

Arnold F. Fleming, P.E.  
&



*Environmental Management & Consulting*

Sent by electronic mail (michael.maccabe@dec.ny.gov)

February 10, 2017

Mr. Michael D. MacCabe, P.E.  
New York State Department of Environmental Conservation (NYSDEC)  
Division of Environmental Remediation  
625 Broadway  
Albany, NY 12233-7015

**Re: Groundwater Management Measures  
388 Bridge Street – Brooklyn, New York  
BCP Site Number: C224134**

Dear Mr. MacCabe:

On behalf of 384 Bridge Street, LLC and R, K, & G Associates, LLC (collectively, the Participant), Arnold F. Fleming, P.E. and Fleming-Lee Shue, Inc. (collectively FLS) have prepared this letter documenting actions regarding management of the waste water generated from purging groundwater monitoring wells for sampling and the condensate water accumulated in the moisture separator from the on-Site soil vapor extraction (SVE) system located 388 Bridge Street, Brooklyn, New York (Site). Please note that the Site was remediated under the NYSDEC Brownfield Cleanup Program (BCP) No. C224134 and obtained the Certificate of Completion (COC) in 2013.

The Site is located in the Brooklyn, Kings County, New York and is identified as Block 152 and Lots 1001-1006 (formerly Lots 37 and 118) on the current New York City Tax Map. The Site is an approximately 0.46-acre area bounded by Saint Joseph High School (SJHS) and a portion of a 5-story commercial building (Lots 33 and 31, respectively) to the north, a fabric discount store (Lot 6) and ASA Institute of Business (Lot 18) to the south, Bridge Street to the east, and Lawrence Street to the west. The Site was developed to a 53-story residential building with retail spaces on the ground floors and parking space in the sub cellar, first, second and third floors of the building. Overall building construction on the Site is complete with some interior retail spaces still under construction.

Remedial investigations completed at the Site between May 2008 and July 2008 found several underground storage tanks (UST). A NYSDEC spill number (#0801499) was opened and then subsequently closed on August 18, 2009 after removal of these USTs. Additional remedial investigations on the Site detected soils indicative of urban fill with elevated levels of semi-volatile organic compounds (SVOC) and metals. In addition, elevated levels of chlorinated volatile organic compounds (VOC) were detected in groundwater and soil vapor samples. Off-Site remedial investigations were completed to determine potential off-Site

impacts from the historic dry cleaning tenant, which operated on the Site until 1982. The off-Site investigations found elevated levels of chlorinated VOCs from the Site at the adjacent school (SJHS) only.

The Site was remediated in accordance with the BCA Index# A2-0623-07-09 for BCP Site No. C224134. On-Site remediation included the excavation of contaminated fill and petroleum-impacted soils and installation of engineering and institutional controls (EC/ IC). As part of the ECs, installation of a SVE system for vapor mitigation was completed. The NYSDEC issued the COC for the Site by in 2013.

Presently, FLS conducts routine activities for evaluating the performance and effectiveness of the remedy as outlined in the NYSDEC-approved Site Management Plan. These activities include conducting periodically inspections of the engineering controls and sampling of existing groundwater monitoring wells. Water generated from purging monitoring wells during semi-annual sampling events and the condensate water accumulated in the moisture separator from the SVE system have been contained in 55-gal drums for future disposal.

In order to characterize the water, FLS collected samples from the drums on January 12, 2017. A composite sample was collected from the two drums (sample ID: DW1) containing condensate water and a grab sample from the drum (DW2) containing purge water. Samples were analyzed for the total contaminant list of VOCs by SGS Accutest Laboratories, a NYSDOH Environmental Laboratory Accreditation Program. The tabulated analytical data and laboratory report are enclosed as Attachment 1 and 2, respectively.

As shown in Attachment 1, groundwater data was compared to the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values (Standards). Groundwater results indicated that not only there were no exceedances of the Standards but there were no VOC contaminant detections.

Based on analytical results presented in this letter, FLS proposes that water generated from this two routine activities be discharged into the building's sanitary sewer system. Of note, the NYCDEP allows the temporary discharge of groundwater to the City sewer system (Sanitary, Storm or Combined sewers). FLS anticipates NYCDEP approval of the proposed effluent as it meets NYCDEP limitations for effluent to sanitary or combined sewers and the estimated discharge of groundwater is limited and less than 10,000 gallons per day. NYCDEP Limitations for Effluent to Sanitary or Combined Sewers is presented in Attachment 3.

Please feel free to contact us if you have any questions or objections regarding the proposed measures described above, or need any additional information.

Sincerely,



Camila Israel  
Senior Project Manager

enc: Attachment 1 – Analytical Data Summary  
Attachment 2 – Laboratory Report  
Attachment 3 – NYCDEP Limitations for Effluent to Sanitary or Combined Sewers

cc: Roger Fortune                      Stahl Realty  
Arnie Fleming, P.E.                  Fleming-Lee Shue

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# **Attachment 1**

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**Attachment 1**  
**Analytical Data Summary**

Client Sample ID:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	DW1	DW2
Lab Sample ID:		JC35477-1	JC35477-2
Date Sampled:		1/12/2017	1/12/2017
Matrix:		Water	Water
GC/MS Volatiles (SW846 8260C)			
Acetone	-	ND (5.0)	ND (5.0)
Benzene	1	ND (0.14)	ND (0.14)
Bromochloromethane	5	ND (0.46)	ND (0.46)
Bromodichloromethane	-	ND (0.55)	ND (0.55)
Bromoform	-	ND (0.34)	ND (0.34)
Bromomethane	5	ND (0.46)	ND (0.46)
2-Butanone (MEK)	-	ND (1.9)	ND (1.9)
Carbon disulfide	60	ND (0.33)	ND (0.33)
Carbon tetrachloride	5	ND (0.54)	ND (0.54)
Chlorobenzene	5	ND (0.17)	ND (0.17)
Chloroethane	5	ND (0.44)	ND (0.44)
Chloroform	7	ND (0.23)	ND (0.23)
Chloromethane	5	ND (0.96)	ND (0.96)
Cyclohexane	-	ND (0.73)	ND (0.73)
1,2-Dibromo-3-chloropropane	0.04	ND (0.69)	ND (0.69)
Dibromochloromethane	-	ND (0.23)	ND (0.23)
1,2-Dibromoethane	0.0006	ND (0.22)	ND (0.22)
1,2-Dichlorobenzene	3	ND (0.23)	ND (0.23)
1,3-Dichlorobenzene	3	ND (0.19)	ND (0.19)
1,4-Dichlorobenzene	3	ND (0.21)	ND (0.21)
Dichlorodifluoromethane	5	ND (0.70)	ND (0.70)
1,1-Dichloroethane	5	ND (0.21)	ND (0.21)
1,2-Dichloroethane	0.6	ND (0.39)	ND (0.39)
1,1-Dichloroethene	5	ND (0.20)	ND (0.20)
cis-1,2-Dichloroethene	5	ND (0.31)	ND (0.31)
trans-1,2-Dichloroethene	5	ND (0.36)	ND (0.36)
1,2-Dichloropropane	1	ND (0.33)	ND (0.33)
cis-1,3-Dichloropropene	-	ND (0.19)	ND (0.19)
trans-1,3-Dichloropropene	-	ND (0.26)	ND (0.26)
1,4-Dioxane	-	ND (32)	ND (32)
Ethylbenzene	5	ND (0.20)	ND (0.20)
Freon 113	5	ND (1.2)	ND (1.2)
2-Hexanone	-	ND (1.5)	ND (1.5)
Isopropylbenzene	5	ND (0.16)	ND (0.16)
Methyl Acetate	-	ND (1.5)	ND (1.5)
Methylcyclohexane	-	ND (0.78)	ND (0.78)
Methyl Tert Butyl Ether	10	ND (0.34)	ND (0.34)
4-Methyl-2-pentanone(MIBK)	-	ND (1.2)	ND (1.2)
Methylene chloride	5	ND (1.0)	ND (1.0)
Styrene	5	ND (0.27)	ND (0.27)
1,1,2,2-Tetrachloroethane	5	ND (0.39)	ND (0.39)
Tetrachloroethene	5	ND (0.23)	ND (0.23)
Toluene	5	ND (0.23)	ND (0.23)
1,2,3-Trichlorobenzene	5	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	5	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	5	ND (0.22)	ND (0.22)
1,1,2-Trichloroethane	1	ND (0.28)	ND (0.28)
Trichloroethene	5	ND (0.26)	ND (0.26)
Trichlorofluoromethane	5	ND (0.58)	ND (0.58)
Vinyl chloride	2	ND (0.33)	ND (0.33)
m,p-Xylene	-	ND (0.42)	ND (0.42)
o-Xylene	5	ND (0.21)	ND (0.21)
Xylene (total)	5	ND (0.21)	ND (0.21)

Notes:

Concentrations are in ug/L

No exceedances in TOGS

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# **Attachment 2**

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### Technical Report for

**Fleming-Lee Shue, Inc.**

**388 Bridge Street, Brooklyn, NY**

**10149-001-1 PO # FP1110**

**SGS Accutest Job Number: JC35477**

**Sampling Date: 01/12/17**

#### Report to:

**Fleming-Lee Shue, Inc.**  
**158 West 29th Street 9th Floor**  
**New York, NY 10001**  
**camila@flemingleeshue.com; adam@flemingleeshue.com**

**ATTN: Camila Israel**

**Total number of pages in report: 130**



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 Cole**  
**Laboratory Director**

**Client Service contact: Tammy McCloskey 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.

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### Sample Summary

Fleming-Lee Shue, Inc.

Job No: JC35477

388 Bridge Street, Brooklyn, NY  
Project No: 10149-001-1 PO # FP1110

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC35477-1	01/12/17	09:30 JG	01/13/17	AQ	Water	DW1
JC35477-2	01/12/17	09:50 JG	01/13/17	AQ	Water	DW2

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Fleming-Lee Shue, Inc.

**Job No** JC35477

**Site:** 388 Bridge Street, Brooklyn, NY

**Report Date** 1/24/2017 1:00:43 PM

On 01/13/2017, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 5.9 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC35477 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

<b>Matrix:</b> AQ	<b>Batch ID:</b> VA8664
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC35610-7MS, JC35610-7MSD were used as the QC samples indicated.

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

## Summary of Hits

**Job Number:** JC35477  
**Account:** Fleming-Lee Shue, Inc.  
**Project:** 388 Bridge Street, Brooklyn, NY  
**Collected:** 01/12/17



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JC35477-1      DW1

No hits reported in this sample.

JC35477-2      DW2

No hits reported in this sample.

**Sample Results**

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**Report of Analysis**

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SGS Accutest

## Report of Analysis

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Client Sample ID: DW1	Date Sampled: 01/12/17
Lab Sample ID: JC35477-1	Date Received: 01/13/17
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260C	
Project: 388 Bridge Street, Brooklyn, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A229253.D	1	01/18/17	GA	n/a	n/a	VA8664
Run #2							

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

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.14	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.33	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.73	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
123-91-1	1,4-Dioxane	ND	130	32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: DW1	Date Sampled: 01/12/17
Lab Sample ID: JC35477-1	Date Received: 01/13/17
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260C	
Project: 388 Bridge Street, Brooklyn, NY	

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.78	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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

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

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## Report of Analysis

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Client Sample ID: DW2	Date Sampled: 01/12/17
Lab Sample ID: JC35477-2	Date Received: 01/13/17
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260C	
Project: 388 Bridge Street, Brooklyn, NY	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	A229254.D	1	01/18/17	GA	n/a	n/a	VA8664

Run #1	Purge Volume
Run #2	5.0 ml

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.14	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.33	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.73	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
123-91-1	1,4-Dioxane	ND	130	32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected

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## Report of Analysis

Client Sample ID:	DW2	Date Sampled:	01/12/17
Lab Sample ID:	JC35477-2	Date Received:	01/13/17
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	388 Bridge Street, Brooklyn, NY		

## VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.78	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	104%		84-119%
460-00-4	4-Bromofluorobenzene	96%		78-117%

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**

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**Includes the following where applicable:**

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



ACCUTEST

WW

CHAIN OF CUSTODY

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

FED-EX Tracking #
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job # JC35477

Client / Reporting Information
Project Information
Requested Analysis (see TEST CODE sheet)
Matrix Codes
Company Name: Fleming-Lee Shue
Project Name: 388 Bridge St
Street Address: 158 West 29th St, Fl 9
City: New York NY 10001
City: Brooklyn NY
Project # 10149
Client Purchase Order # FP1110
Sample Manager: Joshua Golding
C. Israel
Collection table with columns: Date, Time, Sampled by, Matrix, # of bottles, HD, NESH, HNSD, HSDOK, NONE, DI Water, MESH, ENCORE.

Turnaround Time (Business days)
Data Deliverable Information
Comments / Special Instructions
Initial Assessment: 3B D02
Label Verification: JV
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.
Relinquished by: [Signature] Date Time: 11/13/17 9:00
Received By: Chris Saul
Relinquished by: [Signature] Date Time: 11/17/15:15
Received By: James [Signature]

5.1
5

## SGS Accutest Sample Receipt Summary

Job Number: JC35477

Client: Fleming Lee Shue

Project: 388 Bridge Street

Date / Time Received: 1/13/2017 3:15:00 PM

Delivery Method: Accutest Courier

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (4.5);

Cooler Temps (Corrected) °C: Cooler 1: (5.9);

**Cooler Security**

	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>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"/>

**Cooler Temperature**

	<u>Y</u>	<u>or</u>	<u>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		

**Quality Control Preservation**

	<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 checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

**Sample Integrity - Documentation**

	<u>Y</u>	<u>or</u>	<u>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"/>

**Sample Integrity - Condition**

	<u>Y</u>	<u>or</u>	<u>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		

**Sample Integrity - Instructions**

	<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 -1, -2 Received 2 x 40ml HCL preserved. No screen.

SM089-02  
Rev. Date 12/1/16

JC35477: Chain of Custody

Page 2 of 3

5.1  
5

Responded to by: Tammy McCloskey

Response Date: 1/16/17

Response:

Proceed as noted

5.1

5

**JC35477: Chain of Custody**  
**Page 3 of 3**

### Internal Sample Tracking Chronicle

Fleming-Lee Shue, Inc.

Job No: JC35477

388 Bridge Street, Brooklyn, NY  
Project No: 10149-001-1 PO # FP1110

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC35477-1 DW1	Collected: 12-JAN-17 09:30	By: JG	Received: 13-JAN-17	By: JK		
JC35477-1	SW846 8260C	18-JAN-17 15:06	GA			V8260TCL11
JC35477-2 DW2	Collected: 12-JAN-17 09:50	By: JG	Received: 13-JAN-17	By: JK		
JC35477-2	SW846 8260C	18-JAN-17 15:35	GA			V8260TCL11

5.2  
5

# SGS Accutest Internal Chain of Custody

**Job Number:** JC35477  
**Account:** FLSNYYNY Fleming-Lee Shue, Inc.  
**Project:** 388 Bridge Street, Brooklyn, NY  
**Received:** 01/13/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC35477-1.2	Secured Storage	Gabriela Alvarez	01/17/17 14:22	Retrieve from Storage
JC35477-1.2	Gabriela Alvarez	GCMSU	01/17/17 14:22	Load on Instrument
JC35477-1.2	GCMSU	Gabriela Alvarez	01/18/17 11:53	Unload from Instrument
JC35477-1.2	Gabriela Alvarez	Secured Storage	01/18/17 11:53	Return to Storage
JC35477-1.2	Secured Storage	Gabriela Alvarez	01/18/17 11:56	Retrieve from Storage
JC35477-1.2	Gabriela Alvarez	GCMSA	01/18/17 11:56	Load on Instrument
JC35477-1.2	GCMSA	Gabriela Alvarez	01/19/17 11:23	Unload from Instrument
JC35477-1.2	Gabriela Alvarez	Secured Storage	01/19/17 11:23	Return to Storage
JC35477-2.2	Secured Storage	Gabriela Alvarez	01/17/17 14:22	Retrieve from Storage
JC35477-2.2	Gabriela Alvarez	GCMSU	01/17/17 14:22	Load on Instrument
JC35477-2.2	GCMSU	Gabriela Alvarez	01/18/17 11:53	Unload from Instrument
JC35477-2.2	Gabriela Alvarez	Secured Storage	01/18/17 11:53	Return to Storage
JC35477-2.2	Secured Storage	Gabriela Alvarez	01/18/17 11:56	Retrieve from Storage
JC35477-2.2	Gabriela Alvarez	GCMSA	01/18/17 11:56	Load on Instrument
JC35477-2.2	GCMSA	Gabriela Alvarez	01/19/17 11:23	Unload from Instrument
JC35477-2.2	Gabriela Alvarez	Secured Storage	01/19/17 11:23	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: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8664-MB	A229245.D	1	01/18/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35477-1, JC35477-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.14	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.33	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.73	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
123-91-1	1,4-Dioxane	ND	130	32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.78	ug/l	

# Method Blank Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8664-MB	A229245.D	1	01/18/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35477-1, JC35477-2

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 76-120%
17060-07-0	1,2-Dichloroethane-D4	94% 73-122%
2037-26-5	Toluene-D8	102% 84-119%
460-00-4	4-Bromofluorobenzene	104% 78-117%

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

## Method Blank Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8664-MB2	A229267.D	1	01/18/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35610-7MS, JC35610-7MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.14	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.46	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.55	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
74-83-9	Bromomethane	ND	2.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.33	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.54	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.17	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.96	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.73	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.23	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.21	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.70	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.36	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
123-91-1	1,4-Dioxane	ND	130	32	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.16	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.78	ug/l	

# Method Blank Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8664-MB2	A229267.D	1	01/18/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35610-7MS, JC35610-7MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.39	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.22	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.26	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.58	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
	m,p-Xylene	ND	1.0	0.42	ug/l	
95-47-6	o-Xylene	ND	1.0	0.21	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.21	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 76-120%
17060-07-0	1,2-Dichloroethane-D4	101% 73-122%
2037-26-5	Toluene-D8	102% 84-119%
460-00-4	4-Bromofluorobenzene	100% 78-117%

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

**Blank Spike Summary**

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8664-BS	A229246.D	1	01/18/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35477-1, JC35477-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	250	200	80	49-137
71-43-2	Benzene	50	50.1	100	80-118
74-97-5	Bromochloromethane	50	49.1	98	84-120
75-27-4	Bromodichloromethane	50	49.5	99	83-119
75-25-2	Bromoform	50	52.7	105	77-126
74-83-9	Bromomethane	50	48.2	96	57-133
78-93-3	2-Butanone (MEK)	250	233	93	71-127
75-15-0	Carbon disulfide	50	53.2	106	61-144
56-23-5	Carbon tetrachloride	50	52.8	106	77-134
108-90-7	Chlorobenzene	50	54.5	109	85-116
75-00-3	Chloroethane	50	48.7	97	62-133
67-66-3	Chloroform	50	50.9	102	84-125
74-87-3	Chloromethane	50	40.8	82	51-134
110-82-7	Cyclohexane	50	56.3	113	60-134
96-12-8	1,2-Dibromo-3-chloropropane	50	48.4	97	71-124
124-48-1	Dibromochloromethane	50	51.2	102	82-121
106-93-4	1,2-Dibromoethane	50	52.5	105	79-120
95-50-1	1,2-Dichlorobenzene	50	51.2	102	84-117
541-73-1	1,3-Dichlorobenzene	50	51.9	104	83-114
106-46-7	1,4-Dichlorobenzene	50	51.9	104	83-115
75-71-8	Dichlorodifluoromethane	50	45.8	92	43-135
75-34-3	1,1-Dichloroethane	50	50.4	101	79-124
107-06-2	1,2-Dichloroethane	50	50.2	100	81-127
75-35-4	1,1-Dichloroethene	50	53.2	106	69-136
156-59-2	cis-1,2-Dichloroethene	50	52.1	104	79-118
156-60-5	trans-1,2-Dichloroethene	50	53.7	107	73-125
78-87-5	1,2-Dichloropropane	50	52.6	105	81-118
10061-01-5	cis-1,3-Dichloropropene	50	51.7	103	86-119
10061-02-6	trans-1,3-Dichloropropene	50	53.6	107	84-121
123-91-1	1,4-Dioxane	1250	1450	116	58-143
100-41-4	Ethylbenzene	50	54.1	108	84-115
76-13-1	Freon 113	50	69.3	139	67-159
591-78-6	2-Hexanone	250	252	101	71-125
98-82-8	Isopropylbenzene	50	54.0	108	80-121
79-20-9	Methyl Acetate	50	50.3	101	69-126
108-87-2	Methylcyclohexane	50	54.1	108	61-138

\* = Outside of Control Limits.

# Blank Spike Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8664-BS	A229246.D	1	01/18/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35477-1, JC35477-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	100	98.4	98	80-121
108-10-1	4-Methyl-2-pentanone(MIBK)	250	259	104	77-123
75-09-2	Methylene chloride	50	50.2	100	75-122
100-42-5	Styrene	50	53.4	107	86-118
79-34-5	1,1,2,2-Tetrachloroethane	50	50.2	100	74-119
127-18-4	Tetrachloroethene	50	45.5	91	70-134
108-88-3	Toluene	50	52.3	105	84-117
87-61-6	1,2,3-Trichlorobenzene	50	51.3	103	73-130
120-82-1	1,2,4-Trichlorobenzene	50	49.6	99	79-129
71-55-6	1,1,1-Trichloroethane	50	52.5	105	83-134
79-00-5	1,1,2-Trichloroethane	50	53.8	108	84-119
79-01-6	Trichloroethene	50	52.0	104	84-120
75-69-4	Trichlorofluoromethane	50	48.3	97	63-133
75-01-4	Vinyl chloride	50	46.5	93	55-121
	m,p-Xylene	100	108	108	85-117
95-47-6	o-Xylene	50	52.8	106	85-119
1330-20-7	Xylene (total)	150	161	107	85-117

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	73-122%
2037-26-5	Toluene-D8	100%	84-119%
460-00-4	4-Bromofluorobenzene	98%	78-117%

\* = Outside of Control Limits.

## Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC35610-7MS	A229269.D	20	01/19/17	GA	n/a	n/a	VA8664
JC35610-7MSD	A229270.D	20	01/19/17	GA	n/a	n/a	VA8664
JC35610-7 <sup>a</sup>	A229273.D	20	01/19/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35477-1, JC35477-2

CAS No.	Compound	JC35610-7		MS	MS	Spike	MSD	MSD	RPD	Limits	
		ug/l	Q								ug/l
67-64-1	Acetone	ND		5000	3940	79	5000	3760	75	5	39-143/16
71-43-2	Benzene	ND		1000	987	99	1000	970	97	2	54-138/11
74-97-5	Bromochloromethane	ND		1000	1030	103	1000	990	99	4	79-123/11
75-27-4	Bromodichloromethane	ND		1000	961	96	1000	937	94	3	78-123/10
75-25-2	Bromoform	ND		1000	961	96	1000	983	98	2	71-128/11
74-83-9	Bromomethane	ND		1000	953	95	1000	895	90	6	52-140/16
78-93-3	2-Butanone (MEK)	ND		5000	4580	92	5000	4560	91	0	57-141/16
75-15-0	Carbon disulfide	ND		1000	1050	105	1000	1020	102	3	51-156/14
56-23-5	Carbon tetrachloride	ND		1000	1040	104	1000	1000	100	4	65-148/13
108-90-7	Chlorobenzene	ND		1000	988	99	1000	1000	100	1	76-125/10
75-00-3	Chloroethane	ND		1000	1000	100	1000	956	96	4	55-142/16
67-66-3	Chloroform	ND		1000	1020	102	1000	967	97	5	77-131/11
74-87-3	Chloromethane	ND		1000	861	86	1000	820	82	5	43-144/17
110-82-7	Cyclohexane	15.1	J	1000	1030	101	1000	1020	100	1	41-160/18
96-12-8	1,2-Dibromo-3-chloropropane	ND		1000	930	93	1000	906	91	3	66-128/12
124-48-1	Dibromochloromethane	ND		1000	964	96	1000	947	95	2	77-124/10
106-93-4	1,2-Dibromoethane	ND		1000	970	97	1000	980	98	1	77-119/10
95-50-1	1,2-Dichlorobenzene	ND		1000	981	98	1000	968	97	1	78-122/10
541-73-1	1,3-Dichlorobenzene	ND		1000	954	95	1000	983	98	3	77-120/10
106-46-7	1,4-Dichlorobenzene	ND		1000	961	96	1000	940	94	2	75-122/10
75-71-8	Dichlorodifluoromethane	ND		1000	845	85	1000	804	80	5	31-155/20
75-34-3	1,1-Dichloroethane	ND		1000	1010	101	1000	983	98	3	71-131/12
107-06-2	1,2-Dichloroethane	ND		1000	986	99	1000	924	92	6	72-135/11
75-35-4	1,1-Dichloroethene	ND		1000	1090	109	1000	1020	102	7	57-149/14
156-59-2	cis-1,2-Dichloroethene	ND		1000	1050	105	1000	1030	103	2	59-134/11
156-60-5	trans-1,2-Dichloroethene	ND		1000	1050	105	1000	1020	102	3	64-134/12
78-87-5	1,2-Dichloropropane	ND		1000	1010	101	1000	1030	103	2	76-122/11
10061-01-5	cis-1,3-Dichloropropene	ND		1000	981	98	1000	969	97	1	80-124/10
10061-02-6	trans-1,3-Dichloropropene	ND		1000	991	99	1000	1010	101	2	78-124/11
123-91-1	1,4-Dioxane	ND		25000	26200	105	25000	24600	98	6	53-143/22
100-41-4	Ethylbenzene	391		1000	1330	94	1000	1340	95	1	48-143/11
76-13-1	Freon 113	ND		1000	1360	136	1000	1330	133	2	56-179/17
591-78-6	2-Hexanone	ND		5000	4790	96	5000	4840	97	1	63-135/13
98-82-8	Isopropylbenzene	66.8		1000	1070	100	1000	1060	99	1	70-131/12
79-20-9	Methyl Acetate	ND		1000	1010	101	1000	995	100	1	60-127/13
108-87-2	Methylcyclohexane	34.4	J	1000	1050	102	1000	1040	101	1	43-163/17

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC35477  
 Account: FLSNYYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC35610-7MS	A229269.D	20	01/19/17	GA	n/a	n/a	VA8664
JC35610-7MSD	A229270.D	20	01/19/17	GA	n/a	n/a	VA8664
JC35610-7 <sup>a</sup>	A229273.D	20	01/19/17	GA	n/a	n/a	VA8664

The QC reported here applies to the following samples:

Method: SW846 8260C

JC35477-1, JC35477-2

CAS No.	Compound	JC35610-7 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
1634-04-4	Methyl Tert Butyl Ether	ND		2000	2010	101	2000	1920	96	5	70-127/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		5000	5030	101	5000	4950	99	2	71-131/12
75-09-2	Methylene chloride	ND		1000	1060	106	1000	979	98	8	69-127/12
100-42-5	Styrene	ND		1000	979	98	1000	978	98	0	76-128/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		1000	922	92	1000	928	93	1	70-122/10
127-18-4	Tetrachloroethene	ND		1000	826	83	1000	839	84	2	55-144/12
108-88-3	Toluene	5.4	J	1000	1000	99	1000	985	98	2	61-136/11
87-61-6	1,2,3-Trichlorobenzene	ND		1000	1000	100	1000	1010	101	1	68-135/13
120-82-1	1,2,4-Trichlorobenzene	ND		1000	949	95	1000	965	97	2	73-136/13
71-55-6	1,1,1-Trichloroethane	ND		1000	1050	105	1000	998	100	5	70-147/13
79-00-5	1,1,2-Trichloroethane	ND		1000	1040	104	1000	1040	104	0	78-122/10
79-01-6	Trichloroethene	ND		1000	946	95	1000	951	95	1	62-141/11
75-69-4	Trichlorofluoromethane	ND		1000	952	95	1000	912	91	4	50-152/16
75-01-4	Vinyl chloride	ND		1000	948	95	1000	935	94	1	44-136/16
	m,p-Xylene	9.4	J	2000	1980	99	2000	1970	98	1	50-144/12
95-47-6	o-Xylene	ND		1000	966	97	1000	955	96	1	62-137/12
1330-20-7	Xylene (total)	9.4	J	3000	2950	98	3000	2920	97	1	56-141/11

CAS No.	Surrogate Recoveries	MS	MSD	JC35610-7	Limits
1868-53-7	Dibromofluoromethane	101%	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	102%	97%		73-122%
2037-26-5	Toluene-D8	102%	101%		84-119%
460-00-4	4-Bromofluorobenzene	98%	99%		78-117%

(a) Sample used for QC purposes only.

\* = Outside of Control Limits.

**Instrument Performance Check (BFB)**

Job Number: JC35477  
 Account: FLSNYYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-BFB	Injection Date: 01/12/17
Lab File ID: A229078.D	Injection Time: 15:48
Instrument ID: GCMSA	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	16535	19.1	Pass
75	30.0 - 60.0% of mass 95	46298	53.5	Pass
95	Base peak, 100% relative abundance	86594	100.0	Pass
96	5.0 - 9.0% of mass 95	5530	6.39	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) <sup>a</sup>	Pass
174	50.0 - 120.0% of mass 95	70672	81.6	Pass
175	5.0 - 9.0% of mass 174	4437	5.12 (6.28) <sup>a</sup>	Pass
176	95.0 - 101.0% of mass 174	67696	78.2 (95.8) <sup>a</sup>	Pass
177	5.0 - 9.0% of mass 176	4519	5.22 (6.68) <sup>b</sup>	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
VA8658-IC8658	A229079.D	01/12/17	16:33	00:45	Initial cal 0.2
VA8658-IC8658	A229080.D	01/12/17	17:03	01:15	Initial cal 0.5
VA8658-IC8658	A229081.D	01/12/17	17:32	01:44	Initial cal 1.0
VA8658-IC8658	A229082.D	01/12/17	18:01	02:13	Initial cal 2.0
VA8658-IC8658	A229083.D	01/12/17	18:30	02:42	Initial cal 5.0
VA8658-IC8658	A229084.D	01/12/17	18:59	03:11	Initial cal 10.0
VA8658-IC8658	A229085.D	01/12/17	19:28	03:40	Initial cal 20.0
VA8658-ICC8658	A229086.D	01/12/17	19:57	04:09	Initial cal 50.0
VA8658-IC8658	A229087.D	01/12/17	20:27	04:39	Initial cal 100.0
VA8658-IC8658	A229088.D	01/12/17	20:56	05:08	Initial cal 200.0
VA8658-ICV8658	A229091.D	01/12/17	22:23	06:35	Initial cal verification 50

## Instrument Performance Check (BFB)

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-BFB	Injection Date: 01/18/17
Lab File ID: A229241.D	Injection Time: 08:38
Instrument ID: GCMSA	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	15603	20.0	Pass
75	30.0 - 60.0% of mass 95	40005	51.2	Pass
95	Base peak, 100% relative abundance	78077	100.0	Pass
96	5.0 - 9.0% of mass 95	5045	6.46	Pass
173	Less than 2.0% of mass 174	509	0.65 (0.76) <sup>a</sup>	Pass
174	50.0 - 120.0% of mass 95	67285	86.2	Pass
175	5.0 - 9.0% of mass 174	5058	6.48 (7.52) <sup>a</sup>	Pass
176	95.0 - 101.0% of mass 174	65525	83.9 (97.4) <sup>a</sup>	Pass
177	5.0 - 9.0% of mass 176	4404	5.64 (6.72) <sup>b</sup>	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
VA8664-CC8658	A229243.D	01/18/17	09:45	01:07	Continuing cal 20
VA8664-CC8658	A229244.D	01/18/17	10:18	01:40	Continuing cal 5
VA8664-MB	A229245.D	01/18/17	10:50	02:12	Method Blank
VA8664-BS	A229246.D	01/18/17	11:24	02:46	Blank Spike
ZZZZZZ	A229248.D	01/18/17	12:23	03:45	(unrelated sample)
ZZZZZZ	A229249.D	01/18/17	12:52	04:14	(unrelated sample)
ZZZZZZ	A229250.D	01/18/17	13:21	04:43	(unrelated sample)
ZZZZZZ	A229251.D	01/18/17	13:50	05:12	(unrelated sample)
ZZZZZZ	A229252.D	01/18/17	14:20	05:42	(unrelated sample)
JC35477-1	A229253.D	01/18/17	15:06	06:28	DW1
JC35477-2	A229254.D	01/18/17	15:35	06:57	DW2

**Instrument Performance Check (BFB)**

Job Number: JC35477  
 Account: FLSNYYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-BFB2	Injection Date: 01/18/17
Lab File ID: A229264.D	Injection Time: 21:39
Instrument ID: GCMSA	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.95 - 40.0% of mass 95	16084	20.8	Pass
75	30.0 - 60.0% of mass 95	40869	52.8	Pass
95	Base peak, 100% relative abundance	77402	100.0	Pass
96	5.0 - 9.0% of mass 95	5314	6.87	Pass
173	Less than 2.0% of mass 174	0	0.00 (0.00) <sup>a</sup>	Pass
174	50.0 - 120.0% of mass 95	62616	80.9	Pass
175	5.0 - 9.0% of mass 174	5502	7.11 (8.79) <sup>a</sup>	Pass
176	95.0 - 101.0% of mass 174	63005	81.4 (100.6) <sup>a</sup>	Pass
177	5.0 - 9.0% of mass 176	3920	5.06 (6.22) <sup>b</sup>	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
VA8664-CC8658	A229265.D	01/18/17	22:10	00:31	Continuing cal 50
VA8664-MB2	A229267.D	01/18/17	23:43	02:04	Method Blank
VA8664-BS2	A229268.D	01/19/17	00:12	02:33	Blank Spike
JC35610-7MS	A229269.D	01/19/17	00:41	03:02	Matrix Spike
JC35610-7MSD	A229270.D	01/19/17	01:11	03:32	Matrix Spike Duplicate
JC35610-7	A229273.D	01/19/17	02:38	04:59	(used for QC only; not part of job JC35477)
ZZZZZZ	A229276.D	01/19/17	04:05	06:26	(unrelated sample)
ZZZZZZ	A229280.D	01/19/17	06:02	08:23	(unrelated sample)
ZZZZZZ	A229281.D	01/19/17	06:32	08:53	(unrelated sample)
ZZZZZZ	A229282.D	01/19/17	07:01	09:22	(unrelated sample)
ZZZZZZ	A229283.D	01/19/17	07:30	09:51	(unrelated sample)
ZZZZZZ	A229284.D	01/19/17	07:59	10:20	(unrelated sample)
ZZZZZZ	A229285.D	01/19/17	08:28	10:49	(unrelated sample)

# Volatile Internal Standard Area Summary

Job Number: JC35477  
 Account: FLSNYYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Check Std:	VA8664-CC8658	Injection Date:	01/18/17
Lab File ID:	A229243.D	Injection Time:	09:45
Instrument ID:	GCMSA	Method:	SW846 8260C

	IS 1		IS 2		IS 3		IS 4		IS 5	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	501263	7.87	220568	10.22	328513	11.16	307687	14.56	171063	17.16
Upper Limit <sup>a</sup>	1002526	8.37	441136	10.72	657026	11.66	615374	15.06	342126	17.66
Lower Limit <sup>b</sup>	250632	7.37	110284	9.72	164257	10.66	153844	14.06	85532	16.66

Lab	IS 1		IS 2		IS 3		IS 4		IS 5	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
VA8664-MB	494534	7.85	234616	10.22	352306	11.16	317375	14.56	166931	17.16
VA8664-BS	546538	7.86	230785	10.22	353207	11.16	313454	14.56	178388	17.16
ZZZZZZ	548816	7.86	230562	10.22	341951	11.16	304758	14.56	174167	17.16
ZZZZZZ	534329	7.86	223479	10.22	341730	11.16	309232	14.56	174716	17.16
ZZZZZZ	539863	7.85	226600	10.22	335201	11.16	309045	14.56	169589	17.16
ZZZZZZ	516067	7.87	235990	10.22	348798	11.16	304683	14.56	169100	17.16
ZZZZZZ	540135	7.85	216491	10.22	327120	11.16	299772	14.56	167673	17.16
JC35477-1	542361	7.86	239056	10.22	341825	11.16	317506	14.56	172067	17.16
JC35477-2	523391	7.85	209004	10.22	315231	11.16	292607	14.56	166136	17.16

- 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.

6.5.1  
6

# Volatile Internal Standard Area Summary

Job Number: JC35477  
 Account: FLSNYYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Check Std:	VA8664-CC8658	Injection Date:	01/18/17
Lab File ID:	A229265.D	Injection Time:	22:10
Instrument ID:	GCMSA	Method:	SW846 8260C

	IS 1		IS 2		IS 3		IS 4		IS 5	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	530206	7.87	215752	10.22	323994	11.16	297424	14.56	167641	17.16
Upper Limit <sup>a</sup>	1060412	8.37	431504	10.72	647988	11.66	594848	15.06	335282	17.66
Lower Limit <sup>b</sup>	265103	7.37	107876	9.72	161997	10.66	148712	14.06	83821	16.66

Lab	IS 1		IS 2		IS 3		IS 4		IS 5	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
VA8664-MB2	526297	7.85	216041	10.22	331710	11.15	295572	14.56	167212	17.16
VA8664-BS2	524105	7.85	219543	10.22	335489	11.16	307365	14.56	177808	17.16
JC35610-7MS	588830	7.87	227787	10.22	352960	11.16	327240	14.56	183669	17.16
JC35610-7MSD	573690	7.86	238192	10.22	367338	11.16	339053	14.56	187599	17.16
JC35610-7	549720	7.85	234989	10.22	355529	11.16	328943	14.56	183869	17.16
ZZZZZZ	559082	7.85	238705	10.22	360208	11.16	331896	14.56	185320	17.16
ZZZZZZ	554849	7.85	231430	10.22	367828	11.16	332239	14.55	182736	17.16
ZZZZZZ	607098	7.86	255358	10.22	383526	11.16	342745	14.56	187998	17.16
ZZZZZZ	573564	7.85	242123	10.22	369547	11.16	338203	14.56	191839	17.16
ZZZZZZ	591950	7.85	241892	10.22	366569	11.16	338776	14.56	188764	17.16
ZZZZZZ	590002	7.87	249696	10.22	376207	11.16	338039	14.56	191614	17.16
ZZZZZZ	605841	7.84	241036	10.22	368236	11.15	367525	14.56	313962	17.16

- 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.

