Former Lockheed Martin French Road Facility
Utica, New York

# West Lot Groundwater Monitoring

## Summary of First Quarter 2014 Groundwater Sampling

**April 21, 2014**

## I. Background

Based on the results of previous investigations, Lockheed Martin Company (LMC) has agreed to perform additional groundwater sampling at the West Lot portion of the French Road facility in Utica, New York, in accordance with frequencies and methodology approved by NYSDEC. Groundwater gauging, sampling, and analysis are scheduled to be performed quarterly during 2014. The intent of the sampling is to supplement previous investigations and assess the suitability of the site for closure. A Site Location Map is presented in the Attachments as Figure 1.

Sampling is being performed using passive diffusion bags (PDBs) which is consistent with past sampling events as approved by NYSDEC. The program includes a total of 13 monitoring wells; the well locations are shown on the attached Figure 2.

## II. Quarter 1 Well Gauging and Sampling

The Quarter 1 (Q1) sampling event was performed during the period March 5 through 19, 2014. Groundwater levels were gauged on March 4, 2014. Wells PZ-1 and PZ-2 could not be accessed. Well PZ-1 could not be found because of excessive ice sheet buildup over the area of the well. Well PZ-2 had ice buildup in the well casing. PDB samplers were deployed into 11 wells on March 5. The PDBs were retrieved on March 19, 2014. The fluids in the PDBs were transferred to 40-ml vials, and the samples were chilled and shipped to Accutest Laboratories of Marlboro, Massachusetts under chain-of-custody protocol and received at the lab on March 21, 2014. Samples were analyzed for volatile organic compounds (VOCs) using USEPA Method 8260C. A Field Duplicate sample was obtained from well MW-22 for QA/QC purposes.

## III. Discussion of Results

### A. Groundwater Flow Direction

Q1 water level readings are summarized on Table 1; Figure 3 depicts groundwater contours based on the water level readings. Groundwater flow is generally toward the south-southwest with some local variation at a relatively low gradient. This is consistent with conditions observed in previous sampling/gauging events.

## B. Groundwater Quality

The analytical results are summarized in Table 2 and depicted graphically on Figure 4. A copy of the laboratory report is included in Attachment 1, and a Data Usability Summary Report prepared for the data is included as Attachment 2.

Of the eleven wells sampled, eight wells showed no detections of VOCs. The other three wells had only one individual VOC detected in them (as listed below) and each detection was below the NYSDEC groundwater standard of 5 micrograms per liter (µg/L):

| Well | Detected Compound | Concentration (µg/L) |
|---|---|---|
| MW-1-DOT | cis-1,2-Dichloroethene | 4.2 |
| MW-24 | Tetrachloroethene | 1.2 |
| MW-F | Trichloroethene | 3.5 |

These results continue to indicate reduced VOC concentrations in monitoring wells MW-1-DOT and MW-F. Additional monitoring will be necessary at MW-24 to confirm the relationship of the latest data with earlier results. Other wells such as MW-D, MW-E, and PW-1, which historically have been showing reduced concentrations, did not exhibit the presence of VOCs in this sampling round. Wells MW-23 and MW-24, which are located downgradient of the former Burn Pit area, had several VOCs evident in the last sampling event in August 2013, some of which were above standards and guidance values. MW-23 did not exhibit any VOC presence in this sampling round and as noted above MW-24 contained only one VOC at a level below standards and guidance values. As with MW-24, additional quarterly monitoring will be useful in MW-23 to identify long term results and possible seasonal variation.

**Attachments:**

Table 1 - Groundwater Elevation Measurements
Table 2 - Summary of Volatile Organic Compounds in Groundwater Samples
Figure 1- Site Location Map
Figure 2 - Monitoring Well Network
Figure 3 - Groundwater Contours
Figure 4 - Groundwater Monitoring Data
Attachment 1 - Laboratory Report
Attachment 2 - Data Usability Summary Report (with data attachment)

# TABLES

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## 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) |
|---|---|---|---|
| | | March 4, 2014 | |
| **West Lot Site** | | | |
| MW-1-DOT | 508.70 | 9.72 | 498.98 |
| MW-22 | 509.30 | 7.39 | 501.91 |
| MW-23 | 508.70 | 6.90 | 501.80 |
| MW-24 | 508.80 | 6.78 | 502.02 |
| MW-B | 509.85 | 5.99 | 503.86 |
| MW-C | 509.10 | 6.41 | 502.69 |
| MW-D | 508.95 | 6.66 | 502.29 |
| MW-E | 508.50 | 6.56 | 501.94 |
| MW-F | 509.75 | 7.82 | 501.93 |
| PW-1 | 503.26 | 1.75 | 501.51 |
| | | | |
| **10-Acre Parcel** | | | |
| MW-1 | 508.65 | 5.84 | 502.81 |
| MW-5 | 509.75 | 7.75 | 502.00 |
| | | | |
| **Western Parking Lot** | | | |
| PZ-1 | 508.56 | NG | - |
| PZ-2 | 508.95 | NG | - |

**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. NG = not gaged.

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## Table 2. Summary of Volatile Organic Compounds in Groundwater Samples

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| 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 |
| 1,1,1-TRICHLOROETHANE | 5 | 0.51 | < 0.40 | < 1.0 | < 0.94 [< 0.94] | < 1.0 |
| 1,1-DICHLOROETHANE | 5 | < 0.75 | < 0.75 | < 1.0 | < 0.37 [< 0.37] | < 1.0 |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | < 0.50 | < 1.0 | < 0.35 [< 0.35] | < 1.0 |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.30 [< 0.30] | < 1.0 |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.26 [< 0.26] | < 1.0 |
| BENZENE | 1 | < 0.41 | < 0.41 | < 0.50 | < 0.45 [< 0.45] | < 0.50 |
| CHLOROBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.48 [< 0.48] | < 1.0 |
| CHLOROETHANE | 5 | < 0.40 | < 0.40 | < 2.0 | < 0.84 [< 0.84] | < 2.0 |
| CIS-1,2-DICHLOROETHENE | 5 | **8.0** | **7.9** | **6.1** | **6.5 [6.4]** | **4.2** |
| ETHYLBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.38 [< 0.38] | < 1.0 |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.70 [< 0.70] | < 1.0 |
| METHYLENE CHLORIDE | 5 | NA | NA | NA | < 0.41 [< 0.41] | < 2.0 |
| O-XYLENE | NS | < 0.40 | < 0.40 | < 1.0 | < 0.41 [< 0.41] | < 1.0 |
| TETRACHLOROETHENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.61 [< 0.61] | < 1.0 |
| TOLUENE | 5 | < 0.60 | < 0.60 | < 1.0 J | < 0.45 [< 0.45] | < 1.0 |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | < 0.42 | < 1.0 | < 0.54 [< 0.54] | < 1.0 |
| TRICHLOROETHENE | 5 | < 0.46 | < 0.46 | < 1.0 | < 0.45 [< 0.45] | < 1.0 |
| VINYL CHLORIDE | 2 | < 1.0 | < 1.0 | < 1.0 | < 0.61 [< 0.61] | < 1.0 |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.41 [< 0.41] | < 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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

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## Table 2. Summary of Volatile Organic Compounds in Groundwater Samples

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

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

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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**Table 2. Summary of Volatile Organic Compounds in Groundwater Samples**

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| Constituent | NYSDEC TOGS 1.1.1 Water Guidance Values | MW-5 | | | | MW-22 | | |
|---|---|---|---|---|---|---|---|---|
| | | 08/24/09 | 05/08/12 | 08/14/13 | 03/19/14 | 05/08/12 | 08/14/13 | 03/19/14 |
| 1,1,1-TRICHLOROETHANE | 5 | < 0.40 | < 1.0 | < 0.94 | < 1.0 | < 1.0 | < 0.94 | < 1.0 [< 1.0] |
| 1,1-DICHLOROETHANE | 5 | < 0.75 | < 1.0 | < 0.37 | < 1.0 | < 1.0 | < 0.37 | < 1.0 [< 1.0] |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | < 1.0 | < 0.35 | < 1.0 | < 1.0 | < 0.35 | < 1.0 [< 1.0] |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 1.0 | < 0.30 | < 1.0 | < 1.0 | < 0.30 | < 1.0 [< 1.0] |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 1.0 | < 0.26 | < 1.0 | < 1.0 | < 0.26 | < 1.0 [< 1.0] |
| BENZENE | 1 | < 0.41 | < 0.50 | < 0.45 | < 0.50 | < 0.50 | < 0.45 | < 0.50 [< 0.50] |
| CHLOROBENZENE | 5 | < 0.40 | < 1.0 | < 0.48 | < 1.0 | < 1.0 | < 0.48 | < 1.0 [< 1.0] |
| CHLOROETHANE | 5 | < 0.40 | < 2.0 | < 0.84 | < 2.0 | < 2.0 | < 0.84 | < 2.0 [< 2.0] |
| CIS-1,2-DICHLOROETHENE | 5 | < 0.40 | < 1.0 | < 0.54 | < 1.0 | < 1.0 | < 0.54 | < 1.0 [< 1.0] |
| ETHYLBENZENE | 5 | < 0.40 | < 1.0 | < 0.38 | < 1.0 | < 1.0 | < 0.38 | < 1.0 [< 1.0] |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 0.70 | < 1.0 | < 1.0 | < 0.70 | < 1.0 [< 1.0] |
| METHYLENE CHLORIDE | 5 | NA | NA | < 0.41 | < 2.0 | NA | < 0.41 | < 2.0 [< 2.0] |
| O-XYLENE | NS | < 0.40 | < 1.0 | < 0.41 | < 1.0 | < 1.0 | < 0.41 | < 1.0 [< 1.0] |
| TETRACHLOROETHENE | 5 | < 0.40 | < 1.0 | < 0.61 | < 1.0 | < 1.0 | < 0.61 | < 1.0 [< 1.0] |
| TOLUENE | 5 | < 0.60 | < 1.0 J | < 0.45 | < 1.0 | < 1.0 J | < 0.45 | < 1.0 [< 1.0] |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | < 1.0 | < 0.54 | < 1.0 | < 1.0 | < 0.54 | < 1.0 [< 1.0] |
| TRICHLOROETHENE | 5 | < 0.46 | < 1.0 | < 0.45 | < 1.0 | < 1.0 | < 0.45 | < 1.0 [< 1.0] |
| VINYL CHLORIDE | 2 | < 1.0 | < 1.0 | < 0.61 | < 1.0 | < 1.0 | < 0.61 | < 1.0 [< 1.0] |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 0.41 | < 1.0 | < 1.0 | < 0.41 | < 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) [ ] - Duplicate sample result.
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10) 2014 data have been validated as described in attached Data Usability Summary Report.

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**Table 2. Summary of Volatile Organic Compounds in Groundwater Samples**

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| Constituent | NYSDEC TOGS 1.1.1 Water Guidance Values | MW-23 | | | MW-24 | | |
|---|---|---|---|---|---|---|---|
| | | 05/08/12 | 08/14/13 | 03/19/14 | 05/08/12 | 08/14/13 | 03/19/14 |
| 1,1,1-TRICHLOROETHANE | 5 | < 1.0 | < 0.94 | < 1.0 | < 1.0 | < 0.94 | < 1.0 |
| 1,1-DICHLOROETHANE | 5 | < 1.0 | < 0.37 | < 1.0 | < 1.0 | < 0.37 | < 1.0 |
| 1,2-DICHLOROBENZENE | 3 | < 1.0 | < 0.35 | < 1.0 | < 1.0 | < 0.35 | < 1.0 |
| 1,3-DICHLOROBENZENE | 3 | < 1.0 | < 0.30 | < 1.0 | < 1.0 | < 0.30 | < 1.0 |
| 1,4-DICHLOROBENZENE | 3 | < 1.0 | < 0.26 | < 1.0 | < 1.0 | < 0.26 | < 1.0 |
| BENZENE | 1 | < 0.50 | < 0.45 | < 0.50 | < 0.50 | < 0.45 | < 0.50 |
| CHLOROBENZENE | 5 | < 1.0 | < 0.48 | < 1.0 | < 1.0 | < 0.48 | < 1.0 |
| CHLOROETHANE | 5 | < 2.0 | < 0.84 | < 2.0 | < 2.0 | < 0.84 | < 2.0 |
| CIS-1,2-DICHLOROETHENE | 5 | < 1.0 | **7.3** | < 1.0 | < 1.0 | **20.4** | < 1.0 |
| ETHYLBENZENE | 5 | < 1.0 | < 0.38 | < 1.0 | < 1.0 | < 0.38 | < 1.0 |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 0.70 | < 1.0 | < 1.0 | < 0.70 | < 1.0 |
| METHYLENE CHLORIDE | 5 | NA | < 0.41 | < 2.0 | NA | < 0.41 | < 2.0 |
| O-XYLENE | NS | < 1.0 | < 0.41 | < 1.0 | < 1.0 | < 0.41 | < 1.0 |
| TETRACHLOROETHENE | 5 | < 1.0 | < 0.61 | < 1.0 | < 1.0 | **15.7** | **1.2** |
| TOLUENE | 5 | < 1.0 J | < 0.45 | < 1.0 | < 1.0 J | < 0.45 | < 1.0 |
| TRANS-1,2-DICHLOROETHENE | 5 | < 1.0 | < 0.54 | < 1.0 | < 1.0 | < 0.54 | < 1.0 |
| TRICHLOROETHENE | 5 | < 1.0 | < 0.45 | < 1.0 | < 1.0 | **23.5** | < 1.0 |
| VINYL CHLORIDE | 2 | < 1.0 | **10.6** | < 1.0 | < 1.0 | **7.6** | < 1.0 |
| XYLENES, TOTAL | 5 | < 1.0 | < 0.41 | < 1.0 | < 1.0 | < 0.41 | < 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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

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**Table 2. Summary of Volatile Organic Compounds in Groundwater Samples**

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| 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 | 08/24/09 |
| 1,1,1-TRICHLOROETHANE | 5 | < 0.40 | < 1.0 | < 0.94 | < 1.0 | < 0.40 |
| 1,1-DICHLOROETHANE | 5 | < 0.75 | < 1.0 | < 0.37 | < 1.0 | < 0.75 |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | < 1.0 | < 0.35 | < 1.0 | < 0.50 |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 1.0 | < 0.30 | < 1.0 | < 0.40 |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 1.0 | < 0.26 | < 1.0 | < 0.40 |
| BENZENE | 1 | < 0.41 | < 0.50 | < 0.45 | < 0.50 | < 0.41 |
| CHLOROBENZENE | 5 | < 0.40 | < 1.0 | < 0.48 | < 1.0 | < 0.40 |
| CHLOROETHANE | 5 | < 0.40 | < 2.0 | < 0.84 | < 2.0 | < 0.40 |
| CIS-1,2-DICHLOROETHENE | 5 | < 0.40 | < 1.0 | < 0.54 | < 1.0 | < 0.40 |
| ETHYLBENZENE | 5 | < 0.40 | < 1.0 | < 0.38 | < 1.0 | < 0.40 |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 0.70 | < 1.0 | < 1.0 |
| METHYLENE CHLORIDE | 5 | NA | NA | < 0.41 | < 2.0 | NA |
| O-XYLENE | NS | < 0.40 | < 1.0 | < 0.41 | < 1.0 | < 0.40 |
| TETRACHLOROETHENE | 5 | < 0.40 | < 1.0 | < 0.61 | < 1.0 | < 0.40 |
| TOLUENE | 5 | 5.0 | < 1.0 J | < 0.45 | < 1.0 | < 0.60 |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | < 1.0 | < 0.54 | < 1.0 | < 0.42 |
| TRICHLOROETHENE | 5 | < 0.46 | < 1.0 | < 0.45 | < 1.0 | < 0.46 |
| VINYL CHLORIDE | 2 | < 1.0 | < 1.0 | < 0.61 | < 1.0 | < 1.0 |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 0.41 | < 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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

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**Table 2. Summary of Volatile Organic Compounds in Groundwater Samples**

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| 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 |
| 1,1,1-TRICHLOROETHANE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.94 | < 1.0 |
| 1,1-DICHLOROETHANE | 5 | < 0.75 | < 0.75 | < 1.0 | < 0.37 | < 1.0 |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | < 0.50 | < 1.0 | < 0.35 | < 1.0 |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.30 | < 1.0 |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.26 | < 1.0 |
| BENZENE | 1 | < 0.41 | < 0.41 | < 0.50 | < 0.45 | < 0.50 |
| CHLOROBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.48 | < 1.0 |
| CHLOROETHANE | 5 | < 0.40 | < 0.40 | < 2.0 | < 0.84 | < 2.0 |
| CIS-1,2-DICHLOROETHENE | 5 | **48** | **56** | **1.4** | **2.3** | < 1.0 |
| ETHYLBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.38 | < 1.0 |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.70 | < 1.0 |
| METHYLENE CHLORIDE | 5 | NA | NA | NA | < 0.41 | < 2.0 |
| O-XYLENE | NS | < 0.40 | < 0.40 | < 1.0 | < 0.41 | < 1.0 |
| TETRACHLOROETHENE | 5 | 0.59 | < 0.40 | < 1.0 | < 0.61 | < 1.0 |
| TOLUENE | 5 | < 0.60 | < 0.60 | < 1.0 J | < 0.45 | < 1.0 |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | 0.81 | < 1.0 | < 0.54 | < 1.0 |
| TRICHLOROETHENE | 5 | 3.9 | 3.3 | < 1.0 | < 0.45 | < 1.0 |
| VINYL CHLORIDE | 2 | **15** | **18** | < 1.0 | < 0.61 | < 1.0 |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.41 | < 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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

Stantec

## Table 2. Summary of Volatile Organic Compounds in Groundwater Samples

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| 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 |
| 1,1,1-TRICHLOROETHANE | 5 | **10** | **7.1** | < 1.0 | < 0.94 | < 1.0 |
| 1,1-DICHLOROETHANE | 5 | **4.4** | **2.5** | < 1.0 | < 0.37 | < 1.0 |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | < 0.50 | < 1.0 | < 0.35 | < 1.0 |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.30 | < 1.0 |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.26 | < 1.0 |
| BENZENE | 1 | < 0.41 | < 0.41 | < 0.50 | < 0.45 | < 0.50 |
| CHLOROBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.48 | < 1.0 |
| CHLOROETHANE | 5 | < 0.40 | < 0.40 | < 2.0 | < 0.84 | < 2.0 |
| CIS-1,2-DICHLOROETHENE | 5 | **14** | **9** | **4.9** | **1.5** | < 1.0 |
| ETHYLBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.38 | < 1.0 |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.70 | < 1.0 |
| METHYLENE CHLORIDE | 5 | NA | NA | NA | < 0.41 | < 2.0 |
| O-XYLENE | NS | < 0.40 | < 0.40 | < 1.0 | < 0.41 | < 1.0 |
| TETRACHLOROETHENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.61 | < 1.0 |
| TOLUENE | 5 | < 0.60 | < 0.60 | < 1.0 J | < 0.45 | < 1.0 |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | < 0.42 | < 1.0 | < 0.54 | < 1.0 |
| TRICHLOROETHENE | 5 | **26** | **23** | < 1.0 | < 0.45 | < 1.0 |
| VINYL CHLORIDE | 2 | < 1.0 | < 1.0 | < 1.0 | < 0.61 | < 1.0 |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.41 | < 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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

Stantec

## Table 2. Summary of Volatile Organic Compounds in Groundwater Samples

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| 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 |
| 1,1,1-TRICHLOROETHANE | 5 | **1.3** | **1.2** | < 1.0 | < 0.94 | < 1.0 |
| 1,1-DICHLOROETHANE | 5 | < 0.75 | < 0.75 | < 1.0 | < 0.37 | < 1.0 |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | < 0.50 | < 1.0 | < 0.35 | < 1.0 |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.30 | < 1.0 |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.26 | < 1.0 |
| BENZENE | 1 | < 0.41 | < 0.41 | < 0.50 | < 0.45 | < 0.50 |
| CHLOROBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.48 | < 1.0 |
| CHLOROETHANE | 5 | < 0.40 | < 0.40 | < 2.0 | < 0.84 | < 2.0 |
| CIS-1,2-DICHLOROETHENE | 5 | **3.3** | **3.2** | **1.8** | **1.8** | < 1.0 |
| ETHYLBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.38 | < 1.0 |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.70 | < 1.0 |
| METHYLENE CHLORIDE | 5 | NA | NA | NA | **0.81 J** | < 2.0 |
| O-XYLENE | NS | < 0.40 | < 0.40 | < 1.0 | < 0.41 | < 1.0 |
| TETRACHLOROETHENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.61 | < 1.0 |
| TOLUENE | 5 | < 0.60 | < 0.60 | < 1.0 J | < 0.45 | < 1.0 |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | < 0.42 | < 1.0 | < 0.54 | < 1.0 |
| TRICHLOROETHENE | 5 | **35** | **30** | **18.7** | **13.0** | **3.5** |
| VINYL CHLORIDE | 2 | < 1.0 | **0.54 J** | < 1.0 | < 0.61 | < 1.0 |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 1.0 | **0.42 J** | < 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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

Stantec

## Table 2. Summary of Volatile Organic Compounds in Groundwater Samples

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

***March 18, 2014***

| 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 |
| 1,1,1-TRICHLOROETHANE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.94 | < 1.0 |
| 1,1-DICHLOROETHANE | 5 | < 0.75 | < 0.75 | < 1.0 | < 0.37 | < 1.0 |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | **0.51** | < 1.0 | < 0.35 | < 1.0 |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.30 | < 1.0 |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 0.40 | < 1.0 | < 0.26 | < 1.0 |
| BENZENE | 1 | < 0.41 | < 0.41 | < 0.50 | < 0.45 | < 0.50 |
| CHLOROBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.48 | < 1.0 |
| CHLOROETHANE | 5 | < 0.40 | < 0.40 | < 2.0 | < 0.84 | < 2.0 |
| CIS-1,2-DICHLOROETHENE | 5 | **2.4** | **1.5** | **0.88** | < 0.54 | < 1.0 |
| ETHYLBENZENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.38 | < 1.0 |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.70 | < 1.0 |
| METHYLENE CHLORIDE | 5 | NA | NA | NA | < 0.41 | < 2.0 |
| O-XYLENE | NS | < 0.40 | < 0.40 | < 1.0 | < 0.41 | < 1.0 |
| TETRACHLOROETHENE | 5 | < 0.40 | < 0.40 | < 1.0 | < 0.61 | < 1.0 |
| TOLUENE | 5 | < 0.60 | < 0.60 | **< 1.0 J** | **0.47** | < 1.0 |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | < 0.42 | < 1.0 | < 0.54 | < 1.0 |
| TRICHLOROETHENE | 5 | **1.1** | **2.5** | < 1.0 | < 0.45 | < 1.0 |
| VINYL CHLORIDE | 2 | < 1.0 | < 1.0 | < 1.0 | < 0.61 | < 1.0 |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 1.0 | < 0.41 | < 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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

Stantec

**Table 2. Summary of Volatile Organic Compounds in Groundwater Samples**

**West Lot Site, Former Lockheed Martin**
**French Road Facility Utica, New York**

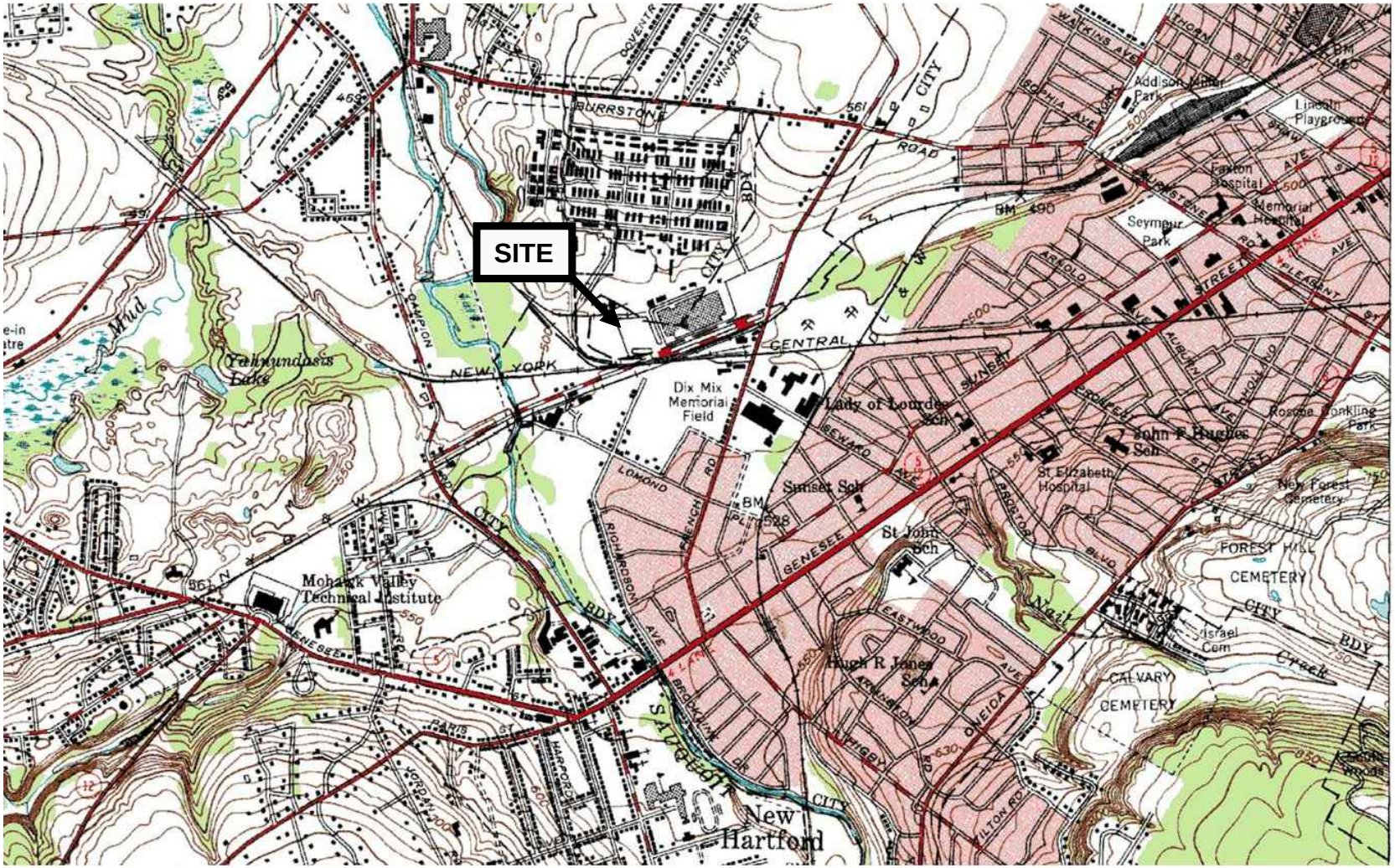
***March 18, 2014***

| Constituent | NYSDEC TOGS 1.1.1 Water Guidance Values | PZ-1 | | | | PZ-2 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 08/24/09 | 05/08/12 | 08/14/13 | 03/19/14 | 08/25/09 | 05/08/12 | 08/14/13 | 03/19/14 |
| 1,1,1-TRICHLOROETHANE | 5 | < 0.40 | < 1.0 | < 0.94 | not sampled | < 0.40 | < 1.0 | < 0.94 | not sampled |
| 1,1-DICHLOROETHANE | 5 | < 0.75 | < 1.0 | < 0.37 | not sampled | < 0.75 | < 1.0 | < 0.37 | not sampled |
| 1,2-DICHLOROBENZENE | 3 | < 0.50 | < 1.0 | < 0.35 | not sampled | < 0.50 | < 1.0 | < 0.35 | not sampled |
| 1,3-DICHLOROBENZENE | 3 | < 0.40 | < 1.0 | < 0.30 | not sampled | < 0.40 | < 1.0 | < 0.30 | not sampled |
| 1,4-DICHLOROBENZENE | 3 | < 0.40 | < 1.0 | < 0.26 | not sampled | < 0.40 | < 1.0 | < 0.26 | not sampled |
| BENZENE | 1 | < 0.41 | < 0.50 | < 0.45 | not sampled | < 0.41 | < 0.50 | < 0.45 | not sampled |
| CHLOROBENZENE | 5 | < 0.40 | < 1.0 | < 0.48 | not sampled | < 0.40 | < 1.0 | < 0.48 | not sampled |
| CHLOROETHANE | 5 | < 0.40 | < 2.0 | < 0.84 | not sampled | < 0.40 | < 2.0 | < 0.84 | not sampled |
| CIS-1,2-DICHLOROETHENE | 5 | **1.8** | **1.2** | **1.7** | not sampled | < 0.40 | < 1.0 | < 0.54 | not sampled |
| ETHYLBENZENE | 5 | < 0.40 | < 1.0 | < 0.38 | not sampled | < 0.40 | < 1.0 | < 0.38 | not sampled |
| M-XYLENE & P-XYLENE | 5 | < 1.0 | < 1.0 | < 0.70 | not sampled | < 1.0 | < 1.0 | < 0.70 | not sampled |
| METHYLENE CHLORIDE | 5 | NA | NA | < 0.41 | not sampled | NA | NA | < 0.41 | not sampled |
| O-XYLENE | NS | < 0.40 | < 1.0 | < 0.41 | not sampled | < 0.40 | < 1.0 | < 0.41 | not sampled |
| TETRACHLOROETHENE | 5 | < 0.40 | < 1.0 | < 0.61 | not sampled | < 0.40 | < 1.0 | < 0.61 | not sampled |
| TOLUENE | 5 | < 0.60 | < 1.0 J | < 0.45 | not sampled | < 0.60 | < 1.0 J | < 0.45 | not sampled |
| TRANS-1,2-DICHLOROETHENE | 5 | < 0.42 | < 1.0 | < 0.54 | not sampled | < 0.42 | < 1.0 | < 0.54 | not sampled |
| TRICHLOROETHENE | 5 | < 0.46 | < 1.0 | < 0.45 | not sampled | < 0.46 | < 1.0 | < 0.45 | not sampled |
| VINYL CHLORIDE | 2 | < 1.0 | < 1.0 | < 0.61 | not sampled | < 1.0 | < 1.0 | < 0.61 | not sampled |
| XYLENES, TOTAL | 5 | < 1.0 | < 1.0 | < 0.41 | not sampled | < 1.0 | < 1.0 | < 0.41 | not sampled |

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) [ ] - Duplicate sample result.
9) < - Reporting Limit Presented when a ND result was found
10) 2014 data have been validated as described in attached Data Usability Summary Report.

# FIGURES

CITY:(MAHWAH) DIV/GROUP:(ENRI-1) DB:(JG LD:(Opt) PIC:(Opt) PM:(CM) TM:(BM) LYR:(Opt)ON=*;OFF=*REF*
U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\6-West Lot\Cad\FIG 1A SITE-LOCATION.DWG LAYOUT: 1 SAVED: 4/24/2014 3:13 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 4/24/2014 3:14 PM BY: LESS, ANDY





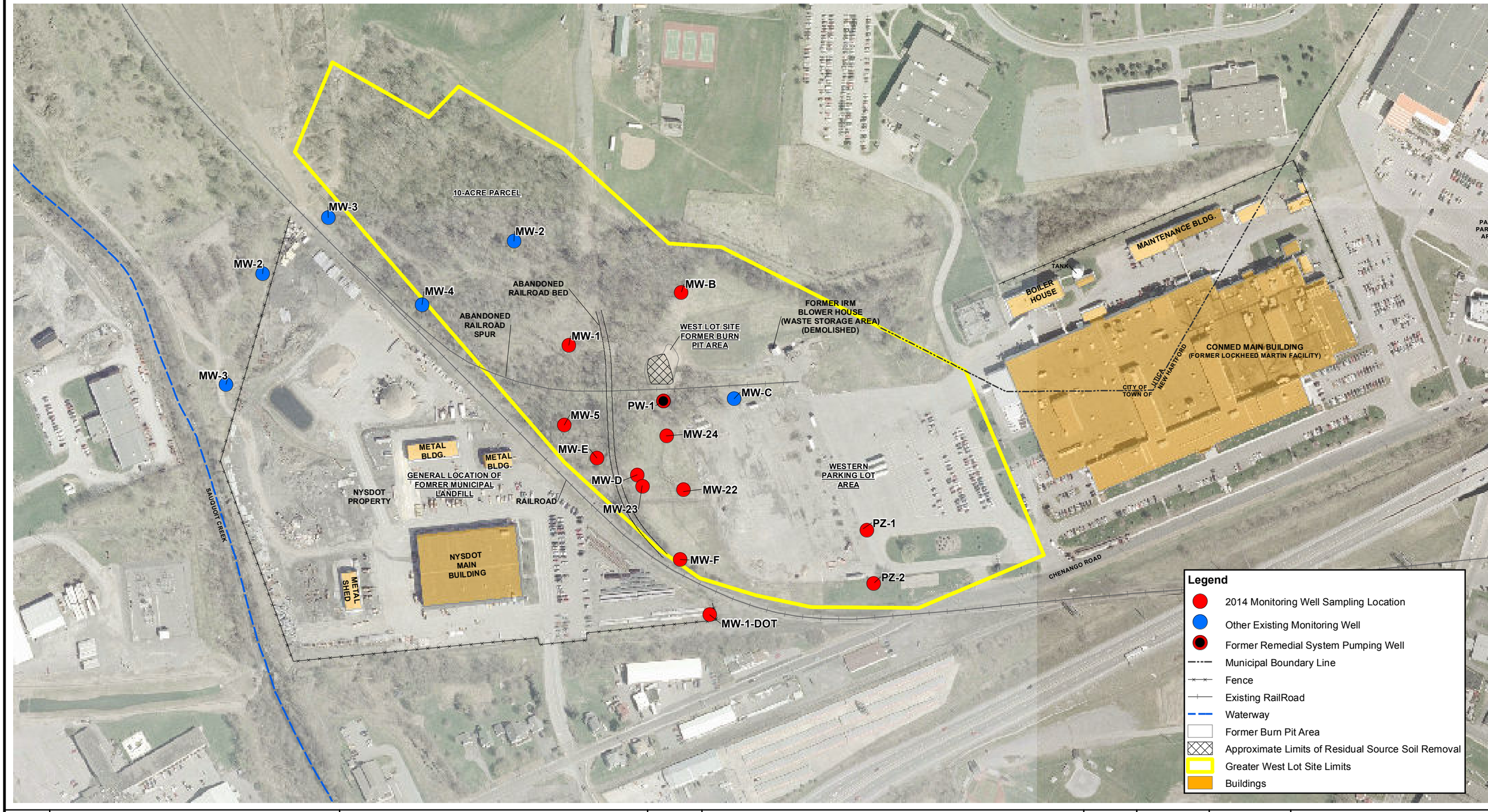
0 1000 2000
SCALE IN FEET

**CONTINUED INVESTIGATION ACTIVITIES**
WEST LOT SITE
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

## SITE LOCATION MAP

Stantec

1






Stantec

Source Notes:

Aerial taken in 2003
Coordinate System: NAD 1983 StatePlane, New York Central, FIPS 3102

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

ArcGIS Version: ArcInfo 10.1

Map Date: 4/18/2014 9:50:41 AM

Server: Rochester
Document Path: U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\6-West Lot\GIS\2014_Fig2_MonitorWellNetwork.mxd

Last Edited By: aless

Checked By: B. Mahoney

Project Manager: P. Nielsen

# Monitoring Well Network

Continued Investigation Activities
West Lot Site / Former Lockheed Martin French Road Facility
Utica, New York

Data: 2014_Fig2_MonitorWellNetwork

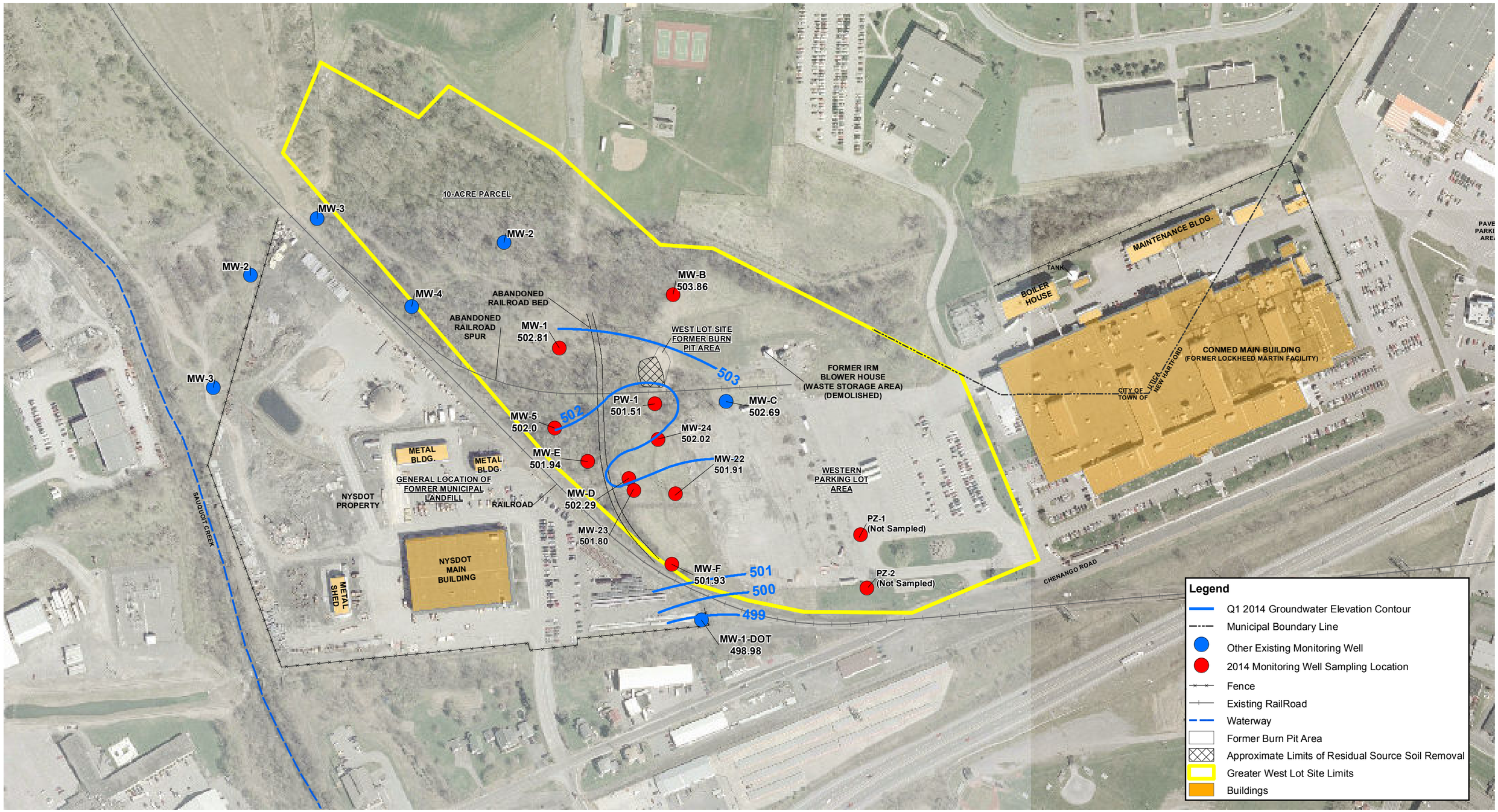
Project Number: 190500800

Figure: 2

N

250 125 0 250

Feet






Stantec

Source Notes: ArcGIS Version: ArcInfo 10.1
Aerial taken in 2003
Coordinate System: NAD 1983 StatePlane, New York Central, FIPS 3102

General Notes:
1.) Wells PZ-1 and PZ-2 not sampled due to being buried by ice and snow.
2.) Groundwater levels measured on March 4, 2014
3.) 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

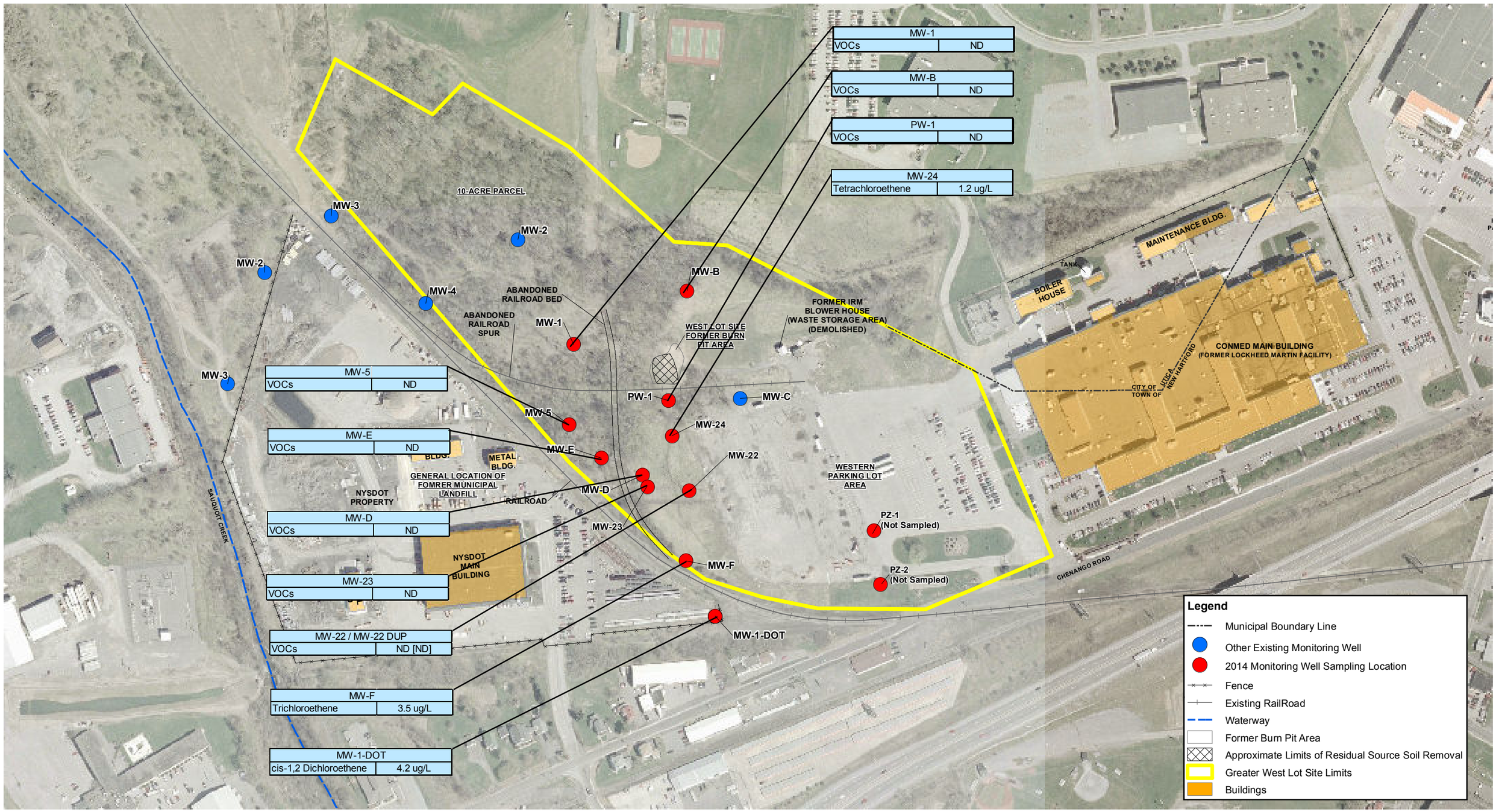
Map Date: 4/18/2014 9:55:13 AM
Server: Rochester
Last Edited By: aless
Document Path: U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\6-West Lot\GIS\2014_Fig3_GroundwaterContourMap.mxd

# Groundwater Contours

March 2014
Continued Investigation Activities
West Lot Site / Former Lockheed Martin French Road Facility
Utica, New York

Checked By: B. Mahoney
Project Manager: P. Nielsen
Data: 2014_Fig3_GroundwaterContourMap
Project Number: 190500800
Figure: 3

N
0 125 250
Feet






Stantec

Source Notes: ArcGIS Version: ArcInfo 10.1

Aerial taken in 2003 Coordinate System: NAD 1983 StatePlane, New York Central, FIPS 3102
All samples were analyzed for TCL VOCs
ND = no analytes detected
[ND] = indicates results of field duplicate
Analytical results given in ug/L (Micrograms per Liter)

General 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

Map Date: 4/18/2014 10:01:22 AM
Server: Rochester
Last Edited By: aless
Document Path: U:\190500800\07_photos_maps_images\DRAWINGS\Report Figures\6-West Lot\GIS\2014_Fig4_GroundwaterContaminatesMap.mxd

Checked By: B. Mahoney
Project Manager: P. Nielsen

# Groundwater Monitoring Data

March 2014
Continued Investigation Activities
West Lot Site / Former Lockheed Martin French Road Facility
Utica, New York

Data: 2014_Fig4_GroundwaterContaminatesMap
Project Number: 190500800
Figure: 4

N
0 125 250
Feet

# ATTACHMENT 1

# Laboratory Report

New England ACCUTEST LABORATORIES

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**

NELAP ACCREDITED TNI LABORATORY

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

Reza Tand
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)


Test results relate only to samples analyzed.

Sections: 1 2 3 4 5 6 7

# Table of Contents

-1-

Accutest Laboratories

# Sample Summary

Stantec Consulting Corporation

LMC - Utica West Lot

**Job No:** MC29101

| 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<br>Analyte | Client Sample ID | Result/<br>Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|

**MC29101-12 PW-1**

No hits reported in this sample.

**MC29101-13 TRIP BLANK**

No hits reported in this sample.

