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

e-Hardcopy 2.0
Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, Humacao, PR

SM04.00.06

SGS Accutest Job Number: FA33668

Sampling Dates: 04/11/16 - 05/04/16

Report to:

Anderson, Mulholland & Associates
2700 Westchester Avenue Suite 417
Purchase, NY 10577
roreilly@amaiconsult.com; ttaylor@amaiconsult.com

ATTN: Terry Taylor

Total number of pages in report: **349**

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.

Norm Farmer
Technical Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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

SGS Accutest is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **6**
Section 4: Sample Results **8**
- **4.1:** FA33668-1: RA-16 GWD 9
- **4.2:** FA33668-2: EB 050316D 11
- **4.3:** FA33668-3: S-42S 13
- **4.4:** FA33668-4: RA-11 GWS 15
- **4.5:** FA33668-5: BPEB-12 17
- **4.6:** FA33668-6: RA-11 (10-11) 19
- **4.7:** FA33668-7: S-43S 21
- **4.8:** FA33668-8: RA-10 (5.5-6.5) 23
- **4.9:** FA33668-9: TB 050416 25

Section 5: Misc. Forms **27**
- **5.1:** Chain of Custody 28

Section 6: GC/MS Volatiles - QC Data Summaries **31**
- **6.1:** Method Blank Summary 32
- **6.2:** Blank Spike Summary 36
- **6.3:** Matrix Spike/Matrix Spike Duplicate Summary 40
- **6.4:** Instrument Performance Checks (BFB) 44
- **6.5:** Internal Standard Area Summaries 48
- **6.6:** Surrogate Recovery Summaries 50
- **6.7:** Initial and Continuing Calibration Summaries 52

Section 7: GC/MS Volatiles - Raw Data **84**
- **7.1:** Samples 85
- **7.2:** Method Blanks 130
- **7.3:** Blank Spikes 134
- **7.4:** Matrix Spike/Matrix Spike Duplicates 149
- **7.5:** Instrument Performance Checks (BFB) 175
- **7.6:** Initial and Continuing Calibrations 179
- **7.7:** Instrument Run Logs 334

Section 8: General Chemistry - QC Data Summaries **348**
- **8.1:** Percent Solids Raw Data Summary 349

SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: FA33668

BMSMC, Building 5 Area, Humacao, PR
Project No: SM04.00.06

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA33668-1	05/03/16	11:00	RTLV	05/05/16	AQ	Ground Water	RA-16 GWD
FA33668-2	05/03/16	11:12	RTLV	05/05/16	AQ	Equipment Blank	EB 050316D
FA33668-3	05/03/16	15:35	RTLV	05/05/16	AQ	Ground Water	S-42S
FA33668-4	05/03/16	16:45	RTLV	05/05/16	AQ	Ground Water	RA-11 GWS
FA33668-5	05/03/16	17:30	RTLV	05/05/16	AQ	Equipment Blank	BPEB-12
FA33668-6	05/04/16	11:10	RTLV	05/05/16	SO	Soil	RA-11 (10-11)
FA33668-7	05/04/16	12:10	RTLV	05/05/16	AQ	Ground Water	S-43S
FA33668-8	05/04/16	12:35	RTLV	05/05/16	SO	Soil	RA-10 (5.5-6.5)
FA33668-9	04/11/16	06:30	RTLV	05/05/16	AQ	Trip Blank Water	TB 050416

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

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Anderson, Mulholland & Associates **Job No:** FA33668

Site: BMSMC, Building 5 Area, Humacao, PR **Report Date:** 5/18/2016 1:53:50 PM

8 Sample(s), 1 Trip Blank(s) were collected on/ between 04/11/2016 and 05/04/2016 and were received at SGS Accutest Southeast (SASE) on 05/05/2016 properly preserved, at 2.8 Deg. C and intact. These Samples received an SASE job number of FA33668. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

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

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** VJ5288

All method blanks for this batch meet method specific criteria.

Sample(s) FA33668-1MS, FA33668-1MSD were used as the QC samples indicated.

The following samples were run outside of holding time for method SW846 8260C: FA33668-9. Sample received outside the holding time. This sample is a Trip Blank.

Blank Spike Recovery(s) for trans-1,2-Dichloroethylene are outside control limits. % Recovery was above upper control limits, but samples were ND for trans-1,2-Dichloroethylene.

Matrix Spike Duplicate Recovery(s) for Tert-Butyl Alcohol are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits for MS/MSD.

FA33668-9: Sample received outside the holding time. This sample is a Trip Blank.

FA33668-1 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA33668-2 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA33668-3 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA33668-4 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA33668-5 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA33668-7 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

FA33668-9 for trans-1,2-Dichloroethylene: Associated BS recovery outside control limits.

Matrix: SO **Batch ID:** VY1148

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33668-8MS, FA33668-8MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Cyclohexane, Methylcyclohexane, Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Methylcyclohexane, Tetrachloroethylene are outside control limits. Probable cause is due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN70945

Sample(s) FA33760-1DUP were used as the QC samples for Solids, Percent.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: May 18, 2016

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
FA33668-1MS	MSVOA	J0976346.D	Carbon Tetrachloride, Trichlorofluoromethane
FA33668-1MSD	MSVOA	J0976347.D	Carbon Tetrachloride, Trichlorofluoromethane
VJ5237-IC5237	MSVOA	J0975150.D	Methyl Bromide, Trichlorofluoromethane
VJ5237-IC5237	MSVOA	J0975151.D	Ethyl Alcohol, Trichlorofluoromethane
VJ5237-IC5237	MSVOA	J0975152.D	Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane
VJ5237-IC5237	MSVOA	J0975153.D	Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane
VJ5237-IC5237	MSVOA	J0975155.D	Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane
VJ5237-IC5237	MSVOA	J0975156.D	Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane
VJ5237-ICC5237	MSVOA	J0975154.D	Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane
VJ5237-ICV5237	MSVOA	J0975159.D	Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane
VJ5288-BS	MSVOA	J0976337.D	Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane
VJ5288-CC5237	MSVOA	J0976336.D	Carbon Tetrachloride, Trichlorofluoromethane
VY1133-IC1133	MSVOA	Y28092.D	Ethyl Alcohol

13 Manual Integrations were found for FA33668

Summary of Hits

Job Number: FA33668
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR
Collected: 04/11/16 thru 05/04/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA33668-1	**RA-16 GWD**					
Methyl Tert Butyl Ether		0.75 J	1.0	0.20	ug/l	SW846 8260C
FA33668-2	**EB 050316D**					
No hits reported in this sample.						
FA33668-3	**S-42S**					
Chlorobenzene		0.44 J	1.0	0.20	ug/l	SW846 8260C
Cyclohexane		0.86 J	1.0	0.26	ug/l	SW846 8260C
Dichlorodifluoromethane		0.68 J	2.0	0.50	ug/l	SW846 8260C
Freon 113		8.7	1.0	0.32	ug/l	SW846 8260C
Methyl Tert Butyl Ether		1.6	1.0	0.20	ug/l	SW846 8260C
FA33668-4	**RA-11 GWS**					
Chlorobenzene		0.76 J	1.0	0.20	ug/l	SW846 8260C
Methyl Tert Butyl Ether		1.7	1.0	0.20	ug/l	SW846 8260C
Tert-Butyl Alcohol		41.1	20	9.1	ug/l	SW846 8260C
FA33668-5	**BPEB-12**					
No hits reported in this sample.						
FA33668-6	**RA-11 (10-11)**					
Methylene Chloride		5.0 J	12	4.9	ug/kg	SW846 8260C
FA33668-7	**S-43S**					
Benzene		0.46 J	1.0	0.20	ug/l	SW846 8260C
Chlorobenzene		12.9	1.0	0.20	ug/l	SW846 8260C
Cyclohexane		6.3	1.0	0.26	ug/l	SW846 8260C
Isopropylbenzene		10.1	1.0	0.33	ug/l	SW846 8260C
Methyl Tert Butyl Ether		11.0	1.0	0.20	ug/l	SW846 8260C
Tert-Amyl Alcohol		12.8 J	20	6.0	ug/l	SW846 8260C
Tert-Butyl Alcohol		223	20	9.1	ug/l	SW846 8260C
Tetrahydrofuran		1.7 J	5.0	1.4	ug/l	SW846 8260C
Toluene		0.27 J	1.0	0.20	ug/l	SW846 8260C
FA33668-8	**RA-10 (5.5-6.5)**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA33668
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR
Collected: 04/11/16 thru 05/04/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA33668-9	**TB 050416**					

No hits reported in this sample.

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	RA-16 GWD		
Lab Sample ID:	FA33668-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0976339.D	1	05/06/16	DP	n/a	n/a	VJ5288
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.26	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene [a]	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	ND	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	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:	RA-16 GWD		
Lab Sample ID:	FA33668-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75	1.0	0.20	ug/l	J
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Associated BS recovery outside control limits.

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

SGS Accutest

Report of Analysis

Client Sample ID:	EB 050316D		
Lab Sample ID:	FA33668-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0976340.D	1	05/06/16	DP	n/a	n/a	VJ5288
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.26	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene [a]	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	ND	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	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:	EB 050316D		
Lab Sample ID:	FA33668-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Associated BS recovery outside control limits.

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-42S		
Lab Sample ID:	FA33668-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0976341.D	1	05/06/16	DP	n/a	n/a	VJ5288
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	0.44	1.0	0.20	ug/l	J
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	0.86	1.0	0.26	ug/l	J
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	0.68	2.0	0.50	ug/l	J
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene [a]	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	8.7	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	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:	S-42S		
Lab Sample ID:	FA33668-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.6	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Associated BS recovery outside control limits.

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-11 GWS		
Lab Sample ID:	FA33668-4	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0976342.D	1	05/06/16	DP	n/a	n/a	VJ5288
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	0.76	1.0	0.20	ug/l	J
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.26	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene [a]	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	ND	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	

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

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

Report of Analysis

Client Sample ID:	RA-11 GWS		
Lab Sample ID:	FA33668-4	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.7	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	
75-65-0	Tert-Butyl Alcohol	41.1	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside control limits.

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	BPEB-12		
Lab Sample ID:	FA33668-5	**Date Sampled:**	05/03/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0976343.D	1	05/06/16	DP	n/a	n/a	VJ5288
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.26	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene [a]	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	ND	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	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:	BPEB-12		
Lab Sample ID:	FA33668-5	**Date Sampled:**	05/03/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside control limits.

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-11 (10-11)		
Lab Sample ID:	FA33668-6	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	75.1
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y28348.D	1	05/05/16	AD	n/a	n/a	VY1148
Run #2							

	Initial Weight	Final Volume
Run #1	5.39 g	5.0 ml
Run #2		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	62	13	ug/kg	
71-43-2	Benzene	ND	6.2	1.6	ug/kg	
100-44-7	Benzyl Chloride	ND	6.2	1.7	ug/kg	
74-97-5	Bromochloromethane	ND	6.2	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	1.2	ug/kg	
75-25-2	Bromoform	ND	6.2	1.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	31	11	ug/kg	
75-15-0	Carbon Disulfide	ND	6.2	1.2	ug/kg	
56-23-5	Carbon Tetrachloride	ND	6.2	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	1.2	ug/kg	
75-00-3	Chloroethane	ND	6.2	2.5	ug/kg	
67-66-3	Chloroform	ND	6.2	1.5	ug/kg	
110-82-7	Cyclohexane	ND	6.2	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	1.2	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	6.2	2.7	ug/kg	
106-93-4	1,2-Dibromoethane	ND	6.2	1.2	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.2	3.1	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.2	1.2	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.2	1.2	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.2	1.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	2.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.2	1.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.2	1.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.2	1.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.2	1.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	2.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	6.2	1.3	ug/kg	
76-13-1	Freon 113	ND	6.2	1.4	ug/kg	
591-78-6	2-Hexanone	ND	31	11	ug/kg	
98-82-8	Isopropylbenzene	ND	6.2	1.7	ug/kg	

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

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

Report of Analysis

Client Sample ID:	RA-11 (10-11)		
Lab Sample ID:	FA33668-6	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	75.1
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	6.2	1.2	ug/kg	
79-20-9	Methyl Acetate	ND	31	11	ug/kg	
74-83-9	Methyl Bromide	ND	6.2	3.2	ug/kg	
74-87-3	Methyl Chloride	ND	6.2	3.0	ug/kg	
108-87-2	Methylcyclohexane	ND	6.2	1.2	ug/kg	
75-09-2	Methylene Chloride	5.0	12	4.9	ug/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	31	13	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.2	1.4	ug/kg	
100-42-5	Styrene	ND	6.2	1.2	ug/kg	
75-85-4	Tert-Amyl Alcohol	ND	62	17	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	62	17	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	2.7	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.2	1.6	ug/kg	
109-99-9	Tetrahydrofuran	ND	12	4.5	ug/kg	
108-88-3	Toluene	ND	6.2	1.4	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.2	2.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.2	1.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	2.2	ug/kg	
79-01-6	Trichloroethylene	ND	6.2	1.4	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.2	2.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.2	1.2	ug/kg	
75-01-4	Vinyl Chloride	ND	6.2	2.1	ug/kg	
	m,p-Xylene	ND	12	2.2	ug/kg	
95-47-6	o-Xylene	ND	6.2	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		75-124%
17060-07-0	1,2-Dichloroethane-D4	110%		72-135%
2037-26-5	Toluene-D8	100%		75-126%
460-00-4	4-Bromofluorobenzene	100%		71-133%

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-43S		
Lab Sample ID:	FA33668-7	**Date Sampled:**	05/04/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0976344.D	1	05/06/16	DP	n/a	n/a	VJ5288
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	0.46	1.0	0.20	ug/l	J
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	12.9	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	6.3	1.0	0.26	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene [a]	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	ND	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	10.1	1.0	0.33	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:	S-43S		
Lab Sample ID:	FA33668-7	**Date Sampled:**	05/04/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	11.0	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	12.8	20	6.0	ug/l	J
75-65-0	Tert-Butyl Alcohol	223	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	1.7	5.0	1.4	ug/l	J
108-88-3	Toluene	0.27	1.0	0.20	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Associated BS recovery outside control limits.

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-10 (5.5-6.5)		
Lab Sample ID:	FA33668-8	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	80.7
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y28349.D	1	05/05/16	AD	n/a	n/a	VY1148
Run #2							

	Initial Weight	Final Volume
Run #1	5.73 g	5.0 ml
Run #2		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	54	11	ug/kg	
71-43-2	Benzene	ND	5.4	1.4	ug/kg	
100-44-7	Benzyl Chloride	ND	5.4	1.5	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	1.1	ug/kg	
75-25-2	Bromoform	ND	5.4	1.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	27	9.8	ug/kg	
75-15-0	Carbon Disulfide	ND	5.4	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.4	1.9	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	1.1	ug/kg	
75-00-3	Chloroethane	ND	5.4	2.2	ug/kg	
67-66-3	Chloroform	ND	5.4	1.3	ug/kg	
110-82-7	Cyclohexane	ND	5.4	1.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	1.1	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.4	2.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.4	1.1	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	2.7	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	1.1	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	1.1	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.4	1.1	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.4	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.4	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.4	1.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	1.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	2.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.4	1.2	ug/kg	
76-13-1	Freon 113	ND	5.4	1.3	ug/kg	
591-78-6	2-Hexanone	ND	27	9.4	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	1.5	ug/kg	

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

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

Report of Analysis

Client Sample ID:	RA-10 (5.5-6.5)		
Lab Sample ID:	FA33668-8	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	80.7
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	5.4	1.1	ug/kg	
79-20-9	Methyl Acetate	ND	27	9.3	ug/kg	
74-83-9	Methyl Bromide	ND	5.4	2.8	ug/kg	
74-87-3	Methyl Chloride	ND	5.4	2.6	ug/kg	
108-87-2	Methylcyclohexane	ND	5.4	1.1	ug/kg	
75-09-2	Methylene Chloride	ND	11	4.3	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	27	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.4	1.2	ug/kg	
100-42-5	Styrene	ND	5.4	1.1	ug/kg	
75-85-4	Tert-Amyl Alcohol	ND	54	15	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	54	15	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	2.4	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.4	1.4	ug/kg	
109-99-9	Tetrahydrofuran	ND	11	3.9	ug/kg	
108-88-3	Toluene	ND	5.4	1.2	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	2.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	1.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.4	1.3	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	2.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.4	1.1	ug/kg	
75-01-4	Vinyl Chloride	ND	5.4	1.8	ug/kg	
	m,p-Xylene	ND	11	1.9	ug/kg	
95-47-6	o-Xylene	ND	5.4	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		75-124%
17060-07-0	1,2-Dichloroethane-D4	111%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	98%		71-133%

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

SGS Accutest

Report of Analysis

Client Sample ID:	TB 050416		
Lab Sample ID:	FA33668-9	**Date Sampled:**	04/11/16
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	J0976345.D	1	05/06/16	DP	n/a	n/a	VJ5288
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.26	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene [b]	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	ND	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	

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

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

Report of Analysis

Client Sample ID:	TB 050416		
Lab Sample ID:	FA33668-9	**Date Sampled:**	04/11/16
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/05/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, Humacao, PR		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Sample received outside the holding time.
(b) Associated BS recovery outside control limits.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS ACCUTEST - FL

CHAIN OF CUSTODY

SGS Accutest ~~Dayton~~ Florida
~~2235 Route 130, Dayton, NJ 08810~~ 4405 Vineland Orlando, FL
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FA33668

PAGE 1 OF 1

802591276584

Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # Get from NJ

Client / Reporting Information

Company Name: Anderson Mulholland Assoc. Inc.
Street Address: 2700 Westchester
City: Purchase State: NY Zip:
Project Contact: Terry Taylor E-mail:
Phone #: 914-251-0400 Fax #:
Sampler(s) Name(s): N. Rivera, T. Taylor, D. Lindsfrand Phone #:

Project Information

Project Name: BMS Release Assessment
Street:
City: Humacao State: PR
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE Sheet): VOC-Method 8260C

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOC-Method 8260C	LAB USE ONLY
1	RA-16 GWD		5/3/16	1100	TT	GW	3	3								X	
2	EB050316		5/3/16	1112	NR	EB	3	3								X	
3	S-42S		5/3/16	1535	NR	GW	3	3								X	
4	RA-11 GWS		5/3/16	1645	TT	GW	3	3								X	
5	BPEB-12		5/3/16	1730	TT	EB	3	3								X	
6	RA-11 (10-11)		5/4/16	1110	TT	SO	4					1			3	X	
7	S-43S		5/4/16	1210	JV	GW	3	3								X	
8	RA-10 (5.5-6.5)		5/4/16	1235	NR	SO	4					1			3	X	
9	TB050416		4/11/16	630		TB	2	2								X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [x] Std. 10 Business Days For Soil Samples
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [x] 1 Day RUSH For aqueous Samples
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [x] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Add to Report: Tetrahydrofuran, p-isopropyl toluene, 1-2-4 Trimethyl benzene, Benzyl chloride, Tetra amyl chloride

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 Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	5/4/16 1500	1 Fed EX	2 FX		2 [signature] 5/5/16 945
3		3	4		4
5		5			

Custody Seal # 610 ☐ Intact ☐ Not intact

Preserved where applicable ☐

On Ice [x] Cooler Temp. 2-8

5.1 5

FA33668: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA33668 CLIENT: Anderson Multholland PROJECT: BMS

DATE/TIME RECEIVED: 5/5/16 945 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: [FEDEX] UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8025 9127 6584

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 2 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR to .2
- [ ] OBSERVED TEMPS: 2.6
- [ ] CORRECTED TEMPS: 2.8 (USED FOR LIMS)

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 5/5/16 REVIEWER SIGNATURE/DATE 5/5/16

NF 11/15 RECEIPTLOG040416.xls

5.1 5

FedEx Express

Expanded Service
International Air Waybill

Origin Copy

Not all services and options are available to all destinations.

1 From

Date 050416 Sender's FedEx Account Number

Sender's Name David Lindstrand Phone 787-487-4290

Company Anderson Mulholland Assoc. INC.

Address BMS in care of

Address Rd#3, Km 77.5

City Humacao State Province PR

Country USA ZIP Postal Code 00791

2 To

Recipient's Name Sample Receiving Phone 407-425-6700

Company SGS Accutest - Florida

Address 4405 Vineland Rd. Dept./Floor

Address

City Orlando State Province FL

Country USA ZIP Postal Code 32811

4a Express Package Service — Packages up to 150 lbs. / 68 kg

1 [X] FedEx Intl. Priority
6 [ ] FedEx Intl. First — Available to select locations.
3 [ ] FedEx Intl. Economy — FedEx Envelope and FedEx Pak rate not available.

4b Express Freight Service — Packages over 150 lbs. / 68 kg

70 [ ] FedEx Intl. Priority Freight
86 [ ] FedEx Intl. Economy Freight

Booking Number
Please call your local FedEx office to book shipments.

5 Packaging

*These unique brown boxes with special pricing are provided by FedEx for FedEx Intl. Priority only.

6 [ ] FedEx Envelope
2 [ ] FedEx Pak
3 [ ] FedEx Box
4 [ ] FedEx Tube
1X [X] Other
PW [ ] FedEx 10kg Box*
PX [ ] FedEx 25kg Box*

6a Special Handling

1 [ ] HOLD at FedEx Location
3 [ ] SATURDAY Delivery — Available to select locations for FedEx Intl. Priority and FedEx Intl. Priority Freight only.

Does this shipment contain dangerous goods? One box must be checked / ticked.

[X] No
4 [ ] Yes — As per attached Shipper's Declaration.
8 [ ] Yes — Shipper's Declaration not required.
6 [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg
CA [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

6b Broker Selection
Not available with FedEx Intl. First.

40 [ ] Intl. Broker Select — To specify a broker other than FedEx.

Broker's Name

City / State / Province / Country

ZIP / Postal Code Phone

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: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1148-MB	Y28347.D	1	05/05/16	AD	n/a	n/a	VY1148

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

FA33668-6, FA33668-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.3	ug/kg	
100-44-7	Benzyl Chloride	ND	5.0	1.4	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	9.1	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.2	ug/kg	
110-82-7	Cyclohexane	ND	5.0	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
76-13-1	Freon 113	ND	5.0	1.2	ug/kg	
591-78-6	2-Hexanone	ND	25	8.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
79-20-9	Methyl Acetate	ND	25	8.6	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.6	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.4	ug/kg	

Method Blank Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1148-MB	Y28347.D	1	05/05/16	AD	n/a	n/a	VY1148

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

FA33668-6, FA33668-8

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	1.0	ug/kg	
75-09-2	Methylene Chloride	ND	10	4.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
75-85-4	Tert-Amyl Alcohol	ND	50	14	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	50	14	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
109-99-9	Tetrahydrofuran	ND	10	3.6	ug/kg	
108-88-3	Toluene	ND	5.0	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.9	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.7	ug/kg	
	m,p-Xylene	ND	10	1.8	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.1	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	75-124%
17060-07-0	1,2-Dichloroethane-D4	103%	72-135%
2037-26-5	Toluene-D8	101%	75-126%
460-00-4	4-Bromofluorobenzene	102%	71-133%

Method Blank Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5288-MB	J0976338.D	1	05/06/16	DP	n/a	n/a	VJ5288

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

FA33668-1, FA33668-2, FA33668-3, FA33668-4, FA33668-5, FA33668-7, FA33668-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-44-7	Benzyl Chloride	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.26	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
76-13-1	Freon 113	ND	1.0	0.32	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	

Method Blank Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5288-MB	J0976338.D	1	05/06/16	DP	n/a	n/a	VJ5288

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

FA33668-1, FA33668-2, FA33668-3, FA33668-4, FA33668-5, FA33668-7, FA33668-9

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	1.0	0.23	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
109-99-9	Tetrahydrofuran	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

Blank Spike Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1148-BS	Y28346.D	1	05/05/16	AD	n/a	n/a	VY1148

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

FA33668-6, FA33668-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	234	94	61-152
71-43-2	Benzene	50	55.5	111	76-126
100-44-7	Benzyl Chloride	50	55.7	111	65-126
74-97-5	Bromochloromethane	50	52.9	106	77-120
75-27-4	Bromodichloromethane	50	56.5	113	74-130
75-25-2	Bromoform	50	61.4	123	76-127
78-93-3	2-Butanone (MEK)	250	252	101	75-137
75-15-0	Carbon Disulfide	50	53.0	106	72-122
56-23-5	Carbon Tetrachloride	50	61.6	123	78-133
108-90-7	Chlorobenzene	50	57.4	115	81-129
75-00-3	Chloroethane	50	47.0	94	68-133
67-66-3	Chloroform	50	54.1	108	72-123
110-82-7	Cyclohexane	50	54.1	108	73-126
124-48-1	Dibromochloromethane	50	58.6	117	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	54.3	109	70-137
106-93-4	1,2-Dibromoethane	50	54.3	109	77-126
75-71-8	Dichlorodifluoromethane	50	58.9	118	68-168
95-50-1	1,2-Dichlorobenzene	50	59.2	118	80-129
541-73-1	1,3-Dichlorobenzene	50	60.8	122	81-129
106-46-7	1,4-Dichlorobenzene	50	60.4	121	76-130
75-34-3	1,1-Dichloroethane	50	53.7	107	73-125
107-06-2	1,2-Dichloroethane	50	54.2	108	74-128
75-35-4	1,1-Dichloroethylene	50	52.5	105	81-136
156-59-2	cis-1,2-Dichloroethylene	50	52.4	105	74-126
156-60-5	trans-1,2-Dichloroethylene	50	56.6	113	70-127
78-87-5	1,2-Dichloropropane	50	53.0	106	74-125
10061-01-5	cis-1,3-Dichloropropene	50	56.7	113	80-123
10061-02-6	trans-1,3-Dichloropropene	50	63.5	127	75-131
100-41-4	Ethylbenzene	50	58.3	117	77-123
76-13-1	Freon 113	50	51.2	102	71-129
591-78-6	2-Hexanone	250	263	105	72-133
98-82-8	Isopropylbenzene	50	59.1	118	80-136
99-87-6	p-Isopropyltoluene	50	61.3	123	77-131
79-20-9	Methyl Acetate	250	275	110	67-137
74-83-9	Methyl Bromide	50	52.6	105	65-139
74-87-3	Methyl Chloride	50	55.3	111	71-144

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1148-BS	Y28346.D	1	05/05/16	AD	n/a	n/a	VY1148

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

FA33668-6, FA33668-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-87-2	Methylcyclohexane	50	55.4	111	75-128
75-09-2	Methylene Chloride	50	52.4	105	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	276	110	76-132
1634-04-4	Methyl Tert Butyl Ether	50	57.8	116	77-120
100-42-5	Styrene	50	59.7	119	78-125
75-85-4	Tert-Amyl Alcohol	500	446	89	69-130
75-65-0	Tert-Butyl Alcohol	500	464	93	58-136
79-34-5	1,1,2,2-Tetrachloroethane	50	55.1	110	71-126
127-18-4	Tetrachloroethylene	50	59.3	119	79-130
109-99-9	Tetrahydrofuran	50	57.3	115	70-133
108-88-3	Toluene	50	55.8	112	76-124
87-61-6	1,2,3-Trichlorobenzene	50	62.6	125	77-128
120-82-1	1,2,4-Trichlorobenzene	50	62.1	124	78-130
71-55-6	1,1,1-Trichloroethane	50	55.2	110	70-129
79-00-5	1,1,2-Trichloroethane	50	56.5	113	74-124
79-01-6	Trichloroethylene	50	53.6	107	75-128
75-69-4	Trichlorofluoromethane	50	54.5	109	73-145
95-63-6	1,2,4-Trimethylbenzene	50	60.9	122	74-123
75-01-4	Vinyl Chloride	50	53.2	106	76-141
	m,p-Xylene	100	116	116	80-128
95-47-6	o-Xylene	50	58.0	116	80-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	75-124%
17060-07-0	1,2-Dichloroethane-D4	101%	72-135%
2037-26-5	Toluene-D8	100%	75-126%
460-00-4	4-Bromofluorobenzene	104%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5288-BS	J0976337.D	1	05/06/16	DP	n/a	n/a	VJ5288

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

FA33668-1, FA33668-2, FA33668-3, FA33668-4, FA33668-5, FA33668-7, FA33668-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	113	90	50-147
71-43-2	Benzene	25	28.8	115	81-122
100-44-7	Benzyl Chloride	25	26.0	104	54-122
74-97-5	Bromochloromethane	25	25.1	100	76-123
75-27-4	Bromodichloromethane	25	28.1	112	79-123
75-25-2	Bromoform	25	25.7	103	66-123
78-93-3	2-Butanone (MEK)	125	118	94	56-143
75-15-0	Carbon Disulfide	25	32.4	130	66-148
56-23-5	Carbon Tetrachloride	25	31.8	127	76-136
108-90-7	Chlorobenzene	25	27.7	111	82-124
75-00-3	Chloroethane	25	26.8	107	62-144
67-66-3	Chloroform	25	27.2	109	80-124
110-82-7	Cyclohexane	25	29.6	118	73-138
124-48-1	Dibromochloromethane	25	26.0	104	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	21.0	84	64-123
106-93-4	1,2-Dibromoethane	25	24.4	98	75-120
75-71-8	Dichlorodifluoromethane	25	24.1	96	42-167
95-50-1	1,2-Dichlorobenzene	25	24.9	100	82-124
541-73-1	1,3-Dichlorobenzene	25	27.6	110	84-125
106-46-7	1,4-Dichlorobenzene	25	25.8	103	78-120
75-34-3	1,1-Dichloroethane	25	29.6	118	81-122
107-06-2	1,2-Dichloroethane	25	25.7	103	75-125
75-35-4	1,1-Dichloroethylene	25	32.5	130	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.4	106	78-120
156-60-5	trans-1,2-Dichloroethylene	25	32.6	130*	76-127
78-87-5	1,2-Dichloropropane	25	26.4	106	76-124
10061-01-5	cis-1,3-Dichloropropene	25	26.8	107	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.6	110	80-120
100-41-4	Ethylbenzene	25	28.7	115	81-121
76-13-1	Freon 113	25	28.9	116	72-134
591-78-6	2-Hexanone	125	118	94	61-129
98-82-8	Isopropylbenzene	25	29.8	119	83-132
99-87-6	p-Isopropyltoluene	25	30.2	121	79-130
79-20-9	Methyl Acetate	125	120	96	65-126
74-83-9	Methyl Bromide	25	22.9	92	59-143
74-87-3	Methyl Chloride	25	26.1	104	50-159

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5288-BS	J0976337.D	1	05/06/16	DP	n/a	n/a	VJ5288

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

FA33668-1, FA33668-2, FA33668-3, FA33668-4, FA33668-5, FA33668-7, FA33668-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-87-2	Methylcyclohexane	25	30.2	121	76-129
75-09-2	Methylene Chloride	25	27.6	110	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	117	94	66-122
1634-04-4	Methyl Tert Butyl Ether	25	25.1	100	72-117
100-42-5	Styrene	25	25.7	103	78-119
75-85-4	Tert-Amyl Alcohol	250	252	101	65-124
75-65-0	Tert-Butyl Alcohol	250	250	100	63-129
79-34-5	1,1,2,2-Tetrachloroethane	25	24.1	96	72-120
127-18-4	Tetrachloroethylene	25	25.9	104	76-135
109-99-9	Tetrahydrofuran	25	23.8	95	56-122
108-88-3	Toluene	25	26.9	108	80-120
87-61-6	1,2,3-Trichlorobenzene	25	22.3	89	68-131
120-82-1	1,2,4-Trichlorobenzene	25	23.4	94	73-129
71-55-6	1,1,1-Trichloroethane	25	28.0	112	75-130
79-00-5	1,1,2-Trichloroethane	25	24.9	100	76-119
79-01-6	Trichloroethylene	25	28.3	113	81-126
75-69-4	Trichlorofluoromethane	25	29.1	116	71-156
95-63-6	1,2,4-Trimethylbenzene	25	28.6	114	79-120
75-01-4	Vinyl Chloride	25	27.8	111	69-159
	m,p-Xylene	50	54.5	109	79-126
95-47-6	o-Xylene	25	27.2	109	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33668-8MS	Y28350.D	1	05/05/16	AD	n/a	n/a	VY1148
FA33668-8MSD	Y28351.D	1	05/05/16	AD	n/a	n/a	VY1148
FA33668-8	Y28349.D	1	05/05/16	AD	n/a	n/a	VY1148

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

FA33668-6, FA33668-8

CAS No.	Compound	FA33668-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		375	364	97	363	358	99	2	61-152/27
71-43-2	Benzene	ND		75	70.7	94	72.6	71.8	99	2	76-126/26
100-44-7	Benzyl Chloride	ND		75	74.3	99	72.6	68.9	95	8	65-126/31
74-97-5	Bromochloromethane	ND		75	72.7	97	72.6	71.1	98	2	77-120/24
75-27-4	Bromodichloromethane	ND		75	75.6	101	72.6	72.3	100	4	74-130/25
75-25-2	Bromoform	ND		75	77.2	103	72.6	75.5	104	2	76-127/26
78-93-3	2-Butanone (MEK)	ND		375	351	94	363	335	92	5	75-137/25
75-15-0	Carbon Disulfide	ND		75	68.1	91	72.6	67.6	93	1	72-122/29
56-23-5	Carbon Tetrachloride	ND		75	70.6	94	72.6	71.4	98	1	78-133/29
108-90-7	Chlorobenzene	ND		75	75.1	100	72.6	75.3	104	0	81-129/29
75-00-3	Chloroethane	ND		75	57.6	77	72.6	63.6	88	10	68-133/29
67-66-3	Chloroform	ND		75	68.4	91	72.6	69.0	95	1	72-123/26
110-82-7	Cyclohexane	ND		75	53.1	71*	72.6	53.4	74	1	73-126/32
124-48-1	Dibromochloromethane	ND		75	75.6	101	72.6	76.0	105	1	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	ND		75	67.6	90	72.6	68.5	94	1	70-137/29
106-93-4	1,2-Dibromoethane	ND		75	72.9	97	72.6	71.6	99	2	77-126/26
75-71-8	Dichlorodifluoromethane	ND		75	54.9	73	72.6	52.3	72	5	68-168/29
95-50-1	1,2-Dichlorobenzene	ND		75	77.9	104	72.6	78.5	108	1	80-129/32
541-73-1	1,3-Dichlorobenzene	ND		75	81.4	109	72.6	80.0	110	2	81-129/33
106-46-7	1,4-Dichlorobenzene	ND		75	81.7	109	72.6	78.7	108	4	76-130/32
75-34-3	1,1-Dichloroethane	ND		75	70.7	94	72.6	73.0	101	3	73-125/27
107-06-2	1,2-Dichloroethane	ND		75	73.6	98	72.6	71.7	99	3	74-128/23
75-35-4	1,1-Dichloroethylene	ND		75	64.7	86	72.6	62.7	86	3	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		75	66.5	89	72.6	67.1	92	1	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		75	71.9	96	72.6	73.2	101	2	70-127/27
78-87-5	1,2-Dichloropropane	ND		75	70.8	94	72.6	67.4	93	5	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		75	76.0	101	72.6	73.3	101	4	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		75	79.4	106	72.6	78.3	108	1	75-131/28
100-41-4	Ethylbenzene	ND		75	74.7	100	72.6	74.2	102	1	77-123/31
76-13-1	Freon 113	ND		75	54.5	73	72.6	53.4	74	2	71-129/30
591-78-6	2-Hexanone	ND		375	373	99	363	343	95	8	72-133/26
98-82-8	Isopropylbenzene	ND		75	74.7	100	72.6	73.3	101	2	80-136/32
99-87-6	p-Isopropyltoluene	ND		75	76.9	103	72.6	76.0	105	1	77-131/34
79-20-9	Methyl Acetate	ND		375	385	103	363	388	107	1	67-137/30
74-83-9	Methyl Bromide	ND		75	69.1	92	72.6	67.4	93	2	65-139/31
74-87-3	Methyl Chloride	ND		75	69.0	92	72.6	68.7	95	0	71-144/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33668-8MS	Y28350.D	1	05/05/16	AD	n/a	n/a	VY1148
FA33668-8MSD	Y28351.D	1	05/05/16	AD	n/a	n/a	VY1148
FA33668-8	Y28349.D	1	05/05/16	AD	n/a	n/a	VY1148

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

FA33668-6, FA33668-8

CAS No.	Compound	FA33668-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-87-2	Methylcyclohexane	ND		75	52.1	69*	72.6	51.7	71*	1	75-128/31
75-09-2	Methylene Chloride	ND		75	70.1	93	72.6	67.5	93	4	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		375	377	101	363	361	100	4	76-132/26
1634-04-4	Methyl Tert Butyl Ether	ND		75	77.7	104	72.6	79.6	110	2	77-120/24
100-42-5	Styrene	ND		75	80.4	107	72.6	77.2	106	4	78-125/30
75-85-4	Tert-Amyl Alcohol	ND		750	685	91	726	645	89	6	69-130/32
75-65-0	Tert-Butyl Alcohol	ND		750	725	97	726	707	97	3	74-126/32
79-34-5	1,1,2,2-Tetrachloroethane	ND		75	70.8	94	72.6	63.6	88	11	71-126/30
127-18-4	Tetrachloroethylene	ND		75	110	147*	72.6	126	174*	14	79-130/31
109-99-9	Tetrahydrofuran	ND		75	66.3	88	72.6	68.8	95	4	70-133/26
108-88-3	Toluene	ND		75	71.7	96	72.6	72.7	100	1	76-124/30
87-61-6	1,2,3-Trichlorobenzene	ND		75	76.1	101	72.6	74.8	103	2	77-128/35
120-82-1	1,2,4-Trichlorobenzene	ND		75	77.5	103	72.6	78.3	108	1	78-130/34
71-55-6	1,1,1-Trichloroethane	ND		75	67.3	90	72.6	68.1	94	1	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		75	73.8	98	72.6	72.9	100	1	74-124/28
79-01-6	Trichloroethylene	ND		75	71.4	95	72.6	73.4	101	3	75-128/27
75-69-4	Trichlorofluoromethane	ND		75	58.3	78	72.6	59.0	81	1	73-145/31
95-63-6	1,2,4-Trimethylbenzene	ND		75	79.8	106	72.6	79.7	110	0	74-123/34
75-01-4	Vinyl Chloride	ND		75	63.1	84	72.6	62.1	86	2	76-141/27
	m,p-Xylene	ND		150	149	99	145	147	101	1	80-128/30
95-47-6	o-Xylene	ND		75	76.0	101	72.6	73.5	101	3	80-132/30

CAS No.	Surrogate Recoveries	MS	MSD	FA33668-8	Limits
1868-53-7	Dibromofluoromethane	100%	100%	107%	75-124%
17060-07-0	1,2-Dichloroethane-D4	100%	96%	111%	72-135%
2037-26-5	Toluene-D8	98%	100%	101%	75-126%
460-00-4	4-Bromofluorobenzene	101%	100%	98%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33668-1MS	J0976346.D	1	05/06/16	DP	n/a	n/a	VJ5288
FA33668-1MSD	J0976347.D	1	05/06/16	DP	n/a	n/a	VJ5288
FA33668-1	J0976339.D	1	05/06/16	DP	n/a	n/a	VJ5288

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

FA33668-1, FA33668-2, FA33668-3, FA33668-4, FA33668-5, FA33668-7, FA33668-9

CAS No.	Compound	FA33668-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	104	83	125	112	90	7	50-147/21
71-43-2	Benzene	ND		25	25.7	103	25	25.9	104	1	81-122/14
100-44-7	Benzyl Chloride	ND		25	19.5	78	25	20.2	81	4	54-122/18
74-97-5	Bromochloromethane	ND		25	23.3	93	25	23.0	92	1	76-123/14
75-27-4	Bromodichloromethane	ND		25	24.4	98	25	24.1	96	1	79-123/19
75-25-2	Bromoform	ND		25	19.1	76	25	19.0	76	1	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	107	86	125	115	92	7	56-143/18
75-15-0	Carbon Disulfide	ND		25	27.0	108	25	24.6	98	9	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	28.6	114	25	25.9	104	10	76-136/23
108-90-7	Chlorobenzene	ND		25	24.7	99	25	24.9	100	1	82-124/14
75-00-3	Chloroethane	ND		25	31.4	126	25	29.0	116	8	62-144/20
67-66-3	Chloroform	ND		25	25.4	102	25	25.4	102	0	80-124/15
110-82-7	Cyclohexane	ND		25	26.6	106	25	26.2	105	2	73-138/18
124-48-1	Dibromochloromethane	ND		25	21.7	87	25	20.6	82	5	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	17.0	68	25	18.6	74	9	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	21.3	85	25	22.3	89	5	75-120/13
75-71-8	Dichlorodifluoromethane	ND		25	23.7	95	25	23.1	92	3	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		25	22.0	88	25	23.1	92	5	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		25	23.9	96	25	24.6	98	3	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		25	23.2	93	25	23.9	96	3	78-120/15
75-34-3	1,1-Dichloroethane	ND		25	27.5	110	25	27.6	110	0	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	23.4	94	25	23.6	94	1	75-125/14
75-35-4	1,1-Dichloroethylene	ND		25	30.2	121	25	29.1	116	4	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		25	23.8	95	25	23.9	96	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	29.7	119	25	29.6	118	0	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	23.4	94	25	24.0	96	3	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25	22.3	89	25	21.5	86	4	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	22.1	88	25	21.6	86	2	80-120/22
100-41-4	Ethylbenzene	ND		25	25.5	102	25	25.7	103	1	81-121/14
76-13-1	Freon 113	ND		25	26.8	107	25	25.3	101	6	72-134/20
591-78-6	2-Hexanone	ND		125	110	88	125	117	94	6	61-129/18
98-82-8	Isopropylbenzene	ND		25	26.3	105	25	25.9	104	2	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	26.1	104	25	26.8	107	3	79-130/16
79-20-9	Methyl Acetate	ND		125	100	80	125	107	86	7	65-126/18
74-83-9	Methyl Bromide	ND		25	25.9	104	25	24.5	98	6	59-143/19
74-87-3	Methyl Chloride	ND		25	27.1	108	25	27.1	108	0	50-159/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33668-1MS	J0976346.D	1	05/06/16	DP	n/a	n/a	VJ5288
FA33668-1MSD	J0976347.D	1	05/06/16	DP	n/a	n/a	VJ5288
FA33668-1	J0976339.D	1	05/06/16	DP	n/a	n/a	VJ5288

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

FA33668-1, FA33668-2, FA33668-3, FA33668-4, FA33668-5, FA33668-7, FA33668-9

CAS No.	Compound	FA33668-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-87-2	Methylcyclohexane	ND		25	28.2	113	25	27.4	110	3	76-129/17
75-09-2	Methylene Chloride	ND		25	25.8	103	25	25.7	103	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	107	86	125	113	90	5	66-122/16
1634-04-4	Methyl Tert Butyl Ether	0.75	J	25	23.0	89	25	23.9	93	4	72-117/14
100-42-5	Styrene	ND		25	21.7	87	25	21.4	86	1	78-119/23
75-85-4	Tert-Amyl Alcohol	ND		250	229	92	250	232	93	1	65-124/23
75-65-0	Tert-Butyl Alcohol	ND		250	293	117	250	332	133*	12	63-129/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	21.1	84	25	22.7	91	7	72-120/14
127-18-4	Tetrachloroethylene	ND		25	23.2	93	25	22.6	90	3	76-135/16
109-99-9	Tetrahydrofuran	ND		25	18.6	74	25	20.9	84	12	56-122/21
108-88-3	Toluene	ND		25	23.9	96	25	23.7	95	1	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	18.1	72	25	20.5	82	12	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		25	20.1	80	25	21.3	85	6	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		25	26.1	104	25	25.6	102	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	22.3	89	25	22.6	90	1	76-119/14
79-01-6	Trichloroethylene	ND		25	26.2	105	25	27.0	108	3	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	30.6	122	25	29.7	119	3	71-156/21
95-63-6	1,2,4-Trimethylbenzene	ND		25	24.9	100	25	25.3	101	2	79-120/18
75-01-4	Vinyl Chloride	ND		25	28.8	115	25	27.9	112	3	69-159/18
	m,p-Xylene	ND		50	48.1	96	50	47.6	95	1	79-126/15
95-47-6	o-Xylene	ND		25	24.5	98	25	24.1	96	2	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA33668-1	Limits
1868-53-7	Dibromofluoromethane	103%	102%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	100%	98%	79-125%
2037-26-5	Toluene-D8	96%	95%	101%	85-112%
460-00-4	4-Bromofluorobenzene	98%	101%	102%	83-118%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VJ5237-BFB
Lab File ID: J0975149.D
Instrument ID: GCMSJ
Injection Date: 03/15/16
Injection Time: 13:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	66293	17.6		Pass
75	30.0 - 60.0% of mass 95	194069	51.4		Pass
95	Base peak, 100% relative abundance	377600	100.0		Pass
96	5.0 - 9.0% of mass 95	26531	7.03		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	318315	84.3		Pass
175	5.0 - 9.0% of mass 174	22907	6.07	(7.20) [a]	Pass
176	95.0 - 101.0% of mass 174	311403	82.5	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	20325	5.38	(6.53) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VJ5237-IC5237	J0975150.D	03/15/16	14:17	00:24	Initial cal 1
VJ5237-IC5237	J0975151.D	03/15/16	14:41	00:48	Initial cal 2
VJ5237-IC5237	J0975152.D	03/15/16	15:05	01:12	Initial cal 3
VJ5237-IC5237	J0975153.D	03/15/16	15:28	01:35	Initial cal 4
VJ5237-ICC5237	J0975154.D	03/15/16	15:51	01:58	Initial cal 5
VJ5237-IC5237	J0975155.D	03/15/16	16:15	02:22	Initial cal 6
VJ5237-IC5237	J0975156.D	03/15/16	16:39	02:46	Initial cal 7
VJ5237-ICV5237	J0975158.D	03/15/16	17:26	03:33	Initial cal verification 5
VJ5237-ICV5237	J0975159.D	03/15/16	17:51	03:58	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VJ5288-BFB
Lab File ID: J0976335.D
Instrument ID: GCMSJ
Injection Date: 05/06/16
Injection Time: 07:51

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	46163	17.6		Pass
75	30.0 - 60.0% of mass 95	130347	49.8		Pass
95	Base peak, 100% relative abundance	261781	100.0		Pass
96	5.0 - 9.0% of mass 95	17617	6.73		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	227328	86.8		Pass
175	5.0 - 9.0% of mass 174	15699	6.00	(6.91) [a]	Pass
176	95.0 - 101.0% of mass 174	223829	85.5	(98.5) [a]	Pass
177	5.0 - 9.0% of mass 176	13748	5.25	(6.14) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VJ5288-CC5237	J0976336.D	05/06/16	08:27	00:36	Continuing cal 5
VJ5288-BS	J0976337.D	05/06/16	09:04	01:13	Blank Spike
VJ5288-MB	J0976338.D	05/06/16	09:27	01:36	Method Blank
FA33668-1	J0976339.D	05/06/16	10:01	02:10	RA-16 GWD
FA33668-2	J0976340.D	05/06/16	10:24	02:33	EB 050316D
FA33668-3	J0976341.D	05/06/16	10:47	02:56	S-42S
FA33668-4	J0976342.D	05/06/16	11:10	03:19	RA-11 GWS
FA33668-5	J0976343.D	05/06/16	11:33	03:42	BPEB-12
FA33668-7	J0976344.D	05/06/16	11:56	04:05	S-43S
FA33668-9	J0976345.D	05/06/16	12:18	04:27	TB 050416
FA33668-1MS	J0976346.D	05/06/16	12:41	04:50	Matrix Spike
FA33668-1MSD	J0976347.D	05/06/16	13:04	05:13	Matrix Spike Duplicate
ZZZZZZ	J0976348.D	05/06/16	13:26	05:35	(unrelated sample)
ZZZZZZ	J0976349.D	05/06/16	13:49	05:58	(unrelated sample)
ZZZZZZ	J0976350.D	05/06/16	14:12	06:21	(unrelated sample)
ZZZZZZ	J0976351.D	05/06/16	14:34	06:43	(unrelated sample)
ZZZZZZ	J0976352.D	05/06/16	14:57	07:06	(unrelated sample)
ZZZZZZ	J0976353.D	05/06/16	15:20	07:29	(unrelated sample)
ZZZZZZ	J0976354.D	05/06/16	15:43	07:52	(unrelated sample)
ZZZZZZ	J0976355.D	05/06/16	16:06	08:15	(unrelated sample)
VJ5288-ECC5237	J0976357.D	05/06/16	16:51	09:00	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VY1133-BFB
Lab File ID: Y28091.D
Instrument ID: GCMSY
Injection Date: 04/25/16
Injection Time: 08:42

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	31414	16.2		Pass
75	30.0 - 60.0% of mass 95	89240	45.9		Pass
95	Base peak, 100% relative abundance	194368	100.0		Pass
96	5.0 - 9.0% of mass 95	13127	6.75		Pass
173	Less than 2.0% of mass 174	173	0.09	(0.14) [a]	Pass
174	50.0 - 100.0% of mass 95	126793	65.2		Pass
175	5.0 - 9.0% of mass 174	10199	5.25	(8.04) [a]	Pass
176	95.0 - 101.0% of mass 174	120513	62.0	(95.0) [a]	Pass
177	5.0 - 9.0% of mass 176	7710	3.97	(6.40) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY1133-IC1133	Y28092.D	04/25/16	09:09	00:27	Initial cal 1
VY1133-IC1133	Y28093.D	04/25/16	09:35	00:53	Initial cal 2
VY1133-IC1133	Y28094.D	04/25/16	10:01	01:19	Initial cal 3
VY1133-ICC1133	Y28095.D	04/25/16	10:27	01:45	Initial cal 4
VY1133-IC1133	Y28096.D	04/25/16	10:54	02:12	Initial cal 5
VY1133-IC1133	Y28097.D	04/25/16	11:20	02:38	Initial cal 6
VY1133-IC1133	Y28098.D	04/25/16	11:47	03:05	Initial cal 7
VY1133-ICV1133	Y28100.D	04/25/16	12:40	03:58	Initial cal verification 4
VY1133-BS	Y28101.D	04/25/16	13:06	04:24	Blank Spike
VY1133-MB	Y28102.D	04/25/16	13:32	04:50	Method Blank
ZZZZZZ	Y28103.D	04/25/16	13:58	05:16	(unrelated sample)
ZZZZZZ	Y28104.D	04/25/16	14:25	05:43	(unrelated sample)
ZZZZZZ	Y28105.D	04/25/16	14:51	06:09	(unrelated sample)
ZZZZZZ	Y28106.D	04/25/16	15:17	06:35	(unrelated sample)
ZZZZZZ	Y28107.D	04/25/16	15:44	07:02	(unrelated sample)
FA33373-1	Y28108.D	04/25/16	16:10	07:28	(used for QC only; not part of job FA33668)
FA33373-1MS	Y28109.D	04/25/16	16:37	07:55	Matrix Spike
FA33373-1MSD	Y28110.D	04/25/16	17:03	08:21	Matrix Spike Duplicate
ZZZZZZ	Y28111.D	04/25/16	17:29	08:47	(unrelated sample)
ZZZZZZ	Y28112.D	04/25/16	17:55	09:13	(unrelated sample)
ZZZZZZ	Y28113.D	04/25/16	18:22	09:40	(unrelated sample)
ZZZZZZ	Y28114.D	04/25/16	18:48	10:06	(unrelated sample)
VY1133-ECC1133	Y28117.D	04/25/16	20:08	11:26	Ending cal 4

Instrument Performance Check (BFB)

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VY1147-BFB
Lab File ID: Y28344.D
Instrument ID: GCMSY
Injection Date: 05/05/16
Injection Time: 11:50

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	41988	17.3		Pass
75	30.0 - 60.0% of mass 95	110276	45.5		Pass
95	Base peak, 100% relative abundance	242432	100.0		Pass
96	5.0 - 9.0% of mass 95	16514	6.81		Pass
173	Less than 2.0% of mass 174	1220	0.50	(0.78) [a]	Pass
174	50.0 - 100.0% of mass 95	155680	64.2		Pass
175	5.0 - 9.0% of mass 174	11116	4.59	(7.14) [a]	Pass
176	95.0 - 101.0% of mass 174	147904	61.0	(95.0) [a]	Pass
177	5.0 - 9.0% of mass 176	10368	4.28	(7.01) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY1147-CC1133	Y28345.D	05/05/16	12:16	00:26	Continuing cal 4
VY1147-BS	Y28346.D	05/05/16	12:43	00:53	Blank Spike
VY1148-BS	Y28346.D	05/05/16	12:43	00:53	Blank Spike
VY1148-MB	Y28347.D	05/05/16	13:09	01:19	Method Blank
VY1147-MB	Y28347.D	05/05/16	13:09	01:19	Method Blank
FA33668-6	Y28348.D	05/05/16	13:37	01:47	RA-11 (10-11)
FA33668-8	Y28349.D	05/05/16	14:03	02:13	RA-10 (5.5-6.5)
FA33668-8MS	Y28350.D	05/05/16	14:30	02:40	Matrix Spike
FA33668-8MSD	Y28351.D	05/05/16	14:56	03:06	Matrix Spike Duplicate
FA33661-1	Y28352.D	05/05/16	15:23	03:33	(used for QC only; not part of job FA33668)
FA33661-1MS	Y28353.D	05/05/16	15:49	03:59	Matrix Spike
FA33661-1MSD	Y28354.D	05/05/16	16:16	04:26	Matrix Spike Duplicate
ZZZZZZ	Y28355.D	05/05/16	16:42	04:52	(unrelated sample)
ZZZZZZ	Y28356.D	05/05/16	17:08	05:18	(unrelated sample)
ZZZZZZ	Y28357.D	05/05/16	17:35	05:45	(unrelated sample)
ZZZZZZ	Y28358.D	05/05/16	18:01	06:11	(unrelated sample)
ZZZZZZ	Y28360.D	05/05/16	18:54	07:04	(unrelated sample)
ZZZZZZ	Y28361.D	05/05/16	19:20	07:30	(unrelated sample)
ZZZZZZ	Y28364.D	05/05/16	20:40	08:50	(unrelated sample)
ZZZZZZ	Y28366.D	05/05/16	21:32	09:42	(unrelated sample)
ZZZZZZ	Y28369.D	05/05/16	22:52	11:02	(unrelated sample)
VY1147-ECC1133	Y28370.D	05/05/16	23:18	11:28	Ending cal 4

Volatile Internal Standard Area Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VJ5288-CC5237	**Injection Date:**	05/06/16
Lab File ID:	J0976336.D	**Injection Time:**	08:27
Instrument ID:	GCMSJ	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	1586569	7.76	1198090	10.85	683182	13.21	86536	5.30
Check Std [b]	1212118	7.76	1006931	10.85	572973	13.21	70938	5.30
Upper Limit [c]	2424236	8.26	2013862	11.35	1145946	13.71	141876	5.80
Lower Limit [d]	606059	7.26	503466	10.35	286487	12.71	35469	4.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VJ5288-BS	1266415	7.76	991226	10.85	553575	13.21	75498	5.29
VJ5288-MB	1159104	7.76	883827	10.85	457173	13.21	60811	5.30
FA33668-1	1152893	7.76	860585	10.85	457571	13.21	58566	5.29
FA33668-2	1102385	7.76	840083	10.85	435532	13.21	57582	5.31
FA33668-3	1090332	7.76	831734	10.85	425513	13.21	46472	5.29
FA33668-4	1091095	7.76	822107	10.85	431356	13.21	44210	5.30
FA33668-5	1047973	7.76	806409	10.85	421807	13.21	43655	5.30
FA33668-7	1030671	7.76	835340	10.85	426289	13.21	43570	5.29
FA33668-9 [e]	1081776	7.76	824836	10.85	426861	13.21	45853	5.30
FA33668-1MS	1104790	7.76	896020	10.85	509227	13.21	54489	5.30
FA33668-1MSD	1187335	7.76	969225	10.85	528581	13.21	63764	5.30
ZZZZZZ	1134505	7.76	865713	10.85	447393	13.21	53062	5.30
ZZZZZZ	1115580	7.76	880610	10.85	462511	13.21	50502	5.29
ZZZZZZ	1105593	7.76	870123	10.85	443911	13.21	55662	5.29
ZZZZZZ	1088320	7.76	838910	10.85	443148	13.21	52422	5.29
ZZZZZZ	1072423	7.76	823652	10.85	442385	13.21	57570	5.30
ZZZZZZ	1062923	7.76	827150	10.85	425756	13.21	53599	5.30
ZZZZZZ	1036000	7.76	819464	10.85	426630	13.21	53218	5.30
ZZZZZZ	1060528	7.76	811868	10.85	414014	13.21	52768	5.30
VJ5288-ECC5237	1182731	7.76	992716	10.85	568214	13.21	73128	5.31

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4
IS 4 = Tert Butyl Alcohol-D10

(a) Initial Cal is: VJ5237-ICC5237 J0975154.D 03/15/16 15:51
(b) Check Std Limit = -50 to +100% of initial cal area.
(c) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(e) Sample received outside the holding time.

Volatile Internal Standard Area Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VY1147-CC1133	**Injection Date:**	05/05/16
Lab File ID:	Y28345.D	**Injection Time:**	12:16
Instrument ID:	GCMSY	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	1290258	7.12	871042	10.31	421584	12.68	132224	4.63
Check Std [b]	1143127	7.12	767774	10.31	349588	12.68	122374	4.63
Upper Limit [c]	2286254	7.62	1535548	10.81	699176	13.18	244748	5.13
Lower Limit [d]	571564	6.62	383887	9.81	174794	12.18	61187	4.13

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VY1147-BS	1137952	7.12	769129	10.31	355287	12.68	137922	4.64
VY1148-BS	1137952	7.12	769129	10.31	355287	12.68	137922	4.64
VY1148-MB	1089657	7.12	690768	10.31	309681	12.68	122321	4.65
VY1147-MB	1089657	7.12	690768	10.31	309681	12.68	122321	4.65
FA33668-6	1013078	7.12	652285	10.31	289645	12.68	115742	4.63
FA33668-8	1046988	7.12	676017	10.31	304662	12.68	132736	4.62
FA33668-8MS	1084285	7.12	740422	10.31	338261	12.68	110523	4.63
FA33668-8MSD	1094889	7.12	731019	10.31	333628	12.68	115010	4.63
FA33661-1	1102525	7.12	747326	10.31	321453	12.68	163541	4.63
FA33661-1MS	1026130	7.12	696311	10.31	315136	12.68	102218	4.62
FA33661-1MSD	1056010	7.12	722942	10.31	329950	12.68	101577	4.63
ZZZZZZ	1040058	7.12	682781	10.31	295773	12.68	148506	4.63
ZZZZZZ	1007305	7.12	669635	10.31	289895	12.68	108726	4.63
ZZZZZZ	920717	7.12	594177	10.31	253996	12.68	114249	4.62
ZZZZZZ	1059211	7.12	737717	10.31	331044	12.68	176156	4.63
ZZZZZZ	1084883	7.12	731607	10.31	326550	12.68	171944	4.63
ZZZZZZ	1051368	7.12	734364	10.31	290674	12.69	100536	4.63
ZZZZZZ	1078425	7.12	712304	10.31	344505	12.68	182135	4.63
ZZZZZZ	1103640	7.12	768818	10.31	369350	12.68	223709	4.62
ZZZZZZ	1058875	7.12	673111	10.31	303648	12.68	118658	4.63
VY1147-ECC11331047437	7.12	714808	10.31	329859	12.68	106277	4.63	

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4
IS 4 = Tert Butyl Alcohol-D10

(a) Initial Cal is: VY1133-ICC1133 Y28095.D 04/25/16 10:27
(b) Check Std Limit = -50 to +100% of initial cal area.
(c) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

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
FA33668-1	J0976339.D	102	98	101	102
FA33668-2	J0976340.D	103	96	101	105
FA33668-3	J0976341.D	102	98	102	107
FA33668-4	J0976342.D	103	97	101	104
FA33668-5	J0976343.D	101	98	96	104
FA33668-7	J0976344.D	101	100	98	107
FA33668-9	J0976345.D	102	96	101	105
FA33668-1MS	J0976346.D	103	102	96	98
FA33668-1MSD	J0976347.D	102	100	95	101
VJ5288-BS	J0976337.D	101	100	98	100
VJ5288-MB	J0976338.D	103	100	101	105

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	83-118%
S2 = 1,2-Dichloroethane-D4	79-125%
S3 = Toluene-D8	85-112%
S4 = 4-Bromofluorobenzene	83-118%

Volatile Surrogate Recovery Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
FA33668-6	Y28348.D	107	110	100	100
FA33668-8	Y28349.D	107	111	101	98
FA33668-8MS	Y28350.D	100	100	98	101
FA33668-8MSD	Y28351.D	100	96	100	100
VY1148-BS	Y28346.D	102	101	100	104
VY1148-MB	Y28347.D	102	103	101	102

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	75-124%
S2 = 1,2-Dichloroethane-D4	72-135%
S3 = Toluene-D8	75-126%
S4 = 4-Bromofluorobenzene	71-133%

Initial Calibration Summary

Job Number: FA33668 **Sample:** VJ5237-ICC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975154.D
Project: BMSMC, Building 5 Area, Humacao, PR

Response Factor Report MSVOA6

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Calibration Files
1 =J0975150.D 2 =J0975151.D 3 =J0975152.D 4 =J0975153.D
5 =J0975154.D 6 =J0975155.D 7 =J0975156.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.226	0.305	0.314	0.308	0.327	0.342	0.332	0.308	12.46
3)P Chloromethane	0.335	0.301	0.320	0.324	0.334	0.351	0.340	0.329	4.86
4)C Vinyl Chloride	0.306	0.335	0.326	0.343	0.351	0.357	0.343	0.337	5.08
5) 1,3-Butadiene	0.236	0.241	0.269	0.252	0.249	0.264	0.245	0.251	4.77
6) Bromomethane	0.330	0.262	0.247	0.239	0.228	0.219	0.189	0.245	17.99
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9990									
Response Ratio = 0.00000 + 0.26348 *A + -0.03644 *A^2									
7) Chloroethane	0.215	0.175	0.178	0.175	0.164	0.158		0.178	11.29
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997									
Response Ratio = 0.00000 + 0.17878 *A + -0.01522 *A^2									
8) Trichlorofluorome	0.349	0.410	0.421	0.423	0.442	0.461	0.424	0.419	8.36
9) Ethyl Ether	0.182	0.184	0.195	0.194	0.201	0.199	0.198	0.193	3.78
10) 1,2-Dichlorotrifl	0.298	0.273	0.294	0.289	0.298	0.290	0.293	0.291	2.94
11)C 1,1-Dichloroethen	0.379	0.323	0.361	0.360	0.366	0.371	0.374	0.362	5.07
12) Freon 113	0.245	0.237	0.254	0.253	0.254	0.252	0.257	0.250	2.71
13) Carbon Disulfide	0.730	0.678	0.750	0.760	0.772	0.781	0.805	0.754	5.44
14) Iodomethane	0.407	0.373	0.395	0.393	0.409	0.405	0.418	0.400	3.68
15) Allyl chloride	0.286	0.321	0.336	0.334	0.336	0.377	0.351	0.335	8.31
16) Methylene Chlorid	0.637	0.344	0.339	0.327	0.332	0.317	0.319	0.374	31.16
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997									
Response Ratio = 0.00000 + 0.33127 *A + -0.00672 *A^2									
17) Acetone	0.014	0.017	0.016	0.015	0.014	0.015	0.014	0.015	7.86
18) Methyl acetate	0.028	0.029	0.028	0.029	0.030	0.030	0.030	0.029	3.89
19) trans-1,2-Dichlor	0.330	0.306	0.333	0.332	0.342	0.341	0.343	0.332	3.84
20) Hexane	0.206	0.202	0.219	0.216	0.219	0.216	0.215	0.213	3.17
21) Methyl Tert Butyl	0.660	0.619	0.646	0.664	0.689	0.679	0.682	0.663	3.67
22) Acetonitrile	0.015	0.014	0.012	0.009	0.009	0.010	0.009	0.011	22.87
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9971									
Response Ratio = 0.00000 + 0.00954 *A + -0.00002 *A^2									
23) Di-isopropyl ethe	0.775	0.685	0.741	0.755	0.797	0.780	0.778	0.759	4.90
24) Chloroprene	0.322	0.323	0.353	0.351	0.369	0.402	0.382	0.357	8.29
25)P 1,1-Dichloroethan	0.468	0.411	0.443	0.436	0.450	0.447	0.452	0.444	3.95
26) Acrylonitrile	0.074	0.063	0.066	0.066	0.064	0.068	0.063	0.066	6.02
27) ETBE	0.704	0.682	0.741	0.781	0.815	0.795	0.801	0.760	6.80
28) Vinyl acetate	0.374	0.384	0.400	0.402	0.397	0.391	0.341	0.384	5.59
29) cis-1,2-Dichloroe	0.285	0.271	0.280	0.280	0.296	0.289	0.294	0.285	3.00
30) 2,2-Dichloropropa	0.357	0.301	0.344	0.342	0.356	0.358	0.366	0.346	6.31
31) Bromochloromethan	0.119	0.129	0.132	0.126	0.135	0.130	0.131	0.129	4.03
32) Cyclohexane	0.410	0.364	0.415	0.424	0.432	0.432	0.445	0.417	6.30
33)C Chloroform	0.515	0.467	0.484	0.491	0.504	0.493	0.496	0.493	3.09
34) Ethyl acetate	0.157	0.155	0.155	0.156	0.152	0.158	0.149	0.154	2.13

Initial Calibration Summary

Job Number: FA33668 **Sample:** VJ5237-ICC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975154.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
35)  Tetrahydrofuran   0.104 0.052 0.047 0.044 0.044 0.044 0.042 0.054  41.52
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.04630 *A + -0.00198 *A^2

36)S Dibromofluorometh 0.250 0.255 0.253 0.252 0.257 0.254 0.255 0.254   0.97
37)  Carbon Tetrachlor 0.330 0.312 0.318 0.342 0.362 0.363 0.370 0.343   6.72
38)  1,1,1-Trichloroet 0.416 0.375 0.425 0.415 0.438 0.436 0.446 0.421   5.61
39)  2-Butanone        0.082 0.058 0.062 0.062 0.064 0.067 0.065 0.066  11.50
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 0.06439 *A + 0.00008 *A^2

40)  1,1-Dichloroprope 0.343 0.311 0.333 0.342 0.348 0.350 0.355 0.340   4.29
41)  tert-Butyl Format 0.126 0.128 0.140 0.152 0.153 0.158 0.153 0.144   8.96
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.15510 *A + -0.00004 *A^2

42)  Propionitrile     0.025 0.022 0.023 0.022 0.022 0.024 0.022 0.023   5.22
43)  Methacrylonitrile 0.113 0.119 0.118 0.102 0.099 0.104 0.092 0.107   9.60
44)  Benzene           1.059 0.971 0.998 1.041 1.070 1.058 1.054 1.036   3.54
45)  TAME              0.673 0.616 0.654 0.689 0.727 0.716 0.724 0.686   6.02
46)S 1,2-Dichloroethan 0.307 0.314 0.312 0.312 0.304 0.302 0.297 0.307   2.01
47)  1,2-Dichloroethan 0.429 0.351 0.353 0.352 0.361 0.347 0.345 0.363   8.20
48)  Trichloroethene   0.274 0.243 0.267 0.267 0.271 0.277 0.280 0.268   4.61
49)  Methylcyclohexane 0.410 0.398 0.456 0.458 0.471 0.473 0.491 0.451   7.63
50)  Dibromomethane    0.164 0.141 0.141 0.144 0.156 0.152 0.150 0.150   5.69
51)C 1,2-Dichloropropa 0.276 0.239 0.251 0.257 0.270 0.263 0.265 0.260   4.85
52)  Bromodichlorometh 0.318 0.299 0.327 0.330 0.351 0.353 0.357 0.334   6.38
53)  Methyl methacryla 0.107 0.131 0.136 0.139 0.143 0.159 0.149 0.138  11.83
54)  2-Chloroethyl vin 0.116 0.121 0.129 0.139 0.136 0.143 0.140 0.132   7.93
55)  cis-1,3-Dichlorop 0.323 0.319 0.361 0.389 0.410 0.410 0.415 0.375  11.08
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 0.39315 *A + 0.01136 *A^2


56) I   Chlorobenzene-d5      ----------------ISTD---------------------
57)S Toluene-d8        1.355 1.347 1.323 1.321 1.300 1.298 1.265 1.315   2.35
58)C Toluene           1.653 1.365 1.460 1.446 1.471 1.407 1.336 1.448   7.11
59)  2-Nitropropane    0.042 0.045 0.049 0.055 0.059 0.057 0.056 0.052  12.75
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.05795 *A + -0.00013 *A^2

60)  4-Methyl-2-pentan 0.205 0.199 0.211 0.211 0.212 0.212 0.197 0.207   3.18
61)  trans-1,3-Dichlor 0.363 0.367 0.402 0.430 0.466 0.456 0.447 0.419  10.05
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.45690 *A + -0.00394 *A^2

62)  Tetrachloroethene 0.394 0.342 0.379 0.383 0.402 0.391 0.418 0.387   6.11
63)  Ethyl methacrylat 0.241 0.301 0.329 0.344 0.354 0.385 0.362 0.331  14.40
64)  1,1,2-Trichloroet 0.239 0.219 0.236 0.239 0.248 0.240 0.233 0.236   3.73
65)  Dibromochlorometh 0.286 0.270 0.283 0.301 0.323 0.321 0.319 0.300   7.15
66)  1,3-Dichloropropa 0.516 0.449 0.471 0.483 0.505 0.484 0.470 0.483   4.63
67)  1,2-Dibromoethane 0.286 0.233 0.261 0.268 0.284 0.274 0.268 0.268   6.68
68)  2-hexanone        0.127 0.127 0.137 0.141 0.144 0.145 0.137 0.137   5.38
69)  1-Chlorohexane    0.374 0.365 0.429 0.433 0.455 0.460 0.457 0.425   9.29
70)C Ethylbenzene      1.800 1.588 1.686 1.674 1.710 1.611 1.489 1.651   6.01
71)P Chlorobenzene     1.070 0.900 0.950 0.938 0.995 0.954 0.934 0.963   5.72
72)  1,1,1,2-Tetrachlo 0.297 0.290 0.298 0.315 0.335 0.330 0.329 0.313   5.94
73)  m,p-Xylene        1.246 1.163 1.285 1.281 1.283 1.151 0.989 1.200   9.06
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 1.44860 *A + -0.11321 *A^2
```

```
 74)  o-Xylene          1.242 1.170 1.286 1.311 1.364 1.312 1.246 1.276   4.93
 75)  Styrene           0.778 0.811 0.917 0.997 1.036 1.013 0.989 0.934  11.01
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 1.03569 *A + -0.02194 *A^2

 76)P Bromoform         0.141 0.150 0.163 0.182 0.193 0.199 0.200 0.175  13.84
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 0.18423 *A + 0.00857 *A^2

 77)  Isopropylbenzene  1.347 1.359 1.510 1.550 1.598 1.525 1.432 1.474   6.56

 78) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
 79)S 4-Bromofluorobenz 0.921 0.908 0.904 0.900 0.902 0.910 0.885 0.904   1.20
 80)  cis-1,4-Dichloro- 0.142 0.152 0.160 0.165 0.165 0.185 0.168 0.162   8.31
 81)  n-Propylbenzene   3.234 3.011 3.289 3.294 3.344 3.138 2.897 3.173   5.22
 82)  Bromobenzene      0.772 0.702 0.735 0.728 0.771 0.760 0.761 0.747   3.50
 83)P 1,1,2,2-Tetrachlo 0.630 0.569 0.592 0.600 0.626 0.607 0.596 0.603   3.46
 84)  1,3,5-Trimethylbe 2.140 2.215 2.428 2.494 2.610 2.517 2.400 2.401   6.99
 85)  2-Chlorotoluene   2.404 2.202 2.363 2.370 2.400 2.324 2.238 2.329   3.42
 86)  trans-1,4-Dichlor 0.105 0.116 0.141 0.148 0.153 0.157 0.156 0.140  14.80
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 0.15022 *A + 0.00335 *A^2

 87)  1,2,3-Trichloropr 0.149 0.146 0.154 0.150 0.161 0.160 0.156 0.154   3.69
 88)  Cyclohexanone     0.011 0.009 0.010 0.009 0.009 0.010 0.009 0.010   8.74
 89)  4-Chlorotoluene   2.027 1.956 2.127 2.091 2.204 2.124 2.064 2.085   3.81
 90)  a-Methyl Styrene  0.597 0.610 0.646 0.682 0.716 0.790 0.760 0.686  10.72
 91)  tert-Butylbenzene 1.371 1.252 1.402 1.420 1.475 1.448 1.451 1.403   5.33
 92)  1,2,4-Trimethylbe 2.082 2.300 2.460 2.510 2.600 2.470 2.362 2.398   7.08
 93)  Pentachloroethane 0.414 0.385 0.412 0.413 0.415 0.484 0.418 0.420   7.18
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9917
               Response Ratio = 0.00000 + 0.46688 *A + -0.01851 *A^2

 94)  sec-Butylbenzene  2.800 2.681 3.012 3.027 3.097 2.922 2.752 2.899   5.41
 95)  4-Isopropyltoluen 2.228 2.226 2.494 2.552 2.616 2.508 2.397 2.432   6.34
 96)  1,3-Dichlorobenze 1.395 1.218 1.320 1.325 1.357 1.336 1.323 1.325   4.07
 97)  1,4-Dichlorobenze 1.607 1.334 1.384 1.367 1.417 1.373 1.362 1.406   6.55
 98)  n-Butylbenzene    1.186 1.230 1.408 1.459 1.506 1.513 1.511 1.402   9.85
 99)  Benzyl Chloride   0.099 0.125 0.161 0.179 0.216 0.221 0.227 0.175  28.43
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
               Response Ratio = 0.00000 + 0.19046 *A + 0.01906 *A^2

100)  1,2-Dichlorobenze 1.358 1.199 1.227 1.261 1.307 1.264 1.260 1.268   4.09
101)  1,2-Dibromo-3-Chl 0.093 0.073 0.080 0.085 0.096 0.096 0.097 0.089  10.86
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
               Response Ratio = 0.00000 + 0.08978 *A + 0.00377 *A^2

102)  Hexachlorobutadie 0.538 0.506 0.560 0.565 0.593 0.585 0.618 0.566   6.56
103)  1,2,4-Trichlorobe 0.828 0.834 0.896 0.945 1.001 0.977 0.998 0.926   7.99
104)  Naphthalene       1.180 1.150 1.346 1.516 1.606 1.531 1.529 1.408  13.07
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 1.55943 *A + -0.01523 *A^2

105)  1,2,3-Trichlorobe 0.839 0.735 0.781 0.828 0.875 0.828 0.855 0.820   5.78

106) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
107)  Ethanol                 0.141 0.133 0.116 0.107 0.108 0.096 0.117  14.69
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 0.12372 *A + -0.00341 *A^2
```

Initial Calibration Summary

Job Number: FA33668 **Sample:** VJ5237-ICC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975154.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
108)  acrolein          2.418 2.888 3.009 3.281 2.989 3.071 2.805 2.923   9.18
109)  Tert Butyl Alcoho 1.180 1.273 1.244 1.202 1.239 1.212 1.133 1.212   3.83
110)  tert Amyl alcohol 0.706 0.750 0.859 0.892 0.929 0.920 0.893 0.850  10.24
111)  Isobutyl alcohol  0.233 0.438 0.421 0.457 0.446 0.452 0.400 0.407  19.43
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 0.49668 *A + -0.01141 *A^2

112)  1,4-Dioxane       0.110 0.091 0.100 0.099 0.102 0.100 0.093 0.099   6.24
113)  3,3-Dimethyl-1-bu 0.907 0.899 1.082 1.094 1.106 1.160       1.041  10.59
 ---------------------------------------------------------------------------
 (#) = Out of Range

          MSJ031516.M        Wed Mar 16 09:51:03 2016
```

6.7.1

6

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\2\data\031516\J0975158.D          Vial: 12
Acq On    : 15 Mar 2016   5:26 pm                    Operator: DARSHNAP
Sample    : ICV5237-5                                Inst    : MSVOA6
Misc      : MS33279,VJ5237,,,,,                      Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	103	0.00	7.76
2		Dichlorodifluoromethane		----------NA----------				
3	P	Chloromethane		----------NA----------				
4	C	Vinyl Chloride		----------NA----------				
5		1,3-Butadiene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
6		Bromomethane		----------NA----------				
7		Chloroethane		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
8		Trichlorofluoromethane		----------NA----------				
9		Ethyl Ether		----------NA----------				
10		1,2-Dichlorotrifluoroetha	0.291	0.287	1.4	99	0.00	4.36
11	C	1,1-Dichloroethene		----------NA----------				
12		Freon 113		----------NA----------				
13		Carbon Disulfide		----------NA----------				
14		Iodomethane		----------NA----------				
15		Allyl chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
16		Methylene Chloride		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
17		Acetone		----------NA----------				
18		Methyl acetate		----------NA----------				
19		trans-1,2-Dichloroethene		----------NA----------				
20		Hexane		----------NA----------				
21		Methyl Tert Butyl Ether		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
22		Acetonitrile		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
23		Di-isopropyl ether		----------NA----------				
24		Chloroprene		----------NA----------				
25	P	1,1-Dichloroethane		----------NA----------				
26		Acrylonitrile		----------NA----------				
27		ETBE		----------NA----------				
28		Vinyl acetate		----------NA----------				
29		cis-1,2-Dichloroethene		----------NA----------				
30		2,2-Dichloropropane		----------NA----------				

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
Project: BMSMC, Building 5 Area, Humacao, PR

31		Bromochloromethane		----------NA----------				
32		Cyclohexane		----------NA----------				
33	C	Chloroform		----------NA----------				
34		Ethyl acetate		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
35		Tetrahydrofuran		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
36	S	Dibromofluoromethane		----------NA----------				
37		Carbon Tetrachloride		----------NA----------				
38		1,1,1-Trichloroethane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
39		2-Butanone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
40		1,1-Dichloropropene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
41		tert-Butyl Formate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
42		Propionitrile		----------NA----------				
43		Methacrylonitrile		----------NA----------				
44		Benzene		----------NA----------				
45		TAME		----------NA----------				
46	S	1,2-Dichloroethane-d4	0.307	0.305	0.7	103	0.00	7.48
47		1,2-Dichloroethane		----------NA----------				
48		Trichloroethene		----------NA----------				
49		Methylcyclohexane		----------NA----------				
50		Dibromomethane		----------NA----------				
51	C	1,2-Dichloropropane		----------NA----------				
52		Bromodichloromethane		----------NA----------				
53		Methyl methacrylate		----------NA----------				
54		2-Chloroethyl vinyl ether		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
55		cis-1,3-Dichloropropene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
56	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00	10.85
57	S	Toluene-d8	1.315	1.293	1.7	104	0.00	9.30
58	C	Toluene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
59		2-Nitropropane		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
60		4-Methyl-2-pentanone		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
61		trans-1,3-Dichloropropene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
62		Tetrachloroethene		----------NA----------				
63		Ethyl methacrylate		----------NA----------				
64		1,1,2-Trichloroethane		----------NA----------				
65		Dibromochloromethane		----------NA----------				

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
Project: BMSMC, Building 5 Area, Humacao, PR

66		1,3-Dichloropropane	----------NA----------					
67		1,2-Dibromoethane	----------NA----------					
68		2-hexanone	----------NA----------					
69		1-Chlorohexane	----------NA----------					
70	C	Ethylbenzene	----------NA----------					
71	P	Chlorobenzene	----------NA----------					
72		1,1,1,2-Tetrachloroethane	----------NA----------					
		----------	Amount	Calc.	%Drift	----------		
73		m,p-Xylene	----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------		
74		o-Xylene	----------NA----------					
		----------	Amount	Calc.	%Drift	----------		
75		Styrene	----------NA----------					
76	P	Bromoform	----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------		
77		Isopropylbenzene	----------NA----------					
78	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	13.21
79	S	4-Bromofluorobenzene	0.904	0.920	-1.8	106	0.00	12.06
80		cis-1,4-Dichloro-2-butene	----------NA----------					
81		n-Propylbenzene	----------NA----------					
82		Bromobenzene	----------NA----------					
83	P	1,1,2,2-Tetrachloroethane	----------NA----------					
84		1,3,5-Trimethylbenzene	----------NA----------					
85		2-Chlorotoluene	----------NA----------					
		----------	Amount	Calc.	%Drift	----------		
86		trans-1,4-Dichloro-2-Bute	----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------		
87		1,2,3-Trichloropropane	----------NA----------					
88		Cyclohexanone	----------NA----------					
89		4-Chlorotoluene	----------NA----------					
90		a-Methyl Styrene	----------NA----------					
91		tert-Butylbenzene	----------NA----------					
92		1,2,4-Trimethylbenzene	----------NA----------					
		----------	Amount	Calc.	%Drift	----------		
93		Pentachloroethane	----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------		
94		sec-Butylbenzene	----------NA----------					
95		4-Isopropyltoluene	----------NA----------					
96		1,3-Dichlorobenzene	----------NA----------					
97		1,4-Dichlorobenzene	----------NA----------					
98		n-Butylbenzene	----------NA----------					
		----------	Amount	Calc.	%Drift	----------		
99		Benzyl Chloride	----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------		
100		1,2-Dichlorobenzene	----------NA----------					
		----------	Amount	Calc.	%Drift	----------		
101		1,2-Dibromo-3-Chloropropa	----------NA----------					

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
            ----------------------- AvgRF   CCRF      %Dev   --------------
102     Hexachlorobutadiene                 ----------NA----------
103     1,2,4-Trichlorobenzene              ----------NA----------

            ----------------------- Amount  Calc.    %Drift   -------------
104     Naphthalene                         ----------NA----------

            ----------------------- AvgRF   CCRF      %Dev   --------------
105     1,2,3-Trichlorobenzene              ----------NA----------

106 I   Tert Butyl Alcohol-d10      1.000   1.000      0.0  102   0.00    5.29

            ----------------------- Amount  Calc.    %Drift   -------------
107     Ethanol                             ----------NA----------

            ----------------------- AvgRF   CCRF      %Dev   --------------
108     acrolein                            ----------NA----------
109     Tert Butyl Alcohol                  ----------NA----------
110     tert Amyl alcohol                   ----------NA----------

            ----------------------- Amount  Calc.    %Drift   -------------
111     Isobutyl alcohol                    ----------NA----------

            ----------------------- AvgRF   CCRF      %Dev   --------------
112     1,4-Dioxane                         ----------NA----------
113     3,3-Dimethyl-1-butanol              ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 4  CCC's out = 6
     J0975154.D MSJ031516.M       Wed Mar 16 09:50:48 2016
```

6.7.2

6

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\031516\J0975159.D Vial: 13
Acq On : 15 Mar 2016 5:51 pm Operator: DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	106	0.00	7.76
2	Dichlorodifluoromethane	0.308	0.262	14.9	85	0.00	2.69
3 P	Chloromethane	0.329	0.287	12.8	91	0.00	2.90
4 C	Vinyl Chloride	0.337	0.315	6.5	96	0.00	3.04
5	1,3-Butadiene	0.251	0.001	99.6#	0#	-0.02	3.02
		Amount	Calc.	%Drift			
6	Bromomethane	40.000	34.533	13.7	96	0.00	3.46
7	Chloroethane	40.000	38.560	3.6	105	0.00	3.61
		AvgRF	CCRF	%Dev			
8	Trichlorofluoromethane	0.419	0.410	2.1	99	0.00	3.84
9	Ethyl Ether	0.193	0.190	1.6	100	0.00	4.12
10	1,2-Dichlorotrifluoroetha		NA				
11 C	1,1-Dichloroethene	0.362	0.353	2.5	103	0.00	4.40
12	Freon 113	0.250	0.214	14.4	90	0.00	4.46
13	Carbon Disulfide	0.754	0.721	4.4	99	0.00	4.48
14	Iodomethane	0.400	0.376	6.0	98	0.00	4.59
15	Allyl chloride	0.335	0.281	16.1	89	0.00	4.92
		Amount	Calc.	%Drift			
16	Methylene Chloride	40.000	37.430	6.4	98	0.00	5.05
		AvgRF	CCRF	%Dev			
17	Acetone	0.015	0.015	0.0	111	0.00	5.07
18	Methyl acetate	0.029	0.029	0.0	103	0.00	5.19
19	trans-1,2-Dichloroethene	0.332	0.338	-1.8	105	0.00	5.23
20	Hexane	0.213	0.207	2.8	101	0.00	5.30
21	Methyl Tert Butyl Ether	0.663	0.652	1.7	101	0.00	5.34
		Amount	Calc.	%Drift			
22	Acetonitrile	400.000	320.467	19.9	92	0.00	5.59
		AvgRF	CCRF	%Dev			
23	Di-isopropyl ether	0.759	0.738	2.8	99	0.00	5.72
24	Chloroprene	0.357	0.318	10.9	92	0.00	5.87
25 P	1,1-Dichloroethane	0.444	0.423	4.7	100	0.00	5.89
26	Acrylonitrile	0.066	0.061	7.6	102	0.00	5.93
27	ETBE	0.760	0.747	1.7	98	0.00	6.12
28	Vinyl acetate	0.384	0.350	8.9	94	0.00	6.11
29	cis-1,2-Dichloroethene	0.285	0.260	8.8	94	0.00	6.47
30	2,2-Dichloropropane	0.346	0.347	-0.3	104	0.00	6.61

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
Project: BMSMC, Building 5 Area, Humacao, PR

31		Bromochloromethane	0.129	0.125	3.1	99	0.00	6.69
32		Cyclohexane	0.417	0.389	6.7	96	0.00	6.73
33	C	Chloroform	0.493	0.458	7.1	97	0.00	6.74
34		Ethyl acetate	0.154	0.135	12.3	95	0.00	6.81
			Amount	Calc.	%Drift			
35		Tetrahydrofuran	40.000	37.551	6.1	101	0.00	6.92
			AvgRF	CCRF	%Dev			
36	S	Dibromofluoromethane	0.254	0.256	-0.8	106	0.00	6.93
37		Carbon Tetrachloride	0.343	0.336	2.0	99	0.00	6.93
38		1,1,1-Trichloroethane	0.421	0.384	8.8	93	0.00	7.00
			Amount	Calc.	%Drift			
39		2-Butanone	200.000	194.637	2.7	105	0.00	7.03
			AvgRF	CCRF	%Dev			
40		1,1-Dichloropropene	0.340	0.329	3.2	101	0.00	7.10
			Amount	Calc.	%Drift			
41		tert-Butyl Formate	400.000	415.053	-3.8	111	0.00	7.19
			AvgRF	CCRF	%Dev			
42		Propionitrile	0.023	0.020	13.0	97	0.00	7.34
43		Methacrylonitrile	0.107	0.092	14.0	99	0.00	7.36
44		Benzene	1.036	0.961	7.2	96	0.00	7.36
45		TAME	0.686	0.655	4.5	96	0.00	7.43
46	S	1,2-Dichloroethane-d4	0.307	0.307	0.0	108	0.00	7.48
47		1,2-Dichloroethane	0.363	0.331	8.8	98	0.00	7.55
48		Trichloroethene	0.268	0.249	7.1	98	0.00	7.94
49		Methylcyclohexane	0.451	0.441	2.2	100	0.00	7.96
50		Dibromomethane	0.150	0.149	0.7	102	0.00	8.36
51	C	1,2-Dichloropropane	0.260	0.241	7.3	95	0.00	8.45
52		Bromodichloromethane	0.334	0.332	0.6	101	0.00	8.50
53		Methyl methacrylate	0.138	0.149	-8.0	111	0.00	8.60
54		2-Chloroethyl vinyl ether	0.132	0.128	3.0	100	0.00	9.01
			Amount	Calc.	%Drift			
55		cis-1,3-Dichloropropene	40.000	38.680	3.3	101	0.00	9.11
			AvgRF	CCRF	%Dev			
56	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00	10.85
57	S	Toluene-d8	1.315	1.310	0.4	107	0.00	9.30
58	C	Toluene	1.448	1.327	8.4	96	0.00	9.36
			Amount	Calc.	%Drift			
59		2-Nitropropane	200.000	195.657	2.2	101	0.00	9.56
			AvgRF	CCRF	%Dev			
60		4-Methyl-2-pentanone	0.207	0.199	3.9	100	0.00	9.67
			Amount	Calc.	%Drift			
61		trans-1,3-Dichloropropene	40.000	41.876	-4.7	108	0.00	9.74
			AvgRF	CCRF	%Dev			
62		Tetrachloroethene	0.387	0.345	10.9	91	0.00	9.76
63		Ethyl methacrylate	0.331	0.292	11.8	88	0.00	9.84
64		1,1,2-Trichloroethane	0.236	0.236	0.0	101	0.00	9.90
65		Dibromochloromethane	0.300	0.309	-3.0	102	0.00	10.10

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
Project: BMSMC, Building 5 Area, Humacao, PR

66		1,3-Dichloropropane	0.483	0.458	5.2	96	0.00	10.18
67		1,2-Dibromoethane	0.268	0.263	1.9	99	0.00	10.37
68		2-hexanone	0.137	0.131	4.4	97	0.00	10.49
69		1-Chlorohexane	0.425	0.430	-1.2	101	0.00	10.80
70	C	Ethylbenzene	1.651	1.575	4.6	98	0.00	10.86
71	P	Chlorobenzene	0.963	0.905	6.0	97	0.00	10.86
72		1,1,1,2-Tetrachloroethane	0.313	0.318	-1.6	101	0.00	10.91
		----------	Amount	Calc.	%Drift	----------		
73		m,p-Xylene	80.000	74.784	6.5	99	0.00	11.00
		----------	AvgRF	CCRF	%Dev	----------		
74		o-Xylene	1.276	1.262	1.1	98	0.00	11.44
		----------	Amount	Calc.	%Drift	----------		
75		Styrene	40.000	36.538	8.7	96	0.00	11.48
76	P	Bromoform	40.000	40.080	-0.2	105	0.00	11.55
		----------	AvgRF	CCRF	%Dev	----------		
77		Isopropylbenzene	1.474	1.496	-1.5	100	0.00	11.74
78	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	13.21
79	S	4-Bromofluorobenzene	0.904	0.917	-1.4	108	0.00	12.06
80		cis-1,4-Dichloro-2-butene	0.162	0.145	10.5	93	0.00	12.09
81		n-Propylbenzene	3.173	3.208	-1.1	102	0.00	12.16
82		Bromobenzene	0.747	0.708	5.2	97	0.00	12.18
83	P	1,1,2,2-Tetrachloroethane	0.603	0.583	3.3	99	0.00	12.22
84		1,3,5-Trimethylbenzene	2.401	2.350	2.1	96	0.00	12.34
85		2-Chlorotoluene	2.329	2.261	2.9	100	0.00	12.35
		----------	Amount	Calc.	%Drift	----------		
86		trans-1,4-Dichloro-2-Bute	40.000	40.996	-2.5	109	0.00	12.40
		----------	AvgRF	CCRF	%Dev	----------		
87		1,2,3-Trichloropropane	0.154	0.155	-0.6	102	0.00	12.39
88		Cyclohexanone	0.010	0.008	20.0	86	0.00	12.45
89		4-Chlorotoluene	2.085	2.084	0.0	100	0.00	12.52
90		a-Methyl Styrene	0.686	0.017	97.5#	3#	0.14	12.75
91		tert-Butylbenzene	1.403	1.351	3.7	97	0.00	12.68
92		1,2,4-Trimethylbenzene	2.398	2.363	1.5	96	0.00	12.76
		----------	Amount	Calc.	%Drift	----------		
93		Pentachloroethane	40.000	35.494	11.3	103	0.00	12.74
		----------	AvgRF	CCRF	%Dev	----------		
94		sec-Butylbenzene	2.899	2.890	0.3	99	0.00	12.87
95		4-Isopropyltoluene	2.432	2.390	1.7	97	0.00	13.00
96		1,3-Dichlorobenzene	1.325	1.292	2.5	101	0.00	13.13
97		1,4-Dichlorobenzene	1.406	1.321	6.0	99	0.00	13.22
98		n-Butylbenzene	1.402	1.436	-2.4	101	0.00	13.43
		----------	Amount	Calc.	%Drift	----------		
99		Benzyl Chloride	40.000	41.280	-3.2	105	0.00	13.45
		----------	AvgRF	CCRF	%Dev	----------		
100		1,2-Dichlorobenzene	1.268	1.223	3.5	99	0.00	13.64
		----------	Amount	Calc.	%Drift	----------		
101		1,2-Dibromo-3-Chloropropa	40.000	37.513	6.2	96	0.00	14.38

Initial Calibration Verification

Job Number: FA33668 **Sample:** VJ5237-ICV5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
Project: BMSMC, Building 5 Area, Humacao, PR

		AvgRF	CCRF	%Dev			
102	Hexachlorobutadiene	0.566	0.525	7.2	94	0.00	14.93
103	1,2,4-Trichlorobenzene	0.926	0.914	1.3	97	0.00	14.97

		Amount	Calc.	%Drift			
104	Naphthalene	40.000	41.497	-3.7	106	0.00	15.26

		AvgRF	CCRF	%Dev			
105	1,2,3-Trichlorobenzene	0.820	0.805	1.8	98	0.00	15.43
106 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	95	0.00	5.30

		Amount	Calc.	%Drift			
107	Ethanol	800.000	682.264	14.7	87	0.00	4.28

		AvgRF	CCRF	%Dev			
108	acrolein	2.923	3.226	-10.4	103	0.00	4.76
109	Tert Butyl Alcohol	1.212	1.230	-1.5	95	0.00	5.37
110	tert Amyl alcohol	0.850	0.964	-13.4	99	0.00	7.57

		Amount	Calc.	%Drift			
111	Isobutyl alcohol	800.000	742.753	7.2	92	0.00	7.46

		AvgRF	CCRF	%Dev			
112	1,4-Dioxane	0.099	0.103	-4.0	96	0.00	8.67
113	3,3-Dimethyl-1-butanol	1.041	1.125	-8.1	97	0.00	10.43

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J0975154.D MSJ031516.M Wed Mar 16 09:50:50 2016

6.7.3

6

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-CC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976336.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\2\data\050616\J0976336.D          Vial: 1
Acq On    :  6 May 2016   8:27 am                     Operator: darshnap
Sample    : cc5237-5                                  Inst    : MSVOA6
Misc      : MS33770,VJ5288,,,,,                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	76	0.00	7.76
2		Dichlorodifluoromethane	0.308	0.285	7.5	67	0.00	2.69
3	P	Chloromethane	0.329	0.328	0.3	75	0.00	2.90
4	C	Vinyl Chloride	0.337	0.360	-6.8	78	0.00	3.03
5		1,3-Butadiene	0.251	0.284	-13.1	87	0.00	3.03
		----------	Amount	Calc.	%Drift		----------	
6		Bromomethane	40.000	36.114	9.7	72	0.00	3.45
7		Chloroethane	40.000	39.392	1.5	77	0.00	3.61
		----------	AvgRF	CCRF	%Dev		----------	
8		Trichlorofluoromethane	0.419	0.462	-10.3	80	0.00	3.83
9		Ethyl Ether	0.193	0.195	-1.0	74	0.00	4.12
10		1,2-Dichlorotrifluoroetha	0.291	0.270	7.2	69	0.00	4.36
11	C	1,1-Dichloroethene	0.362	0.326	9.9	68	0.00	4.39
12		Freon 113	0.250	0.213	14.8	64	0.00	4.46
13		Carbon Disulfide	0.754	0.707	6.2	70	0.00	4.47
14		Iodomethane	0.400	0.391	2.3	73	0.00	4.58
15		Allyl chloride	0.335	0.363	-8.4	82	0.00	4.91
		----------	Amount	Calc.	%Drift		----------	
16		Methylene Chloride	40.000	40.760	-1.9	76	0.00	5.04
		----------	AvgRF	CCRF	%Dev		----------	
17		Acetone	0.015	0.016	-6.7	91	0.00	5.06
18		Methyl acetate	0.029	0.030	-3.4	75	0.00	5.19
19		trans-1,2-Dichloroethene	0.332	0.320	3.6	71	0.00	5.23
20		Hexane	0.213	0.192	9.9	67	-0.01	5.29
21		Methyl Tert Butyl Ether	0.663	0.671	-1.2	74	0.00	5.33
		----------	Amount	Calc.	%Drift		----------	
22		Acetonitrile	400.000	435.638	-8.9	89	0.00	5.58
		----------	AvgRF	CCRF	%Dev		----------	
23		Di-isopropyl ether	0.759	0.790	-4.1	76	0.00	5.71
24		Chloroprene	0.357	0.372	-4.2	77	0.00	5.87
25	P	1,1-Dichloroethane	0.444	0.452	-1.8	77	0.00	5.89
26		Acrylonitrile	0.066	0.066	0.0	79	0.00	5.92
27		ETBE	0.760	0.812	-6.8	76	0.00	6.11
28		Vinyl acetate	0.384	0.386	-0.5	74	-0.01	6.10
29		cis-1,2-Dichloroethene	0.285	0.287	-0.7	74	0.00	6.47
30		2,2-Dichloropropane	0.346	0.353	-2.0	76	0.00	6.60

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-CC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976336.D
Project: BMSMC, Building 5 Area, Humacao, PR

31		Bromochloromethane	0.129	0.132	-2.3	75	0.00	6.69
32		Cyclohexane	0.417	0.362	13.2	64	0.00	6.73
33	C	Chloroform	0.493	0.497	-0.8	75	0.00	6.73
34		Ethyl acetate	0.154	0.146	5.2	74	0.00	6.80
		----------	Amount	Calc.	%Drift	----------		
35		Tetrahydrofuran	40.000	36.233	9.4	70	0.00	6.92
		----------	AvgRF	CCRF	%Dev	----------		
36	S	Dibromofluoromethane	0.254	0.260	-2.4	77	0.00	6.92
37		Carbon Tetrachloride	0.343	0.345	-0.6	73	0.00	6.93
38		1,1,1-Trichloroethane	0.421	0.407	3.3	71	0.00	7.00
		----------	Amount	Calc.	%Drift	----------		
39		2-Butanone	200.000	208.821	-4.4	81	0.00	7.02
		----------	AvgRF	CCRF	%Dev	----------		
40		1,1-Dichloropropene	0.340	0.317	6.8	70	0.00	7.10
		----------	Amount	Calc.	%Drift	----------		
41		tert-Butyl Formate	400.000	462.806	-15.7	89	0.00	7.18
		----------	AvgRF	CCRF	%Dev	----------		
42		Propionitrile	0.023	0.023	0.0	79	-0.01	7.32
43		Methacrylonitrile	0.107	0.104	2.8	80	0.00	7.35
44		Benzene	1.036	1.079	-4.2	77	0.00	7.35
45		TAME	0.686	0.734	-7.0	77	0.00	7.43
46	S	1,2-Dichloroethane-d4	0.307	0.303	1.3	76	0.00	7.48
47		1,2-Dichloroethane	0.363	0.360	0.8	76	0.00	7.54
48		Trichloroethene	0.268	0.258	3.7	72	0.00	7.93
49		Methylcyclohexane	0.451	0.413	8.4	67	0.00	7.96
50		Dibromomethane	0.150	0.149	0.7	73	0.00	8.36
51	C	1,2-Dichloropropane	0.260	0.262	-0.8	74	0.00	8.45
52		Bromodichloromethane	0.334	0.359	-7.5	78	0.00	8.49
53		Methyl methacrylate	0.138	0.142	-2.9	76	0.00	8.59
54		2-Chloroethyl vinyl ether	0.132	0.141	-6.8	79	0.00	9.00
		----------	Amount	Calc.	%Drift	----------		
55		cis-1,3-Dichloropropene	40.000	41.741	-4.4	78	0.00	9.11
		----------	AvgRF	CCRF	%Dev	----------		
56	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00	10.85
57	S	Toluene-d8	1.315	1.229	6.5	79	0.00	9.30
58	C	Toluene	1.448	1.328	8.3	76	0.00	9.35
		----------	Amount	Calc.	%Drift	----------		
59		2-Nitropropane	200.000	185.606	7.2	76	0.00	9.56
		----------	AvgRF	CCRF	%Dev	----------		
60		4-Methyl-2-pentanone	0.207	0.214	-3.4	85	0.00	9.67
		----------	Amount	Calc.	%Drift	----------		
61		trans-1,3-Dichloropropene	40.000	39.795	0.5	81	0.00	9.73
		----------	AvgRF	CCRF	%Dev	----------		
62		Tetrachloroethene	0.387	0.318	17.8	66	0.00	9.76
63		Ethyl methacrylate	0.331	0.318	3.9	75	0.00	9.84
64		1,1,2-Trichloroethane	0.236	0.226	4.2	77	0.00	9.90
65		Dibromochloromethane	0.300	0.307	-2.3	80	0.00	10.10

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-CC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976336.D
Project: BMSMC, Building 5 Area, Humacao, PR

66		1,3-Dichloropropane	0.483	0.459	5.0	76	0.00	10.18
67		1,2-Dibromoethane	0.268	0.251	6.3	74	0.00	10.36
68		2-hexanone	0.137	0.148	-8.0	87	0.00	10.49
69		1-Chlorohexane	0.425	0.390	8.2	72	0.00	10.80
70	C	Ethylbenzene	1.651	1.670	-1.2	82	0.00	10.86
71	P	Chlorobenzene	0.963	0.979	-1.7	83	0.00	10.86
72		1,1,1,2-Tetrachloroethane	0.313	0.326	-4.2	82	0.00	10.91
		----------	Amount	Calc.	%Drift	----------		
73		m,p-Xylene	80.000	79.454	0.7	83	0.00	11.00
		----------	AvgRF	CCRF	%Dev	----------		
74		o-Xylene	1.276	1.303	-2.1	80	0.00	11.44
		----------	Amount	Calc.	%Drift	----------		
75		Styrene	40.000	40.817	-2.0	84	0.00	11.49
76	P	Bromoform	40.000	41.465	-3.7	86	0.00	11.55
		----------	AvgRF	CCRF	%Dev	----------		
77		Isopropylbenzene	1.474	1.518	-3.0	80	0.00	11.74
78	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	84	0.00	13.21
79	S	4-Bromofluorobenzene	0.904	0.889	1.7	83	0.00	12.06
80		cis-1,4-Dichloro-2-butene	0.162	0.152	6.2	77	0.00	12.09
81		n-Propylbenzene	3.173	3.289	-3.7	82	0.00	12.16
82		Bromobenzene	0.747	0.774	-3.6	84	0.00	12.18
83	P	1,1,2,2-Tetrachloroethane	0.603	0.608	-0.8	81	0.00	12.22
84		1,3,5-Trimethylbenzene	2.401	2.563	-6.7	82	0.00	12.34
85		2-Chlorotoluene	2.329	2.429	-4.3	85	0.00	12.35
		----------	Amount	Calc.	%Drift	----------		
86		trans-1,4-Dichloro-2-Bute	40.000	37.441	6.4	79	0.00	12.40
		----------	AvgRF	CCRF	%Dev	----------		
87		1,2,3-Trichloropropane	0.154	0.155	-0.6	81	0.00	12.39
88		Cyclohexanone	0.010	0.013	-30.0#	121	0.00	12.45
89		4-Chlorotoluene	2.085	2.241	-7.5	85	0.00	12.52
90		a-Methyl Styrene	0.686	1.398	-103.8#	164	0.00	12.60
91		tert-Butylbenzene	1.403	1.401	0.1	80	0.00	12.68
92		1,2,4-Trimethylbenzene	2.398	2.612	-8.9	84	0.00	12.75
		----------	Amount	Calc.	%Drift	----------		
93		Pentachloroethane	40.000	44.530	-11.3	101	0.00	12.74
		----------	AvgRF	CCRF	%Dev	----------		
94		sec-Butylbenzene	2.899	2.936	-1.3	80	0.00	12.87
95		4-Isopropyltoluene	2.432	2.545	-4.6	82	0.00	13.00
96		1,3-Dichlorobenzene	1.325	1.360	-2.6	84	0.00	13.13
97		1,4-Dichlorobenzene	1.406	1.419	-0.9	84	0.00	13.22
98		n-Butylbenzene	1.402	1.454	-3.7	81	0.00	13.43
		----------	Amount	Calc.	%Drift	----------		
99		Benzyl Chloride	40.000	43.533	-8.8	88	0.00	13.45
		----------	AvgRF	CCRF	%Dev	----------		
100		1,2-Dichlorobenzene	1.268	1.249	1.5	80	0.00	13.64
		----------	Amount	Calc.	%Drift	----------		
101		1,2-Dibromo-3-Chloropropa	40.000	33.899	15.3	68	0.00	14.38

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-CC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976336.D
Project: BMSMC, Building 5 Area, Humacao, PR

		AvgRF	CCRF	%Dev			
102	Hexachlorobutadiene	0.566	0.514	9.2	73	0.00	14.93
103	1,2,4-Trichlorobenzene	0.926	0.841	9.2	70	0.00	14.98

		Amount	Calc.	%Drift			
104	Naphthalene	40.000	30.542	23.6#	62	0.00	15.26

		AvgRF	CCRF	%Dev			
105	1,2,3-Trichlorobenzene	0.820	0.701	14.5	67	0.00	15.43
106 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	82	0.00	5.30

		Amount	Calc.	%Drift			
107	Ethanol	800.000	1015.885	-27.0#	107	-0.01	4.26

		AvgRF	CCRF	%Dev			
108	acrolein	2.923	2.849	2.5	78	0.00	4.75
109	Tert Butyl Alcohol	1.212	1.245	-2.7	82	0.00	5.37
110	tert Amyl alcohol	0.850	0.932	-9.6	82	0.00	7.57

		Amount	Calc.	%Drift			
111	Isobutyl alcohol	800.000	806.678	-0.8	85	0.00	7.45

		AvgRF	CCRF	%Dev			
112	1,4-Dioxane	0.099	0.119	-20.2#	96	0.00	8.67
113	3,3-Dimethyl-1-butanol	1.041	1.120	-7.6	83	0.00	10.43

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J0975154.D MSJ031516.M Fri May 06 14:17:16 2016

6.7.4 6

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-ECC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976357.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\2\data\050616\J0976357.D          Vial: 18
Acq On    :  6 May 2016   4:51 pm                     Operator: darshnap
Sample    : ecc5237-5                                 Inst    : MSVOA6
Misc      : MS33802,VJ5288,,,,,                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	75	0.00	7.76
2		Dichlorodifluoromethane	0.308	0.319	-3.6	73	0.01	2.70
3	P	Chloromethane	0.329	0.368	-11.9	82	0.00	2.91
4	C	Vinyl Chloride	0.337	0.403	-19.6	86	0.00	3.05
5		1,3-Butadiene	0.251	0.305	-21.5	91	0.01	3.05
		----------	Amount	Calc.	%Drift		----------	
6		Bromomethane	40.000	40.081	-0.2	77	0.00	3.47
7		Chloroethane	40.000	45.182	-13.0	85	0.01	3.62
		----------	AvgRF	CCRF	%Dev		----------	
8		Trichlorofluoromethane	0.419	0.533	-27.2	90	0.00	3.84
9		Ethyl Ether	0.193	0.173	10.4	64	0.00	4.12
10		1,2-Dichlorotrifluoroetha	0.291	0.289	0.7	72	0.00	4.35
11	C	1,1-Dichloroethene	0.362	0.335	7.5	68	0.01	4.40
12		Freon 113	0.250	0.237	5.2	69	0.00	4.47
13		Carbon Disulfide	0.754	0.719	4.6	69	0.00	4.48
14		Iodomethane	0.400	0.362	9.5	66	0.00	4.59
15		Allyl chloride	0.335	0.363	-8.4	80	0.00	4.93
		----------	Amount	Calc.	%Drift		----------	
16		Methylene Chloride	40.000	36.644	8.4	67	0.00	5.05
		----------	AvgRF	CCRF	%Dev		----------	
17		Acetone	0.015	0.015	0.0	79	0.00	5.07
18		Methyl acetate	0.029	0.026	10.3	64	0.00	5.19
19		trans-1,2-Dichloroethene	0.332	0.314	5.4	68	0.00	5.23
20		Hexane	0.213	0.210	1.4	71	0.00	5.30
21		Methyl Tert Butyl Ether	0.663	0.594	10.4	64	0.00	5.33
		----------	Amount	Calc.	%Drift		----------	
22		Acetonitrile	400.000	414.604	-3.7	83	0.01	5.60
		----------	AvgRF	CCRF	%Dev		----------	
23		Di-isopropyl ether	0.759	0.708	6.7	66	0.00	5.72
24		Chloroprene	0.357	0.412	-15.4	83	0.00	5.88
25	P	1,1-Dichloroethane	0.444	0.423	4.7	70	0.00	5.90
26		Acrylonitrile	0.066	0.058	12.1	68	0.00	5.92
27		ETBE	0.760	0.728	4.2	67	0.00	6.12
28		Vinyl acetate	0.384	0.372	3.1	70	0.00	6.11
29		cis-1,2-Dichloroethene	0.285	0.264	7.4	67	0.00	6.48
30		2,2-Dichloropropane	0.346	0.352	-1.7	74	0.00	6.61

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-ECC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976357.D
Project: BMSMC, Building 5 Area, Humacao, PR

31		Bromochloromethane	0.129	0.122	5.4	67	0.00	6.68
32		Cyclohexane	0.417	0.404	3.1	70	0.00	6.74
33	C	Chloroform	0.493	0.472	4.3	70	0.00	6.74
34		Ethyl acetate	0.154	0.138	10.4	68	0.00	6.81
			Amount	Calc.	%Drift			
35		Tetrahydrofuran	40.000	30.531	23.7	58	0.00	6.92
			AvgRF	CCRF	%Dev			
36	S	Dibromofluoromethane	0.254	0.255	-0.4	74	0.00	6.93
37		Carbon Tetrachloride	0.343	0.367	-7.0	76	0.00	6.93
38		1,1,1-Trichloroethane	0.421	0.413	1.9	70	0.00	7.00
			Amount	Calc.	%Drift			
39		2-Butanone	200.000	193.700	3.2	73	0.00	7.03
			AvgRF	CCRF	%Dev			
40		1,1-Dichloropropene	0.340	0.321	5.6	69	0.00	7.10
			Amount	Calc.	%Drift			
41		tert-Butyl Formate	400.000	406.767	-1.7	76	0.00	7.19
			AvgRF	CCRF	%Dev			
42		Propionitrile	0.023	0.021	8.7	73	0.00	7.34
43		Methacrylonitrile	0.107	0.101	5.6	76	0.00	7.36
44		Benzene	1.036	1.061	-2.4	74	0.00	7.36
45		TAME	0.686	0.667	2.8	68	0.00	7.43
46	S	1,2-Dichloroethane-d4	0.307	0.304	1.0	75	0.00	7.48
47		1,2-Dichloroethane	0.363	0.329	9.4	68	0.00	7.55
48		Trichloroethene	0.268	0.261	2.6	72	0.00	7.94
49		Methylcyclohexane	0.451	0.454	-0.7	72	0.00	7.96
50		Dibromomethane	0.150	0.133	11.3	64	0.00	8.36
51	C	1,2-Dichloropropane	0.260	0.249	4.2	69	0.00	8.45
52		Bromodichloromethane	0.334	0.336	-0.6	71	0.00	8.50
53		Methyl methacrylate	0.138	0.134	2.9	70	0.00	8.60
54		2-Chloroethyl vinyl ether	0.132	0.132	0.0	72	0.00	9.01
			Amount	Calc.	%Drift			
55		cis-1,3-Dichloropropene	40.000	38.416	4.0	70	0.00	9.11
			AvgRF	CCRF	%Dev			
56	I	Chlorobenzene-d5	1.000	1.000	0.0	83	0.00	10.85
57	S	Toluene-d8	1.315	1.212	7.8	77	0.00	9.30
58	C	Toluene	1.448	1.322	8.7	74	0.00	9.36
			Amount	Calc.	%Drift			
59		2-Nitropropane	200.000	161.678	19.2	65	0.00	9.56
			AvgRF	CCRF	%Dev			
60		4-Methyl-2-pentanone	0.207	0.205	1.0	80	0.00	9.67
			Amount	Calc.	%Drift			
61		trans-1,3-Dichloropropene	40.000	34.881	12.8	70	0.00	9.74
			AvgRF	CCRF	%Dev			
62		Tetrachloroethene	0.387	0.321	17.1	66	0.00	9.76
63		Ethyl methacrylate	0.331	0.298	10.0	70	0.00	9.84
64		1,1,2-Trichloroethane	0.236	0.209	11.4	70	0.00	9.90
65		Dibromochloromethane	0.300	0.271	9.7	70	0.00	10.10

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-ECC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976357.D
Project: BMSMC, Building 5 Area, Humacao, PR

66		1,3-Dichloropropane	0.483	0.407	15.7	67	0.00	10.18
67		1,2-Dibromoethane	0.268	0.223	16.8	65	0.00	10.36
68		2-hexanone	0.137	0.139	-1.5	80	0.00	10.49
69		1-Chlorohexane	0.425	0.417	1.9	76	0.00	10.80
70	C	Ethylbenzene	1.651	1.643	0.5	80	0.00	10.86
71	P	Chlorobenzene	0.963	0.921	4.4	77	0.00	10.86
72		1,1,1,2-Tetrachloroethane	0.313	0.303	3.2	75	0.00	10.91
		----------	Amount	Calc.	%Drift	----------		
73		m,p-Xylene	80.000	77.684	2.9	80	0.00	11.00
		----------	AvgRF	CCRF	%Dev	----------		
74		o-Xylene	1.276	1.245	2.4	76	0.00	11.44
		----------	Amount	Calc.	%Drift	----------		
75		Styrene	40.000	38.491	3.8	78	0.00	11.48
76	P	Bromoform	40.000	36.625	8.4	75	0.00	11.55
		----------	AvgRF	CCRF	%Dev	----------		
77		Isopropylbenzene	1.474	1.522	-3.3	79	0.00	11.74
78	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00	13.21
79	S	4-Bromofluorobenzene	0.904	0.883	2.3	81	0.00	12.05
80		cis-1,4-Dichloro-2-butene	0.162	0.143	11.7	72	0.00	12.09
81		n-Propylbenzene	3.173	3.313	-4.4	82	0.00	12.16
82		Bromobenzene	0.747	0.716	4.1	77	0.00	12.18
83	P	1,1,2,2-Tetrachloroethane	0.603	0.564	6.5	75	0.00	12.22
84		1,3,5-Trimethylbenzene	2.401	2.530	-5.4	81	0.00	12.34
85		2-Chlorotoluene	2.329	2.362	-1.4	82	0.00	12.35
		----------	Amount	Calc.	%Drift	----------		
86		trans-1,4-Dichloro-2-Bute	40.000	32.808	18.0	68	0.00	12.40
		----------	AvgRF	CCRF	%Dev	----------		
87		1,2,3-Trichloropropane	0.154	0.143	7.1	74	0.00	12.39
88		Cyclohexanone	0.010	0.013	-30.0	114	0.00	12.45
89		4-Chlorotoluene	2.085	2.135	-2.4	81	0.00	12.52
90		a-Methyl Styrene	0.686	1.402	-104.4#	163	0.00	12.60
91		tert-Butylbenzene	1.403	1.418	-1.1	80	0.00	12.68
92		1,2,4-Trimethylbenzene	2.398	2.496	-4.1	80	0.00	12.75
		----------	Amount	Calc.	%Drift	----------		
93		Pentachloroethane	40.000	42.538	-6.3	96	0.00	12.74
		----------	AvgRF	CCRF	%Dev	----------		
94		sec-Butylbenzene	2.899	3.032	-4.6	81	0.00	12.87
95		4-Isopropyltoluene	2.432	2.562	-5.3	81	0.00	13.00
96		1,3-Dichlorobenzene	1.325	1.280	3.4	78	0.00	13.13
97		1,4-Dichlorobenzene	1.406	1.302	7.4	76	0.00	13.22
98		n-Butylbenzene	1.402	1.472	-5.0	81	0.00	13.43
		----------	Amount	Calc.	%Drift	----------		
99		Benzyl Chloride	40.000	39.345	1.6	78	0.00	13.45
		----------	AvgRF	CCRF	%Dev	----------		
100		1,2-Dichlorobenzene	1.268	1.165	8.1	74	0.00	13.64
		----------	Amount	Calc.	%Drift	----------		
101		1,2-Dibromo-3-Chloropropa	40.000	30.506	23.7	61	0.00	14.38

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VJ5288-ECC5237
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976357.D
Project: BMSMC, Building 5 Area, Humacao, PR

		AvgRF	CCRF	%Dev			
102	Hexachlorobutadiene	0.566	0.508	10.2	71	0.00	14.93
103	1,2,4-Trichlorobenzene	0.926	0.756	18.4	63	0.00	14.97

		Amount	Calc.	%Drift			
104	Naphthalene	40.000	26.596	33.5	53	0.00	15.26

		AvgRF	CCRF	%Dev			
105	1,2,3-Trichlorobenzene	0.820	0.627	23.5	60	0.00	15.43
106 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	85	0.01	5.31

		Amount	Calc.	%Drift			
107	Ethanol	800.000	955.816	-19.5	104	0.00	4.28

		AvgRF	CCRF	%Dev			
108	acrolein	2.923	2.505	14.3	71	0.00	4.76
109	Tert Butyl Alcohol	1.212	1.068	11.9	73	0.00	5.38
110	tert Amyl alcohol	0.850	0.816	4.0	74	0.00	7.57

		Amount	Calc.	%Drift			
111	Isobutyl alcohol	800.000	761.502	4.8	83	0.00	7.45

		AvgRF	CCRF	%Dev			
112	1,4-Dioxane	0.099	0.121	-22.2	100	0.00	8.67
113	3,3-Dimethyl-1-butanol	1.041	1.028	1.2	79	0.00	10.43

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J0975154.D MSJ031516.M Mon May 09 08:36:21 2016

Initial Calibration Summary

Job Number: FA33668 **Sample:** VY1133-ICC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28095.D
Project: BMSMC, Building 5 Area, Humacao, PR

Response Factor Report MSVOA14

Method : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Calibration Files
1 =Y28092.D 2 =Y28093.D 3 =Y28094.D 4 =Y28095.D
5 =Y28096.D 6 =Y28097.D 7 =Y28098.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.422	0.435	0.442	0.449	0.394	0.394	0.413	0.421	5.22
3)P Chloromethane	0.501	0.503	0.509	0.501	0.456	0.427	0.417	0.473	8.29
4)C Vinyl Chloride	0.503	0.491	0.510	0.501	0.456	0.437	0.439	0.477	6.63
5) Bromomethane	0.236	0.262	0.245	0.234	0.213	0.197	0.194	0.226	11.29
6) Chloroethane	0.267	0.267	0.262	0.250	0.191			0.248	12.99
7) Trichlorofluorome	0.460	0.469	0.461	0.481	0.422	0.399	0.398	0.442	7.85
8) Ethyl Ether	0.212	0.258	0.246	0.235	0.223	0.226	0.214	0.231	7.33
9) 1,2-Dichlorotrifl	0.438	0.416	0.395	0.406	0.370	0.354	0.346	0.389	8.71
10)C 1,1-Dichloroethen	0.526	0.538	0.558	0.556	0.515	0.507	0.502	0.529	4.27
11) Freon 113	0.337	0.336	0.338	0.358	0.305	0.298	0.300	0.325	7.20
12) Carbon Disulfide	1.127	1.150	1.141	1.148	1.022	0.962	0.934	1.069	8.82
13) Iodomethane	0.464	0.494	0.492	0.486	0.455	0.444	0.436	0.467	5.07
14) Allyl chloride	0.472	0.488	0.473	0.465	0.433	0.416	0.401	0.450	7.35
15) Methylene Chlorid	0.657	0.559	0.498	0.424	0.365	0.357	0.341	0.457	26.04
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.42267 *A + -0.02107 *A^2									
16) Acetone	0.077	0.086	0.075	0.072	0.066	0.065	0.060	0.072	12.41
17) Methyl acetate	0.158	0.169	0.164	0.158	0.140	0.140	0.126	0.151	10.30
18) trans-1,2-Dichlor	0.405	0.423	0.429	0.422	0.389	0.373	0.368	0.401	6.24
19) Hexane	0.304	0.281	0.256	0.283	0.226	0.225	0.230	0.258	12.45
20) Methyl Tert Butyl	0.719	0.775	0.709	0.730	0.666	0.693	0.645	0.705	6.12
21) Acetonitrile	0.028	0.027	0.027	0.027	0.023	0.023	0.022	0.025	9.65
22) Di-isopropyl ethe	0.878	0.941	0.865	0.879	0.810	0.829	0.764	0.852	6.68
23) Chloroprene	0.499	0.495	0.516	0.533	0.474	0.463	0.446	0.489	6.28
24)P 1,1-Dichloroethan	0.568	0.567	0.581	0.614	0.521	0.519	0.481	0.550	8.19
25) Acrylonitrile	0.082	0.088	0.088	0.095	0.081	0.084	0.075	0.085	7.72
26) ETBE	0.822	0.974	0.836	0.895	0.820	0.827	0.767	0.849	7.86
27) Vinyl acetate	0.460	0.486	0.457	0.450	0.409	0.365	0.332	0.423	13.29
28) cis-1,2-Dichloroe	0.342	0.371	0.360	0.363	0.347	0.336	0.327	0.349	4.58
29) 2,2-Dichloropropa	0.216	0.253	0.241	0.224	0.195	0.184	0.175	0.212	13.75
30) Bromochloromethan	0.127	0.150	0.147	0.151	0.148	0.144	0.140	0.144	5.65
31) Cyclohexane	0.552	0.534	0.565	0.602	0.551	0.531	0.545	0.554	4.27
32)C Chloroform	0.574	0.615	0.587	0.595	0.555	0.527	0.515	0.567	6.41
33) Ethyl acetate	0.206	0.207	0.213	0.198	0.184	0.178	0.171	0.194	8.33
34) Tetrahydrofuran	0.096	0.069	0.071	0.068	0.063	0.065	0.063	0.071	16.17
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995									
Response Ratio = 0.00000 + 0.06705 *A + -0.00095 *A^2									
35)S Dibromofluorometh	0.222	0.235	0.224	0.231	0.229	0.230	0.231	0.229	1.93
36) Carbon Tetrachlor	0.319	0.346	0.341	0.352	0.335	0.327	0.339	0.337	3.34
37) 1,1,1-Trichloroet	0.407	0.448	0.435	0.436	0.398	0.375	0.368	0.410	7.64
38) 2-Butanone	0.117	0.112	0.116	0.109	0.100	0.100	0.095	0.107	8.11
39) 1,1-Dichloroprope	0.439	0.438	0.433	0.461	0.422	0.407	0.412	0.430	4.29
40) Propionitrile	0.033	0.035	0.038	0.036	0.033	0.033	0.031	0.034	6.74

Initial Calibration Summary

Job Number: FA33668 **Sample:** VY1133-ICC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28095.D
Project: BMSMC, Building 5 Area, Humacao, PR

41)	Methacrylonitrile	0.132	0.129	0.134	0.129	0.119	0.110	0.104	0.123	9.67
42)	Benzene	1.304	1.384	1.306	1.329	1.200	1.103	1.048	1.239	10.13
43)	TAME	0.825	0.837	0.770	0.821	0.783	0.800	0.720	0.794	5.07
44)S	1,2-Dichloroethan	0.259	0.257	0.247	0.235	0.232	0.227	0.237	0.242	5.16
45)	1,2-Dichloroethan	0.349	0.385	0.362	0.347	0.325	0.322	0.311	0.343	7.45
46)	Trichloroethene	0.362	0.339	0.333	0.341	0.314	0.296	0.295	0.326	7.66
47)	Methylcyclohexane	0.605	0.560	0.574	0.634	0.570	0.551	0.573	0.581	4.92
48)	Dibromomethane	0.154	0.170	0.158	0.156	0.149	0.149	0.147	0.155	5.11
49)C	1,2-Dichloropropa	0.319	0.324	0.325	0.310	0.303	0.299	0.292	0.310	4.17
50)	Bromodichlorometh	0.362	0.359	0.363	0.358	0.351	0.348	0.339	0.354	2.46
51)	Methyl methacryla	0.194	0.148	0.180	0.160	0.170	0.174	0.176	0.172	8.61
52)	2-Chloroethyl vin	0.143	0.126	0.151	0.142	0.146	0.138	0.133	0.140	5.80
53)	cis-1,3-Dichlorop	0.458	0.451	0.477	0.468	0.452	0.441	0.432	0.454	3.34
54) I	Chlorobenzene-d5	----------ISTD----------								
55)S	Toluene-d8	1.413	1.390	1.410	1.399	1.425	1.398	1.426	1.409	0.97
56)C	Toluene	1.999	1.984	1.980	1.931	1.757	1.595	1.511	1.823	11.14
57)	2-Nitropropane	0.076	0.065	0.078	0.071	0.070	0.070	0.069	0.071	6.12
58)	4-Methyl-2-pentan	0.332	0.295	0.335	0.300	0.278	0.263	0.248	0.293	11.25
59)	trans-1,3-Dichlor	0.513	0.489	0.532	0.533	0.513	0.507		0.514	3.18
60)	Tetrachloroethene	0.397	0.415	0.410	0.436	0.386	0.356	0.373	0.396	6.82
61)	Ethyl methacrylat	0.472	0.371	0.450	0.431	0.444	0.448	0.444	0.437	7.20
62)	1,1,2-Trichloroet	0.302	0.302	0.308	0.291	0.273	0.269	0.264	0.287	6.28
63)	Dibromochlorometh	0.338	0.332	0.346	0.339	0.338	0.339	0.336	0.338	1.25
64)	1,3-Dichloropropa	0.621	0.598	0.631	0.599	0.584	0.572	0.558	0.595	4.37
65)	1,2-Dibromoethane	0.311	0.329	0.332	0.307	0.309	0.307	0.301	0.314	3.80
66)	2-hexanone	0.247	0.181	0.236	0.206	0.198	0.191	0.184	0.206	12.48
67)	1-Chlorohexane	0.600	0.480	0.572	0.615	0.563	0.534	0.561	0.561	7.95
68)C	Ethylbenzene	2.026	2.042	2.023	2.042	1.836	1.614	1.523	1.872	11.83
69)P	Chlorobenzene	1.122	1.243	1.173	1.172	1.068	0.990	0.963	1.104	9.31
70)	1,1,1,2-Tetrachlo	0.350	0.390	0.369	0.379	0.366	0.358	0.354	0.366	3.88
71)	m,p-Xylene	1.506	1.478	1.511	1.497	1.275	1.081	0.981	1.333	16.77
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985									
	Response Ratio = 0.00000 + 1.56197 *A + -0.07417 *A^2									
72)	o-Xylene	1.563	1.439	1.557	1.558	1.458	1.340	1.281	1.456	7.75
73)	Styrene	1.018	0.990	1.113	1.158	1.106	1.044	1.016	1.063	5.85
74)P	Bromoform	0.155	0.178	0.165	0.174	0.178	0.185	0.185	0.174	6.25
75)	Isopropylbenzene	1.873	1.762	1.879	1.970	1.749	1.573	1.498	1.758	9.70
76) I	1,4-Dichlorobenzene-d	----------ISTD----------								
77)S	4-Bromofluorobenz	0.722	0.670	0.710	0.658	0.688	0.681	0.691	0.689	3.21
78)	cis-1,4-Dichloro-	0.265	0.239	0.292	0.252	0.254	0.247	0.240	0.256	7.23
79)	n-Propylbenzene	4.851	4.581	4.781	4.713	4.080	3.455	3.220	4.240	15.79
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9979									
	Response Ratio = 0.00000 + 4.87256 *A + -0.42529 *A^2									
80)	Bromobenzene	0.880	0.954	0.928	0.903	0.851	0.805	0.787	0.873	7.12
81)P	1,1,2,2-Tetrachlo	0.988	0.970	1.036	0.923	0.871	0.842	0.799	0.919	9.30
82)	1,3,5-Trimethylbe	3.522	3.390	3.608	3.673	3.243	2.866	2.693	3.285	11.46
83)	2-Chlorotoluene	3.311	3.250	3.346	3.267	2.973	2.674	2.538	3.051	10.81
84)	trans-1,4-Dichlor	0.270	0.251	0.270	0.226	0.231	0.225	0.219	0.242	9.04
85)	1,2,3-Trichloropr	0.290	0.261	0.293	0.232	0.247	0.235	0.223	0.254	11.00
86)	Cyclohexanone	0.053	0.041	0.048	0.041	0.039	0.039	0.036	0.043	13.71
87)	4-Chlorotoluene	2.915	2.849	2.854	2.904	2.629	2.359	2.266	2.682	10.10
88)	tert-Butylbenzene	2.106	2.038	2.133	2.161	2.027	1.876	1.804	2.021	6.64
89)	1,2,4-Trimethylbe	3.307	3.350	3.402	3.528	3.143	2.807	2.641	3.168	10.36
90)	Pentachloroethane	0.468	0.487	0.505	0.504	0.500	0.503	0.495	0.495	2.69
91)	sec-Butylbenzene	4.521	4.433	4.625	4.661	4.063	3.504	3.258	4.152	13.64
92)	4-Isopropyltoluen	3.590	3.438	3.606	3.821	3.330	2.899	2.771	3.351	11.51

Initial Calibration Summary

Job Number: FA33668 **Sample:** VY1133-ICC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28095.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
 93)  1,3-Dichlorobenze 1.798 1.777 1.750 1.752 1.601 1.454 1.426 1.651   9.56
 94)  1,4-Dichlorobenze 1.862 1.876 1.713 1.791 1.601 1.434 1.432 1.673  11.25
 95)  n-Butylbenzene    2.081 1.878 1.920 2.204 1.895 1.692 1.709 1.911   9.67
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9965
               Response Ratio = 0.00000 + 2.07008 *A + -0.09770 *A^2

 96)  Benzyl Chloride   0.381 0.339 0.357 0.333 0.339 0.336 0.322 0.344   5.66
 97)  1,2-Dichlorobenze 1.638 1.733 1.674 1.667 1.537 1.432 1.389 1.582   8.30
 98)  1,2-Dibromo-3-Chl 0.190 0.182 0.179 0.174 0.175 0.176 0.164 0.177   4.53
 99)  Hexachlorobutadie 0.571 0.562 0.509 0.594 0.525 0.465       0.538   8.81
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.63172 *A + -0.05518 *A^2

100)  1,2,4-Trichlorobe 1.147 1.072 0.932 1.070 0.983             1.041   8.06
101)  Naphthalene       2.545 2.468 2.387 2.601 2.524 2.234 2.122 2.411   7.30
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 2.77280 *A + -0.16498 *A^2

102)  1,2,3-Trichlorobe 1.074 1.073 0.987 1.032 0.973             1.028   4.58

103) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
104)  Ethanol           0.134 0.153 0.125 0.135 0.129 0.119 0.136 0.133   8.03
105)  Acrolein          2.059 2.203 2.237 2.282 2.212 2.054 2.460 2.215   6.26
106)  Tert butyl alcoho 1.319 1.445 1.387 1.397 1.325 1.247 1.500 1.374   6.18
107)  Isobutyl alcohol  0.319 0.298 0.372 0.324 0.335 0.316 0.395 0.337  10.21
108)  Tert Amyl Alcohol 1.201 1.089 1.275 1.196 1.157 1.086 1.364 1.195   8.33
109)  1,4-Dioxane       0.127 0.125 0.137 0.136 0.155 0.144 0.185 0.144  14.23
 ---------------------------------------------------------------------------
 (#) = Out of Range

           042516APP9-Y.m        Tue Apr 26 09:09:56 2016
```

