



1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCSolutions.com

July 31, 2017

Ms. Lee Guterman
Director of Hazmat Unit, IEH Division
New York City School Construction Authority
30-30 Thomson Avenue
Long Island City, NY 11101-3045

**Re: Inspection Services during Phase IB Archeological Investigation
Proposed Pre-Kindergarten Facility K710
168 8th Street
Brooklyn, New York 11215
Block 1003, Lot 11
TRC Project No. 275864
SCA Project ID 099267**

Dear Ms. Guterman,

TRC Engineers, Inc. (TRC) has prepared this letter report, which summarizes the results of the environmental consulting/inspection services for the archeological investigation completed at 168 8th Street, Brooklyn, New York 11215 (the "Site").

Site Description and Background

The Site encompasses approximately 13,500 square feet and is currently a concrete- and asphalt-paved vacant lot. TRC understands that the planned Site development includes the construction of a public school facility. TRC conducted environmental due diligence activities at the Site between 2011 and 2013 consisting of a Phase I Environmental Site Assessment (ESA) and a Phase II Environmental Site Investigation (ESI).

The Phase I ESA identified the following on-site recognized environmental conditions (RECs) associated with the Site (Block 1003, Lot 11): the potential presence of buried structures from former on-site structures and historic fill from unknown sources; and the historic use of the Site as an ink manufacturer, a chemical laboratory, and a textile factory. Off-site RECs included the historic and current usage of nearby properties as manufacturing companies, factories, a printing facility, automobile repair facilities, garages with gasoline tanks, a fuel oil company, an undertaker, dry cleaning/laundry facilities, a tire shop, and a filling station. Additionally, nearby sites with the potential to impact the Site are listed in regulatory databases for generation of hazardous waste and petroleum bulk storage. The Phase I ESA identified environmental concerns including potential asbestos-containing material (ACM), lead-based paint (LBP), and polychlorinated biphenyl (PCB)-containing materials in buried structures and debris associated with former structures on the Site.

A Phase II Environmental Site Investigation (ESI) for the Proposed Project Site was completed by TRC on behalf of the NYCSCA in March 2013 to assess the RECs identified in the Phase I ESA. Based on the

results of due diligence activities, elevated concentrations of chlorinated volatile organic compounds (VOCs) are present in soil vapor and groundwater.

Summary of Field Activities

TRC was on-Site between June 14, 2017 and June 26, 2017 to provide periodic inspection services on behalf of SCA's Industrial and Environmental Hygiene (IEH) Department during the implementation of a Phase IB Archeological Investigation. IEH asked TRC to be present to screen soils for evidence of contamination, based on the results of previous environmental due diligence investigations performed at the Site. Brookside Environmental, Inc. (Brookside) was retained as a subcontractor by AKRF Inc. (AKRF) for test pit excavation services. An excavator was utilized to complete eight (8) trenches to a maximum depth of 10 feet below ground surface (bgs).

Soil was excavated in one- to two- foot lifts and placed on concrete in segregated piles correlating to the excavated depth. Excavated soils were inspected and screened with a photoionization detector (PID). Trench locations were selected by AKRF, to provide spatial coverage across the Site. The approximate locations of the trenches are shown on the attached Figure 1.

The findings from each trench are summarized in the attached Table 1. With the exception of Trench 2, visual or olfactory evidence of contamination and/or elevated PID readings were not identified in soil excavated from any trench. Soil samples were collected for analysis from one trench (Trench 2) as described below. Additional detail pertaining to each trench is presented below:

- Trench 1 was excavated in the northern portion of the Site. Trench 1 was approximately 5 feet wide by 50 feet long and excavated to a maximum depth of approximately 5 feet bgs. Soil observed in the trench generally consisted of dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, asphalt, and wood. Native soil was observed in the trench at approximately 4.5 feet bgs and consisted of red/brown fine sand.
- Trench 2 was excavated in the northern portion of the Site. Trench 2 was approximately 19 feet wide by 19 feet long and excavated to a maximum depth of approximately 8 feet bgs. Soil observed in the trench generally consisted of dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, asphalt, wood, and metal to a depth of approximately 3 to 4 feet bgs. Native soil consisted of red/brown silty sand. Items of note identified in Trench 2 include the following:
 - An approximately 5 foot wide by 15 foot long concrete layer was identified in the center of Trench 2. Beneath the concrete layer was a thin asphalt layer mixed with soil, followed by an approximately 2-inch layer of bluestone. A red brick wall, which ran from east to west and extended to a depth of approximately 6 feet bgs, abutted the northern side of this structure. An approximately 6-inch diameter drain inlet was identified on the center of the structure and a four-inch diameter interconnected horizontal pipe extended from east to west from the drain inlet. Evidence of impacted soil (elevated PID readings up to 6.8 parts per million [ppm]) was observed between 3 and 4 feet bgs. Two (2) soil samples, one (1) collected from the apparent impacted zone (3.5 to 4 feet bgs) and one (1) collected from the first underlying clean interval (4 to 5 feet bgs), were selected for laboratory analysis for VOCs.
 - A discrete area of impacted soil consisting of gray fine to medium moist sand, trace silt,

with a petroleum-like odor was identified approximately 7.5 to 8 feet bgs. A PID reading of 45 ppm was recorded. One (1) soil sample (TRC-TR-2(7.5-8)) was collected for laboratory analysis for VOCs. Cave-in material prohibited the collection of a clean underlying sample.

- Trench 3 was excavated in the north central portion of the Site to a maximum depth of approximately 8 feet bgs. The western portion of Trench 3 was approximately 8 feet by 10 feet; the eastern portion of Trench 3 was not inspected by TRC. Soil observed in the trench generally consisted of dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, and asphalt. Native soil was observed in the western portion of Trench 3 at approximately 2 feet bgs and consisted of red/brown silty sand.
- Trench 4 was excavated in the western central portion of the Site and was approximately 18 feet wide by 20 feet long with a maximum depth of 8 feet bgs. Soil observed in the trench generally consisted of dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, and asphalt. Native soil was observed in the trench at approximately 2.5 feet bgs and consisted of red/brown silty sand.
- Trench 5 was excavated in the central portion of the Site and was approximately 57 feet long by 12.5 feet wide with a maximum depth of 4 feet bgs. Soil observed in the trench generally consisted of gravel, asphalt and concrete to a depth of approximately 15 inches bgs. Red/brown silty sand and some bricks were observed to a depth of approximately 4 feet bgs. AKRF identified items of potential archeological significance (i.e. cistern and hand-dug well) in Trench 5.
- Trench 6 was excavated in the southeastern central portion of the Site. The eastern portion of Trench 6 was approximately 18 feet long by 11 feet wide with a maximum depth of approximately 6 feet bgs. The western portion of Trench 6 was not inspected by TRC. Soil observed in Trench 6 generally consisted of red/brown silty sand, and fill material consisting of bricks, concrete and metal. Items of note identified in Trench 6 include the following:
 - An underground storage tank (UST) encased in concrete was identified at approximately 6 feet below ground surface. The tank was approximately 53 inches deep, 6 feet wide with an unknown length. The length was not confirmed since the proposed location of Trench 6 did not extend further east.
- Trench 7 was excavated in the southwestern portion of the Site and was approximately 40 feet long by 40 feet wide with a maximum depth of approximately 10 feet bgs. Soil observed in Trench 7 generally consisted of fill material consisting of concrete and red/brown silty sand.
- Trench 8 was excavated in the southern portion of the Site and was approximately 40 feet long by 10 feet wide with a maximum depth of approximately 8 feet bgs. Soil observed in the trench generally consisted of red/brown fine sand and fill material consisting of bricks, concrete, and metal. Items of note identified in Trench 8 include the following:
 - Two (2) steel USTs were identified at approximately 5 feet bgs. Each tank was approximately 40 inches deep. The exact dimensions of each tank are unknown since the proposed location of Trench 8 did not extend further north. The distance from the southern edge of each tank to what appeared to be a lifting eye/lug (a welded ring typically used for lifting or placing) was approximately 44 inches. Since lifting lugs are typically in

the middle of a tank, each tank is estimated to be 88 inches long.

Following excavation and sample collection, each trench was backfilled with excavated material, with the exception of the discrete area of impacted soil identified in Trench 2.

Investigation derived waste (IDW) generated during the Phase IB Archeological Investigation was temporarily stored in clearly labeled 55-gallon steel drums with the date, location, and contents. Two 55-gallon drums of IDW (impacted soil) were generated during Phase IB Archeological Investigation activities. The drums were removed from the Site by TRC’s subcontractor, Brookside Environmental, and transported to Spring Grove Resource Recovery of Cincinnati, Ohio. A copy of the waste manifest is included as *Appendix C*.

The three soil samples collected during the archeological investigation were containerized in accordance with New York State Department of Environmental Conservation (NYSDEC)/United States Environmental Protection Agency (USEPA) protocols. Each container was properly labeled, preserved, and placed in a chilled cooler for transport via courier to Accutest of Dayton, NY for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) plus the 10 highest concentration tentatively identified compounds (TICs + 10). Accutest is a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. Standard chain-of-custody procedures were followed.

Results of Investigation Field Activities

The Unrestricted Use SCOs found in 6 NYCRR 375-6, Remedial Program Soil Cleanup Objectives, are the appropriate standards for use in evaluating the results of the analyses of the soil samples. Soil which is free of contaminants above these standards is suitable for “unrestricted use” which is the land use category without imposed restrictions, such as environmental easements or other land use controls.

Additionally, the Supplemental Soil Cleanup Objectives (SSCOs) outlined in Table 1 the Commissioner Policy 51 (CP-51), “Soil Cleanup Guidance”, dated October 21, 2010 were used to evaluate soil data.

Six (6) VOCs were detected in soil samples. Five (5) VOCs were detected in soil samples at concentrations below comparison criteria including acetone, carbon disulfide, cis-1,2-dichlorethene, tetrachloroethene, and trans-1,2-dichlorethene. TICs were reported at total concentrations ranging from 0.0059J to 163.5 milligrams per kilograms (mg/kg). One VOC was detected above the Unrestricted Use SCO as shown in the table below.

Summary of VOCs in Soil at Concentrations Greater than Unrestricted Use SCO (mg/kg)

Sample ID Units (mg/kg)	TRC-TR-2 (3.5-4)	TRC-TR-2(4- 5)	TRC-SB-3 (2-4')	Unrestricted Use SCO	CP-51 Table 1 SSCO - Residential
Trichloroethene (TCE)	8.44	0.0204	0.161	0.47	NC

The VOC detected at a concentration above the Unrestricted Use SCO is attributable to former Site uses and/or to historic uses of the former drainage system identified in Trench 2 since the impacted soils were detected in unsaturated soil samples.

July 31, 2017
Ms. Lee Guterman
Inspection Services during Phase IB Archeological Investigation
Proposed Pre-Kindergarten Facility K710

The analytical data is summarized in *Table 2* and the analytical data package is presented in *Appendix B*.

Conclusions and Recommendations

Based on the results of the inspection services, TRC concludes the following:

- Eight (8) trenches were excavated at the Site to a maximum depth of 10 feet bgs. Soil excavated from each trench generally consisted of red/brown fine sand, dark brown/black coarse sand, and fill material consisting of bricks, concrete, and metal.
- Elevated PID readings, visual and/or olfactory indications of potential contamination were observed in a discrete area of soil excavated from Trench 2 from 7.5 to 8 feet bgs. Elevated PID readings were observed in soil excavated from Trench 2 from approximately 3.5 to 4 feet bgs. No other visual or olfactory indications of potential contamination or elevated PID readings were observed in the soils inspected from the remaining trenches.
- The subsurface excavation confirmed the presence of at least three USTs at the Site; one concrete encased UST on the southwestern portion of the Site and two steel USTs on the southern portion of the Site. Additional investigation is required to confirm the capacity of each tank and contents, and to determine if the tanks have leaked. TRC recommends registering, closing, and removing the three tanks in accordance with NYSDEC Petroleum Bulk Storage regulations (6 NYCRR 612 through 614).
- Three soil samples were selected from Trench 2 and submitted to the laboratory for analysis of TCL/CP-51 VOCs. TCE was detected in one soil sample at a concentration above the Unrestricted Use SCO and is attributable to former Site uses and/or the former drainage system identified in Trench 2. TRC recommends additional investigation of the drainage system in Trench 2.
- AKRF identified items of potential archeological significance (i.e. cistern and hand-dug well) in Trench 5. TRC understands that AKRF will complete a Phase 2 Site Evaluation to further investigate the items of potential archeological significance. TRC recommends providing inspection services during completion of the Phase 2 Site Evaluation.

TRC understands that SCA is in the process of completing BCP Pre-Application Forms and will continue to provide environmental consulting services as per TRC's Scope of Work (SOW) dated March 9, 2017. Please do not hesitate to contact us at (212) 221-7822 if you have any questions.

Sincerely,

TRC ENGINEERS, INC.



Lindsay O'Hara
Associate Environmental Scientist

cc: E. Ebert, TRC
J. Miranda, TRC

July 31, 2017
Ms. Lee Guterman
Inspection Services during Phase IB Archeological Investigation
Proposed Pre-Kindergarten Facility K710

Attachments:

Figure 1 – Site Location Map

Figure 2 – Sample Location Plan

Table 1 – Summary of Observations from Trench Excavations

Table 2 – Summary of Results of Analysis of Volatile Organic Compounds in Soil

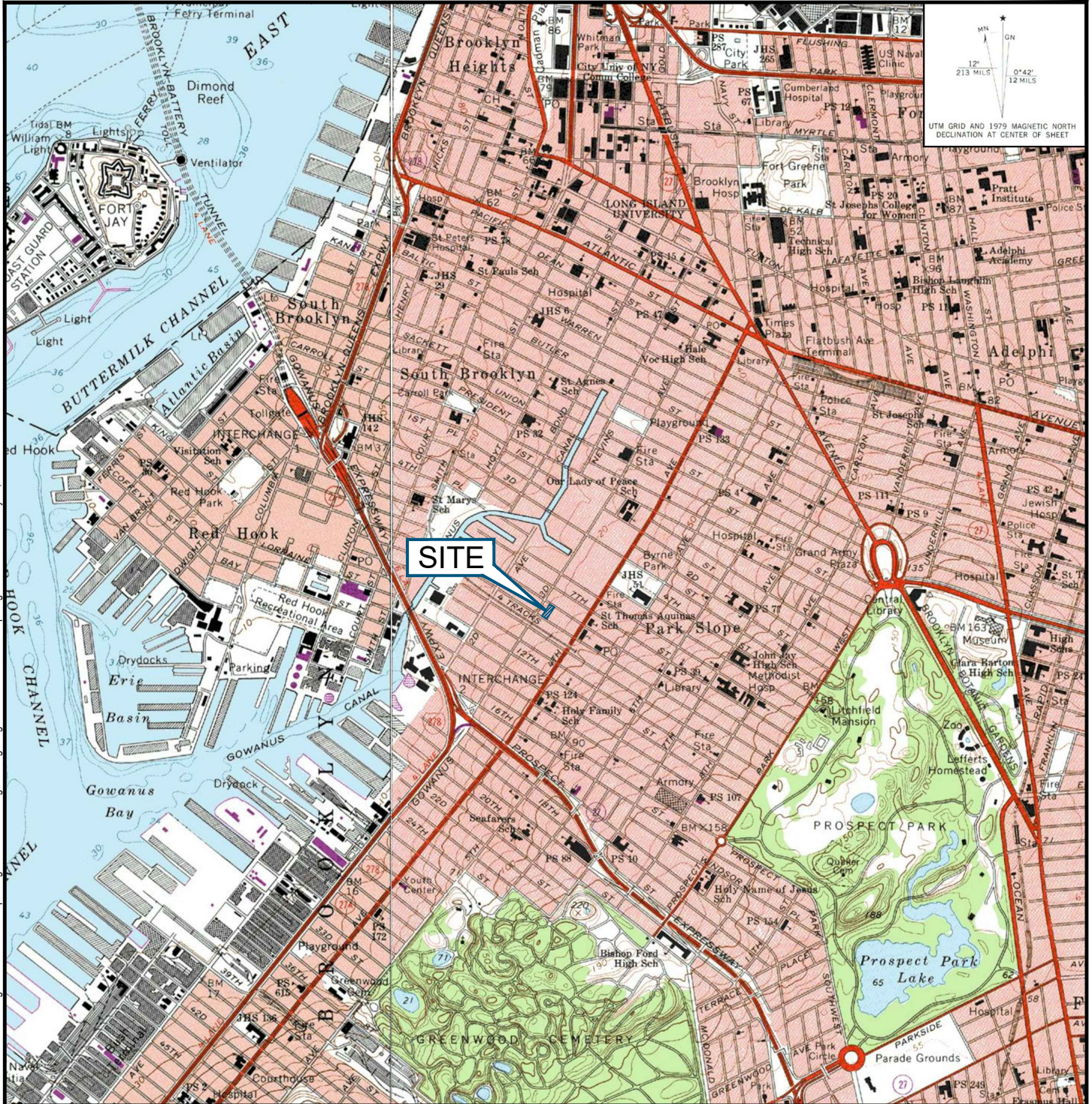
Attachment A – Photograph Log

Attachment B – Laboratory Analytical Reports

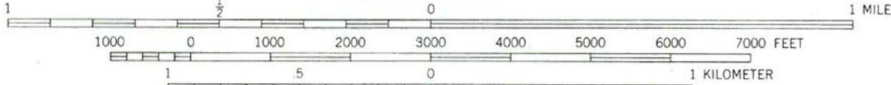
Attachment C – Waste Disposal Manifest

FIGURES

5.611 - ATTACHED REF'S - ATTACHED IMAGES - 197203 9h a.reel.01 - 197203 9h a.reel.02 - DRAWING NAME: I:\Projects\NYCSCA Contract C000014345\275864 - 188 8th Street K710\Archaeological Assessment\Report\Figures\TRC Working Drawings\Figure 1 - Site Location Map.dwg --- PLOT DATE: July 10, 2017 - 12:28PM --- LAYOUT: 8.5x11P



SCALE: 1:2400



CONTOUR INTERVAL 10 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER



MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEETS (S): TP, BROOKLYN, NY, 7.5 MINUTE; DATED 1967, PHOTOREVISED 1979 W, CENTRAL PARK, NY-NJ, 7.5 MINUTE DATED 1966, PHOTOREVISED 1979

MAP OBTAINED THROUGH USE OF MAPTECH TERRAIN NAVIGATOR PRO SOFTWARE.



1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
INSPECTION SERVICES DURING ARCHEOLOGICAL INVESTIGATION
PROPOSED PRE-KINDERGARTEN FACILITY K710
168 8TH STREET - BLOCK: 1003, LOT: 11
BROOKLYN, NY 11215

TITLE:
SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	E. EBERT
APPROVED BY:	J. MIRANDA
DATE:	JULY 2017
PROJ. NO.:	275864.0000.0000
FILE:	Figure 1 - Site Location Map.dwg

FIGURE 1

TABLES

Table 1
New York City School Construction Authority
Proposed Pre-Kindergarten Facility K710
168 8th Street, Brooklyn, NY 11215
Summary of Observations from Trench Excavations

TRENCH NO.	DIMENSIONS (FT.)	TOTAL EXCAVATION DEPTH (FT.)	DESCRIPTION OF SOIL ENCOUNTERED	APPROXIMATE THICKNESS OF FILL MATERIAL (FT.)	EVIDENCE OF CONTAMINATION (Y/N)	STRUCTURES ENCOUNTERED	SOIL SAMPLES COLLECTED/ SAMPLE IDS
1	5 x 50	5	Dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, asphalt, and wood; red/brown fine sand.	4.5	N	N/A	N/A
2	19 x 19	8	Dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, asphalt, wood, and metal; red/brown silty sand.	4	Y	5' x 15' concrete layer overlying a thin asphalt layer, followed by a 2-inch layer of bluestone. A 6-inch diameter drain inlet was identified on the center of the structure; four-inch diameter interconnected horizontal pipes extended from east to west from the drain inlet.	TRC-TR-2(3.5-4) TRC-TR-2(4-5) TRC-TR-2(7.5-8)
3	8 x 10	8	Dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, and asphalt; red/brown silty sand.	2	N	N/A	N/A
4	18 x 20	8	Dark brown/black coarse sand, some coarse gravel and fill material consisting of red bricks, concrete, and asphalt; red/brown silty sand.	2.5	N	N/A	N/A
5	57 x 12.5	4	Gravel, asphalt and concrete; red/brown silty sand and some bricks.	4	N	Cistern and hang-dug well	N/A
6	18 x 11	6	Red/brown silty sand, and fill material consisting of bricks, concrete and metal.	6	N	Concrete encased UST	N/A
7	20 x 20	10	Fill material consisting of concrete; red/brown silty sand.	2.5*	N	N/A	N/A
8	40 x 10	8	Red/brown fine sand, and fill material consisting of bricks, concrete, and metal.	8	N	Two (2) steel USTs	N/A

Notes:

N/A – Not Applicable.

UST – Underground storage tank.

TRC did not inspect the western portion of Trench 3.

*Trench 7 was inspected to a depth of approximately 2.5 feet below ground surface (bgs). The thickness of the fill material may be greater than 2.5 feet.

Soil samples collected were analyzed for volatile organic compounds (VOCs).

Table 2
New York City School Construction Authority
Proposed Pre-Kindergarten Facility K710
168 8th Street, Brooklyn, NY 11215
Summary of Soil Sampling Analytical Results for
Volatile Organic Compounds plus TICs

VOLATILE ORGANIC COMPOUNDS (mg/kg)	Unrestricted Use SCO	CP-51 Table 1 SSCO- Residential	SAMPLE NAME		TRC-TR-2(3.5-4)	TRC-TR-2(4-5)	TRC-TW-2(7.5-8)	
			LAB SAMPLE ID		JC45628-1	JC45628-2	JC45628-3	
			DATE SAMPLE COLLECTED		6/20/2017	6/20/2017	6/20/2017	
			Result		Result		Result	
1,1,1-Trichloroethane	0.68	100	0.0023	U	0.0024	U	0.2	U
1,1,2,2-Tetrachloroethane	NC	35	0.0023	U	0.0024	U	0.2	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NC	100	0.0058	U	0.0059	U	0.5	U
1,1,2-Trichloroethane	NC	NC	0.0023	U	0.0024	U	0.2	U
1,1-Dichloroethane	0.27	NC	0.0012	U	0.0012	U	0.1	U
1,1-Dichloroethene	0.33	NC	0.0012	U	0.0012	U	0.1	U
1,2,3-Trichlorobenzene	NC	NC	0.0058	U	0.0059	U	0.5	U
1,2,4-Trichlorobenzene	NC	NC	0.0058	U	0.0059	U	0.5	U
1,2,4-Trimethylbenzene	3.6	47	0.0023	U	0.0024	U	0.2	U
1,2-Dibromo-3-chloropropane	NC	NC	0.0023	U	0.0024	U	0.2	U
1,2-Dibromoethane (EDB)	NC	NC	0.0012	U	0.0012	U	0.1	U
1,2-Dichlorobenzene	1.1	NC	0.0012	U	0.0012	U	0.1	U
1,2-Dichloroethane	0.02	NC	0.0012	U	0.0012	U	0.1	U
1,2-Dichloropropane	NC	NC	0.0023	U	0.0024	U	0.2	U
1,3,5-Trimethylbenzene	8.4	NC	0.0023	U	0.0024	U	0.2	U
1,3-Dichlorobenzene	2.4	NC	0.0012	U	0.0012	U	0.1	U
1,4-Dichlorobenzene	1.8	NC	0.0012	U	0.0012	U	0.1	U
2-Butanone (MEK)	0.12	100	0.012	U	0.012	U	1.0	U
2-Hexanone (MBK)	NC	NC	0.0058	U	0.0059	U	0.5	U
4-Methyl-2-Pentanone	NC	NC	0.0058	U	0.0059	U	0.5	U
Acetone	0.05	NC	0.0189		0.0199		1.0	U
Benzene	0.06	NC	0.00058	U	0.00059	U	0.05	U
Bromochloromethane	NC	NC	0.0058	U	0.0059	U	0.5	U
Bromodichloromethane	NC	NC	0.0023	U	0.0024	U	0.2	U
Bromoform	NC	NC	0.0058	U	0.0059	U	0.5	U
Bromomethane	NC	NC	0.0058	U	0.0059	U	0.5	U
Carbon Disulfide	NC	100	0.00085	J	0.0024	U	0.2	U
Carbon Tetrachloride	0.76	NC	0.0023	U	0.0024	U	0.2	U
Chlorobenzene	1.1	NC	0.0023	U	0.0024	U	0.2	U
Chloroethane	NC	NC	0.0058	U	0.0059	U	0.5	U
Chloroform	0.37	NC	0.0023	U	0.0024	U	0.2	U
Chloromethane	NC	NC	0.0058	U	0.0059	U	0.5	U
cis-1,2-Dichloroethene	0.25	NC	0.0477		0.00053	J	0.124	
cis-1,3-Dichloropropene	NC	NC	0.0023	U	0.0024	U	0.2	U
Cyclohexane	NC	NC	0.0023	U	0.0024	U	0.2	U
Dibromochloromethane	NC	NC	0.0023	U	0.0024	U	0.2	U
Dichlorodifluoromethane	NC	NC	0.0058	U	0.0059	U	0.5	U
Ethylbenzene	1	NC	0.0012	U	0.0012	U	0.1	U
Isopropylbenzene	NC	100	0.0023	U	0.0024	U	0.2	U
m/p-Xylene	0.26 ⁽¹⁾	100	0.0012	U	0.0012	U	0.1	U
Methyl acetate	NC	NC	0.0058	U	0.0059	U	0.5	U
Methyl tert-butyl ether	0.93	NC	0.0012	U	0.0012	U	0.1	U
Methylcyclohexane	NC	NC	0.0023	U	0.0024	U	0.2	U
Methylene chloride	0.05	NC	0.0058	U	0.0059	U	0.5	U
Naphthalene	12	NC	0.0058	U	0.0059	U	0.5	U
n-Butylbenzene	NC	NC	0.0023	U	0.0024	U	0.2	U
n-Propylbenzene	3.9	NC	0.0023	U	0.0024	U	0.2	U
o-Xylene	0.26 ⁽¹⁾	NC	0.0012	U	0.0012	U	0.1	U
p-Isopropyltoluene (p-Cymene)	NC	NC	0.0023	U	0.0024	U	0.2	U
sec-Butylbenzene	11	NC	0.0023	U	0.0024	U	0.2	U
Styrene	NC	NC	0.0023	U	0.0024	U	0.2	U
Tert-Butylbenzene	5.9	NC	0.0023	U	0.0024	U	0.2	U
Tetrachloroethene	1.3	NC	0.0412		0.0019	J	1.01	
Toluene	0.7	NC	0.0012	U	0.0012	U	0.1	U
trans-1,2-Dichloroethene	0.19	NC	0.00040	J	0.0012	U	0.1	U
trans-1,3-Dichloropropene	NC	NC	0.0023	U	0.0024	U	0.2	U
Trichloroethene	0.47	NC	8.44		0.0204		0.161	
Trichlorofluoromethane	NC	NC	0.0058	U	0.0059	U	0.5	U
Vinyl chloride	0.02	NC	0.0023	U	0.0024	U	0.2	U
Xylenes (Total)	0.26 ⁽¹⁾	NC	0.0012	U	0.0012	U	0.1	U
Total TICs, Volatile	NC	NC	0.0125	J	0.0059	J	163.5	J

Notes:

mg/kg - milligrams per kilogram

U - Analyte not detected in sample; reporting limit is shown.

NC - No criterion

ND - Not detected

J - Estimated value

SCO - Soil Cleanup Objective

SSCO - Supplemental Soil Cleanup Objective

TICs - Tentatively Identified Compounds

Shaded and **bolded** results exceed Unrestricted Use

SCO and/or SSCO.

⁽¹⁾ - There is no SCO for m/p xylene or o-xylene. The SCO for total xylenes is 0.26 mg/kg.

**ATTACHMENT A
PHOTOGRAPH LOG**

**Attachment A
Archeological Assessment Inspection Services Photograph Log**



Photo 1: View of soil in Trench 1 taken facing west-southwest. Photo taken June 14, 2017.




Photo 2: View of soil in Trench 1 taken facing south. Photo taken June 14, 2017.



Photo 3: View of soil in Trench 4 taken facing northeast. Photo taken June 16, 2017.



Photo 4: View of soil in Trench 4 taken facing northeast. Excavation of Trench 3 in progress. Photo taken June 16, 2017.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	1 of 7	NYSCA	168 8 th Street, Brooklyn, NY	

**Attachment A
Archeological Assessment Inspection Services Photograph Log**



Photo 5: Backfilled portion of Trench 4, taken facing northeast. Photo taken June 16, 2017.



Photo 6: View of feature identified in Trench 2, facing north. Photo taken June 20, 2017.



Photo 7: Additional view of feature identified in Trench 2, facing northwest. Photo taken June 20, 2017.

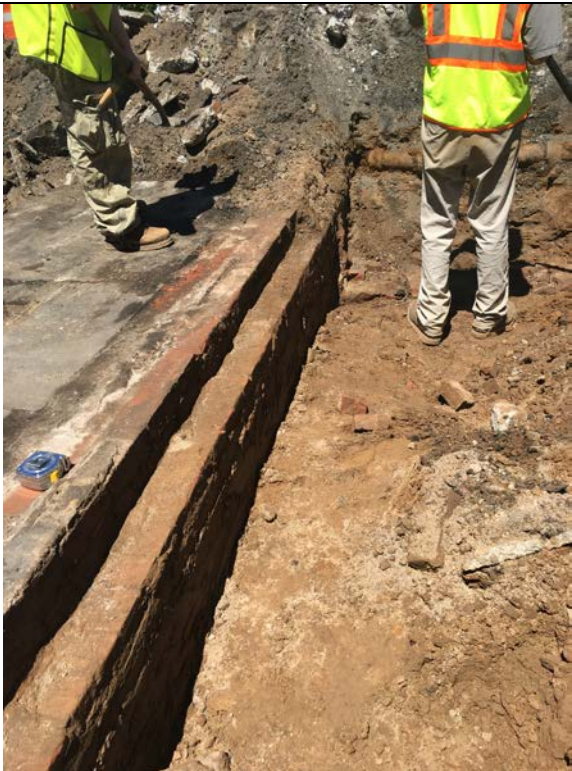



Photo 8: Red brick wall abutting northern wall of feature identified in Trench 2. Photo taken June 20, 2017.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	2 of 7	NYCSCA	168 8 th Street, Brooklyn, NY	

**Attachment A
Archeological Assessment Inspection Services Photograph Log**



Photo 9: Additional view of red brick wall abutting northern wall of feature identified in Trench 2. Photo taken June 20, 2017.




Photo 10: Drain feature identified on bluestone of feature identified in Trench 2. Photo taken June 20, 2017.



Photo 11: Brown organic soil identified beneath bluestone. Drain noted in center of feature. Photo taken June 20, 2017.



Photo 12: 6-inch diameter vertical pipe associated with the drain identified on the feature in Trench 2. Photo taken June 20, 2017.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	3 of 7	NYCSCA	168 8 th Street, Brooklyn, NY	

**Attachment A
Archeological Assessment Inspection Services Photograph Log**



Photo 13: Red/brown fine sand in Trench 2. Photo taken June 20, 2017.

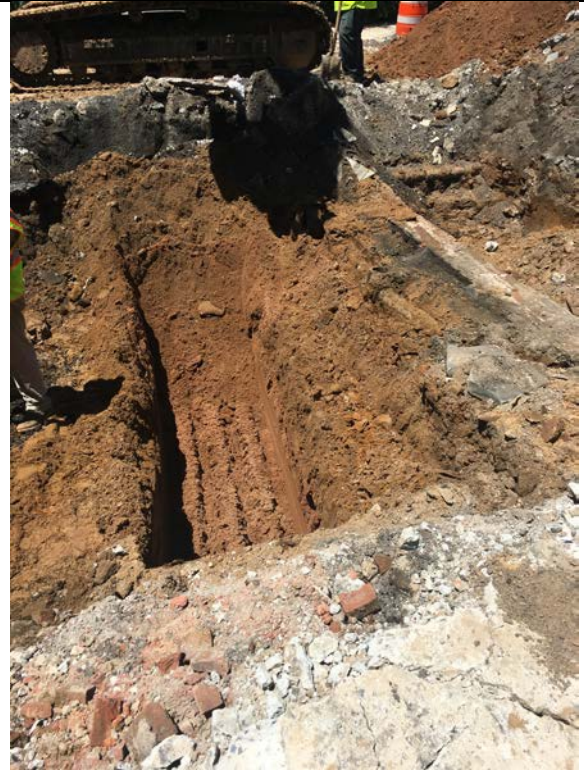



Photo 14: Native soil identified during the excavation of the western portion of Trench 2 to 8 feet bgs. Photo taken June 20, 2017.



Photo 15: Discrete soil contamination consisting of gray fine to medium sand, trace silt, damp with a petroleum odor. Photo taken June 20, 2017.



Photo 16: Stockpiled contaminated soil along western portion of Site. Photo taken June 20, 2017.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	4 of 7	NYCSCA	168 8 th Street, Brooklyn, NY	

Attachment A Archeological Assessment Inspection Services Photograph Log



Photo 17: Backfilled portion of Trench 5, taken facing southwest. Photo taken June 22, 2017.

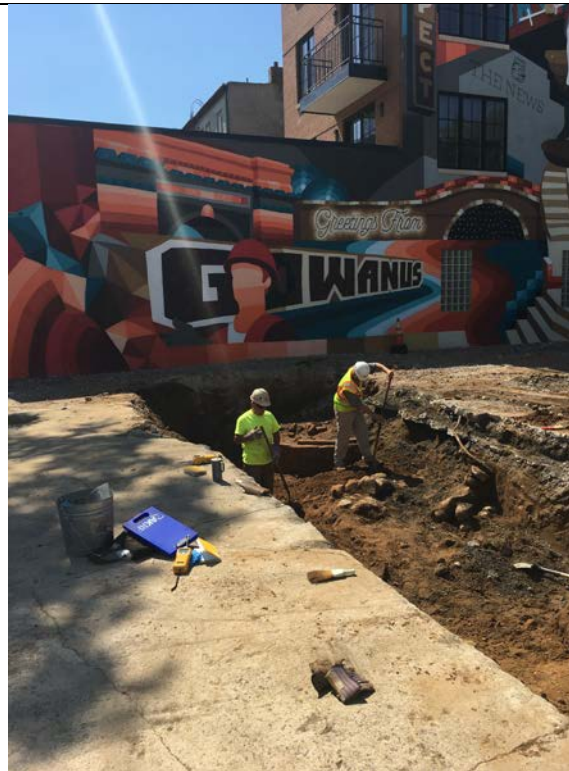



Photo 18: View of eastern portion of Trench 5, taken facing east. Photo taken June 22, 2017.



Photo 19: Southern wall of Trench 5. Photo taken June 22, 2017.



Photo 20: Underground storage tank (UST) identified in Trench 6. Photo taken June 22, 2017.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	5 of 7	NYCSCA	168 8 th Street, Brooklyn, NY	

**Attachment A
Archeological Assessment Inspection Services Photograph Log**



Photo 21: UST identified in Trench 6. Photo taken June 22, 2017.



Photo 22: Demarcation layer (i.e. polyethylene sheeting) placed on top of the UST. Photo taken June 22, 2017.

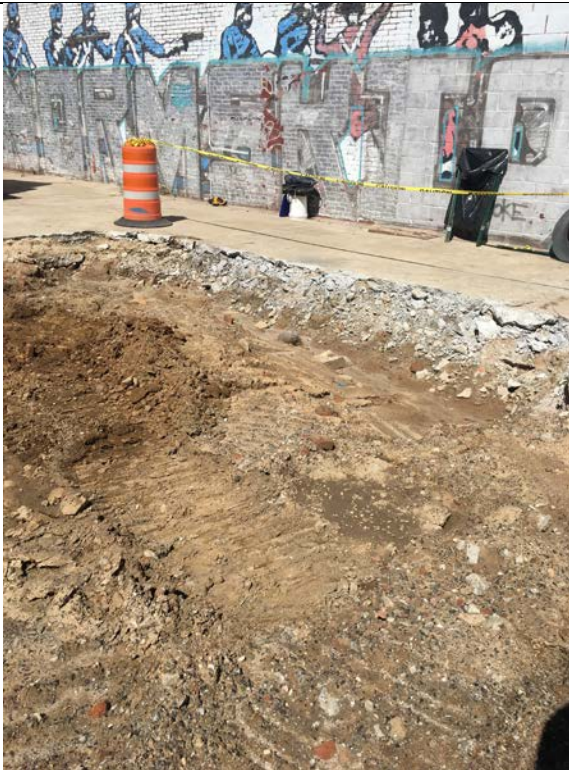



Photo 23: View of Trench 7 facing southwest. Photo taken June 26, 2017.



Photo 24: One of two steel underground storage tanks (USTs) identified in Trench 8. Photo taken June 26, 2017.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	6 of 7	NYCSCA	168 8 th Street, Brooklyn, NY	

**Attachment A
Archeological Assessment Inspection Services Photograph Log**

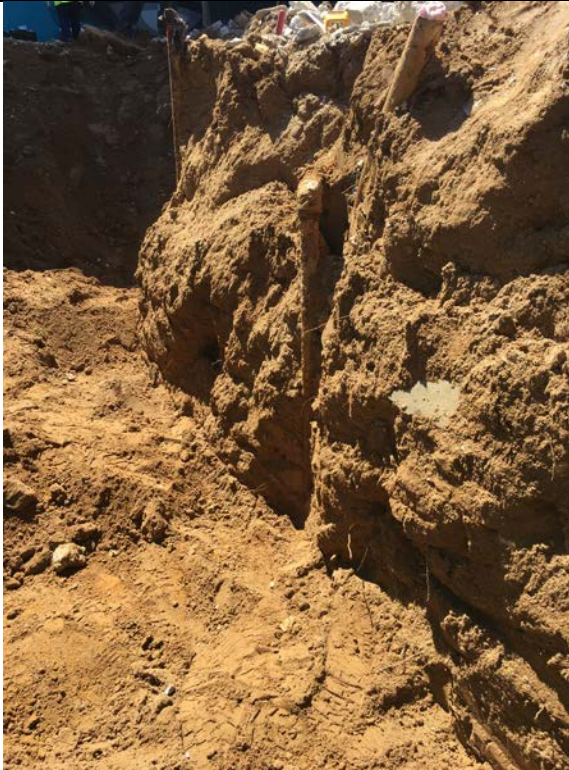


Photo 25: Location of two steel USTs and associated piping identified in Trench 8. Photo taken June 26, 2017.

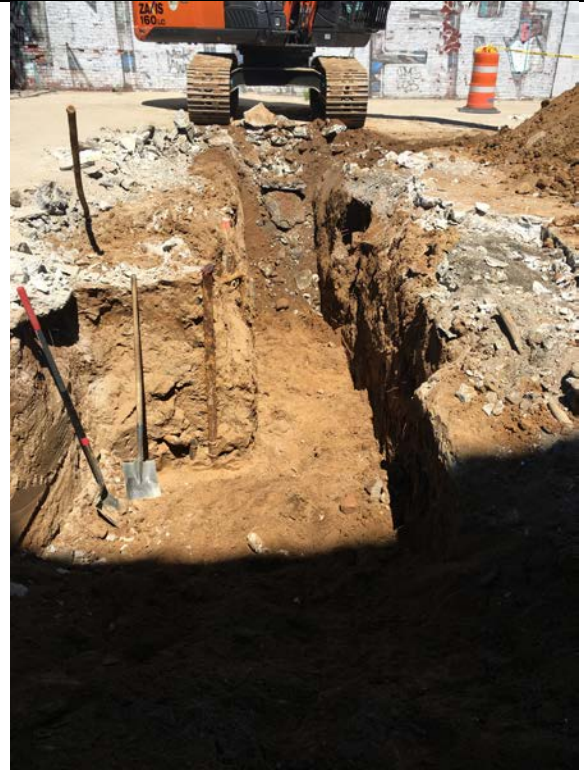



Photo 26: Location of two steel USTs identified in Trench 8. Photo taken June 26, 2017.



Photo 27: Demarcation layer (i.e. polyethylene sheeting) placed on top of the USTs. Photo taken June 26, 2017.



Photo 28: Additional view of demarcation layer (i.e. polyethylene sheeting) placed on top of the USTs. Photo taken June 26, 2017.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
275864	Emily Ebert	7 of 7	NYCSCA	168 8 th Street, Brooklyn, NY	

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION,
VERIFICATION, TESTING AND CERTIFICATION COMPANY.



e-Hardcopy 2.0
Automated Report

Technical Report for

TRC

K710, 168 8th Street, Brooklyn, NY

275864 Po# 110129

SGS Accutest Job Number: JC45628

Sampling Date: 06/20/17

Report to:

**TRC
1430 Broadway 10th Floor
New York, NY 10018
lohara@trcsolutions.com; EEbert@trcsolutions.com
ATTN: Lindsay O'Hara**

Total number of pages in report: 289



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.

Nancy F. Cole

**Nancy Cole
Laboratory Director**

Client Service contact: Matt Cordova 732-329-0200

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

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



ACCUTEST

June 28, 2017

Ms. Lindsay O'Hara
TRC
1430 Broadway
10th Floor
New York, NY 10018

Re: SGS Accutest –Dayton, Jobs # JC45628– Reissues

Dear Ms. O'Hara,

The final reports for SGS Accutest job number JC45628 has edited to reflect corrections to the data package. These edits have been incorporated into the revised report attached.

Specifically, this report has been upgraded to NYASPB deliverable per Ms. Emily Ebbert's request. The attached revised report incorporates these revisions.

SGS Accutest apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me at (732) 329-0200 if I can be of further assistance in this matter.

Sincerely

Report Department

SGS Accutest

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

TRC

Job No: JC45628

K710, 168 8th Street, Brooklyn, NY
 Project No: 275864 Po# 110129

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC45628-1	06/20/17	11:06 EE	06/21/17	SO	Soil	TRC-TR-2(3.5-4)
JC45628-2	06/20/17	11:14 EE	06/21/17	SO	Soil	TRC-TR-2(4-5)
JC45628-3	06/20/17	12:55 EE	06/21/17	SO	Soil	TRC-TR-2(7.5-8)

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

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: TRC

Job No JC45628

Site: K710, 168 8th Street, Brooklyn, NY

Report Date 6/28/2017 3:29:17 PM

On 06/21/2017, 3 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.9 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC45628 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

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

Volatiles by GCMS By Method SW846 8260C

Matrix: SO

Batch ID: VC8081

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC45363-1MS, JC45363-2DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Acetone, m,p-Xylene, Xylene (total) are outside control limits for sample JC45363-2DUP. High RPD due to possible sample nonhomogeneity.

Matrix: SO

Batch ID: VD10119

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC45391-8MS, JC45391-8MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 2-Hexanone, Acetone are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Bromodichloromethane are outside control limits. Outside control limits due to matrix interference.
- JC45628-3: Dilution required due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Methylcyclohexane are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM2540 G-97

Matrix: SO

Batch ID: GN65932

- The data for SM2540 G-97 meets quality control requirements.

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

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

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

Wednesday, June 28, 2017

Page 1 of 1

Summary of Hits

Job Number: JC45628
Account: TRC
Project: K710, 168 8th Street, Brooklyn, NY
Collected: 06/20/17



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC45628-1		TRC-TR-2(3.5-4)				
Acetone		18.9	12	5.8	ug/kg	SW846 8260C
Carbon disulfide		0.85 J	2.3	0.20	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		47.7	1.2	0.50	ug/kg	SW846 8260C
trans-1,2-Dichloroethene		0.40 J	1.2	0.18	ug/kg	SW846 8260C
Tetrachloroethene		41.2	2.3	0.32	ug/kg	SW846 8260C
Trichloroethene		8440	130	24	ug/kg	SW846 8260C
Total TIC, Volatile		12.5 J			ug/kg	
JC45628-2		TRC-TR-2(4-5)				
Acetone		19.9	12	5.9	ug/kg	SW846 8260C
cis-1,2-Dichloroethene		0.53 J	1.2	0.52	ug/kg	SW846 8260C
Tetrachloroethene		1.9 J	2.4	0.33	ug/kg	SW846 8260C
Trichloroethene		20.4	1.2	0.22	ug/kg	SW846 8260C
Total TIC, Volatile		5.9 J			ug/kg	
JC45628-3		TRC-TR-2(7.5-8)				
cis-1,2-Dichloroethene ^a		124	100	44	ug/kg	SW846 8260C
Tetrachloroethene ^a		1010	200	28	ug/kg	SW846 8260C
Trichloroethene ^a		161	100	19	ug/kg	SW846 8260C
Total TIC, Volatile		163500 J			ug/kg	

(a) Dilution required due to matrix interference.

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Page 1 of 3

Client Sample ID:	TRC-TR-2(3.5-4)	Date Sampled:	06/20/17
Lab Sample ID:	JC45628-1	Date Received:	06/21/17
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8260C		
Project:	K710, 168 8th Street, Brooklyn, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C218899.D	1	06/22/17 15:07	SY	n/a	n/a	VC8081
Run #2	D250705.D	1	06/22/17 16:52	XC	n/a	n/a	VD10119

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.2 g		
Run #2	5.2 g	10.0 ml	100 ul

VOA TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	18.9	12	5.8	ug/kg	
71-43-2	Benzene	ND	0.58	0.14	ug/kg	
74-97-5	Bromochloromethane	ND	5.8	0.37	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	0.18	ug/kg	
75-25-2	Bromoform	ND	5.8	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.56	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.0	ug/kg	
104-51-8	n-Butylbenzene	ND	2.3	0.18	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.3	0.18	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.3	0.18	ug/kg	
75-15-0	Carbon disulfide	0.85	2.3	0.20	ug/kg	J
56-23-5	Carbon tetrachloride	ND	2.3	0.19	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	0.19	ug/kg	
75-00-3	Chloroethane	ND	5.8	0.49	ug/kg	
67-66-3	Chloroform	ND	2.3	0.27	ug/kg	
74-87-3	Chloromethane	ND	5.8	0.24	ug/kg	
110-82-7	Cyclohexane	ND	2.3	0.63	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.3	0.56	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	0.17	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.2	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.2	0.16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.2	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.8	0.63	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.2	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.2	0.18	ug/kg	
156-59-2	cis-1,2-Dichloroethene	47.7	1.2	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethene	0.40	1.2	0.18	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	2.3	0.36	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.25	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRC-TR-2(3.5-4)	Date Sampled:	06/20/17
Lab Sample ID:	JC45628-1	Date Received:	06/21/17
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8260C		
Project:	K710, 168 8th Street, Brooklyn, NY		

VOA TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.2	0.17	ug/kg	
76-13-1	Freon 113	ND	5.8	0.56	ug/kg	
591-78-6	2-Hexanone	ND	5.8	1.6	ug/kg	
98-82-8	Isopropylbenzene	ND	2.3	0.18	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.3	0.28	ug/kg	
79-20-9	Methyl Acetate	ND	5.8	2.3	ug/kg	
108-87-2	Methylcyclohexane	ND	2.3	0.58	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	0.98	ug/kg	
75-09-2	Methylene chloride	ND	5.8	1.2	ug/kg	
91-20-3	Naphthalene	ND	5.8	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	2.3	0.23	ug/kg	
100-42-5	Styrene	ND	2.3	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.28	ug/kg	
127-18-4	Tetrachloroethene	41.2	2.3	0.32	ug/kg	
108-88-3	Toluene	ND	1.2	0.14	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.8	0.58	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	0.58	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.19	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.37	ug/kg	
79-01-6	Trichloroethene	8440 ^a	130	24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	0.73	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	0.20	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	0.19	ug/kg	
75-01-4	Vinyl chloride	ND	2.3	0.23	ug/kg	
	m,p-Xylene	ND	1.2	0.25	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	102%	72-129%
17060-07-0	1,2-Dichloroethane-D4	107%	101%	73-132%
2037-26-5	Toluene-D8	106%	94%	80-120%
460-00-4	4-Bromofluorobenzene	115%	110%	77-125%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	alkane	8.89	6.7	ug/kg	J
	unknown	19.99	5.8	ug/kg	J

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRC-TR-2(3.5-4) Lab Sample ID: JC45628-1 Matrix: SO - Soil Method: SW846 8260C Project: K710, 168 8th Street, Brooklyn, NY	Date Sampled: 06/20/17 Date Received: 06/21/17 Percent Solids: 83.4
---	--

VOA TCL Special List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		12.5	ug/kg	J

(a) Result is from Run# 2

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

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

4.1
4

SGS Accutest

Report of Analysis

Page 1 of 2

Client Sample ID: TRC-TR-2(4-5)		Date Sampled: 06/20/17
Lab Sample ID: JC45628-2		Date Received: 06/21/17
Matrix: SO - Soil		Percent Solids: 82.8
Method: SW846 8260C		
Project: K710, 168 8th Street, Brooklyn, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	C218900.D	1	06/22/17 15:36	SY	n/a	n/a	VC8081

Run #1	Initial Weight
Run #2	5.1 g

VOA TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.9	12	5.9	ug/kg	
71-43-2	Benzene	ND	0.59	0.14	ug/kg	
74-97-5	Bromochloromethane	ND	5.9	0.38	ug/kg	
75-27-4	Bromodichloromethane	ND	2.4	0.18	ug/kg	
75-25-2	Bromoform	ND	5.9	0.31	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.57	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.1	ug/kg	
104-51-8	n-Butylbenzene	ND	2.4	0.18	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.4	0.18	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.4	0.19	ug/kg	
75-15-0	Carbon disulfide	ND	2.4	0.20	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.4	0.20	ug/kg	
108-90-7	Chlorobenzene	ND	2.4	0.19	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.51	ug/kg	
67-66-3	Chloroform	ND	2.4	0.28	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.25	ug/kg	
110-82-7	Cyclohexane	ND	2.4	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.4	0.57	ug/kg	
124-48-1	Dibromochloromethane	ND	2.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.2	0.20	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.2	0.16	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.2	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	0.65	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.2	0.22	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.2	0.18	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.53	1.2	0.52	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	1.2	0.19	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.4	0.37	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	0.26	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRC-TR-2(4-5)	Date Sampled:	06/20/17
Lab Sample ID:	JC45628-2	Date Received:	06/21/17
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	SW846 8260C		
Project:	K710, 168 8th Street, Brooklyn, NY		

VOA TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
76-13-1	Freon 113	ND	5.9	0.57	ug/kg	
591-78-6	2-Hexanone	ND	5.9	1.6	ug/kg	
98-82-8	Isopropylbenzene	ND	2.4	0.18	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.4	0.29	ug/kg	
79-20-9	Methyl Acetate	ND	5.9	2.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.4	0.60	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	1.0	ug/kg	
75-09-2	Methylene chloride	ND	5.9	1.2	ug/kg	
91-20-3	Naphthalene	ND	5.9	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	2.4	0.23	ug/kg	
100-42-5	Styrene	ND	2.4	0.17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.28	ug/kg	
127-18-4	Tetrachloroethene	1.9	2.4	0.33	ug/kg	J
108-88-3	Toluene	ND	1.2	0.15	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.9	0.59	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	0.59	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.20	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.38	ug/kg	
79-01-6	Trichloroethene	20.4	1.2	0.22	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.9	0.74	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.4	0.21	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.4	0.20	ug/kg	
75-01-4	Vinyl chloride	ND	2.4	0.24	ug/kg	
	m,p-Xylene	ND	1.2	0.26	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.24	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		72-129%
17060-07-0	1,2-Dichloroethane-D4	98%		73-132%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
110-54-3	alkane-Hexane	8.90	5.9	ug/kg	JN
	Total TIC, Volatile		5.9	ug/kg	J

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Page 1 of 3

Client Sample ID:	TRC-TR-2(7.5-8)	Date Sampled:	06/20/17
Lab Sample ID:	JC45628-3	Date Received:	06/21/17
Matrix:	SO - Soil	Percent Solids:	86.7
Method:	SW846 8260C		
Project:	K710, 168 8th Street, Brooklyn, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	D250709.D	1	06/22/17 18:44	XC	n/a	n/a	VD10119
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.2 g	10.0 ml	100 ul
Run #2			

VOA TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1000	500	ug/kg	
71-43-2	Benzene	ND	50	12	ug/kg	
74-97-5	Bromochloromethane	ND	500	32	ug/kg	
75-27-4	Bromodichloromethane	ND	200	15	ug/kg	
75-25-2	Bromoform	ND	500	27	ug/kg	
74-83-9	Bromomethane	ND	500	49	ug/kg	
78-93-3	2-Butanone (MEK)	ND	1000	180	ug/kg	
104-51-8	n-Butylbenzene	ND	200	15	ug/kg	
135-98-8	sec-Butylbenzene	ND	200	15	ug/kg	
98-06-6	tert-Butylbenzene	ND	200	16	ug/kg	
75-15-0	Carbon disulfide	ND	200	17	ug/kg	
56-23-5	Carbon tetrachloride	ND	200	17	ug/kg	
108-90-7	Chlorobenzene	ND	200	16	ug/kg	
75-00-3	Chloroethane	ND	500	43	ug/kg	
67-66-3	Chloroform	ND	200	24	ug/kg	
74-87-3	Chloromethane	ND	500	21	ug/kg	
110-82-7	Cyclohexane	ND	200	55	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	200	49	ug/kg	
124-48-1	Dibromochloromethane	ND	200	15	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	17	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	14	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	15	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	500	55	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	19	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	15	ug/kg	
156-59-2	cis-1,2-Dichloroethene	124	100	44	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	16	ug/kg	
78-87-5	1,2-Dichloropropane	ND	200	31	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	200	20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	200	22	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRC-TR-2(7.5-8)	Date Sampled:	06/20/17
Lab Sample ID:	JC45628-3	Date Received:	06/21/17
Matrix:	SO - Soil	Percent Solids:	86.7
Method:	SW846 8260C		
Project:	K710, 168 8th Street, Brooklyn, NY		

VOA TCL Special List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	16.03	12000	ug/kg	J
	alkane	16.38	24000	ug/kg	J
	unknown	16.50	4900	ug/kg	J
	alkane	16.65	34000	ug/kg	J
	unknown	16.87	10000	ug/kg	J
	alkene	17.08	10000	ug/kg	J
	Naphthalene, decahydro-isomer	17.13	7500	ug/kg	J
	alkene	17.29	8000	ug/kg	J
	unknown	17.55	5000	ug/kg	J
281-23-2	Adamantane	17.72	4400	ug/kg	JN
1000152-47-3	trans-Decalin, 2-methyl-	17.81	8600	ug/kg	JN
	unknown	17.89	13000	ug/kg	J
	Adamantane, -dimethyl-isomer	18.02	5800	ug/kg	J
	unknown	18.07	11000	ug/kg	J
	Total TIC, Volatile		163500	ug/kg	J

(a) Dilution required due to matrix interference.

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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



ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

Form containing Client/Reporting Information, Project Information, Requested Analysis, Collection data table, and Sample Custody sections.

5.1 5

D.I. slurry voc vials frozen storage
Date: 6/21/17 Time: 2:00 Initials: JK

NYSCA Project
Please include eber@trcsolutions.co on lab data.

SGS Accutest Sample Receipt Summary

Job Number: JC45628

Client: _____

Project: _____

Date / Time Received: 6/21/2017 5:06:00 PM

Delivery Method: _____

Airbill #'s: _____

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

Cooler Temps (Corrected) °C: Cooler 1: (3.9);

<u>Cooler Security</u>	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

SM089-02
Rev. Date 12/1/16

JC45628: Chain of Custody

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5.1
5

Job Change Order: JC45628

Requested Date: 6/28/2017 **Received Date:** 6/21/2017
Account Name: TRC **Due Date:** 6/23/2017
Project Description: K710, 168 8th Street, Brooklyn, NY **Deliverable:** COMMB
CSR: mattc **TAT (Days):** 14

=====
Sample #: JC45628-all **Change:**
Make NYASPB deliverable and reissue

Dept:
TAT:

=====

Above Changes Per: Emily Ebbert

Date/Time: 6/28/2017 12:59:53 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Internal Sample Tracking Chronicle

TRC

Job No: JC45628

7110, 168 8th Street, Brooklyn, NY
 Project No: 275864 Po# 110129

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC45628-1 Collected: 20-JUN-17 11:06 By: EE Received: 21-JUN-17 By: AS TRC-TR-2(3.5-4)						
JC45628-1	SM2540 G-97	22-JUN-17 11:00	LV			SOL104
JC45628-1	SW846 8260C	22-JUN-17 15:07	SY			V8260CP51GTCL20+
JC45628-1	SW846 8260C	22-JUN-17 16:52	XC			V8260CP51GTCL20+
JC45628-2 Collected: 20-JUN-17 11:14 By: EE Received: 21-JUN-17 By: AS TRC-TR-2(4-5)						
JC45628-2	SM2540 G-97	22-JUN-17 11:00	LV			SOL104
JC45628-2	SW846 8260C	22-JUN-17 15:36	SY			V8260CP51GTCL20+
JC45628-3 Collected: 20-JUN-17 12:55 By: EE Received: 21-JUN-17 By: AS TRC-TR-2(7.5-8)						
JC45628-3	SM2540 G-97	22-JUN-17 11:00	LV			SOL104
JC45628-3	SW846 8260C	22-JUN-17 18:44	XC			V8260CP51GTCL20+

5.2
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SGS Accutest Internal Chain of Custody

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY
Received: 06/21/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC45628-1.1	Secured Storage	Dwayne Johnson	06/22/17 08:43	Retrieve from Storage
JC45628-1.1	Dwayne Johnson	Secured Staging Area	06/22/17 08:43	Return to Storage
JC45628-1.1	Secured Staging Area	Luis Villanueva	06/22/17 09:23	Retrieve from Storage
JC45628-1.1	Luis Villanueva	Secured Storage	06/22/17 10:14	Return to Storage
JC45628-1.2	Secured Storage	Ximena Collado	06/22/17 15:57	Retrieve from Storage
JC45628-1.2	Ximena Collado	Secured Storage	06/23/17 07:53	Return to Storage
JC45628-2.1	Secured Storage	Dwayne Johnson	06/22/17 08:43	Retrieve from Storage
JC45628-2.1	Dwayne Johnson	Secured Staging Area	06/22/17 08:43	Return to Storage
JC45628-2.1	Secured Staging Area	Luis Villanueva	06/22/17 09:23	Retrieve from Storage
JC45628-2.1	Luis Villanueva	Secured Storage	06/22/17 10:14	Return to Storage
JC45628-3.1	Secured Storage	Dwayne Johnson	06/22/17 08:43	Retrieve from Storage
JC45628-3.1	Dwayne Johnson	Secured Staging Area	06/22/17 08:43	Return to Storage
JC45628-3.1	Secured Staging Area	Luis Villanueva	06/22/17 09:23	Retrieve from Storage
JC45628-3.1	Luis Villanueva	Secured Storage	06/22/17 10:14	Return to Storage
JC45628-3.2	Secured Storage	Ximena Collado	06/22/17 15:57	Retrieve from Storage
JC45628-3.2	Ximena Collado	Secured Storage	06/23/17 07:53	Return to Storage

5.3
5

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: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC8081-MB	C218887.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/kg	
71-43-2	Benzene	ND	0.50	0.12	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.32	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.15	ug/kg	
75-25-2	Bromoform	ND	5.0	0.27	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.49	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	1.8	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.15	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.15	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.16	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.17	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.43	ug/kg	
67-66-3	Chloroform	ND	2.0	0.24	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.21	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.55	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.48	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.15	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.14	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.15	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.55	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.17	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.15	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.16	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.31	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.15	ug/kg	
76-13-1	Freon 113	ND	5.0	0.48	ug/kg	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	0.15	ug/kg	

Method Blank Summary

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC8081-MB	C218887.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	2.0	0.24	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	2.0	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.51	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.27	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.85	ug/kg	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/kg	
100-42-5	Styrene	ND	2.0	0.15	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.24	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.28	ug/kg	
108-88-3	Toluene	ND	1.0	0.13	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.17	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.32	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.63	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.17	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.17	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.20	ug/kg	
	m,p-Xylene	ND	1.0	0.22	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	82%	72-129%
17060-07-0	1,2-Dichloroethane-D4	98%	73-132%
2037-26-5	Toluene-D8	107%	80-120%
460-00-4	4-Bromofluorobenzene	103%	77-125%

Method Blank Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC8081-MB	C218887.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method:

JC45628-1, JC45628-2

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

6.1.1
6

Method Blank Summary

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10119-MB	D250690.D	1	06/22/17	XC	n/a	n/a	VD10119

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	250	ug/kg	
71-43-2	Benzene	ND	25	6.0	ug/kg	
74-97-5	Bromochloromethane	ND	250	16	ug/kg	
75-27-4	Bromodichloromethane	ND	100	7.6	ug/kg	
75-25-2	Bromoform	ND	250	13	ug/kg	
74-83-9	Bromomethane	ND	250	24	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	88	ug/kg	
104-51-8	n-Butylbenzene	ND	100	7.6	ug/kg	
135-98-8	sec-Butylbenzene	ND	100	7.7	ug/kg	
98-06-6	tert-Butylbenzene	ND	100	7.9	ug/kg	
75-15-0	Carbon disulfide	ND	100	8.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	8.3	ug/kg	
108-90-7	Chlorobenzene	ND	100	8.1	ug/kg	
75-00-3	Chloroethane	ND	250	21	ug/kg	
67-66-3	Chloroform	ND	100	12	ug/kg	
74-87-3	Chloromethane	ND	250	11	ug/kg	
110-82-7	Cyclohexane	ND	100	27	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	24	ug/kg	
124-48-1	Dibromochloromethane	ND	100	7.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	50	12	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	50	8.6	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	50	6.9	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	50	7.7	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	50	9.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	50	8.6	ug/kg	
75-35-4	1,1-Dichloroethene	ND	50	7.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	50	22	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	50	7.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	9.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	11	ug/kg	
100-41-4	Ethylbenzene	ND	50	7.5	ug/kg	
76-13-1	Freon 113	ND	250	24	ug/kg	
591-78-6	2-Hexanone	ND	250	70	ug/kg	
98-82-8	Isopropylbenzene	ND	100	7.7	ug/kg	

Method Blank Summary

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10119-MB	D250690.D	1	06/22/17	XC	n/a	n/a	VD10119

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-3

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	100	12	ug/kg	
79-20-9	Methyl Acetate	ND	250	100	ug/kg	
108-87-2	Methylcyclohexane	ND	100	25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	13	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	42	ug/kg	
75-09-2	Methylene chloride	ND	250	50	ug/kg	
91-20-3	Naphthalene	ND	250	50	ug/kg	
103-65-1	n-Propylbenzene	ND	100	9.9	ug/kg	
100-42-5	Styrene	ND	100	7.3	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	12	ug/kg	
127-18-4	Tetrachloroethene	ND	100	14	ug/kg	
108-88-3	Toluene	ND	50	6.3	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	25	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	25	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	8.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	16	ug/kg	
79-01-6	Trichloroethene	ND	50	9.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	31	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	100	8.7	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	100	8.3	ug/kg	
75-01-4	Vinyl chloride	ND	100	10	ug/kg	
	m,p-Xylene	ND	50	11	ug/kg	
95-47-6	o-Xylene	ND	50	10	ug/kg	
1330-20-7	Xylene (total)	ND	50	10	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	96%	72-129%
17060-07-0	1,2-Dichloroethane-D4	94%	73-132%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	101%	77-125%

Method Blank Summary

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10119-MB	D250690.D	1	06/22/17	XC	n/a	n/a	VD10119

The QC reported here applies to the following samples:

Method:

JC45628-1, JC45628-3

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.84	3400	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

Blank Spike Summary

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10119-BS	D250691.D	1	06/22/17	XC	n/a	n/a	VD10119

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	10000	10100	101	45-144
71-43-2	Benzene	2500	2500	100	76-117
74-97-5	Bromochloromethane	2500	2550	102	82-121
75-27-4	Bromodichloromethane	2500	2570	103	76-121
75-25-2	Bromoform	2500	2880	115	78-129
74-83-9	Bromomethane	2500	2760	110	61-137
78-93-3	2-Butanone (MEK)	10000	10000	100	70-136
104-51-8	n-Butylbenzene	2500	2660	106	72-127
135-98-8	sec-Butylbenzene	2500	2680	107	73-128
98-06-6	tert-Butylbenzene	2500	2640	106	75-127
75-15-0	Carbon disulfide	2500	2690	108	68-135
56-23-5	Carbon tetrachloride	2500	2770	111	74-139
108-90-7	Chlorobenzene	2500	2560	102	80-118
75-00-3	Chloroethane	2500	2610	104	63-133
67-66-3	Chloroform	2500	2240	90	79-125
74-87-3	Chloromethane	2500	2660	106	56-138
110-82-7	Cyclohexane	2500	2590	104	64-139
96-12-8	1,2-Dibromo-3-chloropropane	2500	2390	96	76-125
124-48-1	Dibromochloromethane	2500	2730	109	78-125
106-93-4	1,2-Dibromoethane	2500	2570	103	77-120
95-50-1	1,2-Dichlorobenzene	2500	2590	104	77-119
541-73-1	1,3-Dichlorobenzene	2500	2650	106	75-117
106-46-7	1,4-Dichlorobenzene	2500	2470	99	76-116
75-71-8	Dichlorodifluoromethane	2500	2760	110	47-152
75-34-3	1,1-Dichloroethane	2500	2510	100	75-124
107-06-2	1,2-Dichloroethane	2500	2510	100	72-132
75-35-4	1,1-Dichloroethene	2500	2640	106	71-134
156-59-2	cis-1,2-Dichloroethene	2500	2290	92	73-116
156-60-5	trans-1,2-Dichloroethene	2500	2400	96	73-124
78-87-5	1,2-Dichloropropane	2500	2460	98	78-118
10061-01-5	cis-1,3-Dichloropropene	2500	2610	104	79-120
10061-02-6	trans-1,3-Dichloropropene	2500	2620	105	77-121
100-41-4	Ethylbenzene	2500	2570	103	77-118
76-13-1	Freon 113	2500	2890	116	70-162
591-78-6	2-Hexanone	10000	9730	97	66-133
98-82-8	Isopropylbenzene	2500	2790	112	72-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10119-BS	D250691.D	1	06/22/17	XC	n/a	n/a	VD10119

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
99-87-6	p-Isopropyltoluene	2500	2740	110	74-129
79-20-9	Methyl Acetate	2500	2330	93	62-132
108-87-2	Methylcyclohexane	2500	2830	113	64-138
1634-04-4	Methyl Tert Butyl Ether	2500	2510	100	73-119
108-10-1	4-Methyl-2-pentanone(MIBK)	10000	9790	98	72-133
75-09-2	Methylene chloride	2500	2440	98	72-120
91-20-3	Naphthalene	2500	2580	103	70-130
103-65-1	n-Propylbenzene	2500	2550	102	75-126
100-42-5	Styrene	2500	2760	110	79-118
79-34-5	1,1,2,2-Tetrachloroethane	2500	2380	95	72-120
127-18-4	Tetrachloroethene	2500	2740	110	70-132
108-88-3	Toluene	2500	2600	104	76-118
87-61-6	1,2,3-Trichlorobenzene	2500	2690	108	71-132
120-82-1	1,2,4-Trichlorobenzene	2500	2760	110	76-132
71-55-6	1,1,1-Trichloroethane	2500	2700	108	78-138
79-00-5	1,1,2-Trichloroethane	2500	2530	101	79-117
79-01-6	Trichloroethene	2500	2630	105	79-124
75-69-4	Trichlorofluoromethane	2500	2580	103	64-142
95-63-6	1,2,4-Trimethylbenzene	2500	2660	106	75-123
108-67-8	1,3,5-Trimethylbenzene	2500	2660	106	73-125
75-01-4	Vinyl chloride	2500	2550	102	55-139
	m,p-Xylene	5000	5280	106	79-119
95-47-6	o-Xylene	2500	2690	108	77-122
1330-20-7	Xylene (total)	7500	7970	106	79-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	72-129%
17060-07-0	1,2-Dichloroethane-D4	95%	73-132%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	96%	77-125%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC8081-BS	C218888.D	1	06/22/17	SY	n/a	n/a	VC8081
VC8081-BSD	C218889.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	200	208	104	201	101	3	45-144/20
71-43-2	Benzene	50	52.1	104	51.4	103	1	76-117/20
74-97-5	Bromochloromethane	50	42.5	85	43.3	87	2	82-121/20
75-27-4	Bromodichloromethane	50	50.4	101	49.8	100	1	76-121/20
75-25-2	Bromoform	50	46.5	93	46.3	93	0	78-129/20
74-83-9	Bromomethane	50	63.2	126	63.7	127	1	61-137/20
78-93-3	2-Butanone (MEK)	200	187	94	183	92	2	70-136/20
104-51-8	n-Butylbenzene	50	60.9	122	58.4	117	4	72-127/20
135-98-8	sec-Butylbenzene	50	61.1	122	58.9	118	4	73-128/20
98-06-6	tert-Butylbenzene	50	58.1	116	56.2	112	3	75-127/20
75-15-0	Carbon disulfide	50	56.7	113	56.7	113	0	68-135/20
56-23-5	Carbon tetrachloride	50	58.1	116	57.9	116	0	74-139/20
108-90-7	Chlorobenzene	50	53.6	107	52.4	105	2	80-118/20
75-00-3	Chloroethane	50	53.5	107	54.2	108	1	63-133/20
67-66-3	Chloroform	50	45.0	90	44.4	89	1	79-125/20
74-87-3	Chloromethane	50	53.6	107	57.4	115	7	56-138/20
110-82-7	Cyclohexane	50	48.0	96	47.7	95	1	64-139/20
96-12-8	1,2-Dibromo-3-chloropropane	50	44.6	89	47.1	94	5	76-125/20
124-48-1	Dibromochloromethane	50	49.2	98	47.8	96	3	78-125/20
106-93-4	1,2-Dibromoethane	50	46.2	92	46.5	93	1	77-120/20
95-50-1	1,2-Dichlorobenzene	50	52.0	104	51.6	103	1	77-119/20
541-73-1	1,3-Dichlorobenzene	50	52.7	105	52.7	105	0	75-117/20
106-46-7	1,4-Dichlorobenzene	50	53.5	107	53.1	106	1	76-116/20
75-71-8	Dichlorodifluoromethane	50	52.1	104	54.3	109	4	47-152/20
75-34-3	1,1-Dichloroethane	50	51.1	102	50.7	101	1	75-124/20
107-06-2	1,2-Dichloroethane	50	52.6	105	53.4	107	2	72-132/20
75-35-4	1,1-Dichloroethene	50	54.7	109	54.8	110	0	71-134/20
156-59-2	cis-1,2-Dichloroethene	50	43.2	86	42.6	85	1	73-116/20
156-60-5	trans-1,2-Dichloroethene	50	53.8	108	54.5	109	1	73-124/20
78-87-5	1,2-Dichloropropane	50	52.1	104	51.7	103	1	78-118/20
10061-01-5	cis-1,3-Dichloropropene	50	51.5	103	52.1	104	1	79-120/20
10061-02-6	trans-1,3-Dichloropropene	50	53.0	106	51.8	104	2	77-121/20
100-41-4	Ethylbenzene	50	59.1	118	57.1	114	3	77-118/20
76-13-1	Freon 113	50	50.9	102	53.2	106	4	70-162/20
591-78-6	2-Hexanone	200	198	99	203	102	2	66-133/20
98-82-8	Isopropylbenzene	50	56.0	112	54.0	108	4	72-129/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC45628
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC8081-BS	C218888.D	1	06/22/17	SY	n/a	n/a	VC8081
VC8081-BSD	C218889.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
99-87-6	p-Isopropyltoluene	50	59.8	120	58.0	116	3	74-129/20
79-20-9	Methyl Acetate	50	47.9	96	48.9	98	2	62-132/20
108-87-2	Methylcyclohexane	50	56.2	112	55.6	111	1	64-138/20
1634-04-4	Methyl Tert Butyl Ether	50	46.6	93	47.6	95	2	73-119/20
108-10-1	4-Methyl-2-pentanone(MIBK)	200	178	89	188	94	5	72-133/20
75-09-2	Methylene chloride	50	43.1	86	44.2	88	3	72-120/20
91-20-3	Naphthalene	50	53.1	106	55.1	110	4	70-130/20
103-65-1	n-Propylbenzene	50	60.6	121	59.3	119	2	75-126/20
100-42-5	Styrene	50	53.1	106	51.6	103	3	79-118/20
79-34-5	1,1,2,2-Tetrachloroethane	50	46.3	93	46.3	93	0	72-120/20
127-18-4	Tetrachloroethene	50	56.4	113	53.9	108	5	70-132/20
108-88-3	Toluene	50	55.9	112	53.9	108	4	76-118/20
87-61-6	1,2,3-Trichlorobenzene	50	57.9	116	58.3	117	1	71-132/20
120-82-1	1,2,4-Trichlorobenzene	50	58.2	116	58.5	117	1	76-132/20
71-55-6	1,1,1-Trichloroethane	50	57.1	114	57.6	115	1	78-138/20
79-00-5	1,1,2-Trichloroethane	50	47.4	95	47.8	96	1	79-117/20
79-01-6	Trichloroethene	50	51.8	104	50.9	102	2	79-124/20
75-69-4	Trichlorofluoromethane	50	61.9	124	61.3	123	1	64-142/20
95-63-6	1,2,4-Trimethylbenzene	50	56.6	113	56.2	112	1	75-123/20
108-67-8	1,3,5-Trimethylbenzene	50	57.9	116	56.6	113	2	73-125/20
75-01-4	Vinyl chloride	50	49.9	100	52.0	104	4	55-139/20
	m,p-Xylene	100	114	114	110	110	4	79-119/30
95-47-6	o-Xylene	50	53.8	108	52.3	105	3	77-122/20
1330-20-7	Xylene (total)	150	168	112	163	109	3	79-120/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	85%	86%	72-129%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	73-132%
2037-26-5	Toluene-D8	107%	104%	80-120%
460-00-4	4-Bromofluorobenzene	104%	104%	77-125%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC45363-1MS	C218895.D	1	06/22/17	SY	n/a	n/a	VC8081
JC45363-1	C218891.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	JC45363-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	ND		206	153	74	10-170
71-43-2	Benzene	ND		51.6	49.4	96	51-129
74-97-5	Bromochloromethane	ND		51.6	39.0	76	57-128
75-27-4	Bromodichloromethane	ND		51.6	49.1	95	48-134
75-25-2	Bromoform	ND		51.6	42.7	83	45-135
74-83-9	Bromomethane	ND		51.6	60.9	118	26-142
78-93-3	2-Butanone (MEK)	ND		206	138	67	30-151
104-51-8	n-Butylbenzene	ND		51.6	55.1	107	14-154
135-98-8	sec-Butylbenzene	ND		51.6	58.8	114	25-151
98-06-6	tert-Butylbenzene	ND		51.6	57.0	111	32-150
75-15-0	Carbon disulfide	ND		51.6	43.4	84	39-144
56-23-5	Carbon tetrachloride	ND		51.6	55.9	108	47-146
108-90-7	Chlorobenzene	ND		51.6	52.4	102	48-133
75-00-3	Chloroethane	ND		51.6	53.2	103	22-143
67-66-3	Chloroform	ND		51.6	42.6	83	56-133
74-87-3	Chloromethane	ND		51.6	51.3	100	41-137
110-82-7	Cyclohexane	ND		51.6	46.6	90	30-150
96-12-8	1,2-Dibromo-3-chloropropane	ND		51.6	40.6	79	40-131
124-48-1	Dibromochloromethane	ND		51.6	46.2	90	52-130
106-93-4	1,2-Dibromoethane	ND		51.6	42.9	83	50-124
95-50-1	1,2-Dichlorobenzene	ND		51.6	49.4	96	36-134
541-73-1	1,3-Dichlorobenzene	ND		51.6	51.0	99	35-133
106-46-7	1,4-Dichlorobenzene	ND		51.6	50.4	98	35-133
75-71-8	Dichlorodifluoromethane	ND		51.6	50.2	97	31-144
75-34-3	1,1-Dichloroethane	ND		51.6	47.2	92	54-133
107-06-2	1,2-Dichloroethane	ND		51.6	49.3	96	53-130
75-35-4	1,1-Dichloroethene	ND		51.6	45.5	88	48-141
156-59-2	cis-1,2-Dichloroethene	ND		51.6	39.8	77	47-127
156-60-5	trans-1,2-Dichloroethene	ND		51.6	48.1	93	47-134
78-87-5	1,2-Dichloropropane	ND		51.6	51.1	99	55-126
10061-01-5	cis-1,3-Dichloropropene	ND		51.6	47.1	91	49-128
10061-02-6	trans-1,3-Dichloropropene	ND		51.6	47.3	92	45-128
100-41-4	Ethylbenzene	ND		51.6	57.8	112	40-136
76-13-1	Freon 113	ND		51.6	42.8	83	43-162
591-78-6	2-Hexanone	ND		206	174	84	21-156
98-82-8	Isopropylbenzene	ND		51.6	54.9	106	37-145

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC45363-1MS	C218895.D	1	06/22/17	SY	n/a	n/a	VC8081
JC45363-1	C218891.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	JC45363-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Limits
99-87-6	p-Isopropyltoluene	ND		51.6	56.9	110	26-151
79-20-9	Methyl Acetate	ND		51.6	37.6	73	24-167
108-87-2	Methylcyclohexane	ND		51.6	50.7	98	15-155
1634-04-4	Methyl Tert Butyl Ether	ND		51.6	40.2	78	55-119
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		206	165	80	38-141
75-09-2	Methylene chloride	ND		51.6	38.5	75	51-125
91-20-3	Naphthalene	ND		51.6	48.0	93	16-149
103-65-1	n-Propylbenzene	ND		51.6	59.0	114	29-150
100-42-5	Styrene	ND		51.6	52.0	101	41-137
79-34-5	1,1,2,2-Tetrachloroethane	ND		51.6	42.6	83	35-136
127-18-4	Tetrachloroethene	ND		51.6	52.8	102	27-171
108-88-3	Toluene	ND		51.6	53.5	104	46-131
87-61-6	1,2,3-Trichlorobenzene	ND		51.6	53.5	104	12-148
120-82-1	1,2,4-Trichlorobenzene	ND		51.6	53.6	104	16-151
71-55-6	1,1,1-Trichloroethane	ND		51.6	54.3	105	54-144
79-00-5	1,1,2-Trichloroethane	ND		51.6	45.2	88	52-124
79-01-6	Trichloroethene	ND		51.6	50.3	98	45-145
75-69-4	Trichlorofluoromethane	ND		51.6	60.6	118	44-139
95-63-6	1,2,4-Trimethylbenzene	ND		51.6	55.3	107	31-146
108-67-8	1,3,5-Trimethylbenzene	ND		51.6	56.5	110	33-144
75-01-4	Vinyl chloride	ND		51.6	49.0	95	38-139
	m,p-Xylene	0.33	J	103	112	108	39-138
95-47-6	o-Xylene	ND		51.6	53.0	103	42-139
1330-20-7	Xylene (total)	0.33	J	155	165	106	40-139

CAS No.	Surrogate Recoveries	MS	JC45363-1	Limits
1868-53-7	Dibromofluoromethane	84%	87%	72-129%
17060-07-0	1,2-Dichloroethane-D4	97%	102%	73-132%
2037-26-5	Toluene-D8	108%	104%	80-120%
460-00-4	4-Bromofluorobenzene	102%	105%	77-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC45628

Account: TRCNYYB TRC

Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC45391-8MS	D250697.D	1	06/22/17	XC	n/a	n/a	VD10119
JC45391-8MSD	D250698.D	1	06/22/17	XC	n/a	n/a	VD10119
JC45391-8	D250693.D	1	06/22/17	XC	n/a	n/a	VD10119

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-3

CAS No.	Compound	JC45391-8 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
67-64-1	Acetone	ND		13100	24800	190* a	13100	19100	146	26	10-170/29
71-43-2	Benzene	176		3270	3550	103	3270	3300	96	7	51-129/16
74-97-5	Bromochloromethane	ND		3270	3380	103	3270	3120	95	8	57-128/16
75-27-4	Bromodichloromethane	ND		3270	5190	159* a	3270	4980	152* a	4	48-134/16
75-25-2	Bromoform	ND		3270	3800	116	3270	3610	110	5	45-135/17
74-83-9	Bromomethane	ND		3270	1490	46	3270	1440	44	3	26-142/24
78-93-3	2-Butanone (MEK)	ND		13100	18100	138	13100	15200	116	17	30-151/24
104-51-8	n-Butylbenzene	7330		3270	10800	106	3270	10000	82	8	14-154/19
135-98-8	sec-Butylbenzene	2250		3270	6040	116	3270	5460	98	10	25-151/18
98-06-6	tert-Butylbenzene	142		3270	4240	125	3270	3710	109	13	32-150/18
75-15-0	Carbon disulfide	ND		3270	3950	121	3270	3620	111	9	39-144/19
56-23-5	Carbon tetrachloride	ND		3270	3950	121	3270	3520	108	12	47-146/19
108-90-7	Chlorobenzene	ND		3270	3430	105	3270	3300	101	4	48-133/15
75-00-3	Chloroethane	ND		3270	1750	53	3270	1560	48	11	22-143/25
67-66-3	Chloroform	ND		3270	2960	90	3270	2780	85	6	56-133/16
74-87-3	Chloromethane	ND		3270	3740	114	3270	3490	107	7	41-137/22
110-82-7	Cyclohexane	5280		3270	8350	94	3270	7640	72	9	30-150/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		3270	3750	115	3270	3370	103	11	40-131/17
124-48-1	Dibromochloromethane	ND		3270	3550	109	3270	3380	103	5	52-130/17
106-93-4	1,2-Dibromoethane	ND		3270	3440	105	3270	3340	102	3	50-124/16
95-50-1	1,2-Dichlorobenzene	ND		3270	3540	108	3270	3240	99	9	36-134/16
541-73-1	1,3-Dichlorobenzene	ND		3270	3590	110	3270	3420	105	5	35-133/17
106-46-7	1,4-Dichlorobenzene	ND		3270	3330	102	3270	3120	95	7	35-133/17
75-71-8	Dichlorodifluoromethane	ND		3270	4010	123	3270	3540	108	12	31-144/20
75-34-3	1,1-Dichloroethane	ND		3270	3390	104	3270	3210	98	5	54-133/16
107-06-2	1,2-Dichloroethane	ND		3270	3350	102	3270	3290	101	2	53-130/16
75-35-4	1,1-Dichloroethene	ND		3270	3930	120	3270	3680	113	7	48-141/19
156-59-2	cis-1,2-Dichloroethene	ND		3270	3020	92	3270	2840	87	6	47-127/17
156-60-5	trans-1,2-Dichloroethene	ND		3270	3130	96	3270	3000	92	4	47-134/17
78-87-5	1,2-Dichloropropane	ND		3270	3280	100	3270	3220	98	2	55-126/16
10061-01-5	cis-1,3-Dichloropropene	ND		3270	3530	108	3270	3490	107	1	49-128/16
10061-02-6	trans-1,3-Dichloropropene	ND		3270	3380	103	3270	3260	100	4	45-128/17
100-41-4	Ethylbenzene	4370		3270	7650	100	3270	7310	90	5	40-136/15
76-13-1	Freon 113	ND		3270	4080	125	3270	3660	112	11	43-162/20
591-78-6	2-Hexanone	ND		13100	20900	160* a	13100	18800	144	11	21-156/28
98-82-8	Isopropylbenzene	2960		3270	6820	118	3270	6370	104	7	37-145/18

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC45391-8MS	D250697.D	1	06/22/17	XC	n/a	n/a	VD10119
JC45391-8MSD	D250698.D	1	06/22/17	XC	n/a	n/a	VD10119
JC45391-8	D250693.D	1	06/22/17	XC	n/a	n/a	VD10119

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-3

CAS No.	Compound	JC45391-8 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
99-87-6	p-Isopropyltoluene	582		3270	4550	121	3270	4050	106	12	26-151/18
79-20-9	Methyl Acetate	ND		3270	2610	80	3270	2590	79	1	24-167/23
108-87-2	Methylcyclohexane	20100	E	3270	21700	49	3270	20400	9* b	6	15-155/19
1634-04-4	Methyl Tert Butyl Ether	18.2	J	3270	3440	105	3270	3230	98	6	55-119/16
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		13100	15400	118	13100	14300	109	7	38-141/21
75-09-2	Methylene chloride	ND		3270	3630	111	3270	3380	103	7	51-125/17
91-20-3	Naphthalene	5270		3270	8440	97	3270	7650	73	10	16-149/23
103-65-1	n-Propylbenzene	8620		3270	11600	91	3270	11000	73	5	29-150/17
100-42-5	Styrene	ND		3270	3810	116	3270	3680	113	3	41-137/17
79-34-5	1,1,2,2-Tetrachloroethane	ND		3270	3090	94	3270	2780	85	11	35-136/20
127-18-4	Tetrachloroethene	ND		3270	3640	111	3270	3380	103	7	27-171/19
108-88-3	Toluene	42.6	J	3270	3520	106	3270	3230	97	9	46-131/17
87-61-6	1,2,3-Trichlorobenzene	ND		3270	3710	113	3270	3220	98	14	12-148/24
120-82-1	1,2,4-Trichlorobenzene	ND		3270	3890	119	3270	3410	104	13	16-151/21
71-55-6	1,1,1-Trichloroethane	ND		3270	3490	107	3270	3160	97	10	54-144/18
79-00-5	1,1,2-Trichloroethane	ND		3270	3860	118	3270	3660	112	5	52-124/18
79-01-6	Trichloroethene	ND		3270	3830	117	3270	3600	110	6	45-145/16
75-69-4	Trichlorofluoromethane	ND		3270	3370	103	3270	2760	84	20	44-139/22
95-63-6	1,2,4-Trimethylbenzene	145		3270	4000	118	3270	3580	105	11	31-146/16
108-67-8	1,3,5-Trimethylbenzene	222		3270	4130	119	3270	3660	105	12	33-144/16
75-01-4	Vinyl chloride	ND		3270	3590	110	3270	3240	99	10	38-139/21
	m,p-Xylene	801		6540	8090	111	6540	7610	104	6	39-138/15
95-47-6	o-Xylene	80.2		3270	3890	116	3270	3580	107	8	42-139/15
1330-20-7	Xylene (total)	881		9810	12000	113	9810	11200	105	7	40-139/15

CAS No.	Surrogate Recoveries	MS	MSD	JC45391-8	Limits
1868-53-7	Dibromofluoromethane	95%	93%	94%	72-129%
17060-07-0	1,2-Dichloroethane-D4	110%	108%	113%	73-132%
2037-26-5	Toluene-D8	101%	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	105%	104%	101%	77-125%

(a) Outside control limits due to matrix interference.

(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC45363-2DUP	C218897.D	1	06/22/17	SY	n/a	n/a	VC8081
JC45363-2	C218892.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	JC45363-2 ug/kg	DUP Q	ug/kg	Q	RPD	Limits
67-64-1	Acetone	ND		8.0	J	200* a	30
71-43-2	Benzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
98-06-6	tert-Butylbenzene	ND		ND		nc	30
75-15-0	Carbon disulfide	ND		ND		nc	30
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
110-82-7	Cyclohexane	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
76-13-1	Freon 113	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30
98-82-8	Isopropylbenzene	ND		ND		nc	11

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC45363-2DUP	C218897.D	1	06/22/17	SY	n/a	n/a	VC8081
JC45363-2	C218892.D	1	06/22/17	SY	n/a	n/a	VC8081

The QC reported here applies to the following samples:

Method: SW846 8260C

JC45628-1, JC45628-2

CAS No.	Compound	JC45363-2 ug/kg	DUP Q	Q	RPD	Limits
99-87-6	p-Isopropyltoluene	ND	ND		nc	30
79-20-9	Methyl Acetate	ND	ND		nc	30
108-87-2	Methylcyclohexane	ND	ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	ND	ND		nc	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	ND		nc	30
75-09-2	Methylene chloride	ND	ND		nc	30
91-20-3	Naphthalene	ND	ND		nc	30
103-65-1	n-Propylbenzene	ND	ND		nc	30
100-42-5	Styrene	ND	ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND	ND		nc	30
127-18-4	Tetrachloroethene	ND	ND		nc	30
108-88-3	Toluene	ND	ND		nc	30
87-61-6	1,2,3-Trichlorobenzene	ND	ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND	ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND	ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND	ND		nc	30
79-01-6	Trichloroethene	ND	ND		nc	30
75-69-4	Trichlorofluoromethane	ND	ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND	ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND	ND		nc	30
75-01-4	Vinyl chloride	ND	ND		nc	30
	m,p-Xylene	0.33	J	ND	200* a	30
95-47-6	o-Xylene	ND	ND		nc	30
1330-20-7	Xylene (total)	0.33	J	ND	200* a	30

CAS No.	Surrogate Recoveries	DUP	JC45363-2	Limits
1868-53-7	Dibromofluoromethane	87%	87%	72-129%
17060-07-0	1,2-Dichloroethane-D4	103%	104%	73-132%
2037-26-5	Toluene-D8	105%	104%	80-120%
460-00-4	4-Bromofluorobenzene	103%	106%	77-125%

(a) High RPD due to possible sample nonhomogeneity.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-BFB	Injection Date: 04/28/17
Lab File ID: C217759.D	Injection Time: 16:55
Instrument ID: GCMSC	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	21184	17.1	Pass
75	30.0 - 60.0% of mass 95	57904	46.8	Pass
95	Base peak, 100% relative abundance	123762	100.0	Pass
96	5.0 - 9.0% of mass 95	8335	6.73	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	94218	76.1	Pass
175	5.0 - 9.0% of mass 174	7203	5.82 (7.65) ^a	Pass
176	95.0 - 101.0% of mass 174	90968	73.5 (96.6) ^a	Pass
177	5.0 - 9.0% of mass 176	6241	5.04 (6.86) ^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
VC8031-IC8031	C217760.D	04/28/17	17:32	00:37	Initial cal 0.2
VC8031-IC8031	C217761.D	04/28/17	18:00	01:05	Initial cal 0.5
VC8031-IC8031	C217762.D	04/28/17	18:29	01:34	Initial cal 1
VC8031-IC8031	C217763.D	04/28/17	18:58	02:03	Initial cal 2
VC8031-IC8031	C217764.D	04/28/17	19:26	02:31	Initial cal 4
VC8031-IC8031	C217765.D	04/28/17	19:55	03:00	Initial cal 8
VC8031-IC8031	C217766.D	04/28/17	20:24	03:29	Initial cal 20
VC8031-ICC8031	C217767.D	04/28/17	20:53	03:58	Initial cal 50
VC8031-IC8031	C217768.D	04/28/17	21:22	04:27	Initial cal 100
VC8031-IC8031	C217769.D	04/28/17	21:51	04:56	Initial cal 200
VC8031-ICV8031	C217772.D	04/28/17	23:18	06:23	Initial cal verification 50
VC8031-ICV8031	C217773.D	04/28/17	23:47	06:52	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8033-BFB	Injection Date: 04/29/17
Lab File ID: C217791.D	Injection Time: 14:09
Instrument ID: GCMSC	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	18637	17.8	Pass
75	30.0 - 60.0% of mass 95	50226	48.0	Pass
95	Base peak, 100% relative abundance	104560	100.0	Pass
96	5.0 - 9.0% of mass 95	7201	6.89	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	73928	70.7	Pass
175	5.0 - 9.0% of mass 174	6074	5.81 (8.22) ^a	Pass
176	95.0 - 101.0% of mass 174	71842	68.7 (97.2) ^a	Pass
177	5.0 - 9.0% of mass 176	4764	4.56 (6.63) ^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
VC8033-IC8031	C217792.D	04/29/17	14:43	00:34	Initial cal 0.5
VC8033-IC8031	C217793.D	04/29/17	15:11	01:02	Initial cal 1
VC8033-IC8031	C217794.D	04/29/17	15:40	01:31	Initial cal 2
VC8033-IC8031	C217795.D	04/29/17	16:09	02:00	Initial cal 4
VC8033-IC8031	C217796.D	04/29/17	16:39	02:30	Initial cal 8
VC8033-IC8031	C217797.D	04/29/17	17:08	02:59	Initial cal 20
VC8033-IC8031	C217798.D	04/29/17	17:37	03:28	Initial cal 50
VC8033-IC8031	C217799.D	04/29/17	18:06	03:57	Initial cal 100
VC8033-IC8031	C217800.D	04/29/17	18:35	04:26	Initial cal 200
VC8033-ICV8031	C217803.D	04/29/17	20:02	05:53	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8081-BFB	Injection Date: 06/22/17
Lab File ID: C218886A.D	Injection Time: 08:07
Instrument ID: GCMSC	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	27117	19.4	Pass
75	30.0 - 60.0% of mass 95	70120	50.2	Pass
95	Base peak, 100% relative abundance	139656	100.0	Pass
96	5.0 - 9.0% of mass 95	8982	6.43	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 120.0% of mass 95	105963	75.9	Pass
175	5.0 - 9.0% of mass 174	9092	6.51 (8.58) ^a	Pass
176	95.0 - 101.0% of mass 174	104680	75.0 (98.8) ^a	Pass
177	5.0 - 9.0% of mass 176	6551	4.69 (6.26) ^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
VC8081-CC8031	C218886.D	06/22/17	08:07	00:00	Continuing cal 20
VC8081-MB	C218887.D	06/22/17	08:43	00:36	Method Blank
ZZZZZZ	C218887A.D	06/22/17	08:43	00:36	(unrelated sample)
VC8081-BS	C218888.D	06/22/17	09:23	01:16	Blank Spike
VC8081-BSD	C218889.D	06/22/17	10:08	02:01	Blank Spike Duplicate
JC45363-1	C218891.D	06/22/17	11:14	03:07	(used for QC only; not part of job JC45628)
JC45363-2	C218892.D	06/22/17	11:43	03:36	(used for QC only; not part of job JC45628)
ZZZZZZ	C218893.D	06/22/17	12:19	04:12	(unrelated sample)
ZZZZZZ	C218894.D	06/22/17	12:48	04:41	(unrelated sample)
JC45363-1MS	C218895.D	06/22/17	13:41	05:34	Matrix Spike
JC45363-2DUP	C218897.D	06/22/17	14:38	06:31	Duplicate
JC45628-1	C218899.D	06/22/17	15:07	07:00	TRC-TR-2(3.5-4)
JC45628-2	C218900.D	06/22/17	15:36	07:29	TRC-TR-2(4-5)
ZZZZZZ	C218901.D	06/22/17	16:06	07:59	(unrelated sample)
ZZZZZZ	C218902.D	06/22/17	16:35	08:28	(unrelated sample)
ZZZZZZ	C218903.D	06/22/17	17:03	08:56	(unrelated sample)
ZZZZZZ	C218904.D	06/22/17	17:32	09:25	(unrelated sample)
ZZZZZZ	C218905.D	06/22/17	18:01	09:54	(unrelated sample)
ZZZZZZ	C218906.D	06/22/17	18:30	10:23	(unrelated sample)
ZZZZZZ	C218908.D	06/22/17	19:28	11:21	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC45628
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-BFB	Injection Date: 06/13/17
Lab File ID: D250401.D	Injection Time: 09:58
Instrument ID: GCMSD	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	13333	18.0	Pass
75	30.0 - 60.0% of mass 95	35608	48.1	Pass
95	Base peak, 100% relative abundance	74088	100.0	Pass
96	5.0 - 9.0% of mass 95	5026	6.78	Pass
173	Less than 2.0% of mass 174	200	0.27 (0.27) ^a	Pass
174	50.0 - 150.0% of mass 95	73232	98.8	Pass
175	5.0 - 9.0% of mass 174	5391	7.28 (7.36) ^a	Pass
176	95.0 - 101.0% of mass 174	71122	96.0 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	4698	6.34 (6.61) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VD10106-IC10106	D250402.D	06/13/17	10:29	00:31	Initial cal 2
VD10106-IC10106	D250403.D	06/13/17	10:57	00:59	Initial cal 1
VD10106-IC10106	D250404.D	06/13/17	11:25	01:27	Initial cal 0.5
VD10106-IC10106	D250405.D	06/13/17	11:53	01:55	Initial cal 0.2
VD10106-IC10106	D250406.D	06/13/17	12:21	02:23	Initial cal 4
VD10106-IC10106	D250407.D	06/13/17	12:49	02:51	Initial cal 8
VD10106-IC10106	D250408.D	06/13/17	13:18	03:20	Initial cal 20
VD10106-ICC10106	D250409.D	06/13/17	13:46	03:48	Initial cal 50
VD10106-IC10106	D250410.D	06/13/17	14:14	04:16	Initial cal 100
VD10106-IC10106	D250411.D	06/13/17	14:42	04:44	Initial cal 200
VD10106-ICV10106	D250414.D	06/13/17	16:06	06:08	Initial cal verification 50
VD10106-ICV10106	D250415.D	06/13/17	16:35	06:37	Initial cal verification 50
VD10107-MB	D250417.D	06/13/17	17:31	07:33	Method Blank
ZZZZZZ	D250418.D	06/13/17	17:59	08:01	(unrelated sample)
ZZZZZZ	D250419.D	06/13/17	18:27	08:29	(unrelated sample)
ZZZZZZ	D250420.D	06/13/17	18:55	08:57	(unrelated sample)
ZZZZZZ	D250421.D	06/13/17	19:23	09:25	(unrelated sample)
ZZZZZZ	D250422.D	06/13/17	19:51	09:53	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC45628
Account: TRCNYNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10119-BFB	Injection Date: 06/22/17
Lab File ID: D250688A.D	Injection Time: 07:48
Instrument ID: GCMSD	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	14657	17.4	Pass
75	30.0 - 60.0% of mass 95	40245	47.9	Pass
95	Base peak, 100% relative abundance	84003	100.0	Pass
96	5.0 - 9.0% of mass 95	5653	6.73	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) ^a	Pass
174	50.0 - 150.0% of mass 95	82885	98.7	Pass
175	5.0 - 9.0% of mass 174	6025	7.17 (7.27) ^a	Pass
176	95.0 - 101.0% of mass 174	80880	96.3 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	5567	6.63 (6.88) ^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
VD10119-CC10106	D250688.D	06/22/17	07:48	00:00	Continuing cal 20
ZZZZZZ	D250690A.D	06/22/17	08:52	01:04	(unrelated sample)
VD10119-MB	D250690.D	06/22/17	08:52	01:04	Method Blank
VD10119-BS	D250691.D	06/22/17	09:20	01:32	Blank Spike
JC45391-8	D250693.D	06/22/17	10:28	02:40	(used for QC only; not part of job JC45628)
ZZZZZZ	D250694.D	06/22/17	11:00	03:12	(unrelated sample)
ZZZZZZ	D250695.D	06/22/17	11:28	03:40	(unrelated sample)
ZZZZZZ	D250696.D	06/22/17	11:56	04:08	(unrelated sample)
JC45391-8MS	D250697.D	06/22/17	12:45	04:57	Matrix Spike
JC45391-8MSD	D250698.D	06/22/17	13:13	05:25	Matrix Spike Duplicate
JC45628-1	D250705.D	06/22/17	16:52	09:04	TRC-TR-2(3.5-4)
ZZZZZZ	D250707.D	06/22/17	17:48	10:00	(unrelated sample)
JC45628-3	D250709.D	06/22/17	18:44	10:56	TRC-TR-2(7.5-8)
ZZZZZZ	D250710.D	06/22/17	19:12	11:24	(unrelated sample)
ZZZZZZ	D250711.D	06/22/17	19:40	11:52	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JC45628
Account: TRCNYYNB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std: VC8081-CC8031	Injection Date: 06/22/17
Lab File ID: C218886.D	Injection Time: 08:07
Instrument ID: GCMSC	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	105430	8.06	350041	10.74	554533	11.70	486708	14.75	244868	16.77
Upper Limit ^a	210860	8.56	700082	11.24	1109066	12.20	973416	15.25	489736	17.27
Lower Limit ^b	52715	7.56	175021	10.24	277267	11.20	243354	14.25	122434	16.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VC8081-MB	89820	8.08	337896	10.75	528978	11.71	457137	14.75	226087	16.77
ZZZZZZ	89820	8.08	337896	10.75	528978	11.71	457137	14.75	226087	16.77
VC8081-BS	107709	8.07	364427	10.75	578213	11.70	497144	14.75	251727	16.77
VC8081-BSD	102133	8.07	344874	10.74	549090	11.70	484375	14.75	242920	16.76
JC45363-1	93921	8.08	303993	10.74	477110	11.71	428526	14.75	216528	16.77
JC45363-2	108729	8.09	359887	10.75	569459	11.71	503634	14.75	246486	16.77
ZZZZZZ	132009	8.08	371837	10.75	594213	11.71	538011	14.75	259289	16.77
ZZZZZZ	110847	8.07	352440	10.75	563801	11.71	515188	14.75	242974	16.77
JC45363-1MS	85609	8.07	358537	10.74	559330	11.70	487349	14.75	244590	16.77
JC45363-2DUP	94659	8.07	311364	10.75	490686	11.71	442396	14.75	222302	16.77
JC45628-1	88085	8.08	263183	10.75	431641	11.71	373806	14.75	159857	16.77
JC45628-2	79517	8.09	342963	10.75	542231	11.71	486184	14.75	235442	16.77
ZZZZZZ	134079	8.08	349990	10.75	572570	11.71	528515	14.75	263639	16.77
ZZZZZZ	105682	8.07	351629	10.75	554561	11.71	489428	14.75	241710	16.77
ZZZZZZ	88792	8.08	318971	10.75	502618	11.71	439436	14.75	216467	16.77
ZZZZZZ	102400	8.09	339079	10.75	529047	11.71	476334	14.75	234182	16.77
ZZZZZZ	101532	8.08	333942	10.75	533228	11.71	472012	14.75	231634	16.77
ZZZZZZ	121600	8.08	403263	10.75	646916	11.71	561789	14.75	272984	16.77
ZZZZZZ	120454	8.08	384732	10.75	617297	11.71	543251	14.75	259289	16.77

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

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

6.8.1
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Volatile Internal Standard Area Summary

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Check Std: VD10119-CC10106	Injection Date: 06/22/17
Lab File ID: D250688.D	Injection Time: 07:48
Instrument ID: GCMSD	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	90319	7.54	205494	9.74	281298	10.69	316937	14.11	228473	16.73
Upper Limit ^a	180638	8.04	410988	10.24	562596	11.19	633874	14.61	456946	17.23
Lower Limit ^b	45160	7.04	102747	9.24	140649	10.19	158469	13.61	114237	16.23

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
ZZZZZZ	81447	7.56	183186	9.75	251206	10.69	282100	14.12	184916	16.74
VD10119-MB	81447	7.56	183186	9.75	251206	10.69	282100	14.12	184916	16.74
VD10119-BS	90557	7.56	204310	9.74	278527	10.69	295217	14.11	218269	16.73
JC45391-8	107046	7.55	192549	9.74	261429	10.69	298623	14.12	229409	16.73
ZZZZZZ	92643	7.59	197026	9.74	266936	10.70	300617	14.11	222506	16.73
ZZZZZZ	84757	7.55	217560	9.75	298819	10.69	326982	14.12	221987	16.74
ZZZZZZ	89278	7.56	215032	9.75	298618	10.69	319093	14.12	226425	16.73
JC45391-8MS	97243	7.59	197364	9.74	271277	10.69	301826	14.11	226089	16.73
JC45391-8MSD	95618	7.60	208256	9.74	283681	10.69	325768	14.11	250004	16.73
JC45628-1	171187	7.82	167922	9.74	236129	10.69	282589	14.12	178313	16.74
ZZZZZZ	52187	7.73	188561	9.75	256794	10.70	302581	14.12	202255	16.74
JC45628-3 ^c	121593	7.72	180245	9.75	254623	10.70	290308	14.13	207147	16.74
ZZZZZZ	53774	7.74	191469	9.75	258442	10.70	297213	14.12	215362	16.74
ZZZZZZ	56869	7.78	195130	9.75	262254	10.70	297751	14.12	199260	16.74

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

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
 (c) Dilution required due to matrix interference.