New England ACCUTEST LABORATORIES



Sample Results

Report of Analysis

Accutest Laboratories

# Report of Analysis





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

| | 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 | | | | | | | |

| | 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-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. | 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 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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 | 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





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

| | 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 | | | | | | | |

| | 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
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates 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:** MC29101-2
**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 | 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) | | |
| **Lab Sample ID:** | MC29101-2 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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





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

| | 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 | | | | | | | |

| | 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
**Lab Sample ID:** MC29101-3
**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 | 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 | | |
| **Lab Sample ID:** | MC29101-3 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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





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

| | 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 | | | | | | | |

| | 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-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. | 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 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **Project:** | LMC - Utica West Lot | | |

**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





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

| | 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 | | | | | | | |

| | 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-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. | 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 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **Project:** | LMC - Utica West Lot | | |

**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





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

| | 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 | | | | | | | |

| | 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-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. | 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 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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 | 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





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

| | 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 | | | | | | | |

| | 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-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. | 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 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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 | 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





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

| | 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 | | | | | | | |

| | 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-B | | |
| **Lab Sample ID:** | MC29101-8 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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 | | |
| **Lab Sample ID:** | MC29101-8 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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

Accutest Laboratories

# Report of Analysis





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

| | 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 | | | | | | | |

| | 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-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 | | |
| **Lab Sample ID:** | MC29101-9 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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





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

| | 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 | | | | | | | |

| | 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-E | | |
| **Lab Sample ID:** | MC29101-10 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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 | | |
| **Lab Sample ID:** | MC29101-10 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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





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

| | 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 | | | | | | | |

| | 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-F | | |
| **Lab Sample ID:** | MC29101-11 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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

Accutest Laboratories

# Report of Analysis





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

| | 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 | | | | | | | |

| | 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:** | PW-1 | | |
| **Lab Sample ID:** | MC29101-12 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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 | | |
| **Lab Sample ID:** | MC29101-12 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **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





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

| | 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 | | | | | | | |

| | 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:** 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. | 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 | **Date Sampled:** | 03/19/14 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 03/21/14 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **Project:** | LMC - Utica West Lot | | |

**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

New England ACCUTEST LABORATORIES



## Misc. Forms

# Custody Documents and Other Forms

Includes the following where applicable:

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

ACCUTEST LABORATORIES

# CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 2

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # MC29101

**Client / Reporting Information**

Company Name: Stantec
Street Address: 61 Commercial St.
City State Zip: Rochester NY 14614
Project Contact: Bob Mahoney | E-mail: bob.mahoney@stantec.com
Phone #: 585 413 5301 | Fax #:
Sampler(s) Name(s): Ben Haravitch | Phone #: 585 978 5248

**Project Information**

Project Name: LMC - Utica West Lot
Street:
City:
Project#:
Client PO#: 1905500800
Project Manager: Peter Nielsen

**Billing Information ( If different from Report to)**

Company Name:
Street Address:
City State Zip:
Attention: Ben Haravitch PO#:

**Requested Analysis ( see TEST CODE sheet)**

VOC 8260

**Matrix Codes**

DW - Drinking Water
GW - Ground Water
WW - 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

| Accutest Sample # | Field ID / Point of Collection | MEOH/DI Vial # | Collection Date | Collection Time | Sampled by | Matrix | # of bottles | HCl | NaOH | HNO3 | H2SO4 | NONE | DI Water | MEOH | ENCORE | Bisulfate | VOC 8260 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -1 | MW-1 | | 3/19/14 | 11:45 | BH | GW | 3 | 3 | | | | | | | | | X | |
| -2 | MW-1 (DOT) | | | 14:30 | | | | | | | | | | | | | | |
| -3 | MW-5 | | | 12:15 | | | | | | | | | | | | | | |
| -4 | MW-22 | | | 13:30 | | | | | | | | | | | | | | |
| -5 | MW-22 FD | | | 13:35 | | FB | | | | | | | | | | | | |
| -6 | MW-23 | | | 13:15 | | | | | | | | | | | | | | |
| -7 | MW-24 | | | 12:45 | | | | | | | | | | | | | | |
| -8 | MW-B | | | 11:30 | | | | | | | | | | | | | | |
| -9 | MW-D | | | 13:00 | | | | | | | | | | | | | | 2M2 |
| -10 | MW-E | | | 12:30 | | | | | | | | | | | | | | |
| -11 | MW-F | | | 14:15 | | | | | | | | | | | | | | |
| -12 | PW-1 | | | 12:00 | | | | | | | | | | | | | | |

**Turnaround Time ( Business days)** — Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

**Data Deliverable Information**

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" ( Level 2)
- [ ] FULLT1 ( Level 3+4 )
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYSDEC-compatible
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

**Comments / Special Instructions**

**Sample Custody must be documented below each time samples change possession, including courier delivery.**

| | Relinquished by Sampler: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
|---|---|---|---|---|---|---|
| 1 | Benjamin Haravitch | 3/20 11:30 | FED EX | FED EX | 3/21/14 9:33 | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |

Custody Seal # | [ ] Intact [ ] Not intact | Preserved where applicable [ ] | On Ice [x] | Cooler Temp. 1.0 c

**MC29101: Chain of Custody**
**Page 1 of 3**

ACCUTEST LABORATORIES

# CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, 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

Company Name: Stantec
Street Address: 61 Commercial St
City / State / Zip: Rochester NY 14614
Project Contact / E-mail: Bob Mahoney / bob.mahoney@stantec.com
Phone # / Fax #: 585 413 5301
Sampler(s) Name(s) / Phone #: Ben Haravitch 5859785248

## Project Information

Project Name: LMC - Utica West Lot
Street:
City:
Project#:
Client PO#: 190500800
Project Manager: Peter Nielsen

## Billing Information ( If different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention: Ben Haravitch PO#:

## Requested Analysis ( see TEST CODE sheet)

VOC 8260

## Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - 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

| Accutest Sample # | Field ID / Point of Collection | MEOH/DI Vial # | Collection Date | Collection Time | Sampled by | Matrix | # of bottles | Number of preserved Bottles: HCl | NaOH | HNO3 | H2SO4 | NONE | DI Water | MEOH | ENCORE | Bisulfate | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -13 | Trip Blank | | 3/19/14 | 1600 | BH | TB | 3 | 3 | | | | | | | | | X |

## Data Deliverable Information

- [ ] 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
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYSDEC Compatible
- [ ] Other

## Comments / Special Instructions

## Turnaround Time ( Business days)

Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

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: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
|---|---|---|---|---|---|---|
| 1 | Benjamin Haravitch | 3/20 11:30 | 1 | 2 | 3/4/14 9:30 | 2 |
| 3 | | | 3 | 4 | | 4 |
| 5 | | | 5 | Custody Seal # | [ ] Intact [ ] Not intact | Preserved where applicable [ ] | On Ice [x] Cooler Temp. 1-0 C |

**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 | | 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: | Infared 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

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com



**MC29101: Chain of Custody**
**Page 3 of 3**

# Internal Sample Tracking Chronicle

Stantec Consulting Corporation

LMC - Utica West Lot

**Job No:** MC29101



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

# Internal Sample Tracking Chronicle

Stantec Consulting Corporation

LMC - Utica West Lot

**Job No:** MC29101



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

# Accutest Internal Chain of Custody



**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



**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 |

New England ACCUTEST LABORATORIES

## 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



**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-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. | 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

**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. | 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



**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



**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 | Q | Spike 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

**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 | Q | Spike 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



**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)



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

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

| 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



**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



**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 | 70-130% |
| **S2** = Toluene-D8 | 70-130% |
| **S3** = 4-Bromofluorobenzene | 70-130% |

# Initial Calibration Summary



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

**Sample:** MSV1058-ICC1058
**Lab FileID:** V28209.D

Response Factor Report MSV

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 : 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 ----  Coefficient =  0.9987
              Response Ratio = -0.01381 + 0.37627 *A

51)  trichloroethene
          0.423 0.476 0.455 0.454 0.411 0.411 0.413 0.417 0.438 0.436  0.433    5.16
52)  1,2-dichloropropane
                      0.303 0.297 0.310 0.317 0.315 0.320 0.336 0.337  0.317    4.52
53)  dibromomethane
                      0.191 0.198 0.199 0.196 0.197 0.192 0.200 0.195  0.196    1.64
54)  bromodichloromethane
                      0.502 0.481 0.486 0.480 0.509 0.522 0.551 0.539  0.509    5.27
55)  Methylcyclohexane
                                  0.368 0.408 0.557 0.564 0.605 0.590  0.515   19.54
            ---- Linear regression ----  Coefficient =  0.9996
              Response Ratio = -0.03110 + 0.59654 *A

56)  2-chloroethyl vinyl ether
                                  0.038 0.037 0.054 0.060 0.063 0.067  0.053   23.85
            ---- Linear regression ----  Coefficient =  0.9970
              Response Ratio = -0.00433 + 0.06549 *A

57)  methyl methacrylate
                                  0.083 0.089 0.103 0.108 0.116 0.117  0.103   13.61
58)  1,4-dioxane
                                  0.001 0.001 0.001 0.002 0.002 0.002  0.001#  41.53
            ---- Linear regression ----  Coefficient =  0.9984
              Response Ratio = -0.00081 + 0.00175 *A

59)  cis-1,3-dichloropropene
                  0.264 0.359 0.323 0.371 0.363 0.438 0.475 0.520 0.524  0.404   22.30
            ---- Quadratic regression ----  Coefficient =  0.9986
              Response Ratio = -0.00337 + 0.46127 *A + 0.00864 *A^2

60)  toluene-d8 (s)
                             1.177 1.194 1.249 1.247 1.282 1.352 1.354  1.265    5.51
61)  4-methyl-2-pentanone
                             0.136 0.138 0.141 0.161 0.170 0.178 0.179  0.158   11.93
62)  toluene
                      0.766 0.755 0.814 0.800 0.807 0.831 0.880 0.882  0.817    5.70
63)  trans-1,3-dichloropropene
                  0.181 0.204 0.200 0.226 0.252 0.316 0.357 0.398        0.267   30.12
            ---- Quadratic regression ----  Coefficient =  0.9940
              Response Ratio = -0.00074 + 0.24475 *A + 0.04316 *A^2

64)  1,1,2-trichloroethane
                      0.156 0.184 0.180 0.181 0.180 0.183 0.190 0.189  0.180    5.79
65)  ethyl methacrylate
                                  0.190 0.201 0.241 0.252 0.270 0.268  0.237   14.30

66) I   chlorobenzene-d5      ----------------ISTD---------------------
67)  tetrachloroethene
          0.834 0.908 0.914 0.821 0.816 0.796 0.861 0.879 0.942 0.956  0.873    6.41
68)  1,3-dichloropropane
```

# 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

**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
```

# Initial Calibration Verification



**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 |

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# 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
```

# Continuing Calibration Summary



**Job Number:** MC29101 **Sample:** MSV1088-CC1058
**Account:** STANNYR Stantec Consulting Corporation **Lab FileID:** V29025.D
**Project:** LMC - Utica West Lot

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 |

# Continuing Calibration Summary

**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 |

# 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
```

New England ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

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 |

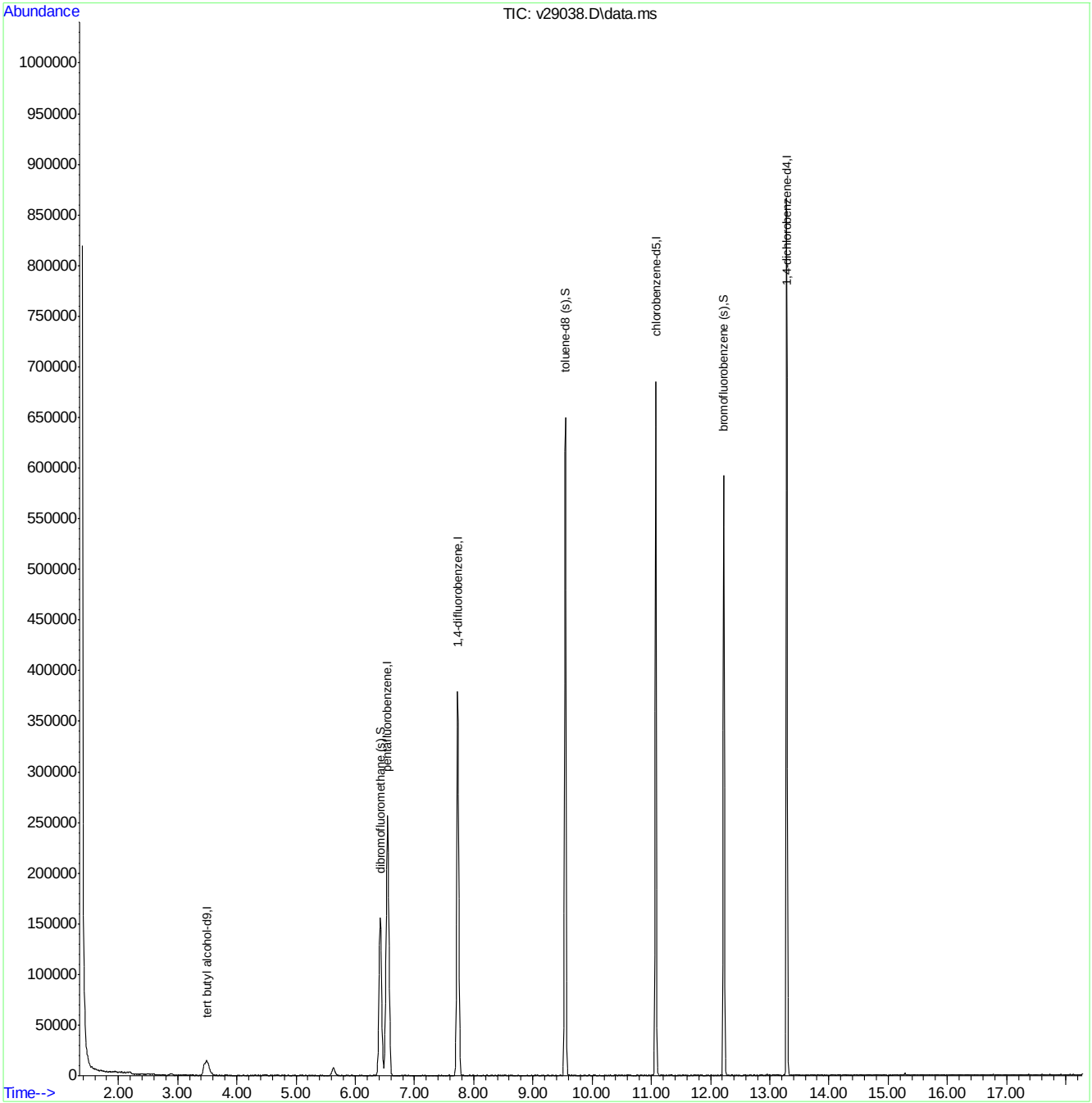
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

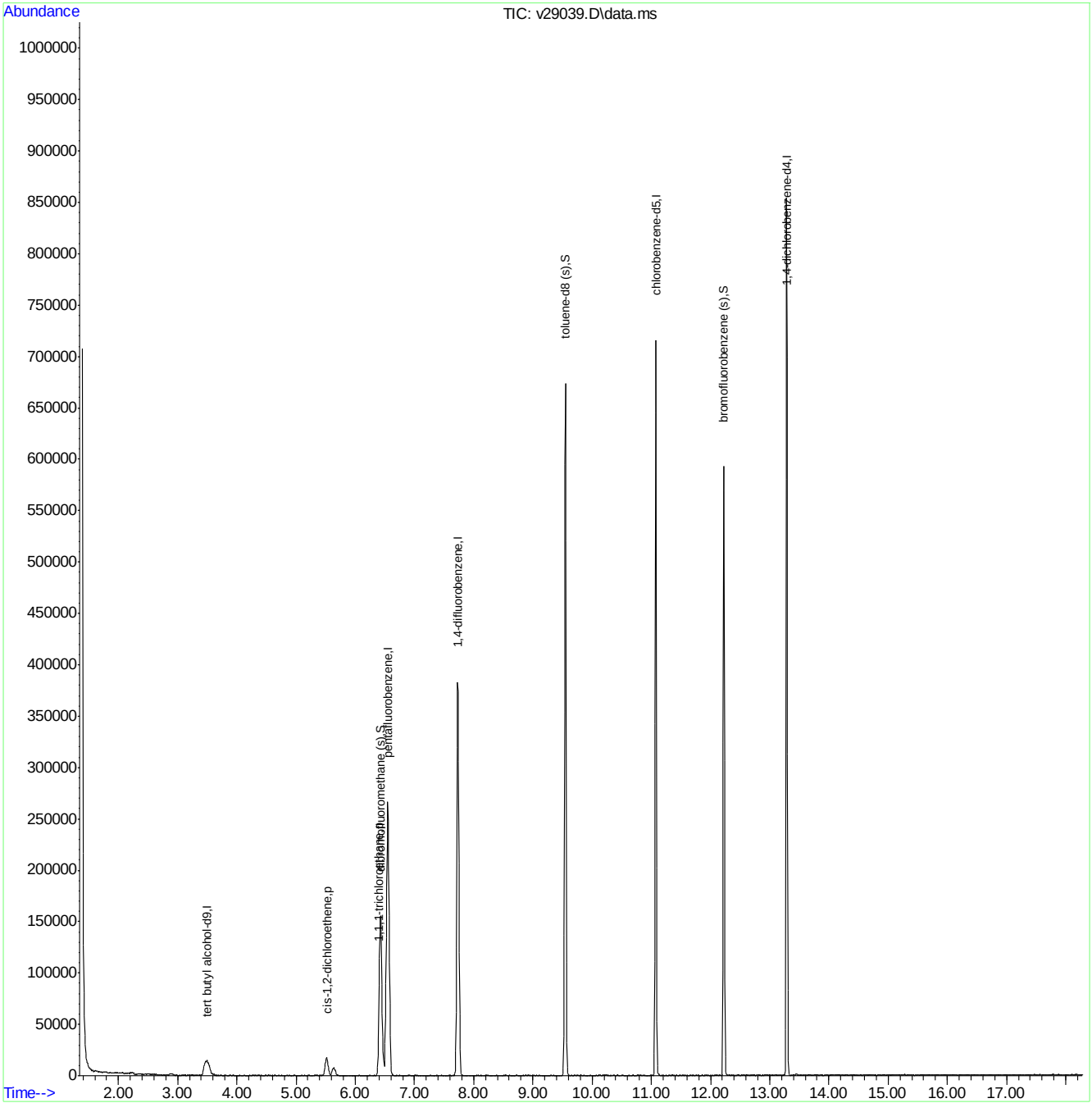
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.496 | 65 | 36043 | 500.00 | ug/L | #-0.01 |
| 4) pentafluorobenzene | 6.550 | 168 | 282094 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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 | | | | | | Qvalue |
| 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 |

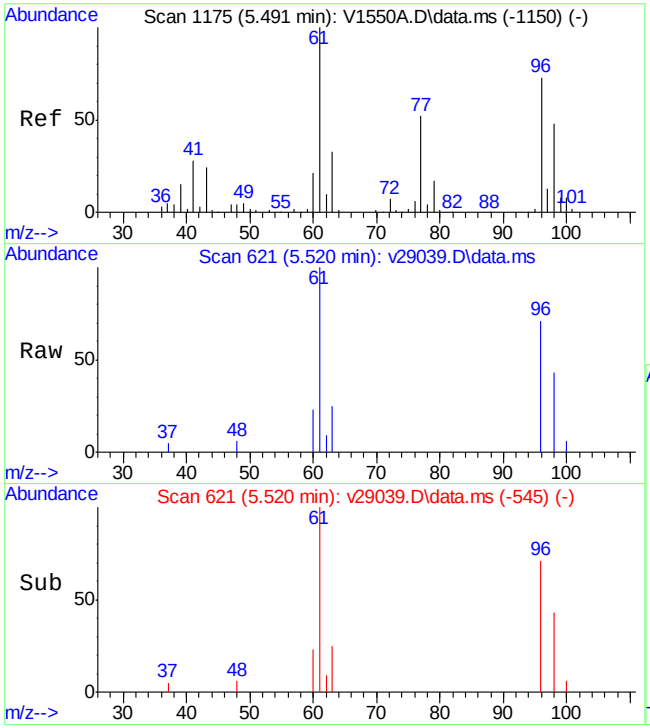
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

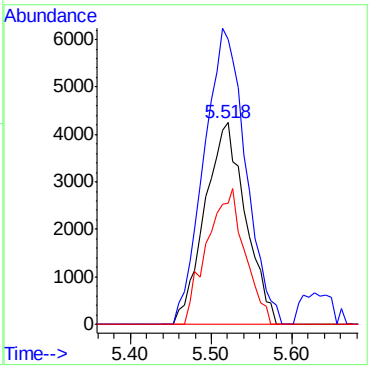


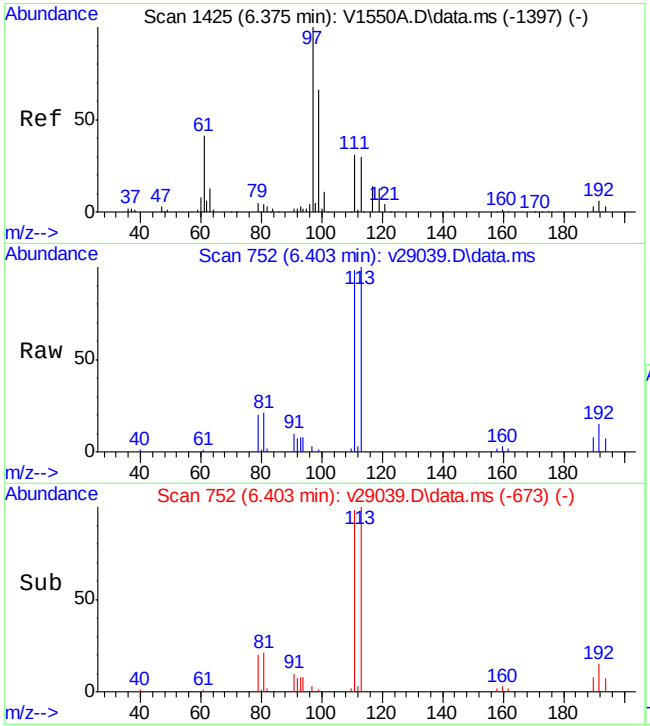



#36
cis-1,2-dichloroethene
Concen: 4.24 ug/L
RT: 5.518 min Scan# 621
Delta R.T. -0.021 min
Lab File: v29039.D
Acq: 25 Mar 2014 3:53 pm

Tgt Ion: 96 Resp: 14875

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

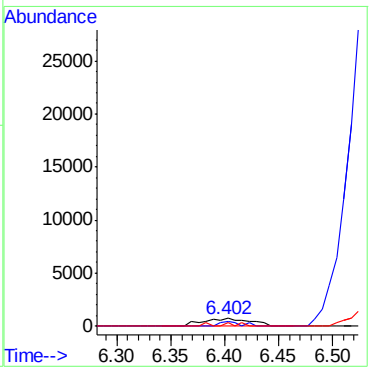



#42
1,1,1-trichloroethane
Concen: 0.32 ug/L
RT: 6.402 min Scan# 752
Delta R.T. -0.020 min
Lab File: v29039.D
Acq: 25 Mar 2014 3:53 pm

Tgt Ion: 97 Resp: 2223

| 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

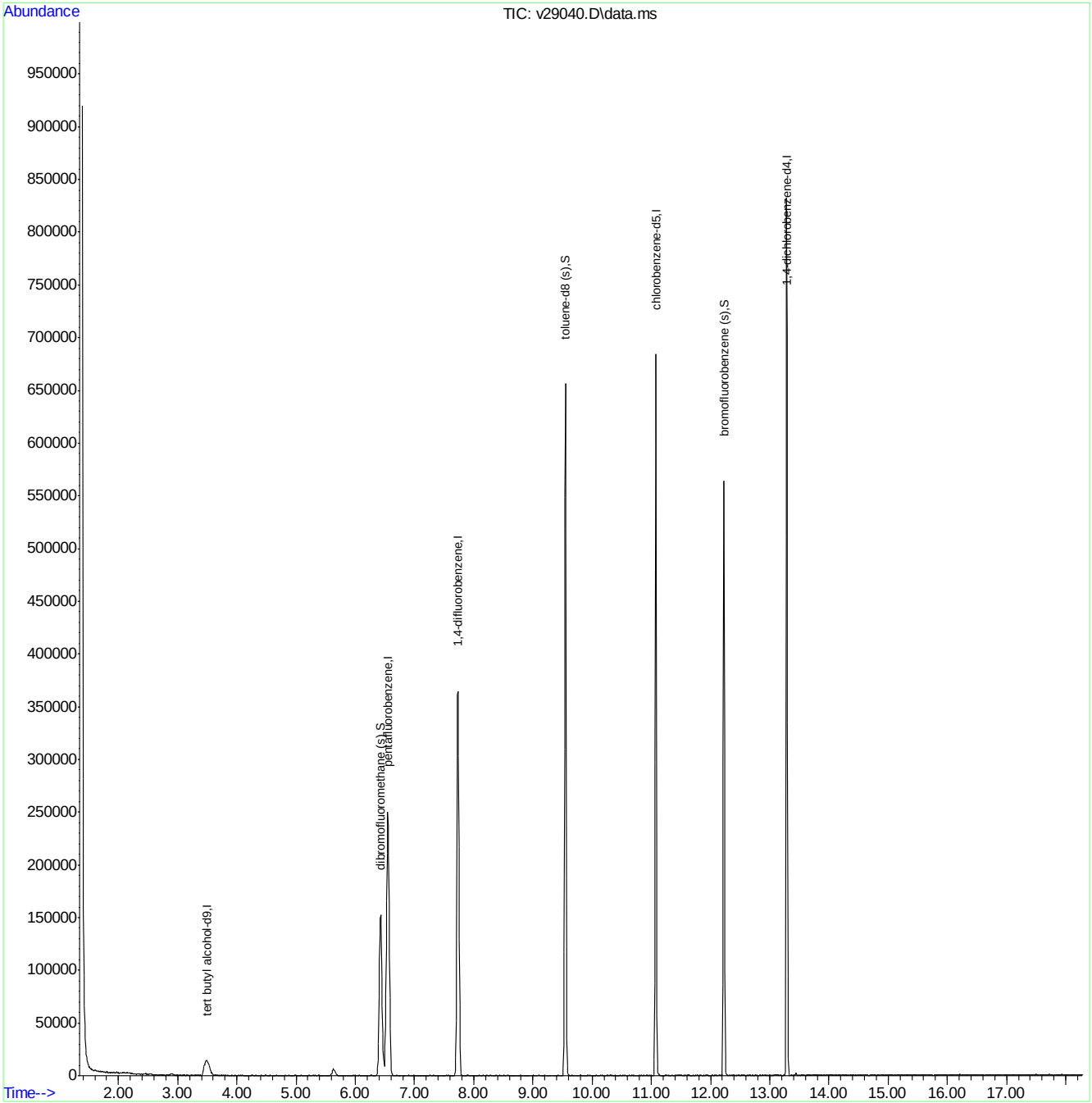
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.497 | 65 | 35724 | 500.00 | ug/L | #-0.01 |
| 4) pentafluorobenzene | 6.552 | 168 | 265038 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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

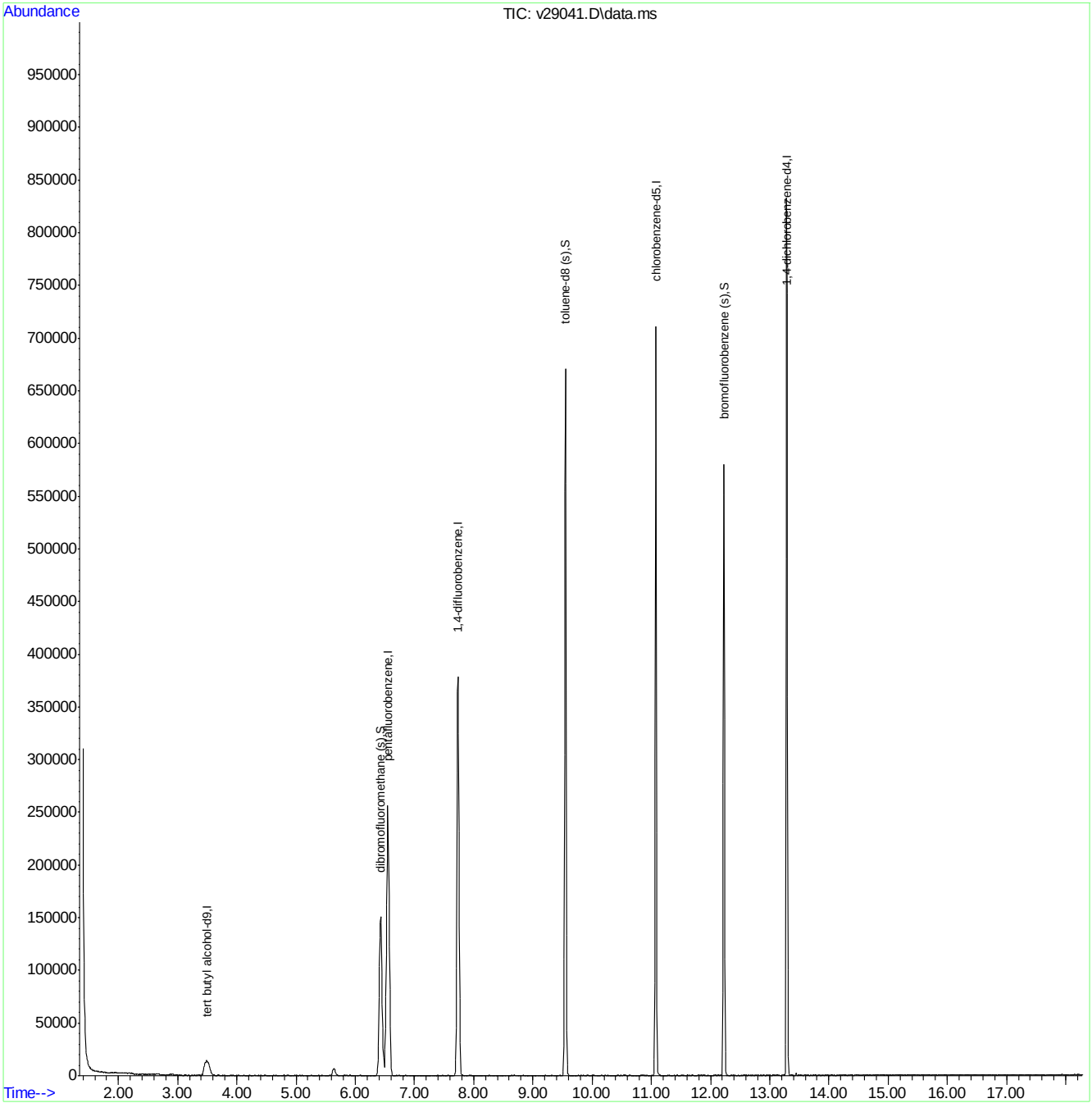
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.499 | 65 | 34735 | 500.00 | ug/L | #-0.01 |
| 4) pentafluorobenzene | 6.553 | 168 | 269992 | 50.00 | ug/L | -0.01 |
| 43) 1,4-difluorobenzene | 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

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




7.1.4

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

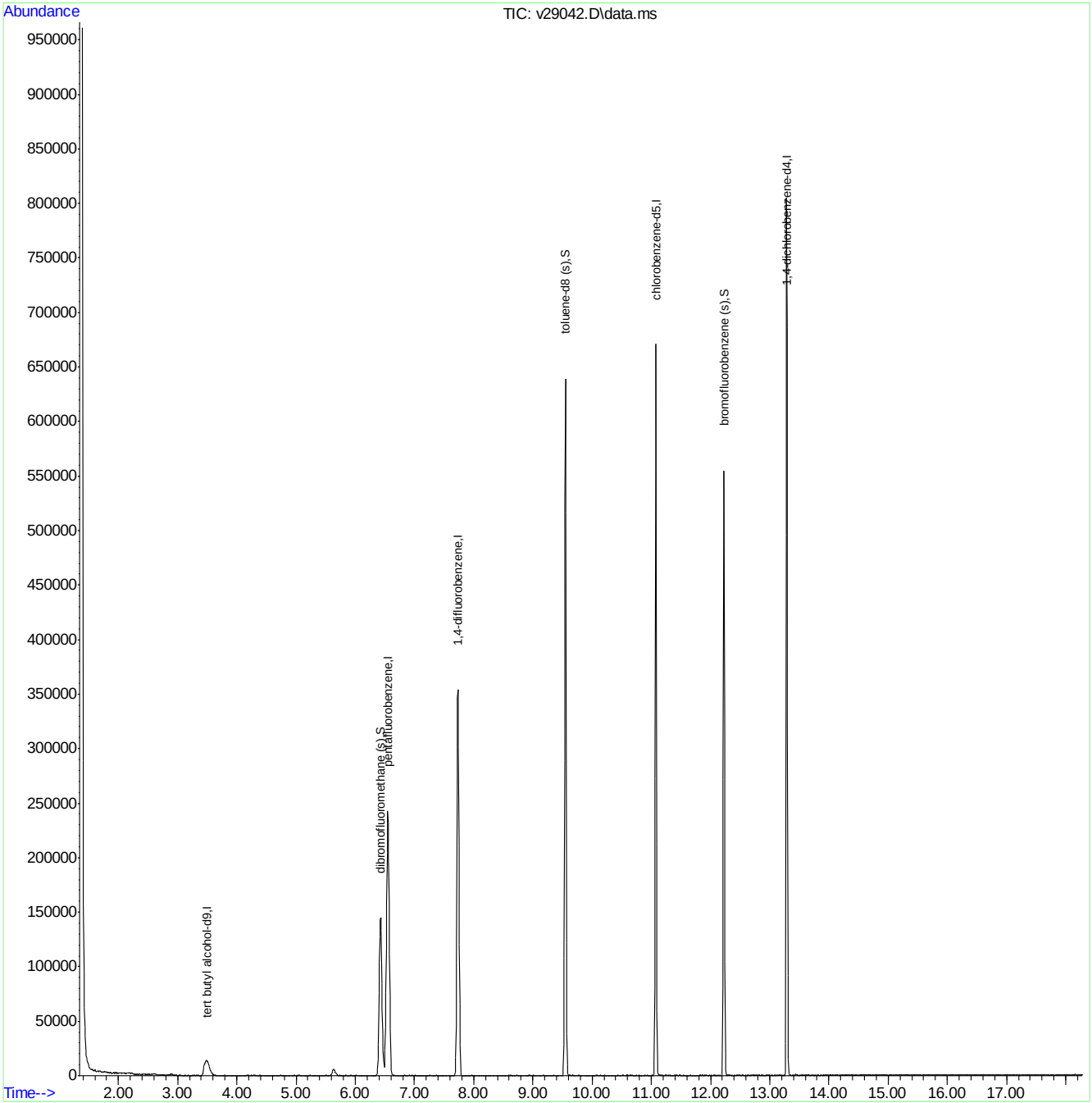
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.497 | 65 | 34218 | 500.00 | ug/L | #-0.01 |
| 4) pentafluorobenzene | 6.552 | 168 | 255971 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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

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

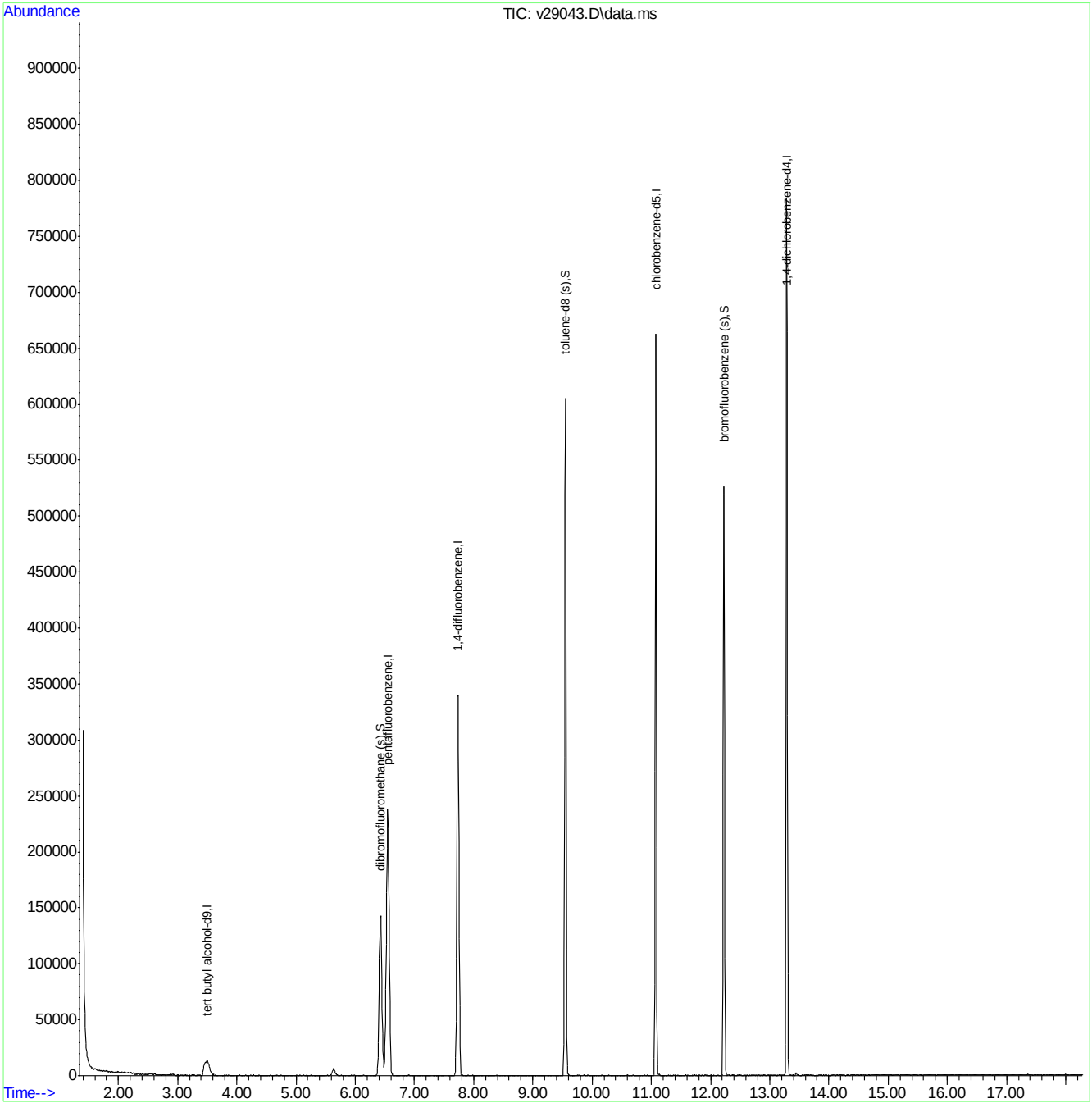
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.495 | 65 | 32066 | 500.00 | ug/L | #-0.01 |
| 4) pentafluorobenzene | 6.551 | 168 | 248124 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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

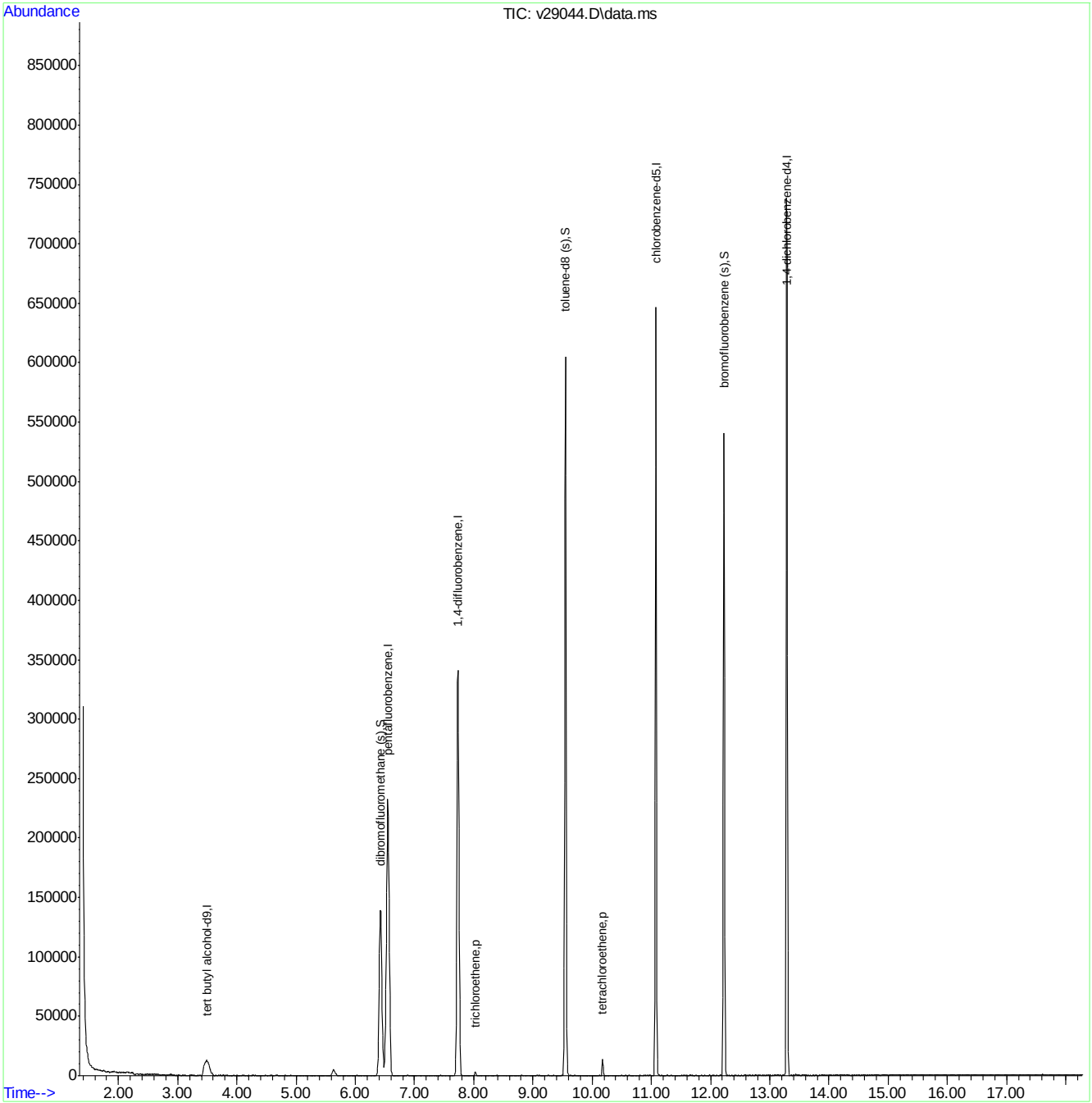
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.494 | 65 | 31063 | 500.00 | ug/L | #-0.02 |
| 4) pentafluorobenzene | 6.552 | 168 | 243103 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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 | | | | | | Qvalue |
| 51) trichloroethene | 8.026 | 95 | 1247 | 0.43 | ug/L | 78 |
| 67) tetrachloroethene | 10.178 | 166 | 3504 | 1.25 | ug/L | 90 |

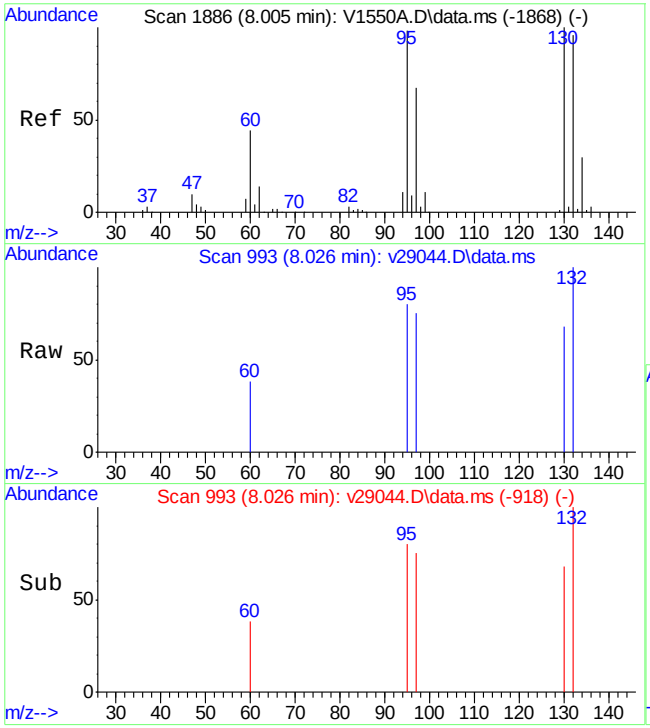
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

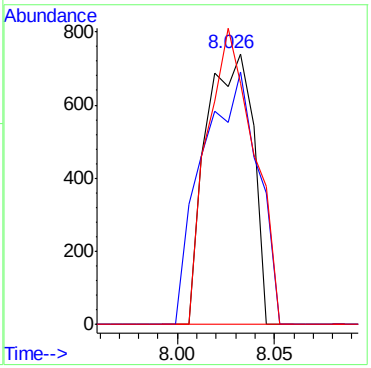


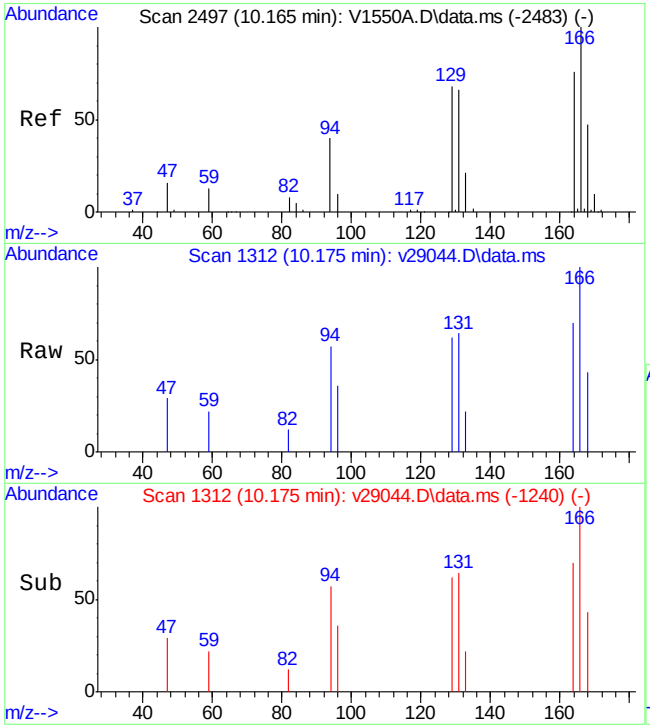



#51
trichloroethene
Concen: 0.43 ug/L
RT: 8.026 min Scan# 993
Delta R.T. -0.014 min
Lab File: v29044.D
Acq: 25 Mar 2014 6:04 pm

