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: FA33359

Sampling Date: 04/22/16

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: 373

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 **7**
4.1: FA33359-1: RA17 (17-18) 8
4.2: FA33359-2: 5-40S (10.5-11.5) 10
4.3: FA33359-3: BPEB-6 12
4.4: FA33359-4: TB042216 14
Section 5: Misc. Forms **16**
5.1: Chain of Custody 17
Section 6: GC/MS Volatiles - QC Data Summaries **20**
6.1: Method Blank Summary 21
6.2: Blank Spike Summary 27
6.3: Matrix Spike/Matrix Spike Duplicate Summary 33
6.4: Instrument Performance Checks (BFB) 37
6.5: Internal Standard Area Summaries 43
6.6: Surrogate Recovery Summaries 48
6.7: Initial and Continuing Calibration Summaries 50
Section 7: GC/MS Volatiles - Raw Data **80**
7.1: Samples 81
7.2: Method Blanks 91
7.3: Blank Spikes 98
7.4: Matrix Spike/Matrix Spike Duplicates 121
7.5: Instrument Performance Checks (BFB) 157
7.6: Initial and Continuing Calibrations 162
7.7: Instrument Run Logs 333
Section 8: General Chemistry - QC Data Summaries **372**
8.1: Percent Solids Raw Data Summary 373

SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: FA33359

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA33359-1	04/22/16	12:30	TTNR	04/23/16	SO	Soil	RA17 (17-18)
FA33359-2	04/22/16	12:31	TTNR	04/23/16	SO	Soil	5-40S (10.5-11.5)
FA33359-3	04/22/16	14:00	TTNR	04/23/16	AQ	Equipment Blank	BPEB-6
FA33359-4	04/22/16	08:00	TTNR	04/23/16	AQ	Trip Blank Soil	TB042216

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:** FA33359

Site: BMSMC, Building 5 Area, Humacao, PR **Report Date:** 5/9/2016 11:52:02 AM

3 Sample(s), 1 Trip Blank(s) were collected on 04/22/2016 and were received at SGS Accutest Southeast (SASE) on 04/23/2016 properly preserved, at 3.4 Deg. C and intact. These Samples received an SASE job number of FA33359. 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:** VP1536

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) MC45432-3MS, MC45432-3MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,2-Dibromo-3-chloropropane, Methyl Tert Butyl Ether, Tetrahydrofuran, 1,2-Dibromoethane, 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Styrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-chloropropane, 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Methyl Tert Butyl Ether, Tetrahydrofuran, Styrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Styrene are outside control limits for sample MC45432-3MSD. Probable cause is due to sample non-homogeneity.

MC45432-3MS and MSD for 1,2-Dibromo-3-chloropropane: Outside control limits.

MC45432-3MS for 1,2-Dibromoethane: Outside DOD QSM control limits.

MC45432-3MS and MSD for 2-Hexanone: Outside DOD QSM control limits.

MC45432-3MS and MSD for 4-Methyl-2-pentanone (MIBK): Outside DOD QSM control limits.

MC45432-3MS and MSD for Methyl Tert Butyl Ether: Outside control limits.

MC45432-3MS, MSD and MS/MSD RPD for Styrene: Outside DOD QSM control limits.

MC45432-3MSD for Tert-Amyl Alcohol: Outside DOD QSM control limits.

MC45432-3MSD for 1,1,2,2-Tetrachloroethane: Outside DOD QSM control limits.

MC45432-3MS and MSD for Tetrahydrofuran: Outside control limits.

Matrix: SO **Batch ID:** VF2640

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

VF2640-BS: No MS/MSD available for this run.

Matrix: SO **Batch ID:** VF2642

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33385-3MS, FA33385-3MSD were used as the QC samples indicated.
Matrix Spike Recovery(s) for Bromoform are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,2-Dibromo-3-chloropropane, Bromoform are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits in MS/MSD. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN70795

Sample(s) FA33388-1DUP 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 6, 2016

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
FA33385-3MS	MSVOA	F0076949.D	Allyl chloride
FA33385-3MSD	MSVOA	F0076950.D	Ethyl Alcohol
MC45432-3MS	MSVOA	P41331.D	1,2-Dichloroethane-D4, Carbon Tetrachloride, Trichlorofluoromethane
MC45432-3MSD	MSVOA	P41332.D	1,2-Dichloroethane-D4, Carbon Tetrachloride, Trichlorofluoromethane
VF2628-IC2628	MSVOA	F0076705.D	Ethyl Alcohol
VF2628-IC2628	MSVOA	F0076706.D	Ethyl Alcohol
VF2628-IC2628	MSVOA	F0076709.D	Allyl chloride
VF2628-IC2628	MSVOA	F0076710.D	Allyl chloride, Ethyl Alcohol
VF2628-IC2628	MSVOA	F0076711.D	Ethyl Alcohol
VF2628-ICC2628	MSVOA	F0076708.D	Ethyl Alcohol
VF2639-CC2628	MSVOA	F0076897.D	Allyl chloride
VF2640-BS	MSVOA	F0076898.D	Allyl chloride
VF2642-BS	MSVOA	F0076933.D	Allyl chloride
VP1531-IC1531	MSVOA	P41204.D	Carbon Tetrachloride, Trichlorofluoromethane
VP1531-IC1531	MSVOA	P41205.D	1,2-Dichloroethane-D4, Carbon Tetrachloride, Trichlorofluoromethane
VP1531-IC1531	MSVOA	P41206.D	1,2-Dichloroethane-D4, Carbon Tetrachloride, Trichlorofluoromethane
VP1531-IC1531	MSVOA	P41208.D	Carbon Tetrachloride, Trichlorofluoromethane
VP1531-IC1531	MSVOA	P41209.D	Carbon Tetrachloride, Trichlorofluoromethane
VP1531-IC1531	MSVOA	P41211.D	1,4-Dichlorobenzene, Trichlorofluoromethane
VP1531-ICC1531	MSVOA	P41207.D	Carbon Tetrachloride, Trichlorofluoromethane
VP1531-ICV1531	MSVOA	P41212.D	Carbon Tetrachloride, Trichlorofluoromethane
VP1535-CC1531	MSVOA	P41306.D	Carbon Tetrachloride, Trichlorofluoromethane
VP1536-BS	MSVOA	P41307.D	Carbon Tetrachloride, Trichlorofluoromethane

23 Manual Integrations were found for FA33359

Summary of Hits

Job Number: FA33359
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR
Collected: 04/22/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA33359-1	**RA17 (17-18)**					
Acetone		82.4	74	15	ug/kg	SW846 8260C
2-Butanone (MEK)		17.3 J	37	13	ug/kg	SW846 8260C
FA33359-2	**5-40S (10.5-11.5)**					
No hits reported in this sample.						
FA33359-3	**BPEB-6**					
No hits reported in this sample.						
FA33359-4	**TB042216**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	RA17 (17-18)		
Lab Sample ID:	FA33359-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/23/16
Method:	SW846 8260C SW846 5035	**Percent Solids:**	72.6
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0076934.D	1	04/25/16	EP	04/23/16 12:46	n/a	VF2642
Run #2							

	Initial Weight	Final Volume
Run #1	4.66 g	5.0 ml
Run #2		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	82.4	74	15	ug/kg	
71-43-2	Benzene	ND	7.4	1.9	ug/kg	
100-44-7	Benzyl Chloride	ND	7.4	2.1	ug/kg	
74-97-5	Bromochloromethane	ND	7.4	1.6	ug/kg	
75-27-4	Bromodichloromethane	ND	7.4	1.5	ug/kg	
75-25-2	Bromoform	ND	7.4	1.5	ug/kg	
78-93-3	2-Butanone (MEK)	17.3	37	13	ug/kg	J
75-15-0	Carbon Disulfide	ND	7.4	1.5	ug/kg	
56-23-5	Carbon Tetrachloride	ND	7.4	2.6	ug/kg	
108-90-7	Chlorobenzene	ND	7.4	1.5	ug/kg	
75-00-3	Chloroethane	ND	7.4	3.0	ug/kg	
67-66-3	Chloroform	ND	7.4	1.8	ug/kg	
110-82-7	Cyclohexane	ND	7.4	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.4	1.5	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	7.4	3.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	7.4	1.5	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.4	3.7	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	7.4	1.5	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	7.4	1.5	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	7.4	1.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.4	2.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.4	1.5	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.4	1.5	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.4	1.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.4	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.4	2.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.4	2.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.4	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	7.4	1.6	ug/kg	
76-13-1	Freon 113	ND	7.4	1.7	ug/kg	
591-78-6	2-Hexanone	ND	37	13	ug/kg	
98-82-8	Isopropylbenzene	ND	7.4	2.1	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:	RA17 (17-18)		
Lab Sample ID:	FA33359-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/23/16
Method:	SW846 8260C SW846 5035	**Percent Solids:**	72.6
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	7.4	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	37	13	ug/kg	
74-83-9	Methyl Bromide	ND	7.4	3.8	ug/kg	
74-87-3	Methyl Chloride	ND	7.4	3.5	ug/kg	
108-87-2	Methylcyclohexane	ND	7.4	1.5	ug/kg	
75-09-2	Methylene Chloride	ND	15	5.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	37	16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.4	1.6	ug/kg	
100-42-5	Styrene	ND	7.4	1.5	ug/kg	
75-85-4	Tert-Amyl Alcohol	ND	74	20	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	74	20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.4	3.3	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.4	1.9	ug/kg	
109-99-9	Tetrahydrofuran	ND	15	5.4	ug/kg	
108-88-3	Toluene	ND	7.4	1.7	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	7.4	2.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	7.4	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.4	1.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.4	2.7	ug/kg	
79-01-6	Trichloroethylene	ND	7.4	1.7	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.4	2.8	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	7.4	1.5	ug/kg	
75-01-4	Vinyl Chloride	ND	7.4	2.5	ug/kg	
	m,p-Xylene	ND	15	2.6	ug/kg	
95-47-6	o-Xylene	ND	7.4	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		75-124%
17060-07-0	1,2-Dichloroethane-D4	122%		72-135%
2037-26-5	Toluene-D8	98%		75-126%
460-00-4	4-Bromofluorobenzene	112%		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:	5-40S (10.5-11.5)		
Lab Sample ID:	FA33359-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/23/16
Method:	SW846 8260C SW846 5035	**Percent Solids:**	75.7
Project:	BMSMC, Building 5 Area, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0076920.D	1	04/23/16	EP	04/23/16 12:52	n/a	VF2640
Run #2							

	Initial Weight	Final Volume
Run #1	5.70 g	5.0 ml
Run #2		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	58	12	ug/kg	
71-43-2	Benzene	ND	5.8	1.5	ug/kg	
100-44-7	Benzyl Chloride	ND	5.8	1.6	ug/kg	
74-97-5	Bromochloromethane	ND	5.8	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	1.2	ug/kg	
75-25-2	Bromoform	ND	5.8	1.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	29	11	ug/kg	
75-15-0	Carbon Disulfide	ND	5.8	1.2	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.8	2.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	1.2	ug/kg	
75-00-3	Chloroethane	ND	5.8	2.3	ug/kg	
67-66-3	Chloroform	ND	5.8	1.4	ug/kg	
110-82-7	Cyclohexane	ND	5.8	1.4	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	1.2	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.8	2.6	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.8	1.2	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.8	2.9	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.8	1.2	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.8	1.2	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.8	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	1.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	1.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	1.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	1.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	1.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	1.3	ug/kg	
76-13-1	Freon 113	ND	5.8	1.4	ug/kg	
591-78-6	2-Hexanone	ND	29	10	ug/kg	
98-82-8	Isopropylbenzene	ND	5.8	1.6	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:	5-40S (10.5-11.5)		
Lab Sample ID:	FA33359-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/23/16
Method:	SW846 8260C SW846 5035	**Percent Solids:**	75.7
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	5.8	1.2	ug/kg	
79-20-9	Methyl Acetate	ND	29	9.9	ug/kg	
74-83-9	Methyl Bromide	ND	5.8	3.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.8	2.8	ug/kg	
108-87-2	Methylcyclohexane	ND	5.8	1.2	ug/kg	
75-09-2	Methylene Chloride	ND	12	4.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	29	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.8	1.3	ug/kg	
100-42-5	Styrene	ND	5.8	1.2	ug/kg	
75-85-4	Tert-Amyl Alcohol	ND	58	16	ug/kg	
75-65-0	Tert-Butyl Alcohol	ND	58	16	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	2.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.8	1.5	ug/kg	
109-99-9	Tetrahydrofuran	ND	12	4.2	ug/kg	
108-88-3	Toluene	ND	5.8	1.3	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.8	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	1.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	2.1	ug/kg	
79-01-6	Trichloroethylene	ND	5.8	1.4	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	2.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.8	1.2	ug/kg	
75-01-4	Vinyl Chloride	ND	5.8	1.9	ug/kg	
	m,p-Xylene	ND	12	2.0	ug/kg	
95-47-6	o-Xylene	ND	5.8	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
17060-07-0	1,2-Dichloroethane-D4	119%		72-135%
2037-26-5	Toluene-D8	95%		75-126%
460-00-4	4-Bromofluorobenzene	107%		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:	BPEB-6		
Lab Sample ID:	FA33359-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/23/16
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	P41309.D	1	04/25/16	KM	n/a	n/a	VP1536
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	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:	BPEB-6		
Lab Sample ID:	FA33359-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/23/16
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	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	94%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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:	TB042216		
Lab Sample ID:	FA33359-4	**Date Sampled:**	04/22/16
Matrix:	AQ - Trip Blank Soil	**Date Received:**	04/23/16
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	P41310.D	1	04/25/16	KM	n/a	n/a	VP1536
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	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:	TB042216		
Lab Sample ID:	FA33359-4	**Date Sampled:**	04/22/16
Matrix:	AQ - Trip Blank Soil	**Date Received:**	04/23/16
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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	95%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

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

FA33359 PAGE 1 OF 1

FED-EX Tracking #:
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 / State / Zip: Purchase NY
Project Contact / E-mail: Terry Taylor
Phone # / Fax #: 914-251-0400
Sampler(s) Name(s) / Phone #: N. Rivera, T. Taylor, D. Lindstrand, R. O'Reilly

Project Information

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

Billing Information (If different from Report to)

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

Requested Analysis (see TEST CODE sheet)

VO - 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	VO - Method 8260C	LAB USE ONLY
1	RA17 (17-18)		4/22/16	1230	TT	SO	4					1			3	X	
2	S-405 (10.5-11.5)		4/22/16	1231	NR	SO	4					1			3	X	
3	BPEB-6		4/22/16	1400	TT	EB	3	3								X	
4	TB042216		4/14/16	0800		TB	2	2								X	

Turnaround Time (Business days)

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

Approved By (SGS Accutest PM): / Date:

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-Iso propyl toluene, 1-2-4 Trimethylbenzene, Benzyl Chloride, Tert 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]	4/22/16 1500	1 Fed EX	2 FX		2 [signature] 4/23/16 930
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 276	Preserved where applicable	On Ice / Cooler Temp. 3.4

Intact / Not Intact

5.1 5

FA33359: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA33359 CLIENT: Anderson Mulholland PROJECT: BUS Release

DATE/TIME RECEIVED: 4/23/16 930 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8025 9127 6654

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

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.2
- [ ] OBSERVED TEMPS: 3.2
- [ ] CORRECTED TEMPS: 3.4 (USED FOR LIMS)

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

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
- [x] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM 6

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

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

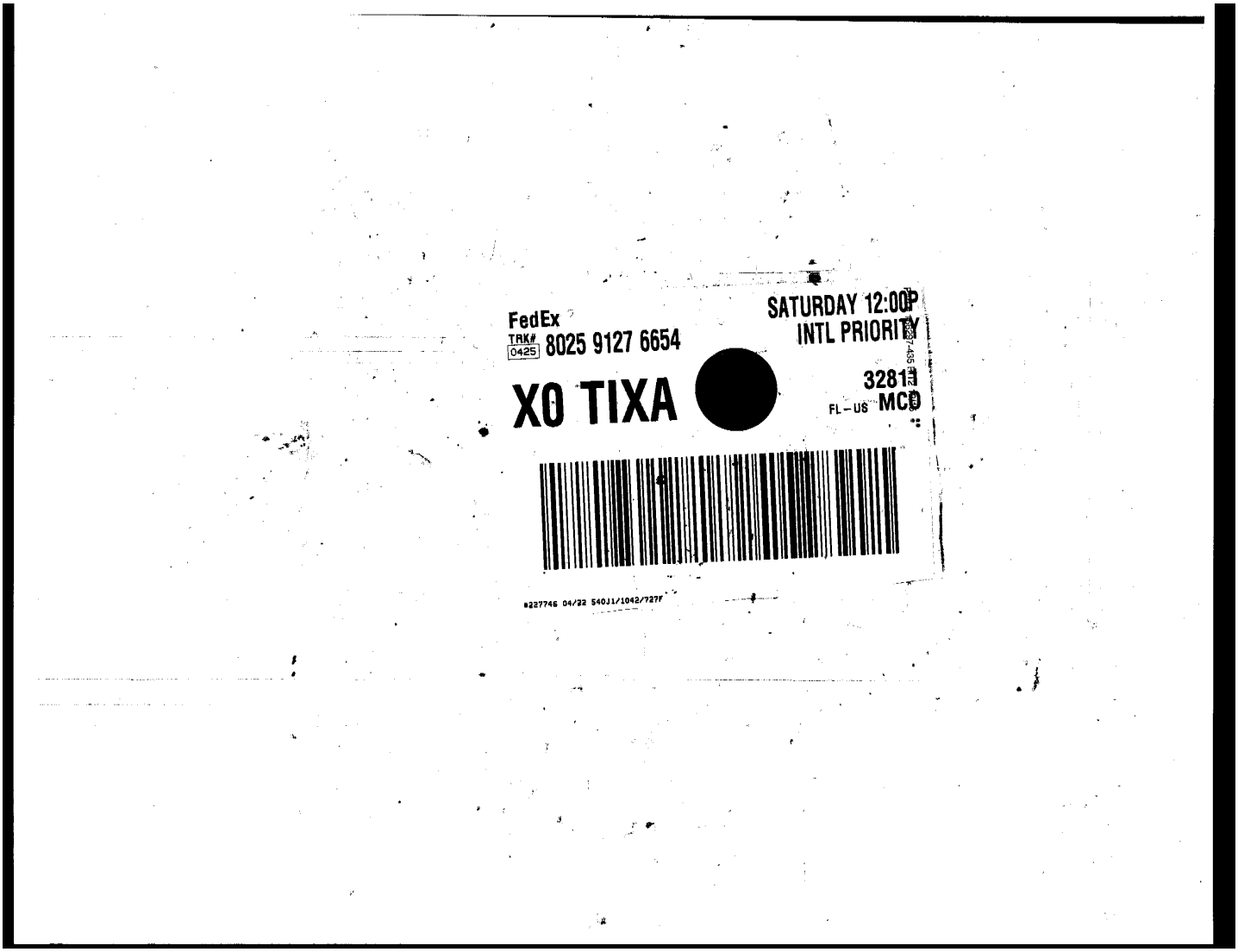
SUMMARY OF COMMENTS: Jar not received for Sample #1.

TECHNICIAN SIGNATURE/DATE 4/23/16 REVIEWER SIGNATURE/DATE 4-23-16

NF 11/15 RECEIPTLOG040416.xls

5.1 5

FA33359: Chain of Custody
Page 2 of 3



FA33359: Chain of Custody
Page 3 of 3

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: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2640-MB	F0076899.D	1	04/23/16	EP	n/a	n/a	VF2640

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

FA33359-2

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: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2640-MB	F0076899.D	1	04/23/16	EP	n/a	n/a	VF2640

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

FA33359-2

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	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	102%	72-135%
2037-26-5	Toluene-D8	99%	75-126%
460-00-4	4-Bromofluorobenzene	109%	71-133%

Method Blank Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1536-MB	P41308.D	1	04/25/16	KM	n/a	n/a	VP1536

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

FA33359-3, FA33359-4

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: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1536-MB	P41308.D	1	04/25/16	KM	n/a	n/a	VP1536

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

FA33359-3, FA33359-4

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	0.65	2.0	0.51	ug/l	J
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	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	96%	83-118%

Method Blank Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2642-MB	F0076932.D	1	04/25/16	EP	n/a	n/a	VF2642

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

FA33359-1

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: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2642-MB	F0076932.D	1	04/25/16	EP	n/a	n/a	VF2642

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

FA33359-1

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	105%	72-135%
2037-26-5	Toluene-D8	99%	75-126%
460-00-4	4-Bromofluorobenzene	110%	71-133%

Blank Spike Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2640-BS [a]	F0076898.D	1	04/23/16	EP	n/a	n/a	VF2640

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

FA33359-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	241	96	61-152
71-43-2	Benzene	50	52.0	104	76-126
100-44-7	Benzyl Chloride	50	49.6	99	65-126
74-97-5	Bromochloromethane	50	51.9	104	77-120
75-27-4	Bromodichloromethane	50	50.6	101	74-130
75-25-2	Bromoform	50	40.4	81	76-127
78-93-3	2-Butanone (MEK)	250	226	90	75-137
75-15-0	Carbon Disulfide	50	46.6	93	72-122
56-23-5	Carbon Tetrachloride	50	48.1	96	78-133
108-90-7	Chlorobenzene	50	50.0	100	81-129
75-00-3	Chloroethane	50	42.8	86	68-133
67-66-3	Chloroform	50	49.2	98	72-123
110-82-7	Cyclohexane	50	48.5	97	73-126
124-48-1	Dibromochloromethane	50	45.5	91	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	41.5	83	70-137
106-93-4	1,2-Dibromoethane	50	48.4	97	77-126
75-71-8	Dichlorodifluoromethane	50	50.1	100	68-168
95-50-1	1,2-Dichlorobenzene	50	51.9	104	80-129
541-73-1	1,3-Dichlorobenzene	50	51.7	103	81-129
106-46-7	1,4-Dichlorobenzene	50	50.8	102	76-130
75-34-3	1,1-Dichloroethane	50	47.4	95	73-125
107-06-2	1,2-Dichloroethane	50	52.3	105	74-128
75-35-4	1,1-Dichloroethylene	50	46.4	93	81-136
156-59-2	cis-1,2-Dichloroethylene	50	51.5	103	74-126
156-60-5	trans-1,2-Dichloroethylene	50	47.5	95	70-127
78-87-5	1,2-Dichloropropane	50	51.4	103	74-125
10061-01-5	cis-1,3-Dichloropropene	50	53.9	108	80-123
10061-02-6	trans-1,3-Dichloropropene	50	49.0	98	75-131
100-41-4	Ethylbenzene	50	50.9	102	77-123
76-13-1	Freon 113	50	46.9	94	71-129
591-78-6	2-Hexanone	250	234	94	72-133
98-82-8	Isopropylbenzene	50	53.8	108	80-136
99-87-6	p-Isopropyltoluene	50	53.6	107	77-131
79-20-9	Methyl Acetate	250	212	85	67-137
74-83-9	Methyl Bromide	50	47.4	95	65-139
74-87-3	Methyl Chloride	50	47.5	95	71-144

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2640-BS [a]	F0076898.D	1	04/23/16	EP	n/a	n/a	VF2640

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

FA33359-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-87-2	Methylcyclohexane	50	52.0	104	75-128
75-09-2	Methylene Chloride	50	49.4	99	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	221	88	76-132
1634-04-4	Methyl Tert Butyl Ether	50	51.6	103	77-120
100-42-5	Styrene	50	51.4	103	78-125
75-85-4	Tert-Amyl Alcohol	500	541	108	69-130
75-65-0	Tert-Butyl Alcohol	500	521	104	58-136
79-34-5	1,1,2,2-Tetrachloroethane	50	43.8	88	71-126
127-18-4	Tetrachloroethylene	50	47.5	95	79-130
109-99-9	Tetrahydrofuran	50	47.6	95	70-133
108-88-3	Toluene	50	49.3	99	76-124
87-61-6	1,2,3-Trichlorobenzene	50	52.9	106	77-128
120-82-1	1,2,4-Trichlorobenzene	50	56.2	112	78-130
71-55-6	1,1,1-Trichloroethane	50	50.4	101	70-129
79-00-5	1,1,2-Trichloroethane	50	46.1	92	74-124
79-01-6	Trichloroethylene	50	50.2	100	75-128
75-69-4	Trichlorofluoromethane	50	48.1	96	73-145
95-63-6	1,2,4-Trimethylbenzene	50	53.9	108	74-123
75-01-4	Vinyl Chloride	50	45.2	90	76-141
	m,p-Xylene	100	103	103	80-128
95-47-6	o-Xylene	50	54.0	108	80-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	75-124%
17060-07-0	1,2-Dichloroethane-D4	103%	72-135%
2037-26-5	Toluene-D8	96%	75-126%
460-00-4	4-Bromofluorobenzene	108%	71-133%

(a) No MS/MSD available for this run.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1536-BS	P41307.D	1	04/25/16	KM	n/a	n/a	VP1536

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

FA33359-3, FA33359-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	124	99	50-147
71-43-2	Benzene	25	25.8	103	81-122
100-44-7	Benzyl Chloride	25	26.7	107	54-122
74-97-5	Bromochloromethane	25	25.9	104	76-123
75-27-4	Bromodichloromethane	25	26.2	105	79-123
75-25-2	Bromoform	25	25.4	102	66-123
78-93-3	2-Butanone (MEK)	125	126	101	56-143
75-15-0	Carbon Disulfide	25	29.3	117	66-148
56-23-5	Carbon Tetrachloride	25	27.9	112	76-136
108-90-7	Chlorobenzene	25	25.5	102	82-124
75-00-3	Chloroethane	25	26.2	105	62-144
67-66-3	Chloroform	25	26.3	105	80-124
110-82-7	Cyclohexane	25	27.1	108	73-138
124-48-1	Dibromochloromethane	25	26.6	106	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.9	96	64-123
106-93-4	1,2-Dibromoethane	25	25.4	102	75-120
75-71-8	Dichlorodifluoromethane	25	28.1	112	42-167
95-50-1	1,2-Dichlorobenzene	25	26.0	104	82-124
541-73-1	1,3-Dichlorobenzene	25	26.2	105	84-125
106-46-7	1,4-Dichlorobenzene	25	25.9	104	78-120
75-34-3	1,1-Dichloroethane	25	26.2	105	81-122
107-06-2	1,2-Dichloroethane	25	24.9	100	75-125
75-35-4	1,1-Dichloroethylene	25	27.9	112	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.8	99	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.9	112	76-127
78-87-5	1,2-Dichloropropane	25	24.8	99	76-124
10061-01-5	cis-1,3-Dichloropropene	25	26.0	104	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.4	110	80-120
100-41-4	Ethylbenzene	25	26.0	104	81-121
76-13-1	Freon 113	25	29.5	118	72-134
591-78-6	2-Hexanone	125	124	99	61-129
98-82-8	Isopropylbenzene	25	27.4	110	83-132
99-87-6	p-Isopropyltoluene	25	27.3	109	79-130
79-20-9	Methyl Acetate	125	125	100	65-126
74-83-9	Methyl Bromide	25	23.8	95	59-143
74-87-3	Methyl Chloride	25	22.9	92	50-159

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1536-BS	P41307.D	1	04/25/16	KM	n/a	n/a	VP1536

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

FA33359-3, FA33359-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-87-2	Methylcyclohexane	25	28.6	114	76-129
75-09-2	Methylene Chloride	25	23.9	96	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	124	99	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.7	99	72-117
100-42-5	Styrene	25	25.6	102	78-119
75-85-4	Tert-Amyl Alcohol	250	238	95	65-124
75-65-0	Tert-Butyl Alcohol	250	230	92	63-129
79-34-5	1,1,2,2-Tetrachloroethane	25	23.6	94	72-120
127-18-4	Tetrachloroethylene	25	28.3	113	76-135
109-99-9	Tetrahydrofuran	25	21.8	87	56-122
108-88-3	Toluene	25	25.3	101	80-120
87-61-6	1,2,3-Trichlorobenzene	25	25.7	103	68-131
120-82-1	1,2,4-Trichlorobenzene	25	26.5	106	73-129
71-55-6	1,1,1-Trichloroethane	25	26.4	106	75-130
79-00-5	1,1,2-Trichloroethane	25	25.7	103	76-119
79-01-6	Trichloroethylene	25	26.9	108	81-126
75-69-4	Trichlorofluoromethane	25	25.9	104	71-156
95-63-6	1,2,4-Trimethylbenzene	25	26.1	104	79-120
75-01-4	Vinyl Chloride	25	25.3	101	69-159
	m,p-Xylene	50	52.7	105	79-126
95-47-6	o-Xylene	25	26.3	105	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2642-BS	F0076933.D	1	04/25/16	EP	n/a	n/a	VF2642

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

FA33359-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	268	107	61-152
71-43-2	Benzene	50	53.1	106	76-126
100-44-7	Benzyl Chloride	50	47.8	96	65-126
74-97-5	Bromochloromethane	50	59.1	118	77-120
75-27-4	Bromodichloromethane	50	52.1	104	74-130
75-25-2	Bromoform	50	38.2	76	76-127
78-93-3	2-Butanone (MEK)	250	269	108	75-137
75-15-0	Carbon Disulfide	50	54.2	108	72-122
56-23-5	Carbon Tetrachloride	50	48.6	97	78-133
108-90-7	Chlorobenzene	50	49.3	99	81-129
75-00-3	Chloroethane	50	62.3	125	68-133
67-66-3	Chloroform	50	56.4	113	72-123
110-82-7	Cyclohexane	50	55.8	112	73-126
124-48-1	Dibromochloromethane	50	44.8	90	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	42.9	86	70-137
106-93-4	1,2-Dibromoethane	50	46.5	93	77-126
75-71-8	Dichlorodifluoromethane	50	50.7	101	68-168
95-50-1	1,2-Dichlorobenzene	50	49.2	98	80-129
541-73-1	1,3-Dichlorobenzene	50	48.4	97	81-129
106-46-7	1,4-Dichlorobenzene	50	46.8	94	76-130
75-34-3	1,1-Dichloroethane	50	54.1	108	73-125
107-06-2	1,2-Dichloroethane	50	58.6	117	74-128
75-35-4	1,1-Dichloroethylene	50	52.9	106	81-136
156-59-2	cis-1,2-Dichloroethylene	50	56.9	114	74-126
156-60-5	trans-1,2-Dichloroethylene	50	52.9	106	70-127
78-87-5	1,2-Dichloropropane	50	53.5	107	74-125
10061-01-5	cis-1,3-Dichloropropene	50	55.6	111	80-123
10061-02-6	trans-1,3-Dichloropropene	50	48.4	97	75-131
100-41-4	Ethylbenzene	50	50.8	102	77-123
76-13-1	Freon 113	50	52.5	105	71-129
591-78-6	2-Hexanone	250	231	92	72-133
98-82-8	Isopropylbenzene	50	49.9	100	80-136
99-87-6	p-Isopropyltoluene	50	50.4	101	77-131
79-20-9	Methyl Acetate	250	240	96	67-137
74-83-9	Methyl Bromide	50	50.4	101	65-139
74-87-3	Methyl Chloride	50	52.2	104	71-144

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2642-BS	F0076933.D	1	04/25/16	EP	n/a	n/a	VF2642

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

FA33359-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-87-2	Methylcyclohexane	50	50.1	100	75-128
75-09-2	Methylene Chloride	50	59.1	118	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	221	88	76-132
1634-04-4	Methyl Tert Butyl Ether	50	55.1	110	77-120
100-42-5	Styrene	50	49.1	98	78-125
75-85-4	Tert-Amyl Alcohol	500	516	103	69-130
75-65-0	Tert-Butyl Alcohol	500	551	110	58-136
79-34-5	1,1,2,2-Tetrachloroethane	50	45.6	91	71-126
127-18-4	Tetrachloroethylene	50	43.3	87	79-130
109-99-9	Tetrahydrofuran	50	55.1	110	70-133
108-88-3	Toluene	50	46.9	94	76-124
87-61-6	1,2,3-Trichlorobenzene	50	49.4	99	77-128
120-82-1	1,2,4-Trichlorobenzene	50	49.3	99	78-130
71-55-6	1,1,1-Trichloroethane	50	55.1	110	70-129
79-00-5	1,1,2-Trichloroethane	50	45.7	91	74-124
79-01-6	Trichloroethylene	50	51.4	103	75-128
75-69-4	Trichlorofluoromethane	50	55.0	110	73-145
95-63-6	1,2,4-Trimethylbenzene	50	52.5	105	74-123
75-01-4	Vinyl Chloride	50	52.7	105	76-141
	m,p-Xylene	100	97.3	97	80-128
95-47-6	o-Xylene	50	50.7	101	80-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	75-124%
17060-07-0	1,2-Dichloroethane-D4	109%	72-135%
2037-26-5	Toluene-D8	93%	75-126%
460-00-4	4-Bromofluorobenzene	106%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33385-3MS	F0076949.D	1	04/25/16	EP	n/a	n/a	VF2642
FA33385-3MSD	F0076950.D	1	04/25/16	EP	n/a	n/a	VF2642
FA33385-3 [a]	F0076947.D	1	04/25/16	EP	n/a	n/a	VF2642

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

FA33359-1

CAS No.	Compound	FA33385-3 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	51.9	J	387	387	87	384	331	73	16	61-152/27
71-43-2	Benzene	ND		77.4	76.8	99	76.9	67.5	88	13	76-126/26
100-44-7	Benzyl Chloride	ND		77.4	56.2	73	76.9	49.9	65	12	65-126/31
74-97-5	Bromochloromethane	ND		77.4	85.9	111	76.9	72.6	94	17	77-120/24
75-27-4	Bromodichloromethane	ND		77.4	75.4	97	76.9	68.6	89	9	74-130/25
75-25-2	Bromoform	ND		77.4	51.9	67*	76.9	49.1	64*	6	76-127/26
78-93-3	2-Butanone (MEK)	ND		387	351	91	384	289	75	19	75-137/25
75-15-0	Carbon Disulfide	ND		77.4	77.3	100	76.9	66.6	87	15	72-122/29
56-23-5	Carbon Tetrachloride	ND		77.4	68.9	89	76.9	62.1	81	10	78-133/29
108-90-7	Chlorobenzene	ND		77.4	74.6	96	76.9	66.5	87	11	81-129/29
75-00-3	Chloroethane	ND		77.4	79.7	103	76.9	62.1	81	25	68-133/29
67-66-3	Chloroform	ND		77.4	84.0	108	76.9	69.6	91	19	72-123/26
110-82-7	Cyclohexane	ND		77.4	72.7	94	76.9	61.6	80	17	73-126/32
124-48-1	Dibromochloromethane	ND		77.4	64.0	83	76.9	58.3	76	9	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	ND		77.4	59.6	77	76.9	52.5	68*	13	70-137/29
106-93-4	1,2-Dibromoethane	ND		77.4	69.2	89	76.9	62.2	81	11	77-126/26
75-71-8	Dichlorodifluoromethane	ND		77.4	71.6	92	76.9	62.0	81	14	68-168/29
95-50-1	1,2-Dichlorobenzene	ND		77.4	75.2	97	76.9	65.6	85	14	80-129/32
541-73-1	1,3-Dichlorobenzene	ND		77.4	77.5	100	76.9	68.1	89	13	81-129/33
106-46-7	1,4-Dichlorobenzene	ND		77.4	77.1	100	76.9	66.5	87	15	76-130/32
75-34-3	1,1-Dichloroethane	ND		77.4	79.4	103	76.9	67.5	88	16	73-125/27
107-06-2	1,2-Dichloroethane	ND		77.4	86.2	111	76.9	70.6	92	20	74-128/23
75-35-4	1,1-Dichloroethylene	ND		77.4	77.8	100	76.9	66.5	87	16	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND		77.4	83.2	107	76.9	70.1	91	17	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND		77.4	81.4	105	76.9	69.5	90	16	70-127/27
78-87-5	1,2-Dichloropropane	ND		77.4	78.1	101	76.9	68.0	88	14	74-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		77.4	78.9	102	76.9	66.3	86	17	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND		77.4	74.5	96	76.9	68.0	88	9	75-131/28
100-41-4	Ethylbenzene	ND		77.4	75.6	98	76.9	67.0	87	12	77-123/31
76-13-1	Freon 113	ND		77.4	73.6	95	76.9	64.8	84	13	71-129/30
591-78-6	2-Hexanone	ND		387	324	84	384	292	76	10	72-133/26
98-82-8	Isopropylbenzene	ND		77.4	75.0	97	76.9	67.5	88	11	80-136/32
99-87-6	p-Isopropyltoluene	ND		77.4	76.9	99	76.9	65.6	85	16	77-131/34
79-20-9	Methyl Acetate	ND		387	479	124	384	367	95	26	67-137/30
74-83-9	Methyl Bromide	ND		77.4	74.7	96	76.9	72.3	94	3	65-139/31
74-87-3	Methyl Chloride	ND		77.4	70.9	92	76.9	62.5	81	13	71-144/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA33385-3MS	F0076949.D	1	04/25/16	EP	n/a	n/a	VF2642
FA33385-3MSD	F0076950.D	1	04/25/16	EP	n/a	n/a	VF2642
FA33385-3 [a]	F0076947.D	1	04/25/16	EP	n/a	n/a	VF2642

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

FA33359-1

CAS No.	Compound	FA33385-3 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		77.4	69.6	90	76.9	63.9	83	9	75-128/31
75-09-2	Methylene Chloride	ND		77.4	91.6	118	76.9	80.9	105	12	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		387	336	87	384	296	77	13	76-132/26
1634-04-4	Methyl Tert Butyl Ether	ND		77.4	84.2	109	76.9	71.7	93	16	77-120/24
100-42-5	Styrene	ND		77.4	72.0	93	76.9	65.6	85	9	78-125/30
75-85-4	Tert-Amyl Alcohol	ND		774	734	95	769	665	87	10	69-130/32
75-65-0	Tert-Butyl Alcohol	ND		774	794	103	769	688	89	14	74-126/32
79-34-5	1,1,2,2-Tetrachloroethane	ND		77.4	65.1	84	76.9	57.7	75	12	71-126/30
127-18-4	Tetrachloroethylene	ND		77.4	72.9	94	76.9	65.1	85	11	79-130/31
109-99-9	Tetrahydrofuran	ND		77.4	80.8	104	76.9	68.3	89	17	70-133/26
108-88-3	Toluene	ND		77.4	69.5	90	76.9	62.7	82	10	76-124/30
87-61-6	1,2,3-Trichlorobenzene	ND		77.4	73.0	94	76.9	62.2	81	16	77-128/35
120-82-1	1,2,4-Trichlorobenzene	ND		77.4	80.2	104	76.9	67.9	88	17	78-130/34
71-55-6	1,1,1-Trichloroethane	ND		77.4	80.4	104	76.9	67.6	88	17	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		77.4	68.6	89	76.9	61.6	80	11	74-124/28
79-01-6	Trichloroethylene	ND		77.4	80.5	104	76.9	70.3	91	14	75-128/27
75-69-4	Trichlorofluoromethane	ND		77.4	78.8	102	76.9	66.8	87	16	73-145/31
95-63-6	1,2,4-Trimethylbenzene	ND		77.4	78.7	102	76.9	68.4	89	14	74-123/34
75-01-4	Vinyl Chloride	ND		77.4	72.9	94	76.9	63.6	83	14	76-141/27
	m,p-Xylene	ND		155	148	96	154	134	87	10	80-128/30
95-47-6	o-Xylene	ND		77.4	75.6	98	76.9	67.3	88	12	80-132/30

CAS No.	Surrogate Recoveries	MS	MSD	FA33385-3	Limits
1868-53-7	Dibromofluoromethane	114%	106%	103%	75-124%
17060-07-0	1,2-Dichloroethane-D4	110%	101%	116%	72-135%
2037-26-5	Toluene-D8	93%	93%	95%	75-126%
460-00-4	4-Bromofluorobenzene	104%	101%	110%	71-133%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC45432-3MS	P41331.D	1	04/25/16	KM	n/a	n/a	VP1536
MC45432-3MSD	P41332.D	1	04/25/16	KM	n/a	n/a	VP1536
MC45432-3	P41313.D	1	04/25/16	KM	n/a	n/a	VP1536

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

FA33359-3, FA33359-4

CAS No.	Compound	MC45432-3 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	25 U		125	143	114	125	151	121	5	50-147/21
71-43-2	Benzene	1.0 U		25	28.0	112	25	27.6	110	1	81-122/14
100-44-7	Benzyl Chloride	2.0 U		25	24.6	98	25	24.4	98	1	54-122/18
74-97-5	Bromochloromethane	1.0 U		25	27.7	111	25	26.5	106	4	76-123/14
75-27-4	Bromodichloromethane	1.0 U		25	27.8	111	25	25.6	102	8	79-123/19
75-25-2	Bromoform	1.0 U		25	24.3	97	25	21.9	88	10	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U		125	162	130	125	164	131	1	56-143/18
75-15-0	Carbon Disulfide	2.0 U		25	26.6	106	25	24.4	98	9	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U		25	28.1	112	25	25.4	102	10	76-136/23
108-90-7	Chlorobenzene	1.0 U		25	26.6	106	25	26.4	106	1	82-124/14
75-00-3	Chloroethane	2.0 U		25	28.6	114	25	27.5	110	4	62-144/20
67-66-3	Chloroform	1.0 U		25	28.2	113	25	27.3	109	3	80-124/15
110-82-7	Cyclohexane	1.0 U		25	30.2	121	25	28.9	116	4	73-138/18
124-48-1	Dibromochloromethane	1.0 U		25	27.1	108	25	24.5	98	10	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U		25	31.8	127* [a]	25	30.9	124* [a]	3	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U		25	31.0	124* [b]	25	30.1	120	3	75-120/13
75-71-8	Dichlorodifluoromethane	2.0 U		25	30.9	124	25	30.2	121	2	42-167/19
95-50-1	1,2-Dichlorobenzene	1.0 U		25	27.4	110	25	27.2	109	1	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U		25	27.4	110	25	27.1	108	1	84-125/14
106-46-7	1,4-Dichlorobenzene	1.0 U		25	26.9	108	25	26.3	105	2	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U		25	29.2	117	25	28.6	114	2	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U		25	27.8	111	25	27.3	109	2	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U		25	29.4	118	25	28.5	114	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U		25	27.0	108	25	26.0	104	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		25	31.1	124	25	29.6	118	5	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U		25	27.8	111	25	27.0	108	3	76-124/14
10061-01-5	cis-1,3-Dichloropropene	1.0 U		25	22.8	91	25	20.9	84	9	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U		25	24.6	98	25	22.0	88	11	80-120/22
100-41-4	Ethylbenzene	1.0 U		25	27.7	111	25	27.5	110	1	81-121/14
76-13-1	Freon 113	1.0 U		25	30.1	120	25	29.2	117	3	72-134/20
591-78-6	2-Hexanone	10 U		125	203	162* [b]	125	205	164* [b]	1	61-129/18
98-82-8	Isopropylbenzene	1.0 U		25	29.0	116	25	28.3	113	2	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U		25	27.3	109	25	27.1	108	1	79-130/16
79-20-9	Methyl Acetate	20 U		125	151	121	125	151	121	0	65-126/18
74-83-9	Methyl Bromide	2.0 U		25	23.6	94	25	22.4	90	5	59-143/19
74-87-3	Methyl Chloride	2.0 U		25	26.2	105	25	27.9	112	6	50-159/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC45432-3MS	P41331.D	1	04/25/16	KM	n/a	n/a	VP1536
MC45432-3MSD	P41332.D	1	04/25/16	KM	n/a	n/a	VP1536
MC45432-3	P41313.D	1	04/25/16	KM	n/a	n/a	VP1536

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

FA33359-3, FA33359-4

CAS No.	Compound	MC45432-3 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	1.0	U	25	29.9	120	25	28.7	115	4	76-129/17
75-09-2	Methylene Chloride	5.0	U	25	28.0	112	25	26.7	107	5	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	125	191	153* [b]	125	195	156* [b]	2	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0	U	25	29.9	120* [a]	25	29.4	118* [a]	2	72-117/14
100-42-5	Styrene	1.0	U	25	19.1	76* [b]	25	7.0	28* [b]	93* [b]	78-119/23
75-85-4	Tert-Amyl Alcohol	20	U	250	282	113	250	305	122 [b]	8	65-124/23
75-65-0	Tert-Butyl Alcohol	20	U	250	238	95	250	246	98	3	63-129/27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	25	30.1	120	25	30.3	121* [a]	1	72-120/14
127-18-4	Tetrachloroethylene	1.0	U	25	28.4	114	25	27.9	112	2	76-135/16
109-99-9	Tetrahydrofuran	5.0	U	25	30.7	123* [a]	25	32.7	131* [a]	6	56-122/21
108-88-3	Toluene	1.0	U	25	27.1	108	25	26.7	107	1	80-120/14
87-61-6	1,2,3-Trichlorobenzene	2.0	U	25	26.7	107	25	28.4	114	6	68-131/25
120-82-1	1,2,4-Trichlorobenzene	2.0	U	25	26.3	105	25	27.3	109	4	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0	U	25	28.1	112	25	27.4	110	3	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0	U	25	28.9	116	25	29.2	117	1	76-119/14
79-01-6	Trichloroethylene	1.0	U	25	28.3	113	25	27.9	112	1	81-126/15
75-69-4	Trichlorofluoromethane	2.0	U	25	26.7	107	25	25.9	104	3	71-156/21
95-63-6	1,2,4-Trimethylbenzene	1.0	U	25	26.4	106	25	23.1	92	13	79-120/18
75-01-4	Vinyl Chloride	1.0	U	25	28.3	113	25	27.5	110	3	69-159/18
	m,p-Xylene	2.0	U	50	56.1	112	50	54.8	110	2	79-126/15
95-47-6	o-Xylene	1.0	U	25	28.5	114	25	27.6	110	3	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	MC45432-3	Limits
1868-53-7	Dibromofluoromethane	99%	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	102%	79-125%
2037-26-5	Toluene-D8	99%	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	102%	98%	83-118%

(a) Outside control limits.
(b) Outside DOD QSM control limits.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VF2628-BFB
Lab File ID: F0076704.D
Instrument ID: GCMSF
Injection Date: 04/13/16
Injection Time: 09:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	47811	19.3		Pass
75	30.0 - 60.0% of mass 95	121419	49.1		Pass
95	Base peak, 100% relative abundance	247424	100.0		Pass
96	5.0 - 9.0% of mass 95	18311	7.40		Pass
173	Less than 2.0% of mass 174	1269	0.51	(0.70) [a]	Pass
174	50.0 - 100.0% of mass 95	181739	73.5		Pass
175	5.0 - 9.0% of mass 174	12488	5.05	(6.87) [a]	Pass
176	95.0 - 101.0% of mass 174	176021	71.1	(96.9) [a]	Pass
177	5.0 - 9.0% of mass 176	10606	4.29	(6.03) [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
VF2628-IC2628	F0076705.D	04/13/16	09:29	00:26	Initial cal 1
VF2628-IC2628	F0076706.D	04/13/16	09:55	00:52	Initial cal 2
VF2628-IC2628	F0076707.D	04/13/16	10:21	01:18	Initial cal 3
VF2628-ICC2628	F0076708.D	04/13/16	10:46	01:43	Initial cal 4
VF2628-IC2628	F0076709.D	04/13/16	11:12	02:09	Initial cal 5
VF2628-IC2628	F0076710.D	04/13/16	11:38	02:35	Initial cal 6
VF2628-IC2628	F0076711.D	04/13/16	12:03	03:00	Initial cal 7
VF2628-ICV2628	F0076714.D	04/13/16	13:21	04:18	Initial cal verification 4
VF2628-BS	F0076714.D	04/13/16	13:21	04:18	Blank Spike
VF2628-MB	F0076715.D	04/13/16	13:46	04:43	Method Blank
ZZZZZZ	F0076716.D	04/13/16	14:19	05:16	(unrelated sample)
ZZZZZZ	F0076717.D	04/13/16	14:45	05:42	(unrelated sample)
ZZZZZZ	F0076718.D	04/13/16	15:10	06:07	(unrelated sample)
ZZZZZZ	F0076719.D	04/13/16	15:36	06:33	(unrelated sample)
FA33056-5	F0076720.D	04/13/16	16:02	06:59	(used for QC only; not part of job FA33359)
FA33056-5MS	F0076721.D	04/13/16	16:28	07:25	Matrix Spike
FA33056-5MSD	F0076722.D	04/13/16	16:53	07:50	Matrix Spike Duplicate
ZZZZZZ	F0076723.D	04/13/16	17:19	08:16	(unrelated sample)
ZZZZZZ	F0076724.D	04/13/16	17:45	08:42	(unrelated sample)
ZZZZZZ	F0076726.D	04/13/16	18:36	09:33	(unrelated sample)
VF2628-ECC2628	F0076728.D	04/13/16	19:28	10:25	Ending cal 4

Instrument Performance Check (BFB)

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VF2639-BFB
Lab File ID: F0076896.D
Instrument ID: GCMSF
Injection Date: 04/23/16
Injection Time: 09:42

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	41440	18.9		Pass
75	30.0 - 60.0% of mass 95	107931	49.2		Pass
95	Base peak, 100% relative abundance	219584	100.0		Pass
96	5.0 - 9.0% of mass 95	15774	7.18		Pass
173	Less than 2.0% of mass 174	824	0.38	(0.50) [a]	Pass
174	50.0 - 100.0% of mass 95	165461	75.4		Pass
175	5.0 - 9.0% of mass 174	12226	5.57	(7.39) [a]	Pass
176	95.0 - 101.0% of mass 174	161109	73.4	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	9781	4.45	(6.07) [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
VF2639-CC2628	F0076897.D	04/23/16	10:08	00:26	Continuing cal 4
VF2640-BS	F0076898.D	04/23/16	10:33	00:51	Blank Spike
VF2639-BS	F0076898.D	04/23/16	10:33	00:51	Blank Spike
VF2639-MB	F0076899.D	04/23/16	10:59	01:17	Method Blank
VF2640-MB	F0076899.D	04/23/16	10:59	01:17	Method Blank
ZZZZZZ	F0076900.D	04/23/16	11:25	01:43	(unrelated sample)
FA33320-5	F0076901.D	04/23/16	11:51	02:09	(used for QC only; not part of job FA33359)
FA33320-5MS	F0076902.D	04/23/16	12:16	02:34	Matrix Spike
FA33320-5MSD	F0076903.D	04/23/16	12:42	03:00	Matrix Spike Duplicate
ZZZZZZ	F0076904.D	04/23/16	13:07	03:25	(unrelated sample)
ZZZZZZ	F0076906.D	04/23/16	13:59	04:17	(unrelated sample)
ZZZZZZ	F0076907.D	04/23/16	14:25	04:43	(unrelated sample)
ZZZZZZ	F0076910.D	04/23/16	15:42	06:00	(unrelated sample)
ZZZZZZ	F0076912.D	04/23/16	16:33	06:51	(unrelated sample)
ZZZZZZ	F0076914.D	04/23/16	17:25	07:43	(unrelated sample)
ZZZZZZ	F0076915.D	04/23/16	17:51	08:09	(unrelated sample)
ZZZZZZ	F0076916.D	04/23/16	18:16	08:34	(unrelated sample)
FA33320-5	F0076917.D	04/23/16	18:42	09:00	(used for QC only; not part of job FA33359)
ZZZZZZ	F0076918.D	04/23/16	19:08	09:26	(unrelated sample)
FA33359-2	F0076920.D	04/23/16	19:59	10:17	5-40S (10.5-11.5)
ZZZZZZ	F0076921.D	04/23/16	20:25	10:43	(unrelated sample)
ZZZZZZ	F0076922.D	04/23/16	20:51	11:09	(unrelated sample)
ZZZZZZ	F0076923.D	04/23/16	21:16	11:34	(unrelated sample)
VF2639-ECC2628	F0076924.D	04/23/16	21:42	12:00	Ending cal 4

Instrument Performance Check (BFB)

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VF2641-BFB
Lab File ID: F0076930.D
Instrument ID: GCMSF
Injection Date: 04/25/16
Injection Time: 09:09

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	47477	18.1		Pass
75	30.0 - 60.0% of mass 95	130995	49.9		Pass
95	Base peak, 100% relative abundance	262528	100.0		Pass
96	5.0 - 9.0% of mass 95	19029	7.25		Pass
173	Less than 2.0% of mass 174	1106	0.42	(0.55) [a]	Pass
174	50.0 - 100.0% of mass 95	199488	76.0		Pass
175	5.0 - 9.0% of mass 174	14603	5.56	(7.32) [a]	Pass
176	95.0 - 101.0% of mass 174	191211	72.8	(95.9) [a]	Pass
177	5.0 - 9.0% of mass 176	12983	4.95	(6.79) [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
VF2641-CC2628	F0076931.D	04/25/16	09:34	00:25	Continuing cal 4
VF2641-MB	F0076932.D	04/25/16	10:00	00:51	Method Blank
VF2642-MB	F0076932.D	04/25/16	10:00	00:51	Method Blank
VF2642-BS	F0076933.D	04/25/16	10:26	01:17	Blank Spike
VF2641-BS	F0076933.D	04/25/16	10:26	01:17	Blank Spike
FA33359-1	F0076934.D	04/25/16	10:52	01:43	RA17 (17-18)
ZZZZZZ	F0076935.D	04/25/16	11:17	02:08	(unrelated sample)
FA33349-4	F0076936.D	04/25/16	11:43	02:34	(used for QC only; not part of job FA33359)
ZZZZZZ	F0076937.D	04/25/16	12:09	03:00	(unrelated sample)
ZZZZZZ	F0076938.D	04/25/16	12:35	03:26	(unrelated sample)
ZZZZZZ	F0076940.D	04/25/16	13:26	04:17	(unrelated sample)
ZZZZZZ	F0076941.D	04/25/16	13:52	04:43	(unrelated sample)
ZZZZZZ	F0076943.D	04/25/16	14:43	05:34	(unrelated sample)
ZZZZZZ	F0076945.D	04/25/16	15:35	06:26	(unrelated sample)
ZZZZZZ	F0076946.D	04/25/16	16:01	06:52	(unrelated sample)
FA33385-3	F0076947.D	04/25/16	16:26	07:17	(used for QC only; not part of job FA33359)
ZZZZZZ	F0076948.D	04/25/16	16:52	07:43	(unrelated sample)
FA33385-3MS	F0076949.D	04/25/16	17:17	08:08	Matrix Spike
FA33385-3MSD	F0076950.D	04/25/16	17:43	08:34	Matrix Spike Duplicate
FA33349-4MS	F0076951.D	04/25/16	18:09	09:00	Matrix Spike
FA33349-4MSD	F0076952.D	04/25/16	18:34	09:25	Matrix Spike Duplicate
ZZZZZZ	F0076953.D	04/25/16	19:00	09:51	(unrelated sample)
ZZZZZZ	F0076954.D	04/25/16	19:26	10:17	(unrelated sample)
VF2641-ECC2628	F0076955.D	04/25/16	19:52	10:43	Ending cal 4

Instrument Performance Check (BFB)

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VP1531-BFB
Lab File ID: P41202.D
Instrument ID: GCMSP
Injection Date: 04/21/16
Injection Time: 10:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	26736	23.9		Pass
75	30.0 - 60.0% of mass 95	62792	56.1		Pass
95	Base peak, 100% relative abundance	112010	100.0		Pass
96	5.0 - 9.0% of mass 95	7361	6.57		Pass
173	Less than 2.0% of mass 174	1381	1.23	(1.59) [a]	Pass
174	50.0 - 100.0% of mass 95	86997	77.7		Pass
175	5.0 - 9.0% of mass 174	7172	6.40	(8.24) [a]	Pass
176	95.0 - 101.0% of mass 174	84648	75.6	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	5493	4.90	(6.49) [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
VP1531-IC1531	P41204.D	04/21/16	11:03	00:52	Initial cal 2
VP1531-IC1531	P41205.D	04/21/16	11:28	01:17	Initial cal 3
VP1531-IC1531	P41206.D	04/21/16	11:53	01:42	Initial cal 4
VP1531-ICC1531	P41207.D	04/21/16	12:19	02:08	Initial cal 5
VP1531-IC1531	P41208.D	04/21/16	12:44	02:33	Initial cal 6
VP1531-IC1531	P41209.D	04/21/16	13:09	02:58	Initial cal 7
VP1531-IC1531	P41211.D	04/21/16	14:03	03:52	Initial cal 1
VP1531-ICV1531	P41212.D	04/21/16	14:43	04:32	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VP1535-BFB
Lab File ID: P41305.D
Instrument ID: GCMSP
Injection Date: 04/25/16
Injection Time: 07:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	30730	22.3		Pass
75	30.0 - 60.0% of mass 95	74157	53.8		Pass
95	Base peak, 100% relative abundance	137714	100.0		Pass
96	5.0 - 9.0% of mass 95	9490	6.89		Pass
173	Less than 2.0% of mass 174	1674	1.22	(1.61) [a]	Pass
174	50.0 - 100.0% of mass 95	104013	75.5		Pass
175	5.0 - 9.0% of mass 174	8371	6.08	(8.05) [a]	Pass
176	95.0 - 101.0% of mass 174	99165	72.0	(95.3) [a]	Pass
177	5.0 - 9.0% of mass 176	6307	4.58	(6.36) [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
VP1535-CC1531	P41306.D	04/25/16	08:19	00:31	Continuing cal 5
VP1536-BS	P41307.D	04/25/16	08:49	01:01	Blank Spike
VP1535-BS	P41307.D	04/25/16	08:49	01:01	Blank Spike
VP1535-MB	P41308.D	04/25/16	09:24	01:36	Method Blank
VP1536-MB	P41308.D	04/25/16	09:24	01:36	Method Blank
FA33359-3	P41309.D	04/25/16	10:11	02:23	BPEB-6
FA33359-4	P41310.D	04/25/16	10:36	02:48	TB042216
ZZZZZZ	P41311.D	04/25/16	11:01	03:13	(unrelated sample)
ZZZZZZ	P41312.D	04/25/16	11:27	03:39	(unrelated sample)
MC45432-3	P41313.D	04/25/16	11:52	04:04	(used for QC only; not part of job FA33359)
ZZZZZZ	P41314.D	04/25/16	12:18	04:30	(unrelated sample)
FA33182-2	P41315.D	04/25/16	12:44	04:56	(used for QC only; not part of job FA33359)
ZZZZZZ	P41316.D	04/25/16	13:09	05:21	(unrelated sample)
ZZZZZZ	P41317.D	04/25/16	13:34	05:46	(unrelated sample)
ZZZZZZ	P41318.D	04/25/16	13:59	06:11	(unrelated sample)
ZZZZZZ	P41319.D	04/25/16	14:25	06:37	(unrelated sample)
ZZZZZZ	P41320.D	04/25/16	14:50	07:02	(unrelated sample)
ZZZZZZ	P41321.D	04/25/16	15:15	07:27	(unrelated sample)
ZZZZZZ	P41322.D	04/25/16	15:40	07:52	(unrelated sample)
ZZZZZZ	P41323.D	04/25/16	16:05	08:17	(unrelated sample)
ZZZZZZ	P41324.D	04/25/16	16:30	08:42	(unrelated sample)
ZZZZZZ	P41325.D	04/25/16	16:55	09:07	(unrelated sample)
ZZZZZZ	P41326.D	04/25/16	17:21	09:33	(unrelated sample)
ZZZZZZ	P41327.D	04/25/16	17:46	09:58	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VP1535-BFB
Lab File ID: P41305.D
Instrument ID: GCMSP
Injection Date: 04/25/16
Injection Time: 07:48

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P41328.D	04/25/16	18:11	10:23	(unrelated sample)
FA33182-2MS	P41329.D	04/25/16	18:36	10:48	Matrix Spike
FA33182-2MSD	P41330.D	04/25/16	19:01	11:13	Matrix Spike Duplicate
MC45432-3MS	P41331.D	04/25/16	19:27	11:39	Matrix Spike
MC45432-3MSD	P41332.D	04/25/16	19:51	12:03	Matrix Spike Duplicate
VP1535-ECC1531	P41333.D	04/25/16	20:16	12:28	Ending cal 5

Volatile Internal Standard Area Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VF2639-CC2628	**Injection Date:**	04/23/16
Lab File ID:	F0076897.D	**Injection Time:**	10:08
Instrument ID:	GCMSF	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	1179452	7.39	865084	10.51	376413	12.87	142911	4.98
Check Std [b]	902977	7.39	723665	10.51	358563	12.87	118296	4.97
Upper Limit [c]	1805954	7.89	1447330	11.01	717126	13.37	236592	5.47
Lower Limit [d]	451489	6.89	361833	10.01	179282	12.37	59148	4.47

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VF2639-BS	945830	7.39	713149	10.51	356072	12.87	103038	4.96
VF2640-BS [e]	945830	7.39	713149	10.51	356072	12.87	103038	4.96
VF2639-MB	905963	7.39	635596	10.51	298531	12.87	111883	4.98
VF2640-MB	905963	7.39	635596	10.51	298531	12.87	111883	4.98
ZZZZZZ	944640	7.39	701731	10.51	374775	12.87	140344	4.97
FA33320-5	908264	7.39	730338	10.51	403071	12.87	114211	5.00
FA33320-5MS	872000	7.39	688884	10.51	384372	12.87	102310	5.09
FA33320-5MSD	926566	7.39	692385	10.51	390468	12.87	107854	5.07
ZZZZZZ	919365	7.39	748459	10.51	429983	12.87	117694	4.99
ZZZZZZ	1031544	7.39	804650	10.51	400390	12.88	117370	5.09
ZZZZZZ	919396	7.39	716678	10.51	393461	12.87	122483	5.10
ZZZZZZ	905637	7.39	677844	10.51	385445	12.87	106688	5.09
ZZZZZZ	856052	7.39	648072	10.51	317303	12.87	108762	4.96
ZZZZZZ	852279	7.39	656338	10.51	320648	12.87	108426	4.97
ZZZZZZ	846516	7.39	624001	10.51	271445	12.87	109593	4.96
ZZZZZZ	833587	7.39	641374	10.51	312993	12.87	107114	4.96
FA33320-5	896602	7.39	607004	10.51	305711	12.87	95549	5.08
ZZZZZZ	860691	7.39	660749	10.51	316765	12.87	120018	5.00
FA33359-2	821013	7.39	648914	10.51	321753	12.87	128903	4.96
ZZZZZZ	836092	7.39	647876	10.51	325361	12.87	178692	4.96
ZZZZZZ	798412	7.39	573452	10.51	230131	12.87	63928	4.97
ZZZZZZ	825040	7.39	633640	10.51	301446	12.87	106935	4.98
VF2639-ECC2628	820755	7.39	640315	10.51	315928	12.87	84173	4.96

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

(a) Initial Cal is: VF2628-ICC2628 F0076708.D 04/13/16 10:46
(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 Internal Standard Area Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VF2639-CC2628	**Injection Date:**	04/23/16
Lab File ID:	F0076897.D	**Injection Time:**	10:08
Instrument ID:	GCMSF	**Method:**	SW846 8260C

Lab	**IS 1**		**IS 2**		**IS 3**		**IS 4**	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(e) No MS/MSD available for this run.

Volatile Internal Standard Area Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VF2641-CC2628	**Injection Date:**	04/25/16
Lab File ID:	F0076931.D	**Injection Time:**	09:34
Instrument ID:	GCMSF	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	1179452	7.39	865084	10.51	376413	12.87	142911	4.98
Check Std [b]	1091485	7.39	856746	10.51	428209	12.87	136003	4.97
Upper Limit [c]	2182970	7.89	1713492	11.01	856418	13.37	272006	5.47
Lower Limit [d]	545743	6.89	428373	10.01	214105	12.37	68002	4.47

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VF2642-MB	1113937	7.39	745738	10.51	332950	12.87	170593	5.10
VF2641-MB	1113937	7.39	745738	10.51	332950	12.87	170593	5.10
VF2641-BS	1023797	7.39	821485	10.51	391238	12.87	122739	4.96
VF2642-BS	1023797	7.39	821485	10.51	391238	12.87	122739	4.96
FA33359-1	910266	7.39	679924	10.51	306128	12.87	122286	4.96
ZZZZZZ	1010233	7.39	812123	10.51	397482	12.87	84860	4.96
FA33349-4	1023295	7.39	773988	10.51	366451	12.87	94533	4.97
ZZZZZZ	1021940	7.39	817646	10.51	428809	12.87	107655	4.97
ZZZZZZ	1088306	7.39	884775	10.51	443303	12.87	106406	4.96
ZZZZZZ	1134443	7.39	915775	10.51	461283	12.87	151661	4.96
ZZZZZZ	1142206	7.39	888267	10.51	439097	12.87	167876	4.96
ZZZZZZ	1094058	7.39	869083	10.51	457499	12.87	153472	4.98
ZZZZZZ	1220995	7.39	867010	10.51	422035	12.87	161773	4.96
ZZZZZZ	1187966	7.39	809808	10.51	399914	12.87	151123	4.96
FA33385-3	1020635	7.39	783095	10.51	368166	12.87	125625	4.96
ZZZZZZ	1200844	7.39	828436	10.51	396725	12.87	136813	4.96
FA33385-3MS	1040145	7.39	820855	10.51	403077	12.87	128987	4.97
FA33385-3MSD	1155045	7.39	838642	10.51	418635	12.87	140812	4.97
FA33349-4MS	1033427	7.39	823173	10.51	393239	12.87	118444	4.97
FA33349-4MSD	1043682	7.39	827765	10.51	402804	12.87	128876	4.97
ZZZZZZ	1003520	7.39	764480	10.51	367287	12.87	91354	4.96
ZZZZZZ	984373	7.39	818821	10.51	453602	12.87	105171	4.96
VF2641-ECC2628	1087975	7.39	866928	10.51	436019	12.87	139445	4.97

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

(a) Initial Cal is: VF2628-ICC2628 F0076708.D 04/13/16 10:46
(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 Internal Standard Area Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VP1535-CC1531	**Injection Date:**	04/25/16
Lab File ID:	P41306.D	**Injection Time:**	08:19
Instrument ID:	GCMSP	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	547729	7.15	415357	10.24	202691	12.60	53901	4.80
Check Std [b]	619913	7.15	469408	10.24	228511	12.60	55965	4.80
Upper Limit [c]	1239826	7.65	938816	10.74	457022	13.10	111930	5.30
Lower Limit [d]	309957	6.65	234704	9.74	114256	12.10	27983	4.30

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VP1535-BS	631386	7.15	471959	10.24	227673	12.60	59883	4.80
VP1536-BS	631386	7.15	471959	10.24	227673	12.60	59883	4.80
VP1536-MB	591187	7.15	429875	10.24	211470	12.60	54189	4.80
VP1535-MB	591187	7.15	429875	10.24	211470	12.60	54189	4.80
FA33359-3	599897	7.14	435514	10.24	203751	12.60	40701	4.80
FA33359-4	577191	7.15	414553	10.24	197109	12.60	42168	4.79
ZZZZZZ	558610	7.15	402983	10.24	191436	12.60	69983	4.79
ZZZZZZ	566416	7.15	410650	10.24	189432	12.60	71119	4.79
MC45432-3	527426	7.14	383646	10.24	188505	12.60	67125	4.79
ZZZZZZ	551630	7.14	403123	10.24	185602	12.60	44707	4.80
FA33182-2	528029	7.15	383582	10.24	180572	12.60	44358	4.79
ZZZZZZ	527525	7.15	387053	10.24	184358	12.60	45088	4.80
ZZZZZZ	524260	7.15	379921	10.24	178048	12.60	48820	4.80
ZZZZZZ	517292	7.15	372581	10.24	174388	12.60	46836	4.79
ZZZZZZ	530485	7.15	378537	10.24	172744	12.60	47515	4.79
ZZZZZZ	530742	7.15	380998	10.24	174005	12.60	49198	4.79
ZZZZZZ	523720	7.15	373740	10.24	171855	12.60	53199	4.79
ZZZZZZ	504475	7.15	367940	10.24	171745	12.60	51959	4.79
ZZZZZZ	519019	7.15	368915	10.24	173444	12.60	53232	4.80
ZZZZZZ	490475	7.14	356301	10.24	168329	12.60	50349	4.79
ZZZZZZ	536921	7.15	393423	10.24	188362	12.60	57261	4.79
ZZZZZZ	522003	7.14	378270	10.24	183444	12.60	51524	4.79
ZZZZZZ	546363	7.15	389302	10.24	179245	12.60	54314	4.80
ZZZZZZ	528951	7.15	380157	10.24	178149	12.60	53890	4.80
FA33182-2MS	548346	7.14	405990	10.24	196205	12.60	55930	4.79
FA33182-2MSD	572728	7.14	416078	10.24	201818	12.60	61210	4.79
MC45432-3MS	553772	7.15	409340	10.24	198287	12.60	83654	4.80
MC45432-3MSD	568132	7.14	420108	10.24	202165	12.60	83872	4.80
VP1535-ECC1531	592314	7.15	436627	10.24	210617	12.60	55959	4.80

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

Volatile Internal Standard Area Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VP1535-CC1531	**Injection Date:**	04/25/16
Lab File ID:	P41306.D	**Injection Time:**	08:19
Instrument ID:	GCMSP	**Method:**	SW846 8260C

Lab	IS 1		IS 2		IS 3		IS 4	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

IS 4 = Tert Butyl Alcohol-D10

(a) Initial Cal is: VP1531-ICC1531 P41207.D 04/21/16 12:19
(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: FA33359
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
FA33359-3	P41309.D	99	94	100	100
FA33359-4	P41310.D	98	95	102	100
MC45432-3MS	P41331.D	99	103	99	101
MC45432-3MSD	P41332.D	101	102	99	102
VP1536-BS	P41307.D	101	96	99	98
VP1536-MB	P41308.D	100	97	100	96

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: FA33359
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
FA33359-1	F0076934.D	104	122	98	112
FA33359-2	F0076920.D	102	119	95	107
FA33385-3MS	F0076949.D	114	110	93	104
FA33385-3MSD	F0076950.D	106	101	93	101
VF2640-BS	F0076898.D	98	103	96	108
VF2640-MB	F0076899.D	99	102	99	109
VF2642-BS	F0076933.D	103	109	93	106
VF2642-MB	F0076932.D	102	105	99	110

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: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR
Sample: VF2628-ICC2628
Lab FileID: F0076708.D

Response Factor Report MSVOA9

Method : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Apr 14 09:35:01 2016
Response via : Initial Calibration

Calibration Files
1 =F0076705.D 2 =F0076706.D 3 =F0076707.D 4 =F0076708.D
5 =F0076709.D 6 =F0076710.D 7 =F0076711.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.422	0.447	0.426	0.424	0.452	0.461	0.435	0.438	3.49
3)P Chloromethane	0.475	0.490	0.485	0.464	0.480	0.484	0.460	0.477	2.34
4)C Vinyl Chloride	0.490	0.497	0.469	0.469	0.504	0.496	0.460	0.484	3.51
5) Bromomethane	0.286	0.284	0.263	0.261	0.221	0.238	0.210	0.252	11.85
6) Chloroethane	0.250	0.236	0.230	0.167	0.135	0.105		0.187	32.10
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9972									
Response Ratio = 0.00000 + 0.20574 *A + -0.03390 *A^2									
7) Trichlorofluorome	0.450	0.435	0.430	0.430	0.446	0.445	0.404	0.434	3.52
8) Ethyl Ether	0.199	0.200	0.201	0.205	0.204	0.211	0.199	0.203	2.08
9) 1,2-Dichlorotrifl	0.416	0.433	0.395	0.396	0.412	0.406	0.374	0.405	4.65
10)C 1,1-Dichloroethen	0.559	0.574	0.553	0.558	0.584	0.589	0.547	0.566	2.84
11) Freon 113	0.354	0.367	0.337	0.344	0.366	0.367	0.337	0.353	3.90
12) Carbon Disulfide	1.145	1.147	1.116	1.152	1.198	1.197	1.102	1.151	3.16
13) Iodomethane	0.539	0.563	0.561	0.560	0.581	0.577	0.539	0.560	2.93
14) Allyl chloride	0.334	0.287	0.294	0.308	0.307	0.314	0.294	0.305	5.20
15) Methylene Chlorid	0.641	0.524	0.447	0.399	0.384	0.380	0.366	0.449	22.46
---- Linear regr., Force(0,0) ---- Coefficient = 0.9995									
Response Ratio = 0.00000 + 0.37448 *A									
16) Acetone	0.069	0.074	0.069	0.057	0.066	0.069	0.066	0.067	7.74
17) Methyl acetate	0.150	0.167	0.155	0.135	0.152	0.154	0.152	0.152	6.09
18) trans-1,2-Dichlor	0.422	0.440	0.420	0.420	0.435	0.435	0.433	0.429	1.92
19) Hexane	0.271	0.271	0.242	0.244	0.246	0.261	0.262	0.257	4.86
20) Methyl Tert Butyl	0.695	0.707	0.706	0.693	0.697	0.728	0.708	0.705	1.70
21) Acetonitrile	0.029	0.027	0.027	0.024	0.027	0.029	0.027	0.027	6.09
22) Di-isopropyl ethe	0.745	0.727	0.756	0.767	0.748	0.772	0.829	0.763	4.26
23) Chloroprene	0.451	0.454	0.439	0.446	0.467	0.502	0.464	0.460	4.51
24)P 1,1-Dichloroethan	0.527	0.525	0.527	0.516	0.529	0.545	0.518	0.527	1.82
25) Acrylonitrile	0.085	0.085	0.084	0.080	0.088	0.099	0.084	0.086	7.11
26) ETBE	0.738	0.771	0.764	0.769	0.763	0.813	0.798	0.774	3.20
27) Vinyl acetate	0.417	0.439	0.436	0.413	0.405	0.452	0.381	0.420	5.75
28) cis-1,2-Dichloroe	0.334	0.344	0.330	0.336	0.344	0.319	0.317	0.332	3.30
29) 2,2-Dichloropropa	0.203	0.201	0.196	0.187	0.193	0.173	0.155	0.187	9.22
30) Bromochloromethan	0.142	0.148	0.144	0.140	0.148	0.136	0.135	0.142	3.81
31) Cyclohexane	0.590	0.572	0.552	0.551	0.579	0.616	0.586	0.578	3.95
32)C Chloroform	0.529	0.535	0.533	0.524	0.538	0.517	0.494	0.524	2.85
33) Ethyl acetate	0.205	0.219	0.203	0.190	0.204	0.229	0.196	0.207	6.46
34) Tetrahydrofuran	0.083	0.079	0.066	0.055	0.063	0.074		0.070	14.96
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9984									
Response Ratio = 0.00000 + 0.04842 *A + 0.00819 *A^2									
35)S Dibromofluorometh	0.228	0.234	0.236	0.231	0.236	0.231	0.229	0.232	1.32
36) Carbon Tetrachlor	0.306	0.307	0.305	0.311	0.331	0.310	0.302	0.310	3.10
37) 1,1,1-Trichloroet	0.333	0.349	0.354	0.347	0.361	0.329	0.310	0.340	5.05

Initial Calibration Summary

Job Number: FA33359 **Sample:** VF2628-ICC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076708.D
Project: BMSMC, Building 5 Area, Humacao, PR

38)	2-Butanone	0.108	0.119	0.112	0.096	0.107	0.123	0.106	0.110	8.00
39)	1,1-Dichloroprope	0.399	0.401	0.396	0.395	0.414	0.411	0.386	0.400	2.38
40)	Propionitrile	0.036	0.037	0.038	0.033	0.036	0.040	0.034	0.036	6.40
41)	Methacrylonitrile	0.124	0.131	0.127	0.117	0.124	0.141	0.118	0.126	6.32
42)	Benzene	1.215	1.264	1.209	1.214	1.221	1.181	1.109	1.202	3.99
43)	TAME	0.719	0.718	0.725	0.717	0.738	0.756	0.734	0.729	1.95
44)S	1,2-Dichloroethan	0.246	0.255	0.249	0.232	0.242	0.243	0.240	0.244	2.99
45)	1,2-Dichloroethan	0.323	0.342	0.328	0.316	0.320	0.322	0.306	0.323	3.47
46)	Trichloroethene	0.324	0.313	0.305	0.309	0.312	0.301	0.283	0.307	4.09
47)	Methylcyclohexane	0.554	0.552	0.527	0.553	0.597	0.607	0.578	0.567	5.02
48)	Dibromomethane	0.145	0.158	0.140	0.153	0.152	0.153	0.145	0.149	4.26
49)C	1,2-Dichloropropa	0.290	0.291	0.269	0.284	0.286	0.290	0.283	0.285	2.63
50)	Bromodichlorometh	0.291	0.317	0.297	0.327	0.318	0.330	0.326	0.315	4.81
51)	Methyl methacryla	0.161	0.186	0.148	0.158	0.179	0.189	0.175	0.171	9.02
52)	2-Chloroethyl vin	0.144	0.154	0.140	0.152	0.163	0.168	0.152	0.153	6.34
53)	cis-1,3-Dichlorop	0.383	0.398	0.351	0.403	0.398	0.422	0.411	0.395	5.81
54) I	Chlorobenzene-d5	----------ISTD----------								
55)S	Toluene-d8	1.531	1.461	1.261	1.287	1.245	1.262	1.282	1.333	8.56
56)C	Toluene	2.027	1.892	1.618	1.642	1.655	1.557	1.440	1.690	11.91
57)	2-Nitropropane	0.056	0.055	0.054	0.046	0.063	0.066	0.061	0.057	11.74
58)	4-Methyl-2-pentan	0.344	0.369	0.336	0.273	0.338	0.318	0.271	0.321	11.52
59)	trans-1,3-Dichlor	0.478	0.478	0.454	0.426	0.463	0.454	0.446	0.457	4.06
60)	Tetrachloroethene	0.442	0.443	0.347	0.389	0.373	0.363	0.348	0.386	10.64
61)	Ethyl methacrylat	0.431	0.424	0.335	0.383	0.398	0.412	0.399	0.397	8.03
62)	1,1,2-Trichloroet	0.313	0.308	0.283	0.264	0.278	0.266	0.250	0.280	8.26
63)	Dibromochlorometh	0.285	0.285	0.248	0.270	0.275	0.277	0.280	0.274	4.70
64)	1,3-Dichloropropa	0.612	0.609	0.523	0.517	0.523	0.505	0.498	0.541	8.92
65)	1,2-Dibromoethane	0.293	0.352	0.279	0.302	0.292	0.288	0.283	0.298	8.34
66)	2-hexanone	0.218	0.271	0.228	0.194	0.243	0.235	0.202	0.227	11.50
67)	1-Chlorohexane	0.429	0.432	0.416	0.512	0.530	0.528	0.503	0.479	10.59
68)C	Ethylbenzene	1.760	1.750	1.755	1.751	1.816	1.666	1.527	1.718	5.52
69)P	Chlorobenzene	1.080	1.022	0.989	1.017	1.014	0.939	0.899	0.994	5.99
70)	1,1,1,2-Tetrachlo	0.285	0.273	0.289	0.276	0.312	0.303	0.305	0.292	5.09
71)	m,p-Xylene	1.165	1.213	1.251	1.242	1.323	1.190	1.011	1.199	8.11
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9963									
	Response Ratio = 0.00000 + 1.38837 *A + -0.04131 *A^2									
72)	o-Xylene	1.040	1.039	1.132	1.165	1.321	1.309	1.235	1.177	9.90
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9975									
	Response Ratio = 0.00000 + 1.26537 *A									
73)	Styrene	0.755	0.786	0.857	0.914	1.036	0.998	0.965	0.902	11.81
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9983									
	Response Ratio = 0.00000 + 0.97329 *A									
74)P	Bromoform	0.124	0.130	0.139	0.121	0.158	0.167	0.167	0.144	14.06
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9964									
	Response Ratio = 0.00000 + 0.16424 *A									
75)	Isopropylbenzene	1.287	1.287	1.410	1.433	1.669	1.593	1.468	1.450	9.91
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9942									
	Response Ratio = 0.00000 + 1.53011 *A									
76) I	1,4-Dichlorobenzene-d	----------ISTD----------								
77)S	4-Bromofluorobenz	0.698	0.668	0.680	0.665	0.664	0.666	0.685	0.675	1.92
78)	cis-1,4-Dichloro-	0.251	0.246	0.245	0.225	0.252	0.245	0.225	0.241	4.67
79)	n-Propylbenzene	3.623	3.728	3.768	4.131	4.071	3.742	3.234	3.757	7.92
80)	Bromobenzene	0.809	0.814	0.797	0.845	0.815	0.768	0.739	0.798	4.37

