25
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 30 07:48:34 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:48:22 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.718	65	116170	500.00	ug/L	# 0.00
4) pentafluorobenzene	9.115	168	374207	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	548195	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	278830	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	233856	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	168534	50.46	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.92%		
60) toluene-d8 (s)	11.777	98	662799	50.63	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.26%		
82) bromofluorobenzene (s)	14.457	95	239099	47.69	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.38%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.803	59	65531	243.63	ug/L	# 100
3) Ethanol	5.576	45	102667m	2491.87	ug/L	
5) dichlorodifluoromethane	4.395	85	109849	26.40	ug/L	98
6) chloromethane	4.661	50	97102	25.47	ug/L	95
7) vinyl chloride	4.901	62	79549	25.29	ug/L	100
8) bromomethane	5.403	96	65667	24.19	ug/L	98
9) chloroethane	5.569	64	61523	25.79	ug/L	99
10) ethyl ether	6.442	59	67322	26.51	ug/L	65
11) acetonitrile	6.435	41	9574	26.84	ug/L	97
12) trichlorofluoromethane	6.206	101	142077	26.51	ug/L	100
13) freon-113	6.966	101	83495	24.97	ug/L	89
14) acrolein	6.213	56	33179	144.70	ug/L	92
15) 1,1-dichloroethene	6.785	96	78708	24.55	ug/L	# 70
16) acetone	6.347	58	10849	22.70	ug/L	87
17) Methyl Acetate	6.976	43	71760	27.08	ug/L	# 87
18) methylene chloride	6.944	84	93171	24.72	ug/L	# 69
19) methyl tert butyl ether	7.708	73	193536	27.90	ug/L	88
20) acrylonitrile	6.860	53	24884	29.82	ug/L	97
21) allyl chloride	7.033	41	110581	25.75	ug/L	79
22) trans-1,2-dichloroethene	7.620	96	86741	24.91	ug/L	# 73
23) iodomethane	6.856	142	95733	28.54	ug/L	89
24) carbon disulfide	7.224	76	295587	25.18	ug/L	98
25) propionitrile	6.750	54	3911	23.58	ug/L	100
26) vinyl acetate	7.980	43	37494	28.23	ug/L	92
27) chloroprene	8.231	53	117718	27.13	ug/L	67
28) di-isopropyl ether	8.267	45	262108	25.29	ug/L	90
29) methacrylonitrile	8.404	41	34427	25.91	ug/L	83
30) 2-butanone	8.295	72	9835	29.08	ug/L	# 1
31) Hexane	8.242	41	105801	24.73	ug/L	# 63
32) 1,1-dichloroethane	7.878	63	161216	25.58	ug/L	91
33) tert-butyl ethyl ether	8.659	59	149748	30.57	ug/L	92
34) isobutyl alcohol	8.263	43	208519	122.27	ug/L	92
35) 2,2-dichloropropane	8.726	77	99509	37.30	ug/L	95
36) cis-1,2-dichloroethene	8.443	96	94013	24.54	ug/L	# 76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93510.D
 Acq On : 30 Dec 2014 1:10 am
 Operator : jaclynb
 Sample : ic3452-25
 Misc : ms33603,MSN3452,,,5,1
 ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 30 07:48:34 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:48:22 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.263	43	208746	24.54	ug/L	89
38) bromochloromethane	8.610	128	43415	26.52	ug/L #	67
39) chloroform	8.641	83	151565	25.25	ug/L	98
41) Tetrahydrofuran	8.984	42	17308	28.65	ug/L	68
42) 1,1,1-trichloroethane	9.391	97	130908	26.02	ug/L	93
44) Cyclohexane	9.667	56	160614	25.06	ug/L #	72
45) carbon tetrachloride	9.751	117	113432	27.19	ug/L	94
46) 1,1-dichloropropene	9.561	75	124663	25.24	ug/L	97
47) benzene	9.790	78	367169	25.13	ug/L	100
48) 1,2-dichloroethane	9.295	62	104192	24.48	ug/L	90
49) tert-amyl methyl ether	9.903	73	122022	27.71	ug/L	85
50) heptane	10.250	43	70086	25.77	ug/L	89
51) trichloroethene	10.405	95	100811	25.82	ug/L	94
52) 1,2-dichloropropane	10.374	63	96428	25.04	ug/L	98
53) dibromomethane	10.352	93	51824	26.06	ug/L	88
54) bromodichloromethane	10.458	83	118376	27.78	ug/L	95
55) Methylcyclohexane	10.915	83	161096	25.59	ug/L #	75
56) 2-chloroethyl vinyl ether	10.374	63	96428	25.04	ug/L #	95
57) methyl methacrylate	10.554	69	48118	27.17	ug/L #	75
58) 1,4-dioxane	10.557	88	3584	148.06	ug/L #	50
59) cis-1,3-dichloropropene	11.074	75	137017	28.48	ug/L	98
61) 4-methyl-2-pentanone	11.180	43	57043	29.35	ug/L	95
62) toluene	11.851	92	230789	25.32	ug/L	100
63) trans-1,3-dichloropropene	11.494	75	110308	28.83	ug/L	92
64) 1,1,2-trichloroethane	11.664	83	67455	27.20	ug/L	99
65) ethyl methacrylate	11.866	69	88693	28.85	ug/L	75
67) tetrachloroethene	12.587	166	98700	24.91	ug/L	93
68) 1,3-dichloropropane	11.901	76	128958	25.07	ug/L	100
69) dibromochloromethane	12.191	129	86086	29.10	ug/L	100
70) 1,2-dibromoethane	12.445	107	72899	27.17	ug/L	97
71) 2-hexanone	12.039	43	41161	24.26	ug/L	96
72) chlorobenzene	13.269	112	244676	24.43	ug/L	93
73) 1,1,1,2-tetrachloroethane	13.184	131	84608	26.38	ug/L	97
74) ethylbenzene	13.439	91	443381	23.91	ug/L	95
75) m,p-xylene	13.626	106	341896	49.38	ug/L #	81
76) o-xylene	14.036	106	167569	25.66	ug/L	83
77) styrene	13.966	104	262218	27.88	ug/L	89
78) bromoform	13.792	173	49136	28.93	ug/L	100
79) trans-1,4-dichloro-2-b...	14.188	53	14944	30.45	ug/L #	32
81) isopropylbenzene	14.397	105	435202	23.83	ug/L	100
83) bromobenzene	14.687	156	104274	24.48	ug/L	87
84) 1,1,2,2-tetrachloroethane	14.040	83	88099	25.44	ug/L	100
85) 1,2,3-trichloropropane	14.188	75	92032	26.38	ug/L	98
86) n-propylbenzene	14.839	91	525771	24.35	ug/L	99
87) 2-chlorotoluene	14.962	91	305670	24.13	ug/L	93
88) 4-chlorotoluene	15.040	91	304563	24.30	ug/L	97
89) 1,3,5-trimethylbenzene	15.118	105	365689	24.45	ug/L	97
90) tert-butylbenzene	15.422	91	218075	24.10	ug/L	90
91) 1,2,4-trimethylbenzene	15.528	105	365154	24.51	ug/L	100
92) sec-butylbenzene	15.641	105	483223	24.58	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93510.D
Acq On : 30 Dec 2014 1:10 am
Operator : jaclynb
Sample : ic3452-25
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 30 07:48:34 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:48:22 2014
Response via : Initial Calibration

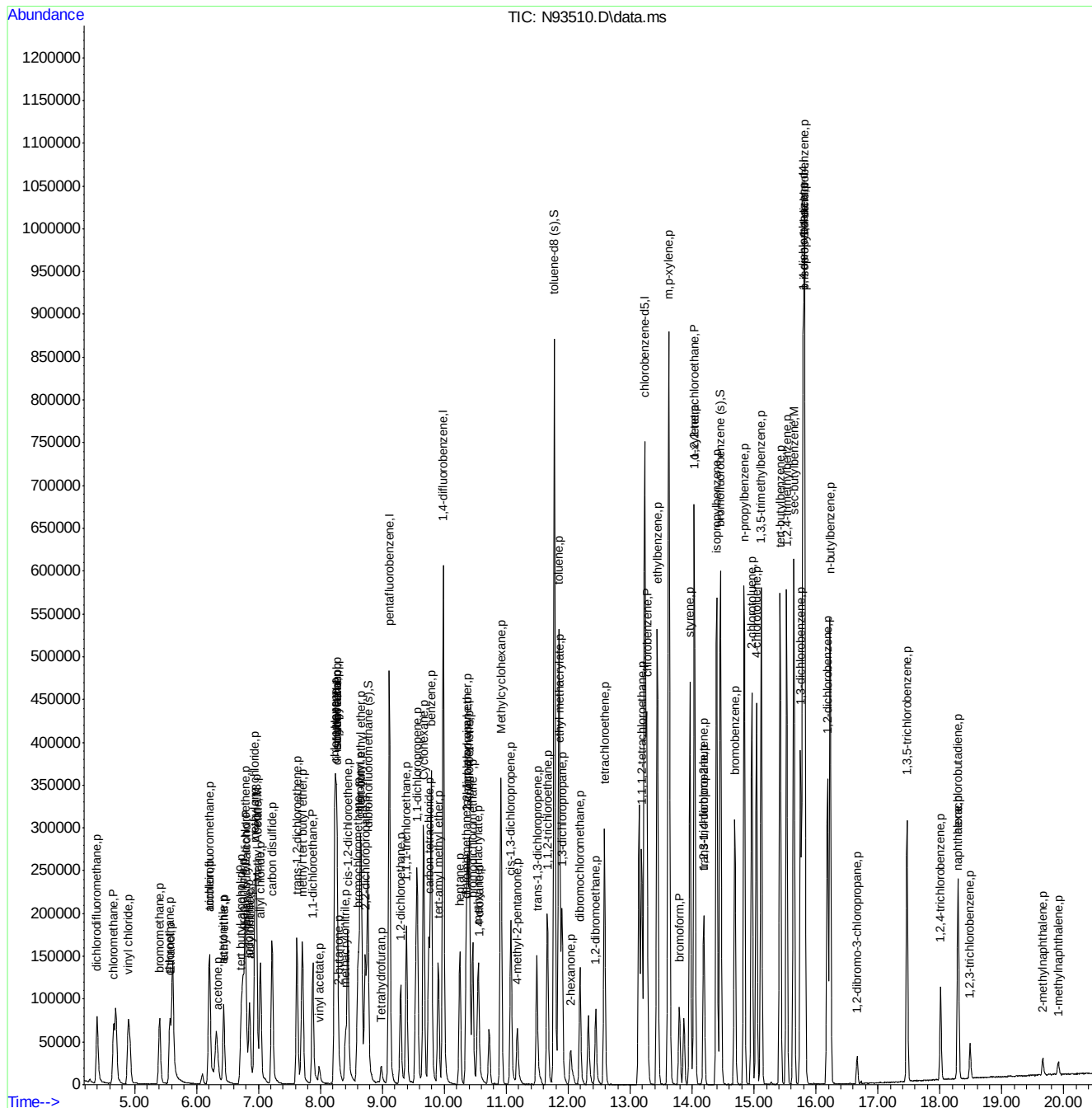
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.751	146	181298	24.95	ug/L	94
94) p-isopropyltoluene	15.814	119	364285	24.81	ug/L	94
95) 1,4-dichlorobenzene	15.818	146	177609	24.36	ug/L	93
96) 1,2-dichlorobenzene	16.186	146	168617	26.24	ug/L	97
97) n-butylbenzene	16.228	91	339412	28.47	ug/L	97
98) 1,2-dibromo-3-chloropr...	16.666	75	8873	31.04	ug/L	80
99) 1,2,4-trichlorobenzene	18.010	180	38894	39.09	ug/L	98
100) 1,3,5-trichlorobenzene	17.469	180	106759	29.73	ug/L	99
101) hexachlorobutadiene	18.293	225	47316	26.83	ug/L	92
102) naphthalene	18.286	128	25565	18.81	ug/L	100
103) 1,2,3-trichlorobenzene	18.487	180	15221	31.17	ug/L	88
104) 2-methylnaphthalene	19.661	142	12532	12.59	ug/L #	100
105) 1-methylnaphthalene	19.912	142	10365	12.37	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93510.D
Acq On : 30 Dec 2014 1:10 am
Operator : jaclynb
Sample : ic3452-25
Misc : ms33603,MSN3452,,,,,5,1
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 30 07:48:34 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:48:22 2014
Response via : Initial Calibration



n141229w.m Tue Dec 30 08:25:20 2014

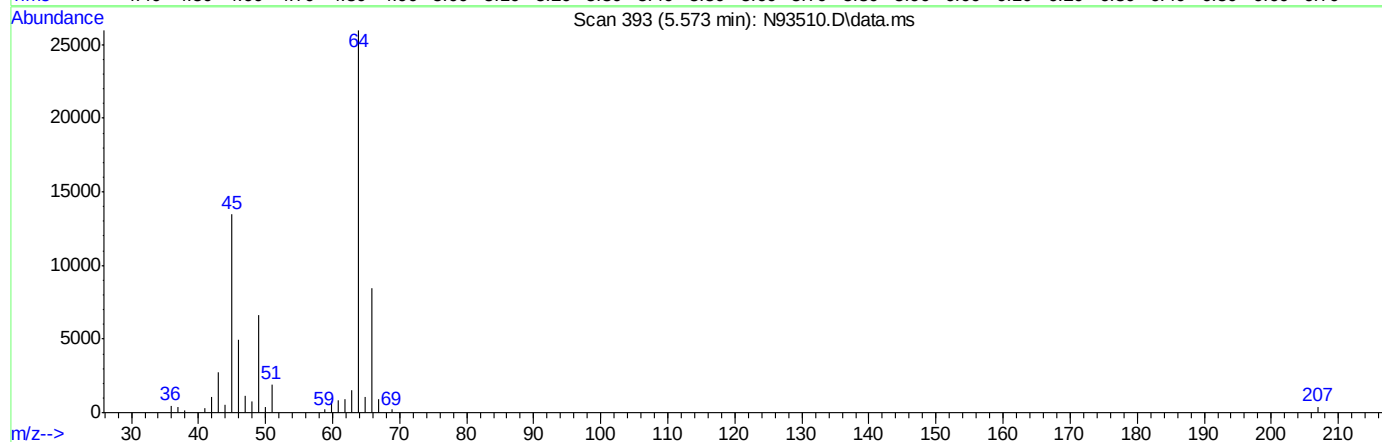
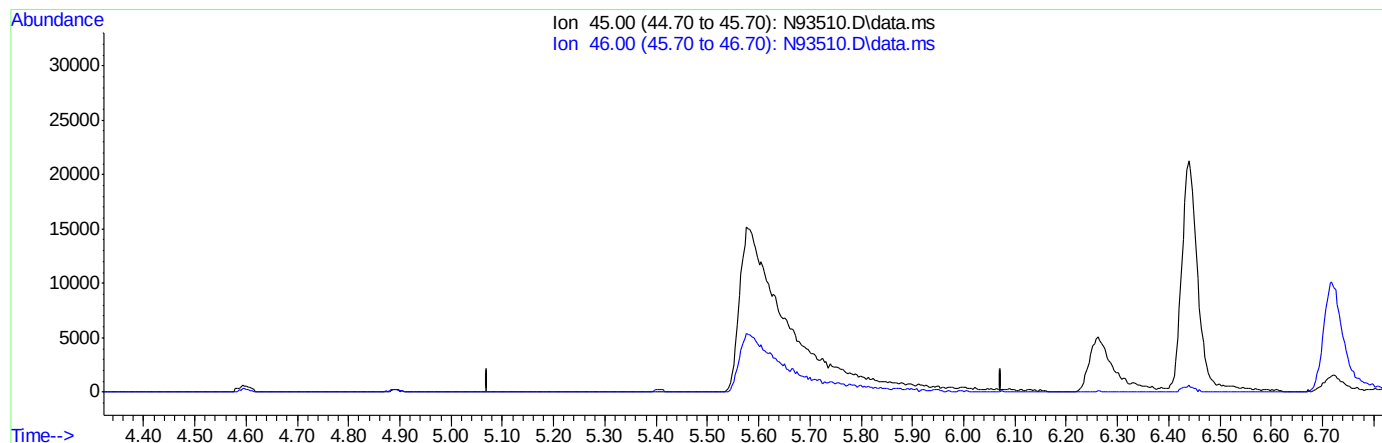
Page: 4

7.6.6

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93510.D
Acq On : 30 Dec 2014 1:10 am
Operator : jaclynb
Sample : ic3452-25
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 30 07:48:28 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:48:22 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

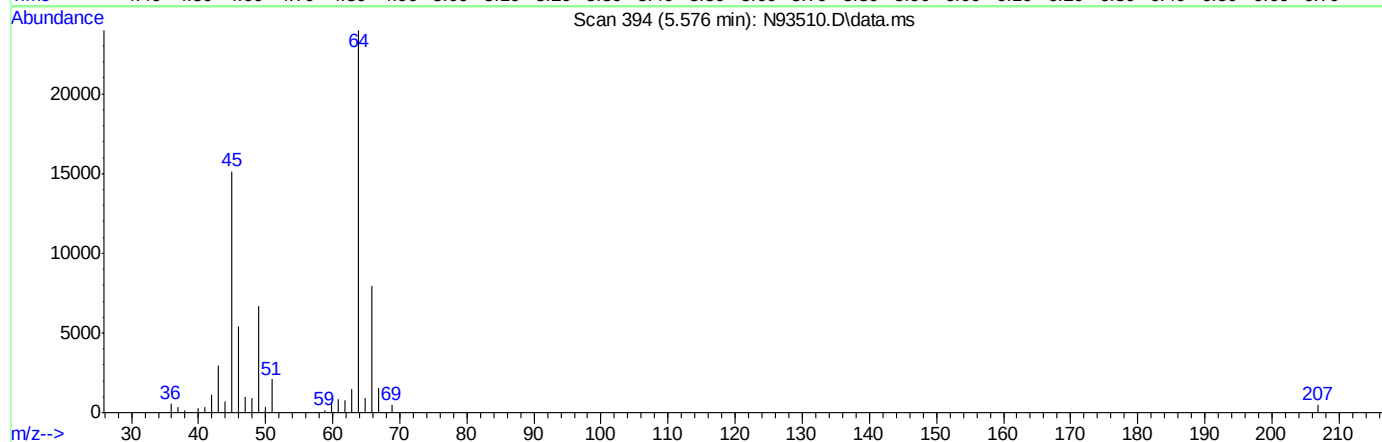
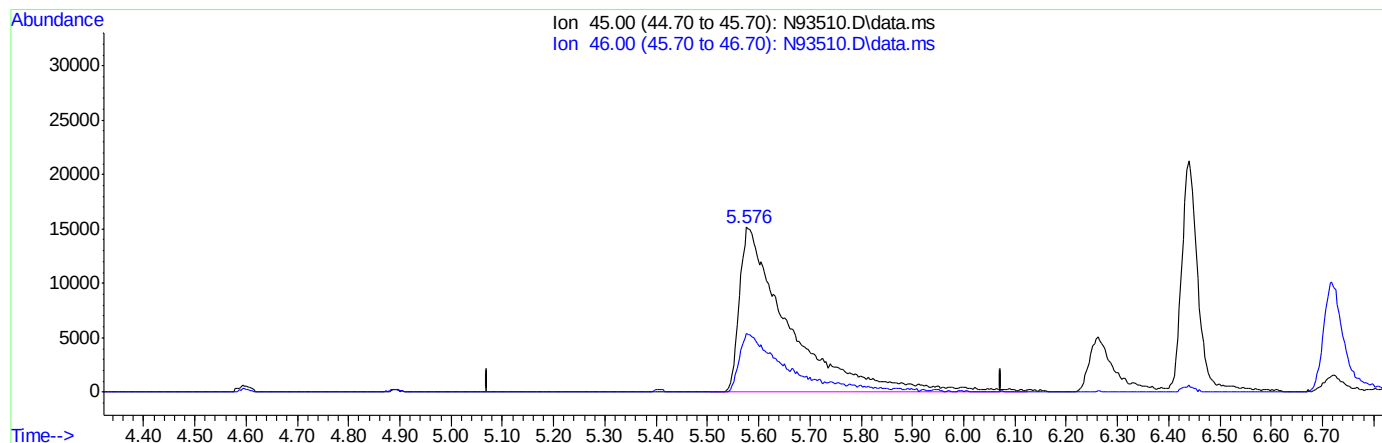
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93510.D
Acq On : 30 Dec 2014 1:10 am
Operator : jaclynb
Sample : ic3452-25
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 30 07:48:28 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:48:22 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.576min (+0.004) 2491.87ug/L m

response 102667

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93511.D
 Acq On : 30 Dec 2014 1:38 am
 Operator : jaclynb
 Sample : icc3452-50
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 30 07:40:59 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Sat Dec 27 07:50:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.711	65	117699	500.00	ug/L	# 0.00
4) pentafluorobenzene	9.111	168	378881	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	559598	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	287098	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	244781	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	170429	49.40	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.80%		
60) toluene-d8 (s)	11.777	98	666875	49.44	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.88%		
82) bromofluorobenzene (s)	14.457	95	244352	47.35	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.70%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.792	59	140998	455.66	ug/L	# 100
3) Ethanol	5.573	45	208089	4735.65	ug/L	99
5) dichlorodifluoromethane	4.399	85	230110	81.90	ug/L	99
6) chloromethane	4.660	50	202920	57.77	ug/L	97
7) vinyl chloride	4.901	62	155218	49.05	ug/L	98
8) bromomethane	5.406	96	139164	58.24	ug/L	99
9) chloroethane	5.573	64	128449	56.54	ug/L	96
10) ethyl ether	6.435	59	146798	48.12	ug/L	64
11) acetonitrile	6.435	41	19230m	43.76	ug/L	
12) trichlorofluoromethane	6.209	101	296951	52.13	ug/L	96
13) freon-113	6.969	101	181896	46.53	ug/L	90
14) acrolein	6.209	56	63497	476.53	ug/L	92
15) 1,1-dichloroethene	6.789	96	171311	49.09	ug/L	# 67
16) acetone	6.340	58	26112	44.27	ug/L	94
17) Methyl Acetate	6.969	43	152750	47.92	ug/L	# 87
18) methylene chloride	6.944	84	198491	46.29	ug/L	# 67
19) methyl tert butyl ether	7.708	73	448718	43.03	ug/L	88
20) acrylonitrile	6.849	53	54258	42.09	ug/L	91
21) allyl chloride	7.033	41	235620	40.54	ug/L	73
22) trans-1,2-dichloroethene	7.623	96	187809	47.93	ug/L	# 72
23) iodomethane	6.856	142	221184	43.21	ug/L	90
24) carbon disulfide	7.223	76	641346	47.37	ug/L	99
26) vinyl acetate	7.977	43	90515	28.36	ug/L	92
27) chloroprene	8.235	53	256503	41.43	ug/L	60
28) di-isopropyl ether	8.263	45	540248	44.33	ug/L	92
29) methacrylonitrile	8.397	41	81534	46.53	ug/L	76
30) 2-butanone	8.291	72	22754	43.53	ug/L	# 1
31) Hexane	8.249	41	220772	45.86	ug/L	# 86
32) 1,1-dichloroethane	7.878	63	351199	48.08	ug/L	92
33) tert-butyl ethyl ether	8.659	59	394625	42.57	ug/L	91
34) isobutyl alcohol	8.259	43	438603	218.55	ug/L	100
35) 2,2-dichloropropane	8.726	77	239692	55.79	ug/L	91
36) cis-1,2-dichloroethene	8.443	96	203880	46.99	ug/L	# 75
37) ethyl acetate	8.259	43	438603	47.56	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93511.D
 Acq On : 30 Dec 2014 1:38 am
 Operator : jaclynb
 Sample : icc3452-50
 Misc : ms33603,MSN3452,,,5,1
 ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 30 07:40:59 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Sat Dec 27 07:50:57 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.613	128	97485	50.76	ug/L #	62
39) chloroform	8.645	83	328760	48.98	ug/L	99
41) Tetrahydrofuran	8.981	42	39106	44.63	ug/L	70
42) 1,1,1-trichloroethane	9.391	97	291064	51.25	ug/L	94
44) Cyclohexane	9.666	56	349275	53.64	ug/L #	73
45) carbon tetrachloride	9.751	117	253811	52.18	ug/L	97
46) 1,1-dichloropropene	9.564	75	273544	49.83	ug/L	96
47) benzene	9.787	78	793948	48.85	ug/L	99
48) 1,2-dichloroethane	9.295	62	230977	46.08	ug/L	91
49) tert-amyl methyl ether	9.903	73	314052	53.98	ug/L	84
50) heptane	10.250	43	153930	49.60	ug/L	87
51) trichloroethene	10.405	95	215794	50.72	ug/L	94
52) 1,2-dichloropropane	10.373	63	211531	49.50	ug/L	99
53) dibromomethane	10.352	93	116506	47.58	ug/L	88
54) bromodichloromethane	10.458	83	266619	50.15	ug/L	96
55) Methylcyclohexane	10.914	83	358472	54.71	ug/L #	74
56) 2-chloroethyl vinyl ether	10.373	63	211531	49.50	ug/L #	95
57) methyl methacrylate	10.550	69	110104	47.04	ug/L #	73
58) 1,4-dioxane	10.557	88	8597	226.95	ug/L #	54
59) cis-1,3-dichloropropene	11.073	75	313171	51.08	ug/L	95
61) 4-methyl-2-pentanone	11.169	43	131660	45.50	ug/L	95
62) toluene	11.848	92	500856	45.66	ug/L	99
63) trans-1,3-dichloropropene	11.491	75	256323	50.42	ug/L	90
64) 1,1,2-trichloroethane	11.664	83	148173	47.75	ug/L	99
65) ethyl methacrylate	11.862	69	204543	51.25	ug/L #	73
67) tetrachloroethene	12.587	166	218171	50.41	ug/L	94
68) 1,3-dichloropropane	11.901	76	280720	45.68	ug/L	100
69) dibromochloromethane	12.191	129	198150	48.71	ug/L	97
70) 1,2-dibromoethane	12.442	107	165054	46.26	ug/L	99
71) 2-hexanone	12.024	43	101450	48.15	ug/L	97
72) chlorobenzene	13.269	112	534885	47.29	ug/L	93
73) 1,1,1,2-tetrachloroethane	13.184	131	188272	49.97	ug/L	97
74) ethylbenzene	13.439	91	951892	49.29	ug/L	94
75) m,p-xylene	13.622	106	730863	90.17	ug/L #	82
76) o-xylene	14.036	106	363403	44.95	ug/L	84
77) styrene	13.965	104	591819	51.96	ug/L	89
78) bromoform	13.796	173	119702	47.21	ug/L	99
79) trans-1,4-dichloro-2-b...	14.185	53	36670	45.11	ug/L #	45
81) isopropylbenzene	14.397	105	958209	49.37	ug/L	99
83) bromobenzene	14.690	156	235790	47.65	ug/L #	85
84) 1,1,2,2-tetrachloroethane	14.040	83	192353	41.89	ug/L	99
85) 1,2,3-trichloropropane	14.188	75	211977	43.39	ug/L	97
86) n-propylbenzene	14.839	91	1155269	49.42	ug/L	97
87) 2-chlorotoluene	14.962	91	670430	47.76	ug/L	92
88) 4-chlorotoluene	15.040	91	679015	47.72	ug/L	96
89) 1,3,5-trimethylbenzene	15.118	105	802540	48.95	ug/L	96
90) tert-butylbenzene	15.422	91	477611	48.43	ug/L	88
91) 1,2,4-trimethylbenzene	15.528	105	813683	49.38	ug/L	100
92) sec-butylbenzene	15.641	105	1054663	49.82	ug/L	100
93) 1,3-dichlorobenzene	15.751	146	413352	47.34	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93511.D
Acq On : 30 Dec 2014 1:38 am
Operator : jaclynb
Sample : icc3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 30 07:40:59 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Sat Dec 27 07:50:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) p-isopropyltoluene	15.814	119	800788	47.23	ug/L	94
95) 1,4-dichlorobenzene	15.818	146	400037	46.37	ug/L	94
96) 1,2-dichlorobenzene	16.186	146	390594	47.70	ug/L	97
97) n-butylbenzene	16.228	91	776374	45.28	ug/L	97
98) 1,2-dibromo-3-chloropr...	16.659	75	23516	38.74	ug/L	83
99) 1,2,4-trichlorobenzene	18.010	180	133935	36.48	ug/L	100
100) 1,3,5-trichlorobenzene	17.469	180	260568	41.88	ug/L	98
101) hexachlorobutadiene	18.296	225	110468	46.11	ug/L	92
102) naphthalene	18.282	128	125505	30.24	ug/L	100
103) 1,2,3-trichlorobenzene	18.487	180	67342	37.21	ug/L	97
104) 2-methylnaphthalene	19.661	142	30370	24.95	ug/L #	100
105) 1-methylnaphthalene	19.908	142	23480	25.77	ug/L	94