Volatile Surrogate Recovery Summary

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Method: SW846 8260C	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC45628-1	D250705.D	102	101	94	110
JC45628-1	C218899.D	91	107	106	115
JC45628-2	C218900.D	86	98	105	104
JC45628-3	D250709.D	98	96	96	98
JC45363-1MS	C218895.D	84	97	108	102
JC45363-2DUP	C218897.D	87	103	105	103
JC45391-8MS	D250697.D	95	110	101	105
JC45391-8MSD	D250698.D	93	108	99	104
VC8081-BS	C218888.D	85	103	107	104
VC8081-BSD	C218889.D	86	102	104	104
VC8081-MB	C218887.D	82	98	107	103
VD10119-BS	D250691.D	96	95	100	96
VD10119-MB	D250690.D	96	94	95	101

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	72-129%
S2 = 1,2-Dichloroethane-D4	73-132%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	77-125%

6.9.1
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Initial Calibration Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICC8031
Lab FileID: C217767.D

Response Factor Report MSC

Method : C:\msdchem\1\METHODS\MCS8031.M (RTE Integrator)
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Mon May 08 14:35:58 2017
 Response via : Initial Calibration

Calibration Files

4 =C217764.D 2 =C217763.D 20 =C217766.D 50 =C217767.D
 100 =C217768.D 1 =C217762.D 200 =C217769.D 0.5 =C217761.D
 8 =C217765.D 0.2 =C217760.D = =

Compound	4	2	20	50	100	1	200	0.5	8	0.2	Avg	%RSD
----------	---	---	----	----	-----	---	-----	-----	---	-----	-----	------

1) Tert Butyl Alcohol-d9 -----ISTD-----												
2) ethanol											0.000#	-1.00
3) tertiary butyl alcohol												
1.253 1.193 1.300 1.236 1.147						1.196		1.369		1.242		5.99
4) 1,4-dioxane												
0.073 0.051 0.094 0.089 0.088						0.095		0.084		0.082		18.82
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane												
0.103 0.129 0.148 0.138						0.166		0.108		0.132		18.12
7) dichlorodifluoromethane												
0.705 0.650 0.718 0.696 0.654 0.794 0.638 0.653 0.731 0.788										0.703		8.02
8) chloromethane												
0.713 0.661 0.668 0.660 0.626 0.730 0.621 0.783 0.708										0.686		7.67
9) vinyl chloride												
0.757 0.735 0.769 0.749 0.707 0.844 0.698 0.804 0.794 0.854										0.771		6.89
10) 1,3-Butadiene **This compound does not meet initial calibration criteria												
0.538 0.530 0.517 0.509 0.490 0.495 0.474 0.470 0.562 0.287										0.487		15.57
11) bromomethane												
0.369 0.359 0.358 0.345 0.329 0.368 0.333 0.315 0.368 0.348										0.349		5.30
12) chloroethane												
0.387 0.407 0.394 0.374 0.357 0.378 0.362								0.408		0.383		5.00
13) vinyl bromide												
0.395 0.389 0.409 0.389 0.376 0.399 0.382 0.397 0.430										0.396		4.02
14) trichlorofluoromethane												
0.685 0.648 0.690 0.702 0.669 0.703 0.682 0.590 0.692										0.673		5.29
15) ethyl ether												
0.226 0.208 0.221 0.249 0.225 0.202 0.229								0.237		0.225		6.65
16) 2-chloropropane												
0.805 0.762 0.768 0.750 0.698 0.768 0.679								0.820		0.756		6.34
17) acrolein												
0.050 0.063 0.059						0.058		0.040		0.054		17.16
18) freon 113												
0.336 0.312 0.342 0.343 0.318						0.316		0.359		0.332		5.31
19) 1,1-dichloroethene												
0.713 0.657 0.699 0.700 0.659 0.671 0.659 0.728 0.769 0.832										0.709		7.96
20) acetone												
0.079 0.077 0.082 0.089 0.069						0.075		0.075		0.078		7.87
21) acetonitrile												
0.029 0.032 0.030						0.031		0.031		0.030		3.08
22) iodomethane												
0.717 0.674 0.704 0.704 0.679 0.704 0.669 0.740 0.728 0.721										0.704		3.38
23) carbon disulfide												

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Initial Calibration Summary

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICC8031
Lab FileID: C217767.D

	1.405	1.352	1.377	1.424	1.314	1.354	1.324	1.503	1.476	1.673	1.420	7.63	
24)	methylene chloride												
	0.554		0.470	0.475	0.444		0.448		0.544		0.489	9.77	
25)	methyl acetate												
	0.159		0.169	0.196	0.168		0.177		0.170		0.173	7.32	
26)	methyl tert butyl ether												
	1.117	1.107	1.167	1.190	1.056	1.113	1.086	1.269	1.181		1.143	5.69	
27)	trans-1,2-dichloroethene												
	0.703	0.641	0.680	0.713	0.669	0.635	0.652	0.649	0.720		0.673	4.79	
28)	hexane												
	0.786	0.912	0.707	0.687	0.661		0.659		0.783		0.742	12.35	
29)	di-isopropyl ether												
	1.446	1.449	1.499	1.518	1.444	1.360	1.479	1.447	1.529	1.518	1.469	3.45	
30)	ethyl tert-butyl ether												
	1.457	1.429	1.494	1.525	1.448	1.413	1.457	1.576	1.543	1.362	1.470	4.38	
31)	1,1-dichloroethane												
	0.892	0.853	0.876	0.875	0.826	0.838	0.824	0.876	0.908	0.665	0.843	8.14	
32)	chloroprene												
	0.724	0.710	0.740	0.758	0.730	0.653	0.722	0.683	0.777		0.722	5.17	
33)	acrylonitrile												
		0.070	0.098	0.082			0.087		0.075		0.083	13.07	
34)	vinyl acetate												
		0.055	0.059	0.060			0.064		0.047		0.057	11.55	
35)	2-butanone												
	0.031	0.020	0.033	0.038	0.031		0.034		0.031		0.031	17.29	
36)	ethyl acetate **This compound does not meet initial calibration criteria												
		0.041	0.040	0.035			0.037		0.034		0.037	8.31	
37)	2,2-dichloropropane												
	0.709	0.712	0.685	0.665	0.626	0.713	0.581	0.745	0.713		0.683	7.52	
38)	cis-1,2-dichloroethene												
	0.578	0.563	0.528	0.531	0.508	0.593	0.515	0.663	0.586		0.563	8.70	
39)	methyl acrylate **This compound does not meet initial calibration criteria												
		0.035	0.043	0.038			0.041		0.030		0.037	12.97	
40)	propionitrile												
	0.033	0.032	0.037	0.042	0.037		0.039		0.035		0.036	8.88	
41)	bromochloromethane												
	0.210	0.178	0.213	0.220	0.200		0.209		0.215		0.206	6.76	
42)	tetrahydrofuran												
		0.116	0.108	0.093			0.091		0.156		0.113	23.30	
	----- Linear regression ----- Coefficient = 0.9984												
	Response Ratio = 0.01126 + 0.08927 *A												
43)	chloroform												
	0.922	0.968	0.825	0.840	0.796	1.086	0.802		0.908		0.893	11.12	
44)	t-butyl formate												
		0.172		0.228	0.286	0.253		0.262		0.207		0.235	17.53
45)	dibromofluoromethane (s)												
	0.482	0.483	0.480	0.483	0.465	0.483	0.464	0.502	0.483	0.520	0.484	3.38	
46)	methacrylonitrile												
	0.113	0.067	0.122	0.125	0.115		0.121		0.107		0.110	18.00	
47)	cyclohexane												
	0.894	0.833	0.838	0.826	0.787	0.885	0.761	0.777	0.858	1.107	0.857	11.46	
48)	1,1,1-trichloroethane												
	0.746	0.769	0.751	0.737	0.688	0.745	0.665	0.725	0.775	0.787	0.739	5.15	
49)	1,1-dichloropropene												
	0.672	0.665	0.660	0.657	0.629	0.636	0.640	0.601	0.702	0.600	0.646	4.91	
50)	carbon tetrachloride												
	0.641	0.630	0.639	0.648	0.596	0.621	0.597	0.580	0.691	0.588	0.623	5.44	
51)	tert-amyl alcohol												
	0.022	0.023	0.018	0.019	0.016		0.017		0.022		0.020	14.62	

Initial Calibration Summary

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICC8031
Lab FileID: C217767.D

52)	isobutyl alcohol	0.015	0.014	0.013	0.014	0.012	0.013	0.014	0.014	7.28			
53) I	1,4-difluorobenzene	-----ISTD-----											
54)	1,2-dichloroethane-d4 (s)	0.272	0.276	0.273	0.270	0.257	0.272	0.250	0.277	0.267	0.294	0.271	4.34
55)	isopropyl acetate	0.032	0.037	0.042	0.039	0.040	0.039	0.038	0.038	8.76			
56)	2,2,4-trimethylpentane	1.336	1.331	1.343	1.326	1.248	1.284	1.213	1.296	1.406	1.459	1.324	5.38
57)	tert-amyl methyl ether	0.818	0.826	0.838	0.864	0.786	0.873	0.783	0.993	0.847	0.848	7.38	
58)	benzene	1.129	1.051	1.156	1.148	1.109	1.136	1.105	1.202	1.186	1.269	1.149	5.21
59)	heptane	0.231	0.217	0.235	0.225	0.215	0.221	0.211	0.239	0.224	4.43		
60)	1,2-dichloroethane	0.306	0.314	0.302	0.312	0.294	0.267	0.297	0.296	0.328	0.302	5.57	
61)	n-butyl alcohol	0.005	0.004	0.005	0.006	0.005	0.005	0.005	0.005#	13.18			
62)	ethyl acrylate	0.193	0.171	0.186	0.203	0.188	0.195	0.181	0.188	5.59			
63)	trichloroethene	0.290	0.282	0.288	0.281	0.271	0.275	0.268	0.323	0.299	0.286	5.88	
64)	2-chloroethyl vinyl ether	0.016	0.010	0.015	0.017	0.015	0.016	0.017	0.015	15.45			
65)	2-nitropropane	0.050	0.053	0.046	0.047	0.042	0.042	0.050	0.047	8.78			
66)	methylcyclohexane	0.576	0.569	0.576	0.579	0.534	0.564	0.529	0.587	0.615	0.609	0.574	4.82
67)	methyl methacrylate	0.044	0.030	0.048	0.051	0.047	0.048	0.045	0.045	14.96			
68)	1,2-dichloropropane	0.273	0.247	0.269	0.275	0.265	0.266	0.265	0.280	0.268	3.70		
69)	dibromomethane	0.132	0.125	0.132	0.133	0.125	0.114	0.124	0.106	0.140	0.126	8.21	
70)	bromodichloromethane	0.352	0.348	0.357	0.357	0.343	0.342	0.342	0.332	0.366	0.318	0.346	3.97
71)	epichlorohydrin	0.018	0.016	0.017	0.018	0.016	0.016	0.018	0.017	5.17			
72)	cis-1,3-dichloropropene	0.432	0.391	0.443	0.442	0.426	0.396	0.431	0.403	0.453	0.372	0.419	6.40
73)	4-methyl-2-pentanone	0.079	0.078	0.073	0.077	0.068	0.066	0.069	0.073	0.073	6.46		
74)	3-methyl-1-butanol	0.009	0.009	0.010	0.011	0.008	0.008	0.009	0.009	0.009#	10.06		
75) I	chlorobenzene-d5	-----ISTD-----											
76)	toluene-d8 (s)	1.336	1.326	1.351	1.375	1.391	1.325	1.372	1.290	1.338	1.268	1.337	2.84
77)	toluene	0.811	0.738	0.796	0.793	0.789	0.762	0.793	0.701	0.826	0.980	0.799	9.17
78)	ethyl methacrylate	0.304	0.287	0.301	0.310	0.289	0.248	0.300	0.298	0.292	6.58		
79)	trans-1,3-dichloropropene	0.403	0.369	0.407	0.410	0.393	0.380	0.396	0.333	0.405	0.389	6.39	
80)	1,1,2-trichloroethane	0.178	0.177	0.175	0.183	0.173	0.141	0.176	0.181	0.186	0.174	7.55	
81)	2-hexanone	0.089	0.082	0.070	0.076	0.067	0.071	0.071	0.069	0.074	10.17		

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Initial Calibration Summary

Job Number: JC45628
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Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICC8031
Lab FileID: C217767.D

82)	tetrachloroethene	0.312	0.325	0.312	0.313	0.308	0.294	0.308	0.374	0.327	0.319	7.14	
83)	1,3-dichloropropane	0.391	0.363	0.379	0.381	0.369	0.347	0.370	0.342	0.397	0.339	0.368	5.44
84)	butyl acetate	0.146		0.147	0.145	0.131		0.136		0.147		0.142	4.81
85)	3,3-dimethyl-1-butanol	0.025	0.023	0.023	0.026	0.022	0.018	0.023		0.023		0.023	9.93
86)	dibromochloromethane	0.255	0.236	0.266	0.272	0.264	0.224	0.265	0.238	0.262		0.254	6.50
87)	1,2-dibromoethane	0.212	0.192	0.209	0.217	0.204	0.185	0.208	0.180	0.221		0.203	7.08
88)	n-butyl ether	1.387	1.330	1.384	1.369	1.339	1.345	1.369	1.386	1.462	1.463	1.384	3.34
89)	chlorobenzene	0.869	0.831	0.877	0.869	0.849	0.826	0.864	0.828	0.893	0.790	0.850	3.63
90)	1,1,1,2-tetrachloroethane	0.312	0.307	0.327	0.326	0.320	0.279	0.317		0.328		0.314	5.09
91)	ethylbenzene	1.499	1.453	1.529	1.522	1.497	1.423	1.515	1.501	1.574	1.600	1.511	3.41
92)	m,p-xylene	0.613	0.615	0.611	0.608	0.598	0.546	0.604	0.582	0.623	0.613	0.601	3.73
93)	o-xylene	1.304	1.311	1.309	1.306	1.286	1.286	1.300	1.271	1.368	1.389	1.313	2.82
94)	styrene	0.991	0.945	1.005	1.015	0.991	0.945	1.022	0.962	1.037	0.956	0.987	3.38
95)	butyl acrylate	0.515	0.450	0.500	0.503	0.457	0.442	0.476	0.462	0.531		0.482	6.52
96)	bromoform	0.158	0.142	0.158	0.164	0.155	0.133	0.159		0.157		0.153	6.66
97)	isopropylbenzene	1.666	1.624	1.686	1.683	1.655	1.566	1.659	1.681	1.722	1.710	1.665	2.68
98)	cis-1,4-dichloro-2-butene	0.115	0.105	0.109	0.108	0.098	0.123	0.102	0.110	0.106		0.109	6.70
99) I	1,4-dichlorobenzene-d -----ISTD-----												
100)	4-bromofluorobenzene (s)	0.723	0.709	0.704	0.710	0.713	0.721	0.715	0.718	0.705	0.691	0.711	1.32
101)	bromobenzene	0.673	0.626	0.667	0.665	0.636	0.619	0.666	0.700	0.681	0.514	0.645	8.11
102)	1,1,2,2-tetrachloroethane	0.587	0.551	0.523	0.563	0.511	0.521	0.525	0.581	0.541	0.464	0.537	6.76
103)	trans-1,4-dichloro-2-butene	0.182	0.159	0.165	0.170	0.153	0.153	0.154	0.151	0.173		0.162	6.73
104)	1,2,3-trichloropropane	0.138	0.142	0.147	0.149	0.140	0.125	0.142	0.128	0.157		0.141	7.07
105)	n-propylbenzene	3.651	3.410	3.621	3.607	3.538	3.600	3.611	3.742	3.799	4.092	3.667	4.98
106)	2-chlorotoluene	0.710	0.699	0.710	0.698	0.691	0.745	0.705	0.640	0.758	0.618	0.697	6.02
107)	4-chlorotoluene	2.155	2.145	2.148	2.123	2.075	2.241	2.155	2.522	2.272	2.524	2.236	7.21
108)	1,3,5-trimethylbenzene	2.669	2.590	2.612	2.649	2.626	2.587	2.675	2.641	2.743	2.931	2.672	3.81
109)	tert-butylbenzene	2.363	2.140	2.324	2.410	2.391	2.408	2.414	2.315	2.371	2.528	2.367	4.18
110)	1,2,4-trimethylbenzene	2.667	2.553	2.640	2.679	2.632	2.720	2.698	2.710	2.784	3.387	2.747	8.48
111)	sec-butylbenzene	3.457	3.294	3.479	3.513	3.457	3.395	3.484	3.494	3.601	3.567	3.474	2.46

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Initial Calibration Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICC8031
Lab FileID: C217767.D

112)	1,3-dichlorobenzene	1.373 1.320 1.365 1.373 1.327 1.346 1.383 1.372 1.416 1.633 1.391	6.43	
113)	p-isopropyltoluene	3.028 2.798 2.936 2.997 2.938 2.933 2.987 2.947 3.113 2.824 2.950	3.11	
114)	1,4-dichlorobenzene	1.344 1.352 1.345 1.345 1.300 1.398 1.354 1.461 1.414	1.368 3.51	
115)	benzyl chloride	1.175 1.118 1.160 1.216 1.123 1.211 1.142 1.518 1.193 1.295 1.215	9.76	
116)	1,2-dichlorobenzene	1.272 1.223 1.265 1.299 1.250 1.205 1.278 1.315 1.307	1.268 2.96	
117)	n-butylbenzene	1.565 1.485 1.581 1.590 1.539 1.352 1.570 1.459 1.639 1.600 1.538	5.48	
118)	hexachloroethane	0.384 0.375 0.410 0.427 0.430 0.361 0.436	0.414 0.405 6.82	
119)	1,2-dibromo-3-chloropropane	0.096 0.112 0.110 0.118 0.107	0.110 0.105 0.108 6.45	
120)	1,3,5-trichlorobenzene	1.081 1.045 1.088 1.123 1.085 1.004 1.125 1.085 1.113 1.011 1.076	4.02	
121)	nitrobenzene	0.046	0.042 0.048 0.042 0.044 0.038 0.043 8.42	
122)	2-ethylhexyl acrylate	**This compound does not meet initial calibration criteria		
		0.501	0.612 0.742 0.807 0.868 0.531 0.677 22.31	
		----- Linear regression ----- Coefficient = 0.9958		
		Response Ratio = -0.00881 + 0.84560 *A		
123)	1,2,4-trichlorobenzene	0.834 0.759 0.861 0.900 0.869 0.775 0.908 0.837 0.883 0.873 0.850	5.86	
124)	hexachlorobutadiene	0.500 0.477 0.507 0.513 0.499 0.450 0.494 0.483 0.519 0.402 0.484	7.25	
125)	naphthalene	1.684 1.511 1.729 1.919 1.799 1.507 1.814 1.617 1.692 1.715 1.699	7.65	
126)	1,2,3-trichlorobenzene	0.743 0.694 0.760 0.801 0.768 0.662 0.798 0.795 0.752 0.695 0.747	6.49	
127)	2-methylnaphthalene	0.565	0.759 0.989 0.954 1.005 0.658 0.822 22.83	
		----- Linear regression ----- Coefficient = 0.9981		
		Response Ratio = -0.02350 + 1.00204 *A		
128)	pentafluorobenzene(a)	-----ISTD-----		
129)	allyl chloride	0.304 0.297 0.312 0.325 0.334 0.279 0.330 0.279 0.306	0.307 6.61	
130)	1,4-dichlorobenzene-d	-----ISTD-----		
131)	4-ethyltoluene	2.981 3.549 2.937 2.996 2.958 2.995 2.969 3.122 3.142	3.072 6.27	
132)	1,4-diethylbenzene	1.611 1.868 1.591 1.694 1.677 1.745 1.695 1.823 1.741	1.716 5.27	
133)	1,2,4,5-tetramethylbenzene	2.585 2.904 2.600 2.745 2.749 2.765 2.784 3.028 2.715	2.764 4.98	

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

MCS8031.M Mon May 08 14:59:51 2017 C

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Initial Calibration Verification

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICV8031
 Lab FileID: C217772.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\c217001-218000\C217772.D Vial: 14
 Acq On : 28 Apr 2017 11:18 pm Operator: SushilaY
 Sample : ICV8031-50 Inst : MSC
 Misc : MS14914,VC8031,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\MCS8031.M (RTE Integrator)
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Mon May 08 14:35:58 2017
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	Tert Butyl Alcohol-d9	1.000	1.000	0.0	99	0.00	8.07
2 M	ethanol			-----NA-----			
3 M	tertiary butyl alcohol	1.242	1.209	2.7	97	0.00	8.21
4	1,4-dioxane	0.082	0.090	-9.8	101	0.00	12.45
5 I	pentafluorobenzene	1.000	1.000	0.0	110	0.00	10.76
6 M	chlorodifluoromethane	0.132	0.351	-165.9#	261#	0.00	3.98
7 M	dichlorodifluoromethane	0.703	0.637	9.4	101	0.00	3.95
8 M	chloromethane	0.686	0.621	9.5	103	0.00	4.36
9 M	vinyl chloride	0.771	0.688	10.8	101	0.00	4.63
10	1,3-Butadiene	0.487	0.339	30.4#	73	0.00	4.70
11 M	bromomethane	0.349	0.326	6.6	104	0.00	5.39
12 M	chloroethane	0.383	0.368	3.9	108	0.00	5.60
13	vinyl bromide	0.396	0.419	-5.8	118	0.00	6.01
14 M	trichlorofluoromethane	0.673	0.633	5.9	99	0.00	6.11
15 M	ethyl ether	0.225	0.252	-12.0	111	0.00	6.65
16 m	2-chloropropane	0.756	0.775	-2.5	113	0.00	6.88
17 M	acrolein	0.054	0.052	3.7	91	0.00	7.01
18	freon 113	0.332	0.380	-14.5	122	0.00	7.10
19 M	1,1-dichloroethene	0.709	0.679	4.2	107	0.00	7.15
20 M	acetone	0.078	0.080	-2.6	99	0.00	7.27
21 M	acetonitrile	0.030	0.112	-273.3#	387#	0.00	7.83
22 M	iodomethane	0.704	0.722	-2.6	113	0.00	7.49
23 M	carbon disulfide	1.420	1.551	-9.2	120	0.00	7.62
24 M	methylene chloride	0.489	0.468	4.3	108	0.00	8.08
25 M	methyl acetate	0.173	0.193	-11.6	108	0.00	7.84
26 M	methyl tert butyl ether	1.143	1.172	-2.5	108	0.00	8.47
27 M	trans-1,2-dichloroethene	0.673	0.700	-4.0	108	0.00	8.54
28	hexane	0.742	0.689	7.1	110	0.00	8.91
29 M	di-isopropyl ether	1.469	1.543	-5.0	112	0.00	9.24
30 M	ethyl tert-butyl ether	1.470	1.500	-2.0	108	0.00	9.80
31 M	1,1-dichloroethane	0.843	0.858	-1.8	108	0.00	9.28
32 M	chloroprene	0.722	0.777	-7.6	113	0.00	9.39
33 M	acrylonitrile	0.083	0.104	-25.3	116	0.00	8.56
34 M	vinyl acetate	0.057	0.064	-12.3	118	0.00	9.29
35	2-butanone	0.031	0.035	-12.9	101	0.00	10.15
36 M	ethyl acetate	0.037	0.038	-2.7	105	0.00	10.17
37 M	2,2-dichloropropane	0.683	0.655	4.1	108	0.00	10.14
38 M	cis-1,2-dichloroethene	0.563	0.548	2.7	113	0.00	10.16
39 m	methyl acrylate	0.037	0.041	-10.8	105	0.00	10.26
40 M	propionitrile	0.036	0.039	-8.3	104	0.00	10.28
41 M	bromochloromethane	0.206	0.211	-2.4	105	0.00	10.51

Initial Calibration Verification

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICV8031
 Lab FileID: C217772.D

		True	Calc.	% Drift			
42 M	tetrahydrofuran	50.000	49.440	1.1	101	0.00	10.55
		AvgRF	CCRF	% Dev			
43 M	chloroform	0.893	0.842	5.7	110	0.00	10.59
44 m	t-butyl formate	0.235	0.216	8.1	83	0.00	10.61
45 S	dibromofluoromethane (s)	0.484	0.474	2.1	108	0.00	10.81
46 M	methacrylonitrile	0.110	0.121	-10.0	106	0.00	10.48
47	cyclohexane	0.857	0.749	12.6	100	0.00	10.88
48 M	1,1,1-trichloroethane	0.739	0.719	2.7	107	0.00	10.83
49	1,1-dichloropropene	0.646	0.653	-1.1	109	0.00	11.03
50	carbon tetrachloride	0.623	0.618	0.8	105	0.00	11.04
51	tert-amyl alcohol	0.020	0.018	10.0	102	0.00	11.22
52	isobutyl alcohol	0.014	0.013	7.1	99	0.00	11.11
53 I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	11.72
54 S	1,2-dichloroethane-d4 (s)	0.271	0.257	5.2	105	0.00	11.26
55	isopropyl acetate	0.038	0.040	-5.3	103	0.00	11.27
56	2,2,4-trimethylpentane	1.324	1.361	-2.8	113	0.00	11.28
57	tert-amyl methyl ether	0.848	0.831	2.0	106	0.00	11.34
58 M	benzene	1.149	1.161	-1.0	111	0.00	11.31
59 M	heptane	0.224	0.253	-12.9	123	0.00	11.48
60 M	1,2-dichloroethane	0.302	0.302	0.0	106	0.00	11.35
61	n-butyl alcohol	0.005	0.006#	-20.0	99	0.00	11.89
62	ethyl acrylate	0.188	0.189	-0.5	102	0.00	12.08
63 M	trichloroethene	0.286	0.288	-0.7	113	0.00	12.05
64 M	2-chloroethyl vinyl ether	0.015	0.017	-13.3	113	0.00	12.87
65	2-nitropropane	0.047	0.044	6.4	103	0.00	12.86
66 M	methylcyclohexane	0.574	0.566	1.4	107	0.00	12.23
67 M	methyl methacrylate	0.045	0.049	-8.9	106	0.00	12.35
68 M	1,2-dichloropropane	0.268	0.282	-5.2	113	0.00	12.33
69 M	dibromomethane	0.126	0.136	-7.9	112	0.00	12.49
70 M	bromodichloromethane	0.346	0.351	-1.4	108	0.00	12.63
71	epichlorohydrin	0.017	0.017	0.0	105	0.00	13.00
72 M	cis-1,3-dichloropropene	0.419	0.437	-4.3	109	0.00	13.07
73 M	4-methyl-2-pentanone	0.073	0.072	1.4	103	0.00	13.16
74 M	3-methyl-1-butanol	0.009	0.009#	0.0	96	0.00	13.21
75 I	chlorobenzene-d5	1.000	1.000	0.0	108	0.00	14.76
76 S	toluene-d8 (s)	1.337	1.361	-1.8	107	0.00	13.33
77	toluene	0.799	0.810	-1.4	111	0.00	13.40
78	ethyl methacrylate	0.292	0.295	-1.0	103	0.00	13.60
79	trans-1,3-dichloropropene	0.389	0.407	-4.6	107	0.00	13.62
80	1,1,2-trichloroethane	0.174	0.181	-4.0	107	0.00	13.82
81 M	2-hexanone	0.074	0.073	1.4	103	0.00	13.98
82 M	tetrachloroethene	0.319	0.340	-6.6	118	0.00	13.95
83 M	1,3-dichloropropane	0.368	0.382	-3.8	108	0.00	13.99
84 M	butyl acetate	0.142	0.144	-1.4	108	0.00	14.04
85 m	3,3-dimethyl-1-butanol	0.023	0.023	0.0	97	0.00	14.15
86 M	dibromochloromethane	0.254	0.265	-4.3	106	0.00	14.24
87 M	1,2-dibromoethane	0.203	0.210	-3.4	105	0.00	14.38
88 M	n-butyl ether	1.384	1.411	-2.0	111	0.00	14.69
89 M	chlorobenzene	0.850	0.890	-4.7	111	0.00	14.78
90 M	1,1,1,2-tetrachloroethane	0.314	0.318	-1.3	106	0.00	14.85
91 M	ethylbenzene	1.511	1.542	-2.1	110	0.00	14.83
92 M	m,p-xylene	0.601	0.615	-2.3	110	0.00	14.92
93 M	o-xylene	1.313	1.306	0.5	108	0.00	15.30
94 M	styrene	0.987	1.019	-3.2	109	0.00	15.31
95	butyl acrylate	0.482	0.481	0.2	104	0.00	15.14

6.10.2
6

Initial Calibration Verification

Job Number: JC45628
 Account: TRCNYNBYB TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICV8031
 Lab FileID: C217772.D

96	M	bromoform	0.153	0.156	-2.0	103	0.00	15.57
97		isopropylbenzene	1.665	1.663	0.1	107	0.00	15.59
98		cis-1,4-dichloro-2-butene	0.109	0.101	7.3	101	0.00	15.68
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	16.78
100	S	4-bromofluorobenzene (s)	0.711	0.711	0.0	106	0.00	15.79
101	M	bromobenzene	0.645	0.665	-3.1	106	0.00	15.96
102	M	1,1,2,2-tetrachloroethane	0.537	0.521	3.0	98	0.00	15.89
103	M	trans-1,4-dichloro-2-bute	0.162	0.162	0.0	101	0.00	15.92
104	M	1,2,3-trichloropropane	0.141	0.143	-1.4	101	0.00	15.95
105	M	n-propylbenzene	3.667	3.639	0.8	107	0.00	15.94
106	M	2-chlorotoluene	0.697	0.720	-3.3	109	0.00	16.09
107	M	4-chlorotoluene	2.236	2.151	3.8	107	0.00	16.17
108	M	1,3,5-trimethylbenzene	2.672	2.772	-3.7	111	0.00	16.07
109	M	tert-butylbenzene	2.367	2.384	-0.7	105	0.00	16.37
110	M	1,2,4-trimethylbenzene	2.747	2.752	-0.2	109	0.00	16.41
111	M	sec-butylbenzene	3.474	3.526	-1.5	106	0.00	16.55
112	M	1,3-dichlorobenzene	1.391	1.373	1.3	106	0.00	16.73
113	M	p-isopropyltoluene	2.950	2.972	-0.7	105	0.00	16.64
114	M	1,4-dichlorobenzene	1.368	1.357	0.8	107	0.00	16.80
115		benzyl chloride	1.215	1.034	14.9	90	0.00	16.90
116	M	1,2-dichlorobenzene	1.268	1.298	-2.4	106	0.00	17.13
117	M	n-butylbenzene	1.538	1.555	-1.1	103	0.00	16.99
118		hexachloroethane	0.405	0.434	-7.2	108	0.00	17.33
119	M	1,2-dibromo-3-chloropropa	0.108	0.109	-0.9	97	0.00	17.76
120	m	1,3,5-trichlorobenzene	1.076	1.054	2.0	99	0.00	17.88
121		nitrobenzene	0.043	0.041	4.7	89	0.00	17.94

	True	Calc.	% Drift				
122	2-ethylhexyl acrylate	10.000	9.827	1.7	112	0.00	18.31

	AvgRF	CCRF	% Dev				
123	M 1,2,4-trichlorobenzene	0.850	0.878	-3.3	103	0.00	18.42
124	M hexachlorobutadiene	0.484	0.502	-3.7	103	0.00	18.49
125	M naphthalene	1.699	1.797	-5.8	99	0.00	18.66
126	M 1,2,3-trichlorobenzene	0.747	0.779	-4.3	103	0.00	18.87

	True	Calc.	% Drift				
127	M 2-methylnaphthalene	25.000	25.484	-1.9	104	0.00	19.66

	AvgRF	CCRF	% Dev				
128	pentafluorobenzene(a)	1.000	1.000	0.0	146	0.00	10.76

129 allyl chloride -----NA-----

130	1,4-dichlorobenzene-d4(a)	1.000	1.000	0.0	124	0.00	16.78
-----	---------------------------	-------	-------	-----	-----	------	-------

131 4-ethyltoluene -----NA-----

132 1,4-diethylbenzene -----NA-----

133 1,2,4,5-tetramethylbenzen -----NA-----

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 C217767.D MCS8031.M Mon May 08 14:41:25 2017 C

Initial Calibration Verification

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8031-ICV8031
Lab FileID: C217773.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\C217773.D Vial: 15
 Acq On : 28 Apr 2017 11:47 pm Operator: SushilaY
 Sample : ICV8031-50 Inst : MSC
 Misc : MS14914,VC8031,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MCS8031.M (RTE Integrator)
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Mon May 01 09:39:54 2017
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	Tert Butyl Alcohol-d9	1.000	1.000	0.0	92	0.00	8.06
5 I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	10.76
21 M	acetonitrile	0.030	0.034	-13.3	108	0.00	7.84
45 S	dibromofluoromethane (s)	0.484	0.477	1.4	100	0.00	10.81
53 I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00	11.72
54 S	1,2-dichloroethane-d4 (s)	0.271	0.250	7.7	94	0.00	11.26
75 I	chlorobenzene-d5	1.000	1.000	0.0	107	0.00	14.76
76 S	toluene-d8 (s)	1.337	1.297	3.0	101	0.00	13.33
99 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	16.78
100 S	4-bromofluorobenzene (s)	0.711	0.719	-1.1	106	0.00	15.79

(#) = Out of Range
 C217767.D MCS8031.M

SPCC's out = 0 CCC's out = 0
 Mon May 01 09:45:20 2017 C

Initial Calibration Verification

Job Number: JC45628
 Account: TRCNYNBYB TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8033-ICV8031
 Lab FileID: C217803.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\c217001-218000\C217803.D Vial: 13
 Acq On : 29 Apr 2017 8:02 pm Operator: Sushilay
 Sample : ICV8031-50 Inst : MSC
 Misc : MS14914,VC8033,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\MCS8031.M (RTE Integrator)
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Mon May 08 14:35:58 2017
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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	Tert Butyl Alcohol-d9	1.000	1.000	0.0	81	0.00	8.06
2 M	ethanol			-----NA-----			
3 M	tertiary butyl alcohol			-----NA-----			
4	1,4-dioxane			-----NA-----			
5 I	pentafluorobenzene	1.000	1.000	0.0	78	0.00	10.76
6 M	chlorodifluoromethane			-----NA-----			
7 M	dichlorodifluoromethane			-----NA-----			
8 M	chloromethane			-----NA-----			
9 M	vinyl chloride			-----NA-----			
10	1,3-Butadiene			-----NA-----			
11 M	bromomethane			-----NA-----			
12 M	chloroethane			-----NA-----			
13	vinyl bromide			-----NA-----			
14 M	trichlorofluoromethane			-----NA-----			
15 M	ethyl ether			-----NA-----			
16 m	2-chloropropane			-----NA-----			
17 M	acrolein			-----NA-----			
18	freon 113			-----NA-----			
19 M	1,1-dichloroethene			-----NA-----			
20 M	acetone			-----NA-----			
21 M	acetonitrile			-----NA-----			
22 M	iodomethane			-----NA-----			
23 M	carbon disulfide			-----NA-----			
24 M	methylene chloride			-----NA-----			
25 M	methyl acetate			-----NA-----			
26 M	methyl tert butyl ether			-----NA-----			
27 M	trans-1,2-dichloroethene			-----NA-----			
28	hexane			-----NA-----			
29 M	di-isopropyl ether			-----NA-----			
30 M	ethyl tert-butyl ether			-----NA-----			
31 M	1,1-dichloroethane			-----NA-----			
32 M	chloroprene			-----NA-----			
33 M	acrylonitrile			-----NA-----			
34 M	vinyl acetate			-----NA-----			
35	2-butanone			-----NA-----			
36 M	ethyl acetate			-----NA-----			
37 M	2,2-dichloropropane			-----NA-----			
38 M	cis-1,2-dichloroethene			-----NA-----			
39 m	methyl acrylate			-----NA-----			
40 M	propionitrile			-----NA-----			
41 M	bromochloromethane			-----NA-----			

Initial Calibration Verification

Job Number: JC45628
Account: TRCNYNBY TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8033-ICV8031
Lab FileID: C217803.D

	True	Calc.	% Drift			
42 M	tetrahydrofuran		NA			
	AvgRF	CCRF	% Dev			
43 M	chloroform		NA			
44 m	t-butyl formate		NA			
45 S	dibromofluoromethane (s)	0.484	0.503	-3.9	81	0.00 10.81
46 M	methacrylonitrile		NA			
47	cyclohexane		NA			
48 M	1,1,1-trichloroethane		NA			
49	1,1-dichloropropene		NA			
50	carbon tetrachloride		NA			
51	tert-amyl alcohol		NA			
52	isobutyl alcohol		NA			
53 I	1,4-difluorobenzene	1.000	1.000	0.0	81	0.00 11.72
54 S	1,2-dichloroethane-d4 (s)	0.271	0.276	-1.8	83	0.00 11.26
55	isopropyl acetate		NA			
56	2,2,4-trimethylpentane		NA			
57	tert-amyl methyl ether		NA			
58 M	benzene		NA			
59 M	heptane		NA			
60 M	1,2-dichloroethane		NA			
61	n-butyl alcohol		NA			
62	ethyl acrylate		NA			
63 M	trichloroethene		NA			
64 M	2-chloroethyl vinyl ether		NA			
65	2-nitropropane		NA			
66 M	methylcyclohexane		NA			
67 M	methyl methacrylate		NA			
68 M	1,2-dichloropropane		NA			
69 M	dibromomethane		NA			
70 M	bromodichloromethane		NA			
71	epichlorohydrin		NA			
72 M	cis-1,3-dichloropropene		NA			
73 M	4-methyl-2-pentanone		NA			
74 M	3-methyl-1-butanol		NA			
75 I	chlorobenzene-d5	1.000	1.000	0.0	87	0.00 14.76
76 S	toluene-d8 (s)	1.337	1.311	1.9	83	0.00 13.33
77	toluene		NA			
78	ethyl methacrylate		NA			
79	trans-1,3-dichloropropene		NA			
80	1,1,2-trichloroethane		NA			
81 M	2-hexanone		NA			
82 M	tetrachloroethene		NA			
83 M	1,3-dichloropropane		NA			
84 M	butyl acetate		NA			
85 m	3,3-dimethyl-1-butanol		NA			
86 M	dibromochloromethane		NA			
87 M	1,2-dibromoethane		NA			
88 M	n-butyl ether		NA			
89 M	chlorobenzene		NA			
90 M	1,1,1,2-tetrachloroethane		NA			
91 M	ethylbenzene		NA			
92 M	m,p-xylene		NA			
93 M	o-xylene		NA			
94 M	styrene		NA			
95	butyl acrylate		NA			

6:10.4

6

Initial Calibration Verification

Job Number: JC45628
Account: TRCNYYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8033-ICV8031
Lab FileID: C217803.D

96	M	bromoform							-----NA-----
97		isopropylbenzene							-----NA-----
98		cis-1,4-dichloro-2-butene							-----NA-----
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	16.78	
100	S	4-bromofluorobenzene (s)	0.711	0.692	2.7	86	0.00	15.79	
101	M	bromobenzene							-----NA-----
102	M	1,1,2,2-tetrachloroethane							-----NA-----
103	M	trans-1,4-dichloro-2-bute							-----NA-----
104	M	1,2,3-trichloropropane							-----NA-----
105	M	n-propylbenzene							-----NA-----
106	M	2-chlorotoluene							-----NA-----
107	M	4-chlorotoluene							-----NA-----
108	M	1,3,5-trimethylbenzene							-----NA-----
109	M	tert-butylbenzene							-----NA-----
110	M	1,2,4-trimethylbenzene							-----NA-----
111	M	sec-butylbenzene							-----NA-----
112	M	1,3-dichlorobenzene							-----NA-----
113	M	p-isopropyltoluene							-----NA-----
114	M	1,4-dichlorobenzene							-----NA-----
115		benzyl chloride							-----NA-----
116	M	1,2-dichlorobenzene							-----NA-----
117	M	n-butylbenzene							-----NA-----
118		hexachloroethane							-----NA-----
119	M	1,2-dibromo-3-chloropropa							-----NA-----
120	m	1,3,5-trichlorobenzene							-----NA-----
121		nitrobenzene							-----NA-----
		-----	True	Calc.	% Drift	-----			
122		2-ethylhexyl acrylate							-----NA-----
		-----	AvgRF	CCRF	% Dev	-----			
123	M	1,2,4-trichlorobenzene							-----NA-----
124	M	hexachlorobutadiene							-----NA-----
125	M	naphthalene							-----NA-----
126	M	1,2,3-trichlorobenzene							-----NA-----
		-----	True	Calc.	% Drift	-----			
127	M	2-methylnaphthalene							-----NA-----
		-----	AvgRF	CCRF	% Dev	-----			
128		pentafluorobenzene(a)	1.000	1.000	0.0	104	0.00	10.76	
129		allyl chloride	0.307	0.312	-1.6	100	-0.01	7.83	
130		1,4-dichlorobenzene-d4(a)	1.000	1.000	0.0	104	0.00	16.78	
131		4-ethyltoluene	3.072	3.048	0.8	106	0.00	16.03	
132		1,4-diethylbenzene	1.716	1.777	-3.6	109	-0.03	16.95	
133		1,2,4,5-tetramethylbenzen	2.764	2.865	-3.7	108	0.00	17.59	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
C217767.D MCS8031.M Mon May 08 15:29:54 2017 C

Continuing Calibration Summary

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8081-CC8031
 Lab FileID: C218886.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\C\vc8081\C218886.D Vial: 1
 Acq On : 22 Jun 2017 8:07 am Operator: SushilaY
 Sample : cc8031-20 Inst : MSC
 Misc : MS17218,VC8081,5,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MCS8031.M (RTE Integrator)
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Tue May 02 09:11:51 2017
 Response via : Multiple Level Calibration

Min. RRF : 0.010 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	Tert Butyl Alcohol-d9	1.000	1.000	0.0	112	0.00	8.06
2 M	ethanol			-----NA-----			
3 M	tertiary butyl alcohol	1.242	1.266	-1.9	109	0.00	8.21
4	1,4-dioxane	0.082	0.091	-11.0	108	-0.02	12.44
5 I	pentafluorobenzene	1.000	1.000	0.0	127	-0.02	10.74
6 M	chlorodifluoromethane	0.132	0.633	-379.5#	625#	0.04	4.01
7 M	dichlorodifluoromethane	0.703	0.724	-3.0	128	0.05	3.99
8 M	chloromethane	0.686	0.777	-13.3	148	0.00	4.37
9 M	vinyl chloride	0.771	0.783	-1.6	130	0.02	4.65
10	1,3-Butadiene	0.487	0.399	18.1	98	0.00	4.70
11 M	bromomethane	0.349	0.469	-34.4#	167	0.00	5.40
12 M	chloroethane	0.383	0.424	-10.7	137	-0.01	5.59
13	vinyl bromide	0.396	0.414	-4.5	129	-0.02	5.99
14 M	trichlorofluoromethane	0.673	0.818	-21.5#	151	0.00	6.11
15 M	ethyl ether	0.225	0.192	14.7	111	-0.02	6.63
16 m	2-chloropropane	0.756	0.902	-19.3	150	0.00	6.87
17 M	acrolein	0.054	0.002#	96.3#	5#	-0.06	6.94
18	freon 113	0.332	0.313	5.7	116	0.00	7.09
19 M	1,1-dichloroethene	0.709	0.731	-3.1	133	0.00	7.14
20 M	acetone	0.078	0.075	3.8	116	-0.02	7.25
21 M	acetonitrile	0.030	0.031	-3.3	136	0.00	7.83
22 M	iodomethane	0.704	0.705	-0.1	128	-0.01	7.48
23 M	carbon disulfide	1.420	1.573	-10.8	146	0.00	7.61
24 M	methylene chloride	0.489	0.457	6.5	124	-0.01	8.07
25 M	methyl acetate	0.173	0.182	-5.2	138	0.00	7.83
26 M	methyl tert butyl ether	1.143	1.123	1.7	123	0.00	8.46
27 M	trans-1,2-dichloroethene	0.673	0.712	-5.8	133	-0.02	8.52
28	hexane	0.742	0.761	-2.6	137	-0.02	8.89
29 M	di-isopropyl ether	1.469	1.585	-7.9	135	0.00	9.23
30 M	ethyl tert-butyl ether	1.470	1.475	-0.3	126	0.00	9.79
31 M	1,1-dichloroethane	0.843	0.848	-0.6	123	-0.02	9.26
32 M	chloroprene	0.722	0.821	-13.7	141	-0.01	9.38
33 M	acrylonitrile	0.083	0.082	1.2	149	0.00	8.55
34 M	vinyl acetate	0.057	0.049	14.0	114	-0.02	9.27
35	2-butanone	0.031	0.028	9.7	108	-0.01	10.13
36 M	ethyl acetate	0.035	0.045	-28.6#	140	0.00	10.16
37 M	2,2-dichloropropane	0.683	0.848	-24.2#	158	0.00	10.13
38 M	cis-1,2-dichloroethene	0.563	0.483	14.2	117	-0.01	10.14
39 m	methyl acrylate	0.032	0.031	3.1	113	0.00	10.25
40 M	propionitrile	0.036	0.031	13.9	105	-0.01	10.27
41 M	bromochloromethane	0.206	0.181	12.1	108	-0.02	10.49

Continuing Calibration Summary

Job Number: JC45628
 Account: TRCNYNBYB TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8081-CC8031
 Lab FileID: C218886.D

	True	Calc.	% Drift			
42 M tetrahydrofuran	20.000	19.214	3.9	125	0.00	10.54
	AvgRF	CCRF	% Dev			
43 M chloroform	0.893	0.798	10.6	123	-0.02	10.57
44 m t-butyl formate	0.235	0.205	12.8	115	-0.01	10.59
45 S dibromofluoromethane (s)	0.484	0.416	14.0	111	-0.02	10.79
46 M methacrylonitrile	0.110	0.099	10.0	103	0.00	10.47
47 cyclohexane	0.857	0.770	10.2	117	-0.01	10.87
48 M 1,1,1-trichloroethane	0.739	0.836	-13.1	142	-0.02	10.81
49 1,1-dichloropropene	0.646	0.684	-5.9	132	-0.02	11.01
50 carbon tetrachloride	0.623	0.701	-12.5	140	-0.01	11.02
51 tert-amyl alcohol	0.020	0.019	5.0	139	-0.01	11.21
52 isobutyl alcohol	0.014	0.014	0.0	134	0.00	11.11
53 I 1,4-difluorobenzene	1.000	1.000	0.0	121	-0.02	11.70
54 S 1,2-dichloroethane-d4 (s)	0.271	0.273	-0.7	122	-0.02	11.24
55 isopropyl acetate	0.038	0.038	0.0	123	-0.02	11.25
56 2,2,4-trimethylpentane	1.324	1.353	-2.2	122	-0.02	11.26
57 tert-amyl methyl ether	0.848	0.813	4.1	118	-0.01	11.33
58 M benzene	1.149	1.186	-3.2	125	-0.02	11.29
59 M heptane	0.224	0.275	-22.8#	142	-0.01	11.46
60 M 1,2-dichloroethane	0.302	0.327	-8.3	132	-0.02	11.33
61 n-butyl alcohol	0.005	0.005#	0.0	112	0.00	11.89
62 ethyl acrylate	0.188	0.205	-9.0	134	-0.01	12.07
63 M trichloroethene	0.286	0.294	-2.8	124	-0.02	12.03
64 M 2-chloroethyl vinyl ether	0.015	0.020	-33.3#	160	-0.01	12.86
65 2-nitropropane	0.047	0.055	-17.0	145	-0.01	12.85
66 M methylcyclohexane	0.574	0.595	-3.7	126	-0.02	12.22
67 M methyl methacrylate	0.045	0.048	-6.7	122	0.00	12.34
68 M 1,2-dichloropropane	0.268	0.284	-6.0	128	-0.02	12.31
69 M dibromomethane	0.126	0.118	6.3	108	-0.02	12.48
70 M bromodichloromethane	0.346	0.349	-0.9	119	-0.02	12.61
71 epichlorohydrin	0.017	0.016	5.9	112	-0.01	12.98
72 M cis-1,3-dichloropropene	0.419	0.435	-3.8	119	-0.01	13.06
73 M 4-methyl-2-pentanone	0.073	0.069	5.5	115	-0.01	13.16
74 M 3-methyl-1-butanol	0.009	0.009#	0.0	111	0.00	13.20
75 I chlorobenzene-d5	1.000	1.000	0.0	119	-0.01	14.75
76 S toluene-d8 (s)	1.337	1.406	-5.2	124	-0.02	13.32
77 toluene	0.799	0.878	-9.9	131	-0.01	13.39
78 ethyl methacrylate	0.292	0.295	-1.0	117	-0.01	13.59
79 trans-1,3-dichloropropene	0.389	0.422	-8.5	123	-0.02	13.61
80 1,1,2-trichloroethane	0.174	0.173	0.6	117	-0.02	13.81
81 M 2-hexanone	0.074	0.076	-2.7	128	0.00	13.97
82 M tetrachloroethene	0.319	0.348	-9.1	132	-0.02	13.94
83 M 1,3-dichloropropane	0.368	0.381	-3.5	120	-0.02	13.98
84 M butyl acetate	0.142	0.148	-4.2	120	-0.01	14.04
85 m 3,3-dimethyl-1-butanol	0.023	0.022	4.3	114	0.00	14.14
86 M dibromochloromethane	0.254	0.252	0.8	113	-0.01	14.23
87 M 1,2-dibromoethane	0.203	0.192	5.4	109	-0.02	14.36
88 M n-butyl ether	1.384	1.617	-16.8	139	-0.01	14.67
89 M chlorobenzene	0.850	0.926	-8.9	125	-0.02	14.77
90 M 1,1,1,2-tetrachloroethane	0.314	0.310	1.3	113	-0.02	14.83
91 M ethylbenzene	1.511	1.760	-16.5	137	-0.01	14.81
92 M m,p-xylene	0.601	0.684	-13.8	133	-0.01	14.91
93 M o-xylene	1.313	1.406	-7.1	128	0.00	15.29
94 M styrene	0.987	1.023	-3.6	121	0.00	15.30
95 butyl acrylate	0.482	0.464	3.7	110	0.00	15.13

6:10.5
6

Continuing Calibration Summary

Job Number: JC45628
 Account: TRCNYNBYB TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VC8081-CC8031
 Lab FileID: C218886.D

96 M	bromoform	0.153	0.144	5.9	108	-0.01	15.56
97	isopropylbenzene	1.665	1.826	-9.7	129	0.00	15.58
98	cis-1,4-dichloro-2-butene	0.109	0.094	13.8	103	-0.01	15.67
99 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	16.77
100 S	4-bromofluorobenzene (s)	0.711	0.732	-3.0	112	0.00	15.78
101 M	bromobenzene	0.645	0.697	-8.1	113	-0.01	15.94
102 M	1,1,2,2-tetrachloroethane	0.537	0.521	3.0	108	0.00	15.88
103 M	trans-1,4-dichloro-2-bute	0.162	0.191	-17.9	125	-0.01	15.90
104 M	1,2,3-trichloropropane	0.141	0.142	-0.7	105	0.00	15.94
105 M	n-propylbenzene	3.667	4.340	-18.4	129	0.00	15.93
106 M	2-chlorotoluene	0.697	0.799	-14.6	122	0.00	16.07
107 M	4-chlorotoluene	2.236	2.456	-9.8	124	0.00	16.16
108 M	1,3,5-trimethylbenzene	2.672	3.027	-13.3	125	0.00	16.06
109 M	tert-butylbenzene	2.367	2.631	-11.2	122	0.00	16.36
110 M	1,2,4-trimethylbenzene	2.747	3.110	-13.2	127	-0.01	16.39
111 M	sec-butylbenzene	3.474	4.045	-16.4	126	0.00	16.54
112 M	1,3-dichlorobenzene	1.391	1.489	-7.0	118	0.00	16.72
113 M	p-isopropyltoluene	2.950	3.387	-14.8	125	0.00	16.63
114 M	1,4-dichlorobenzene	1.368	1.461	-6.8	117	0.00	16.79
115	benzyl chloride	1.215	1.214	0.1	113	0.00	16.89
116 M	1,2-dichlorobenzene	1.268	1.333	-5.1	114	0.00	17.12
117 M	n-butylbenzene	1.538	1.786	-16.1	122	0.00	16.97
118	hexachloroethane	0.405	0.463	-14.3	122	0.00	17.32
119 M	1,2-dibromo-3-chloropropa	0.108	0.099	8.3	97	0.00	17.75
120 m	1,3,5-trichlorobenzene	1.076	1.312	-21.9#	130	0.00	17.88
121	nitrobenzene	0.043	0.052	-20.9#	136	0.00	17.93
----- True		Calc.	% Drift	-----			
122	2-ethylhexyl acrylate	4.000	4.223	-5.6	138	0.00	18.30
----- AvgRF		CCRF	% Dev	-----			
123 M	1,2,4-trichlorobenzene	0.850	0.993	-16.8	125	0.00	18.41
124 M	hexachlorobutadiene	0.484	0.641	-32.4#	137	0.00	18.48
125 M	naphthalene	1.699	1.874	-10.3	117	-0.01	18.65
126 M	1,2,3-trichlorobenzene	0.747	0.866	-15.9	123	0.00	18.86
----- True		Calc.	% Drift	-----			
127 M	2-methylnaphthalene	10.000	12.288	-22.9#	159	0.00	19.65
----- AvgRF		CCRF	% Dev	-----			
128	pentafluorobenzene(a)	1.000	1.000	0.0	165	-0.02	10.74
129	allyl chloride			-----NA-----			
130	1,4-dichlorobenzene-d4(a)	1.000	1.000	0.0	129	0.00	16.77
131	4-ethyltoluene			-----NA-----			
132	1,4-diethylbenzene			-----NA-----			
133	1,2,4,5-tetramethylbenzen			-----NA-----			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 C217766.D MCS8031.M Fri Jun 23 11:13:28 2017

6.10.5
6

Initial Calibration Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICC10106
Lab FileID: D250409.D

Response Factor Report MSD

Method : C:\MSDCHEM\1\METHODS\MD10106.M (RTE Integrator)
Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
Last Update : Wed Jun 14 16:21:29 2017
Response via : Initial Calibration

Calibration Files

1 =d250403.D 4 =d250406.D 100 =d250410.D 50 =d250409.D
20 =d250408.D 200 =d250411.D 8 =d250407.D 0.5 =d250404.D
2 =d250402.D 0.2 =d250405.D = =

Compound

Compound	1	4	100	50	20	200	8	0.5	2	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9 -----ISTD-----												
2) ethanol											0.000	-1.00
3) tertiary butyl alcohol												
	1.303	1.343	1.412	1.334	1.363	1.306		1.110		1.310		7.28
4) 1,4-dioxane											0.128	16.17
	0.091	0.140	0.140	0.142	0.139	0.116						
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane											0.675	5.00
	0.637	0.688	0.741	0.677	0.652	0.672		0.656				
7) dichlorodifluoromethane											0.854	7.53
	0.732	0.817	0.886	0.925	0.859	0.826	0.858	0.931				
8) chloromethane											0.846	5.18
	0.815	0.822	0.898	0.928	0.868	0.827	0.826	0.791	0.837			
9) 1,3-butadiene											0.592	11.46
	0.496	0.660	0.681	0.579	0.633	0.537		0.561				
10) vinyl chloride											0.991	5.85
	0.955	0.991	1.006	1.069	1.017	0.902	1.010	0.912	1.055			
11) bromomethane											0.654	9.21
	0.624	0.656	0.733	0.744	0.670	0.547	0.641	0.610	0.655			
12) chloroethane											0.470	9.79
	0.412	0.447	0.528	0.528	0.465	0.507	0.446	0.424				
13) trichlorofluoromethane											1.151	6.46
	1.025	1.092	1.215	1.252	1.141	1.151	1.120	1.213				
14) vinyl bromide											0.644	8.34
	0.563	0.639	0.710	0.717	0.654	0.666	0.627	0.568	0.651			
15) ethyl ether											0.216	7.48
	0.196	0.208	0.229	0.241	0.220	0.223	0.213	0.194				
16) 2-chloropropane											0.863	7.26
	0.986	0.816	0.853	0.877	0.795	0.806	0.844	0.935	0.852			
17) acrolein											0.087	14.69
	0.063	0.094	0.096	0.092	0.095	0.082						
18) freon 113											0.568	10.84
	0.475	0.521	0.627	0.654	0.589	0.604	0.560	0.513				
19) 1,1-dichloroethene											0.521	4.87
	0.552	0.493	0.543	0.551	0.495	0.518	0.495	0.526				
20) acetone											0.033	9.39
	0.028	0.036	0.036	0.034	0.035	0.031		0.033				
21) acetonitrile											0.077	5.79
	0.073	0.081	0.075	0.077	0.077	0.071	0.074	0.084				
22) iodomethane											1.066	5.81
	1.005	1.009	1.149	1.171	1.069	1.120	1.027	1.003	1.031	1.071		
23) carbon disulfide												

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Initial Calibration Summary

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICC10106
Lab FileID: D250409.D

	1.713	1.704	1.900	1.963	1.803	1.783	1.734	1.682	1.697	1.775	5.54
24)	methylene chloride										
	0.602	0.558	0.564	0.594	0.548	0.536	0.535	0.578	0.546	0.562	4.31
25)	methyl acetate										
	0.274	0.268	0.260	0.270	0.260	0.268		0.289		0.270	3.70
26)	methyl tert butyl ether										
	1.638	1.609	1.684	1.794	1.619	1.673	1.582	1.719	1.591	1.675	1.658
27)	trans-1,2-dichloroethene										
	0.555	0.471	0.476	0.508	0.460	0.453	0.466		0.497	0.486	6.89
28)	hexane										
	0.219	0.238	0.275	0.297	0.269	0.260	0.258		0.224	0.255	10.41
29)	di-isopropyl ether										
	1.482	1.442	1.609	1.705	1.554	1.580	1.513	1.465	1.426	1.594	1.537
30)	2-butanone										
	0.038	0.045	0.046	0.047	0.045	0.040		0.035		0.042	10.70
31)	1,1-dichloroethane										
	0.747	0.718	0.773	0.824	0.765	0.743	0.758	0.668	0.711	0.585	0.729
32)	chloroprene										
	0.524	0.550	0.673	0.703	0.635	0.642	0.588		0.509	0.603	11.81
33)	acrylonitrile										
	0.111	0.138	0.138	0.141	0.152	0.128				0.135	10.24
34)	vinyl acetate										
	0.087	0.085	0.080	0.088	0.064					0.081	12.15
35)	ethyl tert-butyl ether										
	1.646	1.630	1.805	1.905	1.697	1.786	1.632	1.543	1.588	1.628	1.686
36)	ethyl acetate										
	0.040	0.049	0.054	0.053	0.050	0.048				0.049	9.95
37)	2,2-dichloropropane										
	0.988	0.890	0.935	1.002	0.921	0.902	0.921	0.977	0.968	1.110	0.961
38)	cis-1,2-dichloroethene										
	0.545	0.519	0.524	0.553	0.519	0.501	0.512	0.623	0.509	0.732	0.554
39)	propionitrile										
	0.053	0.057	0.059	0.058	0.056	0.053		0.048		0.055	6.99
40)	methyl acrylate *This compound does not meet Initial Calibration criteria										
	0.059	0.059	0.055	0.060	0.041					0.055	14.59
41)	methacrylonitrile										
	0.137	0.159	0.164	0.162	0.158	0.146		0.106		0.147	13.92
42)	bromochloromethane										
	0.249	0.248	0.271	0.288	0.271	0.264	0.265		0.246	0.263	5.45
43)	tetrahydrofuran										
	0.138	0.144	0.159	0.134	0.193					0.153	15.82
44)	chloroform										
	0.926	0.827	0.820	0.869	0.818	0.791	0.823	1.126	0.828	0.870	11.92
45)	tert-Butyl Formate										
	0.292	0.334	0.400	0.407	0.355	0.405	0.342		0.322	0.357	11.97
46)	dibromofluoromethane (s)										
	0.456	0.457	0.448	0.455	0.453	0.443	0.457	0.450	0.460	0.453	0.453
47)	1,1,1-trichloroethane										
	0.875	0.842	0.987	1.043	0.932	0.980	0.900	0.817	0.821	0.730	0.893
48)	cyclohexane										
	0.887	0.827	0.991	1.041	0.945	0.969	0.886		0.807	0.919	8.86
49)	isobutyl alcohol *This compound does not meet Initial Calibration criteria										
	0.003	0.006	0.007	0.006	0.006	0.005				0.006	26.51
	----- Linear regression ----- Coefficient = 0.9994										
	Response Ratio = -0.00048 + 0.00635 *A										
50)	1,1-dichloropropene										
	0.555	0.547	0.587	0.621	0.587	0.568	0.554	0.549	0.526	0.561	0.565
51)	carbon tetrachloride										
	0.782	0.754	0.915	0.946	0.843	0.911	0.799	0.649	0.749	0.817	11.78

Initial Calibration Summary

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICC10106
Lab FileID: D250409.D

52)	tert-amyl alcohol	0.031	0.031	0.029	0.030	0.030	0.028	0.036	0.031	8.02			
53)	isopropyl acetate	0.097	0.106	0.107	0.103	0.106	0.094		0.102	5.46			
54) I	1,4-difluorobenzene	-----ISTD-----											
55)	1,2-dichloroethane-d4 (s)	0.354	0.357	0.355	0.357	0.346	0.370	0.359	0.352	0.353	0.357	0.356	1.78
56)	n-butyl alcohol	0.009	0.010	0.010	0.010	0.010	0.008	0.007	0.009	13.73			
57)	2,2,4-Trimethylpentane	1.143	1.767	1.825	1.412	1.733	1.292		1.529	18.62			
58)	benzene	1.293	1.226	1.315	1.400	1.299	1.278	1.292	1.278	1.216	1.312	1.291	3.94
59)	tert-amyl methyl ether	1.258	1.198	1.371	1.444	1.203	1.382	1.193	1.385	1.176	1.290	8.09	
60)	heptane	0.173	0.207	0.240	0.268	0.239	0.232	0.228	0.186	0.221	14.05		
61)	1,2-dichloroethane	0.421	0.417	0.433	0.463	0.437	0.430	0.425	0.379	0.415	0.424	5.24	
62)	ethyl acrylate	0.306	0.330	0.362	0.340	0.337	0.308		0.331	6.41			
63)	trichloroethene	0.313	0.319	0.340	0.357	0.335	0.334	0.331	0.311	0.285	0.325	6.38	
64)	2-chloroethyl vinyl ether	0.148	0.163	0.170	0.189	0.173	0.169	0.158	0.141	0.148	0.162	9.27	
65)	methyl methacrylate	0.076	0.089	0.095	0.086	0.091	0.070	0.055	0.080	17.66			
66)	methylcyclohexane	0.573	0.606	0.817	0.864	0.704	0.809	0.678	0.601	0.706	15.81		
67)	1,2-dichloropropane	0.304	0.317	0.323	0.344	0.328	0.320	0.329	0.307	0.304	0.320	4.20	
68)	dibromomethane	0.208	0.212	0.213	0.229	0.221	0.213	0.214	0.198	0.203	0.212	4.38	
69)	bromodichloromethane	0.421	0.441	0.469	0.489	0.461	0.467	0.452	0.433	0.427	0.414	0.447	5.40
70)	2-nitropropane	0.115	0.130	0.128	0.137	0.132	0.126	0.122	0.128	0.127	5.18		
71)	epichlorohydrin	0.021	0.033	0.033	0.035	0.035	0.033	0.032	0.028	0.031	15.06		
72)	cis-1,3-dichloropropene	0.521	0.516	0.538	0.577	0.550	0.533	0.527	0.505	0.489	0.450	0.521	6.65
73)	4-methyl-2-pentanone	0.114	0.124	0.130	0.135	0.127	0.129	0.119	0.118	0.125	5.86		
74)	isoamyl alcohol	0.008	0.012	0.011	0.010	0.011	0.009	0.007	0.010	17.90			
75) I	chlorobenzene-d5	-----ISTD-----											
76)	toluene-d8 (s)	1.160	1.177	1.196	1.178	1.222	1.187	1.215	1.163	1.163	1.173	1.183	1.82
77)	toluene	0.779	0.775	0.847	0.867	0.858	0.824	0.826	0.767	0.720	0.840	0.810	5.85
78)	ethyl methacrylate	0.299	0.364	0.433	0.451	0.417	0.431	0.370	0.343	0.389	13.61		
79)	trans-1,3-dichloropropene	0.434	0.442	0.475	0.509	0.492	0.476	0.457	0.379	0.414	0.453	8.92	
80)	1,1,2-trichloroethane	0.226	0.227	0.238	0.251	0.249	0.235	0.238	0.198	0.214	0.231	7.29	
81)	tetrachloroethene	0.295	0.299	0.339	0.345	0.335	0.334	0.325	0.283	0.271	0.314	8.64	

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Initial Calibration Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICC10106
Lab FileID: D250409.D

82)	2-hexanone	0.103	0.098	0.115	0.120	0.115	0.114	0.099	0.112	0.110	7.50		
83)	1,3-dichloropropane	0.455	0.471	0.479	0.514	0.504	0.476	0.482	0.446	0.430	0.408	0.466	6.95
84)	butyl acetate	0.174	0.208	0.217	0.196	0.207	0.185	0.149	0.191	12.33			
85)	3,3-Dimethyl-1-Butanol	*This compound does not meet Initial Calibration criteria											
		0.014	0.032	0.027	0.025	0.031	0.020	0.012	0.023	33.90			
		----- Linear regression ----- Coefficient = 0.9990											
		Response Ratio = -0.01705 + 0.03139 *A											
86)	dibromochloromethane	0.337	0.343	0.400	0.411	0.389	0.405	0.368	0.289	0.346	0.365	11.02	
87)	1,2-dibromoethane	0.298	0.318	0.328	0.350	0.337	0.328	0.317	0.288	0.289	0.317	6.78	
88)	n-butyl ether	1.282	1.295	1.409	1.516	1.414	1.347	1.342	1.247	1.225	1.061	1.314	9.48
89)	chlorobenzene	0.982	1.000	1.043	1.091	1.048	1.013	1.024	1.026	0.940	1.041	1.021	4.01
90)	1,1,1,2-tetrachloroethane	0.372	0.387	0.471	0.468	0.435	0.480	0.420	0.348	0.382	0.418	11.55	
91)	ethylbenzene	1.702	1.631	1.792	1.864	1.778	1.726	1.702	1.743	1.576	1.774	1.729	4.77
92)	m,p-xylene	0.629	0.642	0.727	0.751	0.713	0.710	0.681	0.647	0.606	0.678	7.34	
93)	o-xylene	1.351	1.387	1.581	1.634	1.559	1.547	1.487	1.388	1.324	1.471	1.473	7.24
94)	styrene	1.004	1.088	1.262	1.335	1.239	1.244	1.147	0.997	1.006	0.948	1.127	12.12
95)	butyl acrylate	0.480	0.705	0.743	0.647	0.714	0.545	0.639	16.39				
96)	isopropylbenzene	1.755	1.781	2.140	2.186	2.046	2.065	1.917	1.740	1.672	1.789	1.909	9.76
97)	bromoform	0.236	0.261	0.326	0.341	0.304	0.341	0.280	0.230	0.269	0.288	14.83	
98)	cis-1,4-dichloro-2-butene	0.087	0.150	0.155	0.129	0.162	0.105	0.088	0.125	25.71			
		----- Linear regression ----- Coefficient = 0.9989											
		Response Ratio = -0.00946 + 0.16288 *A											
99) I	1,4-dichlorobenzene-d	-----ISTD-----											
100)	4-bromofluorobenzene (s)	0.789	0.769	0.713	0.707	0.734	0.690	0.732	0.782	0.778	0.743	0.744	4.63
101)	1,1,1,2-tetrachloroethane	0.660	0.637	0.605	0.630	0.648	0.574	0.630	0.608	0.636	0.625	4.13	
102)	trans-1,4-dichloro-2-butene	0.130	0.179	0.185	0.175	0.182	0.143	0.166	13.96				
103)	1,2,3-trichloropropane	0.160	0.192	0.191	0.197	0.195	0.186	0.188	0.176	0.186	6.66		
104)	bromobenzene	0.785	0.784	0.790	0.808	0.796	0.764	0.767	0.810	0.759	0.602	0.766	7.89
105)	n-propylbenzene	3.244	3.095	3.260	3.351	3.323	2.962	3.179	3.406	2.997	3.370	3.219	4.86
106)	2-chlorotoluene	0.670	0.666	0.712	0.715	0.705	0.687	0.673	0.714	0.618	0.684	4.62	
107)	4-chlorotoluene	2.048	2.011	1.982	2.044	1.993	1.870	1.992	2.078	1.889	2.145	2.005	4.11
108)	1,3,5-trimethylbenzene	2.330	2.329	2.641	2.590	2.551	2.482	2.418	2.437	2.141	2.393	2.431	6.01

Initial Calibration Summary

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICC10106
Lab FileID: D250409.D

109)	tert-butylbenzene	1.932	1.856	2.237	2.153	2.135	2.127	1.955	1.987	1.705	2.117	2.020	8.05
110)	1,2,4-trimethylbenzene	2.474	2.418	2.705	2.715	2.637	2.566	2.546	2.357	2.296	2.344	2.506	6.05
111)	sec-butylbenzene	3.116	3.024	3.533	3.548	3.396	3.263	3.203	3.151	2.807	2.922	3.196	7.71
112)	p-isopropyltoluene	2.728	2.591	3.077	3.088	2.948	2.893	2.805	2.643	2.430	2.449	2.765	8.63
113)	1,3-dichlorobenzene	1.522	1.485	1.598	1.657	1.581	1.552	1.525	1.469	1.388	1.323	1.510	6.57
114)	1,4-dichlorobenzene	1.733	1.591	1.646	1.743	1.684	1.613	1.651	1.869	1.582		1.679	5.43
115)	1,2-dichlorobenzene	1.532	1.530	1.642	1.718	1.647	1.603	1.599	1.590	1.484	1.284	1.563	7.59
116)	Benzyl Chloride	1.250	1.445	1.532	1.429	1.428	1.312		1.254			1.378	7.80
117)	n-butylbenzene	1.172	1.268	1.524	1.566	1.471	1.461	1.380	1.179			1.378	11.19
118)	2-ethylhexyl acrylate											0.000	-1.00
119)	hexachloroethane	0.403	0.559	0.506	0.490	0.567	0.442					0.494	12.96
120)	1,2-dibromo-3-chloropropane	0.118	0.145	0.144	0.133	0.142	0.130		0.122			0.133	8.11
121)	1,3,5-trichlorobenzene	1.276	1.347	1.676	1.678	1.554	1.613	1.468	1.245			1.482	11.84
122)	1,2,4-trichlorobenzene	0.983	1.447	1.404	1.251	1.369	1.114		0.902			1.210	17.75
123)	hexachlorobutadiene	0.618	0.615	0.814	0.798	0.717	0.772	0.675	0.561			0.696	13.49
124)	naphthalene	1.825	2.858	2.754	2.461	2.659	2.135					2.449	16.26
125)	1,2,3-trichlorobenzene	0.879	1.303	1.247	1.122	1.227	1.002		0.848			1.090	16.78
126)	2-methylnaphthalene	*This compound does not meet Initial Calibration criteria											
		0.304	1.362	1.100	0.770	1.340	0.476					0.892	50.13

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

MD10106.M Thu Jun 15 09:27:03 2017 RPT1

6.10.6
6

Initial Calibration Verification

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICV10106
 Lab FileID: D250414.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\d250414.D Vial: 17
 Acq On : 13 Jun 2017 4:06 pm Operator: XimenaC
 Sample : ICV10106-50 Inst : MSD
 Misc : ms14425,vd10106,5.0,,100,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10106.M (RTE Integrator)
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 Last Update : Wed Jun 14 16:21:29 2017
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	-0.02	7.55
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.310	1.385	-5.7	98	0.00	7.66
4	1,4-dioxane	0.128	0.128	0.0	91	0.00	11.47
5 I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	9.74
6	chlorodifluoromethane	0.675	0.629	6.8	87	0.00	4.28
7	dichlorodifluoromethane	0.854	0.846	0.9	94	0.00	4.28
8	chloromethane	0.846	0.786	7.1	87	0.00	4.61
9	1,3-butadiene	0.592	0.638	-7.8	96	0.00	4.88
10	vinyl chloride	0.991	0.882	11.0	85	0.00	4.86
11	bromomethane	0.654	0.631	3.5	87	0.00	5.48
12	chloroethane	0.470	0.461	1.9	89	0.00	5.61
13	trichlorofluoromethane	1.151	1.099	4.5	90	0.00	6.08
14	vinyl bromide	0.644	0.864	-34.2#	123	0.00	5.97
15	ethyl ether	0.216	0.233	-7.9	99	0.00	6.41
16	2-chloropropane	0.863	0.832	3.6	97	0.00	6.63
17	acrolein	0.087	0.091	-4.6	97	0.00	6.71
18	freon 113	0.568	0.718	-26.4	113	0.00	6.83
19	1,1-dichloroethene	0.521	0.524	-0.6	98	0.00	6.86
20	acetone	0.033	0.038	-15.2	107	0.00	6.92
21	acetonitrile	0.077	0.141	-83.1#	187	-0.03	7.37
22	iodomethane	1.066	1.124	-5.4	98	0.00	7.16
23	carbon disulfide	1.775	2.232	-25.7	116	0.00	7.28
24	methylene chloride	0.562	0.576	-2.5	99	0.00	7.57
25	methyl acetate	0.270	0.277	-2.6	109	0.00	7.36
26	methyl tert butyl ether	1.658	1.740	-4.9	100	0.00	7.87
27	trans-1,2-dichloroethene	0.486	0.485	0.2	98	0.00	7.93
28	hexane	0.255	0.343	-34.5#	118	0.00	8.19
29	di-isopropyl ether	1.537	1.606	-4.5	97	0.00	8.45
30	2-butanone	0.042	0.047	-11.9	103	0.00	9.21
31	1,1-dichloroethane	0.729	0.801	-9.9	100	0.00	8.50
32	chloroprene	0.603	0.689	-14.3	100	0.00	8.60
33	acrylonitrile	0.135	0.137	-1.5	102	0.00	7.92
34	vinyl acetate	0.081	0.083	-2.5	100	0.00	8.47
35	ethyl tert-butyl ether	1.686	1.772	-5.1	95	0.00	8.91
36	ethyl acetate	0.049	0.049	0.0	94	0.00	9.21
37	2,2-dichloropropane	0.961	1.052	-9.5	108	0.00	9.26
38	cis-1,2-dichloroethene	0.554	0.536	3.2	99	0.00	9.25
39	propionitrile	0.055	0.055	0.0	96	0.00	9.35
40	methyl acrylate	0.055	0.057	-3.6	99	0.00	9.31
41	methacrylonitrile	0.147	0.148	-0.7	93	0.00	9.52

Initial Calibration Verification

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICV10106
 Lab FileID: D250414.D

42	bromochloromethane	0.263	0.272	-3.4	97	0.00	9.56
43	tetrahydrofuran	0.153	0.137	10.5	97	0.00	9.61
44	chloroform	0.870	0.834	4.1	98	0.00	9.61
45	tert-Butyl Formate	0.357	0.287	19.6	72	0.00	9.64
46 S	dibromofluoromethane (s)	0.453	0.446	1.5	100	0.00	9.83
47	1,1,1-trichloroethane	0.893	0.997	-11.6	98	0.00	9.87
48	cyclohexane	0.919	0.997	-8.5	98	0.00	9.93
----- True Calc. % Drift -----							
49	isobutyl alcohol	500.000	494.326	1.1	98	0.00	10.04
----- AvgRF CCRF % Dev -----							
50	1,1-dichloropropene	0.565	0.600	-6.2	99	0.00	10.04
51	carbon tetrachloride	0.817	0.912	-11.6	99	0.00	10.07
52	tert-amyl alcohol	0.031	0.027	12.9	95	0.00	10.19
53	isopropyl acetate	0.102	0.100	2.0	96	0.00	10.22
54 I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	10.69
55 S	1,2-dichloroethane-d4 (s)	0.356	0.354	0.6	101	0.00	10.25
56	n-butyl alcohol	0.009	0.009	0.0	92	0.00	10.84
57	2,2,4-Trimethylpentane	1.529	1.821	-19.1	102	0.00	10.28
58	benzene	1.291	1.352	-4.7	99	0.00	10.32
59	tert-amyl methyl ether	1.290	1.341	-4.0	95	0.00	10.32
60	heptane	0.221	0.288	-30.3#	110	0.00	10.44
61	1,2-dichloroethane	0.424	0.456	-7.5	101	0.00	10.35
62	ethyl acrylate	0.331	0.316	4.5	89	0.00	11.04
63	trichloroethene	0.325	0.357	-9.8	102	0.00	11.04
64	2-chloroethyl vinyl ether	0.162	0.173	-6.8	94	0.00	11.88
65	methyl methacrylate	0.080	0.086	-7.5	92	0.00	11.32
66	methylcyclohexane	0.706	0.817	-15.7	97	0.00	11.25
67	1,2-dichloropropane	0.320	0.336	-5.0	100	0.00	11.33
68	dibromomethane	0.212	0.223	-5.2	99	0.00	11.51
69	bromodichloromethane	0.447	0.488	-9.2	102	0.00	11.64
70	2-nitropropane	0.127	0.127	0.0	95	0.00	11.89
71	epichlorohydrin	0.031	0.031	0.0	91	0.00	12.04
72	cis-1,3-dichloropropene	0.521	0.555	-6.5	98	0.00	12.12
73	4-methyl-2-pentanone	0.125	0.128	-2.4	97	0.00	12.22
74	isoamyl alcohol	0.010	0.010	0.0	91	0.00	12.25
----- True Calc. % Drift -----							
75 I	chlorobenzene-d5	1.000	1.000	0.0	95	0.00	14.11
76 S	toluene-d8 (s)	1.183	1.234	-4.3	99	0.00	12.42
77	toluene	0.810	0.888	-9.6	97	0.00	12.50
78	ethyl methacrylate	0.389	0.409	-5.1	86	0.00	12.71
79	trans-1,3-dichloropropene	0.453	0.507	-11.9	94	0.00	12.74
80	1,1,2-trichloroethane	0.231	0.247	-6.9	93	0.00	12.98
81	tetrachloroethene	0.314	0.359	-14.3	99	0.00	13.14
82	2-hexanone	0.110	0.116	-5.5	92	0.00	13.16
83	1,3-dichloropropane	0.466	0.493	-5.8	91	0.00	13.18
84	butyl acetate	0.191	0.203	-6.3	89	0.00	13.22
----- True Calc. % Drift -----							
85	3,3-Dimethyl-1-Butanol	500.000	468.470	6.3	96	0.00	13.36
----- AvgRF CCRF % Dev -----							
86	dibromochloromethane	0.365	0.411	-12.6	95	0.00	13.48
87	1,2-dibromoethane	0.317	0.334	-5.4	91	0.00	13.65
88	n-butyl ether	1.314	1.478	-12.5	92	0.00	14.01
89	chlorobenzene	1.021	1.048	-2.6	91	0.00	14.15
90	1,1,1,2-tetrachloroethane	0.418	0.483	-15.6	98	0.00	14.22
91	ethylbenzene	1.729	1.793	-3.7	91	0.00	14.20

6-10-7

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Initial Calibration Verification

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICV10106
Lab FileID: D250414.D

92	m,p-xylene	0.678	0.727	-7.2	92	0.00	14.32
93	o-xylene	1.473	1.583	-7.5	92	0.00	14.79
94	styrene	1.127	1.240	-10.0	88	0.00	14.81
95	butyl acrylate	0.639	0.684	-7.0	87	0.00	14.59
96	isopropylbenzene	1.909	2.163	-13.3	94	0.00	15.17
97	bromoform	0.288	0.322	-11.8	89	0.00	15.13
----- True			Calc.	% Drift	-----		
98	cis-1,4-dichloro-2-butene	50.000	49.449	1.1	92	0.00	15.28
----- AvgRF			CCRF	% Dev	-----		
99 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	16.73
100 S	4-bromofluorobenzene (s)	0.744	0.700	5.9	93	0.00	15.42
101	1,1,2,2-tetrachloroethane	0.625	0.598	4.3	89	0.00	15.55
102	trans-1,4-dichloro-2-bute	0.166	0.184	-10.8	94	0.00	15.59
103	1,2,3-trichloropropane	0.186	0.190	-2.2	91	0.00	15.63
104	bromobenzene	0.766	0.776	-1.3	90	0.00	15.64
105	n-propylbenzene	3.219	3.225	-0.2	91	0.00	15.63
106	2-chlorotoluene	0.684	0.688	-0.6	91	0.00	15.81
107	4-chlorotoluene	2.005	1.963	2.1	90	0.00	15.93
108	1,3,5-trimethylbenzene	2.431	2.548	-4.8	93	0.00	15.80
109	tert-butylbenzene	2.020	2.247	-11.2	98	0.00	16.19
110	1,2,4-trimethylbenzene	2.506	2.677	-6.8	93	0.00	16.25
111	sec-butylbenzene	3.196	3.471	-8.6	92	0.00	16.43
112	p-isopropyltoluene	2.765	3.070	-11.0	94	0.00	16.57
113	1,3-dichlorobenzene	1.510	1.626	-7.7	92	0.00	16.67
114	1,4-dichlorobenzene	1.679	1.711	-1.9	92	0.00	16.76
115	1,2-dichlorobenzene	1.563	1.664	-6.5	91	0.00	17.21
116	Benzyl Chloride	1.378	1.490	-8.1	92	0.00	16.89
117	n-butylbenzene	1.378	1.552	-12.6	93	0.00	17.03
118	2-ethylhexyl acrylate			-----NA-----			
119	hexachloroethane	0.494	0.540	-9.3	101	0.00	17.48
120	1,2-dibromo-3-chloropropa	0.133	0.142	-6.8	93	0.00	18.08
121	1,3,5-trichlorobenzene	1.482	1.630	-10.0	91	0.00	18.26
122	1,2,4-trichlorobenzene	1.210	1.445	-19.4	97	0.00	19.00
123	hexachlorobutadiene	0.696	0.791	-13.6	93	0.00	19.11
124	naphthalene	2.449	2.755	-12.5	94	0.00	19.34
125	1,2,3-trichlorobenzene	1.090	1.274	-16.9	96	0.00	19.63
126	2-methylnaphthalene	0.892	1.180	-32.3#	101	0.00	20.74

(#) = Out of Range
d250409.D MD10106.M

SPCC's out = 0 CCC's out = 0
Wed Jun 14 16:27:13 2017 RPT1

6:10:7

6

Initial Calibration Verification

Job Number: JC45628
Account: TRCNYNBYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10106-ICV10106
Lab FileID: D250415.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\d250415.D Vial: 18
 Acq On : 13 Jun 2017 4:35 pm Operator: XimenaC
 Sample : ICV10106-50 Inst : MSD
 Misc : ms14425,vd10106,5.0,,100,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10106.M (RTE Integrator)
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 Last Update : Wed Jun 14 16:21:29 2017
 Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	102	0.00	7.56
5 I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	9.75
21	acetonitrile	0.077	0.063	18.2	83	0.00	7.40
46 S	dibromofluoromethane (s)	0.453	0.449	0.9	100	0.00	9.83
54 I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	10.69
55 S	1,2-dichloroethane-d4 (s)	0.356	0.357	-0.3	101	0.00	10.26
75 I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	14.12
76 S	toluene-d8 (s)	1.183	1.161	1.9	100	0.00	12.43
99 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	91	0.00	16.74
100 S	4-bromofluorobenzene (s)	0.744	0.734	1.3	94	0.00	15.43

(#) = Out of Range
 d250409.D MD10106.M

SPCC's out = 0 CCC's out = 0
 Wed Jun 14 16:27:14 2017 RPT1

Continuing Calibration Summary

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10119-CC10106
 Lab FileID: D250688.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\D\vd10119\d250688.D Vial: 3
 Acq On : 22 Jun 2017 7:48 am Operator: XimenaC
 Sample : cc10106-20 Inst : MSD
 Misc : ms17289,vd10119,5,,100,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10106.M (RTE Integrator)
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 Last Update : Wed Jun 14 16:21:29 2017
 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	83	-0.03	7.54
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.310	1.336	-2.0	83	0.00	7.67
4	1,4-dioxane	0.128	0.124	3.1	72	0.00	11.47
5 I	pentafluorobenzene	1.000	1.000	0.0	90	0.00	9.74
6	chlorodifluoromethane	0.675	0.720	-6.7	96	-0.01	4.28
7	dichlorodifluoromethane	0.854	0.937	-9.7	98	0.00	4.28
8	chloromethane	0.846	0.870	-2.8	90	-0.01	4.60
9	1,3-butadiene	0.592	0.389	34.3#	60	-0.02	4.86
10	vinyl chloride	0.991	1.016	-2.5	90	0.00	4.86
11	bromomethane	0.654	0.673	-2.9	90	-0.01	5.47
12	chloroethane	0.470	0.445	5.3	86	-0.02	5.60
13	trichlorofluoromethane	1.151	1.178	-2.3	93	0.00	6.08
14	vinyl bromide	0.644	0.677	-5.1	93	0.00	5.97
15	ethyl ether	0.216	0.223	-3.2	91	0.00	6.41
16	2-chloropropane	0.863	0.751	13.0	85	0.00	6.63
17	acrolein	0.087	0.071	18.4	69	0.01	6.73
18	freon 113	0.568	0.654	-15.1	100	0.00	6.82
19	1,1-dichloroethene	0.521	0.533	-2.3	97	0.00	6.85
20	acetone	0.033	0.032	3.0	85	0.00	6.93
21	acetonitrile	0.077	0.065	15.6	77	0.00	7.40
22	iodomethane	1.066	1.162	-9.0	98	0.00	7.16
23	carbon disulfide	1.775	1.844	-3.9	92	0.00	7.28
24	methylene chloride	0.562	0.538	4.3	88	0.00	7.58
25	methyl acetate	0.270	0.267	1.1	89	0.00	7.36
26	methyl tert butyl ether	1.658	1.638	1.2	91	0.00	7.86
27	trans-1,2-dichloroethene	0.486	0.457	6.0	89	0.00	7.93
28	hexane	0.255	0.270	-5.9	90	0.00	8.19
29	di-isopropyl ether	1.537	1.435	6.6	83	0.00	8.45
30	2-butanone	0.042	0.042	0.0	82	0.01	9.23
31	1,1-dichloroethane	0.729	0.713	2.2	84	0.00	8.50
32	chloroprene	0.603	0.608	-0.8	86	0.00	8.60
33	acrylonitrile	0.135	0.125	7.4	80	0.01	7.94
34	vinyl acetate	0.081	0.073	9.9	82	0.01	8.49
35	ethyl tert-butyl ether	1.686	1.669	1.0	88	0.00	8.91
36	ethyl acetate	0.049	0.047	4.1	79	0.00	9.22
37	2,2-dichloropropane	0.961	0.953	0.8	93	0.00	9.26
38	cis-1,2-dichloroethene	0.554	0.506	8.7	88	0.00	9.25
39	propionitrile	0.055	0.052	5.5	80	0.00	9.34
40	methyl acrylate	0.055	0.054	1.8	89	0.00	9.31
41	methacrylonitrile	0.147	0.145	1.4	81	0.00	9.52

Continuing Calibration Summary

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10119-CC10106
 Lab FileID: D250688.D

42	bromochloromethane	0.263	0.270	-2.7	89	0.00	9.57
43	tetrahydrofuran	0.153	0.142	7.2	80	0.00	9.61
44	chloroform	0.870	0.781	10.2	86	0.00	9.62
45	tert-Butyl Formate	0.357	0.340	4.8	86	0.00	9.65
46 S	dibromofluoromethane (s)	0.453	0.430	5.1	85	0.00	9.82
47	1,1,1-trichloroethane	0.893	0.932	-4.4	90	0.00	9.87
48	cyclohexane	0.919	0.880	4.2	84	0.00	9.93
----- True Calc. % Drift -----							
49	isobutyl alcohol	200.000	185.678	7.2	82	0.01	10.05
----- AvgRF CCRF % Dev -----							
50	1,1-dichloropropene	0.565	0.571	-1.1	87	0.00	10.05
51	carbon tetrachloride	0.817	0.871	-6.6	93	0.00	10.07
52	tert-amyl alcohol	0.031	0.028	9.7	85	0.00	10.20
53	isopropyl acetate	0.102	0.098	3.9	86	0.00	10.22
54 I	1,4-difluorobenzene	1.000	1.000	0.0	85	0.00	10.69
55 S	1,2-dichloroethane-d4 (s)	0.356	0.334	6.2	82	0.00	10.26
56	n-butyl alcohol	0.009	0.008	11.1	73	0.01	10.85
57	2,2,4-Trimethylpentane	1.529	1.491	2.5	90	0.00	10.28
58	benzene	1.291	1.284	0.5	84	0.00	10.32
59	tert-amyl methyl ether	1.290	1.284	0.5	91	0.00	10.33
60	heptane	0.221	0.241	-9.0	86	0.00	10.44
61	1,2-dichloroethane	0.424	0.431	-1.7	84	0.00	10.35
62	ethyl acrylate	0.331	0.330	0.3	83	0.00	11.05
63	trichloroethene	0.325	0.338	-4.0	86	0.00	11.04
64	2-chloroethyl vinyl ether	0.162	0.169	-4.3	83	0.00	11.89
65	methyl methacrylate	0.080	0.090	-12.5	89	0.00	11.33
66	methylcyclohexane	0.706	0.756	-7.1	91	0.00	11.25
67	1,2-dichloropropane	0.320	0.314	1.9	81	0.00	11.34
68	dibromomethane	0.212	0.220	-3.8	85	0.00	11.51
69	bromodichloromethane	0.447	0.459	-2.7	85	0.00	11.64
70	2-nitropropane	0.127	0.122	3.9	78	0.00	11.89
71	epichlorohydrin	0.031	0.033	-6.5	80	0.00	12.04
72	cis-1,3-dichloropropene	0.521	0.560	-7.5	87	0.00	12.13
73	4-methyl-2-pentanone	0.125	0.126	-0.8	84	0.00	12.23
74	isoamyl alcohol	0.010	0.010	0.0	79	0.00	12.26
----- True Calc. % Drift -----							
75 I	chlorobenzene-d5	1.000	1.000	0.0	92	0.00	14.11
76 S	toluene-d8 (s)	1.183	1.133	4.2	85	0.00	12.42
77	toluene	0.810	0.822	-1.5	88	0.00	12.51
78	ethyl methacrylate	0.389	0.398	-2.3	88	0.00	12.71
79	trans-1,3-dichloropropene	0.453	0.471	-4.0	88	0.00	12.74
80	1,1,2-trichloroethane	0.231	0.229	0.9	85	0.00	12.98
81	tetrachloroethene	0.314	0.337	-7.3	92	0.00	13.15
82	2-hexanone	0.110	0.106	3.6	84	0.00	13.16
83	1,3-dichloropropane	0.466	0.469	-0.6	86	0.00	13.18
84	butyl acetate	0.191	0.189	1.0	89	0.00	13.23
----- True Calc. % Drift -----							
85	3,3-Dimethyl-1-Butanol	200.000	167.140	16.4	80	0.00	13.36
----- AvgRF CCRF % Dev -----							
86	dibromochloromethane	0.365	0.397	-8.8	94	0.00	13.48
87	1,2-dibromoethane	0.317	0.336	-6.0	92	0.00	13.65
88	n-butyl ether	1.314	1.382	-5.2	90	0.00	14.01
89	chlorobenzene	1.021	1.074	-5.2	94	0.00	14.15
90	1,1,1,2-tetrachloroethane	0.418	0.438	-4.8	93	0.00	14.22
91	ethylbenzene	1.729	1.790	-3.5	93	0.00	14.20

6-10-9
6

Continuing Calibration Summary

Job Number: JC45628
 Account: TRCNYNBY TRC
 Project: K710, 168 8th Street, Brooklyn, NY

Sample: VD10119-CC10106
 Lab FileID: D250688.D

92	m,p-xylene	0.678	0.727	-7.2	94	0.00	14.32
93	o-xylene	1.473	1.551	-5.3	92	0.00	14.79
94	styrene	1.127	1.242	-10.2	92	0.00	14.81
95	butyl acrylate	0.639	0.614	3.9	87	0.00	14.60
96	isopropylbenzene	1.909	2.069	-8.4	93	0.00	15.17
97	bromoform	0.288	0.333	-15.6	101	0.00	15.13
		----- True	Calc.	% Drift	-----		
98	cis-1,4-dichloro-2-butene	20.000	22.536	-12.7	114	0.00	15.28
		----- AvgRF	CCRF	% Dev	-----		
99 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	16.73
100 S	4-bromofluorobenzene (s)	0.744	0.748	-0.5	94	0.00	15.42
101	1,1,2,2-tetrachloroethane	0.625	0.606	3.0	86	0.00	15.55
102	trans-1,4-dichloro-2-bute	0.166	0.185	-11.4	97	0.00	15.60
103	1,2,3-trichloropropane	0.186	0.196	-5.4	92	0.00	15.63
104	bromobenzene	0.766	0.837	-9.3	97	0.00	15.64
105	n-propylbenzene	3.219	3.342	-3.8	93	0.00	15.63
106	2-chlorotoluene	0.684	0.721	-5.4	94	0.00	15.81
107	4-chlorotoluene	2.005	2.038	-1.6	94	0.00	15.93
108	1,3,5-trimethylbenzene	2.431	2.589	-6.5	94	0.00	15.80
109	tert-butylbenzene	2.020	2.102	-4.1	91	0.00	16.19
110	1,2,4-trimethylbenzene	2.506	2.665	-6.3	93	0.00	16.25
111	sec-butylbenzene	3.196	3.399	-6.4	92	0.00	16.43
112	p-isopropyltoluene	2.765	2.992	-8.2	94	0.00	16.56
113	1,3-dichlorobenzene	1.510	1.613	-6.8	94	0.00	16.67
114	1,4-dichlorobenzene	1.679	1.704	-1.5	93	0.00	16.76
115	1,2-dichlorobenzene	1.563	1.659	-6.1	93	0.00	17.21
116	Benzyl Chloride	1.378	1.478	-7.3	95	0.00	16.90
117	n-butylbenzene	1.378	1.454	-5.5	91	0.00	17.03
118	2-ethylhexyl acrylate			-----NA-----			
119	hexachloroethane	0.494	0.483	2.2	91	0.00	17.48
120	1,2-dibromo-3-chloropropa	0.133	0.127	4.5	88	0.00	18.09
121	1,3,5-trichlorobenzene	1.482	1.561	-5.3	93	0.00	18.26
122	1,2,4-trichlorobenzene	1.210	1.293	-6.9	95	0.00	19.00
123	hexachlorobutadiene	0.696	0.731	-5.0	94	0.00	19.11
124	naphthalene	2.449	2.452	-0.1	92	0.00	19.35
125	1,2,3-trichlorobenzene	1.090	1.133	-3.9	93	0.00	19.64
126	2-methylnaphthalene	0.892	1.001	-12.2	120	0.00	20.75

(#) = Out of Range
 d250408.D MD10106.M

SPCC's out = 0 CCC's out = 0
 Fri Jun 23 11:50:34 2017

6:10:9

6

GC/MS Volatiles

Raw Data

7

Manual Integrations
APPROVED
 (compounds with "m" flag)
MoHui Huang
06/23/17 15:17

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 11:19:50 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

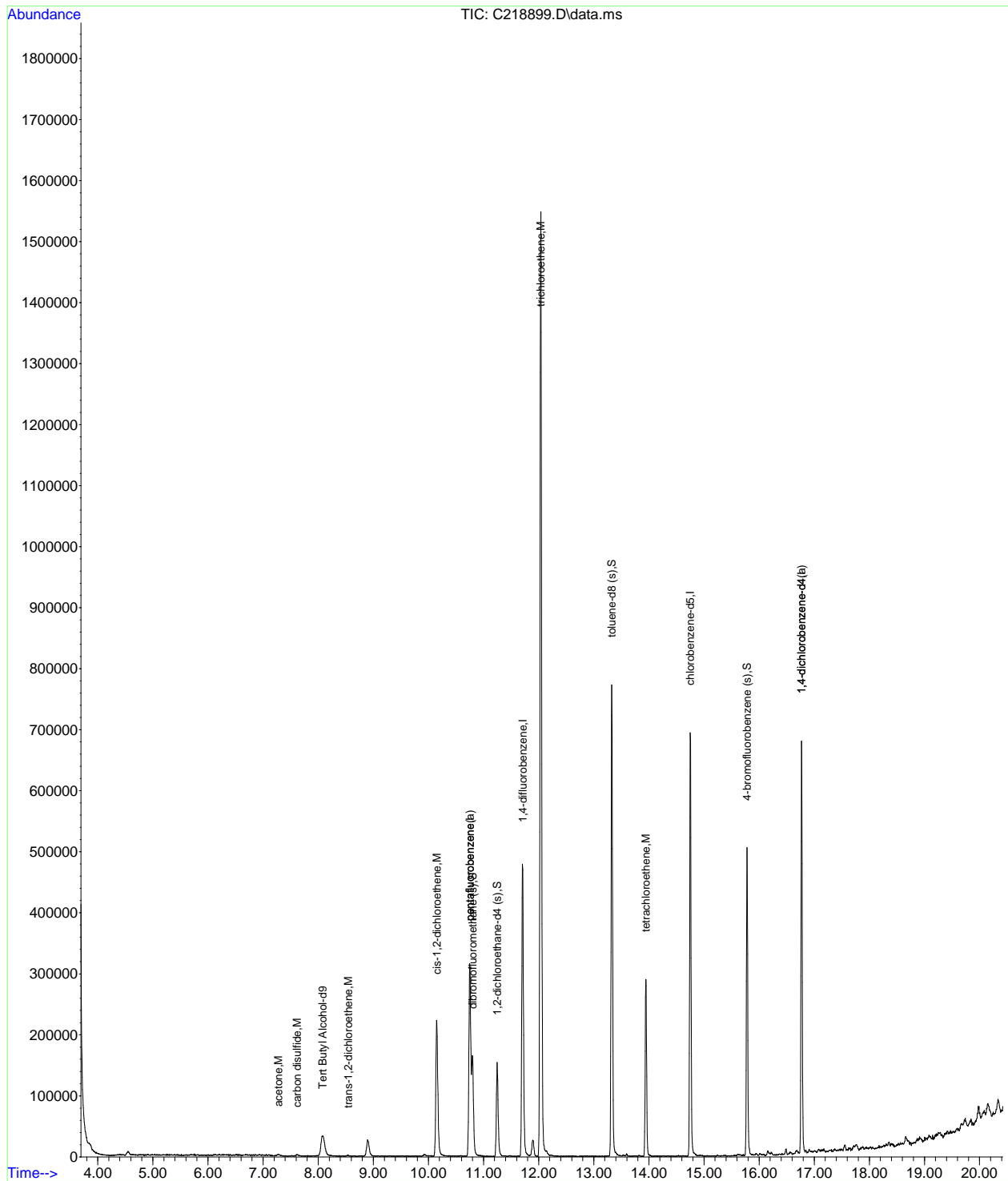
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.081	65	88085	500.00	ug/L	0.02
5) pentafluorobenzene	10.754	168	263183	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.711	114	431641	50.00	ug/L	0.00
75) chlorobenzene-d5	14.749	117	373806	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.768	152	159857	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.754	168	263183	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.768	152	159857	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.801	113	115937	45.47	ug/L	0.00
Spiked Amount	50.000	Range 76 - 120	Recovery	=	90.94%	
54) 1,2-dichloroethane-d4 (s)	11.245	65	125322	53.62	ug/L	0.00
Spiked Amount	50.000	Range 73 - 122	Recovery	=	107.24%	
76) toluene-d8 (s)	13.327	98	529369	52.95	ug/L	0.00
Spiked Amount	50.000	Range 84 - 119	Recovery	=	105.90%	
100) 4-bromofluorobenzene (s)	15.780	174	130328	57.33	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	114.66%	
Target Compounds						
20) acetone	7.276	43	6711	16.35	ug/L	84
23) carbon disulfide	7.616	76	5541	0.74	ug/L	84
27) trans-1,2-dichloroethene	8.547	61	1238m	0.35	ug/L	
38) cis-1,2-dichloroethene	10.152	96	122534	41.37	ug/L	97
63) trichloroethene	12.035	95	569548	230.28	ug/L	95
82) tetrachloroethene	13.944	166	85394	35.78	ug/L	99

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

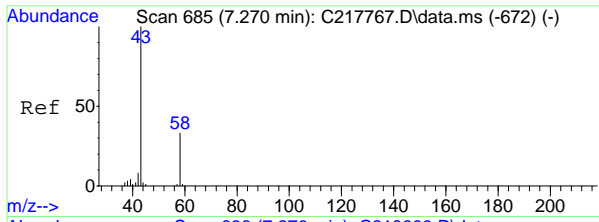
7.1.1
7

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218899.D
Acq On : 22 Jun 2017 3:07 pm
Operator : SushilaY
Sample : jc45628-1
Misc : MS17368,VC8081,5.2,,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 11:19:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration

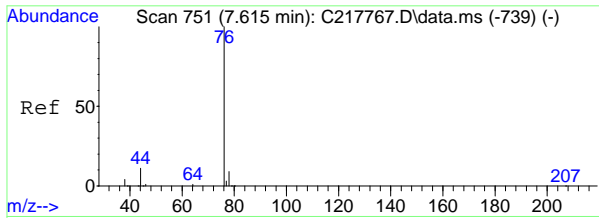
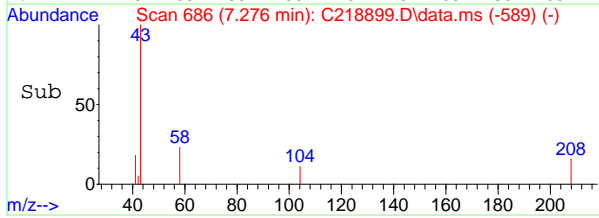
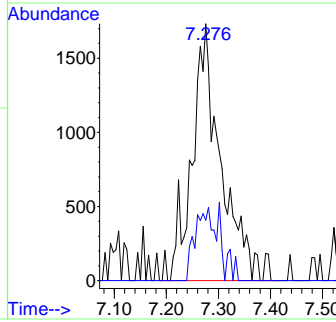
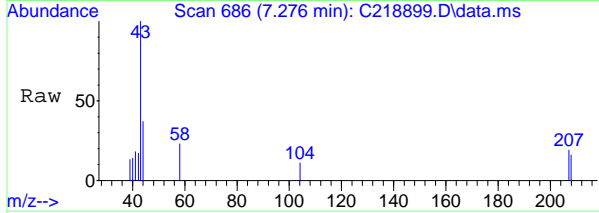


7.1.1



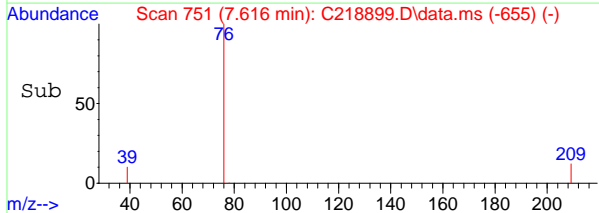
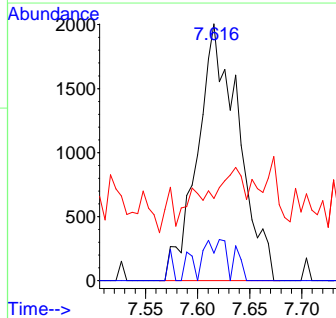
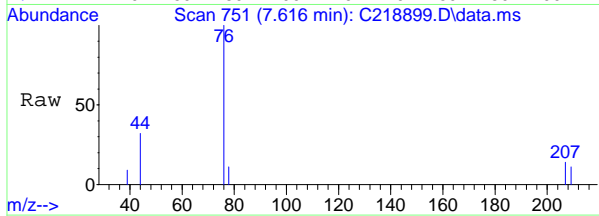
#20
acetone
Concen: 16.35 ug/L
RT: 7.276 min Scan# 686
Delta R.T. 0.006 min
Lab File: C218899.D
Acq: 22 Jun 2017 3:07 pm

Tgt Ion	Resp	Lower	Upper
43	6711		
58	100	2.6	62.6

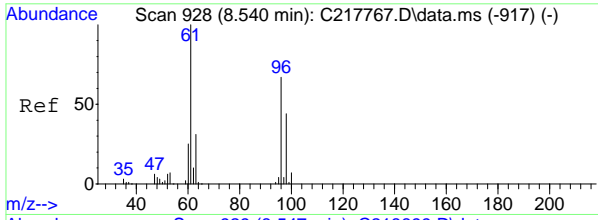


#23
carbon disulfide
Concen: 0.74 ug/L
RT: 7.616 min Scan# 751
Delta R.T. 0.001 min
Lab File: C218899.D
Acq: 22 Jun 2017 3:07 pm

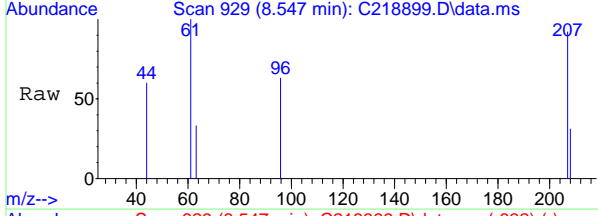
Tgt Ion	Resp	Lower	Upper
76	5541		
78	10.7	0.0	38.6
44	2.4	0.0	41.4



7.1.1
7

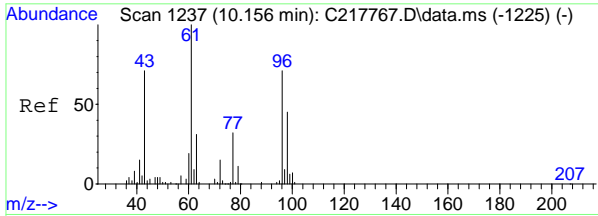
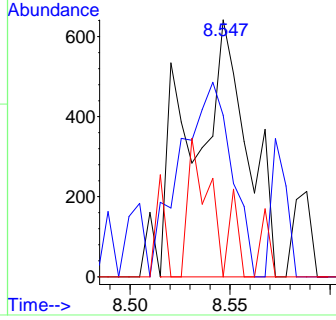
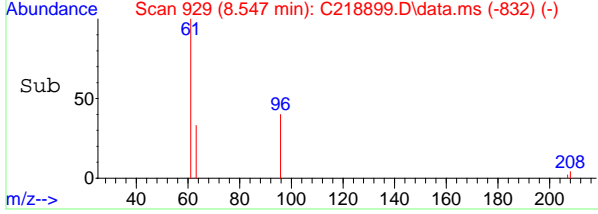


#27
 trans-1,2-dichloroethene
 Concen: 0.35 ug/L m
 RT: 8.547 min Scan# 929
 Delta R.T. 0.006 min
 Lab File: C218899.D
 Acq: 22 Jun 2017 3:07 pm

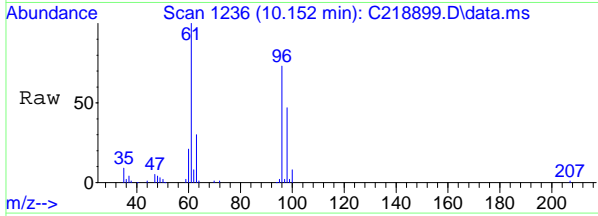


Tgt Ion: 61 Resp: 1238

Ion	Ratio	Lower	Upper
61	100		
96	62.9	47.1	87.5
98	0.0	30.8	57.2#

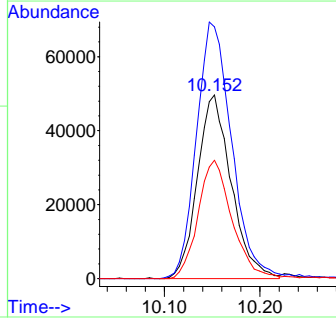
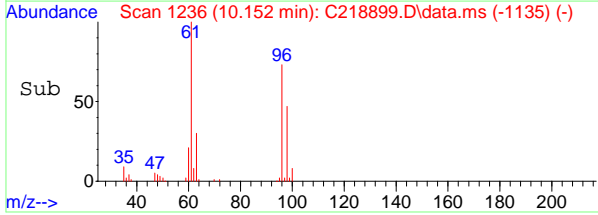


#38
 cis-1,2-dichloroethene
 Concen: 41.37 ug/L
 RT: 10.152 min Scan# 1236
 Delta R.T. -0.004 min
 Lab File: C218899.D
 Acq: 22 Jun 2017 3:07 pm

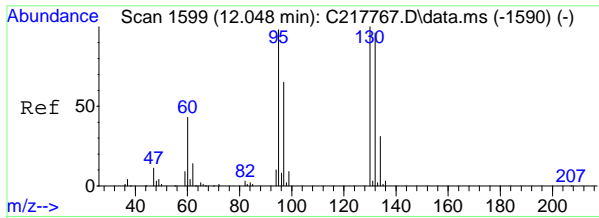


Tgt Ion: 96 Resp: 122534

Ion	Ratio	Lower	Upper
96	100		
61	136.9	110.1	170.1
98	64.3	32.3	92.3

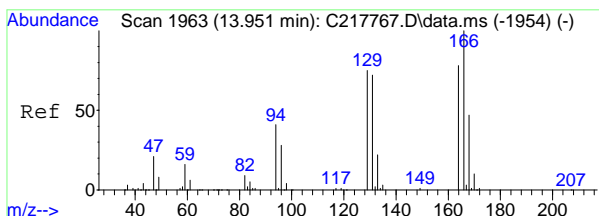
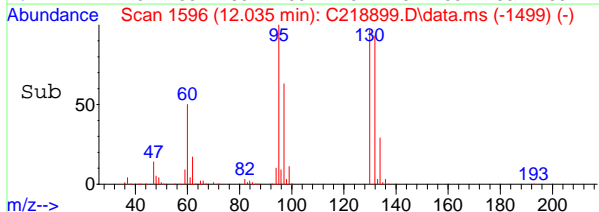
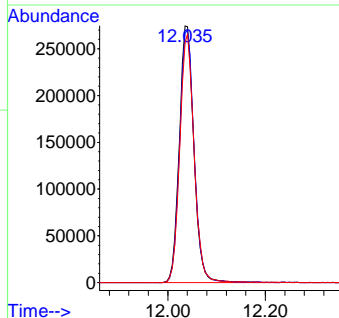
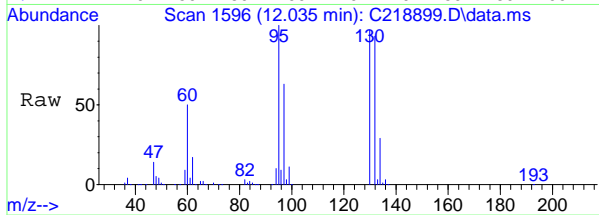


7.1.1
7



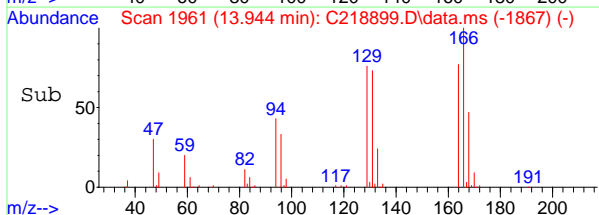
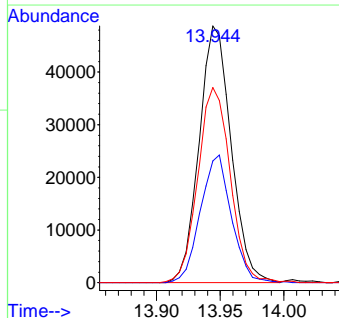
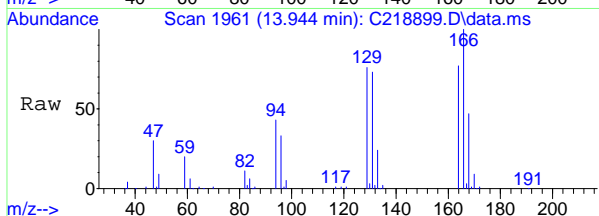
#63
 trichloroethene
 Concen: 230.28 ug/L
 RT: 12.035 min Scan# 1596
 Delta R.T. -0.013 min
 Lab File: C218899.D
 Acq: 22 Jun 2017 3:07 pm

Tgt Ion	Resp	Lower	Upper
95	569548		
95	100		
130	97.2	71.8	131.8
132	93.4	68.1	128.1



#82
 tetrachloroethene
 Concen: 35.78 ug/L
 RT: 13.944 min Scan# 1961
 Delta R.T. -0.007 min
 Lab File: C218899.D
 Acq: 22 Jun 2017 3:07 pm

Tgt Ion	Resp	Lower	Upper
166	85394		
166	100		
168	47.4	16.9	76.9
129	76.0	45.3	105.3



7.1.1
 7

Manual Integration Approval Summary

Sample Number: JC45628-1 **Method:** SW846 8260C
Lab FileID: C218899.D **Analyst approved:** 06/23/17 11:36 Henny Salim
Injection Time: 06/22/17 15:07 **Supervisor approved:** 06/23/17 15:17 MoHui Huang

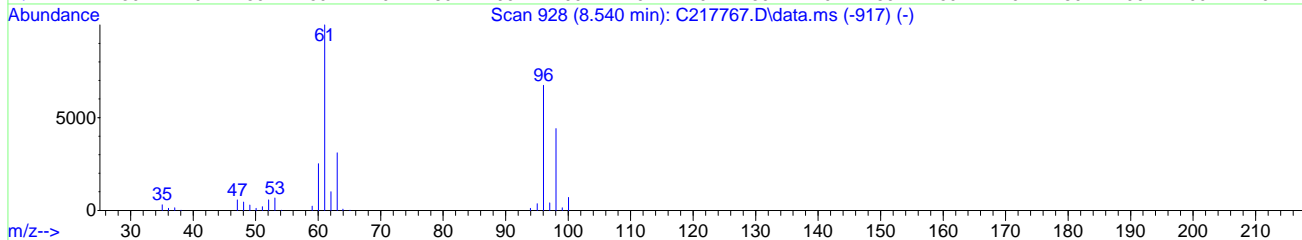
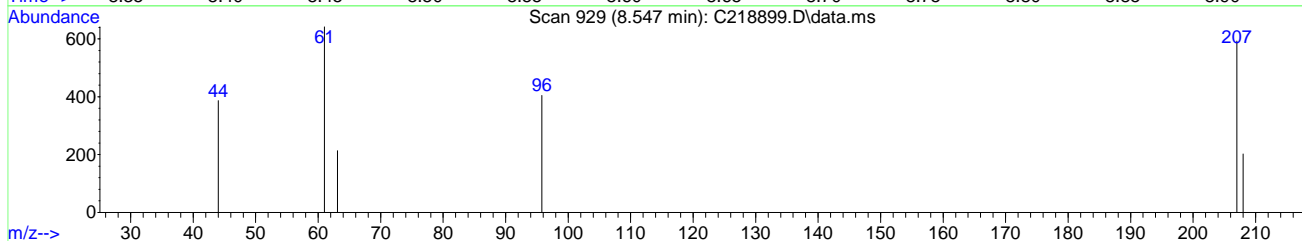
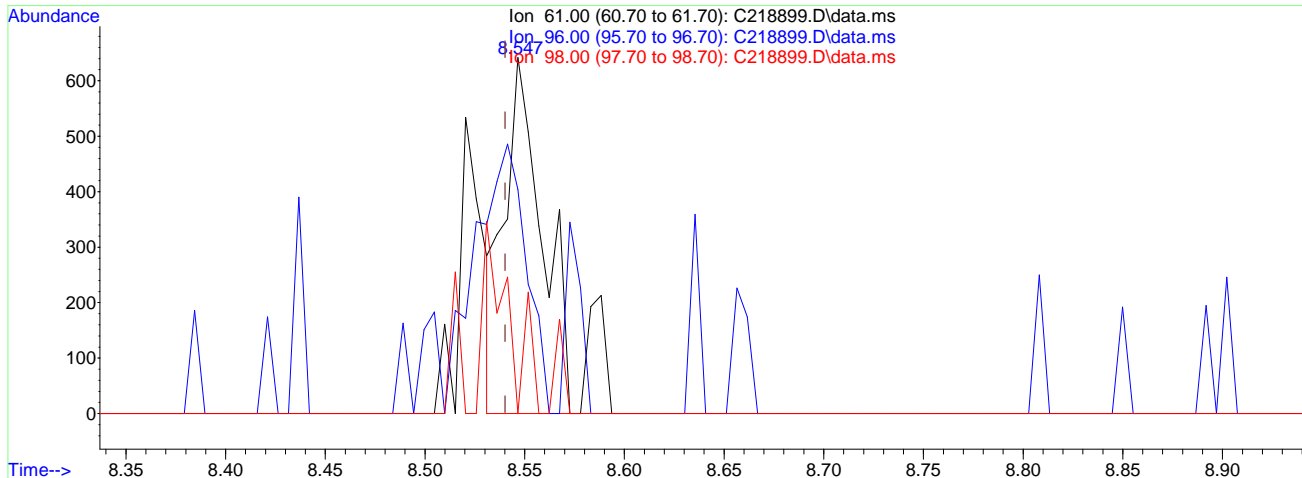
Parameter	CAS	Sig#	R.T. (min.)	Reason
trans-1,2-Dichloroethene	156-60-5		8.55	Split peak

7.1.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 22 15:47:51 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration



TIC: C218899.D\data.ms

(27) trans-1,2-dichloroethene (M)

8.547min (+0.006) 0.24ug/L

response 859

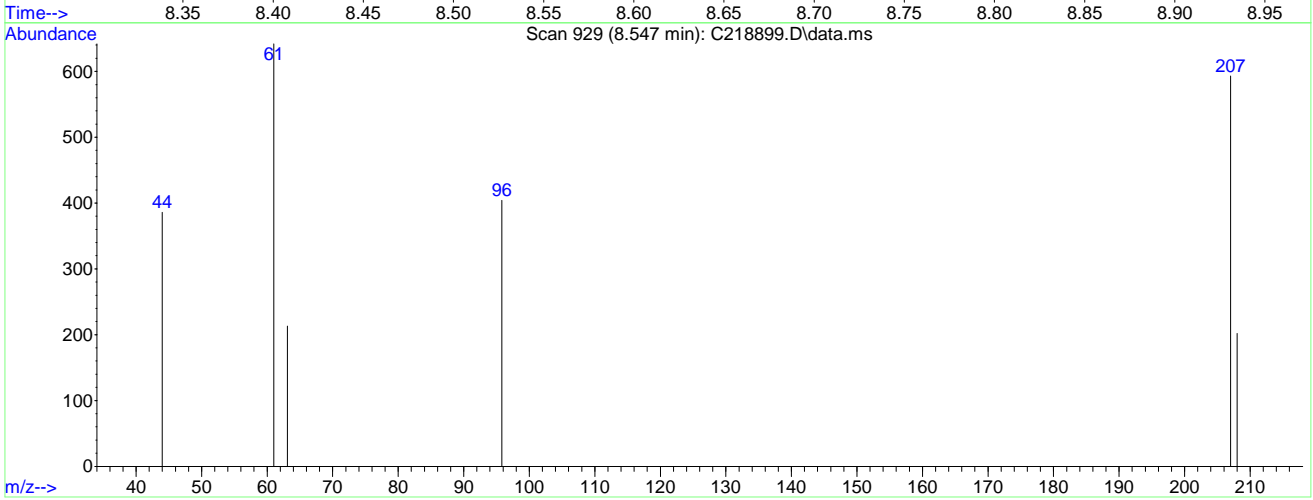
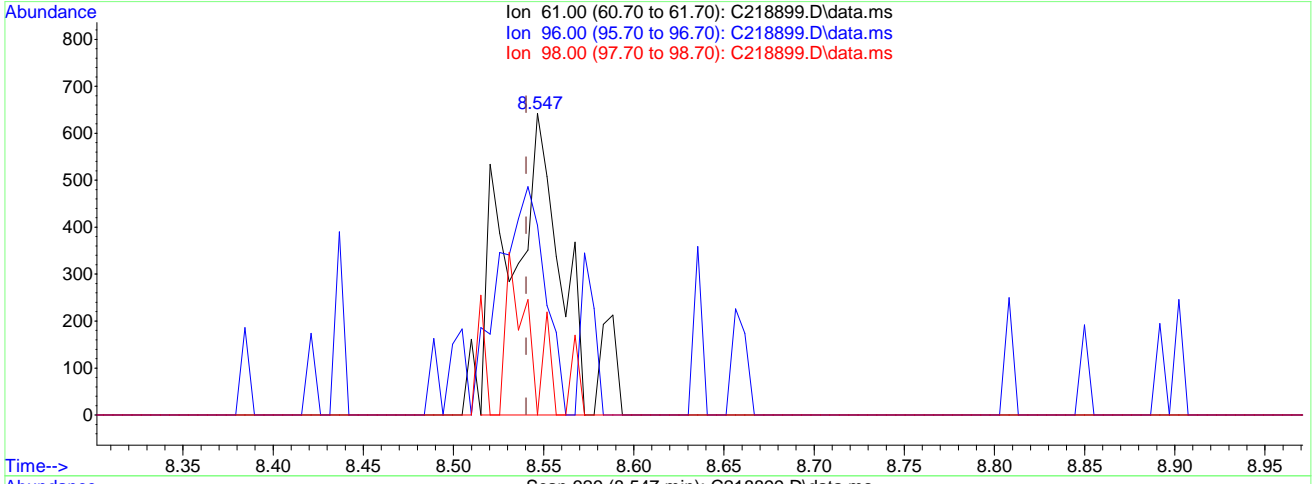
Ion	Exp%	Act%
61.00	100	100
96.00	67.30	27.57#
98.00	44.00	0.00#
0.00	0.00	0.00

7.1.1.2
 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218899.D
Acq On : 22 Jun 2017 3:07 pm
Operator : SushilaY
Sample : jc45628-1
Misc : MS17368,VC8081,5.2,,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 11:19:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration



TIC: C218899.D\data.ms

(27) trans-1,2-dichloroethene (M)

8.547min (+0.006) 0.35ug/L m

response 1238

Ion	Exp%	Act%
61.00	100	100
96.00	67.30	62.93
98.00	44.00	0.00#
0.00	0.00	0.00

7.1.1.3
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
 Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs: 0.001
 Stop Thrs : 0
 Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