6.7.6

6

Initial Calibration Verification

Job Number: FA33668 **Sample:** VY1133-ICV1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28100.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\042516\Y28100.D Vial: 14
Acq On : 25 Apr 2016 12:40 pm Operator: ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Mon Apr 25 13:07:57 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	106	0.00	7.12
2		Dichlorodifluoromethane	0.421	0.438	-4.0	103	0.00	1.98
3	P	Chloromethane	0.473	0.484	-2.3	102	0.00	2.20
4	C	Vinyl Chloride	0.477	0.469	1.7	99	0.00	2.32
5		Bromomethane	0.226	0.218	3.5	98	0.00	2.71
6		Chloroethane	0.248	0.213	14.1	90	0.00	2.88
7		Trichlorofluoromethane	0.442	0.442	0.0	97	0.00	3.05
8		Ethyl Ether	0.231	0.229	0.9	103	0.00	3.41
9		1,2-Dichlorotrifluoroetha	0.389	0.412	-5.9	107	0.00	3.64
10	C	1,1-Dichloroethene	0.529	0.531	-0.4	101	0.00	3.65
11		Freon 113	0.325	0.325	0.0	96	0.00	3.70
12		Carbon Disulfide	1.069	1.067	0.2	98	0.00	3.69
13		Iodomethane	0.467	0.462	1.1	100	0.00	3.81
14		Allyl chloride	0.450	0.393	12.7	89	0.00	4.18
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	51.111	-2.2	102	0.00	4.30
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.072	0.059	18.1	86	0.00	4.35
17		Methyl acetate	0.151	0.146	3.3	97	0.00	4.49
18		trans-1,2-Dichloroethene	0.401	0.448	-11.7	112	0.00	4.49
19		Hexane	0.258	0.273	-5.8	102	0.00	4.59
20		Methyl Tert Butyl Ether	0.705	0.694	1.6	100	0.00	4.61
21		Acetonitrile	0.025	0.022	12.0	87	0.00	4.85
22		Di-isopropyl ether	0.852	0.846	0.7	102	0.00	5.02
23		Chloroprene	0.489	0.437	10.6	86	0.00	5.14
24	P	1,1-Dichloroethane	0.550	0.569	-3.5	98	0.00	5.16
25		Acrylonitrile	0.085	0.083	2.4	92	0.00	5.19
26		ETBE	0.849	0.829	2.4	98	0.00	5.43
27		Vinyl acetate	0.423	0.439	-3.8	103	0.00	5.42
28		cis-1,2-Dichloroethene	0.349	0.350	-0.3	102	0.00	5.75
29		2,2-Dichloropropane	0.212	0.236	-11.3	112	0.00	5.87
30		Bromochloromethane	0.144	0.143	0.7	100	0.00	5.97
31		Cyclohexane	0.554	0.569	-2.7	100	0.00	6.00
32	C	Chloroform	0.567	0.586	-3.4	104	0.00	6.05
33		Ethyl acetate	0.194	0.198	-2.1	106	0.00	6.16
		----------	Amount	Calc.	%Drift		----------	
34		Tetrahydrofuran	50.000	48.718	2.6	100	0.00	6.23
		----------	AvgRF	CCRF	%Dev		----------	

Initial Calibration Verification

Job Number: FA33668 **Sample:** VY1133-ICV1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28100.D
Project: BMSMC, Building 5 Area, Humacao, PR

35	S	Dibromofluoromethane	0.229	0.226	1.3	103	0.00	6.24
36		Carbon Tetrachloride	0.337	0.360	-6.8	108	0.00	6.22
37		1,1,1-Trichloroethane	0.410	0.418	-2.0	101	0.00	6.28
38		2-Butanone	0.107	0.095	11.2	92	0.00	6.37
39		1,1-Dichloropropene	0.430	0.473	-10.0	108	0.00	6.42
40		Propionitrile	0.034	0.033	2.9	96	0.00	6.68
41		Methacrylonitrile	0.123	0.122	0.8	99	0.00	6.70
42		Benzene	1.239	1.309	-5.6	104	0.00	6.68
43		TAME	0.794	0.798	-0.5	103	0.00	6.81
44	S	1,2-Dichloroethane-d4	0.242	0.233	3.7	105	0.00	6.82
45		1,2-Dichloroethane	0.343	0.350	-2.0	107	0.00	6.89
46		Trichloroethene	0.326	0.345	-5.8	107	0.00	7.31
47		Methylcyclohexane	0.581	0.635	-9.3	106	0.00	7.32
48		Dibromomethane	0.155	0.166	-7.1	112	0.00	7.75
49	C	1,2-Dichloropropane	0.310	0.310	0.0	106	0.00	7.85
50		Bromodichloromethane	0.354	0.372	-5.1	110	0.00	7.91
51		Methyl methacrylate	0.172	0.167	2.9	110	0.00	8.05
52		2-Chloroethyl vinyl ether	0.140	0.149	-6.4	111	0.00	8.47
53		cis-1,3-Dichloropropene	0.454	0.493	-8.6	111	0.00	8.55
54	I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00	10.31
55	S	Toluene-d8	1.409	1.431	-1.6	106	0.00	8.75
56	C	Toluene	1.823	1.989	-9.1	106	0.00	8.80
57		2-Nitropropane	0.071	0.068	4.2	98	0.00	9.00
58		4-Methyl-2-pentanone	0.293	0.286	2.4	98	0.00	9.15
59		trans-1,3-Dichloropropene	0.514	0.615	-19.6	119	0.00	9.20
60		Tetrachloroethene	0.396	0.451	-13.9	107	0.00	9.20
61		Ethyl methacrylate	0.437	0.377	13.7	90	0.00	9.34
62		1,1,2-Trichloroethane	0.287	0.294	-2.4	104	0.00	9.36
63		Dibromochloromethane	0.338	0.367	-8.6	112	0.00	9.56
64		1,3-Dichloropropane	0.595	0.611	-2.7	105	0.00	9.64
65		1,2-Dibromoethane	0.314	0.319	-1.6	107	0.00	9.81
66		2-hexanone	0.206	0.186	9.7	93	0.00	9.99
67		1-Chlorohexane	0.561	0.611	-8.9	102	0.00	10.29
68	C	Ethylbenzene	1.872	2.109	-12.7	106	0.00	10.34
69	P	Chlorobenzene	1.104	1.212	-9.8	107	0.00	10.33
70		1,1,1,2-Tetrachloroethane	0.366	0.397	-8.5	108	0.00	10.38
		----------	Amount	Calc.	%Drift	----------		
71		m,p-Xylene	100.000	111.089	-11.1	107	0.00	10.49
		----------	AvgRF	CCRF	%Dev	----------		
72		o-Xylene	1.456	1.636	-12.4	108	0.00	10.92
73		Styrene	1.063	1.216	-14.4	108	0.00	10.97
74	P	Bromoform	0.174	0.187	-7.5	111	0.00	11.02
75		Isopropylbenzene	1.758	2.044	-16.3	107	0.00	11.23
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	12.68
77	S	4-Bromofluorobenzene	0.689	0.708	-2.8	108	0.00	11.53
78		cis-1,4-Dichloro-2-butene	0.256	0.223	12.9	88	0.00	11.58
		----------	Amount	Calc.	%Drift	----------		
79		n-Propylbenzene	50.000	57.324	-14.6	107	0.00	11.65
		----------	AvgRF	CCRF	%Dev	----------		
80		Bromobenzene	0.873	0.951	-8.9	105	0.00	11.65
81	P	1,1,2,2-Tetrachloroethane	0.919	0.892	2.9	97	0.00	11.72
82		1,3,5-Trimethylbenzene	3.285	3.798	-15.6	103	0.00	11.84
83		2-Chlorotoluene	3.051	3.460	-13.4	106	0.00	11.83
84		trans-1,4-Dichloro-2-Bute	0.242	0.219	9.5	97	0.00	11.89

Initial Calibration Verification

Job Number: FA33668 **Sample:** VY1133-ICV1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28100.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.254	0.251	1.2	108	0.00	11.86
86	Cyclohexanone	0.043	0.030	30.2#	73	0.00	11.92
87	4-Chlorotoluene	2.682	3.123	-16.4	108	0.00	12.00
88	tert-Butylbenzene	2.021	2.262	-11.9	105	0.00	12.18
89	1,2,4-Trimethylbenzene	3.168	3.709	-17.1	105	0.00	12.24
90	Pentachloroethane	0.495	0.503	-1.6	100	0.00	12.21
91	sec-Butylbenzene	4.152	4.897	-17.9	105	0.00	12.36
92	4-Isopropyltoluene	3.351	3.952	-17.9	103	0.00	12.50
93	1,3-Dichlorobenzene	1.651	1.929	-16.8	110	0.00	12.60
94	1,4-Dichlorobenzene	1.673	1.892	-13.1	106	0.00	12.69
	----------	Amount	Calc.	%Drift		----------	
95	n-Butylbenzene	50.000	59.396	-18.8	105	0.00	12.94
	----------	AvgRF	CCRF	%Dev		----------	
96	Benzyl Chloride	0.344	0.348	-1.2	104	0.00	12.94
97	1,2-Dichlorobenzene	1.582	1.796	-13.5	108	0.00	13.13
98	1,2-Dibromo-3-Chloropropa	0.177	0.163	7.9	94	0.00	13.95
	----------	Amount	Calc.	%Drift		----------	
99	Hexachlorobutadiene	50.000	56.446	-12.9	108	0.00	14.56
	----------	AvgRF	CCRF	%Dev		----------	
100	1,2,4-Trichlorobenzene	1.041	1.263	-21.3#	118	0.00	14.59
	----------	Amount	Calc.	%Drift		----------	
101	Naphthalene	50.000	58.815	-17.6	117	0.00	14.87
	----------	AvgRF	CCRF	%Dev		----------	
102	1,2,3-Trichlorobenzene	1.028	1.208	-17.5	117	0.00	15.04
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	94	0.00	4.63
104	Ethanol	0.133	0.136	-2.3	94	0.00	3.58
105	Acrolein	2.215	2.446	-10.4	101	0.00	4.01
106	Tert butyl alcohol	1.374	1.372	0.1	92	0.00	4.71
107	Isobutyl alcohol	0.337	0.323	4.2	94	0.00	6.89
108	Tert Amyl Alcohol	1.195	1.142	4.4	90	0.00	7.00
109	1,4-Dioxane	0.144	0.142	1.4	98	0.00	8.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y28095.D 042516APP9-Y.m Tue Apr 26 09:10:47 2016

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VY1147-CC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28345.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\050516\Y28345.D            Vial: 8
Acq On    :  5 May 2016  12:16 pm                     Operator: ANGIED
Sample    : CC1133-4                                  Inst    : MSVOA14
Misc      : MS33784,VY1147,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Mon Apr 25 13:07:57 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	89	0.00	7.12
2		Dichlorodifluoromethane	0.421	0.465	-10.5	92	0.00	1.98
3	P	Chloromethane	0.473	0.477	-0.8	84	0.00	2.20
4	C	Vinyl Chloride	0.477	0.471	1.3	83	0.00	2.32
5		Bromomethane	0.226	0.220	2.7	83	0.00	2.72
6		Chloroethane	0.248	0.210	15.3	74	0.00	2.88
7		Trichlorofluoromethane	0.442	0.441	0.2	81	0.00	3.05
8		Ethyl Ether	0.231	0.242	-4.8	91	0.00	3.41
9		1,2-Dichlorotrifluoroetha	0.389	0.389	0.0	85	0.00	3.64
10	C	1,1-Dichloroethene	0.529	0.508	4.0	81	0.00	3.65
11		Freon 113	0.325	0.346	-6.5	86	0.00	3.70
12		Carbon Disulfide	1.069	1.097	-2.6	85	0.00	3.69
13		Iodomethane	0.467	0.484	-3.6	88	0.00	3.81
14		Allyl chloride	0.450	0.429	4.7	82	0.00	4.18
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	48.486	3.0	81	0.00	4.30
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.072	0.077	-6.9	94	0.00	4.34
17		Methyl acetate	0.151	0.151	0.0	85	0.00	4.49
18		trans-1,2-Dichloroethene	0.401	0.406	-1.2	85	0.00	4.49
19		Hexane	0.258	0.278	-7.8	87	0.00	4.58
20		Methyl Tert Butyl Ether	0.705	0.798	-13.2	97	0.00	4.61
21		Acetonitrile	0.025	0.025	0.0	81	0.00	4.85
22		Di-isopropyl ether	0.852	0.900	-5.6	91	0.00	5.02
23		Chloroprene	0.489	0.506	-3.5	84	0.00	5.14
24	P	1,1-Dichloroethane	0.550	0.580	-5.5	84	0.00	5.16
25		Acrylonitrile	0.085	0.089	-4.7	83	0.00	5.19
26		ETBE	0.849	0.925	-9.0	92	0.00	5.42
27		Vinyl acetate	0.423	0.454	-7.3	89	0.00	5.42
28		cis-1,2-Dichloroethene	0.349	0.347	0.6	85	0.00	5.75
29		2,2-Dichloropropane	0.212	0.245	-15.6	97	0.00	5.87
30		Bromochloromethane	0.144	0.152	-5.6	89	0.00	5.97
31		Cyclohexane	0.554	0.571	-3.1	84	0.00	6.00
32	C	Chloroform	0.567	0.555	2.1	83	0.00	6.04
33		Ethyl acetate	0.194	0.186	4.1	83	0.00	6.16
		----------	Amount	Calc.	%Drift		----------	
34		Tetrahydrofuran	50.000	47.929	4.1	82	0.00	6.23
		----------	AvgRF	CCRF	%Dev		----------	

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VY1147-CC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28345.D
Project: BMSMC, Building 5 Area, Humacao, PR

35	S	Dibromofluoromethane	0.229	0.234	-2.2	90	0.00	6.24
36		Carbon Tetrachloride	0.337	0.372	-10.4	94	0.00	6.22
37		1,1,1-Trichloroethane	0.410	0.419	-2.2	85	0.00	6.28
38		2-Butanone	0.107	0.107	0.0	87	0.00	6.36
39		1,1-Dichloropropene	0.430	0.445	-3.5	85	0.00	6.42
40		Propionitrile	0.034	0.031	8.8	76	0.00	6.67
41		Methacrylonitrile	0.123	0.117	4.9	80	0.00	6.70
42		Benzene	1.239	1.260	-1.7	84	0.00	6.68
43		TAME	0.794	0.842	-6.0	91	0.00	6.81
44	S	1,2-Dichloroethane-d4	0.242	0.238	1.7	90	0.00	6.82
45		1,2-Dichloroethane	0.343	0.336	2.0	86	0.00	6.89
46		Trichloroethene	0.326	0.322	1.2	84	0.00	7.31
47		Methylcyclohexane	0.581	0.622	-7.1	87	0.00	7.32
48		Dibromomethane	0.155	0.152	1.9	86	0.00	7.75
49	C	1,2-Dichloropropane	0.310	0.296	4.5	85	0.00	7.84
50		Bromodichloromethane	0.354	0.360	-1.7	89	0.00	7.91
51		Methyl methacrylate	0.172	0.146	15.1	81	0.00	8.05
52		2-Chloroethyl vinyl ether	0.140	0.146	-4.3	91	0.00	8.47
53		cis-1,3-Dichloropropene	0.454	0.462	-1.8	88	0.00	8.55
54	I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00	10.31
55	S	Toluene-d8	1.409	1.381	2.0	87	0.00	8.75
56	C	Toluene	1.823	1.876	-2.9	86	0.00	8.80
57		2-Nitropropane	0.071	0.070	1.4	87	0.00	9.00
58		4-Methyl-2-pentanone	0.293	0.290	1.0	85	0.00	9.15
59		trans-1,3-Dichloropropene	0.514	0.527	-2.5	87	0.00	9.20
60		Tetrachloroethene	0.396	0.432	-9.1	87	0.00	9.20
61		Ethyl methacrylate	0.437	0.402	8.0	82	0.00	9.34
62		1,1,2-Trichloroethane	0.287	0.285	0.7	86	0.00	9.37
63		Dibromochloromethane	0.338	0.348	-3.0	91	0.00	9.56
64		1,3-Dichloropropane	0.595	0.589	1.0	87	0.00	9.64
65		1,2-Dibromoethane	0.314	0.301	4.1	86	0.00	9.80
66		2-hexanone	0.206	0.200	2.9	86	0.00	9.99
67		1-Chlorohexane	0.561	0.580	-3.4	83	0.00	10.29
68	C	Ethylbenzene	1.872	1.967	-5.1	85	0.00	10.34
69	P	Chlorobenzene	1.104	1.148	-4.0	86	0.00	10.33
70		1,1,1,2-Tetrachloroethane	0.366	0.371	-1.4	86	0.00	10.38
		----------	Amount	Calc.	%Drift	----------		
71		m,p-Xylene	100.000	103.146	-3.1	86	0.00	10.49
		----------	AvgRF	CCRF	%Dev	----------		
72		o-Xylene	1.456	1.498	-2.9	85	0.00	10.92
73		Styrene	1.063	1.128	-6.1	86	0.00	10.97
74	P	Bromoform	0.174	0.178	-2.3	90	0.00	11.02
75		Isopropylbenzene	1.758	1.875	-6.7	84	0.00	11.23
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00	12.68
77	S	4-Bromofluorobenzene	0.689	0.702	-1.9	89	0.00	11.53
78		cis-1,4-Dichloro-2-butene	0.256	0.231	9.8	76	0.00	11.58
		----------	Amount	Calc.	%Drift	----------		
79		n-Propylbenzene	50.000	53.637	-7.3	83	0.00	11.65
		----------	AvgRF	CCRF	%Dev	----------		
80		Bromobenzene	0.873	0.932	-6.8	86	0.00	11.65
81	P	1,1,2,2-Tetrachloroethane	0.919	0.889	3.3	80	0.00	11.72
82		1,3,5-Trimethylbenzene	3.285	3.727	-13.5	84	0.00	11.84
83		2-Chlorotoluene	3.051	3.309	-8.5	84	0.00	11.82
84		trans-1,4-Dichloro-2-Bute	0.242	0.230	5.0	85	0.00	11.89

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VY1147-CC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28345.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.254	0.236	7.1	85	0.00	11.86
86	Cyclohexanone	0.043	0.041	4.7	82	0.00	11.91
87	4-Chlorotoluene	2.682	3.014	-12.4	86	0.00	12.00
88	tert-Butylbenzene	2.021	2.202	-9.0	84	0.00	12.18
89	1,2,4-Trimethylbenzene	3.168	3.602	-13.7	85	0.00	12.24
90	Pentachloroethane	0.495	0.543	-9.7	89	0.00	12.21
91	sec-Butylbenzene	4.152	4.718	-13.6	84	0.00	12.36
92	4-Isopropyltoluene	3.351	3.890	-16.1	84	0.00	12.50
93	1,3-Dichlorobenzene	1.651	1.834	-11.1	87	0.00	12.60
94	1,4-Dichlorobenzene	1.673	1.822	-8.9	84	0.00	12.69
	----------	Amount	Calc.	%Drift	----------		
95	n-Butylbenzene	50.000	55.438	-10.9	82	0.00	12.94
	----------	AvgRF	CCRF	%Dev	----------		
96	Benzyl Chloride	0.344	0.356	-3.5	89	0.00	12.94
97	1,2-Dichlorobenzene	1.582	1.717	-8.5	85	0.00	13.13
98	1,2-Dibromo-3-Chloropropa	0.177	0.170	4.0	81	0.00	13.94
	----------	Amount	Calc.	%Drift	----------		
99	Hexachlorobutadiene	50.000	56.903	-13.8	90	0.00	14.56
	----------	AvgRF	CCRF	%Dev	----------		
100	1,2,4-Trichlorobenzene	1.041	1.234	-18.5	96	0.00	14.59
	----------	Amount	Calc.	%Drift	----------		
101	Naphthalene	50.000	54.015	-8.0	89	0.00	14.87
	----------	AvgRF	CCRF	%Dev	----------		
102	1,2,3-Trichlorobenzene	1.028	1.174	-14.2	94	0.00	15.04
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	93	0.00	4.63
104	Ethanol	0.133	0.119	10.5	81	0.00	3.58
105	Acrolein	2.215	2.045	7.7	83	0.00	4.01
106	Tert butyl alcohol	1.374	1.270	7.6	84	0.00	4.71
107	Isobutyl alcohol	0.337	0.273	19.0	78	0.00	6.88
108	Tert Amyl Alcohol	1.195	1.061	11.2	82	0.00	6.99
109	1,4-Dioxane	0.144	0.128	11.1	87	0.00	8.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y28095.D 042516APP9-Y.m Thu May 05 16:14:06 2016

6.7.8

6

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VY1147-ECC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28370.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\050516\Y28370.D            Vial: 33
Acq On    :  5 May 2016  11:18 pm                     Operator: ANGIED
Sample    : ECC1133-4                                 Inst    : MSVOA14
Misc      : MS33794,VY1147,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Mon Apr 25 13:07:57 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	81	0.00	7.12
2		Dichlorodifluoromethane	0.421	0.463	-10.0	84	0.00	1.98
3	P	Chloromethane	0.473	0.486	-2.7	79	0.00	2.20
4	C	Vinyl Chloride	0.477	0.473	0.8	77	0.00	2.32
5		Bromomethane	0.226	0.230	-1.8	80	0.00	2.72
6		Chloroethane	0.248	0.228	8.1	74	0.00	2.88
7		Trichlorofluoromethane	0.442	0.453	-2.5	76	0.00	3.05
8		Ethyl Ether	0.231	0.234	-1.3	81	0.00	3.41
9		1,2-Dichlorotrifluoroetha	0.389	0.390	-0.3	78	0.00	3.64
10	C	1,1-Dichloroethene	0.529	0.542	-2.5	79	0.00	3.65
11		Freon 113	0.325	0.356	-9.5	81	0.00	3.70
12		Carbon Disulfide	1.069	1.092	-2.2	77	0.00	3.69
13		Iodomethane	0.467	0.507	-8.6	85	0.00	3.81
14		Allyl chloride	0.450	0.444	1.3	77	0.00	4.18
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	46.563	6.9	72	0.00	4.30
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.072	0.071	1.4	79	0.00	4.35
17		Methyl acetate	0.151	0.148	2.0	76	0.00	4.49
18		trans-1,2-Dichloroethene	0.401	0.411	-2.5	79	0.00	4.49
19		Hexane	0.258	0.268	-3.9	77	0.00	4.58
20		Methyl Tert Butyl Ether	0.705	0.760	-7.8	85	0.00	4.61
21		Acetonitrile	0.025	0.023	8.0	69	0.00	4.85
22		Di-isopropyl ether	0.852	0.907	-6.5	84	0.00	5.03
23		Chloroprene	0.489	0.515	-5.3	78	0.00	5.14
24	P	1,1-Dichloroethane	0.550	0.552	-0.4	73	0.00	5.16
25		Acrylonitrile	0.085	0.079	7.1	68	0.00	5.19
26		ETBE	0.849	0.902	-6.2	82	0.00	5.43
27		Vinyl acetate	0.423	0.390	7.8	70	0.00	5.42
28		cis-1,2-Dichloroethene	0.349	0.385	-10.3	86	0.00	5.75
29		2,2-Dichloropropane	0.212	0.243	-14.6	88	0.00	5.87
30		Bromochloromethane	0.144	0.157	-9.0	85	0.00	5.97
31		Cyclohexane	0.554	0.635	-14.6	86	0.00	6.00
32	C	Chloroform	0.567	0.585	-3.2	80	0.00	6.05
33		Ethyl acetate	0.194	0.192	1.0	79	0.00	6.16
		----------	Amount	Calc.	%Drift		----------	
34		Tetrahydrofuran	50.000	49.620	0.8	78	0.00	6.24
		----------	AvgRF	CCRF	%Dev		----------	

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VY1147-ECC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28370.D
Project: BMSMC, Building 5 Area, Humacao, PR

35	S	Dibromofluoromethane	0.229	0.231	-0.9	81	0.00	6.24
36		Carbon Tetrachloride	0.337	0.398	-18.1	92	0.00	6.22
37		1,1,1-Trichloroethane	0.410	0.457	-11.5	85	0.00	6.28
38		2-Butanone	0.107	0.105	1.9	78	0.00	6.37
39		1,1-Dichloropropene	0.430	0.468	-8.8	82	0.00	6.42
40		Propionitrile	0.034	0.032	5.9	71	0.00	6.68
41		Methacrylonitrile	0.123	0.121	1.6	76	0.00	6.70
42		Benzene	1.239	1.329	-7.3	81	0.00	6.68
43		TAME	0.794	0.858	-8.1	85	0.00	6.81
44	S	1,2-Dichloroethane-d4	0.242	0.235	2.9	81	0.00	6.82
45		1,2-Dichloroethane	0.343	0.360	-5.0	84	0.00	6.89
46		Trichloroethene	0.326	0.331	-1.5	79	0.00	7.31
47		Methylcyclohexane	0.581	0.682	-17.4	87	0.00	7.32
48		Dibromomethane	0.155	0.151	2.6	78	0.00	7.75
49	C	1,2-Dichloropropane	0.310	0.315	-1.6	83	0.00	7.84
50		Bromodichloromethane	0.354	0.358	-1.1	81	0.00	7.91
51		Methyl methacrylate	0.172	0.162	5.8	82	0.00	8.05
52		2-Chloroethyl vinyl ether	0.140	0.155	-10.7	89	0.00	8.47
53		cis-1,3-Dichloropropene	0.454	0.470	-3.5	82	0.00	8.55
54	I	Chlorobenzene-d5	1.000	1.000	0.0	82	0.00	10.31
55	S	Toluene-d8	1.409	1.398	0.8	82	0.00	8.75
56	C	Toluene	1.823	1.976	-8.4	84	0.00	8.80
57		2-Nitropropane	0.071	0.073	-2.8	84	0.00	9.00
58		4-Methyl-2-pentanone	0.293	0.293	0.0	80	0.00	9.15
59		trans-1,3-Dichloropropene	0.514	0.535	-4.1	82	0.00	9.20
60		Tetrachloroethene	0.396	0.493	-24.5	93	0.00	9.20
61		Ethyl methacrylate	0.437	0.413	5.5	79	0.00	9.35
62		1,1,2-Trichloroethane	0.287	0.280	2.4	79	0.00	9.37
63		Dibromochloromethane	0.338	0.362	-7.1	88	0.00	9.56
64		1,3-Dichloropropane	0.595	0.606	-1.8	83	0.00	9.64
65		1,2-Dibromoethane	0.314	0.318	-1.3	85	0.00	9.80
66		2-hexanone	0.206	0.202	1.9	81	0.00	9.99
67		1-Chlorohexane	0.561	0.622	-10.9	83	0.00	10.29
68	C	Ethylbenzene	1.872	2.079	-11.1	84	0.00	10.34
69	P	Chlorobenzene	1.104	1.187	-7.5	83	0.00	10.33
70		1,1,1,2-Tetrachloroethane	0.366	0.403	-10.1	87	0.00	10.38
		----------	Amount	Calc.	%Drift	----------		
71		m,p-Xylene	100.000	110.018	-10.0	84	0.00	10.49
		----------	AvgRF	CCRF	%Dev	----------		
72		o-Xylene	1.456	1.606	-10.3	85	0.00	10.92
73		Styrene	1.063	1.194	-12.3	85	0.00	10.97
74	P	Bromoform	0.174	0.195	-12.1	92	0.00	11.01
75		Isopropylbenzene	1.758	2.004	-14.0	84	0.00	11.23
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	78	0.00	12.68
77	S	4-Bromofluorobenzene	0.689	0.745	-8.1	89	0.00	11.53
78		cis-1,4-Dichloro-2-butene	0.256	0.234	8.6	72	0.00	11.58
		----------	Amount	Calc.	%Drift	----------		
79		n-Propylbenzene	50.000	54.529	-9.1	80	0.00	11.65
		----------	AvgRF	CCRF	%Dev	----------		
80		Bromobenzene	0.873	0.986	-12.9	85	0.00	11.65
81	P	1,1,2,2-Tetrachloroethane	0.919	0.895	2.6	76	0.00	11.72
82		1,3,5-Trimethylbenzene	3.285	3.797	-15.6	81	0.00	11.84
83		2-Chlorotoluene	3.051	3.351	-9.8	80	0.00	11.82
84		trans-1,4-Dichloro-2-Bute	0.242	0.222	8.3	77	0.00	11.89

Continuing Calibration Summary

Job Number: FA33668 **Sample:** VY1147-ECC1133
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28370.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.254	0.241	5.1	81	0.00	11.86
86	Cyclohexanone	0.043	0.036	16.3	70	0.00	11.91
87	4-Chlorotoluene	2.682	2.982	-11.2	80	0.00	11.99
88	tert-Butylbenzene	2.021	2.276	-12.6	82	0.00	12.18
89	1,2,4-Trimethylbenzene	3.168	3.636	-14.8	81	0.00	12.24
90	Pentachloroethane	0.495	0.501	-1.2	78	0.00	12.21
91	sec-Butylbenzene	4.152	4.816	-16.0	81	0.00	12.36
92	4-Isopropyltoluene	3.351	3.879	-15.8	79	0.00	12.50
93	1,3-Dichlorobenzene	1.651	1.820	-10.2	81	0.00	12.60
94	1,4-Dichlorobenzene	1.673	1.780	-6.4	78	0.00	12.69
	----------	Amount	Calc.	%Drift	----------		
95	n-Butylbenzene	50.000	51.821	-3.6	72	0.00	12.94
	----------	AvgRF	CCRF	%Dev	----------		
96	Benzyl Chloride	0.344	0.294	14.5	69	0.00	12.94
97	1,2-Dichlorobenzene	1.582	1.755	-10.9	82	0.00	13.13
98	1,2-Dibromo-3-Chloropropa	0.177	0.167	5.6	75	0.00	13.95
	----------	Amount	Calc.	%Drift	----------		
99	Hexachlorobutadiene	50.000	57.175	-14.3	86	0.00	14.56
	----------	AvgRF	CCRF	%Dev	----------		
100	1,2,4-Trichlorobenzene	1.041	1.162	-11.6	85	0.00	14.59
	----------	Amount	Calc.	%Drift	----------		
101	Naphthalene	50.000	53.006	-6.0	83	0.00	14.87
	----------	AvgRF	CCRF	%Dev	----------		
102	1,2,3-Trichlorobenzene	1.028	1.133	-10.2	86	0.00	15.04
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	80	0.00	4.63
104	Ethanol	0.133	0.103	22.6	62	0.00	3.58
105	Acrolein	2.215	1.984	10.4	70	0.00	4.01
106	Tert butyl alcohol	1.374	1.289	6.2	74	0.00	4.71
107	Isobutyl alcohol	0.337	0.297	11.9	74	0.00	6.90
108	Tert Amyl Alcohol	1.195	1.058	11.5	71	0.00	7.01
109	1,4-Dioxane	0.144	0.133	7.6	78	0.00	8.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y28095.D 042516APP9-Y.m Fri May 06 08:06:57 2016

6.7.9

6

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976339.D
Acq On : 6 May 2016 10:01 am
Operator : darshnap
Sample : fa33668-1 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 10:55:10 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1152893	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	860585	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	457571	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.292	65	58566	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.922	113	297460	50.85	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.70%			
46) 1,2-Dichloroethane-d4	7.476	65	347961	49.18	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.36%			
57) Toluene-d8	9.301	98	1148156	50.71	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.42%			
79) 4-Bromofluorobenzene	12.057	95	422490	51.05	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.10%			
Target Compounds						Qvalue
10) 1,2-Dichlorotrifluoroe...	4.361	67	16841	2.51	ug/L	94
21) Methyl Tert Butyl Ether	5.334	73	11429	0.75	ug/L #	66
112) 1,4-Dioxane	8.680	88	1776	76.37	ug/L	85

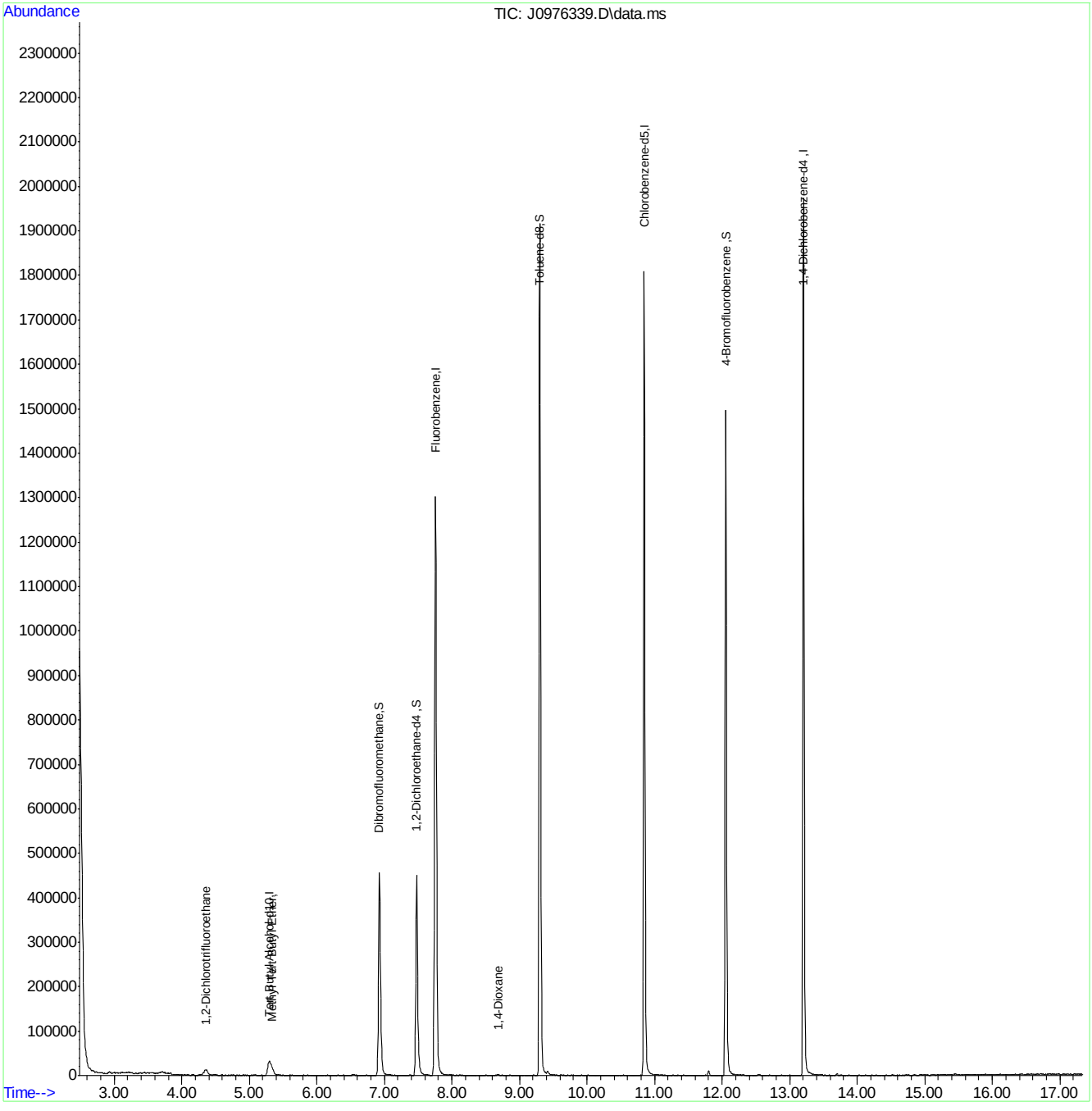
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33668

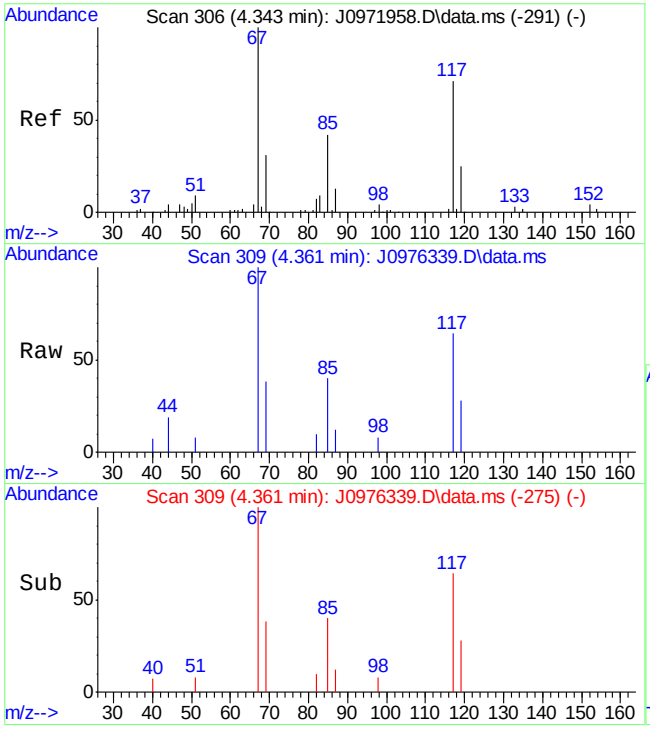
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976339.D
Acq On : 6 May 2016 10:01 am
Operator : darshnap
Sample : fa33668-1 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 10:55:10 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



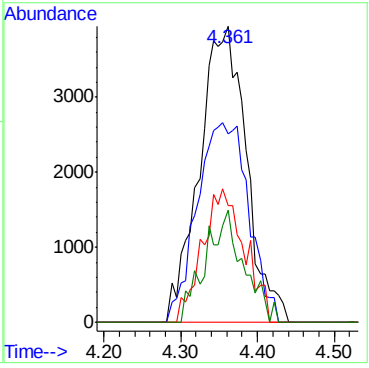
MSJ031516.M Fri May 06 14:16:40 2016 Page: 2

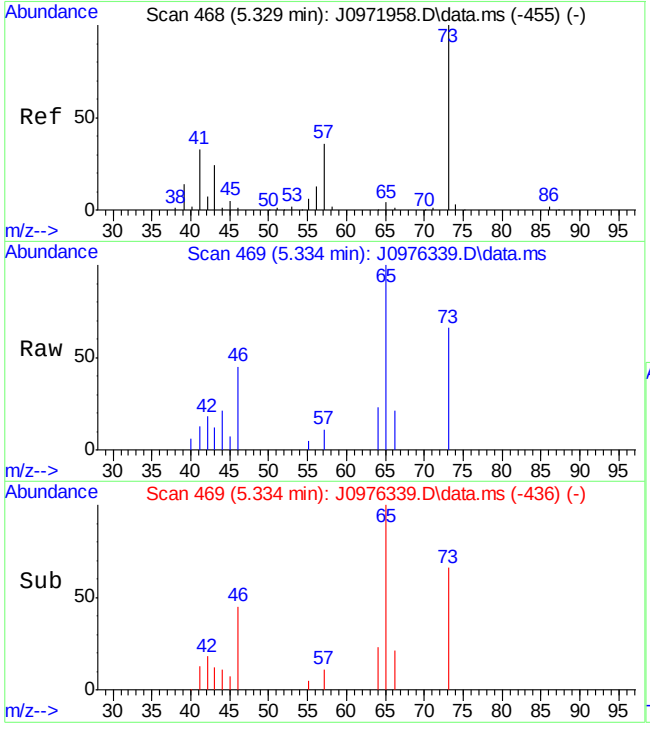


#10
1,2-Dichlorotrifluoroethane
Concen: 2.51 ug/L
RT: 4.361 min Scan# 309
Delta R.T. 0.006 min
Lab File: J0976339.D
Acq: 6 May 2016 10:01 am

Tgt Ion: 67 Resp: 16841

Ion	Ratio	Lower	Upper
67	100		
117	63.8	49.1	89.1
85	39.6	20.5	60.5
69	38.0	12.3	52.3

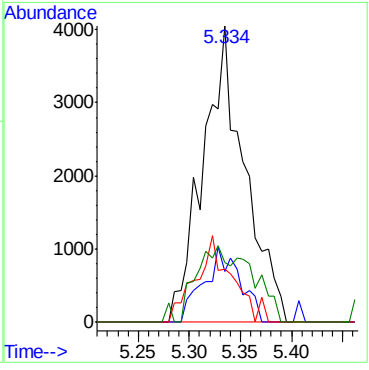


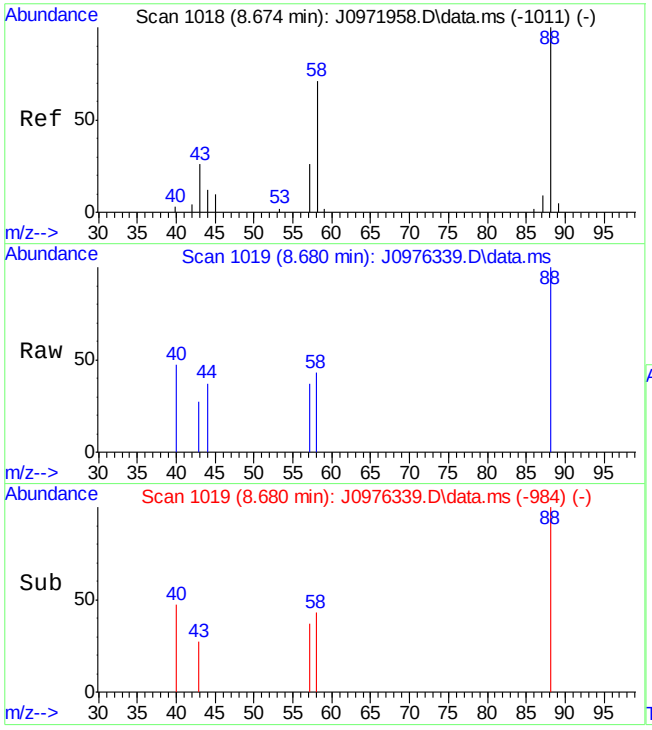


#21
Methyl Tert Butyl Ether
Concen: 0.75 ug/L
RT: 5.334 min Scan# 469
Delta R.T. -0.001 min
Lab File: J0976339.D
Acq: 6 May 2016 10:01 am

Tgt Ion: 73 Resp: 11429

Ion	Ratio	Lower	Upper
73	100		
57	17.0	17.3	77.3#
43	18.0	2.8	62.8
41	20.0	6.2	66.2

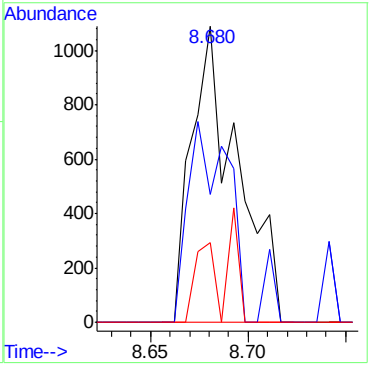




#112
1,4-Dioxane
Concen: 76.37 ug/L
RT: 8.680 min Scan# 1019
Delta R.T. 0.012 min
Lab File: J0976339.D
Acq: 6 May 2016 10:01 am

Tgt Ion: 88 Resp: 1776

Ion	Ratio	Lower	Upper
88	100		
58	43.1	29.4	89.4
43	27.1	0.0	57.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976340.D
Acq On : 6 May 2016 10:24 am
Operator : darshnap
Sample : fa33668-2 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 10:55:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1102385	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	840083	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	435532	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.310	65	57582	250.00	ug/L	0.01
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	288368	51.55	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.10%			
46) 1,2-Dichloroethane-d4	7.482	65	324297	47.94	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 95.88%			
57) Toluene-d8	9.301	98	1110684	50.25	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.50%			
79) 4-Bromofluorobenzene	12.057	95	412738	52.39	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.78%			

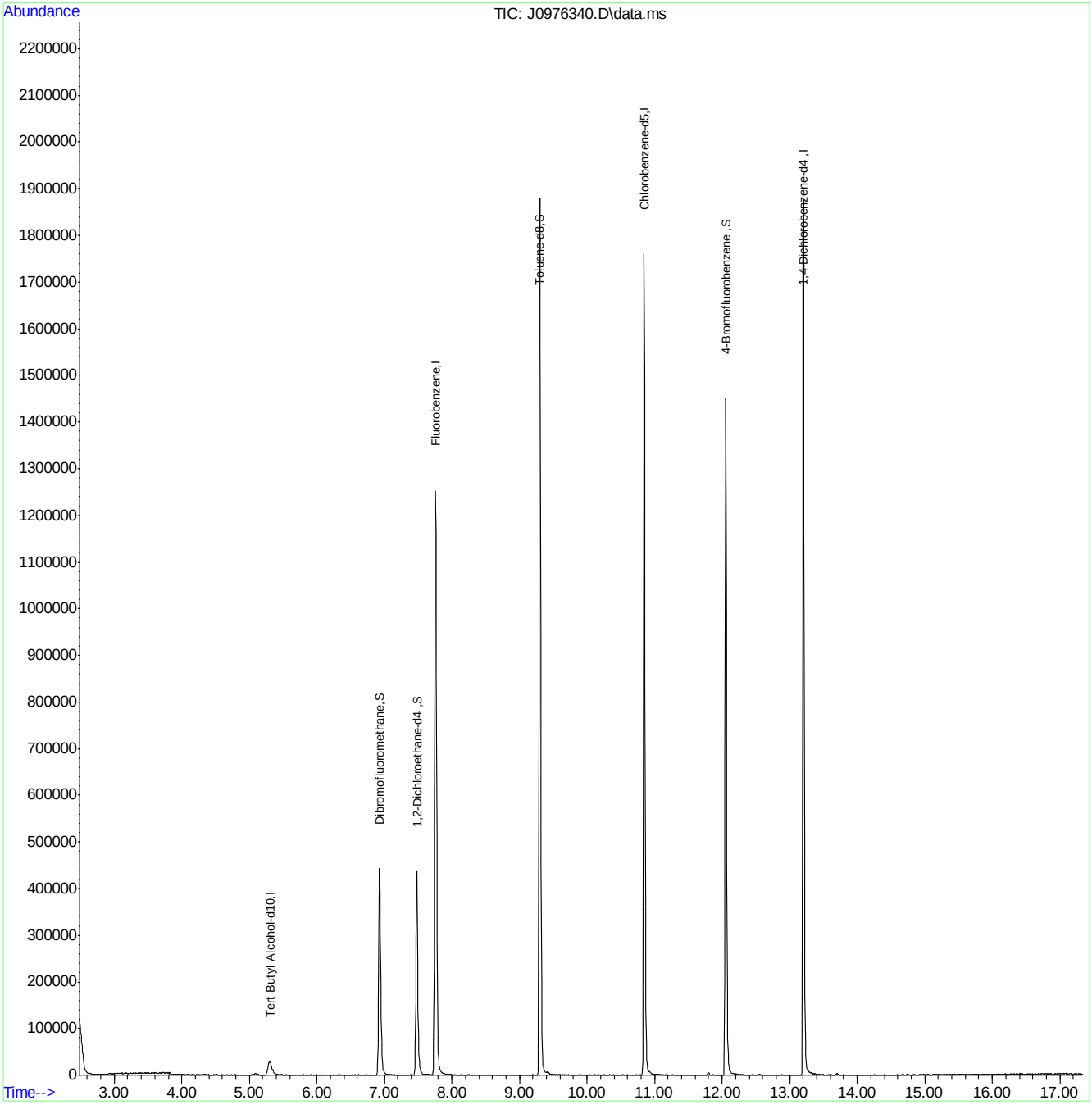
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976340.D
Acq On : 6 May 2016 10:24 am
Operator : darshnap
Sample : fa33668-2 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 10:55:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976341.D
Acq On : 6 May 2016 10:47 am
Operator : darshnap
Sample : fa33668-3 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 14:10:20 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1090332	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	831734	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	425513	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.292	65	46472	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	282388	51.04	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.08%			
46) 1,2-Dichloroethane-d4	7.482	65	327796	48.99	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.98%			
57) Toluene-d8	9.301	98	1116332	51.01	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.02%			
79) 4-Bromofluorobenzene	12.057	95	410415	53.33	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.66%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.658	85	4578	0.68	ug/L	85
9) Ethyl Ether	4.118	59	41882	9.93	ug/L	97
10) 1,2-Dichlorotrifluoroe...	4.355	67	72206	11.39	ug/L	97
12) Freon 113	4.471	101	47635	8.73	ug/L	95
19) trans-1,2-Dichloroethene	5.237	61	1763	0.24	ug/L #	76
21) Methyl Tert Butyl Ether	5.334	73	23466	1.62	ug/L #	71
23) Di-isopropyl ether	5.730	45	4485	0.27	ug/L	69
32) Cyclohexane	6.746	56	7785	0.86	ug/L	86
71) Chlorobenzene	10.864	112	7123	0.44	ug/L	90
77) Isopropylbenzene	11.753	105	5276	0.22	ug/L	86
112) 1,4-Dioxane	8.668	88	222342	12048.99	ug/L	94

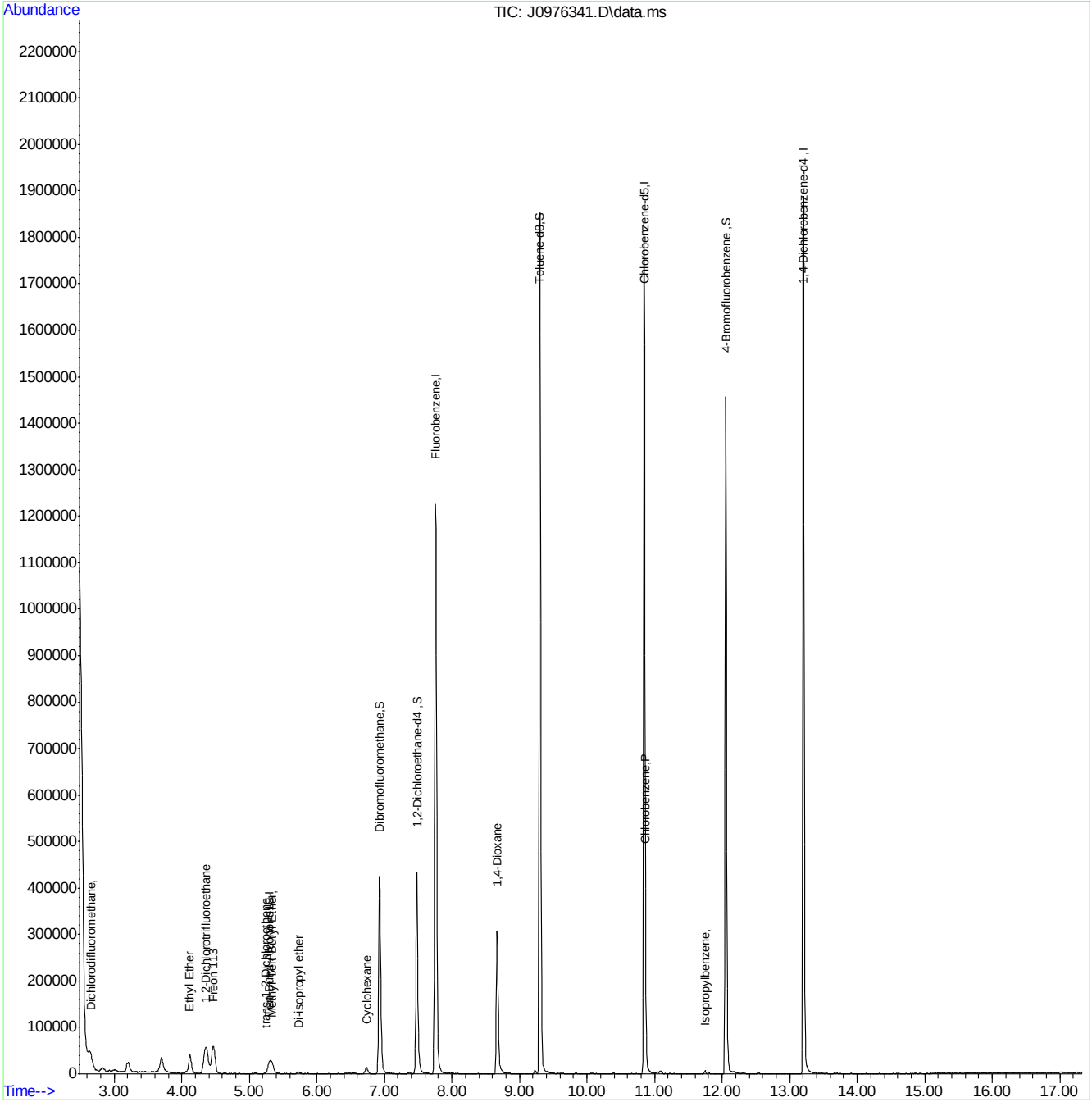
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33668

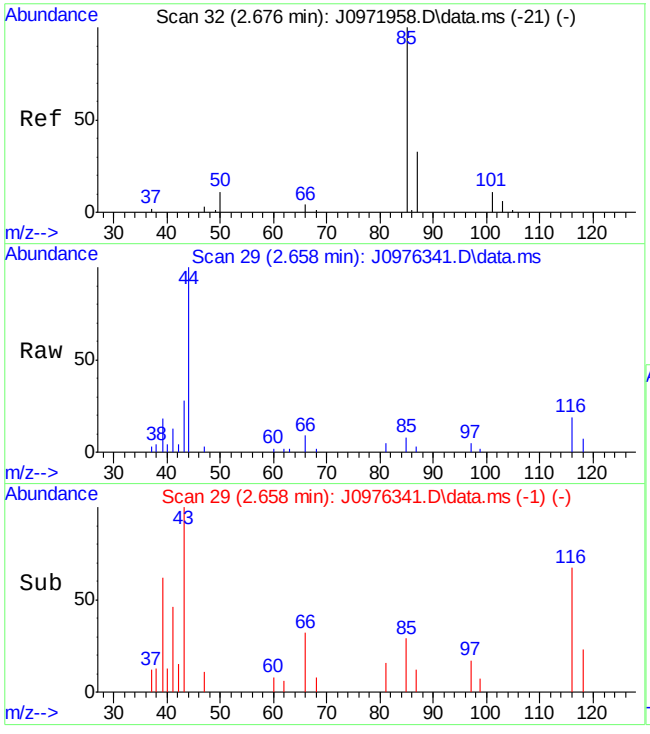
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976341.D
Acq On : 6 May 2016 10:47 am
Operator : darshnap
Sample : fa33668-3 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 14:10:20 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



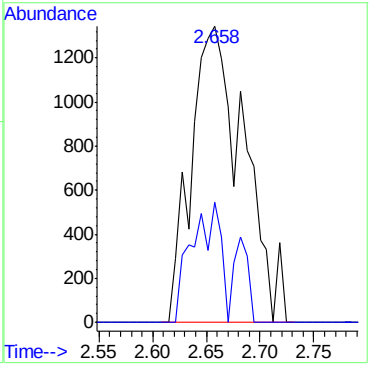
MSJ031516.M Fri May 06 14:16:44 2016 Page: 2

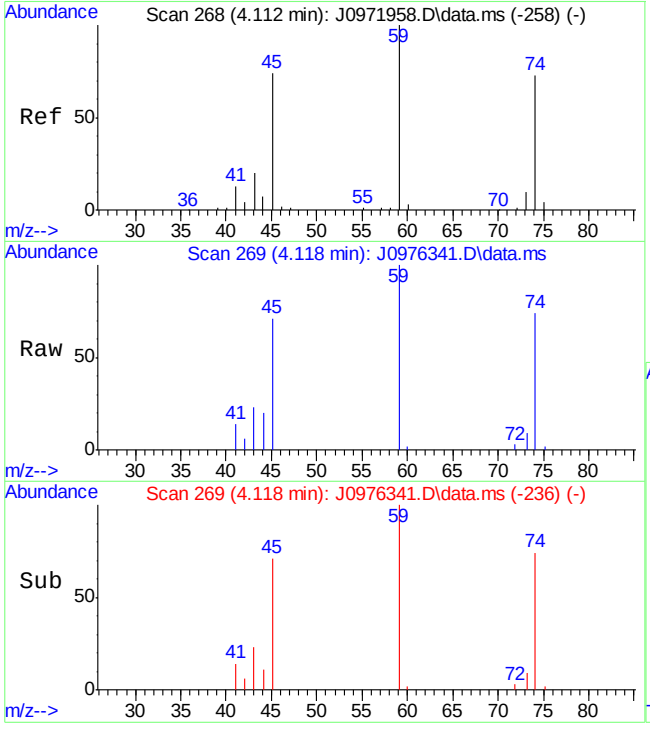


#2
Dichlorodifluoromethane
Concen: 0.68 ug/L
RT: 2.658 min Scan# 29
Delta R.T. -0.030 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 85 Resp: 4578

Ion	Ratio	Lower	Upper
85	100		
87	40.6	2.0	62.0

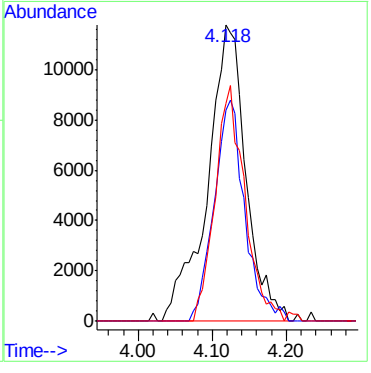


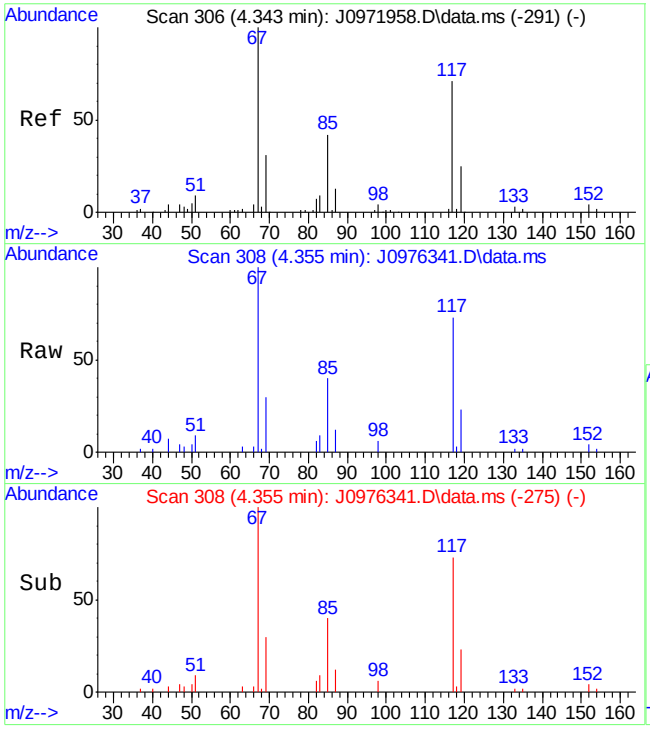


#9
Ethyl Ether
Concen: 9.93 ug/L
RT: 4.118 min Scan# 269
Delta R.T. -0.000 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 59 Resp: 41882

Ion	Ratio	Lower	Upper
59	100		
45	71.2	50.5	90.5
74	73.6	50.1	90.1

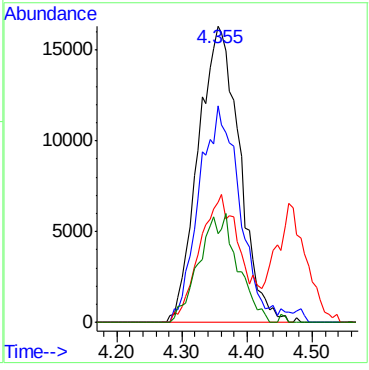


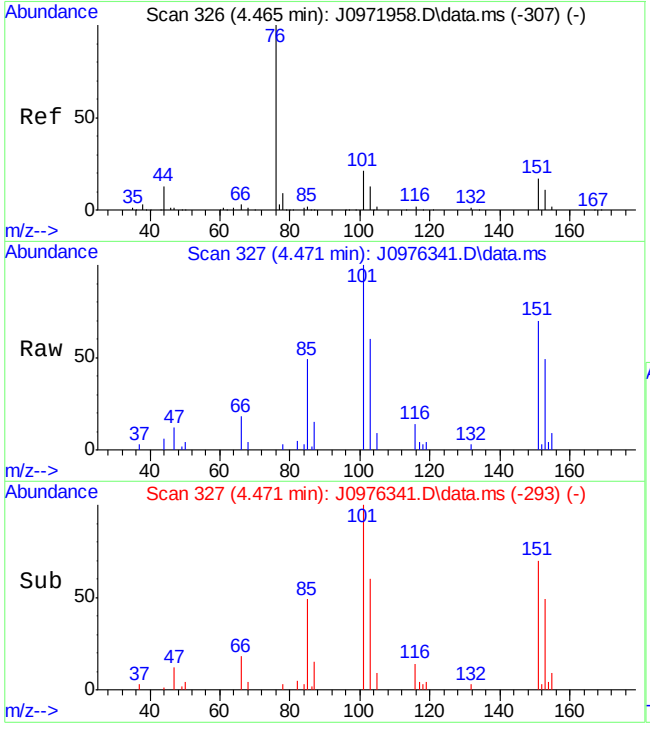


#10
1,2-Dichlorotrifluoroethane
Concen: 11.39 ug/L
RT: 4.355 min Scan# 308
Delta R.T. -0.000 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 67 Resp: 72206

Ion	Ratio	Lower	Upper
67	100		
117	73.2	49.1	89.1
85	40.5	20.5	60.5
69	29.9	12.3	52.3

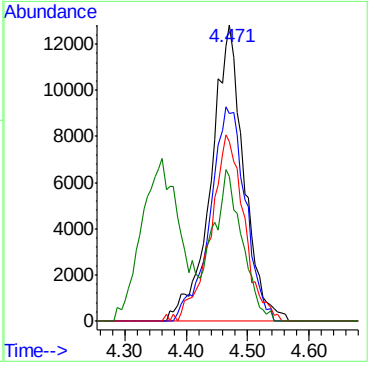


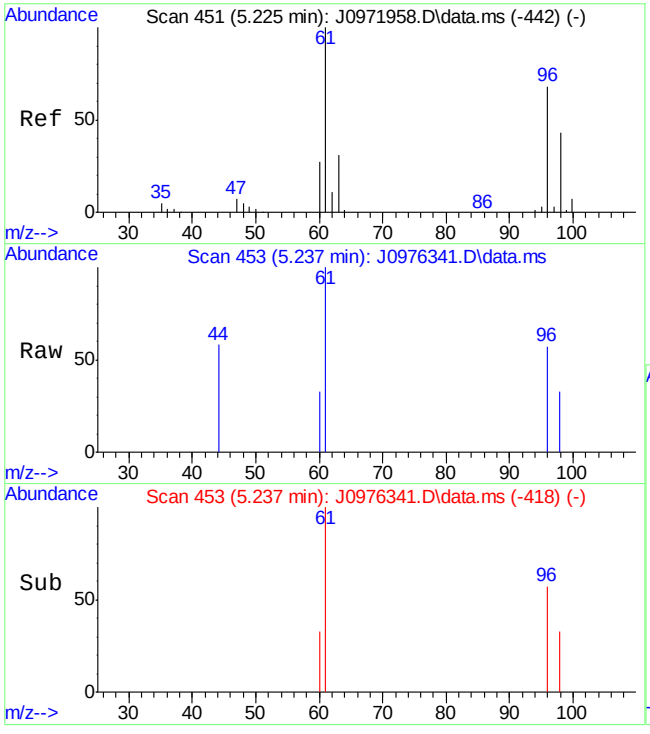


#12
Freon 113
Concen: 8.73 ug/L
RT: 4.471 min Scan# 327
Delta R.T. 0.006 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion:101 Resp: 47635

Ion	Ratio	Lower	Upper
101	100		
151	70.1	56.9	96.9
103	60.5	41.9	81.9
85	49.0	25.3	65.3

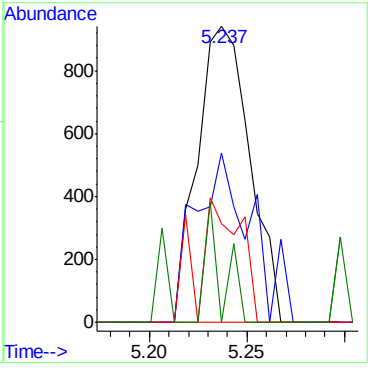


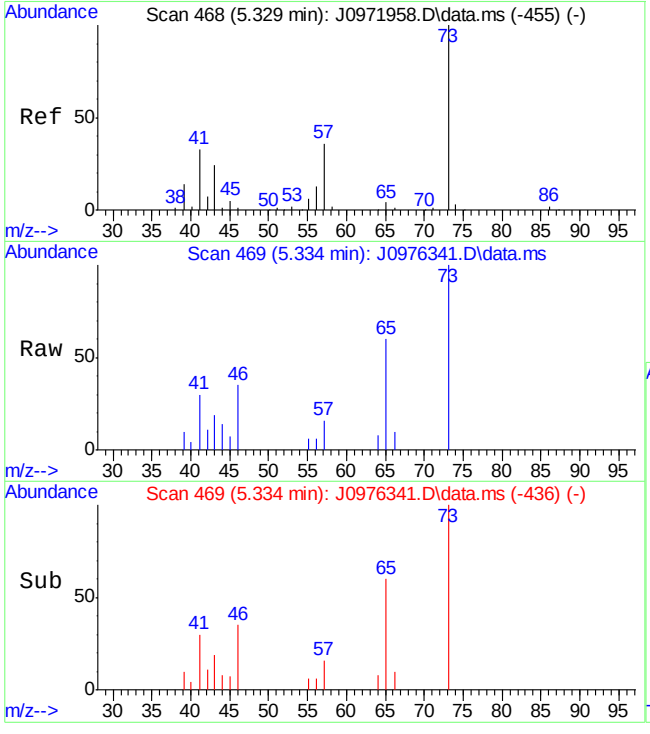


#19
trans-1,2-Dichloroethene
Concen: 0.24 ug/L
RT: 5.237 min Scan# 453
Delta R.T. 0.012 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 61 Resp: 1763

Ion	Ratio	Lower	Upper
61	100		
96	57.1	39.0	99.0
98	33.3	13.2	73.2
63	0.0	1.4	61.4#

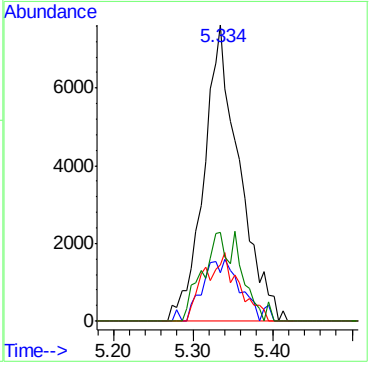


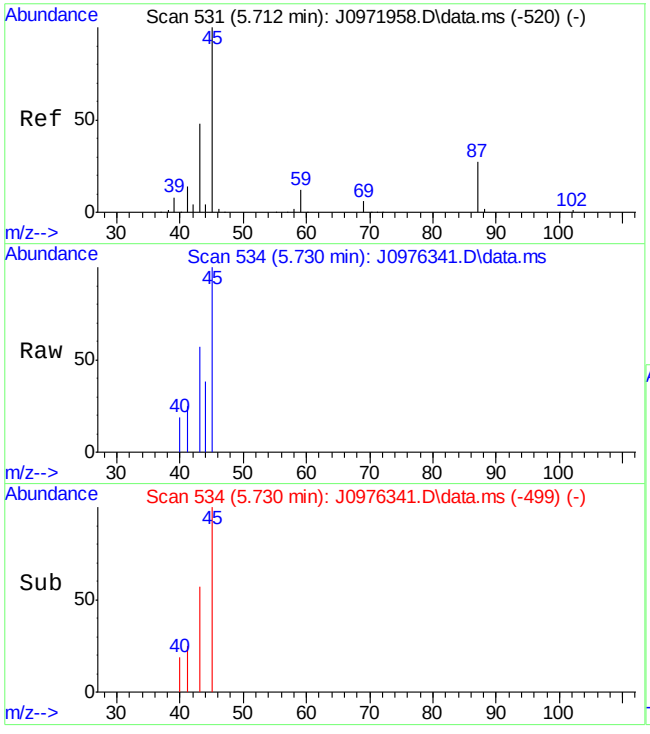


#21
Methyl Tert Butyl Ether
Concen: 1.62 ug/L
RT: 5.334 min Scan# 469
Delta R.T. -0.001 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 73 Resp: 23466

Ion	Ratio	Lower	Upper
73	100		
57	16.3	17.3	77.3#
43	18.8	2.8	62.8
41	30.0	6.2	66.2

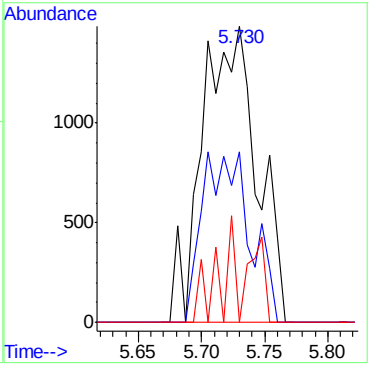


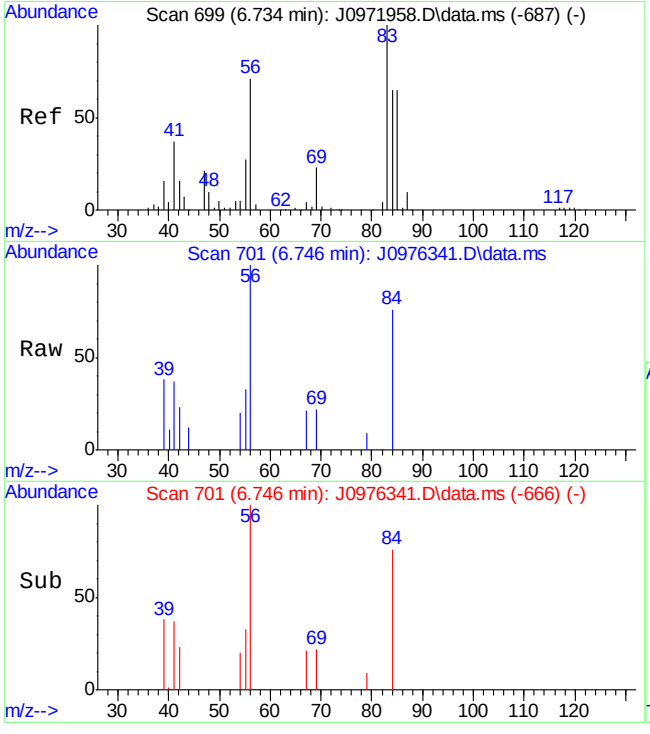


#23
Di-isopropyl ether
Concen: 0.27 ug/L
RT: 5.730 min Scan# 534
Delta R.T. 0.012 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 45 Resp: 4485

Ion	Ratio	Lower	Upper
45	100		
43	57.5	16.8	76.8
87	0.0	0.0	59.5

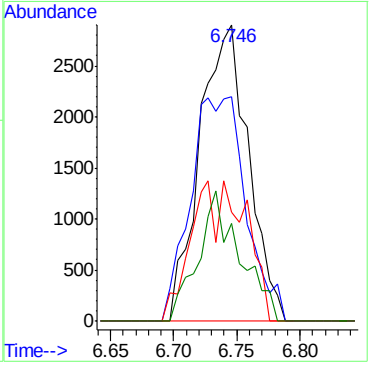


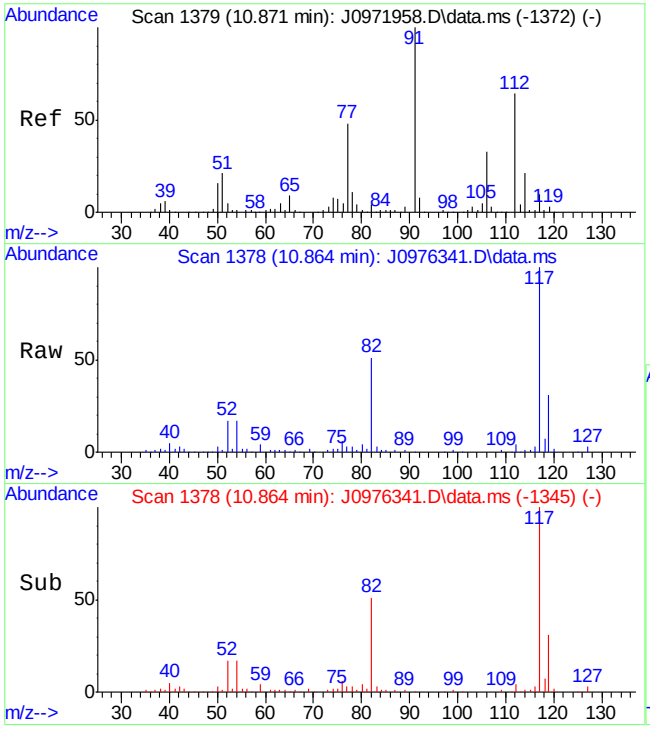


#32
Cyclohexane
Concen: 0.86 ug/L
RT: 6.746 min Scan# 701
Delta R.T. 0.012 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 56 Resp: 7785

Ion	Ratio	Lower	Upper
56	100		
84	75.8	69.0	109.0
41	36.6	31.3	71.3
55	33.2	15.8	55.8

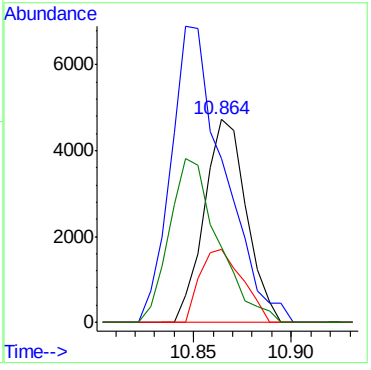


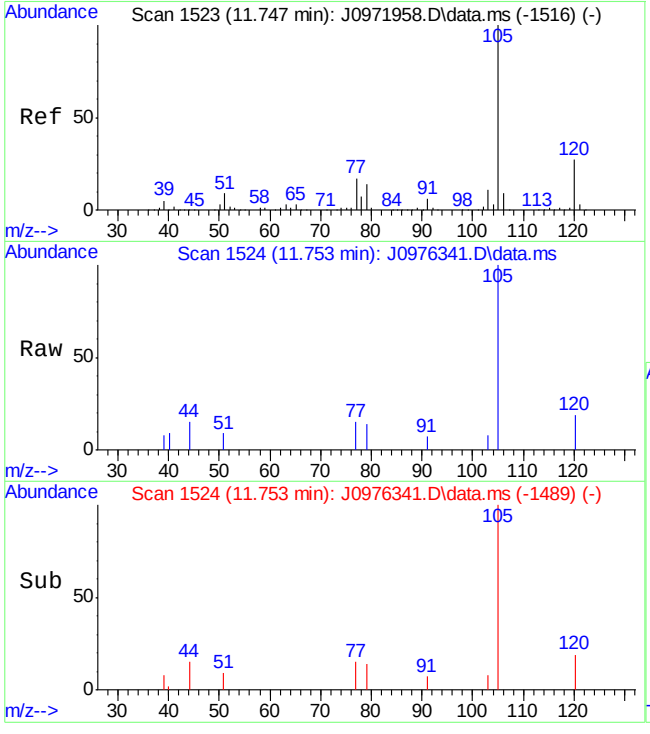


#71
Chlorobenzene
Concen: 0.44 ug/L
RT: 10.864 min Scan# 1378
Delta R.T. -0.001 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion:112 Resp: 7123

Ion	Ratio	Lower	Upper
112	100		
77	80.8	41.1	101.1
114	35.6	3.5	63.5
51	37.0	0.0	59.7

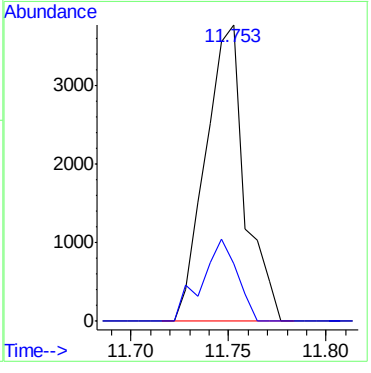




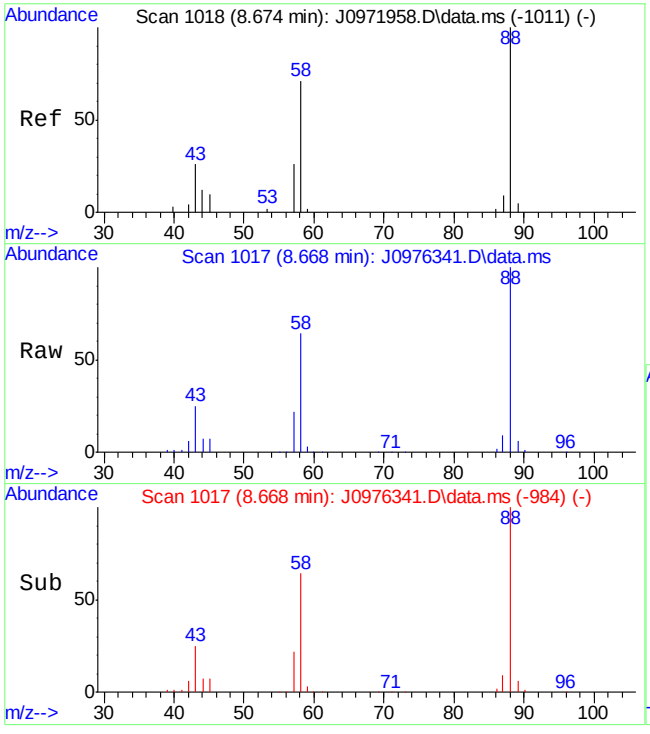
#77
Isopropylbenzene
Concen: 0.22 ug/L
RT: 11.753 min Scan# 1524
Delta R.T. 0.012 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion:105 Resp: 5276

Ion	Ratio	Lower	Upper
105	100		
120	19.5	0.0	56.4



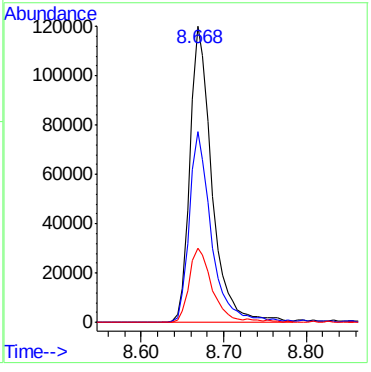
SGS ACCUTEST FA33668



#112
1,4-Dioxane
Concen: 12048.99 ug/L
RT: 8.668 min Scan# 1017
Delta R.T. 0.000 min
Lab File: J0976341.D
Acq: 6 May 2016 10:47 am

Tgt Ion: 88 Resp: 222342

Ion	Ratio	Lower	Upper
88	100		
58	64.3	29.4	89.4
43	25.2	0.0	57.3



SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976342.D
Acq On : 6 May 2016 11:10 am
Operator : darshnap
Sample : fa33668-4 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 14:11:42 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1091095	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	822107	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	431356	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	44210	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	284500	51.39	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.78%			
46) 1,2-Dichloroethane-d4	7.482	65	324609	48.48	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 96.96%			
57) Toluene-d8	9.301	98	1088187	50.31	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.62%			
79) 4-Bromofluorobenzene	12.057	95	404193	51.81	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.62%			
Target Compounds						Qvalue
9) Ethyl Ether	4.124	59	2574	0.61	ug/L #	80
21) Methyl Tert Butyl Ether	5.340	73	23920	1.65	ug/L	72
71) Chlorobenzene	10.870	112	12063	0.76	ug/L	84
109) Tert Butyl Alcohol	5.377	59	8798	41.06	ug/L	94
112) 1,4-Dioxane	8.674	88	52797	3007.53	ug/L	97

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

7.1.4

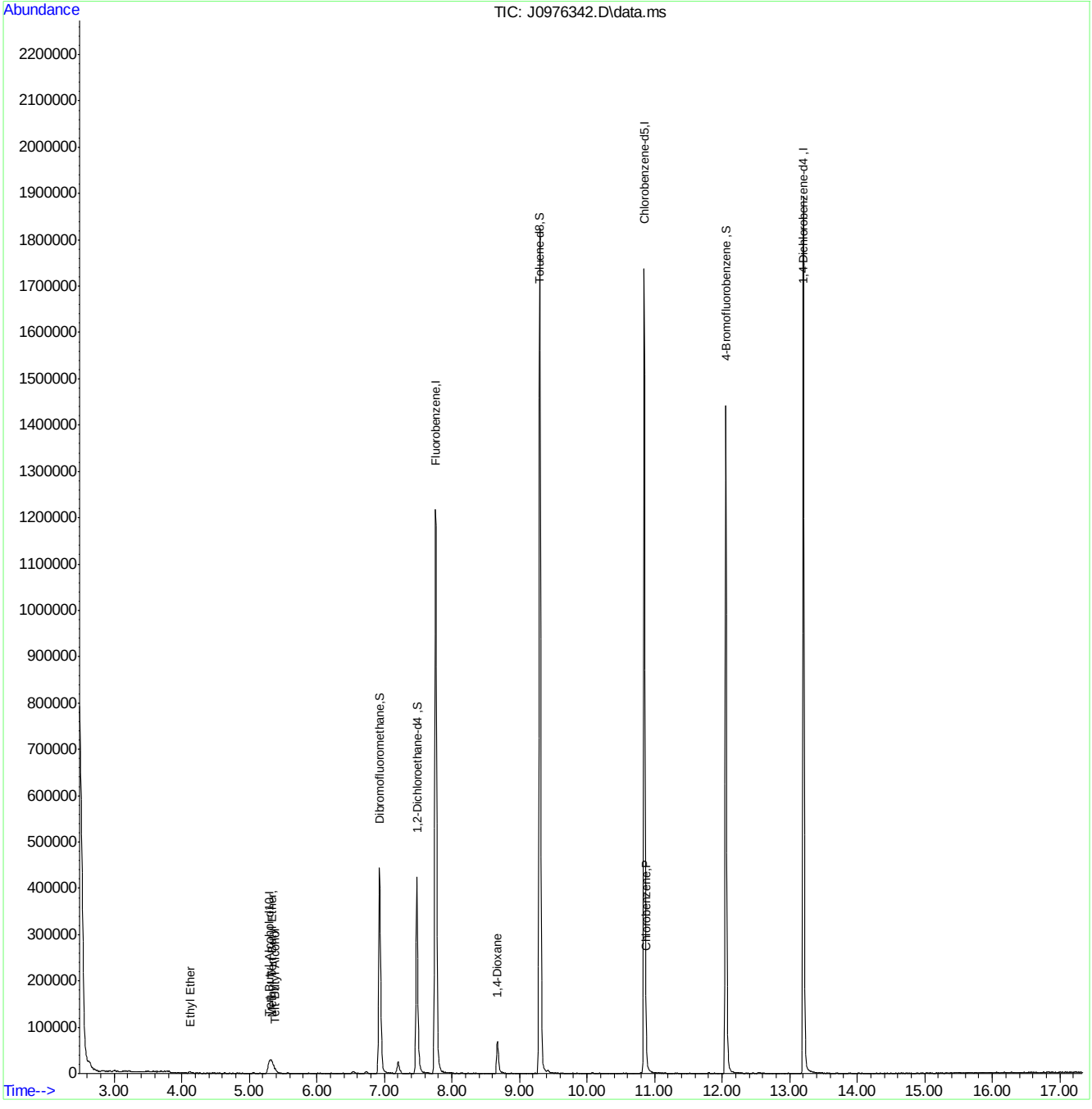
7

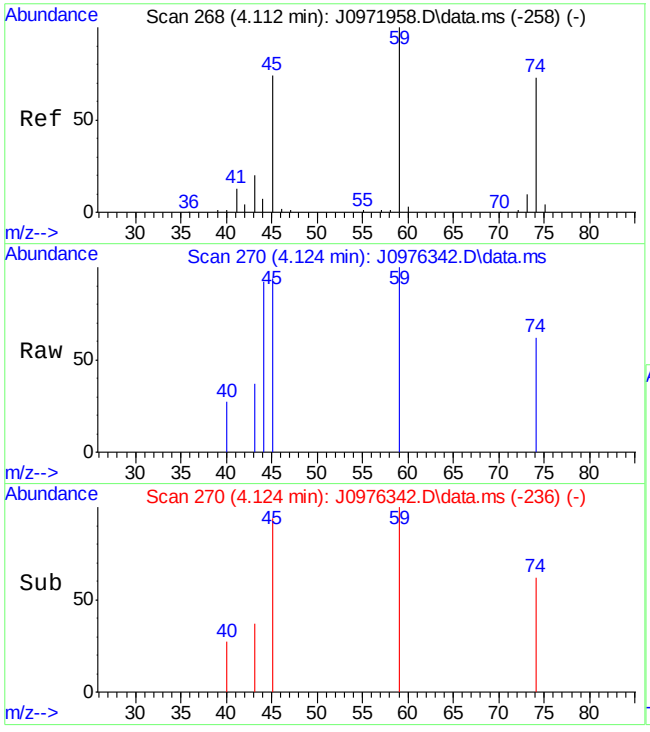
SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976342.D
Acq On : 6 May 2016 11:10 am
Operator : darshnap
Sample : fa33668-4 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 14:11:42 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

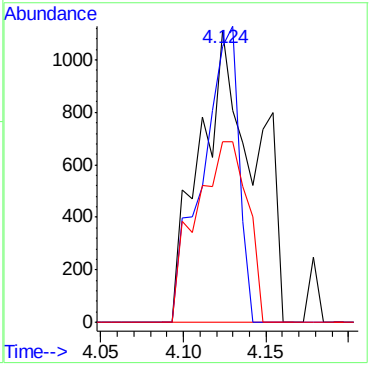


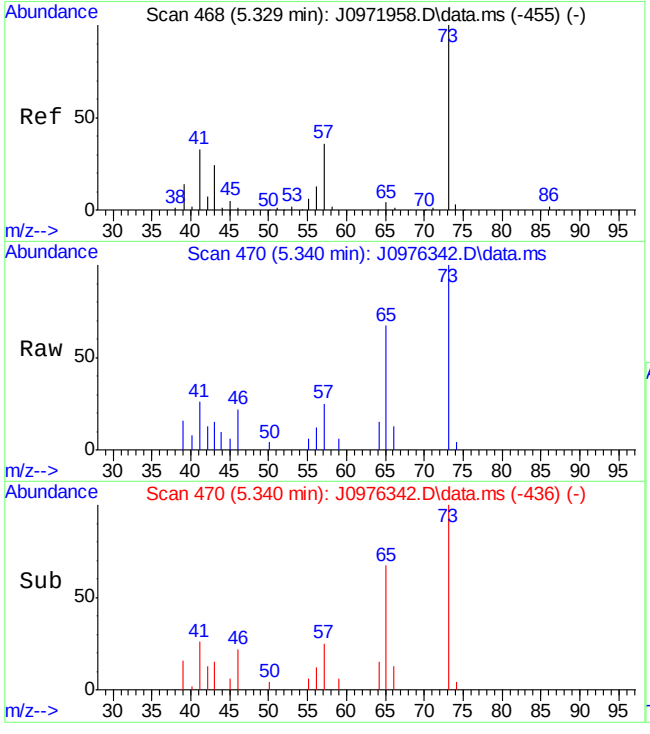


#9
Ethyl Ether
Concen: 0.61 ug/L
RT: 4.124 min Scan# 270
Delta R.T. 0.006 min
Lab File: J0976342.D
Acq: 6 May 2016 11:10 am

Tgt Ion: 59 Resp: 2574

Ion	Ratio	Lower	Upper
59	100		
45	94.3	50.5	90.5#
74	61.7	50.1	90.1

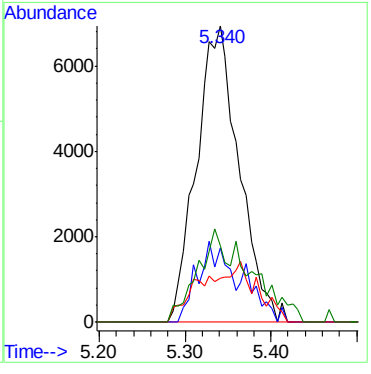




#21
Methyl Tert Butyl Ether
Concen: 1.65 ug/L
RT: 5.340 min Scan# 470
Delta R.T. 0.005 min
Lab File: J0976342.D
Acq: 6 May 2016 11:10 am

Tgt Ion: 73 Resp: 23920

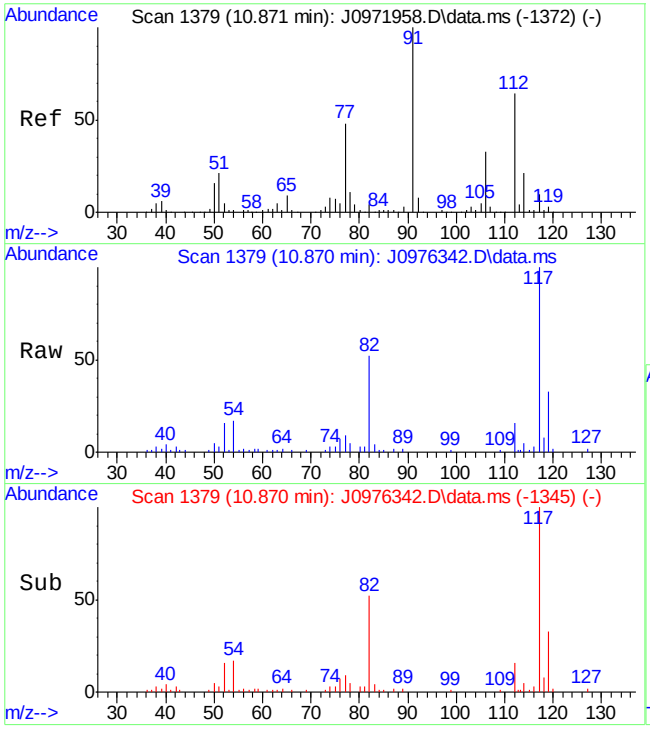
Ion	Ratio	Lower	Upper
73	100		
57	25.2	17.3	77.3
43	14.9	2.8	62.8
41	25.9	6.2	66.2



7.1.4

7

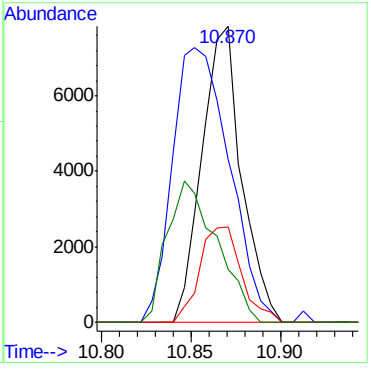
SGS ACCUTEST FA33668

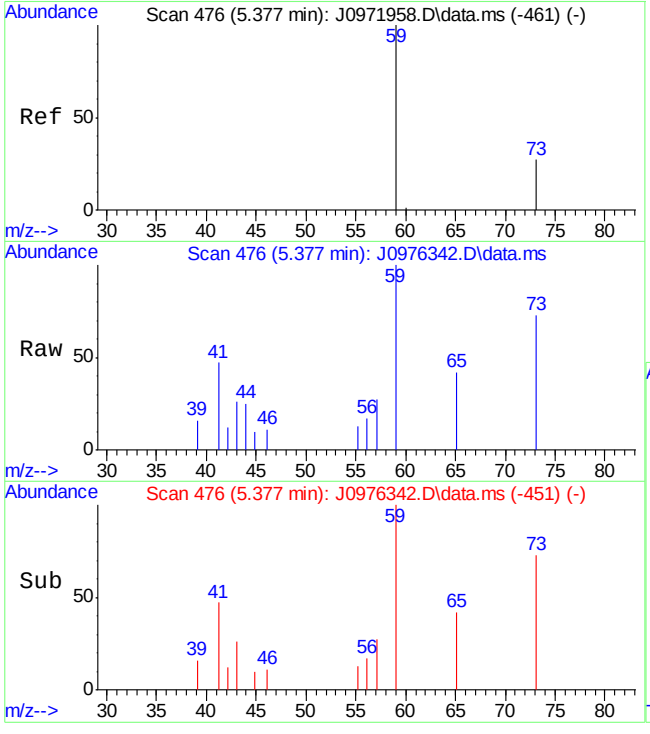


#71
Chlorobenzene
Concen: 0.76 ug/L
RT: 10.870 min Scan# 1379
Delta R.T. 0.005 min
Lab File: J0976342.D
Acq: 6 May 2016 11:10 am

Tgt Ion:112 Resp: 12063

Ion	Ratio	Lower	Upper
112	100		
77	55.1	41.1	101.1
114	32.3	3.5	63.5
51	17.9	0.0	59.7

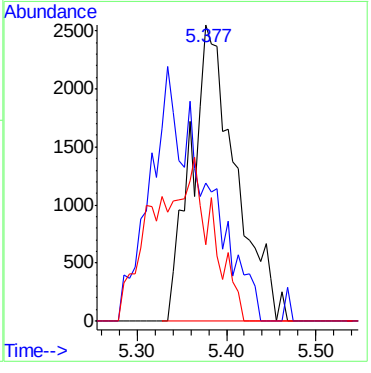


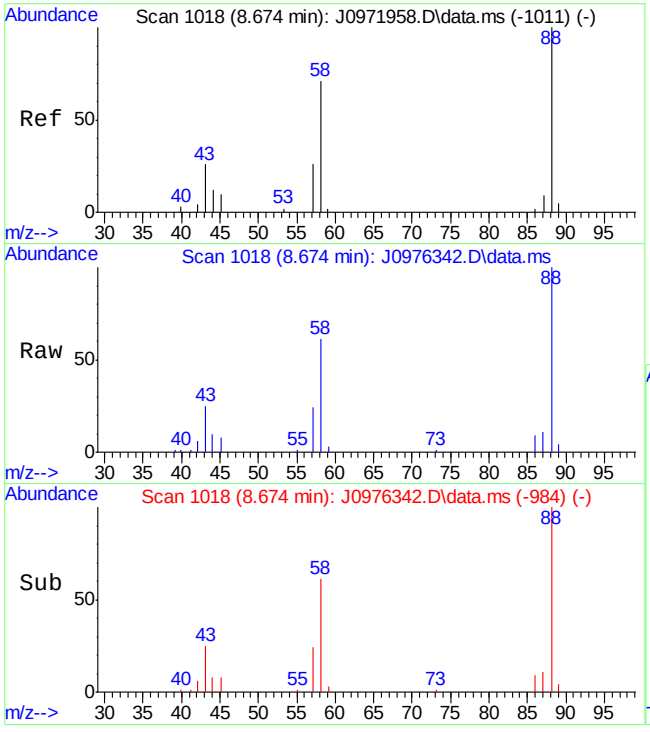


#109
Tert Butyl Alcohol
Concen: 41.06 ug/L
RT: 5.377 min Scan# 476
Delta R.T. -0.000 min
Lab File: J0976342.D
Acq: 6 May 2016 11:10 am

Tgt Ion: 59 Resp: 8798

Ion	Ratio	Lower	Upper
59	100		
41	46.6	27.9	67.9
43	25.9	13.1	53.1

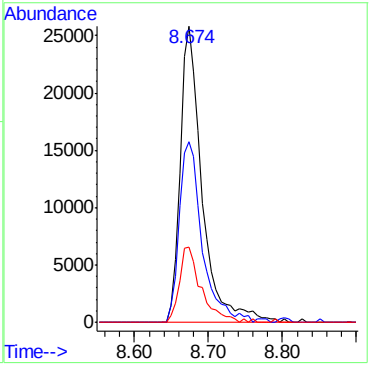




#112
1,4-Dioxane
Concen: 3007.53 ug/L
RT: 8.674 min Scan# 1018
Delta R.T. 0.006 min
Lab File: J0976342.D
Acq: 6 May 2016 11:10 am

Tgt Ion: 88 Resp: 52797

Ion	Ratio	Lower	Upper
88	100		
58	61.1	29.4	89.4
43	25.4	0.0	57.3



7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976343.D
Acq On : 6 May 2016 11:33 am
Operator : darshnap
Sample : fa33668-5 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 06 14:12:08 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1047973	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	806409	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	421807	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.304	65	43655	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	268982	50.58	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.16%			
46) 1,2-Dichloroethane-d4	7.482	65	314663	48.93	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.86%			
57) Toluene-d8	9.301	98	1023638	48.25	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 96.50%			
79) 4-Bromofluorobenzene	12.057	95	396475	51.97	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.94%			
Target Compounds						Qvalue
112) 1,4-Dioxane	8.687	88	399	23.02	ug/L	80

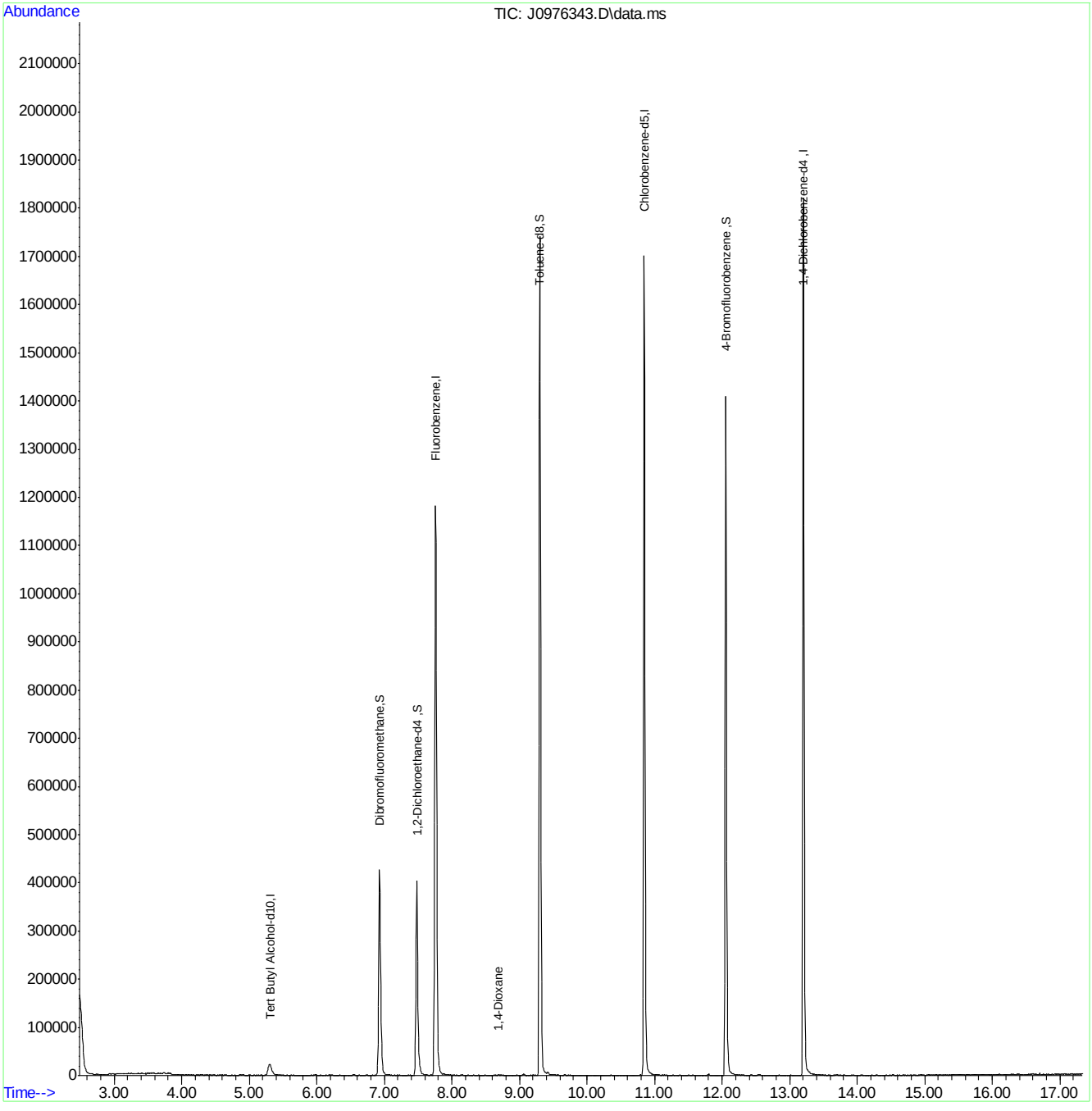
(#) = qualifier out of range (m) = manual integration (+) = signals summed

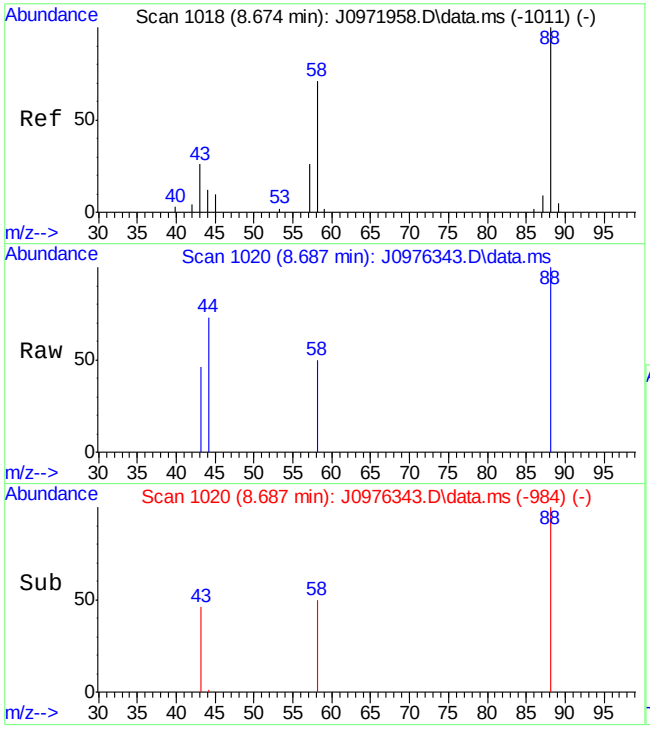
SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976343.D
Acq On : 6 May 2016 11:33 am
Operator : darshnap
Sample : fa33668-5 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 06 14:12:08 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

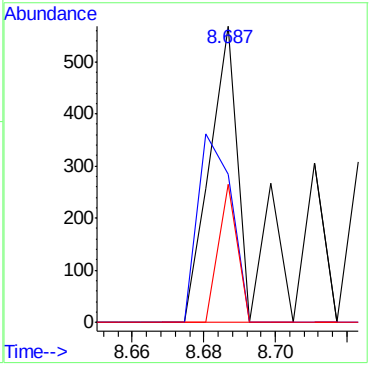




#112
1,4-Dioxane
Concen: 23.02 ug/L
RT: 8.687 min Scan# 1020
Delta R.T. 0.019 min
Lab File: J0976343.D
Acq: 6 May 2016 11:33 am

Tgt Ion: 88 Resp: 399

Ion	Ratio	Lower	Upper
88	100		
58	50.0	29.4	89.4
43	46.5	0.0	57.3



7.1.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28348.D
Acq On : 5 May 2016 1:37 pm
Operator : ANGIED
Sample : FA33668-6 MA Inst : MSVOA14
Misc : MS33792,VY1148,5.39,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 05 14:54:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.120	96	1013078	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.308	117	652285	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.681	152	289645	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.626	65	115742	250.00	ug/Kg	0.00

System Monitoring Compounds						
35) Dibromofluoromethane	6.238	113	247235	53.33	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.66%			
44) 1,2-Dichloroethane-d4	6.816	65	270482	55.21	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 110.42%			
55) Toluene-d8	8.745	98	915900	49.84	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 99.68%			
77) 4-Bromofluorobenzene	11.531	174	199125	49.92	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 99.84%			

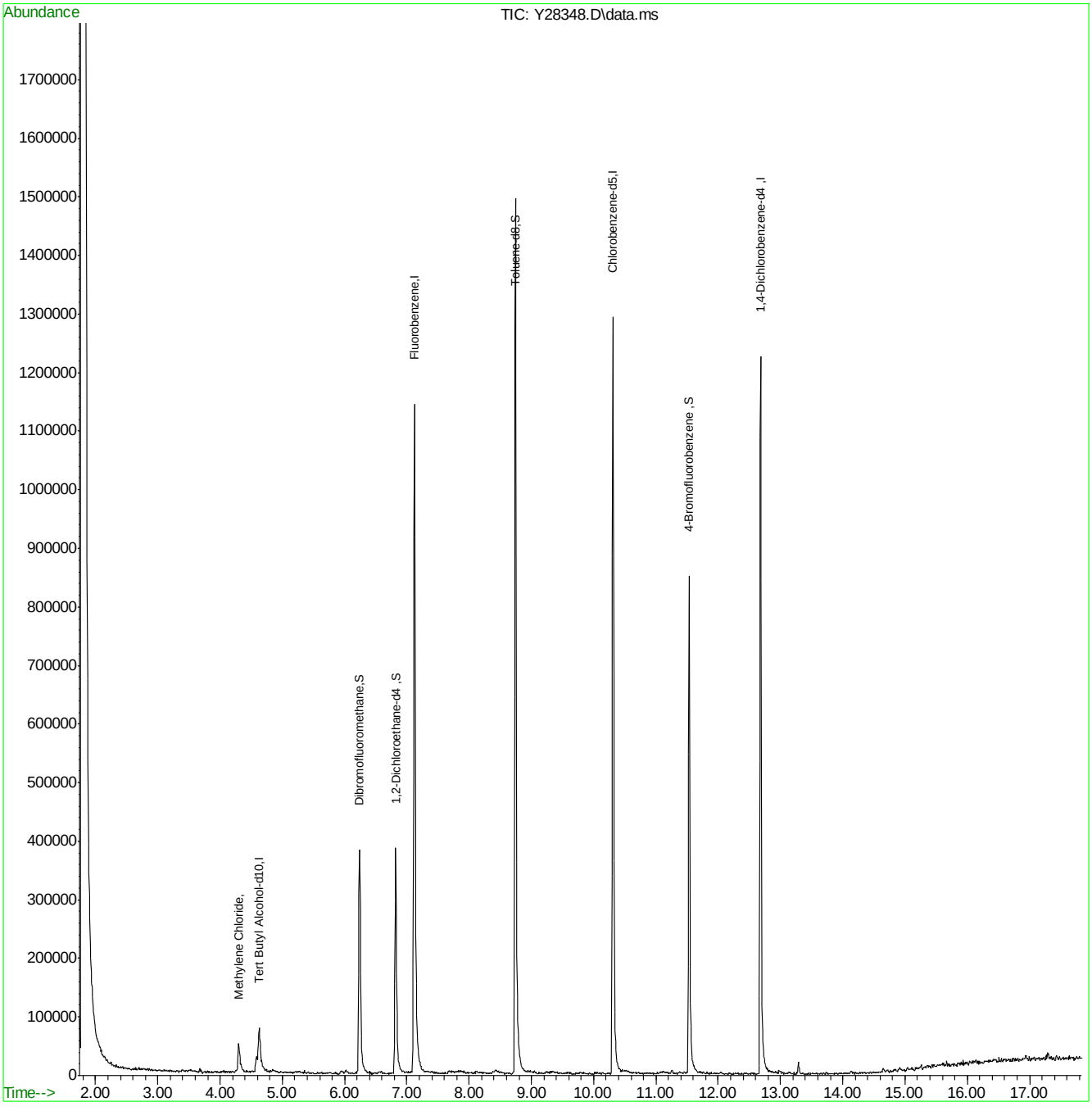
Target Compounds						Qvalue
15) Methylene Chloride	4.298	49	34756	4.07	ug/Kg	94

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

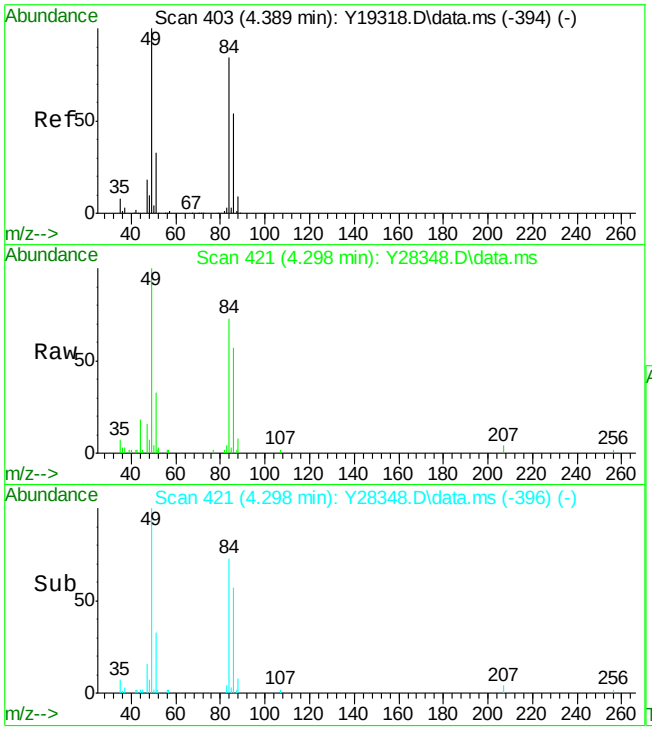
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28348.D
Acq On : 5 May 2016 1:37 pm
Operator : ANGIED
Sample : FA33668-6 MA Inst : MSVOA14
Misc : MS33792,VY1148,5.39,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 05 14:54:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



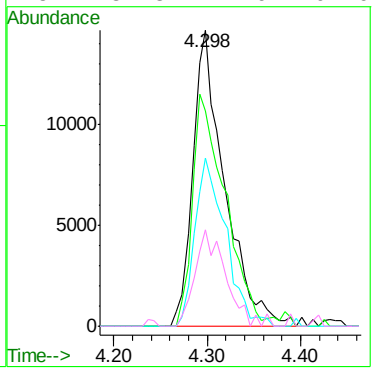
042516APP9-Y.m Fri May 06 08:13:29 2016 Page: 2



#15
Methylene Chloride
Concen: 4.07 ug/Kg
RT: 4.298 min Scan# 421
Delta R.T. -0.000 min
Lab File: Y28348.D
Acq: 5 May 2016 1:37 pm

Tgt Ion: 49 Resp: 34756

Ion	Ratio	Lower	Upper
49	100		
84	72.9	45.9	105.9
86	57.0	19.4	79.4
51	32.8	1.0	61.0



7.1.6

7

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 05/06/16 14:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976344.D
Acq On : 6 May 2016 11:56 am
Operator : darshnap
Sample : fa33668-7 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 06 14:13:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

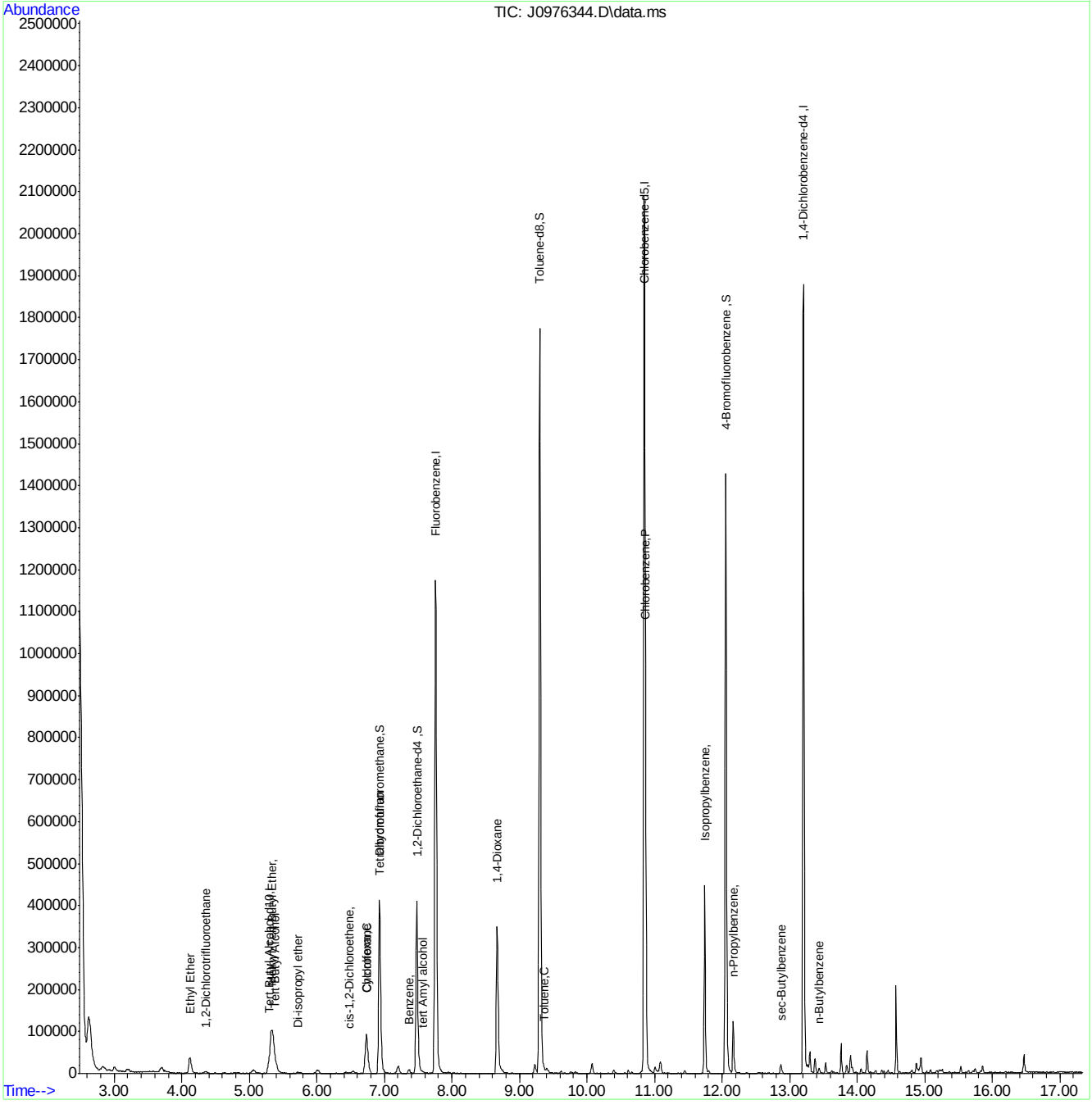
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1030671	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	835340	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	426289	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.292	65	43570	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	265069	50.68	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.36%			
46) 1,2-Dichloroethane-d4	7.482	65	316533	50.05	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.10%			
57) Toluene-d8	9.301	98	1073467	48.84	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 97.68%			
79) 4-Bromofluorobenzene	12.057	95	413021	53.57	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 107.14%			
Target Compounds						Qvalue
9) Ethyl Ether	4.124	59	31168	7.82	ug/L	93
10) 1,2-Dichlorotrifluoroe...	4.361	67	4850m	0.81	ug/L	
21) Methyl Tert Butyl Ether	5.335	73	150272	11.00	ug/L	68
23) Di-isopropyl ether	5.718	45	4126	0.26	ug/L	72
29) cis-1,2-Dichloroethene	6.478	96	1475	0.25	ug/L #	34
32) Cyclohexane	6.740	56	54213	6.30	ug/L	97
33) Chloroform	6.740	83	2821	0.28	ug/L	68
35) Tetrahydrofuran	6.935	42	1578	1.66	ug/L #	52
44) Benzene	7.360	78	9896	0.46	ug/L	81
58) Toluene	9.362	91	6420	0.27	ug/L	87
71) Chlorobenzene	10.865	112	207620	12.90	ug/L	89
77) Isopropylbenzene	11.741	105	247586	10.05	ug/L	99
81) n-Propylbenzene	12.166	91	87818	3.25	ug/L	98
94) sec-Butylbenzene	12.872	105	9746	0.39	ug/L	69
98) n-Butylbenzene	13.438	92	3034	0.25	ug/L #	52
109) Tert Butyl Alcohol	5.377	59	47139	223.21	ug/L	99
110) tert Amyl alcohol	7.567	59	1891	12.77	ug/L #	48
112) 1,4-Dioxane	8.668	88	252278	14581.84	ug/L	93

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

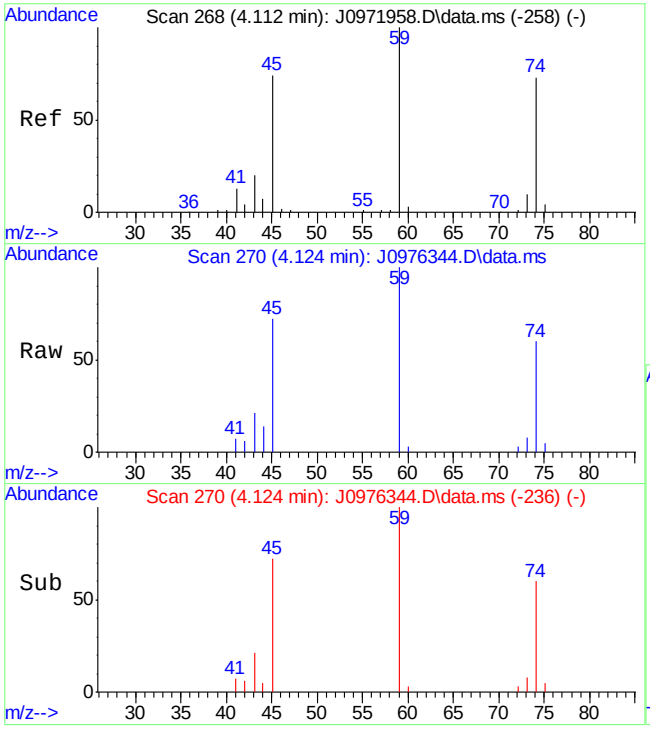
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976344.D
Acq On : 6 May 2016 11:56 am
Operator : darshnap
Sample : fa33668-7 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 06 14:13:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



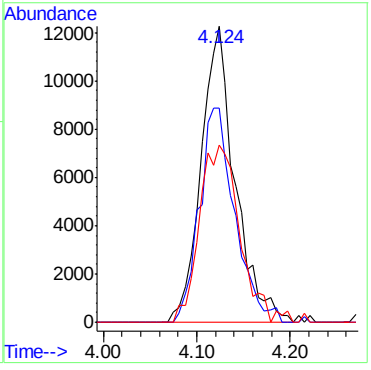
SGS ACCUTEST FA33668

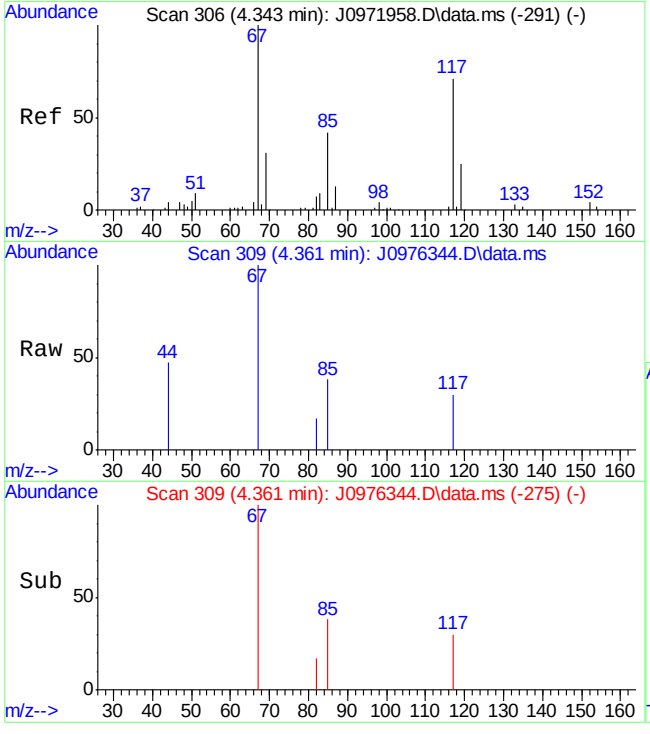


#9
Ethyl Ether
Concen: 7.82 ug/L
RT: 4.124 min Scan# 270
Delta R.T. 0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 59 Resp: 31168

Ion	Ratio	Lower	Upper
59	100		
45	72.4	50.5	90.5
74	59.8	50.1	90.1

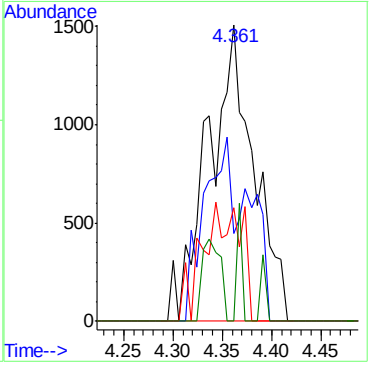


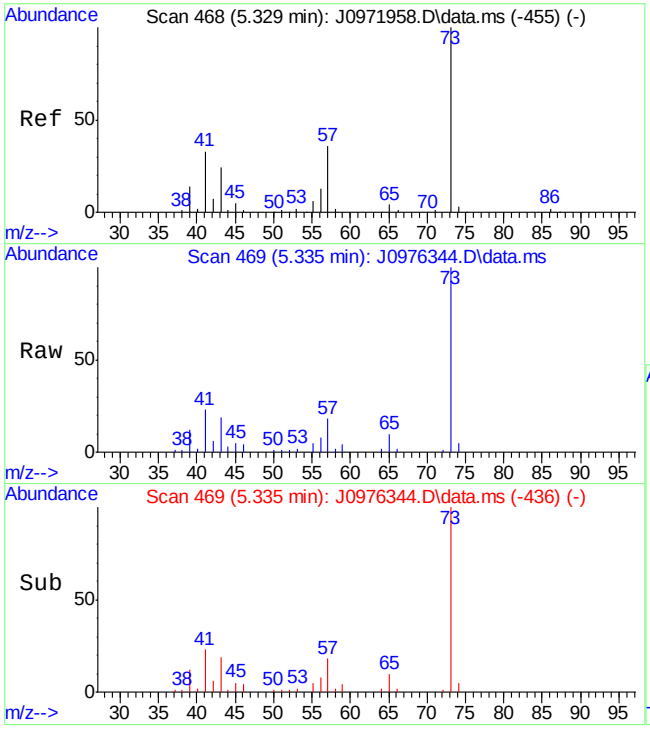


#10
1,2-Dichlorotrifluoroethane
Concen: 0.81 ug/L m
RT: 4.361 min Scan# 309
Delta R.T. 0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 67 Resp: 4850

Ion	Ratio	Lower	Upper
67	100		
117	29.5	49.1	89.1#
85	38.4	20.5	60.5
69	0.0	12.3	52.3#

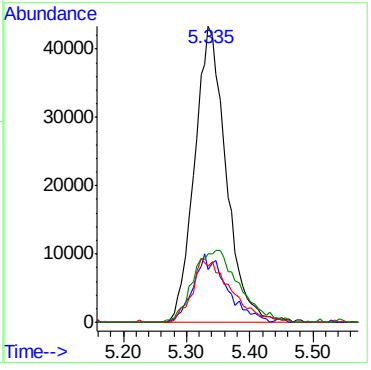


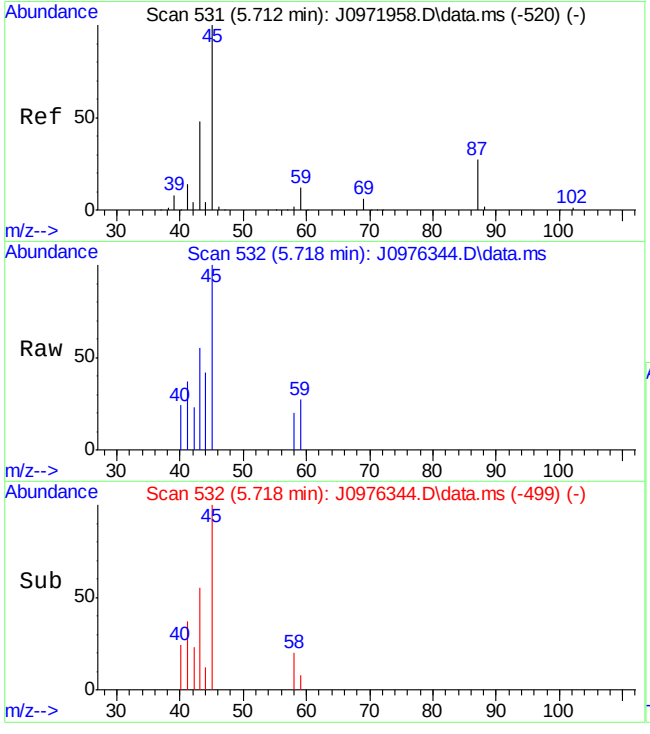


#21
Methyl Tert Butyl Ether
Concen: 11.00 ug/L
RT: 5.335 min Scan# 469
Delta R.T. -0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 73 Resp: 150272

Ion	Ratio	Lower	Upper
73	100		
57	17.7	17.3	77.3
43	18.9	2.8	62.8
41	23.3	6.2	66.2