Tgt Ion: 95 Resp: 1247

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

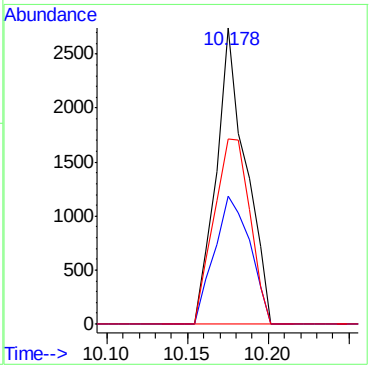



#67
tetrachloroethene
Concen: 1.25 ug/L
RT: 10.178 min Scan# 1312
Delta R.T. -0.010 min
Lab File: v29044.D
Acq: 25 Mar 2014 6:04 pm

Tgt Ion:166 Resp: 3504

| 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

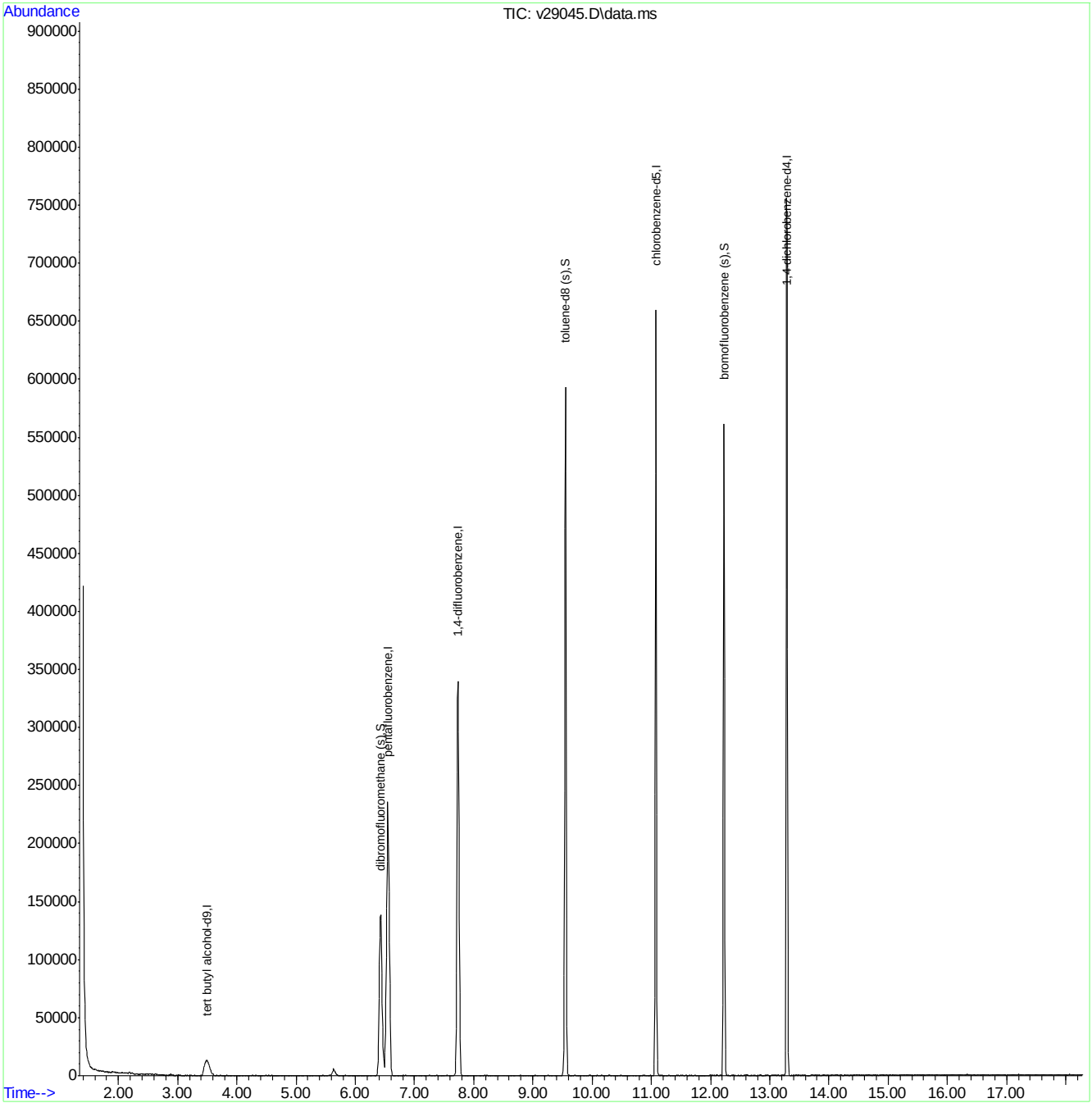
7.1.8

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

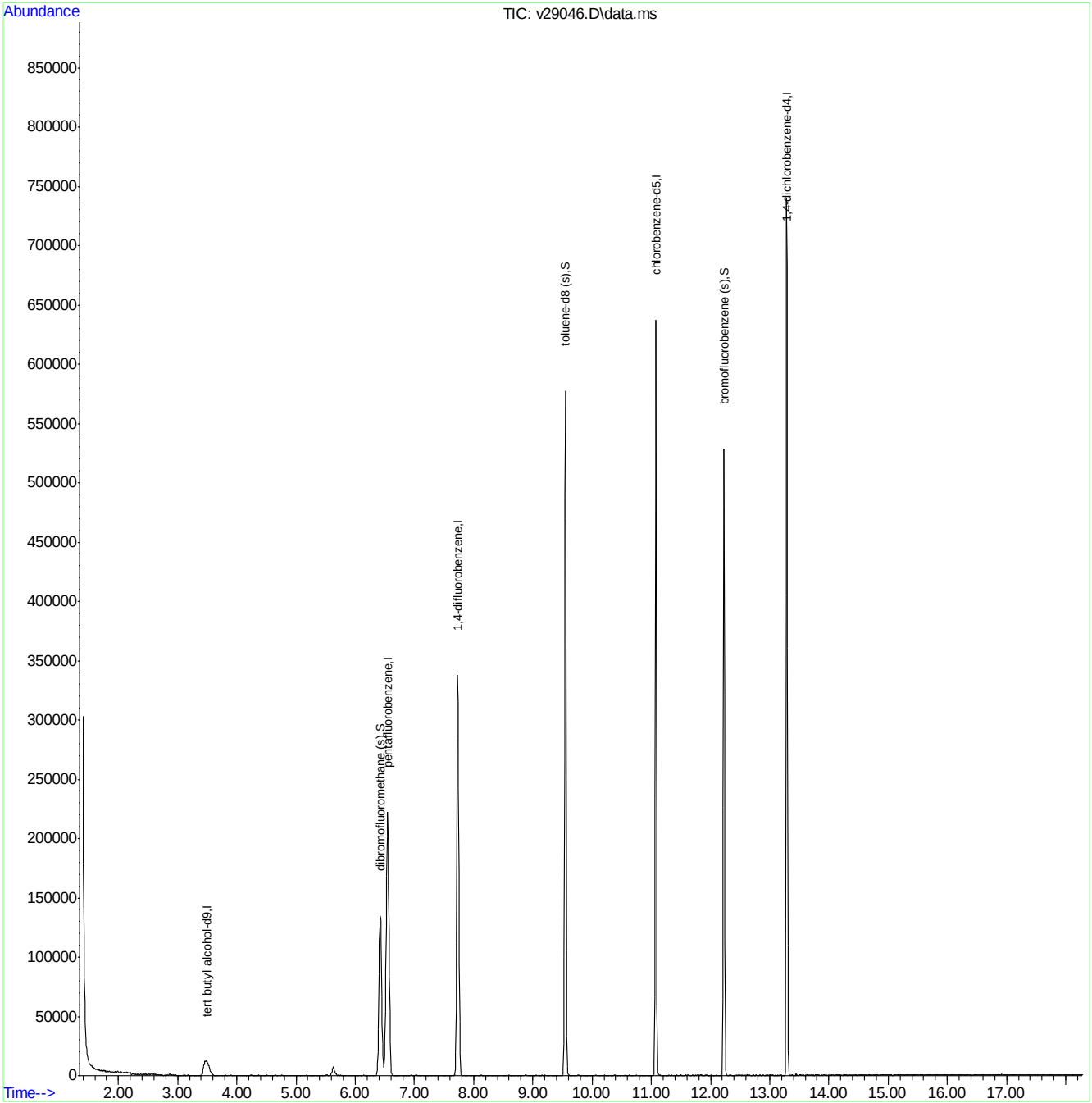
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.490 | 65 | 31431 | 500.00 | ug/L | #-0.02 |
| 4) pentafluorobenzene | 6.548 | 168 | 231782 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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

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

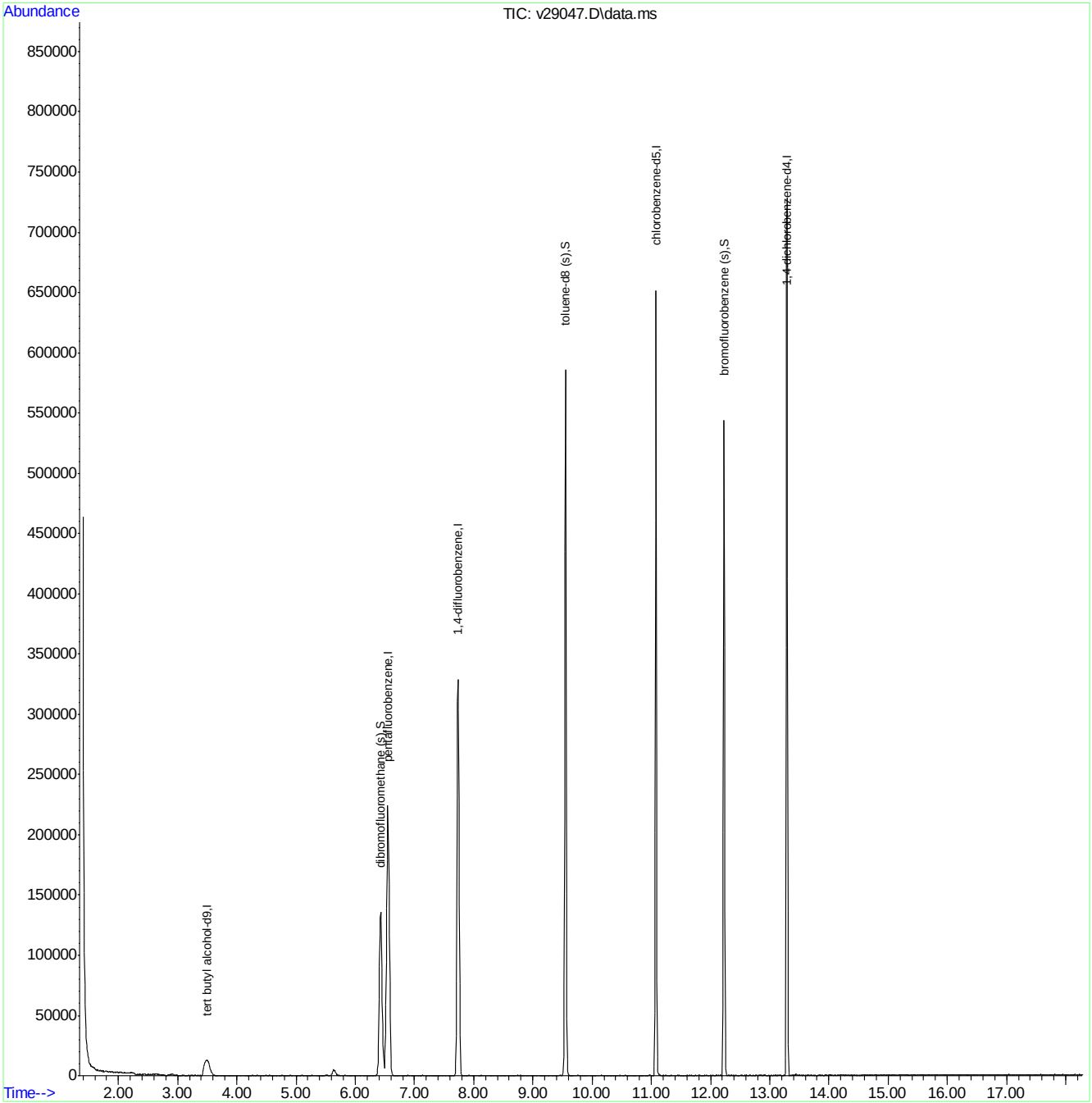
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.499 | 65 | 33378 | 500.00 | ug/L | #-0.01 |
| 4) pentafluorobenzene | 6.554 | 168 | 233607 | 50.00 | ug/L | -0.01 |
| 43) 1,4-difluorobenzene | 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

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




v140226w.m Wed Mar 26 08:54:28 2014 Page: 2

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

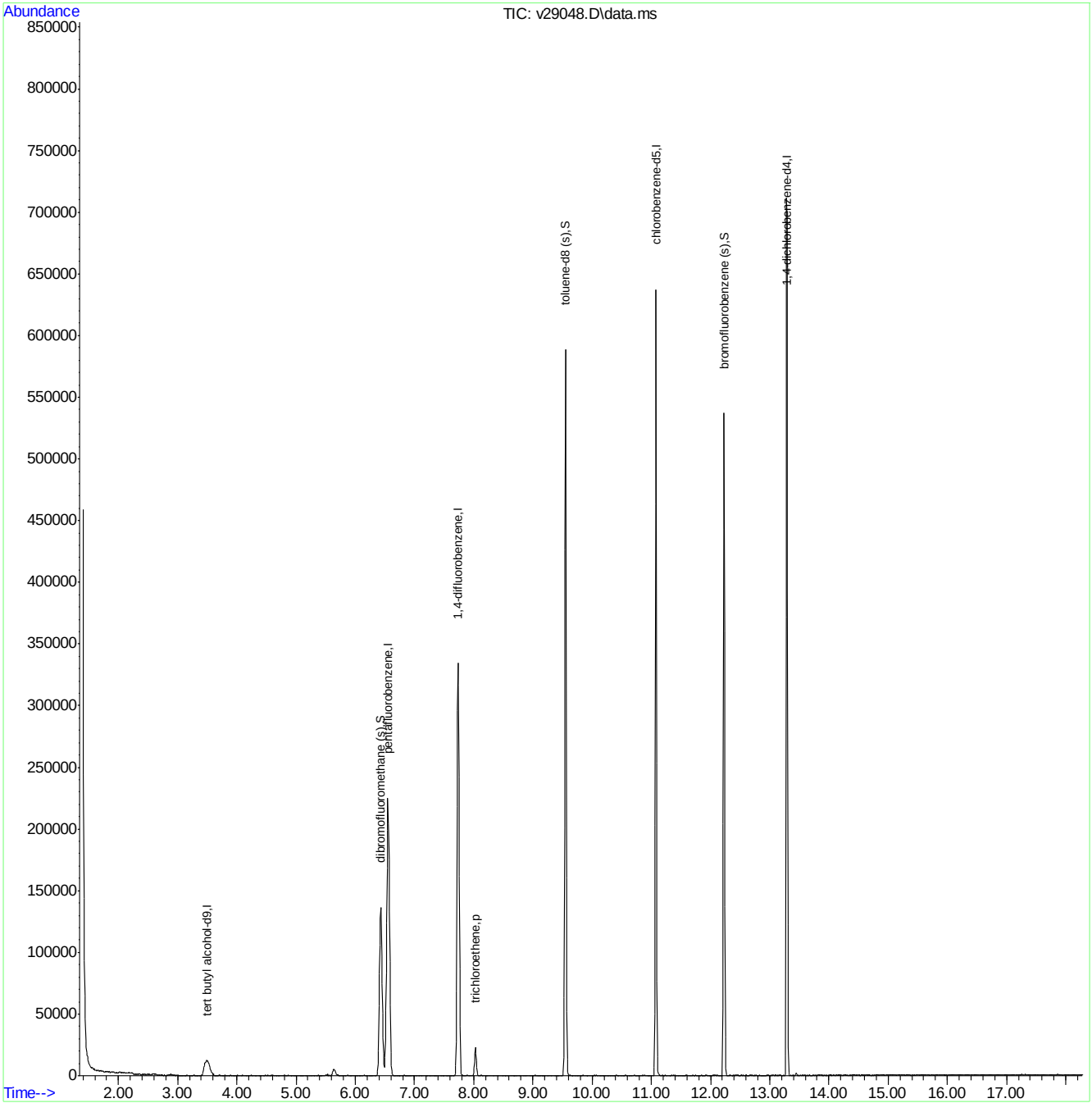
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.501 | 65 | 30839 | 500.00 | ug/L | # 0.00 |
| 4) pentafluorobenzene | 6.556 | 168 | 237019 | 50.00 | ug/L | -0.01 |
| 43) 1,4-difluorobenzene | 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 | | | | | | Qvalue |
| 51) trichloroethene | 8.029 | 95 | 9710 | 3.45 | ug/L | 88 |

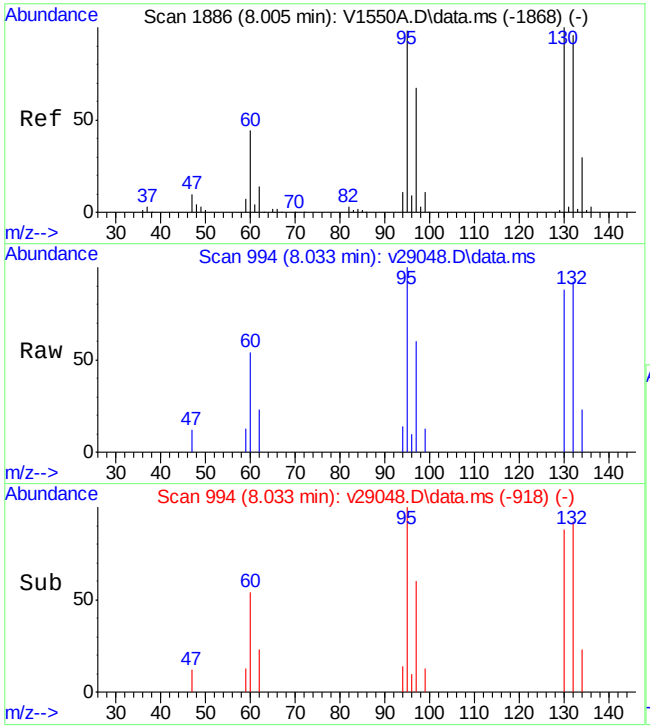
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

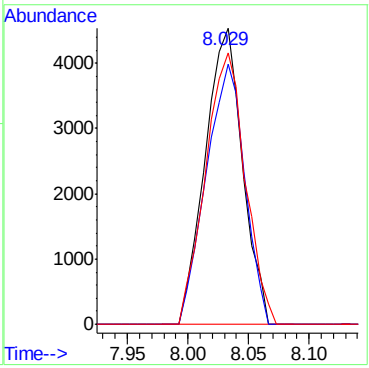





#51
trichloroethene
Concen: 3.45 ug/L
RT: 8.029 min Scan# 994
Delta R.T. -0.011 min
Lab File: v29048.D
Acq: 25 Mar 2014 7:48 pm

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

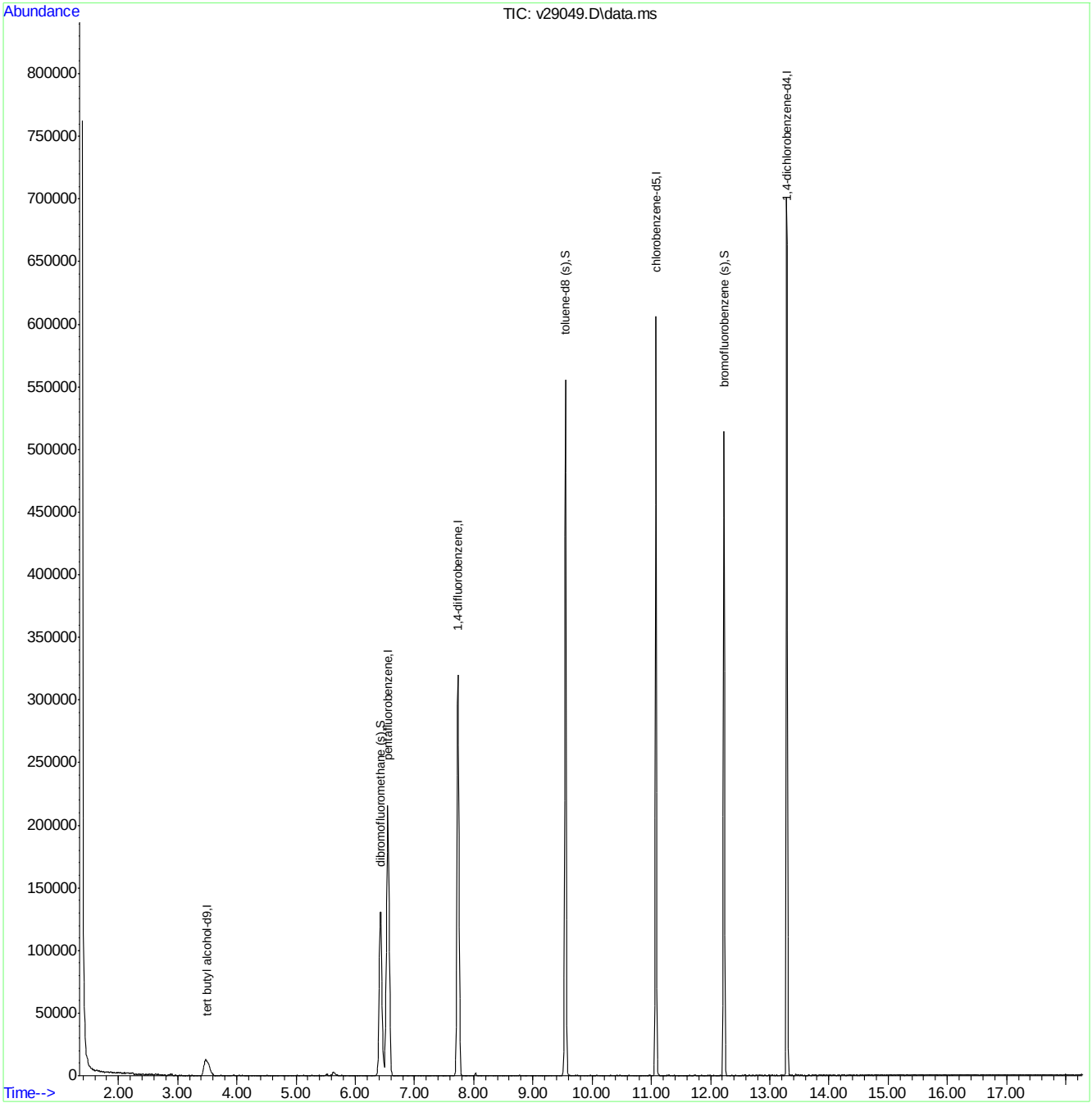
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.494 | 65 | 31630 | 500.00 | ug/L | #-0.02 |
| 4) pentafluorobenzene | 6.552 | 168 | 222778 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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

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

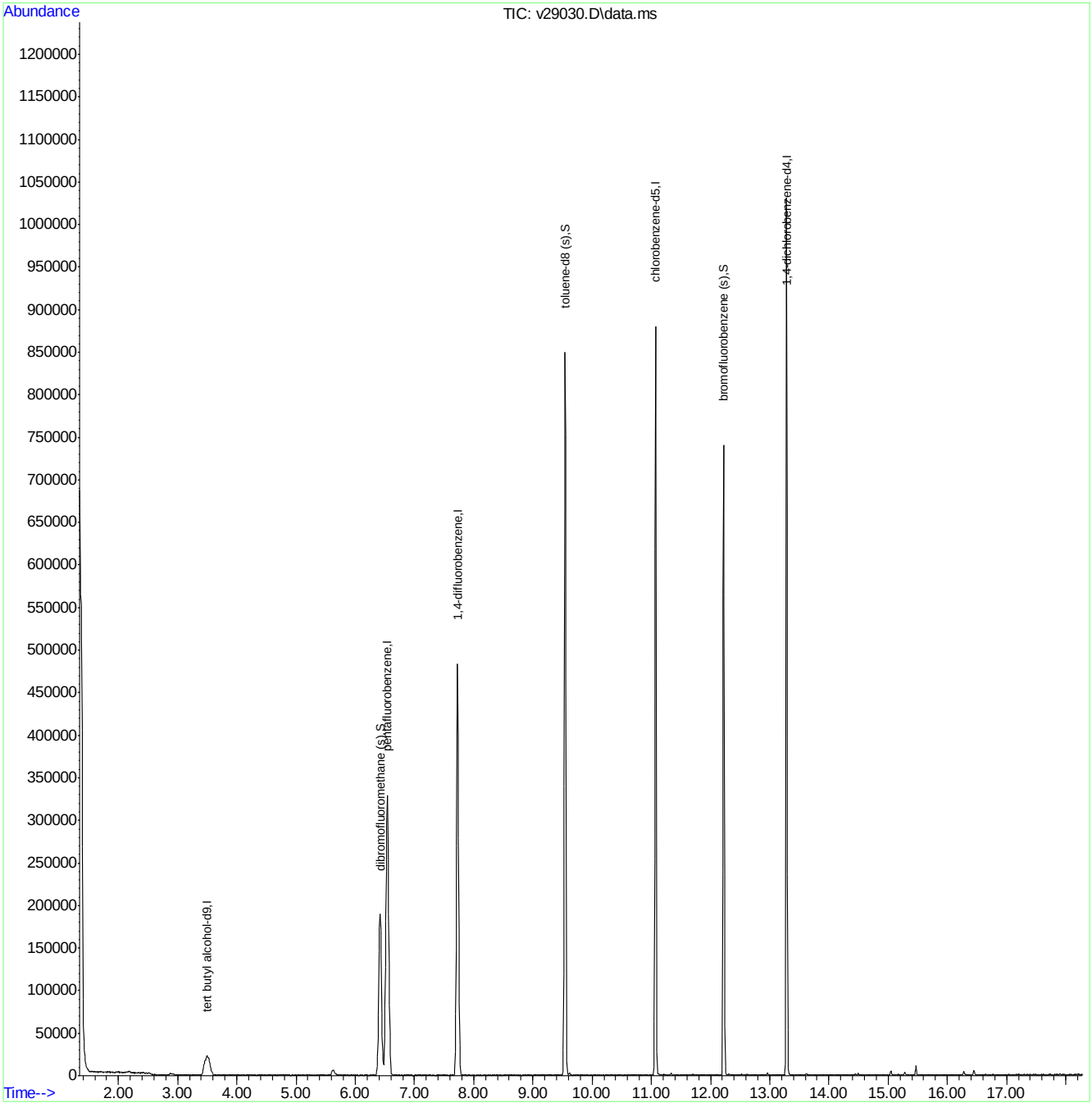
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.491 | 65 | 45052 | 500.00 | ug/L | #-0.02 |
| 4) pentafluorobenzene | 6.543 | 168 | 370155 | 50.00 | ug/L | -0.02 |
| 43) 1,4-difluorobenzene | 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

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

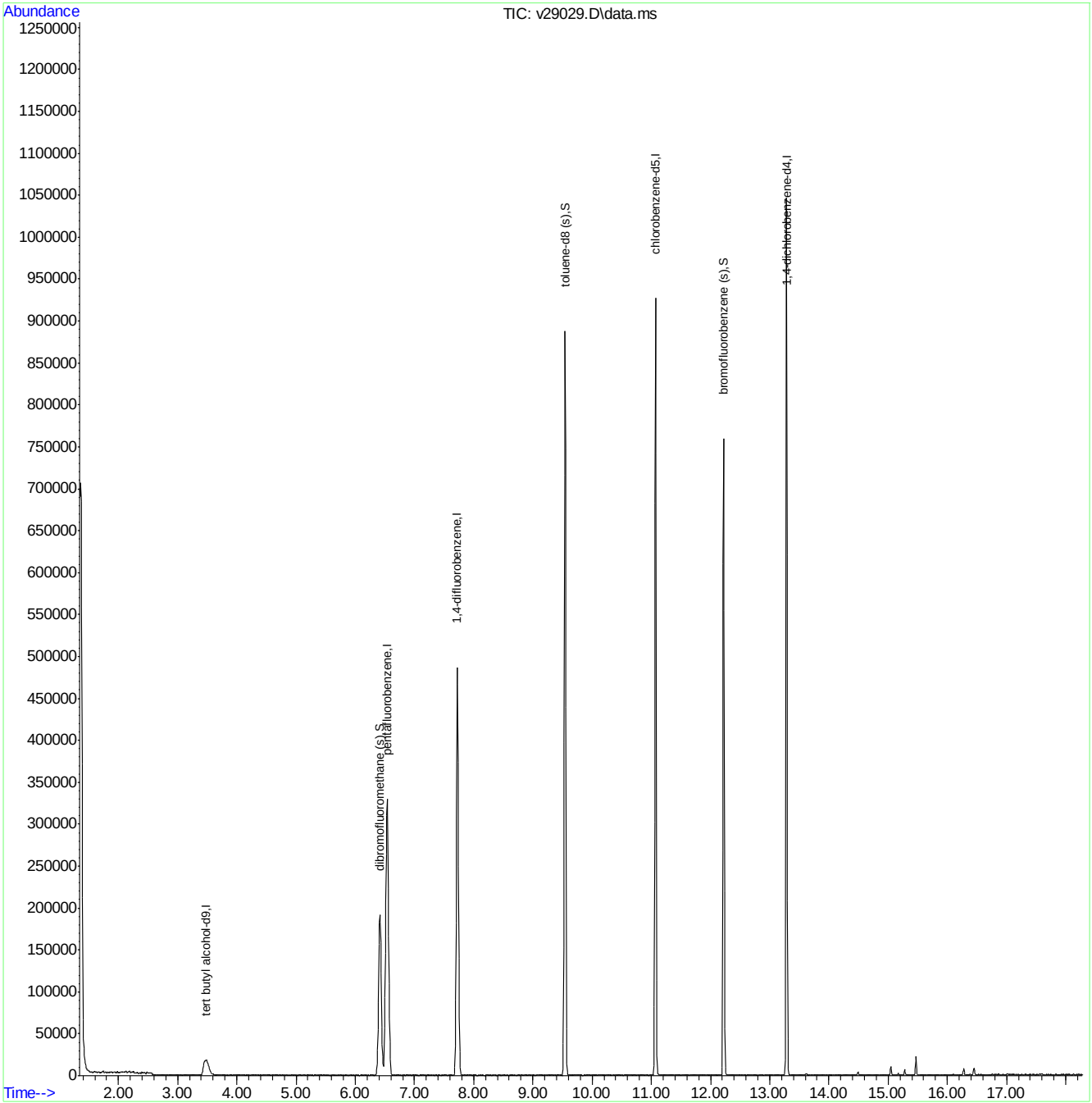
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.487 | 65 | 45928 | 500.00 | ug/L | #-0.02 |
| 4) pentafluorobenzene | 6.540 | 168 | 372112 | 50.00 | ug/L | -0.03 |
| 43) 1,4-difluorobenzene | 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

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

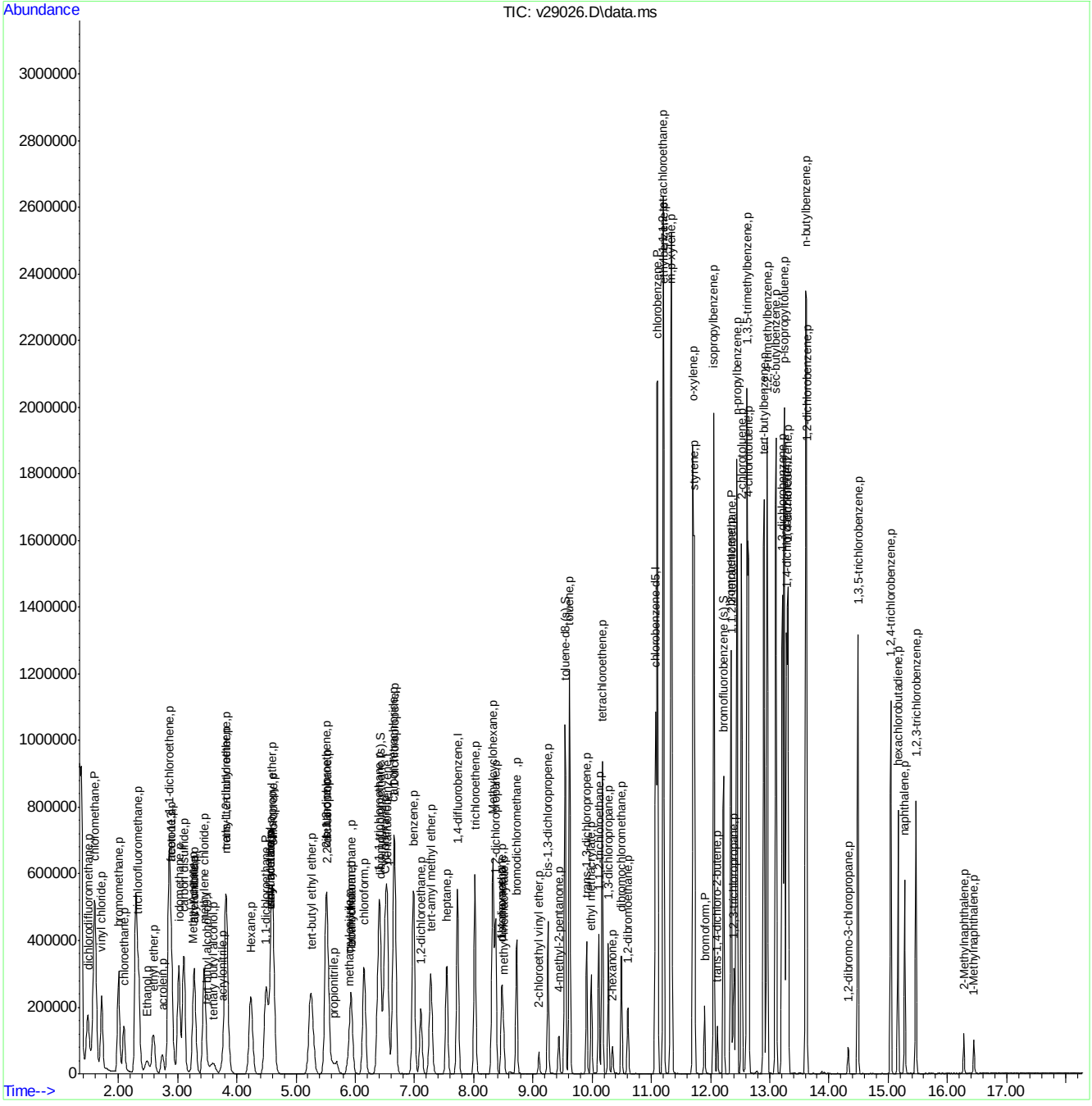
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 93) | 1,3-dichlorobenzene | 13.212 | 146 | 519073 | 50.01 | ug/L | 99 |
| 94) | p-isopropyltoluene | 13.245 | 119 | 1027290 | 54.57 | ug/L | 99 |
| 95) | 1,4-dichlorobenzene | 13.307 | 146 | 499732 | 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

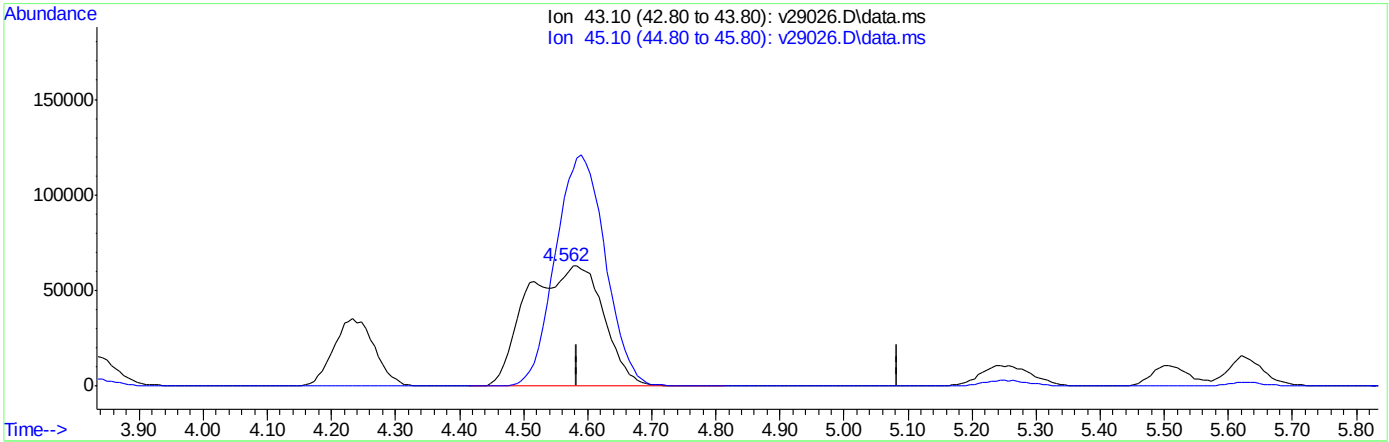
Quant Time: Mar 26 08:47:12 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

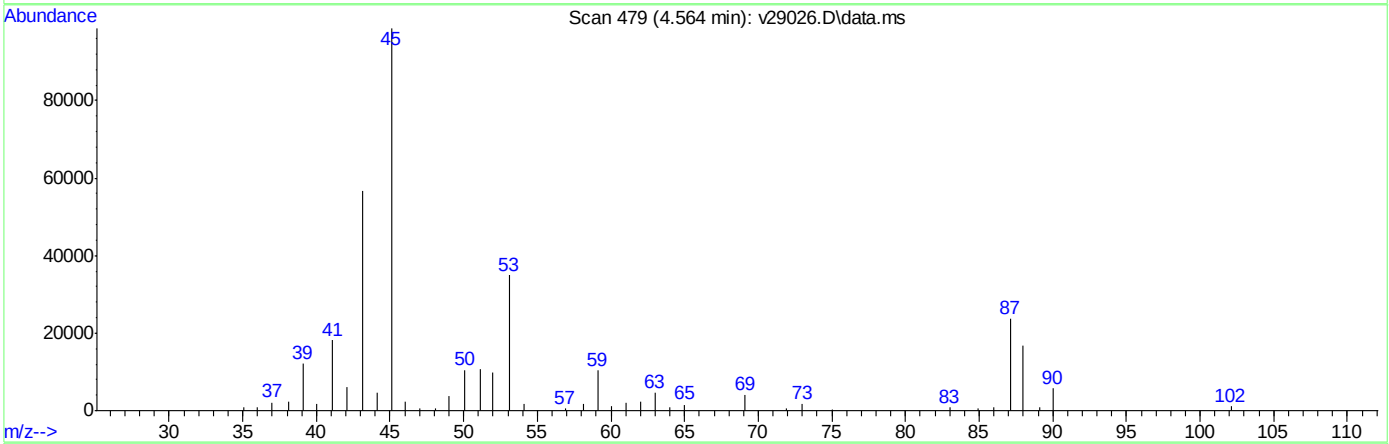


Quantitation Report (Qedit)

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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
03/26/14 12:03

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

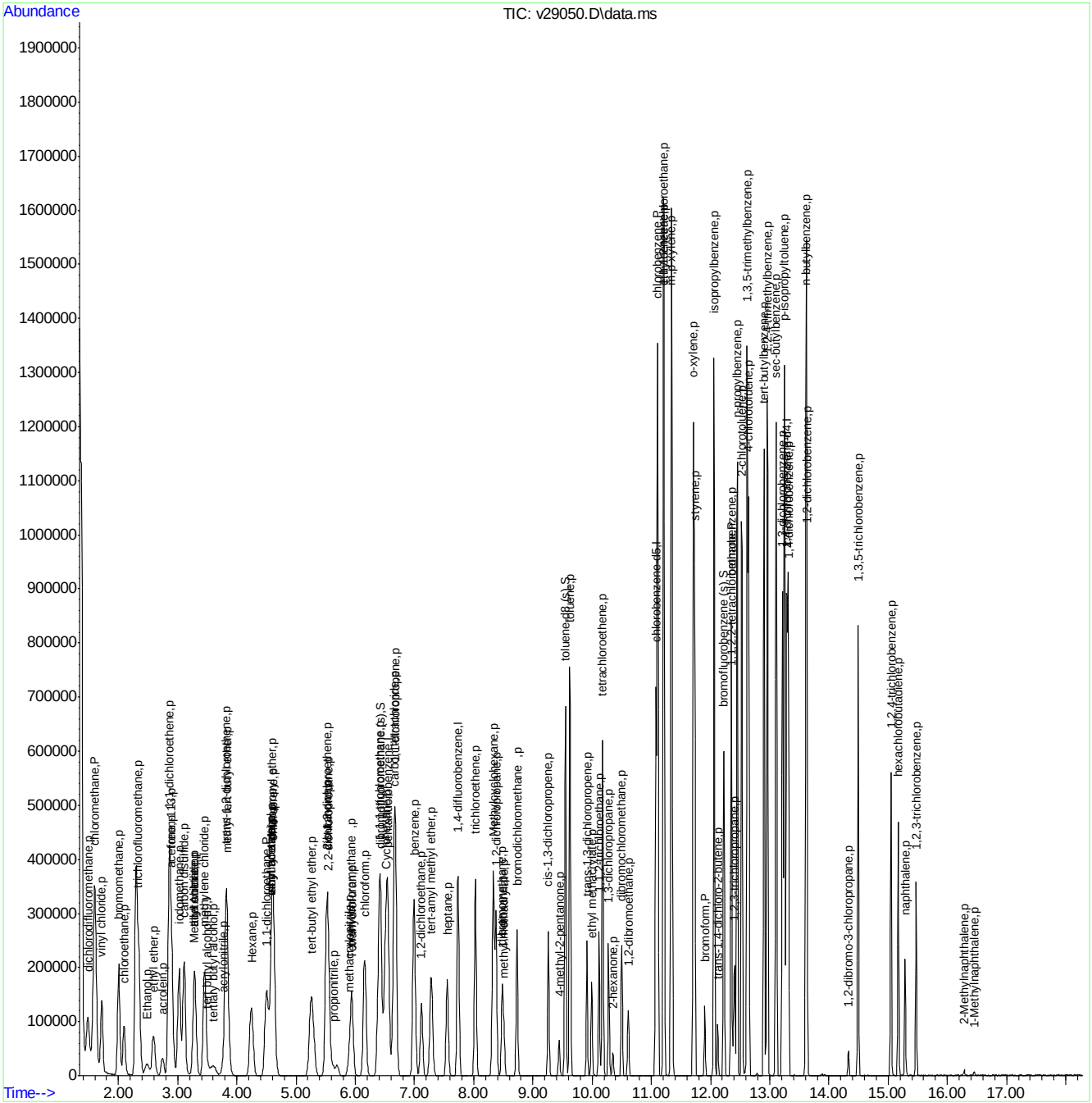
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 94) | p-isopropyltoluene | 13.249 | 119 | 634849 | 51.25 | ug/L | 95 |
| 95) | 1,4-dichlorobenzene | 13.312 | 146 | 294201 | 44.19 | ug/L | 98 |
| 96) | 1,2-dichlorobenzene | 13.628 | 146 | 273506 | 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

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

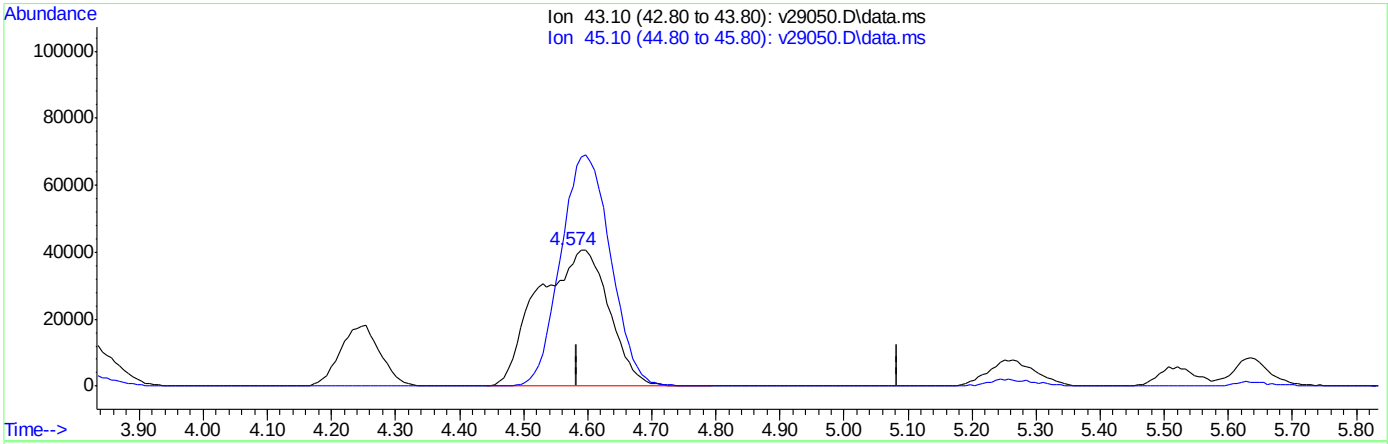
Quant Time: Mar 26 08:55:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