6.5.2  
6

# Volatile Surrogate Recovery Summary

Job Number: JC35477  
 Account: FLSNYYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Method: SW846 8260C	Matrix: AQ
---------------------	------------

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC35477-1	A229253.D	96	96	101	102
JC35477-2	A229254.D	103	104	104	96
JC35610-7MS	A229269.D	101	102	102	98
JC35610-7MSD	A229270.D	103	97	101	99
VA8664-BS	A229246.D	99	99	100	98
VA8664-MB	A229245.D	97	94	102	104
VA8664-MB2	A229267.D	106	101	102	100

Surrogate Compounds	Recovery Limits
---------------------	-----------------

S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	73-122%
S3 = Toluene-D8	84-119%
S4 = 4-Bromofluorobenzene	78-117%

# Initial Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICC8658  
 Lab FileID: A229086.D

## Response Factor Report MSA

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 Last Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

### Calibration Files

5 =A229083.D 2 =A229082.D 20 =A229085.D 50 =A229086.D  
 100 =A229087.D 1 =A229081.D 200 =A229088.D 0.5 =A229080.D  
 10 =A229084.D 0.2 =A229079.D = =

Compound	5	2	20	50	100	1	200	0.5	10	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9 -----ISTD-----												
2) 1,4-dioxane	0.061	0.046	0.066	0.064	0.073		0.058		0.051		0.060	15.52
3) tertiary butyl alcohol	1.116	1.126	1.095	1.148	1.139		1.031		1.023		1.097	4.61
4) I pentafluorobenzene -----ISTD-----												
5) propene											0.000#	-1.00
6) chlorotrifluoroethene											0.000#	-1.00
7) chlorodifluoromethane	1.394	1.328	1.352	1.488	1.422		1.506		1.408		1.414	4.64
8) dichlorodifluoromethane	2.004	1.836	1.814	2.101	1.957		1.899		1.948		1.937	5.10
9) chloromethane	1.201	1.238	1.129	1.330	1.515	1.396	1.610	1.371	1.124		1.324	12.70
10) vinyl chloride	1.508	1.386	1.388	1.576	1.662	1.486	1.715		1.436		1.520	8.06
11) bromomethane	0.765	0.758	0.695	0.815	0.887	0.763	0.970		0.745		0.800	11.10
12) chloroethane	0.545	0.564	0.486	0.563	0.544	0.426	0.585		0.522		0.529	9.74
13) vinyl bromide											0.000#	-1.00
14) trichlorofluoromethane	1.897	1.823	1.749	2.094	2.127		2.171		1.872		1.962	8.46
15) pentane											0.000#	-1.00
16) ethyl ether	0.311	0.260	0.281	0.308	0.318		0.315		0.289		0.298	7.19
17) Freon 123a											0.000#	-1.00
18) acrolein	0.196	0.191	0.189	0.202	0.216	0.184	0.229		0.188		0.199	7.79
19) freon 113	0.665	0.571	0.617	0.686	0.723	0.687	0.758		0.631		0.667	8.99
20) 1,1-dichloroethene	1.110	1.176	1.039	1.173	1.285	1.183	1.438		0.916		1.165	13.39
21) acetone	0.124	0.127	0.126	0.138	0.140	0.124	0.142		0.123		0.131	6.32
22) allyl chloride	0.266	0.288	0.320	0.368	0.359		0.464		0.303		0.338	19.62
23) acetonitrile												

6.7.1  
6

# Initial Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICC8658  
 Lab FileID: A229086.D

24)	iodomethane	0.126	0.125	0.118	0.131	0.129	0.112	0.113	0.122	6.31			
25)	carbon disulfide	1.390	1.391	1.305	1.421	1.586	1.503	1.743	1.217	1.231	1.421	11.96	
26)	methylene chloride	2.551	2.546	2.257	2.527	2.867	2.738	3.166	2.031	2.585	13.57		
27)	methyl acetate	0.733	0.695	0.645	0.685	0.802	0.829	0.880	0.626	0.737	12.39		
28)	methyl tert butyl ether	0.674	0.640	0.672	0.750	0.755	0.737	0.654	0.697	6.92			
29)	trans-1,2-dichloroethene	2.436	2.548	2.423	2.647	2.700	2.474	2.722	2.533	2.372	3.057	2.591	7.81
30)	hexane	0.797	0.831	0.824	0.902	0.871	0.895	0.891	0.847	0.766	0.847	5.57	
31)	di-isopropyl ether	0.646	0.698	0.650	0.718	0.723	0.748	0.728	0.692	0.700	5.24		
32)	t-butyl formate	2.202	2.057	2.061	2.247	2.240	2.326	2.253	2.125	2.189	4.47		
33)	ethyl tert-butyl ether	0.921	0.907	0.918	0.960	1.001	1.176	1.013	0.944	0.980	8.97		
34)	2-butanone	2.295	2.228	2.245	2.453	2.486	2.241	2.491	2.114	2.202	2.306	5.95	
35)	1,1-dichloroethane	0.104	0.101	0.114	0.126	0.124	0.119	0.129	0.118	0.117	8.67		
36)	chloroprene	1.068	1.113	1.011	1.098	1.099	1.079	1.113	1.026	1.019	1.147	1.077	4.23
37)	acrylonitrile	0.902	0.938	0.944	0.999	0.983	1.044	0.971	0.936	0.965	4.58		
38)	vinyl acetate	0.332	0.313	0.329	0.355	0.362	0.332	0.364	0.328	0.339	5.47		
39)	ethyl acetate	0.100	0.105	0.113	0.118	0.124	0.103	0.110	8.46				
40)	2,2-dichloropropane	0.106	0.167	0.133	0.149	0.142	0.140	0.154	0.142	13.47			
41)	cis-1,2-dichloroethene	1.348	1.429	1.308	1.400	1.355	1.455	1.345	1.253	1.362	4.79		
42)	propionitrile	0.548	0.677	0.591	0.633	0.629	0.517	0.644	0.561	0.600	9.10		
43)	bromochloromethane	0.145	0.130	0.153	0.166	0.160	0.149	0.167	0.148	0.152	8.08		
44)	tetrahydrofuran	0.350	0.336	0.311	0.335	0.329	0.302	0.342	0.302	0.326	5.72		
45)	chloroform	0.349	0.322	0.369	0.397	0.395	0.394	0.334	0.366	8.49			
46)	dibromofluoromethane (s)	1.139	1.144	1.079	1.146	1.131	1.262	1.134	1.024	1.132	5.95		
47)	1,2-dichloroethane-d4 (s)	0.587	0.590	0.561	0.570	0.569	0.569	0.594	0.566	0.574	0.556	0.574	2.23
48)	methacrylonitrile	0.798	0.776	0.771	0.777	0.761	0.767	0.761	0.773	0.775	0.755	0.771	1.57
49)	cyclohexane	0.301	0.266	0.327	0.320	0.331	0.307	0.309	7.74				
50)	1,1,1-trichloroethane	0.944	0.891	0.908	1.026	1.058	0.838	1.135	1.071	0.937	0.979	10.03	
51)	iso-butyl alcohol	1.210	1.297	1.294	1.406	1.377	1.412	1.435	1.231	1.333	6.47		
52)	tert-amyl methyl ether	0.057	0.066	0.060	0.063	0.064	0.057	0.056	0.061	6.88			
		2.179	2.112	2.161	2.364	2.419	2.385	2.381	2.181	2.122	2.256	5.65	

6.7.1

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# Initial Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICC8658  
 Lab FileID: A229086.D

53)	I	1,4-difluorobenzene	-----ISTD-----											
54)		Di-isobutylene										0.000#	-1.00	
55)		epichlorohydrin	0.066	0.063	0.070	0.075	0.074	0.074	0.074	0.064		0.070	7.07	
56)		n-butyl alcohol	0.030	0.027	0.031	0.033	0.034	0.028	0.030	0.029		0.030	8.04	
57)		carbon tetrachloride	0.758	0.822	0.787	0.824	0.806	0.859	0.798	0.770		0.803	4.01	
58)		1,1-dichloropropene	0.470	0.490	0.497	0.531	0.505	0.504	0.499	0.585	0.435	0.502	8.17	
59)		benzene	1.292	1.334	1.343	1.403	1.351	1.485	1.312	1.366	1.236	1.347	5.20	
60)		Iso-octane	1.638	1.634	1.629	1.888	1.996	1.889	1.893	1.747	1.619	2.066	1.800	9.29
61)		heptane	0.243	0.257	0.260	0.286	0.281	0.291	0.267	0.267		0.269	6.06	
62)		tert amyl alcohol										0.000#	-1.00	
63)		isopropyl acetate	0.108	0.079	0.109	0.108	0.105		0.104	0.103		0.102	10.29	
64)		1,2-dichloroethane	0.661	0.653	0.645	0.652	0.618	0.693	0.573	0.635		0.641	5.47	
65)		ethyl acrylate	0.533	0.540	0.530	0.568	0.569	0.485	0.535	0.566		0.541	5.14	
66)		trichloroethene	0.356	0.337	0.342	0.376	0.362	0.348	0.355	0.403	0.320	0.356	6.73	
67)		2-nitropropane	0.247	0.287	0.242	0.252	0.244		0.226	0.250		0.250	7.45	
68)		tert-amyl ethyl ether										0.000#	-1.00	
69)		methylcyclohexane	0.669	0.691	0.683	0.763	0.750	0.700	0.779	0.768	0.695	0.722	5.85	
70)		2-chloroethyl vinyl ether	0.236	0.248	0.247	0.253	0.255	0.249	0.237	0.240		0.246	2.97	
71)		methyl methacrylate	0.106		0.112	0.113	0.120		0.112	0.107		0.112	4.52	
72)		1,2-dichloropropane	0.353	0.362	0.354	0.372	0.354	0.326	0.349	0.316		0.348	5.31	
73)		dibromomethane	0.252	0.213	0.254	0.256	0.258	0.219	0.253	0.248		0.244	7.26	
74)		bromodichloromethane	0.536	0.553	0.548	0.563	0.556	0.567	0.541	0.550	0.519	0.548	2.65	
75)		cis-1,3-dichloropropene	0.537	0.573	0.559	0.588	0.605	0.530	0.585	0.661	0.529	0.574	7.37	
76)		toluene-d8 (s)	1.178	1.136	1.140	1.157	1.171	1.155	1.132	1.156	1.160	1.192	1.158	1.62
77)		4-methyl-2-pentanone	0.226	0.231	0.244	0.259	0.250	0.233	0.242	0.245		0.241	4.43	
78)		toluene	1.292	1.338	1.302	1.398	1.384	1.411	1.329	1.282	1.272	1.334	3.91	
79)		3-methyl-1-butanol	0.049	0.044	0.056	0.058	0.056	0.055	0.053	0.052		0.053	8.39	
80)		trans-1,3-dichloropropene	0.527	0.569	0.532	0.566	0.592	0.498	0.555	0.562	0.526	0.547	5.25	
81)		ethyl methacrylate	0.507	0.493	0.521	0.548	0.549	0.646	0.518	0.498		0.535	9.23	
82)		1,1,2-trichloroethane	0.228	0.259	0.255	0.271	0.277	0.227	0.268	0.244		0.254	7.56	
83)		2-hexanone												

6.7.1  
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# Initial Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICC8658  
 Lab FileID: A229086.D

	0.233	0.238	0.239	0.251	0.247	0.234	0.231		0.235		0.238	2.96
84) I	chlorobenzene-d5 -----ISTD-----											
85)	tetrachloroethene											
	0.424	0.376	0.470	0.548	0.513	0.436	0.459		0.439		0.458	11.63
86)	1,3-dichloropropane											
	0.544	0.572	0.624	0.613	0.610	0.634	0.579	0.643	0.602		0.602	5.30
87)	butyl acetate											
	0.345	0.323	0.355	0.355	0.354	0.382	0.327		0.373		0.352	5.73
88)	3,3-dimethyl-1-butanol											
	0.125	0.120	0.152	0.154	0.146	0.125	0.141		0.138		0.137	9.44
89)	dibromochloromethane											
	0.451	0.503	0.494	0.499	0.496	0.502	0.475		0.463		0.485	4.06
90)	1,2-dibromoethane											
	0.395	0.389	0.412	0.408	0.416	0.407	0.403	0.405	0.369	0.419	0.402	3.66
91)	n-butyl ether											
	1.314	1.307	1.514	1.564	1.435	1.561	1.378		1.422		1.437	7.11
92)	chlorobenzene											
	0.886	0.948	0.987	1.006	1.004	0.936	0.975	1.008	0.938		0.965	4.27
93)	1,1,1,2-tetrachloroethane											
	0.434	0.503	0.554	0.575	0.547	0.581	0.550	0.558	0.537		0.538	8.38
94)	ethylbenzene											
	1.581	1.672	1.782	1.864	1.784	1.654	1.710	1.780	1.662		1.721	5.10
95)	m,p-xylene											
	0.575	0.646	0.674	0.700	0.666	0.682	0.654	0.627	0.610		0.648	6.02
96)	o-xylene											
	1.372	1.437	1.618	1.670	1.577	1.611	1.559	1.514	1.502		1.540	6.09
97)	styrene											
	0.968	1.012	1.113	1.118	1.122	1.001	1.087	1.235	1.044	1.067	1.077	7.16
98)	butyl acrylate											
	0.776	0.743	0.880	0.879	0.865	0.940	0.789	0.889	0.863		0.847	7.51
99)	bromoform											
	0.344	0.324	0.384	0.386	0.392	0.304	0.378		0.358		0.359	8.97
100) I	1,4-dichlorobenzene-d -----ISTD-----											
101)	isopropylbenzene											
	3.061	3.351	3.534	3.958	3.651	3.492	3.532	3.383	3.340		3.478	7.08
102)	cyclohexanone											
	0.408	0.385	0.436	0.450	0.430	0.447	0.298		0.411		0.408	12.14
103)	4-bromofluorobenzene (s)											
	0.900	0.906	0.902	0.927	0.887	0.923	0.880	0.909	0.920	0.945	0.910	2.13
104)	bromobenzene											
	0.769	0.861	0.787	0.839	0.850	0.859	0.817	0.824	0.750		0.817	4.94
105)	1,1,2,2-tetrachloroethane											
	1.031	1.053	1.085	1.191	1.144	1.306	1.096	1.272	1.129		1.145	8.26
106)	trans-1,4-dichloro-2-butene											
	0.338	0.383	0.328	0.352	0.347	0.358	0.306		0.302		0.339	7.98
107)	1,2,3-trichloropropane											
	0.306	0.325	0.337	0.367	0.350	0.351	0.321		0.327		0.336	5.88
108)	n-propylbenzene											
	3.477	3.709	3.814	4.217	3.888	4.049	3.666	3.572	3.618		3.779	6.31
109)	2-chlorotoluene											
	0.730	0.732	0.750	0.848	0.833	0.777	0.818		0.774		0.783	5.83
110)	4-chlorotoluene											
	2.149	2.249	2.217	2.479	2.342	2.300	2.214	2.686	2.187		2.314	7.39
111)	p-ethyltoluene											
											0.000#	-1.00
112)	1,3,5-trimethylbenzene											
	2.775	2.946	2.954	3.464	3.252	2.992	3.176	3.114	2.971		3.072	6.64
113)	tert-butylbenzene											

6.7.1  
6

# Initial Calibration Summary

Job Number: JC35477  
Account: FLSNYNY Fleming-Lee Shue, Inc.  
Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICC8658  
Lab FileID: A229086.D

114)	0.523 0.548 0.639 0.751 0.729 0.617 0.750 0.675 0.579	0.646	13.35
	pentachloroethane		
115)	0.502 0.555 0.616 0.556 0.588 0.636 0.745 0.596	0.599	12.03
	1,2,4-trimethylbenzene		
116)	2.628 2.711 2.998 3.359 3.156 2.920 3.098 2.877 2.913	2.962	7.56
	sec-butylbenzene		
117)	3.514 3.687 4.087 4.778 4.410 3.720 4.354 3.929	4.060	10.59
	1,3-dichlorobenzene		
118)	1.456 1.507 1.483 1.632 1.593 1.567 1.545 1.512 1.416 1.867	1.558	8.10
	p-isopropyltoluene		
119)	3.002 3.309 3.410 3.856 3.689 3.166 3.633 3.337 3.314	3.413	7.86
	1,2,3-trimethylbenzene		
120)		0.000#	-1.00
	1,4-dichlorobenzene		
121)	1.382 1.614 1.522 1.623 1.609 1.680 1.559 1.843 1.528	1.596	7.89
	p-diethylbenzene		
122)		0.000#	-1.00
	1,2-dichlorobenzene		
123)	1.450 1.624 1.534 1.690 1.668 1.608 1.645 1.676 1.601	1.611	4.76
	n-butylbenzene		
124)	1.557 1.620 1.654 1.855 1.767 2.061 1.755 1.526 1.575	1.708	10.07
	1,2,4,5-tetramethylbenzene		
125)		0.000#	-1.00
	1,2-dibromo-3-chloropropane		
126)	0.380 0.479 0.408 0.438 0.432 0.409 0.421 0.496 0.393	0.428	8.93
	1,3,5-trichlorobenzene		
127)	1.425 1.482 1.414 1.565 1.635 1.549 1.692 1.419 1.418	1.511	6.91
	1,2,4-trichlorobenzene		
128)	1.479 1.541 1.508 1.614 1.644 1.597 1.735 1.492 1.467	1.564	5.75
	hexachlorobutadiene		
129)	0.729 0.677 0.766 0.898 0.932 0.851 0.992 0.720	0.820	13.86
	naphthalene		
130)	4.824 5.021 5.052 5.383 5.419 5.328 5.130 5.585 4.928	5.186	4.91
	1,2,3-trichlorobenzene		
131)	1.504 1.618 1.662 1.824 1.887 1.613 1.907 1.695 1.561	1.697	8.50
	hexachloroethane		
132)	0.526 0.491 0.651 0.784 0.781 0.582 0.828 0.577	0.652	19.84
	Ethylenimine		
133)	Bis(chloromethyl)ether	0.000#	-1.00
134)	2-methylnaphthalene	0.000#	-1.00
		0.000#	-1.00

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

MA8658.m Fri Jan 13 15:25:24 2017 RPT1

6.7.1  
6

## Initial Calibration Verification

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICV8658  
 Lab FileID: A229091.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A229091.D Vial: 16  
 Acq On : 12 Jan 2017 10:23 pm Operator: Gabriela  
 Sample : icv8658-50 Inst : MSA  
 Misc : MS11294,VA8658,5,,,,,1 Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 Last Update : Fri Jan 13 15:23:28 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 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	116	0.00	7.86
2 M	1,4-dioxane	0.060	0.067	-11.7	121	0.00	11.90
3 M	tertiary butyl alcohol	1.097	1.144	-4.3	116	0.00	7.98
4 I	pentafluorobenzene	1.000	1.000	0.0	116	0.00	10.22
5	propene			NA			
6	chlorotrifluoroethene			NA			
7 M	chlorodifluoromethane	1.414	1.194	15.6	93	0.00	4.18
8 M	dichlorodifluoromethane	1.937	1.563	19.3	86	0.03	4.19
9 M	chloromethane	1.324	1.210	8.6	106	0.00	4.56
10 M	vinyl chloride	1.520	1.425	6.2	105	0.00	4.84
11 M	bromomethane	0.800	0.789	1.4	113	0.00	5.53
12 M	chloroethane	0.529	0.532	-0.6	110	0.00	5.72
13	vinyl bromide			NA			
14 M	trichlorofluoromethane	1.962	1.727	12.0	96	0.00	6.26
15 m	pentane			NA			
16 M	ethyl ether	0.298	0.276	7.4	104	0.00	6.70
17	Freon 123a			NA			
18 M	acrolein	0.199	0.210	-5.5	120	0.00	6.95
19	freon 113	0.667	0.914	-37.0#	155	0.00	7.14
20 M	1,1-dichloroethene	1.165	0.990	15.0	98	0.00	7.14
21 M	acetone	0.131	0.124	5.3	105	0.00	7.19
22 M	allyl chloride	0.338	0.297	12.1	94	0.00	7.71
23 M	acetonitrile	0.122	0.124	-1.6	110	0.00	7.70
24 M	iodomethane	1.421	1.203	15.3	98	0.00	7.43
25 M	carbon disulfide	2.585	1.891	26.8	87	0.02	7.58
26 M	methylene chloride	0.737	0.696	5.6	118	0.00	7.89
27 M	methyl acetate	0.697	0.733	-5.2	114	0.00	7.70
28 M	methyl tert butyl ether	2.591	2.562	1.1	113	0.00	8.28
29 M	trans-1,2-dichloroethene	0.847	0.796	6.0	103	0.00	8.31
30	hexane	0.700	0.505	27.9	82	0.00	8.66
31 M	di-isopropyl ether	2.189	2.292	-4.7	119	0.00	8.92
32 m	t-butyl formate	0.980	0.715	27.0	87	0.00	10.11
33 M	ethyl tert-butyl ether	2.306	2.428	-5.3	115	0.00	9.41
34 M	2-butanone	0.117	0.114	2.6	105	0.00	9.64
35 M	1,1-dichloroethane	1.077	1.034	4.0	110	0.00	8.90
36 M	chloroprene	0.965	0.958	0.7	112	0.00	9.02
37 M	acrylonitrile	0.339	0.364	-7.4	119	0.00	8.24
38 M	vinyl acetate	0.110	0.114	-3.6	117	0.00	8.89
39 M	ethyl acetate	0.142	0.144	-1.4	112	0.00	9.66
40 M	2,2-dichloropropane	1.362	1.249	8.3	104	0.00	9.69
41 M	cis-1,2-dichloroethene	0.600	0.640	-6.7	118	0.00	9.66

# Initial Calibration Verification

Job Number: JC35477  
 Account: FLSNYYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICV8658  
 Lab FileID: A229091.D

42 M	propionitrile	0.152	0.169	-11.2	119	0.00	9.72
43 M	bromochloromethane	0.326	0.320	1.8	111	0.00	9.98
44 M	tetrahydrofuran	0.366	0.385	-5.2	113	0.00	10.03
45 M	chloroform	1.132	1.142	-0.9	116	0.00	10.04
46 S	dibromofluoromethane (s)	0.574	0.570	0.7	116	0.00	10.24
47 S	1,2-dichloroethane-d4 (s)	0.771	0.739	4.2	110	0.00	10.69
48 M	methacrylonitrile	0.309	0.316	-2.3	112	0.00	9.93
49	cyclohexane	0.979	1.052	-7.5	119	0.00	10.42
50 M	1,1,1-trichloroethane	1.333	1.346	-1.0	111	0.00	10.33
51	iso-butyl alcohol	0.061	0.062	-1.6	114	0.01	10.50
52 M	tert-amyl methyl ether	2.256	2.436	-8.0	120	0.00	10.84
53 I	1,4-difluorobenzene	1.000	1.000	0.0	116	0.00	11.16
54 M	Di-isobutylene			-----NA-----			
55 M	epichlorohydrin	0.070	0.069	1.4	107	0.00	12.47
56 M	n-butyl alcohol	0.030	0.032	-6.7	113	0.00	11.27
57 M	carbon tetrachloride	0.803	0.773	3.7	109	0.00	10.54
58 M	1,1-dichloropropene	0.502	0.478	4.8	104	0.00	10.51
59 M	benzene	1.347	1.347	0.0	111	0.00	10.78
60 M	Iso-octane	1.800	1.748	2.9	107	0.00	10.83
61 M	heptane	0.269	0.257	4.5	104	0.00	10.99
62 m	tert amyl alcohol			-----NA-----			
63 M	isopropyl acetate	0.102	0.113	-10.8	121	0.00	10.71
64 M	1,2-dichloroethane	0.641	0.606	5.5	108	0.00	10.78
65	ethyl acrylate	0.541	0.566	-4.6	116	0.00	11.52
66 M	trichloroethene	0.356	0.353	0.8	109	0.00	11.51
67 M	2-nitropropane	0.250	0.238	4.8	109	0.00	12.31
68 m	tert-amyl ethyl ether			-----NA-----			
69 m	methylcyclohexane	0.722	0.756	-4.7	115	0.00	11.77
70 M	2-chloroethyl vinyl ether	0.246	0.269	-9.3	124	0.00	12.34
71 M	methyl methacrylate	0.112	0.123	-9.8	127	0.00	11.80
72 M	1,2-dichloropropane	0.348	0.360	-3.4	112	0.00	11.79
73 M	dibromomethane	0.244	0.258	-5.7	117	0.00	11.94
74 M	bromodichloromethane	0.548	0.541	1.3	112	0.00	12.07
75 M	cis-1,3-dichloropropene	0.574	0.578	-0.7	114	0.00	12.58
76 S	toluene-d8 (s)	1.158	1.165	-0.6	117	0.00	12.90
77 M	4-methyl-2-pentanone	0.241	0.236	2.1	106	0.00	12.70
78 M	toluene	1.334	1.409	-5.6	117	0.00	12.98
79 M	3-methyl-1-butanol	0.053	0.054	-1.9	108	0.00	12.69
80 M	trans-1,3-dichloropropene	0.547	0.562	-2.7	115	0.00	13.17
81 M	ethyl methacrylate	0.535	0.541	-1.1	115	0.00	13.19
82 M	1,1,2-trichloroethane	0.254	0.276	-8.7	118	0.00	13.41
83 M	2-hexanone	0.238	0.225	5.5	104	0.00	13.62
84 I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00	14.56
85 M	tetrachloroethene	0.458	0.578	-26.2	123	0.00	13.62
86 M	1,3-dichloropropane	0.602	0.618	-2.7	117	0.00	13.61
87 M	butyl acetate	0.352	0.367	-4.3	120	0.00	13.70
88	3,3-dimethyl-1-butanol	0.137	0.157	-14.6	118	0.00	13.79
89 M	dibromochloromethane	0.485	0.487	-0.4	114	0.00	13.89
90 M	1,2-dibromoethane	0.402	0.416	-3.5	119	0.00	14.07
91 M	n-butyl ether	1.437	1.586	-10.4	118	0.00	14.53
92 M	chlorobenzene	0.965	1.032	-6.9	119	0.00	14.59
93 M	1,1,1,2-tetrachloroethane	0.538	0.562	-4.5	114	0.00	14.66
94 M	ethylbenzene	1.721	1.844	-7.1	115	0.00	14.67
95 M	m,p-xylene	0.648	0.687	-6.0	114	0.00	14.79
96 M	o-xylene	1.540	1.619	-5.1	113	0.00	15.25
97 M	styrene	1.077	1.116	-3.6	116	0.00	15.26
98	butyl acrylate	0.847	0.835	1.4	111	0.00	15.05
99 M	bromoform	0.359	0.390	-8.6	118	0.00	15.53

6.7.2  
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# Initial Calibration Verification

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8658-ICV8658  
 Lab FileID: A229091.D

100	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	17.16
101	M	isopropylbenzene	3.478	3.930	-13.0	115	0.00	15.64
102	m	cyclohexanone	0.408	0.446	-9.3	115	0.00	15.81
103	S	4-bromofluorobenzene (s)	0.910	0.901	1.0	112	0.00	15.85
104	M	bromobenzene	0.817	0.879	-7.6	121	0.00	16.07
105	M	1,1,2,2-tetrachloroethane	1.145	1.203	-5.1	117	0.00	15.95
106	M	trans-1,4-dichloro-2-bute	0.339	0.362	-6.8	119	0.00	16.00
107	M	1,2,3-trichloropropane	0.336	0.369	-9.8	116	0.00	16.04
108	M	n-propylbenzene	3.779	4.111	-8.8	113	0.00	16.10
109	M	2-chlorotoluene	0.783	0.878	-12.1	120	0.00	16.26
110	M	4-chlorotoluene	2.314	2.396	-3.5	112	0.00	16.37
111	m	p-ethyltoluene			-----NA-----			
112	M	1,3,5-trimethylbenzene	3.072	3.360	-9.4	112	0.00	16.27
113	M	tert-butylbenzene	0.646	0.755	-16.9	116	0.00	16.67
114	M	pentachloroethane	0.599	0.488	18.5	102	0.00	16.74
115	M	1,2,4-trimethylbenzene	2.962	3.375	-13.9	116	0.00	16.71
116	M	sec-butylbenzene	4.060	4.652	-14.6	113	0.00	16.91
117	M	1,3-dichlorobenzene	1.558	1.636	-5.0	116	0.00	17.10
118	M	p-isopropyltoluene	3.413	3.796	-11.2	114	0.00	17.04
119	M	1,2,3-trimethylbenzene			-----NA-----			
120	M	1,4-dichlorobenzene	1.596	1.640	-2.8	117	0.00	17.19
121	m	p-diethylbenzene			-----NA-----			
122	M	1,2-dichlorobenzene	1.611	1.713	-6.3	117	0.00	17.63
123	M	n-butylbenzene	1.708	1.796	-5.2	112	0.00	17.50
124	m	1,2,4,5-tetramethylbenzen			-----NA-----			
125	M	1,2-dibromo-3-chloropropa	0.428	0.438	-2.3	116	0.00	18.47
126	M	1,3,5-trichlorobenzene	1.511	1.660	-9.9	123	0.00	18.69
127	M	1,2,4-trichlorobenzene	1.564	1.650	-5.5	118	0.00	19.42
128	M	hexachlorobutadiene	0.820	0.891	-8.7	115	0.00	19.56
129	M	naphthalene	5.186	5.399	-4.1	116	0.00	19.74
130	M	1,2,3-trichlorobenzene	1.697	1.856	-9.4	118	0.00	20.01
131	M	hexachloroethane	0.652	0.779	-19.5	115	0.00	17.93
132		Ethylenimine			-----NA-----			
133		Bis(chloromethyl)ether			-----NA-----			
134		2-methylnaphthalene			-----NA-----			

(#) = Out of Range  
 A229086.D MA8658.m

SPCC's out = 0 CCC's out = 0  
 Fri Jan 13 15:48:37 2017 RPT1

6.7.2  
 6

## Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229243.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A229243.D Vial: 3  
 Acq On : 18 Jan 2017 9:45 am Operator: Gabriela  
 Sample : cc8658-20 Inst : MSA  
 Misc : MS11644,VA8664,5,,,,,1 Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 Last Update : Fri Jan 13 15:23:28 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 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	84	0.01	7.87
2 M	1,4-dioxane	0.060	0.064	-6.7	81	0.00	11.90
3 M	tertiary butyl alcohol	1.097	1.115	-1.6	86	0.00	7.98
4 I	pentafluorobenzene	1.000	1.000	0.0	93	0.00	10.22
5	propene			NA			
6	chlorotrifluoroethene			NA			
7 M	chlorodifluoromethane	1.414	1.259	11.0	86	0.00	4.19
8 M	dichlorodifluoromethane	1.937	2.025	-4.5	103	0.03	4.20
9 M	chloromethane	1.324	1.108	16.3	91	-0.03	4.52
10 M	vinyl chloride	1.520	1.534	-0.9	102	0.00	4.83
11 M	bromomethane	0.800	0.763	4.6	102	0.00	5.53
12 M	chloroethane	0.529	0.525	0.8	100	0.00	5.71
13	vinyl bromide			NA			
14 M	trichlorofluoromethane	1.962	2.032	-3.6	108	0.01	6.27
15 m	pentane			NA			
16 M	ethyl ether	0.298	0.309	-3.7	102	0.00	6.70
17	Freon 123a			NA			
18 M	acrolein	0.199	0.193	3.0	94	0.00	6.95
19	freon 113	0.667	0.691	-3.6	104	0.00	7.14
20 M	1,1-dichloroethene	1.165	1.192	-2.3	106	0.00	7.14
21 M	acetone	0.131	0.103	21.4#	76	0.00	7.19
22 M	allyl chloride	0.338	0.346	-2.4	100	0.00	7.71
23 M	acetonitrile	0.122	0.123	-0.8	96	-0.02	7.67
24 M	iodomethane	1.421	1.424	-0.2	101	0.00	7.42
25 M	carbon disulfide	2.585	2.806	-8.5	115	0.01	7.58
26 M	methylene chloride	0.737	0.720	2.3	104	0.00	7.89
27 M	methyl acetate	0.697	0.657	5.7	91	0.00	7.69
28 M	methyl tert butyl ether	2.591	2.416	6.8	92	0.00	8.28
29 M	trans-1,2-dichloroethene	0.847	0.848	-0.1	95	0.00	8.30
30	hexane	0.700	0.699	0.1	100	0.00	8.65
31 M	di-isopropyl ether	2.189	2.059	5.9	93	0.00	8.92
32 m	t-butyl formate	0.980	0.904	7.8	91	0.00	10.11
33 M	ethyl tert-butyl ether	2.306	2.226	3.5	92	0.00	9.41
34 M	2-butanone	0.117	0.101	13.7	82	0.00	9.63
35 M	1,1-dichloroethane	1.077	1.064	1.2	97	0.00	8.90
36 M	chloroprene	0.965	0.912	5.5	90	0.00	9.02
37 M	acrylonitrile	0.339	0.336	0.9	95	0.00	8.23
38 M	vinyl acetate	0.110	0.104	5.5	92	0.00	8.90
39 M	ethyl acetate	0.142	0.113	20.4#	79	0.00	9.66
40 M	2,2-dichloropropane	1.362	1.497	-9.9	106	0.00	9.68
41 M	cis-1,2-dichloroethene	0.600	0.582	3.0	91	0.00	9.66

# Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229243.D

42 M	propionitrile	0.152	0.141	7.2	85	0.00	9.72
43 M	bromochloromethane	0.326	0.302	7.4	90	0.00	9.98
44 M	tetrahydrofuran	0.366	0.310	15.3	78	0.00	10.04
45 M	chloroform	1.132	1.057	6.6	91	0.00	10.04
46 S	dibromofluoromethane (s)	0.574	0.574	0.0	95	0.00	10.24
47 S	1,2-dichloroethane-d4 (s)	0.771	0.769	0.3	92	0.00	10.68
48 M	methacrylonitrile	0.309	0.300	2.9	105	0.00	9.92
49	cyclohexane	0.979	0.970	0.9	99	0.00	10.42
50 M	1,1,1-trichloroethane	1.333	1.326	0.5	95	0.00	10.33
51	iso-butyl alcohol	0.061	0.056	8.2	86	0.00	10.48
52 M	tert-amyl methyl ether	2.256	2.052	9.0	88	0.00	10.83
53 I	1,4-difluorobenzene	1.000	1.000	0.0	93	0.00	11.16
54 M	Di-isobutylene			-----NA-----			
55 M	epichlorohydrin	0.070	0.068	2.9	91	0.00	12.46
56 M	n-butyl alcohol	0.030	0.030	0.0	88	0.00	11.27
57 M	carbon tetrachloride	0.803	0.838	-4.4	99	0.00	10.54
58 M	1,1-dichloropropene	0.502	0.510	-1.6	96	0.00	10.51
59 M	benzene	1.347	1.305	3.1	91	0.00	10.78
60 M	Iso-octane	1.800	1.848	-2.7	106	0.00	10.82
61 M	heptane	0.269	0.264	1.9	95	0.00	10.99
62 m	tert amyl alcohol			-----NA-----			
63 M	isopropyl acetate	0.102	0.102	0.0	87	0.00	10.71
64 M	1,2-dichloroethane	0.641	0.619	3.4	89	0.00	10.77
65	ethyl acrylate	0.541	0.562	-3.9	99	0.00	11.52
66 M	trichloroethene	0.356	0.341	4.2	93	0.00	11.51
67 M	2-nitropropane	0.250	0.234	6.4	90	0.00	12.32
68 m	tert-amyl ethyl ether			-----NA-----			
69 m	methylcyclohexane	0.722	0.724	-0.3	99	0.00	11.78
70 M	2-chloroethyl vinyl ether	0.246	0.259	-5.3	98	0.00	12.34
71 M	methyl methacrylate	0.112	0.124	-10.7	104	0.00	11.79
72 M	1,2-dichloropropane	0.348	0.355	-2.0	93	0.00	11.79
73 M	dibromomethane	0.244	0.250	-2.5	92	0.00	11.93
74 M	bromodichloromethane	0.548	0.539	1.6	92	0.00	12.08
75 M	cis-1,3-dichloropropene	0.574	0.550	4.2	92	0.00	12.57
76 S	toluene-d8 (s)	1.158	1.181	-2.0	97	0.00	12.90
77 M	4-methyl-2-pentanone	0.241	0.244	-1.2	93	0.00	12.69
78 M	toluene	1.334	1.313	1.6	94	0.00	12.98
79 M	3-methyl-1-butanol	0.053	0.051	3.8	86	0.00	12.69
80 M	trans-1,3-dichloropropene	0.547	0.568	-3.8	100	0.00	13.17
81 M	ethyl methacrylate	0.535	0.529	1.1	95	0.00	13.19
82 M	1,1,2-trichloroethane	0.254	0.270	-6.3	99	0.00	13.41
83 M	2-hexanone	0.238	0.242	-1.7	94	0.00	13.62
84 I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	14.56
85 M	tetrachloroethene	0.458	0.384	16.2	83	0.00	13.62
86 M	1,3-dichloropropane	0.602	0.584	3.0	95	0.00	13.61
87 M	butyl acetate	0.352	0.330	6.2	94	0.00	13.70
88	3,3-dimethyl-1-butanol	0.137	0.123	10.2	82	0.00	13.79
89 M	dibromochloromethane	0.485	0.474	2.3	97	0.00	13.89
90 M	1,2-dibromoethane	0.402	0.389	3.2	96	0.00	14.07
91 M	n-butyl ether	1.437	1.425	0.8	96	0.00	14.53
92 M	chlorobenzene	0.965	0.998	-3.4	103	0.00	14.59
93 M	1,1,1,2-tetrachloroethane	0.538	0.516	4.1	95	0.00	14.66
94 M	ethylbenzene	1.721	1.649	4.2	94	0.00	14.67
95 M	m,p-xylene	0.648	0.628	3.1	95	0.00	14.78
96 M	o-xylene	1.540	1.501	2.5	94	0.00	15.25
97 M	styrene	1.077	1.066	1.0	97	0.00	15.26
98	butyl acrylate	0.847	0.829	2.1	96	0.00	15.06
99 M	bromoform	0.359	0.347	3.3	92	0.00	15.53

# Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229243.D

100	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	17.16
101	M	isopropylbenzene	3.478	3.433	1.3	93	0.00	15.64
102	m	cyclohexanone	0.408	0.283	30.6#	62	0.00	15.81
103	S	4-bromofluorobenzene (s)	0.910	0.905	0.5	96	0.00	15.85
104	M	bromobenzene	0.817	0.801	2.0	97	0.00	16.07
105	M	1,1,2,2-tetrachloroethane	1.145	1.104	3.6	97	0.00	15.95
106	M	trans-1,4-dichloro-2-bute	0.339	0.300	11.5	88	0.00	16.00
107	M	1,2,3-trichloropropane	0.336	0.324	3.6	92	0.00	16.04
108	M	n-propylbenzene	3.779	3.806	-0.7	96	0.00	16.10
109	M	2-chlorotoluene	0.783	0.727	7.2	93	0.00	16.26
110	M	4-chlorotoluene	2.314	2.325	-0.5	100	0.00	16.37
111	m	p-ethyltoluene			-----NA-----			
112	M	1,3,5-trimethylbenzene	3.072	2.979	3.0	97	0.00	16.27
113	M	tert-butylbenzene	0.646	0.631	2.3	94	0.00	16.67
114	M	pentachloroethane	0.599	0.713	-19.0	111	0.00	16.74
115	M	1,2,4-trimethylbenzene	2.962	2.984	-0.7	95	0.00	16.71
116	M	sec-butylbenzene	4.060	4.153	-2.3	97	0.00	16.91
117	M	1,3-dichlorobenzene	1.558	1.493	4.2	96	0.00	17.09
118	M	p-isopropyltoluene	3.413	3.391	0.6	95	0.00	17.04
119	M	1,2,3-trimethylbenzene			-----NA-----			
120	M	1,4-dichlorobenzene	1.596	1.528	4.3	96	0.00	17.19
121	m	p-diethylbenzene			-----NA-----			
122	M	1,2-dichlorobenzene	1.611	1.506	6.5	94	0.00	17.63
123	M	n-butylbenzene	1.708	1.741	-1.9	101	0.00	17.50
124	m	1,2,4,5-tetramethylbenzen			-----NA-----			
125	M	1,2-dibromo-3-chloropropa	0.428	0.408	4.7	96	0.00	18.47
126	M	1,3,5-trichlorobenzene	1.511	1.461	3.3	99	0.00	18.69
127	M	1,2,4-trichlorobenzene	1.564	1.442	7.8	92	0.00	19.42
128	M	hexachlorobutadiene	0.820	0.754	8.0	94	0.00	19.57
129	M	naphthalene	5.186	4.944	4.7	94	0.00	19.74
130	M	1,2,3-trichlorobenzene	1.697	1.617	4.7	93	0.00	20.01
131	M	hexachloroethane	0.652	0.594	8.9	87	0.00	17.93
132		Ethylenimine			-----NA-----			
133		Bis(chloromethyl)ether			-----NA-----			
134		2-methylnaphthalene			-----NA-----			

(#) = Out of Range  
 A229085.D MA8658.m

SPCC's out = 0 CCC's out = 0  
 Thu Jan 19 15:18:47 2017 RPT1

6.7.3

6

## Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229244.D

## Sensitivity Check for Acetone

Data File : C:\msdchem\1\DATA\A229244.D  
 Acq On : 18 Jan 2017 10:18 am  
 Sample : cc8658-5  
 Misc : MS11644,VA8664,5,,,,,1  
 MS Integration Params: RTEINT.P

Vial: 4  
 Operator: Gabriela  
 Inst : MSA  
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 Last Update : Fri Jan 13 15:23:28 2017  
 Response via : Multiple Level Calibration

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	102	0.00	7.87
2 M	1,4-dioxane			-----NA-----			
3 M	tertiary butyl alcohol			-----NA-----			
4 I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	10.22
5	propene			-----NA-----			
6	chlorotrifluoroethene			-----NA-----			
7 M	chlorodifluoromethane			-----NA-----			
8 M	dichlorodifluoromethane			-----NA-----			
9 M	chloromethane			-----NA-----			
10 M	vinyl chloride			-----NA-----			
11 M	bromomethane			-----NA-----			
12 M	chloroethane			-----NA-----			
13	vinyl bromide			-----NA-----			
14 M	trichlorofluoromethane			-----NA-----			
15 m	pentane			-----NA-----			
16 M	ethyl ether			-----NA-----			
17	Freon 123a			-----NA-----			
18 M	acrolein			-----NA-----			
19	freon 113			-----NA-----			
20 M	1,1-dichloroethene			-----NA-----			
21 M	acetone	0.131	0.190	45.0	165	0.02	7.20
22 M	allyl chloride			-----NA-----			
23 M	acetonitrile			-----NA-----			
24 M	iodomethane			-----NA-----			
25 M	carbon disulfide			-----NA-----			
26 M	methylene chloride			-----NA-----			
27 M	methyl acetate			-----NA-----			
28 M	methyl tert butyl ether			-----NA-----			
29 M	trans-1,2-dichloroethene			-----NA-----			
30	hexane			-----NA-----			
31 M	di-isopropyl ether			-----NA-----			
32 m	t-butyl formate			-----NA-----			
33 M	ethyl tert-butyl ether			-----NA-----			
34 M	2-butanone			-----NA-----			
35 M	1,1-dichloroethane			-----NA-----			
36 M	chloroprene			-----NA-----			
37 M	acrylonitrile			-----NA-----			
38 M	vinyl acetate			-----NA-----			
39 M	ethyl acetate			-----NA-----			
40 M	2,2-dichloropropane			-----NA-----			
41 M	cis-1,2-dichloroethene			-----NA-----			
42 M	propionitrile			-----NA-----			
43 M	bromochloromethane			-----NA-----			
44 M	tetrahydrofuran			-----NA-----			

# Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229244.D

45	M	chloroform								
46	S	dibromofluoromethane (s)	0.574	0.573	0.2	105	0.00	10.24		
47	S	1,2-dichloroethane-d4 (s)	0.771	0.751	2.6	101	0.00	10.69		
48	M	methacrylonitrile								
49		cyclohexane								
50	M	1,1,1-trichloroethane								
51		iso-butyl alcohol								
52	M	tert-amyl methyl ether								
53	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	11.16		
54	M	Di-isobutylene								
55	M	epichlorohydrin								
56	M	n-butyl alcohol								
57	M	carbon tetrachloride								
58	M	1,1-dichloropropene								
59	M	benzene								
60	M	Iso-octane								
61	M	heptane								
62	m	tert amyl alcohol								
63	M	isopropyl acetate								
64	M	1,2-dichloroethane								
65		ethyl acrylate								
66	M	trichloroethene								
67	M	2-nitropropane								
68	m	tert-amyl ethyl ether								
69	m	methylcyclohexane								
70	M	2-chloroethyl vinyl ether								
71	M	methyl methacrylate								
72	M	1,2-dichloropropane								
73	M	dibromomethane								
74	M	bromodichloromethane								
75	M	cis-1,3-dichloropropene								
76	S	toluene-d8 (s)	1.158	1.183	-2.2	106	0.00	12.90		
77	M	4-methyl-2-pentanone								
78	M	toluene								
79	M	3-methyl-1-butanol								
80	M	trans-1,3-dichloropropene								
81	M	ethyl methacrylate								
82	M	1,1,2-trichloroethane								
83	M	2-hexanone								
84	I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	14.56		
85	M	tetrachloroethene								
86	M	1,3-dichloropropane								
87	M	butyl acetate								
88		3,3-dimethyl-1-butanol								
89	M	dibromochloromethane								
90	M	1,2-dibromoethane								
91	M	n-butyl ether								
92	M	chlorobenzene								
93	M	1,1,1,2-tetrachloroethane								
94	M	ethylbenzene								
95	M	m,p-xylene								
96	M	o-xylene								
97	M	styrene								
98		butyl acrylate								
99	M	bromoform								
100	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	17.16		
101	M	isopropylbenzene								

6.7.4

6



## Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229265.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A229265.D Vial: 25  
 Acq On : 18 Jan 2017 10:10 pm Operator: Gabriela  
 Sample : cc8658-50 Inst : MSA  
 Misc : MS11644,VA8664,5,,,,,1 Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 Last Update : Fri Jan 13 15:23:28 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 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	88	0.00	7.87
2 M	1,4-dioxane	0.060	0.070	-16.7	96	0.01	11.91
3 M	tertiary butyl alcohol	1.097	1.139	-3.8	87	0.01	7.99
4 I	pentafluorobenzene	1.000	1.000	0.0	89	0.00	10.22
5	propene			NA			
6	chlorotrifluoroethene			NA			
7 M	chlorodifluoromethane	1.414	1.551	-9.7	93	0.02	4.20
8 M	dichlorodifluoromethane	1.937	2.039	-5.3	86	0.03	4.20
9 M	chloromethane	1.324	1.282	3.2	86	0.00	4.55
10 M	vinyl chloride	1.520	1.597	-5.1	90	0.00	4.83
11 M	bromomethane	0.800	0.845	-5.6	92	0.00	5.53
12 M	chloroethane	0.529	0.548	-3.6	86	0.00	5.71
13	vinyl bromide			NA			
14 M	trichlorofluoromethane	1.962	2.175	-10.9	92	0.00	6.27
15 m	pentane			NA			
16 M	ethyl ether	0.298	0.324	-8.7	94	0.00	6.71
17	Freon 123a			NA			
18 M	acrolein	0.199	0.219	-10.1	96	0.00	6.95
19	freon 113	0.667	0.740	-10.9	96	0.00	7.14
20 M	1,1-dichloroethene	1.165	1.302	-11.8	99	0.00	7.14
21 M	acetone	0.131	0.109	16.8	70	0.00	7.19
22 M	allyl chloride	0.338	0.368	-8.9	89	0.00	7.71
23 M	acetonitrile	0.122	0.138	-13.1	93	-0.04	7.65
24 M	iodomethane	1.421	1.547	-8.9	97	0.00	7.42
25 M	carbon disulfide	2.585	2.963	-14.6	104	0.00	7.57
26 M	methylene chloride	0.737	0.753	-2.2	98	0.00	7.89
27 M	methyl acetate	0.697	0.723	-3.7	86	0.00	7.70
28 M	methyl tert butyl ether	2.591	2.701	-4.2	91	0.00	8.28
29 M	trans-1,2-dichloroethene	0.847	0.933	-10.2	92	0.00	8.30
30	hexane	0.700	0.708	-1.1	88	0.00	8.66
31 M	di-isopropyl ether	2.189	2.230	-1.9	88	0.00	8.92
32 m	t-butyl formate	0.980	1.023	-4.4	95	0.00	10.11
33 M	ethyl tert-butyl ether	2.306	2.430	-5.4	88	0.00	9.40
34 M	2-butanone	0.117	0.111	5.1	78	0.00	9.64
35 M	1,1-dichloroethane	1.077	1.160	-7.7	94	0.00	8.90
36 M	chloroprene	0.965	1.009	-4.6	90	0.00	9.02
37 M	acrylonitrile	0.339	0.364	-7.4	91	0.00	8.24
38 M	vinyl acetate	0.110	0.124	-12.7	97	0.00	8.90
39 M	ethyl acetate	0.142	0.126	11.3	75	0.00	9.67
40 M	2,2-dichloropropane	1.362	1.455	-6.8	92	0.00	9.69
41 M	cis-1,2-dichloroethene	0.600	0.675	-12.5	95	0.00	9.67

# Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229265.D

42 M	propionitrile	0.152	0.159	-4.6	85	0.00	9.72
43 M	bromochloromethane	0.326	0.331	-1.5	88	0.00	9.98
44 M	tetrahydrofuran	0.366	0.377	-3.0	85	0.00	10.03
45 M	chloroform	1.132	1.178	-4.1	91	0.00	10.04
46 S	dibromofluoromethane (s)	0.574	0.582	-1.4	91	0.00	10.24
47 S	1,2-dichloroethane-d4 (s)	0.771	0.809	-4.9	93	0.00	10.69
48 M	methacrylonitrile	0.309	0.305	1.3	83	0.00	9.92
49	cyclohexane	0.979	1.041	-6.3	90	0.00	10.41
50 M	1,1,1-trichloroethane	1.333	1.450	-8.8	92	0.00	10.33
51	iso-butyl alcohol	0.061	0.062	-1.6	87	0.00	10.49
52 M	tert-amyl methyl ether	2.256	2.376	-5.3	89	0.00	10.83
53 I	1,4-difluorobenzene	1.000	1.000	0.0	86	0.00	11.16
54 M	Di-isobutylene			-----NA-----			
55 M	epichlorohydrin	0.070	0.071	-1.4	82	0.00	12.46
56 M	n-butyl alcohol	0.030	0.033	-10.0	86	0.00	11.27
57 M	carbon tetrachloride	0.803	0.908	-13.1	95	0.00	10.54
58 M	1,1-dichloropropene	0.502	0.546	-8.8	89	0.00	10.51
59 M	benzene	1.347	1.420	-5.4	88	0.00	10.78
60 M	Iso-octane	1.800	1.944	-8.0	89	0.00	10.82
61 M	heptane	0.269	0.270	-0.4	82	0.00	10.99
62 m	tert amyl alcohol			-----NA-----			
63 M	isopropyl acetate	0.102	0.106	-3.9	85	0.00	10.71
64 M	1,2-dichloroethane	0.641	0.686	-7.0	91	0.00	10.78
65	ethyl acrylate	0.541	0.573	-5.9	87	0.00	11.52
66 M	trichloroethene	0.356	0.370	-3.9	85	0.00	11.51
67 M	2-nitropropane	0.250	0.255	-2.0	87	0.00	12.31
68 m	tert-amyl ethyl ether			-----NA-----			
69 m	methylcyclohexane	0.722	0.787	-9.0	89	0.00	11.77
70 M	2-chloroethyl vinyl ether	0.246	0.265	-7.7	91	0.00	12.34
71 M	methyl methacrylate	0.112	0.115	-2.7	88	0.00	11.80
72 M	1,2-dichloropropane	0.348	0.380	-9.2	88	0.00	11.79
73 M	dibromomethane	0.244	0.272	-11.5	92	0.00	11.94
74 M	bromodichloromethane	0.548	0.578	-5.5	89	0.00	12.07
75 M	cis-1,3-dichloropropene	0.574	0.611	-6.4	90	0.00	12.57
76 S	toluene-d8 (s)	1.158	1.178	-1.7	88	0.00	12.90
77 M	4-methyl-2-pentanone	0.241	0.251	-4.1	84	0.00	12.69
78 M	toluene	1.334	1.407	-5.5	87	0.00	12.98
79 M	3-methyl-1-butanol	0.053	0.057	-7.5	85	0.00	12.69
80 M	trans-1,3-dichloropropene	0.547	0.592	-8.2	90	0.00	13.18
81 M	ethyl methacrylate	0.535	0.559	-4.5	88	0.00	13.19
82 M	1,1,2-trichloroethane	0.254	0.282	-11.0	90	0.00	13.41
83 M	2-hexanone	0.238	0.240	-0.8	83	0.00	13.62
84 I	chlorobenzene-d5	1.000	1.000	0.0	89	0.00	14.56
85 M	tetrachloroethene	0.458	0.413	9.8	67	0.00	13.62
86 M	1,3-dichloropropane	0.602	0.616	-2.3	90	0.00	13.62
87 M	butyl acetate	0.352	0.350	0.6	88	0.00	13.70
88	3,3-dimethyl-1-butanol	0.137	0.146	-6.6	84	0.00	13.79
89 M	dibromochloromethane	0.485	0.494	-1.9	88	0.00	13.89
90 M	1,2-dibromoethane	0.402	0.417	-3.7	91	0.00	14.07
91 M	n-butyl ether	1.437	1.472	-2.4	84	0.00	14.53
92 M	chlorobenzene	0.965	1.025	-6.2	91	0.00	14.59
93 M	1,1,1,2-tetrachloroethane	0.538	0.566	-5.2	88	0.00	14.66
94 M	ethylbenzene	1.721	1.822	-5.9	87	0.00	14.67
95 M	m,p-xylene	0.648	0.668	-3.1	85	0.00	14.79
96 M	o-xylene	1.540	1.638	-6.4	88	0.00	15.25
97 M	styrene	1.077	1.124	-4.4	90	0.00	15.26
98	butyl acrylate	0.847	0.880	-3.9	89	0.00	15.06
99 M	bromoform	0.359	0.375	-4.5	87	0.00	15.53

# Continuing Calibration Summary

Job Number: JC35477  
 Account: FLSNYNY Fleming-Lee Shue, Inc.  
 Project: 388 Bridge Street, Brooklyn, NY

Sample: VA8664-CC8658  
 Lab FileID: A229265.D

100	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	91	0.00	17.16
101	M	isopropylbenzene	3.478	3.776	-8.6	87	0.00	15.64
102	m	cyclohexanone	0.408	0.247	39.5#	50	0.00	15.81
103	S	4-bromofluorobenzene (s)	0.910	0.903	0.8	89	0.00	15.85
104	M	bromobenzene	0.817	0.870	-6.5	95	0.00	16.07
105	M	1,1,2,2-tetrachloroethane	1.145	1.194	-4.3	92	0.00	15.95
106	M	trans-1,4-dichloro-2-bute	0.339	0.343	-1.2	89	0.00	16.00
107	M	1,2,3-trichloropropane	0.336	0.364	-8.3	91	0.00	16.04
108	M	n-propylbenzene	3.779	4.117	-8.9	89	0.00	16.10
109	M	2-chlorotoluene	0.783	0.851	-8.7	92	0.00	16.26
110	M	4-chlorotoluene	2.314	2.405	-3.9	89	0.00	16.36
111	m	p-ethyltoluene			-----NA-----			
112	M	1,3,5-trimethylbenzene	3.072	3.345	-8.9	88	0.00	16.27
113	M	tert-butylbenzene	0.646	0.705	-9.1	86	0.00	16.67
114	M	pentachloroethane	0.599	0.860	-43.6#	141	0.00	16.74
115	M	1,2,4-trimethylbenzene	2.962	3.227	-8.9	88	0.00	16.71
116	M	sec-butylbenzene	4.060	4.563	-12.4	87	0.00	16.90
117	M	1,3-dichlorobenzene	1.558	1.597	-2.5	89	0.00	17.10
118	M	p-isopropyltoluene	3.413	3.774	-10.6	89	0.00	17.04
119	M	1,2,3-trimethylbenzene			-----NA-----			
120	M	1,4-dichlorobenzene	1.596	1.608	-0.8	90	0.00	17.19
121	m	p-diethylbenzene			-----NA-----			
122	M	1,2-dichlorobenzene	1.611	1.684	-4.5	91	0.00	17.63
123	M	n-butylbenzene	1.708	1.773	-3.8	87	0.00	17.50
124	m	1,2,4,5-tetramethylbenzen			-----NA-----			
125	M	1,2-dibromo-3-chloropropa	0.428	0.412	3.7	86	0.00	18.47
126	M	1,3,5-trichlorobenzene	1.511	1.514	-0.2	88	0.00	18.69
127	M	1,2,4-trichlorobenzene	1.564	1.528	2.3	87	0.00	19.42
128	M	hexachlorobutadiene	0.820	0.832	-1.5	85	0.00	19.56
129	M	naphthalene	5.186	5.304	-2.3	90	0.00	19.74
130	M	1,2,3-trichlorobenzene	1.697	1.749	-3.1	88	0.00	20.01
131	M	hexachloroethane	0.652	0.720	-10.4	84	0.00	17.93
132		Ethylenimine			-----NA-----			
133		Bis(chloromethyl)ether			-----NA-----			
134		2-methylnaphthalene			-----NA-----			

(#) = Out of Range  
 A229086.D MA8658.m

SPCC's out = 0 CCC's out = 0  
 Thu Jan 19 15:34:48 2017 RPT1

6.7.5  
 6

**GC/MS Volatiles**

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**Raw Data**

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
Data File : A229253.D  
Acq On : 18 Jan 2017 3:06 pm  
Operator : Gabriela  
Sample : jc35477-1  
Misc : MS11620,VA8664,5,,,,,1  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 19 15:32:44 2017  
Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
QLast Update : Fri Jan 13 15:23:28 2017  
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.857	65	542361	500.00	ug/L	0.00
4) pentafluorobenzene	10.215	168	239056	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.157	114	341825	50.00	ug/L	0.00
84) chlorobenzene-d5	14.556	117	317506	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.161	152	172067	50.00	ug/L	0.00

System Monitoring Compounds						
46) dibromofluoromethane (s)	10.242	113	132115	48.17	ug/L	0.00
Spiked Amount	50.000	Range 76 - 120	Recovery	=	96.34%	
47) 1,2-dichloroethane-d4 (s)	10.681	65	176630	47.89	ug/L	0.00
Spiked Amount	50.000	Range 73 - 122	Recovery	=	95.78%	
76) toluene-d8 (s)	12.899	98	398810	50.39	ug/L	0.00
Spiked Amount	50.000	Range 84 - 119	Recovery	=	100.78%	
103) 4-bromofluorobenzene (s)	15.848	95	159971	51.09	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	102.18%	

Target Compounds Qvalue

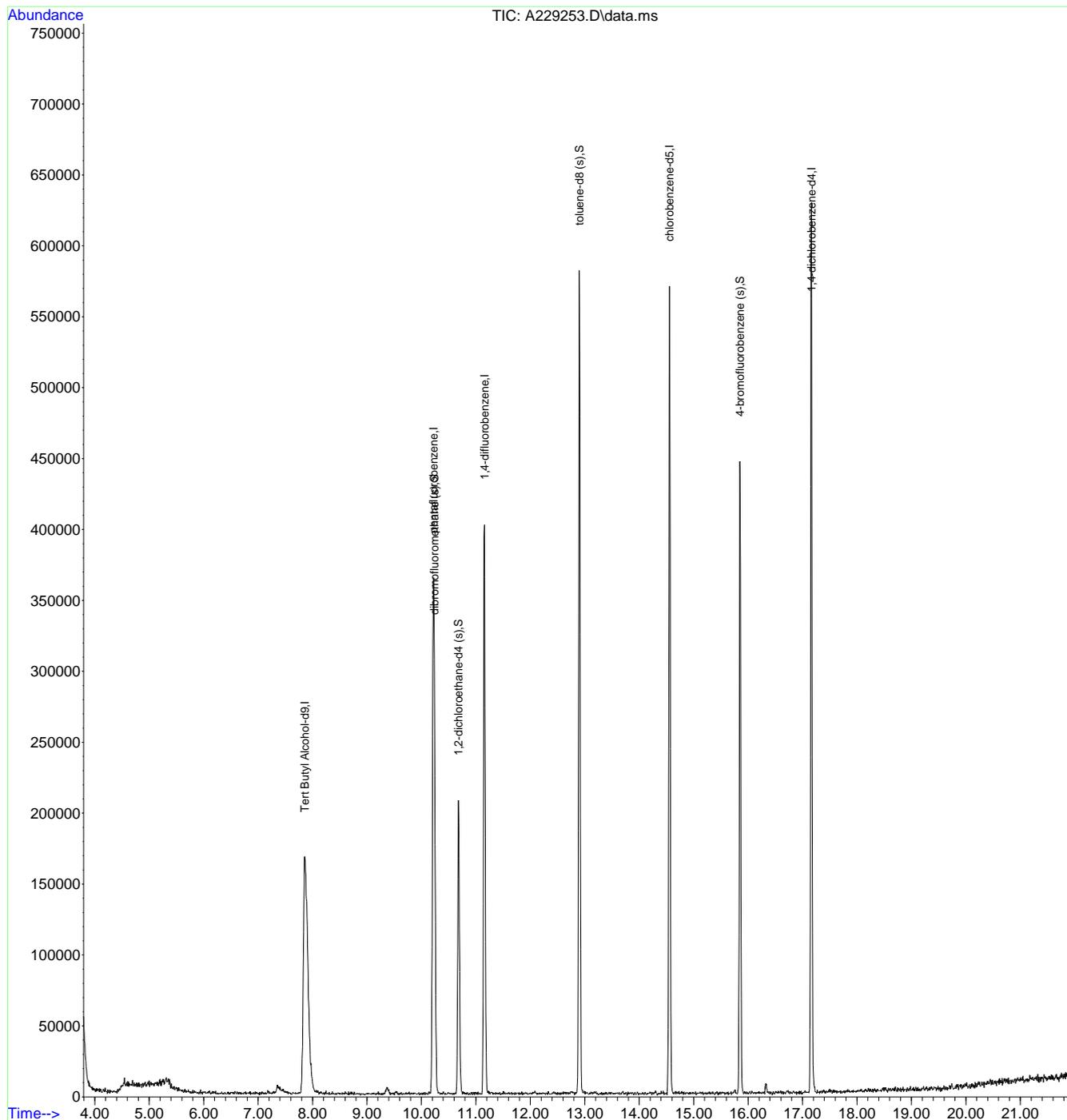
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.1  
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229253.D  
 Acq On : 18 Jan 2017 3:06 pm  
 Operator : Gabriela  
 Sample : jc35477-1  
 Misc : MS11620,VA8664,5,,,,,1  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 19 15:32:44 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229254.D  
 Acq On : 18 Jan 2017 3:35 pm  
 Operator : Gabriela  
 Sample : jc35477-2  
 Misc : MS11620,VA8664,5,,,,1  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 19 15:33:09 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.848	65	523391	500.00	ug/L	-0.01
4) pentafluorobenzene	10.222	168	209004	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	315231	50.00	ug/L	0.00
84) chlorobenzene-d5	14.558	117	292607	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	166136	50.00	ug/L	0.00

System Monitoring Compounds						
46) dibromofluoromethane (s)	10.243	113	123951	51.69	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	103.38%
47) 1,2-dichloroethane-d4 (s)	10.682	65	168101	52.13	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	104.26%
76) toluene-d8 (s)	12.905	98	381315	52.25	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	104.50%
103) 4-bromofluorobenzene (s)	15.850	95	145105	48.00	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	96.00%

Target Compounds Qvalue

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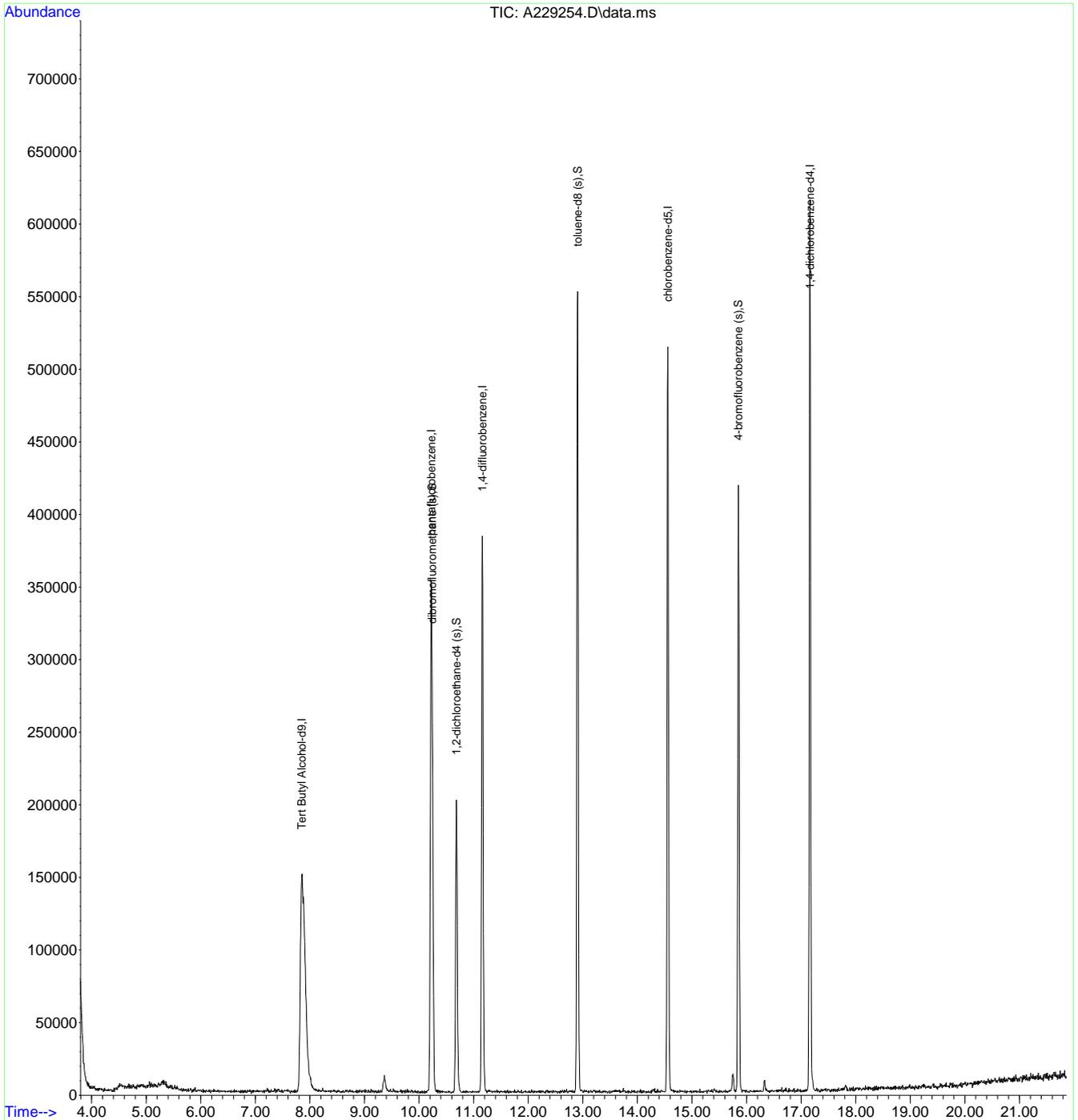
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.12  
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229254.D  
 Acq On : 18 Jan 2017 3:35 pm  
 Operator : Gabriela  
 Sample : jc35477-2  
 Misc : MS11620,VA8664,5,,,,,1  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 19 15:33:09 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229245.D  
 Acq On : 18 Jan 2017 10:50 am  
 Operator : Gabriela  
 Sample : mb  
 Misc : MS11620,VA8664,5,,,,,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 19 15:26:24 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.851	65	494534	500.00	ug/L	0.00
4) pentafluorobenzene	10.215	168	234616	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.157	114	352306	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	317375	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.161	152	166931	50.00	ug/L	0.00

System Monitoring Compounds						
46) dibromofluoromethane (s)	10.236	113	131147	48.72	ug/L	0.00
Spiked Amount	50.000	Range 76 - 120	Recovery	=	97.44%	
47) 1,2-dichloroethane-d4 (s)	10.681	65	169338	46.78	ug/L	0.00
Spiked Amount	50.000	Range 73 - 122	Recovery	=	93.56%	
76) toluene-d8 (s)	12.899	98	416252	51.03	ug/L	0.00
Spiked Amount	50.000	Range 84 - 119	Recovery	=	102.06%	
103) 4-bromofluorobenzene (s)	15.854	95	157403	51.82	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	103.64%	

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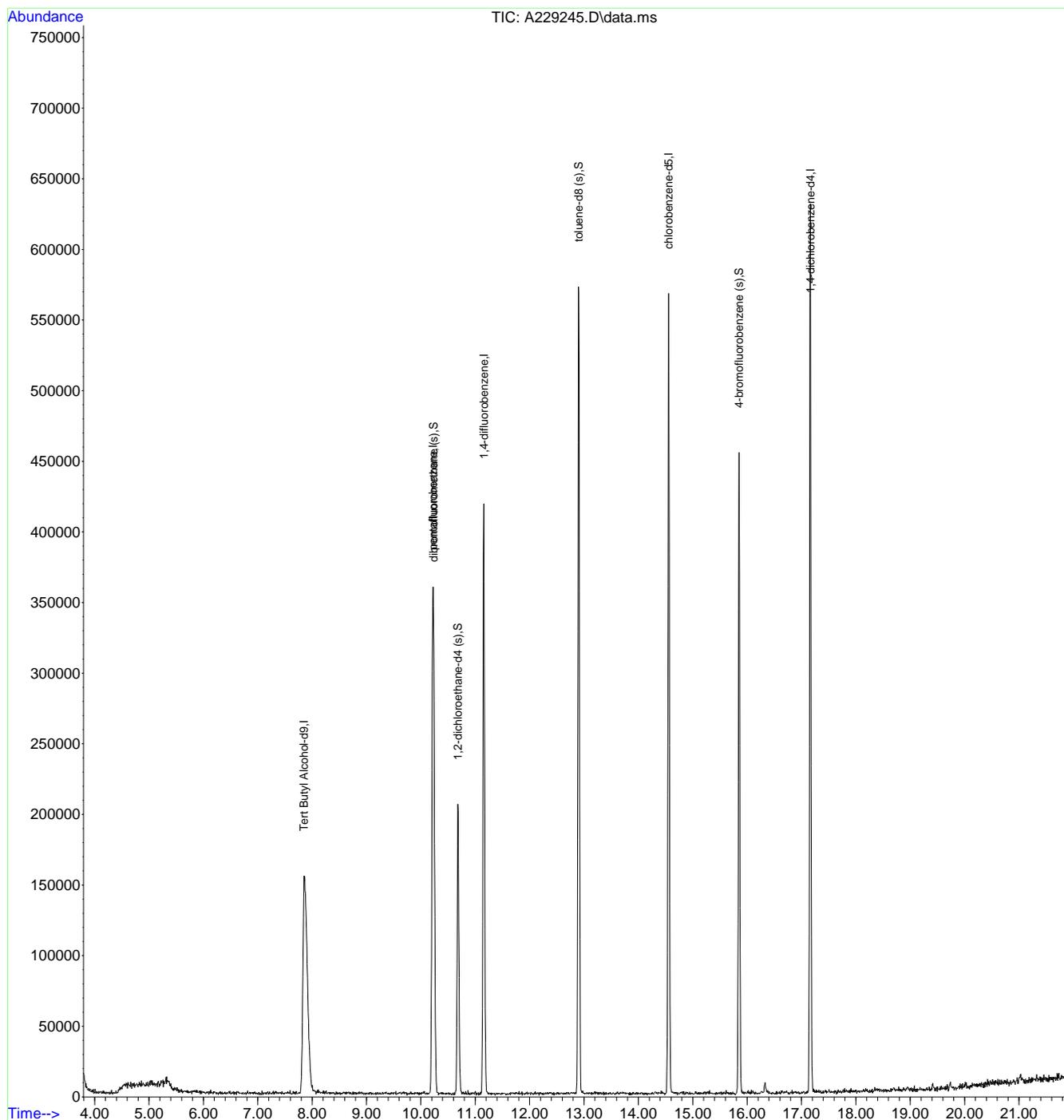
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.1  
7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
Data File : A229245.D  
Acq On : 18 Jan 2017 10:50 am  
Operator : Gabriela  
Sample : mb  
Misc : MS11620,VA8664,5,,,,,1  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 19 15:26:24 2017  
Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
QLast Update : Fri Jan 13 15:23:28 2017  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229267.D  
 Acq On : 18 Jan 2017 11:43 pm  
 Operator : Gabriela  
 Sample : mb2  
 Misc : MS11693,VA8664,5,,,,,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 19 15:35:20 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.848	65	526297	500.00	ug/L	-0.01
4) pentafluorobenzene	10.217	168	216041	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.154	114	331710	50.00	ug/L	0.00
84) chlorobenzene-d5	14.558	117	295572	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.163	152	167212	50.00	ug/L	0.00

System Monitoring Compounds						
46) dibromofluoromethane (s)	10.243	113	131019	52.86	ug/L	0.00
Spiked Amount	50.000	Range 76 - 120	Recovery	=	105.72%	
47) 1,2-dichloroethane-d4 (s)	10.678	65	168463	50.54	ug/L	0.00
Spiked Amount	50.000	Range 73 - 122	Recovery	=	101.08%	
76) toluene-d8 (s)	12.900	98	389941	50.77	ug/L	0.00
Spiked Amount	50.000	Range 84 - 119	Recovery	=	101.54%	
103) 4-bromofluorobenzene (s)	15.850	95	151521	49.80	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	99.60%	

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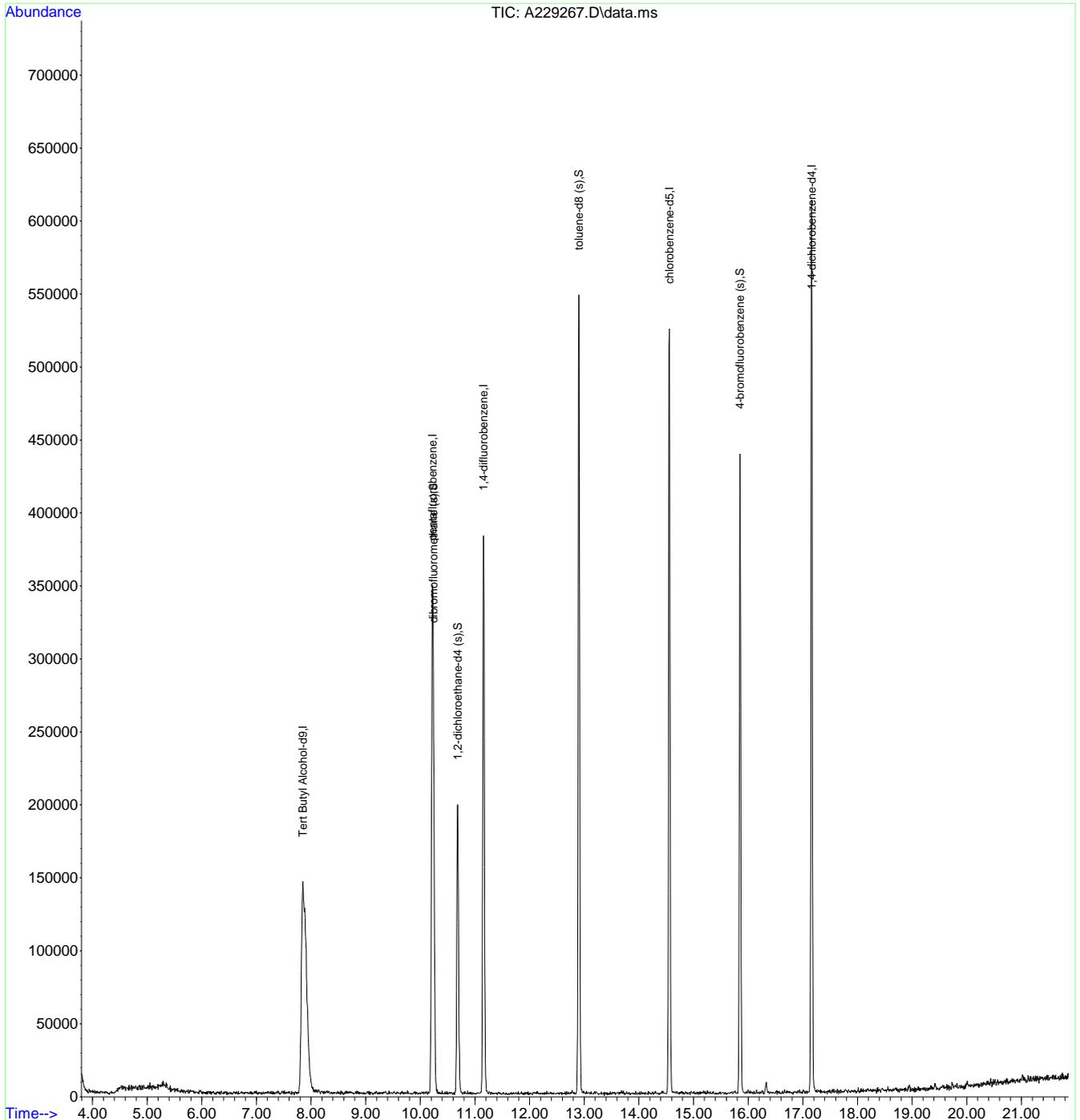
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.22  
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229267.D  
 Acq On : 18 Jan 2017 11:43 pm  
 Operator : Gabriela  
 Sample : mb2  
 Misc : MS11693,VA8664,5,,,,,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jan 19 15:35:20 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration



7.22  
7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229246.D  
 Acq On : 18 Jan 2017 11:24 am  
 Operator : Gabriela  
 Sample : bs  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 19 15:27:00 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.860	65	546538	500.00	ug/L	0.00
4) pentafluorobenzene	10.219	168	230785	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.160	114	353207	50.00	ug/L	0.00
84) chlorobenzene-d5	14.560	117	313454	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.164	152	178388	50.00	ug/L	0.00

## System Monitoring Compounds

46) dibromofluoromethane (s)	10.245	113	131191	49.54	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.08%
47) 1,2-dichloroethane-d4 (s)	10.684	65	175382	49.26	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	98.52%
76) toluene-d8 (s)	12.902	98	408962	50.01	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	100.02%
103) 4-bromofluorobenzene (s)	15.851	95	159392	49.10	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	98.20%

## Target Compounds

Qvalue

2) 1,4-dioxane	11.897	88	94467	1445.50	ug/L	98
3) tertiary butyl alcohol	7.991	59	311316	259.62	ug/L	99
7) chlorodifluoromethane	4.188	51	259358	39.74	ug/L	97
8) dichlorodifluoromethane	4.193	85	409336	45.78	ug/L	97
9) chloromethane	4.533	50	249275	40.79	ug/L	98
10) vinyl chloride	4.832	62	326499	46.55	ug/L	98
11) bromomethane	5.522	94	177811	48.17	ug/L	97
12) chloroethane	5.705	64	118985	48.69	ug/L	92
14) trichlorofluoromethane	6.254	101	437346	48.30	ug/L	100
16) ethyl ether	6.704	74	71409	52.00	ug/L	92
18) acrolein	6.944	56	511397	555.52	ug/L	100
19) freon 113	7.143	151	213529	69.34	ug/L	98
20) 1,1-dichloroethene	7.138	61	286201	53.21	ug/L	96
21) acetone	7.190	58	120333	199.73	ug/L	95
22) allyl chloride	7.698	76	80992	51.84	ug/L #	82
23) acetonitrile	7.692	40	282807	502.02	ug/L	92
24) iodomethane	7.426	142	325690	49.67	ug/L	99
25) carbon disulfide	7.567	76	635234	53.23	ug/L	99
26) methylene chloride	7.891	84	170626	50.16	ug/L	96
27) methyl acetate	7.698	43	161981	50.32	ug/L	99
28) methyl tert butyl ether	8.278	73	1177021	98.41	ug/L	92
29) trans-1,2-dichloroethene	8.299	61	210068	53.71	ug/L	95
30) hexane	8.660	57	130964	40.52	ug/L	97
31) di-isopropyl ether	8.921	45	509889	50.47	ug/L	96
32) t-butyl formate	10.109	59	176580	39.04	ug/L	99
33) ethyl tert-butyl ether	9.403	59	554481	52.09	ug/L	96
34) 2-butanone	9.628	72	125979	233.42	ug/L #	83
35) 1,1-dichloroethane	8.895	63	250373	50.35	ug/L	95
36) chloroprene	9.016	53	219812	49.37	ug/L	91
37) acrylonitrile	8.236	53	413279	263.77	ug/L	98
38) vinyl acetate	8.895	86	29677	58.26	ug/L #	56
39) ethyl acetate	9.664	45	30474	46.59	ug/L	96
40) 2,2-dichloropropane	9.690	77	355403	56.55	ug/L	98
41) cis-1,2-dichloroethene	9.664	96	144335	52.10	ug/L	98
42) propionitrile	9.727	54	364423	518.75	ug/L	92
43) bromochloromethane	9.978	128	73806	49.07	ug/L	87
44) tetrahydrofuran	10.036	42	89123	52.81	ug/L	98
45) chloroform	10.036	83	265879	50.87	ug/L	97
48) methacrylonitrile	9.920	67	75055	52.69	ug/L	87
49) cyclohexane	10.417	84	254482	56.34	ug/L	92
50) 1,1,1-trichloroethane	10.323	97	323276	52.55	ug/L	97

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229246.D  
 Acq On : 18 Jan 2017 11:24 am  
 Operator : Gabriela  
 Sample : bs  
 Misc : MS11644,VA8664,5,,,,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 19 15:27:00 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.496	41	131929	472.21	ug/L	86
52) tert-amyl methyl ether	10.836	73	553037	53.11	ug/L	97
55) epichlorohydrin	12.457	57	119559	242.27	ug/L	91
56) n-butyl alcohol	11.265	56	534543	2497.25	ug/L	95
57) carbon tetrachloride	10.532	117	299416	52.79	ug/L	96
58) 1,1-dichloropropene	10.506	75	183718	51.84	ug/L	96
59) benzene	10.778	78	476486	50.08	ug/L	98
60) Iso-octane	10.825	57	645323	50.76	ug/L	98
61) heptane	10.993	71	101759	53.59	ug/L	91
63) isopropyl acetate	10.710	87	38007	52.54	ug/L #	88
64) 1,2-dichloroethane	10.773	62	227608	50.25	ug/L	96
65) ethyl acrylate	11.521	55	206534	54.07	ug/L	98
66) trichloroethene	11.510	95	130622	52.01	ug/L	92
67) 2-nitropropane	12.311	41	88709	50.29	ug/L	95
69) methylcyclohexane	11.772	83	275775	54.06	ug/L	99
70) 2-chloroethyl vinyl ether	12.342	63	467079	269.24	ug/L	100
71) methyl methacrylate	11.793	100	41605	52.81	ug/L	95
72) 1,2-dichloropropane	11.788	63	129563	52.64	ug/L	98
73) dibromomethane	11.934	93	92939	53.92	ug/L	88
74) bromodichloromethane	12.075	83	191724	49.53	ug/L	98
75) cis-1,3-dichloropropene	12.572	75	209589	51.68	ug/L	96
77) 4-methyl-2-pentanone	12.692	58	442054	259.33	ug/L	96
78) toluene	12.980	91	492802	52.28	ug/L	97
79) 3-methyl-1-butanol	12.687	55	361310	967.01	ug/L	98
80) trans-1,3-dichloropropene	13.174	75	207336	53.62	ug/L	95
81) ethyl methacrylate	13.189	69	190766	50.48	ug/L	98
82) 1,1,2-trichloroethane	13.409	83	96337	53.76	ug/L	95
83) 2-hexanone	13.613	58	424572	252.06	ug/L	94
85) tetrachloroethene	13.618	166	130784	45.53	ug/L	97
86) 1,3-dichloropropane	13.608	76	197593	52.33	ug/L	96
87) butyl acetate	13.707	56	119064	54.01	ug/L	85
88) 3,3-dimethyl-1-butanol	13.791	57	466123	540.92	ug/L	99
89) dibromochloromethane	13.890	129	155912	51.24	ug/L	98
90) 1,2-dibromoethane	14.068	107	132376	52.49	ug/L	97
91) n-butyl ether	14.528	57	501580	55.68	ug/L	99
92) chlorobenzene	14.591	112	329674	54.48	ug/L	98
93) 1,1,1,2-tetrachloroethane	14.654	131	171590	50.90	ug/L	98
94) ethylbenzene	14.664	91	584055	54.13	ug/L	99
95) m,p-xylene	14.784	106	437789	107.73	ug/L	100
96) o-xylene	15.250	91	510138	52.84	ug/L	96
97) styrene	15.255	104	360584	53.42	ug/L	95
98) butyl acrylate	15.056	55	266677	50.21	ug/L	97
99) bromoform	15.527	173	118565	52.71	ug/L	96
101) isopropylbenzene	15.642	105	669991	53.99	ug/L	99
102) cyclohexanone	15.810	55	146697	100.77	ug/L	99
104) bromobenzene	16.071	156	153108	52.51	ug/L	98
105) 1,1,2,2-tetrachloroethane	15.951	83	205308	50.24	ug/L	99
106) trans-1,4-dichloro-2-b...	16.003	53	60754	50.19	ug/L	96
107) 1,2,3-trichloropropane	16.040	110	62169	51.92	ug/L	100
108) n-propylbenzene	16.097	91	733070	54.37	ug/L	99
109) 2-chlorotoluene	16.254	126	148971	53.34	ug/L	89
110) 4-chlorotoluene	16.364	91	435879	52.81	ug/L	94
112) 1,3,5-trimethylbenzene	16.270	105	586462	53.52	ug/L	96
113) tert-butylbenzene	16.667	134	127671	55.42	ug/L #	83
114) pentachloroethane	16.735	167	147598	69.04	ug/L	99
115) 1,2,4-trimethylbenzene	16.709	105	583760	55.23	ug/L	96
116) sec-butylbenzene	16.908	105	817852	56.46	ug/L	99
117) 1,3-dichlorobenzene	17.096	146	288316	51.87	ug/L	95

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229246.D  
 Acq On : 18 Jan 2017 11:24 am  
 Operator : Gabriela  
 Sample : bs  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 19 15:27:00 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

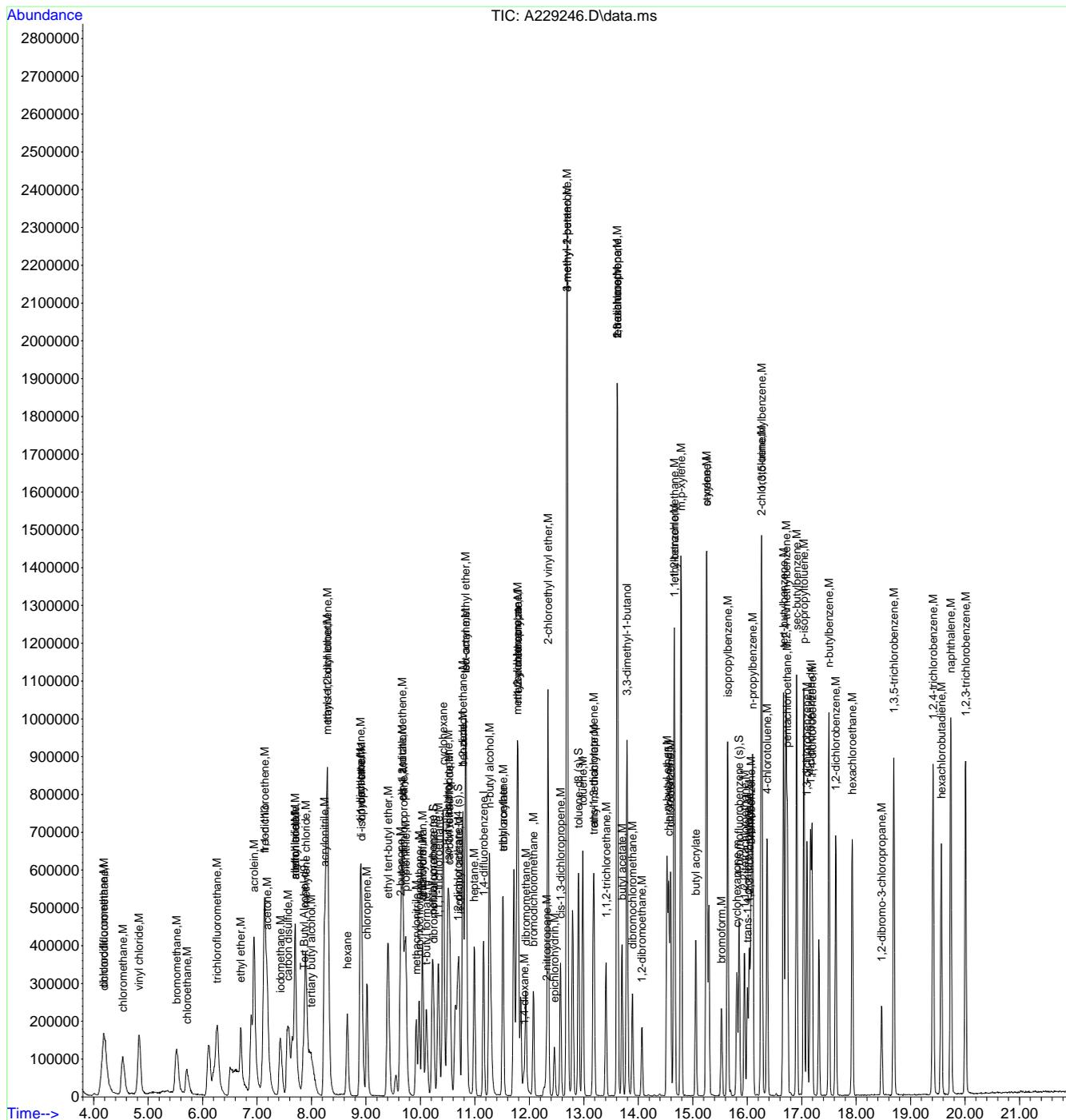
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.039	119	673255	55.29	ug/L	99
120) 1,4-dichlorobenzene	17.190	146	295251	51.86	ug/L	98
122) 1,2-dichlorobenzene	17.624	146	294485	51.25	ug/L	96
123) n-butylbenzene	17.499	92	320790	52.65	ug/L	97
125) 1,2-dibromo-3-chloropr...	18.472	157	74044	48.44	ug/L	95
126) 1,3,5-trichlorobenzene	18.691	180	286864	53.21	ug/L	96
127) 1,2,4-trichlorobenzene	19.418	180	277047	49.65	ug/L	97
128) hexachlorobutadiene	19.565	225	149221	50.98	ug/L	97
129) naphthalene	19.737	128	889505	48.08	ug/L	99
130) 1,2,3-trichlorobenzene	20.009	180	310865	51.35	ug/L	98
131) hexachloroethane	17.928	201	128038	55.00	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
Data File : A229246.D  
Acq On : 18 Jan 2017 11:24 am  
Operator : Gabriela  
Sample : bs  
Misc : MS11644,VA8664,5,,,,,1  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 19 15:27:00 2017  
Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
QLast Update : Fri Jan 13 15:23:28 2017  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229269.D  
 Acq On : 19 Jan 2017 12:41 am  
 Operator : Gabriela  
 Sample : jc35610-7ms  
 Misc : MS11693,VA8664,5,,,,20  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 19 15:36:38 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.868	65	588830	500.00	ug/L	0.00
4) pentafluorobenzene	10.221	168	227787	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	352960	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	327240	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	183669	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.242	113	131692	50.39	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	100.78%
47) 1,2-dichloroethane-d4 (s)	10.682	65	179068	50.95	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	101.90%
76) toluene-d8 (s)	12.904	98	418002	51.15	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	102.30%
103) 4-bromofluorobenzene (s)	15.849	95	164087	49.10	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	98.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.900	88	92408	1312.44	ug/L	90
3) tertiary butyl alcohol	8.004	59	334746	259.11	ug/L	94
7) chlorodifluoromethane	4.202	51	264747	41.10	ug/L	98
8) dichlorodifluoromethane	4.191	85	372689	42.23	ug/L	98
9) chloromethane	4.541	50	259826	43.07	ug/L	94
10) vinyl chloride	4.845	62	328135	47.40	ug/L	100
11) bromomethane	5.535	94	173539	47.63	ug/L	92
12) chloroethane	5.703	64	120632	50.02	ug/L	97
14) trichlorofluoromethane	6.267	101	425658	47.62	ug/L	99
16) ethyl ether	6.702	74	69847	51.53	ug/L #	82
18) acrolein	6.947	56	483932	532.60	ug/L	99
19) freon 113	7.136	151	207348	68.22	ug/L	99
20) 1,1-dichloroethene	7.141	61	289797	54.59	ug/L	96
21) acetone	7.188	58	117275	197.22	ug/L	92
22) allyl chloride	7.706	76	82700	53.63	ug/L #	85
23) acetonitrile	7.674	40	289475	520.62	ug/L #	24
24) iodomethane	7.434	142	331537	51.22	ug/L	99
25) carbon disulfide	7.580	76	615938	52.29	ug/L	95
26) methylene chloride	7.899	84	178231	53.08	ug/L	95
27) methyl acetate	7.695	43	159734	50.28	ug/L	99
28) methyl tert butyl ether	8.276	73	1185381	100.42	ug/L	93
29) trans-1,2-dichloroethene	8.302	61	203408	52.69	ug/L	97
30) hexane	8.663	57	114771	35.98	ug/L	98
31) di-isopropyl ether	8.919	45	516943	51.84	ug/L	93
32) t-butyl formate	10.112	59	94949	21.27	ug/L	98
33) ethyl tert-butyl ether	9.406	59	562880	53.58	ug/L	97
34) 2-butanone	9.625	72	121874	228.78	ug/L #	88
35) 1,1-dichloroethane	8.893	63	248519	50.64	ug/L	97
36) chloroprene	9.024	53	227338	51.73	ug/L	98
37) acrylonitrile	8.234	53	408043	263.85	ug/L	99
38) vinyl acetate	8.893	86	27201	54.10	ug/L #	70
39) ethyl acetate	9.662	45	29930	46.36	ug/L #	89
40) 2,2-dichloropropane	9.688	77	287002	46.27	ug/L	94
41) cis-1,2-dichloroethene	9.662	96	143155	52.36	ug/L	97
42) propionitrile	9.725	54	344228	496.46	ug/L	82
43) bromochloromethane	9.976	128	76785	51.73	ug/L	89
44) tetrahydrofuran	10.033	42	79712	47.85	ug/L	94
45) chloroform	10.038	83	262665	50.92	ug/L	97
48) methacrylonitrile	9.923	67	66842	47.54	ug/L	98
49) cyclohexane	10.420	84	230318	51.66	ug/L	96
50) 1,1,1-trichloroethane	10.331	97	318307	52.42	ug/L	96