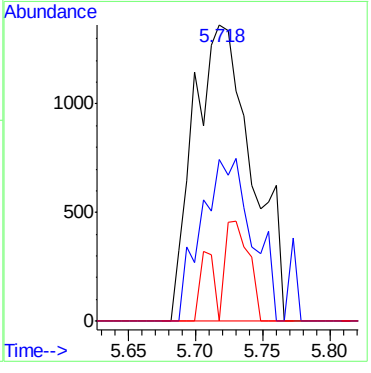


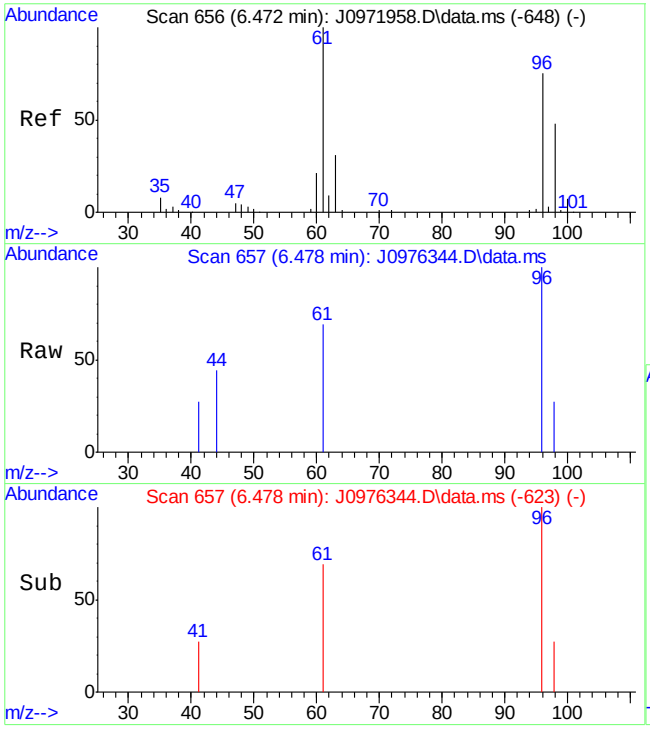


#23
Di-isopropyl ether
Concen: 0.26 ug/L
RT: 5.718 min Scan# 532
Delta R.T. -0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 45 Resp: 4126

Ion	Ratio	Lower	Upper
45	100		
43	54.5	16.8	76.8
87	0.0	0.0	59.5

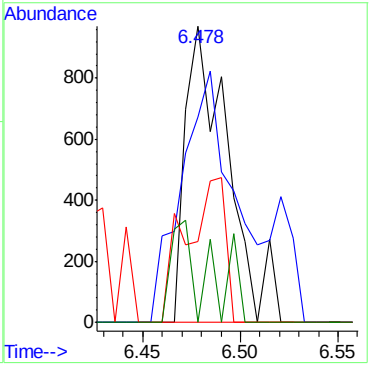


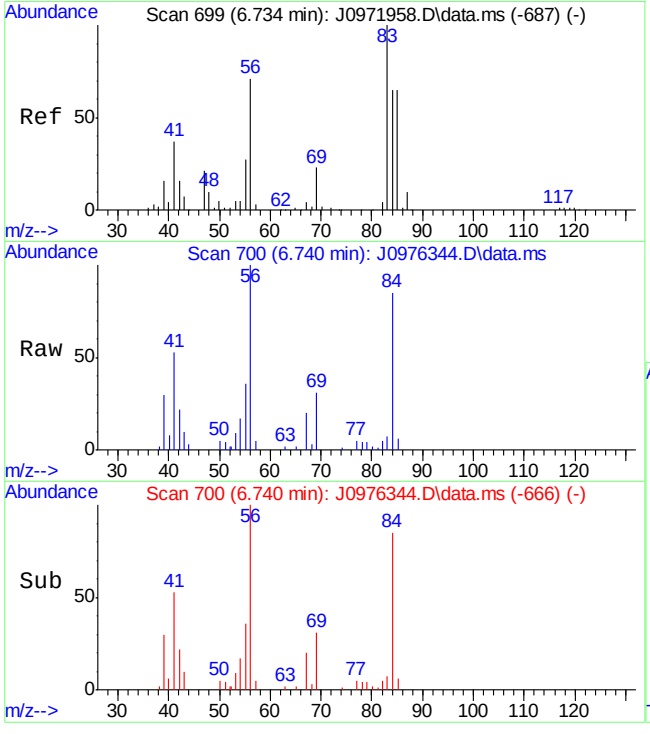


#29
cis-1,2-Dichloroethene
Concen: 0.25 ug/L
RT: 6.478 min Scan# 657
Delta R.T. 0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 96 Resp: 1475

Ion	Ratio	Lower	Upper
96	100		
61	40.9	96.4	156.4#
98	27.2	33.8	93.8#
63	0.0	14.2	74.2#

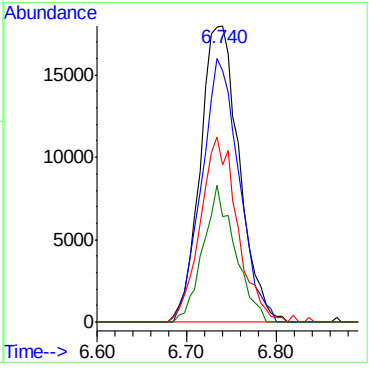


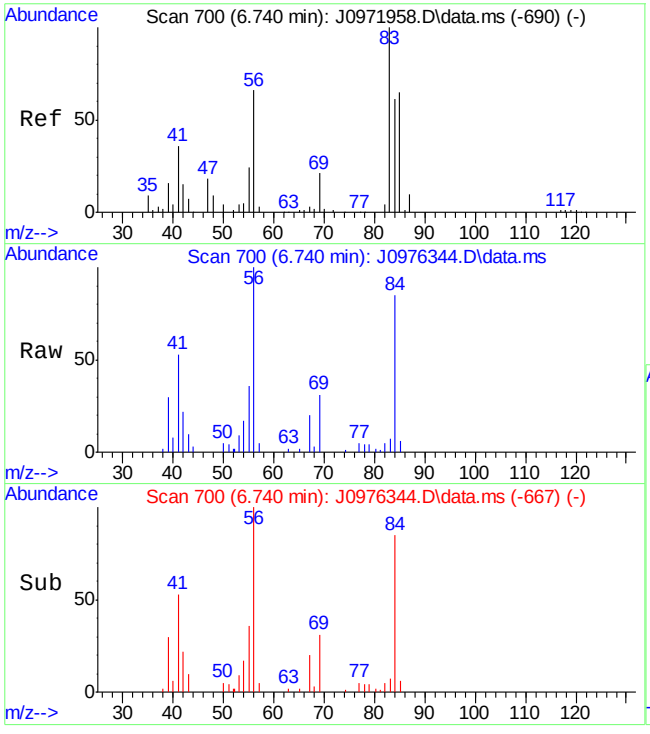


#32
Cyclohexane
Concen: 6.30 ug/L
RT: 6.740 min Scan# 700
Delta R.T. 0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 56 Resp: 54213

Ion	Ratio	Lower	Upper
56	100		
84	84.8	69.0	109.0
41	53.2	31.3	71.3
55	35.7	15.8	55.8

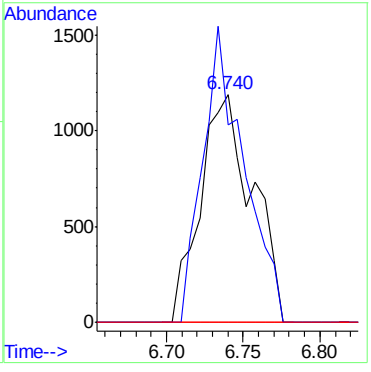


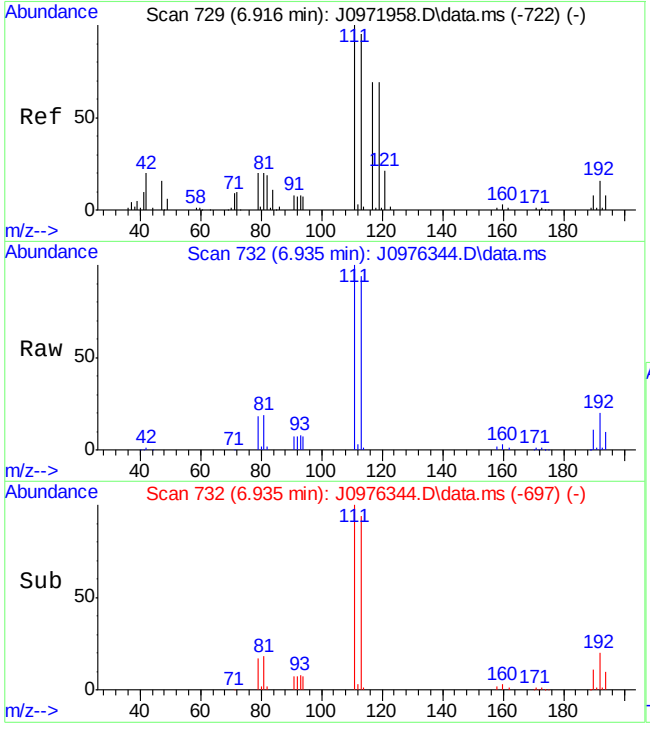


#33
Chloroform
Concen: 0.28 ug/L
RT: 6.740 min Scan# 700
Delta R.T. -0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 83 Resp: 2821

Ion	Ratio	Lower	Upper
83	100		
85	86.7	34.6	94.6
47	0.0	0.0	50.1

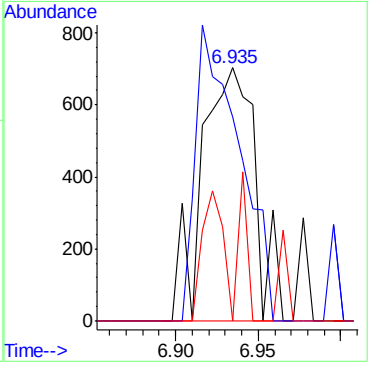


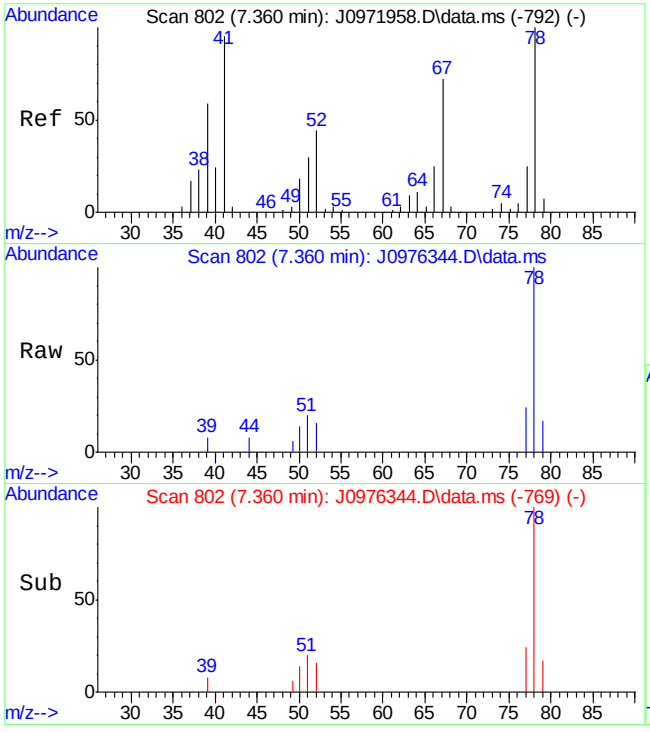


#35
Tetrahydrofuran
Concen: 1.66 ug/L
RT: 6.935 min Scan# 732
Delta R.T. 0.013 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 42 Resp: 1578

Ion	Ratio	Lower	Upper
42	100		
41	80.5	42.3	82.3
72	0.0	35.1	75.1#

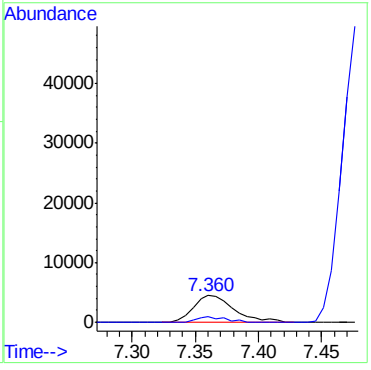


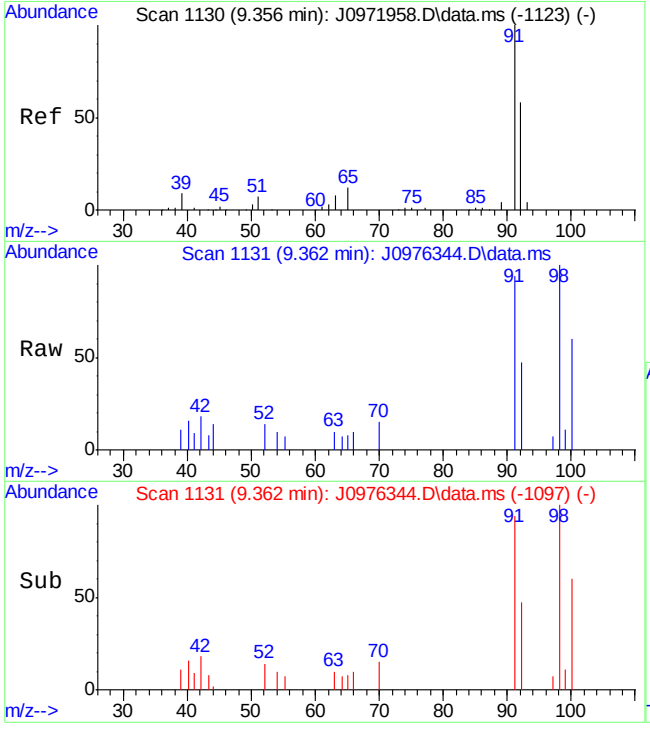


#44
Benzene
Concen: 0.46 ug/L
RT: 7.360 min Scan# 802
Delta R.T. 0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 78 Resp: 9896

Ion	Ratio	Lower	Upper
78	100		
51	20.0	0.7	60.7

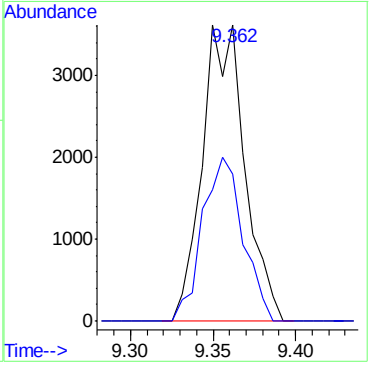


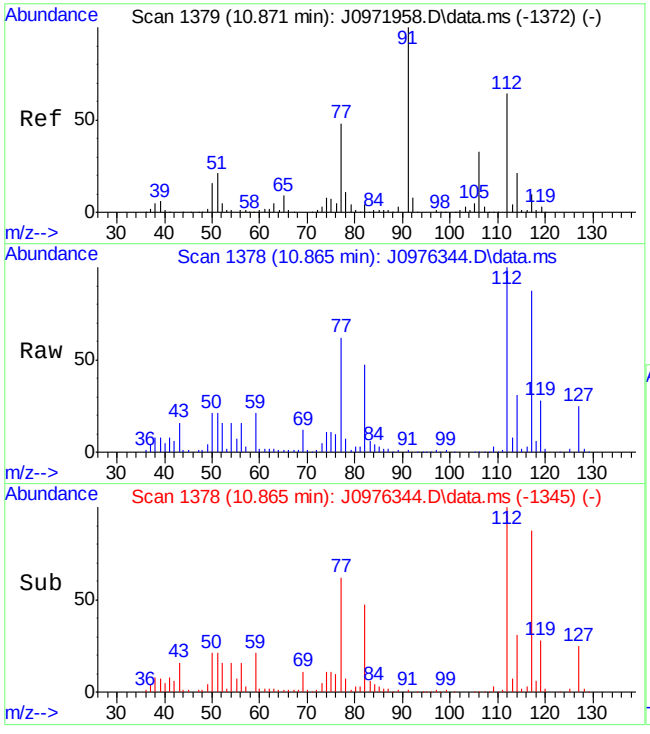


#58
Toluene
Concen: 0.27 ug/L
RT: 9.362 min Scan# 1131
Delta R.T. 0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 91 Resp: 6420

Ion	Ratio	Lower	Upper
91	100		
92	49.8	29.4	89.4

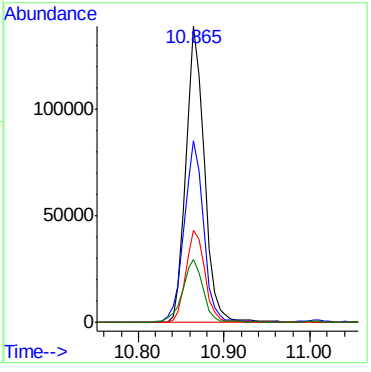


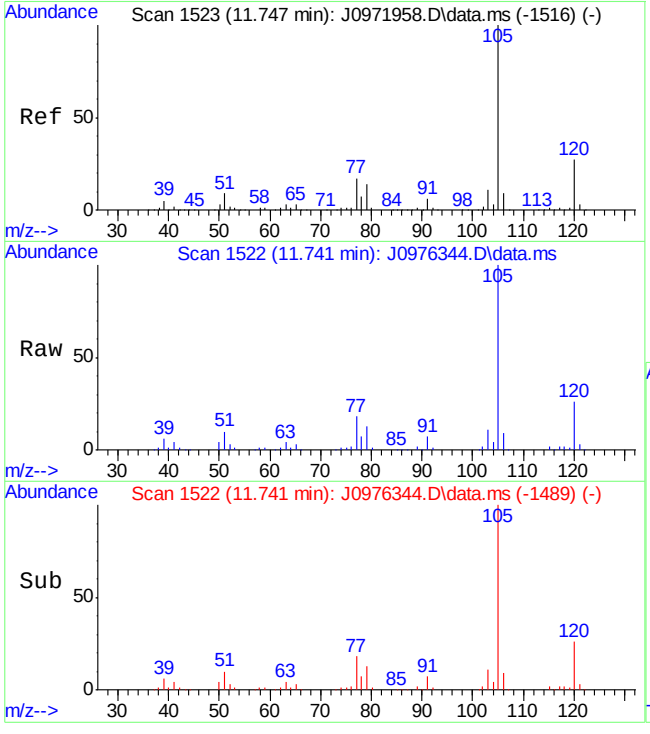


#71
Chlorobenzene
Concen: 12.90 ug/L
RT: 10.865 min Scan# 1378
Delta R.T. -0.001 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion:112 Resp: 207620

Ion	Ratio	Lower	Upper
112	100		
77	61.6	41.1	101.1
114	31.1	3.5	63.5
51	21.1	0.0	59.7

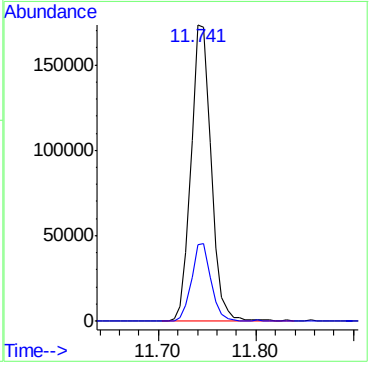




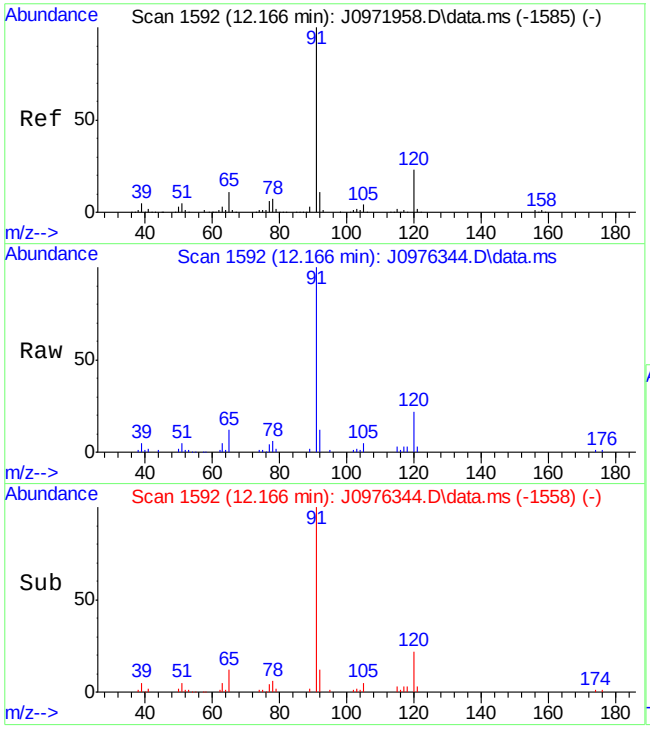
#77
Isopropylbenzene
Concen: 10.05 ug/L
RT: 11.741 min Scan# 1522
Delta R.T. -0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion:105 Resp: 247586

Ion	Ratio	Lower	Upper
105	100		
120	25.8	0.0	56.4



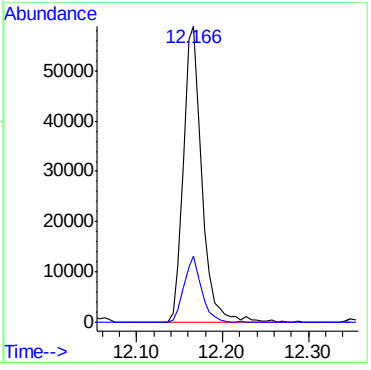
SGS ACCUTEST FA33668

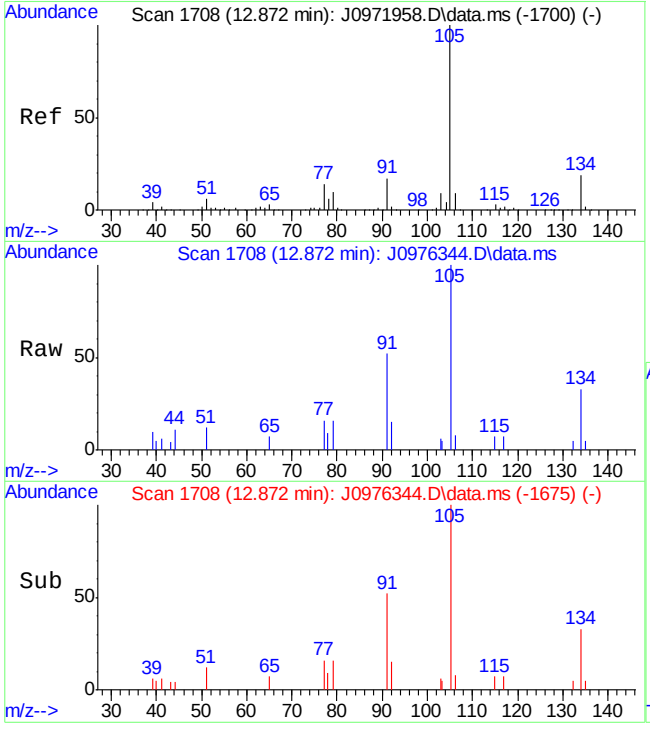


#81
n-Propylbenzene
Concen: 3.25 ug/L
RT: 12.166 min Scan# 1592
Delta R.T. 0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 91 Resp: 87818

Ion	Ratio	Lower	Upper
91	100		
120	22.3	0.0	53.1

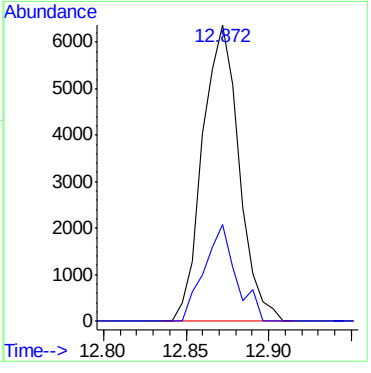


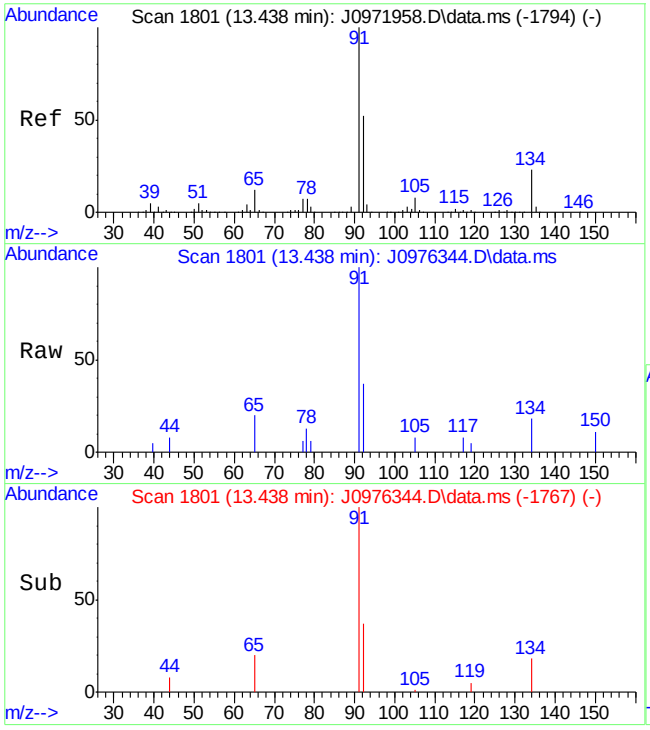


#94
sec-Butylbenzene
Concen: 0.39 ug/L
RT: 12.872 min Scan# 1708
Delta R.T. 0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion:105 Resp: 9746

Ion	Ratio	Lower	Upper
105	100		
134	32.7	0.0	48.8

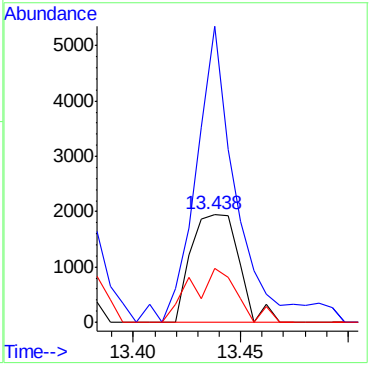


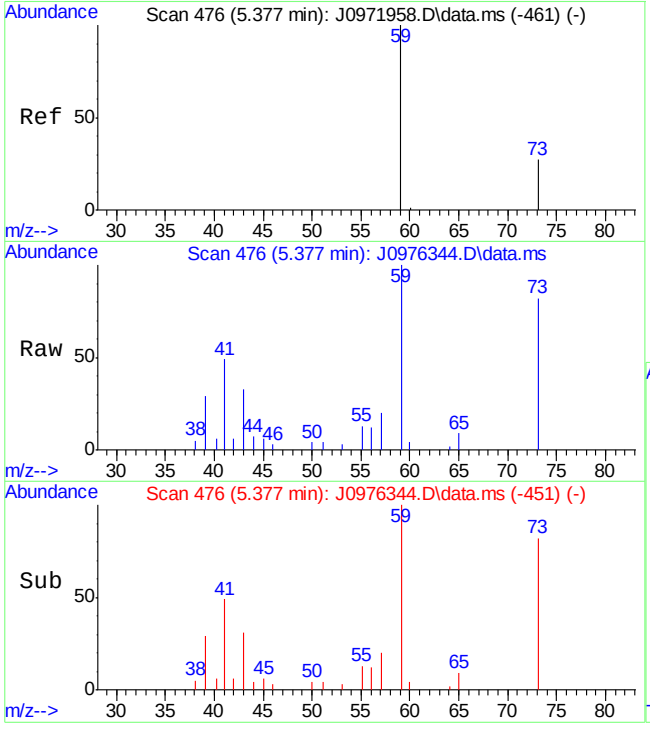


#98
n-Butylbenzene
Concen: 0.25 ug/L
RT: 13.438 min Scan# 1801
Delta R.T. 0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 92 Resp: 3034

Ion	Ratio	Lower	Upper
92	100		
91	273.5	160.5	220.5#
134	49.9	12.7	72.7

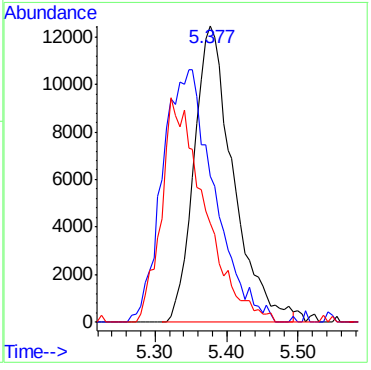


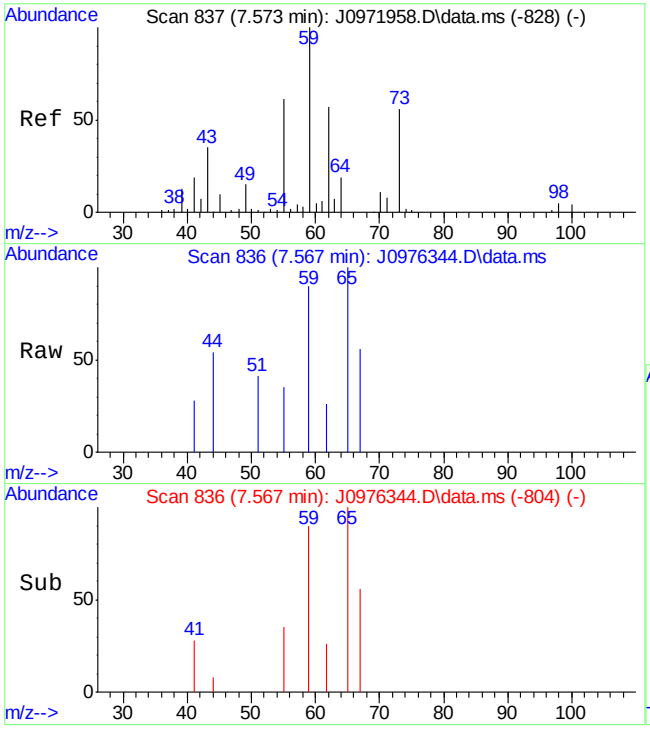


#109
Tert Butyl Alcohol
Concen: 223.21 ug/L
RT: 5.377 min Scan# 476
Delta R.T. 0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 59 Resp: 47139

Ion	Ratio	Lower	Upper
59	100		
41	47.3	27.9	67.9
43	33.4	13.1	53.1

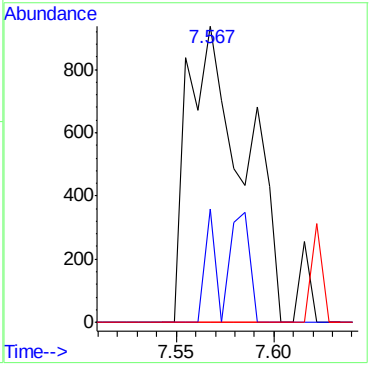


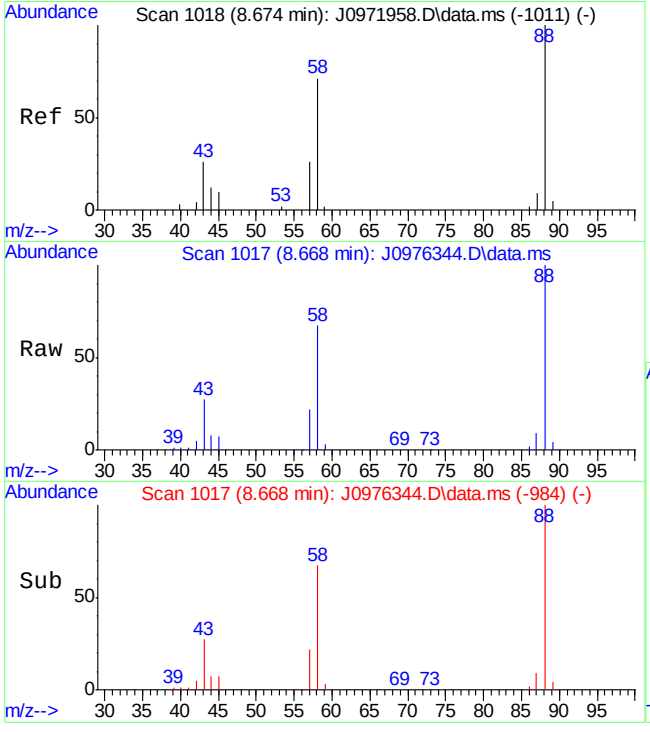


#110
tert Amyl alcohol
Concen: 12.77 ug/L
RT: 7.567 min Scan# 836
Delta R.T. -0.006 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 59 Resp: 1891

Ion	Ratio	Lower	Upper
59	100		
55	38.3	34.1	74.1
73	0.0	39.6	79.6#

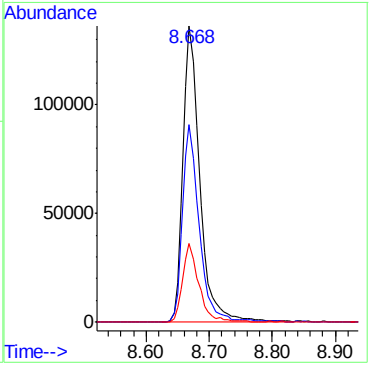




#112
1,4-Dioxane
Concen: 14581.84 ug/L
RT: 8.668 min Scan# 1017
Delta R.T. 0.000 min
Lab File: J0976344.D
Acq: 6 May 2016 11:56 am

Tgt Ion: 88 Resp: 252278

Ion	Ratio	Lower	Upper
88	100		
58	66.6	29.4	89.4
43	26.7	0.0	57.3



Manual Integration Approval Summary

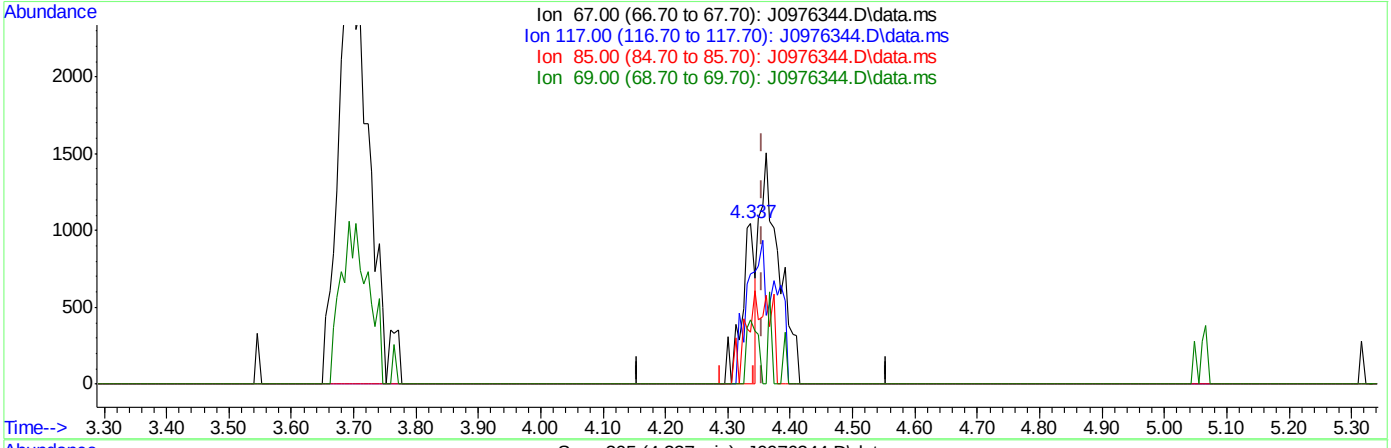
Sample Number:	FA33668-7	**Method:**	SW846 8260C
Lab FileID:	J0976344.D	**Analyst approved:**	05/06/16 14:26 Darshna Patel
Injection Time:	05/06/16 11:56	**Supervisor approved:**	05/06/16 14:45 Melissa Mangual

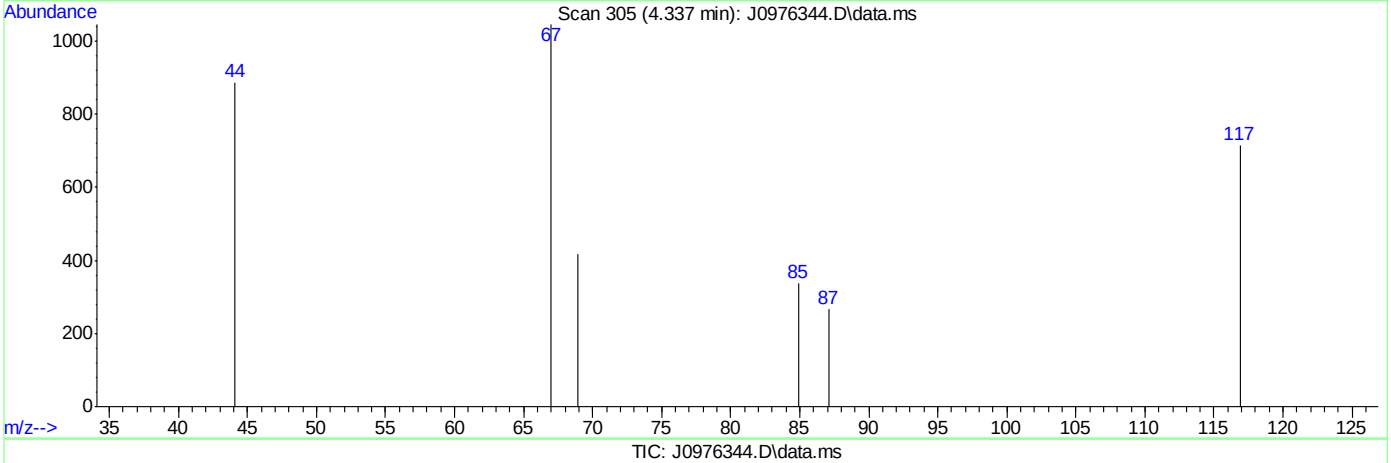
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichlorotrifluoroethane	354-23-4		4.36	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976344.D
Acq On : 6 May 2016 11:56 am
Operator : darshnap
Sample : fa33668-7 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 06 14:09:09 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976344.D\data.ms

(10) 1,2-Dichlorotrifluoroethane

4.337min (-0.018) 0.26ug/L

response 1541

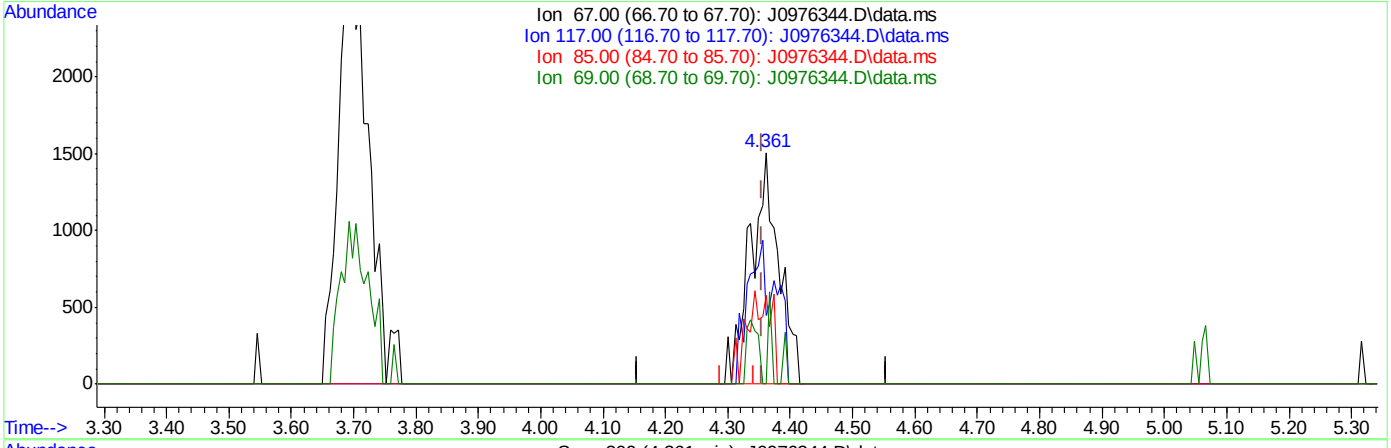
Ion	Exp%	Act%
67.00	100	100
117.00	69.10	68.36
85.00	40.50	32.41
69.00	32.30	39.87

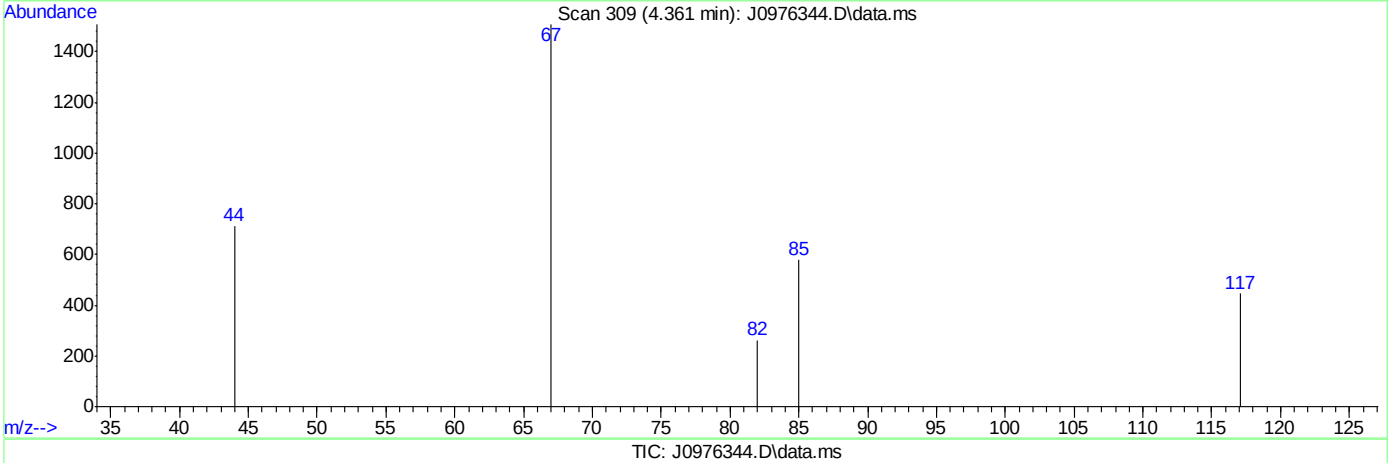
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976344.D
Acq On : 6 May 2016 11:56 am
Operator : darshnap
Sample : fa33668-7 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 06 14:09:09 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976344.D\data.ms

(10) 1,2-Dichlorotrifluoroethane

4.361min (+0.006) 0.81ug/L m

response 4850

Ion	Exp%	Act%
67.00	100	100
117.00	69.10	29.51#
85.00	40.50	38.40
69.00	32.30	0.00#

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28349.D
Acq On : 5 May 2016 2:03 pm
Operator : ANGIED
Sample : FA33668-8 MA Inst : MSVOA14
Misc : MS33792,VY1148,5.73,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 05 14:59:04 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.122	96	1046988	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.309	117	676017	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.682	152	304662	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.621	65	132736	250.00	ug/Kg	0.00

System Monitoring Compounds						
35) Dibromofluoromethane	6.245	113	257266	53.69	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 107.38%			
44) 1,2-Dichloroethane-d4	6.817	65	279844	55.27	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 110.54%			
55) Toluene-d8	8.746	98	957603	50.28	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 100.56%			
77) 4-Bromofluorobenzene	11.538	174	206419	49.20	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 98.40%			

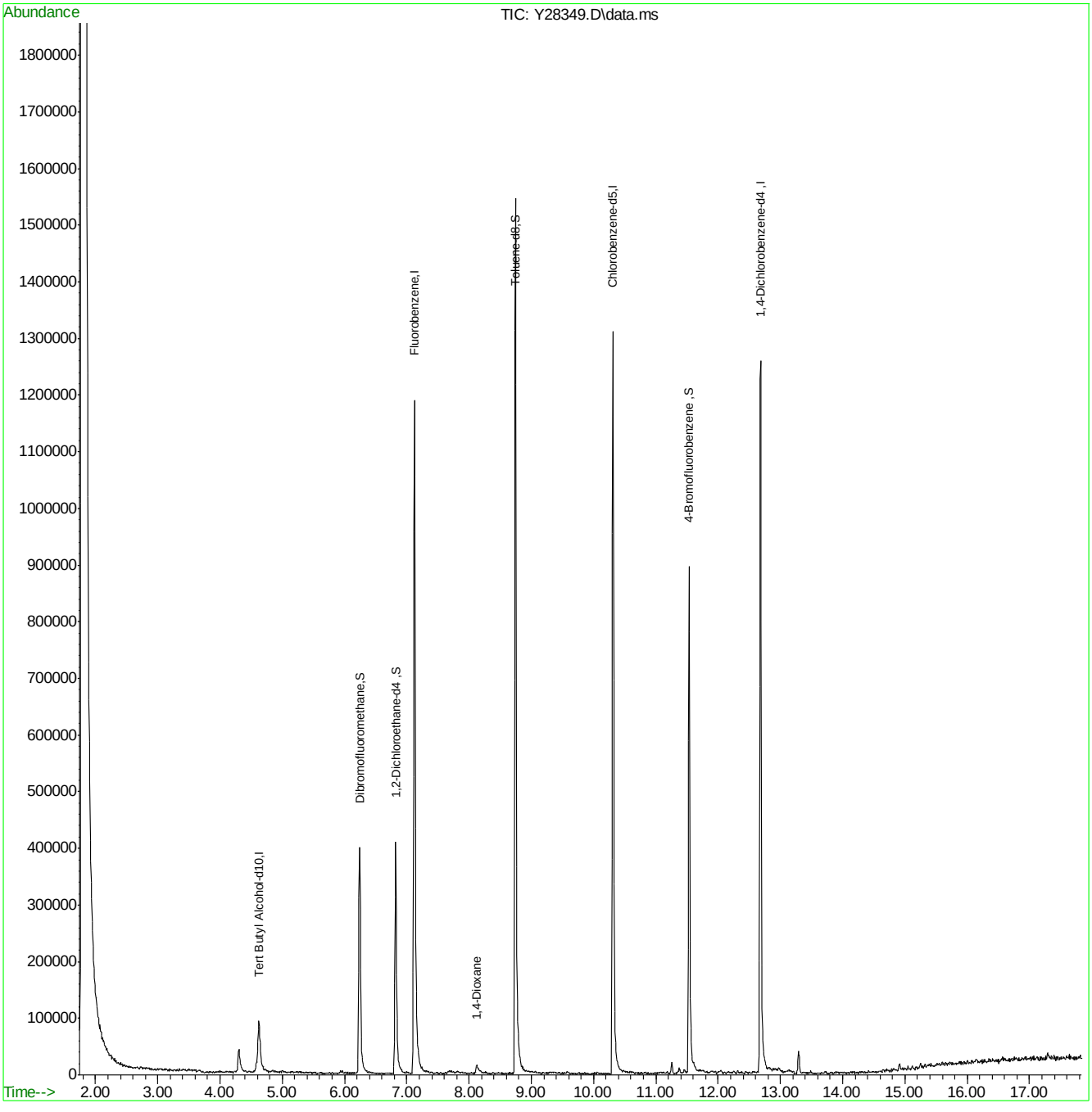
Target Compounds						Qvalue
109) 1,4-Dioxane	8.125	88	11873	155.00	ug/Kg	87

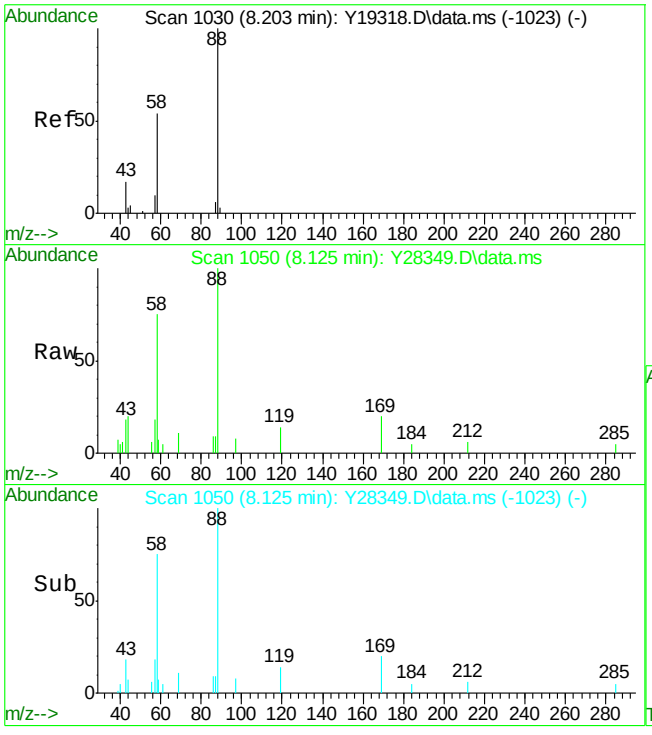
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28349.D
Acq On : 5 May 2016 2:03 pm
Operator : ANGIED
Sample : FA33668-8 MA Inst : MSVOA14
Misc : MS33792,VY1148,5.73,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 05 14:59:04 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

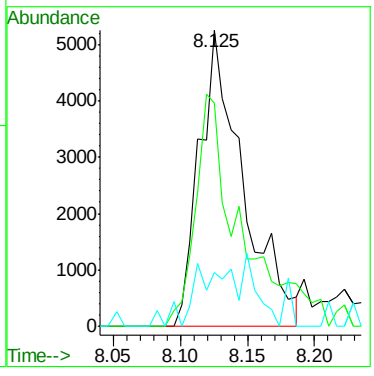




#109
1,4-Dioxane
Concen: 155.00 ug/Kg
RT: 8.125 min Scan# 1050
Delta R.T. 0.012 min
Lab File: Y28349.D
Acq: 5 May 2016 2:03 pm

Tgt Ion: 88 Resp: 11873

Ion	Ratio	Lower	Upper
88	100		
58	82.4	40.2	100.2
43	18.3	0.0	52.3



7.1.8

7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976345.D
Acq On : 6 May 2016 12:18 pm
Operator : darshnap
Sample : fa33668-9 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 06 14:14:14 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1081776	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	824836	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	426861	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	45853	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	280542	51.11	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.22%			
46) 1,2-Dichloroethane-d4	7.482	65	319470	48.12	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 96.24%			
57) Toluene-d8	9.301	98	1095403	50.48	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.96%			
79) 4-Bromofluorobenzene	12.057	95	403811	52.30	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.60%			
Target Compounds						Qvalue
112) 1,4-Dioxane	8.674	88	21703	1191.99	ug/L	87

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

7.1.9

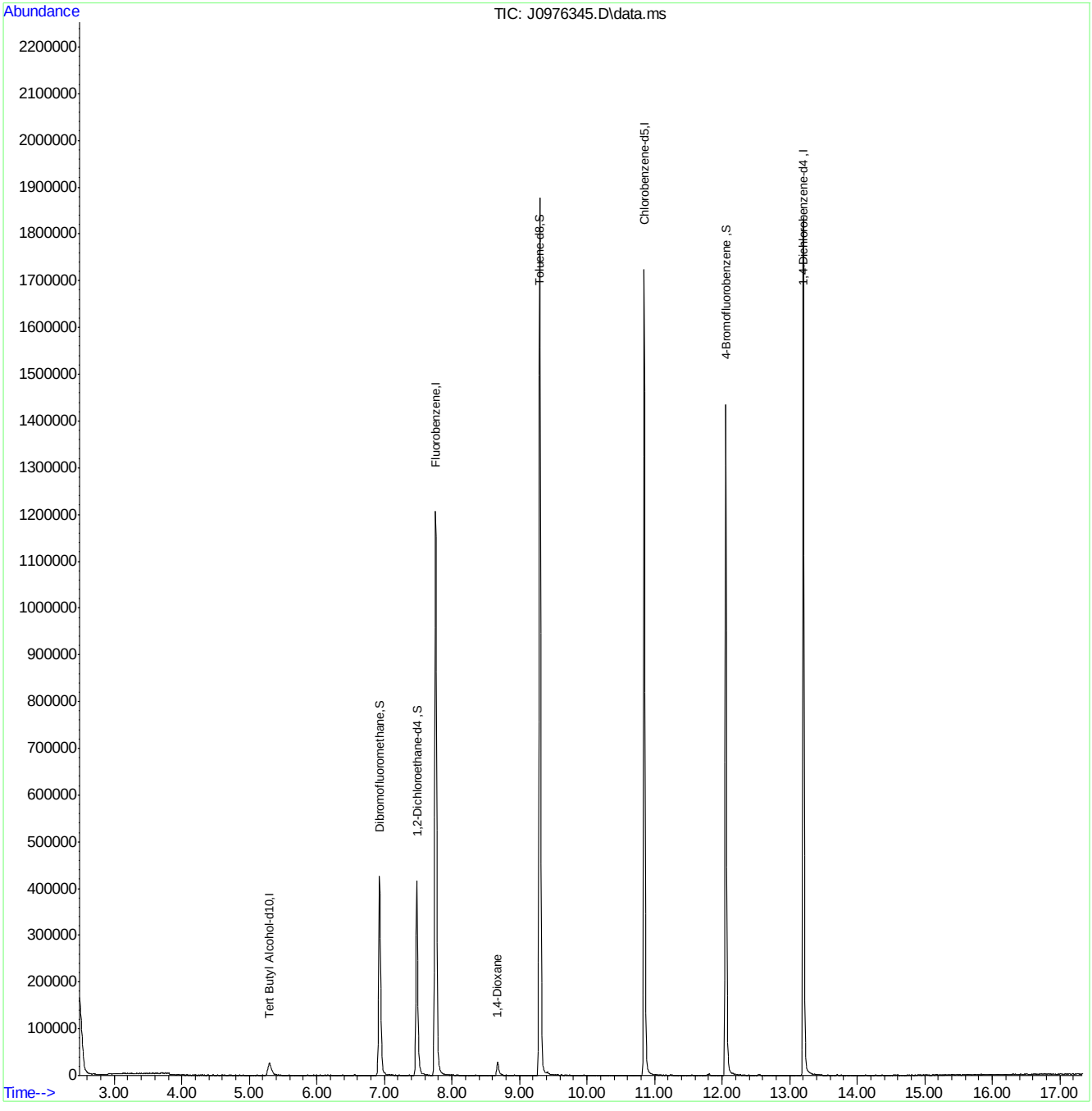
7

SGS ACCUTEST FA33668

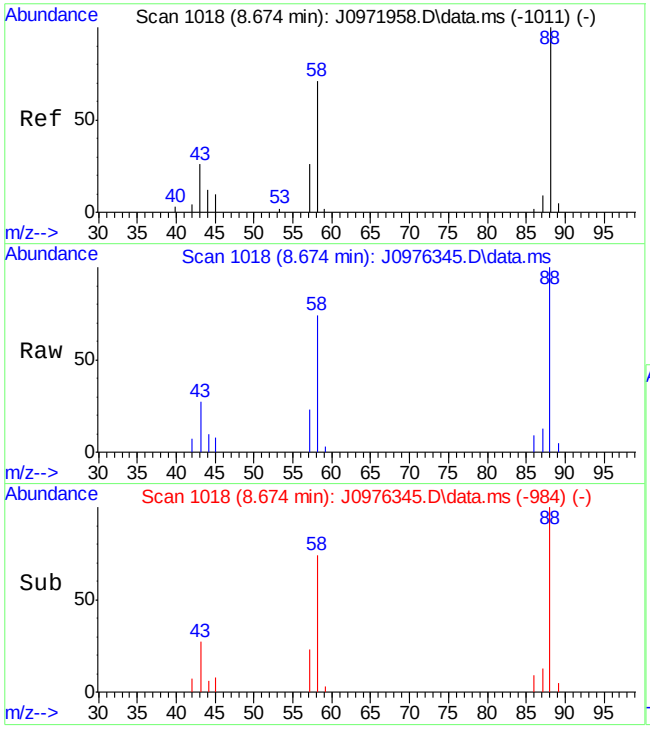
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976345.D
Acq On : 6 May 2016 12:18 pm
Operator : darshnap
Sample : fa33668-9 ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 06 14:14:14 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



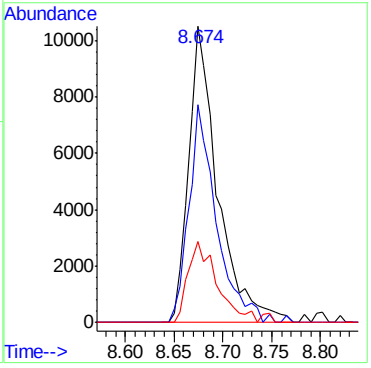
SGS ACCUTEST FA33668



#112
1,4-Dioxane
Concen: 1191.99 ug/L
RT: 8.674 min Scan# 1018
Delta R.T. 0.006 min
Lab File: J0976345.D
Acq: 6 May 2016 12:18 pm

Tgt Ion: 88 Resp: 21703

Ion	Ratio	Lower	Upper
88	100		
58	73.7	29.4	89.4
43	27.1	0.0	57.3



7.1.9

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28347.D
Acq On : 5 May 2016 1:09 pm
Operator : ANGIED
Sample : MB MA Inst : MSVOA14
Misc : MS33792,VY1148,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 05 14:53:16 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.124	96	1089657	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.311	117	690768	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.678	152	309681	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.654	65	122321	250.00	ug/Kg	0.03

System Monitoring Compounds

35) Dibromofluoromethane	6.242	113	254101	50.95	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.90%			
44) 1,2-Dichloroethane-d4	6.820	65	272467	51.70	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 103.40%			
55) Toluene-d8	8.742	98	987218	50.73	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 101.46%			
77) 4-Bromofluorobenzene	11.534	174	217796	51.07	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 102.14%			

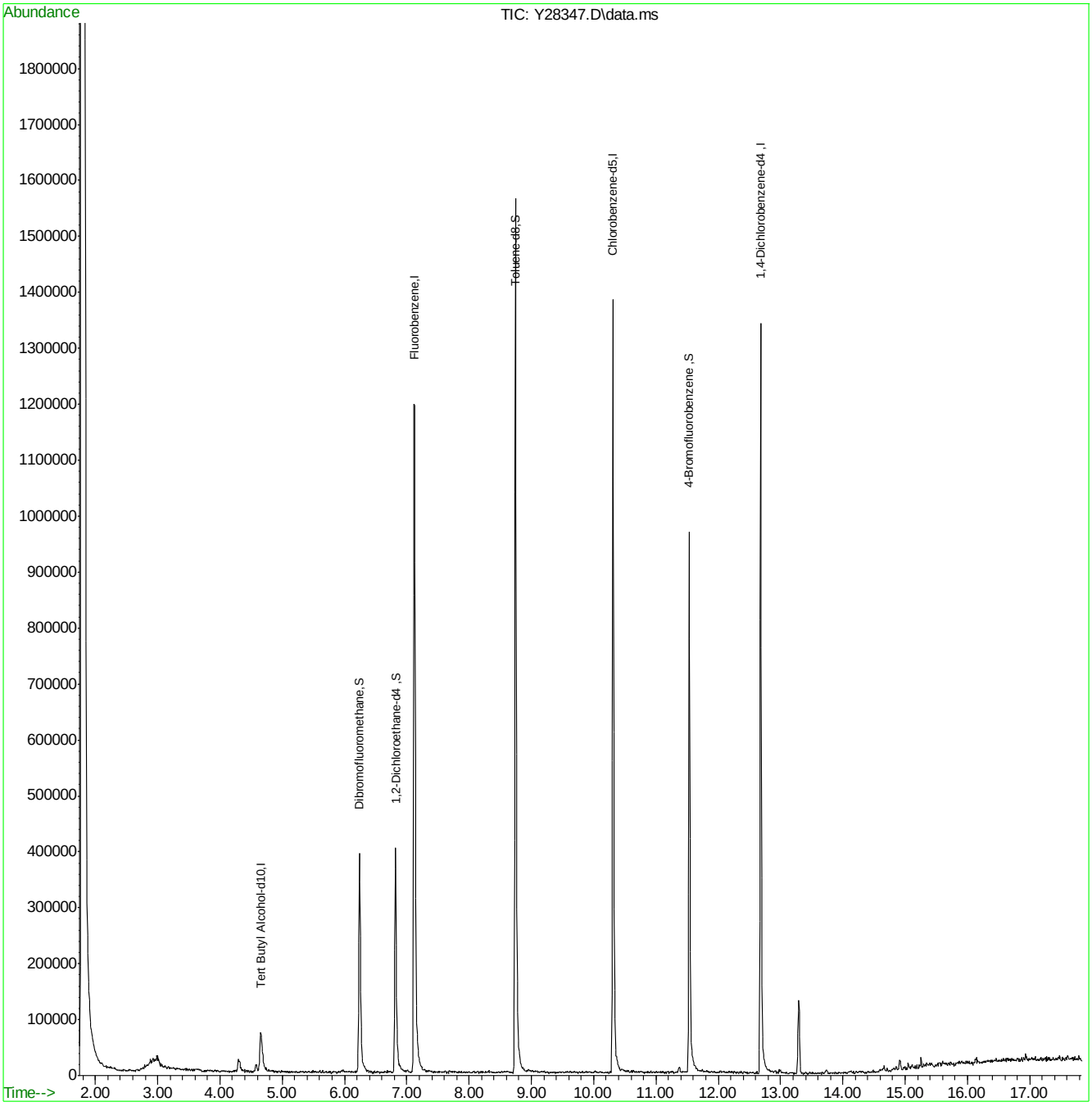
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28347.D
Acq On : 5 May 2016 1:09 pm
Operator : ANGIED
Sample : MB MA Inst : MSVOA14
Misc : MS33792,VY1148,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 05 14:53:16 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



042516APP9-Y.m Fri May 06 08:13:26 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976338.D
Acq On : 6 May 2016 9:27 am
Operator : darshnap
Sample : mb ma Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 10:54:46 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1159104	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	883827	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	457173	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.304	65	60811	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	302568	51.44	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.88%			
46) 1,2-Dichloroethane-d4	7.476	65	355594	49.99	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.98%			
57) Toluene-d8	9.301	98	1179935	50.74	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.48%			
79) 4-Bromofluorobenzene	12.057	95	435160	52.62	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.24%			

Target Compounds Qvalue

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

7.2.2

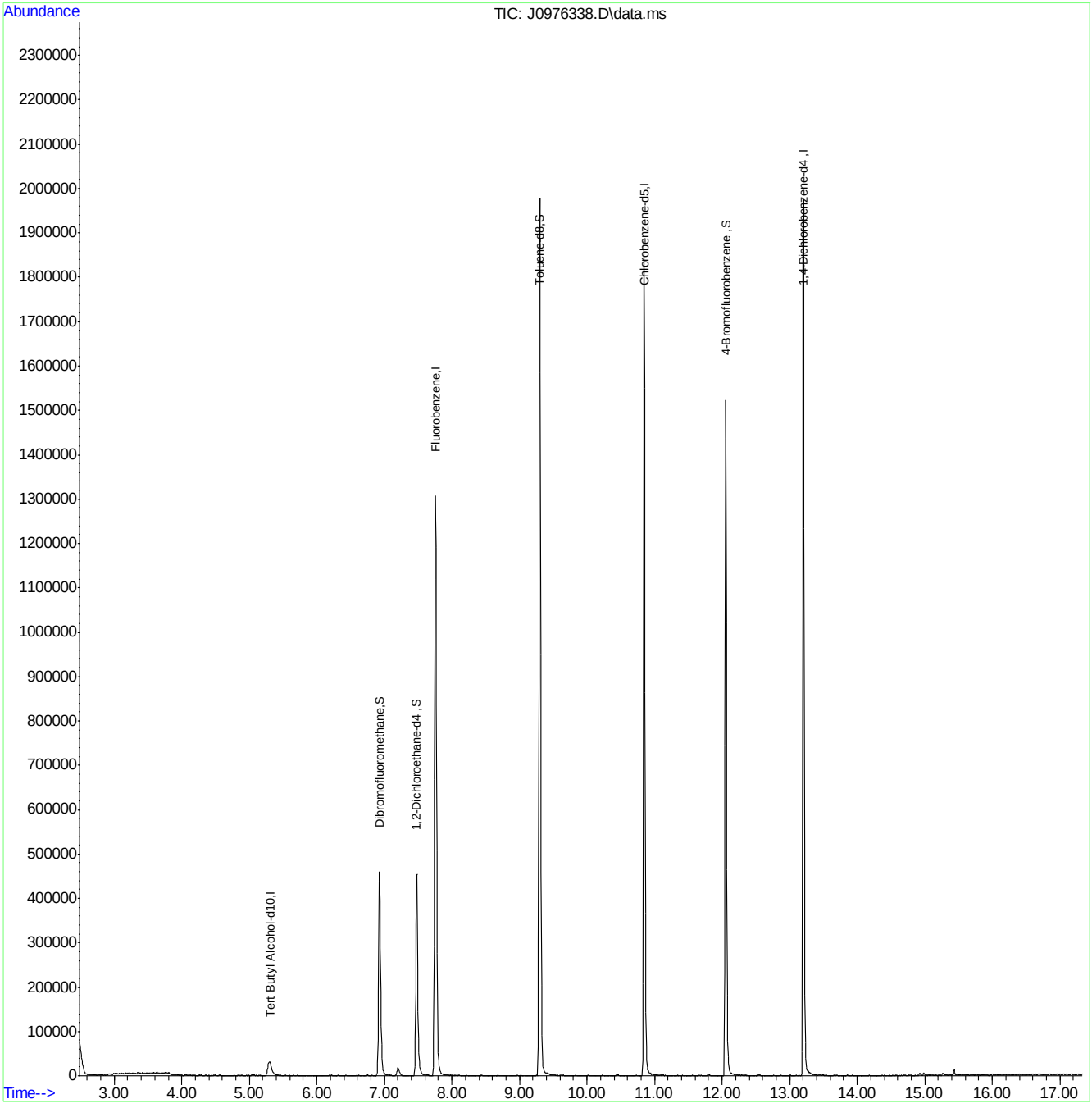
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976338.D
Acq On : 6 May 2016 9:27 am
Operator : darshnap
Sample : mb ma Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 10:54:46 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



MSJ031516.M Fri May 06 14:16:38 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28346.D
Acq On : 5 May 2016 12:43 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33792,VY1148,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 05 14:51:09 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.124	96	1137952	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.311	117	769129	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.678	152	355287	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.635	65	137922	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.241	113	264673	50.82	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.64%			
44) 1,2-Dichloroethane-d4	6.819	65	276943	50.32	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 100.64%			
55) Toluene-d8	8.742	98	1085531	50.09	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 100.18%			
77) 4-Bromofluorobenzene	11.534	174	253996	51.91	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 103.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.983	85	564639	58.91	ug/Kg	100
3) Chloromethane	2.202	50	595646	55.29	ug/Kg	98
4) Vinyl Chloride	2.318	62	577466	53.23	ug/Kg	98
5) Bromomethane	2.719	94	270255	52.61	ug/Kg	97
6) Chloroethane	2.877	64	265025	47.01	ug/Kg	98
7) Trichlorofluoromethane	3.054	101	548004	54.54	ug/Kg	100
8) Ethyl Ether	3.407	59	275570	52.51	ug/Kg	97
9) 1,2-Dichlorotrifluoroe...	3.638	67	483197	54.57	ug/Kg	95
10) 1,1-Dichloroethene	3.650	61	631599	52.48	ug/Kg	91
11) Freon 113	3.705	101	378032	51.17	ug/Kg	97
12) Carbon Disulfide	3.686	76	1289907	53.01	ug/Kg	100
13) Iodomethane	3.808	142	558707	52.53	ug/Kg	98
14) Allyl chloride	4.179	41	454878	44.45	ug/Kg	90
15) Methylene Chloride	4.301	49	478024	52.43	ug/Kg	96
16) Acetone	4.343	43	382474	234.47	ug/Kg	96
17) Methyl acetate	4.489	43	941591	274.65	ug/Kg	92
18) trans-1,2-Dichloroethene	4.483	61	517041	56.62	ug/Kg	98
19) Hexane	4.581	56	317705	54.17	ug/Kg	91
20) Methyl Tert Butyl Ether	4.611	73	928265	57.82	ug/Kg#	27
21) Acetonitrile	4.848	41	301624	524.40	ug/Kg	97
22) Di-isopropyl ether	5.025	45	1039883	53.60	ug/Kg	94
23) Chloroprene	5.140	53	547718	49.16	ug/Kg	98
24) 1,1-Dichloroethane	5.159	63	672289	53.69	ug/Kg	93
25) Acrylonitrile	5.195	53	525119	272.18	ug/Kg	97
26) ETBE	5.426	59	1022927	52.96	ug/Kg	96
27) Vinyl acetate	5.420	43	2802393	291.34	ug/Kg	94
28) cis-1,2-Dichloroethene	5.749	96	416500	52.41	ug/Kg	99
29) 2,2-Dichloropropane	5.864	77	302898	62.68	ug/Kg	96
30) Bromochloromethane	5.968	128	173297	52.90	ug/Kg#	86
31) Cyclohexane	5.998	84	682952	54.14	ug/Kg	93
32) Chloroform	6.041	83	698468	54.14	ug/Kg	99
33) Ethyl acetate	6.162	43	1292556	292.77	ug/Kg	95
34) Tetrahydrofuran	6.241	42	86052	57.32	ug/Kg	96
36) Carbon Tetrachloride	6.217	117	472417	61.58	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28346.D
Acq On : 5 May 2016 12:43 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33792,VY1148,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 05 14:51:09 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.284	97	514870	55.23 ug/Kg	99
38) 2-Butanone	6.369	43	613246	252.04 ug/Kg	96
39) 1,1-Dichloropropene	6.418	75	560859	57.28 ug/Kg	95
40) Propionitrile	6.673	54	411490	527.39 ug/Kg	97
41) Methacrylonitrile	6.704	41	1518580	544.40 ug/Kg	92
42) Benzene	6.679	78	1564072	55.46 ug/Kg	95
43) TAME	6.807	73	971188	53.75 ug/Kg	97
45) 1,2-Dichloroethane	6.892	62	422909	54.19 ug/Kg	98
46) Trichloroethene	7.312	95	397126	53.58 ug/Kg	94
47) Methylcyclohexane	7.318	83	732063	55.36 ug/Kg	96
48) Dibromomethane	7.750	93	196259	55.71 ug/Kg	95
49) 1,2-Dichloropropane	7.841	63	374514	53.03 ug/Kg	91
50) Bromodichloromethane	7.908	83	455529	56.53 ug/Kg	99
51) Methyl methacrylate	8.054	41	198315	50.72 ug/Kg	89
52) 2-Chloroethyl vinyl ether	8.468	63	926489	290.97 ug/Kg	97
53) cis-1,3-Dichloropropene	8.547	75	586438	56.75 ug/Kg	99
56) Toluene	8.797	91	1563991	55.79 ug/Kg	95
57) 2-Nitropropane	9.003	41	300806	273.94 ug/Kg	92
58) 4-Methyl-2-pentanone	9.155	43	1244339	275.91 ug/Kg	93
59) trans-1,3-Dichloropropene	9.204	75	502646	63.52 ug/Kg	98
60) Tetrachloroethene	9.204	166	361420	59.31 ug/Kg	98
61) Ethyl methacrylate	9.344	69	314613	46.78 ug/Kg	93
62) 1,1,2-Trichloroethane	9.362	83	249516	56.54 ug/Kg	96
63) Dibromochloromethane	9.557	129	305103	58.64 ug/Kg	99
64) 1,3-Dichloropropane	9.642	76	499407	54.59 ug/Kg	97
65) 1,2-Dibromoethane	9.806	107	262080	54.30 ug/Kg	95
66) 2-hexanone	9.989	43	834712	263.15 ug/Kg	92
67) 1-Chlorohexane	10.287	91	481409	55.82 ug/Kg	92
68) Ethylbenzene	10.342	91	1679689	58.32 ug/Kg	95
69) Chlorobenzene	10.330	112	975163	57.40 ug/Kg	96
70) 1,1,1,2-Tetrachloroethane	10.384	131	325857	57.80 ug/Kg	97
71) m,p-Xylene	10.482	91	2476277	115.80 ug/Kg	93
72) o-Xylene	10.920	91	1298728	57.97 ug/Kg	100
73) Styrene	10.974	104	976861	59.72 ug/Kg	97
74) Bromoform	11.011	173	164462	61.39 ug/Kg	99
75) Isopropylbenzene	11.230	105	1598277	59.11 ug/Kg	98
78) cis-1,4-Dichloro-2-butene	11.577	53	90733	49.94 ug/Kg	90
79) n-Propylbenzene	11.656	91	1878823	60.70 ug/Kg	95
80) Bromobenzene	11.650	156	359578	57.99 ug/Kg	96
81) 1,1,2,2-Tetrachloroethane	11.717	83	359449	55.07 ug/Kg	94
82) 1,3,5-Trimethylbenzene	11.844	105	1403646	60.13 ug/Kg	95
83) 2-Chlorotoluene	11.826	91	1272954	58.71 ug/Kg	98
84) trans-1,4-Dichloro-2-B...	11.893	53	90012	52.44 ug/Kg	90
85) 1,2,3-Trichloropropane	11.863	110	96770	53.57 ug/Kg	94
86) Cyclohexanone	11.917	55	63167	208.36 ug/Kg	91
87) 4-Chlorotoluene	11.990	91	1166019	61.18 ug/Kg	100
88) tert-Butylbenzene	12.173	91	832161	57.96 ug/Kg	96
89) 1,2,4-Trimethylbenzene	12.246	105	1371475	60.92 ug/Kg	96
90) Pentachloroethane	12.215	167	202423	57.60 ug/Kg	92
91) sec-Butylbenzene	12.361	105	1809694	61.33 ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28346.D
Acq On : 5 May 2016 12:43 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33792,VY1148,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 05 14:51:09 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

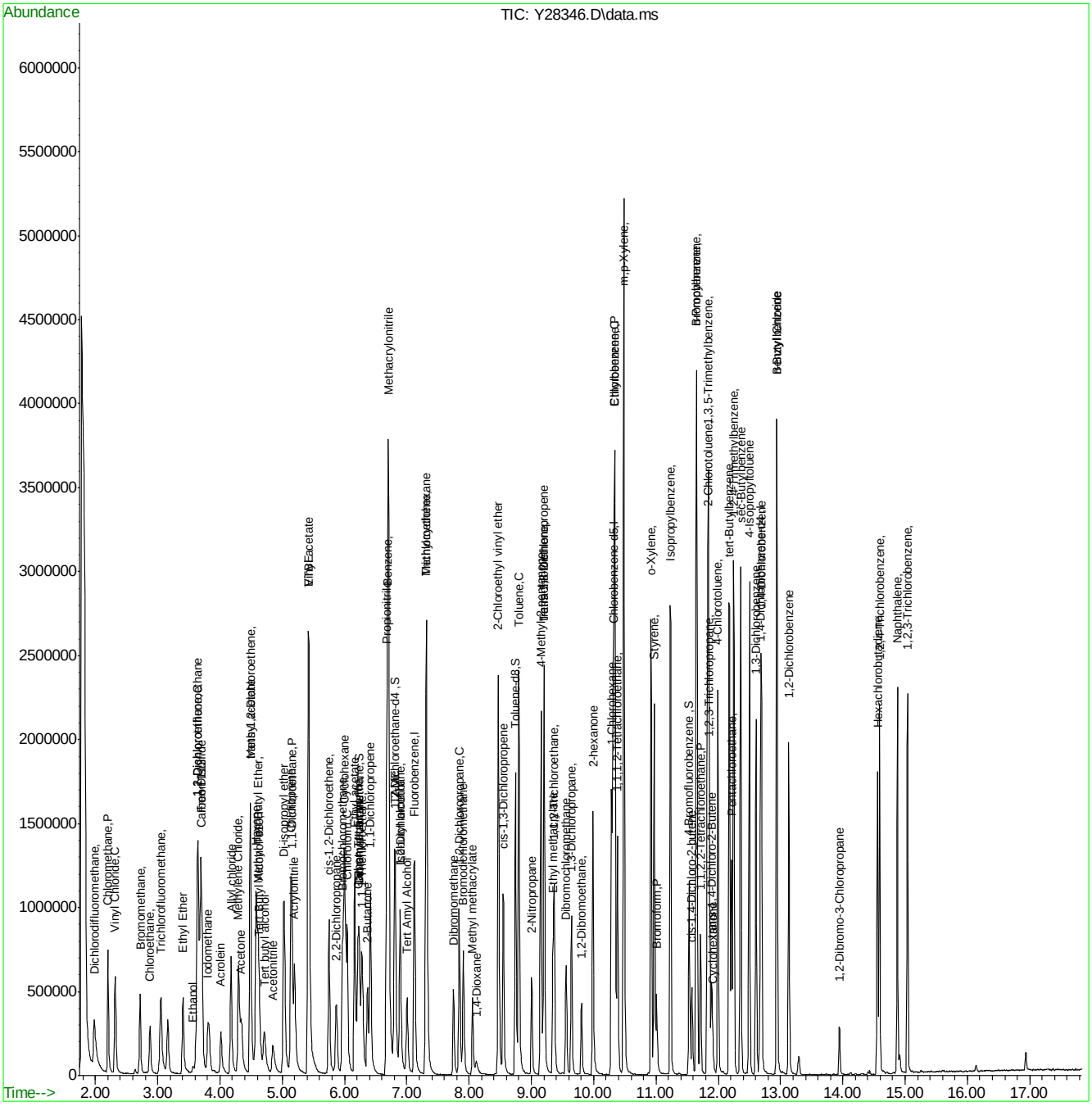
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.501	119	1459337	61.29	ug/Kg	99
93) 1,3-Dichlorobenzene	12.605	146	712815	60.76	ug/Kg	96
94) 1,4-Dichlorobenzene	12.696	146	718072	60.42	ug/Kg	97
95) n-Butylbenzene	12.939	92	832076	59.96	ug/Kg	90
96) Benzyl Chloride	12.939	126	136061	55.69	ug/Kg#	76
97) 1,2-Dichlorobenzene	13.134	146	664780	59.15	ug/Kg	99
98) 1,2-Dibromo-3-Chloropr...	13.943	75	68426	54.34	ug/Kg	89
99) Hexachlorobutadiene	14.558	225	232191	57.50	ug/Kg	95
100) 1,2,4-Trichlorobenzene	14.588	180	459151	62.08	ug/Kg	98
101) Naphthalene	14.874	128	1193973	65.74	ug/Kg	100
102) 1,2,3-Trichlorobenzene	15.038	180	456942	62.57	ug/Kg	97
104) Ethanol	3.571	45	59606	812.06	ug/Kg	95
105) Acrolein	4.015	56	273278	223.60	ug/Kg	94
106) Tert butyl alcohol	4.715	59	352110	464.43	ug/Kg	94
107) Isobutyl alcohol	6.898	42	152537	820.61	ug/Kg	96
108) Tert Amyl Alcohol	7.002	59	294021	445.87	ug/Kg	93
109) 1,4-Dioxane	8.115	88	71210	894.67	ug/Kg	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28346.D
Acq On : 5 May 2016 12:43 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33792,VY1148,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 05 14:51:09 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
05/06/16 14:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs ma Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:42 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1266415	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	991226	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	553575	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.292	65	75498	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.922	113	323533	50.35	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.70%			
46) 1,2-Dichloroethane-d4	7.476	65	387867	49.91	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.82%			
57) Toluene-d8	9.301	98	1279666	49.07	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.14%			
79) 4-Bromofluorobenzene	12.057	95	500607	50.00	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.676	85	188068	24.12	ug/L	96
3) Chloromethane	2.883	50	217631	26.09	ug/L	99
4) Vinyl Chloride	3.029	62	237947	27.84	ug/L	97
5) 1,3-Butadiene	3.023	54	9074	1.43	ug/L #	75
6) Bromomethane	3.449	94	142961	22.87	ug/L	97
7) Chloroethane	3.613	64	115994	26.84	ug/L	97
8) Trichlorofluoromethane	3.826	101	308618m	29.11	ug/L	
9) Ethyl Ether	4.112	59	126217	25.77	ug/L	92
10) 1,2-Dichlorotrifluoroe...	4.355	67	228413	31.02	ug/L	98
11) 1,1-Dichloroethene	4.392	61	297696	32.47	ug/L	97
12) Freon 113	4.458	101	183052	28.87	ug/L	96
13) Carbon Disulfide	4.465	76	618113	32.38	ug/L	95
14) Iodomethane	4.580	142	284684	28.10	ug/L	99
15) Allyl chloride	4.915	41	204296	24.10	ug/L	95
16) Methylene Chloride	5.036	49	228866	27.59	ug/L	98
17) Acetone	5.061	58	43016	113.27	ug/L	91
18) Methyl acetate	5.182	74	89066	120.43	ug/L #	90
19) trans-1,2-Dichloroethene	5.225	61	274460	32.59	ug/L	99
20) Hexane	5.298	56	167880	31.07	ug/L	95
21) Methyl Tert Butyl Ether	5.335	73	421948	25.14	ug/L	84
22) Acetonitrile	5.590	40	54795	228.49	ug/L	97
23) Di-isopropyl ether	5.706	45	500441	26.04	ug/L	98
24) Chloroprene	5.864	53	225932	24.96	ug/L	98
25) 1,1-Dichloroethane	5.894	63	332259	29.55	ug/L	98
26) Acrylonitrile	5.925	53	189981	113.05	ug/L	93
27) ETBE	6.107	59	494658	25.71	ug/L	98
28) Vinyl acetate	6.101	43	1201771	123.48	ug/L	97
29) cis-1,2-Dichloroethene	6.472	96	190426	26.38	ug/L	95
30) 2,2-Dichloropropane	6.600	77	270359	30.81	ug/L	95
31) Bromochloromethane	6.679	128	82049	25.14	ug/L	95
32) Cyclohexane	6.728	56	312740	29.59	ug/L	96
33) Chloroform	6.734	83	339435	27.19	ug/L	99
34) Ethyl acetate	6.807	43	446988	114.23	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs ma Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:42 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) Tetrahydrofuran	6.910	42	27300	23.76 ug/L	87
37) Carbon Tetrachloride	6.928	117	276213m	31.84 ug/L	
38) 1,1,1-Trichloroethane	6.989	97	299085	28.02 ug/L	95
39) 2-Butanone	7.020	43	192869	117.91 ug/L	94
40) 1,1-Dichloropropene	7.099	75	242453	28.13 ug/L	98
41) tert-Butyl Formate	7.184	59	992377	252.95 ug/L	94
42) Propionitrile	7.330	54	130330	224.57 ug/L	96
43) Methacrylonitrile	7.354	41	605565	224.23 ug/L	94
44) Benzene	7.354	78	756198	28.82 ug/L	94
45) TAME	7.427	73	429867	24.76 ug/L	98
47) 1,2-Dichloroethane	7.543	62	235660	25.66 ug/L	98
48) Trichloroethene	7.932	95	192211	28.27 ug/L	99
49) Methylcyclohexane	7.950	83	345172	30.22 ug/L	97
50) Dibromomethane	8.358	93	96709	25.49 ug/L	97
51) 1,2-Dichloropropane	8.443	63	173916	26.39 ug/L	96
52) Bromodichloromethane	8.492	83	237093	28.06 ug/L	98
53) Methyl methacrylate	8.589	41	82964	23.81 ug/L	95
54) 2-Chloroethyl vinyl ether	9.003	63	395791	118.24 ug/L	99
55) cis-1,3-Dichloropropene	9.106	75	271509	26.85 ug/L	95
58) Toluene	9.350	91	771867	26.89 ug/L	100
59) 2-Nitropropane	9.557	41	131206	114.79 ug/L	97
60) 4-Methyl-2-pentanone	9.672	43	481518	117.40 ug/L	99
61) trans-1,3-Dichloropropene	9.733	75	249109	27.63 ug/L	97
62) Tetrachloroethene	9.757	166	198957	25.93 ug/L	97
63) Ethyl methacrylate	9.836	69	124604	19.00 ug/L	95
64) 1,1,2-Trichloroethane	9.903	83	116640	24.91 ug/L	94
65) Dibromochloromethane	10.098	129	154964	26.03 ug/L	97
66) 1,3-Dichloropropane	10.183	76	220123	23.01 ug/L	96
67) 1,2-Dibromoethane	10.360	107	129573	24.41 ug/L	99
68) 2-hexanone	10.487	43	319854	117.93 ug/L	96
69) 1-Chlorohexane	10.791	91	241887	28.73 ug/L	94
70) Ethylbenzene	10.858	91	939859	28.71 ug/L	99
71) Chlorobenzene	10.865	112	528144	27.66 ug/L	96
72) 1,1,1,2-Tetrachloroethane	10.913	131	176793	28.47 ug/L	97
73) m,p-Xylene	10.998	91	1432862	54.54 ug/L	100
74) o-Xylene	11.436	91	687812	27.19 ug/L	99
75) Styrene	11.485	104	521419	25.67 ug/L	97
76) Bromoform	11.546	173	95994	25.67 ug/L	98
77) Isopropylbenzene	11.741	105	870007	29.77 ug/L	98
80) cis-1,4-Dichloro-2-butene	12.087	53	34599	19.23 ug/L	94
81) n-Propylbenzene	12.160	91	1080972	30.78 ug/L	99
82) Bromobenzene	12.185	156	219431	26.53 ug/L	98
83) 1,1,2,2-Tetrachloroethane	12.221	83	161100	24.14 ug/L	99
84) 1,3,5-Trimethylbenzene	12.343	105	774706	29.15 ug/L	99
85) 2-Chlorotoluene	12.349	91	753211	29.21 ug/L	98
86) trans-1,4-Dichloro-2-B...	12.398	53	34952	20.82 ug/L #	75
87) 1,2,3-Trichloropropane	12.385	110	42871	25.20 ug/L	97
88) Cyclohexanone	12.446	55	85802	802.08 ug/L	92
89) 4-Chlorotoluene	12.519	91	673264	29.17 ug/L	99
90) a-Methyl Styrene	12.750	118	7949	1.05 ug/L #	1

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs ma Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:42 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) tert-Butylbenzene	12.684	91	440565	28.37	ug/L	96
92) 1,2,4-Trimethylbenzene	12.750	105	760168	28.64	ug/L	99
93) Pentachloroethane	12.738	167	130111	25.69	ug/L	97
94) sec-Butylbenzene	12.866	105	978464	30.49	ug/L	99
95) 4-Isopropyltoluene	13.000	119	813864	30.23	ug/L	99
96) 1,3-Dichlorobenzene	13.134	146	404232	27.56	ug/L	97
97) 1,4-Dichlorobenzene	13.219	146	401608	25.80	ug/L	96
98) n-Butylbenzene	13.432	92	447917	28.86	ug/L	98
99) Benzyl Chloride	13.450	126	57567	25.95	ug/L #	92
100) 1,2-Dichlorobenzene	13.645	146	349256	24.88	ug/L	98
101) 1,2-Dibromo-3-Chloropr...	14.381	75	21273	21.03	ug/L	97
102) Hexachlorobutadiene	14.928	225	171480	27.35	ug/L	98
103) 1,2,4-Trichlorobenzene	14.977	180	240264	23.44	ug/L	99
104) Naphthalene	15.257	128	350765	20.40	ug/L	98
105) 1,2,3-Trichlorobenzene	15.427	180	202285	22.27	ug/L	98
107) Ethanol	4.264	45	20308m	580.68	ug/L	
108) acrolein	4.751	56	98369	111.44	ug/L	91
109) Tert Butyl Alcohol	5.377	59	91364	249.66	ug/L	96
110) tert Amyl alcohol	7.567	59	64735	252.20	ug/L	92
111) Isobutyl alcohol	7.452	42	62840	436.46	ug/L	92
112) 1,4-Dioxane	8.668	88	19053	635.55	ug/L	91
113) 3,3-Dimethyl-1-butanol	10.433	57	346312	1101.31	ug/L	98

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

7.3.2

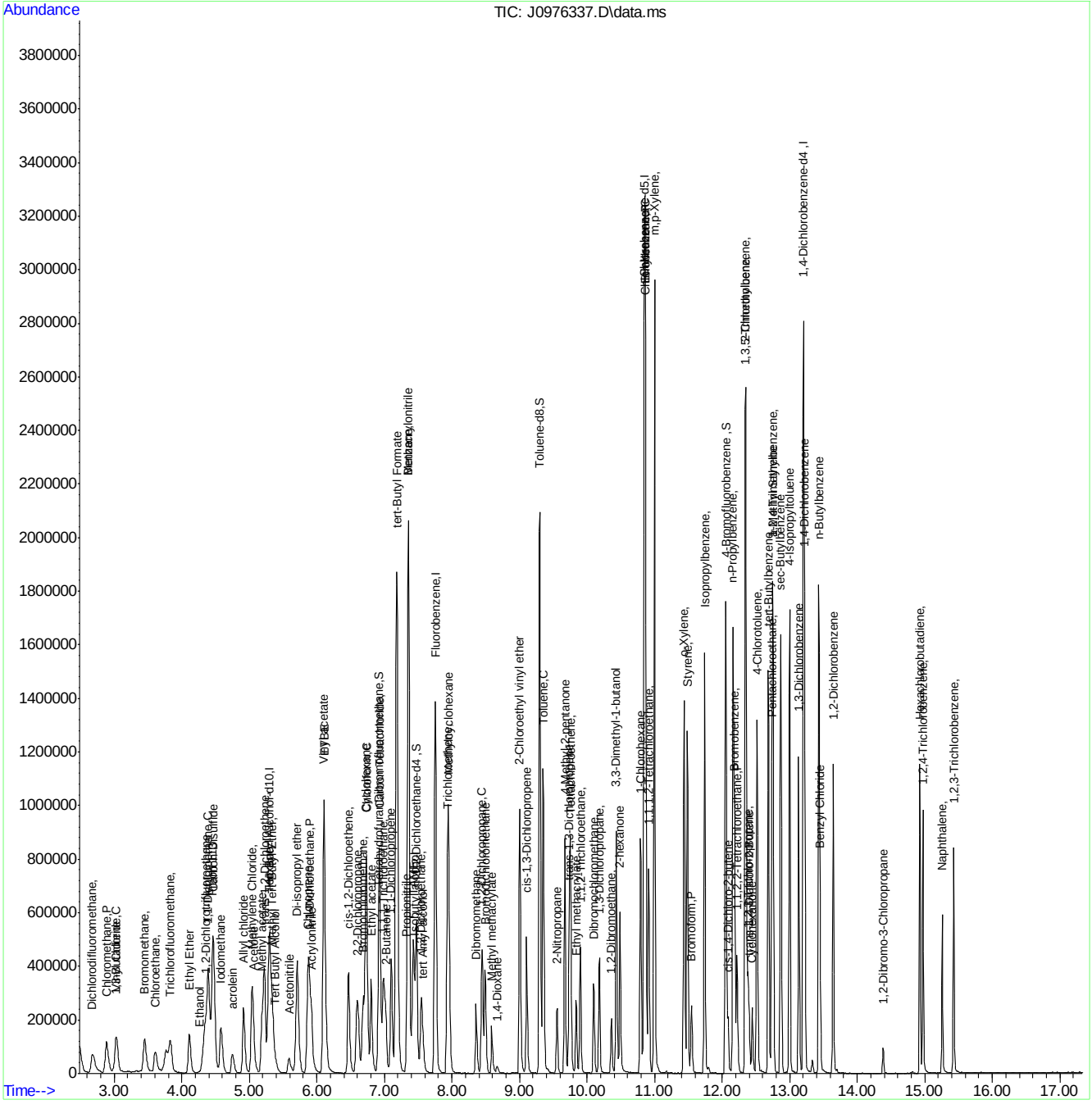
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs ma Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:42 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

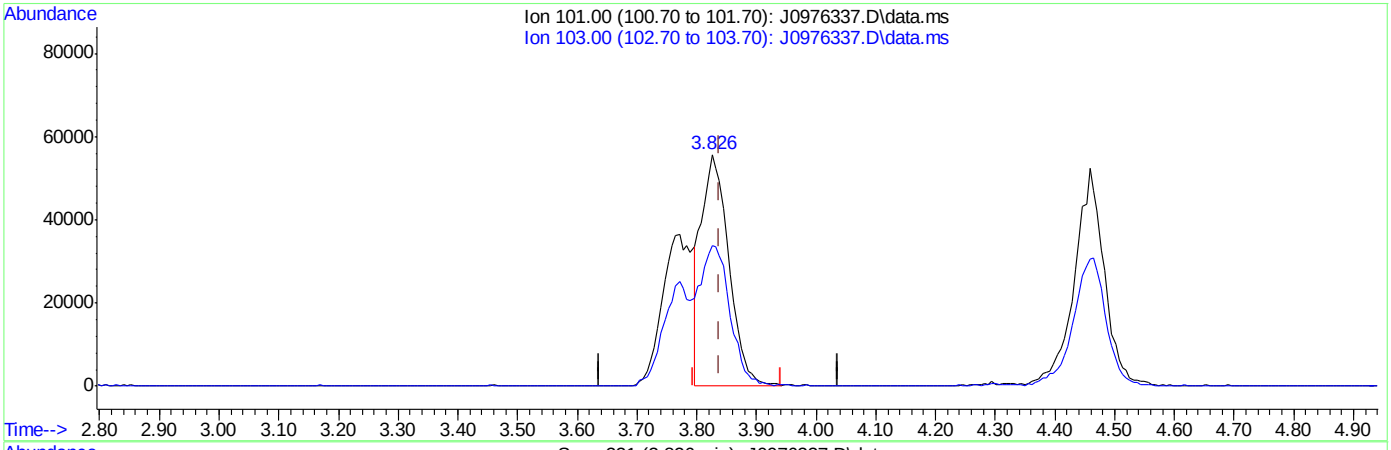
Sample Number:	VJ5288-BS	**Method:**	SW846 8260C
Lab FileID:	J0976337.D	**Analyst approved:**	05/06/16 14:22 Darshna Patel
Injection Time:	05/06/16 09:04	**Supervisor approved:**	05/06/16 14:43 Melissa Mangual

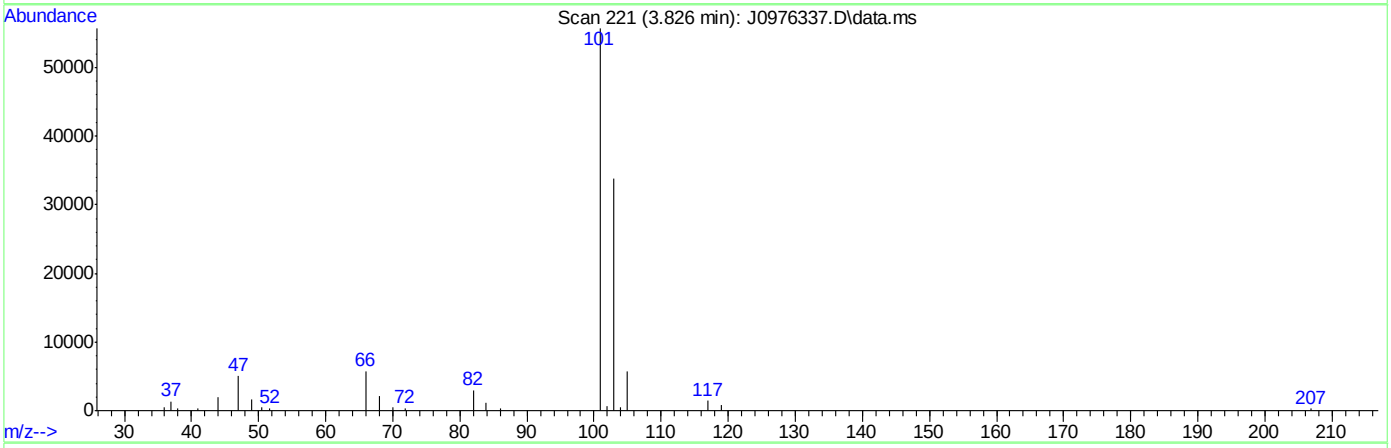
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.83	Split peak
Ethyl Alcohol	64-17-5		4.26	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:12 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976337.D\data.ms

(8) Trichlorofluoromethane ( )

3.826min (-0.012) 17.05ug/L

response 180728

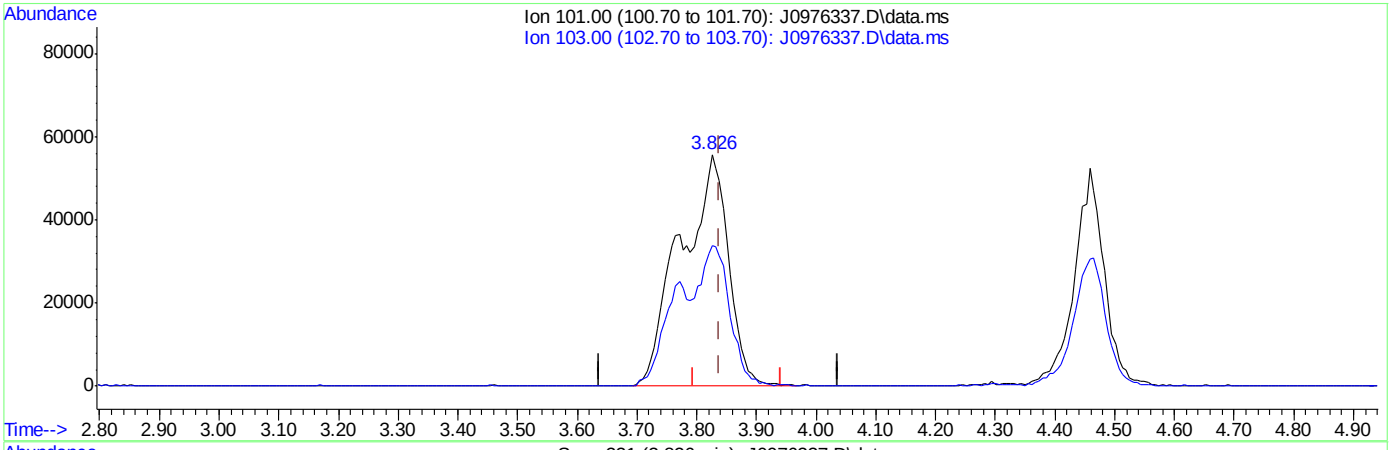
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	60.05
0.00	0.00	0.00
0.00	0.00	0.00

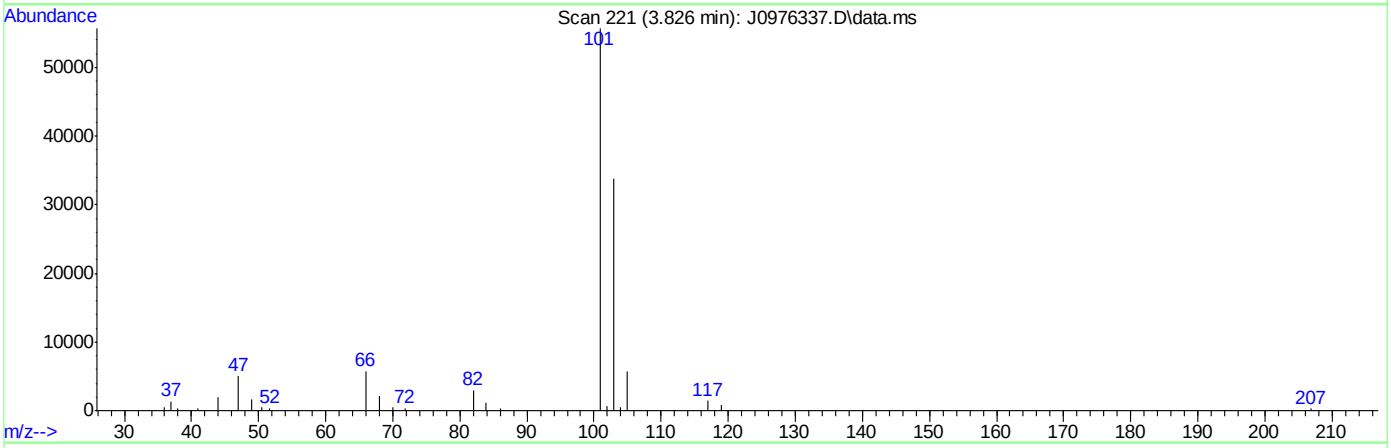
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:12 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976337.D\data.ms

(8) Trichlorofluoromethane ( )

3.826min (-0.012) 29.11ug/L m

response 308618

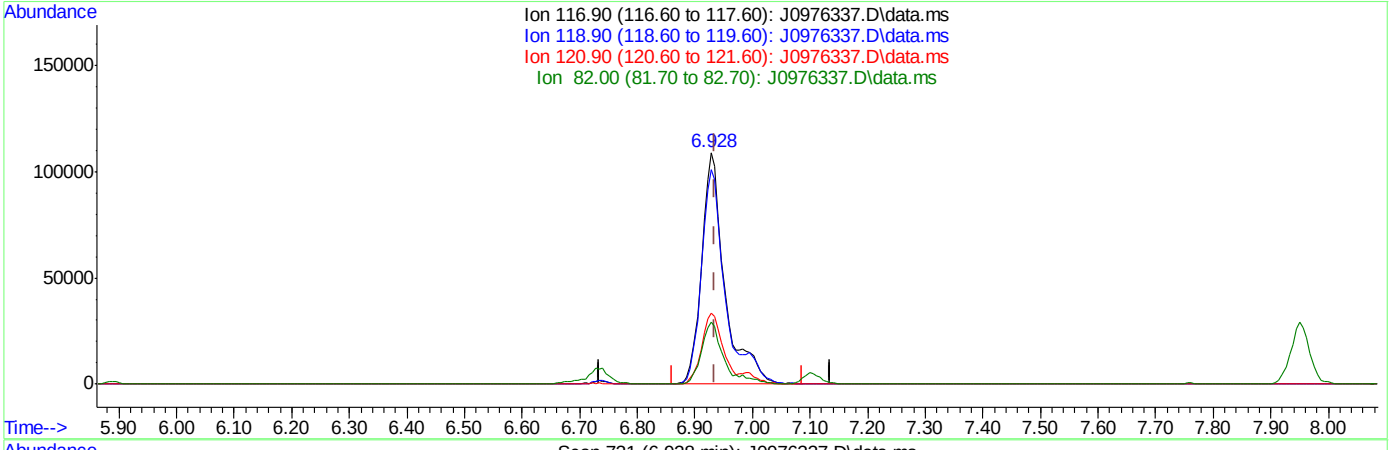
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	60.61
0.00	0.00	0.00
0.00	0.00	0.00

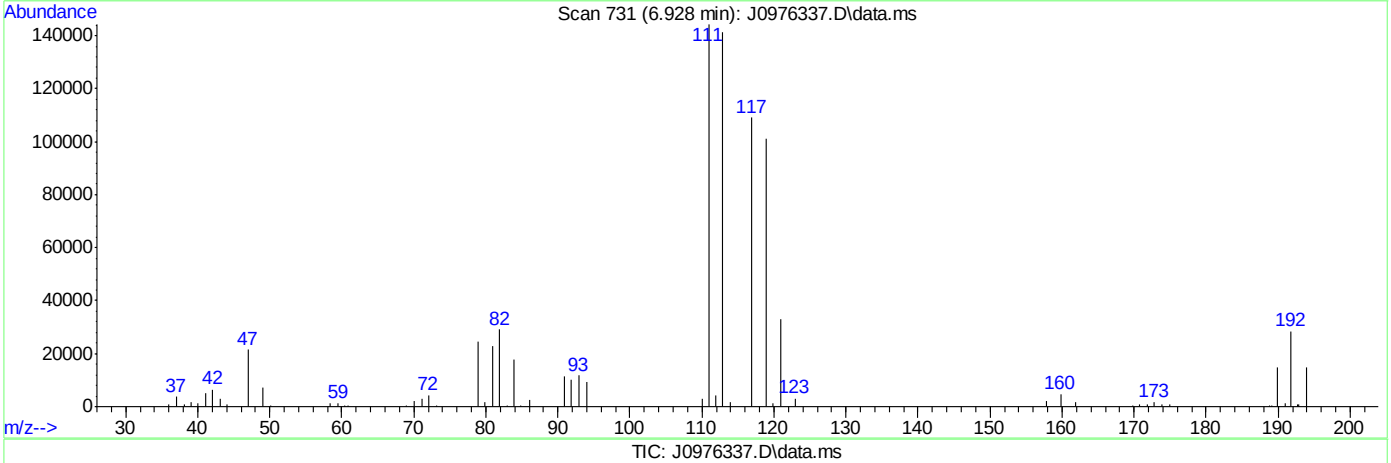
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:12 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976337.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 35.49ug/L

response 307960

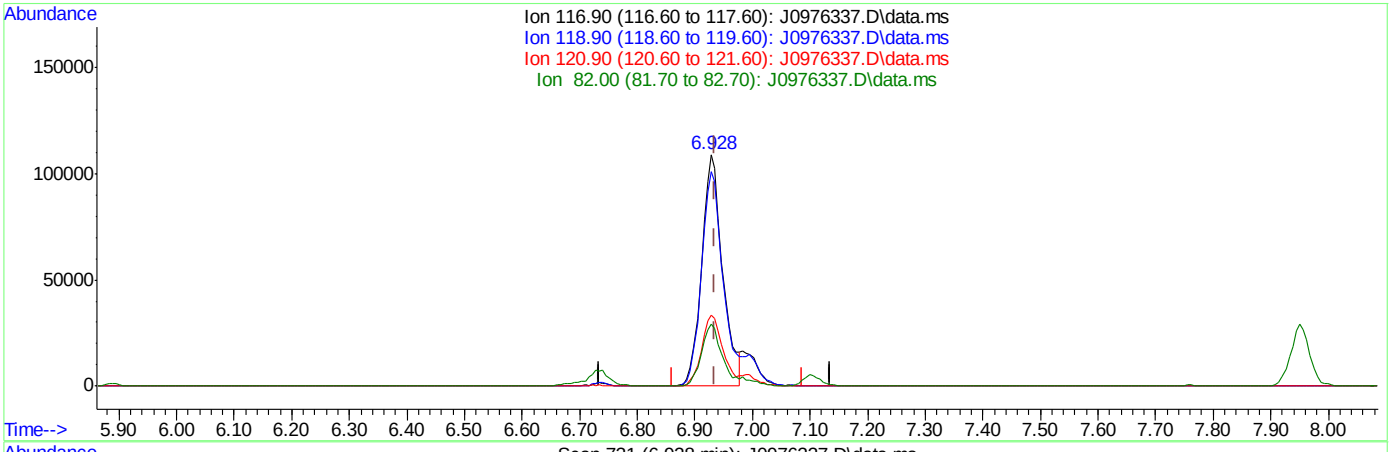
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	92.77
120.90	31.80	30.44
82.00	25.40	26.70

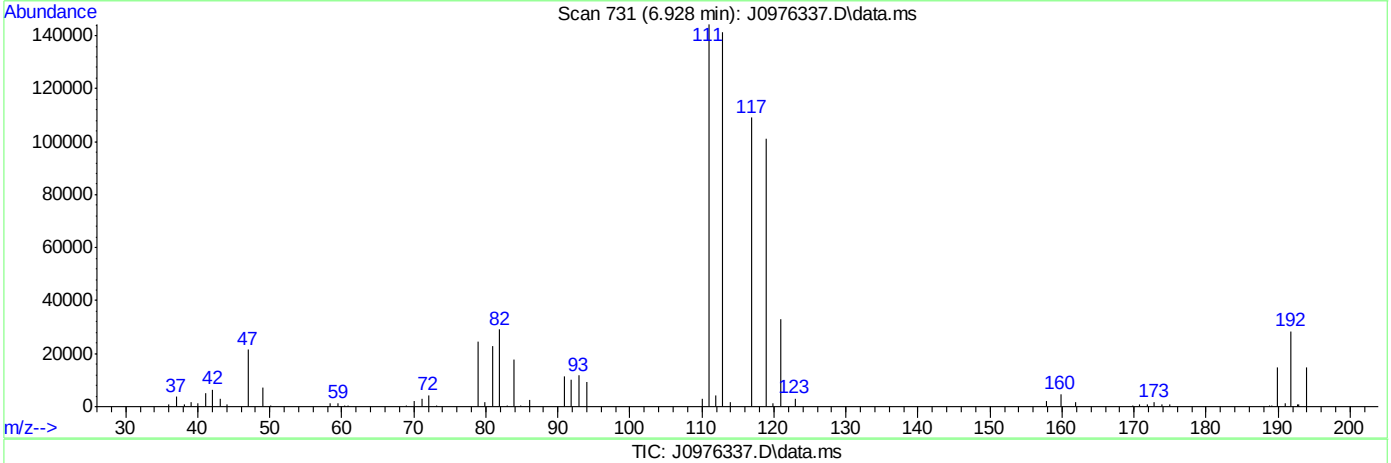
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:12 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976337.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 31.84ug/L m

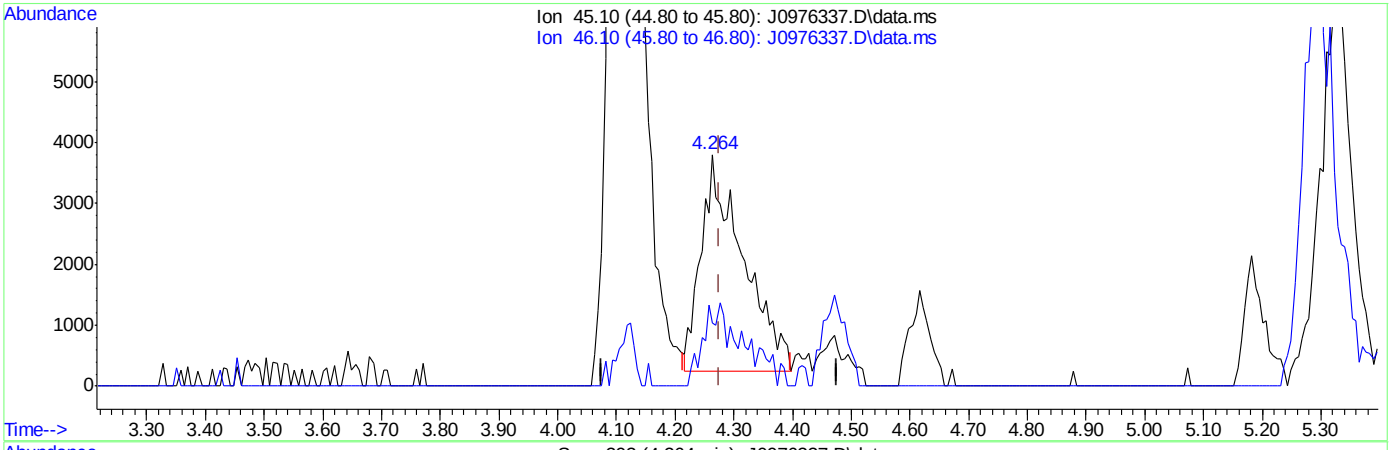
response 276213

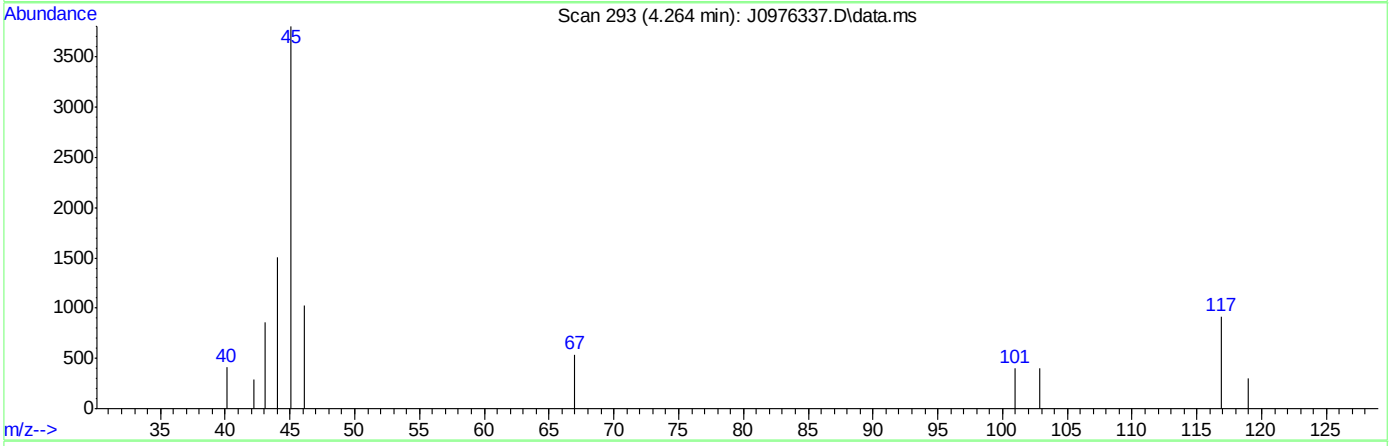
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	92.77
120.90	31.80	30.44
82.00	25.40	26.70

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:12 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976337.D\data.ms

(107) Ethanol

4.264min (-0.012) 497.23ug/L

response 17560

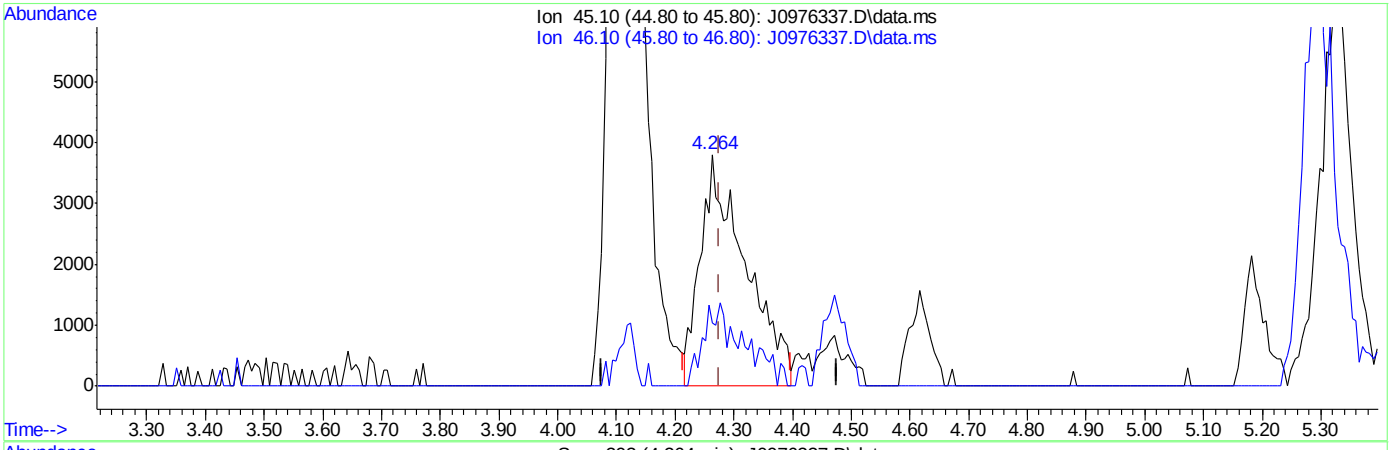
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	28.99
0.00	0.00	0.00
0.00	0.00	0.00

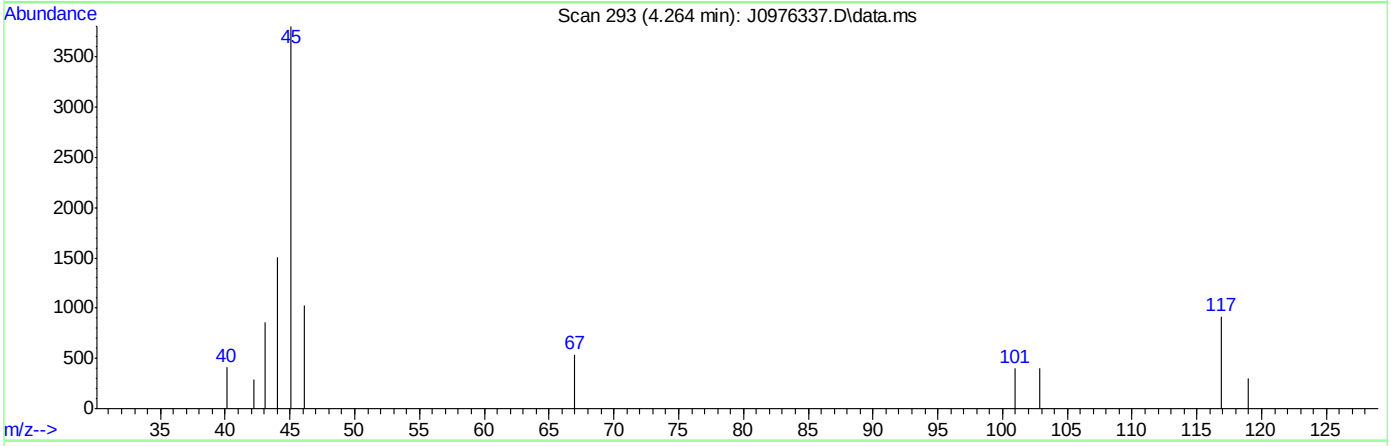
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976337.D
Acq On : 6 May 2016 9:04 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:30:12 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976337.D\data.ms

(107) Ethanol

4.264min (-0.012) 580.68ug/L m

response 20308

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	27.08
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28350.D
Acq On : 5 May 2016 2:30 pm
Operator : ANGIED
Sample : FA33668-8ms MA Inst : MSVOA14
Misc : MS33792,VY1148,4.13,,,5,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 05 14:59:22 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.121	96	1084285	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.309	117	740422	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.681	152	338261	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.627	65	110523	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.239	113	248260	50.03	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.06%			
44) 1,2-Dichloroethane-d4	6.817	65	262324	50.02	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 100.04%			
55) Toluene-d8	8.745	98	1024989	49.13	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 98.26%			
77) 4-Bromofluorobenzene	11.537	174	235930	50.65	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 101.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.980	85	333968	36.57	ug/Kg	97
3) Chloromethane	2.199	50	471813	45.96	ug/Kg	97
4) Vinyl Chloride	2.315	62	434547	42.03	ug/Kg	100
5) Bromomethane	2.716	94	225590	46.09	ug/Kg	96
6) Chloroethane	2.875	64	206297	38.40	ug/Kg	98
7) Trichlorofluoromethane	3.051	101	371885	38.84	ug/Kg	98
8) Ethyl Ether	3.410	59	253500	50.69	ug/Kg	92
9) 1,2-Dichlorotrifluoroe...	3.641	67	370400	43.90	ug/Kg	98
10) 1,1-Dichloroethene	3.647	61	494187	43.10	ug/Kg	92
11) Freon 113	3.708	101	255881	36.35	ug/Kg	93
12) Carbon Disulfide	3.690	76	1051984	45.37	ug/Kg	97
13) Iodomethane	3.811	142	482751	47.64	ug/Kg	98
14) Allyl chloride	4.176	41	405050	41.54	ug/Kg	93
15) Methylene Chloride	4.292	49	408071	46.69	ug/Kg	93
16) Acetone	4.347	43	377318	242.76	ug/Kg	94
17) Methyl acetate	4.487	43	838507	256.69	ug/Kg	93
18) trans-1,2-Dichloroethene	4.487	61	416869	47.91	ug/Kg	97
19) Hexane	4.578	56	207603	37.15	ug/Kg	82
20) Methyl Tert Butyl Ether	4.614	73	792673	51.82	ug/Kg#	24
21) Acetonitrile	4.852	41	257030	468.99	ug/Kg	96
22) Di-isopropyl ether	5.028	45	917772	49.65	ug/Kg	93
23) Chloroprene	5.138	53	439836	41.44	ug/Kg	95
24) 1,1-Dichloroethane	5.162	63	562127	47.11	ug/Kg	97
25) Acrylonitrile	5.198	53	449699	244.62	ug/Kg	95
26) ETBE	5.430	59	919056	49.94	ug/Kg	96
27) Vinyl acetate	5.424	43	1530674	167.00	ug/Kg	95
28) cis-1,2-Dichloroethene	5.752	96	335618	44.32	ug/Kg	99
29) 2,2-Dichloropropane	5.868	77	238609	51.82	ug/Kg	93
30) Bromochloromethane	5.965	128	151322	48.48	ug/Kg#	85
31) Cyclohexane	6.001	84	425273	35.38	ug/Kg	96
32) Chloroform	6.044	83	560899	45.63	ug/Kg	98
33) Ethyl acetate	6.166	43	1010324	240.17	ug/Kg	95
34) Tetrahydrofuran	6.239	42	63428	44.17	ug/Kg	95
36) Carbon Tetrachloride	6.220	117	343954	47.05	ug/Kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28350.D
Acq On : 5 May 2016 2:30 pm
Operator : ANGIED
Sample : FA33668-8ms MA Inst : MSVOA14
Misc : MS33792,VY1148,4.13,,,5,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 05 14:59:22 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.281	97	398282	44.84 ug/Kg	100
38) 2-Butanone	6.366	43	541990	233.78 ug/Kg	94
39) 1,1-Dichloropropene	6.415	75	415139	44.49 ug/Kg	97
40) Propionitrile	6.677	54	349532	470.16 ug/Kg	95
41) Methacrylonitrile	6.707	41	1237126	465.45 ug/Kg	94
42) Benzene	6.683	78	1267146	47.15 ug/Kg	96
43) TAME	6.804	73	844219	49.04 ug/Kg	96
45) 1,2-Dichloroethane	6.890	62	365012	49.08 ug/Kg	96
46) Trichloroethene	7.309	95	335989	47.58 ug/Kg	98
47) Methylcyclohexane	7.316	83	437359	34.71 ug/Kg	96
48) Dibromomethane	7.747	93	168683	50.26 ug/Kg	96
49) 1,2-Dichloropropane	7.845	63	317604	47.19 ug/Kg	94
50) Bromodichloromethane	7.912	83	387125	50.42 ug/Kg	96
51) Methyl methacrylate	8.058	41	191636	51.44 ug/Kg	96
52) 2-Chloroethyl vinyl ether	8.471	63	806828	265.93 ug/Kg	95
53) cis-1,3-Dichloropropene	8.550	75	499106	50.69 ug/Kg	99
56) Toluene	8.800	91	1290018	47.80 ug/Kg	96
57) 2-Nitropropane	9.007	41	261898	247.76 ug/Kg	94
58) 4-Methyl-2-pentanone	9.159	43	1092253	251.57 ug/Kg	95
59) trans-1,3-Dichloropropene	9.201	75	403197	52.93 ug/Kg	98
60) Tetrachloroethene	9.201	166	430965	73.47 ug/Kg	95
61) Ethyl methacrylate	9.347	69	290026	44.79 ug/Kg	93
62) 1,1,2-Trichloroethane	9.366	83	209104	49.22 ug/Kg	96
63) Dibromochloromethane	9.560	129	252590	50.43 ug/Kg	96
64) 1,3-Dichloropropane	9.645	76	433820	49.26 ug/Kg	98
65) 1,2-Dibromoethane	9.804	107	225768	48.59 ug/Kg	95
66) 2-hexanone	9.992	43	759051	248.57 ug/Kg	90
67) 1-Chlorohexane	10.284	91	385484	46.43 ug/Kg	93
68) Ethylbenzene	10.339	91	1380184	49.78 ug/Kg	96
69) Chlorobenzene	10.327	112	818610	50.06 ug/Kg	96
70) 1,1,1,2-Tetrachloroethane	10.382	131	274686	50.61 ug/Kg	98
71) m,p-Xylene	10.485	91	2080384	99.31 ug/Kg	94
72) o-Xylene	10.923	91	1093128	50.68 ug/Kg	98
73) Styrene	10.972	104	844355	53.62 ug/Kg	97
74) Bromoform	11.014	173	132743	51.47 ug/Kg	97
75) Isopropylbenzene	11.233	105	1296303	49.80 ug/Kg	95
78) cis-1,4-Dichloro-2-butene	11.580	53	81199	46.94 ug/Kg	91
79) n-Propylbenzene	11.653	91	1506469	50.08 ug/Kg	97
80) Bromobenzene	11.647	156	303124	51.35 ug/Kg	96
81) 1,1,2,2-Tetrachloroethane	11.714	83	293128	47.17 ug/Kg	99
82) 1,3,5-Trimethylbenzene	11.848	105	1165734	52.45 ug/Kg	97
83) 2-Chlorotoluene	11.829	91	1065335	51.61 ug/Kg	98
84) trans-1,4-Dichloro-2-B...	11.896	53	80695	49.38 ug/Kg	93
85) 1,2,3-Trichloropropane	11.860	110	83847	48.75 ug/Kg	88
86) Cyclohexanone	11.915	55	64542	223.61 ug/Kg	94
87) 4-Chlorotoluene	11.994	91	984167	54.24 ug/Kg	99
88) tert-Butylbenzene	12.176	91	658585	48.18 ug/Kg	98
89) 1,2,4-Trimethylbenzene	12.249	105	1140567	53.22 ug/Kg	97
90) Pentachloroethane	12.213	167	58390	17.45 ug/Kg#	43
91) sec-Butylbenzene	12.359	105	1393569	49.61 ug/Kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28350.D
Acq On : 5 May 2016 2:30 pm
Operator : ANGIED
Sample : FA33668-8ms MA Inst : MSVOA14
Misc : MS33792,VY1148,4.13,,,5,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 05 14:59:22 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

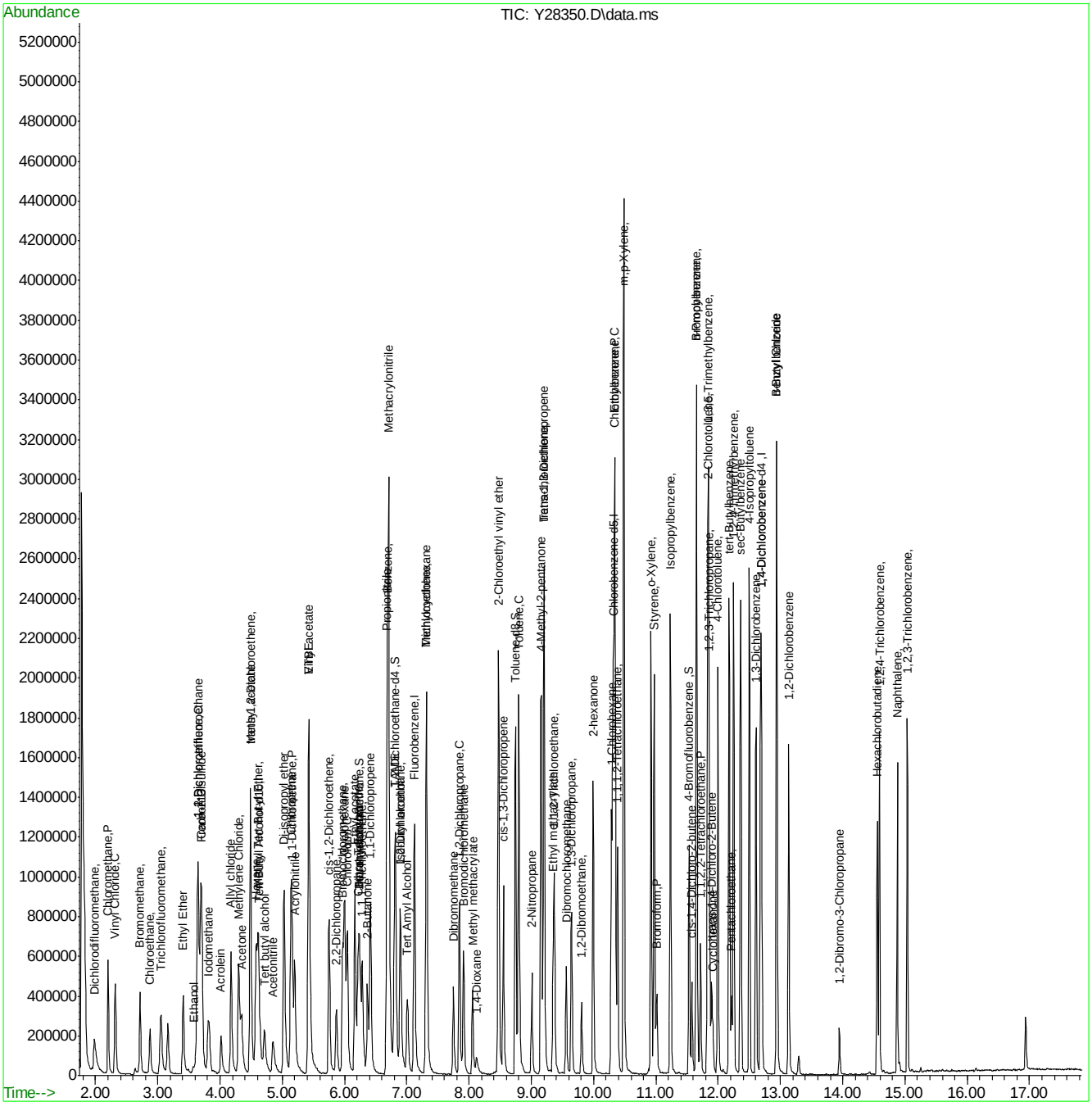
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.499	119	1162333	51.27	ug/Kg	100
93) 1,3-Dichlorobenzene	12.608	146	605873	54.24	ug/Kg	99
94) 1,4-Dichlorobenzene	12.693	146	616449	54.48	ug/Kg	96
95) n-Butylbenzene	12.937	92	666223	49.92	ug/Kg	93
96) Benzyl Chloride	12.937	126	115235	49.54	ug/Kg#	69
97) 1,2-Dichlorobenzene	13.131	146	555265	51.90	ug/Kg	96
98) 1,2-Dibromo-3-Chloropr...	13.946	75	53994	45.04	ug/Kg	93
99) Hexachlorobutadiene	14.555	225	154555	38.79	ug/Kg	95
100) 1,2,4-Trichlorobenzene	14.591	180	363939	51.68	ug/Kg	98
101) Naphthalene	14.877	128	883625	50.09	ug/Kg	99
102) 1,2,3-Trichlorobenzene	15.035	180	352550	50.70	ug/Kg	94
104) Ethanol	3.580	45	50489	858.37	ug/Kg	82
105) Acrolein	4.018	56	200904	205.14	ug/Kg	94
106) Tert butyl alcohol	4.712	59	293505	483.10	ug/Kg	89
107) Isobutyl alcohol	6.902	42	134196	900.92	ug/Kg	93
108) Tert Amyl Alcohol	7.005	59	241385	456.80	ug/Kg	97
109) 1,4-Dioxane	8.119	88	74762	1172.15	ug/Kg	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28350.D
Acq On : 5 May 2016 2:30 pm
Operator : ANGIED
Sample : FA33668-8ms MA Inst : MSVOA14
Misc : MS33792,VY1148,4.13,,,5,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 05 14:59:22 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