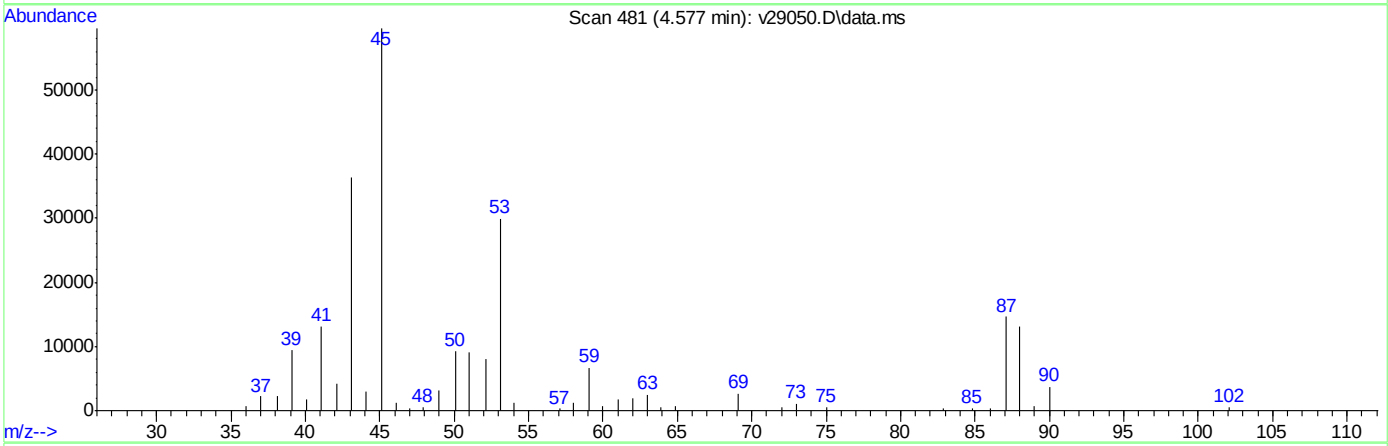


# Quantitation Report (Qedit)

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




TIC: v29050.D\data.ms

(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 |

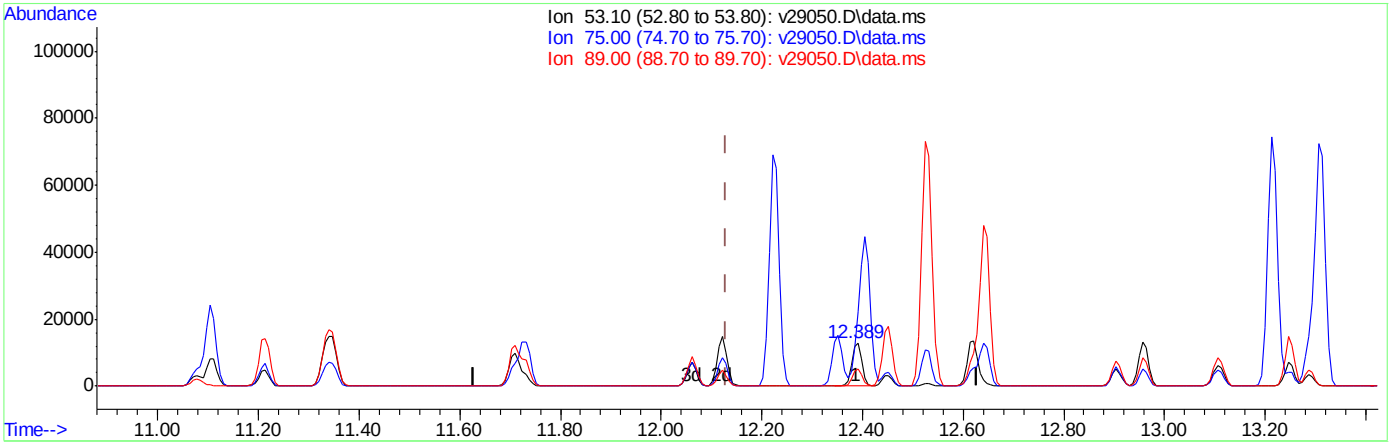


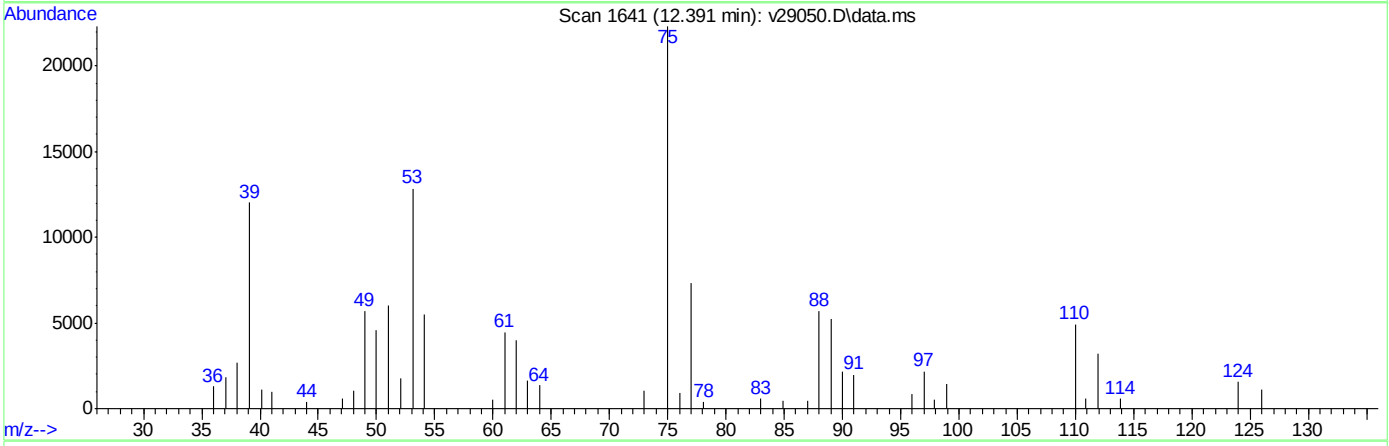
V29050.D edits: ethyl acetate

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




TIC: v29050.D\data.ms

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

12.389min (+0.260) 33.74ug/L

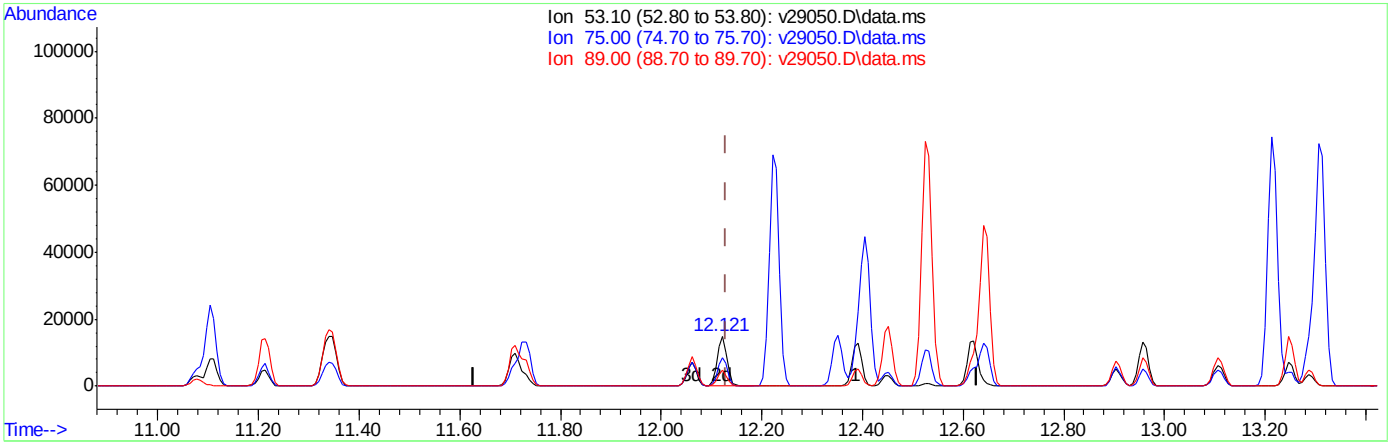
response 17967

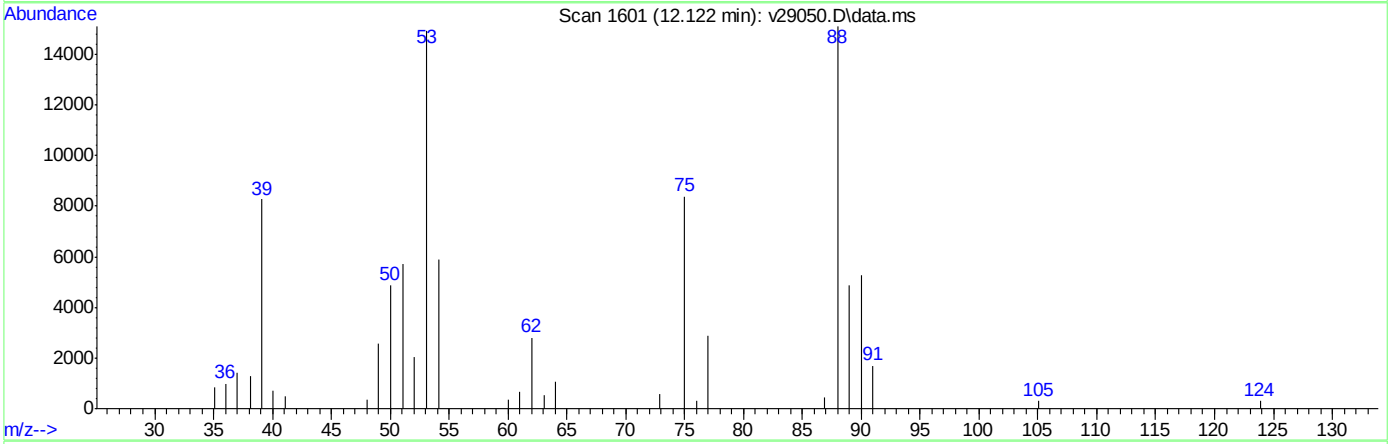
| Ion | Exp% | Act% |
|---|---|---|
| 53.10 | 100 | 100 |
| 75.00 | 105.50 | 131.68 |
| 89.00 | 51.30 | 40.91 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v29050.D\data.ms

(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 |





V29050.D edits: trans-1,4-dichloro-2-butene

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
03/26/14 12:03

# 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

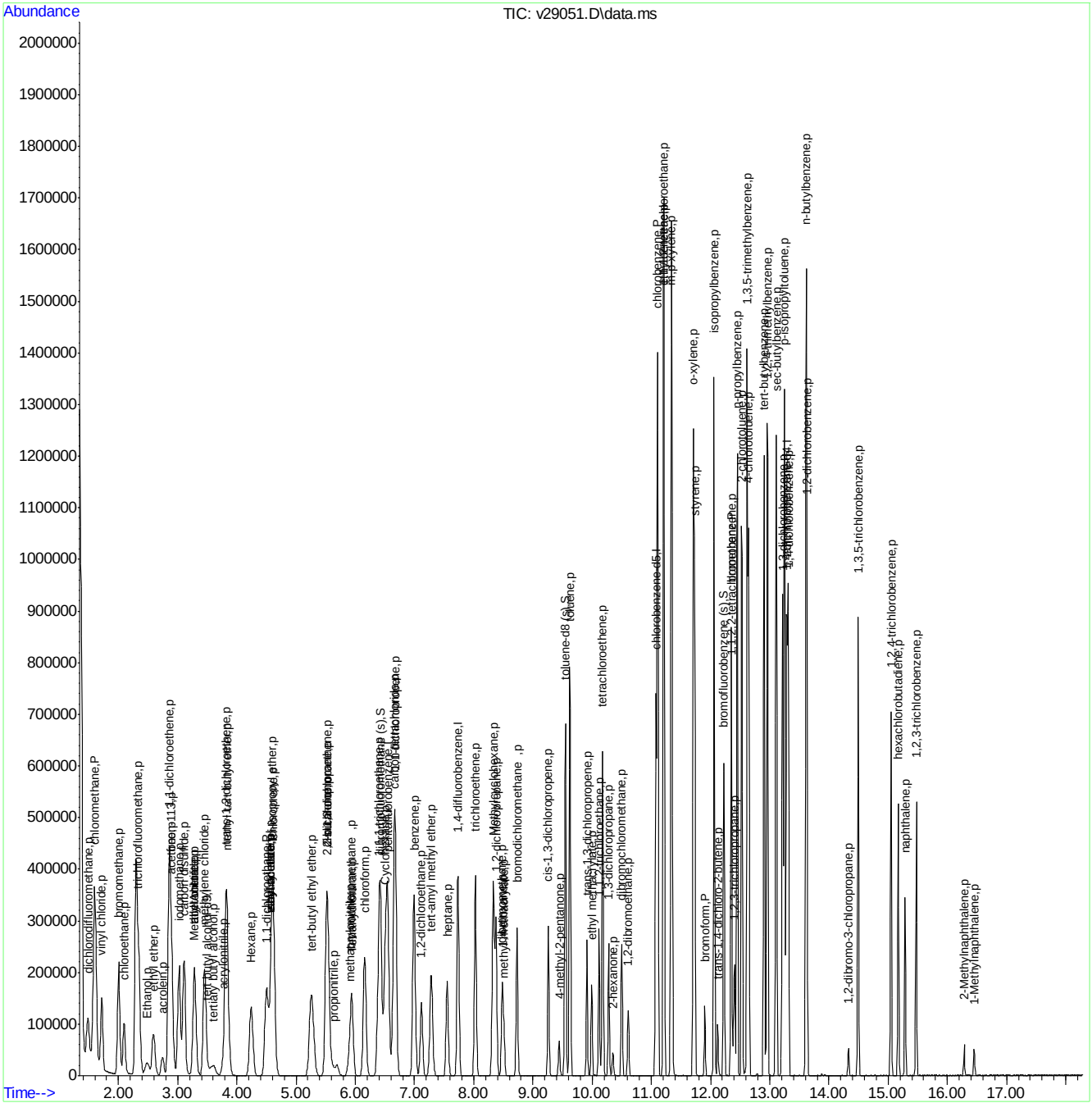
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 94) | p-isopropyltoluene | 13.250 | 119 | 658265 | 53.48 | ug/L | 95 |
| 95) | 1,4-dichlorobenzene | 13.312 | 146 | 307406 | 46.47 | ug/L | 98 |
| 96) | 1,2-dichlorobenzene | 13.629 | 146 | 289260 | 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)

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

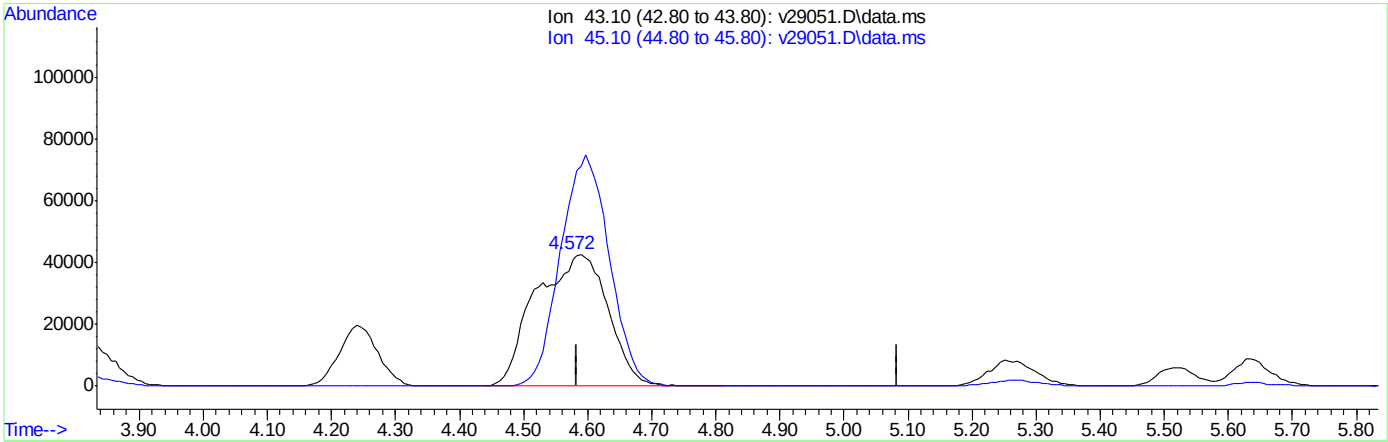
Quant Time: Mar 26 08:56:47 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

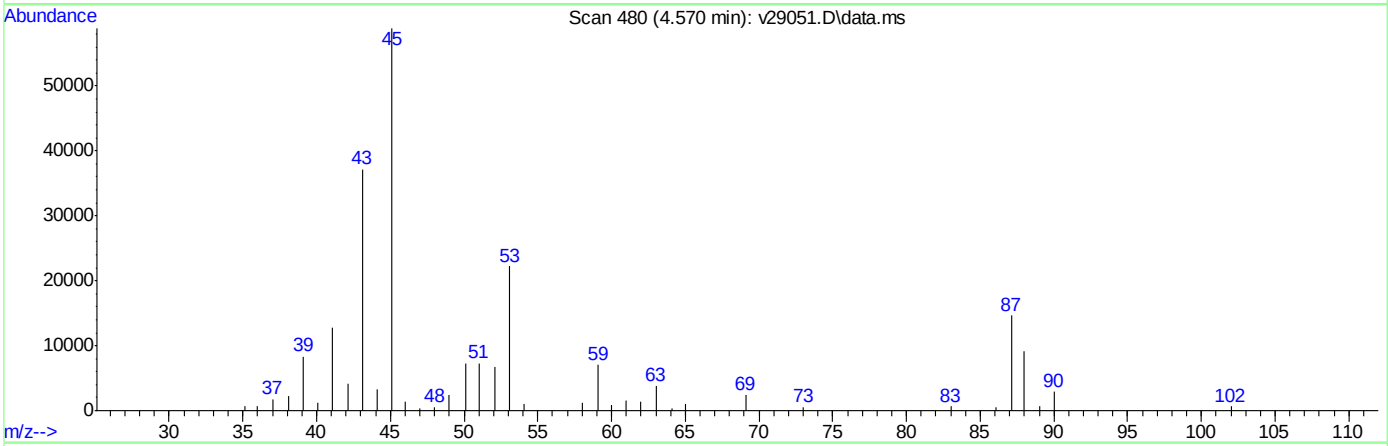


# Quantitation Report (Qedit)

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




TIC: v29051.D\data.ms

(37) ethyl acetate (p)

4.570min (-0.014) 40.03ug/L m

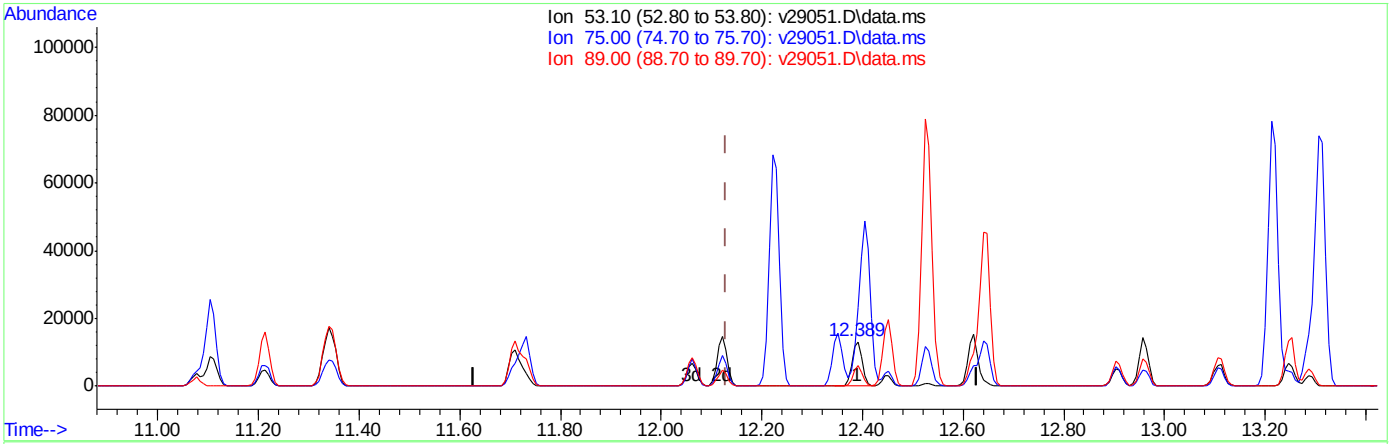
response 335260

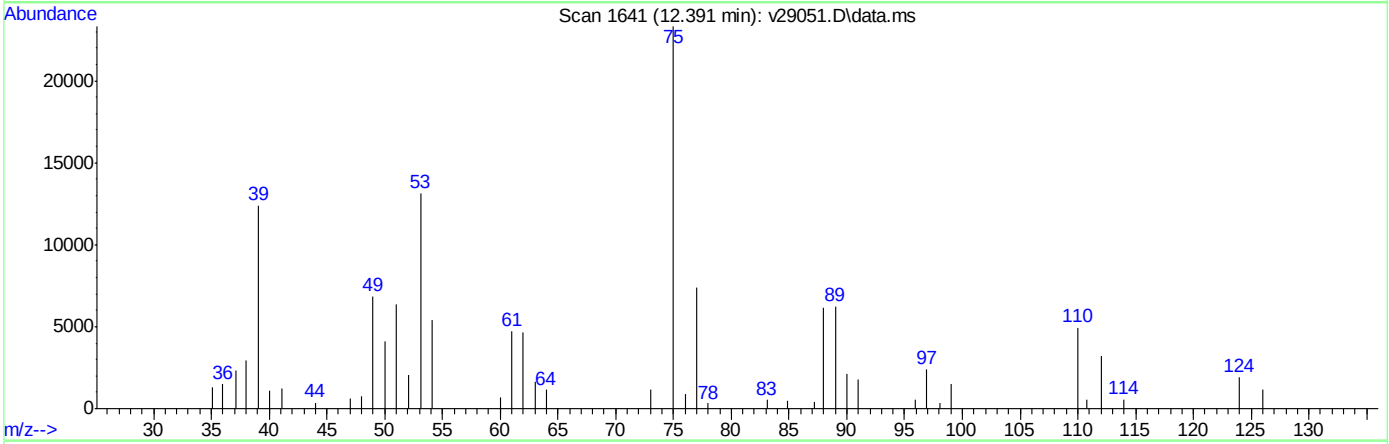
| Ion | Exp% | Act% |
|---|---|---|
| 43.10 | 100 | 100 |
| 45.10 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

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




TIC: v29051.D\data.ms

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

12.389min (+0.260) 33.20ug/L

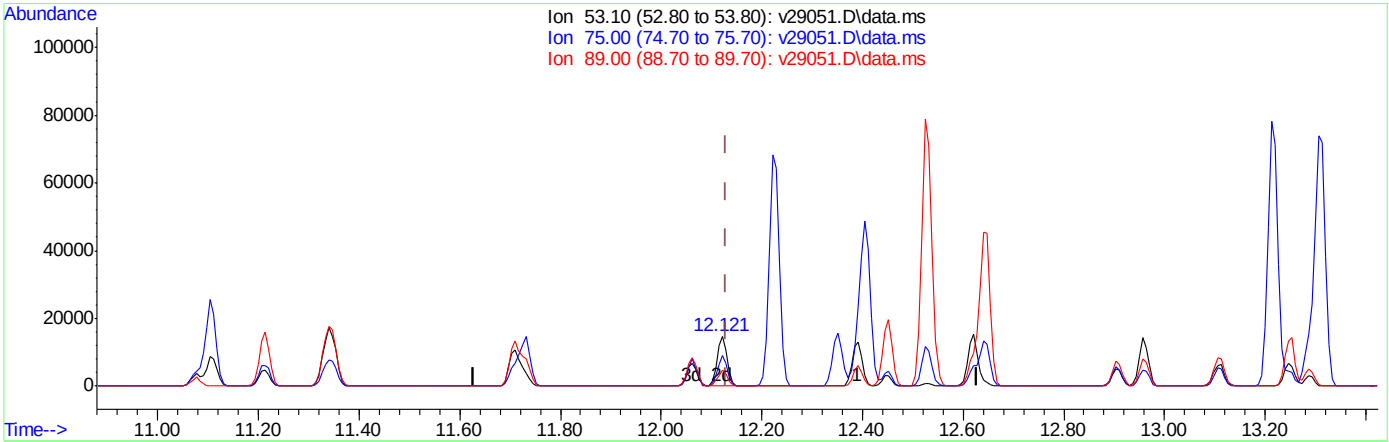
response 18118

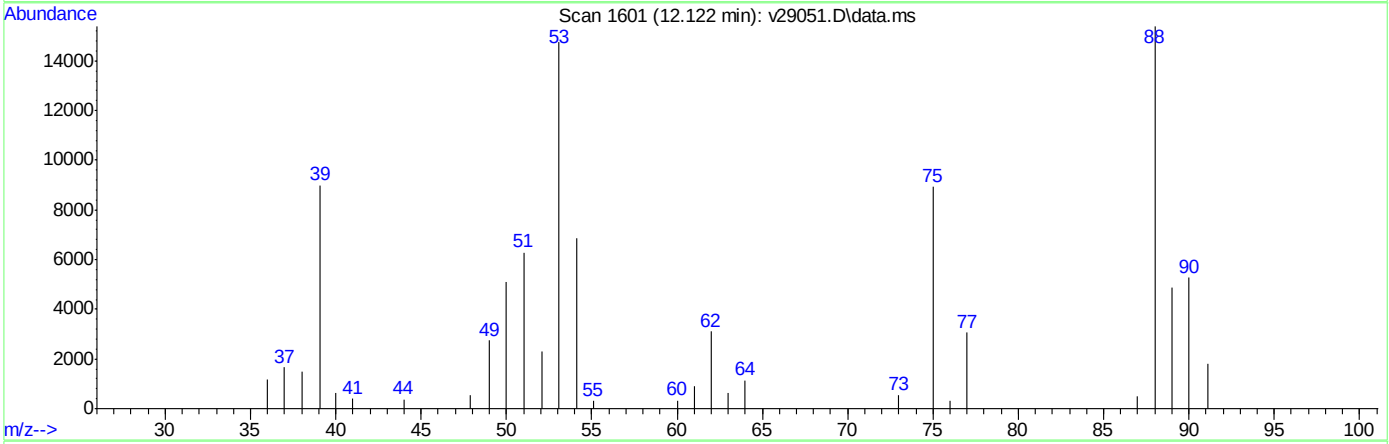
| Ion | Exp% | Act% |
|---|---|---|
| 53.10 | 100 | 100 |
| 75.00 | 105.50 | 134.06 |
| 89.00 | 51.30 | 47.38 |
| 0.00 | 0.00 | 0.00 |

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




TIC: v29051.D\data.ms

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

12.122min (-0.007) 36.56ug/L m

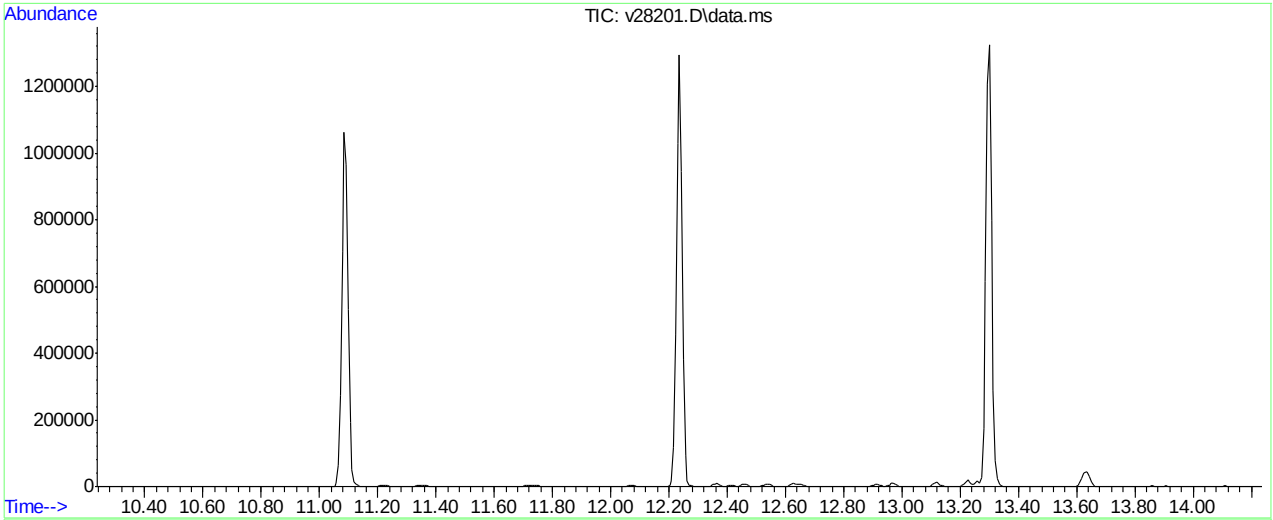
response 20087

| 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 |

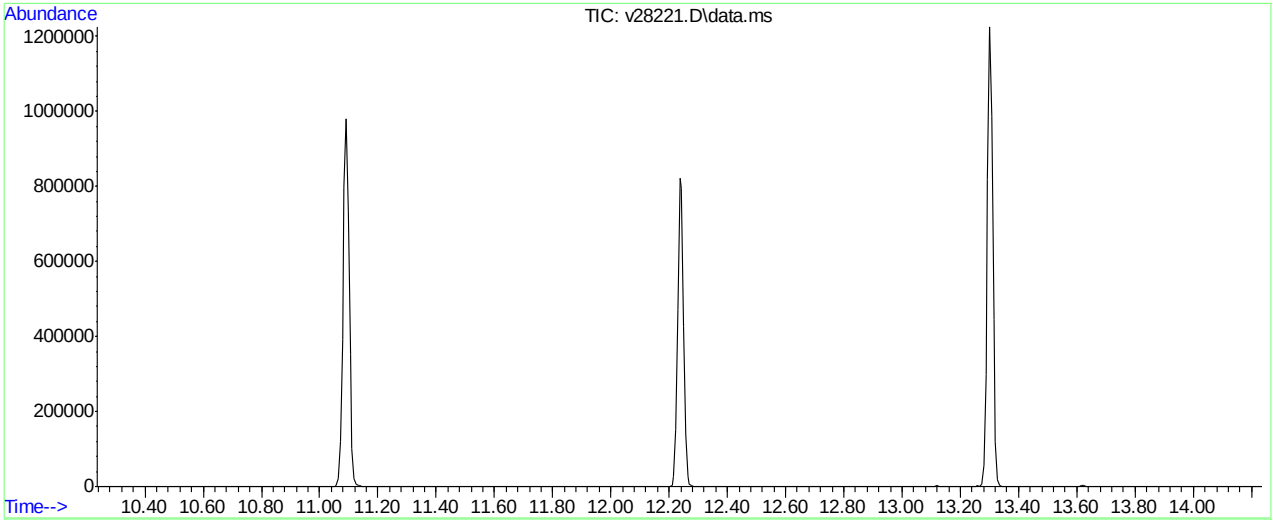
Average of 12.230 to 12.243 min.: v28201.D\data.ms
bfb
Modified:subtracted

| 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 | | |

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 |

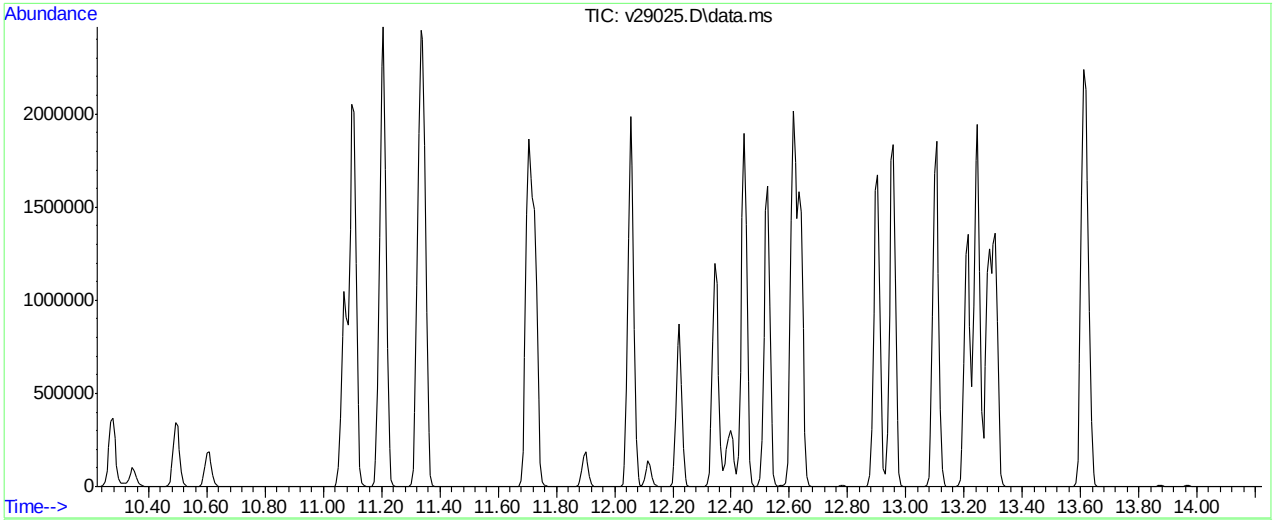
Average of 12.229 to 12.243 min.: v28221.D\data.ms
bfb
Modified:subtracted

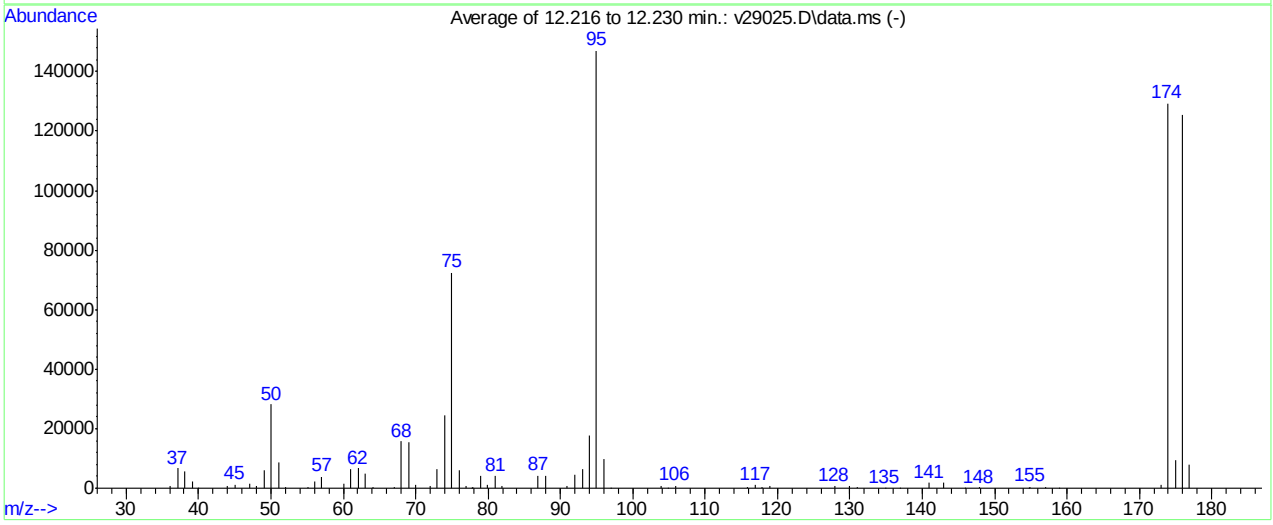
| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 97.10 | 123 | 130.90 | 101 | 173.10 | 531 | | |
| 103.90 | 802 | 134.95 | 230 | 173.90 | 111797 | | |
| 105.95 | 731 | 136.90 | 110 | 175.00 | 8164 | | |
| 115.90 | 379 | 140.95 | 1832 | 175.95 | 106939 | | |
| 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 | | | | |

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 |

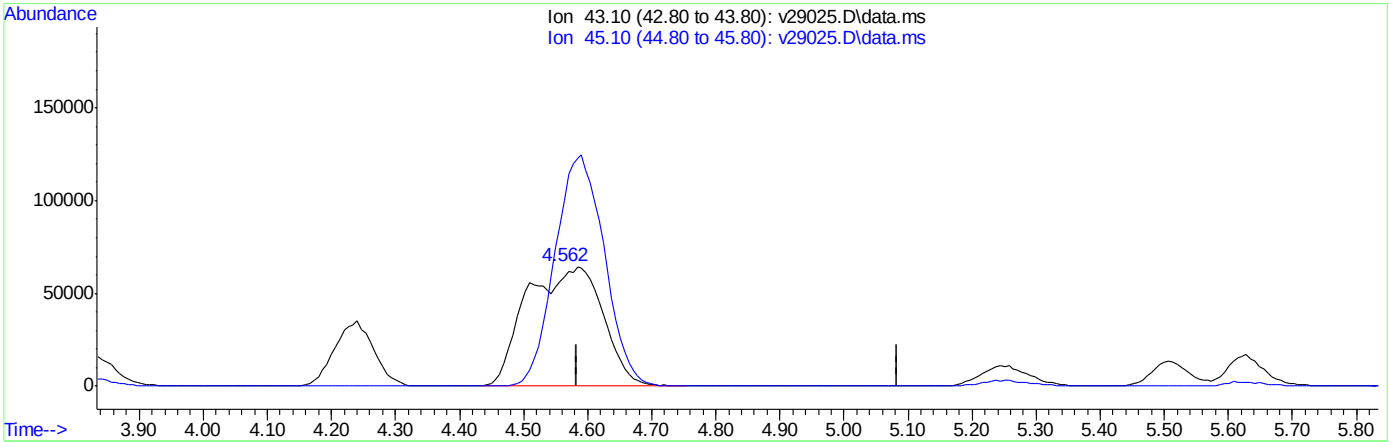
Average of 12.216 to 12.230 min.: v29025.D\data.ms
bfb
Modified:subtracted

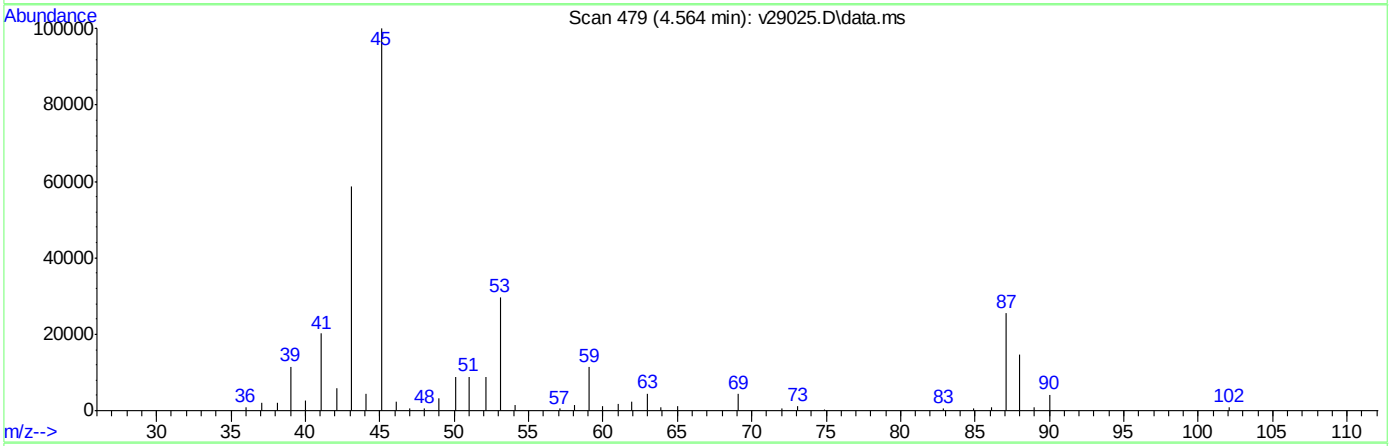
| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 96.00 | 9678 | 130.95 | 266 | 173.00 | 1087 | | |
| 97.00 | 151 | 134.90 | 178 | 173.90 | 129371 | | |
| 103.90 | 744 | 136.90 | 120 | 174.95 | 9549 | | |
| 104.90 | 148 | 140.95 | 1720 | 175.90 | 125507 | | |
| 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 | | | | |

# 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




TIC: v29025.D\data.ms

(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

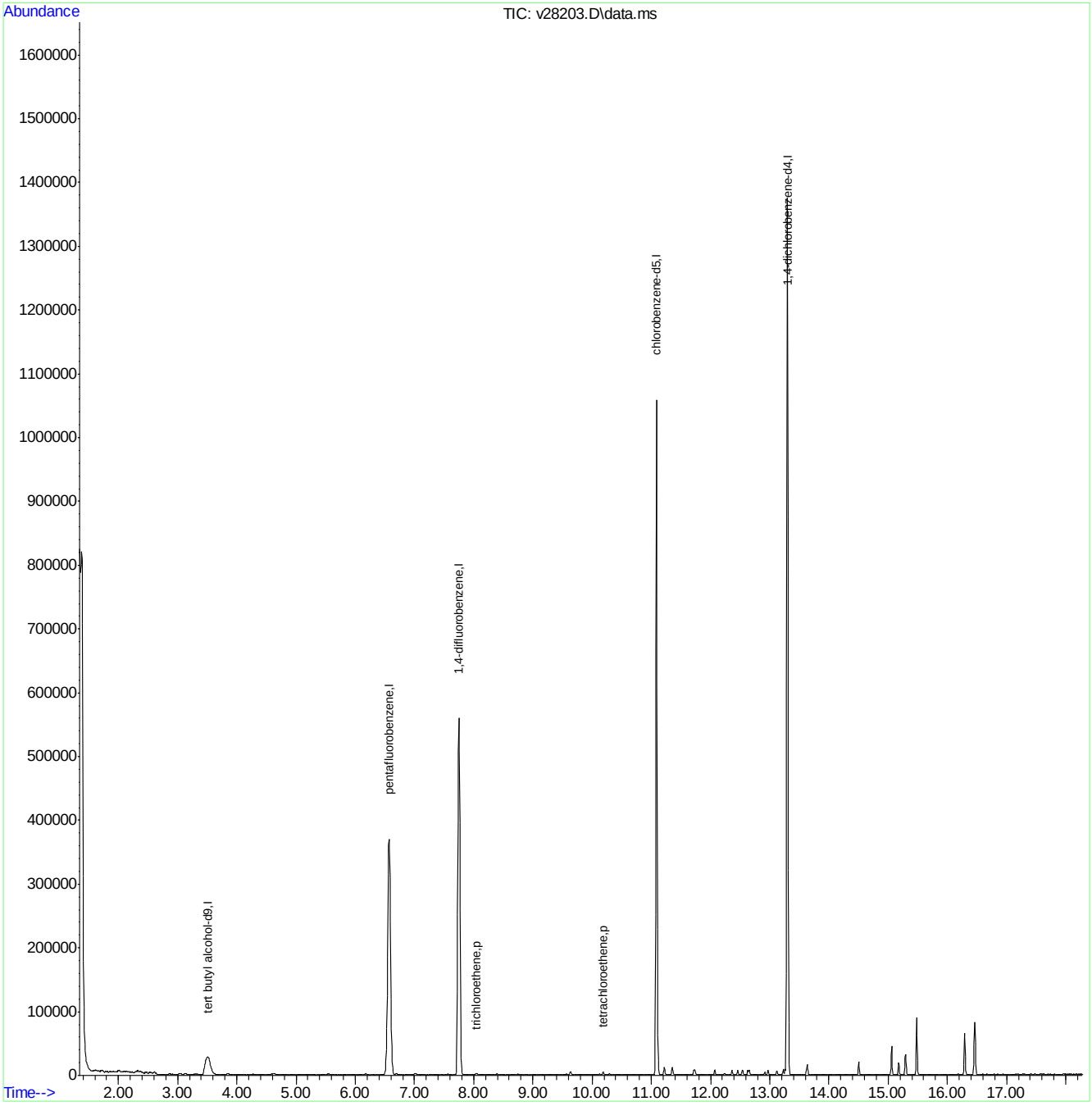
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.515 | 65 | 64815 | 500.00 | ug/L | # 0.00 |
| 4) pentafluorobenzene | 6.572 | 168 | 424956 | 50.00 | ug/L | 0.00 |
| 43) 1,4-difluorobenzene | 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 | | | | | | Qvalue |
| 51) trichloroethene | 8.045 | 95 | 1234 | 0.26 | ug/L | 87 |
| 67) tetrachloroethene | 10.188 | 166 | 1197 | 0.24 | ug/L # | 73 |