Signal : TIC: C218899.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.970	53	54	63	rVB	3127	4441	0.14%	0.035%
2	4.117	79	82	90	rVB3	1036	2484	0.08%	0.020%
3	4.551	154	165	174	rBV7	6949	22687	0.72%	0.181%
4	5.518	346	350	356	rVB2	2188	2784	0.09%	0.022%
5	6.005	438	443	448	rBB4	1904	2767	0.09%	0.022%
6	6.135	463	468	472	rVB5	1515	2888	0.09%	0.023%
7	6.930	615	620	627	rVB4	1660	3944	0.13%	0.031%
8	7.108	650	654	658	rBB4	2059	2657	0.08%	0.021%
9	7.276	679	686	694	rBB6	2581	5541	0.18%	0.044%
10	7.626	745	753	759	rBV3	2684	7914	0.25%	0.063%
11	8.081	823	840	869	rBB3	32715	160241	5.12%	1.279%
12	8.541	920	928	932	rVB3	2019	4773	0.15%	0.038%
13	8.892	983	995	1018	rBB2	26811	90362	2.88%	0.721%
14	9.922	1183	1192	1194	rBV3	3428	5087	0.16%	0.041%
15	9.938	1194	1195	1204	rVB3	2376	3118	0.10%	0.025%
16	10.147	1224	1235	1267	rBB	222790	571726	18.25%	4.564%
17	10.748	1338	1350	1356	rBV	315849	774580	24.73%	6.183%
18	10.796	1356	1359	1380	rVV2	164927	372390	11.89%	2.973%
19	11.245	1433	1445	1465	rBB	153677	336359	10.74%	2.685%
20	11.706	1522	1533	1556	rBB	478624	1023116	32.66%	8.167%
21	11.894	1556	1569	1582	rBB4	26237	71351	2.28%	0.570%
22	12.040	1587	1597	1614	rBB	1544857	3132740	100.00%	25.007%
23	12.145	1614	1617	1627	rVV5	9136	20419	0.65%	0.163%
24	12.229	1631	1633	1643	rVB8	1867	4014	0.13%	0.032%
25	13.327	1831	1843	1869	rBB	771966	1423407	45.44%	11.362%
26	13.594	1886	1894	1903	rVB3	4168	7737	0.25%	0.062%
27	13.824	1933	1938	1945	rBB3	1514	2656	0.08%	0.021%
28	13.944	1954	1961	1971	rBB	289230	509834	16.27%	4.070%
29	14.750	2104	2115	2141	rBB	694024	1181486	37.71%	9.431%
30	15.252	2205	2211	2213	rBV7	2515	4354	0.14%	0.035%
31	15.612	2276	2280	2283	rBV4	2774	3809	0.12%	0.030%
32	15.780	2304	2312	2328	rBB	504332	814768	26.01%	6.504%
33	15.942	2335	2343	2350	rBB6	3459	6465	0.21%	0.052%
34	16.010	2350	2356	2363	rBV4	3463	6708	0.21%	0.054%
35	16.094	2365	2372	2374	rVB7	2149	3871	0.12%	0.031%
36	16.162	2376	2385	2392	rBV6	8272	21765	0.69%	0.174%
37	16.219	2392	2396	2404	rVV6	5009	9305	0.30%	0.074%
38	16.491	2440	2448	2452	rBB5	9301	14035	0.45%	0.112%
39	16.564	2452	2462	2469	rBB7	4700	10706	0.34%	0.085%
40	16.690	2474	2486	2490	rBV8	5945	15807	0.50%	0.126%
41	16.768	2494	2501	2513	rBB	675131	1034015	33.01%	8.254%
42	16.842	2513	2515	2520	rVB5	4963	6153	0.20%	0.049%
43	16.910	2520	2528	2535	rVB8	6162	12880	0.41%	0.103%
44	17.004	2540	2546	2553	rVB10	3288	8519	0.27%	0.068%
45	17.077	2553	2560	2565	rBV8	5624	12423	0.40%	0.099%

7.12
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P
 Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs : 0.001
 Stop Thrs : 0
 Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

46	17.176	2572	2579	2586	rVB10	5777	11494	0.37%	0.092%
47	17.239	2586	2591	2593	rBV6	1497	2513	0.08%	0.020%
48	17.312	2593	2605	2607	rBV6	3890	9427	0.30%	0.075%
49	17.354	2611	2613	2614	rBV2	3859	2554	0.08%	0.020%
50	17.375	2616	2617	2623	rVV5	3266	2507	0.08%	0.020%
51	17.553	2645	2651	2656	rBB9	9461	18545	0.59%	0.148%
52	17.584	2656	2657	2662	rBV3	2252	2631	0.08%	0.021%
53	17.621	2663	2664	2667	rBV2	4204	3706	0.12%	0.030%
54	17.652	2667	2670	2672	rVB4	5055	5147	0.16%	0.041%
55	17.720	2676	2683	2685	rBV7	7674	14151	0.45%	0.113%
56	17.762	2685	2691	2700	rVB7	9539	29064	0.93%	0.232%
57	17.841	2700	2706	2707	rBV6	4279	5262	0.17%	0.042%
58	17.856	2707	2709	2711	rBV3	3199	2613	0.08%	0.021%
59	17.877	2711	2713	2718	rVB6	4382	4823	0.15%	0.038%
60	17.929	2718	2723	2724	rBV5	2634	2812	0.09%	0.022%
61	18.008	2734	2738	2740	rBV5	2951	2599	0.08%	0.021%
62	18.024	2740	2741	2744	rVB3	4048	2596	0.08%	0.021%
63	18.175	2764	2770	2772	rBB7	4155	2742	0.09%	0.022%
64	18.191	2772	2773	2778	rBB4	2864	2814	0.09%	0.022%
65	18.264	2781	2787	2789	rBB6	3160	3829	0.12%	0.031%
66	18.306	2789	2795	2800	rBV8	5257	8683	0.28%	0.069%
67	18.358	2800	2805	2809	rBB7	6282	9557	0.31%	0.076%
68	18.405	2809	2814	2820	rBB9	3869	7290	0.23%	0.058%
69	18.494	2827	2831	2834	rBV5	2950	3333	0.11%	0.027%
70	18.526	2834	2837	2840	rBV4	3930	4230	0.14%	0.034%
71	18.562	2840	2844	2846	rBV5	4271	3931	0.13%	0.031%
72	18.662	2855	2863	2870	rBV5	12567	32245	1.03%	0.257%
73	18.740	2877	2878	2882	rVB4	5543	5690	0.18%	0.045%
74	18.792	2882	2888	2889	rBV6	5032	7956	0.25%	0.064%
75	18.866	2897	2902	2905	rBV7	7763	12401	0.40%	0.099%
76	18.913	2905	2911	2922	rVB7	9262	26428	0.84%	0.211%
77	19.002	2922	2928	2931	rBV8	8429	13000	0.41%	0.104%
78	19.028	2931	2933	2935	rBV3	3012	3460	0.11%	0.028%
79	19.080	2938	2943	2947	rBV8	8190	14313	0.46%	0.114%
80	19.148	2954	2956	2958	rBV3	6159	3077	0.10%	0.025%
81	19.211	2962	2968	2969	rBV6	6889	10298	0.33%	0.082%
82	19.221	2969	2970	2973	rVV3	5997	4929	0.16%	0.039%
83	19.253	2973	2976	2979	rVV5	7186	9128	0.29%	0.073%
84	19.289	2980	2983	2986	rVB5	6196	5832	0.19%	0.047%
85	19.315	2986	2988	2992	rVB4	6027	6484	0.21%	0.052%
86	19.373	2992	2999	3000	rBV6	8143	12873	0.41%	0.103%
87	19.425	3003	3009	3012	rBV8	4436	7138	0.23%	0.057%
88	19.467	3013	3017	3018	rBV4	3742	2926	0.09%	0.023%
89	19.525	3022	3028	3031	rBV8	2937	3549	0.11%	0.028%
90	19.598	3033	3042	3045	rBV10	7642	18900	0.60%	0.151%
91	19.666	3049	3055	3056	rBV6	11330	15839	0.51%	0.126%
92	19.723	3061	3066	3068	rVV6	11961	18311	0.58%	0.146%
93	19.739	3068	3069	3079	rVB10	12983	17221	0.55%	0.137%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.001 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

94	19.823	3079	3085	3086	rBV6	8230	9605	0.31%	0.077%
95	19.844	3086	3089	3093	rVB6	8633	9658	0.31%	0.077%
96	19.990	3100	3117	3123	rBV6	30256	103627	3.31%	0.827%
97	20.084	3123	3135	3140	rVV6	17017	59032	1.88%	0.471%
98	20.147	3140	3147	3160	rVV6	23638	90648	2.89%	0.724%
99	20.246	3162	3166	3169	rVV6	7095	8960	0.29%	0.072%
100	20.335	3169	3183	3192	rVV6	25163	85871	2.74%	0.685%

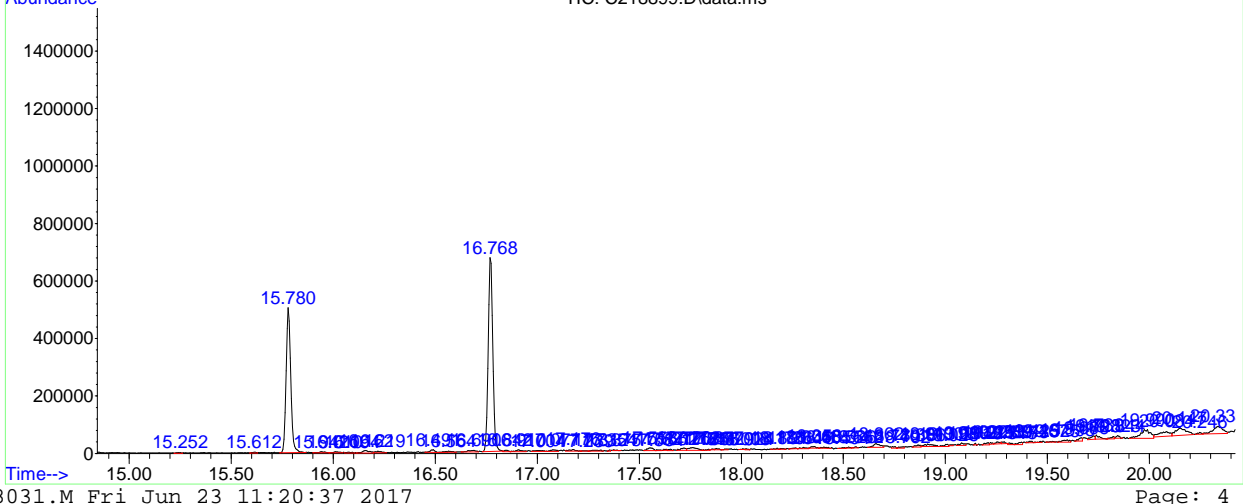
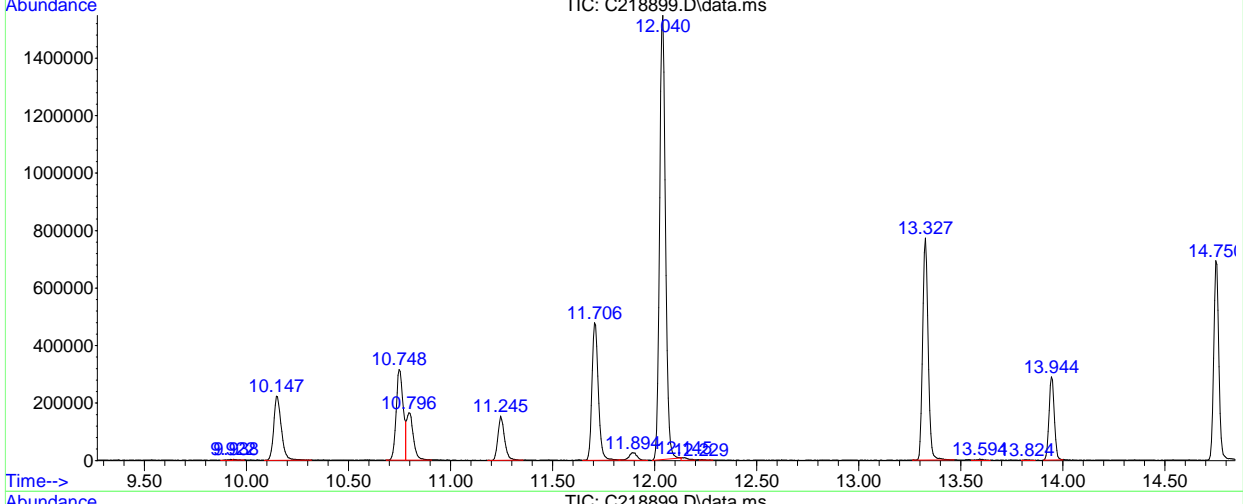
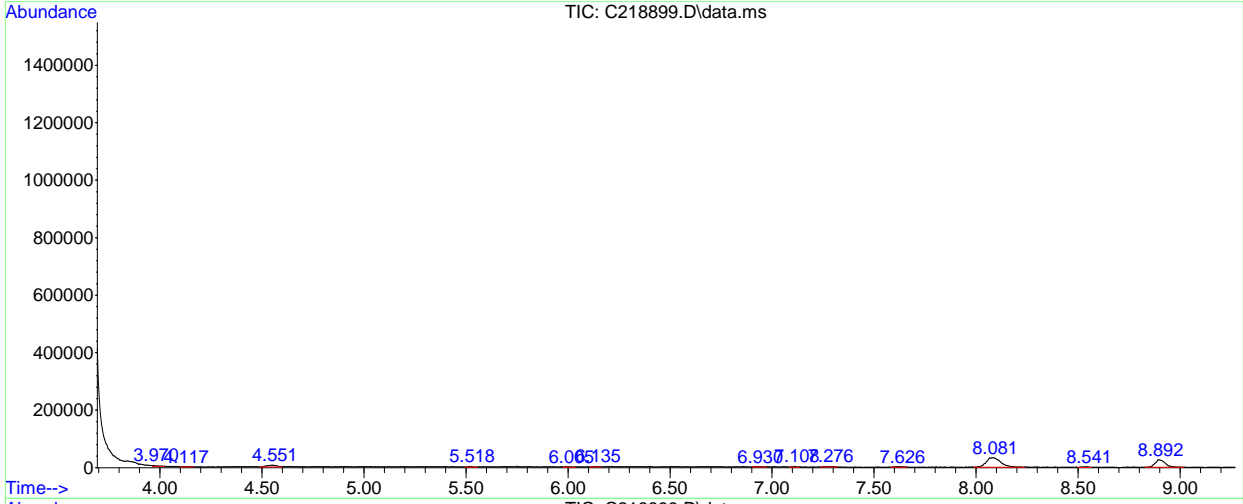
Sum of corrected areas: 12527338

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218899.D
Acq On : 22 Jun 2017 3:07 pm
Operator : SushilaY
Sample : jc45628-1
Misc : MS17368,VC8081,5.2,,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

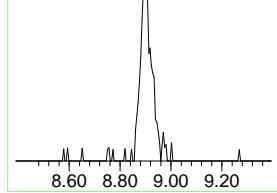
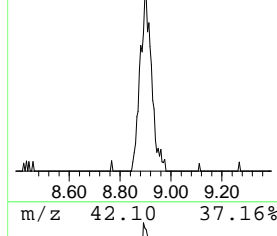
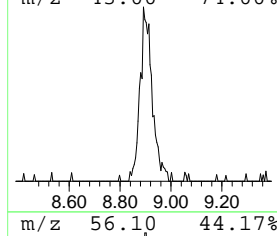
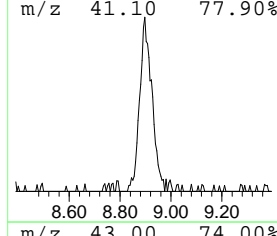
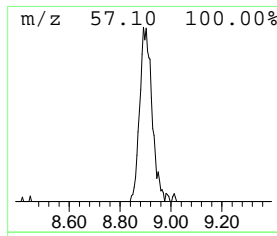
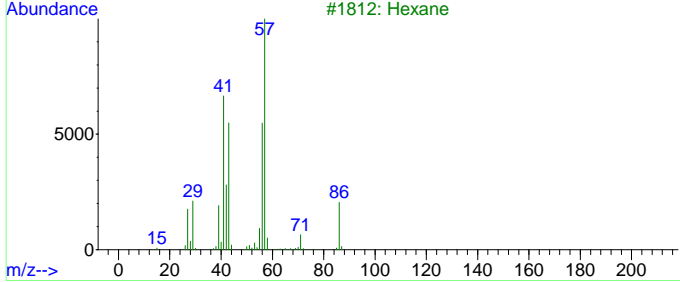
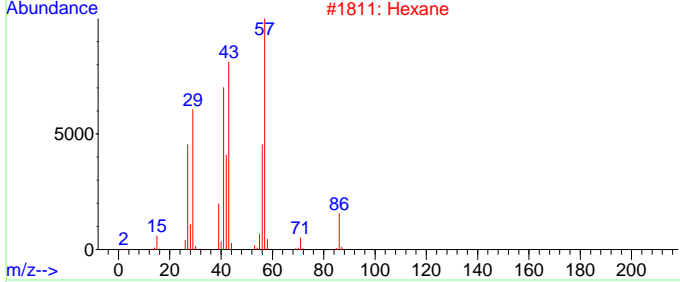
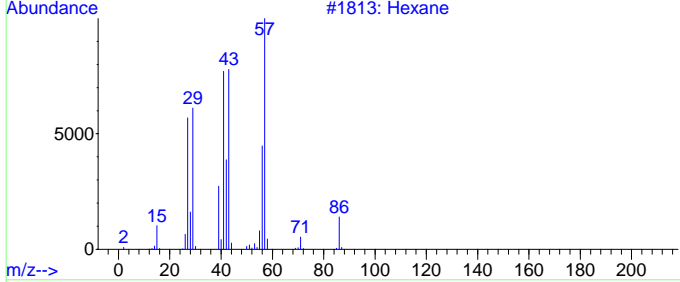
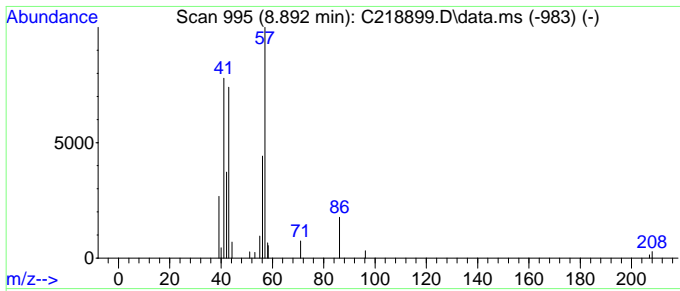
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
 TIC Integration Parameters: lscINT.P

 Peak Number 1 alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.892	5.83 ug/L	90362	pentafluorobenzene	10.754

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Hexane	86	C6H14	000110-54-3	87
2		Hexane	86	C6H14	000110-54-3	87
3		Hexane	86	C6H14	000110-54-3	80
4		Furan, tetrahydro-2-methyl-	86	C5H10O	000096-47-9	43
5		1-Pentene, 4-methyl-	84	C6H12	000691-37-2	36



7.12
 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

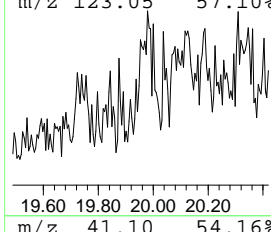
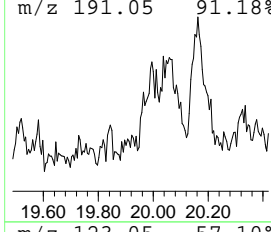
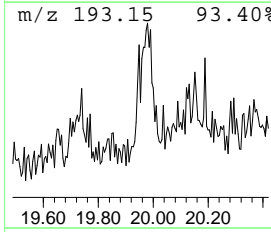
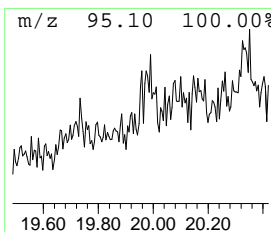
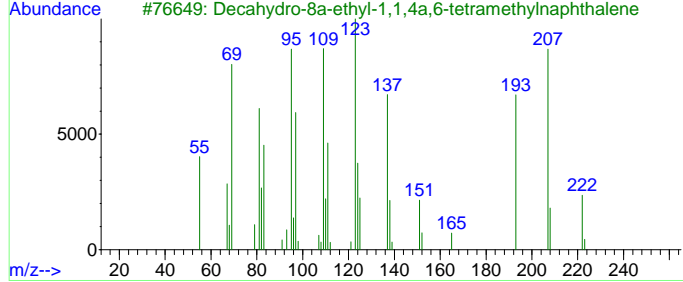
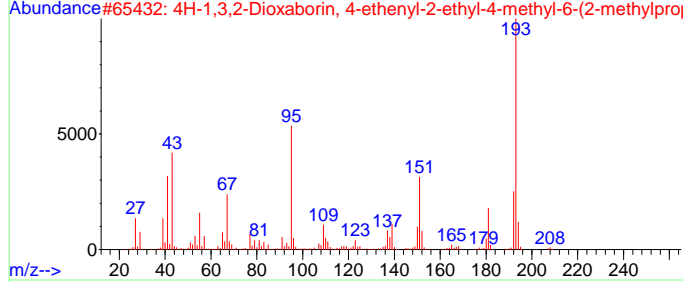
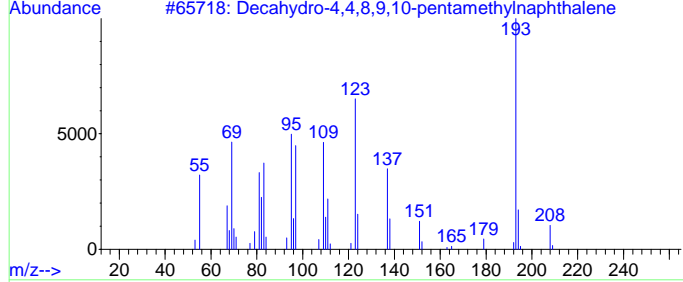
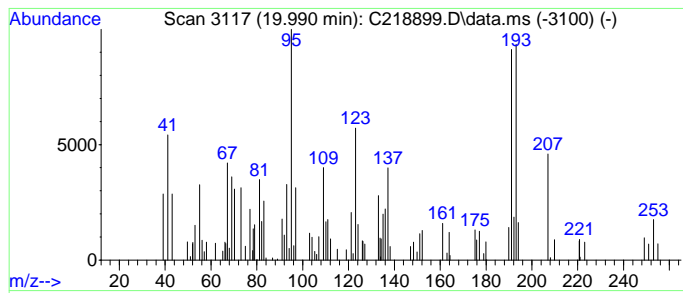
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
 TIC Integration Parameters: lscINT.P

 Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.990	5.01 ug/L	103627	1,4-dichlorobenzene-d4(a)	16.768

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	080655-44-3	43
2		4H-1,3,2-Dioxaborin, 4-ethenyl-2...	208	C12H21BO2	074630-04-9	38
3		Decahydro-8a-ethyl-1,1,4a,6-tetr...	222	C16H30	1000100-23-6	35
4		6-Acetamido-1,4-benzodioxane	193	C10H11NO3	063546-19-0	30
5		Anthracene, 9-butyltetradecahydro-	248	C18H32	055133-89-6	27



7.12
7

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218899.D
 Acq On : 22 Jun 2017 3:07 pm
 Operator : SushilaY
 Sample : jc45628-1
 Misc : MS17368,VC8081,5.2,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
 TIC Integration Parameters: lscINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
alkane	8.892	5.8	ug/L	90362	2	10.754	774580	50.0
unknown	19.990	5.0	ug/L	103627	7	16.768	1034020	50.0

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250705.D
 Acq On : 22 Jun 2017 4:52 pm
 Operator : XimenaC
 Sample : jc45628-1
 Misc : ms17368,vd10119,5.2,,100,10,1
 ALS Vial : 20 Sample Multiplier: 1

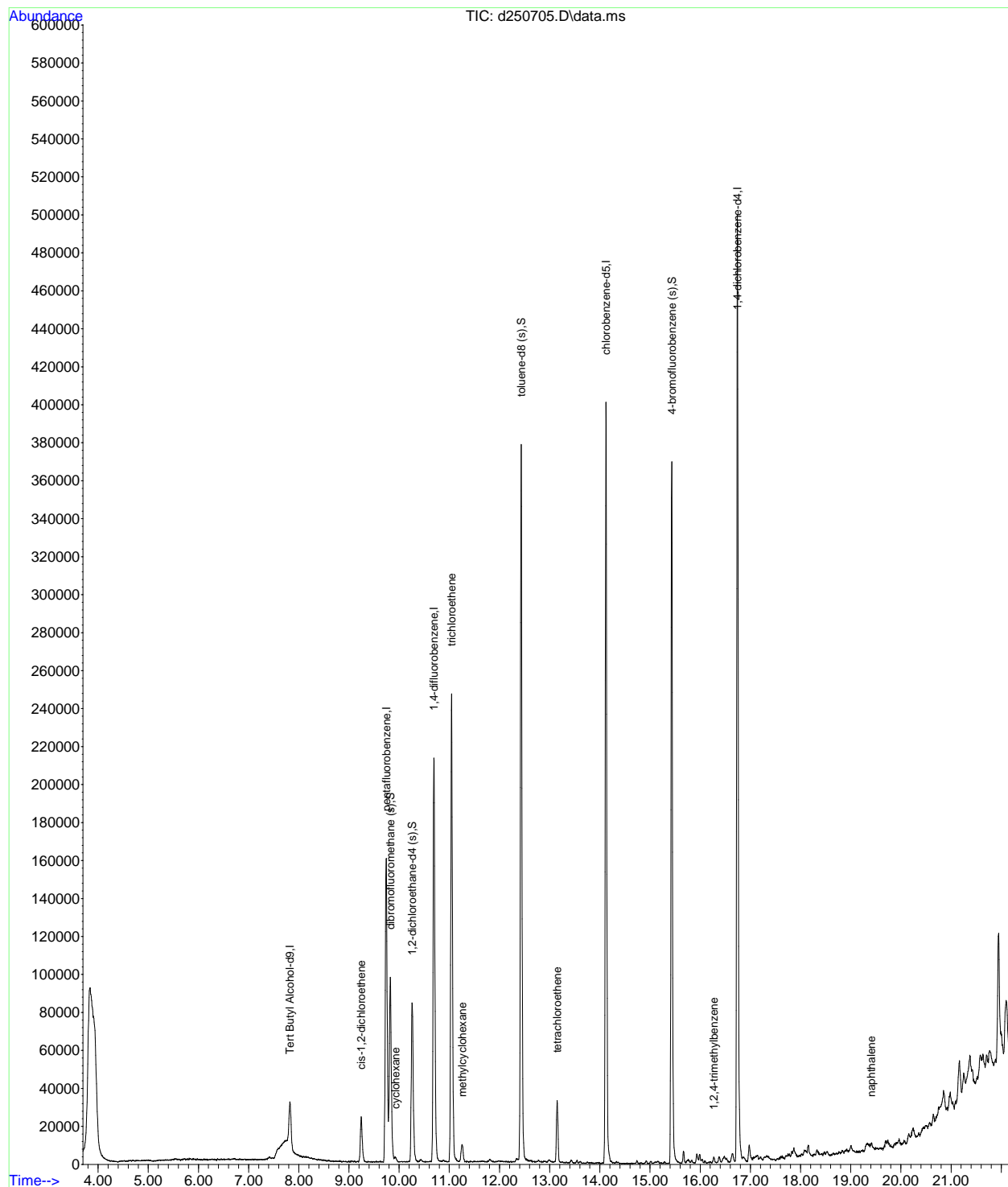
Quant Time: Jun 23 13:02:50 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Thu Jun 22 18:53:43 2017
 Response via : Initial Calibration

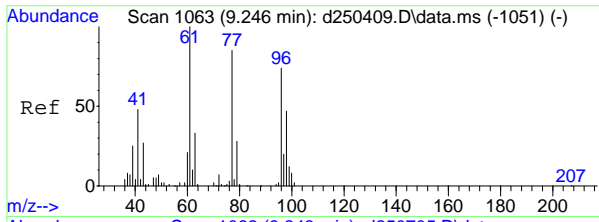
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.821	65	171187	500.00	ug/L	0.12
5) pentafluorobenzene	9.744	168	167922	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.691	114	236129	50.00	ug/L	0.00
75) chlorobenzene-d5	14.120	117	282589	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.739	152	178313	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	9.823	113	77845	51.14	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	102.28%	
55) 1,2-dichloroethane-d4 (s)	10.257	65	84603	50.33	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	100.66%	
76) toluene-d8 (s)	12.432	98	314003	46.94	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	93.88%	
100) 4-bromofluorobenzene (s)	15.432	95	145796	54.97	ug/L	0.01
Spiked Amount	50.000	Range 72 - 130	Recovery	=	109.94%	
Target Compounds						
						Qvalue
38) cis-1,2-dichloroethene	9.243	96	15599	8.39	ug/L	88
48) cyclohexane	9.922	84	1038	0.34	ug/L #	33
63) trichloroethene	11.046	95	103383	67.39	ug/L	97
66) methylcyclohexane	11.255	83	5749	1.72	ug/L	91
81) tetrachloroethene	13.148	164	10012	5.64	ug/L	97
110) 1,2,4-trimethylbenzene	16.274	105	2953	0.33	ug/L	88
124) naphthalene	19.411	128	3988	0.46	ug/L	75

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

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250705.D
 Acq On : 22 Jun 2017 4:52 pm
 Operator : XimenaC
 Sample : jc45628-1
 Misc : ms17368,vd10119,5.2,,100,10,1
 ALS Vial : 20 Sample Multiplier: 1

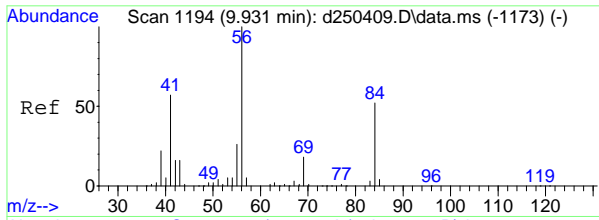
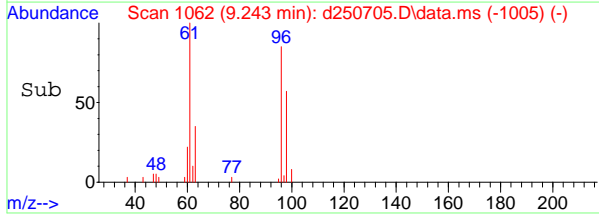
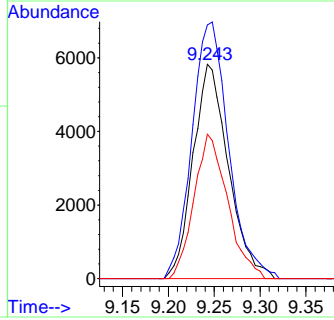
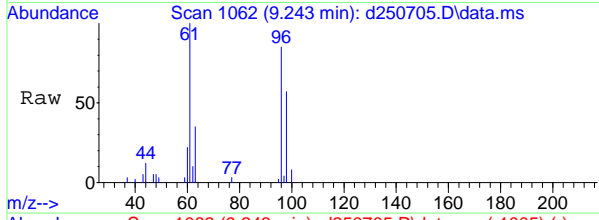
Quant Time: Jun 23 13:02:50 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Thu Jun 22 18:53:43 2017
 Response via : Initial Calibration





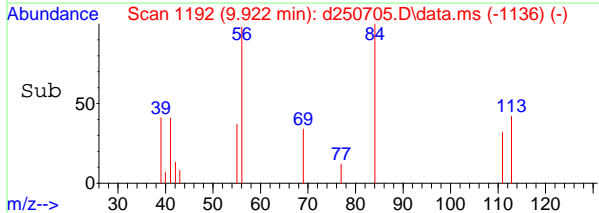
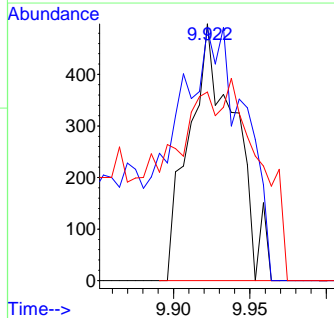
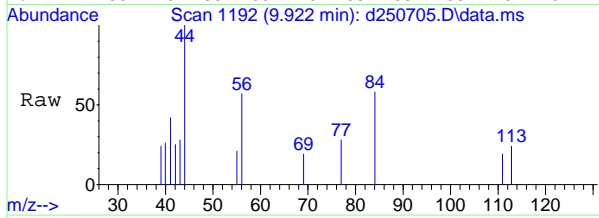
#38
 cis-1,2-dichloroethene
 Concen: 8.39 ug/L
 RT: 9.243 min Scan# 1062
 Delta R.T. -0.004 min
 Lab File: d250705.D
 Acq: 22 Jun 2017 4:52 pm

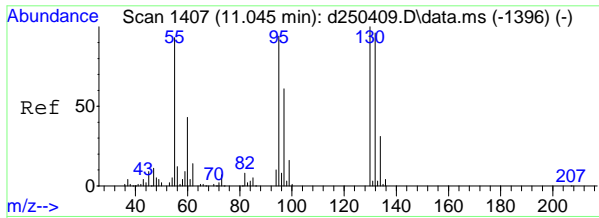
Tgt Ion	Resp	Lower	Upper
96	15599		
96	100		
61	118.3	106.4	166.4
98	67.3	33.8	93.8



#48
 cyclohexane
 Concen: 0.34 ug/L
 RT: 9.922 min Scan# 1192
 Delta R.T. -0.009 min
 Lab File: d250705.D
 Acq: 22 Jun 2017 4:52 pm

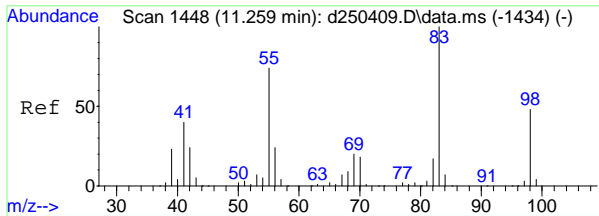
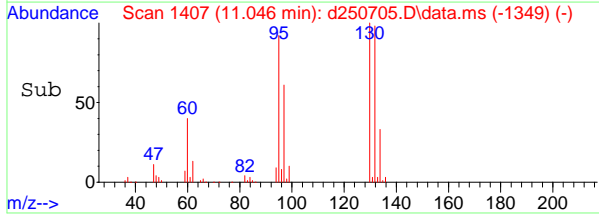
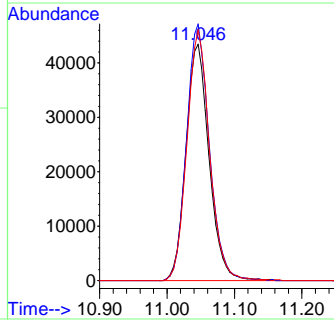
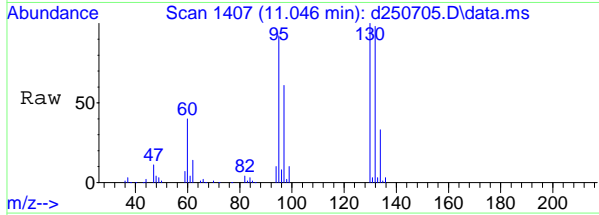
Tgt Ion	Resp	Lower	Upper
84	1038		
84	100		
56	98.2	160.9	220.9#
41	31.3	78.6	138.6#





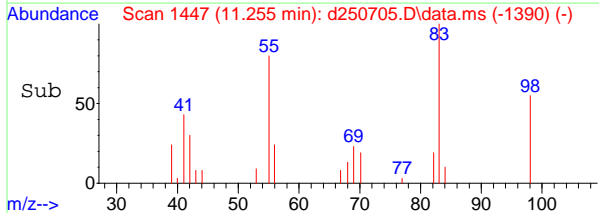
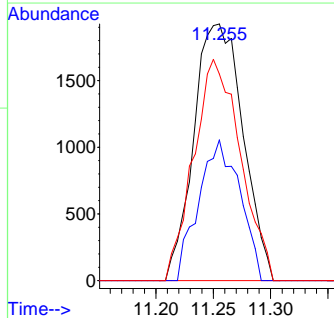
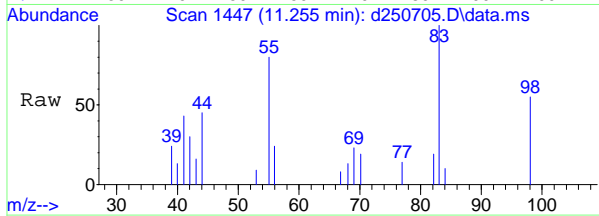
#63
 trichloroethene
 Concen: 67.39 ug/L
 RT: 11.046 min Scan# 1407
 Delta R.T. 0.002 min
 Lab File: d250705.D
 Acq: 22 Jun 2017 4:52 pm

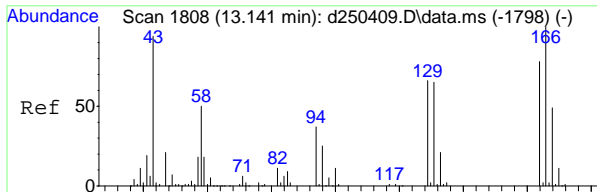
Tgt Ion	Resp	Lower	Upper
95	103383		
95	100		
130	108.6	76.9	136.9
132	106.2	72.2	132.2



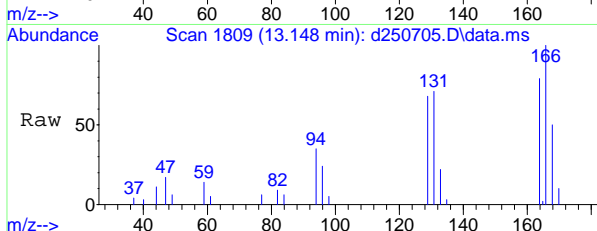
#66
 methylcyclohexane
 Concen: 1.72 ug/L
 RT: 11.255 min Scan# 1447
 Delta R.T. -0.004 min
 Lab File: d250705.D
 Acq: 22 Jun 2017 4:52 pm

Tgt Ion	Resp	Lower	Upper
83	5749		
83	100		
98	54.8	27.6	67.6
55	80.5	53.9	93.9



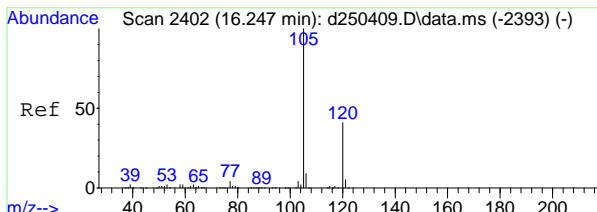
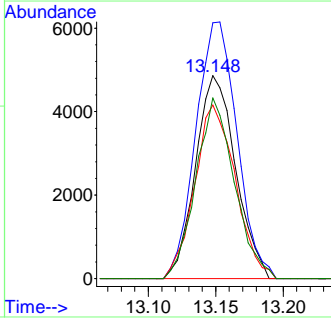
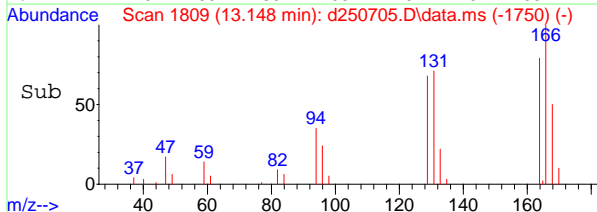


#81
 tetrachloroethene
 Concen: 5.64 ug/L
 RT: 13.148 min Scan# 1809
 Delta R.T. 0.007 min
 Lab File: d250705.D
 Acq: 22 Jun 2017 4:52 pm

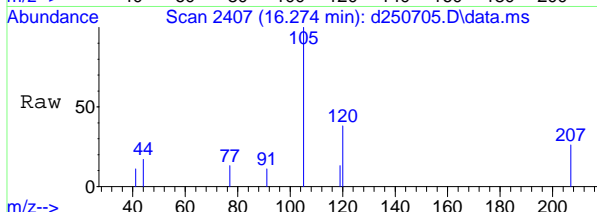


Tgt Ion:164 Resp: 10012

Ion	Ratio	Lower	Upper
164	100		
166	126.1	97.6	157.6
129	85.5	54.1	114.1
131	89.0	53.0	113.0

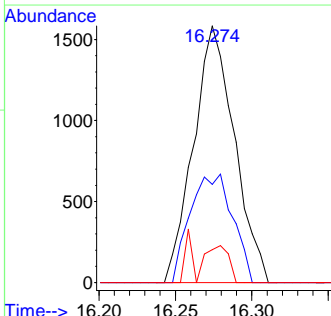
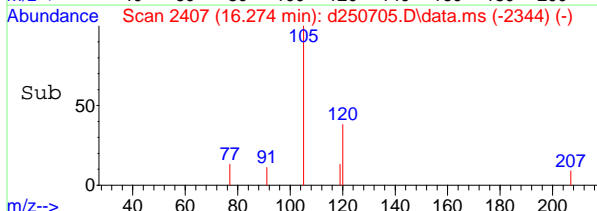


#110
 1,2,4-trimethylbenzene
 Concen: 0.33 ug/L
 RT: 16.274 min Scan# 2407
 Delta R.T. 0.028 min
 Lab File: d250705.D
 Acq: 22 Jun 2017 4:52 pm

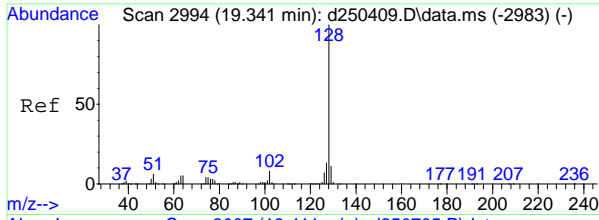


Tgt Ion:105 Resp: 2953

Ion	Ratio	Lower	Upper
105	100		
120	38.3	17.6	77.6
77	12.8	0.0	41.9

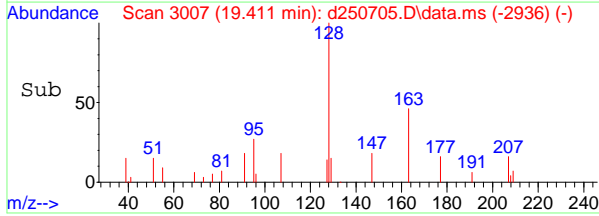
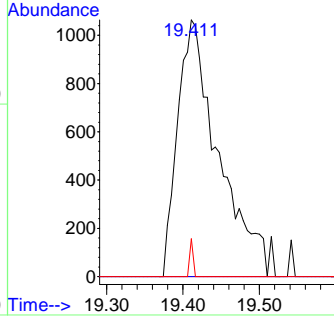
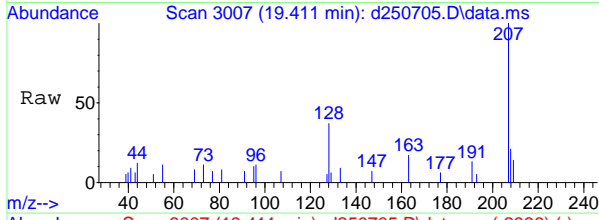


7.1.3
7



#124
 naphthalene
 Concen: 0.46 ug/L
 RT: 19.411 min Scan# 3007
 Delta R.T. 0.070 min
 Lab File: d250705.D
 Acq: 22 Jun 2017 4:52 pm

Tgt Ion	Resp	Lower	Upper
128	3988		
128	100		
102	0.0	0.0	38.5
51	14.8	0.0	36.0



7.1.3
7

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218900.D
 Acq On : 22 Jun 2017 3:36 pm
 Operator : SushilaY
 Sample : jc45628-2
 Misc : MS17368,VC8081,5.1,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 11:21:18 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

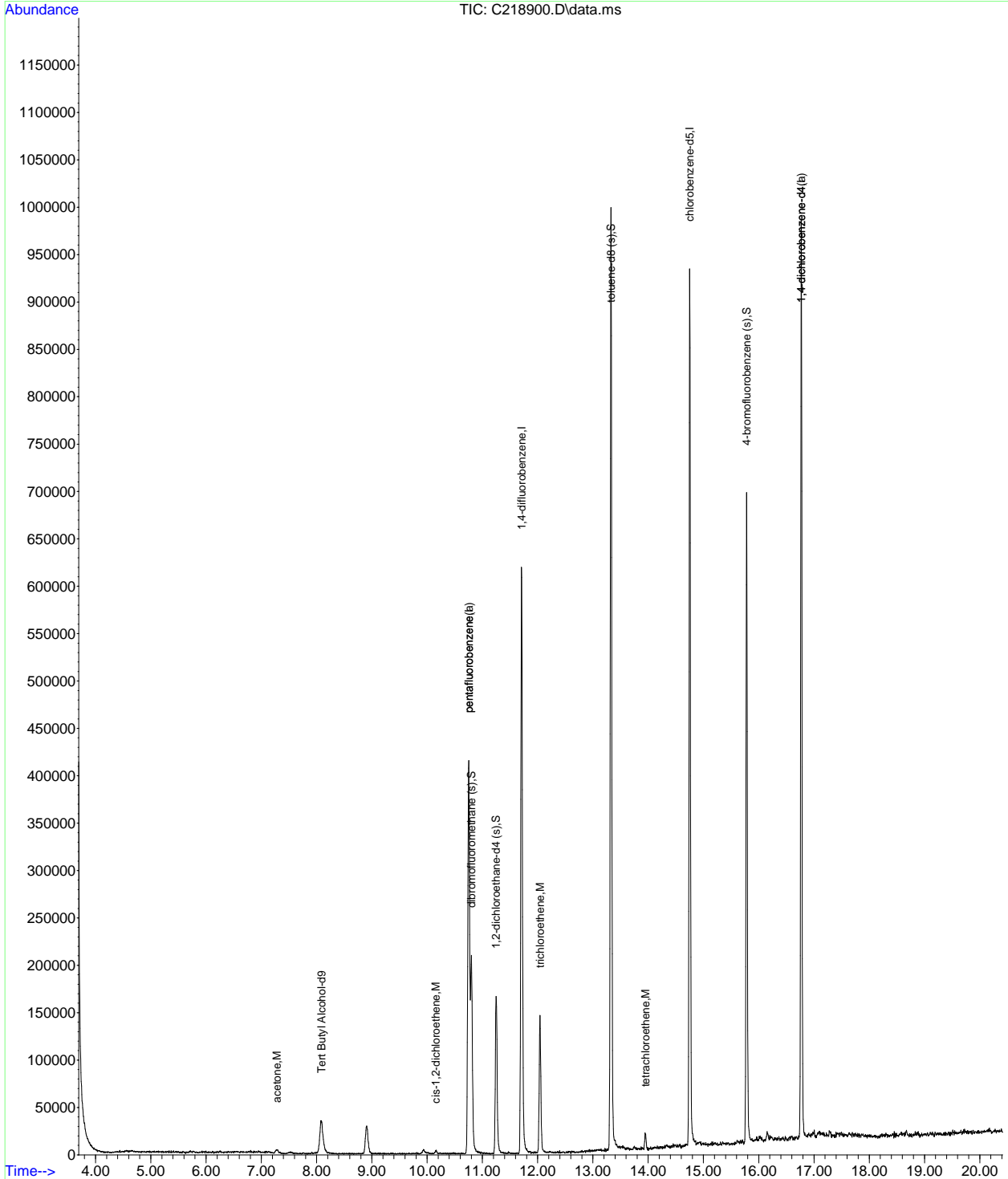
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.087	65	79517	500.00	ug/L	# 0.02
5) pentafluorobenzene	10.754	168	342963	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.711	114	542231	50.00	ug/L	0.00
75) chlorobenzene-d5	14.750	117	486184	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.769	152	235442	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.754	168	342963	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.769	152	235442	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.801	113	142261	42.81	ug/L	0.00
Spiked Amount	50.000	Range 76 - 120	Recovery	=	85.62%	
54) 1,2-dichloroethane-d4 (s)	11.246	65	143497	48.87	ug/L	0.00
Spiked Amount	50.000	Range 73 - 122	Recovery	=	97.74%	
76) toluene-d8 (s)	13.328	98	681871	52.44	ug/L	0.00
Spiked Amount	50.000	Range 84 - 119	Recovery	=	104.88%	
100) 4-bromofluorobenzene (s)	15.780	174	174257	52.05	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	104.10%	
Target Compounds						
20) acetone	7.281	43	8970	16.77	ug/L	91
38) cis-1,2-dichloroethene	10.153	96	1742	0.45	ug/L	87
63) trichloroethene	12.041	95	53432	17.20	ug/L	91
82) tetrachloroethene	13.950	166	5036	1.62	ug/L	95

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

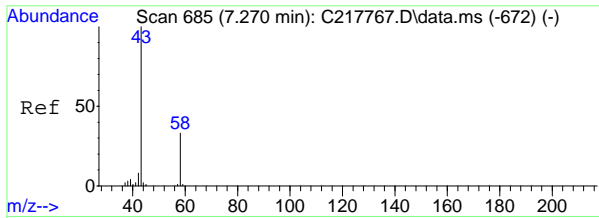
7.1.4
7

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218900.D
 Acq On : 22 Jun 2017 3:36 pm
 Operator : SushilaY
 Sample : jc45628-2
 Misc : MS17368,VC8081,5.1,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

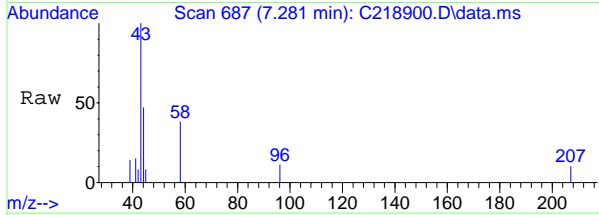
Quant Time: Jun 23 11:21:18 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration



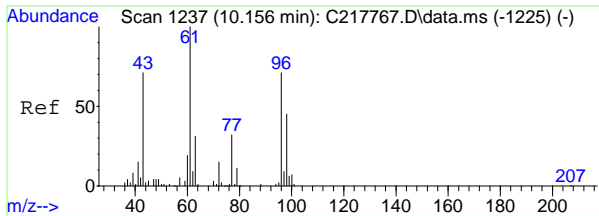
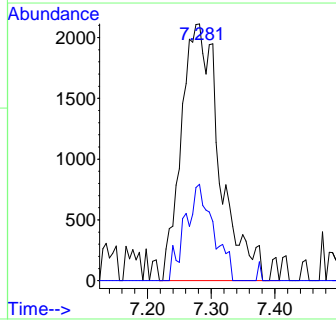
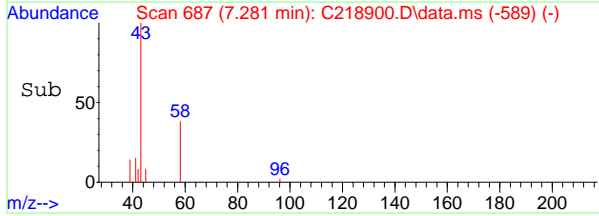
7.1.4
7



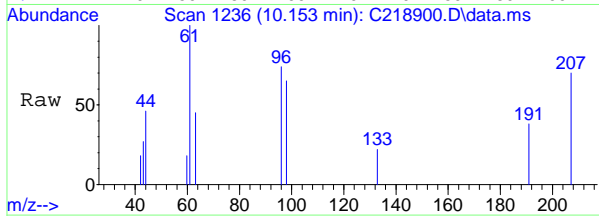
#20
acetone
Concen: 16.77 ug/L
RT: 7.281 min Scan# 687
Delta R.T. 0.012 min
Lab File: C218900.D
Acq: 22 Jun 2017 3:36 pm



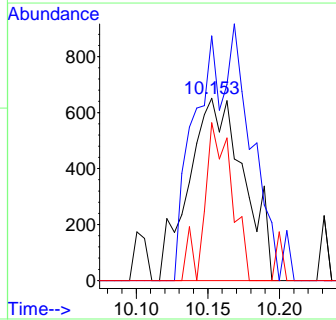
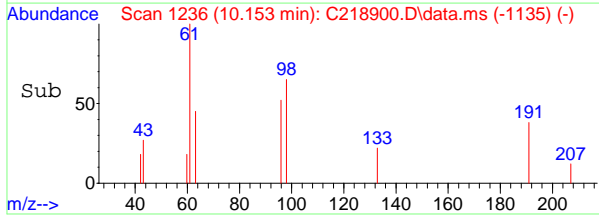
Tgt Ion: 43 Resp: 8970
Ion Ratio Lower Upper
43 100
58 37.5 2.6 62.6



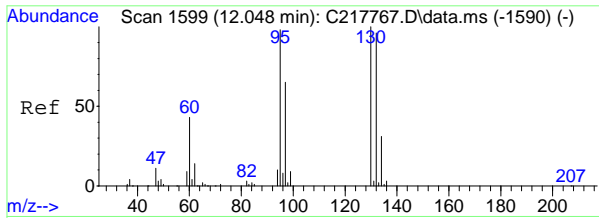
#38
cis-1,2-dichloroethene
Concen: 0.45 ug/L
RT: 10.153 min Scan# 1236
Delta R.T. -0.003 min
Lab File: C218900.D
Acq: 22 Jun 2017 3:36 pm



Tgt Ion: 96 Resp: 1742
Ion Ratio Lower Upper
96 100
61 134.3 110.1 170.1
98 86.6 32.3 92.3

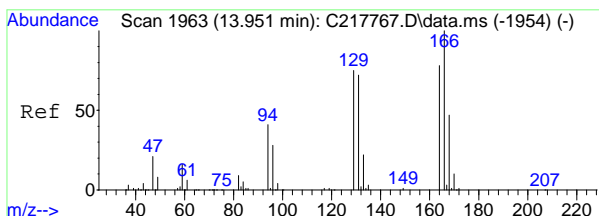
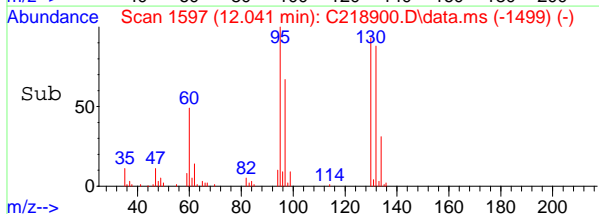
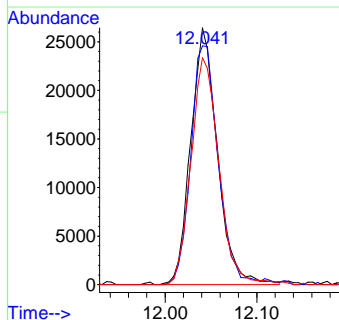
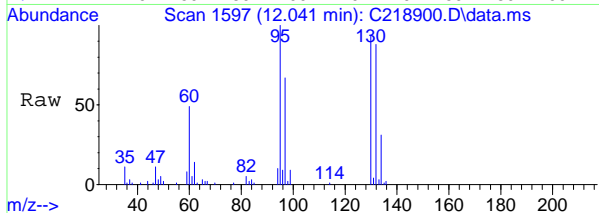


7.14
7



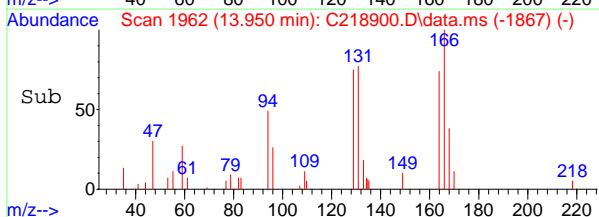
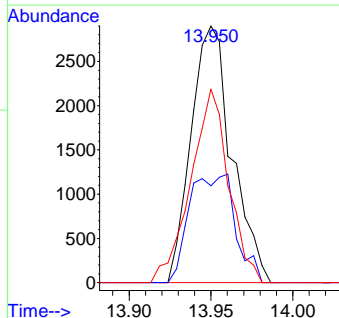
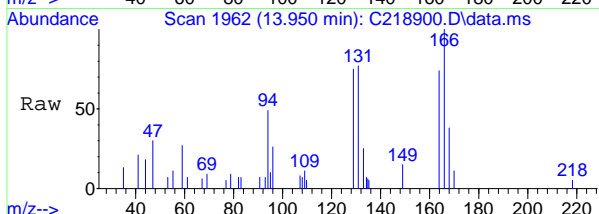
#63
 trichloroethene
 Concen: 17.20 ug/L
 RT: 12.041 min Scan# 1597
 Delta R.T. -0.007 min
 Lab File: C218900.D
 Acq: 22 Jun 2017 3:36 pm

Tgt Ion	Resp	Lower	Upper
95	53432		
95	100		
130	93.0	71.8	131.8
132	88.4	68.1	128.1



#82
 tetrachloroethene
 Concen: 1.62 ug/L
 RT: 13.950 min Scan# 1962
 Delta R.T. -0.001 min
 Lab File: C218900.D
 Acq: 22 Jun 2017 3:36 pm

Tgt Ion	Resp	Lower	Upper
166	5036		
166	100		
168	37.7	16.9	76.9
129	75.4	45.3	105.3



LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218900.D
 Acq On : 22 Jun 2017 3:36 pm
 Operator : SushilaY
 Sample : jc45628-2
 Misc : MS17368,VC8081,5.1,,,1
 ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P
 Integrator: RTE
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.001 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

Signal : TIC: C218900.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.655	371	376	379	rBV2	2016	3675	0.20%	0.036%
2	7.276	677	686	694	rBV4	3852	12575	0.69%	0.124%
3	8.076	827	839	863	rBB2	34306	143615	7.93%	1.418%
4	8.903	983	997	1014	rBB2	29118	99134	5.47%	0.979%
5	9.933	1183	1194	1201	rBV4	4299	11465	0.63%	0.113%
6	10.163	1229	1238	1245	rBB5	3683	7584	0.42%	0.075%
7	10.754	1336	1351	1356	rBV	415186	990296	54.69%	9.777%
8	10.801	1356	1360	1380	rVV2	209482	476698	26.33%	4.706%
9	10.916	1380	1382	1386	rVV2	2785	3394	0.19%	0.034%
10	11.246	1437	1445	1462	rBB2	165589	380848	21.03%	3.760%
11	11.706	1521	1533	1558	rBB	618695	1286399	71.04%	12.700%
12	12.041	1587	1597	1612	rBB	144688	290455	16.04%	2.867%
13	12.862	1747	1754	1755	rVB5	2204	3731	0.21%	0.037%
14	13.328	1833	1843	1860	rBB	992860	1810752	100.00%	17.876%
15	13.427	1860	1862	1867	rVV6	5745	9102	0.50%	0.090%
16	13.484	1871	1873	1876	rVV3	3429	3858	0.21%	0.038%
17	13.526	1876	1881	1883	rVV5	3084	5176	0.29%	0.051%
18	13.631	1898	1901	1907	rVB7	3119	4576	0.25%	0.045%
19	13.751	1917	1924	1926	rVV6	3782	5573	0.31%	0.055%
20	13.945	1956	1961	1969	rBB3	17486	31828	1.76%	0.314%
21	14.122	1989	1995	1997	rBV6	2312	3958	0.22%	0.039%
22	14.342	2030	2037	2040	rBV9	3481	6950	0.38%	0.069%
23	14.494	2061	2066	2070	rBB8	2469	3946	0.22%	0.039%
24	14.578	2077	2082	2087	rVB8	3914	6189	0.34%	0.061%
25	14.630	2087	2092	2095	rBV6	3048	4495	0.25%	0.044%
26	14.750	2108	2115	2133	rBB	923871	1521275	84.01%	15.019%
27	14.849	2133	2134	2139	rVB5	3910	3361	0.19%	0.033%
28	14.954	2144	2154	2156	rVB8	3442	7817	0.43%	0.077%
29	15.074	2173	2177	2178	rVB4	2908	3237	0.18%	0.032%
30	15.216	2198	2204	2206	rBV7	2127	3152	0.17%	0.031%
31	15.346	2224	2229	2233	rBV8	3250	3864	0.21%	0.038%
32	15.378	2233	2235	2240	rVB6	2162	3151	0.17%	0.031%
33	15.451	2245	2249	2252	rVB4	2711	3987	0.22%	0.039%
34	15.608	2277	2279	2283	rBV5	3489	4405	0.24%	0.043%
35	15.665	2287	2290	2294	rBV6	3638	4528	0.25%	0.045%
36	15.702	2294	2297	2302	rVB6	4962	6966	0.38%	0.069%
37	15.780	2302	2312	2326	rBB	686168	1097097	60.59%	10.831%
38	15.958	2342	2346	2350	rBB6	3928	3396	0.19%	0.034%
39	16.005	2350	2355	2357	rVV6	5407	5753	0.32%	0.057%
40	16.026	2357	2359	2363	rVV5	5668	7069	0.39%	0.070%
41	16.052	2363	2364	2371	rVB7	5136	5947	0.33%	0.059%
42	16.115	2371	2376	2377	rBV5	3104	4051	0.22%	0.040%
43	16.152	2377	2383	2390	rBV5	10197	21525	1.19%	0.213%
44	16.199	2390	2392	2393	rVV2	5502	3175	0.18%	0.031%
45	16.220	2393	2396	2397	rVV3	4645	4371	0.24%	0.043%

7.15
 7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218900.D
 Acq On : 22 Jun 2017 3:36 pm
 Operator : SushilaY
 Sample : jc45628-2
 Misc : MS17368,VC8081,5.1,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P
 Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs : 0.001
 Stop Thrs : 0
 Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

46	16.235	2398	2399	2404	rVB5	3653	4388	0.24%	0.043%
47	16.298	2410	2411	2416	rVB5	2980	3469	0.19%	0.034%
48	16.366	2420	2424	2428	rVB6	4484	5671	0.31%	0.056%
49	16.439	2432	2438	2443	rVB10	4234	8283	0.46%	0.082%
50	16.560	2456	2461	2462	rBV5	3769	5268	0.29%	0.052%
51	16.602	2465	2469	2472	rVB6	4665	6665	0.37%	0.066%
52	16.654	2478	2479	2482	rBV3	3482	3522	0.19%	0.035%
53	16.685	2482	2485	2489	rVB6	3219	4172	0.23%	0.041%
54	16.769	2489	2501	2512	rBB	967656	1510546	83.42%	14.913%
55	16.832	2512	2513	2519	rVV6	5767	7155	0.40%	0.071%
56	16.905	2524	2527	2532	rVV6	4867	7430	0.41%	0.073%
57	16.983	2539	2542	2544	rVV3	5407	6617	0.37%	0.065%
58	17.004	2544	2546	2549	rVB4	7187	4828	0.27%	0.048%
59	17.072	2554	2559	2560	rBV4	5649	7442	0.41%	0.073%
60	17.098	2560	2564	2566	rVB5	4193	4916	0.27%	0.049%
61	17.172	2576	2578	2584	rVB7	3765	3746	0.21%	0.037%
62	17.276	2596	2598	2607	rVB9	7391	15018	0.83%	0.148%
63	17.339	2607	2610	2612	rBV4	3060	3431	0.19%	0.034%
64	17.397	2618	2621	2622	rBB3	5707	3661	0.20%	0.036%
65	17.412	2622	2624	2628	rBV4	4544	7369	0.41%	0.073%
66	17.475	2633	2636	2639	rBV5	3956	5259	0.29%	0.052%
67	17.496	2639	2640	2645	rVB5	4823	4755	0.26%	0.047%
68	17.632	2662	2666	2667	rBV4	3814	3521	0.19%	0.035%
69	17.695	2677	2678	2683	rBV5	4945	5294	0.29%	0.052%
70	17.752	2686	2689	2692	rBB5	3399	3678	0.20%	0.036%
71	17.794	2695	2697	2701	rVB4	4606	4192	0.23%	0.041%
72	17.820	2701	2702	2707	rBB5	4087	3990	0.22%	0.039%
73	17.862	2707	2710	2713	rBV5	3839	5027	0.28%	0.050%
74	17.972	2729	2731	2734	rBV3	3561	3361	0.19%	0.033%
75	18.124	2759	2760	2766	rVB5	2886	3300	0.18%	0.033%
76	18.301	2790	2794	2799	rBB7	4282	6485	0.36%	0.064%
77	18.427	2812	2818	2821	rVB8	4840	9225	0.51%	0.091%
78	18.453	2821	2823	2827	rBV5	6929	6256	0.35%	0.062%
79	18.495	2827	2831	2833	rBV5	4277	5174	0.29%	0.051%
80	18.631	2851	2857	2858	rVB6	3306	4976	0.27%	0.049%
81	18.673	2858	2865	2870	rBV7	6285	12248	0.68%	0.121%
82	18.788	2885	2887	2890	rBV4	3315	3694	0.20%	0.036%
83	18.887	2902	2906	2908	rVB4	4165	3733	0.21%	0.037%
84	18.950	2911	2918	2921	rBV7	4705	7752	0.43%	0.077%
85	19.054	2935	2938	2941	rVB4	3589	3434	0.19%	0.034%
86	19.102	2941	2947	2953	rBV8	3999	8189	0.45%	0.081%
87	19.143	2953	2955	2960	rVB6	4780	4942	0.27%	0.049%
88	19.190	2960	2964	2967	rBV5	4765	5319	0.29%	0.053%
89	19.431	3006	3010	3014	rVB4	4011	5450	0.30%	0.054%
90	19.478	3018	3019	3023	rBV4	3570	3484	0.19%	0.034%
91	19.510	3023	3025	3030	rBB6	5204	5227	0.29%	0.052%
92	19.546	3030	3032	3034	rBV2	4558	3142	0.17%	0.031%
93	19.661	3050	3054	3057	rVB6	4686	5643	0.31%	0.056%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218900.D
Acq On : 22 Jun 2017 3:36 pm
Operator : SushilaY
Sample : jc45628-2
Misc : MS17368,VC8081,5.1,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

94	19.724	3065	3066	3074	rBB6	4469	5996	0.33%	0.059%
95	19.881	3092	3096	3099	rBV5	4453	5209	0.29%	0.051%
96	20.059	3126	3130	3133	rBV6	2605	3988	0.22%	0.039%
97	20.174	3151	3152	3159	rVB7	5962	7233	0.40%	0.071%
98	20.257	3162	3168	3169	rVV5	2973	3646	0.20%	0.036%
99	20.278	3171	3172	3176	rVB4	4073	3589	0.20%	0.035%
100	20.331	3176	3182	3184	rBV7	3030	4851	0.27%	0.048%

Sum of corrected areas: 10129258

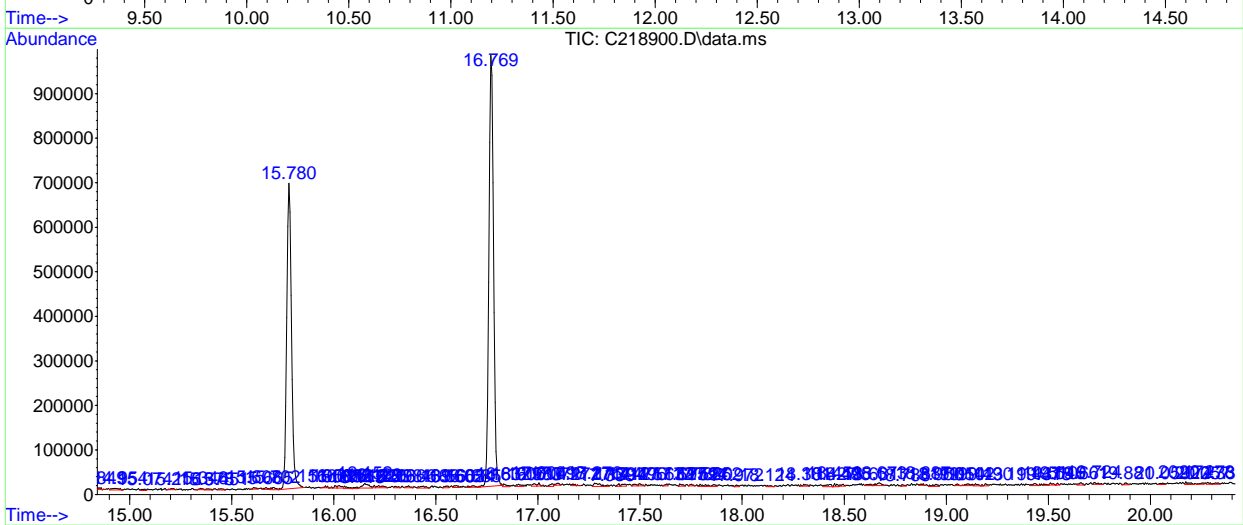
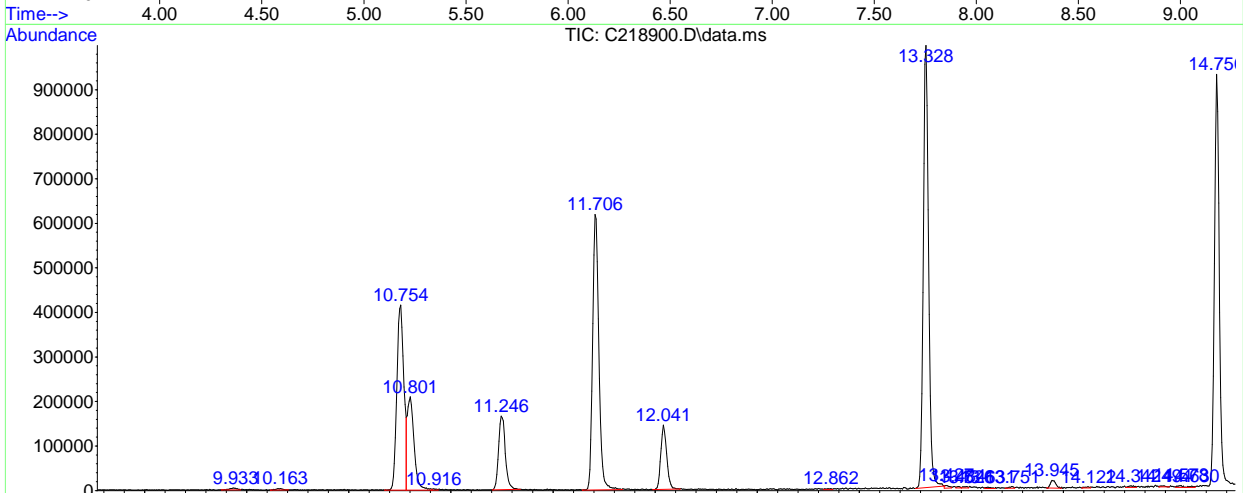
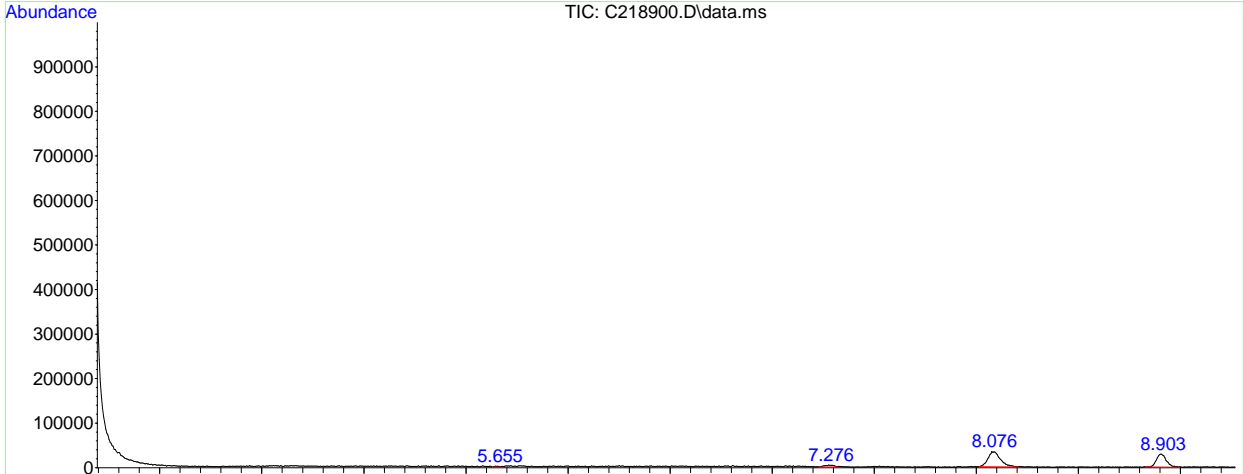
7.1.5
7

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218900.D
Acq On : 22 Jun 2017 3:36 pm
Operator : SushilaY
Sample : jc45628-2
Misc : MS17368,VC8081,5.1,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218900.D
 Acq On : 22 Jun 2017 3:36 pm
 Operator : SushilaY
 Sample : jc45628-2
 Misc : MS17368,VC8081,5.1,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

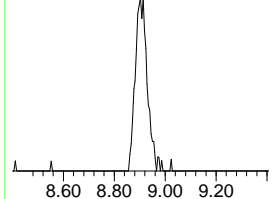
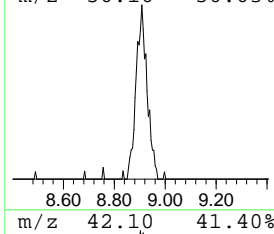
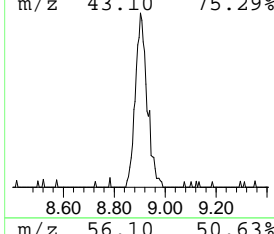
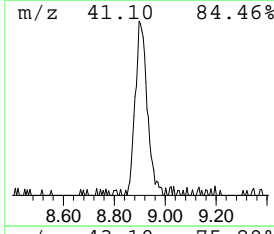
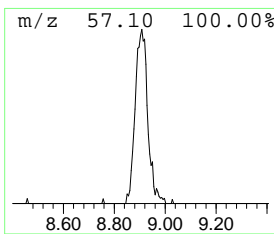
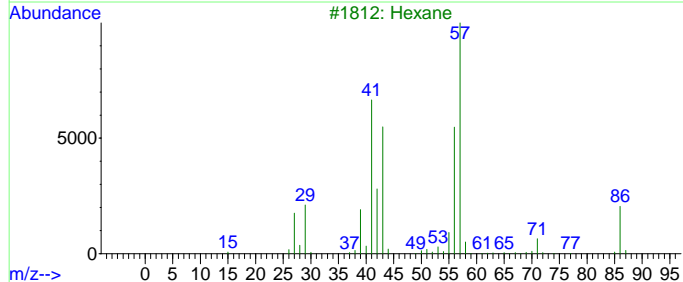
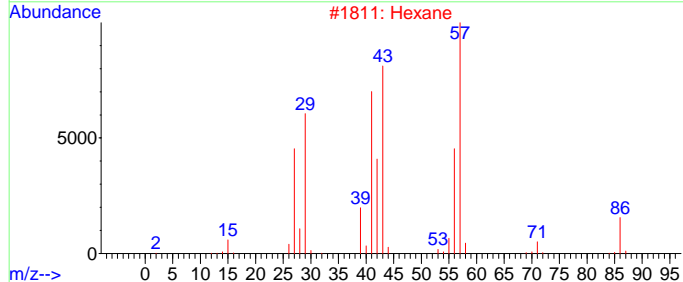
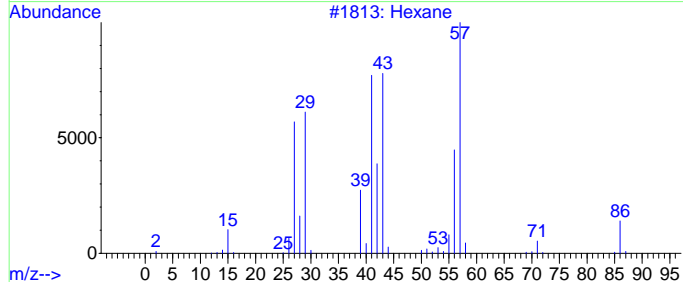
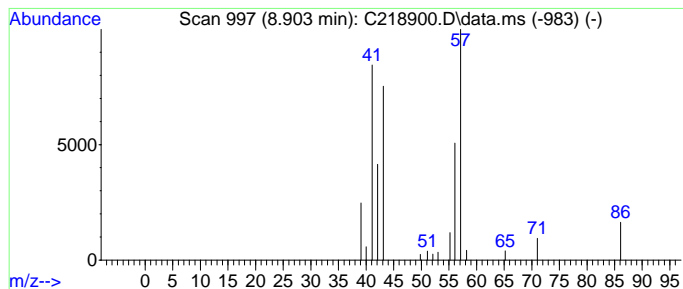
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
 TIC Integration Parameters: lscINT.P

 Peak Number 1 alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.903	5.01 ug/L	99134	pentafluorobenzene	10.754

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Hexane	86	C6H14	000110-54-3	91
2		Hexane	86	C6H14	000110-54-3	91
3		Hexane	86	C6H14	000110-54-3	72
4		1-Pentene, 4-methyl-	84	C6H12	000691-37-2	28
5		Pentane, 2,2,3,4-tetramethyl-	128	C9H20	001186-53-4	28



7.15
7

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218900.D
Acq On : 22 Jun 2017 3:36 pm
Operator : SushilaY
Sample : jc45628-2
Misc : MS17368,VC8081,5.1,,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
alkane	8.903	5.0	ug/L	99134	2	10.754	990296	50.0

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

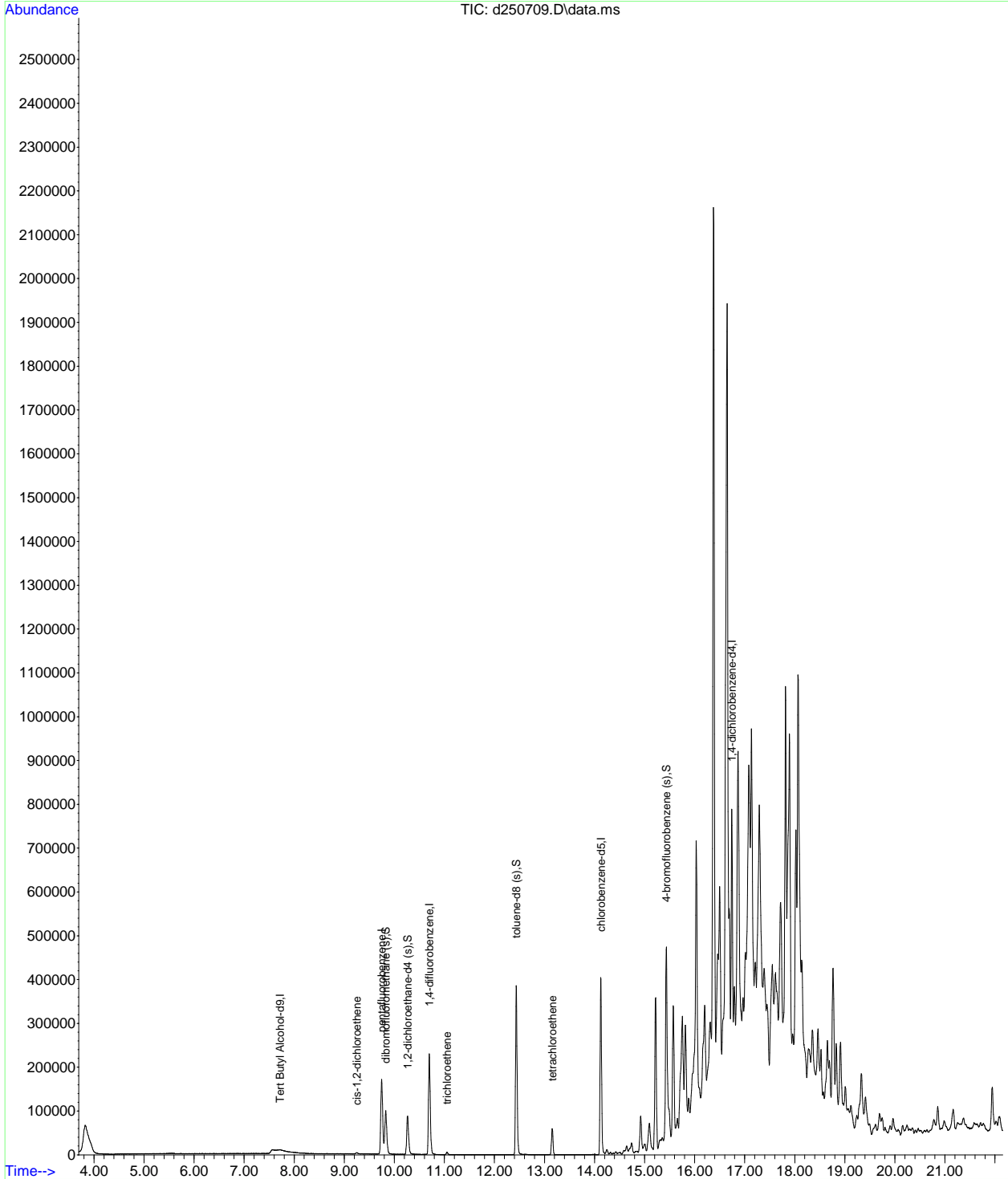
Quant Time: Jun 23 13:05:06 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Thu Jun 22 18:53:43 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.719	65	121593	500.00	ug/L	0.02
5) pentafluorobenzene	9.747	168	180245	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.699	114	254623	50.00	ug/L	0.00
75) chlorobenzene-d5	14.128	117	290308	50.00	ug/L	0.01
99) 1,4-dichlorobenzene-d4	16.742	152	207147	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	9.831	113	80333	49.17	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	98.34%	
55) 1,2-dichloroethane-d4 (s)	10.265	65	87412	48.22	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	96.44%	
76) toluene-d8 (s)	12.434	98	330885	48.15	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	96.30%	
100) 4-bromofluorobenzene (s)	15.430	95	150621	48.89	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	97.78%	
Target Compounds						
38) cis-1,2-dichloroethene	9.250	96	2464	1.23	ug/L #	67
63) trichloroethene	11.054	95	2643	1.60	ug/L	96
81) tetrachloroethene	13.156	164	18207	9.98	ug/L	98

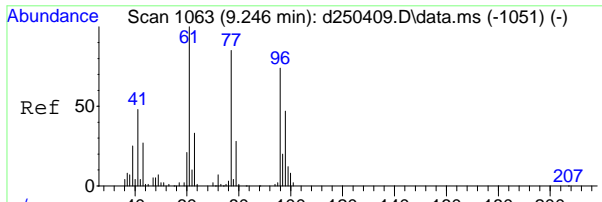
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

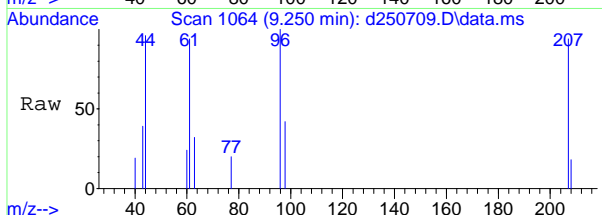
Quant Time: Jun 23 13:05:06 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Thu Jun 22 18:53:43 2017
 Response via : Initial Calibration



7.1.6
7

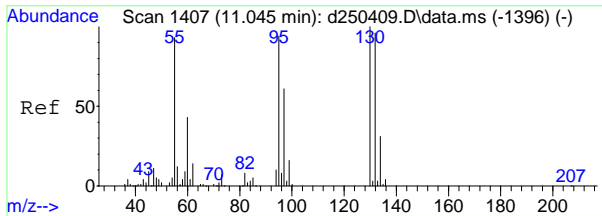
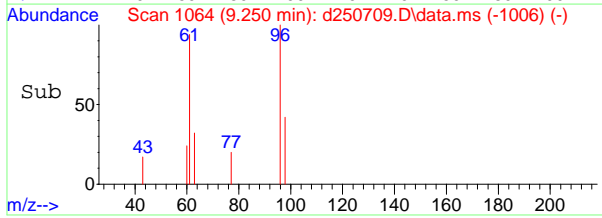
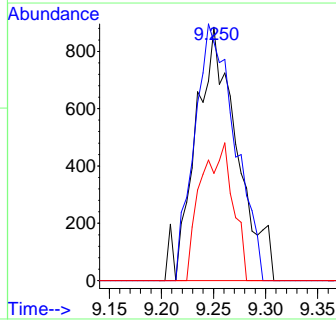


#38
 cis-1,2-dichloroethene
 Concen: 1.23 ug/L
 RT: 9.250 min Scan# 1064
 Delta R.T. 0.004 min
 Lab File: d250709.D
 Acq: 22 Jun 2017 6:44 pm

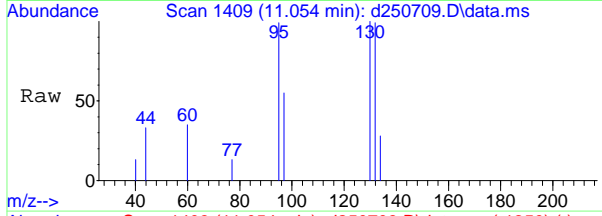


Tgt Ion: 96 Resp: 2464

Ion	Ratio	Lower	Upper
96	100		
61	94.1	106.4	166.4#
98	42.3	33.8	93.8

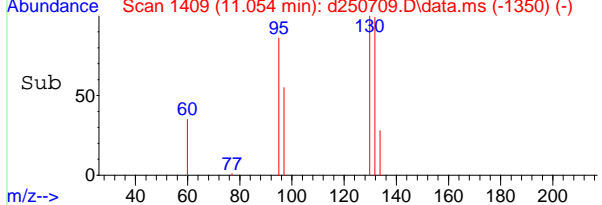
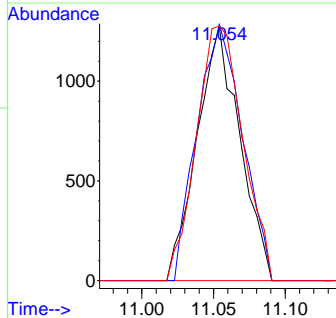


#63
 trichloroethene
 Concen: 1.60 ug/L
 RT: 11.054 min Scan# 1409
 Delta R.T. 0.009 min
 Lab File: d250709.D
 Acq: 22 Jun 2017 6:44 pm

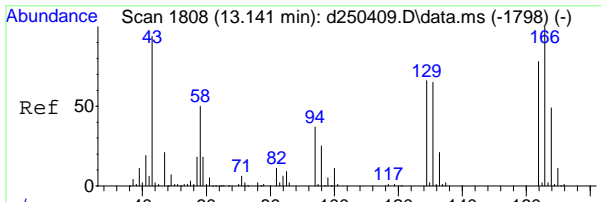


Tgt Ion: 95 Resp: 2643

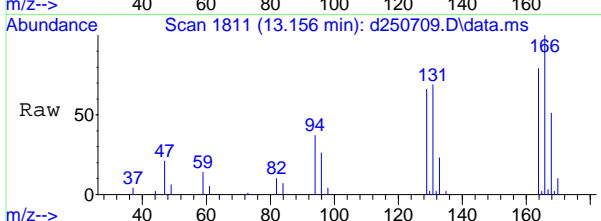
Ion	Ratio	Lower	Upper
95	100		
130	100.9	76.9	136.9
132	99.9	72.2	132.2



7.1.6
7

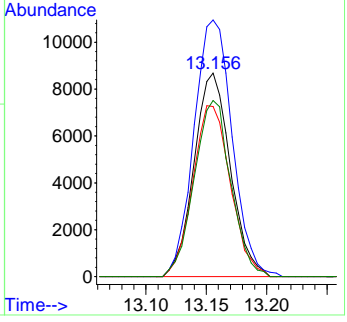
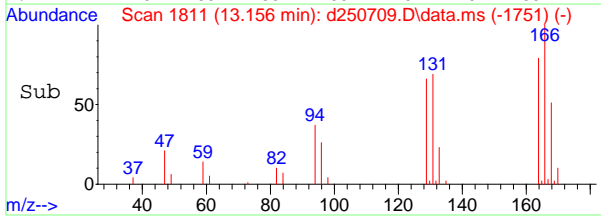


#81
 tetrachloroethene
 Concen: 9.98 ug/L
 RT: 13.156 min Scan# 1811
 Delta R.T. 0.015 min
 Lab File: d250709.D
 Acq: 22 Jun 2017 6:44 pm



Tgt Ion: 164 Resp: 18207

Ion	Ratio	Lower	Upper
164	100		
166	126.1	97.6	157.6
129	83.6	54.1	114.1
131	86.4	53.0	113.0



7.1.6
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: RTEINT.P
 Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs : 0.1
 Stop Thrs : 0.1
 Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

Signal : TIC: d250709.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.824	3	26	83	rVB2	65258	552541	9.82%	1.299%
2	4.446	137	145	148	rBV2	634	1135	0.02%	0.003%
3	5.356	315	319	320	rVB2	716	797	0.01%	0.002%
4	5.444	331	336	339	rBV4	932	1228	0.02%	0.003%
5	5.497	342	346	349	rBV4	775	909	0.02%	0.002%
6	5.591	362	364	372	rVB5	1371	2356	0.04%	0.006%
7	6.108	460	463	469	rVB5	1147	2089	0.04%	0.005%
8	6.155	469	472	474	rBV3	1095	1222	0.02%	0.003%
9	6.197	478	480	484	rBV5	737	848	0.02%	0.002%
10	6.286	495	497	500	rVB3	857	916	0.02%	0.002%
11	6.312	500	502	507	rBV4	1005	1473	0.03%	0.003%
12	6.380	511	515	517	rBV2	1213	1331	0.02%	0.003%
13	7.232	675	678	684	rVB5	757	1484	0.03%	0.003%
14	7.279	684	687	692	rBV5	711	1133	0.02%	0.003%
15	7.572	727	743	745	rBV7	8326	27787	0.49%	0.065%
16	8.503	919	921	926	rBV4	721	1101	0.02%	0.003%
17	8.654	946	950	953	rVB4	1241	1046	0.02%	0.002%
18	9.078	1023	1031	1034	rVB4	741	1058	0.02%	0.002%
19	9.250	1055	1064	1078	rVB6	3320	11136	0.20%	0.026%
20	9.397	1089	1092	1096	rBV4	524	791	0.01%	0.002%
21	9.674	1140	1145	1148	rBV4	729	1448	0.03%	0.003%
22	9.747	1148	1159	1168	rVV2	170341	453824	8.07%	1.067%
23	9.831	1168	1175	1193	rVB	98731	269563	4.79%	0.634%
24	10.265	1247	1258	1275	rBV2	87315	232319	4.13%	0.546%
25	10.699	1331	1341	1369	rVB	229879	558004	9.92%	1.312%
26	11.054	1400	1409	1417	rVB2	5826	12853	0.23%	0.030%
27	12.434	1663	1673	1700	rBV	385975	837392	14.89%	1.969%
28	13.156	1802	1811	1825	rVB	59499	126120	2.24%	0.297%
29	14.008	1967	1974	1980	rVB2	1287	2360	0.04%	0.006%
30	14.123	1983	1996	2012	rBV	404109	840537	14.95%	1.977%
31	14.243	2012	2019	2027	rVB5	10103	24581	0.44%	0.058%
32	14.316	2027	2033	2039	rBV2	4054	7367	0.13%	0.017%
33	14.374	2039	2044	2049	rBV4	2600	4579	0.08%	0.011%
34	14.426	2049	2054	2059	rBV5	4344	7815	0.14%	0.018%
35	14.484	2059	2065	2067	rBV4	1797	3348	0.06%	0.008%
36	14.510	2067	2070	2077	rVB5	4120	6986	0.12%	0.016%
37	14.593	2077	2086	2088	rBV5	8700	19931	0.35%	0.047%
38	14.640	2088	2095	2101	rVV5	14199	32374	0.58%	0.076%
39	14.740	2101	2114	2123	rVB4	22818	72419	1.29%	0.170%
40	14.823	2123	2130	2131	rBV3	3821	6156	0.11%	0.014%
41	14.923	2139	2149	2157	rBV2	82944	199389	3.55%	0.469%
42	15.001	2157	2164	2171	rVB8	15446	39572	0.70%	0.093%
43	15.095	2171	2182	2197	rBV7	62533	196827	3.50%	0.463%
44	15.221	2197	2206	2215	rBV	346455	731401	13.00%	1.720%
45	15.320	2215	2225	2227	rBV6	20156	57393	1.02%	0.135%

7.17
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs: 0.1
 Stop Thrs : 0.1

Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

46	15.357	2228	2232	2236	rVB3	7087	9887	0.18%	0.023%
47	15.435	2236	2247	2264	rBV2	442239	1175695	20.90%	2.765%
48	15.571	2264	2273	2282	rBV2	298603	650721	11.57%	1.530%
49	15.655	2284	2289	2293	rVB3	21614	32327	0.57%	0.076%
50	15.754	2293	2308	2314	rBV6	255114	891129	15.84%	2.096%
51	15.817	2314	2320	2328	rVV5	208864	487976	8.68%	1.148%
52	15.880	2328	2332	2337	rVB4	34116	55609	0.99%	0.131%
53	16.031	2338	2361	2378	rBV2	618569	1998330	35.53%	4.699%
54	16.198	2380	2393	2401	rBV5	205558	677213	12.04%	1.593%
55	16.313	2407	2415	2419	rBV7	98970	248554	4.42%	0.584%
56	16.376	2419	2427	2436	rVV	1944938	4023022	71.53%	9.460%
57	16.460	2436	2443	2446	rVV5	225567	514974	9.16%	1.211%
58	16.496	2446	2450	2458	rVB6	382489	812682	14.45%	1.911%
59	16.648	2458	2479	2492	rBV	1713440	5624162	100.00%	13.226%
60	16.742	2492	2497	2503	rVV	501202	840128	14.94%	1.976%
61	16.794	2503	2507	2511	rVB3	88655	133135	2.37%	0.313%
62	16.868	2512	2521	2535	rVV4	624351	1732128	30.80%	4.073%
63	16.967	2536	2540	2543	rBV2	45041	62434	1.11%	0.147%
64	17.014	2543	2549	2552	rBV4	134392	261656	4.65%	0.615%
65	17.082	2553	2562	2568	rVV8	519805	1667321	29.65%	3.921%
66	17.134	2568	2572	2582	rVB3	587222	1253913	22.30%	2.949%
67	17.291	2591	2602	2615	rBV5	416288	1342251	23.87%	3.156%
68	17.552	2640	2652	2658	rBV7	230005	829722	14.75%	1.951%
69	17.615	2660	2664	2675	rVB8	108877	290344	5.16%	0.683%
70	17.720	2675	2684	2692	rVB5	274066	733554	13.04%	1.725%
71	17.814	2695	2702	2707	rBV	754443	1427571	25.38%	3.357%
72	17.892	2708	2717	2726	rVB2	706560	2170767	38.60%	5.105%
73	18.023	2734	2742	2745	rBV	489552	962574	17.11%	2.264%
74	18.065	2745	2750	2762	rVB3	720989	1825568	32.46%	4.293%
75	18.274	2784	2790	2798	rBV7	65563	216075	3.84%	0.508%
76	18.352	2799	2805	2818	rVB9	103902	273128	4.86%	0.642%
77	18.462	2820	2826	2833	rBV4	97508	193005	3.43%	0.454%
78	18.525	2834	2838	2844	rVB6	104473	179105	3.18%	0.421%
79	18.650	2851	2862	2867	rBV6	132675	337960	6.01%	0.795%
80	18.765	2876	2884	2891	rBV3	297613	721177	12.82%	1.696%
81	18.828	2891	2896	2903	rVB	138824	272626	4.85%	0.641%
82	18.912	2904	2912	2924	rVB3	143882	339302	6.03%	0.798%
83	19.011	2926	2931	2938	rVB4	53160	99648	1.77%	0.234%
84	19.121	2949	2952	2965	rVB9	51599	137152	2.44%	0.323%
85	19.241	2967	2975	2978	rBV8	27189	60904	1.08%	0.143%
86	19.330	2979	2992	3001	rVV6	104316	348715	6.20%	0.820%
87	19.414	3002	3008	3020	rVB6	64435	181442	3.23%	0.427%
88	19.612	3032	3046	3052	rBV8	22943	87490	1.56%	0.206%
89	19.691	3054	3061	3067	rBV3	36978	93491	1.66%	0.220%
90	19.905	3096	3102	3107	rBV4	13519	29824	0.53%	0.070%
91	19.963	3107	3113	3127	rVB6	29516	77669	1.38%	0.183%
92	20.156	3144	3150	3156	rBV6	18567	41010	0.73%	0.096%
93	20.464	3205	3209	3215	rBV8	7623	12449	0.22%	0.029%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: RTEINT.P
 Integrator: RTE
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.1 Max Peaks: 100
 Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

94	20.778	3263	3269	3277	rBV8	17231	46845	0.83%	0.110%
95	20.857	3277	3284	3293	rVB5	53059	125305	2.23%	0.295%
96	20.982	3303	3308	3323	rVB5	22396	70166	1.25%	0.165%
97	21.165	3334	3343	3352	rVB6	44884	126789	2.25%	0.298%
98	21.259	3354	3361	3368	rBV6	10720	34062	0.61%	0.080%
99	21.944	3483	3492	3502	rBV2	96771	254254	4.52%	0.598%
100	22.085	3513	3519	3528	rVB8	26008	73090	1.30%	0.172%

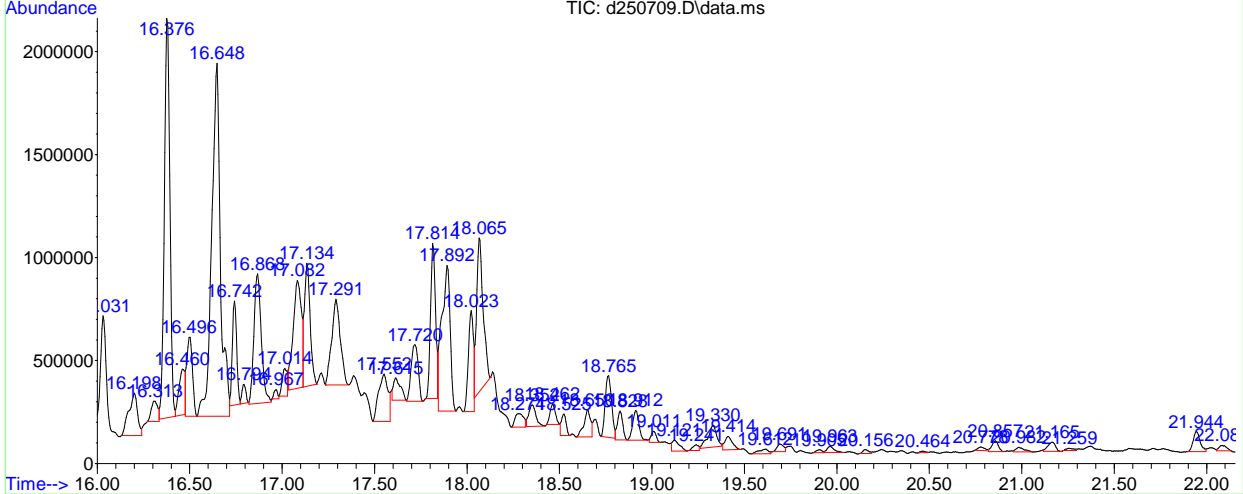
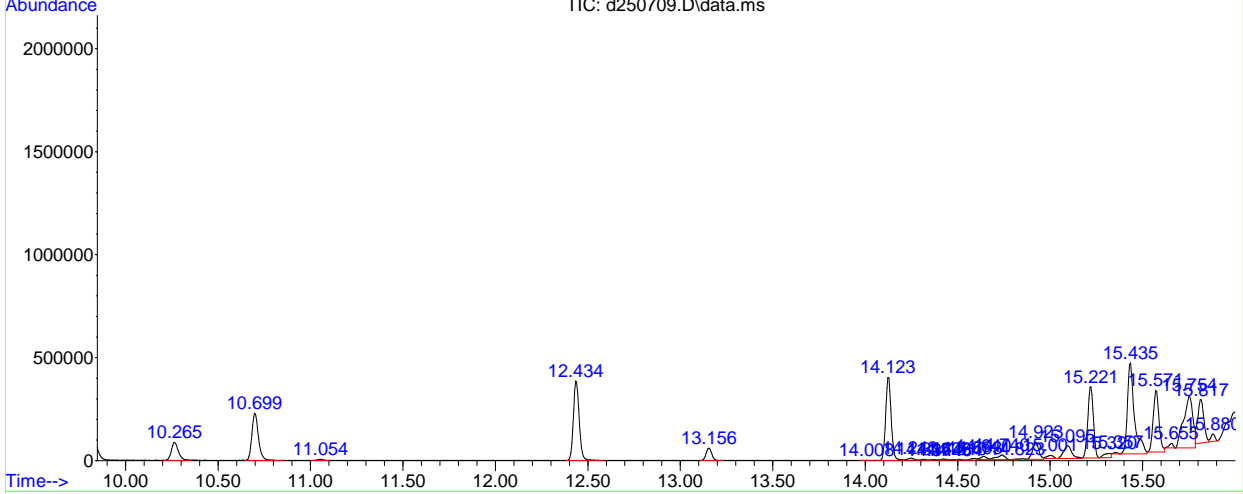
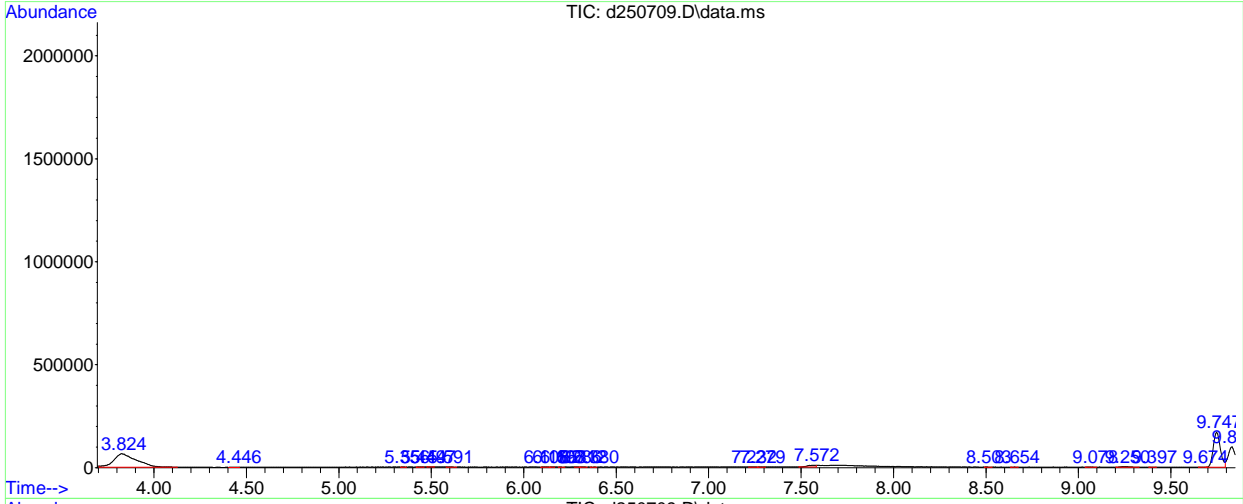
Sum of corrected areas: 42524969

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250709.D
Acq On : 22 Jun 2017 6:44 pm
Operator : XimenaC
Sample : jc45628-3
Misc : ms17368,vd10119,6.2,,100,10,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

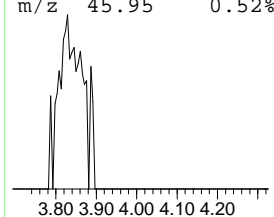
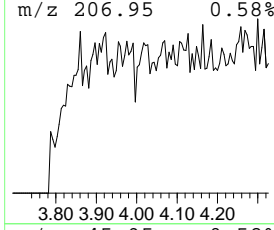
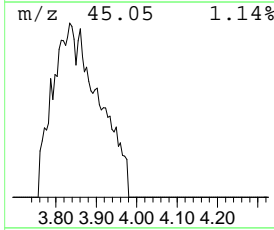
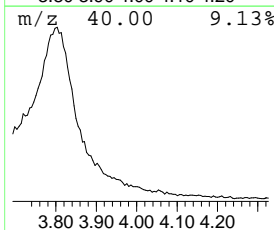
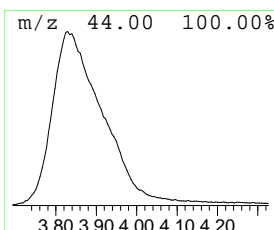
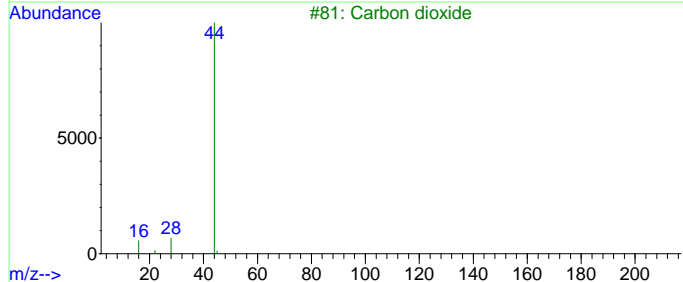
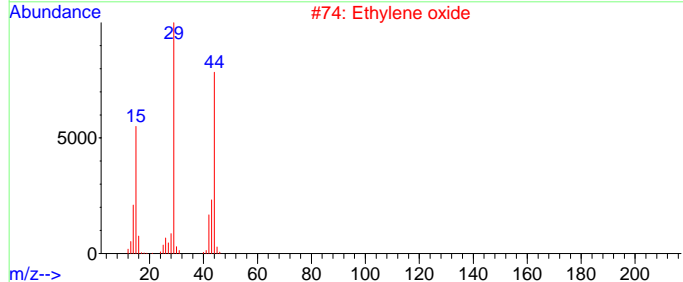
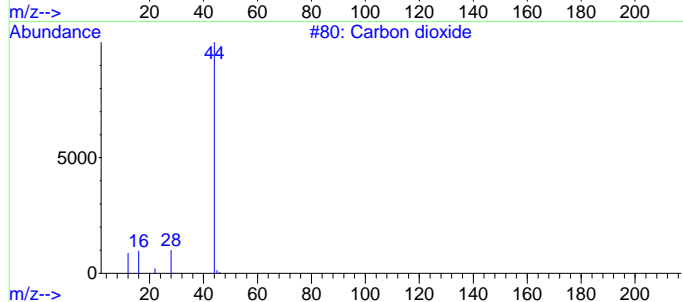
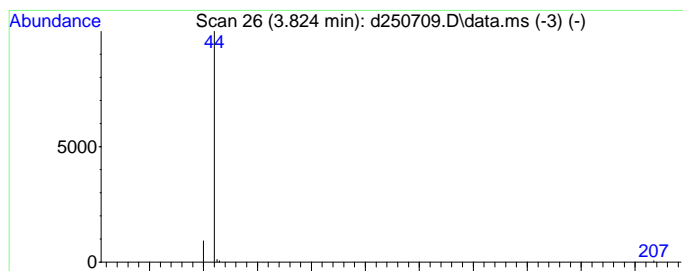
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 1 system artifact Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.824	60.88 ug/L	552541	pentafluorobenzene	9.747

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Carbon dioxide	44	CO2	000124-38-9	4
2		Ethylene oxide	44	C2H4O	000075-21-8	3
3		Carbon dioxide	44	CO2	000124-38-9	3
4		Ethylene oxide	44	C2H4O	000075-21-8	3
5		Nitrous Oxide	44	N2O	010024-97-2	3



7.17
 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

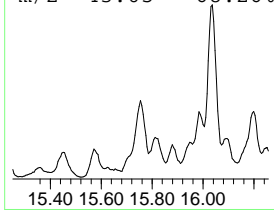
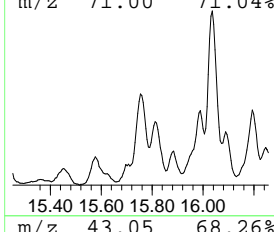
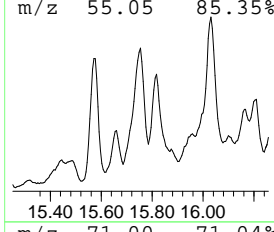
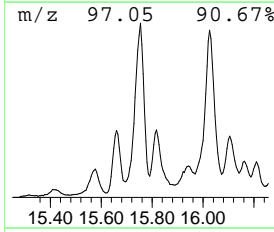
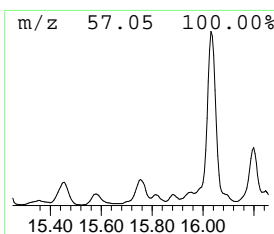
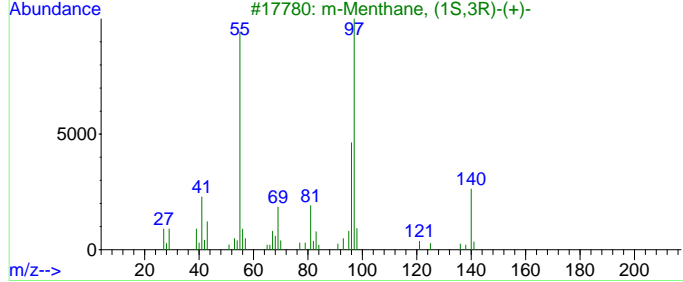
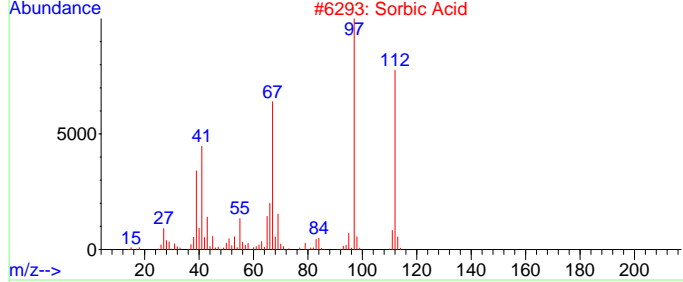
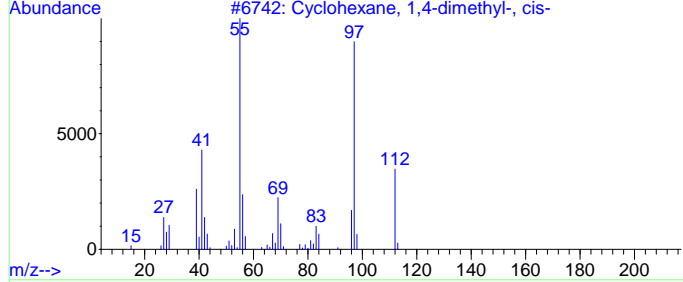
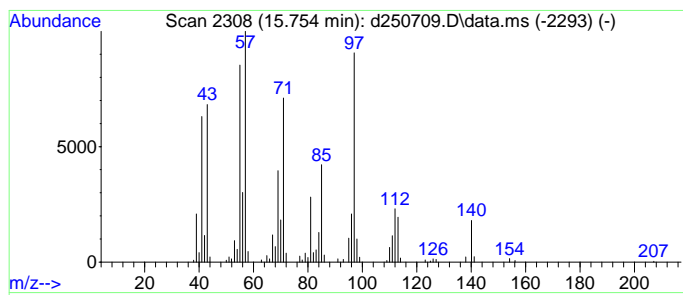
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 2 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.754	53.04 ug/L	891129	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclohexane, 1,4-dimethyl-, cis-	112	C8H16	000624-29-3	43
2		Sorbic Acid	112	C6H8O2	000110-44-1	38
3		m-Menthane, (1S,3R)-(+)-	140	C10H20	013837-66-6	38
4		2-Pentene, 2,3,4-trimethyl-	112	C8H16	000565-77-5	38
5		Cyclohexane, 1,3-dimethyl-, cis-	112	C8H16	000638-04-0	38



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 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

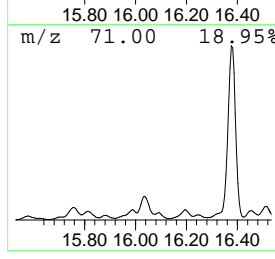
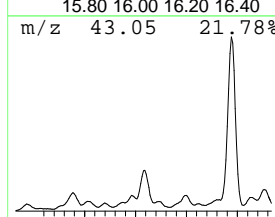
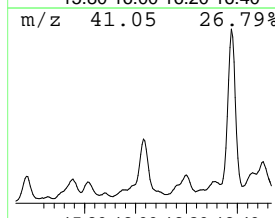
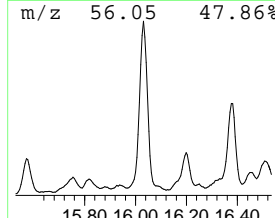
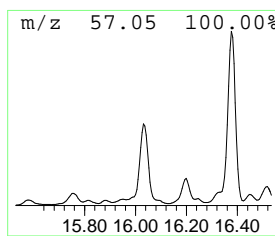
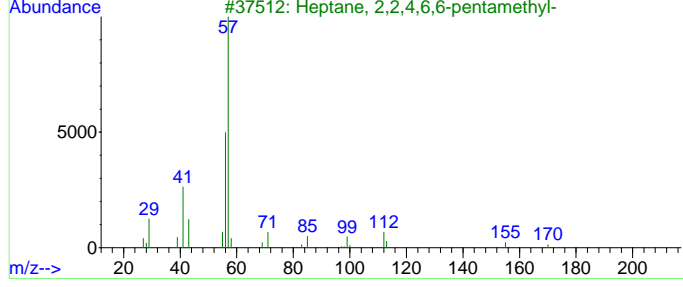
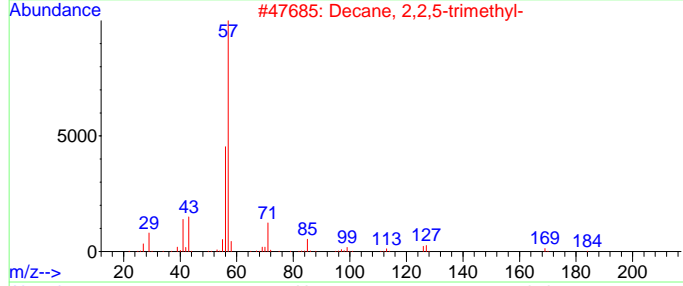
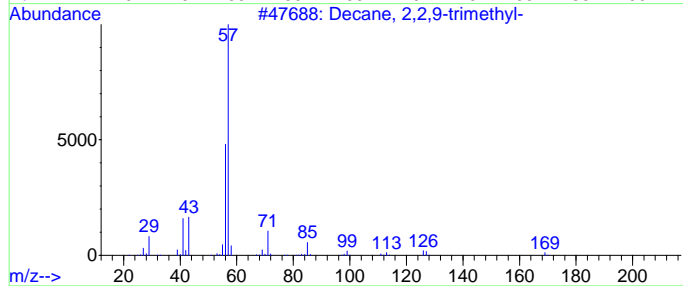
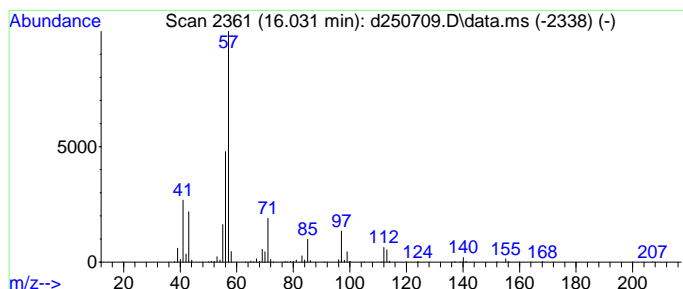
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 3 alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.031	118.93 ug/L	1998330	1,4-dichlorobenzene-d4	16.742