Initial Calibration Summary

Job Number: FA33359 **Sample:** VF2628-ICC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076708.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
 81)P 1,1,2,2-Tetrachlo 0.869 0.981 0.926 0.878 0.909 0.872 0.808 0.892   6.07
 82)  1,3,5-Trimethylbe 2.365 2.481 2.729 3.066 2.991 2.806 2.520 2.708   9.80
 83)  2-Chlorotoluene   2.500 2.603 2.661 2.862 2.764 2.548 2.323 2.609   6.79
 84)  trans-1,4-Dichlor 0.208 0.239 0.245 0.215 0.247 0.221 0.206 0.226   7.72
 85)  1,2,3-Trichloropr 0.203 0.236 0.231 0.209 0.209 0.207 0.187 0.212   7.88
 86)  Cyclohexanone     0.031 0.038 0.035 0.031 0.040 0.037 0.033 0.035   9.72
 87)  4-Chlorotoluene   2.186 2.320 2.293 2.548 2.402 2.275 2.125 2.307   6.03
 88)  tert-Butylbenzene 1.452 1.536 1.603 1.803 1.847 1.744 1.635 1.660   8.70
 89)  1,2,4-Trimethylbe 2.248 2.376 2.608 2.994 2.892 2.668 2.455 2.606  10.39
 90)  Pentachloroethane 0.329 0.351 0.384 0.403 0.427 0.410 0.412 0.388   9.27
 91)  sec-Butylbenzene  3.364 3.378 3.628 4.004 3.990 3.731 3.243 3.620   8.46
 92)  4-Isopropyltoluen 2.250 2.406 2.570 3.105 3.045 2.868 2.583 2.689  12.05
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9903
               Response Ratio = 0.00000 + 2.74568 *A

 93)  1,3-Dichlorobenze 1.470 1.506 1.445 1.544 1.458 1.406 1.266 1.442   6.20
 94)  1,4-Dichlorobenze 1.581 1.559 1.444 1.580 1.454 1.392 1.300 1.473   7.24
 95)  n-Butylbenzene    1.386 1.492 1.453 1.865 1.798 1.748 1.532 1.611  11.74
 96)  Benzyl Chloride   0.233 0.239 0.244 0.259 0.308 0.309 0.294 0.269  12.32
 97)  1,2-Dichlorobenze 1.374 1.414 1.380 1.472 1.439 1.372 1.297 1.393   4.04
 98)  1,2-Dibromo-3-Chl 0.138 0.164 0.154 0.137 0.158 0.155 0.139 0.150   7.36
 99)  Hexachlorobutadie 0.551 0.544 0.450 0.523 0.505 0.498 0.408 0.497  10.42
100)  1,2,4-Trichlorobe 0.950 0.905 0.843 1.009 0.901 0.888 0.770 0.895   8.45
101)  Naphthalene       2.060 2.329 2.220 2.341 2.438 2.332 2.048 2.253   6.65
102)  1,2,3-Trichlorobe 0.975 0.976 0.873 1.012 0.927 0.891 0.804 0.923   7.82

103) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
104)  Ethanol           0.136 0.121 0.123 0.111 0.110 0.116 0.116 0.119   7.21
105)  Acrolein          1.822 1.604 1.762 1.777 1.623 1.659 1.809 1.722   5.29
106)  Tert butyl alcoho 1.095 1.088 1.210 1.080 1.066 1.110 1.142 1.113   4.43
107)  Isobutyl alcohol  0.272 0.277 0.293 0.262 0.258 0.270 0.282 0.274   4.37
108)  Tert Amyl Alcohol 0.926 0.954 0.983 0.885 0.887 0.910 0.987 0.933   4.59
109)  1,4-Dioxane       0.110 0.109 0.099 0.112 0.108 0.117 0.127 0.112   7.86
 ---------------------------------------------------------------------------
 (#) = Out of Range

           041316APP9-F.m        Thu Apr 14 09:36:44 2016
```

Initial Calibration Verification

Job Number: FA33359 **Sample:** VF2628-ICV2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076714.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\041316\F0076714.D Vial: 15
Acq On : 13 Apr 2016 1:21 pm Operator: ericp
Sample : ICV2628-4,BS Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Apr 14 09:35:01 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	87	0.00	7.39
2		Dichlorodifluoromethane	0.438	0.464	-5.9	96	0.00	2.40
3	P	Chloromethane	0.477	0.531	-11.3	100	0.00	2.64
4	C	Vinyl Chloride	0.484	0.514	-6.2	96	0.00	2.76
5		Bromomethane	0.252	0.268	-6.3	90	0.00	3.16
		----------	Amount	Calc.	%Drift		----------	
6		Chloroethane	50.000	58.170	-16.3	101	0.00	3.32
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.434	0.463	-6.7	94	0.00	3.48
8		Ethyl Ether	0.203	0.216	-6.4	92	0.00	3.80
9		1,2-Dichlorotrifluoroetha	0.405	0.431	-6.4	95	0.00	4.03
10	C	1,1-Dichloroethene	0.566	0.591	-4.4	92	0.00	4.06
11		Freon 113	0.353	0.328	7.1	83	0.00	4.09
12		Carbon Disulfide	1.151	1.144	0.6	87	0.00	4.13
13		Iodomethane	0.560	0.580	-3.6	90	0.00	4.24
14		Allyl chloride	0.305	0.273	10.5	77	0.04	4.60
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	58.024	-16.0	95	0.00	4.70
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.067	0.063	6.0	98	0.00	4.73
17		Methyl acetate	0.152	0.149	2.0	96	0.00	4.85
18		trans-1,2-Dichloroethene	0.429	0.474	-10.5	98	0.00	4.87
19		Hexane	0.257	0.264	-2.7	95	0.00	4.92
20		Methyl Tert Butyl Ether	0.705	0.743	-5.4	94	0.00	4.95
21		Acetonitrile	0.027	0.024	11.1	88	0.00	5.25
22		Di-isopropyl ether	0.763	0.801	-5.0	91	0.00	5.34
23		Chloroprene	0.460	0.460	0.0	90	0.00	5.48
24	P	1,1-Dichloroethane	0.527	0.579	-9.9	98	0.00	5.52
25		Acrylonitrile	0.086	0.094	-9.3	103	0.00	5.57
26		ETBE	0.774	0.834	-7.8	95	0.00	5.73
27		Vinyl acetate	0.420	0.522	-24.3#	110	0.00	5.75
28		cis-1,2-Dichloroethene	0.332	0.314	5.4	82	0.00	6.09
29		2,2-Dichloropropane	0.187	0.198	-5.9	92	0.00	6.21
30		Bromochloromethane	0.142	0.135	4.9	84	0.00	6.30
31		Cyclohexane	0.578	0.573	0.9	91	0.00	6.32
32	C	Chloroform	0.524	0.544	-3.8	91	0.00	6.36
33		Ethyl acetate	0.207	0.232	-12.1	107	0.00	6.46

Initial Calibration Verification

Job Number: FA33359 **Sample:** VF2628-ICV2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076714.D
Project: BMSMC, Building 5 Area, Humacao, PR

			Amount	Calc.	%Drift			
34		Tetrahydrofuran	50.000	57.718	-15.4	106	0.00	6.55

			AvgRF	CCRF	%Dev			
35	S	Dibromofluoromethane	0.232	0.231	0.4	87	0.00	6.55
36		Carbon Tetrachloride	0.310	0.303	2.3	85	0.00	6.53
37		1,1,1-Trichloroethane	0.340	0.326	4.1	82	0.00	6.60
38		2-Butanone	0.110	0.113	-2.7	102	0.00	6.68
39		1,1-Dichloropropene	0.400	0.411	-2.7	91	0.00	6.72
40		Propionitrile	0.036	0.037	-2.8	97	0.00	7.00
41		Methacrylonitrile	0.126	0.143	-13.5	106	0.00	7.02
42		Benzene	1.202	1.239	-3.1	89	0.00	6.98
43		TAME	0.729	0.740	-1.5	90	0.00	7.06
44	S	1,2-Dichloroethane-d4	0.244	0.248	-1.6	94	0.00	7.12
45		1,2-Dichloroethane	0.323	0.344	-6.5	95	0.00	7.19
46		Trichloroethene	0.307	0.310	-1.0	88	0.00	7.56
47		Methylcyclohexane	0.567	0.559	1.4	88	0.00	7.56
48		Dibromomethane	0.149	0.157	-5.4	90	0.00	8.00
49	C	1,2-Dichloropropane	0.285	0.298	-4.6	92	0.00	8.09
50		Bromodichloromethane	0.315	0.341	-8.3	91	0.00	8.14
51		Methyl methacrylate	0.171	0.182	-6.4	100	0.00	8.26
52		2-Chloroethyl vinyl ether	0.153	0.176	-15.0	101	0.00	8.68
53		cis-1,3-Dichloropropene	0.395	0.434	-9.9	94	0.00	8.77
54	I	Chlorobenzene-d5	1.000	1.000	0.0	89	0.00	10.51
55	S	Toluene-d8	1.333	1.285	3.6	89	0.00	8.95
56	C	Toluene	1.690	1.684	0.4	91	0.00	9.00
57		2-Nitropropane	0.057	0.055	3.5	107	0.00	9.24
58		4-Methyl-2-pentanone	0.321	0.316	1.6	103	0.00	9.35
59		trans-1,3-Dichloropropene	0.457	0.503	-10.1	105	0.00	9.41
60		Tetrachloroethene	0.386	0.360	6.7	82	0.00	9.39
61		Ethyl methacrylate	0.397	0.338	14.9	78	0.00	9.52
62		1,1,2-Trichloroethane	0.280	0.274	2.1	92	0.00	9.57
63		Dibromochloromethane	0.274	0.277	-1.1	91	0.00	9.76
64		1,3-Dichloropropane	0.541	0.507	6.3	87	0.00	9.85
65		1,2-Dibromoethane	0.298	0.289	3.0	85	0.00	10.02
66		2-hexanone	0.227	0.217	4.4	100	0.00	10.18
67		1-Chlorohexane	0.479	0.486	-1.5	84	0.00	10.46
68	C	Ethylbenzene	1.718	1.829	-6.5	93	0.00	10.53
69	P	Chlorobenzene	0.994	1.025	-3.1	89	0.00	10.53
70		1,1,1,2-Tetrachloroethane	0.292	0.314	-7.5	101	0.00	10.58

			Amount	Calc.	%Drift			
71		m,p-Xylene	100.000	104.204	-4.2	97	0.00	10.67
72		o-Xylene	50.000	52.423	-4.8	101	0.00	11.11
73		Styrene	50.000	51.450	-2.9	97	0.00	11.16
74	P	Bromoform	50.000	47.224	5.6	114	0.00	11.21
75		Isopropylbenzene	50.000	53.872	-7.7	102	0.00	11.41

			AvgRF	CCRF	%Dev			
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	12.87
77	S	4-Bromofluorobenzene	0.675	0.679	-0.6	101	0.00	11.72
78		cis-1,4-Dichloro-2-butene	0.241	0.215	10.8	95	0.00	11.77
79		n-Propylbenzene	3.757	4.184	-11.4	100	0.00	11.83
80		Bromobenzene	0.798	0.826	-3.5	97	0.00	11.85
81	P	1,1,2,2-Tetrachloroethane	0.892	0.851	4.6	96	0.00	11.91
82		1,3,5-Trimethylbenzene	2.708	2.907	-7.3	94	0.00	12.02
83		2-Chlorotoluene	2.609	2.836	-8.7	98	0.00	12.02
84		trans-1,4-Dichloro-2-Bute	0.226	0.219	3.1	101	0.00	12.09

Initial Calibration Verification

Job Number: FA33359 **Sample:** VF2628-ICV2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076714.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.212	0.208	1.9	99	0.00	12.06
86	Cyclohexanone	0.035	0.030	14.3	94	0.00	12.13
87	4-Chlorotoluene	2.307	2.513	-8.9	98	0.00	12.19
88	tert-Butylbenzene	1.660	1.752	-5.5	96	0.00	12.36
89	1,2,4-Trimethylbenzene	2.606	2.900	-11.3	96	0.00	12.43
90	Pentachloroethane	0.388	0.394	-1.5	97	0.00	12.41
91	sec-Butylbenzene	3.620	3.970	-9.7	98	0.00	12.54
	----------	Amount	Calc.	%Drift		----------	
92	4-Isopropyltoluene	50.000	53.376	-6.8	94	0.00	12.68
	----------	AvgRF	CCRF	%Dev		----------	
93	1,3-Dichlorobenzene	1.442	1.557	-8.0	100	0.00	12.80
94	1,4-Dichlorobenzene	1.473	1.528	-3.7	96	0.00	12.89
95	n-Butylbenzene	1.611	1.771	-9.9	94	0.00	13.12
96	Benzyl Chloride	0.269	0.279	-3.7	107	0.00	13.14
97	1,2-Dichlorobenzene	1.393	1.476	-6.0	99	0.00	13.33
98	1,2-Dibromo-3-Chloropropa	0.150	0.145	3.3	105	0.00	14.10
99	Hexachlorobutadiene	0.497	0.491	1.2	93	0.00	14.65
100	1,2,4-Trichlorobenzene	0.895	0.952	-6.4	94	0.00	14.69
101	Naphthalene	2.253	2.599	-15.4	110	0.00	14.98
102	1,2,3-Trichlorobenzene	0.923	0.965	-4.6	95	0.00	15.14
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	86	0.00	4.97
104	Ethanol	0.119	0.125	-5.0	96	0.01	4.00
105	Acrolein	1.722	2.047	-18.9	99	0.00	4.42
106	Tert butyl alcohol	1.113	1.185	-6.5	94	-0.01	5.04
107	Isobutyl alcohol	0.274	0.274	0.0	90	-0.01	7.13
108	Tert Amyl Alcohol	0.933	0.925	0.9	90	0.00	7.25
109	1,4-Dioxane	0.112	0.116	-3.6	89	-0.01	8.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F0076708.D 041316APP9-F.m Thu Apr 14 09:36:14 2016

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2639-CC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076897.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042316\F0076897.D          Vial: 9
Acq On    : 23 Apr 2016  10:08 am                     Operator: ericp
Sample    : CC2628-4                                  Inst    : MSVOA9
Misc      : MS33665,vf2639,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Thu Apr 14 09:35:01 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	77	0.00	7.39
2		Dichlorodifluoromethane	0.438	0.469	-7.1	85	0.00	2.40
3	P	Chloromethane	0.477	0.491	-2.9	81	0.00	2.63
4	C	Vinyl Chloride	0.484	0.495	-2.3	81	0.00	2.76
5		Bromomethane	0.252	0.244	3.2	71	0.00	3.16
		----------	Amount	Calc.	%Drift		----------	
6		Chloroethane	50.000	54.659	-9.3	85	0.00	3.32
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.434	0.455	-4.8	81	0.00	3.48
8		Ethyl Ether	0.203	0.219	-7.9	82	0.00	3.80
9		1,2-Dichlorotrifluoroetha	0.405	0.423	-4.4	82	0.00	4.03
10	C	1,1-Dichloroethene	0.566	0.587	-3.7	81	0.00	4.06
11		Freon 113	0.353	0.343	2.8	76	0.00	4.09
12		Carbon Disulfide	1.151	1.176	-2.2	78	0.00	4.13
13		Iodomethane	0.560	0.587	-4.8	80	0.00	4.24
14		Allyl chloride	0.305	0.281	7.9	70	0.04	4.60
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	54.827	-9.7	79	0.00	4.70
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.067	0.060	10.4	81	0.00	4.73
17		Methyl acetate	0.152	0.143	5.9	81	0.00	4.85
18		trans-1,2-Dichloroethene	0.429	0.470	-9.6	86	0.00	4.87
19		Hexane	0.257	0.245	4.7	77	0.00	4.92
20		Methyl Tert Butyl Ether	0.705	0.799	-13.3	88	0.00	4.95
21		Acetonitrile	0.027	0.022	18.5	71	-0.01	5.24
22		Di-isopropyl ether	0.763	0.795	-4.2	79	0.00	5.34
23		Chloroprene	0.460	0.412	10.4	71	0.00	5.49
24	P	1,1-Dichloroethane	0.527	0.531	-0.8	79	0.00	5.52
25		Acrylonitrile	0.086	0.080	7.0	77	0.00	5.57
26		ETBE	0.774	0.808	-4.4	80	0.00	5.73
27		Vinyl acetate	0.420	0.429	-2.1	80	0.00	5.75
28		cis-1,2-Dichloroethene	0.332	0.337	-1.5	77	0.00	6.09
29		2,2-Dichloropropane	0.187	0.208	-11.2	85	0.00	6.21
30		Bromochloromethane	0.142	0.144	-1.4	79	0.00	6.30
31		Cyclohexane	0.578	0.545	5.7	76	0.00	6.32
32	C	Chloroform	0.524	0.540	-3.1	79	0.00	6.36
33		Ethyl acetate	0.207	0.200	3.4	81	0.00	6.46

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2639-CC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076897.D
Project: BMSMC, Building 5 Area, Humacao, PR

			Amount	Calc.	%Drift			
34		Tetrahydrofuran	50.000	53.048	-6.1	84	0.00	6.55

			AvgRF	CCRF	%Dev			
35	S	Dibromofluoromethane	0.232	0.231	0.4	77	0.00	6.55
36		Carbon Tetrachloride	0.310	0.317	-2.3	78	0.00	6.53
37		1,1,1-Trichloroethane	0.340	0.345	-1.5	76	0.00	6.60
38		2-Butanone	0.110	0.093	15.5	74	0.00	6.68
39		1,1-Dichloropropene	0.400	0.423	-5.7	82	0.00	6.72
40		Propionitrile	0.036	0.033	8.3	76	0.00	7.00
41		Methacrylonitrile	0.126	0.119	5.6	78	0.00	7.02
42		Benzene	1.202	1.227	-2.1	77	0.00	6.98
43		TAME	0.729	0.775	-6.3	83	0.00	7.06
44	S	1,2-Dichloroethane-d4	0.244	0.237	2.9	78	0.00	7.12
45		1,2-Dichloroethane	0.323	0.335	-3.7	81	0.00	7.19
46		Trichloroethene	0.307	0.322	-4.9	80	0.00	7.56
47		Methylcyclohexane	0.567	0.593	-4.6	82	0.00	7.56
48		Dibromomethane	0.149	0.167	-12.1	83	0.00	8.00
49	C	1,2-Dichloropropane	0.285	0.296	-3.9	80	0.00	8.09
50		Bromodichloromethane	0.315	0.346	-9.8	81	0.00	8.14
51		Methyl methacrylate	0.171	0.182	-6.4	88	0.00	8.26
52		2-Chloroethyl vinyl ether	0.153	0.168	-9.8	85	0.00	8.68
53		cis-1,3-Dichloropropene	0.395	0.453	-14.7	86	0.00	8.77
54	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00	10.51
55	S	Toluene-d8	1.333	1.300	2.5	85	0.00	8.95
56	C	Toluene	1.690	1.679	0.7	86	0.00	9.00
57		2-Nitropropane	0.057	0.032	43.9#	59	0.00	9.24
58		4-Methyl-2-pentanone	0.321	0.268	16.5	82	0.00	9.36
59		trans-1,3-Dichloropropene	0.457	0.493	-7.9	97	0.00	9.41
60		Tetrachloroethene	0.386	0.379	1.8	81	0.00	9.39
61		Ethyl methacrylate	0.397	0.378	4.8	83	0.00	9.52
62		1,1,2-Trichloroethane	0.280	0.275	1.8	87	0.00	9.57
63		Dibromochloromethane	0.274	0.252	8.0	78	0.00	9.76
64		1,3-Dichloropropane	0.541	0.519	4.1	84	0.00	9.85
65		1,2-Dibromoethane	0.298	0.298	0.0	82	0.00	10.02
66		2-hexanone	0.227	0.212	6.6	92	0.00	10.18
67		1-Chlorohexane	0.479	0.513	-7.1	84	0.00	10.46
68	C	Ethylbenzene	1.718	1.831	-6.6	87	0.00	10.53
69	P	Chlorobenzene	0.994	1.048	-5.4	86	0.00	10.53
70		1,1,1,2-Tetrachloroethane	0.292	0.303	-3.8	92	0.00	10.58

			Amount	Calc.	%Drift			
71		m,p-Xylene	100.000	105.818	-5.8	93	0.00	10.67
72		o-Xylene	50.000	55.297	-10.6	100	0.00	11.11
73		Styrene	50.000	53.382	-6.8	95	0.00	11.16
74	P	Bromoform	50.000	40.171	19.7	92	0.00	11.21
75		Isopropylbenzene	50.000	56.069	-12.1	100	0.00	11.41

			AvgRF	CCRF	%Dev			
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	12.87
77	S	4-Bromofluorobenzene	0.675	0.715	-5.9	103	0.00	11.72
78		cis-1,4-Dichloro-2-butene	0.241	0.204	15.4	86	0.00	11.77
79		n-Propylbenzene	3.757	4.155	-10.6	96	0.00	11.83
80		Bromobenzene	0.798	0.825	-3.4	93	0.00	11.85
81	P	1,1,2,2-Tetrachloroethane	0.892	0.796	10.8	86	0.00	11.91
82		1,3,5-Trimethylbenzene	2.708	2.925	-8.0	91	0.00	12.02
83		2-Chlorotoluene	2.609	2.817	-8.0	94	0.00	12.02
84		trans-1,4-Dichloro-2-Bute	0.226	0.205	9.3	91	0.00	12.09

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2639-CC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076897.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.212	0.201	5.2	92	0.00	12.06
86	Cyclohexanone	0.035	0.028	20.0#	86	0.00	12.13
87	4-Chlorotoluene	2.307	2.495	-8.1	93	0.00	12.19
88	tert-Butylbenzene	1.660	1.752	-5.5	93	0.00	12.36
89	1,2,4-Trimethylbenzene	2.606	2.845	-9.2	91	0.00	12.43
90	Pentachloroethane	0.388	0.370	4.6	87	0.00	12.41
91	sec-Butylbenzene	3.620	3.921	-8.3	93	0.00	12.54
	----------	Amount	Calc.	%Drift	----------		
92	4-Isopropyltoluene	50.000	54.335	-8.7	92	0.00	12.68
	----------	AvgRF	CCRF	%Dev	----------		
93	1,3-Dichlorobenzene	1.442	1.548	-7.4	96	0.00	12.80
94	1,4-Dichlorobenzene	1.473	1.545	-4.9	93	0.00	12.89
95	n-Butylbenzene	1.611	1.750	-8.6	89	0.00	13.12
96	Benzyl Chloride	0.269	0.277	-3.0	102	0.00	13.14
97	1,2-Dichlorobenzene	1.393	1.496	-7.4	97	0.00	13.33
98	1,2-Dibromo-3-Chloropropa	0.150	0.131	12.7	91	0.00	14.10
99	Hexachlorobutadiene	0.497	0.515	-3.6	94	0.00	14.65
100	1,2,4-Trichlorobenzene	0.895	1.022	-14.2	97	0.00	14.69
101	Naphthalene	2.253	2.601	-15.4	106	0.00	14.98
102	1,2,3-Trichlorobenzene	0.923	1.023	-10.8	96	0.00	15.14
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	83	0.00	4.97
104	Ethanol	0.119	0.115	3.4	86	0.01	4.00
105	Acrolein	1.722	1.748	-1.5	81	0.00	4.42
106	Tert butyl alcohol	1.113	1.188	-6.7	91	-0.01	5.04
107	Isobutyl alcohol	0.274	0.262	4.4	83	0.00	7.14
108	Tert Amyl Alcohol	0.933	0.969	-3.9	91	0.00	7.25
109	1,4-Dioxane	0.112	0.139	-24.1#	103	0.00	8.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F0076708.D 041316APP9-F.m Mon Apr 25 09:35:05 2016

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2639-ECC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076924.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042316\F0076924.D          Vial: 36
Acq On    : 23 Apr 2016   9:42 pm                     Operator: ericp
Sample    : ECC2628-4                                 Inst    : MSVOA9
Misc      : MS33673,vf2639,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Thu Apr 14 09:35:01 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	70	0.00	7.39
2		Dichlorodifluoromethane	0.438	0.448	-2.3	74	0.00	2.40
3	P	Chloromethane	0.477	0.478	-0.2	72	0.00	2.63
4	C	Vinyl Chloride	0.484	0.493	-1.9	73	0.00	2.76
5		Bromomethane	0.252	0.243	3.6	65	0.00	3.16
		----------	Amount	Calc.	%Drift		----------	
6		Chloroethane	50.000	59.328	-18.7	82	0.00	3.32
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.434	0.439	-1.2	71	0.00	3.49
8		Ethyl Ether	0.203	0.209	-3.0	71	0.00	3.80
9		1,2-Dichlorotrifluoroetha	0.405	0.398	1.7	70	0.00	4.03
10	C	1,1-Dichloroethene	0.566	0.553	2.3	69	0.00	4.06
11		Freon 113	0.353	0.349	1.1	70	0.00	4.09
12		Carbon Disulfide	1.151	1.120	2.7	68	0.00	4.13
13		Iodomethane	0.560	0.616	-10.0	77	0.00	4.24
14		Allyl chloride	0.305	0.317	-3.9	72	0.04	4.60
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	51.850	-3.7	68	0.00	4.70
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.067	0.058	13.4	71	0.00	4.73
17		Methyl acetate	0.152	0.139	8.6	71	0.00	4.85
18		trans-1,2-Dichloroethene	0.429	0.413	3.7	68	0.00	4.87
19		Hexane	0.257	0.219	14.8	63	0.00	4.92
20		Methyl Tert Butyl Ether	0.705	0.725	-2.8	73	0.00	4.95
21		Acetonitrile	0.027	0.024	11.1	70	0.00	5.25
22		Di-isopropyl ether	0.763	0.793	-3.9	72	0.00	5.34
23		Chloroprene	0.460	0.456	0.9	71	0.00	5.49
24	P	1,1-Dichloroethane	0.527	0.515	2.3	70	0.00	5.52
25		Acrylonitrile	0.086	0.072	16.3	63	0.00	5.57
26		ETBE	0.774	0.818	-5.7	74	0.00	5.73
27		Vinyl acetate	0.420	0.278	33.8	47#	0.00	5.75
28		cis-1,2-Dichloroethene	0.332	0.351	-5.7	73	0.00	6.09
29		2,2-Dichloropropane	0.187	0.194	-3.7	72	0.00	6.21
30		Bromochloromethane	0.142	0.152	-7.0	75	0.00	6.30
31		Cyclohexane	0.578	0.583	-0.9	74	0.00	6.32
32	C	Chloroform	0.524	0.543	-3.6	72	0.00	6.36
33		Ethyl acetate	0.207	0.191	7.7	70	0.00	6.46

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2639-ECC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076924.D
Project: BMSMC, Building 5 Area, Humacao, PR

			Amount	Calc.	%Drift			
34		Tetrahydrofuran	50.000	49.635	0.7	71	0.00	6.55

			AvgRF	CCRF	%Dev			
35	S	Dibromofluoromethane	0.232	0.234	-0.9	71	0.00	6.55
36		Carbon Tetrachloride	0.310	0.294	5.2	66	0.00	6.53
37		1,1,1-Trichloroethane	0.340	0.352	-3.5	71	0.00	6.60
38		2-Butanone	0.110	0.101	8.2	73	0.00	6.68
39		1,1-Dichloropropene	0.400	0.386	3.5	68	0.00	6.72
40		Propionitrile	0.036	0.034	5.6	71	0.00	7.00
41		Methacrylonitrile	0.126	0.135	-7.1	80	0.00	7.01
42		Benzene	1.202	1.213	-0.9	70	0.00	6.98
43		TAME	0.729	0.791	-8.5	77	0.00	7.06
44	S	1,2-Dichloroethane-d4	0.244	0.256	-4.9	77	0.00	7.12
45		1,2-Dichloroethane	0.323	0.343	-6.2	76	0.00	7.19
46		Trichloroethene	0.307	0.293	4.6	66	0.00	7.56
47		Methylcyclohexane	0.567	0.560	1.2	70	0.00	7.56
48		Dibromomethane	0.149	0.147	1.3	67	0.00	8.00
49	C	1,2-Dichloropropane	0.285	0.290	-1.8	71	0.00	8.09
50		Bromodichloromethane	0.315	0.316	-0.3	67	0.00	8.14
51		Methyl methacrylate	0.171	0.175	-2.3	77	0.00	8.26
52		2-Chloroethyl vinyl ether	0.153	0.147	3.9	68	0.00	8.68
53		cis-1,3-Dichloropropene	0.395	0.406	-2.8	70	0.00	8.77
54	I	Chlorobenzene-d5	1.000	1.000	0.0	74	0.00	10.51
55	S	Toluene-d8	1.333	1.258	5.6	72	0.00	8.95
56	C	Toluene	1.690	1.527	9.6	69	0.00	9.00
57		2-Nitropropane	0.057	0.037	35.1	60	0.00	9.24
58		4-Methyl-2-pentanone	0.321	0.254	20.9	69	0.00	9.35
59		trans-1,3-Dichloropropene	0.457	0.415	9.2	72	0.00	9.41
60		Tetrachloroethene	0.386	0.330	14.5	63	0.00	9.39
61		Ethyl methacrylate	0.397	0.338	14.9	65	0.00	9.52
62		1,1,2-Trichloroethane	0.280	0.246	12.1	69	0.00	9.57
63		Dibromochloromethane	0.274	0.237	13.5	65	0.00	9.76
64		1,3-Dichloropropane	0.541	0.482	10.9	69	0.00	9.85
65		1,2-Dibromoethane	0.298	0.268	10.1	66	0.00	10.02
66		2-hexanone	0.227	0.180	20.7	69	0.00	10.18
67		1-Chlorohexane	0.479	0.426	11.1	62	0.00	10.46
68	C	Ethylbenzene	1.718	1.588	7.6	67	0.00	10.53
69	P	Chlorobenzene	0.994	0.901	9.4	66	0.00	10.53
70		1,1,1,2-Tetrachloroethane	0.292	0.287	1.7	77	0.00	10.58

			Amount	Calc.	%Drift			
71		m,p-Xylene	100.000	89.081	10.9	70	0.00	10.67
72		o-Xylene	50.000	48.619	2.8	78	0.00	11.10
73		Styrene	50.000	44.702	10.6	70	0.00	11.16
74	P	Bromoform	50.000	37.436	25.1	75	0.00	11.21
75		Isopropylbenzene	50.000	47.754	4.5	75	0.00	11.41

			AvgRF	CCRF	%Dev			
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	84	0.00	12.87
77	S	4-Bromofluorobenzene	0.675	0.703	-4.1	89	0.00	11.72
78		cis-1,4-Dichloro-2-butene	0.241	0.188	22.0	70	0.00	11.77
79		n-Propylbenzene	3.757	3.293	12.4	67	0.00	11.83
80		Bromobenzene	0.798	0.731	8.4	73	0.00	11.85
81	P	1,1,2,2-Tetrachloroethane	0.892	0.728	18.4	70	0.00	11.91
82		1,3,5-Trimethylbenzene	2.708	2.459	9.2	67	0.00	12.02
83		2-Chlorotoluene	2.609	2.343	10.2	69	0.00	12.02
84		trans-1,4-Dichloro-2-Bute	0.226	0.177	21.7	69	0.00	12.09

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2639-ECC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076924.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.212	0.179	15.6	72	0.00	12.06
86	Cyclohexanone	0.035	0.031	11.4	84	0.00	12.13
87	4-Chlorotoluene	2.307	1.946	15.6	64	0.00	12.19
88	tert-Butylbenzene	1.660	1.610	3.0	75	0.00	12.36
89	1,2,4-Trimethylbenzene	2.606	2.291	12.1	64	0.00	12.43
90	Pentachloroethane	0.388	0.331	14.7	69	0.00	12.41
91	sec-Butylbenzene	3.620	3.301	8.8	69	0.00	12.54
	----------	Amount	Calc.	%Drift	----------		
92	4-Isopropyltoluene	50.000	42.944	14.1	64	0.00	12.68
	----------	AvgRF	CCRF	%Dev	----------		
93	1,3-Dichlorobenzene	1.442	1.185	17.8	64	0.00	12.80
94	1,4-Dichlorobenzene	1.473	1.164	21.0	62	0.00	12.89
95	n-Butylbenzene	1.611	1.216	24.5	55	0.00	13.12
96	Benzyl Chloride	0.269	0.182	32.3	59	0.00	13.14
97	1,2-Dichlorobenzene	1.393	1.208	13.3	69	0.00	13.33
98	1,2-Dibromo-3-Chloropropa	0.150	0.113	24.7	69	0.00	14.10
99	Hexachlorobutadiene	0.497	0.383	22.9	62	0.00	14.65
100	1,2,4-Trichlorobenzene	0.895	0.656	26.7	55	0.00	14.69
101	Naphthalene	2.253	1.994	11.5	71	0.00	14.97
102	1,2,3-Trichlorobenzene	0.923	0.745	19.3	62	0.00	15.14
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	59	0.00	4.96
104	Ethanol	0.119	0.139	-16.8	74	0.00	3.99
105	Acrolein	1.722	1.685	2.1	56	0.00	4.42
106	Tert butyl alcohol	1.113	1.199	-7.7	65	-0.01	5.04
107	Isobutyl alcohol	0.274	0.294	-7.3	66	0.00	7.14
108	Tert Amyl Alcohol	0.933	0.979	-4.9	65	0.00	7.25
109	1,4-Dioxane	0.112	0.142	-26.8	75	-0.01	8.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F0076708.D 041316APP9-F.m Mon Apr 25 08:23:50 2016

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2641-CC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076931.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042516\F0076931.D          Vial: 7
Acq On    : 25 Apr 2016   9:34 am                     Operator: ericp
Sample    : CC2628-4                                  Inst    : MSVOA9
Misc      : MS33673,vf2641,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Thu Apr 14 09:35:01 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	93	0.00	7.39
2		Dichlorodifluoromethane	0.438	0.472	-7.8	103	0.00	2.40
3	P	Chloromethane	0.477	0.516	-8.2	103	0.00	2.63
4	C	Vinyl Chloride	0.484	0.525	-8.5	103	0.00	2.76
5		Bromomethane	0.252	0.276	-9.5	98	0.00	3.16
		----------	Amount	Calc.	%Drift		----------	
6		Chloroethane	50.000	59.005	-18.0	108	0.00	3.32
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.434	0.492	-13.4	106	0.00	3.48
8		Ethyl Ether	0.203	0.231	-13.8	105	0.00	3.80
9		1,2-Dichlorotrifluoroetha	0.405	0.454	-12.1	106	0.00	4.03
10	C	1,1-Dichloroethene	0.566	0.616	-8.8	102	0.00	4.06
11		Freon 113	0.353	0.361	-2.3	97	0.00	4.09
12		Carbon Disulfide	1.151	1.263	-9.7	101	0.00	4.13
13		Iodomethane	0.560	0.629	-12.3	104	0.00	4.24
14		Allyl chloride	0.305	0.313	-2.6	94	0.04	4.60
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	60.812	-21.6#	106	0.00	4.70
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.067	0.060	10.4	98	0.00	4.73
17		Methyl acetate	0.152	0.150	1.3	103	0.00	4.85
18		trans-1,2-Dichloroethene	0.429	0.509	-18.6	112	0.00	4.87
19		Hexane	0.257	0.275	-7.0	105	0.00	4.92
20		Methyl Tert Butyl Ether	0.705	0.802	-13.8	107	0.00	4.95
21		Acetonitrile	0.027	0.024	11.1	93	0.00	5.25
22		Di-isopropyl ether	0.763	0.875	-14.7	106	0.00	5.34
23		Chloroprene	0.460	0.473	-2.8	98	0.00	5.49
24	P	1,1-Dichloroethane	0.527	0.611	-15.9	110	0.00	5.51
25		Acrylonitrile	0.086	0.092	-7.0	107	0.00	5.57
26		ETBE	0.774	0.914	-18.1	110	0.00	5.73
27		Vinyl acetate	0.420	0.548	-30.5#	123	0.00	5.74
28		cis-1,2-Dichloroethene	0.332	0.345	-3.9	95	0.00	6.09
29		2,2-Dichloropropane	0.187	0.212	-13.4	105	0.00	6.21
30		Bromochloromethane	0.142	0.151	-6.3	100	0.00	6.30
31		Cyclohexane	0.578	0.640	-10.7	108	0.00	6.32
32	C	Chloroform	0.524	0.589	-12.4	104	0.00	6.36
33		Ethyl acetate	0.207	0.238	-15.0	116	0.00	6.46

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2641-CC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076931.D
Project: BMSMC, Building 5 Area, Humacao, PR

			Amount	Calc.	%Drift			
34		Tetrahydrofuran	50.000	58.807	-17.6	115	0.00	6.55

			AvgRF	CCRF	%Dev			
35	S	Dibromofluoromethane	0.232	0.239	-3.0	96	0.00	6.55
36		Carbon Tetrachloride	0.310	0.316	-1.9	94	0.00	6.53
37		1,1,1-Trichloroethane	0.340	0.368	-8.2	98	0.00	6.60
38		2-Butanone	0.110	0.109	0.9	105	0.00	6.67
39		1,1-Dichloropropene	0.400	0.456	-14.0	107	0.00	6.72
40		Propionitrile	0.036	0.036	0.0	101	0.00	7.00
41		Methacrylonitrile	0.126	0.148	-17.5	117	0.00	7.02
42		Benzene	1.202	1.329	-10.6	101	0.00	6.98
43		TAME	0.729	0.812	-11.4	105	0.00	7.06
44	S	1,2-Dichloroethane-d4	0.244	0.264	-8.2	106	0.00	7.12
45		1,2-Dichloroethane	0.323	0.383	-18.6	112	0.00	7.19
46		Trichloroethene	0.307	0.335	-9.1	100	0.00	7.56
47		Methylcyclohexane	0.567	0.626	-10.4	105	0.00	7.56
48		Dibromomethane	0.149	0.175	-17.4	106	0.00	7.99
49	C	1,2-Dichloropropane	0.285	0.328	-15.1	107	0.00	8.09
50		Bromodichloromethane	0.315	0.371	-17.8	105	0.00	8.14
51		Methyl methacrylate	0.171	0.190	-11.1	111	0.00	8.26
52		2-Chloroethyl vinyl ether	0.153	0.173	-13.1	106	0.00	8.68
53		cis-1,3-Dichloropropene	0.395	0.472	-19.5	108	0.00	8.76
54	I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00	10.51
55	S	Toluene-d8	1.333	1.258	5.6	97	0.00	8.95
56	C	Toluene	1.690	1.692	-0.1	102	0.00	9.00
57		2-Nitropropane	0.057	0.039	31.6#	84	0.00	9.24
58		4-Methyl-2-pentanone	0.321	0.297	7.5	108	0.00	9.35
59		trans-1,3-Dichloropropene	0.457	0.535	-17.1	124	0.00	9.41
60		Tetrachloroethene	0.386	0.396	-2.6	101	0.00	9.39
61		Ethyl methacrylate	0.397	0.342	13.9	88	0.00	9.52
62		1,1,2-Trichloroethane	0.280	0.282	-0.7	106	0.00	9.57
63		Dibromochloromethane	0.274	0.278	-1.5	102	0.00	9.76
64		1,3-Dichloropropane	0.541	0.532	1.7	102	0.00	9.85
65		1,2-Dibromoethane	0.298	0.303	-1.7	99	0.00	10.01
66		2-hexanone	0.227	0.203	10.6	104	-0.01	10.17
67		1-Chlorohexane	0.479	0.525	-9.6	102	0.00	10.46
68	C	Ethylbenzene	1.718	1.878	-9.3	106	0.00	10.53
69	P	Chlorobenzene	0.994	1.076	-8.2	105	0.00	10.53
70		1,1,1,2-Tetrachloroethane	0.292	0.315	-7.9	113	0.00	10.58

			Amount	Calc.	%Drift			
71		m,p-Xylene	100.000	108.148	-8.1	112	0.00	10.67
72		o-Xylene	50.000	56.230	-12.5	121	0.00	11.10
73		Styrene	50.000	54.755	-9.5	116	0.00	11.16
74	P	Bromoform	50.000	43.013	14.0	116	0.00	11.21
75		Isopropylbenzene	50.000	56.314	-12.6	119	0.00	11.41

			AvgRF	CCRF	%Dev			
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	114	0.00	12.87
77	S	4-Bromofluorobenzene	0.675	0.715	-5.9	122	0.00	11.72
78		cis-1,4-Dichloro-2-butene	0.241	0.205	14.9	104	0.00	11.77
79		n-Propylbenzene	3.757	4.209	-12.0	116	0.00	11.83
80		Bromobenzene	0.798	0.822	-3.0	111	0.00	11.85
81	P	1,1,2,2-Tetrachloroethane	0.892	0.806	9.6	104	0.00	11.91
82		1,3,5-Trimethylbenzene	2.708	2.970	-9.7	110	0.00	12.02
83		2-Chlorotoluene	2.609	2.860	-9.6	114	0.00	12.02
84		trans-1,4-Dichloro-2-Bute	0.226	0.209	7.5	110	0.00	12.08

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2641-CC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076931.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.212	0.200	5.7	109	0.00	12.06
86	Cyclohexanone	0.035	0.028	20.0#	101	0.00	12.13
87	4-Chlorotoluene	2.307	2.552	-10.6	114	0.00	12.19
88	tert-Butylbenzene	1.660	1.809	-9.0	114	0.00	12.36
89	1,2,4-Trimethylbenzene	2.606	2.937	-12.7	112	0.00	12.43
90	Pentachloroethane	0.388	0.367	5.4	104	0.00	12.41
91	sec-Butylbenzene	3.620	3.975	-9.8	113	0.00	12.54
	----------	Amount	Calc.	%Drift		----------	
92	4-Isopropyltoluene	50.000	55.553	-11.1	112	0.00	12.67
	----------	AvgRF	CCRF	%Dev		----------	
93	1,3-Dichlorobenzene	1.442	1.621	-12.4	119	0.00	12.80
94	1,4-Dichlorobenzene	1.473	1.603	-8.8	115	0.00	12.89
95	n-Butylbenzene	1.611	1.802	-11.9	110	0.00	13.12
96	Benzyl Chloride	0.269	0.265	1.5	117	0.00	13.14
97	1,2-Dichlorobenzene	1.393	1.494	-7.3	115	0.00	13.33
98	1,2-Dibromo-3-Chloropropa	0.150	0.132	12.0	109	-0.01	14.09
99	Hexachlorobutadiene	0.497	0.529	-6.4	115	0.00	14.64
100	1,2,4-Trichlorobenzene	0.895	1.043	-16.5	118	0.00	14.69
101	Naphthalene	2.253	2.579	-14.5	125	0.00	14.97
102	1,2,3-Trichlorobenzene	0.923	1.027	-11.3	115	0.00	15.14
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	95	0.00	4.97
104	Ethanol	0.119	0.120	-0.8	103	0.03	4.02
105	Acrolein	1.722	1.864	-8.2	100	0.00	4.42
106	Tert butyl alcohol	1.113	1.155	-3.8	102	-0.01	5.04
107	Isobutyl alcohol	0.274	0.243	11.3	88	-0.01	7.13
108	Tert Amyl Alcohol	0.933	0.905	3.0	97	-0.01	7.24
109	1,4-Dioxane	0.112	0.129	-15.2	110	-0.01	8.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F0076708.D 041316APP9-F.m Mon Apr 25 14:04:18 2016

6.7.5
6

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2641-ECC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076955.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042516\F0076955.D          Vial: 31
Acq On    : 25 Apr 2016   7:52 pm                     Operator: ericp
Sample    : ECC2628-4                                 Inst    : MSVOA9
Misc      : MS33682,vf2641,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Thu Apr 14 09:35:01 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	92	0.00	7.39
2		Dichlorodifluoromethane	0.438	0.438	0.0	95	0.00	2.40
3	P	Chloromethane	0.477	0.464	2.7	92	0.00	2.63
4	C	Vinyl Chloride	0.484	0.472	2.5	93	0.00	2.76
5		Bromomethane	0.252	0.280	-11.1	99	0.00	3.16
		----------	Amount	Calc.	%Drift		----------	
6		Chloroethane	50.000	54.263	-8.5	101	0.00	3.32
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.434	0.456	-5.1	98	0.00	3.49
8		Ethyl Ether	0.203	0.237	-16.7	107	0.00	3.80
9		1,2-Dichlorotrifluoroetha	0.405	0.423	-4.4	99	0.00	4.03
10	C	1,1-Dichloroethene	0.566	0.610	-7.8	101	0.00	4.06
11		Freon 113	0.353	0.367	-4.0	98	0.00	4.09
12		Carbon Disulfide	1.151	1.193	-3.6	95	0.00	4.13
13		Iodomethane	0.560	0.641	-14.5	106	0.00	4.24
14		Allyl chloride	0.305	0.335	-9.8	100	0.04	4.60
		----------	Amount	Calc.	%Drift		----------	
15		Methylene Chloride	50.000	56.185	-12.4	97	0.00	4.70
		----------	AvgRF	CCRF	%Dev		----------	
16		Acetone	0.067	0.067	0.0	110	0.00	4.73
17		Methyl acetate	0.152	0.157	-3.3	107	0.00	4.85
18		trans-1,2-Dichloroethene	0.429	0.450	-4.9	99	0.00	4.87
19		Hexane	0.257	0.234	8.9	88	0.00	4.92
20		Methyl Tert Butyl Ether	0.705	0.829	-17.6	110	0.00	4.95
21		Acetonitrile	0.027	0.027	0.0	102	0.00	5.25
22		Di-isopropyl ether	0.763	0.886	-16.1	107	0.00	5.34
23		Chloroprene	0.460	0.483	-5.0	100	0.00	5.49
24	P	1,1-Dichloroethane	0.527	0.564	-7.0	101	0.00	5.52
25		Acrylonitrile	0.086	0.081	5.8	94	0.00	5.57
26		ETBE	0.774	0.933	-20.5	112	0.00	5.73
27		Vinyl acetate	0.420	0.392	6.7	88	0.00	5.75
28		cis-1,2-Dichloroethene	0.332	0.375	-13.0	103	0.00	6.09
29		2,2-Dichloropropane	0.187	0.206	-10.2	101	0.00	6.21
30		Bromochloromethane	0.142	0.167	-17.6	110	0.00	6.30
31		Cyclohexane	0.578	0.610	-5.5	102	0.00	6.32
32	C	Chloroform	0.524	0.583	-11.3	103	0.00	6.36
33		Ethyl acetate	0.207	0.196	5.3	95	0.00	6.46

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2641-ECC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076955.D
Project: BMSMC, Building 5 Area, Humacao, PR

			Amount	Calc.	%Drift			
34		Tetrahydrofuran	50.000	52.425	-4.8	100	0.00	6.55

			AvgRF	CCRF	%Dev			
35	S	Dibromofluoromethane	0.232	0.266	-14.7	106	0.00	6.55
36		Carbon Tetrachloride	0.310	0.328	-5.8	97	0.00	6.53
37		1,1,1-Trichloroethane	0.340	0.379	-11.5	101	0.00	6.60
38		2-Butanone	0.110	0.106	3.6	101	0.00	6.68
39		1,1-Dichloropropene	0.400	0.418	-4.5	98	0.00	6.72
40		Propionitrile	0.036	0.036	0.0	101	0.00	7.00
41		Methacrylonitrile	0.126	0.144	-14.3	114	0.00	7.02
42		Benzene	1.202	1.235	-2.7	94	0.00	6.98
43		TAME	0.729	0.854	-17.1	110	0.00	7.06
44	S	1,2-Dichloroethane-d4	0.244	0.273	-11.9	108	0.00	7.12
45		1,2-Dichloroethane	0.323	0.372	-15.2	109	0.00	7.19
46		Trichloroethene	0.307	0.297	3.3	89	0.00	7.56
47		Methylcyclohexane	0.567	0.571	-0.7	95	0.00	7.56
48		Dibromomethane	0.149	0.162	-8.7	98	0.00	8.00
49	C	1,2-Dichloropropane	0.285	0.298	-4.6	97	0.00	8.09
50		Bromodichloromethane	0.315	0.337	-7.0	95	0.00	8.14
51		Methyl methacrylate	0.171	0.186	-8.8	108	0.00	8.26
52		2-Chloroethyl vinyl ether	0.153	0.160	-4.6	98	0.00	8.68
53		cis-1,3-Dichloropropene	0.395	0.412	-4.3	94	0.00	8.77
54	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00	10.51
55	S	Toluene-d8	1.333	1.239	7.1	96	0.00	8.95
56	C	Toluene	1.690	1.488	12.0	91	0.00	9.00
57		2-Nitropropane	0.057	0.038	33.3	83	0.00	9.24
58		4-Methyl-2-pentanone	0.321	0.284	11.5	105	0.00	9.35
59		trans-1,3-Dichloropropene	0.457	0.439	3.9	103	0.00	9.41
60		Tetrachloroethene	0.386	0.317	17.9	82	0.00	9.39
61		Ethyl methacrylate	0.397	0.375	5.5	98	0.00	9.52
62		1,1,2-Trichloroethane	0.280	0.260	7.1	99	0.00	9.57
63		Dibromochloromethane	0.274	0.251	8.4	93	0.00	9.76
64		1,3-Dichloropropane	0.541	0.501	7.4	97	0.00	9.85
65		1,2-Dibromoethane	0.298	0.281	5.7	93	0.00	10.02
66		2-hexanone	0.227	0.204	10.1	106	0.00	10.18
67		1-Chlorohexane	0.479	0.423	11.7	83	0.00	10.46
68	C	Ethylbenzene	1.718	1.564	9.0	89	0.00	10.53
69	P	Chlorobenzene	0.994	0.884	11.1	87	0.00	10.53
70		1,1,1,2-Tetrachloroethane	0.292	0.286	2.1	104	0.00	10.58

			Amount	Calc.	%Drift			
71		m,p-Xylene	100.000	87.479	12.5	93	0.00	10.67
72		o-Xylene	50.000	47.796	4.4	104	0.00	11.10
73		Styrene	50.000	45.032	9.9	96	0.00	11.16
74	P	Bromoform	50.000	39.327	21.3	107	0.00	11.21
75		Isopropylbenzene	50.000	47.548	4.9	102	0.00	11.41

			AvgRF	CCRF	%Dev			
76	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	12.87
77	S	4-Bromofluorobenzene	0.675	0.718	-6.4	125	0.00	11.72
78		cis-1,4-Dichloro-2-butene	0.241	0.204	15.4	105	0.00	11.77
79		n-Propylbenzene	3.757	3.124	16.8	88	0.00	11.83
80		Bromobenzene	0.798	0.715	10.4	98	0.00	11.85
81	P	1,1,2,2-Tetrachloroethane	0.892	0.769	13.8	101	0.00	11.91
82		1,3,5-Trimethylbenzene	2.708	2.431	10.2	92	0.00	12.02
83		2-Chlorotoluene	2.609	2.252	13.7	91	0.00	12.02
84		trans-1,4-Dichloro-2-Bute	0.226	0.191	15.5	102	0.00	12.09

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VF2641-ECC2628
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F0076955.D
Project: BMSMC, Building 5 Area, Humacao, PR

85	1,2,3-Trichloropropane	0.212	0.189	10.8	105	0.00	12.06
86	Cyclohexanone	0.035	0.029	17.1	108	0.00	12.13
87	4-Chlorotoluene	2.307	1.874	18.8	85	0.00	12.19
88	tert-Butylbenzene	1.660	1.578	4.9	101	0.00	12.36
89	1,2,4-Trimethylbenzene	2.606	2.279	12.5	88	0.00	12.43
90	Pentachloroethane	0.388	0.347	10.6	100	0.00	12.41
91	sec-Butylbenzene	3.620	3.196	11.7	92	0.00	12.54
	----------	Amount	Calc.	%Drift		----------	
92	4-Isopropyltoluene	50.000	40.909	18.2	84	0.00	12.68
	----------	AvgRF	CCRF	%Dev		----------	
93	1,3-Dichlorobenzene	1.442	1.125	22.0	84	0.00	12.80
94	1,4-Dichlorobenzene	1.473	1.127	23.5	83	0.00	12.89
95	n-Butylbenzene	1.611	1.143	29.1	71	0.00	13.12
96	Benzyl Chloride	0.269	0.209	22.3	94	0.00	13.14
97	1,2-Dichlorobenzene	1.393	1.198	14.0	94	0.00	13.33
98	1,2-Dibromo-3-Chloropropa	0.150	0.125	16.7	106	-0.01	14.09
99	Hexachlorobutadiene	0.497	0.357	28.2	79	0.00	14.65
100	1,2,4-Trichlorobenzene	0.895	0.644	28.0	74	0.00	14.69
101	Naphthalene	2.253	2.055	8.8	102	0.00	14.97
102	1,2,3-Trichlorobenzene	0.923	0.727	21.2	83	0.00	15.14
103 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	98	0.00	4.97
104	Ethanol	0.119	0.111	6.7	97	0.02	4.01
105	Acrolein	1.722	1.647	4.4	90	0.00	4.42
106	Tert butyl alcohol	1.113	1.135	-2.0	103	0.00	5.05
107	Isobutyl alcohol	0.274	0.258	5.8	96	0.00	7.14
108	Tert Amyl Alcohol	0.933	0.900	3.5	99	0.00	7.25
109	1,4-Dioxane	0.112	0.110	1.8	96	0.00	8.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F0076708.D 041316APP9-F.m Tue Apr 26 07:23:55 2016

Initial Calibration Summary

Job Number: FA33359 **Sample:** VP1531-ICC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41207.D
Project: BMSMC, Building 5 Area, Humacao, PR

Response Factor Report MSVOA13

Method : C:\msdchem\1\METHODS\8260P042116.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Calibration Files
1 =P41211.D 2 =P41204.D 3 =P41205.D 4 =P41206.D
5 =P41207.D 6 =P41208.D 7 =P41209.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------	----------	----------	ISTD	----------	----------	----------		
2) Dichlorodifluorom	0.166	0.205	0.220	0.223	0.225	0.233	0.238	0.216	11.29
3)P Chloromethane	0.378	0.398	0.396	0.417	0.387	0.393	0.395	0.395	3.00
4)C Vinyl Chloride	0.363	0.339	0.331	0.345	0.340	0.344	0.344	0.344	2.78
5) Bromomethane	0.208	0.197	0.201	0.215	0.207	0.208	0.206	0.206	2.80
6) Chloroethane	0.202	0.225	0.223	0.249	0.250	0.245	0.229	0.232	7.46
7) Trichlorofluorome	0.371	0.384	0.390	0.402	0.392	0.419	0.413	0.396	4.19
8) Ethyl Ether	0.279	0.286	0.310	0.322	0.308	0.328	0.336	0.310	6.79
9) 1,2-Dichlorotrifl	0.273	0.329	0.347	0.339	0.302	0.337	0.343	0.324	8.41
10)C 1,1-Dichloroethen	0.416	0.444	0.473	0.474	0.418	0.472	0.482	0.454	6.20
11) Freon 113	0.184	0.220	0.248	0.243	0.219	0.245	0.246	0.229	10.27
12) Carbon Disulfide	0.739	0.839	0.884	0.843	0.754	0.839	0.854	0.822	6.55
13) Iodomethane	0.358	0.374	0.396	0.397	0.359	0.368	0.391	0.378	4.44
14) Methylene Chlorid	0.466	0.446	0.478	0.475	0.436	0.456	0.471	0.461	3.42
15) Acetone	0.029	0.027	0.028	0.025	0.027	0.028	0.028	0.027	3.97
16) Methyl acetate	0.038	0.040	0.045	0.046	0.045	0.047	0.049	0.044	8.46
17) trans-1,2-Dichlor	0.360	0.392	0.415	0.429	0.381	0.420	0.432	0.404	6.76
18) Hexane	0.280	0.306	0.323	0.336	0.296	0.334	0.333	0.315	6.95
19) Methyl Tert Butyl	0.734	0.757	0.823	0.862	0.824	0.852	0.900	0.822	7.11
20) Di-isopropyl ethe	1.037	1.109	1.214	1.282	1.182	1.266	1.292	1.197	7.99
21)P 1,1-Dichloroethan	0.469	0.525	0.574	0.578	0.526	0.563	0.575	0.544	7.36
22) Acrylonitrile	0.108	0.104	0.111	0.112	0.127	0.125	0.128	0.116	8.44
23) ETBE	0.872	0.965	1.091	1.120	1.070	1.138	1.176	1.062	10.07
24) Vinyl acetate	0.708	0.701	0.790	0.825	0.919	0.894	0.898	0.819	11.03
25) cis-1,2-Dichloroe	0.286	0.285	0.311	0.321	0.298	0.317	0.327	0.307	5.57
26) 2,2-Dichloropropa	0.343	0.381	0.435	0.441	0.393	0.423	0.428	0.406	8.77
27) Bromochloromethan	0.109	0.135	0.146	0.151	0.138	0.147	0.150	0.139	10.48
28) Cyclohexane	0.456	0.523	0.591	0.605	0.542	0.618	0.637	0.567	11.26
29)C Chloroform	0.460	0.497	0.542	0.562	0.505	0.550	0.552	0.524	7.14
30) Tetrahydrofuran	0.091	0.095	0.107	0.092	0.090	0.095	0.101	0.096	6.33
31)S Dibromofluorometh	0.241	0.242	0.240	0.243	0.248	0.245	0.246	0.244	1.23
32) Carbon Tetrachlor	0.352	0.386	0.414	0.420	0.363	0.411	0.423	0.395	7.26
33) 1,1,1-Trichloroet	0.411	0.407	0.450	0.453	0.405	0.447	0.452	0.432	5.35
34) 2-Butanone	0.145	0.143	0.139	0.142	0.151	0.151	0.152	0.146	3.54
35) 1,1-Dichloroprope	0.334	0.392	0.424	0.436	0.381	0.440	0.437	0.406	9.71
36) Benzene	1.054	1.153	1.225	1.261	1.131	1.227	1.233	1.184	6.25
37) TAME	0.773	0.786	0.867	0.887	0.842	0.887	0.934	0.854	6.80
38)S 1,2-Dichloroethan	0.323	0.329	0.326	0.329	0.330	0.327	0.325	0.327	0.76
39) 1,2-Dichloroethan	0.441	0.422	0.455	0.456	0.426	0.454	0.453	0.444	3.29
40) Trichloroethene	0.259	0.276	0.304	0.305	0.267	0.302	0.302	0.288	6.85
41) Methylcyclohexane	0.429	0.471	0.532	0.538	0.480	0.553	0.556	0.509	9.53
42) Dibromomethane	0.144	0.160	0.173	0.180	0.170	0.179	0.186	0.170	8.42
43)C 1,2-Dichloropropa	0.284	0.328	0.349	0.359	0.336	0.362	0.366	0.341	8.39
44) Bromodichlorometh	0.337	0.371	0.401	0.420	0.389	0.423	0.422	0.395	8.17
45) 2-Chloroethyl vin	0.188	0.201	0.198	0.211	0.236	0.238	0.244	0.217	10.35
46) cis-1,3-Dichlorop	0.424	0.465	0.501	0.541	0.503	0.539	0.550	0.504	9.08

Initial Calibration Summary

Job Number: FA33359 **Sample:** VP1531-ICC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41207.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
47) I   Chlorobenzene-d5      ----------------ISTD---------------------
48)S Toluene-d8        1.373 1.376 1.351 1.358 1.340 1.338 1.333 1.353   1.26
49)C Toluene           1.733 1.680 1.789 1.826 1.602 1.783 1.782 1.742   4.45
50)  2-Nitropropane    0.108 0.106 0.116 0.121 0.114 0.124 0.125 0.116   6.48
51)  4-Methyl-2-pentan 0.397 0.421 0.431 0.444 0.462 0.467 0.469 0.441   6.09
52)  trans-1,3-Dichlor 0.535 0.554 0.594 0.640 0.602 0.653 0.671 0.607   8.38
53)  Tetrachloroethene 0.355 0.352 0.390 0.385 0.341 0.386 0.382 0.370   5.42
54)  1,1,2-Trichloroet 0.264 0.283 0.296 0.311 0.288 0.306 0.314 0.295   6.05
55)  Dibromochlorometh 0.313 0.346 0.383 0.396 0.366 0.398 0.412 0.374   9.25
56)  1,3-Dichloropropa 0.555 0.622 0.663 0.683 0.631 0.683 0.696 0.647   7.60
57)  1,2-Dibromoethane 0.264 0.300 0.330 0.346 0.324 0.353 0.366 0.326  10.71
58)  2-hexanone        0.261 0.276 0.286 0.292 0.314 0.321 0.321 0.296   7.90
59)  1-Chlorohexane    0.501 0.506 0.544 0.573 0.517 0.590 0.586 0.545   7.04
60)C Ethylbenzene      1.795 1.806 1.964 2.030 1.813 2.020 2.032 1.923   5.87
61)P Chlorobenzene     1.162 1.075 1.131 1.156 1.035 1.128 1.146 1.119   4.18
62)  1,1,1,2-Tetrachlo 0.335 0.364 0.383 0.390 0.354 0.387 0.396 0.373   6.01
63)  m,p-Xylene        1.267 1.340 1.496 1.559 1.382 1.544 1.550 1.448   8.13
64)  o-Xylene          1.204 1.301 1.454 1.527 1.379 1.537 1.542 1.421   9.26
65)  Styrene           0.885 0.986 1.117 1.221 1.108 1.223 1.250 1.113  12.22
66)P Bromoform         0.248 0.214 0.233 0.252 0.233 0.252 0.260 0.242   6.56
67)  Isopropylbenzene  1.536 1.601 1.819 1.888 1.672 1.862 1.882 1.751   8.32

68) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
69)S 4-Bromofluorobenz 0.988 0.993 0.967 0.975 0.976 1.004 1.005 0.987   1.50
70)  n-Propylbenzene   3.818 4.197 4.563 4.673 4.177 4.716 4.778 4.418   8.12
71)  Bromobenzene      0.909 0.853 0.930 0.951 0.868 0.926 0.961 0.914   4.42
72)P 1,1,2,2-Tetrachlo 0.956 0.857 0.890 0.913 0.867 0.931 0.965 0.911   4.65
73)  1,3,5-Trimethylbe 2.704 3.001 3.333 3.430 3.111 3.486 3.608 3.239   9.78
74)  2-Chlorotoluene   2.710 2.747 2.990 3.088 2.797 3.153 3.248 2.962   7.19
75)  trans-1,4-Dichlor 0.237 0.219 0.262 0.267 0.272 0.310 0.324 0.270  13.75
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9962
              Response Ratio = 0.00000 + 0.31287 *A

76)  1,2,3-Trichloropr 0.246 0.246 0.252 0.259 0.248 0.267 0.280 0.257   4.96
77)  Cyclohexanone     0.025 0.028 0.031 0.030 0.034 0.036 0.038 0.032  14.90
78)  4-Chlorotoluene   2.540 2.551 2.758 2.897 2.609 2.906 2.933 2.742   6.36
79)  tert-Butylbenzene 1.594 1.647 1.809 1.850 1.685 1.905 1.935 1.775   7.51
80)  1,2,4-Trimethylbe 2.796 2.892 3.237 3.333 3.051 3.403 3.437 3.164   8.03
81)  sec-Butylbenzene  3.662 3.653 4.122 4.186 3.784 4.249 4.298 3.993   7.09
82)  4-Isopropyltoluen 2.826 2.940 3.354 3.489 3.181 3.539 3.621 3.279   9.35
83)  1,3-Dichlorobenze 1.621 1.612 1.750 1.778 1.631 1.751 1.804 1.707   4.81
84)  1,4-Dichlorobenze 1.854 1.682 1.833 1.816 1.680 1.820 1.860 1.792   4.34
85)  n-Butylbenzene    1.643 1.662 1.852 1.944 1.797 2.035 2.055 1.855   8.96
86)  Benzyl Chloride   0.269 0.315 0.356 0.364 0.343 0.379 0.392 0.345  12.11
87)  1,2-Dichlorobenze 1.517 1.508 1.602 1.662 1.515 1.654 1.696 1.593   5.02
88)  1,2-Dibromo-3-Chl 0.148 0.125 0.133 0.141 0.132 0.148 0.154 0.140   7.57
89)  Hexachlorobutadie 0.613 0.484 0.503 0.515 0.471 0.537 0.550 0.525   9.11
90)  1,2,4-Trichlorobe 1.015 0.846 0.989 1.051 1.000 1.112 1.139 1.022   9.38
91)  Naphthalene       1.975 1.569 1.813 1.941 1.917 2.102 2.198 1.931  10.53
92)  1,2,3-Trichlorobe 1.000 0.775 0.847 0.900 0.857 0.931 0.982 0.899   8.84

93) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
94)  acrolein          2.860 2.745 2.860 2.835 2.805 2.990 2.883 2.854   2.65
95)  Tert Butyl Alcoho 1.419 1.363 1.453 1.359 1.306 1.328 1.309 1.362   4.09
96)  tert Amyl alcohol 1.060 1.031 1.153 1.199 1.109 1.215 1.174 1.135   6.17
97)  1,4-Dioxane       0.113 0.118 0.132 0.141 0.135 0.147 0.139 0.132   9.43
-------------------------------------------------------------------------
(#) = Out of Range
```

Initial Calibration Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VP1531-ICC1531
Lab FileID: P41207.D

8260P042116.M Fri Apr 22 08:34:19 2016

Initial Calibration Verification

Job Number: FA33359 **Sample:** VP1531-ICV1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41212.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\042116\P41212.D Vial: 10
Acq On : 21 Apr 2016 2:43 pm Operator: katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,, Multiplr: 1.00
MS Integration Params: tiny.p

Method : C:\msdchem\1\METHODS\8260P042116.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Apr 21 14:27:49 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	108	0.00	7.15
2		Dichlorodifluoromethane	0.216	0.234	-8.3	112	0.00	2.53
3	P	Chloromethane	0.395	0.376	4.8	105	0.00	2.70
4	C	Vinyl Chloride	0.344	0.347	-0.9	110	0.00	2.83
5		Bromomethane	0.206	0.211	-2.4	110	0.00	3.17
6		Chloroethane	0.232	0.270	-16.4	117	0.00	3.30
7		Trichlorofluoromethane	0.396	0.408	-3.0	112	0.00	3.51
8		Ethyl Ether	0.310	0.330	-6.5	116	0.00	3.73
9		1,2-Dichlorotrifluoroetha	0.324	0.353	-9.0	126	0.00	3.96
10	C	1,1-Dichloroethene	0.454	0.471	-3.7	122	0.00	3.98
11		Freon 113	0.229	0.239	-4.4	118	0.00	4.05
12		Carbon Disulfide	0.822	0.914	-11.2	131	0.00	4.04
13		Iodomethane	0.378	0.407	-7.7	122	0.00	4.15
14		Methylene Chloride	0.461	0.461	0.0	114	0.00	4.56
15		Acetone	0.027	0.027	0.0	108	0.00	4.58
16		Methyl acetate	0.044	0.046	-4.5	112	0.00	4.69
17		trans-1,2-Dichloroethene	0.404	0.440	-8.9	125	0.00	4.72
18		Hexane	0.315	0.325	-3.2	119	0.00	4.79
19		Methyl Tert Butyl Ether	0.822	0.855	-4.0	112	0.00	4.83
20		Di-isopropyl ether	1.197	1.205	-0.7	110	0.00	5.18
21	P	1,1-Dichloroethane	0.544	0.580	-6.6	119	0.00	5.33
22		Acrylonitrile	0.116	0.114	1.7	97	0.00	5.36
23		ETBE	1.062	1.090	-2.6	110	0.00	5.56
24		Vinyl acetate	0.819	0.789	3.7	93	0.00	5.53
25		cis-1,2-Dichloroethene	0.307	0.310	-1.0	112	0.00	5.89
26		2,2-Dichloropropane	0.406	0.456	-12.3	125	0.00	6.01
27		Bromochloromethane	0.139	0.147	-5.8	115	0.00	6.09
28		Cyclohexane	0.567	0.579	-2.1	115	0.00	6.14
29	C	Chloroform	0.524	0.555	-5.9	119	0.00	6.14
30		Tetrahydrofuran	0.096	0.094	2.1	112	0.00	6.31
31	S	Dibromofluoromethane	0.244	0.246	-0.8	107	0.00	6.33
32		Carbon Tetrachloride	0.395	0.418	-5.8	124	0.00	6.33
33		1,1,1-Trichloroethane	0.432	0.435	-0.7	116	0.00	6.39
34		2-Butanone	0.146	0.152	-4.1	109	0.00	6.42
35		1,1-Dichloropropene	0.406	0.430	-5.9	122	0.00	6.50
36		Benzene	1.184	1.223	-3.3	117	0.00	6.74
37		TAME	0.854	0.846	0.9	109	0.00	6.84
38	S	1,2-Dichloroethane-d4	0.327	0.321	1.8	105	0.00	6.87
39		1,2-Dichloroethane	0.444	0.460	-3.6	117	0.00	6.93
40		Trichloroethene	0.288	0.304	-5.6	123	0.00	7.32
41		Methylcyclohexane	0.509	0.530	-4.1	119	0.00	7.34
42		Dibromomethane	0.170	0.188	-10.6	119	0.00	7.74

Initial Calibration Verification

Job Number: FA33359 **Sample:** VP1531-ICV1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41212.D
Project: BMSMC, Building 5 Area, Humacao, PR

43	C	1,2-Dichloropropane	0.341	0.358	-5.0	115	0.00	7.83
44		Bromodichloromethane	0.395	0.433	-9.6	120	0.00	7.88
45		2-Chloroethyl vinyl ether	0.217	0.232	-6.9	107	0.00	8.41
46		cis-1,3-Dichloropropene	0.504	0.555	-10.1	119	0.00	8.50
47	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00	10.24
48	S	Toluene-d8	1.353	1.346	0.5	107	0.00	8.70
49	C	Toluene	1.742	1.797	-3.2	119	0.00	8.75
50		2-Nitropropane	0.116	0.120	-3.4	112	0.00	8.95
51		4-Methyl-2-pentanone	0.441	0.459	-4.1	106	0.00	9.08
52		trans-1,3-Dichloropropene	0.607	0.718	-18.3	127	0.00	9.14
53		Tetrachloroethene	0.370	0.400	-8.1	124	0.00	9.15
54		1,1,2-Trichloroethane	0.295	0.315	-6.8	116	0.00	9.30
55		Dibromochloromethane	0.374	0.417	-11.5	121	0.00	9.49
56		1,3-Dichloropropane	0.647	0.666	-2.9	112	0.00	9.58
57		1,2-Dibromoethane	0.326	0.357	-9.5	117	0.00	9.74
58		2-hexanone	0.296	0.304	-2.7	103	0.00	9.90
59		1-Chlorohexane	0.545	0.556	-2.0	114	0.00	10.21
60	C	Ethylbenzene	1.923	2.040	-6.1	119	0.00	10.27
61	P	Chlorobenzene	1.119	1.180	-5.5	121	0.00	10.26
62		1,1,1,2-Tetrachloroethane	0.373	0.406	-8.8	122	0.00	10.32
63		m,p-Xylene	1.448	1.563	-7.9	120	0.00	10.41
64		o-Xylene	1.421	1.561	-9.9	120	0.00	10.84
65		Styrene	1.113	1.219	-9.5	117	0.00	10.89
66	P	Bromoform	0.242	0.272	-12.4	124	0.00	10.94
67		Isopropylbenzene	1.751	1.928	-10.1	122	0.00	11.15
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	12.60
69	S	4-Bromofluorobenzene	0.987	0.970	1.7	106	0.00	11.45
70		n-Propylbenzene	4.418	4.815	-9.0	123	0.00	11.57
71		Bromobenzene	0.914	0.957	-4.7	118	0.00	11.57
72	P	1,1,2,2-Tetrachloroethane	0.911	0.917	-0.7	113	0.00	11.63
73		1,3,5-Trimethylbenzene	3.239	3.460	-6.8	119	0.00	11.76
74		2-Chlorotoluene	2.962	3.149	-6.3	120	0.00	11.75
		----------	Amount	Calc.	%Drift	----------		
75		trans-1,4-Dichloro-2-Bute	40.000	36.026	9.9	111	0.00	11.81
		----------	AvgRF	CCRF	%Dev	----------		
76		1,2,3-Trichloropropane	0.257	0.273	-6.2	117	0.00	11.78
77		Cyclohexanone	0.032	0.030	6.3	93	0.00	11.84
78		4-Chlorotoluene	2.742	2.902	-5.8	119	0.00	11.92
79		tert-Butylbenzene	1.775	1.897	-6.9	120	0.00	12.09
80		1,2,4-Trimethylbenzene	3.164	3.415	-7.9	120	0.00	12.16
81		sec-Butylbenzene	3.993	4.334	-8.5	122	0.00	12.28
82		4-Isopropyltoluene	3.279	3.537	-7.9	119	0.00	12.41
83		1,3-Dichlorobenzene	1.707	1.865	-9.3	122	0.00	12.53
84		1,4-Dichlorobenzene	1.792	1.923	-7.3	122	0.00	12.62
85		n-Butylbenzene	1.855	2.021	-8.9	120	0.00	12.85
86		Benzyl Chloride	0.345	0.403	-16.8	125	0.00	12.86
87		1,2-Dichlorobenzene	1.593	1.719	-7.9	121	0.00	13.05
88		1,2-Dibromo-3-Chloropropa	0.140	0.146	-4.3	117	0.00	13.83
89		Hexachlorobutadiene	0.525	0.527	-0.4	120	0.00	14.42
90		1,2,4-Trichlorobenzene	1.022	1.126	-10.2	120	0.00	14.45
91		Naphthalene	1.931	2.257	-16.9	126	0.00	14.73
92		1,2,3-Trichlorobenzene	0.899	0.941	-4.7	117	0.00	14.89
93	I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	105	0.00	4.80
94		acrolein	2.854	3.345	-17.2	125	0.00	4.30
95		Tert Butyl Alcohol	1.362	1.351	0.8	109	0.00	4.88

Initial Calibration Verification

Job Number: FA33359 **Sample:** VP1531-ICV1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41212.D
Project: BMSMC, Building 5 Area, Humacao, PR

96	tert Amyl alcohol	1.135	1.179	-3.9	112	0.00	6.99
97	1,4-Dioxane	0.132	0.144	-9.1	112	0.00	8.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P41207.D 8260P042116.M Fri Apr 22 08:34:31 2016

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VP1535-CC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41306.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042516\P41306.D            Vial: 1
Acq On    : 25 Apr 2016   8:19 am                    Operator: katiem
Sample    : CC1531-5                                 Inst    : MSVOA13
Misc      : MS33659,VP1535,,,,,                      Multiplr: 1.00
MS Integration Params: tiny.p