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

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

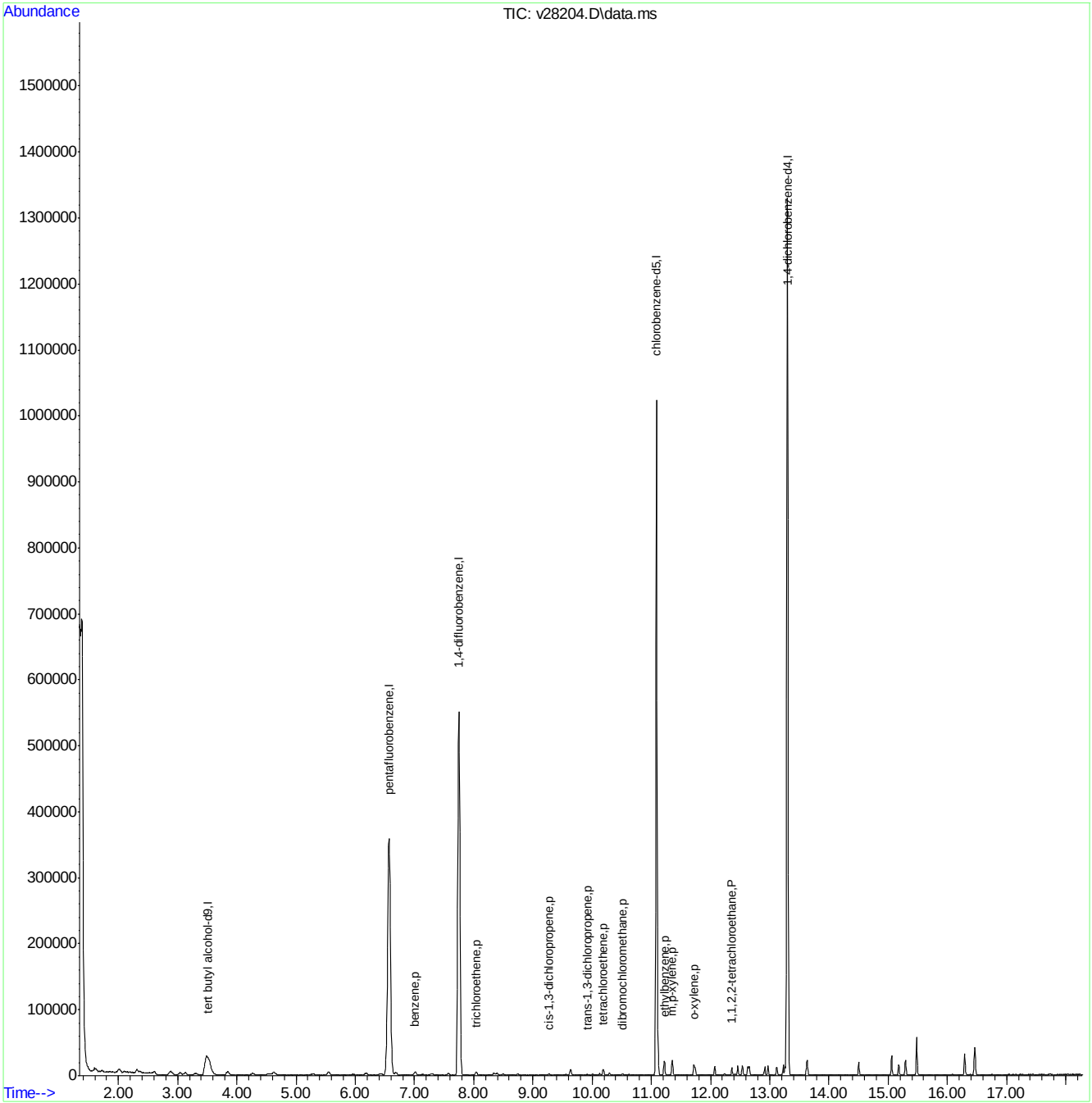
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) tert butyl alcohol-d9 | 3.515 | 65 | 63696 | 500.00 | ug/L | # 0.00 |
| 4) pentafluorobenzene | 6.571 | 168 | 409115 | 50.00 | ug/L | 0.00 |
| 43) 1,4-difluorobenzene | 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 | | | | | | Qvalue |
| 47) benzene | 7.011 | 78 | 7780 | 0.56 | ug/L | 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



Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
02/28/14 12:22

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 | 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 | | | | | | | 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

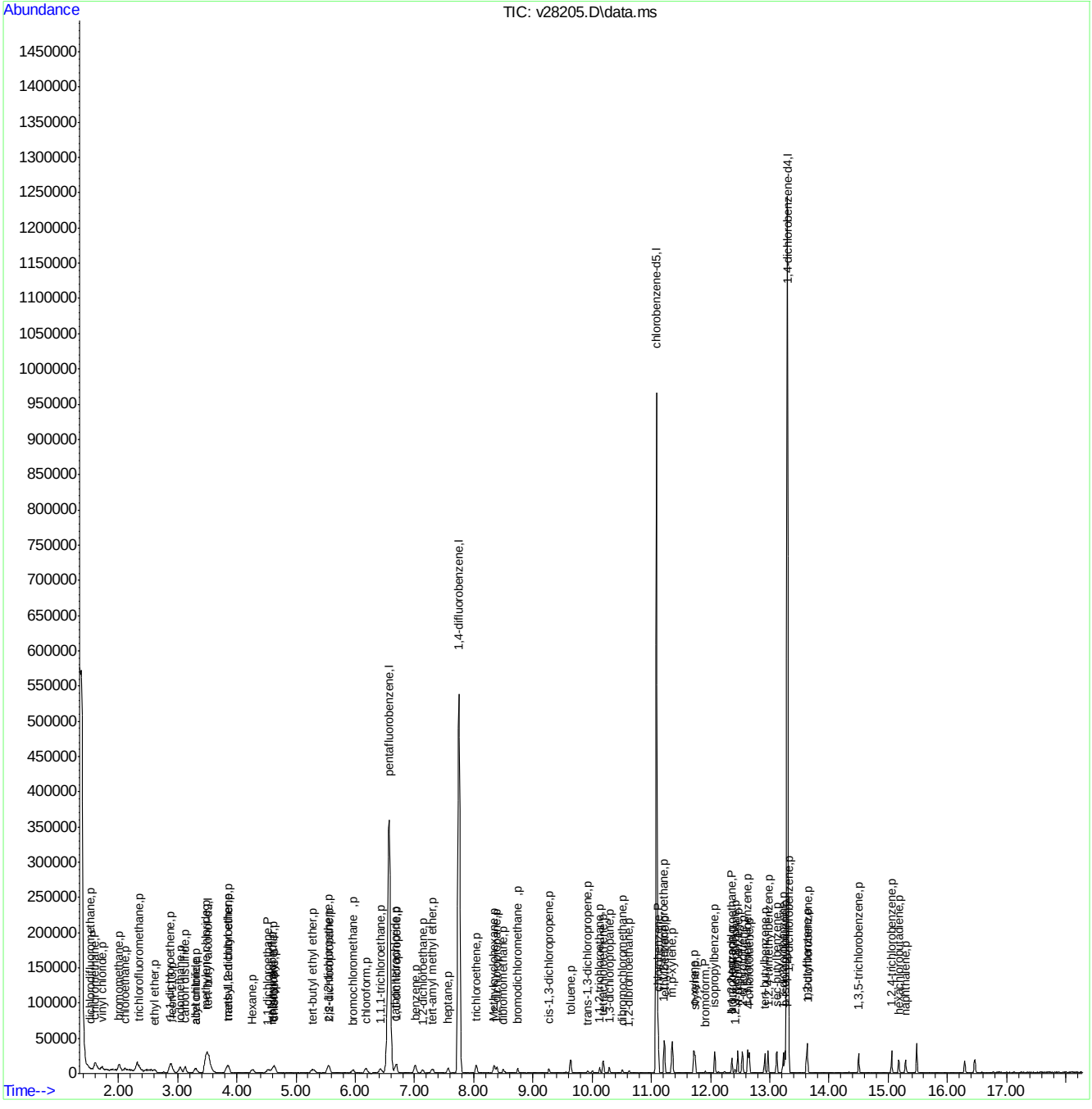
| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 52) | 1,2-dichloropropane | 8.392 | 63 | 3330 | 0.96 | ug/L | | 89 |
| 53) | dibromomethane | 8.495 | 93 | 2095 | 0.97 | ug/L | | 90 |
| 54) | bromodichloromethane | 8.744 | 83 | 5516 | 0.99 | 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

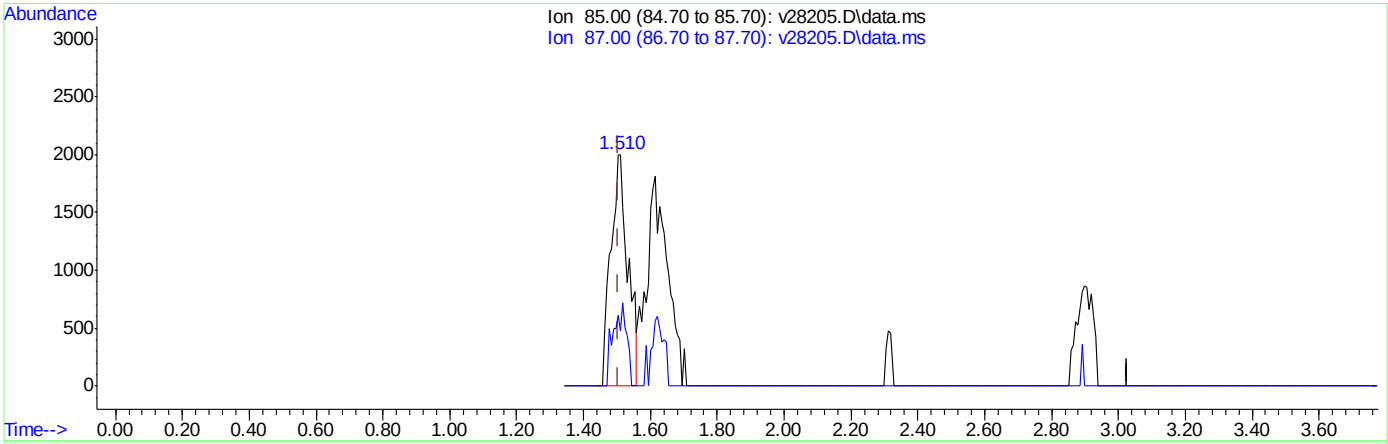
Quant Time: Feb 27 08:04:52 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

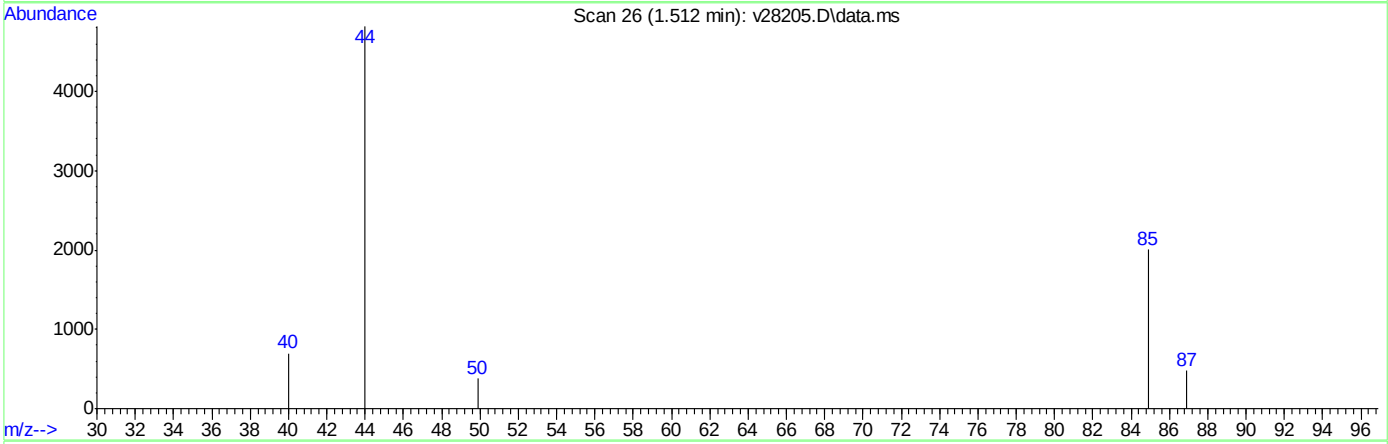


# Quantitation Report (Qedit)

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




TIC: v28205.D\data.ms

(5) dichlorodifluoromethane (p)

1.510min (+0.004) 0.58ug/L

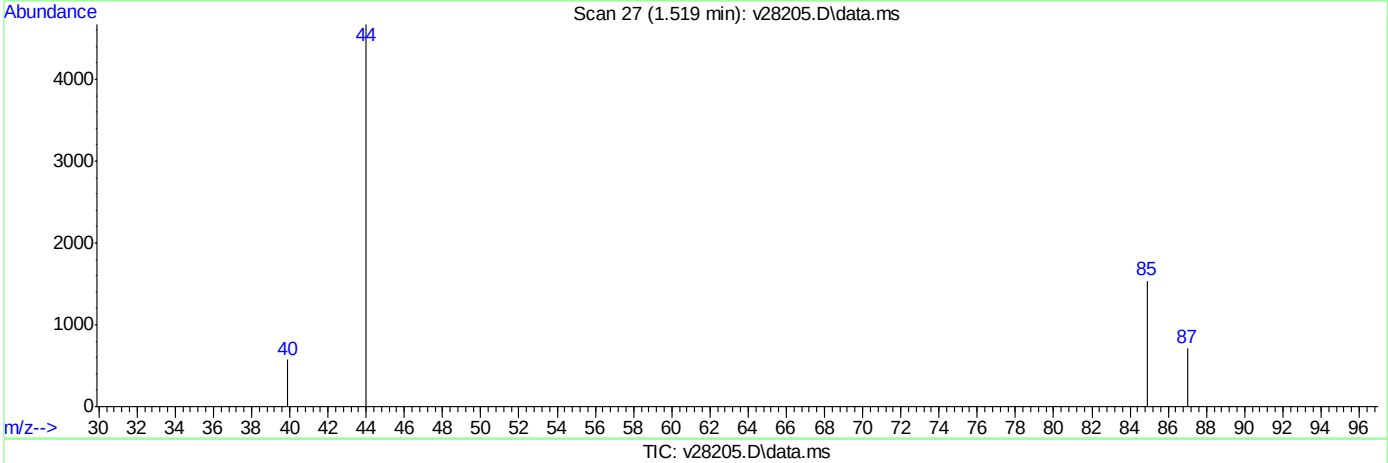
response 7040

| 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


TIC: v28205.D\data.ms

(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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski 02/28/14 12:22

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

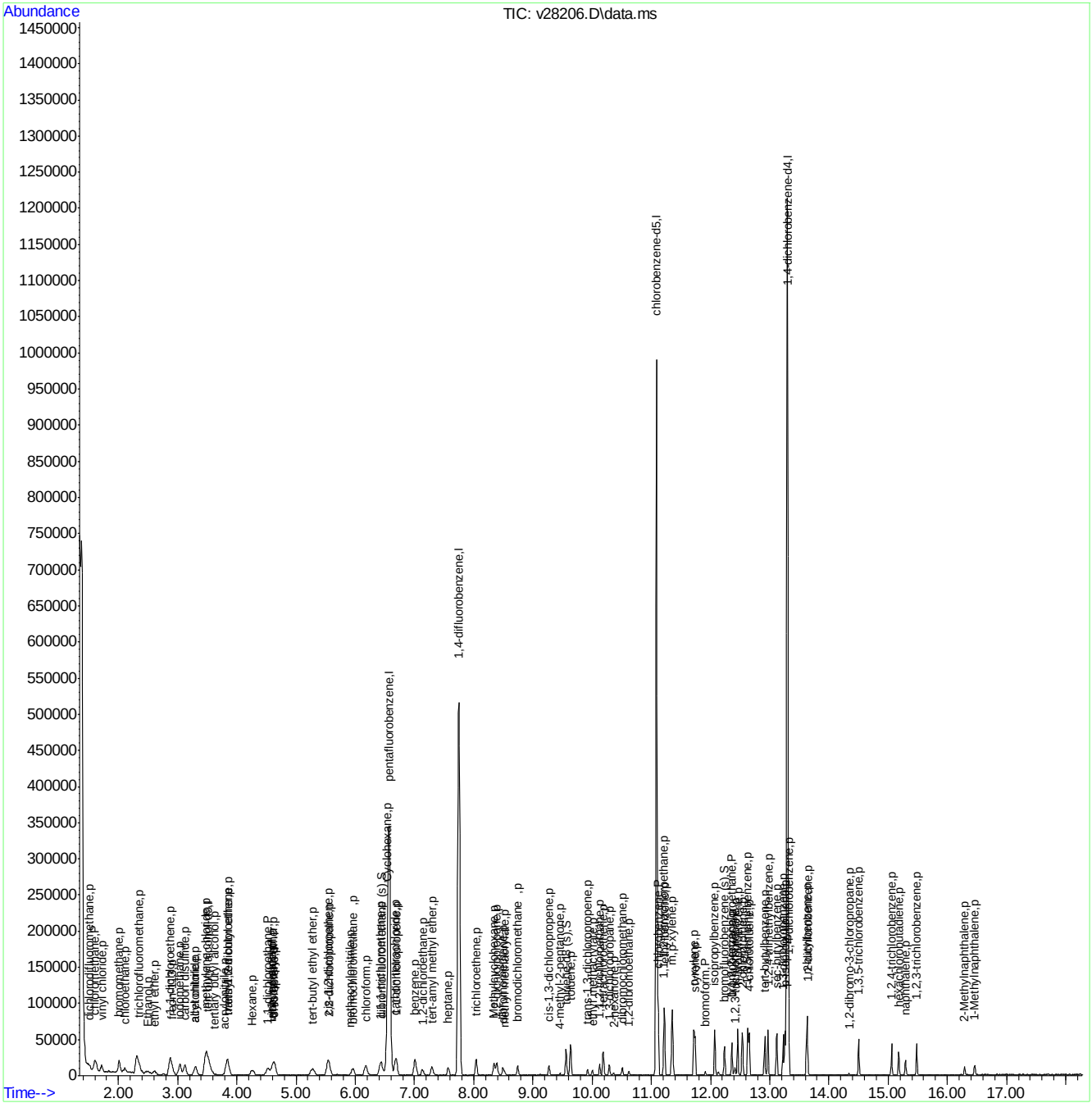
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 103) 1,2,3-trichlorobenzene | 15.482 | 180 | 12382 | 3.52 | ug/L | 92 |
| 104) 2-Methylnaphthalene | 16.292 | 142 | 6367 | 4.40 | ug/L | 98 |
| 105) 1-Methylnaphthalene | 16.463 | 142 | 7291 | 6.10 | ug/L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

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

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

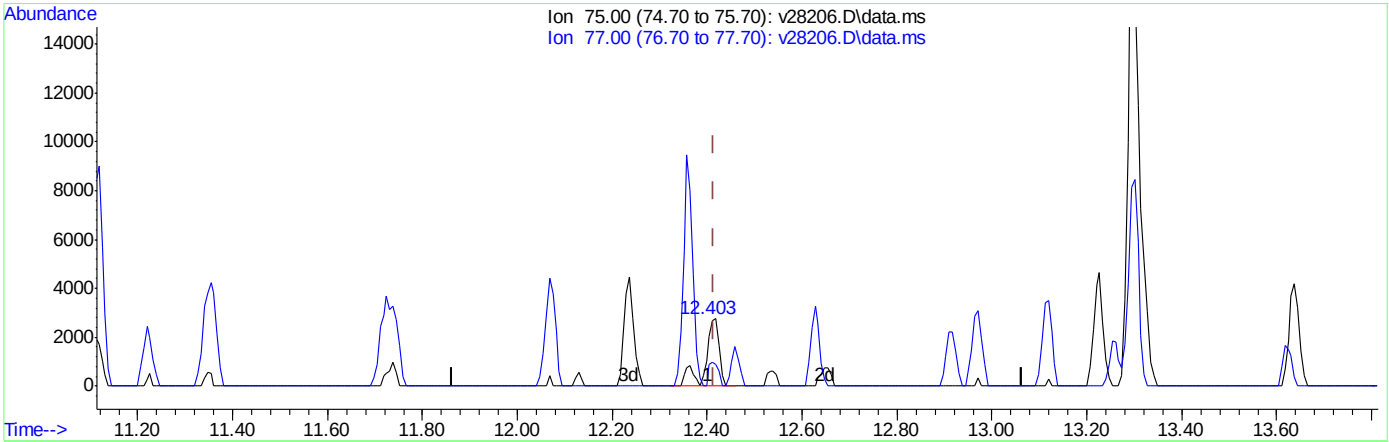
Quant Time: Feb 27 08:06:36 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

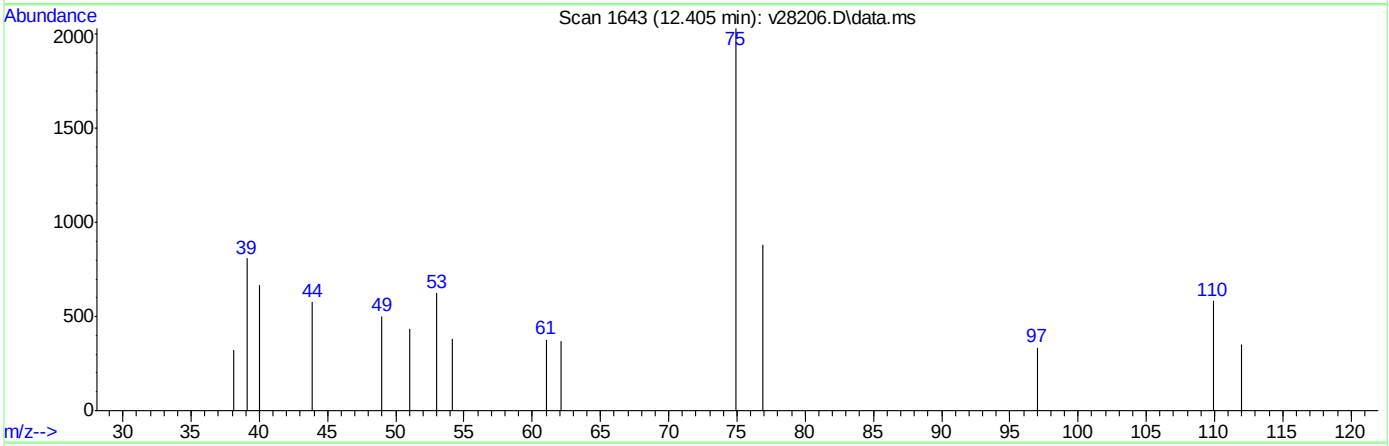


Quantitation Report (Qedit)

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)

12.403min (-0.011) 2.24ug/L

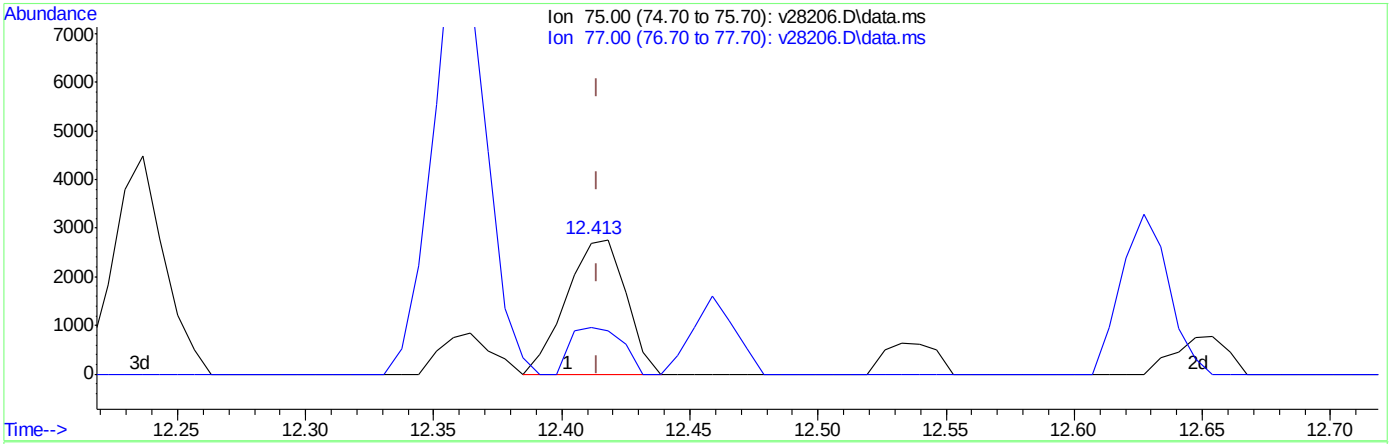
response 5612

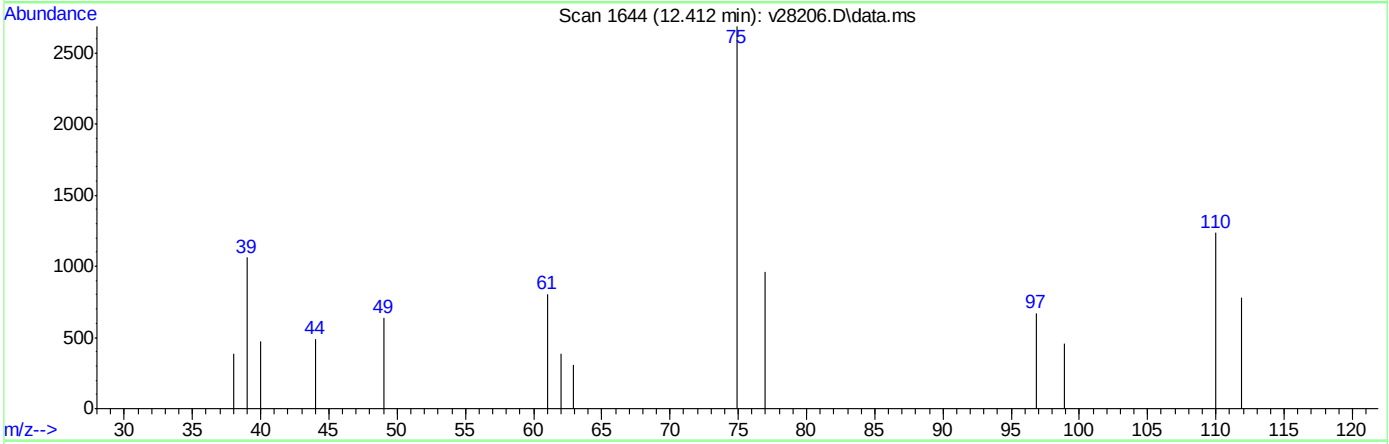
| Ion | Exp% | Act% |
|---|---|---|
| 75.00 | 100 | 100 |
| 77.00 | 32.20 | 43.45 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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

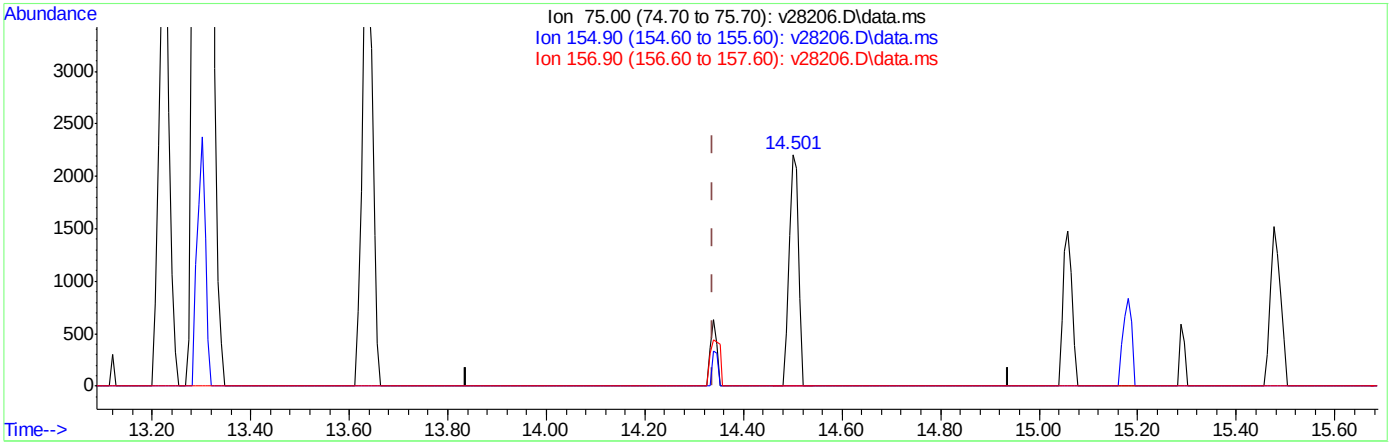
response 4461

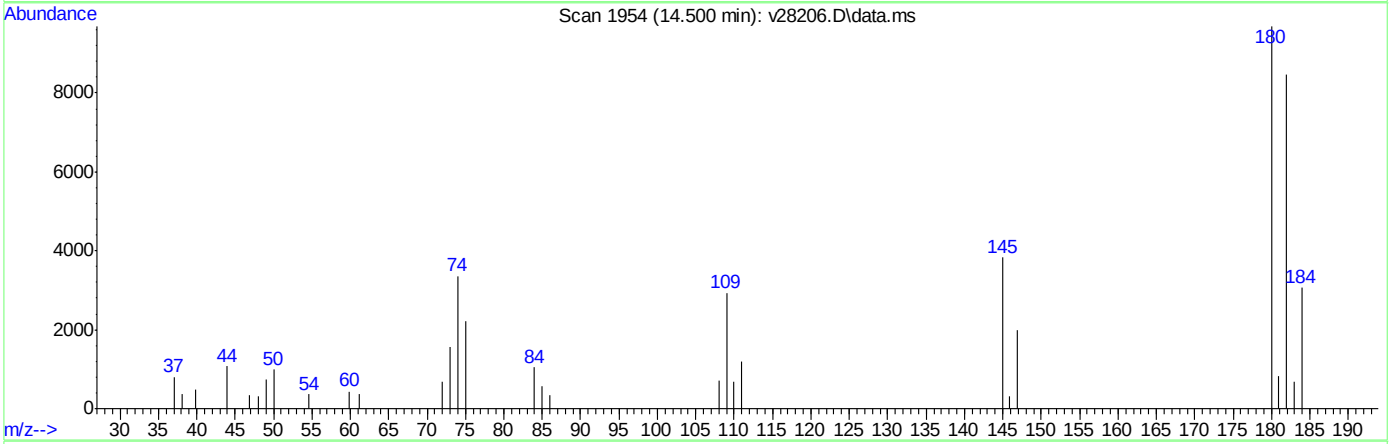
| Ion | Exp% | Act% |
|---|---|---|
| 75.00 | 100 | 100 |
| 77.00 | 32.20 | 35.90 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28206.D\data.ms

(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 |



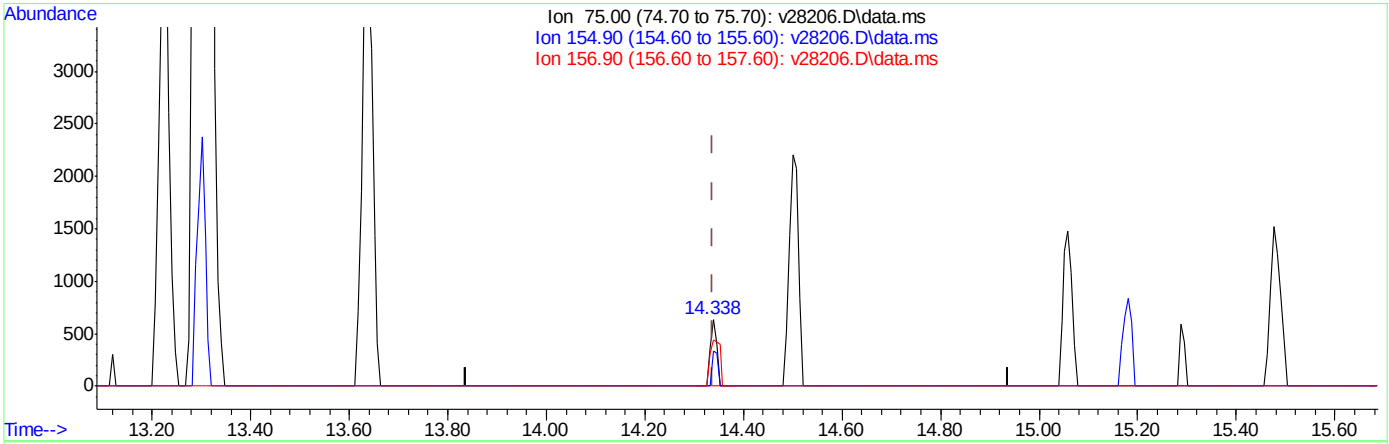


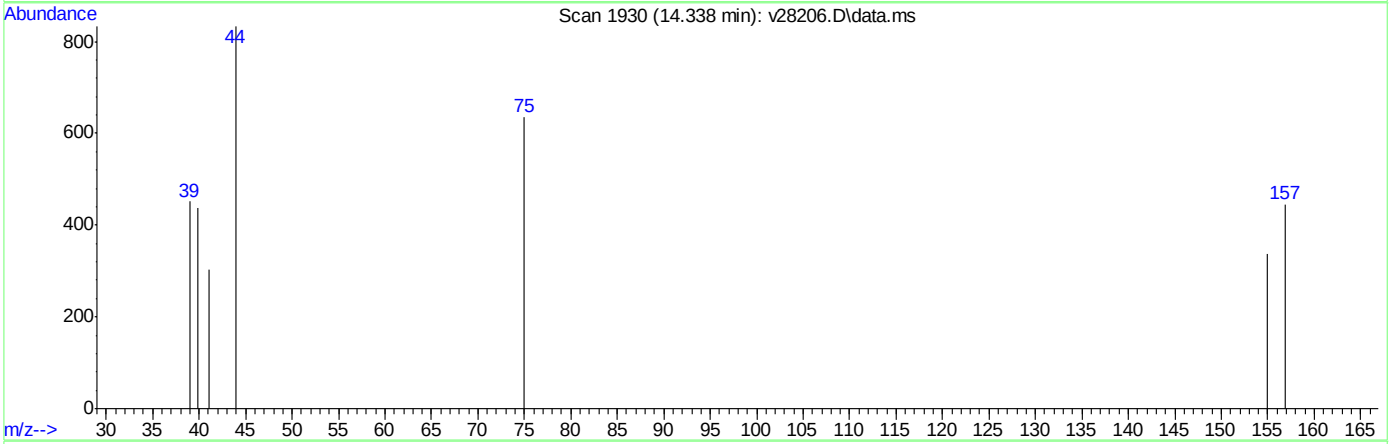
V28206.D edits: 1,2-dibromo-3-chloropropane

# 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

(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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
02/28/14 12:22

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

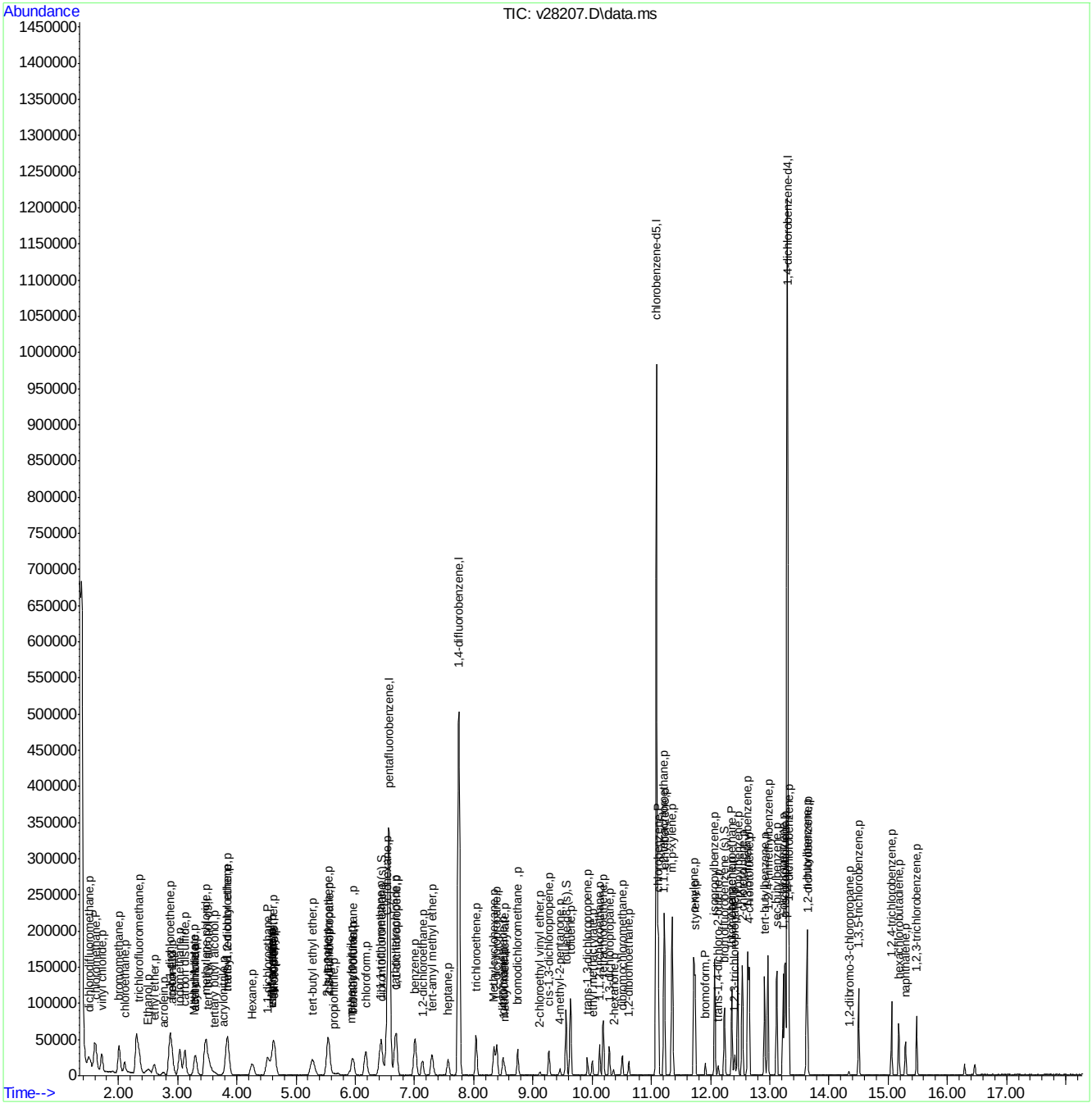
7.6.5

7

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

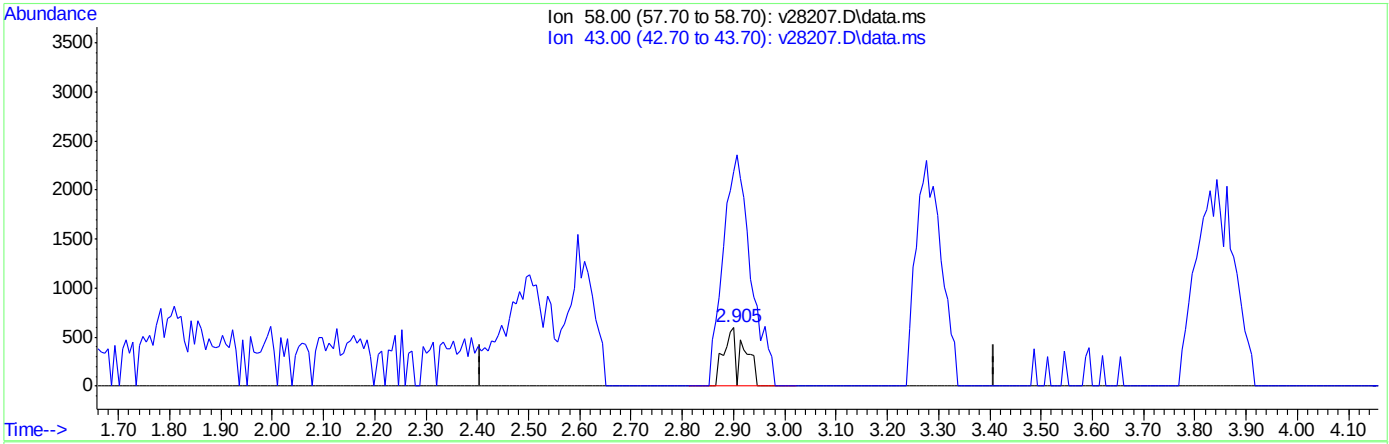
Quant Time: Feb 27 08:08:25 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

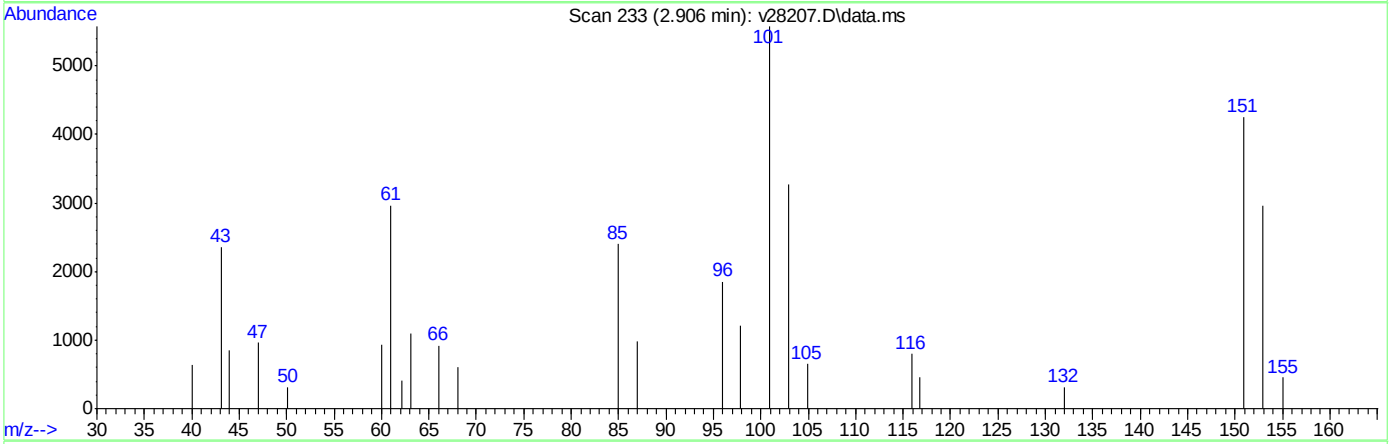


# Quantitation Report (Qedit)

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

(16) acetone (p)

2.906min (-0.001) 5.90ug/L m

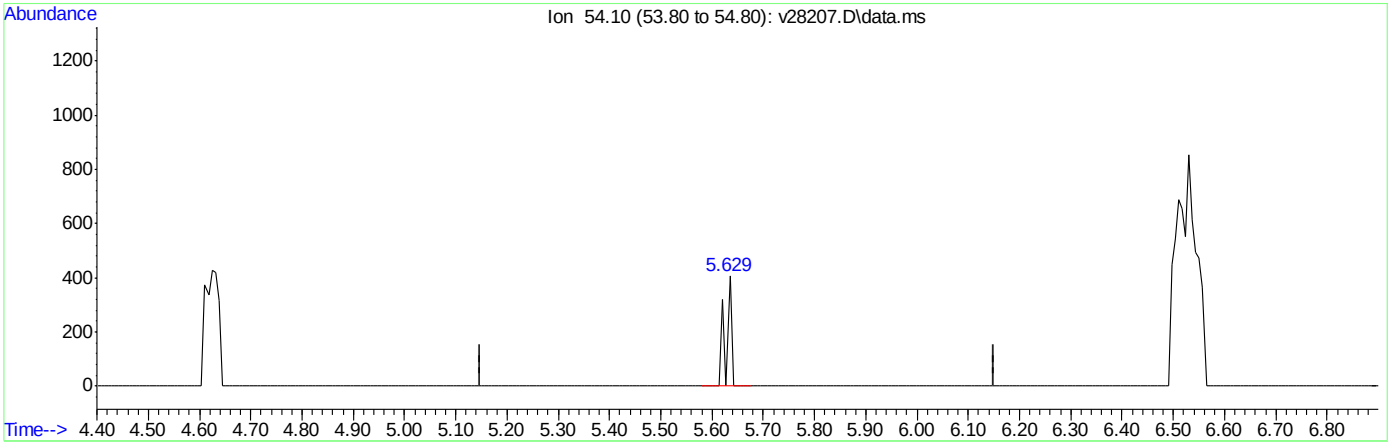
response 1619

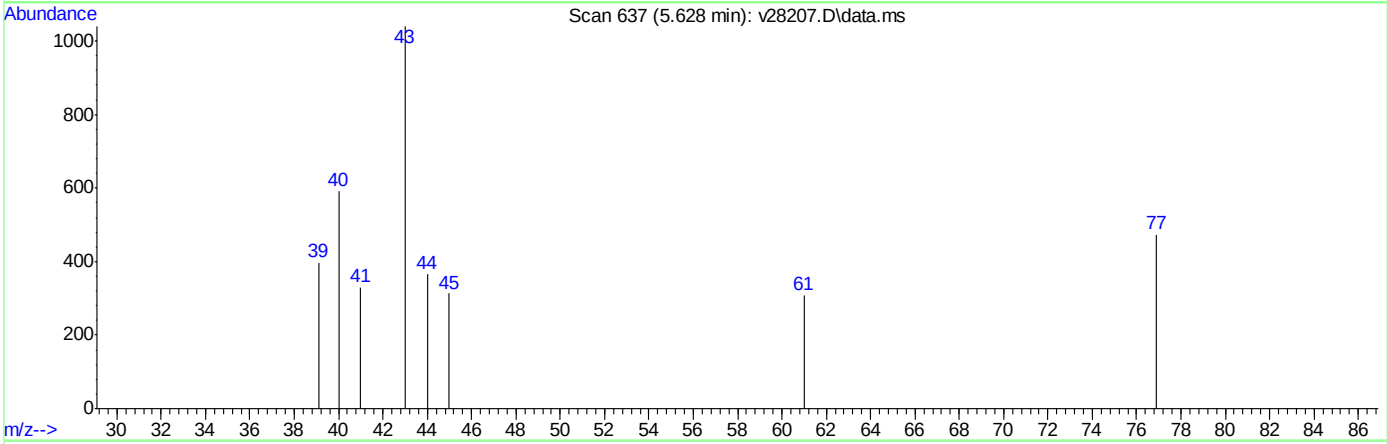
| Ion | Exp% | Act% |
|---|---|---|
| 58.00 | 100 | 100 |
| 43.00 | 310.00 | 236300.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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