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

7.6.7

7

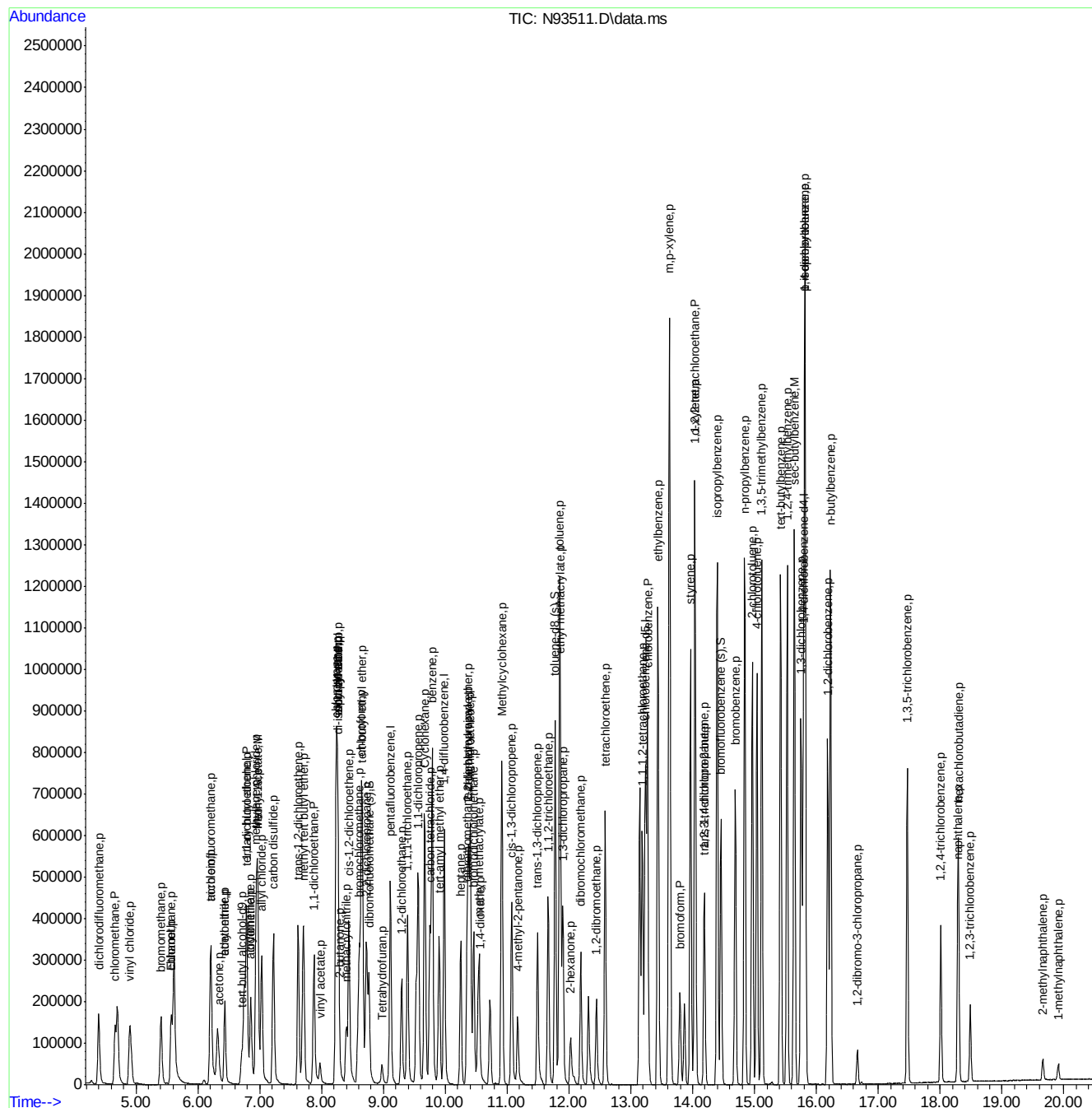
Quantitation Report (QT Reviewed)

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Data Path   : C:\msdchem\1\data\N141229\
Data File   : N93511.D
Acq On      : 30 Dec 2014    1:38 am
Operator    : jaclynb
Sample      : icc3452-50
Misc        : ms33603,MSN3452,,,,,5,1
ALS Vial    : 53      Sample Multiplier: 1

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Quant Time: Dec 30 07:40:59 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Sat Dec 27 07:50:57 2014
Response via : Initial Calibration



n141229w.m Tue Dec 30 08:25:23 2014

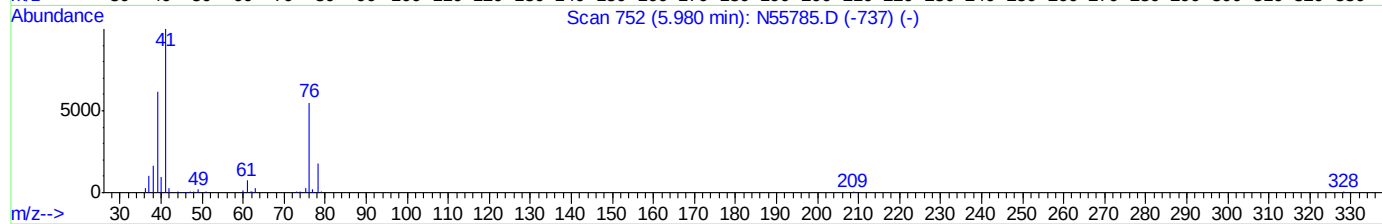
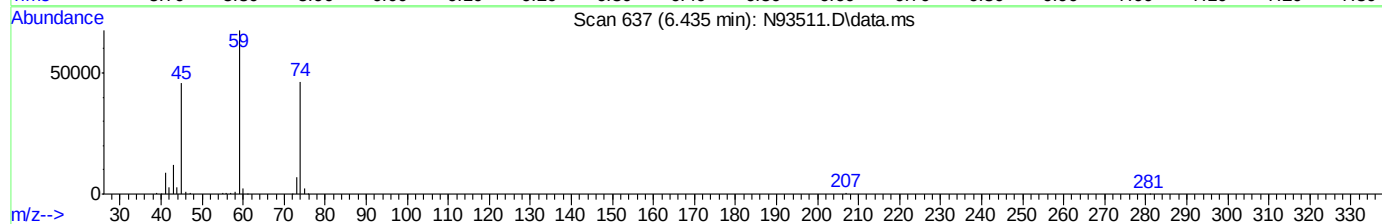
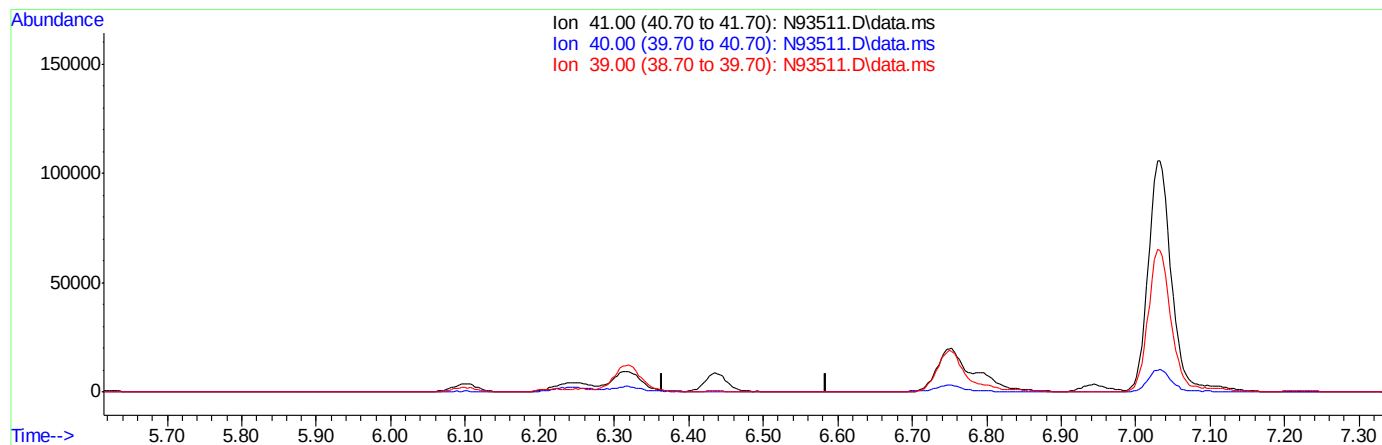
Page: 4

7.6.7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93511.D
Acq On : 30 Dec 2014 1:38 am
Operator : jaclynb
Sample : icc3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 30 07:40:30 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Sat Dec 27 07:50:57 2014
Response via : Initial Calibration



TIC: N93511.D\data.ms

(11) acetonitrile (p)

6.435min (-6.435) 0.00ug/L

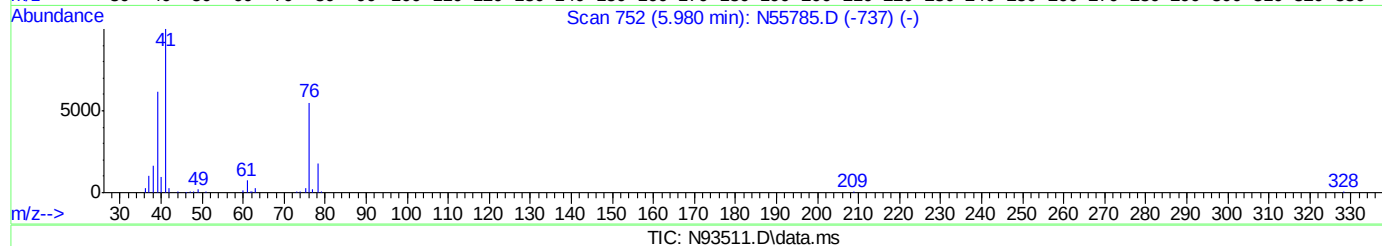
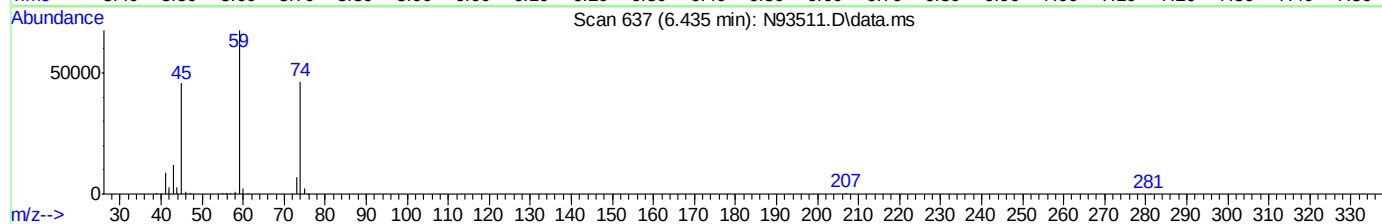
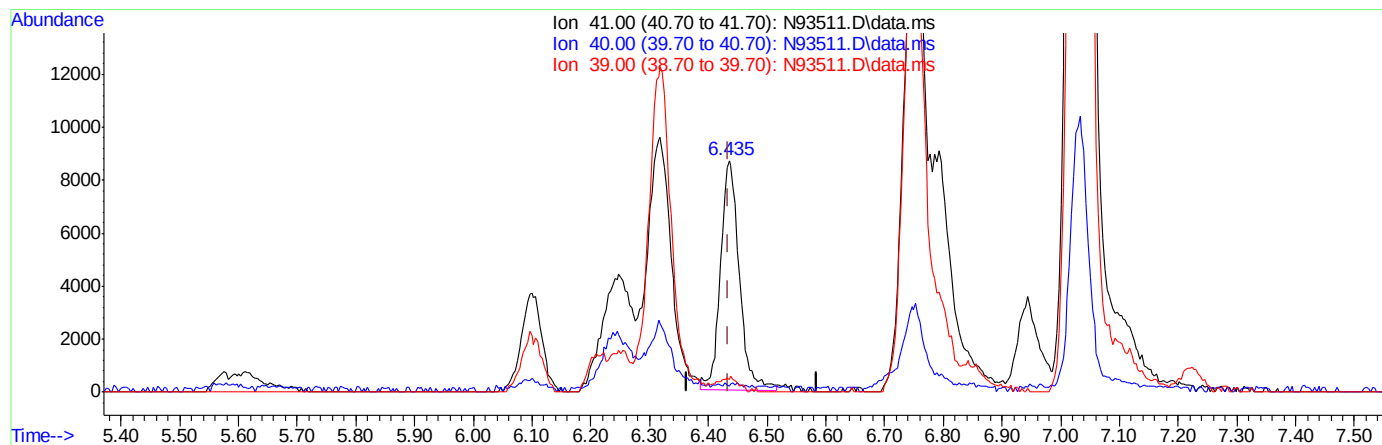
response 0

Ion	Exp%	Act%
41.00	100	0.00
40.00	0.80	0.00
39.00	5.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93511.D
Acq On : 30 Dec 2014 1:38 am
Operator : jaclynb
Sample : icc3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 30 07:40:30 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Sat Dec 27 07:50:57 2014
Response via : Initial Calibration



(11) acetonitrile (p)

6.435min (+0.000) 43.76ug/L m

response 19230

Ion	Exp%	Act%
41.00	100	100
40.00	0.80	2.61
39.00	5.00	5.67
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93512.D
 Acq On : 30 Dec 2014 2:06 am
 Operator : jaclynb
 Sample : ic3452-100
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:51 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:51:31 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.700	65	116263	500.00	ug/L	#-0.01
4) pentafluorobenzene	9.115	168	397625	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	580375	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	289823	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	252321	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	178585	43.93	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	87.86%		
60) toluene-d8 (s)	11.777	98	693901	43.67	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	87.34%		
82) bromofluorobenzene (s)	14.457	95	251730	41.19	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	82.38%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.789	59	269381	1005.82	ug/L	# 100
3) Ethanol	5.569	45	376440m	9135.35	ug/L	
5) dichlorodifluoromethane	4.399	85	483470	108.33	ug/L	98
6) chloromethane	4.661	50	404649	99.58	ug/L	97
7) vinyl chloride	4.897	62	282277	84.32	ug/L	99
8) bromomethane	5.403	96	290839	101.36	ug/L	97
9) chloroethane	5.569	64	259394	101.80	ug/L	97
10) ethyl ether	6.435	59	291697	107.03	ug/L	64
11) acetonitrile	6.435	41	36711	95.11	ug/L	99
12) trichlorofluoromethane	6.209	101	618027	107.46	ug/L	98
13) freon-113	6.969	101	362387	102.00	ug/L	90
14) acrolein	6.205	56	150897	281.90	ug/L	98
15) 1,1-dichloroethene	6.789	96	345848	101.77	ug/L	# 67
16) acetone	6.336	58	36969	74.52	ug/L	# 82
17) Methyl Acetate	6.962	43	284711	99.46	ug/L	# 87
18) methylene chloride	6.941	84	391915	98.04	ug/L	# 64
19) methyl tert butyl ether	7.704	73	923861	123.29	ug/L	88
20) acrylonitrile	6.849	53	103711	112.61	ug/L	96
21) allyl chloride	7.029	41	434580	94.66	ug/L	73
22) trans-1,2-dichloroethene	7.623	96	385758	104.31	ug/L	# 72
23) iodomethane	6.856	142	456092m	124.42	ug/L	
24) carbon disulfide	7.220	76	1321848	105.85	ug/L	99
25) propionitrile	6.746	54	11280	64.92	ug/L	100
26) vinyl acetate	7.970	43	243337	168.07	ug/L	93
27) chloroprene	8.235	53	500380	107.02	ug/L	58
28) di-isopropyl ether	8.263	45	999092	90.54	ug/L	92
29) methacrylonitrile	8.394	41	149897	105.41	ug/L	76
30) 2-butanone	8.284	72	39402	105.34	ug/L	# 1
31) Hexane	8.245	41	407374	89.82	ug/L	# 77
32) 1,1-dichloroethane	7.874	63	716039	106.57	ug/L	92
33) tert-butyl ethyl ether	8.655	59	872041	161.55	ug/L	88
34) isobutyl alcohol	8.256	43	793352	439.72	ug/L	93
35) 2,2-dichloropropane	8.730	77	506694	162.75	ug/L	93
36) cis-1,2-dichloroethene	8.443	96	414103	102.00	ug/L	# 73

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93512.D
 Acq On : 30 Dec 2014 2:06 am
 Operator : jaclynb
 Sample : ic3452-100
 Misc : ms33603,MSN3452,,,5,1
 ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:51 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:51:31 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.256	43	793352	88.11	ug/L	90
38) bromochloromethane	8.609	128	200317	114.00	ug/L #	62
39) chloroform	8.645	83	655853	102.69	ug/L	98
41) Tetrahydrofuran	8.974	42	76788	116.24	ug/L	64
42) 1,1,1-trichloroethane	9.391	97	600911	111.75	ug/L	94
44) Cyclohexane	9.670	56	691222	101.83	ug/L #	68
45) carbon tetrachloride	9.751	117	531780	118.92	ug/L	96
46) 1,1-dichloropropene	9.564	75	559365	106.80	ug/L	95
47) benzene	9.790	78	1593332	102.94	ug/L	99
48) 1,2-dichloroethane	9.292	62	473001	105.35	ug/L	91
49) tert-amyl methyl ether	9.900	73	735641	154.99	ug/L	85
50) heptane	10.250	43	302921	104.65	ug/L	84
51) trichloroethene	10.405	95	426378	102.68	ug/L	91
52) 1,2-dichloropropane	10.374	63	412335	101.12	ug/L	98
53) dibromomethane	10.352	93	235880	111.25	ug/L	87
54) bromodichloromethane	10.458	83	544044	118.69	ug/L	98
55) Methylcyclohexane	10.914	83	706081	105.53	ug/L #	72
56) 2-chloroethyl vinyl ether	10.374	63	412335	101.12	ug/L #	95
57) methyl methacrylate	10.547	69	221463	116.12	ug/L #	72
58) 1,4-dioxane	10.557	88	17494	652.52	ug/L #	57
59) cis-1,3-dichloropropene	11.074	75	636650	122.55	ug/L	95
61) 4-methyl-2-pentanone	11.165	43	258894	122.29	ug/L	95
62) toluene	11.848	92	974430	100.80	ug/L	96
63) trans-1,3-dichloropropene	11.491	75	525692	127.01	ug/L	89
64) 1,1,2-trichloroethane	11.664	83	298585	112.30	ug/L	99
65) ethyl methacrylate	11.858	69	401588	119.69	ug/L #	70
67) tetrachloroethene	12.583	166	442903	107.58	ug/L	93
68) 1,3-dichloropropane	11.901	76	550293	102.86	ug/L	99
69) dibromochloromethane	12.191	129	410299	130.39	ug/L	98
70) 1,2-dibromoethane	12.445	107	334290	118.38	ug/L	99
71) 2-hexanone	12.018	43	180468	102.93	ug/L	98
72) chlorobenzene	13.269	112	1066943	102.83	ug/L	93
73) 1,1,1,2-tetrachloroethane	13.184	131	383266	114.07	ug/L	97
74) ethylbenzene	13.439	91	1905114	99.47	ug/L	94
75) m,p-xylene	13.623	106	1419235	197.55	ug/L #	82
76) o-xylene	14.036	106	706433	103.69	ug/L #	82
77) styrene	13.962	104	1201520	120.59	ug/L	89
78) bromoform	13.792	173	255888	141.25	ug/L	99
79) trans-1,4-dichloro-2-b...	14.185	53	75092	141.07	ug/L #	47
81) isopropylbenzene	14.393	105	1874223	95.86	ug/L	99
83) bromobenzene	14.687	156	479521	104.69	ug/L #	84
84) 1,1,2,2-tetrachloroethane	14.040	83	372091	99.34	ug/L	99
85) 1,2,3-trichloropropane	14.185	75	421985	111.08	ug/L	99
86) n-propylbenzene	14.839	91	2265675	97.68	ug/L	97
87) 2-chlorotoluene	14.962	91	1332849	98.08	ug/L	90
88) 4-chlorotoluene	15.037	91	1347192	100.11	ug/L	95
89) 1,3,5-trimethylbenzene	15.114	105	1580475	98.28	ug/L	98
90) tert-butylbenzene	15.422	91	939263	96.79	ug/L	87
91) 1,2,4-trimethylbenzene	15.525	105	1594489	99.52	ug/L	100
92) sec-butylbenzene	15.641	105	2085417	98.59	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93512.D
Acq On : 30 Dec 2014 2:06 am
Operator : jaclynb
Sample : ic3452-100
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:51 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:51:31 2014
Response via : Initial Calibration

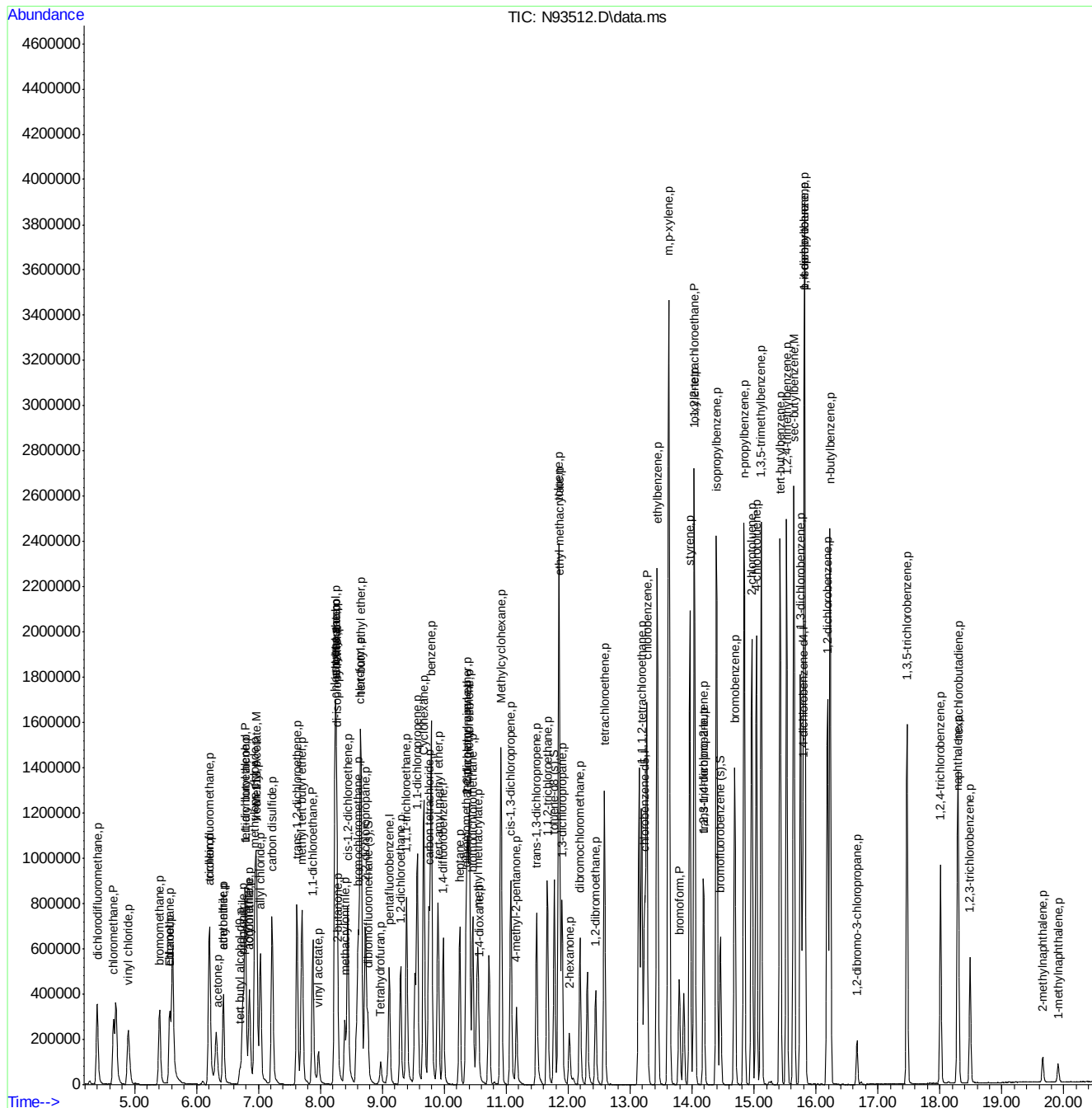
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,3-dichlorobenzene	15.751	146	851799	108.68	ug/L	93
94) p-isopropyltoluene	15.811	119	1540188	97.34	ug/L	94
95) 1,4-dichlorobenzene	15.818	146	782609	99.91	ug/L	93
96) 1,2-dichlorobenzene	16.186	146	805243	115.19	ug/L	97
97) n-butylbenzene	16.228	91	1558389	118.42	ug/L	95
98) 1,2-dibromo-3-chloropr...	16.663	75	53391	165.11	ug/L	74
99) 1,2,4-trichlorobenzene	18.010	180	342349	286.60	ug/L	99
100) 1,3,5-trichlorobenzene	17.469	180	563002	140.87	ug/L	99
101) hexachlorobutadiene	18.296	225	241178	125.21	ug/L	88
102) naphthalene	18.282	128	447290	318.17	ug/L	100
103) 1,2,3-trichlorobenzene	18.487	180	206452	373.44	ug/L	96
104) 2-methylnaphthalene	19.661	142	66458	61.76	ug/L #	100
105) 1-methylnaphthalene	19.908	142	49896	55.34	ug/L	96

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

(QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93512.D
Acq On : 30 Dec 2014 2:06 am
Operator : jaclynb
Sample : ic3452-100
Misc : ms33603,MSN3452,,,5,1
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:51 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:51:31 2014
Response via : Initial Calibration



n141229w.m Tue Dec 30 08:25:43 2014

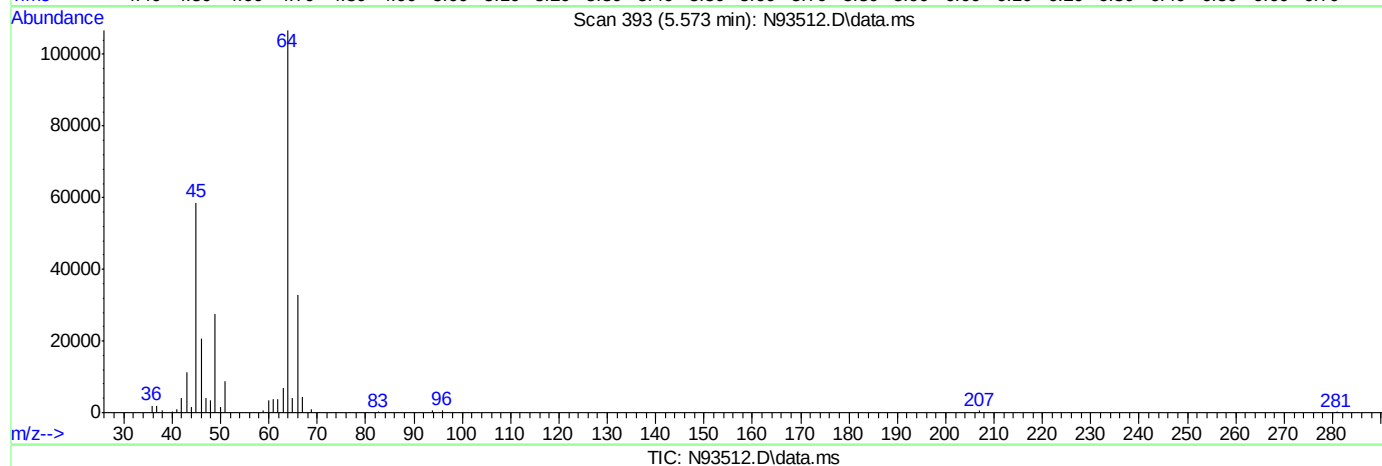
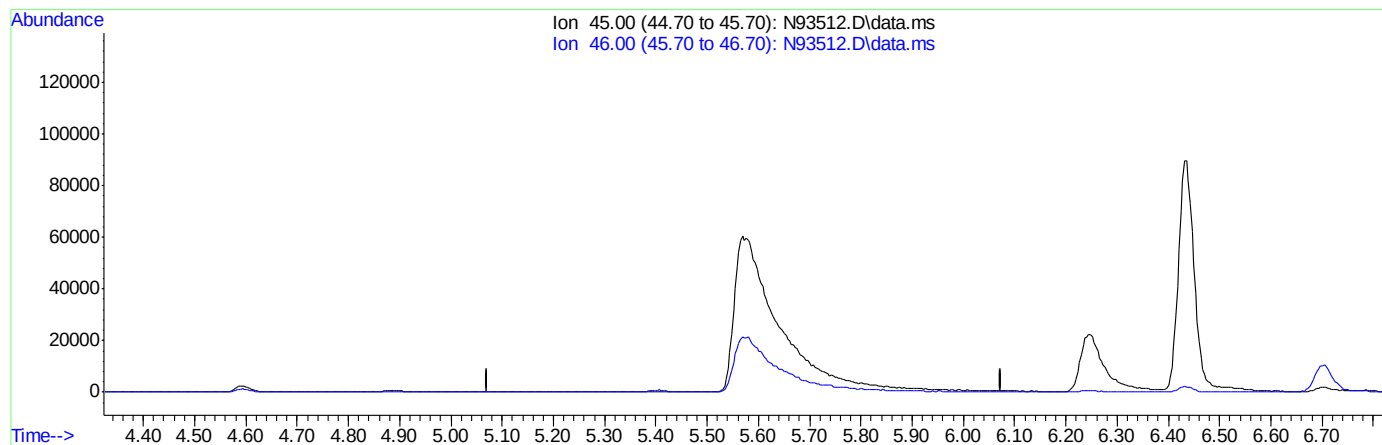
Page: 4