Method       : C:\msdchem\1\METHODS\8260P042116.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Thu Apr 21 14:27:49 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	113	0.00	7.15
2		Dichlorodifluoromethane	0.216	0.215	0.5	108	0.00	2.53
3	P	Chloromethane	0.395	0.360	8.9	105	0.00	2.71
4	C	Vinyl Chloride	0.344	0.319	7.3	106	0.00	2.84
5		Bromomethane	0.206	0.214	-3.9	117	0.00	3.17
6		Chloroethane	0.232	0.240	-3.4	109	0.00	3.31
7		Trichlorofluoromethane	0.396	0.386	2.5	112	0.00	3.52
8		Ethyl Ether	0.310	0.315	-1.6	116	-0.01	3.73
9		1,2-Dichlorotrifluoroetha	0.324	0.334	-3.1	125	0.00	3.96
10	C	1,1-Dichloroethene	0.454	0.458	-0.9	124	0.00	3.99
11		Freon 113	0.229	0.250	-9.2	129	0.00	4.05
12		Carbon Disulfide	0.822	0.841	-2.3	126	0.00	4.06
13		Iodomethane	0.378	0.408	-7.9	128	0.00	4.15
14		Methylene Chloride	0.461	0.429	6.9	111	0.00	4.56
15		Acetone	0.027	0.027	0.0	111	0.00	4.58
16		Methyl acetate	0.044	0.046	-4.5	116	0.00	4.69
17		trans-1,2-Dichloroethene	0.404	0.409	-1.2	122	0.00	4.72
18		Hexane	0.315	0.309	1.9	118	0.00	4.79
19		Methyl Tert Butyl Ether	0.822	0.849	-3.3	117	0.00	4.82
20		Di-isopropyl ether	1.197	1.158	3.3	111	0.00	5.18
21	P	1,1-Dichloroethane	0.544	0.553	-1.7	119	0.00	5.34
22		Acrylonitrile	0.116	0.113	2.6	101	0.00	5.36
23		ETBE	1.062	1.076	-1.3	114	0.00	5.56
24		Vinyl acetate	0.819	0.810	1.1	100	0.00	5.53
25		cis-1,2-Dichloroethene	0.307	0.318	-3.6	121	0.00	5.89
26		2,2-Dichloropropane	0.406	0.440	-8.4	127	0.00	6.01
27		Bromochloromethane	0.139	0.152	-9.4	125	0.00	6.09
28		Cyclohexane	0.567	0.566	0.2	118	0.00	6.14
29	C	Chloroform	0.524	0.546	-4.2	122	0.00	6.15
30		Tetrahydrofuran	0.096	0.085	11.5	107	0.00	6.31
31	S	Dibromofluoromethane	0.244	0.246	-0.8	112	0.00	6.33
32		Carbon Tetrachloride	0.395	0.416	-5.3	130	0.00	6.33
33		1,1,1-Trichloroethane	0.432	0.448	-3.7	125	0.00	6.39
34		2-Butanone	0.146	0.141	3.4	106	0.00	6.42
35		1,1-Dichloropropene	0.406	0.420	-3.4	124	0.00	6.49
36		Benzene	1.184	1.208	-2.0	121	0.00	6.74
37		TAME	0.854	0.880	-3.0	118	0.00	6.84
38	S	1,2-Dichloroethane-d4	0.327	0.319	2.4	109	0.00	6.87
39		1,2-Dichloroethane	0.444	0.444	0.0	118	0.00	6.94
40		Trichloroethene	0.288	0.299	-3.8	127	0.00	7.32
41		Methylcyclohexane	0.509	0.522	-2.6	123	0.00	7.35
42		Dibromomethane	0.170	0.178	-4.7	118	0.00	7.74

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VP1535-CC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41306.D
Project: BMSMC, Building 5 Area, Humacao, PR

43	C	1,2-Dichloropropane	0.341	0.345	-1.2	116	0.00	7.83
44		Bromodichloromethane	0.395	0.409	-3.5	119	0.00	7.88
45		2-Chloroethyl vinyl ether	0.217	0.224	-3.2	107	0.00	8.42
46		cis-1,3-Dichloropropene	0.504	0.533	-5.8	120	0.00	8.50
47	I	Chlorobenzene-d5	1.000	1.000	0.0	113	0.00	10.24
48	S	Toluene-d8	1.353	1.321	2.4	111	0.00	8.70
49	C	Toluene	1.742	1.734	0.5	122	0.00	8.75
50		2-Nitropropane	0.116	0.114	1.7	113	0.00	8.95
51		4-Methyl-2-pentanone	0.441	0.434	1.6	106	0.00	9.08
52		trans-1,3-Dichloropropene	0.607	0.623	-2.6	117	0.00	9.13
53		Tetrachloroethene	0.370	0.389	-5.1	129	0.00	9.15
54		1,1,2-Trichloroethane	0.295	0.296	-0.3	116	0.00	9.30
55		Dibromochloromethane	0.374	0.389	-4.0	120	0.00	9.49
56		1,3-Dichloropropane	0.647	0.647	0.0	116	0.00	9.58
57		1,2-Dibromoethane	0.326	0.345	-5.8	120	0.00	9.74
58		2-hexanone	0.296	0.294	0.7	106	0.00	9.90
59		1-Chlorohexane	0.545	0.555	-1.8	121	0.00	10.21
60	C	Ethylbenzene	1.923	1.951	-1.5	122	0.00	10.27
61	P	Chlorobenzene	1.119	1.125	-0.5	123	0.00	10.26
62		1,1,1,2-Tetrachloroethane	0.373	0.384	-2.9	123	0.00	10.32
63		m,p-Xylene	1.448	1.496	-3.3	122	0.00	10.41
64		o-Xylene	1.421	1.462	-2.9	120	0.00	10.84
65		Styrene	1.113	1.177	-5.8	120	0.00	10.89
66	P	Bromoform	0.242	0.247	-2.1	120	0.00	10.94
67		Isopropylbenzene	1.751	1.812	-3.5	122	0.00	11.15
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	12.60
69	S	4-Bromofluorobenzene	0.987	0.952	3.5	110	0.00	11.45
70		n-Propylbenzene	4.418	4.444	-0.6	120	0.00	11.57
71		Bromobenzene	0.914	0.935	-2.3	121	0.00	11.57
72	P	1,1,2,2-Tetrachloroethane	0.911	0.887	2.6	115	0.00	11.63
73		1,3,5-Trimethylbenzene	3.239	3.319	-2.5	120	0.00	11.76
74		2-Chlorotoluene	2.962	2.959	0.1	119	0.00	11.75
		----------	Amount	Calc.	%Drift	----------		
75		trans-1,4-Dichloro-2-Bute	40.000	27.477	31.3#	89	0.00	11.81
		----------	AvgRF	CCRF	%Dev	----------		
76		1,2,3-Trichloropropane	0.257	0.259	-0.8	118	0.00	11.78
77		Cyclohexanone	0.032	0.030	6.3	97	0.00	11.83
78		4-Chlorotoluene	2.742	2.750	-0.3	119	0.00	11.92
79		tert-Butylbenzene	1.775	1.788	-0.7	120	0.00	12.09
80		1,2,4-Trimethylbenzene	3.164	3.222	-1.8	119	0.00	12.16
81		sec-Butylbenzene	3.993	4.071	-2.0	121	0.00	12.28
82		4-Isopropyltoluene	3.279	3.404	-3.8	121	0.00	12.41
83		1,3-Dichlorobenzene	1.707	1.743	-2.1	120	0.00	12.53
84		1,4-Dichlorobenzene	1.792	1.799	-0.4	121	0.00	12.61
85		n-Butylbenzene	1.855	1.911	-3.0	120	0.00	12.85
86		Benzyl Chloride	0.345	0.393	-13.9	129	0.00	12.86
87		1,2-Dichlorobenzene	1.593	1.629	-2.3	121	0.00	13.06
88		1,2-Dibromo-3-Chloropropa	0.140	0.133	5.0	113	0.00	13.83
89		Hexachlorobutadiene	0.525	0.520	1.0	124	0.00	14.42
90		1,2,4-Trichlorobenzene	1.022	1.063	-4.0	120	0.00	14.45
91		Naphthalene	1.931	1.934	-0.2	114	0.00	14.73
92		1,2,3-Trichlorobenzene	0.899	0.881	2.0	116	0.00	14.89
93	I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	104	0.00	4.80
94		acrolein	2.854	3.034	-6.3	112	0.00	4.30
95		Tert Butyl Alcohol	1.362	1.314	3.5	104	0.00	4.87

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VP1535-CC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41306.D
Project: BMSMC, Building 5 Area, Humacao, PR

96	tert Amyl alcohol	1.135	1.209	-6.5	113	0.00	6.98
97	1,4-Dioxane	0.132	0.154	-16.7	118	0.00	8.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P41207.D 8260P042116.M Tue Apr 26 10:35:07 2016

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VP1535-ECC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41333.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042516\P41333.D            Vial: 26
Acq On    : 25 Apr 2016   8:16 pm                    Operator: katiem
Sample    : ECC1531-5                                Inst    : MSVOA13
Misc      : MS33688,VP1536,,,,,                      Multiplr: 1.00
MS Integration Params: tiny.p

Method       : C:\msdchem\1\METHODS\8260P042116.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Thu Apr 21 14:27:49 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	108	0.00	7.15
2		Dichlorodifluoromethane	0.216	0.210	2.8	101	0.00	2.54
3	P	Chloromethane	0.395	0.398	-0.8	111	0.00	2.71
4	C	Vinyl Chloride	0.344	0.323	6.1	103	0.00	2.84
5		Bromomethane	0.206	0.189	8.3	99	0.00	3.18
6		Chloroethane	0.232	0.223	3.9	96	0.00	3.30
7		Trichlorofluoromethane	0.396	0.367	7.3	101	0.00	3.52
8		Ethyl Ether	0.310	0.311	-0.3	109	0.00	3.74
9		1,2-Dichlorotrifluoroetha	0.324	0.308	4.9	110	-0.01	3.95
10	C	1,1-Dichloroethene	0.454	0.431	5.1	112	0.00	3.98
11		Freon 113	0.229	0.221	3.5	109	0.00	4.05
12		Carbon Disulfide	0.822	0.722	12.2	104	0.00	4.05
13		Iodomethane	0.378	0.354	6.3	106	-0.01	4.14
14		Methylene Chloride	0.461	0.454	1.5	113	0.00	4.56
15		Acetone	0.027	0.028	-3.7	112	0.00	4.58
16		Methyl acetate	0.044	0.047	-6.8	114	0.00	4.70
17		trans-1,2-Dichloroethene	0.404	0.400	1.0	114	0.00	4.72
18		Hexane	0.315	0.295	6.3	108	0.00	4.79
19		Methyl Tert Butyl Ether	0.822	0.838	-1.9	110	0.00	4.82
20		Di-isopropyl ether	1.197	1.198	-0.1	110	0.00	5.18
21	P	1,1-Dichloroethane	0.544	0.536	1.5	110	0.00	5.34
22		Acrylonitrile	0.116	0.118	-1.7	101	0.00	5.37
23		ETBE	1.062	1.073	-1.0	108	0.00	5.55
24		Vinyl acetate	0.819	0.875	-6.8	103	0.00	5.54
25		cis-1,2-Dichloroethene	0.307	0.302	1.6	110	0.00	5.88
26		2,2-Dichloropropane	0.406	0.351	13.5	97	0.00	6.01
27		Bromochloromethane	0.139	0.137	1.4	107	0.00	6.09
28		Cyclohexane	0.567	0.545	3.9	109	0.00	6.13
29	C	Chloroform	0.524	0.518	1.1	111	0.00	6.14
30		Tetrahydrofuran	0.096	0.091	5.2	109	0.00	6.31
31	S	Dibromofluoromethane	0.244	0.244	0.0	106	0.00	6.33
32		Carbon Tetrachloride	0.395	0.362	8.4	108	0.00	6.33
33		1,1,1-Trichloroethane	0.432	0.413	4.4	110	0.00	6.39
34		2-Butanone	0.146	0.161	-10.3	115	0.00	6.42
35		1,1-Dichloropropene	0.406	0.402	1.0	114	0.00	6.50
36		Benzene	1.184	1.166	1.5	112	0.00	6.75
37		TAME	0.854	0.857	-0.4	110	0.00	6.84
38	S	1,2-Dichloroethane-d4	0.327	0.322	1.5	106	0.00	6.87
39		1,2-Dichloroethane	0.444	0.439	1.1	111	0.00	6.94
40		Trichloroethene	0.288	0.279	3.1	113	0.00	7.32
41		Methylcyclohexane	0.509	0.481	5.5	108	0.00	7.34
42		Dibromomethane	0.170	0.177	-4.1	112	0.00	7.74

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VP1535-ECC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41333.D
Project: BMSMC, Building 5 Area, Humacao, PR

43	C	1,2-Dichloropropane	0.341	0.343	-0.6	110	0.00	7.84
44		Bromodichloromethane	0.395	0.383	3.0	106	0.00	7.88
45		2-Chloroethyl vinyl ether	0.217	0.246	-13.4	113	0.00	8.41
46		cis-1,3-Dichloropropene	0.504	0.448	11.1	96	0.00	8.50
47	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00	10.24
48	S	Toluene-d8	1.353	1.338	1.1	105	0.00	8.69
49	C	Toluene	1.742	1.691	2.9	111	0.00	8.75
50		2-Nitropropane	0.116	0.119	-2.6	110	0.00	8.95
51		4-Methyl-2-pentanone	0.441	0.520	-17.9	118	0.00	9.08
52		trans-1,3-Dichloropropene	0.607	0.527	13.2	92	0.00	9.14
53		Tetrachloroethene	0.370	0.362	2.2	112	0.00	9.15
54		1,1,2-Trichloroethane	0.295	0.294	0.3	108	0.00	9.30
55		Dibromochloromethane	0.374	0.331	11.5	95	0.00	9.50
56		1,3-Dichloropropane	0.647	0.662	-2.3	110	0.00	9.58
57		1,2-Dibromoethane	0.326	0.340	-4.3	110	0.00	9.75
58		2-hexanone	0.296	0.356	-20.3	119	0.00	9.90
59		1-Chlorohexane	0.545	0.520	4.6	106	0.00	10.21
60	C	Ethylbenzene	1.923	1.884	2.0	109	0.00	10.27
61	P	Chlorobenzene	1.119	1.065	4.8	108	0.00	10.26
62		1,1,1,2-Tetrachloroethane	0.373	0.360	3.5	107	0.00	10.31
63		m,p-Xylene	1.448	1.438	0.7	109	0.00	10.41
64		o-Xylene	1.421	1.413	0.6	108	0.00	10.84
65		Styrene	1.113	1.125	-1.1	107	0.00	10.89
66	P	Bromoform	0.242	0.174	28.1	78	0.00	10.94
67		Isopropylbenzene	1.751	1.726	1.4	108	0.00	11.15
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	12.60
69	S	4-Bromofluorobenzene	0.987	0.978	0.9	104	0.00	11.45
70		n-Propylbenzene	4.418	4.325	2.1	108	0.00	11.57
71		Bromobenzene	0.914	0.879	3.8	105	0.00	11.57
72	P	1,1,2,2-Tetrachloroethane	0.911	0.899	1.3	108	0.00	11.63
73		1,3,5-Trimethylbenzene	3.239	3.237	0.1	108	0.00	11.76
74		2-Chlorotoluene	2.962	2.874	3.0	107	0.00	11.75
		----------	Amount	Calc.	%Drift	----------		
75		trans-1,4-Dichloro-2-Bute	40.000	1.650	95.9#	5	0.00	11.81
		----------	AvgRF	CCRF	%Dev	----------		
76		1,2,3-Trichloropropane	0.257	0.253	1.6	106	0.00	11.78
77		Cyclohexanone	0.032	0.025	21.9	76	0.00	11.83
78		4-Chlorotoluene	2.742	2.698	1.6	107	0.00	11.91
79		tert-Butylbenzene	1.775	1.755	1.1	108	0.00	12.09
80		1,2,4-Trimethylbenzene	3.164	3.137	0.9	107	0.00	12.16
81		sec-Butylbenzene	3.993	3.857	3.4	106	0.00	12.28
82		4-Isopropyltoluene	3.279	3.224	1.7	105	0.00	12.42
83		1,3-Dichlorobenzene	1.707	1.660	2.8	106	0.00	12.53
84		1,4-Dichlorobenzene	1.792	1.725	3.7	107	0.00	12.62
85		n-Butylbenzene	1.855	1.777	4.2	103	0.00	12.85
86		Benzyl Chloride	0.345	0.290	15.9	88	0.00	12.85
87		1,2-Dichlorobenzene	1.593	1.574	1.2	108	0.00	13.06
88		1,2-Dibromo-3-Chloropropa	0.140	0.138	1.4	109	0.00	13.83
89		Hexachlorobutadiene	0.525	0.473	9.9	104	0.00	14.42
90		1,2,4-Trichlorobenzene	1.022	1.027	-0.5	107	0.00	14.45
91		Naphthalene	1.931	2.018	-4.5	109	0.00	14.73
92		1,2,3-Trichlorobenzene	0.899	0.878	2.3	106	0.00	14.89
93	I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	104	0.00	4.80
94		acrolein	2.854	2.448	14.2	91	0.00	4.30
95		Tert Butyl Alcohol	1.362	1.251	8.1	99	0.00	4.88

Continuing Calibration Summary

Job Number: FA33359 **Sample:** VP1535-ECC1531
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P41333.D
Project: BMSMC, Building 5 Area, Humacao, PR

96	tert Amyl alcohol	1.135	1.191	-4.9	111	0.00	6.99
97	1,4-Dioxane	0.132	0.120	9.1	92	0.00	8.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P41207.D 8260P042116.M Tue Apr 26 10:37:08 2016

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076934.D
Acq On : 25 Apr 2016 10:52 am
Operator : ericp
Sample : FA33359-1 Inst : MSVOA9
Misc : MS33674,vf2642,4.66,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:29:25 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

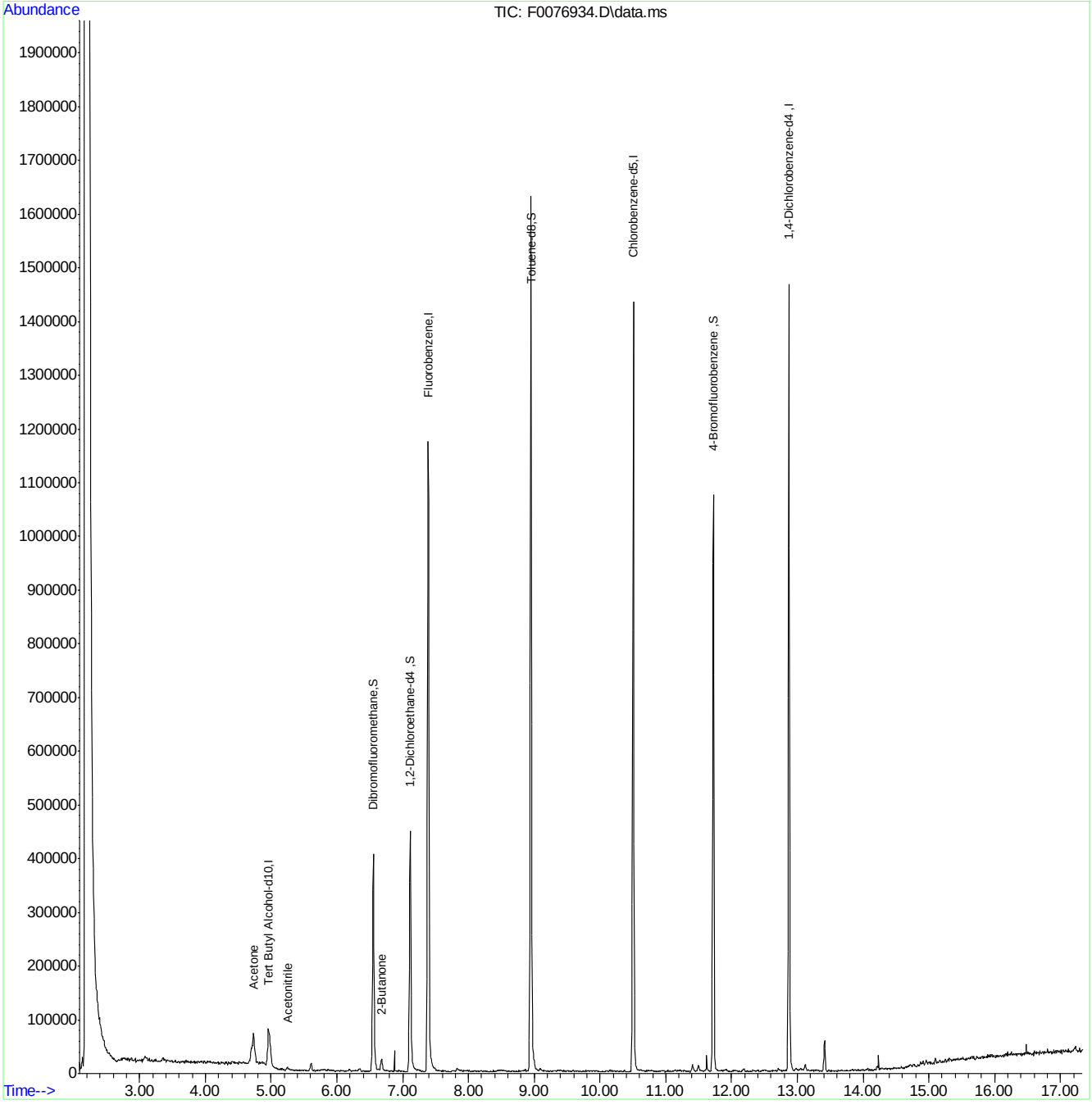
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	910266	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	679924	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	306128	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.965	65	122286	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	218873	51.80	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 103.60%			
44) 1,2-Dichloroethane-d4	7.112	65	271107	61.06	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 122.12%			
55) Toluene-d8	8.950	98	891161	49.17	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 98.34%			
77) 4-Bromofluorobenzene	11.724	174	231829	56.09	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 112.18%			
Target Compounds						Qvalue
16) Acetone	4.734	43	67997	55.74	ug/Kg	98
21) Acetonitrile	5.251	41	7643	15.40	ug/Kg	83
38) 2-Butanone	6.681	43	23485	11.72	ug/Kg	85

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

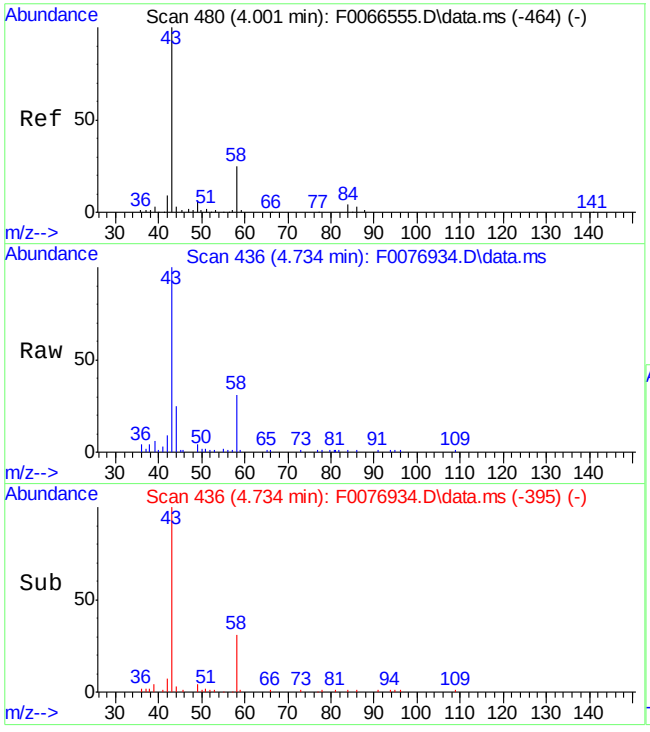
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076934.D
Acq On : 25 Apr 2016 10:52 am
Operator : ericp
Sample : FA33359-1 Inst : MSVOA9
Misc : MS33674,vf2642,4.66,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:29:25 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



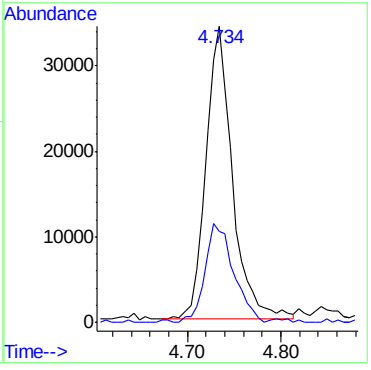
041316APP9-F.m Mon Apr 25 14:11:41 2016 Page: 2

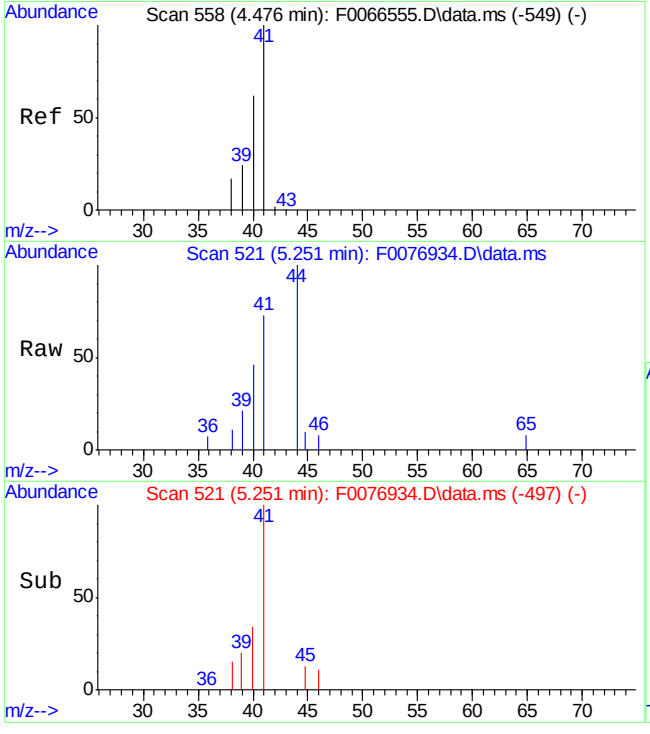


#16
Acetone
Concen: 55.74 ug/Kg
RT: 4.734 min Scan# 436
Delta R.T. -0.000 min
Lab File: F0076934.D
Acq: 25 Apr 2016 10:52 am

Tgt Ion: 43 Resp: 67997

Ion	Ratio	Lower	Upper
43	100		
58	30.9	0.0	60.0

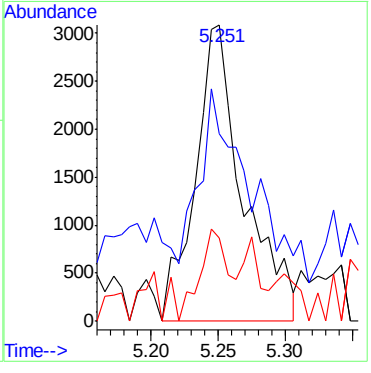


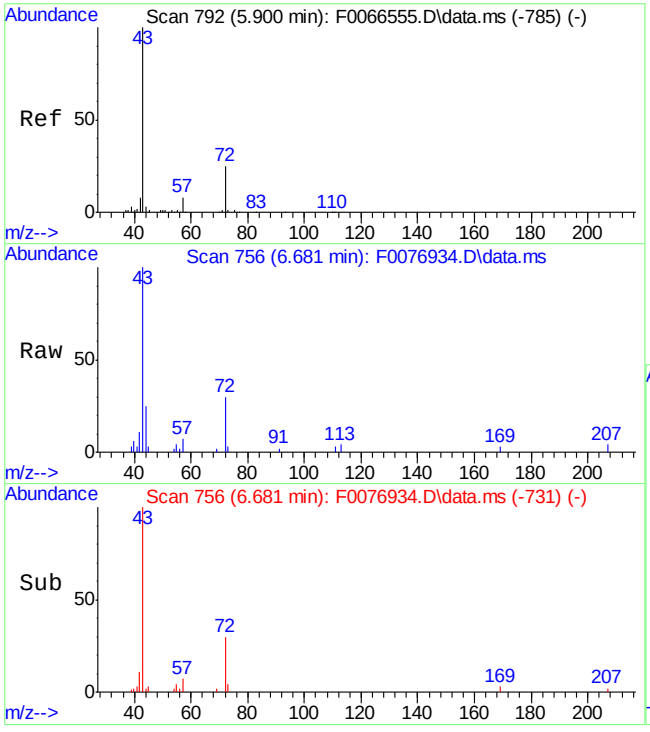


#21
Acetonitrile
Concen: 15.40 ug/Kg
RT: 5.251 min Scan# 521
Delta R.T. -0.006 min
Lab File: F0076934.D
Acq: 25 Apr 2016 10:52 am

Tgt Ion: 41 Resp: 7643

Ion	Ratio	Lower	Upper
41	100		
40	41.2	21.8	81.8
39	28.0	0.0	48.3

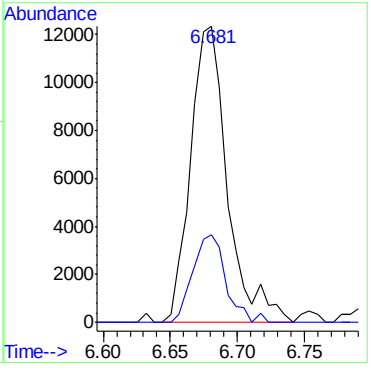




#38
2-Butanone
Concen: 11.72 ug/Kg
RT: 6.681 min Scan# 756
Delta R.T. 0.001 min
Lab File: F0076934.D
Acq: 25 Apr 2016 10:52 am

Tgt Ion: 43 Resp: 23485

Ion	Ratio	Lower	Upper
43	100		
72	29.6	0.0	52.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076920.D
Acq On : 23 Apr 2016 7:59 pm
Operator : ericp
Sample : FA33359-2 Inst : MSVOA9
Misc : MS33674,vf2640,5.70,,,5,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 25 08:20:06 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	821013	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	648914	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	321753	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.965	65	128903	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	194357	51.00	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.00%			
44) 1,2-Dichloroethane-d4	7.112	65	238580	59.57	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 119.14%			
55) Toluene-d8	8.950	98	817831	47.28	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 94.56%			
77) 4-Bromofluorobenzene	11.724	174	232923	53.62	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 107.24%			

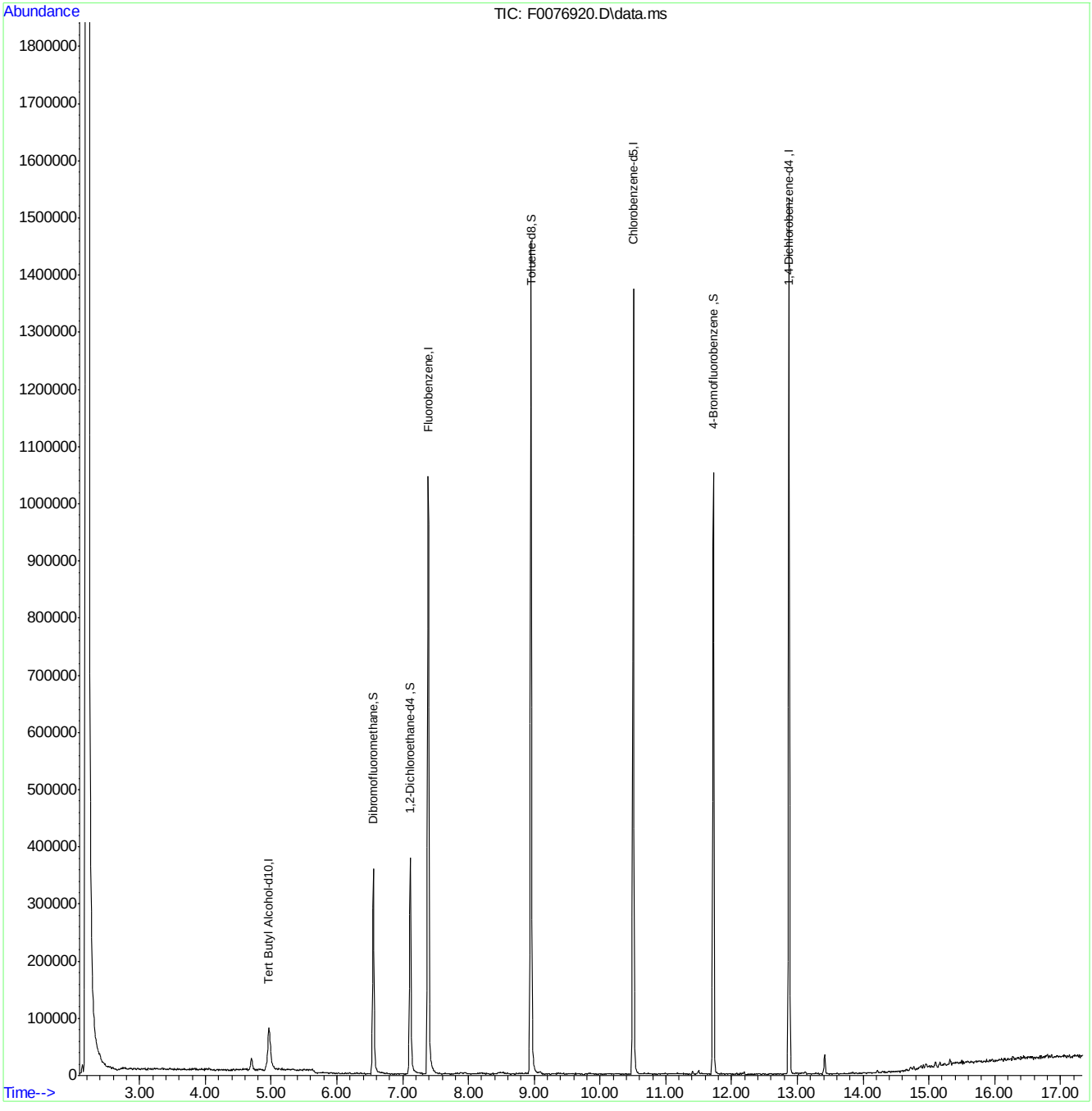
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076920.D
Acq On : 23 Apr 2016 7:59 pm
Operator : ericp
Sample : FA33359-2 Inst : MSVOA9
Misc : MS33674,vf2640,5.70,,,5,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 25 08:20:06 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



041316APP9-F.m Mon Apr 25 09:41:05 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41309.D
Acq On : 25 Apr 2016 10:11 am
Operator : katiem
Sample : FA33359-3 MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 26 07:27:43 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	7.142	96	599897	50.00 ug/L	0.00
47) Chlorobenzene-d5	10.239	117	435514	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.599	152	203751	50.00 ug/L	0.00
93) Tert Butyl Alcohol-d10	4.800	65	40701	250.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	6.327	113	144894	49.55 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.10%		
38) 1,2-Dichloroethane-d4	6.869	65	184030	46.88 ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 93.76%		
48) Toluene-d8	8.694	98	588685	49.96 ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.92%		
69) 4-Bromofluorobenzene	11.449	95	201729	50.17 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.34%		

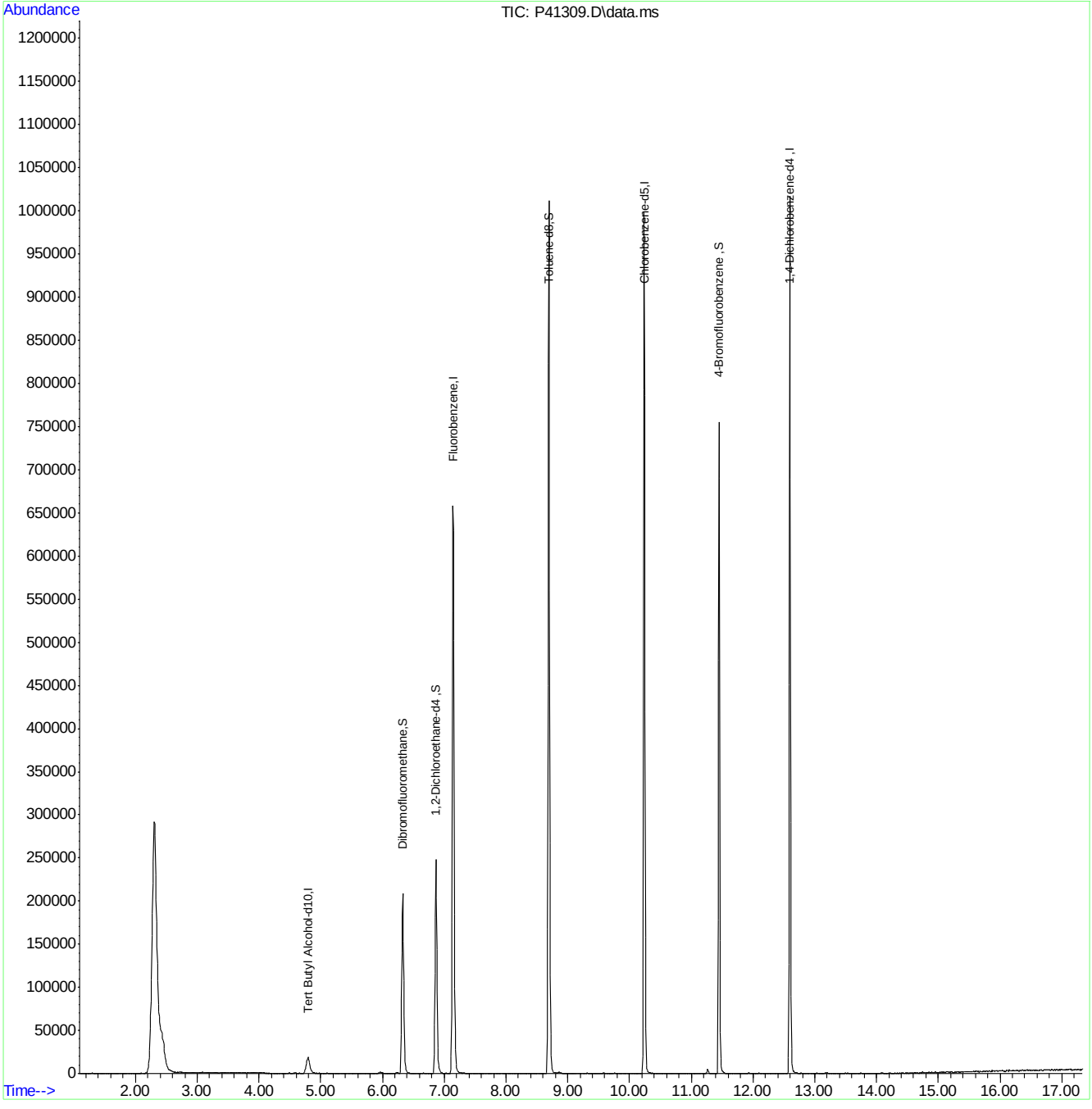
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41309.D
Acq On : 25 Apr 2016 10:11 am
Operator : katiem
Sample : FA33359-3 MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 26 07:27:43 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41310.D
Acq On : 25 Apr 2016 10:36 am
Operator : katiem
Sample : FA33359-4 MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 07:27:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	7.147	96	577191	50.00 ug/L	0.00
47) Chlorobenzene-d5	10.237	117	414553	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.598	152	197109	50.00 ug/L	0.00
93) Tert Butyl Alcohol-d10	4.793	65	42168	250.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	6.326	113	138426	49.20 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.40%		
38) 1,2-Dichloroethane-d4	6.867	65	179411	47.50 ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 95.00%		
48) Toluene-d8	8.692	98	572841	51.07 ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.14%		
69) 4-Bromofluorobenzene	11.454	95	193804	49.82 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.64%		

Target Compounds Qvalue

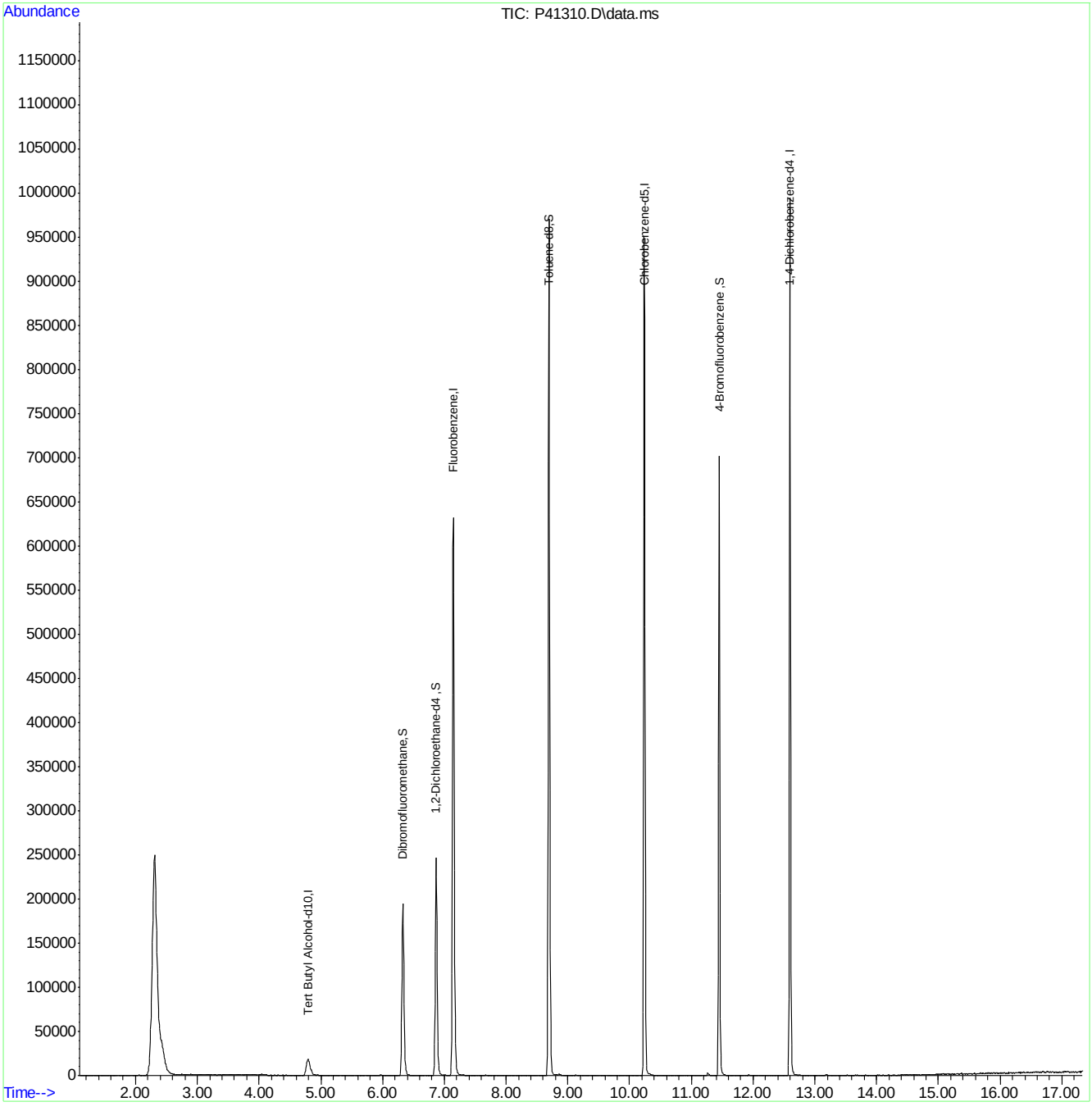
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41310.D
Acq On : 25 Apr 2016 10:36 am
Operator : katiem
Sample : FA33359-4 MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 07:27:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076899.D
Acq On : 23 Apr 2016 10:59 am
Operator : ericp
Sample : MB Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 23 11:27:19 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	905963	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	635596	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	298531	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.983	65	111883	250.00	ug/Kg	0.01
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	207521	49.35	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.70%			
44) 1,2-Dichloroethane-d4	7.112	65	224473	50.79	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 101.58%			
55) Toluene-d8	8.950	98	840188	49.59	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 99.18%			
77) 4-Bromofluorobenzene	11.724	174	219336	54.42	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 108.84%			

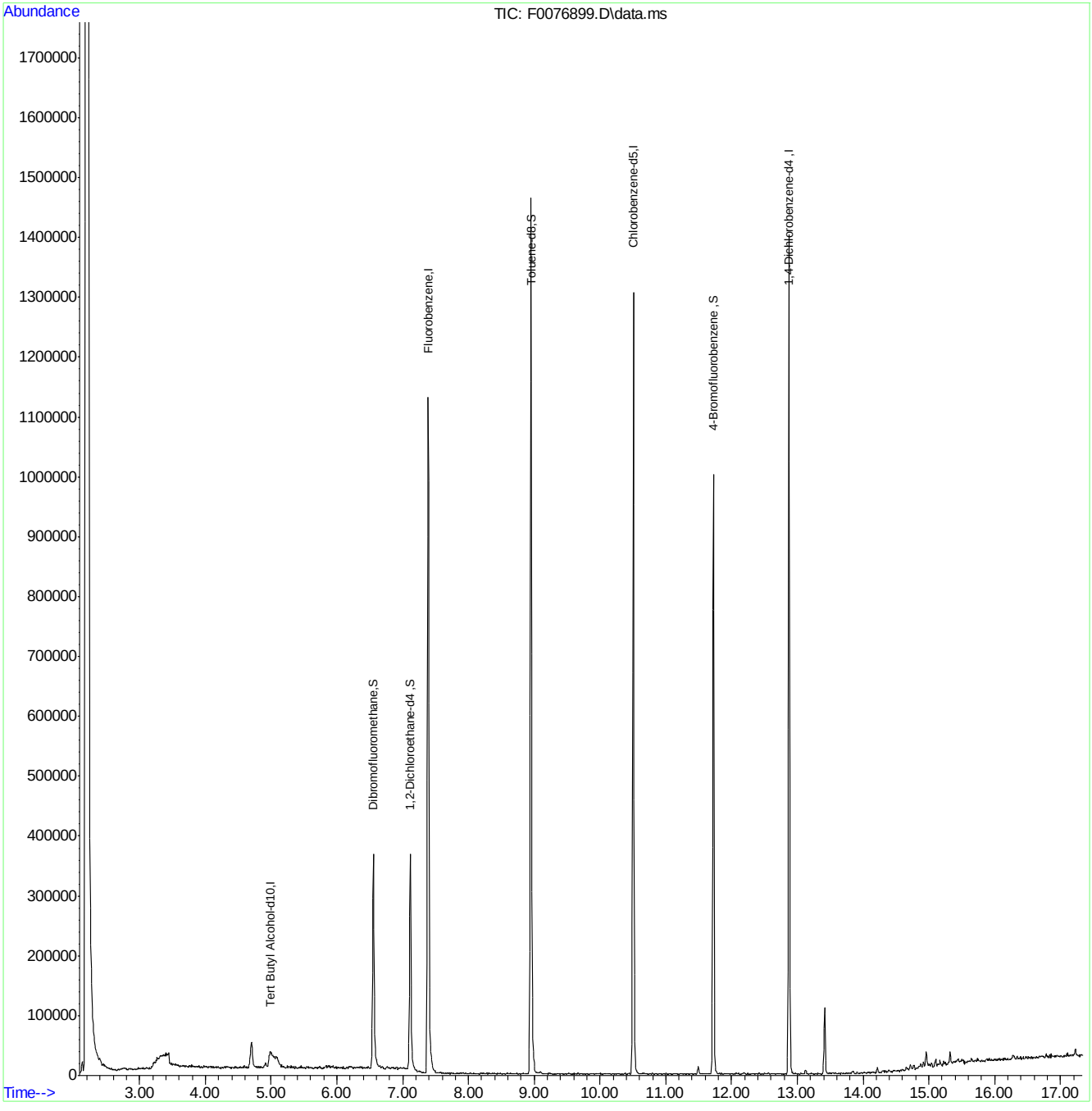
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076899.D
Acq On : 23 Apr 2016 10:59 am
Operator : ericp
Sample : MB Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 23 11:27:19 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



041316APP9-F.m Mon Apr 25 09:40:18 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41308.D
Acq On : 25 Apr 2016 9:24 am
Operator : katiem
Sample : MB ma Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 26 07:27:24 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.149	96	591187	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.239	117	429875	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.599	152	211470	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.800	65	54189	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.327	113	144126	50.01	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.02%			
38) 1,2-Dichloroethane-d4	6.869	65	187903	48.58	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.16%			
48) Toluene-d8	8.694	98	581400	49.99	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.98%			
69) 4-Bromofluorobenzene	11.450	95	200899	48.14	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.28%			

Target Compounds						Qvalue
92) 1,2,3-Trichlorobenzene	14.893	180	2475	0.65	ug/L	92

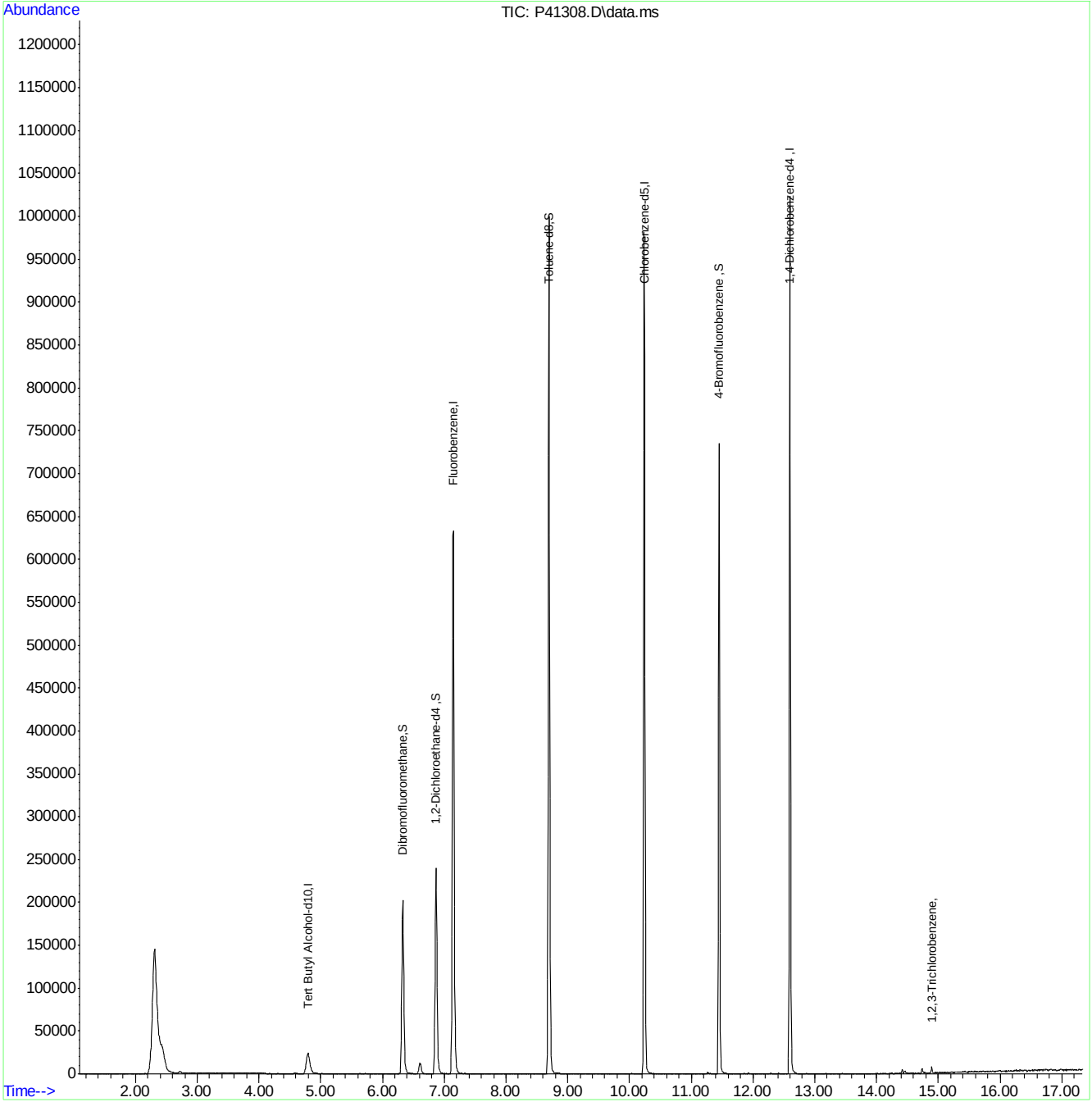
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

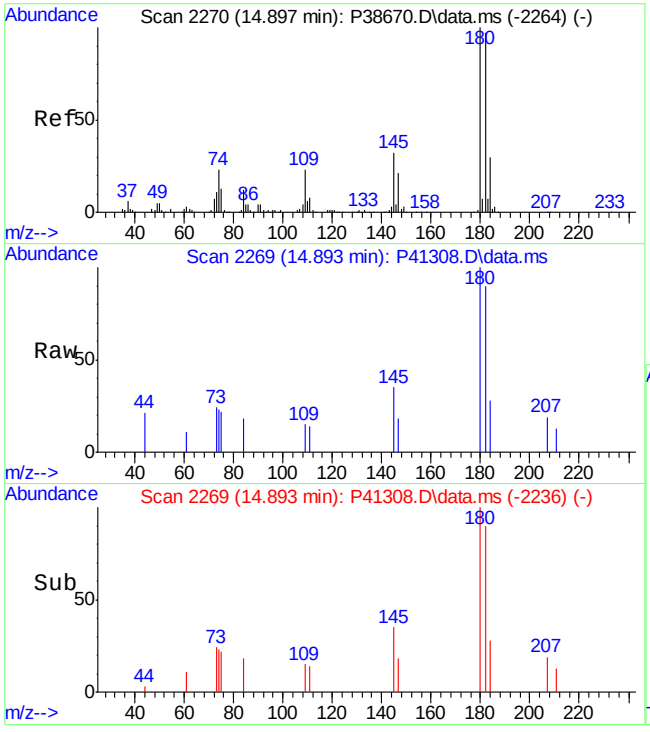
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41308.D
Acq On : 25 Apr 2016 9:24 am
Operator : katiem
Sample : MB ma Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 26 07:27:24 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



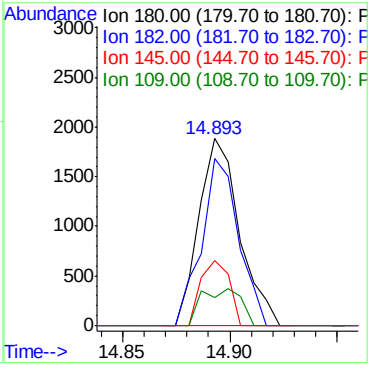
8260P042116.M Tue Apr 26 11:04:22 2016 Page: 2



#92
1,2,3-Trichlorobenzene
Concen: 0.65 ug/L
RT: 14.893 min Scan# 2269
Delta R.T. 0.001 min
Lab File: P41308.D
Acq: 25 Apr 2016 9:24 am

Tgt Ion:180 Resp: 2475

Ion	Ratio	Lower	Upper
180	100		
182	89.5	64.5	124.5
145	34.6	4.5	64.5
109	15.2	0.0	58.2



7.2.2

7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076932.D
Acq On : 25 Apr 2016 10:00 am
Operator : ericp
Sample : MB Inst : MSVOA9
Misc : MS33674,vf2642,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:17:00 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1113937	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	745738	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	332950	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	5.099	65	170593	250.00	ug/Kg	0.13
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	264776	51.21	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.42%			
44) 1,2-Dichloroethane-d4	7.112	65	285616	52.56	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 105.12%			
55) Toluene-d8	8.950	98	984600	49.53	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 99.06%			
77) 4-Bromofluorobenzene	11.724	174	247353	55.03	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 110.06%			

Target Compounds Qvalue

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

7.2.3

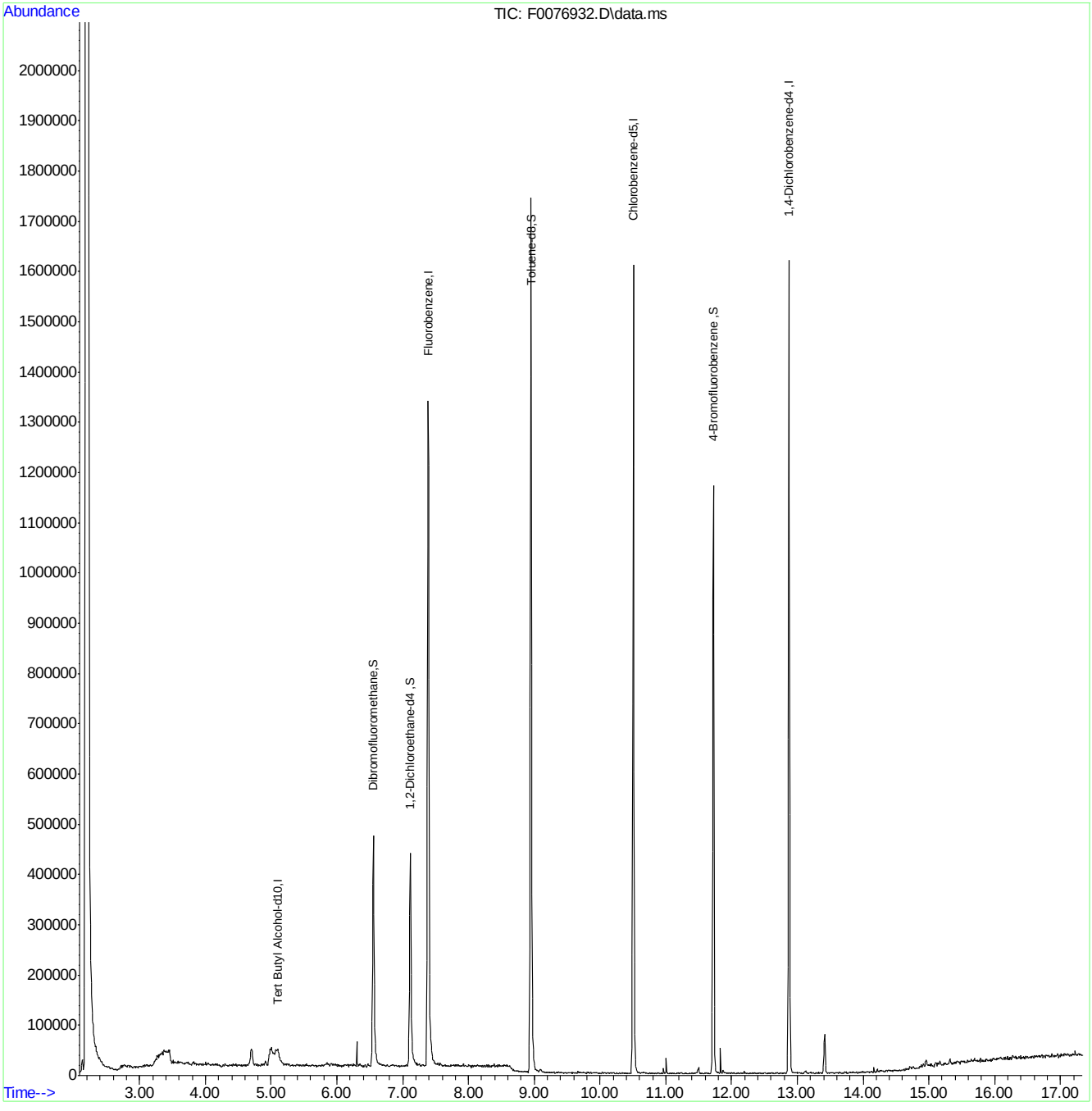
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076932.D
Acq On : 25 Apr 2016 10:00 am
Operator : ericp
Sample : MB Inst : MSVOA9
Misc : MS33674,vf2642,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:17:00 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



041316APP9-F.m Mon Apr 25 14:11:39 2016 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
04/26/16 09:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076898.D
Acq On : 23 Apr 2016 10:33 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 23 10:56:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	945830	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	713149	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.873	152	356072	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.965	65	103038	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	214050	48.76	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.52%			
44) 1,2-Dichloroethane-d4	7.118	65	237320	51.44	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 102.88%			
55) Toluene-d8	8.950	98	917136	48.24	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 96.48%			
77) 4-Bromofluorobenzene	11.724	174	259379	53.96	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 107.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	415321	50.11	ug/Kg	100
3) Chloromethane	2.641	50	428769	47.52	ug/Kg	99
4) Vinyl Chloride	2.763	62	413206	45.16	ug/Kg	98
5) Bromomethane	3.164	94	225644	47.36	ug/Kg	96
6) Chloroethane	3.316	64	143133	42.82	ug/Kg	97
7) Trichlorofluoromethane	3.487	101	395089	48.10	ug/Kg	100
8) Ethyl Ether	3.797	59	189885	49.54	ug/Kg	88
9) 1,2-Dichlorotrifluoroe...	4.034	67	353578	46.19	ug/Kg	95
10) 1,1-Dichloroethene	4.064	61	497008	46.40	ug/Kg	93
11) Freon 113	4.095	101	313784	46.94	ug/Kg	95
12) Carbon Disulfide	4.131	76	1013736	46.56	ug/Kg	95
13) Iodomethane	4.247	142	523340	49.40	ug/Kg	93
14) Allyl chloride	4.600	41	297743m	51.52	ug/Kg	
15) Methylene Chloride	4.703	49	350041	49.41	ug/Kg	83
16) Acetone	4.734	43	304886	240.52	ug/Kg	91
17) Methyl acetate	4.849	43	608694	211.56	ug/Kg	84
18) trans-1,2-Dichloroethene	4.874	61	385439	47.46	ug/Kg	89
19) Hexane	4.922	56	219365	45.19	ug/Kg	93
20) Methyl Tert Butyl Ether	4.953	73	688044	51.61	ug/Kg	93
21) Acetonitrile	5.251	41	218525	423.74	ug/Kg	98
22) Di-isopropyl ether	5.336	45	722235	50.01	ug/Kg	85
23) Chloroprene	5.488	53	422837	48.57	ug/Kg	93
24) 1,1-Dichloroethane	5.518	63	471856	47.36	ug/Kg	99
25) Acrylonitrile	5.573	53	349412	213.68	ug/Kg	90
26) ETBE	5.725	59	781985	53.42	ug/Kg	94
27) Vinyl acetate	5.750	43	1959040	246.44	ug/Kg	90
28) cis-1,2-Dichloroethene	6.090	96	323524	51.51	ug/Kg	97
29) 2,2-Dichloropropane	6.206	77	182921	51.75	ug/Kg	100
30) Bromochloromethane	6.303	128	139393	51.93	ug/Kg	95
31) Cyclohexane	6.321	56	530500	48.53	ug/Kg	90
32) Chloroform	6.358	83	488070	49.21	ug/Kg	98
33) Ethyl acetate	6.455	43	874231	223.77	ug/Kg	99
34) Tetrahydrofuran	6.553	42	50610	47.59	ug/Kg	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076898.D
Acq On : 23 Apr 2016 10:33 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 23 10:56:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	281961	48.07	ug/Kg	98
37)	1,1,1-Trichloroethane	6.601	97	324858	50.44	ug/Kg	98
38)	2-Butanone	6.680	43	469467	225.57	ug/Kg	82
39)	1,1-Dichloropropene	6.717	75	380608	50.25	ug/Kg	91
40)	Propionitrile	7.003	54	337316	491.32	ug/Kg	98
41)	Methacrylonitrile	7.015	41	1301905	545.49	ug/Kg	96
42)	Benzene	6.978	78	1182500	52.01	ug/Kg	100
43)	TAME	7.058	73	780647	56.57	ug/Kg	96
45)	1,2-Dichloroethane	7.185	62	319186	52.30	ug/Kg	93
46)	Trichloroethene	7.563	95	291164	50.19	ug/Kg	93
47)	Methylcyclohexane	7.563	83	557518	52.00	ug/Kg	90
48)	Dibromomethane	8.001	93	142803	50.57	ug/Kg	94
49)	1,2-Dichloropropane	8.092	63	276808	51.39	ug/Kg	91
50)	Bromodichloromethane	8.140	83	301371	50.55	ug/Kg	98
51)	Methyl methacrylate	8.256	41	166292	51.44	ug/Kg	79
52)	2-Chloroethyl vinyl ether	8.676	63	736647	254.29	ug/Kg	91
53)	cis-1,3-Dichloropropene	8.767	75	402642	53.85	ug/Kg	97
56)	Toluene	9.004	91	1187213	49.25	ug/Kg	96
57)	2-Nitropropane	9.235	41	121339	148.71	ug/Kg	93
58)	4-Methyl-2-pentanone	9.351	43	1014739	221.46	ug/Kg	92
59)	trans-1,3-Dichloropropene	9.406	75	319180	48.96	ug/Kg	86
60)	Tetrachloroethene	9.394	166	261824	47.50	ug/Kg	97
61)	Ethyl methacrylate	9.521	69	292602	51.63	ug/Kg	90
62)	1,1,2-Trichloroethane	9.570	83	184440	46.10	ug/Kg	97
63)	Dibromochloromethane	9.759	129	177881	45.48	ug/Kg	98
64)	1,3-Dichloropropane	9.850	76	363670	47.14	ug/Kg	93
65)	1,2-Dibromoethane	10.020	107	206113	48.42	ug/Kg	95
66)	2-hexanone	10.178	43	759105	234.22	ug/Kg	93
67)	1-Chlorohexane	10.464	91	370808	54.33	ug/Kg	94
68)	Ethylbenzene	10.525	91	1247459	50.91	ug/Kg	99
69)	Chlorobenzene	10.525	112	708899	49.99	ug/Kg	92
70)	1,1,1,2-Tetrachloroethane	10.580	131	205946	49.47	ug/Kg	97
71)	m,p-Xylene	10.665	91	1906189	102.52	ug/Kg	96
72)	o-Xylene	11.103	91	974597	54.00	ug/Kg	96
73)	Styrene	11.158	104	713352	51.39	ug/Kg	96
74)	Bromoform	11.213	173	94545	40.36	ug/Kg	96
75)	Isopropylbenzene	11.413	105	1173896	53.79	ug/Kg	98
78)	cis-1,4-Dichloro-2-butene	11.772	53	78539	45.73	ug/Kg	90
79)	n-Propylbenzene	11.833	91	1402117	52.41	ug/Kg	59
80)	Bromobenzene	11.845	156	287550	50.59	ug/Kg	97
81)	1,1,2,2-Tetrachloroethane	11.906	83	278294	43.81	ug/Kg	99
82)	1,3,5-Trimethylbenzene	12.022	105	1034173	53.62	ug/Kg	84
83)	2-Chlorotoluene	12.016	91	957838	51.56	ug/Kg	91
84)	trans-1,4-Dichloro-2-B...	12.089	53	71113	44.25	ug/Kg	81
85)	1,2,3-Trichloropropane	12.064	110	66703	44.26	ug/Kg	96
86)	Cyclohexanone	12.131	55	61810	248.43	ug/Kg	92
87)	4-Chlorotoluene	12.186	91	859243	52.30	ug/Kg	95
88)	tert-Butylbenzene	12.356	91	608315	51.46	ug/Kg	94
89)	1,2,4-Trimethylbenzene	12.429	105	1000200	53.90	ug/Kg	96
90)	Pentachloroethane	12.405	167	140087	50.69	ug/Kg	86

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076898.D
Acq On : 23 Apr 2016 10:33 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 23 10:56:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1327983	51.52	ug/Kg	98
92)	4-Isopropyltoluene	12.679	119	1048486	53.62	ug/Kg	100
93)	1,3-Dichlorobenzene	12.800	146	530564	51.67	ug/Kg	95
94)	1,4-Dichlorobenzene	12.892	146	532816	50.80	ug/Kg	99
95)	n-Butylbenzene	13.117	92	589893	51.43	ug/Kg	99
96)	Benzyl Chloride	13.135	126	95196	49.63	ug/Kg#	84
97)	1,2-Dichlorobenzene	13.330	146	514511	51.88	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.096	75	44200	41.51	ug/Kg	88
99)	Hexachlorobutadiene	14.650	225	180059	50.89	ug/Kg	86
100)	1,2,4-Trichlorobenzene	14.692	180	358505	56.25	ug/Kg	97
101)	Naphthalene	14.978	128	814491	50.77	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	347729	52.93	ug/Kg	98
104)	Ethanol	4.028	45	51823	1057.51	ug/Kg	87
105)	Acrolein	4.417	56	187262	263.81	ug/Kg	93
106)	Tert butyl alcohol	5.044	59	238936	520.87	ug/Kg	92
107)	Isobutyl alcohol	7.137	42	123087	1091.70	ug/Kg	88
108)	Tert Amyl Alcohol	7.246	59	208172	541.25	ug/Kg	92
109)	1,4-Dioxane	8.353	88	55795	1212.45	ug/Kg	75

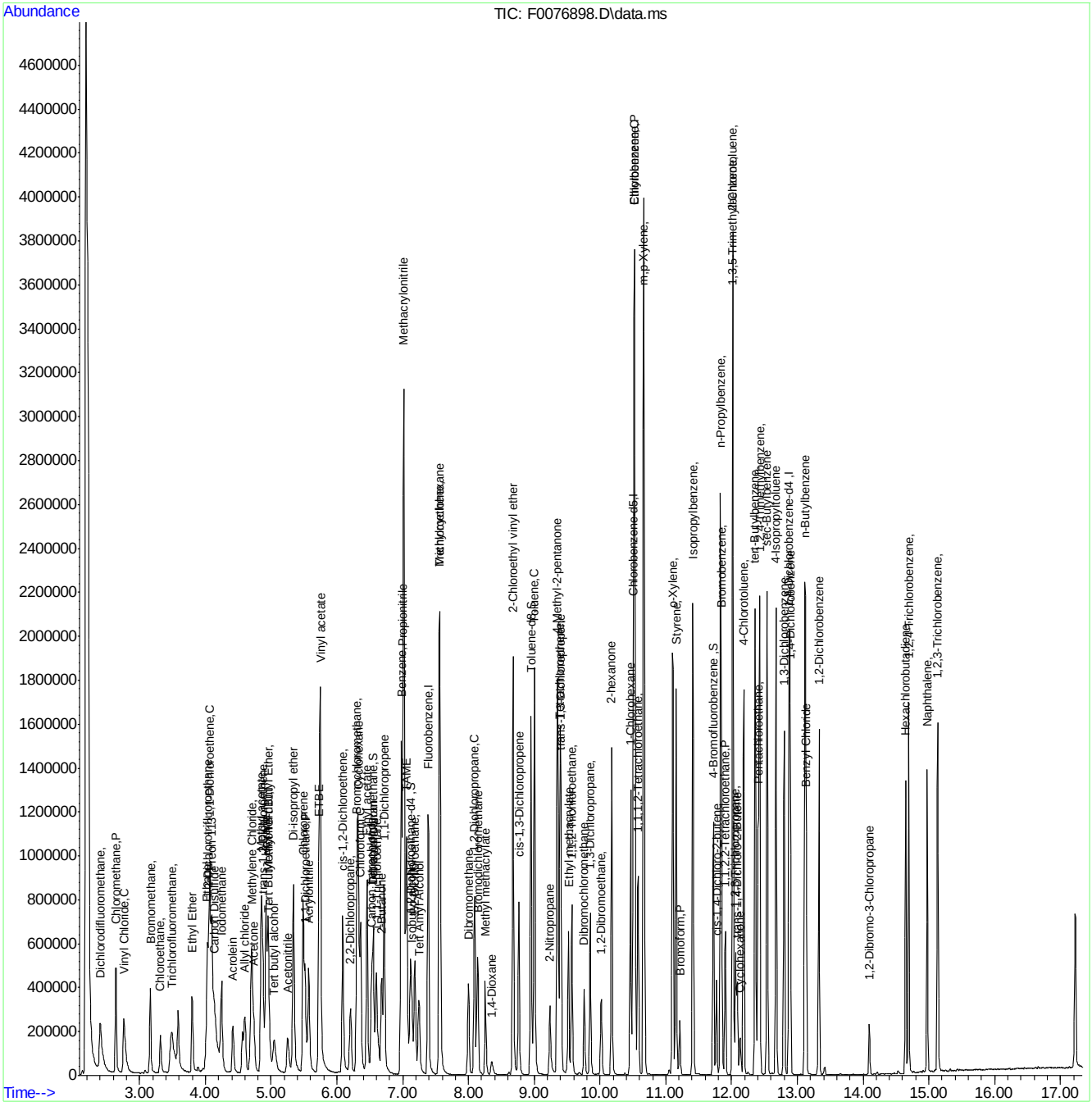
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076898.D
Acq On : 23 Apr 2016 10:33 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 23 10:56:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

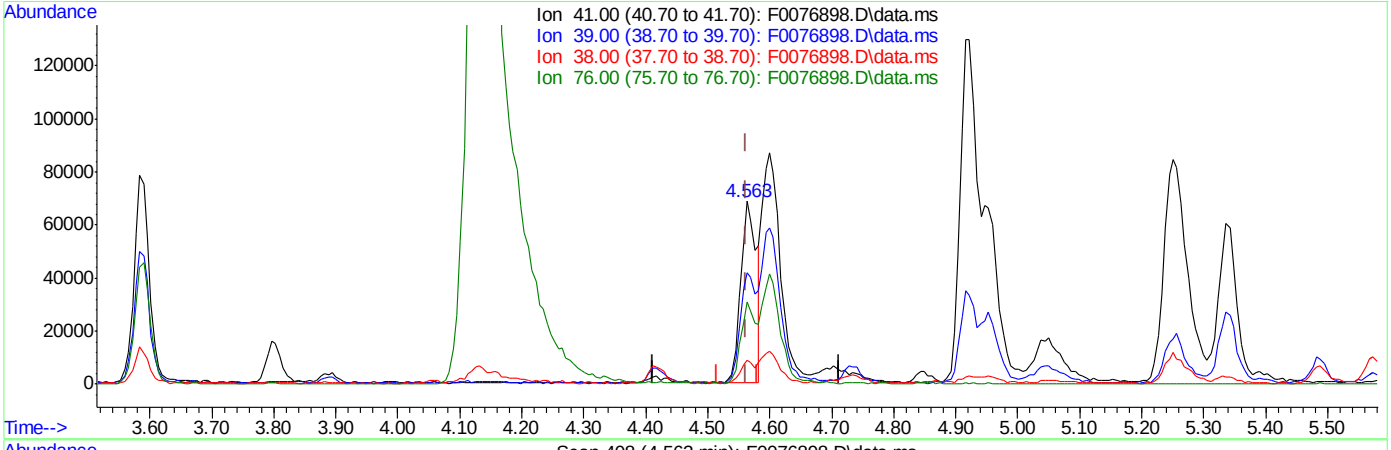
Sample Number:	VF2640-BS	**Method:**	SW846 8260C
Lab FileID:	F0076898.D	**Analyst approved:**	04/26/16 09:26 Eric Parrish
Injection Time:	04/23/16 10:33	**Supervisor approved:**	04/26/16 09:32 Melissa Mangual

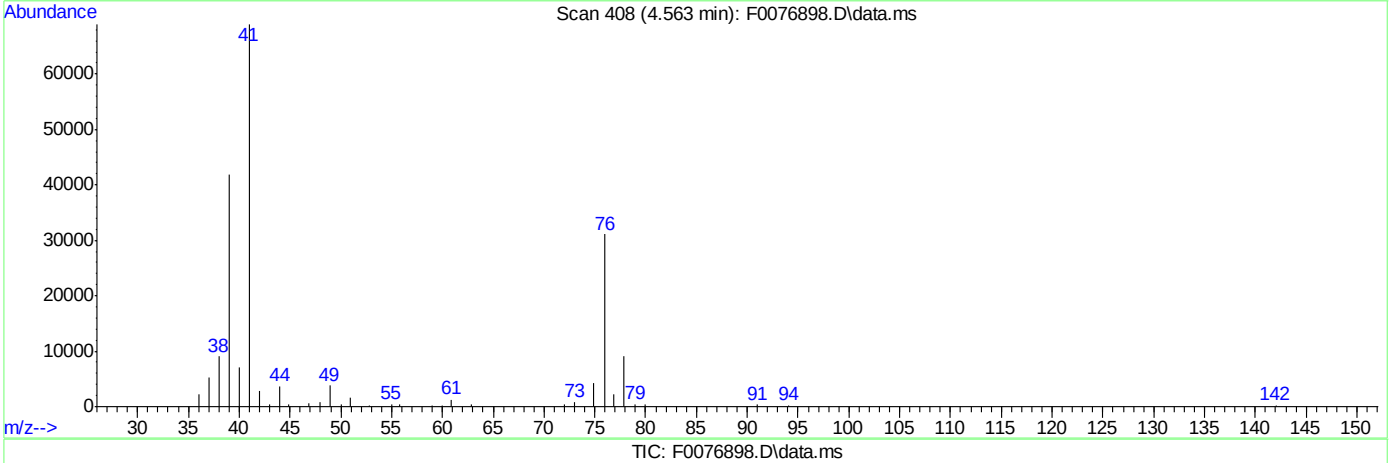
Parameter	CAS	Sig#	R.T. (min.)	Reason
Allyl chloride	107-05-1		4.60	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076898.D
Acq On : 23 Apr 2016 10:33 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 23 10:55:40 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





(14) Allyl chloride

4.563min (+0.000) 21.12ug/Kg

response 122025

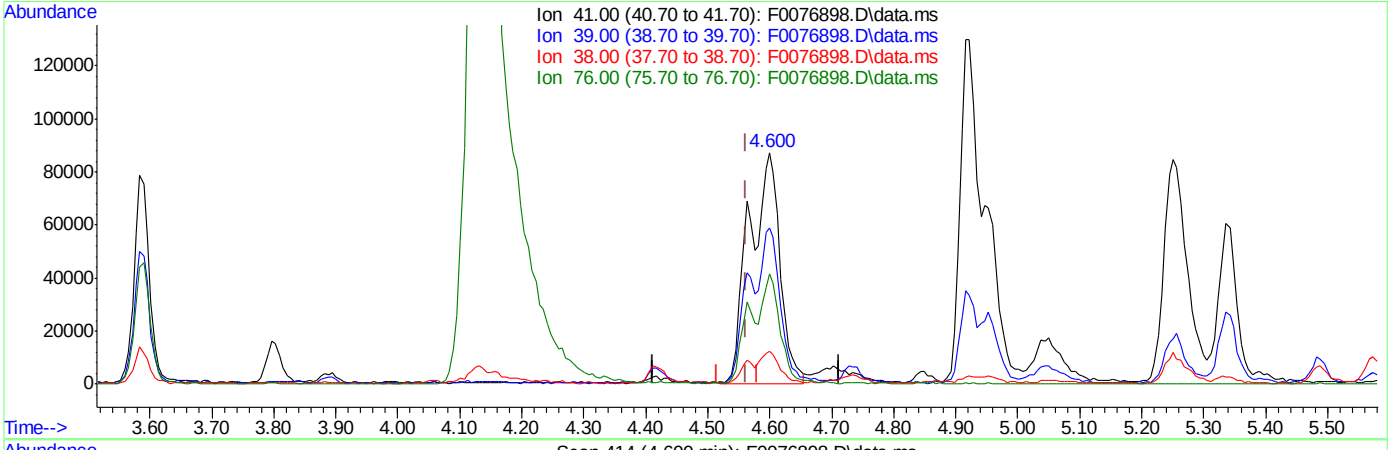
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	60.47
38.00	10.90	12.28
76.00	31.30	44.80