042516APP9-Y.m Fri May 06 08:12:13 2016 Page: 4

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28351.D
Acq On : 5 May 2016 2:56 pm
Operator : ANGIED
Sample : FA33668-8msd MA Inst : MSVOA14
Misc : MS33792,VY1148,4.27,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 05 16:11:51 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.121	96	1094889	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.309	117	731019	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.675	152	333628	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.627	65	115010	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.239	113	250105	49.91	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.82%			
44) 1,2-Dichloroethane-d4	6.817	65	255065	48.17	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 96.34%			
55) Toluene-d8	8.745	98	1031253	50.07	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 100.14%			
77) 4-Bromofluorobenzene	11.531	174	229861	50.03	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 100.06%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.980	85	332229	36.02	ug/Kg	98
3) Chloromethane	2.205	50	490686	47.34	ug/Kg	100
4) Vinyl Chloride	2.315	62	446622	42.78	ug/Kg	100
5) Bromomethane	2.716	94	229498	46.43	ug/Kg	98
6) Chloroethane	2.881	64	237580	43.80	ug/Kg	95
7) Trichlorofluoromethane	3.051	101	393067	40.66	ug/Kg	99
8) Ethyl Ether	3.410	59	247840	49.08	ug/Kg	92
9) 1,2-Dichlorotrifluoroe...	3.641	67	378977	44.48	ug/Kg	95
10) 1,1-Dichloroethene	3.647	61	500155	43.20	ug/Kg	91
11) Freon 113	3.708	101	261810	36.83	ug/Kg	98
12) Carbon Disulfide	3.690	76	1090667	46.59	ug/Kg	99
13) Iodomethane	3.805	142	489725	47.86	ug/Kg	99
14) Allyl chloride	4.177	41	408088	41.45	ug/Kg	93
15) Methylene Chloride	4.298	49	410712	46.53	ug/Kg	86
16) Acetone	4.341	43	387490	246.89	ug/Kg	97
17) Methyl acetate	4.487	43	881462	267.22	ug/Kg	92
18) trans-1,2-Dichloroethene	4.487	61	443270	50.45	ug/Kg	98
19) Hexane	4.584	56	211008	37.39	ug/Kg	97
20) Methyl Tert Butyl Ether	4.608	73	847221	54.85	ug/Kg#	27
21) Acetonitrile	4.846	41	280927	507.62	ug/Kg	95
22) Di-isopropyl ether	5.028	45	941445	50.44	ug/Kg	94
23) Chloroprene	5.138	53	460232	42.94	ug/Kg	94
24) 1,1-Dichloroethane	5.156	63	606349	50.33	ug/Kg	98
25) Acrylonitrile	5.199	53	484831	261.18	ug/Kg	95
26) ETBE	5.430	59	961161	51.72	ug/Kg	96
27) Vinyl acetate	5.424	43	995506	107.56	ug/Kg	93
28) cis-1,2-Dichloroethene	5.752	96	353490	46.23	ug/Kg	97
29) 2,2-Dichloropropane	5.868	77	249124	53.58	ug/Kg	98
30) Bromochloromethane	5.965	128	154478	49.01	ug/Kg#	84
31) Cyclohexane	6.002	84	446338	36.78	ug/Kg	95
32) Chloroform	6.044	83	590074	47.53	ug/Kg	96
33) Ethyl acetate	6.160	43	1009378	237.62	ug/Kg	94
34) Tetrahydrofuran	6.233	42	68671	47.41	ug/Kg	98
36) Carbon Tetrachloride	6.214	117	363386	49.23	ug/Kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28351.D
Acq On : 5 May 2016 2:56 pm
Operator : ANGIED
Sample : FA33668-8msd MA Inst : MSVOA14
Misc : MS33792,VY1148,4.27,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 05 16:11:51 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.281	97	421067	46.95	ug/Kg	98
38) 2-Butanone	6.360	43	540374	230.83	ug/Kg	95
39) 1,1-Dichloropropene	6.415	75	436018	46.28	ug/Kg	96
40) Propionitrile	6.671	54	344804	459.30	ug/Kg	86
41) Methacrylonitrile	6.701	41	1284545	478.61	ug/Kg	94
42) Benzene	6.683	78	1342286	49.46	ug/Kg	95
43) TAME	6.805	73	873608	50.25	ug/Kg	98
45) 1,2-Dichloroethane	6.890	62	370814	49.38	ug/Kg	94
46) Trichloroethene	7.309	95	360556	50.56	ug/Kg	96
47) Methylcyclohexane	7.316	83	453274	35.63	ug/Kg	96
48) Dibromomethane	7.748	93	166904	49.24	ug/Kg	95
49) 1,2-Dichloropropane	7.839	63	315883	46.48	ug/Kg	97
50) Bromodichloromethane	7.906	83	386458	49.85	ug/Kg	96
51) Methyl methacrylate	8.052	41	156334	41.56	ug/Kg	90
52) 2-Chloroethyl vinyl ether	8.471	63	787932	257.19	ug/Kg	93
53) cis-1,3-Dichloropropene	8.551	75	502156	50.50	ug/Kg	98
56) Toluene	8.794	91	1334781	50.09	ug/Kg	97
57) 2-Nitropropane	9.001	41	242514	232.37	ug/Kg	87
58) 4-Methyl-2-pentanone	9.153	43	1067533	249.04	ug/Kg	92
59) trans-1,3-Dichloropropene	9.201	75	405961	53.98	ug/Kg	97
60) Tetrachloroethene	9.201	166	503825	86.99	ug/Kg	98
61) Ethyl methacrylate	9.347	69	273107	42.72	ug/Kg	91
62) 1,1,2-Trichloroethane	9.366	83	210874	50.27	ug/Kg	97
63) Dibromochloromethane	9.560	129	258988	52.37	ug/Kg	95
64) 1,3-Dichloropropane	9.639	76	423506	48.70	ug/Kg	99
65) 1,2-Dibromoethane	9.804	107	226432	49.36	ug/Kg	97
66) 2-hexanone	9.986	43	712920	236.47	ug/Kg	93
67) 1-Chlorohexane	10.284	91	369608	45.09	ug/Kg	93
68) Ethylbenzene	10.339	91	1400242	51.15	ug/Kg	95
69) Chlorobenzene	10.327	112	837539	51.87	ug/Kg	95
70) 1,1,1,2-Tetrachloroethane	10.382	131	272092	50.78	ug/Kg	94
71) m,p-Xylene	10.485	91	2087648	101.13	ug/Kg	94
72) o-Xylene	10.917	91	1078667	50.66	ug/Kg	99
73) Styrene	10.972	104	827598	53.23	ug/Kg	99
74) Bromoform	11.014	173	132536	52.05	ug/Kg	99
75) Isopropylbenzene	11.233	105	1298522	50.53	ug/Kg	98
78) cis-1,4-Dichloro-2-butene	11.580	53	74205	43.49	ug/Kg	95
79) n-Propylbenzene	11.653	91	1517092	51.25	ug/Kg	97
80) Bromobenzene	11.647	156	306874	52.71	ug/Kg	95
81) 1,1,2,2-Tetrachloroethane	11.714	83	268768	43.85	ug/Kg	99
82) 1,3,5-Trimethylbenzene	11.842	105	1193032	54.43	ug/Kg	96
83) 2-Chlorotoluene	11.830	91	1077220	52.91	ug/Kg	99
84) trans-1,4-Dichloro-2-B...	11.890	53	74375	46.14	ug/Kg	90
85) 1,2,3-Trichloropropane	11.860	110	83029	48.95	ug/Kg	91
86) Cyclohexanone	11.915	55	58256	204.63	ug/Kg	96
87) 4-Chlorotoluene	11.994	91	992024	55.43	ug/Kg	97
88) tert-Butylbenzene	12.176	91	665301	49.35	ug/Kg	98
89) 1,2,4-Trimethylbenzene	12.249	105	1161700	54.95	ug/Kg	94
90) Pentachloroethane	12.213	167	24689	7.48	ug/Kg#	25
91) sec-Butylbenzene	12.359	105	1416804	51.14	ug/Kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28351.D
Acq On : 5 May 2016 2:56 pm
Operator : ANGIED
Sample : FA33668-8msd MA Inst : MSVOA14
Misc : MS33792,VY1148,4.27,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 05 16:11:51 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

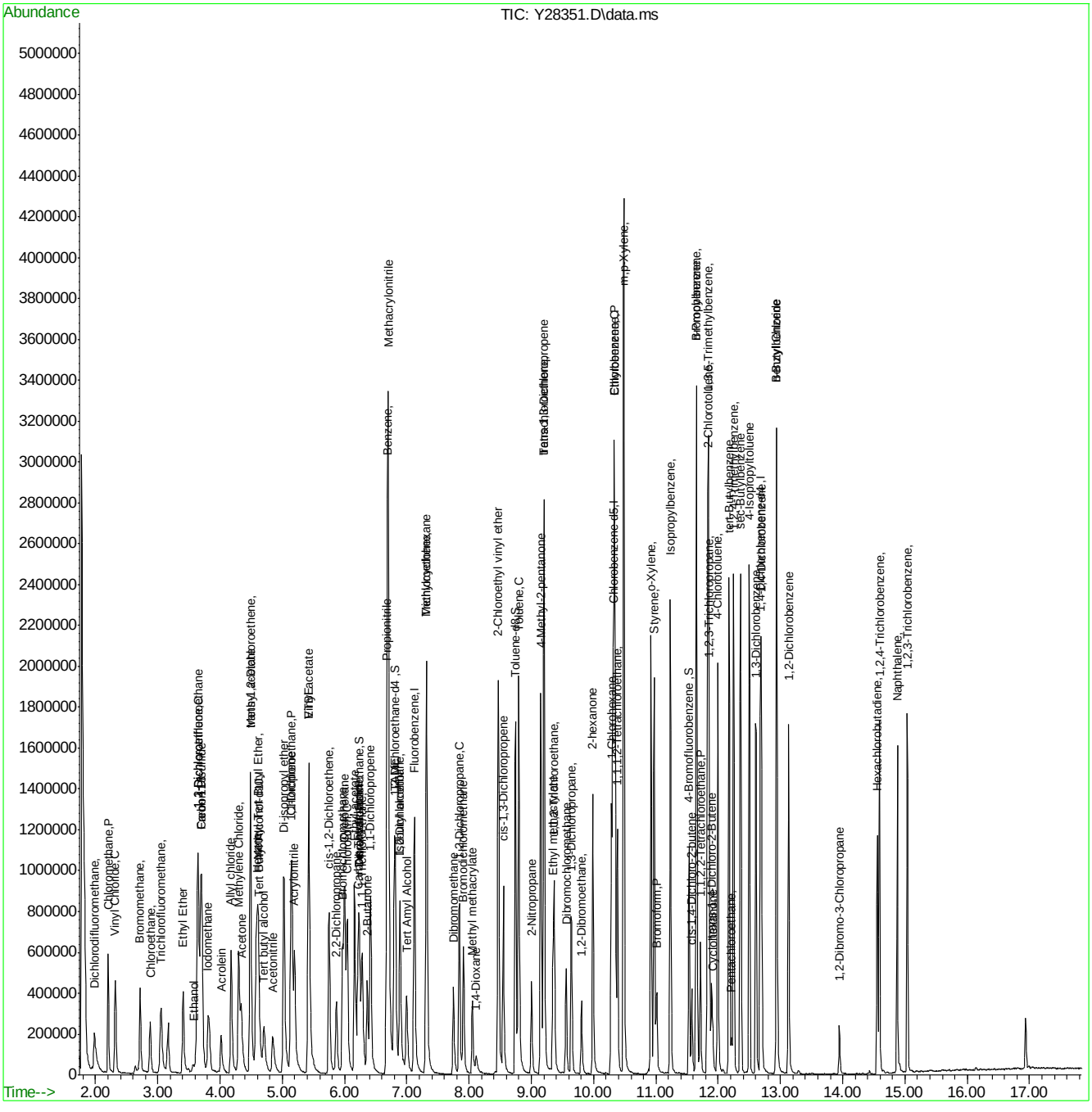
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.499	119	1171484	52.40	ug/Kg	98
93) 1,3-Dichlorobenzene	12.608	146	607536	55.14	ug/Kg	97
94) 1,4-Dichlorobenzene	12.693	146	605498	54.25	ug/Kg	97
95) n-Butylbenzene	12.937	92	658122	50.01	ug/Kg	97
96) Benzyl Chloride	12.937	126	108900	47.46	ug/Kg#	77
97) 1,2-Dichlorobenzene	13.131	146	570944	54.10	ug/Kg	98
98) 1,2-Dibromo-3-Chloropr...	13.947	75	55791	47.18	ug/Kg	97
99) Hexachlorobutadiene	14.555	225	147210	37.36	ug/Kg	99
100) 1,2,4-Trichlorobenzene	14.591	180	374836	53.97	ug/Kg	97
101) Naphthalene	14.877	128	922301	53.22	ug/Kg	99
102) 1,2,3-Trichlorobenzene	15.036	180	353366	51.53	ug/Kg	96
104) Ethanol	3.580	45	58488	955.57	ug/Kg	95
105) Acrolein	4.012	56	199277	195.54	ug/Kg	97
106) Tert butyl alcohol	4.706	59	307916	487.05	ug/Kg	95
107) Isobutyl alcohol	6.890	42	132120	852.37	ug/Kg	93
108) Tert Amyl Alcohol	6.993	59	244357	444.38	ug/Kg	93
109) 1,4-Dioxane	8.113	88	78392	1181.12	ug/Kg	89

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28351.D
Acq On : 5 May 2016 2:56 pm
Operator : ANGIED
Sample : FA33668-8msd MA Inst : MSVOA14
Misc : MS33792,VY1148,4.27,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 05 16:11:51 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
05/06/16 14:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:14:49 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1104790	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	896020	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	509227	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	54489	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	287929	51.36	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.72%			
46) 1,2-Dichloroethane-d4	7.476	65	345063	50.90	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.80%			
57) Toluene-d8	9.301	98	1128570	47.87	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.74%			
79) 4-Bromofluorobenzene	12.057	95	449625	48.82	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.694	85	160949	23.67	ug/L	94
3) Chloromethane	2.901	50	197189	27.09	ug/L	99
4) Vinyl Chloride	3.047	62	214743	28.81	ug/L	100
5) 1,3-Butadiene	3.041	54	42824	7.73	ug/L	94
6) Bromomethane	3.461	94	139889	25.88	ug/L	93
7) Chloroethane	3.619	64	117287	31.37	ug/L	97
8) Trichlorofluoromethane	3.844	101	282577m	30.55	ug/L	
9) Ethyl Ether	4.118	59	96663	22.63	ug/L	100
10) 1,2-Dichlorotrifluoroe...	4.355	67	198879	30.96	ug/L	97
11) 1,1-Dichloroethene	4.398	61	241434	30.18	ug/L	96
12) Freon 113	4.464	101	148171	26.79	ug/L	96
13) Carbon Disulfide	4.477	76	450094	27.02	ug/L	98
14) Iodomethane	4.586	142	226307	25.60	ug/L	99
15) Allyl chloride	4.927	41	173227	23.43	ug/L	96
16) Methylene Chloride	5.048	49	186932	25.81	ug/L	98
17) Acetone	5.067	58	34332	103.62	ug/L	98
18) Methyl acetate	5.194	74	64530	100.02	ug/L	96
19) trans-1,2-Dichloroethene	5.231	61	217989	29.67	ug/L	98
20) Hexane	5.298	56	136499	28.96	ug/L	95
21) Methyl Tert Butyl Ether	5.334	73	337354	23.04	ug/L	91
22) Acetonitrile	5.590	40	44634	213.24	ug/L	97
23) Di-isopropyl ether	5.718	45	388355	23.17	ug/L	95
24) Chloroprene	5.870	53	215871	27.33	ug/L	99
25) 1,1-Dichloroethane	5.900	63	269524	27.48	ug/L	94
26) Acrylonitrile	5.924	53	136305	92.98	ug/L	96
27) ETBE	6.113	59	384721	22.92	ug/L	99
28) Vinyl acetate	6.107	43	933897	109.99	ug/L	97
29) cis-1,2-Dichloroethene	6.472	96	150176	23.85	ug/L	96
30) 2,2-Dichloropropane	6.606	77	211896	27.68	ug/L	95
31) Bromochloromethane	6.691	128	66249	23.27	ug/L	87
32) Cyclohexane	6.734	56	245535	26.63	ug/L	95
33) Chloroform	6.740	83	276459	25.39	ug/L	99
34) Ethyl acetate	6.807	43	342302	100.27	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:14:49 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Tetrahydrofuran	6.916	42	18723	18.60	ug/L	91
37) Carbon Tetrachloride	6.928	117	216386m	28.59	ug/L	
38) 1,1,1-Trichloroethane	6.995	97	242737	26.07	ug/L	97
39) 2-Butanone	7.020	43	152922	107.20	ug/L	93
40) 1,1-Dichloropropene	7.105	75	190711	25.36	ug/L	96
41) tert-Butyl Formate	7.190	59	267601	78.12	ug/L	91
42) Propionitrile	7.330	54	114307	225.77	ug/L	82
43) Methacrylonitrile	7.360	41	529448	224.73	ug/L	96
44) Benzene	7.360	78	588293	25.70	ug/L	99
45) TAME	7.433	73	321738	21.24	ug/L	96
47) 1,2-Dichloroethane	7.549	62	187136	23.36	ug/L	98
48) Trichloroethene	7.938	95	155667	26.25	ug/L	95
49) Methylcyclohexane	7.956	83	281249	28.22	ug/L	98
50) Dibromomethane	8.358	93	76157	23.01	ug/L	96
51) 1,2-Dichloropropane	8.449	63	134426	23.38	ug/L	92
52) Bromodichloromethane	8.492	83	179511	24.36	ug/L	99
53) Methyl methacrylate	8.595	41	71079	23.38	ug/L	94
55) cis-1,3-Dichloropropene	9.112	75	196031	22.28	ug/L	99
58) Toluene	9.356	91	621194	23.94	ug/L	98
59) 2-Nitropropane	9.556	41	95076	91.93	ug/L	98
60) 4-Methyl-2-pentanone	9.672	43	397595	107.24	ug/L	96
61) trans-1,3-Dichloropropene	9.739	75	180148	22.09	ug/L	94
62) Tetrachloroethene	9.757	166	160604	23.15	ug/L	96
63) Ethyl methacrylate	9.842	69	110376	18.62	ug/L	99
64) 1,1,2-Trichloroethane	9.903	83	94363	22.29	ug/L	98
65) Dibromochloromethane	10.104	129	116852	21.72	ug/L	95
66) 1,3-Dichloropropane	10.183	76	176534	20.41	ug/L	94
67) 1,2-Dibromoethane	10.365	107	102382	21.34	ug/L	96
68) 2-hexanone	10.487	43	269723	110.02	ug/L	96
69) 1-Chlorohexane	10.797	91	194262	25.53	ug/L	97
70) Ethylbenzene	10.858	91	755833	25.54	ug/L	98
71) Chlorobenzene	10.864	112	425869	24.67	ug/L	96
72) 1,1,1,2-Tetrachloroethane	10.913	131	141852	25.27	ug/L	98
73) m,p-Xylene	10.998	91	1154857	48.10	ug/L	97
74) o-Xylene	11.436	91	559105	24.45	ug/L	98
75) Styrene	11.485	104	399381	21.72	ug/L	98
76) Bromoform	11.552	173	64301	19.14	ug/L	99
77) Isopropylbenzene	11.740	105	693628	26.25	ug/L	100
80) cis-1,4-Dichloro-2-butene	12.087	53	19957	12.06	ug/L	92
81) n-Propylbenzene	12.160	91	879060	27.21	ug/L	100
82) Bromobenzene	12.184	156	178975	23.53	ug/L	95
83) 1,1,2,2-Tetrachloroethane	12.221	83	129690	21.12	ug/L	93
84) 1,3,5-Trimethylbenzene	12.343	105	617360	25.25	ug/L	97
85) 2-Chlorotoluene	12.349	91	615185	25.94	ug/L	98
86) trans-1,4-Dichloro-2-B...	12.397	53	19048	12.38	ug/L #	58
87) 1,2,3-Trichloropropane	12.385	110	34491	22.04	ug/L	97
88) Cyclohexanone	12.452	55	8609	87.49	ug/L	88
89) 4-Chlorotoluene	12.519	91	539532	25.41	ug/L	98
90) a-Methyl Styrene	12.689	118	3151	0.45	ug/L #	1
91) tert-Butylbenzene	12.683	91	352797	24.70	ug/L	95

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:14:49 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,4-Trimethylbenzene	12.750	105	608210	24.91	ug/L	97
93) Pentachloroethane	12.738	167	120539	25.88	ug/L	97
94) sec-Butylbenzene	12.866	105	789321	26.74	ug/L	98
95) 4-Isopropyltoluene	13.000	119	645888	26.08	ug/L	100
96) 1,3-Dichlorobenzene	13.134	146	323117	23.95	ug/L	95
97) 1,4-Dichlorobenzene	13.219	146	331915	23.18	ug/L	95
98) n-Butylbenzene	13.432	92	351345	24.61	ug/L	96
99) Benzyl Chloride	13.450	126	39242	19.47	ug/L #	90
100) 1,2-Dichlorobenzene	13.645	146	284430	22.03	ug/L	98
101) 1,2-Dibromo-3-Chloropr...	14.381	75	15800	17.04	ug/L	91
102) Hexachlorobutadiene	14.928	225	133086	23.07	ug/L	97
103) 1,2,4-Trichlorobenzene	14.971	180	189034	20.05	ug/L	98
104) Naphthalene	15.257	128	257352	16.26	ug/L	99
105) 1,2,3-Trichlorobenzene	15.427	180	151395	18.12	ug/L	97
107) Ethanol	4.282	45	13881	547.83	ug/L	87
108) acrolein	4.763	56	66001	103.60	ug/L	93
109) Tert Butyl Alcohol	5.377	59	77349	292.86	ug/L	92
110) tert Amyl alcohol	7.573	59	42445	229.11	ug/L	96
111) Isobutyl alcohol	7.458	42	48431	467.46	ug/L #	89
112) 1,4-Dioxane	8.668	88	11497	531.37	ug/L	94
113) 3,3-Dimethyl-1-butanol	10.432	57	226899	999.77	ug/L	97

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

7.4.3

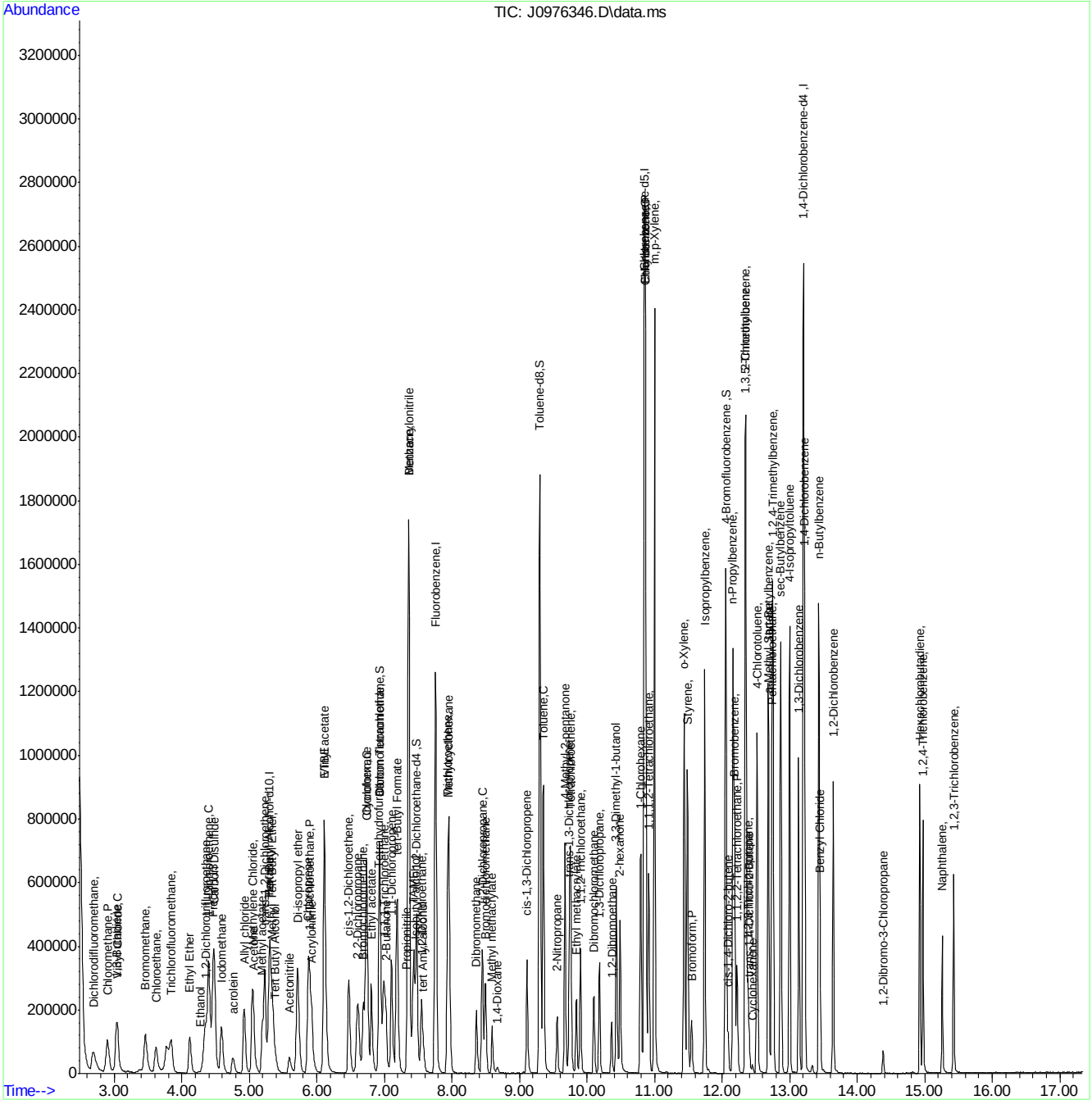
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:14:49 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

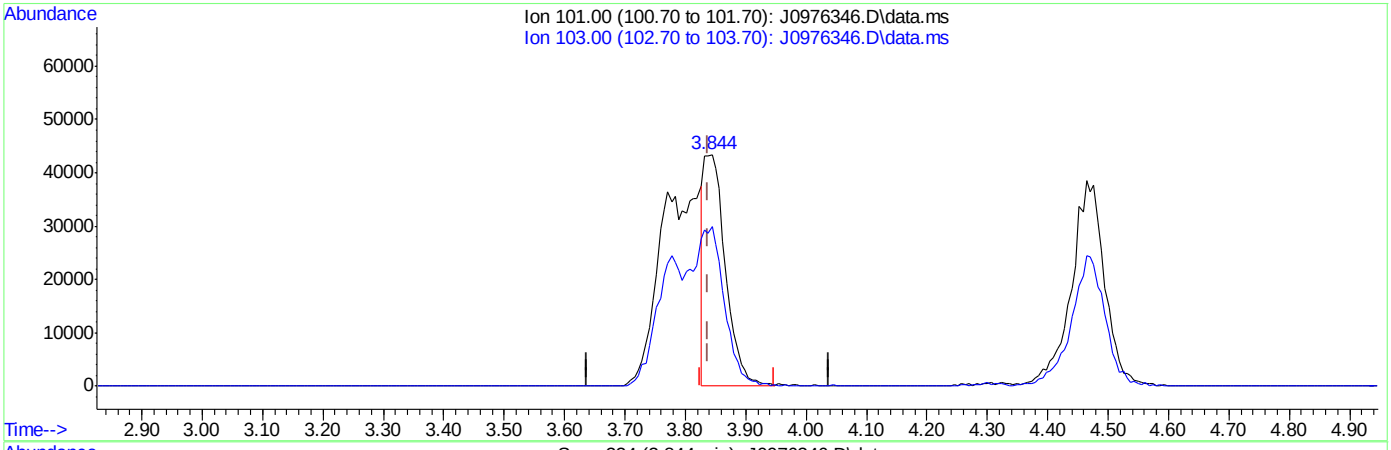
Sample Number:	FA33668-1MS	**Method:**	SW846 8260C
Lab FileID:	J0976346.D	**Analyst approved:**	05/06/16 14:26 Darshna Patel
Injection Time:	05/06/16 12:41	**Supervisor approved:**	05/06/16 14:45 Melissa Mangual

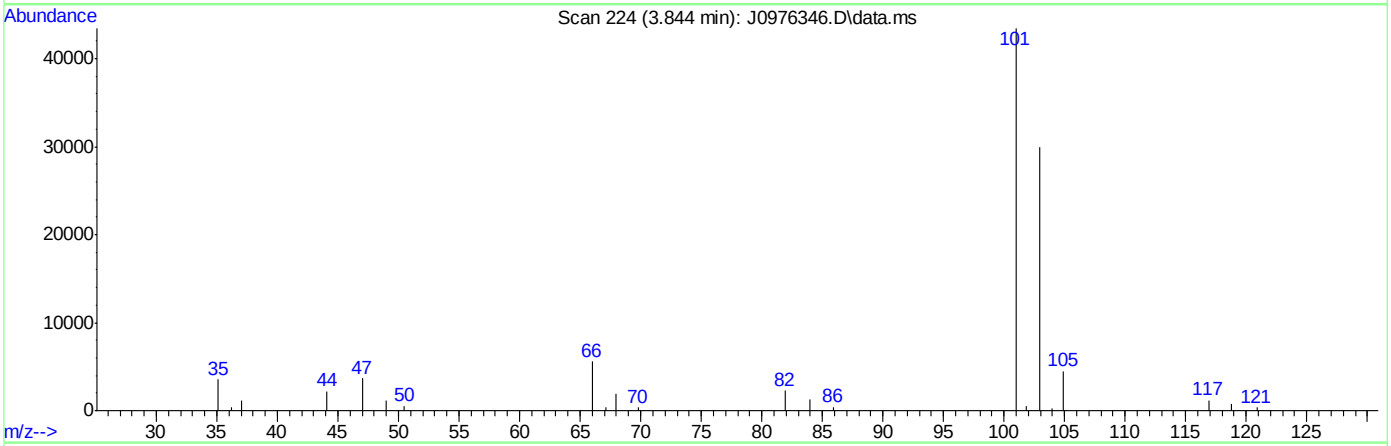
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.84	Split peak
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:14 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





(8) Trichlorofluoromethane ( )

3.844min (+0.006) 11.76ug/L

response 108759

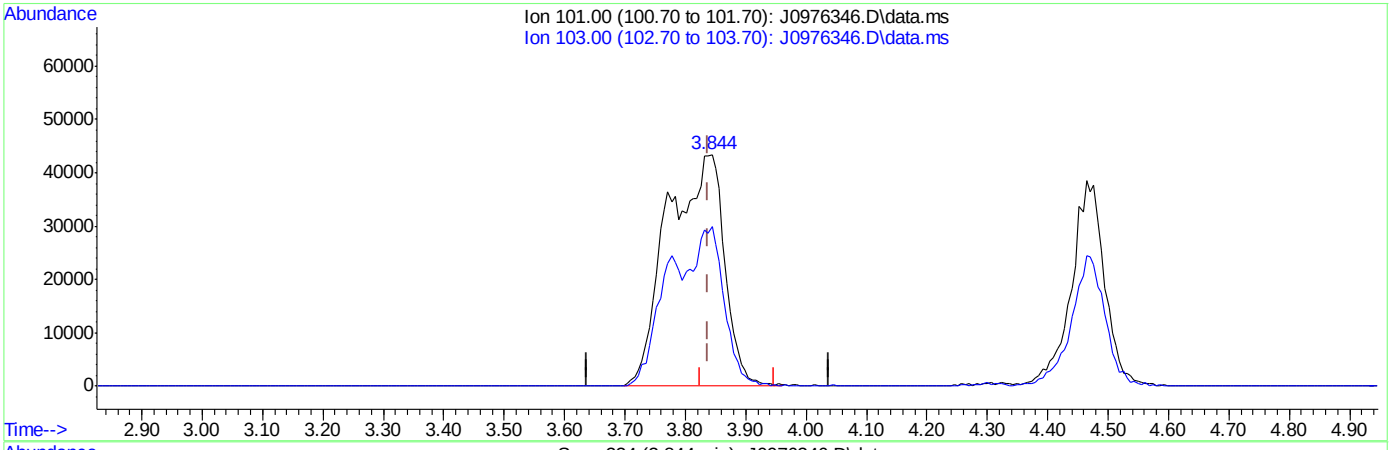
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	67.99
0.00	0.00	0.00
0.00	0.00	0.00

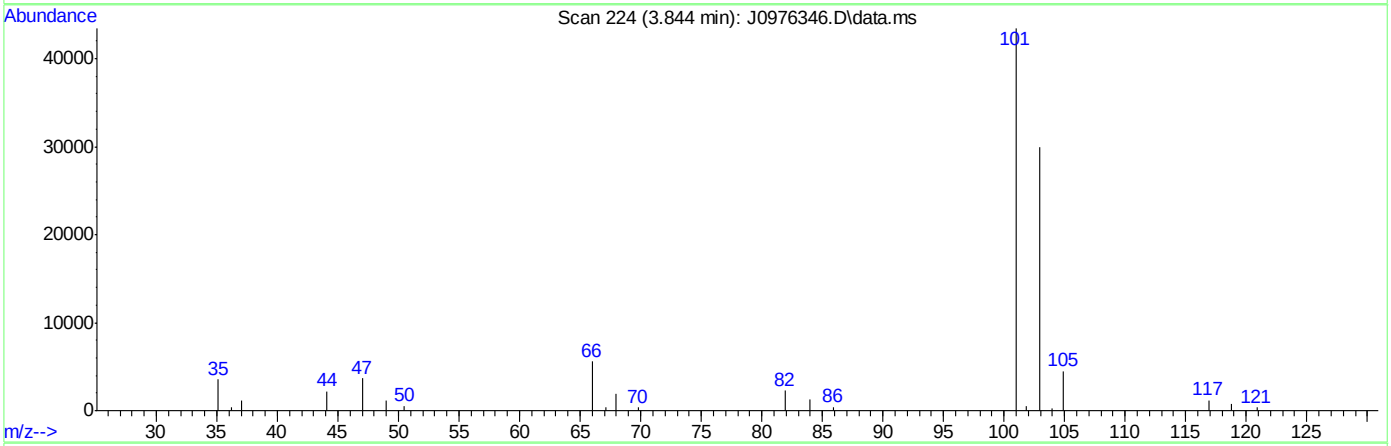
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:14 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976346.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 30.55ug/L m

response 282577

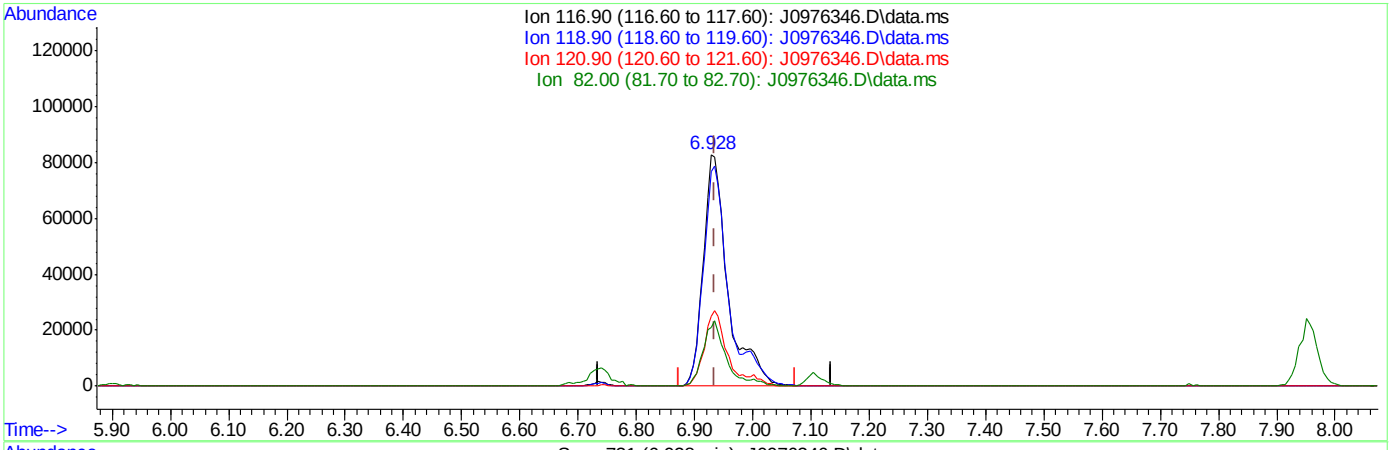
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	68.80
0.00	0.00	0.00
0.00	0.00	0.00

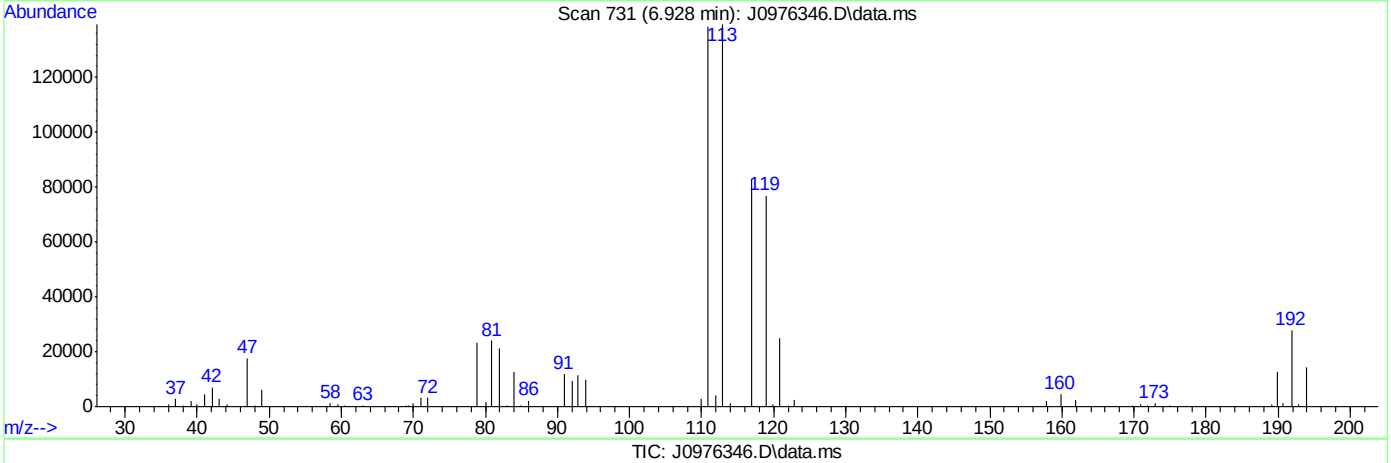
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:14 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976346.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 32.49ug/L

response 245888

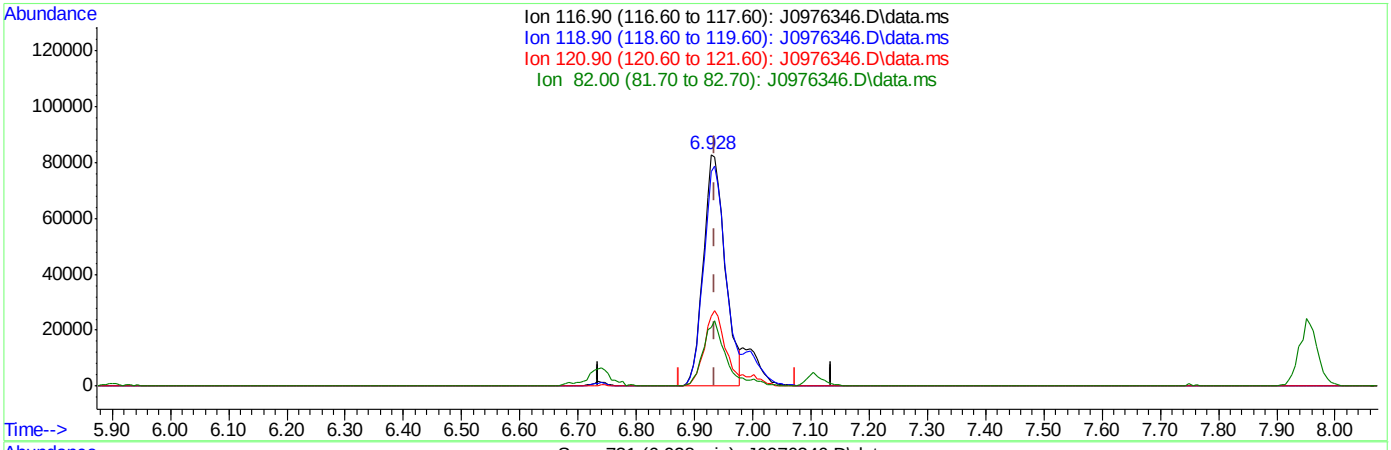
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	92.79
120.90	31.80	30.07
82.00	25.40	25.52

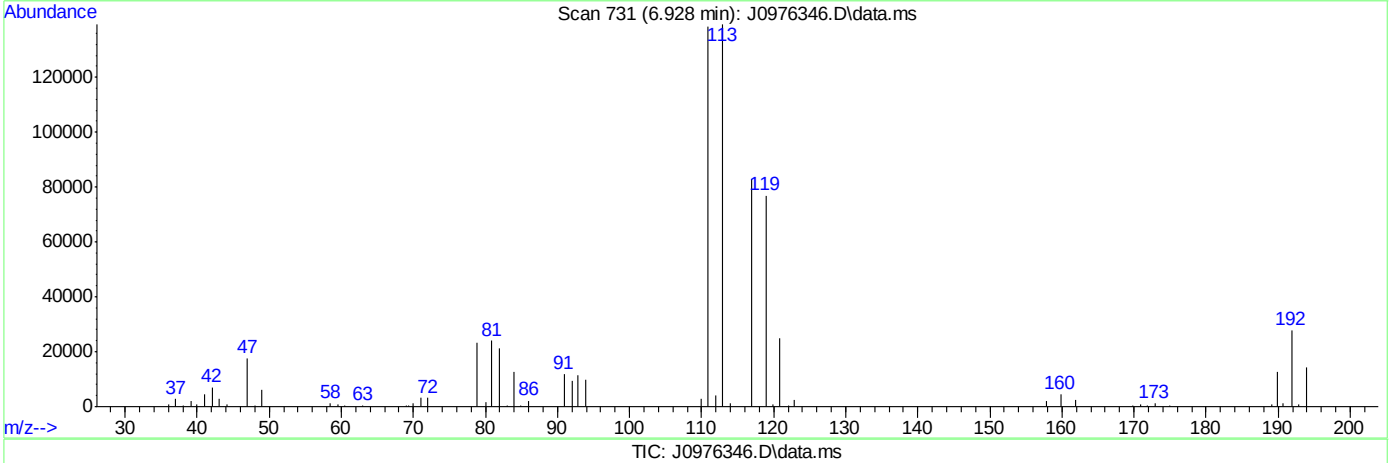
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976346.D
Acq On : 6 May 2016 12:41 pm
Operator : darshnap
Sample : fa33668-1ms ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:14 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976346.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 28.59ug/L m

response 216386

Ion	Exp%	Act%
116.90	100	100
118.90	96.80	92.79
120.90	31.80	30.07
82.00	25.40	25.52

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 05/06/16 14:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:15:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1187335	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	969225	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	528581	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.304	65	63764	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	305951	50.78	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.56%			
46) 1,2-Dichloroethane-d4	7.476	65	363057	49.83	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.66%			
57) Toluene-d8	9.301	98	1212920	47.57	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.14%			
79) 4-Bromofluorobenzene	12.051	95	483874	50.61	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.22%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.700	85	168949	23.11	ug/L	99
3) Chloromethane	2.907	50	211659	27.06	ug/L	93
4) Vinyl Chloride	3.041	62	223729	27.92	ug/L	99
5) 1,3-Butadiene	3.035	54	49481	8.31	ug/L	95
6) Bromomethane	3.461	94	142828	24.49	ug/L	94
7) Chloroethane	3.619	64	117090	29.01	ug/L	99
8) Trichlorofluoromethane	3.850	101	294840m	29.66	ug/L	
9) Ethyl Ether	4.124	59	107986	23.52	ug/L	98
10) 1,2-Dichlorotrifluoroe...	4.361	67	212754	30.82	ug/L	96
11) 1,1-Dichloroethene	4.398	61	250028	29.08	ug/L	98
12) Freon 113	4.465	101	150116	25.25	ug/L	97
13) Carbon Disulfide	4.477	76	441228	24.65	ug/L	99
14) Iodomethane	4.592	142	241540	25.43	ug/L	98
15) Allyl chloride	4.927	41	176509	22.21	ug/L	93
16) Methylene Chloride	5.049	49	200413	25.75	ug/L	98
17) Acetone	5.073	58	39740	111.61	ug/L	96
18) Methyl acetate	5.195	74	74134	106.92	ug/L #	91
19) trans-1,2-Dichloroethene	5.231	61	233791	29.61	ug/L	95
20) Hexane	5.298	56	142373	28.10	ug/L	93
21) Methyl Tert Butyl Ether	5.341	73	376061	23.90	ug/L	84
22) Acetonitrile	5.596	40	51674	229.84	ug/L	96
23) Di-isopropyl ether	5.718	45	433621	24.07	ug/L	95
24) Chloroprene	5.870	53	218788	25.78	ug/L	97
25) 1,1-Dichloroethane	5.900	63	291312	27.63	ug/L	97
26) Acrylonitrile	5.931	53	161441	102.47	ug/L	94
27) ETBE	6.119	59	426543	23.64	ug/L	98
28) Vinyl acetate	6.107	43	1044398	114.46	ug/L	98
29) cis-1,2-Dichloroethene	6.478	96	161936	23.93	ug/L	96
30) 2,2-Dichloropropane	6.606	77	223087	27.12	ug/L	96
31) Bromochloromethane	6.685	128	70389	23.01	ug/L	95
32) Cyclohexane	6.734	56	259336	26.17	ug/L	96
33) Chloroform	6.740	83	297013	25.38	ug/L	98
34) Ethyl acetate	6.807	43	397814	108.43	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:15:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35)	Tetrahydrofuran	6.922	42	22589	20.92	ug/L		89
37)	Carbon Tetrachloride	6.934	117	210576m	25.89	ug/L		
38)	1,1,1-Trichloroethane	6.995	97	255773	25.56	ug/L		96
39)	2-Butanone	7.026	43	175870	114.69	ug/L		99
40)	1,1-Dichloropropene	7.105	75	200925	24.86	ug/L		97
41)	tert-Butyl Formate	7.190	59	234027	63.56	ug/L	#	85
42)	Propionitrile	7.336	54	130932	240.63	ug/L		100
43)	Methacrylonitrile	7.360	41	615155	242.95	ug/L		98
44)	Benzene	7.360	78	637900	25.93	ug/L		95
45)	TAME	7.433	73	362849	22.29	ug/L		95
47)	1,2-Dichloroethane	7.549	62	203437	23.63	ug/L		97
48)	Trichloroethene	7.938	95	172156	27.01	ug/L		97
49)	Methylcyclohexane	7.957	83	292958	27.36	ug/L		99
50)	Dibromomethane	8.364	93	85092	23.92	ug/L		95
51)	1,2-Dichloropropane	8.449	63	148177	23.98	ug/L		93
52)	Bromodichloromethane	8.498	83	190770	24.08	ug/L		100
53)	Methyl methacrylate	8.595	41	83122	25.45	ug/L		94
55)	cis-1,3-Dichloropropene	9.112	75	202892	21.47	ug/L		95
58)	Toluene	9.356	91	664852	23.68	ug/L		99
59)	2-Nitropropane	9.556	41	110419	98.73	ug/L		98
60)	4-Methyl-2-pentanone	9.672	43	454944	113.44	ug/L		98
61)	trans-1,3-Dichloropropene	9.739	75	190309	21.57	ug/L		95
62)	Tetrachloroethene	9.757	166	169610	22.60	ug/L		98
63)	Ethyl methacrylate	9.842	69	129060	20.13	ug/L		93
64)	1,1,2-Trichloroethane	9.903	83	103310	22.56	ug/L		94
65)	Dibromochloromethane	10.104	129	120024	20.62	ug/L		96
66)	1,3-Dichloropropane	10.183	76	198172	21.18	ug/L		96
67)	1,2-Dibromoethane	10.366	107	115544	22.26	ug/L		100
68)	2-hexanone	10.487	43	310096	116.93	ug/L		94
69)	1-Chlorohexane	10.798	91	202240	24.57	ug/L		97
70)	Ethylbenzene	10.858	91	824153	25.75	ug/L		98
71)	Chlorobenzene	10.864	112	465483	24.93	ug/L		97
72)	1,1,1,2-Tetrachloroethane	10.913	131	149653	24.64	ug/L		97
73)	m,p-Xylene	10.998	91	1237625	47.62	ug/L		98
74)	o-Xylene	11.436	91	595990	24.10	ug/L		98
75)	Styrene	11.485	104	425103	21.37	ug/L		98
76)	Bromoform	11.546	173	68954	18.97	ug/L		98
77)	Isopropylbenzene	11.741	105	738905	25.86	ug/L		100
80)	cis-1,4-Dichloro-2-butene	12.087	53	22078	12.85	ug/L		91
81)	n-Propylbenzene	12.160	91	927891	27.67	ug/L		99
82)	Bromobenzene	12.185	156	194884	24.68	ug/L		96
83)	1,1,2,2-Tetrachloroethane	12.221	83	144615	22.69	ug/L		96
84)	1,3,5-Trimethylbenzene	12.343	105	653251	25.74	ug/L		98
85)	2-Chlorotoluene	12.349	91	651165	26.45	ug/L		100
86)	trans-1,4-Dichloro-2-B...	12.404	53	21515	13.47	ug/L		87
87)	1,2,3-Trichloropropane	12.379	110	38474	23.69	ug/L		95
88)	Cyclohexanone	12.446	55	11686	114.41	ug/L		97
89)	4-Chlorotoluene	12.519	91	575597	26.12	ug/L		98
90)	a-Methyl Styrene	12.683	118	7974	1.10	ug/L	#	1
91)	tert-Butylbenzene	12.683	91	381347	25.72	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:15:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

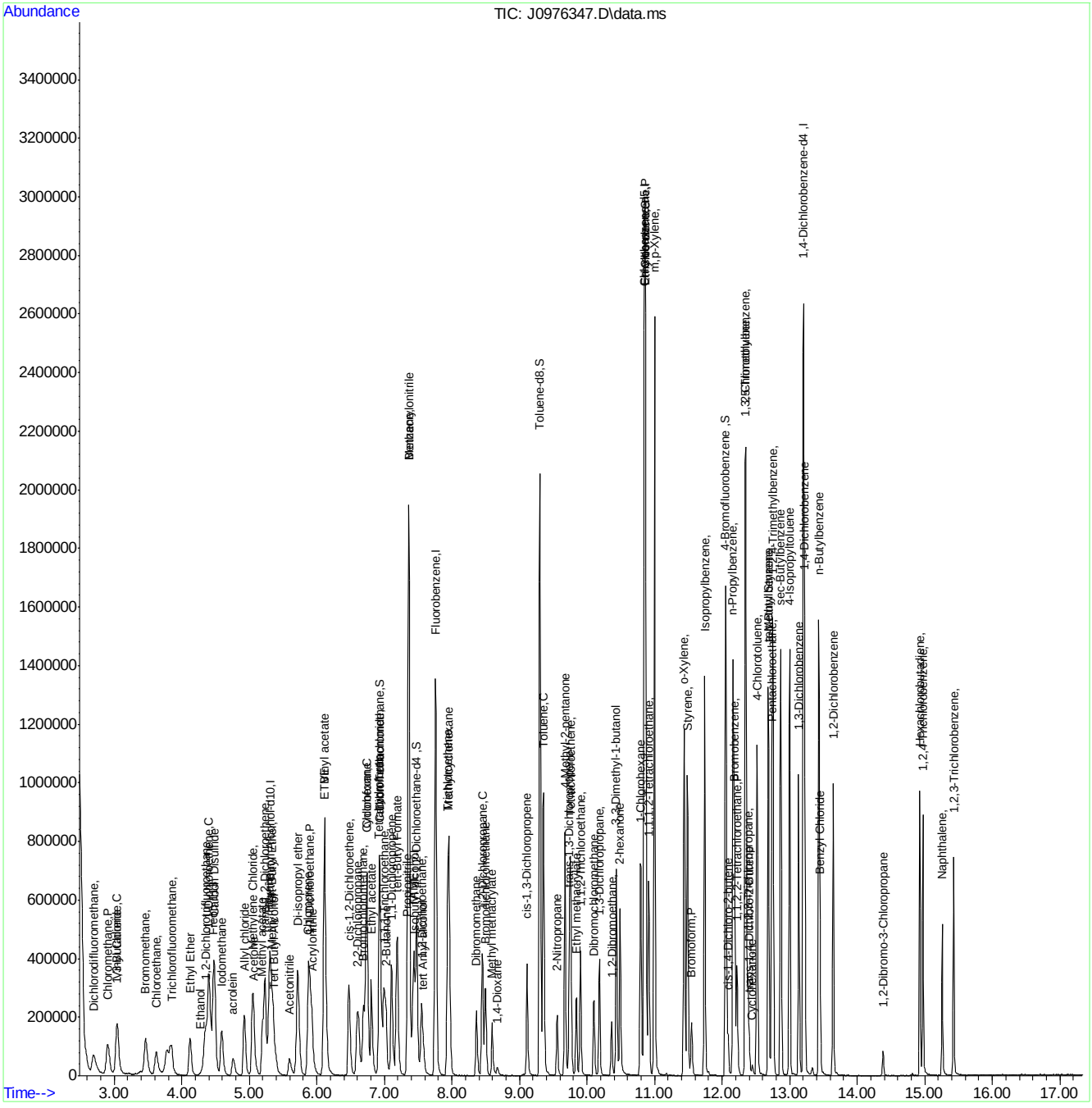
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	1,2,4-Trimethylbenzene	12.750	105	640179	25.26	ug/L		97
93)	Pentachloroethane	12.738	167	123395	25.52	ug/L		95
94)	sec-Butylbenzene	12.866	105	838377	27.36	ug/L		99
95)	4-Isopropyltoluene	13.000	119	689195	26.81	ug/L		99
96)	1,3-Dichlorobenzene	13.134	146	345050	24.64	ug/L		96
97)	1,4-Dichlorobenzene	13.219	146	354564	23.85	ug/L		95
98)	n-Butylbenzene	13.432	92	380727	25.69	ug/L		99
99)	Benzyl Chloride	13.450	126	42236	20.16	ug/L	#	93
100)	1,2-Dichlorobenzene	13.645	146	309823	23.12	ug/L		97
101)	1,2-Dibromo-3-Chloropr...	14.381	75	17884	18.55	ug/L		95
102)	Hexachlorobutadiene	14.928	225	145714	24.34	ug/L		96
103)	1,2,4-Trichlorobenzene	14.971	180	208394	21.30	ug/L		97
104)	Naphthalene	15.257	128	309649	18.85	ug/L		98
105)	1,2,3-Trichlorobenzene	15.427	180	177612	20.48	ug/L		96
107)	Ethanol	4.276	45	19887	681.36	ug/L		93
108)	acrolein	4.757	56	75614	101.42	ug/L		96
109)	Tert Butyl Alcohol	5.371	59	102574	331.88	ug/L	#	69
110)	tert Amyl alcohol	7.573	59	50296	232.00	ug/L		93
111)	Isobutyl alcohol	7.452	42	56017	461.78	ug/L		91
112)	1,4-Dioxane	8.674	88	18853	744.60	ug/L		87
113)	3,3-Dimethyl-1-butanol	10.433	57	273531	1029.93	ug/L		96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:15:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

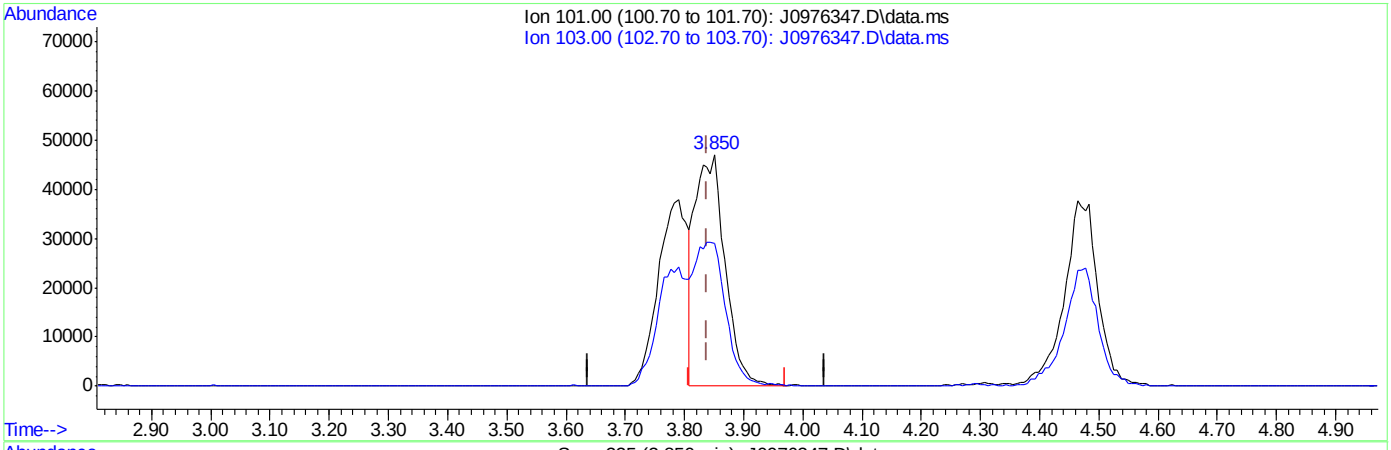
Sample Number:	FA33668-1MSD	**Method:**	SW846 8260C
Lab FileID:	J0976347.D	**Analyst approved:**	05/06/16 14:26 Darshna Patel
Injection Time:	05/06/16 13:04	**Supervisor approved:**	05/06/16 14:45 Melissa Mangual

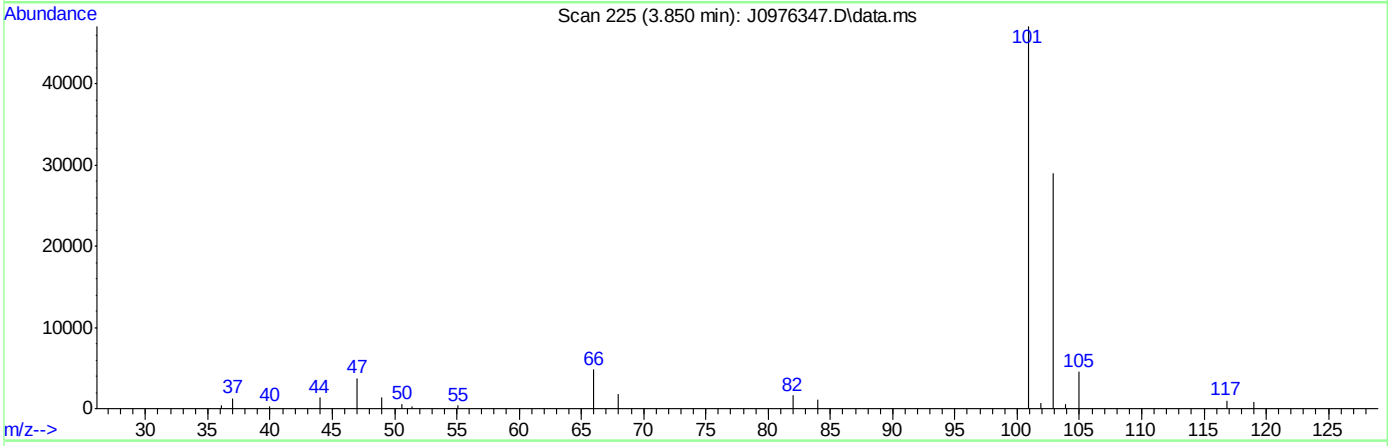
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.85	Split peak
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:17 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976347.D\data.ms

(8) Trichlorofluoromethane ( )

3.850min (+0.012) 16.57ug/L

response 164731

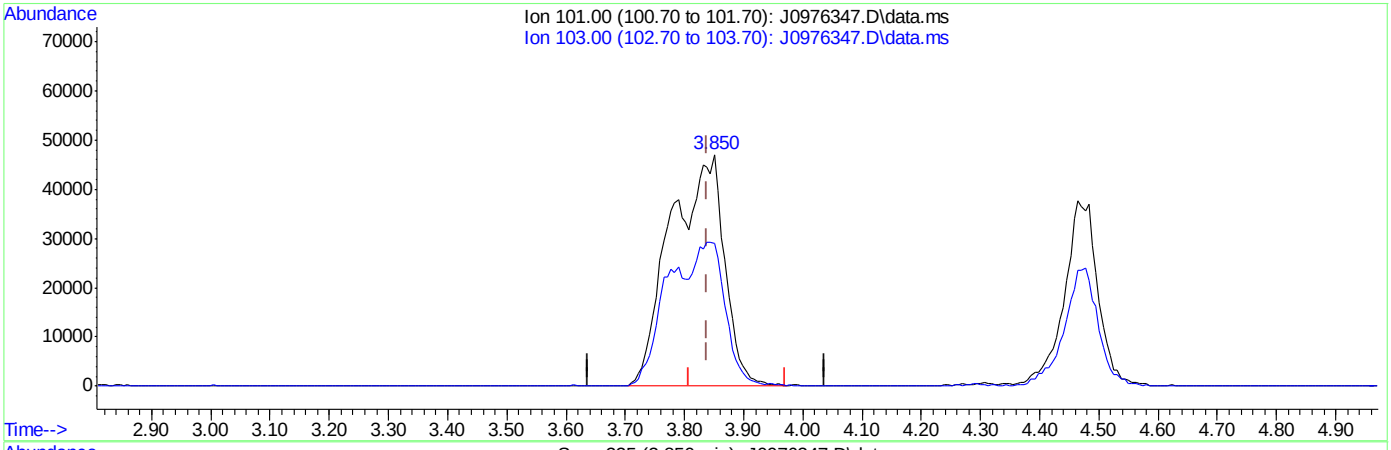
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	61.58
0.00	0.00	0.00
0.00	0.00	0.00

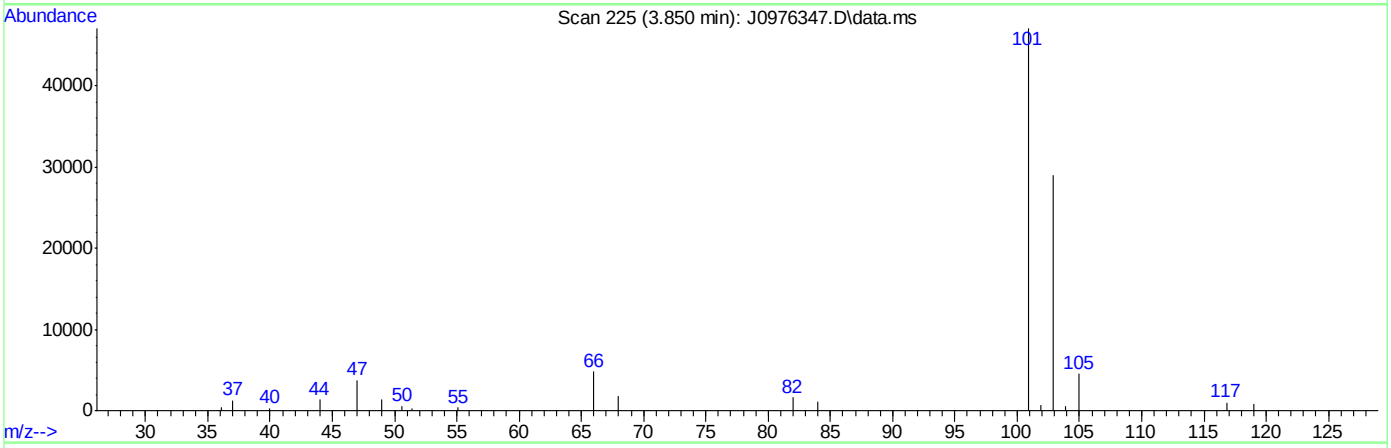
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:17 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976347.D\data.ms

(8) Trichlorofluoromethane ( )

3.850min (+0.012) 29.66ug/L m

response 294840

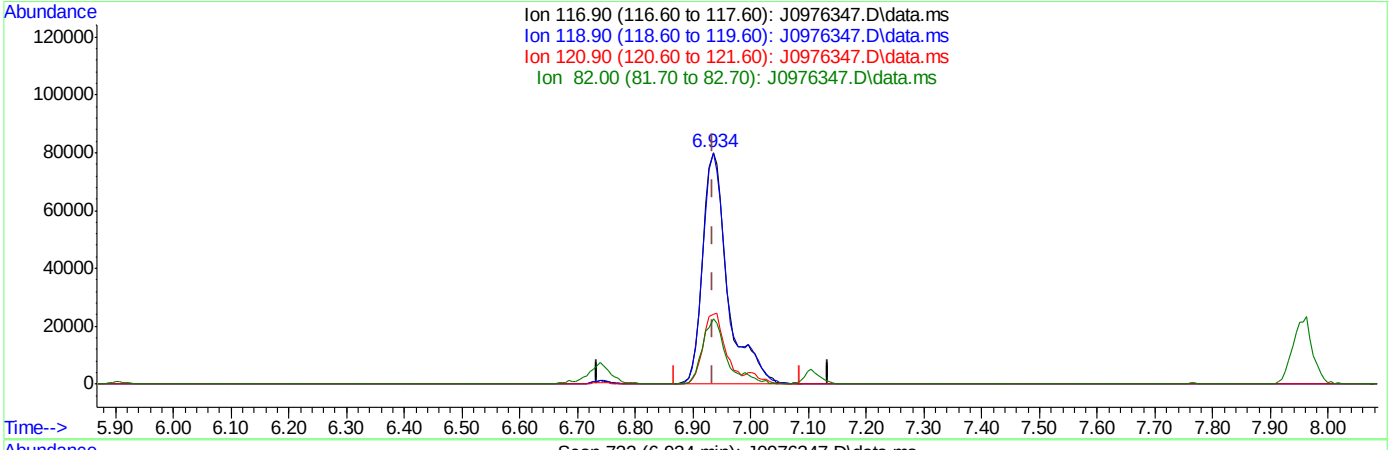
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	61.58
0.00	0.00	0.00
0.00	0.00	0.00

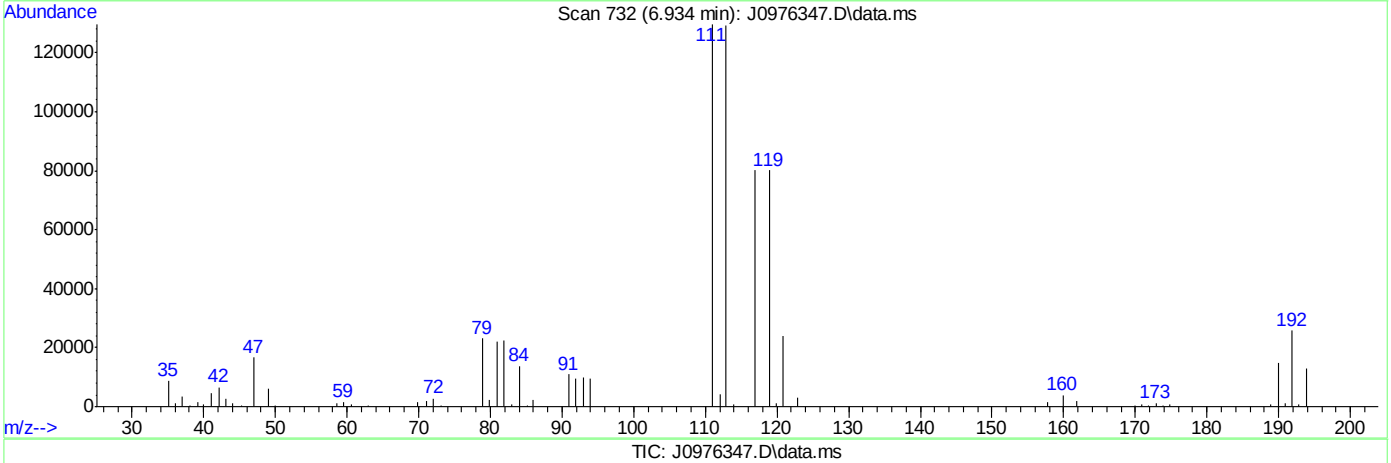
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:17 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





(37) Carbon Tetrachloride ( )

6.934min (-0.001) 29.71ug/L

response 241696

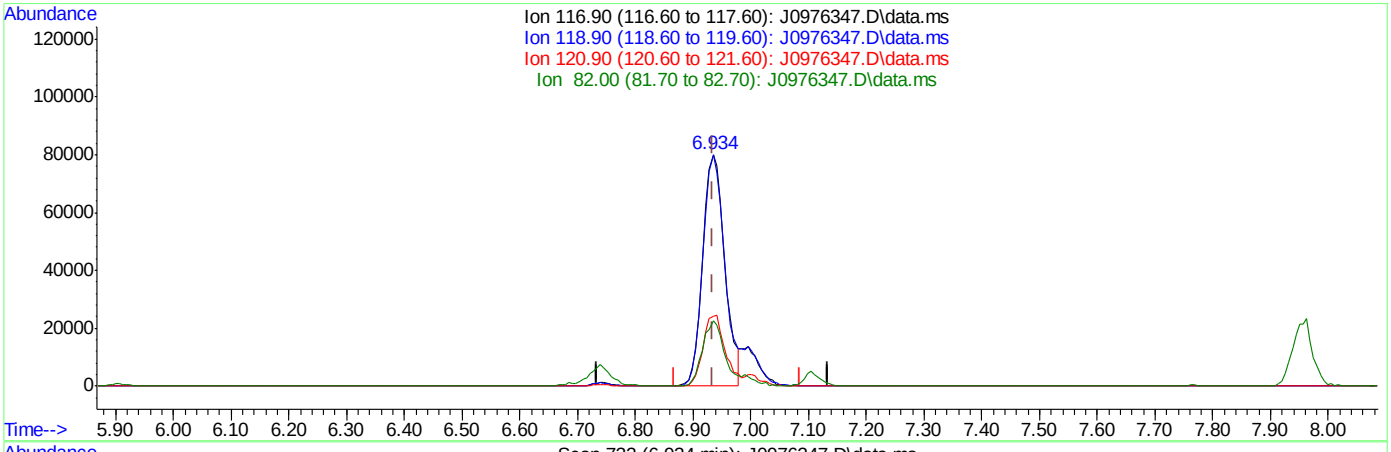
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	100.00
120.90	31.80	30.07
82.00	25.40	28.01

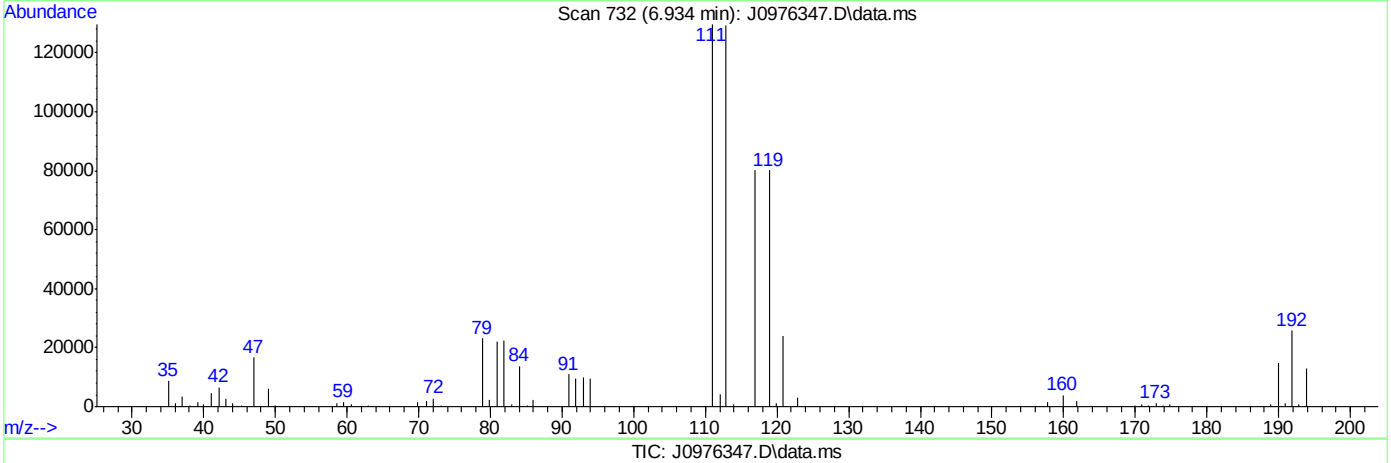
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976347.D
Acq On : 6 May 2016 1:04 pm
Operator : darshnap
Sample : fa33668-1msd ma Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:09:17 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976347.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 25.89ug/L m

response 210576

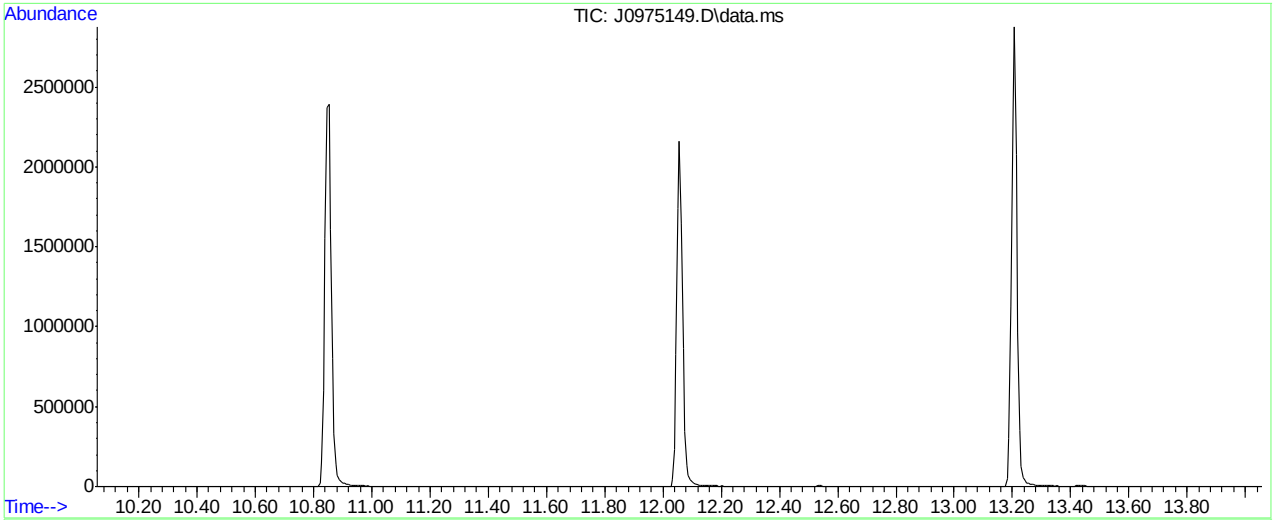
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	100.00
120.90	31.80	30.07
82.00	25.40	28.01

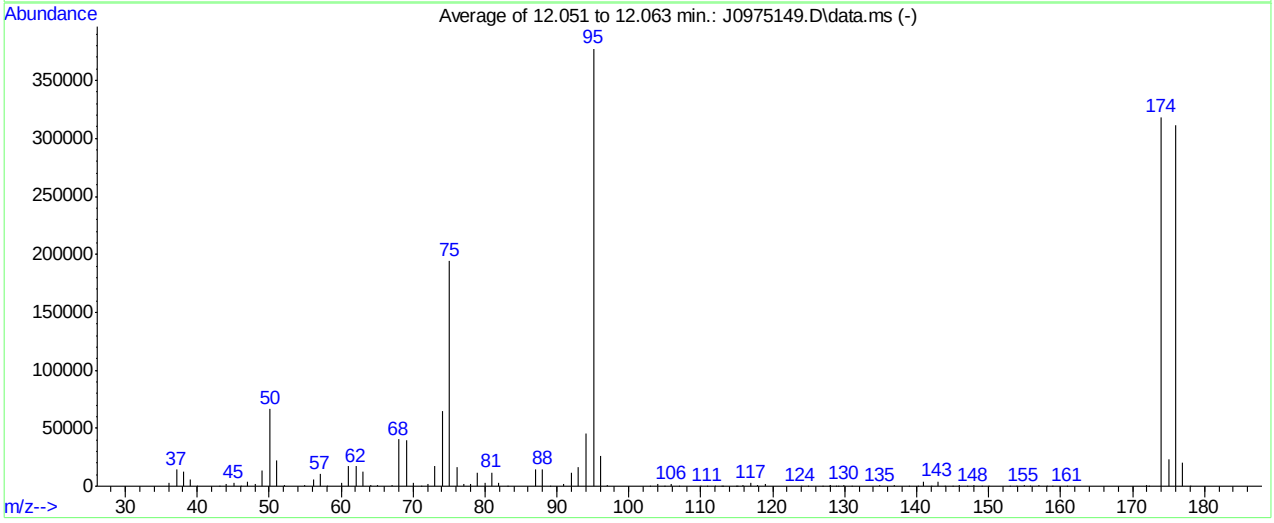
SGS ACCUTEST FA33668

Methods: SW-846 8260B

Data File : C:\msdchem\2\data\031516\J0975149.D Vial: 5
Acq On : 15 Mar 2016 1:53 pm Operator: DARSHNAP
Sample : BFB Inst : MSVOA6
Misc : MS33279,VJ5237,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624





AutoFind: Scans 1573, 1574, 1575; Background Corrected with Scan 1566

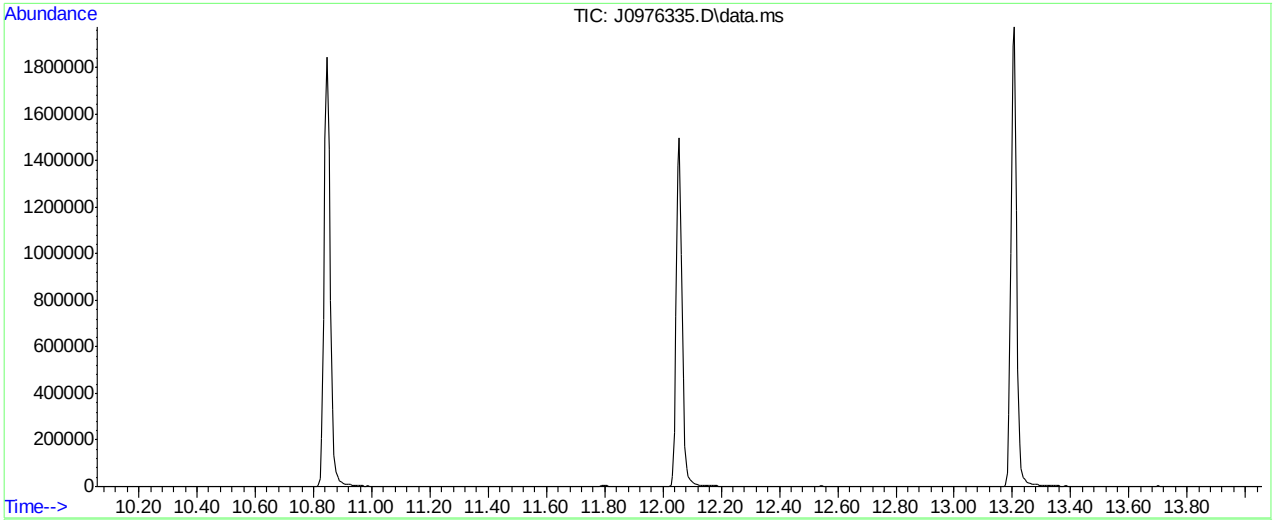
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	66293	PASS
75	95	30	60	51.4	194069	PASS
95	95	100	100	100.0	377600	PASS
96	95	5	9	7.0	26531	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	84.3	318315	PASS
175	174	5	9	7.2	22907	PASS
176	174	95	101	97.8	311403	PASS
177	176	5	9	6.5	20325	PASS

J0975149.D MSJ031516.M Wed Mar 16 09:52:48 2016

Methods: SW-846 8260B

Data File : C:\msdchem\2\data\050616\J0976335.D Vial: 1
Acq On : 6 May 2016 7:51 am Operator: darshnap
Sample : bfb Inst : MSVOA6
Misc : MS33770,VJ5288,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624



AutoFind: Scans 1573, 1574, 1575; Background Corrected with Scan 1566

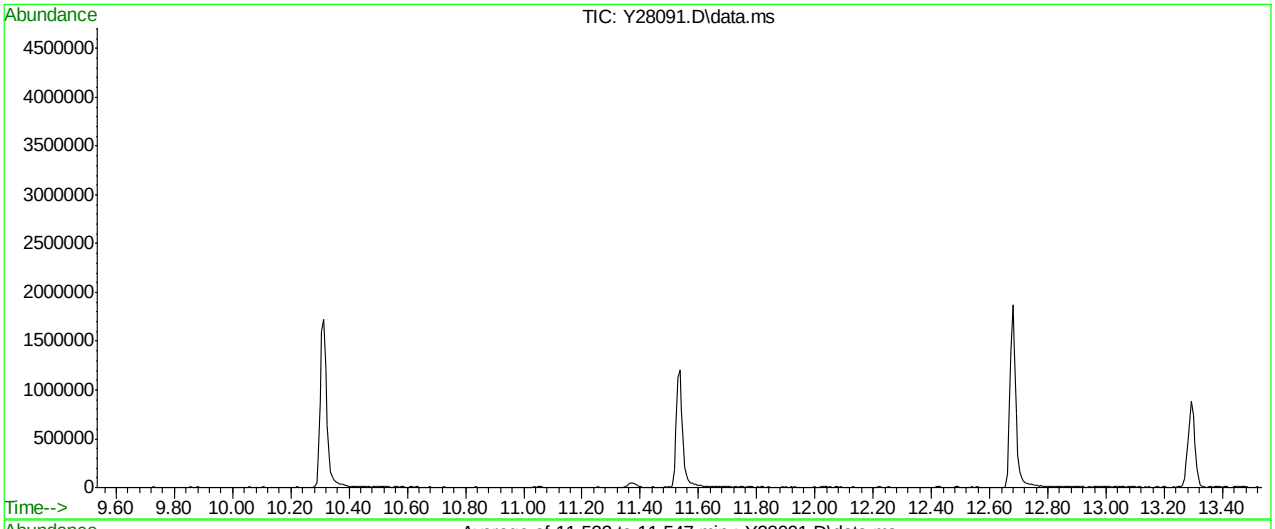
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	46163	PASS
75	95	30	60	49.8	130347	PASS
95	95	100	100	100.0	261781	PASS
96	95	5	9	6.7	17617	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.8	227328	PASS
175	174	5	9	6.9	15699	PASS
176	174	95	101	98.5	223829	PASS
177	176	5	9	6.1	13748	PASS

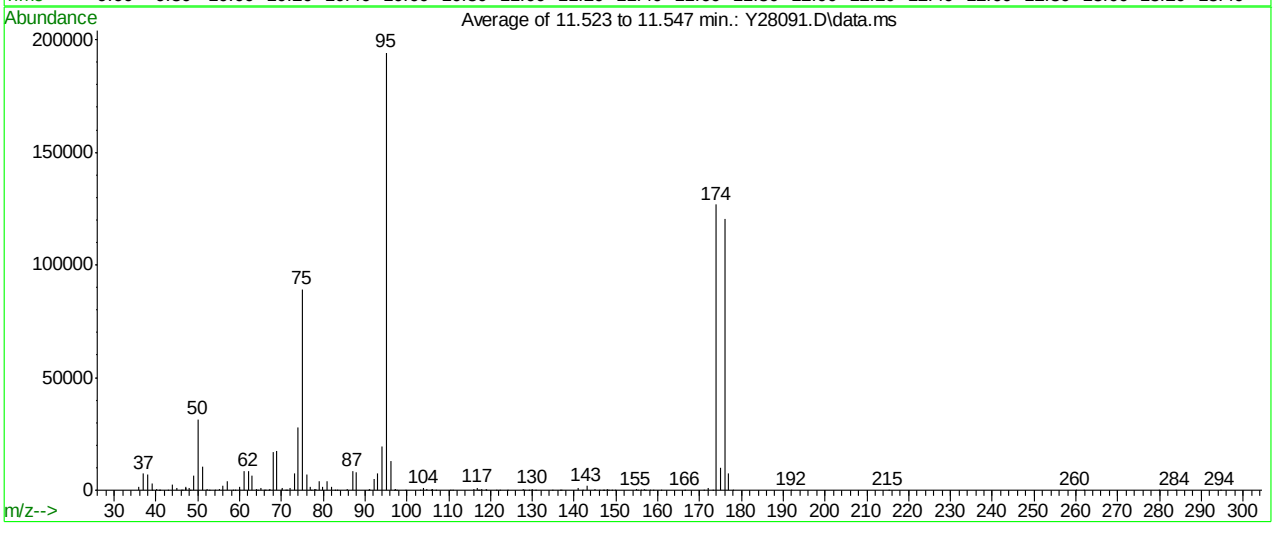
J0976335.D MSJ031516.M Fri May 06 14:24:41 2016

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\042516\Y28091.D Vial: 5
Acq On : 25 Apr 2016 8:42 am Operator: ANGIED
Sample : BFB Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B





Spectrum Information: Average of 11.523 to 11.547 min.

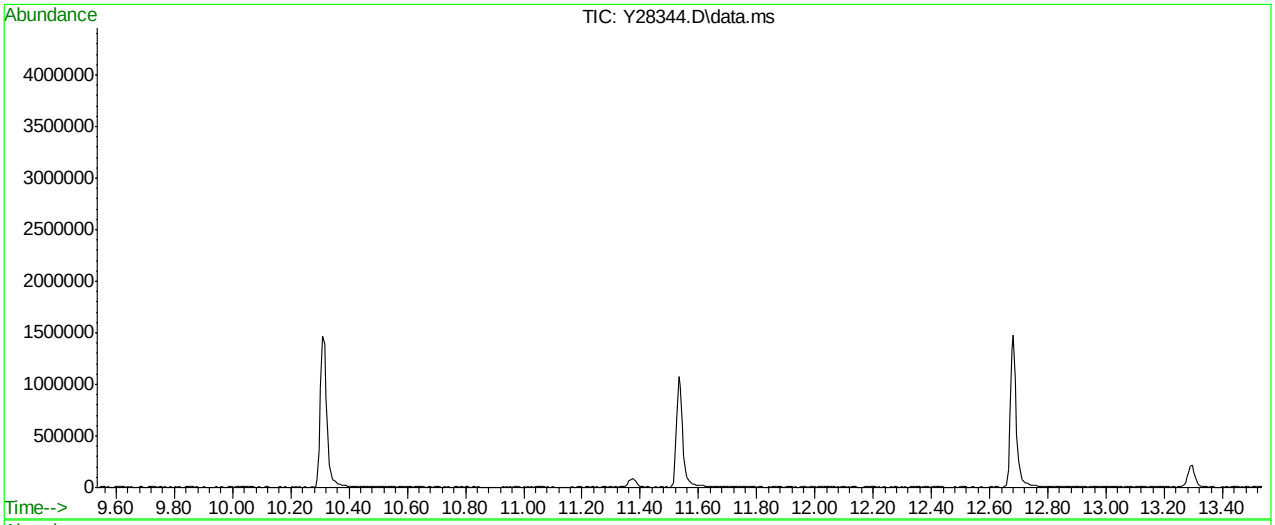
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	31414	PASS
75	95	30	60	45.9	89240	PASS
95	95	100	100	100.0	194368	PASS
96	95	5	9	6.8	13127	PASS
173	174	0.00	2	0.1	173	PASS
174	95	50	100	65.2	126793	PASS
175	174	5	9	8.0	10199	PASS
176	174	95	101	95.0	120513	PASS
177	176	5	9	6.4	7710	PASS

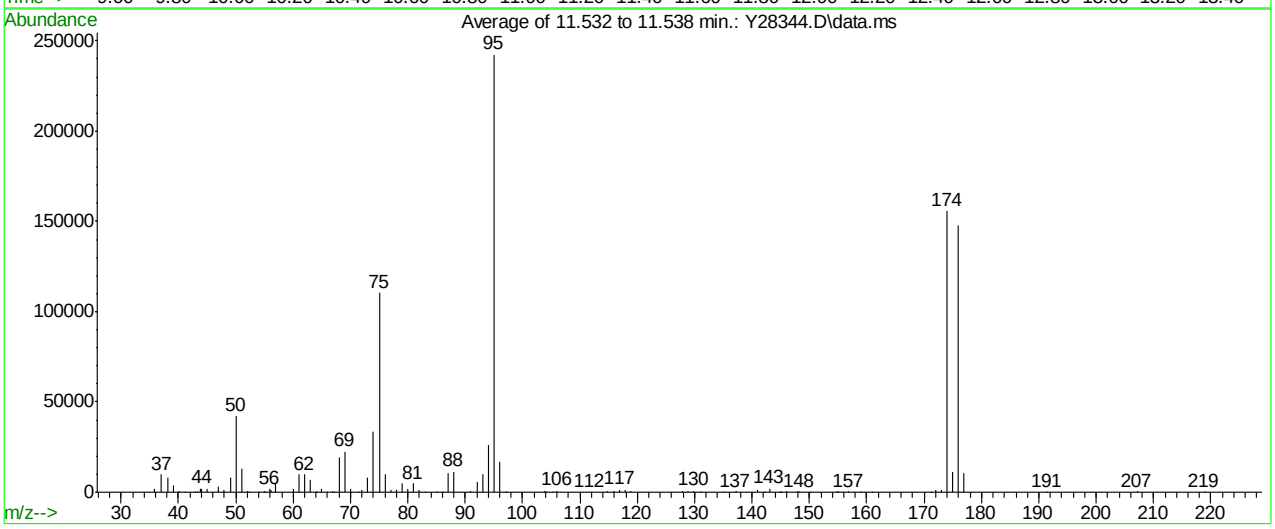
Y28091.D 042516APP9-Y.m Tue Apr 26 09:05:17 2016

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\050516\Y28344.D Vial: 7
Acq On : 5 May 2016 11:50 am Operator: ANGIED
Sample : BFB Inst : MSVOA14
Misc : MS33784,VY1147,5.00,,,5,, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B





Spectrum Information: Average of 11.532 to 11.538 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	41988	PASS
75	95	30	60	45.5	110276	PASS
95	95	100	100	100.0	242432	PASS
96	95	5	9	6.8	16514	PASS
173	174	0.00	2	0.8	1220	PASS
174	95	50	100	64.2	155680	PASS
175	174	5	9	7.1	11116	PASS
176	174	95	101	95.0	147904	PASS
177	176	5	9	7.0	10368	PASS

Y28344.D 042516APP9-Y.m Thu May 05 16:13:30 2016

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.762	96	1497519	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1089904	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	603459	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	91725	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	373911	48.86	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.72%			
46) 1,2-Dichloroethane-d4	7.482	65	459347	49.68	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.36%			
57) Toluene-d8	9.301	98	1476291	51.18	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.36%			
79) 4-Bromofluorobenzene	12.057	95	555679	47.95	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.676	85	6775	0.68	ug/L	95
3) Chloromethane	2.895	50	10042	1.02	ug/L	86
4) Vinyl Chloride	3.029	62	9163	0.89	ug/L	84
5) 1,3-Butadiene	3.029	54	7059	0.86	ug/L	85
6) Bromomethane	3.455	94	9881m	1.44	ug/L	
7) Chloroethane	3.607	64	6448	1.12	ug/L	90
8) Trichlorofluoromethane	3.850	101	10448m	0.79	ug/L	
9) Ethyl Ether	4.130	59	5459	0.88	ug/L	92
10) 1,2-Dichlorotrifluoroe...	4.355	67	8916	1.01	ug/L #	71
11) 1,1-Dichloroethene	4.398	61	11350	1.02	ug/L	94
12) Freon 113	4.458	101	7347	0.99	ug/L #	83
13) Carbon Disulfide	4.471	76	21866	0.93	ug/L	92
14) Iodomethane	4.586	142	12203	1.00	ug/L	95
15) Allyl chloride	4.927	41	8571	0.82	ug/L	96
16) Methylene Chloride	5.042	49	19069	1.87	ug/L	92
17) Acetone	5.091	58	2092	4.99	ug/L	92
18) Methyl acetate	5.213	74	4128	4.66	ug/L #	49
19) trans-1,2-Dichloroethene	5.231	61	9877	0.91	ug/L	95
20) Hexane	5.310	56	6156	0.92	ug/L #	69
21) Methyl Tert Butyl Ether	5.334	73	19763	0.98	ug/L	85
22) Acetonitrile	5.608	40	4443	14.08	ug/L #	56
23) Di-isopropyl ether	5.724	45	23214	1.00	ug/L	83
24) Chloroprene	5.876	53	9643	0.84	ug/L	85
25) 1,1-Dichloroethane	5.900	63	14012	1.00	ug/L	98
26) Acrylonitrile	5.949	53	11139	5.74	ug/L	97
27) ETBE	6.113	59	21083	0.90	ug/L	79
28) Vinyl acetate	6.125	43	55946	4.80	ug/L	97
29) cis-1,2-Dichloroethene	6.478	96	8540	0.96	ug/L	93
30) 2,2-Dichloropropane	6.606	77	10698	1.02	ug/L	86
31) Bromochloromethane	6.691	128	3551	0.86	ug/L #	79
32) Cyclohexane	6.734	56	12273	0.98	ug/L #	81
33) Chloroform	6.746	83	15433	1.01	ug/L	93
34) Ethyl acetate	6.825	43	23574	5.07	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35)	Tetrahydrofuran	6.947	42	3124	2.34	ug/L	#	71
37)	Carbon Tetrachloride	6.934	117	9892	0.93	ug/L	#	81
38)	1,1,1-Trichloroethane	6.995	97	12445	0.97	ug/L		92
39)	2-Butanone	7.050	43	12221	5.99	ug/L		98
40)	1,1-Dichloropropene	7.105	75	10270	0.96	ug/L		93
41)	tert-Butyl Formate	7.190	59	37883	8.06	ug/L	#	33
42)	Propionitrile	7.348	54	7401	10.45	ug/L	#	64
43)	Methacrylonitrile	7.366	41	33814	10.07	ug/L		88
44)	Benzene	7.360	78	31721	0.98	ug/L		85
45)	TAME	7.439	73	20156	0.98	ug/L		94
47)	1,2-Dichloroethane	7.549	62	12849	1.15	ug/L		88
48)	Trichloroethene	7.944	95	8203	0.96	ug/L		96
49)	Methylcyclohexane	7.950	83	12273	0.91	ug/L		93
50)	Dibromomethane	8.370	93	4922	1.10	ug/L		92
51)	1,2-Dichloropropane	8.455	63	8279	1.04	ug/L		93
52)	Bromodichloromethane	8.504	83	9529	0.93	ug/L		93
53)	Methyl methacrylate	8.607	41	3207	0.75	ug/L	#	72
54)	2-Chloroethyl vinyl ether	9.015	63	17389	4.02	ug/L		93
55)	cis-1,3-Dichloropropene	9.118	75	9664	0.83	ug/L		98
58)	Toluene	9.356	91	36026	1.05	ug/L		93
59)	2-Nitropropane	9.556	41	4628	3.48	ug/L		84
60)	4-Methyl-2-pentanone	9.678	43	22365	4.71	ug/L		96
61)	trans-1,3-Dichloropropene	9.745	75	7916	0.84	ug/L		90
62)	Tetrachloroethene	9.757	166	8590	0.93	ug/L		86
63)	Ethyl methacrylate	9.848	69	5248	0.64	ug/L		93
64)	1,1,2-Trichloroethane	9.903	83	5205	0.97	ug/L		87
65)	Dibromochloromethane	10.110	129	6228	0.91	ug/L		85
66)	1,3-Dichloropropane	10.189	76	11243	1.03	ug/L		95
67)	1,2-Dibromoethane	10.378	107	6238	1.07	ug/L	#	60
68)	2-hexanone	10.505	43	13884	4.29	ug/L		77
69)	1-Chlorohexane	10.797	91	8158	0.81	ug/L	#	83
70)	Ethylbenzene	10.864	91	39232	0.97	ug/L		97
71)	Chlorobenzene	10.864	112	23328	1.06	ug/L		91
72)	1,1,1,2-Tetrachloroethane	10.913	131	6466	0.93	ug/L	#	75
73)	m,p-Xylene	11.004	91	54337	1.71	ug/L		98
74)	o-Xylene	11.442	91	27064	0.95	ug/L		95
75)	Styrene	11.491	104	16955	0.80	ug/L		94
76)	Bromoform	11.552	173	3073	0.82	ug/L		78
77)	Isopropylbenzene	11.746	105	29354	0.80	ug/L		96
80)	cis-1,4-Dichloro-2-butene	12.099	53	1716	1.08	ug/L	#	39
81)	n-Propylbenzene	12.166	91	39032	0.93	ug/L		97
82)	Bromobenzene	12.191	156	9314	0.95	ug/L		97
83)	1,1,2,2-Tetrachloroethane	12.221	83	7603	1.06	ug/L		95
84)	1,3,5-Trimethylbenzene	12.343	105	25826	0.82	ug/L		93
85)	2-Chlorotoluene	12.355	91	29015	0.95	ug/L		99
86)	trans-1,4-Dichloro-2-B...	12.410	53	1269	0.87	ug/L	#	57
87)	1,2,3-Trichloropropane	12.385	110	1795	0.91	ug/L		75
88)	Cyclohexanone	12.452	55	686	5.72	ug/L	#	65
89)	4-Chlorotoluene	12.525	91	24461	0.87	ug/L		95
90)	a-Methyl Styrene	12.610	118	7205	0.82	ug/L	#	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
91)	tert-Butylbenzene	12.683	91	16548	0.90	ug/L		96
92)	1,2,4-Trimethylbenzene	12.756	105	25129	0.80	ug/L		93
93)	Pentachloroethane	12.738	167	4995	1.16	ug/L	#	88
94)	sec-Butylbenzene	12.872	105	33797	0.91	ug/L		95
95)	4-Isopropyltoluene	13.000	119	26896	0.86	ug/L		97
96)	1,3-Dichlorobenzene	13.140	146	16834	1.01	ug/L		86
97)	1,4-Dichlorobenzene	13.225	146	19396	1.09	ug/L		86
98)	n-Butylbenzene	13.438	92	14315	0.80	ug/L		94
99)	Benzyl Chloride	13.450	126	1193	0.60	ug/L	#	6
100)	1,2-Dichlorobenzene	13.651	146	16386	1.08	ug/L		89
101)	1,2-Dibromo-3-Chloropr...	14.387	75	1127	1.88	ug/L	#	47
102)	Hexachlorobutadiene	14.934	225	6492	1.35	ug/L		94
103)	1,2,4-Trichlorobenzene	14.977	180	9990	1.91	ug/L		94
104)	Naphthalene	15.263	128	14240	2.35	ug/L		90
105)	1,2,3-Trichlorobenzene	15.433	180	10129	3.18	ug/L		95
108)	acrolein	4.756	56	4435	4.39	ug/L		82
109)	Tert Butyl Alcohol	5.383	59	4329	10.16	ug/L		82
110)	tert Amyl alcohol	7.579	59	2592	8.16	ug/L	#	63
111)	Isobutyl alcohol	7.433	42	1712	9.78	ug/L	#	83
112)	1,4-Dioxane	8.674	88	807	19.87	ug/L	#	29
113)	3,3-Dimethyl-1-butanol	10.438	57	16639	48.08	ug/L		89

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

7.6.1

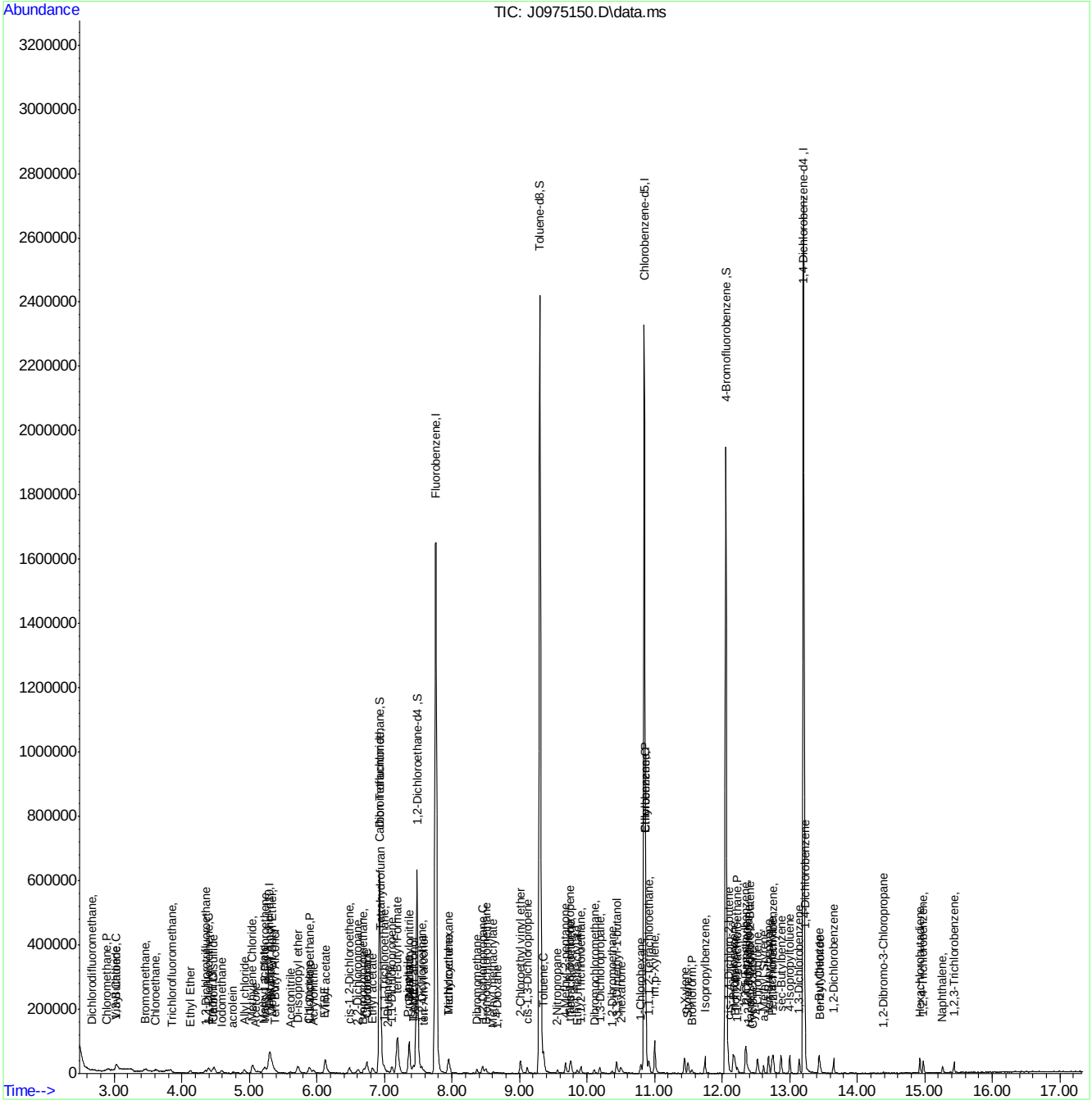
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



MSJ031516.M Wed Mar 16 09:49:22 2016 Page: 4

SGS ACCUTEST FA33668

Manual Integration Approval Summary

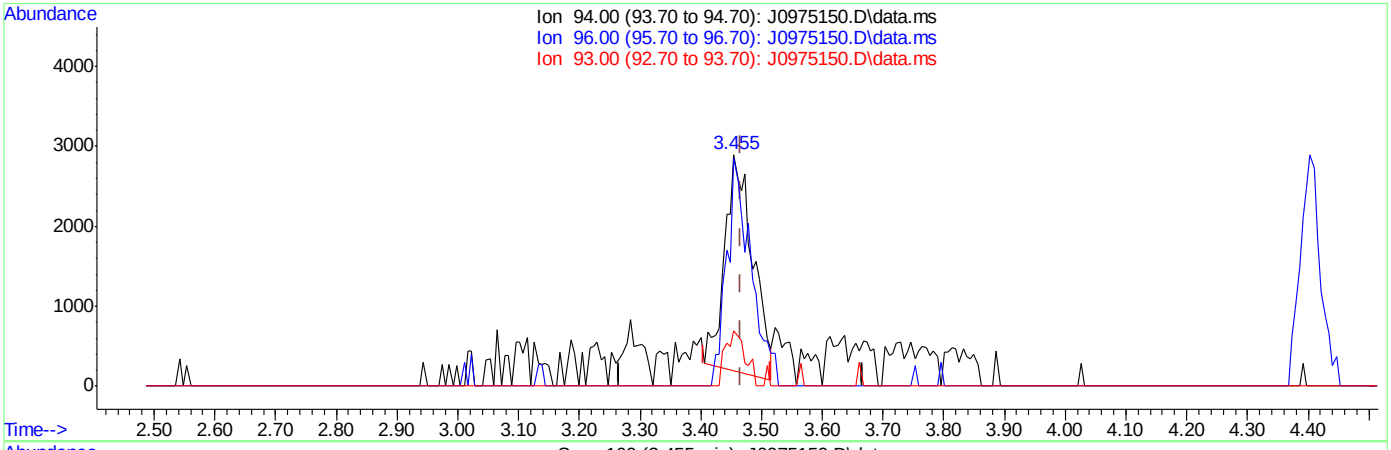
Sample Number:	VJ5237-IC5237	**Method:**	SW846 8260B
Lab FileID:	J0975150.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 14:17	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

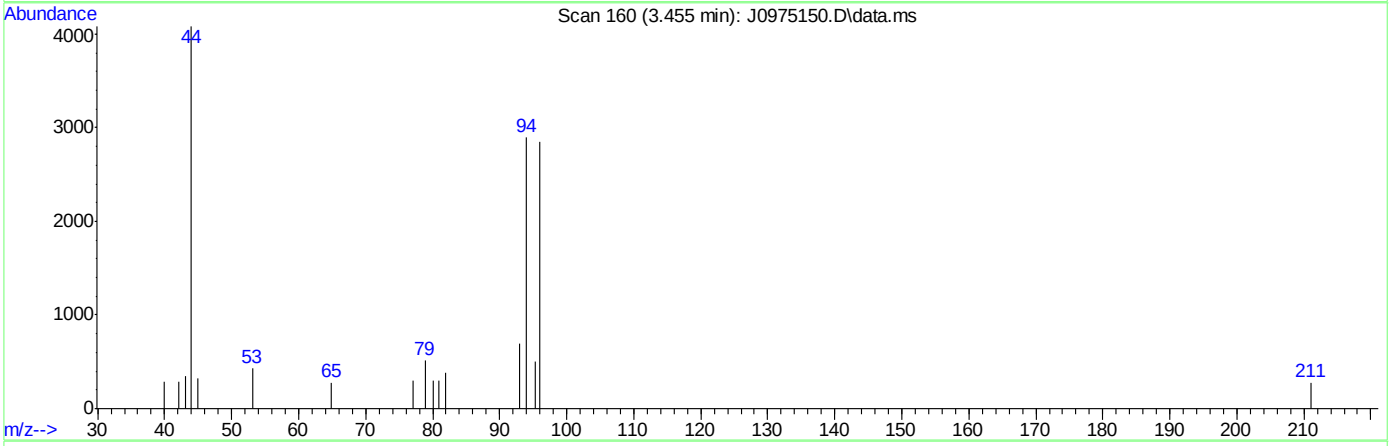
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Bromide	74-83-9		3.45	Poor instrument integration
Trichlorofluoromethane	75-69-4		3.85	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975150.D\data.ms

(6) Bromomethane ( )

3.455min (-0.012) 1.27ug/L

response 8695

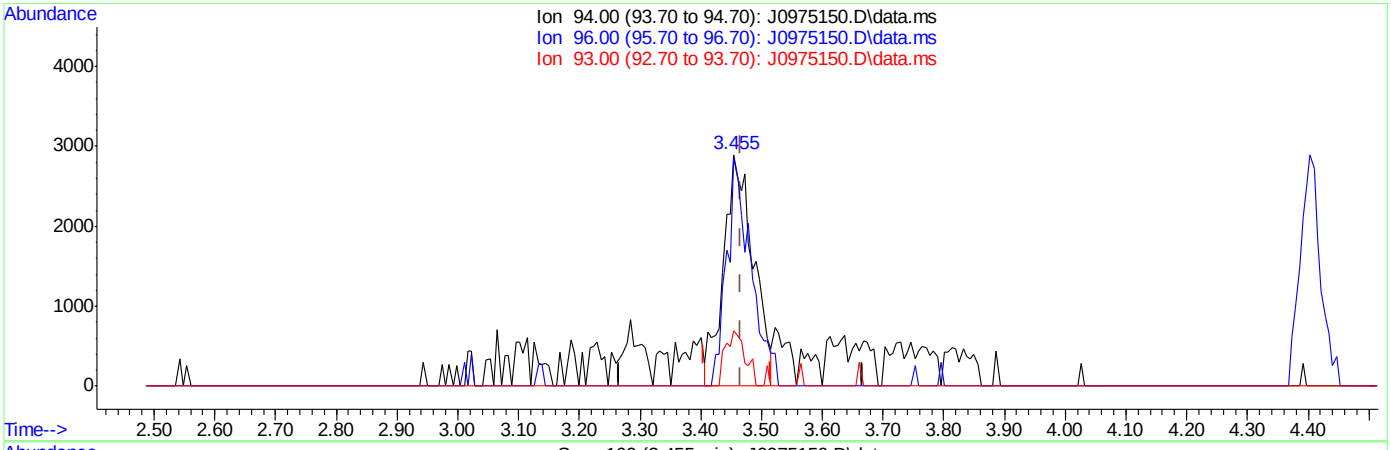
Ion	Exp%	Act%
94.00	100	100
96.00	91.30	108.90
93.00	18.00	26.71
0.00	0.00	0.00

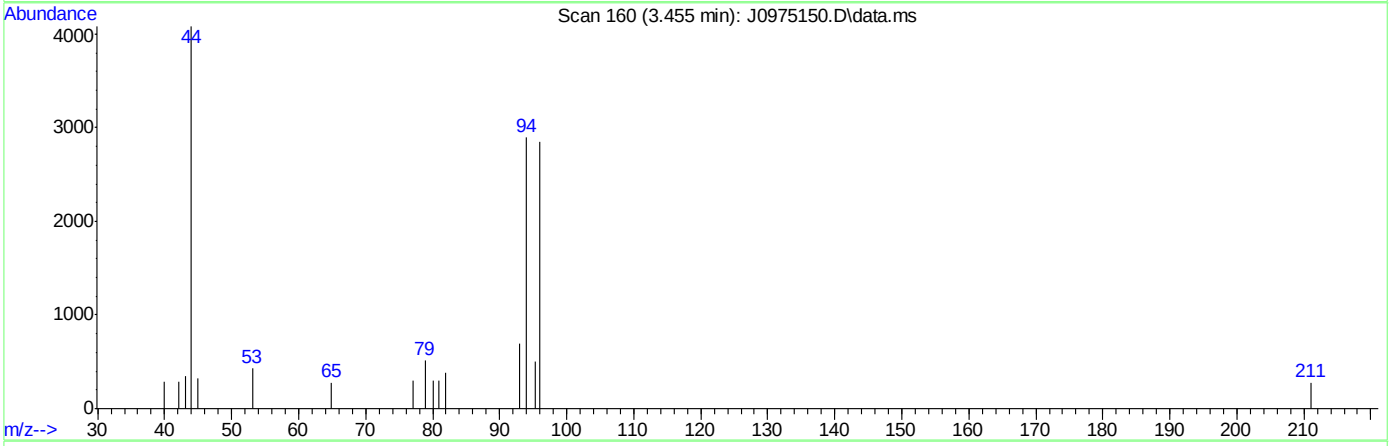
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975150.D\data.ms

(6) Bromomethane ( )

3.455min (-0.012) 1.44ug/L m

response 9881

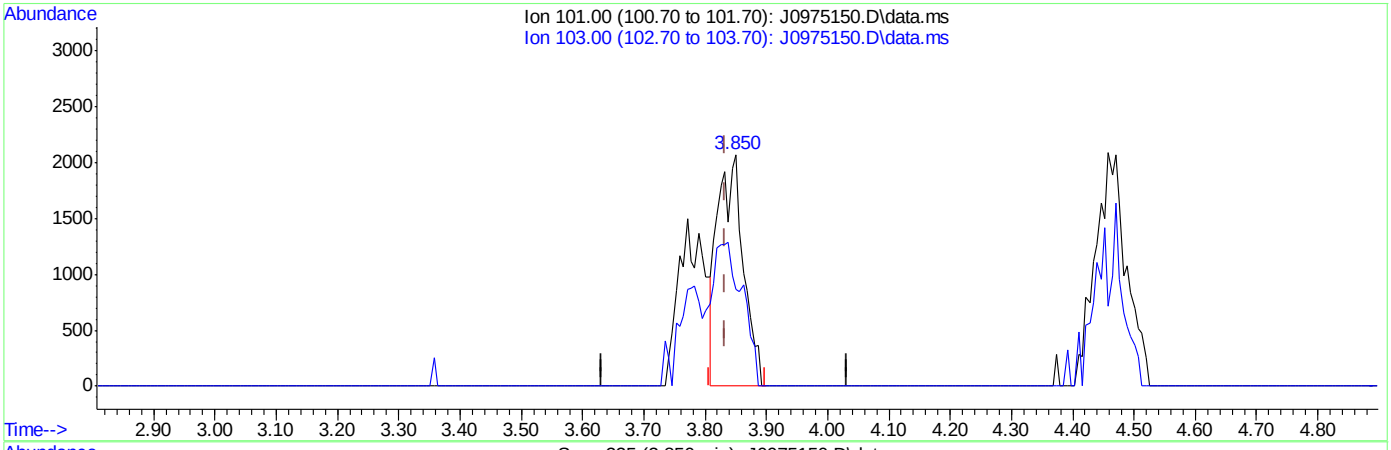
Ion	Exp%	Act%
94.00	100	100
96.00	91.30	98.31
93.00	18.00	24.11
0.00	0.00	0.00

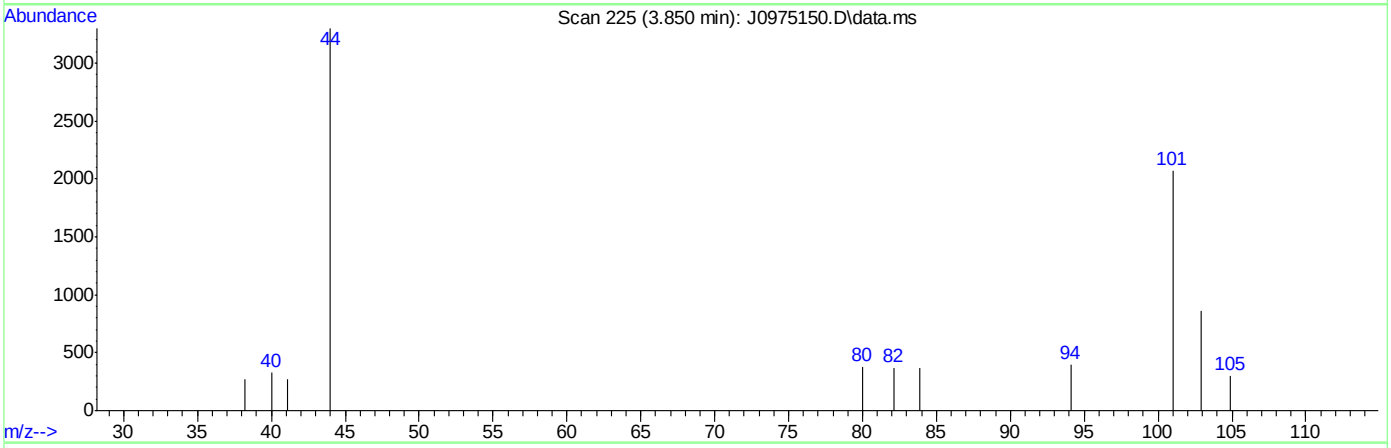
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975150.D\data.ms

(8) Trichlorofluoromethane ( )

3.850min (+0.018) 0.46ug/L

response 6075

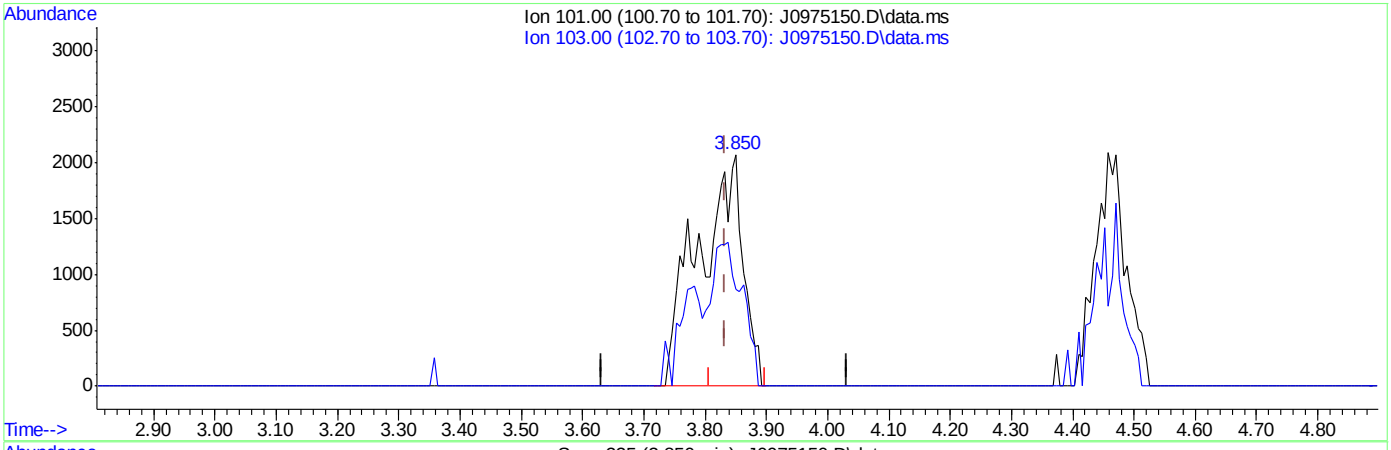
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	41.68
0.00	0.00	0.00
0.00	0.00	0.00

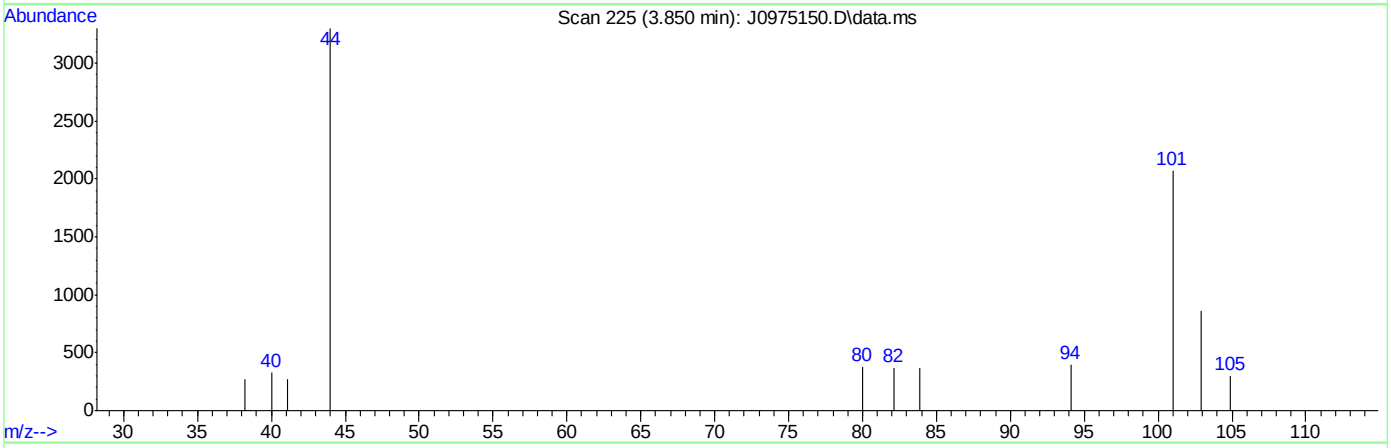
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975150.D\data.ms

(8) Trichlorofluoromethane ( )

3.850min (+0.018) 0.79ug/L m

response 10448

Ion	Exp%	Act%
101.00	100	100
103.00	63.50	41.68
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1497867	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1105198	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	620103	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	80218	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	381652	49.86	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.72%			
46) 1,2-Dichloroethane-d4	7.482	65	470179	50.84	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.68%			
57) Toluene-d8	9.301	98	1489073	50.91	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.82%			
79) 4-Bromofluorobenzene	12.057	95	563252	47.30	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 94.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.700	85	45739	4.57	ug/L	97
3) Chloromethane	2.883	50	45096	4.58	ug/L	99
4) Vinyl Chloride	3.035	62	50250	4.89	ug/L	100
5) 1,3-Butadiene	3.023	54	36147	4.38	ug/L	91
6) Bromomethane	3.455	94	39184	5.80	ug/L	92
7) Chloroethane	3.613	64	26261	4.61	ug/L	95
8) Trichlorofluoromethane	3.832	101	61441m	4.67	ug/L	
9) Ethyl Ether	4.118	59	27596	4.44	ug/L	97
10) 1,2-Dichlorotrifluoroe...	4.349	67	40875	4.65	ug/L	94
11) 1,1-Dichloroethene	4.391	61	48452	4.36	ug/L	95
12) Freon 113	4.464	101	35541	4.79	ug/L	92
13) Carbon Disulfide	4.471	76	101564	4.31	ug/L	100
14) Iodomethane	4.580	142	55852	4.59	ug/L	92
15) Allyl chloride	4.921	41	48119	4.60	ug/L	92
16) Methylene Chloride	5.042	49	51479	5.05	ug/L	94
17) Acetone	5.073	58	12734	30.31	ug/L	91
18) Methyl acetate	5.201	74	21874	24.70	ug/L #	77
19) trans-1,2-Dichloroethene	5.231	61	45857	4.24	ug/L	95
20) Hexane	5.298	56	30261	4.50	ug/L #	90
21) Methyl Tert Butyl Ether	5.334	73	92687	4.59	ug/L	79
22) Acetonitrile	5.596	40	21113	67.20	ug/L #	86
23) Di-isopropyl ether	5.718	45	102600	4.41	ug/L	96
24) Chloroprene	5.876	53	48399	4.22	ug/L	95
25) 1,1-Dichloroethane	5.894	63	61532	4.39	ug/L	98
26) Acrylonitrile	5.931	53	47478	24.45	ug/L	96
27) ETBE	6.119	59	102089	4.38	ug/L	97
28) Vinyl acetate	6.113	43	287674	24.68	ug/L	98
29) cis-1,2-Dichloroethene	6.472	96	40640	4.55	ug/L	96
30) 2,2-Dichloropropane	6.600	77	45028	4.28	ug/L	98
31) Bromochloromethane	6.691	128	19294	4.65	ug/L	97
32) Cyclohexane	6.728	56	54509	4.36	ug/L	93
33) Chloroform	6.740	83	69984	4.58	ug/L	96
34) Ethyl acetate	6.813	43	116131	24.95	ug/L	97

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) Tetrahydrofuran	6.928	42	7754	5.81 ug/L	91
37) Carbon Tetrachloride	6.928	117	46777	4.41 ug/L	94
38) 1,1,1-Trichloroethane	6.995	97	56130	4.36 ug/L	88
39) 2-Butanone	7.032	43	43633	21.39 ug/L	98
40) 1,1-Dichloropropene	7.105	75	46613	4.37 ug/L	98
41) tert-Butyl Formate	7.190	59	191737	40.76 ug/L #	67
42) Propionitrile	7.342	54	32717	46.19 ug/L #	73
43) Methacrylonitrile	7.360	41	178244	53.47 ug/L	96
44) Benzene	7.360	78	145505	4.48 ug/L	97
45) TAME	7.433	73	92220	4.49 ug/L	89
47) 1,2-Dichloroethane	7.549	62	52574	4.69 ug/L	96
48) Trichloroethene	7.938	95	36327	4.24 ug/L	93
49) Methylcyclohexane	7.950	83	59605	4.41 ug/L	95
50) Dibromomethane	8.364	93	21077	4.73 ug/L	93
51) 1,2-Dichloropropane	8.449	63	35727	4.47 ug/L	95
52) Bromodichloromethane	8.498	83	44773	4.35 ug/L	96
53) Methyl methacrylate	8.601	41	19555	4.55 ug/L	95
54) 2-Chloroethyl vinyl ether	9.009	63	90559	20.99 ug/L	99
55) cis-1,3-Dichloropropene	9.112	75	47740	4.11 ug/L	93
58) Toluene	9.356	91	150830	4.34 ug/L	98
59) 2-Nitropropane	9.563	41	24627	18.28 ug/L	88
60) 4-Methyl-2-pentanone	9.678	43	110229	22.87 ug/L	97
61) trans-1,3-Dichloropropene	9.739	75	40521	4.26 ug/L	93
62) Tetrachloroethene	9.757	166	37799	4.02 ug/L	96
63) Ethyl methacrylate	9.842	69	33308	4.03 ug/L	93
64) 1,1,2-Trichloroethane	9.903	83	24194	4.45 ug/L	96
65) Dibromochloromethane	10.104	129	29798	4.27 ug/L	97
66) 1,3-Dichloropropane	10.189	76	49657	4.47 ug/L	95
67) 1,2-Dibromoethane	10.366	107	25707	4.34 ug/L	99
68) 2-hexanone	10.493	43	69997	21.35 ug/L	96
69) 1-Chlorohexane	10.797	91	40374	3.98 ug/L	96
70) Ethylbenzene	10.864	91	175498	4.31 ug/L	100
71) Chlorobenzene	10.864	112	99467	4.45 ug/L	93
72) 1,1,1,2-Tetrachloroethane	10.913	131	32015	4.52 ug/L	94
73) m,p-Xylene	10.998	91	257172	8.07 ug/L	97
74) o-Xylene	11.436	91	129261	4.46 ug/L	92
75) Styrene	11.491	104	89606	4.18 ug/L	99
76) Bromoform	11.552	173	16553	4.34 ug/L	94
77) Isopropylbenzene	11.747	105	150179	4.07 ug/L	98
80) cis-1,4-Dichloro-2-butene	12.087	53	9412	5.79 ug/L #	83
81) n-Propylbenzene	12.166	91	186692	4.32 ug/L	97
82) Bromobenzene	12.185	156	43521	4.34 ug/L	93
83) 1,1,2,2-Tetrachloroethane	12.221	83	35300	4.80 ug/L	96
84) 1,3,5-Trimethylbenzene	12.343	105	137372	4.27 ug/L	100
85) 2-Chlorotoluene	12.355	91	136546	4.36 ug/L	93
86) trans-1,4-Dichloro-2-B...	12.404	53	7220	4.78 ug/L #	56
87) 1,2,3-Trichloropropane	12.385	110	9078	4.49 ug/L	91
88) Cyclohexanone	12.458	55	2885	23.41 ug/L #	85
89) 4-Chlorotoluene	12.519	91	121317	4.22 ug/L	96
90) a-Methyl Styrene	12.610	118	37805	4.21 ug/L	96