7.6.8

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93512.D
Acq On : 30 Dec 2014 2:06 am
Operator : jaclynb
Sample : ic3452-100
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:37 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:51:31 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

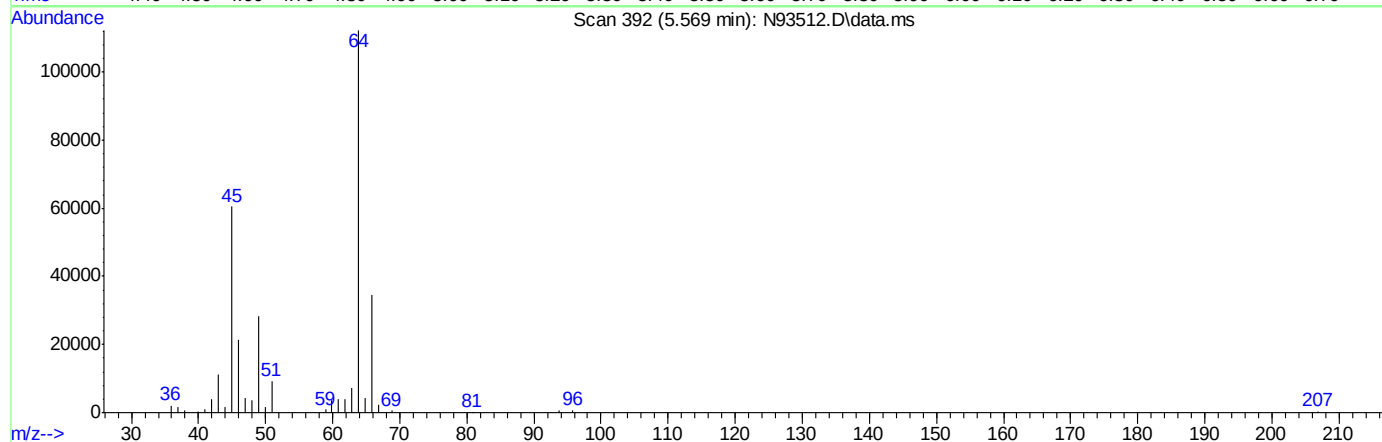
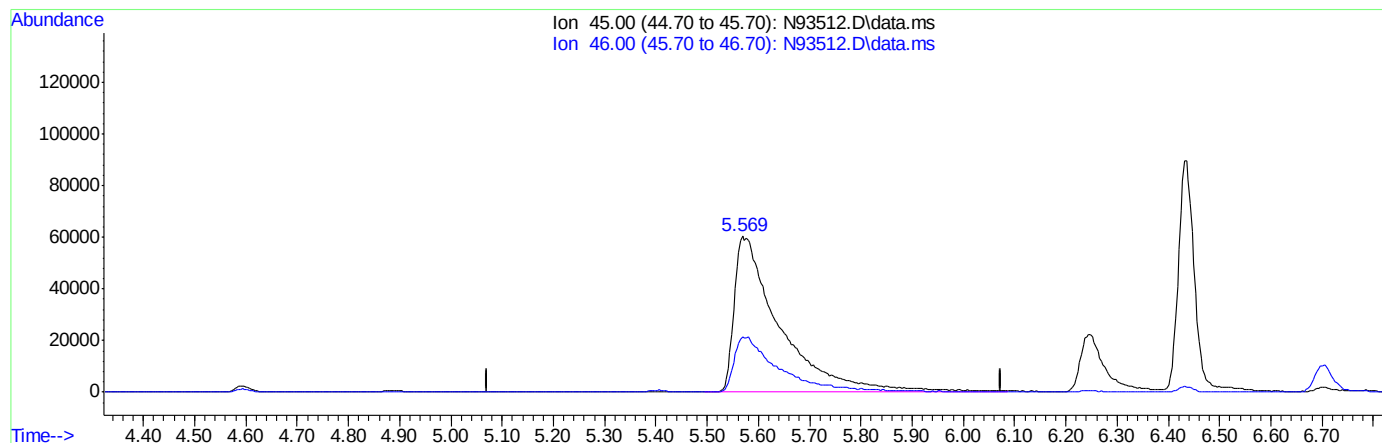
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93512.D
Acq On : 30 Dec 2014 2:06 am
Operator : jaclynb
Sample : ic3452-100
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:37 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:51:31 2014
Response via : Initial Calibration



TIC: N93512.D\data.ms

(3) Ethanol (p)

5.569min (-0.004) 9135.35ug/L m

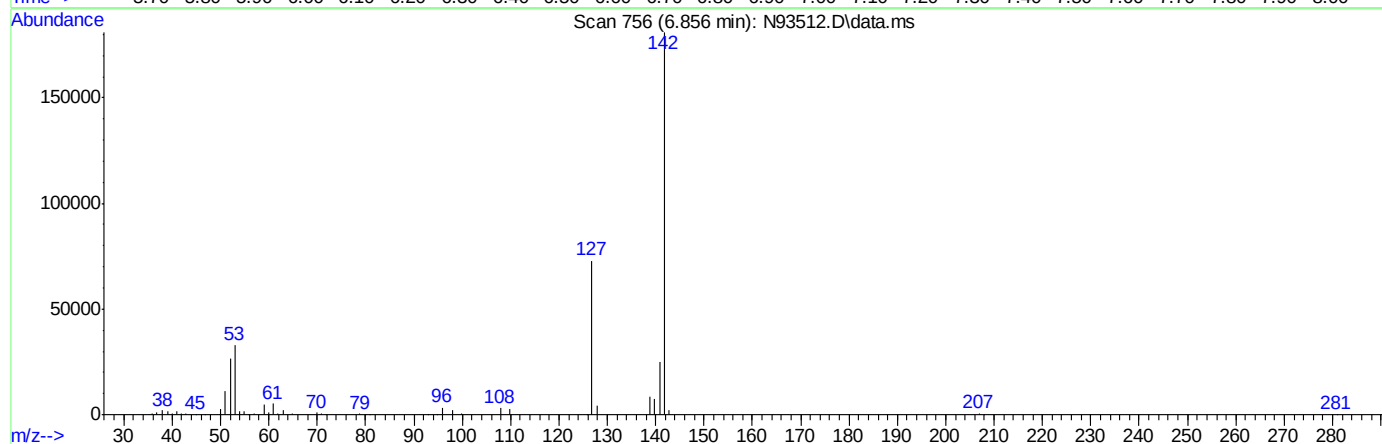
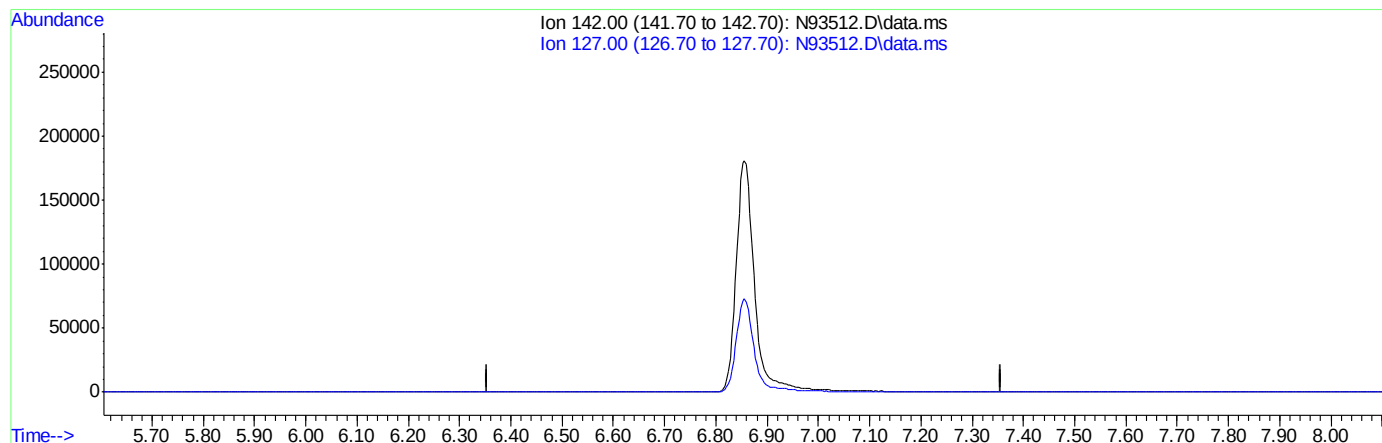
response 376440

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93512.D
Acq On : 30 Dec 2014 2:06 am
Operator : jaclynb
Sample : ic3452-100
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:37 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:51:31 2014
Response via : Initial Calibration



TIC: N93512.D\data.ms

(23) iodomethane (p)

6.856min (-6.856) 0.00ug/L

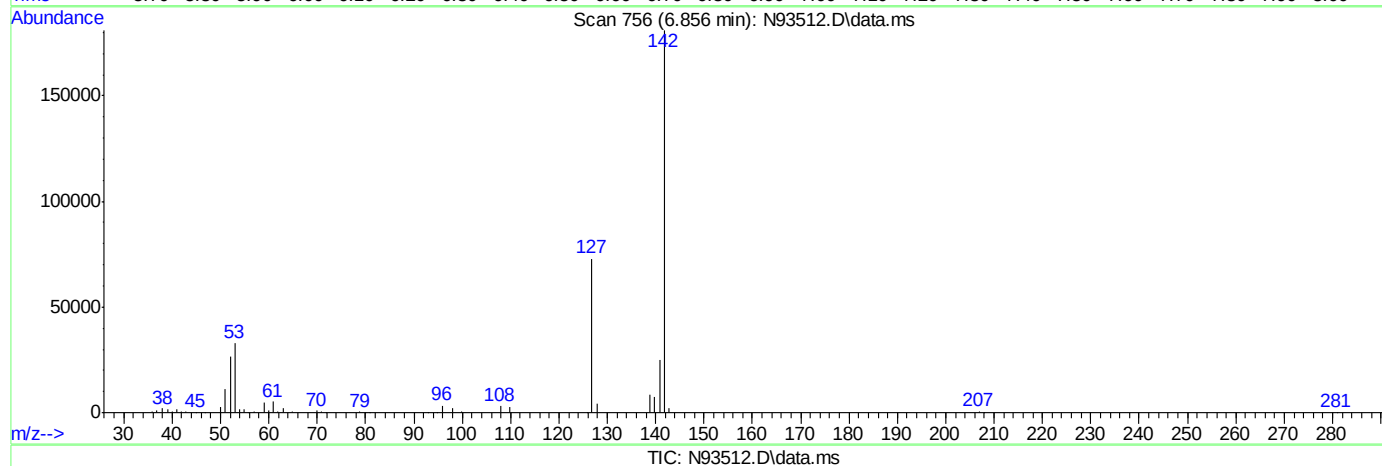
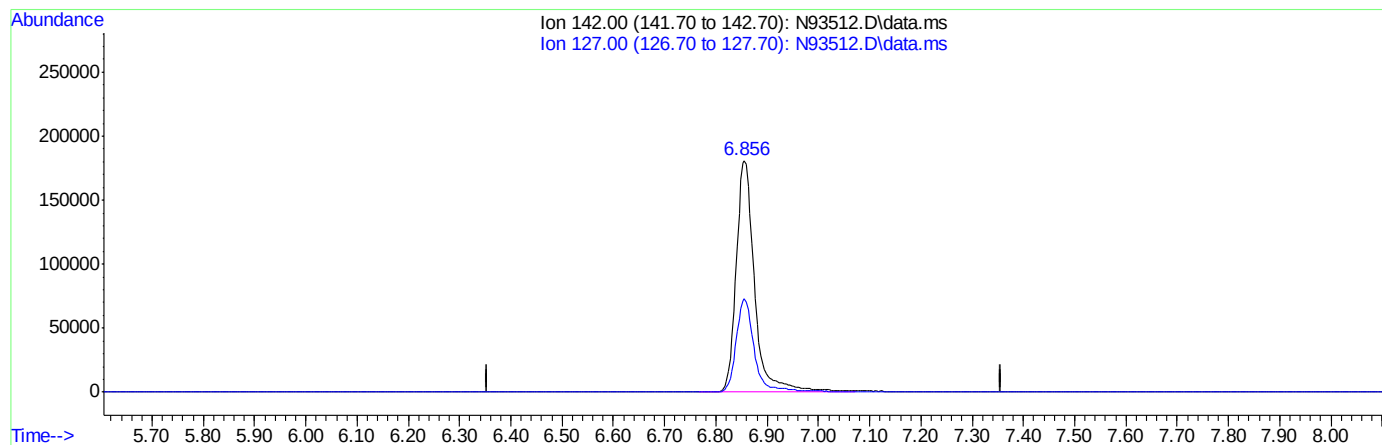
response 0

Ion	Exp%	Act%
142.00	100	0.00
127.00	47.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93512.D
Acq On : 30 Dec 2014 2:06 am
Operator : jaclynb
Sample : ic3452-100
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 30 07:51:37 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:51:31 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.856min (-0.000) 124.42ug/L m

response 456092

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	40.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93513.D
 Acq On : 30 Dec 2014 2:34 am
 Operator : jaclynb
 Sample : ic3452-200
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 30 07:52:23 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:52:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.700	65	114657	500.00	ug/L	#-0.01
4) pentafluorobenzene	9.111	168	392665	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	577306	50.00	ug/L	0.00
66) chlorobenzene-d5	13.233	82	286234	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	253602	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.768	113	177378	44.86	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	89.72%		
60) toluene-d8 (s)	11.777	98	689567	44.33	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	88.66%		
82) bromofluorobenzene (s)	14.457	95	257908	42.94	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	85.88%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.782	59	505321	1911.36	ug/L	# 100
3) Ethanol	5.576	45	650470m	16240.59	ug/L	
5) dichlorodifluoromethane	4.399	85	931371	208.84	ug/L	98
6) chloromethane	4.657	50	808457	201.58	ug/L	97
7) vinyl chloride	4.894	62	426489	131.58	ug/L	98
8) bromomethane	5.403	96	579641	204.17	ug/L	99
9) chloroethane	5.565	64	468871	185.86	ug/L	99
10) ethyl ether	6.435	59	547414	201.37	ug/L	59
11) acetonitrile	6.432	41	67912	179.92	ug/L	99
12) trichlorofluoromethane	6.209	101	1185256	206.49	ug/L	96
13) freon-113	6.969	101	689016	195.82	ug/L	89
14) acrolein	6.202	56	252912	524.18	ug/L	92
15) 1,1-dichloroethene	6.789	96	649336	193.05	ug/L	# 65
16) acetone	6.336	58	85965	184.89	ug/L	89
17) Methyl Acetate	6.962	43	510581	180.78	ug/L	# 83
18) methylene chloride	6.941	84	740980	188.22	ug/L	# 61
19) methyl tert butyl ether	7.704	73	1806560	237.22	ug/L	87
20) acrylonitrile	6.845	53	204447	220.17	ug/L	96
21) allyl chloride	7.033	41	707223	157.39	ug/L	69
22) trans-1,2-dichloroethene	7.623	96	735931	200.42	ug/L	# 69
23) iodomethane	6.856	142	862797m	229.03	ug/L	
24) carbon disulfide	7.220	76	2468076	198.48	ug/L	99
25) propionitrile	6.746	54	16012	100.36	ug/L	100
26) vinyl acetate	7.966	43	468934	294.56	ug/L	92
27) chloroprene	8.235	53	889548	190.74	ug/L	55
28) di-isopropyl ether	8.263	45	1663557	154.75	ug/L	86
29) methacrylonitrile	8.394	41	304678	215.02	ug/L	74
30) 2-butanone	8.281	72	81989	219.62	ug/L	# 1
31) Hexane	8.249	41	692326	157.24	ug/L	# 84
32) 1,1-dichloroethane	7.878	63	1328748	198.63	ug/L	91
33) tert-butyl ethyl ether	8.659	59	1702028	293.49	ug/L	88
34) isobutyl alcohol	8.263	43	1367449	783.23	ug/L	95
35) 2,2-dichloropropane	8.730	77	966969	284.73	ug/L	92
36) cis-1,2-dichloroethene	8.443	96	798200	198.60	ug/L	# 71

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93513.D
 Acq On : 30 Dec 2014 2:34 am
 Operator : jaclynb
 Sample : ic3452-200
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 30 07:52:23 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:52:04 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.263	43	1367449	156.90	ug/L	93
38) bromochloromethane	8.613	128	364615	206.01	ug/L #	59
39) chloroform	8.645	83	1195651	188.94	ug/L	97
41) Tetrahydrofuran	8.973	42	149430	223.02	ug/L	64
42) 1,1,1-trichloroethane	9.391	97	1146497	212.78	ug/L	93
44) Cyclohexane	9.670	56	1244786	183.87	ug/L #	64
45) carbon tetrachloride	9.755	117	1012508	222.37	ug/L	98
46) 1,1-dichloropropene	9.564	75	1039043	197.51	ug/L	94
47) benzene	9.790	78	2916477	188.74	ug/L	99
48) 1,2-dichloroethane	9.295	62	911608	202.57	ug/L	89
49) tert-amyl methyl ether	9.896	73	1583524	310.97	ug/L	84
50) heptane	10.250	43	560853	193.51	ug/L	80
51) trichloroethene	10.405	95	794314	191.67	ug/L	91
52) 1,2-dichloropropane	10.373	63	744082	183.15	ug/L	98
53) dibromomethane	10.349	93	459454	214.40	ug/L	86
54) bromodichloromethane	10.462	83	1047443	224.49	ug/L	99
55) Methylcyclohexane	10.914	83	1310223	195.33	ug/L #	70
56) 2-chloroethyl vinyl ether	10.373	63	744082	183.15	ug/L #	94
57) methyl methacrylate	10.543	69	427925	219.66	ug/L #	69
58) 1,4-dioxane	10.561	88	33776	1193.71	ug/L #	53
59) cis-1,3-dichloropropene	11.073	75	1234671	232.37	ug/L	94
61) 4-methyl-2-pentanone	11.162	43	496983	228.72	ug/L	93
62) toluene	11.848	92	1742621	181.04	ug/L	100
63) trans-1,3-dichloropropene	11.491	75	1057511	248.47	ug/L	89
64) 1,1,2-trichloroethane	11.664	83	569986	212.25	ug/L	99
65) ethyl methacrylate	11.862	69	730949	212.05	ug/L #	68
67) tetrachloroethene	12.587	166	838846	204.37	ug/L	94
68) 1,3-dichloropropane	11.901	76	1065404	200.83	ug/L	99
69) dibromochloromethane	12.191	129	823550	255.30	ug/L	97
70) 1,2-dibromoethane	12.445	107	667366	233.92	ug/L	100
71) 2-hexanone	12.014	43	398063	228.77	ug/L	98
72) chlorobenzene	13.269	112	2029995	197.40	ug/L	94
73) 1,1,1,2-tetrachloroethane	13.188	131	737363	218.37	ug/L	97
74) ethylbenzene	13.439	91	3487253	184.47	ug/L	93
75) m,p-xylene	13.626	106	2441797	344.67	ug/L #	81
76) o-xylene	14.036	106	1268785	187.70	ug/L #	79
77) styrene	13.965	104	2255158	222.63	ug/L	89
78) bromoform	13.796	173	535346	282.57	ug/L	98
79) trans-1,4-dichloro-2-b...	14.184	53	153532	273.33	ug/L #	54
81) isopropylbenzene	14.397	105	3434454	175.82	ug/L	99
83) bromobenzene	14.690	156	941969	203.24	ug/L #	79
84) 1,1,2,2-tetrachloroethane	14.043	83	663736	176.45	ug/L	98
85) 1,2,3-trichloropropane	14.188	75	838615	216.21	ug/L	97
86) n-propylbenzene	14.842	91	4070215	175.18	ug/L	95
87) 2-chlorotoluene	14.962	91	2469754	181.32	ug/L	89
88) 4-chlorotoluene	15.037	91	2535514	187.43	ug/L	94
89) 1,3,5-trimethylbenzene	15.118	105	2914066	180.74	ug/L	98
90) tert-butylbenzene	15.422	91	1727607	177.95	ug/L	88
91) 1,2,4-trimethylbenzene	15.528	105	2971797	184.68	ug/L	98
92) sec-butylbenzene	15.645	105	3768920	177.63	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93513.D
Acq On : 30 Dec 2014 2:34 am
Operator : jaclynb
Sample : ic3452-200
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 30 07:52:23 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:04 2014
Response via : Initial Calibration

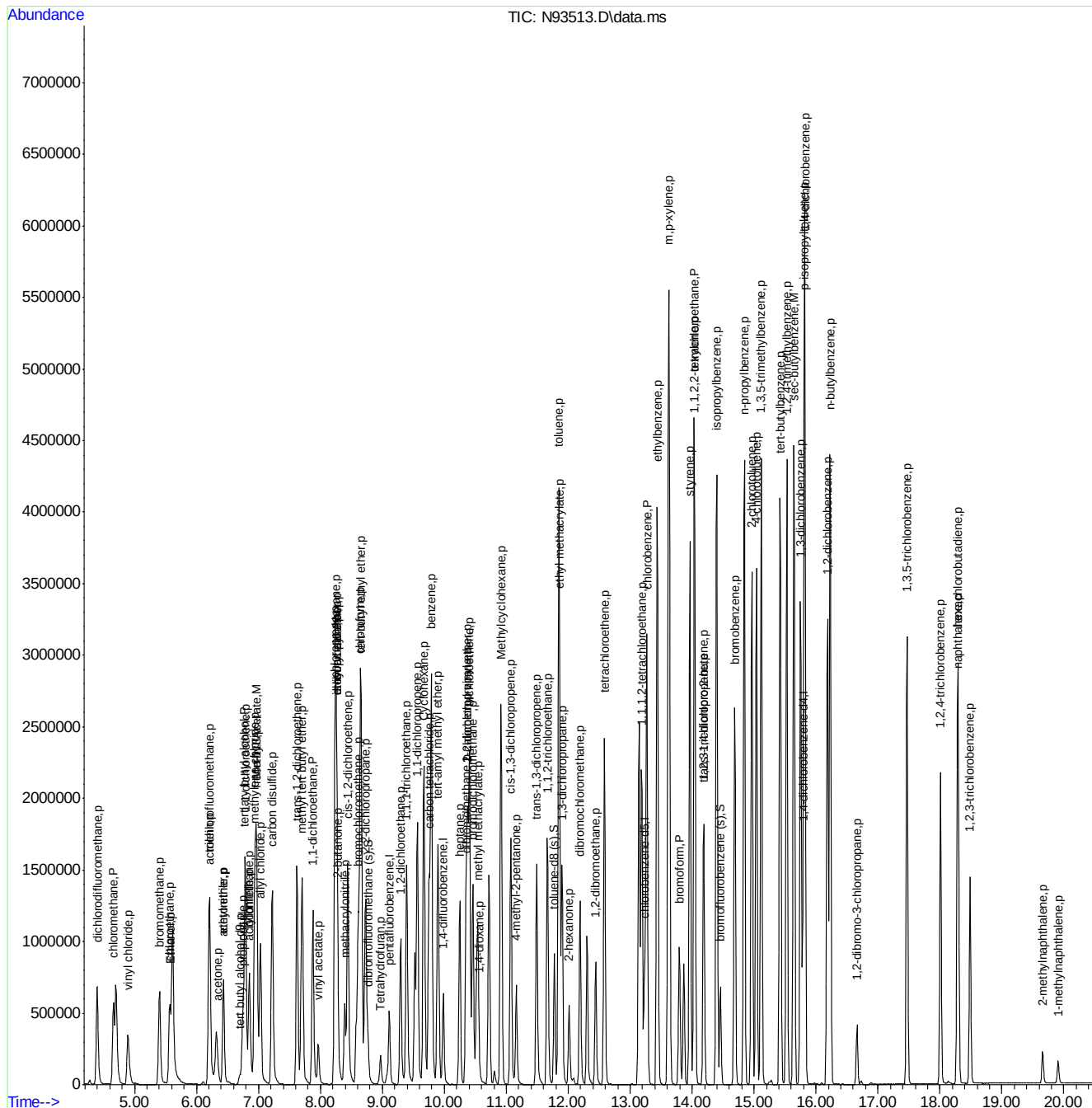
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.751	146	1652828	207.25	ug/L	95
94)	p-isopropyltoluene	15.811	119	2624172	165.64	ug/L	94
95)	1,4-dichlorobenzene	15.821	146	1396158	177.37	ug/L	93
96)	1,2-dichlorobenzene	16.185	146	1600501	222.95	ug/L	96
97)	n-butylbenzene	16.228	91	2869220	211.36	ug/L	92
98)	1,2-dibromo-3-chloropr...	16.659	75	120691	334.99	ug/L	73
99)	1,2,4-trichlorobenzene	18.010	180	798042	507.03	ug/L	99
100)	1,3,5-trichlorobenzene	17.469	180	1138911	267.89	ug/L	99
101)	hexachlorobutadiene	18.293	225	484768	241.69	ug/L	88
102)	naphthalene	18.282	128	1270783	685.68	ug/L	100
103)	1,2,3-trichlorobenzene	18.487	180	543437	671.85	ug/L	96
104)	2-methylnaphthalene	19.657	142	131864	116.44	ug/L #	100
105)	1-methylnaphthalene	19.908	142	95224	102.89	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93513.D
Acq On : 30 Dec 2014 2:34 am
Operator : jaclynb
Sample : ic3452-200
Misc : ms33603,MSN3452,,,5,1
ALS Vial : 55 Sample Multiplier: 1