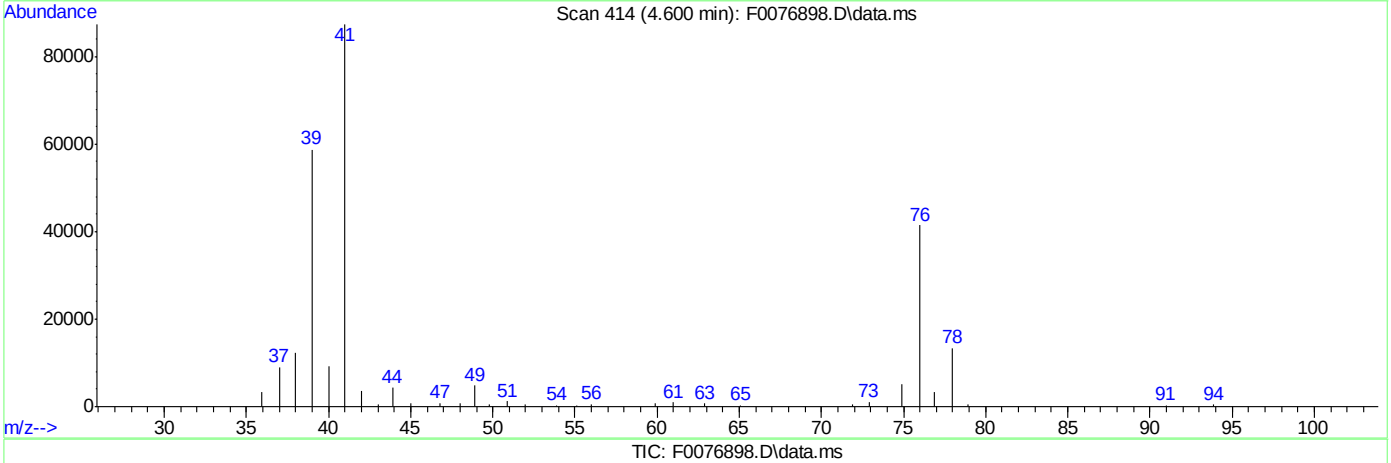
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076898.D
Acq On : 23 Apr 2016 10:33 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 23 10:55:40 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076898.D\data.ms

(14) Allyl chloride

4.600min (+0.037) 51.52ug/Kg m

response 297743

Ion	Exp%	Act%
41.00	100	100
39.00	59.80	67.27
38.00	10.90	14.05
76.00	31.30	47.42

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 12:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS ma Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:07:04 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	7.147	96	631386	50.00 ug/L	0.00
47) Chlorobenzene-d5	10.237	117	471959	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.598	152	227673	50.00 ug/L	0.00
93) Tert Butyl Alcohol-d10	4.798	65	59883	250.00 ug/L	0.00
System Monitoring Compounds					
31) Dibromofluoromethane	6.332	113	155301	50.46 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.92%		
38) 1,2-Dichloroethane-d4	6.867	65	197463	47.80 ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 95.60%		
48) Toluene-d8	8.692	98	629082	49.27 ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.54%		
69) 4-Bromofluorobenzene	11.454	95	219362	48.82 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.64%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.542	85	76555	28.11 ug/L	96
3) Chloromethane	2.706	50	114160	22.90 ug/L	97
4) Vinyl Chloride	2.834	62	110085	25.35 ug/L	100
5) Bromomethane	3.174	94	61920	23.82 ug/L	97
6) Chloroethane	3.302	64	76826	26.22 ug/L	97
7) Trichlorofluoromethane	3.521	101	129590m	25.92 ug/L	
8) Ethyl Ether	3.728	59	98200	25.10 ug/L	97
9) 1,2-Dichlorotrifluoroe...	3.965	67	122040	29.81 ug/L	95
10) 1,1-Dichloroethene	3.989	61	159850	27.87 ug/L	92
11) Freon 113	4.050	101	85269	29.46 ug/L	93
12) Carbon Disulfide	4.050	76	304276	29.32 ug/L	85
13) Iodomethane	4.154	142	133855	28.07 ug/L	97
14) Methylene Chloride	4.561	49	139404	23.94 ug/L	98
15) Acetone	4.573	58	42850	124.39 ug/L	94
16) Methyl acetate	4.689	74	69907	124.70 ug/L #	48
17) trans-1,2-Dichloroethene	4.726	61	142390	27.91 ug/L	98
18) Hexane	4.780	56	114672	28.80 ug/L	96
19) Methyl Tert Butyl Ether	4.823	73	256537	24.73 ug/L	95
20) Di-isopropyl ether	5.176	45	351092	23.22 ug/L	99
21) 1,1-Dichloroethane	5.340	63	180330	26.24 ug/L	97
22) Acrylonitrile	5.364	53	163089	111.14 ug/L	100
23) ETBE	5.553	59	317956	23.71 ug/L	96
24) Vinyl acetate	5.535	43	1122613	108.54 ug/L	96
25) cis-1,2-Dichloroethene	5.881	96	95909	24.78 ug/L	93
26) 2,2-Dichloropropane	6.009	77	146902	28.64 ug/L	99
27) Bromochloromethane	6.088	128	45571	25.88 ug/L	96
28) Cyclohexane	6.137	56	194102	27.09 ug/L	97
29) Chloroform	6.143	83	174225	26.33 ug/L	96
30) Tetrahydrofuran	6.313	42	26417	21.78 ug/L	90
32) Carbon Tetrachloride	6.332	117	139573m	27.95 ug/L	
33) 1,1,1-Trichloroethane	6.392	97	143946	26.37 ug/L	96
34) 2-Butanone	6.423	43	233103	126.32 ug/L	99
35) 1,1-Dichloropropene	6.496	75	144294	28.13 ug/L	97
36) Benzene	6.745	78	385986	25.83 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS ma Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:07:04 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.836	73	250951	23.28 ug/L	96
39) 1,2-Dichloroethane	6.934	62	139341	24.85 ug/L	96
40) Trichloroethene	7.323	95	97737	26.90 ug/L	97
41) Methylcyclohexane	7.347	83	183928	28.64 ug/L	96
42) Dibromomethane	7.743	93	57238	26.60 ug/L	97
43) 1,2-Dichloropropane	7.834	63	106529	24.77 ug/L	96
44) Bromodichloromethane	7.889	83	130543	26.18 ug/L	97
45) 2-Chloroethyl vinyl ether	8.412	63	355538	130.01 ug/L	97
46) cis-1,3-Dichloropropene	8.503	75	165539	26.03 ug/L	96
49) Toluene	8.747	91	416745	25.34 ug/L	97
50) 2-Nitropropane	8.947	41	129644	118.09 ug/L	97
51) 4-Methyl-2-pentanone	9.081	43	515917	123.84 ug/L	98
52) trans-1,3-Dichloropropene	9.136	75	157068	27.42 ug/L	97
53) Tetrachloroethene	9.148	166	98898	28.31 ug/L	94
54) 1,1,2-Trichloroethane	9.300	83	71468	25.70 ug/L	95
55) Dibromochloromethane	9.495	129	93856	26.61 ug/L	98
56) 1,3-Dichloropropane	9.580	76	147899	24.20 ug/L	95
57) 1,2-Dibromoethane	9.744	107	78126	25.37 ug/L	95
58) 2-hexanone	9.903	43	347004	124.30 ug/L	95
59) 1-Chlorohexane	10.207	91	138429	26.91 ug/L	93
60) Ethylbenzene	10.268	91	471341	25.97 ug/L	97
61) Chlorobenzene	10.255	112	269106	25.48 ug/L	90
62) 1,1,1,2-Tetrachloroethane	10.310	131	90977	25.85 ug/L	97
63) m,p-Xylene	10.407	91	721083	52.75 ug/L	98
64) o-Xylene	10.839	91	352799	26.31 ug/L	98
65) Styrene	10.894	104	269324	25.64 ug/L	97
66) Bromoform	10.937	173	57841	25.36 ug/L	98
67) Isopropylbenzene	11.150	105	452937	27.40 ug/L	98
70) n-Propylbenzene	11.569	91	549132	27.30 ug/L	98
71) Bromobenzene	11.575	156	107086	25.73 ug/L	98
72) 1,1,2,2-Tetrachloroethane	11.630	83	98013	23.62 ug/L	98
73) 1,3,5-Trimethylbenzene	11.758	105	383190	25.98 ug/L	99
74) 2-Chlorotoluene	11.752	91	348938	25.87 ug/L	96
75) trans-1,4-Dichloro-2-B...	11.807	53	21914	15.38 ug/L	94
76) 1,2,3-Trichloropropane	11.782	110	28899	24.70 ug/L	93
77) Cyclohexanone	11.831	55	34838	240.09 ug/L	92
78) 4-Chlorotoluene	11.916	91	318959	25.55 ug/L	96
79) tert-Butylbenzene	12.093	91	215424	26.65 ug/L	92
80) 1,2,4-Trimethylbenzene	12.166	105	375431	26.06 ug/L	96
81) sec-Butylbenzene	12.275	105	500008	27.50 ug/L	97
82) 4-Isopropyltoluene	12.415	119	407499	27.30 ug/L	96
83) 1,3-Dichlorobenzene	12.525	146	203917	26.24 ug/L	99
84) 1,4-Dichlorobenzene	12.616	146	211247	25.89 ug/L	99
85) n-Butylbenzene	12.853	92	224329	26.55 ug/L	91
86) Benzyl Chloride	12.853	126	42017	26.71 ug/L #	1
87) 1,2-Dichlorobenzene	13.054	146	188279	25.95 ug/L	97
88) 1,2-Dibromo-3-Chloropr...	13.832	75	15264	23.89 ug/L	91
89) Hexachlorobutadiene	14.416	225	64826	27.13 ug/L	98
90) 1,2,4-Trichlorobenzene	14.453	180	123197	26.47 ug/L	99
91) Naphthalene	14.733	128	240964	27.41 ug/L	98

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS ma Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:07:04 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.891	180	105183	25.70	ug/L	98
94) acrolein	4.306	56	83605	122.30	ug/L	97
95) Tert Butyl Alcohol	4.865	59	75214	230.48	ug/L	87
96) tert Amyl alcohol	6.982	59	64781	238.36	ug/L	93
97) 1,4-Dioxane	8.065	88	16715	528.29	ug/L	96

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

7.3.2

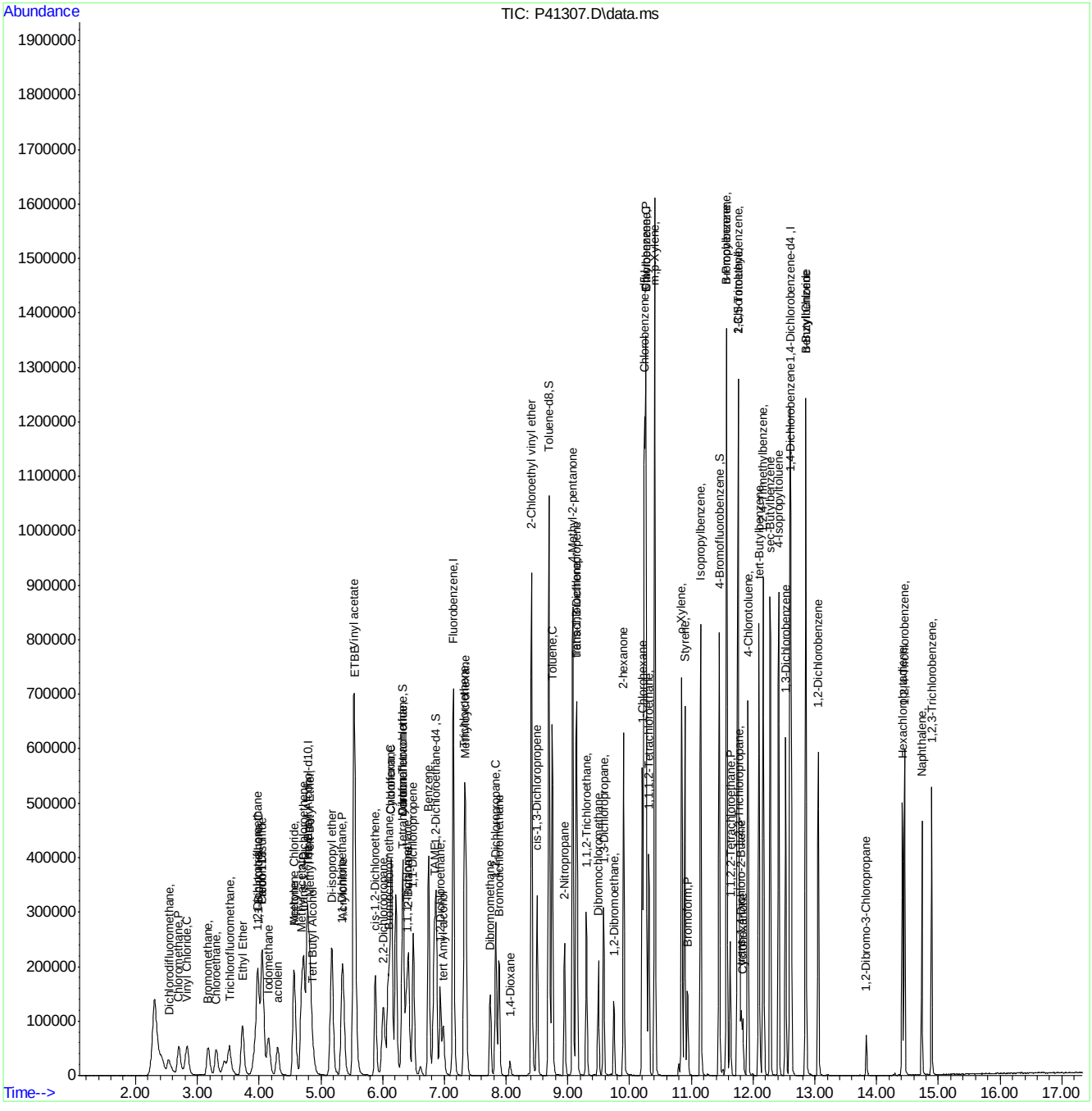
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS ma Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:07:04 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



8260P042116.M Tue Apr 26 11:03:28 2016 Page: 4

Manual Integration Approval Summary

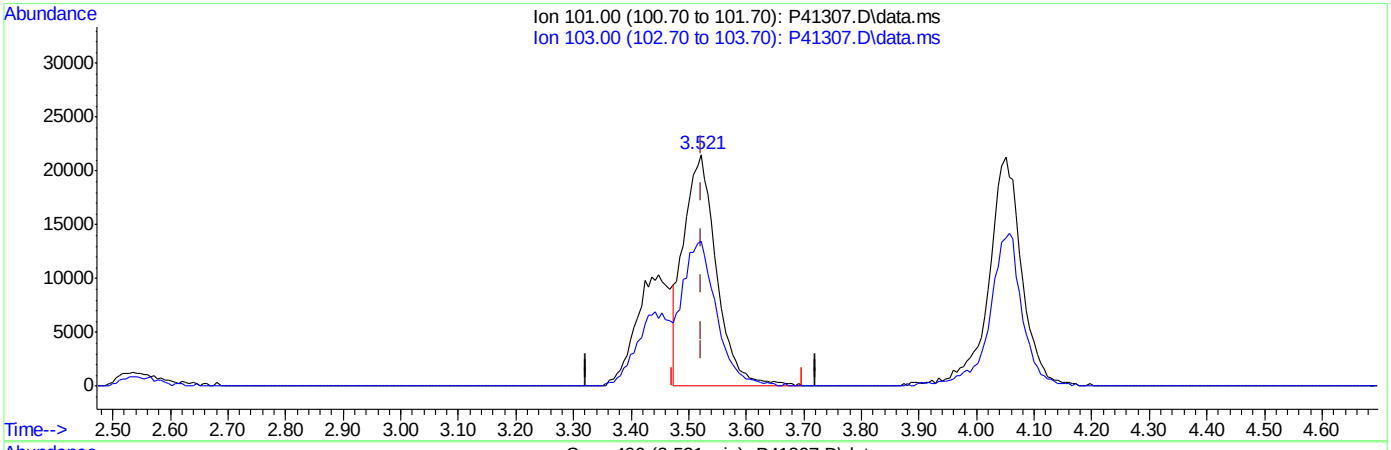
Sample Number:	VP1536-BS	**Method:**	SW846 8260C
Lab FileID:	P41307.D	**Analyst approved:**	04/26/16 11:02 Kathleen McNatt
Injection Time:	04/25/16 08:49	**Supervisor approved:**	04/26/16 12:05 Juan Garcia

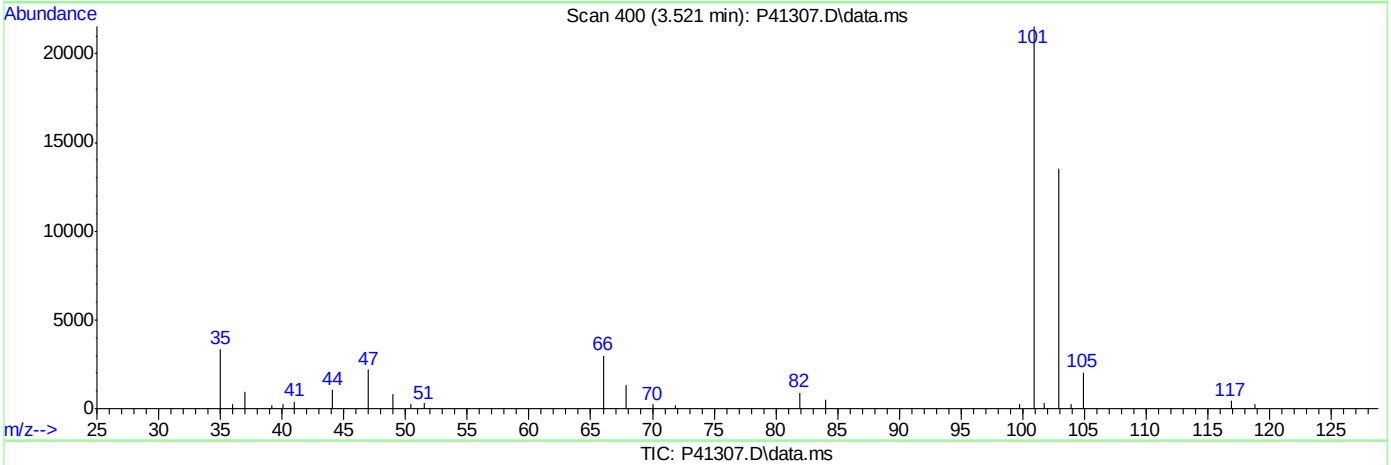
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.52	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:06:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41307.D\data.ms

(7) Trichlorofluoromethane ( )

3.521min (-0.001) 17.20ug/L

response 85965

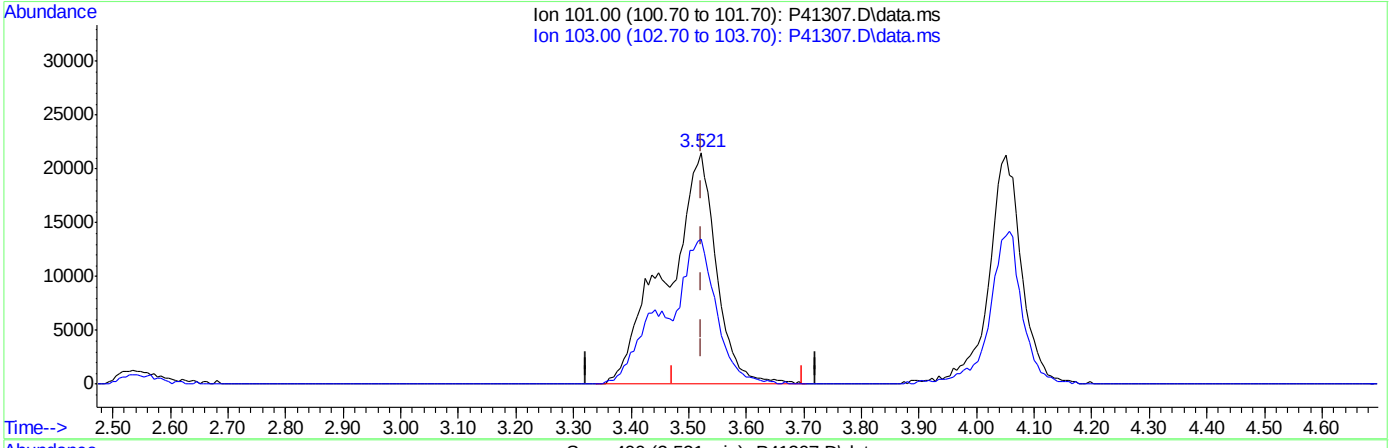
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	61.89
0.00	0.00	0.00
0.00	0.00	0.00

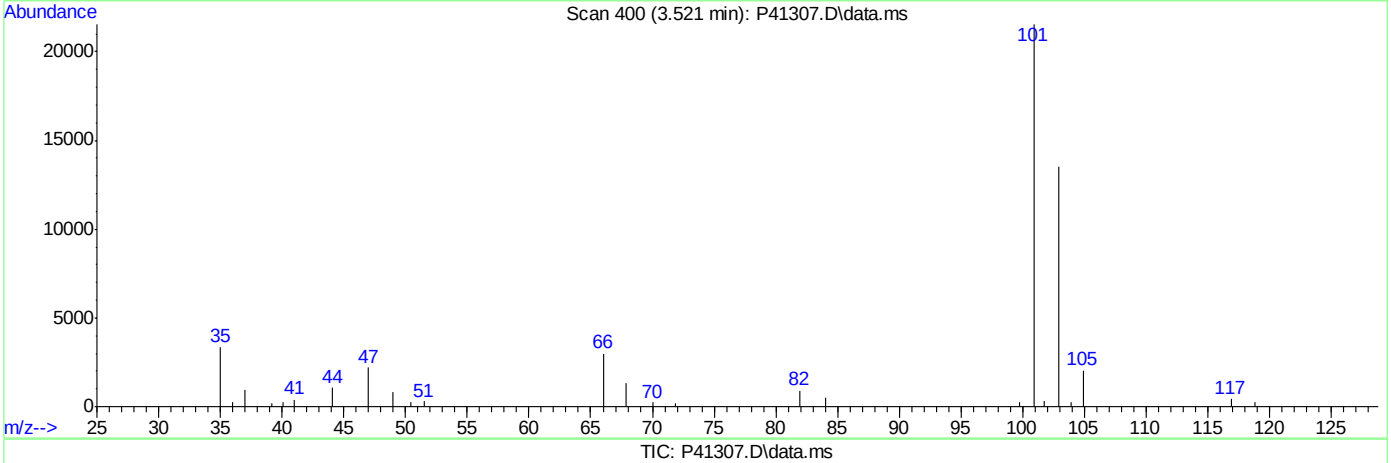
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:06:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41307.D\data.ms

(7) Trichlorofluoromethane ( )

3.521min (-0.001) 25.92ug/L m

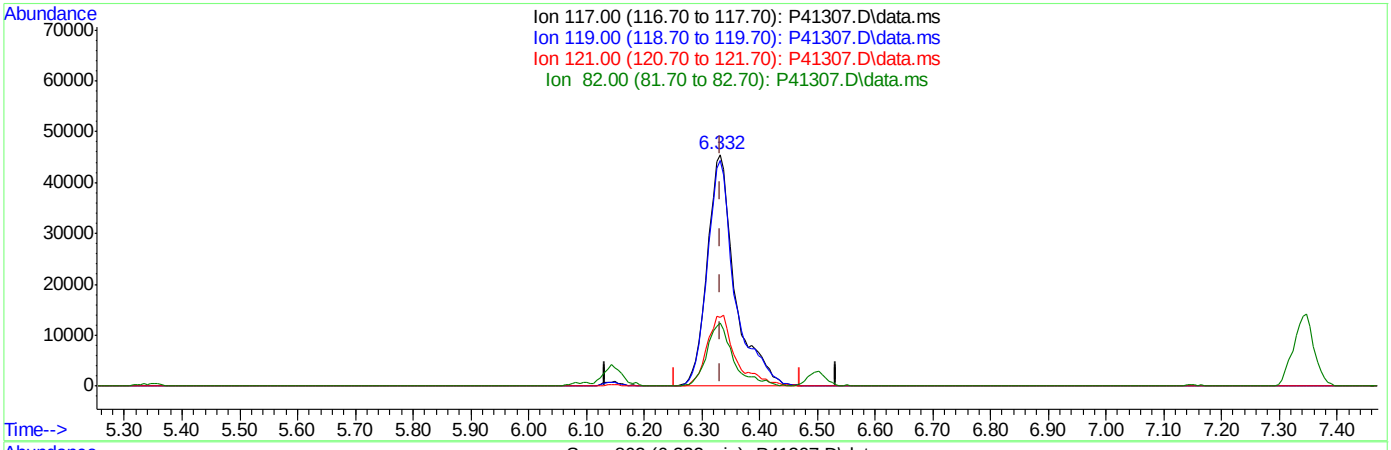
response 129590

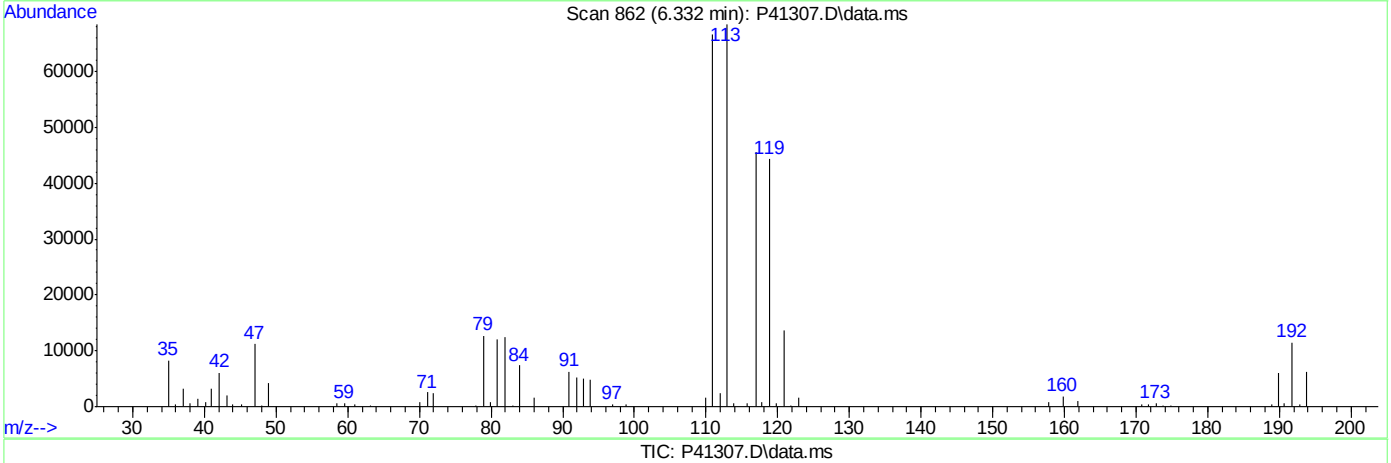
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	62.84
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:06:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41307.D\data.ms

(32) Carbon Tetrachloride ( )

6.332min (-0.001) 30.40ug/L

response 151795

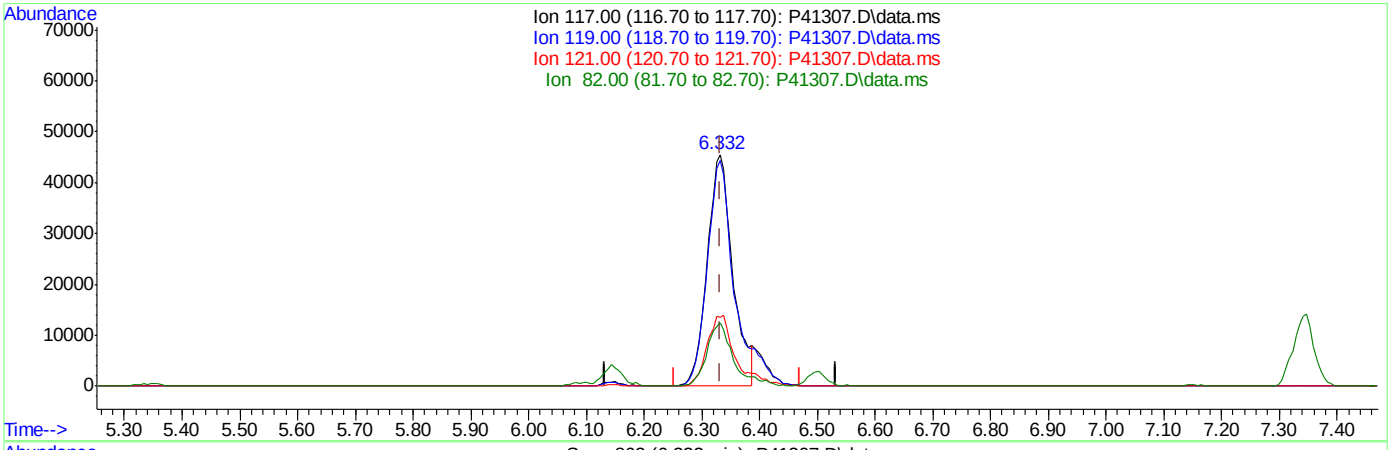
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	97.31
121.00	30.70	29.82
82.00	25.90	27.23

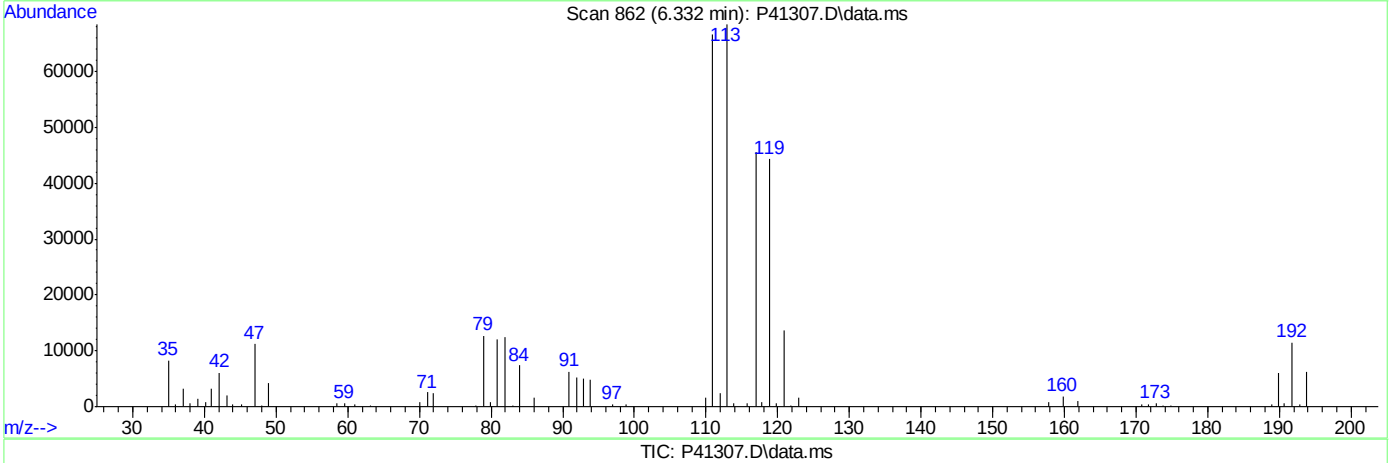
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41307.D
Acq On : 25 Apr 2016 8:49 am
Operator : katiem
Sample : BS Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 09:06:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41307.D\data.ms

(32) Carbon Tetrachloride ( )

6.332min (-0.001) 27.95ug/L m

response 139573

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	97.31
121.00	30.70	29.82
82.00	25.90	27.23

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 11:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076933.D
Acq On : 25 Apr 2016 10:26 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:55:22 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1023797	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	821485	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	391238	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.965	65	122739	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	244664	51.49	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.98%			
44) 1,2-Dichloroethane-d4	7.119	65	272780	54.62	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 109.24%			
55) Toluene-d8	8.950	98	1020151	46.58	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 93.16%			
77) 4-Bromofluorobenzene	11.724	174	279470	52.91	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 105.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	455248	50.74	ug/Kg	100
3) Chloromethane	2.635	50	509895	52.21	ug/Kg	98
4) Vinyl Chloride	2.757	62	522198	52.73	ug/Kg	94
5) Bromomethane	3.158	94	259706	50.36	ug/Kg	97
6) Chloroethane	3.316	64	208596	62.31	ug/Kg	93
7) Trichlorofluoromethane	3.481	101	488880	54.99	ug/Kg	92
8) Ethyl Ether	3.797	59	235017	56.64	ug/Kg	86
9) 1,2-Dichlorotrifluoroe...	4.028	67	439691	53.07	ug/Kg	97
10) 1,1-Dichloroethene	4.058	61	613720	52.93	ug/Kg	94
11) Freon 113	4.089	101	380214	52.55	ug/Kg	96
12) Carbon Disulfide	4.125	76	1277942	54.23	ug/Kg	95
13) Iodomethane	4.241	142	666478	58.12	ug/Kg	92
14) Allyl chloride	4.600	41	379847m	60.73	ug/Kg	
15) Methylene Chloride	4.697	49	453358	59.12	ug/Kg	88
16) Acetone	4.734	43	367377	267.75	ug/Kg	88
17) Methyl acetate	4.849	43	747046	239.87	ug/Kg	86
18) trans-1,2-Dichloroethene	4.868	61	464782	52.88	ug/Kg	91
19) Hexane	4.916	56	240214	45.72	ug/Kg	94
20) Methyl Tert Butyl Ether	4.953	73	795864	55.15	ug/Kg	94
21) Acetonitrile	5.251	41	273333	489.66	ug/Kg	98
22) Di-isopropyl ether	5.336	45	859360	54.98	ug/Kg	84
23) Chloroprene	5.482	53	511894	54.32	ug/Kg	97
24) 1,1-Dichloroethane	5.512	63	583182	54.07	ug/Kg	100
25) Acrylonitrile	5.573	53	413515	233.62	ug/Kg	95
26) ETBE	5.731	59	897658	56.65	ug/Kg	94
27) Vinyl acetate	5.750	43	2284717	265.53	ug/Kg	91
28) cis-1,2-Dichloroethene	6.090	96	386591	56.86	ug/Kg	94
29) 2,2-Dichloropropane	6.206	77	225540	58.95	ug/Kg	98
30) Bromochloromethane	6.303	128	171757	59.12	ug/Kg	97
31) Cyclohexane	6.322	56	660307	55.81	ug/Kg	92
32) Chloroform	6.358	83	605077	56.36	ug/Kg	97
33) Ethyl acetate	6.455	43	1136279	268.69	ug/Kg	100
34) Tetrahydrofuran	6.547	42	64823	55.10	ug/Kg	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076933.D
Acq On : 25 Apr 2016 10:26 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:55:22 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	308372	48.57	ug/Kg	94
37)	1,1,1-Trichloroethane	6.601	97	384032	55.09	ug/Kg	94
38)	2-Butanone	6.680	43	605995	268.99	ug/Kg	92
39)	1,1-Dichloropropene	6.717	75	427356	52.12	ug/Kg	98
40)	Propionitrile	7.003	54	387700	521.70	ug/Kg	96
41)	Methacrylonitrile	7.015	41	1556690	602.58	ug/Kg	96
42)	Benzene	6.979	78	1307911	53.14	ug/Kg	94
43)	TAME	7.058	73	826687	55.34	ug/Kg	96
45)	1,2-Dichloroethane	7.185	62	387377	58.64	ug/Kg	90
46)	Trichloroethene	7.563	95	322496	51.36	ug/Kg	94
47)	Methylcyclohexane	7.563	83	581251	50.09	ug/Kg	94
48)	Dibromomethane	8.001	93	163536	53.50	ug/Kg	89
49)	1,2-Dichloropropane	8.092	63	312034	53.52	ug/Kg	90
50)	Bromodichloromethane	8.141	83	336502	52.15	ug/Kg	99
51)	Methyl methacrylate	8.256	41	190408	54.41	ug/Kg	86
52)	2-Chloroethyl vinyl ether	8.676	63	847057	270.13	ug/Kg	92
53)	cis-1,3-Dichloropropene	8.767	75	450312	55.64	ug/Kg	96
56)	Toluene	9.004	91	1303042	46.93	ug/Kg	97
57)	2-Nitropropane	9.236	41	139739	148.67	ug/Kg	96
58)	4-Methyl-2-pentanone	9.351	43	1165077	220.74	ug/Kg	93
59)	trans-1,3-Dichloropropene	9.406	75	363145	48.36	ug/Kg	84
60)	Tetrachloroethene	9.394	166	274735	43.27	ug/Kg	98
61)	Ethyl methacrylate	9.522	69	307241	47.06	ug/Kg	93
62)	1,1,2-Trichloroethane	9.570	83	210626	45.71	ug/Kg	94
63)	Dibromochloromethane	9.759	129	201964	44.83	ug/Kg	96
64)	1,3-Dichloropropane	9.850	76	410906	46.24	ug/Kg	95
65)	1,2-Dibromoethane	10.020	107	228132	46.52	ug/Kg	99
66)	2-hexanone	10.179	43	863795	231.37	ug/Kg	95
67)	1-Chlorohexane	10.464	91	379921	48.32	ug/Kg	93
68)	Ethylbenzene	10.525	91	1433298	50.78	ug/Kg	98
69)	Chlorobenzene	10.525	112	805210	49.30	ug/Kg	91
70)	1,1,1,2-Tetrachloroethane	10.580	131	235888	49.19	ug/Kg	96
71)	m,p-Xylene	10.665	91	2090725	97.29	ug/Kg	96
72)	o-Xylene	11.103	91	1054543	50.72	ug/Kg	96
73)	Styrene	11.158	104	784665	49.07	ug/Kg	96
74)	Bromoform	11.213	173	103115	38.21	ug/Kg	96
75)	Isopropylbenzene	11.414	105	1255393	49.94	ug/Kg	96
78)	cis-1,4-Dichloro-2-butene	11.772	53	87399	46.32	ug/Kg	83
79)	n-Propylbenzene	11.833	91	1487449	50.60	ug/Kg	60
80)	Bromobenzene	11.845	156	316383	50.66	ug/Kg	99
81)	1,1,2,2-Tetrachloroethane	11.906	83	318114	45.58	ug/Kg	97
82)	1,3,5-Trimethylbenzene	12.016	105	1097808	51.81	ug/Kg	84
83)	2-Chlorotoluene	12.016	91	1032707	50.59	ug/Kg	89
84)	trans-1,4-Dichloro-2-B...	12.089	53	85090	48.19	ug/Kg	86
85)	1,2,3-Trichloropropane	12.064	110	75312	45.48	ug/Kg	94
86)	Cyclohexanone	12.125	55	71096	260.07	ug/Kg	97
87)	4-Chlorotoluene	12.186	91	915566	50.72	ug/Kg	92
88)	tert-Butylbenzene	12.356	91	682311	52.53	ug/Kg	96
89)	1,2,4-Trimethylbenzene	12.429	105	1069899	52.47	ug/Kg	97
90)	Pentachloroethane	12.405	167	147584	48.61	ug/Kg	92

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076933.D
Acq On : 25 Apr 2016 10:26 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:55:22 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1440430	50.86	ug/Kg	98
92)	4-Isopropyltoluene	12.679	119	1083861	50.45	ug/Kg	98
93)	1,3-Dichlorobenzene	12.801	146	545953	48.39	ug/Kg	95
94)	1,4-Dichlorobenzene	12.892	146	539686	46.83	ug/Kg	98
95)	n-Butylbenzene	13.117	92	595141	47.22	ug/Kg	99
96)	Benzyl Chloride	13.135	126	100639	47.75	ug/Kg#	76
97)	1,2-Dichlorobenzene	13.330	146	536272	49.21	ug/Kg	98
98)	1,2-Dibromo-3-Chloropr...	14.090	75	50148	42.86	ug/Kg	82
99)	Hexachlorobutadiene	14.650	225	174980	45.01	ug/Kg	84
100)	1,2,4-Trichlorobenzene	14.693	180	345246	49.30	ug/Kg	97
101)	Naphthalene	14.972	128	900323	51.08	ug/Kg	100
102)	1,2,3-Trichlorobenzene	15.137	180	356714	49.42	ug/Kg	97
104)	Ethanol	3.998	45	65034	1114.08	ug/Kg	94
105)	Acrolein	4.417	56	228964	270.78	ug/Kg	96
106)	Tert butyl alcohol	5.044	59	301236	551.28	ug/Kg	92
107)	Isobutyl alcohol	7.137	42	138999	1034.94	ug/Kg	94
108)	Tert Amyl Alcohol	7.246	59	236507	516.22	ug/Kg	90
109)	1,4-Dioxane	8.353	88	66791	1218.43	ug/Kg	81

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

7.3.3

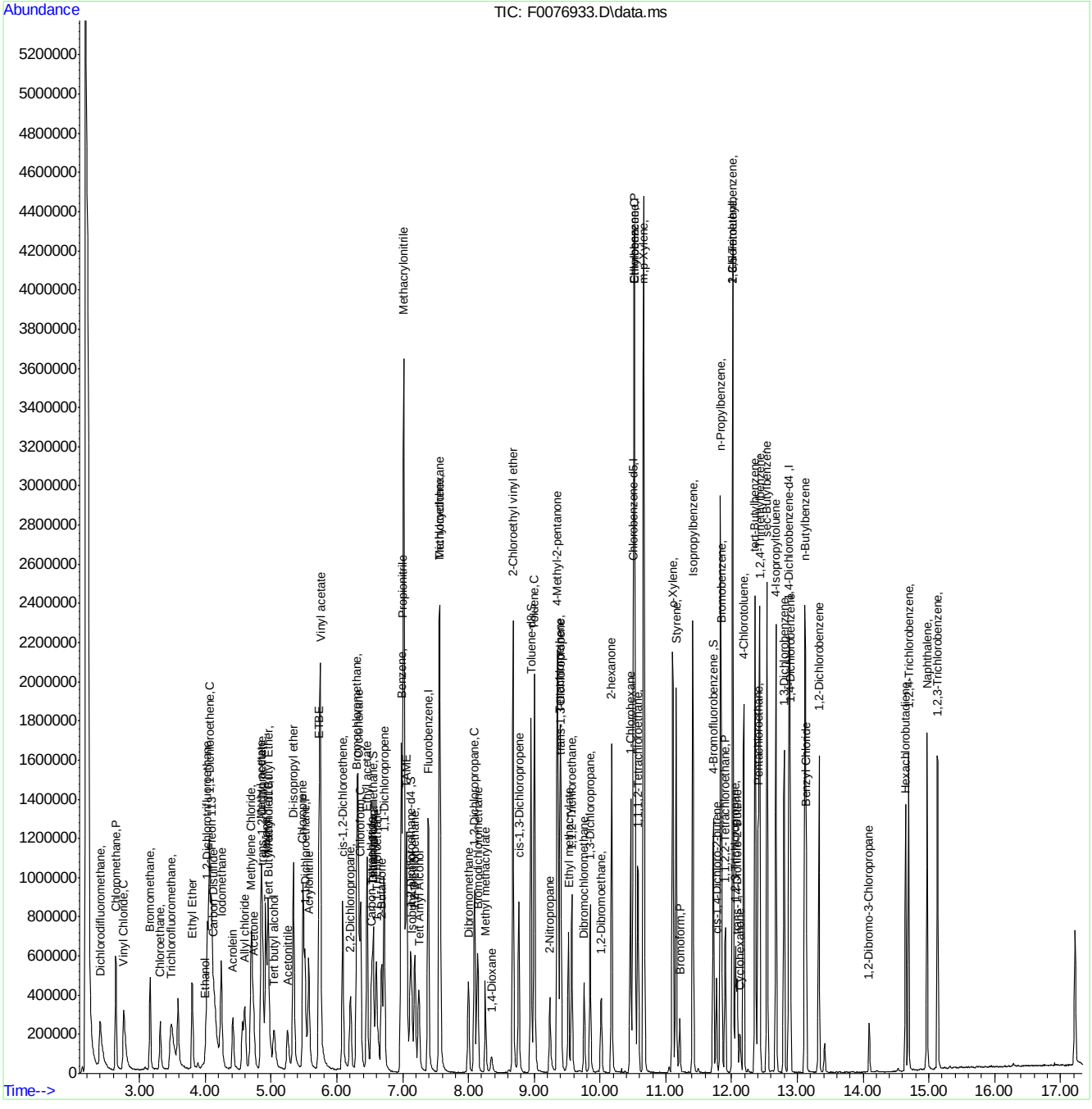
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076933.D
Acq On : 25 Apr 2016 10:26 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:55:22 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

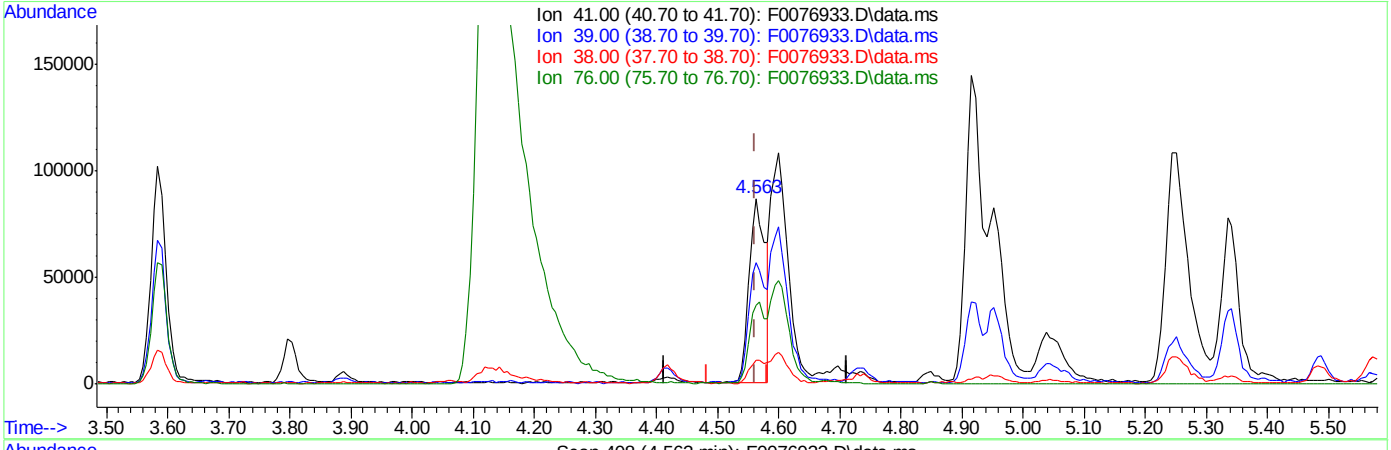
Sample Number:	VF2642-BS	**Method:**	SW846 8260C
Lab FileID:	F0076933.D	**Analyst approved:**	04/26/16 10:30 Eric Parrish
Injection Time:	04/25/16 10:26	**Supervisor approved:**	04/26/16 11:09 Juan Garcia

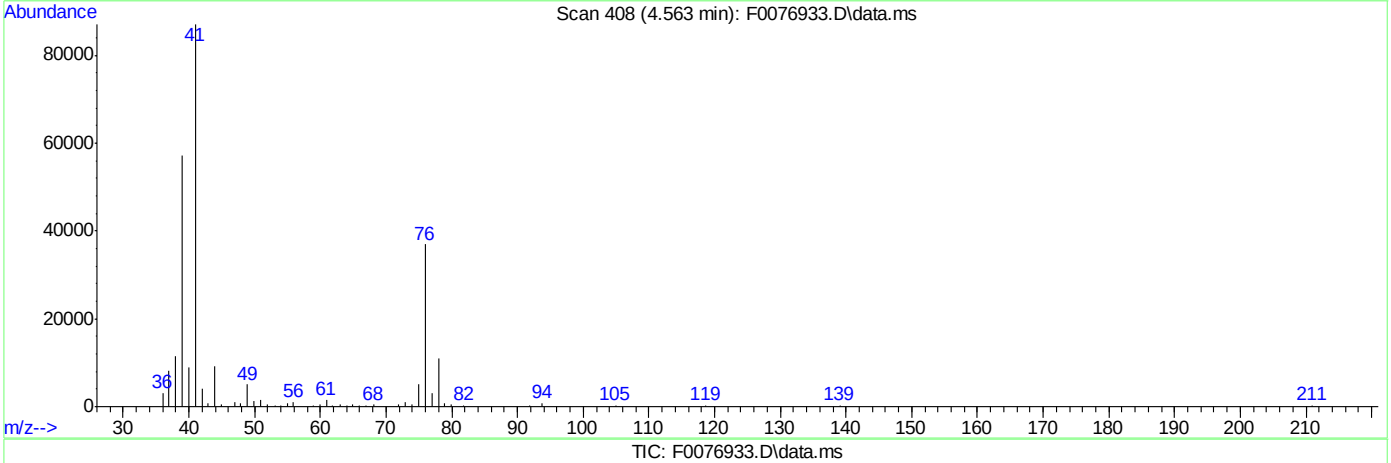
Parameter	CAS	Sig#	R.T. (min.)	Reason
Allyl chloride	107-05-1		4.60	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076933.D
Acq On : 25 Apr 2016 10:26 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:59 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076933.D\data.ms

(14) Allyl chloride

4.563min (+0.000) 25.63ug/Kg

response 160296

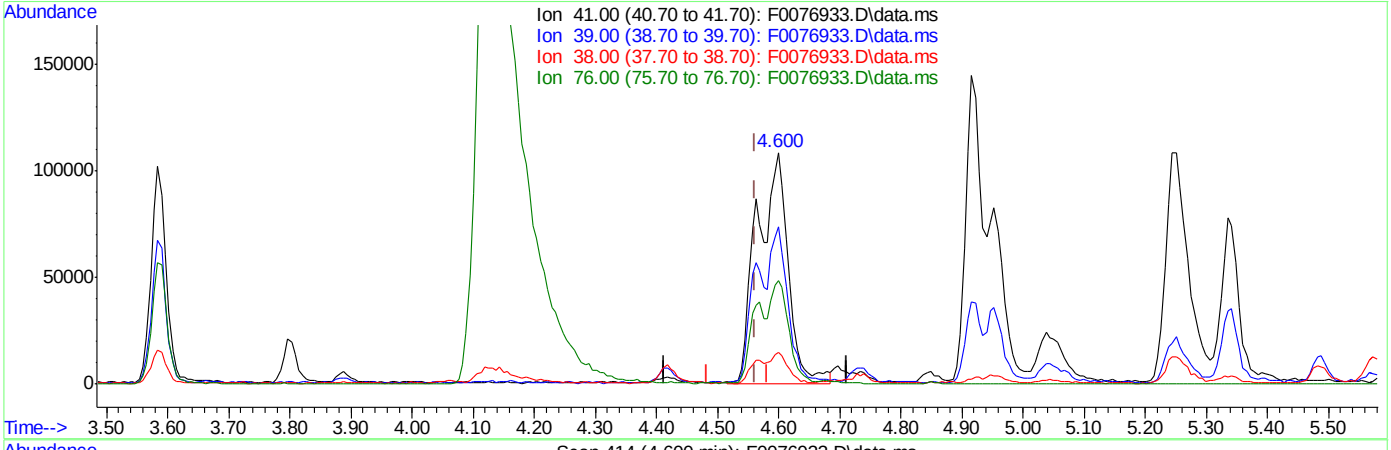
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	65.08
38.00	10.90	12.22
76.00	31.30	41.93

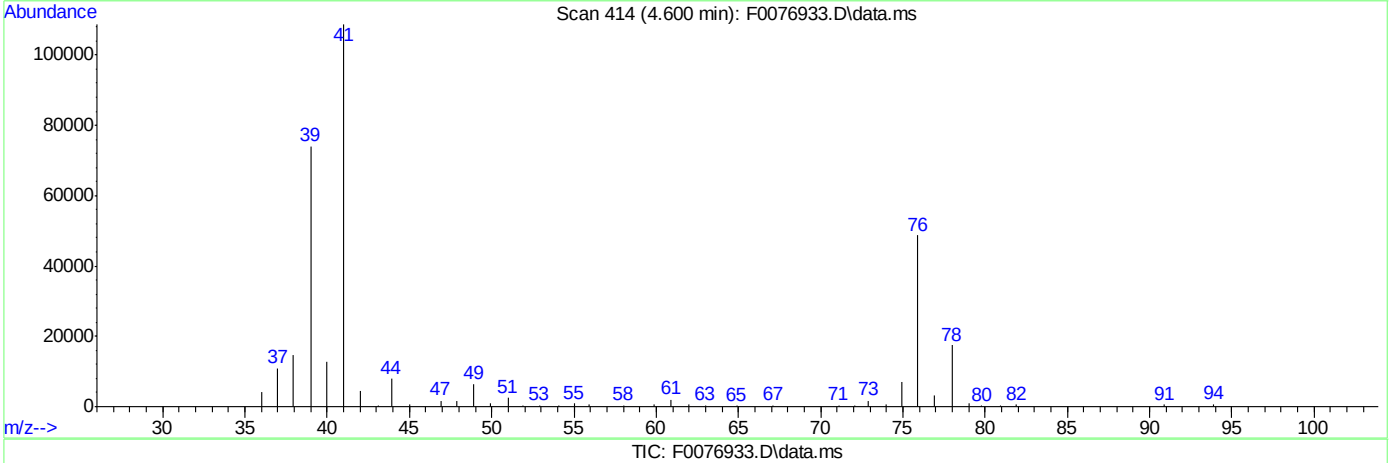
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076933.D
Acq On : 25 Apr 2016 10:26 am
Operator : ericp
Sample : BS Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:59 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076933.D\data.ms

(14) Allyl chloride

4.600min (+0.037) 60.73ug/Kg m

response 379847

Ion	Exp%	Act%
41.00	100	100
39.00	59.80	68.15
38.00	10.90	13.62
76.00	31.30	44.78

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
05/06/16 11:18

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076949.D
Acq On : 25 Apr 2016 5:17 pm
Operator : ericp
Sample : FA33385-3MS Inst : MSVOA9
Misc : MS33682,vf2642,4.02,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:19:03 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1040145	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	820855	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.873	152	403077	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	128987	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	275899	57.15	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 114.30%			
44) 1,2-Dichloroethane-d4	7.118	65	279740	55.13	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 110.26%			
55) Toluene-d8	8.950	98	1015206	46.39	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 92.78%			
77) 4-Bromofluorobenzene	11.724	174	283272	52.06	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 104.12%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	421236	46.22	ug/Kg	99
3) Chloromethane	2.641	50	453970	45.75	ug/Kg	100
4) Vinyl Chloride	2.763	62	473284	47.04	ug/Kg	96
5) Bromomethane	3.158	94	252743	48.24	ug/Kg	94
6) Chloroethane	3.316	64	182815	51.43	ug/Kg	96
7) Trichlorofluoromethane	3.480	101	459804	50.91	ug/Kg	92
8) Ethyl Ether	3.797	59	227327	53.93	ug/Kg	86
9) 1,2-Dichlorotrifluoroe...	4.028	67	417839	49.64	ug/Kg	98
10) 1,1-Dichloroethene	4.058	61	592035	50.26	ug/Kg	95
11) Freon 113	4.089	101	349158	47.50	ug/Kg	96
12) Carbon Disulfide	4.131	76	1195129	49.91	ug/Kg	95
13) Iodomethane	4.241	142	619817	53.20	ug/Kg	93
14) Allyl chloride	4.600	41	279062m	43.91	ug/Kg	
15) Methylene Chloride	4.703	49	460561	59.12	ug/Kg	81
16) Acetone	4.734	43	348034	249.67	ug/Kg	92
17) Methyl acetate	4.849	43	979339	309.51	ug/Kg	84
18) trans-1,2-Dichloroethene	4.874	61	469389	52.56	ug/Kg	92
19) Hexane	4.916	56	251585	47.13	ug/Kg	94
20) Methyl Tert Butyl Ether	4.953	73	797237	54.38	ug/Kg	93
21) Acetonitrile	5.251	41	268954	474.24	ug/Kg	98
22) Di-isopropyl ether	5.336	45	846295	53.29	ug/Kg	89
23) Chloroprene	5.488	53	442712	46.24	ug/Kg	95
24) 1,1-Dichloroethane	5.518	63	561433	51.24	ug/Kg	99
25) Acrylonitrile	5.573	53	411576	228.87	ug/Kg	92
26) ETBE	5.725	59	870337	54.07	ug/Kg	98
27) Vinyl acetate	5.750	43	644767	73.76	ug/Kg	92
28) cis-1,2-Dichloroethene	6.090	96	371186	53.74	ug/Kg	94
29) 2,2-Dichloropropane	6.206	77	201760	51.90	ug/Kg	99
30) Bromochloromethane	6.303	128	163655	55.44	ug/Kg	95
31) Cyclohexane	6.321	56	564530	46.96	ug/Kg	90
32) Chloroform	6.358	83	591234	54.21	ug/Kg	99
33) Ethyl acetate	6.455	43	990265	230.48	ug/Kg	100
34) Tetrahydrofuran	6.553	42	61861	52.19	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076949.D
Acq On : 25 Apr 2016 5:17 pm
Operator : ericp
Sample : FA33385-3MS Inst : MSVOA9
Misc : MS33682,vf2642,4.02,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:19:03 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Carbon Tetrachloride	6.528	117	286833	44.47	ug/Kg	97
37) 1,1,1-Trichloroethane	6.595	97	367695	51.92	ug/Kg	99
38) 2-Butanone	6.680	43	518348	226.47	ug/Kg	85
39) 1,1-Dichloropropene	6.717	75	435469	52.28	ug/Kg	94
40) Propionitrile	7.003	54	362561	480.20	ug/Kg	99
41) Methacrylonitrile	7.015	41	1421737	541.69	ug/Kg	96
42) Benzene	6.978	78	1240078	49.60	ug/Kg	98
43) TAME	7.058	73	804340	53.00	ug/Kg	97
45) 1,2-Dichloroethane	7.185	62	373476	55.65	ug/Kg	90
46) Trichloroethene	7.562	95	331471	51.96	ug/Kg	91
47) Methylcyclohexane	7.562	83	529679	44.93	ug/Kg	93
48) Dibromomethane	8.000	93	161248	51.92	ug/Kg	92
49) 1,2-Dichloropropane	8.092	63	298812	50.44	ug/Kg	88
50) Bromodichloromethane	8.140	83	319294	48.70	ug/Kg	97
51) Methyl methacrylate	8.256	41	189624	53.34	ug/Kg	84
52) 2-Chloroethyl vinyl ether	8.676	63	794016	249.24	ug/Kg	93
53) cis-1,3-Dichloropropene	8.767	75	418581	50.91	ug/Kg	93
56) Toluene	9.004	91	1244435	44.85	ug/Kg	97
57) 2-Nitropropane	9.235	41	144646	154.01	ug/Kg	92
58) 4-Methyl-2-pentanone	9.351	43	1145417	217.18	ug/Kg	94
59) trans-1,3-Dichloropropene	9.406	75	360922	48.10	ug/Kg	89
60) Tetrachloroethene	9.394	166	298603	47.07	ug/Kg	95
61) Ethyl methacrylate	9.521	69	260987	40.01	ug/Kg	89
62) 1,1,2-Trichloroethane	9.570	83	203990	44.30	ug/Kg	92
63) Dibromochloromethane	9.759	129	185975	41.31	ug/Kg	94
64) 1,3-Dichloropropane	9.850	76	391897	44.14	ug/Kg	95
65) 1,2-Dibromoethane	10.020	107	218895	44.67	ug/Kg	98
66) 2-hexanone	10.178	43	780631	209.26	ug/Kg	92
67) 1-Chlorohexane	10.464	91	369964	47.09	ug/Kg	94
68) Ethylbenzene	10.525	91	1376538	48.81	ug/Kg	97
69) Chlorobenzene	10.525	112	786252	48.17	ug/Kg	89
70) 1,1,1,2-Tetrachloroethane	10.580	131	216574	45.20	ug/Kg	98
71) m,p-Xylene	10.665	91	2047566	95.23	ug/Kg	96
72) o-Xylene	11.103	91	1014250	48.82	ug/Kg	95
73) Styrene	11.158	104	743036	46.50	ug/Kg	97
74) Bromoform	11.213	173	90400	33.53	ug/Kg	95
75) Isopropylbenzene	11.413	105	1216449	48.43	ug/Kg	97
78) cis-1,4-Dichloro-2-butene	11.772	53	70004	36.01	ug/Kg	88
79) n-Propylbenzene	11.833	91	1506572	49.75	ug/Kg	60
80) Bromobenzene	11.845	156	306859	47.69	ug/Kg	99
81) 1,1,2,2-Tetrachloroethane	11.906	83	302169	42.02	ug/Kg	94
82) 1,3,5-Trimethylbenzene	12.022	105	1090980	49.97	ug/Kg	84
83) 2-Chlorotoluene	12.016	91	1047447	49.81	ug/Kg	90
84) trans-1,4-Dichloro-2-B...	12.089	53	70206	38.59	ug/Kg	92
85) 1,2,3-Trichloropropane	12.064	110	72897	42.72	ug/Kg	96
86) Cyclohexanone	12.131	55	50484	179.25	ug/Kg	91
87) 4-Chlorotoluene	12.186	91	936225	50.34	ug/Kg	93
88) tert-Butylbenzene	12.356	91	647259	48.37	ug/Kg	94
89) 1,2,4-Trimethylbenzene	12.429	105	1067789	50.83	ug/Kg	98
90) Pentachloroethane	12.405	167	121681	38.90	ug/Kg	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076949.D
Acq On : 25 Apr 2016 5:17 pm
Operator : ericp
Sample : FA33385-3MS Inst : MSVOA9
Misc : MS33682,vf2642,4.02,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:19:03 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

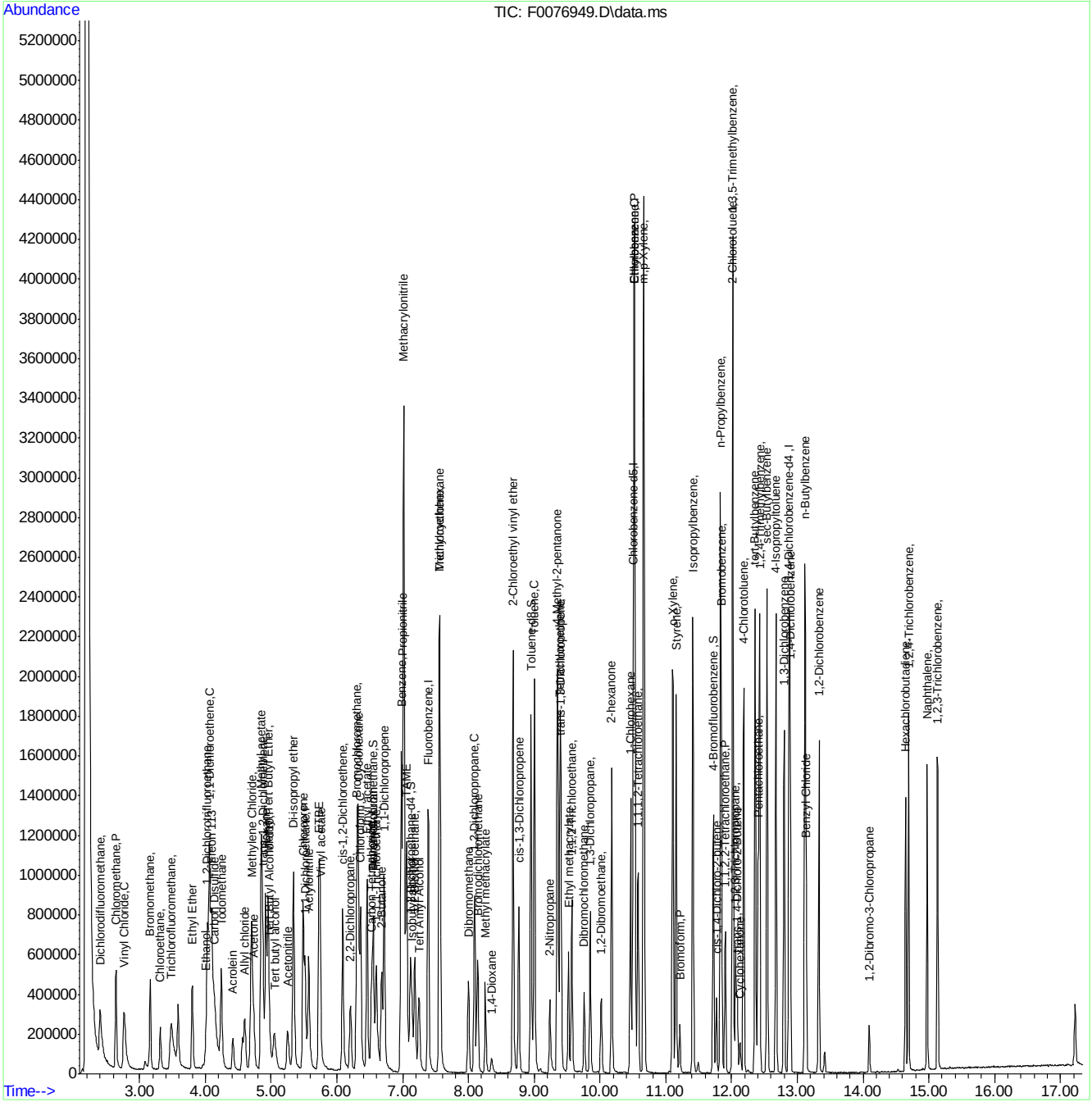
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1402201	48.05	ug/Kg	98
92)	4-Isopropyltoluene	12.679	119	1098627	49.63	ug/Kg	96
93)	1,3-Dichlorobenzene	12.800	146	581769	50.05	ug/Kg	94
94)	1,4-Dichlorobenzene	12.892	146	590897	49.76	ug/Kg	99
95)	n-Butylbenzene	13.117	92	633858	48.82	ug/Kg	98
96)	Benzyl Chloride	13.135	126	78768	36.28	ug/Kg#	85
97)	1,2-Dichlorobenzene	13.330	146	544686	48.52	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.096	75	46412	38.50	ug/Kg	90
99)	Hexachlorobutadiene	14.644	225	177439	44.30	ug/Kg	93
100)	1,2,4-Trichlorobenzene	14.692	180	373781	51.81	ug/Kg	98
101)	Naphthalene	14.972	128	820539	45.18	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	350687	47.16	ug/Kg	99
104)	Ethanol	4.010	45	54750	892.48	ug/Kg	97
105)	Acrolein	4.417	56	132902	149.56	ug/Kg	98
106)	Tert butyl alcohol	5.050	59	294423	512.71	ug/Kg	92
107)	Isobutyl alcohol	7.137	42	126963	899.54	ug/Kg	94
108)	Tert Amyl Alcohol	7.246	59	228213	473.99	ug/Kg	93
109)	1,4-Dioxane	8.353	88	57376	995.98	ug/Kg	80

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076949.D
Acq On : 25 Apr 2016 5:17 pm
Operator : ericp
Sample : FA33385-3MS Inst : MSVOA9
Misc : MS33682,vf2642,4.02,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:19:03 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



041316APP9-F.m Tue Apr 26 07:26:02 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

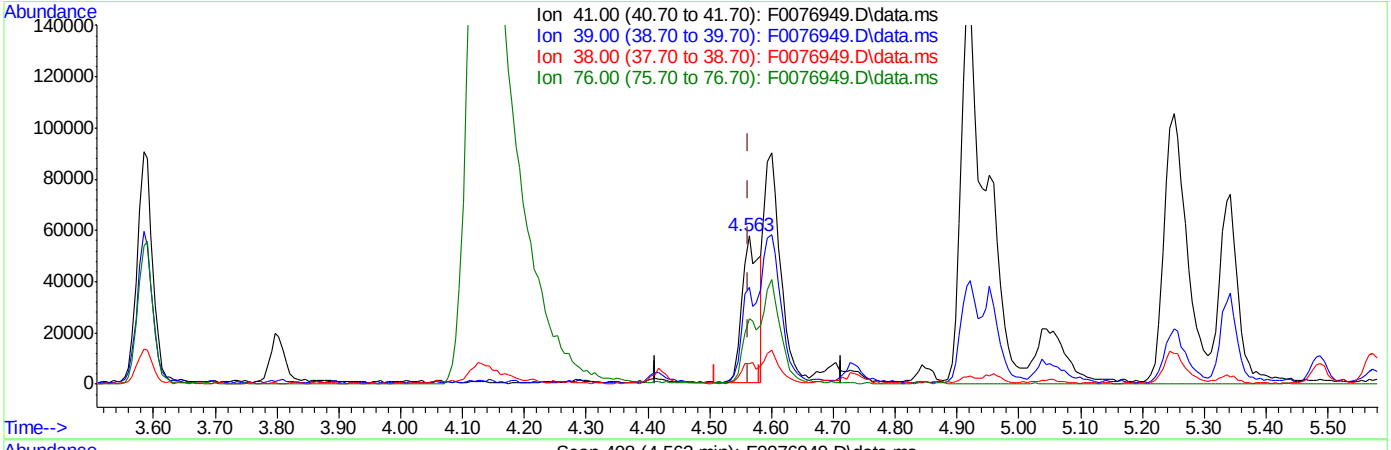
Sample Number:	FA33385-3MS	**Method:**	SW846 8260C
Lab FileID:	F0076949.D	**Analyst approved:**	05/06/16 07:18 Eric Parrish
Injection Time:	04/25/16 17:17	**Supervisor approved:**	05/06/16 11:18 Melissa Mangual

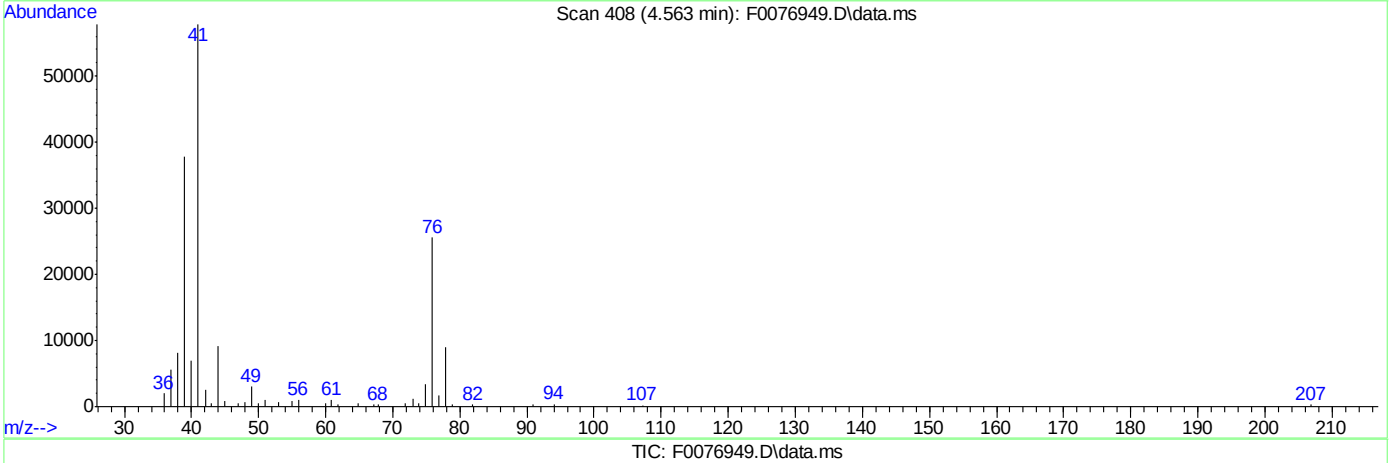
Parameter	CAS	Sig#	R.T. (min.)	Reason
Allyl chloride	107-05-1		4.60	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076949.D
Acq On : 25 Apr 2016 5:17 pm
Operator : ericp
Sample : FA33385-3MS Inst : MSVOA9
Misc : MS33682,vf2642,4.02,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:18:45 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076949.D\data.ms

(14) Allyl chloride

4.563min (+0.000) 17.21ug/Kg

response 109351

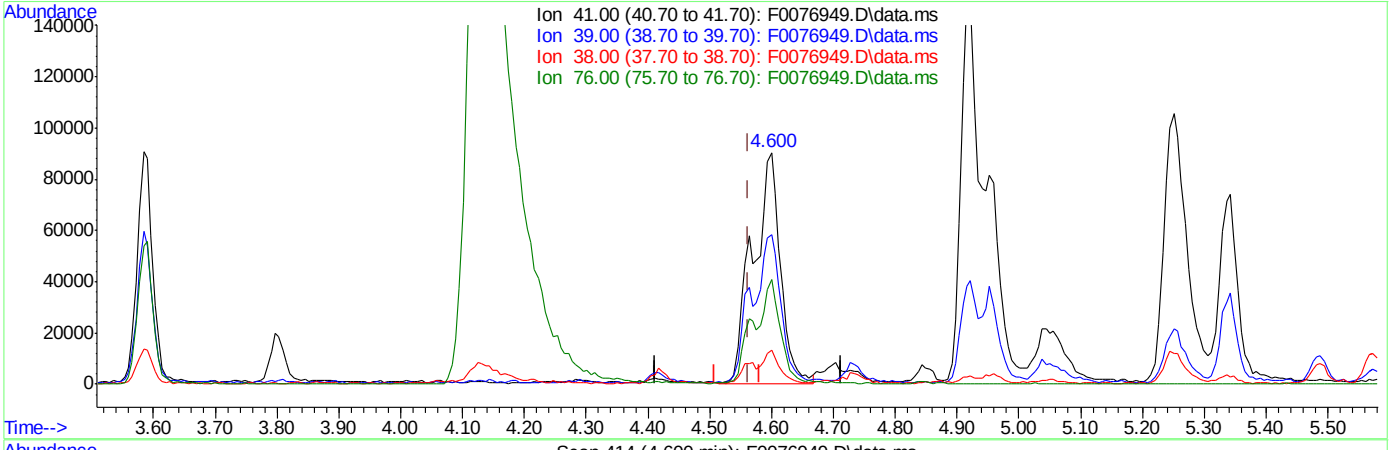
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	64.57
38.00	10.90	12.97
76.00	31.30	43.83

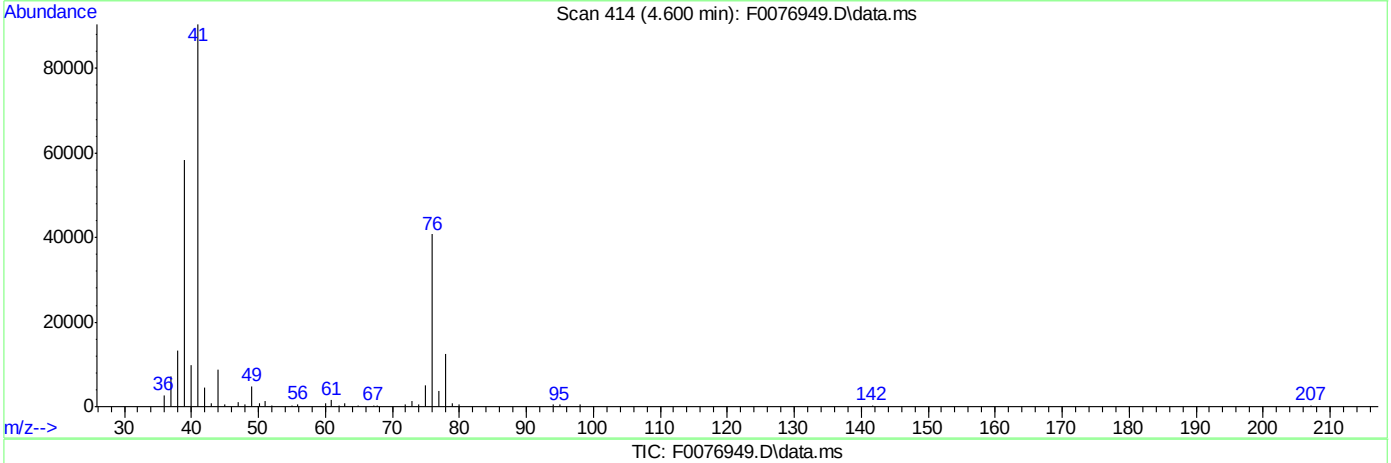
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076949.D
Acq On : 25 Apr 2016 5:17 pm
Operator : ericp
Sample : FA33385-3MS Inst : MSVOA9
Misc : MS33682,vf2642,4.02,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:18:45 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076949.D\data.ms

(14) Allyl chloride

4.600min (+0.037) 43.91ug/Kg m

response 279062

Ion	Exp%	Act%
41.00	100	100
39.00	59.80	64.66
38.00	10.90	14.57
76.00	31.30	45.11