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) tert-Butylbenzene	12.683	91	77635	4.09	ug/L	92
92) 1,2,4-Trimethylbenzene	12.756	105	142610	4.42	ug/L	96
93) Pentachloroethane	12.738	167	23873	5.36	ug/L	96
94) sec-Butylbenzene	12.872	105	166261	4.33	ug/L	99
95) 4-Isopropyltoluene	13.000	119	138055	4.32	ug/L	95
96) 1,3-Dichlorobenzene	13.140	146	75534	4.40	ug/L	95
97) 1,4-Dichlorobenzene	13.219	146	82699	4.53	ug/L	86
98) n-Butylbenzene	13.432	92	76297	4.17	ug/L	97
99) Benzyl Chloride	13.450	126	7780	3.78	ug/L #	84
100) 1,2-Dichlorobenzene	13.645	146	74335	4.76	ug/L	99
101) 1,2-Dibromo-3-Chloropr...	14.381	75	4498	7.21	ug/L	88
102) Hexachlorobutadiene	14.928	225	31359	6.31	ug/L	98
103) 1,2,4-Trichlorobenzene	14.977	180	51743	9.47	ug/L	97
104) Naphthalene	15.263	128	71283	10.99	ug/L	99
105) 1,2,3-Trichlorobenzene	15.433	180	45604	13.31	ug/L	98
107) Ethanol	4.282	45	4538m	130.44	ug/L	
108) acrolein	4.756	56	23167	26.19	ug/L	87
109) Tert Butyl Alcohol	5.371	59	20425	54.82	ug/L #	64
110) tert Amyl alcohol	7.579	59	12035	43.30	ug/L #	76
111) Isobutyl alcohol	7.458	42	14047	92.39	ug/L #	89
112) 1,4-Dioxane	8.674	88	2924	82.31	ug/L	91
113) 3,3-Dimethyl-1-butanol	10.439	57	72142	236.23	ug/L	99

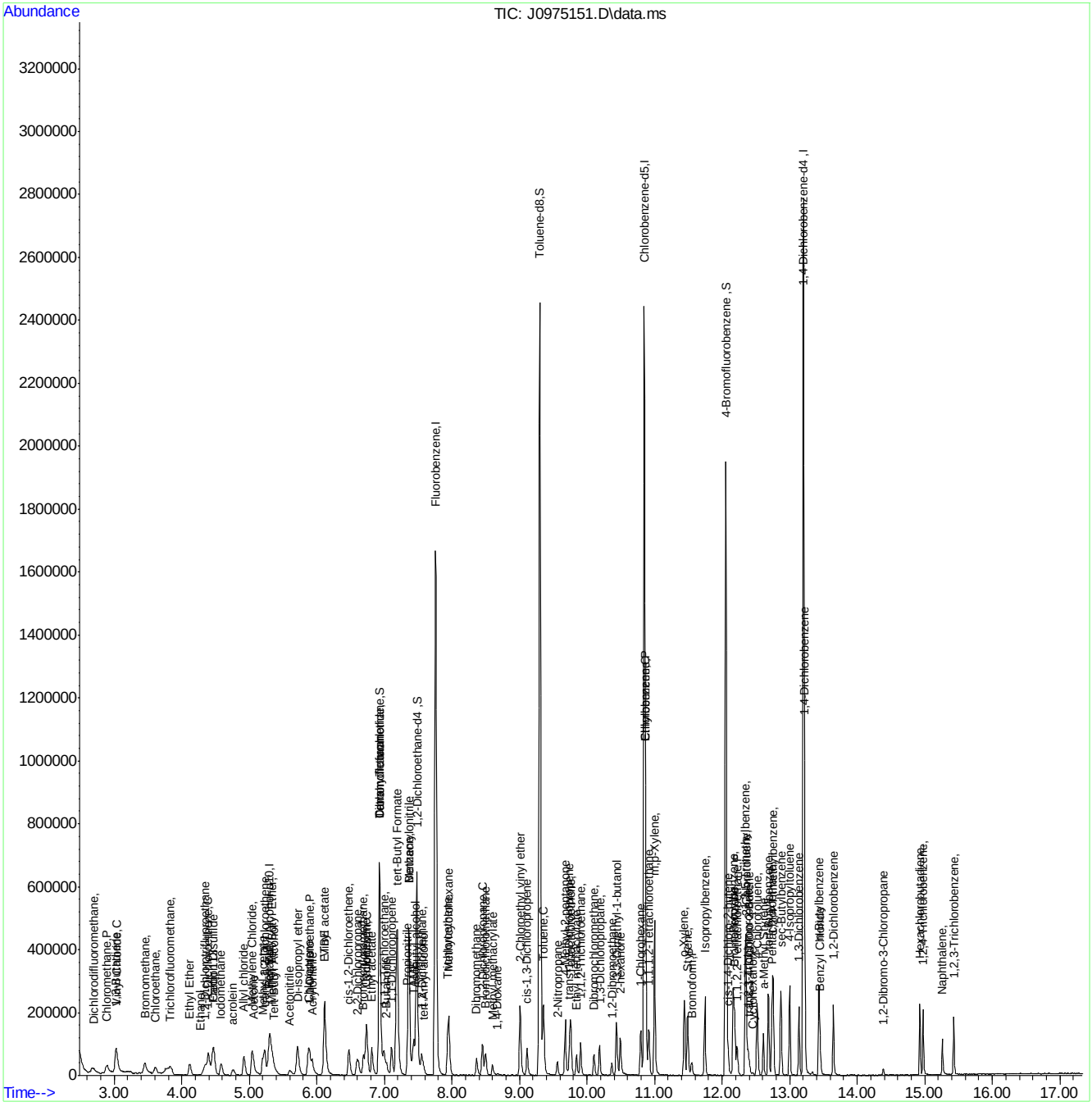
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration


Abundance
TIC: J0975151.D\data.ms
Time-->
Toluene-d8,S
Chlorobenzene-d5,I
4-Bromofluorobenzene ,S
1,4-Dichlorobenzene-d4 ,I
Fluorobenzene,I
1,2-Dichloroethane-d4 ,S
tert-Butyl Formate
Dichlorodifluoromethane,
Chloromethane,P
Vinyl chloride,C
Bromomethane,
Chloroethane,
Trichlorofluoromethane,
Ethyl Ether
Iodomethane
Carbon disulfide
acrolein
Allyl chloride
Acetonitrile
Di-isopropyl ether
Ethyl acetate
cis-1,2-Dichloroethene,
2-Butanone
Methyl acrylonitrile
Methyl Methacrylate
Methyl acrylate
Propionitrile
Methyl Ethyl Ketone
Methyl Acrylate
Methyl Methacrylate
Dibromomethane
Chloroprene
1,4-Dioxane
Methyl methacrylate
cis-1,3-Dichloropropene
2-Chloroethyl vinyl ether
Toluene,C
2-Nitropropane
Ethyl methacrylate
Ethyl Methacrylate
Dibromochloromethane,
1,2-Dichloroethane,
1,2-Dibromoethane,
1-Chlorohexane
2-Hexanone
1-Butanol
1,1,1,2-Tetrachloroethane
1-Chlorohexane
m,p-Xylene,
Bromoform,P
o-Xylene,
Isopropylbenzene,
Cyclohexanone
Cyclohexanone
Cyclohexanone

Manual Integration Approval Summary

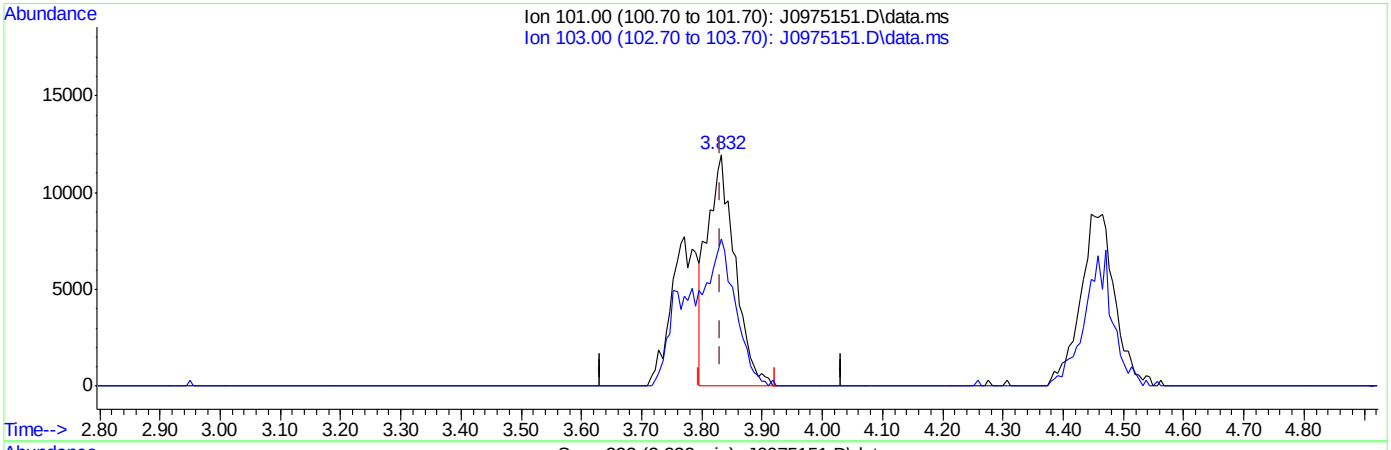
Sample Number:	VJ5237-IC5237	**Method:**	SW846 8260B
Lab FileID:	J0975151.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 14:41	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

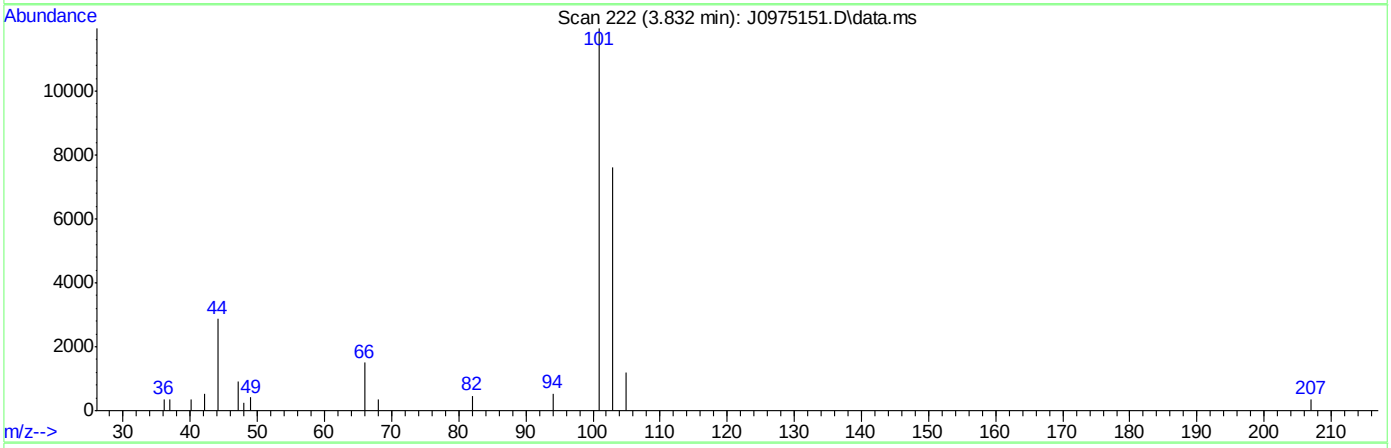
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.83	Split peak
Ethyl Alcohol	64-17-5		4.28	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975151.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 2.87ug/L

response 37793

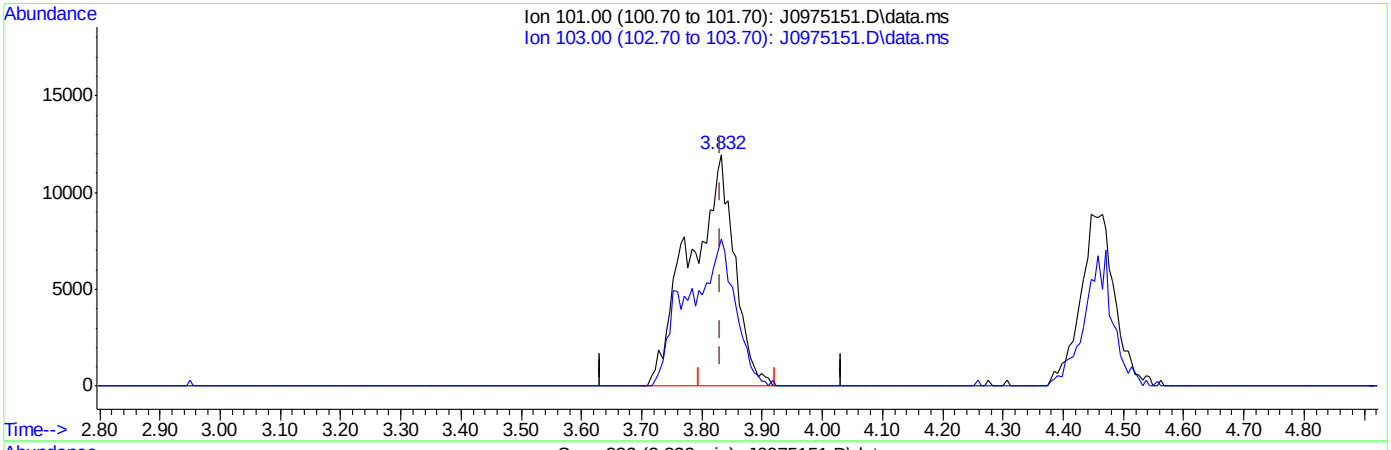
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	63.74
0.00	0.00	0.00
0.00	0.00	0.00

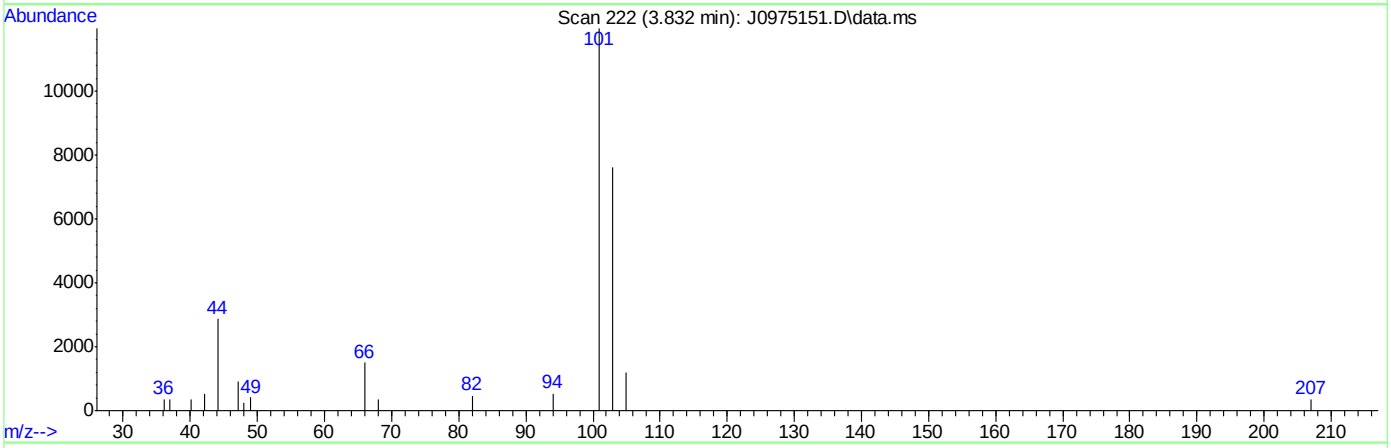
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975151.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 4.67ug/L m

response 61441

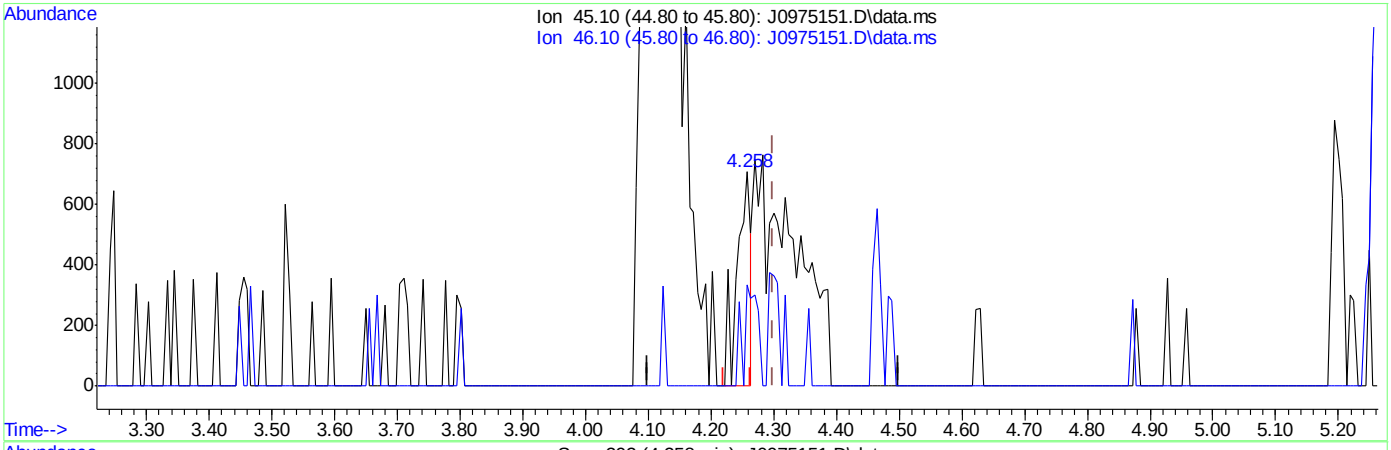
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	63.74
0.00	0.00	0.00
0.00	0.00	0.00

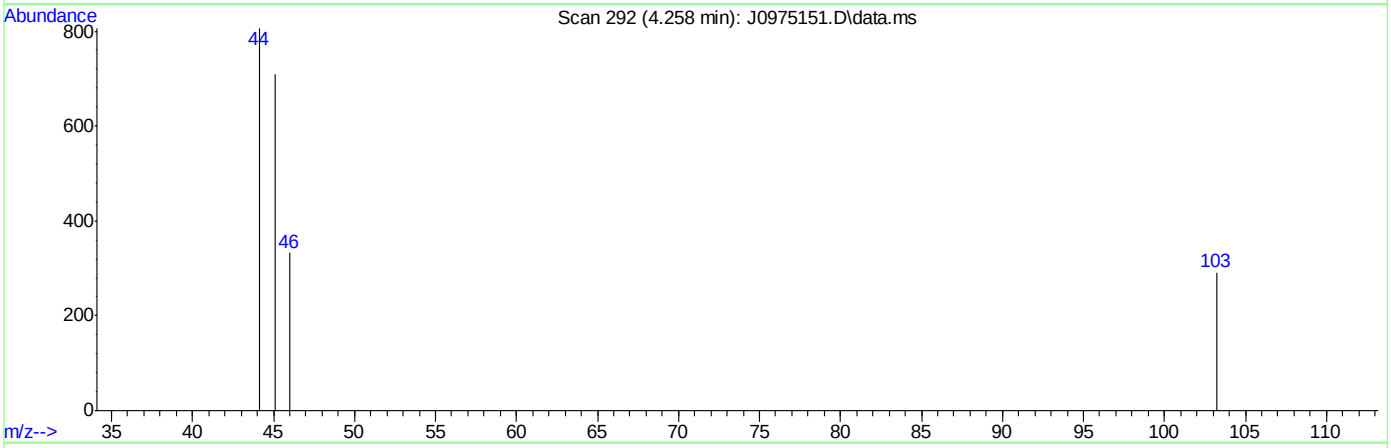
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975151.D\data.ms

(107) Ethanol

4.258min (-0.042) 31.39ug/L

response 1092

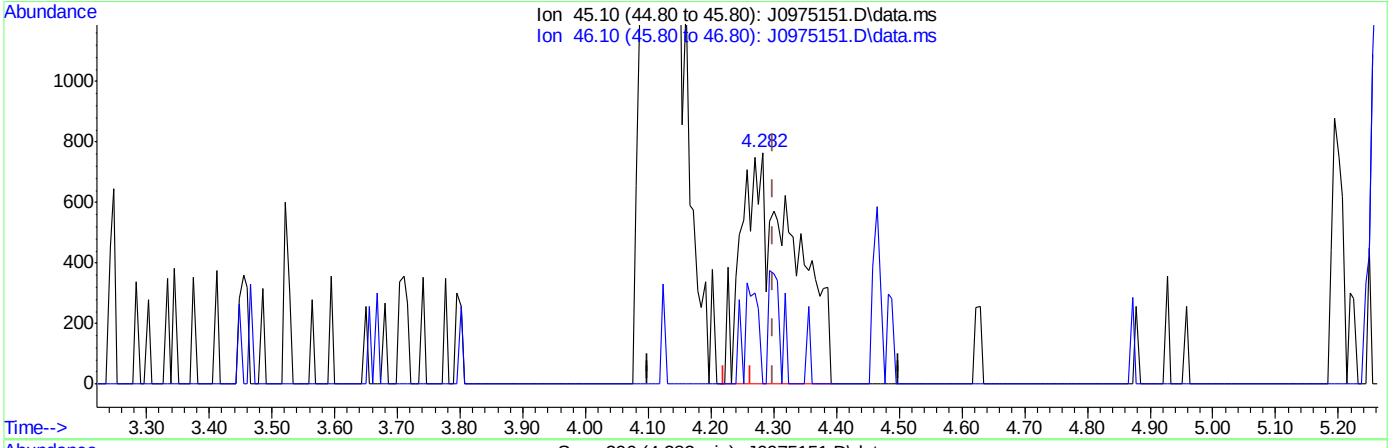
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	47.03
0.00	0.00	0.00
0.00	0.00	0.00

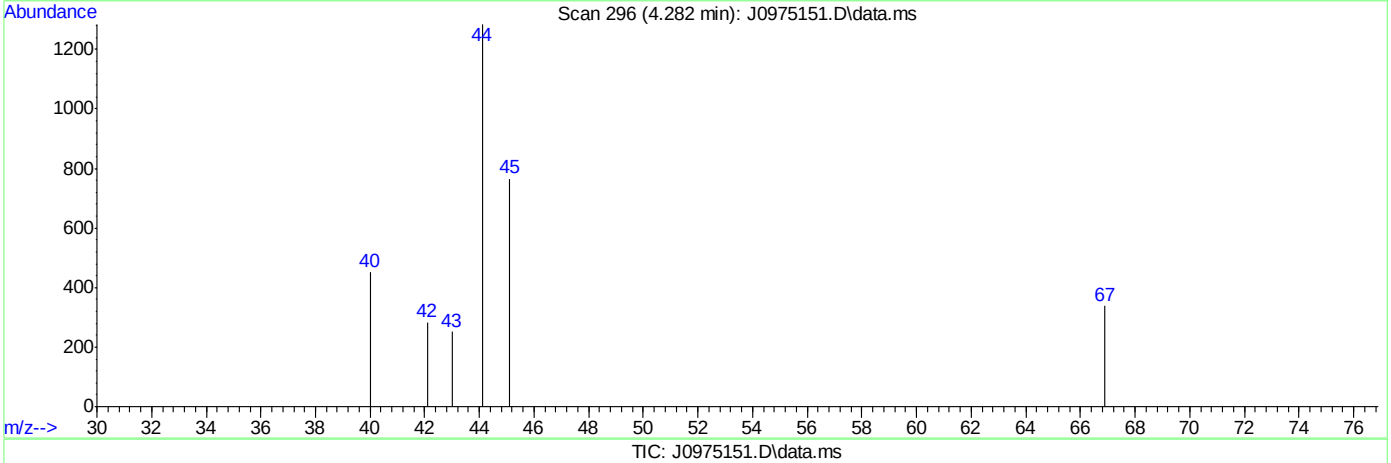
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975151.D\data.ms

(107) Ethanol

4.282min (-0.018) 130.44ug/L m

response 4538

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1542004	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1142014	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	645463	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.292	65	86968	250.00	ug/L	-0.01
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	390494	49.55	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.10%			
46) 1,2-Dichloroethane-d4	7.482	65	480391	50.46	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.92%			
57) Toluene-d8	9.301	98	1510629	49.99	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.98%			
79) 4-Bromofluorobenzene	12.057	95	583662	47.09	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 94.18%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.682	85	96837	9.39	ug/L	89
3) Chloromethane	2.889	50	98790	9.76	ug/L	92
4) Vinyl Chloride	3.035	62	100613	9.52	ug/L	99
5) 1,3-Butadiene	3.023	54	82854	9.75	ug/L	94
6) Bromomethane	3.455	94	76300	11.20	ug/L	97
7) Chloroethane	3.613	64	54861	9.56	ug/L	98
8) Trichlorofluoromethane	3.832	101	129700m	9.58	ug/L	
9) Ethyl Ether	4.118	59	60071	9.39	ug/L	98
10) 1,2-Dichlorotrifluoroe...	4.361	67	90564	10.00	ug/L	93
11) 1,1-Dichloroethene	4.392	61	111413	9.75	ug/L	96
12) Freon 113	4.452	101	78248	10.25	ug/L	96
13) Carbon Disulfide	4.471	76	231267	9.54	ug/L	92
14) Iodomethane	4.580	142	121731	9.73	ug/L	97
15) Allyl chloride	4.921	41	103477	9.62	ug/L	90
16) Methylene Chloride	5.043	49	104616	10.01	ug/L	98
17) Acetone	5.079	58	24885	57.38	ug/L	94
18) Methyl acetate	5.195	74	43154	47.33	ug/L	93
19) trans-1,2-Dichloroethene	5.225	61	102701	9.23	ug/L	95
20) Hexane	5.298	56	67523	9.75	ug/L	95
21) Methyl Tert Butyl Ether	5.335	73	199338	9.58	ug/L	82
22) Acetonitrile	5.590	40	35809	111.18	ug/L	97
23) Di-isopropyl ether	5.718	45	228448	9.53	ug/L	97
24) Chloroprene	5.870	53	108840	9.22	ug/L	96
25) 1,1-Dichloroethane	5.894	63	136729	9.48	ug/L	99
26) Acrylonitrile	5.925	53	101112	50.59	ug/L	95
27) ETBE	6.113	59	228598	9.53	ug/L	98
28) Vinyl acetate	6.113	43	617170	51.43	ug/L	96
29) cis-1,2-Dichloroethene	6.472	96	86398	9.39	ug/L	96
30) 2,2-Dichloropropane	6.600	77	106201	9.81	ug/L	98
31) Bromochloromethane	6.685	128	40628	9.51	ug/L	97
32) Cyclohexane	6.728	56	128094	9.95	ug/L	96
33) Chloroform	6.740	83	149140	9.47	ug/L	96
34) Ethyl acetate	6.807	43	238777	49.82	ug/L	99

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) Tetrahydrofuran	6.922	42	14645	10.65 ug/L	93
37) Carbon Tetrachloride	6.928	117	98194m	8.99 ug/L	
38) 1,1,1-Trichloroethane	6.995	97	130953	9.89 ug/L	96
39) 2-Butanone	7.032	43	95601	45.54 ug/L	97
40) 1,1-Dichloropropene	7.105	75	102750	9.36 ug/L	96
41) tert-Butyl Formate	7.184	59	431536	89.05 ug/L #	79
42) Propionitrile	7.336	54	71061	97.45 ug/L	99
43) Methacrylonitrile	7.360	41	364135	107.10 ug/L	98
44) Benzene	7.360	78	307875	9.21 ug/L	98
45) TAME	7.433	73	201643	9.53 ug/L	94
47) 1,2-Dichloroethane	7.549	62	108962	9.44 ug/L	97
48) Trichloroethene	7.938	95	82434	9.35 ug/L	95
49) Methylcyclohexane	7.957	83	140503	10.10 ug/L	94
50) Dibromomethane	8.364	93	43618	9.51 ug/L	91
51) 1,2-Dichloropropane	8.449	63	77405	9.41 ug/L	97
52) Bromodichloromethane	8.498	83	100869	9.52 ug/L	97
53) Methyl methacrylate	8.595	41	41843	9.45 ug/L	96
54) 2-Chloroethyl vinyl ether	9.009	63	198236	44.77 ug/L	99
55) cis-1,3-Dichloropropene	9.112	75	111485	9.33 ug/L	96
58) Toluene	9.356	91	333474	9.35 ug/L	98
59) 2-Nitropropane	9.557	41	56369	40.49 ug/L	98
60) 4-Methyl-2-pentanone	9.672	43	241484	48.48 ug/L	98
61) trans-1,3-Dichloropropene	9.739	75	91892	9.35 ug/L	99
62) Tetrachloroethene	9.757	166	86651	8.91 ug/L	97
63) Ethyl methacrylate	9.842	69	75067	8.79 ug/L	96
64) 1,1,2-Trichloroethane	9.903	83	53956	9.61 ug/L	94
65) Dibromochloromethane	10.104	129	64538	8.94 ug/L	90
66) 1,3-Dichloropropane	10.183	76	107662	9.37 ug/L	95
67) 1,2-Dibromoethane	10.366	107	59559	9.73 ug/L	99
68) 2-hexanone	10.493	43	156481	46.19 ug/L	94
69) 1-Chlorohexane	10.798	91	97922	9.33 ug/L	95
70) Ethylbenzene	10.858	91	385160	9.25 ug/L	99
71) Chlorobenzene	10.865	112	216946	9.43 ug/L	92
72) 1,1,1,2-Tetrachloroethane	10.913	131	67973	9.29 ug/L	96
73) m,p-Xylene	10.998	91	586786	18.12 ug/L	96
74) o-Xylene	11.436	91	293795	9.82 ug/L	98
75) Styrene	11.485	104	209544	9.47 ug/L	97
76) Bromoform	11.546	173	37240	9.38 ug/L	97
77) Isopropylbenzene	11.741	105	344800	9.12 ug/L	99
80) cis-1,4-Dichloro-2-butene	12.087	53	20702	12.22 ug/L #	83
81) n-Propylbenzene	12.160	91	424611	9.43 ug/L	96
82) Bromobenzene	12.185	156	94857	9.08 ug/L	100
83) 1,1,2,2-Tetrachloroethane	12.221	83	76382	9.98 ug/L	97
84) 1,3,5-Trimethylbenzene	12.343	105	313459	9.35 ug/L	97
85) 2-Chlorotoluene	12.355	91	305103	9.36 ug/L	97
86) trans-1,4-Dichloro-2-B...	12.404	53	18224	11.47 ug/L #	83
87) 1,2,3-Trichloropropane	12.385	110	19886	9.45 ug/L	96
88) Cyclohexanone	12.446	55	6163	48.04 ug/L	95
89) 4-Chlorotoluene	12.519	91	274526	9.17 ug/L	99
90) a-Methyl Styrene	12.611	118	83330	8.90 ug/L	98

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) tert-Butylbenzene	12.684	91	180959	9.16	ug/L	94
92) 1,2,4-Trimethylbenzene	12.750	105	317609	9.46	ug/L	98
93) Pentachloroethane	12.738	167	53231	11.32	ug/L	98
94) sec-Butylbenzene	12.872	105	388833	9.74	ug/L	99
95) 4-Isopropyltoluene	13.000	119	322012	9.68	ug/L	99
96) 1,3-Dichlorobenzene	13.140	146	170341	9.52	ug/L	98
97) 1,4-Dichlorobenzene	13.219	146	178667	9.41	ug/L	92
98) n-Butylbenzene	13.432	92	181738	9.54	ug/L	98
99) Benzyl Chloride	13.450	126	20775	9.56	ug/L	98
100) 1,2-Dichlorobenzene	13.645	146	158407	9.75	ug/L	99
101) 1,2-Dibromo-3-Chloropr...	14.381	75	10283	15.60	ug/L	91
102) Hexachlorobutadiene	14.928	225	72278	13.85	ug/L	98
103) 1,2,4-Trichlorobenzene	14.977	180	115617	19.85	ug/L	97
104) Naphthalene	15.263	128	173792	24.23	ug/L	99
105) 1,2,3-Trichlorobenzene	15.427	180	100782	26.68	ug/L	96
107) Ethanol	4.282	45	9223m	244.52	ug/L	
108) acrolein	4.757	56	52343	54.58	ug/L	93
109) Tert Butyl Alcohol	5.371	59	43268	107.11	ug/L	83
110) tert Amyl alcohol	7.573	59	29873	99.13	ug/L	91
111) Isobutyl alcohol	7.452	42	29297	179.04	ug/L #	88
112) 1,4-Dioxane	8.674	88	6964	180.83	ug/L	98
113) 3,3-Dimethyl-1-butanol	10.433	57	188130	559.66	ug/L	96

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

7.6.3

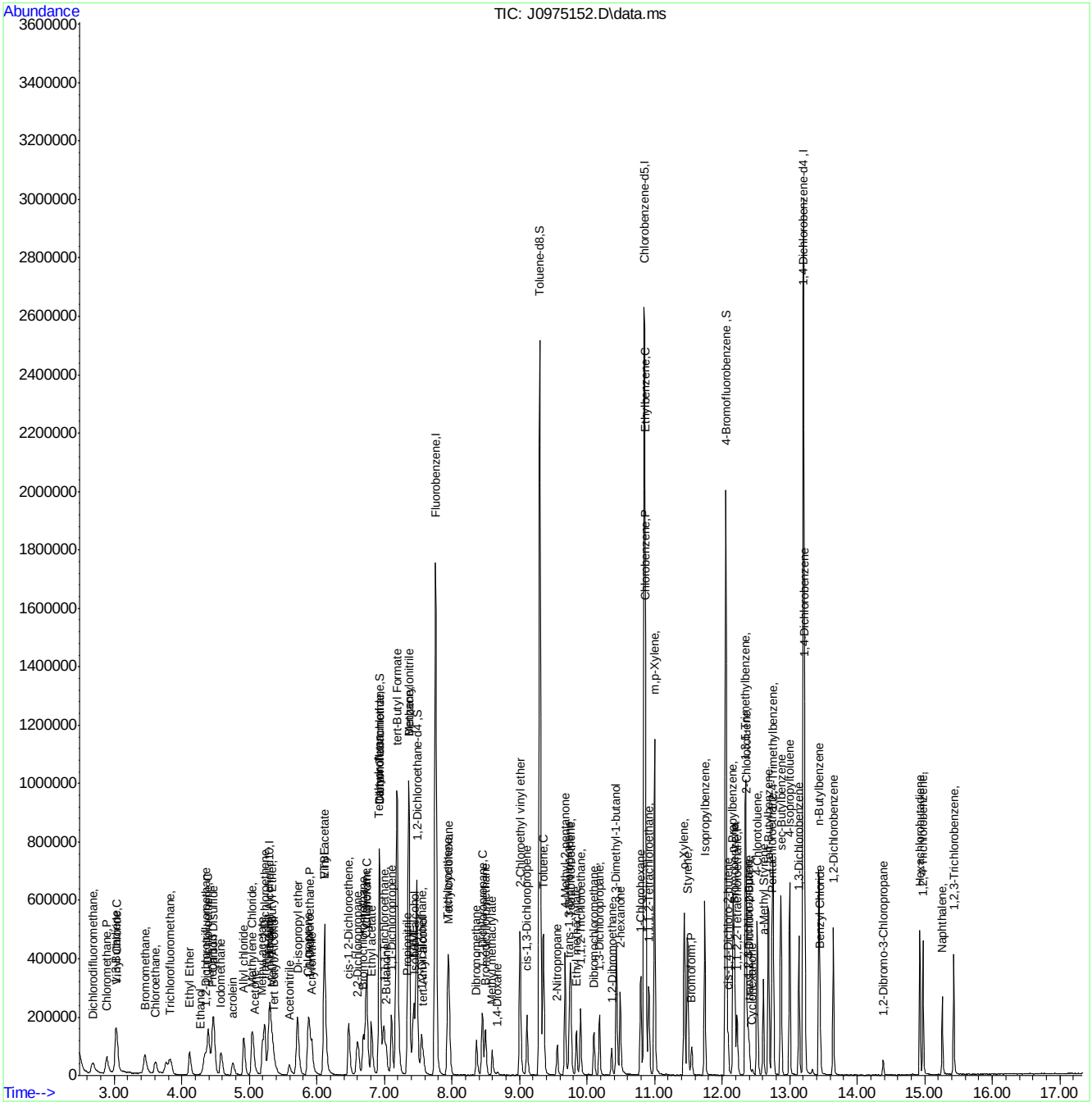
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

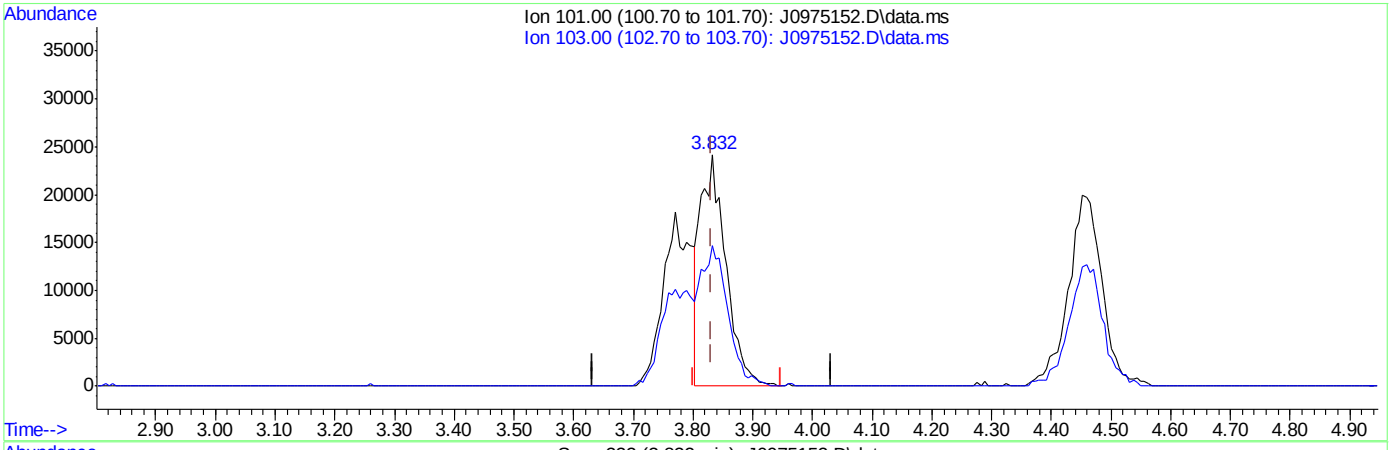
Sample Number:	VJ5237-IC5237	**Method:**	SW846 8260B
Lab FileID:	J0975152.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 15:05	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

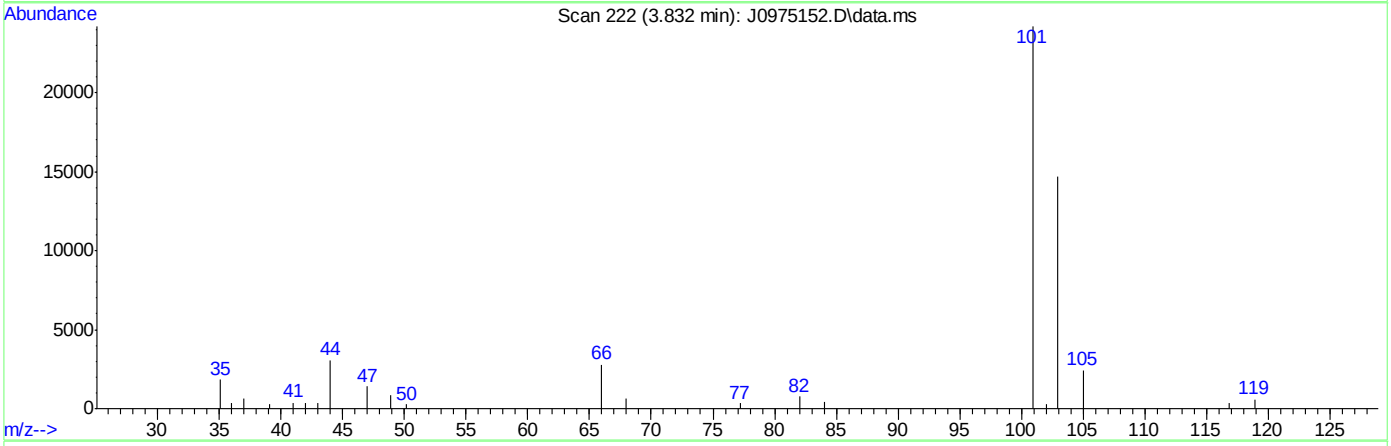
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.83	Split peak
Ethyl Alcohol	64-17-5		4.28	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975152.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 5.33ug/L

response 72205

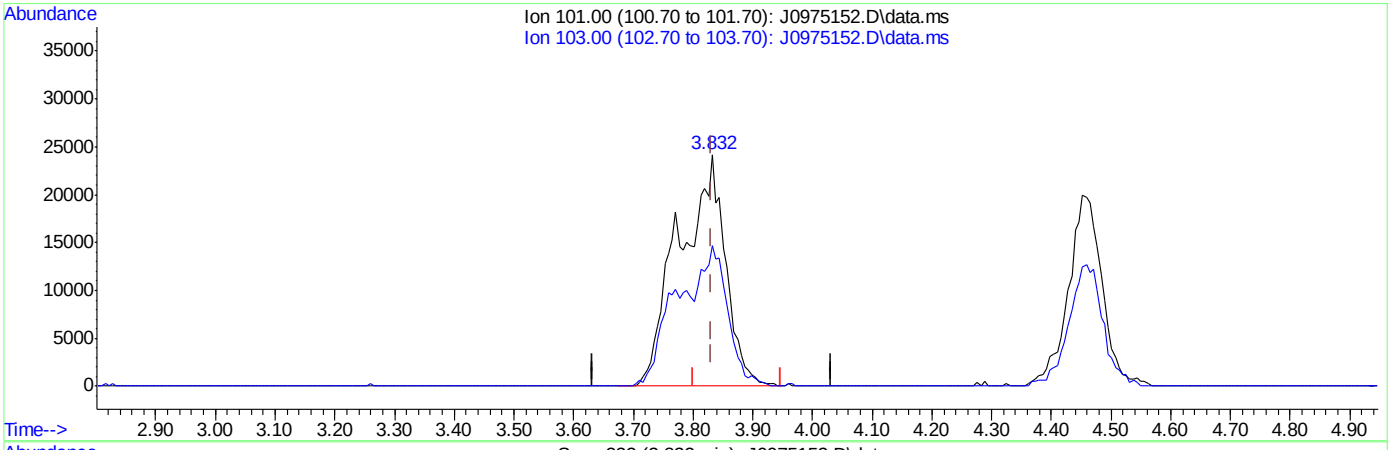
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	60.65
0.00	0.00	0.00
0.00	0.00	0.00

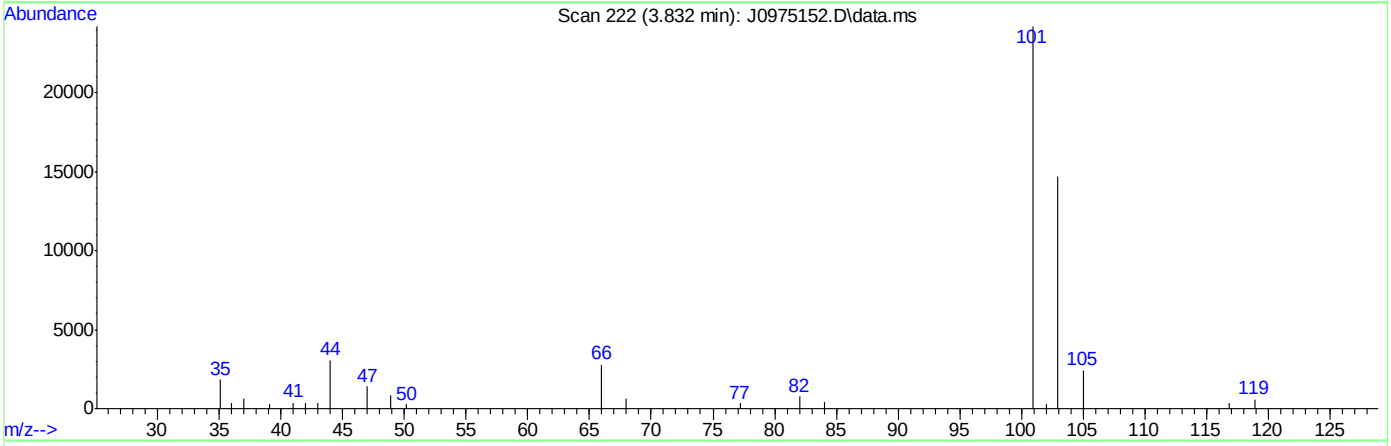
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975152.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 9.58ug/L m

response 129700

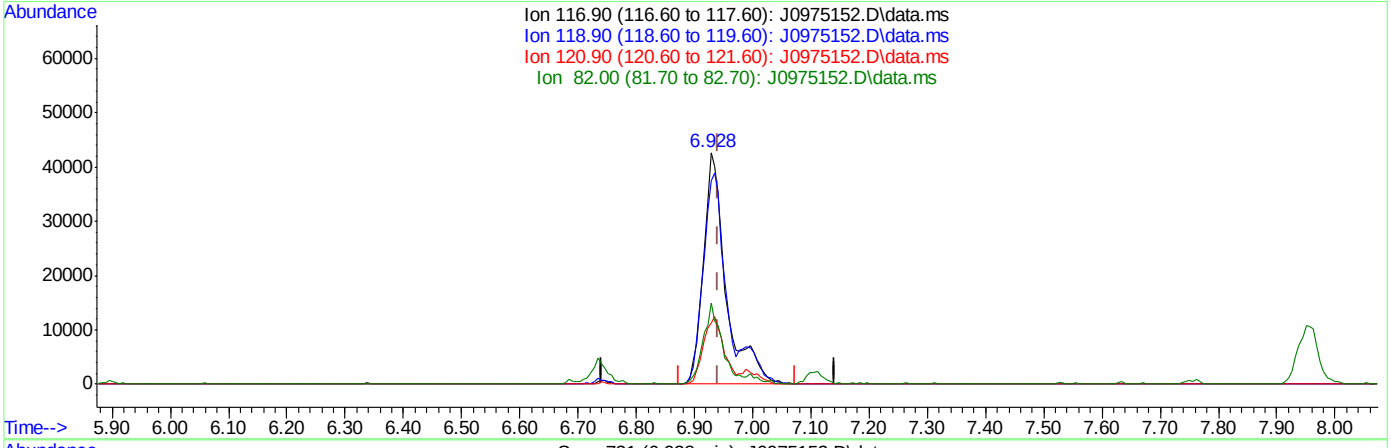
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	60.65
0.00	0.00	0.00
0.00	0.00	0.00

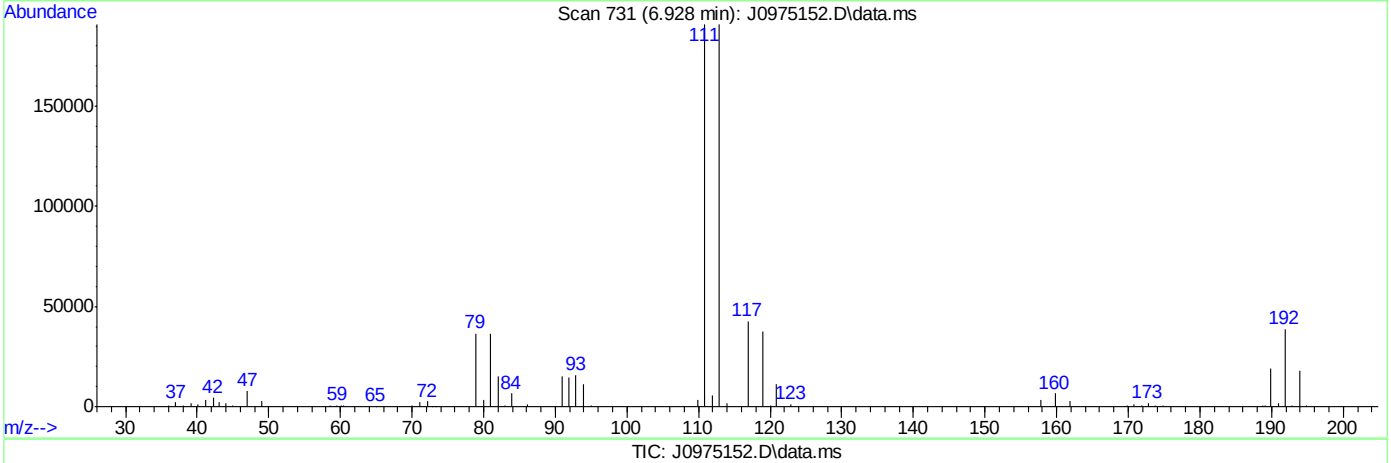
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975152.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.013) 10.70ug/L

response 116845

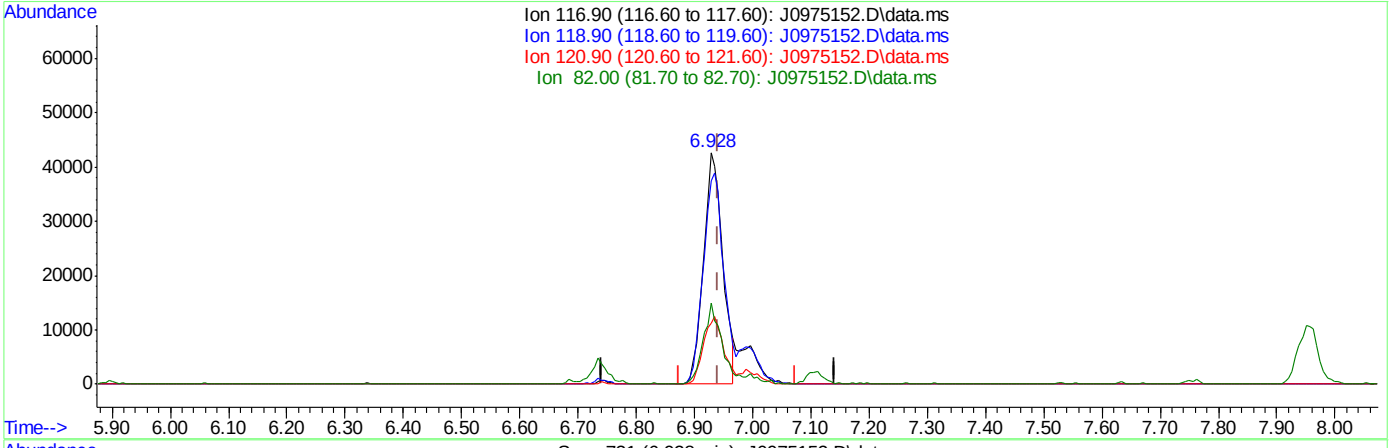
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	87.87
120.90	31.80	26.11
82.00	25.40	35.08

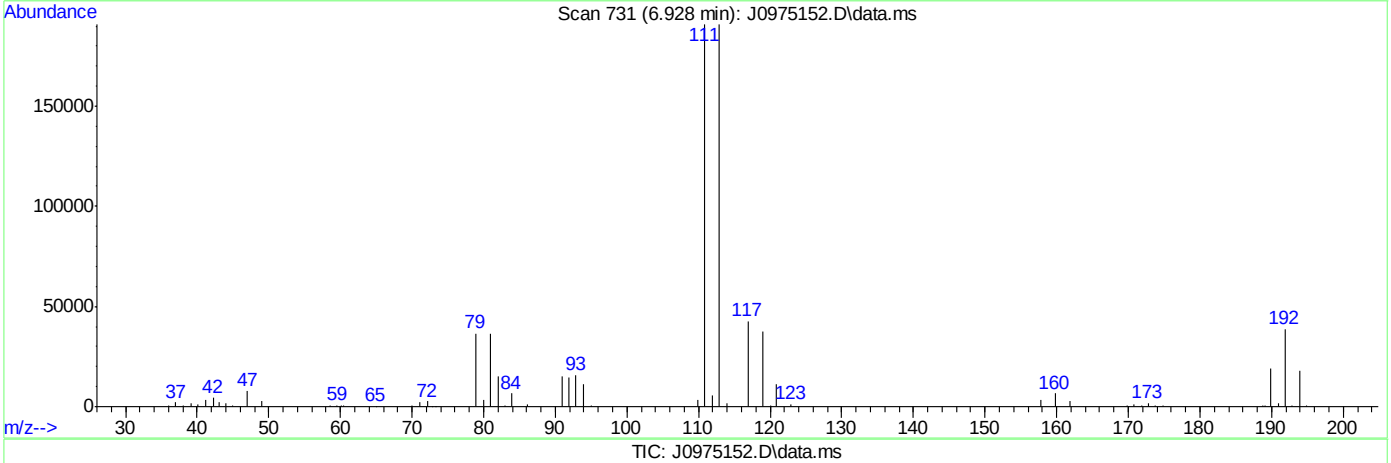
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975152.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.013) 8.99ug/L m

response 98194

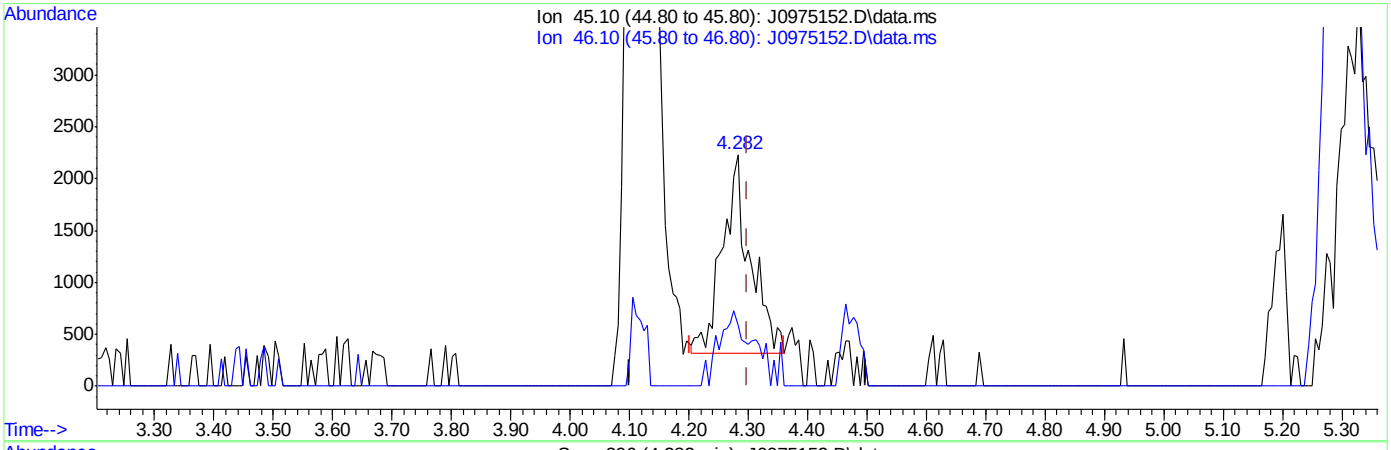
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	87.87
120.90	31.80	26.11
82.00	25.40	35.08

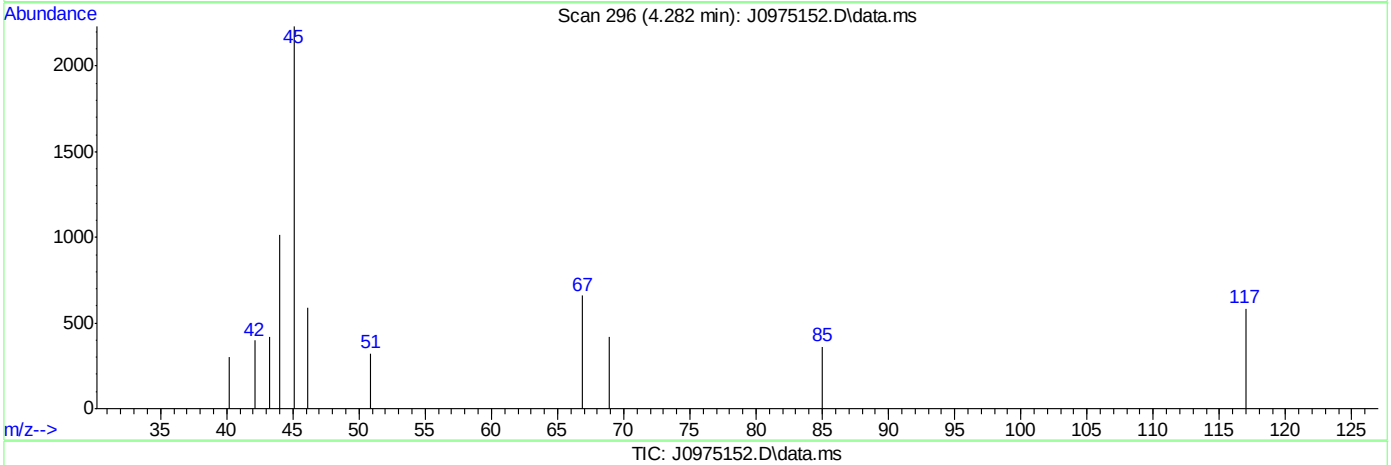
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975152.D\data.ms

(107) Ethanol

4.282min (-0.018) 164.75ug/L

response 6214

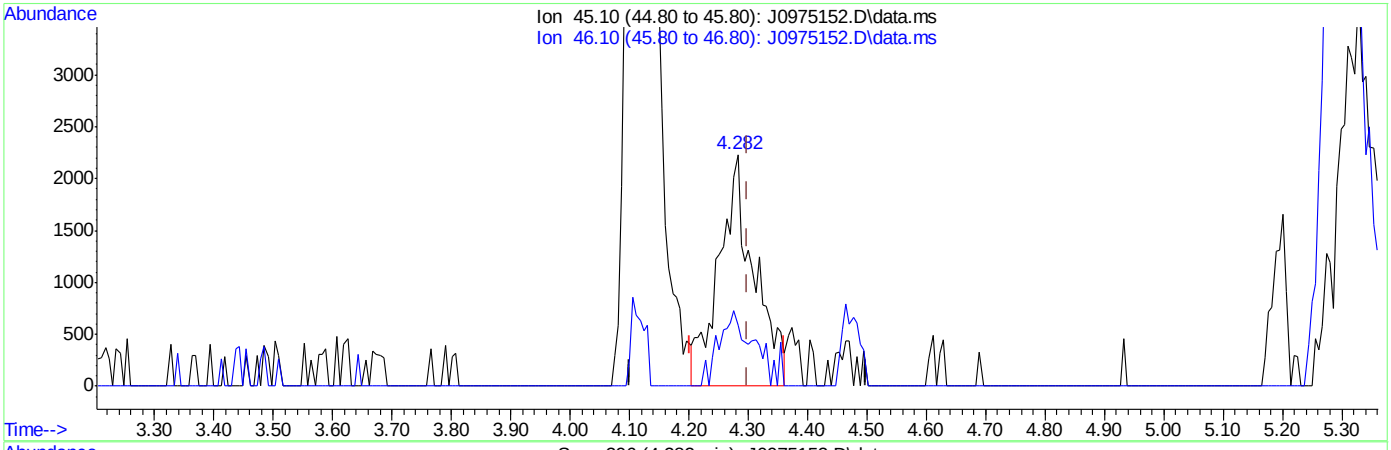
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	30.86
0.00	0.00	0.00
0.00	0.00	0.00

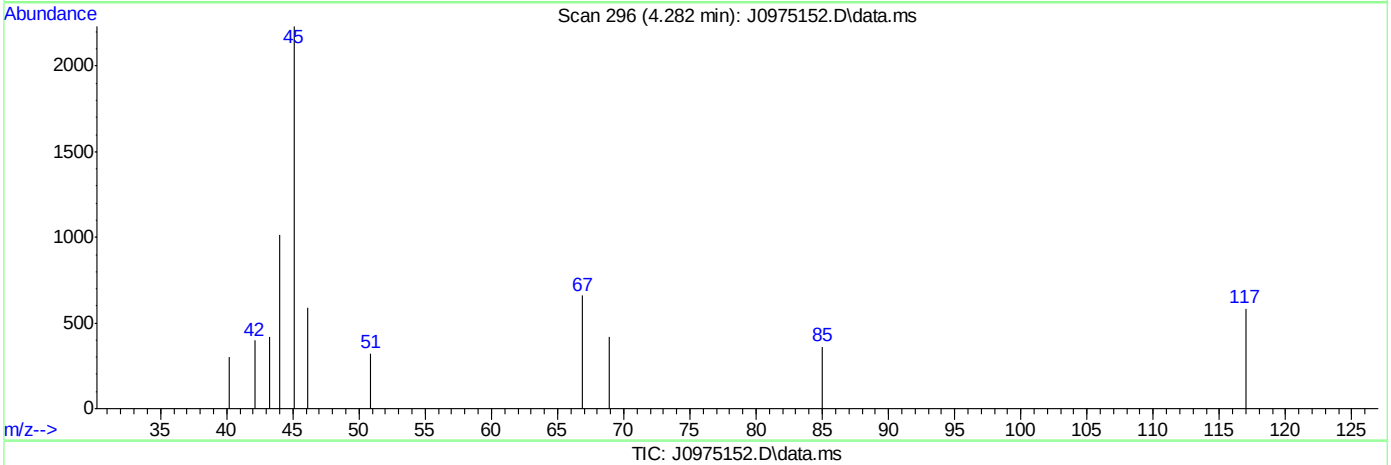
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975152.D\data.ms

(107) Ethanol

4.282min (-0.018) 244.52ug/L m

response 9223

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	26.48
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.762	96	1533430	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1155545	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	660864	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.310	65	80804	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	385904	49.24	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.48%			
46) 1,2-Dichloroethane-d4	7.482	65	478987	50.60	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.20%			
57) Toluene-d8	9.301	98	1526389	49.92	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.84%			
79) 4-Bromofluorobenzene	12.057	95	594796	46.87	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.74%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.688	85	236090	23.03	ug/L	96
3) Chloromethane	2.895	50	248511	24.83	ug/L	99
4) Vinyl Chloride	3.041	62	262732	24.99	ug/L	97
5) 1,3-Butadiene	3.041	54	192842	22.81	ug/L	97
6) Bromomethane	3.467	94	183448	29.03	ug/L	99
7) Chloroethane	3.619	64	134383	25.30	ug/L	98
8) Trichlorofluoromethane	3.838	101	324542m	24.10	ug/L	
9) Ethyl Ether	4.124	59	148874	23.39	ug/L	92
10) 1,2-Dichlorotrifluoroe...	4.349	67	221917	24.65	ug/L	99
11) 1,1-Dichloroethene	4.398	61	275821	24.26	ug/L	95
12) Freon 113	4.464	101	193752	25.52	ug/L	97
13) Carbon Disulfide	4.477	76	582506	24.16	ug/L	99
14) Iodomethane	4.586	142	301222	24.20	ug/L	99
15) Allyl chloride	4.921	41	256312	23.95	ug/L	96
16) Methylene Chloride	5.042	49	250982	24.38	ug/L	98
17) Acetone	5.067	58	56549	130.19	ug/L	98
18) Methyl acetate	5.201	74	110573	121.96	ug/L	94
19) trans-1,2-Dichloroethene	5.231	61	254770	23.02	ug/L	98
20) Hexane	5.298	56	165802	24.07	ug/L	98
21) Methyl Tert Butyl Ether	5.334	73	508807	24.59	ug/L	85
22) Acetonitrile	5.590	40	70431	222.21	ug/L	95
23) Di-isopropyl ether	5.718	45	579005	24.29	ug/L	95
24) Chloroprene	5.870	53	268885	22.90	ug/L	98
25) 1,1-Dichloroethane	5.900	63	334371	23.31	ug/L	98
26) Acrylonitrile	5.925	53	252370	126.97	ug/L	96
27) ETBE	6.119	59	598509	25.08	ug/L	99
28) Vinyl acetate	6.113	43	1542708	129.29	ug/L	97
29) cis-1,2-Dichloroethene	6.478	96	214930	23.50	ug/L	99
30) 2,2-Dichloropropane	6.606	77	262403	24.38	ug/L	95
31) Bromochloromethane	6.685	128	96920	22.82	ug/L	93
32) Cyclohexane	6.734	56	324888	25.37	ug/L	97
33) Chloroform	6.740	83	376439	24.05	ug/L	98
34) Ethyl acetate	6.813	43	597459	125.36	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35)	Tetrahydrofuran	6.922	42	33527	24.42	ug/L	92
37)	Carbon Tetrachloride	6.934	117	262480m	24.16	ug/L	
38)	1,1,1-Trichloroethane	6.995	97	318246	24.16	ug/L	96
39)	2-Butanone	7.026	43	237967	114.01	ug/L	99
40)	1,1-Dichloropropene	7.105	75	262106	24.02	ug/L	99
41)	tert-Butyl Formate	7.190	59	1165018	241.25	ug/L	87
42)	Propionitrile	7.336	54	169075	233.16	ug/L	87
43)	Methacrylonitrile	7.360	41	781087	236.37	ug/L	96
44)	Benzene	7.360	78	797780	24.00	ug/L	100
45)	TAME	7.433	73	528216	25.10	ug/L	95
47)	1,2-Dichloroethane	7.549	62	269892	23.52	ug/L	98
48)	Trichloroethene	7.938	95	204516	23.33	ug/L	96
49)	Methylcyclohexane	7.956	83	351296	25.39	ug/L	99
50)	Dibromomethane	8.364	93	110710	24.27	ug/L	99
51)	1,2-Dichloropropane	8.449	63	197382	24.13	ug/L	99
52)	Bromodichloromethane	8.498	83	253035	24.02	ug/L	99
53)	Methyl methacrylate	8.595	41	106473	24.18	ug/L	94
54)	2-Chloroethyl vinyl ether	9.009	63	533856	122.44	ug/L	99
55)	cis-1,3-Dichloropropene	9.112	75	298406	25.11	ug/L	95
58)	Toluene	9.356	91	835217	23.62	ug/L	96
59)	2-Nitropropane	9.556	41	159940	113.53	ug/L	99
60)	4-Methyl-2-pentanone	9.672	43	610403	121.12	ug/L	98
61)	trans-1,3-Dichloropropene	9.739	75	248569	24.99	ug/L	96
62)	Tetrachloroethene	9.757	166	221333	22.50	ug/L	99
63)	Ethyl methacrylate	9.842	69	198559	22.96	ug/L	97
64)	1,1,2-Trichloroethane	9.903	83	138084	24.30	ug/L	97
65)	Dibromochloromethane	10.104	129	173760	23.68	ug/L	97
66)	1,3-Dichloropropane	10.183	76	279208	24.02	ug/L	96
67)	1,2-Dibromoethane	10.366	107	155004	25.02	ug/L	99
68)	2-hexanone	10.487	43	407879	118.99	ug/L	96
69)	1-Chlorohexane	10.797	91	250072	23.55	ug/L	98
70)	Ethylbenzene	10.864	91	966996	23.63	ug/L	99
71)	Chlorobenzene	10.864	112	542095	23.50	ug/L	93
72)	1,1,1,2-Tetrachloroethane	10.913	131	181972	24.59	ug/L	97
73)	m,p-Xylene	10.998	91	1479689	47.57	ug/L	98
74)	o-Xylene	11.436	91	757610	25.01	ug/L	98
75)	Styrene	11.485	104	576061	25.73	ug/L	98
76)	Bromoform	11.552	173	105048	25.68	ug/L	97
77)	Isopropylbenzene	11.747	105	895282	23.97	ug/L	99
80)	cis-1,4-Dichloro-2-butene	12.087	53	54472	31.42	ug/L	90
81)	n-Propylbenzene	12.160	91	1088512	23.62	ug/L	100
82)	Bromobenzene	12.185	156	240631	22.50	ug/L	98
83)	1,1,2,2-Tetrachloroethane	12.221	83	198304	25.30	ug/L	98
84)	1,3,5-Trimethylbenzene	12.343	105	824062	24.01	ug/L	99
85)	2-Chlorotoluene	12.355	91	783191	23.47	ug/L	97
86)	trans-1,4-Dichloro-2-B...	12.404	53	49038	29.39	ug/L	89
87)	1,2,3-Trichloropropane	12.385	110	49418	22.94	ug/L	93
88)	Cyclohexanone	12.452	55	14654	111.57	ug/L	94
89)	4-Chlorotoluene	12.519	91	691016	22.55	ug/L	99
90)	a-Methyl Styrene	12.610	118	225477	23.53	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) tert-Butylbenzene	12.683	91	469170	23.19	ug/L	94
92) 1,2,4-Trimethylbenzene	12.756	105	829299	24.13	ug/L	99
93) Pentachloroethane	12.738	167	136417	27.26	ug/L	97
94) sec-Butylbenzene	12.872	105	1000249	24.47	ug/L	100
95) 4-Isopropyltoluene	13.000	119	843251	24.76	ug/L	99
96) 1,3-Dichlorobenzene	13.140	146	437811	23.91	ug/L	97
97) 1,4-Dichlorobenzene	13.219	146	451698	23.23	ug/L	95
98) n-Butylbenzene	13.432	92	482211	24.72	ug/L	98
99) Benzyl Chloride	13.450	126	59122	25.52	ug/L #	93
100) 1,2-Dichlorobenzene	13.645	146	416704	25.05	ug/L	99
101) 1,2-Dibromo-3-Chloropr...	14.381	75	28131	39.89	ug/L	91
102) Hexachlorobutadiene	14.928	225	186738	34.17	ug/L	96
103) 1,2,4-Trichlorobenzene	14.977	180	312376	49.18	ug/L	99
104) Naphthalene	15.257	128	500811	59.09	ug/L	97
105) 1,2,3-Trichlorobenzene	15.427	180	273581	61.74	ug/L	99
107) Ethanol	4.282	45	18758m	535.26	ug/L	
108) acrolein	4.763	56	132543	148.76	ug/L	96
109) Tert Butyl Alcohol	5.383	59	97091	258.68	ug/L	95
110) tert Amyl alcohol	7.579	59	72108	257.53	ug/L	86
111) Isobutyl alcohol	7.452	42	73885	499.48	ug/L #	82
112) 1,4-Dioxane	8.674	88	16071	449.14	ug/L	87
113) 3,3-Dimethyl-1-butanol	10.439	57	441948	1363.94	ug/L	96

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

7.6.4

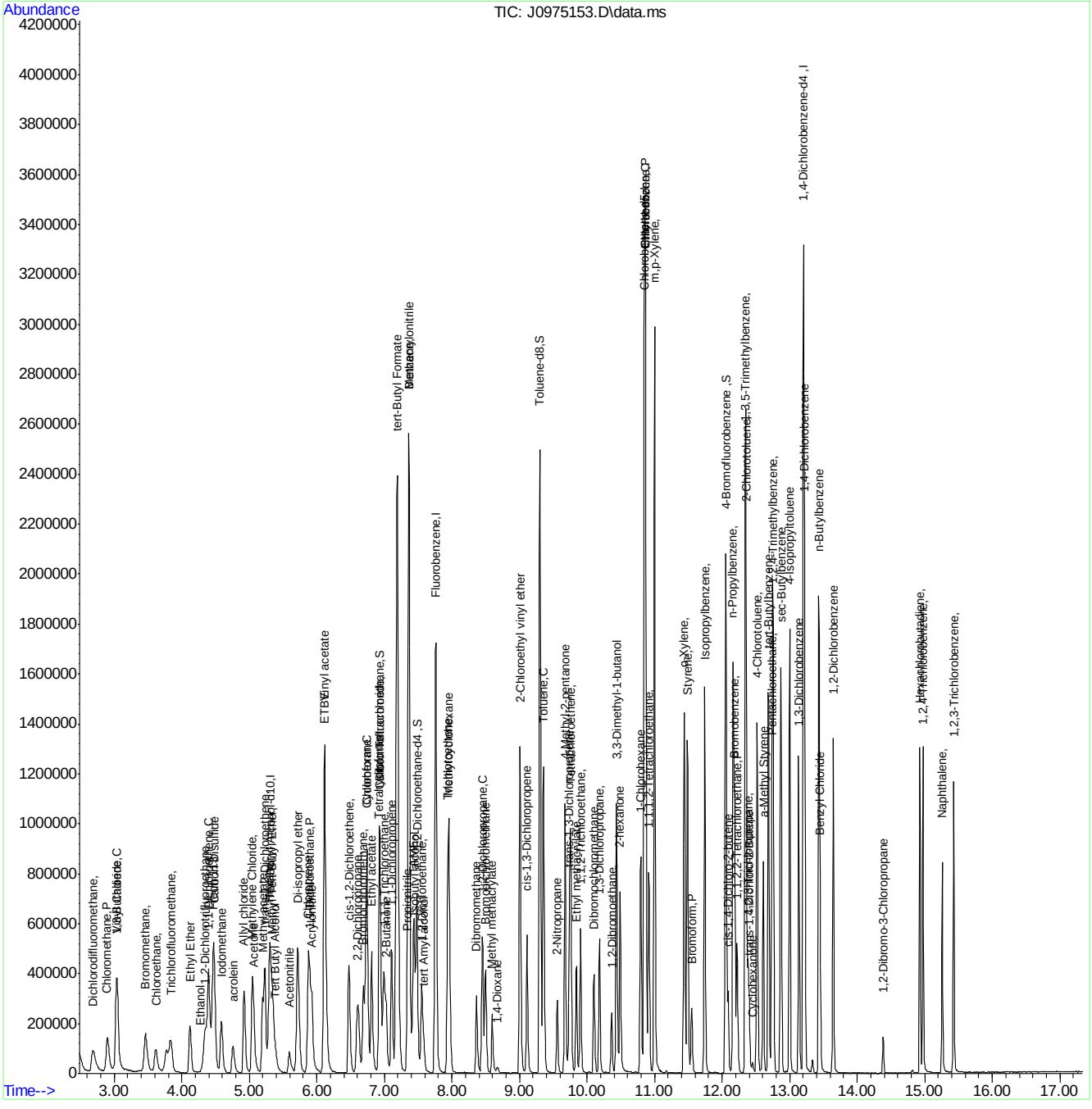
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

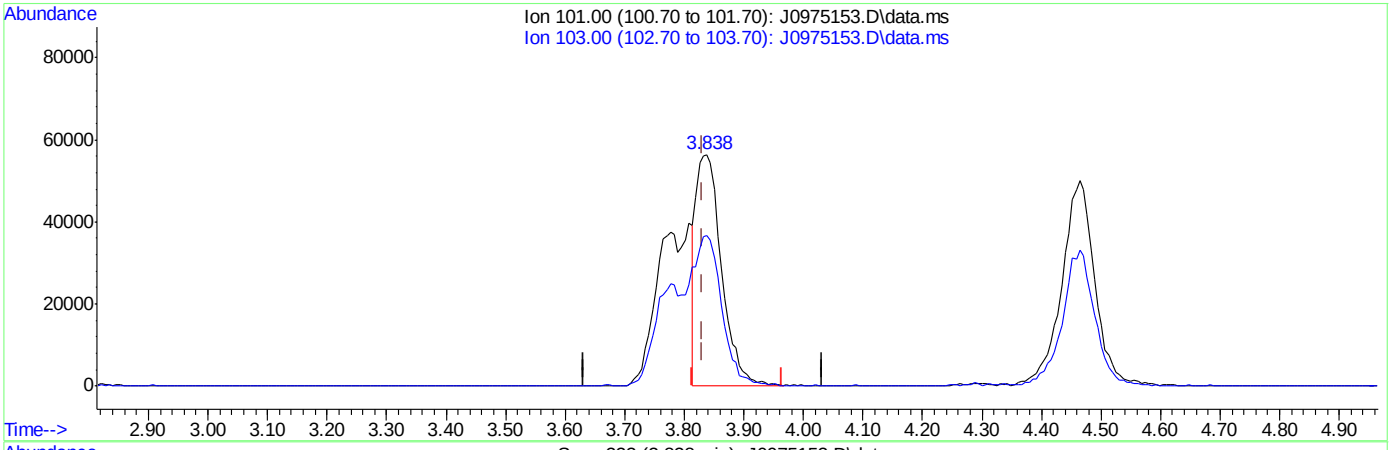
Sample Number:	VJ5237-IC5237	**Method:**	SW846 8260B
Lab FileID:	J0975153.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 15:28	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

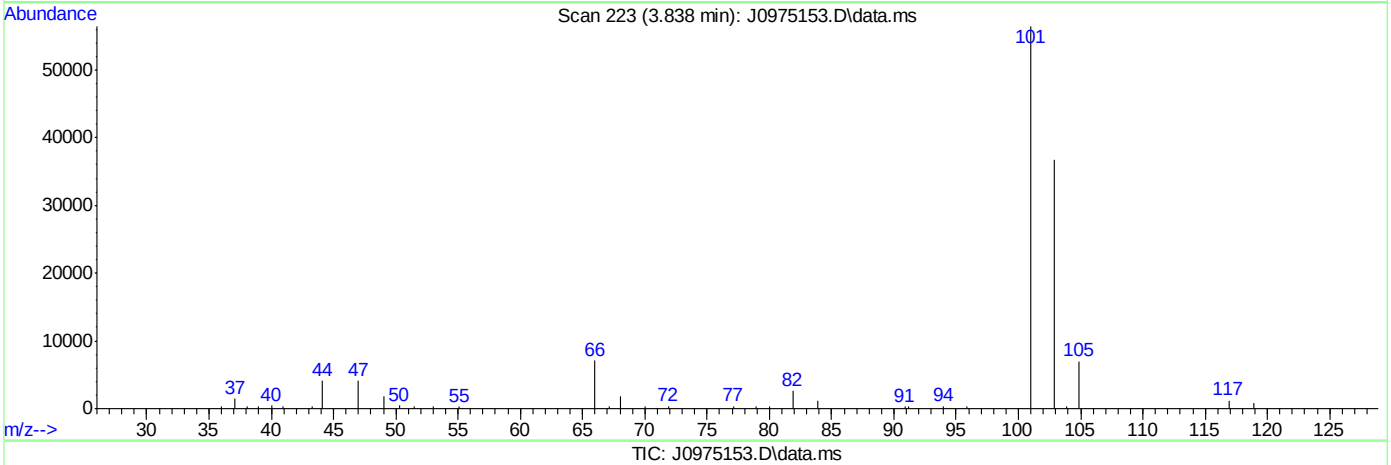
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.84	Split peak
Ethyl Alcohol	64-17-5		4.28	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975153.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 12.38ug/L

response 166709

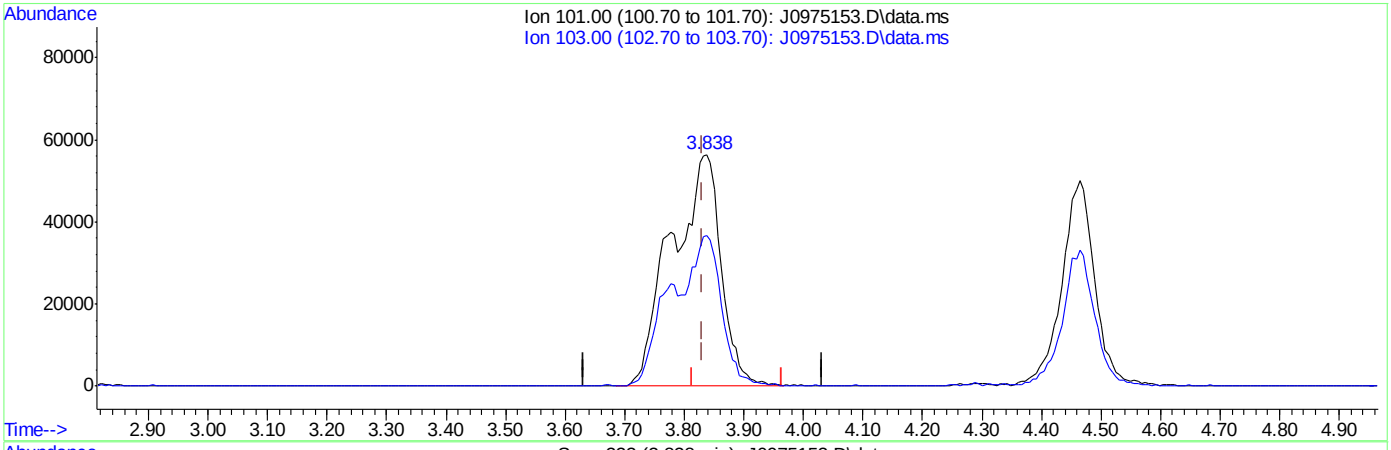
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	65.20
0.00	0.00	0.00
0.00	0.00	0.00

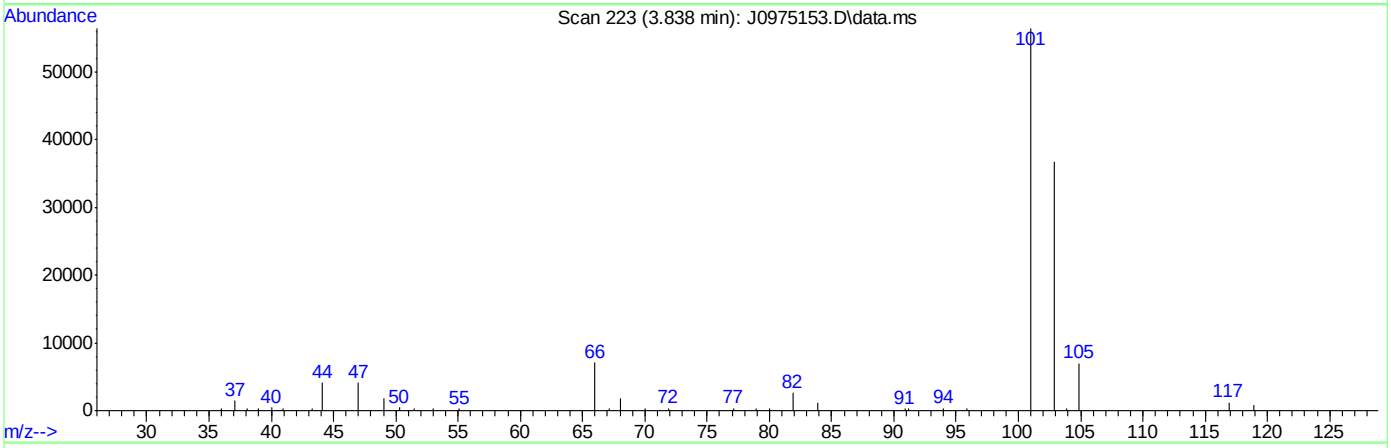
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975153.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 24.10ug/L m

response 324542

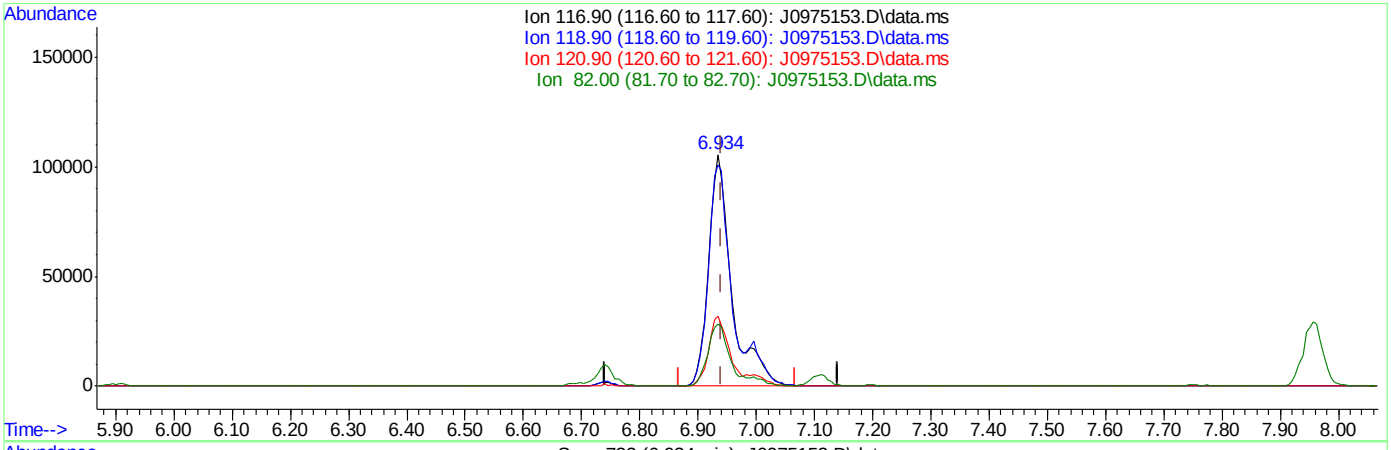
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	65.20
0.00	0.00	0.00
0.00	0.00	0.00

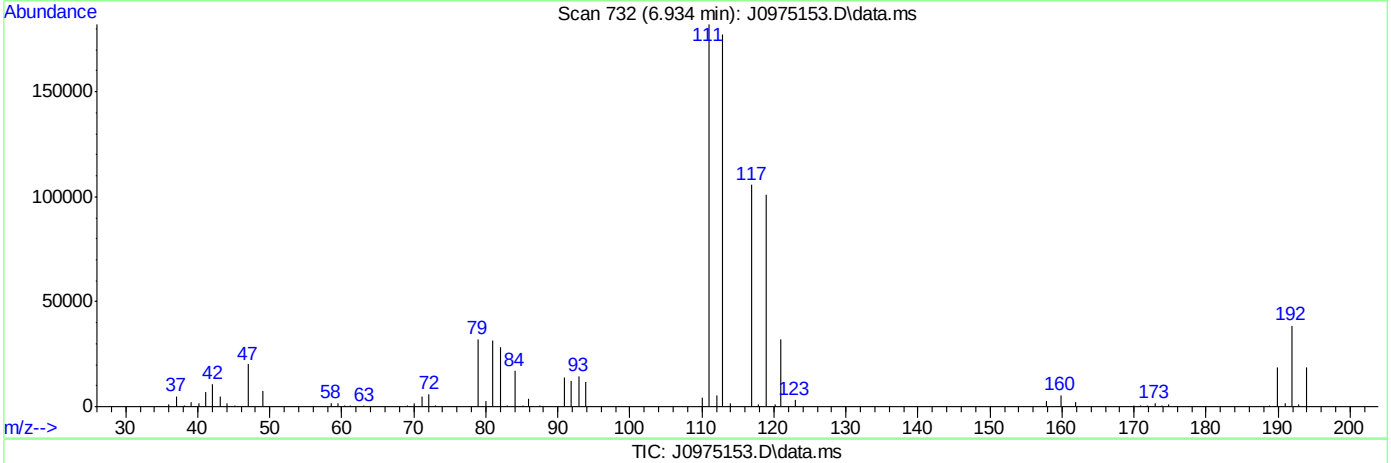
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975153.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 27.13ug/L

response 294752

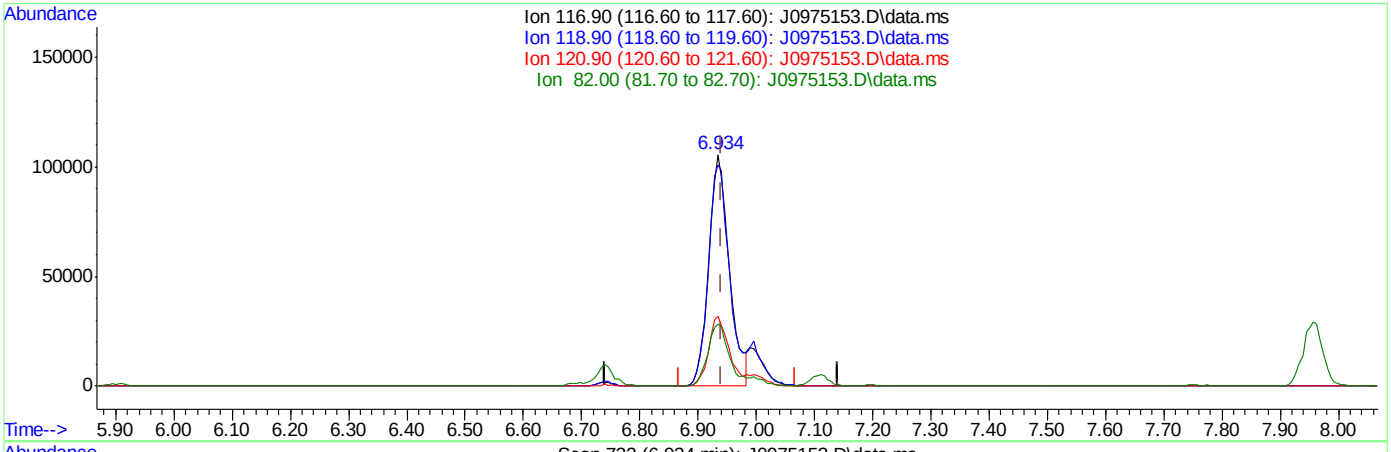
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	95.48
120.90	31.80	30.27
82.00	25.40	26.77

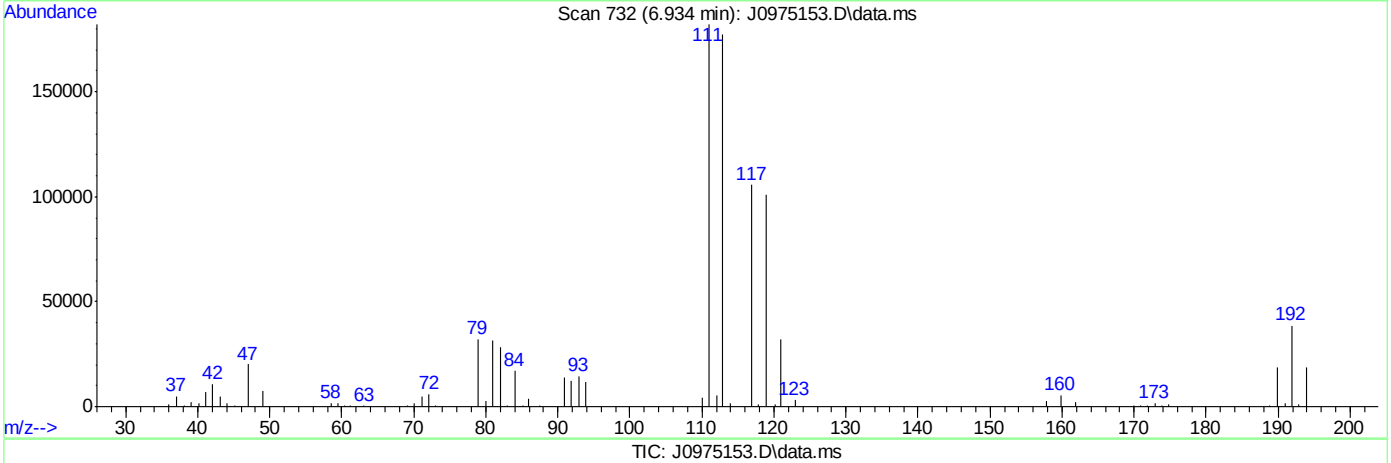
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975153.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 24.16ug/L m

response 262480

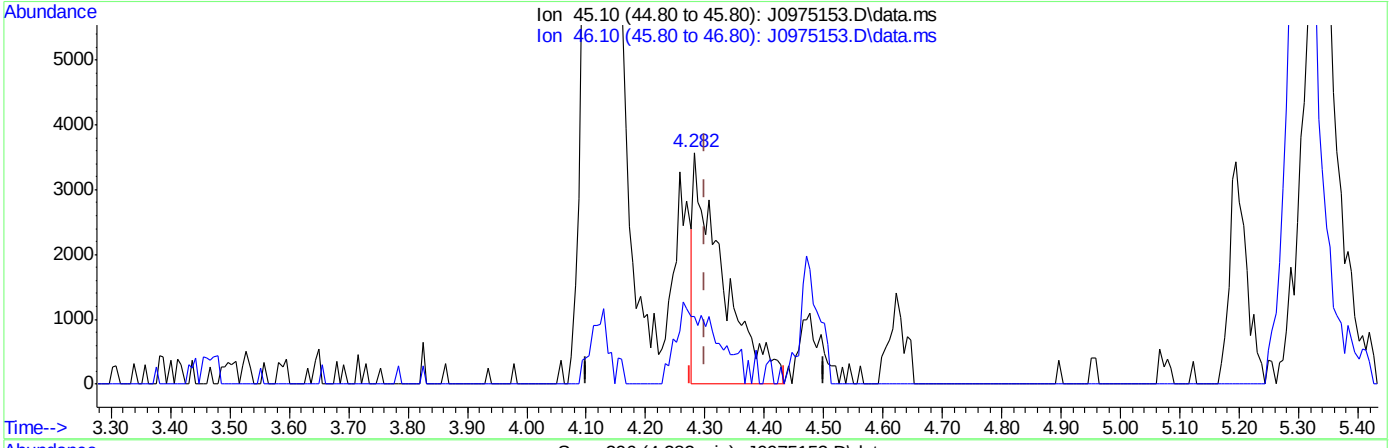
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	95.48
120.90	31.80	30.27
82.00	25.40	26.77

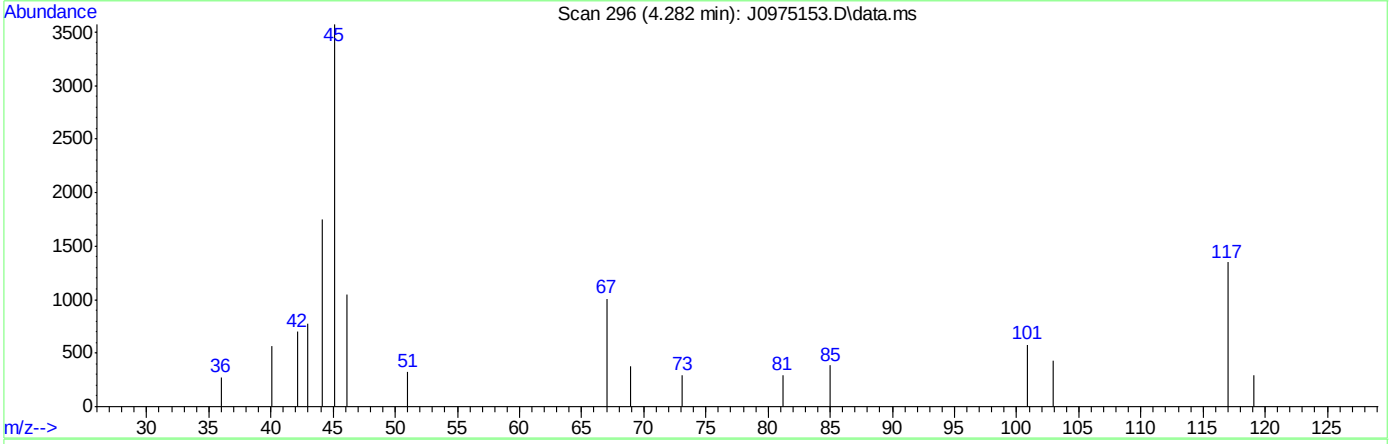
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975153.D\data.ms

(107) Ethanol

4.282min (-0.018) 352.95ug/L

response 12369

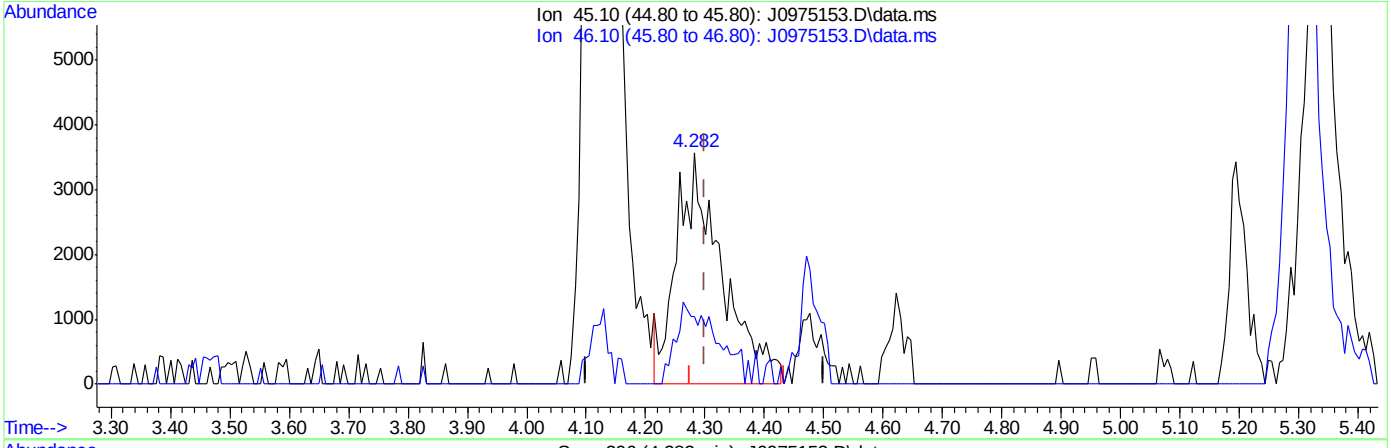
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	29.42
0.00	0.00	0.00
0.00	0.00	0.00

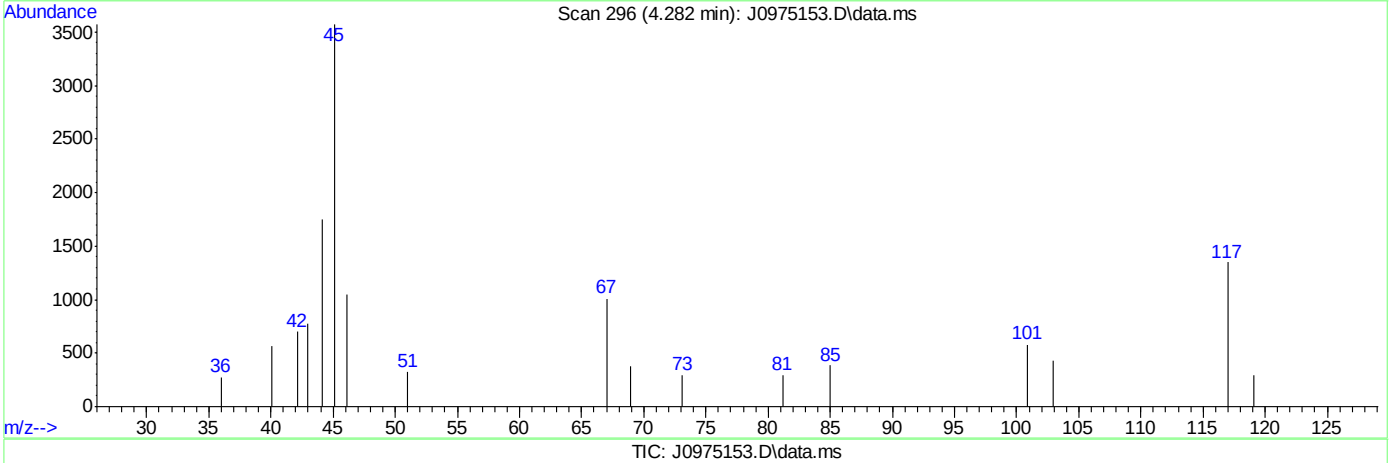
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975153.D\data.ms

(107) Ethanol

4.282min (-0.018) 535.26ug/L m

response 18758

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	29.42
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1586569	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1198090	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	683182	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	86536	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.929	113	408048	50.32	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.64%			
46) 1,2-Dichloroethane-d4	7.482	65	482966	49.31	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.62%			
57) Toluene-d8	9.301	98	1558079	49.14	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.28%			
79) 4-Bromofluorobenzene	12.057	95	616289	46.98	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.96%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.688	85	415271	39.15	ug/L	96
3) Chloromethane	2.901	50	424351	41.25	ug/L	100
4) Vinyl Chloride	3.041	62	445143	40.92	ug/L	94
5) 1,3-Butadiene	3.035	54	315692	36.10	ug/L	96
6) Bromomethane	3.461	94	289547	47.95	ug/L	99
7) Chloroethane	3.613	64	208091	40.89	ug/L	98
8) Trichlorofluoromethane	3.838	101	561191m	40.27	ug/L	
9) Ethyl Ether	4.118	59	255135	38.75	ug/L	96
10) 1,2-Dichlorotrifluoroe...	4.355	67	378597	40.65	ug/L	99
11) 1,1-Dichloroethene	4.392	61	464099	39.46	ug/L	98
12) Freon 113	4.465	101	322937	41.11	ug/L	99
13) Carbon Disulfide	4.471	76	980388	39.30	ug/L	97
14) Iodomethane	4.586	142	519003	40.30	ug/L	99
15) Allyl chloride	4.921	41	426981	38.56	ug/L	94
16) Methylene Chloride	5.043	49	421451	40.00	ug/L	95
17) Acetone	5.067	58	87983	194.56	ug/L	89
18) Methyl acetate	5.195	74	192440	205.15	ug/L	99
19) trans-1,2-Dichloroethene	5.225	61	434370	37.94	ug/L	98
20) Hexane	5.304	56	278304	39.05	ug/L	96
21) Methyl Tert Butyl Ether	5.335	73	873948	40.83	ug/L	83
22) Acetonitrile	5.584	40	111089	342.69	ug/L	91
23) Di-isopropyl ether	5.718	45	1011013	40.99	ug/L	99
24) Chloroprene	5.870	53	468107	38.53	ug/L	98
25) 1,1-Dichloroethane	5.900	63	571199	38.49	ug/L	99
26) Acrylonitrile	5.925	53	404863	196.86	ug/L	95
27) ETBE	6.113	59	1034777	41.91	ug/L	99
28) Vinyl acetate	6.113	43	2522469	204.32	ug/L	98
29) cis-1,2-Dichloroethene	6.472	96	375158	39.64	ug/L	96
30) 2,2-Dichloropropane	6.606	77	452177	40.61	ug/L	97
31) Bromochloromethane	6.685	128	170819	38.87	ug/L	98
32) Cyclohexane	6.734	56	547845	41.34	ug/L	95
33) Chloroform	6.740	83	640283	39.53	ug/L	97
34) Ethyl acetate	6.807	43	962139	195.12	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) Tetrahydrofuran	6.922	42	56284	39.45 ug/L	91
37) Carbon Tetrachloride	6.935	117	459299m	40.87 ug/L	
38) 1,1,1-Trichloroethane	6.995	97	555621	40.77 ug/L	96
39) 2-Butanone	7.026	43	404230	187.23 ug/L	97
40) 1,1-Dichloropropene	7.105	75	441244	39.08 ug/L	98
41) tert-Butyl Formate	7.190	59	1946975	388.88 ug/L	90
42) Propionitrile	7.336	54	278535	371.24 ug/L	95
43) Methacrylonitrile	7.360	41	1256833	377.12 ug/L	95
44) Benzene	7.360	78	1357482	39.47 ug/L	99
45) TAME	7.433	73	922804	42.38 ug/L	98
47) 1,2-Dichloroethane	7.549	62	457821	38.56 ug/L	98
48) Trichloroethene	7.938	95	344581	37.99 ug/L	97
49) Methylcyclohexane	7.957	83	597642	41.74 ug/L	99
50) Dibromomethane	8.364	93	198020	41.96 ug/L	98
51) 1,2-Dichloropropane	8.449	63	342560	40.48 ug/L	97
52) Bromodichloromethane	8.498	83	445682	40.89 ug/L	99
53) Methyl methacrylate	8.595	41	181806	39.91 ug/L	97
54) 2-Chloroethyl vinyl ether	9.009	63	866218	193.77 ug/L	97
55) cis-1,3-Dichloropropene	9.113	75	520569	42.33 ug/L	97
58) Toluene	9.356	91	1409718	39.36 ug/L	99
59) 2-Nitropropane	9.557	41	283671	194.21 ug/L	99
60) 4-Methyl-2-pentanone	9.672	43	1017283	194.69 ug/L	99
61) trans-1,3-Dichloropropene	9.739	75	446417	43.29 ug/L	96
62) Tetrachloroethene	9.757	166	384918	37.75 ug/L	98
63) Ethyl methacrylate	9.843	69	339257	37.79 ug/L	97
64) 1,1,2-Trichloroethane	9.903	83	237256	40.26 ug/L	98
65) Dibromochloromethane	10.104	129	309572	40.48 ug/L	98
66) 1,3-Dichloropropane	10.183	76	483827	40.15 ug/L	98
67) 1,2-Dibromoethane	10.360	107	271883	42.33 ug/L	96
68) 2-hexanone	10.487	43	687786	193.52 ug/L	97
69) 1-Chlorohexane	10.798	91	435688	39.57 ug/L	98
70) Ethylbenzene	10.859	91	1639107	40.00 ug/L	100
71) Chlorobenzene	10.865	112	953873	40.30 ug/L	96
72) 1,1,1,2-Tetrachloroethane	10.913	131	320629	41.79 ug/L	97
73) m,p-Xylene	10.998	91	2459561	81.21 ug/L	97
74) o-Xylene	11.436	91	1307404	41.63 ug/L	99
75) Styrene	11.485	104	993416	42.79 ug/L	98
76) Bromoform	11.546	173	185461	42.90 ug/L	98
77) Isopropylbenzene	11.741	105	1531567	40.66 ug/L	99
80) cis-1,4-Dichloro-2-butene	12.087	53	90262	50.36 ug/L	94
81) n-Propylbenzene	12.160	91	1827678	38.36 ug/L	99
82) Bromobenzene	12.185	156	421116	38.09 ug/L	98
83) 1,1,2,2-Tetrachloroethane	12.221	83	342225	42.23 ug/L	100
84) 1,3,5-Trimethylbenzene	12.343	105	1426304	40.21 ug/L	100
85) 2-Chlorotoluene	12.349	91	1311770	38.02 ug/L	99
86) trans-1,4-Dichloro-2-B...	12.398	53	83427	47.19 ug/L #	78
87) 1,2,3-Trichloropropane	12.385	110	88036	39.52 ug/L	95
88) Cyclohexanone	12.452	55	25515	187.91 ug/L	90
89) 4-Chlorotoluene	12.519	91	1204575	38.03 ug/L	99
90) a-Methyl Styrene	12.611	118	391096	39.49 ug/L	99

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
91)	tert-Butylbenzene	12.684	91	806108	38.54	ug/L		96
92)	1,2,4-Trimethylbenzene	12.751	105	1420845	40.00	ug/L		99
93)	Pentachloroethane	12.738	167	226954	42.38	ug/L		96
94)	sec-Butylbenzene	12.872	105	1692642	40.05	ug/L		98
95)	4-Isopropyltoluene	13.000	119	1429582	40.60	ug/L		97
96)	1,3-Dichlorobenzene	13.134	146	741697	39.18	ug/L		96
97)	1,4-Dichlorobenzene	13.219	146	774353	38.52	ug/L		94
98)	n-Butylbenzene	13.432	92	822978	40.81	ug/L		98
99)	Benzyl Chloride	13.450	126	117906	46.76	ug/L	#	74
100)	1,2-Dichlorobenzene	13.645	146	714095	41.52	ug/L		98
101)	1,2-Dibromo-3-Chloropr...	14.381	75	52670	68.74	ug/L		93
102)	Hexachlorobutadiene	14.928	225	324044	56.03	ug/L		97
103)	1,2,4-Trichlorobenzene	14.971	180	547353	78.54	ug/L		97
104)	Naphthalene	15.257	128	877863	89.67	ug/L		100
105)	1,2,3-Trichlorobenzene	15.427	180	478341	93.59	ug/L		97
107)	Ethanol	4.276	45	29706m	791.51	ug/L		
108)	acrolein	4.757	56	206891	216.83	ug/L		92
109)	Tert Butyl Alcohol	5.377	59	171596	426.90	ug/L		83
110)	tert Amyl alcohol	7.573	59	128641	429.01	ug/L		95
111)	Isobutyl alcohol	7.452	42	123504	800.53	ug/L	#	86
112)	1,4-Dioxane	8.668	88	28170	735.12	ug/L		95
113)	3,3-Dimethyl-1-butanol	10.433	57	765808	2133.22	ug/L		97

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

7.6.5

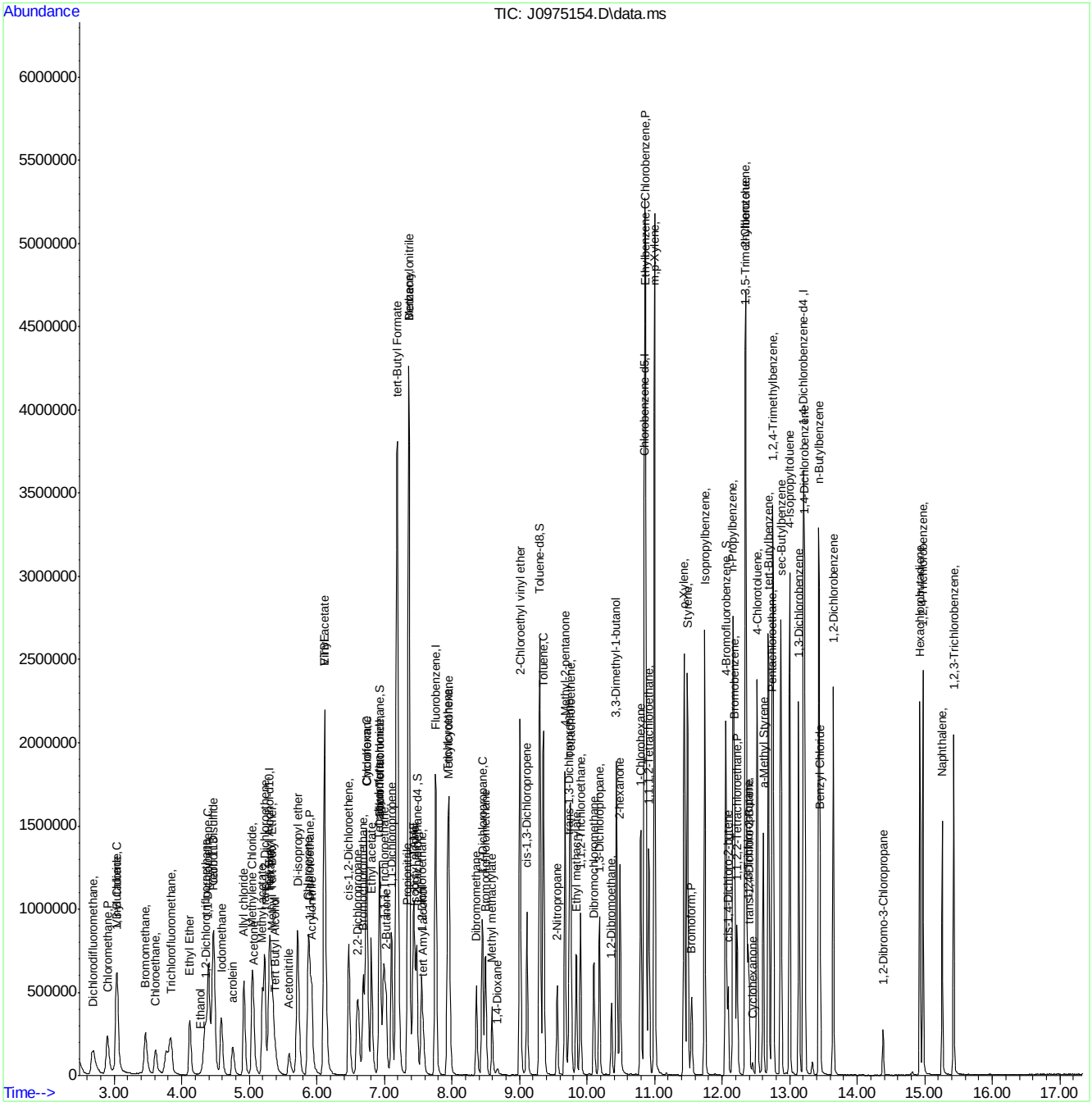
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

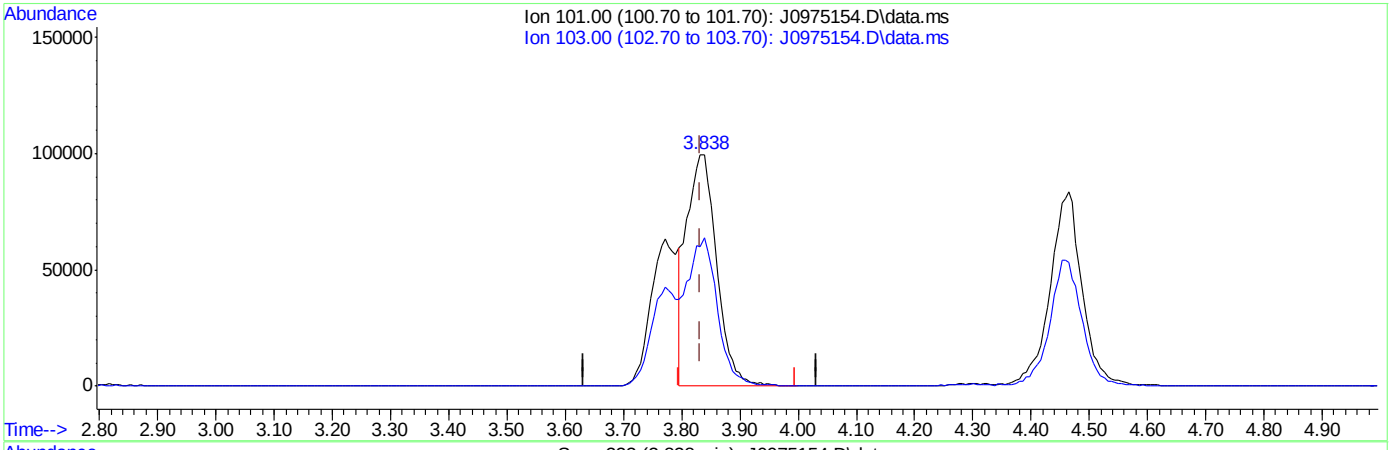
Sample Number:	VJ5237-ICC5237	**Method:**	SW846 8260B
Lab FileID:	J0975154.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 15:51	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

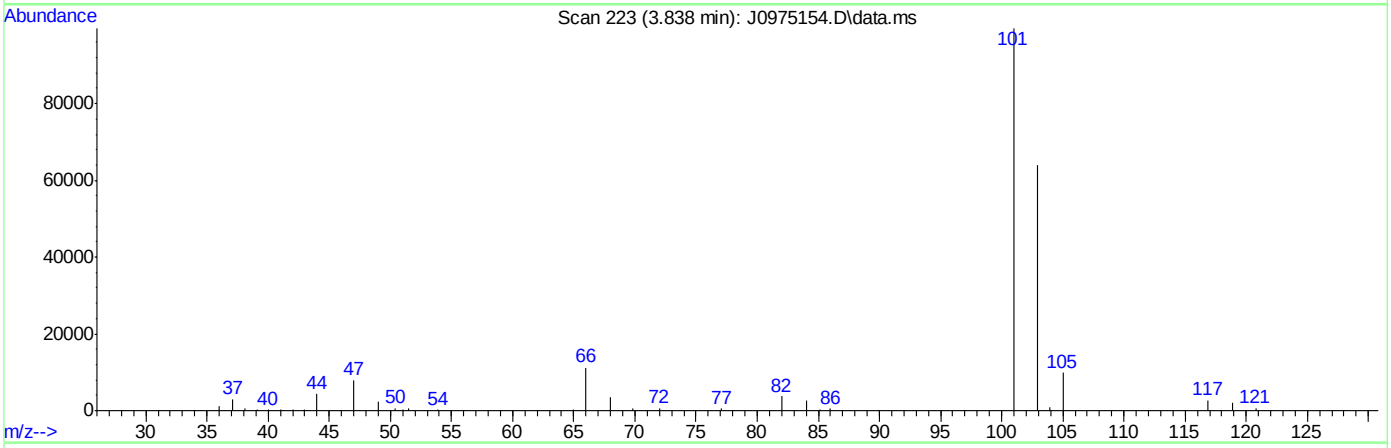
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.84	Split peak
Ethyl Alcohol	64-17-5		4.28	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975154.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 25.59ug/L

response 356542

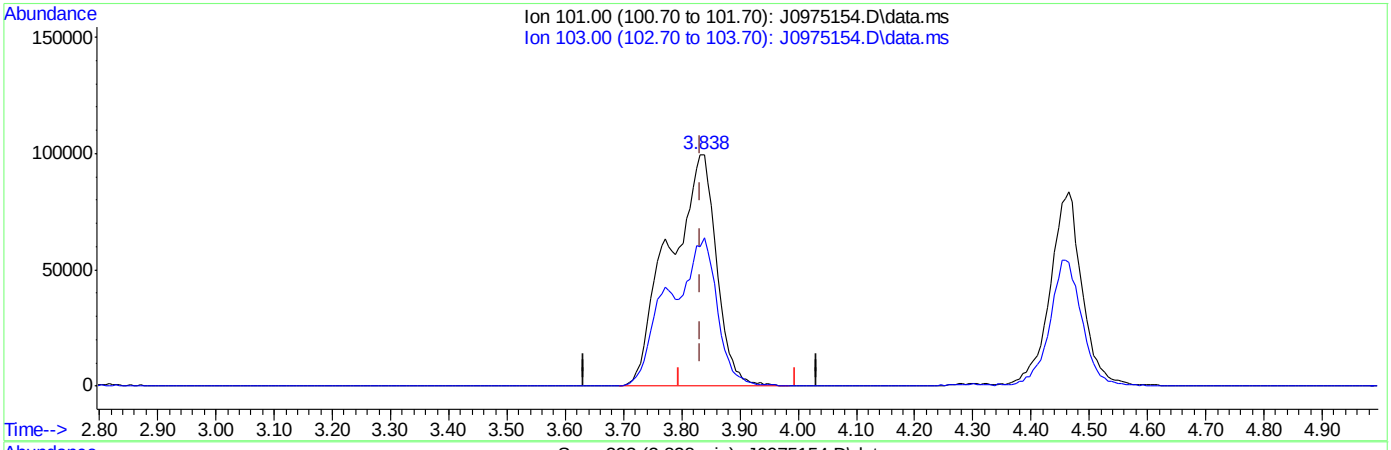
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	64.12
0.00	0.00	0.00
0.00	0.00	0.00

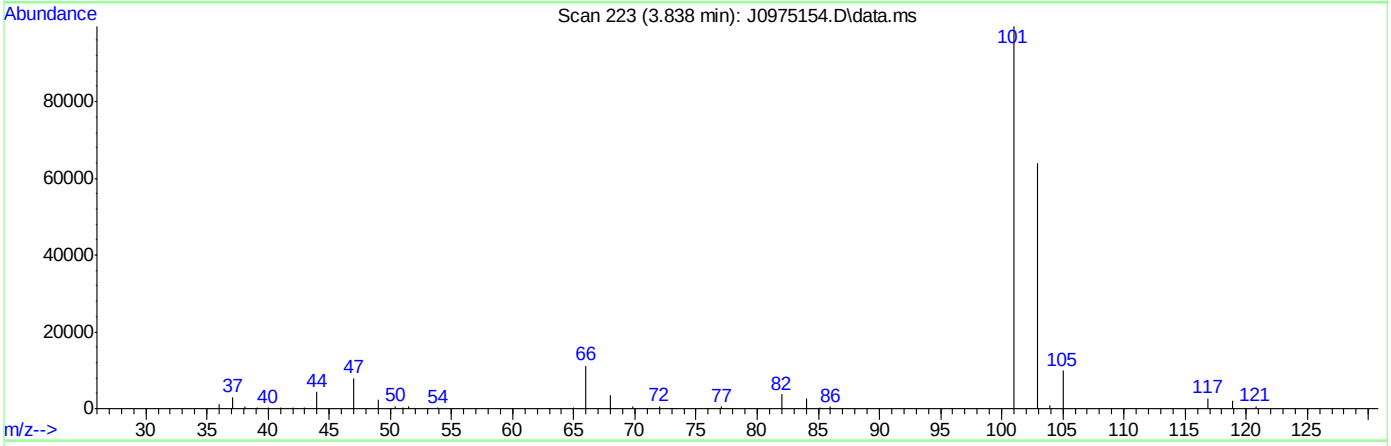
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975154.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 40.27ug/L m

response 561191

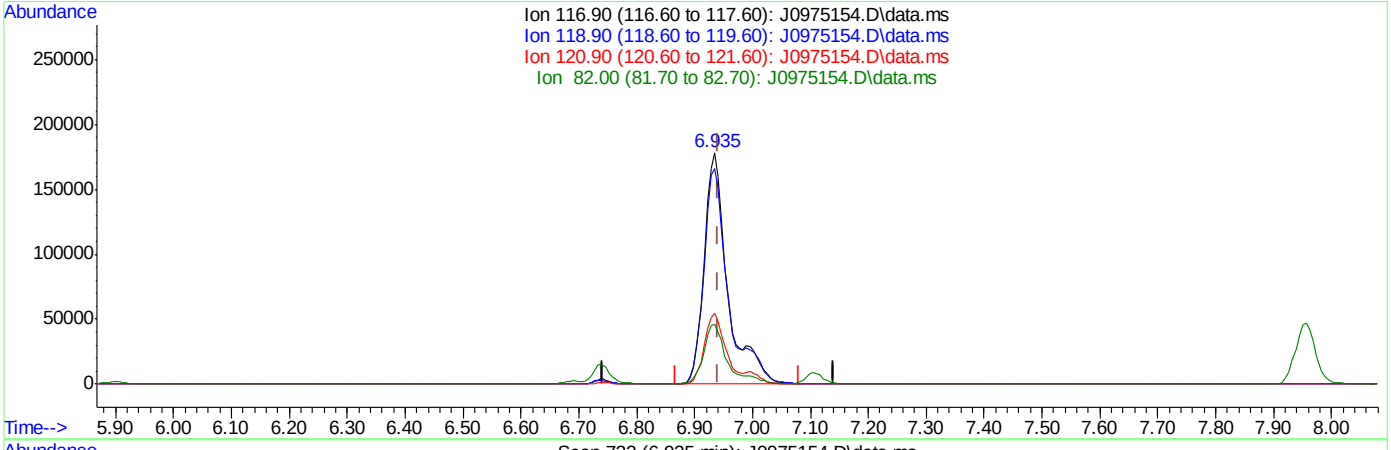
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	64.12
0.00	0.00	0.00
0.00	0.00	0.00

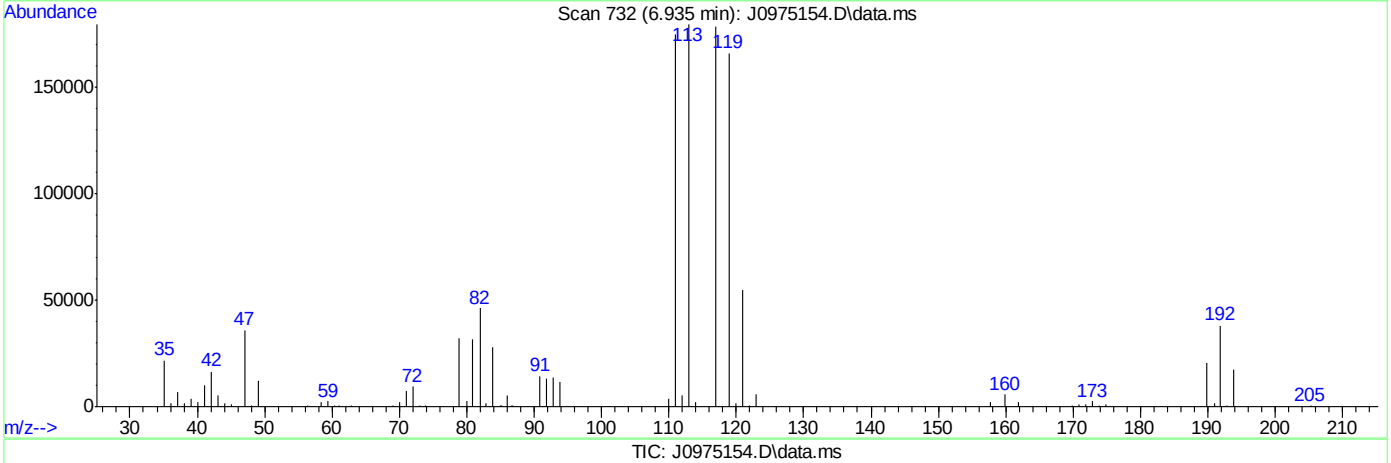
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975154.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 45.76ug/L

response 514333

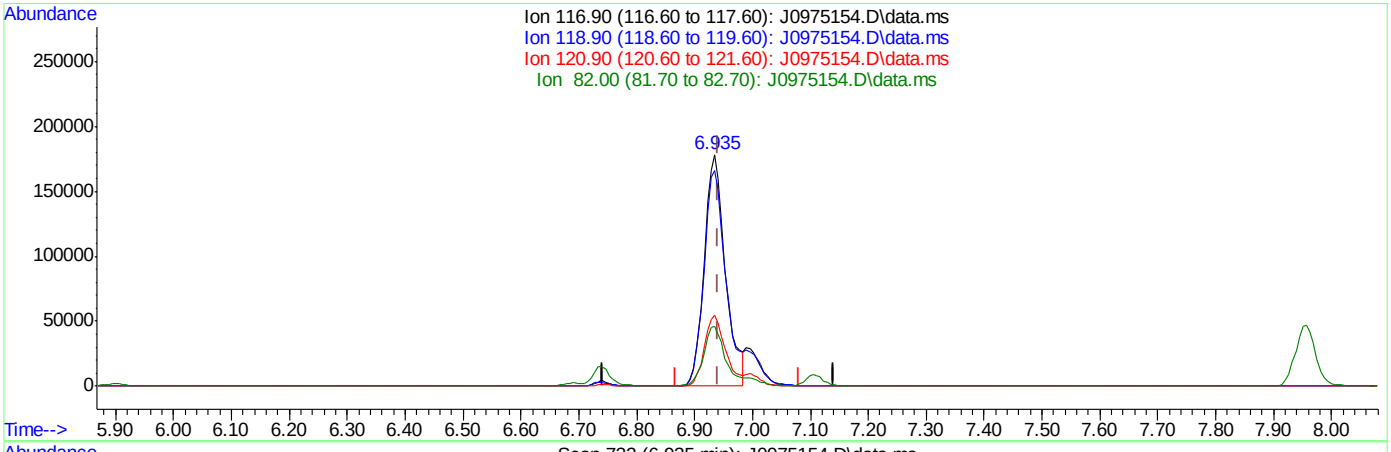
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	92.97
120.90	31.80	30.81
82.00	25.40	25.83