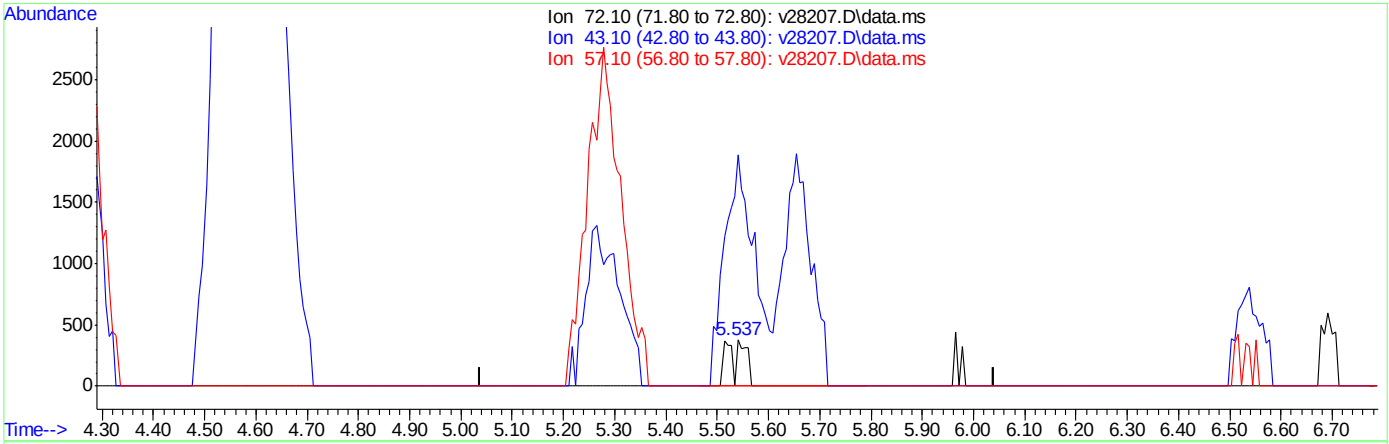
response 293

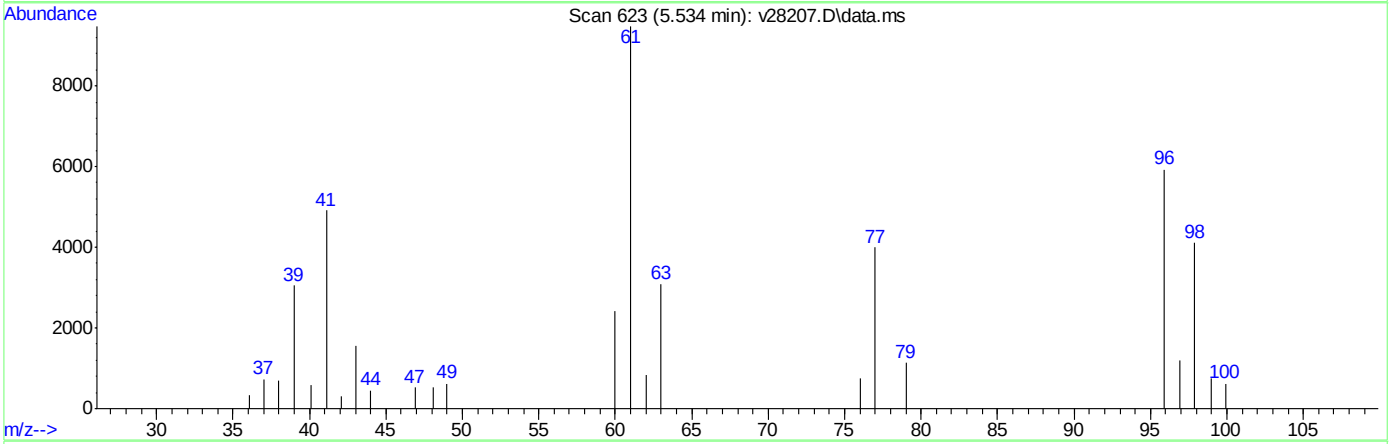
| Ion | Exp% | Act% |
|---|---|---|
| 54.10 | 100 | 100 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

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




TIC: v28207.D\data.ms

(30) 2-butanone (p)

5.534min (-0.006) 3.75ug/L m

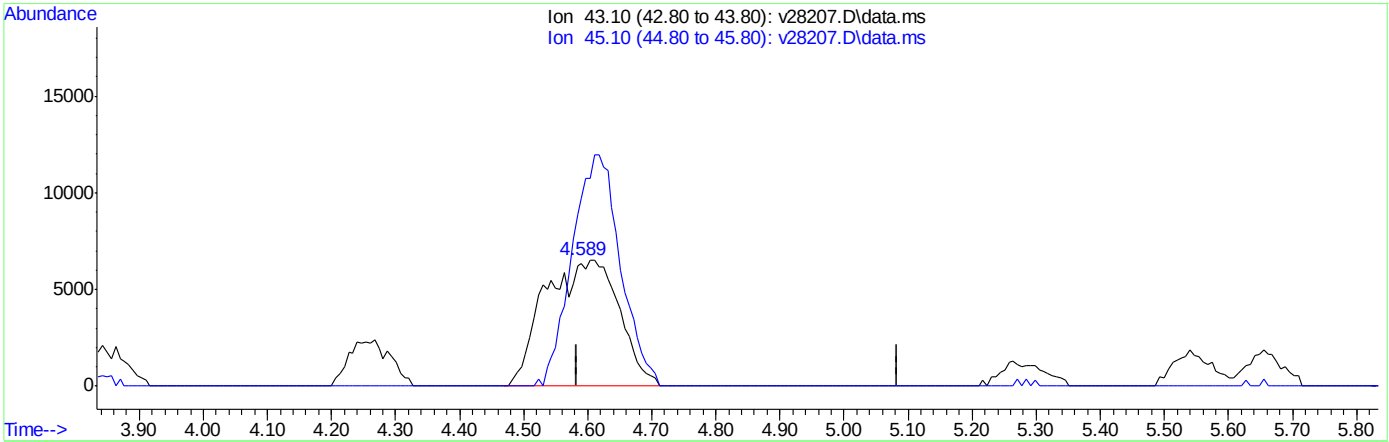
response 946

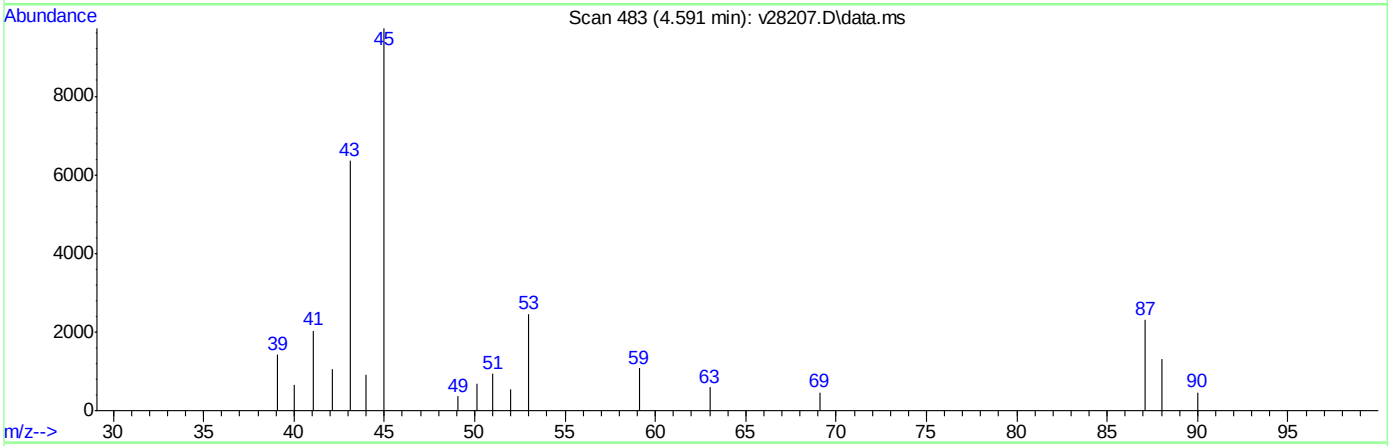
| Ion | Exp% | Act% |
|---|---|---|
| 72.10 | 100 | 100 |
| 43.10 | 342.00 | 155300.00# |
| 57.10 | 31.20 | 0.00# |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28207.D\data.ms

(37) ethyl acetate (p)

4.591min (+0.007) 4.90ug/L m

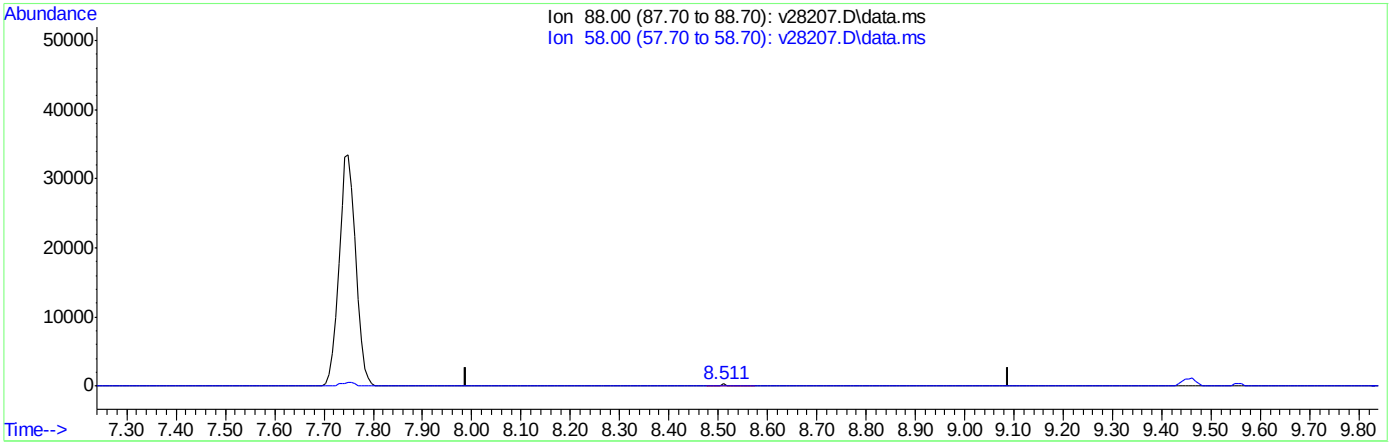
response 52672

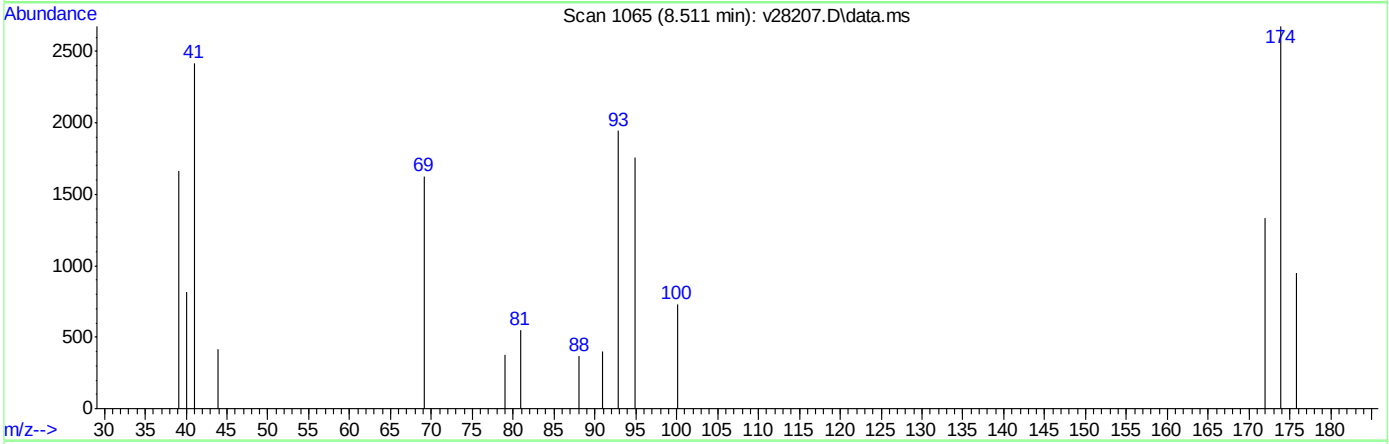
| Ion | Exp% | Act% |
|---|---|---|
| 43.10 | 100 | 100 |
| 45.10 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

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




TIC: v28207.D\data.ms

(58) 1,4-dioxane (p)

8.511min (+0.012) 9.90ug/L m

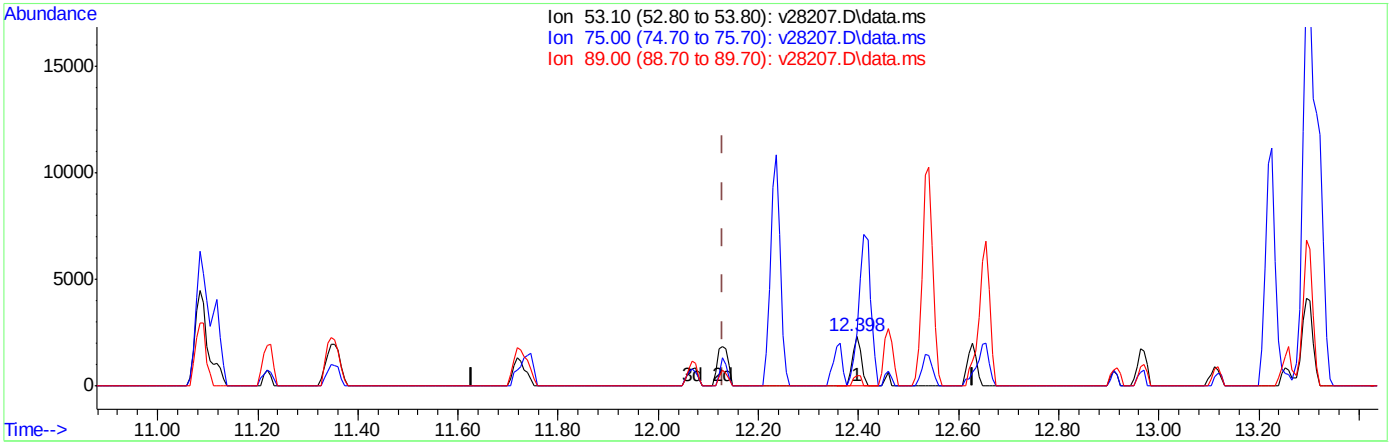
response 148

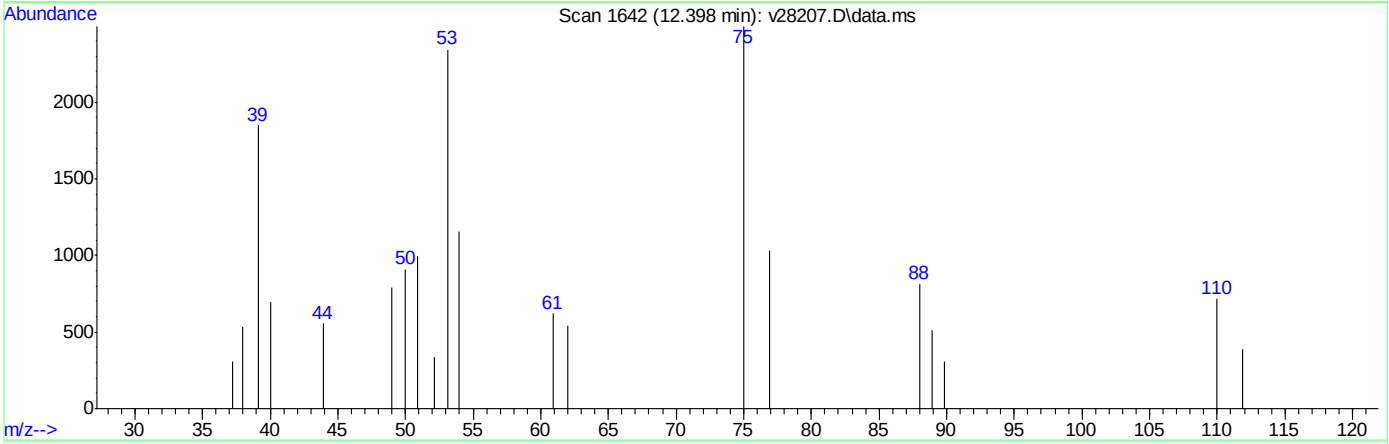
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100 | 100 |
| 58.00 | 76.50 | 0.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28207.D\data.ms

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

12.398min (+0.269) 4.12ug/L

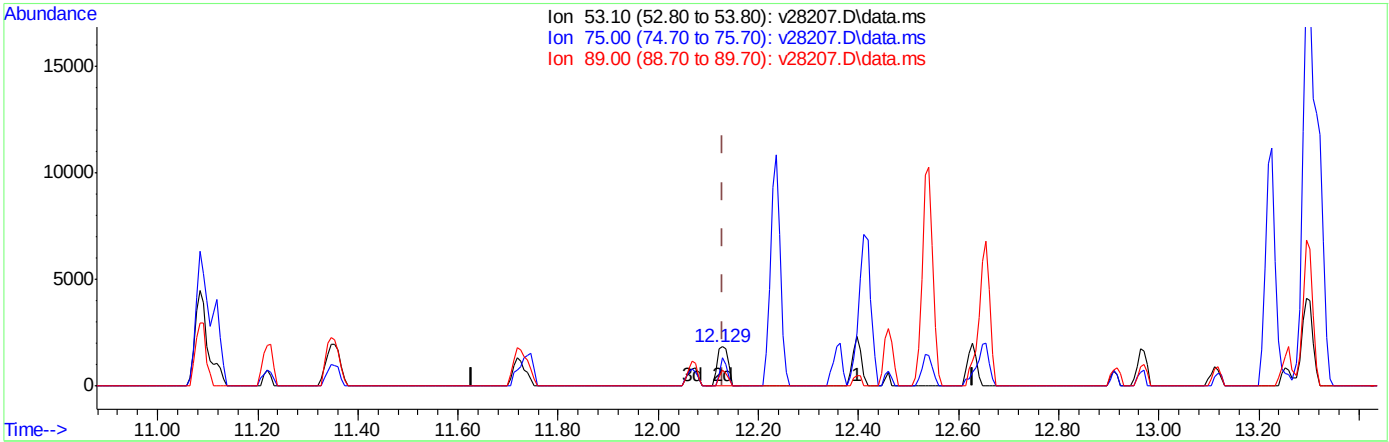
response 2764

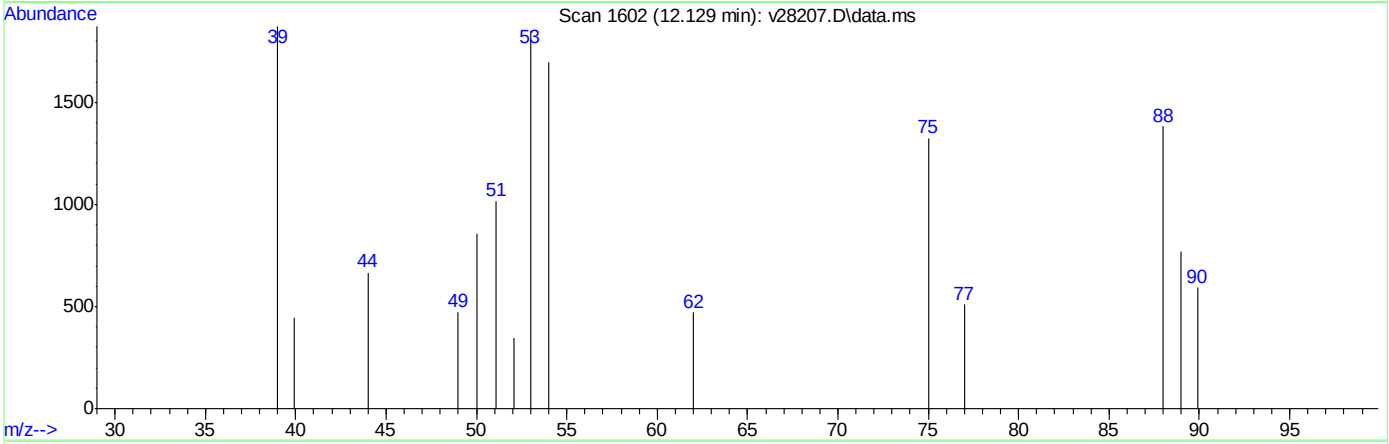
| Ion | Exp% | Act% |
|---|---|---|
| 53.10 | 100 | 100 |
| 75.00 | 105.50 | 106.44 |
| 89.00 | 51.30 | 21.89 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28207.D\data.ms

(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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
02/28/14 12:22

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

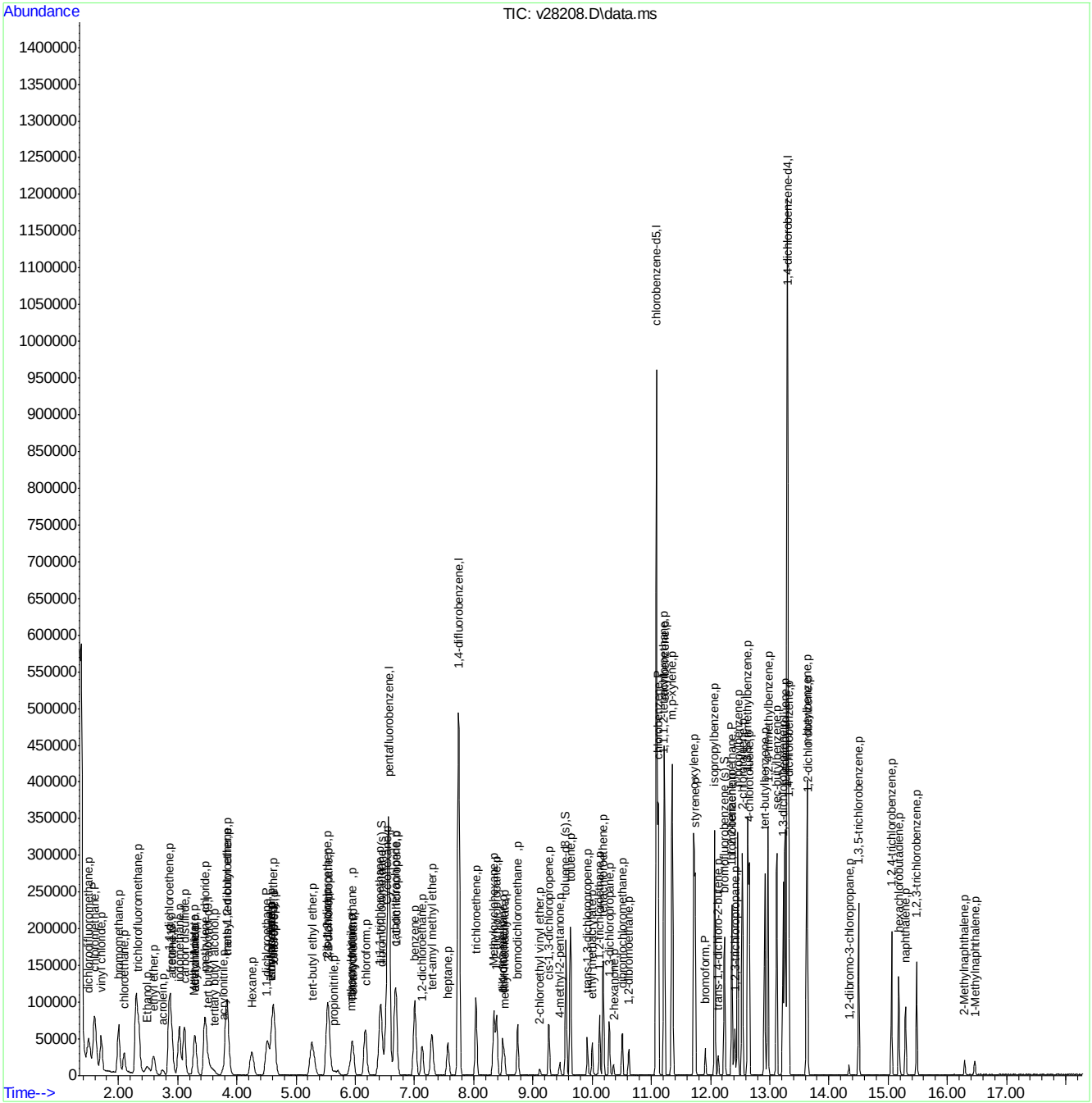
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 93) | 1,3-dichlorobenzene | 13.225 | 146 | 92409 | 10.16 | ug/L | 99 |
| 94) | p-isopropyltoluene | 13.258 | 119 | 162005 | 8.99 | ug/L | 97 |
| 95) | 1,4-dichlorobenzene | 13.320 | 146 | 89251 | 10.45 | 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

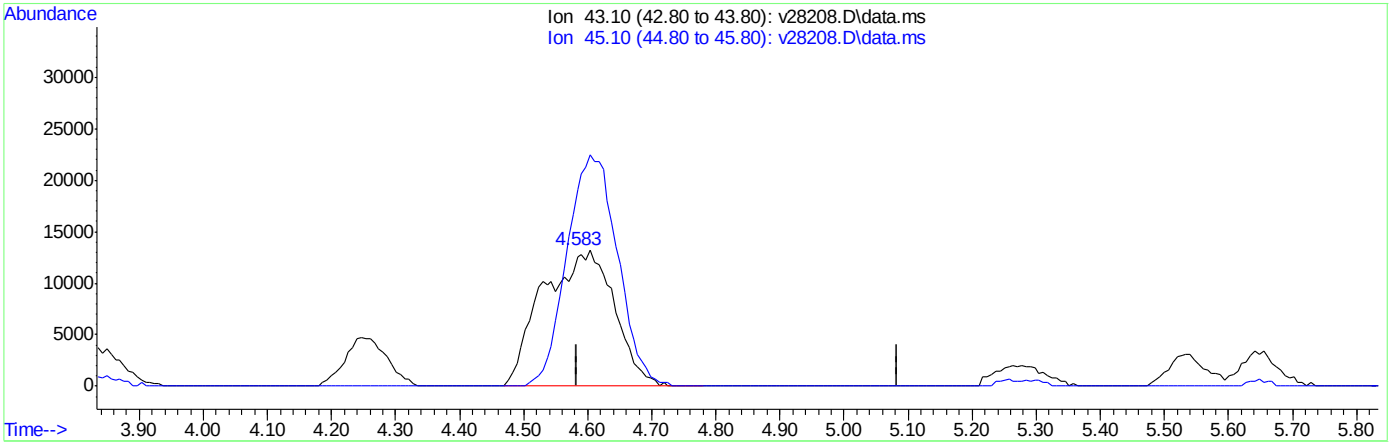
Quant Time: Feb 27 08:09:23 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

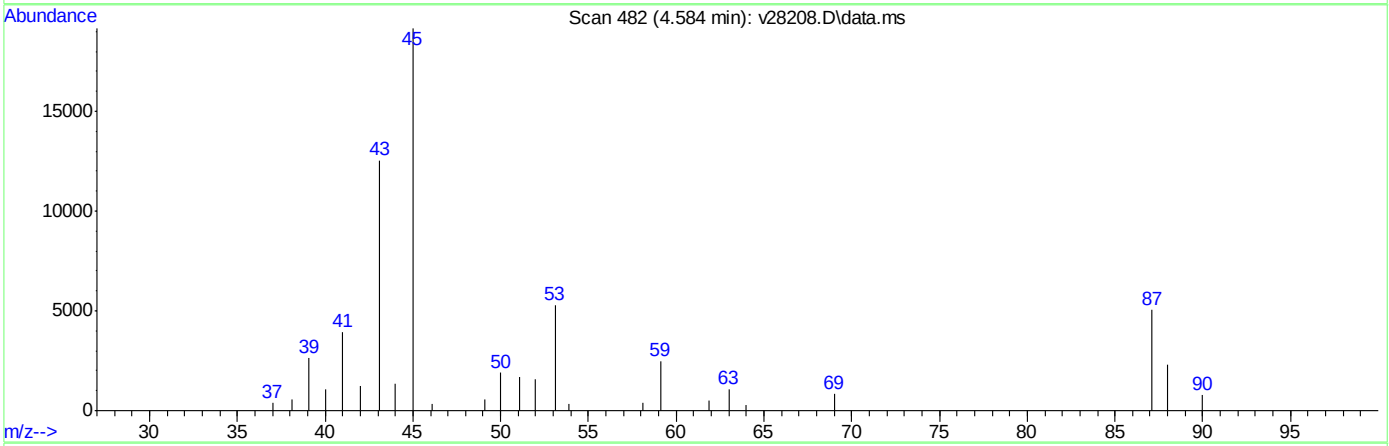


# Quantitation Report (Qedit)

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




TIC: v28208.D\data.ms

(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 |

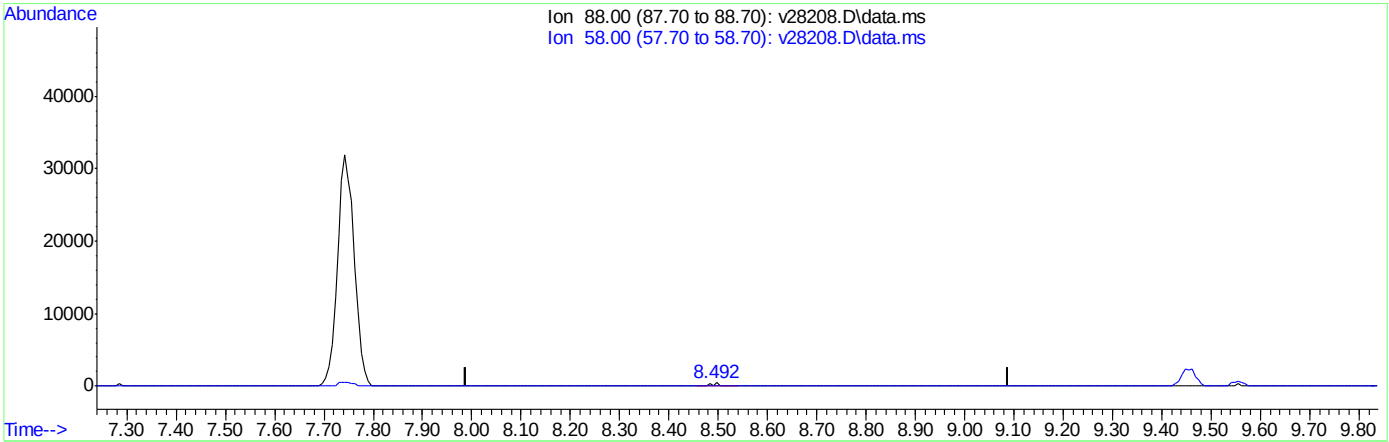


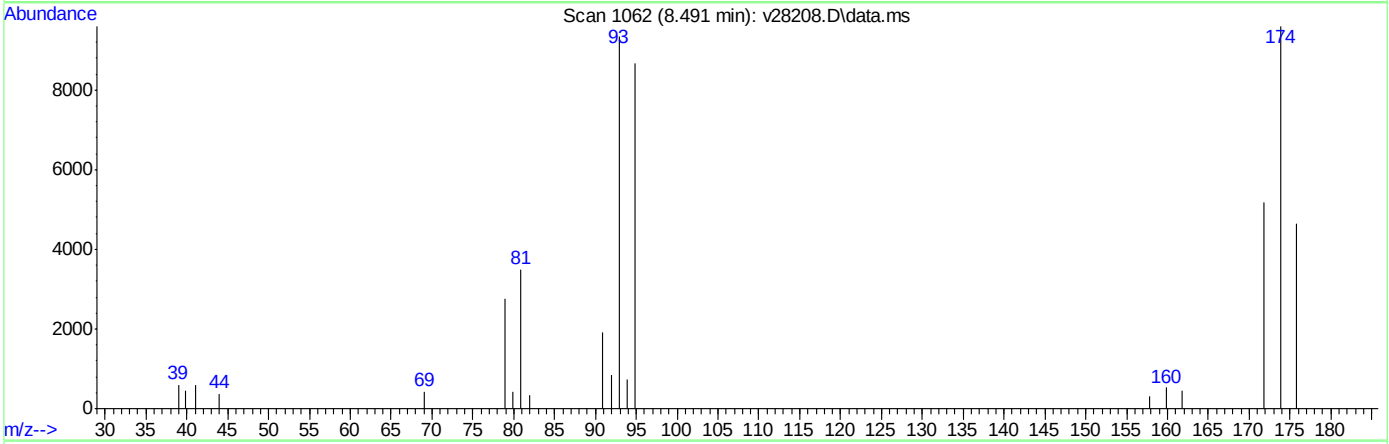
V28208.D edits: ethyl acetate

# 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




TIC: v28208.D\data.ms

(58) 1,4-dioxane (p)

8.491min (-0.009) 22.71ug/L m

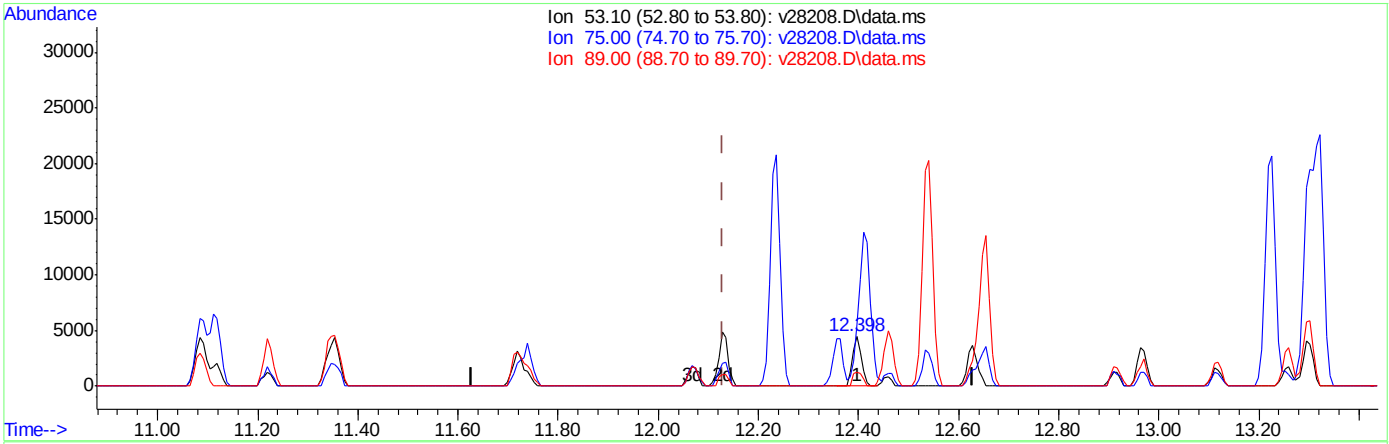
response 331

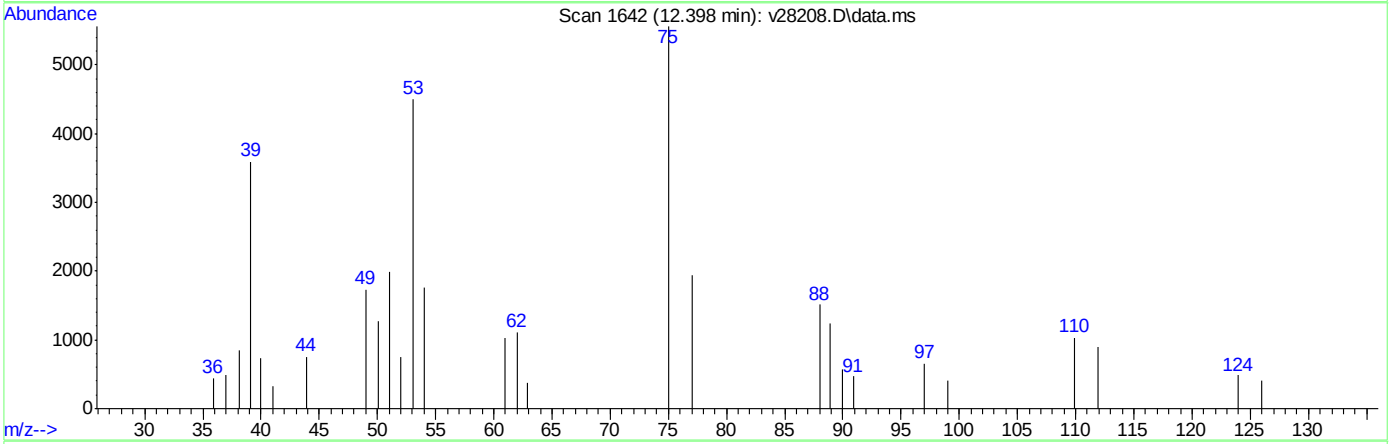
| Ion | Exp% | Act% |
|---|---|---|
| 88.00 | 100 | 100 |
| 58.00 | 76.50 | 0.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28208.D\data.ms

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

12.398min (+0.270) 8.46ug/L

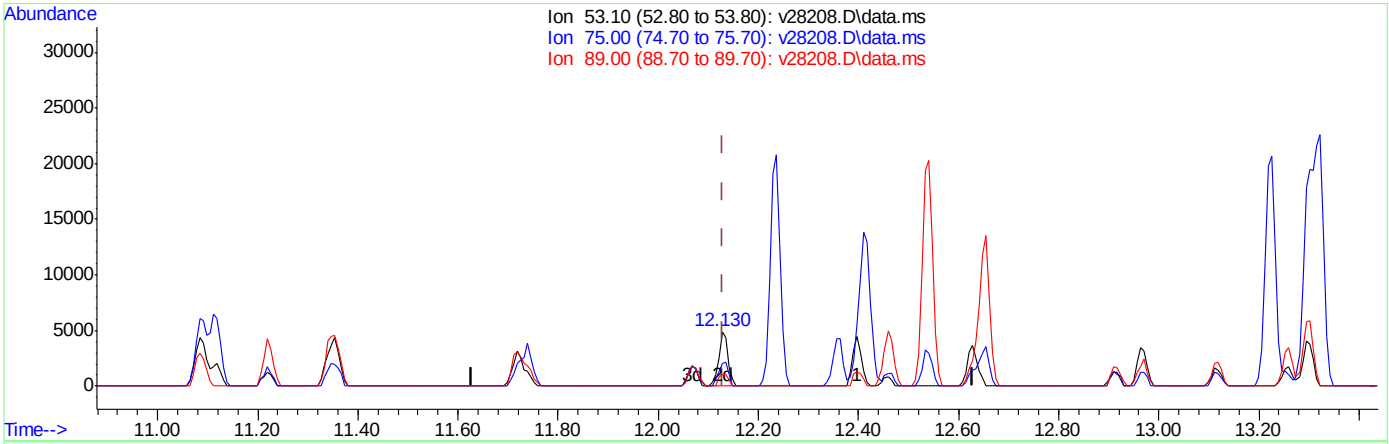
response 5571

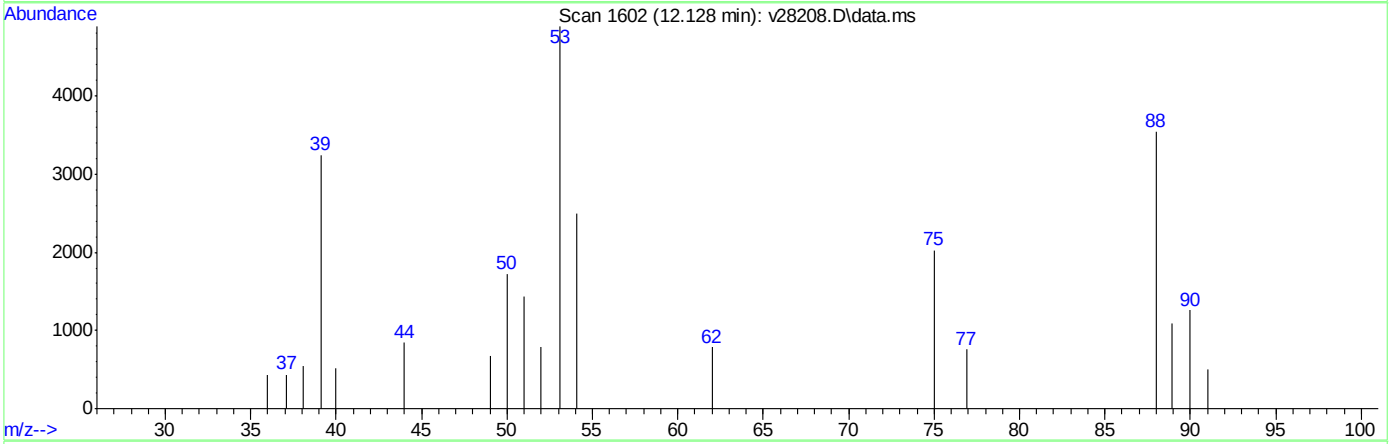
| Ion | Exp% | Act% |
|---|---|---|
| 53.10 | 100 | 100 |
| 75.00 | 105.50 | 105.31 |
| 89.00 | 51.30 | 27.62 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28208.D\data.ms

(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 |





V28208.D edits: trans-1,4-dichloro-2-butene

V28209.D

Manual Integrations APPROVED (compounds with "m" flag)

Tomasz Torski 02/28/14 12:22

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

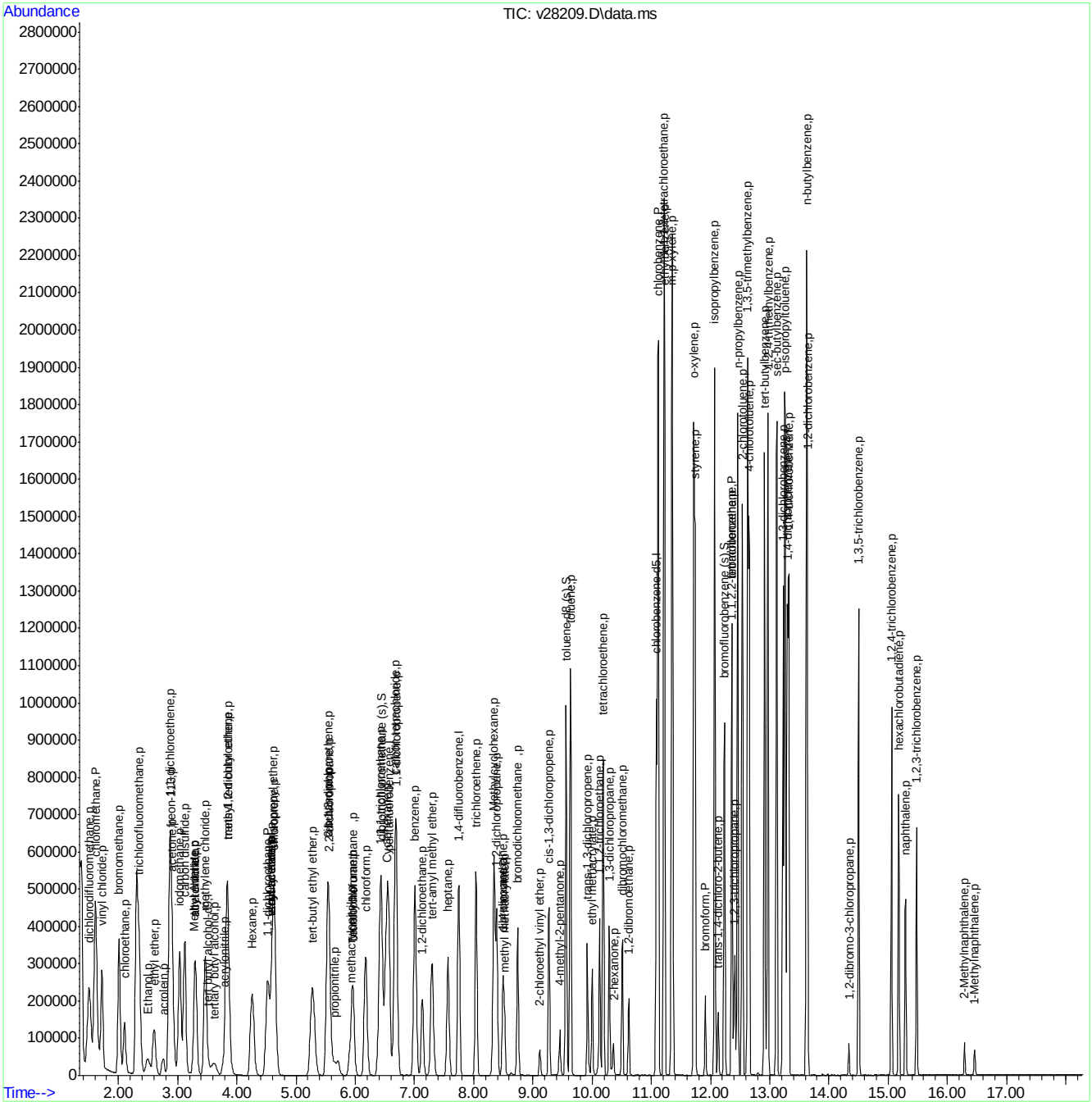
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 93) | 1,3-dichlorobenzene | 13.224 | 146 | 466743 | 50.00 | ug/L | 99 |
| 94) | p-isopropyltoluene | 13.257 | 119 | 924650 | 50.00 | ug/L | 98 |
| 95) | 1,4-dichlorobenzene | 13.320 | 146 | 437997 | 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

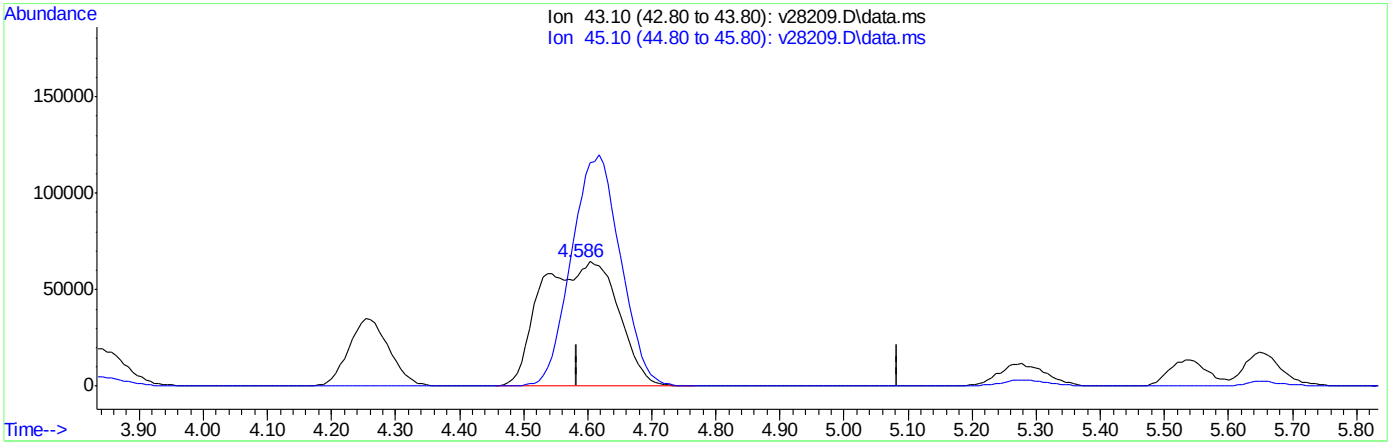
Quant Time: Feb 27 08:10:37 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