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
05/06/16 11:18

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076950.D
Acq On : 25 Apr 2016 5:43 pm
Operator : ericp
Sample : FA33385-3MSD Inst : MSVOA9
Misc : MS33682,vf2642,4.05,,,5,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:19:45 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1155045	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	838642	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.873	152	418635	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	140812	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	283470	52.87	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 105.74%			
44) 1,2-Dichloroethane-d4	7.118	65	285639	50.70	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 101.40%			
55) Toluene-d8	8.950	98	1034851	46.29	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 92.58%			
77) 4-Bromofluorobenzene	11.724	174	285420	50.50	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 101.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	408322	40.34	ug/Kg	100
3) Chloromethane	2.641	50	448090	40.67	ug/Kg	100
4) Vinyl Chloride	2.763	62	462079	41.36	ug/Kg	96
5) Bromomethane	3.164	94	273681	47.04	ug/Kg	96
6) Chloroethane	3.316	64	166505	40.42	ug/Kg	96
7) Trichlorofluoromethane	3.487	101	435572	43.43	ug/Kg	94
8) Ethyl Ether	3.797	59	216268	46.20	ug/Kg	87
9) 1,2-Dichlorotrifluoroe...	4.028	67	408832	43.74	ug/Kg	96
10) 1,1-Dichloroethene	4.064	61	566039	43.27	ug/Kg	92
11) Freon 113	4.095	101	343797	42.12	ug/Kg	94
12) Carbon Disulfide	4.131	76	1151120	43.29	ug/Kg	95
13) Iodomethane	4.241	142	594510	45.96	ug/Kg	92
14) Allyl chloride	4.600	41	289216	40.98	ug/Kg	86
15) Methylene Chloride	4.703	49	455045	52.60	ug/Kg	86
16) Acetone	4.734	43	333334	215.33	ug/Kg	90
17) Methyl acetate	4.849	43	839243	238.85	ug/Kg	87
18) trans-1,2-Dichloroethene	4.874	61	448603	45.24	ug/Kg	95
19) Hexane	4.922	56	243510	41.08	ug/Kg	95
20) Methyl Tert Butyl Ether	4.953	73	759295	46.64	ug/Kg	94
21) Acetonitrile	5.251	41	251913	400.01	ug/Kg	97
22) Di-isopropyl ether	5.336	45	804945	45.64	ug/Kg	87
23) Chloroprene	5.488	53	426099	40.08	ug/Kg	94
24) 1,1-Dichloroethane	5.518	63	534253	43.91	ug/Kg	99
25) Acrylonitrile	5.573	53	369675	185.12	ug/Kg	94
26) ETBE	5.731	59	823846	46.09	ug/Kg	92
27) Vinyl acetate	5.750	43	886311	91.30	ug/Kg	91
28) cis-1,2-Dichloroethene	6.090	96	349979	45.63	ug/Kg	95
29) 2,2-Dichloropropane	6.206	77	191452	44.35	ug/Kg	97
30) Bromochloromethane	6.303	128	154678	47.19	ug/Kg	93
31) Cyclohexane	6.321	56	534800	40.06	ug/Kg	90
32) Chloroform	6.358	83	548017	45.25	ug/Kg	99
33) Ethyl acetate	6.455	43	919883	192.80	ug/Kg	99
34) Tetrahydrofuran	6.553	42	57174	44.43	ug/Kg	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076950.D
Acq On : 25 Apr 2016 5:43 pm
Operator : ericp
Sample : FA33385-3MSD Inst : MSVOA9
Misc : MS33682,vf2642,4.05,,,5,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:19:45 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.534	117	289227	40.38	ug/Kg	94
37)	1,1,1-Trichloroethane	6.601	97	345603	43.95	ug/Kg	99
38)	2-Butanone	6.680	43	477627	187.92	ug/Kg	84
39)	1,1-Dichloropropene	6.717	75	407645	44.07	ug/Kg	93
40)	Propionitrile	7.003	54	324781	387.37	ug/Kg	89
41)	Methacrylonitrile	7.015	41	1138506	390.62	ug/Kg	94
42)	Benzene	6.979	78	1219064	43.90	ug/Kg	100
43)	TAME	7.064	73	774563	45.96	ug/Kg	94
45)	1,2-Dichloroethane	7.185	62	342430	45.95	ug/Kg	89
46)	Trichloroethene	7.563	95	323722	45.69	ug/Kg	94
47)	Methylcyclohexane	7.563	83	543958	41.55	ug/Kg	92
48)	Dibromomethane	8.001	93	165565	48.01	ug/Kg	95
49)	1,2-Dichloropropane	8.092	63	291134	44.26	ug/Kg	93
50)	Bromodichloromethane	8.140	83	324918	44.63	ug/Kg	98
51)	Methyl methacrylate	8.256	41	174798	44.28	ug/Kg	75
52)	2-Chloroethyl vinyl ether	8.676	63	740320	209.27	ug/Kg	93
53)	cis-1,3-Dichloropropene	8.767	75	393621	43.11	ug/Kg	95
56)	Toluene	9.004	91	1156399	40.79	ug/Kg	96
57)	2-Nitropropane	9.242	41	138748	144.60	ug/Kg	99
58)	4-Methyl-2-pentanone	9.357	43	1038253	192.68	ug/Kg	92
59)	trans-1,3-Dichloropropene	9.406	75	338982	44.22	ug/Kg	85
60)	Tetrachloroethene	9.394	166	274431	42.34	ug/Kg	96
61)	Ethyl methacrylate	9.521	69	242169	36.33	ug/Kg	93
62)	1,1,2-Trichloroethane	9.570	83	188538	40.08	ug/Kg	92
63)	Dibromochloromethane	9.759	129	174261	37.89	ug/Kg	96
64)	1,3-Dichloropropane	9.850	76	362786	39.99	ug/Kg	96
65)	1,2-Dibromoethane	10.020	107	202552	40.46	ug/Kg	98
66)	2-hexanone	10.178	43	723532	189.84	ug/Kg	97
67)	1-Chlorohexane	10.464	91	338319	42.15	ug/Kg	95
68)	Ethylbenzene	10.525	91	1255236	43.56	ug/Kg	97
69)	Chlorobenzene	10.525	112	720966	43.24	ug/Kg	90
70)	1,1,1,2-Tetrachloroethane	10.580	131	205358	41.95	ug/Kg	98
71)	m,p-Xylene	10.665	91	1917878	86.85	ug/Kg	95
72)	o-Xylene	11.109	91	929052	43.77	ug/Kg	96
73)	Styrene	11.158	104	697004	42.70	ug/Kg	96
74)	Bromoform	11.213	173	87975	31.94	ug/Kg	96
75)	Isopropylbenzene	11.413	105	1127407	43.93	ug/Kg	94
78)	cis-1,4-Dichloro-2-butene	11.772	53	66607	32.99	ug/Kg#	78
79)	n-Propylbenzene	11.833	91	1373438	43.66	ug/Kg	59
80)	Bromobenzene	11.845	156	286881	42.93	ug/Kg	98
81)	1,1,2,2-Tetrachloroethane	11.906	83	280495	37.56	ug/Kg	97
82)	1,3,5-Trimethylbenzene	12.022	105	982964	43.35	ug/Kg	85
83)	2-Chlorotoluene	12.016	91	956591	43.80	ug/Kg	89
84)	trans-1,4-Dichloro-2-B...	12.089	53	67550	35.75	ug/Kg	89
85)	1,2,3-Trichloropropane	12.064	110	68259	38.52	ug/Kg	96
86)	Cyclohexanone	12.131	55	46643	159.45	ug/Kg	92
87)	4-Chlorotoluene	12.186	91	867194	44.89	ug/Kg	93
88)	tert-Butylbenzene	12.356	91	585162	42.10	ug/Kg	95
89)	1,2,4-Trimethylbenzene	12.429	105	970204	44.47	ug/Kg	97
90)	Pentachloroethane	12.405	167	117009	36.01	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076950.D
Acq On : 25 Apr 2016 5:43 pm
Operator : ericp
Sample : FA33385-3MSD Inst : MSVOA9
Misc : MS33682,vf2642,4.05,,,5,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:19:45 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

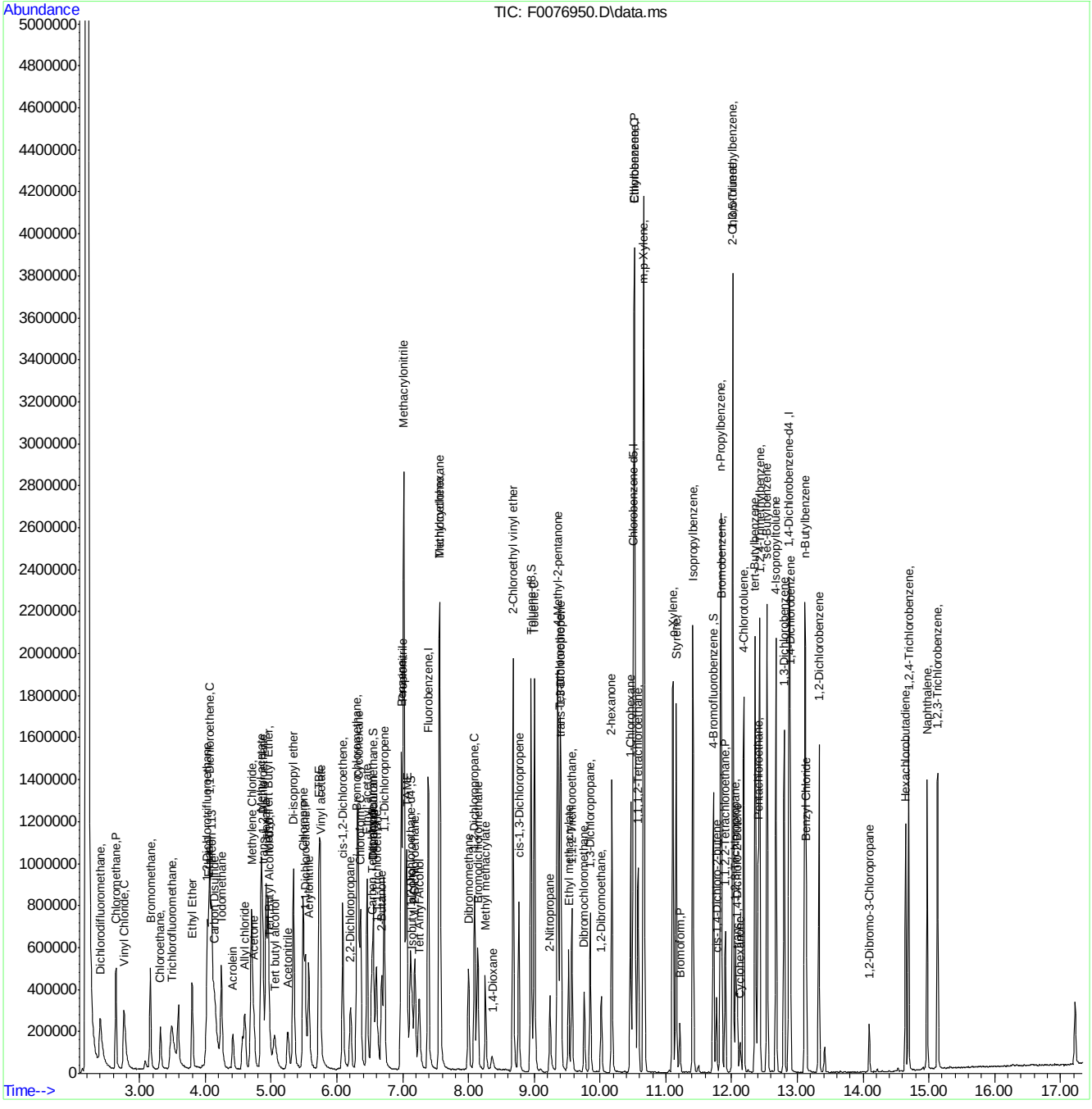
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1274215	42.04	ug/Kg	96
92)	4-Isopropyltoluene	12.679	119	981220	42.68	ug/Kg	99
93)	1,3-Dichlorobenzene	12.800	146	534965	44.31	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	533331	43.25	ug/Kg	98
95)	n-Butylbenzene	13.117	92	555925	41.23	ug/Kg	98
96)	Benzyl Chloride	13.135	126	73246	32.48	ug/Kg#	80
97)	1,2-Dichlorobenzene	13.330	146	497471	42.67	ug/Kg	98
98)	1,2-Dibromo-3-Chloropr...	14.096	75	42736	34.14	ug/Kg	89
99)	Hexachlorobutadiene	14.650	225	150210	36.11	ug/Kg	87
100)	1,2,4-Trichlorobenzene	14.692	180	331005	44.17	ug/Kg	96
101)	Naphthalene	14.972	128	749196	39.72	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	312292	40.43	ug/Kg	99
104)	Ethanol	4.046	45	55939m	835.28	ug/Kg	
105)	Acrolein	4.417	56	142959	147.37	ug/Kg	94
106)	Tert butyl alcohol	5.050	59	280398	447.28	ug/Kg	91
107)	Isobutyl alcohol	7.143	42	125904	817.12	ug/Kg	95
108)	Tert Amyl Alcohol	7.252	59	227495	432.82	ug/Kg	88
109)	1,4-Dioxane	8.366	88	63909	1016.22	ug/Kg#	69

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076950.D
Acq On : 25 Apr 2016 5:43 pm
Operator : ericp
Sample : FA33385-3MSD Inst : MSVOA9
Misc : MS33682,vf2642,4.05,,,5,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:19:45 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

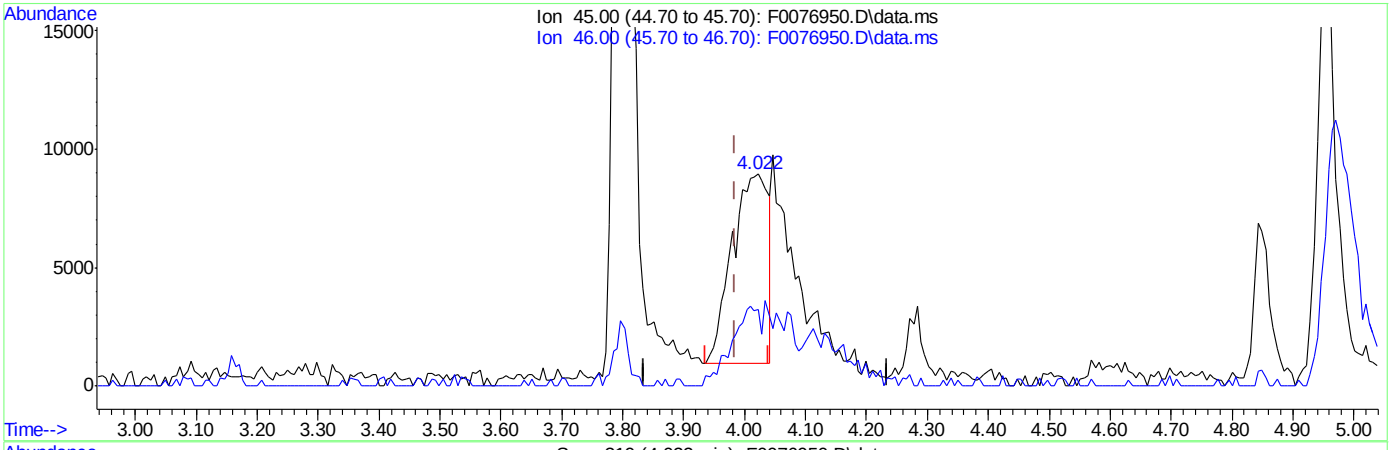
Sample Number:	FA33385-3MSD	**Method:**	SW846 8260C
Lab FileID:	F0076950.D	**Analyst approved:**	05/06/16 07:18 Eric Parrish
Injection Time:	04/25/16 17:43	**Supervisor approved:**	05/06/16 11:18 Melissa Mangual

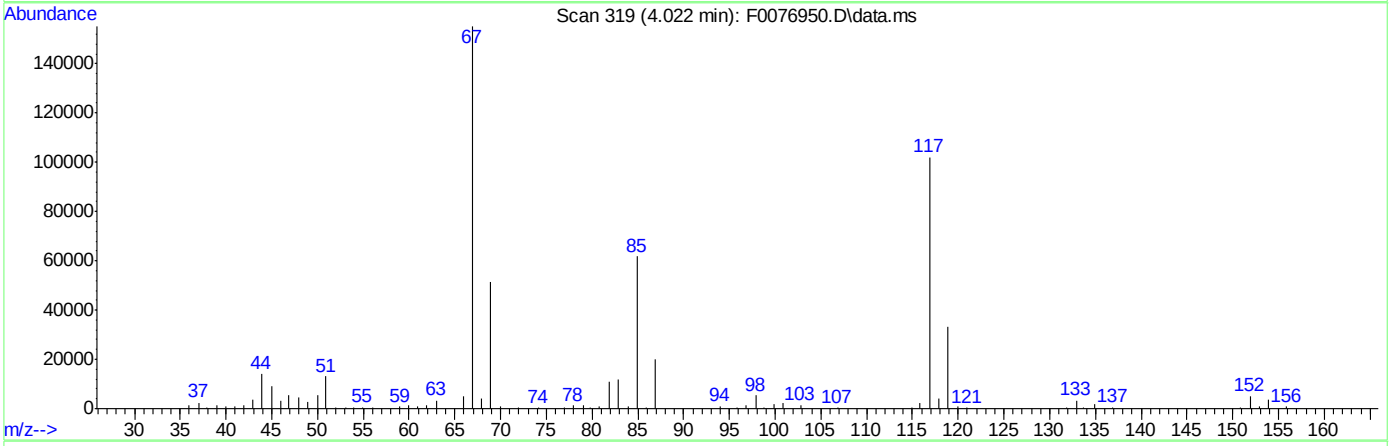
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		4.05	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076950.D
Acq On : 25 Apr 2016 5:43 pm
Operator : ericp
Sample : FA33385-3MSD Inst : MSVOA9
Misc : MS33682,vf2642,4.05,,,5,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:19:24 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076950.D\data.ms

(104) Ethanol

4.022min (+0.037) 486.62ug/Kg

response 32589

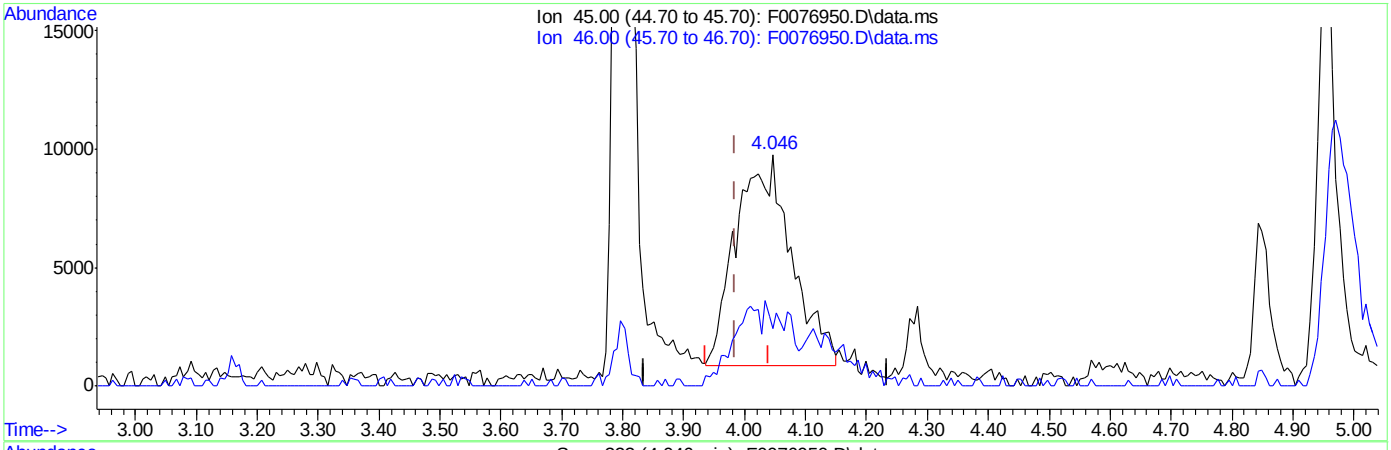
Ion	Exp%	Act%
45.00	100	100
46.00	35.00	34.73
0.00	0.00	0.00
0.00	0.00	0.00

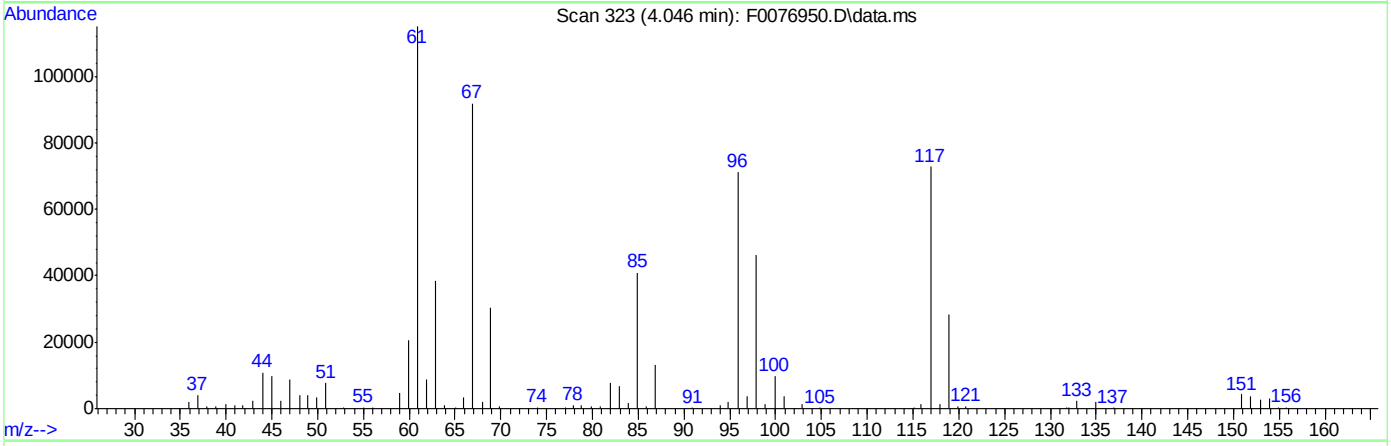
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076950.D
Acq On : 25 Apr 2016 5:43 pm
Operator : ericp
Sample : FA33385-3MSD Inst : MSVOA9
Misc : MS33682,vf2642,4.05,,,5,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:19:24 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076950.D\data.ms

(104) Ethanol

4.046min (+0.061) 835.28ug/Kg m

response 55939

Ion	Exp%	Act%
45.00	100	100
46.00	35.00	24.99
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 12:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:39:37 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.147	96	553772	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.238	117	409340	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.598	152	198287	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.799	65	83654	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.332	113	133718	49.53	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.06%			
38) 1,2-Dichloroethane-d4	6.867	65	186155m	51.37	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.74%			
48) Toluene-d8	8.693	98	546427	49.34	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.68%			
69) 4-Bromofluorobenzene	11.448	95	197916	50.58	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.16%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.536	85	73800	30.89	ug/L	95
3) Chloromethane	2.700	50	114700	26.23	ug/L	98
4) Vinyl Chloride	2.834	62	107870	28.32	ug/L	97
5) Bromomethane	3.175	94	53782	23.59	ug/L	98
6) Chloroethane	3.303	64	73522	28.61	ug/L	93
7) Trichlorofluoromethane	3.509	101	117070m	26.70	ug/L	
8) Ethyl Ether	3.735	59	97016	28.27	ug/L	94
9) 1,2-Dichlorotrifluoroe...	3.960	67	110684	30.83	ug/L	90
10) 1,1-Dichloroethene	3.984	61	147736	29.37	ug/L	92
11) Freon 113	4.051	101	76458	30.12	ug/L	97
12) Carbon Disulfide	4.045	76	242039	26.60	ug/L	88
13) Iodomethane	4.154	142	117995	28.21	ug/L	97
14) Methylene Chloride	4.562	49	143043	28.01	ug/L	95
15) Acetone	4.580	58	43196	142.97	ug/L	89
16) Methyl acetate	4.696	74	74439	151.39	ug/L #	36
17) trans-1,2-Dichloroethene	4.726	61	139026	31.07	ug/L	93
18) Hexane	4.787	56	105036	30.08	ug/L	89
19) Methyl Tert Butyl Ether	4.823	73	272249	29.92	ug/L	96
20) Di-isopropyl ether	5.182	45	366250	27.62	ug/L	97
21) 1,1-Dichloroethane	5.334	63	176216	29.24	ug/L	97
22) Acrylonitrile	5.365	53	186338	144.78	ug/L	98
23) ETBE	5.553	59	317889	27.03	ug/L	96
24) Vinyl acetate	5.535	43	1106442	121.97	ug/L	96
25) cis-1,2-Dichloroethene	5.882	96	91530	26.96	ug/L	93
26) 2,2-Dichloropropane	6.004	77	119107	26.48	ug/L	94
27) Bromochloromethane	6.089	128	42802	27.72	ug/L	93
28) Cyclohexane	6.131	56	189509	30.16	ug/L	93
29) Chloroform	6.144	83	163679	28.21	ug/L	95
30) Tetrahydrofuran	6.314	42	32700	30.74	ug/L	95
32) Carbon Tetrachloride	6.326	117	122937m	28.07	ug/L	
33) 1,1,1-Trichloroethane	6.393	97	134697	28.14	ug/L	96
34) 2-Butanone	6.423	43	262124	161.96	ug/L	98
35) 1,1-Dichloropropene	6.496	75	134602	29.92	ug/L	95
36) Benzene	6.746	78	366586	27.97	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:39:37 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.837	73	252368	26.69 ug/L	92
39) 1,2-Dichloroethane	6.934	62	136817	27.82 ug/L	94
40) Trichloroethene	7.324	95	90176	28.30 ug/L	94
41) Methylcyclohexane	7.342	83	168522	29.92 ug/L	95
42) Dibromomethane	7.744	93	55271	29.29 ug/L	96
43) 1,2-Dichloropropane	7.835	63	104819	27.79 ug/L	95
44) Bromodichloromethane	7.883	83	121664	27.82 ug/L	97
45) 2-Chloroethyl vinyl ether	8.504	63	549	0.23 ug/L #	22
46) cis-1,3-Dichloropropene	8.504	75	127205	22.81 ug/L	94
49) Toluene	8.747	91	386573	27.10 ug/L	97
50) 2-Nitropropane	8.948	41	153867	161.60 ug/L	97
51) 4-Methyl-2-pentanone	9.082	43	691489	191.38 ug/L	95
52) trans-1,3-Dichloropropene	9.137	75	122399	24.64 ug/L	92
53) Tetrachloroethene	9.149	166	86158	28.43 ug/L	97
54) 1,1,2-Trichloroethane	9.301	83	69770	28.93 ug/L	95
55) Dibromochloromethane	9.496	129	83010	27.13 ug/L	98
56) 1,3-Dichloropropane	9.581	76	148491	28.01 ug/L	93
57) 1,2-Dibromoethane	9.745	107	82738	30.98 ug/L	92
58) 2-hexanone	9.903	43	490914	202.74 ug/L	95
59) 1-Chlorohexane	10.207	91	125360	28.09 ug/L	88
60) Ethylbenzene	10.268	91	436502	27.73 ug/L	98
61) Chlorobenzene	10.256	112	243222	26.56 ug/L	92
62) 1,1,1,2-Tetrachloroethane	10.311	131	83091	27.23 ug/L	96
63) m,p-Xylene	10.408	91	664749	56.07 ug/L	99
64) o-Xylene	10.840	91	331229	28.48 ug/L	98
65) Styrene	10.895	104	173942	19.09 ug/L	98
66) Bromoform	10.937	173	47990	24.26 ug/L	97
67) Isopropylbenzene	11.150	105	415650	28.99 ug/L	99
70) n-Propylbenzene	11.570	91	505339	28.85 ug/L	99
71) Bromobenzene	11.570	156	95761	26.42 ug/L	97
72) 1,1,2,2-Tetrachloroethane	11.631	83	108856	30.12 ug/L	95
73) 1,3,5-Trimethylbenzene	11.759	105	350938	27.32 ug/L	99
74) 2-Chlorotoluene	11.753	91	326753	27.82 ug/L	96
75) trans-1,4-Dichloro-2-B...	11.807	53	1574	1.27 ug/L #	1
76) 1,2,3-Trichloropropane	11.783	110	32705	32.10 ug/L	92
77) Cyclohexanone	11.832	55	18182	143.88 ug/L	97
78) 4-Chlorotoluene	11.917	91	299797	27.57 ug/L	98
79) tert-Butylbenzene	12.093	91	198566	28.21 ug/L	92
80) 1,2,4-Trimethylbenzene	12.160	105	330929	26.37 ug/L	96
81) sec-Butylbenzene	12.276	105	449978	28.41 ug/L	100
82) 4-Isopropyltoluene	12.416	119	355507	27.34 ug/L	98
83) 1,3-Dichlorobenzene	12.525	146	185323	27.38 ug/L	97
84) 1,4-Dichlorobenzene	12.616	146	190998	26.88 ug/L	99
85) n-Butylbenzene	12.854	92	198239	26.94 ug/L	93
86) Benzyl Chloride	12.854	126	33669	24.58 ug/L #	1
87) 1,2-Dichlorobenzene	13.054	146	172932	27.37 ug/L	97
88) 1,2-Dibromo-3-Chloropr...	13.833	75	17712	31.83 ug/L	93
89) Hexachlorobutadiene	14.417	225	48104	23.11 ug/L	99
90) 1,2,4-Trichlorobenzene	14.454	180	106758	26.34 ug/L	98
91) Naphthalene	14.733	128	277444	36.24 ug/L	98

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:39:37 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.892	180	95215	26.72 ug/L	99
94) acrolein	4.300	56	86970	91.07 ug/L	97
95) Tert Butyl Alcohol	4.866	59	108693	238.42 ug/L	94
96) tert Amyl alcohol	6.983	59	107156	282.24 ug/L	93
97) 1,4-Dioxane	8.066	88	19813	448.26 ug/L	97

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

7.4.3

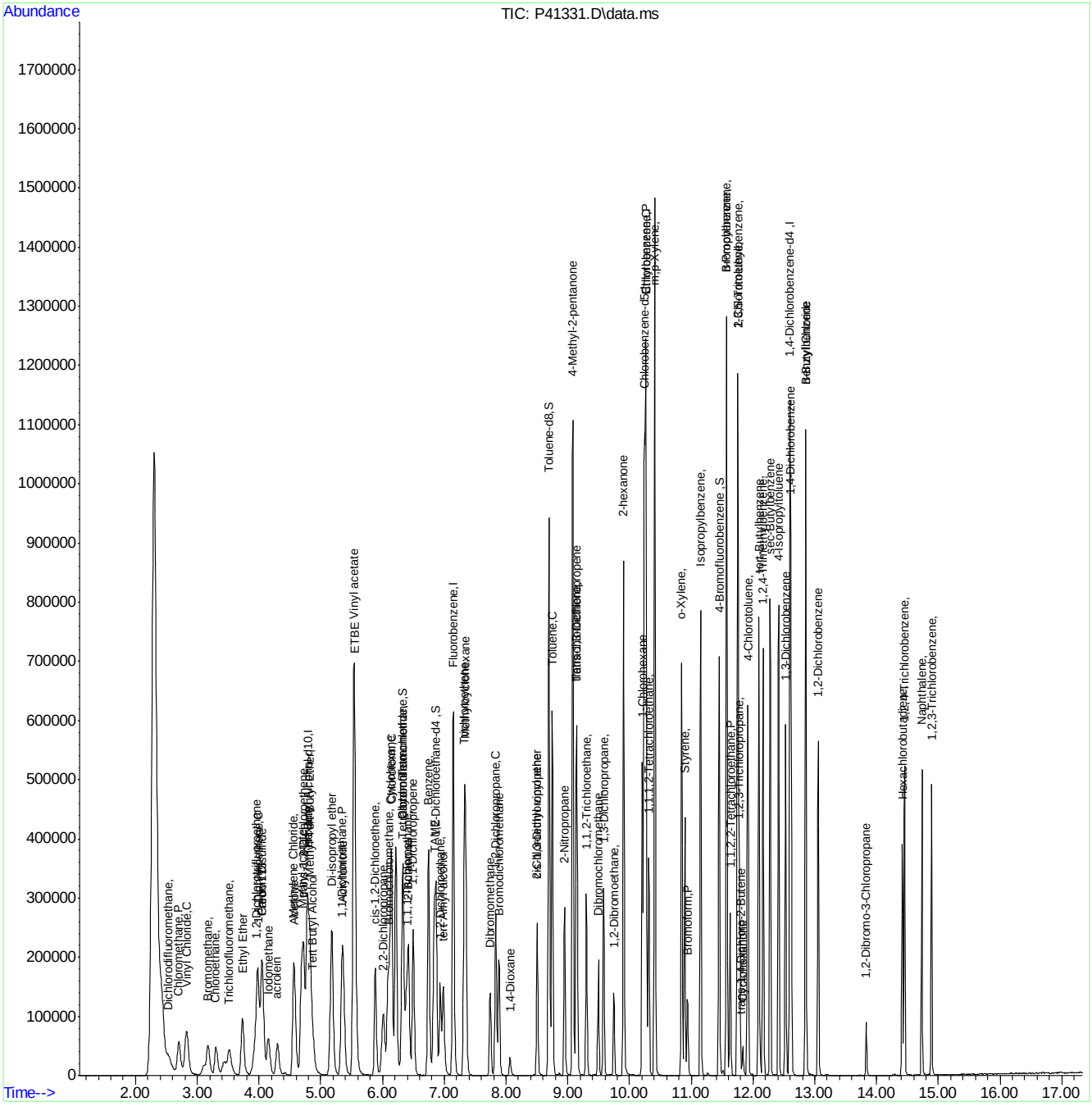
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:39:37 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



8260P042116.M Tue Apr 26 11:03:36 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

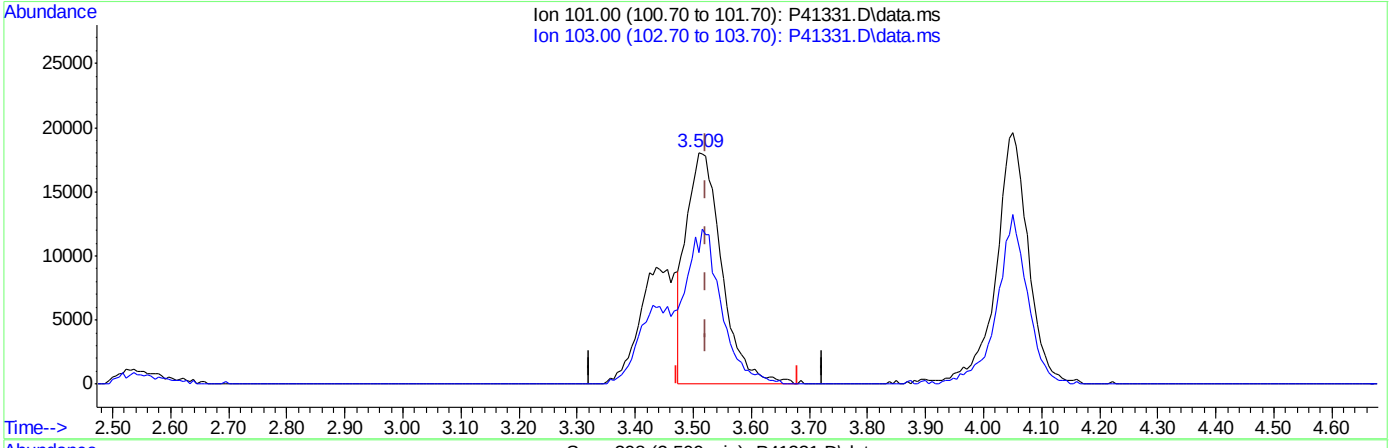
Sample Number:	MC45432-3MS	**Method:**	SW846 8260C
Lab FileID:	P41331.D	**Analyst approved:**	04/26/16 11:02 Kathleen McNatt
Injection Time:	04/25/16 19:27	**Supervisor approved:**	04/26/16 12:05 Juan Garcia

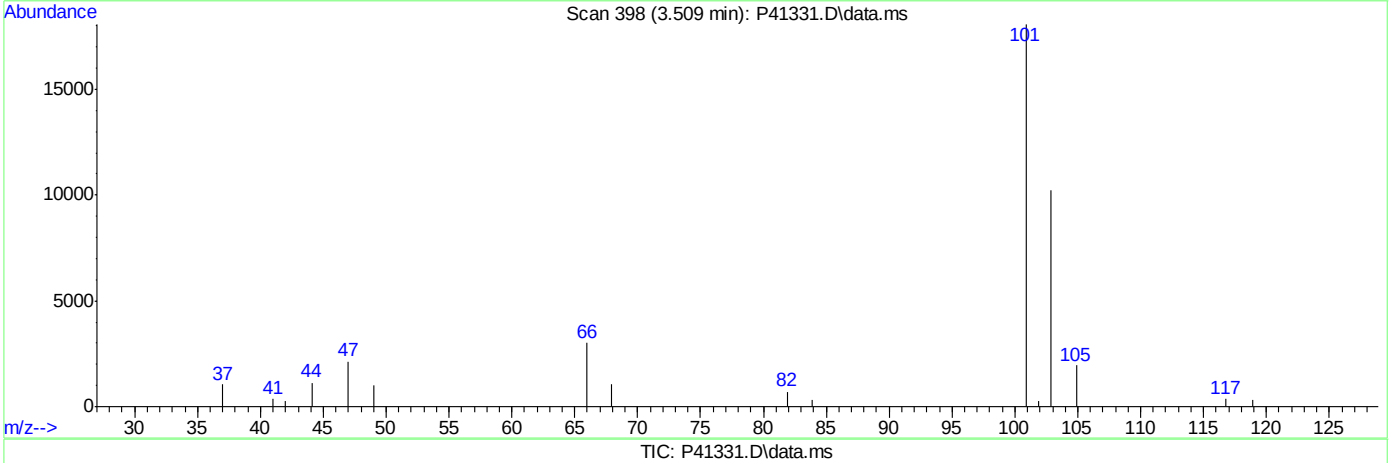
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.51	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		6.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41331.D\data.ms

(7) Trichlorofluoromethane ( )

3.509min (-0.013) 17.57ug/L

response 77051

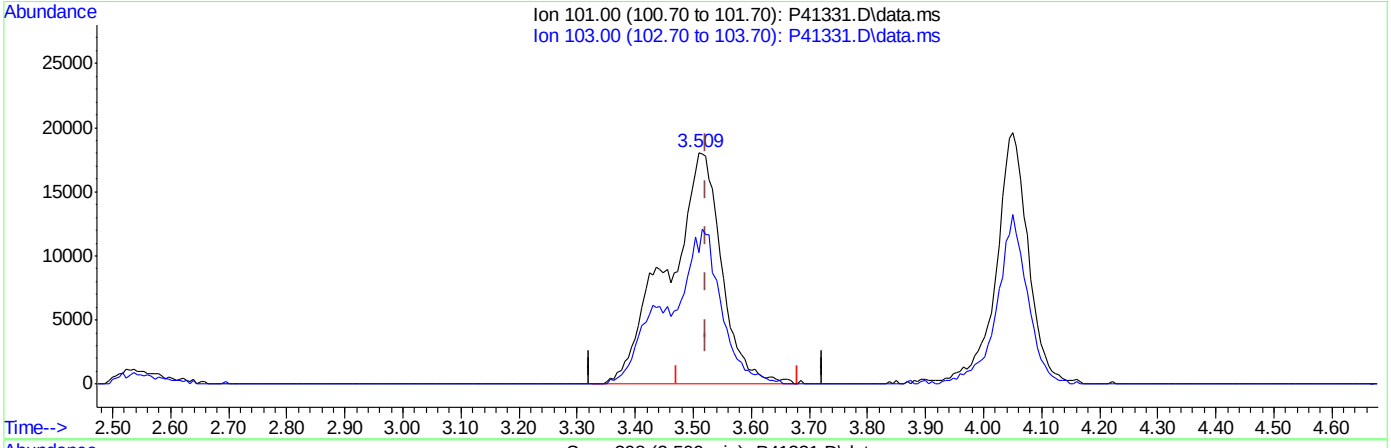
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	56.74
0.00	0.00	0.00
0.00	0.00	0.00

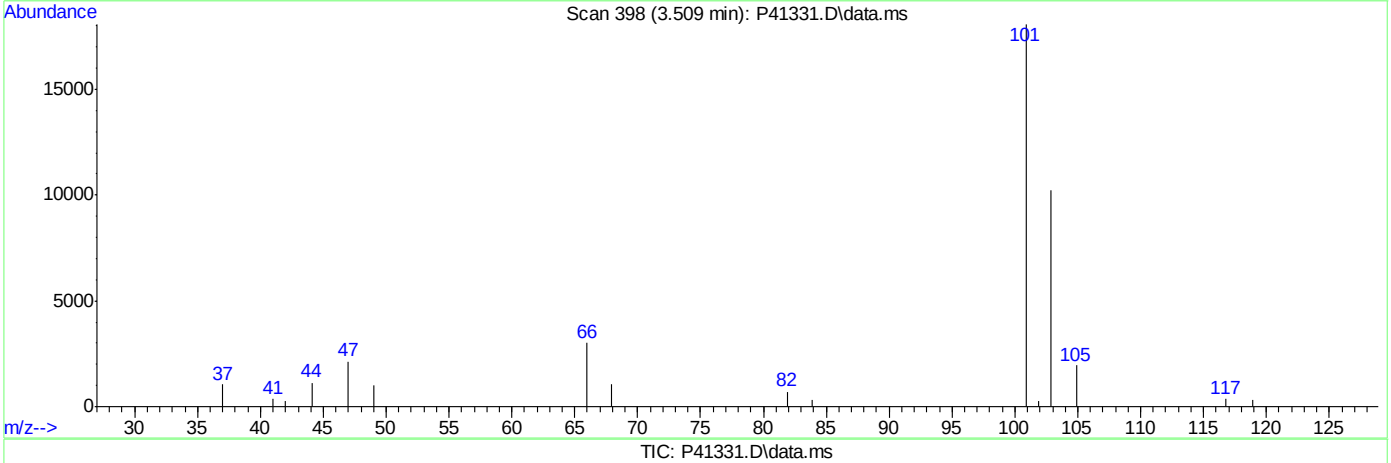
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41331.D\data.ms

(7) Trichlorofluoromethane ( )

3.509min (-0.013) 26.70ug/L m

response 117070

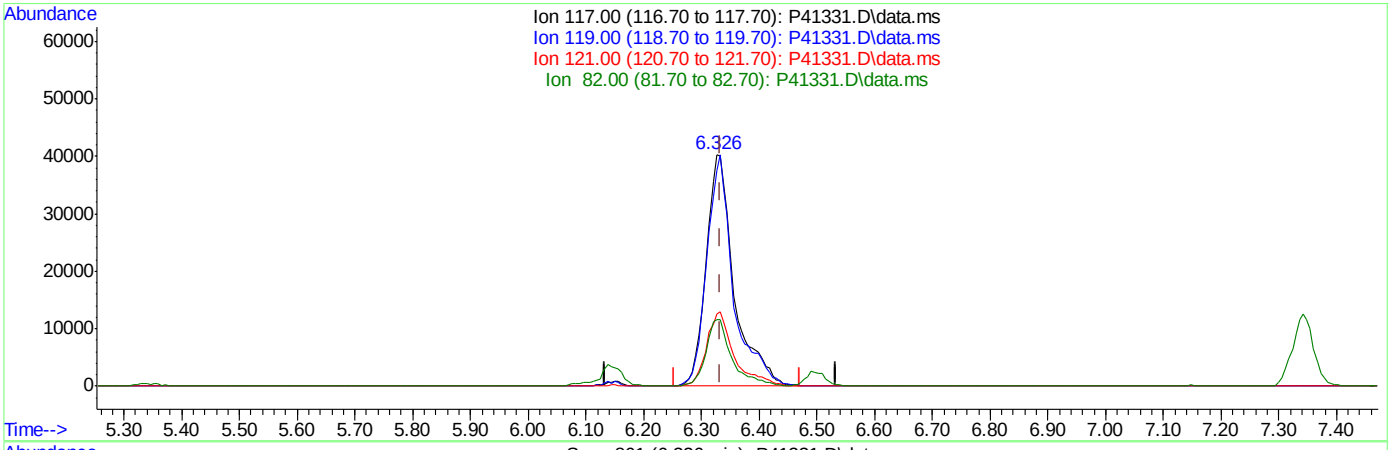
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	56.74
0.00	0.00	0.00
0.00	0.00	0.00

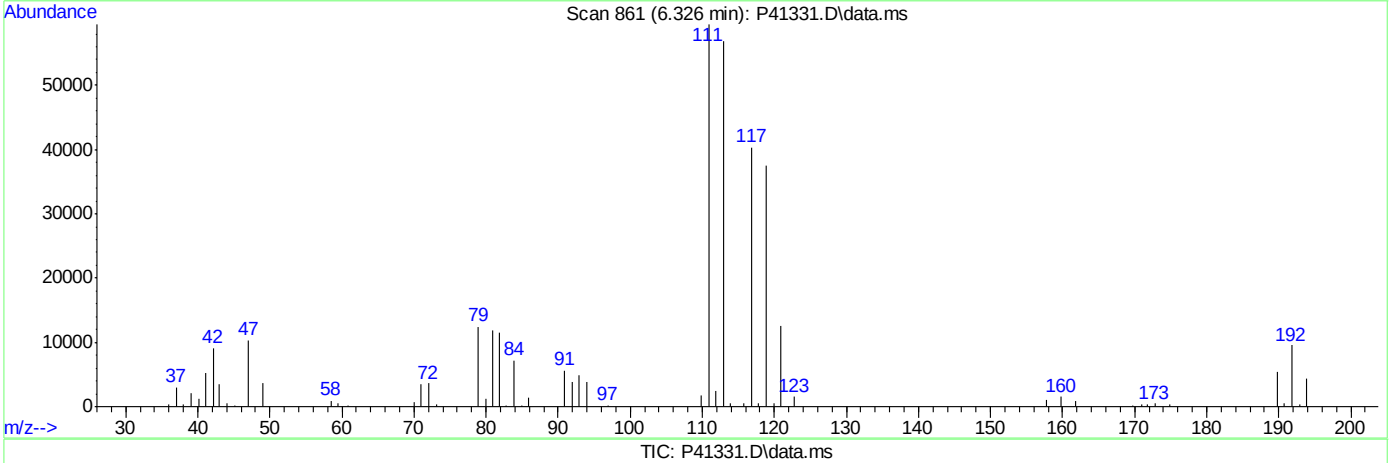
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41331.D\data.ms

(32) Carbon Tetrachloride ( )

6.326min (-0.007) 31.08ug/L

response 136120

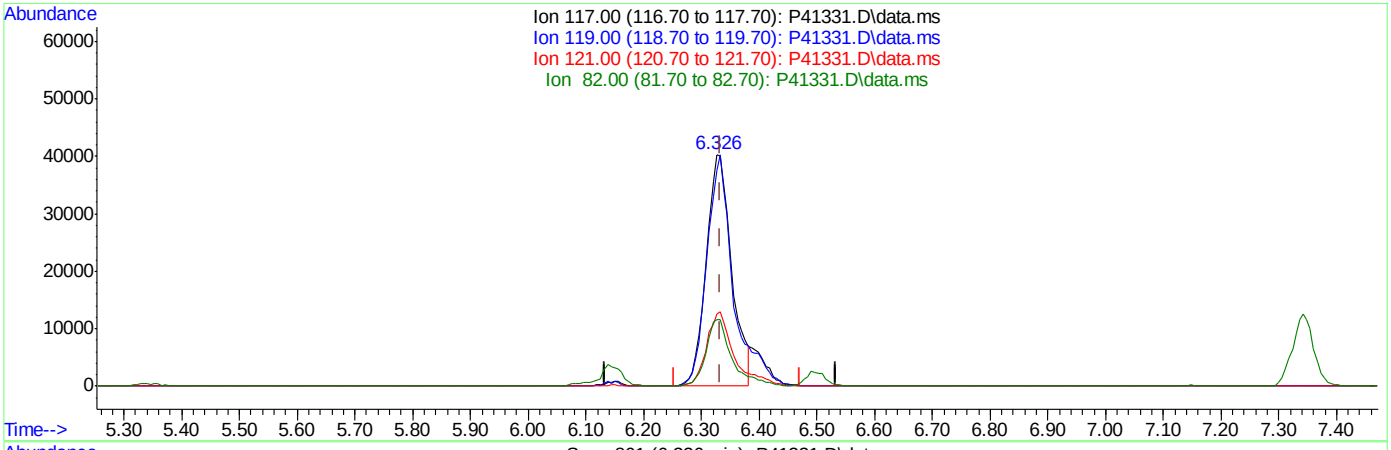
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	93.10
121.00	30.70	31.13
82.00	25.90	28.74

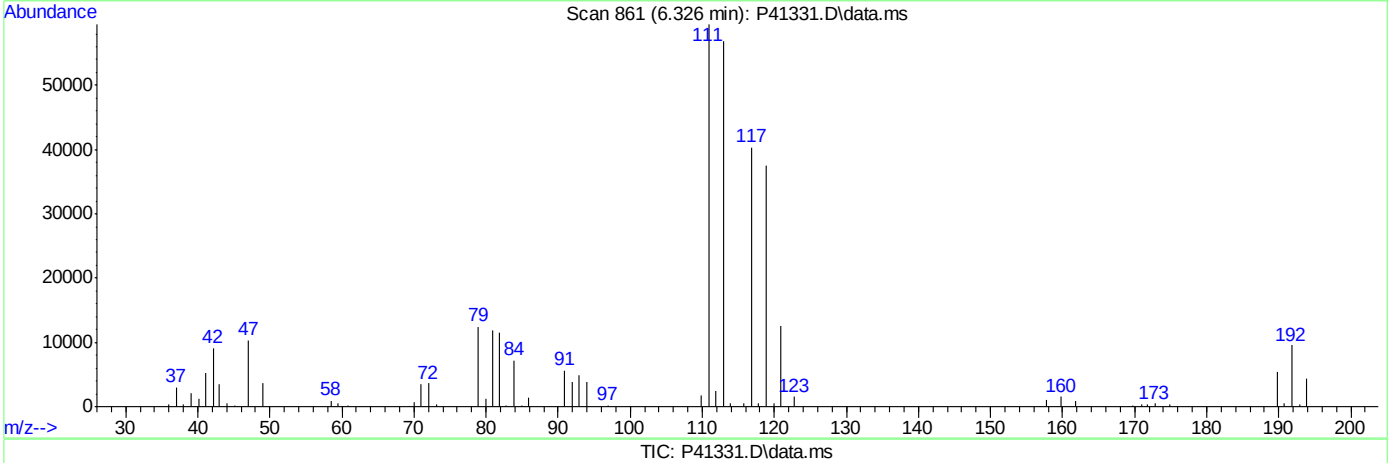
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41331.D\data.ms

(32) Carbon Tetrachloride ( )

6.326min (-0.007) 28.07ug/L m

response 122937

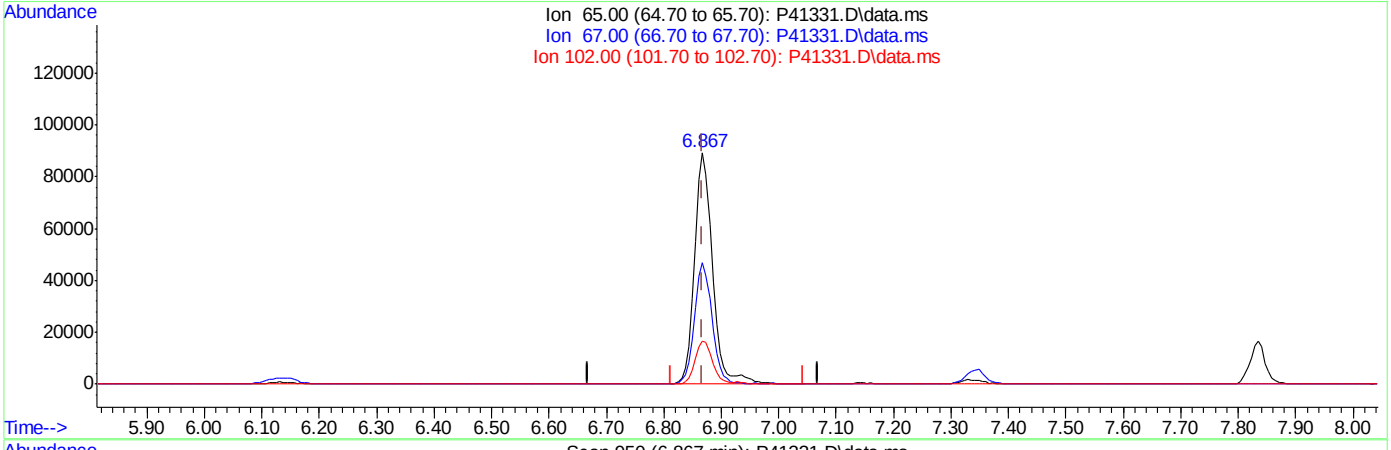
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	93.10
121.00	30.70	31.13
82.00	25.90	28.74

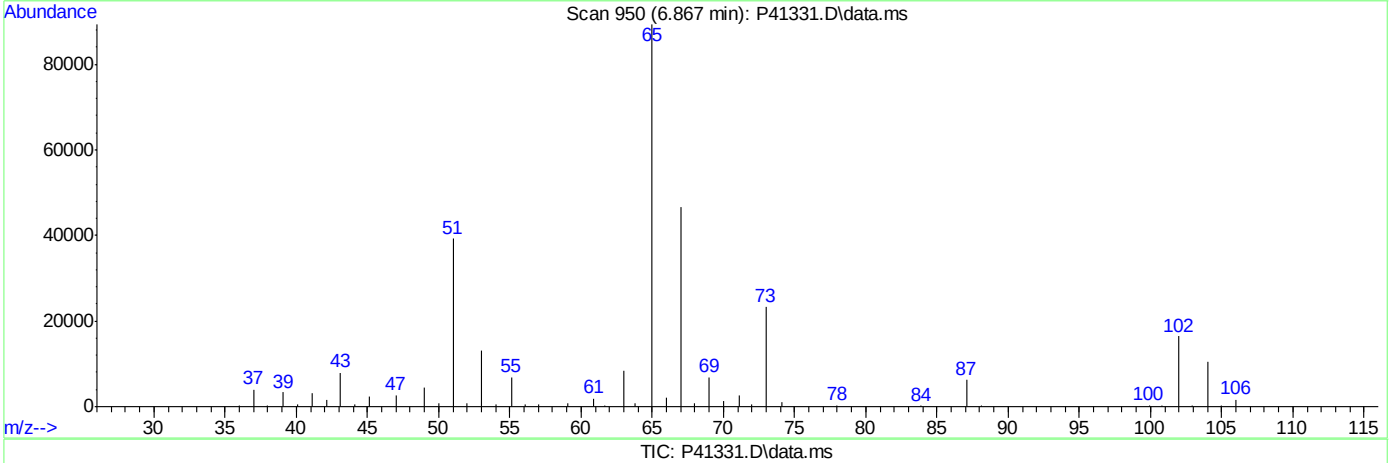
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41331.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.867min (-0.001) 53.60ug/L

response 194217

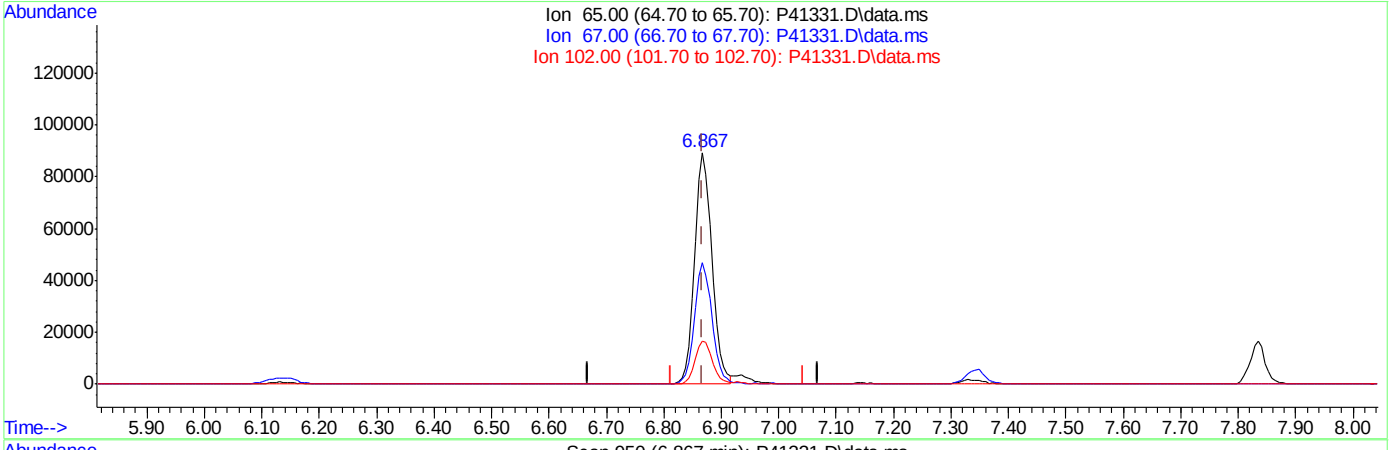
Ion	Exp%	Act%
65.00	100	100
67.00	51.40	52.31
102.00	19.40	18.47
0.00	0.00	0.00

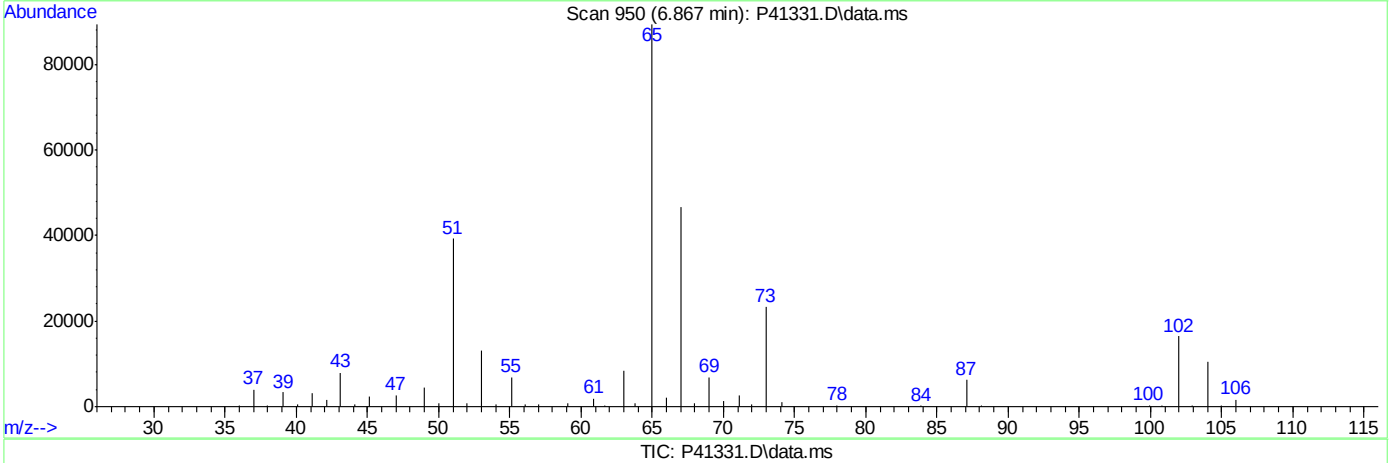
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41331.D
Acq On : 25 Apr 2016 7:27 pm
Operator : katiem
Sample : MC45432-3MS Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41331.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.867min (-0.001) 51.37ug/L m

response 186155

Ion	Exp%	Act%
65.00	100	100
67.00	51.40	52.31
102.00	19.40	18.47
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 12:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:40:12 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.141	96	568132	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.237	117	420108	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.597	152	202165	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.798	65	83872	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.325	113	139571	50.39	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.78%			
38) 1,2-Dichloroethane-d4	6.867	65	190177m	51.16	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.32%			
48) Toluene-d8	8.692	98	561465	49.40	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.80%			
69) 4-Bromofluorobenzene	11.448	95	202517	50.76	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.52%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.523	85	74079	30.23	ug/L	96
3) Chloromethane	2.694	50	125050	27.87	ug/L	96
4) Vinyl Chloride	2.827	62	107590	27.53	ug/L	97
5) Bromomethane	3.162	94	52288	22.35	ug/L	97
6) Chloroethane	3.296	64	72592	27.53	ug/L	96
7) Trichlorofluoromethane	3.509	101	116291m	25.85	ug/L	
8) Ethyl Ether	3.734	59	98185	27.89	ug/L	93
9) 1,2-Dichlorotrifluoroe...	3.953	67	111327	30.23	ug/L	91
10) 1,1-Dichloroethene	3.977	61	147169	28.52	ug/L	90
11) Freon 113	4.044	101	75908	29.15	ug/L	96
12) Carbon Disulfide	4.044	76	227791	24.40	ug/L	83
13) Iodomethane	4.148	142	110792	25.82	ug/L	98
14) Methylene Chloride	4.555	49	139929	26.70	ug/L	96
15) Acetone	4.579	58	46671	150.57	ug/L	97
16) Methyl acetate	4.689	74	76349	151.35	ug/L #	17
17) trans-1,2-Dichloroethene	4.719	61	135745	29.57	ug/L	96
18) Hexane	4.780	56	103849	28.99	ug/L	86
19) Methyl Tert Butyl Ether	4.817	73	274436	29.40	ug/L	95
20) Di-isopropyl ether	5.176	45	365768	26.88	ug/L	98
21) 1,1-Dichloroethane	5.334	63	177027	28.63	ug/L	100
22) Acrylonitrile	5.364	53	184624	139.82	ug/L	96
23) ETBE	5.553	59	320028	26.52	ug/L	96
24) Vinyl acetate	5.535	43	1090828	117.21	ug/L	96
25) cis-1,2-Dichloroethene	5.881	96	90496	25.98	ug/L	91
26) 2,2-Dichloropropane	6.009	77	115541	25.04	ug/L	98
27) Bromochloromethane	6.088	128	41947	26.48	ug/L	91
28) Cyclohexane	6.131	56	186103	28.87	ug/L	96
29) Chloroform	6.143	83	162239	27.25	ug/L	98
30) Tetrahydrofuran	6.307	42	35638	32.65	ug/L	89
32) Carbon Tetrachloride	6.331	117	114292m	25.43	ug/L	
33) 1,1,1-Trichloroethane	6.392	97	134492	27.38	ug/L	95
34) 2-Butanone	6.417	43	271909	163.76	ug/L	98
35) 1,1-Dichloropropene	6.496	75	134030	29.04	ug/L	95
36) Benzene	6.745	78	371083	27.59	ug/L	97

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:40:12 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.836	73	256991	26.49 ug/L	92
39) 1,2-Dichloroethane	6.934	62	137876	27.33 ug/L	96
40) Trichloroethene	7.317	95	91186	27.89 ug/L	96
41) Methylcyclohexane	7.341	83	166091	28.75 ug/L	94
42) Dibromomethane	7.743	93	56873	29.37 ug/L	95
43) 1,2-Dichloropropane	7.828	63	104659	27.05 ug/L	96
44) Bromodichloromethane	7.883	83	114941	25.62 ug/L	96
45) 2-Chloroethyl vinyl ether	8.509	63	587	0.24 ug/L #	37
46) cis-1,3-Dichloropropene	8.503	75	119749	20.93 ug/L	96
49) Toluene	8.747	91	390871	26.70 ug/L	99
50) 2-Nitropropane	8.947	41	158214	161.90 ug/L	97
51) 4-Methyl-2-pentanone	9.075	43	723362	195.07 ug/L	96
52) trans-1,3-Dichloropropene	9.136	75	111925	21.95 ug/L	94
53) Tetrachloroethene	9.148	166	86754	27.89 ug/L	96
54) 1,1,2-Trichloroethane	9.300	83	72341	29.23 ug/L	92
55) Dibromochloromethane	9.489	129	76991	24.52 ug/L	98
56) 1,3-Dichloropropane	9.574	76	152518	28.04 ug/L	89
57) 1,2-Dibromoethane	9.744	107	82444	30.08 ug/L	99
58) 2-hexanone	9.902	43	510049	205.25 ug/L	96
59) 1-Chlorohexane	10.207	91	126198	27.56 ug/L	88
60) Ethylbenzene	10.267	91	444228	27.49 ug/L	98
61) Chlorobenzene	10.255	112	248447	26.43 ug/L	94
62) 1,1,1,2-Tetrachloroethane	10.310	131	79741	25.46 ug/L	96
63) m,p-Xylene	10.407	91	667369	54.84 ug/L	99
64) o-Xylene	10.839	91	329923	27.64 ug/L	98
65) Styrene	10.894	104	65493	7.00 ug/L	98
66) Bromoform	10.937	173	44534	21.94 ug/L	98
67) Isopropylbenzene	11.150	105	416457	28.30 ug/L	97
70) n-Propylbenzene	11.569	91	506626	28.36 ug/L	100
71) Bromobenzene	11.569	156	98211	26.57 ug/L	97
72) 1,1,2,2-Tetrachloroethane	11.630	83	111688	30.31 ug/L	97
73) 1,3,5-Trimethylbenzene	11.758	105	353711	27.01 ug/L	99
74) 2-Chlorotoluene	11.746	91	328228	27.41 ug/L	97
75) trans-1,4-Dichloro-2-B...	11.837	53	1046	0.83 ug/L #	1
76) 1,2,3-Trichloropropane	11.782	110	33972	32.70 ug/L	91
77) Cyclohexanone	11.831	55	18497	143.56 ug/L	93
78) 4-Chlorotoluene	11.916	91	296461	26.74 ug/L	99
79) tert-Butylbenzene	12.093	91	198275	27.63 ug/L	94
80) 1,2,4-Trimethylbenzene	12.159	105	296019	23.14 ug/L	98
81) sec-Butylbenzene	12.275	105	457686	28.35 ug/L	98
82) 4-Isopropyltoluene	12.415	119	358994	27.08 ug/L	97
83) 1,3-Dichlorobenzene	12.524	146	187025	27.10 ug/L	99
84) 1,4-Dichlorobenzene	12.616	146	190863	26.34 ug/L	97
85) n-Butylbenzene	12.853	92	200829	26.77 ug/L	92
86) Benzyl Chloride	12.853	126	34032	24.37 ug/L #	1
87) 1,2-Dichlorobenzene	13.054	146	175411	27.23 ug/L	96
88) 1,2-Dibromo-3-Chloropr...	13.832	75	17532	30.90 ug/L	87
89) Hexachlorobutadiene	14.416	225	52611	24.79 ug/L	95
90) 1,2,4-Trichlorobenzene	14.453	180	112895	27.32 ug/L	98
91) Naphthalene	14.733	128	293281	37.57 ug/L	97

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:40:12 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.891	180	103029	28.35 ug/L	99
94) acrolein	4.294	56	79265	82.78 ug/L	86
95) Tert Butyl Alcohol	4.871	59	112592	246.33 ug/L	86
96) tert Amyl alcohol	6.982	59	115971	304.67 ug/L	92
97) 1,4-Dioxane	8.065	88	19924	449.60 ug/L	96

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

7.4.4

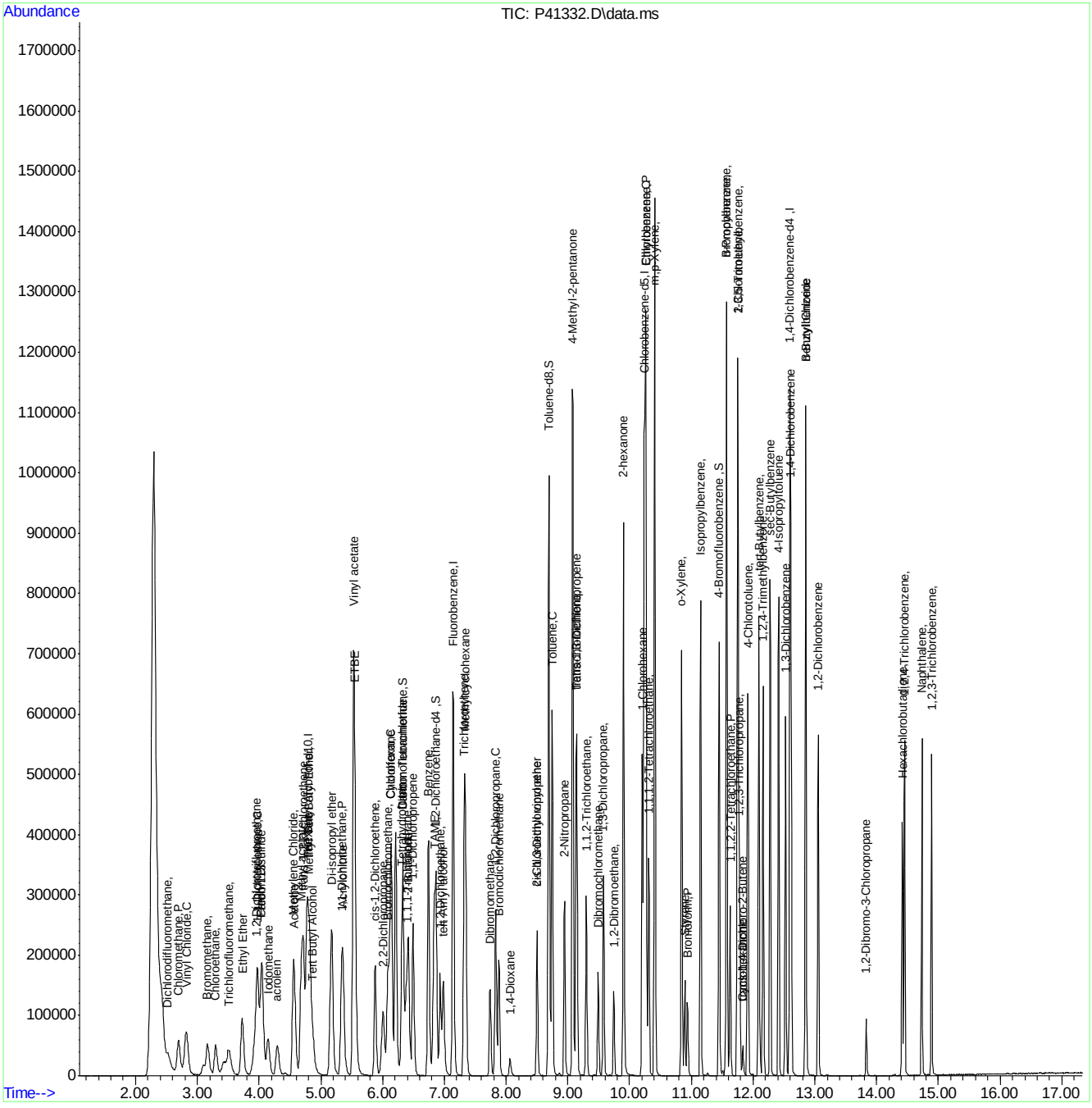
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD MA Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:40:12 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



8260P042116.M Tue Apr 26 11:03:38 2016 Page: 4

Manual Integration Approval Summary

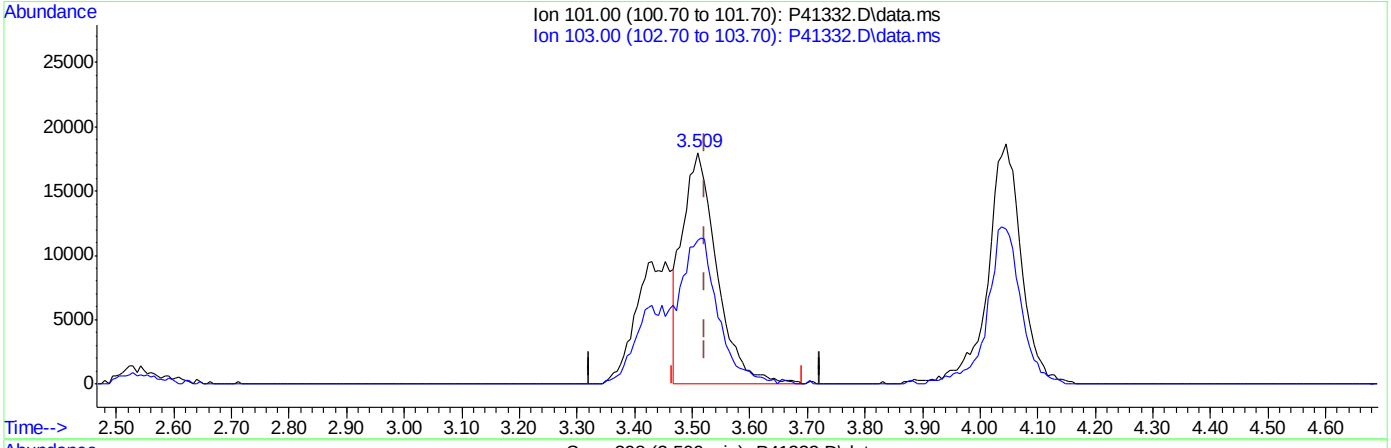
Sample Number:	MC45432-3MSD	**Method:**	SW846 8260C
Lab FileID:	P41332.D	**Analyst approved:**	04/26/16 11:02 Kathleen McNatt
Injection Time:	04/25/16 19:51	**Supervisor approved:**	04/26/16 12:05 Juan Garcia

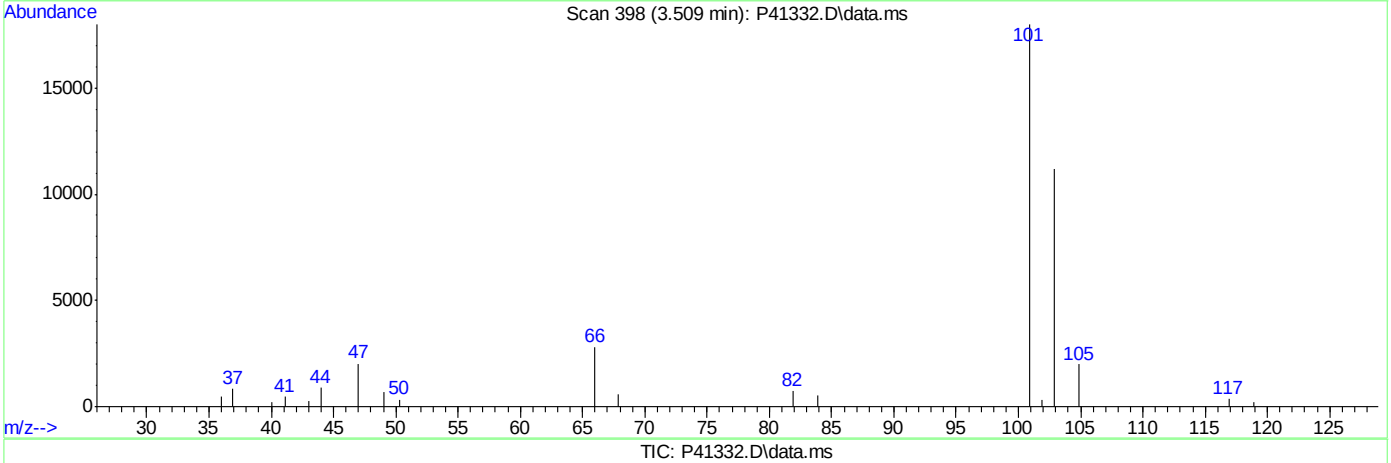
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.51	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		6.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41332.D\data.ms

(7) Trichlorofluoromethane ( )

3.509min (-0.013) 16.85ug/L

response 75786

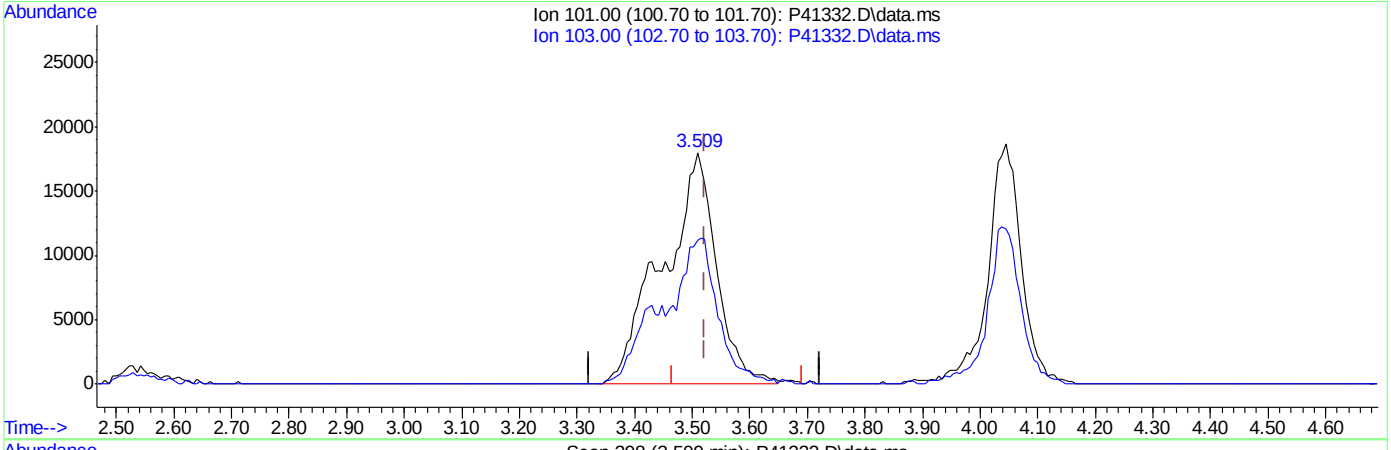
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	62.11
0.00	0.00	0.00
0.00	0.00	0.00