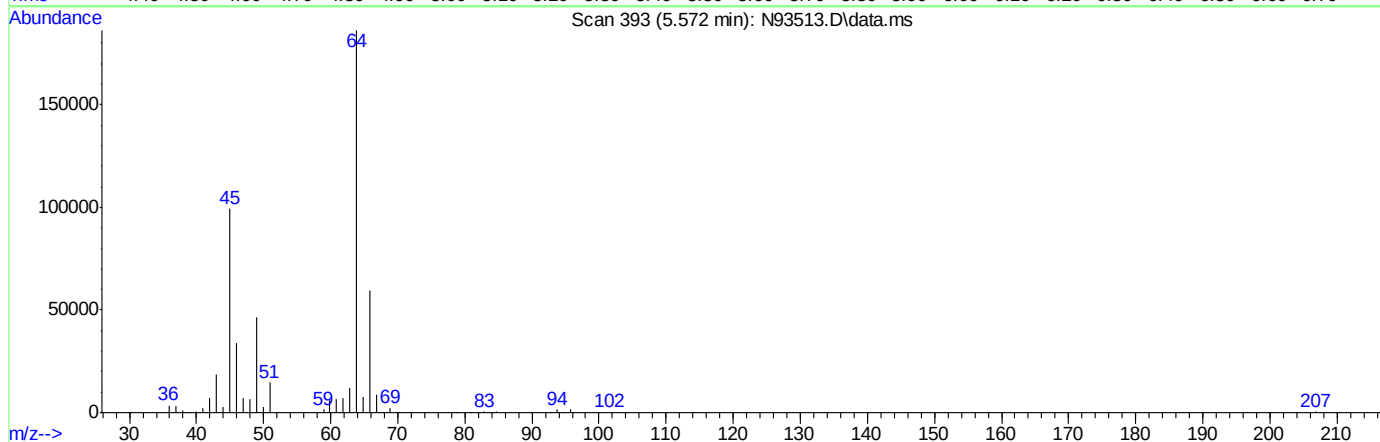
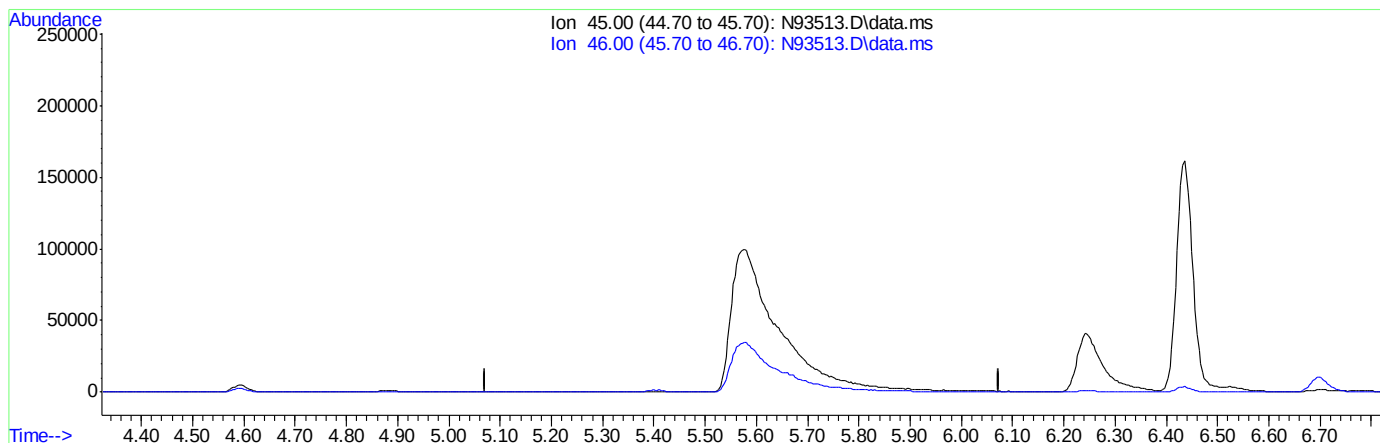
Quant Time: Dec 30 07:52:23 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:04 2014
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93513.D
Acq On : 30 Dec 2014 2:34 am
Operator : jaclynb
Sample : ic3452-200
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 30 07:52:10 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:04 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

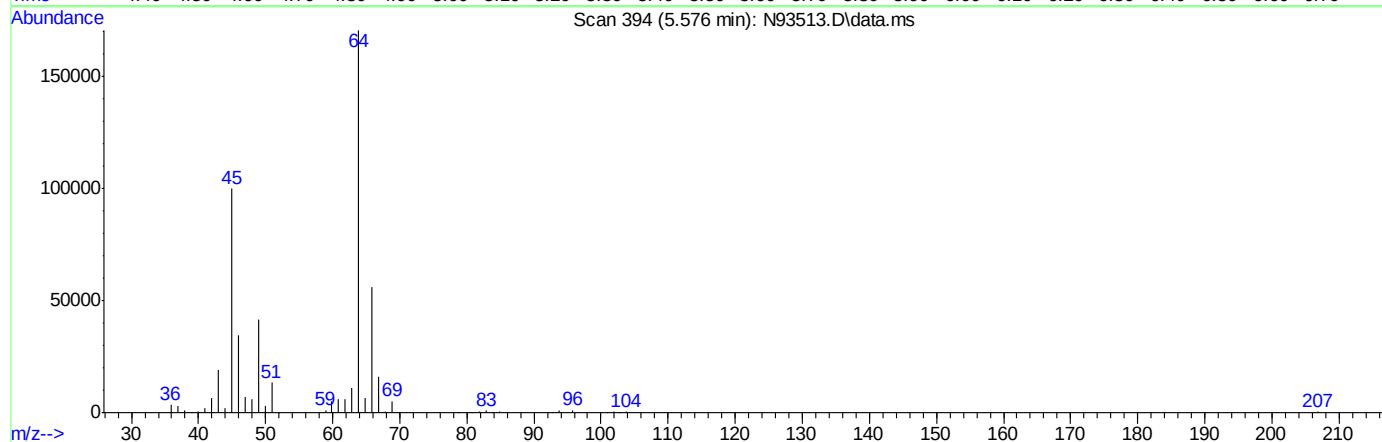
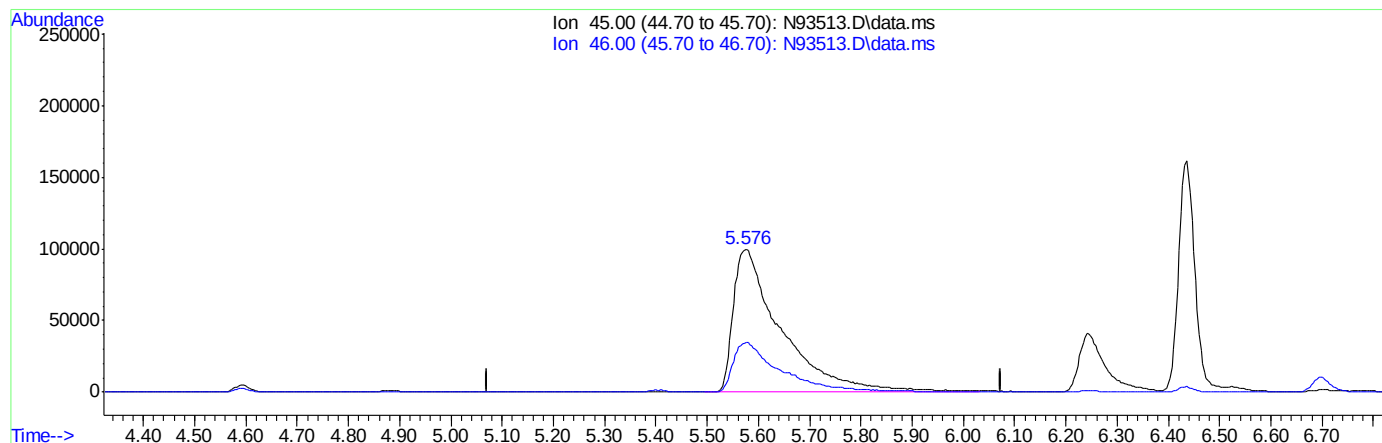
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93513.D
Acq On : 30 Dec 2014 2:34 am
Operator : jaclynb
Sample : ic3452-200
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 30 07:52:10 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:04 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.576min (+0.003) 16240.59ug/L m

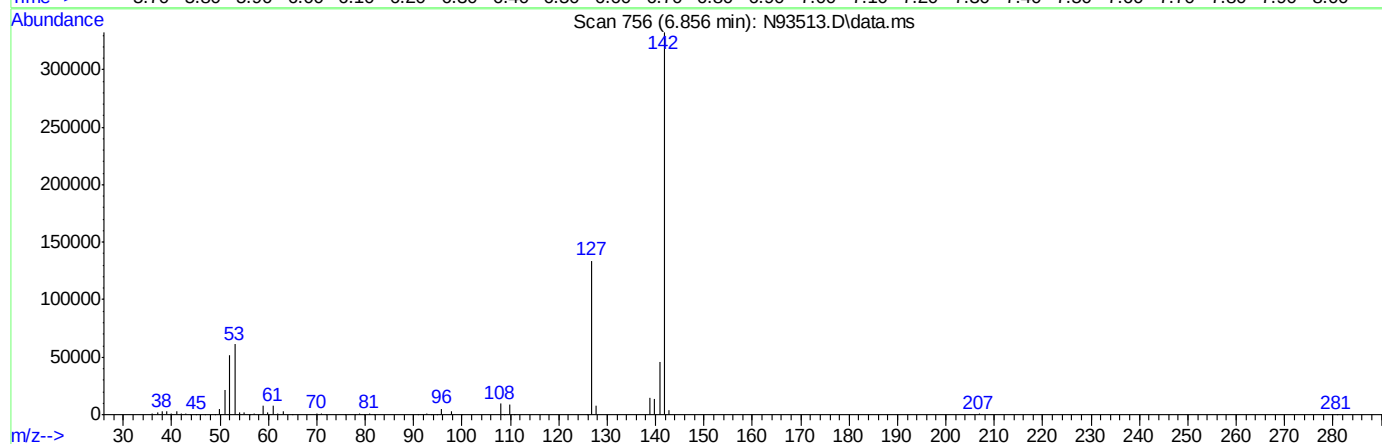
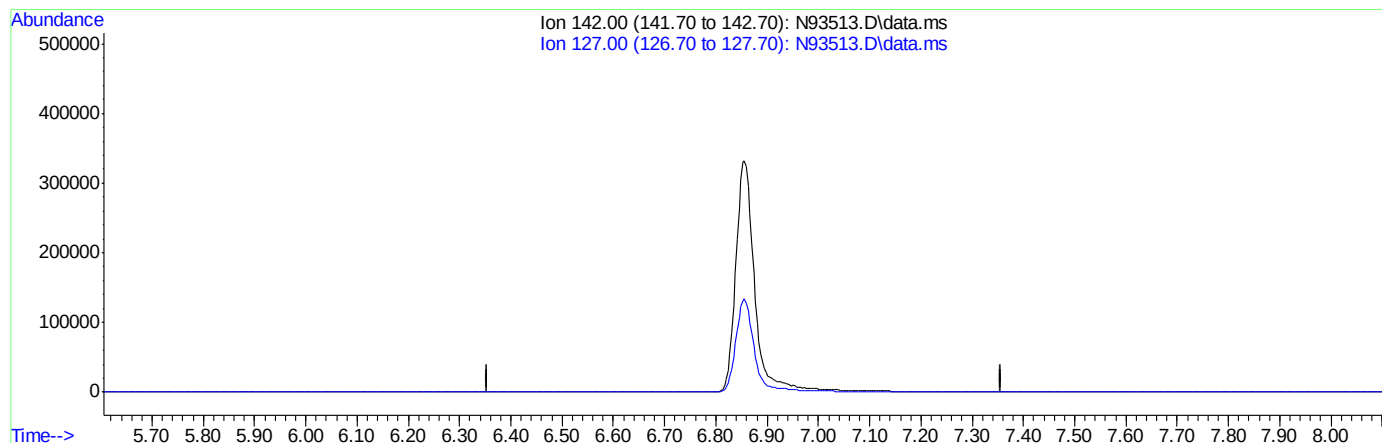
response 650470

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93513.D
Acq On : 30 Dec 2014 2:34 am
Operator : jaclynb
Sample : ic3452-200
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 30 07:52:10 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:04 2014
Response via : Initial Calibration



TIC: N93513.D\data.ms

(23) iodomethane (p)

6.856min (-6.856) 0.00ug/L

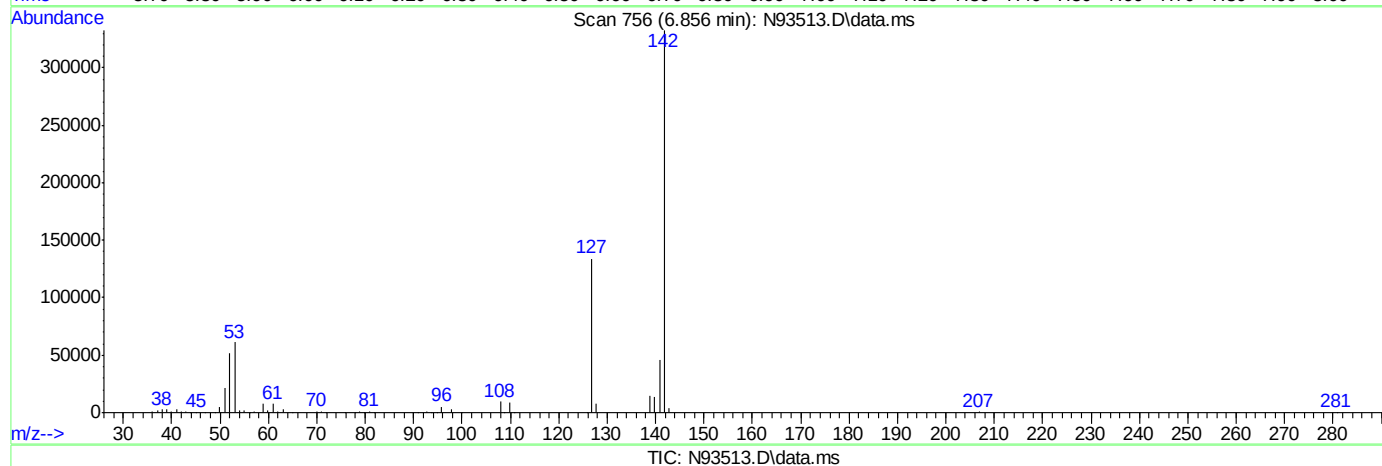
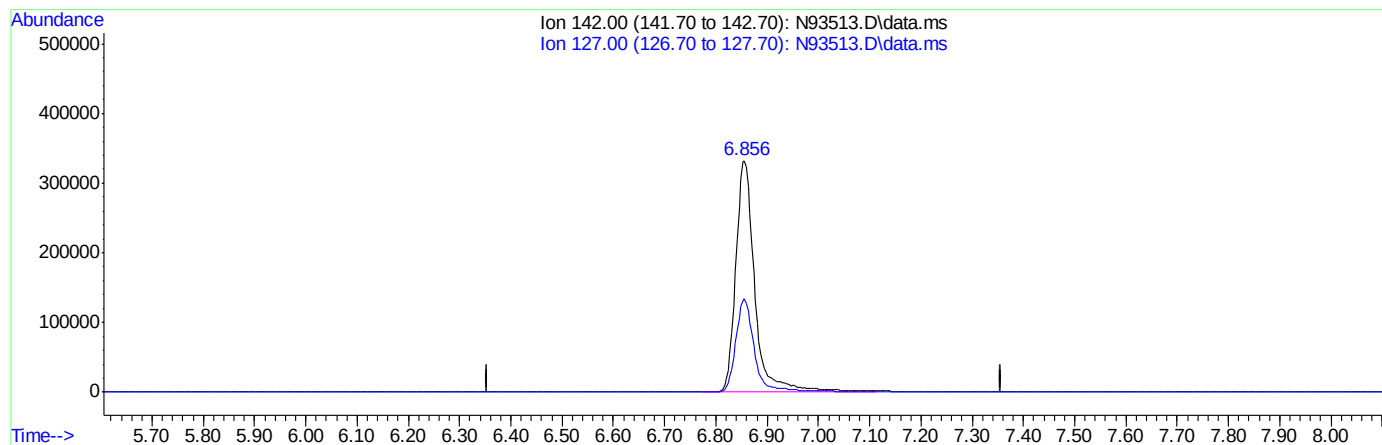
response 0

Ion	Exp%	Act%
142.00	100	0.00
127.00	47.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93513.D
Acq On : 30 Dec 2014 2:34 am
Operator : jaclynb
Sample : ic3452-200
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 30 07:52:10 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:04 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.856min (-0.000) 229.03ug/L m

response 862797

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	40.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93514.D
 Acq On : 30 Dec 2014 3:01 am
 Operator : jaclynb
 Sample : ic3452-400
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:57 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:52:32 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.697	65	111411	500.00	ug/L	#-0.01
4) pentafluorobenzene	9.115	168	399779	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	586778	50.00	ug/L	0.00
66) chlorobenzene-d5	13.237	82	288862	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	244442	50.00	ug/L	0.00

System Monitoring Compounds						
40) dibromofluoromethane (s)	8.769	113	178398	44.83	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	89.66%
60) toluene-d8 (s)	11.777	98	710427	45.51	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	91.02%
82) bromofluorobenzene (s)	14.457	95	264979	46.50	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	93.00%

Target Compounds						Qvalue
2) tertiary butyl alcohol	6.782	59	954034	3737.40	ug/L	# 100
3) Ethanol	5.576	45	1159401	30612.74	ug/L	# 99
5) dichlorodifluoromethane	4.395	85	1854823	406.26	ug/L	# 100
6) chloromethane	4.654	50	1616720	395.55	ug/L	# 96
7) vinyl chloride	4.887	62	618511	194.84	ug/L	# 97
8) bromomethane	5.399	96	1147553	395.99	ug/L	# 96
9) chloroethane	5.566	64	875661	343.97	ug/L	# 99
10) ethyl ether	6.435	59	1032745	372.82	ug/L	# 57
11) acetonitrile	6.435	41	127695	337.94	ug/L	# 98
12) trichlorofluoromethane	6.213	101	2335589	398.04	ug/L	# 98
13) freon-113	6.973	101	1289491	360.90	ug/L	# 88
14) acrolein	6.198	56	520127	1150.01	ug/L	# 98
15) 1,1-dichloroethene	6.789	96	1251004	366.73	ug/L	# 61
16) acetone	6.336	58	134634	288.04	ug/L	# 80
17) Methyl Acetate	6.962	43	848543	299.20	ug/L	# 82
18) methylene chloride	6.941	84	1365060	343.10	ug/L	# 58
19) methyl tert butyl ether	7.705	73	3455757	436.67	ug/L	# 86
20) acrylonitrile	6.845	53	385797	402.27	ug/L	# 97
21) allyl chloride	7.033	41	945168	213.09	ug/L	# 65
22) trans-1,2-dichloroethene	7.623	96	1411795	377.56	ug/L	# 66
23) iodomethane	6.853	142	1459694m	372.85	ug/L	#
24) carbon disulfide	7.220	76	4671350m	369.33	ug/L	#
25) propionitrile	6.750	54	24213	162.56	ug/L	# 100
26) vinyl acetate	7.966	43	1045431	604.19	ug/L	# 90
27) chloroprene	8.231	53	1483119	314.17	ug/L	# 55
28) di-isopropyl ether	8.267	45	2569788	241.64	ug/L	# 84
29) methacrylonitrile	8.394	41	576033	395.05	ug/L	# 74
30) 2-butanone	8.284	72	136020	352.11	ug/L	# 1
31) Hexane	8.249	41	1109137	255.22	ug/L	# 89
32) 1,1-dichloroethane	7.878	63	2446485	359.47	ug/L	# 89
33) tert-butyl ethyl ether	8.663	59	2831657	453.12	ug/L	# 87
34) isobutyl alcohol	8.263	43	2117718	1229.45	ug/L	# 100
35) 2,2-dichloropropane	8.733	77	1849802	504.46	ug/L	# 91
36) cis-1,2-dichloroethene	8.443	96	1497115	366.15	ug/L	# 68

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93514.D
 Acq On : 30 Dec 2014 3:01 am
 Operator : jaclynb
 Sample : ic3452-400
 Misc : ms33603,MSN3452,,,5,1
 ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:57 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 07:52:32 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.263	43	2114258	245.84	ug/L	88
38) bromochloromethane	8.613	128	641592	354.72	ug/L #	55
39) chloroform	8.645	83	2004888	313.10	ug/L	97
41) Tetrahydrofuran	8.970	42	295741	426.52	ug/L	63
42) 1,1,1-trichloroethane	9.394	97	2190267	396.45	ug/L	93
44) Cyclohexane	9.674	56	2154607	316.32	ug/L #	55
45) carbon tetrachloride	9.755	117	1937125	413.43	ug/L	98
46) 1,1-dichloropropene	9.568	75	1918447	359.35	ug/L	93
47) benzene	9.794	78	5083012	325.67	ug/L	97
48) 1,2-dichloroethane	9.295	62	1756615	383.43	ug/L	89
49) tert-amyl methyl ether	9.900	73	3115639	562.93	ug/L	85
50) heptane	10.250	43	1030871	351.36	ug/L #	75
51) trichloroethene	10.409	95	1350962	322.22	ug/L	88
52) 1,2-dichloropropane	10.377	63	1203454	294.54	ug/L	97
53) dibromomethane	10.352	93	851204	387.31	ug/L	84
54) bromodichloromethane	10.462	83	2007711	417.67	ug/L	99
55) Methylcyclohexane	10.918	83	2365383	347.96	ug/L #	69
56) 2-chloroethyl vinyl ether	10.377	63	1203454	294.54	ug/L #	93
57) methyl methacrylate	10.547	69	816063	406.43	ug/L #	65
58) 1,4-dioxane	10.565	88	67190	2263.22	ug/L #	42
59) cis-1,3-dichloropropene	11.074	75	2312178	420.58	ug/L	91
61) 4-methyl-2-pentanone	11.162	43	955532	425.02	ug/L	91
62) toluene	11.844	92	2780197	287.19	ug/L	99
63) trans-1,3-dichloropropene	11.491	75	2029062	456.75	ug/L	87
64) 1,1,2-trichloroethane	11.668	83	1076786	391.83	ug/L	99
65) ethyl methacrylate	11.862	69	1151126	325.75	ug/L #	67
67) tetrachloroethene	12.587	166	1574675	379.23	ug/L	93
68) 1,3-dichloropropane	11.901	76	1973553	368.44	ug/L	98
69) dibromochloromethane	12.194	129	1606342	478.72	ug/L	97
70) 1,2-dibromoethane	12.445	107	1323764	451.28	ug/L	98
71) 2-hexanone	12.014	43	690932	385.54	ug/L	100
72) chlorobenzene	13.269	112	3645724	351.79	ug/L	93
73) 1,1,1,2-tetrachloroethane	13.188	131	1399696	406.60	ug/L	97
74) ethylbenzene	13.439	91	5909092	312.44	ug/L	90
75) m,p-xylene	13.626	106	3634108	516.24	ug/L #	81
76) o-xylene	14.040	106	2029222	299.52	ug/L #	80
77) styrene	13.966	104	3927624	378.85	ug/L	92
78) bromoform	13.796	173	1101100	547.63	ug/L	99
79) trans-1,4-dichloro-2-b...	14.185	53	287165	481.37	ug/L #	59
81) isopropylbenzene	14.397	105	5802149	312.89	ug/L	97
83) bromobenzene	14.690	156	1796238	401.28	ug/L #	74
84) 1,1,2,2-tetrachloroethane	14.050	83	1038680	290.27	ug/L	98
85) 1,2,3-trichloropropane	14.188	75	1568643	415.37	ug/L	96
86) n-propylbenzene	14.842	91	6789716	307.95	ug/L	90
87) 2-chlorotoluene	14.966	91	4336355	334.18	ug/L	86
88) 4-chlorotoluene	15.040	91	4439185	343.14	ug/L	91
89) 1,3,5-trimethylbenzene	15.118	105	4931914	321.23	ug/L	96
90) tert-butylbenzene	15.426	91	2964282	321.20	ug/L	89
91) 1,2,4-trimethylbenzene	15.528	105	5031517	327.53	ug/L	98
92) sec-butylbenzene	15.645	105	6256787	310.28	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93514.D
Acq On : 30 Dec 2014 3:01 am
Operator : jaclynb
Sample : ic3452-400
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:57 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:32 2014
Response via : Initial Calibration

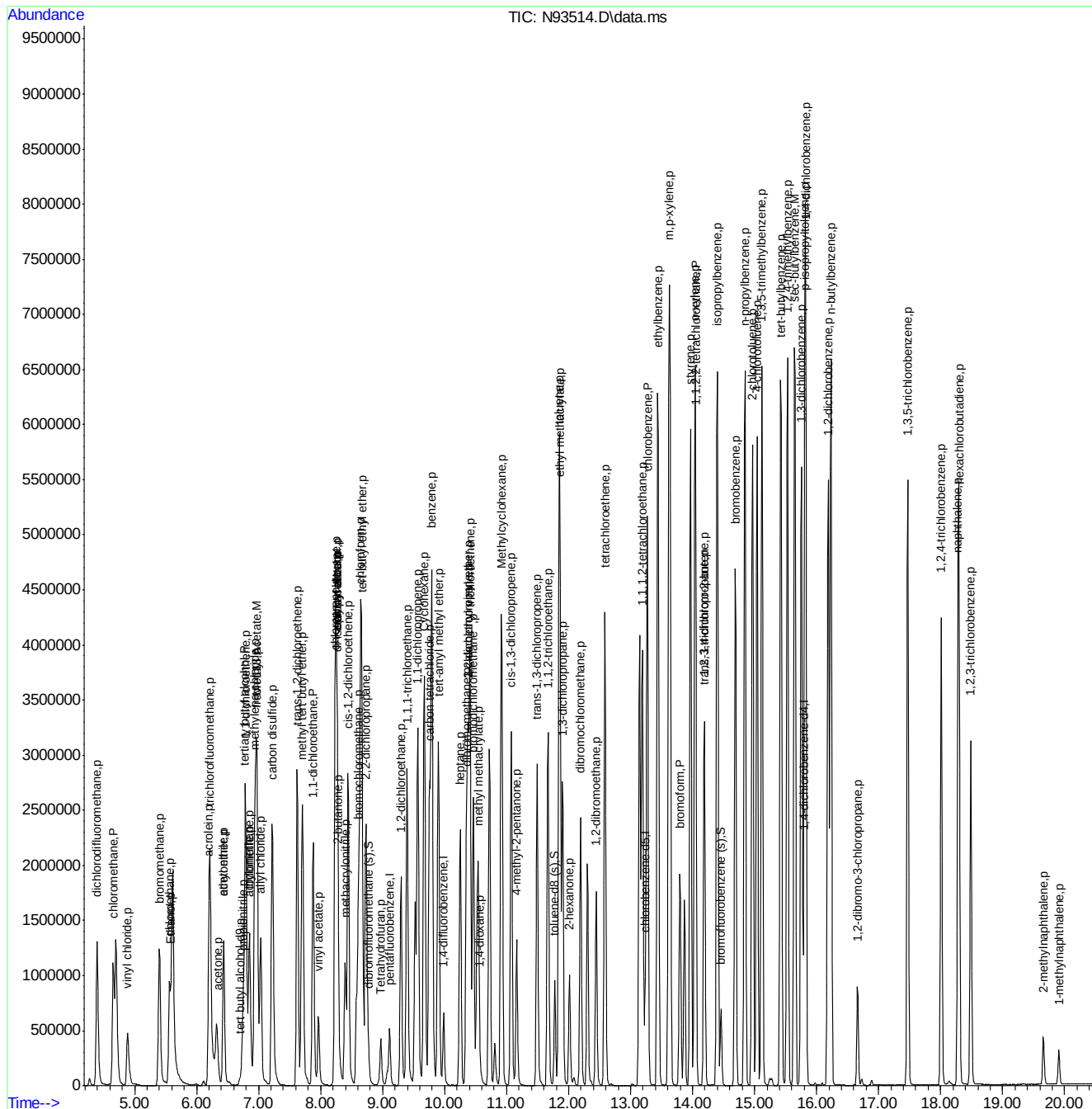
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.754	146	3060464	396.33	ug/L	94
94)	p-isopropyltoluene	15.811	119	3947813	264.20	ug/L	95
95)	1,4-dichlorobenzene	15.825	146	2207967	295.18	ug/L	92
96)	1,2-dichlorobenzene	16.186	146	2940119	418.90	ug/L	97
97)	n-butylbenzene	16.232	91	4719530	358.15	ug/L	88
98)	1,2-dibromo-3-chloropr...	16.659	75	256982	674.94	ug/L	71
99)	1,2,4-trichlorobenzene	18.010	180	1664022	899.56	ug/L	99
100)	1,3,5-trichlorobenzene	17.469	180	2152883	503.98	ug/L	100
101)	hexachlorobutadiene	18.296	225	950580	479.20	ug/L	87
102)	naphthalene	18.279	128	2779190	1193.48	ug/L	100
103)	1,2,3-trichlorobenzene	18.487	180	1226087	1176.19	ug/L	96
104)	2-methylnaphthalene	19.657	142	263026	234.54	ug/L #	100
105)	1-methylnaphthalene	19.908	142	192019	214.22	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93514.D
Acq On : 30 Dec 2014 3:01 am
Operator : jaclynb
Sample : ic3452-400
Misc : ms33603,MSN3452,,,5,1
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:57 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:32 2014
Response via : Initial Calibration



n141229w.m Tue Dec 30 08:25:47 2014

Page: 4

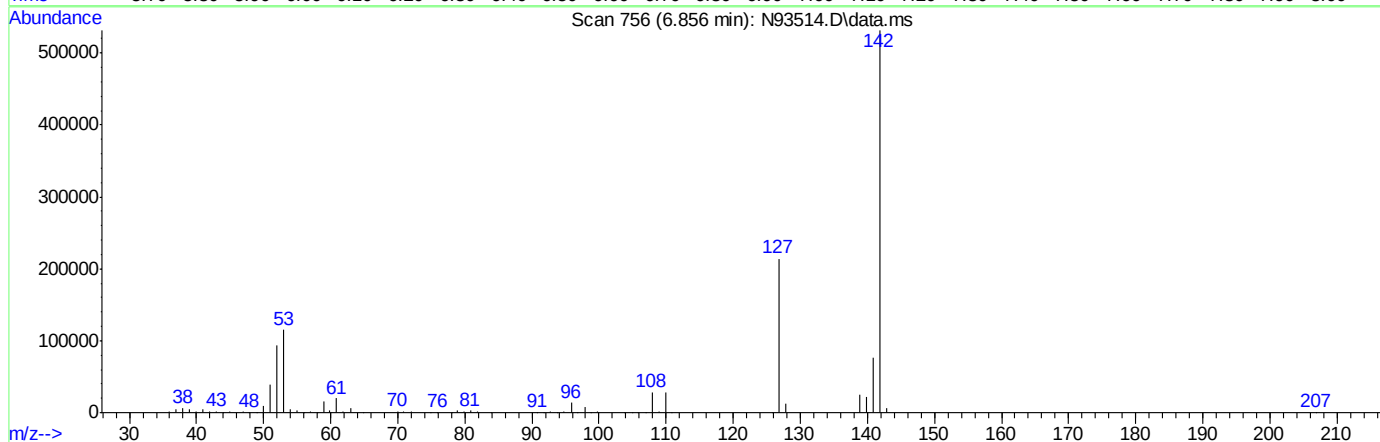
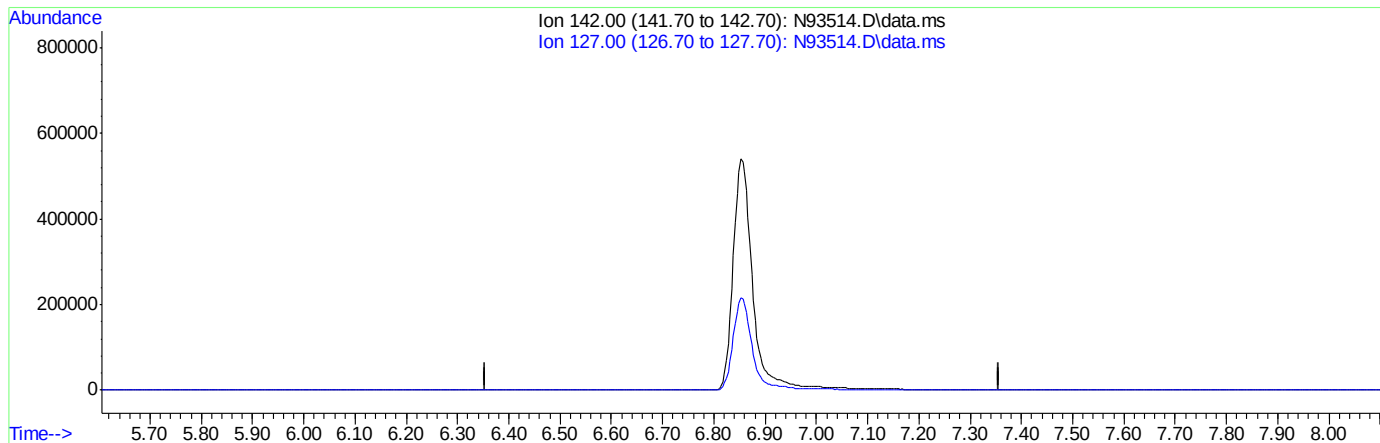
7.6.10