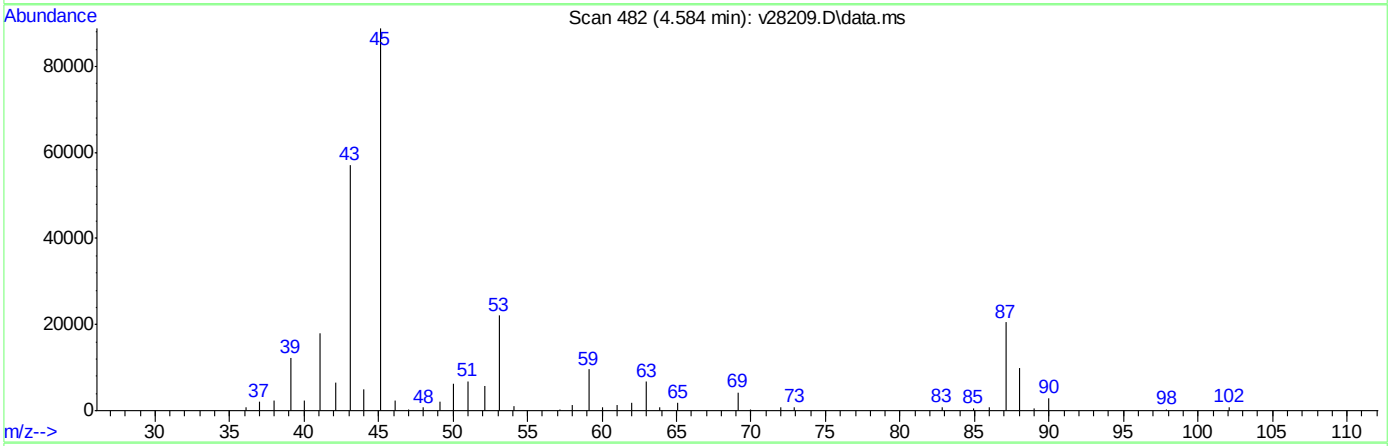


# Quantitation Report (Qedit)

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




TIC: v28209.D\data.ms

(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 |



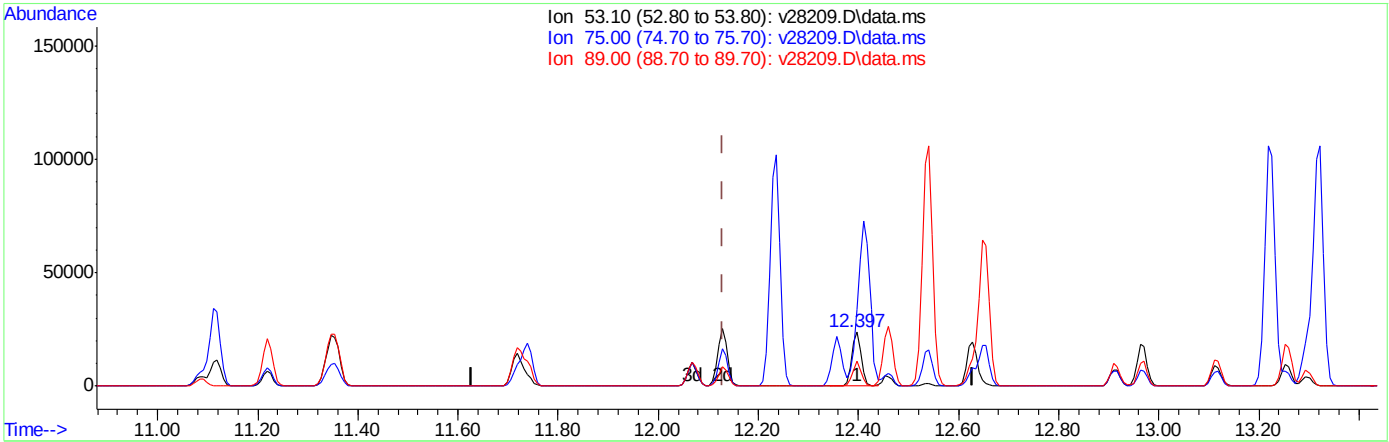


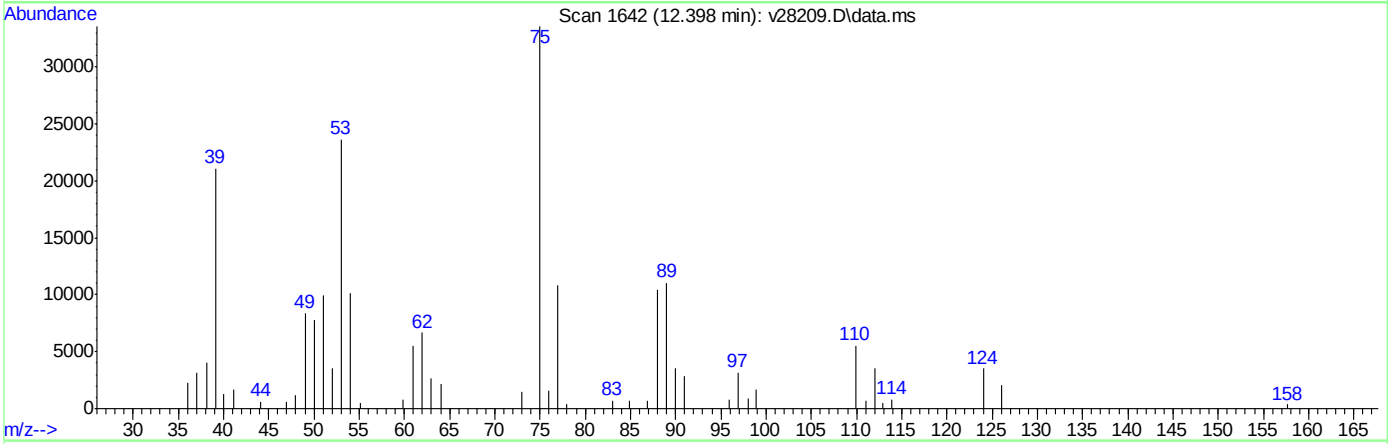
V28209.D edits: ethyl acetate

# 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




TIC: v28209.D\data.ms

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

12.397min (+0.269) 45.97ug/L

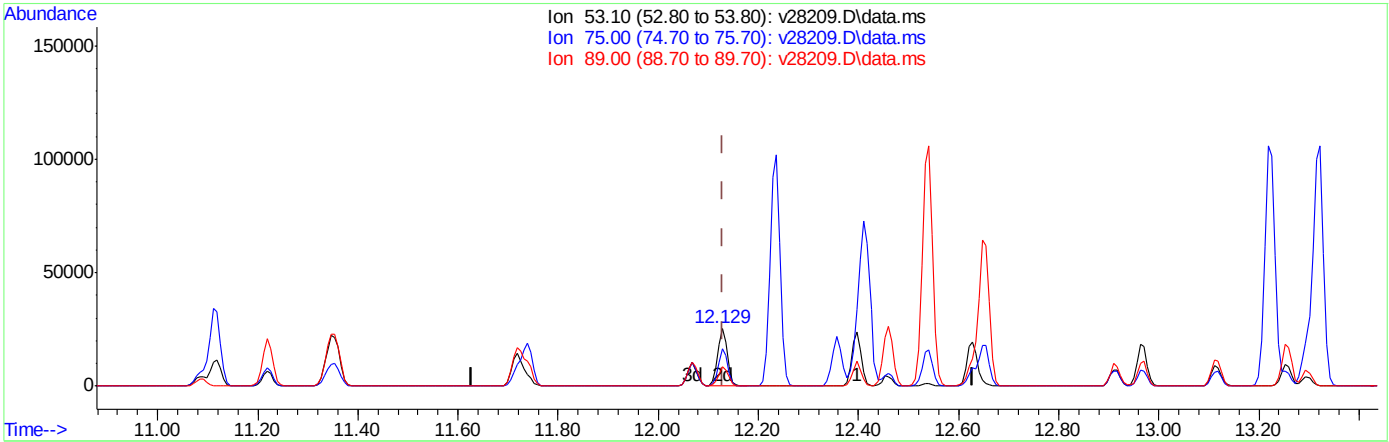
response 31441

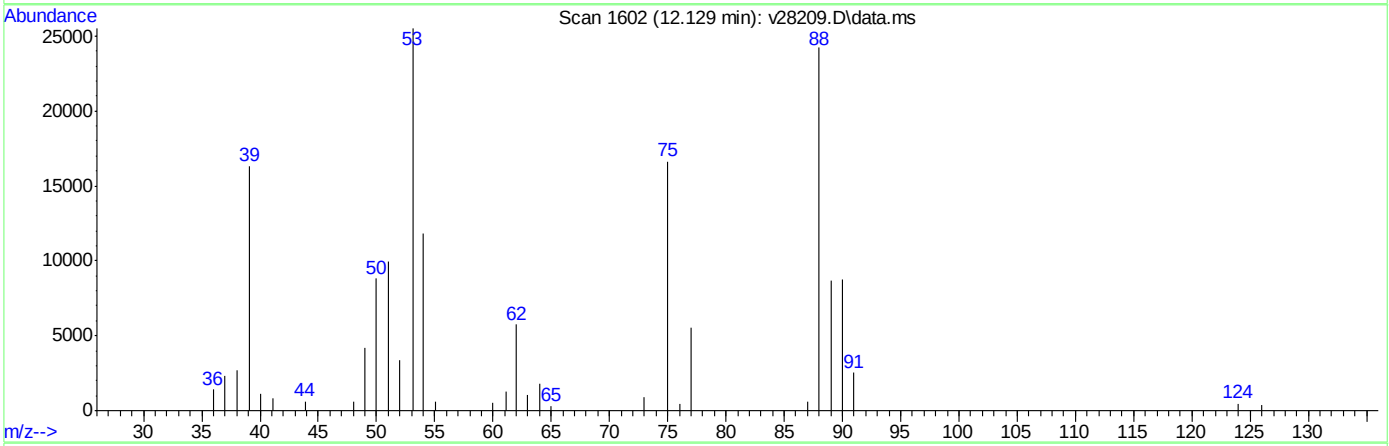
| Ion | Exp% | Act% |
|---|---|---|
| 53.10 | 100 | 100 |
| 75.00 | 105.50 | 129.83 |
| 89.00 | 51.30 | 46.62 |
| 0.00 | 0.00 | 0.00 |

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




TIC: v28209.D\data.ms

(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 |







V28209.D edits: trans-1,4-dichloro-2-butene

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski 02/28/14 12:22

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

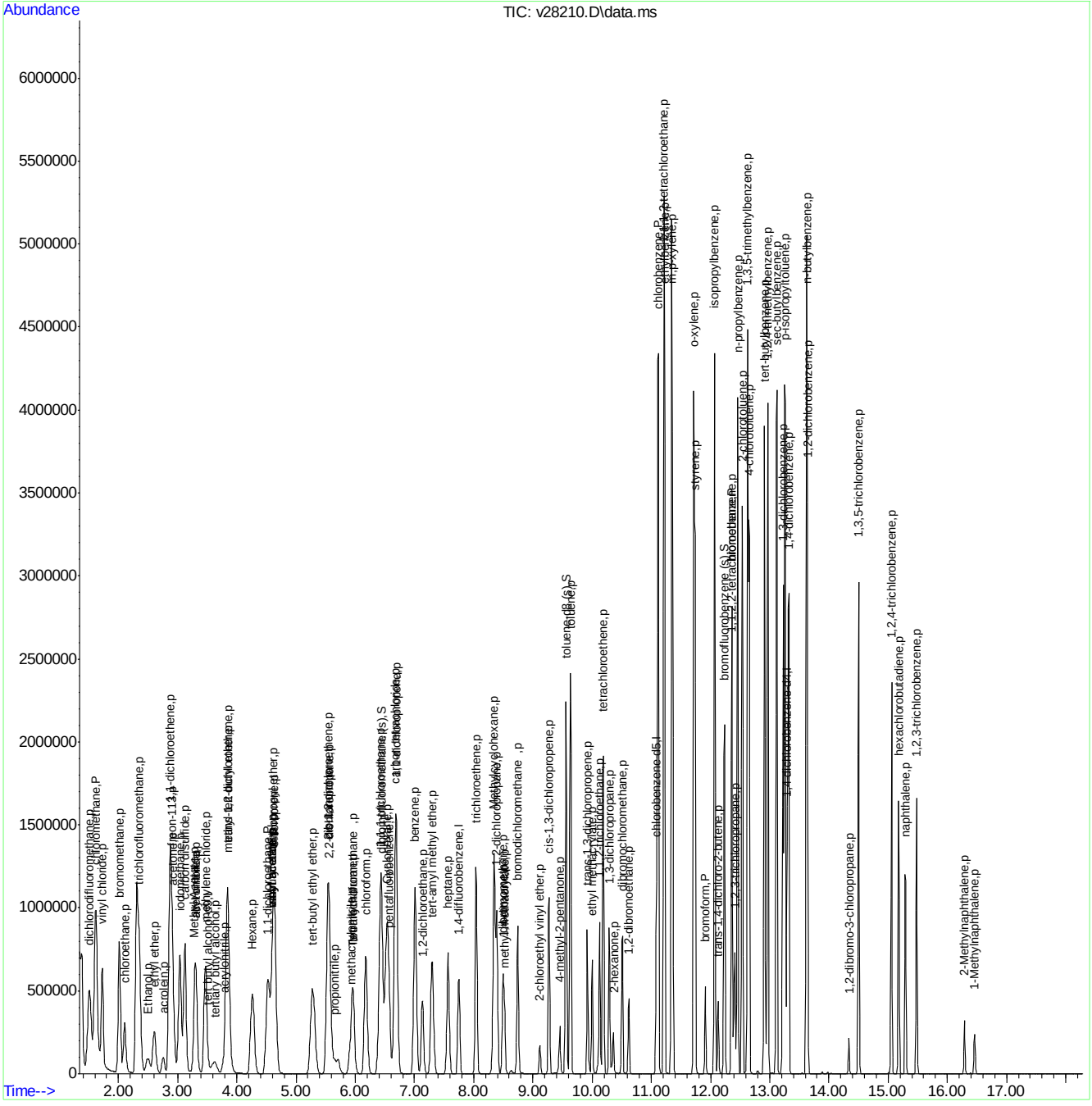
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 93) | 1,3-dichlorobenzene | 13.224 | 146 | 1074819 | 103.24 | ug/L | 99 |
| 94) | p-isopropyltoluene | 13.257 | 119 | 2163618 | 104.92 | ug/L | 98 |
| 95) | 1,4-dichlorobenzene | 13.319 | 146 | 1008895 | 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

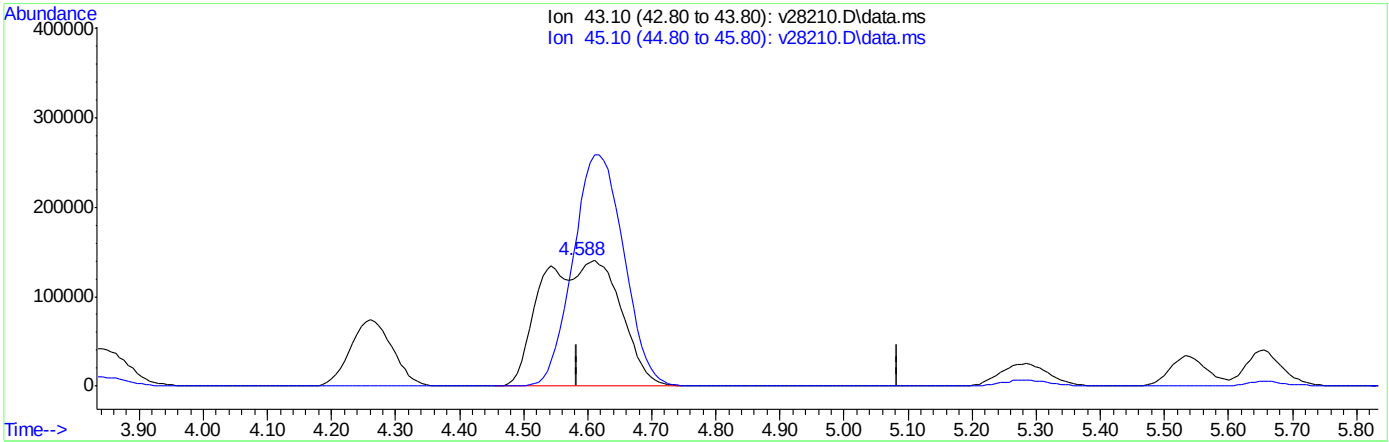
Quant Time: Feb 27 08:11:49 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

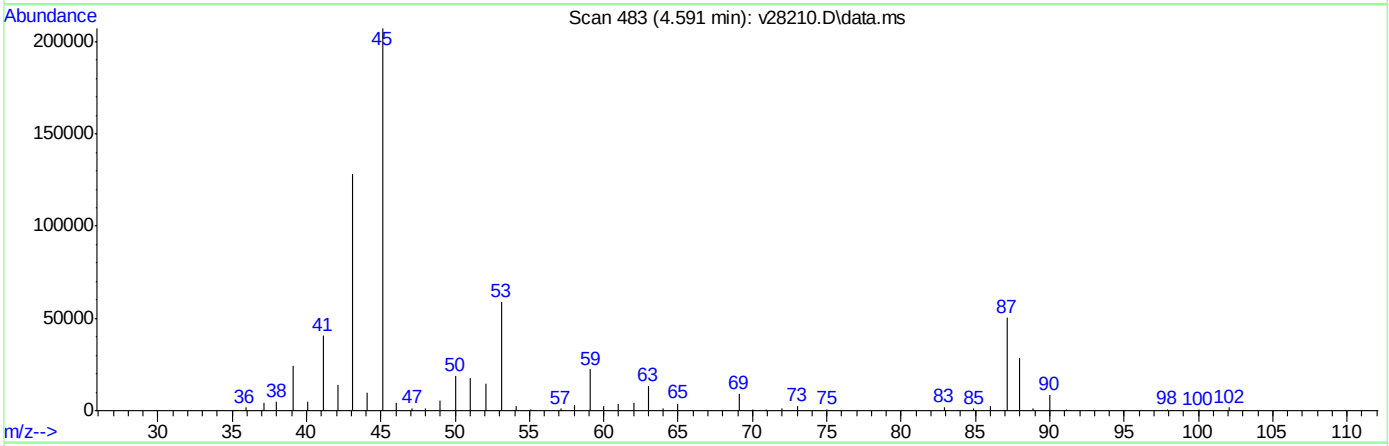


# Quantitation Report (Qedit)

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




TIC: v28210.D\data.ms

(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 |

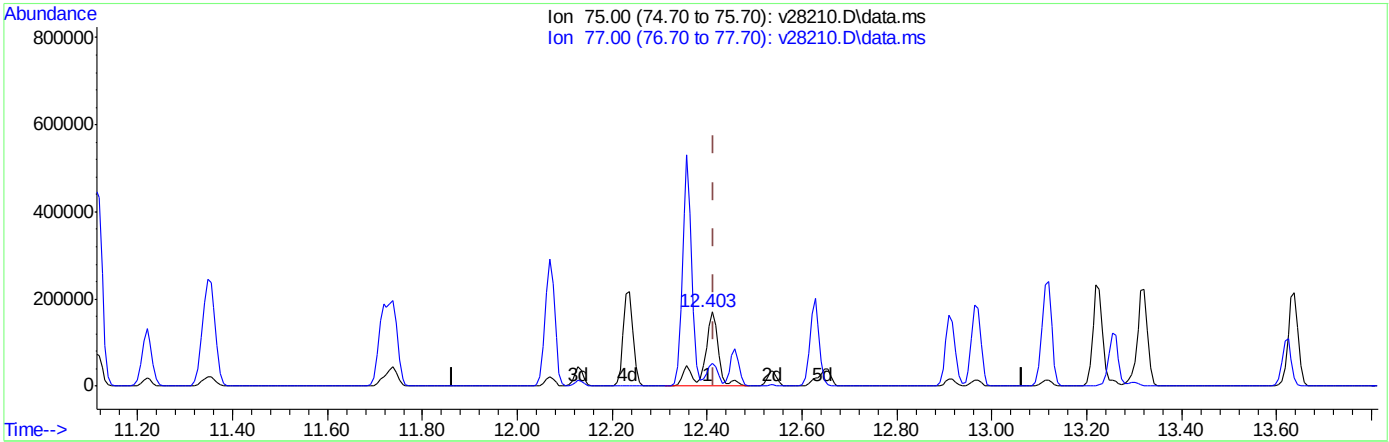


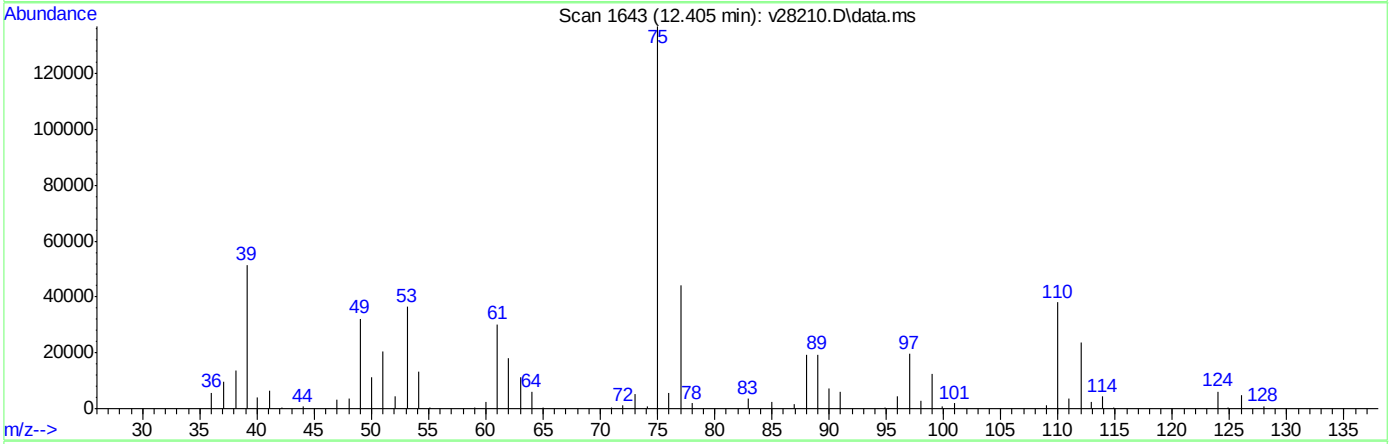
V28210.D edits: ethyl acetate

# 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




TIC: v28210.D\data.ms

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

12.403min (-0.011) 131.40ug/L

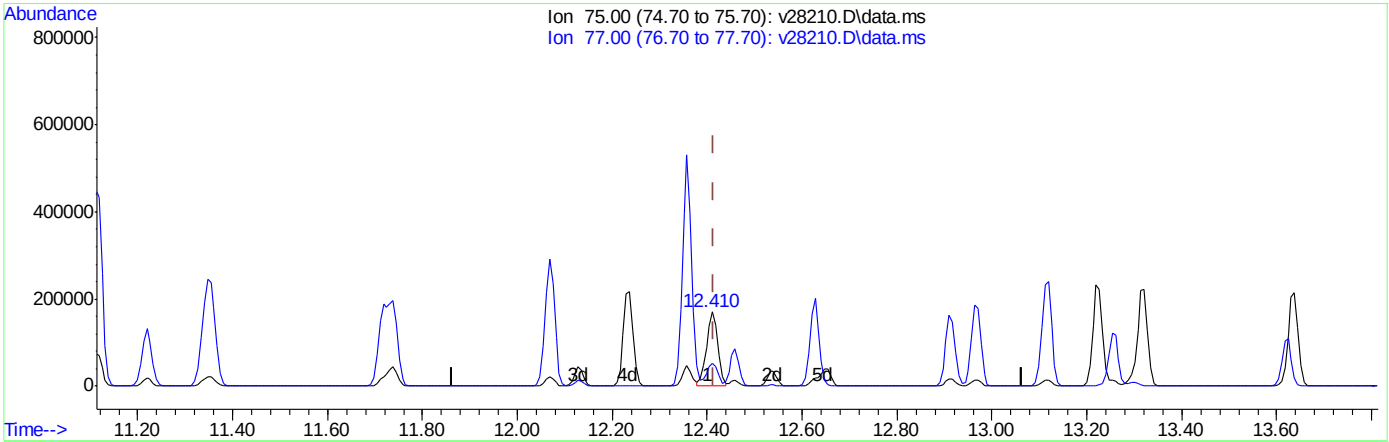
response 365936

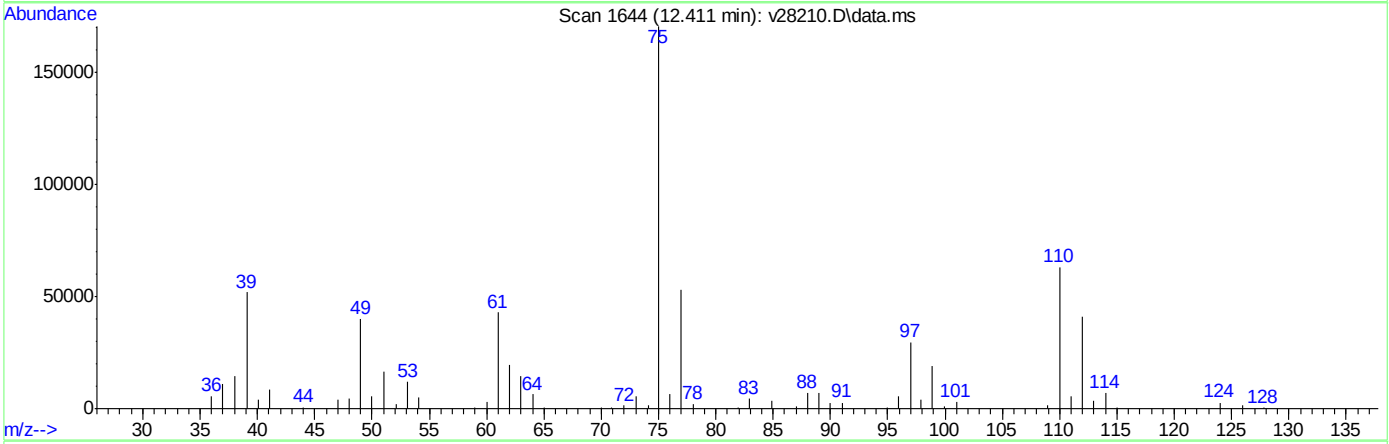
| Ion | Exp% | Act% |
|---|---|---|
| 75.00 | 100 | 100 |
| 77.00 | 32.20 | 32.14 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28210.D\data.ms

(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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
02/28/14 12:22

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

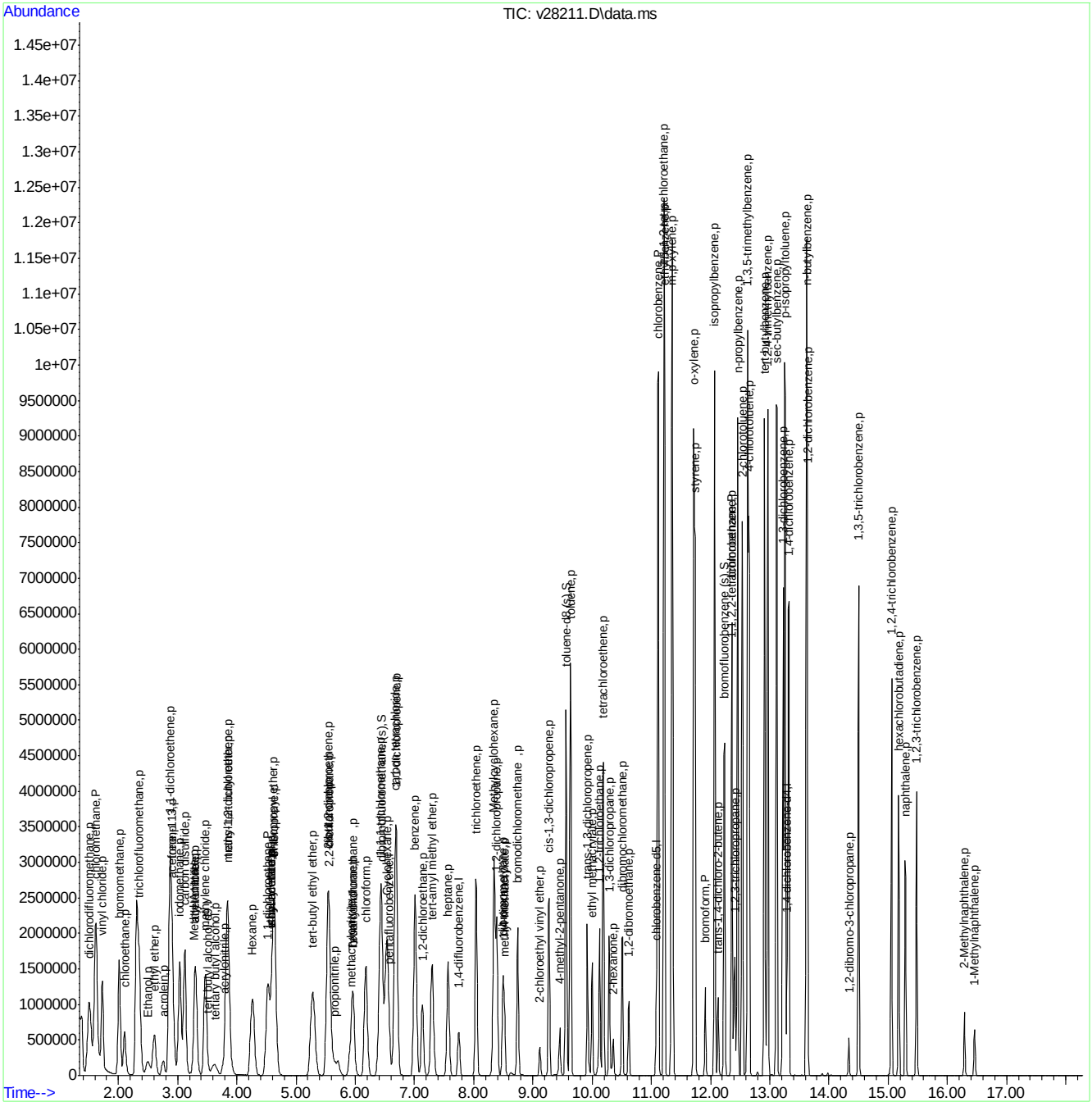
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 93) | 1,3-dichlorobenzene | 13.224 | 146 | 2543134 | 216.98 | ug/L | 99 |
| 94) | p-isopropyltoluene | 13.256 | 119 | 5229455 | 225.25 | ug/L | 98 |
| 95) | 1,4-dichlorobenzene | 13.319 | 146 | 2404403 | 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

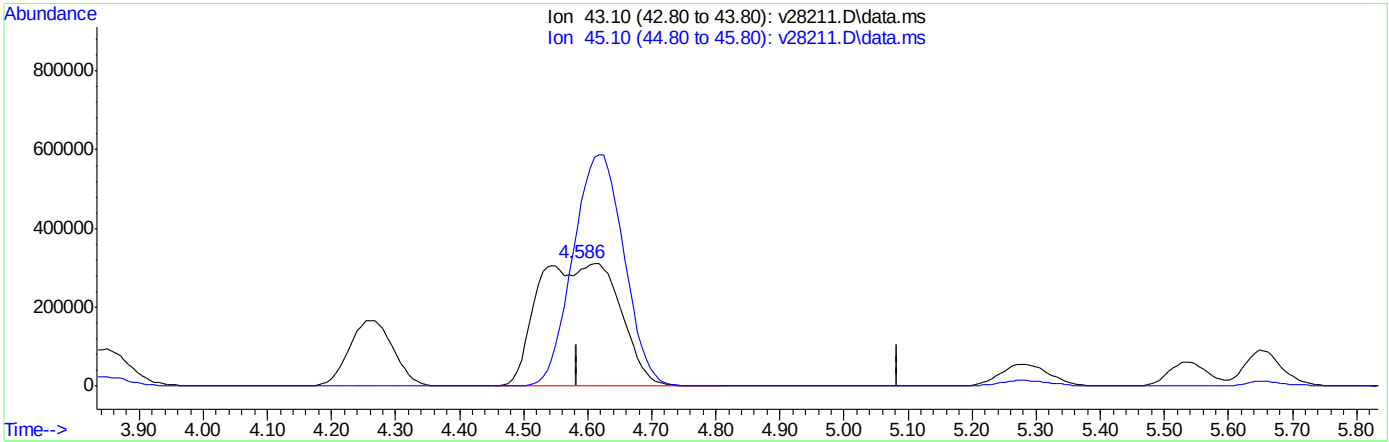
Quant Time: Feb 27 08:13:06 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration

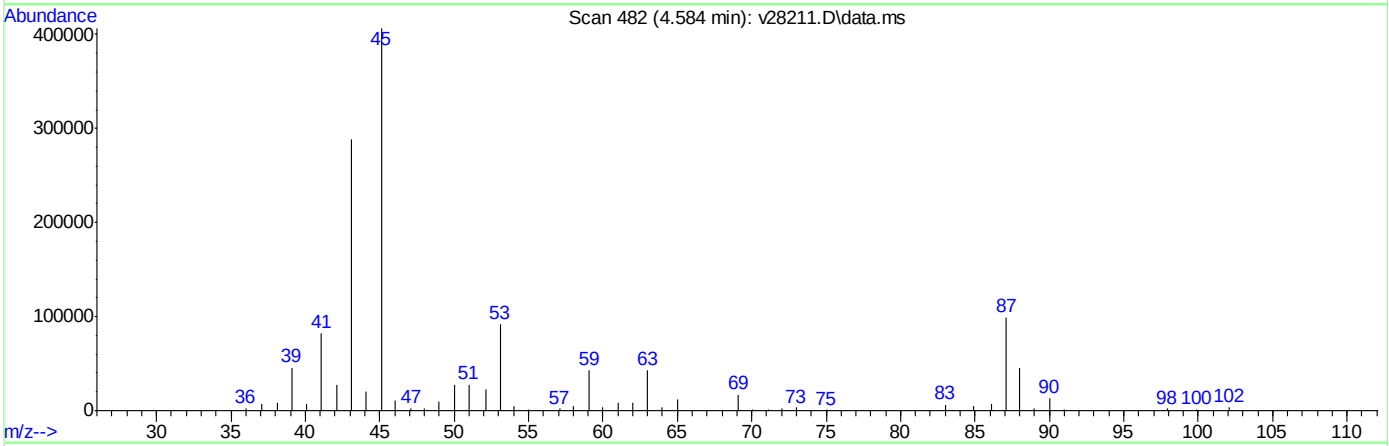


# Quantitation Report (Qedit)

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




TIC: v28211.D\data.ms

(37) ethyl acetate (p)

4.584min (-0.000) 212.40ug/L m

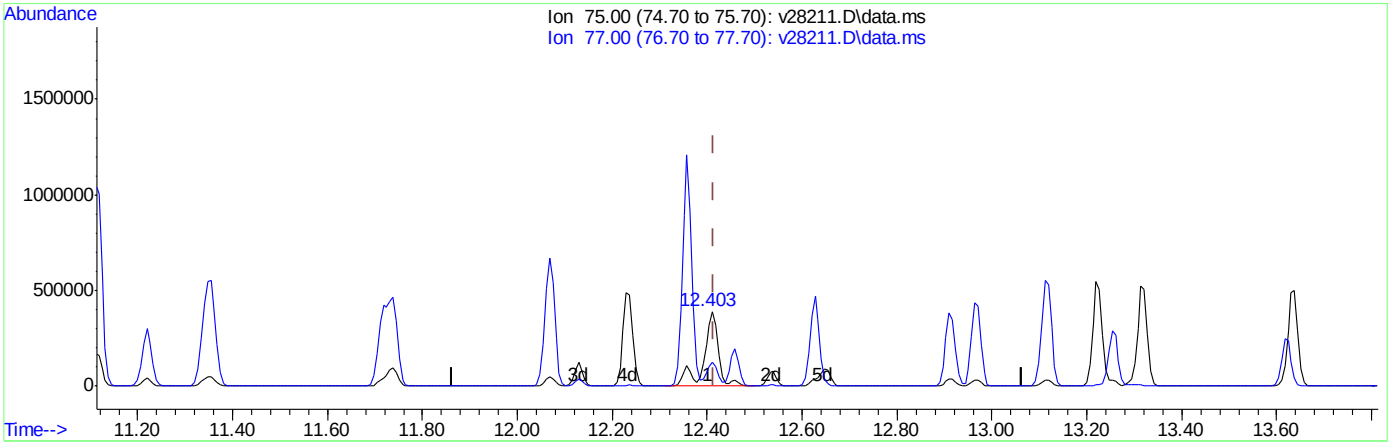
response 2803221

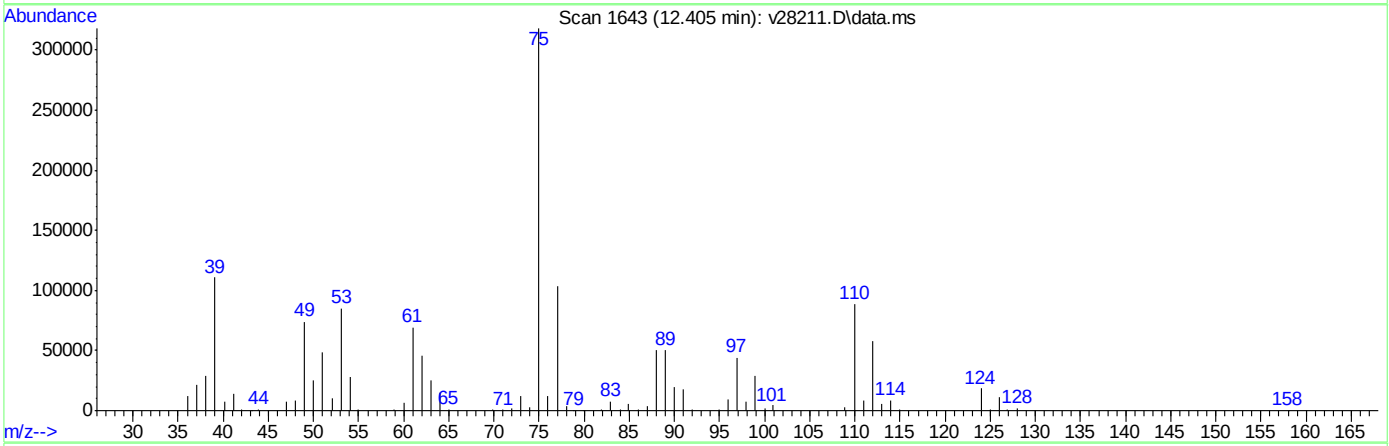
| Ion | Exp% | Act% |
|---|---|---|
| 43.10 | 100 | 100 |
| 45.10 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28211.D\data.ms

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

12.403min (-0.011) 270.00ug/L

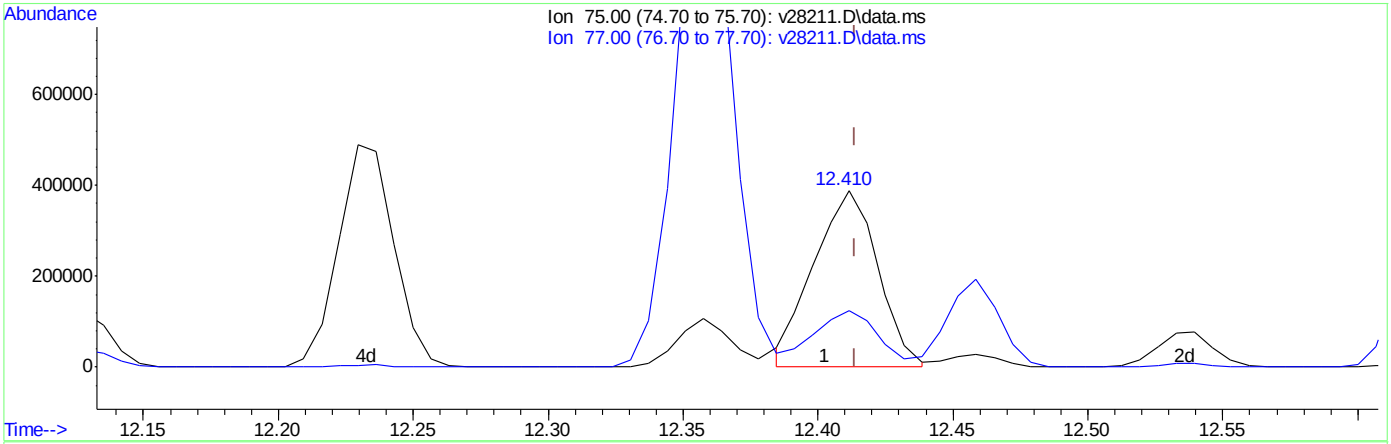
response 846539

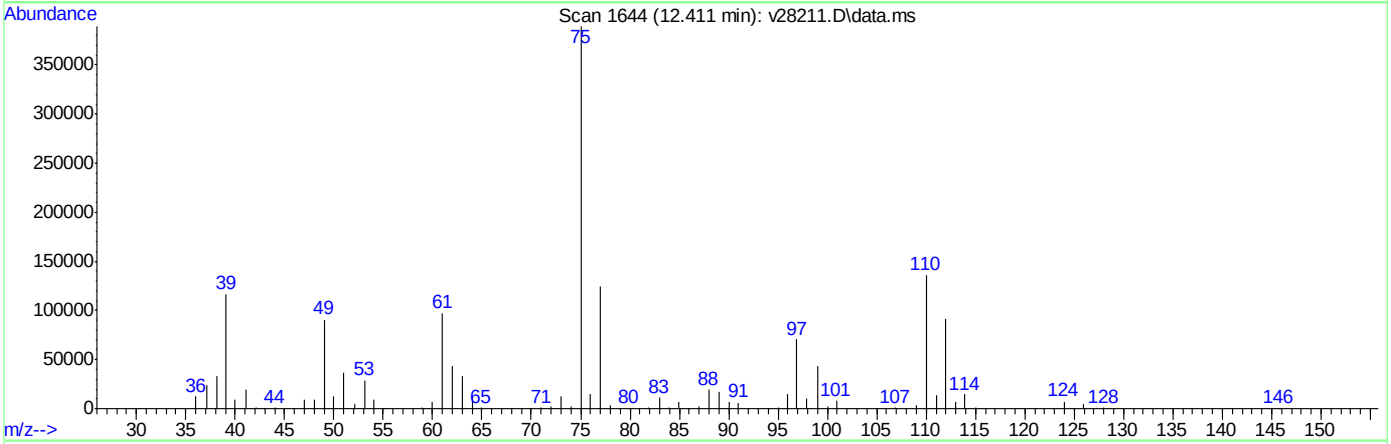
| Ion | Exp% | Act% |
|---|---|---|
| 75.00 | 100 | 100 |
| 77.00 | 32.20 | 32.58 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28211.D\data.ms

(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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski 02/28/14 12:22

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 | | | | | | | Qvalue |
| 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

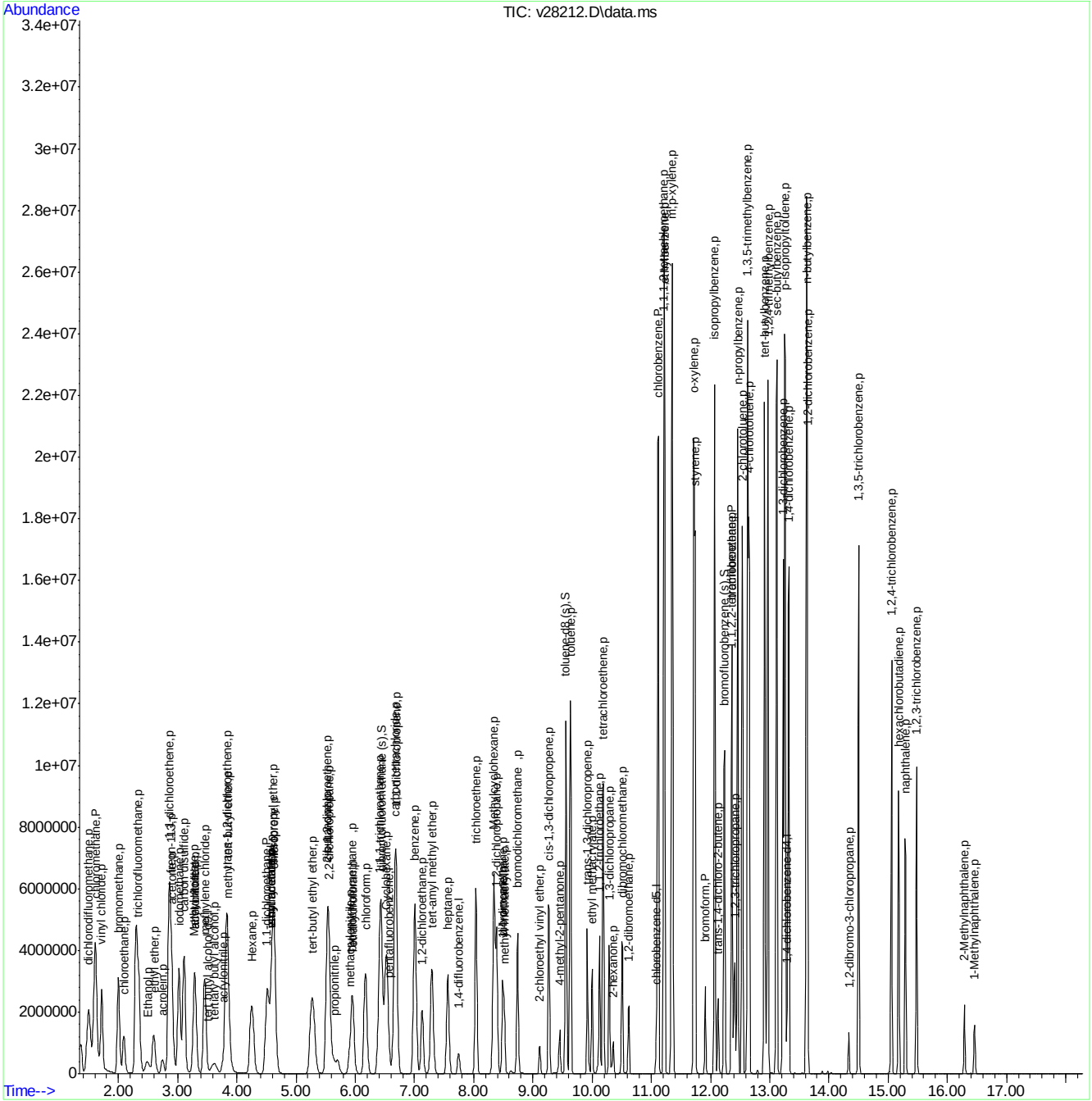
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 93) | 1,3-dichlorobenzene | 13.224 | 146 | 6169911 | 435.59 | ug/L | 99 |
| 94) | p-isopropyltoluene | 13.257 | 119 | 12332970 | 439.56 | ug/L | 95 |
| 95) | 1,4-dichlorobenzene | 13.319 | 146 | 5999372 | 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