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Decane, 2,2,9-trimethyl-	184	C13H28	062238-00-0	64
2		Decane, 2,2,5-trimethyl-	184	C13H28	062237-96-1	64
3		Heptane, 2,2,4,6,6-pentamethyl-	170	C12H26	013475-82-6	64
4		Decane, 2,2,7-trimethyl-	184	C13H28	062237-99-4	59
5		Octane, 2,2,6-trimethyl-	156	C11H24	062016-28-8	59



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Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250709.D
Acq On : 22 Jun 2017 6:44 pm
Operator : XimenaC
Sample : jc45628-3
Misc : ms17368,vd10119,6.2,,100,10,1
ALS Vial : 24 Sample Multiplier: 1

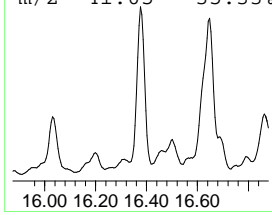
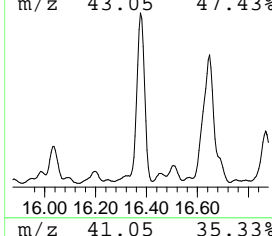
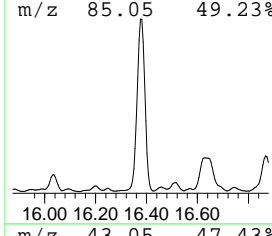
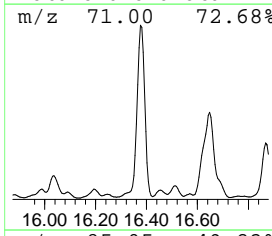
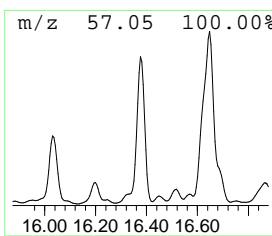
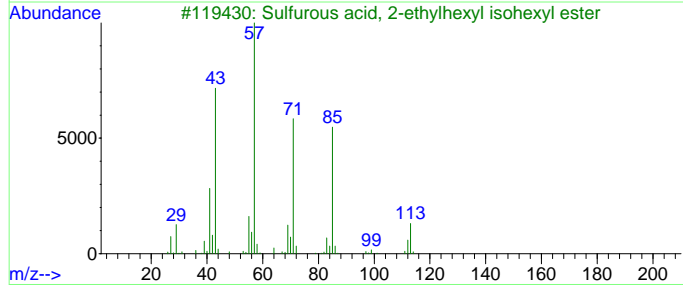
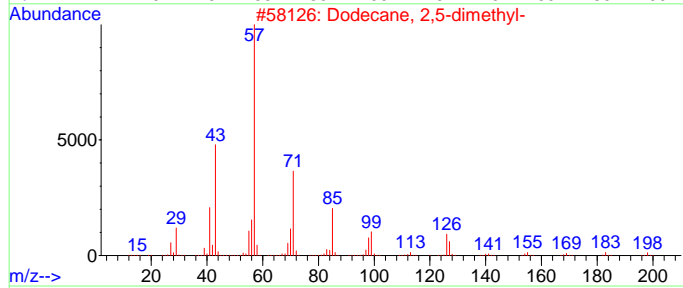
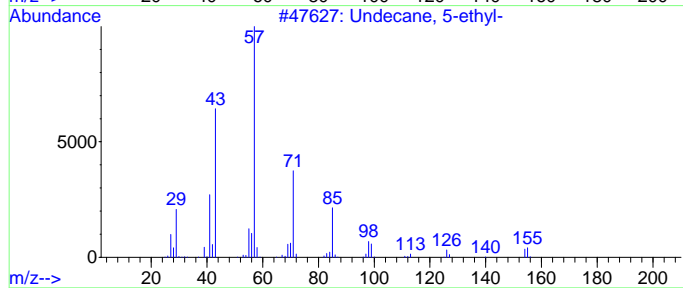
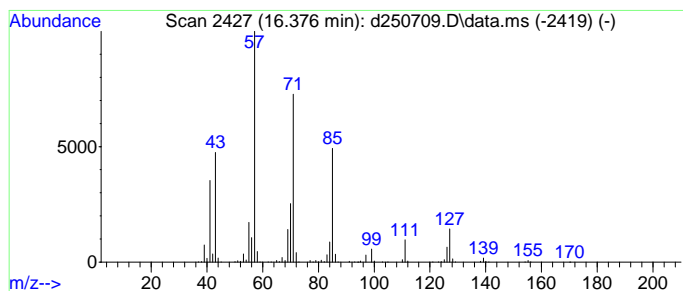
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Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

Peak Number 4 alkane Concentration Rank 2

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Row 1: 16.376, 239.43 ug/L, 4023020, 1,4-dichlorobenzene-d4, 16.742

Table with 7 columns: Hit# of, Tentative ID, MW, MolForm, CAS#, Qual
Row 1: 1, Undecane, 5-ethyl-, 184, C13H28, 017453-94-0, 64
Row 2: 2, Dodecane, 2,5-dimethyl-, 198, C14H30, 056292-65-0, 59
Row 3: 3, Sulfurous acid, 2-ethylhexyl iso..., 278, C14H30O3S, 1000309-19-0, 53
Row 4: 4, Sulfurous acid, hexyl 2-pentyl e..., 236, C11H24O3S, 1000309-15-6, 53
Row 5: 5, Nonane, 2-methyl-5-propyl-, 184, C13H28, 031081-17-1, 50



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Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368, vd10119, 6.2, ,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

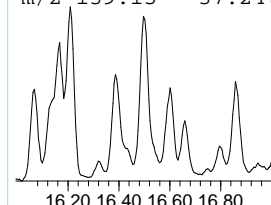
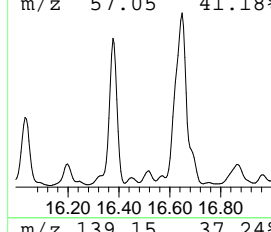
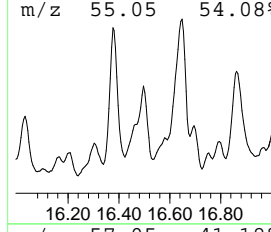
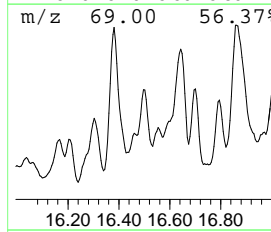
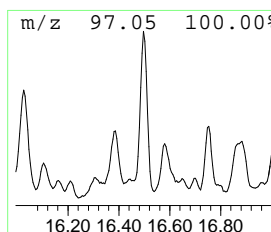
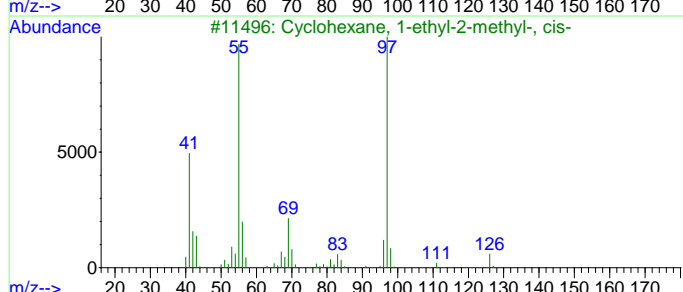
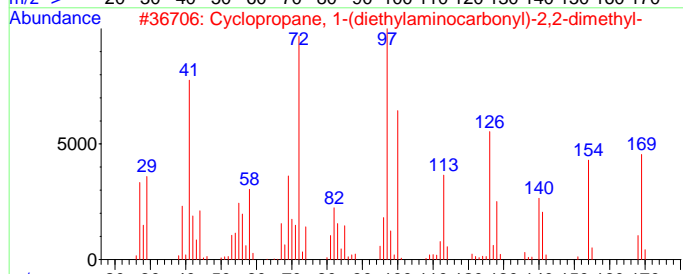
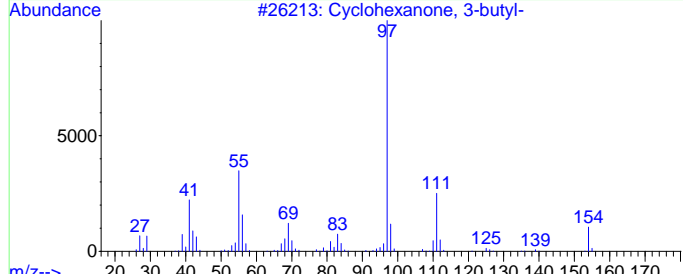
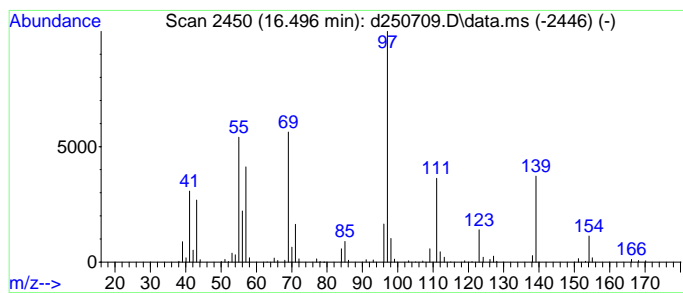
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 5 cycloalkene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.496	48.37 ug/L	812682	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclohexanone, 3-butyl-	154	C10H18O	039178-69-3	53
2		Cyclopropane, 1-(diethylaminocar...	169	C10H19NO	1000154-89-6	50
3		Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	43
4		Sulfurous acid, cyclohexylmethyl...	402	C23H46O3S	1000309-22-4	43
5		Sulfurous acid, cyclohexylmethyl...	416	C24H48O3S	1000309-22-5	43



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7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368, vd10119, 6.2, ,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

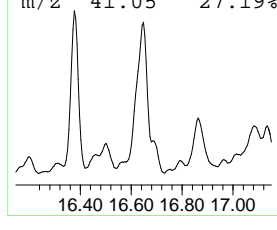
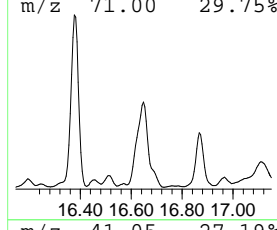
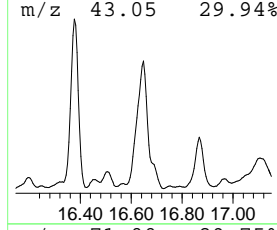
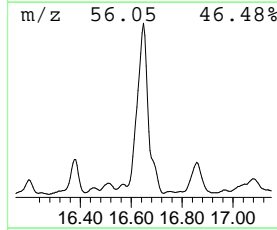
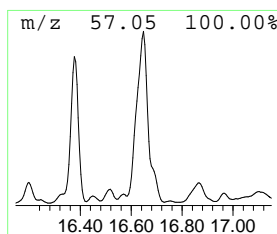
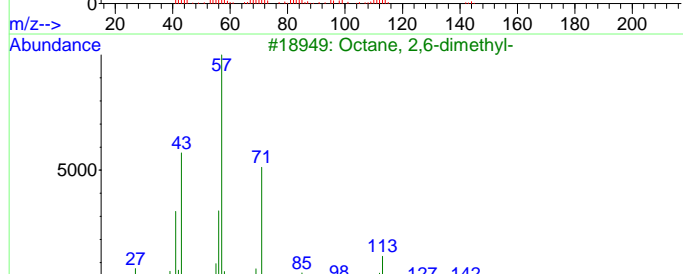
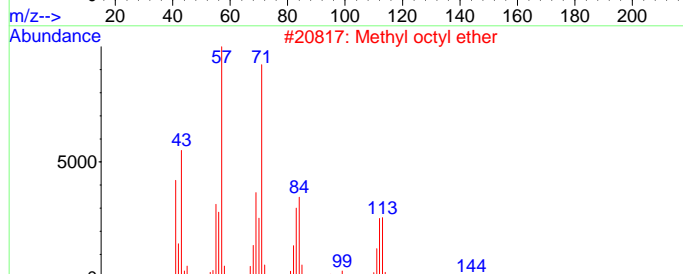
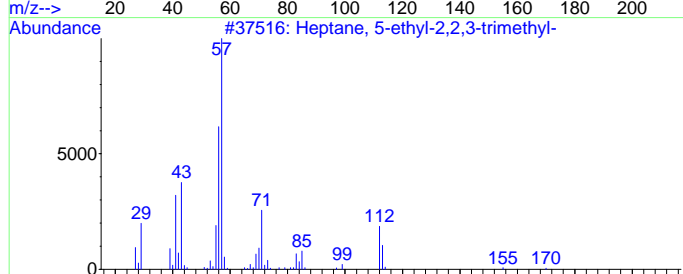
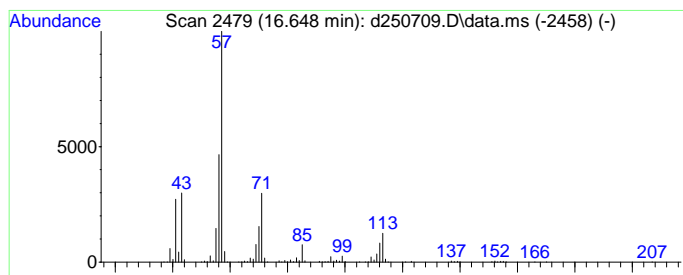
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 6 alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.648	334.72 ug/L	5624160	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Heptane, 5-ethyl-2,2,3-trimethyl-	170	C12H26	062199-06-8	64
2		Methyl octyl ether	144	C9H20O	1000130-68-7	59
3		Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	50
4		Hexane, 2,2,5,5-tetramethyl-	142	C10H22	001071-81-4	50
5		Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	50



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Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
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 Misc : ms17368, vd10119, 6.2, , 100, 10, 1
 ALS Vial : 24 Sample Multiplier: 1

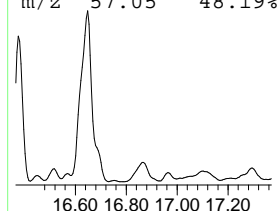
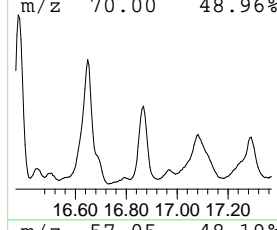
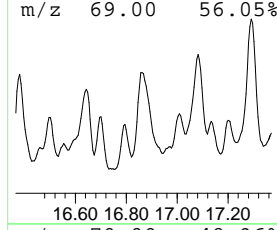
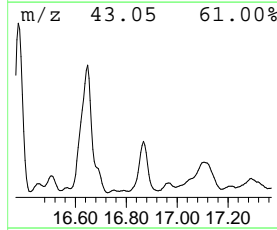
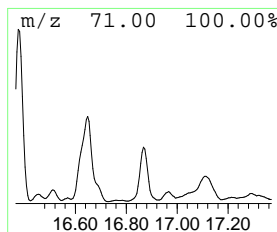
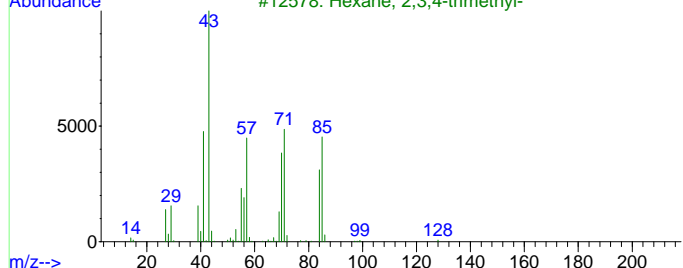
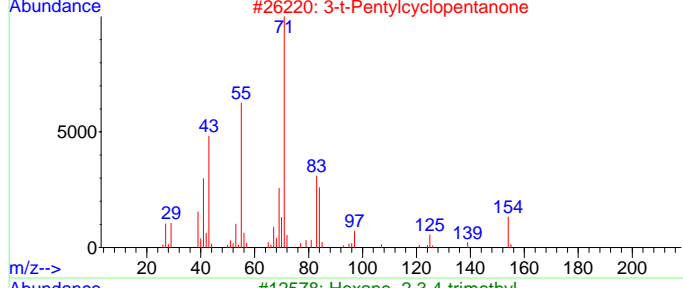
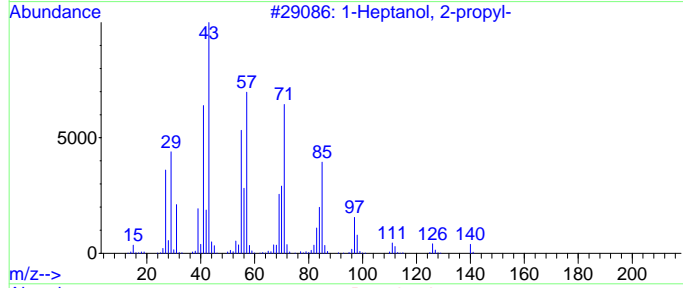
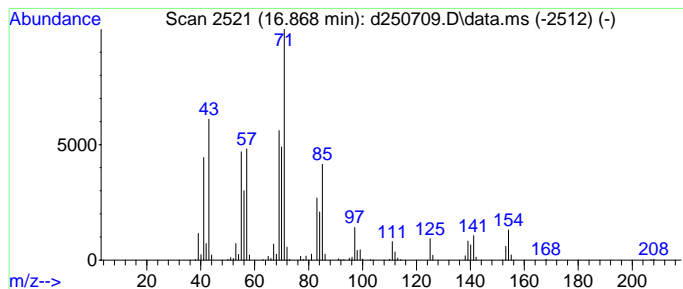
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 7 alkane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.868	103.09 ug/L	1732130	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Heptanol, 2-propyl-	158	C10H22O	010042-59-8	59
2		3-t-Pentylcyclopentanone	154	C10H18O	1000114-66-3	46
3		Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	43
4		Oxalic acid, hexyl neopentyl ester	244	C13H24O4	1000309-73-1	43
5		Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	38



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Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
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 Sample : jc45628-3
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 ALS Vial : 24 Sample Multiplier: 1

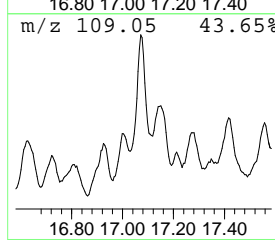
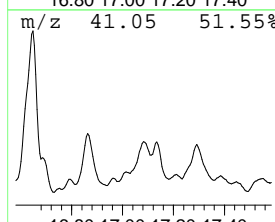
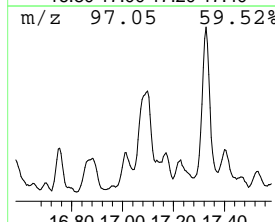
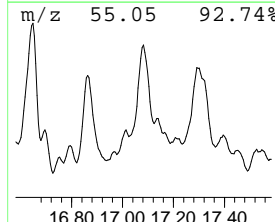
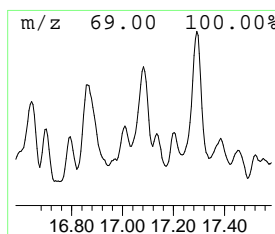
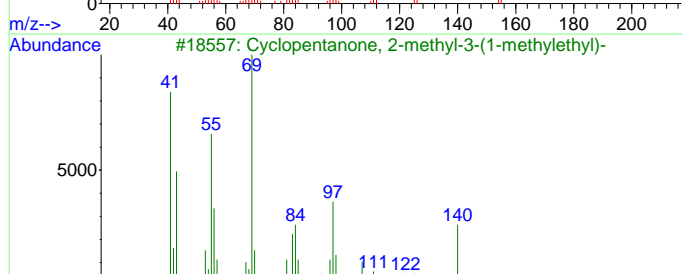
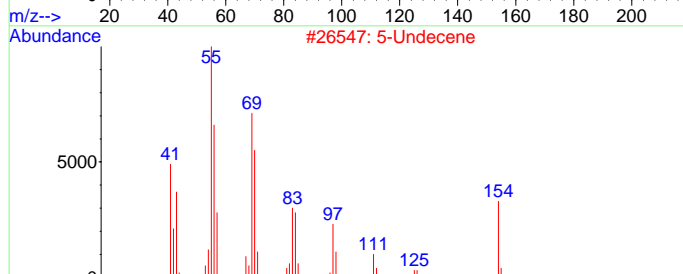
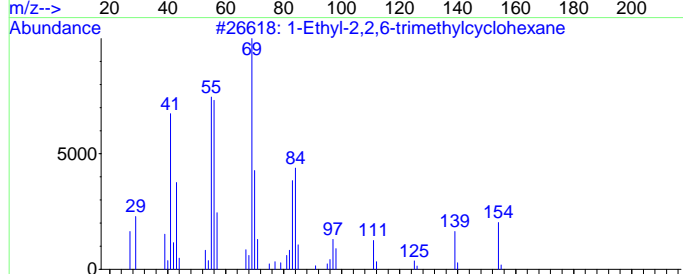
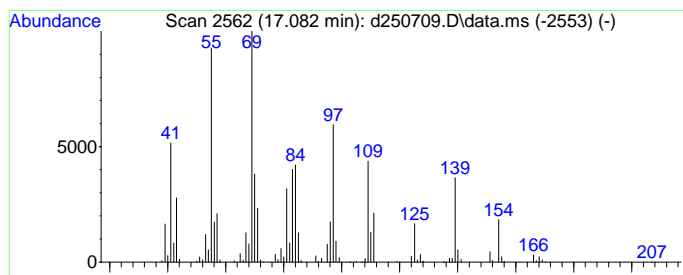
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 8 cycloalkene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.082	99.23 ug/L	1667320	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Ethyl-2,2,6-trimethylcyclohexane	154	C11H22	071186-27-1	62
2		5-Undecene	154	C11H22	004941-53-1	53
3		Cyclopentanone, 2-methyl-3-(1-me...	140	C9H16O	054549-81-4	50
4		Cyclodecanone	154	C10H18O	001502-06-3	45
5		1,3-Cyclohexanedione, 5-isopropyl-	154	C9H14O2	018456-87-6	45



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Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
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 ALS Vial : 24 Sample Multiplier: 1

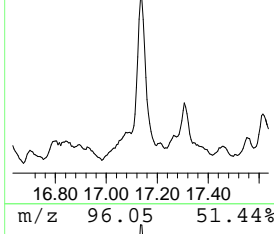
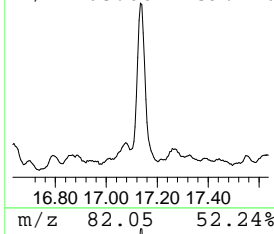
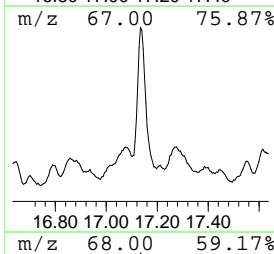
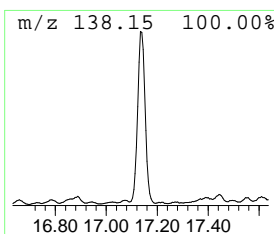
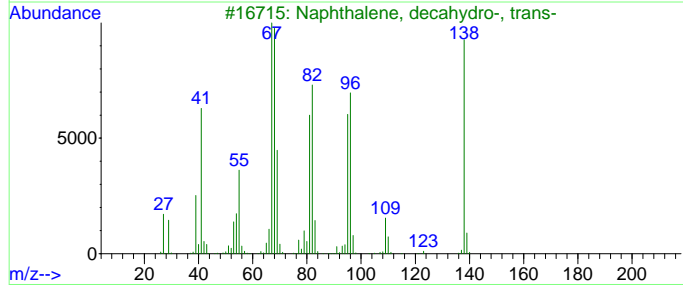
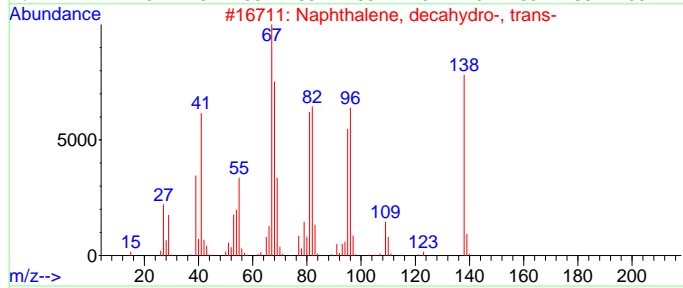
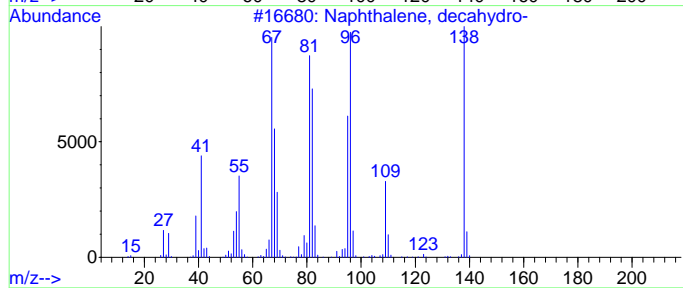
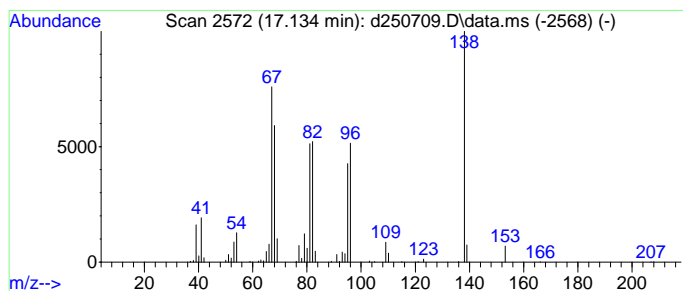
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 9 Naphthalene, decahydro- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.134	74.63 ug/L	1253910	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Naphthalene, decahydro-	138	C10H18	000091-17-8	91
2		Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	91
3		Naphthalene, decahydro-, trans-	138	C10H18	000493-02-7	91
4		Naphthalene, decahydro-	138	C10H18	000091-17-8	90
5		Naphthalene, decahydro-	138	C10H18	000091-17-8	90



7.17
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Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
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 ALS Vial : 24 Sample Multiplier: 1

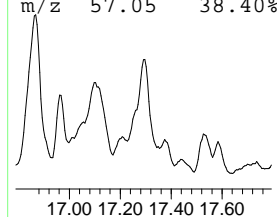
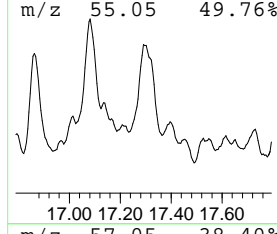
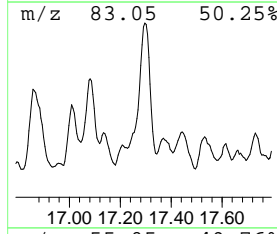
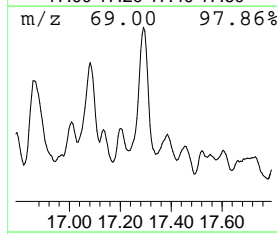
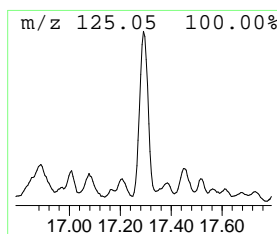
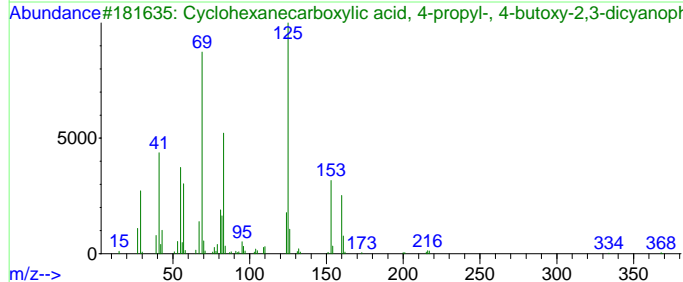
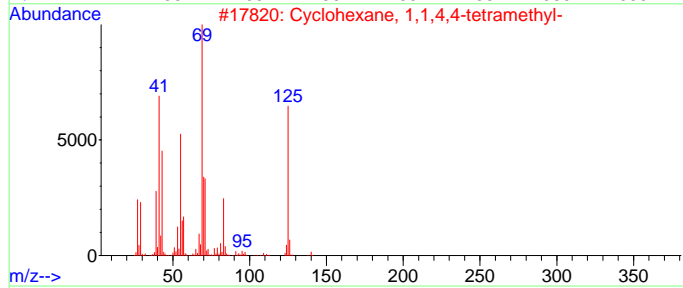
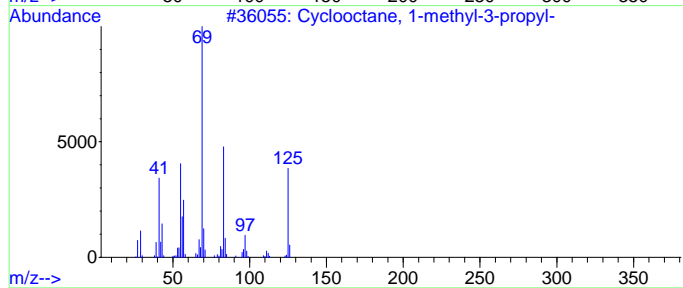
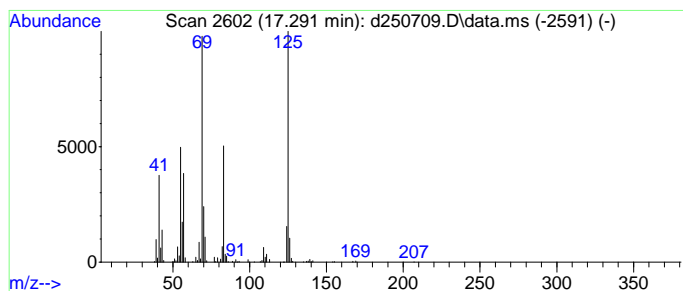
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 10 cycloalkene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.291	79.88 ug/L	1342250	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclooctane, 1-methyl-3-propyl-	168	C12H24	255885-37-1	64
2		Cyclohexane, 1,1,4,4-tetramethyl-	140	C10H20	002223-52-1	64
3		Cyclohexanecarboxylic acid, 4-pr...	368	C22H28N2O3	075941-67-2	64
4		Cyclohexane, 1,1,3,5-tetramethyl...	140	C10H20	050876-32-9	56
5		Cyclohexane, 2,4-diethyl-1-methyl-	154	C11H22	061142-70-9	56



7.17
 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250709.D
Acq On : 22 Jun 2017 6:44 pm
Operator : XimenaC
Sample : jc45628-3
Misc : ms17368,vd10119,6.2,,100,10,1
ALS Vial : 24 Sample Multiplier: 1

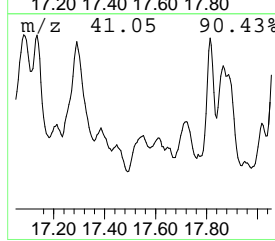
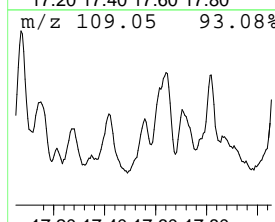
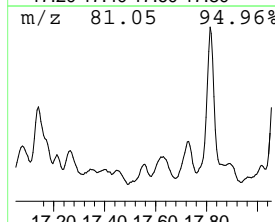
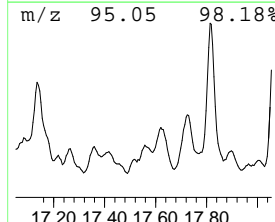
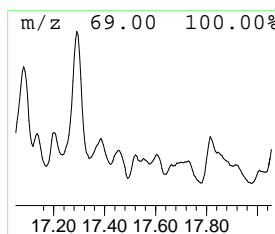
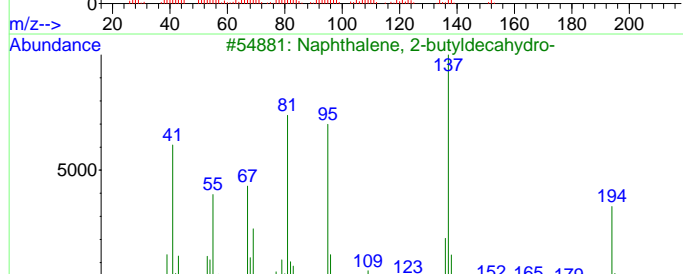
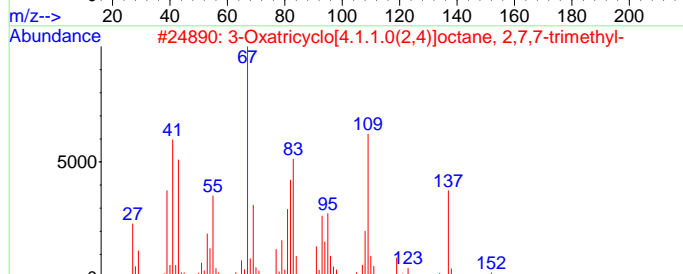
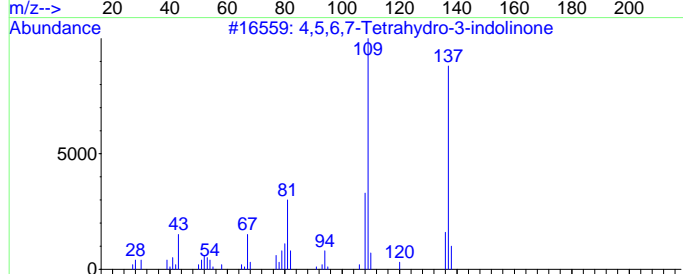
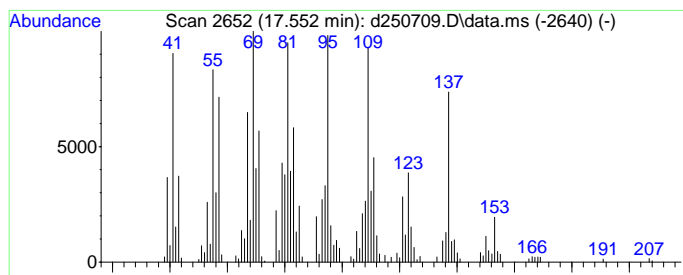
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Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p

Peak Number 11 unknown Concentration Rank 14

Table with 5 columns: R.T., EstConc, Area, Relative to ISTD, R.T.
Row 1: 17.552, 49.38 ug/L, 829722, 1,4-dichlorobenzene-d4, 16.742

Table with 7 columns: Hit# of, 5, Tentative ID, MW, MolForm, CAS#, Qual
Row 1: 1, 4,5,6,7-Tetrahydro-3-indolinone, 137, C8H11NO, 058074-25-2, 38



7.17
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368, vd10119, 6.2, , 100, 10, 1
 ALS Vial : 24 Sample Multiplier: 1

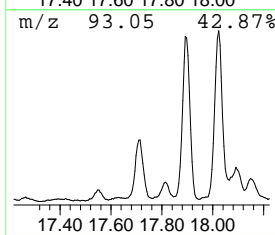
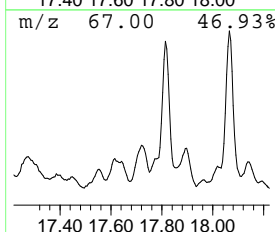
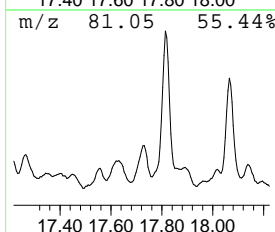
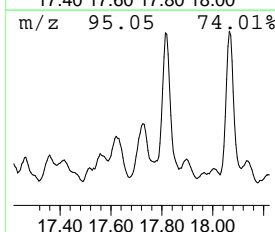
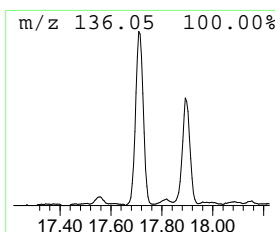
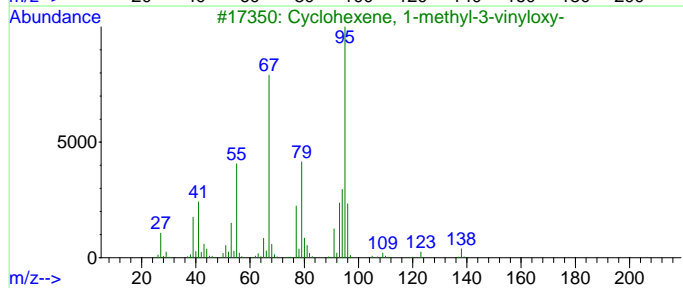
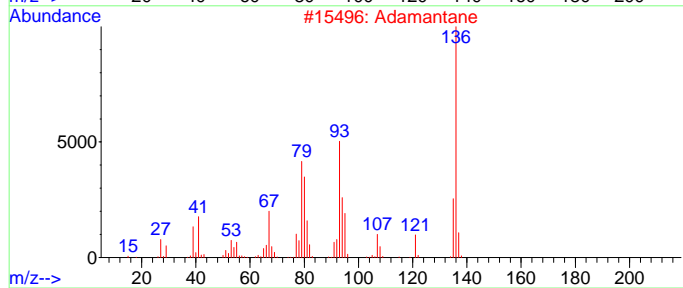
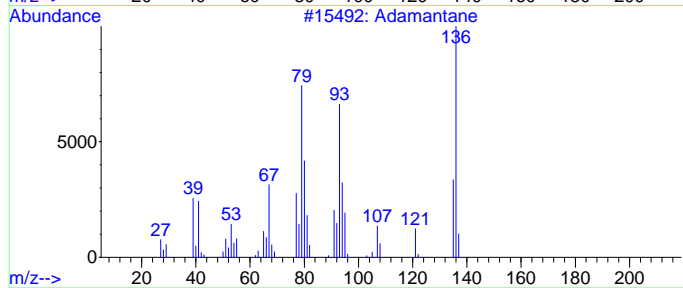
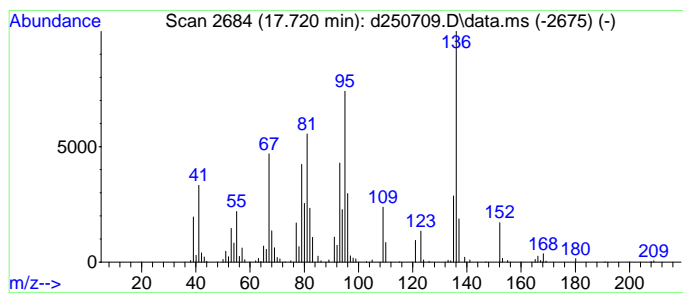
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 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 12 Adamantane Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.720	43.66 ug/L	733554	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Adamantane	136	C10H16	000281-23-2	64
2		Adamantane	136	C10H16	000281-23-2	49
3		Cyclohexene, 1-methyl-3-vinyloxy-	138	C9H14O	100144-30-7	43
4		Adamantane	136	C10H16	000281-23-2	38
5		trans-4a-Methyl-decahydronaphtha...	152	C11H20	002547-27-5	38



7.17
 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

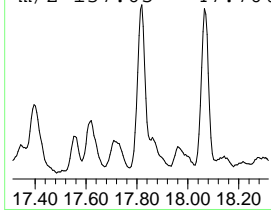
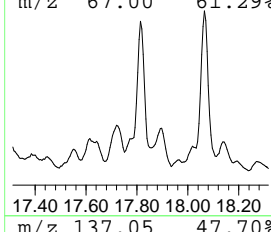
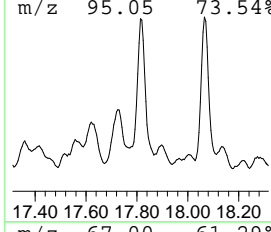
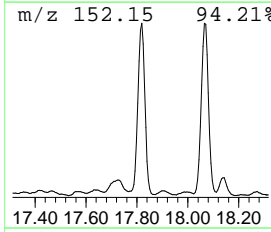
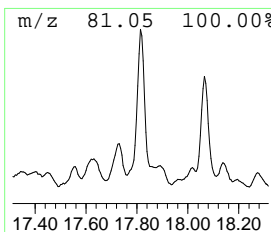
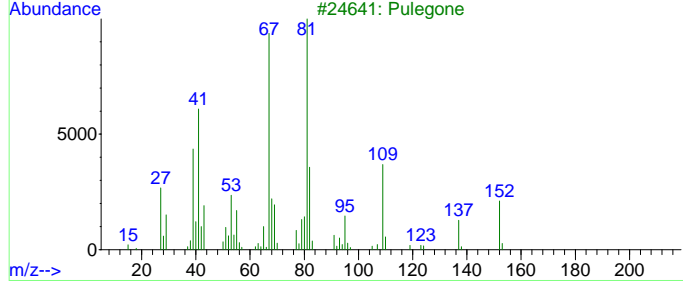
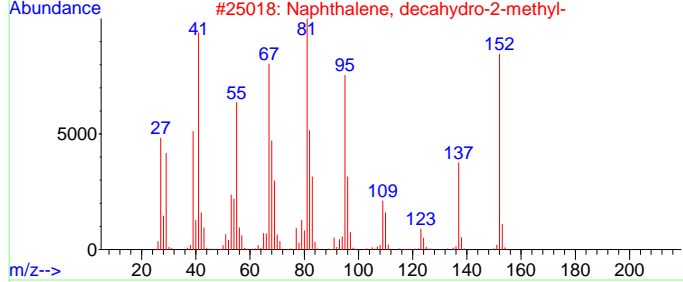
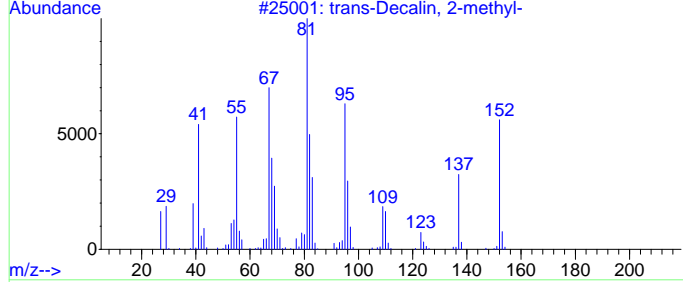
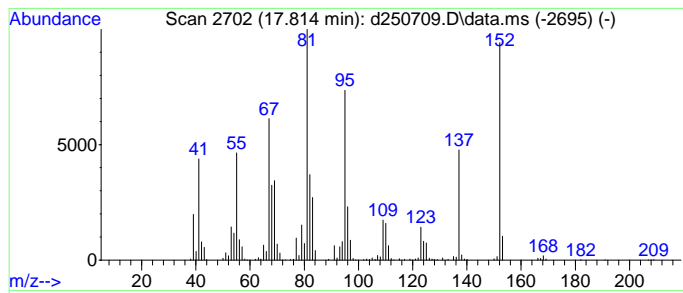
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 13 trans-Decalin, 2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.814	84.96 ug/L	1427570	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	trans-Decalin, 2-methyl-	152	C11H20	1000152-47-3	95
2		Naphthalene, decahydro-2-methyl-	152	C11H20	002958-76-1	92
3		Pulegone	152	C10H16O	000089-82-7	58
4		Pulegone	152	C10H16O	000089-82-7	58
5		Cyclohexanone, 5-methyl-2-(1-met...	152	C10H16O	000529-00-0	52



7.17
 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368, vd10119, 6.2, ,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

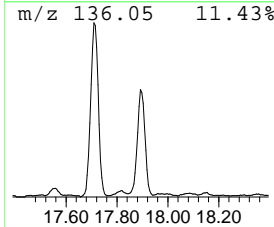
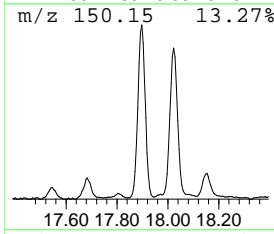
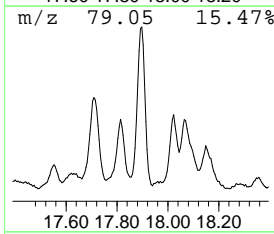
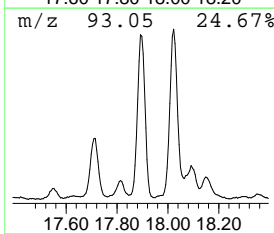
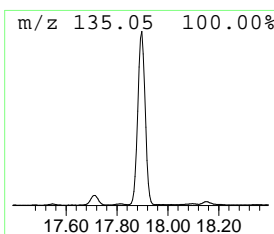
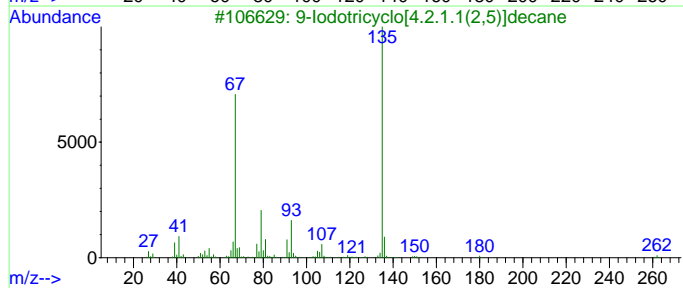
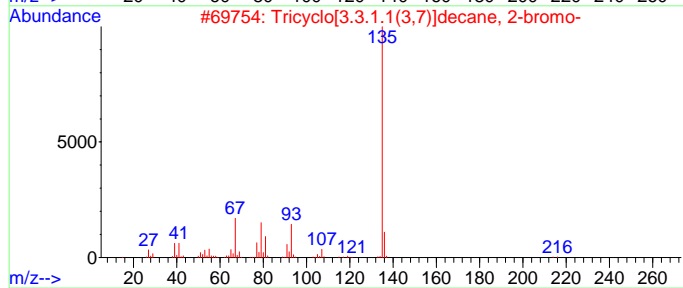
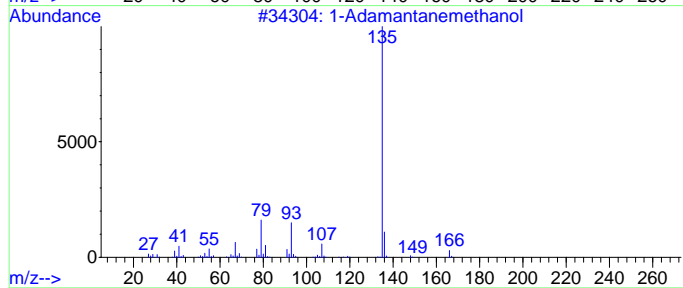
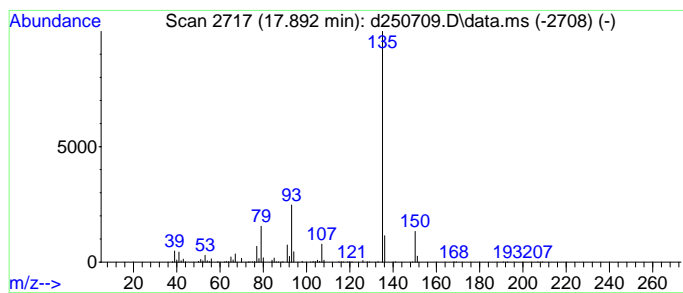
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 14 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.892	129.19 ug/L	2170770	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Adamantanemethanol	166	C11H18O	000770-71-8	78
2		Tricyclo[3.3.1.1(3,7)]decane, 2-...	214	C10H15Br	007314-85-4	72
3		9-Iodotricyclo[4.2.1.1(2,5)]decane	262	C10H15I	1000194-77-8	64
4		Adamantane, 1-(2,4-dichlorobenzy...	307	C17H19Cl2N	160013-80-9	64
5		1-Adamantan-1-yl-6-chloro-7-fluo...	375	C20H19ClFNO3	1000210-85-1	64



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 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368, vd10119, 6.2, , 100, 10, 1
 ALS Vial : 24 Sample Multiplier: 1

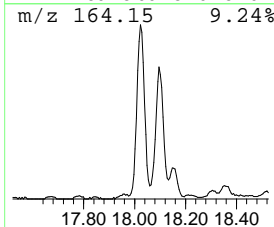
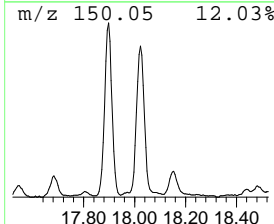
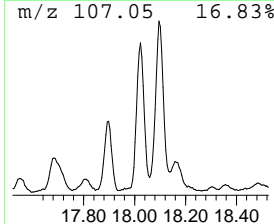
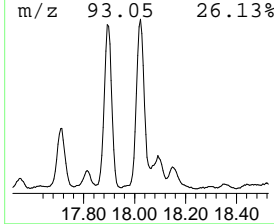
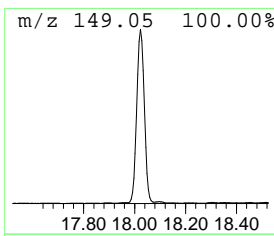
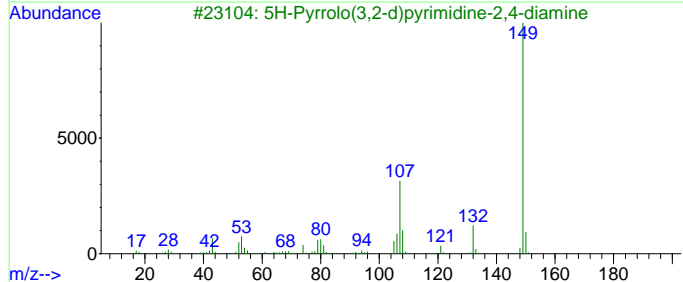
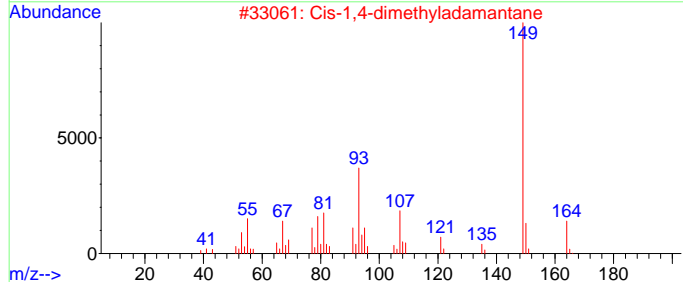
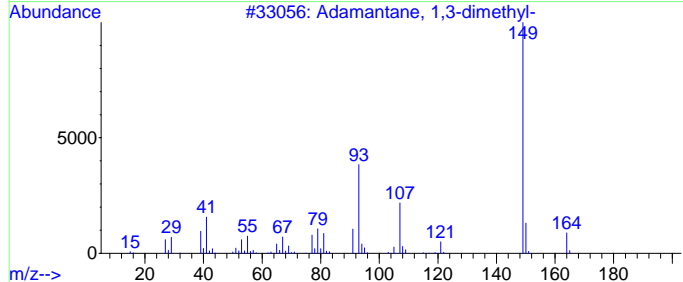
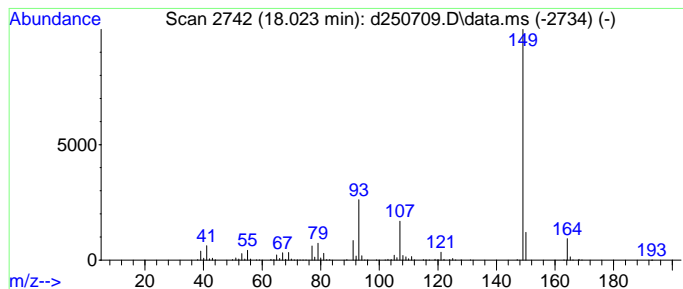
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 15 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.023	57.29 ug/L	962574	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Adamantane, 1,3-dimethyl-	164	C12H20	000702-79-4	91
2		Cis-1,4-dimethyladamantane	164	C12H20	024145-89-9	56
3		5H-Pyrrolo(3,2-d)pyrimidine-2,4-...	149	C6H7N5	1000244-21-4	53
4		Phthalic acid, decyl 2,7-dimethy...	440	C28H40O4	1000315-49-5	50
5		Adamantane, 1,3-dimethyl-	164	C12H20	000702-79-4	47



7.17
 7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368, vd10119, 6.2, , 100, 10, 1
 ALS Vial : 24 Sample Multiplier: 1

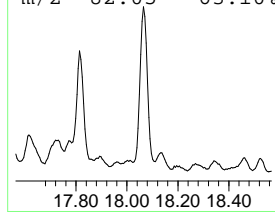
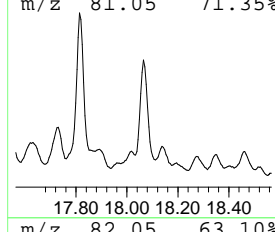
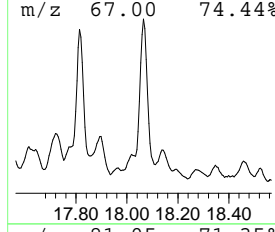
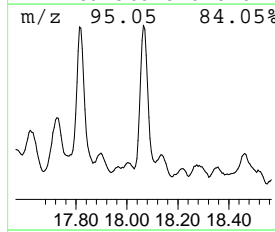
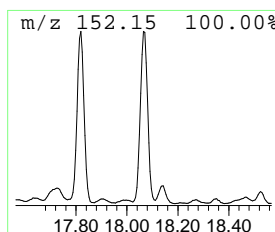
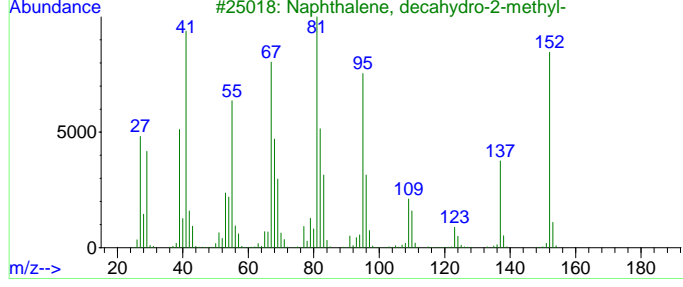
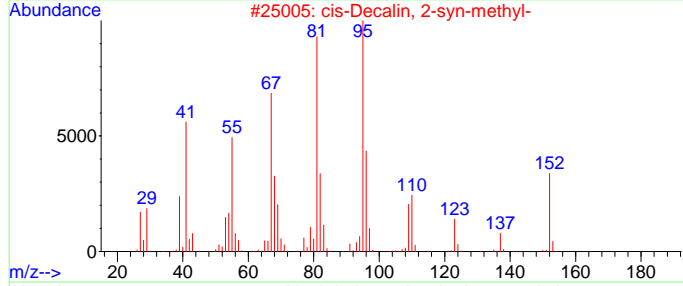
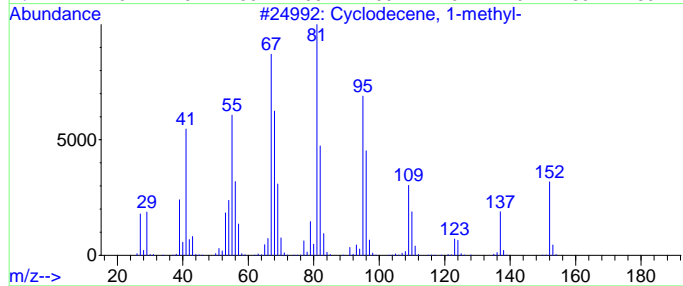
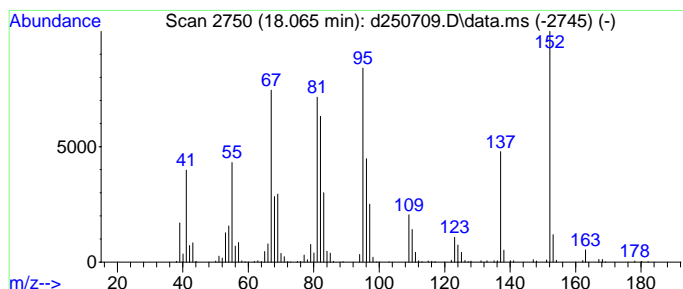
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 16 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.065	108.65 ug/L	1825570	1,4-dichlorobenzene-d4	16.742

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclodecene, 1-methyl-	152	C11H20	066633-38-3	80
2		cis-Decalin, 2-syn-methyl-	152	C11H20	1000155-85-6	72
3		Naphthalene, decahydro-2-methyl-	152	C11H20	002958-76-1	70
4		trans-Decalin, 2-methyl-	152	C11H20	1000152-47-3	64
5		Decalin, anti-1-methyl-, cis-	152	C11H20	1000158-89-0	62



7.17
 7

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250709.D
 Acq On : 22 Jun 2017 6:44 pm
 Operator : XimenaC
 Sample : jc45628-3
 Misc : ms17368,vd10119,6.2,,100,10,1
 ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal #	RT	Standard--- Resp	Conc
system artifact	3.824	60.9	ug/L	552541	2	9.747	453824	50.0
unknown	15.754	53.0	ug/L	891129	5	16.742	840128	50.0
alkane	16.031	118.9	ug/L	1998330	5	16.742	840128	50.0
alkane	16.376	239.4	ug/L	4023020	5	16.742	840128	50.0
cycloalkene	16.496	48.4	ug/L	812682	5	16.742	840128	50.0
alkane	16.648	334.7	ug/L	5624160	5	16.742	840128	50.0
alkane	16.868	103.1	ug/L	1732130	5	16.742	840128	50.0
cycloalkene	17.082	99.2	ug/L	1667320	5	16.742	840128	50.0
Naphthalene, de...	17.134	74.6	ug/L	1253910	5	16.742	840128	50.0
cycloalkene	17.291	79.9	ug/L	1342250	5	16.742	840128	50.0
unknown	17.552	49.4	ug/L	829722	5	16.742	840128	50.0
Adamantane	17.720	43.7	ug/L	733554	5	16.742	840128	50.0
trans-Decalin, ...	17.814	85.0	ug/L	1427570	5	16.742	840128	50.0
unknown	17.892	129.2	ug/L	2170770	5	16.742	840128	50.0
unknown	18.023	57.3	ug/L	962574	5	16.742	840128	50.0
unknown	18.065	108.7	ug/L	1825570	5	16.742	840128	50.0

7.17

7

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218887.D
 Acq On : 22 Jun 2017 8:43 am
 Operator : SushilaY
 Sample : mb
 Misc : MS37,VC8081,5,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 11:13:54 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

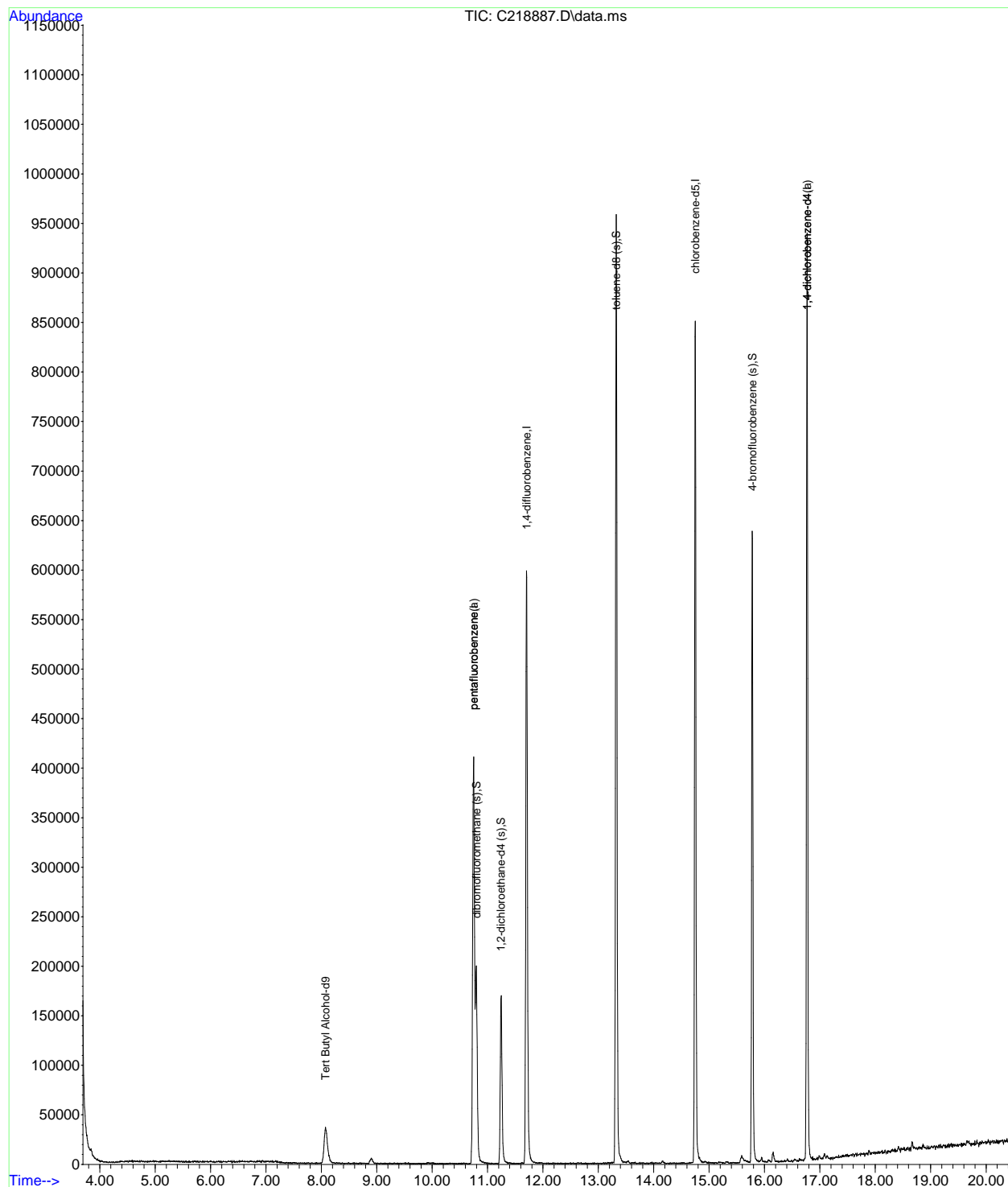
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.077	65	89820	500.00	ug/L	0.01
5) pentafluorobenzene	10.750	168	337896	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.707	114	528978	50.00	ug/L	0.00
75) chlorobenzene-d5	14.751	117	457137	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.770	152	226087	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.750	168	337896	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.770	152	226087	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.797	113	133951	40.92	ug/L	-0.01
Spiked Amount	50.000	Range	76 - 120	Recovery	=	81.84%
54) 1,2-dichloroethane-d4 (s)	11.241	65	140810	49.16	ug/L	-0.01
Spiked Amount	50.000	Range	73 - 122	Recovery	=	98.32%
76) toluene-d8 (s)	13.323	98	654318	53.52	ug/L	-0.01
Spiked Amount	50.000	Range	84 - 119	Recovery	=	107.04%
100) 4-bromofluorobenzene (s)	15.781	174	165278	51.41	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	102.82%

Target Compounds Qvalue

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

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218887.D
Acq On : 22 Jun 2017 8:43 am
Operator : SushilaY
Sample : mb
Misc : MS37,VC8081,5,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 11:13:54 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218887.D
 Acq On : 22 Jun 2017 8:43 am
 Operator : SushilaY
 Sample : mb
 Misc : MS37,VC8081,5,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs : 0.001
 Stop Thrs : 0

Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

Signal : TIC: C218887.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.841	26	29	49	rVB4	11641	34490	1.98%	0.368%
2	3.961	49	52	60	rVB2	3152	5768	0.33%	0.062%
3	4.024	63	64	73	rVB2	1692	2903	0.17%	0.031%
4	6.111	456	463	466	rBV2	1671	3063	0.18%	0.033%
5	6.362	510	511	515	rVB2	1962	2117	0.12%	0.023%
6	6.717	574	579	581	rBV2	1775	2441	0.14%	0.026%
7	6.942	617	622	627	rBV5	2236	4342	0.25%	0.046%
8	7.177	660	667	671	rBB3	2147	3444	0.20%	0.037%
9	8.077	820	839	864	rBB3	36188	155993	8.95%	1.666%
10	8.903	986	997	1008	rBB4	5572	17118	0.98%	0.183%
11	10.750	1337	1350	1355	rBV2	410924	971986	55.78%	10.378%
12	10.797	1355	1359	1381	rVV	199704	453705	26.04%	4.844%
13	10.922	1381	1383	1387	rVV2	2272	2407	0.14%	0.026%
14	11.246	1434	1445	1468	rBB	170072	385538	22.12%	4.116%
15	11.702	1521	1532	1558	rBB	598308	1247739	71.60%	13.322%
16	13.323	1829	1842	1867	rBB	957595	1742638	100.00%	18.606%
17	13.532	1876	1882	1893	rVB3	2723	8227	0.47%	0.088%
18	13.877	1942	1948	1952	rVB2	1332	2184	0.13%	0.023%
19	14.165	1996	2003	2008	rBB2	2312	4338	0.25%	0.046%
20	14.264	2014	2022	2024	rVB	944	2121	0.12%	0.023%
21	14.751	2105	2115	2139	rBB	849743	1446575	83.01%	15.445%
22	14.929	2146	2149	2154	rVB4	1812	2712	0.16%	0.029%
23	15.174	2189	2196	2200	rBV4	1716	2430	0.14%	0.026%
24	15.310	2216	2222	2225	rBV5	1891	3310	0.19%	0.035%
25	15.588	2264	2275	2284	rBV7	7473	21163	1.21%	0.226%
26	15.656	2286	2288	2292	rVV3	2437	3307	0.19%	0.035%
27	15.692	2292	2295	2301	rVB5	1783	2472	0.14%	0.026%
28	15.776	2304	2311	2334	rBB	637438	1042335	59.81%	11.129%
29	15.948	2334	2344	2350	rBB5	4603	8511	0.49%	0.091%
30	16.069	2364	2367	2376	rBB6	2340	4985	0.29%	0.053%
31	16.158	2376	2384	2391	rBB5	10035	19457	1.12%	0.208%
32	16.414	2429	2433	2437	rBB3	2592	2766	0.16%	0.030%
33	16.492	2442	2448	2450	rVB4	1793	2551	0.15%	0.027%
34	16.545	2450	2458	2466	rBV6	3200	8858	0.51%	0.095%
35	16.628	2471	2474	2481	rBV3	3403	5632	0.32%	0.060%
36	16.770	2488	2501	2515	rBB	935421	1444744	82.91%	15.426%
37	16.853	2515	2517	2519	rVB3	2745	2172	0.12%	0.023%
38	16.953	2533	2536	2538	rVB4	2851	2482	0.14%	0.027%
39	16.984	2538	2542	2550	rBV2	4393	9442	0.54%	0.101%
40	17.078	2555	2560	2566	rBB5	4843	7543	0.43%	0.081%
41	17.136	2566	2571	2575	rBB8	2756	3816	0.22%	0.041%
42	17.225	2584	2588	2589	rVB3	2333	2476	0.14%	0.026%
43	17.251	2589	2593	2596	rBV5	2273	3099	0.18%	0.033%
44	17.293	2596	2601	2602	rBV4	1977	2470	0.14%	0.026%
45	17.497	2636	2640	2642	rVB5	2745	3005	0.17%	0.032%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218887.D
 Acq On : 22 Jun 2017 8:43 am
 Operator : SushilaY
 Sample : mb
 Misc : MS37,VC8081,5,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs: 0.001
 Stop Thrs : 0

Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

46	17.570	2646	2654	2656	rVV7	1857	3628	0.21%	0.039%
47	17.601	2656	2660	2663	rVB6	3169	5006	0.29%	0.053%
48	17.648	2663	2669	2672	rBV7	3689	6305	0.36%	0.067%
49	17.669	2672	2673	2676	rBV3	3463	2701	0.15%	0.029%
50	17.716	2676	2682	2685	rVB6	2124	3928	0.23%	0.042%
51	17.795	2693	2697	2700	rVB5	3426	4732	0.27%	0.051%
52	17.836	2700	2705	2709	rBV6	3418	7256	0.42%	0.077%
53	17.884	2711	2714	2719	rBV5	4984	7285	0.42%	0.078%
54	17.941	2723	2725	2729	rVV3	2066	2954	0.17%	0.032%
55	17.978	2729	2732	2736	rVB5	2324	2999	0.17%	0.032%
56	18.176	2766	2770	2774	rVB5	4170	5566	0.32%	0.059%
57	18.218	2774	2778	2779	rBV3	3491	3229	0.19%	0.034%
58	18.244	2779	2783	2784	rBV4	2879	3225	0.19%	0.034%
59	18.312	2788	2796	2798	rBV7	3686	6246	0.36%	0.067%
60	18.354	2803	2804	2808	rBB4	3324	2380	0.14%	0.025%
61	18.417	2808	2816	2823	rBB10	5905	12588	0.72%	0.134%
62	18.464	2823	2825	2829	rBV5	4682	5915	0.34%	0.063%
63	18.569	2842	2845	2846	rBV3	2769	2411	0.14%	0.026%
64	18.590	2846	2849	2853	rVB4	3904	4841	0.28%	0.052%
65	18.621	2853	2855	2858	rBB3	3454	3406	0.20%	0.036%
66	18.663	2858	2863	2868	rBV4	9409	18041	1.04%	0.193%
67	18.747	2876	2879	2882	rVB4	2172	2284	0.13%	0.024%
68	18.862	2897	2901	2905	rBV6	5235	7373	0.42%	0.079%
69	18.935	2912	2915	2918	rBB4	3311	2288	0.13%	0.024%
70	19.008	2923	2929	2931	rBV7	2876	4069	0.23%	0.043%
71	19.066	2936	2940	2944	rVB6	4034	6831	0.39%	0.073%
72	19.097	2944	2946	2947	rBV2	3825	2935	0.17%	0.031%
73	19.154	2953	2957	2959	rBV4	2912	3049	0.17%	0.033%
74	19.175	2959	2961	2964	rVB4	3562	2301	0.13%	0.025%
75	19.238	2968	2973	2978	rBB7	3292	6799	0.39%	0.073%
76	19.322	2981	2989	2991	rVB7	4096	4867	0.28%	0.052%
77	19.374	2994	2999	3003	rVB7	4096	6448	0.37%	0.069%
78	19.400	3003	3004	3009	rBV4	3171	4385	0.25%	0.047%
79	19.515	3023	3026	3028	rBV3	2270	2702	0.16%	0.029%
80	19.547	3029	3032	3034	rVB4	3557	2605	0.15%	0.028%
81	19.594	3037	3041	3042	rBV4	3046	2539	0.15%	0.027%
82	19.657	3049	3053	3057	rBV6	4710	9010	0.52%	0.096%
83	19.693	3057	3060	3065	rVB7	4047	5452	0.31%	0.058%
84	19.777	3070	3076	3078	rVB5	2047	3154	0.18%	0.034%
85	19.798	3078	3080	3082	rBV3	4455	2091	0.12%	0.022%
86	19.834	3082	3087	3093	rVB9	6721	11807	0.68%	0.126%
87	19.881	3093	3096	3097	rBV3	4544	3748	0.22%	0.040%
88	19.897	3097	3099	3101	rBV3	3317	3200	0.18%	0.034%
89	19.929	3104	3105	3109	rBV4	3217	2778	0.16%	0.030%
90	19.986	3114	3116	3119	rVB4	2934	2767	0.16%	0.030%
91	20.007	3119	3120	3123	rBV3	2646	2127	0.12%	0.023%
92	20.038	3123	3126	3130	rBB6	3742	3901	0.22%	0.042%
93	20.117	3137	3141	3144	rVB6	2962	3247	0.19%	0.035%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218887.D
 Acq On : 22 Jun 2017 8:43 am
 Operator : SushilaY
 Sample : mb
 Misc : MS37,VC8081,5,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.001 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 10 prefer < Tangent else baseline drop >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

94	20.143	3144	3146	3150	rBB4	2653	3015	0.17%	0.032%
95	20.185	3150	3154	3156	rBB4	3605	2156	0.12%	0.023%
96	20.216	3159	3160	3163	rBB3	3191	2455	0.14%	0.026%
97	20.268	3166	3170	3171	rVV4	2350	2869	0.16%	0.031%
98	20.300	3172	3176	3179	rVB6	4651	6167	0.35%	0.066%
99	20.331	3179	3182	3185	rBV4	4533	6132	0.35%	0.065%
100	20.378	3187	3191	3193	rBB5	3293	2721	0.16%	0.029%

Sum of corrected areas: 9365789

7.2.2

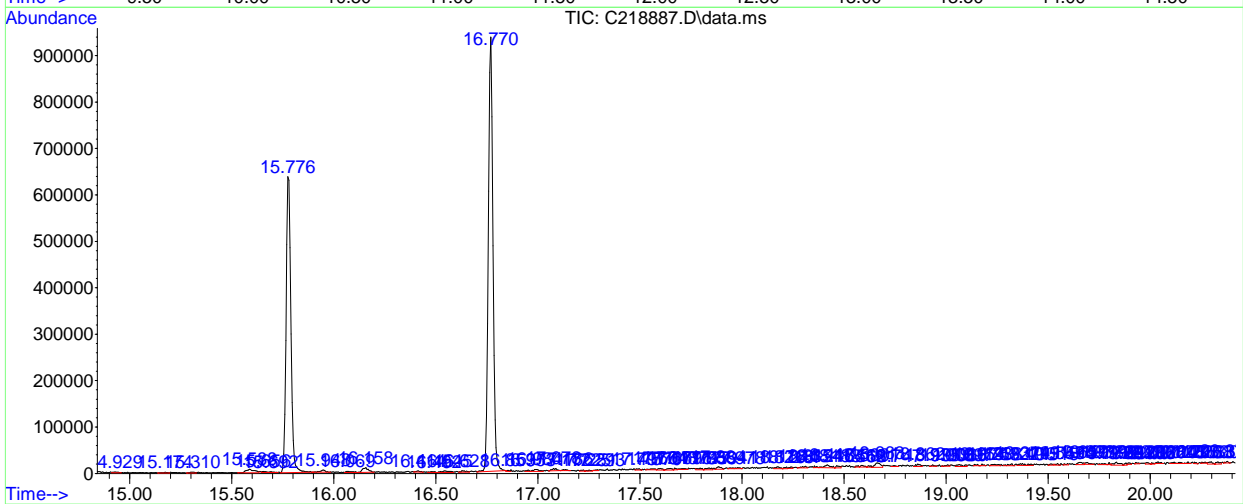
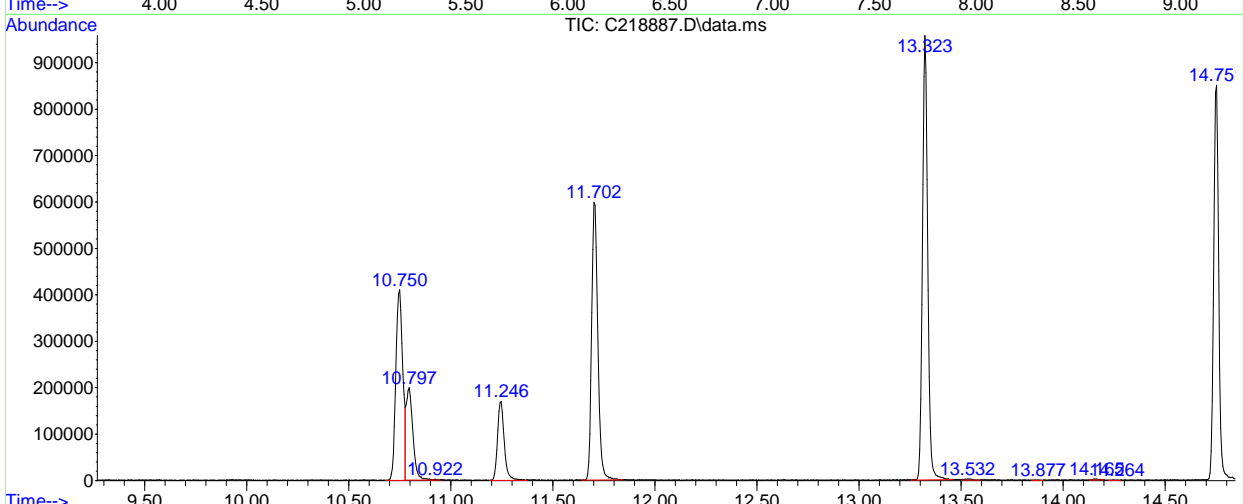
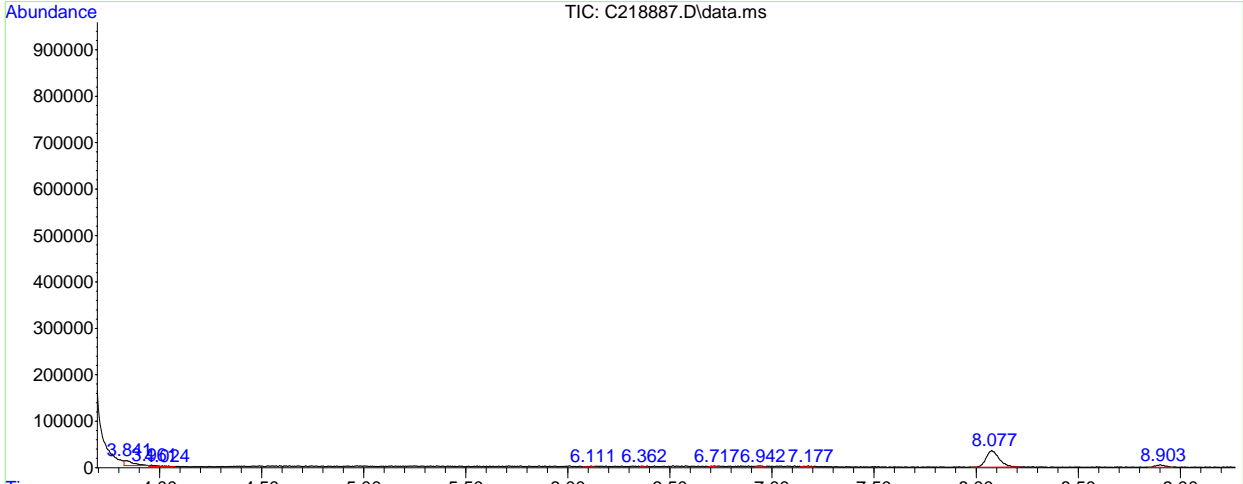
7

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218887.D
Acq On : 22 Jun 2017 8:43 am
Operator : SushilaY
Sample : mb
Misc : MS37,VC8081,5,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscINT.P



7.2.2
7

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218887.D
Acq On : 22 Jun 2017 8:43 am
Operator : SushilaY
Sample : mb
Misc : MS37,VC8081,5,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

No Library Search Compounds Detected

7.2.2
7

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250690.D
 Acq On : 22 Jun 2017 8:52 am
 Operator : XimenaC
 Sample : mb
 Misc : ms37,vd10119,5,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 12:52:04 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

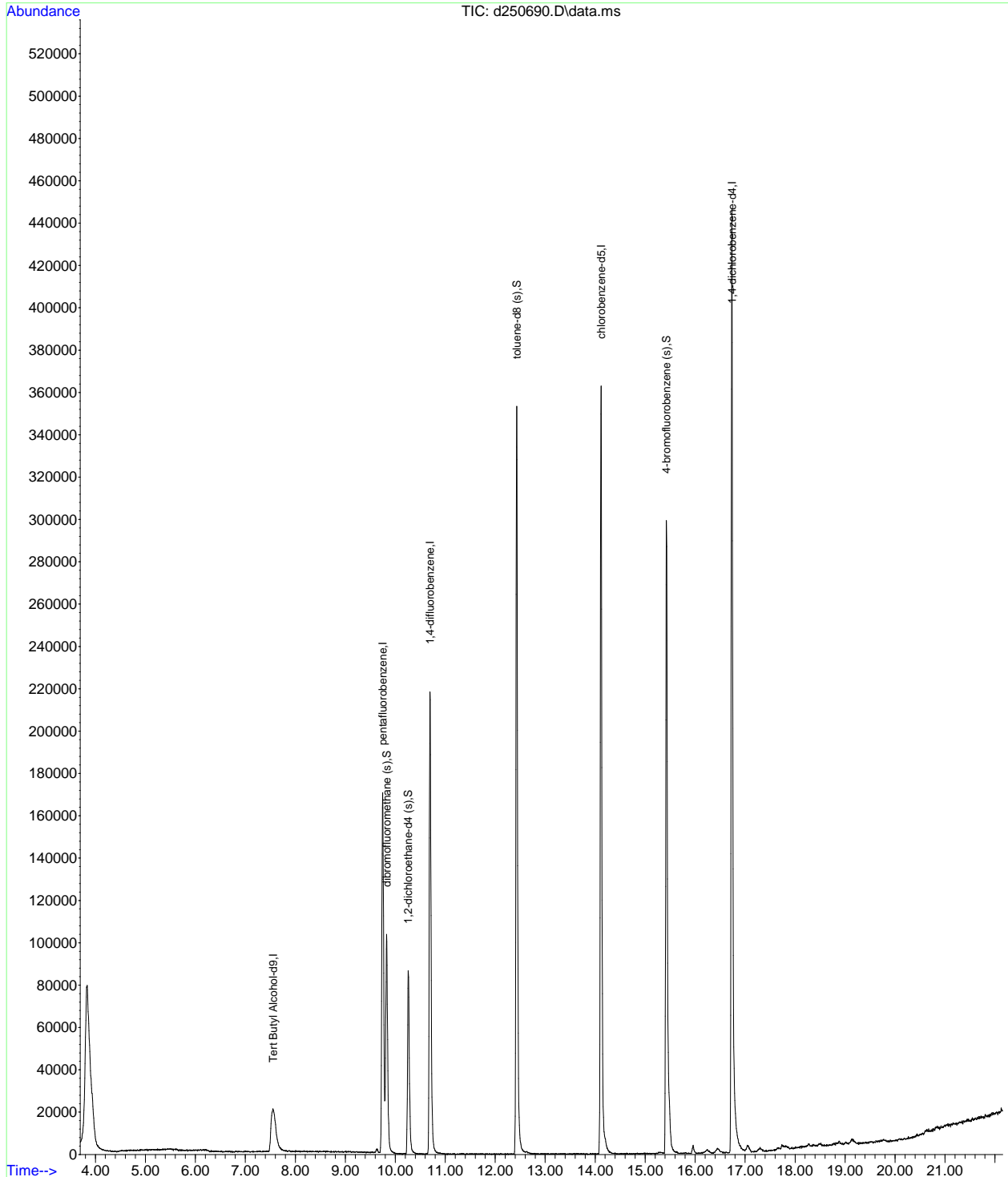
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.557	65	81447	500.00	ug/L	-0.01
5) pentafluorobenzene	9.748	168	183186	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.694	114	251206	50.00	ug/L	0.00
75) chlorobenzene-d5	14.118	117	282100	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.738	152	184916	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	9.826	113	79376	47.80	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	95.60%	
55) 1,2-dichloroethane-d4 (s)	10.260	65	83828	46.87	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	93.74%	
76) toluene-d8 (s)	12.430	98	318291	47.67	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	95.34%	
100) 4-bromofluorobenzene (s)	15.425	95	138619	50.40	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	100.80%	

Target Compounds Qvalue

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

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250690.D
Acq On : 22 Jun 2017 8:52 am
Operator : XimenaC
Sample : mb
Misc : ms37,vd10119,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 12:52:04 2017
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Wed Jun 14 16:21:29 2017
Response via : Initial Calibration



7.2.3
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250690.D
 Acq On : 22 Jun 2017 8:52 am
 Operator : XimenaC
 Sample : mb
 Misc : ms37,vd10119,5,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.1 Max Peaks: 100
 Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

Signal : TIC: d250690.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.835	3	28	83	rVB	77604	595541	57.85%	10.498%
2	4.499	149	155	158	rBV3	515	836	0.08%	0.015%
3	4.650	180	184	186	rBV2	502	787	0.08%	0.014%
4	4.907	232	233	239	rBV3	587	769	0.07%	0.014%
5	5.079	261	266	270	rBV2	720	1320	0.13%	0.023%
6	5.147	275	279	286	rBV4	459	872	0.08%	0.015%
7	5.409	328	329	332	rBV2	634	599	0.06%	0.011%
8	5.592	358	364	365	rBV3	645	1206	0.12%	0.021%
9	5.686	379	382	386	rBV2	731	1019	0.10%	0.018%
10	5.837	406	411	413	rVB3	708	965	0.09%	0.017%
11	5.858	413	415	418	rBV3	585	680	0.07%	0.012%
12	6.052	450	452	455	rBV3	685	700	0.07%	0.012%
13	6.203	478	481	484	rBV2	523	629	0.06%	0.011%
14	6.736	580	583	585	rVB3	597	571	0.06%	0.010%
15	6.768	585	589	592	rBV	536	753	0.07%	0.013%
16	6.857	605	606	610	rBV3	429	507	0.05%	0.009%
17	7.003	628	634	635	rBV2	576	743	0.07%	0.013%
18	7.552	723	739	766	rBV2	20321	136229	13.23%	2.401%
19	7.866	794	799	800	rBV2	473	547	0.05%	0.010%
20	8.007	824	826	830	rBV3	760	726	0.07%	0.013%
21	8.106	844	845	849	rBV3	428	500	0.05%	0.009%
22	8.357	888	893	898	rBV2	322	561	0.05%	0.010%
23	8.498	914	920	923	rBV3	692	1000	0.10%	0.018%
24	8.718	961	962	969	rBV3	645	868	0.08%	0.015%
25	8.775	969	973	974	rVB	504	506	0.05%	0.009%
26	8.807	975	979	983	rVB3	556	887	0.09%	0.016%
27	8.937	1001	1004	1007	rVB2	563	817	0.08%	0.014%
28	8.964	1007	1009	1012	rBV3	444	533	0.05%	0.009%
29	9.005	1012	1017	1019	rVV3	537	576	0.06%	0.010%
30	9.141	1040	1043	1047	rBV2	546	658	0.06%	0.012%
31	9.230	1057	1060	1063	rVB2	575	707	0.07%	0.012%
32	9.387	1088	1090	1094	rVB3	445	513	0.05%	0.009%
33	9.633	1124	1137	1143	rBV5	1832	4686	0.46%	0.083%
34	9.748	1147	1159	1167	rBV	170014	433933	42.15%	7.649%
35	9.826	1167	1174	1202	rVB2	103432	282579	27.45%	4.981%
36	10.109	1225	1228	1234	rVB2	604	997	0.10%	0.018%
37	10.145	1234	1235	1240	rBV	413	652	0.06%	0.011%
38	10.260	1246	1257	1285	rBV	86586	221103	21.48%	3.897%
39	10.569	1313	1316	1320	rBV	386	512	0.05%	0.009%
40	10.694	1330	1340	1365	rBV	218379	536143	52.08%	9.451%
41	11.055	1407	1409	1415	rBV	542	661	0.06%	0.012%
42	12.252	1633	1638	1640	rBB	420	558	0.05%	0.010%
43	12.294	1640	1646	1648	rBV	401	576	0.06%	0.010%
44	12.430	1661	1672	1706	rBV	353280	800069	77.72%	14.103%
45	12.634	1706	1711	1715	rVV	1107	2416	0.23%	0.043%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250690.D
 Acq On : 22 Jun 2017 8:52 am
 Operator : XimenaC
 Sample : mb
 Misc : ms37,vd10119,5,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
 Smoothing : ON
 Sampling : 1
 Start Thrs : 0.1
 Stop Thrs : 0.1

Filtering: 5
 Min Area: 100 Area counts
 Max Peaks: 100
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

46	12.660	1715	1716	1725	rVB3	706	1069	0.10%	0.019%
47	14.118	1983	1995	2028	rBV	362828	807467	78.44%	14.233%
48	14.395	2046	2048	2054	rVB2	573	649	0.06%	0.011%
49	14.845	2127	2134	2136	rBV2	477	712	0.07%	0.013%
50	15.002	2161	2164	2168	rBV	445	604	0.06%	0.011%
51	15.039	2168	2171	2174	rVB	557	559	0.05%	0.010%
52	15.148	2187	2192	2193	rBV2	421	584	0.06%	0.010%
53	15.222	2203	2206	2211	rBV2	437	819	0.08%	0.014%
54	15.269	2211	2215	2216	rBV	673	659	0.06%	0.012%
55	15.425	2234	2245	2278	rBV	298940	718712	69.82%	12.669%
56	15.629	2283	2284	2289	rVB2	792	711	0.07%	0.013%
57	15.807	2313	2318	2323	rVB3	398	635	0.06%	0.011%
58	15.959	2340	2347	2360	rVB	3872	8642	0.84%	0.152%
59	16.131	2377	2380	2383	rVB	565	546	0.05%	0.010%
60	16.246	2386	2402	2416	rVB2	1654	7627	0.74%	0.134%
61	16.445	2425	2440	2442	rBV4	2404	6545	0.64%	0.115%
62	16.570	2461	2464	2466	rVB2	584	527	0.05%	0.009%
63	16.623	2471	2474	2478	rBV3	408	574	0.06%	0.010%
64	16.738	2483	2496	2539	rBV	446083	1029423	100.00%	18.146%
65	16.968	2539	2540	2545	rVV5	1384	2015	0.20%	0.036%
66	17.046	2545	2555	2571	rVB6	3387	13784	1.34%	0.243%
67	17.166	2571	2578	2579	rBV2	360	666	0.06%	0.012%
68	17.281	2589	2600	2601	rBV2	1489	3427	0.33%	0.060%
69	17.302	2601	2604	2610	rVV5	1147	1736	0.17%	0.031%
70	17.496	2637	2641	2643	rBV2	444	526	0.05%	0.009%
71	17.600	2660	2661	2664	rBV3	637	510	0.05%	0.009%
72	17.653	2664	2671	2673	rBV3	1066	1974	0.19%	0.035%
73	17.673	2673	2675	2681	rVB4	767	1090	0.11%	0.019%
74	17.736	2681	2687	2688	rBV4	2140	2250	0.22%	0.040%
75	18.008	2736	2739	2744	rBV4	990	1282	0.12%	0.023%
76	18.045	2744	2746	2749	rBV3	475	539	0.05%	0.010%
77	18.118	2756	2760	2762	rVB4	1038	1371	0.13%	0.024%
78	18.139	2762	2764	2766	rBV2	1146	914	0.09%	0.016%
79	18.249	2781	2785	2786	rBV3	795	831	0.08%	0.015%
80	18.269	2786	2789	2798	rVB10	1318	2191	0.21%	0.039%
81	18.348	2801	2804	2805	rBV3	803	519	0.05%	0.009%
82	18.364	2806	2807	2813	rVB4	811	991	0.10%	0.017%
83	18.479	2824	2829	2830	rBV3	1364	1609	0.16%	0.028%
84	18.630	2857	2858	2863	rBV3	784	784	0.08%	0.014%
85	18.740	2877	2879	2881	rBV2	751	677	0.07%	0.012%
86	18.771	2881	2885	2887	rVV4	930	1181	0.11%	0.021%
87	18.813	2892	2893	2895	rBV2	1180	852	0.08%	0.015%
88	18.881	2904	2906	2911	rVB5	1263	1401	0.14%	0.025%
89	19.012	2928	2931	2938	rVB6	966	1549	0.15%	0.027%
90	19.618	3045	3047	3052	rBV2	828	869	0.08%	0.015%
91	20.815	3273	3276	3278	rBV4	1265	1445	0.14%	0.025%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250690.D
Acq On : 22 Jun 2017 8:52 am
Operator : XimenaC
Sample : mb
Misc : ms37,vd10119,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P

Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MD10106.M
Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

Sum of corrected areas: 5673057

7.2.4

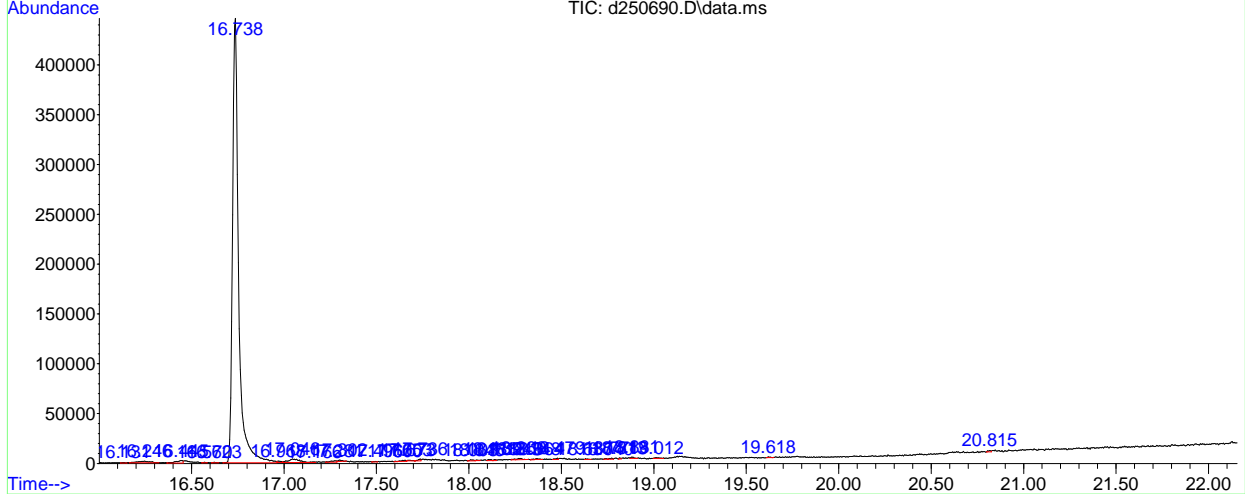
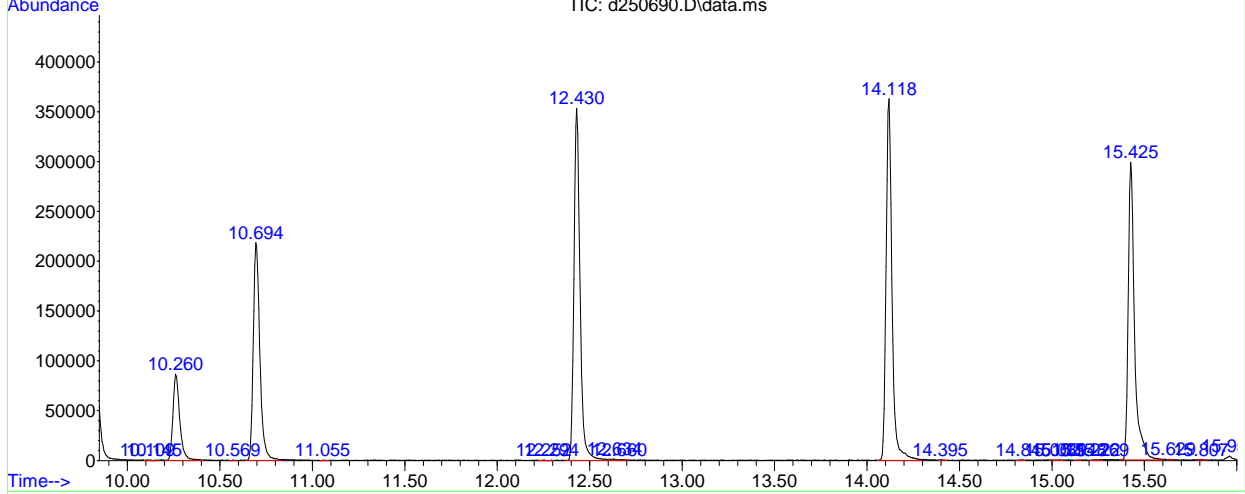
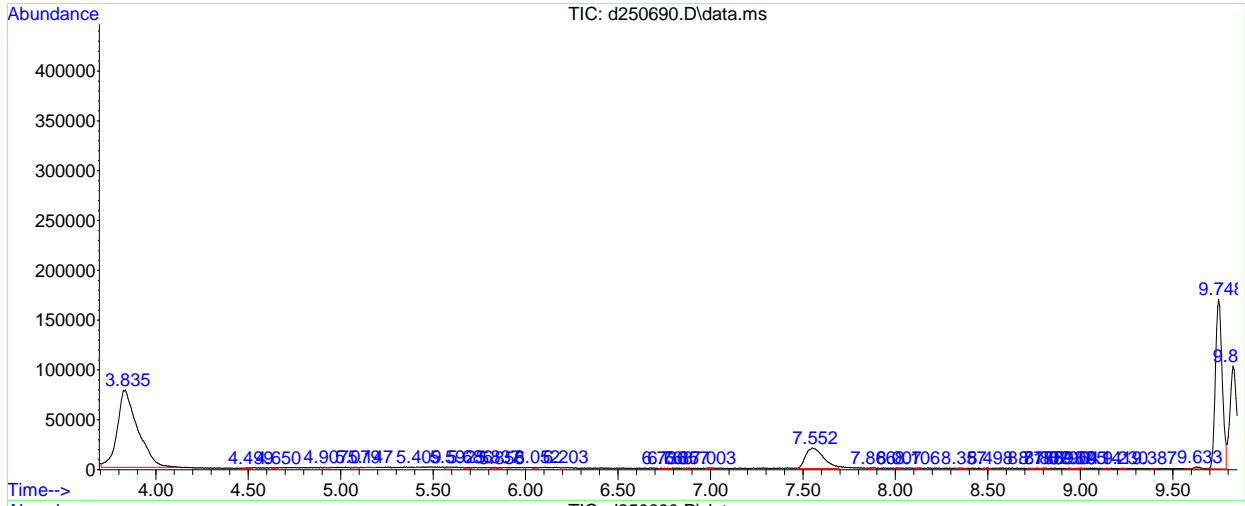
7

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250690.D
Acq On : 22 Jun 2017 8:52 am
Operator : XimenaC
Sample : mb
Misc : ms37,vd10119,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: lscint.p



7.2.4
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250690.D
 Acq On : 22 Jun 2017 8:52 am
 Operator : XimenaC
 Sample : mb
 Misc : ms37,vd10119,5,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

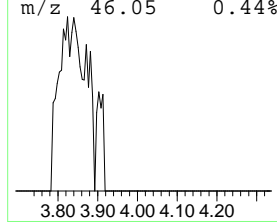
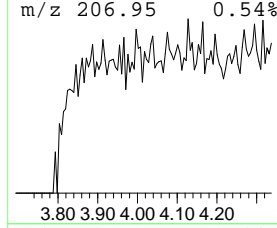
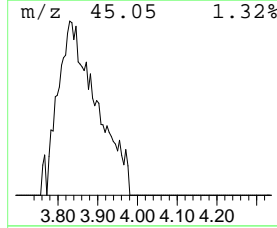
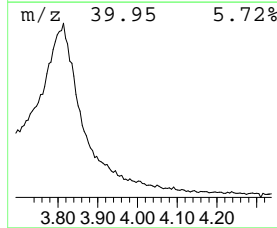
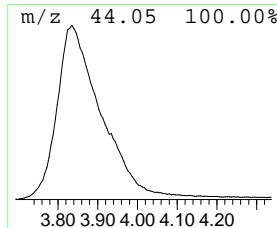
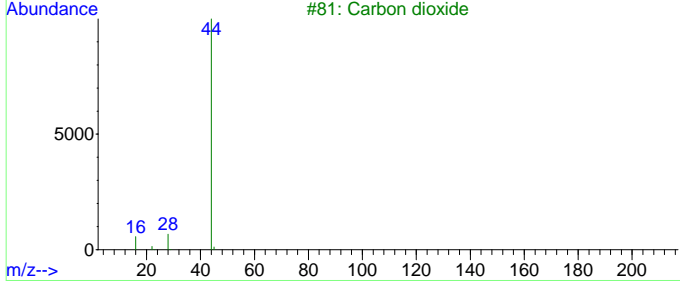
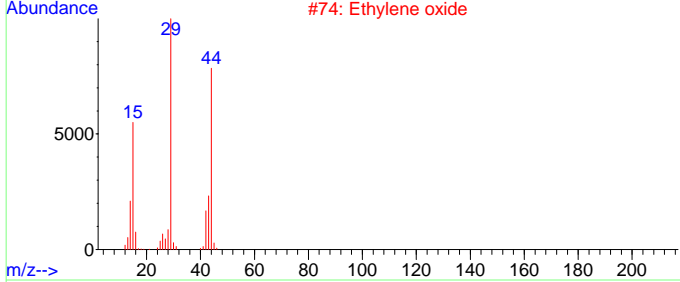
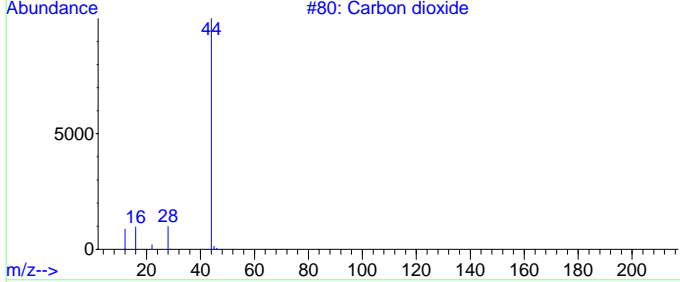
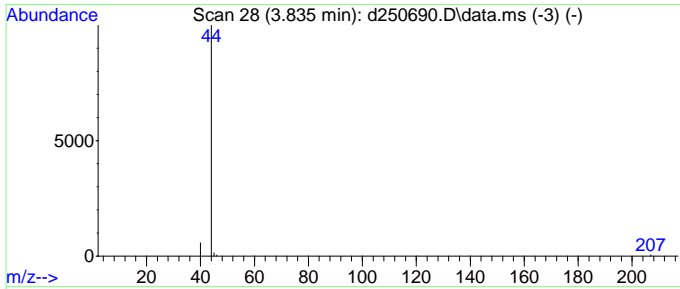
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

 Peak Number 1 system artifact Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.835	68.62 ug/L	595541	pentafluorobenzene	9.748

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Carbon dioxide	44	CO2	000124-38-9	4
2		Ethylene oxide	44	C2H4O	000075-21-8	3
3		Carbon dioxide	44	CO2	000124-38-9	3
4		Nitrous Oxide	44	N2O	010024-97-2	3
5		Nitrous Oxide	44	N2O	010024-97-2	3



7.24
7

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250690.D
 Acq On : 22 Jun 2017 8:52 am
 Operator : XimenaC
 Sample : mb
 Misc : ms37,vd10119,5,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um

TIC Library : C:\DATABASE\NIST08.L
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
system artifact	3.835	68.6	ug/L	595541	2	9.748	433933	50.0

7.2.4
7

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250691.D
 Acq On : 22 Jun 2017 9:20 am
 Operator : XimenaC
 Sample : bs
 Misc : ms17289, vd10119, 5, , 100, 5, 1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 12:53:08 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

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

Internal Standards							
1) Tert Butyl Alcohol-d9	7.558	65	90557	500.00	ug/L	-0.01	
5) pentafluorobenzene	9.743	168	204310	50.00	ug/L	0.00	
54) 1,4-difluorobenzene	10.694	114	278527	50.00	ug/L	0.00	
75) chlorobenzene-d5	14.113	117	295217	50.00	ug/L	0.00	
99) 1,4-dichlorobenzene-d4	16.733	152	218269	50.00	ug/L	0.00	
System Monitoring Compounds							
46) dibromofluoromethane (s)	9.826	113	88844	47.97	ug/L	0.00	
Spiked Amount	50.000	Range 70 - 122	Recovery =	95.94%			
55) 1,2-dichloroethane-d4 (s)	10.255	65	94475	47.65	ug/L	0.00	
Spiked Amount	50.000	Range 68 - 124	Recovery =	95.30%			
76) toluene-d8 (s)	12.425	98	347781	49.77	ug/L	0.00	
Spiked Amount	50.000	Range 77 - 125	Recovery =	99.54%			
100) 4-bromofluorobenzene (s)	15.420	95	156139	48.10	ug/L	0.00	
Spiked Amount	50.000	Range 72 - 130	Recovery =	96.20%			
Target Compounds							
							Qvalue
3) tertiary butyl alcohol	7.657	59	59204	249.51	ug/L		96
4) 1,4-dioxane	11.463	88	27303	1178.07	ug/L		99
6) chlorodifluoromethane	4.285	51	149229	54.14	ug/L		99
7) dichlorodifluoromethane	4.274	85	192846	55.26	ug/L		98
8) chloromethane	4.614	50	183789	53.19	ug/L		98
9) 1,3-butadiene	4.870	54	73810	30.49	ug/L		97
10) vinyl chloride	4.870	62	206450	50.99	ug/L		99
11) bromomethane	5.482	94	147284	55.15	ug/L		100
12) chloroethane	5.618	64	100235	52.23	ug/L		97
13) trichlorofluoromethane	6.078	101	242946	51.65	ug/L		99
14) vinyl bromide	5.979	106	142098	54.02	ug/L		97
15) ethyl ether	6.413	74	45706	51.90	ug/L		96
16) 2-chloropropane	6.632	43	164749	46.74	ug/L		98
17) acrolein	6.721	56	16423	46.28	ug/L		97
18) freon 113	6.820	151	134163	57.82	ug/L		94
19) 1,1-dichloroethene	6.857	96	112650	52.87	ug/L		98
20) acetone	6.925	58	27565	202.09	ug/L		90
21) acetonitrile	7.390	41	133853	427.71	ug/L		99
22) iodomethane	7.160	142	244503	56.15	ug/L		99
23) carbon disulfide	7.280	76	390510	53.83	ug/L		99
24) methylene chloride	7.578	84	112289	48.88	ug/L		97
25) methyl acetate	7.359	43	51399	46.59	ug/L		99
26) methyl tert butyl ether	7.871	73	339664	50.13	ug/L		99
27) trans-1,2-dichloroethene	7.929	96	95242	47.99	ug/L		97
28) hexane	8.185	56	56395	54.10	ug/L		96
29) di-isopropyl ether	8.446	45	303647	48.35	ug/L		97
30) 2-butanone	9.215	72	34793	200.91	ug/L		97
31) 1,1-dichloroethane	8.504	63	149365	50.14	ug/L		100
32) chloroprene	8.603	53	129190	52.43	ug/L		97
33) acrylonitrile	7.923	53	27526	50.01	ug/L		97
34) vinyl acetate	8.472	86	15923	48.33	ug/L	#	86
35) ethyl tert-butyl ether	8.912	59	352539	51.17	ug/L		98
36) ethyl acetate	9.210	45	9555	47.82	ug/L	#	93
37) 2,2-dichloropropane	9.257	77	197878	50.37	ug/L		96
38) cis-1,2-dichloroethene	9.246	96	103618	45.80	ug/L		99
39) propionitrile	9.346	54	106498	474.49	ug/L		96
40) methyl acrylate	9.309	85	11426	50.99	ug/L	#	90
41) methacrylonitrile	9.518	67	30496	50.64	ug/L		98
42) bromochloromethane	9.570	128	54788	51.03	ug/L		95
43) tetrahydrofuran	9.607	42	27272	43.51	ug/L		99
44) chloroform	9.612	83	159527	44.88	ug/L		99
45) tert-Butyl Formate	9.644	59	72159	49.45	ug/L		98
47) 1,1,1-trichloroethane	9.874	97	196691	53.92	ug/L		98
48) cyclohexane	9.931	84	194174	51.71	ug/L		94
49) isobutyl alcohol	10.041	74	12109	470.37	ug/L		81

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250691.D
 Acq On : 22 Jun 2017 9:20 am
 Operator : XimenaC
 Sample : bs
 Misc : ms17289,vd10119,5,,100,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 12:53:08 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 1,1-dichloropropene	10.041	75	118643	51.35	ug/L	98
51) carbon tetrachloride	10.072	117	184598	55.32	ug/L	96
52) tert-amyl alcohol	10.198	73	26436	210.75	ug/L #	85
53) isopropyl acetate	10.219	87	20576	49.35	ug/L	95
56) n-butyl alcohol	10.841	56	118340	2320.85	ug/L	97
57) 2,2,4-Trimethylpentane	10.281	57	471154	55.32	ug/L	99
58) benzene	10.318	78	359335	49.97	ug/L	100
59) tert-amyl methyl ether	10.323	73	366649	51.02	ug/L	98
60) heptane	10.443	57	69387	56.25	ug/L	99
61) 1,2-dichloroethane	10.349	62	118789	50.27	ug/L	97
62) ethyl acrylate	11.045	55	86504	46.98	ug/L	96
63) trichloroethene	11.045	95	95359	52.70	ug/L	96
64) 2-chloroethyl vinyl ether	11.881	63	223281	247.35	ug/L	99
65) methyl methacrylate	11.322	100	23751	53.12	ug/L	93
66) methylcyclohexane	11.254	83	222443	56.52	ug/L	98
67) 1,2-dichloropropane	11.337	63	87452	49.11	ug/L	98
68) dibromomethane	11.515	93	60003	50.75	ug/L	94
69) bromodichloromethane	11.641	83	128288	51.49	ug/L	99
70) 2-nitropropane	11.886	41	32456	45.76	ug/L	93
71) epichlorohydrin	12.038	57	44938	258.96	ug/L	96
72) cis-1,3-dichloropropene	12.122	75	151299	52.17	ug/L	97
73) 4-methyl-2-pentanone	12.221	58	135823	195.78	ug/L	97
74) isoamyl alcohol	12.252	70	55523	1008.66	ug/L	97
77) toluene	12.503	92	248466	51.93	ug/L	99
78) ethyl methacrylate	12.707	69	119959	52.28	ug/L	99
79) trans-1,3-dichloropropene	12.738	75	140423	52.48	ug/L	97
80) 1,1,2-trichloroethane	12.979	83	68905	50.60	ug/L	96
81) tetrachloroethene	13.146	164	101651	54.82	ug/L	99
82) 2-hexanone	13.157	58	126190	194.56	ug/L	98
83) 1,3-dichloropropane	13.178	76	137027	49.76	ug/L	98
84) butyl acetate	13.225	56	56619	50.25	ug/L	97
85) 3,3-Dimethyl-1-Butanol	13.355	69	76011	437.33	ug/L	95
86) dibromochloromethane	13.476	129	117933	54.67	ug/L	96
87) 1,2-dibromoethane	13.648	107	96388	51.49	ug/L	98
88) n-butyl ether	14.014	57	408795	52.69	ug/L	100
89) chlorobenzene	14.150	112	308361	51.16	ug/L	99
90) 1,1,1,2-tetrachloroethane	14.218	131	136704	55.38	ug/L	98
91) ethylbenzene	14.197	91	525233	51.46	ug/L	99
92) m,p-xylene	14.312	106	423177	105.66	ug/L	99
93) o-xylene	14.793	91	467044	53.70	ug/L	99
94) styrene	14.809	104	366718	55.12	ug/L	99
95) butyl acrylate	14.589	55	190279	50.43	ug/L	99
96) isopropylbenzene	15.169	105	627849	55.70	ug/L	100
97) bromoform	15.133	173	97760	57.58	ug/L	99
98) cis-1,4-dichloro-2-butene	15.285	88	49105	53.96	ug/L	94
101) 1,1,2,2-tetrachloroethane	15.546	83	129869	47.57	ug/L	100
102) trans-1,4-dichloro-2-b...	15.593	53	40845	56.49	ug/L	98
103) 1,2,3-trichloropropane	15.630	110	41681	51.44	ug/L	95
104) bromobenzene	15.645	156	174030	52.02	ug/L	97
105) n-propylbenzene	15.635	91	717121	51.04	ug/L	99
106) 2-chlorotoluene	15.813	126	156150	52.26	ug/L	99
107) 4-chlorotoluene	15.922	91	430452	49.18	ug/L	99
108) 1,3,5-trimethylbenzene	15.802	105	563578	53.10	ug/L	98
109) tert-butylbenzene	16.194	119	465736	52.80	ug/L	99
110) 1,2,4-trimethylbenzene	16.246	105	580994	53.11	ug/L	99
111) sec-butylbenzene	16.435	105	747996	53.61	ug/L	99
112) p-isopropyltoluene	16.565	119	661193	54.77	ug/L	99
113) 1,3-dichlorobenzene	16.665	146	349224	52.98	ug/L	100
114) 1,4-dichlorobenzene	16.759	146	361793	49.35	ug/L	99
115) 1,2-dichlorobenzene	17.208	146	353244	51.77	ug/L	99
116) Benzyl Chloride	16.895	91	334285	55.55	ug/L	99
117) n-butylbenzene	17.031	92	320327	53.27	ug/L	100
119) hexachloroethane	17.480	201	114440	53.03	ug/L	99

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250691.D
 Acq On : 22 Jun 2017 9:20 am
 Operator : XimenaC
 Sample : bs
 Misc : ms17289,vd10119,5,,100,5,1
 ALS Vial : 6 Sample Multiplier: 1