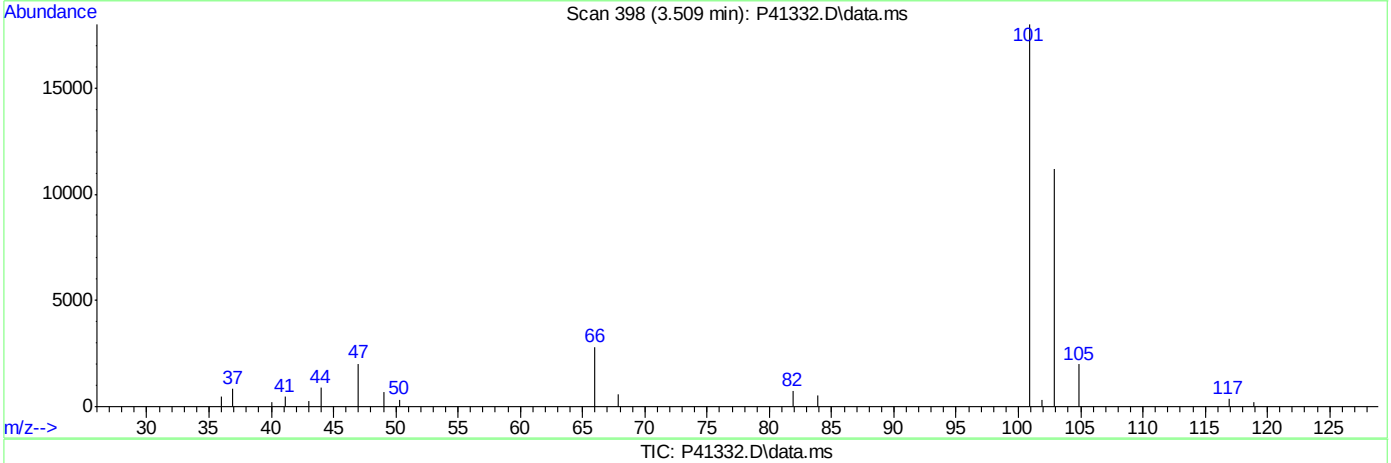
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41332.D\data.ms

(7) Trichlorofluoromethane ( )

3.509min (-0.013) 25.85ug/L m

response 116291

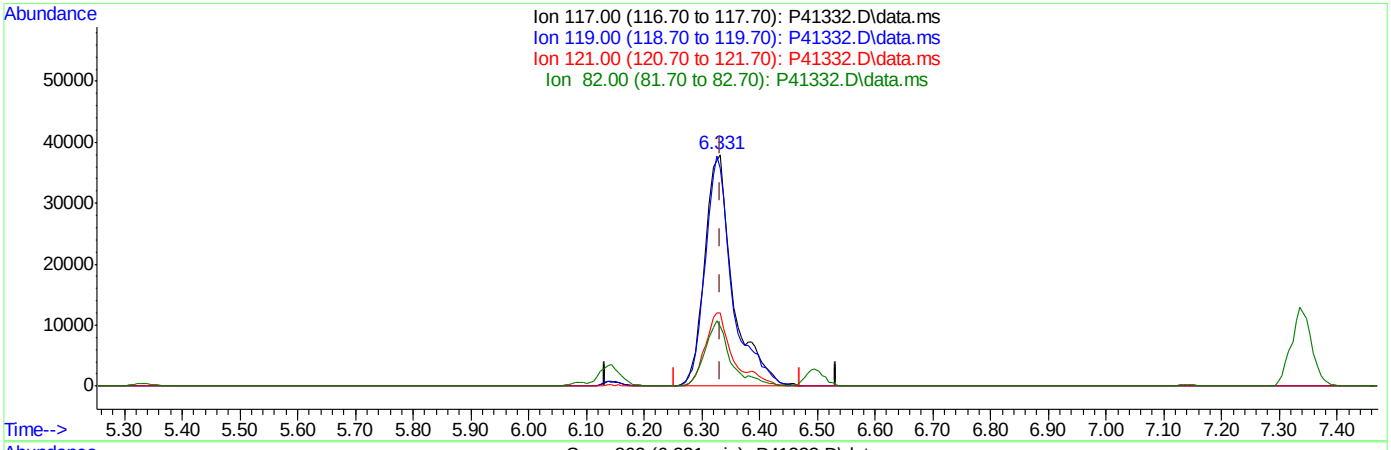
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	62.11
0.00	0.00	0.00
0.00	0.00	0.00

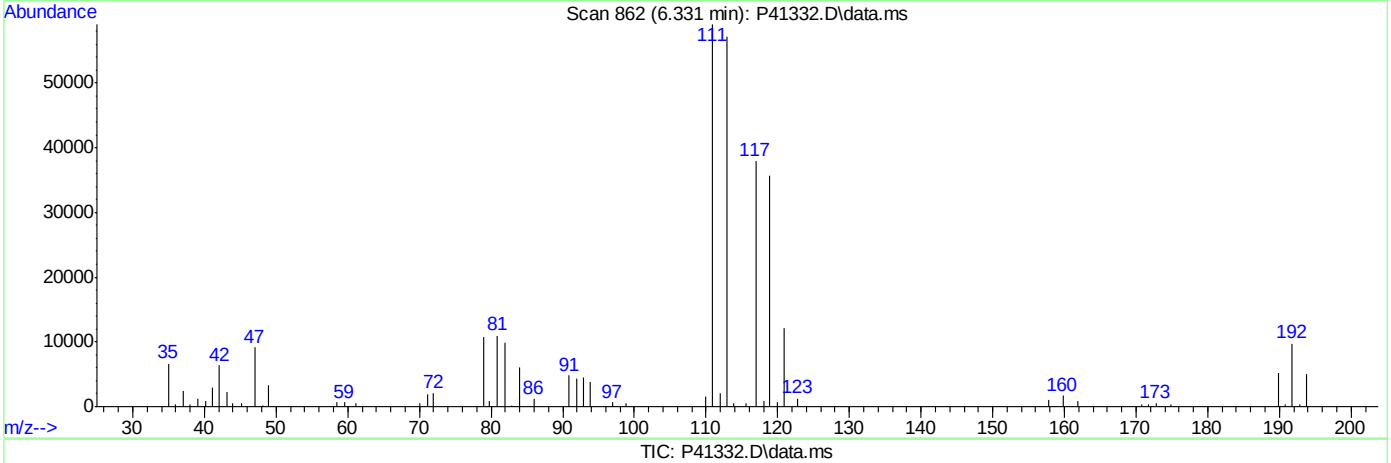
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41332.D\data.ms

(32) Carbon Tetrachloride ( )

6.331min (-0.001) 28.76ug/L

response 129218

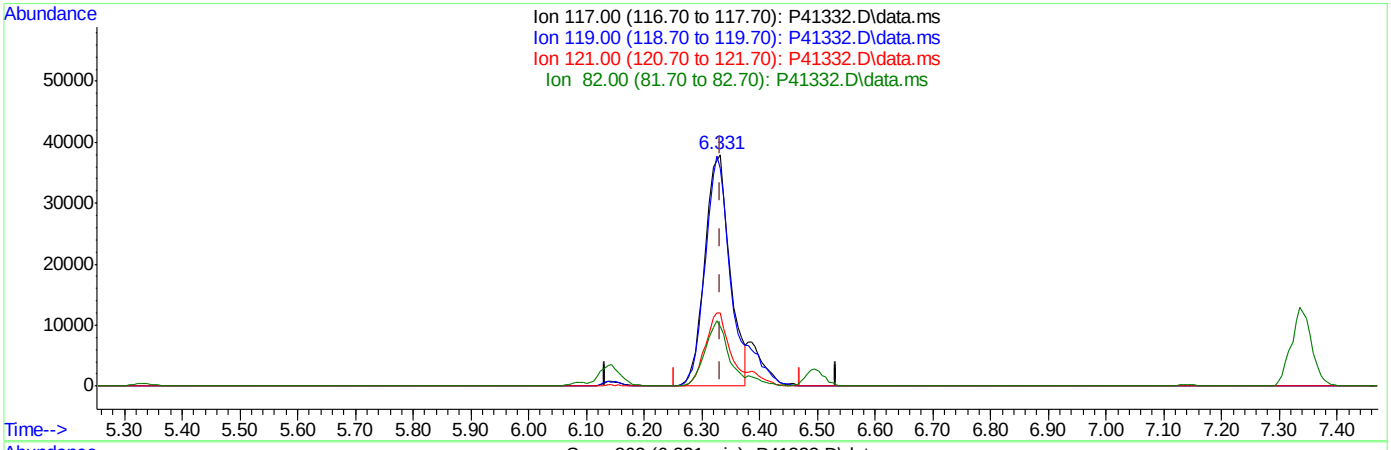
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	93.83
121.00	30.70	31.83
82.00	25.90	26.05

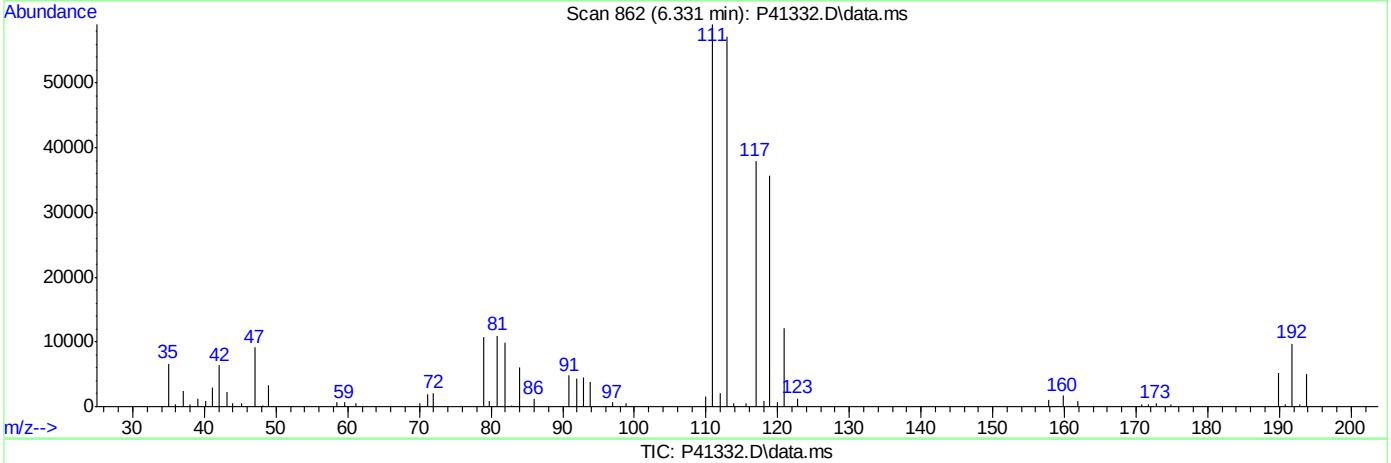
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41332.D\data.ms

(32) Carbon Tetrachloride ( )

6.331min (-0.001) 25.43ug/L m

response 114292

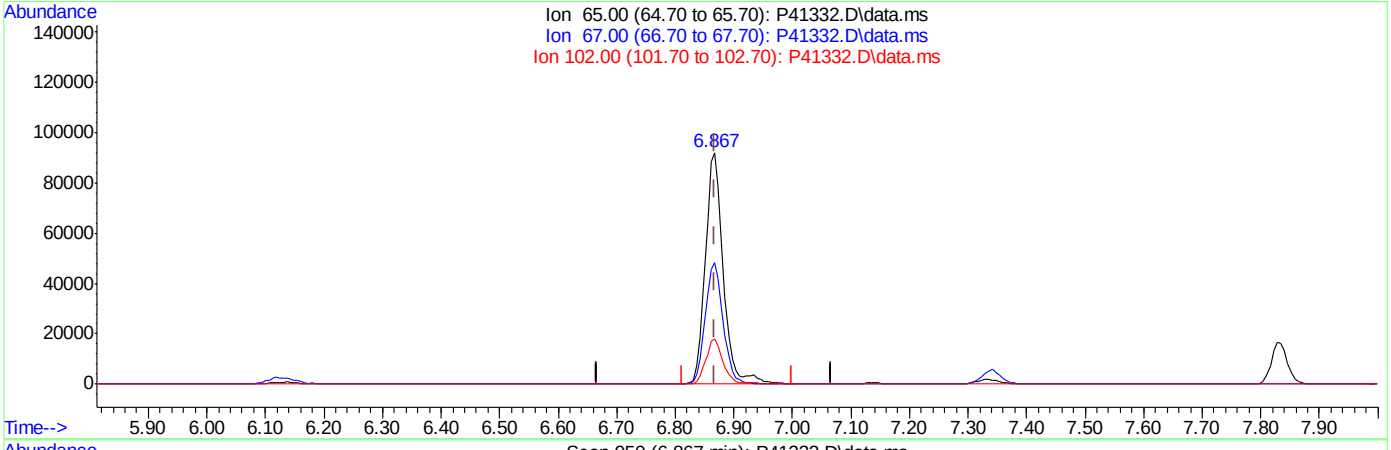
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	93.83
121.00	30.70	31.83
82.00	25.90	26.05

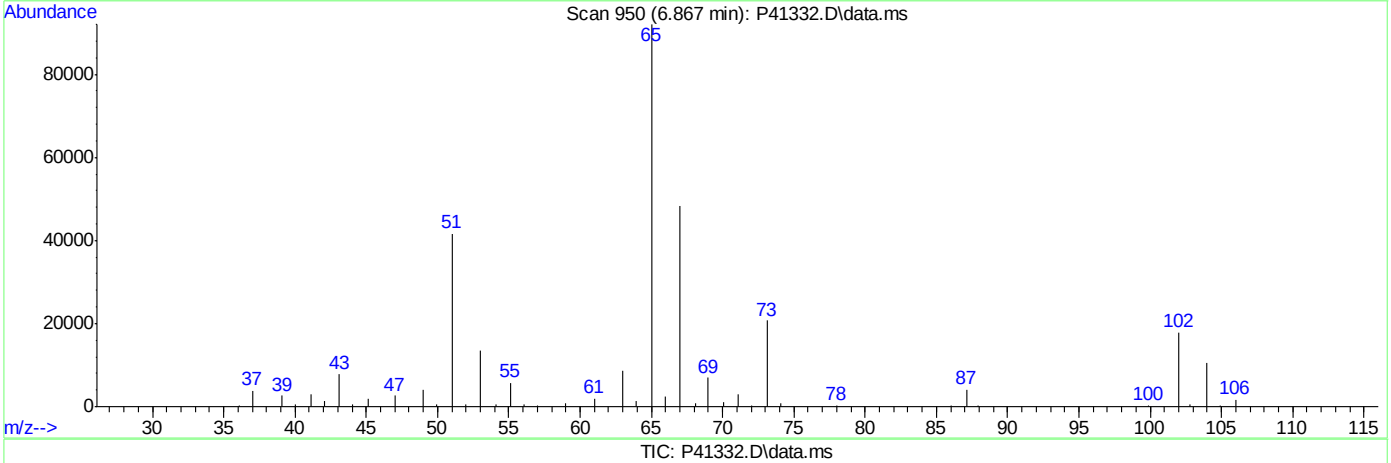
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41332.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.867min (-0.001) 53.04ug/L

response 197161

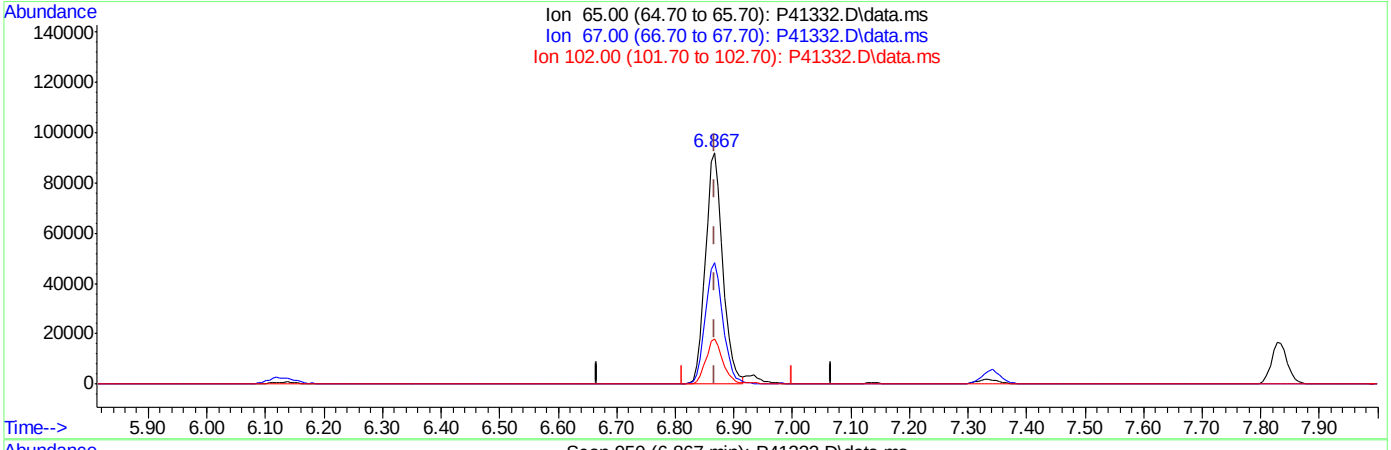
Ion	Exp%	Act%
65.00	100	100
67.00	51.40	52.40
102.00	19.40	19.47
0.00	0.00	0.00

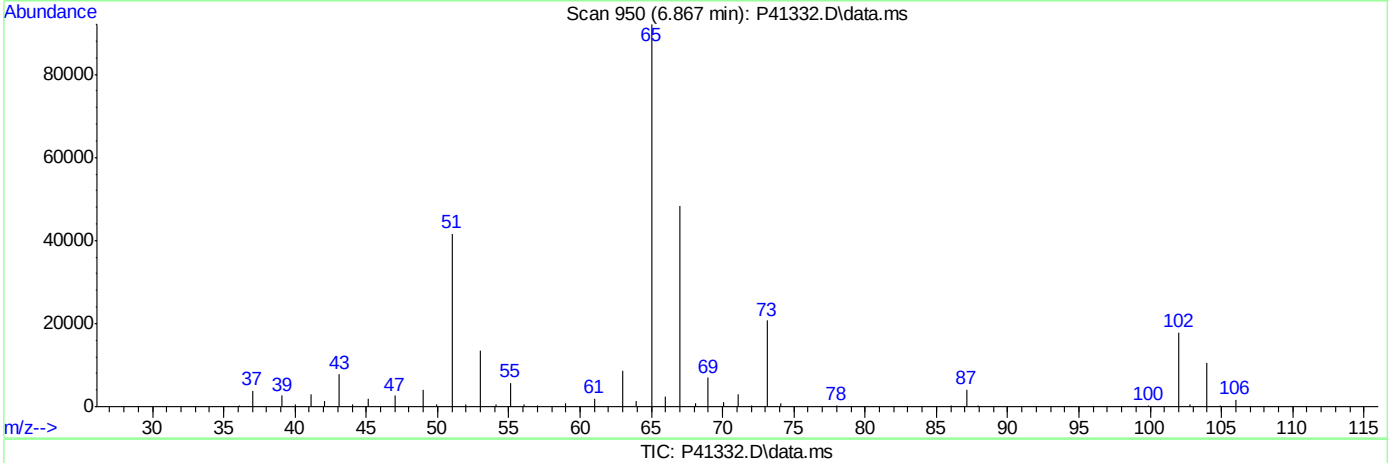
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41332.D
Acq On : 25 Apr 2016 7:51 pm
Operator : katiem
Sample : MC45432-3MSD Inst : MSVOA13
Misc : MS33677,VP1536,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 26 07:08:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41332.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.867min (-0.001) 51.16ug/L m

response 190177

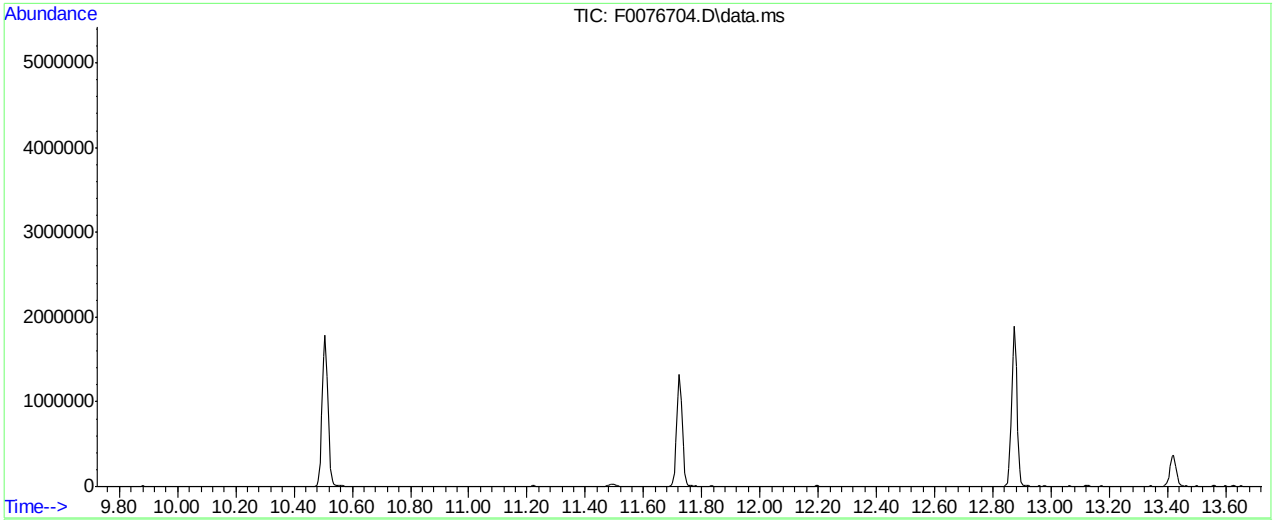
Ion	Exp%	Act%
65.00	100	100
67.00	51.40	52.40
102.00	19.40	19.47
0.00	0.00	0.00

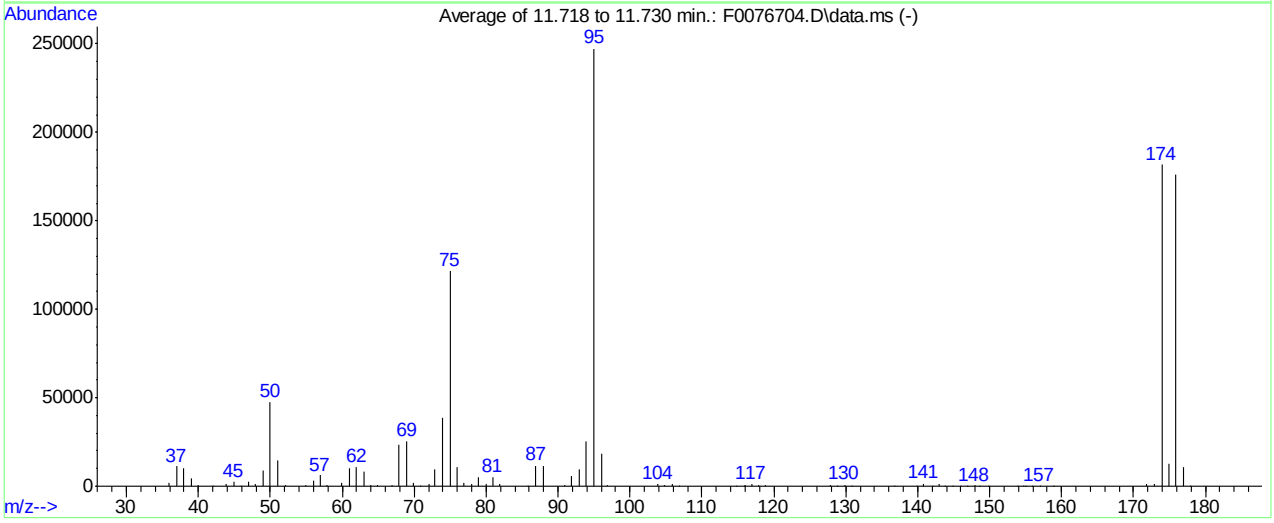
SGS ACCUTEST FA33359

Methods: SW-846 8260B

```
Data File : C:\msdchem\1\DATA\041316\F0076704.D          Vial: 5
Acq On    : 13 Apr 2016   9:03 am                    Operator: ericp
Sample    : BFB                                      Inst    : MSVOA9
Misc      : MS33533,vf2628,5.00,,,5,,                Multiplr: 1.00
MS Integration Params: rteint.p

Method    : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title     : SW-846 Method 5035A/8260B
```





Spectrum Information: Average of 11.718 to 11.730 min.

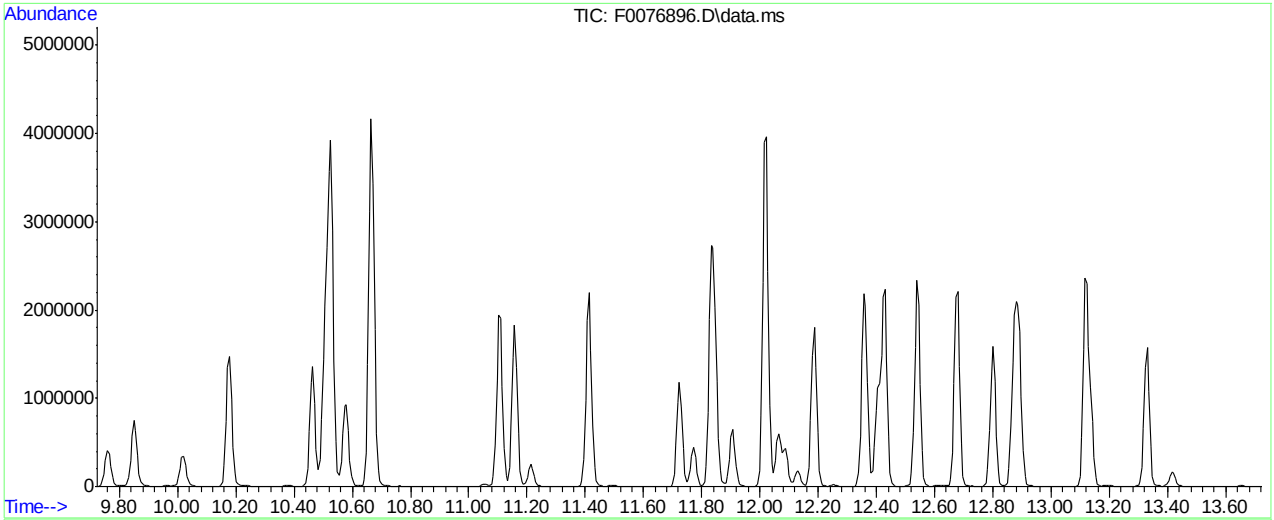
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	47811	PASS
75	95	30	60	49.1	121419	PASS
95	95	100	100	100.0	247424	PASS
96	95	5	9	7.4	18311	PASS
173	174	0.00	2	0.7	1269	PASS
174	95	50	100	73.5	181739	PASS
175	174	5	9	6.9	12488	PASS
176	174	95	101	96.9	176021	PASS
177	176	5	9	6.0	10606	PASS

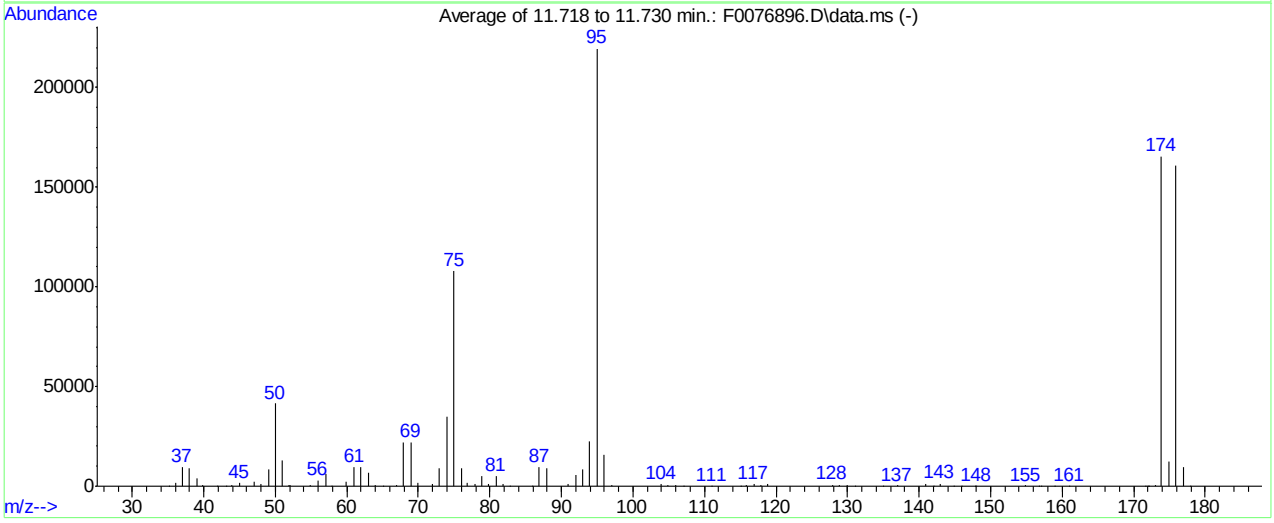
F0076704.D 041316APP9-F.m Wed Apr 13 14:51:05 2016

Methods: SW-846 8260B

```
Data File : C:\msdchem\1\DATA\042316\F0076896.D          Vial: 8
Acq On    : 23 Apr 2016   9:42 am                    Operator: ericp
Sample    : BFB,CC2628-4                             Inst    : MSVOA9
Misc      : MS33665,vf2639,5.00,,,5,,                Multiplr: 1.00
MS Integration Params: rteint.p

Method    : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title     : SW-846 Method 5035A/8260B
```





Spectrum Information: Average of 11.718 to 11.730 min.

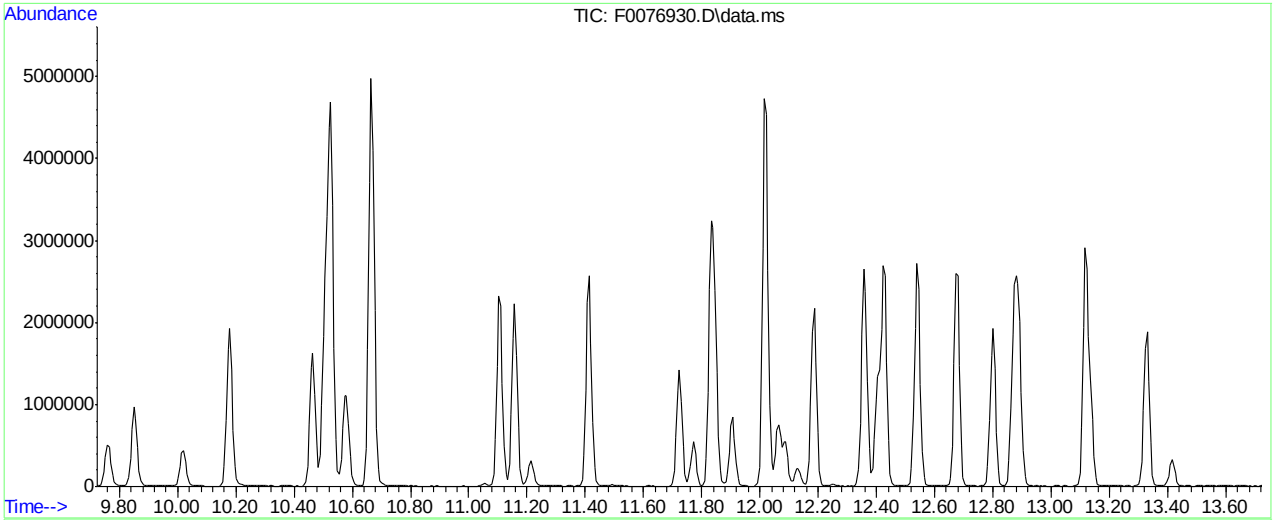
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	41440	PASS
75	95	30	60	49.2	107931	PASS
95	95	100	100	100.0	219584	PASS
96	95	5	9	7.2	15774	PASS
173	174	0.00	2	0.5	824	PASS
174	95	50	100	75.4	165461	PASS
175	174	5	9	7.4	12226	PASS
176	174	95	101	97.4	161109	PASS
177	176	5	9	6.1	9781	PASS

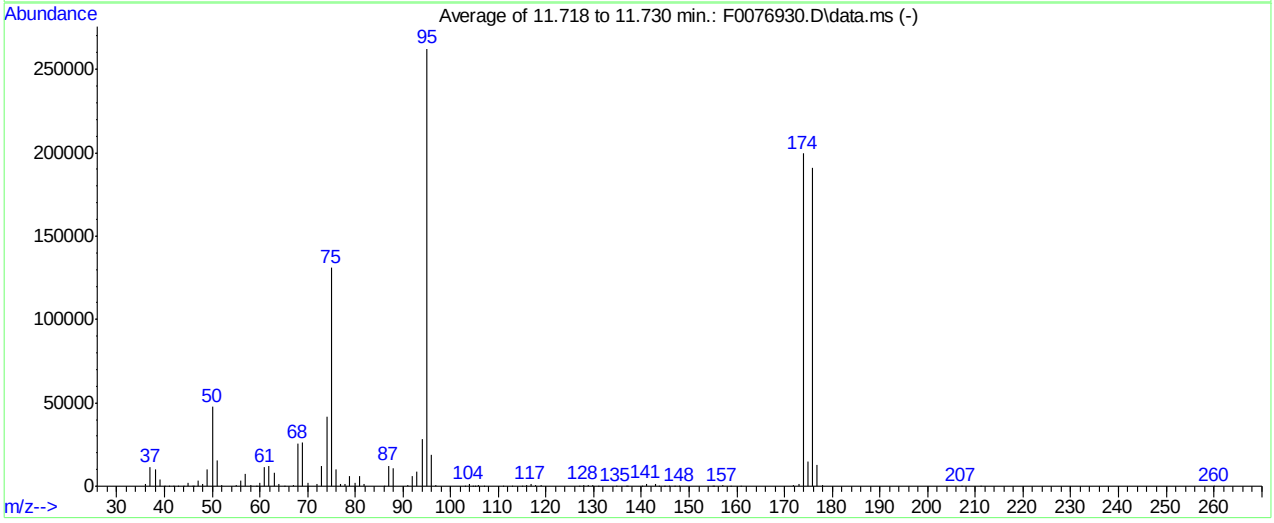
F0076896.D 041316APP9-F.m Mon Apr 25 09:35:35 2016

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\042516\F0076930.D Vial: 6
Acq On : 25 Apr 2016 9:09 am Operator: ericp
Sample : BFB,CC2628-4 Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\041316APP9-F.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B





Spectrum Information: Average of 11.718 to 11.730 min.

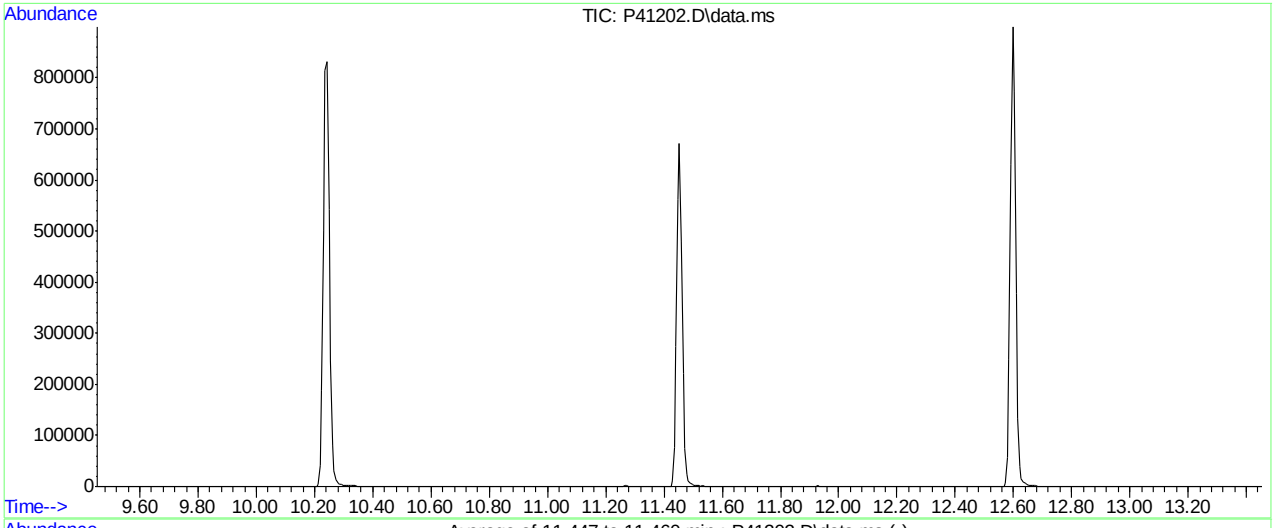
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	47477	PASS
75	95	30	60	49.9	130995	PASS
95	95	100	100	100.0	262528	PASS
96	95	5	9	7.2	19029	PASS
173	174	0.00	2	0.6	1106	PASS
174	95	50	100	76.0	199488	PASS
175	174	5	9	7.3	14603	PASS
176	174	95	101	95.9	191211	PASS
177	176	5	9	6.8	12983	PASS

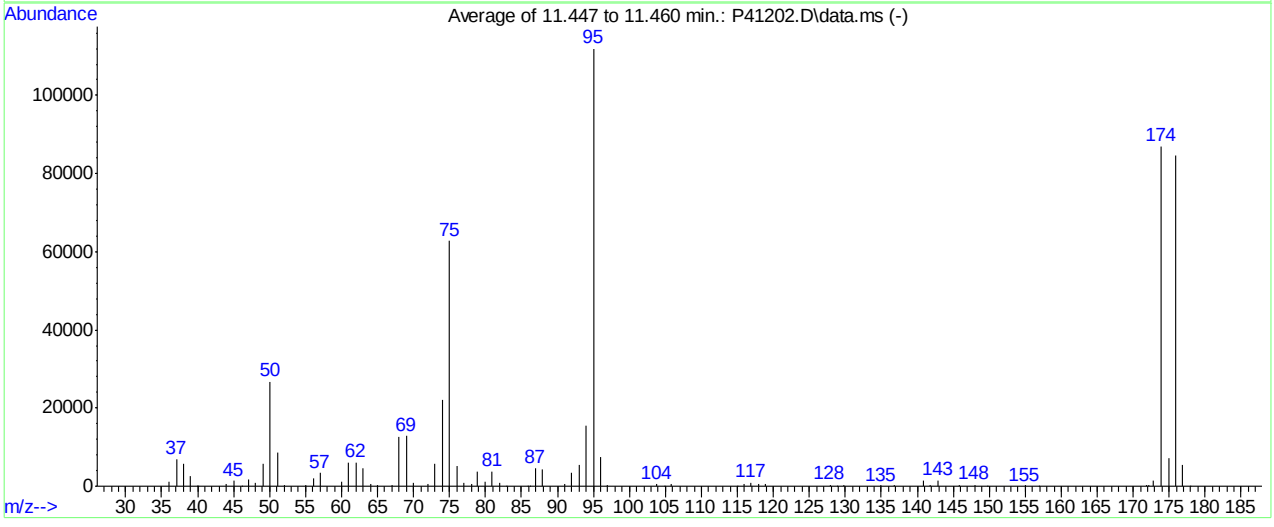
F0076930.D 041316APP9-F.m Mon Apr 25 14:04:09 2016

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\042116\P41202.D Vial: 1
Acq On : 21 Apr 2016 10:11 am Operator: katiem
Sample : BFB Inst : MSVOA13
Misc : MS33627,VP1531,,,,, Multiplr: 1.00
MS Integration Params: tiny.p

Method : C:\msdchem\1\METHODS\8260P042116.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624





AutoFind: Scans 1703, 1704, 1705; Background Corrected with Scan 1696

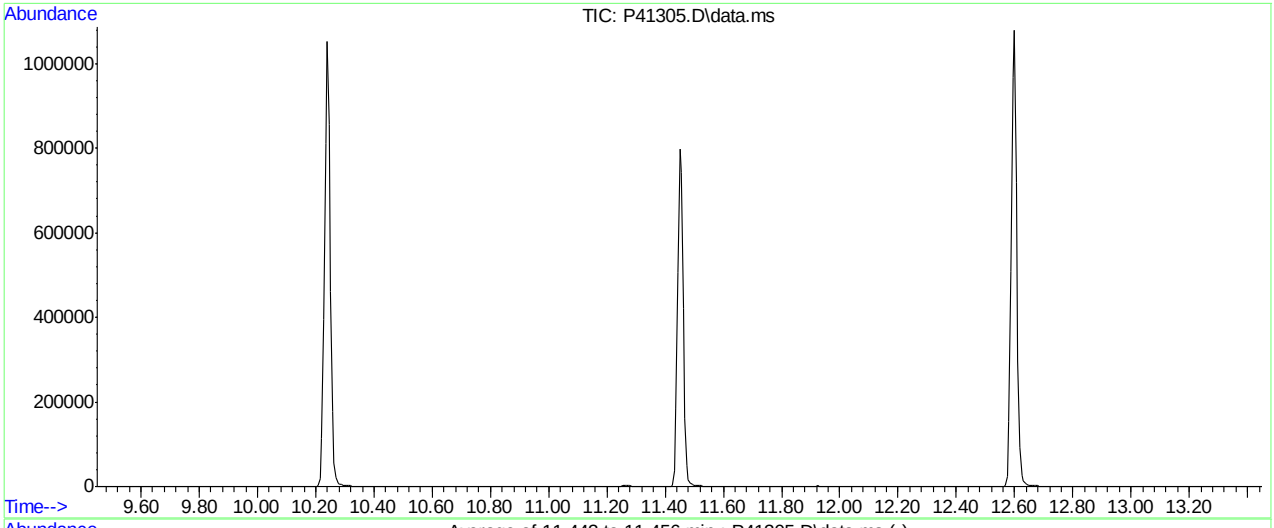
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.9	26736	PASS
75	95	30	60	56.1	62792	PASS
95	95	100	100	100.0	112010	PASS
96	95	5	9	6.6	7361	PASS
173	174	0.00	2	1.6	1381	PASS
174	95	50	100	77.7	86997	PASS
175	174	5	9	8.2	7172	PASS
176	174	95	101	97.3	84648	PASS
177	176	5	9	6.5	5493	PASS

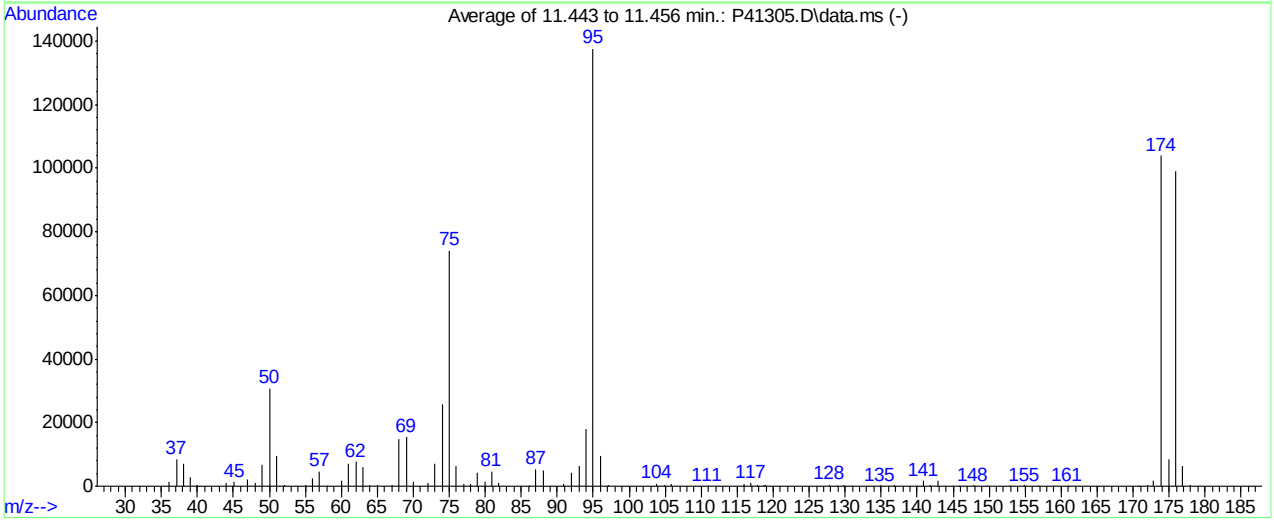
P41202.D 8260P042116.M Fri Apr 22 09:28:13 2016

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\042516\P41305.D Vial: 1
Acq On : 25 Apr 2016 7:48 am Operator: katiem
Sample : bfb Inst : MSVOA13
Misc : MS33659,VP1535,,,,, Multiplr: 1.00
MS Integration Params: tiny.p

Method : C:\msdchem\1\METHODS\8260P042116.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624





AutoFind: Scans 1702, 1703, 1704; Background Corrected with Scan 1696

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	30730	PASS
75	95	30	60	53.8	74157	PASS
95	95	100	100	100.0	137714	PASS
96	95	5	9	6.9	9490	PASS
173	174	0.00	2	1.6	1674	PASS
174	95	50	100	75.5	104013	PASS
175	174	5	9	8.0	8371	PASS
176	174	95	101	95.3	99165	PASS
177	176	5	9	6.4	6307	PASS

P41305.D 8260P042116.M Tue Apr 26 07:26:20 2016

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/18/16 10:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076705.D
Acq On : 13 Apr 2016 9:29 am
Operator : ericp
Sample : IC2628-1 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 10:53:36 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.392	96	1138306	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	694933	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	330954	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.965	65	155689	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.559	113	259783	49.06	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.12%			
44) 1,2-Dichloroethane-d4	7.118	65	279773	49.15	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 98.30%			
55) Toluene-d8	8.950	98	1063763	53.98	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 107.96%			
77) 4-Bromofluorobenzene	11.724	174	230907	51.17	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 102.34%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.404	85	48049	4.88	ug/Kg	91
3) Chloromethane	2.635	50	54056	4.91	ug/Kg	94
4) Vinyl Chloride	2.750	62	55806	5.05	ug/Kg	96
5) Bromomethane	3.164	94	32603	5.16	ug/Kg	96
6) Chloroethane	3.322	64	28430	5.23	ug/Kg	89
7) Trichlorofluoromethane	3.481	101	51167	5.12	ug/Kg	97
8) Ethyl Ether	3.803	59	22634	4.97	ug/Kg	81
9) 1,2-Dichlorotrifluoroe...	4.028	67	47326	5.01	ug/Kg	92
10) 1,1-Dichloroethene	4.058	61	63579	4.97	ug/Kg	93
11) Freon 113	4.089	101	40298	5.02	ug/Kg	82
12) Carbon Disulfide	4.131	76	130341	5.04	ug/Kg	83
13) Iodomethane	4.247	142	61339	4.86	ug/Kg	99
14) Allyl chloride	4.563	41	38058	5.48	ug/Kg	81
15) Methylene Chloride	4.703	49	72981	5.96	ug/Kg	85
16) Acetone	4.734	43	39034	24.41	ug/Kg	88
17) Methyl acetate	4.849	43	85318	23.83	ug/Kg	86
18) trans-1,2-Dichloroethene	4.874	61	47993	4.93	ug/Kg	97
19) Hexane	4.922	56	30818	5.18	ug/Kg	95
20) Methyl Tert Butyl Ether	4.959	73	79095	4.95	ug/Kg	91
21) Acetonitrile	5.251	41	32822	52.12	ug/Kg	95
22) Di-isopropyl ether	5.342	45	84750	5.01	ug/Kg	87
23) Chloroprene	5.488	53	51282	5.03	ug/Kg	94
24) 1,1-Dichloroethane	5.519	63	59971	5.01	ug/Kg	98
25) Acrylonitrile	5.573	53	48550	25.20	ug/Kg	86
26) ETBE	5.731	59	83975	4.87	ug/Kg	94
27) Vinyl acetate	5.750	43	237208	24.19	ug/Kg	93
28) cis-1,2-Dichloroethene	6.090	96	38062	4.97	ug/Kg	97
29) 2,2-Dichloropropane	6.212	77	23090	5.07	ug/Kg	95
30) Bromochloromethane	6.309	128	16201	4.91	ug/Kg	91
31) Cyclohexane	6.322	56	67155	5.16	ug/Kg	91
32) Chloroform	6.364	83	60175	4.97	ug/Kg	96
33) Ethyl acetate	6.461	43	116576	24.50	ug/Kg	99
34) Tetrahydrofuran	6.553	42	9405	5.44	ug/Kg	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076705.D
Acq On : 13 Apr 2016 9:29 am
Operator : ericp
Sample : IC2628-1 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 10:53:36 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	34826	5.00	ug/Kg	96
37)	1,1,1-Trichloroethane	6.595	97	37905	4.82	ug/Kg	92
38)	2-Butanone	6.680	43	61191	23.82	ug/Kg	91
39)	1,1-Dichloropropene	6.723	75	45424	5.00	ug/Kg	87
40)	Propionitrile	7.003	54	41490	49.24	ug/Kg	82
41)	Methacrylonitrile	7.021	41	141117	48.61	ug/Kg	95
42)	Benzene	6.979	78	138361	4.94	ug/Kg	98
43)	TAME	7.064	73	81829	4.99	ug/Kg	94
45)	1,2-Dichloroethane	7.191	62	36800	4.88	ug/Kg	85
46)	Trichloroethene	7.563	95	36870	5.16	ug/Kg	91
47)	Methylcyclohexane	7.563	83	63037	5.09	ug/Kg	89
48)	Dibromomethane	8.001	93	16516	4.91	ug/Kg	90
49)	1,2-Dichloropropane	8.098	63	32954	5.11	ug/Kg	91
50)	Bromodichloromethane	8.141	83	33124	4.82	ug/Kg	99
51)	Methyl methacrylate	8.256	41	18333	4.89	ug/Kg	74
52)	2-Chloroethyl vinyl ether	8.676	63	81958	24.68	ug/Kg	90
53)	cis-1,3-Dichloropropene	8.767	75	43581	5.07	ug/Kg	98
56)	Toluene	9.004	91	140851	5.49	ug/Kg	98
57)	2-Nitropropane	9.242	41	19484	25.47	ug/Kg	87
58)	4-Methyl-2-pentanone	9.357	43	119635	24.62	ug/Kg	94
59)	trans-1,3-Dichloropropene	9.406	75	33248	5.09	ug/Kg	82
60)	Tetrachloroethene	9.400	166	30717	5.38	ug/Kg	96
61)	Ethyl methacrylate	9.521	69	29927	5.43	ug/Kg	85
62)	1,1,2-Trichloroethane	9.576	83	21753	5.19	ug/Kg	96
63)	Dibromochloromethane	9.765	129	19771	5.22	ug/Kg	92
64)	1,3-Dichloropropane	9.856	76	42504	5.26	ug/Kg	94
65)	1,2-Dibromoethane	10.020	107	20347	4.75	ug/Kg	96
66)	2-hexanone	10.179	43	75807	22.80	ug/Kg	99
67)	1-Chlorohexane	10.464	91	29786	5.04	ug/Kg	93
68)	Ethylbenzene	10.525	91	122280	5.01	ug/Kg	92
69)	Chlorobenzene	10.525	112	75072	5.24	ug/Kg	89
70)	1,1,1,2-Tetrachloroethane	10.580	131	19825	5.05	ug/Kg	96
71)	m,p-Xylene	10.665	91	161906	9.63	ug/Kg	91
72)	o-Xylene	11.109	91	72257	4.86	ug/Kg	96
73)	Styrene	11.158	104	52491	4.72	ug/Kg	97
74)	Bromoform	11.213	173	8590	4.72	ug/Kg	88
75)	Isopropylbenzene	11.413	105	89404	4.84	ug/Kg	91
78)	cis-1,4-Dichloro-2-butene	11.772	53	8303	5.07	ug/Kg	88
79)	n-Propylbenzene	11.833	91	119919	4.89	ug/Kg	58
80)	Bromobenzene	11.845	156	26771	5.01	ug/Kg	99
81)	1,1,2,2-Tetrachloroethane	11.906	83	28754	4.69	ug/Kg	95
82)	1,3,5-Trimethylbenzene	12.022	105	78272	4.68	ug/Kg	75
83)	2-Chlorotoluene	12.022	91	82740	4.83	ug/Kg	91
84)	trans-1,4-Dichloro-2-B...	12.089	53	6872	4.51	ug/Kg#	75
85)	1,2,3-Trichloropropane	12.064	110	6712	4.54	ug/Kg	88
86)	Cyclohexanone	12.137	55	5126	22.34	ug/Kg	89
87)	4-Chlorotoluene	12.186	91	72363	4.82	ug/Kg	90
88)	tert-Butylbenzene	12.356	91	48054	4.74	ug/Kg	89
89)	1,2,4-Trimethylbenzene	12.429	105	74415	4.66	ug/Kg	91
90)	Pentachloroethane	12.405	167	10872	4.63	ug/Kg#	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076705.D
Acq On : 13 Apr 2016 9:29 am
Operator : ericp
Sample : IC2628-1 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 10:53:36 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	111324	4.87	ug/Kg	94
92)	4-Isopropyltoluene	12.679	119	74465	4.67	ug/Kg	96
93)	1,3-Dichlorobenzene	12.801	146	48638	4.99	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	52330	5.17	ug/Kg	87
95)	n-Butylbenzene	13.117	92	45872	4.80	ug/Kg	91
96)	Benzyl Chloride	13.141	126	7719	4.88	ug/Kg#	45
97)	1,2-Dichlorobenzene	13.330	146	45458	4.94	ug/Kg	93
98)	1,2-Dibromo-3-Chloropr...	14.096	75	4579	4.54	ug/Kg#	69
99)	Hexachlorobutadiene	14.650	225	18235	5.35	ug/Kg	90
100)	1,2,4-Trichlorobenzene	14.693	180	31427	5.28	ug/Kg	93
101)	Naphthalene	14.978	128	68180	4.68	ug/Kg	97
102)	1,2,3-Trichlorobenzene	15.137	180	32282	5.18	ug/Kg	98
104)	Ethanol	3.992	45	8439m	117.18	ug/Kg	
105)	Acrolein	4.417	56	28360	26.34	ug/Kg	83
106)	Tert butyl alcohol	5.044	59	34082	48.38	ug/Kg	90
107)	Isobutyl alcohol	7.143	42	16957	97.01	ug/Kg#	85
108)	Tert Amyl Alcohol	7.246	59	28836	48.51	ug/Kg	92
109)	1,4-Dioxane	8.360	88	6862	104.00	ug/Kg	71

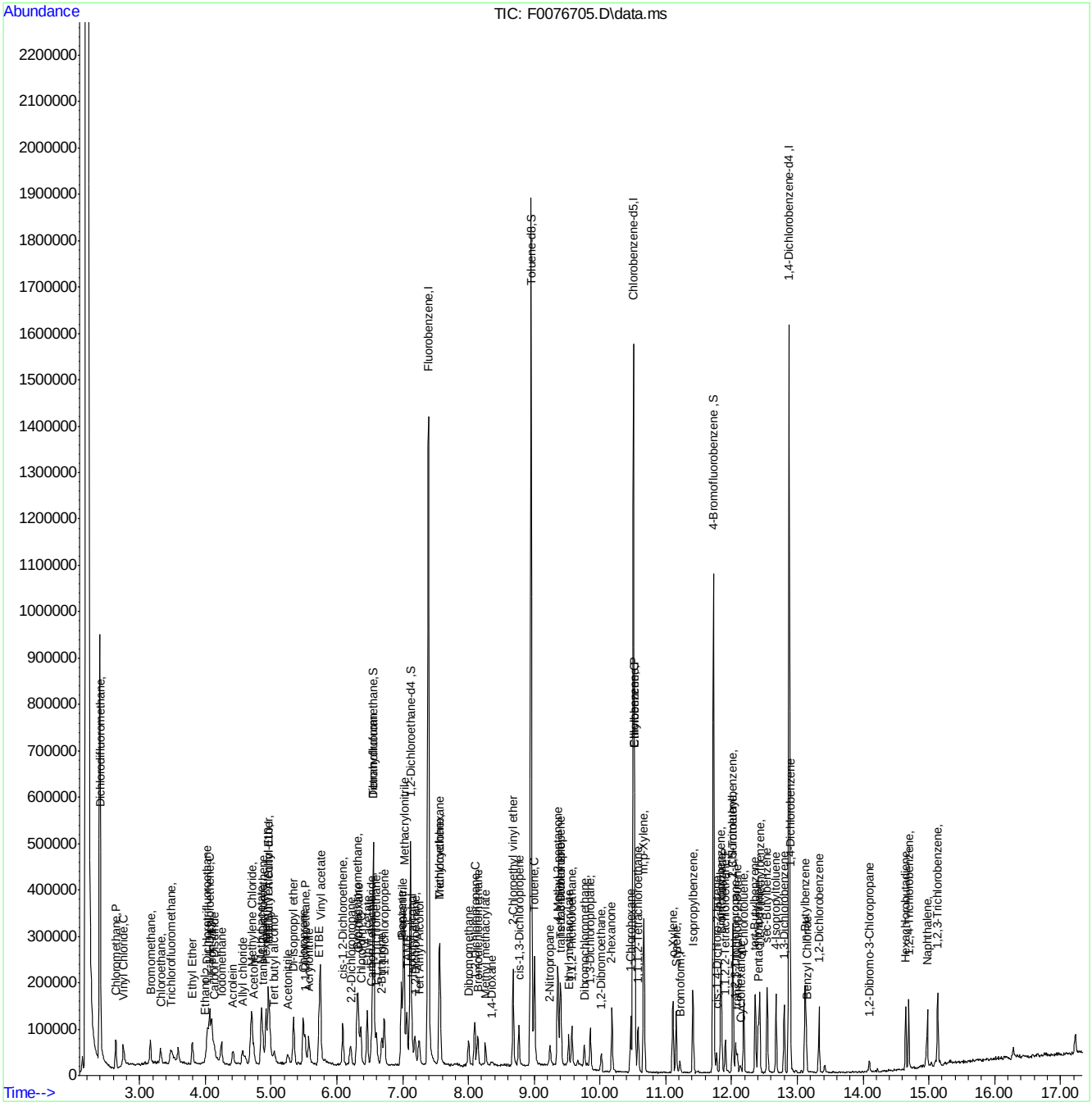
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076705.D
Acq On : 13 Apr 2016 9:29 am
Operator : ericp
Sample : IC2628-1 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 10:53:36 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

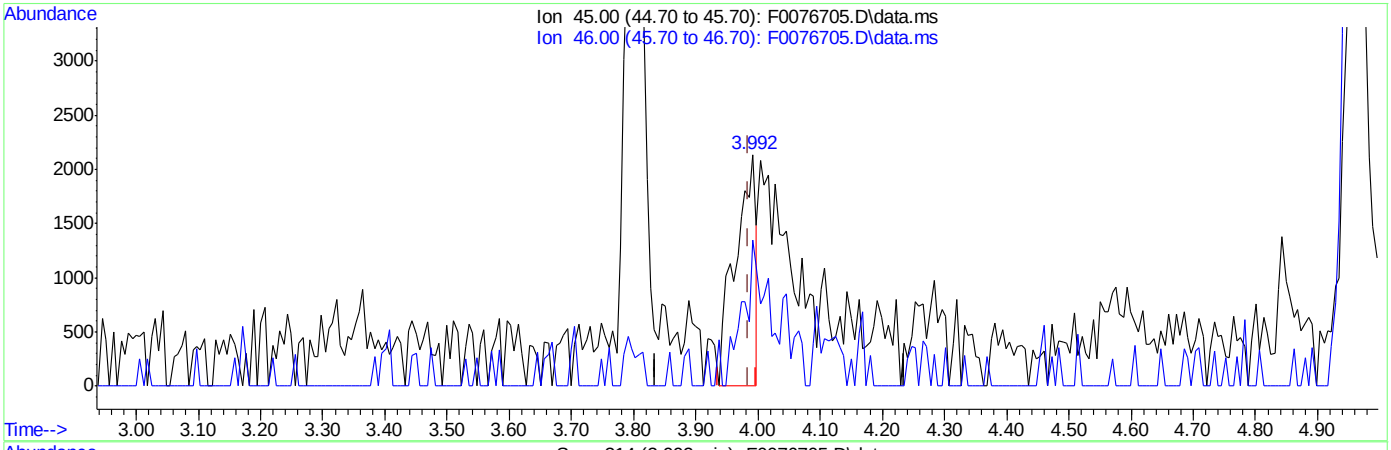
Sample Number:	VF2628-IC2628	**Method:**	SW846 8260B
Lab FileID:	F0076705.D	**Analyst approved:**	04/14/16 07:30 Eric Parrish
Injection Time:	04/13/16 09:29	**Supervisor approved:**	04/18/16 10:49 Juan Garcia

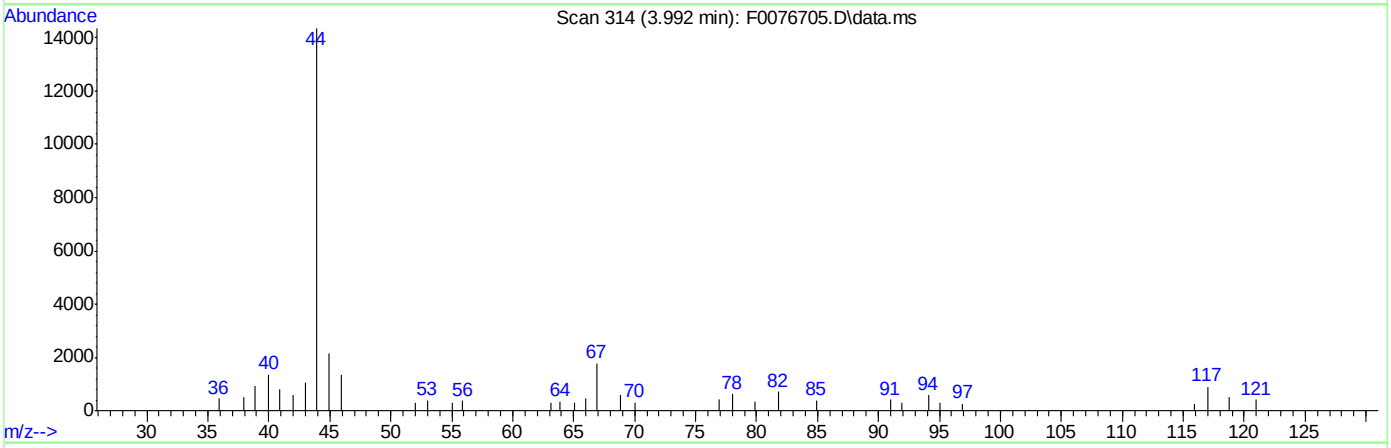
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		3.99	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076705.D
Acq On : 13 Apr 2016 9:29 am
Operator : ericp
Sample : IC2628-1 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 10:51:57 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration





TIC: F0076705.D\data.ms

(104) Ethanol

3.992min (+0.007) 69.07ug/Kg

response 4974

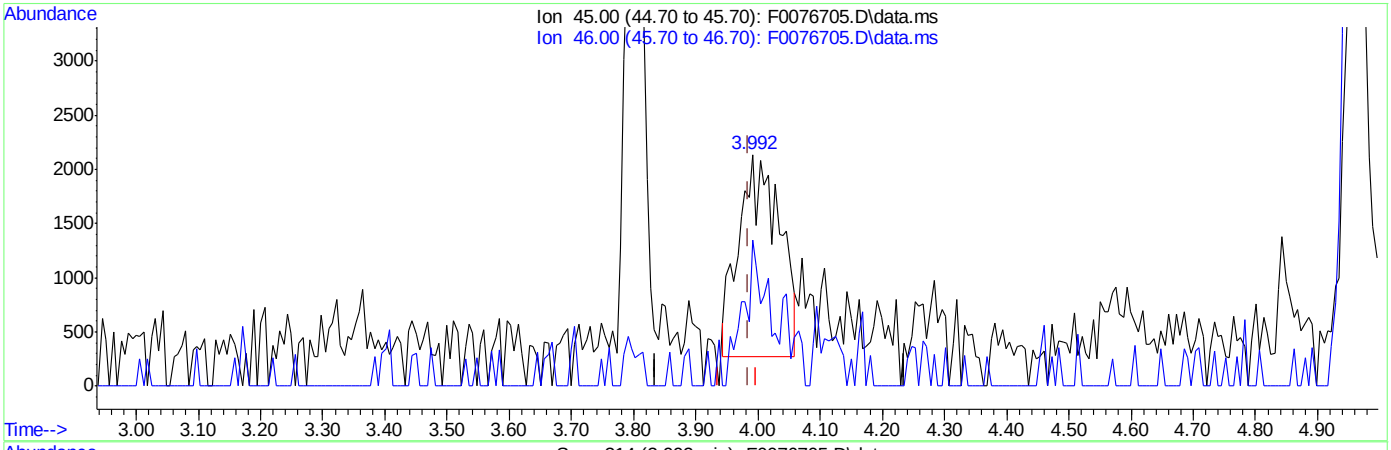
Ion	Exp%	Act%
45.00	100	100
46.00	35.00	42.92
0.00	0.00	0.00
0.00	0.00	0.00

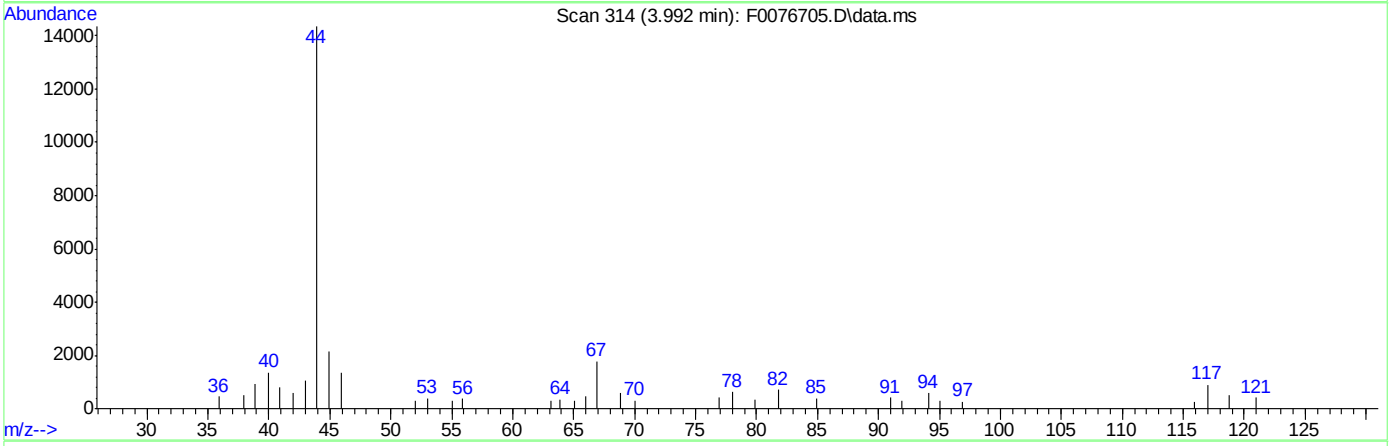
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076705.D
Acq On : 13 Apr 2016 9:29 am
Operator : ericp
Sample : IC2628-1 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 10:51:57 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration





TIC: F0076705.D\data.ms

(104) Ethanol

3.992min (+0.007) 117.18ug/Kg m

response 8439

Ion	Exp%	Act%
45.00	100	100
46.00	35.00	62.83
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/18/16 10:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076706.D
Acq On : 13 Apr 2016 9:55 am
Operator : ericp
Sample : IC2628-2 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 10:55:13 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:53:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.392	96	1115314	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	729766	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	339461	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	171473	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.559	113	260520	50.22	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.44%			
44) 1,2-Dichloroethane-d4	7.118	65	284262	50.96	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 101.92%			
55) Toluene-d8	8.950	98	1066505	51.54	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 103.08%			
77) 4-Bromofluorobenzene	11.730	174	226610	48.95	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 97.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	99696	10.34	ug/Kg	95
3) Chloromethane	2.635	50	109274	10.14	ug/Kg	96
4) Vinyl Chloride	2.750	62	110760	10.23	ug/Kg	98
5) Bromomethane	3.158	94	63330	10.22	ug/Kg	96
6) Chloroethane	3.316	64	52719	9.90	ug/Kg	95
7) Trichlorofluoromethane	3.487	101	96946	9.95	ug/Kg	95
8) Ethyl Ether	3.797	59	44550	9.99	ug/Kg	85
9) 1,2-Dichlorotrifluoroe...	4.028	67	96678	10.45	ug/Kg	96
10) 1,1-Dichloroethene	4.058	61	128088	10.22	ug/Kg	97
11) Freon 113	4.095	101	81906	10.41	ug/Kg	93
12) Carbon Disulfide	4.131	76	255861	10.10	ug/Kg	99
13) Iodomethane	4.241	142	125673	10.16	ug/Kg	89
14) Allyl chloride	4.563	41	64019	9.40	ug/Kg	91
15) Methylene Chloride	4.697	49	116968	9.75	ug/Kg	90
16) Acetone	4.734	43	82030	52.34	ug/Kg	95
17) Methyl acetate	4.849	43	186162	53.06	ug/Kg	92
18) trans-1,2-Dichloroethene	4.868	61	98161	10.30	ug/Kg	96
19) Hexane	4.922	56	60349	10.36	ug/Kg	87
20) Methyl Tert Butyl Ether	4.953	73	157745	10.07	ug/Kg	94
21) Acetonitrile	5.257	41	60759	98.48	ug/Kg	94
22) Di-isopropyl ether	5.342	45	162162	9.79	ug/Kg	88
23) Chloroprene	5.488	53	101311	10.14	ug/Kg	97
24) 1,1-Dichloroethane	5.519	63	117177	9.98	ug/Kg	94
25) Acrylonitrile	5.573	53	94549	50.10	ug/Kg	93
26) ETBE	5.731	59	171934	10.17	ug/Kg	100
27) Vinyl acetate	5.750	43	490116	51.02	ug/Kg	91
28) cis-1,2-Dichloroethene	6.090	96	76788	10.24	ug/Kg	95
29) 2,2-Dichloropropane	6.206	77	44850	10.06	ug/Kg	100
30) Bromochloromethane	6.303	128	33124	10.25	ug/Kg	93
31) Cyclohexane	6.322	56	127592	10.01	ug/Kg	91
32) Chloroform	6.364	83	119363	10.06	ug/Kg	88
33) Ethyl acetate	6.461	43	244537	52.45	ug/Kg	99
34) Tetrahydrofuran	6.553	42	17685	10.43	ug/Kg	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076706.D
Acq On : 13 Apr 2016 9:55 am
Operator : ericp
Sample : IC2628-2 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 10:55:13 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:53:57 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	68381	10.03	ug/Kg	94
37)	1,1,1-Trichloroethane	6.595	97	77791	10.10	ug/Kg	92
38)	2-Butanone	6.680	43	132910	52.81	ug/Kg	88
39)	1,1-Dichloropropene	6.723	75	89512	10.06	ug/Kg	88
40)	Propionitrile	7.003	54	82603	100.04	ug/Kg	85
41)	Methacrylonitrile	7.015	41	292630	102.89	ug/Kg	92
42)	Benzene	6.979	78	281982	10.28	ug/Kg	99
43)	TAME	7.064	73	160066	9.96	ug/Kg	96
45)	1,2-Dichloroethane	7.185	62	76395	10.34	ug/Kg	91
46)	Trichloroethene	7.563	95	69743	9.96	ug/Kg	91
47)	Methylcyclohexane	7.563	83	123102	10.14	ug/Kg	95
48)	Dibromomethane	8.001	93	35260	10.71	ug/Kg	95
49)	1,2-Dichloropropane	8.092	63	64971	10.28	ug/Kg	97
50)	Bromodichloromethane	8.141	83	70821	10.52	ug/Kg	98
51)	Methyl methacrylate	8.262	41	41397	11.26	ug/Kg	86
52)	2-Chloroethyl vinyl ether	8.682	63	171470	52.70	ug/Kg	87
53)	cis-1,3-Dichloropropene	8.767	75	88888	10.56	ug/Kg	95
56)	Toluene	9.004	91	276103	10.25	ug/Kg	92
57)	2-Nitropropane	9.242	41	40310	50.18	ug/Kg	97
58)	4-Methyl-2-pentanone	9.357	43	269277	52.76	ug/Kg	95
59)	trans-1,3-Dichloropropene	9.406	75	69758	10.17	ug/Kg	84
60)	Tetrachloroethene	9.394	166	64722	10.80	ug/Kg	97
61)	Ethyl methacrylate	9.521	69	61856	10.69	ug/Kg	94
62)	1,1,2-Trichloroethane	9.576	83	44986	10.22	ug/Kg	89
63)	Dibromochloromethane	9.759	129	41590	10.46	ug/Kg	93
64)	1,3-Dichloropropane	9.856	76	88862	10.48	ug/Kg	90
65)	1,2-Dibromoethane	10.020	107	51408	11.44	ug/Kg	100
66)	2-hexanone	10.185	43	198008	56.72	ug/Kg	98
67)	1-Chlorohexane	10.464	91	63053	10.15	ug/Kg	90
68)	Ethylbenzene	10.525	91	255453	9.97	ug/Kg	97
69)	Chlorobenzene	10.525	112	149105	9.92	ug/Kg	90
70)	1,1,1,2-Tetrachloroethane	10.580	131	39916	9.68	ug/Kg	96
71)	m,p-Xylene	10.665	91	353939	20.05	ug/Kg	92
72)	o-Xylene	11.109	91	151716	9.71	ug/Kg	97
73)	Styrene	11.158	104	114792	9.84	ug/Kg	95
74)	Bromoform	11.213	173	19013	9.96	ug/Kg	96
75)	Isopropylbenzene	11.413	105	187907	9.69	ug/Kg	95
78)	cis-1,4-Dichloro-2-butene	11.772	53	16682	9.94	ug/Kg#	75
79)	n-Propylbenzene	11.833	91	253134	10.06	ug/Kg	57
80)	Bromobenzene	11.845	156	55283	10.09	ug/Kg	92
81)	1,1,2,2-Tetrachloroethane	11.906	83	66618	10.60	ug/Kg	93
82)	1,3,5-Trimethylbenzene	12.022	105	168416	9.82	ug/Kg	79
83)	2-Chlorotoluene	12.022	91	176718	10.06	ug/Kg	88
84)	trans-1,4-Dichloro-2-B...	12.089	53	16201	10.36	ug/Kg	86
85)	1,2,3-Trichloropropane	12.064	110	16018	10.57	ug/Kg	92
86)	Cyclohexanone	12.131	55	12836	54.53	ug/Kg	99
87)	4-Chlorotoluene	12.186	91	157530	10.24	ug/Kg	88
88)	tert-Butylbenzene	12.363	91	104269	10.04	ug/Kg	97
89)	1,2,4-Trimethylbenzene	12.429	105	161281	9.85	ug/Kg	97
90)	Pentachloroethane	12.411	167	23846	9.91	ug/Kg	89

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076706.D
Acq On : 13 Apr 2016 9:55 am
Operator : ericp
Sample : IC2628-2 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 10:55:13 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:53:57 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.545	105	229325	9.77	ug/Kg	100
92)	4-Isopropyltoluene	12.679	119	163373	9.99	ug/Kg	96
93)	1,3-Dichlorobenzene	12.801	146	102216	10.22	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	105832	10.20	ug/Kg	91
95)	n-Butylbenzene	13.123	92	101269	10.33	ug/Kg#	83
96)	Benzyl Chloride	13.135	126	16215	10.00	ug/Kg	91
97)	1,2-Dichlorobenzene	13.330	146	96000	10.18	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.102	75	11141	10.78	ug/Kg	72
99)	Hexachlorobutadiene	14.650	225	36934	10.56	ug/Kg	92
100)	1,2,4-Trichlorobenzene	14.693	180	61413	10.06	ug/Kg	94
101)	Naphthalene	14.978	128	158117	10.57	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	66246	10.36	ug/Kg	99
104)	Ethanol	3.985	45	16533m	203.77	ug/Kg	
105)	Acrolein	4.417	56	55010	46.38	ug/Kg	86
106)	Tert butyl alcohol	5.056	59	74659	96.23	ug/Kg	89
107)	Isobutyl alcohol	7.143	42	37966	197.21	ug/Kg	92
108)	Tert Amyl Alcohol	7.252	59	65461	99.98	ug/Kg	95
109)	1,4-Dioxane	8.360	88	14929	205.44	ug/Kg	80