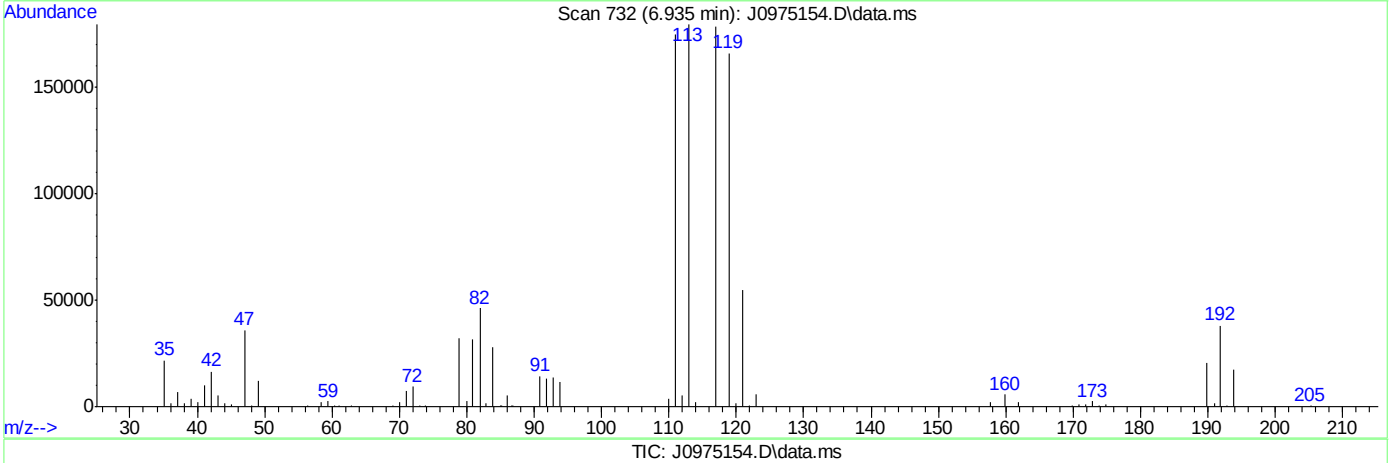
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975154.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 40.87ug/L m

response 459299

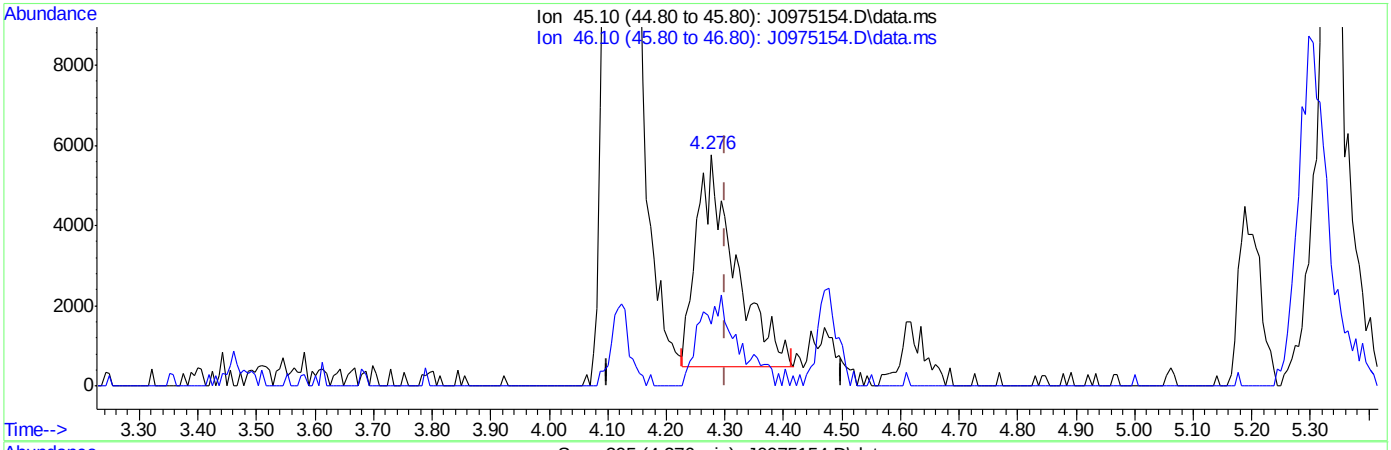
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	92.97
120.90	31.80	30.81
82.00	25.40	25.83

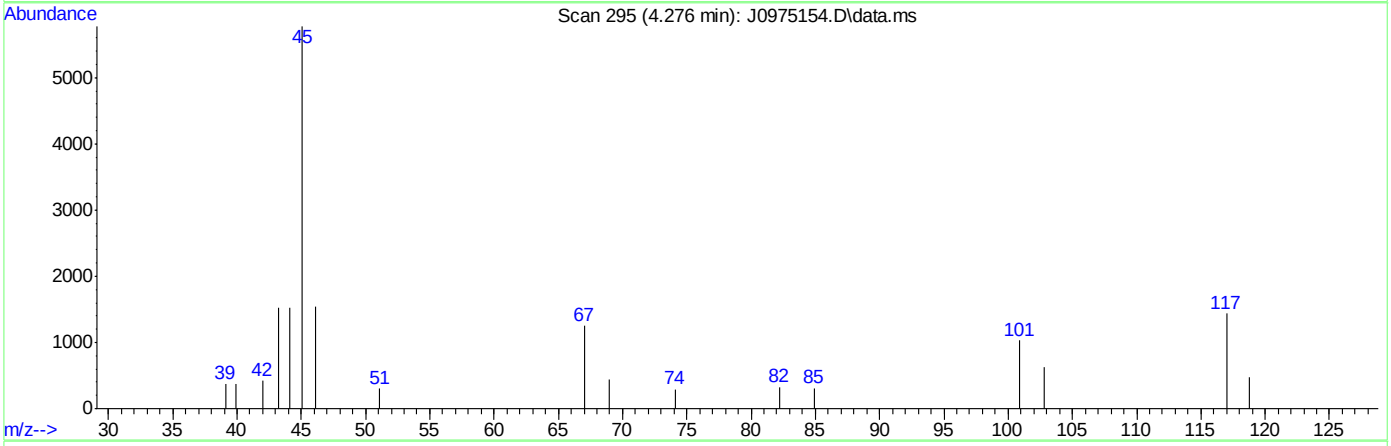
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975154.D\data.ms

(107) Ethanol

4.276min (-0.024) 648.61ug/L

response 24343

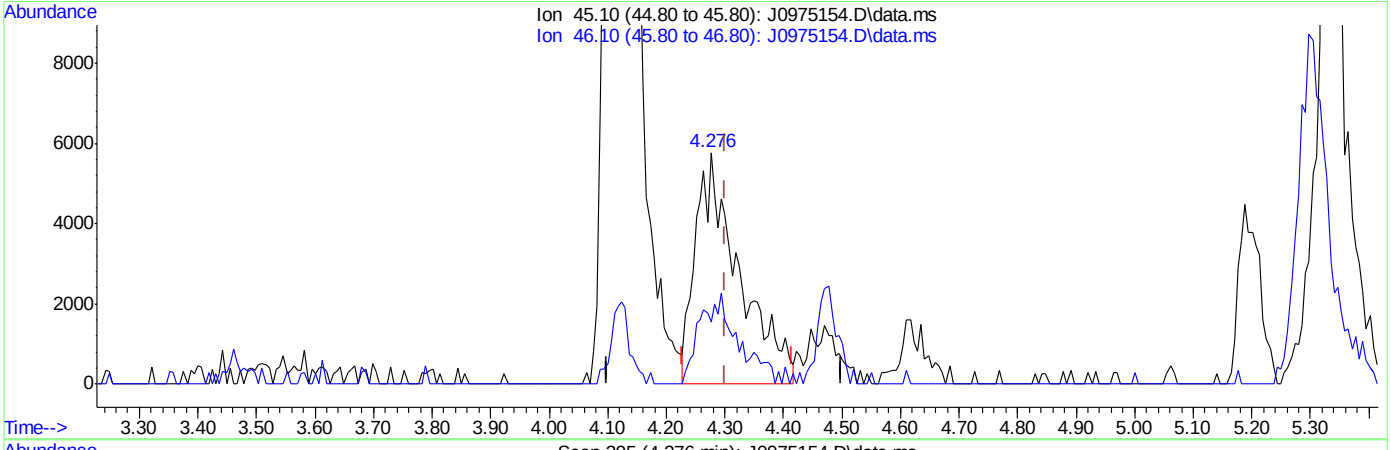
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	29.18
0.00	0.00	0.00
0.00	0.00	0.00

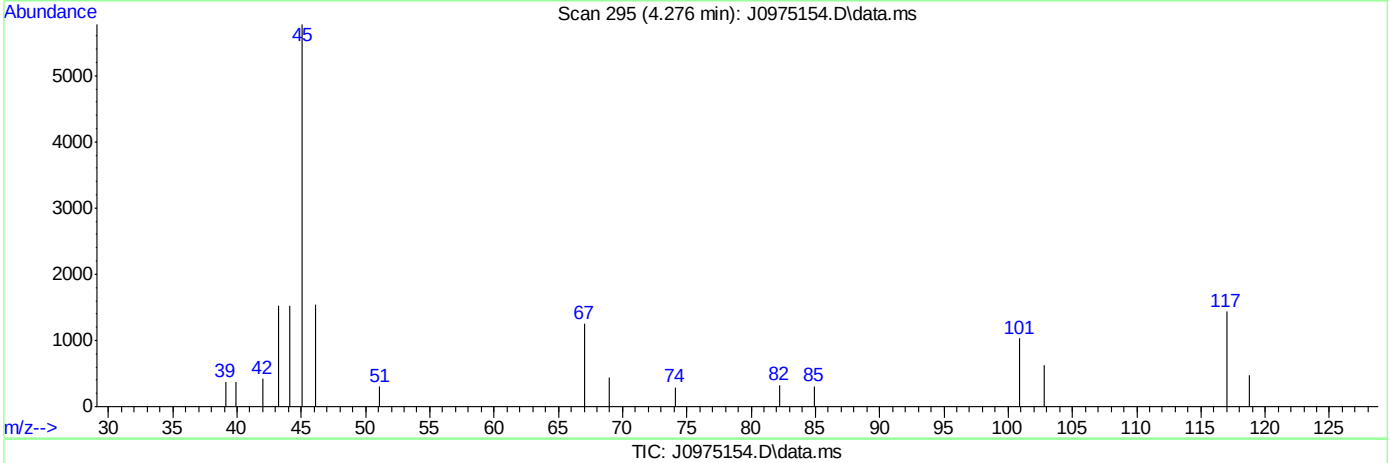
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975154.D\data.ms

(107) Ethanol

4.276min (-0.024) 791.51ug/L m

response 29706

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	26.78
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.762	96	1663509	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1267133	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	720297	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.310	65	95696	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	422774	49.73	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.46%			
46) 1,2-Dichloroethane-d4	7.482	65	502188	48.90	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.80%			
57) Toluene-d8	9.301	98	1644207	49.03	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.06%			
79) 4-Bromofluorobenzene	12.057	95	655388	47.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 94.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.688	85	796177	71.59	ug/L	96
3) Chloromethane	2.913	50	817162	76.83	ug/L	96
4) Vinyl Chloride	3.053	62	832466	72.98	ug/L	97
5) 1,3-Butadiene	3.047	54	615937	67.17	ug/L	99
6) Bromomethane	3.473	94	509770	111.69	ug/L	97
7) Chloroethane	3.613	64	367451	95.87	ug/L	96
8) Trichlorofluoromethane	3.844	101	1073506m	73.47	ug/L	
9) Ethyl Ether	4.124	59	462843	67.04	ug/L	97
10) 1,2-Dichlorotrifluoroe...	4.355	67	675216	69.14	ug/L	97
11) 1,1-Dichloroethene	4.404	61	863633	70.03	ug/L	97
12) Freon 113	4.464	101	586383	71.20	ug/L	96
13) Carbon Disulfide	4.477	76	1819367	69.56	ug/L	97
14) Iodomethane	4.592	142	943964	69.91	ug/L	99
15) Allyl chloride	4.927	41	878928	75.70	ug/L	95
16) Methylene Chloride	5.048	49	738336	68.18	ug/L	95
17) Acetone	5.073	58	174900	362.96	ug/L	95
18) Methyl acetate	5.195	74	349986	355.84	ug/L	98
19) trans-1,2-Dichloroethene	5.231	61	794113	66.14	ug/L	99
20) Hexane	5.304	56	503015	67.32	ug/L	98
21) Methyl Tert Butyl Ether	5.341	73	1582123	70.49	ug/L	79
22) Acetonitrile	5.596	40	224350	682.39	ug/L	95
23) Di-isopropyl ether	5.718	45	1816338	70.24	ug/L	97
24) Chloroprene	5.876	53	937188	73.58	ug/L	97
25) 1,1-Dichloroethane	5.900	63	1041124	66.92	ug/L	99
26) Acrylonitrile	5.925	53	796530	369.39	ug/L	97
27) ETBE	6.119	59	1850410	71.47	ug/L	99
28) Vinyl acetate	6.113	43	4549644	351.47	ug/L	95
29) cis-1,2-Dichloroethene	6.478	96	672081	67.73	ug/L	98
30) 2,2-Dichloropropane	6.612	77	833617	71.41	ug/L	96
31) Bromochloromethane	6.691	128	303789	65.93	ug/L	98
32) Cyclohexane	6.734	56	1006050	72.41	ug/L	97
33) Chloroform	6.740	83	1148321	67.61	ug/L	95
34) Ethyl acetate	6.807	43	1839719	355.84	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35)	Tetrahydrofuran	6.922	42	102589	68.04	ug/L	94
37)	Carbon Tetrachloride	6.934	117	845243m	71.73	ug/L	
38)	1,1,1-Trichloroethane	6.995	97	1015151	71.04	ug/L	98
39)	2-Butanone	7.026	43	776266	343.13	ug/L	99
40)	1,1-Dichloropropene	7.105	75	815891	68.92	ug/L	100
41)	tert-Butyl Formate	7.190	59	3673836	696.93	ug/L	94
42)	Propionitrile	7.336	54	568454	722.62	ug/L	88
43)	Methacrylonitrile	7.360	41	2411629	739.42	ug/L	97
44)	Benzene	7.360	78	2463561	68.32	ug/L	99
45)	TAME	7.433	73	1667655	73.05	ug/L	98
47)	1,2-Dichloroethane	7.549	62	807016	64.83	ug/L	98
48)	Trichloroethene	7.938	95	645164	67.84	ug/L	97
49)	Methylcyclohexane	7.956	83	1101854	73.40	ug/L	99
50)	Dibromomethane	8.364	93	353388	71.42	ug/L	96
51)	1,2-Dichloropropane	8.449	63	612595	69.05	ug/L	97
52)	Bromodichloromethane	8.498	83	821422	71.87	ug/L	99
53)	Methyl methacrylate	8.595	41	369451	77.35	ug/L	95
54)	2-Chloroethyl vinyl ether	9.009	63	1668101	363.83	ug/L	97
55)	cis-1,3-Dichloropropene	9.112	75	955569	74.12	ug/L	98
58)	Toluene	9.356	91	2496299	68.91	ug/L	96
59)	2-Nitropropane	9.556	41	508815	329.36	ug/L	95
60)	4-Methyl-2-pentanone	9.672	43	1880700	340.32	ug/L	96
61)	trans-1,3-Dichloropropene	9.739	75	809345	74.20	ug/L	97
62)	Tetrachloroethene	9.757	166	694249	64.37	ug/L	99
63)	Ethyl methacrylate	9.842	69	683133	71.80	ug/L	95
64)	1,1,2-Trichloroethane	9.903	83	425903	68.34	ug/L	99
65)	Dibromochloromethane	10.104	129	569577	69.79	ug/L	98
66)	1,3-Dichloropropane	10.183	76	858931	67.39	ug/L	96
67)	1,2-Dibromoethane	10.359	107	486838	71.67	ug/L	99
68)	2-hexanone	10.487	43	1286975	342.39	ug/L	99
69)	1-Chlorohexane	10.797	91	815671	70.05	ug/L	96
70)	Ethylbenzene	10.864	91	2858512	70.62	ug/L	93
71)	Chlorobenzene	10.864	112	1693129	68.89	ug/L	96
72)	1,1,1,2-Tetrachloroethane	10.913	131	585767	72.18	ug/L	100
73)	m,p-Xylene	10.998	91	4082149	145.43	ug/L	87
74)	o-Xylene	11.436	91	2326915	70.06	ug/L	96
75)	Styrene	11.485	104	1796313	73.16	ug/L	96
76)	Bromoform	11.552	173	352668	74.52	ug/L	98
77)	Isopropylbenzene	11.740	105	2705718	71.65	ug/L	95
80)	cis-1,4-Dichloro-2-butene	12.087	53	186907	98.90	ug/L	96
81)	n-Propylbenzene	12.160	91	3164340	62.99	ug/L	93
82)	Bromobenzene	12.185	156	766821	65.78	ug/L	99
83)	1,1,2,2-Tetrachloroethane	12.221	83	612245	71.66	ug/L	97
84)	1,3,5-Trimethylbenzene	12.343	105	2538671	67.87	ug/L	95
85)	2-Chlorotoluene	12.355	91	2343688	64.43	ug/L	95
86)	trans-1,4-Dichloro-2-B...	12.404	53	158679	81.31	ug/L	87
87)	1,2,3-Trichloropropane	12.385	110	161261	68.67	ug/L	98
88)	Cyclohexanone	12.446	55	50911	355.62	ug/L	92
89)	4-Chlorotoluene	12.519	91	2142166	64.15	ug/L	96
90)	a-Methyl Styrene	12.610	118	796296	76.25	ug/L	97

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
91)	tert-Butylbenzene	12.689	91	1460467	66.23	ug/L		99
92)	1,2,4-Trimethylbenzene	12.756	105	2491193	66.52	ug/L		96
93)	Pentachloroethane	12.738	167	487790	79.67	ug/L		98
94)	sec-Butylbenzene	12.872	105	2946134	66.12	ug/L		94
95)	4-Isopropyltoluene	13.000	119	2529417	68.14	ug/L		93
96)	1,3-Dichlorobenzene	13.134	146	1347196	67.49	ug/L		96
97)	1,4-Dichlorobenzene	13.219	146	1384060	65.31	ug/L		96
98)	n-Butylbenzene	13.432	92	1525563	71.75	ug/L		90
99)	Benzyl Chloride	13.450	126	222363	77.92	ug/L	#	72
100)	1,2-Dichlorobenzene	13.645	146	1274423	70.28	ug/L		97
101)	1,2-Dibromo-3-Chloropr...	14.381	75	96556	111.51	ug/L		91
102)	Hexachlorobutadiene	14.928	225	589535	93.01	ug/L		98
103)	1,2,4-Trichlorobenzene	14.971	180	985671	123.30	ug/L		95
104)	Naphthalene	15.257	128	1543756	130.98	ug/L		98
105)	1,2,3-Trichlorobenzene	15.427	180	835296	136.14	ug/L		98
107)	Ethanol	4.288	45	57616m	1388.22	ug/L		
108)	acrolein	4.756	56	411471	389.95	ug/L		93
109)	Tert Butyl Alcohol	5.383	59	324763	730.62	ug/L		92
110)	tert Amyl alcohol	7.579	59	246499	743.36	ug/L		95
111)	Isobutyl alcohol	7.452	42	242482	1518.42	ug/L	#	84
112)	1,4-Dioxane	8.674	88	53462	1261.60	ug/L		93
113)	3,3-Dimethyl-1-butanol	10.439	57	1553566	3668.90	ug/L		98

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

7.6.6

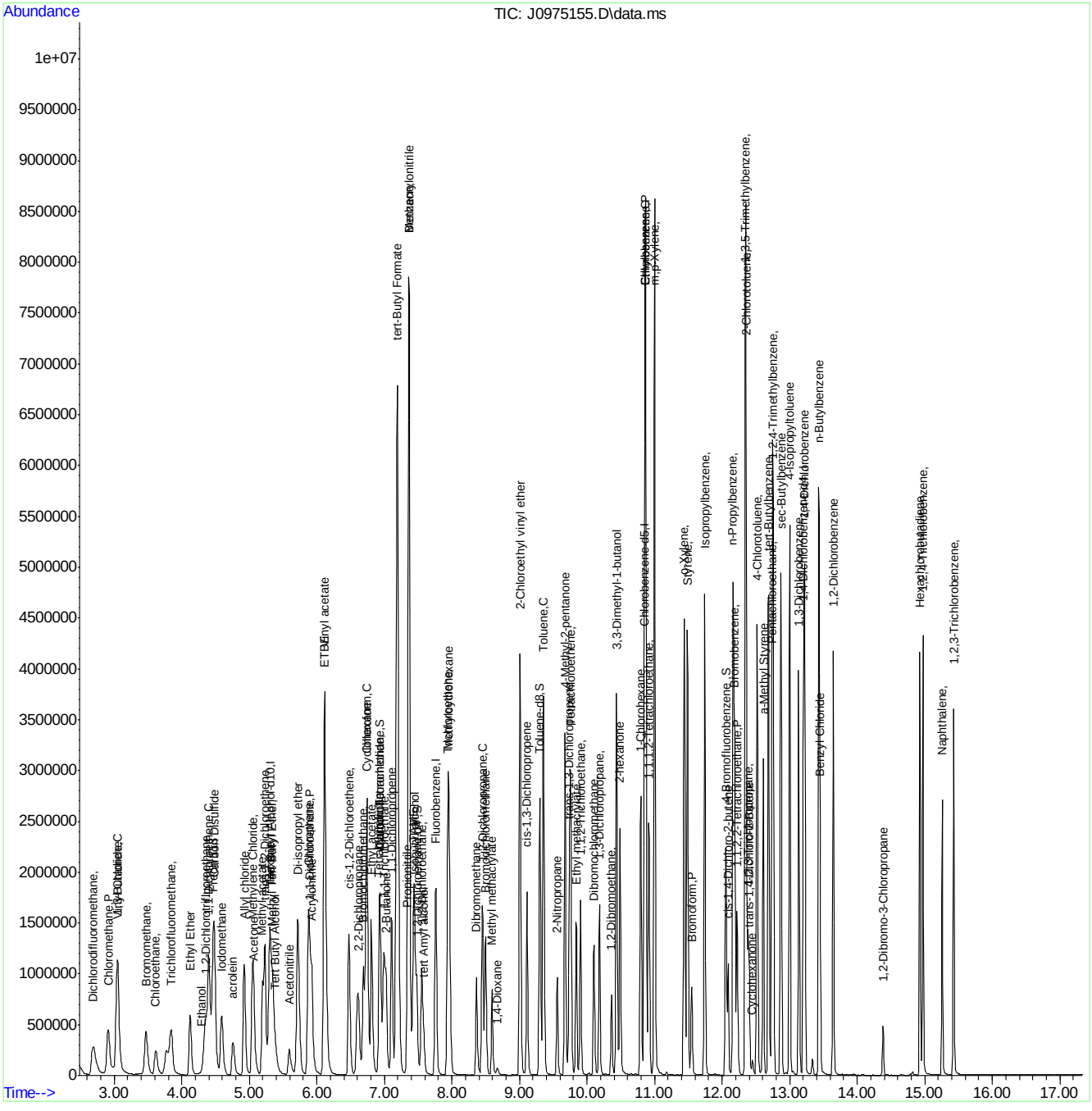
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



MSJ031516.M Wed Mar 16 09:49:34 2016 Page: 4

Manual Integration Approval Summary

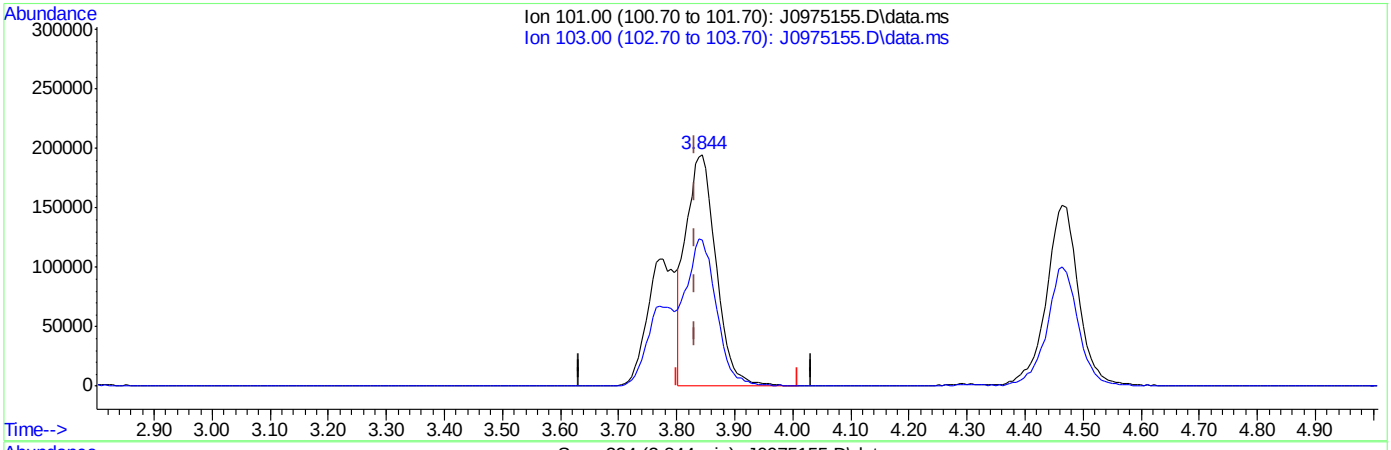
Sample Number:	VJ5237-IC5237	**Method:**	SW846 8260B
Lab FileID:	J0975155.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 16:15	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

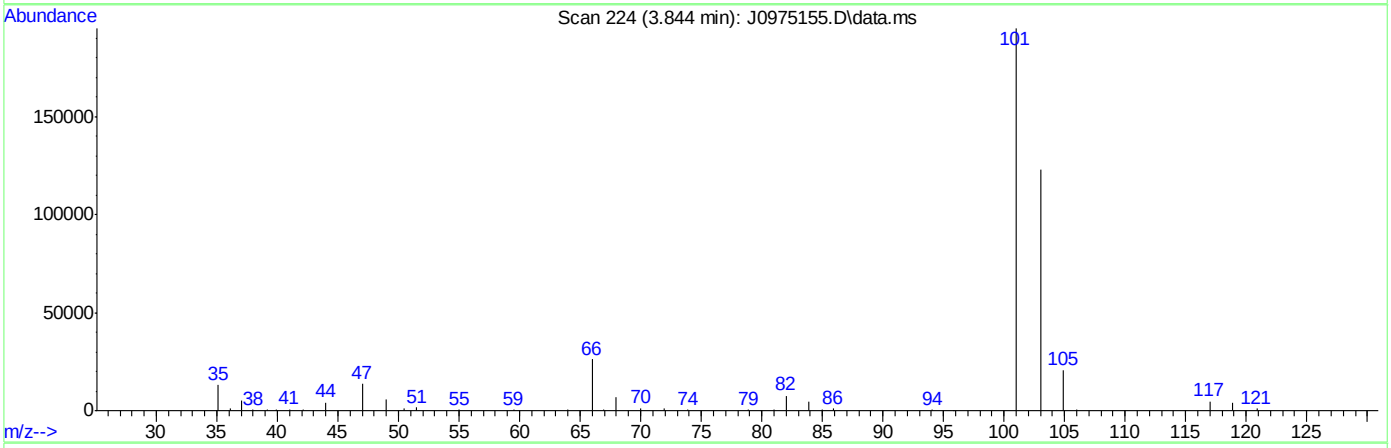
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.84	Split peak
Ethyl Alcohol	64-17-5		4.29	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975155.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.012) 47.92ug/L

response 700090

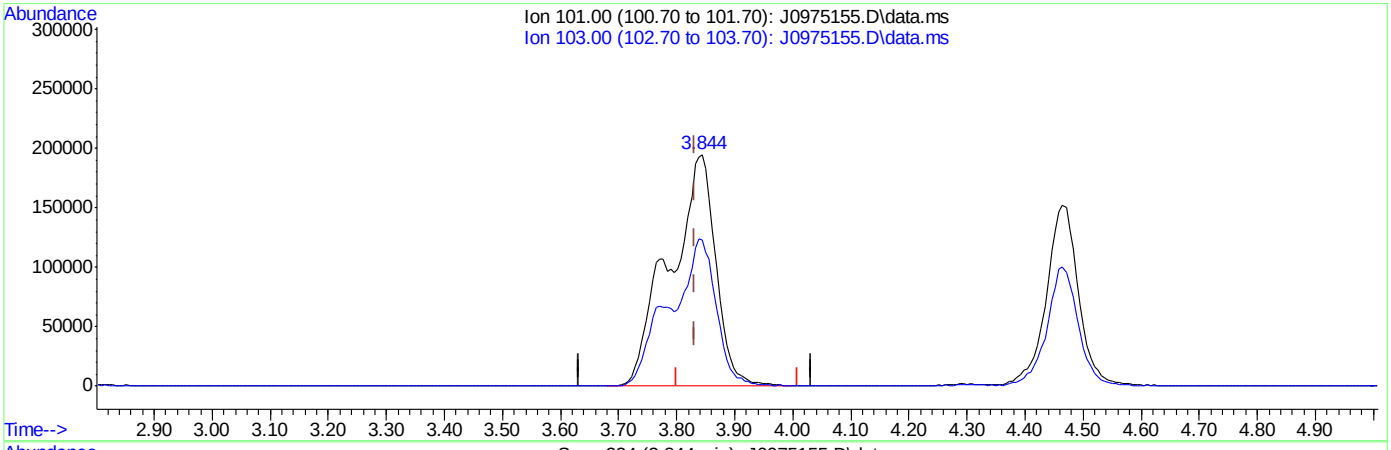
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	62.84
0.00	0.00	0.00
0.00	0.00	0.00

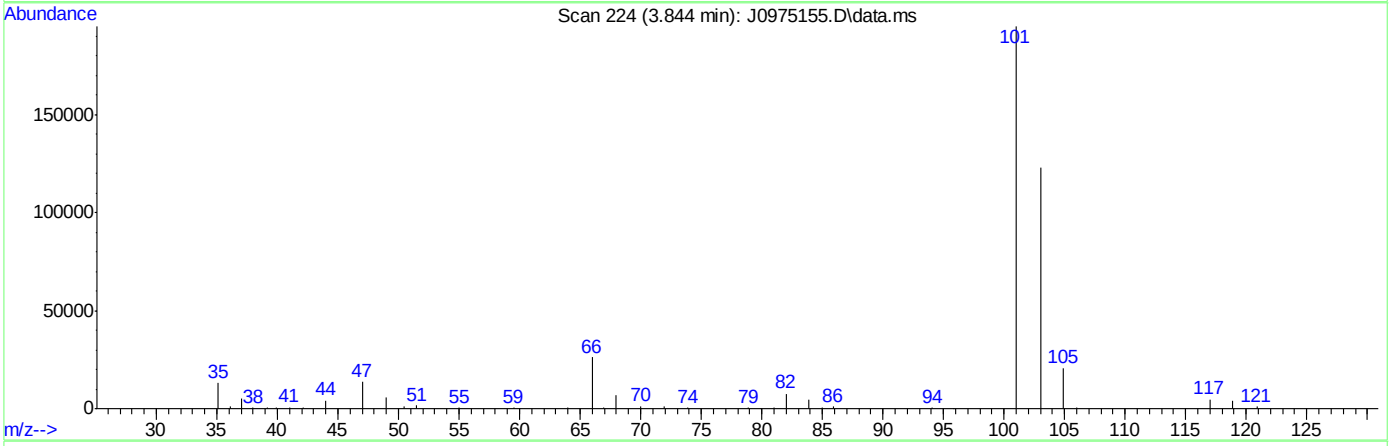
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975155.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.012) 73.47ug/L m

response 1073506

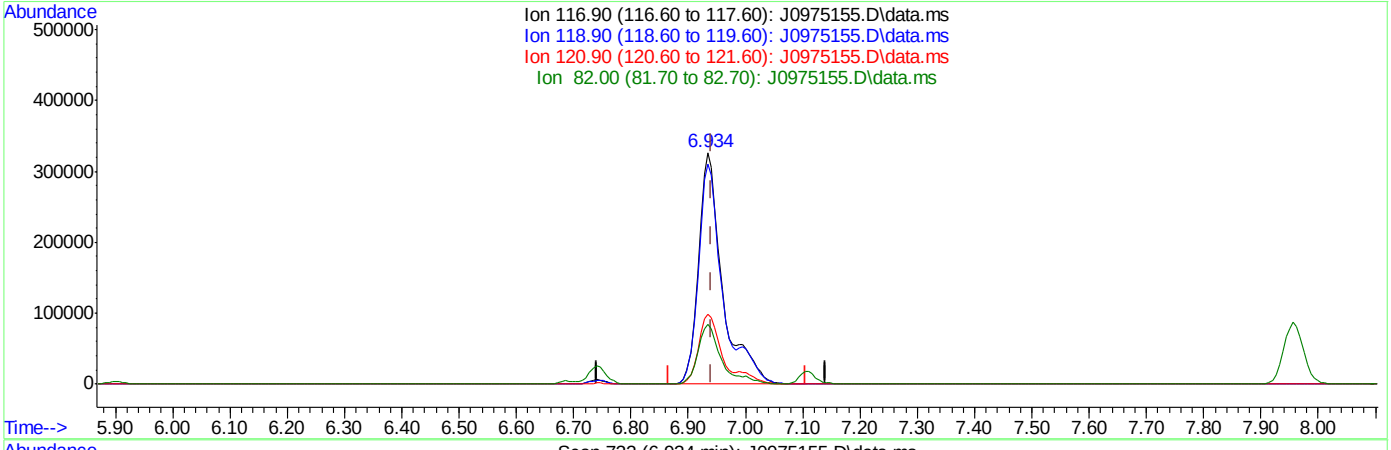
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	63.02
0.00	0.00	0.00
0.00	0.00	0.00

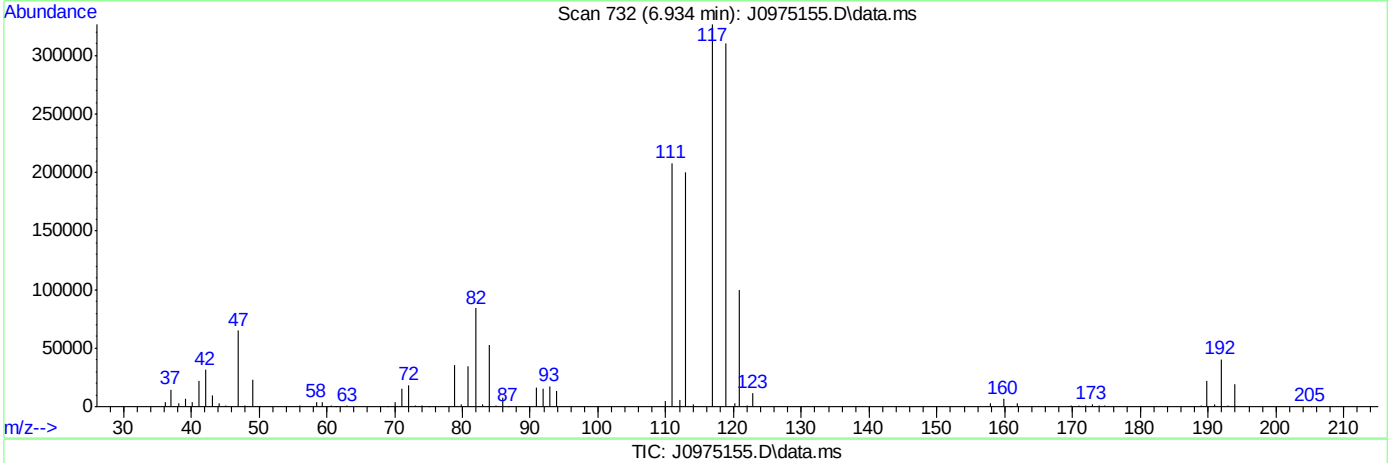
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975155.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 81.22ug/L

response 957149

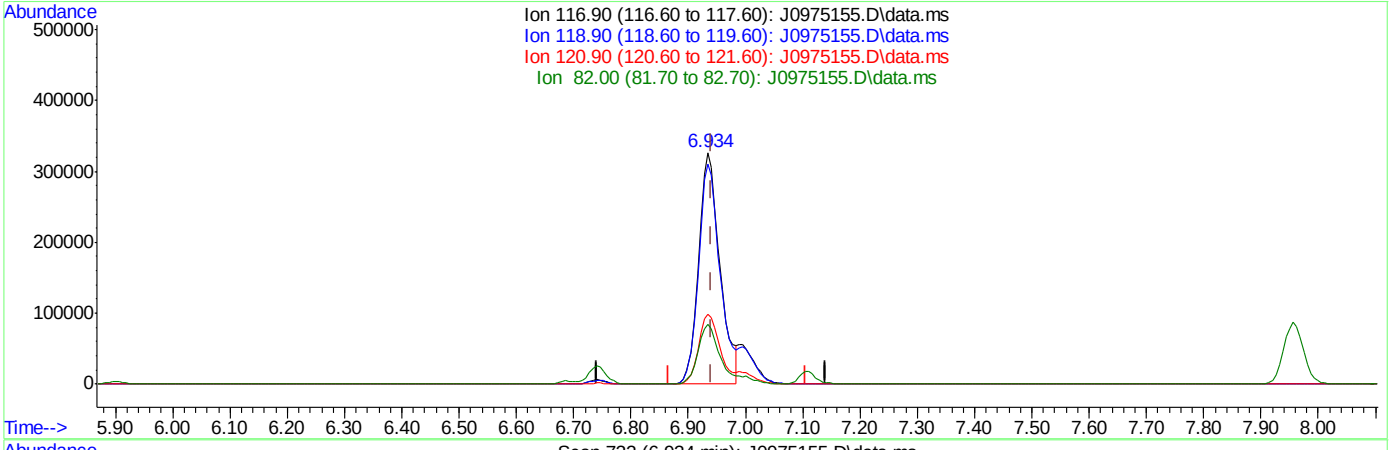
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	94.95
120.90	31.80	30.39
82.00	25.40	25.70

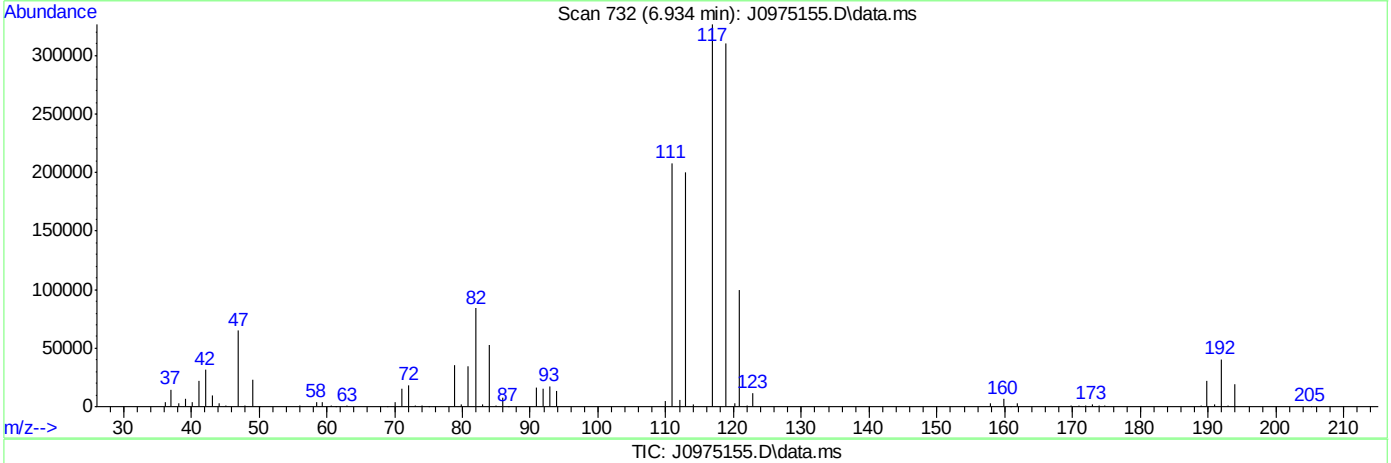
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975155.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 71.73ug/L m

response 845243

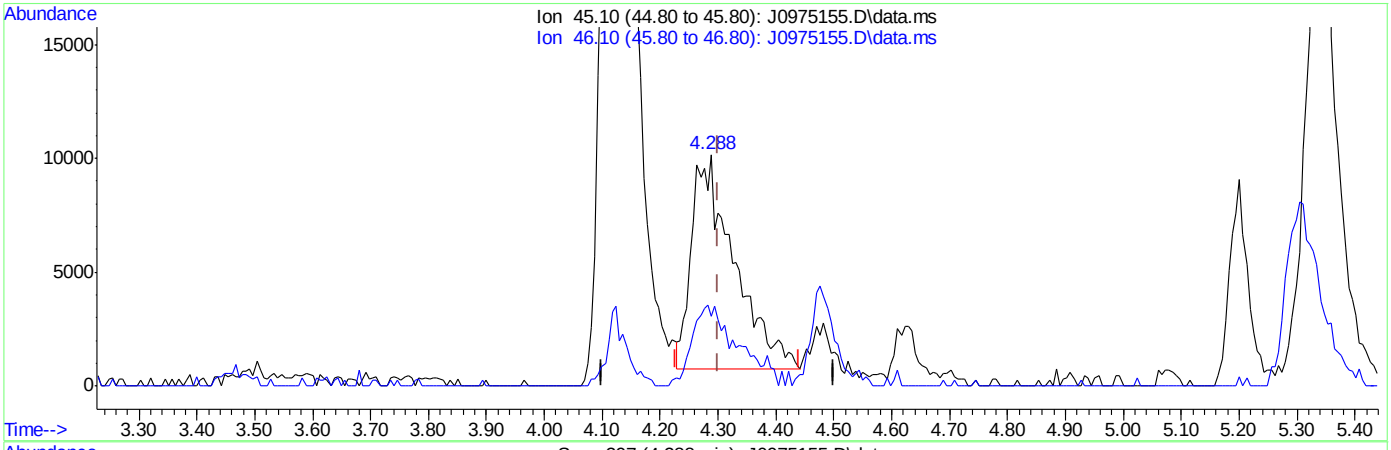
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	94.95
120.90	31.80	30.39
82.00	25.40	25.70

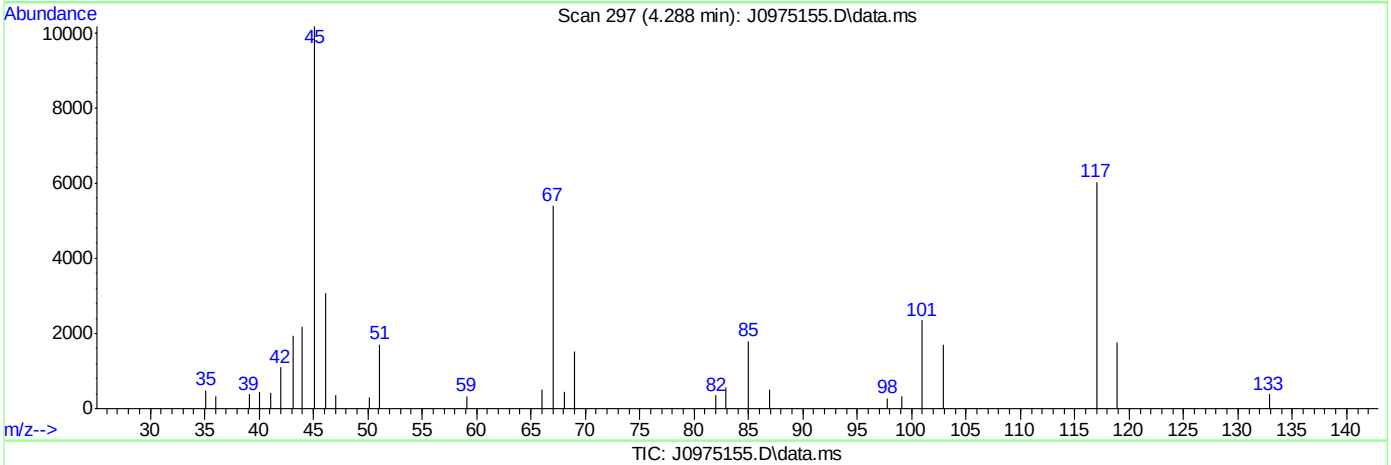
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975155.D\data.ms

(107) Ethanol

4.288min (-0.012) 1148.43ug/L

response 47664

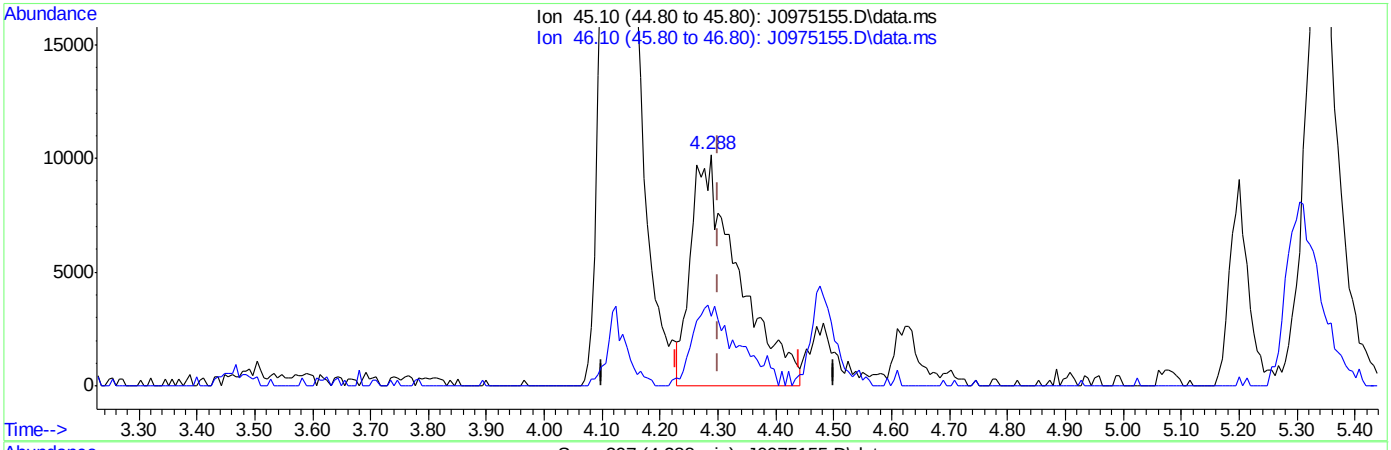
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	28.80
0.00	0.00	0.00
0.00	0.00	0.00

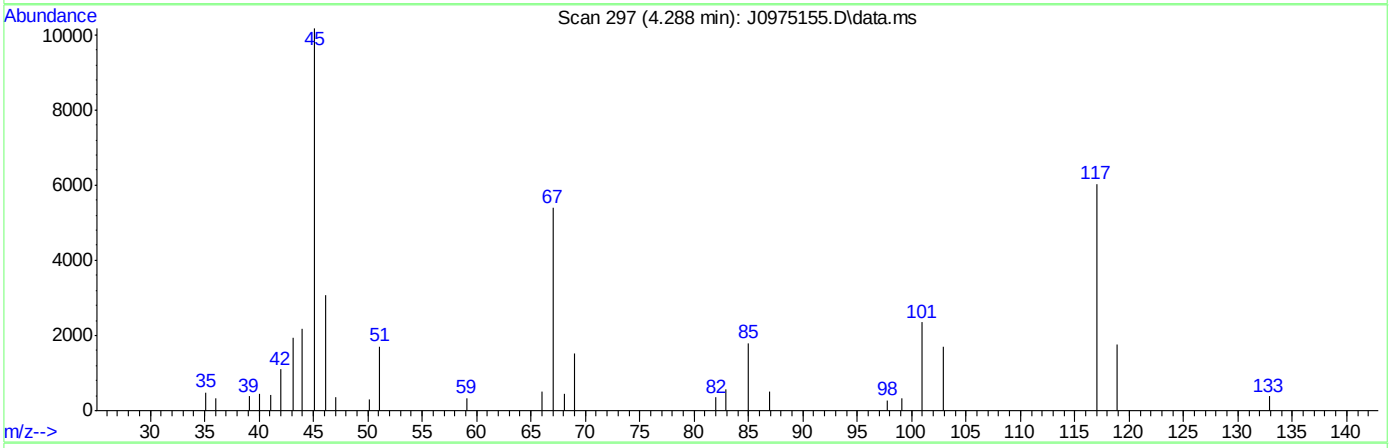
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975155.D\data.ms

(107) Ethanol

4.288min (-0.012) 1388.22ug/L m

response 57616

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	30.28
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

J0975156.D

Manual Integrations APPROVED (compounds with "m" flag)

Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1677660	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1313937	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	735618	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.304	65	101995	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	428253	49.95	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.90%			
46) 1,2-Dichloroethane-d4	7.482	65	498305	48.11	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 96.22%			
57) Toluene-d8	9.301	98	1661771	47.79	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.58%			
79) 4-Bromofluorobenzene	12.057	95	651178	46.10	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 92.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.688	85	1114041	99.32	ug/L	98
3) Chloromethane	2.907	50	1139732	107.58	ug/L	98
4) Vinyl Chloride	3.053	62	1151714	100.12	ug/L	99
5) 1,3-Butadiene	3.041	54	823142	89.01	ug/L	99
6) Bromomethane	3.467	94	633782	Below Cal		98
7) Chloroethane	3.613	64	426457	Below Cal		98
8) Trichlorofluoromethane	3.838	101	1422690m	96.55	ug/L	
9) Ethyl Ether	4.118	59	665052	95.52	ug/L	95
10) 1,2-Dichlorotrifluoroe...	4.349	67	982810	99.79	ug/L	98
11) 1,1-Dichloroethene	4.398	61	1255822	100.97	ug/L	95
12) Freon 113	4.465	101	862244	103.81	ug/L	98
13) Carbon Disulfide	4.471	76	2701494	102.41	ug/L	97
14) Iodomethane	4.586	142	1402340	102.98	ug/L	99
15) Allyl chloride	4.921	41	1179323	100.72	ug/L	95
16) Methylene Chloride	5.043	49	1070637	100.32	ug/L	96
17) Acetone	5.073	58	238474	485.07	ug/L	96
18) Methyl acetate	5.195	74	510159	514.32	ug/L #	88
19) trans-1,2-Dichloroethene	5.225	61	1150951	95.06	ug/L	98
20) Hexane	5.298	56	722765	95.92	ug/L	97
21) Methyl Tert Butyl Ether	5.341	73	2289989	101.17	ug/L	76
22) Acetonitrile	5.590	40	307391	952.74	ug/L	94
23) Di-isopropyl ether	5.718	45	2611639	100.14	ug/L	98
24) Chloroprene	5.870	53	1282244	99.82	ug/L	97
25) 1,1-Dichloroethane	5.900	63	1517500	96.71	ug/L	99
26) Acrylonitrile	5.925	53	1057913	486.47	ug/L	99
27) ETBE	6.119	59	2687192	102.92	ug/L	99
28) Vinyl acetate	6.113	43	5725222	438.56	ug/L	93
29) cis-1,2-Dichloroethene	6.472	96	986636	98.59	ug/L	98
30) 2,2-Dichloropropane	6.606	77	1229663	104.45	ug/L	99
31) Bromochloromethane	6.685	128	440819	94.86	ug/L	98
32) Cyclohexane	6.734	56	1493354	106.58	ug/L	93
33) Chloroform	6.740	83	1662786	97.08	ug/L	97
34) Ethyl acetate	6.807	43	2494873	478.48	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) Tetrahydrofuran	6.922	42	141622	92.52 ug/L	96
37) Carbon Tetrachloride	6.935	117	1240589m	104.39 ug/L	
38) 1,1,1-Trichloroethane	6.995	97	1496888	103.86 ug/L	98
39) 2-Butanone	7.026	43	1085834	476.16 ug/L	99
40) 1,1-Dichloropropene	7.105	75	1191218	99.78 ug/L	97
41) tert-Butyl Formate	7.190	59	5144797	964.23 ug/L	96
42) Propionitrile	7.336	54	751362	947.07 ug/L	95
43) Methacrylonitrile	7.366	41	3085566	985.97 ug/L	95
44) Benzene	7.360	78	3537446	97.27 ug/L	99
45) TAME	7.433	73	2430907	105.58 ug/L	97
47) 1,2-Dichloroethane	7.549	62	1159083	92.33 ug/L	99
48) Trichloroethene	7.938	95	938979	97.90 ug/L	98
49) Methylcyclohexane	7.957	83	1648708	108.90 ug/L	98
50) Dibromomethane	8.358	93	503424	100.88 ug/L	99
51) 1,2-Dichloropropane	8.449	63	890414	99.51 ug/L	99
52) Bromodichloromethane	8.498	83	1197814	103.92 ug/L	98
53) Methyl methacrylate	8.589	41	499600	103.72 ug/L	96
54) 2-Chloroethyl vinyl ether	9.009	63	2357081	520.45 ug/L	97
55) cis-1,3-Dichloropropene	9.112	75	1392882	107.12 ug/L	97
58) Toluene	9.356	91	3511420	97.88 ug/L	92
59) 2-Nitropropane	9.557	41	742165	463.29 ug/L	98
60) 4-Methyl-2-pentanone	9.672	43	2582624	450.69 ug/L	93
61) trans-1,3-Dichloropropene	9.739	75	1174760	103.87 ug/L	96
62) Tetrachloroethene	9.757	166	1098957	98.27 ug/L	99
63) Ethyl methacrylate	9.836	69	951549	96.29 ug/L	97
64) 1,1,2-Trichloroethane	9.903	83	612697	94.81 ug/L	99
65) Dibromochloromethane	10.104	129	838584	98.24 ug/L	98
66) 1,3-Dichloropropane	10.183	76	1234537	93.41 ug/L	97
67) 1,2-Dibromoethane	10.360	107	705132	100.10 ug/L	99
68) 2-hexanone	10.487	43	1797070	461.06 ug/L	98
69) 1-Chlorohexane	10.798	91	1201715	99.52 ug/L	96
70) Ethylbenzene	10.865	91	3913054	100.03 ug/L	85
71) Chlorobenzene	10.865	112	2454813	98.17 ug/L	94
72) 1,1,1,2-Tetrachloroethane	10.913	131	865611	102.87 ug/L	98
73) m,p-Xylene	10.998	91	5199315	206.12 ug/L	71
74) o-Xylene	11.436	91	3274848	95.09 ug/L	92
75) Styrene	11.485	104	2597936	102.05 ug/L	94
76) Bromoform	11.552	173	526813	104.07 ug/L	97
77) Isopropylbenzene	11.741	105	3763480	101.47 ug/L	88
80) cis-1,4-Dichloro-2-butene	12.087	53	246701	127.83 ug/L	93
81) n-Propylbenzene	12.160	91	4262827	83.09 ug/L	84
82) Bromobenzene	12.185	156	1120243	94.09 ug/L	98
83) 1,1,2,2-Tetrachloroethane	12.221	83	876296	100.43 ug/L	99
84) 1,3,5-Trimethylbenzene	12.343	105	3530308	92.42 ug/L	87
85) 2-Chlorotoluene	12.355	91	3292953	88.64 ug/L	90
86) trans-1,4-Dichloro-2-B...	12.404	53	229741	110.96 ug/L	90
87) 1,2,3-Trichloropropane	12.385	110	229231	95.58 ug/L	99
88) Cyclohexanone	12.446	55	67015	458.36 ug/L	91
89) 4-Chlorotoluene	12.519	91	3036759	89.04 ug/L	91
90) a-Methyl Styrene	12.611	118	1117515	104.79 ug/L	98

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) tert-Butylbenzene	12.690	91	2134042	94.76	ug/L	96
92) 1,2,4-Trimethylbenzene	12.750	105	3474573	90.84	ug/L	89
93) Pentachloroethane	12.738	167	615420	95.31	ug/L	98
94) sec-Butylbenzene	12.872	105	4048307	88.96	ug/L	85
95) 4-Isopropyltoluene	13.000	119	3526930	93.03	ug/L	87
96) 1,3-Dichlorobenzene	13.134	146	1945931	95.46	ug/L	96
97) 1,4-Dichlorobenzene	13.225	146	2004086	92.60	ug/L	97
98) n-Butylbenzene	13.432	92	2222818	102.37	ug/L #	80
99) Benzyl Chloride	13.450	126	334209	107.65	ug/L #	66
100) 1,2-Dichlorobenzene	13.645	146	1853570	100.08	ug/L	96
101) 1,2-Dibromo-3-Chloropr...	14.381	75	142658	151.74	ug/L	92
102) Hexachlorobutadiene	14.928	225	909906	134.80	ug/L	97
103) 1,2,4-Trichlorobenzene	14.971	180	1467882	166.70	ug/L	97
104) Naphthalene	15.257	128	2248808	168.08	ug/L	95
105) 1,2,3-Trichlorobenzene	15.427	180	1258478	178.93	ug/L	97
107) Ethanol	4.276	45	78200m	1767.82	ug/L	
108) acrolein	4.757	56	572291	508.87	ug/L	94
109) Tert Butyl Alcohol	5.383	59	462156	975.50	ug/L	96
110) tert Amyl alcohol	7.579	59	364351	1030.91	ug/L	97
111) Isobutyl alcohol	7.458	42	326293	2011.49	ug/L	95
112) 1,4-Dioxane	8.674	88	75690	1675.83	ug/L	93
113) 3,3-Dimethyl-1-butanol	10.439	57	2227836	4731.75	ug/L	97

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

7.6.7

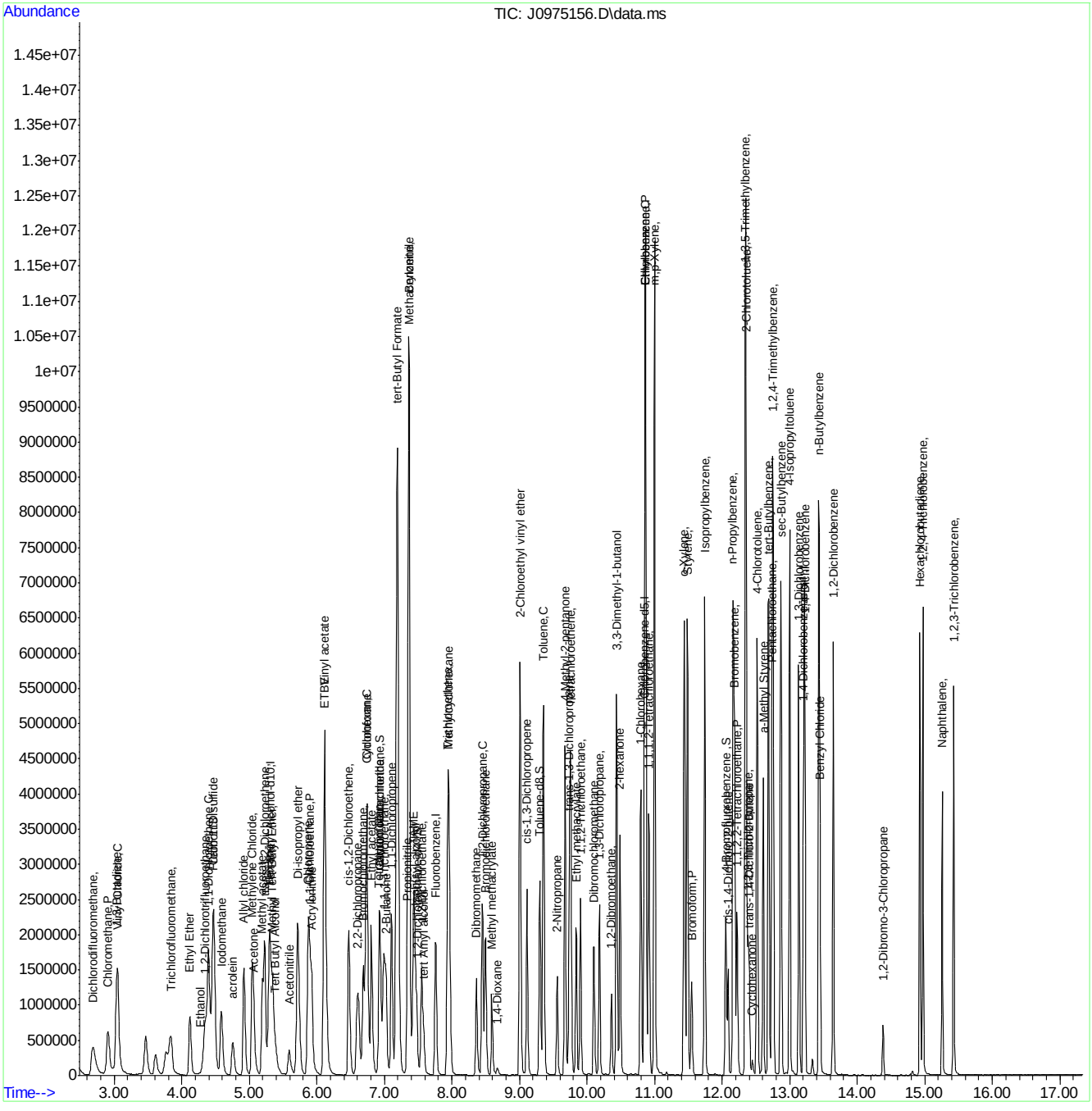
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

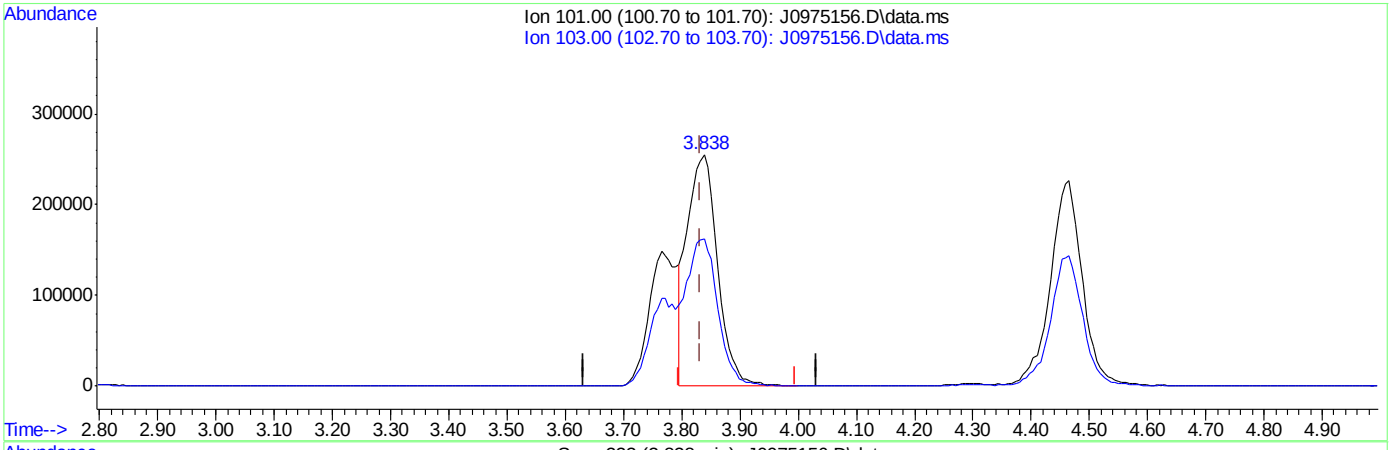
Sample Number:	VJ5237-IC5237	**Method:**	SW846 8260B
Lab FileID:	J0975156.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 16:39	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

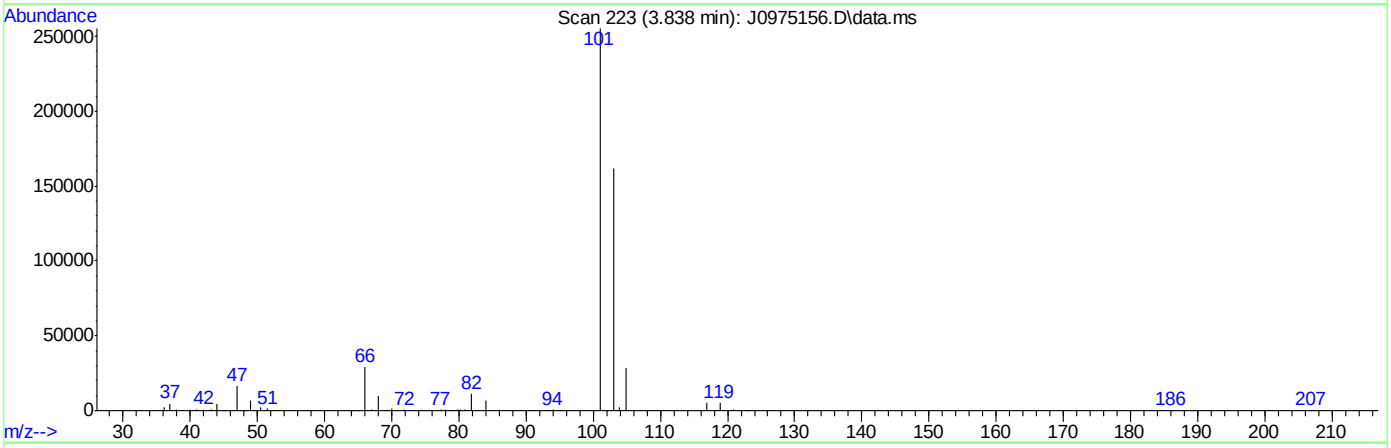
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.84	Split peak
Ethyl Alcohol	64-17-5		4.28	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975156.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 62.31ug/L

response 918142

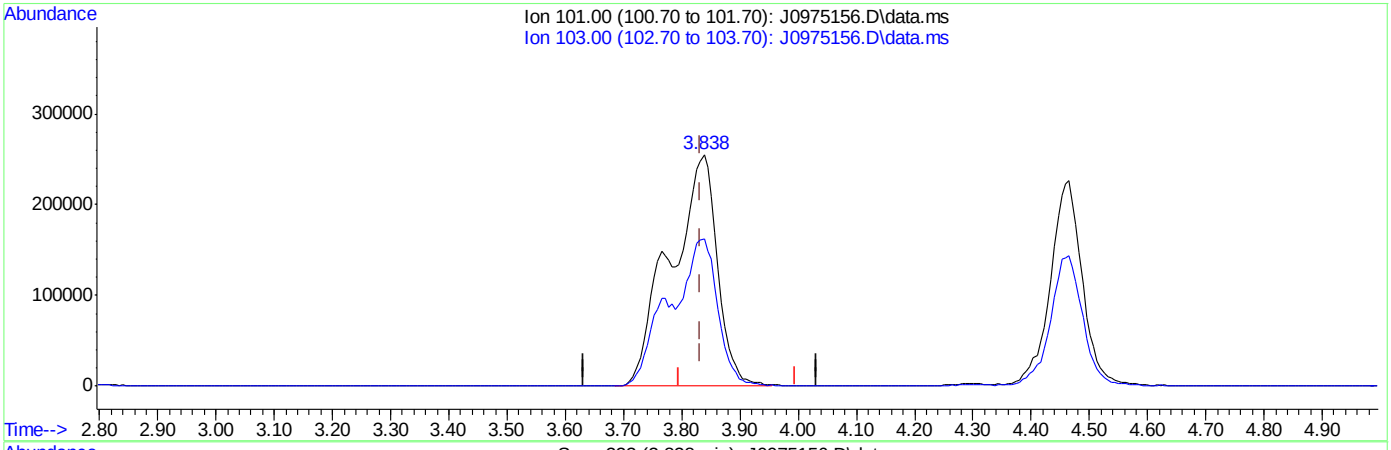
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	63.35
0.00	0.00	0.00
0.00	0.00	0.00

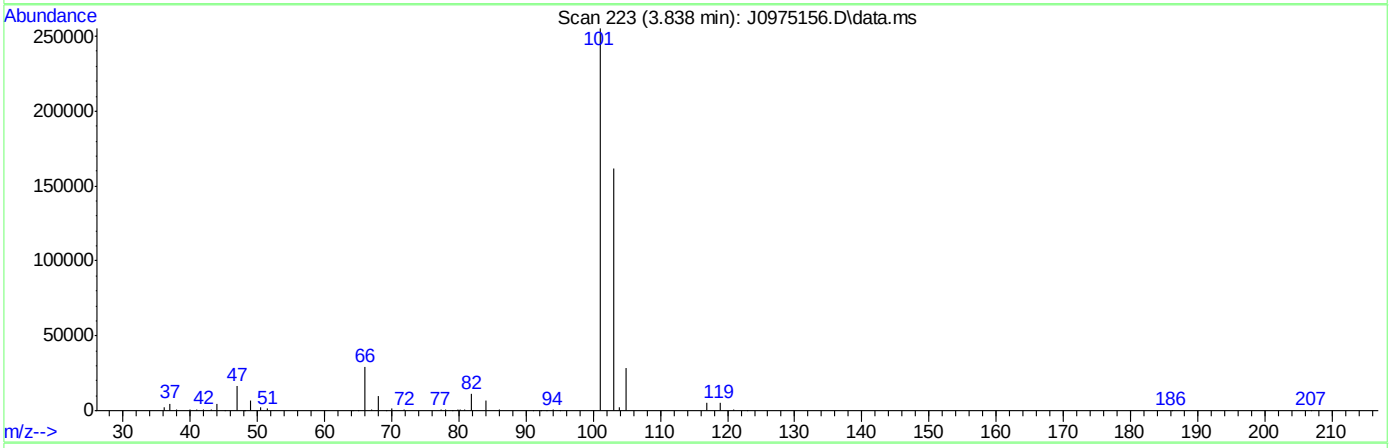
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975156.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 96.55ug/L m

response 1422690

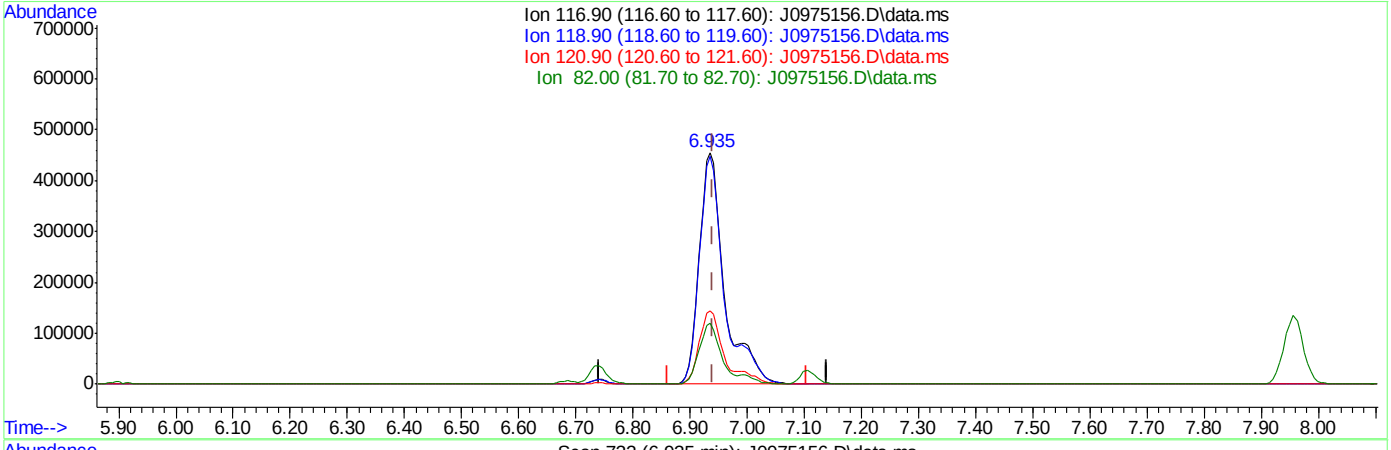
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	63.42
0.00	0.00	0.00
0.00	0.00	0.00

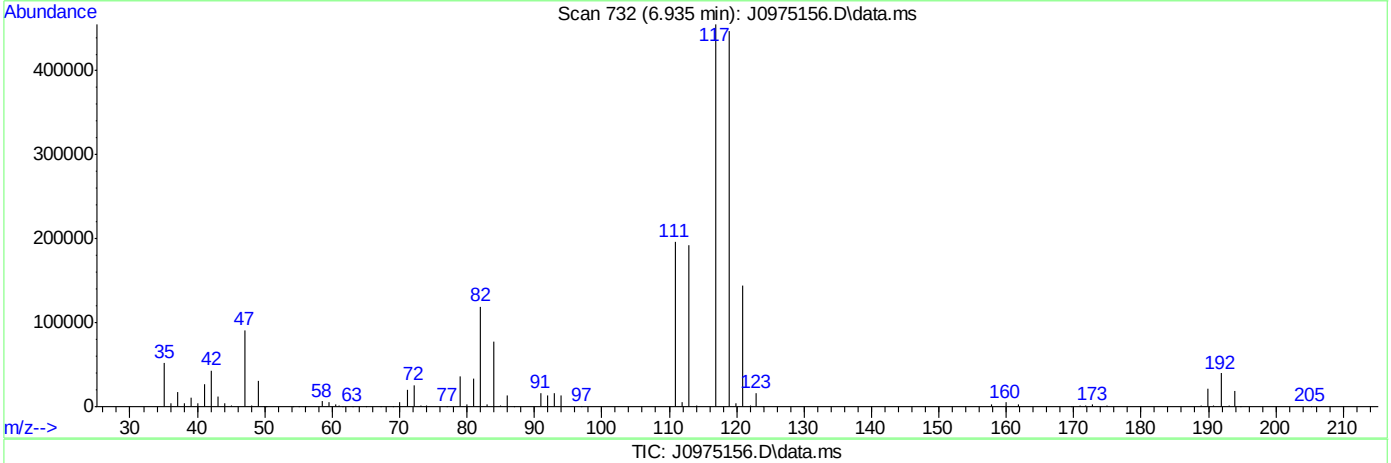
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975156.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 118.07ug/L

response 1403127

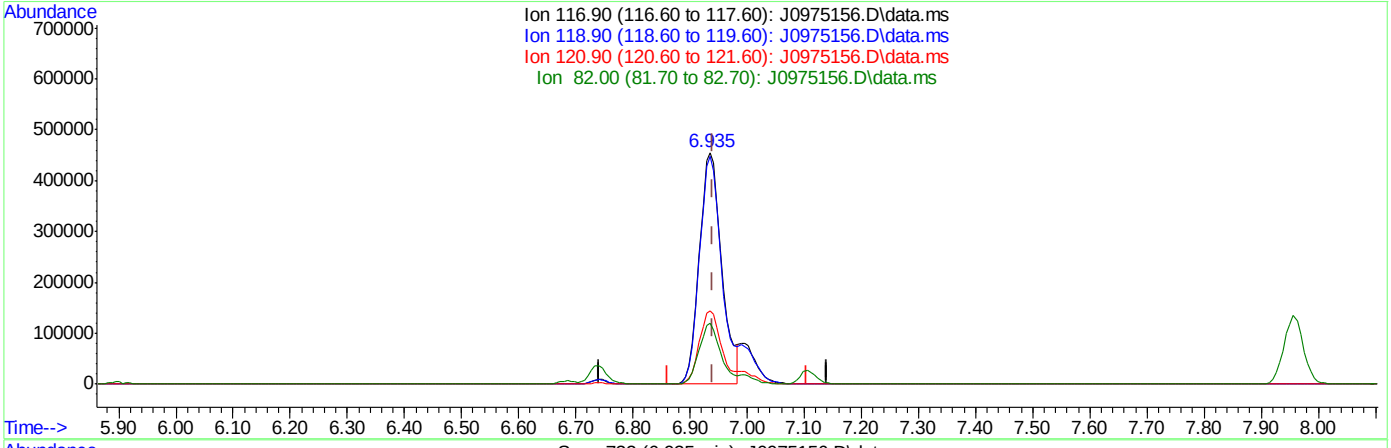
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	98.22
120.90	31.80	31.58
82.00	25.40	26.25

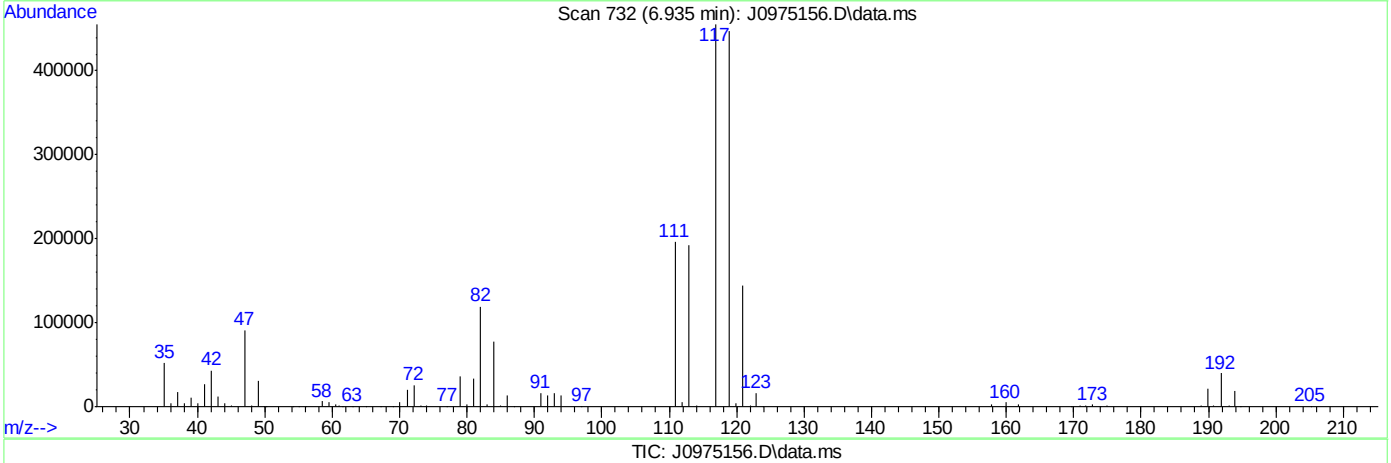
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975156.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 104.39ug/L m

response 1240589

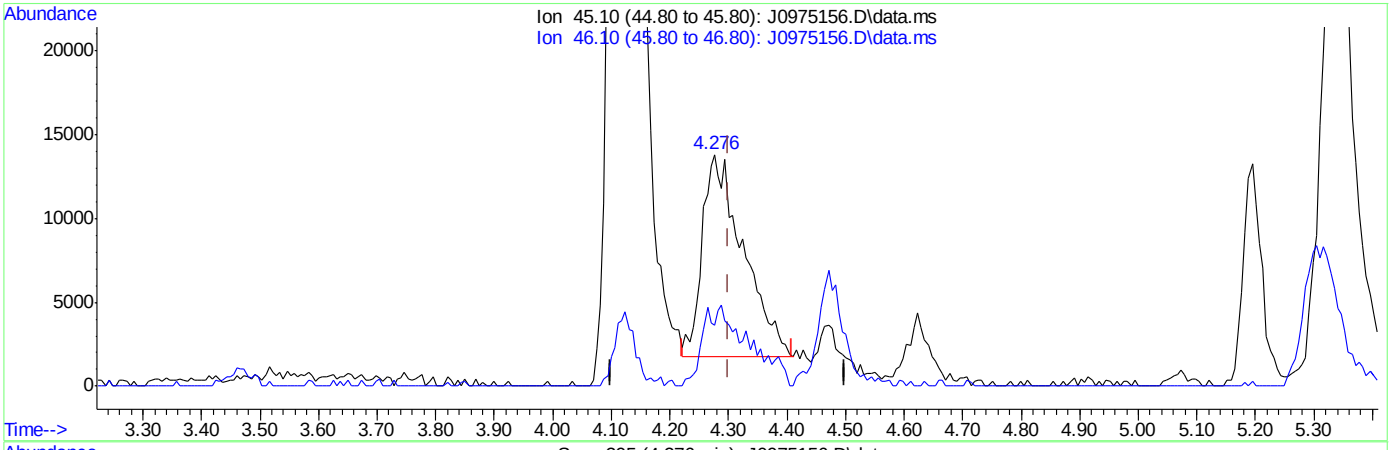
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	98.22
120.90	31.80	31.58
82.00	25.40	26.25

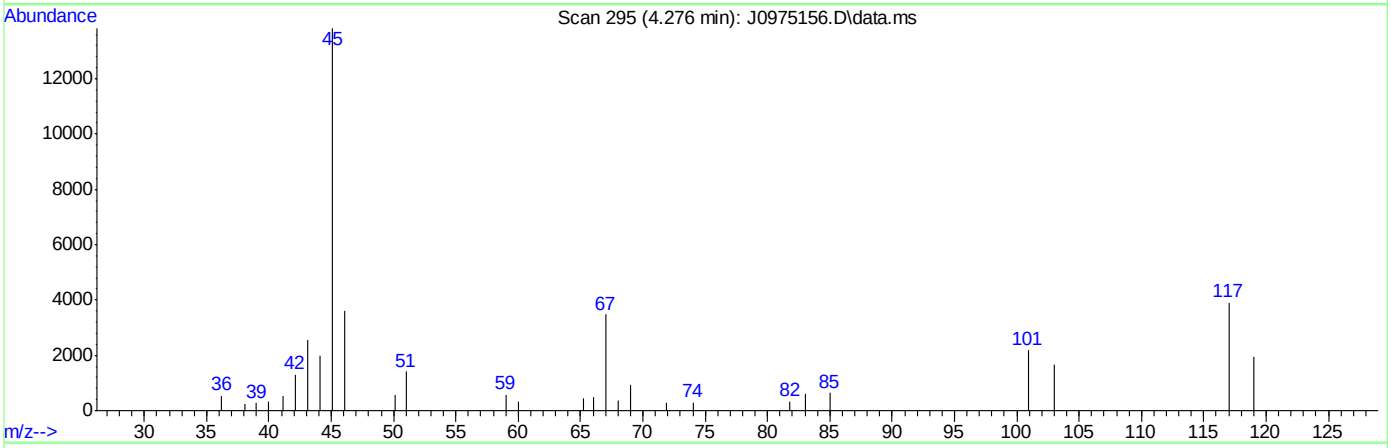
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975156.D\data.ms

(107) Ethanol

4.276min (-0.024) 1320.44ug/L

response 58410

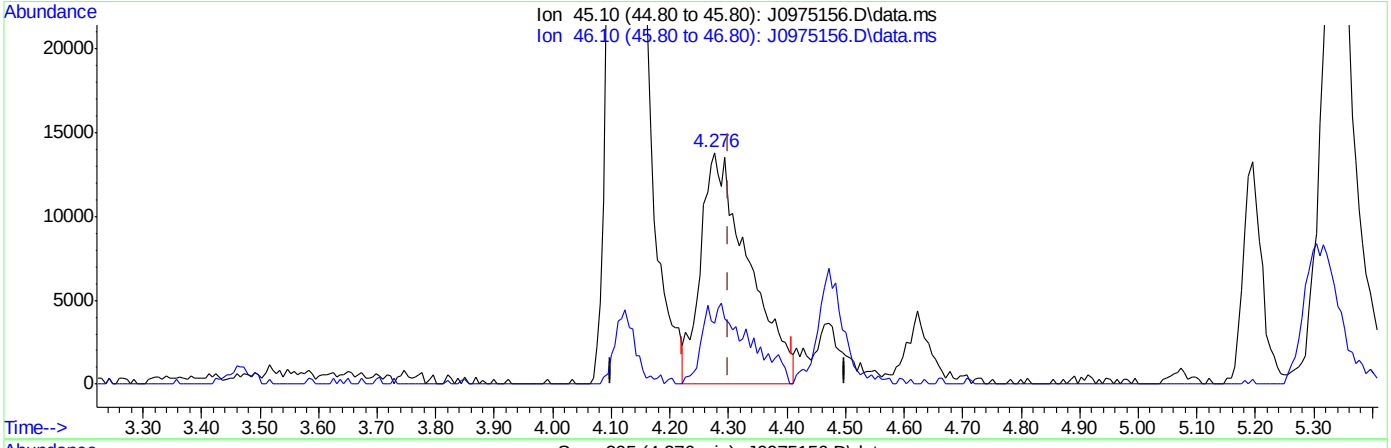
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	29.86
0.00	0.00	0.00
0.00	0.00	0.00

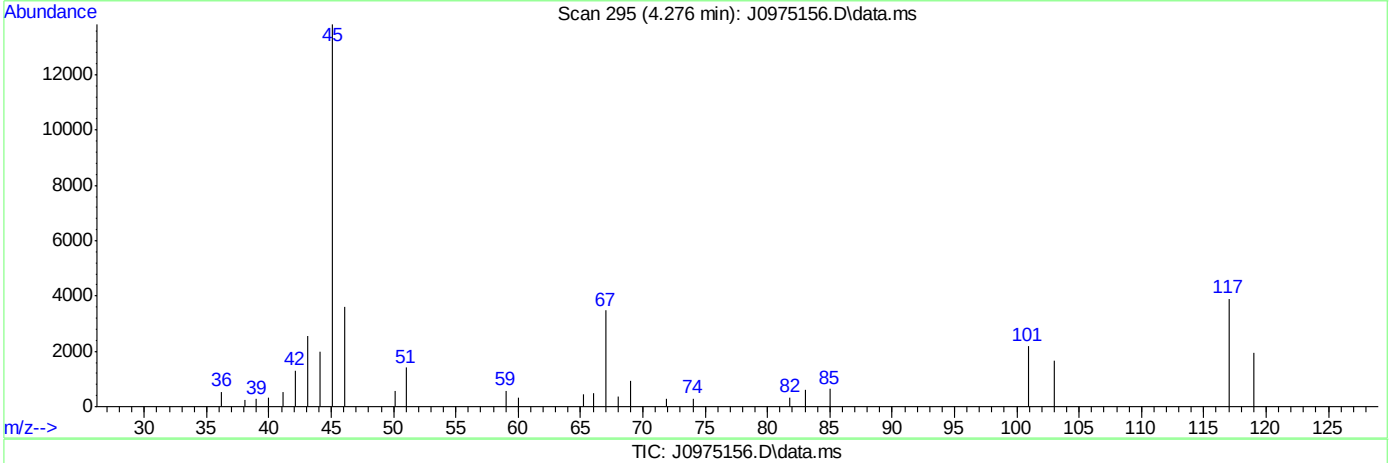
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration





TIC: J0975156.D\data.ms

(107) Ethanol

4.276min (-0.024) 1767.82ug/L m

response 78200

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	26.08
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:39:04 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1639270	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1249756	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	712475	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.292	65	88026	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	0.000	113	0d	0.00	ug/L	
Spiked Amount 50.000	Range 83 - 118		Recovery = 0.00%#			
46) 1,2-Dichloroethane-d4	7.482	65	499348	49.64	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.28%			
57) Toluene-d8	9.301	98	1616219	49.15	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.30%			
79) 4-Bromofluorobenzene	12.057	95	655632	50.88	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.76%			
Target Compounds						Qvalue
10) 1,2-Dichlorotrifluoroe...	4.355	67	376698	39.53	ug/L	98

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

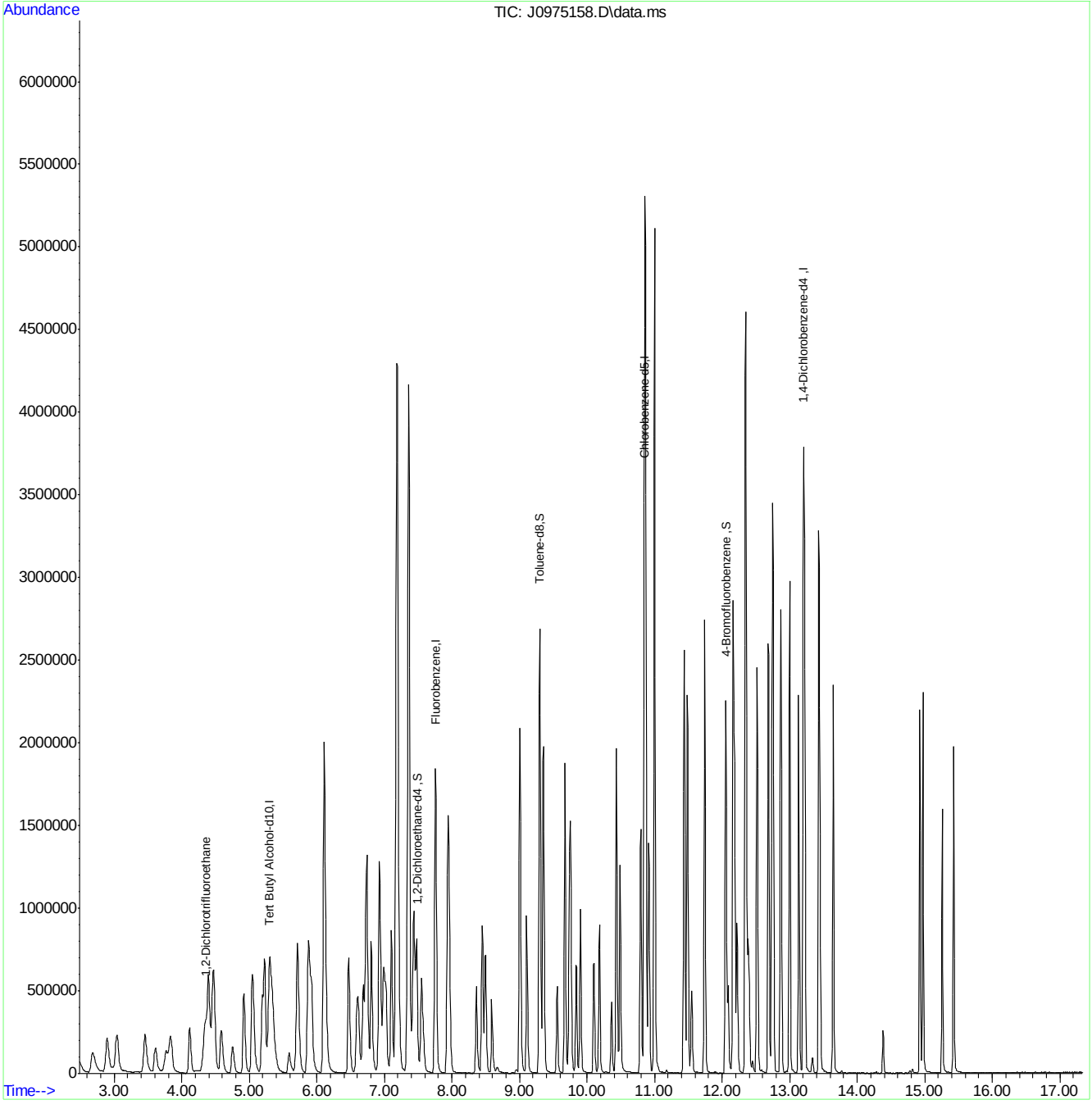
7.6.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:39:04 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

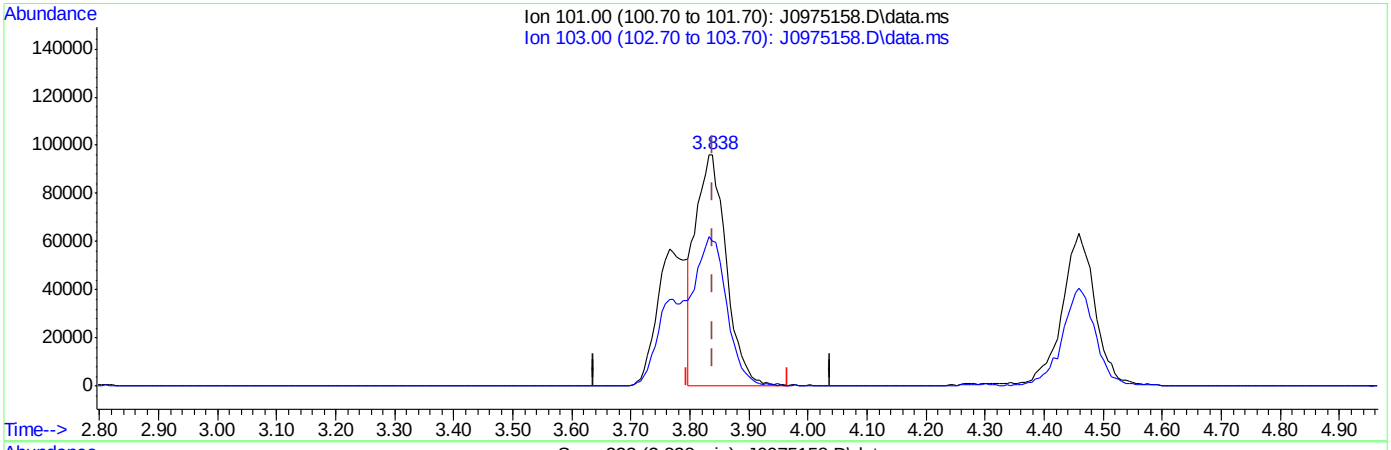


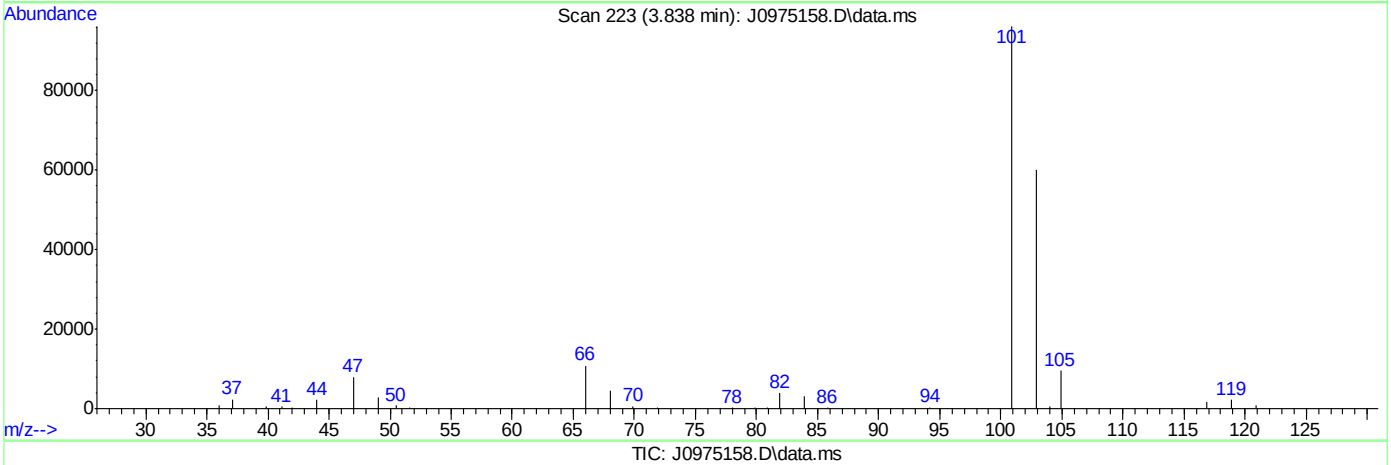
MSJ031516.M Wed Mar 16 09:49:38 2016 Page: 2

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975158.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 25.41ug/L

response 348698

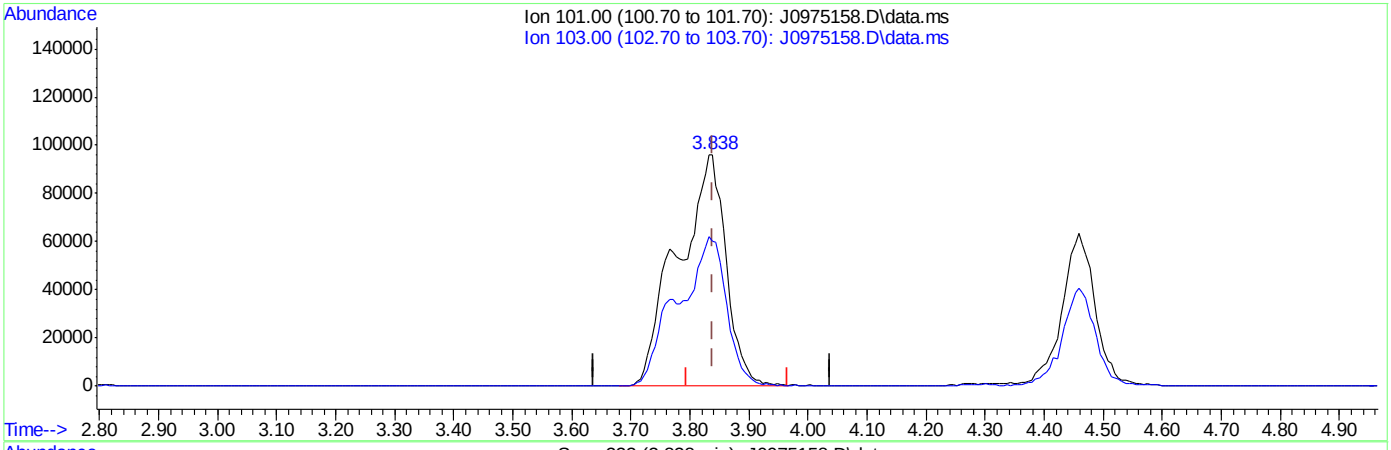
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	62.38
0.00	0.00	0.00
0.00	0.00	0.00

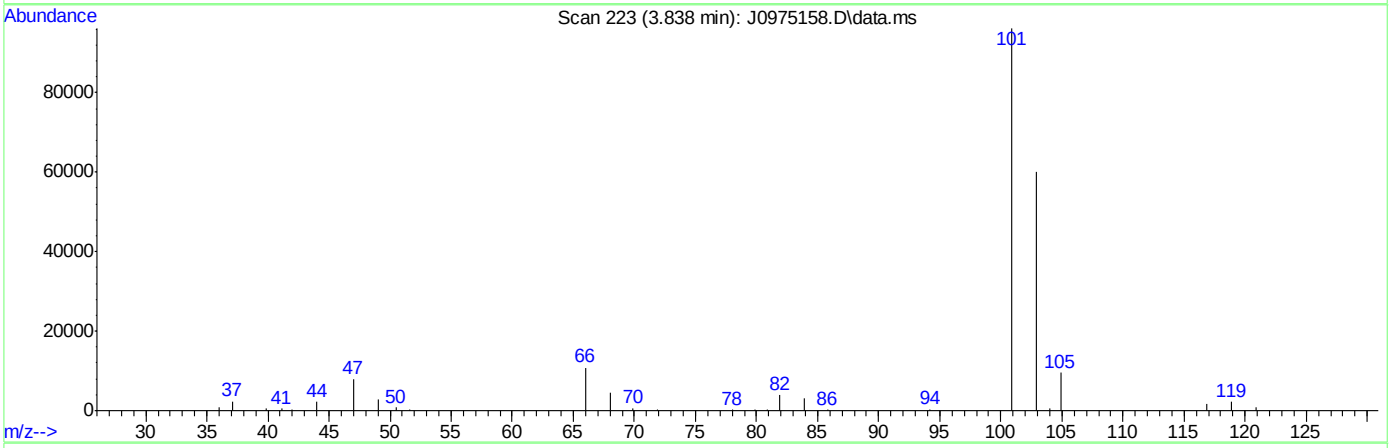
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975158.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 39.59ug/L m

response 543281

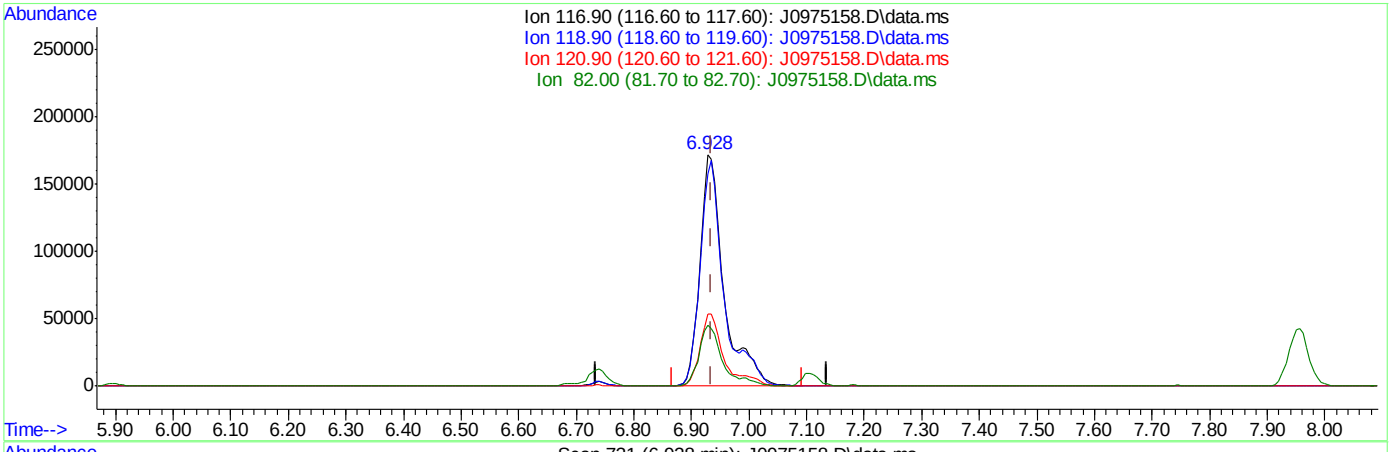
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	62.54
0.00	0.00	0.00
0.00	0.00	0.00

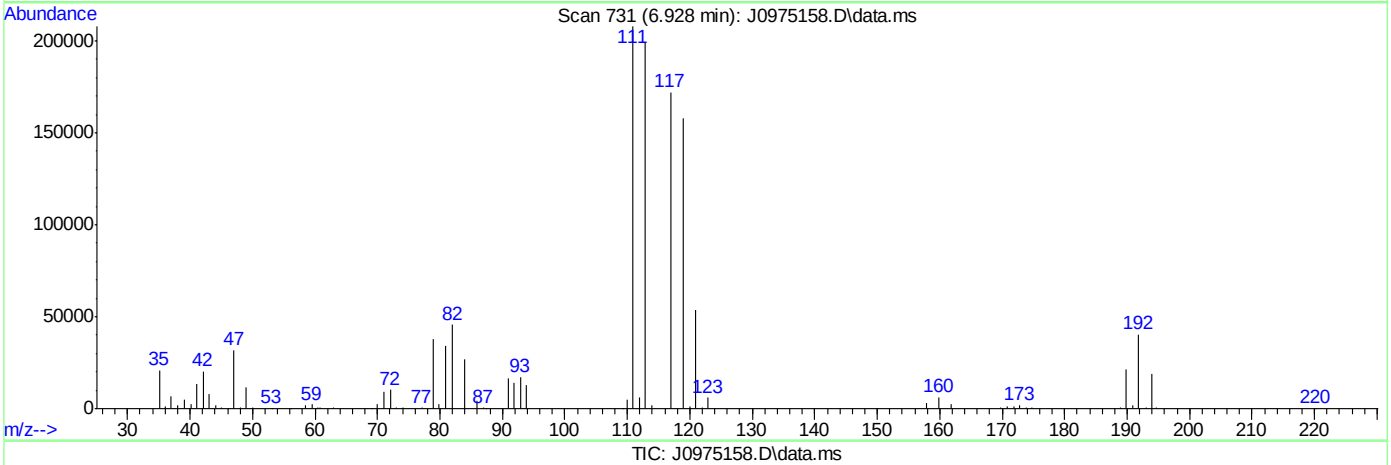
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975158.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 45.07ug/L

response 506180

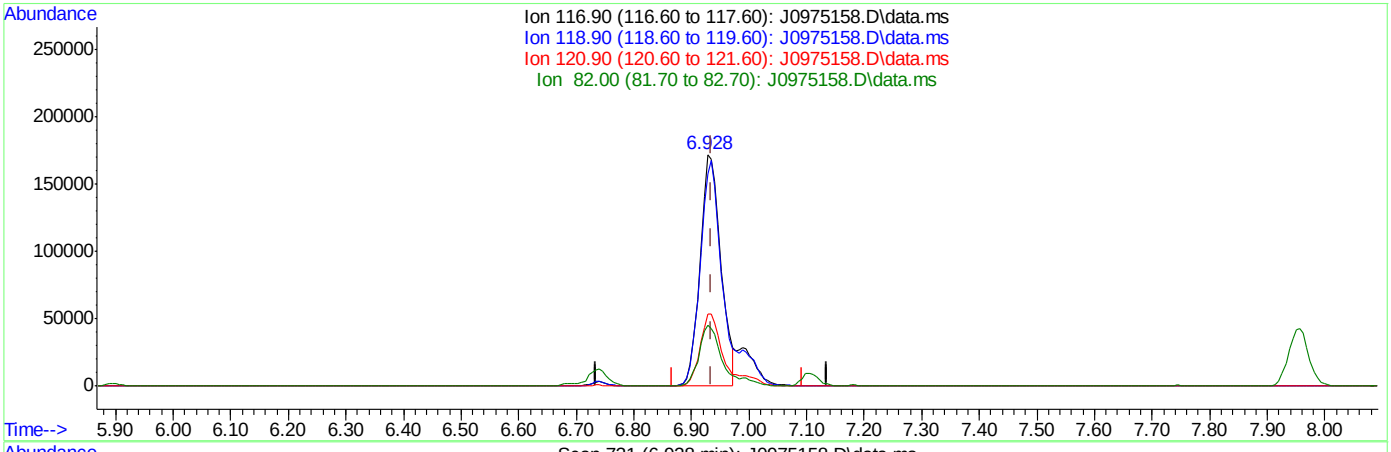
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	91.71
120.90	31.80	31.05
82.00	25.40	26.52

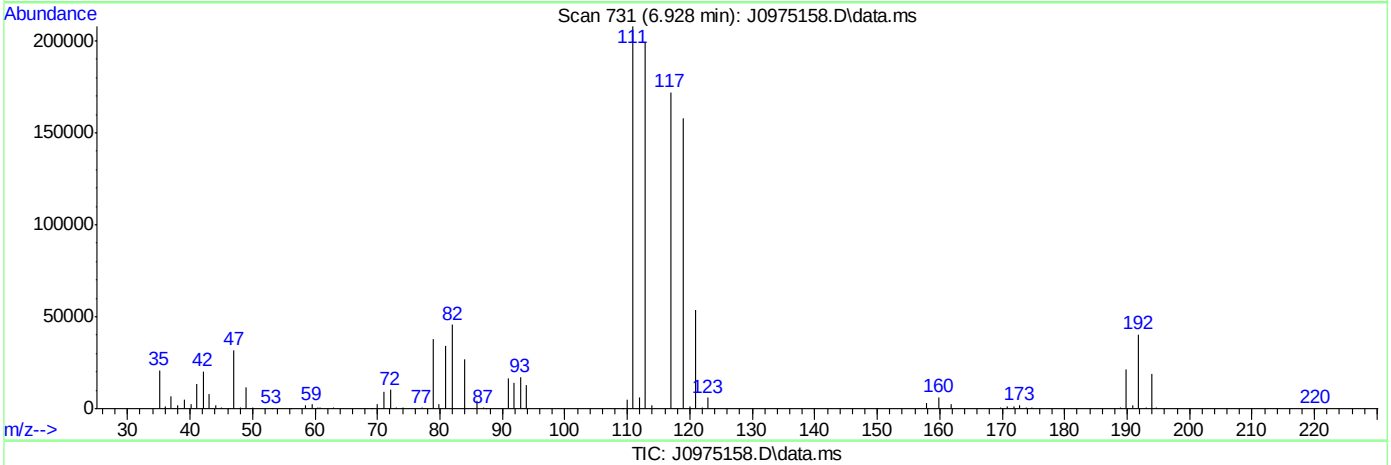
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975158.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 38.77ug/L m

response 435379

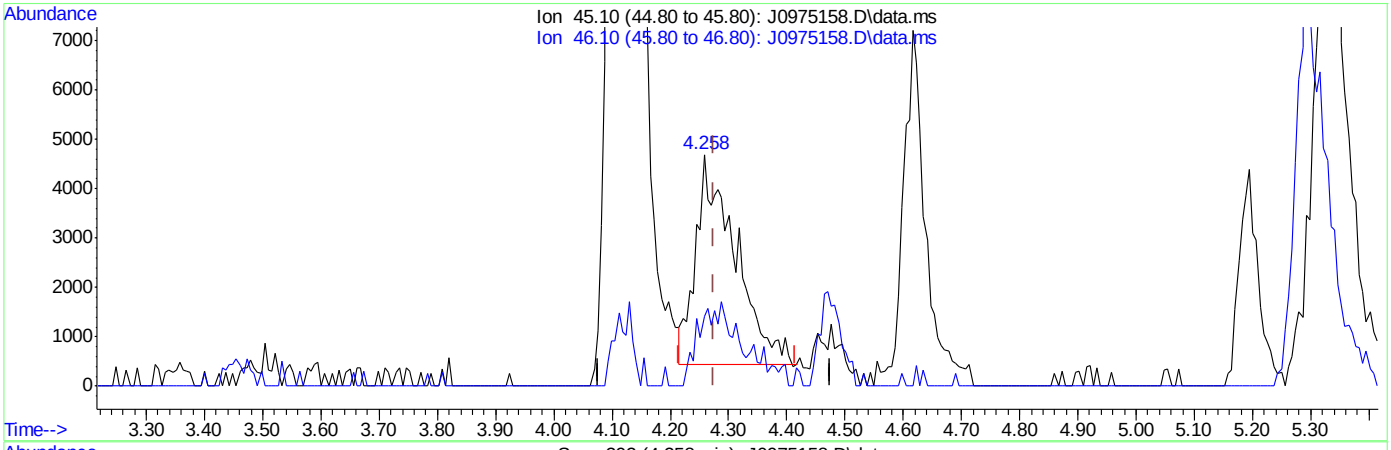
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	91.71
120.90	31.80	31.05
82.00	25.40	26.52

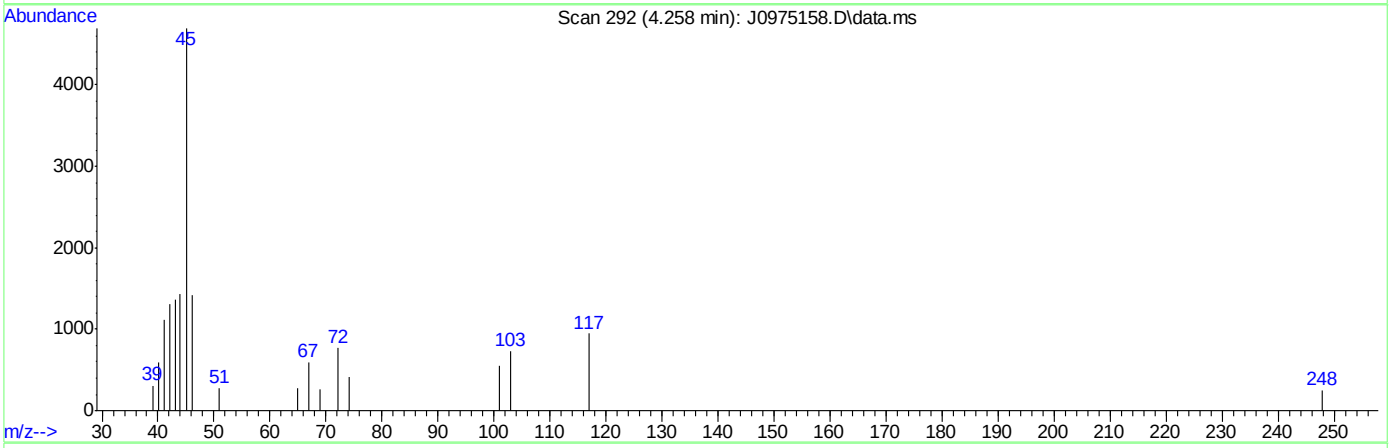
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975158.D\data.ms

(107) Ethanol

4.258min (-0.018) 482.59ug/L

response 19905

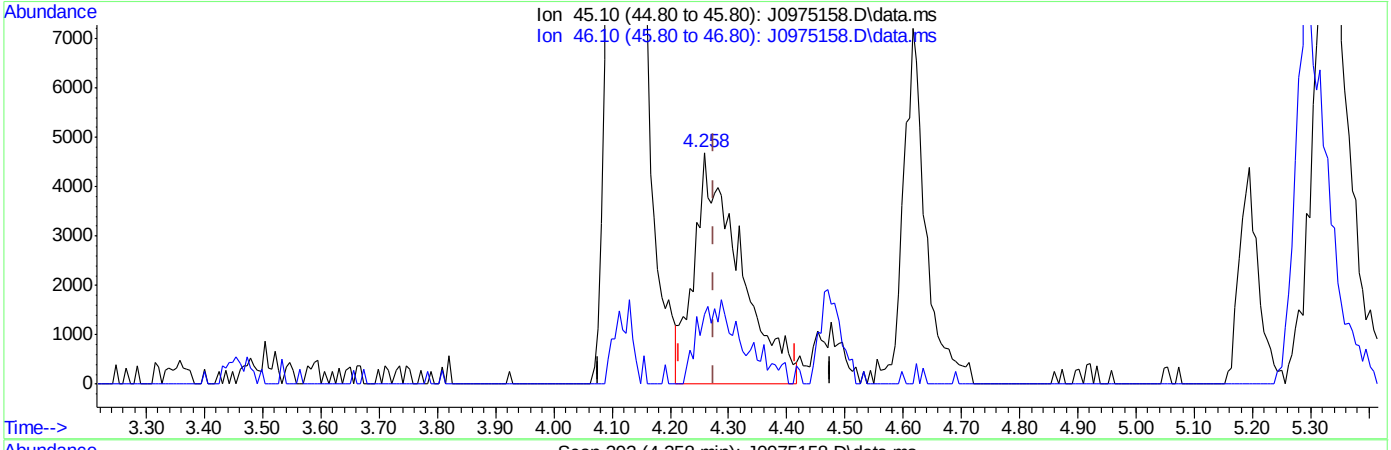
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	33.25
0.00	0.00	0.00
0.00	0.00	0.00

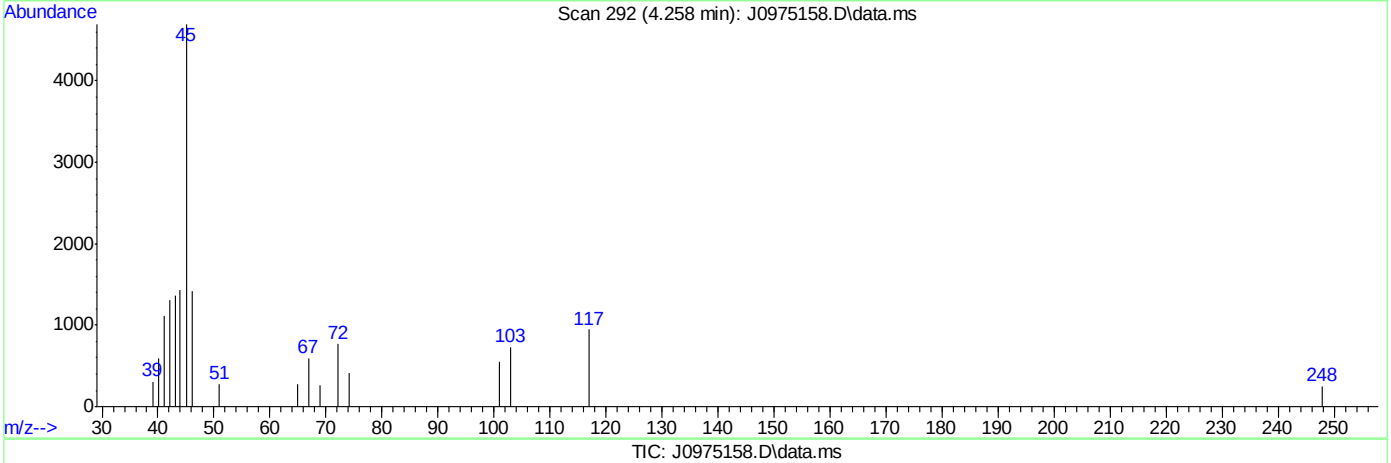
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975158.D\data.ms

(107) Ethanol

4.258min (-0.018) 633.21ug/L m

response 25660

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	30.12
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1689319	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1274772	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	725111	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	82619	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	432540	50.46	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.92%			
46) 1,2-Dichloroethane-d4	7.482	65	519342	50.10	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.20%			
57) Toluene-d8	9.301	98	1670418	49.81	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.62%			
79) 4-Bromofluorobenzene	12.057	95	665209	50.72	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.688	85	354259	34.07	ug/L	96
3) Chloromethane	2.901	50	387748	34.84	ug/L	95
4) Vinyl Chloride	3.041	62	425438	37.32	ug/L	99
6) Bromomethane	3.461	94	278051	34.53	ug/L	95
7) Chloroethane	3.613	64	217628	38.56	ug/L	97
8) Trichlorofluoromethane	3.844	101	553847m	39.16	ug/L	
9) Ethyl Ether	4.124	59	256246	39.23	ug/L	99
11) 1,1-Dichloroethene	4.398	61	477652	39.05	ug/L	97
12) Freon 113	4.465	101	289648	34.25	ug/L	94
13) Carbon Disulfide	4.477	76	975070	38.29	ug/L	98
14) Iodomethane	4.586	142	507869	37.58	ug/L	97
15) Allyl chloride	4.921	41	379599	33.57	ug/L	96
16) Methylene Chloride	5.049	49	412563	37.43	ug/L	92
17) Acetone	5.067	58	98076	193.60	ug/L #	83
18) Methyl acetate	5.195	74	198401	201.11	ug/L	98
19) trans-1,2-Dichloroethene	5.231	61	456974	40.68	ug/L	97
20) Hexane	5.298	56	279737	38.81	ug/L	96
21) Methyl Tert Butyl Ether	5.341	73	881327	39.36	ug/L	79
22) Acetonitrile	5.590	40	102201	320.47	ug/L	97
23) Di-isopropyl ether	5.718	45	997320	38.91	ug/L	98
24) Chloroprene	5.870	53	429680	35.58	ug/L	98
25) 1,1-Dichloroethane	5.894	63	571999	38.14	ug/L	100
26) Acrylonitrile	5.931	53	411362	183.51	ug/L	96
27) ETBE	6.119	59	1009684	39.34	ug/L	98
28) Vinyl acetate	6.113	43	2362562	181.98	ug/L	98
29) cis-1,2-Dichloroethene	6.472	96	351476	36.50	ug/L	96
30) 2,2-Dichloropropane	6.606	77	469483	40.11	ug/L	98
31) Bromochloromethane	6.685	128	168857	38.79	ug/L	98
32) Cyclohexane	6.734	56	525225	37.25	ug/L	95
33) Chloroform	6.740	83	618400	37.14	ug/L	97
34) Ethyl acetate	6.807	43	910882	174.50	ug/L	98
35) Tetrahydrofuran	6.916	42	56856	37.55	ug/L	86
37) Carbon Tetrachloride	6.934	117	454277m	39.25	ug/L	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) 1,1,1-Trichloroethane	6.995	97	518860	36.44	ug/L	97
39) 2-Butanone	7.026	43	425502	194.64	ug/L	99
40) 1,1-Dichloropropene	7.105	75	445038	38.71	ug/L	99
41) tert-Butyl Formate	7.190	59	2170239	415.05	ug/L	91
42) Propionitrile	7.336	54	271119	350.21	ug/L	92
43) Methacrylonitrile	7.360	41	1247708	346.35	ug/L	95
44) Benzene	7.360	78	1298928	37.11	ug/L	99
45) TAME	7.433	73	884954	38.21	ug/L	97
47) 1,2-Dichloroethane	7.549	62	446703	36.47	ug/L	96
48) Trichloroethene	7.938	95	336292	37.08	ug/L	98
49) Methylcyclohexane	7.957	83	595618	39.09	ug/L	98
50) Dibromomethane	8.364	93	201900	39.89	ug/L	93
51) 1,2-Dichloropropane	8.449	63	325127	36.98	ug/L	95
52) Bromodichloromethane	8.498	83	448772	39.82	ug/L	98
53) Methyl methacrylate	8.595	41	201813	43.42	ug/L	98
54) 2-Chloroethyl vinyl ether	9.009	63	863009	193.28	ug/L	98
55) cis-1,3-Dichloropropene	9.112	75	525273	38.68	ug/L	99
58) Toluene	9.356	91	1352904	36.64	ug/L	99
59) 2-Nitropropane	9.556	41	286557	195.66	ug/L	99
60) 4-Methyl-2-pentanone	9.672	43	1016587	192.72	ug/L	99
61) trans-1,3-Dichloropropene	9.739	75	484292	41.88	ug/L	98
62) Tetrachloroethene	9.757	166	351639	35.63	ug/L	97
63) Ethyl methacrylate	9.836	69	298048	35.34	ug/L	95
64) 1,1,2-Trichloroethane	9.903	83	240723	39.97	ug/L	98
65) Dibromochloromethane	10.104	129	315391	41.20	ug/L	96
66) 1,3-Dichloropropane	10.183	76	466774	37.93	ug/L	99
67) 1,2-Dibromoethane	10.366	107	267849	39.24	ug/L	100
68) 2-hexanone	10.487	43	667151	191.27	ug/L	99
69) 1-Chlorohexane	10.798	91	438744	40.52	ug/L	98
70) Ethylbenzene	10.864	91	1605826	38.15	ug/L	99
71) Chlorobenzene	10.864	112	922655	37.57	ug/L	95
72) 1,1,1,2-Tetrachloroethane	10.913	131	324751	40.66	ug/L	99
73) m,p-Xylene	10.998	91	2439122	74.78	ug/L	98
74) o-Xylene	11.436	91	1286993	39.57	ug/L	99
75) Styrene	11.485	104	949865	36.54	ug/L	98
76) Bromoform	11.546	173	195280	40.08	ug/L	97
77) Isopropylbenzene	11.740	105	1525541	40.59	ug/L	100
80) cis-1,4-Dichloro-2-butene	12.087	53	84202	35.73	ug/L	96
81) n-Propylbenzene	12.160	91	1860742	40.44	ug/L	99
82) Bromobenzene	12.185	156	410484	37.89	ug/L	100
83) 1,1,2,2-Tetrachloroethane	12.221	83	338472	38.72	ug/L	97
84) 1,3,5-Trimethylbenzene	12.343	105	1363036	39.15	ug/L	99
85) 2-Chlorotoluene	12.355	91	1311798	38.84	ug/L	97
86) trans-1,4-Dichloro-2-B...	12.398	53	90941	41.00	ug/L #	84
87) 1,2,3-Trichloropropane	12.385	110	90006	40.39	ug/L	95
88) Cyclohexanone	12.446	55	22052	157.38	ug/L	88
89) 4-Chlorotoluene	12.519	91	1209033	39.99	ug/L	98
90) a-Methyl Styrene	12.750	118	10042	1.01	ug/L #	1
91) tert-Butylbenzene	12.683	91	783832	38.53	ug/L	96
92) 1,2,4-Trimethylbenzene	12.756	105	1370993	39.43	ug/L	99

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) Pentachloroethane	12.738	167	233557	35.49	ug/L	98
94) sec-Butylbenzene	12.872	105	1676645	39.88	ug/L	99
95) 4-Isopropyltoluene	13.000	119	1386532	39.32	ug/L	99
96) 1,3-Dichlorobenzene	13.134	146	749434	39.01	ug/L	96
97) 1,4-Dichlorobenzene	13.219	146	766175	37.57	ug/L	95
98) n-Butylbenzene	13.432	92	833176	40.98	ug/L	99
99) Benzyl Chloride	13.450	126	123442	41.28	ug/L #	79
100) 1,2-Dichlorobenzene	13.645	146	709720	38.60	ug/L	98
101) 1,2-Dibromo-3-Chloropr...	14.381	75	50379	37.51	ug/L	96
102) Hexachlorobutadiene	14.928	225	304579	37.08	ug/L	99
103) 1,2,4-Trichlorobenzene	14.971	180	530342	39.51	ug/L	97
104) Naphthalene	15.257	128	930860	41.50	ug/L	99
105) 1,2,3-Trichlorobenzene	15.427	180	466779	39.24	ug/L	98
107) Ethanol	4.276	45	25799m	682.26	ug/L	
108) acrolein	4.757	56	213250	220.76	ug/L	94
109) Tert Butyl Alcohol	5.371	59	162595	406.01	ug/L #	57
110) tert Amyl alcohol	7.573	59	127486	453.85	ug/L	96
111) Isobutyl alcohol	7.458	42	113595	742.75	ug/L	96
112) 1,4-Dioxane	8.674	88	27105	826.21	ug/L	93
113) 3,3-Dimethyl-1-butanol	10.433	57	743617	2160.96	ug/L	98

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

7.6.9

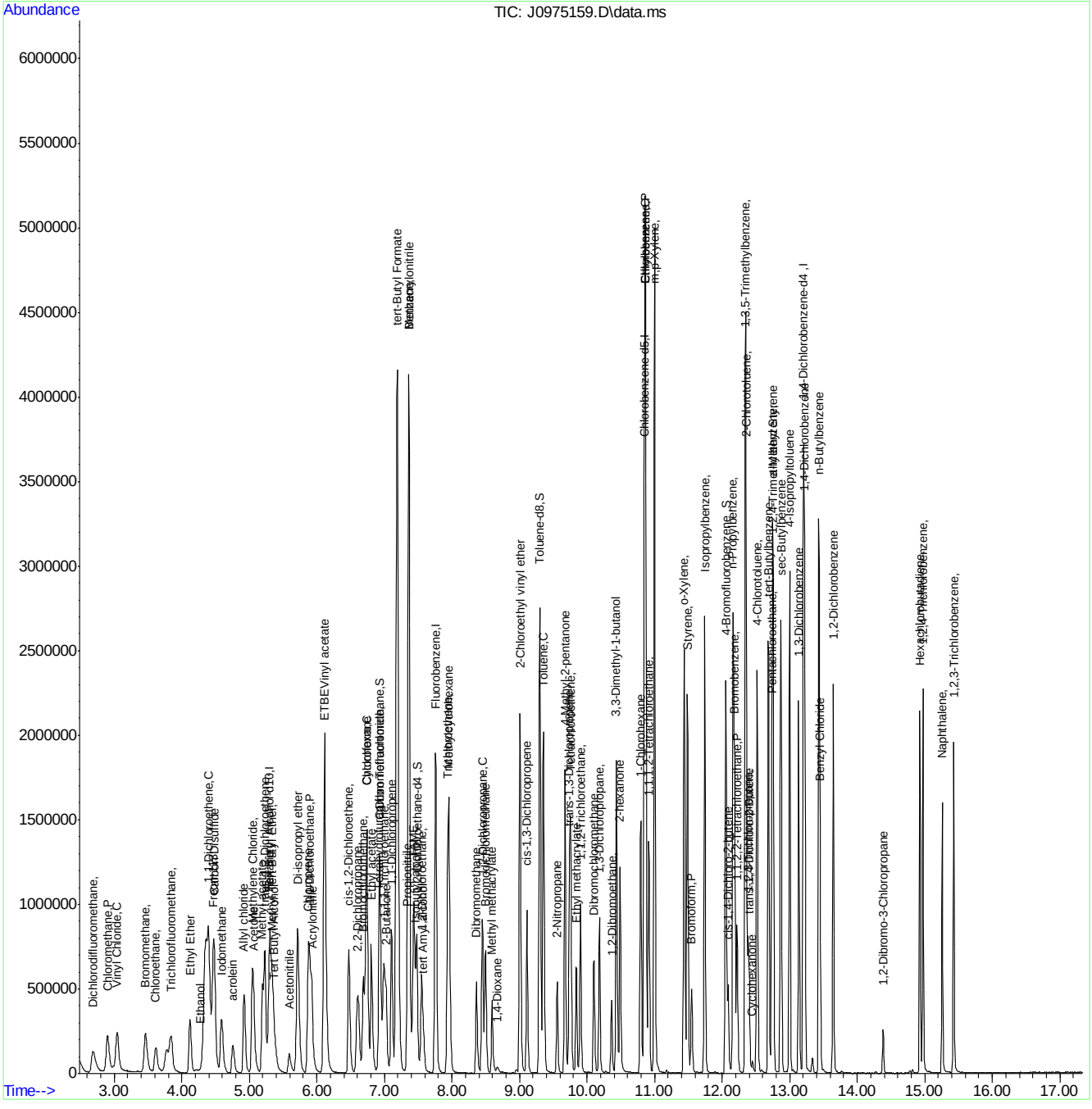
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

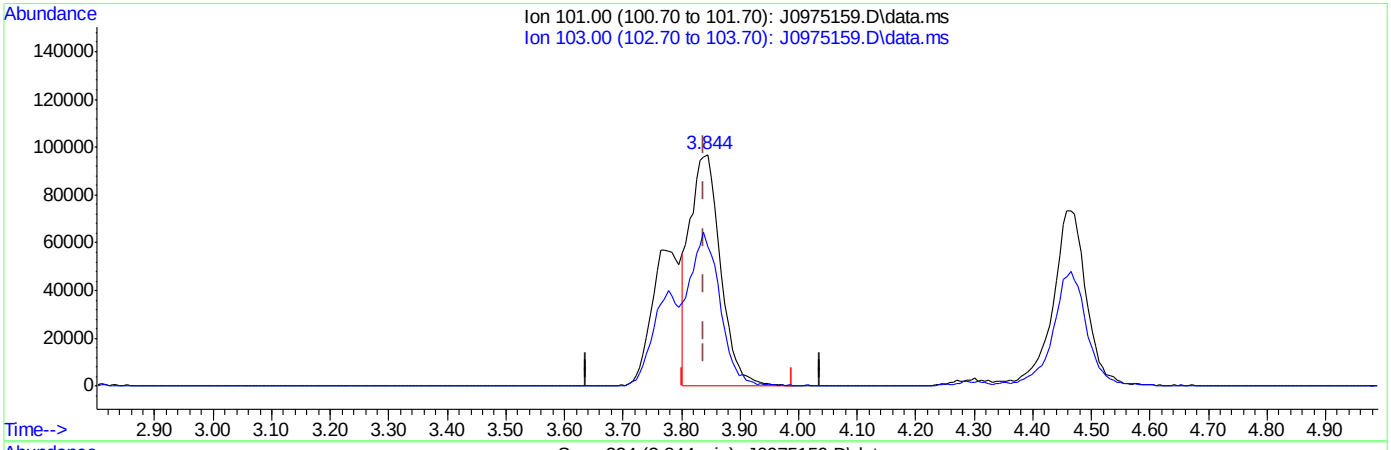
Sample Number:	VJ5237-ICV5237	**Method:**	SW846 8260B
Lab FileID:	J0975159.D	**Analyst approved:**	03/16/16 09:56 Darshna Patel
Injection Time:	03/15/16 17:51	**Supervisor approved:**	03/16/16 15:48 Melissa Mangual