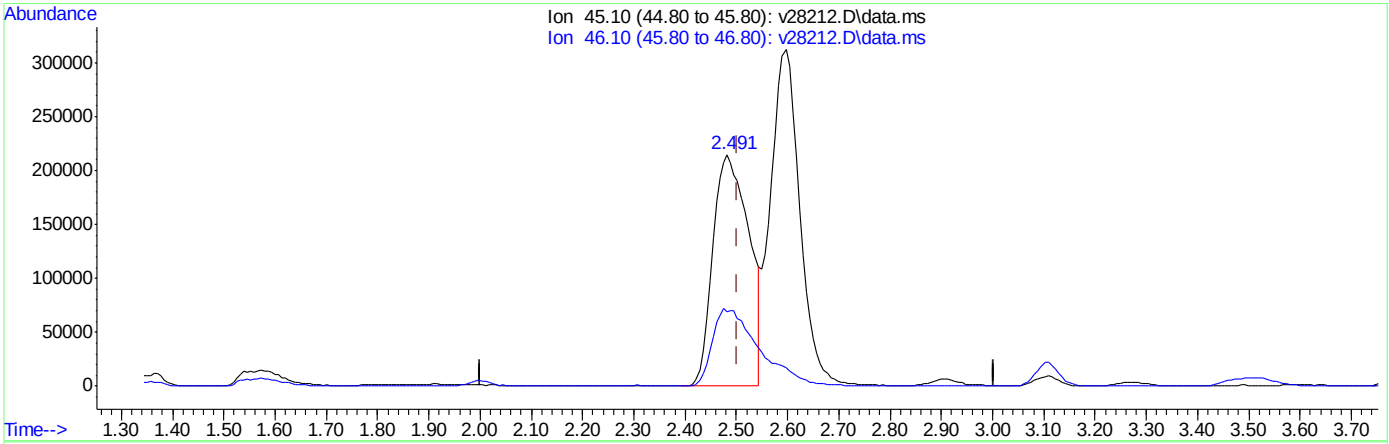
Quant Time: Feb 27 08:14:44 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 07:59:03 2014
Response via : Initial Calibration



# 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

(3) Ethanol (p)

2.491min (-0.011) 34816.67ug/L

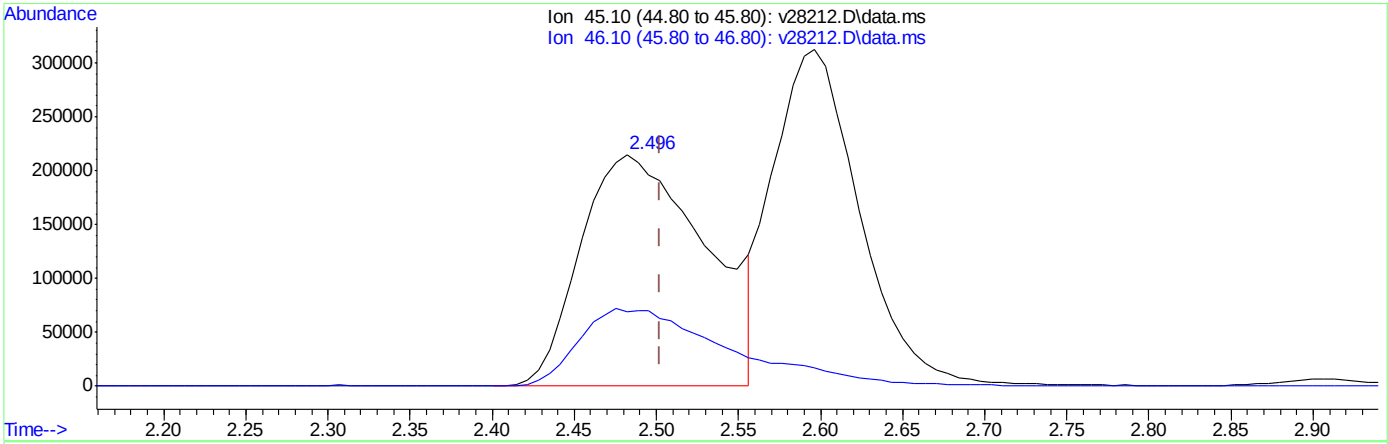
response 1043774

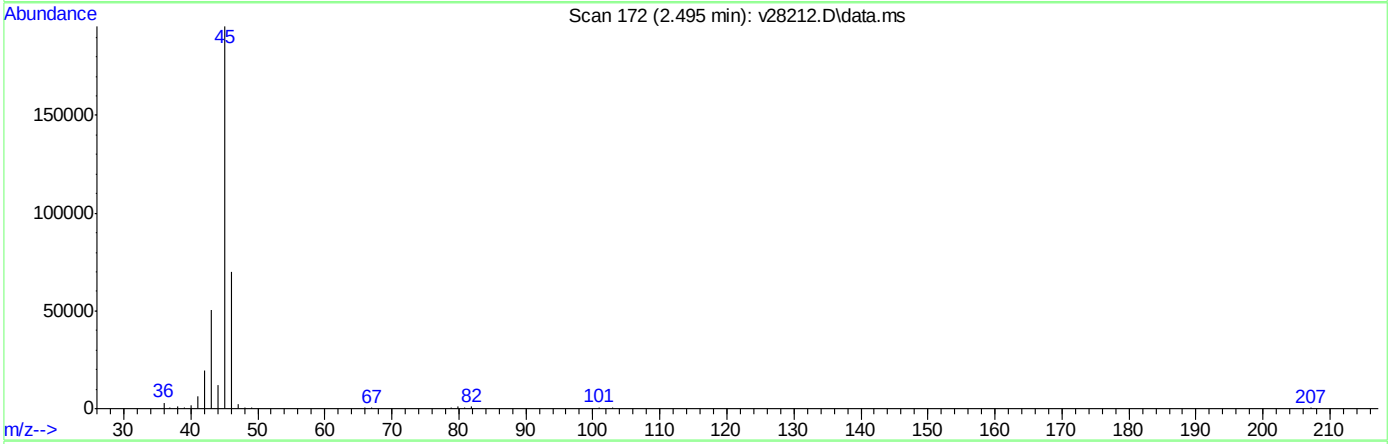
| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 0.00 | 44.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28212.D\data.ms

(3) Ethanol (p)

2.495min (-0.007) 37932.43ug/L m

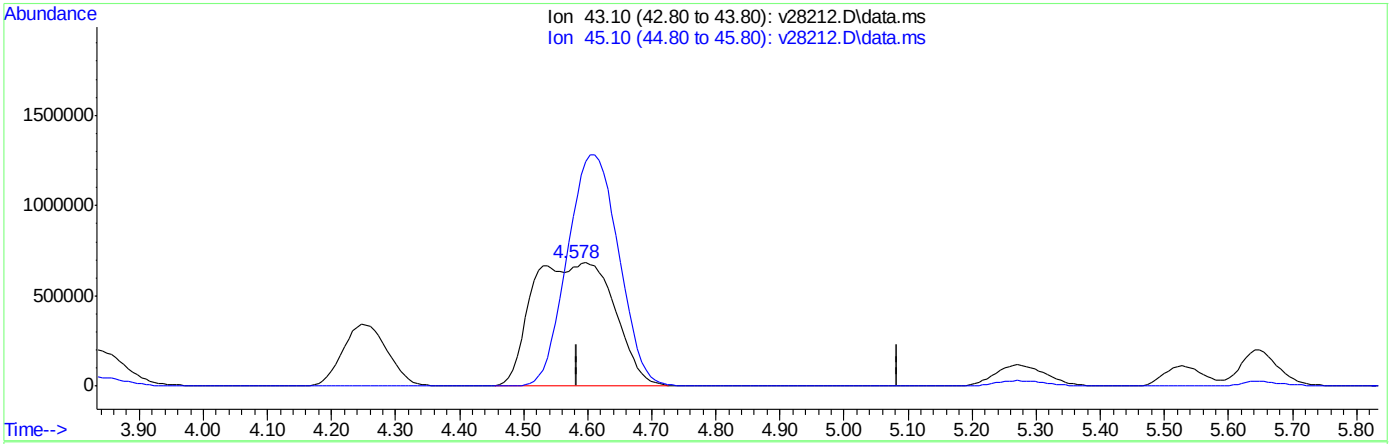
response 1137182

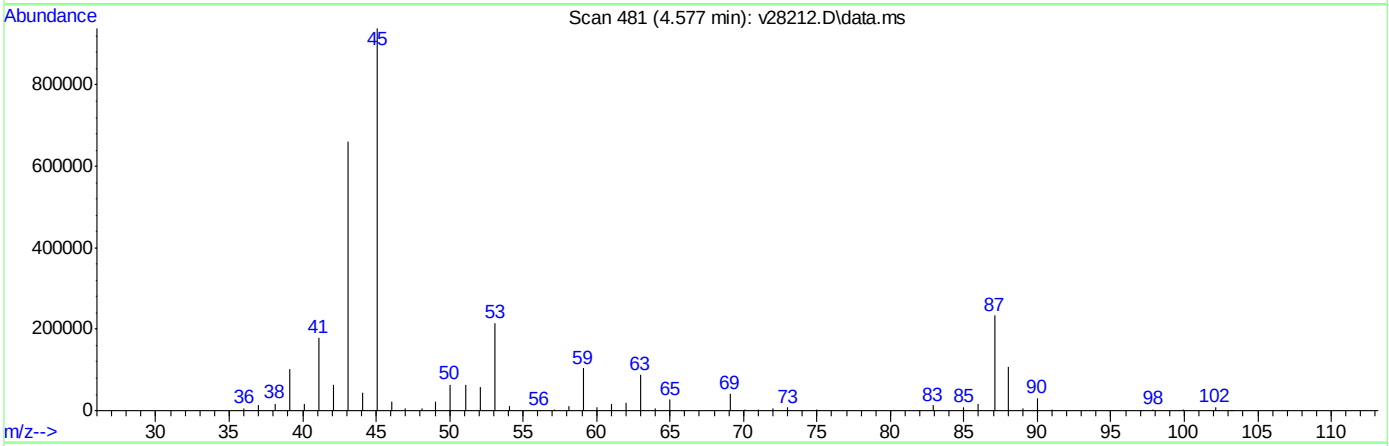
| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 0.00 | 40.38# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

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

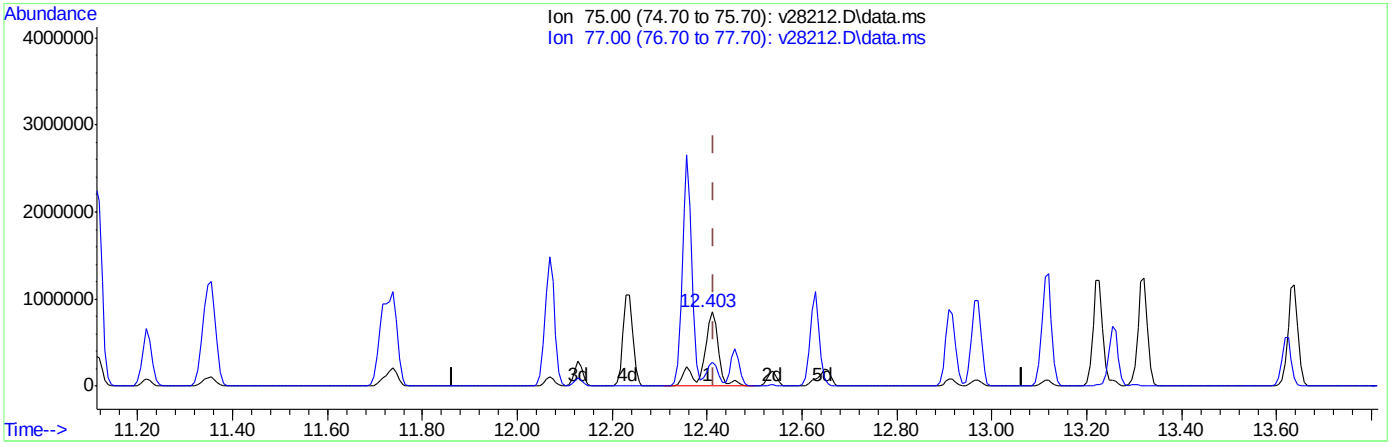
response 6132910

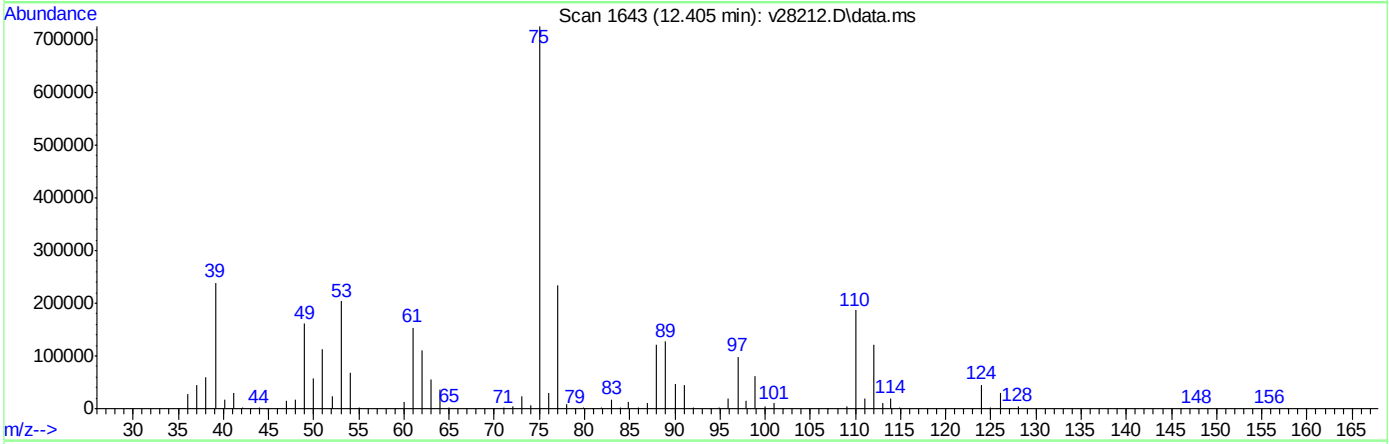
| Ion | Exp% | Act% |
|---|---|---|
| 43.10 | 100 | 100 |
| 45.10 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

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




TIC: v28212.D\data.ms

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

12.403min (-0.011) 504.24ug/L

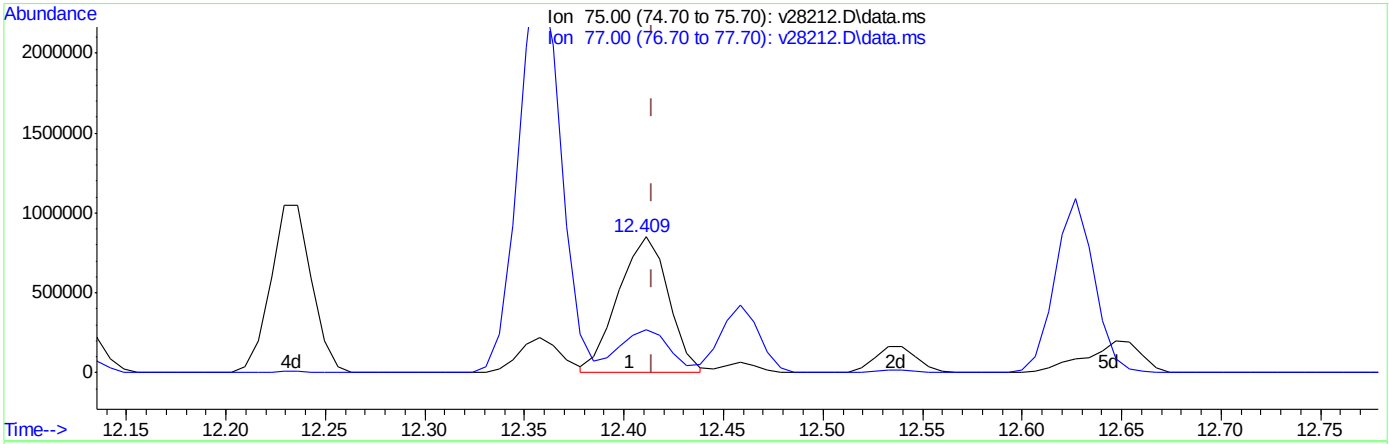
response 1910630

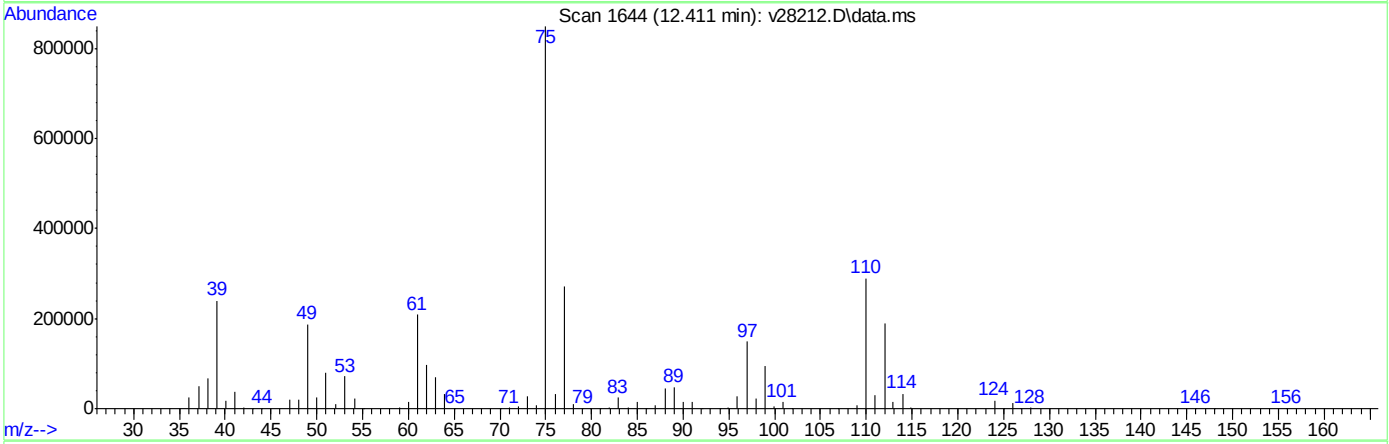
| Ion | Exp% | Act% |
|---|---|---|
| 75.00 | 100 | 100 |
| 77.00 | 32.20 | 32.26 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




TIC: v28212.D\data.ms

(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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
02/28/14 12:22

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

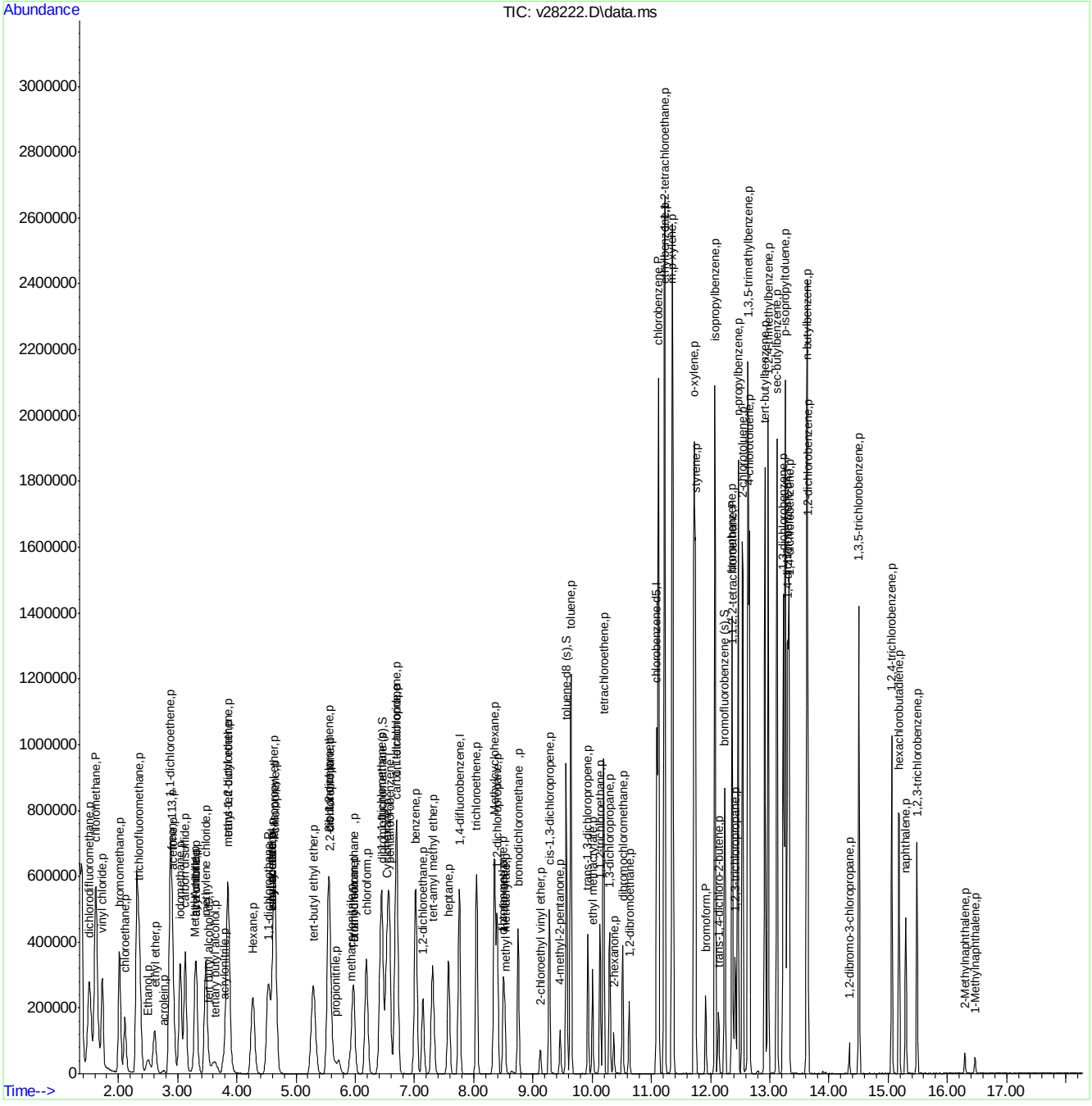
7.6.11

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

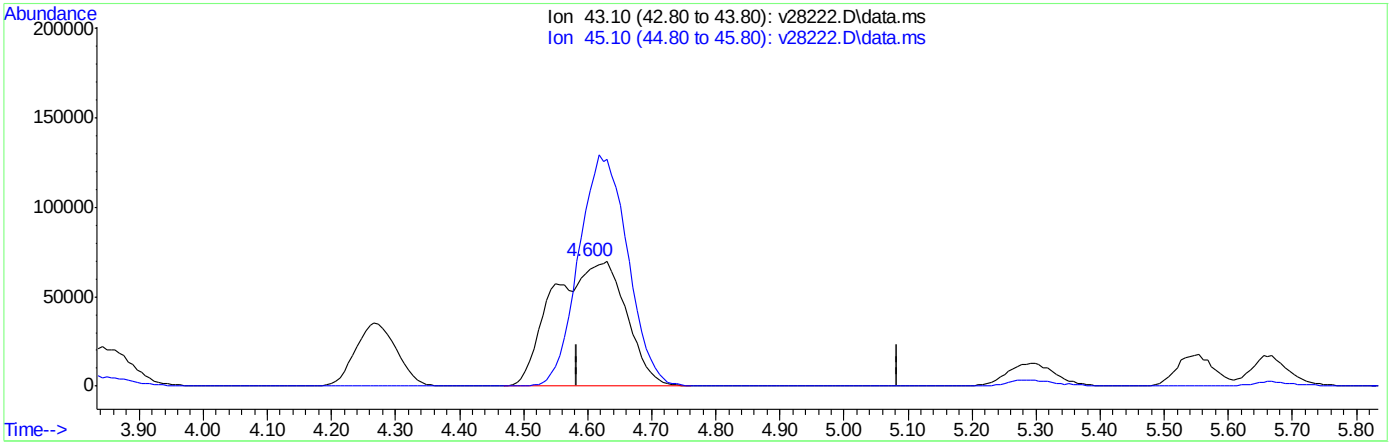
Quant Time: Feb 27 12:16:53 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

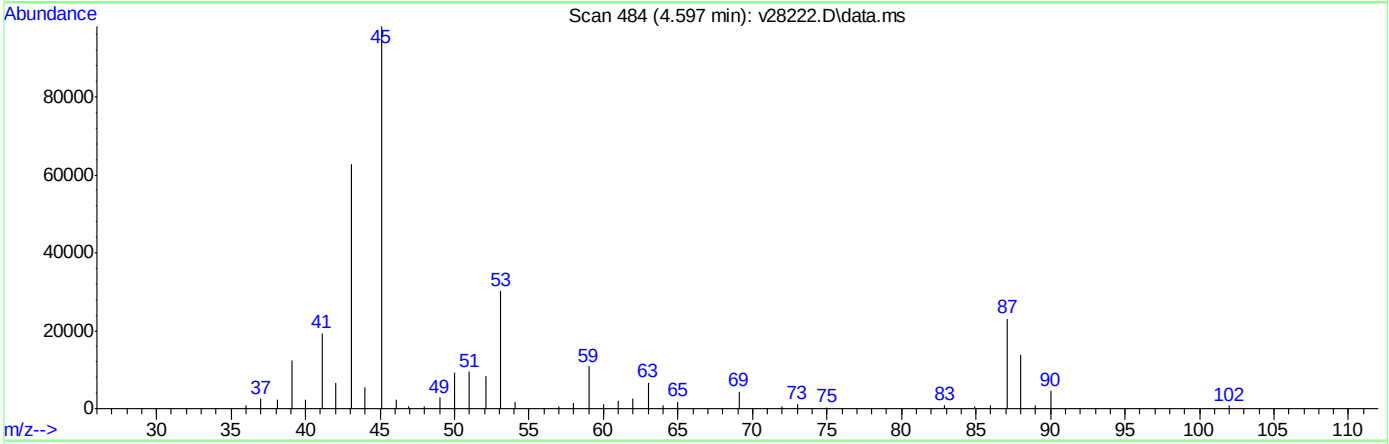


# Quantitation Report (Qedit)

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




TIC: v28222.D\data.ms

(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 |

Manual Integrations APPROVED (compounds with "m" flag)
Tomasz Torski
03/26/14 12:03

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

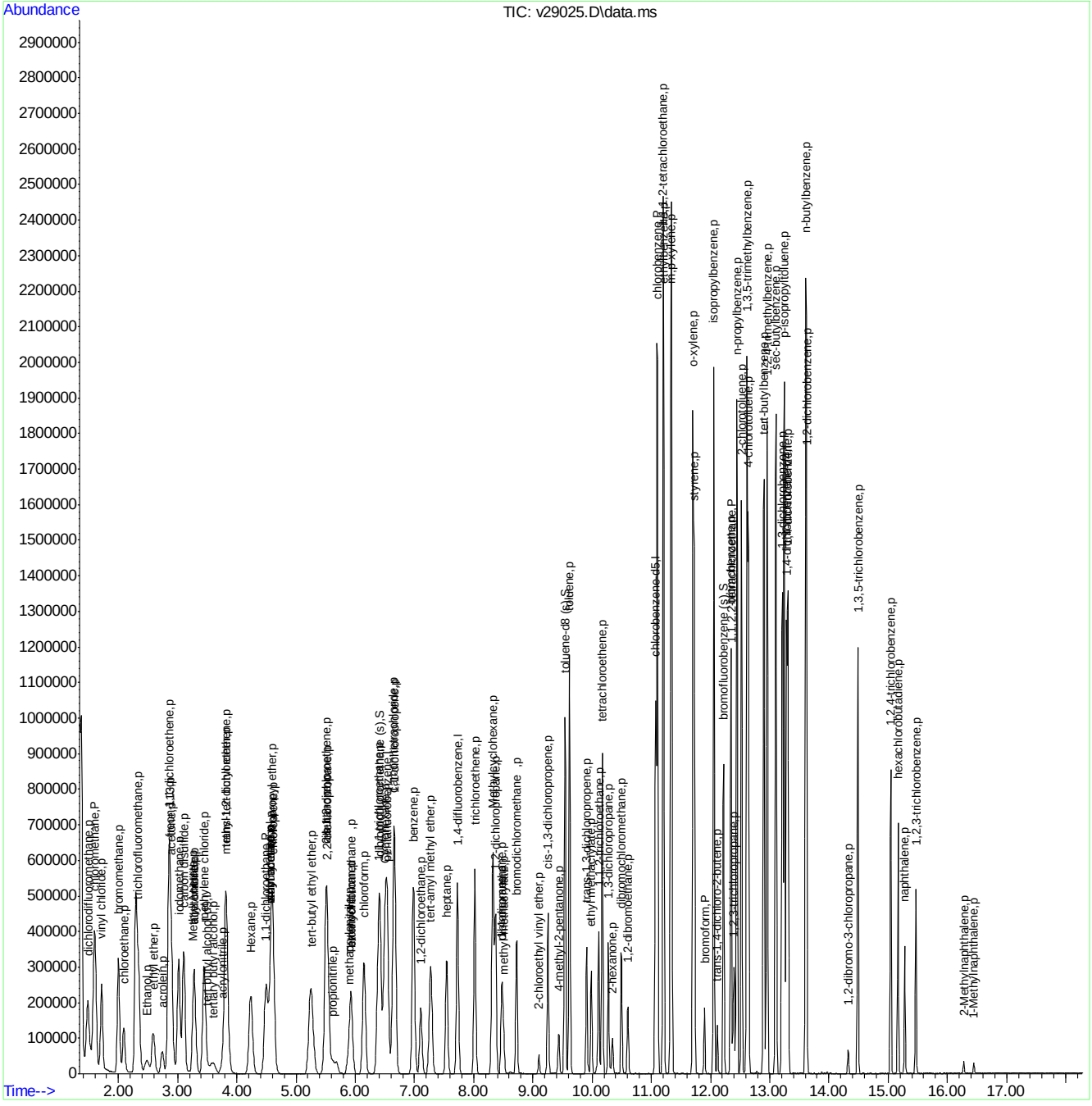
| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 93) | 1,3-dichlorobenzene | 13.211 | 146 | 493635 | 49.55 | ug/L | 99 |
| 94) | p-isopropyltoluene | 13.245 | 119 | 982036 | 54.34 | ug/L | 99 |
| 95) | 1,4-dichlorobenzene | 13.307 | 146 | 461212 | 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

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

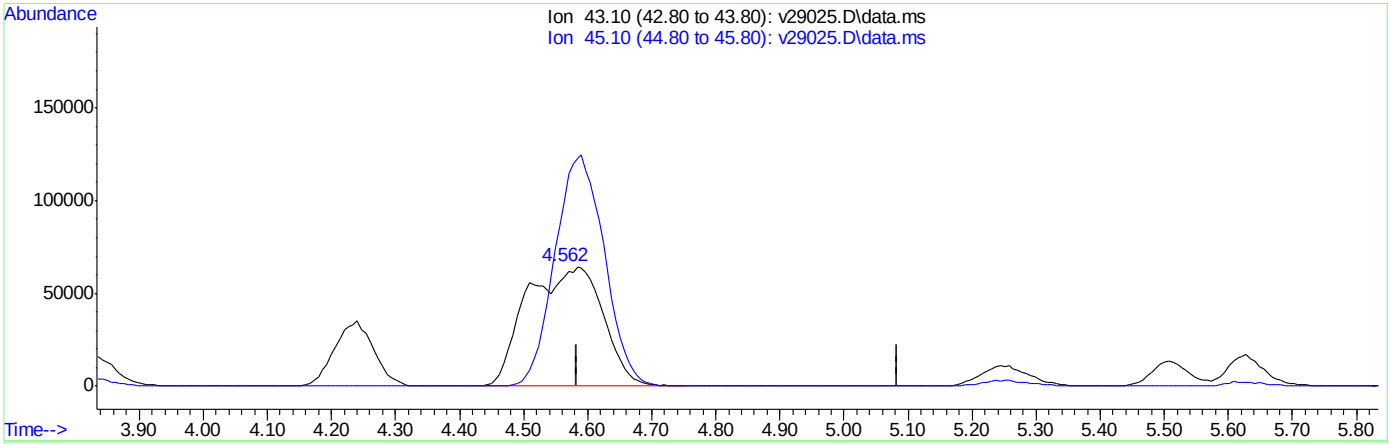
Quant Time: Mar 26 08:46:00 2014
Quant Method : C:\msdchem\1\METHODS\v140226w.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Feb 27 09:00:59 2014
Response via : Initial Calibration

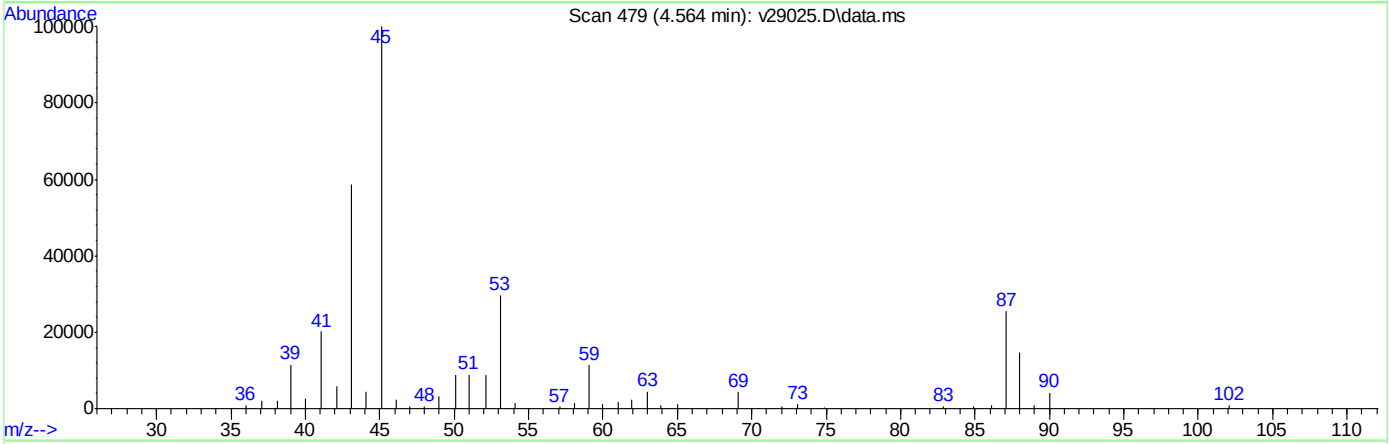


# Quantitation Report (Qedit)

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




TIC: v29025.D\data.ms

(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 |

**Accutest Laboratories of New England, Inc.** **Instrument: GCMS V**

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

| Lot # | Description | Conc |
|---|---|---|
| MS 9617 | V8260 Cal STD | 200 ug/ml |
| 9604 | Cal Gas | |
| 9587 | BS STD | |
| 9588 | BS Gas | |
| 9524 | SS | |
| 9558 | IS | 200 ug/ml |

Daily Saved File

| | |
|---|---|
| Tune file 1: | V28201 |
| Tune file 2: | NA |
| Initial Cal: | 02/26/14 |
| ID File: | V140226W |
| ICAL Verified: | V28222 |
| Sequence verified: | |

Date: 2/26/14

Batch ID: MSV1058

Analysts Ag Yang

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 | blk | NA | NA | NA | 1 | NA | NA | NA | 1:1 | NA | |
| 92 | | | | | 2 | | | | | | |
| 93 | | | | | 3 | | | | | | |
| 94 | test 0.5 | | | | 4 | | | | | | |
| 95 | 5 | | | | 5 | | | | | | |
| 96 | 400 | | | | 6 | | | | | | |
| 97 | blk | | | | 7 | | | | | | |
| 98 | test 5 | | | | 8 | | | | | | |
| 99 | 400 | | | | 9 | | | | | | |
| V28200 | blk | | | | 10 | | | | | | |
| 01 | BFB | | | | 11 | | | | | | |
| 02 | blk | | | | 12 | | | | | | |
| 03 | ICV1058-0.5 | 2.2 | MS9617/9604 | | 13 | | | | | | |
| 04 | -0.5 | | | | 14 | | | | | | |
| 05 | -1 | | | | 15 | | | | | | |
| 06 | -2 | | | | 16 | | | | | | |
| 07 | -5 | | | | 17 | | | | | | |
| 08 | -10 | | | | 18 | | | | | | |
| 09 | ICV1058-50 | | | | 19 | | | | | | |
| 10 | ICV1058-100 | | | | 20 | | | | | | |
| 11 | -200 | | | | 21 | | | | | | |
| 12 | -400 | | | | 22 | | | | | | |
| 13 | blk | NA | NA | | 23 | | | | | | |
| 14 | | | | | 24 | | | | | | |
| 15 | ICV1058-50 | 2.2 | MS9587/9588 | | 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:

**Accutest Laboratories of New England, Inc.** **Instrument: GCMS V**

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

| Lot # | Description | Conc |
|---|---|---|
| MS 9617 | V 326 Cal STD | 200 ug/mL |
| 9604 | Cal Gas | |
| 8587 | BS STD | |
| 8588 | BS Gas | |
| 9559 | IS/SS | 250 ug/mL |

Daily Saved File

| | |
|---|---|
| Tune file 1: | V28222 |
| Tune file 2: | NA |
| Initial Cal: | 02/26/14 |
| ID File: | V140226W |
| ICAL Verified: | V28222 |
| Sequence verified: | |

Date: 2/27/14

Batch ID: MSV1058(1)

Analysts Az Yang

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| V28217 | MB | NA | NA | NA | 1 | NA | NA | NA | 1:1 | NA | |
| 18 | | | | | 2 | | | | | | |
| 19 | | | | | 3 | | | | | | |
| 20 | | | | | 4 | | | | | | |
| 21 | | | | | 5 | | | | | | |
| 22 | IW1038-S0 | 2,2 | MS 9587/8588 | | 6 | | | | | | |
| 23 | BS | | | | 7 | | | | | | |
| 24 | MB | NA | NA | | 8 | | | | | | |
| 25 | | | | | 9 | | | | | | |
| 26 | MB | | | | 10 | | | | | | |
| 27 | MC27895-7 | NA | MC 9611/9604 | LOD/LOQ | 11 | | | | | | |
| 28 | | | | | 12 | | | | | | |
| 29 | | | | | 13 | | | | | | |
| 30 | | | | | 14 | | | | | | |
| 31 | | | | | 15 | | | | | | |
| 32 | | | | | 16 | | | | | | |
| 33 | | | | | 17 | | | | | | |
| 34 | | | | | 18 | | | | | | |
| 35 | MC27895-14 | | | | 19 | | | | | | |
| 36 | | | | | 20 | | | | | | |
| 37 | | | | | 21 | | | | | | |
| 38 | | | | | 22 | | | | | | |
| 39 | | | | | 23 | | | | | | |
| 40 | | | | | 24 | | | | | | |
| 41 | | | | | 25 | | | | | | |
| 42 | | | | | 26 | | | | | | |

2/28/14 mg

= Matrix: Designate W for water, S for soil, O for oil.
ple amount is reported in grams (wet) for soil and oil, mls for water.

1-05 Date: 07/22/13

Review:

**Accutest Laboratories of New England, Inc.** **Instrument: GCMS V**

VOLATILE ORGANICS BY GC/MS ANALYSIS LOG

Standards Data

| Lot # | Description | Conc |
|---|---|---|
| MS 9640 | V8260 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: | V140226W1 |
| ICAL Verified: | |
| Sequence verified: | GK |

Date: 3/25/14

Batch ID: MSV1088

Analysts: AD Yang

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/0.05-50 | 1,2 | MS9640/9625 | NA | 1 | | 5 mL | NA | 1:1 | NA | |
| 26 | BS | 2,2 | MS9626/9627 | | 2 | | | | | | |
| 27 | BLK | NA | NA | | 3 | | | | | | |
| 28 | ↓ | ↓ | ↓ | | 4 | | | | | | |
| 29 | MB | ↓ | ↓ | ↓ | 5 | | | | | | |
| 30 | MC29101-13 | 1 | MS31386 | V8260STD | 6 | WTB | | | | <2 | |
| 31 | MC29163-4 | 1 | ↓ | ↓ | 7 | ↓ | | | | | |
| 32 | ↓ -3 | 5 | ↓ | ↓ | 8 | WFB | | | | | |
| 33 | MC29067-1 | 2 | MS31373 | V8260STAR | 9 | AW | | | | | |
| 34 | MC29066-4 | 2 | ↓ | ↓ | 10 | ↓ | | | | | |
| 35 | MC29163-1 | 4 | MC21386 | V8260STD | 11 | | | | | | |
| 36 | ↓ -2 | 4 | ↓ | ↓ | 12 | | | | | | |
| X 37 | MC29066-3 | 2 | MS31373 | V8260STAR | 13 | | | | 1:100 | NA | RR = 1:20 |
| 38 | MC29101-1 | 1 | MS31386 | V8260STD | 14 | | | | 1:1 | <2 | JT |
| 39 | -2 | | | | 15 | | | | | | |
| 40 | -3 | | | | 16 | | | | | | |
| 41 | -4 | | | | 17 | | | | | | |
| 42 | -5 | | | | 18 | | | | | | |
| 43 | -6 | | | | 19 | | | | | | |
| 44 | -7 | | | | 20 | | | | | | |
| 45 | -8 | | | | 21 | | | | | | |
| 46 | -9 | | | | 22 | | | | | | |
| 47 | -10 | | | | 23 | | | | | | |
| 48 | -11 | | | | 24 | | | | | | |
| 49 | ↓ -12 | ↓ | ↓ | ↓ | 25 | | | | | | |
| 50 | MC29163-1MS | 3 | | | 26 | | | | 1:5 | | |
| 51 | ↓ -1MSD | ↓ | ↓ | ↓ | 27 | | | | ↓ | | |
| 52 | BLK | NA | NA | NA | 28 | | | | 1:1 | NA | |
| 53 | ↓ | ↓ | ↓ | ↓ | 29 | | | | ↓ | ↓ | |

3/26/14 m

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:

# ATTACHMENT 2

# Data Usability Summary Report

***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 *Quality Assurance Program Plan, Solvent Deck Area, Former French Road Facility, Utica, NY* October 14, 2009, *USEPA National Functional Guidelines* (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.

| | Yes | No |
|---|---|---|
| 1. Were all the analyses requested for the samples submitted with each COC completed by the lab? | X | |
| 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<br>X |
| Comments: | | |
| 8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples? | Yes | No<br>X |
| Comments: | | |
| 9. Were instrument calibrations within method criteria? | Yes | No<br>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<br><br>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<br><br>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<br>X | No |
| Comments: | | |
| 11. Were laboratory control (LC/LD) sample recoveries within 70-130% control limits? | Yes | No<br>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<br>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<br>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<br>X |
| Comments: | | |
| 15. Were Tentatively Identified Compounds (TIC) present? | Yes | No<br>X |
| Comments: | | |

| | | | |
|---|---|---|---|
| 16. Were organic system performance/instrument tune criteria met? | | Yes<br>X | No |
| Comments: | | | |
| 17. Were GC/MS internal standards within method criteria? | | Yes<br>X | No |
| Comments: | | | |
| 18. Were inorganic method performance criteria met? | NA | Yes | No |
| Comments: No inorganic analyses requested. | | | |
| 19. Were field duplicates collected? If so, discuss the precision (RPD) of the results.<br><br>Duplicate Sample Nos.<br>MW-22FD MW-22 | | Yes<br>X | No |
| Comments: All sample results non-detect, RPD within ±25% limit. | | | |
| 20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results? | Yes<br>X | No | Initials<br>EAC |
| Comments: | | | |
| 21. Other: | | Yes | No<br>X |
| Comments: | | | |

**PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT**

Data are usable as flagged. See Form 1s for flagged data.

| | | | |
|---|---|---|---|
| Precision: | Acceptable<br>X | Unacceptable | Initials EAC |
| Comments: | | | |
| Sensitivity: | Acceptable<br>X | Unacceptable | Initials EAC |
| Comments: | | | |
| Accuracy: | Acceptable<br>X | Unacceptable | Initials EAC |
| Comments: | | | |
| Representativeness: | Acceptable<br>X | Unacceptable | Initials EAC |
| Comments: | | | |
| Method Compliance: | Acceptable<br>X | Unacceptable | Initials EAC |
| Comments: | | | |
| Completeness: | Acceptable<br>X | Unacceptable | Initials EAC |
| Comments: | | | |