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229269.D  
 Acq On : 19 Jan 2017 12:41 am  
 Operator : Gabriela  
 Sample : jc35610-7ms  
 Misc : MS11693,VA8664,5,,,,20  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 19 15:36:38 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.488	41	142879	518.13	ug/L	97
52) tert-amyl methyl ether	10.833	73	564525	54.93	ug/L	95
55) epichlorohydrin	12.455	57	107504	217.99	ug/L	95
56) n-butyl alcohol	11.267	56	555750	2598.14	ug/L	99
57) carbon tetrachloride	10.535	117	294345	51.94	ug/L	95
58) 1,1-dichloropropene	10.509	75	176878	49.94	ug/L	97
59) benzene	10.776	78	469226	49.35	ug/L	99
60) Iso-octane	10.828	57	616368	48.51	ug/L	98
61) heptane	10.985	71	84656	44.61	ug/L	92
63) isopropyl acetate	10.713	87	36635	50.68	ug/L #	94
64) 1,2-dichloroethane	10.776	62	223232	49.31	ug/L	100
65) ethyl acrylate	11.518	55	190917	50.01	ug/L	96
66) trichloroethene	11.513	95	118694	47.30	ug/L	90
67) 2-nitropropane	12.313	41	65939	37.41	ug/L	85
69) methylcyclohexane	11.770	83	267216	52.42	ug/L	99
71) methyl methacrylate	11.801	100	41451	52.65	ug/L #	60
72) 1,2-dichloropropane	11.790	63	124480	50.61	ug/L	91
73) dibromomethane	11.937	93	87588	50.85	ug/L	91
74) bromodichloromethane	12.078	83	185899	48.06	ug/L	99
75) cis-1,3-dichloropropene	12.570	75	198787	49.05	ug/L	97
77) 4-methyl-2-pentanone	12.695	58	428416	251.51	ug/L	99
78) toluene	12.983	91	472966	50.21	ug/L	95
79) 3-methyl-1-butanol	12.690	55	377012	1009.74	ug/L	99
80) trans-1,3-dichloropropene	13.171	75	191492	49.56	ug/L	92
81) ethyl methacrylate	13.187	69	179190	47.45	ug/L	97
82) 1,1,2-trichloroethane	13.407	83	93457	52.19	ug/L	88
83) 2-hexanone	13.616	58	402924	239.37	ug/L	98
85) tetrachloroethene	13.621	166	123922	41.32	ug/L	98
86) 1,3-dichloropropane	13.611	76	187240	47.50	ug/L	96
87) butyl acetate	13.699	56	113286	49.23	ug/L	86
88) 3,3-dimethyl-1-butanol	13.794	57	472378	525.08	ug/L	99
89) dibromochloromethane	13.893	129	153067	48.18	ug/L	97
90) 1,2-dibromoethane	14.066	107	127741	48.52	ug/L	98
91) n-butyl ether	14.526	57	480557	51.10	ug/L	99
92) chlorobenzene	14.594	112	312028	49.39	ug/L	92
93) 1,1,1,2-tetrachloroethane	14.657	131	166003	47.17	ug/L	96
94) ethylbenzene	14.667	91	751214	66.69	ug/L	98
95) m,p-xylene	14.787	106	420358	99.09	ug/L	96
96) o-xylene	15.253	91	486998	48.32	ug/L	96
97) styrene	15.253	104	344822	48.93	ug/L	98
98) butyl acrylate	15.054	55	251294	45.32	ug/L	98
99) bromoform	15.530	173	112858	48.06	ug/L	93
101) isopropylbenzene	15.640	105	683018	53.46	ug/L	97
102) cyclohexanone	15.812	55	133261	88.91	ug/L	98
104) bromobenzene	16.069	156	146511	48.80	ug/L	91
105) 1,1,2,2-tetrachloroethane	15.948	83	193905	46.09	ug/L	97
106) trans-1,4-dichloro-2-b...	16.006	53	56425	45.27	ug/L	91
107) 1,2,3-trichloropropane	16.037	110	63315	51.35	ug/L	91
108) n-propylbenzene	16.100	91	792958	57.12	ug/L	97
109) 2-chlorotoluene	16.252	126	145868	50.72	ug/L	87
110) 4-chlorotoluene	16.367	91	408492	48.07	ug/L	93
112) 1,3,5-trimethylbenzene	16.267	105	562708	49.87	ug/L	96
113) tert-butylbenzene	16.665	134	126777	53.45	ug/L #	87
114) pentachloroethane	16.738	167	143469	65.18	ug/L	96
115) 1,2,4-trimethylbenzene	16.712	105	564091	51.84	ug/L	93
116) sec-butylbenzene	16.906	105	787129	52.78	ug/L	99
117) 1,3-dichlorobenzene	17.099	146	273094	47.72	ug/L	98
118) p-isopropyltoluene	17.041	119	659067	52.57	ug/L	97

7.4.1

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## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229269.D  
 Acq On : 19 Jan 2017 12:41 am  
 Operator : Gabriela  
 Sample : jc35610-7ms  
 Misc : MS11693,VA8664,5,,,,20  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 19 15:36:38 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

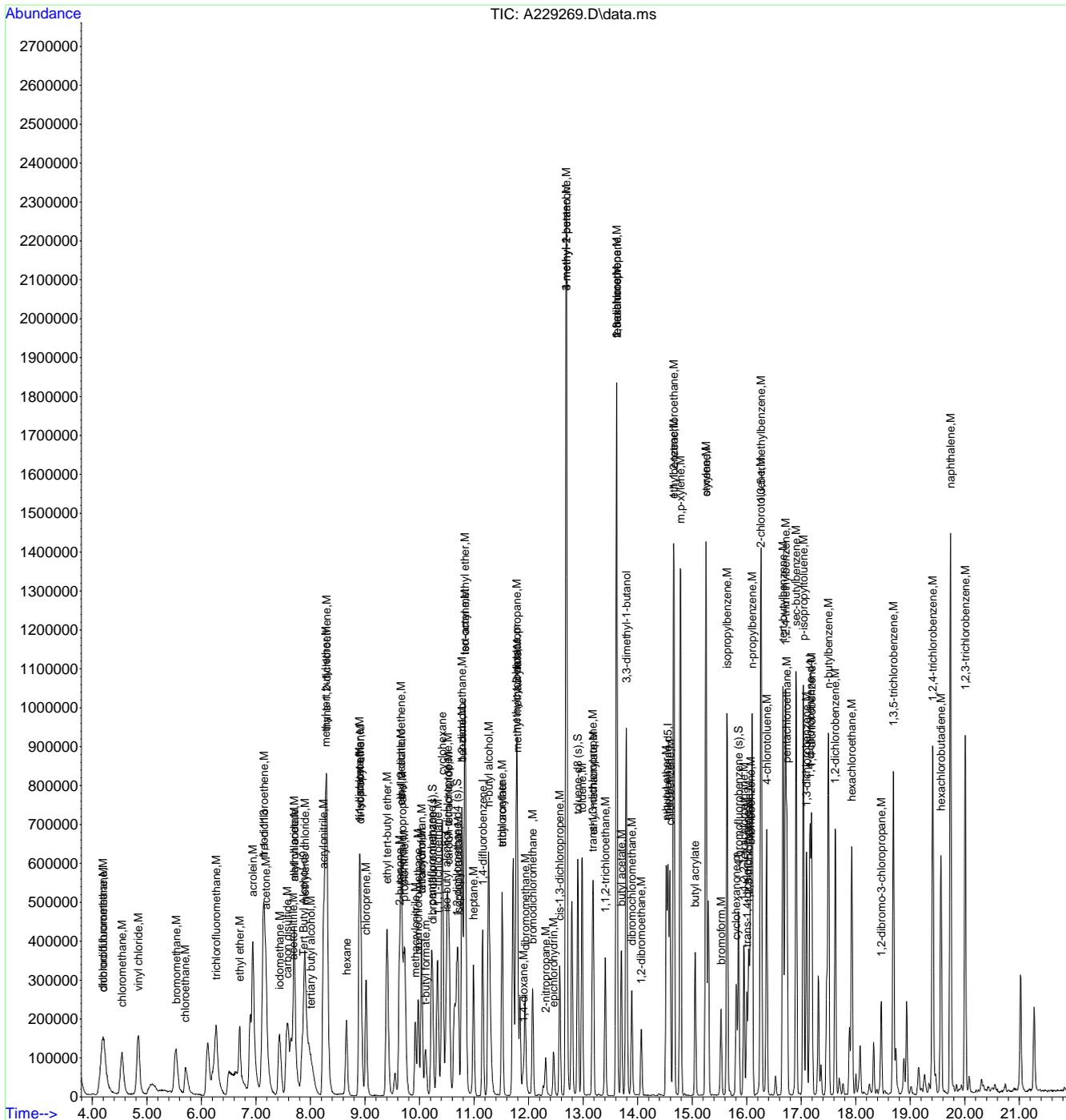
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
120) 1,4-dichlorobenzene	17.188	146	281706	48.06	ug/L	98
122) 1,2-dichlorobenzene	17.627	146	290304	49.07	ug/L	97
123) n-butylbenzene	17.502	92	310321	49.47	ug/L	98
125) 1,2-dibromo-3-chloropr...	18.469	157	73205	46.51	ug/L	94
126) 1,3,5-trichlorobenzene	18.694	180	272369	49.07	ug/L	95
127) 1,2,4-trichlorobenzene	19.416	180	272482	47.43	ug/L	98
128) hexachlorobutadiene	19.562	225	141008	46.79	ug/L	96
129) naphthalene	19.740	128	1265128	66.41	ug/L	99
130) 1,2,3-trichlorobenzene	20.007	180	313102	50.23	ug/L	96
131) hexachloroethane	17.931	201	119569	49.89	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
Data File : A229269.D  
Acq On : 19 Jan 2017 12:41 am  
Operator : Gabriela  
Sample : jc35610-7ms  
Misc : MS11693,VA8664,5,,,,,20  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 19 15:36:38 2017  
Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
QLast Update : Fri Jan 13 15:23:28 2017  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229270.D  
 Acq On : 19 Jan 2017 1:11 am  
 Operator : Gabriela  
 Sample : jc35610-7msd  
 Misc : MS11693,VA8664,5,,,,,20  
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 19 15:37:19 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.857	65	573690	500.00	ug/L	0.00
4) pentafluorobenzene	10.216	168	238192	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	367338	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	339053	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	187599	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.242	113	140861	51.54	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	103.08%
47) 1,2-dichloroethane-d4 (s)	10.682	65	179130	48.74	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	97.48%
76) toluene-d8 (s)	12.904	98	431270	50.71	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	101.42%
103) 4-bromofluorobenzene (s)	15.854	95	168999	49.51	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.02%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.895	88	84477	1231.46	ug/L	95
3) tertiary butyl alcohol	7.972	59	333823	265.22	ug/L	94
7) chlorodifluoromethane	4.207	51	274905	40.81	ug/L	94
8) dichlorodifluoromethane	4.175	85	371034	40.21	ug/L	91
9) chloromethane	4.547	50	258553	40.99	ug/L	95
10) vinyl chloride	4.840	62	338290	46.73	ug/L	96
11) bromomethane	5.525	94	170585	44.77	ug/L	98
12) chloroethane	5.713	64	120489	47.78	ug/L	96
14) trichlorofluoromethane	6.273	101	426097	45.59	ug/L	98
16) ethyl ether	6.702	74	72158	50.91	ug/L	92
18) acrolein	6.942	56	500260	526.52	ug/L	98
19) freon 113	7.146	151	211496	66.54	ug/L	98
20) 1,1-dichloroethene	7.141	61	282905	50.97	ug/L	98
21) acetone	7.188	58	116921	188.03	ug/L	100
22) allyl chloride	7.706	76	78506	48.69	ug/L #	81
23) acetonitrile	7.685	40	283740	488.01	ug/L #	50
24) iodomethane	7.434	142	327189	48.34	ug/L	97
25) carbon disulfide	7.585	76	626512	50.87	ug/L	97
26) methylene chloride	7.899	84	171818	48.94	ug/L	90
27) methyl acetate	7.690	43	165237	49.74	ug/L	99
28) methyl tert butyl ether	8.276	73	1187707	96.22	ug/L	91
29) trans-1,2-dichloroethene	8.302	61	206621	51.19	ug/L	96
30) hexane	8.658	57	117783	35.31	ug/L	98
31) di-isopropyl ether	8.919	45	527224	50.56	ug/L	89
32) t-butyl formate	10.112	59	90405	19.37	ug/L	98
33) ethyl tert-butyl ether	9.405	59	572128	52.08	ug/L	98
34) 2-butanone	9.636	72	127015	228.02	ug/L #	78
35) 1,1-dichloroethane	8.898	63	252252	49.15	ug/L	99
36) chloroprene	9.024	53	228344	49.69	ug/L	95
37) acrylonitrile	8.234	53	416116	257.32	ug/L	98
38) vinyl acetate	8.888	86	28706	54.60	ug/L #	25
39) ethyl acetate	9.667	45	32648	48.36	ug/L #	47
40) 2,2-dichloropropane	9.688	77	279648	43.11	ug/L	98
41) cis-1,2-dichloroethene	9.662	96	147696	51.66	ug/L	91
42) propionitrile	9.719	54	363947	501.97	ug/L #	62
43) bromochloromethane	9.976	128	76829	49.49	ug/L	91
44) tetrahydrofuran	10.033	42	78996	45.35	ug/L	93
45) chloroform	10.038	83	260857	48.36	ug/L	96
48) methacrylonitrile	9.918	67	70265	47.79	ug/L	95
49) cyclohexane	10.420	84	238062	51.07	ug/L	93
50) 1,1,1-trichloroethane	10.326	97	316717	49.88	ug/L	95

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229270.D  
 Acq On : 19 Jan 2017 1:11 am  
 Operator : Gabriela  
 Sample : jc35610-7msd  
 Misc : MS11693,VA8664,5,,,,20  
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 19 15:37:19 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.493	41	146584	508.34	ug/L	97
52) tert-amyl methyl ether	10.833	73	561158	52.22	ug/L	99
55) epichlorohydrin	12.460	57	113061	220.29	ug/L	96
56) n-butyl alcohol	11.262	56	551494	2477.33	ug/L	92
57) carbon tetrachloride	10.540	117	296185	50.22	ug/L	98
58) 1,1-dichloropropene	10.509	75	174420	47.32	ug/L	98
59) benzene	10.781	78	479673	48.48	ug/L	98
60) Iso-octane	10.828	57	650995	49.23	ug/L	98
61) heptane	10.990	71	87788	44.45	ug/L	85
63) isopropyl acetate	10.713	87	37595	49.97	ug/L #	90
64) 1,2-dichloroethane	10.776	62	217694	46.21	ug/L	99
65) ethyl acrylate	11.518	55	197918	49.82	ug/L	99
66) trichloroethene	11.513	95	124137	47.53	ug/L	92
67) 2-nitropropane	12.313	41	65973	35.96	ug/L	98
69) methylcyclohexane	11.775	83	275660	51.96	ug/L	99
71) methyl methacrylate	11.801	100	41507	50.66	ug/L #	70
72) 1,2-dichloropropane	11.785	63	131217	51.27	ug/L	84
73) dibromomethane	11.932	93	90547	50.51	ug/L	89
74) bromodichloromethane	12.073	83	188646	46.86	ug/L	99
75) cis-1,3-dichloropropene	12.575	75	204434	48.47	ug/L	99
77) 4-methyl-2-pentanone	12.690	58	438766	247.50	ug/L	97
78) toluene	12.983	91	483018	49.27	ug/L	97
79) 3-methyl-1-butanol	12.690	55	378736	974.66	ug/L	100
80) trans-1,3-dichloropropene	13.176	75	203026	50.49	ug/L	99
81) ethyl methacrylate	13.192	69	190141	48.38	ug/L	91
82) 1,1,2-trichloroethane	13.407	83	96807	51.95	ug/L	92
83) 2-hexanone	13.616	58	423593	241.80	ug/L	98
85) tetrachloroethene	13.621	166	130334	41.95	ug/L	99
86) 1,3-dichloropropane	13.611	76	198411	48.58	ug/L	96
87) butyl acetate	13.705	56	119370	50.06	ug/L	92
88) 3,3-dimethyl-1-butanol	13.794	57	490920	526.68	ug/L	99
89) dibromochloromethane	13.893	129	155849	47.35	ug/L	97
90) 1,2-dibromoethane	14.066	107	133645	48.99	ug/L	99
91) n-butyl ether	14.526	57	500165	51.33	ug/L	99
92) chlorobenzene	14.594	112	327431	50.02	ug/L	95
93) 1,1,1,2-tetrachloroethane	14.662	131	165397	45.36	ug/L	96
94) ethylbenzene	14.667	91	780097	66.84	ug/L	100
95) m,p-xylene	14.787	106	432507	98.40	ug/L	99
96) o-xylene	15.248	91	498668	47.75	ug/L	98
97) styrene	15.253	104	357055	48.90	ug/L	97
98) butyl acrylate	15.054	55	258899	45.07	ug/L	97
99) bromoform	15.530	173	119562	49.14	ug/L	93
101) isopropylbenzene	15.640	105	691265	52.97	ug/L	99
102) cyclohexanone	15.807	55	125178	81.76	ug/L	99
104) bromobenzene	16.074	156	151361	49.36	ug/L	97
105) 1,1,2,2-tetrachloroethane	15.948	83	199467	46.42	ug/L	98
106) trans-1,4-dichloro-2-b...	16.006	53	60114	47.22	ug/L	89
107) 1,2,3-trichloropropane	16.037	110	62319	49.49	ug/L	86
108) n-propylbenzene	16.100	91	813175	57.35	ug/L	99
109) 2-chlorotoluene	16.257	126	143748	48.94	ug/L	96
110) 4-chlorotoluene	16.367	91	417200	48.06	ug/L	95
112) 1,3,5-trimethylbenzene	16.267	105	565175	49.04	ug/L	97
113) tert-butylbenzene	16.665	134	127617	52.67	ug/L #	86
114) pentachloroethane	16.738	167	144723	64.37	ug/L	93
115) 1,2,4-trimethylbenzene	16.707	105	567261	51.04	ug/L	98
116) sec-butylbenzene	16.905	105	792909	52.05	ug/L	99
117) 1,3-dichlorobenzene	17.099	146	287142	49.13	ug/L	97
118) p-isopropyltoluene	17.041	119	673896	52.63	ug/L	96

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229270.D  
 Acq On : 19 Jan 2017 1:11 am  
 Operator : Gabriela  
 Sample : jc35610-7msd  
 Misc : MS11693,VA8664,5,,,,,20  
 ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 19 15:37:19 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

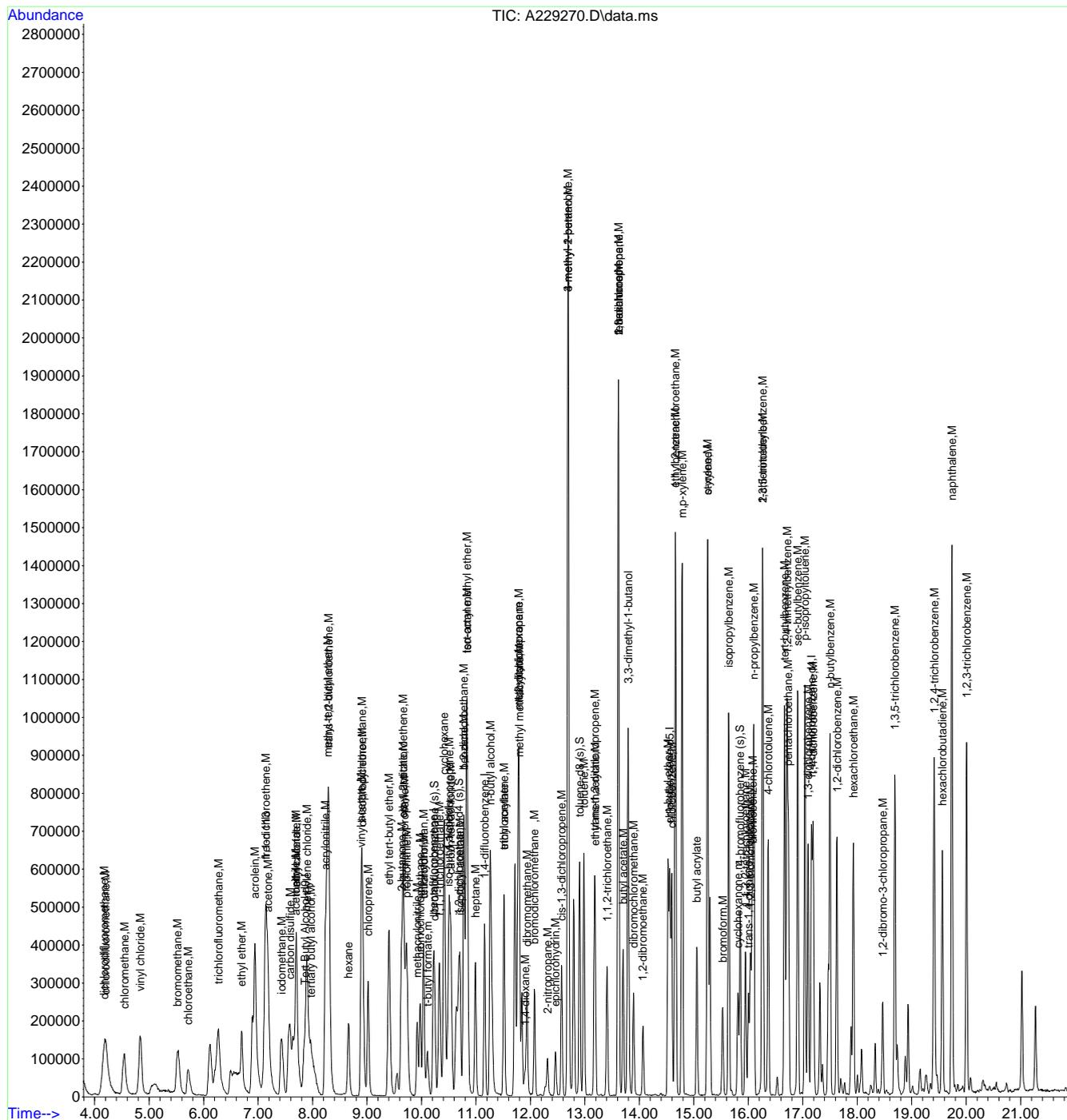
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
120) 1,4-dichlorobenzene	17.188	146	281289	46.98	ug/L	98
122) 1,2-dichlorobenzene	17.627	146	292627	48.42	ug/L	97
123) n-butylbenzene	17.502	92	308318	48.12	ug/L	94
125) 1,2-dibromo-3-chloropr...	18.469	157	72860	45.32	ug/L	95
126) 1,3,5-trichlorobenzene	18.689	180	278669	49.15	ug/L	95
127) 1,2,4-trichlorobenzene	19.416	180	283157	48.25	ug/L	98
128) hexachlorobutadiene	19.562	225	143821	46.72	ug/L	97
129) naphthalene	19.740	128	1284908	66.04	ug/L	98
130) 1,2,3-trichlorobenzene	20.007	180	323069	50.74	ug/L	99
131) hexachloroethane	17.931	201	125751	51.37	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A229270.D
Acq On : 19 Jan 2017 1:11 am
Operator : Gabriela
Sample : jc35610-7msd
Misc : MS11693,VA8664,5,,,,,20
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 19 15:37:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Jan 13 15:23:28 2017
Response via : Initial Calibration



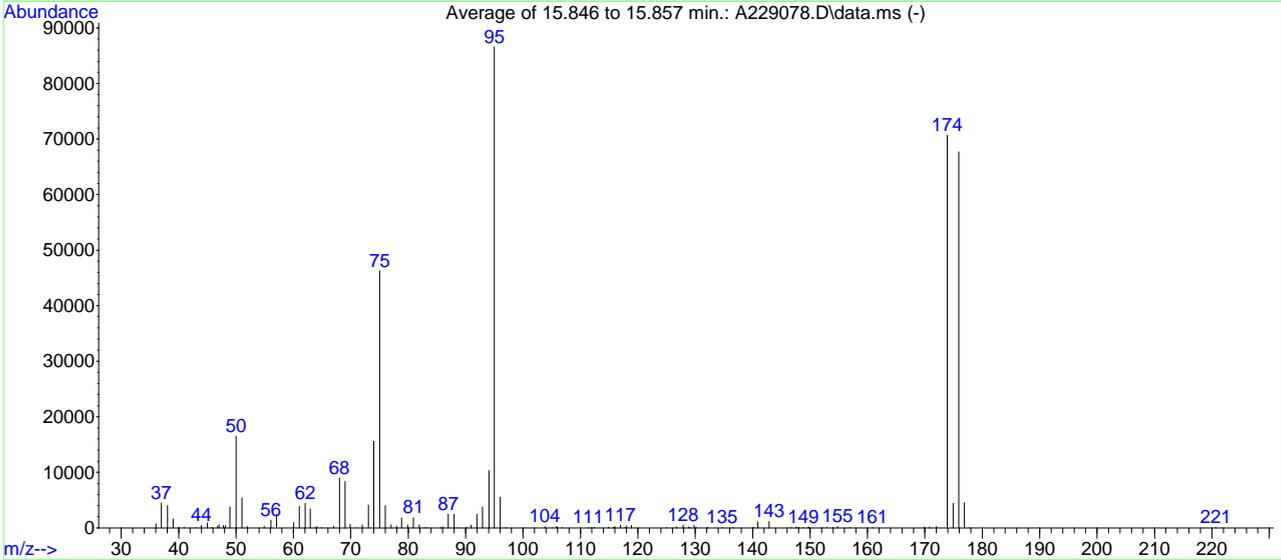
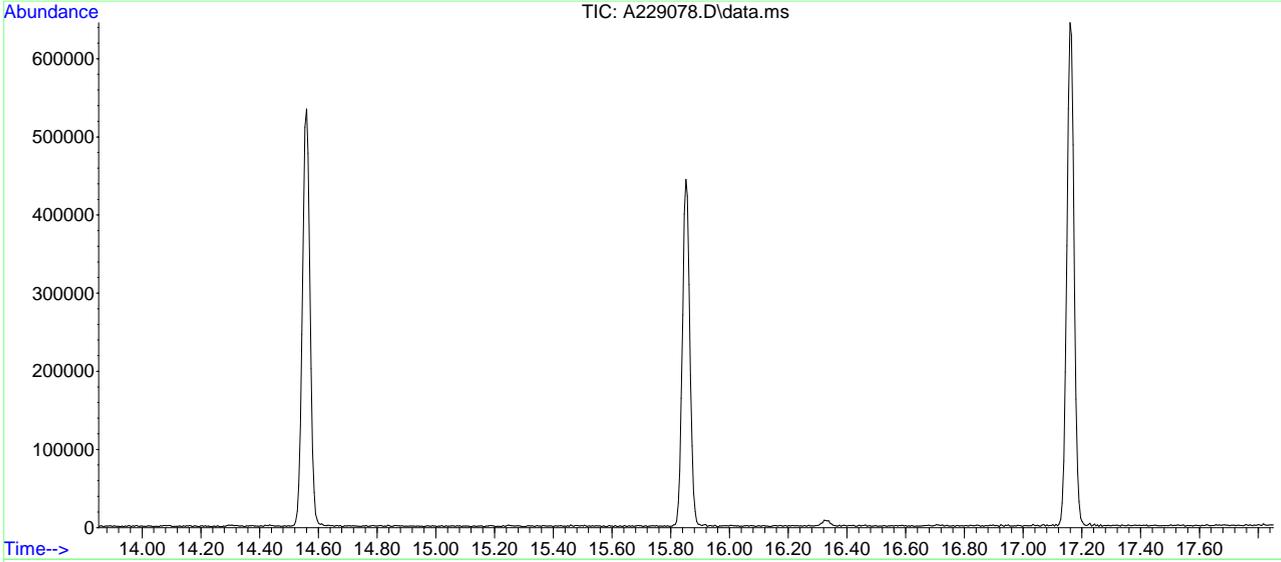
7.4.2 7

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A229078.D  
 Acq On : 12 Jan 2017 3:48 pm  
 Sample : bfb  
 Misc : MS11294,VA8658,5,,,,,1  
 MS Integration Params: RTEINT.P

Vial: 3  
 Operator: Gabriela  
 Inst : MSA  
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2305, 2306, 2307; Background Corrected with Scan 2295

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	16535	PASS
75	95	30	60	53.5	46298	PASS
95	95	100	100	100.0	86594	PASS
96	95	5	9	6.4	5530	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	81.6	70672	PASS
175	174	5	9	6.3	4437	PASS
176	174	95	101	95.8	67696	PASS
177	176	5	9	6.7	4519	PASS

7.5.1  
7

Average of 15.846 to 15.857 min.: A229078.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	727	47.00	581	61.00	3877	72.00	549
37.00	4449	47.80	444	62.05	4409	73.05	4130
38.05	3997	48.15	430	62.95	3418	74.00	15554
39.05	1613	48.95	3782	63.80	98	75.00	46298
40.00	109	50.00	16535	64.10	213	76.00	4015
40.95	110	51.05	5359	64.90	56	77.05	572
43.00	57	51.95	241	67.00	336	77.95	349
43.95	417	54.90	275	68.00	8991	78.85	1806
45.00	886	56.10	1405	69.00	8347	79.90	554
45.80	54	57.05	2394	69.90	618	80.90	1843
46.80	266	60.05	944	71.00	50	81.90	535

Average of 15.846 to 15.857 min.: A229078.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.80	56	94.05	10329	112.40	63	128.80	169
83.20	92	95.00	86594	114.85	127	129.10	56
85.70	63	96.00	5530	115.80	115	129.80	466
86.10	186	97.00	66	116.00	226	130.20	65
86.95	2449	103.80	227	116.95	477	132.20	83
88.00	2434	105.10	82	117.80	74	134.70	91
88.70	52	105.75	159	118.05	346	136.60	58
90.20	63	106.00	203	118.90	454	140.10	70
90.95	467	106.80	60	125.00	58	140.90	1106
91.95	2432	111.40	54	126.70	159	142.85	1156
92.95	3760	112.00	85	127.90	477	146.70	67

Average of 15.846 to 15.857 min.: A229078.D\data.ms

bfb

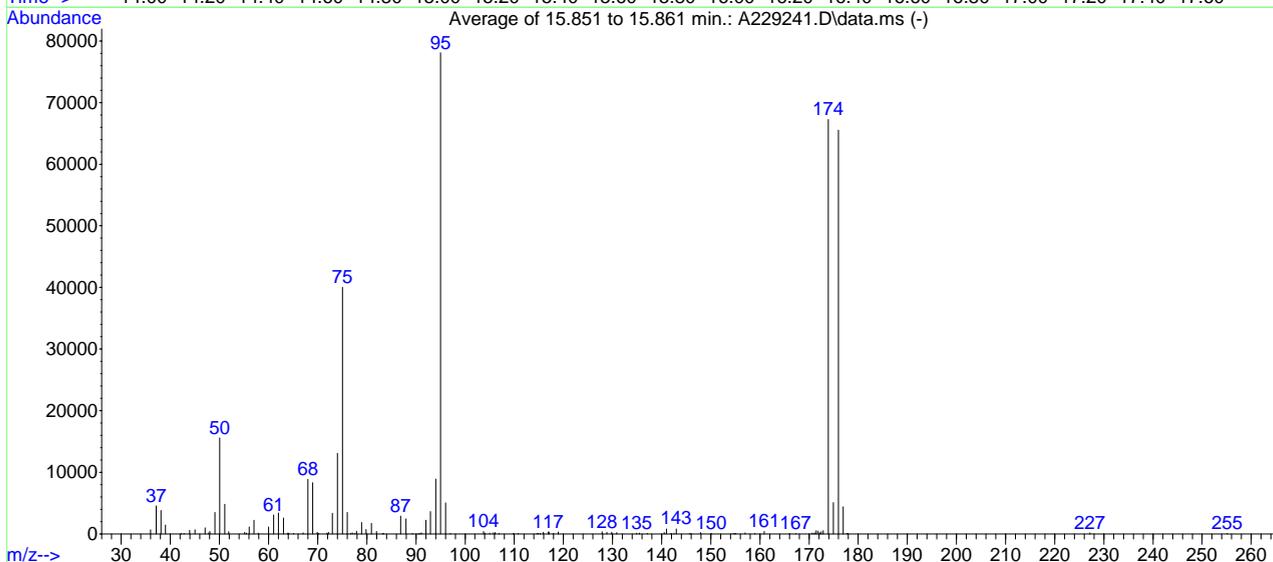
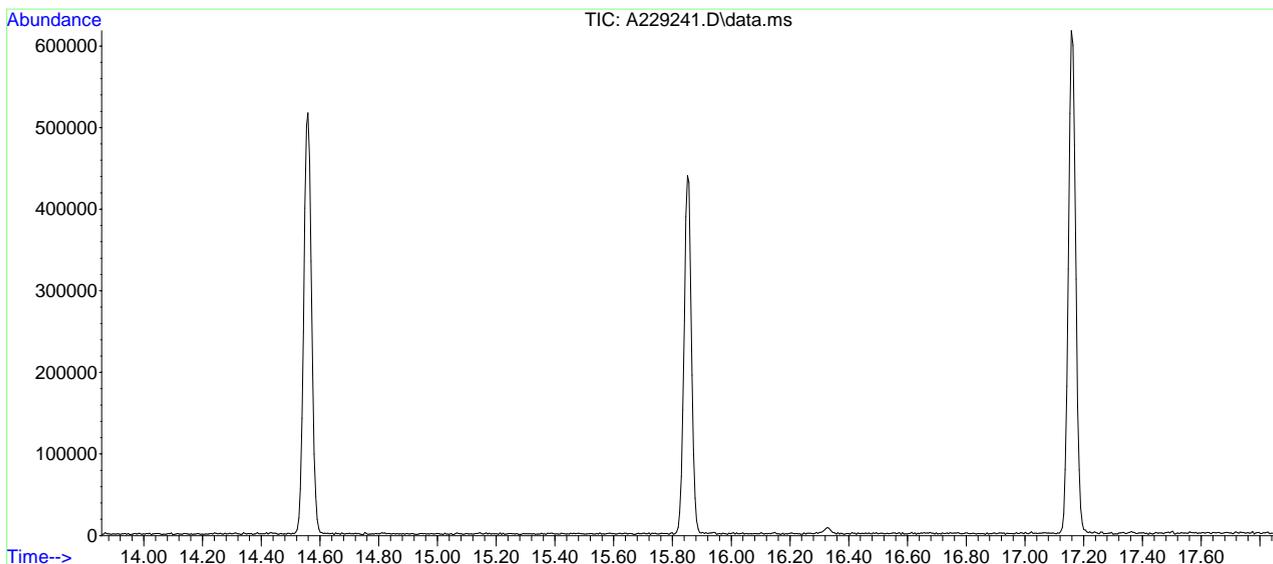
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.60	198	160.90	55				
147.80	55	169.90	142				
148.10	56	170.80	181				
148.90	68	172.00	219				
149.60	76	173.90	70672				
149.80	117	174.90	4437				
152.20	53	175.90	67696				
152.90	144	176.90	4519				
154.00	71	177.80	55				
154.80	212	220.70	71				
156.90	108						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A229241.D Vial: 1  
 Acq On : 18 Jan 2017 8:38 am Operator: Gabriela  
 Sample : bfb Inst : MSA  
 Misc : MS11644,VA8664,5,,,,,1 Multiplr: 1.00  
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2306, 2307, 2308; Background Corrected with Scan 2295

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.0	15603	PASS
75	95	30	60	51.2	40005	PASS
95	95	100	100	100.0	78077	PASS
96	95	5	9	6.5	5045	PASS
173	174	0.00	2	0.8	509	PASS
174	95	50	120	86.2	67285	PASS
175	174	5	9	7.5	5058	PASS
176	174	95	101	97.4	65525	PASS
177	176	5	9	6.7	4404	PASS

7.5.2  
7

Average of 15.851 to 15.861 min.: A229241.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	681	49.05	3499	62.00	3396	72.20	255
37.10	4536	50.05	15603	63.05	2587	73.00	3331
38.10	3807	51.05	4808	63.90	98	74.00	13068
39.00	1454	51.90	350	64.10	111	75.05	40005
42.20	79	55.15	232	65.10	52	76.00	3494
42.80	70	55.50	96	67.05	176	76.70	74
43.95	554	56.05	1131	68.00	8872	77.05	178
45.00	680	57.05	2219	69.00	8317	77.50	56
47.05	994	57.90	103	69.90	244	77.90	446
47.80	183	60.00	1119	70.20	66	78.95	1864
48.05	398	61.05	3069	71.90	107	79.85	715

Average of 15.851 to 15.861 min.: A229241.D\data.ms

bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	1688	92.95	3624	109.80	52	128.85	241
81.95	408	94.00	8896	110.80	54	129.85	253
83.20	50	95.00	78077	114.60	51	130.85	185
83.40	50	96.00	5045	114.90	92	134.90	113
86.90	2880	97.00	56	115.30	86	135.50	112
87.95	2451	103.75	377	115.90	265	137.10	90
89.30	67	104.10	100	116.90	312	140.50	192
90.50	58	105.00	131	117.05	305	140.95	813
90.80	62	105.75	162	118.00	95	141.90	85
91.10	156	106.10	184	118.95	280	142.50	79
92.00	2207	106.90	84	127.90	335	142.95	823

Average of 15.851 to 15.861 min.: A229241.D\data.ms

bfb

Modified:subtracted

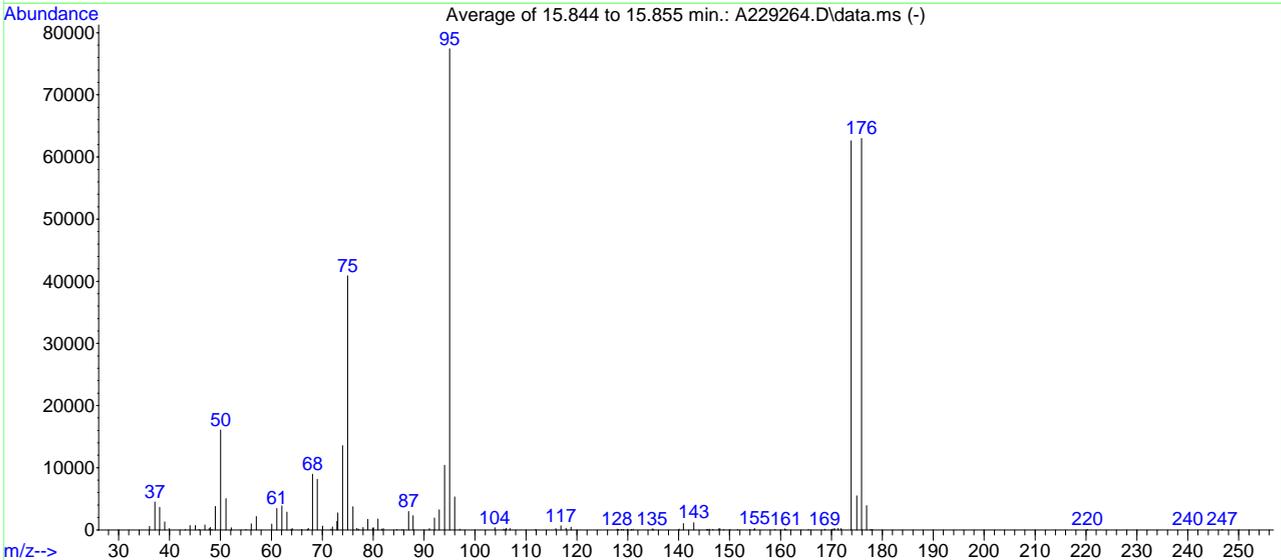
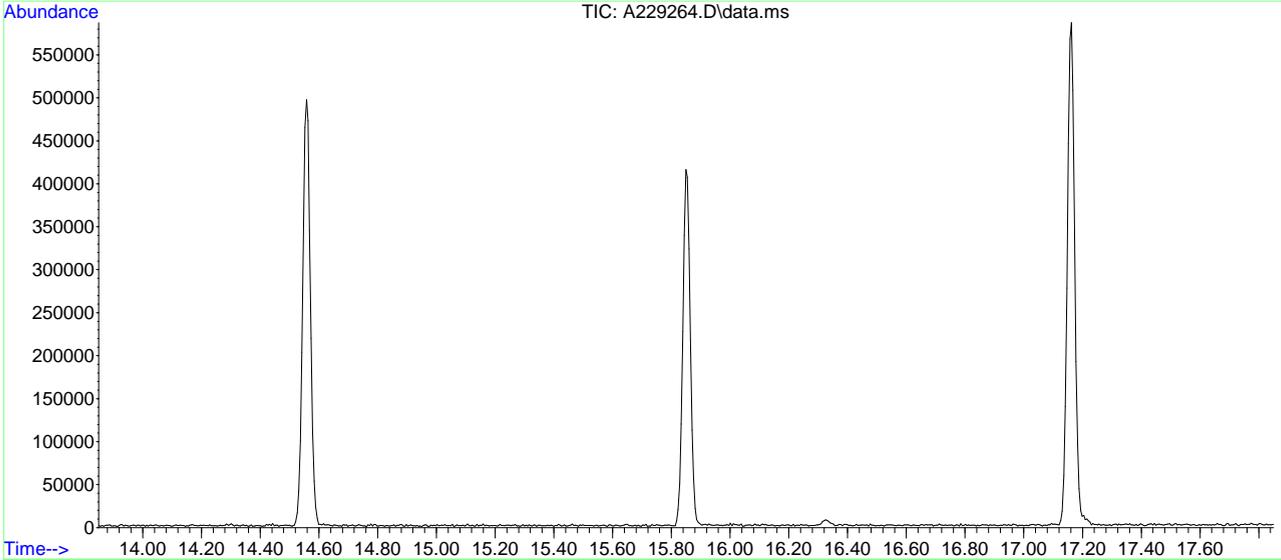
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.70	91	167.30	85	175.95	65525		
146.00	66	170.60	107	176.95	4404		
147.90	187	170.95	121	177.70	75		
150.10	50	171.30	163	178.00	90		
154.60	61	171.45	531	227.15	171		
154.90	74	171.85	421	255.10	72		
155.10	60	172.20	149				
157.00	150	172.50	355				
159.00	70	172.90	509				
160.85	390	173.90	67285				
166.00	62	174.95	5058				

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A229264.D  
 Acq On : 18 Jan 2017 9:39 pm  
 Sample : bfb2  
 Misc : MS11644,VA8664,5,,,,1  
 MS Integration Params: RTEINT.P

Vial: 24  
 Operator: Gabriela  
 Inst : MSA  
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MA8658.m (RTE Integrator)  
 Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2305, 2306, 2307; Background Corrected with Scan 2296

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	16084	PASS
75	95	30	60	52.8	40869	PASS
95	95	100	100	100.0	77402	PASS
96	95	5	9	6.9	5314	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	80.9	62616	PASS
175	174	5	9	8.8	5502	PASS
176	174	95	101	100.6	63005	PASS
177	176	5	9	6.2	3920	PASS

7.5.3  
 7

Average of 15.844 to 15.855 min.: A229264.D\data.ms  
bfb2

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	559	48.00	406	62.05	3837	72.00	463
37.10	4477	48.30	91	63.05	2846	72.90	1385
38.05	3643	49.00	3758	63.90	124	73.05	2748
39.05	1294	50.05	16084	64.10	201	74.00	13573
39.95	222	51.05	5013	65.90	50	75.00	40869
43.10	56	52.10	340	67.10	61	76.05	3706
44.00	696	55.00	77	67.25	258	76.80	254
45.05	687	56.05	982	68.05	8944	77.10	92
45.80	89	57.05	2124	69.00	8145	78.00	393
46.95	779	60.05	921	70.05	602	78.95	1696
47.75	201	61.05	3469	71.70	92	79.90	283

Average of 15.844 to 15.855 min.: A229264.D\data.ms  
bfb2

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.05	351	94.00	10381	116.85	659	135.00	98
80.95	1725	95.00	77402	117.85	255	140.10	113
81.70	119	96.00	5314	118.85	414	140.95	1014
82.00	205	97.00	138	127.90	92	142.95	1144
84.70	63	103.90	343	128.20	55	145.50	57
85.70	54	105.60	120	128.80	51	145.70	52
86.95	2955	105.80	50	129.10	70	146.00	121
87.85	2279	106.10	230	130.00	100	146.70	52
91.05	227	106.90	222	130.70	62	147.85	173
92.05	1896	111.90	80	131.05	135	148.10	216
92.95	3217	115.85	227	134.80	171	148.90	86