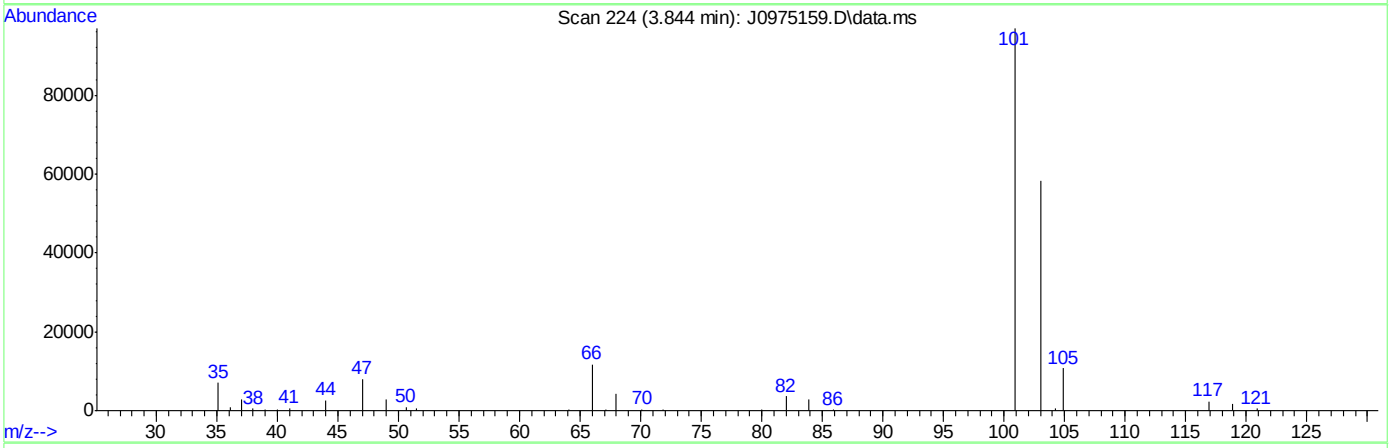
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.84	Split peak
Ethyl Alcohol	64-17-5		4.28	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 08:34:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975159.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 24.89ug/L

response 352017

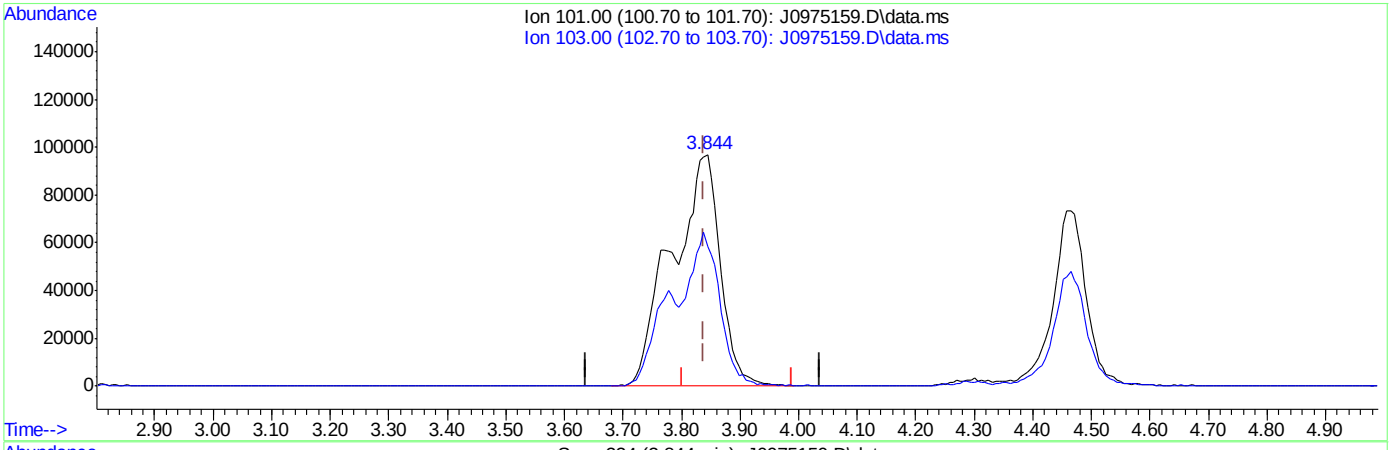
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	60.08
0.00	0.00	0.00
0.00	0.00	0.00

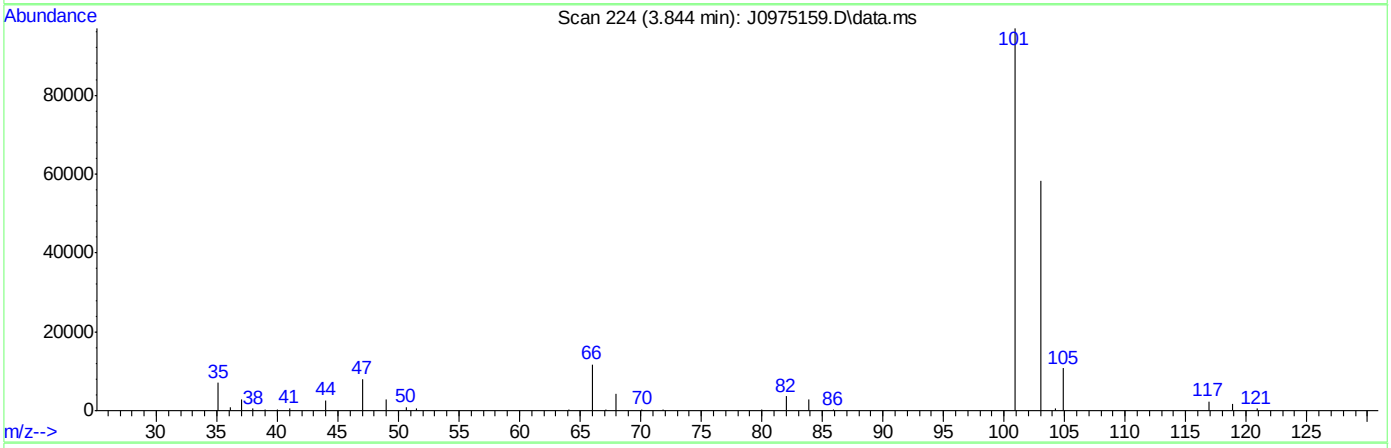
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 08:34:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975159.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 39.16ug/L m

response 553847

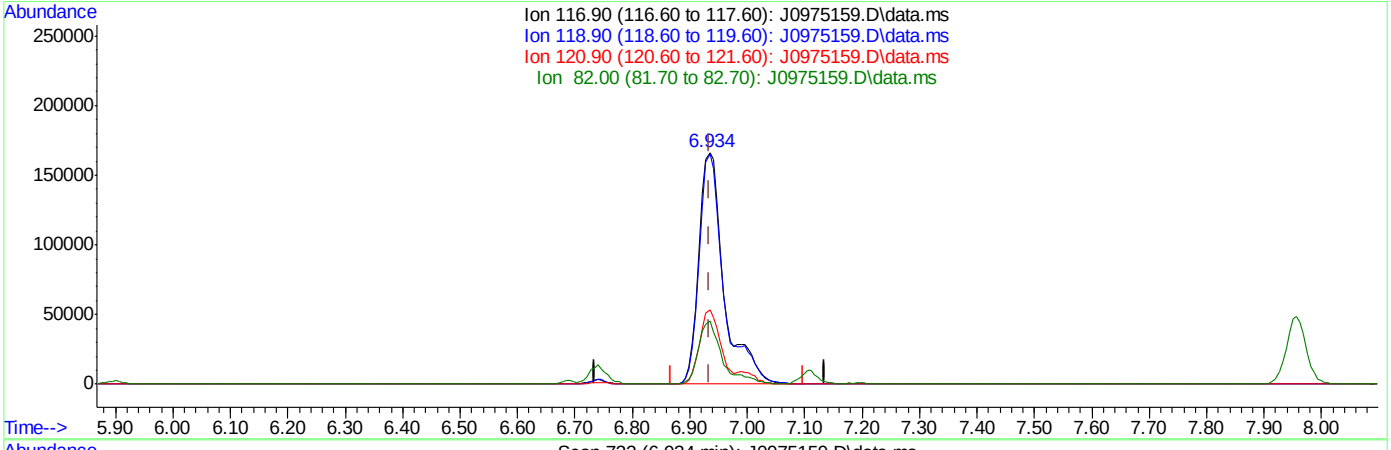
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	60.08
0.00	0.00	0.00
0.00	0.00	0.00

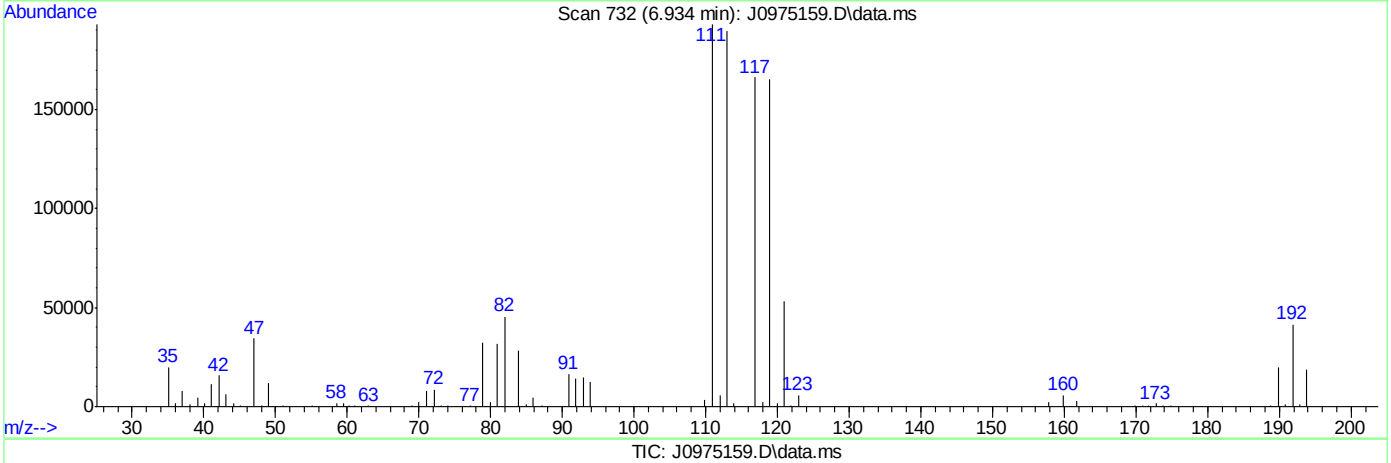
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 08:34:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975159.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 43.99ug/L

response 509174

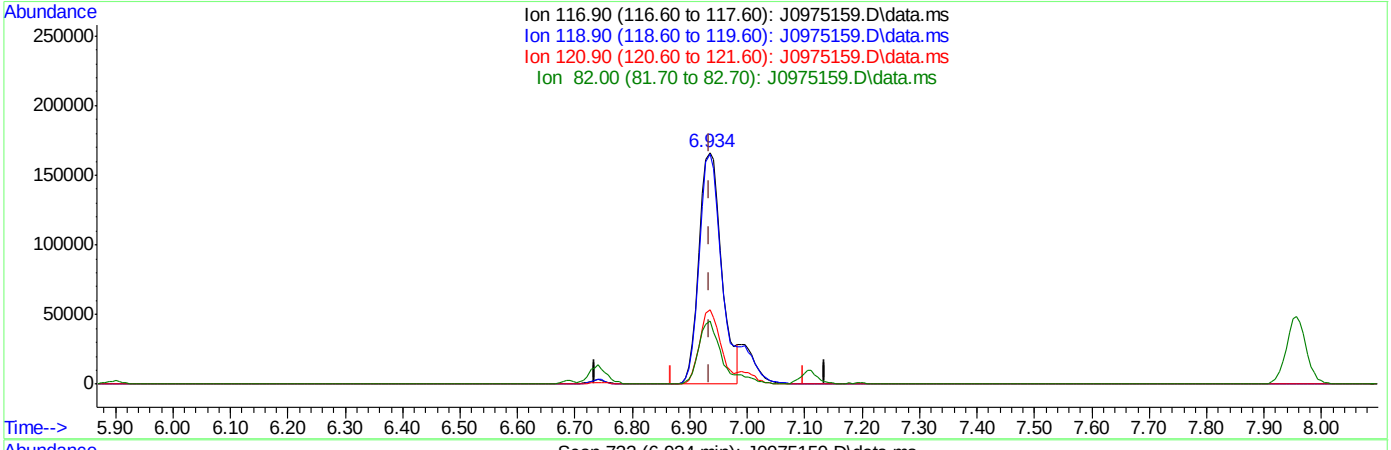
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	99.23
120.90	31.80	31.88
82.00	25.40	27.27

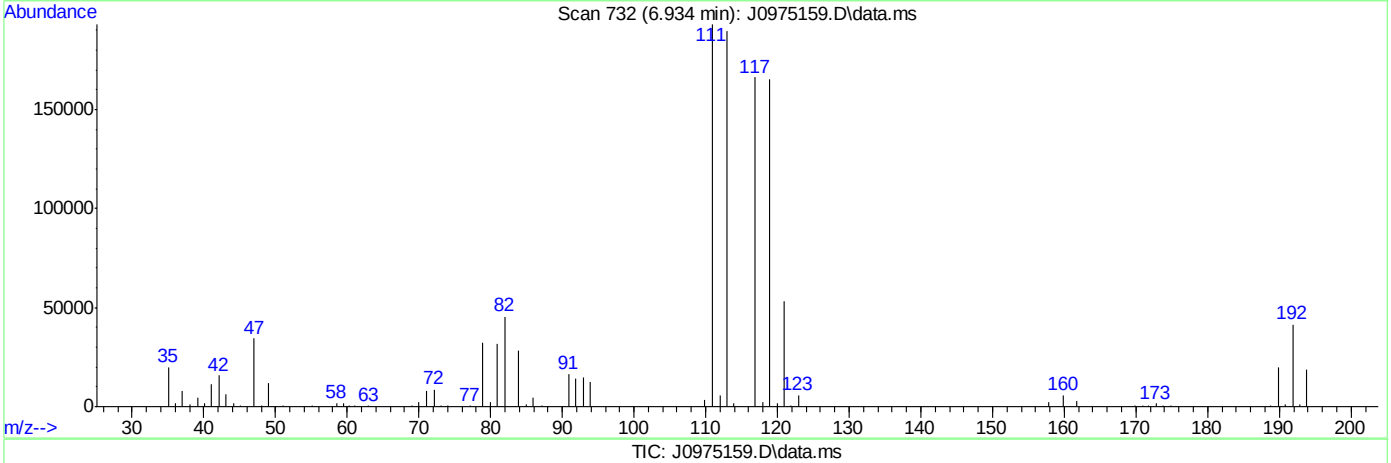
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 08:34:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975159.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 39.25ug/L m

response 454277

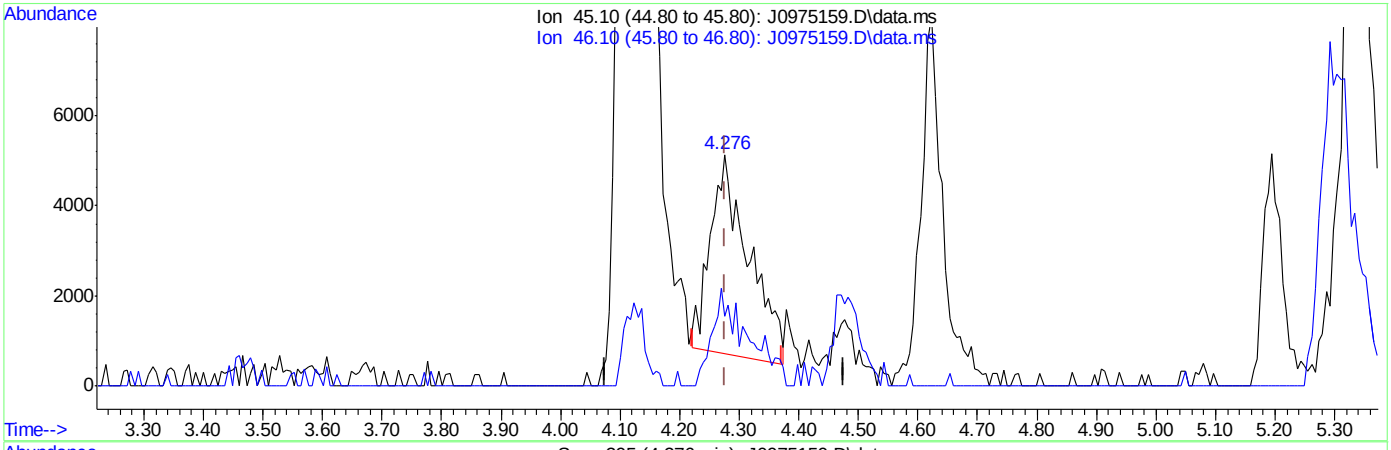
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	99.23
120.90	31.80	31.88
82.00	25.40	27.27

SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 08:34:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



TIC: J0975159.D\data.ms

(107) Ethanol

4.276min (-0.000) 508.74ug/L

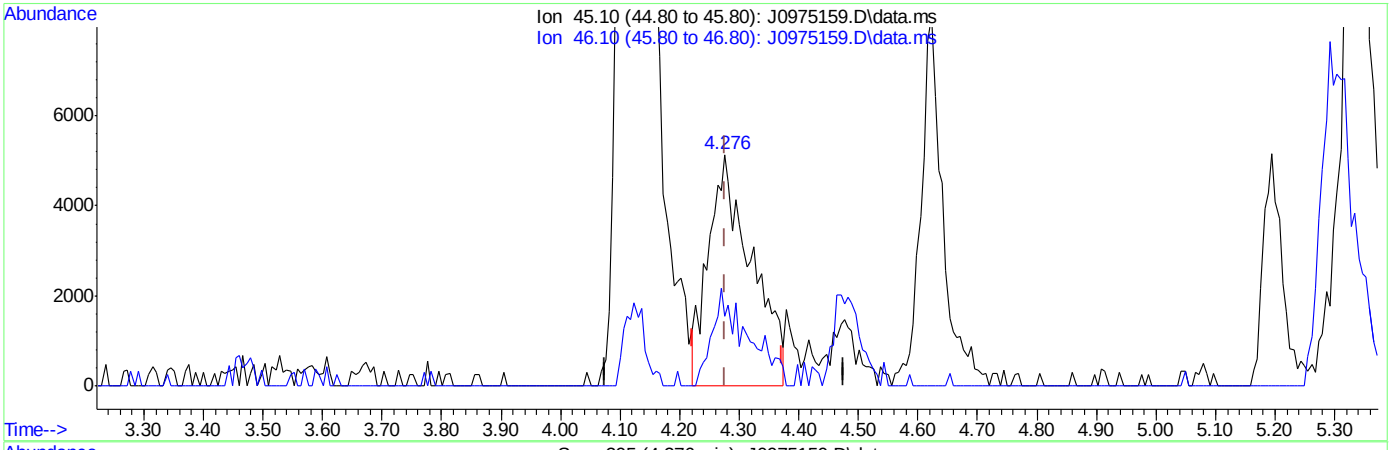
response 19635

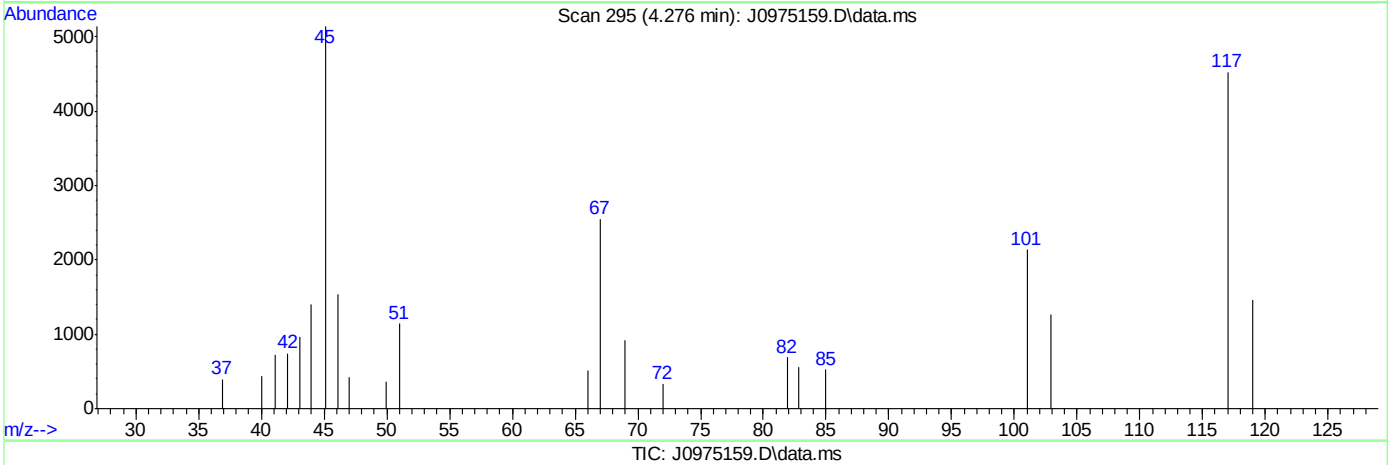
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	36.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 08:34:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0975159.D\data.ms

(107) Ethanol

4.276min (-0.000) 682.26ug/L m

response 25799

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	30.02
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
05/06/16 14:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 10:51:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1212118	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	1006931	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	572973	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.298	65	70938	250.00	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	6.922	113	315640	51.32	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.64%			
46) 1,2-Dichloroethane-d4	7.476	65	367663	49.43	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.86%			
57) Toluene-d8	9.301	98	1237131	46.70	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 93.40%			
79) 4-Bromofluorobenzene	12.057	95	509551	49.17	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.34%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.688	85	276538	37.06	ug/L	99
3) Chloromethane	2.901	50	317625	39.78	ug/L	99
4) Vinyl Chloride	3.035	62	349220	42.70	ug/L	98
5) 1,3-Butadiene	3.035	54	275244	45.27	ug/L	98
6) Bromomethane	3.455	94	207629	36.11	ug/L	98
7) Chloroethane	3.613	64	159276	39.39	ug/L	99
8) Trichlorofluoromethane	3.832	101	448077m	44.16	ug/L	
9) Ethyl Ether	4.118	59	188627	40.24	ug/L	98
10) 1,2-Dichlorotrifluoroe...	4.355	67	261672	37.13	ug/L	98
11) 1,1-Dichloroethene	4.392	61	316105	36.02	ug/L	98
12) Freon 113	4.465	101	207012	34.11	ug/L	96
13) Carbon Disulfide	4.471	76	685670	37.52	ug/L	98
14) Iodomethane	4.580	142	379094	39.09	ug/L	98
15) Allyl chloride	4.915	41	351845	43.37	ug/L	94
16) Methylene Chloride	5.043	49	321921	40.76	ug/L	98
17) Acetone	5.061	58	79741	219.37	ug/L	89
18) Methyl acetate	5.189	74	144632	204.33	ug/L	98
19) trans-1,2-Dichloroethene	5.225	61	310486	38.52	ug/L	96
20) Hexane	5.292	56	186258	36.01	ug/L	97
21) Methyl Tert Butyl Ether	5.335	73	650982	40.52	ug/L	80
22) Acetonitrile	5.584	40	99302	435.64	ug/L	97
23) Di-isopropyl ether	5.712	45	765900	41.64	ug/L	94
24) Chloroprene	5.870	53	360435	41.60	ug/L	98
25) 1,1-Dichloroethane	5.894	63	437932	40.69	ug/L	97
26) Acrylonitrile	5.919	53	319362	198.55	ug/L	96
27) ETBE	6.113	59	787489	42.76	ug/L	98
28) Vinyl acetate	6.101	43	1869330	200.67	ug/L	98
29) cis-1,2-Dichloroethene	6.472	96	278373	40.29	ug/L	98
30) 2,2-Dichloropropane	6.600	77	342428	40.77	ug/L	95
31) Bromochloromethane	6.685	128	127915	40.95	ug/L	99
32) Cyclohexane	6.734	56	351464	34.74	ug/L	97
33) Chloroform	6.734	83	482151	40.35	ug/L	100
34) Ethyl acetate	6.801	43	709723	189.49	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 10:51:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) Tetrahydrofuran	6.916	42	39410	36.23 ug/L	98
37) Carbon Tetrachloride	6.928	117	334158m	40.24 ug/L	
38) 1,1,1-Trichloroethane	6.995	97	394219	38.59 ug/L	98
39) 2-Butanone	7.020	43	327671	208.82 ug/L	97
40) 1,1-Dichloropropene	7.099	75	307250	37.24 ug/L	98
41) tert-Butyl Formate	7.184	59	1735909	462.81 ug/L	95
42) Propionitrile	7.324	54	220880	397.64 ug/L #	76
43) Methacrylonitrile	7.354	41	1011688	391.39 ug/L	98
44) Benzene	7.354	78	1046326	41.67 ug/L	100
45) TAME	7.427	73	712091	42.85 ug/L	97
47) 1,2-Dichloroethane	7.543	62	348645	39.67 ug/L	97
48) Trichloroethene	7.932	95	249778	38.39 ug/L	96
49) Methylcyclohexane	7.957	83	400926	36.67 ug/L	97
50) Dibromomethane	8.358	93	144021	39.66 ug/L	96
51) 1,2-Dichloropropane	8.449	63	254341	40.32 ug/L	96
52) Bromodichloromethane	8.492	83	348445	43.09 ug/L	100
53) Methyl methacrylate	8.589	41	138055	41.40 ug/L	97
54) 2-Chloroethyl vinyl ether	9.003	63	682248	212.95 ug/L	98
55) cis-1,3-Dichloropropene	9.106	75	407418	41.74 ug/L	96
58) Toluene	9.350	91	1069919	36.69 ug/L	99
59) 2-Nitropropane	9.557	41	214818	185.61 ug/L	98
60) 4-Methyl-2-pentanone	9.672	43	861108	206.67 ug/L	99
61) trans-1,3-Dichloropropene	9.733	75	363655	39.79 ug/L	96
62) Tetrachloroethene	9.757	166	255832	32.82 ug/L	98
63) Ethyl methacrylate	9.836	69	255878	38.41 ug/L	97
64) 1,1,2-Trichloroethane	9.903	83	182316	38.32 ug/L	97
65) Dibromochloromethane	10.098	129	246952	40.84 ug/L	98
66) 1,3-Dichloropropane	10.183	76	369438	38.01 ug/L	96
67) 1,2-Dibromoethane	10.360	107	201823	37.43 ug/L	100
68) 2-hexanone	10.487	43	595719	216.22 ug/L	97
69) 1-Chlorohexane	10.798	91	314441	36.77 ug/L	97
70) Ethylbenzene	10.858	91	1345640	40.47 ug/L	99
71) Chlorobenzene	10.865	112	788948	40.67 ug/L	97
72) 1,1,1,2-Tetrachloroethane	10.913	131	262641	41.63 ug/L	98
73) m,p-Xylene	10.998	91	2030021	79.45 ug/L	99
74) o-Xylene	11.436	91	1049267	40.84 ug/L	99
75) Styrene	11.485	104	836621	40.82 ug/L	97
76) Bromoform	11.546	173	159778	41.46 ug/L	97
77) Isopropylbenzene	11.741	105	1222770	41.18 ug/L	100
80) cis-1,4-Dichloro-2-butene	12.087	53	69503	37.33 ug/L	97
81) n-Propylbenzene	12.160	91	1507719	41.47 ug/L	99
82) Bromobenzene	12.185	156	354850	41.45 ug/L	98
83) 1,1,2,2-Tetrachloroethane	12.221	83	278738	40.35 ug/L	99
84) 1,3,5-Trimethylbenzene	12.343	105	1175013	42.71 ug/L	99
85) 2-Chlorotoluene	12.349	91	1113533	41.72 ug/L	99
86) trans-1,4-Dichloro-2-B...	12.404	53	65526	37.44 ug/L #	86
87) 1,2,3-Trichloropropane	12.385	110	71032	40.34 ug/L	95
88) Cyclohexanone	12.446	55	30820	278.35 ug/L	90
89) 4-Chlorotoluene	12.519	91	1027033	42.99 ug/L	99
90) a-Methyl Styrene	12.604	118	640659	81.54 ug/L	99

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 10:51:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) tert-Butylbenzene	12.684	91	642138	39.95	ug/L	98
92) 1,2,4-Trimethylbenzene	12.750	105	1197406	43.58	ug/L	99
93) Pentachloroethane	12.738	167	229830	44.53	ug/L	97
94) sec-Butylbenzene	12.866	105	1345942	40.52	ug/L	99
95) 4-Isopropyltoluene	13.000	119	1166656	41.87	ug/L	99
96) 1,3-Dichlorobenzene	13.134	146	623496	41.07	ug/L	96
97) 1,4-Dichlorobenzene	13.219	146	650301	40.36	ug/L	95
98) n-Butylbenzene	13.432	92	666609	41.50	ug/L	99
99) Benzyl Chloride	13.450	126	103293	43.53	ug/L #	75
100) 1,2-Dichlorobenzene	13.645	146	572336	39.39	ug/L	99
101) 1,2-Dibromo-3-Chloropr...	14.381	75	35868	33.90	ug/L	93
102) Hexachlorobutadiene	14.928	225	235803	36.33	ug/L	96
103) 1,2,4-Trichlorobenzene	14.977	180	385632	36.35	ug/L	98
104) Naphthalene	15.257	128	542542	30.54	ug/L	100
105) 1,2,3-Trichlorobenzene	15.427	180	321421	34.19	ug/L	98
107) Ethanol	4.264	45	31673	1015.88	ug/L	98
108) acrolein	4.751	56	161662	194.92	ug/L	99
109) Tert Butyl Alcohol	5.371	59	141338	411.05	ug/L	91
110) tert Amyl alcohol	7.573	59	105785	438.61	ug/L	91
111) Isobutyl alcohol	7.452	42	105261	806.68	ug/L	93
112) 1,4-Dioxane	8.674	88	26958	957.04	ug/L	94
113) 3,3-Dimethyl-1-butanol	10.433	57	635713	2151.59	ug/L	98

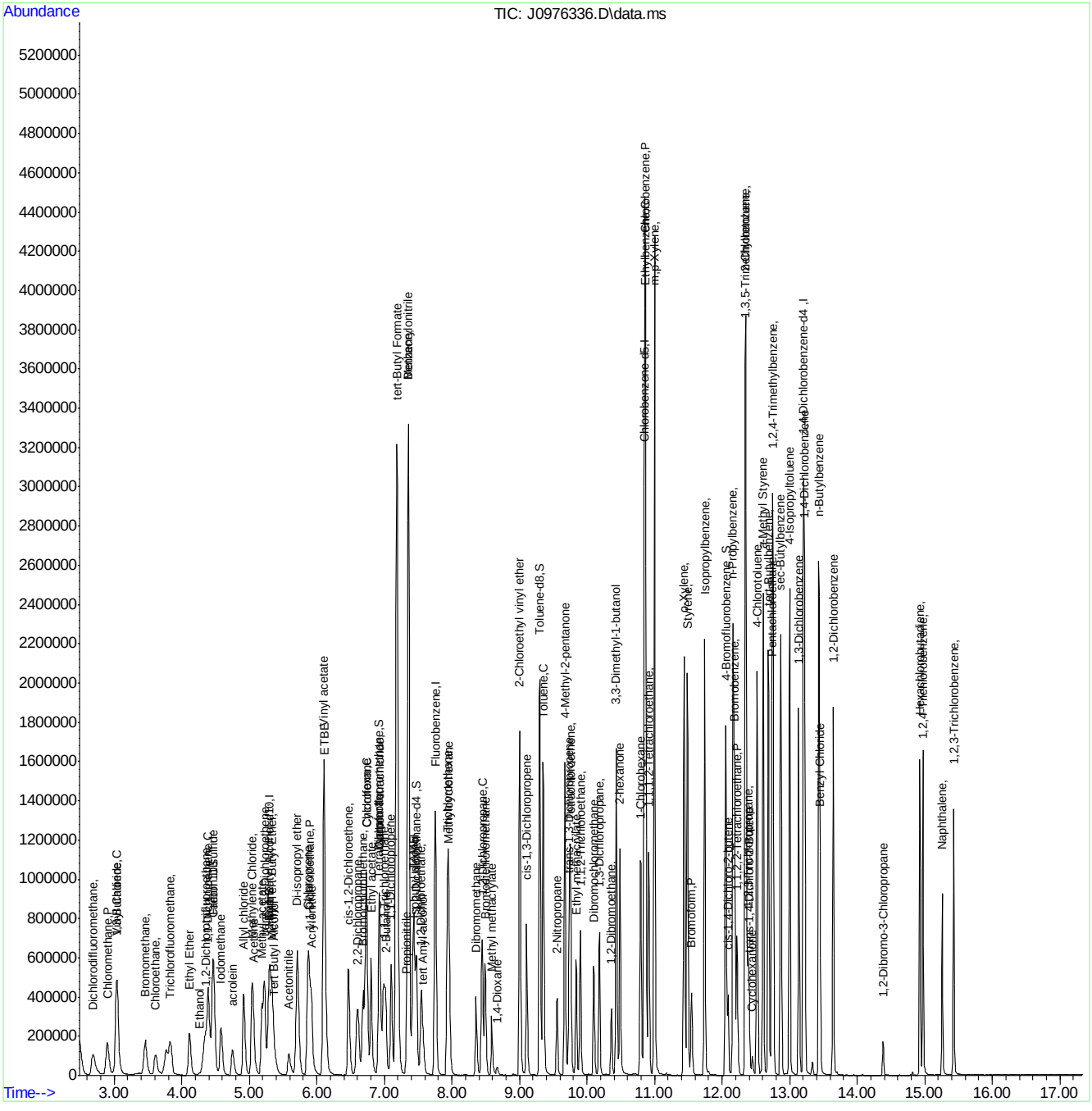
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 10:51:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



Manual Integration Approval Summary

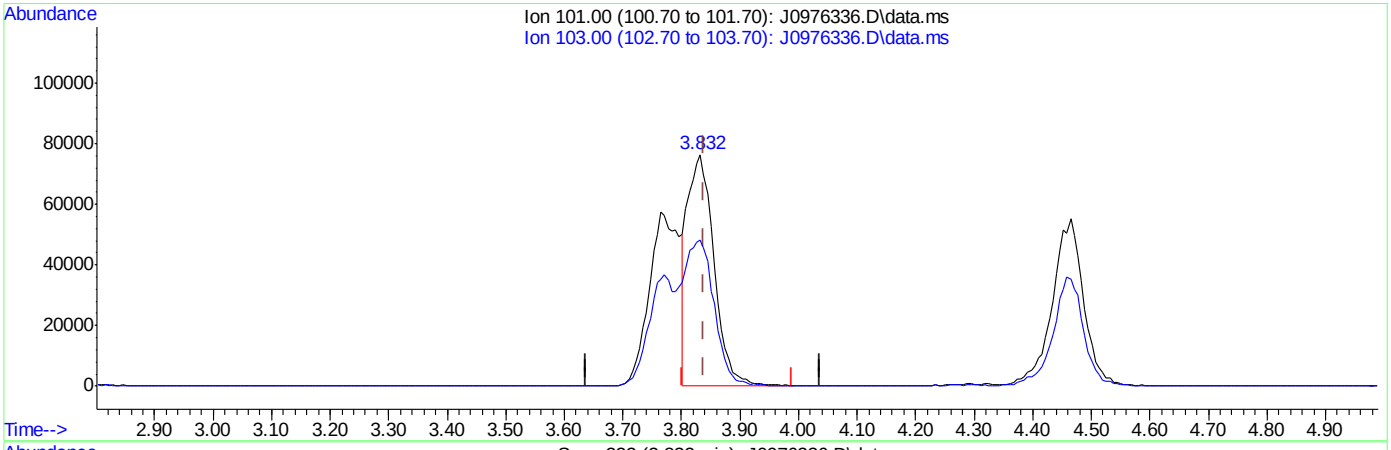
Sample Number:	VJ5288-CC5237	**Method:**	SW846 8260B
Lab FileID:	J0976336.D	**Analyst approved:**	05/06/16 14:22 Darshna Patel
Injection Time:	05/06/16 08:27	**Supervisor approved:**	05/06/16 14:43 Melissa Mangual

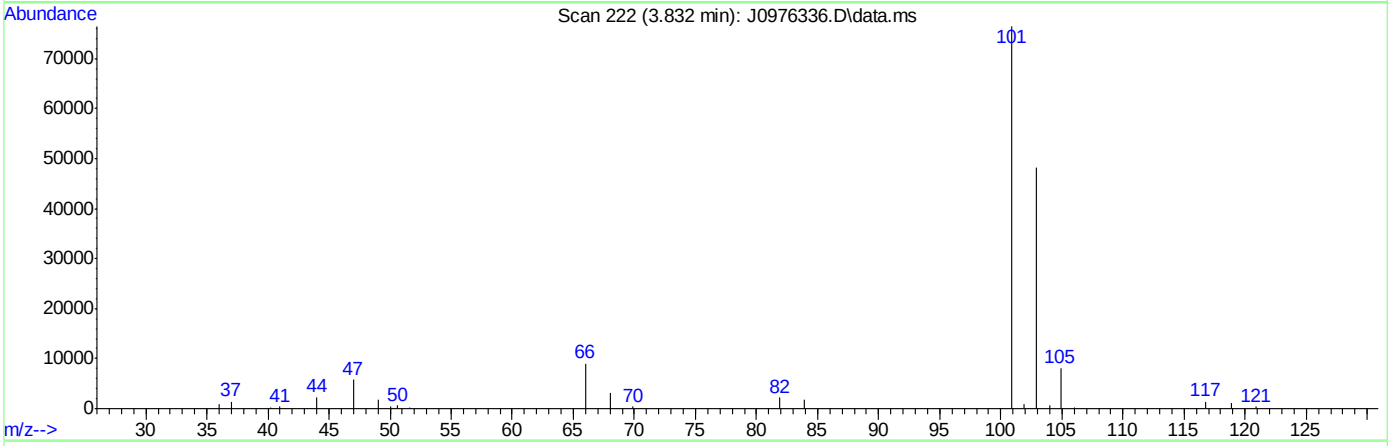
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.83	Split peak
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 08:45:40 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976336.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.006) 23.60ug/L

response 239469

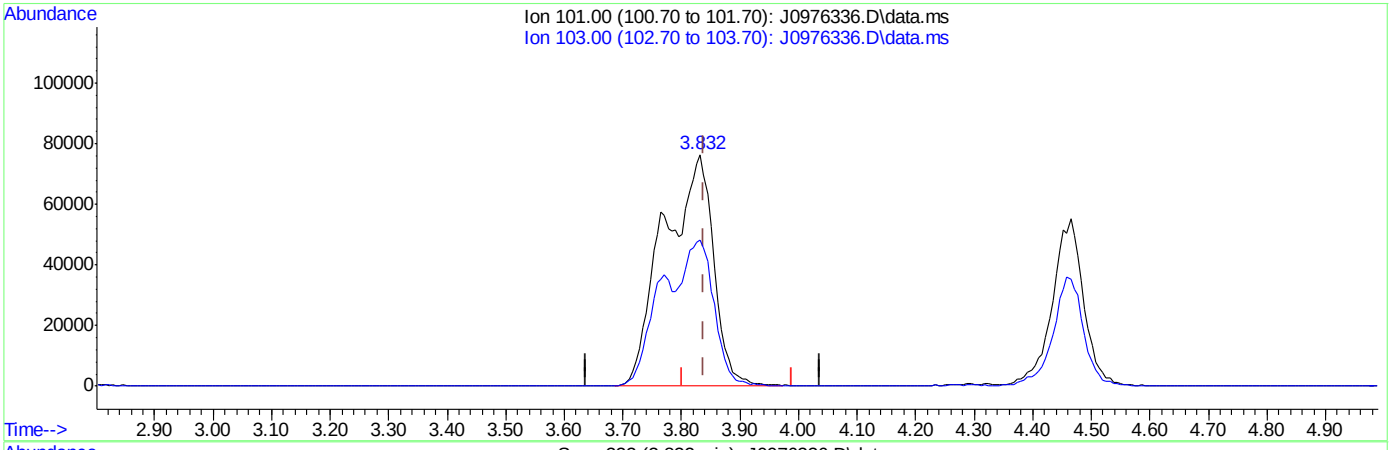
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	63.02
0.00	0.00	0.00
0.00	0.00	0.00

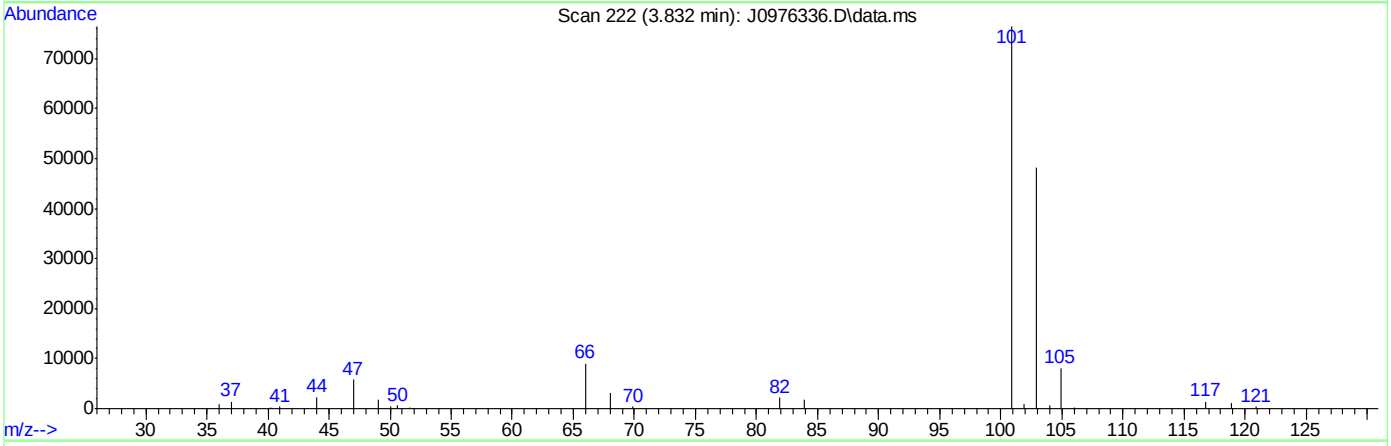
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 08:45:40 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976336.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.006) 44.16ug/L m

response 448077

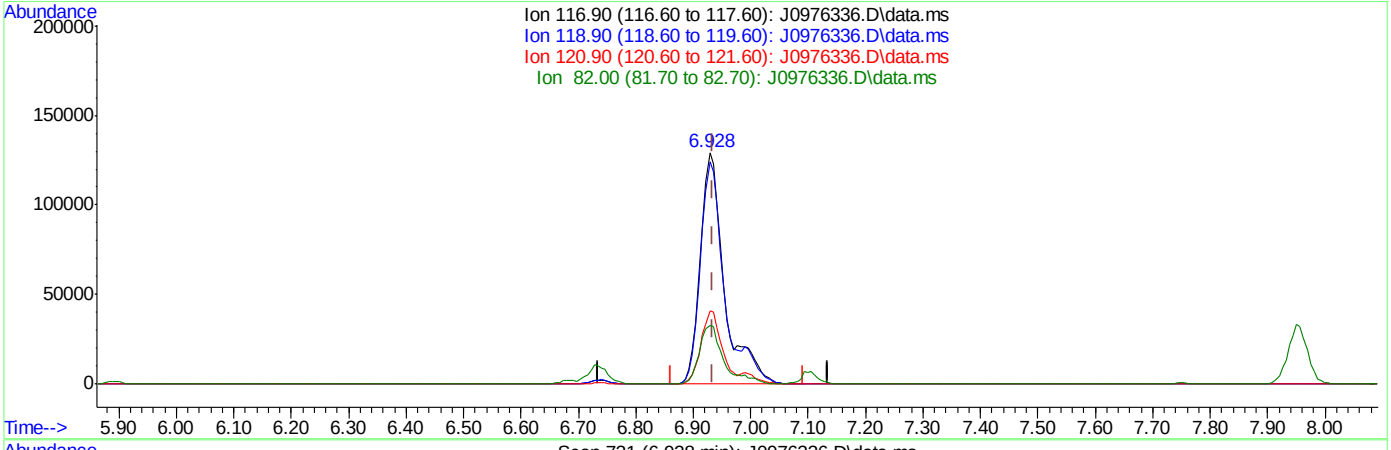
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	63.02
0.00	0.00	0.00
0.00	0.00	0.00

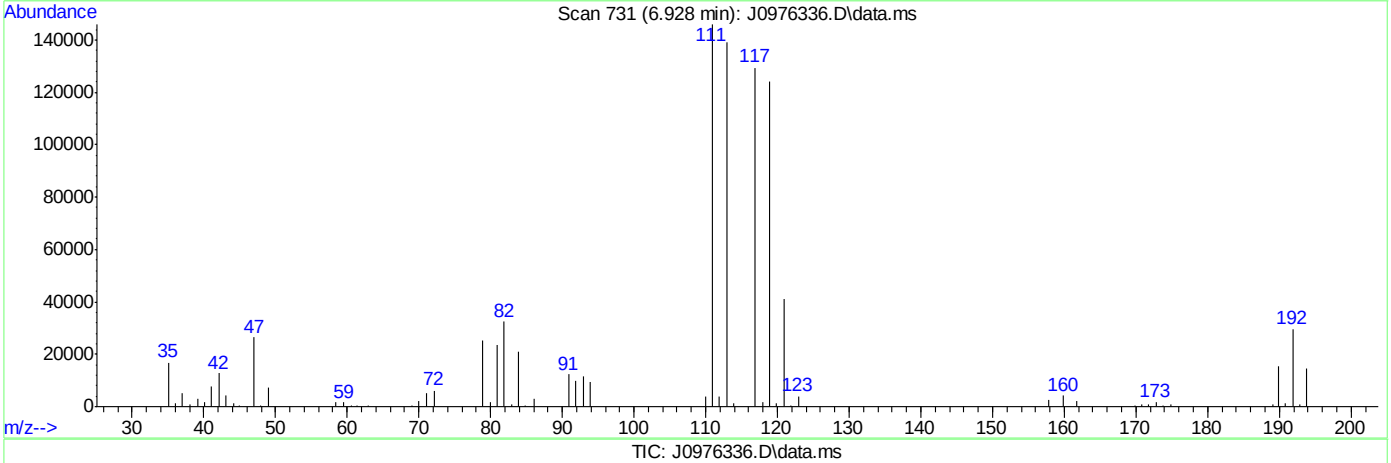
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 08:45:40 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976336.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 45.58ug/L

response 378471

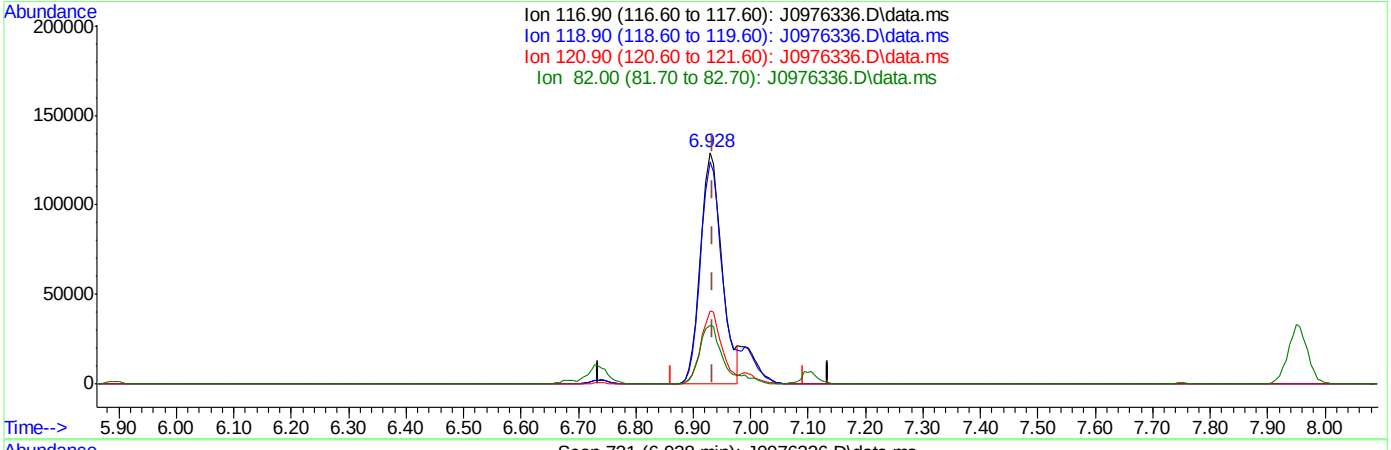
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	96.06
120.90	31.80	31.75
82.00	25.40	25.12

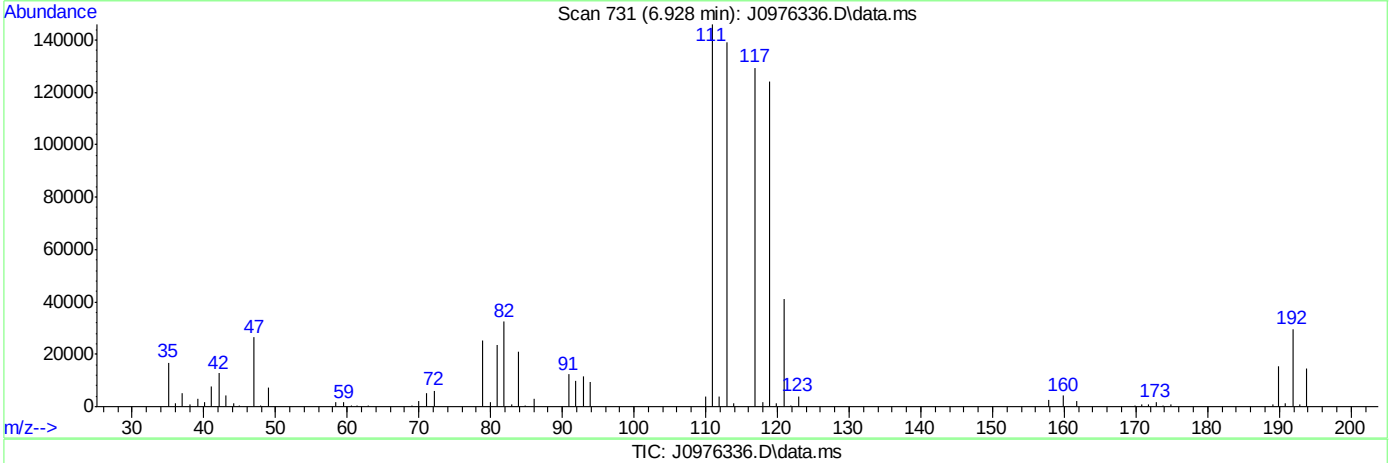
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976336.D
Acq On : 6 May 2016 8:27 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33770,VJ5288,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 08:45:40 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976336.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 40.24ug/L m

response 334158

Ion	Exp%	Act%
116.90	100	100
118.90	96.80	96.06
120.90	31.80	31.75
82.00	25.40	25.12

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
05/09/16 10:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:30:51 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.756	96	1182731	50.00	ug/L	0.00
56) Chlorobenzene-d5	10.846	117	992716	50.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	13.207	152	568214	50.00	ug/L	0.00
106) Tert Butyl Alcohol-d10	5.310	65	73128	250.00	ug/L	0.01
System Monitoring Compounds						
36) Dibromofluoromethane	6.928	113	301825	50.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.58%			
46) 1,2-Dichloroethane-d4	7.482	65	360049	49.61	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.22%			
57) Toluene-d8	9.301	98	1202689	46.05	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 92.10%			
79) 4-Bromofluorobenzene	12.051	95	501677	48.81	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.62%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.700	85	302225	41.51	ug/L	98
3) Chloromethane	2.907	50	348317	44.70	ug/L	94
4) Vinyl Chloride	3.047	62	381665	47.82	ug/L	99
5) 1,3-Butadiene	3.047	54	288248	48.58	ug/L	98
6) Bromomethane	3.467	94	222111	40.08	ug/L	98
7) Chloroethane	3.625	64	176376	45.18	ug/L	97
8) Trichlorofluoromethane	3.838	101	504061m	50.91	ug/L	
9) Ethyl Ether	4.124	59	164155	35.89	ug/L	94
10) 1,2-Dichlorotrifluoroe...	4.355	67	273281	39.74	ug/L	98
11) 1,1-Dichloroethene	4.404	61	317087	37.03	ug/L	97
12) Freon 113	4.471	101	224289	37.88	ug/L	98
13) Carbon Disulfide	4.477	76	680472	38.16	ug/L	98
14) Iodomethane	4.586	142	342446	36.19	ug/L	98
15) Allyl chloride	4.927	41	343343	43.37	ug/L	95
16) Methylene Chloride	5.049	49	282872	36.64	ug/L	96
17) Acetone	5.073	58	69628	196.31	ug/L	94
18) Methyl acetate	5.195	74	123153	178.31	ug/L #	89
19) trans-1,2-Dichloroethene	5.231	61	297078	37.77	ug/L	98
20) Hexane	5.304	56	198228	39.28	ug/L	97
21) Methyl Tert Butyl Ether	5.334	73	562324	35.87	ug/L	92
22) Acetonitrile	5.596	40	92281	414.60	ug/L	98
23) Di-isopropyl ether	5.718	45	669574	37.31	ug/L	95
24) Chloroprene	5.876	53	390136	46.14	ug/L	98
25) 1,1-Dichloroethane	5.900	63	400247	38.12	ug/L	100
26) Acrylonitrile	5.925	53	275674	175.65	ug/L	98
27) ETBE	6.119	59	688646	38.32	ug/L	98
28) Vinyl acetate	6.107	43	1757775	193.39	ug/L	98
29) cis-1,2-Dichloroethene	6.478	96	249770	37.05	ug/L	94
30) 2,2-Dichloropropane	6.606	77	333347	40.68	ug/L	98
31) Bromochloromethane	6.685	128	115065	37.75	ug/L	94
32) Cyclohexane	6.740	56	382173	38.71	ug/L	96
33) Chloroform	6.740	83	446358	38.28	ug/L	97
34) Ethyl acetate	6.807	43	653369	178.78	ug/L	100

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:30:51 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) Tetrahydrofuran	6.922	42	32566	30.53 ug/L	92
37) Carbon Tetrachloride	6.934	117	346972m	42.82 ug/L	
38) 1,1,1-Trichloroethane	6.995	97	390908	39.22 ug/L	95
39) 2-Butanone	7.026	43	296462	193.70 ug/L	95
40) 1,1-Dichloropropene	7.105	75	303851	37.75 ug/L	96
41) tert-Butyl Formate	7.190	59	1489167	406.77 ug/L	93
42) Propionitrile	7.336	54	202460	373.54 ug/L	99
43) Methacrylonitrile	7.360	41	955586	378.87 ug/L	99
44) Benzene	7.360	78	1003790	40.97 ug/L	98
45) TAME	7.433	73	631281	38.93 ug/L	96
47) 1,2-Dichloroethane	7.549	62	311156	36.28 ug/L	97
48) Trichloroethene	7.938	95	247098	38.92 ug/L	95
49) Methylcyclohexane	7.956	83	429430	40.26 ug/L	99
50) Dibromomethane	8.364	93	126254	35.63 ug/L	96
51) 1,2-Dichloropropane	8.449	63	235192	38.21 ug/L	95
52) Bromodichloromethane	8.498	83	317487	40.24 ug/L	99
53) Methyl methacrylate	8.595	41	126867	38.99 ug/L	97
54) 2-Chloroethyl vinyl ether	9.009	63	624186	199.67 ug/L	97
55) cis-1,3-Dichloropropene	9.112	75	365191	38.42 ug/L	96
58) Toluene	9.356	91	1049602	36.50 ug/L	100
59) 2-Nitropropane	9.556	41	184681	161.68 ug/L	99
60) 4-Methyl-2-pentanone	9.672	43	814234	198.22 ug/L	98
61) trans-1,3-Dichloropropene	9.739	75	314519	34.88 ug/L	98
62) Tetrachloroethene	9.757	166	255241	33.21 ug/L	97
63) Ethyl methacrylate	9.836	69	236889	36.07 ug/L	94
64) 1,1,2-Trichloroethane	9.903	83	166053	35.40 ug/L	98
65) Dibromochloromethane	10.104	129	215182	36.10 ug/L	96
66) 1,3-Dichloropropane	10.183	76	322984	33.71 ug/L	93
67) 1,2-Dibromoethane	10.359	107	176921	33.28 ug/L	97
68) 2-hexanone	10.487	43	551279	202.96 ug/L	98
69) 1-Chlorohexane	10.797	91	330898	39.24 ug/L	97
70) Ethylbenzene	10.858	91	1304500	39.79 ug/L	100
71) Chlorobenzene	10.864	112	731052	38.23 ug/L	96
72) 1,1,1,2-Tetrachloroethane	10.913	131	240991	38.74 ug/L	99
73) m,p-Xylene	10.998	91	1962964	77.68 ug/L	99
74) o-Xylene	11.436	91	988948	39.04 ug/L	100
75) Styrene	11.485	104	778575	38.49 ug/L	99
76) Bromoform	11.546	173	138534	36.63 ug/L	96
77) Isopropylbenzene	11.740	105	1209058	41.31 ug/L	99
80) cis-1,4-Dichloro-2-butene	12.087	53	65062	35.24 ug/L	98
81) n-Propylbenzene	12.160	91	1505968	41.77 ug/L	100
82) Bromobenzene	12.185	156	325547	38.35 ug/L	100
83) 1,1,2,2-Tetrachloroethane	12.221	83	256291	37.41 ug/L	99
84) 1,3,5-Trimethylbenzene	12.343	105	1150289	42.17 ug/L	99
85) 2-Chlorotoluene	12.349	91	1073561	40.56 ug/L	99
86) trans-1,4-Dichloro-2-B...	12.404	53	56826	32.81 ug/L #	86
87) 1,2,3-Trichloropropane	12.385	110	64945	37.19 ug/L	95
88) Cyclohexanone	12.446	55	29046	264.53 ug/L	96
89) 4-Chlorotoluene	12.519	91	970483	40.96 ug/L	98
90) a-Methyl Styrene	12.604	118	637194	81.78 ug/L	98

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:30:51 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) tert-Butylbenzene	12.683	91	644577	40.44	ug/L	96
92) 1,2,4-Trimethylbenzene	12.750	105	1134654	41.64	ug/L	98
93) Pentachloroethane	12.738	167	218082	42.54	ug/L	95
94) sec-Butylbenzene	12.866	105	1378050	41.83	ug/L	99
95) 4-Isopropyltoluene	13.000	119	1164467	42.14	ug/L	100
96) 1,3-Dichlorobenzene	13.134	146	581761	38.64	ug/L	97
97) 1,4-Dichlorobenzene	13.219	146	591875	37.04	ug/L	95
98) n-Butylbenzene	13.432	92	669194	42.01	ug/L	99
99) Benzyl Chloride	13.450	126	91866	39.34	ug/L #	74
100) 1,2-Dichlorobenzene	13.645	146	529418	36.74	ug/L	98
101) 1,2-Dibromo-3-Chloropr...	14.381	75	31921	30.51	ug/L	96
102) Hexachlorobutadiene	14.928	225	230844	35.87	ug/L	99
103) 1,2,4-Trichlorobenzene	14.971	180	343872	32.69	ug/L	96
104) Naphthalene	15.257	128	468879	26.60	ug/L	99
105) 1,2,3-Trichlorobenzene	15.427	180	284891	30.56	ug/L	97
107) Ethanol	4.282	45	30949m	955.82	ug/L	
108) acrolein	4.757	56	146565	171.42	ug/L	90
109) Tert Butyl Alcohol	5.383	59	124964	352.55	ug/L	96
110) tert Amyl alcohol	7.573	59	95458	383.94	ug/L	93
111) Isobutyl alcohol	7.452	42	102893	761.50	ug/L	94
112) 1,4-Dioxane	8.674	88	28261	973.25	ug/L	94
113) 3,3-Dimethyl-1-butanol	10.432	57	601212	1973.88	ug/L	95

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

7.6.11

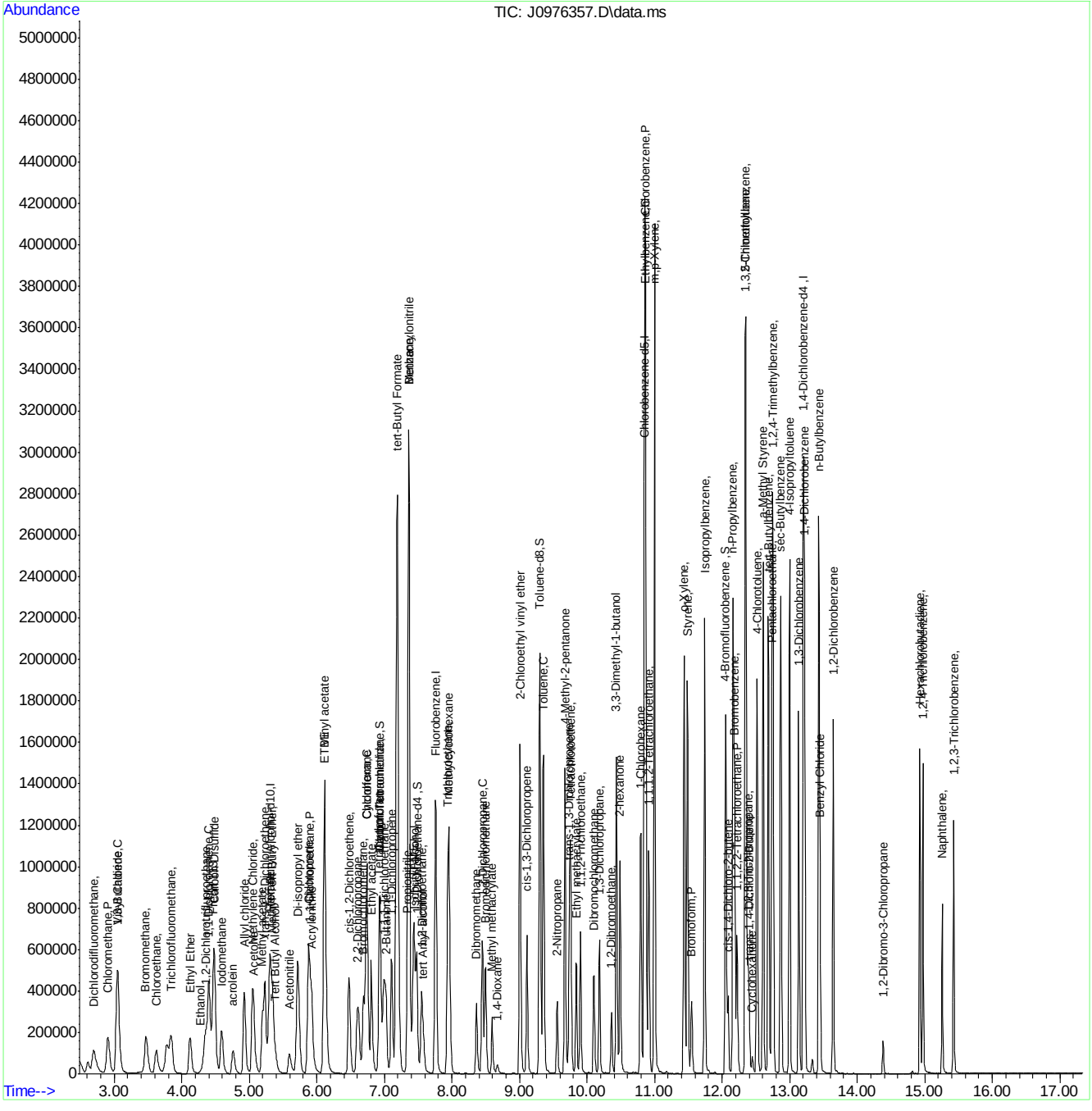
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:30:51 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

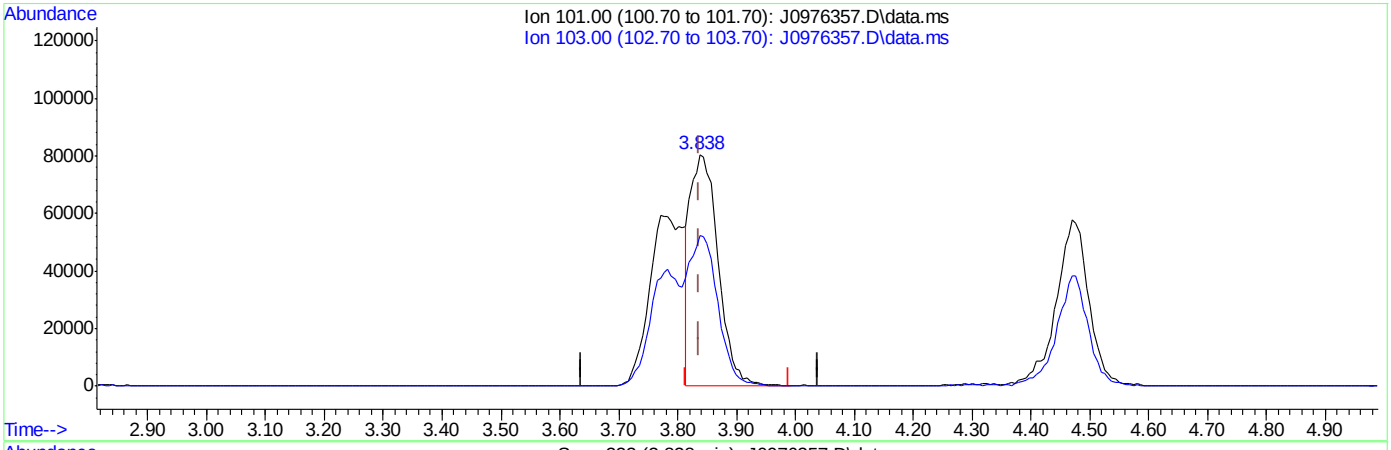
Sample Number:	VJ5288-ECC5237	**Method:**	SW846 8260B
Lab FileID:	J0976357.D	**Analyst approved:**	05/09/16 09:44 Darshna Patel
Injection Time:	05/06/16 16:51	**Supervisor approved:**	05/09/16 10:33 Juan Garcia

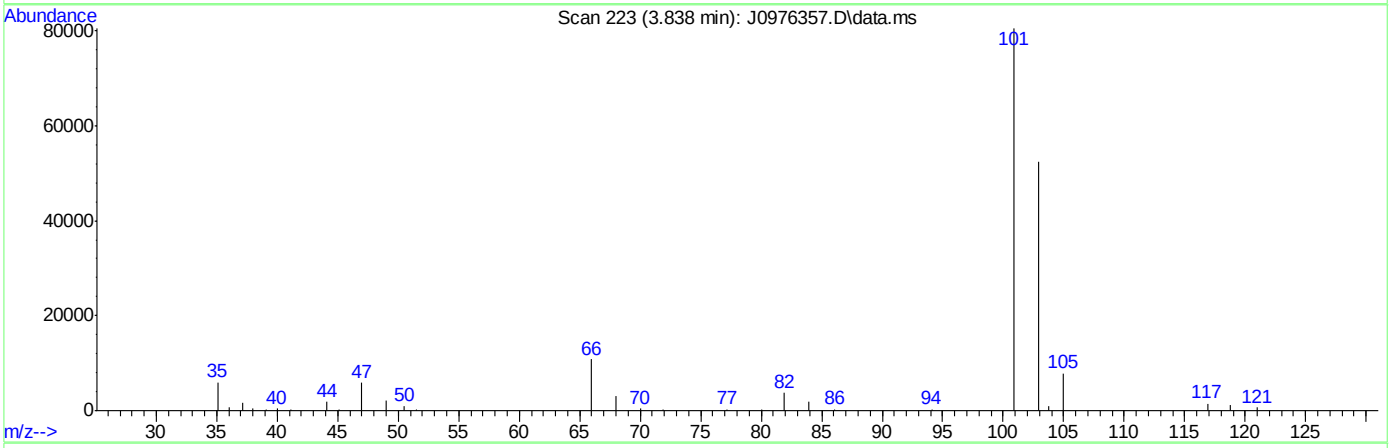
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.84	Split peak
Ethyl Alcohol	64-17-5		4.28	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.93	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:22:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





(8) Trichlorofluoromethane ( )

3.838min (-0.000) 26.65ug/L

response 263872

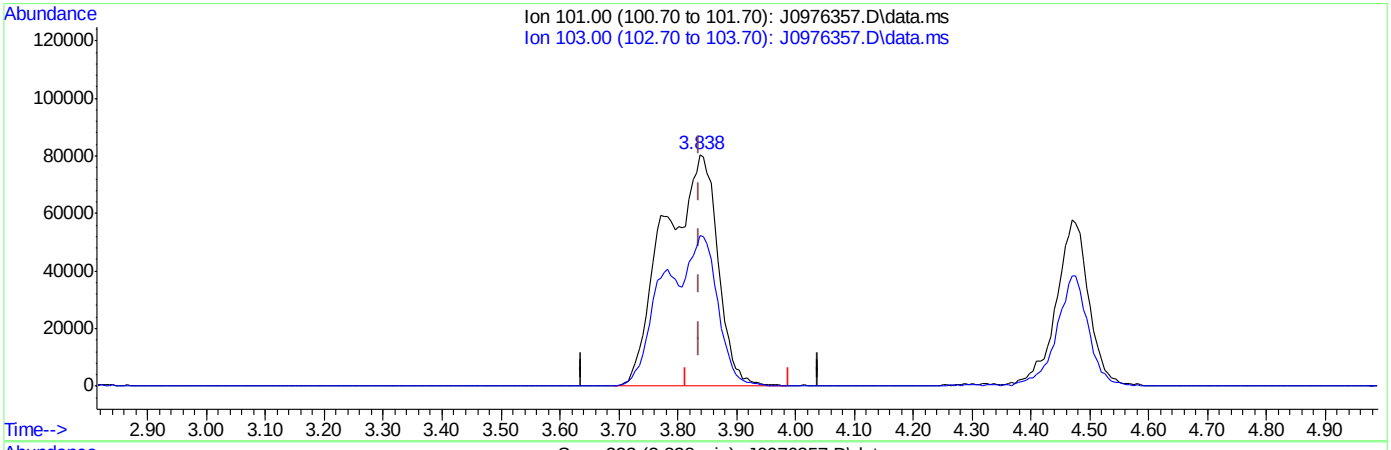
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	64.65
0.00	0.00	0.00
0.00	0.00	0.00

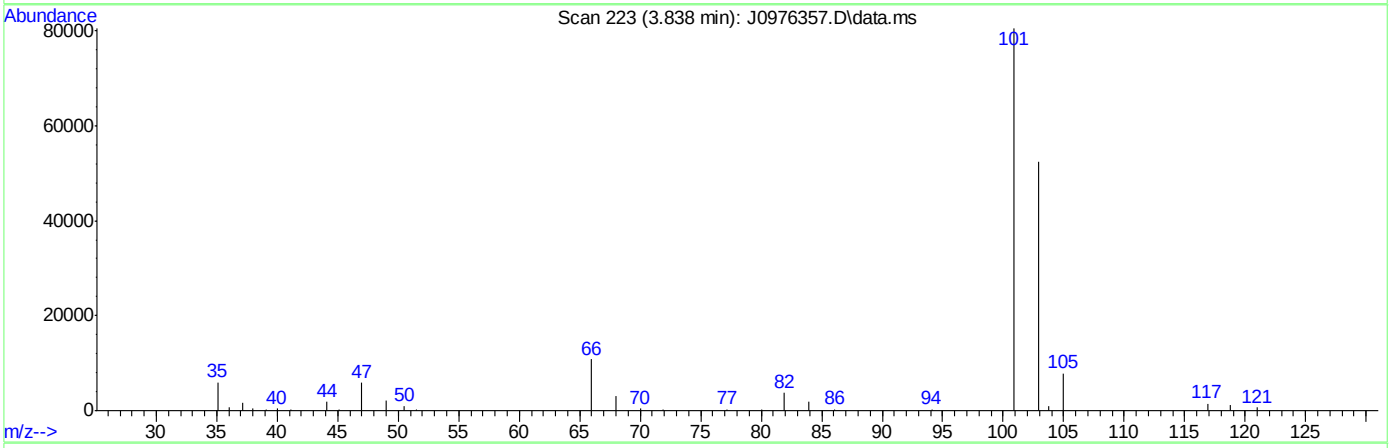
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:22:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976357.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 50.91ug/L m

response 504061

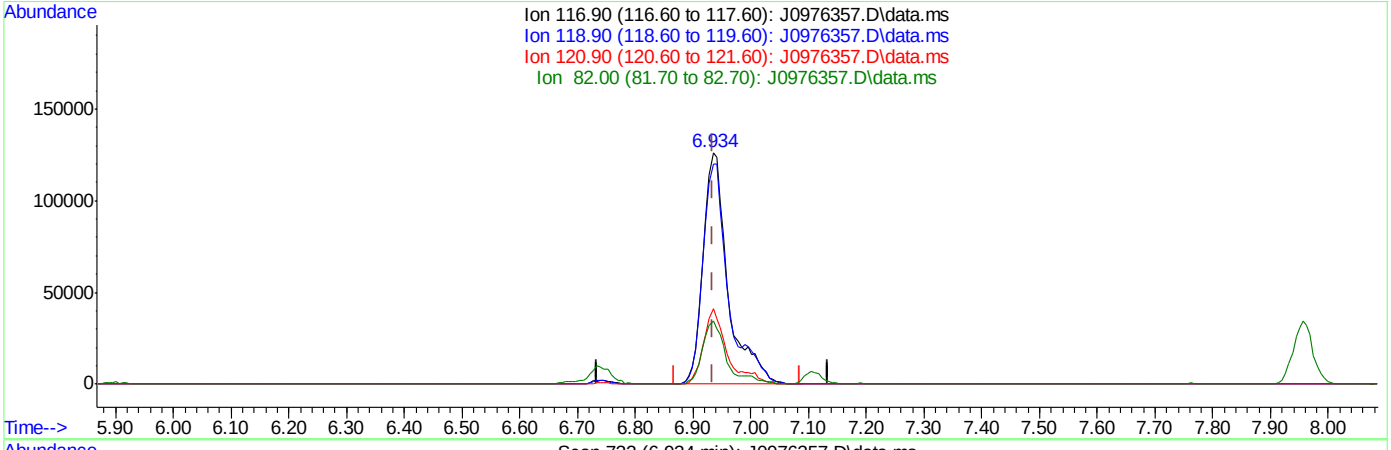
Ion	Exp%	Act%
101.00	100	100
103.00	63.50	65.00
0.00	0.00	0.00
0.00	0.00	0.00

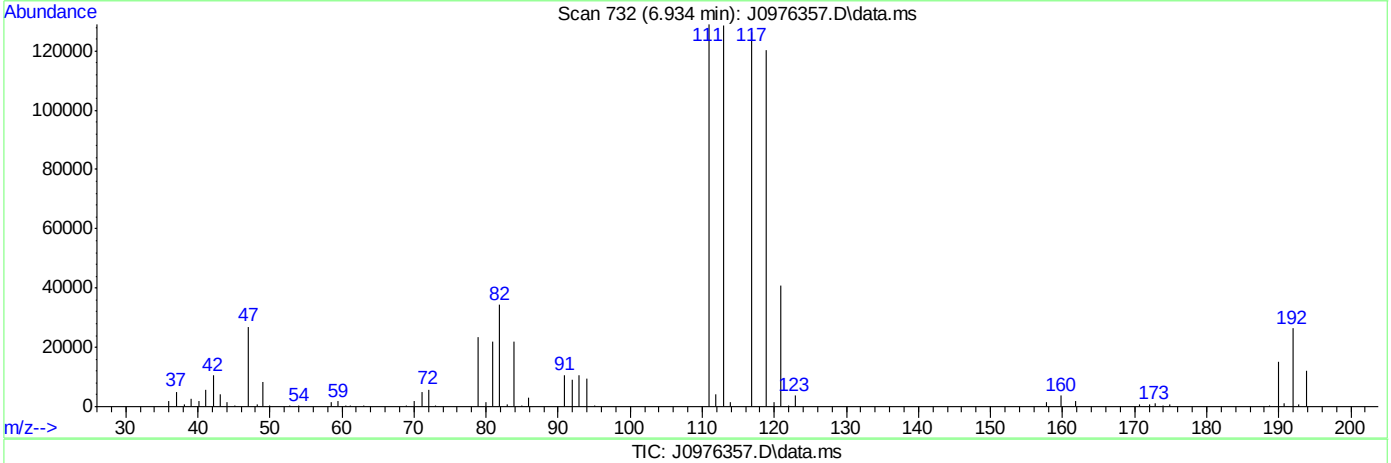
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:22:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976357.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 46.91ug/L

response 380093

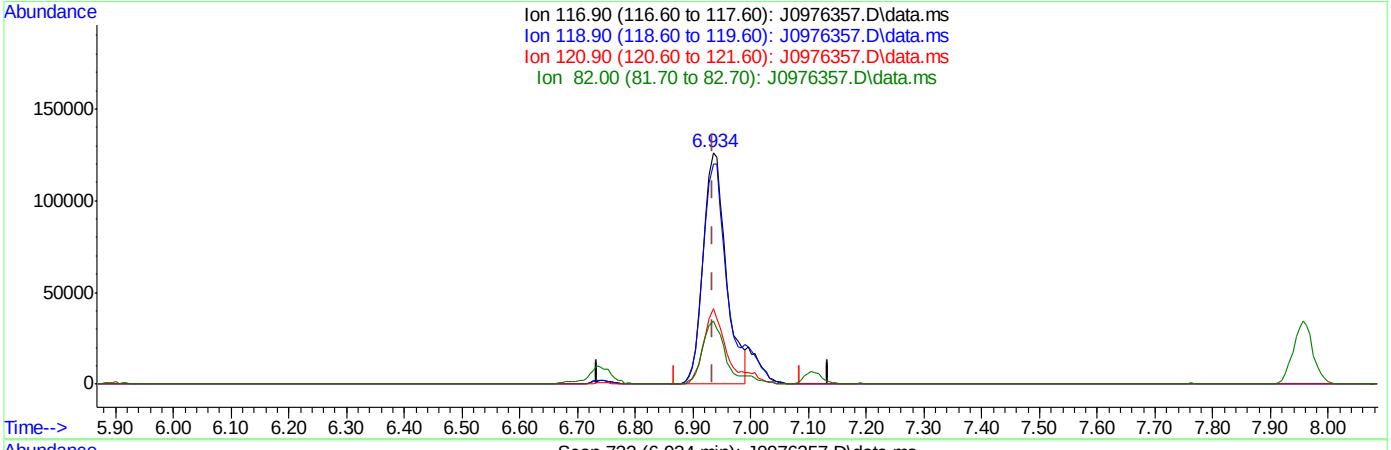
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	95.24
120.90	31.80	32.43
82.00	25.40	27.24

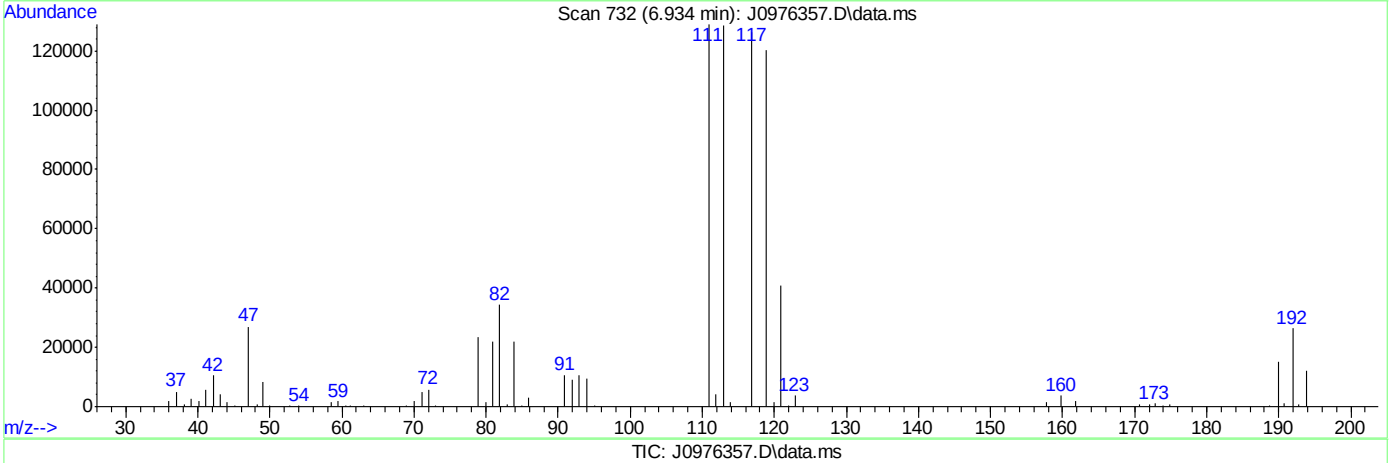
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:22:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976357.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 42.82ug/L m

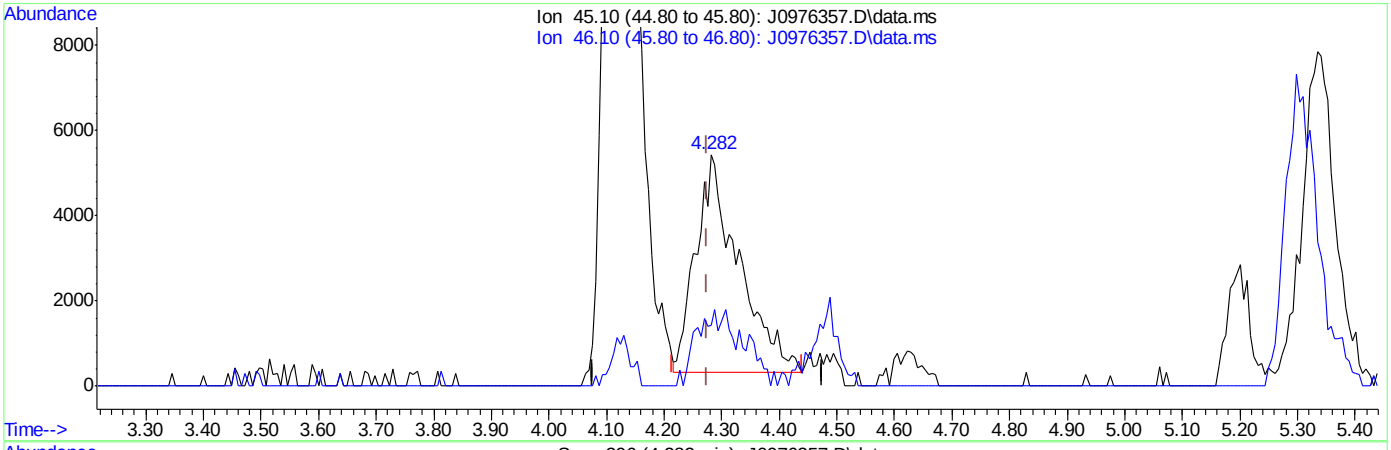
response 346972

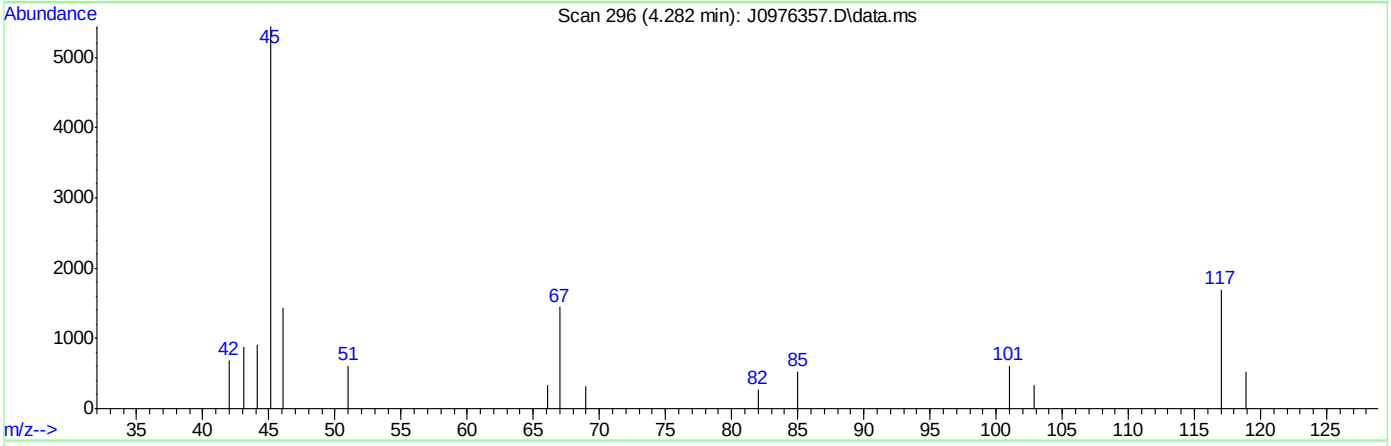
Ion	Exp%	Act%
116.90	100	100
118.90	96.80	95.24
120.90	31.80	32.43
82.00	25.40	27.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:22:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976357.D\data.ms

(107) Ethanol

4.282min (+0.006) 801.36ug/L

response 26441

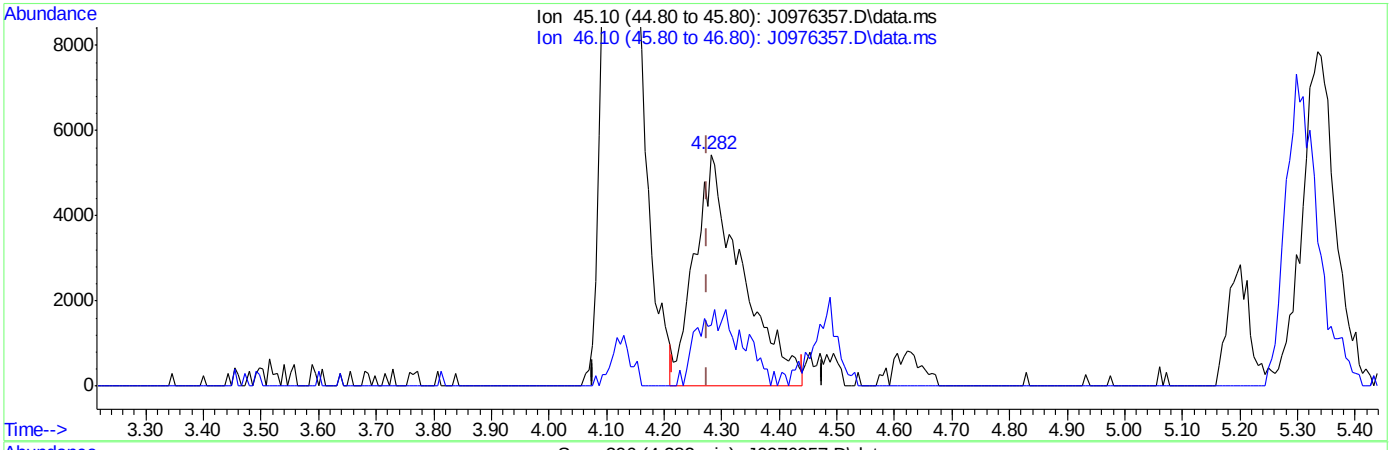
Ion	Exp%	Act%
45.10	100	100
46.10	28.20	28.01
0.00	0.00	0.00
0.00	0.00	0.00

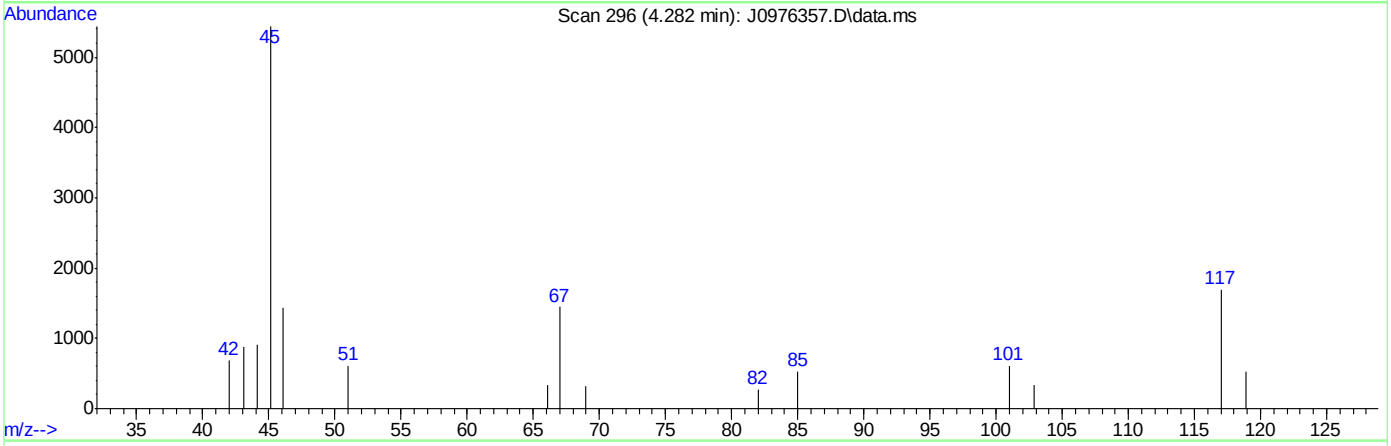
SGS ACCUTEST FA33668

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\050616\
Data File : J0976357.D
Acq On : 6 May 2016 4:51 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33802,VJ5288,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 09 08:22:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration





TIC: J0976357.D\data.ms

(107) Ethanol

4.282min (+0.006) 955.82ug/L m

response 30949

Ion	Exp%	Act%
45.10	100	100
46.10	28.20	26.37
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.122	96	1305093	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.310	117	885352	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.682	152	403151	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.628	65	140559	250.00	ug/Kg	0.00

System Monitoring Compounds						
35) Dibromofluoromethane	6.240	113	289840	49.55	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.10%			
44) 1,2-Dichloroethane-d4	6.824	65	337985	50.70	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 101.40%			
55) Toluene-d8	8.746	98	1250636	47.64	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 95.28%			
77) 4-Bromofluorobenzene	11.533	174	291145	50.08	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 100.16%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.982	85	55060	4.78	ug/Kg	89
3) Chloromethane	2.200	50	65393	4.80	ug/Kg	95
4) Vinyl Chloride	2.316	62	65616	4.78	ug/Kg	95
5) Bromomethane	2.718	94	30739	4.50	ug/Kg	93
6) Chloroethane	2.882	64	34886	5.30	ug/Kg	97
7) Trichlorofluoromethane	3.052	101	60069	4.68	ug/Kg	96
8) Ethyl Ether	3.411	59	27706	4.30	ug/Kg	89
9) 1,2-Dichlorotrifluoroe...	3.636	67	57107	5.26	ug/Kg	97
10) 1,1-Dichloroethene	3.654	61	68590	4.55	ug/Kg	91
11) Freon 113	3.709	101	44016	4.86	ug/Kg	92
12) Carbon Disulfide	3.697	76	147027	4.85	ug/Kg	85
13) Iodomethane	3.813	142	60504	4.87	ug/Kg	96
14) Allyl chloride	4.178	41	61578	4.54	ug/Kg	98
15) Methylene Chloride	4.299	49	85681	6.64	ug/Kg	96
16) Acetone	4.348	43	50257	25.33	ug/Kg	96
17) Methyl acetate	4.488	43	102852	22.64	ug/Kg	92
18) trans-1,2-Dichloroethene	4.488	61	52810	4.45	ug/Kg	95
19) Hexane	4.579	56	39636	5.25	ug/Kg	78
20) Methyl Tert Butyl Ether	4.616	73	93901	4.42	ug/Kg#	24
21) Acetonitrile	4.853	41	36322	40.77	ug/Kg	98
22) Di-isopropyl ether	5.029	45	114570	4.55	ug/Kg	97
23) Chloroprene	5.145	53	65189	4.46	ug/Kg	98
24) 1,1-Dichloroethane	5.163	63	74091	4.72	ug/Kg	95
25) Acrylonitrile	5.200	53	53635	20.49	ug/Kg	94
26) ETBE	5.431	59	107279	4.45	ug/Kg	89
27) Vinyl acetate	5.425	43	300033	22.34	ug/Kg	97
28) cis-1,2-Dichloroethene	5.753	96	44587	4.82	ug/Kg	82
29) 2,2-Dichloropropane	5.869	77	28159	3.85	ug/Kg	92
30) Bromochloromethane	5.972	128	16619	4.51	ug/Kg#	80
31) Cyclohexane	6.003	84	72083	4.69	ug/Kg	92
32) Chloroform	6.045	83	74931	4.91	ug/Kg	93
33) Ethyl acetate	6.167	43	134321	23.54	ug/Kg	93
34) Tetrahydrofuran	6.234	42	12500	5.76	ug/Kg#	54
36) Carbon Tetrachloride	6.216	117	41627	4.02	ug/Kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.283	97	53090	4.29	ug/Kg	93
38) 2-Butanone	6.374	43	76647	25.19	ug/Kg	99
39) 1,1-Dichloropropene	6.422	75	57246	4.66	ug/Kg	99
40) Propionitrile	6.678	54	43436	44.04	ug/Kg	90
41) Methacrylonitrile	6.708	41	172604	48.27	ug/Kg	94
42) Benzene	6.684	78	170236	4.97	ug/Kg	95
43) TAME	6.812	73	107696	4.86	ug/Kg	95
45) 1,2-Dichloroethane	6.897	62	45581	4.71	ug/Kg	97
46) Trichloroethene	7.317	95	47206	5.49	ug/Kg	91
47) Methylcyclohexane	7.317	83	78934	4.87	ug/Kg	94
48) Dibromomethane	7.749	93	20084	4.91	ug/Kg	92
49) 1,2-Dichloropropane	7.846	63	41661	4.97	ug/Kg	94
50) Bromodichloromethane	7.913	83	47207	4.87	ug/Kg	92
51) Methyl methacrylate	8.059	41	25329	5.34	ug/Kg	91
52) 2-Chloroethyl vinyl ether	8.479	63	93386	24.73	ug/Kg	92
53) cis-1,3-Dichloropropene	8.552	75	59766	4.92	ug/Kg	97
56) Toluene	8.801	91	177013	4.89	ug/Kg	95
57) 2-Nitropropane	9.014	41	33735	22.50	ug/Kg	92
58) 4-Methyl-2-pentanone	9.160	43	146974	24.40	ug/Kg	95
59) trans-1,3-Dichloropropene	9.209	75	45389	4.43	ug/Kg	96
60) Tetrachloroethene	9.203	166	35127	4.61	ug/Kg	94
61) Ethyl methacrylate	9.355	69	41779	5.37	ug/Kg	84
62) 1,1,2-Trichloroethane	9.373	83	26735	5.02	ug/Kg	94
63) Dibromochloromethane	9.562	129	29940	4.68	ug/Kg	88
64) 1,3-Dichloropropane	9.647	76	54996	4.75	ug/Kg	94
65) 1,2-Dibromoethane	9.811	107	27558	4.67	ug/Kg	100
66) 2-hexanone	9.993	43	109333	28.65	ug/Kg	90
67) 1-Chlorohexane	10.292	91	53124	5.02	ug/Kg	93
68) Ethylbenzene	10.346	91	179402	4.91	ug/Kg	97
69) Chlorobenzene	10.328	112	99311	4.67	ug/Kg	93
70) 1,1,1,2-Tetrachloroethane	10.383	131	30949	4.41	ug/Kg	93
71) m,p-Xylene	10.486	91	266610	9.73	ug/Kg	99
72) o-Xylene	10.924	91	138367	4.94	ug/Kg	98
73) Styrene	10.979	104	90105	4.59	ug/Kg	95
74) Bromoform	11.015	173	13694	4.41	ug/Kg	92
75) Isopropylbenzene	11.234	105	165857	4.84	ug/Kg	98
78) cis-1,4-Dichloro-2-butene	11.581	53	10687	4.55	ug/Kg	92
79) n-Propylbenzene	11.654	91	195566	4.78	ug/Kg	99
80) Bromobenzene	11.654	156	35484	4.41	ug/Kg	83
81) 1,1,2,2-Tetrachloroethane	11.721	83	39832	4.86	ug/Kg	99
82) 1,3,5-Trimethylbenzene	11.849	105	142001	4.44	ug/Kg	93
83) 2-Chlorotoluene	11.831	91	133468	4.54	ug/Kg	98
84) trans-1,4-Dichloro-2-B...	11.904	53	10890	5.32	ug/Kg#	70
85) 1,2,3-Trichloropropane	11.867	110	11675	5.22	ug/Kg	81
86) Cyclohexanone	11.922	55	10685	26.29	ug/Kg	83
87) 4-Chlorotoluene	12.001	91	117529	4.54	ug/Kg	98
88) tert-Butylbenzene	12.177	91	84900	4.11	ug/Kg	94
89) 1,2,4-Trimethylbenzene	12.250	105	133327	4.45	ug/Kg	99
90) Pentachloroethane	12.220	167	18870	3.89	ug/Kg#	53
91) sec-Butylbenzene	12.360	105	182284	4.43	ug/Kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration

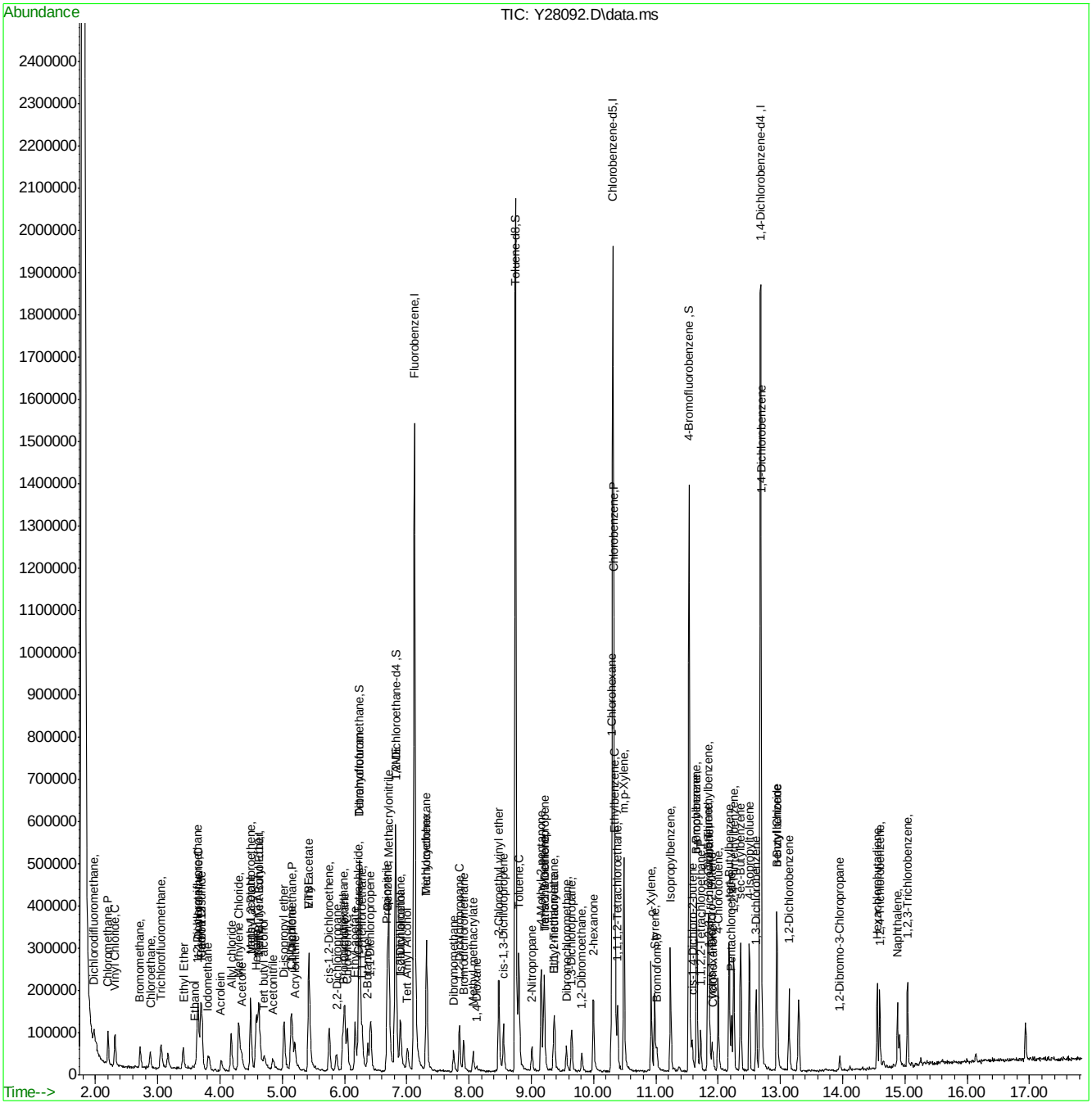
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.500	119	144743	4.50	ug/Kg	99
93) 1,3-Dichlorobenzene	12.615	146	72497	4.99	ug/Kg	99
94) 1,4-Dichlorobenzene	12.694	146	75062	5.13	ug/Kg	91
95) n-Butylbenzene	12.944	92	83880	4.76	ug/Kg	95
96) Benzyl Chloride	12.944	126	15373	5.77	ug/Kg#	46
97) 1,2-Dichlorobenzene	13.139	146	66022	4.71	ug/Kg	95
98) 1,2-Dibromo-3-Chloropr...	13.948	75	7661	4.79	ug/Kg	75
99) Hexachlorobutadiene	14.556	225	23012	4.68	ug/Kg	87
100) 1,2,4-Trichlorobenzene	14.599	180	46232	5.04	ug/Kg	98
101) Naphthalene	14.885	128	102610	4.40	ug/Kg	90
102) 1,2,3-Trichlorobenzene	15.043	180	43282	4.67	ug/Kg	95
104) Ethanol	3.588	45	7515m	86.85	ug/Kg	
105) Acrolein	4.019	56	28938	20.95	ug/Kg	64
106) Tert butyl alcohol	4.713	59	37088	45.47	ug/Kg	89
107) Isobutyl alcohol	6.897	42	17948	88.86	ug/Kg	89
108) Tert Amyl Alcohol	7.006	59	33750	51.69	ug/Kg	81
109) 1,4-Dioxane	8.126	88	7154	88.95	ug/Kg	82

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Manual Integration Approval Summary

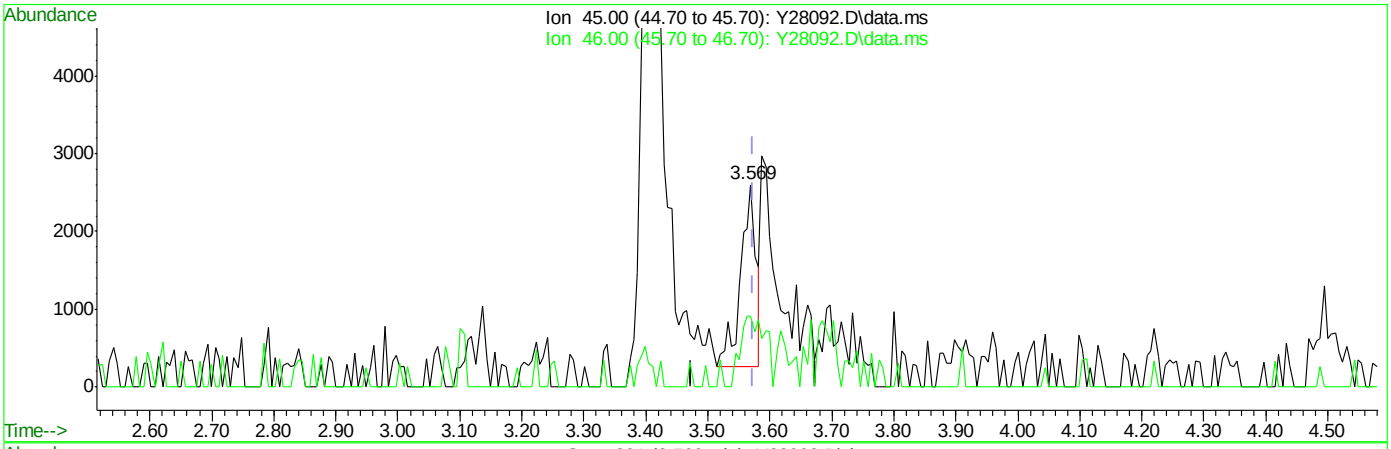
Sample Number:	VY1133-IC1133	**Method:**	SW846 8260B
Lab FileID:	Y28092.D	**Analyst approved:**	04/26/16 09:25 Angie Diaz
Injection Time:	04/25/16 09:09	**Supervisor approved:**	04/26/16 10:43 Juan Garcia

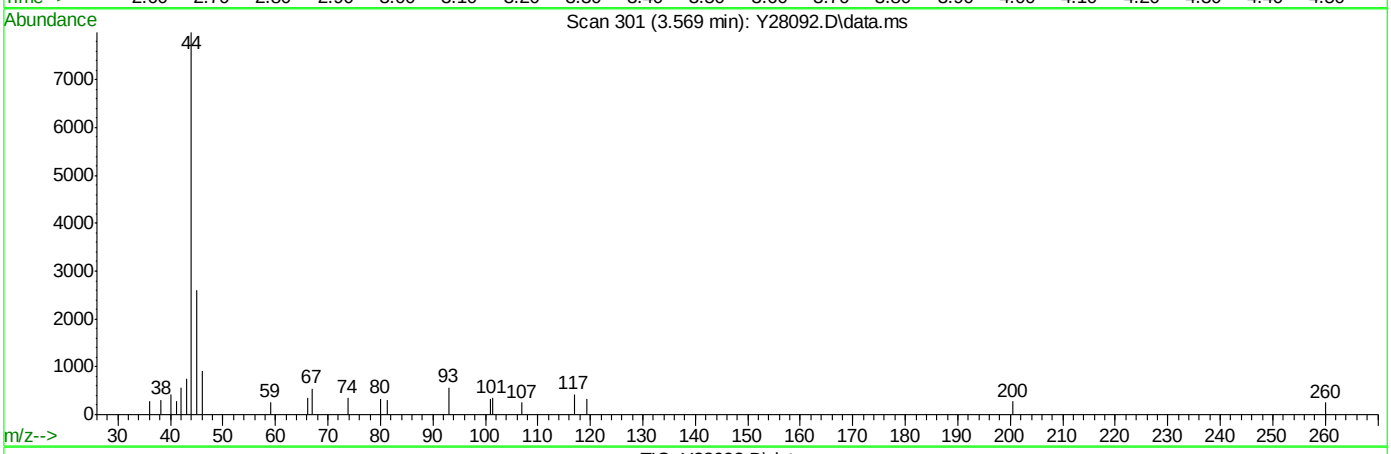
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		3.59	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 09:32:00 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration





TIC: Y28092.D\data.ms

(104) Ethanol

3.569min (-0.005) 46.40ug/Kg

response 4015

Ion	Exp%	Act%
45.00	100	100
46.00	41.20	38.86
0.00	0.00	0.00
0.00	0.00	0.00

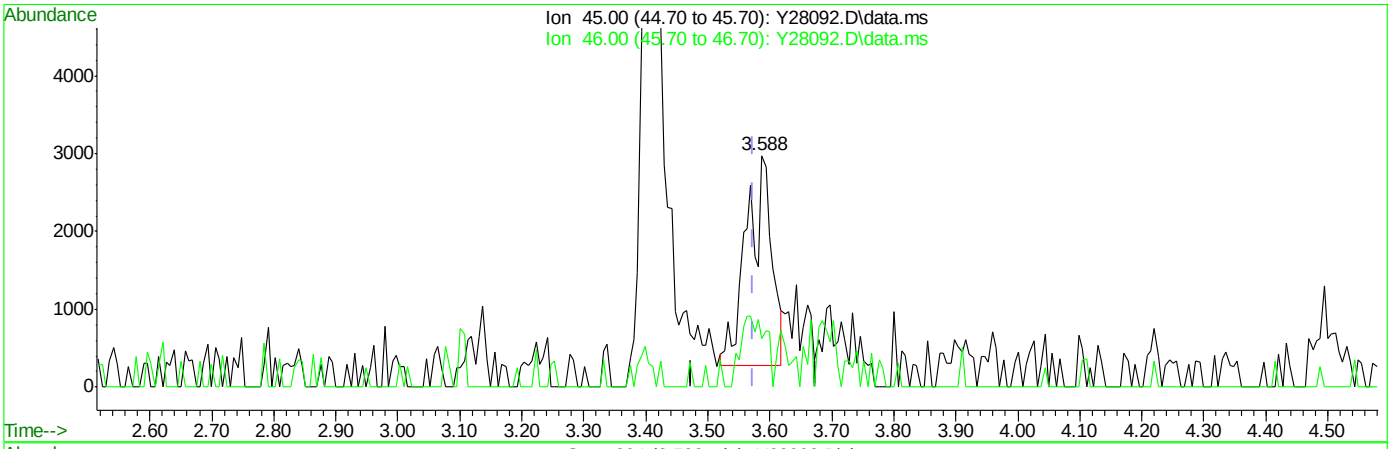
SGS ACCUTEST FA33668

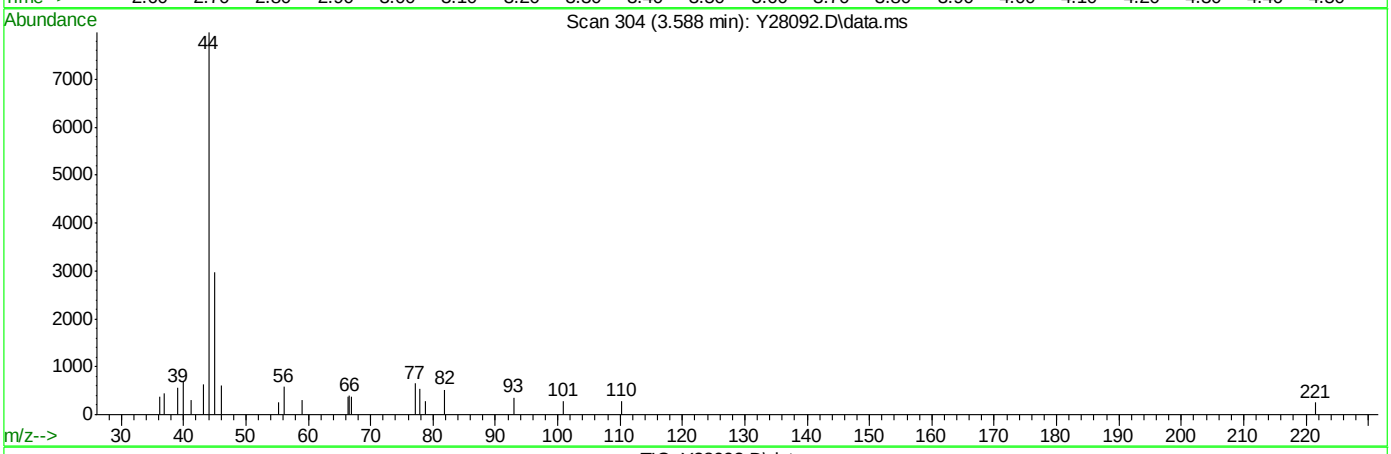
Y28092.D edits: Ethanol

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 09:32:00 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration





TIC: Y28092.D\data.ms

(104) Ethanol

3.588min (+0.014) 86.85ug/Kg m

response 7515

Ion	Exp%	Act%
45.00	100	100
46.00	41.20	20.77
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.124	96	1249684	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.312	117	844727	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.678	152	395907	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.624	65	130024	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.242	113	293643	52.90	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 105.80%			
44) 1,2-Dichloroethane-d4	6.820	65	320666	49.54	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 99.08%			
55) Toluene-d8	8.742	98	1174063	49.20	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 98.40%			
77) 4-Bromofluorobenzene	11.535	174	265241	46.38	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 92.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.984	85	108633	10.30	ug/Kg	93
3) Chloromethane	2.203	50	125655	10.03	ug/Kg	97
4) Vinyl Chloride	2.312	62	122668	9.76	ug/Kg	100
5) Bromomethane	2.720	94	65603	11.14	ug/Kg	96
6) Chloroethane	2.878	64	66803	10.00	ug/Kg	96
7) Trichlorofluoromethane	3.054	101	117307	10.20	ug/Kg	97
8) Ethyl Ether	3.407	59	64524	12.16	ug/Kg	93
9) 1,2-Dichlorotrifluoroe...	3.638	67	103870	9.50	ug/Kg	96
10) 1,1-Dichloroethene	3.644	61	134503	10.24	ug/Kg	98
11) Freon 113	3.699	101	83882	9.95	ug/Kg	95
12) Carbon Disulfide	3.687	76	287537	10.21	ug/Kg	84
13) Iodomethane	3.815	142	123485	10.66	ug/Kg	94
14) Allyl chloride	4.180	41	121996	10.35	ug/Kg	94
15) Methylene Chloride	4.295	49	139827	8.52	ug/Kg	93
16) Acetone	4.344	43	107824	56.01	ug/Kg	96
17) Methyl acetate	4.490	43	211113	53.59	ug/Kg	91
18) trans-1,2-Dichloroethene	4.490	61	105771	10.46	ug/Kg	95
19) Hexane	4.587	56	70303	9.26	ug/Kg	79
20) Methyl Tert Butyl Ether	4.612	73	193793	10.78	ug/Kg#	27
21) Acetonitrile	4.849	41	67040	96.38	ug/Kg	96
22) Di-isopropyl ether	5.025	45	235170	10.72	ug/Kg	95
23) Chloroprene	5.141	53	123830	9.92	ug/Kg	92
24) 1,1-Dichloroethane	5.159	63	141677	9.98	ug/Kg	96
25) Acrylonitrile	5.196	53	110216	53.65	ug/Kg	95
26) ETBE	5.427	59	243398	11.85	ug/Kg	95
27) Vinyl acetate	5.421	43	607413	52.86	ug/Kg	95
28) cis-1,2-Dichloroethene	5.749	96	92795	10.87	ug/Kg	95
29) 2,2-Dichloropropane	5.871	77	63223	11.72	ug/Kg	91
30) Bromochloromethane	5.968	128	37482	11.78	ug/Kg	88
31) Cyclohexane	5.999	84	133585	9.68	ug/Kg	95
32) Chloroform	6.041	83	153695	10.71	ug/Kg	97
33) Ethyl acetate	6.163	43	258334	50.21	ug/Kg	97
34) Tetrahydrofuran	6.236	42	17319	7.23	ug/Kg	80
36) Carbon Tetrachloride	6.218	117	86543	10.86	ug/Kg	93

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.285	97	111978	11.01	ug/Kg	98
38) 2-Butanone	6.370	43	139385	47.48	ug/Kg	96
39) 1,1-Dichloropropene	6.418	75	109500	9.99	ug/Kg	96
40) Propionitrile	6.680	54	87470	105.15	ug/Kg	82
41) Methacrylonitrile	6.704	41	322917	97.69	ug/Kg	95
42) Benzene	6.686	78	346034	10.61	ug/Kg	92
43) TAME	6.808	73	209206	10.14	ug/Kg	95
45) 1,2-Dichloroethane	6.893	62	96122	11.01	ug/Kg	96
46) Trichloroethene	7.313	95	84835	9.38	ug/Kg	94
47) Methylcyclohexane	7.319	83	140067	9.27	ug/Kg	97
48) Dibromomethane	7.751	93	42529	11.06	ug/Kg	92
49) 1,2-Dichloropropane	7.848	63	80976	10.15	ug/Kg	95
50) Bromodichloromethane	7.909	83	89697	9.92	ug/Kg	98
51) Methyl methacrylate	8.061	41	36909	7.61	ug/Kg	96
52) 2-Chloroethyl vinyl ether	8.475	63	157992	44.17	ug/Kg	94
53) cis-1,3-Dichloropropene	8.554	75	112692	9.85	ug/Kg	99
56) Toluene	8.797	91	335244	9.92	ug/Kg	97
57) 2-Nitropropane	9.004	41	54639	42.44	ug/Kg	92
58) 4-Methyl-2-pentanone	9.156	43	249513	44.48	ug/Kg	96
59) trans-1,3-Dichloropropene	9.205	75	82652	9.54	ug/Kg	96
60) Tetrachloroethene	9.211	166	70042	10.45	ug/Kg	95
61) Ethyl methacrylate	9.351	69	62761	7.87	ug/Kg	91
62) 1,1,2-Trichloroethane	9.369	83	51090	10.01	ug/Kg	97
63) Dibromochloromethane	9.557	129	56024	9.81	ug/Kg	94
64) 1,3-Dichloropropane	9.649	76	100988	9.62	ug/Kg	96
65) 1,2-Dibromoethane	9.807	107	55632	10.58	ug/Kg	91
66) 2-hexanone	9.989	43	153084	36.69	ug/Kg	95
67) 1-Chlorohexane	10.287	91	81040	7.99	ug/Kg	96
68) Ethylbenzene	10.342	91	344947	10.08	ug/Kg	99
69) Chlorobenzene	10.330	112	210007	11.08	ug/Kg	96
70) 1,1,1,2-Tetrachloroethane	10.385	131	65849	11.15	ug/Kg	94
71) m,p-Xylene	10.488	91	499389	19.63	ug/Kg	99
72) o-Xylene	10.920	91	243058	9.21	ug/Kg	99
73) Styrene	10.981	104	167328	9.73	ug/Kg	96
74) Bromoform	11.018	173	30005	11.48	ug/Kg	94
75) Isopropylbenzene	11.236	105	297686	9.41	ug/Kg	98
78) cis-1,4-Dichloro-2-butene	11.583	53	18919	9.01	ug/Kg	89
79) n-Propylbenzene	11.656	91	362763	9.44	ug/Kg	99
80) Bromobenzene	11.650	156	75560	10.84	ug/Kg	93
81) 1,1,2,2-Tetrachloroethane	11.717	83	76835	9.82	ug/Kg	91
82) 1,3,5-Trimethylbenzene	11.845	105	268449	9.63	ug/Kg	98
83) 2-Chlorotoluene	11.833	91	257367	9.82	ug/Kg	98
84) trans-1,4-Dichloro-2-B...	11.894	53	19843	9.28	ug/Kg#	74
85) 1,2,3-Trichloropropane	11.863	110	20628	9.00	ug/Kg	90
86) Cyclohexanone	11.918	55	16337	38.92	ug/Kg	97
87) 4-Chlorotoluene	11.997	91	225582	9.77	ug/Kg	98
88) tert-Butylbenzene	12.179	91	161364	9.68	ug/Kg	98
89) 1,2,4-Trimethylbenzene	12.252	105	265253	10.13	ug/Kg	99
90) Pentachloroethane	12.216	167	38571	10.41	ug/Kg	94
91) sec-Butylbenzene	12.362	105	351015	9.80	ug/Kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.502	119	272245	9.58	ug/Kg	100
93) 1,3-Dichlorobenzene	12.611	146	140693	9.88	ug/Kg	97
94) 1,4-Dichlorobenzene	12.697	146	148520	10.07	ug/Kg	97
95) n-Butylbenzene	12.940	92	148702	9.03	ug/Kg	98
96) Benzyl Chloride	12.940	126	26846	8.89	ug/Kg#	85
97) 1,2-Dichlorobenzene	13.135	146	137237	10.58	ug/Kg	98
98) 1,2-Dibromo-3-Chloropr...	13.950	75	14445	9.60	ug/Kg	97
99) Hexachlorobutadiene	14.552	225	44528	9.85	ug/Kg	89
100) 1,2,4-Trichlorobenzene	14.595	180	84896	9.35	ug/Kg	96
101) Naphthalene	14.881	128	195403	9.70	ug/Kg	100
102) 1,2,3-Trichlorobenzene	15.039	180	84980	10.00	ug/Kg	95
104) Ethanol	3.565	45	15931	428.94	ug/Kg	81
105) Acrolein	4.009	56	57298	53.51	ug/Kg	87
106) Tert butyl alcohol	4.709	59	75171	109.55	ug/Kg	96
107) Isobutyl alcohol	6.893	42	30965	186.50	ug/Kg	90
108) Tert Amyl Alcohol	6.996	59	56624	90.68	ug/Kg	92
109) 1,4-Dioxane	8.122	88	13030	196.89	ug/Kg	79

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

7.6.13

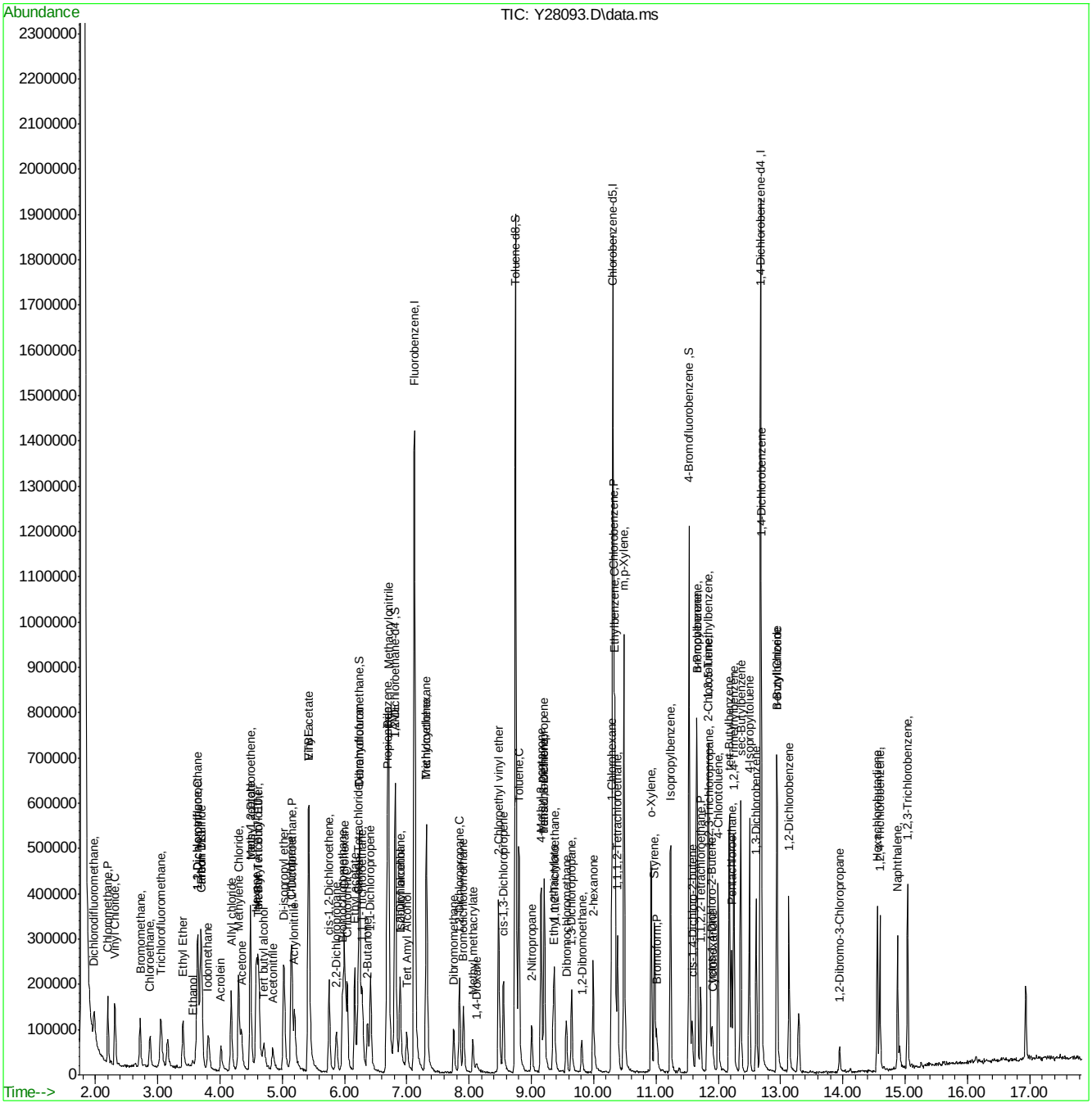
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration


Abundance
TIC: Y28093.D\data.ms
Time-->
Dichlorodifluoromethane,
Chloromethane,P
Vinyl Chloride,C
Bromomethane,
Chloroethane,
Trichlorofluoromethane,
Ethyl Ether
Ethanol
Iodomethane
Acrolein
Acetone
Allyl chloride
Methylene Chloride,
Acetonitrile
Acrylonitrile,P
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
4-Bromofluorobenzene ,S
1,4-Dichlorobenzene-d4 ,I
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2-Dibromo-3-Chloropropane
Naphthalene
1,2,3-Trichlorobenzene
Styrene
o-Xylene
Isopropylbenzene
Bromoform,P
2-Nitropropane
2-hexanone
1,2-Dibromoethane,
Dibromochloromethane,
cis-1,3-Dichloropropene
2-Chloroethyl vinyl ether
Toluene,C
1,1,1,2-Tetrachloroethane,
Chlorobenzene,P
m,p-Xylene,
Dibromomethane
Bromodichloromethane
Methyl methacrylate
1,4-Dioxane
Tert Amyl Alcohol
Methyl Acrylonitrile
Methacrylonitrile
Ethyl Acetate
Di-isopropyl ether
Tert butyl alcohol
2-Butanone
1,1-Dichloropropene
cis-1,2-Dichloroethene,
2,2-Dichloroethane
Chloroform,P
Carbon tetrachloride,
Ethyl Methacrylate
Methyl Methacrylate
Tetrahydrofuran
Methyl Acrylate
Propionitrile
Methacrylonitrile