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93514.D
Acq On : 30 Dec 2014 3:01 am
Operator : jaclynb
Sample : ic3452-400
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:38 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:32 2014
Response via : Initial Calibration



TIC: N93514.D\data.ms

(23) iodomethane (p)

6.856min (-6.856) 0.00ug/L

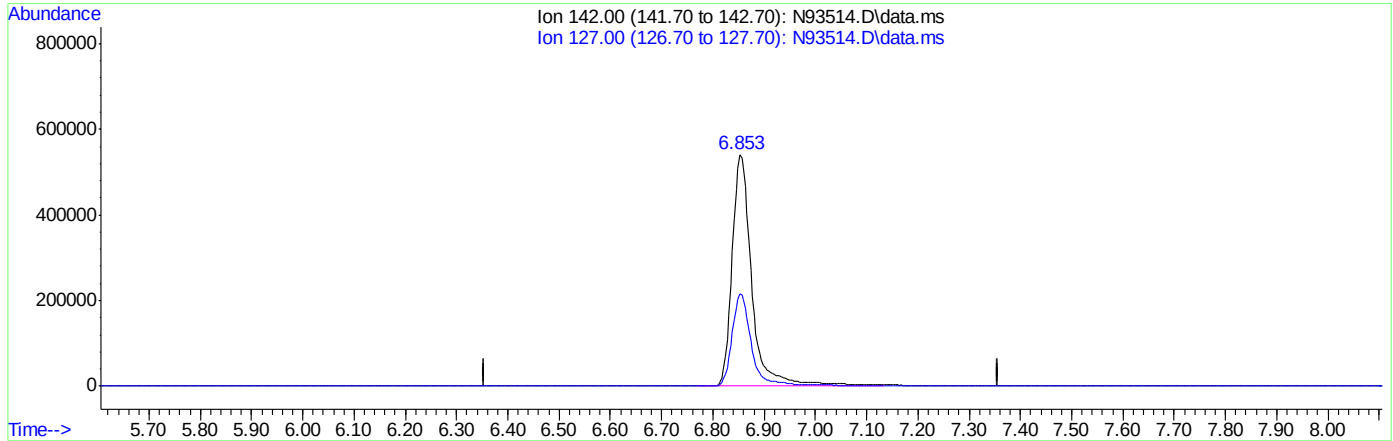
response 0

Ion	Exp%	Act%
142.00	100	0.00
127.00	47.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93514.D
Acq On : 30 Dec 2014 3:01 am
Operator : jaclynb
Sample : ic3452-400
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:38 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:32 2014
Response via : Initial Calibration



(23) iodomethane (p)

6.853min (-0.003) 372.85ug/L m

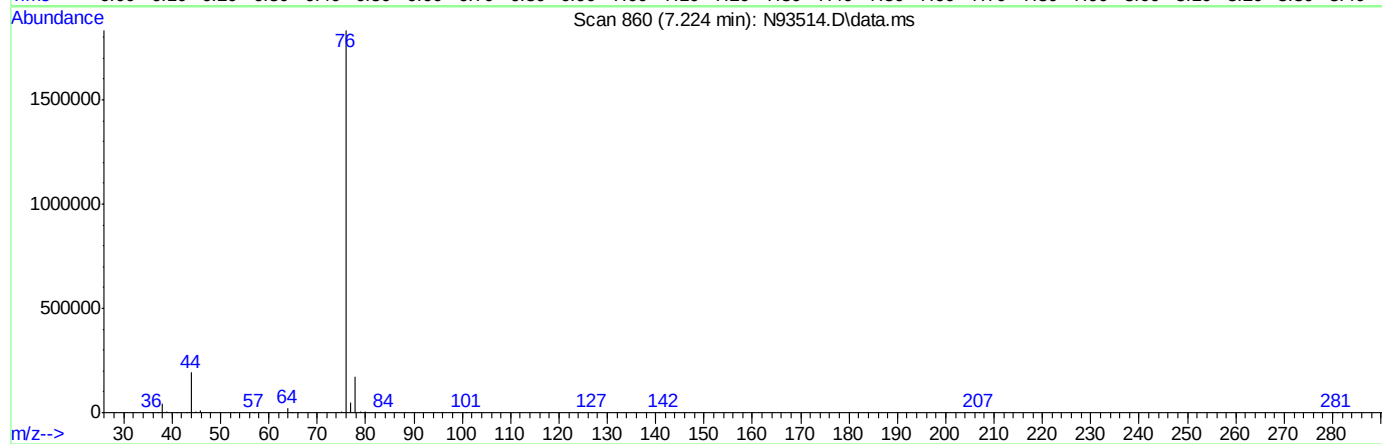
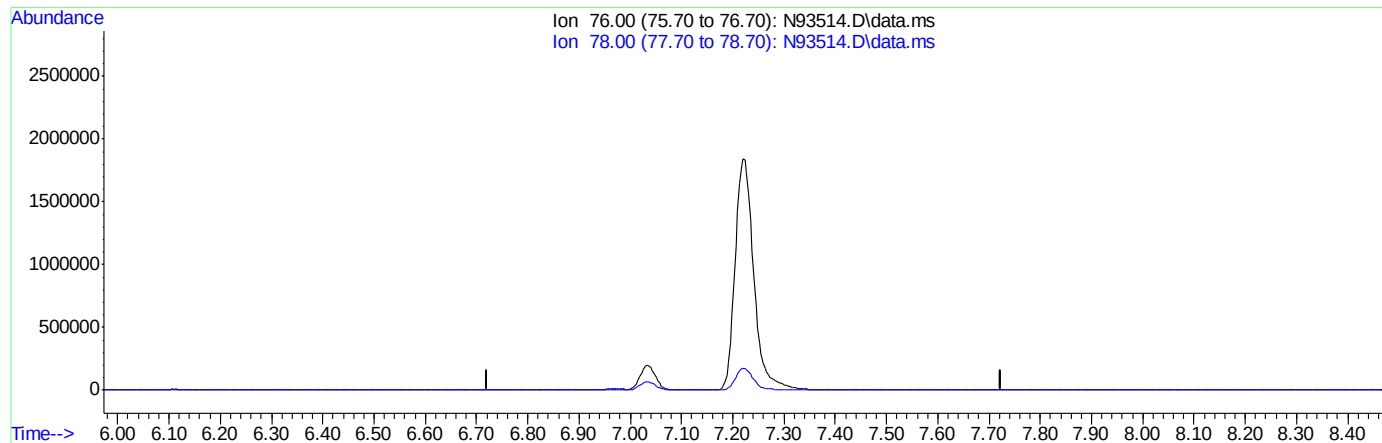
response 1459694

Ion	Exp%	Act%
142.00	100	100
127.00	47.30	39.88
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93514.D
Acq On : 30 Dec 2014 3:01 am
Operator : jaclynb
Sample : ic3452-400
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:38 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:32 2014
Response via : Initial Calibration



TIC: N93514.D\data.ms

(24) carbon disulfide (p)

7.223min (-7.223) 0.00ug/L

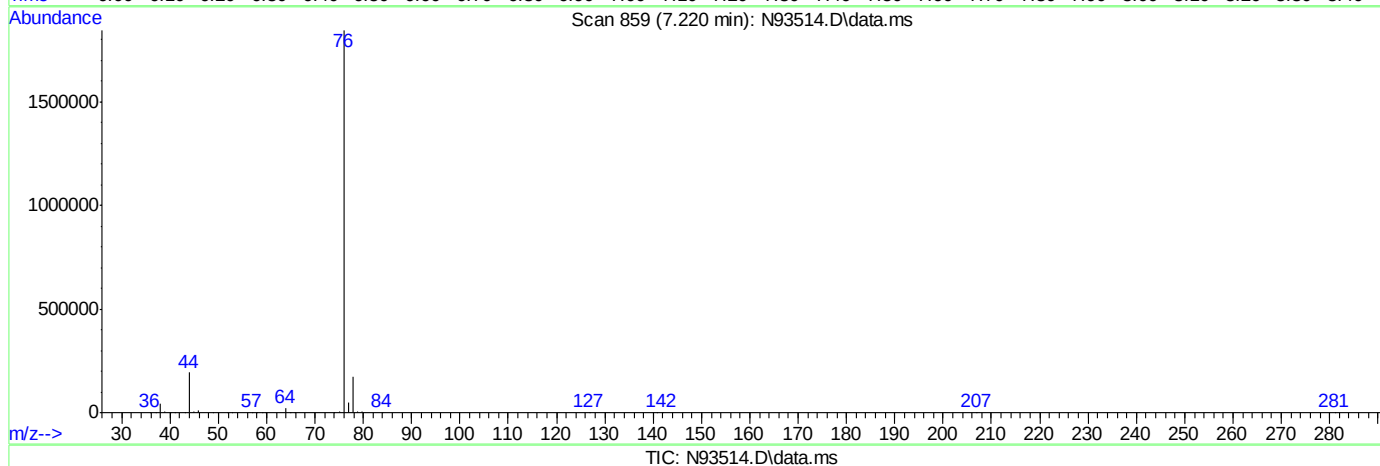
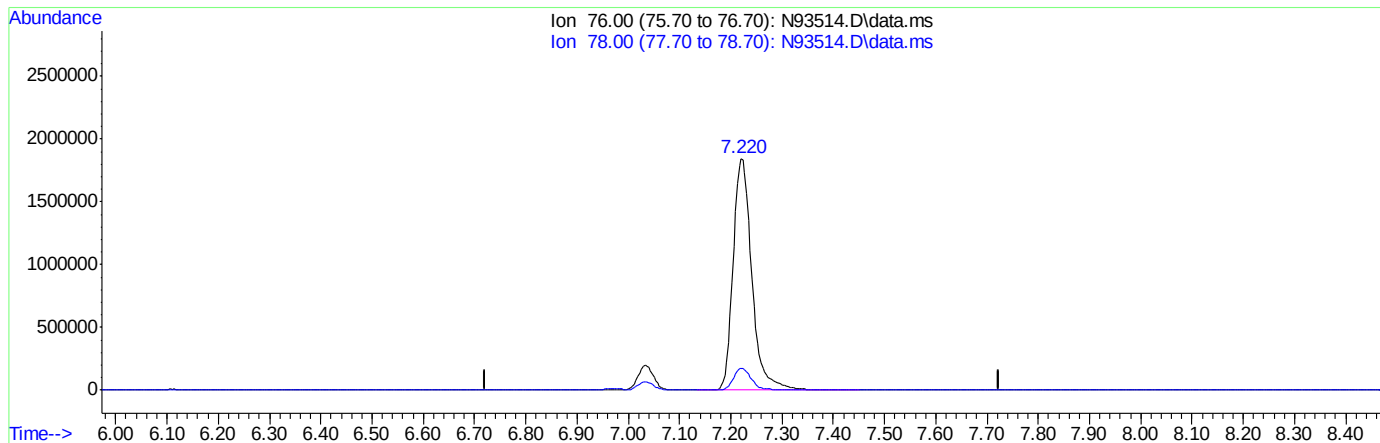
response 0

Ion	Exp%	Act%
76.00	100	0.00
78.00	8.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93514.D
Acq On : 30 Dec 2014 3:01 am
Operator : jaclynb
Sample : ic3452-400
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Dec 30 07:52:38 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 07:52:32 2014
Response via : Initial Calibration



(24) carbon disulfide (p)

7.220min (-0.003) 369.33ug/L m

response 4671350

Ion	Exp%	Act%
76.00	100	100
78.00	8.70	9.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93517.D
 Acq On : 30 Dec 2014 4:25 am
 Operator : jaclynb
 Sample : icv3452-50
 Misc : ms33603,MSN3452,,,5,1
 ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:40:27 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:15:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.711	65	115598	500.00	ug/L	# 0.00
4) pentafluorobenzene	9.112	168	387399	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	562903	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	287345	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	250405	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	170712	49.23	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	98.46%		
60) toluene-d8 (s)	11.777	98	677825	50.28	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	100.56%		
82) bromofluorobenzene (s)	14.457	95	248813	47.08	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	94.16%		
Target Compounds						
2) tertiary butyl alcohol	6.796	59	138823	528.47	ug/L	# 100
3) Ethanol	5.580	45	181603m	4761.02	ug/L	
5) dichlorodifluoromethane	4.395	85	186259	42.03	ug/L	99
6) chloromethane	4.661	50	193458	48.91	ug/L	99
7) vinyl chloride	4.901	62	147148	47.83	ug/L	97
8) bromomethane	5.403	96	136795	48.77	ug/L	100
9) chloroethane	5.569	64	110353	45.44	ug/L	99
10) ethyl ether	6.439	59	130689	49.06	ug/L	61
11) acetonitrile	6.435	41	17910	50.02	ug/L	100
12) trichlorofluoromethane	6.209	101	310994	54.72	ug/L	96
13) freon-113	6.969	101	156721	45.76	ug/L	89
14) acrolein	6.209	56	79156	310.85	ug/L	92
15) 1,1-dichloroethene	6.789	96	143666	43.83	ug/L	# 66
16) acetone	6.343	58	25898m	57.18	ug/L	
17) Methyl Acetate	6.969	43	99231	37.28	ug/L	# 86
18) methylene chloride	6.941	84	188039	49.56	ug/L	# 66
19) methyl tert butyl ether	7.704	73	436240	56.37	ug/L	87
20) acrylonitrile	6.852	53	48909	49.89	ug/L	94
21) allyl chloride	7.033	41	209037	48.63	ug/L	70
22) trans-1,2-dichloroethene	7.623	96	175391	48.68	ug/L	# 71
23) iodomethane	6.856	142	191840	49.57	ug/L	89
24) carbon disulfide	7.220	76	458637	35.65	ug/L	100
25) propionitrile	6.743	54	2947	16.38	ug/L	100
26) vinyl acetate	7.973	43	165918	78.07	ug/L	91
27) chloroprene	8.231	53	212486	47.58	ug/L	60
28) di-isopropyl ether	8.259	45	527344	51.17	ug/L	90
29) methacrylonitrile	8.397	41	74150	52.56	ug/L	76
30) 2-butanone	8.288	72	23586	55.46	ug/L	# 1
31) Hexane	8.245	41	179485	42.62	ug/L	# 85
32) 1,1-dichloroethane	7.878	63	321092	49.19	ug/L	92
33) tert-butyl ethyl ether	8.655	59	361911	43.74	ug/L	88
34) isobutyl alcohol	8.263	43	399162	239.14	ug/L	89
35) 2,2-dichloropropane	8.726	77	224785	47.19	ug/L	93
36) cis-1,2-dichloroethene	8.440	96	207567	52.83	ug/L	# 72

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
 Data File : N93517.D
 Acq On : 30 Dec 2014 4:25 am
 Operator : jaclynb
 Sample : icv3452-50
 Misc : ms33603,MSN3452,,,,5,1
 ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:40:27 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:15:33 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) ethyl acetate	8.263	43	399162	47.90	ug/L	89
38) bromochloromethane	8.610	128	93562	54.06	ug/L #	62
39) chloroform	8.641	83	331549	54.62	ug/L	99
41) Tetrahydrofuran	8.977	42	33864	49.99	ug/L	64
42) 1,1,1-trichloroethane	9.391	97	289359	54.10	ug/L	94
44) Cyclohexane	9.667	56	296322	46.43	ug/L #	70
45) carbon tetrachloride	9.751	117	253063	56.11	ug/L	98
46) 1,1-dichloropropene	9.564	75	246841	48.75	ug/L	95
47) benzene	9.790	78	773214	52.62	ug/L	99
48) 1,2-dichloroethane	9.292	62	227272	51.95	ug/L	91
49) tert-amyl methyl ether	9.900	73	296969	44.39	ug/L	86
50) heptane	10.250	43	134388	48.40	ug/L	85
51) trichloroethene	10.405	95	229145	58.10	ug/L	93
52) 1,2-dichloropropane	10.374	63	211317	55.54	ug/L	98
53) dibromomethane	10.349	93	109478	52.11	ug/L	85
54) bromodichloromethane	10.458	83	268399	57.95	ug/L	98
55) Methylcyclohexane	10.915	83	333334	51.86	ug/L #	73
56) 2-chloroethyl vinyl ether	10.374	63	211317	55.54	ug/L #	95
57) methyl methacrylate	10.547	69	110094	57.04	ug/L #	72
58) 1,4-dioxane	10.557	88	8094	245.32	ug/L #	61
59) cis-1,3-dichloropropene	11.074	75	332335	62.69	ug/L	95
61) 4-methyl-2-pentanone	11.173	43	134188	59.50	ug/L	93
62) toluene	11.848	92	513588	56.91	ug/L	99
63) trans-1,3-dichloropropene	11.491	75	264599	52.32	ug/L	89
64) 1,1,2-trichloroethane	11.664	83	152883	58.11	ug/L	99
65) ethyl methacrylate	11.862	69	216625	63.24	ug/L #	72
67) tetrachloroethene	12.583	166	223542	54.40	ug/L	94
68) 1,3-dichloropropane	11.901	76	296930	56.22	ug/L	100
69) dibromochloromethane	12.191	129	207623	52.03	ug/L	97
70) 1,2-dibromoethane	12.442	107	167653	56.73	ug/L	99
71) 2-hexanone	12.025	43	108751	55.32	ug/L	98
72) chlorobenzene	13.269	112	536395	52.67	ug/L	92
73) 1,1,1,2-tetrachloroethane	13.184	131	204670	59.67	ug/L	97
74) ethylbenzene	13.439	91	1002360	54.47	ug/L	93
75) m,p-xylene	13.623	106	751742	111.30	ug/L #	80
76) o-xylene	14.036	106	364709	55.51	ug/L #	81
77) styrene	13.965	104	613443m	59.84	ug/L	
78) bromoform	13.796	173	123731	53.35	ug/L	97
79) trans-1,4-dichloro-2-b...	14.185	53	36134	49.11	ug/L #	31
81) isopropylbenzene	14.393	105	967245	52.18	ug/L	99
83) bromobenzene	14.690	156	246010	53.63	ug/L #	83
84) 1,1,2,2-tetrachloroethane	14.040	83	201929	56.64	ug/L	97
85) 1,2,3-trichloropropane	14.188	75	221811	57.09	ug/L	95
86) n-propylbenzene	14.839	91	1126063	51.16	ug/L	97
87) 2-chlorotoluene	14.962	91	661043	50.66	ug/L	92
88) 4-chlorotoluene	15.037	91	680725	52.19	ug/L	93
89) 1,3,5-trimethylbenzene	15.118	105	856711	55.69	ug/L	96
90) tert-butylbenzene	15.419	91	477955	51.69	ug/L	89
91) 1,2,4-trimethylbenzene	15.528	105	826204	53.58	ug/L	100
92) sec-butylbenzene	15.641	105	1047514	52.01	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:40:27 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	1,3-dichlorobenzene	15.751	146	417384	52.82	ug/L	95
94)	p-isopropyltoluene	15.814	119	826610	56.12	ug/L	94
95)	1,4-dichlorobenzene	15.818	146	405263	54.48	ug/L	93
96)	1,2-dichlorobenzene	16.182	146	388913	53.81	ug/L	97
97)	n-butylbenzene	16.228	91	783741	58.74	ug/L	96
98)	1,2-dibromo-3-chloropr...	16.663	75	24999	50.76	ug/L	70
99)	1,2,4-trichlorobenzene	18.010	180	140114	47.41	ug/L	99
100)	1,3,5-trichlorobenzene	17.469	180	253676	47.35	ug/L	100
101)	hexachlorobutadiene	18.293	225	123094	59.27	ug/L	94
102)	naphthalene	18.282	128	121710	47.37	ug/L	100
103)	1,2,3-trichlorobenzene	18.487	180	73143	44.44	ug/L	96
104)	2-methylnaphthalene	19.661	142	31893	27.09	ug/L #	100
105)	1-methylnaphthalene	19.908	142	25157	27.12	ug/L	94

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

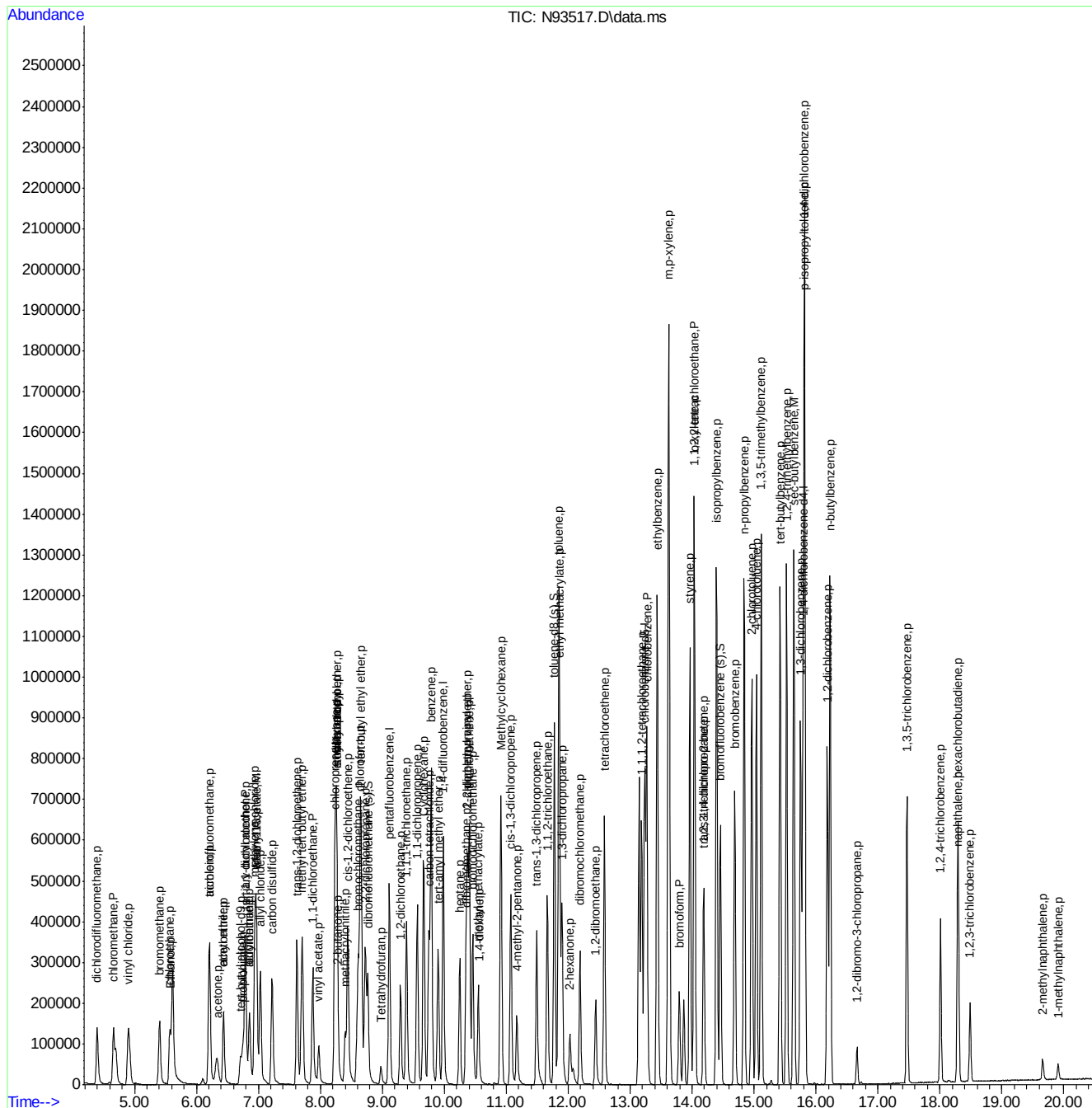
7.6.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:40:27 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration

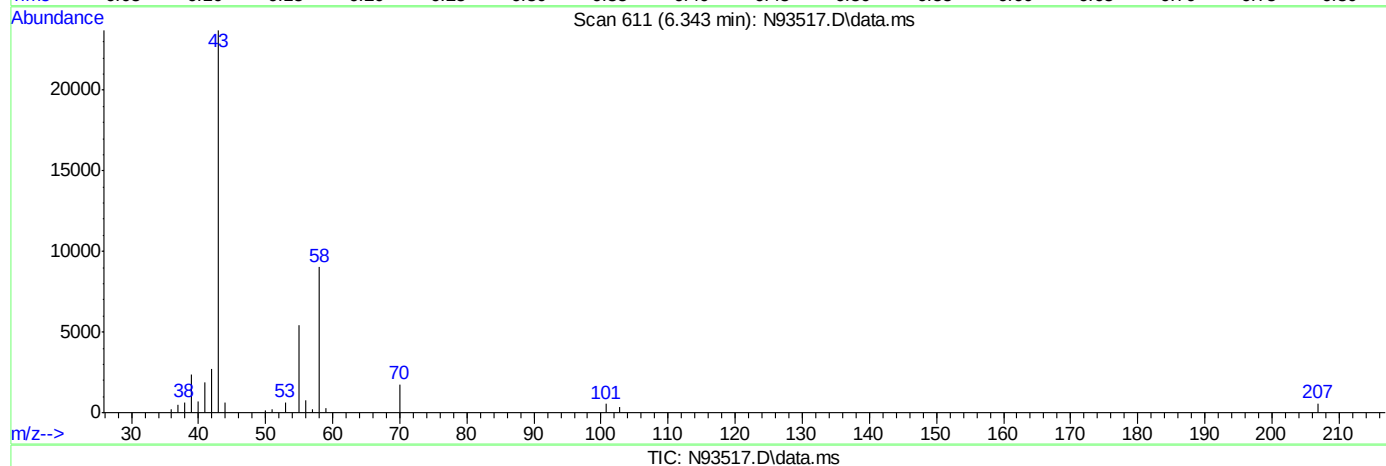
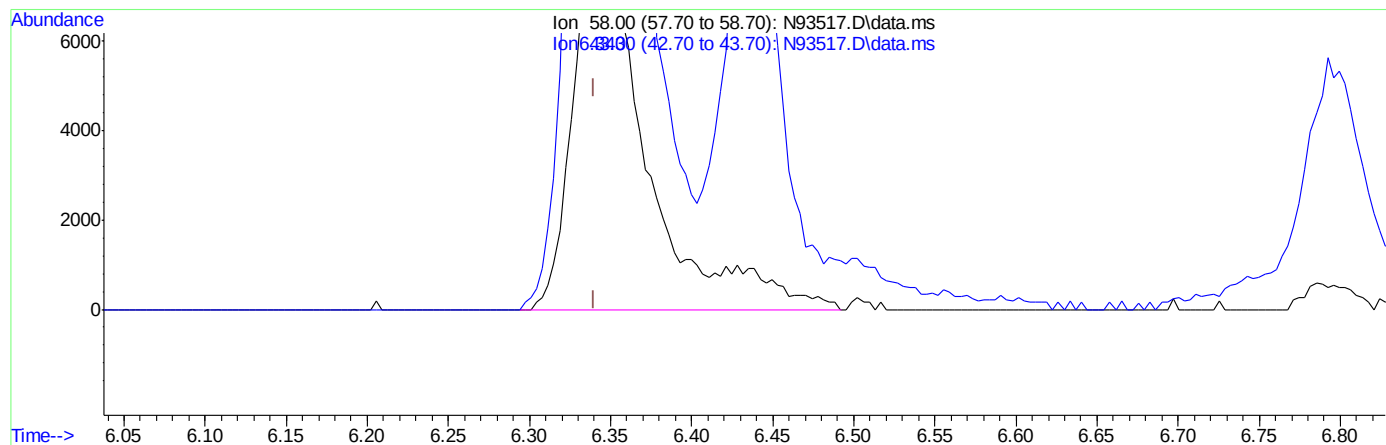