Average of 15.844 to 15.855 min.: A229264.D\data.ms  
bfb2

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
150.10	54	170.40	160	240.00	51		
151.60	54	170.60	198	246.80	59		
154.00	60	171.35	237				
154.80	57	171.90	186				
154.95	194	173.90	62616				
158.90	90	175.00	5502				
160.85	140	175.90	63005				
161.10	80	176.90	3920				
165.50	56	177.70	91				
168.70	131	178.00	50				
170.10	75	220.30	56				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229079.D  
 Acq On : 12 Jan 2017 4:33 pm  
 Operator : Gabriela  
 Sample : ic8658-0.2  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:43:18 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	556758	500.00	ug/L	0.00
4) pentafluorobenzene	10.217	168	238811	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	349909	50.00	ug/L	0.00
84) chlorobenzene-d5	14.558	117	330732	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	176655	50.00	ug/L	0.00

System Monitoring Compounds						
46) dibromofluoromethane (s)	10.243	113	132855	48.78	ug/L	0.00
Spiked Amount	50.000	Range 76 - 120	Recovery	=	97.56%	
47) 1,2-dichloroethane-d4 (s)	10.677	65	180297	48.57	ug/L	0.00
Spiked Amount	50.000	Range 73 - 122	Recovery	=	97.14%	
76) toluene-d8 (s)	12.900	98	417078	51.49	ug/L	0.00
Spiked Amount	50.000	Range 84 - 119	Recovery	=	102.98%	
103) 4-bromofluorobenzene (s)	15.849	95	166920	50.96	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	101.92%	

Target Compounds						Qvalue
28) methyl tert butyl ether	8.271	73	2920	0.23	ug/L	69
35) 1,1-dichloroethane	8.883	63	1096	0.21	ug/L	77
60) Iso-octane	10.823	57	2891	0.22	ug/L	92
90) 1,2-dibromoethane	14.076	107	554	0.21	ug/L	83
97) styrene	15.248	104	1412	0.19	ug/L #	71
117) 1,3-dichlorobenzene	17.099	146	1319	0.23	ug/L	86

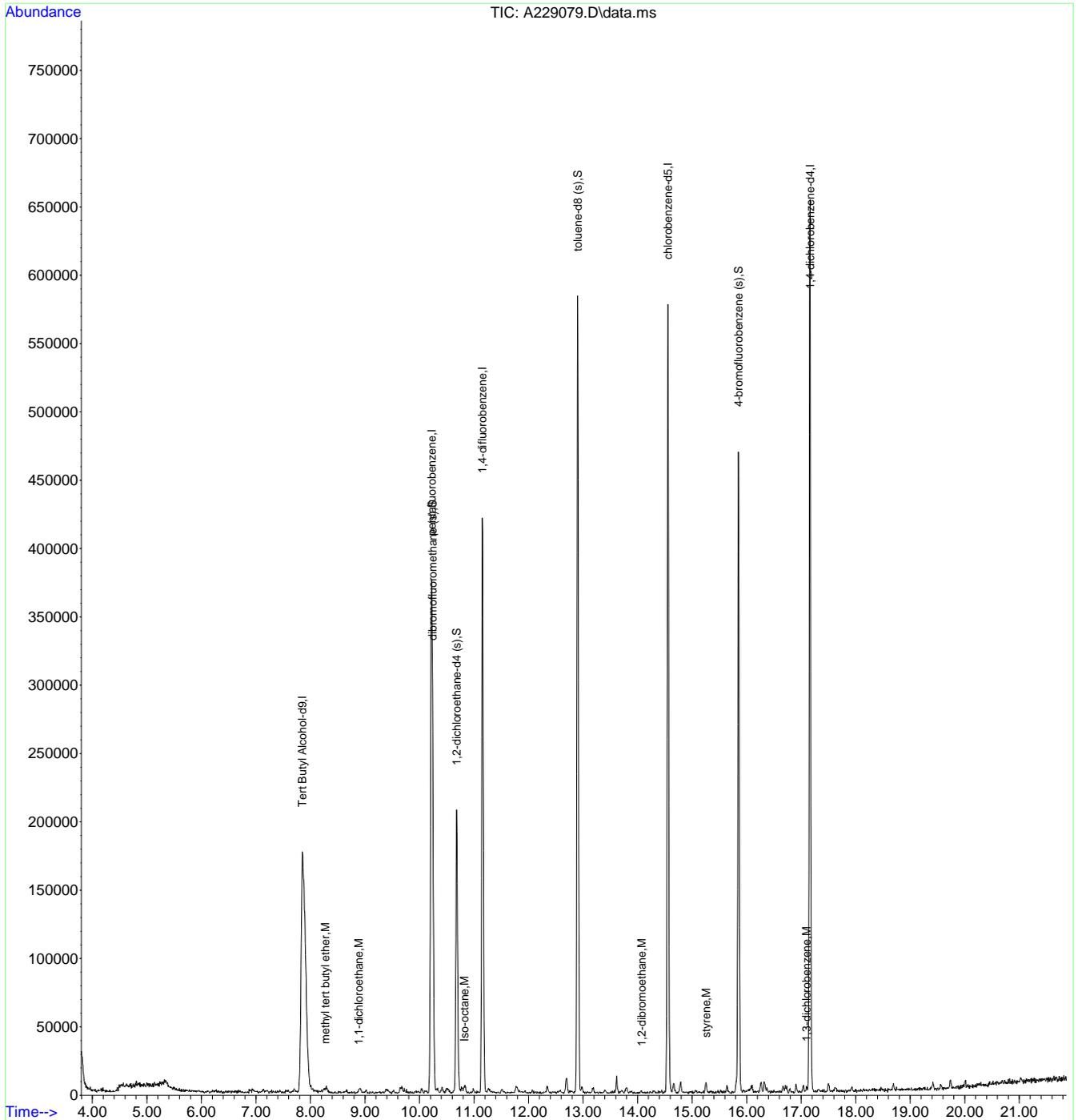
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.1  
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229079.D  
 Acq On : 12 Jan 2017 4:33 pm  
 Operator : Gabriela  
 Sample : ic8658-0.2  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 13 11:43:18 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



1.9.7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229080.D  
 Acq On : 12 Jan 2017 5:03 pm  
 Operator : Gabriela  
 Sample : ic8658-0.5  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 15:22:56 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.863	65	566109	500.00	ug/L	0.00
4) pentafluorobenzene	10.222	168	227577	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	332432	50.00	ug/L	0.00
84) chlorobenzene-d5	14.558	117	302887	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	167744	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.243	113	128772	49.61	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.22%
47) 1,2-dichloroethane-d4 (s)	10.682	65	176013	49.76	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	99.52%
76) toluene-d8 (s)	12.905	98	384217	49.93	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	99.86%
103) 4-bromofluorobenzene (s)	15.849	95	152429	49.01	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	98.02%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) chloromethane	4.537	50	3120	0.52	ug/L	90
24) iodomethane	7.424	142	2769	0.43	ug/L #	55
28) methyl tert butyl ether	8.287	73	5764	0.48	ug/L	93
29) trans-1,2-dichloroethene	8.297	61	1928	0.47	ug/L #	59
33) ethyl tert-butyl ether	9.401	59	4810	0.43	ug/L	74
35) 1,1-dichloroethane	8.899	63	2336	0.47	ug/L	80
49) cyclohexane	10.431	84	2437	0.52	ug/L #	84
52) tert-amyl methyl ether	10.829	73	4963	0.46	ug/L	70
58) 1,1-dichloropropene	10.509	75	1944	0.55	ug/L	86
59) benzene	10.781	78	4541	0.49	ug/L	83
60) Iso-octane	10.813	57	5808	0.46	ug/L	93
66) trichloroethene	11.519	95	1341	0.54	ug/L	80
69) methylcyclohexane	11.770	83	2552	0.50	ug/L	96
74) bromodichloromethane	12.079	83	1828	0.49	ug/L	92
75) cis-1,3-dichloropropene	12.575	75	2196	0.56	ug/L	78
78) toluene	12.983	91	4263	0.46	ug/L	92
80) trans-1,3-dichloropropene	13.172	75	1869	0.50	ug/L	91
86) 1,3-dichloropropane	13.616	76	1948	0.52	ug/L	76
90) 1,2-dibromoethane	14.066	107	1226	0.50	ug/L #	59
92) chlorobenzene	14.589	112	3052	0.50	ug/L #	41
93) 1,1,1,2-tetrachloroethane	14.647	131	1691	0.49	ug/L #	59
94) ethylbenzene	14.673	91	5391	0.48	ug/L	91
95) m,p-xylene	14.782	106	3796	0.90	ug/L	85
96) o-xylene	15.253	91	4587	0.45	ug/L	98
97) styrene	15.264	104	3742	0.55	ug/L #	49
98) butyl acrylate	15.065	55	2693	0.51	ug/L	87
101) isopropylbenzene	15.640	105	5674	0.43	ug/L	94
104) bromobenzene	16.074	156	1382	0.49	ug/L #	43
105) 1,1,2,2-tetrachloroethane	15.949	83	2133	0.53	ug/L	84
108) n-propylbenzene	16.090	91	5991	0.42	ug/L	82
110) 4-chlorotoluene	16.367	91	4505	0.54	ug/L	84
112) 1,3,5-trimethylbenzene	16.263	105	5223	0.45	ug/L	80
113) tert-butylbenzene	16.671	134	1132	0.45	ug/L #	65
115) 1,2,4-trimethylbenzene	16.718	105	4826	0.43	ug/L	87
117) 1,3-dichlorobenzene	17.094	146	2536	0.46	ug/L	92
118) p-isopropyltoluene	17.042	119	5598	0.43	ug/L	85
120) 1,4-dichlorobenzene	17.194	146	3092	0.57	ug/L	91
122) 1,2-dichlorobenzene	17.622	146	2811	0.50	ug/L	83
123) n-butylbenzene	17.502	92	2559	0.41	ug/L	92
125) 1,2-dibromo-3-chloropr...	18.470	157	832	0.57	ug/L #	55
126) 1,3,5-trichlorobenzene	18.695	180	2381	0.45	ug/L #	64

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229080.D  
 Acq On : 12 Jan 2017 5:03 pm  
 Operator : Gabriela  
 Sample : ic8658-0.5  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 15:22:56 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

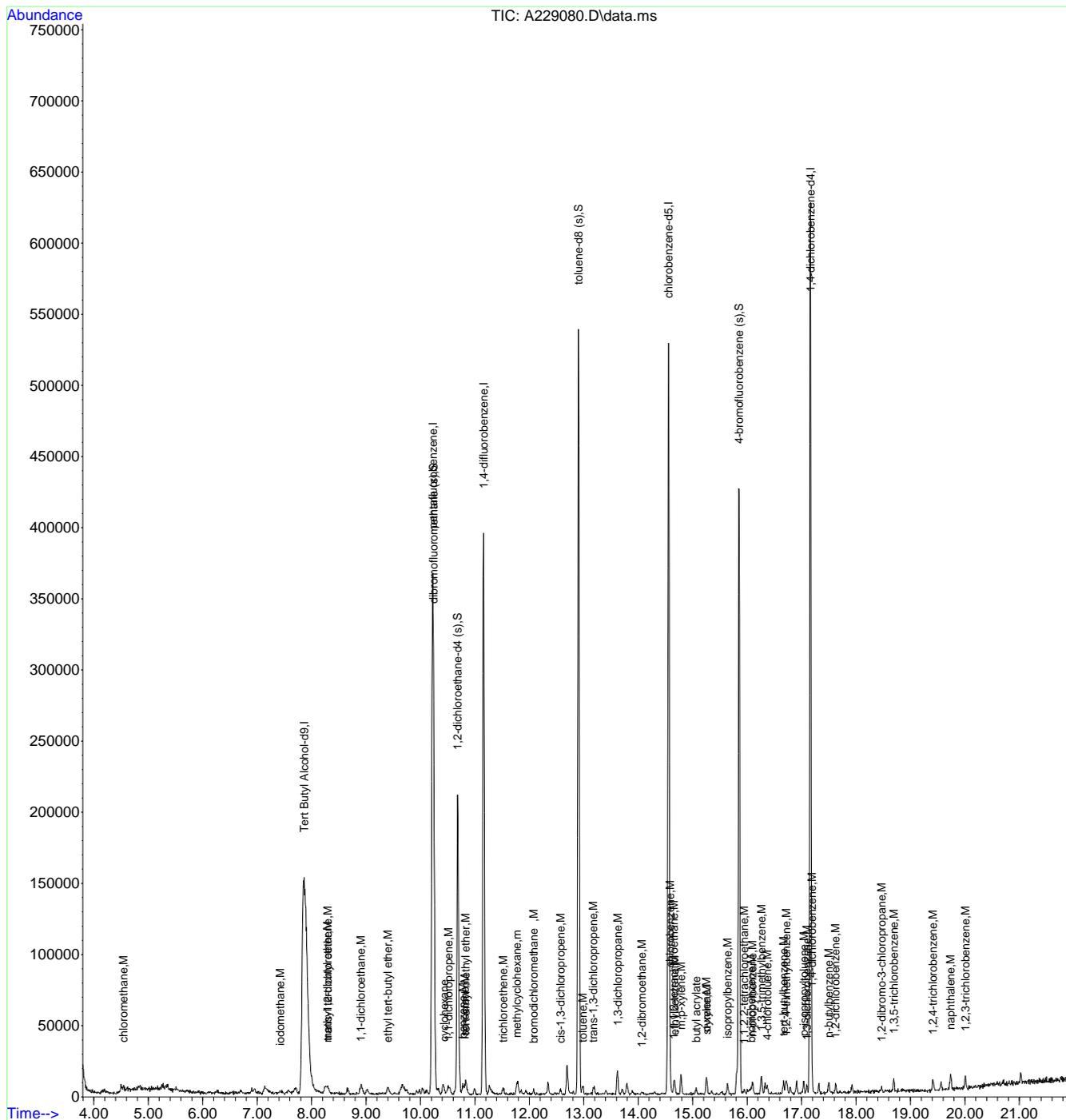
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
127) 1,2,4-trichlorobenzene	19.416	180	2502	0.46	ug/L	84
129) naphthalene	19.735	128	9369	0.52	ug/L	87
130) 1,2,3-trichlorobenzene	20.007	180	2844	0.46	ug/L	79

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229080.D  
 Acq On : 12 Jan 2017 5:03 pm  
 Operator : Gabriela  
 Sample : ic8658-0.5  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 13 15:22:56 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



7.6.2  
7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229081.D  
 Acq On : 12 Jan 2017 5:32 pm  
 Operator : Gabriela  
 Sample : ic8658-1.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 15:23:46 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.859	65	564051	500.00	ug/L	0.00
4) pentafluorobenzene	10.223	168	231474	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.159	114	335680	50.00	ug/L	0.00
84) chlorobenzene-d5	14.559	117	303824	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.163	152	168932	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.244	113	131803	49.92	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.84%
47) 1,2-dichloroethane-d4 (s)	10.683	65	177443	49.32	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	98.64%
76) toluene-d8 (s)	12.906	98	387831	49.91	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	99.82%
103) 4-bromofluorobenzene (s)	15.856	95	155890	49.77	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.54%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) chloromethane	4.527	50	6463	1.05	ug/L	88
10) vinyl chloride	4.862	62	6878	0.94	ug/L	73
11) bromomethane	5.531	94	3531	0.94	ug/L	83
12) chloroethane	5.725	64	1971	0.76	ug/L	81
18) acrolein	6.949	56	8505	9.07	ug/L	80
19) freon 113	7.158	151	3179	1.00	ug/L #	83
20) 1,1-dichloroethene	7.147	61	5476	1.01	ug/L	84
21) acetone	7.210	58	2865	4.47	ug/L #	43
24) iodomethane	7.425	142	6959	1.06	ug/L	90
25) carbon disulfide	7.597	76	12676	1.08	ug/L	75
26) methylene chloride	7.911	84	3838	1.21	ug/L #	45
28) methyl tert butyl ether	8.288	73	11453	0.93	ug/L	90
29) trans-1,2-dichloroethene	8.303	61	4145	0.99	ug/L	82
30) hexane	8.664	57	3463	1.04	ug/L	95
31) di-isopropyl ether	8.936	45	10766	1.03	ug/L	82
32) t-butyl formate	10.118	59	5443	1.22	ug/L	73
33) ethyl tert-butyl ether	9.391	59	10374	0.91	ug/L	92
34) 2-butanone	9.637	72	2755	4.71	ug/L #	14
35) 1,1-dichloroethane	8.905	63	4994	0.98	ug/L	77
36) chloroprene	9.025	53	4832	1.05	ug/L	79
37) acrylonitrile	8.241	53	7677	4.67	ug/L	80
40) 2,2-dichloropropane	9.694	77	6735	1.04	ug/L	93
41) cis-1,2-dichloroethene	9.658	96	2394	0.82	ug/L #	65
42) propionitrile	9.726	54	6878	8.95	ug/L #	59
43) bromochloromethane	9.977	128	1396	0.90	ug/L #	72
45) chloroform	10.050	83	5842	1.10	ug/L	80
49) cyclohexane	10.437	84	3878	0.82	ug/L #	86
50) 1,1,1-trichloroethane	10.338	97	6535	1.00	ug/L	79
52) tert-amyl methyl ether	10.829	73	11041	1.01	ug/L	93
55) epichlorohydrin	12.466	57	2477	4.94	ug/L	82
56) n-butyl alcohol	11.269	56	9249	41.65	ug/L	78
57) carbon tetrachloride	10.547	117	5764	1.04	ug/L	93
58) 1,1-dichloropropene	10.510	75	3382	0.95	ug/L	93
59) benzene	10.788	78	9968	1.06	ug/L	87
60) Iso-octane	10.829	57	12679	1.00	ug/L	81
61) heptane	10.992	71	1956	1.02	ug/L #	69
64) 1,2-dichloroethane	10.788	62	4653	1.06	ug/L	87
65) ethyl acrylate	11.525	55	3257	0.85	ug/L	77
66) trichloroethene	11.515	95	2335	0.93	ug/L	86
69) methylcyclohexane	11.771	83	4700	0.92	ug/L	84
70) 2-chloroethyl vinyl ether	12.346	63	8372	4.93	ug/L	89

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229081.D  
 Acq On : 12 Jan 2017 5:32 pm  
 Operator : Gabriela  
 Sample : ic8658-1.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 15:23:46 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

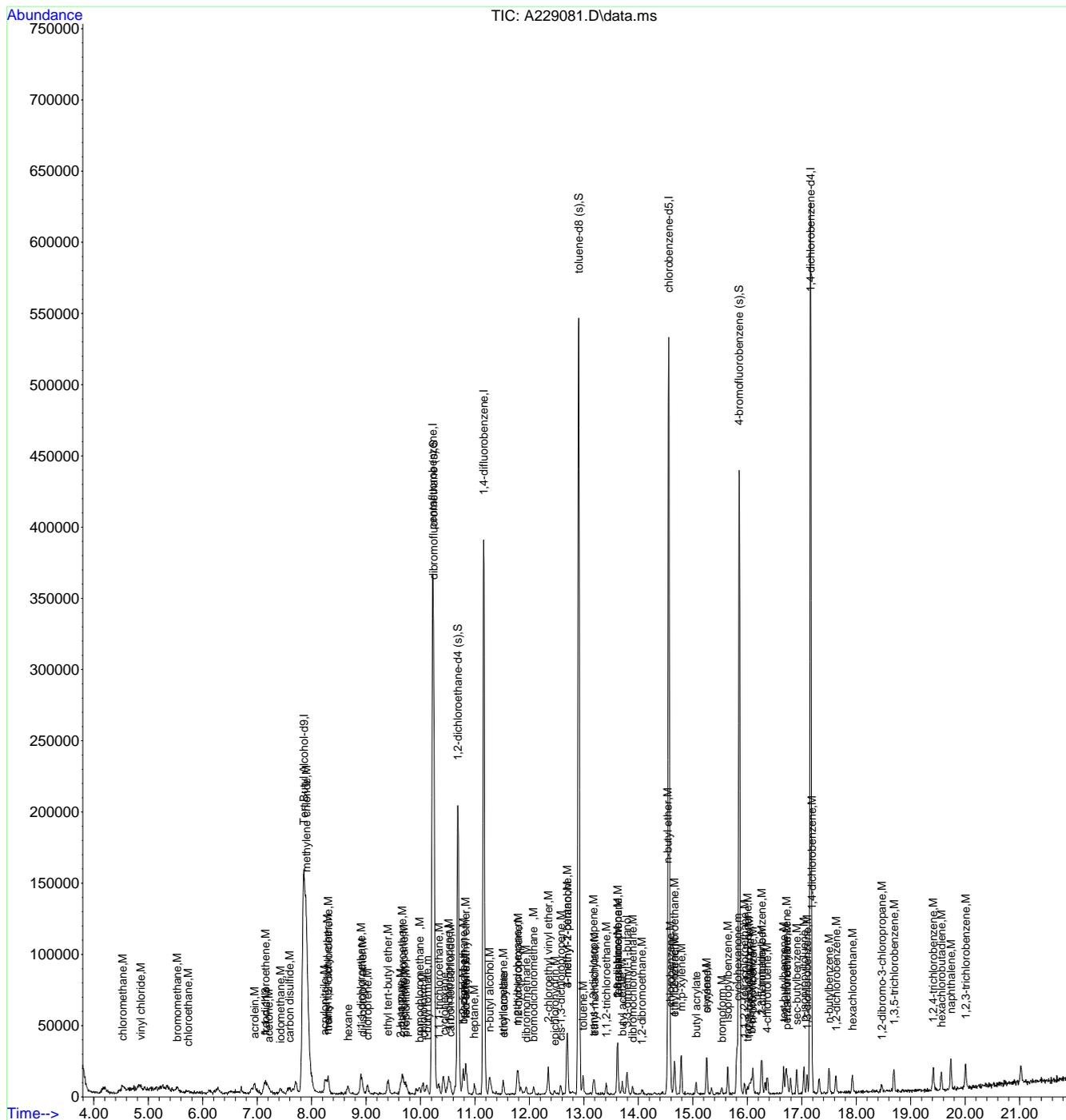
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) 1,2-dichloropropane	11.792	63	2186	0.87	ug/L	85
73) dibromomethane	11.933	93	1471	0.85	ug/L #	38
74) bromodichloromethane	12.069	83	3804	1.01	ug/L	78
75) cis-1,3-dichloropropene	12.576	75	3557	0.90	ug/L	81
77) 4-methyl-2-pentanone	12.691	58	7837	4.50	ug/L	91
78) toluene	12.984	91	9472	1.01	ug/L	96
79) 3-methyl-1-butanol	12.697	55	7378	18.92	ug/L	94
80) trans-1,3-dichloropropene	13.167	75	3344	0.88	ug/L #	68
81) ethyl methacrylate	13.199	69	4337	1.18	ug/L #	70
82) 1,1,2-trichloroethane	13.413	83	1522	0.84	ug/L #	72
83) 2-hexanone	13.622	58	7845	4.66	ug/L	85
85) tetrachloroethene	13.622	166	2649	0.80	ug/L	92
86) 1,3-dichloropropane	13.622	76	3852	1.03	ug/L	81
87) butyl acetate	13.706	56	2320	1.08	ug/L	91
88) 3,3-dimethyl-1-butanol	13.795	57	7611	8.13	ug/L	91
89) dibromochloromethane	13.900	129	3050	1.01	ug/L	95
90) 1,2-dibromoethane	14.067	107	2474	1.00	ug/L	91
91) n-butyl ether	14.532	57	9487	1.00	ug/L #	84
92) chlorobenzene	14.595	112	5690	0.93	ug/L	83
93) 1,1,1,2-tetrachloroethane	14.658	131	3532	1.01	ug/L #	69
94) ethylbenzene	14.668	91	10053	0.89	ug/L	88
95) m,p-xylene	14.789	106	8291	1.95	ug/L	99
96) o-xylene	15.254	91	9787	0.96	ug/L	92
97) styrene	15.254	104	6080	0.89	ug/L	78
98) butyl acrylate	15.061	55	5714	1.07	ug/L	96
99) bromoform	15.531	173	1846	0.79	ug/L	83
101) isopropylbenzene	15.641	105	11799	0.88	ug/L	91
102) cyclohexanone	15.814	55	15098	9.93	ug/L	97
104) bromobenzene	16.070	156	2902	1.02	ug/L	90
105) 1,1,2,2-tetrachloroethane	15.950	83	4412	1.10	ug/L	95
106) trans-1,4-dichloro-2-b...	16.007	53	1210	1.02	ug/L	92
107) 1,2,3-trichloropropane	16.028	110	1185	0.95	ug/L #	64
108) n-propylbenzene	16.101	91	13680	0.96	ug/L	95
109) 2-chlorotoluene	16.258	126	2625	0.92	ug/L #	76
110) 4-chlorotoluene	16.368	91	7771	0.93	ug/L	95
112) 1,3,5-trimethylbenzene	16.269	105	10109	0.86	ug/L	88
113) tert-butylbenzene	16.666	134	2086	0.82	ug/L #	71
114) pentachloroethane	16.729	167	2149	1.14	ug/L #	73
115) 1,2,4-trimethylbenzene	16.713	105	9867	0.87	ug/L	90
116) sec-butylbenzene	16.912	105	12568	0.78	ug/L	92
117) 1,3-dichlorobenzene	17.100	146	5293	0.96	ug/L	99
118) p-isopropyltoluene	17.043	119	10696	0.82	ug/L	91
120) 1,4-dichlorobenzene	17.189	146	5677	1.04	ug/L	89
122) 1,2-dichlorobenzene	17.634	146	5432	0.95	ug/L	90
123) n-butylbenzene	17.498	92	6965	1.11	ug/L	83
125) 1,2-dibromo-3-chloropr...	18.476	157	1383	0.93	ug/L #	65
126) 1,3,5-trichlorobenzene	18.696	180	5234	0.99	ug/L #	83
127) 1,2,4-trichlorobenzene	19.412	180	5395	0.99	ug/L #	74
128) hexachlorobutadiene	19.569	225	2874	0.95	ug/L	75
129) naphthalene	19.736	128	18003	0.99	ug/L	89
130) 1,2,3-trichlorobenzene	20.008	180	5451	0.88	ug/L	86
131) hexachloroethane	17.937	201	1968	0.74	ug/L	89

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229081.D  
 Acq On : 12 Jan 2017 5:32 pm  
 Operator : Gabriela  
 Sample : ic8658-1.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 13 15:23:46 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



7.6.3

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229082.D  
 Acq On : 12 Jan 2017 6:01 pm  
 Operator : Gabriela  
 Sample : ic8658-2.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:59:49 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:58:39 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.846	65	541519	500.00	ug/L	-0.01
4) pentafluorobenzene	10.221	168	225120	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.157	114	340969	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	309103	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.161	152	169503	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.247	113	132900	51.62	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	103.24%
47) 1,2-dichloroethane-d4 (s)	10.681	65	174750	50.35	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	100.70%
76) toluene-d8 (s)	12.904	98	387318	48.96	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	97.92%
103) 4-bromofluorobenzene (s)	15.849	95	153590	49.77	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.54%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.905	88	2481	36.88	ug/L	92
3) tertiary butyl alcohol	7.972	59	12194	10.31	ug/L	77
7) chlorodifluoromethane	4.180	51	11956	1.86	ug/L	92
8) dichlorodifluoromethane	4.185	85	16534	1.88	ug/L	98
9) chloromethane	4.525	50	11151	1.86	ug/L	87
10) vinyl chloride	4.829	62	12483	1.80	ug/L	72
11) bromomethane	5.529	94	6829	1.88	ug/L	75
12) chloroethane	5.713	64	5078	2.15	ug/L #	59
14) trichlorofluoromethane	6.272	101	16414	1.84	ug/L	99
16) ethyl ether	6.701	74	2345	1.71	ug/L #	63
18) acrolein	6.947	56	17227	19.07	ug/L	99
19) freon 113	7.146	151	5140	1.71	ug/L	87
20) 1,1-dichloroethene	7.140	61	10592	2.02	ug/L	91
21) acetone	7.193	58	5719	9.69	ug/L	88
22) allyl chloride	7.700	76	2591	1.66	ug/L #	47
23) acetonitrile	7.663	40	11294	20.65	ug/L #	1
24) iodomethane	7.423	142	12522	1.95	ug/L	93
25) carbon disulfide	7.569	76	22927	1.97	ug/L	93
26) methylene chloride	7.894	84	6261	1.87	ug/L	95
27) methyl acetate	7.700	43	5765	1.81	ug/L #	94
28) methyl tert butyl ether	8.281	73	22946	1.96	ug/L	97
29) trans-1,2-dichloroethene	8.296	61	7482	1.96	ug/L	71
30) hexane	8.657	57	6281	1.99	ug/L	91
31) di-isopropyl ether	8.913	45	18525	1.86	ug/L #	52
32) t-butyl formate	10.111	59	8169	1.83	ug/L	94
33) ethyl tert-butyl ether	9.400	59	20059	1.92	ug/L	93
34) 2-butanone	9.640	72	4533	8.44	ug/L #	68
35) 1,1-dichloroethane	8.903	63	10021	2.07	ug/L	99
36) chloroprene	9.023	53	8446	1.94	ug/L	95
37) acrylonitrile	8.239	53	14087	9.11	ug/L	86
39) ethyl acetate	9.667	45	1505	2.43	ug/L #	1
40) 2,2-dichloropropane	9.682	77	12865	2.11	ug/L	91
41) cis-1,2-dichloroethene	9.667	96	6098	2.30	ug/L	94
42) propionitrile	9.729	54	11682	19.25	ug/L	86
43) bromochloromethane	9.986	128	3025	2.07	ug/L	91
44) tetrahydrofuran	10.038	42	2902	1.73	ug/L	91
45) chloroform	10.038	83	10301	2.02	ug/L	88
49) cyclohexane	10.414	84	8019	1.80	ug/L	93
50) 1,1,1-trichloroethane	10.331	97	11678	1.94	ug/L	90
51) iso-butyl alcohol	10.493	41	5984	22.23	ug/L #	69
52) tert-amyl methyl ether	10.838	73	19021	1.86	ug/L	88

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229082.D  
 Acq On : 12 Jan 2017 6:01 pm  
 Operator : Gabriela  
 Sample : ic8658-2.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:59:49 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:58:39 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
55) epichlorohydrin	12.454	57	4266	8.82	ug/L	83
56) n-butyl alcohol	11.267	56	18576	88.62	ug/L	86
57) carbon tetrachloride	10.545	117	11208	2.05	ug/L	96
58) 1,1-dichloropropene	10.514	75	6682	1.95	ug/L	93
59) benzene	10.781	78	18200	1.98	ug/L	93
60) Iso-octane	10.822	57	22284	1.80	ug/L	87
61) heptane	10.990	71	3502	1.90	ug/L	94
63) isopropyl acetate	10.702	87	1078	1.49	ug/L #	1
64) 1,2-dichloroethane	10.781	62	8903	2.04	ug/L	95
65) ethyl acrylate	11.523	55	7368	2.00	ug/L	85
66) trichloroethene	11.508	95	4593	1.88	ug/L	77
67) 2-nitropropane	12.313	41	3916	2.36	ug/L	81
69) methylcyclohexane	11.780	83	9429	1.90	ug/L	98
70) 2-chloroethyl vinyl ether	12.344	63	16907	10.11	ug/L	94
72) 1,2-dichloropropane	11.785	63	4932	2.09	ug/L	97
73) dibromomethane	11.936	93	2900	1.71	ug/L	80
74) bromodichloromethane	12.072	83	7542	2.02	ug/L	87
75) cis-1,3-dichloropropene	12.575	75	7809	1.99	ug/L	83
77) 4-methyl-2-pentanone	12.690	58	15755	9.52	ug/L	97
78) toluene	12.988	91	18247	2.01	ug/L	79
79) 3-methyl-1-butanol	12.684	55	12057	32.66	ug/L	87
80) trans-1,3-dichloropropene	13.176	75	7759	2.09	ug/L	76
81) ethyl methacrylate	13.192	69	6725	1.82	ug/L	85
82) 1,1,2-trichloroethane	13.406	83	3534	2.05	ug/L	81
83) 2-hexanone	13.615	58	16259	10.00	ug/L	93
85) tetrachloroethene	13.621	166	4651	1.60	ug/L	90
86) 1,3-dichloropropane	13.615	76	7073	1.89	ug/L	99
87) butyl acetate	13.699	56	3993	1.82	ug/L #	68
88) 3,3-dimethyl-1-butanol	13.788	57	14833	17.14	ug/L	96
89) dibromochloromethane	13.892	129	6215	2.08	ug/L	94
90) 1,2-dibromoethane	14.070	107	4811	1.93	ug/L	99
91) n-butyl ether	14.531	57	16163	1.80	ug/L	65
92) chlorobenzene	14.599	112	11722	1.96	ug/L	91
93) 1,1,1,2-tetrachloroethane	14.661	131	6222	1.86	ug/L	97
94) ethylbenzene	14.672	91	20673	1.94	ug/L	94
95) m,p-xylene	14.787	106	15967	3.98	ug/L	84
96) o-xylene	15.247	91	17773	1.85	ug/L	95
97) styrene	15.258	104	12513	1.87	ug/L	95
98) butyl acrylate	15.064	55	9188	1.73	ug/L	93
99) bromoform	15.530	173	4012	1.78	ug/L	82
101) isopropylbenzene	15.639	105	22723	1.92	ug/L	98
102) cyclohexanone	15.807	55	26086	18.71	ug/L	94
104) bromobenzene	16.073	156	5839	2.12	ug/L #	65
105) 1,1,2,2-tetrachloroethane	15.948	83	7137	1.82	ug/L	87
106) trans-1,4-dichloro-2-b...	16.005	53	2598	2.30	ug/L #	66
107) 1,2,3-trichloropropane	16.037	110	2205	1.93	ug/L #	63
108) n-propylbenzene	16.100	91	25149	1.96	ug/L	93
109) 2-chlorotoluene	16.257	126	4962	1.85	ug/L	96
110) 4-chlorotoluene	16.366	91	15249	1.94	ug/L	97
112) 1,3,5-trimethylbenzene	16.267	105	19974	1.91	ug/L	98
113) tert-butylbenzene	16.664	134	3718	1.67	ug/L #	64
114) pentachloroethane	16.732	167	3765	1.83	ug/L	83
115) 1,2,4-trimethylbenzene	16.712	105	18383	1.81	ug/L	96
116) sec-butylbenzene	16.905	105	25001	1.79	ug/L	95
117) 1,3-dichlorobenzene	17.099	146	10219	1.93	ug/L	95
118) p-isopropyltoluene	17.041	119	22436	1.93	ug/L	93
120) 1,4-dichlorobenzene	17.193	146	10946	2.03	ug/L	93
122) 1,2-dichlorobenzene	17.622	146	11013	2.02	ug/L	81

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229082.D  
 Acq On : 12 Jan 2017 6:01 pm  
 Operator : Gabriela  
 Sample : ic8658-2.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:59:49 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:58:39 2017  
 Response via : Initial Calibration

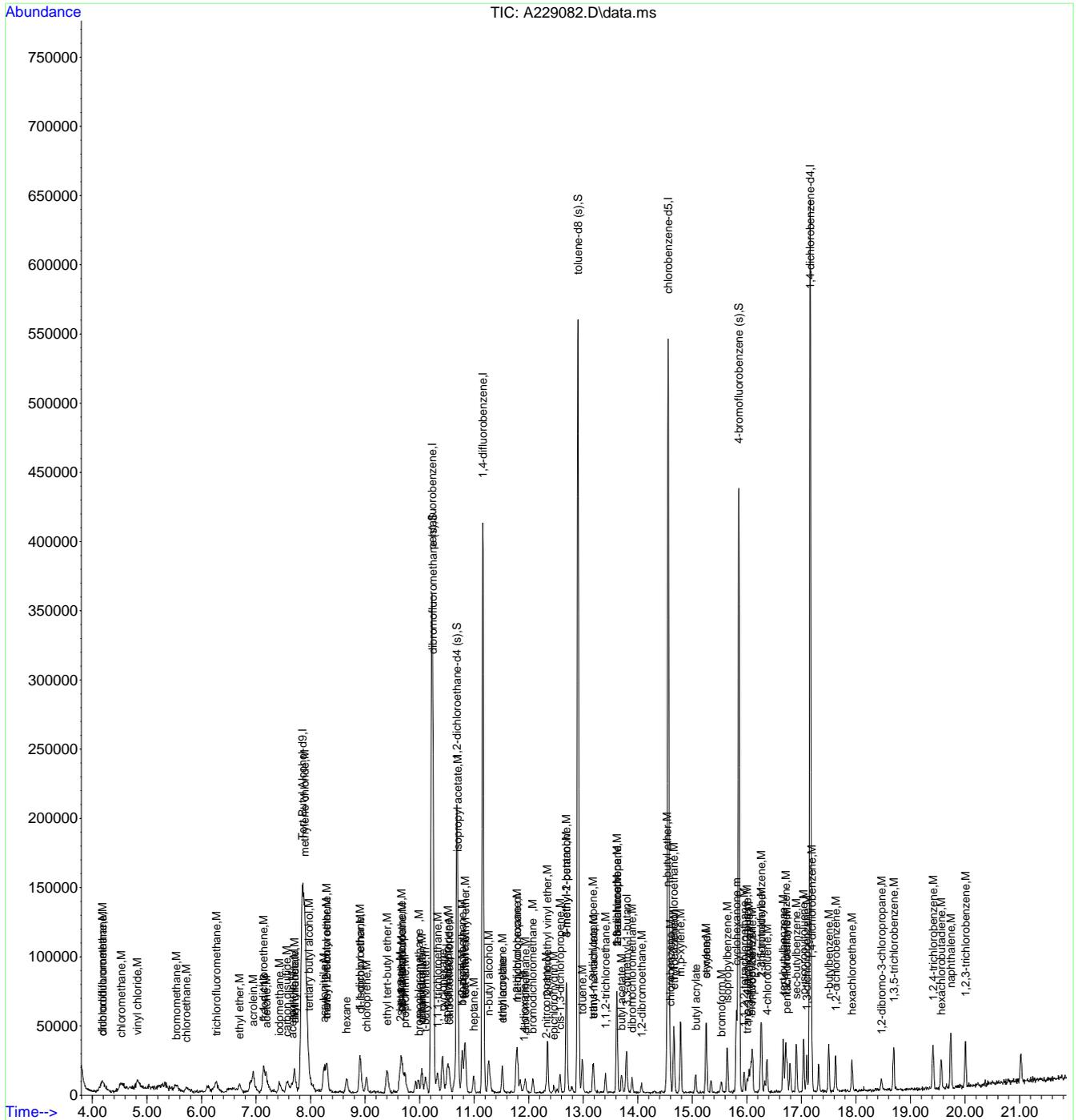
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
123) n-butylbenzene	17.501	92	10987	1.89	ug/L #	82
125) 1,2-dibromo-3-chloropr...	18.474	157	3250	2.27	ug/L #	58
126) 1,3,5-trichlorobenzene	18.689	180	10047	1.96	ug/L	84
127) 1,2,4-trichlorobenzene	19.416	180	10447	1.97	ug/L	92
128) hexachlorobutadiene	19.562	225	4588	1.61	ug/L	91
129) naphthalene	19.740	128	34046	1.93	ug/L	95
130) 1,2,3-trichlorobenzene	20.012	180	10972	1.90	ug/L	81
131) hexachloroethane	17.925	201	3326	1.45	ug/L	92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229082.D  
 Acq On : 12 Jan 2017 6:01 pm  
 Operator : Gabriela  
 Sample : ic8658-2.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 13 11:59:49 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:58:39 2017  
 Response via : Initial Calibration



7.64  
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## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229083.D  
 Acq On : 12 Jan 2017 6:30 pm  
 Operator : Gabriela  
 Sample : ic8658-5.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 12:06:36 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 12:05:48 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.846	65	551945	500.00	ug/L	-0.01
4) pentafluorobenzene	10.221	168	216458	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.157	114	326016	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	304584	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.161	152	173040	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.242	113	127004	51.14	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	102.28%
47) 1,2-dichloroethane-d4 (s)	10.686	65	172815	51.75	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	103.50%
76) toluene-d8 (s)	12.904	98	383917	50.86	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	101.72%
103) 4-bromofluorobenzene (s)	15.854	95	155769	49.47	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	98.94%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.905	88	8443	127.93	ug/L	90
3) tertiary butyl alcohol	7.977	59	30802	25.44	ug/L	99
7) chlorodifluoromethane	4.190	51	30171	4.93	ug/L	77
8) dichlorodifluoromethane	4.180	85	43382	5.17	ug/L	80
9) chloromethane	4.530	50	26007	4.54	ug/L	90
10) vinyl chloride	4.834	62	32644	4.96	ug/L	87
11) bromomethane	5.529	94	16561	4.78	ug/L	96
12) chloroethane	5.723	64	11798	5.15	ug/L	72
14) trichlorofluoromethane	6.272	101	41062	4.83	ug/L	98
16) ethyl ether	6.701	74	6740	5.23	ug/L #	51
18) acrolein	6.947	56	42337	49.03	ug/L	96
19) freon 113	7.130	151	14403	5.06	ug/L	90
20) 1,1-dichloroethene	7.145	61	24034	4.76	ug/L	89
21) acetone	7.192	58	13425	23.76	ug/L #	65
22) allyl chloride	7.700	76	5759	3.93	ug/L #	73
23) acetonitrile	7.700	40	27225	51.53	ug/L	91
24) iodomethane	7.433	142	30078	4.89	ug/L	87
25) carbon disulfide	7.585	76	55225	4.93	ug/L	97
26) methylene chloride	7.893	84	15872	4.97	ug/L	86
27) methyl acetate	7.695	43	14591	4.83	ug/L	95
28) methyl tert butyl ether	8.280	73	52738	4.70	ug/L	96
29) trans-1,2-dichloroethene	8.306	61	17259	4.71	ug/L	90
30) hexane	8.662	57	13988	4.61	ug/L	97
31) di-isopropyl ether	8.913	45	47669	5.03	ug/L	83
32) t-butyl formate	10.106	59	19941	4.70	ug/L	98
33) ethyl tert-butyl ether	9.405	59	49680	4.98	ug/L	95
34) 2-butanone	9.630	72	11294	22.31	ug/L #	76
35) 1,1-dichloroethane	8.898	63	23121	4.96	ug/L	95
36) chloroprene	9.018	53	19528	4.68	ug/L	87
37) acrylonitrile	8.233	53	35969	24.48	ug/L	94
38) vinyl acetate	8.903	86	2166	4.53	ug/L #	36
39) ethyl acetate	9.656	45	2300	3.75	ug/L #	77
40) 2,2-dichloropropane	9.687	77	29175	4.95	ug/L	96
41) cis-1,2-dichloroethene	9.666	96	11872	4.57	ug/L	98
42) propionitrile	9.719	54	31440	54.13	ug/L #	58
43) bromochloromethane	9.980	128	7576	5.37	ug/L	88
44) tetrahydrofuran	10.032	42	7555	4.77	ug/L	96
45) chloroform	10.043	83	24646	5.03	ug/L	93
48) methacrylonitrile	9.928	67	6515	4.88	ug/L #	77
49) cyclohexane	10.419	84	20427	4.82	ug/L	95
50) 1,1,1-trichloroethane	10.331	97	26201	4.54	ug/L	87