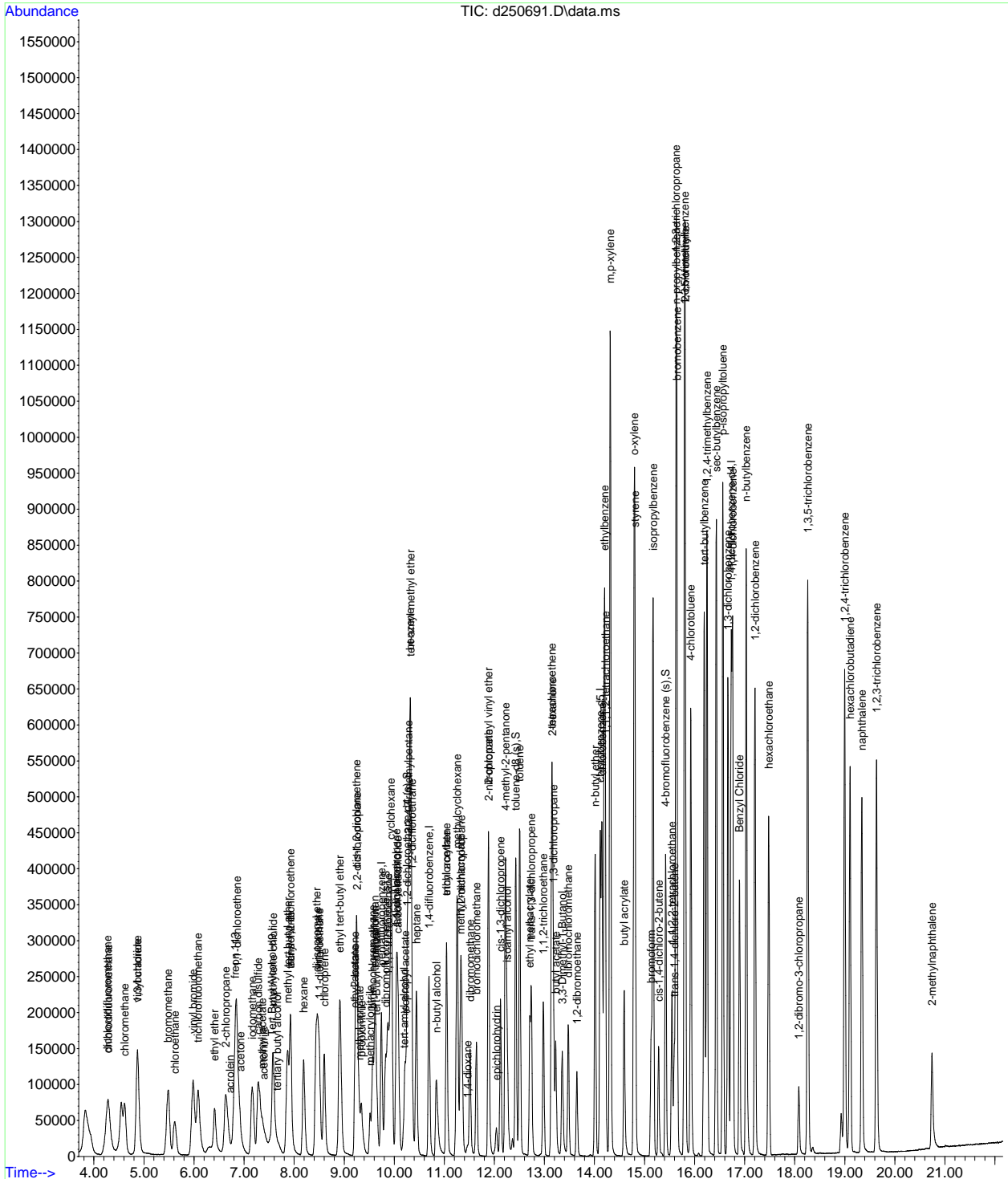
Quant Time: Jun 23 12:53:08 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
120) 1,2-dibromo-3-chloropr...	18.081	75	27816	47.77	ug/L	94
121) 1,3,5-trichlorobenzene	18.259	180	348977	53.94	ug/L	99
122) 1,2,4-trichlorobenzene	18.996	180	291602	55.21	ug/L	98
123) hexachlorobutadiene	19.106	225	163963	53.93	ug/L	99
124) naphthalene	19.341	128	551072	51.55	ug/L	99
125) 1,2,3-trichlorobenzene	19.634	180	255722	53.75	ug/L	99
126) 2-methylnaphthalene	20.743	142	115108	29.57	ug/L	96

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

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250691.D
Acq On : 22 Jun 2017 9:20 am
Operator : XimenaC
Sample : bs
Misc : ms17289,vd10119,5,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 12:53:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Wed Jun 14 16:21:29 2017
Response via : Initial Calibration



7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218888.D
 Acq On : 22 Jun 2017 9:23 am
 Operator : SushilaY
 Sample : bs
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 11:15:15 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

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

Internal Standards						
1) Tert Butyl Alcohol-d9	8.068	65	107709	500.00	ug/L	0.00
5) pentafluorobenzene	10.751	168	364427	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.703	114	578213	50.00	ug/L	-0.01
75) chlorobenzene-d5	14.752	117	497144	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.771	152	251727	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.751	168	364427	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.771	152	251727	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.798	113	150599	42.65	ug/L	-0.01
Spiked Amount	50.000	Range	76 - 120	Recovery	=	85.30%
54) 1,2-dichloroethane-d4 (s)	11.248	65	161044	51.43	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	102.86%
76) toluene-d8 (s)	13.325	98	709745	53.38	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	106.76%
100) 4-bromofluorobenzene (s)	15.783	174	185721	51.88	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	103.76%
Target Compounds						
						Qvalue
3) tertiary butyl alcohol	8.225	59	64641	241.60	ug/L	96
4) 1,4-dioxane	12.446	88	23714	1344.71	ug/L	99
6) chlorodifluoromethane	4.020	51	215750	224.16	ug/L	84
7) dichlorodifluoromethane	3.994	85	266835	52.10	ug/L	97
8) chloromethane	4.381	50	267919	53.62	ug/L	99
9) vinyl chloride	4.658	62	280178	49.85	ug/L	99
10) 1,3-Butadiene	4.721	54	123961	34.92	ug/L	99
11) bromomethane	5.406	94	160867	63.22	ug/L	92
12) chloroethane	5.605	64	149298	53.46	ug/L	93
13) vinyl bromide	6.002	106	150073	51.98	ug/L	95
14) trichlorofluoromethane	6.107	101	303569	61.85	ug/L	99
15) ethyl ether	6.646	74	68586	41.91	ug/L	84
16) 2-chloropropane	6.881	43	326622	59.27	ug/L	92
17) acrolein	6.996	56	16790	42.83	ug/L	96
18) freon 113	7.101	151	123392	50.94	ug/L	93
19) 1,1-dichloroethene	7.143	61	282306	54.66	ug/L	95
20) acetone	7.263	43	118135	207.88	ug/L	93
21) acetonitrile	7.838	41	108512	488.67	ug/L	93
22) iodomethane	7.488	142	252633	49.23	ug/L	97
23) carbon disulfide	7.618	76	586637	56.67	ug/L	95
24) methylene chloride	8.079	84	153633	43.08	ug/L	93
25) methyl acetate	7.838	43	60448	47.89	ug/L	93
26) methyl tert butyl ether	8.471	73	388102	46.59	ug/L	98
27) trans-1,2-dichloroethene	8.529	61	264117	53.81	ug/L	92
28) hexane	8.900	57	289419	53.51	ug/L	96
29) di-isopropyl ether	9.240	45	560774	52.38	ug/L	99
30) ethyl tert-butyl ether	9.799	59	521442	48.65	ug/L	99
31) 1,1-dichloroethane	9.266	63	314358	51.14	ug/L	99
32) chloroprene	9.386	53	316278	60.10	ug/L	93
33) acrylonitrile	8.549	53	28604	47.50	ug/L	94
34) vinyl acetate	9.282	86	18398	44.38	ug/L	# 35
35) 2-butanone	10.134	72	42356	187.10	ug/L	# 81
36) ethyl acetate	10.160	45	13132	48.41	ug/L	79
37) 2,2-dichloropropane	10.134	77	317965	63.84	ug/L	99
38) cis-1,2-dichloroethene	10.150	96	177261	43.22	ug/L	92
39) methyl acrylate	10.244	85	11289	41.55	ug/L	# 96
40) propionitrile	10.275	54	119690	452.04	ug/L	99
41) bromochloromethane	10.506	128	63915	42.49	ug/L	96
42) tetrahydrofuran	10.537	42	35347	48.02	ug/L	89
43) chloroform	10.573	83	292899	44.98	ug/L	96
44) t-butyl formate	10.605	59	67679	39.59	ug/L	96
46) methacrylonitrile	10.464	67	35853	44.75	ug/L	93
47) cyclohexane	10.877	84	299529	47.97	ug/L	93

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218888.D
 Acq On : 22 Jun 2017 9:23 am
 Operator : SushilaY
 Sample : bs
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 11:15:15 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 1,1,1-trichloroethane	10.819	97	307514	57.11	ug/L	97
49) 1,1-dichloropropene	11.013	75	256322	54.43	ug/L	94
50) carbon tetrachloride	11.029	117	263834	58.09	ug/L	97
51) tert-amyl alcohol	11.222	73	29663	208.17	ug/L	89
52) isobutyl alcohol	11.102	43	45077	455.51	ug/L	96
55) isopropyl acetate	11.253	87	20159	45.53	ug/L #	35
56) 2,2,4-trimethylpentane	11.269	57	835965	54.58	ug/L	97
57) tert-amyl methyl ether	11.332	73	454952	46.42	ug/L	95
58) benzene	11.295	78	692156	52.08	ug/L	98
59) heptane	11.468	57	161772	62.37	ug/L	96
60) 1,2-dichloroethane	11.337	62	183480	52.55	ug/L	99
61) n-butyl alcohol	11.886	56	141326	2367.18	ug/L	86
62) ethyl acrylate	12.075	55	110966	51.02	ug/L	98
63) trichloroethene	12.038	95	171458	51.75	ug/L	94
64) 2-chloroethyl vinyl ether	12.864	63	46864	267.24	ug/L	97
65) 2-nitropropane	12.849	41	28886	52.88	ug/L	90
66) methylcyclohexane	12.231	83	372503	56.15	ug/L	95
67) methyl methacrylate	12.336	100	25861	50.08	ug/L	95
68) 1,2-dichloropropane	12.315	63	161191	52.09	ug/L	96
69) dibromomethane	12.483	93	68823	47.36	ug/L	99
70) bromodichloromethane	12.613	83	201245	50.36	ug/L	99
71) epichlorohydrin	12.990	57	43342	219.88	ug/L	99
72) cis-1,3-dichloropropene	13.058	75	249400	51.47	ug/L	93
73) 4-methyl-2-pentanone	13.157	58	150263	178.02	ug/L	93
74) 3-methyl-1-butanol	13.204	55	90641	858.47	ug/L	94
77) toluene	13.393	92	443664	55.85	ug/L	98
78) ethyl methacrylate	13.591	69	144477	49.76	ug/L	92
79) trans-1,3-dichloropropene	13.612	75	204691	52.99	ug/L	98
80) 1,1,2-trichloroethane	13.816	83	82284	47.45	ug/L	96
81) 2-hexanone	13.973	58	146213	197.75	ug/L	92
82) tetrachloroethene	13.942	166	179158	56.44	ug/L	99
83) 1,3-dichloropropane	13.984	76	181425	49.59	ug/L	99
84) butyl acetate	14.036	56	71462	50.63	ug/L	92
85) 3,3-dimethyl-1-butanol	14.146	57	104616	459.38	ug/L	92
86) dibromochloromethane	14.235	129	123986	49.18	ug/L	99
87) 1,2-dibromoethane	14.365	107	93262	46.19	ug/L	97
88) n-butyl ether	14.674	57	809511	58.85	ug/L	98
89) chlorobenzene	14.779	112	452975	53.62	ug/L	95
90) 1,1,1,2-tetrachloroethane	14.836	131	155141	49.62	ug/L	98
91) ethylbenzene	14.820	91	888020	59.10	ug/L	100
92) m,p-xylene	14.915	106	683871	114.42	ug/L	95
93) o-xylene	15.291	91	701710	53.75	ug/L	99
94) styrene	15.302	104	520831	53.08	ug/L	98
95) butyl acrylate	15.134	55	229117	47.83	ug/L	98
96) bromoform	15.563	173	70931	46.54	ug/L	100
97) isopropylbenzene	15.584	105	927415	56.01	ug/L	98
98) cis-1,4-dichloro-2-butene	15.673	75	48170	44.63	ug/L	92
101) bromobenzene	15.950	156	169302	52.16	ug/L	98
102) 1,1,2,2-tetrachloroethane	15.877	83	125200	46.34	ug/L	99
103) trans-1,4-dichloro-2-b...	15.908	53	47705	58.39	ug/L	90
104) 1,2,3-trichloropropane	15.945	110	35645	50.23	ug/L #	55
105) n-propylbenzene	15.940	91	1119369	60.63	ug/L	99
106) 2-chlorotoluene	16.076	126	198692	56.59	ug/L	94
107) 4-chlorotoluene	16.159	91	631071	56.05	ug/L	98
108) 1,3,5-trimethylbenzene	16.060	105	779106	57.91	ug/L	97
109) tert-butylbenzene	16.363	119	692594	58.13	ug/L	98
110) 1,2,4-trimethylbenzene	16.400	105	782997	56.62	ug/L	98
111) sec-butylbenzene	16.541	105	1068429	61.08	ug/L	99
112) 1,3-dichlorobenzene	16.719	146	368912	52.69	ug/L	98
113) p-isopropyltoluene	16.635	119	887488	59.75	ug/L	99
114) 1,4-dichlorobenzene	16.792	146	368561	53.50	ug/L	99
115) benzyl chloride	16.892	91	305756	49.99	ug/L	100
116) 1,2-dichlorobenzene	17.122	146	332045	52.01	ug/L	98

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218888.D
 Acq On : 22 Jun 2017 9:23 am
 Operator : SushilaY
 Sample : bs
 Misc : MS17218,VC8081,5,,,,1
 ALS Vial : 3 Sample Multiplier: 1

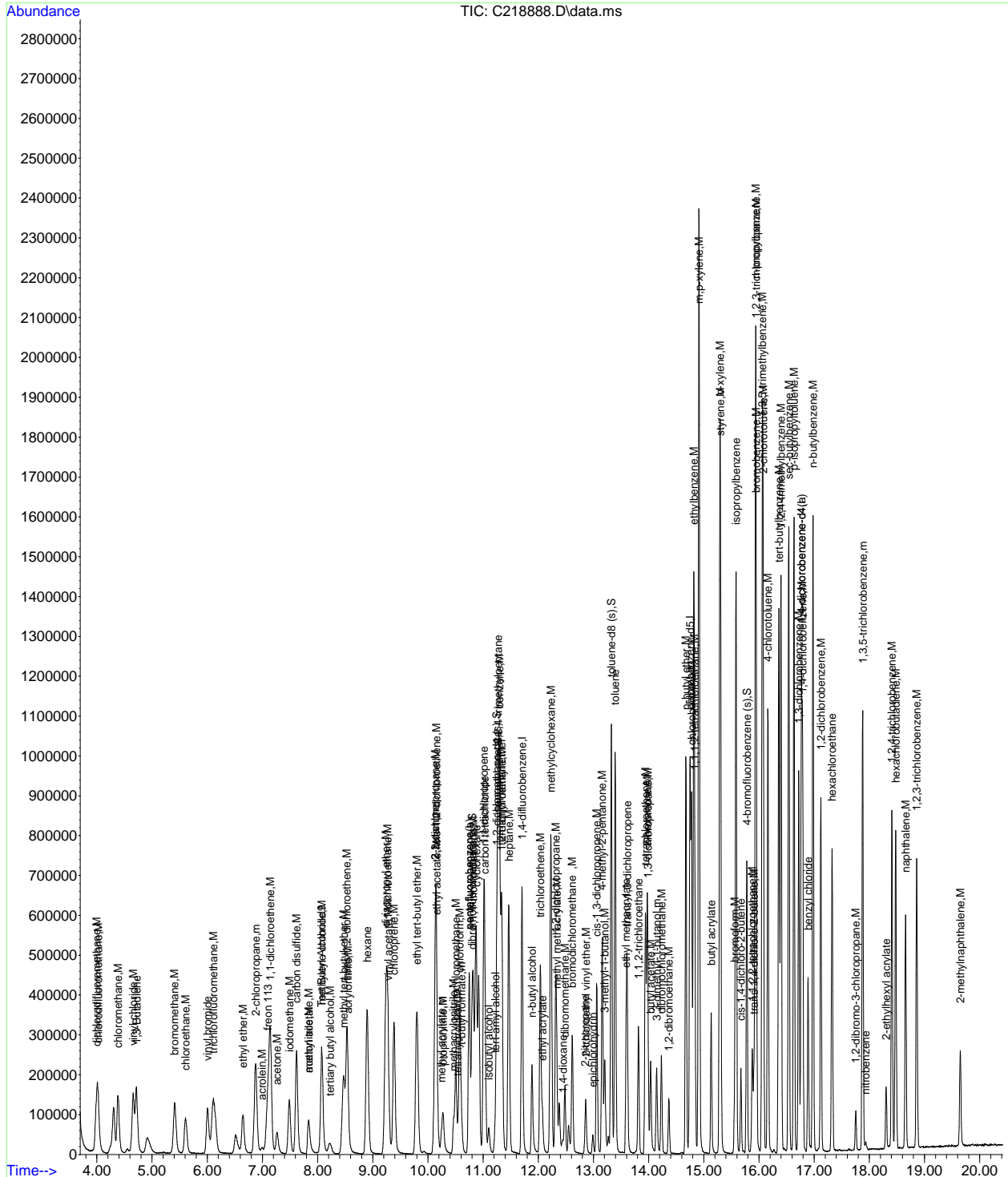
Quant Time: Jun 23 11:15:15 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
117) n-butylbenzene	16.980	92	471757	60.92	ug/L	96
118) hexachloroethane	17.326	201	124627	61.16	ug/L	98
119) 1,2-dibromo-3-chloropr...	17.754	157	24333	44.61	ug/L	88
120) 1,3,5-trichlorobenzene	17.880	180	327858	60.51	ug/L	93
121) nitrobenzene	17.932	77	10928	50.03	ug/L	86
122) 2-ethylhexyl acrylate	18.304	70	40843	10.11	ug/L	92
123) 1,2,4-trichlorobenzene	18.408	180	248854	58.17	ug/L	97
124) hexachlorobutadiene	18.476	225	168673	69.19	ug/L	97
125) naphthalene	18.659	128	454129	53.10	ug/L	99
126) 1,2,3-trichlorobenzene	18.858	180	217583	57.88	ug/L	99
127) 2-methylnaphthalene	19.648	142	130319	27.00	ug/L	93

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

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218888.D
Acq On : 22 Jun 2017 9:23 am
Operator : SushilaY
Sample : bs
Misc : MS17218,VC8081,5,, ,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 11:15:15 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration



7.32
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218889.D
 Acq On : 22 Jun 2017 10:08 am
 Operator : SushilaY
 Sample : bsd
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 11:15:32 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

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

Internal Standards						
1) Tert Butyl Alcohol-d9	8.067	65	102133	500.00	ug/L	0.00
5) pentafluorobenzene	10.740	168	344874	50.00	ug/L	-0.02
53) 1,4-difluorobenzene	11.702	114	549090	50.00	ug/L	-0.01
75) chlorobenzene-d5	14.746	117	484375	50.00	ug/L	-0.01
99) 1,4-dichlorobenzene-d4	16.765	152	242920	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.740	168	344874	50.00	ug/L	-0.02
130) 1,4-dichlorobenzene-d4(a)	16.765	152	242920	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.792	113	144295	43.18	ug/L	-0.02
Spiked Amount	50.000	Range	76 - 120	Recovery	=	86.36%
54) 1,2-dichloroethane-d4 (s)	11.237	65	151465	50.94	ug/L	-0.02
Spiked Amount	50.000	Range	73 - 122	Recovery	=	101.88%
76) toluene-d8 (s)	13.318	98	674975	52.10	ug/L	-0.02
Spiked Amount	50.000	Range	84 - 119	Recovery	=	104.20%
100) 4-bromofluorobenzene (s)	15.776	174	179232	51.88	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	103.76%
Target Compounds						
						Qvalue
3) tertiary butyl alcohol	8.214	59	63282	249.43	ug/L	93
4) 1,4-dioxane	12.434	88	23550	1408.32	ug/L	91
6) chlorodifluoromethane	4.014	51	220029	241.56	ug/L	85
7) dichlorodifluoromethane	3.988	85	263302	54.33	ug/L	98
8) chloromethane	4.375	50	271596	57.44	ug/L	100
9) vinyl chloride	4.647	62	276453	51.98	ug/L	98
10) 1,3-Butadiene	4.709	54	119405	35.54	ug/L	95
11) bromomethane	5.400	94	153418	63.71	ug/L	98
12) chloroethane	5.593	64	143210	54.19	ug/L	93
13) vinyl bromide	6.001	106	140603	51.46	ug/L	# 98
14) trichlorofluoromethane	6.101	101	284500	61.25	ug/L	95
15) ethyl ether	6.639	74	65673	42.40	ug/L	83
16) 2-chloropropane	6.864	43	320436	61.45	ug/L	92
17) acrolein	6.995	56	16853	45.43	ug/L	97
18) freon 113	7.100	151	121884	53.17	ug/L	96
19) 1,1-dichloroethene	7.136	61	267678	54.76	ug/L	94
20) acetone	7.262	43	108200	201.19	ug/L	91
21) acetonitrile	7.832	41	108652	517.04	ug/L	98
22) iodomethane	7.481	142	242624	49.96	ug/L	97
23) carbon disulfide	7.612	76	555093	56.67	ug/L	96
24) methylene chloride	8.067	84	149035	44.16	ug/L	97
25) methyl acetate	7.827	43	58354	48.85	ug/L	93
26) methyl tert butyl ether	8.465	73	375284	47.61	ug/L	97
27) trans-1,2-dichloroethene	8.527	61	253362	54.54	ug/L	95
28) hexane	8.888	57	267546	52.27	ug/L	91
29) di-isopropyl ether	9.234	45	537383	53.04	ug/L	98
30) ethyl tert-butyl ether	9.793	59	505564	49.85	ug/L	99
31) 1,1-dichloroethane	9.265	63	294938	50.70	ug/L	99
32) chloroprene	9.380	53	294632	59.17	ug/L	92
33) acrylonitrile	8.543	53	29450	51.68	ug/L	90
34) vinyl acetate	9.270	86	17926	45.69	ug/L	# 30
35) 2-butanone	10.133	72	39180	182.88	ug/L	# 70
36) ethyl acetate	10.159	45	12617	49.15	ug/L	92
37) 2,2-dichloropropane	10.128	77	295103	62.61	ug/L	98
38) cis-1,2-dichloroethene	10.144	96	165447	42.63	ug/L	90
39) methyl acrylate	10.243	85	10542	41.00	ug/L	90
40) propionitrile	10.269	54	116464	464.79	ug/L	98
41) bromochloromethane	10.499	128	61675	43.32	ug/L	99
42) tetrahydrofuran	10.536	42	32577	46.60	ug/L	94
43) chloroform	10.572	83	273704	44.41	ug/L	97
44) t-butyl formate	10.593	59	67895	41.96	ug/L	89
46) methacrylonitrile	10.463	67	34779	45.87	ug/L	96
47) cyclohexane	10.871	84	281651	47.67	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218889.D
 Acq On : 22 Jun 2017 10:08 am
 Operator : SushilaY
 Sample : bsd
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 11:15:32 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 1,1,1-trichloroethane	10.813	97	293266	57.56	ug/L	97
49) 1,1-dichloropropene	11.007	75	237589	53.31	ug/L	97
50) carbon tetrachloride	11.022	117	248880	57.91	ug/L	96
51) tert-amyl alcohol	11.211	73	28713	212.92	ug/L	94
52) isobutyl alcohol	11.095	43	44349	473.56	ug/L	95
55) isopropyl acetate	11.252	87	19735	46.94	ug/L #	45
56) 2,2,4-trimethylpentane	11.268	57	778879	53.55	ug/L	91
57) tert-amyl methyl ether	11.326	73	444103	47.71	ug/L	96
58) benzene	11.289	78	648268	51.37	ug/L	97
59) heptane	11.462	57	156040	63.35	ug/L	96
60) 1,2-dichloroethane	11.331	62	176915	53.36	ug/L	97
61) n-butyl alcohol	11.880	56	141361	2493.35	ug/L	87
62) ethyl acrylate	12.068	55	110950	53.72	ug/L	99
63) trichloroethene	12.032	95	160094	50.88	ug/L	96
64) 2-chloroethyl vinyl ether	12.858	63	47002	282.24	ug/L	94
65) 2-nitropropane	12.848	41	28853	55.62	ug/L	91
66) methylcyclohexane	12.225	83	350402	55.62	ug/L	95
67) methyl methacrylate	12.330	100	24609	50.18	ug/L	96
68) 1,2-dichloropropane	12.314	63	151808	51.66	ug/L	94
69) dibromomethane	12.481	93	66372	48.10	ug/L	97
70) bromodichloromethane	12.612	83	189053	49.81	ug/L	100
71) epichlorohydrin	12.984	57	41299	220.63	ug/L	95
72) cis-1,3-dichloropropene	13.057	75	239842	52.12	ug/L	93
73) 4-methyl-2-pentanone	13.156	58	150809	188.15	ug/L	95
74) 3-methyl-1-butanol	13.203	55	92702	924.56	ug/L	96
77) toluene	13.391	92	417063	53.89	ug/L	98
78) ethyl methacrylate	13.590	69	141040	49.86	ug/L	91
79) trans-1,3-dichloropropene	13.606	75	194974	51.80	ug/L	98
80) 1,1,2-trichloroethane	13.810	83	80815	47.83	ug/L	96
81) 2-hexanone	13.967	58	146090	202.79	ug/L	92
82) tetrachloroethene	13.941	166	166712	53.90	ug/L	96
83) 1,3-dichloropropane	13.977	76	176115	49.41	ug/L	98
84) butyl acetate	14.035	56	69788	50.75	ug/L	96
85) 3,3-dimethyl-1-butanol	14.145	57	105174	474.00	ug/L	94
86) dibromochloromethane	14.228	129	117477	47.83	ug/L	97
87) 1,2-dibromoethane	14.364	107	91524	46.53	ug/L	98
88) n-butyl ether	14.673	57	765064	57.08	ug/L	98
89) chlorobenzene	14.777	112	431719	52.45	ug/L	97
90) 1,1,1,2-tetrachloroethane	14.835	131	147796	48.52	ug/L	98
91) ethylbenzene	14.814	91	836347	57.13	ug/L	100
92) m,p-xylene	14.908	106	641955	110.24	ug/L	93
93) o-xylene	15.285	91	664996	52.29	ug/L	100
94) styrene	15.300	104	493445	51.61	ug/L	98
95) butyl acrylate	15.128	55	227171	48.67	ug/L	97
96) bromoform	15.557	173	68747	46.29	ug/L	99
97) isopropylbenzene	15.583	105	871071	54.00	ug/L	98
98) cis-1,4-dichloro-2-butene	15.672	75	46423	44.15	ug/L	89
101) bromobenzene	15.949	156	163910	52.33	ug/L	94
102) 1,1,2,2-tetrachloroethane	15.876	83	120676	46.29	ug/L	99
103) trans-1,4-dichloro-2-b...	15.907	53	46540	59.02	ug/L	90
104) 1,2,3-trichloropropane	15.939	110	34671	50.63	ug/L #	92
105) n-propylbenzene	15.933	91	1057282	59.34	ug/L	99
106) 2-chlorotoluene	16.075	126	187787	55.42	ug/L	92
107) 4-chlorotoluene	16.158	91	592166	54.51	ug/L	97
108) 1,3,5-trimethylbenzene	16.059	105	734668	56.59	ug/L	98
109) tert-butylbenzene	16.357	119	646193	56.20	ug/L	97
110) 1,2,4-trimethylbenzene	16.399	105	749768	56.18	ug/L	98
111) sec-butylbenzene	16.540	105	994042	58.89	ug/L	99
112) 1,3-dichlorobenzene	16.718	146	355781	52.65	ug/L	100
113) p-isopropyltoluene	16.634	119	831714	58.03	ug/L	99
114) 1,4-dichlorobenzene	16.786	146	353290	53.15	ug/L	99
115) benzyl chloride	16.890	91	293823	49.78	ug/L	100
116) 1,2-dichlorobenzene	17.121	146	318160	51.64	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218889.D
 Acq On : 22 Jun 2017 10:08 am
 Operator : SushilaY
 Sample : bsd
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 4 Sample Multiplier: 1

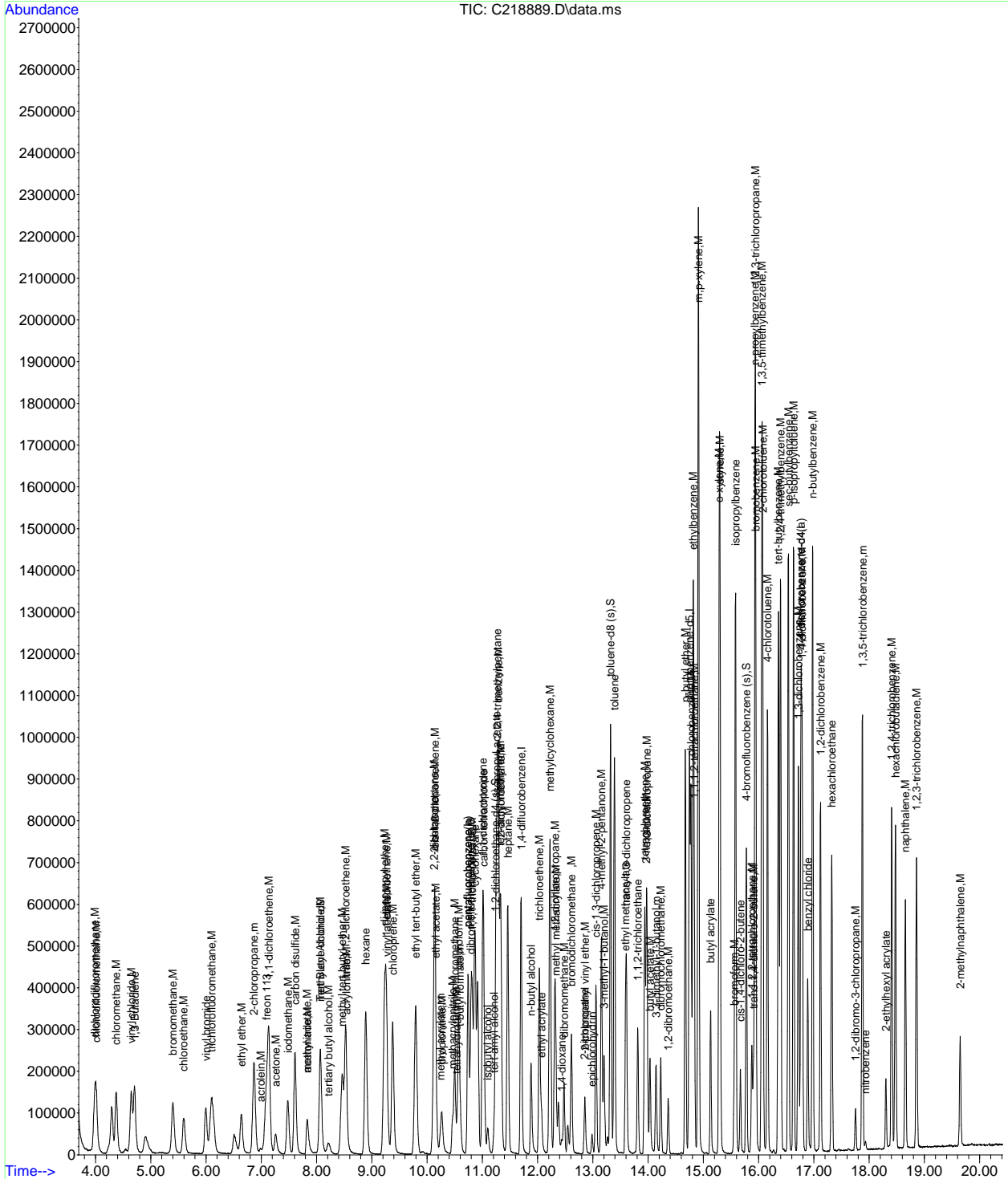
Quant Time: Jun 23 11:15:32 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
117) n-butylbenzene	16.974	92	436350	58.39	ug/L	99
118) hexachloroethane	17.325	201	117384	59.70	ug/L	98
119) 1,2-dibromo-3-chloropr...	17.753	157	24820	47.15	ug/L	89
120) 1,3,5-trichlorobenzene	17.879	180	309843	59.26	ug/L	93
121) nitrobenzene	17.931	77	11230	53.28	ug/L	91
122) 2-ethylhexyl acrylate	18.303	70	42093	10.77	ug/L	94
123) 1,2,4-trichlorobenzene	18.407	180	241345	58.46	ug/L	98
124) hexachlorobutadiene	18.475	225	157027	66.74	ug/L	96
125) naphthalene	18.653	128	454431	55.06	ug/L	98
126) 1,2,3-trichlorobenzene	18.857	180	211460	58.29	ug/L	97
127) 2-methylnaphthalene	19.647	142	134303	28.76	ug/L	96

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

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218889.D
Acq On : 22 Jun 2017 10:08 am
Operator : SushilaY
Sample : bsd
Misc : MS17218,VC8081,5,, ,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 11:15:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration



7.3.3
7

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250697.D
 Acq On : 22 Jun 2017 12:45 pm
 Operator : XimenaC
 Sample : jc45391-8ms
 Misc : ms17267,vd10119,6.3,,100,5,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 13:00:55 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

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

Internal Standards						
1) Tert Butyl Alcohol-d9	7.593	65	97243	500.00	ug/L	0.03
5) pentafluorobenzene	9.742	168	197364	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.693	114	271277	50.00	ug/L	0.00
75) chlorobenzene-d5	14.112	117	301826	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.732	152	226089	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	9.820	113	84820	47.41	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	94.82%	
55) 1,2-dichloroethane-d4 (s)	10.259	65	106433	55.11	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	110.22%	
76) toluene-d8 (s)	12.424	98	360268	50.43	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	100.86%	
100) 4-bromofluorobenzene (s)	15.419	95	175863	52.30	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	104.60%	
Target Compounds						
						Qvalue
3) tertiary butyl alcohol	7.682	59	61314	240.63	ug/L	77
4) 1,4-dioxane	11.467	88	28512	1145.65	ug/L	82
6) chlorodifluoromethane	4.279	51	168198	63.17	ug/L	99
7) dichlorodifluoromethane	4.279	85	206671	61.31	ug/L	99
8) chloromethane	4.608	50	190757	57.15	ug/L	98
10) vinyl chloride	4.859	62	214595	54.87	ug/L	98
11) bromomethane	5.450	94	58668	22.74	ug/L	98
12) chloroethane	5.596	64	49686	26.80	ug/L	96
13) trichlorofluoromethane	6.061	101	234384	51.58	ug/L	98
14) vinyl bromide	5.957	106	230739	90.80	ug/L	98
15) ethyl ether	6.412	74	45916	53.97	ug/L	85
16) 2-chloropropane	6.626	43	173354	50.91	ug/L	98
17) acrolein	6.704	56	16721	48.78	ug/L	74
18) freon 113	6.819	151	139643	62.30	ug/L	95
19) 1,1-dichloroethene	6.861	96	123582	60.04	ug/L	99
20) acetone	6.945	58	49859	378.40	ug/L	93
21) acetonitrile	7.509	41	553976	1832.45	ug/L #	41
22) iodomethane	7.159	142	258829	61.54	ug/L	99
23) carbon disulfide	7.295	76	422650	60.31	ug/L	99
24) methylene chloride	7.572	84	122992	55.42	ug/L	95
25) methyl acetate	7.358	43	42598	39.97	ug/L	98
26) methyl tert butyl ether	7.875	73	344215	52.59	ug/L #	1
27) trans-1,2-dichloroethene	7.922	96	91788	47.88	ug/L	94
28) hexane	8.184	56	255373	253.61	ug/L	98
29) di-isopropyl ether	8.450	45	332547	54.81	ug/L	86
30) 2-butanone	9.229	72	46252	276.48	ug/L #	65
31) 1,1-dichloroethane	8.498	63	149271	51.87	ug/L	98
32) chloroprene	8.597	53	132610	55.71	ug/L	98
33) acrylonitrile	7.917	53	24542	46.16	ug/L	91
34) vinyl acetate	8.482	86	15701	49.34	ug/L #	72
35) ethyl tert-butyl ether	8.911	59	358651	53.89	ug/L #	66
36) ethyl acetate	9.214	45	9984	51.73	ug/L #	93
37) 2,2-dichloropropane	9.256	77	184821	48.70	ug/L	95
38) cis-1,2-dichloroethene	9.245	96	101008	46.22	ug/L	96
39) propionitrile	9.350	54	107816	497.27	ug/L #	60
40) methyl acrylate	9.303	85	11396	52.65	ug/L #	84
41) methacrylonitrile	9.517	67	35162	60.44	ug/L	92
42) bromochloromethane	9.569	128	53616	51.70	ug/L	91
43) tetrahydrofuran	9.611	42	28515	47.09	ug/L #	1
44) chloroform	9.616	83	155356	45.25	ug/L	95
45) tert-Butyl Formate	9.648	59	97833	69.41	ug/L	91
47) 1,1,1-trichloroethane	9.867	97	187754	53.28	ug/L	99
48) cyclohexane	9.935	84	462893	127.62	ug/L #	47
49) isobutyl alcohol	10.040	74	12697	510.24	ug/L #	11
50) 1,1-dichloropropene	10.040	75	115177	51.60	ug/L	99

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250697.D
 Acq On : 22 Jun 2017 12:45 pm
 Operator : XimenaC
 Sample : jc45391-8ms
 Misc : ms17267,vd10119,6.3,,100,5,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 13:00:55 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) carbon tetrachloride	10.071	117	194756	60.42	ug/L	98
52) tert-amyl alcohol	10.207	73	30317	250.20	ug/L #	69
53) isopropyl acetate	10.218	87	22607	56.12	ug/L #	1
56) n-butyl alcohol	10.929	56	69292	1395.26	ug/L	82
57) 2,2,4-Trimethylpentane	10.280	57	2434596	293.51	ug/L	87
58) benzene	10.317	78	379936	54.24	ug/L	95
59) tert-amyl methyl ether	10.327	73	394562	56.37	ug/L #	63
60) heptane	10.437	57	516864	430.17	ug/L #	74
61) 1,2-dichloroethane	10.348	62	117705	51.14	ug/L	88
62) ethyl acrylate	11.044	55	87611	48.86	ug/L	98
63) trichloroethene	11.044	95	103115	58.51	ug/L	98
64) 2-chloroethyl vinyl ether	11.880	63	242268	275.56	ug/L	96
65) methyl methacrylate	11.321	100	25524	58.61	ug/L	90
66) methylcyclohexane	11.258	83	1268510	330.94	ug/L	98
67) 1,2-dichloropropane	11.331	63	86819	50.06	ug/L	95
68) dibromomethane	11.509	93	60116	52.20	ug/L	94
69) bromodichloromethane	11.640	83	192352	79.26	ug/L	86
70) 2-nitropropane	11.802	41	1153522	1669.93	ug/L	95
71) epichlorohydrin	11.985	57	1222212	7231.25	ug/L	54
72) cis-1,3-dichloropropene	12.121	75	152395	53.95	ug/L	86
73) 4-methyl-2-pentanone	12.220	58	159108	235.48	ug/L	87
74) isoamyl alcohol	12.241	70	222240	4145.21	ug/L #	46
77) toluene	12.507	92	263078	53.78	ug/L	99
78) ethyl methacrylate	12.706	69	162719	69.36	ug/L	99
79) trans-1,3-dichloropropene	12.737	75	141482	51.72	ug/L	91
80) 1,1,2-trichloroethane	12.978	83	82143	59.00	ug/L #	73
81) tetrachloroethene	13.140	164	105439	55.62	ug/L	99
82) 2-hexanone	13.156	58	211398	318.80	ug/L #	86
83) 1,3-dichloropropane	13.177	76	140192	49.79	ug/L #	57
84) butyl acetate	13.224	56	51720	44.90	ug/L #	80
85) 3,3-Dimethyl-1-Butanol	13.354	69	112145	619.06	ug/L	93
86) dibromochloromethane	13.475	129	119684	54.27	ug/L	97
87) 1,2-dibromoethane	13.647	107	100591	52.56	ug/L	100
88) n-butyl ether	14.013	57	546947	68.96	ug/L	98
89) chlorobenzene	14.149	112	323431	52.49	ug/L	99
90) 1,1,1,2-tetrachloroethane	14.217	131	155893	61.77	ug/L	98
91) ethylbenzene	14.196	91	1220267	116.93	ug/L	98
92) m,p-xylene	14.316	106	506577	123.71	ug/L	97
93) o-xylene	14.792	91	528835	59.47	ug/L	97
94) styrene	14.808	104	396430	58.28	ug/L	98
95) butyl acrylate	14.588	55	346673	89.86	ug/L	87
96) isopropylbenzene	15.168	105	1202176	104.32	ug/L	100
97) bromoform	15.132	173	100847	58.10	ug/L	96
98) cis-1,4-dichloro-2-butene	15.278	88	52172	55.96	ug/L #	72
101) 1,1,2,2-tetrachloroethane	15.550	83	133603	47.25	ug/L	99
102) trans-1,4-dichloro-2-b...	15.592	53	50080	66.87	ug/L	97
103) 1,2,3-trichloropropane	15.634	110	51510	61.38	ug/L	97
104) bromobenzene	15.644	156	182936	52.79	ug/L	92
105) n-propylbenzene	15.634	91	2587255	177.77	ug/L	97
106) 2-chlorotoluene	15.812	126	166312	53.74	ug/L	98
107) 4-chlorotoluene	15.927	91	467744	51.59	ug/L	97
108) 1,3,5-trimethylbenzene	15.801	105	694100	63.14	ug/L	98
109) tert-butylbenzene	16.193	119	591424	64.74	ug/L	99
110) 1,2,4-trimethylbenzene	16.251	105	692185	61.09	ug/L	99
111) sec-butylbenzene	16.434	105	1333532	92.27	ug/L	98
112) p-isopropyltoluene	16.564	119	870143	69.59	ug/L	99
113) 1,3-dichlorobenzene	16.669	146	374297	54.82	ug/L	98
114) 1,4-dichlorobenzene	16.763	146	386140	50.85	ug/L	98
115) 1,2-dichlorobenzene	17.207	146	382898	54.18	ug/L	99
116) Benzyl Chloride	16.894	91	624076	100.12	ug/L	82
117) n-butylbenzene	17.030	92	1025087	164.57	ug/L	96
119) hexachloroethane	17.484	201	146510	65.54	ug/L	96
120) 1,2-dibromo-3-chloropr...	18.080	75	34602	57.37	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250697.D
 Acq On : 22 Jun 2017 12:45 pm
 Operator : XimenaC
 Sample : jc45391-8ms
 Misc : ms17267,vd10119,6.3,,100,5,1
 ALS Vial : 12 Sample Multiplier: 1

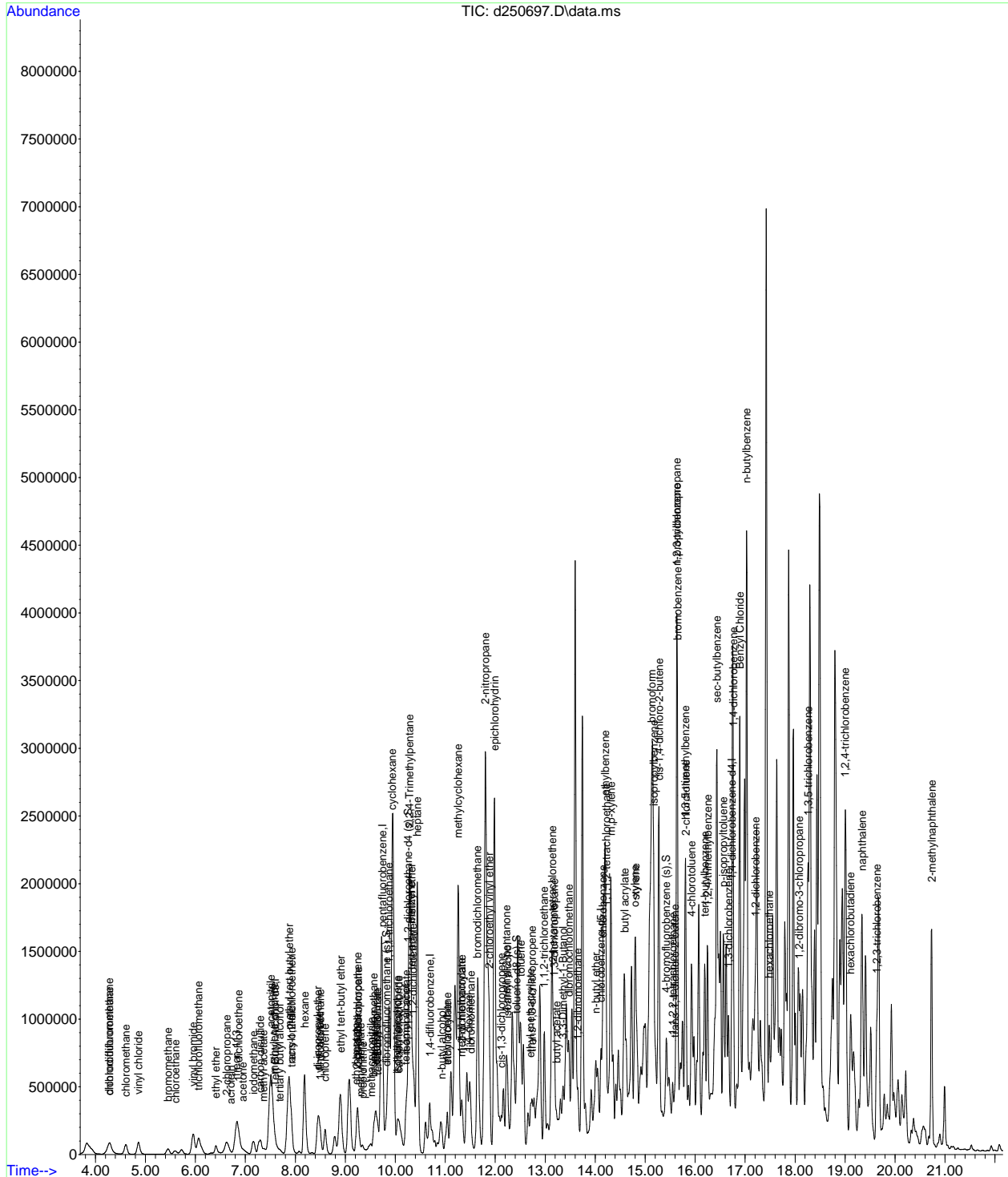
Quant Time: Jun 23 13:00:55 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) 1,3,5-trichlorobenzene	18.258	180	387966	57.89	ug/L	97
122) 1,2,4-trichlorobenzene	19.001	180	325195	59.44	ug/L	98
123) hexachlorobutadiene	19.105	225	212073	67.34	ug/L	98
124) naphthalene	19.340	128	1428584	129.02	ug/L	99
125) 1,2,3-trichlorobenzene	19.633	180	279196	56.65	ug/L	94
126) 2-methylnaphthalene	20.731	142	976772	242.22	ug/L	99

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

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250697.D
Acq On : 22 Jun 2017 12:45 pm
Operator : XimenaC
Sample : jc45391-8ms
Misc : ms17267,vd10119,6.3,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 13:00:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Wed Jun 14 16:21:29 2017
Response via : Initial Calibration



7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250698.D
 Acq On : 22 Jun 2017 1:13 pm
 Operator : XimenaC
 Sample : jc45391-8msd
 Misc : ms17267,vd10119,6.3,,100,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 13:01:03 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

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

Internal Standards						
1) Tert Butyl Alcohol-d9	7.604	65	95618	500.00	ug/L	0.04
5) pentafluorobenzene	9.742	168	208256	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.688	114	283681	50.00	ug/L	0.00
75) chlorobenzene-d5	14.112	117	325768	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.732	152	250004	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	9.820	113	87854	46.54	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	93.08%	
55) 1,2-dichloroethane-d4 (s)	10.259	65	109343	54.14	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	108.28%	
76) toluene-d8 (s)	12.429	98	380532	49.35	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	98.70%	
100) 4-bromofluorobenzene (s)	15.425	95	193138	51.94	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	103.88%	
Target Compounds						
						Qvalue
3) tertiary butyl alcohol	7.719	59	59621	237.97	ug/L	77
4) 1,4-dioxane	11.467	88	29857	1220.08	ug/L #	66
6) chlorodifluoromethane	4.279	51	158606	56.45	ug/L	97
7) dichlorodifluoromethane	4.279	85	192367	54.08	ug/L	98
8) chloromethane	4.597	50	188009	53.38	ug/L	100
10) vinyl chloride	4.859	62	204519	49.56	ug/L	99
11) bromomethane	5.450	94	59921	22.01	ug/L	98
12) chloroethane	5.586	64	46498	23.77	ug/L	95
13) trichlorofluoromethane	6.056	101	202025	42.14	ug/L	97
14) vinyl bromide	5.962	106	206659	77.07	ug/L	95
15) ethyl ether	6.406	74	47822	53.27	ug/L #	85
16) 2-chloropropane	6.621	43	169056	47.06	ug/L	98
17) acrolein	6.704	56	17059	47.16	ug/L	73
18) freon 113	6.814	151	132499	56.02	ug/L	98
19) 1,1-dichloroethene	6.861	96	122215	56.28	ug/L	97
20) acetone	6.929	58	40510	291.36	ug/L	98
21) acetonitrile	7.509	41	549312	1721.99	ug/L #	43
22) iodomethane	7.154	142	251049	56.56	ug/L	99
23) carbon disulfide	7.306	76	409543	55.38	ug/L	98
24) methylene chloride	7.572	84	121102	51.71	ug/L	94
25) methyl acetate	7.353	43	44594	39.65	ug/L	99
26) methyl tert butyl ether	7.870	73	340859	49.35	ug/L #	1
27) trans-1,2-dichloroethene	7.922	96	92634	45.79	ug/L	95
28) hexane	8.184	56	267243	251.52	ug/L	99
29) di-isopropyl ether	8.445	45	327767	51.20	ug/L	95
30) 2-butanone	9.219	72	41011	232.33	ug/L	94
31) 1,1-dichloroethane	8.498	63	148826	49.01	ug/L	99
32) chloroprene	8.597	53	132782	52.86	ug/L	98
33) acrylonitrile	7.922	53	24780	44.17	ug/L	92
34) vinyl acetate	8.477	86	16108	47.97	ug/L	94
35) ethyl tert-butyl ether	8.916	59	359765	51.23	ug/L #	72
36) ethyl acetate	9.214	45	10278	50.47	ug/L #	78
37) 2,2-dichloropropane	9.256	77	179470	44.82	ug/L	90
38) cis-1,2-dichloroethene	9.245	96	100235	43.47	ug/L	98
39) propionitrile	9.345	54	108004	472.09	ug/L	94
40) methyl acrylate	9.308	85	11552	50.58	ug/L #	92
41) methacrylonitrile	9.517	67	37600	61.25	ug/L	93
42) bromochloromethane	9.569	128	52245	47.74	ug/L	91
43) tetrahydrofuran	9.611	42	27784	43.48	ug/L #	1
44) chloroform	9.611	83	153714	42.43	ug/L	92
45) tert-Butyl Formate	9.648	59	94714	63.68	ug/L	92
47) 1,1,1-trichloroethane	9.873	97	179463	48.26	ug/L	98
48) cyclohexane	9.940	84	447183	116.84	ug/L #	33
49) isobutyl alcohol	10.040	74	12163	463.57	ug/L #	11
50) 1,1-dichloropropene	10.040	75	114450	48.60	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250698.D
 Acq On : 22 Jun 2017 1:13 pm
 Operator : XimenaC
 Sample : jc45391-8msd
 Misc : ms17267,vd10119,6.3,,100,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 13:01:03 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) carbon tetrachloride	10.076	117	183217	53.87	ug/L	98
52) tert-amyl alcohol	10.218	73	27699	216.64	ug/L #	62
53) isopropyl acetate	10.223	87	21807	51.31	ug/L #	1
56) n-butyl alcohol	10.923	56	95708	1842.90	ug/L	77
57) 2,2,4-Trimethylpentane	10.286	57	2442508	281.59	ug/L	87
58) benzene	10.317	78	369491	50.45	ug/L	96
59) tert-amyl methyl ether	10.327	73	389256	53.18	ug/L #	63
60) heptane	10.442	57	530176	421.96	ug/L #	76
61) 1,2-dichloroethane	10.348	62	120978	50.27	ug/L	87
62) ethyl acrylate	11.044	55	88649	47.27	ug/L	98
63) trichloroethene	11.044	95	101488	55.07	ug/L	98
64) 2-chloroethyl vinyl ether	11.880	63	255087	277.45	ug/L	98
65) methyl methacrylate	11.321	100	25941	56.96	ug/L #	75
66) methylcyclohexane	11.258	83	1252462	312.47	ug/L	99
67) 1,2-dichloropropane	11.331	63	89157	49.16	ug/L	93
68) dibromomethane	11.514	93	59450	49.37	ug/L	92
69) bromodichloromethane	11.645	83	193278	76.16	ug/L	83
70) 2-nitropropane	11.802	41	1175775	1627.72	ug/L	96
71) epichlorohydrin	11.985	57	1247548	7058.41	ug/L	54
72) cis-1,3-dichloropropene	12.121	75	157566	53.34	ug/L	84
73) 4-methyl-2-pentanone	12.225	58	154225	218.27	ug/L	92
74) isoamyl alcohol	12.241	70	218139	3890.81	ug/L #	45
77) toluene	12.507	92	260252	49.30	ug/L	97
78) ethyl methacrylate	12.706	69	164788	65.08	ug/L	98
79) trans-1,3-dichloropropene	12.737	75	147254	49.87	ug/L	92
80) 1,1,2-trichloroethane	12.978	83	84005	55.90	ug/L #	74
81) tetrachloroethene	13.145	164	105720	51.67	ug/L	98
82) 2-hexanone	13.156	58	205545	287.20	ug/L #	82
83) 1,3-dichloropropane	13.182	76	145093	47.74	ug/L #	73
84) butyl acetate	13.224	56	55180	44.38	ug/L #	81
85) 3,3-Dimethyl-1-Butanol	13.360	69	109840	564.29	ug/L #	79
86) dibromochloromethane	13.480	129	123048	51.69	ug/L	99
87) 1,2-dibromoethane	13.647	107	105321	50.98	ug/L	99
88) n-butyl ether	14.013	57	561761	65.62	ug/L	96
89) chlorobenzene	14.149	112	335694	50.47	ug/L	96
90) 1,1,1,2-tetrachloroethane	14.217	131	148844	54.64	ug/L	99
91) ethylbenzene	14.196	91	1258647	111.75	ug/L	98
92) m,p-xylene	14.316	106	514191	116.34	ug/L	98
93) o-xylene	14.792	91	525322	54.74	ug/L	98
94) styrene	14.808	104	412842	56.23	ug/L	99
95) butyl acrylate	14.588	55	373154	89.62	ug/L	86
96) isopropylbenzene	15.168	105	1210647	97.33	ug/L	99
97) bromoform	15.132	173	103484	55.24	ug/L	97
98) cis-1,4-dichloro-2-butene	15.284	88	53915	53.71	ug/L #	77
101) 1,1,2,2-tetrachloroethane	15.550	83	132685	42.44	ug/L	95
102) trans-1,4-dichloro-2-b...	15.592	53	51411	62.08	ug/L	95
103) 1,2,3-trichloropropane	15.634	110	53507	57.66	ug/L	95
104) bromobenzene	15.644	156	191087	49.87	ug/L	87
105) n-propylbenzene	15.634	91	2717384	168.85	ug/L	96
106) 2-chlorotoluene	15.812	126	168426	49.21	ug/L	95
107) 4-chlorotoluene	15.927	91	486680	48.54	ug/L	99
108) 1,3,5-trimethylbenzene	15.801	105	680980	56.02	ug/L	99
109) tert-butylbenzene	16.193	119	572216	56.64	ug/L	99
110) 1,2,4-trimethylbenzene	16.251	105	685615	54.72	ug/L	99
111) sec-butylbenzene	16.434	105	1335034	83.53	ug/L	99
112) p-isopropyltoluene	16.564	119	856899	61.98	ug/L	99
113) 1,3-dichlorobenzene	16.669	146	395214	52.34	ug/L	99
114) 1,4-dichlorobenzene	16.763	146	400021	47.64	ug/L	98
115) 1,2-dichlorobenzene	17.207	146	387167	49.54	ug/L	97
116) Benzyl Chloride	16.894	91	640905	92.98	ug/L	82
117) n-butylbenzene	17.030	92	1057077	153.47	ug/L	96
119) hexachloroethane	17.485	201	140332	56.77	ug/L	98
120) 1,2-dibromo-3-chloropr...	18.080	75	34378	51.55	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250698.D
 Acq On : 22 Jun 2017 1:13 pm
 Operator : XimenaC
 Sample : jc45391-8msd
 Misc : ms17267,vd10119,6.3,,100,5,1
 ALS Vial : 13 Sample Multiplier: 1

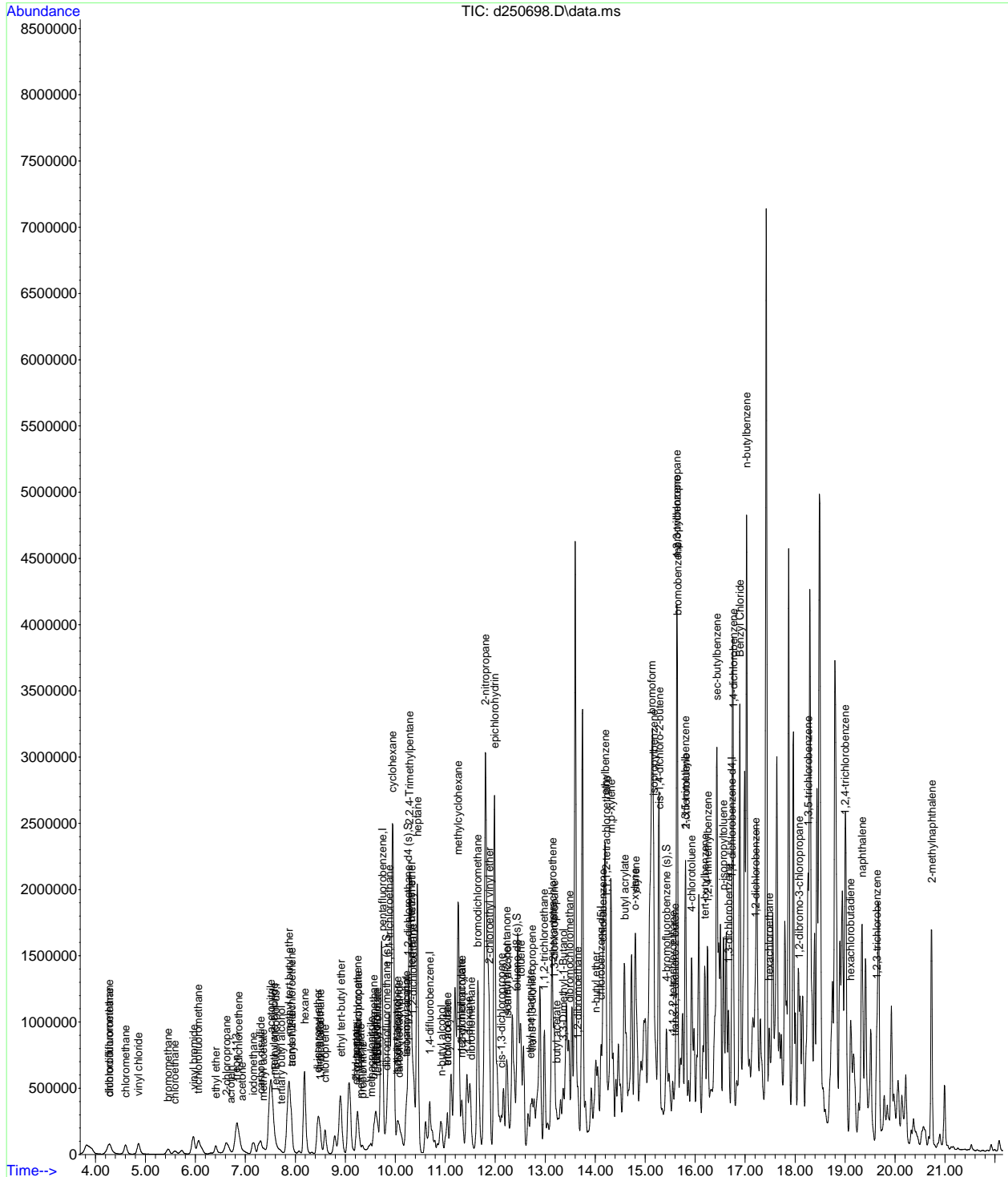
Quant Time: Jun 23 13:01:03 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) 1,3,5-trichlorobenzene	18.258	180	373780	50.44	ug/L	98
122) 1,2,4-trichlorobenzene	18.995	180	315058	52.08	ug/L	98
123) hexachlorobutadiene	19.105	225	204371	58.69	ug/L	100
124) naphthalene	19.340	128	1432120	116.97	ug/L	99
125) 1,2,3-trichlorobenzene	19.633	180	267878	49.16	ug/L	97
126) 2-methylnaphthalene	20.731	142	1013230	227.23	ug/L	99

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

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250698.D
Acq On : 22 Jun 2017 1:13 pm
Operator : XimenaC
Sample : jc45391-8msd
Misc : ms17267,vd10119,6.3,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 13:01:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Wed Jun 14 16:21:29 2017
Response via : Initial Calibration



7.4.2
7

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218895.D
 Acq On : 22 Jun 2017 1:41 pm
 Operator : SushilaY
 Sample : jc45363-lms
 Misc : MS17255,VC8081,6.1,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 11:18:21 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.066	65	85609	500.00	ug/L	# 0.00
5) pentafluorobenzene	10.744	168	358537	50.00	ug/L	-0.01
53) 1,4-difluorobenzene	11.701	114	559330	50.00	ug/L	-0.01
75) chlorobenzene-d5	14.745	117	487349	50.00	ug/L	-0.01
99) 1,4-dichlorobenzene-d4	16.769	152	244590	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.744	168	358537	50.00	ug/L	-0.01
130) 1,4-dichlorobenzene-d4(a)	16.769	152	244590	50.00	ug/L	0.00

System Monitoring Compounds						
45) dibromofluoromethane (s)	10.791	113	146745	42.24	ug/L	-0.02
Spiked Amount	50.000	Range	76 - 120	Recovery	=	84.48%
54) 1,2-dichloroethane-d4 (s)	11.241	65	146593	48.40	ug/L	-0.01
Spiked Amount	50.000	Range	73 - 122	Recovery	=	96.80%
76) toluene-d8 (s)	13.323	98	702296	53.88	ug/L	-0.01
Spiked Amount	50.000	Range	84 - 119	Recovery	=	107.76%
100) 4-bromofluorobenzene (s)	15.781	174	177659	51.08	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	102.16%

Target Compounds						Qvalue
3) tertiary butyl alcohol	8.223	59	50680	238.32	ug/L	94
4) 1,4-dioxane	12.439	88	20421	1456.91	ug/L	86
6) chlorodifluoromethane	4.029	51	129502	136.76	ug/L	89
7) dichlorodifluoromethane	3.997	85	245350	48.69	ug/L	98
8) chloromethane	4.384	50	244468	49.73	ug/L	97
9) vinyl chloride	4.661	62	262960	47.56	ug/L	99
11) bromomethane	5.415	94	147774	59.02	ug/L	99
12) chloroethane	5.603	64	141643	51.55	ug/L	98
13) vinyl bromide	6.006	106	139293	49.04	ug/L	# 92
14) trichlorofluoromethane	6.110	101	283947	58.80	ug/L	97
15) ethyl ether	6.654	74	54133	33.62	ug/L	94
16) 2-chloropropane	6.874	43	264733	48.83	ug/L	# 93
17) acrolein	6.994	56	10241	26.55	ug/L	92
18) freon 113	7.104	151	98875	41.49	ug/L	97
19) 1,1-dichloroethene	7.141	61	224251	44.13	ug/L	95
20) acetone	7.266	43	82700	147.91	ug/L	97
21) acetonitrile	7.836	41	89674	410.47	ug/L	93
22) iodomethane	7.486	142	201068	39.83	ug/L	95
23) carbon disulfide	7.616	76	428683	42.09	ug/L	95
24) methylene chloride	8.072	84	131165	37.39	ug/L	92
25) methyl acetate	7.836	43	45284	36.47	ug/L	91
26) methyl tert butyl ether	8.474	73	319153	38.94	ug/L	94
27) trans-1,2-dichloroethene	8.527	61	225223	46.64	ug/L	90
28) hexane	8.898	57	207095	38.92	ug/L	93
29) di-isopropyl ether	9.238	45	504333	47.88	ug/L	95
30) ethyl tert-butyl ether	9.792	59	458775	43.51	ug/L	96
31) 1,1-dichloroethane	9.264	63	277068	45.81	ug/L	96
32) chloroprene	9.384	53	275778	53.27	ug/L	94
33) acrylonitrile	8.553	53	22215	37.49	ug/L	98
34) vinyl acetate	9.280	86	14486	35.52	ug/L	# 21
35) 2-butanone	10.137	72	29835	133.95	ug/L	# 57
36) ethyl acetate	10.164	45	10778	40.38	ug/L	90
37) 2,2-dichloropropane	10.132	77	232309	47.41	ug/L	96
38) cis-1,2-dichloroethene	10.148	96	155846	38.62	ug/L	91
39) methyl acrylate	10.247	85	8732	32.66	ug/L	81
40) propionitrile	10.273	54	94326	362.10	ug/L	93
41) bromochloromethane	10.504	128	55962	37.81	ug/L	95
42) tetrahydrofuran	10.540	42	28717	38.56	ug/L	91
43) chloroform	10.572	83	264894	41.35	ug/L	99
44) t-butyl formate	10.598	59	76895	45.72	ug/L	96
46) methacrylonitrile	10.462	67	28818	36.56	ug/L	95
47) cyclohexane	10.864	84	277497	45.17	ug/L	97
48) 1,1,1-trichloroethane	10.817	97	279109	52.69	ug/L	97

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218895.D
 Acq On : 22 Jun 2017 1:41 pm
 Operator : SushilaY
 Sample : jc45363-lms
 Misc : MS17255,VC8081,6.1,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 11:18:21 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) 1,1-dichloropropene	11.011	75	224404	48.43	ug/L	95
50) carbon tetrachloride	11.027	117	242043	54.17	ug/L	99
51) tert-amyl alcohol	11.215	73	23839	170.04	ug/L	94
52) isobutyl alcohol	11.105	43	35415	363.75	ug/L	96
55) isopropyl acetate	11.251	87	16698	38.99	ug/L #	55
56) 2,2,4-trimethylpentane	11.267	57	542550	36.62	ug/L	89
57) tert-amyl methyl ether	11.330	73	405588	42.78	ug/L	96
58) benzene	11.293	78	616355	47.95	ug/L	98
59) heptane	11.461	57	88389	35.23	ug/L	91
60) 1,2-dichloroethane	11.340	62	161333	47.77	ug/L	99
61) n-butyl alcohol	11.884	56	115150	1993.85	ug/L	84
62) ethyl acrylate	12.073	55	94894	45.10	ug/L	98
63) trichloroethene	12.036	95	156385	48.80	ug/L	98
64) 2-chloroethyl vinyl ether	12.857	63	40212	237.05	ug/L	96
65) 2-nitropropane	12.852	41	23549	44.56	ug/L #	79
66) methylcyclohexane	12.229	83	315547	49.17	ug/L	95
67) methyl methacrylate	12.334	100	21976	43.99	ug/L #	83
68) 1,2-dichloropropane	12.313	63	148277	49.53	ug/L	93
69) dibromomethane	12.481	93	59613	42.41	ug/L	99
70) bromodichloromethane	12.611	83	184236	47.66	ug/L	95
71) epichlorohydrin	12.988	57	29810	156.34	ug/L	95
72) cis-1,3-dichloropropene	13.056	75	213954	45.64	ug/L	92
73) 4-methyl-2-pentanone	13.160	58	130326	159.61	ug/L	99
74) 3-methyl-1-butanol	13.202	55	74985	734.17	ug/L	96
77) toluene	13.391	92	404412	51.94	ug/L	98
78) ethyl methacrylate	13.589	69	128354	45.10	ug/L	93
79) trans-1,3-dichloropropene	13.610	75	173579	45.84	ug/L	98
80) 1,1,2-trichloroethane	13.814	83	74495	43.82	ug/L	96
81) 2-hexanone	13.971	58	122447	168.93	ug/L	83
82) tetrachloroethene	13.940	166	159441	51.23	ug/L	99
83) 1,3-dichloropropane	13.982	76	160412	44.73	ug/L	99
84) butyl acetate	14.034	56	59140	42.74	ug/L	88
85) 3,3-dimethyl-1-butanol	14.144	57	85136	381.35	ug/L	92
86) dibromochloromethane	14.227	129	110835	44.85	ug/L	98
87) 1,2-dibromoethane	14.363	107	82286	41.58	ug/L	95
88) n-butyl ether	14.672	57	769534	57.07	ug/L	98
89) chlorobenzene	14.777	112	421199	50.86	ug/L	97
90) 1,1,1,2-tetrachloroethane	14.834	131	146726	47.87	ug/L	97
91) ethylbenzene	14.818	91	826212	56.09	ug/L	99
92) m,p-xylene	14.913	106	635940	108.54	ug/L	98
93) o-xylene	15.289	91	657703	51.40	ug/L	100
94) styrene	15.300	104	485296	50.45	ug/L	96
95) butyl acrylate	15.132	55	201542	42.92	ug/L	98
96) bromoform	15.561	173	61838	41.39	ug/L	99
97) isopropylbenzene	15.582	105	863906	53.23	ug/L	99
98) cis-1,4-dichloro-2-butene	15.671	75	35724	33.77	ug/L	90
101) bromobenzene	15.948	156	155294	49.24	ug/L	97
102) 1,1,2,2-tetrachloroethane	15.875	83	108472	41.32	ug/L	98
103) trans-1,4-dichloro-2-b...	15.906	53	38083	47.97	ug/L	86
104) 1,2,3-trichloropropane	15.938	110	29653	43.01	ug/L #	89
105) n-propylbenzene	15.938	91	1026897	57.24	ug/L	100
106) 2-chlorotoluene	16.074	126	185263	54.30	ug/L	94
107) 4-chlorotoluene	16.157	91	569237	52.04	ug/L	98
108) 1,3,5-trimethylbenzene	16.058	105	716616	54.82	ug/L	99
109) tert-butylbenzene	16.361	119	639602	55.25	ug/L	99
110) 1,2,4-trimethylbenzene	16.398	105	720790	53.64	ug/L	98
111) sec-butylbenzene	16.539	105	968952	57.01	ug/L	99
112) 1,3-dichlorobenzene	16.722	146	336322	49.43	ug/L	98
113) p-isopropyltoluene	16.633	119	795751	55.14	ug/L	99
114) 1,4-dichlorobenzene	16.790	146	327007	48.86	ug/L	99
115) benzyl chloride	16.890	91	153352	25.80	ug/L	97
116) 1,2-dichlorobenzene	17.120	146	297253	47.92	ug/L	96
117) n-butylbenzene	16.978	92	402239	53.46	ug/L	97

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218895.D
 Acq On : 22 Jun 2017 1:41 pm
 Operator : SushilaY
 Sample : jc45363-lms
 Misc : MS17255,VC8081,6.1,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

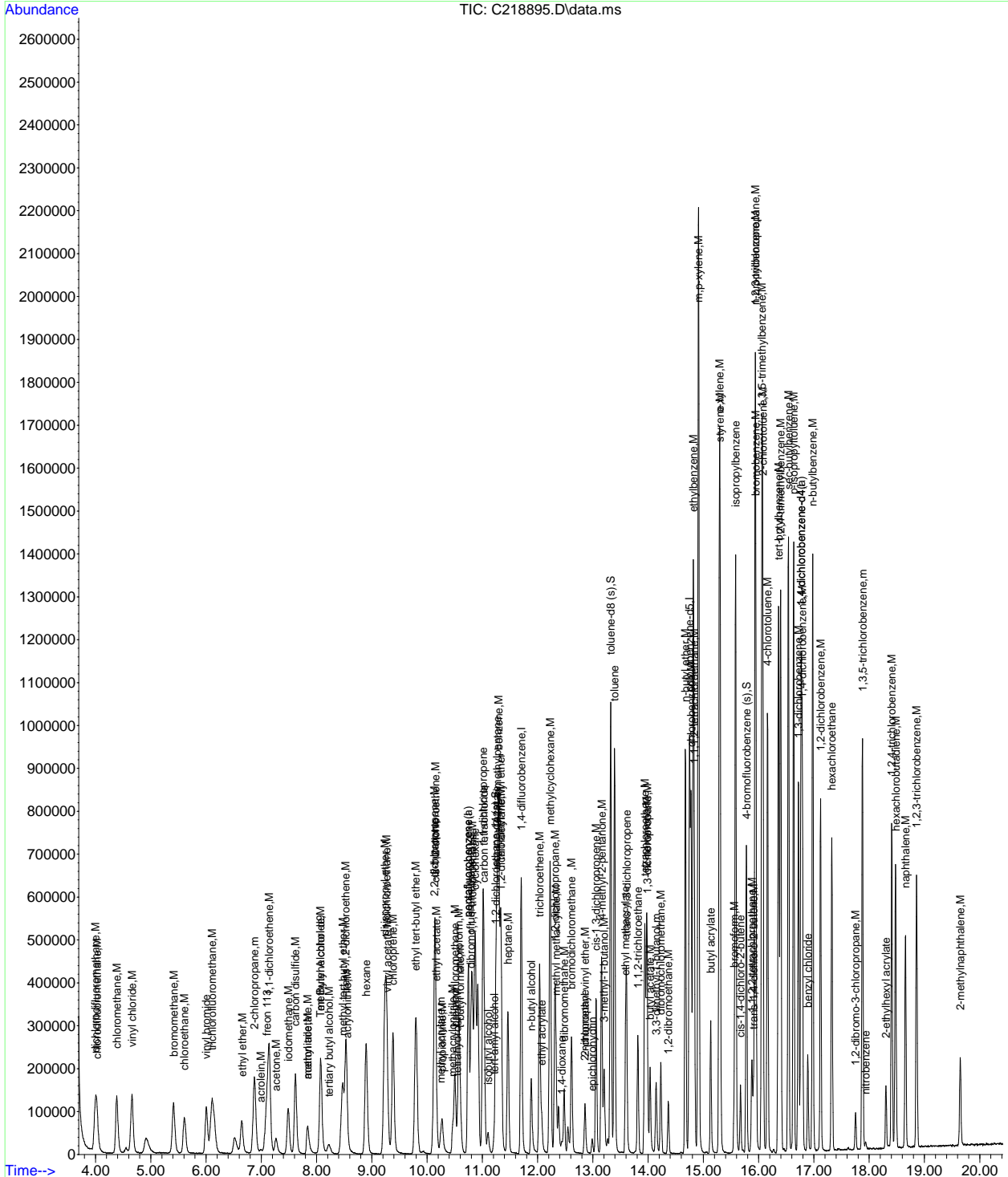
Quant Time: Jun 23 11:18:21 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) hexachloroethane	17.324	201	117436	59.32	ug/L	98
119) 1,2-dibromo-3-chloropr...	17.752	157	20851	39.34	ug/L #	76
120) 1,3,5-trichlorobenzene	17.878	180	283446	53.84	ug/L	94
121) nitrobenzene	17.936	77	8560	40.33	ug/L #	79
122) 2-ethylhexyl acrylate	18.302	70	36549	9.36	ug/L	91
123) 1,2,4-trichlorobenzene	18.406	180	216291	52.03	ug/L	97
124) hexachlorobutadiene	18.479	225	139158	58.74	ug/L	98
125) naphthalene	18.657	128	387049	46.58	ug/L	99
126) 1,2,3-trichlorobenzene	18.856	180	189405	51.86	ug/L	97
127) 2-methylnaphthalene	19.646	142	110336	23.68	ug/L	97

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

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218895.D
Acq On : 22 Jun 2017 1:41 pm
Operator : SushilaY
Sample : jc45363-1ms
Misc : MS17255,VC8081,6.1,,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 11:18:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218897.D
 Acq On : 22 Jun 2017 2:38 pm
 Operator : SushilaY
 Sample : jc45363-2dup
 Misc : MS17255,VC8081,5.2,,,,,1
 ALS Vial : 12 Sample Multiplier: 1

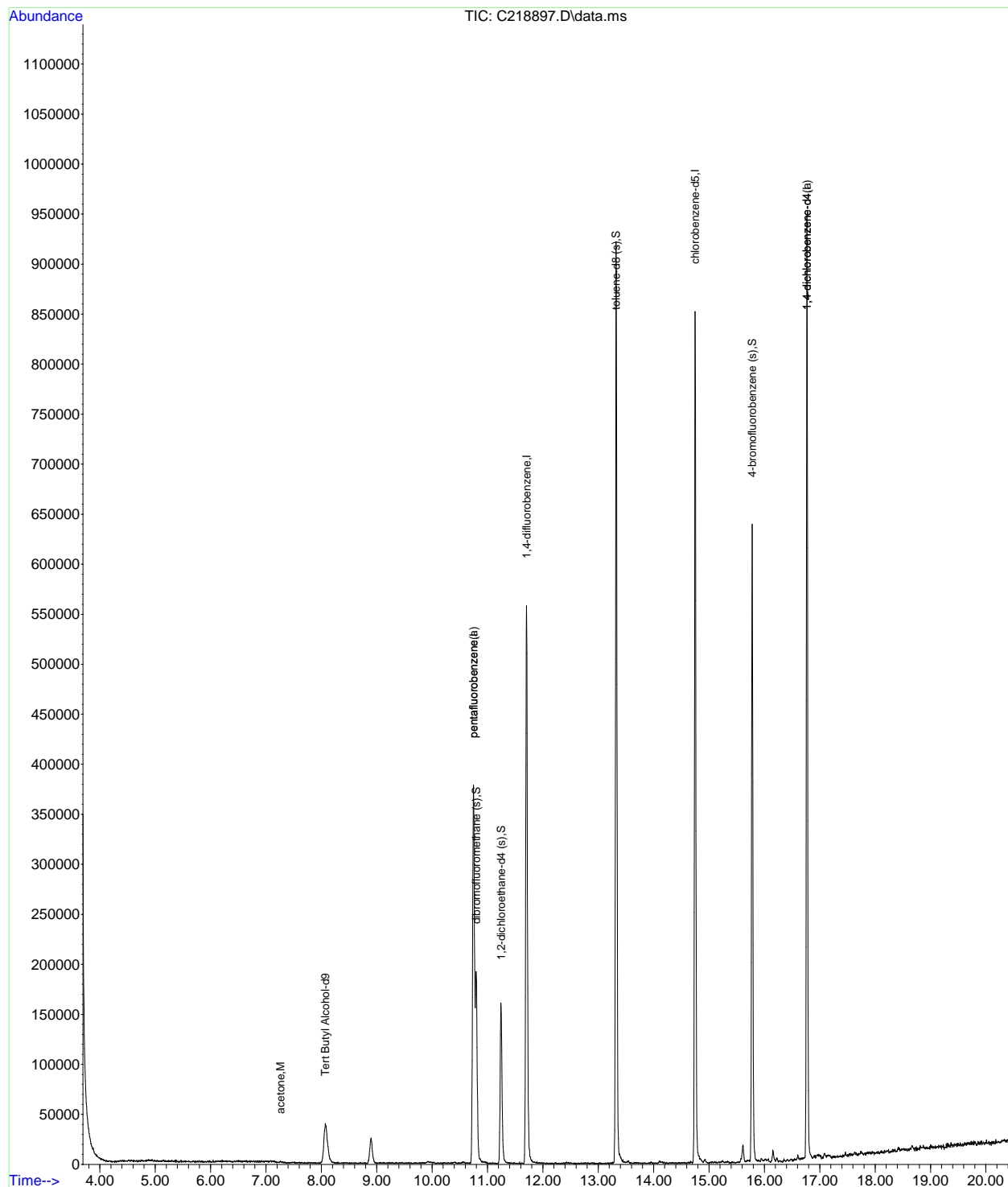
Quant Time: Jun 23 11:18:50 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

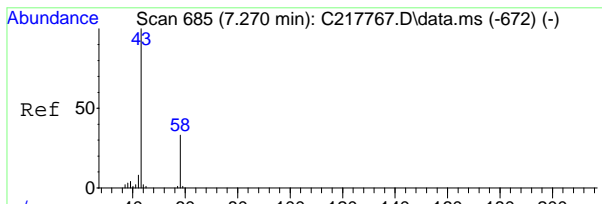
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.070	65	94659	500.00	ug/L	0.00
5) pentafluorobenzene	10.748	168	311364	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.705	114	490686	50.00	ug/L	0.00
75) chlorobenzene-d5	14.749	117	442396	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.768	152	222302	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.748	168	311364	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.768	152	222302	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.795	113	130561	43.28	ug/L	-0.01
Spiked Amount	50.000	Range	76 - 120	Recovery	=	86.56%
54) 1,2-dichloroethane-d4 (s)	11.245	65	136725	51.46	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	102.92%
76) toluene-d8 (s)	13.322	98	621757	52.55	ug/L	-0.01
Spiked Amount	50.000	Range	84 - 119	Recovery	=	105.10%
100) 4-bromofluorobenzene (s)	15.780	174	163335	51.67	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	103.34%
Target Compounds						
20) acetone	7.260	43	3010	6.20	ug/L	Qvalue 97

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

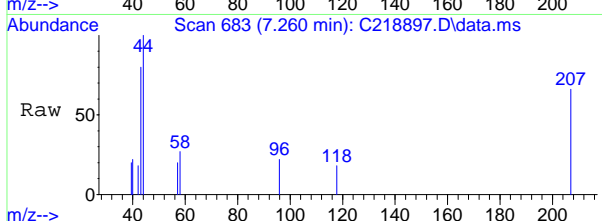
Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218897.D
Acq On : 22 Jun 2017 2:38 pm
Operator : SushilaY
Sample : jc45363-2dup
Misc : MS17255,VC8081,5.2,,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 11:18:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration

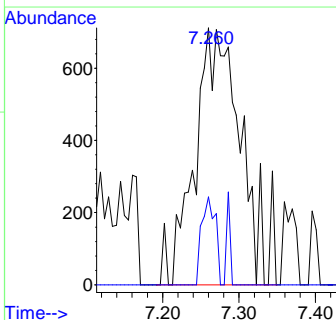
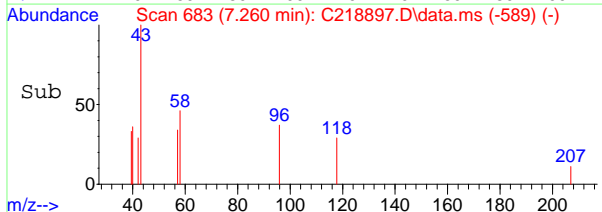




#20
 acetone
 Concen: 6.20 ug/L
 RT: 7.260 min Scan# 683
 Delta R.T. -0.010 min
 Lab File: C218897.D
 Acq: 22 Jun 2017 2:38 pm



Tgt Ion: 43 Resp: 3010
 Ion Ratio Lower Upper
 43 100
 58 34.1 2.6 62.6



7.5.1
 7

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\C217759.D

Vial: 1

Acq On : 28 Apr 2017 4:55 pm

Operator: SushilaY

Sample : BFB

Inst : MSC

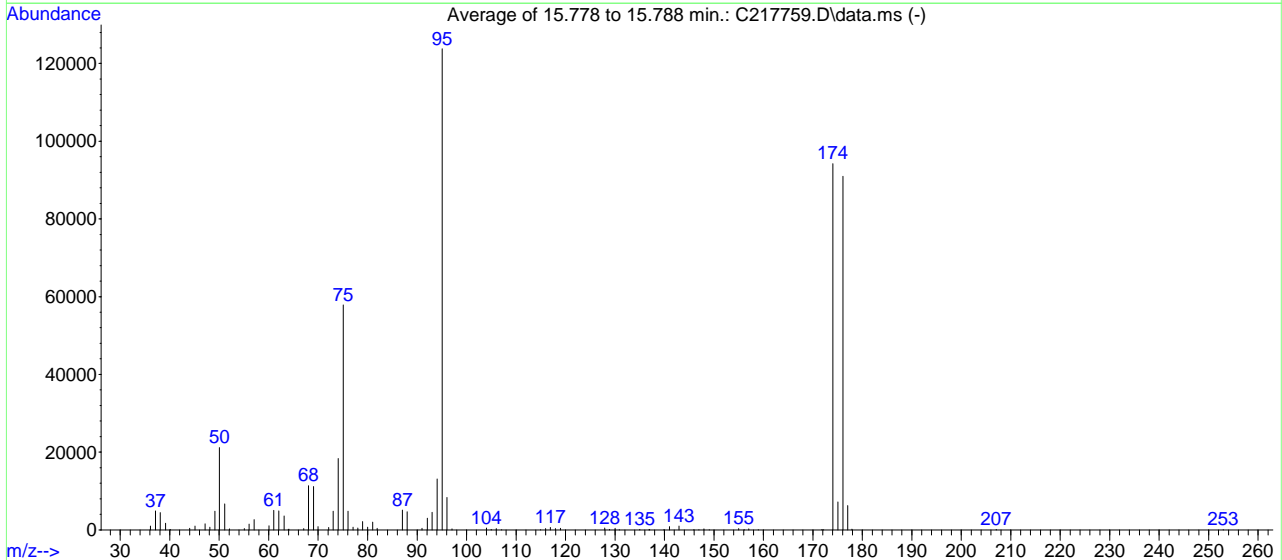
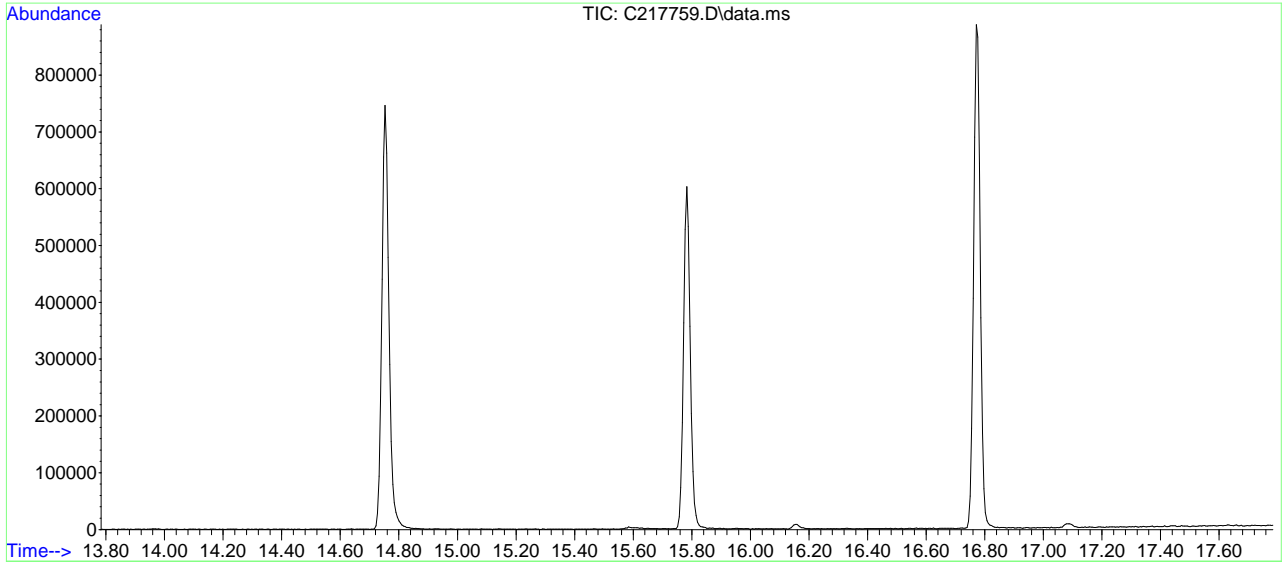
Misc : MS14914,VC8031,5.0,,,,,1

Multiplr: 1.00

MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MCS8031.M (RTE Integrator)

Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um



AutoFind: Scans 2312, 2313, 2314; Background Corrected with Scan 2303

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	21184	PASS
75	95	30	60	46.8	57904	PASS
95	95	100	100	100.0	123762	PASS
96	95	5	9	6.7	8335	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	76.1	94218	PASS
175	174	5	9	7.6	7203	PASS
176	174	95	101	96.6	90968	PASS
177	176	5	9	6.9	6241	PASS

C217759.D MCS8031.M Mon May 01 08:57:52 2017 C

Average of 15.778 to 15.788 min.: C217759.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	961	51.10	6704	67.10	297	79.00	2114
37.10	4852	52.10	267	68.05	11390	80.00	658
38.10	4467	55.05	313	69.05	11158	81.00	2010
39.15	1699	56.05	1471	70.00	827	81.95	414
40.10	139	57.05	2662	72.10	640	87.05	5077
44.05	404	60.05	1055	73.05	4831	88.00	4625
45.10	1002	61.05	5021	74.05	18358	91.00	369
47.15	1543	62.05	4865	75.05	57904	92.05	3000
48.10	665	63.10	3594	76.05	4793	93.05	4498
49.10	4776	63.95	109	77.05	690	94.05	13060
50.05	21184	64.10	210	78.00	457	95.05	123762

Average of 15.778 to 15.788 min.: C217759.D\data.ms

BFB

Modified:subtracted

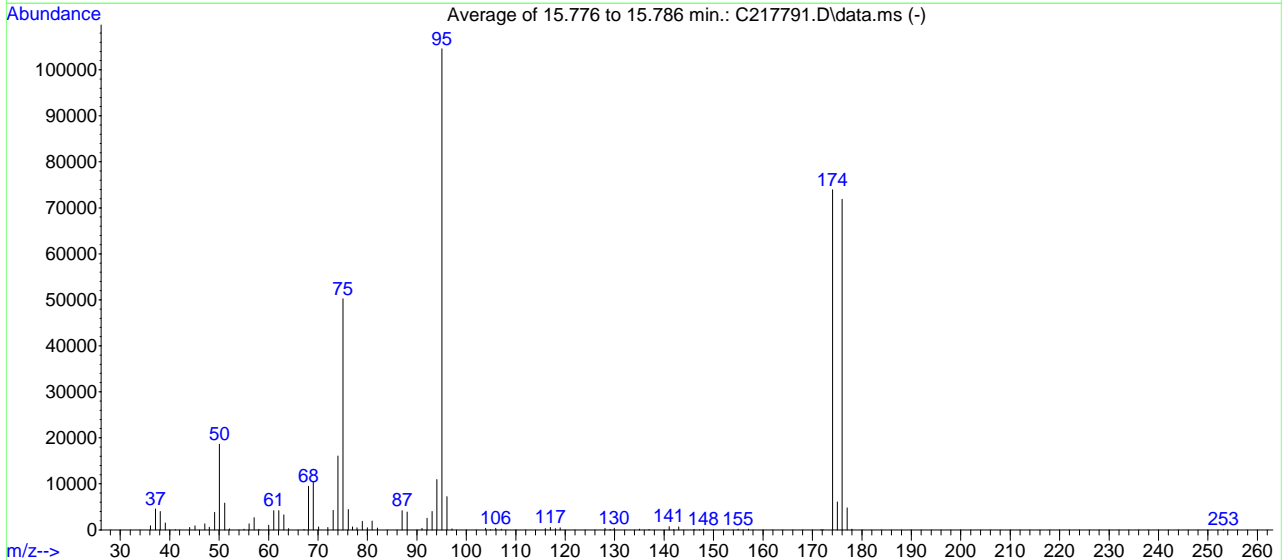
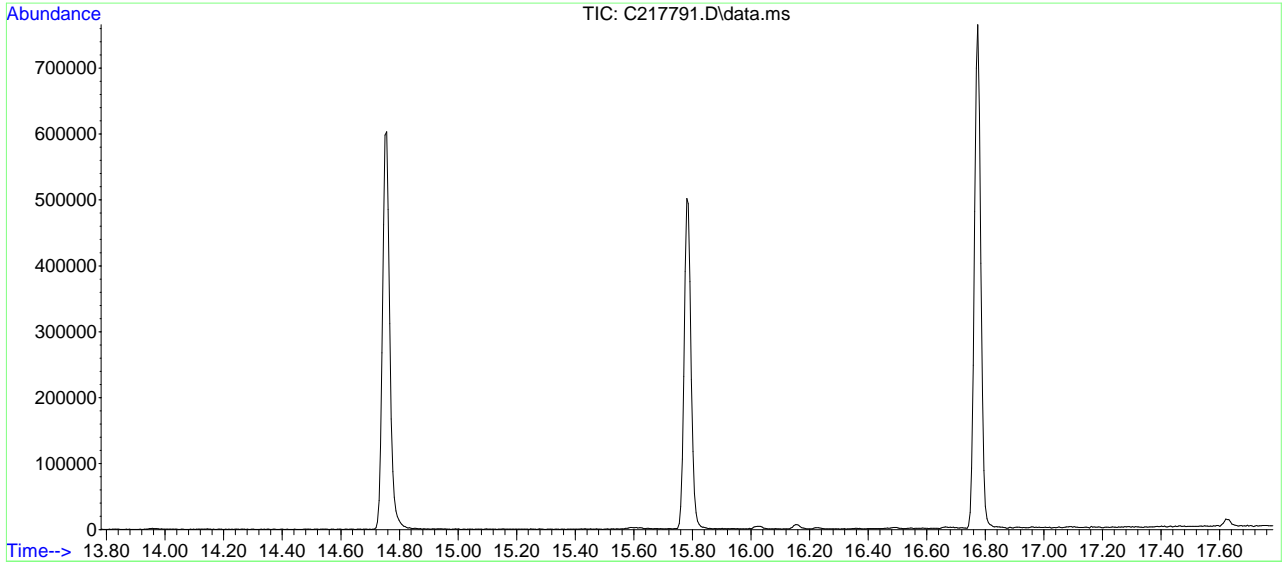
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	8335	127.95	437	146.95	65	176.05	90968
97.05	284	128.90	116	148.00	269	177.05	6241
104.00	458	130.00	430	149.05	57	177.90	204
105.00	126	130.85	73	155.00	308	207.05	132
106.00	345	135.00	134	156.15	67	252.95	58
107.05	62	136.85	72	157.05	255		
114.95	56	137.00	113	158.95	55		
116.00	340	139.85	54	171.85	91		
116.95	580	141.00	840	172.15	66		
117.95	345	142.95	987	174.05	94218		
118.95	417	145.95	69	175.05	7203		

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\C217791.D
 Acq On : 29 Apr 2017 2:09 pm
 Sample : BFB
 Misc : MS14914,VC8033,5.0,,,,,1
 MS Integration Params: lscint.p

Vial: 1
 Operator: SushilaY
 Inst : MSC
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MCS8031.M (RTE Integrator)
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um



AutoFind: Scans 2312, 2313, 2314; Background Corrected with Scan 2304

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	18637	PASS
75	95	30	60	48.0	50226	PASS
95	95	100	100	100.0	104560	PASS
96	95	5	9	6.9	7201	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	70.7	73928	PASS
175	174	5	9	8.2	6074	PASS
176	174	95	101	97.2	71842	PASS
177	176	5	9	6.6	4764	PASS

C217791.D MCS8031.M Mon May 01 10:09:15 2017 C

Average of 15.776 to 15.786 min.: C217791.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	872	51.10	5840	67.15	86	78.95	1864
37.10	4550	52.10	245	68.05	9473	80.00	487
38.10	3988	55.05	175	69.05	10342	80.95	1910
39.10	1521	56.05	1314	70.10	629	82.00	387
41.15	62	57.05	2633	72.00	496	87.00	4165
44.05	551	58.05	72	73.05	4264	88.05	3892
45.10	888	60.05	992	74.05	16032	91.05	338
47.10	1319	61.05	4178	75.05	50226	92.05	2548
48.00	560	62.05	4176	76.10	4410	93.05	4008
49.10	3780	63.10	3259	77.00	644	94.05	10938
50.05	18637	64.05	297	77.90	468	95.05	104560

Average of 15.776 to 15.786 min.: C217791.D\data.ms

BFB

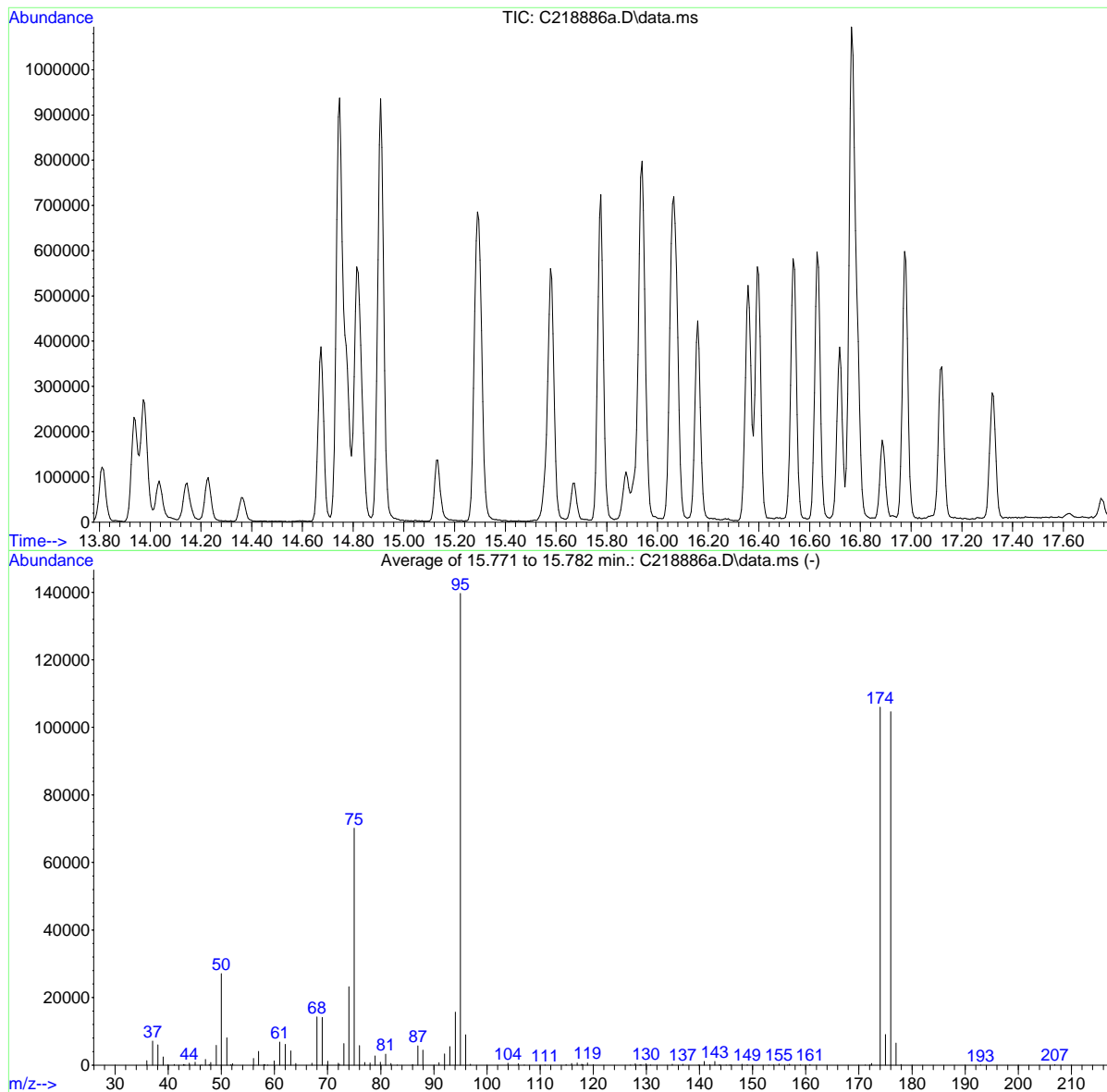
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	7201	129.05	116	157.05	134		
97.10	239	129.90	337	171.75	50		
103.90	313	135.00	131	172.15	61		
104.85	50	136.95	66	174.05	73928		
105.95	332	141.00	705	175.05	6074		
107.05	131	141.95	62	176.00	71842		
116.00	256	142.95	648	177.00	4764		
117.00	538	146.05	65	178.00	182		
118.00	259	147.15	54	253.15	62		
118.95	452	147.95	144				
128.05	313	154.95	136				

SW-846 Method 8260

Data File : C:\msdchem\1\data\C\vc8081\C218886a.D Vial: 1
 Acq On : 22 Jun 2017 8:07 am Operator: SushilaY
 Sample : bfb Inst : MSC
 Misc : MS17218,VC8081,5,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MCS8031.M (RTE Integrator)
 Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um



AutoFind: Scans 2310, 2311, 2312; Background Corrected with Scan 2301

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	27117	PASS
75	95	30	60	50.2	70120	PASS
95	95	100	100	100.0	139656	PASS
96	95	5	9	6.4	8982	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	75.9	105963	PASS
175	174	5	9	8.6	9092	PASS
176	174	95	101	98.8	104680	PASS
177	176	5	9	6.3	6551	PASS

C218886a.D MCS8031.M Fri Jun 23 11:35:40 2017

Average of 15.771 to 15.782 min.: C218886a.D\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	1321	47.00	1667	58.20	86	72.00	561
37.05	7149	47.70	160	58.70	54	72.20	251
38.05	5998	48.00	815	59.95	1266	73.05	6393
39.05	2457	49.05	5863	61.00	6820	74.00	23176
39.95	57	50.00	27117	62.00	6182	75.00	70120
41.15	199	51.05	8070	63.05	4234	76.00	5767
42.90	175	51.80	95	64.00	469	77.00	783
43.10	91	52.10	391	67.05	578	78.00	613
43.95	559	56.05	1994	68.00	14283	78.95	2695
45.05	900	57.00	4059	69.00	14099	79.95	866
46.30	67	58.00	184	70.05	1198	80.90	3223

Average of 15.771 to 15.782 min.: C218886a.D\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.90	526	96.90	297	120.00	83	141.95	128
83.10	54	103.95	539	127.00	52	142.90	1066
86.00	189	105.90	413	127.90	398	143.70	55
87.00	5673	107.00	58	128.80	126	143.90	75
87.95	4470	110.90	55	129.00	79	145.00	63
90.95	724	114.90	199	129.95	421	145.70	71
92.00	3321	115.95	469	130.80	78	145.90	54
93.00	5481	116.95	642	134.90	260	148.00	274
94.05	15720	117.80	259	136.85	251	149.00	87
95.00	139656	118.00	204	139.80	74	153.00	65
96.00	8982	118.90	651	140.90	1050	153.90	59

Average of 15.771 to 15.782 min.: C218886a.D\data.ms
bfb

Modified:subtracted

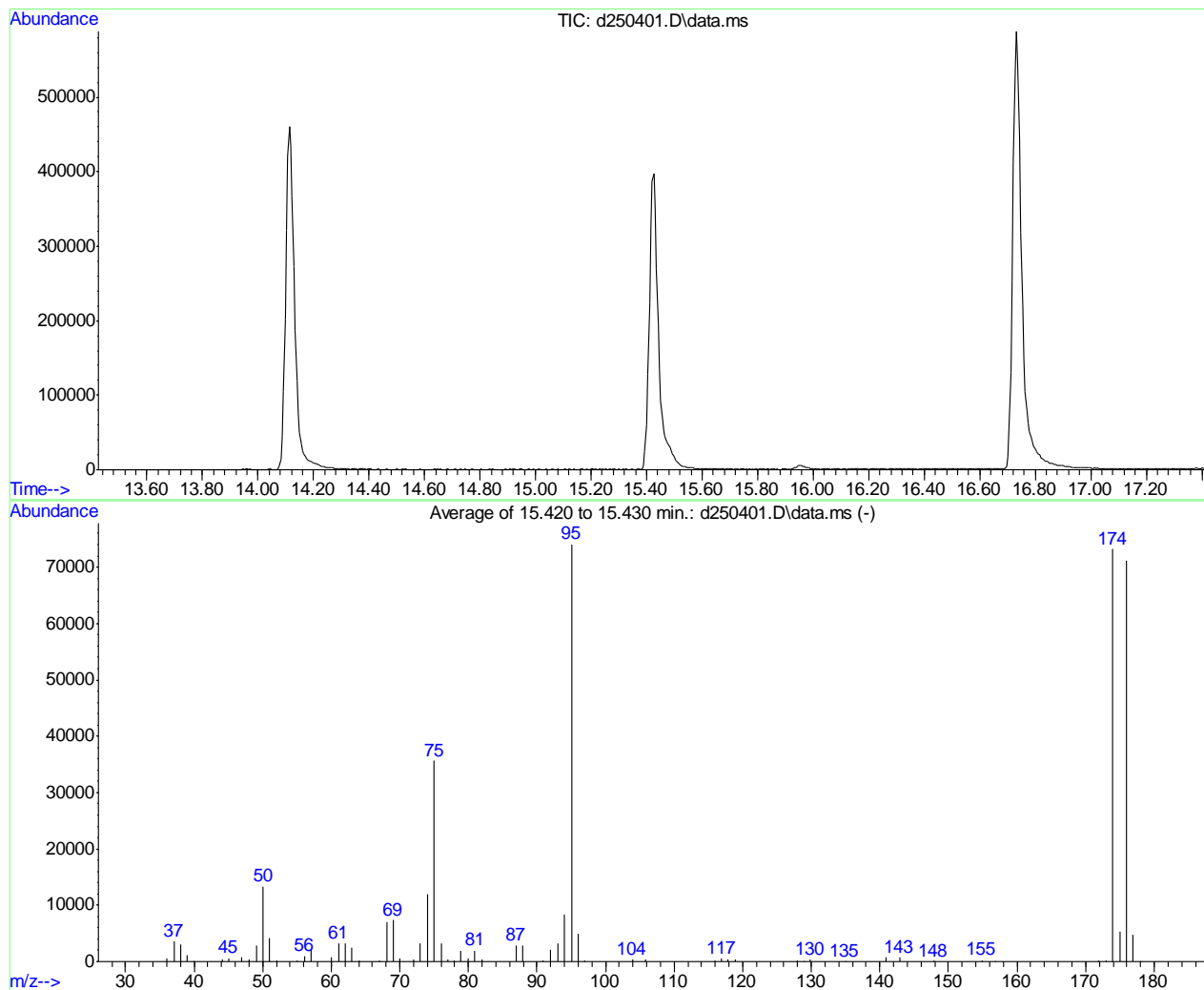
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.95	324	177.00	6551				
156.60	54	177.95	204				
156.95	258	192.90	51				
159.00	75	206.90	130				
160.80	217						
171.20	52						
172.10	132						
172.40	488						
174.00	105963						
175.00	9092						
176.00	104680						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\d250401.D
 Acq On : 13 Jun 2017 9:58 am
 Sample : BFB
 Misc : ms14425,vd10106,5.0,,100,5,1
 MS Integration Params: Iscint.p

Vial: 4
 Operator: XimenaC
 Inst : MSD
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MD10106.M (RTE Integrator)
 Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um



AutoFind: Scans 2244, 2245, 2246; Background Corrected with Scan 2234

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	13333	PASS
75	95	30	60	48.1	35608	PASS
95	95	100	100	100.0	74088	PASS
96	95	5	9	6.8	5026	PASS
173	174	0.00	2	0.3	200	PASS
174	95	50	150	98.8	73232	PASS
175	174	5	9	7.4	5391	PASS
176	174	95	101	97.1	71122	PASS
177	176	5	9	6.6	4698	PASS

d250401.D MD10106.M Tue Jun 13 16:06:03 2017 RPT1

Average of 15.420 to 15.430 min.: d250401.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	574	51.05	4100	68.05	6984	79.95	581
37.05	3562	52.00	189	69.05	7378	80.90	1936
38.05	3102	55.05	127	70.00	564	81.95	445
39.05	1159	56.05	1008	71.95	340	86.95	2848
39.95	8	57.05	2023	73.00	3162	87.95	2815
44.05	397	60.00	678	74.05	11919	90.90	235
45.05	639	61.05	3244	75.05	35608	92.00	2014
47.00	708	62.05	3227	76.05	3166	93.00	3158
48.00	401	63.05	2552	77.00	430	94.05	8355
49.05	2884	64.05	220	77.95	256	95.05	74088
50.05	13333	67.00	197	78.90	1872	96.05	5026

Average of 15.420 to 15.430 min.: d250401.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.00	128	140.90	728	177.95	52		
103.90	357	142.90	740				
105.90	328	147.90	182				
115.90	239	154.85	222				
116.90	519	156.85	62				
117.85	310	171.90	273				
118.90	374	173.05	200				
127.90	254	173.95	73232				
128.95	58	174.95	5391				
129.90	304	175.95	71122				
134.95	56	176.95	4698				

SW-846 Method 8260

Data File : C:\msdchem\1\data\D\vd10119\d250688a.D

Vial: 3

Acq On : 22 Jun 2017 7:48 am

Operator: XimenaC

Sample : BFB

Inst : MSD

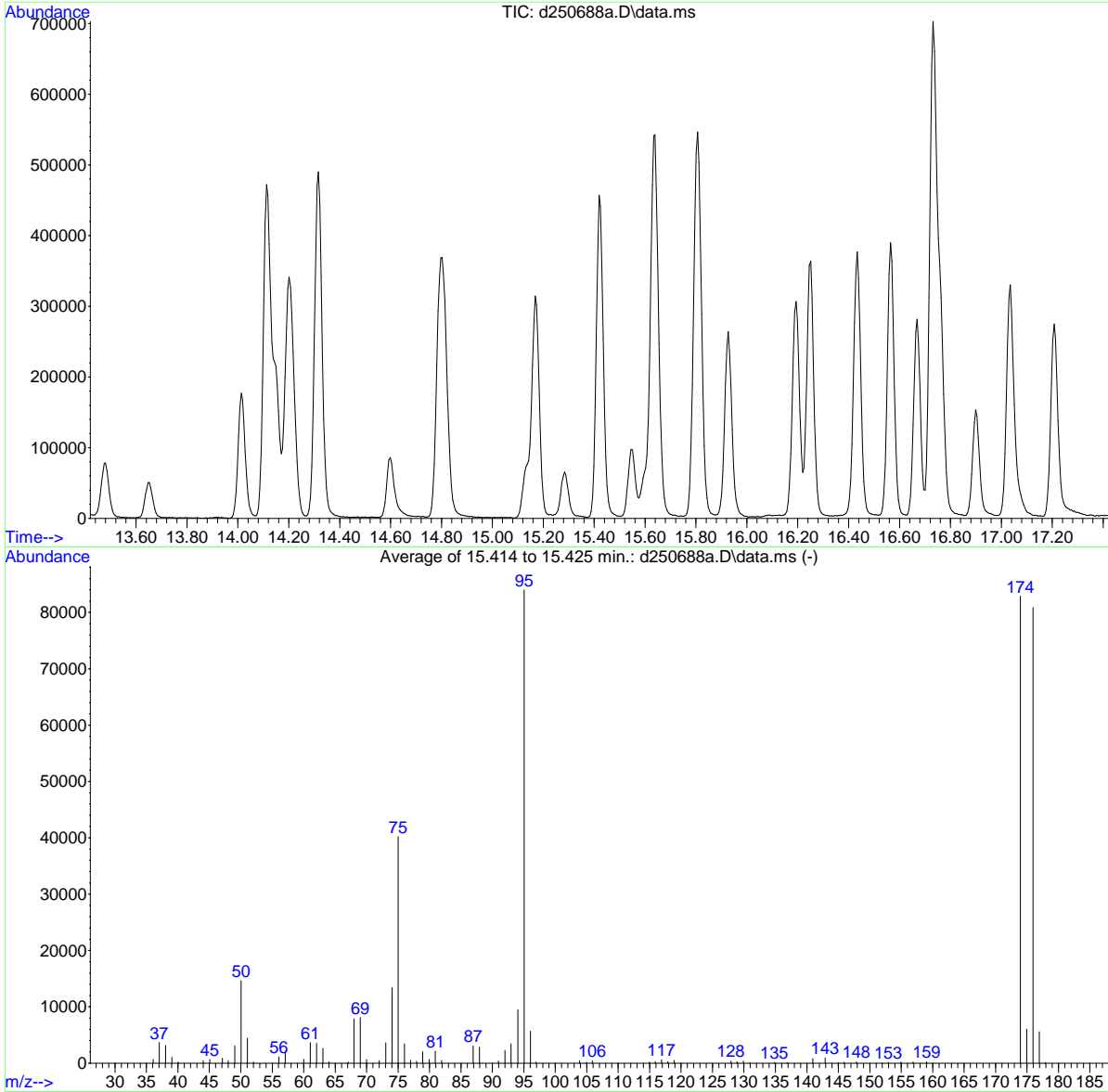
Misc : ms17289,vd10119,5,,100,5,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10106.M (RTE Integrator)

Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um



AutoFind: Scans 2243, 2244, 2245; Background Corrected with Scan 2233

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	14657	PASS
75	95	30	60	47.9	40245	PASS
95	95	100	100	100.0	84003	PASS
96	95	5	9	6.7	5653	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	150	98.7	82885	PASS
175	174	5	9	7.3	6025	PASS
176	174	95	101	97.6	80880	PASS
177	176	5	9	6.9	5567	PASS

d250688a.D MD10106.M Fri Jun 23 11:49:56 2017

Average of 15.414 to 15.425 min.: d250688a.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	650	51.05	4403	69.00	8072	80.90	2150
37.05	3675	52.00	202	70.00	655	81.90	491
38.05	3139	56.05	1122	72.00	420	86.95	3092
39.05	1069	57.05	2110	73.05	3606	87.95	2863
40.05	201	60.00	697	74.05	13393	90.95	366
44.00	419	61.05	3650	75.00	40245	92.00	2286
45.05	668	62.05	3525	76.00	3443	92.95	3441
47.05	887	63.05	2636	77.00	498	94.05	9462
48.00	429	64.00	259	77.95	334	95.05	84003
49.05	3052	67.05	207	78.90	2035	96.05	5653
50.05	14657	68.00	7878	79.95	654	96.95	199

Average of 15.414 to 15.425 min.: d250688a.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.85	408	130.95	70	156.90	213		
104.95	182	134.85	118	159.05	228		
105.90	410	136.85	117	173.95	82885		
114.95	192	140.95	832	174.95	6025		
115.90	298	142.90	910	175.95	80880		
116.90	600	145.05	52	176.95	5567		
117.90	314	145.90	183	177.90	113		
118.90	464	147.90	229				
127.95	389	151.95	62				
128.90	295	152.95	165				
129.90	364	154.95	220				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217760.D
 Acq On : 28 Apr 2017 5:32 pm
 Operator : SushilaY
 Sample : IC8031-0.2
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 01 09:40:01 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.055	65	105112	500.00	ug/L	-0.01
5) pentafluorobenzene	10.758	168	229761	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.715	114	385779	50.00	ug/L	0.00
75) chlorobenzene-d5	14.758	117	369055	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.776	152	215909	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.758	168	229761	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.776	152	215909	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.805	113	119494	53.27	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	106.54%
54) 1,2-dichloroethane-d4 (s)	11.250	65	113381	56.21	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	112.42%
76) toluene-d8 (s)	13.330	98	468030	48.00	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	96.00%
100) 4-bromofluorobenzene (s)	15.788	174	149274	48.10	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	96.20%

Target Compounds

						Qvalue
7) dichlorodifluoromethane	3.951	85	724	0.22	ug/L	# 50
9) vinyl chloride	4.621	62	785	0.19	ug/L	# 50
10) 1,3-Butadiene	4.704	54	264	0.17	ug/L	# 72
11) bromomethane	5.389	94	320	0.16	ug/L	# 69
19) 1,1-dichloroethene	7.140	61	765	0.19	ug/L	# 65
22) iodomethane	7.486	142	663	0.17	ug/L	# 46
23) carbon disulfide	7.606	76	1538	0.17	ug/L	# 72
29) di-isopropyl ether	9.247	45	1395	0.17	ug/L	# 91
30) ethyl tert-butyl ether	9.802	59	1252	0.16	ug/L	# 59
31) 1,1-dichloroethane	9.274	63	611	0.12	ug/L	# 74
47) cyclohexane	10.879	84	1017	0.23	ug/L	# 91
48) 1,1,1-trichloroethane	10.821	97	723	0.19	ug/L	# 1
49) 1,1-dichloropropene	11.025	75	551	0.15	ug/L	# 54
50) carbon tetrachloride	11.025	117	540	0.17	ug/L	# 72
56) 2,2,4-trimethylpentane	11.281	57	2251	0.17	ug/L	# 88
58) benzene	11.302	78	1958	0.18	ug/L	# 80
66) methylcyclohexane	12.233	83	939	0.17	ug/L	# 63
70) bromodichloromethane	12.625	83	490	0.18	ug/L	# 79
72) cis-1,3-dichloropropene	13.085	75	574	0.16	ug/L	# 89
77) toluene	13.404	92	1446	0.21	ug/L	# 81
83) 1,3-dichloropropane	14.005	76	501	0.17	ug/L	# 49
88) n-butyl ether	14.695	57	2160	0.18	ug/L	# 91
89) chlorobenzene	14.784	112	1166	0.16	ug/L	# 51
91) ethylbenzene	14.831	91	2362	0.18	ug/L	# 87
92) m,p-xylene	14.925	106	1810	0.35	ug/L	# 81
93) o-xylene	15.301	91	2051	0.19	ug/L	# 91
94) styrene	15.328	104	1411	0.18	ug/L	# 84
97) isopropylbenzene	15.594	105	2524	0.18	ug/L	# 88
101) bromobenzene	15.965	156	444	0.13	ug/L	# 50
102) 1,1,2,2-tetrachloroethane	15.887	83	401	0.15	ug/L	# 78
105) n-propylbenzene	15.944	91	3534	0.18	ug/L	# 88
106) 2-chlorotoluene	16.086	126	534	0.15	ug/L	# 67
107) 4-chlorotoluene	16.174	91	2180	0.19	ug/L	# 95
108) 1,3,5-trimethylbenzene	16.070	105	2531	0.19	ug/L	# 94
109) tert-butylbenzene	16.363	119	2183	0.19	ug/L	# 97
110) 1,2,4-trimethylbenzene	16.410	105	2925	0.22	ug/L	# 90
111) sec-butylbenzene	16.546	105	3081	0.17	ug/L	# 95
112) 1,3-dichlorobenzene	16.729	146	1410	0.20	ug/L	# 85
113) p-isopropyltoluene	16.640	119	2439	0.16	ug/L	# 91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217760.D
 Acq On : 28 Apr 2017 5:32 pm
 Operator : SushilaY
 Sample : IC8031-0.2
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 01 09:40:01 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

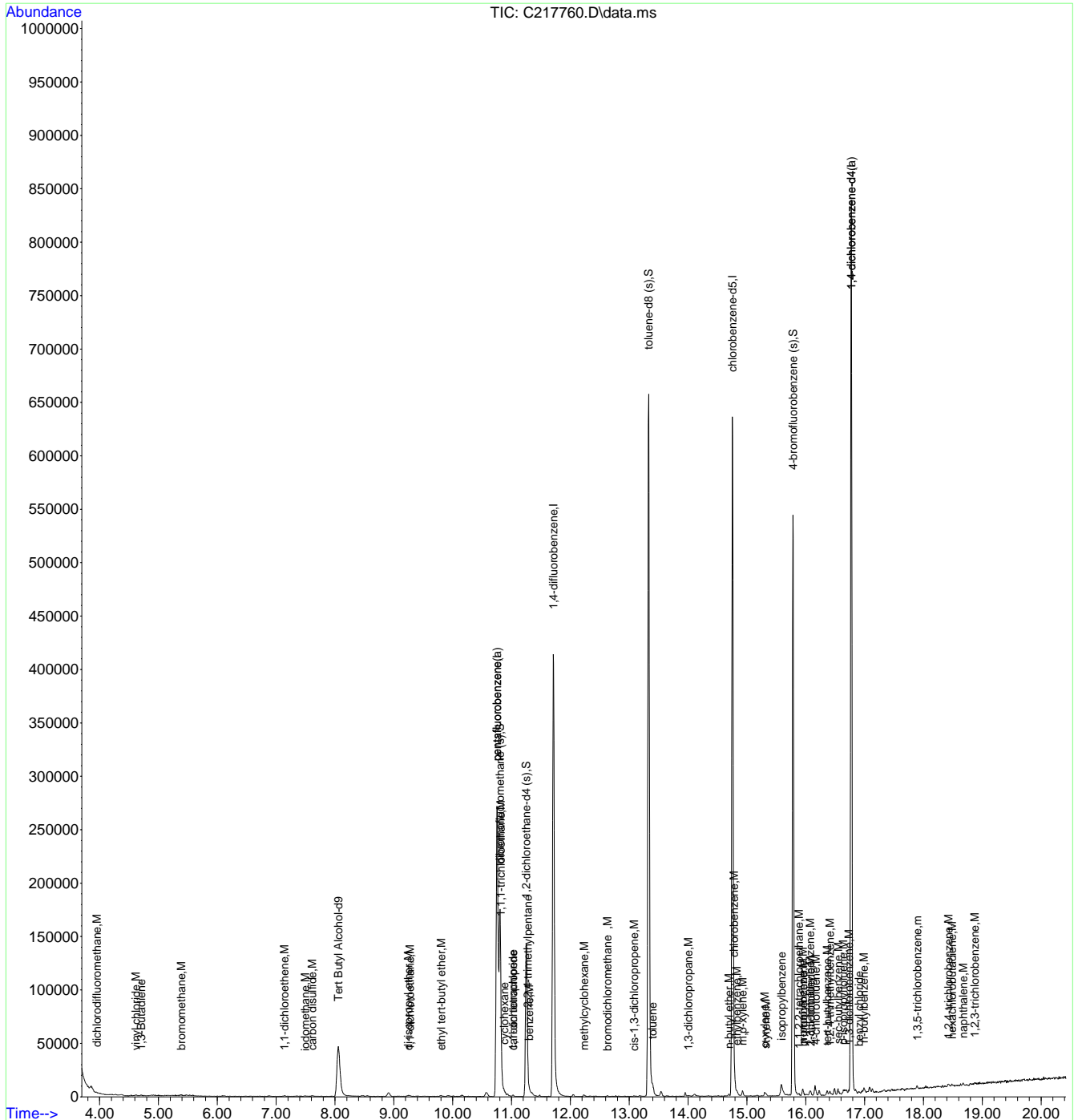
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) benzyl chloride	16.901	91	1118	0.22	ug/L #	89
117) n-butylbenzene	16.985	92	1382	0.17	ug/L	94
120) 1,3,5-trichlorobenzene	17.889	180	873	0.16	ug/L #	75
123) 1,2,4-trichlorobenzene	18.433	180	754	0.18	ug/L	65
124) hexachlorobutadiene	18.485	225	347	0.14	ug/L #	80
125) naphthalene	18.673	128	1481	0.19	ug/L	80
126) 1,2,3-trichlorobenzene	18.872	180	600	0.16	ug/L	81

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-21800\
 Data File : C217760.D
 Acq On : 28 Apr 2017 5:32 pm
 Operator : Sushilay
 Sample : IC8031-0.2
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 01 09:40:01 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration



7.7.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217761.D
 Acq On : 28 Apr 2017 6:00 pm
 Operator : SushilaY
 Sample : IC8031-0.5
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 01 09:08:50 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.053	65	107313	500.00	ug/L	-0.01
5) pentafluorobenzene	10.756	168	262382	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.713	114	443954	50.00	ug/L	0.00
75) chlorobenzene-d5	14.756	117	418358	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.774	152	226848	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.756	168	262382	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.774	152	226848	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.803	113	131693	51.40	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	102.80%
54) 1,2-dichloroethane-d4 (s)	11.253	65	122992	52.99	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	105.98%
76) toluene-d8 (s)	13.328	98	539638	48.82	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	97.64%
100) 4-bromofluorobenzene (s)	15.786	174	162965	49.98	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.96%

Target Compounds

						Qvalue
7) dichlorodifluoromethane	3.944	85	1713	0.46	ug/L	91
8) chloromethane	4.352	50	2055	0.45	ug/L	92
9) vinyl chloride	4.619	62	2110	0.44	ug/L	82
10) 1,3-Butadiene	4.702	54	1234	0.69	ug/L	87
11) bromomethane	5.392	94	826	0.37	ug/L	93
13) vinyl bromide	6.015	106	1041	0.36	ug/L #	61
14) trichlorofluoromethane	6.109	101	1548	0.41	ug/L	79
19) 1,1-dichloroethene	7.139	61	1910	0.41	ug/L #	78
22) iodomethane	7.484	142	1942	0.44	ug/L	84
23) carbon disulfide	7.620	76	3943	0.39	ug/L	85
26) methyl tert butyl ether	8.472	73	3330	0.44	ug/L	73
27) trans-1,2-dichloroethene	8.545	61	1702	0.38	ug/L	87
29) di-isopropyl ether	9.245	45	3796	0.41	ug/L	90
30) ethyl tert-butyl ether	9.794	59	4134	0.46	ug/L	88
31) 1,1-dichloroethane	9.282	63	2299	0.40	ug/L	87
32) chloroprene	9.413	53	1793	0.40	ug/L	71
37) 2,2-dichloropropane	10.134	77	1956	0.46	ug/L	79
38) cis-1,2-dichloroethene	10.171	96	1739	0.50	ug/L #	76
47) cyclohexane	10.877	84	2040	0.40	ug/L	82
48) 1,1,1-trichloroethane	10.819	97	1901	0.44	ug/L #	1
49) 1,1-dichloropropene	11.028	75	1578	0.38	ug/L #	76
50) carbon tetrachloride	11.023	117	1523	0.41	ug/L #	83
56) 2,2,4-trimethylpentane	11.274	57	5754	0.39	ug/L #	91
57) tert-amyl methyl ether	11.337	73	4407	0.51	ug/L	92
58) benzene	11.300	78	5336	0.43	ug/L	90
60) 1,2-dichloroethane	11.358	62	1312	0.46	ug/L	91
63) trichloroethene	12.053	95	1435	0.50	ug/L	88
66) methylcyclohexane	12.231	83	2608	0.42	ug/L #	79
69) dibromomethane	12.497	93	470	0.38	ug/L #	66
70) bromodichloromethane	12.628	83	1475	0.47	ug/L	88
72) cis-1,3-dichloropropene	13.083	75	1791	0.43	ug/L	90
77) toluene	13.402	92	2932	0.38	ug/L	90
79) trans-1,3-dichloropropene	13.626	75	1394	0.40	ug/L #	78
80) 1,1,2-trichloroethane	13.825	83	759	0.49	ug/L	93
82) tetrachloroethene	13.951	166	1566	0.54	ug/L	85
83) 1,3-dichloropropane	13.998	76	1432	0.42	ug/L	86
86) dibromochloromethane	14.238	129	995	0.48	ug/L #	61
87) 1,2-dibromoethane	14.374	107	754	0.41	ug/L	82
88) n-butyl ether	14.693	57	5800	0.42	ug/L #	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217761.D
 Acq On : 28 Apr 2017 6:00 pm
 Operator : SushilaY
 Sample : IC8031-0.5
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 01 09:08:50 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

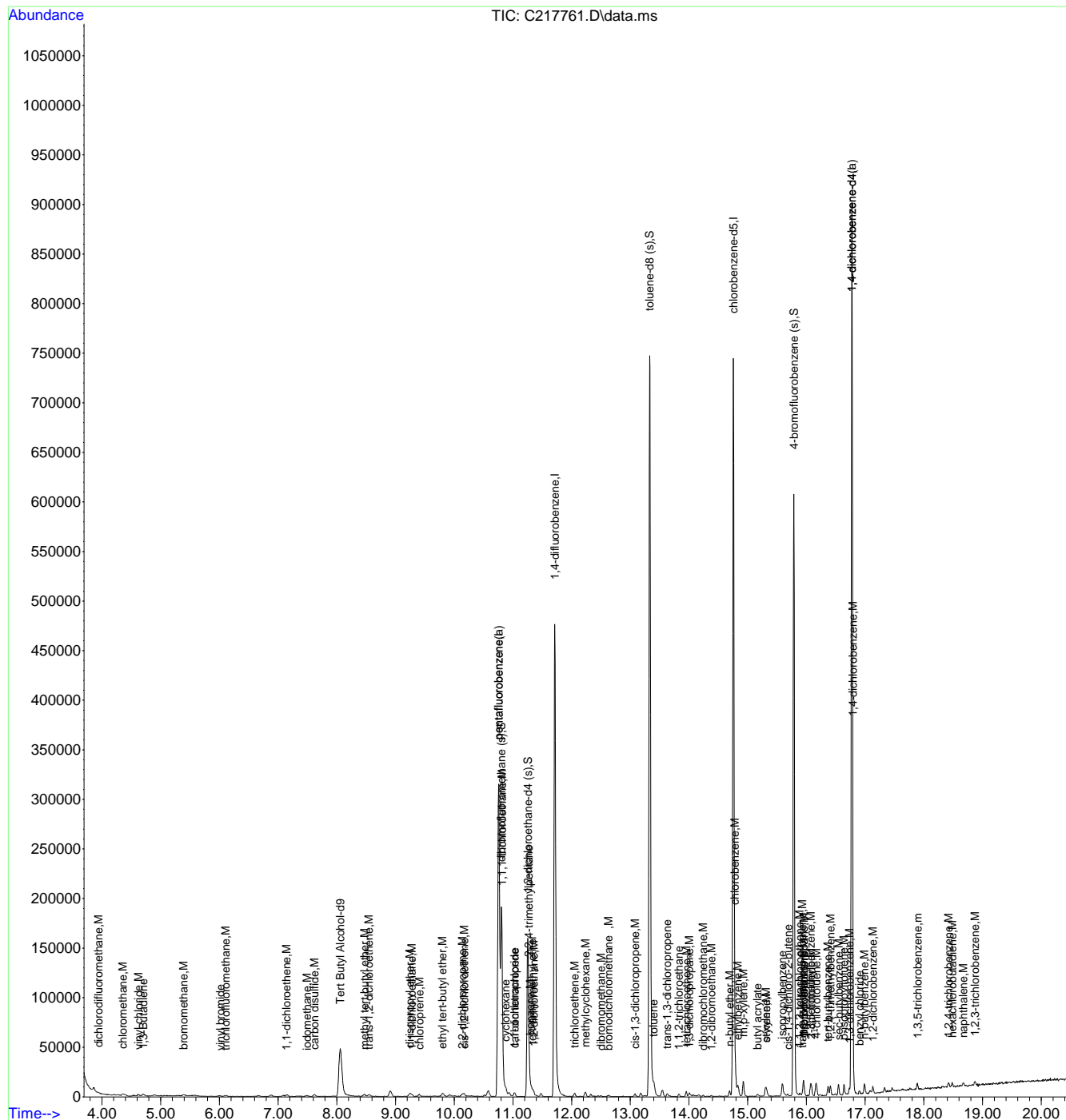
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
89) chlorobenzene	14.782	112	3464	0.42	ug/L	87
91) ethylbenzene	14.834	91	6278	0.42	ug/L	100
92) m,p-xylene	14.923	106	4869	0.83	ug/L	90
93) o-xylene	15.305	91	5319	0.44	ug/L	98
94) styrene	15.320	104	4024	0.45	ug/L	98
95) butyl acrylate	15.169	55	1933	0.50	ug/L #	85
97) isopropylbenzene	15.592	105	7032	0.45	ug/L	95
98) cis-1,4-dichloro-2-butene	15.692	75	462	0.57	ug/L #	79
101) bromobenzene	15.958	156	1587	0.45	ug/L	88
102) 1,1,2,2-tetrachloroethane	15.885	83	1317	0.47	ug/L	95
103) trans-1,4-dichloro-2-b...	15.922	53	343	0.42	ug/L #	57
104) 1,2,3-trichloropropane	15.958	110	290	0.41	ug/L #	30
105) n-propylbenzene	15.948	91	8489	0.41	ug/L	99
106) 2-chlorotoluene	16.084	126	1452	0.38	ug/L	87
107) 4-chlorotoluene	16.173	91	5722	0.47	ug/L	96
108) 1,3,5-trimethylbenzene	16.073	105	5990	0.42	ug/L	98
109) tert-butylbenzene	16.366	119	5252	0.43	ug/L	95
110) 1,2,4-trimethylbenzene	16.408	105	6147	0.44	ug/L	93
111) sec-butylbenzene	16.549	105	7926	0.42	ug/L	93
112) 1,3-dichlorobenzene	16.732	146	3113	0.42	ug/L	92
113) p-isopropyltoluene	16.643	119	6686	0.42	ug/L	93
114) 1,4-dichlorobenzene	16.795	146	3315	0.46	ug/L	78
115) benzyl chloride	16.899	91	3443	0.66	ug/L	98
116) 1,2-dichlorobenzene	17.129	146	2982	0.45	ug/L	97
117) n-butylbenzene	16.988	92	3310	0.40	ug/L	92
120) 1,3,5-trichlorobenzene	17.887	180	2462	0.43	ug/L	91
123) 1,2,4-trichlorobenzene	18.421	180	1898	0.43	ug/L #	70
124) hexachlorobutadiene	18.483	225	1095	0.42	ug/L	94
125) naphthalene	18.666	128	3669	0.46	ug/L	92
126) 1,2,3-trichlorobenzene	18.865	180	1804	0.47	ug/L #	63

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-21800\
 Data File : C217761.D
 Acq On : 28 Apr 2017 6:00 pm
 Operator : Sushilay
 Sample : IC8031-0.5
 Misc : MS14914,VC8031,5.0,,,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 01 09:08:50 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration



7.7.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217762.D
 Acq On : 28 Apr 2017 6:29 pm
 Operator : SushilaY
 Sample : IC8031-1
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 01 16:13:35 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.064	65	92820	500.00	ug/L	0.00
5) pentafluorobenzene	10.757	168	260612	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.713	114	436158	50.00	ug/L	0.00
75) chlorobenzene-d5	14.756	117	403075	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.774	152	220569	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.757	168	260612	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.774	152	220569	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.809	113	125916	49.48	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	98.96%
54) 1,2-dichloroethane-d4 (s)	11.253	65	118790	52.09	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	104.18%
76) toluene-d8 (s)	13.334	98	534153	50.16	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	100.32%
100) 4-bromofluorobenzene (s)	15.786	174	159078	50.17	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	100.34%

Target Compounds

						Qvalue
7) dichlorodifluoromethane	3.934	85	4140	1.11	ug/L	77
8) chloromethane	4.363	50	3805	0.84	ug/L	88
9) vinyl chloride	4.624	62	4401	0.93	ug/L	93
10) 1,3-Butadiene	4.708	54	2578	1.46	ug/L	89
11) bromomethane	5.398	94	1917	0.86	ug/L	88
12) chloroethane	5.612	64	1968	0.82	ug/L	79
13) vinyl bromide	6.010	106	2079	0.73	ug/L #	92
14) trichlorofluoromethane	6.119	101	3664	0.97	ug/L	86
15) ethyl ether	6.674	74	1054	0.76	ug/L #	72
16) 2-chloropropane	6.883	43	4001	0.71	ug/L #	86
19) 1,1-dichloroethene	7.144	61	3499	0.75	ug/L	94
22) iodomethane	7.489	142	3672	0.84	ug/L	98
23) carbon disulfide	7.615	76	7058	0.71	ug/L	99
26) methyl tert butyl ether	8.477	73	5799	0.76	ug/L	91
27) trans-1,2-dichloroethene	8.550	61	3310	0.74	ug/L	88
29) di-isopropyl ether	9.246	45	7091	0.77	ug/L	89
30) ethyl tert-butyl ether	9.816	59	7366	0.83	ug/L	92
31) 1,1-dichloroethane	9.282	63	4367	0.77	ug/L	94
32) chloroprene	9.403	53	3403	0.76	ug/L	94
37) 2,2-dichloropropane	10.135	77	3717	0.88	ug/L	91
38) cis-1,2-dichloroethene	10.166	96	3091	0.89	ug/L #	68
43) chloroform	10.589	83	5661	1.14	ug/L	96
47) cyclohexane	10.872	84	4615	0.92	ug/L #	76
48) 1,1,1-trichloroethane	10.819	97	3884	0.90	ug/L #	61
49) 1,1-dichloropropene	11.023	75	3314	0.80	ug/L	91
50) carbon tetrachloride	11.039	117	3236	0.88	ug/L	97
56) 2,2,4-trimethylpentane	11.274	57	11202	0.77	ug/L	98
57) tert-amyl methyl ether	11.347	73	7615	0.90	ug/L	97
58) benzene	11.306	78	9913	0.82	ug/L	97
59) heptane	11.478	57	1925	0.77	ug/L	96
60) 1,2-dichloroethane	11.363	62	2333	0.84	ug/L	85
63) trichloroethene	12.048	95	2399	0.85	ug/L	82
66) methylcyclohexane	12.236	83	4921	0.81	ug/L #	86
68) 1,2-dichloropropane	12.330	63	2323	0.84	ug/L	76
69) dibromomethane	12.498	93	998	0.82	ug/L	84
70) bromodichloromethane	12.623	83	2987	0.97	ug/L	93
72) cis-1,3-dichloropropene	13.078	75	3456	0.84	ug/L	92
73) 4-methyl-2-pentanone	13.177	58	2312	3.60	ug/L	93
74) 3-methyl-1-butanol	13.245	55	1323	16.94	ug/L	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217762.D
 Acq On : 28 Apr 2017 6:29 pm
 Operator : SushilaY
 Sample : IC8031-1
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 01 16:13:35 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

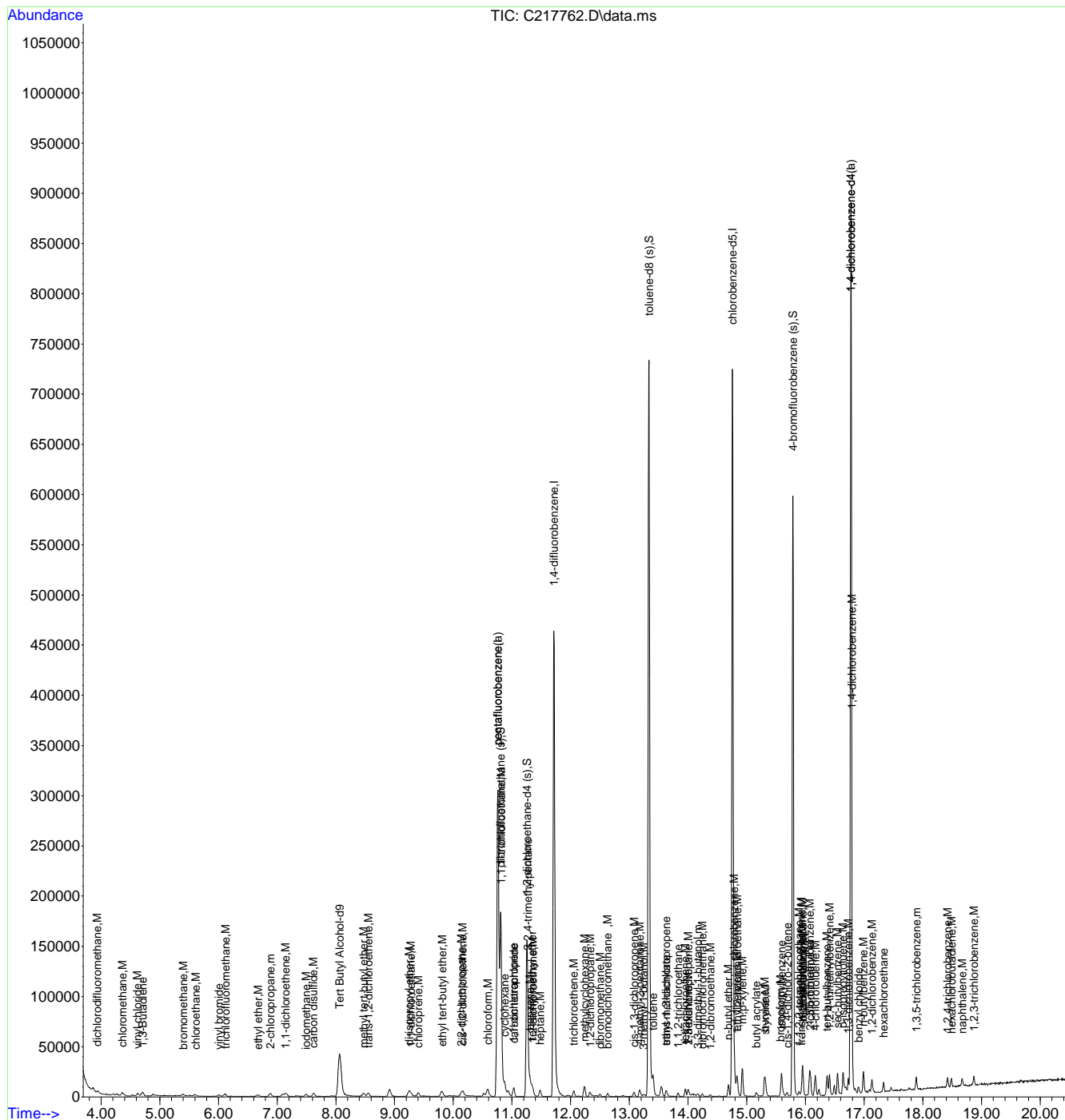
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) toluene	13.407	92	6145	0.82	ug/L	96
78) ethyl methacrylate	13.622	69	2001	0.79	ug/L #	89
79) trans-1,3-dichloropropene	13.632	75	3065	0.92	ug/L	93
80) 1,1,2-trichloroethane	13.831	83	1137	0.76	ug/L	93
81) 2-hexanone	14.003	58	2276	3.55	ug/L	92
82) tetrachloroethene	13.956	166	2371	0.85	ug/L	89
83) 1,3-dichloropropane	13.998	76	2798	0.86	ug/L	89
85) 3,3-dimethyl-1-butanol	14.160	57	1462	7.82	ug/L	89
86) dibromochloromethane	14.249	129	1809	0.90	ug/L	81
87) 1,2-dibromoethane	14.374	107	1488	0.85	ug/L #	68
88) n-butyl ether	14.688	57	10845	0.82	ug/L	99
89) chlorobenzene	14.787	112	6661	0.84	ug/L	97
90) 1,1,1,2-tetrachloroethane	14.845	131	2253	0.88	ug/L	87
91) ethylbenzene	14.829	91	11469	0.79	ug/L	97
92) m,p-xylene	14.923	106	8800	1.56	ug/L	98
93) o-xylene	15.300	91	10365	0.88	ug/L	96
94) styrene	15.321	104	7622	0.88	ug/L	94
95) butyl acrylate	15.159	55	3562	0.95	ug/L #	87
96) bromoform	15.572	173	1075	0.89	ug/L	84
97) isopropylbenzene	15.593	105	12623	0.83	ug/L	98
98) cis-1,4-dichloro-2-butene	15.687	75	991	1.27	ug/L	85
101) bromobenzene	15.959	156	2732	0.79	ug/L	90
102) 1,1,2,2-tetrachloroethane	15.885	83	2299	0.85	ug/L	93
103) trans-1,4-dichloro-2-b...	15.922	53	675	0.85	ug/L #	66
104) 1,2,3-trichloropropane	15.948	110	552	0.81	ug/L #	45
105) n-propylbenzene	15.948	91	15879	0.80	ug/L	99
106) 2-chlorotoluene	16.089	126	3285	0.88	ug/L	90
107) 4-chlorotoluene	16.173	91	9887	0.83	ug/L	97
108) 1,3,5-trimethylbenzene	16.068	105	11413	0.83	ug/L	99
109) tert-butylbenzene	16.372	119	10623	0.89	ug/L	96
110) 1,2,4-trimethylbenzene	16.408	105	11999	0.87	ug/L	91
111) sec-butylbenzene	16.544	105	14975	0.81	ug/L	97
112) 1,3-dichlorobenzene	16.732	146	5938	0.82	ug/L	96
113) p-isopropyltoluene	16.643	119	12939	0.84	ug/L	99
114) 1,4-dichlorobenzene	16.795	146	6169	0.87	ug/L	82
115) benzyl chloride	16.905	91	5343	1.05	ug/L	98
116) 1,2-dichlorobenzene	17.135	146	5314	0.83	ug/L	89
117) n-butylbenzene	16.988	92	5964	0.74	ug/L	93
118) hexachloroethane	17.334	201	1594	0.87	ug/L	95
120) 1,3,5-trichlorobenzene	17.888	180	4428	0.80	ug/L	91
123) 1,2,4-trichlorobenzene	18.421	180	3419	0.80	ug/L	93
124) hexachlorobutadiene	18.484	225	1985	0.78	ug/L	82
125) naphthalene	18.667	128	6649	0.85	ug/L	94
126) 1,2,3-trichlorobenzene	18.865	180	2922	0.78	ug/L	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217762.D
 Acq On : 28 Apr 2017 6:29 pm
 Operator : Sushilay
 Sample : IC8031-1
 Misc : MS14914,VC8031,5.0,,,1
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 01 16:13:35 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration



7.7.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217763.D
 Acq On : 28 Apr 2017 6:58 pm
 Operator : SushilaY
 Sample : IC8031-2
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 08 14:38:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:17:50 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.059	65	104800	500.00	ug/L	0.00
5) pentafluorobenzene	10.757	168	267133	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.713	114	435794	50.00	ug/L	0.00
75) chlorobenzene-d5	14.756	117	405519	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.774	152	226323	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.757	168	267133	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.774	152	226323	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.809	113	128934	49.82	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.64%
54) 1,2-dichloroethane-d4 (s)	11.253	65	120372	50.96	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	101.92%
76) toluene-d8 (s)	13.334	98	537724	49.58	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	99.16%
100) 4-bromofluorobenzene (s)	15.786	174	160408	49.84	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.68%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	8.232	59	2500	9.74	ug/L	72
4) 1,4-dioxane	12.477	88	536	31.24	ug/L	79
7) dichlorodifluoromethane	3.945	85	6942	1.85	ug/L	98
8) chloromethane	4.368	50	7064	1.95	ug/L	97
9) vinyl chloride	4.624	62	7855	1.91	ug/L	98
10) 1,3-Butadiene	4.708	54	5658	2.02	ug/L	96
11) bromomethane	5.398	94	3832	2.05	ug/L	99
12) chloroethane	5.607	64	4346	2.21	ug/L	88
13) vinyl bromide	6.015	106	4160	1.97	ug/L #	92
14) trichlorofluoromethane	6.098	101	6920	1.92	ug/L	95
15) ethyl ether	6.658	74	2218	1.90	ug/L	85
16) 2-chloropropane	6.883	43	8137	2.10	ug/L	98
18) freon 113	7.097	151	3332	1.88	ug/L #	88
19) 1,1-dichloroethene	7.149	61	7015	1.85	ug/L	89
20) acetone	7.322	43	3292	7.90	ug/L	91
22) iodomethane	7.500	142	7201	1.91	ug/L	97
23) carbon disulfide	7.615	76	14442	1.90	ug/L	98
26) methyl tert butyl ether	8.472	73	11833	1.94	ug/L	96
27) trans-1,2-dichloroethene	8.550	61	6844	1.90	ug/L	95
28) hexane	8.927	57	9750	2.46	ug/L	88
29) di-isopropyl ether	9.235	45	15478	1.97	ug/L	96
30) ethyl tert-butyl ether	9.800	59	15271	1.94	ug/L	95
31) 1,1-dichloroethane	9.277	63	9110	2.02	ug/L	92
32) chloroprene	9.403	53	7585	1.97	ug/L	94
35) 2-butanone	10.202	72	867	5.44	ug/L #	92
37) 2,2-dichloropropane	10.140	77	7605	2.16	ug/L	90
38) cis-1,2-dichloroethene	10.161	96	6019	2.00	ug/L #	68
40) propionitrile	10.312	54	3458	17.82	ug/L	87
41) bromochloromethane	10.527	128	1903	1.73	ug/L	85
43) chloroform	10.589	83	10344	2.17	ug/L	89
46) methacrylonitrile	10.495	67	719	1.22	ug/L #	42
47) cyclohexane	10.872	84	8900	1.94	ug/L	89
48) 1,1,1-trichloroethane	10.825	97	8214	2.08	ug/L	82
49) 1,1-dichloropropene	11.028	75	7110	2.06	ug/L	93
50) carbon tetrachloride	11.039	117	6732	2.02	ug/L #	83
51) tert-amyl alcohol	11.238	73	1239	11.86	ug/L #	74
52) isobutyl alcohol	11.133	43	1450	19.99	ug/L #	78
56) 2,2,4-trimethylpentane	11.279	57	23209	2.01	ug/L	98
57) tert-amyl methyl ether	11.342	73	14407	1.95	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217763.D
 Acq On : 28 Apr 2017 6:58 pm
 Operator : SushilaY
 Sample : IC8031-2
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 08 14:38:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:17:50 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
58) benzene	11.306	78	18315	1.83	ug/L	96
59) heptane	11.483	57	3788	1.94	ug/L #	74
60) 1,2-dichloroethane	11.358	62	5473	2.08	ug/L	90
61) n-butyl alcohol	11.922	56	3416	75.92	ug/L	82
62) ethyl acrylate	12.111	55	2978	1.92	ug/L #	74
63) trichloroethene	12.048	95	4922	1.97	ug/L	96
64) 2-chloroethyl vinyl ether	12.890	63	874	6.61	ug/L	76
65) 2-nitropropane	12.864	41	929	2.26	ug/L #	41
66) methylcyclohexane	12.236	83	9921	1.98	ug/L	98
67) methyl methacrylate	12.356	100	529	1.36	ug/L #	40
68) 1,2-dichloropropane	12.335	63	4308	1.85	ug/L	97
69) dibromomethane	12.498	93	2176	1.99	ug/L	87
70) bromodichloromethane	12.628	83	6064	2.01	ug/L	92
71) epichlorohydrin	13.015	57	1417	9.94	ug/L #	83
72) cis-1,3-dichloropropene	13.078	75	6808	1.86	ug/L	89
73) 4-methyl-2-pentanone	13.172	58	5465	8.59	ug/L	93
74) 3-methyl-1-butanol	13.235	55	3279	41.20	ug/L #	68
77) toluene	13.402	92	11972	1.85	ug/L	99
78) ethyl methacrylate	13.616	69	4648	1.96	ug/L	96
79) trans-1,3-dichloropropene	13.627	75	5978	1.98	ug/L	93
80) 1,1,2-trichloroethane	13.831	83	2863	2.02	ug/L	94
81) 2-hexanone	13.993	58	5340	8.85	ug/L	85
82) tetrachloroethene	13.956	166	5278	2.04	ug/L	89
83) 1,3-dichloropropane	13.998	76	5896	1.98	ug/L	97
85) 3,3-dimethyl-1-butanol	14.165	57	3797	20.44	ug/L #	80
86) dibromochloromethane	14.244	129	3835	1.91	ug/L	93
87) 1,2-dibromoethane	14.380	107	3107	1.89	ug/L	94
88) n-butyl ether	14.688	57	21572	1.92	ug/L	98
89) chlorobenzene	14.787	112	13478	1.96	ug/L	85
90) 1,1,1,2-tetrachloroethane	14.845	131	4973	1.95	ug/L	96
91) ethylbenzene	14.829	91	23572	1.92	ug/L	97
92) m,p-xylene	14.923	106	19946	4.09	ug/L	94
93) o-xylene	15.300	91	21258	2.00	ug/L	97
94) styrene	15.315	104	15327	1.91	ug/L	100
95) butyl acrylate	15.148	55	7300	1.94	ug/L	97
96) bromoform	15.572	173	2308	1.86	ug/L	97
97) isopropylbenzene	15.593	105	26346	1.95	ug/L	99
98) cis-1,4-dichloro-2-butene	15.681	75	1708	1.94	ug/L	95
101) bromobenzene	15.964	156	5666	1.94	ug/L	93
102) 1,1,2,2-tetrachloroethane	15.885	83	4990	2.05	ug/L	98
103) trans-1,4-dichloro-2-b...	15.922	53	1441	2.01	ug/L	93
104) 1,2,3-trichloropropane	15.948	110	1289	2.02	ug/L #	61
105) n-propylbenzene	15.948	91	30873	1.86	ug/L	99
106) 2-chlorotoluene	16.084	126	6332	2.01	ug/L	92
107) 4-chlorotoluene	16.173	91	19419	1.92	ug/L	93
108) 1,3,5-trimethylbenzene	16.068	105	23447	1.94	ug/L	94
109) tert-butylbenzene	16.371	119	19373	1.81	ug/L	97
110) 1,2,4-trimethylbenzene	16.408	105	23115	1.86	ug/L	93
111) sec-butylbenzene	16.549	105	29824	1.90	ug/L	97
112) 1,3-dichlorobenzene	16.727	146	11950	1.90	ug/L	91
113) p-isopropyltoluene	16.643	119	25330	1.90	ug/L	99
114) 1,4-dichlorobenzene	16.795	146	12236	1.94	ug/L	94
115) benzyl chloride	16.900	91	10118	1.84	ug/L #	88
116) 1,2-dichlorobenzene	17.130	146	11070	1.87	ug/L	93
117) n-butylbenzene	16.988	92	13446	1.93	ug/L	91
118) hexachloroethane	17.333	201	3399	1.86	ug/L	93
119) 1,2-dibromo-3-chloropr...	17.762	157	1017	2.20	ug/L	99
120) 1,3,5-trichlorobenzene	17.888	180	9458	1.94	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217763.D
 Acq On : 28 Apr 2017 6:58 pm
 Operator : SushilaY
 Sample : IC8031-2
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 08 14:38:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:17:50 2017
 Response via : Initial Calibration

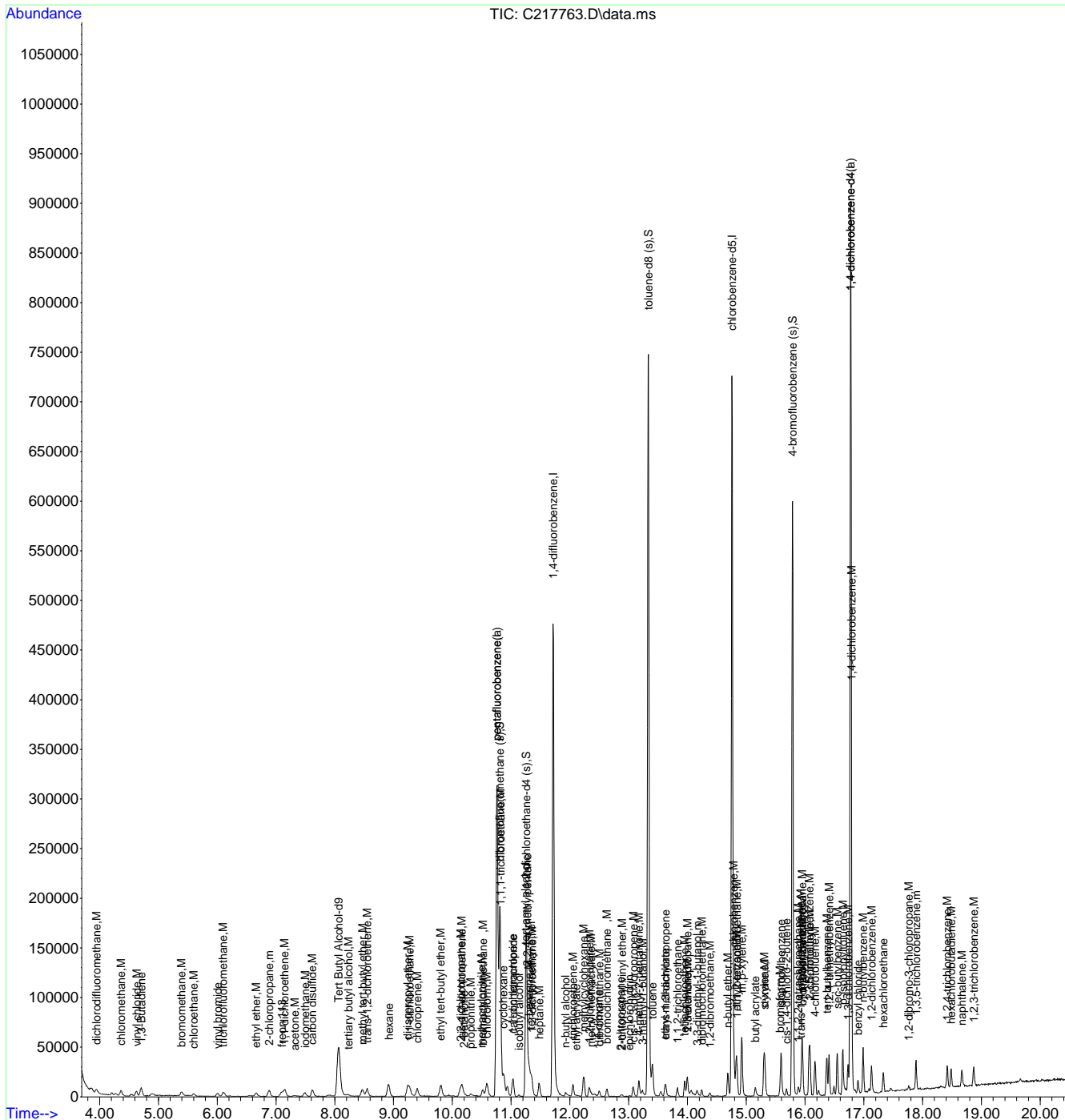
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
123) 1,2,4-trichlorobenzene	18.421	180	6867	1.79	ug/L	97
124) hexachlorobutadiene	18.484	225	4317	1.97	ug/L	74
125) naphthalene	18.667	128	13675	1.78	ug/L	93
126) 1,2,3-trichlorobenzene	18.870	180	6279	1.86	ug/L	88

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217763.D
 Acq On : 28 Apr 2017 6:58 pm
 Operator : Sushilay
 Sample : IC8031-2
 Misc : MS14914,VC8031,5.0,,,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 08 14:38:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:17:50 2017
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217764.D
 Acq On : 28 Apr 2017 7:26 pm
 Operator : SushilaY
 Sample : IC8031-4
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 08 14:37:42 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:25:59 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.059	65	102624	500.00	ug/L	0.00
5) pentafluorobenzene	10.762	168	273006	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.714	114	457117	50.00	ug/L	0.00
75) chlorobenzene-d5	14.756	117	413980	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.774	152	225772	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.762	168	273006	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.774	152	225772	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.809	113	131495	49.71	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.42%
54) 1,2-dichloroethane-d4 (s)	11.259	65	124251	50.15	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	100.30%
76) toluene-d8 (s)	13.334	98	553008	49.95	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	99.90%
100) 4-bromofluorobenzene (s)	15.786	174	163183	50.83	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	101.66%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	8.211	59	5143	20.47	ug/L	79
4) 1,4-dioxane	12.456	88	1497	89.09	ug/L	95
6) chlorodifluoromethane	3.982	51	2260	3.15	ug/L	75
7) dichlorodifluoromethane	3.940	85	15405	4.02	ug/L	98
8) chloromethane	4.358	50	15575	4.22	ug/L	96
9) vinyl chloride	4.625	62	16535	3.93	ug/L	96
10) 1,3-Butadiene	4.703	54	11748	4.11	ug/L	93
11) bromomethane	5.393	94	8053	4.22	ug/L	88
12) chloroethane	5.602	64	8450	4.21	ug/L	97
13) vinyl bromide	6.015	106	8626	3.99	ug/L	98
14) trichlorofluoromethane	6.115	101	14964	4.07	ug/L	88
15) ethyl ether	6.658	74	4943	4.15	ug/L	96
16) 2-chloropropane	6.878	43	17581	4.45	ug/L	97
18) freon 113	7.108	151	7347	4.05	ug/L	87
19) 1,1-dichloroethene	7.150	61	15575	4.03	ug/L	98
20) acetone	7.296	43	6906	16.22	ug/L	87
22) iodomethane	7.489	142	15660	4.07	ug/L	94
23) carbon disulfide	7.620	76	30678	3.96	ug/L	95
24) methylene chloride	8.080	84	12089	4.53	ug/L	96
25) methyl acetate	7.882	43	3477	3.89	ug/L	58
26) methyl tert butyl ether	8.462	73	24404	3.91	ug/L	98
27) trans-1,2-dichloroethene	8.551	61	15359	4.18	ug/L	99
28) hexane	8.912	57	17162	4.24	ug/L	98
29) di-isopropyl ether	9.246	45	31592	3.94	ug/L	98
30) ethyl tert-butyl ether	9.800	59	31823	3.96	ug/L	95
31) 1,1-dichloroethane	9.283	63	19488	4.23	ug/L	99
32) chloroprene	9.398	53	15807	4.01	ug/L	97
35) 2-butanone	10.171	72	2681	16.47	ug/L #	96
37) 2,2-dichloropropane	10.135	77	15487	4.30	ug/L	99
38) cis-1,2-dichloroethene	10.161	96	12619	4.11	ug/L	96
40) propionitrile	10.302	54	7228	36.44	ug/L	97
41) bromochloromethane	10.517	128	4590	4.07	ug/L	88
43) chloroform	10.590	83	20146	4.13	ug/L	97
44) t-butyl formate	10.605	59	3747	2.93	ug/L #	76
46) methacrylonitrile	10.506	67	2466	4.11	ug/L #	73
47) cyclohexane	10.877	84	19531	4.18	ug/L	97
48) 1,1,1-trichloroethane	10.820	97	16293	4.04	ug/L	86
49) 1,1-dichloropropene	11.029	75	14682	4.16	ug/L	99
50) carbon tetrachloride	11.039	117	14001	4.12	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217764.D
 Acq On : 28 Apr 2017 7:26 pm
 Operator : SushilaY
 Sample : IC8031-4
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 08 14:37:42 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:25:59 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) tert-amyl alcohol	11.228	73	2455	23.00	ug/L	97
52) isobutyl alcohol	11.123	43	3315	44.72	ug/L	91
55) isopropyl acetate	11.275	87	1178	3.37	ug/L #	34
56) 2,2,4-trimethylpentane	11.275	57	48856	4.04	ug/L	98
57) tert-amyl methyl ether	11.343	73	29908	3.86	ug/L	93
58) benzene	11.306	78	41295	3.93	ug/L	94
59) heptane	11.478	57	8449	4.12	ug/L	92
60) 1,2-dichloroethane	11.358	62	11201	4.06	ug/L	92
61) n-butyl alcohol	11.918	56	9550	202.34	ug/L	90
62) ethyl acrylate	12.106	55	7053	4.33	ug/L	97
63) trichloroethene	12.043	95	10606	4.05	ug/L	80
64) 2-chloroethyl vinyl ether	12.885	63	2911	21.00	ug/L	94
65) 2-nitropropane	12.864	41	1835	4.25	ug/L #	71
66) methylcyclohexane	12.231	83	21051	4.01	ug/L	98
67) methyl methacrylate	12.357	100	1617	3.96	ug/L #	56
68) 1,2-dichloropropane	12.331	63	9992	4.08	ug/L	98
69) dibromomethane	12.493	93	4819	4.19	ug/L	92
70) bromodichloromethane	12.629	83	12863	4.07	ug/L	88
71) epichlorohydrin	13.010	57	3236	21.63	ug/L #	86
72) cis-1,3-dichloropropene	13.073	75	15803	4.13	ug/L	98
73) 4-methyl-2-pentanone	13.167	58	11511	17.25	ug/L	95
74) 3-methyl-1-butanol	13.230	55	6783	81.26	ug/L	93
77) toluene	13.402	92	26844	4.06	ug/L	98
78) ethyl methacrylate	13.606	69	10066	4.16	ug/L	97
79) trans-1,3-dichloropropene	13.627	75	13345	4.32	ug/L	97
80) 1,1,2-trichloroethane	13.831	83	5890	4.08	ug/L	97
81) 2-hexanone	13.988	58	11757	19.10	ug/L	97
82) tetrachloroethene	13.951	166	10323	3.91	ug/L	93
83) 1,3-dichloropropane	13.993	76	12965	4.26	ug/L	98
84) butyl acetate	14.051	56	4842	4.24	ug/L #	74
85) 3,3-dimethyl-1-butanol	14.155	57	8166	43.06	ug/L	90
86) dibromochloromethane	14.239	129	8451	4.12	ug/L	95
87) 1,2-dibromoethane	14.380	107	7017	4.17	ug/L	97
88) n-butyl ether	14.688	57	45946	4.01	ug/L	100
89) chlorobenzene	14.788	112	28772	4.09	ug/L	90
90) 1,1,1,2-tetrachloroethane	14.845	131	10318	3.96	ug/L	99
91) ethylbenzene	14.830	91	49642	3.97	ug/L	99
92) m,p-xylene	14.924	106	40572	8.15	ug/L	92
93) o-xylene	15.300	91	43180	3.97	ug/L	97
94) styrene	15.316	104	32823	4.02	ug/L	94
95) butyl acrylate	15.149	55	17051	4.44	ug/L	98
96) bromoform	15.572	173	5223	4.12	ug/L	85
97) isopropylbenzene	15.593	105	55175	4.00	ug/L	99
98) cis-1,4-dichloro-2-butene	15.682	75	3815	4.24	ug/L	95
101) bromobenzene	15.964	156	12153	4.17	ug/L	86
102) 1,1,2,2-tetrachloroethane	15.891	83	10602	4.38	ug/L	96
103) trans-1,4-dichloro-2-b...	15.922	53	3293	4.61	ug/L	94
104) 1,2,3-trichloropropane	15.948	110	2493	3.92	ug/L #	85
105) n-propylbenzene	15.948	91	65936	3.98	ug/L	96
106) 2-chlorotoluene	16.084	126	12822	4.07	ug/L	96
107) 4-chlorotoluene	16.168	91	38929	3.86	ug/L	98
108) 1,3,5-trimethylbenzene	16.069	105	48210	4.00	ug/L	99
109) tert-butylbenzene	16.367	119	42687	3.99	ug/L	97
110) 1,2,4-trimethylbenzene	16.408	105	48166	3.88	ug/L	97
111) sec-butylbenzene	16.550	105	62443	3.98	ug/L	98
112) 1,3-dichlorobenzene	16.733	146	24801	3.95	ug/L	99
113) p-isopropyltoluene	16.644	119	54689	4.11	ug/L	99
114) 1,4-dichlorobenzene	16.801	146	24282	3.86	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217764.D
 Acq On : 28 Apr 2017 7:26 pm
 Operator : SushilaY
 Sample : IC8031-4
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 08 14:37:42 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:25:59 2017
 Response via : Initial Calibration

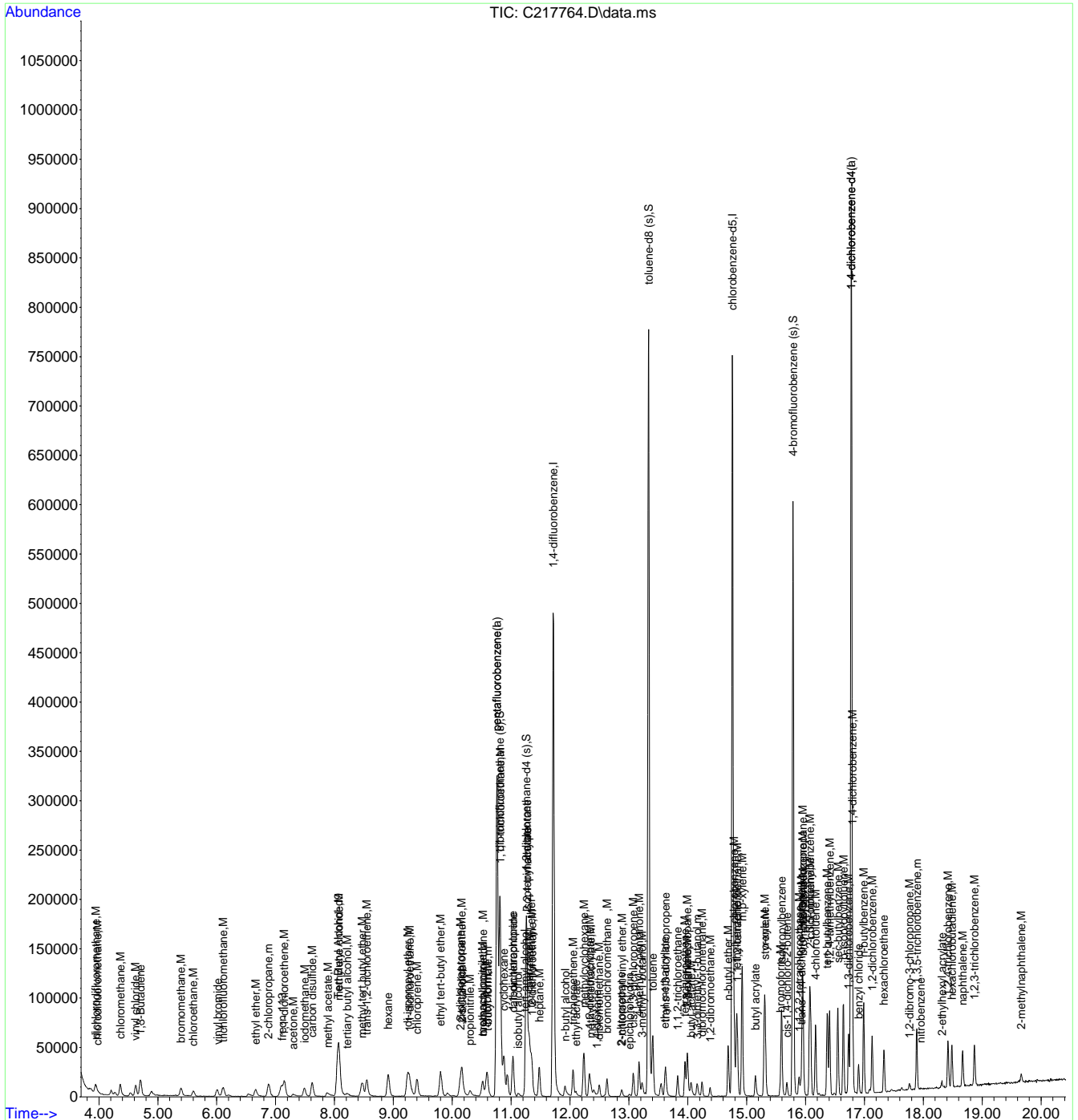
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) benzyl chloride	16.900	91	21221	3.87	ug/L	98
116) 1,2-dichlorobenzene	17.130	146	22976	3.90	ug/L	98
117) n-butylbenzene	16.989	92	28274	4.07	ug/L	97
118) hexachloroethane	17.334	201	6943	3.80	ug/L	95
119) 1,2-dibromo-3-chloropr...	17.768	157	1726	3.74	ug/L	90
120) 1,3,5-trichlorobenzene	17.888	180	19533	4.02	ug/L	97
121) nitrobenzene	17.956	77	831	4.25	ug/L #	75
122) 2-ethylhexyl acrylate	18.317	70	1810	0.85	ug/L	92
123) 1,2,4-trichlorobenzene	18.416	180	15070	3.93	ug/L	99
124) hexachlorobutadiene	18.484	225	9026	4.13	ug/L	97
125) naphthalene	18.667	128	30417	3.97	ug/L	95
126) 1,2,3-trichlorobenzene	18.866	180	13413	3.98	ug/L	92
127) 2-methylnaphthalene	19.660	142	5103	2.30	ug/L	88

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
Data File : C217764.D
Acq On : 28 Apr 2017 7:26 pm
Operator : Sushilay
Sample : IC8031-4
Misc : MS14914,VC8031,5.0,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 08 14:37:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 01 09:25:59 2017
Response via : Initial Calibration



7.7.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217765.D
 Acq On : 28 Apr 2017 7:55 pm
 Operator : SushilaY
 Sample : IC8031-8
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 01 09:29:39 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:29:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.061	65	89893	500.00	ug/L	0.00
5) pentafluorobenzene	10.764	168	259963	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.715	114	437899	50.00	ug/L	0.00
75) chlorobenzene-d5	14.758	117	395712	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.776	152	217833	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.764	168	259963	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.776	152	217833	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.811	113	125447	49.81	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.62%
54) 1,2-dichloroethane-d4 (s)	11.255	65	116701	49.17	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	98.34%
76) toluene-d8 (s)	13.336	98	529412	50.02	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	100.04%
100) 4-bromofluorobenzene (s)	15.788	174	153669	49.61	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.22%

Target Compounds

Qvalue

3) tertiary butyl alcohol	8.218	59	9845	44.74	ug/L	92
4) 1,4-dioxane	12.458	88	3003	204.04	ug/L	98
6) chlorodifluoromethane	3.983	51	4485	6.57	ug/L	96
7) dichlorodifluoromethane	3.936	85	30404	8.32	ug/L	99
8) chloromethane	4.359	50	29428	8.36	ug/L	97
9) vinyl chloride	4.621	62	33010	8.23	ug/L	95
10) 1,3-Butadiene	4.699	54	23363	8.59	ug/L	98
11) bromomethane	5.400	94	15295	8.43	ug/L	94
12) chloroethane	5.609	64	16965	8.88	ug/L	92
13) vinyl bromide	6.012	106	17879	8.68	ug/L	90
14) trichlorofluoromethane	6.116	101	28788	8.22	ug/L	95
15) ethyl ether	6.655	74	9858	8.70	ug/L	94
16) 2-chloropropane	6.885	43	34091	9.06	ug/L	97
17) acrolein	7.026	56	1649	5.90	ug/L	71
18) freon 113	7.104	151	14945	8.65	ug/L	94
19) 1,1-dichloroethene	7.151	61	31987	8.68	ug/L	94
20) acetone	7.287	43	12427	30.65	ug/L	92
21) acetonitrile	7.862	41	12752	80.50	ug/L	95
22) iodomethane	7.486	142	30280	8.27	ug/L	99
23) carbon disulfide	7.622	76	61396	8.31	ug/L	98
24) methylene chloride	8.087	84	22637	8.90	ug/L	96
25) methyl acetate	7.862	43	7065	8.29	ug/L	87
26) methyl tert butyl ether	8.474	73	49109	8.26	ug/L	95
27) trans-1,2-dichloroethene	8.547	61	29942	8.55	ug/L	98
28) hexane	8.913	57	32558	8.44	ug/L	99
29) di-isopropyl ether	9.242	45	63597	8.33	ug/L	99
30) ethyl tert-butyl ether	9.802	59	64194	8.40	ug/L	96
31) 1,1-dichloroethane	9.279	63	37780	8.62	ug/L	95
32) chloroprene	9.399	53	32324	8.61	ug/L	96
33) acrylonitrile	8.594	53	3140	10.21	ug/L	# 69
34) vinyl acetate	9.305	86	1935	6.54	ug/L	# 58
35) 2-butanone	10.163	72	5164	33.31	ug/L	# 86
36) ethyl acetate	10.183	45	1414	7.76	ug/L	# 25
37) 2,2-dichloropropane	10.136	77	29661	8.65	ug/L	98
38) cis-1,2-dichloroethene	10.163	96	24359	8.33	ug/L	92
39) methyl acrylate	10.278	85	1259	7.50	ug/L	64
40) propionitrile	10.299	54	14405	76.27	ug/L	88
41) bromochloromethane	10.513	128	8953	8.34	ug/L	88
42) tetrahydrofuran	10.560	42	6500	7.70	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217765.D
 Acq On : 28 Apr 2017 7:55 pm
 Operator : SushilaY
 Sample : IC8031-8
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 01 09:29:39 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:29:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) chloroform	10.586	83	37764	8.13	ug/L	98
44) t-butyl formate	10.607	59	8630	7.10	ug/L	92
46) methacrylonitrile	10.492	67	4440	7.77	ug/L	88
47) cyclohexane	10.879	84	35681	8.01	ug/L	97
48) 1,1,1-trichloroethane	10.827	97	32253	8.40	ug/L	98
49) 1,1-dichloropropene	11.025	75	29182	8.69	ug/L	99
50) carbon tetrachloride	11.036	117	28732	8.87	ug/L	98
51) tert-amyl alcohol	11.224	73	4476	44.03	ug/L #	75
52) isobutyl alcohol	11.114	43	5755	81.52	ug/L	93
55) isopropyl acetate	11.276	87	2761	8.23	ug/L #	87
56) 2,2,4-trimethylpentane	11.276	57	98477	8.49	ug/L	100
57) tert-amyl methyl ether	11.339	73	59361	8.00	ug/L	96
58) benzene	11.307	78	83066	8.25	ug/L	94
59) heptane	11.475	57	16723	8.51	ug/L	94
60) 1,2-dichloroethane	11.355	62	22995	8.70	ug/L	98
61) n-butyl alcohol	11.909	56	17072	377.58	ug/L	98
62) ethyl acrylate	12.097	55	12680	8.13	ug/L #	90
63) trichloroethene	12.050	95	20984	8.36	ug/L	97
64) 2-chloroethyl vinyl ether	12.876	63	5890	44.35	ug/L	95
65) 2-nitropropane	12.860	41	3486	8.43	ug/L #	64
66) methylcyclohexane	12.233	83	43072	8.57	ug/L	93
67) methyl methacrylate	12.353	100	3125	7.99	ug/L #	53
68) 1,2-dichloropropane	12.322	63	19636	8.38	ug/L	98
69) dibromomethane	12.494	93	9792	8.90	ug/L	96
70) bromodichloromethane	12.630	83	25620	8.46	ug/L	98
71) epichlorohydrin	13.007	57	6347	44.29	ug/L	92
72) cis-1,3-dichloropropene	13.075	75	31764	8.66	ug/L	95
73) 4-methyl-2-pentanone	13.169	58	20416	31.94	ug/L	87
74) 3-methyl-1-butanol	13.221	55	12777	159.79	ug/L	86
77) toluene	13.404	92	52294	8.27	ug/L	100
78) ethyl methacrylate	13.608	69	18855	8.16	ug/L	98
79) trans-1,3-dichloropropene	13.624	75	25662	8.70	ug/L	99
80) 1,1,2-trichloroethane	13.827	83	11769	8.53	ug/L	98
81) 2-hexanone	13.984	58	17558	29.83	ug/L	91
82) tetrachloroethene	13.953	166	20685	8.19	ug/L	94
83) 1,3-dichloropropane	13.995	76	25116	8.63	ug/L	97
84) butyl acetate	14.047	56	9295	8.52	ug/L	93
85) 3,3-dimethyl-1-butanol	14.157	57	14549	80.26	ug/L	90
86) dibromochloromethane	14.246	129	16595	8.46	ug/L	97
87) 1,2-dibromoethane	14.382	107	14007	8.72	ug/L	93
88) n-butyl ether	14.685	57	92556	8.45	ug/L	99
89) chlorobenzene	14.789	112	56525	8.41	ug/L	97
90) 1,1,1,2-tetrachloroethane	14.842	131	20752	8.34	ug/L	94
91) ethylbenzene	14.826	91	99668	8.33	ug/L	99
92) m,p-xylene	14.920	106	78873	16.58	ug/L	98
93) o-xylene	15.296	91	86582	8.33	ug/L	99
94) styrene	15.312	104	65665	8.41	ug/L	99
95) butyl acrylate	15.145	55	33606	9.15	ug/L	96
96) bromoform	15.574	173	9916	8.17	ug/L	95
97) isopropylbenzene	15.594	105	109008	8.27	ug/L	99
98) cis-1,4-dichloro-2-butene	15.683	75	6707	7.79	ug/L	97
101) bromobenzene	15.960	156	23729	8.45	ug/L	97
102) 1,1,2,2-tetrachloroethane	15.887	83	18850	8.06	ug/L	97
103) trans-1,4-dichloro-2-b...	15.919	53	6033	8.76	ug/L	98
104) 1,2,3-trichloropropane	15.950	110	5466	8.90	ug/L #	87
105) n-propylbenzene	15.945	91	132404	8.29	ug/L	98
106) 2-chlorotoluene	16.086	126	26420	8.69	ug/L	97
107) 4-chlorotoluene	16.170	91	79192	8.13	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217765.D
 Acq On : 28 Apr 2017 7:55 pm
 Operator : SushilaY
 Sample : IC8031-8
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 01 09:29:39 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:29:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,3,5-trimethylbenzene	16.070	105	95608	8.21	ug/L	97
109) tert-butylbenzene	16.368	119	82629	8.01	ug/L	99
110) 1,2,4-trimethylbenzene	16.405	105	97028	8.11	ug/L	98
111) sec-butylbenzene	16.546	105	125499	8.29	ug/L	98
112) 1,3-dichlorobenzene	16.729	146	49357	8.15	ug/L	98
113) p-isopropyltoluene	16.640	119	108508	8.44	ug/L	100
114) 1,4-dichlorobenzene	16.797	146	49291	8.11	ug/L	93
115) benzyl chloride	16.901	91	41588	7.86	ug/L	93
116) 1,2-dichlorobenzene	17.131	146	45568	8.02	ug/L	99
117) n-butylbenzene	16.985	92	57117	8.52	ug/L	98
118) hexachloroethane	17.335	201	14443	8.19	ug/L	98
119) 1,2-dibromo-3-chloropr...	17.764	157	3660	8.22	ug/L	92
120) 1,3,5-trichlorobenzene	17.890	180	38796	8.27	ug/L	99
121) nitrobenzene	17.947	77	1324	7.02	ug/L	97
122) 2-ethylhexyl acrylate	18.318	70	3700	1.39	ug/L	94
123) 1,2,4-trichlorobenzene	18.423	180	30773	8.31	ug/L	98
124) hexachlorobutadiene	18.486	225	18074	8.57	ug/L	96
125) naphthalene	18.669	128	58968	7.97	ug/L	98
126) 1,2,3-trichlorobenzene	18.867	180	26218	8.06	ug/L	95
127) 2-methylnaphthalene	19.662	142	11467	3.80	ug/L	93

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

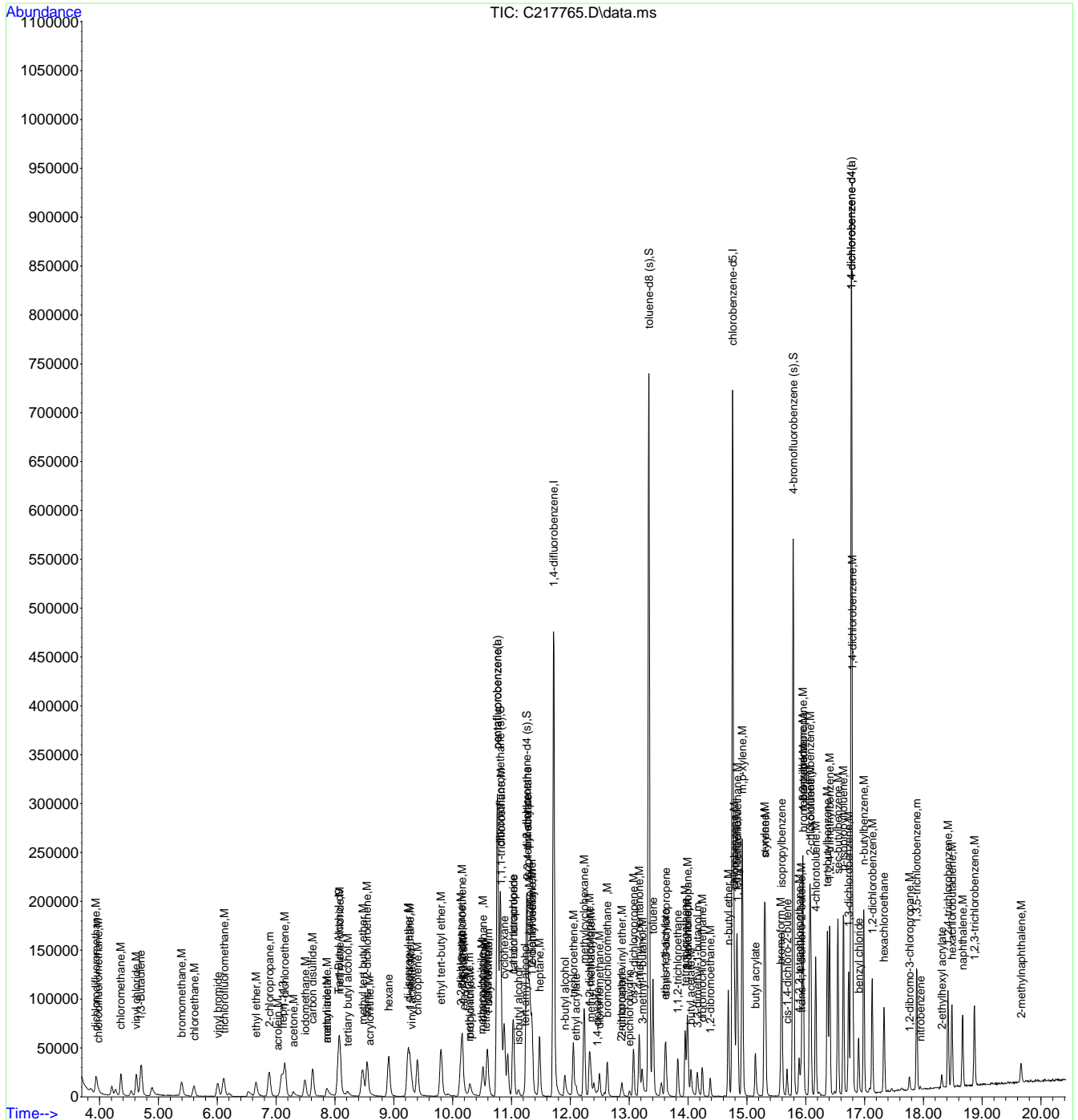
7.7.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217765.D
 Acq On : 28 Apr 2017 7:55 pm
 Operator : Sushilay
 Sample : IC8031-8
 Misc : MS14914,VC8031,5.0,,,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 01 09:29:39 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:29:22 2017
 Response via : Initial Calibration



7.7.6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217766.D
 Acq On : 28 Apr 2017 8:24 pm
 Operator : SushilaY
 Sample : IC8031-20
 Misc : MS14914,VC8031,5.0,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 01 09:32:48 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:43:38 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.061	65	93892	500.00	ug/L	0.00
5) pentafluorobenzene	10.764	168	274759	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.715	114	456477	50.00	ug/L	0.00
75) chlorobenzene-d5	14.758	117	409395	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.776	152	226632	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.764	168	274759	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.776	152	226632	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.811	113	131858	49.53	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.06%
54) 1,2-dichloroethane-d4 (s)	11.255	65	124465	50.30	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	100.60%
76) toluene-d8 (s)	13.331	98	553261	50.53	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	101.06%
100) 4-bromofluorobenzene (s)	15.788	174	159608	49.52	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.04%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	8.207	59	24413	106.22	ug/L	88
4) 1,4-dioxane	12.458	88	8854	575.95	ug/L	93
6) chlorodifluoromethane	3.978	51	14192	19.66	ug/L	98
7) dichlorodifluoromethane	3.941	85	78939	20.44	ug/L	99
8) chloromethane	4.359	50	73440	19.75	ug/L	99
9) vinyl chloride	4.621	62	84556	19.95	ug/L	97
10) 1,3-Butadiene	4.704	54	56778	20.29	ug/L	98
11) bromomethane	5.394	94	39343	20.51	ug/L	94
12) chloroethane	5.604	64	43313	21.44	ug/L	98
13) vinyl bromide	6.006	106	44944	20.65	ug/L	95
14) trichlorofluoromethane	6.105	101	75880	20.51	ug/L	93
15) ethyl ether	6.654	74	24316	20.30	ug/L	93
16) 2-chloropropane	6.879	43	84355	21.21	ug/L	99
17) acrolein	7.020	56	5456	18.46	ug/L	89
18) freon 113	7.104	151	37631	20.60	ug/L	92
19) 1,1-dichloroethene	7.151	61	76840	19.73	ug/L	98
20) acetone	7.271	43	36008	84.04	ug/L	94
21) acetonitrile	7.846	41	32234	192.54	ug/L	95
22) iodomethane	7.491	142	77374	20.00	ug/L	99
23) carbon disulfide	7.622	76	151353	19.39	ug/L	98
24) methylene chloride	8.082	84	51646	19.21	ug/L	97
25) methyl acetate	7.852	43	18532	20.58	ug/L	91
26) methyl tert butyl ether	8.469	73	128272	20.42	ug/L	98
27) trans-1,2-dichloroethene	8.542	61	74735	20.19	ug/L	97
28) hexane	8.913	57	77705	19.06	ug/L	92
29) di-isopropyl ether	9.242	45	164704	20.41	ug/L	98
30) ethyl tert-butyl ether	9.802	59	164175	20.32	ug/L	96
31) 1,1-dichloroethane	9.279	63	96306	20.78	ug/L	98
32) chloroprene	9.399	53	81378	20.51	ug/L	98
33) acrylonitrile	8.573	53	7732	19.34	ug/L	90
34) vinyl acetate	9.295	86	6067	19.41	ug/L	78
35) 2-butanone	10.152	72	14352	87.60	ug/L	# 88
36) ethyl acetate	10.183	45	4518	23.47	ug/L	# 3
37) 2,2-dichloropropane	10.136	77	75261	20.76	ug/L	98
38) cis-1,2-dichloroethene	10.162	96	58008	18.76	ug/L	94
39) methyl acrylate	10.267	85	3876	21.86	ug/L	85
40) propionitrile	10.288	54	41103	205.90	ug/L	95
41) bromochloromethane	10.513	128	23397	20.63	ug/L	93
42) tetrahydrofuran	10.560	42	12728	19.64	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217766.D
 Acq On : 28 Apr 2017 8:24 pm
 Operator : SushilaY
 Sample : IC8031-20
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 01 09:32:48 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:43:38 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) chloroform	10.586	83	90653	18.46	ug/L	98
44) t-butyl formate	10.607	59	25028	24.05	ug/L	97
46) methacrylonitrile	10.481	67	13378	24.32	ug/L	91
47) cyclohexane	10.873	84	92097	19.56	ug/L	98
48) 1,1,1-trichloroethane	10.826	97	82539	20.33	ug/L	98
49) 1,1-dichloropropene	11.025	75	72488	20.41	ug/L	98
50) carbon tetrachloride	11.035	117	70205	20.50	ug/L	98
51) tert-amyl alcohol	11.224	73	9661	78.63	ug/L	97
52) isobutyl alcohol	11.114	43	14428	156.05	ug/L	98
55) isopropyl acetate	11.271	87	6810	15.22	ug/L #	75
56) 2,2,4-trimethylpentane	11.276	57	245302	20.29	ug/L	99
57) tert-amyl methyl ether	11.339	73	152994	18.66	ug/L	98
58) benzene	11.307	78	211147	20.13	ug/L	100
59) heptane	11.475	57	42958	22.44	ug/L	97
60) 1,2-dichloroethane	11.354	62	55155	21.25	ug/L	98
61) n-butyl alcohol	11.898	56	50056	1326.31	ug/L	93
62) ethyl acrylate	12.086	55	33906	18.25	ug/L	98
63) trichloroethene	12.044	95	52541	19.01	ug/L	94
64) 2-chloroethyl vinyl ether	12.871	63	13952	106.91	ug/L	96
65) 2-nitropropane	12.865	41	8369	21.33	ug/L	98
66) methylcyclohexane	12.233	83	105114	20.07	ug/L	99
67) methyl methacrylate	12.348	100	8825	21.65	ug/L #	85
68) 1,2-dichloropropane	12.327	63	49139	21.63	ug/L	95
69) dibromomethane	12.489	93	24125	21.03	ug/L	94
70) bromodichloromethane	12.625	83	65199	20.67	ug/L	97
71) epichlorohydrin	13.001	57	15691	105.04	ug/L	97
72) cis-1,3-dichloropropene	13.074	75	80937	21.16	ug/L	99
73) 4-methyl-2-pentanone	13.169	58	53536	86.71	ug/L	98
74) 3-methyl-1-butanol	13.216	55	35168	291.93	ug/L	87
77) toluene	13.404	92	130360	19.93	ug/L	100
78) ethyl methacrylate	13.602	69	49281	19.24	ug/L	98
79) trans-1,3-dichloropropene	13.623	75	66699	21.85	ug/L	99
80) 1,1,2-trichloroethane	13.827	83	28696	20.09	ug/L	99
81) 2-hexanone	13.984	58	46086	79.83	ug/L	97
82) tetrachloroethene	13.953	166	51149	17.92	ug/L	99
83) 1,3-dichloropropane	13.995	76	61985	20.58	ug/L	99
84) butyl acetate	14.047	56	24011	15.38	ug/L	92
85) 3,3-dimethyl-1-butanol	14.151	57	37418	211.08	ug/L	93
86) dibromochloromethane	14.240	129	43484	21.43	ug/L	98
87) 1,2-dibromoethane	14.376	107	34274	20.61	ug/L	99
88) n-butyl ether	14.685	57	226675	20.01	ug/L	99
89) chlorobenzene	14.784	112	143694	20.65	ug/L	97
90) 1,1,1,2-tetrachloroethane	14.847	131	53529	22.34	ug/L	98
91) ethylbenzene	14.826	91	250320	20.23	ug/L	98
92) m,p-xylene	14.920	106	200249	40.69	ug/L	98
93) o-xylene	15.296	91	214404	19.94	ug/L	97
94) styrene	15.312	104	164530	20.36	ug/L	98
95) butyl acrylate	15.139	55	81927	21.56	ug/L	99
96) bromoform	15.573	173	25880	21.93	ug/L	95
97) isopropylbenzene	15.594	105	276114	20.25	ug/L	100
98) cis-1,4-dichloro-2-butene	15.683	75	17772	19.95	ug/L	98
101) bromobenzene	15.960	156	60425	20.68	ug/L	98
102) 1,1,2,2-tetrachloroethane	15.887	83	47422	19.50	ug/L	97
103) trans-1,4-dichloro-2-b...	15.918	53	14966	20.88	ug/L	97
104) 1,2,3-trichloropropane	15.950	110	13344	20.89	ug/L	94
105) n-propylbenzene	15.945	91	328296	19.75	ug/L	99
106) 2-chlorotoluene	16.086	126	64376	20.36	ug/L	98
107) 4-chlorotoluene	16.169	91	194699	19.21	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217766.D
 Acq On : 28 Apr 2017 8:24 pm
 Operator : SushilaY
 Sample : IC8031-20
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 01 09:32:48 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:43:38 2017
 Response via : Initial Calibration

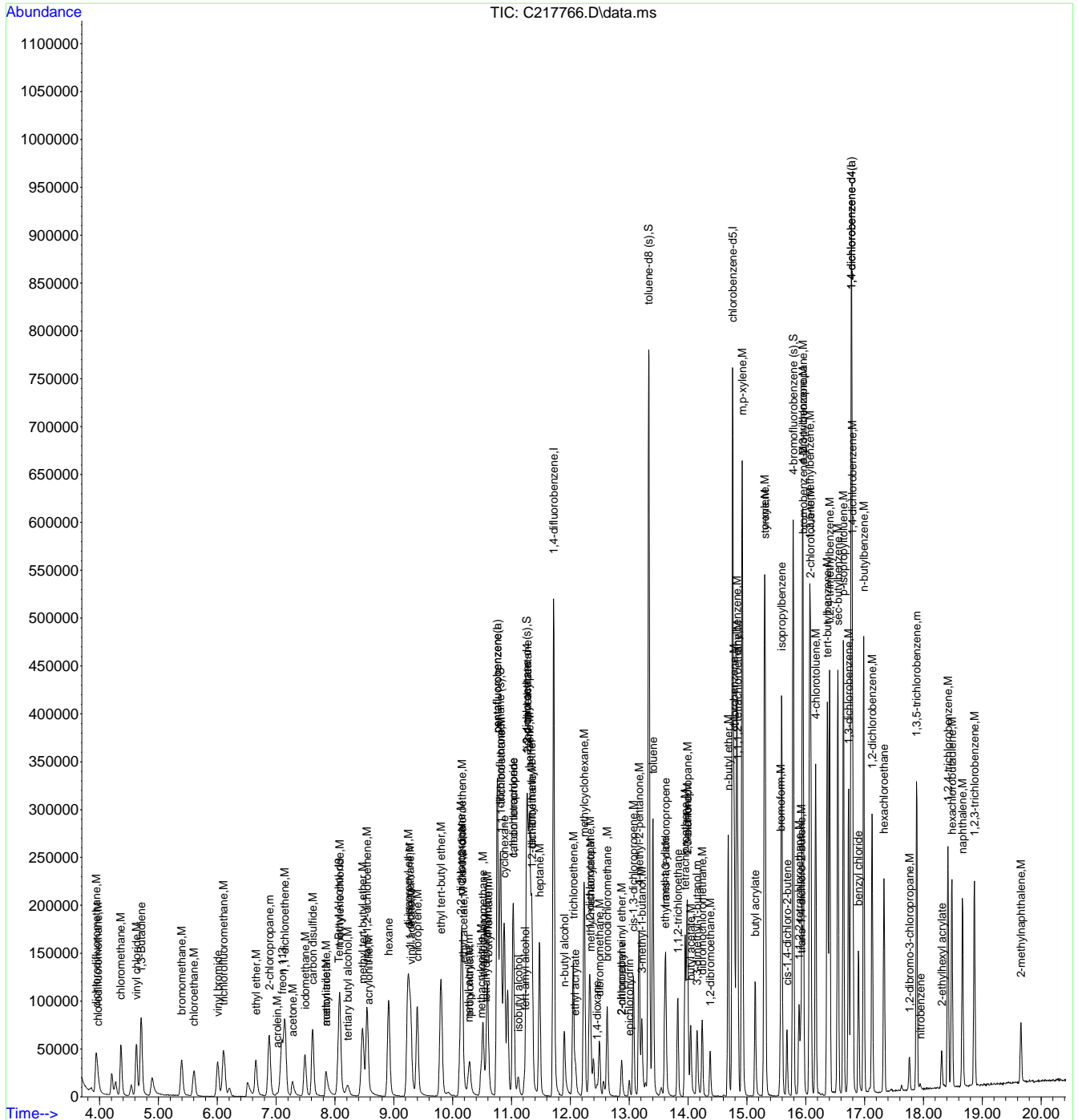
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,3,5-trimethylbenzene	16.065	105	236809	19.55	ug/L	99
109) tert-butylbenzene	16.368	119	210710	19.64	ug/L	99
110) 1,2,4-trimethylbenzene	16.405	105	239306	19.22	ug/L	98
111) sec-butylbenzene	16.546	105	315407	20.03	ug/L	100
112) 1,3-dichlorobenzene	16.729	146	123730	19.63	ug/L	99
113) p-isopropyltoluene	16.640	119	266132	19.90	ug/L	98
114) 1,4-dichlorobenzene	16.797	146	121909	19.28	ug/L	99
115) benzyl chloride	16.896	91	105137	19.09	ug/L	100
116) 1,2-dichlorobenzene	17.131	146	114656	19.39	ug/L	97
117) n-butylbenzene	16.985	92	143327	20.56	ug/L	96
118) hexachloroethane	17.335	201	37173	21.93	ug/L	98
119) 1,2-dibromo-3-chloropr...	17.764	157	10015	22.37	ug/L	98
120) 1,3,5-trichlorobenzene	17.884	180	98666	20.23	ug/L	95
121) nitrobenzene	17.942	77	3782	16.76	ug/L	89
122) 2-ethylhexyl acrylate	18.308	70	11096	3.93	ug/L	99
123) 1,2,4-trichlorobenzene	18.417	180	78051	20.26	ug/L	99
124) hexachlorobutadiene	18.485	225	45942	20.93	ug/L	98
125) naphthalene	18.663	128	156750	20.36	ug/L	100
126) 1,2,3-trichlorobenzene	18.867	180	68900	20.36	ug/L	95
127) 2-methylnaphthalene	19.656	142	34405	11.68	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217766.D
 Acq On : 28 Apr 2017 8:24 pm
 Operator : Sushilay
 Sample : IC8031-20
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 01 09:32:48 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:43:38 2017
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217767.D
 Acq On : 28 Apr 2017 8:53 pm
 Operator : SushilaY
 Sample : ICC8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 01 09:35:20 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:35:01 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.065	65	102603	500.00	ug/L	0.00
5) pentafluorobenzene	10.757	168	277184	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.714	114	466339	50.00	ug/L	0.00
75) chlorobenzene-d5	14.756	117	413569	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.774	152	226684	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.757	168	277184	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.774	152	226684	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.809	113	134009	49.90	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.80%
54) 1,2-dichloroethane-d4 (s)	11.254	65	125743	49.75	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	99.50%
76) toluene-d8 (s)	13.334	98	568502	51.40	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	102.80%
100) 4-bromofluorobenzene (s)	15.786	174	160902	49.91	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.82%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	8.216	59	63431	252.55	ug/L	99
4) 1,4-dioxane	12.456	88	22730	1353.05	ug/L	100
6) chlorodifluoromethane	3.971	51	40965	56.24	ug/L	99
7) dichlorodifluoromethane	3.940	85	192792	49.49	ug/L	100
8) chloromethane	4.363	50	183071	48.80	ug/L	100
9) vinyl chloride	4.625	62	207532	48.55	ug/L	100
10) 1,3-Butadiene	4.708	54	141091	48.66	ug/L	100
11) bromomethane	5.393	94	95549	49.37	ug/L	100
12) chloroethane	5.607	64	103577	50.82	ug/L	100
13) vinyl bromide	6.010	106	107862	49.11	ug/L	100
14) trichlorofluoromethane	6.109	101	194454	52.09	ug/L	100
15) ethyl ether	6.653	74	68973	57.08	ug/L	100
16) 2-chloropropane	6.878	43	207976	51.85	ug/L	100
17) acrolein	6.998	56	17367	58.24	ug/L	100
18) freon 113	7.097	151	95082	51.61	ug/L	100
19) 1,1-dichloroethene	7.144	61	193982	49.38	ug/L	100
20) acetone	7.270	43	98237	227.27	ug/L	100
21) acetonitrile	7.835	41	87966	520.83	ug/L	100
22) iodomethane	7.489	142	195002	49.96	ug/L	100
23) carbon disulfide	7.615	76	394729	50.14	ug/L	100
24) methylene chloride	8.080	84	131775	48.58	ug/L	100
25) methyl acetate	7.840	43	54430	59.91	ug/L	100
26) methyl tert butyl ether	8.467	73	329787	52.05	ug/L	100
27) trans-1,2-dichloroethene	8.540	61	197726	52.96	ug/L	100
28) hexane	8.912	57	190354	46.27	ug/L	100
29) di-isopropyl ether	9.236	45	420627	51.66	ug/L	100
30) ethyl tert-butyl ether	9.795	59	422662	51.85	ug/L	100
31) 1,1-dichloroethane	9.277	63	242549	51.88	ug/L	100
32) chloroprene	9.392	53	210085	52.49	ug/L	100
33) acrylonitrile	8.556	53	27262	59.27	ug/L	99
34) vinyl acetate	9.288	86	16338	51.81	ug/L	100
35) 2-butanone	10.145	72	42010	254.16	ug/L	99
36) ethyl acetate	10.166	45	10972	56.50	ug/L	100
37) 2,2-dichloropropane	10.130	77	184370	50.41	ug/L	100
38) cis-1,2-dichloroethene	10.156	96	147153	47.17	ug/L	100
39) methyl acrylate	10.255	85	11801	65.98	ug/L	100
40) propionitrile	10.281	54	115092	571.48	ug/L	100
41) bromochloromethane	10.511	128	60977	53.29	ug/L	100
42) tetrahydrofuran	10.548	42	29923	54.16	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217767.D
 Acq On : 28 Apr 2017 8:53 pm
 Operator : SushilaY
 Sample : ICC8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 01 09:35:20 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:35:01 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) chloroform	10.584	83	232928	47.03	ug/L	100
44) t-butyl formate	10.605	59	79177	61.07	ug/L	100
46) methacrylonitrile	10.475	67	34595	56.78	ug/L	100
47) cyclohexane	10.877	84	228946	48.21	ug/L	100
48) 1,1,1-trichloroethane	10.825	97	204259	49.88	ug/L	100
49) 1,1-dichloropropene	11.024	75	182170	50.86	ug/L	100
50) carbon tetrachloride	11.034	117	179723	52.03	ug/L	100
51) tert-amyl alcohol	11.222	73	26535	244.83	ug/L	100
52) isobutyl alcohol	11.107	43	39593	526.02	ug/L	100
55) isopropyl acetate	11.264	87	19631	54.97	ug/L	100
56) 2,2,4-trimethylpentane	11.280	57	618533	50.08	ug/L	100
57) tert-amyl methyl ether	11.337	73	402883	50.96	ug/L	100
58) benzene	11.306	78	535542	49.97	ug/L	100
59) heptane	11.473	57	104998	50.19	ug/L	100
60) 1,2-dichloroethane	11.348	62	145497	51.67	ug/L	100
61) n-butyl alcohol	11.891	56	144039	2991.40	ug/L	100
62) ethyl acrylate	12.085	55	94853	57.12	ug/L	100
63) trichloroethene	12.048	95	130994	49.02	ug/L	100
64) 2-chloroethyl vinyl ether	12.869	63	38552	272.58	ug/L	100
65) 2-nitropropane	12.859	41	21957	49.84	ug/L	100
66) methylcyclohexane	12.237	83	269885	50.44	ug/L	100
67) methyl methacrylate	12.341	100	23590	56.64	ug/L	100
68) 1,2-dichloropropane	12.325	63	128258	51.39	ug/L	100
69) dibromomethane	12.493	93	61971	52.88	ug/L	100
70) bromodichloromethane	12.623	83	166328	51.60	ug/L	100
71) epichlorohydrin	12.995	57	41631	272.81	ug/L	100
72) cis-1,3-dichloropropene	13.068	75	206208	52.76	ug/L	100
73) 4-methyl-2-pentanone	13.167	58	143105	210.21	ug/L	100
74) 3-methyl-1-butanol	13.209	55	100247	1177.22	ug/L	100
77) toluene	13.402	92	328076	49.65	ug/L	100
78) ethyl methacrylate	13.601	69	128006	53.00	ug/L	100
79) trans-1,3-dichloropropene	13.622	75	169763	55.06	ug/L	100
80) 1,1,2-trichloroethane	13.826	83	75598	52.40	ug/L	100
81) 2-hexanone	13.977	58	125968	204.79	ug/L	100
82) tetrachloroethene	13.951	166	129360	48.98	ug/L	100
83) 1,3-dichloropropane	13.993	76	157693	51.82	ug/L	100
84) butyl acetate	14.045	56	60116	52.73	ug/L	100
85) 3,3-dimethyl-1-butanol	14.150	57	107730	568.65	ug/L	100
86) dibromochloromethane	14.239	129	112361	54.81	ug/L	100
87) 1,2-dibromoethane	14.375	107	89669	53.39	ug/L	100
88) n-butyl ether	14.683	57	566184	49.48	ug/L	100
89) chlorobenzene	14.788	112	359549	51.16	ug/L	100
90) 1,1,1,2-tetrachloroethane	14.845	131	134701	51.79	ug/L	100
91) ethylbenzene	14.824	91	629599	50.37	ug/L	100
92) m,p-xylene	14.918	106	502644	101.09	ug/L	100
93) o-xylene	15.295	91	540128	49.74	ug/L	100
94) styrene	15.311	104	419716	51.41	ug/L	100
95) butyl acrylate	15.138	55	207961	54.18	ug/L	100
96) bromoform	15.572	173	67948	53.59	ug/L	100
97) isopropylbenzene	15.593	105	696122	50.54	ug/L	100
98) cis-1,4-dichloro-2-butene	15.682	75	44852	49.84	ug/L	100
101) bromobenzene	15.959	156	150839	51.61	ug/L	100
102) 1,1,2,2-tetrachloroethane	15.886	83	127551	52.43	ug/L	100
103) trans-1,4-dichloro-2-b...	15.917	53	38473	53.67	ug/L	100
104) 1,2,3-trichloropropane	15.948	110	33834	52.95	ug/L	100
105) n-propylbenzene	15.943	91	817648	49.18	ug/L	100
106) 2-chlorotoluene	16.084	126	158150	50.02	ug/L	100
107) 4-chlorotoluene	16.168	91	481324	47.48	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217767.D
 Acq On : 28 Apr 2017 8:53 pm
 Operator : SushilaY
 Sample : ICC8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 01 09:35:20 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:35:01 2017
 Response via : Initial Calibration

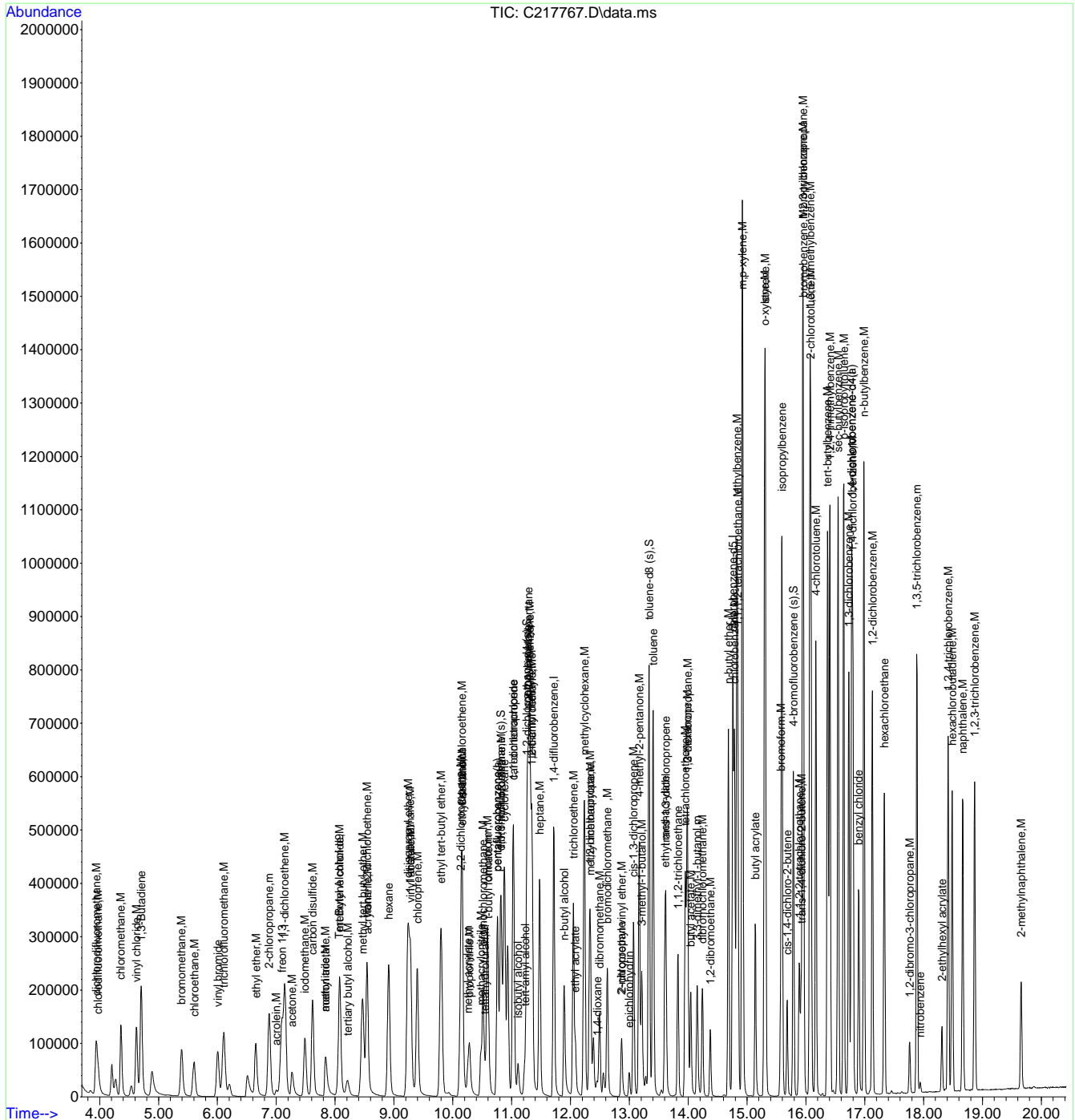
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,3,5-trimethylbenzene	16.069	105	600422	49.56	ug/L	100
109) tert-butylbenzene	16.367	119	546377	50.93	ug/L	100
110) 1,2,4-trimethylbenzene	16.408	105	607274	48.76	ug/L	100
111) sec-butylbenzene	16.544	105	796238	50.55	ug/L	100
112) 1,3-dichlorobenzene	16.727	146	311184	49.35	ug/L	100
113) p-isopropyltoluene	16.638	119	679384	50.79	ug/L	100
114) 1,4-dichlorobenzene	16.795	146	304959	48.23	ug/L	100
115) benzyl chloride	16.895	91	275608	50.04	ug/L	100
116) 1,2-dichlorobenzene	17.130	146	294551	49.80	ug/L	100
117) n-butylbenzene	16.984	92	360503	51.70	ug/L	100
118) hexachloroethane	17.334	201	96694	52.70	ug/L	100
119) 1,2-dibromo-3-chloropr...	17.763	157	26769	57.77	ug/L	100
120) 1,3,5-trichlorobenzene	17.888	180	254593	52.18	ug/L	100
121) nitrobenzene	17.940	77	10981	55.97	ug/L	100
122) 2-ethylhexyl acrylate	18.311	70	33653	9.24	ug/L	100
123) 1,2,4-trichlorobenzene	18.416	180	203903	52.92	ug/L	100
124) hexachlorobutadiene	18.484	225	116296	52.97	ug/L	100
125) naphthalene	18.667	128	435005	56.48	ug/L	100
126) 1,2,3-trichlorobenzene	18.866	180	181479	53.61	ug/L	100
127) 2-methylnaphthalene	19.655	142	112147	25.86	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
Data File : C217767.D
Acq On : 28 Apr 2017 8:53 pm
Operator : Sushilay
Sample : ICC8031-50
Misc : MS14914,VC8031,5.0,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 01 09:35:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 01 09:35:01 2017
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217768.D
 Acq On : 28 Apr 2017 9:22 pm
 Operator : SushilaY
 Sample : IC8031-100
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 01 09:36:25 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.064	65	92956	500.00	ug/L	0.00
5) pentafluorobenzene	10.757	168	296919	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.713	114	497791	50.00	ug/L	0.00
75) chlorobenzene-d5	14.756	117	433719	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.779	152	236710	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.757	168	296919	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.779	152	236710	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) dibromofluoromethane (s)	10.809	113	138154	47.65	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	95.30%
54) 1,2-dichloroethane-d4 (s)	11.253	65	128170	49.25	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	98.50%
76) toluene-d8 (s)	13.334	98	603398	52.66	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	105.32%
100) 4-bromofluorobenzene (s)	15.786	174	168777	49.60	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) tertiary butyl alcohol	8.211	59	106632	452.72	ug/L	97
4) 1,4-dioxane	12.450	88	40898	2399.15	ug/L	96
6) chlorodifluoromethane	3.976	51	81864	97.72	ug/L	89
7) dichlorodifluoromethane	3.939	85	388570	91.67	ug/L	98
8) chloromethane	4.363	50	371498	72.13	ug/L	99
9) vinyl chloride	4.624	62	419745	77.92	ug/L	99
10) 1,3-Butadiene	4.703	54	290933	144.62	ug/L	98
11) bromomethane	5.393	94	195652	77.03	ug/L	96
12) chloroethane	5.602	64	211877	77.14	ug/L	98
13) vinyl bromide	6.004	106	223259	68.58	ug/L	95
14) trichlorofluoromethane	6.104	101	397463	92.33	ug/L	99
15) ethyl ether	6.653	74	133333	84.49	ug/L	97
16) 2-chloropropane	6.877	43	414221	64.88	ug/L	98
17) acrolein	6.992	56	35020	114.76	ug/L	90
18) freon 113	7.097	151	188652	79.73	ug/L	93
19) 1,1-dichloroethene	7.149	61	391169	73.72	ug/L	97
20) acetone	7.264	43	164267	336.99	ug/L	100
21) acetonitrile	7.834	41	176907	640.52	ug/L #	47
22) iodomethane	7.489	142	403066	81.09	ug/L	99
23) carbon disulfide	7.615	76	780314	68.60	ug/L	99
24) methylene chloride	8.080	84	263865	72.36	ug/L	99
25) methyl acetate	7.839	43	99855	88.96	ug/L	99
26) methyl tert butyl ether	8.461	73	627068	72.42	ug/L	94
27) trans-1,2-dichloroethene	8.540	61	397220	77.82	ug/L	98
28) hexane	8.911	57	392304	75.63	ug/L	97
29) di-isopropyl ether	9.235	45	857356	81.35	ug/L	99
30) ethyl tert-butyl ether	9.800	59	859931	85.02	ug/L	99
31) 1,1-dichloroethane	9.272	63	490784	76.18	ug/L	97
32) chloroprene	9.392	53	433535	85.32	ug/L	99
33) acrylonitrile	8.550	53	48786	87.24	ug/L	98
34) vinyl acetate	9.287	86	35511	92.57	ug/L	94
35) 2-butanone	10.145	72	73759	383.35	ug/L #	79
36) ethyl acetate	10.171	45	20529	85.16	ug/L	38
37) 2,2-dichloropropane	10.134	77	371692	76.99	ug/L	98
38) cis-1,2-dichloroethene	10.155	96	301594	75.91	ug/L	99
39) methyl acrylate	10.255	85	22283	107.20	ug/L	81
40) propionitrile	10.281	54	217867	875.22	ug/L	93
41) bromochloromethane	10.516	128	118673	88.86	ug/L	97
42) tetrahydrofuran	10.547	42	55286	76.30	ug/L	91

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217768.D
 Acq On : 28 Apr 2017 9:22 pm
 Operator : SushilaY
 Sample : IC8031-100
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 01 09:36:25 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) chloroform	10.584	83	472829	83.21	ug/L	99
44) t-butyl formate	10.600	59	149982	92.46	ug/L	98
46) methacrylonitrile	10.469	67	68119	94.23	ug/L	99
47) cyclohexane	10.877	84	467197	81.84	ug/L	98
48) 1,1,1-trichloroethane	10.825	97	408766	83.44	ug/L	99
49) 1,1-dichloropropene	11.023	75	373518	79.57	ug/L	98
50) carbon tetrachloride	11.034	117	353768	84.89	ug/L	96
51) tert-amyl alcohol	11.222	73	47937	376.02	ug/L	88
52) isobutyl alcohol	11.112	43	72037	828.78	ug/L	98
55) isopropyl acetate	11.264	87	38784	99.70	ug/L #	80
56) 2,2,4-trimethylpentane	11.279	57	1242905	74.53	ug/L	99
57) tert-amyl methyl ether	11.337	73	782960	81.00	ug/L	99
58) benzene	11.306	78	1104366	80.13	ug/L	99
59) heptane	11.473	57	213917	74.81	ug/L	98
60) 1,2-dichloroethane	11.353	62	293176	92.04	ug/L	99
61) n-butyl alcohol	11.891	56	258763	4488.07	ug/L	98
62) ethyl acrylate	12.079	55	186700	96.69	ug/L	99
63) trichloroethene	12.048	95	269979	84.01	ug/L	99
64) 2-chloroethyl vinyl ether	12.869	63	75878	213.48	ug/L	95
65) 2-nitropropane	12.863	41	41928	83.65	ug/L	93
66) methylcyclohexane	12.236	83	531283	76.41	ug/L	96
67) methyl methacrylate	12.341	100	46474	100.52	ug/L #	78
68) 1,2-dichloropropane	12.325	63	263400	83.60	ug/L	96
69) dibromomethane	12.492	93	124697	89.34	ug/L	95
70) bromodichloromethane	12.623	83	341073	96.72	ug/L	98
71) epichlorohydrin	12.994	57	79901	474.04	ug/L	98
72) cis-1,3-dichloropropene	13.067	75	423824	90.17	ug/L	97
73) 4-methyl-2-pentanone	13.167	58	272361	371.75	ug/L	98
74) 3-methyl-1-butanol	13.209	55	168263	1887.77	ug/L	92
77) toluene	13.402	92	684732	85.26	ug/L	100
78) ethyl methacrylate	13.601	69	250571	91.99	ug/L	99
79) trans-1,3-dichloropropene	13.622	75	340873	95.40	ug/L	99
80) 1,1,2-trichloroethane	13.825	83	150171	93.16	ug/L	99
81) 2-hexanone	13.977	58	231548	335.52	ug/L	99
82) tetrachloroethene	13.951	166	267547	89.51	ug/L	99
83) 1,3-dichloropropane	13.993	76	319865	91.07	ug/L	98
84) butyl acetate	14.040	56	113731	80.83	ug/L	97
85) 3,3-dimethyl-1-butanol	14.150	57	194832	968.37	ug/L	97
86) dibromochloromethane	14.238	129	228603	105.56	ug/L	98
87) 1,2-dibromoethane	14.374	107	177195	93.88	ug/L	100
88) n-butyl ether	14.683	57	1161274	81.93	ug/L	98
89) chlorobenzene	14.787	112	736303	86.72	ug/L	99
90) 1,1,1,2-tetrachloroethane	14.845	131	277752	100.64	ug/L	99
91) ethylbenzene	14.824	91	1298550	83.20	ug/L	99
92) m,p-xylene	14.918	106	1036698	171.32	ug/L	99
93) o-xylene	15.294	91	1115141	88.25	ug/L	98
94) styrene	15.310	104	859815	91.96	ug/L	99
95) butyl acrylate	15.138	55	396737	98.26	ug/L	99
96) bromoform	15.572	173	134331	103.17	ug/L	100
97) isopropylbenzene	15.592	105	1435800	88.26	ug/L	100
98) cis-1,4-dichloro-2-butene	15.681	75	85137	101.26	ug/L	97
101) bromobenzene	15.958	156	301152	81.01	ug/L	97
102) 1,1,2,2-tetrachloroethane	15.885	83	241773	83.28	ug/L	99
103) trans-1,4-dichloro-2-b...	15.917	53	72496	84.65	ug/L	99
104) 1,2,3-trichloropropane	15.948	110	66274	90.56	ug/L	93
105) n-propylbenzene	15.943	91	1675142	78.18	ug/L	100
106) 2-chlorotoluene	16.084	126	327017	81.73	ug/L	98
107) 4-chlorotoluene	16.168	91	982378	76.71	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217768.D
 Acq On : 28 Apr 2017 9:22 pm
 Operator : SushilaY
 Sample : IC8031-100
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 01 09:36:25 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

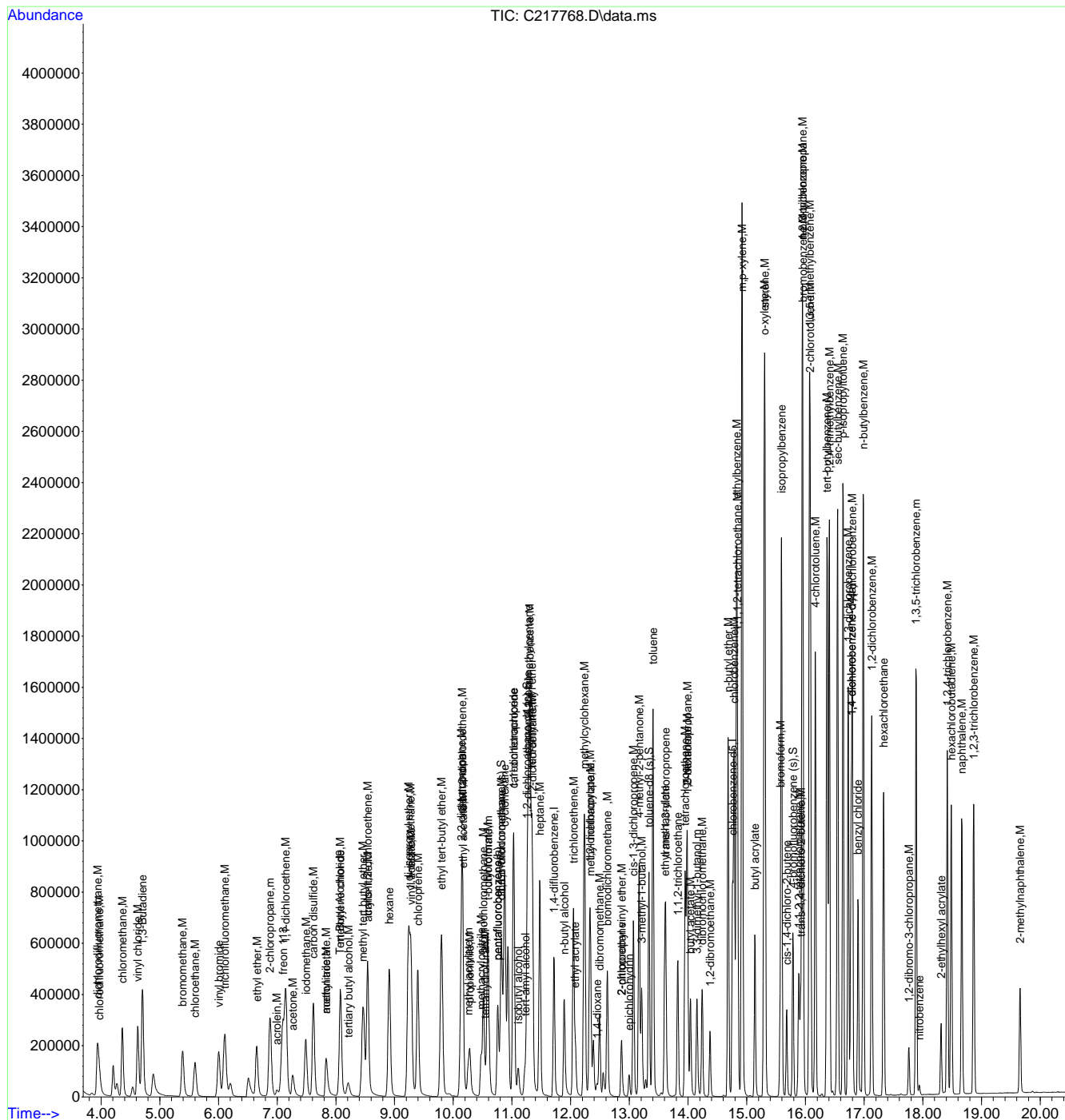
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,3,5-trimethylbenzene	16.068	105	1243192	84.03	ug/L	100
109) tert-butylbenzene	16.366	119	1132008	88.05	ug/L	100
110) 1,2,4-trimethylbenzene	16.408	105	1246276	84.62	ug/L	98
111) sec-butylbenzene	16.549	105	1636818	82.50	ug/L	99
112) 1,3-dichlorobenzene	16.727	146	628313	80.93	ug/L	98
113) p-isopropyltoluene	16.638	119	1391014	83.82	ug/L	99
114) 1,4-dichlorobenzene	16.800	146	615587	81.18	ug/L	98
115) benzyl chloride	16.894	91	531543	97.07	ug/L	99
116) 1,2-dichlorobenzene	17.130	146	591541	86.06	ug/L	99
117) n-butylbenzene	16.983	92	728729	83.77	ug/L	100
118) hexachloroethane	17.333	201	203469	103.82	ug/L	99
119) 1,2-dibromo-3-chloropr...	17.762	157	50811	99.55	ug/L	93
120) 1,3,5-trichlorobenzene	17.888	180	513835	86.91	ug/L	98
121) nitrobenzene	17.940	77	19908	102.86	ug/L	98
122) 2-ethylhexyl acrylate	18.311	70	76382	33.53	ug/L	98
123) 1,2,4-trichlorobenzene	18.416	180	411438	89.67	ug/L	99
124) hexachlorobutadiene	18.484	225	236110	86.10	ug/L	99
125) naphthalene	18.661	128	851773	101.94	ug/L	99
126) 1,2,3-trichlorobenzene	18.865	180	363463	90.41	ug/L	99
127) 2-methylnaphthalene	19.655	142	225902	63.91	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217768.D
 Acq On : 28 Apr 2017 9:22 pm
 Operator : Sushilay
 Sample : IC8031-100
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 01 09:36:25 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration