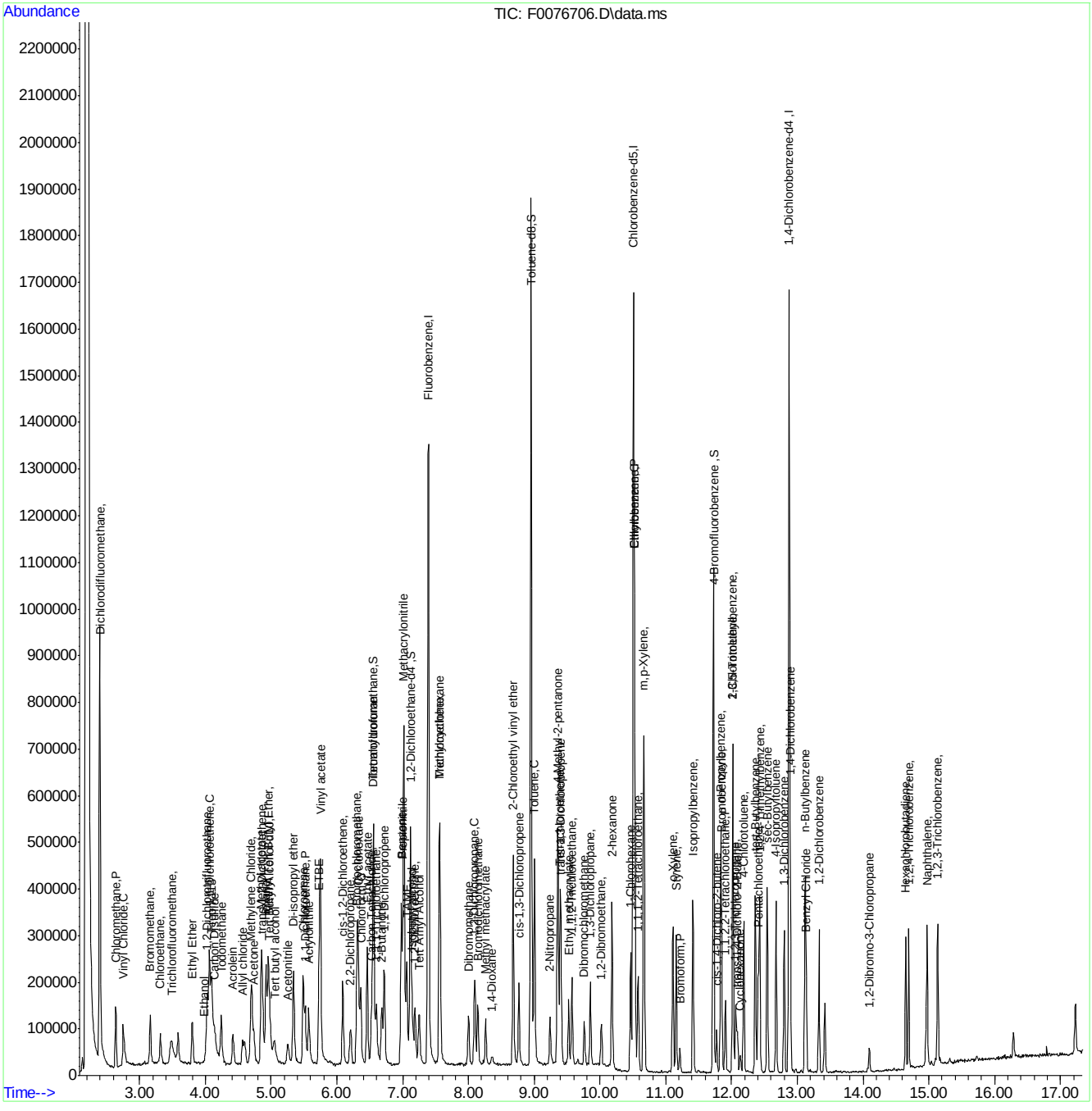
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076706.D
Acq On : 13 Apr 2016 9:55 am
Operator : ericp
Sample : IC2628-2 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 10:55:13 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:53:57 2016
Response via : Initial Calibration



041316APP9-F.m Wed Apr 13 14:56:04 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

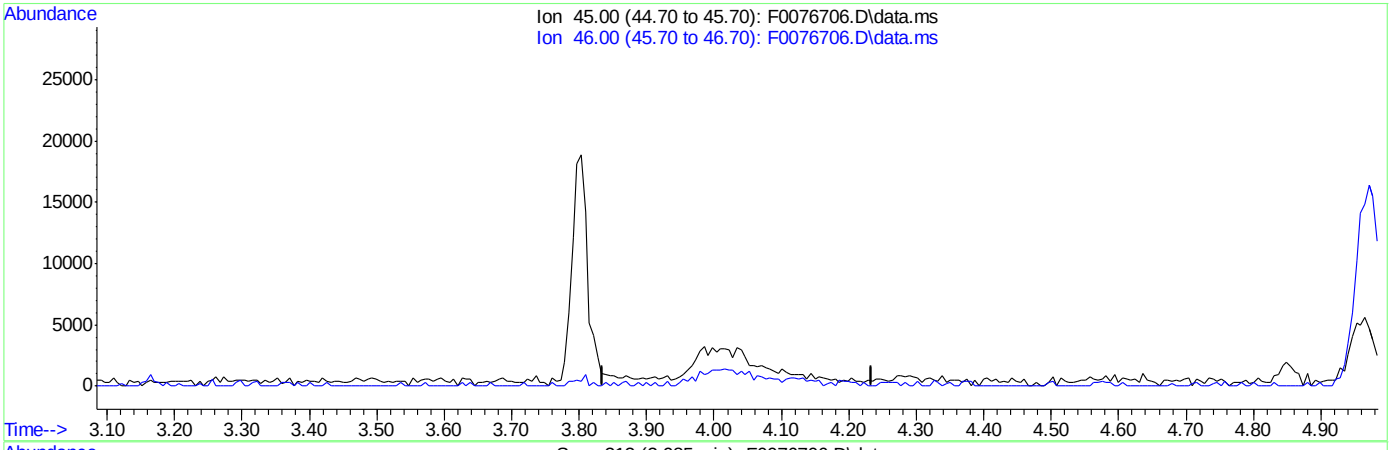
Sample Number:	VF2628-IC2628	**Method:**	SW846 8260B
Lab FileID:	F0076706.D	**Analyst approved:**	04/14/16 07:30 Eric Parrish
Injection Time:	04/13/16 09:55	**Supervisor approved:**	04/18/16 10:49 Juan Garcia

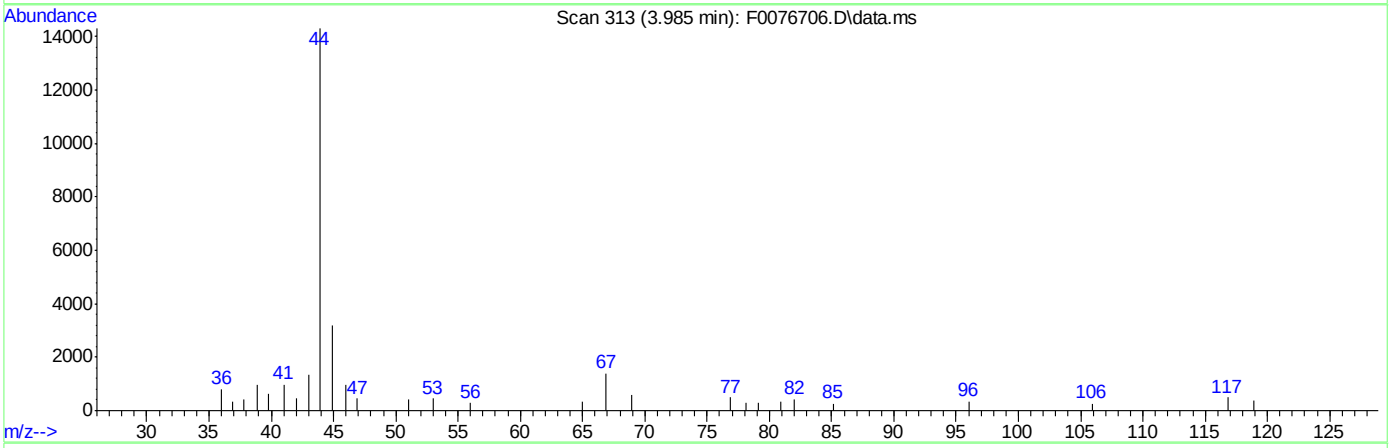
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		3.99	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076706.D
Acq On : 13 Apr 2016 9:55 am
Operator : ericp
Sample : IC2628-2 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 10:54:49 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:53:57 2016
Response via : Initial Calibration





(104) Ethanol

3.985min (-3.985) 0.00ug/Kg

response 0

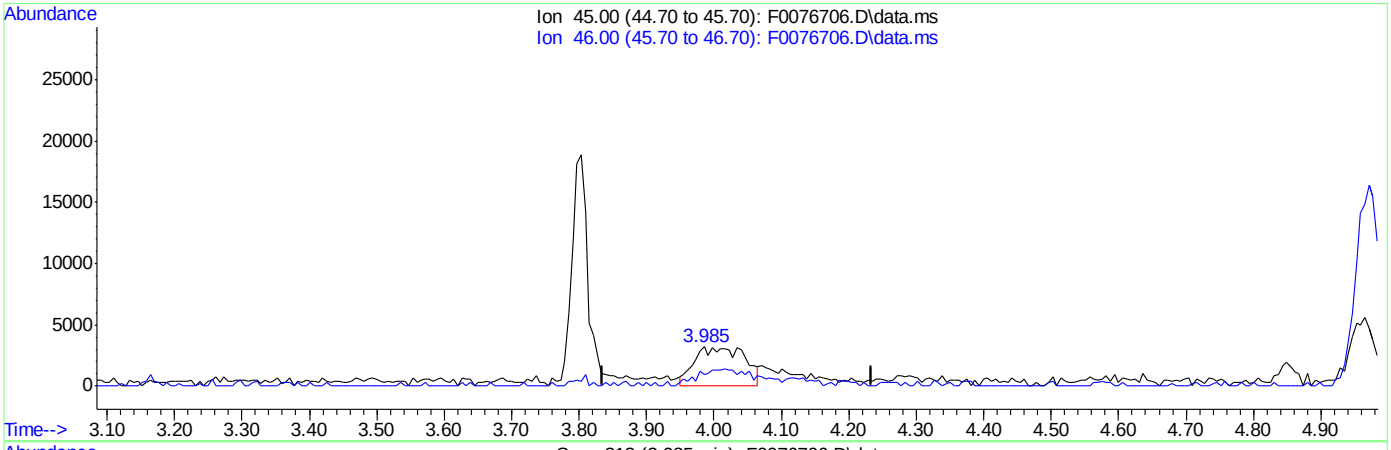
Ion	Exp%	Act%
45.00	100	0.00
46.00	35.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

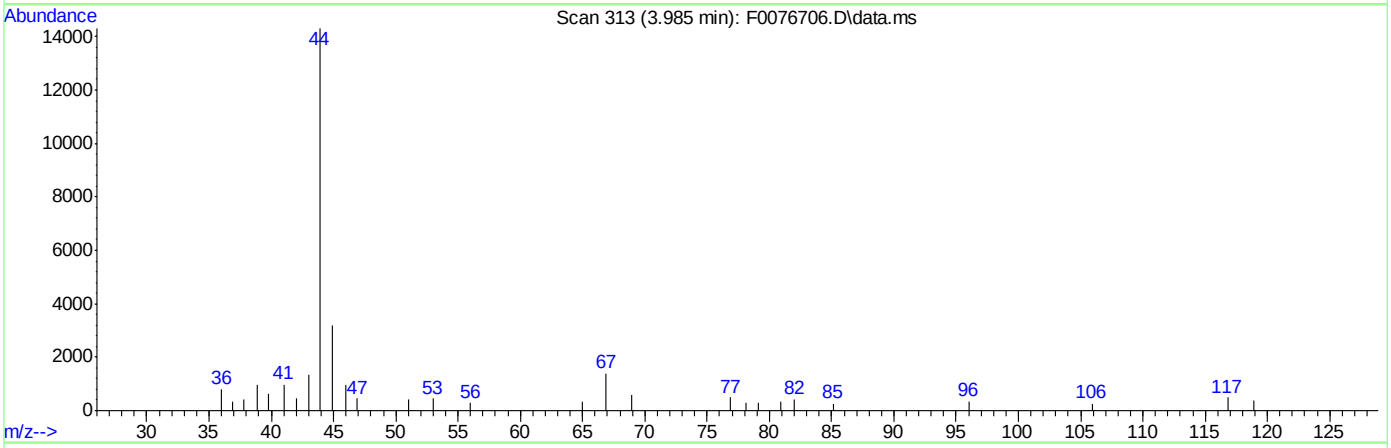
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076706.D
Acq On : 13 Apr 2016 9:55 am
Operator : ericp
Sample : IC2628-2 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 10:54:49 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:53:57 2016
Response via : Initial Calibration





TIC: F0076706.D\data.ms

(104) Ethanol

3.985min (+0.000) 203.77ug/Kg m

response 16533

Ion	Exp%	Act%
45.00	100	100
46.00	35.00	29.92
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076707.D
Acq On : 13 Apr 2016 10:21 am
Operator : ericp
Sample : IC2628-3 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 10:51:20 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.392	96	1114902	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	735883	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	345680	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	148162	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.559	113	263022	50.72	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.44%			
44) 1,2-Dichloroethane-d4	7.118	65	278155	49.89	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 99.78%			
55) Toluene-d8	8.950	98	928182	44.48	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 88.96%			
77) 4-Bromofluorobenzene	11.724	174	235120	49.88	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 99.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	190071	19.73	ug/Kg	97
3) Chloromethane	2.635	50	216420	20.08	ug/Kg	98
4) Vinyl Chloride	2.750	62	209278	19.34	ug/Kg	95
5) Bromomethane	3.164	94	117256	18.93	ug/Kg	96
6) Chloroethane	3.316	64	102600	19.27	ug/Kg	91
7) Trichlorofluoromethane	3.474	101	191666	19.56	ug/Kg	96
8) Ethyl Ether	3.803	59	89734	20.13	ug/Kg	85
9) 1,2-Dichlorotrifluoroe...	4.028	67	176125	19.05	ug/Kg	97
10) 1,1-Dichloroethene	4.058	61	246552	19.68	ug/Kg	94
11) Freon 113	4.089	101	150433	19.12	ug/Kg	96
12) Carbon Disulfide	4.125	76	497833	19.64	ug/Kg	97
13) Iodomethane	4.247	142	250404	20.24	ug/Kg	92
14) Allyl chloride	4.563	41	131209	19.28	ug/Kg	88
15) Methylene Chloride	4.703	49	199279	16.62	ug/Kg	88
16) Acetone	4.734	43	153035	97.69	ug/Kg	91
17) Methyl acetate	4.849	43	345675	98.57	ug/Kg	86
18) trans-1,2-Dichloroethene	4.868	61	187470	19.67	ug/Kg	92
19) Hexane	4.922	56	108094	18.56	ug/Kg	90
20) Methyl Tert Butyl Ether	4.959	73	314629	20.09	ug/Kg	92
21) Acetonitrile	5.251	41	119990	194.55	ug/Kg	97
22) Di-isopropyl ether	5.342	45	337303	20.37	ug/Kg	87
23) Chloroprene	5.488	53	195639	19.59	ug/Kg	97
24) 1,1-Dichloroethane	5.518	63	234882	20.02	ug/Kg	96
25) Acrylonitrile	5.573	53	186753	98.99	ug/Kg	95
26) ETBE	5.731	59	340753	20.17	ug/Kg	94
27) Vinyl acetate	5.750	43	971709	101.19	ug/Kg	93
28) cis-1,2-Dichloroethene	6.090	96	147012	19.62	ug/Kg	95
29) 2,2-Dichloropropane	6.206	77	87385	19.60	ug/Kg	96
30) Bromochloromethane	6.309	128	64136	19.85	ug/Kg	97
31) Cyclohexane	6.322	56	245998	19.31	ug/Kg	89
32) Chloroform	6.364	83	237599	20.02	ug/Kg	98
33) Ethyl acetate	6.461	43	452528	97.10	ug/Kg	99
34) Tetrahydrofuran	6.559	42	29485	17.40	ug/Kg	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076707.D
Acq On : 13 Apr 2016 10:21 am
Operator : ericp
Sample : IC2628-3 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 10:51:20 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	135812	19.93	ug/Kg	92
37)	1,1,1-Trichloroethane	6.601	97	157770	20.50	ug/Kg	98
38)	2-Butanone	6.680	43	249302	99.09	ug/Kg	81
39)	1,1-Dichloropropene	6.723	75	176653	19.86	ug/Kg	91
40)	Propionitrile	7.003	54	167520	202.97	ug/Kg	82
41)	Methacrylonitrile	7.015	41	567953	199.77	ug/Kg	95
42)	Benzene	6.979	78	539298	19.67	ug/Kg	99
43)	TAME	7.064	73	323137	20.12	ug/Kg	92
45)	1,2-Dichloroethane	7.185	62	146408	19.82	ug/Kg	91
46)	Trichloroethene	7.563	95	135909	19.43	ug/Kg	93
47)	Methylcyclohexane	7.563	83	234878	19.36	ug/Kg	90
48)	Dibromomethane	8.001	93	62285	18.92	ug/Kg	82
49)	1,2-Dichloropropane	8.092	63	120106	19.01	ug/Kg	89
50)	Bromodichloromethane	8.140	83	132553	19.69	ug/Kg	98
51)	Methyl methacrylate	8.262	41	65898	17.93	ug/Kg	80
52)	2-Chloroethyl vinyl ether	8.682	63	311858	95.88	ug/Kg	90
53)	cis-1,3-Dichloropropene	8.767	75	156500	18.60	ug/Kg	96
56)	Toluene	9.004	91	476337	17.54	ug/Kg	94
57)	2-Nitropropane	9.242	41	79199	97.77	ug/Kg	92
58)	4-Methyl-2-pentanone	9.357	43	494090	96.01	ug/Kg	94
59)	trans-1,3-Dichloropropene	9.406	75	133681	19.32	ug/Kg	83
60)	Tetrachloroethene	9.400	166	102025	16.88	ug/Kg	97
61)	Ethyl methacrylate	9.521	69	98649	16.90	ug/Kg	97
62)	1,1,2-Trichloroethane	9.576	83	83414	18.80	ug/Kg	94
63)	Dibromochloromethane	9.765	129	72869	18.18	ug/Kg	99
64)	1,3-Dichloropropane	9.850	76	153910	18.00	ug/Kg	96
65)	1,2-Dibromoethane	10.020	107	82079	18.11	ug/Kg	97
66)	2-hexanone	10.178	43	335579	95.33	ug/Kg	98
67)	1-Chlorohexane	10.464	91	122389	19.54	ug/Kg	88
68)	Ethylbenzene	10.525	91	516691	20.00	ug/Kg	97
69)	Chlorobenzene	10.525	112	291110	19.20	ug/Kg	87
70)	1,1,1,2-Tetrachloroethane	10.580	131	85022	20.45	ug/Kg	97
71)	m,p-Xylene	10.665	91	736586	41.38	ug/Kg	96
72)	o-Xylene	11.109	91	333150	21.15	ug/Kg	96
73)	Styrene	11.158	104	252249	21.43	ug/Kg	95
74)	Bromoform	11.213	173	40782	21.18	ug/Kg	98
75)	Isopropylbenzene	11.413	105	415007	21.23	ug/Kg	98
78)	cis-1,4-Dichloro-2-butene	11.772	53	33886	19.83	ug/Kg	86
79)	n-Propylbenzene	11.833	91	520972	20.33	ug/Kg	59
80)	Bromobenzene	11.845	156	110183	19.76	ug/Kg	95
81)	1,1,2,2-Tetrachloroethane	11.906	83	128044	20.01	ug/Kg	97
82)	1,3,5-Trimethylbenzene	12.022	105	377328	21.62	ug/Kg	82
83)	2-Chlorotoluene	12.022	91	367916	20.56	ug/Kg	91
84)	trans-1,4-Dichloro-2-B...	12.089	53	33812	21.24	ug/Kg	86
85)	1,2,3-Trichloropropane	12.064	110	31905	20.68	ug/Kg	93
86)	Cyclohexanone	12.125	55	24349	101.58	ug/Kg	94
87)	4-Chlorotoluene	12.186	91	317112	20.24	ug/Kg	90
88)	tert-Butylbenzene	12.356	91	221615	20.95	ug/Kg	93
89)	1,2,4-Trimethylbenzene	12.429	105	360596	21.64	ug/Kg	97
90)	Pentachloroethane	12.405	167	53091	21.66	ug/Kg	92

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076707.D
Acq On : 13 Apr 2016 10:21 am
Operator : ericp
Sample : IC2628-3 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 10:51:20 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.545	105	501660	20.99	ug/Kg	97
92)	4-Isopropyltoluene	12.679	119	355328	21.34	ug/Kg	99
93)	1,3-Dichlorobenzene	12.801	146	199789	19.61	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	199702	18.90	ug/Kg	93
95)	n-Butylbenzene	13.123	92	200873	20.13	ug/Kg	90
96)	Benzyl Chloride	13.135	126	33758	20.45	ug/Kg	97
97)	1,2-Dichlorobenzene	13.330	146	190853	19.87	ug/Kg	94
98)	1,2-Dibromo-3-Chloropr...	14.096	75	21341	20.27	ug/Kg	81
99)	Hexachlorobutadiene	14.650	225	62198	17.47	ug/Kg	86
100)	1,2,4-Trichlorobenzene	14.693	180	116511	18.75	ug/Kg	95
101)	Naphthalene	14.978	128	307010	20.16	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	120718	18.55	ug/Kg	97
104)	Ethanol	3.991	45	29069	424.15	ug/Kg	98
105)	Acrolein	4.417	56	104418	101.89	ug/Kg	91
106)	Tert butyl alcohol	5.050	59	143464	214.01	ug/Kg	96
107)	Isobutyl alcohol	7.137	42	69454	417.53	ug/Kg	95
108)	Tert Amyl Alcohol	7.246	59	116557	206.02	ug/Kg	88
109)	1,4-Dioxane	8.353	88	23429	373.13	ug/Kg	84

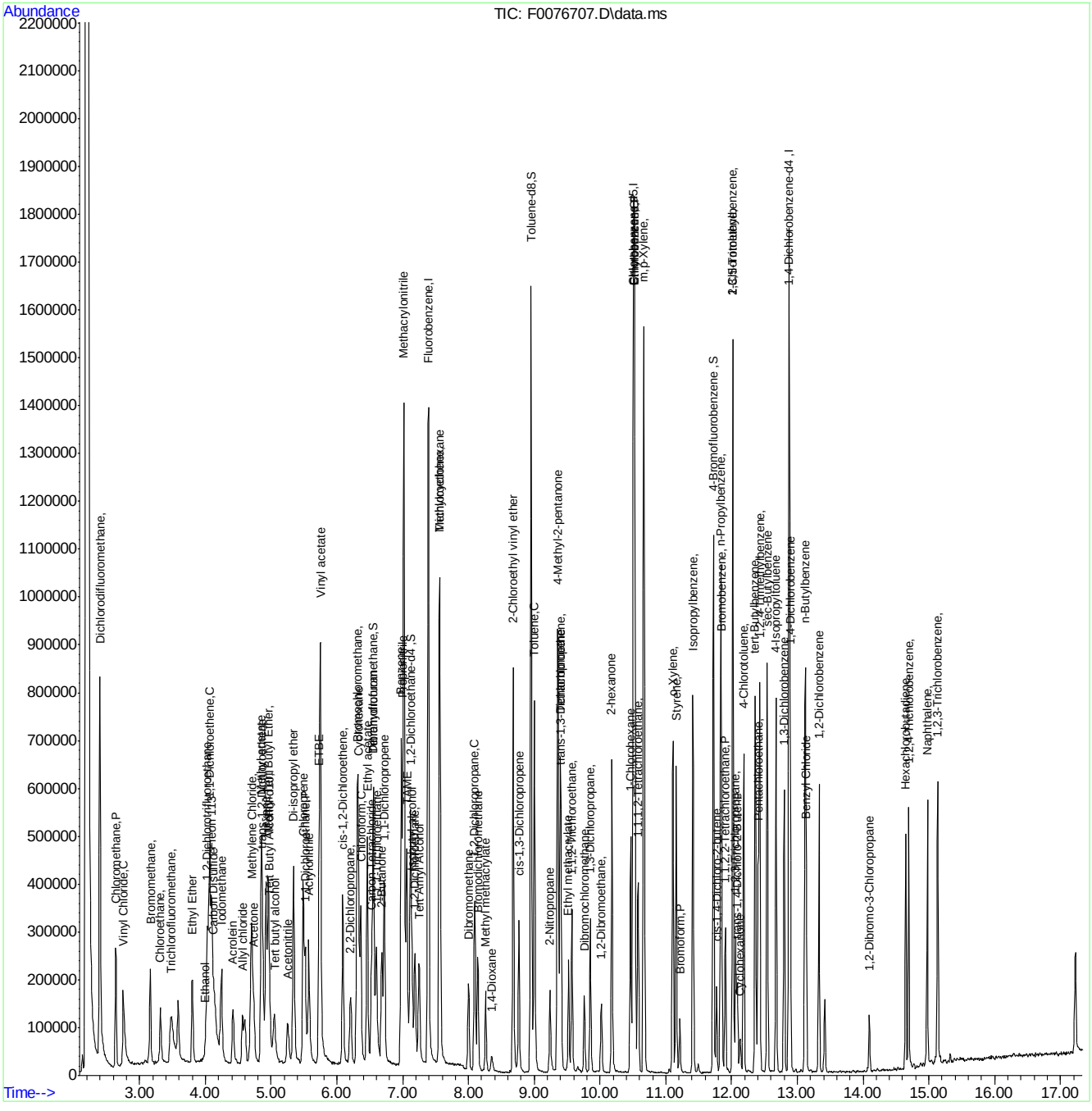
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076707.D
Acq On : 13 Apr 2016 10:21 am
Operator : ericp
Sample : IC2628-3 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 10:51:20 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:50:03 2016
Response via : Initial Calibration



041316APP9-F.m Wed Apr 13 14:56:06 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/18/16 10:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076708.D
Acq On : 13 Apr 2016 10:46 am
Operator : ericp
Sample : ICC2628-4 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 11:05:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:55:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.392	96	1179452	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	865084	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	376413	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.977	65	142911	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.559	113	272607	49.69	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.38%			
44) 1,2-Dichloroethane-d4	7.119	65	273603	46.39	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 92.78%			
55) Toluene-d8	8.950	98	1113454	45.39	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 90.78%			
77) 4-Bromofluorobenzene	11.724	174	250243	48.75	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 97.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	499672	49.06	ug/Kg	98
3) Chloromethane	2.635	50	547675	48.03	ug/Kg	98
4) Vinyl Chloride	2.757	62	553461	48.34	ug/Kg	96
5) Bromomethane	3.164	94	308185	47.04	ug/Kg	98
6) Chloroethane	3.316	64	196972	34.98	ug/Kg	94
7) Trichlorofluoromethane	3.481	101	507459	49.12	ug/Kg	95
8) Ethyl Ether	3.797	59	241390	51.19	ug/Kg	87
9) 1,2-Dichlorotrifluoroe...	4.028	67	467013	47.74	ug/Kg	93
10) 1,1-Dichloroethene	4.059	61	658577	49.69	ug/Kg	95
11) Freon 113	4.095	101	406232	48.81	ug/Kg	93
12) Carbon Disulfide	4.132	76	1358753	50.70	ug/Kg	97
13) Iodomethane	4.241	142	660799	50.51	ug/Kg	91
14) Allyl chloride	4.594	41	363827	50.54	ug/Kg	90
15) Methylene Chloride	4.703	49	470031	42.32	ug/Kg	85
16) Acetone	4.734	43	334273	201.71	ug/Kg	93
17) Methyl acetate	4.849	43	798507	215.22	ug/Kg	85
18) trans-1,2-Dichloroethene	4.868	61	495938	49.20	ug/Kg	91
19) Hexane	4.922	56	287370	46.64	ug/Kg	97
20) Methyl Tert Butyl Ether	4.953	73	816890	49.29	ug/Kg	96
21) Acetonitrile	5.251	41	282980	433.71	ug/Kg	98
22) Di-isopropyl ether	5.336	45	905077	51.67	ug/Kg	89
23) Chloroprene	5.488	53	525850	49.78	ug/Kg	98
24) 1,1-Dichloroethane	5.519	63	608177	48.99	ug/Kg	98
25) Acrylonitrile	5.573	53	469574	235.27	ug/Kg	95
26) ETBE	5.732	59	907570	50.79	ug/Kg	95
27) Vinyl acetate	5.750	43	2432847	239.48	ug/Kg	92
28) cis-1,2-Dichloroethene	6.090	96	396530	50.02	ug/Kg	96
29) 2,2-Dichloropropane	6.206	77	220776	46.81	ug/Kg	100
30) Bromochloromethane	6.303	128	165478	48.42	ug/Kg	93
31) Cyclohexane	6.322	56	649433	48.20	ug/Kg	91
32) Chloroform	6.364	83	617453	49.19	ug/Kg	99
33) Ethyl acetate	6.462	43	1119153	227.00	ug/Kg	98
34) Tetrahydrofuran	6.553	42	64824	39.59	ug/Kg	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076708.D
Acq On : 13 Apr 2016 10:46 am
Operator : ericp
Sample : ICC2628-4 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 11:05:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:55:30 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	366353	50.81	ug/Kg	94
37)	1,1,1-Trichloroethane	6.601	97	409476	50.29	ug/Kg	96
38)	2-Butanone	6.681	43	567532	213.24	ug/Kg	83
39)	1,1-Dichloropropene	6.717	75	466466	49.58	ug/Kg	95
40)	Propionitrile	7.003	54	388717	445.19	ug/Kg	88
41)	Methacrylonitrile	7.015	41	1382047	459.50	ug/Kg	95
42)	Benzene	6.979	78	1431852	49.36	ug/Kg	99
43)	TAME	7.064	73	846134	49.80	ug/Kg	93
45)	1,2-Dichloroethane	7.186	62	372579	47.67	ug/Kg	93
46)	Trichloroethene	7.563	95	364367	49.23	ug/Kg	94
47)	Methylcyclohexane	7.563	83	652210	50.81	ug/Kg	91
48)	Dibromomethane	8.001	93	180498	51.84	ug/Kg	95
49)	1,2-Dichloropropane	8.092	63	334736	50.08	ug/Kg	94
50)	Bromodichloromethane	8.141	83	385197	54.09	ug/Kg	97
51)	Methyl methacrylate	8.262	41	186657	48.01	ug/Kg	76
52)	2-Chloroethyl vinyl ether	8.682	63	893822	259.77	ug/Kg	87
53)	cis-1,3-Dichloropropene	8.767	75	475799	53.44	ug/Kg	97
56)	Toluene	9.005	91	1420303	44.48	ug/Kg	97
57)	2-Nitropropane	9.242	41	197646	207.54	ug/Kg	91
58)	4-Methyl-2-pentanone	9.357	43	1179099	194.90	ug/Kg	90
59)	trans-1,3-Dichloropropene	9.406	75	368278	45.27	ug/Kg	87
60)	Tetrachloroethene	9.394	166	336860	47.41	ug/Kg	97
61)	Ethyl methacrylate	9.522	69	331304	48.29	ug/Kg	91
62)	1,1,2-Trichloroethane	9.570	83	228593	43.82	ug/Kg	95
63)	Dibromochloromethane	9.765	129	233691	49.60	ug/Kg	99
64)	1,3-Dichloropropane	9.850	76	447000	44.46	ug/Kg	92
65)	1,2-Dibromoethane	10.020	107	261622	49.10	ug/Kg	99
66)	2-hexanone	10.179	43	837496	202.39	ug/Kg	90
67)	1-Chlorohexane	10.465	91	442667	60.13	ug/Kg	93
68)	Ethylbenzene	10.525	91	1514613	49.88	ug/Kg	99
69)	Chlorobenzene	10.525	112	879566	49.34	ug/Kg	92
70)	1,1,1,2-Tetrachloroethane	10.580	131	238836	48.86	ug/Kg	96
71)	m,p-Xylene	10.665	91	2148940	102.69	ug/Kg	95
72)	o-Xylene	11.109	91	1007811	54.42	ug/Kg	97
73)	Styrene	11.158	104	790473	57.14	ug/Kg	97
74)	Bromoform	11.219	173	104330	46.10	ug/Kg	95
75)	Isopropylbenzene	11.414	105	1239712	53.96	ug/Kg	95
78)	cis-1,4-Dichloro-2-butene	11.773	53	84818	45.57	ug/Kg	86
79)	n-Propylbenzene	11.833	91	1555076	55.73	ug/Kg	59
80)	Bromobenzene	11.846	156	318075	52.38	ug/Kg	99
81)	1,1,2,2-Tetrachloroethane	11.906	83	330643	47.46	ug/Kg	95
82)	1,3,5-Trimethylbenzene	12.022	105	1153953	60.71	ug/Kg	83
83)	2-Chlorotoluene	12.022	91	1077472	55.30	ug/Kg	92
84)	trans-1,4-Dichloro-2-B...	12.089	53	81105	46.79	ug/Kg	84
85)	1,2,3-Trichloropropane	12.065	110	78644	46.81	ug/Kg	98
86)	Cyclohexanone	12.131	55	58799	225.28	ug/Kg	95
87)	4-Chlorotoluene	12.186	91	959091	56.20	ug/Kg	93
88)	tert-Butylbenzene	12.363	91	678717	58.92	ug/Kg	97
89)	1,2,4-Trimethylbenzene	12.430	105	1126890	62.09	ug/Kg	95
90)	Pentachloroethane	12.411	167	151673	56.82	ug/Kg	95

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076708.D
Acq On : 13 Apr 2016 10:46 am
Operator : ericp
Sample : ICC2628-4 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 11:05:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:55:30 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.545	105	1507307	57.93	ug/Kg	97
92)	4-Isopropyltoluene	12.679	119	1168822	64.46	ug/Kg	97
93)	1,3-Dichlorobenzene	12.801	146	581309	52.41	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	594699	51.70	ug/Kg	93
95)	n-Butylbenzene	13.123	92	702064	64.61	ug/Kg	96
96)	Benzyl Chloride	13.135	126	97391	54.19	ug/Kg#	90
97)	1,2-Dichlorobenzene	13.330	146	554256	52.99	ug/Kg	96
98)	1,2-Dibromo-3-Chloropr...	14.096	75	51641	45.05	ug/Kg	85
99)	Hexachlorobutadiene	14.650	225	196880	50.79	ug/Kg	91
100)	1,2,4-Trichlorobenzene	14.693	180	379638	56.10	ug/Kg	96
101)	Naphthalene	14.979	128	881284	53.14	ug/Kg	98
102)	1,2,3-Trichlorobenzene	15.137	180	380916	53.75	ug/Kg	99
104)	Ethanol	4.028	45	63573m	881.10	ug/Kg	
105)	Acrolein	4.417	56	253973	256.94	ug/Kg	91
106)	Tert butyl alcohol	5.050	59	308684	477.39	ug/Kg	98
107)	Isobutyl alcohol	7.143	42	149980	934.76	ug/Kg	90
108)	Tert Amyl Alcohol	7.252	59	252913	463.47	ug/Kg	92
109)	1,4-Dioxane	8.360	88	63834	1053.97	ug/Kg#	70

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

7.6.4

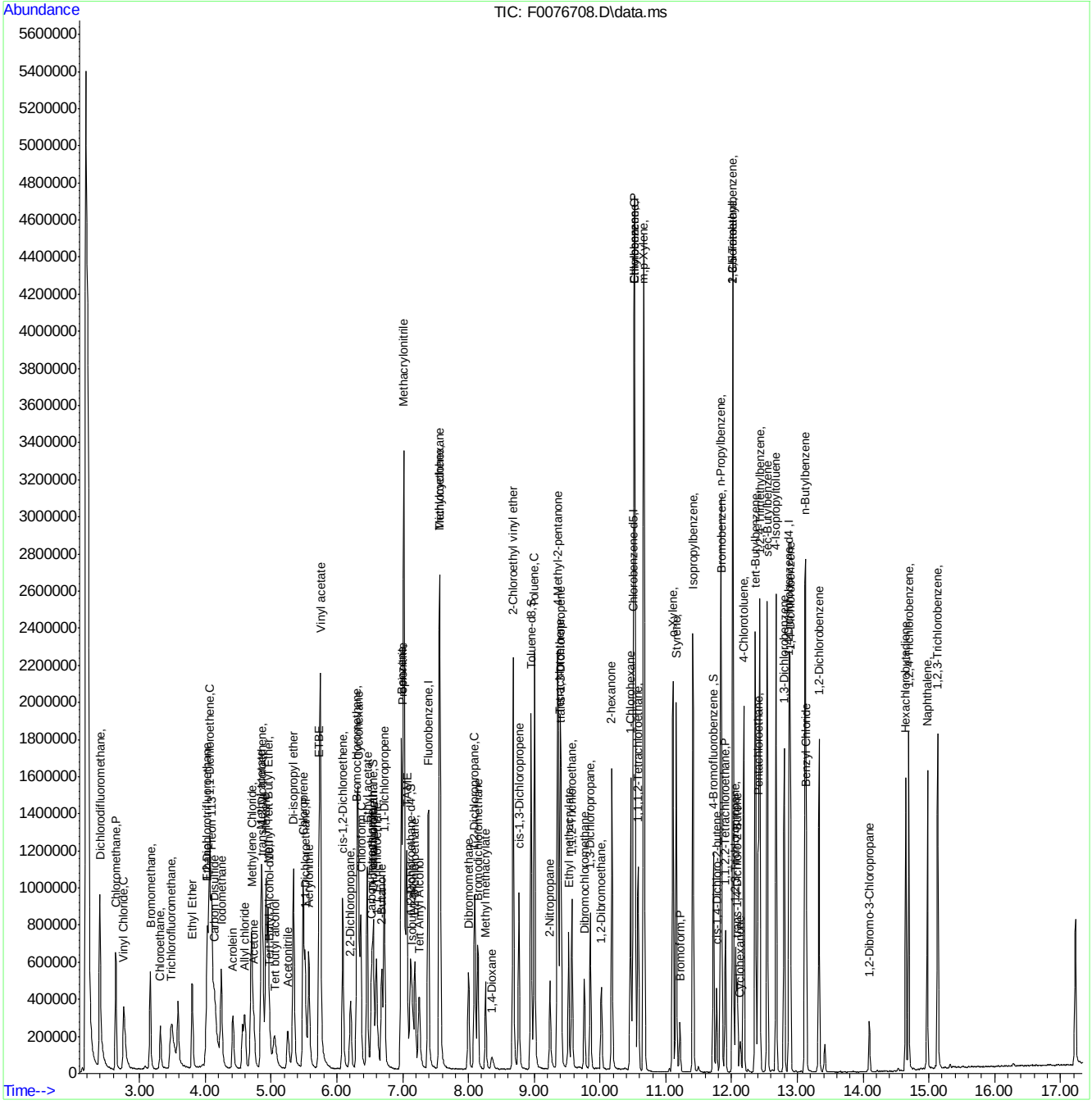
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076708.D
Acq On : 13 Apr 2016 10:46 am
Operator : ericp
Sample : ICC2628-4 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 11:05:01 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:55:30 2016
Response via : Initial Calibration



041316APP9-F.m Wed Apr 13 14:56:08 2016 Page: 4

Manual Integration Approval Summary

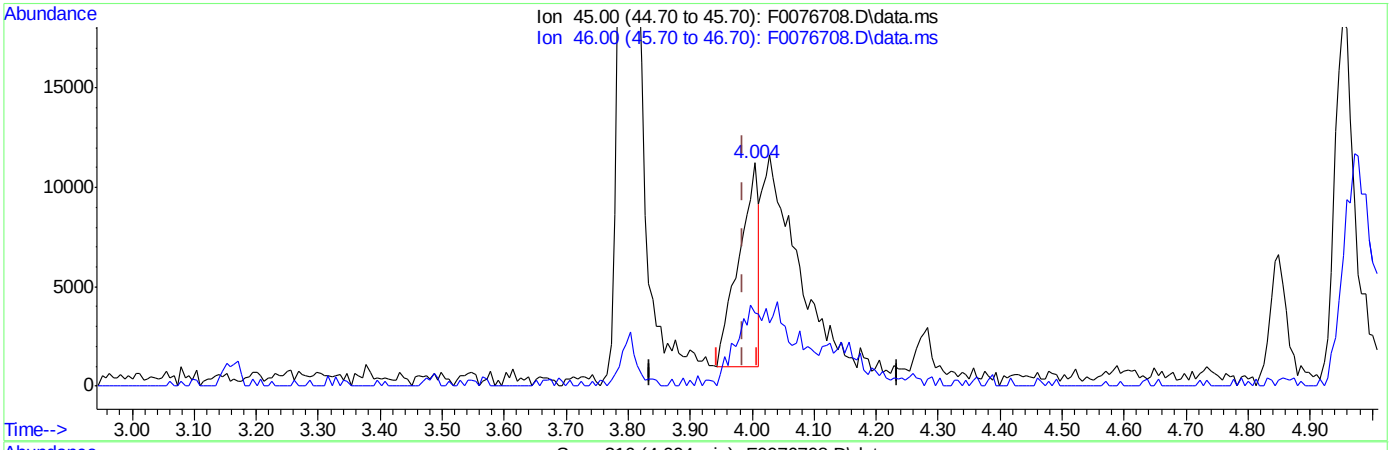
Sample Number:	VF2628-ICC2628	**Method:**	SW846 8260B
Lab FileID:	F0076708.D	**Analyst approved:**	04/14/16 07:30 Eric Parrish
Injection Time:	04/13/16 10:46	**Supervisor approved:**	04/18/16 10:49 Juan Garcia

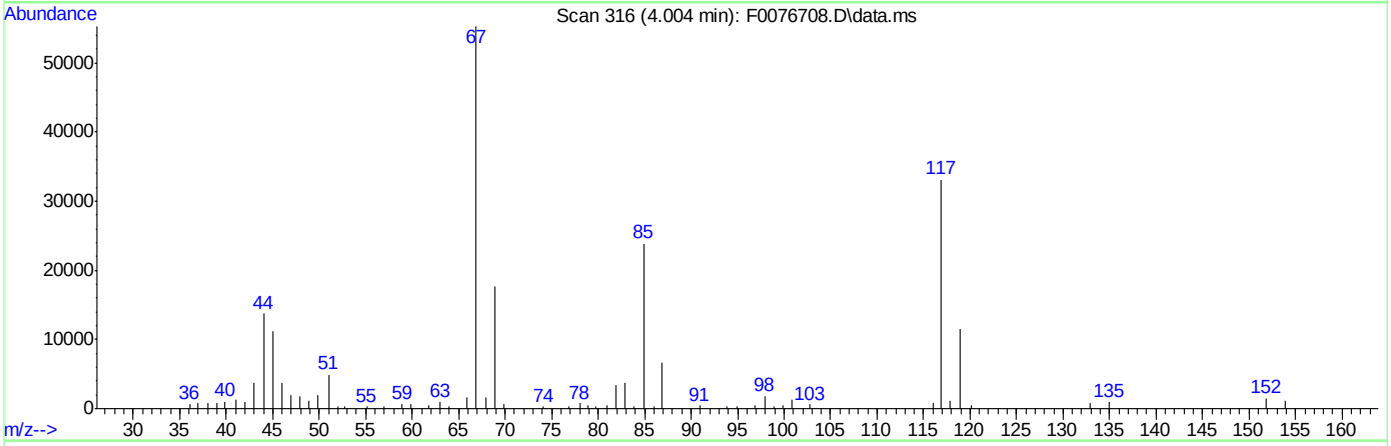
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		4.03	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076708.D
Acq On : 13 Apr 2016 10:46 am
Operator : ericp
Sample : ICC2628-4 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 11:04:14 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:55:30 2016
Response via : Initial Calibration





TIC: F0076708.D\data.ms

(104) Ethanol

4.004min (+0.019) 311.83ug/Kg

response 22499

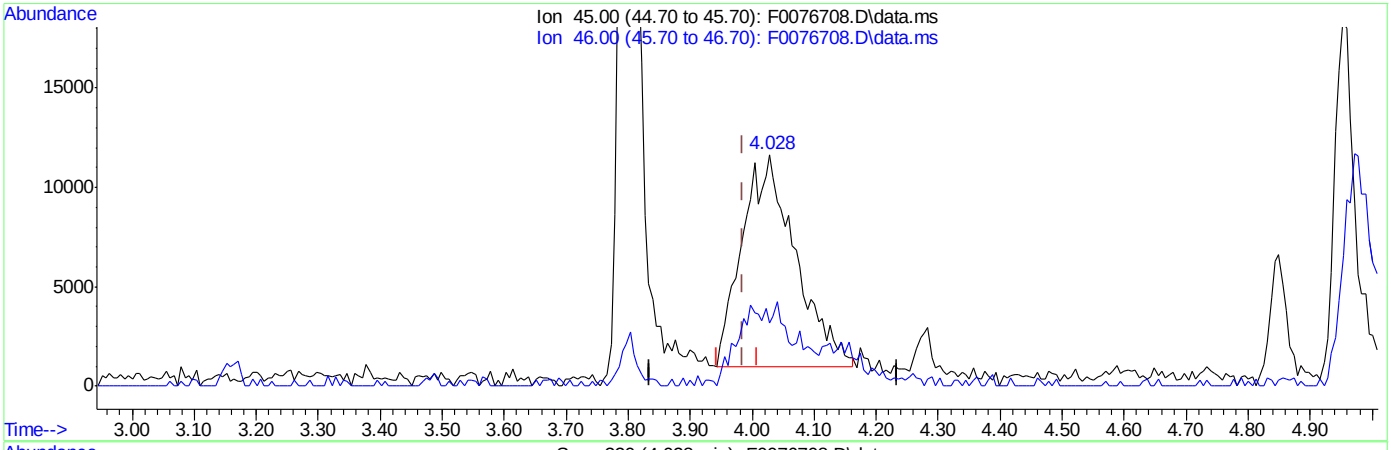
Ion	Exp%	Act%
45.00	100	100
46.00	35.00	36.26
0.00	0.00	0.00
0.00	0.00	0.00

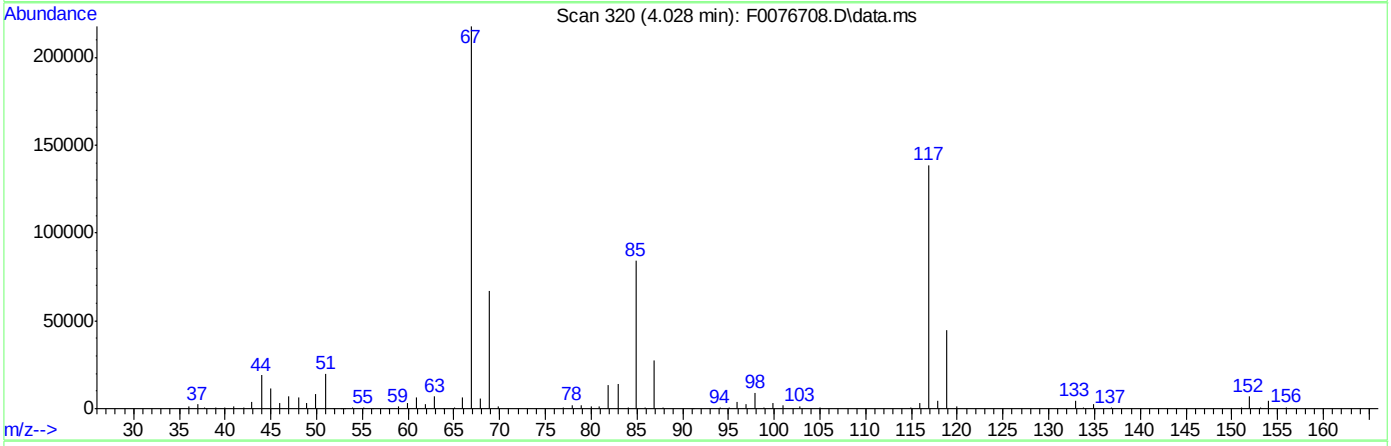
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076708.D
Acq On : 13 Apr 2016 10:46 am
Operator : ericp
Sample : ICC2628-4 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 11:04:14 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 10:55:30 2016
Response via : Initial Calibration





TIC: F0076708.D\data.ms

(104) Ethanol

4.028min (+0.043) 881.10ug/Kg m

response 63573

Ion	Exp%	Act%
45.00	100	100
46.00	35.00	27.31
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/18/16 10:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076709.D
Acq On : 13 Apr 2016 11:12 am
Operator : ericp
Sample : IC2628-5 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 11:32:23 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:05:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.392	96	1045455	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	732211	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	360120	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	149781	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	246328	50.73	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.46%			
44) 1,2-Dichloroethane-d4	7.119	65	253383	49.36	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 98.72%			
55) Toluene-d8	8.950	98	911898	44.96	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 89.92%			
77) 4-Bromofluorobenzene	11.724	174	239210	49.02	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 98.04%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	945700	105.25	ug/Kg	99
3) Chloromethane	2.635	50	1004223	100.35	ug/Kg	98
4) Vinyl Chloride	2.763	62	1053290	104.66	ug/Kg	99
5) Bromomethane	3.158	94	462149	80.77	ug/Kg	97
6) Chloroethane	3.310	64	282313	75.72	ug/Kg	97
7) Trichlorofluoromethane	3.481	101	931676	102.19	ug/Kg	97
8) Ethyl Ether	3.803	59	426435	101.41	ug/Kg	85
9) 1,2-Dichlorotrifluoroe...	4.028	67	862404	100.59	ug/Kg	98
10) 1,1-Dichloroethene	4.058	61	1220496	104.05	ug/Kg	94
11) Freon 113	4.089	101	765802	104.42	ug/Kg	94
12) Carbon Disulfide	4.131	76	2503915	105.04	ug/Kg	96
13) Iodomethane	4.241	142	1213964	104.42	ug/Kg	92
14) Allyl chloride	4.600	41	641576m	100.27	ug/Kg	
15) Methylene Chloride	4.703	49	803591	93.49	ug/Kg	84
16) Acetone	4.734	43	688793	492.69	ug/Kg	87
17) Methyl acetate	4.849	43	1591021	501.23	ug/Kg	85
18) trans-1,2-Dichloroethene	4.868	61	909800	102.23	ug/Kg	93
19) Hexane	4.916	56	513927	95.70	ug/Kg	94
20) Methyl Tert Butyl Ether	4.953	73	1458171	99.62	ug/Kg	94
21) Acetonitrile	5.257	41	574347	1027.15	ug/Kg	96
22) Di-isopropyl ether	5.342	45	1564365	99.92	ug/Kg	86
23) Chloroprene	5.488	53	975474	104.30	ug/Kg	95
24) 1,1-Dichloroethane	5.519	63	1106584	101.07	ug/Kg	99
25) Acrylonitrile	5.573	53	923891	530.04	ug/Kg	93
26) ETBE	5.731	59	1596057	100.37	ug/Kg	95
27) Vinyl acetate	5.750	43	4230435	474.79	ug/Kg	90
28) cis-1,2-Dichloroethene	6.090	96	719241	102.34	ug/Kg	94
29) 2,2-Dichloropropane	6.206	77	403272	98.02	ug/Kg	97
30) Bromochloromethane	6.303	128	309142	102.86	ug/Kg	94
31) Cyclohexane	6.322	56	1210673	102.29	ug/Kg	88
32) Chloroform	6.364	83	1125310	101.54	ug/Kg	98
33) Ethyl acetate	6.461	43	2136901	500.49	ug/Kg	100
34) Tetrahydrofuran	6.553	42	131885	109.76	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076709.D
Acq On : 13 Apr 2016 11:12 am
Operator : ericp
Sample : IC2628-5 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 11:32:23 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:05:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) Carbon Tetrachloride	6.528	117	691734	107.79 ug/Kg	97
37) 1,1,1-Trichloroethane	6.601	97	753894	104.31 ug/Kg	98
38) 2-Butanone	6.681	43	1114142	490.29 ug/Kg	82
39) 1,1-Dichloropropene	6.717	75	865749	104.04 ug/Kg	94
40) Propionitrile	7.003	54	757719	1006.62 ug/Kg	82
41) Methacrylonitrile	7.021	41	2602900	996.51 ug/Kg	94
42) Benzene	6.979	78	2553980	99.65 ug/Kg	99
43) TAME	7.064	73	1542117	102.49 ug/Kg	94
45) 1,2-Dichloroethane	7.185	62	669064	97.71 ug/Kg	92
46) Trichloroethene	7.563	95	652452	99.83 ug/Kg	94
47) Methylcyclohexane	7.563	83	1248308	109.28 ug/Kg	90
48) Dibromomethane	8.001	93	317254	101.86 ug/Kg	92
49) 1,2-Dichloropropane	8.092	63	597344	100.78 ug/Kg	91
50) Bromodichloromethane	8.141	83	664942	103.23 ug/Kg	99
51) Methyl methacrylate	8.262	41	375023	109.92 ug/Kg	82
52) 2-Chloroethyl vinyl ether	8.682	63	1700474	552.15 ug/Kg	92
53) cis-1,3-Dichloropropene	8.767	75	832121	103.66 ug/Kg	97
56) Toluene	9.004	91	2423170	92.20 ug/Kg	97
57) 2-Nitropropane	9.242	41	463389	600.39 ug/Kg	91
58) 4-Methyl-2-pentanone	9.357	43	2477834	512.11 ug/Kg	91
59) trans-1,3-Dichloropropene	9.406	75	678392	100.91 ug/Kg	97
60) Tetrachloroethene	9.400	166	545979	91.97 ug/Kg	98
61) Ethyl methacrylate	9.522	69	582868	101.24 ug/Kg	93
62) 1,1,2-Trichloroethane	9.576	83	406939	95.09 ug/Kg	96
63) Dibromochloromethane	9.765	129	402196	101.05 ug/Kg	98
64) 1,3-Dichloropropane	9.850	76	765424	92.51 ug/Kg	95
65) 1,2-Dibromoethane	10.020	107	427579	95.24 ug/Kg	97
66) 2-hexanone	10.179	43	1778919	533.29 ug/Kg	91
67) 1-Chlorohexane	10.464	91	776064	118.55 ug/Kg	96
68) Ethylbenzene	10.525	91	2659060	103.52 ug/Kg	99
69) Chlorobenzene	10.525	112	1485135	98.76 ug/Kg	90
70) 1,1,1,2-Tetrachloroethane	10.580	131	456745	111.02 ug/Kg	95
71) m,p-Xylene	10.665	91	3874293	217.27 ug/Kg	97
72) o-Xylene	11.109	91	1934576	120.75 ug/Kg	98
73) Styrene	11.158	104	1516625	125.06 ug/Kg	96
74) Bromoform	11.219	173	231319	123.16 ug/Kg	97
75) Isopropylbenzene	11.414	105	2444183	123.25 ug/Kg	99
78) cis-1,4-Dichloro-2-butene	11.772	53	181164	104.05 ug/Kg	89
79) n-Propylbenzene	11.833	91	2931830	106.76 ug/Kg	60
80) Bromobenzene	11.845	156	587194	99.88 ug/Kg	100
81) 1,1,2,2-Tetrachloroethane	11.906	83	654685	99.49 ug/Kg	98
82) 1,3,5-Trimethylbenzene	12.022	105	2154096	112.43 ug/Kg	86
83) 2-Chlorotoluene	12.022	91	1990612	104.04 ug/Kg	93
84) trans-1,4-Dichloro-2-B...	12.089	53	177718	108.91 ug/Kg	80
85) 1,2,3-Trichloropropane	12.064	110	150697	95.28 ug/Kg	98
86) Cyclohexanone	12.131	55	142929	586.90 ug/Kg	95
87) 4-Chlorotoluene	12.186	91	1729887	102.77 ug/Kg	93
88) tert-Butylbenzene	12.363	91	1330587	115.58 ug/Kg	94
89) 1,2,4-Trimethylbenzene	12.429	105	2082939	113.13 ug/Kg	98
90) Pentachloroethane	12.405	167	307826	116.56 ug/Kg	90

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076709.D
Acq On : 13 Apr 2016 11:12 am
Operator : ericp
Sample : IC2628-5 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 11:32:23 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:05:10 2016
Response via : Initial Calibration

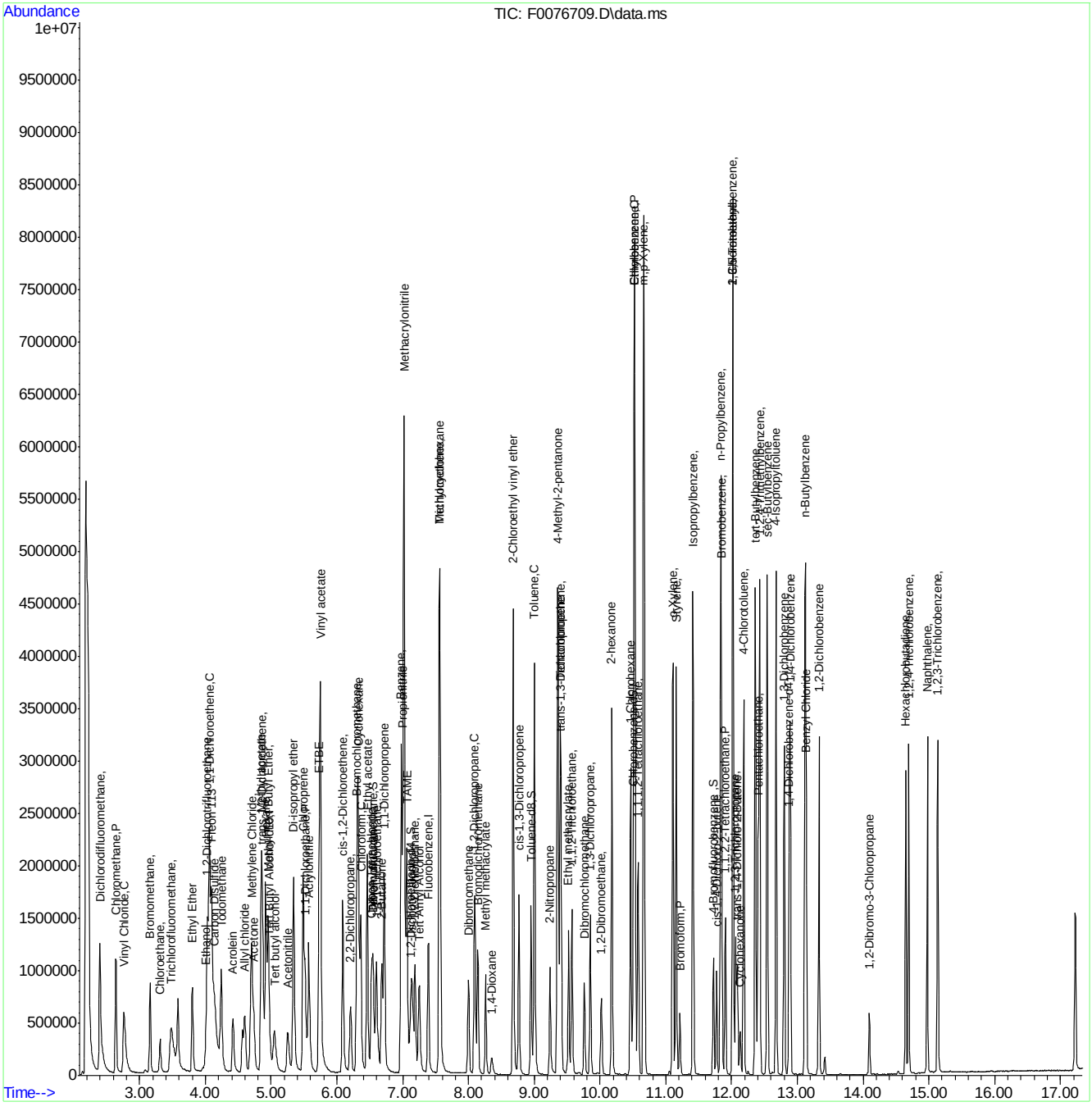
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.545	105	2873580	111.03	ug/Kg	100
92)	4-Isopropyltoluene	12.679	119	2192793	117.88	ug/Kg	99
93)	1,3-Dichlorobenzene	12.801	146	1049816	97.75	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	1047372	94.36	ug/Kg	92
95)	n-Butylbenzene	13.123	92	1294975	116.08	ug/Kg	98
96)	Benzyl Chloride	13.135	126	221658	126.27	ug/Kg#	90
97)	1,2-Dichlorobenzene	13.330	146	1036072	102.02	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.096	75	114076	106.66	ug/Kg	89
99)	Hexachlorobutadiene	14.650	225	363446	97.61	ug/Kg	90
100)	1,2,4-Trichlorobenzene	14.693	180	648840	97.25	ug/Kg	95
101)	Naphthalene	14.979	128	1756095	108.96	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	667613	96.65	ug/Kg	99
104)	Ethanol	4.010	45	132276	1802.80	ug/Kg	91
105)	Acrolein	4.417	56	486267	466.14	ug/Kg	93
106)	Tert butyl alcohol	5.050	59	638404	952.80	ug/Kg	96
107)	Isobutyl alcohol	7.137	42	308642	1865.83	ug/Kg	92
108)	Tert Amyl Alcohol	7.252	59	531142	945.96	ug/Kg	92
109)	1,4-Dioxane	8.353	88	129030	2005.65	ug/Kg	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076709.D
Acq On : 13 Apr 2016 11:12 am
Operator : ericp
Sample : IC2628-5 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 11:32:23 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:05:10 2016
Response via : Initial Calibration



041316APP9-F.m Wed Apr 13 14:56:10 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

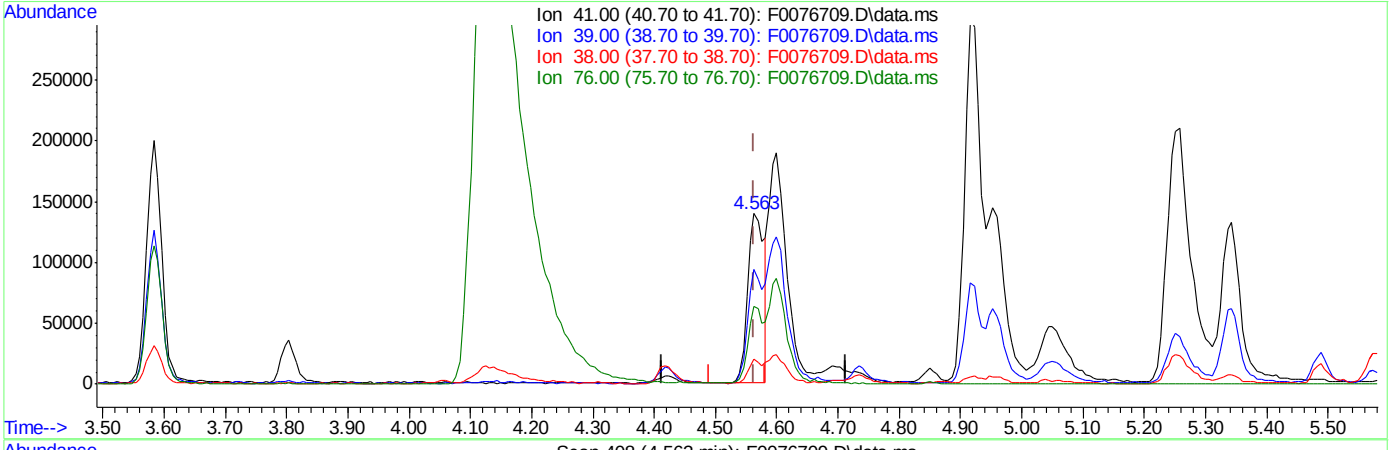
Sample Number:	VF2628-IC2628	**Method:**	SW846 8260B
Lab FileID:	F0076709.D	**Analyst approved:**	04/14/16 07:30 Eric Parrish
Injection Time:	04/13/16 11:12	**Supervisor approved:**	04/18/16 10:49 Juan Garcia

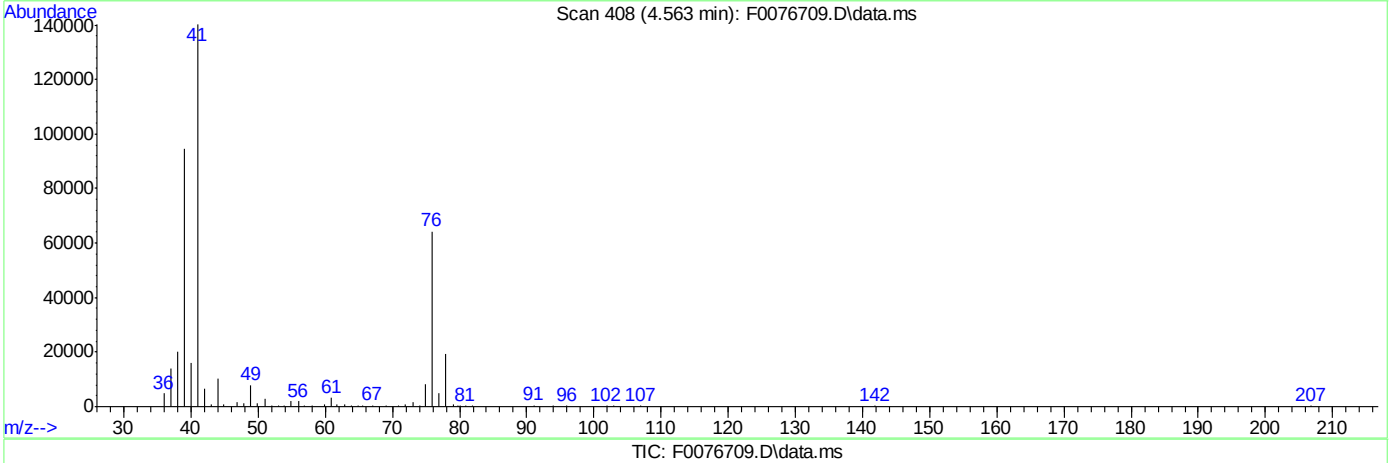
Parameter	CAS	Sig#	R.T. (min.)	Reason
Allyl chloride	107-05-1		4.60	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076709.D
Acq On : 13 Apr 2016 11:12 am
Operator : ericp
Sample : IC2628-5 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 11:31:51 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:05:10 2016
Response via : Initial Calibration





TIC: F0076709.D\data.ms

(14) Allyl chloride

4.563min (+0.000) 42.11ug/Kg

response 269433

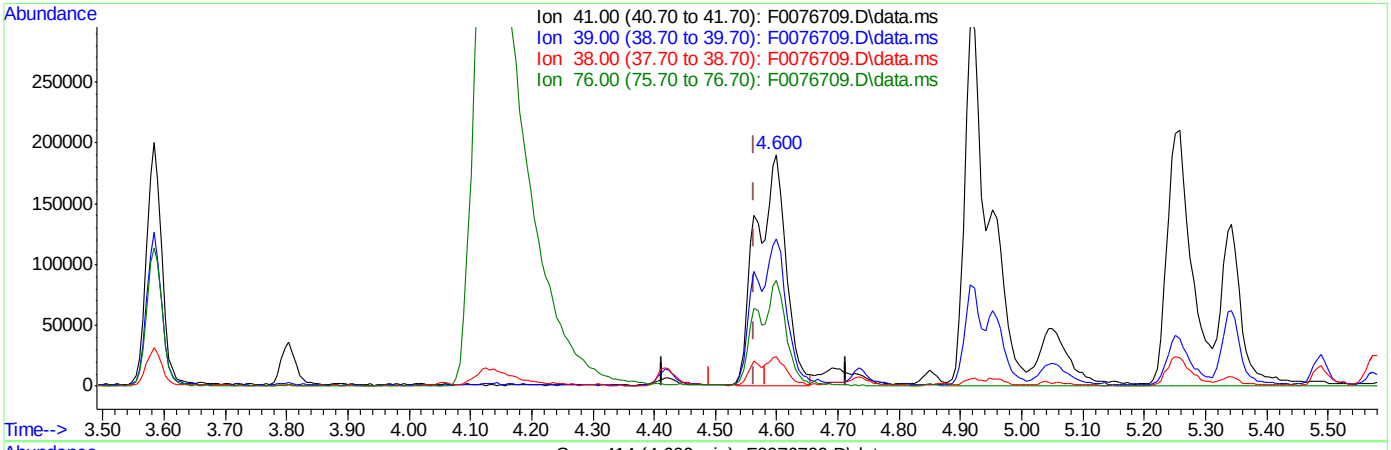
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	66.74
38.00	10.90	13.92
76.00	31.30	45.35

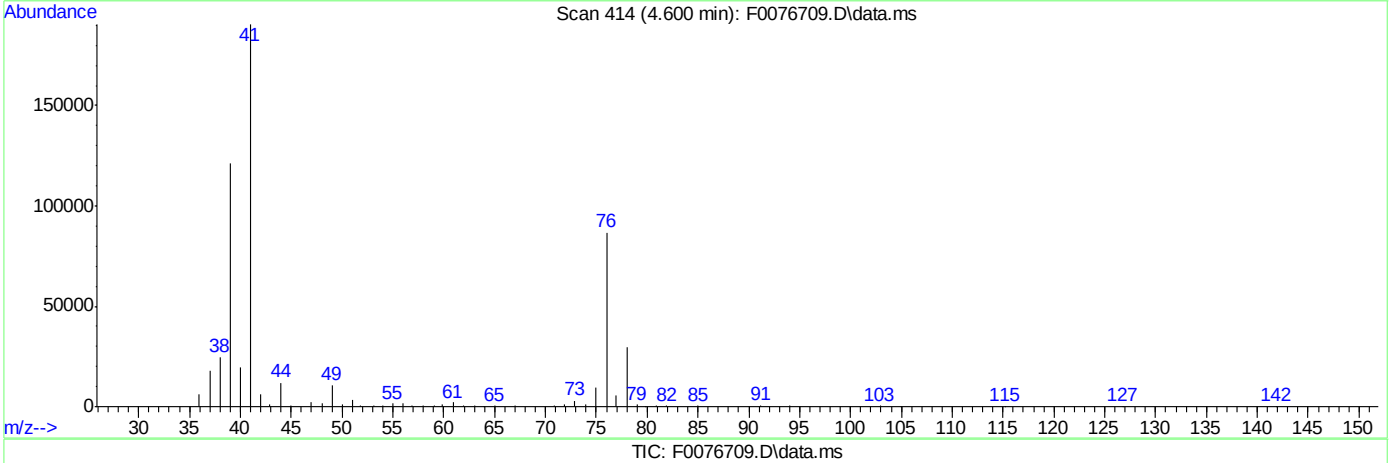
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076709.D
Acq On : 13 Apr 2016 11:12 am
Operator : ericp
Sample : IC2628-5 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 11:31:51 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:05:10 2016
Response via : Initial Calibration





TIC: F0076709.D\data.ms

(14) Allyl chloride

4.600min (+0.037) 100.27ug/Kg m

response 641576

Ion	Exp%	Act%
41.00	100	100
39.00	59.80	63.72
38.00	10.90	12.99
76.00	31.30	45.52

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/18/16 10:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:54:30 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1030724	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	779790	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	392351	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.983	65	152534	250.00	ug/Kg	0.01
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	238287	49.63	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.26%			
44) 1,2-Dichloroethane-d4	7.119	65	250726	49.66	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 99.32%			
55) Toluene-d8	8.950	98	983871	46.48	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 92.96%			
77) 4-Bromofluorobenzene	11.724	174	261169	49.32	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 98.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	1424440	159.13	ug/Kg	99
3) Chloromethane	2.635	50	1496941	151.62	ug/Kg	99
4) Vinyl Chloride	2.763	62	1534630	153.24	ug/Kg	98
5) Bromomethane	3.164	94	734777	135.47	ug/Kg	97
6) Chloroethane	3.310	64	324583	Below Cal		99
7) Trichlorofluoromethane	3.481	101	1376433	152.46	ug/Kg	98
8) Ethyl Ether	3.803	59	651613	156.73	ug/Kg	85
9) 1,2-Dichlorotrifluoroe...	4.028	67	1255267	148.34	ug/Kg	97
10) 1,1-Dichloroethene	4.059	61	1820884	156.19	ug/Kg	94
11) Freon 113	4.089	101	1134748	155.57	ug/Kg	95
12) Carbon Disulfide	4.125	76	3700858	155.90	ug/Kg	96
13) Iodomethane	4.241	142	1783297	154.22	ug/Kg	92
14) Allyl chloride	4.600	41	969921m	153.67	ug/Kg	
15) Methylene Chloride	4.703	49	1174873	145.93	ug/Kg	83
16) Acetone	4.734	43	1071597	779.75	ug/Kg	87
17) Methyl acetate	4.849	43	2376389	758.97	ug/Kg	83
18) trans-1,2-Dichloroethene	4.874	61	1343958	152.49	ug/Kg	92
19) Hexane	4.916	56	806970	153.74	ug/Kg	94
20) Methyl Tert Butyl Ether	4.953	73	2251598	156.15	ug/Kg	92
21) Acetonitrile	5.257	41	898198	1620.47	ug/Kg	99
22) Di-isopropyl ether	5.342	45	2385862	154.59	ug/Kg	87
23) Chloroprene	5.488	53	1551646	166.84	ug/Kg	96
24) 1,1-Dichloroethane	5.519	63	1686099	155.87	ug/Kg	98
25) Acrylonitrile	5.573	53	1532216	881.02	ug/Kg	93
26) ETBE	5.732	59	2514196	160.25	ug/Kg	97
27) Vinyl acetate	5.750	43	6985962	803.36	ug/Kg	89
28) cis-1,2-Dichloroethene	6.090	96	986689	141.74	ug/Kg	99
29) 2,2-Dichloropropane	6.206	77	535608	132.57	ug/Kg	99
30) Bromochloromethane	6.303	128	419597	140.81	ug/Kg	90
31) Cyclohexane	6.322	56	1904808	162.49	ug/Kg	95
32) Chloroform	6.358	83	1600140	146.00	ug/Kg	98
33) Ethyl acetate	6.455	43	3535430	839.71	ug/Kg	99
34) Tetrahydrofuran	6.553	42	227366	178.55	ug/Kg	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:54:30 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	958683	149.20	ug/Kg	95
37)	1,1,1-Trichloroethane	6.601	97	1018660	141.73	ug/Kg	95
38)	2-Butanone	6.681	43	1894096	848.73	ug/Kg	87
39)	1,1-Dichloropropene	6.717	75	1270520	153.62	ug/Kg	98
40)	Propionitrile	7.003	54	1234687	1661.51	ug/Kg	89
41)	Methacrylonitrile	7.015	41	4346297	1688.92	ug/Kg	92
42)	Benzene	6.979	78	3650425	144.57	ug/Kg	96
43)	TAME	7.058	73	2337799	156.81	ug/Kg	97
45)	1,2-Dichloroethane	7.185	62	996622	148.30	ug/Kg	94
46)	Trichloroethene	7.563	95	931192	144.57	ug/Kg	91
47)	Methylcyclohexane	7.563	83	1877303	163.65	ug/Kg	93
48)	Dibromomethane	8.001	93	472700	153.36	ug/Kg	93
49)	1,2-Dichloropropane	8.092	63	897461	153.34	ug/Kg	93
50)	Bromodichloromethane	8.141	83	1019281	159.47	ug/Kg	99
51)	Methyl methacrylate	8.256	41	584375	170.35	ug/Kg	81
52)	2-Chloroethyl vinyl ether	8.676	63	2592744	836.46	ug/Kg	92
53)	cis-1,3-Dichloropropene	8.767	75	1304271	163.60	ug/Kg	98
56)	Toluene	9.004	91	3642041	132.19	ug/Kg	99
57)	2-Nitropropane	9.236	41	769038	899.49	ug/Kg	91
58)	4-Methyl-2-pentanone	9.351	43	3716521	717.77	ug/Kg	89
59)	trans-1,3-Dichloropropene	9.406	75	1062499	148.14	ug/Kg	96
60)	Tetrachloroethene	9.394	166	849219	136.52	ug/Kg	96
61)	Ethyl methacrylate	9.522	69	964463	156.91	ug/Kg	93
62)	1,1,2-Trichloroethane	9.570	83	623010	138.06	ug/Kg	95
63)	Dibromochloromethane	9.759	129	648905	152.77	ug/Kg	98
64)	1,3-Dichloropropane	9.850	76	1181309	136.10	ug/Kg	95
65)	1,2-Dibromoethane	10.020	107	674843	142.50	ug/Kg	99
66)	2-hexanone	10.179	43	2743347	762.09	ug/Kg	90
67)	1-Chlorohexane	10.465	91	1235616	170.89	ug/Kg	94
68)	Ethylbenzene	10.525	91	3897045	141.47	ug/Kg	98
69)	Chlorobenzene	10.525	112	2196174	137.47	ug/Kg	90
70)	1,1,1,2-Tetrachloroethane	10.580	131	707681	158.04	ug/Kg	98
71)	m,p-Xylene	10.665	91	5565773	288.11	ug/Kg	94
72)	o-Xylene	11.109	91	3061702	172.29	ug/Kg	99
73)	Styrene	11.158	104	2334760	172.15	ug/Kg	96
74)	Bromoform	11.213	173	390292	186.48	ug/Kg	96
75)	Isopropylbenzene	11.414	105	3725970	168.58	ug/Kg	99
78)	cis-1,4-Dichloro-2-butene	11.773	53	287875	150.53	ug/Kg	94
79)	n-Propylbenzene	11.833	91	4404805	145.26	ug/Kg	63
80)	Bromobenzene	11.845	156	904178	141.20	ug/Kg	98
81)	1,1,2,2-Tetrachloroethane	11.906	83	1026814	143.37	ug/Kg	98
82)	1,3,5-Trimethylbenzene	12.022	105	3303369	154.42	ug/Kg	87
83)	2-Chlorotoluene	12.016	91	2998909	142.71	ug/Kg	92
84)	trans-1,4-Dichloro-2-B...	12.089	53	260091	143.73	ug/Kg#	78
85)	1,2,3-Trichloropropane	12.065	110	243334	142.55	ug/Kg	95
86)	Cyclohexanone	12.131	55	217272	791.37	ug/Kg	93
87)	4-Chlorotoluene	12.186	91	2677403	145.19	ug/Kg	95
88)	tert-Butylbenzene	12.357	91	2052204	158.67	ug/Kg	96
89)	1,2,4-Trimethylbenzene	12.430	105	3140299	152.54	ug/Kg	99
90)	Pentachloroethane	12.405	167	483175	162.55	ug/Kg	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:54:30 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.545	105	4391631	152.38	ug/Kg	97
92)	4-Isopropyltoluene	12.679	119	3375740	160.81	ug/Kg	97
93)	1,3-Dichlorobenzene	12.801	146	1655417	142.12	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	1638807	137.07	ug/Kg	92
95)	n-Butylbenzene	13.117	92	2057691	164.02	ug/Kg	92
96)	Benzyl Chloride	13.135	126	363163	180.40	ug/Kg#	76
97)	1,2-Dichlorobenzene	13.330	146	1614654	145.34	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.096	75	182489	154.55	ug/Kg	94
99)	Hexachlorobutadiene	14.650	225	586231	145.21	ug/Kg	90
100)	1,2,4-Trichlorobenzene	14.693	180	1045484	144.62	ug/Kg	96
101)	Naphthalene	14.979	128	2745389	153.60	ug/Kg	98
102)	1,2,3-Trichlorobenzene	15.137	180	1048241	140.23	ug/Kg	98
104)	Ethanol	4.059	45	211953m	2893.64	ug/Kg	
105)	Acrolein	4.417	56	759180	724.44	ug/Kg	95
106)	Tert butyl alcohol	5.062	59	1015779	1502.84	ug/Kg	92
107)	Isobutyl alcohol	7.143	42	495079	2978.84	ug/Kg	92
108)	Tert Amyl Alcohol	7.246	59	832574	1471.96	ug/Kg	91
109)	1,4-Dioxane	8.360	88	214491	3272.03	ug/Kg	82