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229083.D  
 Acq On : 12 Jan 2017 6:30 pm  
 Operator : Gabriela  
 Sample : ic8658-5.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 12:06:36 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 12:05:48 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.487	41	12296	46.86	ug/L	92
52) tert-amyl methyl ether	10.838	73	47156	4.83	ug/L	89
55) epichlorohydrin	12.449	57	10756	23.61	ug/L	89
56) n-butyl alcohol	11.267	56	49391	249.99	ug/L	97
57) carbon tetrachloride	10.545	117	24700	4.72	ug/L	88
58) 1,1-dichloropropene	10.514	75	15329	4.69	ug/L	90
59) benzene	10.775	78	42112	4.80	ug/L	98
60) Iso-octane	10.822	57	53409	4.55	ug/L	98
61) heptane	10.990	71	7909	4.51	ug/L #	78
63) isopropyl acetate	10.712	87	3535	5.29	ug/L #	75
64) 1,2-dichloroethane	10.770	62	21565	5.16	ug/L	84
65) ethyl acrylate	11.523	55	17380	4.93	ug/L	91
66) trichloroethene	11.513	95	11606	5.01	ug/L	86
67) 2-nitropropane	12.318	41	8050	4.94	ug/L #	63
69) methylcyclohexane	11.774	83	21809	4.63	ug/L	98
70) 2-chloroethyl vinyl ether	12.344	63	38446	24.01	ug/L	98
71) methyl methacrylate	11.795	100	3455	4.75	ug/L #	81
72) 1,2-dichloropropane	11.790	63	11524	5.07	ug/L	96
73) dibromomethane	11.936	93	8205	5.16	ug/L	84
74) bromodichloromethane	12.072	83	17471	4.89	ug/L	90
75) cis-1,3-dichloropropene	12.574	75	17515	4.68	ug/L	92
77) 4-methyl-2-pentanone	12.695	58	36919	23.47	ug/L	96
78) toluene	12.982	91	42125	4.84	ug/L	98
79) 3-methyl-1-butanol	12.689	55	32113	93.12	ug/L	91
80) trans-1,3-dichloropropene	13.181	75	17165	4.81	ug/L	81
81) ethyl methacrylate	13.186	69	16544	4.74	ug/L	96
82) 1,1,2-trichloroethane	13.406	83	7439	4.50	ug/L	77
83) 2-hexanone	13.615	58	38001	24.44	ug/L	91
85) tetrachloroethene	13.626	166	12920	4.63	ug/L	95
86) 1,3-dichloropropane	13.610	76	16572	4.52	ug/L	95
87) butyl acetate	13.704	56	10500	4.90	ug/L #	76
88) 3,3-dimethyl-1-butanol	13.793	57	37974	45.35	ug/L	97
89) dibromochloromethane	13.903	129	13748	4.65	ug/L	89
90) 1,2-dibromoethane	14.070	107	12027	4.91	ug/L	85
91) n-butyl ether	14.525	57	40030	4.57	ug/L	86
92) chlorobenzene	14.593	112	26999	4.59	ug/L	88
93) 1,1,1,2-tetrachloroethane	14.661	131	13207	4.03	ug/L	80
94) ethylbenzene	14.666	91	48158	4.59	ug/L	92
95) m,p-xylene	14.787	106	35009	8.87	ug/L	83
96) o-xylene	15.247	91	41803	4.46	ug/L	96
97) styrene	15.257	104	29477	4.49	ug/L	95
98) butyl acrylate	15.059	55	23637	4.58	ug/L	96
99) bromoform	15.529	173	10488	4.80	ug/L	99
101) isopropylbenzene	15.639	105	52969	4.40	ug/L	96
102) cyclohexanone	15.812	55	70529	49.94	ug/L	97
104) bromobenzene	16.068	156	13309	4.71	ug/L	87
105) 1,1,2,2-tetrachloroethane	15.953	83	17849	4.50	ug/L	90
106) trans-1,4-dichloro-2-b...	16.000	53	5849	4.98	ug/L #	79
107) 1,2,3-trichloropropane	16.037	110	5294	4.56	ug/L	91
108) n-propylbenzene	16.099	91	60171	4.60	ug/L	99
109) 2-chlorotoluene	16.251	126	12640	4.67	ug/L #	75
110) 4-chlorotoluene	16.366	91	37181	4.64	ug/L	98
112) 1,3,5-trimethylbenzene	16.272	105	48016	4.52	ug/L	95
113) tert-butylbenzene	16.664	134	9052	4.05	ug/L	95
114) pentachloroethane	16.737	167	8682	4.19	ug/L	95
115) 1,2,4-trimethylbenzene	16.706	105	45468	4.44	ug/L	91
116) sec-butylbenzene	16.905	105	60806	4.33	ug/L	98
117) 1,3-dichlorobenzene	17.104	146	25199	4.67	ug/L	92

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229083.D  
 Acq On : 12 Jan 2017 6:30 pm  
 Operator : Gabriela  
 Sample : ic8658-5.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 12:06:36 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 12:05:48 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.036	119	51954	4.40	ug/L	97
120) 1,4-dichlorobenzene	17.192	146	23913	4.33	ug/L	90
122) 1,2-dichlorobenzene	17.627	146	25091	4.50	ug/L	86
123) n-butylbenzene	17.501	92	26944	4.56	ug/L	99
125) 1,2-dibromo-3-chloropr...	18.474	157	6569	4.43	ug/L	80
126) 1,3,5-trichlorobenzene	18.688	180	24652	4.71	ug/L	94
127) 1,2,4-trichlorobenzene	19.421	180	25592	4.73	ug/L	99
128) hexachlorobutadiene	19.567	225	12615	4.44	ug/L	88
129) naphthalene	19.740	128	83478	4.65	ug/L	98
130) 1,2,3-trichlorobenzene	20.012	180	26028	4.43	ug/L	96
131) hexachloroethane	17.930	201	9099	4.03	ug/L	93

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

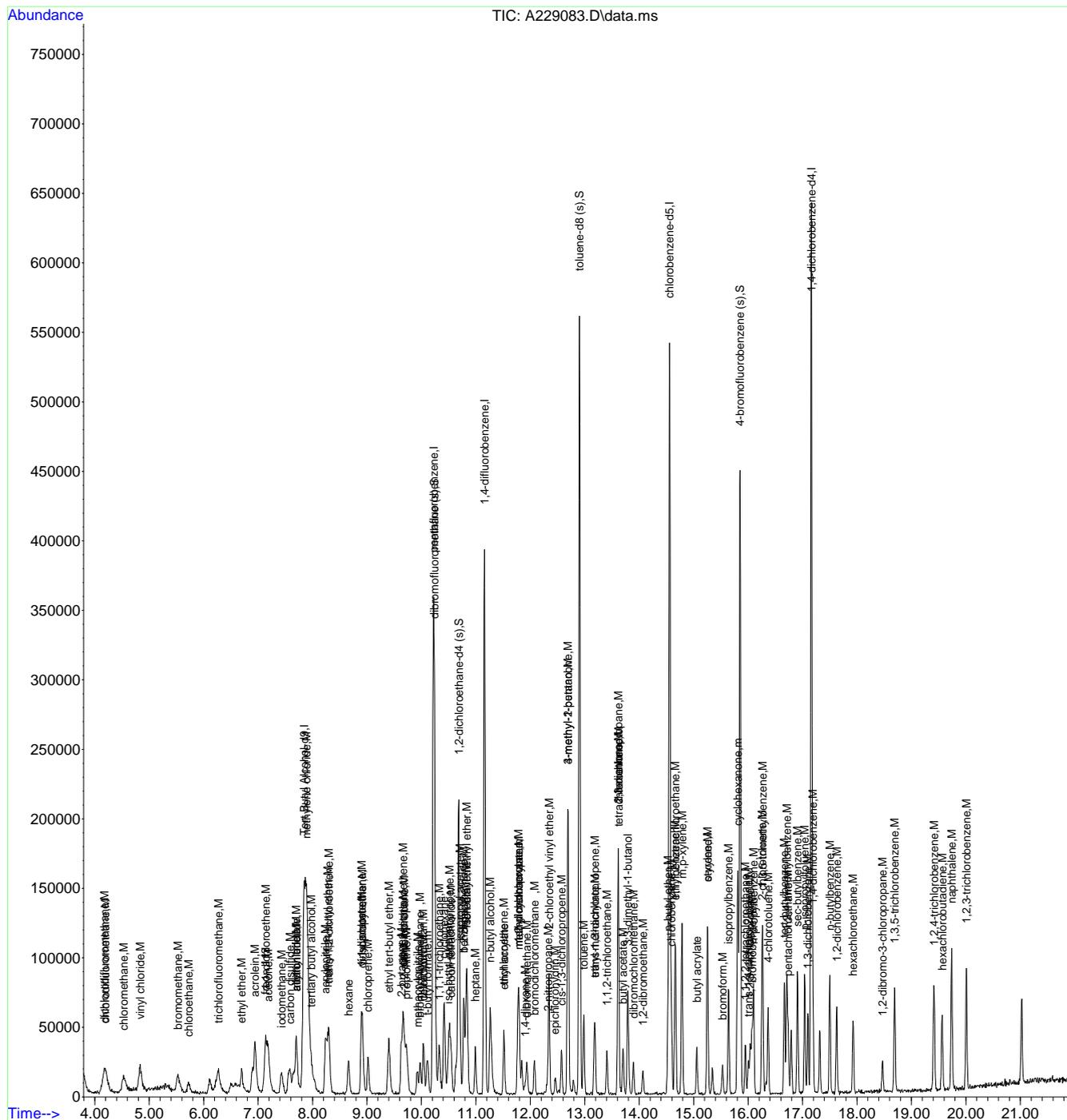
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229083.D  
 Acq On : 12 Jan 2017 6:30 pm  
 Operator : Gabriela  
 Sample : ic8658-5.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 13 12:06:36 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 12:05:48 2017  
 Response via : Initial Calibration



7.6.5  
7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229084.D  
 Acq On : 12 Jan 2017 6:59 pm  
 Operator : Gabriela  
 Sample : ic8658-10.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:29:24 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	563657	500.00	ug/L	0.00
4) pentafluorobenzene	10.222	168	234021	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	350468	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	304781	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	171476	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.243	113	134355	50.34	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	100.68%
47) 1,2-dichloroethane-d4 (s)	10.687	65	181289	49.84	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	99.68%
76) toluene-d8 (s)	12.905	98	406424	50.10	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	100.20%
103) 4-bromofluorobenzene (s)	15.855	95	157704	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
2) 1,4-dioxane	11.916	88	14271	197.58	ug/L	71
3) tertiary butyl alcohol	7.988	59	57686	44.58	ug/L	95
7) chlorodifluoromethane	4.176	51	65891	9.46	ug/L	91
8) dichlorodifluoromethane	4.181	85	91180	9.27	ug/L	96
9) chloromethane	4.542	50	52631	8.45	ug/L	96
10) vinyl chloride	4.835	62	67206	9.11	ug/L	97
11) bromomethane	5.525	94	34862	9.14	ug/L	89
12) chloroethane	5.724	64	24416	9.26	ug/L	91
14) trichlorofluoromethane	6.268	101	87631	8.94	ug/L	94
16) ethyl ether	6.702	74	13534	9.39	ug/L #	75
18) acrolein	6.942	56	88150	93.01	ug/L	99
19) freon 113	7.157	151	29536	9.20	ug/L	99
20) 1,1-dichloroethene	7.141	61	42881	7.81	ug/L	96
21) acetone	7.193	58	28755	44.40	ug/L	95
22) allyl chloride	7.706	76	14200	8.24	ug/L	95
23) acetonitrile	7.706	40	52837	86.20	ug/L #	86
24) iodomethane	7.429	142	57612	8.66	ug/L	99
25) carbon disulfide	7.565	76	95036	8.04	ug/L	92
26) methylene chloride	7.894	84	29313	9.14	ug/L	85
27) methyl acetate	7.696	43	30602	8.72	ug/L	94
28) methyl tert butyl ether	8.276	73	111023	8.96	ug/L	99
29) trans-1,2-dichloroethene	8.302	61	35842	8.49	ug/L	92
30) hexane	8.663	57	32376	9.63	ug/L	98
31) di-isopropyl ether	8.919	45	99438	9.45	ug/L	84
32) t-butyl formate	10.117	59	44186	9.84	ug/L	97
33) ethyl tert-butyl ether	9.406	59	103076	8.98	ug/L	98
34) 2-butanone	9.631	72	27673	46.75	ug/L #	85
35) 1,1-dichloroethane	8.898	63	47688	9.28	ug/L	89
36) chloroprene	9.029	53	43821	9.38	ug/L	89
37) acrylonitrile	8.234	53	76835	46.19	ug/L	97
38) vinyl acetate	8.893	86	4802	9.05	ug/L #	16
39) ethyl acetate	9.657	45	7212	10.32	ug/L	98
40) 2,2-dichloropropane	9.683	77	58659	8.95	ug/L	97
41) cis-1,2-dichloroethene	9.667	96	26280	8.87	ug/L	96
42) propionitrile	9.720	54	69132	89.03	ug/L	75
43) bromochloromethane	9.976	128	14136	9.01	ug/L	97
44) tetrahydrofuran	10.044	42	15630	8.42	ug/L	98
45) chloroform	10.044	83	47927	8.94	ug/L	97
48) methacrylonitrile	9.924	67	14386	9.41	ug/L #	78
49) cyclohexane	10.426	84	43865	9.14	ug/L	95
50) 1,1,1-trichloroethane	10.332	97	57626	8.76	ug/L	89

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229084.D  
 Acq On : 12 Jan 2017 6:59 pm  
 Operator : Gabriela  
 Sample : ic8658-10.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:29:24 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.483	41	25995	87.81	ug/L	93
52) tert-amyl methyl ether	10.834	73	99303	8.98	ug/L	97
55) epichlorohydrin	12.455	57	22487	42.96	ug/L	85
56) n-butyl alcohol	11.262	56	100394	432.97	ug/L	93
57) carbon tetrachloride	10.541	117	54003	9.36	ug/L	82
58) 1,1-dichloropropene	10.509	75	30470	8.18	ug/L	94
59) benzene	10.781	78	86664	8.81	ug/L	94
60) Iso-octane	10.823	57	113482	8.57	ug/L	99
61) heptane	10.991	71	18724	9.35	ug/L	93
63) isopropyl acetate	10.708	87	7222	9.53	ug/L #	90
64) 1,2-dichloroethane	10.776	62	44493	9.74	ug/L	98
65) ethyl acrylate	11.519	55	39640	9.96	ug/L	96
66) trichloroethene	11.514	95	22453	8.52	ug/L	88
67) 2-nitropropane	12.314	41	17515	9.91	ug/L	90
69) methylcyclohexane	11.770	83	48749	9.11	ug/L	94
70) 2-chloroethyl vinyl ether	12.340	63	83960	47.35	ug/L	95
71) methyl methacrylate	11.801	100	7467	9.47	ug/L #	84
72) 1,2-dichloropropane	11.786	63	22171	8.49	ug/L	94
73) dibromomethane	11.937	93	17349	9.65	ug/L	86
74) bromodichloromethane	12.073	83	36379	9.22	ug/L	98
75) cis-1,3-dichloropropene	12.570	75	37091	9.00	ug/L	96
77) 4-methyl-2-pentanone	12.696	58	85775	47.22	ug/L	96
78) toluene	12.978	91	89182	9.10	ug/L	97
79) 3-methyl-1-butanol	12.685	55	73119	179.57	ug/L	97
80) trans-1,3-dichloropropene	13.171	75	36848	9.29	ug/L	99
81) ethyl methacrylate	13.187	69	34897	9.09	ug/L	86
82) 1,1,2-trichloroethane	13.407	83	17107	9.00	ug/L	91
83) 2-hexanone	13.616	58	82185	46.79	ug/L	100
85) tetrachloroethene	13.621	166	26790	8.02	ug/L	90
86) 1,3-dichloropropane	13.611	76	36673	9.82	ug/L	89
87) butyl acetate	13.705	56	22717	10.50	ug/L	87
88) 3,3-dimethyl-1-butanol	13.789	57	83818	89.21	ug/L	98
89) dibromochloromethane	13.893	129	28205	9.28	ug/L	90
90) 1,2-dibromoethane	14.066	107	22497	9.06	ug/L	96
91) n-butyl ether	14.526	57	86703	9.09	ug/L	95
92) chlorobenzene	14.594	112	57157	9.32	ug/L	90
93) 1,1,1,2-tetrachloroethane	14.657	131	32752	9.34	ug/L	94
94) ethylbenzene	14.667	91	101338	8.92	ug/L	94
95) m,p-xylene	14.788	106	74376	17.44	ug/L	94
96) o-xylene	15.253	91	91562	8.99	ug/L	92
97) styrene	15.258	104	63614	9.33	ug/L	99
98) butyl acrylate	15.060	55	52596	9.82	ug/L	96
99) bromoform	15.530	173	21820	9.27	ug/L	96
101) isopropylbenzene	15.640	105	114536	8.44	ug/L	99
102) cyclohexanone	15.807	55	140871	91.25	ug/L	99
104) bromobenzene	16.074	156	25710	8.94	ug/L	87
105) 1,1,2,2-tetrachloroethane	15.949	83	38720	9.48	ug/L	99
106) trans-1,4-dichloro-2-b...	16.006	53	10345	8.57	ug/L	96
107) 1,2,3-trichloropropene	16.038	110	11222	8.91	ug/L	92
108) n-propylbenzene	16.100	91	124090	8.58	ug/L	100
109) 2-chlorotoluene	16.257	126	26552	9.13	ug/L #	83
110) 4-chlorotoluene	16.367	91	74996	8.82	ug/L	95
112) 1,3,5-trimethylbenzene	16.268	105	101907	8.58	ug/L	98
113) tert-butylbenzene	16.670	134	19865	7.72	ug/L #	85
114) pentachloroethane	16.738	167	20426	10.71	ug/L	95
115) 1,2,4-trimethylbenzene	16.712	105	99893	8.67	ug/L	92
116) sec-butylbenzene	16.906	105	134749	8.22	ug/L	96
117) 1,3-dichlorobenzene	17.094	146	48561	8.67	ug/L	96

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229084.D  
 Acq On : 12 Jan 2017 6:59 pm  
 Operator : Gabriela  
 Sample : ic8658-10.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:29:24 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

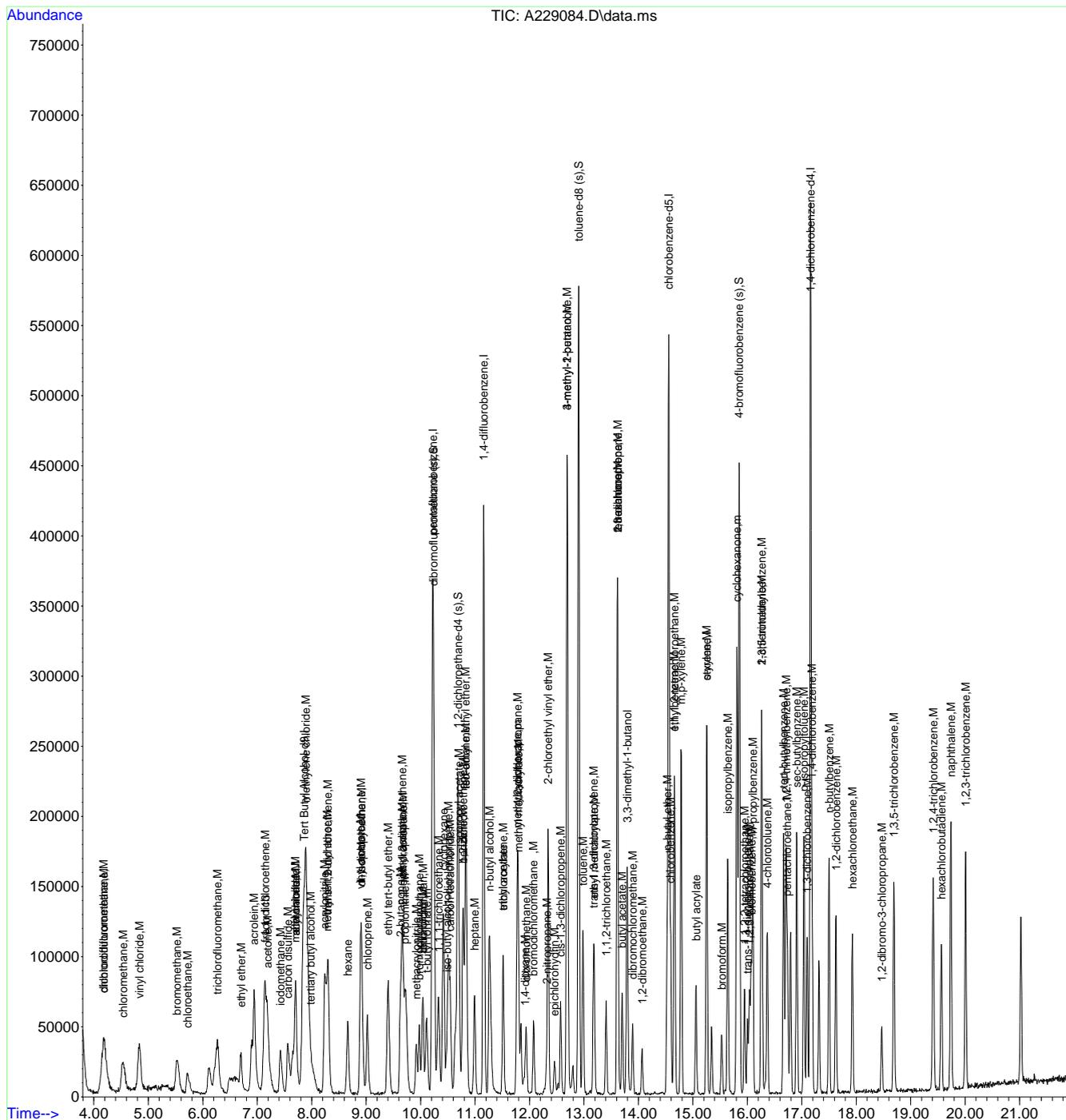
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.042	119	113653	8.59	ug/L	95
120) 1,4-dichlorobenzene	17.188	146	52389	9.41	ug/L	96
122) 1,2-dichlorobenzene	17.628	146	54908	9.48	ug/L	90
123) n-butylbenzene	17.502	92	54012	8.49	ug/L	92
125) 1,2-dibromo-3-chloropr...	18.470	157	13492	8.98	ug/L	89
126) 1,3,5-trichlorobenzene	18.695	180	48633	9.06	ug/L	91
127) 1,2,4-trichlorobenzene	19.416	180	50302	9.09	ug/L	91
128) hexachlorobutadiene	19.563	225	24698	8.02	ug/L	92
129) naphthalene	19.741	128	169011	9.16	ug/L	96
130) 1,2,3-trichlorobenzene	20.007	180	53544	8.56	ug/L	92
131) hexachloroethane	17.931	201	19798	7.36	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229084.D  
 Acq On : 12 Jan 2017 6:59 pm  
 Operator : Gabriela  
 Sample : ic8658-10.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 13 11:29:24 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



9.9.7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229085.D  
 Acq On : 12 Jan 2017 7:28 pm  
 Operator : Gabriela  
 Sample : ic8658-20.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:29:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.854	65	595944	500.00	ug/L	0.00
4) pentafluorobenzene	10.218	168	238077	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.160	114	352482	50.00	ug/L	0.00
84) chlorobenzene-d5	14.559	117	302882	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.164	152	178614	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.244	113	133456	49.15	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	98.30%
47) 1,2-dichloroethane-d4 (s)	10.684	65	183598	49.61	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	99.22%
76) toluene-d8 (s)	12.901	98	401848	49.25	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	98.50%
103) 4-bromofluorobenzene (s)	15.851	95	161058	48.63	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	97.26%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.902	88	39195	513.24	ug/L	91
3) tertiary butyl alcohol	7.985	59	130512	95.40	ug/L	96
7) chlorodifluoromethane	4.172	51	128790	18.18	ug/L	94
8) dichlorodifluoromethane	4.183	85	172784	17.27	ug/L	93
9) chloromethane	4.533	50	107502	16.97	ug/L	97
10) vinyl chloride	4.836	62	132227	17.63	ug/L	98
11) bromomethane	5.527	94	66166	17.05	ug/L	97
12) chloroethane	5.720	64	46298	17.26	ug/L	85
14) trichlorofluoromethane	6.264	101	166574	16.70	ug/L	92
16) ethyl ether	6.693	74	26753	18.25	ug/L #	83
18) acrolein	6.939	56	180398	187.09	ug/L	95
19) freon 113	7.143	151	58756	18.00	ug/L	97
20) 1,1-dichloroethene	7.143	61	98962	17.71	ug/L	97
21) acetone	7.195	58	59807	90.78	ug/L	100
22) allyl chloride	7.708	76	30516	17.40	ug/L	95
23) acetonitrile	7.655	40	112364	180.18	ug/L #	13
24) iodomethane	7.425	142	124284	18.36	ug/L	95
25) carbon disulfide	7.561	76	214968	17.87	ug/L	99
26) methylene chloride	7.891	84	61396	18.82	ug/L	94
27) methyl acetate	7.692	43	63986	17.92	ug/L	98
28) methyl tert butyl ether	8.278	73	230727	18.31	ug/L	99
29) trans-1,2-dichloroethene	8.304	61	78502	18.27	ug/L	90
30) hexane	8.660	57	61886	18.10	ug/L	97
31) di-isopropyl ether	8.916	45	196230	18.34	ug/L	86
32) t-butyl formate	10.108	59	87414	19.13	ug/L	99
33) ethyl tert-butyl ether	9.397	59	213773	18.30	ug/L	95
34) 2-butanone	9.627	72	54163	89.94	ug/L	91
35) 1,1-dichloroethane	8.900	63	96324	18.42	ug/L	99
36) chloroprene	9.015	53	89855	18.90	ug/L	96
37) acrylonitrile	8.231	53	156692	92.60	ug/L	95
38) vinyl acetate	8.895	86	9985	18.49	ug/L #	74
39) ethyl acetate	9.669	45	12707	17.88	ug/L #	67
40) 2,2-dichloropropane	9.679	77	124546	18.68	ug/L	94
41) cis-1,2-dichloroethene	9.653	96	56316	18.68	ug/L	98
42) propionitrile	9.721	54	146152	185.01	ug/L	71
43) bromochloromethane	9.978	128	29586	18.53	ug/L	90
44) tetrahydrofuran	10.030	42	35110	18.59	ug/L	97
45) chloroform	10.040	83	102737	18.83	ug/L	94
48) methacrylonitrile	9.920	67	25313	16.28	ug/L	96
49) cyclohexane	10.417	84	86451	17.70	ug/L	100
50) 1,1,1-trichloroethane	10.328	97	123262	18.41	ug/L	94

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229085.D  
 Acq On : 12 Jan 2017 7:28 pm  
 Operator : Gabriela  
 Sample : ic8658-20.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:29:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.490	41	57210	189.96	ug/L	96
52) tert-amyl methyl ether	10.830	73	205774	18.28	ug/L	95
55) epichlorohydrin	12.462	57	49426	93.90	ug/L	95
56) n-butyl alcohol	11.259	56	219369	940.66	ug/L	96
57) carbon tetrachloride	10.537	117	110983	19.12	ug/L	97
58) 1,1-dichloropropene	10.506	75	70041	18.71	ug/L	95
59) benzene	10.778	78	189303	19.14	ug/L	96
60) Iso-octane	10.825	57	229708	17.26	ug/L	98
61) heptane	10.992	71	36607	18.17	ug/L	93
63) isopropyl acetate	10.704	87	15344	20.14	ug/L #	89
64) 1,2-dichloroethane	10.773	62	90982	19.80	ug/L	95
65) ethyl acrylate	11.520	55	74788	18.69	ug/L	96
66) trichloroethene	11.510	95	48245	18.21	ug/L	95
67) 2-nitropropane	12.315	41	34173	19.23	ug/L	86
69) methylcyclohexane	11.771	83	96357	17.91	ug/L	99
70) 2-chloroethyl vinyl ether	12.342	63	174365	97.77	ug/L	98
71) methyl methacrylate	11.803	100	15792	19.91	ug/L #	50
72) 1,2-dichloropropane	11.787	63	49904	19.00	ug/L	84
73) dibromomethane	11.939	93	35743	19.77	ug/L	93
74) bromodichloromethane	12.075	83	77218	19.46	ug/L	95
75) cis-1,3-dichloropropene	12.572	75	78804	19.01	ug/L	97
77) 4-methyl-2-pentanone	12.692	58	171988	94.15	ug/L	98
78) toluene	12.980	91	183599	18.63	ug/L	98
79) 3-methyl-1-butanol	12.692	55	157768	385.24	ug/L	98
80) trans-1,3-dichloropropene	13.173	75	75000	18.80	ug/L	99
81) ethyl methacrylate	13.189	69	73392	19.02	ug/L	98
82) 1,1,2-trichloroethane	13.408	83	35884	18.78	ug/L	92
83) 2-hexanone	13.612	58	168328	95.29	ug/L	97
85) tetrachloroethene	13.623	166	56940	17.16	ug/L	93
86) 1,3-dichloropropane	13.612	76	75626	20.37	ug/L	96
87) butyl acetate	13.701	56	42957	19.98	ug/L	88
88) 3,3-dimethyl-1-butanol	13.790	57	183929	196.99	ug/L	100
89) dibromochloromethane	13.895	129	59894	19.83	ug/L	98
90) 1,2-dibromoethane	14.067	107	49933	20.22	ug/L	98
91) n-butyl ether	14.528	57	183397	19.36	ug/L	97
92) chlorobenzene	14.596	112	119608	19.63	ug/L	93
93) 1,1,1,2-tetrachloroethane	14.653	131	67116	19.26	ug/L	94
94) ethylbenzene	14.664	91	215907	19.12	ug/L	97
95) m,p-xylene	14.784	106	163430	38.55	ug/L	100
96) o-xylene	15.249	91	195982	19.37	ug/L	99
97) styrene	15.255	104	134816	19.90	ug/L	94
98) butyl acrylate	15.056	55	106642	20.03	ug/L	98
99) bromoform	15.532	173	46478	19.88	ug/L	96
101) isopropylbenzene	15.642	105	252499	17.86	ug/L	99
102) cyclohexanone	15.809	55	311663	193.82	ug/L	99
104) bromobenzene	16.071	156	56240	18.77	ug/L	95
105) 1,1,2,2-tetrachloroethane	15.945	83	77537	18.22	ug/L	93
106) trans-1,4-dichloro-2-b...	16.003	53	23430	18.64	ug/L	98
107) 1,2,3-trichloropropane	16.034	110	24099	18.36	ug/L	95
108) n-propylbenzene	16.102	91	272488	18.09	ug/L	98
109) 2-chlorotoluene	16.259	126	53572	17.68	ug/L	97
110) 4-chlorotoluene	16.369	91	158375	17.88	ug/L	98
112) 1,3,5-trimethylbenzene	16.269	105	211017	17.05	ug/L	96
113) tert-butylbenzene	16.667	134	45654	17.03	ug/L	94
114) pentachloroethane	16.735	167	43988	22.15	ug/L	95
115) 1,2,4-trimethylbenzene	16.709	105	214219	17.85	ug/L	99
116) sec-butylbenzene	16.907	105	291994	17.11	ug/L	96
117) 1,3-dichlorobenzene	17.096	146	105950	18.17	ug/L	92

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229085.D  
 Acq On : 12 Jan 2017 7:28 pm  
 Operator : Gabriela  
 Sample : ic8658-20.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:29:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.038	119	243641	17.69	ug/L	97
120) 1,4-dichlorobenzene	17.190	146	108728	18.75	ug/L	95
122) 1,2-dichlorobenzene	17.629	146	109589	18.16	ug/L	99
123) n-butylbenzene	17.498	92	118136	17.83	ug/L	97
125) 1,2-dibromo-3-chloropr...	18.471	157	29142	18.62	ug/L	98
126) 1,3,5-trichlorobenzene	18.691	180	101043	18.07	ug/L	98
127) 1,2,4-trichlorobenzene	19.418	180	107771	18.69	ug/L	92
128) hexachlorobutadiene	19.564	225	54726	17.07	ug/L	97
129) naphthalene	19.737	128	360921	18.77	ug/L	99
130) 1,2,3-trichlorobenzene	20.009	180	118754	18.23	ug/L	98
131) hexachloroethane	17.927	201	46526	16.61	ug/L	98

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

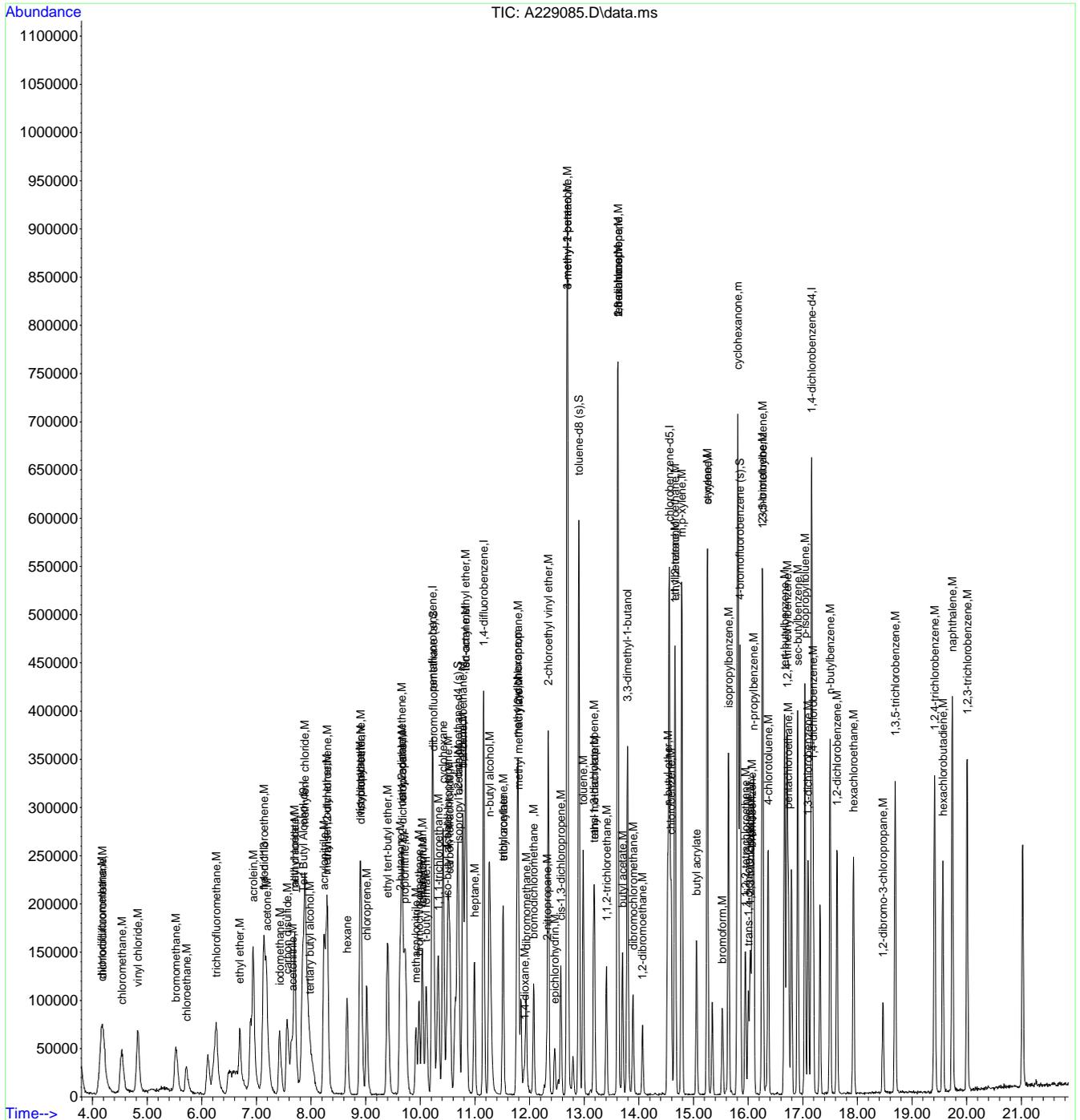
7.6.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229085.D  
 Acq On : 12 Jan 2017 7:28 pm  
 Operator : Gabriela  
 Sample : ic8658-20.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 13 11:29:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



7.6.7  
7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229086.D  
 Acq On : 12 Jan 2017 7:57 pm  
 Operator : Gabriela  
 Sample : icc8658-50.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 13 11:26:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.861	65	605508	500.00	ug/L	0.00
4) pentafluorobenzene	10.219	168	242812	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.161	114	374820	50.00	ug/L	0.00
84) chlorobenzene-d5	14.560	117	333284	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.160	152	183479	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.240	113	138473	50.00	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	100.00%
47) 1,2-dichloroethane-d4 (s)	10.685	65	188713	50.00	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	100.00%
76) toluene-d8 (s)	12.902	98	433802	50.00	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	100.00%
103) 4-bromofluorobenzene (s)	15.852	95	170108	50.00	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	100.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.898	88	96992	1250.00	ug/L	100
3) tertiary butyl alcohol	7.976	59	347510	250.00	ug/L	100
7) chlorodifluoromethane	4.179	51	361331	50.00	ug/L	100
8) dichlorodifluoromethane	4.163	85	510177	50.00	ug/L	100
9) chloromethane	4.550	50	323051	50.00	ug/L	100
10) vinyl chloride	4.832	62	382551	50.00	ug/L	100
11) bromomethane	5.523	94	197940	50.00	ug/L	100
12) chloroethane	5.716	64	136773	50.00	ug/L	100
14) trichlorofluoromethane	6.260	101	508515	50.00	ug/L	100
16) ethyl ether	6.699	74	74736	50.00	ug/L	100
18) acrolein	6.940	56	491693	500.00	ug/L	100
19) freon 113	7.144	151	166502	50.00	ug/L	100
20) 1,1-dichloroethene	7.139	61	284919	50.00	ug/L	100
21) acetone	7.186	58	167974	250.00	ug/L	100
22) allyl chloride	7.704	76	89441	50.00	ug/L	100
23) acetonitrile	7.693	40	318006	500.00	ug/L	100
24) iodomethane	7.426	142	345143	50.00	ug/L	100
25) carbon disulfide	7.562	76	613573	50.00	ug/L	100
26) methylene chloride	7.892	84	166397	50.00	ug/L	100
27) methyl acetate	7.693	43	182050	50.00	ug/L	100
28) methyl tert butyl ether	8.274	73	642659	50.00	ug/L	100
29) trans-1,2-dichloroethene	8.300	61	219134	50.00	ug/L	100
30) hexane	8.656	57	174332	50.00	ug/L	100
31) di-isopropyl ether	8.922	45	545690	50.00	ug/L	100
32) t-butyl formate	10.110	59	233050	50.00	ug/L	100
33) ethyl tert-butyl ether	9.403	59	595715	50.00	ug/L	100
34) 2-butanone	9.634	72	153549	250.00	ug/L	100
35) 1,1-dichloroethane	8.901	63	266613	50.00	ug/L	100
36) chloroprene	9.022	53	242474	50.00	ug/L	100
37) acrylonitrile	8.237	53	431462	250.00	ug/L	100
38) vinyl acetate	8.896	86	27532	50.00	ug/L	100
39) ethyl acetate	9.665	45	36243	50.00	ug/L	100
40) 2,2-dichloropropane	9.686	77	339979	50.00	ug/L	100
41) cis-1,2-dichloroethene	9.660	96	153729	50.00	ug/L	100
42) propionitrile	9.728	54	402846	500.00	ug/L	100
43) bromochloromethane	9.979	128	81417	50.00	ug/L	100
44) tetrahydrofuran	10.031	42	96287	50.00	ug/L	100
45) chloroform	10.042	83	278243	50.00	ug/L	100
48) methacrylonitrile	9.927	67	79310	50.00	ug/L	100
49) cyclohexane	10.418	84	249021	50.00	ug/L	100
50) 1,1,1-trichloroethane	10.329	97	341383	50.00	ug/L	100

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229086.D  
 Acq On : 12 Jan 2017 7:57 pm  
 Operator : Gabriela  
 Sample : icc8658-50.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 13 11:26:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.486	41	153577	500.00	ug/L	100
52) tert-amyl methyl ether	10.837	73	573903	50.00	ug/L	100
55) epichlorohydrin	12.463	57	139939	250.00	ug/L	100
56) n-butyl alcohol	11.265	56	619965	2500.00	ug/L	100
57) carbon tetrachloride	10.544	117	308681	50.00	ug/L	100
58) 1,1-dichloropropene	10.507	75	199081	50.00	ug/L	100
59) benzene	10.779	78	525847	50.00	ug/L	100
60) Iso-octane	10.826	57	707704	50.00	ug/L	100
61) heptane	10.993	71	107100	50.00	ug/L	100
63) isopropyl acetate	10.706	87	40504	50.00	ug/L	100
64) 1,2-dichloroethane	10.774	62	244277	50.00	ug/L	100
65) ethyl acrylate	11.516	55	212803	50.00	ug/L	100
66) trichloroethene	11.511	95	140841	50.00	ug/L	100
67) 2-nitropropane	12.311	41	94476	50.00	ug/L	100
69) methylcyclohexane	11.773	83	286101	50.00	ug/L	100
70) 2-chloroethyl vinyl ether	12.343	63	474111	250.00	ug/L	100
71) methyl methacrylate	11.794	100	42170	50.00	ug/L	100
72) 1,2-dichloropropane	11.788	63	139613	50.00	ug/L	100
73) dibromomethane	11.935	93	96115	50.00	ug/L	100
74) bromodichloromethane	12.076	83	210980	50.00	ug/L	100
75) cis-1,3-dichloropropene	12.573	75	220388	50.00	ug/L	100
77) 4-methyl-2-pentanone	12.693	58	485629	250.00	ug/L	100
78) toluene	12.981	91	523843	50.00	ug/L	100
79) 3-methyl-1-butanol	12.693	55	435485	1000.00	ug/L	100
80) trans-1,3-dichloropropene	13.174	75	212093	50.00	ug/L	100
81) ethyl methacrylate	13.190	69	205214	50.00	ug/L	100
82) 1,1,2-trichloroethane	13.405	83	101606	50.00	ug/L	100
83) 2-hexanone	13.614	58	469599	250.00	ug/L	100
85) tetrachloroethene	13.619	166	182612	50.00	ug/L	100
86) 1,3-dichloropropane	13.614	76	204253	50.00	ug/L	100
87) butyl acetate	13.703	56	118283	50.00	ug/L	100
88) 3,3-dimethyl-1-butanol	13.792	57	513717	500.00	ug/L	100
89) dibromochloromethane	13.891	129	166179	50.00	ug/L	100
90) 1,2-dibromoethane	14.069	107	135835	50.00	ug/L	100
91) n-butyl ether	14.529	57	521269	50.00	ug/L	100
92) chlorobenzene	14.592	112	335174	50.00	ug/L	100
93) 1,1,1,2-tetrachloroethane	14.660	131	191713	50.00	ug/L	100
94) ethylbenzene	14.665	91	621323	50.00	ug/L	100
95) m,p-xylene	14.785	106	466474	100.00	ug/L	100
96) o-xylene	15.251	91	556733	50.00	ug/L	100
97) styrene	15.256	104	372698	50.00	ug/L	100
98) butyl acrylate	15.057	55	292927	50.00	ug/L	100
99) bromoform	15.528	173	128638	50.00	ug/L	100
101) isopropylbenzene	15.643	105	726275	50.00	ug/L	100
102) cyclohexanone	15.810	55	825892	500.00	ug/L	100
104) bromobenzene	16.072	156	153886	50.00	ug/L	100
105) 1,1,2,2-tetrachloroethane	15.952	83	218572	50.00	ug/L	100
106) trans-1,4-dichloro-2-b...	16.004	53	64554	50.00	ug/L	100
107) 1,2,3-trichloropropane	16.035	110	67408	50.00	ug/L	100
108) n-propylbenzene	16.103	91	773732	50.00	ug/L	100
109) 2-chlorotoluene	16.255	126	155601	50.00	ug/L	100
110) 4-chlorotoluene	16.365	91	454877	50.00	ug/L	100
112) 1,3,5-trimethylbenzene	16.265	105	635510	50.00	ug/L	100
113) tert-butylbenzene	16.668	134	137711	50.00	ug/L	100
114) pentachloroethane	16.736	167	101990	50.00	ug/L	100
115) 1,2,4-trimethylbenzene	16.710	105	616357	50.00	ug/L	100
116) sec-butylbenzene	16.909	105	876651	50.00	ug/L	100
117) 1,3-dichlorobenzene	17.097	146	299510	50.00	ug/L	100

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229086.D  
 Acq On : 12 Jan 2017 7:57 pm  
 Operator : Gabriela  
 Sample : icc8658-50.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 13 11:26:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