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7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217769.D
 Acq On : 28 Apr 2017 9:51 pm
 Operator : SushilaY
 Sample : IC8031-200
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 01 09:36:47 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.070	65	96749	500.00	ug/L	0.00
5) pentafluorobenzene	10.762	168	318218	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.713	114	549614	50.00	ug/L	0.00
75) chlorobenzene-d5	14.756	117	480053	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.779	152	259678	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.762	168	318218	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.779	152	259678	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.809	113	147557	47.49	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	94.98%
54) 1,2-dichloroethane-d4 (s)	11.253	65	137350	47.80	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	95.60%
76) toluene-d8 (s)	13.334	98	658603	51.93	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	103.86%
100) 4-bromofluorobenzene (s)	15.786	174	185740	49.76	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.52%

Target Compounds

						Qvalue
3) tertiary butyl alcohol	8.211	59	231404	943.94	ug/L	98
4) 1,4-dioxane	12.445	88	91471	5155.48	ug/L	97
6) chlorodifluoromethane	3.976	51	211615	235.69	ug/L	93
7) dichlorodifluoromethane	3.939	85	811844	178.71	ug/L	98
8) chloromethane	4.363	50	789861	143.09	ug/L	99
9) vinyl chloride	4.624	62	888009	153.82	ug/L	99
10) 1,3-Butadiene	4.703	54	603335	279.84	ug/L	96
11) bromomethane	5.377	94	424425	155.91	ug/L	98
12) chloroethane	5.597	64	460484	156.43	ug/L	98
13) vinyl bromide	5.999	106	485672	139.20	ug/L	98
14) trichlorofluoromethane	6.104	101	867499	188.04	ug/L	97
15) ethyl ether	6.648	74	291131	172.13	ug/L	97
16) 2-chloropropane	6.878	43	864423	126.33	ug/L	98
17) acrolein	6.993	56	73848	225.81	ug/L	96
18) freon 113	7.097	151	402039	158.54	ug/L	95
19) 1,1-dichloroethene	7.144	61	838207	147.39	ug/L	98
20) acetone	7.259	43	383708	734.49	ug/L	99
21) acetonitrile	7.829	41	392273	1325.22	ug/L #	49
22) iodomethane	7.484	142	851810	159.89	ug/L	98
23) carbon disulfide	7.615	76	1685559	138.27	ug/L	99
24) methylene chloride	8.075	84	570500	145.97	ug/L	99
25) methyl acetate	7.834	43	225122	187.13	ug/L	100
26) methyl tert butyl ether	8.467	73	1382176	148.94	ug/L	93
27) trans-1,2-dichloroethene	8.540	61	829690	151.67	ug/L	96
28) hexane	8.906	57	839124	150.94	ug/L	98
29) di-isopropyl ether	9.235	45	1882772	166.68	ug/L	99
30) ethyl tert-butyl ether	9.800	59	1854939	171.11	ug/L	100
31) 1,1-dichloroethane	9.272	63	1048834	151.91	ug/L	98
32) chloroprene	9.392	53	919508	168.84	ug/L	98
33) acrylonitrile	8.540	53	110449	184.29	ug/L	96
34) vinyl acetate	9.282	86	81377	197.93	ug/L	76
35) 2-butanone	10.135	72	172215	835.16	ug/L #	87
36) ethyl acetate	10.166	45	46889	181.48	ug/L	64
37) 2,2-dichloropropane	10.135	77	740034	143.03	ug/L	99
38) cis-1,2-dichloroethene	10.156	96	655865	154.03	ug/L	99
39) methyl acrylate	10.244	85	51895	232.95	ug/L	95
40) propionitrile	10.281	54	491321	1841.64	ug/L	90
41) bromochloromethane	10.516	128	265399	185.42	ug/L	95
42) tetrahydrofuran	10.548	42	116366	149.84	ug/L	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217769.D
 Acq On : 28 Apr 2017 9:51 pm
 Operator : SushilaY
 Sample : IC8031-200
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 01 09:36:47 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) chloroform	10.584	83	1020500	167.57	ug/L	100
44) t-butyl formate	10.600	59	334019	192.14	ug/L	96
46) methacrylonitrile	10.474	67	154282	199.13	ug/L	95
47) cyclohexane	10.877	84	969101	158.40	ug/L	98
48) 1,1,1-trichloroethane	10.825	97	845859	161.11	ug/L	99
49) 1,1-dichloropropene	11.023	75	814389	161.87	ug/L	98
50) carbon tetrachloride	11.034	117	760297	170.22	ug/L	97
51) tert-amyl alcohol	11.222	73	106850	782.04	ug/L	83
52) isobutyl alcohol	11.107	43	164395	1764.75	ug/L	97
55) isopropyl acetate	11.264	87	87396	203.49	ug/L #	74
56) 2,2,4-trimethylpentane	11.280	57	2667390	144.87	ug/L	100
57) tert-amyl methyl ether	11.337	73	1720648	161.22	ug/L	100
58) benzene	11.306	78	2429104	159.63	ug/L	99
59) heptane	11.473	57	464782	147.21	ug/L	97
60) 1,2-dichloroethane	11.347	62	653552	185.82	ug/L	98
61) n-butyl alcohol	11.891	56	578698	9090.74	ug/L	97
62) ethyl acrylate	12.079	55	429300	201.36	ug/L	98
63) trichloroethene	12.048	95	590265	166.36	ug/L	98
64) 2-chloroethyl vinyl ether	12.869	63	179490	457.38	ug/L	96
65) 2-nitropropane	12.858	41	93230	168.46	ug/L	93
66) methylcyclohexane	12.236	83	1162079	151.37	ug/L	97
67) methyl methacrylate	12.341	100	105166	206.01	ug/L #	85
68) 1,2-dichloropropane	12.325	63	583127	167.63	ug/L	96
69) dibromomethane	12.487	93	272617	176.89	ug/L	97
70) bromodichloromethane	12.623	83	751950	193.13	ug/L	99
71) epichlorohydrin	12.994	57	177528	953.94	ug/L	98
72) cis-1,3-dichloropropene	13.068	75	948434	182.76	ug/L	98
73) 4-methyl-2-pentanone	13.167	58	609645	753.66	ug/L	98
74) 3-methyl-1-butanol	13.209	55	388326	3945.90	ug/L	97
77) toluene	13.402	92	1522716	171.31	ug/L	100
78) ethyl methacrylate	13.601	69	576232	191.13	ug/L	100
79) trans-1,3-dichloropropene	13.616	75	759583	192.07	ug/L	100
80) 1,1,2-trichloroethane	13.826	83	337884	189.39	ug/L	99
81) 2-hexanone	13.977	58	543173	711.10	ug/L	97
82) tetrachloroethene	13.951	166	590867	178.61	ug/L	99
83) 1,3-dichloropropane	13.993	76	711193	182.94	ug/L	98
84) butyl acetate	14.040	56	260422	167.22	ug/L	95
85) 3,3-dimethyl-1-butanol	14.150	57	435798	1956.97	ug/L	96
86) dibromochloromethane	14.239	129	509034	212.36	ug/L	99
87) 1,2-dibromoethane	14.374	107	398708	190.85	ug/L	98
88) n-butyl ether	14.683	57	2628973	167.57	ug/L	99
89) chlorobenzene	14.788	112	1659897	176.64	ug/L	98
90) 1,1,1,2-tetrachloroethane	14.845	131	609571	199.56	ug/L	99
91) ethylbenzene	14.824	91	2908262	168.35	ug/L	99
92) m,p-xylene	14.918	106	2317711	346.05	ug/L	99
93) o-xylene	15.295	91	2495638	178.44	ug/L	98
94) styrene	15.310	104	1963187	189.71	ug/L	98
95) butyl acrylate	15.138	55	913991	204.52	ug/L	99
96) bromoform	15.572	173	305757	212.17	ug/L	98
97) isopropylbenzene	15.593	105	3185410	176.92	ug/L	99
98) cis-1,4-dichloro-2-butene	15.682	75	195808	210.41	ug/L	99
101) bromobenzene	15.959	156	692144	169.72	ug/L	97
102) 1,1,2,2-tetrachloroethane	15.885	83	544838	171.08	ug/L	99
103) trans-1,4-dichloro-2-b...	15.917	53	159848	170.14	ug/L	99
104) 1,2,3-trichloropropane	15.948	110	147415	183.62	ug/L	96
105) n-propylbenzene	15.943	91	3751160	159.58	ug/L	99
106) 2-chlorotoluene	16.084	126	732795	166.94	ug/L	99
107) 4-chlorotoluene	16.168	91	2238579	159.34	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217769.D
 Acq On : 28 Apr 2017 9:51 pm
 Operator : SushilaY
 Sample : IC8031-200
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 01 09:36:47 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 08:28:43 2017
 Response via : Initial Calibration

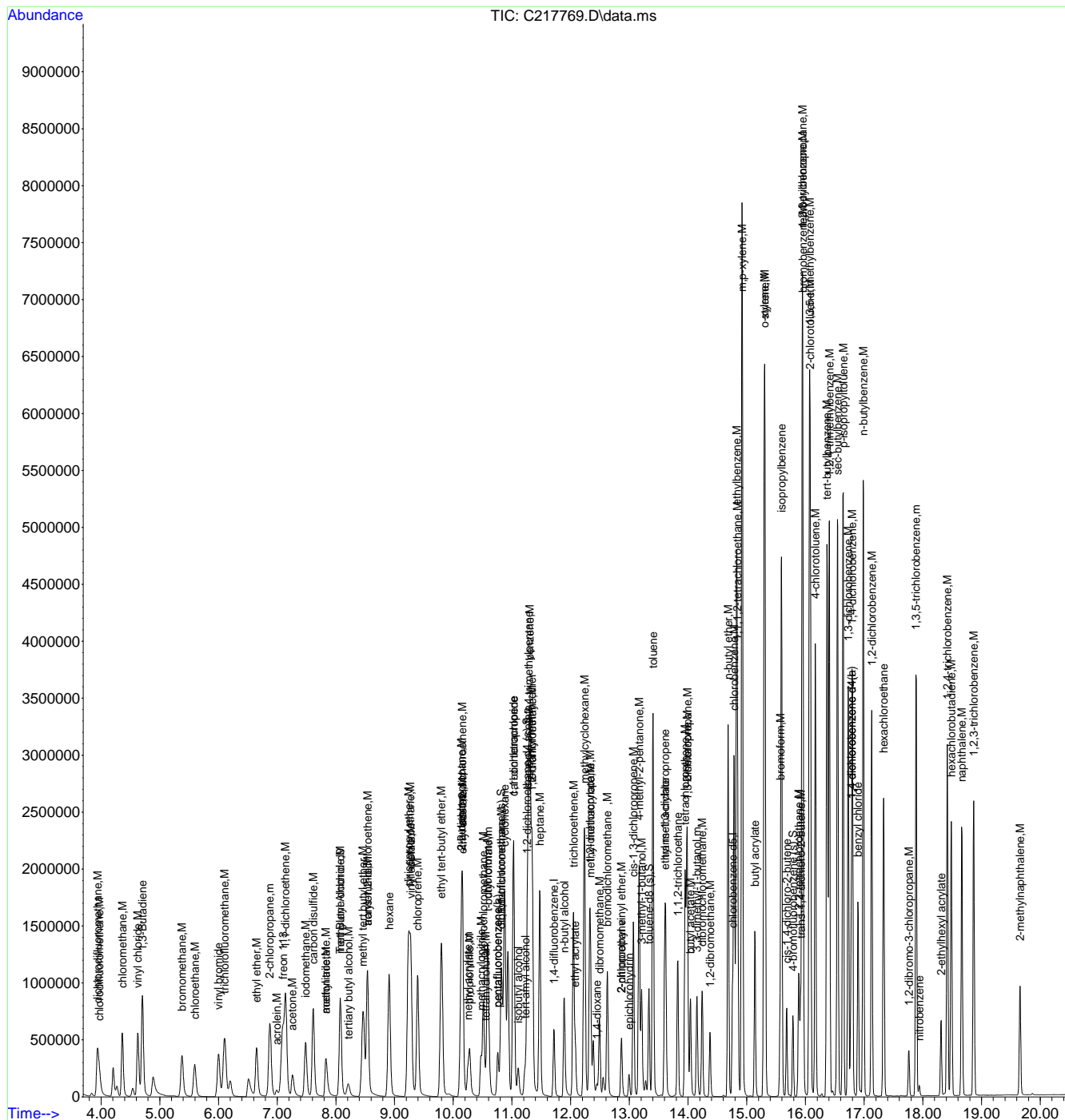
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,3,5-trimethylbenzene	16.068	105	2778327	171.19	ug/L	99
109) tert-butylbenzene	16.366	119	2507704	177.80	ug/L	99
110) 1,2,4-trimethylbenzene	16.408	105	2802534	173.46	ug/L	99
111) sec-butylbenzene	16.544	105	3619065	166.28	ug/L	99
112) 1,3-dichlorobenzene	16.727	146	1436114	168.63	ug/L	98
113) p-isopropyltoluene	16.643	119	3102568	170.43	ug/L	100
114) 1,4-dichlorobenzene	16.800	146	1406015	169.02	ug/L	98
115) benzyl chloride	16.894	91	1186112	197.45	ug/L	100
116) 1,2-dichlorobenzene	17.130	146	1327617	176.06	ug/L	99
117) n-butylbenzene	16.983	92	1630872	170.89	ug/L	100
118) hexachloroethane	17.334	201	452609	210.52	ug/L	99
119) 1,2-dibromo-3-chloropr...	17.762	157	113905	203.42	ug/L	95
120) 1,3,5-trichlorobenzene	17.888	180	1168780	180.20	ug/L	98
121) nitrobenzene	17.940	77	45807	215.74	ug/L	95
122) 2-ethylhexyl acrylate	18.311	70	180246	72.13	ug/L	98
123) 1,2,4-trichlorobenzene	18.416	180	942897	187.32	ug/L	100
124) hexachlorobutadiene	18.484	225	513467	170.68	ug/L	99
125) naphthalene	18.661	128	1884487	205.58	ug/L	98
126) 1,2,3-trichlorobenzene	18.865	180	828425	187.83	ug/L	99
127) 2-methylnaphthalene	19.655	142	522131	134.65	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
Data File : C217769.D
Acq On : 28 Apr 2017 9:51 pm
Operator : Sushilay
Sample : IC8031-200
Misc : MS14914,VC8031,5.0,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 01 09:36:47 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 01 08:28:43 2017
Response via : Initial Calibration



7.7.10 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217772.D
 Acq On : 28 Apr 2017 11:18 pm
 Operator : SushilaY
 Sample : ICV8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 08 14:58:23 2017
 Quant Method : C:\msdchem\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 14:35:58 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.066	65	101702	500.00	ug/L	0.00
5) pentafluorobenzene	10.759	168	304260	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.716	114	512397	50.00	ug/L	0.00
75) chlorobenzene-d5	14.758	117	447499	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.776	152	239854	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.759	168	304260	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.776	152	239854	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) dibromofluoromethane (s)	10.811	113	144265	48.94	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	97.88%
54) 1,2-dichloroethane-d4 (s)	11.255	65	131469	47.38	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	94.76%
76) toluene-d8 (s)	13.331	98	609188	50.90	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	101.80%
100) 4-bromofluorobenzene (s)	15.788	174	170607	50.02	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	100.04%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) tertiary butyl alcohol	8.213	59	61489	243.39	ug/L	93
4) 1,4-dioxane	12.447	88	22955	1378.55	ug/L	92
6) chlorodifluoromethane	3.978	51	106723	132.81	ug/L	86
7) dichlorodifluoromethane	3.947	85	193803	45.32	ug/L	97
8) chloromethane	4.365	50	188843	45.27	ug/L	99
9) vinyl chloride	4.626	62	209260	44.60	ug/L	100
10) 1,3-Butadiene	4.705	54	103071	34.77	ug/L	98
11) bromomethane	5.395	94	99116	46.65	ug/L	99
12) chloroethane	5.604	64	112004	48.04	ug/L	96
13) vinyl bromide	6.007	106	127617	52.94	ug/L	99
14) trichlorofluoromethane	6.106	101	192662	47.02	ug/L	98
15) ethyl ether	6.655	74	76640	56.09	ug/L	94
16) 2-chloropropane	6.885	43	235798	51.25	ug/L	99
17) acrolein	7.005	56	15736	48.08	ug/L	96
18) freon 113	7.104	151	115591	57.15	ug/L	93
19) 1,1-dichloroethene	7.151	61	206631	47.92	ug/L	97
20) acetone	7.272	43	96942	204.32	ug/L	97
21) acetonitrile	7.831	41	340105	1834.50	ug/L #	48
22) iodomethane	7.491	142	219696	51.28	ug/L	97
23) carbon disulfide	7.622	76	471951	54.61	ug/L	99
24) methylene chloride	8.082	84	142416	47.83	ug/L	98
25) methyl acetate	7.842	43	58672	55.68	ug/L	99
26) methyl tert butyl ether	8.469	73	712986	102.52	ug/L	95
27) trans-1,2-dichloroethene	8.542	61	212919	51.95	ug/L	98
28) hexane	8.913	57	209682	46.43	ug/L	98
29) di-isopropyl ether	9.243	45	469517	52.53	ug/L	98
30) ethyl tert-butyl ether	9.797	59	456431	51.01	ug/L	98
31) 1,1-dichloroethane	9.279	63	261086	50.87	ug/L	99
32) chloroprene	9.394	53	236474	53.83	ug/L	99
33) acrylonitrile	8.558	53	31507	62.66	ug/L	92
34) vinyl acetate	9.295	86	19339	55.87	ug/L	98
35) 2-butanone	10.152	72	42493	224.82	ug/L #	93
36) ethyl acetate	10.168	45	11555	51.02	ug/L	58
37) 2,2-dichloropropane	10.137	77	199407	47.96	ug/L	98
38) cis-1,2-dichloroethene	10.163	96	166704	48.68	ug/L	98
39) methyl acrylate	10.257	85	12377	54.56	ug/L	97
40) propionitrile	10.283	54	119525	540.68	ug/L	97
41) bromochloromethane	10.513	128	64202	51.12	ug/L	95
42) tetrahydrofuran	10.550	42	30282	49.44	ug/L	94

7.7.11
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217772.D
 Acq On : 28 Apr 2017 11:18 pm
 Operator : SushilaY
 Sample : ICV8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 08 14:58:23 2017
 Quant Method : C:\msdchem\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 14:35:58 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) chloroform	10.586	83	256129	47.11	ug/L	99
44) t-butyl formate	10.607	59	65678	46.01	ug/L	99
46) methacrylonitrile	10.477	67	36774	54.98	ug/L	98
47) cyclohexane	10.879	84	227829	43.70	ug/L	98
48) 1,1,1-trichloroethane	10.827	97	218903	48.70	ug/L	98
49) 1,1-dichloropropene	11.025	75	198569	50.50	ug/L	98
50) carbon tetrachloride	11.036	117	187973	49.58	ug/L	97
51) tert-amyl alcohol	11.219	73	26976	226.75	ug/L	87
52) isobutyl alcohol	11.109	43	39248	475.03	ug/L	98
55) isopropyl acetate	11.266	87	20275	51.67	ug/L #	85
56) 2,2,4-trimethylpentane	11.282	57	697332	51.38	ug/L	99
57) tert-amyl methyl ether	11.339	73	425893	49.03	ug/L	100
58) benzene	11.308	78	594806	50.51	ug/L	99
59) heptane	11.475	57	129655	56.41	ug/L	97
60) 1,2-dichloroethane	11.350	62	154723	50.01	ug/L	99
61) n-butyl alcohol	11.893	56	142081	2685.51	ug/L	98
62) ethyl acrylate	12.082	55	96849	50.25	ug/L	99
63) trichloroethene	12.050	95	147371	50.19	ug/L	99
64) 2-chloroethyl vinyl ether	12.871	63	43484	279.82	ug/L	93
65) 2-nitropropane	12.860	41	22550	46.58	ug/L	88
66) methylcyclohexane	12.233	83	290085	49.35	ug/L	96
67) methyl methacrylate	12.348	100	25050	54.74	ug/L #	82
68) 1,2-dichloropropane	12.327	63	144443	52.67	ug/L	94
69) dibromomethane	12.489	93	69554	54.01	ug/L	95
70) bromodichloromethane	12.625	83	179706	50.74	ug/L	98
71) epichlorohydrin	12.996	57	43666	249.98	ug/L	94
72) cis-1,3-dichloropropene	13.070	75	223945	52.15	ug/L	96
73) 4-methyl-2-pentanone	13.164	58	147740	197.52	ug/L	92
74) 3-methyl-1-butanol	13.211	55	96503	1031.39	ug/L	98
77) toluene	13.404	92	362548	50.71	ug/L	100
78) ethyl methacrylate	13.603	69	132155	50.57	ug/L	98
79) trans-1,3-dichloropropene	13.619	75	182009	52.35	ug/L	99
80) 1,1,2-trichloroethane	13.822	83	81134	51.97	ug/L	98
81) 2-hexanone	13.979	58	130174	195.58	ug/L	99
82) tetrachloroethene	13.953	166	152006	53.19	ug/L	99
83) 1,3-dichloropropane	13.995	76	171047	51.94	ug/L	98
84) butyl acetate	14.042	56	64632	50.87	ug/L	97
85) 3,3-dimethyl-1-butanol	14.152	57	104770	511.09	ug/L	99
86) dibromochloromethane	14.241	129	118700	52.31	ug/L	98
87) 1,2-dibromoethane	14.377	107	93926	51.68	ug/L	100
88) n-butyl ether	14.685	57	631202	50.98	ug/L	100
89) chlorobenzene	14.784	112	398400	52.39	ug/L	98
90) 1,1,1,2-tetrachloroethane	14.847	131	142161	50.51	ug/L	97
91) ethylbenzene	14.826	91	690236	51.03	ug/L	100
92) m,p-xylene	14.920	106	550494	102.32	ug/L	99
93) o-xylene	15.297	91	584551	49.75	ug/L	98
94) styrene	15.312	104	455917	51.61	ug/L	98
95) butyl acrylate	15.140	55	215437	49.96	ug/L	99
96) bromoform	15.569	173	69969	51.00	ug/L	99
97) isopropylbenzene	15.595	105	744204	49.94	ug/L	99
98) cis-1,4-dichloro-2-butene	15.678	75	45151	46.48	ug/L	97
101) bromobenzene	15.961	156	159510	51.58	ug/L	96
102) 1,1,2,2-tetrachloroethane	15.887	83	125082	48.59	ug/L	99
103) trans-1,4-dichloro-2-b...	15.919	53	38794	49.83	ug/L	96
104) 1,2,3-trichloropropane	15.950	110	34255	50.66	ug/L #	88
105) n-propylbenzene	15.945	91	872923	49.62	ug/L	99
106) 2-chlorotoluene	16.086	126	172769	51.64	ug/L	98
107) 4-chlorotoluene	16.170	91	515944	48.10	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217772.D
 Acq On : 28 Apr 2017 11:18 pm
 Operator : SushilaY
 Sample : ICV8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 08 14:58:23 2017
 Quant Method : C:\msdchem\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 14:35:58 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,3,5-trimethylbenzene	16.065	105	664790	51.86	ug/L	98
109) tert-butylbenzene	16.368	119	571726	50.36	ug/L	100
110) 1,2,4-trimethylbenzene	16.405	105	660024	50.09	ug/L	98
111) sec-butylbenzene	16.546	105	845722	50.75	ug/L	100
112) 1,3-dichlorobenzene	16.729	146	329212	49.35	ug/L	100
113) p-isopropyltoluene	16.640	119	712734	50.36	ug/L	99
114) 1,4-dichlorobenzene	16.797	146	325562	49.60	ug/L	97
115) benzyl chloride	16.896	91	247946	42.54	ug/L	98
116) 1,2-dichlorobenzene	17.132	146	311375	51.18	ug/L	99
117) n-butylbenzene	16.985	92	372961	50.55	ug/L	99
118) hexachloroethane	17.330	201	103995	53.57	ug/L	99
119) 1,2-dibromo-3-chloropr...	17.764	157	26069	50.15	ug/L	92
120) 1,3,5-trichlorobenzene	17.885	180	252814	48.97	ug/L	97
121) nitrobenzene	17.942	77	9806	47.12	ug/L	88
122) 2-ethylhexyl acrylate	18.313	70	37748	9.83	ug/L	96
123) 1,2,4-trichlorobenzene	18.418	180	210523	51.64	ug/L	99
124) hexachlorobutadiene	18.486	225	120302	51.79	ug/L	97
125) naphthalene	18.664	128	430949	52.88	ug/L	98
126) 1,2,3-trichlorobenzene	18.867	180	186825	52.16	ug/L	98
127) 2-methylnaphthalene	19.657	142	116862	25.48	ug/L	93

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

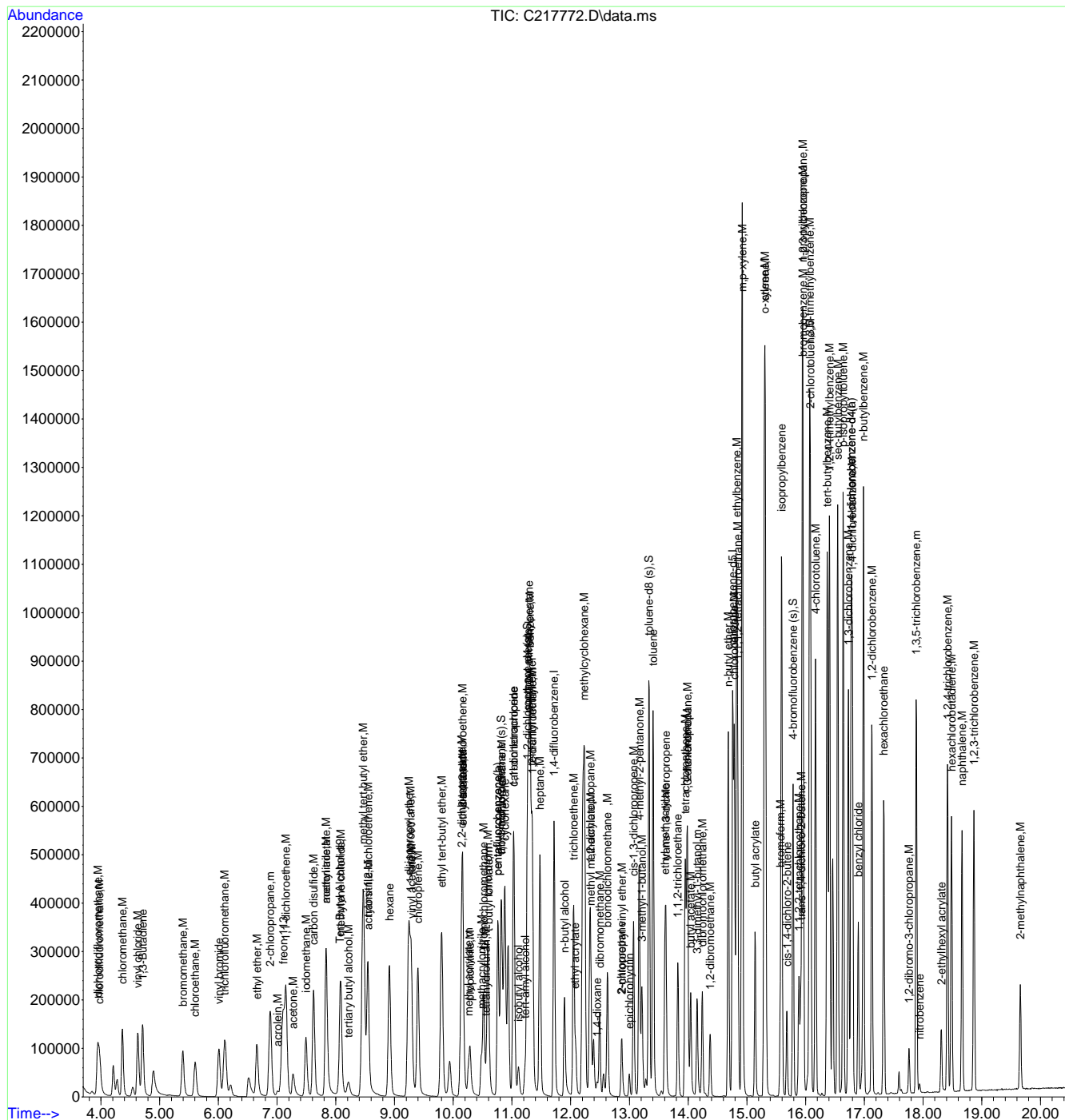
7.7.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217772.D
 Acq On : 28 Apr 2017 11:18 pm
 Operator : Sushilay
 Sample : ICV8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 08 14:58:23 2017
 Quant Method : C:\msdchem\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 14:35:58 2017
 Response via : Initial Calibration



7.7.11
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217773.D
 Acq On : 28 Apr 2017 11:47 pm
 Operator : SushilaY
 Sample : ICV8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 01 09:45:06 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:39:54 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.065	65	94222	500.00	ug/L	0.00
5) pentafluorobenzene	10.763	168	280897	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.719	114	473126	50.00	ug/L	0.00
75) chlorobenzene-d5	14.762	117	441817	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.780	152	238101	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.763	168	280897	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.780	152	238101	50.00	ug/L	0.00

System Monitoring Compounds

45) dibromofluoromethane (s)	10.810	113	134064	49.26	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	98.52%
54) 1,2-dichloroethane-d4 (s)	11.259	65	118122	46.11	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	92.22%
76) toluene-d8 (s)	13.335	98	573092	48.50	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	97.00%
100) 4-bromofluorobenzene (s)	15.787	174	171173	50.55	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	101.10%

Target Compounds

21) acetonitrile	7.840	41	94665	553.09	ug/L	Qvalue # 91
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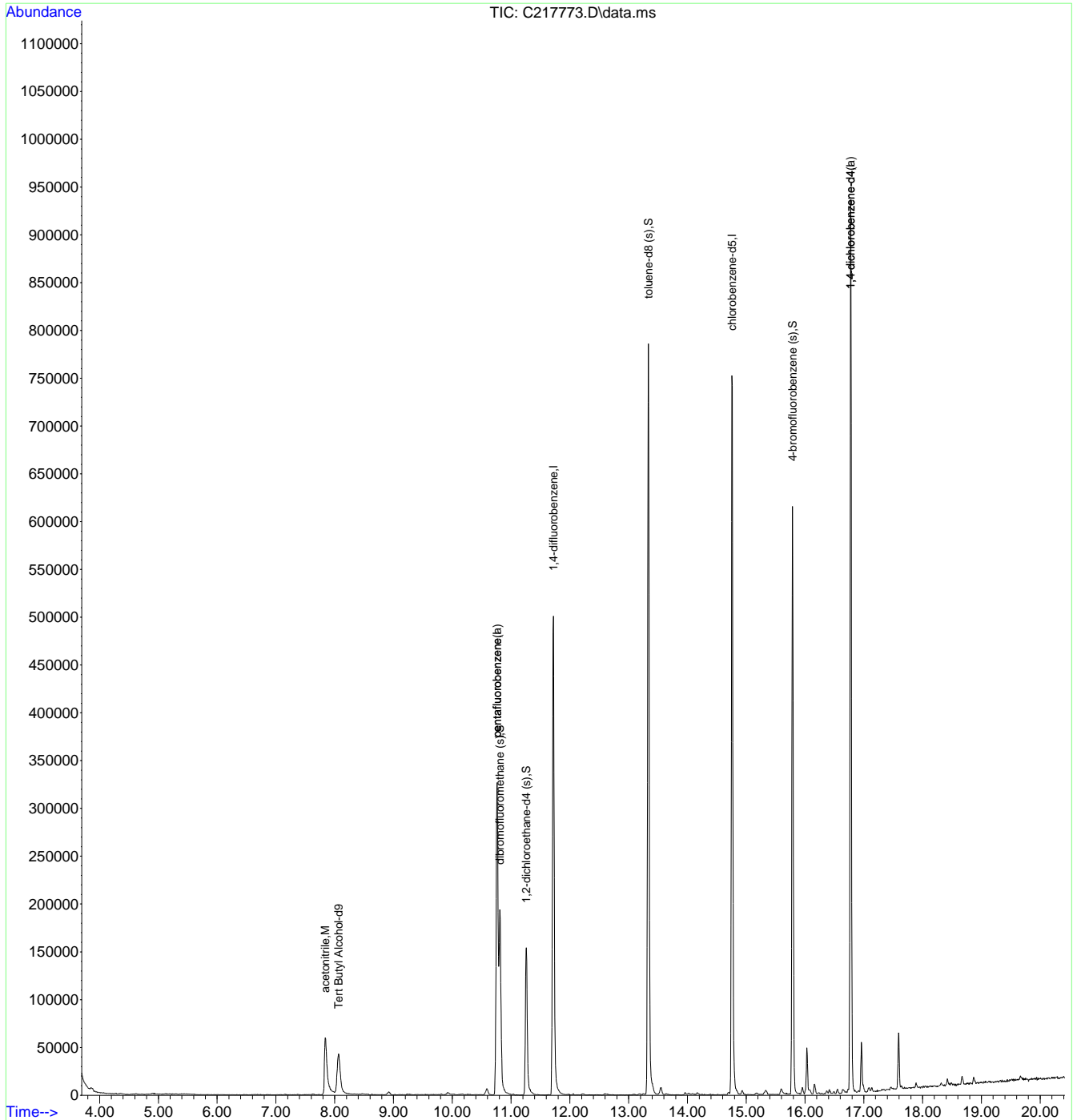
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217773.D
 Acq On : 28 Apr 2017 11:47 pm
 Operator : SushilaY
 Sample : ICV8031-50
 Misc : MS14914,VC8031,5.0,,,,,1
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 01 09:45:06 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 09:39:54 2017
 Response via : Initial Calibration



7.7.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217803.D
 Acq On : 29 Apr 2017 8:02 pm
 Operator : SushilaY
 Sample : ICV8031-50
 Misc : MS14914,VC8033,5.0,,,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 01 10:34:27 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 10:33:49 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.062	65	82791	500.00	ug/L	0.00
5) pentafluorobenzene	10.760	168	216993	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.716	114	377606	50.00	ug/L	0.00
75) chlorobenzene-d5	14.759	117	359869	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.777	152	200692	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.760	168	216993	50.00	ug/L	0.00
130) 1,4-dichlorobenzene-d4(a)	16.777	152	200692	50.00	ug/L	0.00

System Monitoring Compounds						
45) dibromofluoromethane (s)	10.807	113	109148	51.92	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	103.84%
54) 1,2-dichloroethane-d4 (s)	11.256	65	104225	50.97	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	101.94%
76) toluene-d8 (s)	13.332	98	471643	49.00	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	98.00%
100) 4-bromofluorobenzene (s)	15.789	174	138876	48.66	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	97.32%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
129) allyl chloride	7.832	76	67638	50.71	ug/L #	1
131) 4-ethyltoluene	16.029	105	611713	49.61	ug/L #	1
132) 1,4-diethylbenzene	16.955	119	356713	51.79	ug/L #	1
133) 1,2,4,5-tetramethylben...	17.593	119	574981	51.83	ug/L #	3

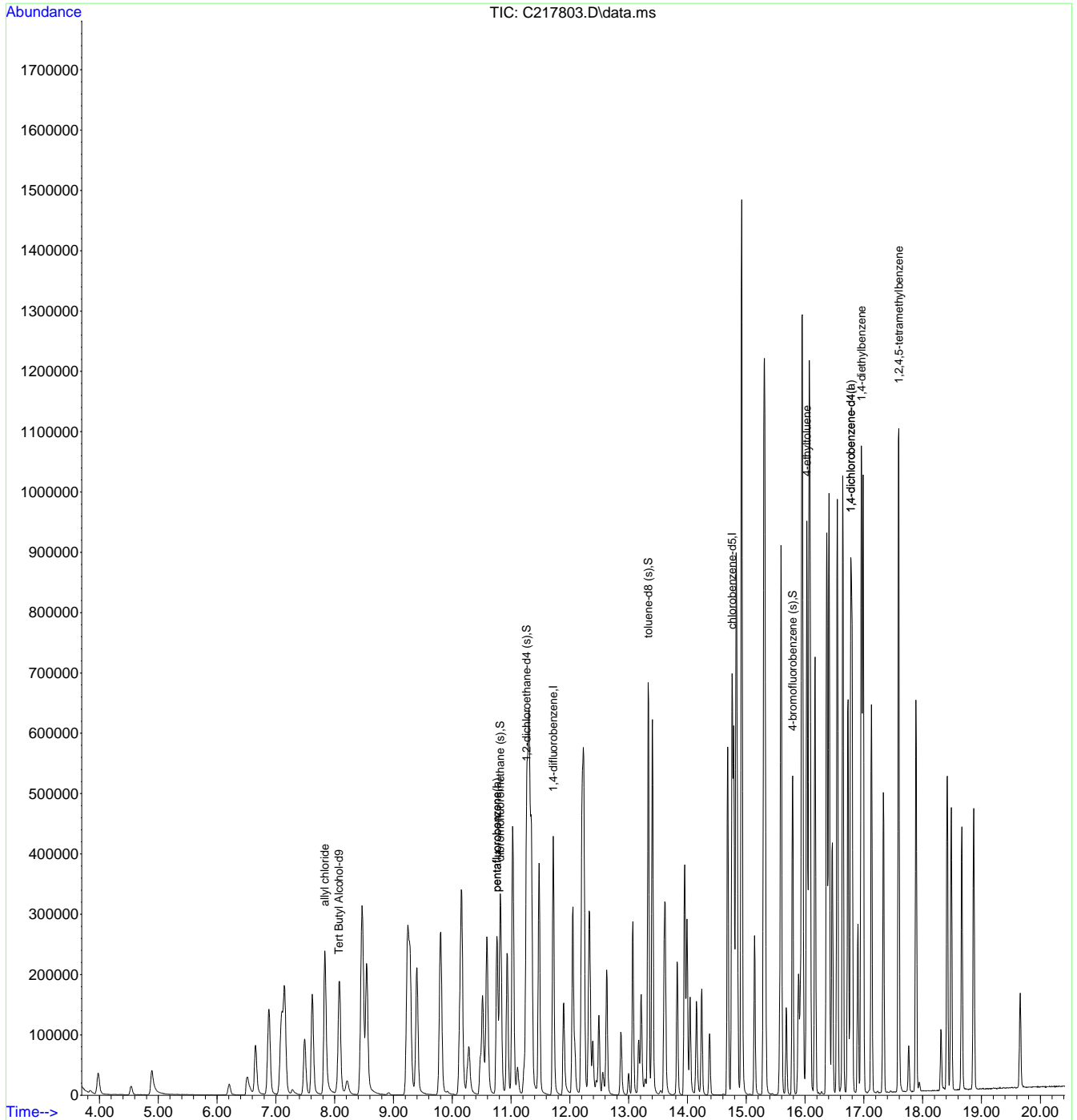
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\c217001-218000\
 Data File : C217803.D
 Acq On : 29 Apr 2017 8:02 pm
 Operator : SushilaY
 Sample : ICV8031-50
 Misc : MS14914,VC8033,5.0,,,,,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 01 10:34:27 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 01 10:33:49 2017
 Response via : Initial Calibration



7.7.13
7

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218886.D
 Acq On : 22 Jun 2017 8:07 am
 Operator : SushilaY
 Sample : cc8031-20
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 11:13:18 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.057	65	105430	500.00	ug/L	0.00
5) pentafluorobenzene	10.740	168	350041	50.00	ug/L	-0.02
53) 1,4-difluorobenzene	11.697	114	554533	50.00	ug/L	-0.02
75) chlorobenzene-d5	14.746	117	486708	50.00	ug/L	-0.01
99) 1,4-dichlorobenzene-d4	16.765	152	244868	50.00	ug/L	0.00
128) pentafluorobenzene(a)	10.740	168	350041	50.00	ug/L	-0.02
130) 1,4-dichlorobenzene-d4(a)	16.765	152	244868	50.00	ug/L	0.00

System Monitoring Compounds						
45) dibromofluoromethane (s)	10.792	113	145726	42.97	ug/L	-0.02
Spiked Amount	50.000	Range 76 - 120	Recovery	=	85.94%	
54) 1,2-dichloroethane-d4 (s)	11.237	65	151618	50.49	ug/L	-0.02
Spiked Amount	50.000	Range 73 - 122	Recovery	=	100.98%	
76) toluene-d8 (s)	13.319	98	684401	52.58	ug/L	-0.02
Spiked Amount	50.000	Range 84 - 119	Recovery	=	105.16%	
100) 4-bromofluorobenzene (s)	15.777	174	179191	51.46	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	102.92%	

Target Compounds						Qvalue
3) tertiary butyl alcohol	8.214	59	26697	101.94	ug/L	97
4) 1,4-dioxane	12.440	88	9557	553.65	ug/L	82
6) chlorodifluoromethane	4.009	51	88641	95.88	ug/L	87
7) dichlorodifluoromethane	3.988	85	101389	20.61	ug/L	99
8) chloromethane	4.370	50	108802	22.67	ug/L	96
9) vinyl chloride	4.647	62	109567	20.30	ug/L	99
10) 1,3-Butadiene	4.704	54	55922	16.40	ug/L	96
11) bromomethane	5.400	94	65731	26.89	ug/L	96
12) chloroethane	5.594	64	59423	22.15	ug/L	96
13) vinyl bromide	5.991	106	57907	20.88	ug/L #	98
14) trichlorofluoromethane	6.106	101	114477	24.28	ug/L	99
15) ethyl ether	6.634	74	26946	17.14	ug/L	99
16) 2-chloropropane	6.870	43	126316	23.87	ug/L #	90
17) acrolein	6.938	56	264	0.70	ug/L	86
18) freon 113	7.095	151	43811	18.83	ug/L	96
19) 1,1-dichloroethene	7.136	61	102404	20.64	ug/L	89
20) acetone	7.252	43	41879	76.72	ug/L	95
21) acetonitrile	7.832	41	43810	205.40	ug/L	95
22) iodomethane	7.476	142	98719	20.03	ug/L	95
23) carbon disulfide	7.607	76	220225	22.15	ug/L	98
24) methylene chloride	8.067	84	64028	18.69	ug/L	94
25) methyl acetate	7.832	43	25488	21.02	ug/L	94
26) methyl tert butyl ether	8.465	73	157306	19.66	ug/L	92
27) trans-1,2-dichloroethene	8.522	61	99639	21.13	ug/L	95
28) hexane	8.889	57	106489	20.50	ug/L	94
29) di-isopropyl ether	9.229	45	221932	21.58	ug/L	97
30) ethyl tert-butyl ether	9.793	59	206574	20.07	ug/L	100
31) 1,1-dichloroethane	9.260	63	118736	20.11	ug/L	96
32) chloroprene	9.380	53	114964	22.75	ug/L	92
33) acrylonitrile	8.549	53	11505	19.89	ug/L	89
34) vinyl acetate	9.270	86	6911	17.36	ug/L	69
35) 2-butanone	10.133	72	15551	71.52	ug/L #	70
36) ethyl acetate	10.165	45	6336	24.32	ug/L #	8
37) 2,2-dichloropropane	10.128	77	118729	24.82	ug/L	98
38) cis-1,2-dichloroethene	10.144	96	67583	17.16	ug/L	92
39) methyl acrylate	10.254	85	4364	16.72	ug/L	69
40) propionitrile	10.269	54	43171	169.75	ug/L	86
41) bromochloromethane	10.494	128	25349	17.54	ug/L	96
42) tetrahydrofuran	10.541	42	15949	19.21	ug/L	92
43) chloroform	10.567	83	111730	17.86	ug/L	95
44) t-butyl formate	10.594	59	28744	17.50	ug/L	83
46) methacrylonitrile	10.468	67	13827	17.97	ug/L	93
47) cyclohexane	10.866	84	107849	17.98	ug/L	96

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218886.D
 Acq On : 22 Jun 2017 8:07 am
 Operator : SushilaY
 Sample : cc8031-20
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 11:13:18 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 1,1,1-trichloroethane	10.808	97	116989	22.62	ug/L	97
49) 1,1-dichloropropene	11.007	75	95740	21.16	ug/L	98
50) carbon tetrachloride	11.022	117	98102	22.49	ug/L	98
51) tert-amyl alcohol	11.211	73	13401	97.91	ug/L	80
52) isobutyl alcohol	11.106	43	19376	203.84	ug/L	97
55) isopropyl acetate	11.247	87	8410	19.81	ug/L #	64
56) 2,2,4-trimethylpentane	11.263	57	300092	20.43	ug/L	96
57) tert-amyl methyl ether	11.326	73	180293	19.18	ug/L	94
58) benzene	11.289	78	263172	20.65	ug/L	97
59) heptane	11.462	57	61107	24.56	ug/L	93
60) 1,2-dichloroethane	11.331	62	72571	21.67	ug/L	98
61) n-butyl alcohol	11.885	56	55824	974.97	ug/L	88
62) ethyl acrylate	12.074	55	45407	21.77	ug/L	96
63) trichloroethene	12.032	95	65121	20.50	ug/L	97
64) 2-chloroethyl vinyl ether	12.858	63	22294	132.56	ug/L	93
65) 2-nitropropane	12.848	41	12116	23.13	ug/L	87
66) methylcyclohexane	12.220	83	131999	20.75	ug/L	94
67) methyl methacrylate	12.335	100	10745	21.69	ug/L #	80
68) 1,2-dichloropropane	12.309	63	63055	21.24	ug/L	95
69) dibromomethane	12.476	93	26118	18.74	ug/L	93
70) bromodichloromethane	12.607	83	77473	20.21	ug/L	95
71) epichlorohydrin	12.984	57	17622	93.22	ug/L	96
72) cis-1,3-dichloropropene	13.057	75	96524	20.77	ug/L	96
73) 4-methyl-2-pentanone	13.156	58	61449	75.91	ug/L	99
74) 3-methyl-1-butanol	13.203	55	38989	385.04	ug/L	91
77) toluene	13.392	92	170956	21.98	ug/L	99
78) ethyl methacrylate	13.590	69	57515	20.24	ug/L	91
79) trans-1,3-dichloropropene	13.606	75	82066	21.70	ug/L	98
80) 1,1,2-trichloroethane	13.810	83	33698	19.85	ug/L	96
81) 2-hexanone	13.972	58	58972	81.47	ug/L	86
82) tetrachloroethene	13.936	166	67748	21.80	ug/L	98
83) 1,3-dichloropropane	13.977	76	74143	20.70	ug/L	100
84) butyl acetate	14.035	56	28816	20.85	ug/L	93
85) 3,3-dimethyl-1-butanol	14.145	57	42617	191.15	ug/L	92
86) dibromochloromethane	14.229	129	49140	19.91	ug/L	96
87) 1,2-dibromoethane	14.359	107	37435	18.94	ug/L	95
88) n-butyl ether	14.673	57	314861	23.38	ug/L	97
89) chlorobenzene	14.772	112	180278	21.80	ug/L	96
90) 1,1,1,2-tetrachloroethane	14.830	131	60301	19.70	ug/L	96
91) ethylbenzene	14.814	91	342620	23.29	ug/L	98
92) m,p-xylene	14.908	106	266183	45.49	ug/L	94
93) o-xylene	15.285	91	273774	21.42	ug/L	100
94) styrene	15.301	104	199247	20.74	ug/L	98
95) butyl acrylate	15.133	55	90334	19.26	ug/L	99
96) bromoform	15.557	173	28000	18.76	ug/L	91
97) isopropylbenzene	15.583	105	355476	21.93	ug/L	98
98) cis-1,4-dichloro-2-butene	15.667	75	18273	17.29	ug/L	89
101) bromobenzene	15.944	156	68253	21.62	ug/L	89
102) 1,1,2,2-tetrachloroethane	15.876	83	51005	19.41	ug/L	96
103) trans-1,4-dichloro-2-b...	15.902	53	18661	23.48	ug/L	85
104) 1,2,3-trichloropropane	15.939	110	13948	20.21	ug/L #	68
105) n-propylbenzene	15.934	91	425054	23.67	ug/L	98
106) 2-chlorotoluene	16.075	126	78248	22.91	ug/L	97
107) 4-chlorotoluene	16.158	91	240534	21.96	ug/L	99
108) 1,3,5-trimethylbenzene	16.059	105	296454	22.65	ug/L	98
109) tert-butylbenzene	16.357	119	257659	22.23	ug/L	99
110) 1,2,4-trimethylbenzene	16.394	105	304603	22.64	ug/L	98
111) sec-butylbenzene	16.535	105	396186	23.29	ug/L	98
112) 1,3-dichlorobenzene	16.718	146	145867	21.42	ug/L	97
113) p-isopropyltoluene	16.629	119	331758	22.96	ug/L	99
114) 1,4-dichlorobenzene	16.786	146	143130	21.36	ug/L	94
115) benzyl chloride	16.885	91	118943	19.99	ug/L	97
116) 1,2-dichlorobenzene	17.121	146	130535	21.02	ug/L	99

Data Path : C:\msdchem\1\data\C\vc8081\
 Data File : C218886.D
 Acq On : 22 Jun 2017 8:07 am
 Operator : SushilaY
 Sample : cc8031-20
 Misc : MS17218,VC8081,5,,,1
 ALS Vial : 1 Sample Multiplier: 1

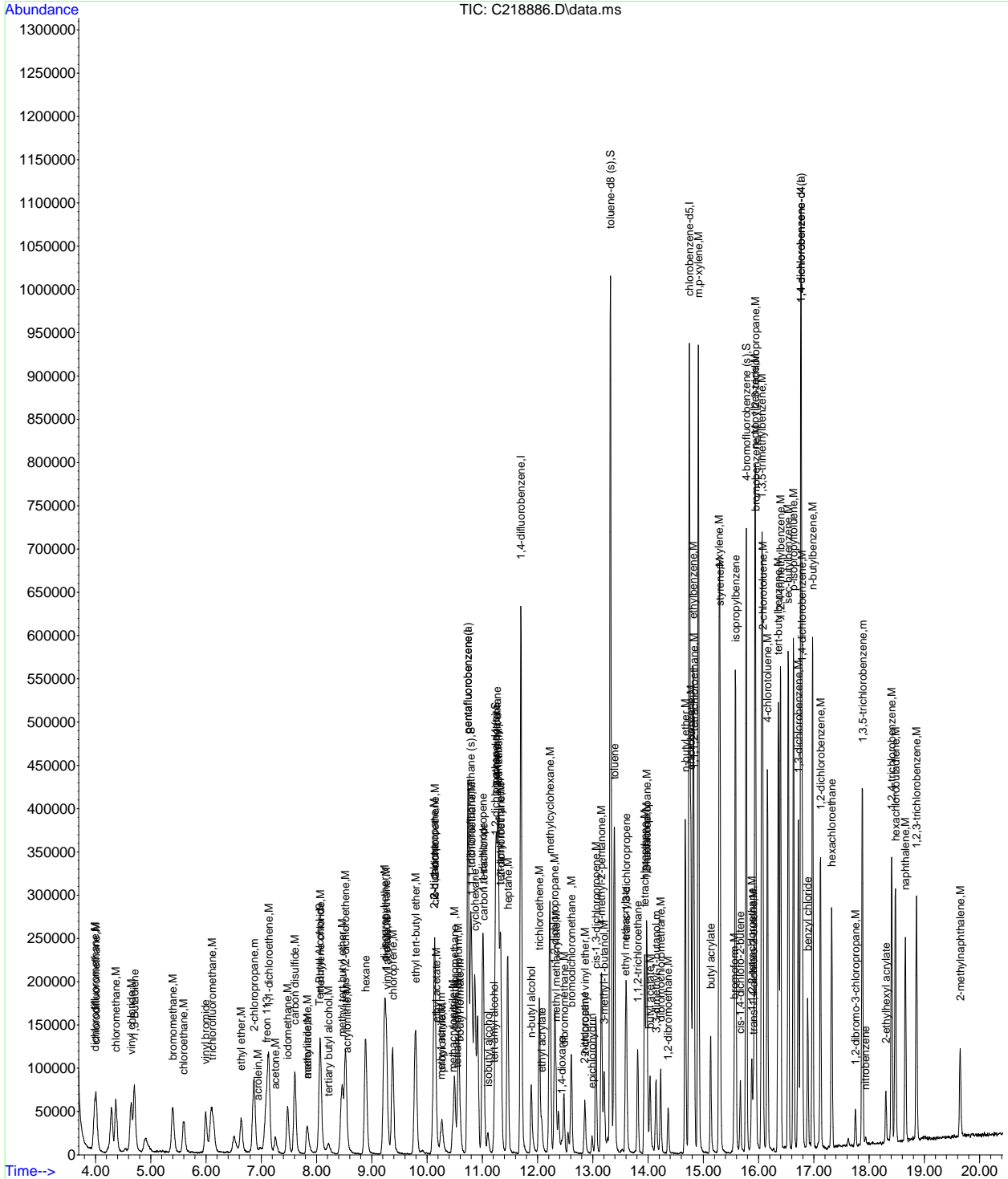
Quant Time: Jun 23 11:13:18 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
 Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
 QLast Update : Mon May 08 15:28:45 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
117) n-butylbenzene	16.974	92	174952	23.23	ug/L	97
118) hexachloroethane	17.325	201	45396	22.90	ug/L	96
119) 1,2-dibromo-3-chloropr...	17.754	157	9703	18.29	ug/L	84
120) 1,3,5-trichlorobenzene	17.879	180	128551	24.39	ug/L	95
121) nitrobenzene	17.931	77	5127	24.13	ug/L	96
122) 2-ethylhexyl acrylate	18.303	70	15333	4.22	ug/L	93
123) 1,2,4-trichlorobenzene	18.407	180	97243	23.37	ug/L	99
124) hexachlorobutadiene	18.475	225	62796	26.48	ug/L	100
125) naphthalene	18.653	128	183578	22.07	ug/L	99
126) 1,2,3-trichlorobenzene	18.857	180	84823	23.20	ug/L	96
127) 2-methylnaphthalene	19.647	142	54546	12.29	ug/L	98

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

Data Path : C:\msdchem\1\data\C\vc8081\
Data File : C218886.D
Acq On : 22 Jun 2017 8:07 am
Operator : SushilaY
Sample : cc8031-20
Misc : MS17218,VC8081,5,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 11:13:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MCS8031.M
Quant Title : Method 8260C, ZB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Mon May 08 15:28:45 2017
Response via : Initial Calibration



7.7.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250402.D
 Acq On : 13 Jun 2017 10:29 am
 Operator : XimenaC
 Sample : IC10106-2
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 14 15:57:01 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.560	65	97486	500.00	ug/L	0.00
5) pentafluorobenzene	9.745	168	205172	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.692	114	293932	50.00	ug/L	0.00
75) chlorobenzene-d5	14.116	117	332119	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.735	152	229669	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.824	113	94454	50.79	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	101.58%	
55) 1,2-dichloroethane-d4 (s)	10.258	65	103751	50.98	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	101.96%	
76) toluene-d8 (s)	12.427	98	386180	48.61	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	97.22%	
100) 4-bromofluorobenzene (s)	15.423	95	178592	53.19	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	106.38%	

Target Compounds

Qvalue

3) tertiary butyl alcohol	7.665	59	2165	8.32	ug/L	75
6) chlorodifluoromethane	4.298	51	5381	1.96	ug/L	88
7) dichlorodifluoromethane	4.277	85	7637	2.18	ug/L	85
8) chloromethane	4.564	50	6873	1.99	ug/L	90
9) 1,3-butadiene	4.836	54	4607	1.90	ug/L	96
10) vinyl chloride	4.841	62	8662	2.13	ug/L	96
11) bromomethane	5.458	94	5377	2.01	ug/L	96
12) chloroethane	5.594	64	3477	1.80	ug/L	97
13) trichlorofluoromethane	6.091	101	9954	2.11	ug/L	98
14) vinyl bromide	5.955	106	5339	2.02	ug/L	88
15) ethyl ether	6.426	74	1590	1.80	ug/L #	73
16) 2-chloropropane	6.640	43	6990	1.97	ug/L	87
18) freon 113	6.818	151	4209	1.81	ug/L	95
19) 1,1-dichloroethene	6.865	96	4319	2.02	ug/L #	81
20) acetone	6.959	58	1090	7.96	ug/L #	1
21) acetonitrile	7.450	41	6906	21.97	ug/L	73
22) iodomethane	7.157	142	8464	1.94	ug/L	97
23) carbon disulfide	7.283	76	13923	1.91	ug/L	96
24) methylene chloride	7.581	84	4481	1.94	ug/L	92
25) methyl acetate	7.382	43	2375	2.14	ug/L	86
26) methyl tert butyl ether	7.869	73	13059	1.92	ug/L	95
27) trans-1,2-dichloroethene	7.936	96	4079	2.06	ug/L	96
28) hexane	8.203	56	1838	1.76	ug/L	92
29) di-isopropyl ether	8.454	45	11703	1.86	ug/L	96
30) 2-butanone	9.264	72	1145	6.58	ug/L #	49
31) 1,1-dichloroethane	8.506	63	5832	1.95	ug/L	94
32) chloroprene	8.606	53	4176	1.69	ug/L	93
35) ethyl tert-butyl ether	8.914	59	13036	1.88	ug/L	95
37) 2,2-dichloropropane	9.254	77	7941	2.01	ug/L	99
38) cis-1,2-dichloroethene	9.254	96	4175	1.84	ug/L	90
39) propionitrile	9.369	54	3958	18.58	ug/L	71
41) methacrylonitrile	9.547	67	871	1.44	ug/L #	58
42) bromochloromethane	9.573	128	2022	1.88	ug/L	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250402.D
 Acq On : 13 Jun 2017 10:29 am
 Operator : XimenaC
 Sample : IC10106-2
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 14 15:57:01 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) chloroform	9.615	83	6799	1.90	ug/L	86
45) tert-Butyl Formate	9.651	59	2645	1.81	ug/L	84
47) 1,1,1-trichloroethane	9.866	97	6741	1.84	ug/L	94
48) cyclohexane	9.928	84	6619	1.78	ug/L #	86
50) 1,1-dichloropropene	10.038	75	4320	1.86	ug/L	94
51) carbon tetrachloride	10.064	117	6143	1.83	ug/L	92
52) tert-amyl alcohol	10.211	73	1468	11.65	ug/L #	59
56) n-butyl alcohol	10.901	56	4033	78.97	ug/L	90
58) benzene	10.320	78	14294	1.88	ug/L	89
59) tert-amyl methyl ether	10.326	73	13829	1.84	ug/L	96
60) heptane	10.451	57	2183	1.72	ug/L	89
61) 1,2-dichloroethane	10.357	62	4877	1.96	ug/L	97
63) trichloroethene	11.052	95	3349	1.75	ug/L	89
64) 2-chloroethyl vinyl ether	11.899	63	8701	9.13	ug/L	95
65) methyl methacrylate	11.350	100	648	1.37	ug/L #	45
66) methylcyclohexane	11.256	83	7068	1.70	ug/L	98
67) 1,2-dichloropropane	11.340	63	3572	1.90	ug/L	88
68) dibromomethane	11.518	93	2384	1.91	ug/L	97
69) bromodichloromethane	11.643	83	5025	1.91	ug/L	94
70) 2-nitropropane	11.899	41	1500	2.01	ug/L	91
71) epichlorohydrin	12.061	57	1663	9.08	ug/L	54
72) cis-1,3-dichloropropene	12.135	75	5744	1.88	ug/L	95
73) 4-methyl-2-pentanone	12.234	58	5553	7.58	ug/L	92
74) isoamyl alcohol	12.297	70	1667	29.02	ug/L #	74
77) toluene	12.511	92	9570	1.76	ug/L	98
78) ethyl methacrylate	12.741	69	4559	1.75	ug/L	94
79) trans-1,3-dichloropropene	12.751	75	5504	1.81	ug/L	78
80) 1,1,2-trichloroethane	12.987	83	2848	1.84	ug/L	93
81) tetrachloroethene	13.149	164	3602	1.71	ug/L	97
82) 2-hexanone	13.191	58	5956	8.06	ug/L	92
83) 1,3-dichloropropane	13.191	76	5717	1.83	ug/L	87
84) butyl acetate	13.259	56	1979	1.56	ug/L #	81
85) 3,3-Dimethyl-1-Butanol	13.395	69	1560	33.36	ug/L	93
86) dibromochloromethane	13.489	129	4593	1.87	ug/L	96
87) 1,2-dibromoethane	13.661	107	3843	1.80	ug/L	91
88) n-butyl ether	14.038	57	16270	1.84	ug/L	95
89) chlorobenzene	14.153	112	12493	1.82	ug/L	89
90) 1,1,1,2-tetrachloroethane	14.221	131	5075	1.81	ug/L	94
91) ethylbenzene	14.205	91	20935	1.82	ug/L	96
92) m,p-xylene	14.330	106	16102	3.61	ug/L	96
93) o-xylene	14.806	91	17594	1.78	ug/L	99
94) styrene	14.837	104	13367	1.77	ug/L	94
96) isopropylbenzene	15.177	105	22213	1.73	ug/L	97
97) bromoform	15.146	173	3567	1.85	ug/L	97
98) cis-1,4-dichloro-2-butene	15.303	88	1173	4.30	ug/L	95
101) 1,1,2,2-tetrachloroethane	15.559	83	5841	2.04	ug/L	99
103) 1,2,3-trichloropropane	15.648	110	1619	1.90	ug/L #	84
104) bromobenzene	15.653	156	6974	1.98	ug/L	90
105) n-propylbenzene	15.648	91	27533	1.86	ug/L	97
106) 2-chlorotoluene	15.831	126	5681	1.81	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250402.D
 Acq On : 13 Jun 2017 10:29 am
 Operator : XimenaC
 Sample : IC10106-2
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 14 15:57:01 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

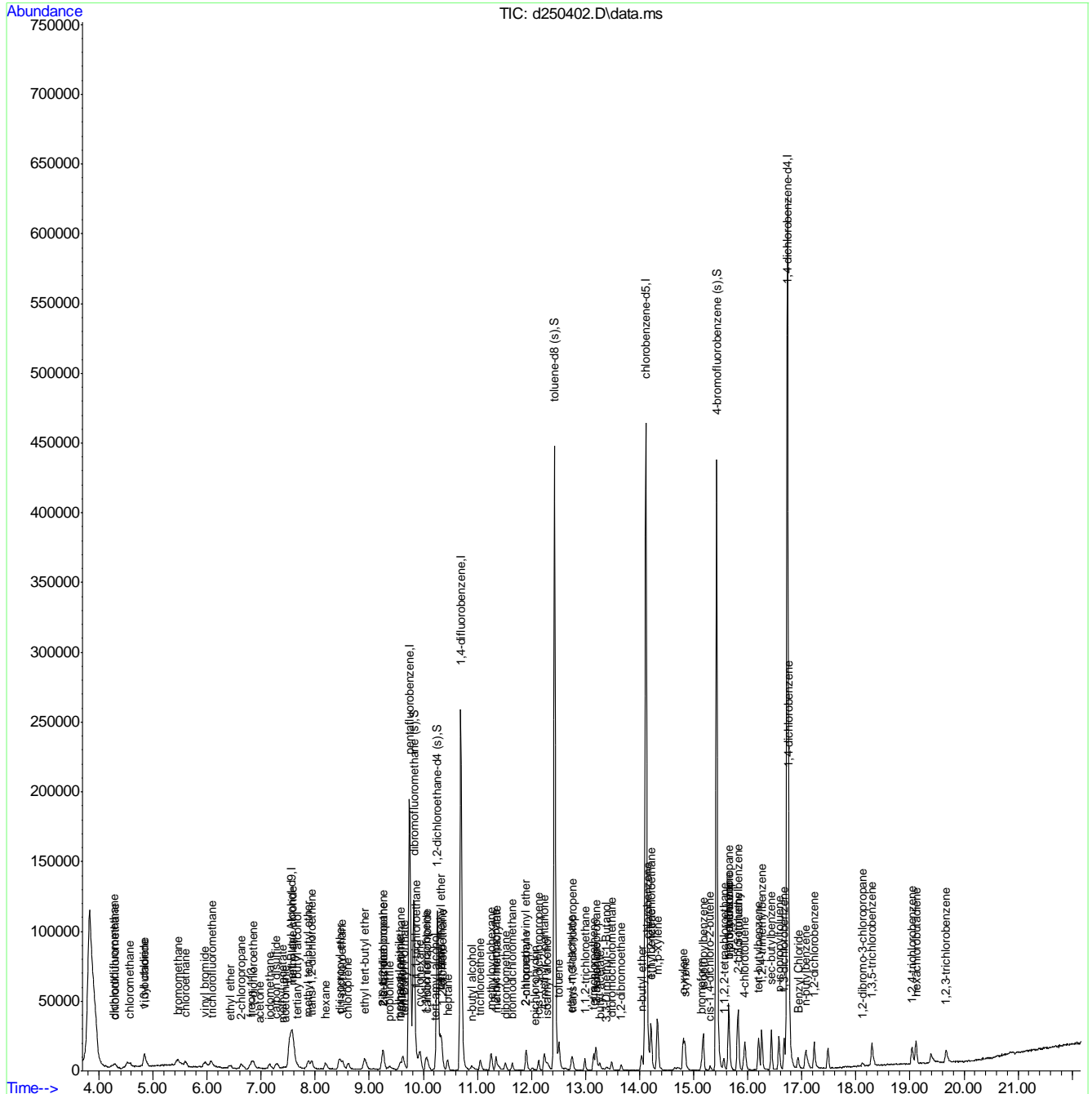
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 4-chlorotoluene	15.946	91	17352	1.90	ug/L	99
108) 1,3,5-trimethylbenzene	15.815	105	19673	1.76	ug/L	96
109) tert-butylbenzene	16.202	119	15662	1.84	ug/L	94
110) 1,2,4-trimethylbenzene	16.259	105	21096	1.84	ug/L	99
111) sec-butylbenzene	16.437	105	25791	1.76	ug/L	97
112) p-isopropyltoluene	16.573	119	22322	1.76	ug/L	97
113) 1,3-dichlorobenzene	16.672	146	12751	1.91	ug/L	99
114) 1,4-dichlorobenzene	16.761	146	14536	1.99	ug/L	93
115) 1,2-dichlorobenzene	17.227	146	13635	1.90	ug/L	97
116) Benzyl Chloride	16.929	91	11521	1.88	ug/L	89
117) n-butylbenzene	17.070	92	10827	1.71	ug/L	97
120) 1,2-dibromo-3-chloropr...	18.121	75	1122	1.83	ug/L	90
121) 1,3,5-trichlorobenzene	18.293	180	11438	1.68	ug/L	93
122) 1,2,4-trichlorobenzene	19.035	180	8282	1.49	ug/L	96
123) hexachlorobutadiene	19.114	225	5155	1.61	ug/L	96
125) 1,2,3-trichlorobenzene	19.668	180	7791	1.56	ug/L	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250402.D
 Acq On : 13 Jun 2017 10:29 am
 Operator : XimenaC
 Sample : IC10106-2
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 14 15:57:01 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



7.7.15
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250403.D
 Acq On : 13 Jun 2017 10:57 am
 Operator : XimenaC
 Sample : IC10106-1
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 14 16:00:54 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.557	65	92418	500.00	ug/L	-0.01
5) pentafluorobenzene	9.747	168	225563	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.694	114	322560	50.00	ug/L	0.00
75) chlorobenzene-d5	14.113	117	364062	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.732	152	237855	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.826	113	102767	50.26	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	100.52%	
55) 1,2-dichloroethane-d4 (s)	10.260	65	114067	51.07	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	102.14%	
76) toluene-d8 (s)	12.429	98	422459	48.51	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	97.02%	
100) 4-bromofluorobenzene (s)	15.425	95	187613	53.96	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	107.92%	

Target Compounds

						Qvalue
7) dichlorodifluoromethane	4.279	85	3302	0.86	ug/L	# 49
8) chloromethane	4.572	50	3677	0.97	ug/L	89
10) vinyl chloride	4.844	62	4308	0.96	ug/L	92
11) bromomethane	5.450	94	2814	0.95	ug/L	91
12) chloroethane	5.596	64	1859	0.88	ug/L	93
13) trichlorofluoromethane	6.072	101	4624	0.89	ug/L	86
14) vinyl bromide	5.952	106	2542	0.88	ug/L	# 75
15) ethyl ether	6.428	74	884	0.91	ug/L	# 79
16) 2-chloropropane	6.637	43	4450	1.14	ug/L	97
18) freon 113	6.830	151	2144	0.84	ug/L	81
19) 1,1-dichloroethene	6.856	96	2489	1.06	ug/L	# 76
21) acetonitrile	7.426	41	3303	9.56	ug/L	85
22) iodomethane	7.160	142	4535	0.94	ug/L	92
23) carbon disulfide	7.285	76	7727	0.96	ug/L	97
24) methylene chloride	7.578	84	2714	1.07	ug/L	93
26) methyl tert butyl ether	7.865	73	7389	0.99	ug/L	85
27) trans-1,2-dichloroethene	7.928	96	2502	1.15	ug/L	81
28) hexane	8.200	56	989	0.86	ug/L	# 75
29) di-isopropyl ether	8.461	45	6687	0.96	ug/L	94
31) 1,1-dichloroethane	8.514	63	3368	1.02	ug/L	81
32) chloroprene	8.608	53	2366	0.87	ug/L	90
35) ethyl tert-butyl ether	8.911	59	7424	0.98	ug/L	95
37) 2,2-dichloropropane	9.251	77	4456	1.03	ug/L	98
38) cis-1,2-dichloroethene	9.261	96	2459	0.98	ug/L	86
42) bromochloromethane	9.580	128	1123	0.95	ug/L	97
44) chloroform	9.622	83	4179	1.06	ug/L	91
45) tert-Butyl Formate	9.638	59	1316	0.82	ug/L	76
47) 1,1,1-trichloroethane	9.862	97	3947	0.98	ug/L	93
48) cyclohexane	9.936	84	4003	0.98	ug/L	91
50) 1,1-dichloropropene	10.045	75	2504	0.98	ug/L	92
51) carbon tetrachloride	10.077	117	3530	0.96	ug/L	95
58) benzene	10.323	78	8339	1.00	ug/L	86
59) tert-amyl methyl ether	10.323	73	8115	0.99	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250403.D
 Acq On : 13 Jun 2017 10:57 am
 Operator : XimenaC
 Sample : IC10106-1
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 14 16:00:54 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

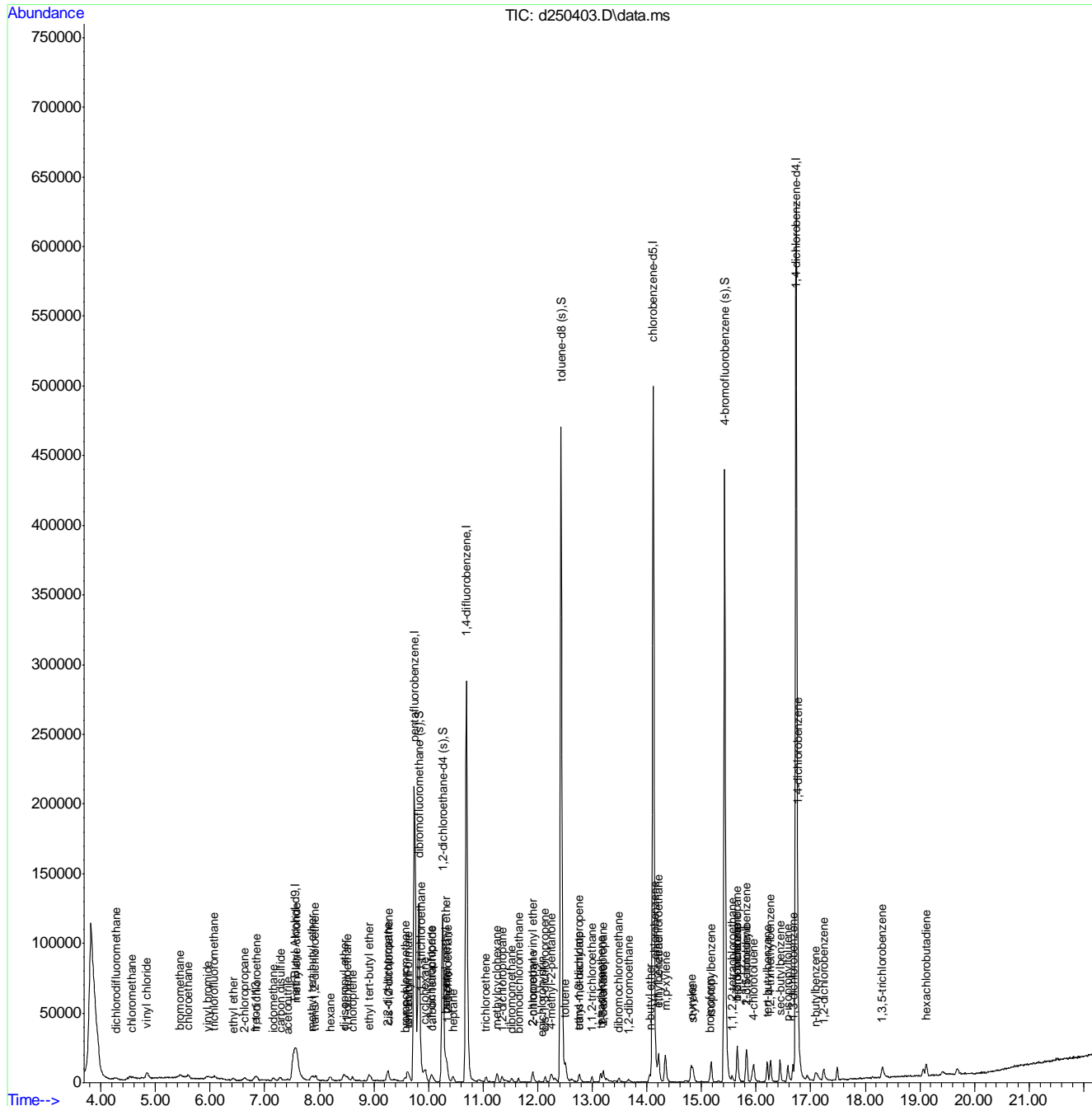
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
60) heptane	10.448	57	1116	0.80	ug/L	77
61) 1,2-dichloroethane	10.354	62	2713	0.99	ug/L	84
63) trichloroethene	11.049	95	2017	0.96	ug/L	94
64) 2-chloroethyl vinyl ether	11.907	63	4776	4.57	ug/L	93
66) methylcyclohexane	11.253	83	3696	0.81	ug/L	85
67) 1,2-dichloropropane	11.347	63	1961	0.95	ug/L	88
68) dibromomethane	11.520	93	1341	0.98	ug/L	95
69) bromodichloromethane	11.645	83	2715	0.94	ug/L	90
70) 2-nitropropane	11.907	41	744	0.91	ug/L #	39
71) epichlorohydrin	12.074	57	671	3.34	ug/L	54
72) cis-1,3-dichloropropene	12.142	75	3359	1.00	ug/L	88
73) 4-methyl-2-pentanone	12.246	58	2929	3.65	ug/L #	80
77) toluene	12.508	92	5675	0.95	ug/L	97
78) ethyl methacrylate	12.754	69	2179	0.76	ug/L	75
79) trans-1,3-dichloropropene	12.759	75	3163	0.95	ug/L	81
80) 1,1,2-trichloroethane	12.994	83	1646	0.97	ug/L	88
81) tetrachloroethene	13.156	164	2148	0.93	ug/L	93
82) 2-hexanone	13.203	58	3010	3.71	ug/L #	81
83) 1,3-dichloropropane	13.198	76	3311	0.96	ug/L	92
86) dibromochloromethane	13.485	129	2456	0.91	ug/L	94
87) 1,2-dibromoethane	13.663	107	2169	0.93	ug/L	96
88) n-butyl ether	14.061	57	9336	0.97	ug/L	91
89) chlorobenzene	14.155	112	7151	0.95	ug/L	89
90) 1,1,1,2-tetrachloroethane	14.217	131	2712	0.88	ug/L	95
91) ethylbenzene	14.212	91	12393	0.98	ug/L	98
92) m,p-xylene	14.338	106	9161	1.87	ug/L	86
93) o-xylene	14.813	91	9835	0.91	ug/L	96
94) styrene	14.845	104	7311	0.88	ug/L	99
96) isopropylbenzene	15.179	105	12778	0.91	ug/L	95
97) bromoform	15.148	173	1720	0.81	ug/L	89
101) 1,1,2,2-tetrachloroethane	15.566	83	3138	1.06	ug/L	94
103) 1,2,3-trichloropropane	15.650	110	759	0.86	ug/L	97
104) bromobenzene	15.650	156	3732	1.02	ug/L	88
105) n-propylbenzene	15.655	91	15430	1.01	ug/L	99
106) 2-chlorotoluene	15.828	126	3189	0.98	ug/L	91
107) 4-chlorotoluene	15.958	91	9741	1.03	ug/L	98
108) 1,3,5-trimethylbenzene	15.817	105	11083	0.96	ug/L	96
109) tert-butylbenzene	16.204	119	9191	1.04	ug/L	97
110) 1,2,4-trimethylbenzene	16.267	105	11768	0.99	ug/L	98
111) sec-butylbenzene	16.439	105	14822	0.98	ug/L	95
112) p-isopropyltoluene	16.580	119	12976	0.99	ug/L	91
113) 1,3-dichlorobenzene	16.675	146	7239	1.05	ug/L	94
114) 1,4-dichlorobenzene	16.763	146	8243	1.09	ug/L	91
115) 1,2-dichlorobenzene	17.239	146	7290	0.98	ug/L	97
117) n-butylbenzene	17.093	92	5575	0.85	ug/L	95
121) 1,3,5-trichlorobenzene	18.316	180	6069	0.86	ug/L	86
123) hexachlorobutadiene	19.121	225	2942	0.89	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250403.D
 Acq On : 13 Jun 2017 10:57 am
 Operator : XimenaC
 Sample : IC10106-1
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 14 16:00:54 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



7.7.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250404.D
 Acq On : 13 Jun 2017 11:25 am
 Operator : XimenaC
 Sample : IC10106-0.5
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 14 16:04:53 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.562	65	110018	500.00	ug/L	0.00
5) pentafluorobenzene	9.747	168	223597	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.693	114	322496	50.00	ug/L	0.00
75) chlorobenzene-d5	14.118	117	361073	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.737	152	237022	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.820	113	100686	49.68	ug/L	0.00
Spiked Amount	50.000	Range	70 - 122	Recovery	=	99.36%
55) 1,2-dichloroethane-d4 (s)	10.259	65	113398	50.78	ug/L	0.00
Spiked Amount	50.000	Range	68 - 124	Recovery	=	101.56%
76) toluene-d8 (s)	12.429	98	419899	48.61	ug/L	0.00
Spiked Amount	50.000	Range	77 - 125	Recovery	=	97.22%
100) 4-bromofluorobenzene (s)	15.425	95	185281	53.48	ug/L	0.00
Spiked Amount	50.000	Range	72 - 130	Recovery	=	106.96%

Target Compounds

Qvalue

8) chloromethane	4.556	50	1768	0.47	ug/L	70
10) vinyl chloride	4.854	62	2040	0.46	ug/L #	53
11) bromomethane	5.450	94	1365	0.47	ug/L	73
14) vinyl bromide	5.951	106	1269	0.44	ug/L	88
16) 2-chloropropane	6.636	43	2091	0.54	ug/L #	73
22) iodomethane	7.159	142	2243	0.47	ug/L	82
23) carbon disulfide	7.285	76	3760	0.47	ug/L	79
24) methylene chloride	7.577	84	1292	0.51	ug/L	96
26) methyl tert butyl ether	7.886	73	3843	0.52	ug/L	92
29) di-isopropyl ether	8.456	45	3276	0.48	ug/L	89
31) 1,1-dichloroethane	8.508	63	1493	0.46	ug/L	81
35) ethyl tert-butyl ether	8.911	59	3450	0.46	ug/L	88
37) 2,2-dichloropropane	9.250	77	2185	0.51	ug/L	94
38) cis-1,2-dichloroethene	9.266	96	1392	0.56	ug/L	80
44) chloroform	9.621	83	2518	0.65	ug/L	93
47) 1,1,1-trichloroethane	9.867	97	1826	0.46	ug/L	77
50) 1,1-dichloropropene	10.045	75	1227	0.49	ug/L #	39
51) carbon tetrachloride	10.076	117	1452	0.40	ug/L #	70
58) benzene	10.322	78	4122	0.50	ug/L #	58
59) tert-amyl methyl ether	10.343	73	4468	0.54	ug/L	90
61) 1,2-dichloroethane	10.359	62	1222	0.45	ug/L	53
63) trichloroethene	11.049	95	1002	0.48	ug/L	90
64) 2-chloroethyl vinyl ether	11.917	63	2275	2.18	ug/L	89
67) 1,2-dichloropropane	11.352	63	991	0.48	ug/L #	49
68) dibromomethane	11.530	93	637	0.47	ug/L	82
69) bromodichloromethane	11.650	83	1395	0.48	ug/L	95
72) cis-1,3-dichloropropene	12.136	75	1628	0.48	ug/L	89
77) toluene	12.513	92	2770	0.47	ug/L #	79
79) trans-1,3-dichloropropene	12.769	75	1368	0.41	ug/L	84
80) 1,1,2-trichloroethane	12.988	83	714	0.42	ug/L #	72
81) tetrachloroethene	13.161	164	1023	0.45	ug/L	89
83) 1,3-dichloropropane	13.203	76	1609	0.47	ug/L	87
86) dibromochloromethane	13.490	129	1042	0.39	ug/L	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250404.D
 Acq On : 13 Jun 2017 11:25 am
 Operator : XimenaC
 Sample : IC10106-0.5
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 14 16:04:53 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
87) 1,2-dibromoethane	13.678	107	1041	0.45	ug/L	85
88) n-butyl ether	14.071	57	4504	0.47	ug/L	91
89) chlorobenzene	14.154	112	3705	0.50	ug/L	91
90) 1,1,1,2-tetrachloroethane	14.227	131	1257	0.41	ug/L #	70
91) ethylbenzene	14.217	91	6295	0.50	ug/L	89
92) m,p-xylene	14.348	106	4669	0.96	ug/L	90
93) o-xylene	14.818	91	5012	0.47	ug/L	98
94) styrene	14.855	104	3599	0.44	ug/L	98
96) isopropylbenzene	15.184	105	6283	0.45	ug/L	97
97) bromoform	15.148	173	829	0.39	ug/L	75
101) 1,1,2,2-tetrachloroethane	15.571	83	1441	0.49	ug/L	90
104) bromobenzene	15.655	156	1921	0.53	ug/L	98
105) n-propylbenzene	15.665	91	8073	0.53	ug/L	97
106) 2-chlorotoluene	15.843	126	1693	0.52	ug/L #	80
107) 4-chlorotoluene	15.963	91	4925	0.52	ug/L	88
108) 1,3,5-trimethylbenzene	15.827	105	5777	0.50	ug/L	97
109) tert-butylbenzene	16.204	119	4710	0.54	ug/L	90
110) 1,2,4-trimethylbenzene	16.266	105	5586	0.47	ug/L	98
111) sec-butylbenzene	16.444	105	7469	0.49	ug/L	96
112) p-isopropyltoluene	16.590	119	6265	0.48	ug/L	98
113) 1,3-dichlorobenzene	16.679	146	3481	0.51	ug/L	97
114) 1,4-dichlorobenzene	16.768	146	4431	0.59	ug/L	91
115) 1,2-dichlorobenzene	17.249	146	3768	0.51	ug/L	87

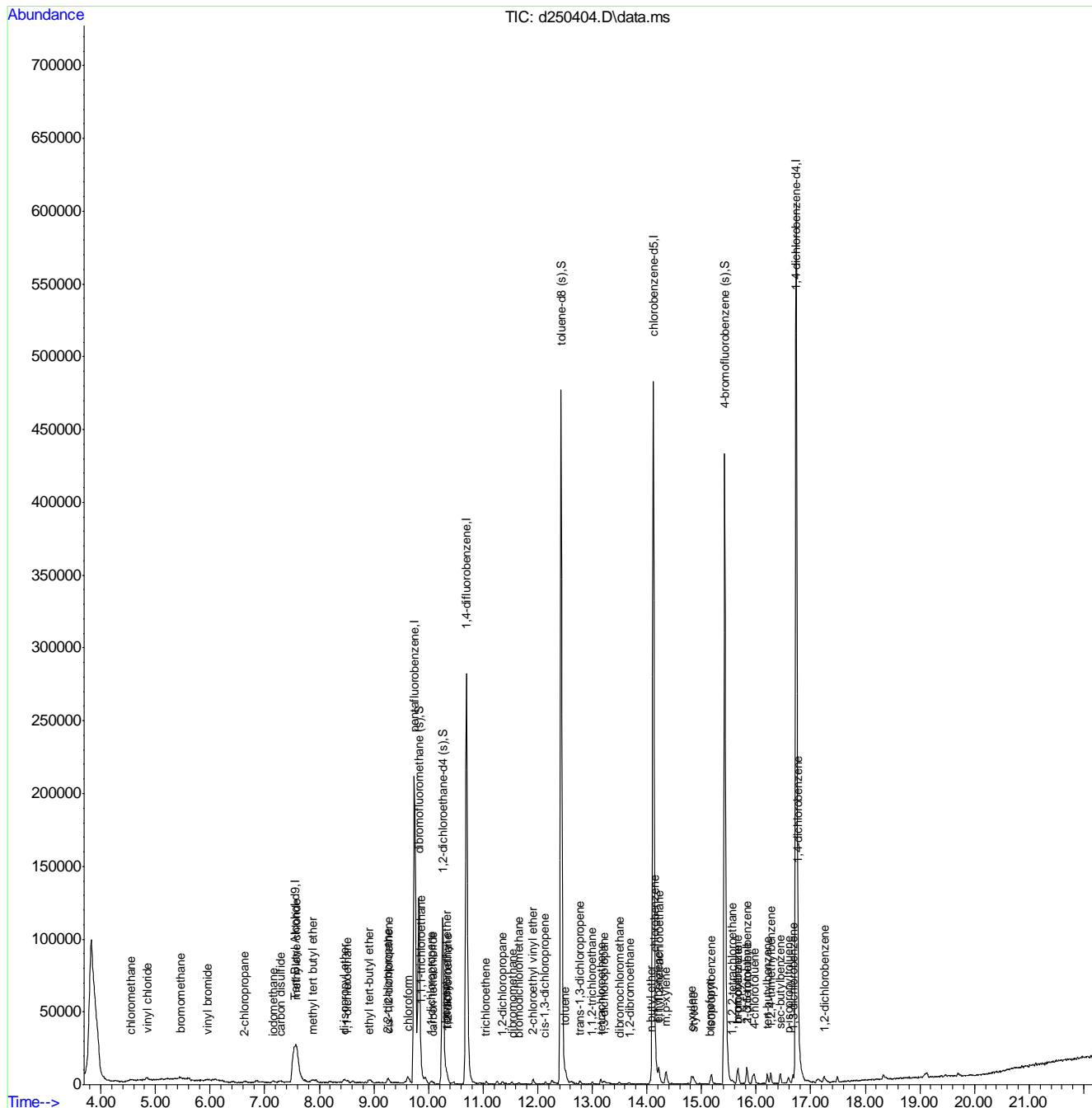
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.17
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250404.D
 Acq On : 13 Jun 2017 11:25 am
 Operator : XimenaC
 Sample : IC10106-0.5
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 14 16:04:53 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250405.D
 Acq On : 13 Jun 2017 11:53 am
 Operator : XimenaC
 Sample : IC10106-0.2
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 14 16:08:47 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.568	65	107683	500.00	ug/L	0.00
5) pentafluorobenzene	9.748	168	223609	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.694	114	315387	50.00	ug/L	0.00
75) chlorobenzene-d5	14.113	117	346308	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.738	152	237273	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.826	113	101383	50.02	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	100.04%	
55) 1,2-dichloroethane-d4 (s)	10.260	65	112680	51.60	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	103.20%	
76) toluene-d8 (s)	12.430	98	406268	49.04	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	98.08%	
100) 4-bromofluorobenzene (s)	15.426	95	176209	50.80	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	101.60%	

Target Compounds

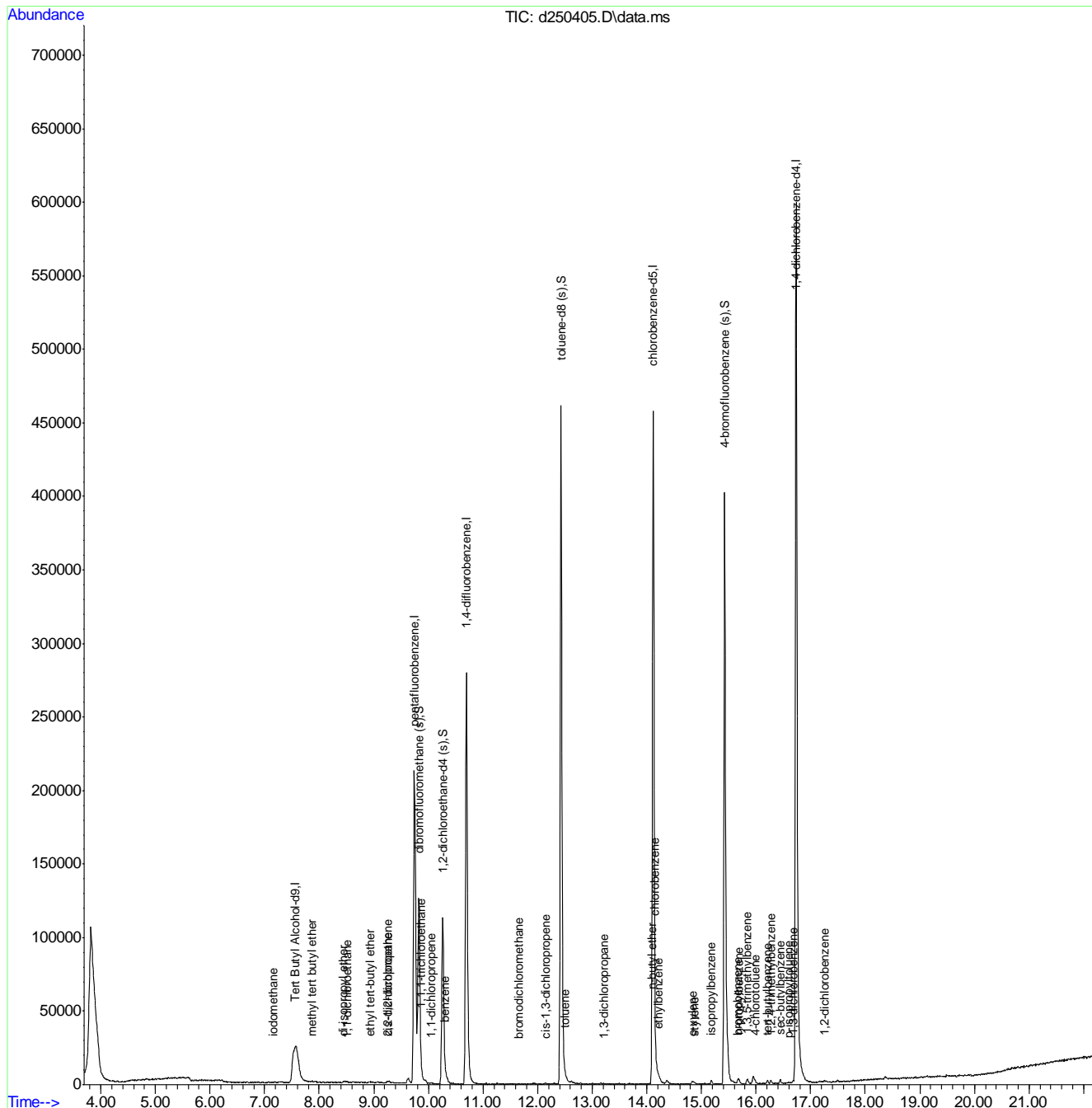
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
22) iodomethane	7.150	142	958	0.20	ug/L	77
26) methyl tert butyl ether	7.866	73	1498	0.20	ug/L	55
29) di-isopropyl ether	8.446	45	1426	0.21	ug/L	71
31) 1,1-dichloroethane	8.509	63	523	0.16	ug/L #	54
35) ethyl tert-butyl ether	8.927	59	1456	0.19	ug/L #	64
37) 2,2-dichloropropane	9.246	77	993	0.23	ug/L	83
38) cis-1,2-dichloroethene	9.251	96	655	0.26	ug/L #	51
47) 1,1,1-trichloroethane	9.868	97	653	0.16	ug/L #	63
50) 1,1-dichloropropene	10.046	75	502	0.20	ug/L #	37
58) benzene	10.313	78	1655	0.20	ug/L #	1
69) bromodichloromethane	11.656	83	522	0.19	ug/L	81
72) cis-1,3-dichloropropene	12.148	75	568	0.17	ug/L #	70
77) toluene	12.514	92	1164	0.21	ug/L #	78
83) 1,3-dichloropropane	13.209	76	565	0.17	ug/L #	74
88) n-butyl ether	14.082	57	1470	0.16	ug/L	71
89) chlorobenzene	14.150	112	1442	0.20	ug/L	80
91) ethylbenzene	14.223	91	2457	0.20	ug/L	91
93) o-xylene	14.830	91	2038	0.20	ug/L	93
94) styrene	14.861	104	1313	0.17	ug/L	98
96) isopropylbenzene	15.180	105	2478	0.19	ug/L	99
104) bromobenzene	15.656	156	571	0.16	ug/L	90
105) n-propylbenzene	15.687	91	3198	0.21	ug/L	86
107) 4-chlorotoluene	15.985	91	2036	0.22	ug/L	83
108) 1,3,5-trimethylbenzene	15.833	105	2271	0.20	ug/L	95
109) tert-butylbenzene	16.210	119	2009	0.23	ug/L	89
110) 1,2,4-trimethylbenzene	16.273	105	2225	0.19	ug/L	90
111) sec-butylbenzene	16.445	105	2773	0.18	ug/L	89
112) p-isopropyltoluene	16.597	119	2324	0.18	ug/L	50
113) 1,3-dichlorobenzene	16.680	146	1256	0.18	ug/L	97
115) 1,2-dichlorobenzene	17.261	146	1219	0.16	ug/L	88

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250405.D
 Acq On : 13 Jun 2017 11:53 am
 Operator : XimenaC
 Sample : IC10106-0.2
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 14 16:08:47 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250406.D
 Acq On : 13 Jun 2017 12:21 pm
 Operator : XimenaC
 Sample : IC10106-4
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 14 16:11:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.568	65	105096	500.00	ug/L	0.00
5) pentafluorobenzene	9.748	168	219952	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.694	114	315839	50.00	ug/L	0.00
75) chlorobenzene-d5	14.114	117	354270	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.733	152	243746	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.821	113	100410	50.36	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	100.72%	
55) 1,2-dichloroethane-d4 (s)	10.261	65	112797	51.58	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	103.16%	
76) toluene-d8 (s)	12.430	98	417041	49.21	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	98.42%	
100) 4-bromofluorobenzene (s)	15.421	95	187531	52.63	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	105.26%	

Target Compounds

Qvalue

3) tertiary butyl alcohol	7.652	59	5479	19.54	ug/L	75
4) 1,4-dioxane	11.489	88	1909	69.51	ug/L	78
6) chlorodifluoromethane	4.290	51	11214	3.80	ug/L	89
7) dichlorodifluoromethane	4.285	85	14373	3.83	ug/L	96
8) chloromethane	4.572	50	14460	3.90	ug/L	95
9) 1,3-butadiene	4.839	54	8725	3.35	ug/L	92
10) vinyl chloride	4.844	62	17446	4.00	ug/L	99
11) bromomethane	5.461	94	11548	4.02	ug/L	97
12) chloroethane	5.592	64	7872	3.81	ug/L	97
13) trichlorofluoromethane	6.078	101	19214	3.79	ug/L	96
14) vinyl bromide	5.963	106	11237	3.97	ug/L	89
15) ethyl ether	6.423	74	3667	3.87	ug/L #	84
16) 2-chloropropane	6.627	43	14361	3.78	ug/L	97
17) acrolein	6.726	56	1107	2.90	ug/L	85
18) freon 113	6.821	151	9168	3.67	ug/L	92
19) 1,1-dichloroethene	6.862	96	8671	3.78	ug/L	92
20) acetone	6.930	58	1945	13.25	ug/L #	54
21) acetonitrile	7.443	41	14337	42.55	ug/L	90
22) iodomethane	7.160	142	17757	3.79	ug/L	97
23) carbon disulfide	7.281	76	29985	3.84	ug/L	98
24) methylene chloride	7.573	84	9822	3.97	ug/L	93
25) methyl acetate	7.390	43	4828	4.06	ug/L	80
26) methyl tert butyl ether	7.871	73	28317	3.88	ug/L	95
27) trans-1,2-dichloroethene	7.934	96	8279	3.90	ug/L	98
28) hexane	8.195	56	4193	3.74	ug/L	88
29) di-isopropyl ether	8.446	45	25369	3.75	ug/L	97
30) 2-butanone	9.246	72	2703	14.50	ug/L #	78
31) 1,1-dichloroethane	8.509	63	12640	3.94	ug/L	97
32) chloroprene	8.608	53	9677	3.65	ug/L	98
33) acrylonitrile	7.965	53	1953	3.54	ug/L	85
35) ethyl tert-butyl ether	8.912	59	28690	3.87	ug/L	99
36) ethyl acetate	9.236	45	705	3.52	ug/L #	37
37) 2,2-dichloropropane	9.257	77	15662	3.70	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250406.D
 Acq On : 13 Jun 2017 12:21 pm
 Operator : XimenaC
 Sample : IC10106-4
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 14 16:11:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) cis-1,2-dichloroethene	9.257	96	9124	3.75	ug/L	97
39) propionitrile	9.361	54	9243	40.48	ug/L	89
41) methacrylonitrile	9.534	67	2415	3.73	ug/L	94
42) bromochloromethane	9.570	128	4372	3.78	ug/L	97
44) chloroform	9.617	83	14548	3.80	ug/L	98
45) tert-Butyl Formate	9.659	59	5883	3.75	ug/L	82
47) 1,1,1-trichloroethane	9.874	97	14820	3.77	ug/L	98
48) cyclohexane	9.936	84	14545	3.65	ug/L	92
49) isobutyl alcohol	10.051	74	479	18.33	ug/L #	31
50) 1,1-dichloropropene	10.046	75	9621	3.87	ug/L	98
51) carbon tetrachloride	10.067	117	13275	3.70	ug/L	98
52) tert-amyl alcohol	10.213	73	2753	20.39	ug/L	95
53) isopropyl acetate	10.229	87	1704	4.41	ug/L #	86
56) n-butyl alcohol	10.877	56	10923	199.05	ug/L	95
57) 2,2,4-Trimethylpentane	10.266	57	28879	2.99	ug/L	97
58) benzene	10.323	78	30982	3.80	ug/L	92
59) tert-amyl methyl ether	10.323	73	30273	3.75	ug/L	91
60) heptane	10.444	57	5222	3.84	ug/L	93
61) 1,2-dichloroethane	10.349	62	10526	3.93	ug/L	98
62) ethyl acrylate	11.076	55	7741	3.86	ug/L	92
63) trichloroethene	11.045	95	8070	3.93	ug/L	85
64) 2-chloroethyl vinyl ether	11.897	63	20536	20.06	ug/L	97
65) methyl methacrylate	11.348	100	1919	3.78	ug/L	98
66) methylcyclohexane	11.254	83	15305	3.43	ug/L	96
67) 1,2-dichloropropane	11.343	63	8006	3.97	ug/L	95
68) dibromomethane	11.520	93	5354	3.99	ug/L	94
69) bromodichloromethane	11.641	83	11143	3.94	ug/L	92
70) 2-nitropropane	11.892	41	3293	4.11	ug/L	96
71) epichlorohydrin	12.059	57	4118	20.93	ug/L	92
72) cis-1,3-dichloropropene	12.127	75	13048	3.97	ug/L	95
73) 4-methyl-2-pentanone	12.237	58	12507	15.90	ug/L	91
74) isoamyl alcohol	12.284	70	4272	69.22	ug/L	87
77) toluene	12.514	92	21960	3.79	ug/L	97
78) ethyl methacrylate	12.733	69	10310	3.70	ug/L	95
79) trans-1,3-dichloropropene	12.754	75	12535	3.86	ug/L	89
80) 1,1,2-trichloroethane	12.984	83	6434	3.89	ug/L	99
81) tetrachloroethene	13.146	164	8484	3.77	ug/L	96
82) 2-hexanone	13.183	58	11164	14.16	ug/L	97
83) 1,3-dichloropropane	13.188	76	13356	4.00	ug/L	90
84) butyl acetate	13.251	56	4932	3.64	ug/L	92
85) 3,3-Dimethyl-1-Butanol	13.387	69	4092	44.28	ug/L	90
86) dibromochloromethane	13.481	129	9732	3.72	ug/L	97
87) 1,2-dibromoethane	13.653	107	9022	3.97	ug/L	93
88) n-butyl ether	14.025	57	36691	3.90	ug/L	97
89) chlorobenzene	14.150	112	28344	3.88	ug/L	100
90) 1,1,1,2-tetrachloroethane	14.218	131	10957	3.66	ug/L	97
91) ethylbenzene	14.202	91	46221	3.76	ug/L	99
92) m,p-xylene	14.323	106	36373	7.64	ug/L	94
93) o-xylene	14.804	91	39315	3.73	ug/L	99
94) styrene	14.825	104	30836	3.82	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250406.D
 Acq On : 13 Jun 2017 12:21 pm
 Operator : XimenaC
 Sample : IC10106-4
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 14 16:11:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

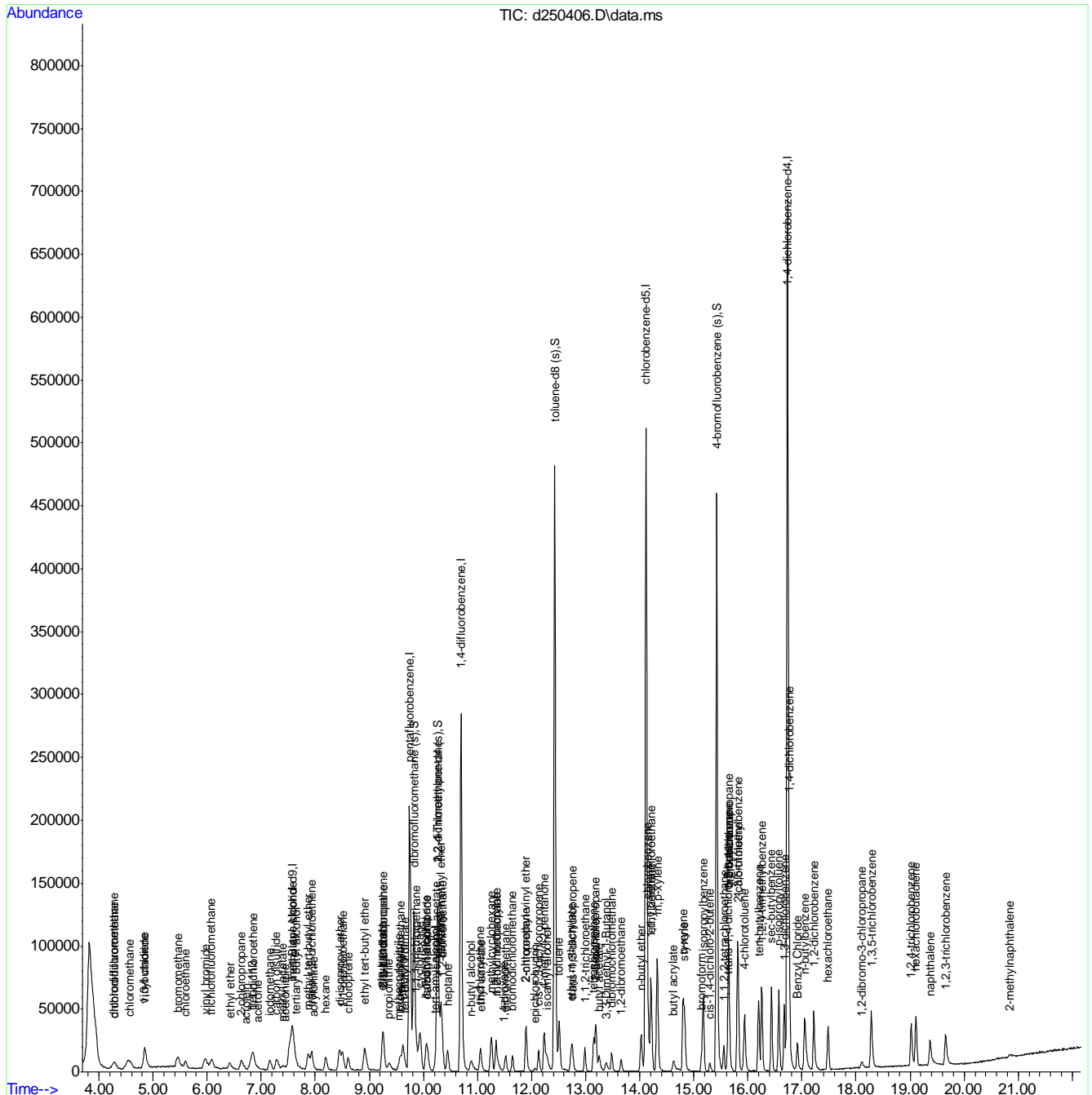
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) butyl acrylate	14.621	55	13617	3.03	ug/L	99
96) isopropylbenzene	15.175	105	50466	3.69	ug/L	95
97) bromoform	15.138	173	7408	3.59	ug/L	93
98) cis-1,4-dichloro-2-butene	15.300	88	2454	5.34	ug/L	92
101) 1,1,2,2-tetrachloroethane	15.551	83	12422	4.09	ug/L	92
102) trans-1,4-dichloro-2-b...	15.619	53	2539	3.15	ug/L #	27
103) 1,2,3-trichloropropane	15.640	110	3748	4.14	ug/L	93
104) bromobenzene	15.651	156	15281	4.09	ug/L	93
105) n-propylbenzene	15.640	91	60354	3.85	ug/L	99
106) 2-chlorotoluene	15.823	126	12995	3.89	ug/L	100
107) 4-chlorotoluene	15.938	91	39217	4.05	ug/L	96
108) 1,3,5-trimethylbenzene	15.813	105	45415	3.83	ug/L	99
109) tert-butylbenzene	16.200	119	36189	4.00	ug/L	97
110) 1,2,4-trimethylbenzene	16.257	105	47143	3.87	ug/L	98
111) sec-butylbenzene	16.440	105	58972	3.79	ug/L	98
112) p-isopropyltoluene	16.571	119	50529	3.75	ug/L	97
113) 1,3-dichlorobenzene	16.675	146	28955	4.09	ug/L	100
114) 1,4-dichlorobenzene	16.764	146	31025	4.00	ug/L	97
115) 1,2-dichlorobenzene	17.219	146	29833	3.92	ug/L	99
116) Benzyl Chloride	16.916	91	24374	3.74	ug/L	98
117) n-butylbenzene	17.052	92	24729	3.68	ug/L	95
119) hexachloroethane	17.486	201	7866	3.26	ug/L	93
120) 1,2-dibromo-3-chloropr...	18.108	75	2295	3.53	ug/L	98
121) 1,3,5-trichlorobenzene	18.286	180	26265	3.64	ug/L	95
122) 1,2,4-trichlorobenzene	19.023	180	19166	3.26	ug/L	99
123) hexachlorobutadiene	19.112	225	11991	3.53	ug/L	98
124) naphthalene	19.368	128	35579	2.98	ug/L	98
125) 1,2,3-trichlorobenzene	19.660	180	17139	3.23	ug/L	92
126) 2-methylnaphthalene	20.842	142	2960	0.68	ug/L	90

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250406.D
 Acq On : 13 Jun 2017 12:21 pm
 Operator : XimenaC
 Sample : IC10106-4
 Misc : ms14425, vd10106, 5.0, , 100, 5, 1
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 14 16:11:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



7.7.19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250407.D
 Acq On : 13 Jun 2017 12:49 pm
 Operator : XimenaC
 Sample : IC10106-8
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 14 16:13:14 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.542	65	100345	500.00	ug/L	-0.03
5) pentafluorobenzene	9.743	168	222341	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.694	114	315992	50.00	ug/L	0.00
75) chlorobenzene-d5	14.113	117	333102	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.733	152	238382	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.821	113	101630	50.43	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	100.86%	
55) 1,2-dichloroethane-d4 (s)	10.260	65	113381	51.82	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	103.64%	
76) toluene-d8 (s)	12.425	98	404800	50.80	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	101.60%	
100) 4-bromofluorobenzene (s)	15.420	95	174614	50.11	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	100.22%	

Target Compounds

Qvalue

3) tertiary butyl alcohol	7.683	59	10486	39.16	ug/L	94
4) 1,4-dioxane	11.478	88	4648	177.25	ug/L	95
6) chlorodifluoromethane	4.290	51	23908	8.02	ug/L	97
7) dichlorodifluoromethane	4.285	85	30517	8.04	ug/L	98
8) chloromethane	4.598	50	29368	7.83	ug/L	98
9) 1,3-butadiene	4.849	54	19090	7.25	ug/L	97
10) vinyl chloride	4.855	62	35920	8.15	ug/L	97
11) bromomethane	5.466	94	22819	7.85	ug/L	95
12) chloroethane	5.597	64	15854	7.59	ug/L	98
13) trichlorofluoromethane	6.083	101	39829	7.78	ug/L	97
14) vinyl bromide	5.958	106	22294	7.79	ug/L	99
15) ethyl ether	6.412	74	7590	7.92	ug/L	93
16) 2-chloropropane	6.622	43	30008	7.82	ug/L	97
17) acrolein	6.731	56	2911	7.54	ug/L	89
18) freon 113	6.825	151	19905	7.88	ug/L	98
19) 1,1-dichloroethene	6.857	96	17593	7.59	ug/L	98
20) acetone	6.946	58	4422	29.79	ug/L	100
21) acetonitrile	7.427	41	26347	77.36	ug/L	95
22) iodomethane	7.160	142	36533	7.71	ug/L	98
23) carbon disulfide	7.280	76	61696	7.81	ug/L	99
24) methylene chloride	7.578	84	19024	7.61	ug/L	96
25) methyl acetate	7.374	43	9536	7.94	ug/L	99
26) methyl tert butyl ether	7.876	73	56272	7.63	ug/L	98
27) trans-1,2-dichloroethene	7.934	96	16566	7.72	ug/L	96
28) hexane	8.195	56	9179	8.09	ug/L	89
29) di-isopropyl ether	8.451	45	53836	7.88	ug/L	98
30) 2-butanone	9.236	72	5750	30.51	ug/L #	89
31) 1,1-dichloroethane	8.509	63	26972	8.32	ug/L	98
32) chloroprene	8.608	53	20916	7.80	ug/L	97
33) acrylonitrile	7.949	53	4564	8.18	ug/L	89
34) vinyl acetate	8.493	86	2274	6.49	ug/L #	55
35) ethyl tert-butyl ether	8.911	59	58057	7.74	ug/L	97
36) ethyl acetate	9.225	45	1697	8.39	ug/L #	41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250407.D
 Acq On : 13 Jun 2017 12:49 pm
 Operator : XimenaC
 Sample : IC10106-8
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 14 16:13:14 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	9.256	77	32770	7.67	ug/L	97
38) cis-1,2-dichloroethene	9.251	96	18229	7.40	ug/L	99
39) propionitrile	9.361	54	18959	82.14	ug/L	92
40) methyl acrylate	9.319	85	1461	5.99	ug/L #	77
41) methacrylonitrile	9.528	67	5197	7.93	ug/L	93
42) bromochloromethane	9.575	128	9433	8.07	ug/L	99
43) tetrahydrofuran	9.617	42	6878	10.25	ug/L	89
44) chloroform	9.617	83	29286	7.57	ug/L	98
45) tert-Butyl Formate	9.643	59	12172	7.67	ug/L	96
47) 1,1,1-trichloroethane	9.868	97	32031	8.07	ug/L	97
48) cyclohexane	9.931	84	31513	7.81	ug/L	94
49) isobutyl alcohol	10.041	74	1871	70.83	ug/L #	12
50) 1,1-dichloropropene	10.046	75	19698	7.84	ug/L	92
51) carbon tetrachloride	10.072	117	28437	7.83	ug/L	98
52) tert-amyl alcohol	10.203	73	5060	37.07	ug/L	92
53) isopropyl acetate	10.229	87	3328	8.52	ug/L #	81
56) n-butyl alcohol	10.867	56	21285	387.70	ug/L	92
57) 2,2,4-Trimethylpentane	10.276	57	65326	6.76	ug/L	99
58) benzene	10.323	78	65333	8.01	ug/L	96
59) tert-amyl methyl ether	10.328	73	60324	7.48	ug/L	95
60) heptane	10.443	57	11550	8.48	ug/L	97
61) 1,2-dichloroethane	10.354	62	21495	8.03	ug/L	98
62) ethyl acrylate	11.060	55	15550	7.74	ug/L	95
63) trichloroethene	11.044	95	16734	8.15	ug/L	91
64) 2-chloroethyl vinyl ether	11.891	63	39877	38.94	ug/L	100
65) methyl methacrylate	11.337	100	3525	6.95	ug/L #	71
66) methylcyclohexane	11.259	83	34279	7.68	ug/L	98
67) 1,2-dichloropropane	11.337	63	16653	8.25	ug/L	95
68) dibromomethane	11.515	93	10814	8.06	ug/L	99
69) bromodichloromethane	11.640	83	22848	8.08	ug/L	96
70) 2-nitropropane	11.897	41	6164	7.68	ug/L	98
71) epichlorohydrin	12.053	57	8113	41.21	ug/L	99
72) cis-1,3-dichloropropene	12.127	75	26650	8.10	ug/L	100
73) 4-methyl-2-pentanone	12.226	58	24049	30.56	ug/L	97
74) isoamyl alcohol	12.268	70	8908	144.27	ug/L	95
77) toluene	12.508	92	44031	8.07	ug/L	97
78) ethyl methacrylate	12.723	69	19713	7.53	ug/L	97
79) trans-1,3-dichloropropene	12.744	75	24380	7.98	ug/L	91
80) 1,1,2-trichloroethane	12.984	83	12690	8.16	ug/L	97
81) tetrachloroethene	13.146	164	17330	8.19	ug/L	97
82) 2-hexanone	13.172	58	21202	28.60	ug/L	96
83) 1,3-dichloropropane	13.188	76	25679	8.18	ug/L	100
84) butyl acetate	13.240	56	9884	7.75	ug/L	92
85) 3,3-Dimethyl-1-Butanol	13.371	69	10885	77.94	ug/L	96
86) dibromochloromethane	13.481	129	19614	7.96	ug/L	97
87) 1,2-dibromoethane	13.653	107	16890	7.90	ug/L	97
88) n-butyl ether	14.019	57	71538	8.08	ug/L	97
89) chlorobenzene	14.150	112	54575	7.94	ug/L	99
90) 1,1,1,2-tetrachloroethane	14.218	131	22383	7.94	ug/L	96
91) ethylbenzene	14.202	91	90688	7.84	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250407.D
 Acq On : 13 Jun 2017 12:49 pm
 Operator : XimenaC
 Sample : IC10106-8
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 14 16:13:14 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