7.6.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:07:49 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:06:33 2014
Response via : Initial Calibration



(16) acetone (p)

6.343min (+0.003) 59.67ug/L

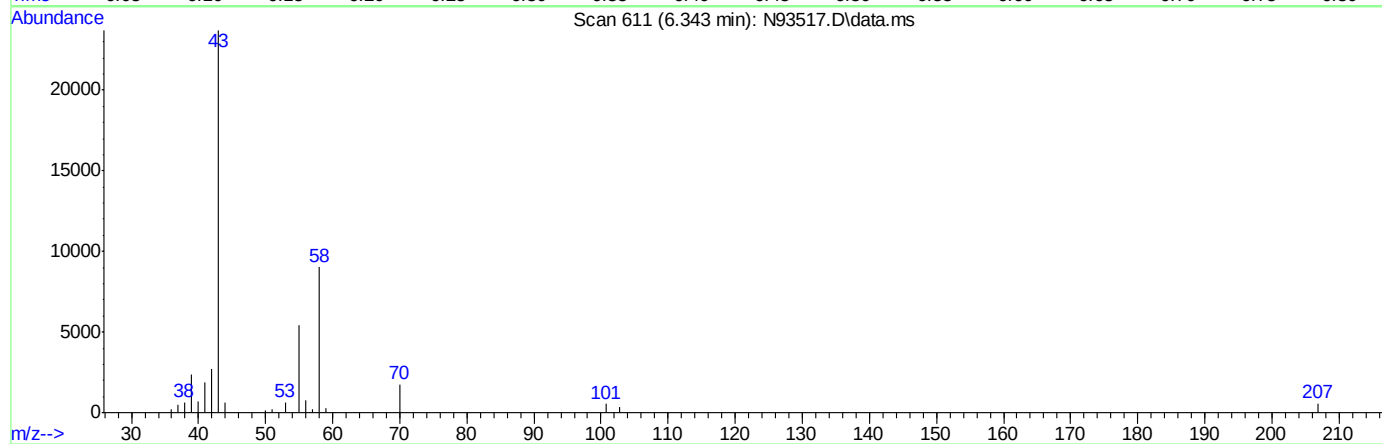
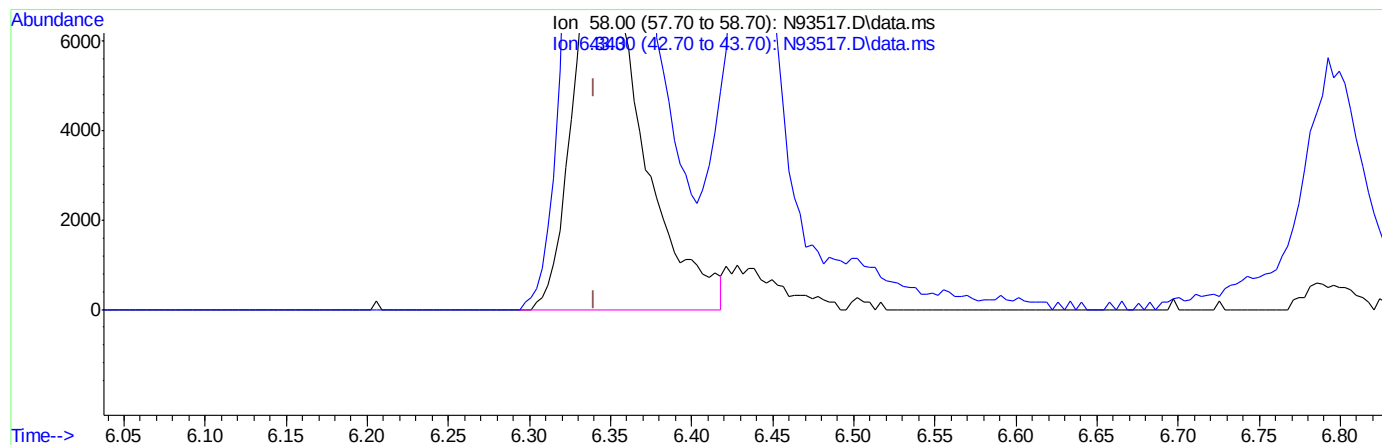
response 27026

Ion	Exp%	Act%
58.00	100	100
43.00	286.20	262.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:07:49 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:06:33 2014
Response via : Initial Calibration



TIC: N93517.D\data.ms

(16) acetone (p)

6.343min (+0.003) 54.66ug/L m

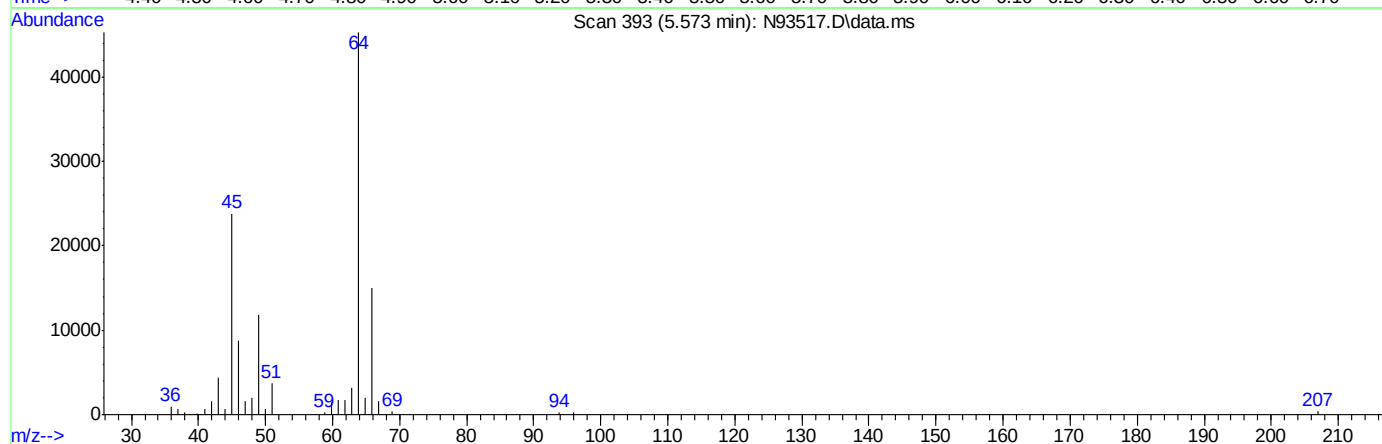
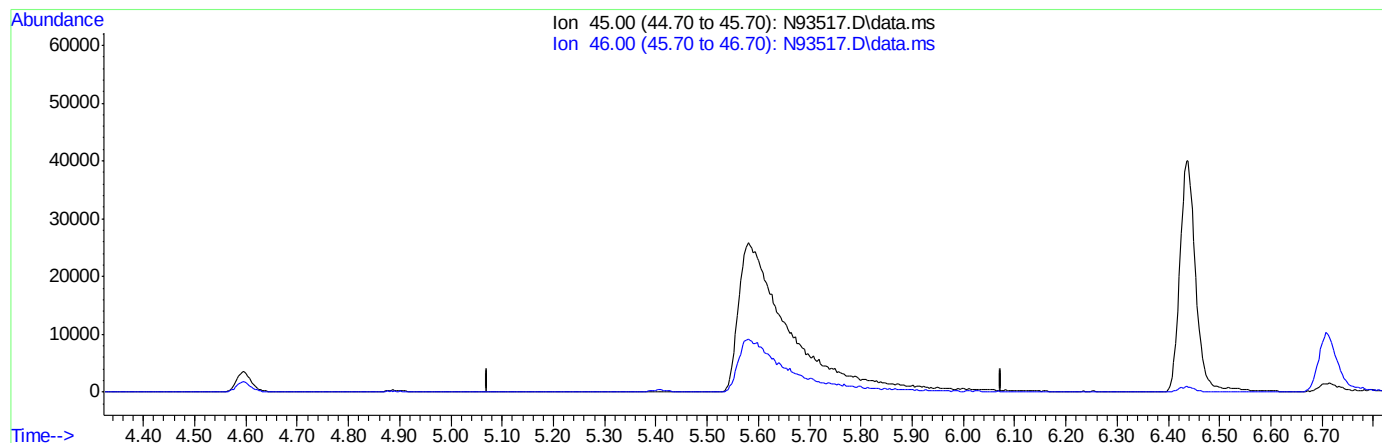
response 24758

Ion	Exp%	Act%
58.00	100	100
43.00	286.20	262.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:07:49 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:06:33 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

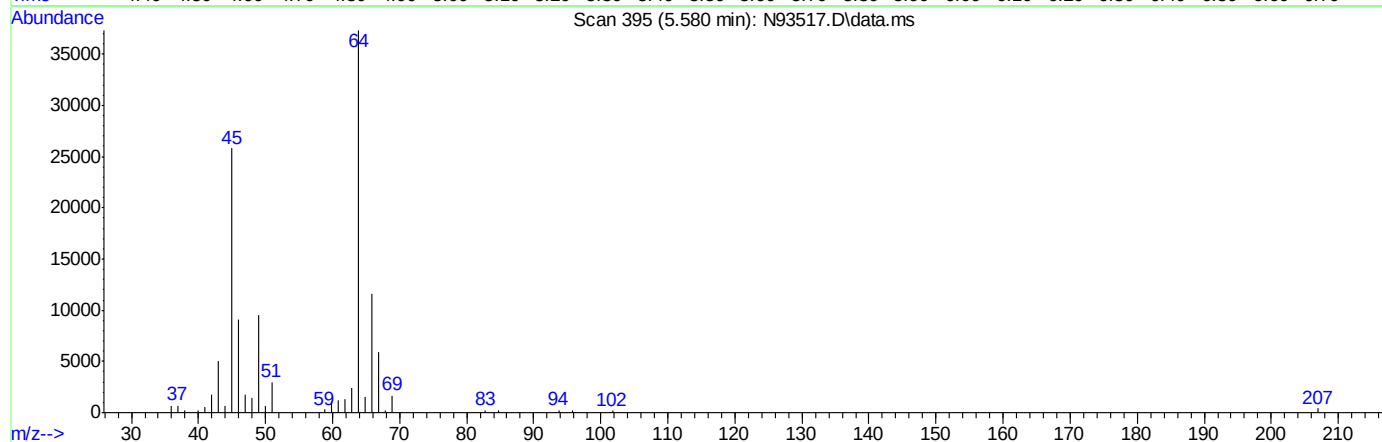
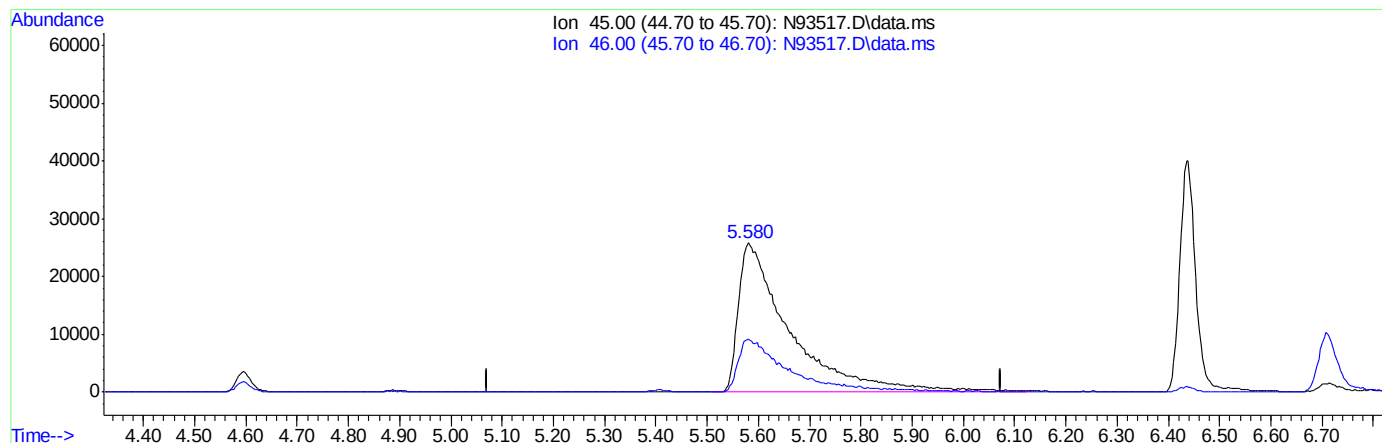
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:07:49 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:06:33 2014
Response via : Initial Calibration



TIC: N93517.D\data.ms

(3) Ethanol (p)

5.580min (+0.007) 4746.42ug/L m

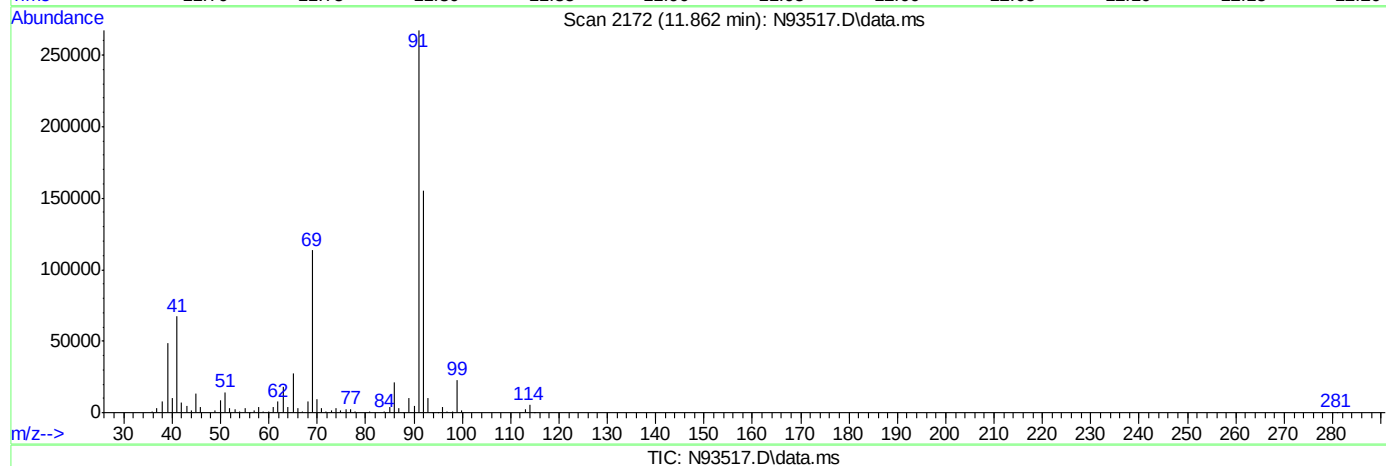
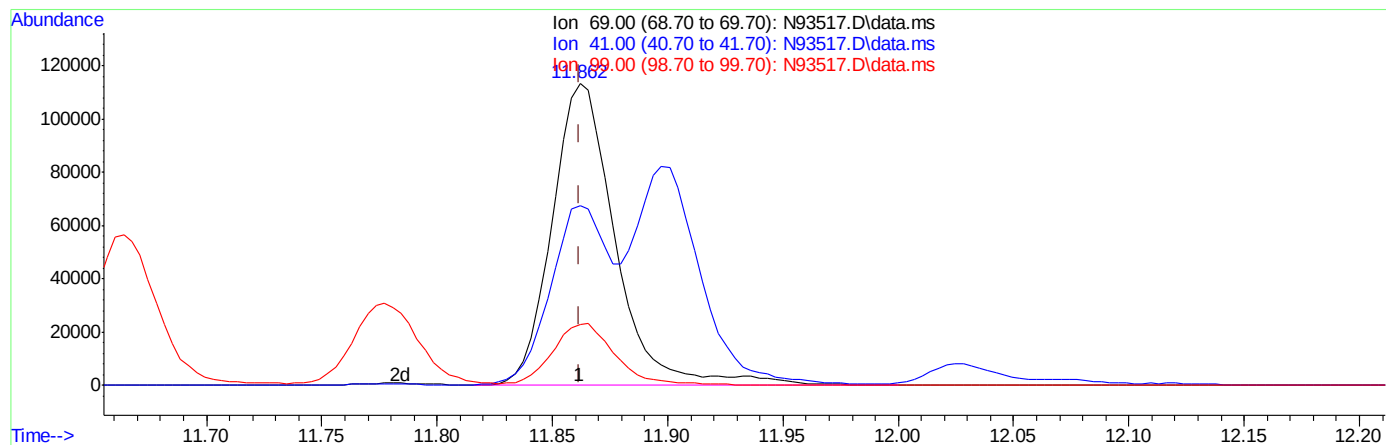
response 181046

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:09:17 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:06:33 2014
Response via : Initial Calibration



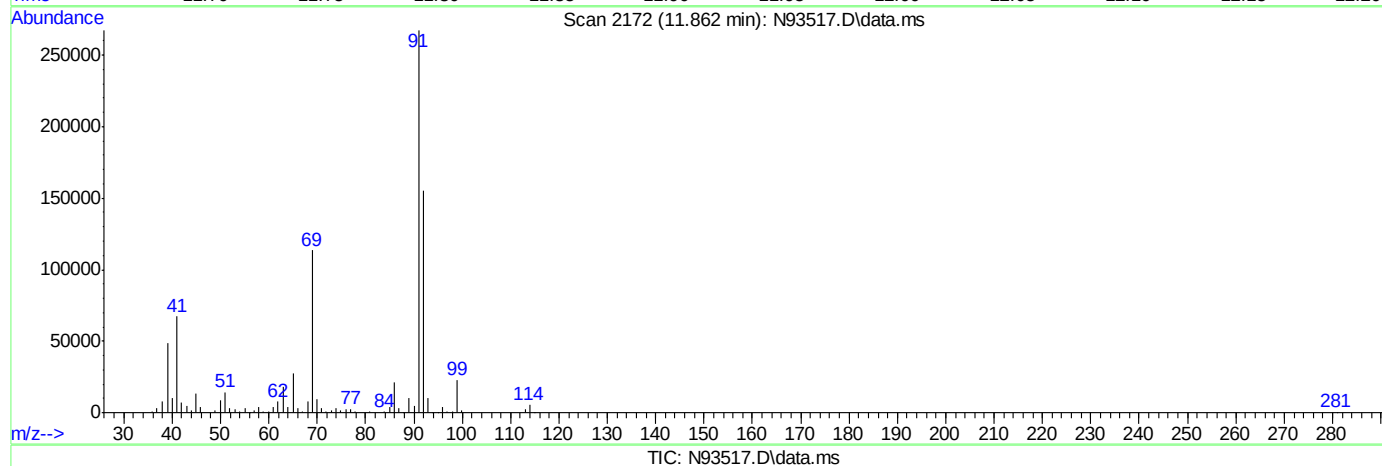
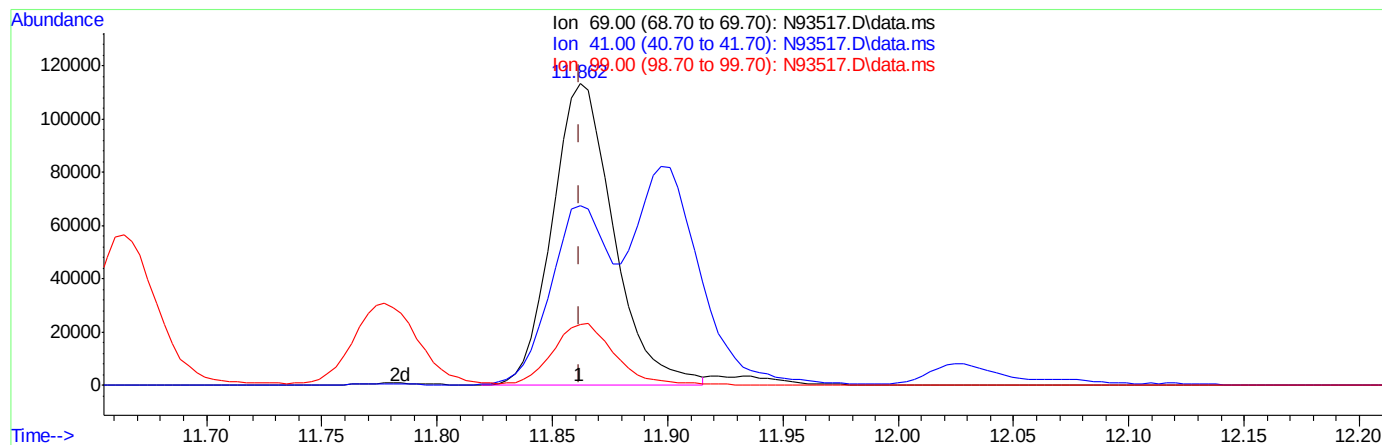
(65) ethyl methacrylate (p)
11.862min (-0.000) 63.24ug/L
response 216625

Ion	Exp%	Act%
69.00	100	100
41.00	91.70	59.29#
99.00	20.90	20.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:09:17 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:06:33 2014
Response via : Initial Calibration



(65) ethyl methacrylate (p)

11.862min (-0.000) 61.20ug/L m

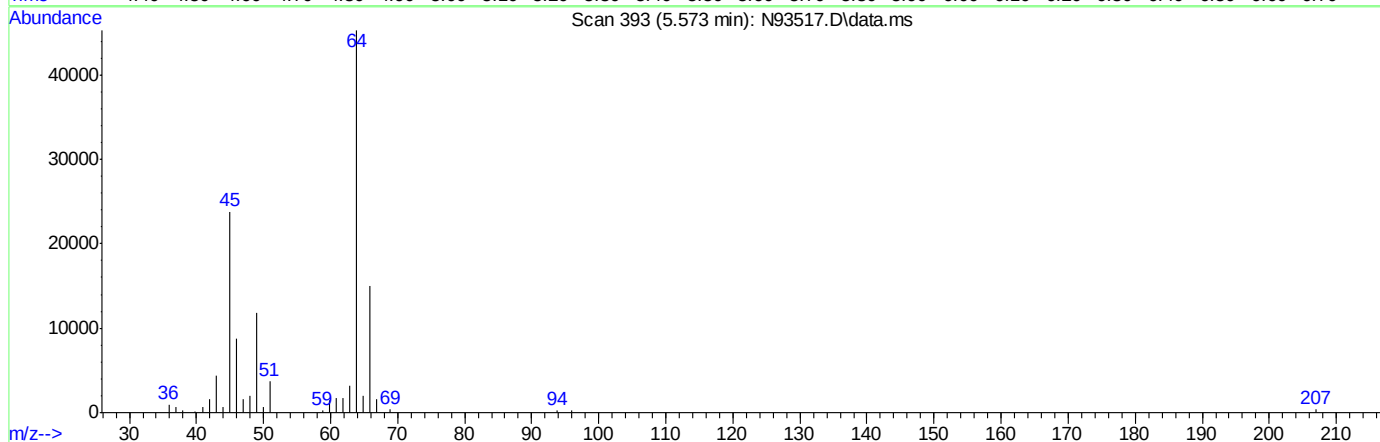
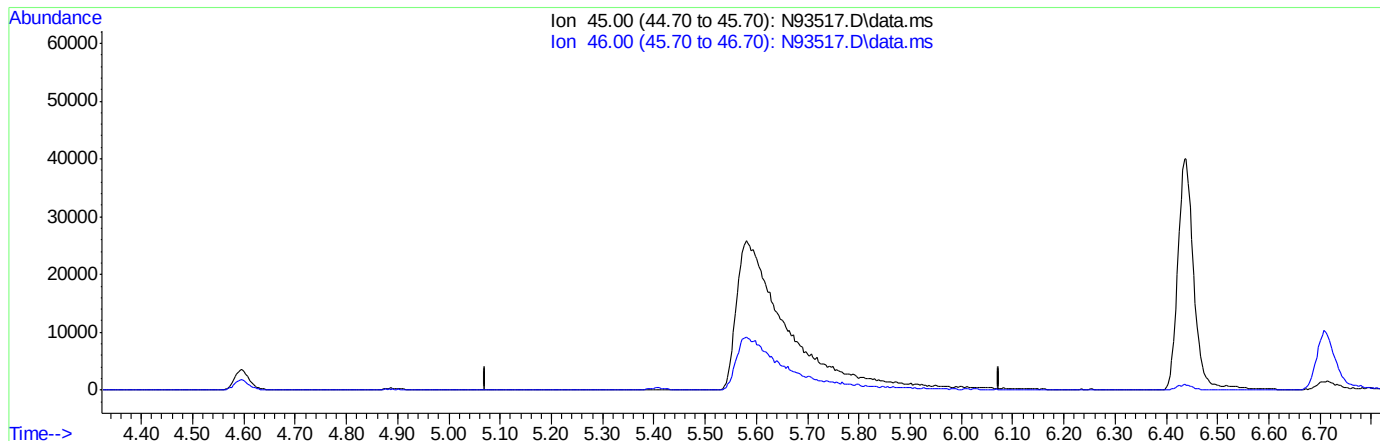
response 209649

Ion	Exp%	Act%
69.00	100	100
41.00	91.70	59.43#
99.00	20.90	20.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:15:36 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration



TIC: N93517.D\data.ms

(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

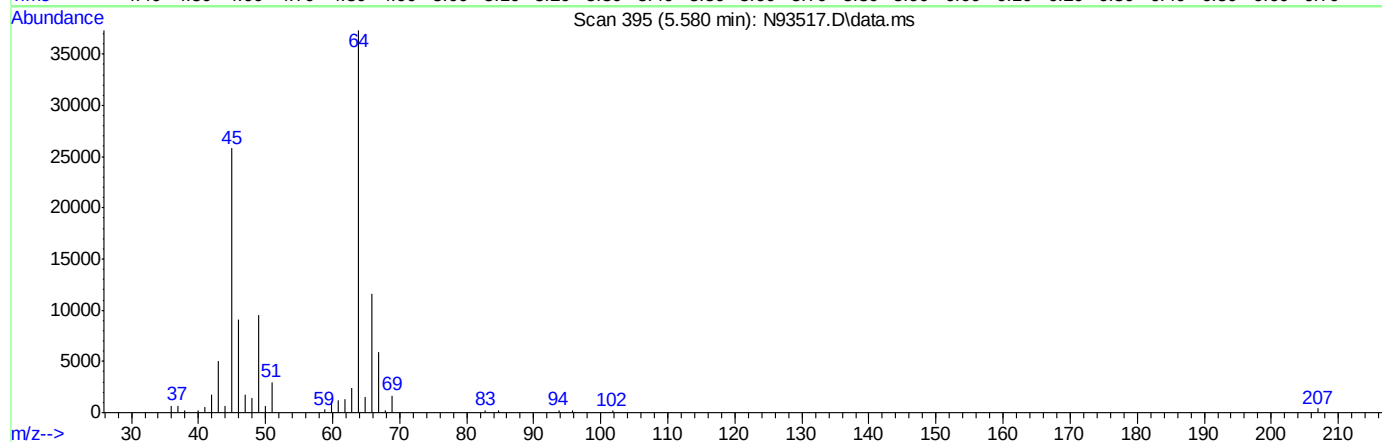
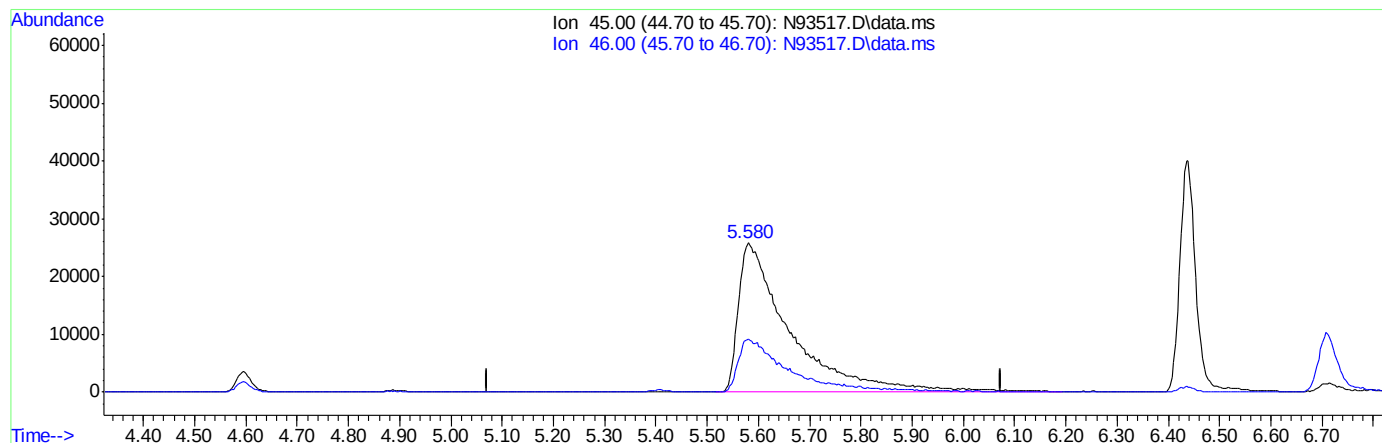
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:15:36 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration



TIC: N93517.D\data.ms

(3) Ethanol (p)

5.580min (+0.007) 4761.02ug/L m

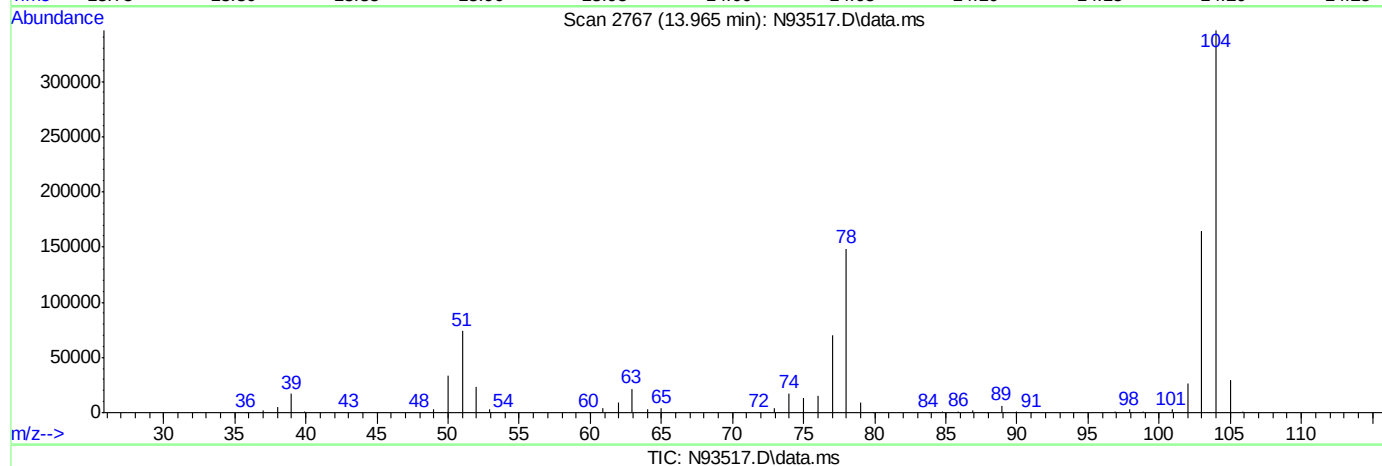
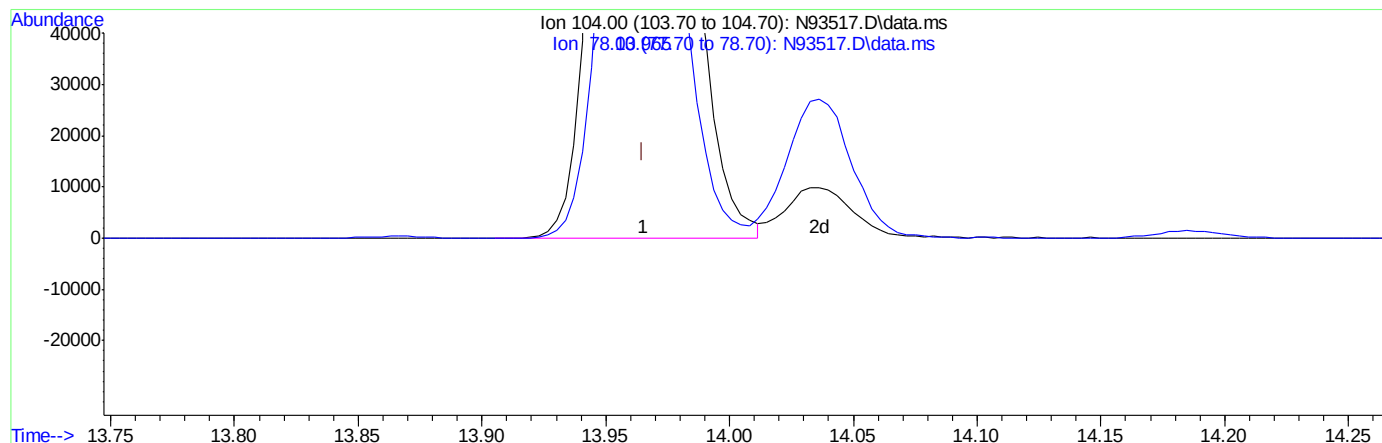
response 181603

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:16:17 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration



(77) styrene (p)

13.965min (+0.000) 60.47ug/L

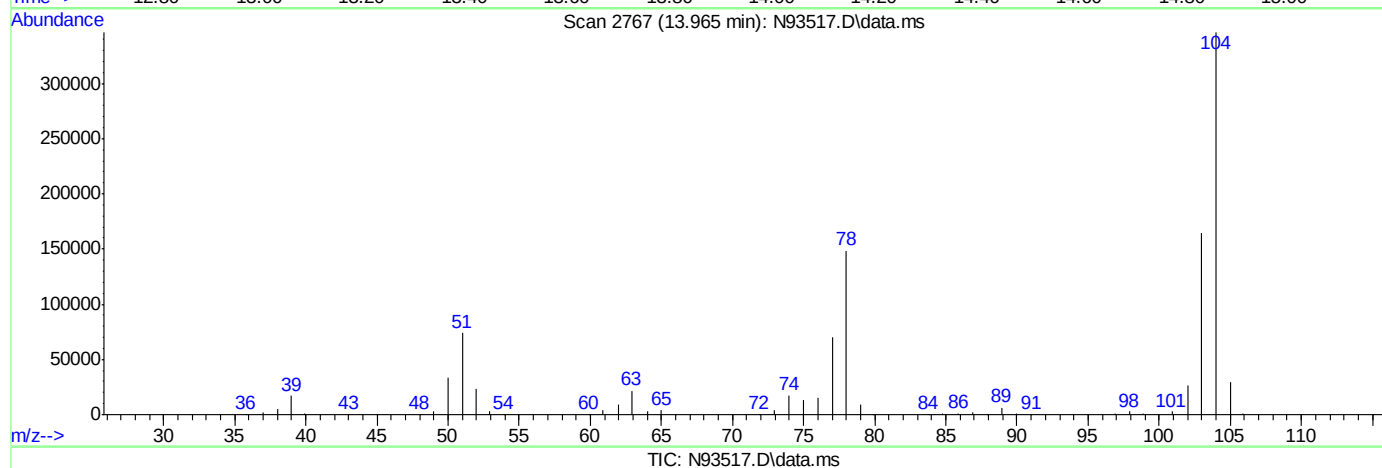
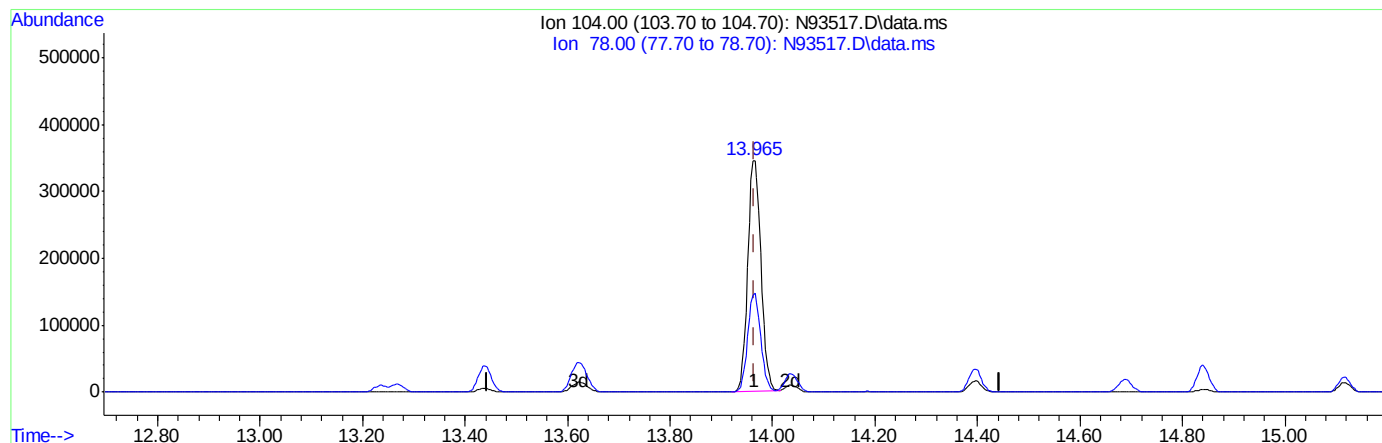
response 619929

Ion	Exp%	Act%
104.00	100	100
78.00	50.10	42.89
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:16:17 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration



(77) styrene (p)

13.965min (+0.000) 59.84ug/L m

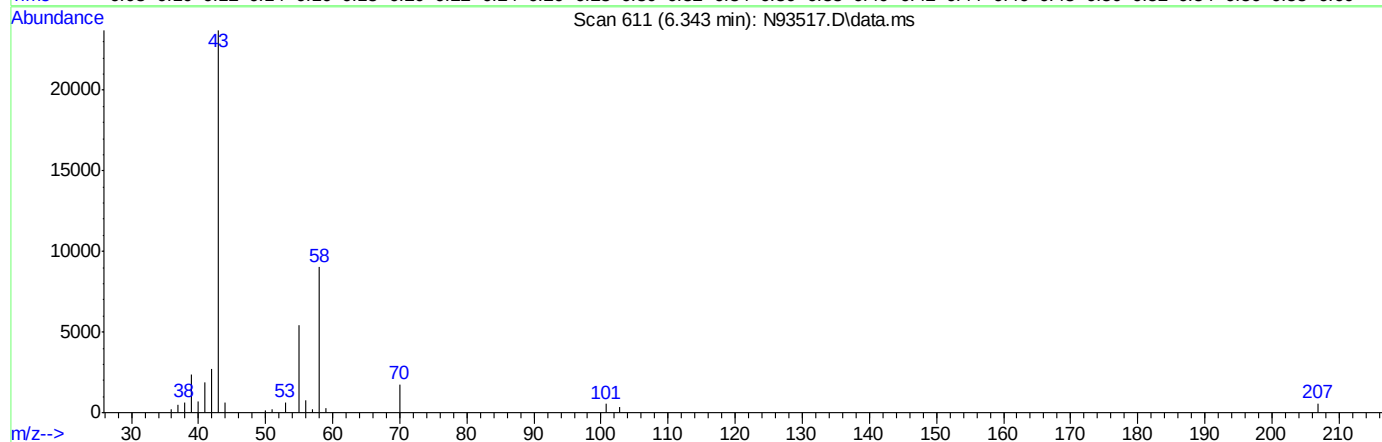
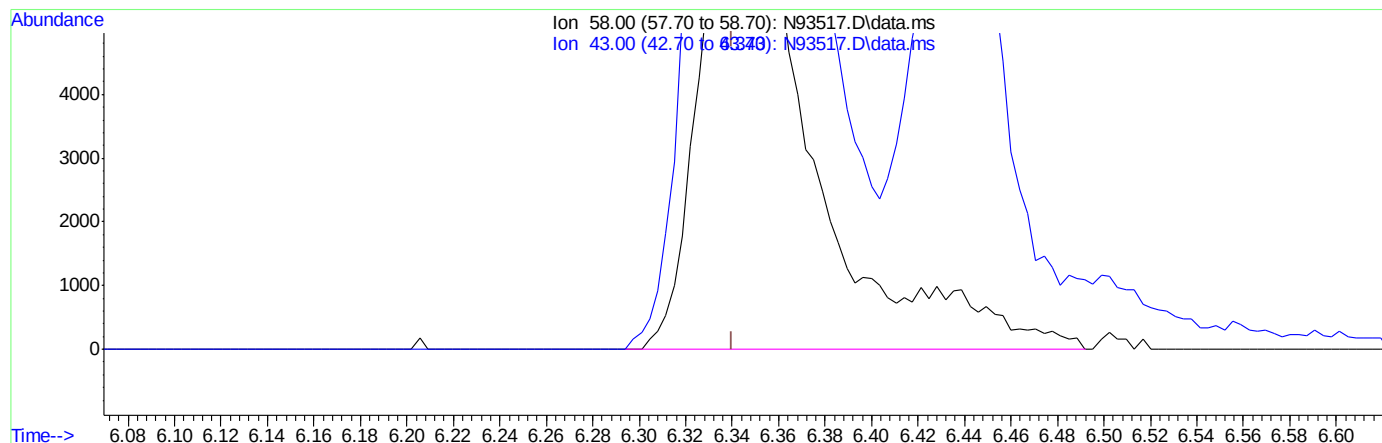
response 613443

Ion	Exp%	Act%
104.00	100	100
78.00	50.10	42.89
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:17:41 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration



TIC: N93517.D\data.ms

(16) acetone (p)

6.343min (+0.003) 59.67ug/L

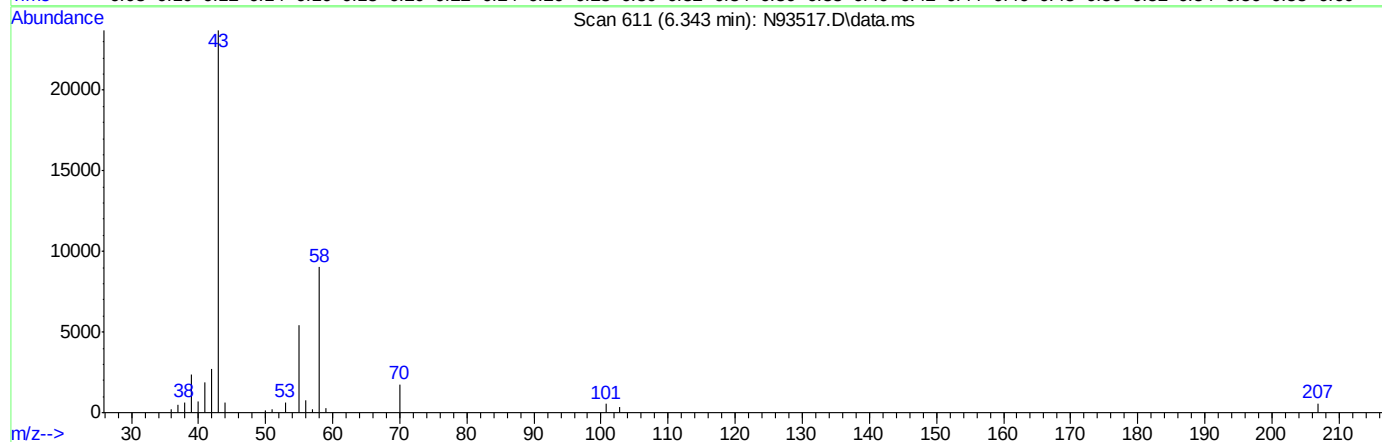
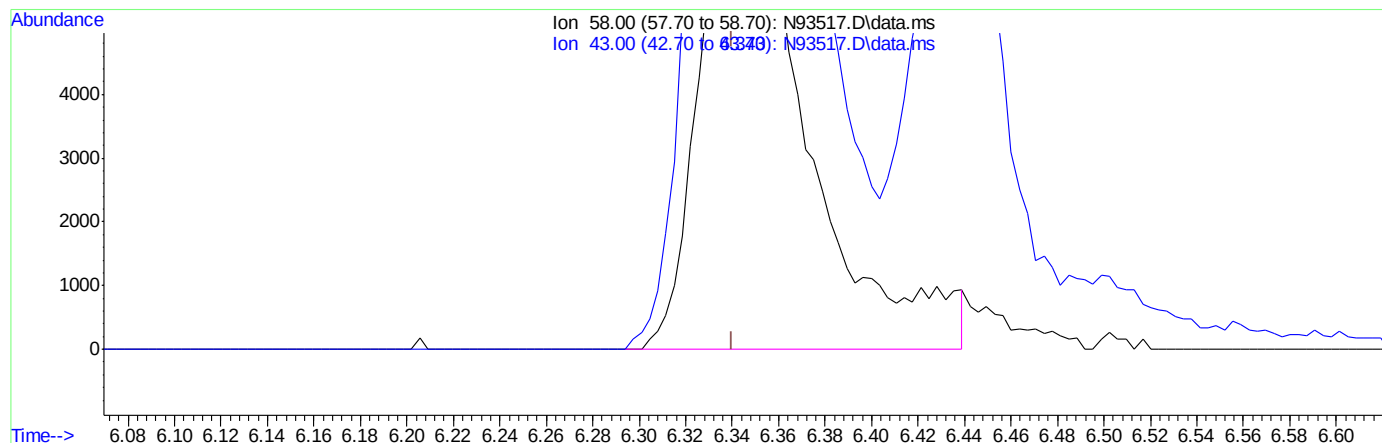
response 27026

Ion	Exp%	Act%
58.00	100	100
43.00	286.20	262.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141229\
Data File : N93517.D
Acq On : 30 Dec 2014 4:25 am
Operator : jaclynb
Sample : icv3452-50
Misc : ms33603,MSN3452,,,,5,1
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Dec 30 08:17:41 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:15:33 2014
Response via : Initial Calibration



TIC: N93517.D\data.ms

(16) acetone (p)

6.343min (+0.003) 57.18ug/L m

response 25898

Ion	Exp%	Act%
58.00	100	100
43.00	286.20	262.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93576.D
 Acq On : 31 Dec 2014 9:19 am
 Operator : jaclynb
 Sample : bs
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 12:20:44 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.714	65	90153	500.00	ug/L	# 0.00
4) pentafluorobenzene	9.111	168	362590	50.00	ug/L	0.00
43) 1,4-difluorobenzene	9.985	114	533127	50.00	ug/L	0.00
66) chlorobenzene-d5	13.234	82	276438	50.00	ug/L	0.00
80) 1,4-dichlorobenzene-d4	15.790	152	230481	50.00	ug/L	0.00
System Monitoring Compounds						
40) dibromofluoromethane (s)	8.765	113	164406	50.66	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.32%		
60) toluene-d8 (s)	11.777	98	646263	50.62	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	101.24%		
82) bromofluorobenzene (s)	14.457	95	233354	47.97	ug/L	0.00
Spiked Amount 50.000	Range 70 - 130		Recovery =	95.94%		
Target Compounds						
						Qvalue
2) tertiary butyl alcohol	6.792	59	113380	553.44	ug/L	# 100
3) Ethanol	5.576	45	160728m	5403.05	ug/L	
5) dichlorodifluoromethane	4.395	85	184403	44.45	ug/L	99
6) chloromethane	4.660	50	180707	48.81	ug/L	97
7) vinyl chloride	4.897	62	158537	55.06	ug/L	99
8) bromomethane	5.403	96	142634	54.33	ug/L	99
9) chloroethane	5.565	64	110280	48.52	ug/L	99
10) ethyl ether	6.435	59	119699	48.01	ug/L	68
11) acetonitrile	6.439	41	15340	45.77	ug/L	98
12) trichlorofluoromethane	6.205	101	307500	57.81	ug/L	98
13) freon-113	6.962	101	151244	47.18	ug/L	92
14) acrolein	6.205	56	74085	310.84	ug/L	92
15) 1,1-dichloroethene	6.785	96	127683	41.62	ug/L	# 70
16) acetone	6.343	58	21878	51.61	ug/L	87
17) Methyl Acetate	6.973	43	87147	34.98	ug/L	# 88
18) methylene chloride	6.941	84	170804	48.09	ug/L	# 66
19) methyl tert butyl ether	7.708	73	362081	49.99	ug/L	86
20) acrylonitrile	6.852	53	41948	45.72	ug/L	95
21) allyl chloride	7.029	41	204985	50.95	ug/L	76
22) trans-1,2-dichloroethene	7.619	96	159482	47.29	ug/L	# 74
23) iodomethane	6.856	142	162794	44.94	ug/L	89
24) carbon disulfide	7.216	76	385844	33.92	ug/L	100
26) vinyl acetate	7.973	43	205703	101.31	ug/L	92
27) chloroprene	8.231	53	200623	48.00	ug/L	64
28) di-isopropyl ether	8.263	45	515521	53.45	ug/L	90
29) methacrylonitrile	8.401	41	65581	49.67	ug/L	77
30) 2-butanone	8.291	72	19665	49.45	ug/L	# 1
31) Hexane	8.245	41	187497	47.57	ug/L	# 84
32) 1,1-dichloroethane	7.874	63	298163	48.80	ug/L	93
33) tert-butyl ethyl ether	8.655	59	284604	36.95	ug/L	89
34) isobutyl alcohol	8.259	43	393353	251.78	ug/L	92
35) 2,2-dichloropropane	8.723	77	240675	53.59	ug/L	95
36) cis-1,2-dichloroethene	8.440	96	185145	50.35	ug/L	# 74
37) ethyl acetate	8.259	43	393353	50.43	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93576.D
 Acq On : 31 Dec 2014 9:19 am
 Operator : jaclynb
 Sample : bs
 Misc : ms33623,MSN3454,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 12:20:44 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) bromochloromethane	8.609	128	81740	50.46	ug/L #	68
39) chloroform	8.641	83	305441	53.76	ug/L	99
41) Tetrahydrofuran	8.977	42	28708	45.27	ug/L	67
42) 1,1,1-trichloroethane	9.387	97	260677	52.07	ug/L	94
44) Cyclohexane	9.666	56	284751	47.11	ug/L #	73
45) carbon tetrachloride	9.751	117	229513	53.73	ug/L	98
46) 1,1-dichloropropene	9.560	75	227420	47.42	ug/L	96
47) benzene	9.790	78	706726	50.78	ug/L	98
48) 1,2-dichloroethane	9.292	62	207487	50.08	ug/L	91
49) tert-amyl methyl ether	9.900	73	209943	33.50	ug/L	85
50) heptane	10.250	43	160477	61.03	ug/L	87
51) trichloroethene	10.402	95	197666	52.92	ug/L	93
52) 1,2-dichloropropane	10.374	63	198670	55.13	ug/L	98
53) dibromomethane	10.349	93	96857	48.68	ug/L	87
54) bromodichloromethane	10.458	83	247013	56.31	ug/L	99
55) Methylcyclohexane	10.914	83	322636	53.00	ug/L #	74
56) 2-chloroethyl vinyl ether	10.374	63	198670	55.13	ug/L #	95
57) methyl methacrylate	10.550	69	91859	50.25	ug/L #	75
58) 1,4-dioxane	10.557	88	6356	205.57	ug/L #	58
59) cis-1,3-dichloropropene	11.073	75	308364	61.42	ug/L	98
61) 4-methyl-2-pentanone	11.172	43	114999	53.84	ug/L	95
62) toluene	11.848	92	454200	53.14	ug/L	98
63) trans-1,3-dichloropropene	11.491	75	240284	50.17	ug/L	92
64) 1,1,2-trichloroethane	11.664	83	137746	55.28	ug/L	99
65) ethyl methacrylate	11.862	69	182262	56.18	ug/L	74
67) tetrachloroethene	12.587	166	196352	49.67	ug/L	94
68) 1,3-dichloropropane	11.897	76	264901	52.13	ug/L	100
69) dibromochloromethane	12.191	129	182946	47.70	ug/L	99
70) 1,2-dibromoethane	12.442	107	144782	50.92	ug/L	100
71) 2-hexanone	12.032	43	93461	49.76	ug/L	97
72) chlorobenzene	13.269	112	475659	48.55	ug/L	94
73) 1,1,1,2-tetrachloroethane	13.184	131	182380	55.27	ug/L	97
74) ethylbenzene	13.439	91	905963	51.18	ug/L	94
75) m,p-xylene	13.622	106	673416	103.64	ug/L #	80
76) o-xylene	14.036	106	323118	51.12	ug/L #	82
77) styrene	13.962	104	550050	55.77	ug/L	90
78) bromoform	13.792	173	102947	46.56	ug/L	98
79) trans-1,4-dichloro-2-b...	14.188	53	32739	46.40	ug/L #	35
81) isopropylbenzene	14.397	105	866602	50.79	ug/L	99
83) bromobenzene	14.690	156	215561	51.05	ug/L #	85
84) 1,1,2,2-tetrachloroethane	14.040	83	179613	54.74	ug/L	99
85) 1,2,3-trichloropropane	14.188	75	190026	53.14	ug/L	99
86) n-propylbenzene	14.839	91	1025318	50.61	ug/L	98
87) 2-chlorotoluene	14.962	91	595078	49.54	ug/L	92
88) 4-chlorotoluene	15.040	91	610772	50.87	ug/L	95
89) 1,3,5-trimethylbenzene	15.118	105	766508	54.13	ug/L	98
90) tert-butylbenzene	15.422	91	433143	50.89	ug/L	90
91) 1,2,4-trimethylbenzene	15.528	105	744216	52.44	ug/L	100
92) sec-butylbenzene	15.641	105	951555	51.33	ug/L	99
93) 1,3-dichlorobenzene	15.751	146	368971	50.73	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
 Data File : N93576.D
 Acq On : 31 Dec 2014 9:19 am
 Operator : jaclynb
 Sample : bs
 Misc : ms33623,MSN3454,,,,5,1
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 12:20:44 2014
 Quant Method : C:\msdchem\1\methods\n141229w.m
 Quant Title : SW-846 Method 8260
 QLast Update : Tue Dec 30 08:41:58 2014
 Response via : Initial Calibration