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.120	96	1215789	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.314	117	820827	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.681	152	368003	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.632	65	123881	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.238	113	272452	49.03	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.06%			
44) 1,2-Dichloroethane-d4	6.822	65	299874	47.84	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 95.68%			
55) Toluene-d8	8.745	98	1157652	50.33	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 100.66%			
77) 4-Bromofluorobenzene	11.537	174	261153	50.98	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 101.96%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.980	85	214797	20.63	ug/Kg	92
3) Chloromethane	2.199	50	247566	20.29	ug/Kg	96
4) Vinyl Chloride	2.314	62	248112	20.54	ug/Kg	97
5) Bromomethane	2.716	94	118925	19.64	ug/Kg	97
6) Chloroethane	2.880	64	127440	19.61	ug/Kg	96
7) Trichlorofluoromethane	3.051	101	224330	19.85	ug/Kg	100
8) Ethyl Ether	3.403	59	119798	20.94	ug/Kg	96
9) 1,2-Dichlorotrifluoroe...	3.641	67	192110	18.52	ug/Kg	94
10) 1,1-Dichloroethene	3.647	61	271200	20.97	ug/Kg	94
11) Freon 113	3.708	101	164397	20.10	ug/Kg	99
12) Carbon Disulfide	3.689	76	554936	20.05	ug/Kg	96
13) Iodomethane	3.811	142	239241	20.55	ug/Kg	97
14) Allyl chloride	4.176	41	229798	19.69	ug/Kg	93
15) Methylene Chloride	4.298	49	242122	16.38	ug/Kg	92
16) Acetone	4.352	43	183568	92.46	ug/Kg	94
17) Methyl acetate	4.486	43	398534	100.38	ug/Kg	94
18) trans-1,2-Dichloroethene	4.486	61	208608	20.73	ug/Kg	97
19) Hexane	4.584	56	124333	17.48	ug/Kg	81
20) Methyl Tert Butyl Ether	4.614	73	345039	18.98	ug/Kg#	25
21) Acetonitrile	4.851	41	129805	195.35	ug/Kg	98
22) Di-isopropyl ether	5.028	45	420733	19.03	ug/Kg	90
23) Chloroprene	5.143	53	251069	20.76	ug/Kg	97
24) 1,1-Dichloroethane	5.162	63	282414	20.47	ug/Kg	95
25) Acrylonitrile	5.198	53	214914	103.74	ug/Kg	94
26) ETBE	5.435	59	406365	18.61	ug/Kg	94
27) Vinyl acetate	5.423	43	1110507	96.57	ug/Kg	95
28) cis-1,2-Dichloroethene	5.752	96	174847	20.17	ug/Kg	93
29) 2,2-Dichloropropane	5.873	77	117056	20.54	ug/Kg	88
30) Bromochloromethane	5.971	128	71399	21.18	ug/Kg#	87
31) Cyclohexane	6.001	84	274527	20.78	ug/Kg	94
32) Chloroform	6.044	83	285536	19.75	ug/Kg	99
33) Ethyl acetate	6.165	43	519060	103.48	ug/Kg	95
34) Tetrahydrofuran	6.244	42	34341	17.11	ug/Kg	83
36) Carbon Tetrachloride	6.214	117	165945	20.52	ug/Kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.287	97	211766	20.38	ug/Kg	94
38) 2-Butanone	6.372	43	281321	101.05	ug/Kg	99
39) 1,1-Dichloropropene	6.421	75	210685	19.77	ug/Kg	93
40) Propionitrile	6.682	54	185885	223.92	ug/Kg	89
41) Methacrylonitrile	6.707	41	652521	205.28	ug/Kg	96
42) Benzene	6.682	78	635035	19.43	ug/Kg	96
43) TAME	6.810	73	374524	18.53	ug/Kg	98
45) 1,2-Dichloroethane	6.895	62	175971	19.72	ug/Kg	97
46) Trichloroethene	7.315	95	161806	18.98	ug/Kg	97
47) Methylcyclohexane	7.315	83	279387	19.72	ug/Kg	97
48) Dibromomethane	7.747	93	76817	19.50	ug/Kg	95
49) 1,2-Dichloropropane	7.844	63	158219	20.23	ug/Kg	96
50) Bromodichloromethane	7.911	83	176302	20.12	ug/Kg	94
51) Methyl methacrylate	8.057	41	87682	21.10	ug/Kg	91
52) 2-Chloroethyl vinyl ether	8.471	63	366639	111.88	ug/Kg	96
53) cis-1,3-Dichloropropene	8.550	75	231769	20.98	ug/Kg	99
56) Toluene	8.799	91	649988	19.88	ug/Kg	96
57) 2-Nitropropane	9.006	41	127495	110.25	ug/Kg	94
58) 4-Methyl-2-pentanone	9.158	43	550761	106.95	ug/Kg	98
59) trans-1,3-Dichloropropene	9.207	75	174597	21.23	ug/Kg	95
60) Tetrachloroethene	9.207	166	134682	20.22	ug/Kg	96
61) Ethyl methacrylate	9.353	69	147700	21.34	ug/Kg	92
62) 1,1,2-Trichloroethane	9.371	83	100969	20.35	ug/Kg	98
63) Dibromochloromethane	9.560	129	113549	20.65	ug/Kg	97
64) 1,3-Dichloropropane	9.645	76	207224	20.71	ug/Kg	97
65) 1,2-Dibromoethane	9.809	107	108927	20.72	ug/Kg	95
66) 2-hexanone	9.992	43	387976	110.38	ug/Kg	93
67) 1-Chlorohexane	10.290	91	187698	21.18	ug/Kg	88
68) Ethylbenzene	10.345	91	664316	19.89	ug/Kg	97
69) Chlorobenzene	10.332	112	385182	19.84	ug/Kg	98
70) 1,1,1,2-Tetrachloroethane	10.387	131	121165	19.97	ug/Kg	94
71) m,p-Xylene	10.485	91	991988	40.51	ug/Kg	99
72) o-Xylene	10.923	91	511179	20.75	ug/Kg	99
73) Styrene	10.977	104	365278	22.16	ug/Kg	98
74) Bromoform	11.014	173	54178	19.86	ug/Kg	89
75) Isopropylbenzene	11.233	105	616781	20.67	ug/Kg	98
78) cis-1,4-Dichloro-2-butene	11.580	53	43026	23.20	ug/Kg#	80
79) n-Propylbenzene	11.653	91	703778	20.28	ug/Kg	100
80) Bromobenzene	11.653	156	136613	20.24	ug/Kg	99
81) 1,1,2,2-Tetrachloroethane	11.720	83	152553	21.17	ug/Kg	99
82) 1,3,5-Trimethylbenzene	11.847	105	531122	20.88	ug/Kg	96
83) 2-Chlorotoluene	11.829	91	492580	20.40	ug/Kg	98
84) trans-1,4-Dichloro-2-B...	11.896	53	39735	20.74	ug/Kg	88
85) 1,2,3-Trichloropropane	11.866	110	43122	21.30	ug/Kg	91
86) Cyclohexanone	11.914	55	35571	102.53	ug/Kg	95
87) 4-Chlorotoluene	11.993	91	420046	19.80	ug/Kg	100
88) tert-Butylbenzene	12.176	91	313931	20.59	ug/Kg	98
89) 1,2,4-Trimethylbenzene	12.249	105	500777	20.44	ug/Kg	97
90) Pentachloroethane	12.212	167	74354	21.15	ug/Kg	92
91) sec-Butylbenzene	12.358	105	680796	20.66	ug/Kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.498	119	530876	20.52	ug/Kg	100
93) 1,3-Dichlorobenzene	12.608	146	257592	19.58	ug/Kg	98
94) 1,4-Dichlorobenzene	12.693	146	252121	18.33	ug/Kg	95
95) n-Butylbenzene	12.942	92	282590	19.40	ug/Kg	96
96) Benzyl Chloride	12.936	126	52518	19.81	ug/Kg#	50
97) 1,2-Dichlorobenzene	13.137	146	246461	19.87	ug/Kg	97
98) 1,2-Dibromo-3-Chloropr...	13.946	75	26408	19.27	ug/Kg	84
99) Hexachlorobutadiene	14.554	225	74936	17.97	ug/Kg	98
100) 1,2,4-Trichlorobenzene	14.591	180	137254	16.81	ug/Kg	98
101) Naphthalene	14.877	128	351329	19.04	ug/Kg	99
102) 1,2,3-Trichlorobenzene	15.041	180	145339	18.40	ug/Kg	96
104) Ethanol	3.568	45	24870	446.99	ug/Kg	90
105) Acrolein	4.018	56	110825	104.95	ug/Kg	98
106) Tert butyl alcohol	4.711	59	137421	200.62	ug/Kg	91
107) Isobutyl alcohol	6.901	42	73790	482.77	ug/Kg	96
108) Tert Amyl Alcohol	7.011	59	126365	222.79	ug/Kg	97
109) 1,4-Dioxane	8.118	88	27187	434.56	ug/Kg	98

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

7.6.14

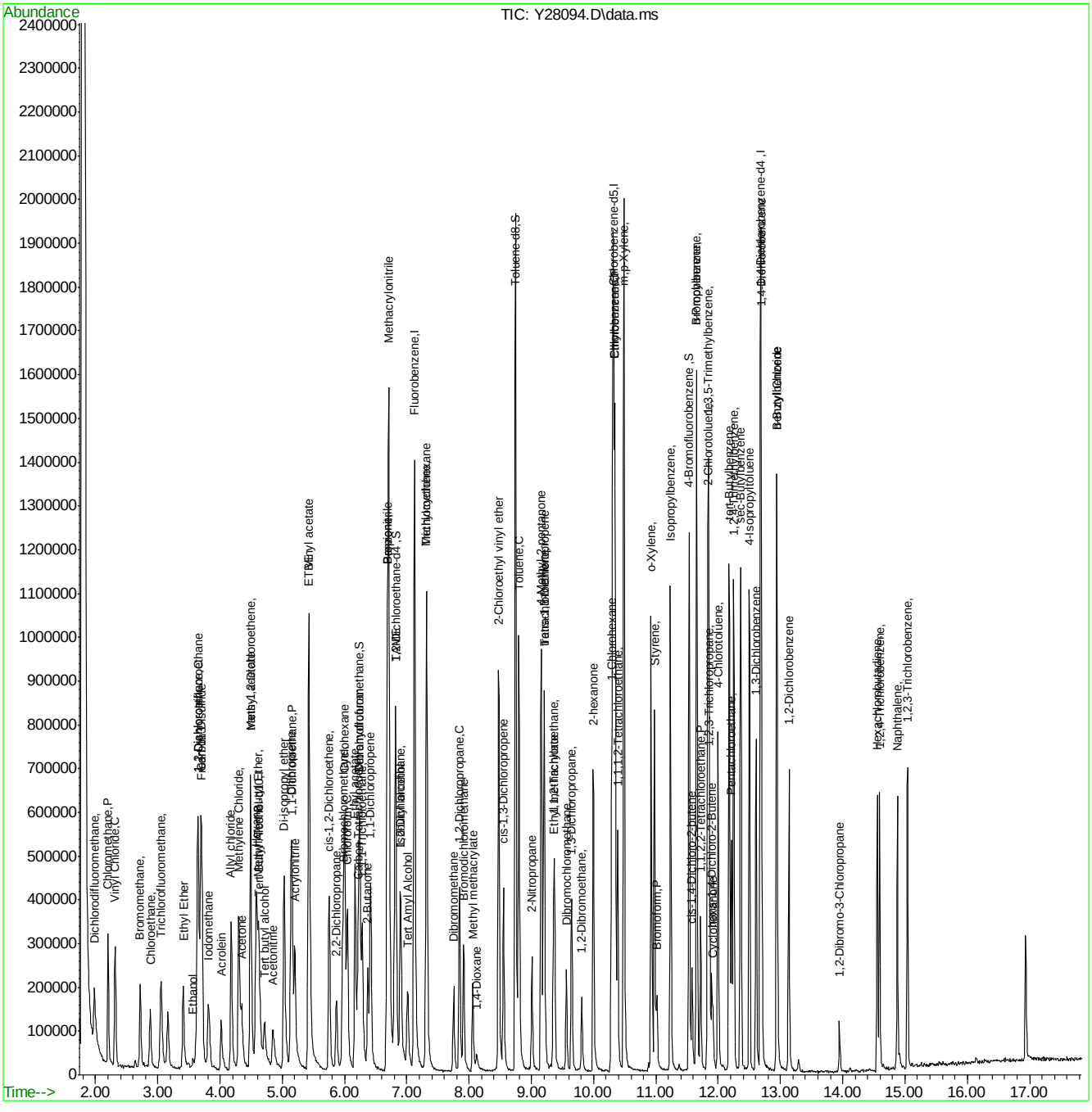
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.122	96	1290258	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.309	117	871042	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.676	152	421584	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.628	65	132224	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.240	113	298161	50.89	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.78%			
44) 1,2-Dichloroethane-d4	6.818	65	302684	46.17	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 92.34%			
55) Toluene-d8	8.746	98	1218742	49.82	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 99.64%			
77) 4-Bromofluorobenzene	11.532	174	277388	46.96	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 93.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.981	85	579120	51.86	ug/Kg	100
3) Chloromethane	2.200	50	645827	49.63	ug/Kg	98
4) Vinyl Chloride	2.316	62	646206	49.96	ug/Kg	100
5) Bromomethane	2.717	94	302023	47.29	ug/Kg	96
6) Chloroethane	2.875	64	323060	47.15	ug/Kg	95
7) Trichlorofluoromethane	3.052	101	620810	51.89	ug/Kg	95
8) Ethyl Ether	3.405	59	302703	49.10	ug/Kg	94
9) 1,2-Dichlorotrifluoroe...	3.636	67	523940	48.80	ug/Kg	98
10) 1,1-Dichloroethene	3.648	61	717393	51.44	ug/Kg	96
11) Freon 113	3.703	101	462106	53.14	ug/Kg	99
12) Carbon Disulfide	3.691	76	1481340	50.38	ug/Kg	96
13) Iodomethane	3.806	142	627352	50.31	ug/Kg	97
14) Allyl chloride	4.177	41	600277	48.72	ug/Kg	91
15) Methylene Chloride	4.299	49	547199	37.12	ug/Kg	89
16) Acetone	4.342	43	466701	227.21	ug/Kg	97
17) Methyl acetate	4.488	43	1018283	241.37	ug/Kg	94
18) trans-1,2-Dichloroethene	4.488	61	544311	50.35	ug/Kg	97
19) Hexane	4.579	56	364770	50.45	ug/Kg	89
20) Methyl Tert Butyl Ether	4.609	73	942213	49.69	ug/Kg#	28
21) Acetonitrile	4.846	41	351827	502.82	ug/Kg	98
22) Di-isopropyl ether	5.029	45	1134305	49.13	ug/Kg	91
23) Chloroprene	5.139	53	688064	52.93	ug/Kg	98
24) 1,1-Dichloroethane	5.157	63	792668	53.72	ug/Kg	96
25) Acrylonitrile	5.193	53	612586	275.21	ug/Kg	97
26) ETBE	5.424	59	1155138	51.03	ug/Kg	97
27) Vinyl acetate	5.418	43	2901265	240.48	ug/Kg	94
28) cis-1,2-Dichloroethene	5.753	96	468314	50.77	ug/Kg	96
29) 2,2-Dichloropropane	5.869	77	288454	47.27	ug/Kg	98
30) Bromochloromethane	5.966	128	194562	53.33	ug/Kg#	80
31) Cyclohexane	6.002	84	776181	54.65	ug/Kg	93
32) Chloroform	6.045	83	767367	50.23	ug/Kg	98
33) Ethyl acetate	6.161	43	1278379	237.40	ug/Kg	94
34) Tetrahydrofuran	6.234	42	87931	43.37	ug/Kg	93
36) Carbon Tetrachloride	6.215	117	454018	52.44	ug/Kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.282	97	562065	50.64	ug/Kg	96
38) 2-Butanone	6.367	43	701128	236.47	ug/Kg	94
39) 1,1-Dichloropropene	6.416	75	595060	52.81	ug/Kg	98
40) Propionitrile	6.672	54	465264	507.88	ug/Kg	86
41) Methacrylonitrile	6.702	41	1669770	490.66	ug/Kg	92
42) Benzene	6.684	78	1714983	49.91	ug/Kg	98
43) TAME	6.805	73	1059238	50.63	ug/Kg	96
45) 1,2-Dichloroethane	6.891	62	447157	47.44	ug/Kg	96
46) Trichloroethene	7.310	95	439510	49.42	ug/Kg	99
47) Methylcyclohexane	7.316	83	817654	54.64	ug/Kg	97
48) Dibromomethane	7.748	93	201665	48.64	ug/Kg	98
49) 1,2-Dichloropropane	7.846	63	399429	47.94	ug/Kg	96
50) Bromodichloromethane	7.907	83	461746	49.56	ug/Kg	94
51) Methyl methacrylate	8.053	41	206599	46.01	ug/Kg	90
52) 2-Chloroethyl vinyl ether	8.466	63	913975	252.80	ug/Kg	96
53) cis-1,3-Dichloropropene	8.551	75	603905	50.68	ug/Kg	96
56) Toluene	8.795	91	1682093	48.57	ug/Kg	94
57) 2-Nitropropane	9.002	41	310981	245.04	ug/Kg	88
58) 4-Methyl-2-pentanone	9.154	43	1308049	233.94	ug/Kg	94
59) trans-1,3-Dichloropropene	9.202	75	464069	52.11	ug/Kg	95
60) Tetrachloroethene	9.202	166	379901	53.56	ug/Kg	97
61) Ethyl methacrylate	9.342	69	375268	49.97	ug/Kg	97
62) 1,1,2-Trichloroethane	9.367	83	253061	47.79	ug/Kg	97
63) Dibromochloromethane	9.561	129	295081	50.03	ug/Kg	99
64) 1,3-Dichloropropane	9.640	76	521964	48.59	ug/Kg	97
65) 1,2-Dibromoethane	9.805	107	267200	47.32	ug/Kg	97
66) 2-hexanone	9.987	43	895195	231.98	ug/Kg	92
67) 1-Chlorohexane	10.285	91	536048	55.90	ug/Kg	93
68) Ethylbenzene	10.340	91	1778991	50.29	ug/Kg	94
69) Chlorobenzene	10.328	112	1020892	49.69	ug/Kg	97
70) 1,1,1,2-Tetrachloroethane	10.382	131	330164	51.30	ug/Kg	97
71) m,p-Xylene	10.486	91	2607434	99.91	ug/Kg	93
72) o-Xylene	10.918	91	1356838	51.26	ug/Kg	99
73) Styrene	10.973	104	1008607	55.66	ug/Kg	99
74) Bromoform	11.015	173	151941	52.62	ug/Kg	98
75) Isopropylbenzene	11.234	105	1715719	53.58	ug/Kg	96
78) cis-1,4-Dichloro-2-butene	11.575	53	106408	47.54	ug/Kg	91
79) n-Propylbenzene	11.654	91	1987002	49.74	ug/Kg	94
80) Bromobenzene	11.648	156	380727	49.04	ug/Kg	98
81) 1,1,2,2-Tetrachloroethane	11.715	83	389191	46.24	ug/Kg	99
82) 1,3,5-Trimethylbenzene	11.842	105	1548684	52.38	ug/Kg	95
83) 2-Chlorotoluene	11.824	91	1377474	49.47	ug/Kg	98
84) trans-1,4-Dichloro-2-B...	11.891	53	95094	42.79	ug/Kg	93
85) 1,2,3-Trichloropropane	11.861	110	97690	41.23	ug/Kg	96
86) Cyclohexanone	11.909	55	86477	215.77	ug/Kg	93
87) 4-Chlorotoluene	11.995	91	1224107	50.54	ug/Kg	96
88) tert-Butylbenzene	12.177	91	911072	51.65	ug/Kg	97
89) 1,2,4-Trimethylbenzene	12.244	105	1487209	52.60	ug/Kg	98
90) Pentachloroethane	12.214	167	212552	51.79	ug/Kg	97
91) sec-Butylbenzene	12.360	105	1965133	51.49	ug/Kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.499	119	1610985	53.90	ug/Kg	96
93) 1,3-Dichlorobenzene	12.603	146	738757	49.36	ug/Kg	95
94) 1,4-Dichlorobenzene	12.694	146	754926	49.28	ug/Kg	99
95) n-Butylbenzene	12.938	92	929331	56.25	ug/Kg	88
96) Benzyl Chloride	12.938	126	140284	46.34	ug/Kg#	78
97) 1,2-Dichlorobenzene	13.132	146	702758	49.56	ug/Kg	99
98) 1,2-Dibromo-3-Chloropr...	13.947	75	73367	47.30	ug/Kg	96
99) Hexachlorobutadiene	14.556	225	250557	54.28	ug/Kg	99
100) 1,2,4-Trichlorobenzene	14.592	180	451070	50.93	ug/Kg	99
101) Naphthalene	14.872	128	1096476	52.72	ug/Kg	98
102) 1,2,3-Trichlorobenzene	15.036	180	435078	49.39	ug/Kg	96
104) Ethanol	3.575	45	71418	982.55	ug/Kg	97
105) Acrolein	4.013	56	301801	263.42	ug/Kg	98
106) Tert butyl alcohol	4.707	59	369500	504.88	ug/Kg	86
107) Isobutyl alcohol	6.891	42	171251	981.98	ug/Kg	95
108) Tert Amyl Alcohol	7.000	59	316190	503.17	ug/Kg	92
109) 1,4-Dioxane	8.113	88	72049	1048.77	ug/Kg	91

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

7.6.15

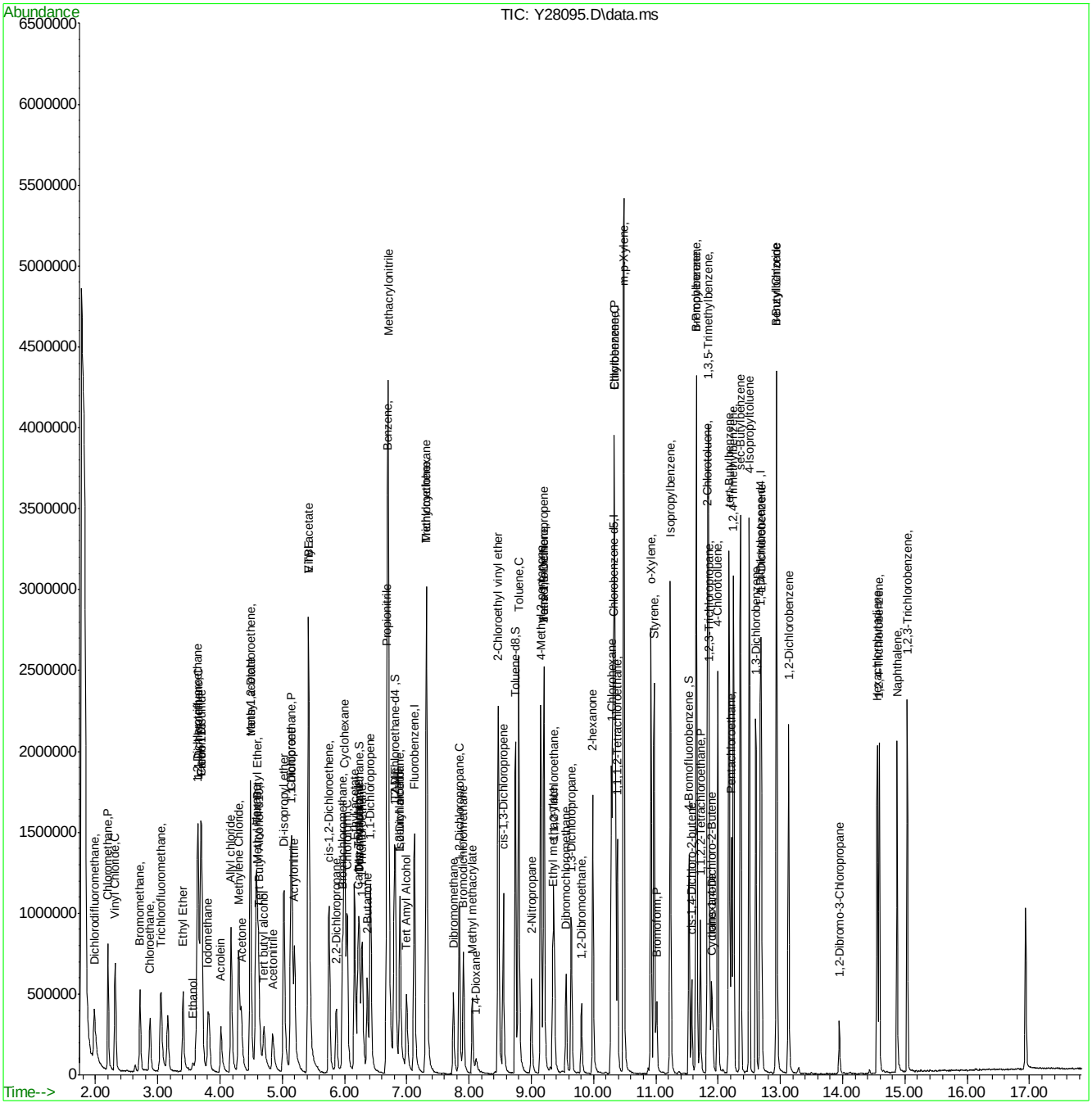
7

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.124	96	1322955	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.312	117	898018	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.678	152	425189	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.636	65	127032	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.242	113	302318	50.10	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.20%			
44) 1,2-Dichloroethane-d4	6.820	65	306301	46.45	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 92.90%			
55) Toluene-d8	8.742	98	1279711	50.79	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 101.58%			
77) 4-Bromofluorobenzene	11.534	174	292631	49.88	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 99.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.983	85	1042725	90.23	ug/Kg	99
3) Chloromethane	2.202	50	1205987	90.55	ug/Kg	97
4) Vinyl Chloride	2.318	62	1207072	91.03	ug/Kg	96
5) Bromomethane	2.713	94	562451	87.06	ug/Kg	92
6) Chloroethane	2.871	64	506689	73.16	ug/Kg	95
7) Trichlorofluoromethane	3.048	101	1116435	90.16	ug/Kg	99
8) Ethyl Ether	3.407	59	590845	93.89	ug/Kg	95
9) 1,2-Dichlorotrifluoroe...	3.638	67	979631	89.52	ug/Kg	97
10) 1,1-Dichloroethene	3.650	61	1362653	94.61	ug/Kg	93
11) Freon 113	3.705	101	806642	89.07	ug/Kg	99
12) Carbon Disulfide	3.687	76	2703543	89.51	ug/Kg	98
13) Iodomethane	3.814	142	1204726	94.08	ug/Kg	100
14) Allyl chloride	4.179	41	1145893	91.29	ug/Kg	91
15) Methylene Chloride	4.295	49	964521	68.20	ug/Kg	91
16) Acetone	4.344	43	869101	422.29	ug/Kg	99
17) Methyl acetate	4.490	43	1854283	432.41	ug/Kg	91
18) trans-1,2-Dichloroethene	4.484	61	1029954	92.76	ug/Kg	97
19) Hexane	4.581	56	596757	80.31	ug/Kg	88
20) Methyl Tert Butyl Ether	4.611	73	1761567	90.75	ug/Kg#	26
21) Acetonitrile	4.849	41	612176	852.08	ug/Kg	100
22) Di-isopropyl ether	5.031	45	2144365	90.98	ug/Kg	90
23) Chloroprene	5.141	53	1252911	92.64	ug/Kg	95
24) 1,1-Dichloroethane	5.159	63	1378823	89.48	ug/Kg	96
25) Acrylonitrile	5.195	53	1067943	456.42	ug/Kg	97
26) ETBE	5.433	59	2170597	93.05	ug/Kg	97
27) Vinyl acetate	5.420	43	5404927	441.14	ug/Kg	93
28) cis-1,2-Dichloroethene	5.749	96	916915	96.57	ug/Kg	97
29) 2,2-Dichloropropane	5.871	77	514727	83.40	ug/Kg	98
30) Bromochloromethane	5.968	128	392116	103.11	ug/Kg#	81
31) Cyclohexane	5.998	84	1456947	97.77	ug/Kg	95
32) Chloroform	6.041	83	1467487	93.57	ug/Kg	99
33) Ethyl acetate	6.163	43	2440378	447.63	ug/Kg	94
34) Tetrahydrofuran	6.236	42	167188	83.19	ug/Kg	92
36) Carbon Tetrachloride	6.217	117	885851	98.59	ug/Kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.284	97	1053232	92.26 ug/Kg	97
38) 2-Butanone	6.363	43	1323303	441.26 ug/Kg	90
39) 1,1-Dichloropropene	6.412	75	1115347	95.20 ug/Kg	98
40) Propionitrile	6.674	54	883622	937.02 ug/Kg	100
41) Methacrylonitrile	6.704	41	3154557	908.30 ug/Kg	91
42) Benzene	6.686	78	3174153	90.13 ug/Kg	100
43) TAME	6.807	73	2072360	96.30 ug/Kg	96
45) 1,2-Dichloroethane	6.893	62	860668	90.22 ug/Kg	95
46) Trichloroethene	7.312	95	831776	91.49 ug/Kg	96
47) Methylcyclohexane	7.318	83	1507819	96.04 ug/Kg	96
48) Dibromomethane	7.744	93	395378	93.64 ug/Kg	97
49) 1,2-Dichloropropane	7.842	63	801561	94.81 ug/Kg	97
50) Bromodichloromethane	7.909	83	928534	97.41 ug/Kg	93
51) Methyl methacrylate	8.048	41	450510	99.84 ug/Kg	91
52) 2-Chloroethyl vinyl ether	8.468	63	1930113	519.20 ug/Kg	96
53) cis-1,3-Dichloropropene	8.547	75	1194979	97.47 ug/Kg	98
56) Toluene	8.797	91	3156386	89.05 ug/Kg	93
57) 2-Nitropropane	9.004	41	631693	485.20 ug/Kg	92
58) 4-Methyl-2-pentanone	9.150	43	2499199	440.62 ug/Kg	91
59) trans-1,3-Dichloropropene	9.204	75	921653	99.33 ug/Kg	97
60) Tetrachloroethene	9.204	166	693861	93.22 ug/Kg	99
61) Ethyl methacrylate	9.344	69	798289	103.12 ug/Kg	95
62) 1,1,2-Trichloroethane	9.363	83	490225	90.80 ug/Kg	92
63) Dibromochloromethane	9.557	129	607498	99.90 ug/Kg	95
64) 1,3-Dichloropropane	9.642	76	1049702	95.45 ug/Kg	98
65) 1,2-Dibromoethane	9.801	107	555568	96.74 ug/Kg	96
66) 2-hexanone	9.983	43	1777132	454.89 ug/Kg	89
67) 1-Chlorohexane	10.287	91	1010519	99.28 ug/Kg	90
68) Ethylbenzene	10.342	91	3297102	90.28 ug/Kg	91
69) Chlorobenzene	10.324	112	1918208	90.70 ug/Kg	96
70) 1,1,1,2-Tetrachloroethane	10.385	131	656589	98.31 ug/Kg	97
71) m,p-Xylene	10.482	91	4580405	170.27 ug/Kg	86
72) o-Xylene	10.920	91	2619003	95.37 ug/Kg	95
73) Styrene	10.969	104	1986162	103.38 ug/Kg	96
74) Bromoform	11.011	173	319773	106.02 ug/Kg	97
75) Isopropylbenzene	11.230	105	3141152	93.48 ug/Kg	93
78) cis-1,4-Dichloro-2-butene	11.577	53	216192	96.97 ug/Kg	90
79) n-Propylbenzene	11.650	91	3469192	86.22 ug/Kg	91
80) Bromobenzene	11.650	156	723339	92.82 ug/Kg	95
81) 1,1,2,2-Tetrachloroethane	11.717	83	740419	88.89 ug/Kg	96
82) 1,3,5-Trimethylbenzene	11.845	105	2758173	91.40 ug/Kg	90
83) 2-Chlorotoluene	11.826	91	2528166	90.26 ug/Kg	96
84) trans-1,4-Dichloro-2-B...	11.893	53	196156	90.79 ug/Kg	94
85) 1,2,3-Trichloropropane	11.857	110	209817	91.83 ug/Kg	95
86) Cyclohexanone	11.911	55	167207	428.32 ug/Kg	97
87) 4-Chlorotoluene	11.991	91	2235289	91.26 ug/Kg	95
88) tert-Butylbenzene	12.173	91	1723851	96.10 ug/Kg	98
89) 1,2,4-Trimethylbenzene	12.246	105	2672696	92.53 ug/Kg	92
90) Pentachloroethane	12.216	167	424947	101.75 ug/Kg	98
91) sec-Butylbenzene	12.362	105	3455478	89.11 ug/Kg	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration

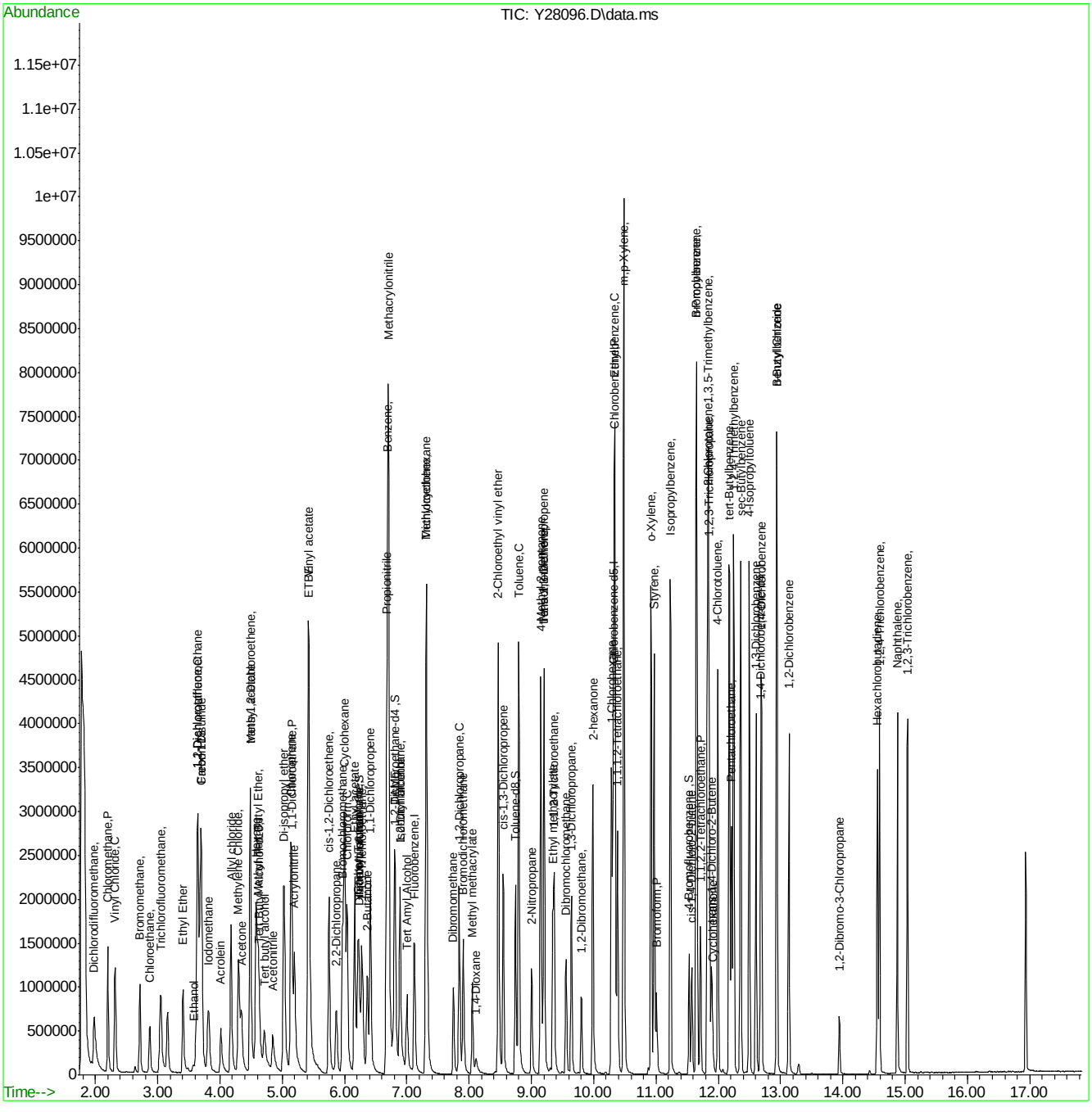
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.502	119	2831410	92.13	ug/Kg	94
93) 1,3-Dichlorobenzene	12.605	146	1361149	90.47	ug/Kg	97
94) 1,4-Dichlorobenzene	12.696	146	1361330	88.43	ug/Kg	96
95) n-Butylbenzene	12.940	92	1611112	93.76	ug/Kg	80
96) Benzyl Chloride	12.934	126	288323	96.19	ug/Kg#	20
97) 1,2-Dichlorobenzene	13.134	146	1307401	91.62	ug/Kg	98
98) 1,2-Dibromo-3-Chloropr...	13.943	75	148544	96.26	ug/Kg	85
99) Hexachlorobutadiene	14.558	225	446421	93.89	ug/Kg	94
100) 1,2,4-Trichlorobenzene	14.588	180	835948	93.15	ug/Kg	98
101) Naphthalene	14.874	128	2146746	100.97	ug/Kg	97
102) 1,2,3-Trichlorobenzene	15.038	180	827087	93.38	ug/Kg	96
104) Ethanol	3.583	45	131421	1890.20	ug/Kg	95
105) Acrolein	4.015	56	562063	503.87	ug/Kg	95
106) Tert butyl alcohol	4.715	59	673153	955.05	ug/Kg	91
107) Isobutyl alcohol	6.893	42	340153	2039.40	ug/Kg	96
108) Tert Amyl Alcohol	7.002	59	587928	972.31	ug/Kg	96
109) 1,4-Dioxane	8.109	88	157531	2358.05	ug/Kg	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.121	96	1394332	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.309	117	947036	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.676	152	463540	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.633	65	145049	250.00	ug/Kg	0.00

System Monitoring Compounds						
35) Dibromofluoromethane	6.239	113	321169	50.48	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.96%			
44) 1,2-Dichloroethane-d4	6.817	65	316475	46.19	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 92.38%			
55) Toluene-d8	8.746	98	1324366	49.68	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 99.36%			
77) 4-Bromofluorobenzene	11.532	174	315563	49.36	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 98.72%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.981	85	1649371	138.12	ug/Kg	99
3) Chloromethane	2.200	50	1786933	129.76	ug/Kg	95
4) Vinyl Chloride	2.322	62	1828570	133.23	ug/Kg	95
5) Bromomethane	2.717	94	824255	124.27	ug/Kg	95
6) Chloroethane	2.869	64	554759	80.31	ug/Kg	92
7) Trichlorofluoromethane	3.045	101	1669087	130.45	ug/Kg	99
8) Ethyl Ether	3.410	59	943314	143.98	ug/Kg	94
9) 1,2-Dichlorotrifluoroe...	3.642	67	1478961	130.98	ug/Kg	95
10) 1,1-Dichloroethene	3.648	61	2122184	141.33	ug/Kg	92
11) Freon 113	3.702	101	1247135	133.58	ug/Kg	98
12) Carbon Disulfide	3.690	76	4025825	129.17	ug/Kg	96
13) Iodomethane	3.818	142	1856913	139.24	ug/Kg	95
14) Allyl chloride	4.177	41	1739723	133.83	ug/Kg	90
15) Methylene Chloride	4.299	49	1495056	107.12	ug/Kg	90
16) Acetone	4.347	43	1356011	645.20	ug/Kg	97
17) Methyl acetate	4.487	43	2930858	666.49	ug/Kg	90
18) trans-1,2-Dichloroethene	4.487	61	1559813	135.24	ug/Kg	95
19) Hexane	4.578	56	941067	125.09	ug/Kg	86
20) Methyl Tert Butyl Ether	4.615	73	2896904	144.26	ug/Kg#	25
21) Acetonitrile	4.846	41	982633	1337.26	ug/Kg	98
22) Di-isopropyl ether	5.029	45	3469579	142.24	ug/Kg	90
23) Chloroprene	5.138	53	1936473	137.89	ug/Kg	94
24) 1,1-Dichloroethane	5.156	63	2172186	136.62	ug/Kg	96
25) Acrylonitrile	5.193	53	1766018	728.83	ug/Kg	97
26) ETBE	5.424	59	3459972	142.71	ug/Kg	97
27) Vinyl acetate	5.418	43	7641057	605.99	ug/Kg	86
28) cis-1,2-Dichloroethene	5.753	96	1404180	141.29	ug/Kg	96
29) 2,2-Dichloropropane	5.868	77	768799	122.25	ug/Kg	99
30) Bromochloromethane	5.966	128	601906	149.24	ug/Kg#	85
31) Cyclohexane	6.002	84	2222590	142.14	ug/Kg	94
32) Chloroform	6.045	83	2206181	135.21	ug/Kg	97
33) Ethyl acetate	6.160	43	3728107	662.71	ug/Kg	91
34) Tetrahydrofuran	6.233	42	271292	174.90	ug/Kg	96
36) Carbon Tetrachloride	6.215	117	1368007	144.87	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.282	97	1568556	132.41 ug/Kg	99
38) 2-Butanone	6.367	43	2090362	677.27 ug/Kg	92
39) 1,1-Dichloropropene	6.416	75	1703642	139.31 ug/Kg	96
40) Propionitrile	6.677	54	1363752	1389.64 ug/Kg	90
41) Methacrylonitrile	6.702	41	4594032	1278.50 ug/Kg	86
42) Benzene	6.683	78	4614996	126.84 ug/Kg	98
43) TAME	6.805	73	3347766	148.70 ug/Kg	96
45) 1,2-Dichloroethane	6.890	62	1345993	136.54 ug/Kg	96
46) Trichloroethene	7.310	95	1237382	131.37 ug/Kg	97
47) Methylcyclohexane	7.316	83	2304260	140.37 ug/Kg	97
48) Dibromomethane	7.748	93	622423	141.67 ug/Kg	98
49) 1,2-Dichloropropane	7.839	63	1252063	141.99 ug/Kg	95
50) Bromodichloromethane	7.906	83	1454565	145.54 ug/Kg	95
51) Methyl methacrylate	8.046	41	729106	153.36 ug/Kg	90
52) 2-Chloroethyl vinyl ether	8.472	63	2887004	731.24 ug/Kg	97
53) cis-1,3-Dichloropropene	8.551	75	1843862	143.42 ug/Kg	97
56) Toluene	8.794	91	4531968	123.95 ug/Kg	88
57) 2-Nitropropane	9.001	41	992994	727.54 ug/Kg	95
58) 4-Methyl-2-pentanone	9.153	43	3729722	638.70 ug/Kg	87
59) trans-1,3-Dichloropropene	9.202	75	1439654	147.33 ug/Kg	95
60) Tetrachloroethene	9.202	166	1012318	130.74 ug/Kg	97
61) Ethyl methacrylate	9.342	69	1273429	155.02 ug/Kg	95
62) 1,1,2-Trichloroethane	9.366	83	763738	136.65 ug/Kg	96
63) Dibromochloromethane	9.555	129	963455	150.26 ug/Kg	97
64) 1,3-Dichloropropane	9.640	76	1625005	141.40 ug/Kg	97
65) 1,2-Dibromoethane	9.804	107	872657	145.03 ug/Kg	100
66) 2-hexanone	9.987	43	2718383	671.93 ug/Kg	87
67) 1-Chlorohexane	10.285	91	1518408	141.66 ug/Kg	93
68) Ethylbenzene	10.340	91	4584323	121.39 ug/Kg	86
69) Chlorobenzene	10.327	112	2811303	128.44 ug/Kg	97
70) 1,1,1,2-Tetrachloroethane	10.382	131	1017808	145.00 ug/Kg	98
71) m,p-Xylene	10.486	91	6142947	223.17 ug/Kg	76
72) o-Xylene	10.917	91	3807021	132.68 ug/Kg	92
73) Styrene	10.972	104	2965503	145.39 ug/Kg	94
74) Bromoform	11.015	173	524722	163.01 ug/Kg	96
75) Isopropylbenzene	11.234	105	4470176	127.81 ug/Kg	86
78) cis-1,4-Dichloro-2-butene	11.574	53	343859	142.33 ug/Kg	97
79) n-Propylbenzene	11.654	91	4804840	112.64 ug/Kg	82
80) Bromobenzene	11.647	156	1119523	133.69 ug/Kg	98
81) 1,1,2,2-Tetrachloroethane	11.714	83	1170291	131.81 ug/Kg	96
82) 1,3,5-Trimethylbenzene	11.842	105	3984967	123.25 ug/Kg	88
83) 2-Chlorotoluene	11.830	91	3718058	124.18 ug/Kg	93
84) trans-1,4-Dichloro-2-B...	11.891	53	313277	135.50 ug/Kg	92
85) 1,2,3-Trichloropropane	11.860	110	326587	133.28 ug/Kg	95
86) Cyclohexanone	11.909	55	273142	660.74 ug/Kg	96
87) 4-Chlorotoluene	11.994	91	3281078	125.06 ug/Kg	91
88) tert-Butylbenzene	12.177	91	2608373	134.43 ug/Kg	97
89) 1,2,4-Trimethylbenzene	12.250	105	3902822	125.82 ug/Kg	89
90) Pentachloroethane	12.213	167	699625	153.12 ug/Kg	96
91) sec-Butylbenzene	12.359	105	4873148	117.84 ug/Kg	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration

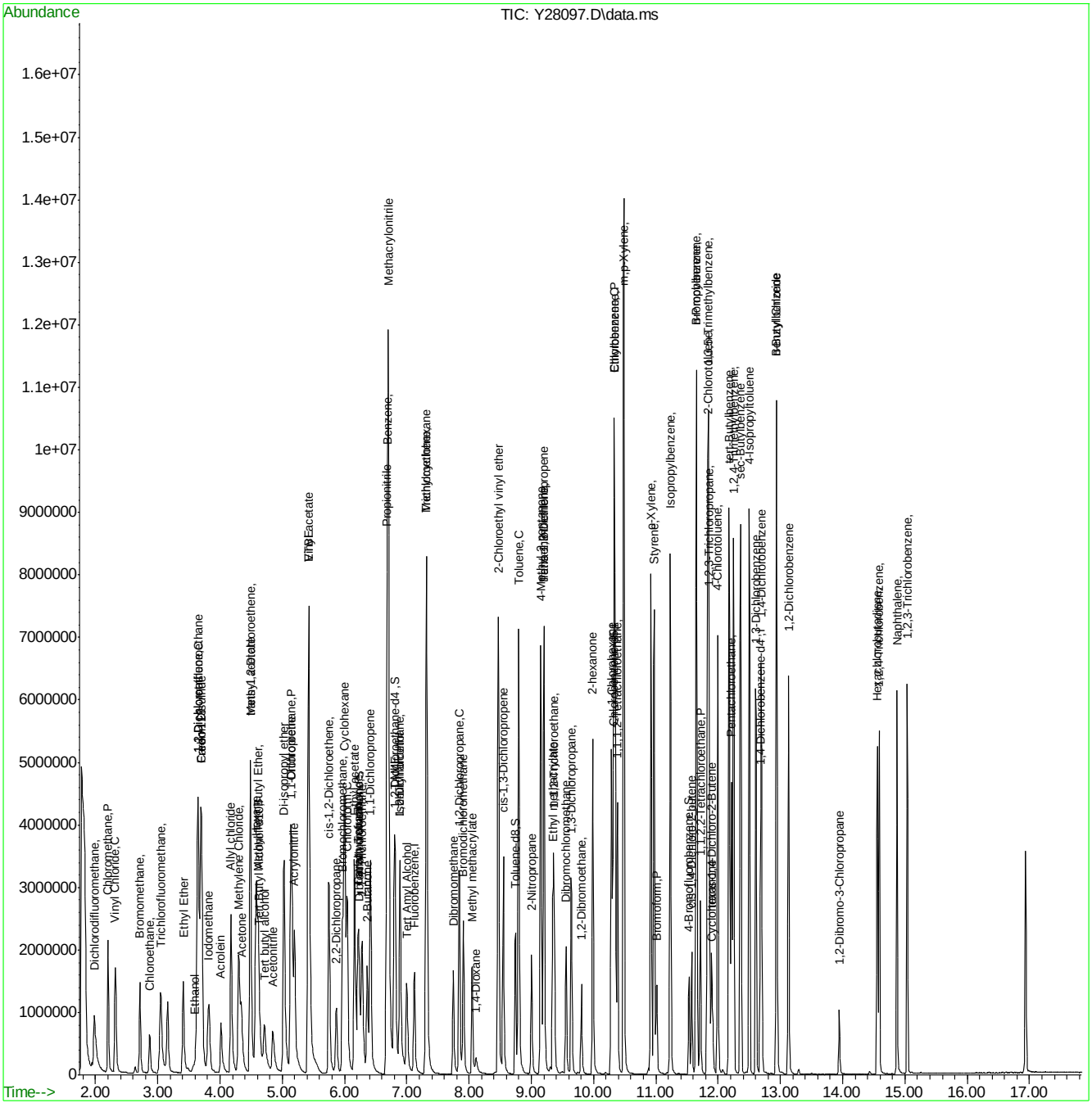
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.499	119	4030987	122.23	ug/Kg	88
93) 1,3-Dichlorobenzene	12.603	146	2021904	125.66	ug/Kg	95
94) 1,4-Dichlorobenzene	12.694	146	1994505	121.66	ug/Kg	94
95) n-Butylbenzene	12.937	92	2352810	127.18	ug/Kg	75
96) Benzyl Chloride	12.937	126	467065	144.03	ug/Kg#	1
97) 1,2-Dichlorobenzene	13.132	146	1991660	130.21	ug/Kg	95
98) 1,2-Dibromo-3-Chloropr...	13.941	75	244587	146.48	ug/Kg	88
99) Hexachlorobutadiene	14.555	225	646245	126.21	ug/Kg	98
100) 1,2,4-Trichlorobenzene	14.592	180	1172710	121.53	ug/Kg	99
101) Naphthalene	14.872	128	3106102	133.75	ug/Kg	93
102) 1,2,3-Trichlorobenzene	15.036	180	1194645	125.38	ug/Kg	95
104) Ethanol	3.593	45	207096	2637.60	ug/Kg	92
105) Acrolein	4.013	56	893862	700.70	ug/Kg	97
106) Tert butyl alcohol	4.712	59	1084857	1360.20	ug/Kg	90
107) Isobutyl alcohol	6.890	42	549722	2875.16	ug/Kg	93
108) Tert Amyl Alcohol	7.000	59	945408	1376.92	ug/Kg	93
109) 1,4-Dioxane	8.113	88	250919	3175.71	ug/Kg	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration



042516APP9-Y.m Tue Apr 26 09:13:36 2016 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.122	96	1357519	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.309	117	920377	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.676	152	462785	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.639	65	111707	250.00	ug/Kg	0.01

System Monitoring Compounds						
35) Dibromofluoromethane	6.239	113	313165	50.48	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.96%			
44) 1,2-Dichloroethane-d4	6.817	65	322276	48.94	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 97.88%			
55) Toluene-d8	8.746	98	1312089	50.70	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 101.40%			
77) 4-Bromofluorobenzene	11.532	174	319897	50.23	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 100.46%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.981	85	2240402	195.28	ug/Kg	97
3) Chloromethane	2.200	50	2265558	172.86	ug/Kg	93
4) Vinyl Chloride	2.316	62	2384008	181.80	ug/Kg	95
5) Bromomethane	2.711	94	1051640	167.65	ug/Kg	97
6) Chloroethane	2.869	64	548687	125.40	ug/Kg	89
7) Trichlorofluoromethane	3.046	101	2158748	177.15	ug/Kg	98
8) Ethyl Ether	3.411	59	1161838	183.37	ug/Kg	95
9) 1,2-Dichlorotrifluoroe...	3.642	67	1876327	174.37	ug/Kg	95
10) 1,1-Dichloroethene	3.648	61	2723664	188.11	ug/Kg	91
11) Freon 113	3.703	101	1629533	182.61	ug/Kg	94
12) Carbon Disulfide	3.690	76	5069505	171.03	ug/Kg	94
13) Iodomethane	3.824	142	2367639	184.56	ug/Kg	99
14) Allyl chloride	4.177	41	2175898	175.07	ug/Kg	89
15) Methylene Chloride	4.299	49	1850495	218.50	ug/Kg	91
16) Acetone	4.347	43	1630300	815.74	ug/Kg	97
17) Methyl acetate	4.487	43	3417595	813.34	ug/Kg	89
18) trans-1,2-Dichloroethene	4.487	61	1996419	180.76	ug/Kg	96
19) Hexane	4.579	56	1249040	175.38	ug/Kg	91
20) Methyl Tert Butyl Ether	4.615	73	3499789	180.16	ug/Kg#	24
21) Acetonitrile	4.852	41	1176570	1674.89	ug/Kg	94
22) Di-isopropyl ether	5.029	45	4148774	176.22	ug/Kg	88
23) Chloroprene	5.138	53	2419226	179.35	ug/Kg	94
24) 1,1-Dichloroethane	5.157	63	2613906	171.41	ug/Kg	96
25) Acrylonitrile	5.199	53	2023025	861.59	ug/Kg	98
26) ETBE	5.430	59	4163463	177.82	ug/Kg	97
27) Vinyl acetate	5.418	43	9024937	759.45	ug/Kg	82
28) cis-1,2-Dichloroethene	5.753	96	1773941	185.12	ug/Kg	94
29) 2,2-Dichloropropane	5.868	77	950713	160.22	ug/Kg	99
30) Bromochloromethane	5.966	128	762816	194.43	ug/Kg#	86
31) Cyclohexane	6.002	84	2958287	196.04	ug/Kg	94
32) Chloroform	6.045	83	2797930	179.07	ug/Kg	97
33) Ethyl acetate	6.160	43	4642607	864.42	ug/Kg	89
34) Tetrahydrofuran	6.233	42	343168	198.44	ug/Kg	93
36) Carbon Tetrachloride	6.215	117	1843119	201.62	ug/Kg	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.282	97	1999535	176.83 ug/Kg	98
38) 2-Butanone	6.367	43	2579347	872.46 ug/Kg	90
39) 1,1-Dichloropropene	6.416	75	2236124	190.06 ug/Kg	95
40) Propionitrile	6.677	54	1705981	1807.67 ug/Kg	87
41) Methacrylonitrile	6.708	41	5639722	1652.75 ug/Kg	84
42) Benzene	6.683	78	5689625	164.86 ug/Kg	95
43) TAME	6.805	73	3911264	178.70 ug/Kg	96
45) 1,2-Dichloroethane	6.890	62	1689298	178.68 ug/Kg	95
46) Trichloroethene	7.310	95	1600871	178.26 ug/Kg	98
47) Methylcyclohexane	7.316	83	3110974	196.76 ug/Kg	98
48) Dibromomethane	7.748	93	797879	188.27 ug/Kg	98
49) 1,2-Dichloropropane	7.839	63	1585082	186.29 ug/Kg	94
50) Bromodichloromethane	7.906	83	1838816	189.92 ug/Kg	95
51) Methyl methacrylate	8.046	41	954356	205.41 ug/Kg	89
52) 2-Chloroethyl vinyl ether	8.472	63	3622789	946.43 ug/Kg	97
53) cis-1,3-Dichloropropene	8.551	75	2348347	189.00 ug/Kg	95
56) Toluene	8.794	91	5561525	161.18 ug/Kg	84
57) 2-Nitropropane	9.001	41	1279053	969.11 ug/Kg	96
58) 4-Methyl-2-pentanone	9.153	43	4569750	825.64 ug/Kg	83
59) trans-1,3-Dichloropropene	9.202	75	1830170	193.29 ug/Kg	93
60) Tetrachloroethene	9.202	166	1371677	186.27 ug/Kg	99
61) Ethyl methacrylate	9.342	69	1634615	203.61 ug/Kg	94
62) 1,1,2-Trichloroethane	9.366	83	972053	181.66 ug/Kg	97
63) Dibromochloromethane	9.555	129	1237447	198.52 ug/Kg	100
64) 1,3-Dichloropropane	9.640	76	2052607	185.55 ug/Kg	96
65) 1,2-Dibromoethane	9.804	107	1107297	190.41 ug/Kg	99
66) 2-hexanone	9.987	43	3389138	877.21 ug/Kg	86
67) 1-Chlorohexane	10.285	91	2064282	200.02 ug/Kg	94
68) Ethylbenzene	10.340	91	5607606	157.80 ug/Kg	79
69) Chlorobenzene	10.327	112	3544688	170.73 ug/Kg	96
70) 1,1,1,2-Tetrachloroethane	10.382	131	1304143	192.24 ug/Kg	98
71) m,p-Xylene	10.486	91	7224751	282.12 ug/Kg	66
72) o-Xylene	10.918	91	4715085	172.41 ug/Kg	89
73) Styrene	10.972	104	3739454	189.61 ug/Kg	92
74) Bromoform	11.015	173	679619	214.15 ug/Kg	97
75) Isopropylbenzene	11.234	105	5515794	166.38 ug/Kg	80
78) cis-1,4-Dichloro-2-butene	11.575	53	443559	185.48 ug/Kg	94
79) n-Propylbenzene	11.654	91	5960048	146.01 ug/Kg	75
80) Bromobenzene	11.648	156	1456228	177.40 ug/Kg	98
81) 1,1,2,2-Tetrachloroethane	11.715	83	1479858	170.39 ug/Kg	95
82) 1,3,5-Trimethylbenzene	11.842	105	4985149	159.17 ug/Kg	84
83) 2-Chlorotoluene	11.824	91	4699003	161.84 ug/Kg	89
84) trans-1,4-Dichloro-2-B...	11.891	53	404993	178.33 ug/Kg	94
85) 1,2,3-Trichloropropane	11.861	110	413161	172.09 ug/Kg	96
86) Cyclohexanone	11.915	55	337106	833.33 ug/Kg	95
87) 4-Chlorotoluene	11.994	91	4194924	164.72 ug/Kg	85
88) tert-Butylbenzene	12.177	91	3338932	175.40 ug/Kg	95
89) 1,2,4-Trimethylbenzene	12.250	105	4888199	162.20 ug/Kg	83
90) Pentachloroethane	12.213	167	916030	200.12 ug/Kg	98
91) sec-Butylbenzene	12.359	105	6030286	151.47 ug/Kg	78

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration

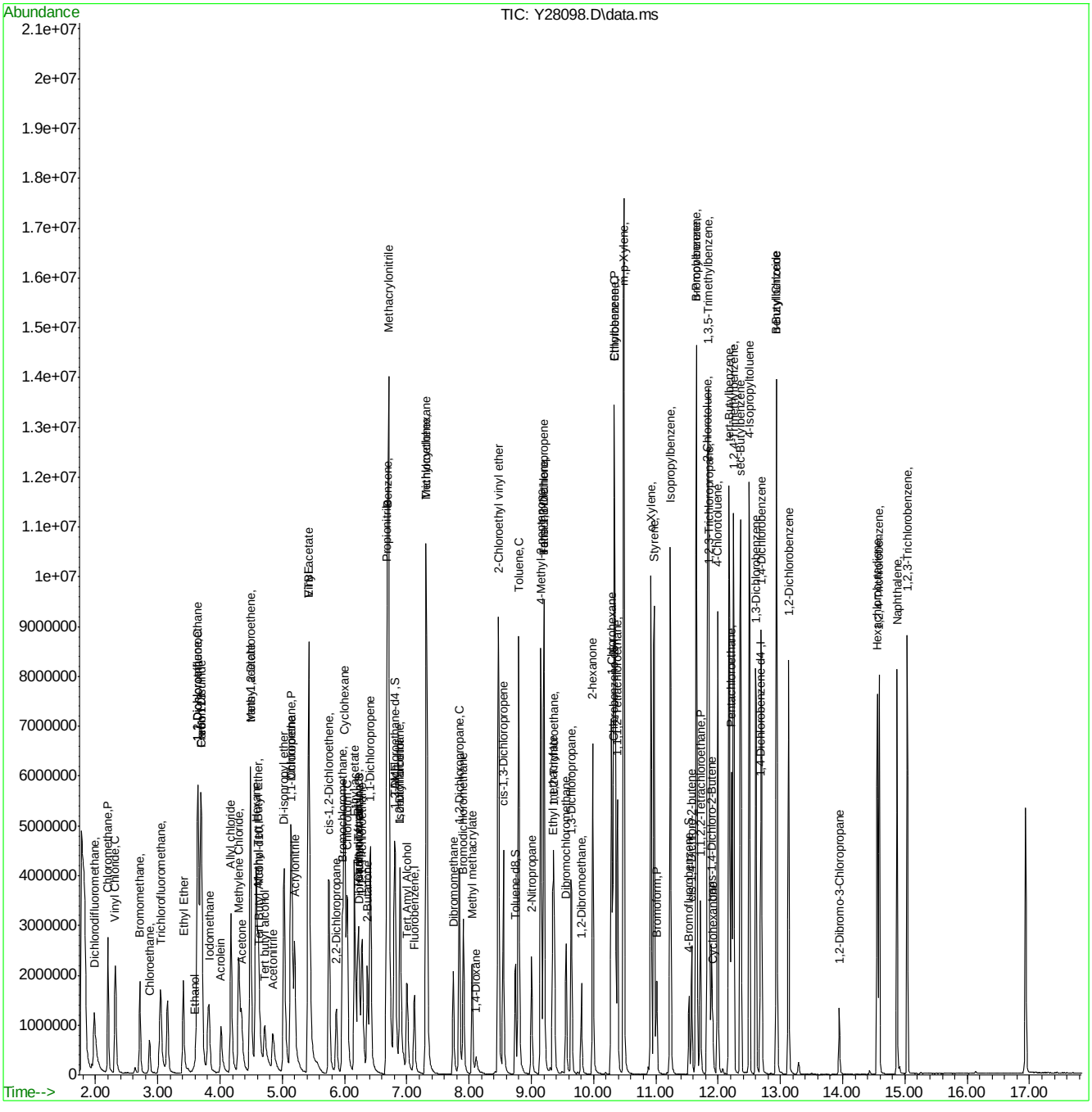
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.499	119	5129717	160.76	ug/Kg	83
93) 1,3-Dichlorobenzene	12.603	146	2639433	168.87	ug/Kg	91
94) 1,4-Dichlorobenzene	12.694	146	2651452	167.26	ug/Kg	92
95) n-Butylbenzene	12.937	92	3163975	175.77	ug/Kg#	62
96) Benzyl Chloride	12.937	126	596334	185.42	ug/Kg#	1
97) 1,2-Dichlorobenzene	13.132	146	2571687	172.19	ug/Kg	93
98) 1,2-Dibromo-3-Chloropr...	13.941	75	303740	182.92	ug/Kg	91
99) Hexachlorobutadiene	14.556	225	936445	188.16	ug/Kg	98
100) 1,2,4-Trichlorobenzene	14.592	180	1683624	180.47	ug/Kg	99
101) Naphthalene	14.872	128	3927745	172.52	ug/Kg	88
102) 1,2,3-Trichlorobenzene	15.036	180	1650968	178.44	ug/Kg	95
104) Ethanol	3.593	45	242564	4093.84	ug/Kg	93
105) Acrolein	4.013	56	1099006	1131.05	ug/Kg	96
106) Tert butyl alcohol	4.719	59	1340388	2216.64	ug/Kg	85
107) Isobutyl alcohol	6.896	42	706001	4828.15	ug/Kg	93
108) Tert Amyl Alcohol	7.000	59	1218641	2336.58	ug/Kg	94
109) 1,4-Dioxane	8.113	88	330374	5376.86	ug/Kg	91

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.123	96	1361823	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.310	117	898405	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.677	152	421822	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.628	65	124154	250.00	ug/Kg	0.00

System Monitoring Compounds						
35) Dibromofluoromethane	6.240	113	307851	49.40	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.80%			
44) 1,2-Dichloroethane-d4	6.818	65	316835	48.11	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 96.22%			
55) Toluene-d8	8.747	98	1286054	50.81	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 101.62%			
77) 4-Bromofluorobenzene	11.533	174	298794	51.44	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 102.88%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.982	85	596550	52.01	ug/Kg	95
3) Chloromethane	2.201	50	658814	51.10	ug/Kg	99
4) Vinyl Chloride	2.317	62	639214	49.23	ug/Kg	98
5) Bromomethane	2.712	94	297211	48.35	ug/Kg	97
6) Chloroethane	2.876	64	290505	43.06	ug/Kg	97
7) Trichlorofluoromethane	3.053	101	602294	50.09	ug/Kg	98
8) Ethyl Ether	3.406	59	311384	49.58	ug/Kg	96
9) 1,2-Dichlorotrifluoroe...	3.637	67	561413	52.98	ug/Kg	96
10) 1,1-Dichloroethene	3.649	61	723103	50.21	ug/Kg	91
11) Freon 113	3.704	101	442501	50.05	ug/Kg	98
12) Carbon Disulfide	3.685	76	1453342	49.91	ug/Kg	97
13) Iodomethane	3.807	142	628958	49.42	ug/Kg	98
14) Allyl chloride	4.178	41	534852	43.67	ug/Kg	92
15) Methylene Chloride	4.300	49	558405	51.11	ug/Kg	95
16) Acetone	4.348	43	401795	205.83	ug/Kg	97
17) Methyl acetate	4.488	43	991416	241.64	ug/Kg	95
18) trans-1,2-Dichloroethene	4.488	61	610657	55.88	ug/Kg	96
19) Hexane	4.586	56	371730	52.96	ug/Kg	86
20) Methyl Tert Butyl Ether	4.610	73	945154	49.20	ug/Kg#	30
21) Acetonitrile	4.847	41	305875	444.37	ug/Kg	99
22) Di-isopropyl ether	5.024	45	1152400	49.64	ug/Kg	94
23) Chloroprene	5.139	53	595137	44.64	ug/Kg	98
24) 1,1-Dichloroethane	5.158	63	775433	51.75	ug/Kg	96
25) Acrylonitrile	5.194	53	565325	244.85	ug/Kg	98
26) ETBE	5.425	59	1129252	48.85	ug/Kg	97
27) Vinyl acetate	5.419	43	2987383	259.51	ug/Kg	94
28) cis-1,2-Dichloroethene	5.748	96	476833	50.14	ug/Kg	96
29) 2,2-Dichloropropane	5.869	77	321697	55.62	ug/Kg	100
30) Bromochloromethane	5.967	128	195116	49.77	ug/Kg#	86
31) Cyclohexane	5.997	84	775491	51.37	ug/Kg	93
32) Chloroform	6.046	83	798582	51.72	ug/Kg	99
33) Ethyl acetate	6.161	43	1350609	255.63	ug/Kg	95
34) Tetrahydrofuran	6.234	42	87742	48.72	ug/Kg	97
36) Carbon Tetrachloride	6.216	117	490680	53.45	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.283	97	569574	51.06 ug/Kg	98
38) 2-Butanone	6.368	43	648183	222.61 ug/Kg	94
39) 1,1-Dichloropropene	6.417	75	644284	54.98 ug/Kg	94
40) Propionitrile	6.678	54	447431	479.19 ug/Kg	79
41) Methacrylonitrile	6.703	41	1660466	497.41 ug/Kg	92
42) Benzene	6.684	78	1782974	52.83 ug/Kg	97
43) TAME	6.806	73	1086226	50.24 ug/Kg	98
45) 1,2-Dichloroethane	6.891	62	477133	51.09 ug/Kg	95
46) Trichloroethene	7.311	95	470107	53.00 ug/Kg	99
47) Methylcyclohexane	7.317	83	865222	54.68 ug/Kg	96
48) Dibromomethane	7.749	93	225451	53.48 ug/Kg	99
49) 1,2-Dichloropropane	7.846	63	422471	49.98 ug/Kg	95
50) Bromodichloromethane	7.907	83	507202	52.60 ug/Kg	97
51) Methyl methacrylate	8.053	41	228010	48.73 ug/Kg	93
52) 2-Chloroethyl vinyl ether	8.467	63	1015930	266.61 ug/Kg	97
53) cis-1,3-Dichloropropene	8.552	75	670849	54.25 ug/Kg	97
56) Toluene	8.795	91	1786966	54.57 ug/Kg	93
57) 2-Nitropropane	9.002	41	305809	238.42 ug/Kg	94
58) 4-Methyl-2-pentanone	9.154	43	1285275	243.97 ug/Kg	95
59) trans-1,3-Dichloropropene	9.203	75	552281	59.75 ug/Kg	98
60) Tetrachloroethene	9.203	166	405221	56.93 ug/Kg	99
61) Ethyl methacrylate	9.343	69	339017	43.15 ug/Kg	96
62) 1,1,2-Trichloroethane	9.361	83	264011	51.22 ug/Kg	98
63) Dibromochloromethane	9.556	129	329490	54.21 ug/Kg	97
64) 1,3-Dichloropropane	9.641	76	548750	51.35 ug/Kg	99
65) 1,2-Dibromoethane	9.805	107	286638	50.84 ug/Kg	99
66) 2-hexanone	9.988	43	833642	224.99 ug/Kg	90
67) 1-Chlorohexane	10.286	91	549334	54.53 ug/Kg	93
68) Ethylbenzene	10.341	91	1894497	56.31 ug/Kg	97
69) Chlorobenzene	10.328	112	1088475	54.86 ug/Kg	97
70) 1,1,1,2-Tetrachloroethane	10.383	131	356934	54.20 ug/Kg	95
71) m,p-Xylene	10.487	91	2788850	111.09 ug/Kg	92
72) o-Xylene	10.919	91	1470002	56.17 ug/Kg	99
73) Styrene	10.973	104	1092520	57.18 ug/Kg	98
74) Bromoform	11.016	173	168090	53.72 ug/Kg	96
75) Isopropylbenzene	11.235	105	1836758	58.16 ug/Kg	95
78) cis-1,4-Dichloro-2-butene	11.576	53	94142	43.64 ug/Kg	91
79) n-Propylbenzene	11.655	91	2120614	57.32 ug/Kg	93
80) Bromobenzene	11.649	156	400948	54.47 ug/Kg	99
81) 1,1,2,2-Tetrachloroethane	11.716	83	376283	48.56 ug/Kg	96
82) 1,3,5-Trimethylbenzene	11.843	105	1602249	57.81 ug/Kg	97
83) 2-Chlorotoluene	11.825	91	1459647	56.70 ug/Kg	97
84) trans-1,4-Dichloro-2-B...	11.892	53	92439	45.36 ug/Kg	96
85) 1,2,3-Trichloropropane	11.862	110	105975	49.41 ug/Kg	85
86) Cyclohexanone	11.916	55	63018	175.08 ug/Kg	94
87) 4-Chlorotoluene	11.995	91	1317263	58.21 ug/Kg	95
88) tert-Butylbenzene	12.178	91	954230	55.98 ug/Kg	98
89) 1,2,4-Trimethylbenzene	12.245	105	1564344	58.53 ug/Kg	95
90) Pentachloroethane	12.214	167	212365	50.90 ug/Kg	98
91) sec-Butylbenzene	12.360	105	2065823	58.97 ug/Kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

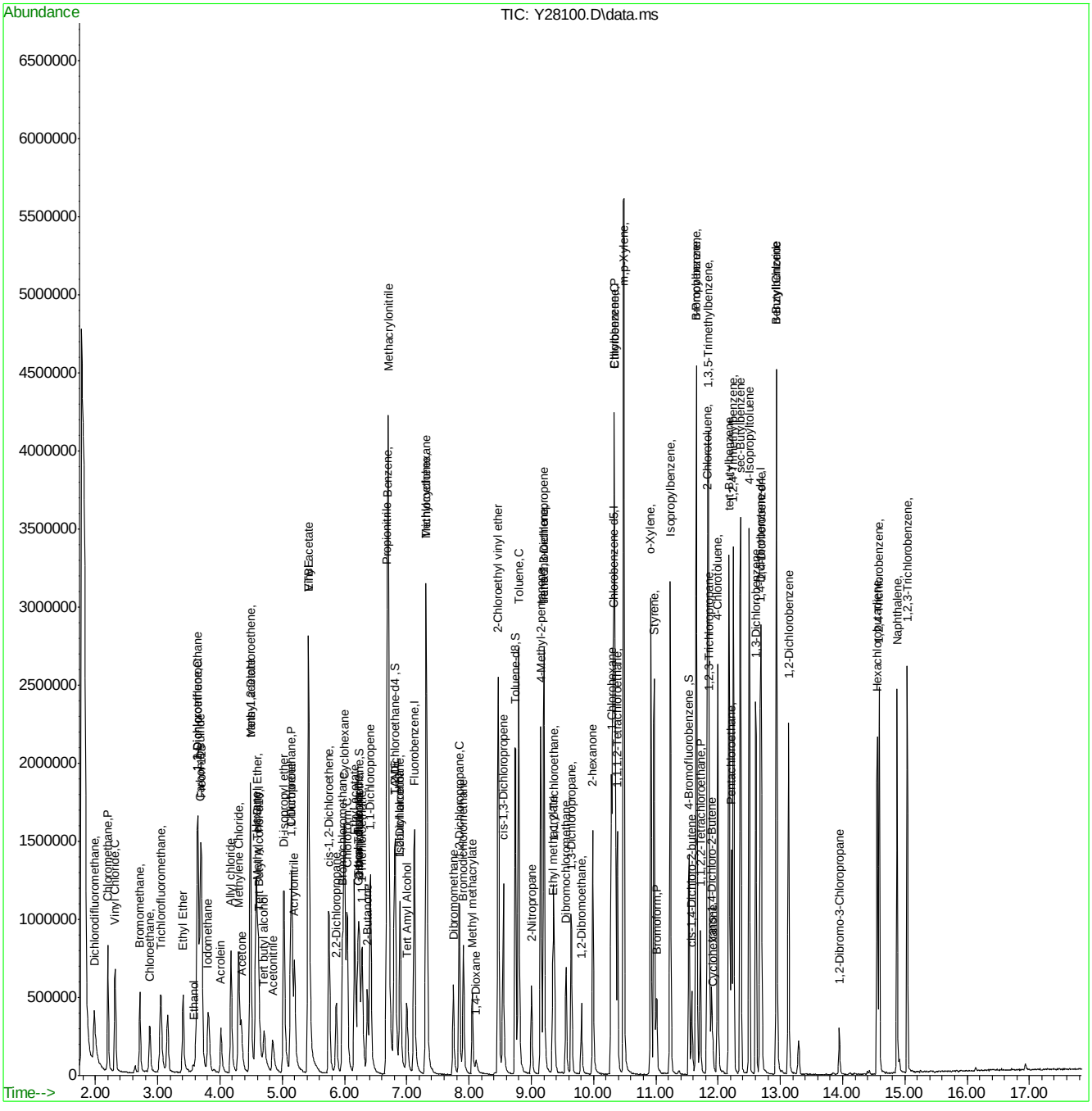
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.500	119	1666886	58.97	ug/Kg	97
93) 1,3-Dichlorobenzene	12.604	146	813727	58.42	ug/Kg	97
94) 1,4-Dichlorobenzene	12.695	146	798172	56.56	ug/Kg	96
95) n-Butylbenzene	12.938	92	979150	59.40	ug/Kg	87
96) Benzyl Chloride	12.938	126	146585	50.53	ug/Kg#	69
97) 1,2-Dichlorobenzene	13.133	146	757405	56.76	ug/Kg	98
98) 1,2-Dibromo-3-Chloropr...	13.948	75	68633	45.91	ug/Kg	98
99) Hexachlorobutadiene	14.557	225	271163	56.45	ug/Kg	95
100) 1,2,4-Trichlorobenzene	14.587	180	532688	60.66	ug/Kg	98
101) Naphthalene	14.873	128	1279540	58.82	ug/Kg	98
102) 1,2,3-Trichlorobenzene	15.037	180	509737	58.79	ug/Kg	96
104) Ethanol	3.576	45	67435	1020.60	ug/Kg	99
105) Acrolein	4.014	56	303695	276.05	ug/Kg	94
106) Tert butyl alcohol	4.707	59	340652	499.14	ug/Kg	96
107) Isobutyl alcohol	6.891	42	160402	958.62	ug/Kg	93
108) Tert Amyl Alcohol	7.001	59	283498	477.59	ug/Kg	93
109) 1,4-Dioxane	8.114	88	70291	981.06	ug/Kg	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



042516APP9-Y.m Tue Apr 26 09:14:40 2016 Page: 4

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28345.D
Acq On : 5 May 2016 12:16 pm
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33784,VY1147,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 05 12:40:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.122	96	1143127	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.310	117	767774	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.676	152	349588	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.628	65	122374	250.00	ug/Kg	0.00

System Monitoring Compounds						
35) Dibromofluoromethane	6.240	113	267393	51.11	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.22%			
44) 1,2-Dichloroethane-d4	6.818	65	271571	49.12	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 98.24%			
55) Toluene-d8	8.746	98	1060146	49.01	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 98.02%			
77) 4-Bromofluorobenzene	11.533	174	245549	51.00	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 102.00%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.982	85	531110	55.16	ug/Kg	100
3) Chloromethane	2.201	50	544869	50.35	ug/Kg	98
4) Vinyl Chloride	2.316	62	538427	49.40	ug/Kg	100
5) Bromomethane	2.718	94	250996	48.64	ug/Kg	95
6) Chloroethane	2.876	64	240141	42.40	ug/Kg	97
7) Trichlorofluoromethane	3.052	101	503657	49.90	ug/Kg	98
8) Ethyl Ether	3.405	59	276831	52.51	ug/Kg	92
9) 1,2-Dichlorotrifluoroe...	3.636	67	444118	49.93	ug/Kg	95
10) 1,1-Dichloroethene	3.649	61	580893	48.05	ug/Kg	95
11) Freon 113	3.703	101	396041	53.37	ug/Kg	97
12) Carbon Disulfide	3.685	76	1253921	51.30	ug/Kg	99
13) Iodomethane	3.813	142	553057	51.77	ug/Kg	99
14) Allyl chloride	4.178	41	490116	47.68	ug/Kg	96
15) Methylene Chloride	4.299	49	445880	48.49	ug/Kg	89
16) Acetone	4.342	43	440794	269.00	ug/Kg	99
17) Methyl acetate	4.488	43	860860	249.96	ug/Kg	92
18) trans-1,2-Dichloroethene	4.488	61	464330	50.62	ug/Kg	95
19) Hexane	4.579	56	317228	53.84	ug/Kg	88
20) Methyl Tert Butyl Ether	4.610	73	911752	56.54	ug/Kg#	28
21) Acetonitrile	4.847	41	286712	496.22	ug/Kg	99
22) Di-isopropyl ether	5.023	45	1029164	52.81	ug/Kg	93
23) Chloroprene	5.139	53	578924	51.73	ug/Kg	96
24) 1,1-Dichloroethane	5.157	63	662596	52.67	ug/Kg	99
25) Acrylonitrile	5.194	53	505937	261.05	ug/Kg	99
26) ETBE	5.425	59	1057853	54.52	ug/Kg	96
27) Vinyl acetate	5.419	43	2592486	268.29	ug/Kg	94
28) cis-1,2-Dichloroethene	5.753	96	396835	49.71	ug/Kg	95
29) 2,2-Dichloropropane	5.869	77	280634	57.81	ug/Kg	97
30) Bromochloromethane	5.966	128	173878	52.84	ug/Kg#	87
31) Cyclohexane	6.003	84	653285	51.56	ug/Kg	90
32) Chloroform	6.039	83	634665	48.97	ug/Kg	98
33) Ethyl acetate	6.161	43	1062855	239.65	ug/Kg	95
34) Tetrahydrofuran	6.234	42	72476	47.93	ug/Kg	88
36) Carbon Tetrachloride	6.216	117	425222	55.18	ug/Kg	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28345.D
Acq On : 5 May 2016 12:16 pm
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33784,VY1147,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 05 12:40:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.283	97	479017	51.15	ug/Kg	98
38) 2-Butanone	6.362	43	610045	249.59	ug/Kg	94
39) 1,1-Dichloropropene	6.417	75	508426	51.69	ug/Kg	94
40) Propionitrile	6.672	54	354103	451.79	ug/Kg	90
41) Methacrylonitrile	6.702	41	1339883	478.16	ug/Kg	92
42) Benzene	6.684	78	1440618	50.85	ug/Kg	95
43) TAME	6.806	73	962483	53.03	ug/Kg	94
45) 1,2-Dichloroethane	6.891	62	384372	49.03	ug/Kg	98
46) Trichloroethene	7.311	95	368179	49.45	ug/Kg	98
47) Methylcyclohexane	7.317	83	710701	53.50	ug/Kg	96
48) Dibromomethane	7.749	93	173385	49.00	ug/Kg	98
49) 1,2-Dichloropropane	7.840	63	338769	47.75	ug/Kg	95
50) Bromodichloromethane	7.907	83	411631	50.85	ug/Kg	96
51) Methyl methacrylate	8.053	41	166570	42.41	ug/Kg	91
52) 2-Chloroethyl vinyl ether	8.467	63	834924	261.02	ug/Kg	96
53) cis-1,3-Dichloropropene	8.546	75	528549	50.92	ug/Kg	99
56) Toluene	8.795	91	1440176	51.46	ug/Kg	97
57) 2-Nitropropane	9.002	41	269409	245.78	ug/Kg	91
58) 4-Methyl-2-pentanone	9.148	43	1114089	247.46	ug/Kg	94
59) trans-1,3-Dichloropropene	9.203	75	404762	51.24	ug/Kg	98
60) Tetrachloroethene	9.203	166	331389	54.48	ug/Kg	98
61) Ethyl methacrylate	9.343	69	308965	46.02	ug/Kg	95
62) 1,1,2-Trichloroethane	9.367	83	218471	49.59	ug/Kg	95
63) Dibromochloromethane	9.556	129	267500	51.50	ug/Kg	96
64) 1,3-Dichloropropane	9.641	76	452514	49.55	ug/Kg	99
65) 1,2-Dibromoethane	9.805	107	230817	47.91	ug/Kg	96
66) 2-hexanone	9.988	43	768879	242.82	ug/Kg	89
67) 1-Chlorohexane	10.286	91	444935	51.68	ug/Kg	91
68) Ethylbenzene	10.340	91	1510413	52.54	ug/Kg	95
69) Chlorobenzene	10.328	112	881502	51.98	ug/Kg	97
70) 1,1,1,2-Tetrachloroethane	10.383	131	284959	50.63	ug/Kg	98
71) m,p-Xylene	10.486	91	2231592	103.15	ug/Kg	95
72) o-Xylene	10.918	91	1150488	51.44	ug/Kg	97
73) Styrene	10.973	104	865735	53.02	ug/Kg	97
74) Bromoform	11.016	173	136913	51.20	ug/Kg	93
75) Isopropylbenzene	11.235	105	1439430	53.33	ug/Kg	96
78) cis-1,4-Dichloro-2-butene	11.575	53	80669	45.12	ug/Kg	87
79) n-Propylbenzene	11.654	91	1656197	53.64	ug/Kg	95
80) Bromobenzene	11.648	156	325879	53.42	ug/Kg	98
81) 1,1,2,2-Tetrachloroethane	11.715	83	310758	48.39	ug/Kg	96
82) 1,3,5-Trimethylbenzene	11.843	105	1302997	56.73	ug/Kg	96
83) 2-Chlorotoluene	11.825	91	1156711	54.22	ug/Kg	99
84) trans-1,4-Dichloro-2-B...	11.892	53	80408	47.61	ug/Kg	90
85) 1,2,3-Trichloropropane	11.861	110	82572	46.46	ug/Kg	92
86) Cyclohexanone	11.910	55	71323	239.09	ug/Kg	92
87) 4-Chlorotoluene	11.995	91	1053692	56.19	ug/Kg	96
88) tert-Butylbenzene	12.178	91	769800	54.49	ug/Kg	97
89) 1,2,4-Trimethylbenzene	12.244	105	1259220	56.85	ug/Kg	98
90) Pentachloroethane	12.214	167	189990	54.94	ug/Kg#	82
91) sec-Butylbenzene	12.360	105	1649515	56.82	ug/Kg	96

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28345.D
Acq On : 5 May 2016 12:16 pm
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33784,VY1147,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 05 12:40:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.500	119	1359960	58.05	ug/Kg	98
93) 1,3-Dichlorobenzene	12.603	146	641023	55.53	ug/Kg	98
94) 1,4-Dichlorobenzene	12.695	146	637048	54.47	ug/Kg	97
95) n-Butylbenzene	12.938	92	760391	55.44	ug/Kg	91
96) Benzyl Chloride	12.938	126	124489	51.78	ug/Kg#	67
97) 1,2-Dichlorobenzene	13.133	146	600142	54.27	ug/Kg	98
98) 1,2-Dibromo-3-Chloropr...	13.942	75	59292	47.85	ug/Kg	85
99) Hexachlorobutadiene	14.556	225	226349	56.90	ug/Kg	95
100) 1,2,4-Trichlorobenzene	14.593	180	431230	59.26	ug/Kg	99
101) Naphthalene	14.873	128	979871	54.02	ug/Kg	100
102) 1,2,3-Trichlorobenzene	15.037	180	410479	57.12	ug/Kg	95
104) Ethanol	3.576	45	58083	891.85	ug/Kg	85
105) Acrolein	4.014	56	250316	230.84	ug/Kg	97
106) Tert butyl alcohol	4.707	59	310852	462.10	ug/Kg	98
107) Isobutyl alcohol	6.885	42	133805	811.30	ug/Kg	89
108) Tert Amyl Alcohol	6.994	59	259755	443.96	ug/Kg	93
109) 1,4-Dioxane	8.114	88	62466	884.53	ug/Kg	85

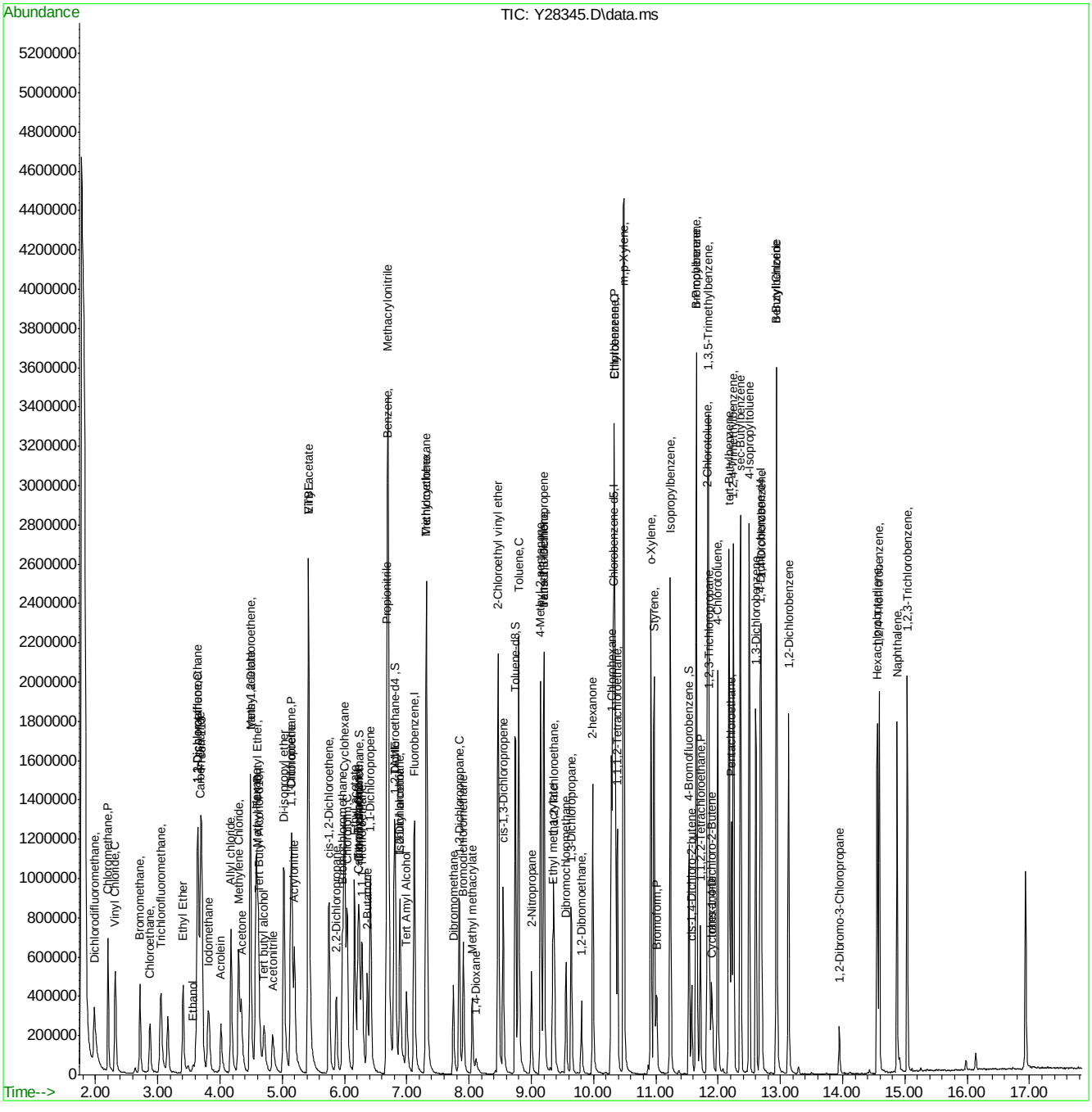
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28345.D
Acq On : 5 May 2016 12:16 pm
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33784,VY1147,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 05 12:40:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



SGS ACCUTEST FA33668

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28370.D
Acq On : 5 May 2016 11:18 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33794,VY1147,5.00,,,5,,
ALS Vial : 33 Sample Multiplier: 1

Quant Time: May 06 08:05:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.122	96	1047437	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.310	117	714808	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.676	152	329859	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.628	65	106277	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.240	113	242184	50.52	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.04%			
44) 1,2-Dichloroethane-d4	6.818	65	245824	48.53	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 97.06%			
55) Toluene-d8	8.746	98	999552	49.63	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 99.26%			
77) 4-Bromofluorobenzene	11.533	174	245769	54.10	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 108.20%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.982	85	484980	54.97	ug/Kg	98
3) Chloromethane	2.201	50	509515	51.38	ug/Kg	100
4) Vinyl Chloride	2.316	62	495837	49.65	ug/Kg	99
5) Bromomethane	2.718	94	240790	50.93	ug/Kg	97
6) Chloroethane	2.882	64	239178	46.09	ug/Kg	93
7) Trichlorofluoromethane	3.052	101	474726	51.33	ug/Kg	98
8) Ethyl Ether	3.405	59	244717	50.66	ug/Kg	95
9) 1,2-Dichlorotrifluoroe...	3.642	67	408440	50.11	ug/Kg	94
10) 1,1-Dichloroethene	3.655	61	567306	51.22	ug/Kg	94
11) Freon 113	3.703	101	372788	54.82	ug/Kg	98
12) Carbon Disulfide	3.691	76	1143976	51.08	ug/Kg	99
13) Iodomethane	3.807	142	531550	54.30	ug/Kg	98
14) Allyl chloride	4.178	41	464920	49.36	ug/Kg	88
15) Methylene Chloride	4.299	49	393142	46.56	ug/Kg	94
16) Acetone	4.348	43	369388	246.02	ug/Kg	96
17) Methyl acetate	4.488	43	775502	245.75	ug/Kg	93
18) trans-1,2-Dichloroethene	4.488	61	430517	51.22	ug/Kg	93
19) Hexane	4.579	56	280605	51.98	ug/Kg	93
20) Methyl Tert Butyl Ether	4.610	73	796173	53.88	ug/Kg#	28
21) Acetonitrile	4.847	41	241996	457.09	ug/Kg	94
22) Di-isopropyl ether	5.029	45	950100	53.21	ug/Kg	91
23) Chloroprene	5.139	53	539860	52.65	ug/Kg	96
24) 1,1-Dichloroethane	5.157	63	578622	50.20	ug/Kg	99
25) Acrylonitrile	5.194	53	415214	233.81	ug/Kg	96
26) ETBE	5.431	59	945270	53.17	ug/Kg	96
27) Vinyl acetate	5.419	43	2043966	230.85	ug/Kg	94
28) cis-1,2-Dichloroethene	5.753	96	403693	55.19	ug/Kg	94
29) 2,2-Dichloropropane	5.869	77	254801	57.28	ug/Kg	99
30) Bromochloromethane	5.966	128	164917	54.70	ug/Kg#	83
31) Cyclohexane	6.003	84	665502	57.32	ug/Kg	94
32) Chloroform	6.045	83	612307	51.56	ug/Kg	97
33) Ethyl acetate	6.161	43	1005598	247.46	ug/Kg	95
34) Tetrahydrofuran	6.240	42	68719	49.62	ug/Kg	91
36) Carbon Tetrachloride	6.216	117	416684	59.01	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28370.D
Acq On : 5 May 2016 11:18 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33794,VY1147,5.00,,,5,,
ALS Vial : 33 Sample Multiplier: 1

Quant Time: May 06 08:05:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	6.283	97	478242	55.74	ug/Kg	97
38) 2-Butanone	6.368	43	547434	244.44	ug/Kg	94
39) 1,1-Dichloropropene	6.416	75	490612	54.43	ug/Kg	96
40) Propionitrile	6.678	54	330144	459.70	ug/Kg	74
41) Methacrylonitrile	6.702	41	1263054	491.92	ug/Kg	93
42) Benzene	6.684	78	1391896	53.62	ug/Kg	94
43) TAME	6.806	73	898975	54.05	ug/Kg	97
45) 1,2-Dichloroethane	6.891	62	377550	52.56	ug/Kg	96
46) Trichloroethene	7.311	95	346753	50.83	ug/Kg	91
47) Methylcyclohexane	7.317	83	714873	58.73	ug/Kg	94
48) Dibromomethane	7.749	93	157979	48.72	ug/Kg	89
49) 1,2-Dichloropropane	7.840	63	329590	50.70	ug/Kg	95
50) Bromodichloromethane	7.907	83	374922	50.55	ug/Kg	96
51) Methyl methacrylate	8.053	41	169835	47.19	ug/Kg	89
52) 2-Chloroethyl vinyl ether	8.467	63	811482	276.87	ug/Kg	97
53) cis-1,3-Dichloropropene	8.552	75	492636	51.79	ug/Kg	98
56) Toluene	8.795	91	1412369	54.21	ug/Kg	96
57) 2-Nitropropane	9.002	41	261477	256.22	ug/Kg	94
58) 4-Methyl-2-pentanone	9.154	43	1047762	249.97	ug/Kg	93
59) trans-1,3-Dichloropropene	9.203	75	382731	52.05	ug/Kg	93
60) Tetrachloroethene	9.203	166	352635	62.27	ug/Kg	98
61) Ethyl methacrylate	9.349	69	295069	47.20	ug/Kg	93
62) 1,1,2-Trichloroethane	9.367	83	200270	48.83	ug/Kg	95
63) Dibromochloromethane	9.556	129	258650	53.49	ug/Kg	97
64) 1,3-Dichloropropane	9.641	76	433401	50.97	ug/Kg	97
65) 1,2-Dibromoethane	9.805	107	227389	50.69	ug/Kg	97
66) 2-hexanone	9.987	43	722503	245.08	ug/Kg	90
67) 1-Chlorohexane	10.286	91	444465	55.45	ug/Kg	93
68) Ethylbenzene	10.340	91	1486281	55.53	ug/Kg	96
69) Chlorobenzene	10.328	112	848340	53.73	ug/Kg	95
70) 1,1,1,2-Tetrachloroethane	10.383	131	288074	54.98	ug/Kg	98
71) m,p-Xylene	10.486	91	2200035	110.02	ug/Kg	94
72) o-Xylene	10.918	91	1148013	55.14	ug/Kg	99
73) Styrene	10.973	104	853190	56.12	ug/Kg	98
74) Bromoform	11.009	173	139081	55.86	ug/Kg	97
75) Isopropylbenzene	11.235	105	1432758	57.02	ug/Kg	96
78) cis-1,4-Dichloro-2-butene	11.575	53	77065	45.69	ug/Kg	95
79) n-Propylbenzene	11.654	91	1585984	54.53	ug/Kg	94
80) Bromobenzene	11.648	156	325189	56.49	ug/Kg	98
81) 1,1,2,2-Tetrachloroethane	11.715	83	295211	48.72	ug/Kg	97
82) 1,3,5-Trimethylbenzene	11.843	105	1252353	57.78	ug/Kg	95
83) 2-Chlorotoluene	11.825	91	1105408	54.91	ug/Kg	99
84) trans-1,4-Dichloro-2-B...	11.892	53	73328	46.01	ug/Kg	89
85) 1,2,3-Trichloropropane	11.861	110	79448	47.37	ug/Kg	97
86) Cyclohexanone	11.910	55	60123	213.60	ug/Kg	92
87) 4-Chlorotoluene	11.995	91	983723	55.59	ug/Kg	97
88) tert-Butylbenzene	12.177	91	750838	56.33	ug/Kg	96
89) 1,2,4-Trimethylbenzene	12.244	105	1199365	57.38	ug/Kg	97
90) Pentachloroethane	12.214	167	165307	50.66	ug/Kg	96
91) sec-Butylbenzene	12.360	105	1588530	57.99	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28370.D
Acq On : 5 May 2016 11:18 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33794,VY1147,5.00,,,5,,
ALS Vial : 33 Sample Multiplier: 1

Quant Time: May 06 08:05:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

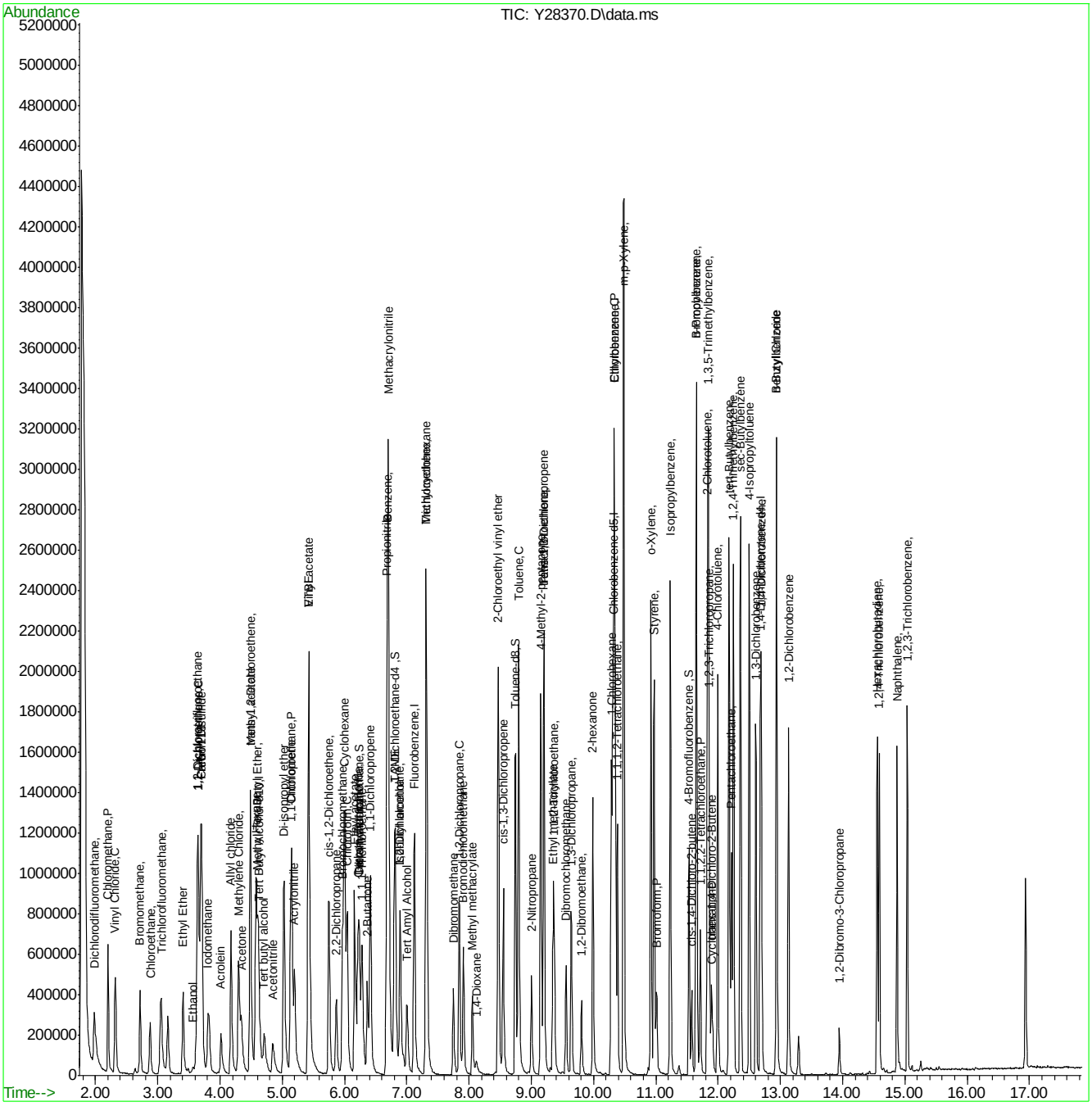
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 4-Isopropyltoluene	12.500	119	1279633	57.89	ug/Kg	97
93) 1,3-Dichlorobenzene	12.603	146	600226	55.10	ug/Kg	98
94) 1,4-Dichlorobenzene	12.695	146	587201	53.21	ug/Kg	97
95) n-Butylbenzene	12.938	92	673082	51.82	ug/Kg	90
96) Benzyl Chloride	12.938	126	96932	42.73	ug/Kg	97
97) 1,2-Dichlorobenzene	13.133	146	578857	55.48	ug/Kg	98
98) 1,2-Dibromo-3-Chloropr...	13.948	75	55233	47.24	ug/Kg	96
99) Hexachlorobutadiene	14.556	225	214482	57.18	ug/Kg	93
100) 1,2,4-Trichlorobenzene	14.593	180	383282	55.82	ug/Kg	97
101) Naphthalene	14.872	128	908453	53.01	ug/Kg	100
102) 1,2,3-Trichlorobenzene	15.037	180	373625	55.10	ug/Kg	97
104) Ethanol	3.575	45	43978	777.55	ug/Kg	97
105) Acrolein	4.013	56	210801	223.84	ug/Kg	98
106) Tert butyl alcohol	4.713	59	274065	469.13	ug/Kg	89
107) Isobutyl alcohol	6.897	42	126410	882.55	ug/Kg	96
108) Tert Amyl Alcohol	7.007	59	224976	442.76	ug/Kg	96
109) 1,4-Dioxane	8.120	88	56424	919.98	ug/Kg	92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\050516\
Data File : Y28370.D
Acq On : 5 May 2016 11:18 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33794,VY1147,5.00,,,5,,
ALS Vial : 33 Sample Multiplier: 1

Quant Time: May 06 08:05:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration



042516APP9-Y.m Fri May 06 08:12:24 2016 Page: 4

SGS ACCUTEST FA33668

ACCUTEST LABORATORIES SE

DATE:	03-15-16
COLUMN TYPE:	RTX-VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA6-J
PURGE PRESSURE:	10.6 psi
ANALYST:	DP

1-12 pH LOT 200814
0-3 pH LOT 204413A

MS VOA6-J ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	MSJ031516.m
CALIB. DATE:	03-15-16
EM VOLTAGE:	1553
BFB RESPONSE:	301204.5
RUN ID:	VJ~~5237~~ 5237 DP 03-16-16

STANDARDS

BFB:	V19931 V19964 (New gases) V19953 (Acro)
ICAL/CCV:	V19947 V19895 V1999 V19932 V19955 V19909 V19928 V19929
ISTD/SURR:	V19931
ICV/QC:	V19967 V19924 V19956 V19900
Purge Volume	V19916 V19960 V19853 V19869

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	Cl ?	RR	COMMENTS
J0975140	BLK	N/A	H2O	1	8260		N/A	N/A		
J 41	BLK			1						
J 42	BLK			1						20ul → 50ul Naph ↑
J 43	CC5236-5 A			1						↓ ↓
J 44	-5			1						
J 45	BLK New trap			1						
J 46	BLK			1						
J 47	BLK			1						
J 48	BLK			2						
J 49	BLK / BFB			3						
J 50	ICS237-1			4		PII(6) SP(8)				0.5ul → 50ul
J 51	-2			5		SP(8) OP(37) PII(107)				2.5ul → 50ul
J 52	-3			6		SP(8) OP(37) PII(107)				5ul → 50ul
J 53	-4			7		SP(8) OP(37) PII(107)				12.5ul → 50ul
J 54	-5			8		SP(8) OP(37) PII(107)				20ul → 50ul
J 55	-6			9		SP(8) OP(37) PII(107)				35ul → 50ul
J 56	-7			10		SP(8) OP(37) PII(107)				50ul → 50ul
J 57	BLK			11						
J 58	ICV5237-5	↓	↓	12	↓		↓	↓		25ul → 50ul
J 59	ICV5237-5			13						
J										
J										
J						03-16-16 DP				
J										
J										
J										
J										

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: DP

msvoa6_j_log.xls NF 06/10

[redacted]

CCUTEST LABORATORIES SE

ATE: 05-06-16
OLUMN TYPE: RTX-UMS
ETECTOR: 5973 MSD
STRUMENT: MSVOA6-J
URGE PRESSURE: 11.4psi
NALYST: Dp

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

MS VOA6-J ANALYSIS LOG

METHODS:* 8260
METHOD FILE: MST031516.m
CALIB. DATE: 03-15-16
EM VOLTAGE: 1553V
BFB RESPONSE: 2107894
RUN ID: VJ 5288/~~5289~~ DP 05-06-16 DP

STANDARDS

BFB: V20115
ICAL/CCV: V20155 V20131 V20164
V20141 V20136 V20093 V20156 V20119
ISTD/SURR: V20115
ICV/QC: V20166 V20168 V20096 V20167
Purge Volumes 5ml V20165 V20088 V20121 V20107

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
0976334	Blk	N/A	W	1	8260		N/A	N/A		✓
35	BFB			1						Passed Auto
36	CCS237-5			1		SP(8) OP(37)				20ul→50ml ✓
37	BS			1		SP(8) OP(37) PII(107)				12.5ul→40ml ✓
38	MB DP 05-06-16			2			✓	✓		ND
39	FA33668-1 mA	1		1			1	N		✓
40	-2 mA	1		2			1			ND
41	-3 mA	1		3			1			✓
42	-4 mA	1		4			1			✓
43	-5 mA	1		5			1			✓
44	-7 mA	1		6		PII(10)	1			✓
45	-9 mA	1		7			1			✓
46	-1ms mA	2		8		SP(8) OP(37)	1			12.5ul→40ml
47	-1msomA	2		9		SP(8) OP(37)	1			✓
48	FA33570-1	1		10		FA33722-1mA	1			✓
49	-2	1		11		-2mA	1			✓
50	-3	1		12		-3 mA PII(10)	1			✓
51	-4	1		13		-4 mA	1			✓
52	-5	1		14		-5 mA	1			✓
53	-6	1		15		-6 mA	1			ND
54	-7	1		16		-7mA	1			✓
55	FA33643-6,10X	1		17		~~5ml→50ml~~ DP 05-06-16 DP FA33722-8mA	1	✓		✓
56	-	—		18		~~ECCS237-5~~ Blank DP 05-09-16	—	—		~~20ul→50ml~~ DP 05-09-16 ND
57				18		ECCS237-5 SP(8) OP(37) PII(107)	—	✓		20ul→50ml
58	-9			19						
59	-10			20		05-09-16 DP				
60	-11			21						

For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: PD

msvoa6_j_log.xls NF 06/10

ACCUTEST LABORATORIES SE

DATE:	4/25/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA14-Y
PURGE PRESSURE:	20 PSI
ANALYST:	AD

MS VOA14-Y ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	042516 APP9-4
CALIB. DATE:	4/25/16
EM VOLTAGE:	1958
BFB RESPONSE:	1822 668
RUN ID:	VY 1133

STANDARDS

A	BFB:	.BFB: V20120
	ICAL/CCV:	.ICAL/CCV: V20105,V20084,V20079, .V20076,V20066,V20064
	ISTD/SURR:	.ISTD/SURR: V20030
B	ICV/QC:	.ICV/QC: V20106,V20085,V20080, .V20077,V20067,V20065
	STD A=250ppm=60µl each/24ml	AD
	METHANOL LOT #:	157226

	DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS
											STD B=250ppm=75µl each/24ml
Y	28091	BFB	–	–	–	–	5	–		–	Avg. passed
Y	92	1CI133-1	–	–	–	–	6	–	SP 104	–	0.1 ml STD A/5ml
Y	93	1CI133-2	–	–	–	–	7	–		–	0.2 ml
Y	94	1CI133-3	–	–	–	–	8	–		–	0.4 ml
Y	95	1CCI133-4	–	–	–	–	9	–		–	1 ml
Y	96	1CI133-5	–	–	–	–	10	–		–	2 ml
Y	97	1CI133-6	–	–	–	–	11	–		–	3 ml
Y	98	1CI133-7	–	–	–	–	12	–		–	4 ml
Y	99	BLK	–	–	–	–	13	–		–	
Y	28100	1CVI133-4	–	–	–	–	14	–		–	1ml STD B/5ml
Y	01	BS	–	–	–	–	15	–		–	" "
Y	02	MB	–	–	–	100	16	–		–	
685 Y	03	FA33364-1	B1223	S	5.57	–	17	PT	NaHSO4	–	
Y	04	-2	B1226	S	5.37	–	18	PT		–	
Y	05	-3	B1229	S	5.01	–	19	PT		–	
Y	06	-4	B1232	S	5.65	–	20	PT		–	
Y	07	-5	B1235	S	5.99	–	21	PT		–	
Y	08	FA33373-1	B1271	S	6.10	–	22	PT		–	
Y	09	-1ms	B1270	S	6.44	–	23	PT		–	1ml STD B added
Y	10	-1msD	B1276	S	6.24	–	24	PT		–	" "
Y	11	FA33364-6	B1238	S	5.35	–	25	PT		–	
Y	12	-7	B1241	S	4.13	–	26	PT		RR2	50X ISTD 3 ↓
Y	13	-8	B1244	S	5.29	–	27	PT		RR	c.o.?
Y	14	-9	B1247	S	0.02	–	28	PT		–	
Y	15	-10	B1250	S	4.60	–	29	PT	Not logged in ↓	–	
Y	16	-11	B1253	S	4.69	–	30	PT ↓		RR2	50X ISTD 3 ↓
Y	17	ECCI133-4	–	–	–	–	31	–		–	1ml STD A/5ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005

Matrix: Designate "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

msvoa14_y_log.xls NF 09/11

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1213	FA33366-1	W (NaHSO4)	31.13	35.78	4.65	04/23/16	13:30	RCM	PT	IN
14	-1	M	29.65	34.27	4.62					
15	-1	M	29.72	33.74	4.02					
16	-1	M	29.57	34.42	4.85					
17	-2	W (NaHSO4)	31.20	36.52	5.32					
18	-2	W ↓	31.38	36.02	4.64					
19	-2	M	29.76	33.67	3.91					
20	-2	M	29.53	34.68	5.15					
21	-2	M	29.58	34.65	5.07		13:37			
22	FA33364-1	W (NaHSO4)	31.12	36.92	5.80		13:38			
23	-1	W ↓	31.09	36.66	5.57					
24	-1	M	29.71	35.09	5.38					
25	-2	W (NaHSO4)	31.16	36.83	5.67					
26	-2	W ↓	31.13	36.50	5.37					
27	-2	M	29.63	35.24	5.61					
28	-3	W (NaHSO4)	30.70	35.81	5.11					
29	-3	W ↓	31.10	36.11	5.01					
30	-3	M	29.66	34.75	5.09					
31	-4	W (NaHSO4)	31.08	36.32	5.24					
32	-4	W ↓	31.17	36.82	5.65					
33	-4	M	29.80	35.09	5.29					
34	-5	W (NaHSO4)	30.89	36.89	6.00					
B1235	-5	W ↓	31.25	37.24	5.99		13:52			

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1259	FA33365-7	W (NaHSO4)	31.11	37.02	5.91	02/23/14	14:14	DCM	PT	IN
60	-7	M	29.56	33.55	3.99					
61	-6	W (NaHSO4)	31.34	35.80	4.46					
62	-6	W ↓	31.23	36.04	4.81					
63	-6	M	29.80	32.90	3.10					
64	-4	W (NaHSO4)	31.06	37.10	6.04					
65	-4	W ↓	31.36	36.82	5.46					
66	-4	M	29.76	35.57	5.81					
67	-2	W (NaHSO4)	31.32	36.79	5.47					
68	-2	W ↓	31.42	36.13	4.71					
69	-2	M	29.63	33.92	4.29		14:22			
70	FA33373-1	W (NaHSO4)	31.08	37.52	6.44	02/23/14	14:30	DCM	PT	IN
71	-1	W ↓	30.84	36.94	6.10					
72	-1	M	29.80	35.83	6.03					
73	-1	W (NaHSO4)	30.95	37.97	7.02					
74	-1	W ↓	31.06	38.26	7.20					
75	-1	M	29.82	37.28	7.46					
76	-1	W (NaHSO4)	31.15	37.39	6.24					
77	-1	W ↓	31.11	37.91	6.80					
78	-1	M	29.61	35.95	6.34					
B12 79	-4	W (NaHSO4)	31.06	37.84	6.78					
80	-4	W ↓	31.00	38.67	7.67					
B12 81	-4	M	29.83	36.46	6.63		14:38			

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1236	-5	M	29.72	35.44	5.72	04/23/16	13:53	[illegible]	PT	IN
37	-6	W (NaHSO4)	31.04	35.90	4.86					
38	-6	W ↓	31.09	36.44	5.35					
39	-6	M	29.77	34.92	5.15					
40	[illegible] ~~-6~~ 7	W (NaHSO4)	31.09	34.94	3.85					
41	-7	W ↓	31.18	35.31	4.13					
42	-7	M	29.74	33.84	4.10					
43	-8	W (NaHSO4)	31.20	36.58	5.38					31.20
44	-8	W ↓	31.30	36.59	5.29					
45	-8	M	29.77	35.22	5.45					
46	-9	W (NaHSO4)	31.61	31.62	0.01					TB
47	-9	W ↓	31.62	31.64	0.02					↓
48	-9	M	29.56	29.54	-0.02					
49	-10	W (NaHSO4)	31.05	34.94	3.89					
50	-10	W ↓	31.09	35.69	4.60					
51	-10	M	29.67	34.29	4.62					
52	-11	W (NaHSO4)	31.18	35.57	4.39					
53	-11	W ↓	31.09	35.78	4.69		↓			
54	-11	M	29.65	34.04	4.39		14:06			
55	MC45430-1	M 10mL	36.83	53.08	16.97		14:07			10mL no
56	-2	M	36.45	55.54	19.09		↓			↓
57	-3	M ↓	37.49	55.52	18.03		14:10			
B12 68	FA33365 7	W(NaHSO4)	31.21	36.56	5.35	↓	14:17	↓	↓	↓

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

[redacted]

ACCUTEST LABORATORIES SE

DATE:	5/5/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA14-Y
PURGE PRESSURE:	20 PSI
ANALYST:	AD

MS VOA14-Y ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	042516APP9-Y
CALIB. DATE:	4/25/16
EM VOLTAGE:	1953
BFB RESPONSE:	1598215
RUN ID:	VY 1147/48

STANDARD

A	BFB:	.BFB: V20120
	ICAL/CCV:	.ICAL/CCV: V20149,V20159,V20151, .V20147,V20145,V20143
	ISTD/SURR:	.ISTD/SURR: V20161
B	ICV/QC:	.ICV/QC: V20150,V20160,V20152, .V20148,V20146,V20144

STD A=250ppm=(6)2 each/24ml

METHANOL LOT #: 157226

	DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STD B=250ppm=75 each/24ml
Y	28344	BFB	—	—	—	—	7	—		—	Avg. passed
Y	45	CC1133-4	—	—	—	—	8	—		—	1 ml STD A/5ml
Y	46	BS	—	—	—	—	9	—		—	1 ml STD B/5ml
Y	47	MB	—	—	—	100	10	—		—	
Y	48	FA336608-6	B1724	S	5.39	—	11	EN	8260C FS VY1148	—	
Y	49	-8	B1727	S	5.73	—	12	EN		—	1 ml STD B added
Y	50	-8MS	—	S	4.13	—	13	—		—	" "
Y	51	-8MSD	—	S	4.27	—	14	—		—	
Y	52	FA336661-1	B1706	S	6.63	—	15	PT	DOD 4	—	1 ml STD B added
Y	53	-1MS	—	S	4.52	—	16	—		—	" "
Y	54	-1MSD	—	S	4.58	—	17	—		—	
Y	55	-2	B1709	S	6.92	—	18	PT	DOD 4	—	
Y	56	-3	B1712	S	6.05	—	19	PT		—	
Y	57	-4	B1715	S	6.98	—	20	PT		—	
Y	58	-5	B1718	S	6.37	—	21	PT		—	
Y	59	BLK	—	—	—	—	22	—		—	
Y	60	FA336661-6	B1721	S	6.52	—	23	PT		—	
Y	61	FA336669-1	B1746	S	6.93	—	24	PT	MNP methylene chloride 79 below cal	RR	50X
Y	62	-3	B1751	S	6.58	—	25	PT		RR	1X BS (NAP) +50X
Y	63	-4	B1755	S	0.02		26	PT	TB Not logged in	RR	1X C.O.
Y	64	FA336672-1	B1789	S	4.25	—	27	PT	Nathan	—	
Y	65	FA336704-1	B1760	S	3.88	—	28	PT		RR	1X Nap-BS
Y	66	-2 AD 5/5/16	B1765	S	4.12	—	29	PT	improper methylene below Cal	—	
Y	67	-3, 50X	B1771	S	4.85	100	30	PT		—	
Y	68	-3, 500X	B1771	S	4.85	10	31	PT	90 ml MeOH added	RR	500X NAP-BS
Y	69	FA336697-1	B1797	S	4.50	—	32	5030A	DOD 4	—	
Y	70	ECC1133-4	—	—	—	—	33	—		—	1 ml STD A/5ml

AD 5/5/16

194

* For NELAC purposes, Method 8260 includes analytes by SOP MS005

Matrix: Designate "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

msvoa14_y_log.xls NF 09/11

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials 05/04/16	Container Type *	Comments
B1696	FA33639-1	M	29.94	37.15	7.21	05/04/16	14:00	DTH	PT	IN
97	-1	M	29.78	36.53	6.75					
98	-2	W	31.06	37.81	6.75		14:03			
99	-2	W	30.95	37.74	6.79					
B1700	-2	M	29.75	36.97	7.22					
01	-2	M	29.73	36.19	7.17					
02	-3	W	30.90	38.05	7.15					
03	-3	W	30.86	37.88	7.02					
04	-3	M	29.85	36.97	7.12					
05	-3	M	29.89	36.76	6.87		14:11			
06	FA33661-1	W	31.21	37.84	6.63	05/05/16	9:21	DM	PT	IN
07	-1	W	31.02	37.90	6.88					
08	-1	M	29.92	37.08	7.16					
09	-2	W	30.67	37.59	6.92					
10	-2	W	30.83	37.93	7.10					
11	-2	M	29.68	36.11	6.43					
12	-3	W	30.99	37.64	6.65					
13	-3	W	30.90	37.27	6.37					
14	-3	M	29.81	35.51	5.70					
15	-4	W	31.05	38.03	6.98					
16	-4	W	30.98	37.91	6.93					
17	-4	M	29.78	36.64	6.86					
B1718	-5	W	30.79	37.16	6.37		9:36			

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

Instrument Run Log VY1147 page 2 of 6

SGS ACCUTEST FA33668

341 of 349

7.7.4 7

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1719	FA33661 -5	W	30.99	36.91	5.92	05/05/16	9:38	PKM	PT	IN
20	-5	M	29.89	36.34	6.45					
21	-6	W	31.19	37.71	6.52					
22	-6	W	30.87	38.05	7.18					
23	-6	M	29.85	36.70	6.85		9:43			
24	FA33668 -6	W (Ac2481)	—	—	5.39	05/09/16	11:19	RKM	En	IN FS unlocked
25	-6	W	—	—	5.60					
26	-6	M (Ac2456)	—	—	5.38					
27	-8	W (Ac2481)	—	—	5.73					
28	-8	W	—	—	5.78					
29	-8	M (Ac2456)	—	—	5.65		11:23			
30	FA33667-1	W	31.00	36.41	5.41		11:29	RKM	PT	IN
31	-1	W	30.91	36.21	5.30					
32	-1	M	29.70	35.16	5.46					
33	-1	M	29.71	35.45	5.74					
34	-2	W	30.96	36.55	5.59					
35	-2	W	30.91	36.36	5.45					
36	-2	M	29.82	35.14	5.32					
37	-2	M	29.95	35.47	5.52					
38	-3	W	31.07	36.62	5.55					
39	-3	W	31.03	36.44	5.41					
40	-3	M	29.68	35.49	5.81					
B1741	-3	M	29.98	35.15	5.17		11:45			

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

Instrument Run Log VY1147 page 3 of 6

SGS ACCUTEST FA33668

342 of 349

7.7.4 7

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1742	FA33666-1	W (AC2481)	—	—	4.89	05/05/16	11:47	SICM	5030A	IN
43	-1	W ↓	—	—	4.51	↓	↓	↓	↓	↓
44	-1	M (AC2456)	—	—	4.63	↓	11:51	↓	↓	↓
45	FA33669-1	W	30.56	38.10	7.54	05/05/16	12:18	SICM	PT	IN frozen @10:05
46	-1	W	30.50	37.43	6.93	↓	↓	↓	↓	↓
47	-1	M	29.50	36.71	7.21	↓	↓	↓	↓	↓
48	-1	M	29.29	36.69	7.40	↓	↓	↓	↓	↓
49	-2	M	29.48	36.90	7.42	↓	↓	↓	↓	↓
50	-3	W	30.78	37.31	6.53	↓	↓	↓	↓	↓
51	-3	W	30.62	37.20	6.58	↓	↓	↓	↓	↓
52	-3	M	29.50	36.46	6.96	↓	↓	↓	↓	↓
53	-3	M	29.62	36.56	6.94	↓	↓	↓	↓	↓
54	-4	W	30.97	30.97	0.00	↓	↓	↓	↓	TB
55	-4	W	30.79	30.81	0.02	↓	↓	↓	↓	↓
56	-4	M	29.57	29.56	-0.01	↓	↓	↓	↓	↓
57	-5	M	29.28	29.22	-0.06	↓	↓	↓	↓	↓
58	-5	M	29.42	29.40	-0.02	↓	12:30	↓	↓	↓
59	FA33670-1	W (NaHSO4)	31.50	35.52	4.02	05/05/16	13:49	SICM	PT	IN
60	-1	W ↓	31.59	35.47	3.88	↓	↓	↓	↓	↓
61	-1	M	29.84	33.55	3.71	↓	↓	↓	↓	↓
62	-1	M	29.64	33.65	4.01	↓	↓	↓	↓	↓
63	-1	M	29.55	33.33	3.78	↓	↓	↓	↓	↓
B1764	-2	W (NaHSO4)	31.47	35.51	4.04	↓	13:54	↓	↓	↓

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1765	FA33670-2	W (NaHSO4)	31.48	35.60	4.12	05/05/16	13:55	DKM	PT	IN
66	-2	M	29.69	33.10	3.41					
67	-2	M	29.72	33.67	3.95					
68	-2	M	29.51	33.31	3.80					
69	-3	W (NaHSO4)	31.20	34.02	2.82					
70	-3	W ↓	31.08	35.61	4.53					
71	-3	M	29.50	34.35	4.85					
72	-3	M	30.14	35.67	5.53					
73	-3	M	29.71	33.02	3.31		↓			
74	FA33683-1	W (NaHSO4)	31.63	38.14	6.51		14:04			
75	-1	W ↓	31.60	38.04	6.44					
76	-1	M	29.76	35.84	6.08					
77	-1	M	29.90	36.13	6.23					
78	-1	M	29.80	36.12	6.32					
79	-1	M	29.60	36.06	6.46					
80	-1	M	29.56	35.95	6.39					
81	-2	W (NaHSO4)	31.44	37.47	6.03					
82	-2	W ↓	31.57	37.40	5.83					
83	-2	M	29.54	35.61	6.07					
84	-2	M	29.77	35.82	6.05					
85	-2	M	29.74	36.19	6.45					
86	-2	M	29.55	35.74	6.19		↓			
B1787	-2	M	29.78	36.58	6.80	↓	14:20	↓	↓	↓

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1788	FA33672-1	W (NaHSO4)	31.66	36.01	4.35	05/05/16	14:21	JCM	PT	IN
89	-1	W ↓	31.61	35.86	4.25	↓	↓	↓	↓	↓
90	-1	M	29.69	33.67	3.98					
91	-1	M	29.53	33.74	4.21					
92	-1	M	29.68	33.33	~~7.83~~ 3.65		↓			3.65
93	FA33671-1	W (NaHSO4)	31.86	36.95	5.09		14:25			
94	-1	W ↓	31.82	36.85	5.03		↓			
95	-1	M	29.80	34.16	4.36	↓	14:28	↓	↓	↓
96	FA33697-1	W (AC2481)	—	—	4.52	05/05/16	15:20	JCM	~~PT~~ 5030A	IN
97	-1	W ↓	—	—	4.50	↓	↓	↓	↓	↓
98	-1	M (AC2456)	—	—	4.72	↓	15:25	↓	↓	↓
99										
B1800										
01										
02										
03										
04										
05										
06										
07										
08										
09										
B1810										

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

Instrument Run Log VY1147 page 6 of 6

SGS ACCUTEST FA33668

345 of 349

7.7.4 7

ACCUTEST LABORATORIES SE

DATE:	5/5/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA14-Y
PURGE PRESSURE:	20 PSI
ANALYST:	AD

MS VOA14-Y ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	042516APP9-Y
CALIB. DATE:	4/25/16
EM VOLTAGE:	1953
BFB RESPONSE:	1598215
RUN ID:	VY 1147/48

STANDARD

	BFB:	BFB: V20120
A	ICAL/CCV:	ICAL/CCV: V20149,V20159,V20151, V20147,V20145,V20143
	ISTD/SURR:	ISTD/SURR: V20161
B	ICV/QC:	ICV/QC: V20150,V20160,V20152, V20148,V20146,V20144

STD A=250ppm=(60µl each)/24ml

METHANOL LOT #: 157226

DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STD B=250ppm=75 each/24ml
Y 28314	BFB	—	—	—	—	7	—		—	Avg. passed
Y 45	CC1133-4	—	—	—	—	8	—		—	1 ml STD A/5ml
Y 46	BS	—	—	—	—	9	—		—	1 ml STD B/5ml
Y 47	MB	—	—	—	100	10	—		—	
92 Y 48	FA336608-6	B1724	S	5.39	—	11	EN	8260C FS VY1148	—	
Y 49	-8	B1727	S	5.73	—	12	EN		—	
Y 50	-8ms	—	S	4.13	—	13	—		—	1 ml STD B added
Y 51	-8msd	—	S	4.27	—	14	—		—	" "
194 Y 52	FA336661-1	B1706	S	6.63	—	15	PT	DOD 4	—	
Y 53	-1ms	—	S	4.52	—	16	—		—	1 ml STD B added
Y 54	-1msd	—	S	4.58	—	17	—		—	" "
Y 55	-2	B1709	S	6.92	—	18	PT	DOD 4	—	
Y 56	-3	B1712	S	6.65	—	19	PT		—	
Y 57	-4	B1715	S	6.98	—	20	PT		—	
Y 58	-5	B1718	S	6.37	—	21	PT		—	
Y 59	BLK	—	—	—	—	22	—		—	
Y 60	FA336661-6	B1721	S	6.52	—	23	PT		—	
Y 61	FA336669-1	B1746	S	6.93	—	24	PT	NAP 79	RR	50X
Y 62	-3	B1751	S	6.58	—	25	PT		RR	1X BS(NAP) +50X
Y 63	-4	B1755	S	0.02		26	PT	TB Not logged in	RR	1X C.O.
Y 64	FA336672-1	B1789	S	4.25	—	27	PT	Nathan	—	
Y 65	FA336704-1 AD 5/5/16	B1760	S	3.88	—	28	PT		RR	1X Nap-BS
Y 66	-2	B1765	S	4.12	—	29	PT		—	
Y 67	-3, 50X	B1771	S	4.85	100	30	PT		—	
Y 68	-3, 500X	B1771	S	4.85	10	31	PT	90µl MeOH added	RR	500X NAP-BS
Y 69	FA336697-1	B1797	S	4.50	—	32	5030A	DOD 4	—	
Y 70	CC1133-4	—	—	—	—	33	—		—	1 ml STD A/5ml

Analyst's Signature:

* For NELAC purposes, Method 8260 includes analytes by SOP MS005

Matrix: Designate "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

msvoa14_y_log.xls NF 09/11

ACCUTEST SOUTHEAST

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1719	FA33661 -5	W	30.99	36.91	5.92	05/05/16	9:38	PKM	PT	IN
20	-5	M	29.89	36.34	6.45					
21	-6	W	31.19	37.71	6.52					
22	-6	W	30.87	38.05	7.18					
23	-6	M	29.85	36.70	6.85		9:43			
24	FA33668 -6	W (Ac2481)	—		5.39	05/05/16	11:19	RCM	En	IN FS unloaded
25	-6	W	—		5.60					
26	-6	M (Ac2456)	—		5.38					
27	-8	W (Ac2481)	—		5.73					
28	-8	W	—		5.78					
29	-8	M (Ac2456)	—		5.65		11:23			
30	FA33667-1	W	31.00	36.41	5.41		11:29	RCM	PT	IN
31	-1	W	30.91	36.21	5.30					
32	-1	M	29.70	35.16	5.46					
33	-1	M	29.71	35.45	5.74					
34	-2	W	30.96	36.55	5.59					
35	-2	W	30.91	36.36	5.45					
36	-2	M	29.82	35.14	5.32					
37	-2	M	29.95	35.47	5.52					
38	-3	W	31.07	36.62	5.55					
39	-3	W	31.03	36.44	5.41					
40	-3	M	29.68	35.49	5.81					
B1741	-3	M	29.98	35.15	5.17		11:45			

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA33668
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: FA33668-6 **Analyzed:** 17-MAY-16 by JK **Method:** SM19 2540G
ClientID: RA-11 (10-11)

Wet Weight (Total)	7.87	g
Tare Weight	1.09	g
Dry Weight (Total)	6.18	g
Solids, Percent	75.1	%

Sample: FA33668-8 **Analyzed:** 17-MAY-16 by JK **Method:** SM19 2540G
ClientID: RA-10 (5.5-6.5)

Wet Weight (Total)	7.06	g
Tare Weight	1.14	g
Dry Weight (Total)	5.92	g
Solids, Percent	80.7	%