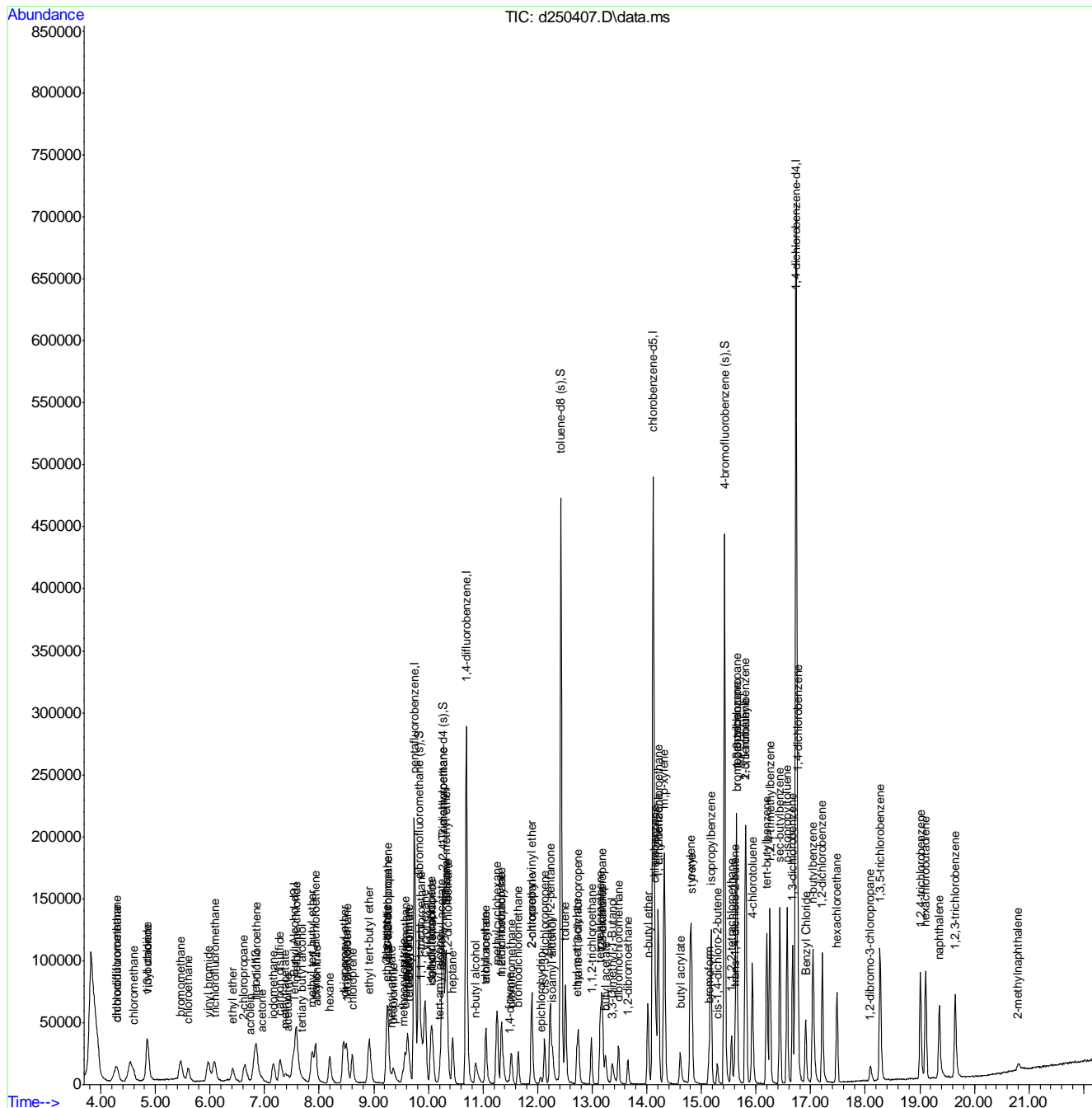
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) m,p-xylene	14.317	106	72621	16.23	ug/L	99
93) o-xylene	14.793	91	79275	7.99	ug/L	97
94) styrene	14.819	104	61109	8.05	ug/L	97
95) butyl acrylate	14.610	55	29054	6.88	ug/L	98
96) isopropylbenzene	15.175	105	102151	7.95	ug/L	99
97) bromoform	15.138	173	14943	7.71	ug/L	98
98) cis-1,4-dichloro-2-butene	15.290	88	5583	8.35	ug/L	94
101) 1,1,2,2-tetrachloroethane	15.551	83	24031	8.10	ug/L	97
102) trans-1,4-dichloro-2-b...	15.609	53	5450	6.91	ug/L	93
103) 1,2,3-trichloropropane	15.635	110	7159	8.09	ug/L	97
104) bromobenzene	15.650	156	29265	8.01	ug/L	97
105) n-propylbenzene	15.635	91	121232	7.90	ug/L	99
106) 2-chlorotoluene	15.812	126	25665	7.86	ug/L #	86
107) 4-chlorotoluene	15.933	91	75989	8.03	ug/L	99
108) 1,3,5-trimethylbenzene	15.807	105	92228	7.96	ug/L	99
109) tert-butylbenzene	16.194	119	74583	8.42	ug/L	98
110) 1,2,4-trimethylbenzene	16.252	105	97092	8.14	ug/L	98
111) sec-butylbenzene	16.435	105	122182	8.02	ug/L	99
112) p-isopropyltoluene	16.570	119	107001	8.12	ug/L	99
113) 1,3-dichlorobenzene	16.670	146	58176	8.40	ug/L	98
114) 1,4-dichlorobenzene	16.764	146	62989	8.29	ug/L	100
115) 1,2-dichlorobenzene	17.214	146	61002	8.19	ug/L	98
116) Benzyl Chloride	16.905	91	50035	7.85	ug/L	99
117) n-butylbenzene	17.041	92	52639	8.02	ug/L	95
119) hexachloroethane	17.480	201	16862	7.15	ug/L	95
120) 1,2-dibromo-3-chloropr...	18.092	75	4963	7.80	ug/L	88
121) 1,3,5-trichlorobenzene	18.270	180	56005	7.93	ug/L	97
122) 1,2,4-trichlorobenzene	19.012	180	42486	7.39	ug/L	99
123) hexachlorobutadiene	19.106	225	25760	7.76	ug/L	98
124) naphthalene	19.357	128	81433	6.98	ug/L	97
125) 1,2,3-trichlorobenzene	19.645	180	38221	7.36	ug/L	99
126) 2-methylnaphthalene	20.800	142	9076	2.15	ug/L	90

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250407.D
 Acq On : 13 Jun 2017 12:49 pm
 Operator : XimenaC
 Sample : IC10106-8
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 14 16:13:14 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



7.7.20
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250408.D
 Acq On : 13 Jun 2017 1:18 pm
 Operator : XimenaC
 Sample : IC10106-20
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 14 16:15:07 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.546	65	108903	500.00	ug/L	-0.02
5) pentafluorobenzene	9.747	168	228833	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.693	114	330381	50.00	ug/L	0.00
75) chlorobenzene-d5	14.112	117	344568	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.731	152	247816	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.825	113	103671	49.98	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	99.96%	
55) 1,2-dichloroethane-d4 (s)	10.259	65	114222	49.93	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	99.86%	
76) toluene-d8 (s)	12.424	98	420948	51.07	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	102.14%	
100) 4-bromofluorobenzene (s)	15.419	95	181897	50.21	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	100.42%	

Target Compounds

						Qvalue
3) tertiary butyl alcohol	7.645	59	29054	99.98	ug/L	99
4) 1,4-dioxane	11.472	88	15488	544.21	ug/L	88
6) chlorodifluoromethane	4.284	51	61936	20.18	ug/L	96
7) dichlorodifluoromethane	4.278	85	78598	20.11	ug/L	98
8) chloromethane	4.597	50	79432	20.57	ug/L	99
9) 1,3-butadiene	4.864	54	53011	19.55	ug/L	97
10) vinyl chloride	4.859	62	93089	20.53	ug/L	97
11) bromomethane	5.470	94	61326	20.50	ug/L	98
12) chloroethane	5.601	64	42557	19.80	ug/L	98
13) trichlorofluoromethane	6.077	101	104433	19.82	ug/L	96
14) vinyl bromide	5.962	106	59832	20.31	ug/L	97
15) ethyl ether	6.411	74	20133	20.41	ug/L	97
16) 2-chloropropane	6.641	43	72761	18.43	ug/L	99
17) acrolein	6.720	56	8449	21.26	ug/L	82
18) freon 113	6.824	151	53911	20.74	ug/L	98
19) 1,1-dichloroethene	6.861	96	45273	18.97	ug/L	96
20) acetone	6.929	58	12406	81.21	ug/L	90
21) acetonitrile	7.415	41	70181	200.22	ug/L	97
22) iodomethane	7.159	142	97834	20.06	ug/L	98
23) carbon disulfide	7.279	76	165059	20.31	ug/L	100
24) methylene chloride	7.572	84	50186	19.50	ug/L	96
25) methyl acetate	7.368	43	24689	19.98	ug/L	98
26) methyl tert butyl ether	7.875	73	148155	19.52	ug/L	97
27) trans-1,2-dichloroethene	7.933	96	42126	19.07	ug/L	96
28) hexane	8.194	56	24591	21.06	ug/L	95
29) di-isopropyl ether	8.445	45	142205	20.22	ug/L	98
30) 2-butanone	9.229	72	17071	88.01	ug/L	93
31) 1,1-dichloroethane	8.503	63	70006	20.98	ug/L	98
32) chloroprene	8.602	53	58142	21.07	ug/L	97
33) acrylonitrile	7.933	53	12889	22.44	ug/L	97
34) vinyl acetate	8.487	86	7315	20.28	ug/L #	73
35) ethyl tert-butyl ether	8.916	59	155322	20.13	ug/L	98
36) ethyl acetate	9.224	45	4825	23.17	ug/L #	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250408.D
 Acq On : 13 Jun 2017 1:18 pm
 Operator : XimenaC
 Sample : IC10106-20
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 14 16:15:07 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	9.255	77	84283	19.16	ug/L	97
38) cis-1,2-dichloroethene	9.250	96	47485	18.74	ug/L	99
39) propionitrile	9.350	54	53537	225.36	ug/L	97
40) methyl acrylate	9.313	85	5002	19.93	ug/L	95
41) methacrylonitrile	9.522	67	14789	21.93	ug/L	95
42) bromochloromethane	9.569	128	24802	20.62	ug/L	99
43) tetrahydrofuran	9.611	42	14529	21.03	ug/L	93
44) chloroform	9.616	83	74849	18.80	ug/L	96
45) tert-Butyl Formate	9.642	59	32486	19.88	ug/L	98
47) 1,1,1-trichloroethane	9.867	97	85326	20.88	ug/L	99
48) cyclohexane	9.930	84	86470	20.83	ug/L	92
49) isobutyl alcohol	10.045	74	5761	211.91	ug/L #	75
50) 1,1-dichloropropene	10.045	75	53708	20.76	ug/L	98
51) carbon tetrachloride	10.066	117	77144	20.64	ug/L	96
52) tert-amyl alcohol	10.196	73	13547	96.43	ug/L	94
53) isopropyl acetate	10.223	87	9442	23.48	ug/L #	72
56) n-butyl alcohol	10.845	56	64357	1121.18	ug/L	98
57) 2,2,4-Trimethylpentane	10.270	57	186596	18.47	ug/L	99
58) benzene	10.322	78	171671	20.13	ug/L	99
59) tert-amyl methyl ether	10.327	73	158996	18.85	ug/L	98
60) heptane	10.442	57	31563	22.16	ug/L	98
61) 1,2-dichloroethane	10.353	62	57697	20.62	ug/L	98
62) ethyl acrylate	11.049	55	44983	21.42	ug/L	98
63) trichloroethene	11.049	95	44261	20.62	ug/L	99
64) 2-chloroethyl vinyl ether	11.885	63	114618	107.04	ug/L	99
65) methyl methacrylate	11.326	100	11352	21.40	ug/L #	86
66) methylcyclohexane	11.253	83	93094	19.94	ug/L	98
67) 1,2-dichloropropane	11.336	63	43394	20.57	ug/L	100
68) dibromomethane	11.514	93	29192	20.81	ug/L	98
69) bromodichloromethane	11.645	83	60897	20.60	ug/L	98
70) 2-nitropropane	11.890	41	17474	20.83	ug/L	100
71) epichlorohydrin	12.047	57	23308	113.23	ug/L	96
72) cis-1,3-dichloropropene	12.126	75	72706	21.14	ug/L	96
73) 4-methyl-2-pentanone	12.225	58	67316	81.80	ug/L	96
74) isoamyl alcohol	12.256	70	27695	428.99	ug/L	94
77) toluene	12.507	92	118191	20.95	ug/L	98
78) ethyl methacrylate	12.711	69	57490	21.23	ug/L	99
79) trans-1,3-dichloropropene	12.743	75	67758	21.44	ug/L	97
80) 1,1,2-trichloroethane	12.978	83	34360	21.36	ug/L	96
81) tetrachloroethene	13.145	164	46217	21.11	ug/L	98
82) 2-hexanone	13.161	58	63617	82.96	ug/L	100
83) 1,3-dichloropropane	13.182	76	69482	21.39	ug/L	99
84) butyl acetate	13.229	56	26951	20.43	ug/L	98
85) 3,3-Dimethyl-1-Butanol	13.359	69	34793	186.76	ug/L	98
86) dibromochloromethane	13.480	129	53633	21.05	ug/L	98
87) 1,2-dibromoethane	13.652	107	46465	21.02	ug/L	99
88) n-butyl ether	14.013	57	194926	21.30	ug/L	98
89) chlorobenzene	14.149	112	144393	20.31	ug/L	98
90) 1,1,1,2-tetrachloroethane	14.217	131	59950	20.57	ug/L	98
91) ethylbenzene	14.196	91	245014	20.49	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250408.D
 Acq On : 13 Jun 2017 1:18 pm
 Operator : XimenaC
 Sample : IC10106-20
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 14 16:15:07 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

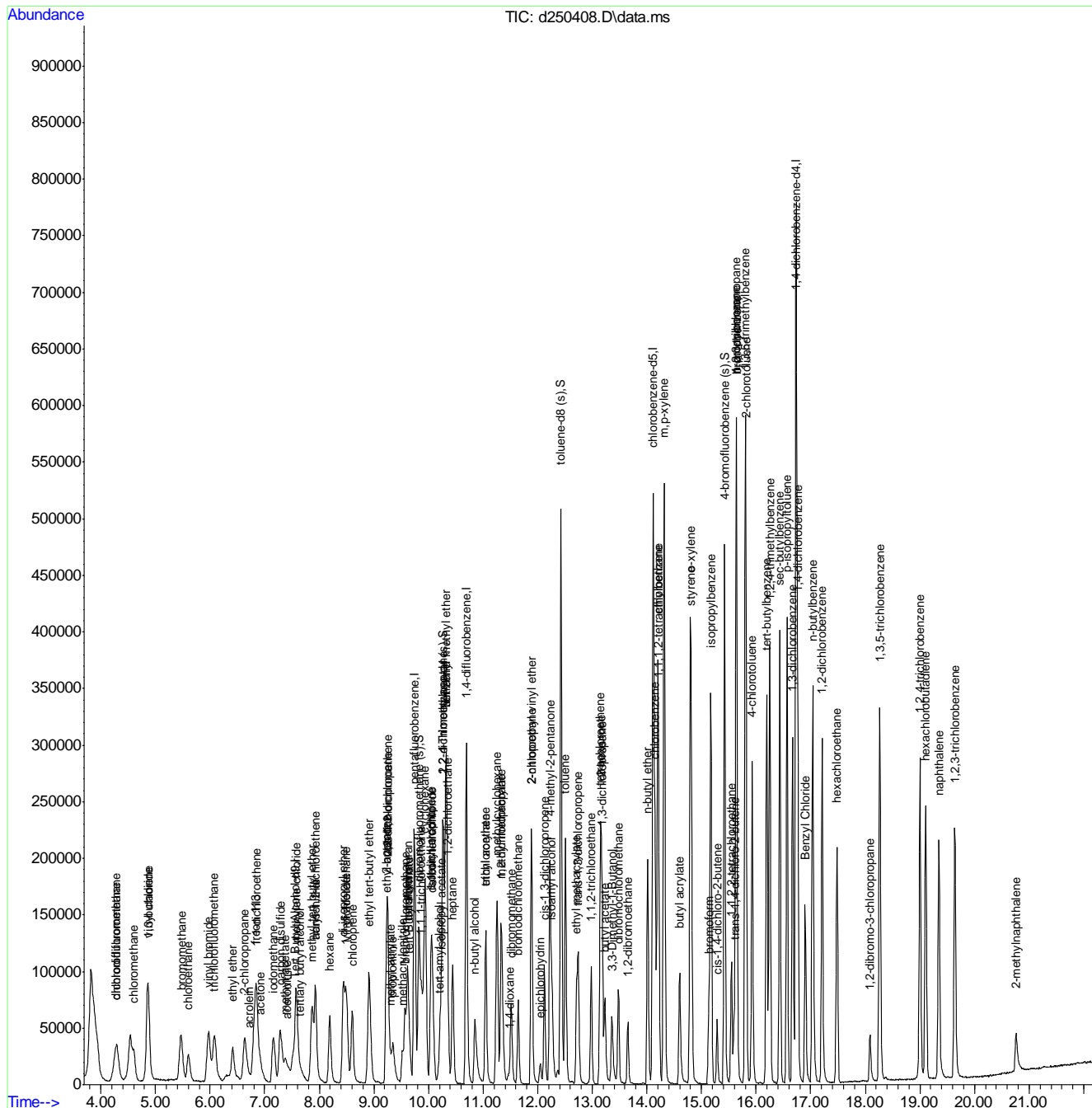
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) m,p-xylene	14.316	106	196570	42.46	ug/L	99
93) o-xylene	14.792	91	214854	20.95	ug/L	99
94) styrene	14.813	104	170725	21.75	ug/L	99
95) butyl acrylate	14.598	55	89169	20.41	ug/L	99
96) isopropylbenzene	15.168	105	281999	21.21	ug/L	98
97) bromoform	15.132	173	41861	20.88	ug/L	97
98) cis-1,4-dichloro-2-butene	15.283	88	17759	18.99	ug/L	96
101) 1,1,2,2-tetrachloroethane	15.550	83	64235	20.82	ug/L	99
102) trans-1,4-dichloro-2-b...	15.602	53	17337	21.14	ug/L	93
103) 1,2,3-trichloropropane	15.634	110	19348	21.03	ug/L	99
104) bromobenzene	15.644	156	78897	20.77	ug/L	94
105) n-propylbenzene	15.634	91	329428	20.65	ug/L	98
106) 2-chlorotoluene	15.817	126	69864	20.59	ug/L	99
107) 4-chlorotoluene	15.926	91	197557	20.08	ug/L	98
108) 1,3,5-trimethylbenzene	15.801	105	252840	20.98	ug/L	99
109) tert-butylbenzene	16.193	119	211662	23.00	ug/L	99
110) 1,2,4-trimethylbenzene	16.250	105	261393	21.08	ug/L	100
111) sec-butylbenzene	16.433	105	336623	21.26	ug/L	99
112) p-isopropyltoluene	16.564	119	292268	21.34	ug/L	99
113) 1,3-dichlorobenzene	16.669	146	156735	21.77	ug/L	99
114) 1,4-dichlorobenzene	16.763	146	166947	21.15	ug/L	98
115) 1,2-dichlorobenzene	17.207	146	163229	21.07	ug/L	99
116) Benzyl Chloride	16.899	91	141635	21.38	ug/L	99
117) n-butylbenzene	17.035	92	145774	21.35	ug/L	98
119) hexachloroethane	17.479	201	48536	19.81	ug/L	96
120) 1,2-dibromo-3-chloropr...	18.086	75	13179	19.93	ug/L	99
121) 1,3,5-trichlorobenzene	18.263	180	154050	20.97	ug/L	100
122) 1,2,4-trichlorobenzene	19.000	180	123971	20.73	ug/L	97
123) hexachlorobutadiene	19.105	225	71122	20.60	ug/L	99
124) naphthalene	19.345	128	243997	20.10	ug/L	99
125) 1,2,3-trichlorobenzene	19.638	180	111264	20.60	ug/L	98
126) 2-methylnaphthalene	20.762	142	38140	8.67	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250408.D
 Acq On : 13 Jun 2017 1:18 pm
 Operator : XimenaC
 Sample : IC10106-20
 Misc : ms14425, vd10106, 5.0, , 100, 5, 1
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 14 16:15:07 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250409.D
 Acq On : 13 Jun 2017 1:46 pm
 Operator : XimenaC
 Sample : ICC10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 14 16:15:39 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.568	65	101952	500.00	ug/L	0.00
5) pentafluorobenzene	9.743	168	220923	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.689	114	300466	50.00	ug/L	0.00
75) chlorobenzene-d5	14.113	117	326402	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.733	152	250720	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.821	113	100509	50.19	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	100.38%	
55) 1,2-dichloroethane-d4 (s)	10.255	65	107384	51.62	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	103.24%	
76) toluene-d8 (s)	12.425	98	384601	49.26	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	98.52%	
100) 4-bromofluorobenzene (s)	15.420	95	177304	48.38	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	96.76%	

Target Compounds

Qvalue

3) tertiary butyl alcohol	7.667	59	71958	264.51	ug/L	100
4) 1,4-dioxane	11.463	88	35726	1340.91	ug/L	100
6) chlorodifluoromethane	4.290	51	163611	55.22	ug/L	100
7) dichlorodifluoromethane	4.285	85	204305	54.14	ug/L	100
8) chloromethane	4.614	50	204986	54.98	ug/L	100
9) 1,3-butadiene	4.876	54	150515	57.50	ug/L	100
10) vinyl chloride	4.865	62	236083	53.93	ug/L	100
11) bromomethane	5.477	94	164379	56.93	ug/L	100
12) chloroethane	5.613	64	116685	56.23	ug/L	100
13) trichlorofluoromethane	6.083	101	276633	54.39	ug/L	100
14) vinyl bromide	5.968	106	158470	55.71	ug/L	100
15) ethyl ether	6.413	74	53247	55.91	ug/L	100
16) 2-chloropropane	6.637	43	193731	50.83	ug/L	100
17) acrolein	6.711	56	21115	55.02	ug/L	100
18) freon 113	6.826	151	144435	57.57	ug/L	100
19) 1,1-dichloroethene	6.857	96	121643	52.80	ug/L	100
20) acetone	6.920	58	32065	217.40	ug/L	100
21) acetonitrile	7.406	41	171200	505.91	ug/L	100
22) iodomethane	7.155	142	258690	54.94	ug/L	100
23) carbon disulfide	7.280	76	433771	55.29	ug/L	100
24) methylene chloride	7.578	84	131147	52.79	ug/L	100
25) methyl acetate	7.354	43	57455	48.16	ug/L	100
26) methyl tert butyl ether	7.871	73	396419	54.10	ug/L	100
27) trans-1,2-dichloroethene	7.929	96	112309	52.65	ug/L	100
28) hexane	8.190	56	65678	58.27	ug/L	100
29) di-isopropyl ether	8.441	45	376608	55.46	ug/L	100
30) 2-butanone	9.215	72	40896	218.40	ug/L	100
31) 1,1-dichloroethane	8.504	63	182090	56.52	ug/L	100
32) chloroprene	8.598	53	155367	58.31	ug/L	100
33) acrylonitrile	7.924	53	30496	54.99	ug/L	100
34) vinyl acetate	8.472	86	18767	53.89	ug/L	100
35) ethyl tert-butyl ether	8.912	59	420927	56.50	ug/L	100
36) ethyl acetate	9.210	45	11871	59.04	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250409.D
 Acq On : 13 Jun 2017 1:46 pm
 Operator : XimenaC
 Sample : ICC10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 14 16:15:39 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	9.251	77	221298	52.10	ug/L	100
38) cis-1,2-dichloroethene	9.246	96	122246	49.97	ug/L	100
39) propionitrile	9.340	54	130368	568.43	ug/L	100
40) methyl acrylate	9.309	85	12962	53.50	ug/L	100
41) methacrylonitrile	9.518	67	36287	55.73	ug/L	100
42) bromochloromethane	9.570	128	63621	54.80	ug/L	100
43) tetrahydrofuran	9.607	42	31732	47.58	ug/L	100
44) chloroform	9.612	83	192038	49.96	ug/L	100
45) tert-Butyl Formate	9.644	59	89818	56.94	ug/L	100
47) 1,1,1-trichloroethane	9.868	97	230423	58.41	ug/L	100
48) cyclohexane	9.931	84	229878	57.36	ug/L	100
49) isobutyl alcohol	10.041	74	14423	549.53	ug/L	97
50) 1,1-dichloropropene	10.041	75	137268	54.96	ug/L	100
51) carbon tetrachloride	10.072	117	209030	57.93	ug/L	100
52) tert-amyl alcohol	10.192	73	31752	234.10	ug/L	100
53) isopropyl acetate	10.224	87	23710	61.07	ug/L	96
56) n-butyl alcohol	10.836	56	149870	2870.87	ug/L	100
57) 2,2,4-Trimethylpentane	10.276	57	548457	59.70	ug/L	100
58) benzene	10.318	78	420752	54.24	ug/L	100
59) tert-amyl methyl ether	10.323	73	433761	56.53	ug/L	100
60) heptane	10.443	57	80420	62.09	ug/L	100
61) 1,2-dichloroethane	10.349	62	139064	54.64	ug/L	100
62) ethyl acrylate	11.039	55	108784	56.95	ug/L	100
63) trichloroethene	11.045	95	107195	54.91	ug/L	100
64) 2-chloroethyl vinyl ether	11.881	63	283749	291.38	ug/L	100
65) methyl methacrylate	11.322	100	28548	59.18	ug/L	100
66) methylcyclohexane	11.259	83	259619	61.15	ug/L	100
67) 1,2-dichloropropane	11.332	63	103448	53.91	ug/L	100
68) dibromomethane	11.510	93	68841	53.97	ug/L	100
69) bromodichloromethane	11.641	83	146818	54.62	ug/L	100
70) 2-nitropropane	11.886	41	41204	54.00	ug/L	100
71) epichlorohydrin	12.038	57	52571	280.82	ug/L	100
72) cis-1,3-dichloropropene	12.122	75	173331	55.41	ug/L	100
73) 4-methyl-2-pentanone	12.221	58	162569	217.23	ug/L	100
74) isoamyl alcohol	12.252	70	67945	1157.25	ug/L	100
77) toluene	12.503	92	282993	52.95	ug/L	100
78) ethyl methacrylate	12.707	69	147365	57.44	ug/L	100
79) trans-1,3-dichloropropene	12.739	75	166045	55.47	ug/L	100
80) 1,1,2-trichloroethane	12.979	83	81928	53.78	ug/L	100
81) tetrachloroethene	13.141	164	112632	54.31	ug/L	100
82) 2-hexanone	13.157	58	157099	216.26	ug/L	100
83) 1,3-dichloropropane	13.178	76	167617	54.46	ug/L	100
84) butyl acetate	13.225	56	70775	56.64	ug/L	100
85) 3,3-Dimethyl-1-Butanol	13.355	69	89323	461.89	ug/L	100
86) dibromochloromethane	13.476	129	134018	55.54	ug/L	100
87) 1,2-dibromoethane	13.648	107	114276	54.57	ug/L	100
88) n-butyl ether	14.014	57	494910	57.08	ug/L	100
89) chlorobenzene	14.145	112	356151	52.89	ug/L	100
90) 1,1,1,2-tetrachloroethane	14.218	131	152648	55.29	ug/L	100
91) ethylbenzene	14.197	91	608365	53.70	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250409.D
 Acq On : 13 Jun 2017 1:46 pm
 Operator : XimenaC
 Sample : ICC10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 14 16:15:39 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

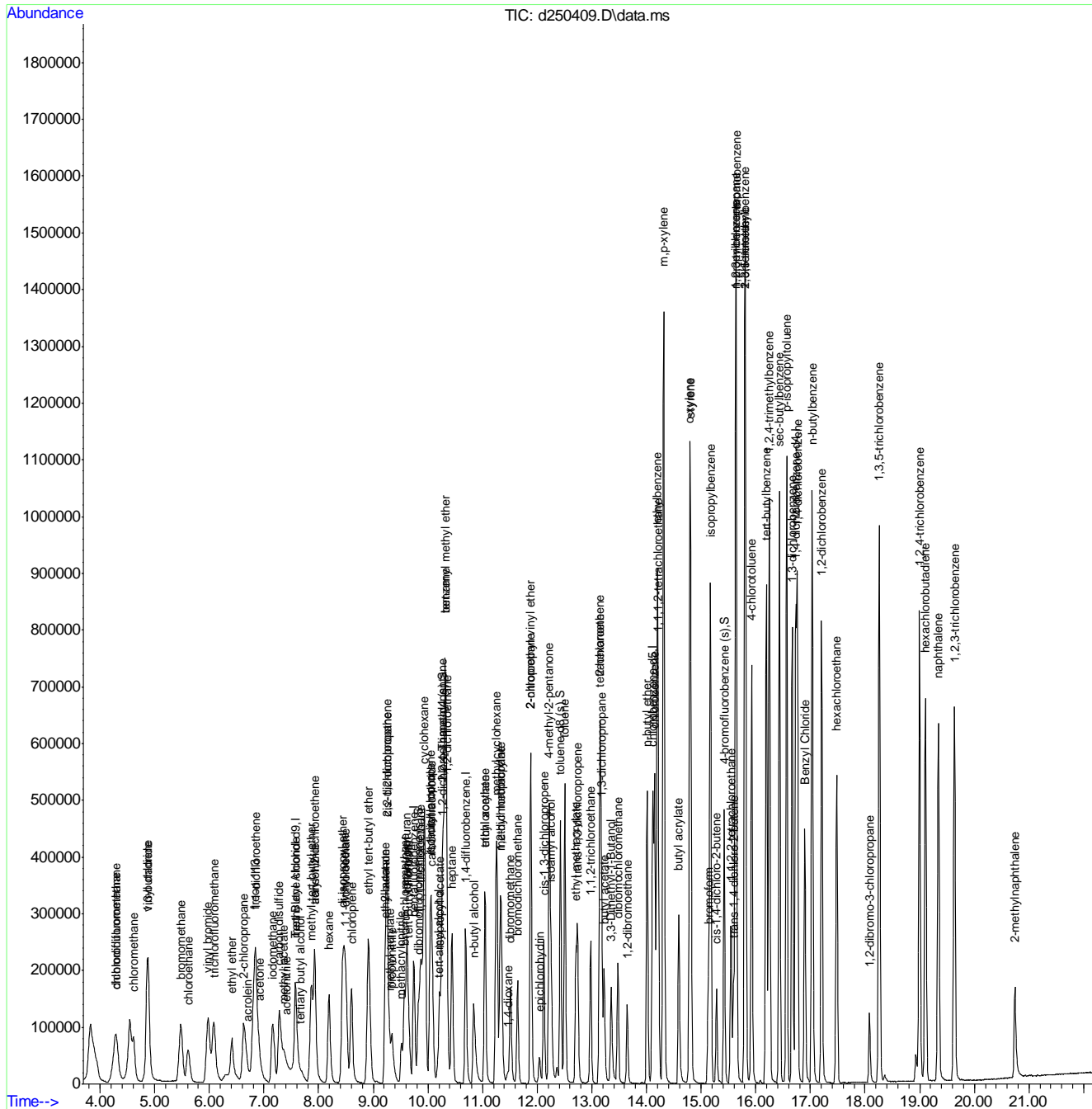
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) m,p-xylene	14.312	106	490346	111.82	ug/L	100
93) o-xylene	14.788	91	533327	54.89	ug/L	100
94) styrene	14.809	104	435590	58.59	ug/L	100
95) butyl acrylate	14.589	55	242645	58.64	ug/L	100
96) isopropylbenzene	15.170	105	713522	56.66	ug/L	100
97) bromoform	15.133	173	111283	58.60	ug/L	100
98) cis-1,4-dichloro-2-butene	15.279	88	50750	50.80	ug/L	100
101) 1,1,2,2-tetrachloroethane	15.546	83	158016	50.63	ug/L	100
102) trans-1,4-dichloro-2-b...	15.593	53	46309	55.81	ug/L	100
103) 1,2,3-trichloropropane	15.635	110	49429	53.11	ug/L	100
104) bromobenzene	15.645	156	202543	52.70	ug/L	100
105) n-propylbenzene	15.635	91	840157	52.06	ug/L	100
106) 2-chlorotoluene	15.813	126	179174	52.20	ug/L	100
107) 4-chlorotoluene	15.922	91	512552	51.48	ug/L	100
108) 1,3,5-trimethylbenzene	15.797	105	649361	53.27	ug/L	100
109) tert-butylbenzene	16.194	119	539726	57.96	ug/L	100
110) 1,2,4-trimethylbenzene	16.247	105	680802	54.27	ug/L	100
111) sec-butylbenzene	16.435	105	889505	55.53	ug/L	100
112) p-isopropyltoluene	16.565	119	774343	55.88	ug/L	100
113) 1,3-dichlorobenzene	16.665	146	415507	57.04	ug/L	100
114) 1,4-dichlorobenzene	16.759	146	436895	54.70	ug/L	100
115) 1,2-dichlorobenzene	17.208	146	430706	54.96	ug/L	100
116) Benzyl Chloride	16.895	91	384016	57.30	ug/L	100
117) n-butylbenzene	17.031	92	392595	56.85	ug/L	100
119) hexachloroethane	17.480	201	126802	51.15	ug/L	100
120) 1,2-dibromo-3-chloropr...	18.082	75	36155	54.06	ug/L	100
121) 1,3,5-trichlorobenzene	18.259	180	420675	56.60	ug/L	100
122) 1,2,4-trichlorobenzene	18.996	180	352021	58.19	ug/L	100
123) hexachlorobutadiene	19.106	225	200133	57.31	ug/L	100
124) naphthalene	19.341	128	690604	56.24	ug/L	100
125) 1,2,3-trichlorobenzene	19.634	180	312718	57.22	ug/L	100
126) 2-methylnaphthalene	20.743	142	137863	30.98	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : d250409.D
Acq On : 13 Jun 2017 1:46 pm
Operator : XimenaC
Sample : ICC10106-50
Misc : ms14425,vd10106,5.0,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 14 16:15:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Wed Jun 14 08:13:22 2017
Response via : Initial Calibration



7.7.22 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250410.D
 Acq On : 13 Jun 2017 2:14 pm
 Operator : XimenaC
 Sample : IC10106-100
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 14 16:16:15 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.548	65	116500	500.00	ug/L	-0.02
5) pentafluorobenzene	9.743	168	233376	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.690	114	321586	50.00	ug/L	0.00
75) chlorobenzene-d5	14.114	117	336433	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.728	152	247569	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.822	113	104634	49.46	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	98.92%	
55) 1,2-dichloroethane-d4 (s)	10.256	65	114017	51.21	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	102.42%	
76) toluene-d8 (s)	12.425	98	402356	50.00	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	100.00%	
100) 4-bromofluorobenzene (s)	15.421	95	176395	48.74	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	97.48%	

Target Compounds

Qvalue

3) tertiary butyl alcohol	7.673	59	156403	503.12	ug/L	98
4) 1,4-dioxane	11.463	88	81282	2669.80	ug/L	97
6) chlorodifluoromethane	4.285	51	321090	102.60	ug/L	100
7) dichlorodifluoromethane	4.275	85	413418	103.71	ug/L	97
8) chloromethane	4.620	50	419135	106.43	ug/L	99
9) 1,3-butadiene	4.892	54	308042	111.40	ug/L	98
10) vinyl chloride	4.871	62	469423	101.51	ug/L	99
11) bromomethane	5.482	94	342195	112.18	ug/L	99
12) chloroethane	5.613	64	246624	112.50	ug/L	98
13) trichlorofluoromethane	6.073	101	567332	105.59	ug/L	99
14) vinyl bromide	5.979	106	331620	110.36	ug/L	97
15) ethyl ether	6.408	74	106889	106.25	ug/L	90
16) 2-chloropropane	6.627	43	397926	98.84	ug/L	99
17) acrolein	6.711	56	43753	107.93	ug/L	99
18) freon 113	6.821	151	292760	110.46	ug/L	98
19) 1,1-dichloroethene	6.852	96	253227	104.05	ug/L	99
20) acetone	6.915	58	67423	432.74	ug/L	99
21) acetonitrile	7.396	41	350099	979.36	ug/L	99
22) iodomethane	7.155	142	536333	107.84	ug/L	98
23) carbon disulfide	7.281	76	886827	107.01	ug/L	99
24) methylene chloride	7.574	84	263189	100.29	ug/L	98
25) methyl acetate	7.354	43	125282	99.41	ug/L	98
26) methyl tert butyl ether	7.866	73	785960	101.54	ug/L	99
27) trans-1,2-dichloroethene	7.929	96	222288	98.65	ug/L	96
28) hexane	8.185	56	128433	107.87	ug/L	97
29) di-isopropyl ether	8.442	45	750918	104.67	ug/L	96
30) 2-butanone	9.215	72	84013	424.71	ug/L	98
31) 1,1-dichloroethane	8.504	63	360821	106.03	ug/L	98
32) chloroprene	8.598	53	313896	111.52	ug/L	99
33) acrylonitrile	7.919	53	64595	110.25	ug/L	97
34) vinyl acetate	8.473	86	40504	110.09	ug/L	99
35) ethyl tert-butyl ether	8.912	59	842720	107.08	ug/L	99
36) ethyl acetate	9.210	45	23030	108.43	ug/L #	70

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250410.D
 Acq On : 13 Jun 2017 2:14 pm
 Operator : XimenaC
 Sample : IC10106-100
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 14 16:16:15 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	9.252	77	436489	97.27	ug/L	98
38) cis-1,2-dichloroethene	9.247	96	244390	94.57	ug/L	99
39) propionitrile	9.341	54	266719	1100.90	ug/L	94
40) methyl acrylate	9.304	85	27690	108.19	ug/L	97
41) methacrylonitrile	9.513	67	74090	107.71	ug/L	97
42) bromochloromethane	9.566	128	126276	102.96	ug/L	99
43) tetrahydrofuran	9.602	42	64282	91.24	ug/L	98
44) chloroform	9.613	83	382751	94.27	ug/L	99
45) tert-Butyl Formate	9.644	59	186492	111.91	ug/L	98
47) 1,1,1-trichloroethane	9.869	97	460493	110.51	ug/L	98
48) cyclohexane	9.931	84	462513	109.25	ug/L	95
49) isobutyl alcohol	10.041	74	30314	1093.36	ug/L #	60
50) 1,1-dichloropropene	10.041	75	273775	103.77	ug/L	97
51) carbon tetrachloride	10.067	117	427040	112.04	ug/L	98
52) tert-amyl alcohol	10.193	73	71685	500.31	ug/L	92
53) isopropyl acetate	10.214	87	49255	120.11	ug/L #	70
56) n-butyl alcohol	10.831	56	337105	6033.41	ug/L	97
57) 2,2,4-Trimethylpentane	10.277	57	1136500	115.58	ug/L	99
58) benzene	10.318	78	846033	101.89	ug/L	99
59) tert-amyl methyl ether	10.324	73	881776	107.38	ug/L	99
60) heptane	10.439	57	154241	111.26	ug/L	99
61) 1,2-dichloroethane	10.345	62	278182	102.13	ug/L	98
62) ethyl acrylate	11.040	55	212225	103.80	ug/L	99
63) trichloroethene	11.040	95	218436	104.55	ug/L	99
64) 2-chloroethyl vinyl ether	11.876	63	545236	523.14	ug/L	100
65) methyl methacrylate	11.317	100	57433	111.25	ug/L #	90
66) methylcyclohexane	11.254	83	525417	115.63	ug/L	99
67) 1,2-dichloropropane	11.333	63	207506	101.04	ug/L	99
68) dibromomethane	11.510	93	136964	100.32	ug/L	97
69) bromodichloromethane	11.636	83	301512	104.80	ug/L	99
70) 2-nitropropane	11.882	41	82265	100.73	ug/L	97
71) epichlorohydrin	12.038	57	104969	523.89	ug/L	99
72) cis-1,3-dichloropropene	12.122	75	345940	103.32	ug/L	98
73) 4-methyl-2-pentanone	12.216	58	334402	417.49	ug/L	99
74) isoamyl alcohol	12.248	70	150263	2391.22	ug/L	96
77) toluene	12.504	92	569685	103.41	ug/L	100
78) ethyl methacrylate	12.702	69	291486	110.22	ug/L	100
79) trans-1,3-dichloropropene	12.734	75	319613	103.59	ug/L	99
80) 1,1,2-trichloroethane	12.974	83	159827	101.78	ug/L	96
81) tetrachloroethene	13.141	164	227893	106.60	ug/L	98
82) 2-hexanone	13.152	58	310334	414.46	ug/L	98
83) 1,3-dichloropropane	13.178	76	322340	101.61	ug/L	95
84) butyl acetate	13.220	56	139928	108.64	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.351	69	213595	1037.41	ug/L	97
86) dibromochloromethane	13.476	129	269191	108.23	ug/L	99
87) 1,2-dibromoethane	13.643	107	220642	102.21	ug/L	97
88) n-butyl ether	14.009	57	948394	106.12	ug/L	100
89) chlorobenzene	14.145	112	701542	101.08	ug/L	100
90) 1,1,1,2-tetrachloroethane	14.213	131	317168	111.45	ug/L	97
91) ethylbenzene	14.192	91	1205691	103.26	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250410.D
 Acq On : 13 Jun 2017 2:14 pm
 Operator : XimenaC
 Sample : IC10106-100
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 14 16:16:15 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

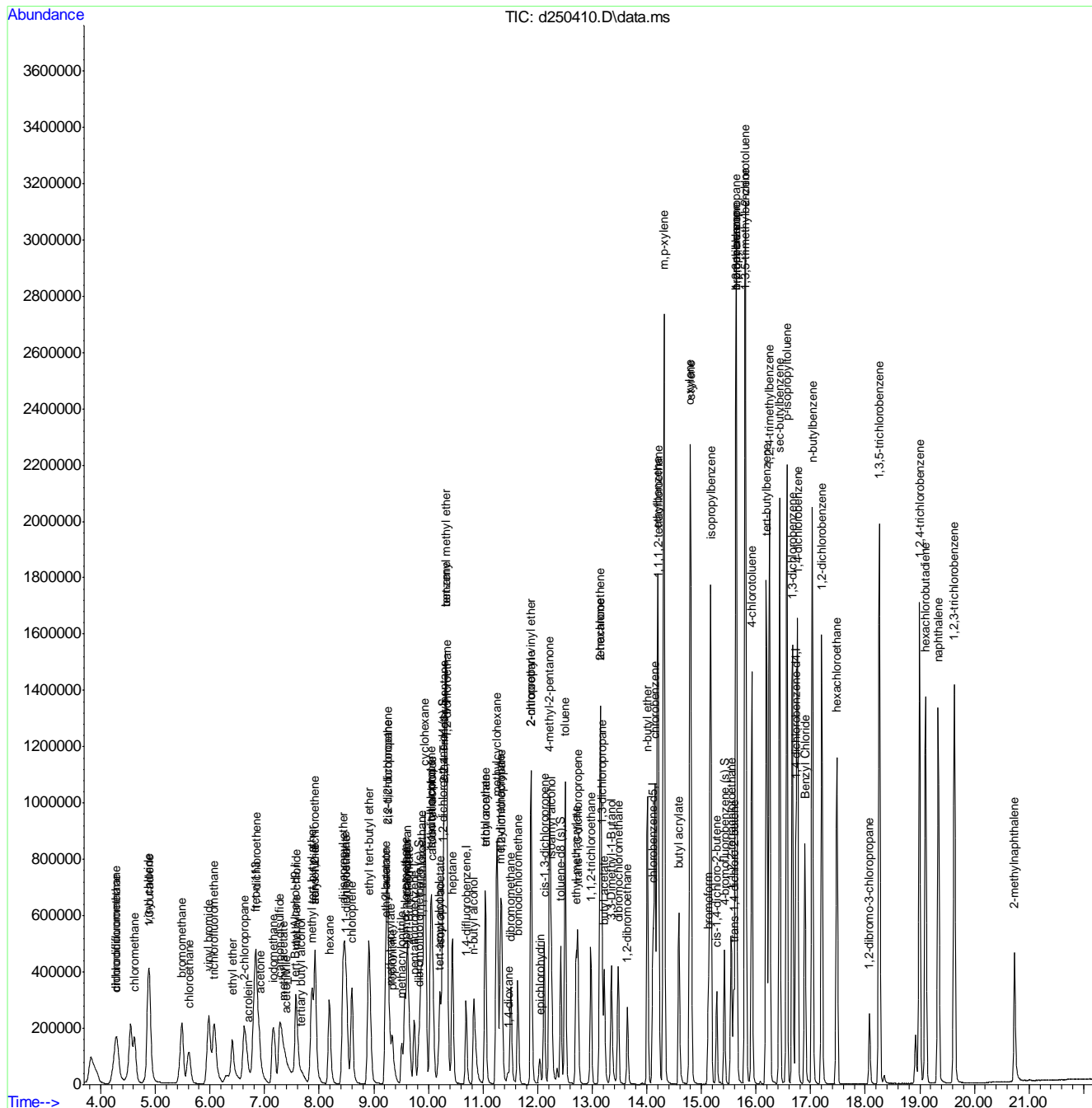
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) m,p-xylene	14.313	106	977696	216.30	ug/L	97
93) o-xylene	14.788	91	1063816	106.22	ug/L	99
94) styrene	14.804	104	848880	110.78	ug/L	96
95) butyl acrylate	14.590	55	474249	111.19	ug/L	100
96) isopropylbenzene	15.170	105	1440169	110.96	ug/L	100
97) bromoform	15.128	173	219648	112.21	ug/L	99
98) cis-1,4-dichloro-2-butene	15.280	88	101264	95.32	ug/L	97
101) 1,1,2,2-tetrachloroethane	15.546	83	299772	97.28	ug/L	99
102) trans-1,4-dichloro-2-b...	15.593	53	88595	108.13	ug/L	99
103) 1,2,3-trichloropropane	15.630	110	94558	102.89	ug/L	98
104) bromobenzene	15.640	156	391106	103.07	ug/L	98
105) n-propylbenzene	15.630	91	1614131	101.28	ug/L	99
106) 2-chlorotoluene	15.813	126	352508	104.01	ug/L	99
107) 4-chlorotoluene	15.923	91	981184	99.81	ug/L	99
108) 1,3,5-trimethylbenzene	15.797	105	1307564	108.62	ug/L	99
109) tert-butylbenzene	16.189	119	1107622	120.47	ug/L	97
110) 1,2,4-trimethylbenzene	16.247	105	1339556	108.14	ug/L	100
111) sec-butylbenzene	16.435	105	1749400	110.59	ug/L	99
112) p-isopropyltoluene	16.566	119	1523393	111.33	ug/L	99
113) 1,3-dichlorobenzene	16.665	146	791048	109.98	ug/L	100
114) 1,4-dichlorobenzene	16.759	146	815092	103.35	ug/L	99
115) 1,2-dichlorobenzene	17.204	146	812920	105.05	ug/L	99
116) Benzyl Chloride	16.895	91	715507	108.13	ug/L	99
117) n-butylbenzene	17.031	92	754774	110.68	ug/L	99
119) hexachloroethane	17.481	201	276722	113.05	ug/L	98
120) 1,2-dibromo-3-chloropr...	18.077	75	71754	108.65	ug/L	99
121) 1,3,5-trichlorobenzene	18.260	180	829935	113.09	ug/L	100
122) 1,2,4-trichlorobenzene	18.997	180	716364	119.92	ug/L	99
123) hexachlorobutadiene	19.107	225	402799	116.81	ug/L	99
124) naphthalene	19.337	128	1414870	116.69	ug/L	100
125) 1,2,3-trichlorobenzene	19.635	180	645050	119.54	ug/L	98
126) 2-methylnaphthalene	20.733	142	337166	76.73	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250410.D
 Acq On : 13 Jun 2017 2:14 pm
 Operator : XimenaC
 Sample : IC10106-100
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 14 16:16:15 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration



7.7.23
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250411.D
 Acq On : 13 Jun 2017 2:42 pm
 Operator : XimenaC
 Sample : IC10106-200
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 14 16:16:45 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.568	65	114988	500.00	ug/L	0.00
5) pentafluorobenzene	9.743	168	239427	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.689	114	327272	50.00	ug/L	0.00
75) chlorobenzene-d5	14.113	117	344224	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.733	152	265938	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.821	113	105978	48.83	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	97.66%	
55) 1,2-dichloroethane-d4 (s)	10.255	65	121218	53.49	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	106.98%	
76) toluene-d8 (s)	12.425	98	408708	49.64	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	99.28%	
100) 4-bromofluorobenzene (s)	15.420	95	183568	47.22	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	94.44%	

Target Compounds

Qvalue

3) tertiary butyl alcohol	7.678	59	313424	1021.48	ug/L	99
4) 1,4-dioxane	11.458	88	160105	5327.99	ug/L	96
6) chlorodifluoromethane	4.285	51	624063	194.36	ug/L	99
7) dichlorodifluoromethane	4.269	85	791085	193.44	ug/L	99
8) chloromethane	4.625	50	791773	195.97	ug/L	97
9) 1,3-butadiene	4.896	54	605935	213.60	ug/L	100
10) vinyl chloride	4.870	62	863448	182.00	ug/L	99
11) bromomethane	5.482	94	524280	167.53	ug/L	100
12) chloroethane	5.618	64	485559	215.90	ug/L	99
13) trichlorofluoromethane	6.073	101	1102074	199.94	ug/L	99
14) vinyl bromide	5.973	106	637730	206.86	ug/L	99
15) ethyl ether	6.407	74	213370	206.74	ug/L	97
16) 2-chloropropane	6.627	43	771664	186.82	ug/L	99
17) acrolein	6.705	56	90728	218.16	ug/L	98
18) freon 113	6.815	151	578612	212.79	ug/L	98
19) 1,1-dichloroethene	6.852	96	496319	198.78	ug/L	98
20) acetone	6.914	58	135886	850.10	ug/L	99
21) acetonitrile	7.380	41	676384	1844.29	ug/L	98
22) iodomethane	7.155	142	1072735	210.23	ug/L	99
23) carbon disulfide	7.280	76	1707826	200.88	ug/L	99
24) methylene chloride	7.568	84	513362	190.68	ug/L	97
25) methyl acetate	7.348	43	249040	192.61	ug/L	97
26) methyl tert butyl ether	7.866	73	1601783	201.71	ug/L	99
27) trans-1,2-dichloroethene	7.923	96	433868	187.68	ug/L	98
28) hexane	8.185	56	249182	203.99	ug/L	99
29) di-isopropyl ether	8.441	45	1513338	205.62	ug/L	89
30) 2-butanone	9.210	72	172658	850.78	ug/L	98
31) 1,1-dichloroethane	8.504	63	711327	203.74	ug/L	98
32) chloroprene	8.598	53	614966	212.96	ug/L	98
33) acrylonitrile	7.918	53	145217	241.60	ug/L	98
34) vinyl acetate	8.467	86	83836	222.11	ug/L #	93
35) ethyl tert-butyl ether	8.912	59	1710149	211.81	ug/L	98
36) ethyl acetate	9.210	45	47722	219.00	ug/L #	78

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250411.D
 Acq On : 13 Jun 2017 2:42 pm
 Operator : XimenaC
 Sample : IC10106-200
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 14 16:16:45 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	9.251	77	863840	187.65	ug/L	98
38) cis-1,2-dichloroethene	9.241	96	480130	181.10	ug/L	99
39) propionitrile	9.340	54	534408	2150.06	ug/L	92
40) methyl acrylate	9.298	85	57909	220.54	ug/L	97
41) methacrylonitrile	9.508	67	150950	213.90	ug/L	98
42) bromochloromethane	9.565	128	252447	200.64	ug/L	97
43) tetrahydrofuran	9.602	42	127959	177.02	ug/L	98
44) chloroform	9.612	83	757476	181.85	ug/L	98
45) tert-Butyl Formate	9.638	59	388102	227.01	ug/L	98
47) 1,1,1-trichloroethane	9.874	97	938826	219.60	ug/L	99
48) cyclohexane	9.931	84	927730	213.59	ug/L	97
49) isobutyl alcohol	10.041	74	60193	2116.17	ug/L #	67
50) 1,1-dichloropropene	10.036	75	543900	200.94	ug/L	99
51) carbon tetrachloride	10.072	117	872877	223.22	ug/L	98
52) tert-amyl alcohol	10.192	73	145122	987.26	ug/L	91
53) isopropyl acetate	10.213	87	101396	241.00	ug/L #	84
56) n-butyl alcohol	10.830	56	651258	11453.52	ug/L	97
57) 2,2,4-Trimethylpentane	10.281	57	2269283	226.78	ug/L	99
58) benzene	10.313	78	1672984	197.99	ug/L	99
59) tert-amyl methyl ether	10.323	73	1809140	216.48	ug/L	98
60) heptane	10.438	57	303166	214.89	ug/L	99
61) 1,2-dichloroethane	10.344	62	562475	202.91	ug/L	99
62) ethyl acrylate	11.034	55	440889	211.90	ug/L	99
63) trichloroethene	11.039	95	436786	205.43	ug/L	100
64) 2-chloroethyl vinyl ether	11.881	63	1106756	1043.45	ug/L	99
65) methyl methacrylate	11.316	100	118978	226.46	ug/L #	83
66) methylcyclohexane	11.254	83	1058509	228.91	ug/L	99
67) 1,2-dichloropropane	11.332	63	419231	200.58	ug/L	98
68) dibromomethane	11.510	93	279418	201.12	ug/L	96
69) bromodichloromethane	11.641	83	611737	208.94	ug/L	100
70) 2-nitropropane	11.881	41	165097	198.64	ug/L	98
71) epichlorohydrin	12.033	57	212922	1044.22	ug/L	98
72) cis-1,3-dichloropropene	12.122	75	698295	204.93	ug/L	99
73) 4-methyl-2-pentanone	12.216	58	677890	831.62	ug/L	97
74) isoamyl alcohol	12.247	70	297246	4648.07	ug/L	96
77) toluene	12.503	92	1133875	201.16	ug/L	99
78) ethyl methacrylate	12.702	69	593804	219.45	ug/L	99
79) trans-1,3-dichloropropene	12.733	75	655331	207.59	ug/L	99
80) 1,1,2-trichloroethane	12.974	83	322946	201.01	ug/L	95
81) tetrachloroethene	13.141	164	459196	209.94	ug/L	98
82) 2-hexanone	13.151	58	630063	822.42	ug/L	99
83) 1,3-dichloropropane	13.178	76	655426	201.94	ug/L	95
84) butyl acetate	13.219	56	285130	216.36	ug/L	99
85) 3,3-Dimethyl-1-Butanol	13.350	69	424325	1989.90	ug/L	99
86) dibromochloromethane	13.476	129	558041	219.28	ug/L	100
87) 1,2-dibromoethane	13.643	107	451291	204.33	ug/L	99
88) n-butyl ether	14.014	57	1855353	202.91	ug/L	99
89) chlorobenzene	14.145	112	1394607	196.39	ug/L	99
90) 1,1,1,2-tetrachloroethane	14.213	131	660452	226.82	ug/L	98
91) ethylbenzene	14.197	91	2377034	198.97	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250411.D
 Acq On : 13 Jun 2017 2:42 pm
 Operator : XimenaC
 Sample : IC10106-200
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 14 16:16:45 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 08:13:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) m,p-xylene	14.312	106	1954183	422.55	ug/L	92
93) o-xylene	14.788	91	2130401	207.90	ug/L	98
94) styrene	14.804	104	1712223	218.38	ug/L	94
95) butyl acrylate	14.584	55	982835	225.22	ug/L	99
96) isopropylbenzene	15.169	105	2842792	214.06	ug/L	97
97) bromoform	15.128	173	469064	234.21	ug/L	99
98) cis-1,4-dichloro-2-butene	15.279	88	223573	201.97	ug/L	95
101) 1,1,2,2-tetrachloroethane	15.546	83	610474	184.42	ug/L	99
102) trans-1,4-dichloro-2-b...	15.588	53	193772	220.15	ug/L	98
103) 1,2,3-trichloropropane	15.630	110	197650	200.22	ug/L	97
104) bromobenzene	15.640	156	812302	199.28	ug/L	95
105) n-propylbenzene	15.635	91	3151135	184.07	ug/L	96
106) 2-chlorotoluene	15.813	126	730266	200.59	ug/L	96
107) 4-chlorotoluene	15.922	91	1988850	188.34	ug/L	98
108) 1,3,5-trimethylbenzene	15.797	105	2639729	204.14	ug/L	98
109) tert-butylbenzene	16.194	119	2262892	229.11	ug/L	99
110) 1,2,4-trimethylbenzene	16.246	105	2730011	205.16	ug/L	97
111) sec-butylbenzene	16.435	105	3470885	204.26	ug/L	95
112) p-isopropyltoluene	16.565	119	3077250	209.36	ug/L	95
113) 1,3-dichlorobenzene	16.665	146	1651228	213.71	ug/L	99
114) 1,4-dichlorobenzene	16.759	146	1716004	202.55	ug/L	98
115) 1,2-dichlorobenzene	17.203	146	1705057	205.11	ug/L	98
116) Benzyl Chloride	16.895	91	1519047	213.70	ug/L	97
117) n-butylbenzene	17.031	92	1553875	212.12	ug/L	97
119) hexachloroethane	17.480	201	602644	229.19	ug/L	97
120) 1,2-dibromo-3-chloropr...	18.076	75	150709	212.43	ug/L	97
121) 1,3,5-trichlorobenzene	18.259	180	1715580	217.63	ug/L	99
122) 1,2,4-trichlorobenzene	18.996	180	1456714	227.01	ug/L	99
123) hexachlorobutadiene	19.106	225	821746	221.84	ug/L	99
124) naphthalene	19.336	128	2828947	217.20	ug/L	99
125) 1,2,3-trichlorobenzene	19.634	180	1305629	225.24	ug/L	98
126) 2-methylnaphthalene	20.732	142	712775	151.01	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250414.D
 Acq On : 13 Jun 2017 4:06 pm
 Operator : XimenaC
 Sample : ICV10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 14 16:26:11 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.552	65	101574	500.00	ug/L	-0.02
5) pentafluorobenzene	9.742	168	226380	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.694	114	307248	50.00	ug/L	0.00
75) chlorobenzene-d5	14.113	117	309316	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.732	152	236156	50.00	ug/L	0.00

System Monitoring Compounds

46) dibromofluoromethane (s)	9.826	113	100864	49.15	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	98.30%	
55) 1,2-dichloroethane-d4 (s)	10.255	65	108845	49.76	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	99.52%	
76) toluene-d8 (s)	12.424	98	381560	52.12	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	104.24%	
100) 4-bromofluorobenzene (s)	15.420	95	165243	47.05	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	94.10%	

Target Compounds

Qvalue

3) tertiary butyl alcohol	7.662	59	70343	264.30	ug/L	96
4) 1,4-dioxane	11.468	88	32612	1254.52	ug/L	97
6) chlorodifluoromethane	4.284	51	142301	46.59	ug/L	100
7) dichlorodifluoromethane	4.284	85	191422	49.50	ug/L	100
8) chloromethane	4.609	50	177983	46.49	ug/L	99
9) 1,3-butadiene	4.875	54	144433	53.85	ug/L	99
10) vinyl chloride	4.860	62	199584	44.49	ug/L	98
11) bromomethane	5.476	94	142805	48.26	ug/L	98
12) chloroethane	5.612	64	104293	49.05	ug/L	98
13) trichlorofluoromethane	6.078	101	248737	47.73	ug/L	98
14) vinyl bromide	5.968	106	195661	67.13	ug/L	98
15) ethyl ether	6.412	74	52808	54.12	ug/L	100
16) 2-chloropropane	6.632	43	188288	48.21	ug/L	98
17) acrolein	6.710	56	20510	52.16	ug/L	99
18) freon 113	6.825	151	162570	63.23	ug/L	95
19) 1,1-dichloroethene	6.857	96	118707	50.28	ug/L	99
20) acetone	6.925	58	34350	227.28	ug/L	87
21) acetonitrile	7.374	41	320066	923.02	ug/L #	40
22) iodomethane	7.160	142	254455	52.74	ug/L	97
23) carbon disulfide	7.280	76	505326	62.86	ug/L	100
24) methylene chloride	7.573	84	130483	51.26	ug/L	97
25) methyl acetate	7.359	43	62613	51.22	ug/L	100
26) methyl tert butyl ether	7.866	73	787474	104.88	ug/L	92
27) trans-1,2-dichloroethene	7.928	96	109780	49.92	ug/L	99
28) hexane	8.190	56	77746	67.31	ug/L	98
29) di-isopropyl ether	8.446	45	363526	52.24	ug/L	96
30) 2-butanone	9.214	72	42222	220.04	ug/L	97
31) 1,1-dichloroethane	8.503	63	181372	54.94	ug/L	98
32) chloroprene	8.598	53	156039	57.15	ug/L	99
33) acrylonitrile	7.923	53	31014	50.86	ug/L	93
34) vinyl acetate	8.472	86	18709	51.26	ug/L	97
35) ethyl tert-butyl ether	8.911	59	401207	52.56	ug/L	99
36) ethyl acetate	9.209	45	11131	50.28	ug/L #	78

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250414.D
 Acq On : 13 Jun 2017 4:06 pm
 Operator : XimenaC
 Sample : ICV10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 14 16:26:11 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	9.256	77	238067	54.69	ug/L	100
38) cis-1,2-dichloroethene	9.246	96	121282	48.38	ug/L	99
39) propionitrile	9.345	54	124659	501.26	ug/L	94
40) methyl acrylate	9.309	85	12843	51.73	ug/L	95
41) methacrylonitrile	9.518	67	33591	50.34	ug/L	98
42) bromochloromethane	9.565	128	61493	51.69	ug/L	93
43) tetrahydrofuran	9.607	42	30907	44.50	ug/L	96
44) chloroform	9.612	83	188717	47.92	ug/L	99
45) tert-Butyl Formate	9.643	59	64932	40.16	ug/L	99
47) 1,1,1-trichloroethane	9.873	97	225713	55.84	ug/L	99
48) cyclohexane	9.931	84	225676	54.24	ug/L	98
49) isobutyl alcohol	10.040	74	14106	494.33	ug/L	79
50) 1,1-dichloropropene	10.040	75	135765	53.03	ug/L	97
51) carbon tetrachloride	10.072	117	206427	55.83	ug/L	99
52) tert-amyl alcohol	10.192	73	30244	217.61	ug/L	91
53) isopropyl acetate	10.218	87	22749	49.24	ug/L #	84
56) n-butyl alcohol	10.835	56	137643	2447.08	ug/L	97
57) 2,2,4-Trimethylpentane	10.276	57	559586	59.57	ug/L	100
58) benzene	10.318	78	415481	52.37	ug/L	99
59) tert-amyl methyl ether	10.323	73	412116	51.99	ug/L	96
60) heptane	10.443	57	88641	65.14	ug/L	99
61) 1,2-dichloroethane	10.349	62	140182	53.78	ug/L	99
62) ethyl acrylate	11.044	55	97081	47.80	ug/L	99
63) trichloroethene	11.044	95	109565	54.89	ug/L	99
64) 2-chloroethyl vinyl ether	11.881	63	266126	267.25	ug/L	99
65) methyl methacrylate	11.321	100	26342	53.41	ug/L	97
66) methylcyclohexane	11.253	83	250910	57.80	ug/L	99
67) 1,2-dichloropropane	11.332	63	103364	52.62	ug/L	100
68) dibromomethane	11.515	93	68430	52.46	ug/L	94
69) bromodichloromethane	11.640	83	150076	54.60	ug/L	100
70) 2-nitropropane	11.886	41	39126	50.01	ug/L	97
71) epichlorohydrin	12.038	57	47976	250.62	ug/L	97
72) cis-1,3-dichloropropene	12.121	75	170573	53.32	ug/L	98
73) 4-methyl-2-pentanone	12.221	58	157267	205.50	ug/L	98
74) isoamyl alcohol	12.252	70	62133	1023.22	ug/L	97
77) toluene	12.503	92	274643	54.79	ug/L	99
78) ethyl methacrylate	12.707	69	126503	52.62	ug/L	99
79) trans-1,3-dichloropropene	12.738	75	156796	55.93	ug/L	99
80) 1,1,2-trichloroethane	12.979	83	76408	53.55	ug/L	96
81) tetrachloroethene	13.141	164	111022	57.14	ug/L	98
82) 2-hexanone	13.156	58	143888	211.74	ug/L	98
83) 1,3-dichloropropane	13.177	76	152393	52.81	ug/L	99
84) butyl acetate	13.224	56	62732	53.14	ug/L	96
85) 3,3-Dimethyl-1-Butanol	13.355	69	85688	468.47	ug/L	95
86) dibromochloromethane	13.475	129	127058	56.22	ug/L	99
87) 1,2-dibromoethane	13.648	107	103449	52.74	ug/L	100
88) n-butyl ether	14.014	57	457020	56.22	ug/L	100
89) chlorobenzene	14.150	112	324045	51.31	ug/L	99
90) 1,1,1,2-tetrachloroethane	14.218	131	149394	57.76	ug/L	97
91) ethylbenzene	14.197	91	554729	51.87	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250414.D
 Acq On : 13 Jun 2017 4:06 pm
 Operator : XimenaC
 Sample : ICV10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 14 16:26:11 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

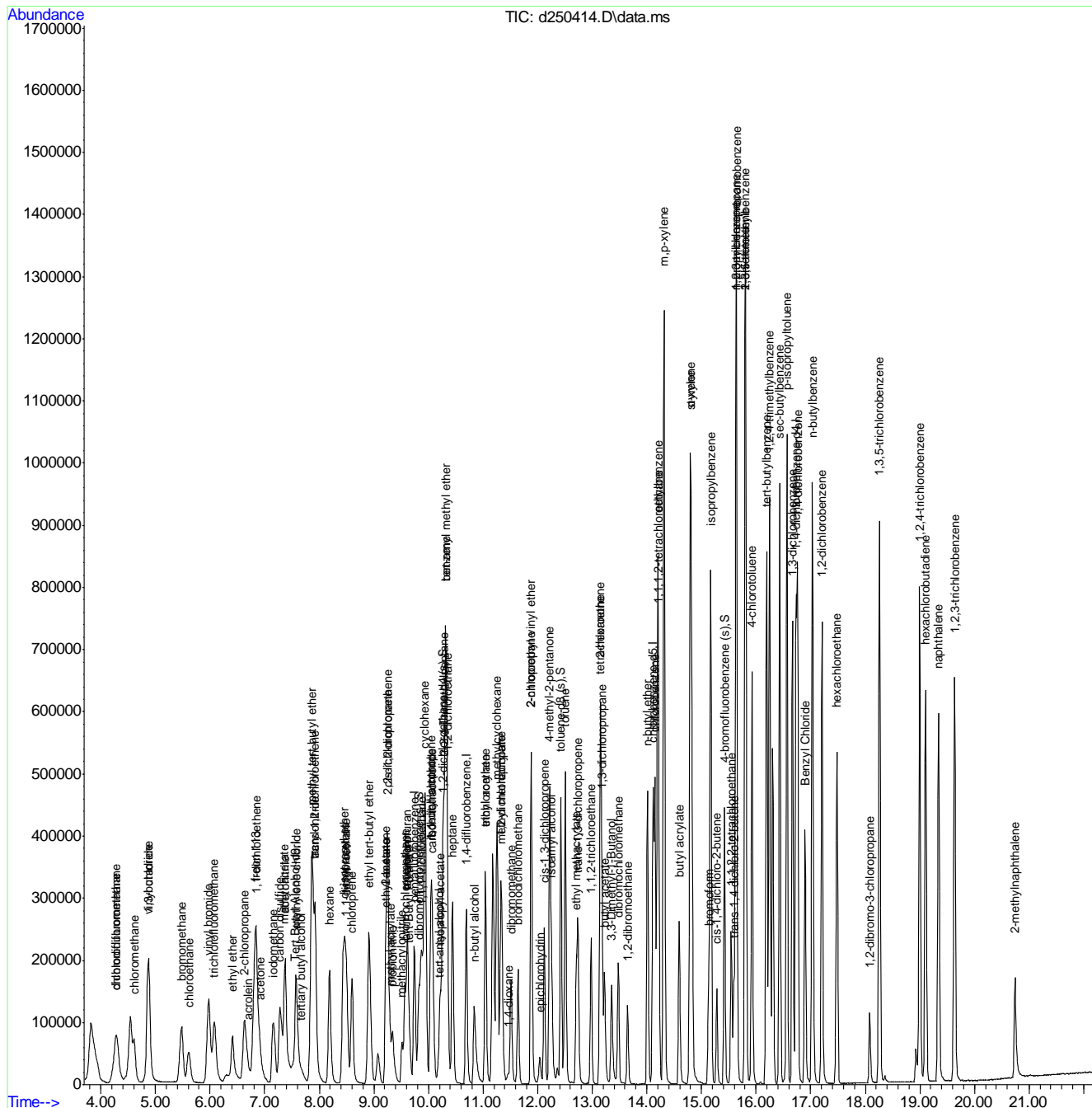
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) m,p-xylene	14.317	106	449963	107.23	ug/L	98
93) o-xylene	14.793	91	489583	53.73	ug/L	99
94) styrene	14.808	104	383601	55.03	ug/L	97
95) butyl acrylate	14.594	55	211697	53.54	ug/L	98
96) isopropylbenzene	15.169	105	669109	56.66	ug/L	99
97) bromoform	15.133	173	99552	55.97	ug/L	97
98) cis-1,4-dichloro-2-butene	15.279	88	46901	49.45	ug/L	99
101) 1,1,2,2-tetrachloroethane	15.546	83	141210	47.81	ug/L	100
102) trans-1,4-dichloro-2-b...	15.593	53	43411	55.49	ug/L	95
103) 1,2,3-trichloropropane	15.629	110	44937	51.26	ug/L	96
104) bromobenzene	15.645	156	183254	50.63	ug/L	99
105) n-propylbenzene	15.634	91	761669	50.10	ug/L	100
106) 2-chlorotoluene	15.812	126	162417	50.24	ug/L	98
107) 4-chlorotoluene	15.927	91	463557	48.95	ug/L	99
108) 1,3,5-trimethylbenzene	15.802	105	601839	52.41	ug/L	99
109) tert-butylbenzene	16.194	119	530720	55.61	ug/L	98
110) 1,2,4-trimethylbenzene	16.246	105	632241	53.42	ug/L	99
111) sec-butylbenzene	16.434	105	819670	54.29	ug/L	100
112) p-isopropyltoluene	16.565	119	725115	55.52	ug/L	99
113) 1,3-dichlorobenzene	16.670	146	384057	53.85	ug/L	99
114) 1,4-dichlorobenzene	16.758	146	403975	50.93	ug/L	100
115) 1,2-dichlorobenzene	17.208	146	393050	53.25	ug/L	99
116) Benzyl Chloride	16.894	91	351971	54.06	ug/L	100
117) n-butylbenzene	17.030	92	366520	56.33	ug/L	99
119) hexachloroethane	17.480	201	127479	54.59	ug/L	97
120) 1,2-dibromo-3-chloropr...	18.081	75	33478	53.14	ug/L	99
121) 1,3,5-trichlorobenzene	18.259	180	384852	54.98	ug/L	100
122) 1,2,4-trichlorobenzene	18.996	180	341159	59.70	ug/L	98
123) hexachlorobutadiene	19.106	225	186741	56.77	ug/L	99
124) naphthalene	19.341	128	650676	56.26	ug/L	100
125) 1,2,3-trichlorobenzene	19.634	180	300766	58.43	ug/L	98
126) 2-methylnaphthalene	20.742	142	139279	33.07	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250414.D
 Acq On : 13 Jun 2017 4:06 pm
 Operator : XimenaC
 Sample : ICV10106-50
 Misc : ms14425, vd10106, 5.0, , 100, 5, 1
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 14 16:26:11 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration



7.7.25
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250415.D
 Acq On : 13 Jun 2017 4:35 pm
 Operator : XimenaC
 Sample : ICV10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 14 16:26:47 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.563	65	103490	500.00	ug/L	0.00
5) pentafluorobenzene	9.748	168	224800	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.694	114	305081	50.00	ug/L	0.00
75) chlorobenzene-d5	14.119	117	331739	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.738	152	227949	50.00	ug/L	0.00

System Monitoring Compounds						
46) dibromofluoromethane (s)	9.826	113	100956	49.54	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery	=	99.08%	
55) 1,2-dichloroethane-d4 (s)	10.260	65	108803	50.10	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery	=	100.20%	
76) toluene-d8 (s)	12.430	98	385164	49.05	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery	=	98.10%	
100) 4-bromofluorobenzene (s)	15.426	95	167402	49.38	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery	=	98.76%	

Target Compounds					Qvalue
21) acetonitrile	7.401	41	141463	410.82	ug/L 97

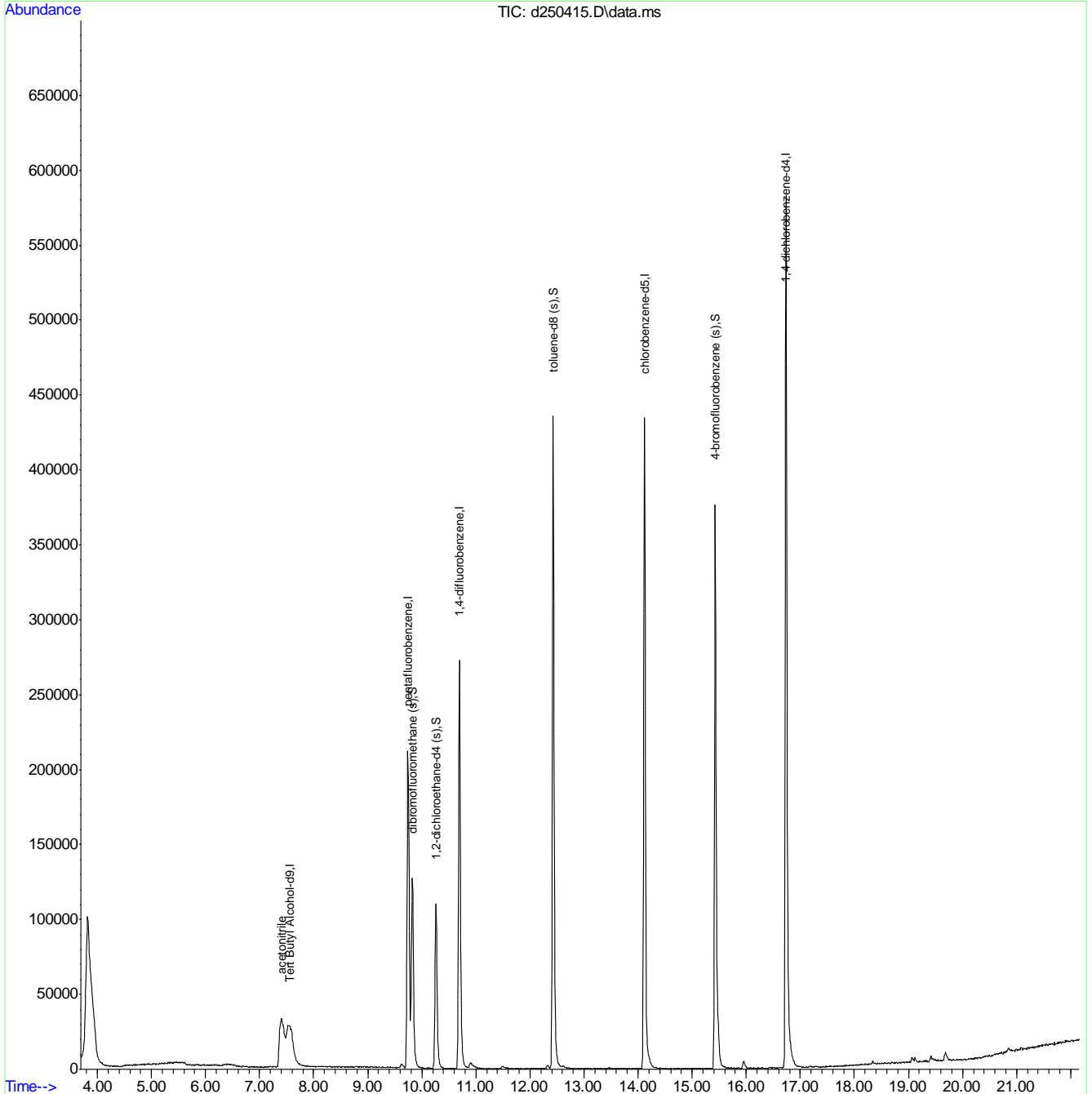
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.26
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
 Data File : d250415.D
 Acq On : 13 Jun 2017 4:35 pm
 Operator : XimenaC
 Sample : ICV10106-50
 Misc : ms14425,vd10106,5.0,,100,5,1
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 14 16:26:47 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Wed Jun 14 16:21:29 2017
 Response via : Initial Calibration



7.7.26
7

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250688.D
 Acq On : 22 Jun 2017 7:48 am
 Operator : XimenaC
 Sample : cc10106-20
 Misc : ms17289,vd10119,5,,100,5,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 11:50:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Thu Jun 22 18:48:41 2017
 Response via : Initial Calibration

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

Internal Standards						
1) Tert Butyl Alcohol-d9	7.541	65	90319	500.00	ug/L	-0.16
5) pentafluorobenzene	9.742	168	205494	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.693	114	281298	50.00	ug/L	0.00
75) chlorobenzene-d5	14.112	117	316937	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.732	152	228473	50.00	ug/L	0.00
System Monitoring Compounds						
46) dibromofluoromethane (s)	9.820	113	88406	47.46	ug/L	0.00
Spiked Amount	50.000	Range 70 - 122	Recovery =	94.92%		
55) 1,2-dichloroethane-d4 (s)	10.259	65	93822	46.85	ug/L	0.00
Spiked Amount	50.000	Range 68 - 124	Recovery =	93.70%		
76) toluene-d8 (s)	12.424	98	359042	47.86	ug/L	0.00
Spiked Amount	50.000	Range 77 - 125	Recovery =	95.72%		
100) 4-bromofluorobenzene (s)	15.419	95	170873	50.28	ug/L	0.00
Spiked Amount	50.000	Range 72 - 130	Recovery =	100.56%		
Target Compounds						
						Qvalue
3) tertiary butyl alcohol	7.666	59	24140	102.00	ug/L	96
4) 1,4-dioxane	11.472	88	11193	484.23	ug/L	96
6) chlorodifluoromethane	4.279	51	59180	21.35	ug/L	98
7) dichlorodifluoromethane	4.279	85	77032	21.95	ug/L	97
8) chloromethane	4.603	50	71551	20.59	ug/L	99
9) 1,3-butadiene	4.859	54	31977	13.13	ug/L	99
10) vinyl chloride	4.859	62	83549	20.52	ug/L	100
11) bromomethane	5.465	94	55356	20.61	ug/L	98
12) chloroethane	5.596	64	36551	18.94	ug/L	97
13) trichlorofluoromethane	6.082	101	96855	20.47	ug/L	98
14) vinyl bromide	5.967	106	55688	21.05	ug/L	97
15) ethyl ether	6.412	74	18301	20.66	ug/L	98
16) 2-chloropropane	6.631	43	61705	17.41	ug/L	99
17) acrolein	6.725	56	5855	16.40	ug/L	88
18) freon 113	6.825	151	53792	23.05	ug/L	94
19) 1,1-dichloroethene	6.851	96	43852	20.46	ug/L	98
20) acetone	6.929	58	10540	76.83	ug/L	95
21) acetonitrile	7.400	41	53836	171.03	ug/L	97
22) iodomethane	7.159	142	95516	21.81	ug/L	98
23) carbon disulfide	7.279	76	151578	20.77	ug/L	100
24) methylene chloride	7.577	84	44205	19.13	ug/L	95
25) methyl acetate	7.363	43	21915	19.75	ug/L	96
26) methyl tert butyl ether	7.865	73	134600	19.75	ug/L	99
27) trans-1,2-dichloroethene	7.928	96	37574	18.82	ug/L	94
28) hexane	8.189	56	22193	21.17	ug/L	97
29) di-isopropyl ether	8.445	45	117991	18.68	ug/L	97
30) 2-butanone	9.229	72	13969	80.20	ug/L	# 84
31) 1,1-dichloroethane	8.503	63	58569	19.55	ug/L	97
32) chloroprene	8.602	53	49967	20.16	ug/L	97
33) acrylonitrile	7.938	53	10273	18.56	ug/L	98
34) vinyl acetate	8.487	86	6031	18.20	ug/L	# 55
35) ethyl tert-butyl ether	8.911	59	137178	19.80	ug/L	98
36) ethyl acetate	9.219	45	3834	19.08	ug/L	# 85
37) 2,2-dichloropropane	9.256	77	78357	19.83	ug/L	97
38) cis-1,2-dichloroethene	9.245	96	41584	18.27	ug/L	98
39) propionitrile	9.344	54	42653	188.94	ug/L	91
40) methyl acrylate	9.313	85	4435	19.68	ug/L	99
41) methacrylonitrile	9.522	67	11906	19.66	ug/L	98
42) bromochloromethane	9.569	128	22159	20.52	ug/L	94
43) tetrahydrofuran	9.611	42	11663	18.50	ug/L	96
44) chloroform	9.616	83	64196	17.96	ug/L	98
45) tert-Butyl Formate	9.648	59	27959	19.05	ug/L	99
47) 1,1,1-trichloroethane	9.867	97	76642	20.89	ug/L	97
48) cyclohexane	9.930	84	72366	19.16	ug/L	95
49) isobutyl alcohol	10.050	74	4748	185.68	ug/L	# 61

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250688.D
 Acq On : 22 Jun 2017 7:48 am
 Operator : XimenaC
 Sample : cc10106-20
 Misc : ms17289,vd10119,5,,100,5,1
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 11:50:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Thu Jun 22 18:48:41 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 1,1-dichloropropene	10.045	75	46928	20.19	ug/L	99
51) carbon tetrachloride	10.066	117	71632	21.34	ug/L	97
52) tert-amyl alcohol	10.202	73	11571	91.72	ug/L	98
53) isopropyl acetate	10.218	87	8082	19.27	ug/L	98
56) n-butyl alcohol	10.850	56	46891	910.56	ug/L	99
57) 2,2,4-Trimethylpentane	10.275	57	167790	19.51	ug/L	99
58) benzene	10.317	78	144483	19.89	ug/L	98
59) tert-amyl methyl ether	10.327	73	144434	19.90	ug/L	97
60) heptane	10.442	57	27140	21.78	ug/L	98
61) 1,2-dichloroethane	10.348	62	48512	20.33	ug/L	98
62) ethyl acrylate	11.049	55	37114	19.96	ug/L	98
63) trichloroethene	11.044	95	38078	20.84	ug/L	99
64) 2-chloroethyl vinyl ether	11.885	63	95276	104.51	ug/L	99
65) methyl methacrylate	11.326	100	10096	22.36	ug/L #	87
66) methylcyclohexane	11.253	83	85010	21.39	ug/L	97
67) 1,2-dichloropropane	11.336	63	35358	19.66	ug/L	98
68) dibromomethane	11.514	93	24734	20.71	ug/L	93
69) bromodichloromethane	11.640	83	51694	20.54	ug/L	98
70) 2-nitropropane	11.885	41	13682	19.10	ug/L	95
71) epichlorohydrin	12.042	57	18674	106.55	ug/L	99
72) cis-1,3-dichloropropene	12.126	75	63000	21.51	ug/L	98
73) 4-methyl-2-pentanone	12.225	58	56492	80.63	ug/L	96
74) isoamyl alcohol	12.262	70	21959	394.99	ug/L	98
77) toluene	12.507	92	104263	20.30	ug/L	98
78) ethyl methacrylate	12.711	69	50449	20.48	ug/L	95
79) trans-1,3-dichloropropene	12.743	75	59738	20.80	ug/L	99
80) 1,1,2-trichloroethane	12.978	83	29042	19.87	ug/L	100
81) tetrachloroethene	13.145	164	42664	21.43	ug/L	98
82) 2-hexanone	13.161	58	53701	77.12	ug/L	99
83) 1,3-dichloropropane	13.182	76	59493	20.12	ug/L	99
84) butyl acetate	13.234	56	23942	19.79	ug/L	97
85) 3,3-Dimethyl-1-Butanol	13.360	69	27850	167.14	ug/L	98
86) dibromochloromethane	13.480	129	50307	21.72	ug/L	99
87) 1,2-dibromoethane	13.652	107	42610	21.20	ug/L	99
88) n-butyl ether	14.013	57	175157	21.03	ug/L	99
89) chlorobenzene	14.149	112	136158	21.04	ug/L	98
90) 1,1,1,2-tetrachloroethane	14.217	131	55492	20.94	ug/L	99
91) ethylbenzene	14.196	91	226972	20.71	ug/L	99
92) m,p-xylene	14.316	106	184369	42.88	ug/L	98
93) o-xylene	14.792	91	196625	21.06	ug/L	100
94) styrene	14.813	104	157414	22.04	ug/L	99
95) butyl acrylate	14.599	55	77872	19.22	ug/L	98
96) isopropylbenzene	15.168	105	262283	21.67	ug/L	98
97) bromoform	15.132	173	42161	23.13	ug/L	99
98) cis-1,4-dichloro-2-butene	15.283	88	20270	22.54	ug/L	97
101) 1,1,2,2-tetrachloroethane	15.550	83	55357	19.37	ug/L	99
102) trans-1,4-dichloro-2-b...	15.597	53	16866	22.28	ug/L	92
103) 1,2,3-trichloropropane	15.634	110	17870	21.07	ug/L	98
104) bromobenzene	15.644	156	76520	21.85	ug/L	99
105) n-propylbenzene	15.634	91	305441	20.77	ug/L	100
106) 2-chlorotoluene	15.812	126	65864	21.06	ug/L	97
107) 4-chlorotoluene	15.927	91	186215	20.32	ug/L	98
108) 1,3,5-trimethylbenzene	15.801	105	236569	21.30	ug/L	99
109) tert-butylbenzene	16.193	119	192083	20.81	ug/L	98
110) 1,2,4-trimethylbenzene	16.251	105	243596	21.27	ug/L	99
111) sec-butylbenzene	16.434	105	310607	21.27	ug/L	99
112) p-isopropyltoluene	16.564	119	273404	21.64	ug/L	99
113) 1,3-dichlorobenzene	16.669	146	147440	21.37	ug/L	99
114) 1,4-dichlorobenzene	16.758	146	155761	20.30	ug/L	99
115) 1,2-dichlorobenzene	17.207	146	151652	21.23	ug/L	97
116) Benzyl Chloride	16.899	91	135055	21.44	ug/L	98
117) n-butylbenzene	17.035	92	132889	21.11	ug/L	98
119) hexachloroethane	17.479	201	44160	19.55	ug/L	99

Data Path : C:\msdchem\1\data\D\vd10119\
 Data File : d250688.D
 Acq On : 22 Jun 2017 7:48 am
 Operator : XimenaC
 Sample : cc10106-20
 Misc : ms17289,vd10119,5,,100,5,1
 ALS Vial : 3 Sample Multiplier: 1

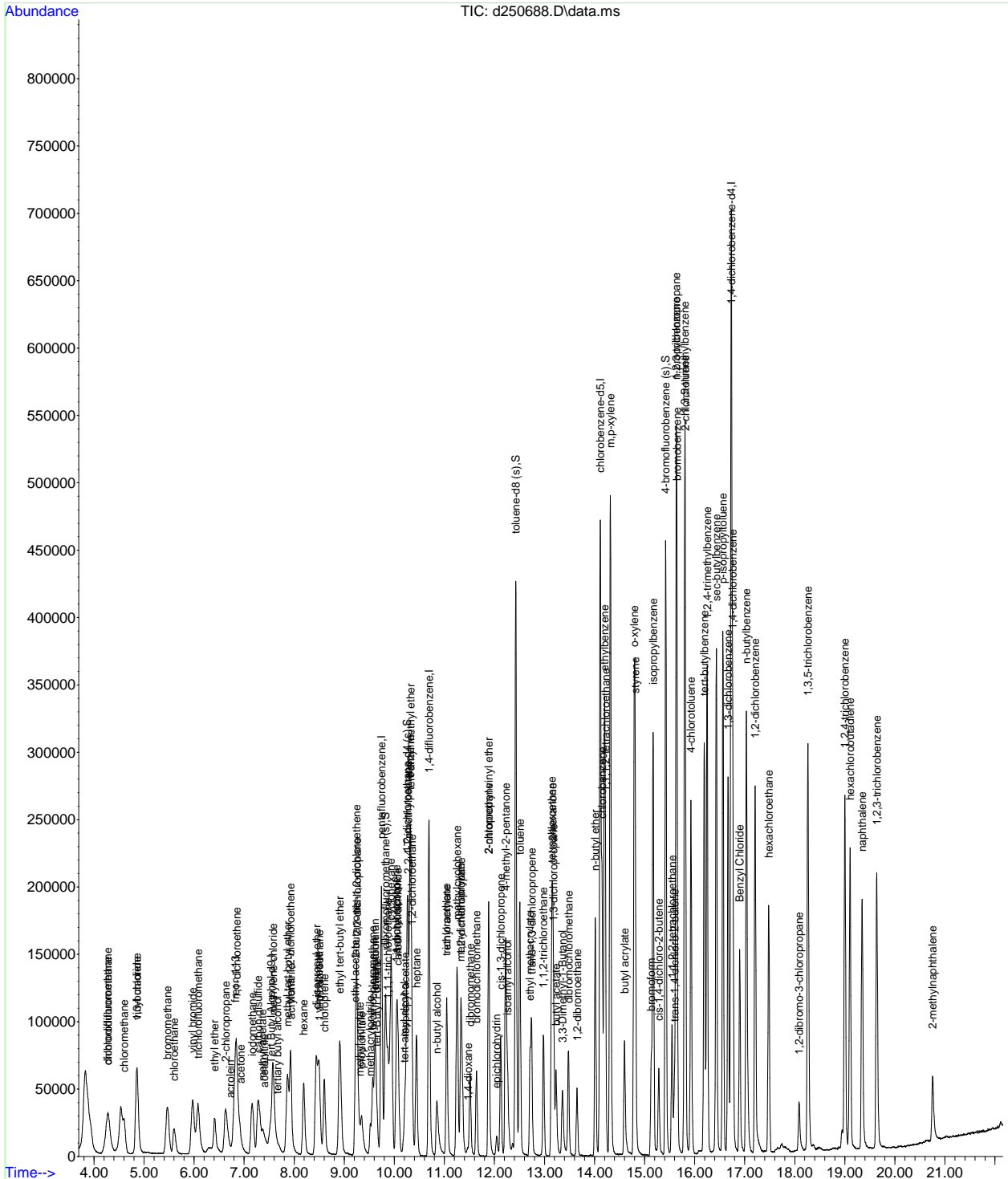
Quant Time: Jun 23 11:50:24 2017
 Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
 Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
 QLast Update : Thu Jun 22 18:48:41 2017
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
120) 1,2-dibromo-3-chloropr...	18.086	75	11600	19.03	ug/L	89
121) 1,3,5-trichlorobenzene	18.263	180	142655	21.06	ug/L	99
122) 1,2,4-trichlorobenzene	19.001	180	118137	21.37	ug/L	98
123) hexachlorobutadiene	19.105	225	66841	21.00	ug/L	99
124) naphthalene	19.346	128	224113	20.03	ug/L	99
125) 1,2,3-trichlorobenzene	19.638	180	103565	20.80	ug/L	99
126) 2-methylnaphthalene	20.752	142	45718	11.22	ug/L	99

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

Data Path : C:\msdchem\1\data\D\vd10119\
Data File : d250688.D
Acq On : 22 Jun 2017 7:48 am
Operator : XimenaC
Sample : cc10106-20
Misc : ms17289,vd10119,5,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 11:50:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MD10106.M
Quant Title : SW846 8260C, ZB624 MS 60m x 0.25mm x 1.4um
QLast Update : Thu Jun 22 18:48:41 2017
Response via : Initial Calibration



7.7.27
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VOLATILE ANALYSIS LOG

Batch ID: VC8031

Date: 11/28/17

017-2451-137 @ EXT 1B BTDN FINE 100 PPM

Print Analyst Name: Prohant B. Sikk

Analyst Signature: [Signature]

Columns: 2B62x160 mLx25mm X1mm

Method V 8260C

Initial Cal. Method MLC8031

Standard Data			Standard Data		
Lot #	Description	Conc.	Lot #	Description	Conc.
2478-04	(V) Std A+B	100 PPM	2478-22	(39) EXT A	100 PPM
2478-24	(5) Std C	100 PPM	2478-130	(10) EXT B	100 PPM
2478-20	(W) Std E	100 PPM	2478-25	(6) EXT C	100 PPM
2478-18	(2) Std K	300 PPM	2478-132	(15) EXT E	100 PPM
2478-26	(2) 1,3-Buta+Fin	100 PPM	2478-01	(12) EXT K	300 PPM

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044. 1M Sur. 2500 PPM 017-2451-02 (5) EXT 102 150 PPM

Supervisor Signature: [Signature] Date: 11/11/17

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L + S U	I S U	Status (Data)	Comments	pH < 2
	C													
	217759	BFB	TUNE	S		1	50							
	217760	1C8031-02	IC 8260	S		2	50						1.33 Butadiene	
	217761	1C8031-05	IC 8260	S		3	50						1M STD A+B, C, E, K	
	217762	1C8031-1	IC 8260	S		4	50						1M STD A+B, C, E, K	
	217763	1C8031-2	IC 8260	S		5	50						1M STD A+B, C, E, K	
	217764	1C8031-4	IC 8260	S		6	50						2M STD A+B, C, E, K	
	217765	1C8031-8	IC 8260	S		7	50						1M STD A+B, C, E, K	
	217766	1C8031-20	IC 8260	S		8	50						8M STD A+B, C, E, K	
	217767	1C8031-50	IC 8260	S		9	50						20M STD A+B, C, E, K	
	217768	1C8031-100	IC 8260	S		10	50						50M STD A+B, C, E, K	
	217769	1C8031-200	IC 8260	S		11	50						100M STD A+B, C, E, K	
	217770	1B		S		12	50						20M STD A+B, C, E, K	
	217771	1B		S		13	50							
	217772	1CV8031-50	1CV 8260	S		14	50							
	217773	1CV8031-50	1CV 8260	S		15	50						25M EXT A+B, C, E, K	
	217774	1B		S		16	50						25M EXT A+B, C, E, K	

TTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result. If strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10 Rev. Date: 1/19/16

VOLATILE ANALYSIS LOG

Batch ID: VC8033 VC8033-KU511
 Print Analyst Name: Prashant B. Shukla

Analyst Signature: [Signature]

Columns: 2B624 (60x25 mm x 1.4, um)

Method V8260C

Initial Cal. Method MC8031 MC8033 MC8033-KU511

Date: 4/24/17

Standard Data		
Lot #	Description	Conc.
2178-23	Int. Surv.	250 ppm
2178-11	Std NYSUF	100 ppm
2178-126	Std Allyl chloride	100 ppm

Standard Data		
Lot #	Description	Conc.
2178-12	Ext NYSUF	100 ppm
2178-130	Ext B	100 ppm
2178-22	Ext A	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 5/11/17

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S U	Status (Data)	Comments	pH < 2
	C													
	217791	BFB	TUNE	S		1	50						OK 200 pm	
	217792	IC8031-0.5	IC 8260	S		2	50					WCL	1 ul STD NYSUF, Allyl chloride	100 ppm
	217793	IC8031-1	IC 8260	S		3	50					WCL	1 ul STD NYSUF, Allyl chloride	100 ppm
	217794	IC8031-2	IC 8260	S		4	50					WCL	2 ul STD NYSUF, Allyl chloride	100 ppm
	217795	IC8031-4	IC 8260	S		5	50					WCL	4 ul STD NYSUF, Allyl chloride	100 ppm
	217796	IC8031-8	IC 8260	S		6	50					WCL	8 ul STD NYSUF, Allyl chloride	100 ppm
	217797	IC8031-20	IC 8260	S		7	50					WCL	20 ul STD NYSUF, Allyl chloride	100 ppm
	217798	IC8031-50	IC 8260	S		8	50					WCL	50 ul STD NYSUF, Allyl chloride	100 ppm
	217799	IC8031-100	IC 8260	S		9	50					WCL	100 ul STD NYSUF, Allyl chloride	100 ppm
	217800	IC8031-200	IC 8260	S		10	50					WCL	200 ul STD NYSUF, Allyl chloride	100 ppm
	217801	IB		S		11	50							
	217802	IB		S		12	50							
	217803	ICV8031-50	ICV 8260	S		13	50					WCL	25 Ext (A, B, NYSUF)	50 ppm
	217804	IB		S		14	50							

Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
 Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
 If strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
 Rev. Date: 1/19/16

VOLATILE ANALYSIS LOG

Batch ID: VC8081

Print Analyst Name: Sushila Yadav

Analyst Signature: [Signature]

Columns: 7Bx24/60mx0.25mmx1.1um

Method: V8260 L

Initial Cal. Method: MC8031

Date: 6/22/2017

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
017-2438	93-25 STD (A,B,K)	100 PPM
017-2438	68-8 STD	100 PPM
017-2438	105-16 STD	100 PPM
017-2438	94 T/S	200 PPM

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature]

Date: 6/22/17

R	Data File	Sample ID	Test #	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	S U	Status (Data)	Comments	pH* < 2
	C218885L	IB				1	5								
	218886	CC8031-20				1	5								
	218887	JC45460F-22A	17255 T620			2	5						W	8:01 A.m 70.11 STD (A,B,K,E,K)	50ml Diln
	218888	BS				3	5						W		
	218889	BSD				4	5						W	25.11 STD (A,B,K,E,K)	50ml Diln
	218890	IB				5	5						W		
	218891	JC45362-1	17255 T620		5	6	5.3						W		
	218892	JC45363-2	✓		5	7	5.3						W		
	218893	JC45434-1	17308 STD		5	8	9.0						W		
	218894	JC45434-2	✓		5	9	7.5						W	namcp	
	218895	JC45363-1ms	17255 T620		4	10	6.1						W		
	218896	IB				11							W	25.11 STD (A,B,K,E,K)	5ml Diln
	218897	JC45363-2dup	17255 T620		4	12	5.2						W		
	218898	JC45410-1	17339 T620+		7	13	5.9						W		
	218899	JC45428-2	17339 T620+		5	14	5.2						W		
	218890	JC45428-3	CP314T		5	15	7.5						W	Effluent JC45428-1 PRSINE DL	
	218901	JC45428-4	✓		5	16	6.3						W	JC45428-2	

ITX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

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VOLATILE ANALYSIS LOG

Batch ID: VC8081

Print Analyst Name: Sushila Yadav

Analyst Signature: Sy

Columns: ZB624/60mmx0.25mmx1.0um

Method: V8260C

Initial Cal. Method: MC8031

Date: 6/22/2017

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.

Pages Page # 297

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Hb

Date: 6/23/17

R	Data File	Sample ID	Test #	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L I S + S U	Status (Data)	Comments	pH < 2
	C218902	JC45404-11	17318 PCE	✓	4	17	4.4						
	218903	JC45404-13	✓	✓	4	18	4.3					SME DL	
	218904	JC45404-14	✓	✓	4	19	5.6					SME DL	
	218905	JC45404-21	✓	✓	4	20	3.3					SME DL	
	218906	JC45404-22	✓	✓	4	21	5.2					SME DL	
	218907	JC45404-29	✓	✓	4	22	4.9					SME DL	
	218908	JC45428	1723918 TC124	✓	4	23	7.8					C10 (Y-CORE)	
	218909	IB				24						C10 JC45411-1 (Y-CORE)	
	218910	IB				25							

Sy 6/22/2017

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

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7.8.3
7

Date: 6/13/17

Print Analyst Name: XWENA

Standard Data

Lot #	Description	Conc.
W17-2478-36-39	EXT A/B	100-10000 ppm
W17-2478-96-1	EXT C	100 ppm
W17-2478-90-6	EXT E	100 ppm
W17-2478-97-4	EXT K	300 ppm
W17-2478-98-7	Hexane	100 ppm

Standard Data

Lot #	Description	Conc.
W17-2478-81-30	A/B/K	100-10000 ppm
W17-2478-95-3	C	100 ppm
W17-2478-71-17	E	100 ppm
W17-2478-73-6	1/3 BTD	100 ppm
W17-2478-70	IS	750/2500 ppm

Analyst Signature: gypollwo

Columns: 38-624 (60m x 0.25mm x 1.4um)

Method V8260C

Initial Cal. Method MD10106

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

W17-2478-88-3 6A Acetonitrile 1000 ppm
 W17-2478-74 Ext 1/3 BTD 100 ppm

Supervisor Signature: ps

Date: 6/13/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L	I	S	Status (Data)	Comments	pH < 2
	D250401	bfb				1							OK		
	250402	IC10106-2	V8260 1/13 BTD	S	5	2	5/5	100					WOK	2ml A,B,C,E,K, 1/3 BTD / 100ml	
	250403	IC10106-1	cal ✓	S	3	3	5/5	100					WOK	1ml A,B,C,E,K, 1/3 BTD / 100ml	
	250404	IC10106-0.5	✓	S	4	4	5/5	100					WOK	2.5ml A,B,C,E,K, 1/3 BTD / 100ml	
	250405	IC10106-0.2	✓	S	5	5	5/5	100					WOK	1ml A,B,C,E,K, 1/3 BTD / 500ml	
	250406	IC10106-4	✓	S	6	6	5/5	100					WOK	4ml A,B,C,E,K, 1/3 BTD / 100ml	
	250407	IC10106-8	✓	S	7	7	5/5	100					WOK	8ml A,B,C,E,K, 1/3 BTD / 100ml	
	250408	IC10106-20	✓	S	8	8	5/5	100					WOK	20ml A,B,C,E,K, 1/3 BTD / 100ml	
	250409	IC10106-50	✓	S	9	9	5/5	100					WOK	50ml A,B,C,E,K, 1/3 BTD / 100ml	
	250410	IC10106-100	✓	S	10	10	5/5	100					WOK	100ml A,B,C,E,K, 1/3 BTD / 100ml	
	250411	IC10106-200	✓	S	11	11	5/5	100					WOK	200ml A,B,C,E,K, 1/3 BTD / 100ml	
	250412	ib			12	12	5/5						-		
	250413	ib			13	13	5/5						-		
	250414	ICV10106-50		S	14	14	5/5	100					WOK	25ml EXT (A,B,C,E,K, 1/3 BTD, hex) / 100ml	
	250415	ICV10106-50		S	15	15	5/5	100					WOK	25ml EXT Acetonitrile / 100ml	
	250416	ib											-		
XC 6/13/17															

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
 Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
 All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Date: 6/22/17

Print Analyst Name: Ximel VA

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
1013-2478-113-11	A181K	100-1000 ppm
1014-2478-114-11	C	100 ppm
1013-2478-105-13	E	100 ppm
1013-2478-94	IS	200/2000 ppm

Analyst Signature: [Signature]

Columns: 78-624 (60 m x 0.25 mm x 1.4 mm)

Method V8260C

Initial Cal. Method M D 10106

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 6/28/17

R	Data File	Sample ID	Test	M T X	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	S U	Status (Data)	Comments	pH* < 2
	D200686	1b				1									
	250 687	1b				2									
	250 688	cc 10106-20				3								7:48 AM 25ml A181K, C, E / 100ml	
	250 689	1b				4									
	250 690	mb/JC34461f-29				5							W/C	Lot # 171415 Disp #24	
	250 691	bs				6							W/C	25ml A181K, C, E / 50ml	
	250 692	1b				7							W		
R	250 693	JC 45391-8	17267 PAUG	S	3	8	6.5/5	100					W/C		
R	250 694	JC 45391-9	✓	S	3	9	6.0/5	100					W/C		
	250 695	JC 45391-3	✓	S	3	10	6.5/5	5					W/C	+2D 167694	
	250 696	JC 45391-4	✓	S	3	11	6.5/5	5					W/C	+2D 167695	
	250 697	JC 45391-8ms	✓	S	3	12	6.3/5	100					W/C	25ml A181K, C, E / 50ml	
	250 698	JC 45391-8msd	✓	S	3	13	6.3/5	100					W/C		
	250 699	1b				14							W		
	250 700	JC 45564-1	17323 TLL20+	S	4	15	10.4/10	100					W/R	RR clo	
	250 701	JC 455628-3	17308 CP 516720+	S	2	16	6.2/10	100					W/R	RR clo	
	250 702	1b													

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Date: 6/22/17

Print Analyst Name: Ximena

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.

See pg 19

Analyst Signature: [Signature]

Columns: 93-624160m x 0.5mm x 1.4um

Method: V8260C

Initial Cal. Method: VD10106

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [Signature] Date: 6/22/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+S	I+S	Status (Data)	Comments	pH* <2
	D250703	1b												
	250704	1b										NR		
	250705	JC45628-1	17368 CP576TEL20+	S	2		5.2/10	100				WCA		
	250706	JC45628-1	✓	S	2		5.2/10	10				W NOT NEED		
R	250707	JC45564-1	17323 TEL20+	S	4		10/10	100				WCA		
	250708	1b												
R	250709	JC45628-3	17368 CP576TEL20+	S	2		6.2/10	100				WCA		
	250710	JC45342-1	17200 SL	S	3		10.8/10	100				WCA		
R	250711	JC45370-1	17213 TEL20+	S	4		5.3/5	100				WCA	XC 6/22/17 7:40 PM	
	250712	1b												
	250713	1b												
	250714	CC10106-50 JP 6/22/17										α	25ml A/B/M, C, E / 10ml 9:04 PM	
	250715	1B												
	250716	MSR										α		
F/O	250717	JC4540413	17318 PCE	S	3		4.9/5	5				WCA	+C, E	
F/O	250718	JC45404121	✓	S	3		4.3/5	100				WCA	+C 1DL FOX	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

195

7.8.5
7

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC45628
Account: TRCNVNYB TRC
Project: K710, 168 8th Street, Brooklyn, NY

Sample: JC45628-1 **Analyzed:** 22-JUN-17 by LV **Method:** SM2540 G-97
ClientID: TRC-TR-2(3.5-4)

Wet Weight (Total)	35.93	g
Tare Weight	30.57	g
Dry Weight (Total)	35.04	g
Solids, Percent	83.4	%

Sample: JC45628-2 **Analyzed:** 22-JUN-17 by LV **Method:** SM2540 G-97
ClientID: TRC-TR-2(4-5)

Wet Weight (Total)	32.83	g
Tare Weight	26.48	g
Dry Weight (Total)	31.74	g
Solids, Percent	82.8	%

Sample: JC45628-3 **Analyzed:** 22-JUN-17 by LV **Method:** SM2540 G-97
ClientID: TRC-TR-2(7.5-8)

Wet Weight (Total)	32.33	g
Tare Weight	26.03	g
Dry Weight (Total)	31.49	g
Solids, Percent	86.7	%

8.1
8

Misc. Raw Data

Raw Data

Methanol Prep Log

Vial Track #:	Lims ID:	Initial Tare Wt (g)	Total Wt (g)	Weight of Sample (g)	Date Prepared	Lot #:	Prep By	Vial Desc:	Comments
6/5/2017-720	JC45628-1.2	35.9500	41.1800	5.2300	6/21/2017 9:07:26 PM	166879	jp	10ml MeOH	
5/31/2017-5579	JC45628-1.3	33.7900	39.3900	5.6000	6/21/2017 9:07:40 PM	N/A	jr	DI water	
5/31/2017-5569	JC45628-1.4	33.7700	39.0100	5.2400	6/21/2017 9:07:50 PM	N/A	jr	DI water	
6/5/2017-729	JC45628-2.2	36.0200	40.8600	4.8400	6/21/2017 9:08:21 PM	166879	jp	10ml MeOH	
5/31/2017-5598	JC45628-2.3	34.0500	39.6800	5.6300	6/21/2017 9:08:32 PM	N/A	jr	DI water	
5/31/2017-5588	JC45628-2.4	33.7700	38.8700	5.1000	6/21/2017 9:08:45 PM	N/A	jr	DI water	
6/5/2017-728	JC45628-3.2	36.2300	42.4600	6.2300	6/21/2017 9:09:23 PM	166879	jp	10ml MeOH	
5/31/2017-5587	JC45628-3.3	33.8800	39.0100	5.1300	6/21/2017 9:09:34 PM	N/A	jr	DI water	
5/31/2017-5597	JC45628-3.4	33.7900	39.2400	5.4500	6/21/2017 9:09:44 PM	N/A	jr	DI water	

**ATTACHMENT C
WASTE DISPOSAL MANIFEST**

PHONE: 631.608.8810
 FAX: 631.608.8811

B-BROOKSIDE ENVIRONMENTAL
 www.brooksideweb.com

Transporter Permit #1A-644
 EPA ID #NYR000081661
 BIC # 2935

NON-HAZARDOUS MANIFEST		1. Customer's US EPA ID NO.	Document No.	2. Page 1 of	
		NOT REQUIRED	2215-1	1	2215
3. Generator Site Address and Mailing Address			A. Document Number		
NYCSCA 30-30 THOMSON AVE QUEENS, NY 11011			168-170 8 TH STREET BROOKLYN, NY 11215		
4. Phone 212-221-7822			B. State ID		
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Transporter's ID	
BROOKSIDE ENVIRONMENTAL		NYR000081661		IA-644	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone	
				631-608-8810	
9. Designated Facility Name and Site Address			G. State Facility's ID		
SPRING GROVE RESOURCE RECOVERY 4879 SPRING GROVE AVENUE CINCINNATI, OH 45232			OH0000816629		
11. US DOT Description (Including Proper Shipping Name)			12. Containers		13. Total Quantity
			No. Type		14. Unit Wt/Vol
a. NON-DOT REGULATED MATERIAL (SOIL)			X2 PM		500 P
b.					
c.					
d.					
J. Additional Descriptions for Materials Listed Above			K. Handling Codes for Wastes Listed Above		
a.) SOIL w/ TRACE SOLVENTS					
APPROVAL # CH1465542 1703394122					
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
Printed / Type Name		Signature		DATE	
EMILY EBERT as agent of NYCSCA				Month Day Year 7 7 17	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed / Type Name		Signature		DATE	
Nicholas Holdener				Month Day Year 7 7 17	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed / Type Name		Signature		DATE	
				Month Day Year	
19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted.					
Printed / Typed Name				DATE	
				Month Day Year	

GENERATOR

TRANSPORTER

FACILITY