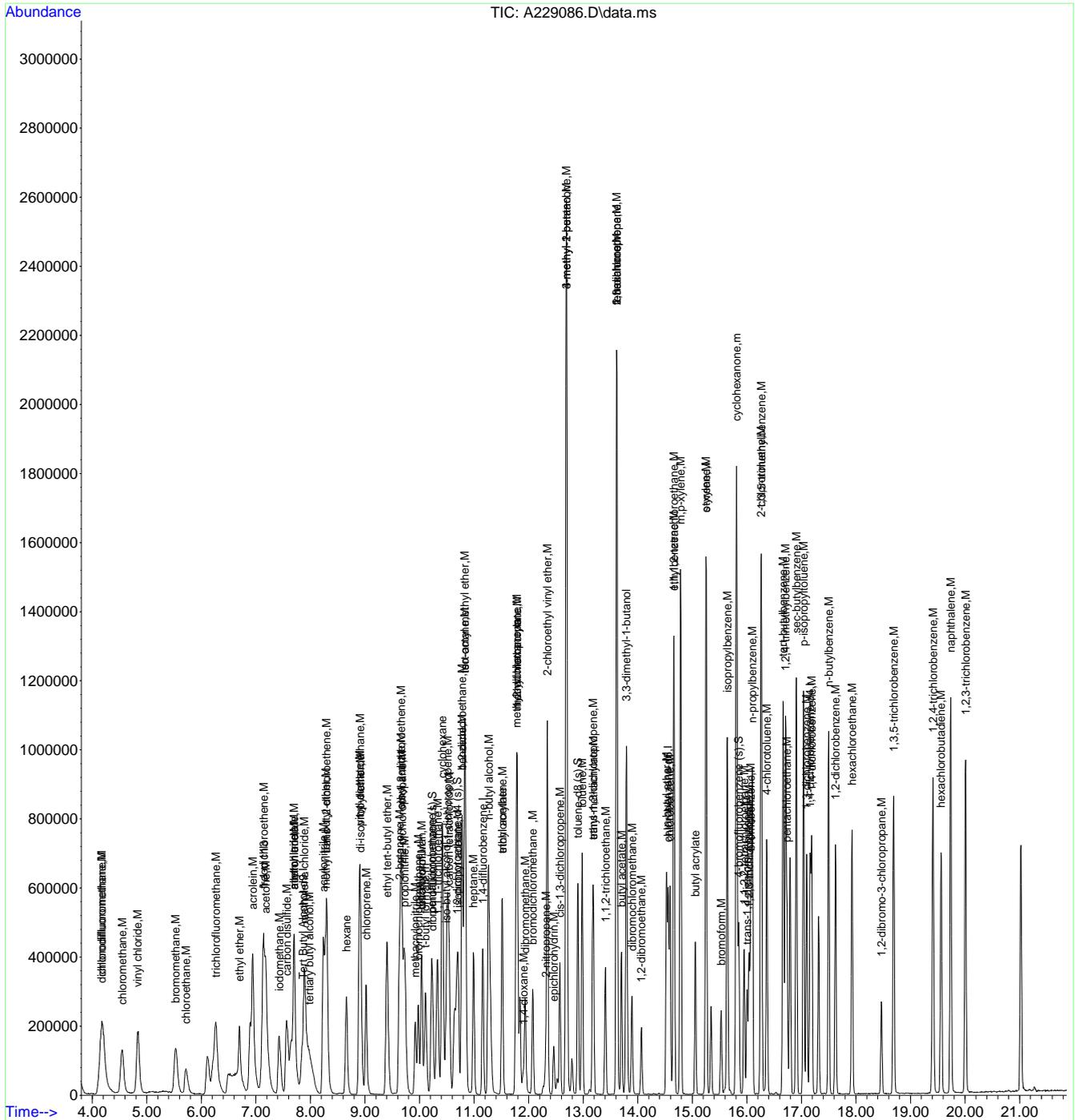
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.039	119	707451	50.00	ug/L	100
120) 1,4-dichlorobenzene	17.191	146	297856	50.00	ug/L	100
122) 1,2-dichlorobenzene	17.625	146	310029	50.00	ug/L	100
123) n-butylbenzene	17.500	92	340278	50.00	ug/L	100
125) 1,2-dibromo-3-chloropr...	18.467	157	80387	50.00	ug/L	100
126) 1,3,5-trichlorobenzene	18.692	180	287125	50.00	ug/L	100
127) 1,2,4-trichlorobenzene	19.414	180	296133	50.00	ug/L	100
128) hexachlorobutadiene	19.566	225	164689	50.00	ug/L	100
129) naphthalene	19.738	128	987643	50.00	ug/L	100
130) 1,2,3-trichlorobenzene	20.010	180	334634	50.00	ug/L	100
131) hexachloroethane	17.929	201	143894	50.00	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229086.D  
 Acq On : 12 Jan 2017 7:57 pm  
 Operator : Gabriela  
 Sample : icc8658-50.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 13 11:26:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



8.9.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229087.D  
 Acq On : 12 Jan 2017 8:27 pm  
 Operator : Gabriela  
 Sample : ic8658-100.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:30:26 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.868	65	621085	500.00	ug/L	0.00
4) pentafluorobenzene	10.221	168	251872	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.157	114	391218	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	356793	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.161	152	200945	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.242	113	143231	49.86	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.72%
47) 1,2-dichloroethane-d4 (s)	10.681	65	191615	48.94	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	97.88%
76) toluene-d8 (s)	12.904	98	457930	50.57	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	101.14%
103) 4-bromofluorobenzene (s)	15.854	95	178286	47.85	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	95.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.895	88	227125	2853.70	ug/L	91
3) tertiary butyl alcohol	7.993	59	707682	496.34	ug/L	94
7) chlorodifluoromethane	4.191	51	716549	95.59	ug/L	96
8) dichlorodifluoromethane	4.170	85	985731	93.13	ug/L	92
9) chloromethane	4.557	50	763345	113.90	ug/L	98
10) vinyl chloride	4.850	62	837403	105.51	ug/L	99
11) bromomethane	5.540	94	446877	108.82	ug/L	91
12) chloroethane	5.707	64	274019	96.57	ug/L	93
14) trichlorofluoromethane	6.251	101	1071513	101.57	ug/L	99
16) ethyl ether	6.706	74	160401	103.45	ug/L	84
18) acrolein	6.942	56	1087668	1066.26	ug/L	99
19) freon 113	7.135	151	364371	105.48	ug/L	99
20) 1,1-dichloroethene	7.146	61	647373	109.52	ug/L	97
21) acetone	7.188	58	353662	507.43	ug/L	97
22) allyl chloride	7.700	76	181077	97.59	ug/L #	78
23) acetonitrile	7.648	40	650868	986.55	ug/L #	20
24) iodomethane	7.428	142	798724	111.55	ug/L	96
25) carbon disulfide	7.580	76	1444220	113.46	ug/L	99
26) methylene chloride	7.894	84	404076	117.05	ug/L	95
27) methyl acetate	7.695	43	380292	100.69	ug/L	99
28) methyl tert butyl ether	8.281	73	1360283	102.03	ug/L	99
29) trans-1,2-dichloroethene	8.296	61	438795	96.52	ug/L	96
30) hexane	8.663	57	363986	100.64	ug/L	99
31) di-isopropyl ether	8.919	45	1128350	99.67	ug/L	92
32) t-butyl formate	10.106	59	504167	104.28	ug/L	97
33) ethyl tert-butyl ether	9.405	59	1252417	101.34	ug/L	98
34) 2-butanone	9.630	72	313318	491.78	ug/L #	86
35) 1,1-dichloroethane	8.893	63	553445	100.06	ug/L	98
36) chloroprene	9.018	53	495135	98.43	ug/L	98
37) acrylonitrile	8.234	53	912331	509.61	ug/L	99
38) vinyl acetate	8.893	86	59216	103.67	ug/L #	45
39) ethyl acetate	9.661	45	71421	94.99	ug/L #	60
40) 2,2-dichloropropane	9.688	77	682661	96.79	ug/L	96
41) cis-1,2-dichloroethene	9.661	96	316804	99.33	ug/L	91
42) propionitrile	9.724	54	804395	962.48	ug/L	77
43) bromochloromethane	9.975	128	165963	98.26	ug/L	85
44) tetrahydrofuran	10.033	42	199100	99.67	ug/L	99
45) chloroform	10.038	83	569799	98.71	ug/L	97
48) methacrylonitrile	9.928	67	160964	97.83	ug/L	93
49) cyclohexane	10.420	84	533207	103.21	ug/L	92
50) 1,1,1-trichloroethane	10.331	97	693699	97.95	ug/L	95

7.6.9  
 7

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229087.D  
 Acq On : 12 Jan 2017 8:27 pm  
 Operator : Gabriela  
 Sample : ic8658-100.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:30:26 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.493	41	323170	1014.30	ug/L	97
52) tert-amyl methyl ether	10.838	73	1218778	102.36	ug/L	97
55) epichlorohydrin	12.460	57	287821	492.64	ug/L	92
56) n-butyl alcohol	11.267	56	1329157	5135.15	ug/L	97
57) carbon tetrachloride	10.535	117	630375	97.83	ug/L	97
58) 1,1-dichloropropene	10.509	75	395157	95.09	ug/L	95
59) benzene	10.781	78	1056696	96.26	ug/L	99
60) Iso-octane	10.828	57	1561575	105.70	ug/L	100
61) heptane	10.990	71	219633	98.24	ug/L	88
63) isopropyl acetate	10.707	87	82224	97.25	ug/L	96
64) 1,2-dichloroethane	10.775	62	483566	94.83	ug/L	98
65) ethyl acrylate	11.518	55	444982	100.17	ug/L	97
66) trichloroethene	11.513	95	283490	96.42	ug/L	95
67) 2-nitropropane	12.313	41	190781	96.74	ug/L	86
69) methylcyclohexane	11.774	83	587078	98.30	ug/L	99
70) 2-chloroethyl vinyl ether	12.345	63	996849	503.61	ug/L	99
71) methyl methacrylate	11.801	100	93780	106.53	ug/L #	69
72) 1,2-dichloropropane	11.790	63	277244	95.13	ug/L	97
73) dibromomethane	11.937	93	201688	100.52	ug/L	95
74) bromodichloromethane	12.073	83	434765	98.72	ug/L	98
75) cis-1,3-dichloropropene	12.575	75	473623	102.95	ug/L	99
77) 4-methyl-2-pentanone	12.695	58	978251	482.49	ug/L	94
78) toluene	12.983	91	1082896	99.03	ug/L	97
79) 3-methyl-1-butanol	12.690	55	871395	1917.10	ug/L	100
80) trans-1,3-dichloropropene	13.171	75	462887	104.55	ug/L	92
81) ethyl methacrylate	13.192	69	429737	100.32	ug/L	98
82) 1,1,2-trichloroethane	13.406	83	217056	102.34	ug/L	95
83) 2-hexanone	13.615	58	967987	493.73	ug/L	96
85) tetrachloroethene	13.621	166	365805	93.56	ug/L	98
86) 1,3-dichloropropane	13.615	76	434962	99.46	ug/L	97
87) butyl acetate	13.704	56	252613	99.75	ug/L	96
88) 3,3-dimethyl-1-butanol	13.793	57	1039250	944.85	ug/L	99
89) dibromochloromethane	13.893	129	354143	99.53	ug/L	96
90) 1,2-dibromoethane	14.065	107	297054	102.14	ug/L	96
91) n-butyl ether	14.525	57	1023744	91.73	ug/L	99
92) chlorobenzene	14.593	112	716354	99.82	ug/L	98
93) 1,1,1,2-tetrachloroethane	14.656	131	390285	95.08	ug/L	96
94) ethylbenzene	14.667	91	1273049	95.70	ug/L	99
95) m,p-xylene	14.787	106	950642	190.37	ug/L	99
96) o-xylene	15.252	91	1125216	94.40	ug/L	99
97) styrene	15.258	104	800810	100.36	ug/L	99
98) butyl acrylate	15.054	55	617299	98.42	ug/L	98
99) bromoform	15.530	173	280021	101.67	ug/L	95
101) isopropylbenzene	15.640	105	1467318	92.24	ug/L	98
102) cyclohexanone	15.812	55	1727567	954.97	ug/L	99
104) bromobenzene	16.074	156	341599	101.34	ug/L	97
105) 1,1,2,2-tetrachloroethane	15.948	83	459832	96.05	ug/L	95
106) trans-1,4-dichloro-2-b...	16.006	53	139606	98.73	ug/L	91
107) 1,2,3-trichloropropane	16.037	110	140767	95.34	ug/L	93
108) n-propylbenzene	16.100	91	1562719	92.21	ug/L	99
109) 2-chlorotoluene	16.257	126	334753	98.22	ug/L	94
110) 4-chlorotoluene	16.366	91	941383	94.48	ug/L	96
112) 1,3,5-trimethylbenzene	16.267	105	1306945	93.89	ug/L	95
113) tert-butylbenzene	16.665	134	292816	97.07	ug/L	89
114) pentachloroethane	16.738	167	236440	105.84	ug/L	97
115) 1,2,4-trimethylbenzene	16.712	105	1268438	93.95	ug/L	98
116) sec-butylbenzene	16.910	105	1772481	92.31	ug/L	99
117) 1,3-dichlorobenzene	17.099	146	640392	97.61	ug/L	95

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229087.D  
 Acq On : 12 Jan 2017 8:27 pm  
 Operator : Gabriela  
 Sample : ic8658-100.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:30:26 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.041	119	1482400	95.66	ug/L	98
120) 1,4-dichlorobenzene	17.188	146	646529	99.10	ug/L	99
122) 1,2-dichlorobenzene	17.627	146	670246	98.70	ug/L	97
123) n-butylbenzene	17.501	92	710033	95.26	ug/L	96
125) 1,2-dibromo-3-chloropr...	18.469	157	173598	98.59	ug/L	93
126) 1,3,5-trichlorobenzene	18.694	180	656969	104.46	ug/L	94
127) 1,2,4-trichlorobenzene	19.416	180	660741	101.86	ug/L	99
128) hexachlorobutadiene	19.562	225	374389	103.79	ug/L	99
129) naphthalene	19.740	128	2177900	100.67	ug/L	99
130) 1,2,3-trichlorobenzene	20.007	180	758340	103.46	ug/L	98
131) hexachloroethane	17.930	201	313700	99.53	ug/L	99

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

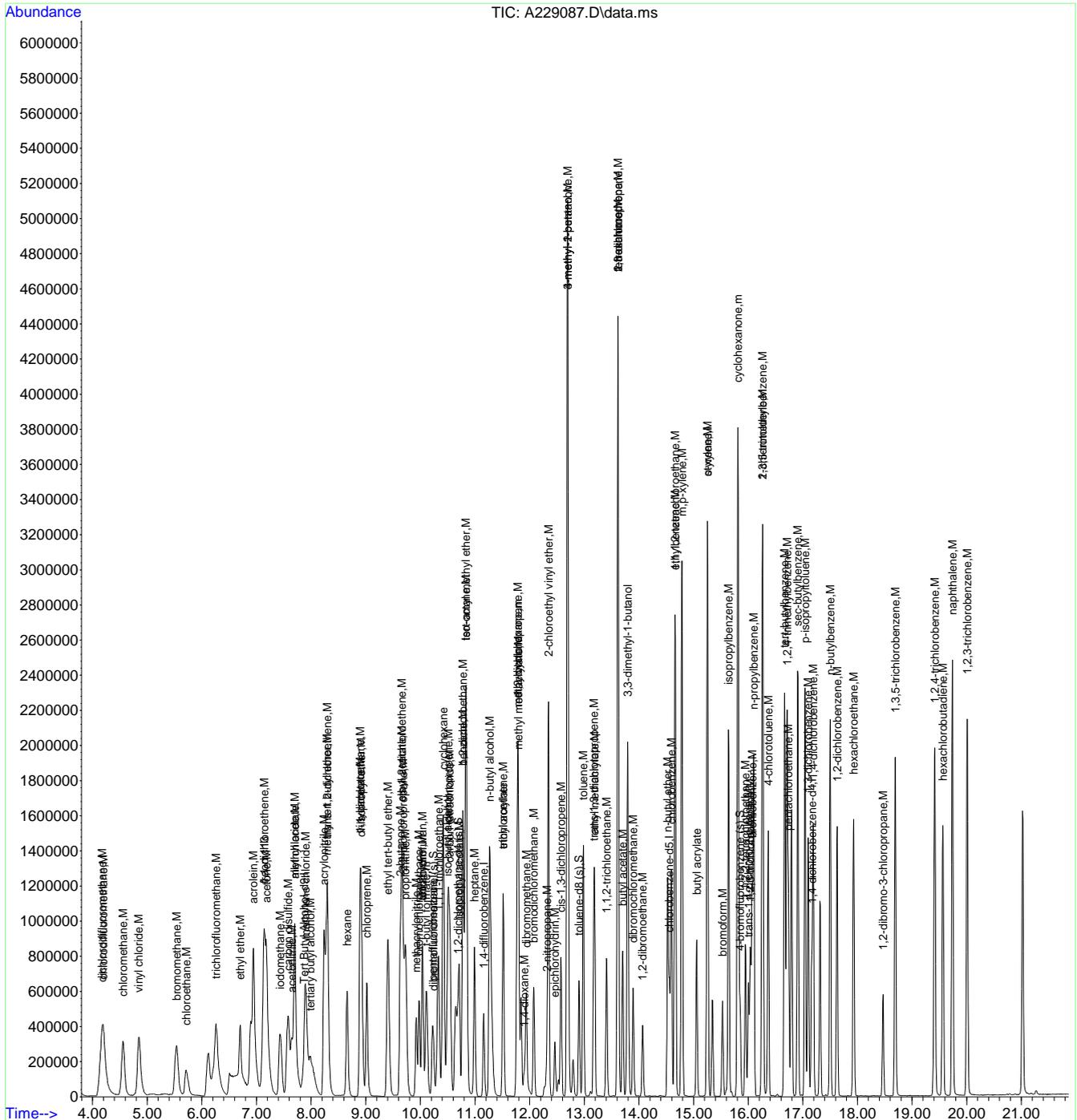
7.6.9

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229087.D  
 Acq On : 12 Jan 2017 8:27 pm  
 Operator : Gabriela  
 Sample : ic8658-100.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 13 11:30:26 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



697

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229088.D  
 Acq On : 12 Jan 2017 8:56 pm  
 Operator : Gabriela  
 Sample : ic8658-200.0  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 13 11:30:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.874	65	682479	500.00	ug/L	0.01
4) pentafluorobenzene	10.222	168	276626	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.159	114	452641	50.00	ug/L	0.00
84) chlorobenzene-d5	14.558	117	412109	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.163	152	238499	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.243	113	164448	52.12	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	104.24%
47) 1,2-dichloroethane-d4 (s)	10.683	65	210451	48.94	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	97.88%
76) toluene-d8 (s)	12.905	98	512512	48.92	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	97.84%
103) 4-bromofluorobenzene (s)	15.850	95	209835	47.45	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	94.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.901	88	395098	4517.62	ug/L	96
3) tertiary butyl alcohol	7.994	59	1407647	898.46	ug/L	88
7) chlorodifluoromethane	4.192	51	1666818	202.46	ug/L	97
8) dichlorodifluoromethane	4.187	85	2101442	180.78	ug/L	95
9) chloromethane	4.569	50	1781942	242.09	ug/L	99
10) vinyl chloride	4.861	62	1897651	217.71	ug/L	98
11) bromomethane	5.541	94	1073176	237.95	ug/L	94
12) chloroethane	5.719	64	647733	207.85	ug/L	96
14) trichlorofluoromethane	6.268	101	2402064	207.31	ug/L	98
16) ethyl ether	6.702	74	348084	204.41	ug/L	# 79
18) acrolein	6.948	56	2531164	2259.30	ug/L	99
19) freon 113	7.142	151	838305	220.97	ug/L	98
20) 1,1-dichloroethene	7.157	61	1591671	245.18	ug/L	95
21) acetone	7.194	58	786379	1027.32	ug/L	# 86
22) allyl chloride	7.707	76	513380	251.91	ug/L	# 66
23) acetonitrile	7.701	40	1240228	1711.64	ug/L	# 79
24) iodomethane	7.440	142	1929094	245.30	ug/L	97
25) carbon disulfide	7.592	76	3503696	250.62	ug/L	98
26) methylene chloride	7.900	84	973634	256.80	ug/L	94
27) methyl acetate	7.696	43	815487	196.60	ug/L	99
28) methyl tert butyl ether	8.287	73	3011491	205.66	ug/L	99
29) trans-1,2-dichloroethene	8.303	61	986437	197.56	ug/L	98
30) hexane	8.659	57	805813	202.86	ug/L	97
31) di-isopropyl ether	8.920	45	2492843	200.49	ug/L	89
32) t-butyl formate	10.113	59	1120349	210.98	ug/L	96
33) ethyl tert-butyl ether	9.412	59	2756751	203.10	ug/L	96
34) 2-butanone	9.637	72	711038	1016.16	ug/L	# 81
35) 1,1-dichloroethane	8.899	63	1231164	202.67	ug/L	98
36) chloroprene	9.025	53	1074821	194.54	ug/L	95
37) acrylonitrile	8.240	53	2012635	1023.62	ug/L	97
38) vinyl acetate	8.899	86	136910	218.25	ug/L	# 49
39) ethyl acetate	9.668	45	154920	187.60	ug/L	# 77
40) 2,2-dichloropropane	9.689	77	1488341	192.13	ug/L	94
41) cis-1,2-dichloroethene	9.663	96	712098	203.30	ug/L	93
42) propionitrile	9.725	54	1850745	2016.30	ug/L	71
43) bromochloromethane	9.976	128	378228	203.89	ug/L	85
44) tetrahydrofuran	10.039	42	435607	198.55	ug/L	98
45) chloroform	10.039	83	1254530	197.88	ug/L	98
48) methacrylonitrile	9.929	67	366584	202.86	ug/L	95
49) cyclohexane	10.426	84	1255889	221.34	ug/L	88
50) 1,1,1-trichloroethane	10.332	97	1587918	204.14	ug/L	95

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229088.D  
 Acq On : 12 Jan 2017 8:56 pm  
 Operator : Gabriela  
 Sample : ic8658-200.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 13 11:30:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.500	41	635506	1816.10	ug/L	97
52) tert-amyl methyl ether	10.839	73	2634457	201.47	ug/L	97
55) epichlorohydrin	12.461	57	670244	991.52	ug/L	91
56) n-butyl alcohol	11.274	56	2760990	9219.48	ug/L	95
57) carbon tetrachloride	10.541	117	1444641	193.77	ug/L	99
58) 1,1-dichloropropene	10.510	75	903791	187.97	ug/L	95
59) benzene	10.782	78	2375112	187.01	ug/L	99
60) Iso-octane	10.829	57	3427119	200.50	ug/L	97
61) heptane	10.991	71	482575	186.56	ug/L	90
63) isopropyl acetate	10.709	87	188822	193.02	ug/L #	86
64) 1,2-dichloroethane	10.777	62	1037245	175.81	ug/L	98
65) ethyl acrylate	11.525	55	968741	188.48	ug/L	98
66) trichloroethene	11.514	95	642823	188.97	ug/L	96
67) 2-nitropropane	12.314	41	408716	179.12	ug/L	91
69) methylcyclohexane	11.776	83	1410418	204.11	ug/L	98
70) 2-chloroethyl vinyl ether	12.346	63	2143323	935.87	ug/L	99
71) methyl methacrylate	11.797	100	203342	199.65	ug/L	96
72) 1,2-dichloropropane	11.791	63	632552	187.59	ug/L	90
73) dibromomethane	11.938	93	458962	197.71	ug/L	93
74) bromodichloromethane	12.079	83	979421	192.21	ug/L	99
75) cis-1,3-dichloropropene	12.576	75	1059092	198.97	ug/L	96
77) 4-methyl-2-pentanone	12.696	58	2186444	932.06	ug/L #	84
78) toluene	12.984	91	2406525	190.21	ug/L	100
79) 3-methyl-1-butanol	12.691	55	1913808	3639.10	ug/L	99
80) trans-1,3-dichloropropene	13.172	75	1005523	196.29	ug/L	90
81) ethyl methacrylate	13.193	69	937829	189.21	ug/L	94
82) 1,1,2-trichloroethane	13.407	83	485501	197.84	ug/L	93
83) 2-hexanone	13.617	58	2091631	922.08	ug/L	89
85) tetrachloroethene	13.622	166	757217	167.67	ug/L	98
86) 1,3-dichloropropane	13.611	76	954977	189.06	ug/L	94
87) butyl acetate	13.706	56	539543	184.45	ug/L	92
88) 3,3-dimethyl-1-butanol	13.795	57	2318616	1825.06	ug/L	97
89) dibromochloromethane	13.899	129	783474	190.64	ug/L	96
90) 1,2-dibromoethane	14.066	107	664701	197.87	ug/L	99
91) n-butyl ether	14.527	57	2271347	176.20	ug/L	100
92) chlorobenzene	14.595	112	1606494	193.81	ug/L	97
93) 1,1,1,2-tetrachloroethane	14.657	131	905920	191.08	ug/L	97
94) ethylbenzene	14.668	91	2818298	183.42	ug/L	98
95) m,p-xylene	14.788	106	2156325	373.84	ug/L	90
96) o-xylene	15.254	91	2569287	186.61	ug/L	97
97) styrene	15.259	104	1792286	194.46	ug/L	97
98) butyl acrylate	15.055	55	1300519	179.53	ug/L	96
99) bromoform	15.531	173	622606	195.71	ug/L	93
101) isopropylbenzene	15.641	105	3369937	178.48	ug/L	99
102) cyclohexanone	15.813	55	2844753	1324.92	ug/L	98
104) bromobenzene	16.075	156	779638	194.88	ug/L	96
105) 1,1,2,2-tetrachloroethane	15.949	83	1046021	184.08	ug/L	99
106) trans-1,4-dichloro-2-b...	16.007	53	292237	174.13	ug/L	89
107) 1,2,3-trichloropropane	16.038	110	306352	174.82	ug/L	96
108) n-propylbenzene	16.101	91	3496960	173.85	ug/L	95
109) 2-chlorotoluene	16.258	126	780824	193.02	ug/L #	85
110) 4-chlorotoluene	16.368	91	2111798	178.58	ug/L	94
112) 1,3,5-trimethylbenzene	16.268	105	3030344	183.42	ug/L	90
113) tert-butylbenzene	16.671	134	715888	199.96	ug/L #	80
114) pentachloroethane	16.739	167	710976	268.14	ug/L	96
115) 1,2,4-trimethylbenzene	16.713	105	2955185	184.43	ug/L	93
116) sec-butylbenzene	16.906	105	4153515	182.25	ug/L	96
117) 1,3-dichlorobenzene	17.100	146	1473881	189.29	ug/L	97

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229088.D  
 Acq On : 12 Jan 2017 8:56 pm  
 Operator : Gabriela  
 Sample : ic8658-200.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 13 11:30:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration

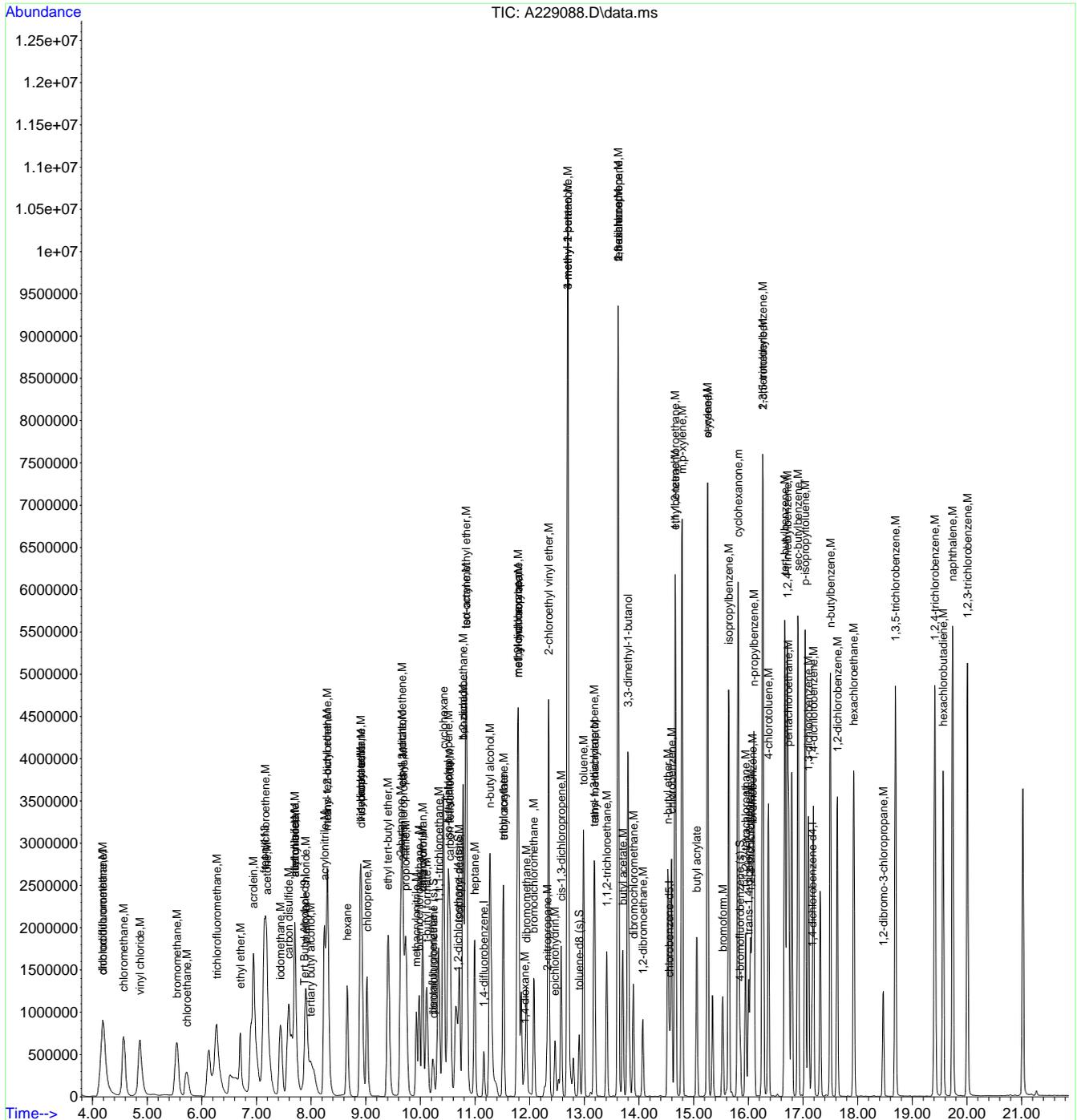
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.042	119	3465500	188.43	ug/L	98
120) 1,4-dichlorobenzene	17.189	146	1487691	192.12	ug/L	97
122) 1,2-dichlorobenzene	17.628	146	1569400	194.72	ug/L	99
123) n-butylbenzene	17.503	92	1674656	189.30	ug/L	96
125) 1,2-dibromo-3-chloropr...	18.470	157	401302	192.02	ug/L	97
126) 1,3,5-trichlorobenzene	18.690	180	1614123	216.24	ug/L	96
127) 1,2,4-trichlorobenzene	19.417	180	1654968	214.97	ug/L	99
128) hexachlorobutadiene	19.563	225	945994	220.95	ug/L	99
129) naphthalene	19.741	128	4894272	190.62	ug/L	96
130) 1,2,3-trichlorobenzene	20.008	180	1819667	209.17	ug/L	99
131) hexachloroethane	17.932	201	789574	211.07	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229088.D  
 Acq On : 12 Jan 2017 8:56 pm  
 Operator : Gabriela  
 Sample : ic8658-200.0  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 13 11:30:55 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 11:26:01 2017  
 Response via : Initial Calibration



7.6-10  
7

## Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229091.D  
 Acq On : 12 Jan 2017 10:23 pm  
 Operator : Gabriela  
 Sample : icv8658-50  
 Misc : MS11294,VA8658,5,,,,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 13 15:40:17 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.863	65	704160	500.00	ug/L	0.00
4) pentafluorobenzene	10.222	168	282307	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	435063	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	387801	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	212205	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.242	113	160910	49.68	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.36%
47) 1,2-dichloroethane-d4 (s)	10.687	65	208490	47.87	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	95.74%
76) toluene-d8 (s)	12.905	98	506867	50.32	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	100.64%
103) 4-bromofluorobenzene (s)	15.854	95	191192	49.51	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.02%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.895	88	117122	1391.00	ug/L	98
3) tertiary butyl alcohol	7.983	59	402898	260.79	ug/L	94
7) chlorodifluoromethane	4.181	51	336972	42.20	ug/L	97
8) dichlorodifluoromethane	4.191	85	441166	40.34	ug/L	94
9) chloromethane	4.557	50	341670	45.70	ug/L	98
10) vinyl chloride	4.840	62	402230	46.88	ug/L	98
11) bromomethane	5.530	94	222825	49.35	ug/L	93
12) chloroethane	5.718	64	150119	50.22	ug/L	97
14) trichlorofluoromethane	6.257	101	487630	44.02	ug/L	95
16) ethyl ether	6.702	74	77961	46.41	ug/L #	82
18) acrolein	6.947	56	591511	525.28	ug/L	94
19) freon 113	7.141	151	257898	68.46	ug/L	98
20) 1,1-dichloroethene	7.141	61	279614	42.50	ug/L	94
21) acetone	7.188	58	175556	238.21	ug/L	96
22) allyl chloride	7.706	76	83983	43.94	ug/L	91
23) acetonitrile	7.695	40	350664	508.87	ug/L	88
24) iodomethane	7.434	142	339712	42.35	ug/L	99
25) carbon disulfide	7.580	76	533731	36.56	ug/L	98
26) methylene chloride	7.894	84	196442	47.21	ug/L	96
27) methyl acetate	7.695	43	206891	52.54	ug/L	99
28) methyl tert butyl ether	8.281	73	1446190	98.85	ug/L	93
29) trans-1,2-dichloroethene	8.307	61	224724	46.97	ug/L	95
30) hexane	8.663	57	142479	36.04	ug/L	98
31) di-isopropyl ether	8.924	45	647074	52.36	ug/L	99
32) t-butyl formate	10.112	59	201731	36.46	ug/L	98
33) ethyl tert-butyl ether	9.406	59	685526	52.65	ug/L	98
34) 2-butanone	9.636	72	160549	243.18	ug/L	92
35) 1,1-dichloroethane	8.898	63	291991	48.00	ug/L	96
36) chloroprene	9.024	53	270401	49.65	ug/L	98
37) acrylonitrile	8.239	53	514492	268.44	ug/L	98
38) vinyl acetate	8.893	86	32120	51.55	ug/L #	59
39) ethyl acetate	9.662	45	40641	50.79	ug/L #	67
40) 2,2-dichloropropane	9.693	77	352486	45.85	ug/L	96
41) cis-1,2-dichloroethene	9.662	96	180814	53.36	ug/L	97
42) propionitrile	9.725	54	477826	556.05	ug/L	75
43) bromochloromethane	9.981	128	90339	49.10	ug/L	84
44) tetrahydrofuran	10.033	42	108705	52.66	ug/L	98
45) chloroform	10.044	83	322415	50.43	ug/L	99
48) methacrylonitrile	9.929	67	89154	51.17	ug/L	96
49) cyclohexane	10.420	84	297060	53.77	ug/L	90
50) 1,1,1-trichloroethane	10.331	97	380123	50.51	ug/L	93

## Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229091.D  
 Acq On : 12 Jan 2017 10:23 pm  
 Operator : Gabriela  
 Sample : icv8658-50  
 Misc : MS11294,VA8658,5,,,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 13 15:40:17 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.499	41	175690	514.07	ug/L	93
52) tert-amyl methyl ether	10.839	73	687737	54.00	ug/L	97
55) epichlorohydrin	12.465	57	150323	247.29	ug/L	99
56) n-butyl alcohol	11.268	56	703353	2667.66	ug/L	94
57) carbon tetrachloride	10.541	117	336307	48.14	ug/L	98
58) 1,1-dichloropropene	10.509	75	207915	47.63	ug/L	91
59) benzene	10.781	78	585884	49.99	ug/L	97
60) Iso-octane	10.828	57	760550	48.56	ug/L	98
61) heptane	10.990	71	111886	47.84	ug/L	92
63) isopropyl acetate	10.708	87	48999	54.99	ug/L #	86
64) 1,2-dichloroethane	10.776	62	263704	47.26	ug/L	96
65) ethyl acrylate	11.524	55	246297	52.35	ug/L	96
66) trichloroethene	11.513	95	153390	49.59	ug/L	96
67) 2-nitropropane	12.314	41	103402	47.59	ug/L	86
69) methylcyclohexane	11.775	83	329019	52.36	ug/L	99
70) 2-chloroethyl vinyl ether	12.345	63	586103	274.28	ug/L	99
71) methyl methacrylate	11.801	100	53389	55.01	ug/L #	76
72) 1,2-dichloropropane	11.791	63	156559	51.64	ug/L	90
73) dibromomethane	11.937	93	112211	52.85	ug/L	97
74) bromodichloromethane	12.073	83	235258	49.34	ug/L	95
75) cis-1,3-dichloropropene	12.575	75	251535	50.36	ug/L	98
77) 4-methyl-2-pentanone	12.695	58	513744	244.69	ug/L	98
78) toluene	12.983	91	612899	52.79	ug/L	93
79) 3-methyl-1-butanol	12.690	55	469879	1020.97	ug/L	99
80) trans-1,3-dichloropropene	13.171	75	244559	51.35	ug/L	92
81) ethyl methacrylate	13.187	69	235581	50.61	ug/L	98
82) 1,1,2-trichloroethane	13.407	83	120027	54.38	ug/L	90
83) 2-hexanone	13.616	58	490416	236.37	ug/L	98
85) tetrachloroethene	13.621	166	224153	63.07	ug/L	97
86) 1,3-dichloropropane	13.611	76	239747	51.32	ug/L	97
87) butyl acetate	13.705	56	142321	52.19	ug/L	89
88) 3,3-dimethyl-1-butanol	13.794	57	608478	570.74	ug/L	98
89) dibromochloromethane	13.893	129	188699	50.12	ug/L	98
90) 1,2-dibromoethane	14.066	107	161446	51.74	ug/L	98
91) n-butyl ether	14.526	57	614974	55.18	ug/L	98
92) chlorobenzene	14.594	112	400065	53.44	ug/L	99
93) 1,1,1,2-tetrachloroethane	14.657	131	217780	52.22	ug/L	97
94) ethylbenzene	14.667	91	715187	53.58	ug/L	99
95) m,p-xylene	14.787	106	532594	105.94	ug/L	97
96) o-xylene	15.253	91	627700	52.55	ug/L	100
97) styrene	15.258	104	432884	51.84	ug/L	98
98) butyl acrylate	15.054	55	323710	49.27	ug/L	99
99) bromoform	15.530	173	151394	54.40	ug/L	91
101) isopropylbenzene	15.640	105	834027	56.50	ug/L	98
102) cyclohexanone	15.813	55	945955	546.23	ug/L	99
104) bromobenzene	16.069	156	186612	53.80	ug/L	95
105) 1,1,2,2-tetrachloroethane	15.949	83	255259	52.51	ug/L	95
106) trans-1,4-dichloro-2-b...	16.001	53	76797	53.33	ug/L	98
107) 1,2,3-trichloropropane	16.037	110	78286	54.96	ug/L	96
108) n-propylbenzene	16.100	91	872442	54.40	ug/L	99
109) 2-chlorotoluene	16.257	126	186289	56.07	ug/L	89
110) 4-chlorotoluene	16.367	91	508536	51.79	ug/L	95
112) 1,3,5-trimethylbenzene	16.268	105	712933	54.69	ug/L	96
113) tert-butylbenzene	16.665	134	160272	58.48	ug/L	89
114) pentachloroethane	16.738	167	103549	40.72	ug/L	95
115) 1,2,4-trimethylbenzene	16.707	105	716088	56.96	ug/L	99
116) sec-butylbenzene	16.906	105	987135	57.29	ug/L	100
117) 1,3-dichlorobenzene	17.099	146	347199	52.51	ug/L	98

## Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229091.D  
 Acq On : 12 Jan 2017 10:23 pm  
 Operator : Gabriela  
 Sample : icv8658-50  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 13 15:40:17 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

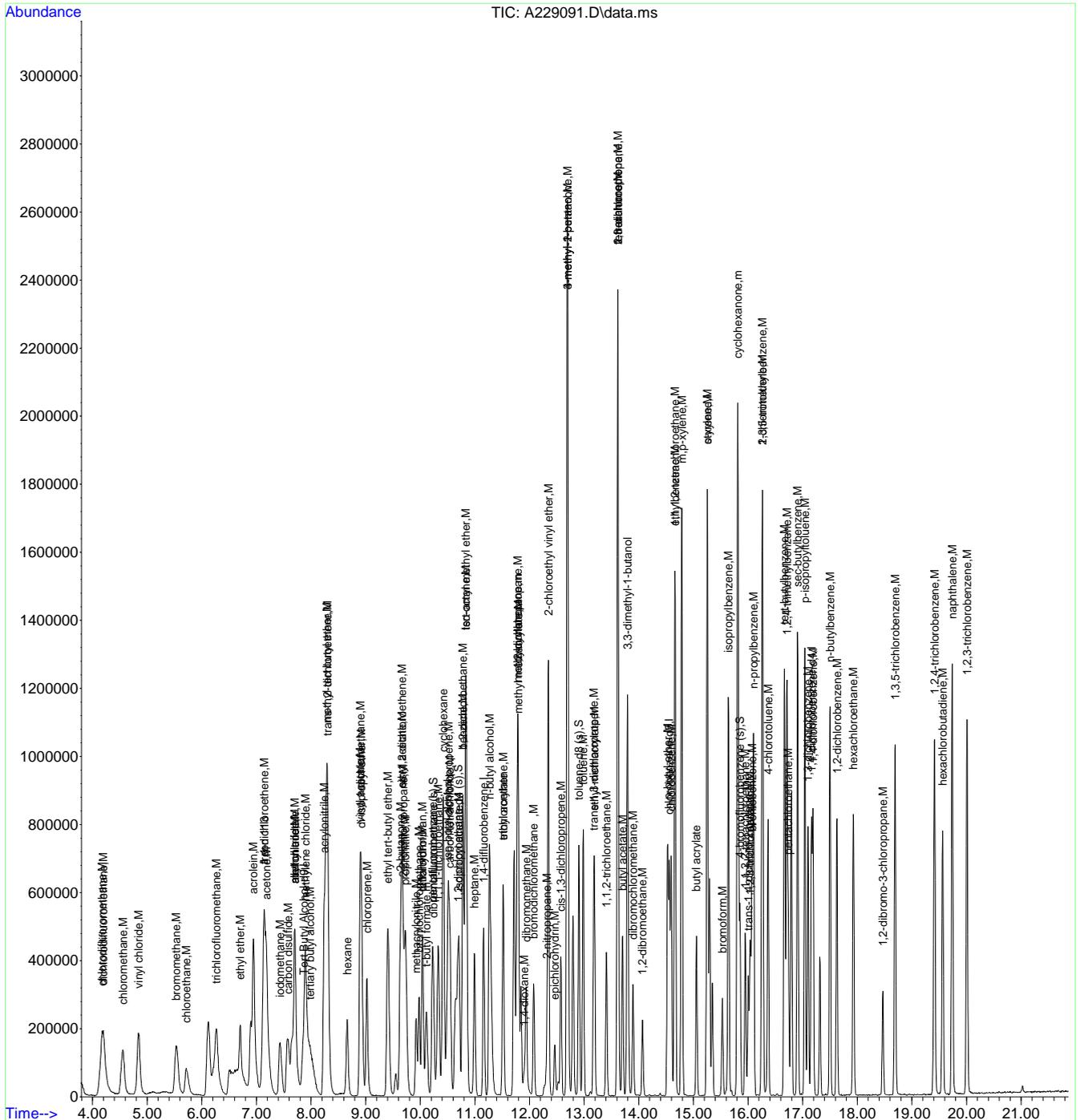
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.042	119	805576	55.62	ug/L	99
120) 1,4-dichlorobenzene	17.188	146	348065	51.40	ug/L	97
122) 1,2-dichlorobenzene	17.627	146	363424	53.17	ug/L	98
123) n-butylbenzene	17.502	92	381024	52.57	ug/L	96
125) 1,2-dibromo-3-chloropr...	18.469	157	92889	51.08	ug/L	96
126) 1,3,5-trichlorobenzene	18.694	180	352196	54.92	ug/L	92
127) 1,2,4-trichlorobenzene	19.416	180	350211	52.76	ug/L	98
128) hexachlorobutadiene	19.563	225	189126	54.32	ug/L	98
129) naphthalene	19.740	128	1145602	52.05	ug/L	98
130) 1,2,3-trichlorobenzene	20.007	180	393802	54.68	ug/L	97
131) hexachloroethane	17.931	201	165269	59.68	ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229091.D  
 Acq On : 12 Jan 2017 10:23 pm  
 Operator : Gabriela  
 Sample : icv8658-50  
 Misc : MS11294,VA8658,5,,,,,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 13 15:40:17 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration



7.6.11  
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229243.D  
 Acq On : 18 Jan 2017 9:45 am  
 Operator : Gabriela  
 Sample : cc8658-20  
 Misc : MS11644,VA8664,5,,,1  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 19 15:18:26 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.873	65	501263	500.00	ug/L	0.01
4) pentafluorobenzene	10.216	168	220568	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	328513	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	307687	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	171063	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.243	113	126520	49.99	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	99.98%
47) 1,2-dichloroethane-d4 (s)	10.682	65	169611	49.84	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	99.68%
76) toluene-d8 (s)	12.900	98	387918	51.00	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	102.00%
103) 4-bromofluorobenzene (s)	15.849	95	154887	49.76	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.52%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.901	88	31875	531.79	ug/L	82
3) tertiary butyl alcohol	7.978	59	111732	101.60	ug/L	93
7) chlorodifluoromethane	4.186	51	111119	17.81	ug/L	97
8) dichlorodifluoromethane	4.197	85	178640	20.90	ug/L	94
9) chloromethane	4.521	50	97785	16.74	ug/L	98
10) vinyl chloride	4.835	62	135377	20.19	ug/L	95
11) bromomethane	5.525	94	67353	19.09	ug/L	88
12) chloroethane	5.713	64	46324	19.84	ug/L	86
14) trichlorofluoromethane	6.273	101	179245	20.71	ug/L	97
16) ethyl ether	6.697	74	27243	20.76	ug/L	98
18) acrolein	6.948	56	170018	193.24	ug/L	99
19) freon 113	7.141	151	60937	20.70	ug/L	96
20) 1,1-dichloroethene	7.136	61	105152	20.46	ug/L	94
21) acetone	7.193	58	45561	79.13	ug/L	93
22) allyl chloride	7.706	76	30507	20.43	ug/L #	67
23) acetonitrile	7.675	40	108322	201.19	ug/L #	23
24) iodomethane	7.424	142	125626	20.04	ug/L	97
25) carbon disulfide	7.575	76	247550	21.70	ug/L	98
26) methylene chloride	7.894	84	63549	19.55	ug/L	90
27) methyl acetate	7.690	43	57937	18.83	ug/L	97
28) methyl tert butyl ether	8.276	73	213154	18.65	ug/L	98
29) trans-1,2-dichloroethene	8.297	61	74859	20.03	ug/L	96
30) hexane	8.653	57	61659	19.96	ug/L	99
31) di-isopropyl ether	8.919	45	181689	18.82	ug/L	92
32) t-butyl formate	10.107	59	79795	18.46	ug/L	95
33) ethyl tert-butyl ether	9.406	59	196365	19.30	ug/L	98
34) 2-butanone	9.625	72	44485	86.24	ug/L #	82
35) 1,1-dichloroethane	8.898	63	93891	19.76	ug/L	98
36) chloroprene	9.024	53	80450	18.91	ug/L	97
37) acrylonitrile	8.234	53	148093	98.90	ug/L	99
38) vinyl acetate	8.898	86	9155	18.80	ug/L #	90
39) ethyl acetate	9.662	45	10013	16.02	ug/L #	84
40) 2,2-dichloropropane	9.683	77	132107	21.99	ug/L	100
41) cis-1,2-dichloroethene	9.657	96	51358	19.40	ug/L #	80
42) propionitrile	9.725	54	124726	185.77	ug/L	76
43) bromochloromethane	9.976	128	26682	18.56	ug/L #	78
44) tetrahydrofuran	10.039	42	27376	16.97	ug/L	95
45) chloroform	10.039	83	93281	18.68	ug/L	95
48) methacrylonitrile	9.918	67	26504	19.47	ug/L	95
49) cyclohexane	10.415	84	85581	19.83	ug/L	99
50) 1,1,1-trichloroethane	10.332	97	116951	19.89	ug/L	95

7.6.12  
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## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229243.D  
 Acq On : 18 Jan 2017 9:45 am  
 Operator : Gabriela  
 Sample : cc8658-20  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 19 15:18:26 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.483	41	49255	184.46	ug/L	90
52) tert-amyl methyl ether	10.834	73	181072	18.20	ug/L	92
55) epichlorohydrin	12.460	57	44825	97.66	ug/L	95
56) n-butyl alcohol	11.268	56	193823	973.56	ug/L	93
57) carbon tetrachloride	10.536	117	110179	20.89	ug/L	99
58) 1,1-dichloropropene	10.509	75	66954	20.31	ug/L	95
59) benzene	10.776	78	171540	19.39	ug/L	97
60) Iso-octane	10.823	57	242891	20.54	ug/L	99
61) heptane	10.985	71	34687	19.64	ug/L	95
63) isopropyl acetate	10.708	87	13414	19.94	ug/L #	92
64) 1,2-dichloroethane	10.771	62	81364	19.31	ug/L	98
65) ethyl acrylate	11.524	55	73847	20.79	ug/L	96
66) trichloroethene	11.514	95	44841	19.20	ug/L	91
67) 2-nitropropane	12.319	41	30692	18.71	ug/L #	72
69) methylcyclohexane	11.775	83	95162	20.06	ug/L	98
70) 2-chloroethyl vinyl ether	12.340	63	170325	105.56	ug/L	96
71) methyl methacrylate	11.791	100	16354	22.32	ug/L #	60
72) 1,2-dichloropropane	11.786	63	46593	20.35	ug/L	84
73) dibromomethane	11.932	93	32899	20.52	ug/L	91
74) bromodichloromethane	12.078	83	70876	19.69	ug/L	93
75) cis-1,3-dichloropropene	12.570	75	72334	19.18	ug/L	97
77) 4-methyl-2-pentanone	12.690	58	160549	101.27	ug/L	100
78) toluene	12.978	91	172567	19.68	ug/L	95
79) 3-methyl-1-butanol	12.685	55	135311	389.37	ug/L	97
80) trans-1,3-dichloropropene	13.171	75	74648	20.76	ug/L	94
81) ethyl methacrylate	13.187	69	69483	19.77	ug/L	96
82) 1,1,2-trichloroethane	13.407	83	35494	21.30	ug/L	99
83) 2-hexanone	13.616	58	158964	101.47	ug/L	91
85) tetrachloroethene	13.621	166	47233	16.75	ug/L	93
86) 1,3-dichloropropane	13.611	76	71867	19.39	ug/L	92
87) butyl acetate	13.700	56	40592	18.76	ug/L	93
88) 3,3-dimethyl-1-butanol	13.789	57	151036	178.56	ug/L	99
89) dibromochloromethane	13.893	129	58340	19.53	ug/L	91
90) 1,2-dibromoethane	14.066	107	47882	19.34	ug/L	95
91) n-butyl ether	14.526	57	175438	19.84	ug/L	99
92) chlorobenzene	14.594	112	122774	20.67	ug/L	90
93) 1,1,1,2-tetrachloroethane	14.657	131	63530	19.20	ug/L	95
94) ethylbenzene	14.667	91	202893	19.16	ug/L	96
95) m,p-xylene	14.782	106	154624	38.76	ug/L	99
96) o-xylene	15.253	91	184763	19.50	ug/L	96
97) styrene	15.258	104	131196	19.80	ug/L	94
98) butyl acrylate	15.060	55	101970	19.56	ug/L	95
99) bromoform	15.530	173	42671	19.33	ug/L	96
101) isopropylbenzene	15.640	105	234930	19.74	ug/L	98
102) cyclohexanone	15.813	55	193718	138.76	ug/L	99
104) bromobenzene	16.069	156	54825	19.61	ug/L	86
105) 1,1,2,2-tetrachloroethane	15.949	83	75525	19.27	ug/L	99
106) trans-1,4-dichloro-2-b...	16.001	53	20502	17.66	ug/L	91
107) 1,2,3-trichloropropane	16.043	110	22142	19.28	ug/L	96
108) n-propylbenzene	16.100	91	260427	20.14	ug/L	95
109) 2-chlorotoluene	16.257	126	49754	18.58	ug/L #	82
110) 4-chlorotoluene	16.367	91	159082	20.10	ug/L	99
112) 1,3,5-trimethylbenzene	16.268	105	203854	19.40	ug/L	95
113) tert-butylbenzene	16.665	134	43143	19.53	ug/L	93
114) pentachloroethane	16.738	167	48783	23.80	ug/L	97
115) 1,2,4-trimethylbenzene	16.712	105	204150	20.14	ug/L	93
116) sec-butylbenzene	16.906	105	284201	20.46	ug/L	98
117) 1,3-dichlorobenzene	17.094	146	102162	19.17	ug/L	98

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229243.D  
 Acq On : 18 Jan 2017 9:45 am  
 Operator : Gabriela  
 Sample : cc8658-20  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 19 15:18:26 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

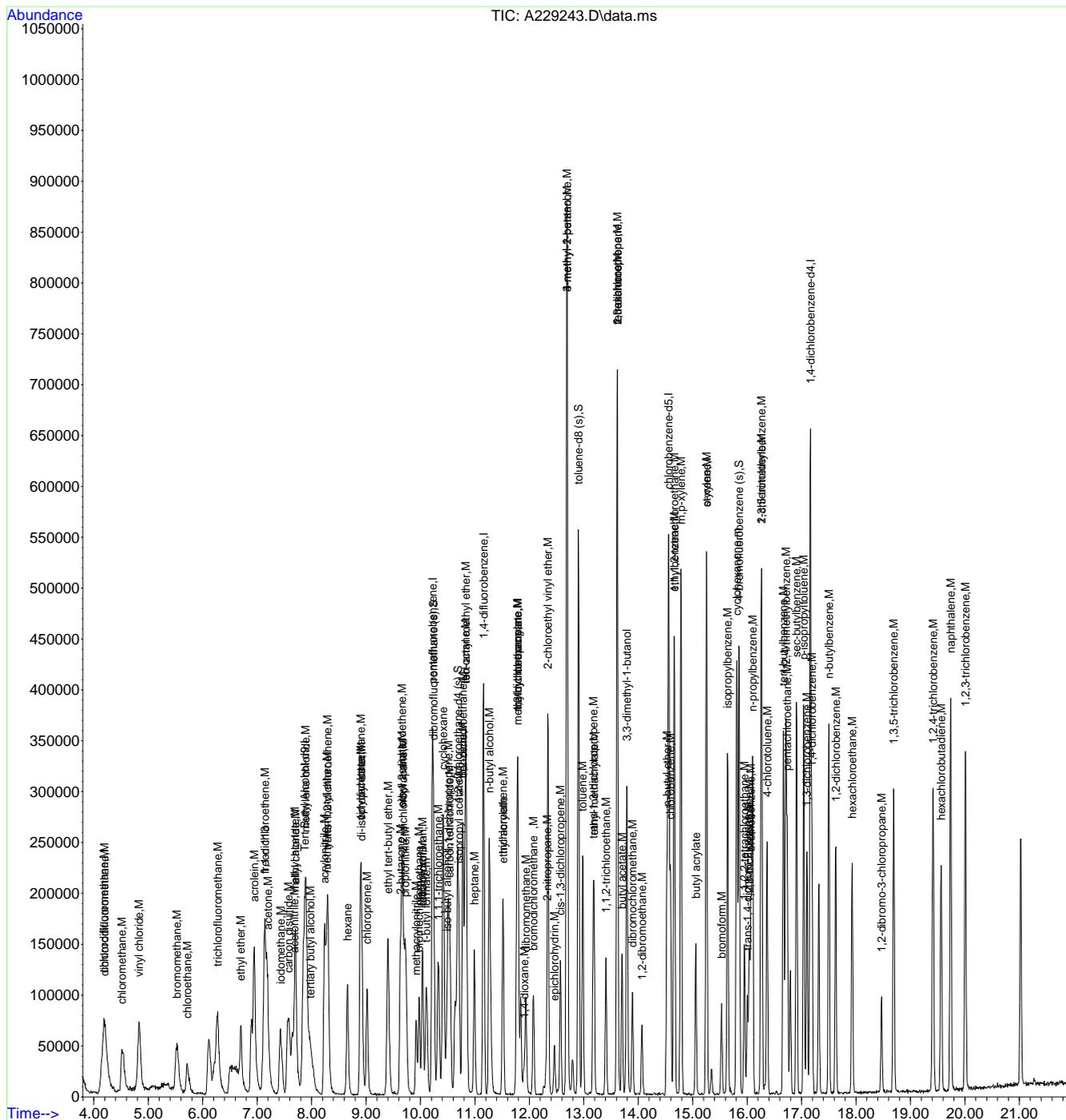
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.042	119	232001	19.87	ug/L	98
120) 1,4-dichlorobenzene	17.193	146	104569	19.15	ug/L	97
122) 1,2-dichlorobenzene	17.628	146	103027	18.70	ug/L	96
123) n-butylbenzene	17.502	92	119128	20.39	ug/L	95
125) 1,2-dibromo-3-chloropr...	18.470	157	27940	19.06	ug/L	97
126) 1,3,5-trichlorobenzene	18.689	180	99954	19.34	ug/L	89
127) 1,2,4-trichlorobenzene	19.416	180	98660	18.44	ug/L	97
128) hexachlorobutadiene	19.568	225	51601	18.38	ug/L	92
129) naphthalene	19.741	128	338281	19.07	ug/L	99
130) 1,2,3-trichlorobenzene	20.007	180	110629	19.05	ug/L	97
131) hexachloroethane	17.931	201	40624	18.20	ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
Data File : A229243.D  
Acq On : 18 Jan 2017 9:45 am  
Operator : Gabriela  
Sample : cc8658-20  
Misc : MS11644,VA8664,5,,1  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 19 15:18:26 2017  
Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
QLast Update : Fri Jan 13 15:23:28 2017  
Response via : Initial Calibration



7.6.12 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229244.D  
 Acq On : 18 Jan 2017 10:18 am  
 Operator : Gabriela  
 Sample : cc8658-5  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 19 15:19:42 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.868	65	562329	500.00	ug/L	0.00
4) pentafluorobenzene	10.221	168	232631	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.158	114	344713	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	311909	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.162	152	177099	50.00	ug/L	0.00

System Monitoring Compounds						
46) dibromofluoromethane (s)	10.242	113	133362	49.97	ug/L	0.00
Spiked Amount	50.000	Range 76 - 120	Recovery	=	99.94%	
47) 1,2-dichloroethane-d4 (s)	10.687	65	174785	48.70	ug/L	0.00
Spiked Amount	50.000	Range 73 - 122	Recovery	=	97.40%	
76) toluene-d8 (s)	12.905	98	407869	51.10	ug/L	0.00
Spiked Amount	50.000	Range 84 - 119	Recovery	=	102.20%	
103) 4-bromofluorobenzene (s)	15.854	95	156035	48.42	ug/L	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	96.84%	

Target Compounds					Qvalue
21) acetone	7.204	58	4402	7.25 ug/L	# 61

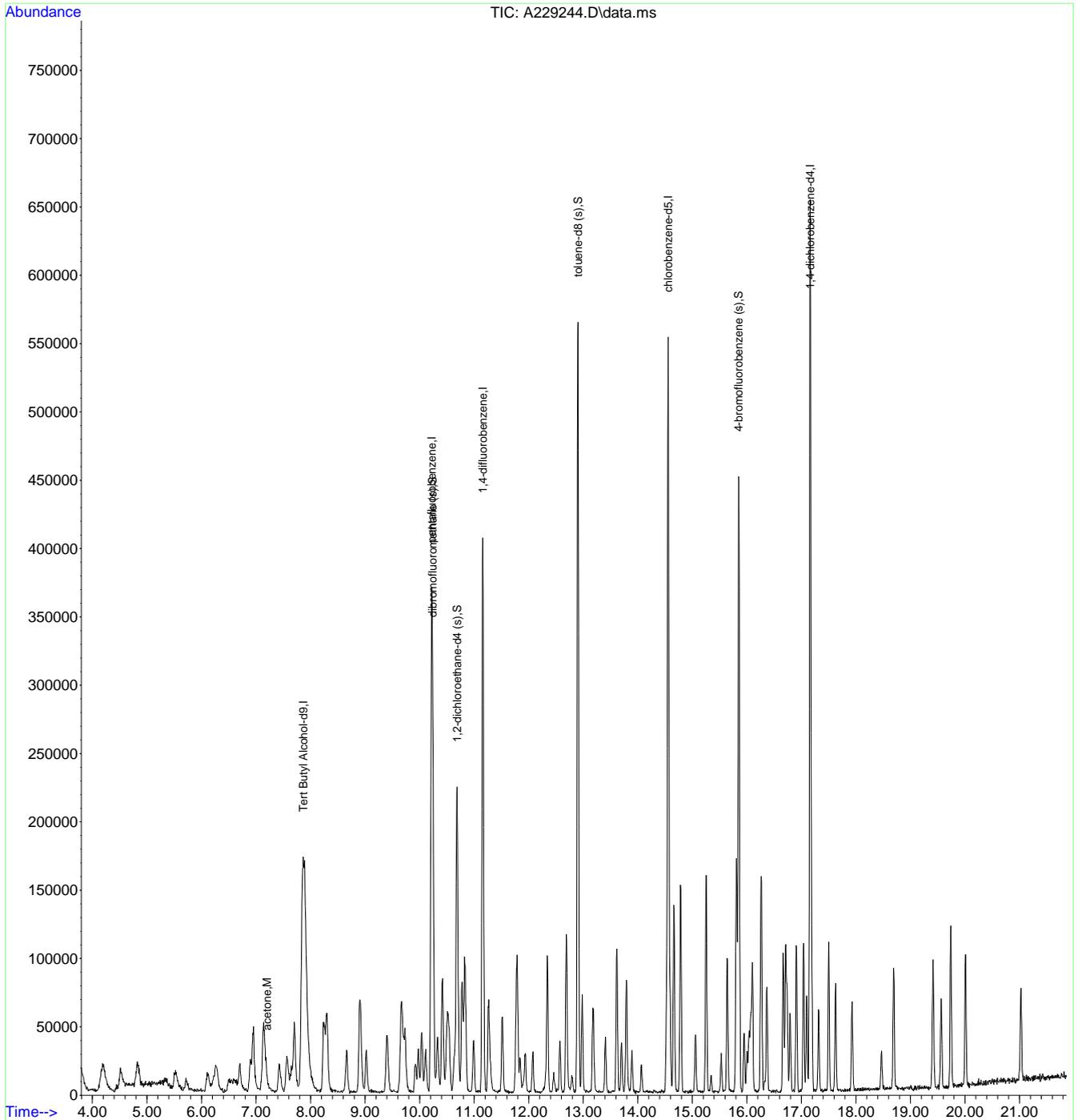
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.13  
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229244.D  
 Acq On : 18 Jan 2017 10:18 am  
 Operator : Gabriela  
 Sample : cc8658-5  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 19 15:19:42 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration



7.6.13  
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229265.D  
 Acq On : 18 Jan 2017 10:10 pm  
 Operator : Gabriela  
 Sample : cc8658-50  
 Misc : MS11644,VA8664,5,,,,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 19 15:34:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.867	65	530206	500.00	ug/L	0.00
4) pentafluorobenzene	10.221	168	215752	50.00	ug/L	0.00
53) 1,4-difluorobenzene	11.162	114	323994	50.00	ug/L	0.00
84) chlorobenzene-d5	14.557	117	297424	50.00	ug/L	0.00
100) 1,4-dichlorobenzene-d4	17.161	152	167641	50.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) dibromofluoromethane (s)	10.242	113	125642	50.76	ug/L	0.00
Spiked Amount	50.000	Range	76 - 120	Recovery	=	101.52%
47) 1,2-dichloroethane-d4 (s)	10.686	65	174567	52.44	ug/L	0.00
Spiked Amount	50.000	Range	73 - 122	Recovery	=	104.88%
76) toluene-d8 (s)	12.904	98	381506	50.86	ug/L	0.00
Spiked Amount	50.000	Range	84 - 119	Recovery	=	101.72%
103) 4-bromofluorobenzene (s)	15.848	95	151325	49.61	ug/L	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	99.22%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-dioxane	11.910	88	92888	1465.12	ug/L	91
3) tertiary butyl alcohol	7.988	59	302033	259.64	ug/L	95
7) chlorodifluoromethane	4.196	51	334708	54.85	ug/L	98
8) dichlorodifluoromethane	4.196	85	439933	52.63	ug/L	96
9) chloromethane	4.546	50	276665	48.42	ug/L	93
10) vinyl chloride	4.834	62	344514	52.54	ug/L	99
11) bromomethane	5.529	94	182315	52.83	ug/L	94
12) chloroethane	5.707	64	118212	51.75	ug/L	94
14) trichlorofluoromethane	6.267	101	469242	55.43	ug/L	96
16) ethyl ether	6.706	74	69930	54.47	ug/L	89
18) acrolein	6.947	56	471844	548.27	ug/L	98
19) freon 113	7.140	151	159643	55.45	ug/L	97
20) 1,1-dichloroethene	7.140	61	280815	55.85	ug/L	97
21) acetone	7.187	58	117847	209.23	ug/L	96
22) allyl chloride	7.705	76	79381	54.35	ug/L #	86
23) acetonitrile	7.653	40	296985	563.92	ug/L #	21
24) iodomethane	7.423	142	333703	54.43	ug/L	98
25) carbon disulfide	7.569	76	639295	57.30	ug/L	98
26) methylene chloride	7.893	84	162480	51.09	ug/L	97
27) methyl acetate	7.700	43	155936	51.82	ug/L	98
28) methyl tert butyl ether	8.280	73	582642	52.11	ug/L	99
29) trans-1,2-dichloroethene	8.301	61	201227	55.04	ug/L	92
30) hexane	8.662	57	152782	50.56	ug/L	97
31) di-isopropyl ether	8.918	45	481203	50.95	ug/L	82
32) t-butyl formate	10.111	59	220737	52.20	ug/L	97
33) ethyl tert-butyl ether	9.405	59	524364	52.69	ug/L	97
34) 2-butanone	9.635	72	119786	237.41	ug/L #	79
35) 1,1-dichloroethane	8.898	63	250332	53.85	ug/L	95
36) chloroprene	9.018	53	217641	52.29	ug/L	98
37) acrylonitrile	8.239	53	392965	268.28	ug/L	96
38) vinyl acetate	8.898	86	26652	55.96	ug/L #	75
39) ethyl acetate	9.666	45	27281	44.61	ug/L	99
40) 2,2-dichloropropane	9.687	77	313931	53.43	ug/L	96
41) cis-1,2-dichloroethene	9.666	96	145721	56.27	ug/L	91
42) propionitrile	9.724	54	344007	523.81	ug/L	74
43) bromochloromethane	9.980	128	71311	50.72	ug/L	85
44) tetrahydrofuran	10.033	42	81374	51.58	ug/L	98
45) chloroform	10.043	83	254146	52.02	ug/L	94
48) methacrylonitrile	9.923	67	65815	49.42	ug/L	94
49) cyclohexane	10.414	84	224538	53.18	ug/L	99
50) 1,1,1-trichloroethane	10.325	97	312911	54.41	ug/L	97

7.6.14  
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## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229265.D  
 Acq On : 18 Jan 2017 10:10 pm  
 Operator : Gabriela  
 Sample : cc8658-50  
 Misc : MS11644,VA8664,5,,,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 19 15:34:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) iso-butyl alcohol	10.493	41	133054	509.42	ug/L	96
52) tert-amyl methyl ether	10.833	73	512647	52.66	ug/L	94
55) epichlorohydrin	12.465	57	114310	252.51	ug/L	92
56) n-butyl alcohol	11.267	56	530449	2701.56	ug/L	100
57) carbon tetrachloride	10.540	117	294307	56.57	ug/L	98
58) 1,1-dichloropropene	10.508	75	176770	54.37	ug/L	94
59) benzene	10.780	78	460150	52.73	ug/L	99
60) Iso-octane	10.822	57	629705	53.99	ug/L	95
61) heptane	10.990	71	87533	50.25	ug/L	88
63) isopropyl acetate	10.707	87	34396	51.84	ug/L	97
64) 1,2-dichloroethane	10.780	62	222264	53.49	ug/L	97
65) ethyl acrylate	11.523	55	185501	52.94	ug/L	98
66) trichloroethene	11.513	95	119851	52.03	ug/L	98
67) 2-nitropropane	12.313	41	82587	51.04	ug/L	97
69) methylcyclohexane	11.769	83	255082	54.51	ug/L	100
70) 2-chloroethyl vinyl ether	12.344	63	429446	269.87	ug/L	98
71) methyl methacrylate	11.800	100	37128	51.37	ug/L #	81
72) 1,2-dichloropropane	11.790	63	123221	54.58	ug/L	86
73) dibromomethane	11.936	93	88007	55.66	ug/L	85
74) bromodichloromethane	12.072	83	187365	52.77	ug/L	96
75) cis-1,3-dichloropropene	12.574	75	197986	53.22	ug/L	98
77) 4-methyl-2-pentanone	12.695	58	406235	259.81	ug/L	100
78) toluene	12.982	91	455772	52.72	ug/L	99
79) 3-methyl-1-butanol	12.695	55	371625	1084.30	ug/L	100
80) trans-1,3-dichloropropene	13.176	75	191683	54.04	ug/L	98
81) ethyl methacrylate	13.186	69	181001	52.22	ug/L	93
82) 1,1,2-trichloroethane	13.406	83	91294	55.54	ug/L	93
83) 2-hexanone	13.615	58	388220	251.26	ug/L	99
85) tetrachloroethene	13.620	166	122935	45.10	ug/L	95
86) 1,3-dichloropropane	13.615	76	183249	51.15	ug/L	98
87) butyl acetate	13.704	56	104091	49.77	ug/L	94
88) 3,3-dimethyl-1-butanol	13.793	57	433827	530.57	ug/L	100
89) dibromochloromethane	13.892	129	146933	50.89	ug/L	98
90) 1,2-dibromoethane	14.070	107	124147	51.88	ug/L	97
91) n-butyl ether	14.525	57	437773	51.22	ug/L	98
92) chlorobenzene	14.593	112	304934	53.11	ug/L	97
93) 1,1,1,2-tetrachloroethane	14.656	131	168416	52.65	ug/L	93
94) ethylbenzene	14.666	91	541835	52.92	ug/L	99
95) m,p-xylene	14.787	106	397618	103.12	ug/L	98
96) o-xylene	15.252	91	487164	53.18	ug/L	99
97) styrene	15.257	104	334354	52.20	ug/L	96
98) butyl acrylate	15.059	55	261741	51.94	ug/L	95
99) bromoform	15.529	173	111621	52.30	ug/L	92
101) isopropylbenzene	15.639	105	632944	54.28	ug/L	97
102) cyclohexanone	15.812	55	414359	302.87	ug/L	99
104) bromobenzene	16.073	156	145805	53.21	ug/L	97
105) 1,1,2,2-tetrachloroethane	15.948	83	200122	52.12	ug/L	98
106) trans-1,4-dichloro-2-b...	16.000	53	57571	50.61	ug/L	97
107) 1,2,3-trichloropropane	16.037	110	61105	54.30	ug/L	89
108) n-propylbenzene	16.099	91	690123	54.47	ug/L	99
109) 2-chlorotoluene	16.256	126	142677	54.36	ug/L	90
110) 4-chlorotoluene	16.361	91	403151	51.97	ug/L	99
112) 1,3,5-trimethylbenzene	16.267	105	560681	54.44	ug/L	97
113) tert-butylbenzene	16.670	134	118184	54.59	ug/L #	87
114) pentachloroethane	16.738	167	144252	71.80	ug/L	95
115) 1,2,4-trimethylbenzene	16.711	105	541003	54.47	ug/L	96
116) sec-butylbenzene	16.905	105	765022	56.20	ug/L	99
117) 1,3-dichlorobenzene	17.098	146	267681	51.25	ug/L	96

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229265.D  
 Acq On : 18 Jan 2017 10:10 pm  
 Operator : Gabriela  
 Sample : cc8658-50  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 19 15:34:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration

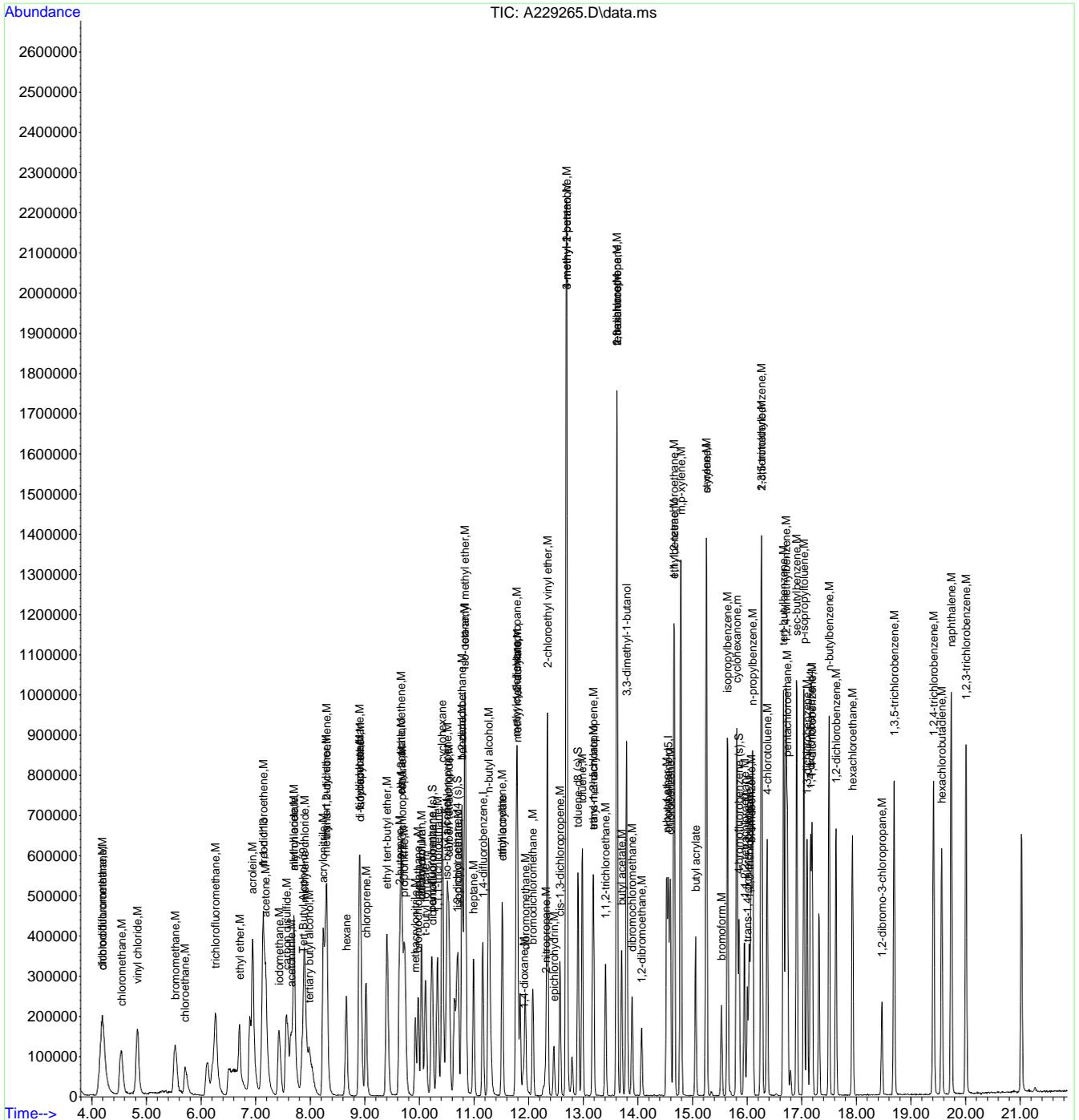
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) p-isopropyltoluene	17.041	119	632698	55.29	ug/L	99
120) 1,4-dichlorobenzene	17.187	146	269494	50.37	ug/L	98
122) 1,2-dichlorobenzene	17.627	146	282247	52.27	ug/L	96
123) n-butylbenzene	17.501	92	297249	51.91	ug/L	93
125) 1,2-dibromo-3-chloropr...	18.469	157	69057	48.07	ug/L	99
126) 1,3,5-trichlorobenzene	18.694	180	253877	50.11	ug/L	99
127) 1,2,4-trichlorobenzene	19.415	180	256182	48.85	ug/L	98
128) hexachlorobutadiene	19.562	225	139432	50.69	ug/L	94
129) naphthalene	19.740	128	889203	51.14	ug/L	98
130) 1,2,3-trichlorobenzene	20.006	180	293213	51.53	ug/L	99
131) hexachloroethane	17.930	201	120780	55.21	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\  
 Data File : A229265.D  
 Acq On : 18 Jan 2017 10:10 pm  
 Operator : Gabriela  
 Sample : cc8658-50  
 Misc : MS11644,VA8664,5,,,,,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jan 19 15:34:31 2017  
 Quant Method : C:\MSDCHEM\1\METHODS\MA8658.m  
 Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um  
 QLast Update : Fri Jan 13 15:23:28 2017  
 Response via : Initial Calibration



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ACCUTEST

# VOLATILE ANALYSIS LOG

Batch ID: VA81658

Date: 1/12/17

Print Analyst Name: Ally Annrot

### Standard Data

### Standard Data

Lot #	Description	Conc.
VO16-247-86.2	A	100ppm
VO16-247-67.26	B	100ppm
VO16-247-88.3	C	100ppm
VO16-247-166.10	E	100ppm
VO16-247-81	1/5 SD stoppin	

Lot #	Description	Conc.
VO16-247-62.18	Ext A	100ppm
VO16-247-61.19	Ext B	100ppm
VO16-247-76.1	Ext C	100ppm
VO16-247-51.32	Ext E	100ppm
VO16-247-19.7	Ext HX	100ppm

Analyst Signature: [Signature]

Columns: DB1024 10mm x 0.25mm 1.4

Method: VB2100

Initial Cal. Method: MA81658

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

VO16-247-38.16 ketone 45ppm

VO16-247-89.3 Ext ketone 90ppm

Supervisor Signature: [Signature]

Date: 1/12/2017

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
	A227076	ib													
	227077	ib													
	227078	bfb													
	227079	1C81658-0.2	826pc initial calibration	A			5		1x				OK	3:48 PM 200µl ABCET ketone/100µl	
	227080	1C81658-0.5	✓	A			5		1x				OK	500µl ABCET ketone/500µl	
	227081	1C81658-1.0	✓	A			5		1x				OK	500µl ABCET ketone/500µl	
	227082	1C81658-2.0	✓	A			5		1x				OK	1000µl ABCET ketone/500µl	
	227083	1C81658-5.0	✓	A			5		1x				OK	500µl ABCET ketone/250µl	
	227084	1C81658-10.0	✓	A			5		1x				OK	1000µl ABCET ketone/100µl	
	227085	1C81658-20.0	✓	A			5		1x				OK	2000µl ABCET ketone/50µl	
	227086	1C81658-50.0	✓	A			5		1x				OK	2000µl ABCET ketone/50µl	
	227087	1C81658-100.0	✓	A			5		1x				OK	1000µl ABCET ketone/50µl	
	227088	1C81658-200.0	✓	A			5		1x				OK	2000µl ABCET ketone/50µl	
	227089	ib		A			5								
	227090	ib		A											
	227091	1CV81658-50		A			5		1x				OK	500µl ABCET ketone (Header) 50µl F131	
	227092	ib		A											

SCA 1/12/17

TX = 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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7.7.1  
7

VOLATILE ANALYSIS LOG

Batch ID: VA8664

Print Analyst Name: Gary Rivera

Date: 1/18/17

pH paper 2NO 3.5

Analyst Signature: [Signature]

Standard Data

Standard Data

Lot #	Description	Conc.
VO16 247-82.18	A	100ppm
VO16 247-67.33	B	100ppm
VO16 247-103.1	C	100ppm
VO16 247-126.32	F	100ppm
VO16 247-81	K	100ppm

Lot #	Description	Conc.
VO16 247-62.24	A	100ppm
VO16 247-61.24	B	100ppm
VO16 247-91.25	C	100ppm
VO16 247-51.26	E	100ppm
VO16 247-70.9	H	100ppm

Columns: DB1624 (10mm) 25mm x 1.4um

Method V8100C

Initial Cal. Method MASHUS8

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

VO16 247-100.10 Ketone 400ppm VO16 247-100.5 Ketone 400ppm

Supervisor Signature: [Signature]

Date: 1/24/17

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
	A.229241	bfb													
	229242	CC81058-20					5						OK	8:38am 20ul ACE Ketone / 100ul Acet	
	229243	CC81058-20					5						OK	20ul ACE Ketone / 100ul Acet	
	229244	CC81058-5					5						OK	5ul ACE / 100ul	
	229245	mb					5						OK		
	229246	bs					5						OK	5ul ACE Ketone / 100ul	
	229247	lb					5						OK		
	229248	JC34210-4	11620 TCL20T	S	14		5		1x				OK		✓
	229249	JC35352-7	11502 TCL4210	S	2		5		1x				OK		✓
		JC35246-4			4								NOT RUN		
	229250	JC35352-4	11502 TCL4210	S	6		5		1x				OK		✓
	229251	JC35352-5	V	S	6		5		1x				OK		✓
	229252	JC35352-6	V	S	6		5		1x				OK		✓
	229253	JC35377-1	11620 TCL11	S	2		5		1x				OK		✓
	229254	JC35377-2	✓	S	2		5		1x				OK		✓
	229255	JC35377-1115	✓	S	1		5		1x				NOT RUN		
	229256	lb											↓		

X = 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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ACCUTEST

### VOLATILE ANALYSIS LOG

Batch ID: V 81004

Print Analyst Name: GARY HANCOCK

Analyst Signature: [Signature]

Columns: DB 1024 (100M X 0.25mm X 1.4um)

Method VOL00C

Initial Cal. Method M A 8 1058

Date: 1/18/17

#### Standard Data

Lot #	Description	Conc.

#### Standard Data

Lot #	Description	Conc.

*see pg. 135*

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: 1/24/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L +	I S	S U	Status (Data)	Comments	pH* <2
	229257	JC35477-2			1		5		1x				NOT RUN		
	229258	JC35559-3	11571 SST	W			5		1x						
	229259	JC35559-2	✓	W			10/50		5x						
	229260	JC35553-3	11674 APL JATING	W			5		1x						
	229261	JC35553-5	1351115 ✓	W			5		1x						
	229262	JC35553-4	✓	W			10/50		5x						
	229263	1b													

*W 1/19*

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.  
 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

**VOLATILE ANALYSIS LOG**

EXH 1/19/17

Date: 1/18/17

pH paper 216315

Batch ID: VA816084

Print Analyst Name: ALAN AVAROFF

Analyst Signature: [Signature]

Columns: ZW24 160mm x 0.25mm x 1.4um

Method: V8210C

Initial Cal. Method: MARS1A3

Lot #	Description	Conc.
VOL# 247-80.18	A	100ppm
VOL# 247-67.33	B	100ppm
VOL# 247-103.1	C	100ppm
VOL# 247-106.36	E	100ppm
VOL# 247-81	1/5	250ppm

Lot #	Description	Conc.
VOL# 247-62.24	ST A	100ppm
VOL# 247-61.24	ST B	100ppm
VOL# 247-91.5	ST C	100ppm
VOL# 247-51.30	ST F	100ppm
VOL# 247-99	ST H	100ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

VOL# 247-100.6 Ketone 400ppm  
 VOL# 247-100.5 Fxt Ketone 900ppm

Supervisor Signature: [Signature]

Date: 1/24/17

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
	229264	bf62									OU	9:39 pm	
	229265	CC81058-50					5				W OU	SOB ACCEPTORY	
	229266	ib					5				W /		
	229267	mb2					5				W OU		
	229268	bs2					5				W OU	SOB ACCEPTORY	
	229269	JC351010-7ms	11693	ST	5		2.5/50		20X		W OU	SOB ACCEPTORY (Fxt)	✓
	229270	JC351010-7msd	11693	ST	5		7.5/50		20X		W OU		✓
	229271	ib					5				W /		✗
	229272	ib					5				W /		✗
	229273	JC351010-7	11693	ST	5				20X		W PR	RR 1X 40	✓
	229274	JC351010-1	11693	IC, VLS, BTX	5		5/50		10X		W PR	RR 1X 40	✓
	229275	JC351010-1	11693	VC	5		0.5/50		100X		W NOT NEEDED		✓
	229276	JC351010-3	11693	BTX, VLS	5		5/50		10X		W OU		✓
	229277	JC351010-3	11693	VC	5		0.5/50		100X		W NOT NEEDED		✓
	229278	JC351010-4	11693	IC, VLS, BTX	5		50/50		10X		W OU	TOXENS, XYL	✓
	229279	JC351010-7A	11693	VC	5		0.5/50		100X		W NOT NEEDED	RR 5X 40	✓
	229280	JC351010-5	11693	VC	5		5		1X		W OU		✓

X = 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

7.7.2  
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ACCUTEST

### VOLATILE ANALYSIS LOG

SCA 1/19/17

Batch ID: VA 810284

Print Analyst Name: GARY ANKORF

Analyst Signature: *[Signature]*

Columns: 2 x 100m x 0.25mm x 1/4 in

Method VZ00C

Initial Cal. Method MA 8158

Date: 1/18/17

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.

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: 1/24/17

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
A229281	JC351010-2	11693	IC.VIS.BENT	W	5		5		1x				Ma		✓
229282	JC351010-8	11693	IC.VIS.BENT	W	5		5		1x				Ma	Toluene, XYL	✓
229283	JC35018-2	11693	BENT	W	1		5		1x				Ma		✓
229284	JC35018-3	✓		W	1		5		1x				Ma		✓
229285	JC35018-1	✓		W	1		5		1x				Ma		✓
229286	1b												NOT RUN HERE		

SCA 1/18/17

X = 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 Date: 1/19/16

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7.7.2 7

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# **Attachment 3**

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**TABLE A**  
**LIMITATIONS FOR EFFLUENT TO *SANITARY OR COMBINED* SEWERS**

Parameter <sup>1</sup>	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material <sup>2</sup>	50 mg/l		Instantaneous	---
pH 5-12		SU's	Instantaneous	---
Temperature	< 150	Degree F	Instantaneous	---
Flash Point	> 140	Degree F	Instantaneous	---
Cadmium	2            0.69	mg/l mg/l	Instantaneous Composite	---
Chromium (VI)	5	mg/l	Instantaneous	---
Copper 5		mg/l	Instantaneous	---
Lead 2		mg/l	Instantaneous	---
Mercury 0.05		mg/l	Instantaneous	---
Nickel 3		mg/l	Instantaneous	---
Zinc 5		mg/l	Instantaneous	---
Benzene 134		ppb	Instantaneous	57
Carbontetrachloride ---		---	Composite	---
Chloroform ---		---	Composite	---
1,4 Dichlorobenzene	---	---	Composite	---
Ethylbenzene 380		ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50 ppb		Instantaneous	---
Naphthalene 47		ppb	Composite	19
Phenol ---		---	Composite	---
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	---
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---	---	Composite	---
1,1,1 Trichloroethane	---	---	Composite	---
Xylenes (Total)	74	ppb	Instantaneous	28
PCB's (Total) <sup>3</sup>	1 ppb		Composite	---
Total Suspended Solids (TSS)	350 <sup>4</sup>	mg/l Instantan	eous	---
CBOD <sup>5</sup>	---		Composite	---
Chloride <sup>5</sup>	---		Instantaneous	---
Total Nitrogen <sup>5</sup>	---		Composite	---
Total Solids <sup>5</sup>	---		Instantaneous	---
Other				

- All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater." All analyses shall be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the least of the Practical Quantitation Limits identified in NYSDEC's Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters, December 1988.
- Analysis for *non-polar materials* must be done by EPA method 1664 Rev. A. Non-Polar Material shall mean that portion of the oil and grease that is not eliminated from a solution containing N-Hexane, or any other extraction solvent the EPA shall prescribe, by silica gel absorption.
- Analysis for PCB=s is required if *both* conditions listed below are met:
  - if proposed discharge  $\geq$  10,000 gpd;
  - if duration of a discharge > 10 days.

Analysis for PCB=s must be done by EPA method 608 with MDL= $\leq$ 65 ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).
- For discharge  $\geq$  10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000gpd, the limit is determined on a case by case basis.
- Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids and Total Nitrogen are required if proposed discharge  $\geq$  10,000 gpd. Total Nitrogen = Total Kjeldahl Nitrogen (TKN) + Nitrite (NO<sub>2</sub>) + Nitrate (NO<sub>3</sub>).