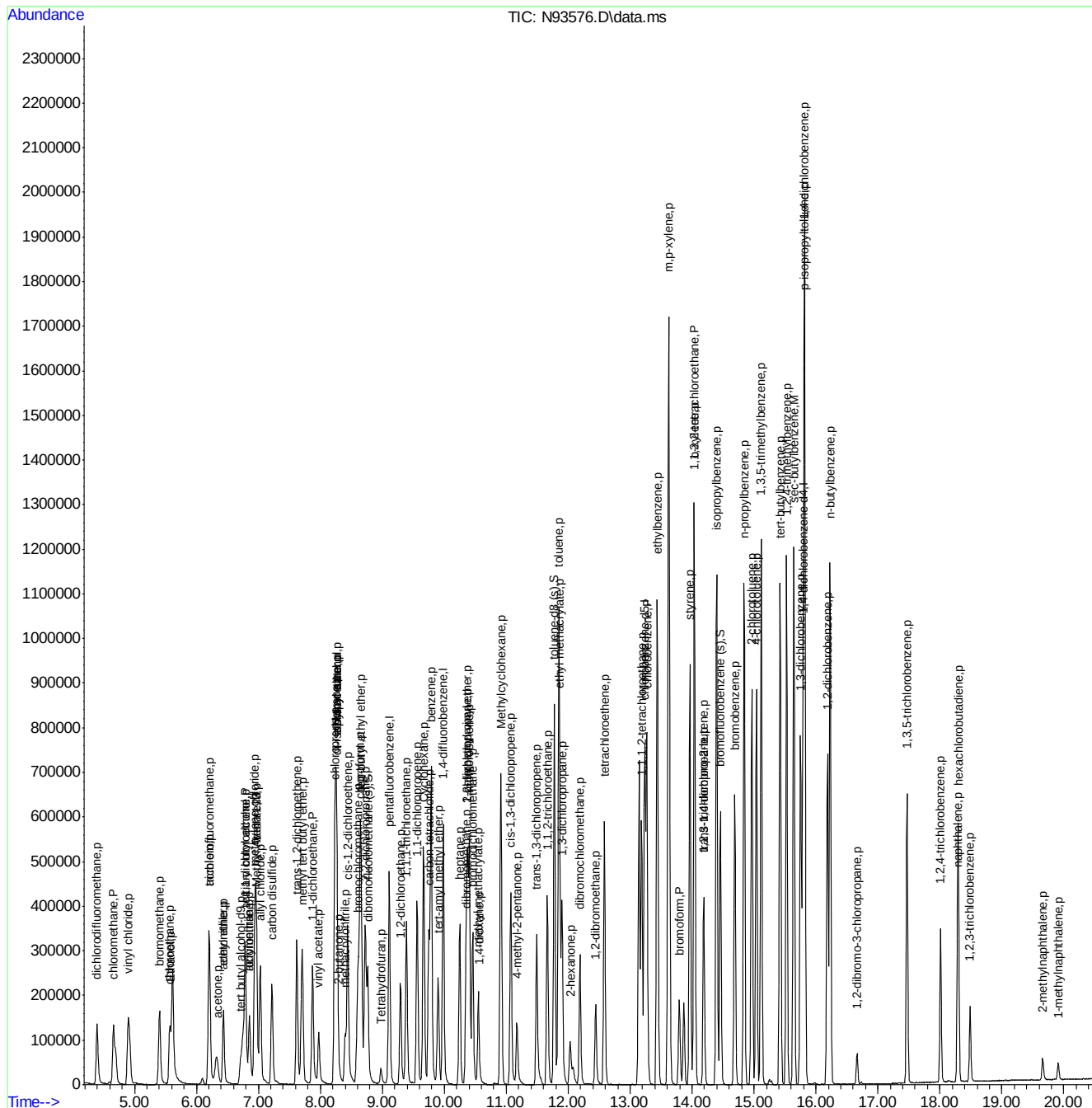
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	p-isopropyltoluene	15.811	119	756296	55.78	ug/L	95
95)	1,4-dichlorobenzene	15.818	146	361234	52.75	ug/L	93
96)	1,2-dichlorobenzene	16.186	146	345335	51.91	ug/L	97
97)	n-butylbenzene	16.228	91	737334	60.04	ug/L	97
98)	1,2-dibromo-3-chloropr...	16.659	75	20183	45.11	ug/L	84
99)	1,2,4-trichlorobenzene	18.010	180	121152	45.00	ug/L	100
100)	1,3,5-trichlorobenzene	17.469	180	225150	45.71	ug/L	99
101)	hexachlorobutadiene	18.296	225	110452	57.78	ug/L	94
102)	naphthalene	18.282	128	99909	43.80	ug/L	100
103)	1,2,3-trichlorobenzene	18.487	180	60619	40.95	ug/L	96
104)	2-methylnaphthalene	19.657	142	29710	27.42	ug/L #	100
105)	1-methylnaphthalene	19.908	142	23328	27.32	ug/L	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bs
Misc : ms33623,MSN3454,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 12:20:44 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



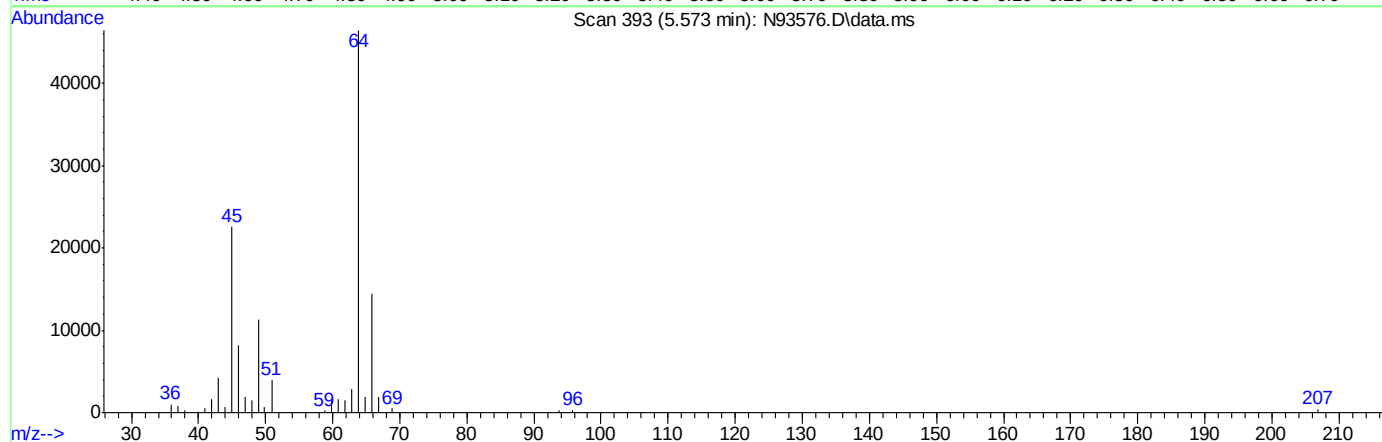
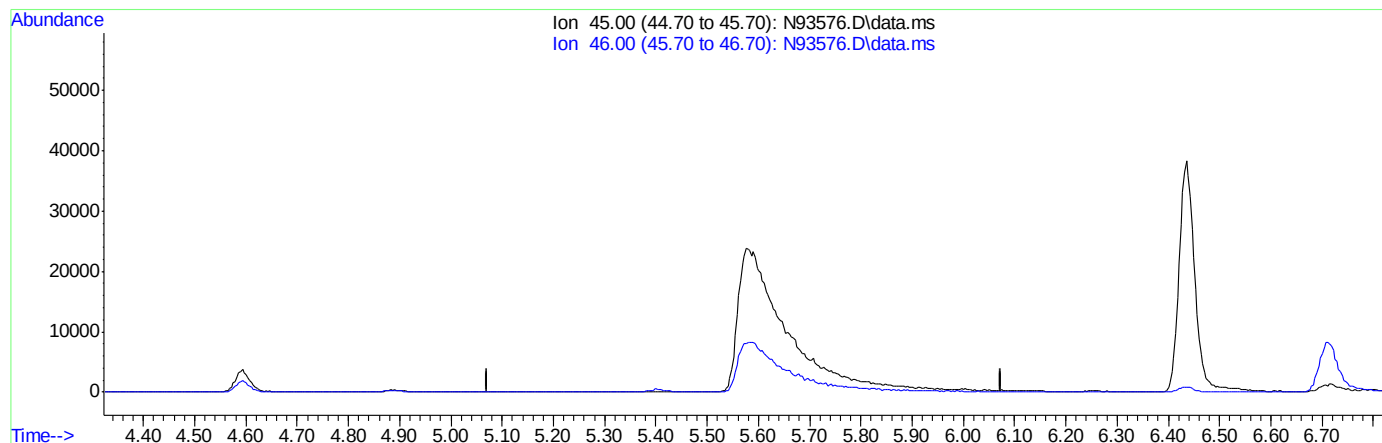
7.6.12



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bfb
Misc : ms33617,MSN3455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:54:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



(3) Ethanol (p)

5.573min (-5.573) 0.00ug/L

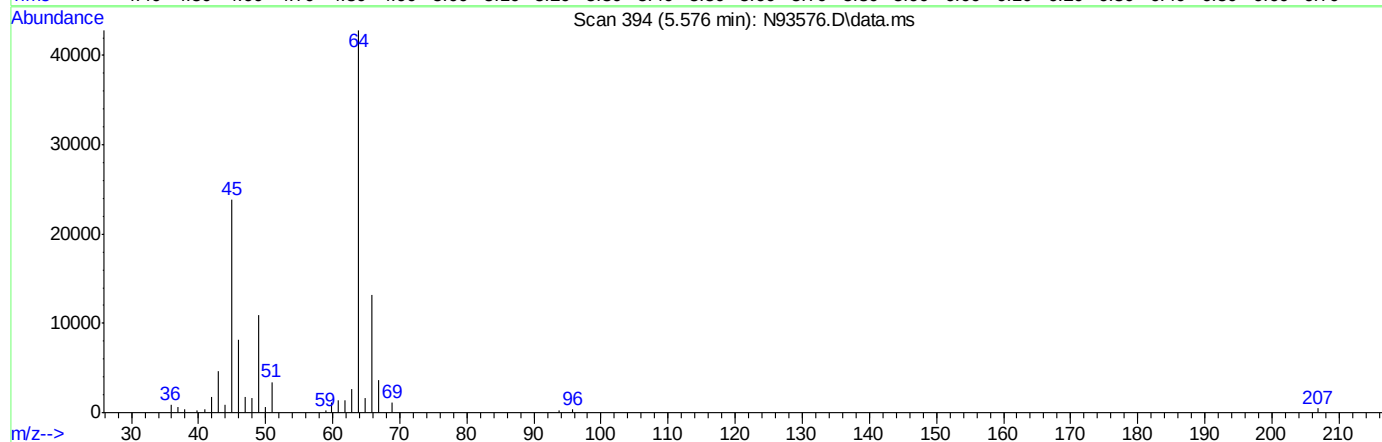
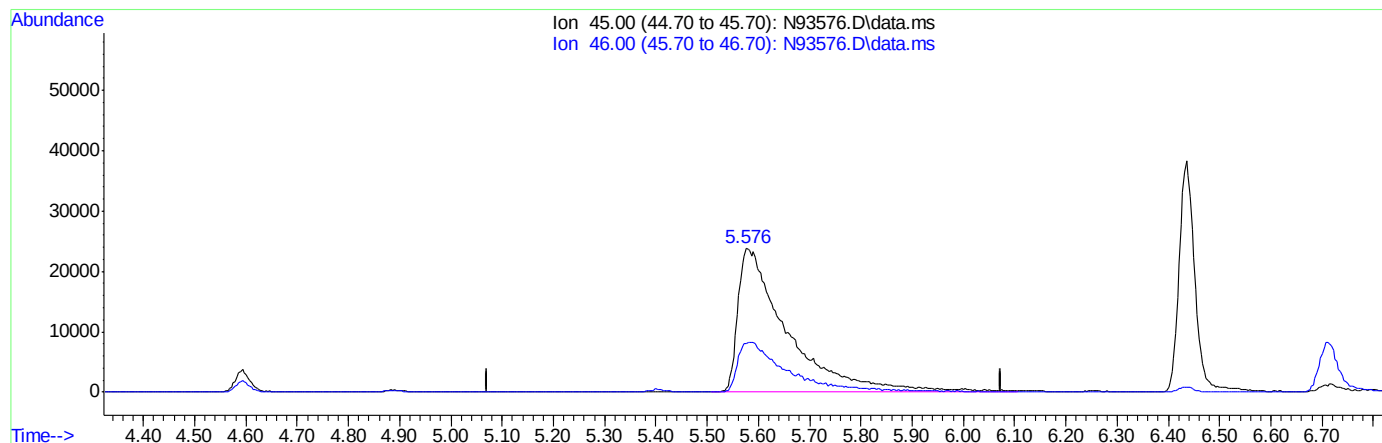
response 0

Ion	Exp%	Act%
45.00	100	0.00
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\N141231\
Data File : N93576.D
Acq On : 31 Dec 2014 9:19 am
Operator : jaclynb
Sample : bfb
Misc : ms33617,MSN3455,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 31 09:54:03 2014
Quant Method : C:\msdchem\1\methods\n141229w.m
Quant Title : SW-846 Method 8260
QLast Update : Tue Dec 30 08:41:58 2014
Response via : Initial Calibration



TIC: N93576.D\data.ms

(3) Ethanol (p)

5.576min (+0.003) 5403.05ug/L m

response 160728

Ion	Exp%	Act%
45.00	100	100
46.00	35.90	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS10042	8260 CC	200ug/ml
062	CC gas	1
046	bs	1
036	bs gas	1
059	15/55 C	125ug/ml

Daily Saved File

Tune file 1:	N93504
Tune file 2:	N/A
Initial Cal:	12/29/14
ID File:	N141229
ICAL Verified:	N93517
Sequence verified:	

Date: 12/29/14

Batch ID: MSN3452

Analysts: JPB

Signature: JPB

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
N93504	1b1K	N/A	N/A	8260	46	N/A	5ml	N/A	1:1	N/A	bpb
505	K3452-0.5	2.1	MS10042 2 MS10042 1		47						✓
506	-1				48						✓
507	-2				49						✓
508	-5				50						✓
509	-10				51						✓
510	-25				52						✓
511	1CC3452-50				53						✓
512	1C3452-100				54						✓
513	-200				55						✓
514	-400				56						✓
515	1b1K	N/A	N/A		57						✓
516	1b1K	1	1		58						✓
517	1CV3452-50	37/1/2	MS10046 1 MS10046 2		59						✓
518	1	1	1		60						not needed
519	1b1K	N/A	N/A		61						✓
520	1b1K	1	1		62						✓

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: JPB 1/2/15

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

Lot #	Description	Conc
MS10042	8260 cc	200 ug/ml
062	cc gas	
046	bs	
036	bs gas	
059	10/35	125 ug/ml

Daily Saved File

Tune file 1: N93576
Tune file 2: N/A
Initial Cal: 12/29/14
ID File: N141229
ICAL Verified: N93517
Sequence verified: GK

Date: 12/31/14

Batch ID: MSN3454

Analysts: JB

Signature: JB

*Note: If sample matrix is soil - method SW846 5035 used for preparation. SW846 5030 is purge and trap method for soil and water

pH paper LOT#202513 exp: 1/15/2016

Data File	Sample ID	Bot No.	Work Group	Test	ALS #	*MTX	Samp Amt.	% Sol	Dil. Fact.	pH	Comments
N93575	CC3452-50	2.1	MS10042 MS10062	8260	15	N/A	5mL	N/A	1:1	N/A	JB
576	bs	1.2	MS10046 MS10036		16						JB BV CC/bc
577	bsd	1			17						✓
578	blk	N/A	N/A		18						✓
579	mb	1			19						✓
580	MC36014-15	2	MS33623	V26 STD	20	WTB				2.2	✓
581	-1	3			21	GW					✓
582	-2	3			22						✓
583	-3	1			23						✓
584	-4	1			24						✓
585	-5	2			25						✓
586	-6	3			26						✓
587	-7	2			27						✓
588	-8	3			28						✓
589	-9	2			29						✓
590	-10	1			30						✓
591	-11	1			31						✓
592	-12	2			32						✓
593	-13	3			33						✓
594	-14	1			34						✓
595	D65963-5	2	MS33624		35	WTB					✓
596	-1	1			36	GW					✓
597	-2	3			37						✓
598	-3	2			38						✓
599	-4	2			39						✓
600	MC36014-1ms	3	MS33623		40	1mL		1:5			✓
601	-1ms	3			41						✓
02	blk	N/A	N/A		42	N/A	5mL		1:1	N/A	✓
03					43						✓

MTX = Matrix: Designate W for water, S for soil, O for oil.

Sample amount is reported in grams (wet) for soil and oil, mls for water.

MS001-05 Date: 07/22/13

Review: DM 1/2/15

Appendix C

Data Usability Summary Reports

Stantec Data Usability Summary Report**Report No. 041014-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800		
Stantec Validator: Elizabeth Crowley	Laboratory: Accutest – Marlborough, MA		
Date Validated: 04/09/14	Laboratory Project Number: MC29101		
Sample Start-End Date: 03/19/14	Laboratory Report Date: 04/01/14		
Parameters Validated: Volatile Organic Compounds by EPA SW-846 8260B			
Samples Validated: 12 aqueous field samples and 1 Trip Blank – See Samples Validated Table			
VALIDATION CRITERIA CHECK			
Data review based on <i>Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY</i> October 14, 2009, <i>USEPA National Functional Guidelines</i> (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation			
Validation Flags Applicable to this Review:			
U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.		
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.		
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.		
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.		
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.		
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.		
B	The analyte was detected in the method, field and/or trip blank.		
1.	Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments:			
2.	Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Refer to laboratory report.			
3.	Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:			
4.	Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:			
5.	Were sample holding times met?	Yes X	No
Comments:			
6.	Were correct concentration units reported?	Yes X	No
Comments:			

7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Instrument GCMSV – ICAL dated 02/26/14 – RRF <0.050 limit for acetone and 2-butanone. Associated sample results flagged “R”. Reason Code – ICAL Instrument GCMSV – ICV dated 02/26/14 – RRF <0.05 for acetone and 2-butanone. %D ±25% for 2-hexanone. Associated non-detect sample results flagged “UJ”. All 2-hexanone sample results non-detect. Acetone and 2-butanone previously rejected. Reason Code – ICV Instrument GCMSV – CCAL dated 03/25/14 – RRF <0.05 for acetone and 2-butanone. Associated results previously rejected. %D ±25% limits for 1,2-dibromo-3-chloropropane, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene and naphthalene. Associated non-detect sample results flagged “UJ”. Associated results non-detect for all four analytes. Reason Code – CCAL		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes	No X
Comments: Batch MSV1088 - %R below 70% limit for acetone and dichlorodifluoromethane. Associated non-detect dichlorodifluoromethane sample results flagged “UJ”. All sample results non-detect. Acetone results previously rejected. Reason Code – LCS		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes NA	No
Comments: Site specific MS/MD sample not analyzed, non-specific sample analyzed. MS/DS %Rs below 70% limit for acetone, 2-butanone, 2-hexanone, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, dichlorodifluoromethane and naphthalene. Laboratory control sample within limits for all analytes except dichlorodifluoromethane and acetone. No qualifying action required since acetone and dichlorodifluoromethane results previously qualified.		
13. Were RPDs within 30% control limit?	Yes	No X
Comments: MS/DS RPD >30% for naphthalene and 1,2,3-trichlorobenzene. Associated sample results non-detect. No qualifying action required.		
14. Were dilutions required on any samples?	Yes	No X
Comments:		
15. Were Tentatively Identified Compounds (TIC) present?	Yes	No X
Comments:		

16. Were organic system performance/instrument tune criteria met?	Yes X	No
Comments:		
17. Were GC/MS internal standards within method criteria?	Yes X	No
Comments:		
18. Were inorganic method performance criteria met?	Yes	No
NA		
Comments: No inorganic analyses requested.		
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results.	Yes X	No
Duplicate Sample Nos. MW-22FD MW-22		
Comments: All sample results non-detect, RPD within $\pm 25\%$ limit.		
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No Initials EAC
Comments:		
21. Other:	Yes	No X
Comments:		
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT Data are usable as flagged. See Form 1s for flagged data.		
Precision:	Acceptable X	Unacceptable Initials EAC
Comments:		
Sensitivity:	Acceptable X	Unacceptable Initials EAC
Comments:		
Accuracy:	Acceptable X	Unacceptable Initials EAC
Comments:		
Representativeness:	Acceptable X	Unacceptable Initials EAC
Comments:		
Method Compliance:	Acceptable X	Unacceptable Initials EAC
Comments:		
Completeness:	Acceptable X	Unacceptable Initials EAC
Comments:		

Stantec Data Usability Summary Report**Report No. 071014-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800		
Stantec Validator: Elizabeth Crowley	Laboratory: Accutest – Marlborough, MA		
Date Validated: 07/09/14	Laboratory Project Number: MC31396		
Sample Start-End Date: 06/12/14	Laboratory Report Date: 06/30/14		
Parameters Validated: Volatile Organic Compounds by EPA SW-846 8260B			
Samples Validated: 14 aqueous field samples and 1 Trip Blank – See Samples Validated Table			
VALIDATION CRITERIA CHECK			
Data review based on <i>Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY</i> October 14, 2009, <i>USEPA National Functional Guidelines</i> (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation			
Validation Flags Applicable to this Review:			
U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.		
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.		
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.		
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.		
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.		
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.		
B	The analyte was detected in the method, field and/or trip blank.		
1.	Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments:			
2.	Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Refer to laboratory report.			
3.	Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:			
4.	Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:			
5.	Were sample holding times met?	Yes X	No
Comments:			
6.	Were correct concentration units reported?	Yes X	No
Comments:			

7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes X	No
Comments: TRIP BLANK – acetone =22.8 µg/L. Associated sample results non-detect for acetone. No qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Instrument GCMSU CCAL dated 06/19/14 – %D ±25% above limits for difluorodichloromethane and vinyl acetate. Associated results non-detect for both analytes. No qualifying action required.		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes	No X
Comments: Batch MSU924 - %R below 70% limit for acetone and 2-hexanone. Associated non-detect acetone and 2-hexanone sample results flagged "UJ". All sample results non-detect except acetone in the TRIP BLANK. TRIP BLANK acetone result flagged "J". Reason Code – LCS Batch MSU924 - %Rs above limits for vinyl acetate. Associated sample results non-detect. No qualifying action required.		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes	No X
Comments: Site specific MS/MD sample MW-1 (DOT) analyzed in batch MSU924. MSM/D %Rs below 70% limit for acetone, 2-butanone and 2-hexanone. Associated MW-1 (DOT) results non-detect and flagged "UJ". No additional qualifying action required. Reason Code – MS		
13. Were RPDs within 30% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes	No X
Comments:		
15. Were Tentatively Identified Compounds (TIC) present?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL		
16. Were organic system performance/instrument tune	Yes	No

criteria met?	X		
Comments:			
17. Were GC/MS internal standards within method criteria?	Yes X	No	
Comments:			
18. Were inorganic method performance criteria met?	Yes NA	No	
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results.	Yes X	No	
Duplicate Sample Nos. FIELD DUPLICATE MW-D			
Comments: All RPDs within $\pm 25\%$ limit.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:	Yes	No X	
Comments:			
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT Data are usable as flagged. See Form 1s for flagged data.			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report**Report No. 100714-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800		
Stantec Validator: Elizabeth Crowley	Laboratory: Accutest – Marlborough, MA		
Date Validated: 10/03/14	Laboratory Project Number: MC33777		
Sample Start-End Date: 09/18/14	Laboratory Report Date: 10/01/14		
Parameters Validated: Volatile Organic Compounds by EPA SW-846 8260C			
Samples Validated: 14 aqueous field samples and 1 Trip Blank – See Samples Validated Table			
VALIDATION CRITERIA CHECK			
Data review based on <i>Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY</i> October 14, 2009, <i>USEPA National Functional Guidelines</i> (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation			
Validation Flags Applicable to this Review:			
U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.		
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.		
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.		
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.		
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.		
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.		
B	The analyte was detected in the method, field and/or trip blank.		
1.	Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments:			
2.	Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Refer to laboratory report Case Narrative for matrix non-conformance. Matrix information discussed in item 12 for this report.			
3.	Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:			
4.	Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:			
5.	Were sample holding times met?	Yes X	No
Comments:			
6.	Were correct concentration units reported?	Yes X	No

Comments:		
7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Instrument GCMSN ICAL dated 09/19/14 - %RSD above limits for bromomethane, 2,2-dichloropropane, iodomethane, naphthalene and vinyl chloride. Linear regression coefficient within limits. Associated sample results flagged "UJ" if non-detect or "J" if positive. Reason Code – ICAL ICAL dated 09/19/14 – RRF below 0.05 for first and last calibration concentrations. The average RRF exceeds 0.050. Associated sample results flagged "R". Reason Code – RRF ICV dated 09/19/14 – %D ±25% below limits for dichlorodifluoromethane, trans-1,3-dichloropropene, 1,2-dibromo-3-chloropropane and naphthalene. All sample results are non-detect and flagged "UJ". Reason Code – ICV CCAL dated 09/29/14 - %D±25% below limits for vinyl acetate and 2-hexanone. All sample results are non-detect and flagged "UJ". Reason Code - CCAL		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes	No X
Comments: Batch MSN3355 - %R above 70% limit for 2-butanone, 2-hexanone and naphthalene. Associated sample results are non-detect. No qualifying action required.		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes	No X
Comments: Site specific MS/MD sample MW-1 (DOT) analyzed in batch MSN3355. MSM/D %Rs below 70% limit for acetone. Associated MW-1 (DOT) results non-detect and flagged "UJ". No additional qualifying action required. Reason Code – MS		
13. Were RPDs within 30% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes	No X

Comments:			
15. Were Tentatively Identified Compounds (TIC) present?	Yes X	No	
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic system performance/instrument tune criteria met?	Yes X	No	
Comments:			
17. Were GC/MS internal standards within method criteria?	Yes X	No	
Comments:			
18. Were inorganic method performance criteria met?	Yes	No	NA
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results.	Yes X	No	
Duplicate Sample Nos. FIELD DUPLICATE MW-F			
Comments: All RPDs within $\pm 25\%$ limit.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:	Yes	No X	
Comments:			
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT Data are usable as flagged. See Form 1s for flagged data.			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Data Usability Summary Report**Report No. 010715-EC-01**

Project Name: Lockheed, Utica, NY	Project Number: 190500800		
Stantec Validator: Elizabeth Crowley	Laboratory: Accutest – Marlborough, MA		
Date Validated: 01/07/15	Laboratory Project Number: MC36014		
Sample Start-End Date: 12/17/14	Laboratory Report Date: 01/05/15		
Parameters Validated: Volatile Organic Compounds by EPA SW-846 8260C			
Samples Validated: 14 aqueous field samples and 1 Trip Blank – See Samples Validated Table			
VALIDATION CRITERIA CHECK			
Data review based on <i>Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY</i> October 14, 2009, <i>USEPA National Functional Guidelines</i> (USEPA, 1999b), USEPA Region II SOPs and NYSDEC ASP 2005 – Tier III Validation			
Validation Flags Applicable to this Review:			
U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.		
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.		
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.		
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.		
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.		
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.		
B	The analyte was detected in the method, field and/or trip blank.		
1.	Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments:			
2.	Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Refer to laboratory report Case Narrative for matrix and calibration non-conformance. Calibration information is discussed in item 9 and matrix information discussed in item 12 for this report.			
3.	Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:			
4.	Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:			
5.	Were sample holding times met?	Yes X	No
Comments:			
6.	Were correct concentration units reported?	Yes X	No

Comments:		
7. Were detections found in laboratory blank samples?	Yes	No X
Comments:		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes	No X
Comments: Instrument GCMSN ICV dated 12/30/14 - %D $\pm$25% above limits for vinyl acetate at 56%. Associated sample results non-detect, no qualifying action required. CCAL dated 12/31/14 - %D$\pm$25% below limits for carbon disulfide. All sample results are non-detect and flagged "UJ". Reason Code - CCAL CCAL dated 12/31/14 - %D $\pm$25% above limits for vinyl acetate at 103%. Associated sample results non-detect, no qualifying action required.		
10. Were surrogate recoveries within 70-130% control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits?	Yes	No X
Comments: Batch MSN3454 - %R above 130% limit for vinyl acetate at 202%. Associated sample results are non-detect. No qualifying action required. Batch MSN3454 - %R below 70% limit for carbon disulfide at 68%. Associated sample results non-detect and flagged "UJ". Reason Code - CCAL		
12. Were site specific matrix spike (MS/MD) recoveries within 70-130% control limits?	Yes	No X
Comments: Site specific MS/MD sample MW-1 (DOT) analyzed in batch MSN3454. MSM/D %Rs below 70% limit for acetone at 67%. Associated MW-1 (DOT) results non-detect and flagged "UJ". No additional qualifying action required. Reason Code – MS Site specific MS/MD sample MW-1 (DOT) analyzed in batch MSN3454. MSM/D %Rs above 130% limit for 4-methyl-2-pentanone at 138% and naphthalene at 133%. Associated MW-1 (DOT) results non-detect, no additional qualifying action required.		
13. Were RPDs within 30% control limit?	Yes X	No
Comments:		
14. Were dilutions required on any samples?	Yes	No X

Comments:			
15. Were Tentatively Identified Compounds (TIC) present?	Yes X	No	
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic system performance/instrument tune criteria met?	Yes X	No	
Comments:			
17. Were GC/MS internal standards within method criteria?	Yes X	No	
Comments:			
18. Were inorganic method performance criteria met?	Yes	No	
NA			
Comments: No inorganic analyses requested.			
19. Were field duplicates collected? If so, discuss the precision (RPD) of the results.	Yes X	No	
Duplicate Sample Nos. FIELD DUPLICATE MW-D			
Comments: All RPDs within $\pm 25\%$ limit.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:	Yes	No X	
Comments:			
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT Data are usable as flagged. See Form 1s for flagged data.			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			