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

7.6.6

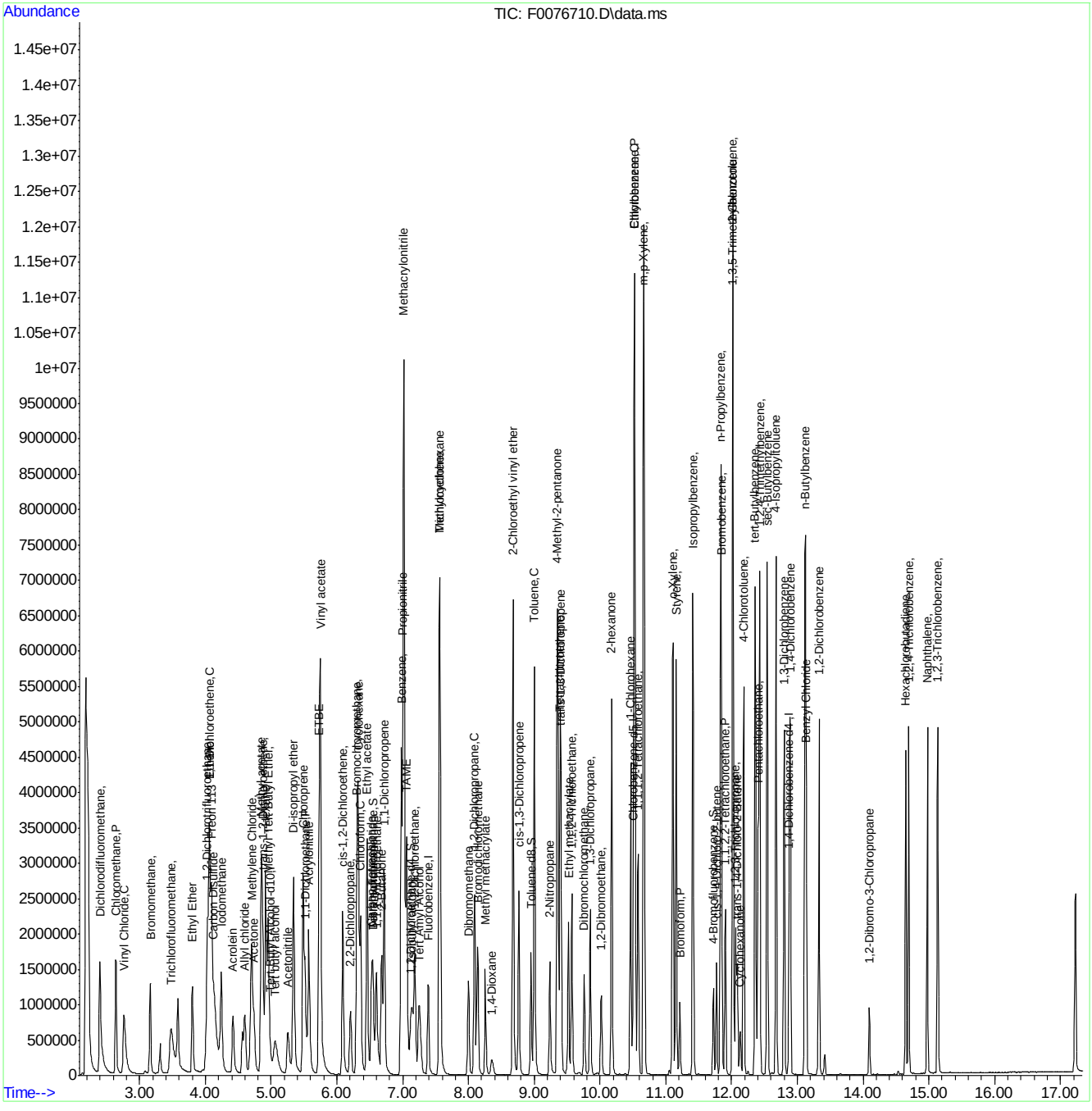
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:54:30 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

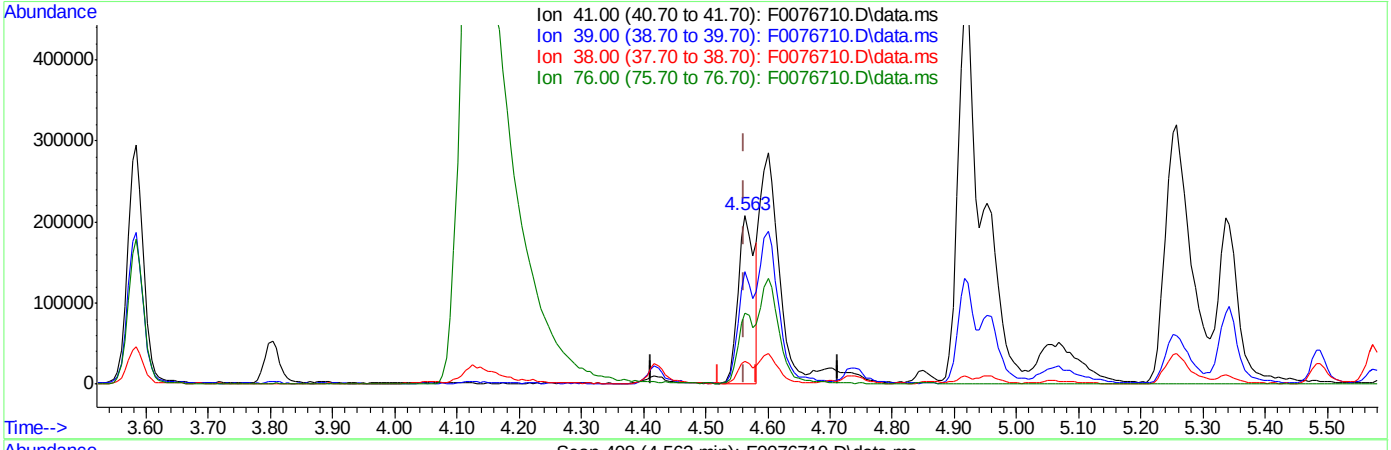
Sample Number:	VF2628-IC2628	**Method:**	SW846 8260B
Lab FileID:	F0076710.D	**Analyst approved:**	04/14/16 07:30 Eric Parrish
Injection Time:	04/13/16 11:38	**Supervisor approved:**	04/18/16 10:49 Juan Garcia

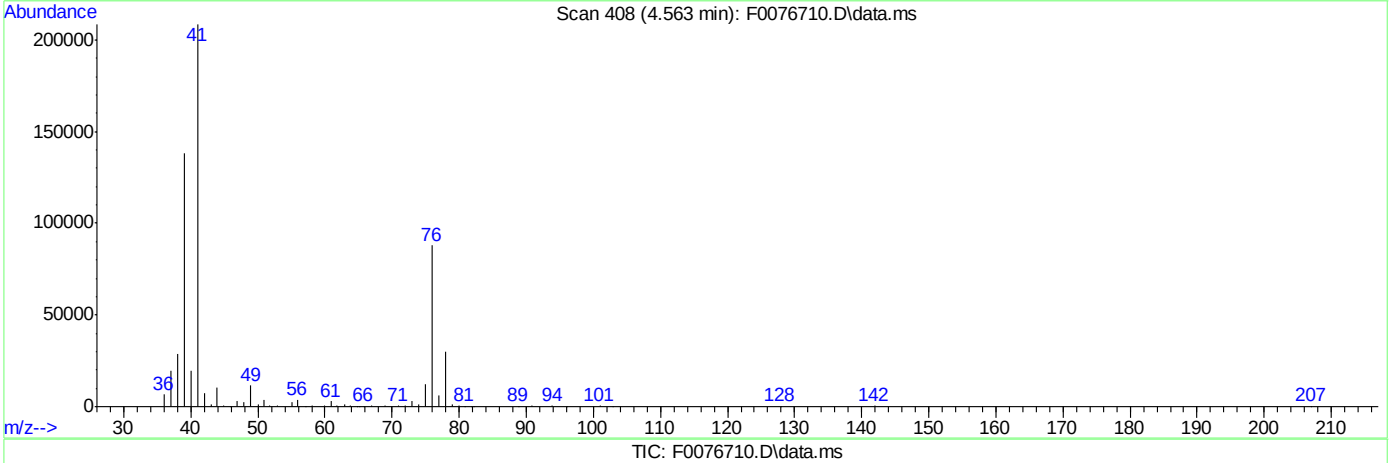
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		4.06	Split peak
Allyl chloride	107-05-1		4.60	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:53:37 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration





TIC: F0076710.D\data.ms

(14) Allyl chloride

4.563min (+0.000) 62.23ug/Kg

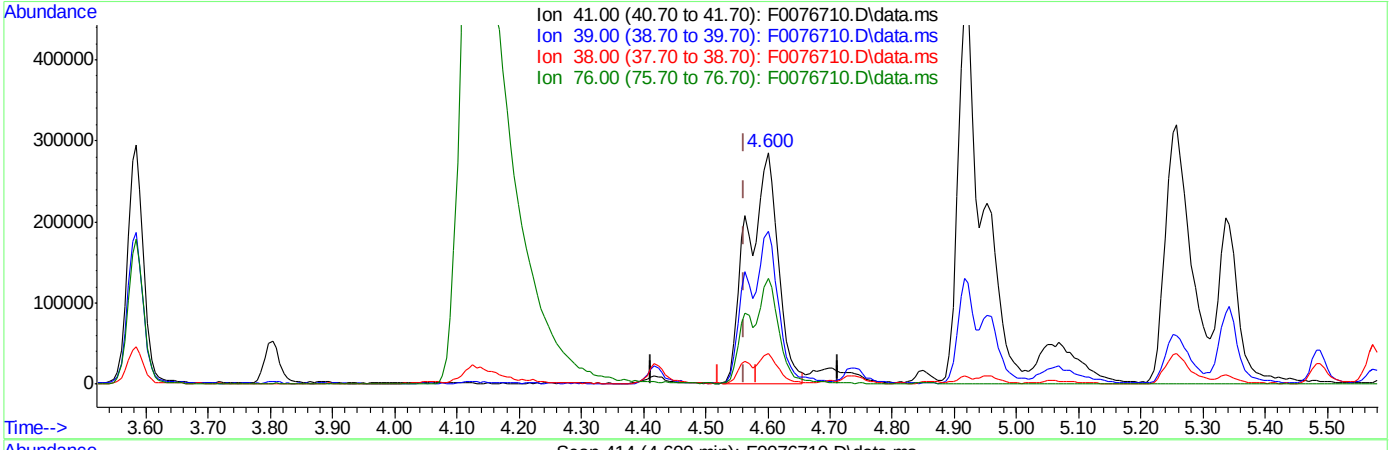
response 392796

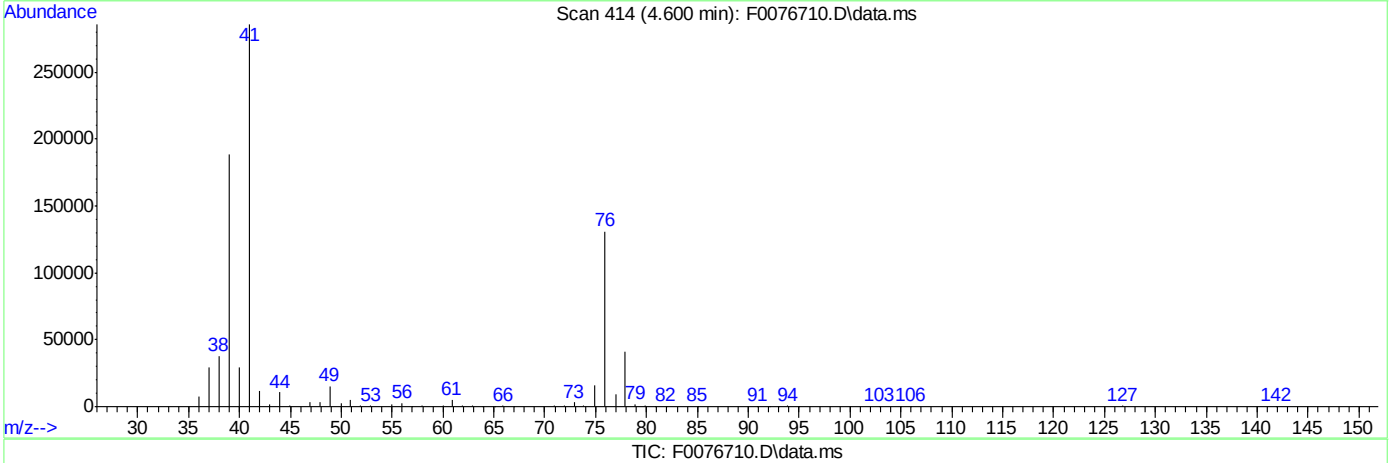
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	66.09
38.00	10.90	13.18
76.00	31.30	41.80

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:53:37 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration





TIC: F0076710.D\data.ms

(14) Allyl chloride

4.600min (+0.037) 153.67ug/Kg m

response 969921

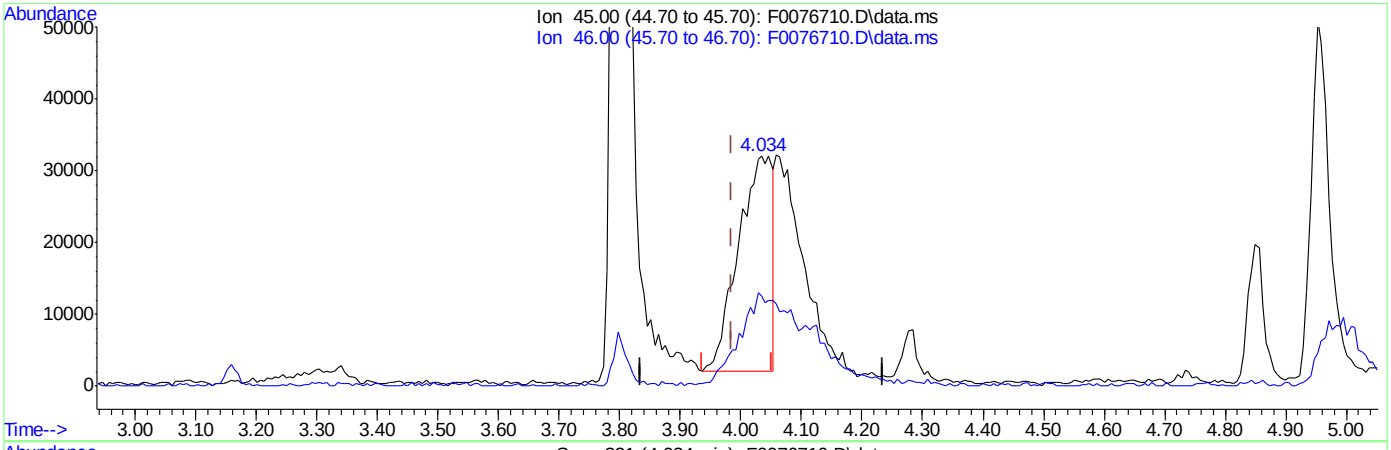
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	65.86
38.00	10.90	13.35
76.00	31.30	45.78

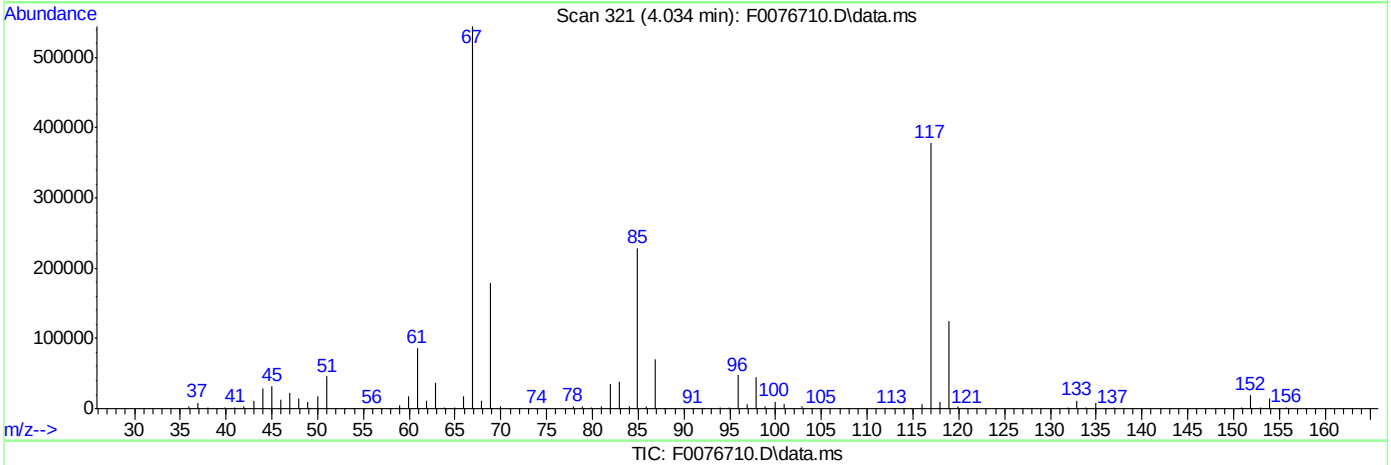
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:53:37 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration





TIC: F0076710.D\data.ms

(104) Ethanol

4.034min (+0.049) 1582.64ug/Kg

response 115925

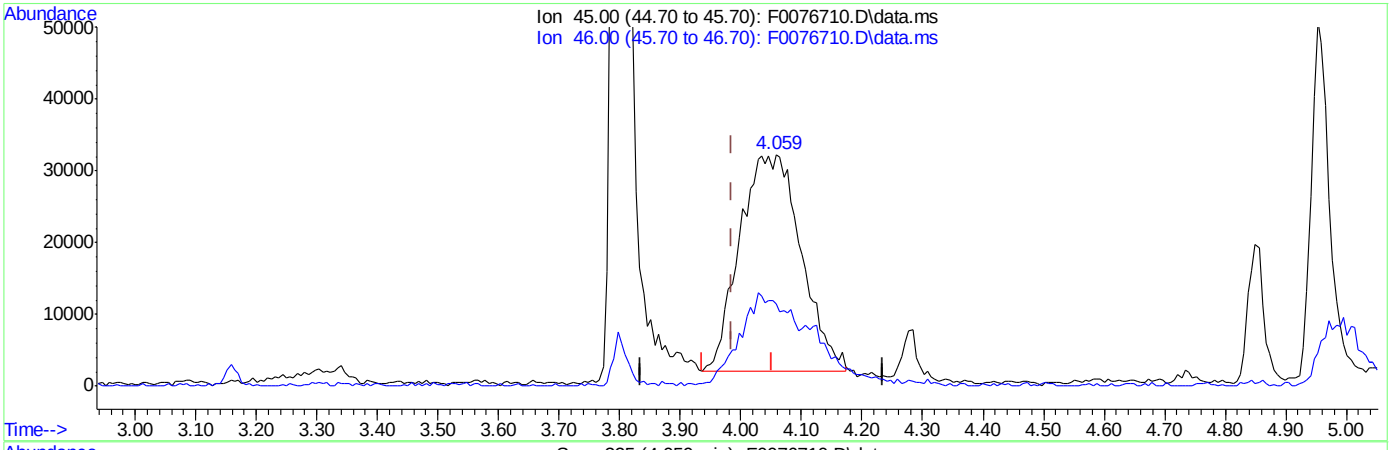
Ion	Exp%	Act%
45.00	100	100
46.00	35.00	40.51
0.00	0.00	0.00
0.00	0.00	0.00

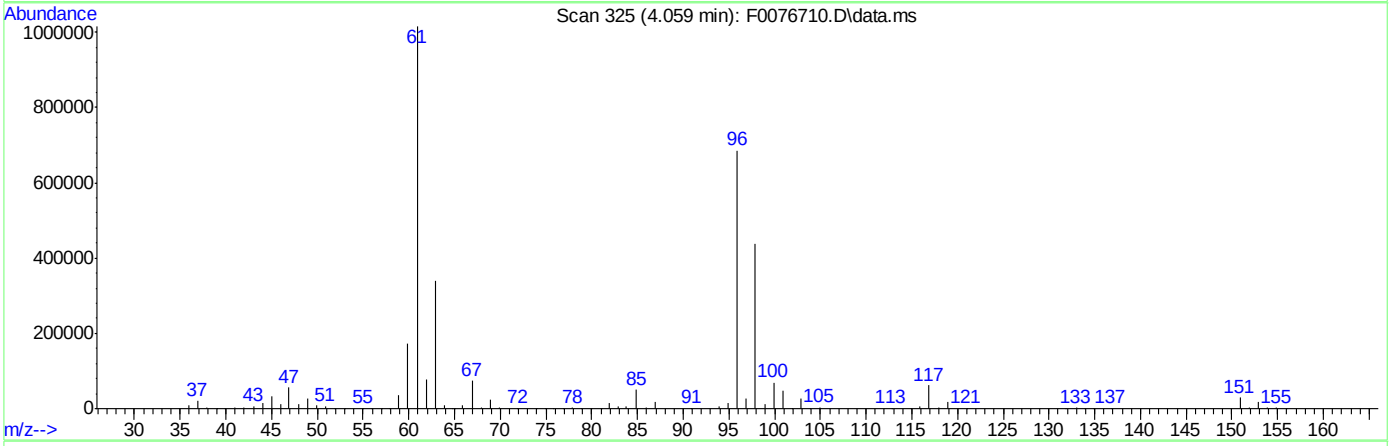
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076710.D
Acq On : 13 Apr 2016 11:38 am
Operator : ericp
Sample : IC2628-6 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 11:53:37 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:33:30 2016
Response via : Initial Calibration





TIC: F0076710.D\data.ms

(104) Ethanol

4.059min (+0.074) 2893.64ug/Kg m

response 211953

Ion	Exp%	Act%
45.00	100	100
46.00	35.00	35.30
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33359

F0076711.D

Manual Integrations APPROVED (compounds with "m" flag)

Juan Garcia
04/18/16 10:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076711.D
Acq On : 13 Apr 2016 12:03 pm
Operator : ericp
Sample : IC2628-7 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 13 12:20:39 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:56:59 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1151332	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	859122	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.873	152	440487	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.983	65	136213	250.00	ug/Kg	0.01
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	263509	49.20	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.40%			
44) 1,2-Dichloroethane-d4	7.118	65	275789	48.96	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 97.92%			
55) Toluene-d8	8.950	98	1101757	47.81	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 95.62%			
77) 4-Bromofluorobenzene	11.724	174	301754	50.87	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 101.74%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	2003909	198.40	ug/Kg	99
3) Chloromethane	2.641	50	2118839	191.78	ug/Kg	98
4) Vinyl Chloride	2.763	62	2120067	188.84	ug/Kg	98
5) Bromomethane	3.158	94	966539	162.15	ug/Kg	98
6) Chloroethane	3.310	64	439200	Below Cal		99
7) Trichlorofluoromethane	3.474	101	1862767	184.21	ug/Kg	99
8) Ethyl Ether	3.803	59	918222	196.26	ug/Kg	87
9) 1,2-Dichlorotrifluoroe...	4.028	67	1722220	182.53	ug/Kg	99
10) 1,1-Dichloroethene	4.058	61	2519407	192.14	ug/Kg	93
11) Freon 113	4.089	101	1553473	189.49	ug/Kg	96
12) Carbon Disulfide	4.131	76	5074825	190.13	ug/Kg	95
13) Iodomethane	4.241	142	2481062	191.19	ug/Kg	94
14) Allyl chloride	4.594	41	1353151	191.15	ug/Kg	88
15) Methylene Chloride	4.703	49	1686363	190.80	ug/Kg	84
16) Acetone	4.740	43	1529591	989.87	ug/Kg	90
17) Methyl acetate	4.849	43	3490180	995.94	ug/Kg	88
18) trans-1,2-Dichloroethene	4.867	61	1993059	201.89	ug/Kg	97
19) Hexane	4.916	56	1207699	205.13	ug/Kg	94
20) Methyl Tert Butyl Ether	4.953	73	3259432	200.99	ug/Kg	97
21) Acetonitrile	5.257	41	1259345	2007.16	ug/Kg	99
22) Di-isopropyl ether	5.342	45	3817154	220.29	ug/Kg	89
23) Chloroprene	5.488	53	2137630	201.99	ug/Kg	98
24) 1,1-Dichloroethane	5.518	63	2386173	196.20	ug/Kg	100
25) Acrylonitrile	5.573	53	1938429	969.60	ug/Kg	94
26) ETBE	5.731	59	3675960	207.39	ug/Kg	95
27) Vinyl acetate	5.750	43	8762492	891.52	ug/Kg	84
28) cis-1,2-Dichloroethene	6.090	96	1458864	189.35	ug/Kg	99
29) 2,2-Dichloropropane	6.206	77	713561	161.24	ug/Kg	98
30) Bromochloromethane	6.303	128	620456	188.32	ug/Kg	92
31) Cyclohexane	6.321	56	2696973	203.15	ug/Kg	93
32) Chloroform	6.364	83	2276683	186.80	ug/Kg	97
33) Ethyl acetate	6.455	43	4509920	940.21	ug/Kg	98
34) Tetrahydrofuran	6.547	42	296002	183.82	ug/Kg	93

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076711.D
Acq On : 13 Apr 2016 12:03 pm
Operator : ericp
Sample : IC2628-7 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 13 12:20:39 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:56:59 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.534	117	1391021	193.98	ug/Kg	96
37)	1,1,1-Trichloroethane	6.601	97	1429468	179.71	ug/Kg	97
38)	2-Butanone	6.674	43	2449276	961.44	ug/Kg	89
39)	1,1-Dichloropropene	6.717	75	1778056	191.69	ug/Kg	97
40)	Propionitrile	7.003	54	1560556	1846.90	ug/Kg	95
41)	Methacrylonitrile	7.015	41	5454372	1858.47	ug/Kg	90
42)	Benzene	6.978	78	5105797	182.12	ug/Kg	95
43)	TAME	7.058	73	3382259	201.58	ug/Kg	97
45)	1,2-Dichloroethane	7.185	62	1409780	188.16	ug/Kg	92
46)	Trichloroethene	7.562	95	1304935	182.47	ug/Kg	92
47)	Methylcyclohexane	7.562	83	2661069	204.57	ug/Kg	92
48)	Dibromomethane	8.000	93	665540	192.59	ug/Kg	94
49)	1,2-Dichloropropane	8.092	63	1305295	198.92	ug/Kg	93
50)	Bromodichloromethane	8.140	83	1501376	208.10	ug/Kg	99
51)	Methyl methacrylate	8.256	41	807287	206.02	ug/Kg	79
52)	2-Chloroethyl vinyl ether	8.676	63	3510720	994.85	ug/Kg	92
53)	cis-1,3-Dichloropropene	8.767	75	1894410	209.57	ug/Kg	98
56)	Toluene	9.004	91	4948936	166.32	ug/Kg	96
57)	2-Nitropropane	9.235	41	1041276	1069.90	ug/Kg	89
58)	4-Methyl-2-pentanone	9.351	43	4657036	822.25	ug/Kg	86
59)	trans-1,3-Dichloropropene	9.406	75	1531175	194.17	ug/Kg	90
60)	Tetrachloroethene	9.400	166	1195506	177.09	ug/Kg	100
61)	Ethyl methacrylate	9.521	69	1370116	200.78	ug/Kg	92
62)	1,1,2-Trichloroethane	9.570	83	860108	175.33	ug/Kg	96
63)	Dibromochloromethane	9.759	129	963315	205.21	ug/Kg	98
64)	1,3-Dichloropropane	9.850	76	1711883	181.82	ug/Kg	94
65)	1,2-Dibromoethane	10.020	107	970821	187.63	ug/Kg	100
66)	2-hexanone	10.178	43	3470984	872.84	ug/Kg	87
67)	1-Chlorohexane	10.464	91	1729734	212.21	ug/Kg	95
68)	Ethylbenzene	10.525	91	5248303	174.58	ug/Kg	94
69)	Chlorobenzene	10.525	112	3088842	177.97	ug/Kg	90
70)	1,1,1,2-Tetrachloroethane	10.580	131	1048191	210.59	ug/Kg	99
71)	m,p-Xylene	10.665	91	6947663	328.60	ug/Kg	86
72)	o-Xylene	11.109	91	4245246	190.17	ug/Kg	97
73)	Styrene	11.158	104	3315724	197.25	ug/Kg	94
74)	Bromoform	11.213	173	575416	208.48	ug/Kg	97
75)	Isopropylbenzene	11.413	105	5045381	183.54	ug/Kg	95
78)	cis-1,4-Dichloro-2-butene	11.772	53	396377	184.51	ug/Kg	96
79)	n-Propylbenzene	11.833	91	5697441	168.24	ug/Kg	67
80)	Bromobenzene	11.845	156	1301531	182.82	ug/Kg	99
81)	1,1,2,2-Tetrachloroethane	11.906	83	1423659	178.37	ug/Kg	98
82)	1,3,5-Trimethylbenzene	12.022	105	4439547	183.95	ug/Kg	91
83)	2-Chlorotoluene	12.022	91	4093568	174.93	ug/Kg	95
84)	trans-1,4-Dichloro-2-B...	12.089	53	362369	179.62	ug/Kg#	79
85)	1,2,3-Trichloropropane	12.064	110	329757	173.51	ug/Kg	98
86)	Cyclohexanone	12.131	55	288098	926.15	ug/Kg	94
87)	4-Chlorotoluene	12.186	91	3743759	181.80	ug/Kg	97
88)	tert-Butylbenzene	12.362	91	2881079	196.52	ug/Kg	92
89)	1,2,4-Trimethylbenzene	12.429	105	4326279	186.66	ug/Kg	96
90)	Pentachloroethane	12.405	167	725581	214.43	ug/Kg	89

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076711.D
Acq On : 13 Apr 2016 12:03 pm
Operator : ericp
Sample : IC2628-7 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 13 12:20:39 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:56:59 2016
Response via : Initial Calibration

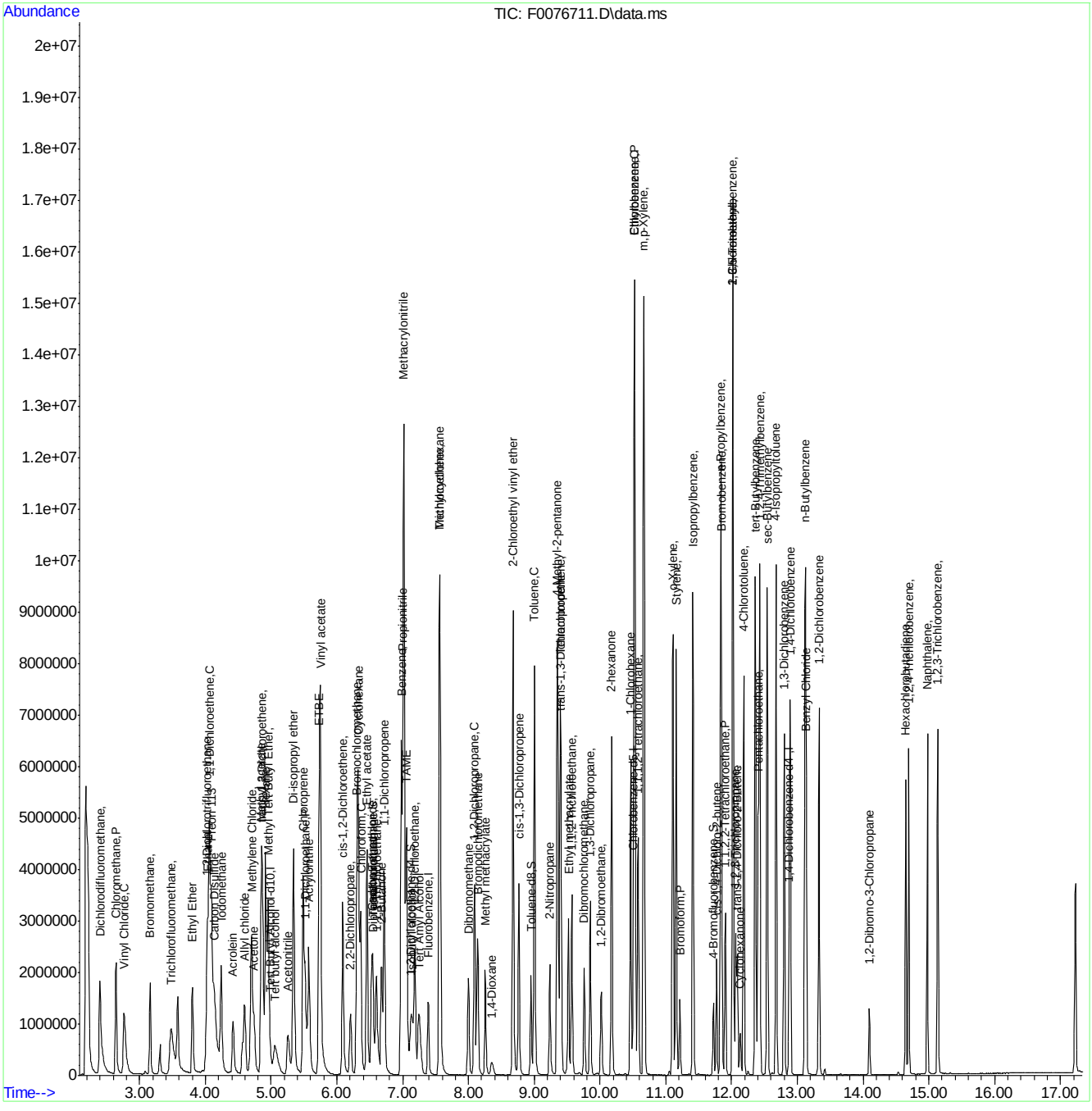
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.545	105	5714088	176.13	ug/Kg	91
92)	4-Isopropyltoluene	12.679	119	4550476	176.33	ug/Kg	94
93)	1,3-Dichlorobenzene	12.800	146	2230063	172.04	ug/Kg	93
94)	1,4-Dichlorobenzene	12.892	146	2290220	173.10	ug/Kg	91
95)	n-Butylbenzene	13.123	92	2700000	173.53	ug/Kg	94
96)	Benzyl Chloride	13.135	126	518348	221.86	ug/Kg#	74
97)	1,2-Dichlorobenzene	13.330	146	2286051	184.24	ug/Kg	96
98)	1,2-Dibromo-3-Chloropr...	14.096	75	245432	184.21	ug/Kg	95
99)	Hexachlorobutadiene	14.650	225	718129	159.29	ug/Kg	90
100)	1,2,4-Trichlorobenzene	14.692	180	1357464	168.26	ug/Kg	96
101)	Naphthalene	14.978	128	3607941	179.08	ug/Kg	96
102)	1,2,3-Trichlorobenzene	15.137	180	1416447	170.63	ug/Kg	99
104)	Ethanol	4.040	45	253350m	3896.26	ug/Kg	
105)	Acrolein	4.417	56	985700	1059.31	ug/Kg	93
106)	Tert butyl alcohol	5.056	59	1244564	2061.31	ug/Kg	98
107)	Isobutyl alcohol	7.143	42	615609	4152.76	ug/Kg	90
108)	Tert Amyl Alcohol	7.246	59	1075874	2136.67	ug/Kg	90
109)	1,4-Dioxane	8.359	88	277218	4665.13	ug/Kg	78

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076711.D
Acq On : 13 Apr 2016 12:03 pm
Operator : ericp
Sample : IC2628-7 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 13 12:20:39 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:56:59 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

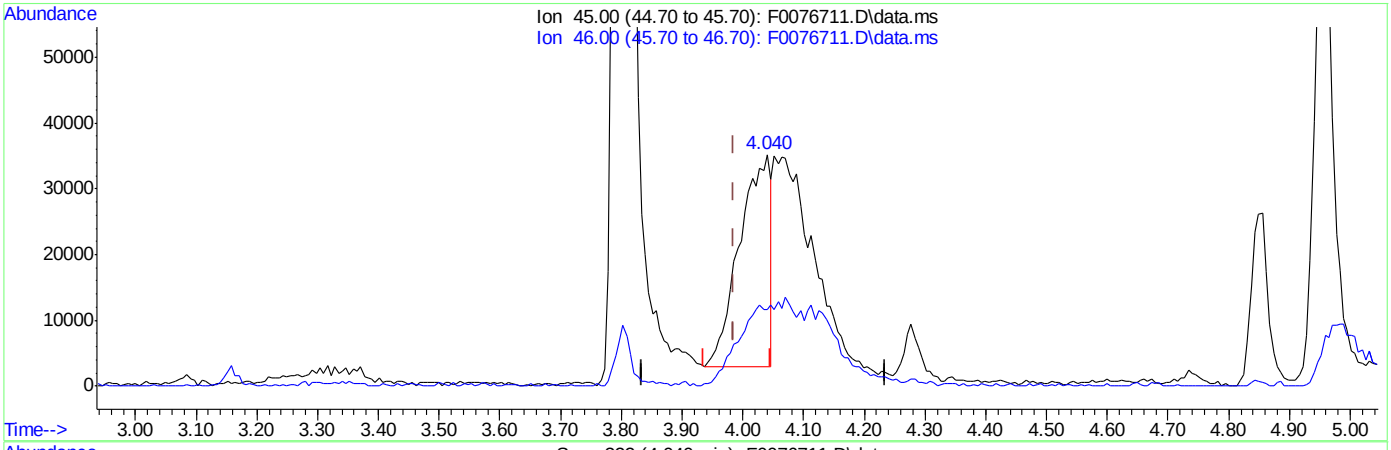
Sample Number:	VF2628-IC2628	**Method:**	SW846 8260B
Lab FileID:	F0076711.D	**Analyst approved:**	04/14/16 07:30 Eric Parrish
Injection Time:	04/13/16 12:03	**Supervisor approved:**	04/18/16 10:49 Juan Garcia

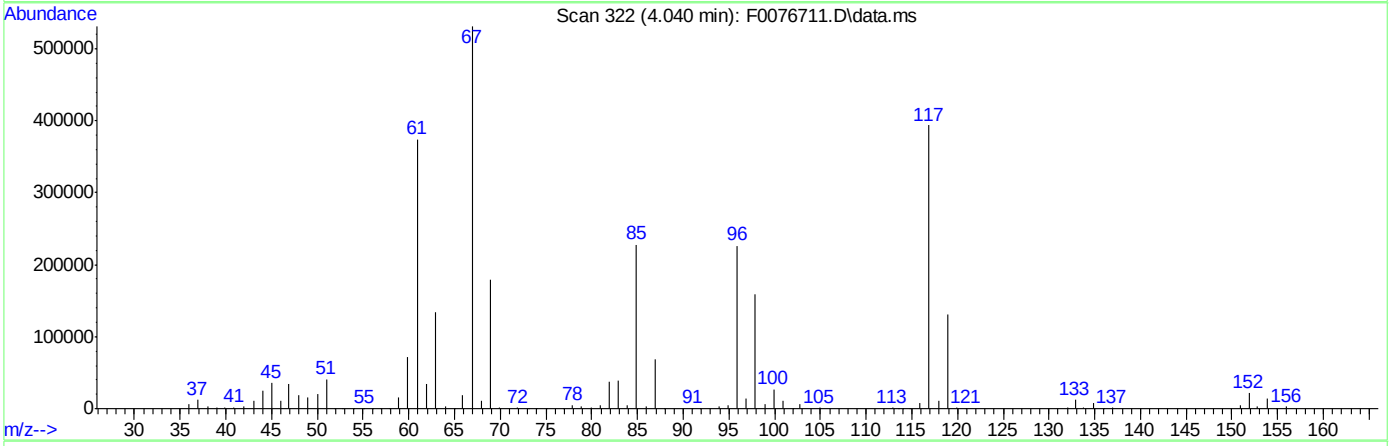
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		4.04	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076711.D
Acq On : 13 Apr 2016 12:03 pm
Operator : ericp
Sample : IC2628-7 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 13 12:19:20 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:56:59 2016
Response via : Initial Calibration





TIC: F0076711.D\data.ms

(104) Ethanol

4.040min (+0.055) 1764.23ug/Kg

response 114717

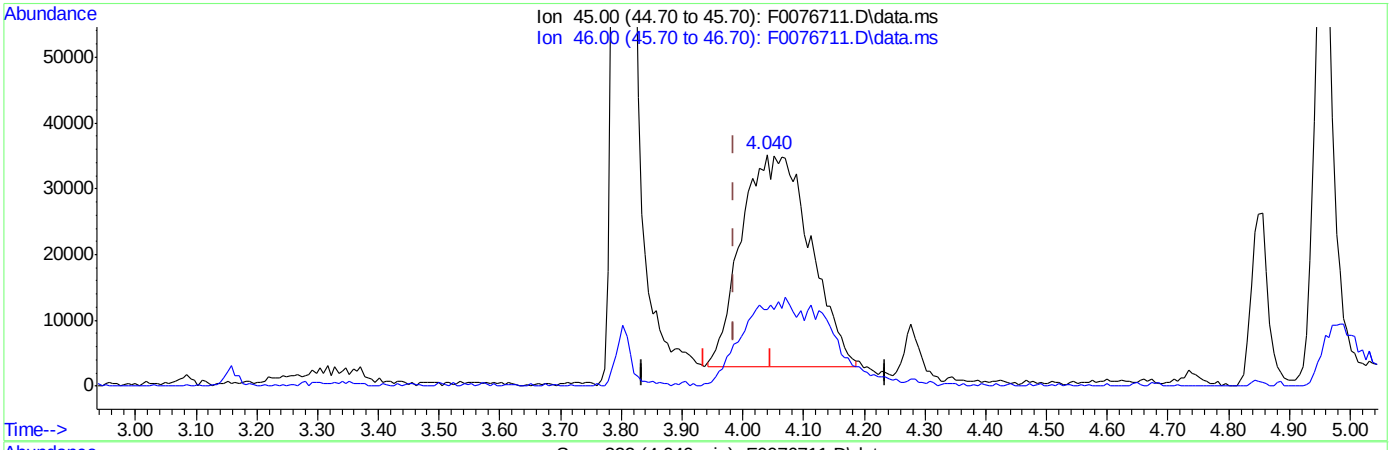
Ion	Exp%	Act%
45.00	100	100
46.00	35.00	35.04
0.00	0.00	0.00
0.00	0.00	0.00

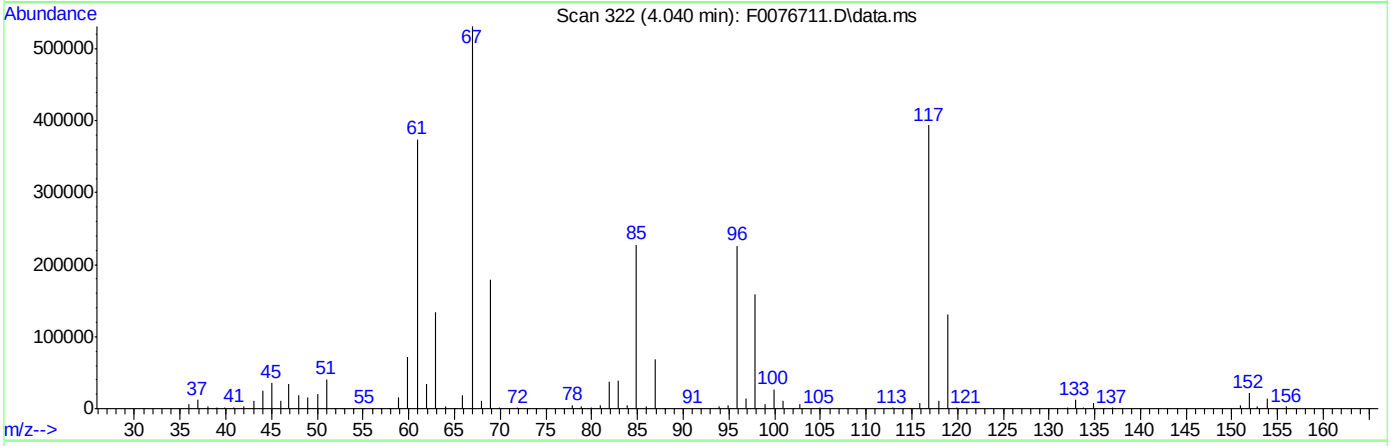
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076711.D
Acq On : 13 Apr 2016 12:03 pm
Operator : ericp
Sample : IC2628-7 Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 13 12:19:20 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 11:56:59 2016
Response via : Initial Calibration





TIC: F0076711.D\data.ms

(104) Ethanol

4.040min (+0.055) 3896.26ug/Kg m

response 253350

Ion	Exp%	Act%
45.00	100	100
46.00	35.00	33.25
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33359

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076714.D
Acq On : 13 Apr 2016 1:21 pm
Operator : ericp
Sample : ICV2628-4,BS Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 14 09:35:51 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1030020	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	767337	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	373476	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.965	65	122889	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	237701	49.72	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.44%			
44) 1,2-Dichloroethane-d4	7.119	65	255836	50.92	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 101.84%			
55) Toluene-d8	8.950	98	986162	48.21	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 96.42%			
77) 4-Bromofluorobenzene	11.724	174	253738	50.32	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 100.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	477598	52.91	ug/Kg	99
3) Chloromethane	2.635	50	547387	55.71	ug/Kg	99
4) Vinyl Chloride	2.757	62	529768	53.17	ug/Kg	97
5) Bromomethane	3.158	94	276054	53.20	ug/Kg	96
6) Chloroethane	3.316	64	199278	58.17	ug/Kg	95
7) Trichlorofluoromethane	3.481	101	476386	53.26	ug/Kg	97
8) Ethyl Ether	3.803	59	222690	53.35	ug/Kg	85
9) 1,2-Dichlorotrifluoroe...	4.028	67	443848	53.25	ug/Kg	99
10) 1,1-Dichloroethene	4.059	61	608313	52.15	ug/Kg	94
11) Freon 113	4.089	101	338303	46.47	ug/Kg	96
12) Carbon Disulfide	4.125	76	1177934	49.68	ug/Kg	96
13) Iodomethane	4.241	142	597430	51.79	ug/Kg	92
14) Allyl chloride	4.600	41	280870	44.63	ug/Kg	90
15) Methylene Chloride	4.703	49	447622	58.02	ug/Kg	83
16) Acetone	4.734	43	326120	236.25	ug/Kg	86
17) Methyl acetate	4.849	43	767504	244.95	ug/Kg	84
18) trans-1,2-Dichloroethene	4.868	61	487760	55.15	ug/Kg	92
19) Hexane	4.916	56	272095	51.47	ug/Kg	93
20) Methyl Tert Butyl Ether	4.953	73	765384	52.72	ug/Kg	94
21) Acetonitrile	5.251	41	248665	442.78	ug/Kg	99
22) Di-isopropyl ether	5.342	45	825346	52.48	ug/Kg	87
23) Chloroprene	5.482	53	473642	49.96	ug/Kg	98
24) 1,1-Dichloroethane	5.519	63	595938	54.92	ug/Kg	99
25) Acrylonitrile	5.573	53	481867	270.59	ug/Kg	92
26) ETBE	5.732	59	858650	53.86	ug/Kg	97
27) Vinyl acetate	5.750	43	2685979	310.27	ug/Kg	94
28) cis-1,2-Dichloroethene	6.090	96	323588	47.31	ug/Kg	99
29) 2,2-Dichloropropane	6.206	77	203815	52.95	ug/Kg	98
30) Bromochloromethane	6.303	128	139286	47.65	ug/Kg#	89
31) Cyclohexane	6.322	56	590259	49.59	ug/Kg	95
32) Chloroform	6.358	83	560660	51.91	ug/Kg	96
33) Ethyl acetate	6.455	43	1196328	281.18	ug/Kg	99
34) Tetrahydrofuran	6.553	42	68821	57.72	ug/Kg	91

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076714.D
Acq On : 13 Apr 2016 1:21 pm
Operator : ericp
Sample : ICV2628-4,BS Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 14 09:35:51 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Carbon Tetrachloride	6.529	117	311947	48.83	ug/Kg	94
37) 1,1,1-Trichloroethane	6.595	97	336155	47.93	ug/Kg	94
38) 2-Butanone	6.681	43	581487	256.55	ug/Kg	91
39) 1,1-Dichloropropene	6.717	75	423495	51.34	ug/Kg	97
40) Propionitrile	6.997	54	378243	505.90	ug/Kg	75
41) Methacrylonitrile	7.015	41	1470093	565.62	ug/Kg	97
42) Benzene	6.979	78	1276320	51.55	ug/Kg	99
43) TAME	7.058	73	761739	50.69	ug/Kg	96
45) 1,2-Dichloroethane	7.186	62	354493	53.34	ug/Kg	92
46) Trichloroethene	7.557	95	319213	50.53	ug/Kg	84
47) Methylcyclohexane	7.563	83	575970	49.33	ug/Kg	93
48) Dibromomethane	8.001	93	161928	52.65	ug/Kg	92
49) 1,2-Dichloropropane	8.092	63	306507	52.25	ug/Kg	90
50) Bromodichloromethane	8.141	83	350975	54.06	ug/Kg	98
51) Methyl methacrylate	8.256	41	187524	53.26	ug/Kg	85
52) 2-Chloroethyl vinyl ether	8.676	63	906700	287.41	ug/Kg	92
53) cis-1,3-Dichloropropene	8.767	75	447519	54.96	ug/Kg	96
56) Toluene	9.005	91	1292107	49.82	ug/Kg	98
57) 2-Nitropropane	9.236	41	210555	239.83	ug/Kg	90
58) 4-Methyl-2-pentanone	9.351	43	1210760	245.58	ug/Kg	94
59) trans-1,3-Dichloropropene	9.406	75	385643	54.98	ug/Kg	85
60) Tetrachloroethene	9.394	166	276397	46.60	ug/Kg	93
61) Ethyl methacrylate	9.522	69	259276	42.52	ug/Kg	93
62) 1,1,2-Trichloroethane	9.570	83	210001	48.79	ug/Kg	96
63) Dibromochloromethane	9.759	129	212707	50.54	ug/Kg	98
64) 1,3-Dichloropropane	9.850	76	389353	46.91	ug/Kg	95
65) 1,2-Dibromoethane	10.020	107	221699	48.40	ug/Kg	100
66) 2-hexanone	10.179	43	833960	239.14	ug/Kg	93
67) 1-Chlorohexane	10.465	91	373190	50.82	ug/Kg	94
68) Ethylbenzene	10.525	91	1403396	53.23	ug/Kg	97
69) Chlorobenzene	10.525	112	786179	51.53	ug/Kg	90
70) 1,1,1,2-Tetrachloroethane	10.580	131	241019	53.81	ug/Kg	96
71) m,p-Xylene	10.665	91	2082583	104.20	ug/Kg	96
72) o-Xylene	11.109	91	1018012	52.42	ug/Kg	97
73) Styrene	11.158	104	768501	51.45	ug/Kg	96
74) Bromoform	11.213	173	119031	47.22	ug/Kg	97
75) Isopropylbenzene	11.414	105	1265024	53.87	ug/Kg	97
78) cis-1,4-Dichloro-2-butene	11.773	53	80171	44.51	ug/Kg	86
79) n-Propylbenzene	11.833	91	1562725	55.69	ug/Kg	59
80) Bromobenzene	11.846	156	308586	51.76	ug/Kg	98
81) 1,1,2,2-Tetrachloroethane	11.906	83	317834	47.70	ug/Kg	96
82) 1,3,5-Trimethylbenzene	12.022	105	1085512	53.66	ug/Kg	85
83) 2-Chlorotoluene	12.016	91	1059054	54.35	ug/Kg	91
84) trans-1,4-Dichloro-2-B...	12.089	53	81933	48.61	ug/Kg	87
85) 1,2,3-Trichloropropane	12.065	110	77580	49.07	ug/Kg	95
86) Cyclohexanone	12.131	55	55117	211.21	ug/Kg	91
87) 4-Chlorotoluene	12.186	91	938507	54.46	ug/Kg	92
88) tert-Butylbenzene	12.357	91	654490	52.79	ug/Kg	96
89) 1,2,4-Trimethylbenzene	12.430	105	1083087	55.64	ug/Kg	96
90) Pentachloroethane	12.405	167	147266	50.81	ug/Kg	90

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076714.D
Acq On : 13 Apr 2016 1:21 pm
Operator : ericp
Sample : ICV2628-4,BS Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 14 09:35:51 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

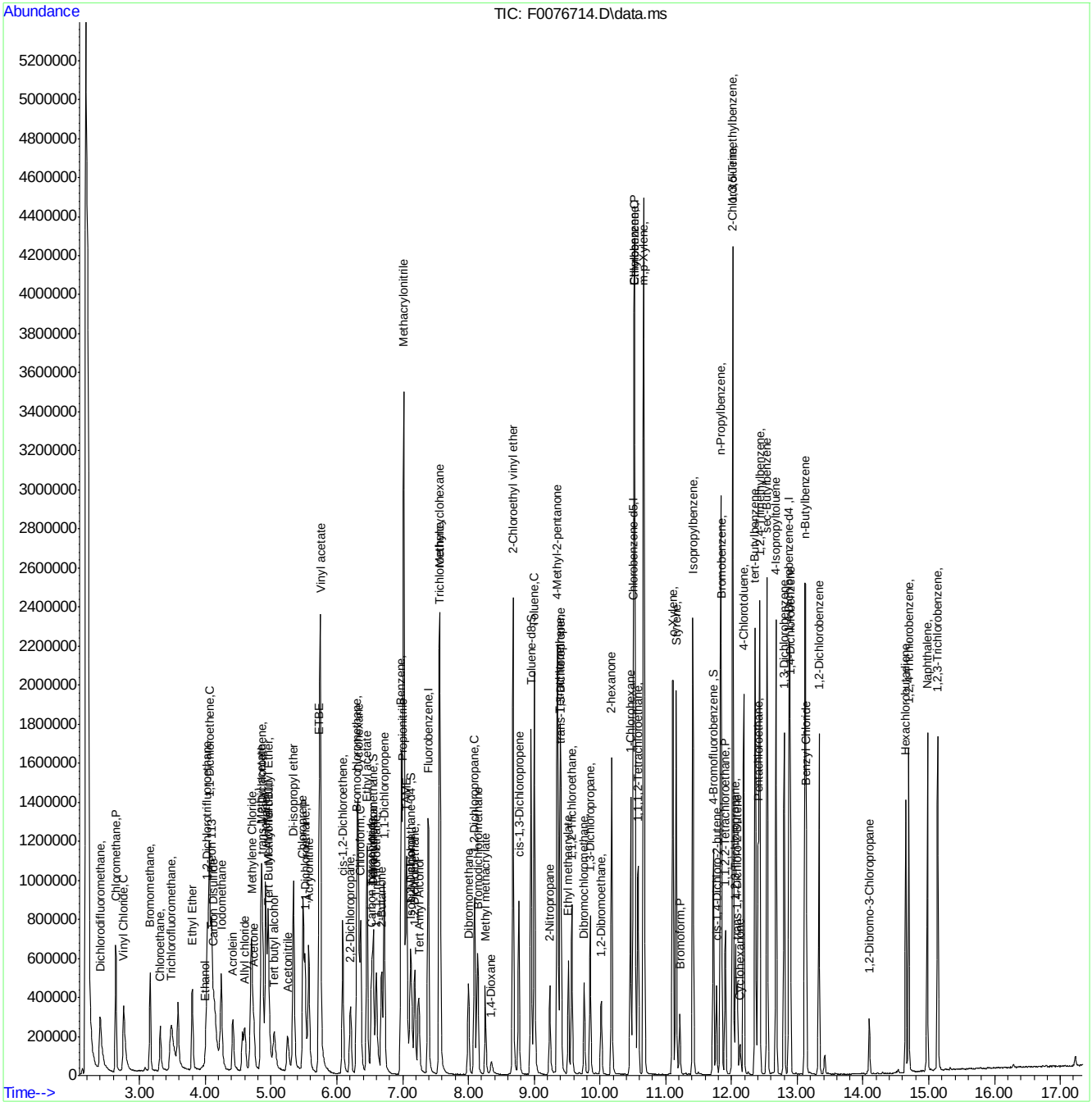
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1482645	54.84	ug/Kg	97
92)	4-Isopropyltoluene	12.679	119	1094681	53.38	ug/Kg	99
93)	1,3-Dichlorobenzene	12.801	146	581347	53.97	ug/Kg	94
94)	1,4-Dichlorobenzene	12.892	146	570803	51.88	ug/Kg	93
95)	n-Butylbenzene	13.117	92	661552	54.99	ug/Kg	99
96)	Benzyl Chloride	13.135	126	104358	51.87	ug/Kg#	83
97)	1,2-Dichlorobenzene	13.330	146	551204	52.99	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.096	75	54069	48.41	ug/Kg	92
99)	Hexachlorobutadiene	14.650	225	183404	49.42	ug/Kg	87
100)	1,2,4-Trichlorobenzene	14.693	180	355550	53.19	ug/Kg	96
101)	Naphthalene	14.979	128	970581	57.68	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	360453	52.31	ug/Kg	98
104)	Ethanol	3.998	45	61306	1048.93	ug/Kg	100
105)	Acrolein	4.418	56	251578	297.16	ug/Kg	88
106)	Tert butyl alcohol	5.044	59	291317	532.48	ug/Kg	96
107)	Isobutyl alcohol	7.131	42	134447	999.83	ug/Kg	90
108)	Tert Amyl Alcohol	7.246	59	227377	495.69	ug/Kg	87
109)	1,4-Dioxane	8.348	88	56850	1035.82	ug/Kg	77

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\041316\
Data File : F0076714.D
Acq On : 13 Apr 2016 1:21 pm
Operator : ericp
Sample : ICV2628-4,BS Inst : MSVOA9
Misc : MS33533,vf2628,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 14 09:35:51 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



041316APP9-F.m Thu Apr 14 09:35:52 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
04/26/16 09:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076897.D
Acq On : 23 Apr 2016 10:08 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 23 10:56:15 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.392	96	902977	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	723665	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	358563	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	118296	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	208695	49.79	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.58%			
44) 1,2-Dichloroethane-d4	7.119	65	213997	48.58	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 97.16%			
55) Toluene-d8	8.950	98	941113	48.78	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 97.56%			
77) 4-Bromofluorobenzene	11.724	174	256513	52.99	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 105.98%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	423316	53.50	ug/Kg	95
3) Chloromethane	2.635	50	443643	51.50	ug/Kg	99
4) Vinyl Chloride	2.757	62	446741	51.14	ug/Kg	95
5) Bromomethane	3.158	94	219973	48.36	ug/Kg	96
6) Chloroethane	3.316	64	166505	54.66	ug/Kg	91
7) Trichlorofluoromethane	3.481	101	410990	52.41	ug/Kg	98
8) Ethyl Ether	3.797	59	197756	54.04	ug/Kg	86
9) 1,2-Dichlorotrifluoroe...	4.028	67	382100	52.29	ug/Kg	97
10) 1,1-Dichloroethene	4.059	61	530306	51.86	ug/Kg	93
11) Freon 113	4.089	101	310017	48.58	ug/Kg	92
12) Carbon Disulfide	4.125	76	1061758	51.08	ug/Kg	96
13) Iodomethane	4.241	142	530252	52.43	ug/Kg	94
14) Allyl chloride	4.600	41	253533m	45.96	ug/Kg	
15) Methylene Chloride	4.703	49	370792	54.83	ug/Kg	82
16) Acetone	4.734	43	271634	224.46	ug/Kg	87
17) Methyl acetate	4.849	43	646108	235.22	ug/Kg	83
18) trans-1,2-Dichloroethene	4.874	61	424371	54.74	ug/Kg	91
19) Hexane	4.916	56	220951	47.68	ug/Kg	93
20) Methyl Tert Butyl Ether	4.953	73	721830	56.71	ug/Kg	94
21) Acetonitrile	5.245	41	200724	407.70	ug/Kg	99
22) Di-isopropyl ether	5.336	45	717610	52.05	ug/Kg	88
23) Chloroprene	5.488	53	372378	44.80	ug/Kg	97
24) 1,1-Dichloroethane	5.519	63	479378	50.39	ug/Kg	100
25) Acrylonitrile	5.573	53	361778	231.74	ug/Kg	93
26) ETBE	5.731	59	729953	52.23	ug/Kg	94
27) Vinyl acetate	5.750	43	1937869	255.35	ug/Kg	91
28) cis-1,2-Dichloroethene	6.090	96	303858	50.67	ug/Kg	94
29) 2,2-Dichloropropane	6.206	77	187517	55.57	ug/Kg	97
30) Bromochloromethane	6.303	128	130179	50.80	ug/Kg	96
31) Cyclohexane	6.322	56	492470	47.19	ug/Kg	86
32) Chloroform	6.364	83	487457	51.48	ug/Kg	98
33) Ethyl acetate	6.462	43	903387	242.20	ug/Kg	99
34) Tetrahydrofuran	6.553	42	54718	53.05	ug/Kg	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076897.D
Acq On : 23 Apr 2016 10:08 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 23 10:56:15 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	285971	51.07	ug/Kg	95
37)	1,1,1-Trichloroethane	6.595	97	311678	50.69	ug/Kg	98
38)	2-Butanone	6.681	43	419675	211.21	ug/Kg	80
39)	1,1-Dichloropropene	6.717	75	381966	52.82	ug/Kg	92
40)	Propionitrile	7.003	54	294345	449.08	ug/Kg	91
41)	Methacrylonitrile	7.015	41	1073127	470.97	ug/Kg	95
42)	Benzene	6.979	78	1108174	51.05	ug/Kg	100
43)	TAME	7.064	73	699914	53.13	ug/Kg	92
45)	1,2-Dichloroethane	7.185	62	302600	51.94	ug/Kg	91
46)	Trichloroethene	7.563	95	290810	52.51	ug/Kg	95
47)	Methylcyclohexane	7.563	83	535138	52.28	ug/Kg	88
48)	Dibromomethane	8.001	93	150562	55.85	ug/Kg	92
49)	1,2-Dichloropropane	8.092	63	267370	51.99	ug/Kg	93
50)	Bromodichloromethane	8.141	83	312627	54.93	ug/Kg	98
51)	Methyl methacrylate	8.256	41	163936	53.12	ug/Kg	77
52)	2-Chloroethyl vinyl ether	8.676	63	756424	273.51	ug/Kg	88
53)	cis-1,3-Dichloropropene	8.767	75	408745	57.26	ug/Kg	97
56)	Toluene	9.004	91	1215149	49.68	ug/Kg	97
57)	2-Nitropropane	9.236	41	115720	139.76	ug/Kg	99
58)	4-Methyl-2-pentanone	9.357	43	968417	208.28	ug/Kg	88
59)	trans-1,3-Dichloropropene	9.406	75	356693	53.92	ug/Kg	95
60)	Tetrachloroethene	9.394	166	274053	49.00	ug/Kg	97
61)	Ethyl methacrylate	9.522	69	273783	47.60	ug/Kg	92
62)	1,1,2-Trichloroethane	9.570	83	198858	48.99	ug/Kg	96
63)	Dibromochloromethane	9.765	129	182584	46.01	ug/Kg	99
64)	1,3-Dichloropropane	9.850	76	375284	47.94	ug/Kg	95
65)	1,2-Dibromoethane	10.020	107	215328	49.85	ug/Kg	98
66)	2-hexanone	10.179	43	768098	233.55	ug/Kg	92
67)	1-Chlorohexane	10.464	91	371340	53.62	ug/Kg	95
68)	Ethylbenzene	10.525	91	1324982	53.29	ug/Kg	98
69)	Chlorobenzene	10.525	112	758406	52.71	ug/Kg	91
70)	1,1,1,2-Tetrachloroethane	10.580	131	219342	51.92	ug/Kg	96
71)	m,p-Xylene	10.665	91	1992426	105.82	ug/Kg	96
72)	o-Xylene	11.109	91	1012708	55.30	ug/Kg	96
73)	Styrene	11.158	104	751969	53.38	ug/Kg	96
74)	Bromoform	11.213	173	95489	40.17	ug/Kg	95
75)	Isopropylbenzene	11.414	105	1241680	56.07	ug/Kg	98
78)	cis-1,4-Dichloro-2-butene	11.772	53	73271	42.37	ug/Kg#	82
79)	n-Propylbenzene	11.833	91	1489728	55.30	ug/Kg	60
80)	Bromobenzene	11.845	156	295894	51.69	ug/Kg	99
81)	1,1,2,2-Tetrachloroethane	11.906	83	285582	44.65	ug/Kg	97
82)	1,3,5-Trimethylbenzene	12.022	105	1048840	54.01	ug/Kg	85
83)	2-Chlorotoluene	12.022	91	1010123	53.99	ug/Kg	92
84)	trans-1,4-Dichloro-2-B...	12.089	53	73470	45.40	ug/Kg	89
85)	1,2,3-Trichloropropane	12.064	110	71985	47.43	ug/Kg	92
86)	Cyclohexanone	12.131	55	50726	202.46	ug/Kg	88
87)	4-Chlorotoluene	12.186	91	894629	54.07	ug/Kg	94
88)	tert-Butylbenzene	12.357	91	628147	52.77	ug/Kg	94
89)	1,2,4-Trimethylbenzene	12.430	105	1020265	54.60	ug/Kg	96
90)	Pentachloroethane	12.405	167	132538	47.63	ug/Kg	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076897.D
Acq On : 23 Apr 2016 10:08 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 23 10:56:15 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1405848	54.16	ug/Kg	98
92)	4-Isopropyltoluene	12.679	119	1069852	54.33	ug/Kg	98
93)	1,3-Dichlorobenzene	12.801	146	555223	53.69	ug/Kg	94
94)	1,4-Dichlorobenzene	12.892	146	553874	52.44	ug/Kg	99
95)	n-Butylbenzene	13.117	92	627540	54.33	ug/Kg	99
96)	Benzyl Chloride	13.135	126	99230	51.37	ug/Kg#	74
97)	1,2-Dichlorobenzene	13.330	146	536367	53.71	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.096	75	46924	43.76	ug/Kg	91
99)	Hexachlorobutadiene	14.650	225	184639	51.82	ug/Kg	87
100)	1,2,4-Trichlorobenzene	14.693	180	366432	57.09	ug/Kg	98
101)	Naphthalene	14.979	128	932492	57.72	ug/Kg	98
102)	1,2,3-Trichlorobenzene	15.137	180	366828	55.45	ug/Kg	98
104)	Ethanol	3.998	45	54379	966.54	ug/Kg	90
105)	Acrolein	4.417	56	206834	253.80	ug/Kg	93
106)	Tert butyl alcohol	5.044	59	281011	533.58	ug/Kg	92
107)	Isobutyl alcohol	7.137	42	124061	958.41	ug/Kg	90
108)	Tert Amyl Alcohol	7.246	59	229211	519.09	ug/Kg	89
109)	1,4-Dioxane	8.354	88	65961	1248.48	ug/Kg#	68

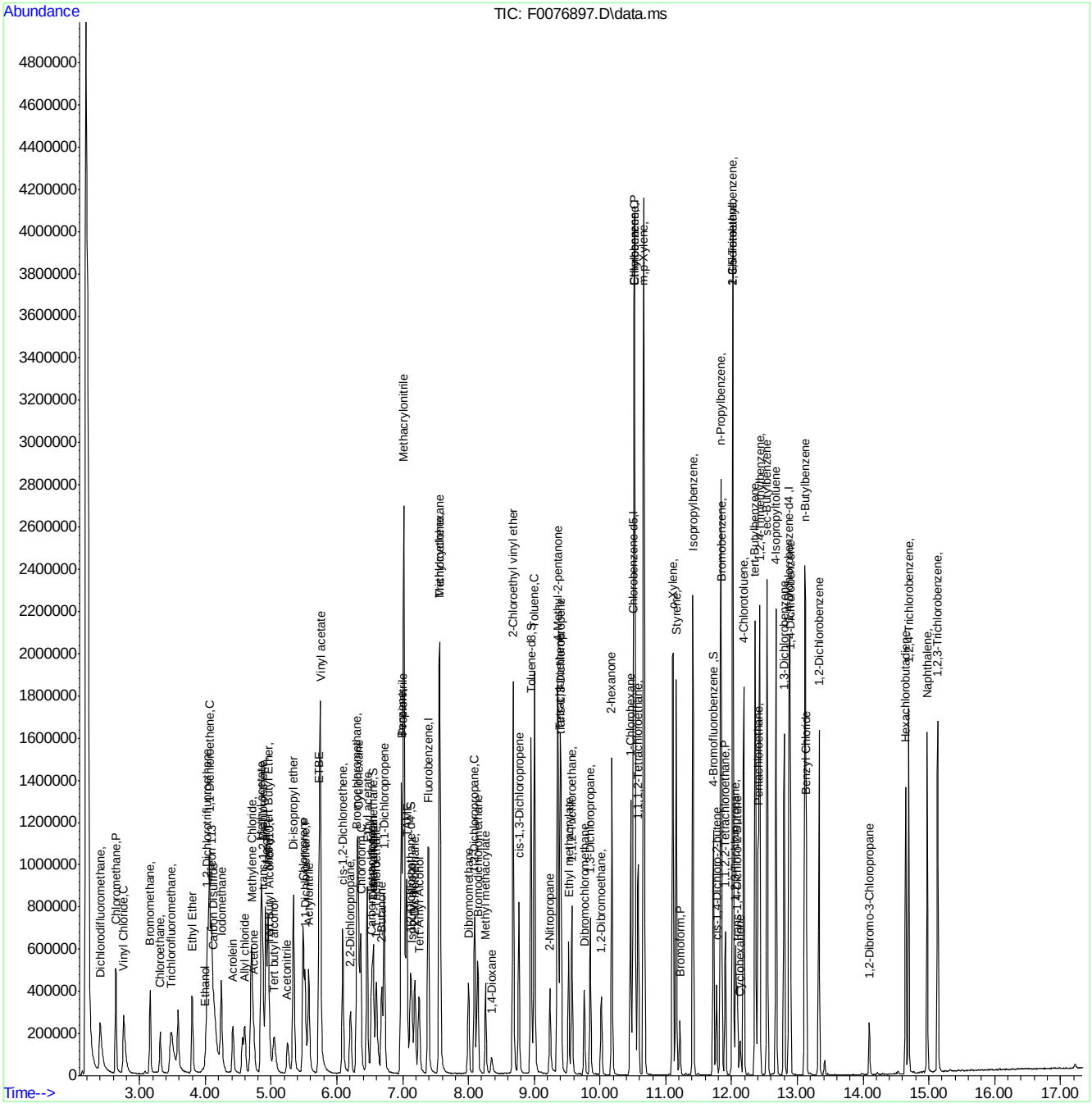
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076897.D
Acq On : 23 Apr 2016 10:08 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 23 10:56:15 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

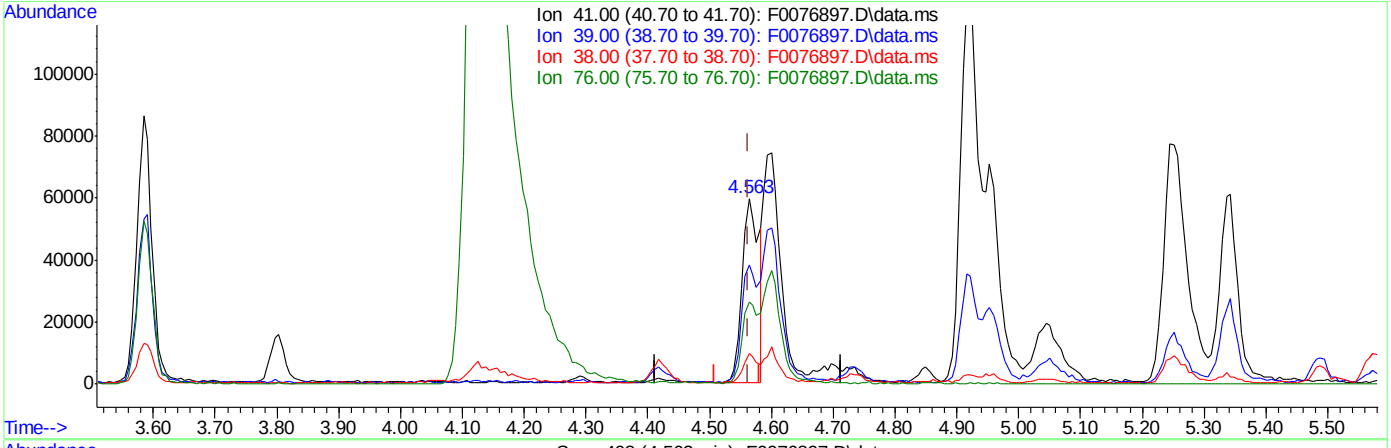
Sample Number:	VF2639-CC2628	**Method:**	SW846 8260B
Lab FileID:	F0076897.D	**Analyst approved:**	04/25/16 09:42 Eric Parrish
Injection Time:	04/23/16 10:08	**Supervisor approved:**	04/26/16 09:09 Melissa Mangual

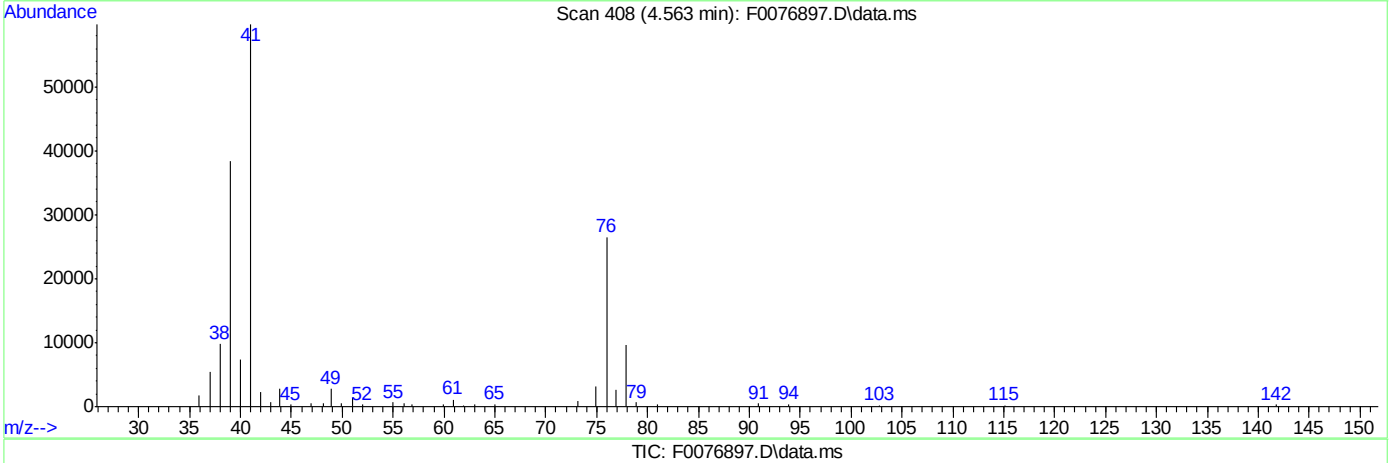
Parameter	CAS	Sig#	R.T. (min.)	Reason
Allyl chloride	107-05-1		4.60	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076897.D
Acq On : 23 Apr 2016 10:08 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 23 10:24:12 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076897.D\data.ms

(14) Allyl chloride

4.563min (+0.000) 20.23ug/Kg

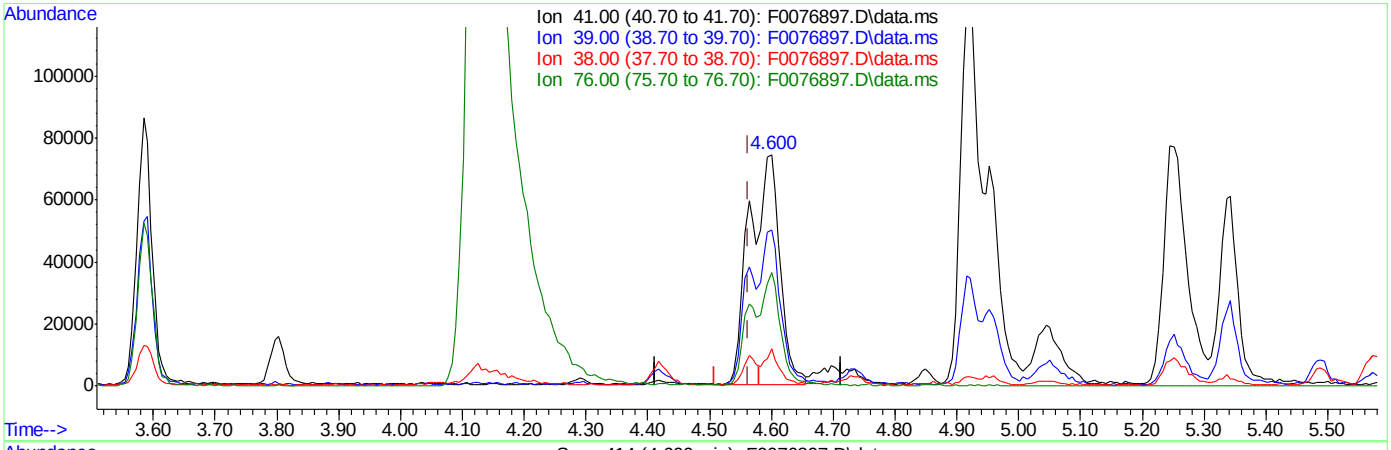
response 111602

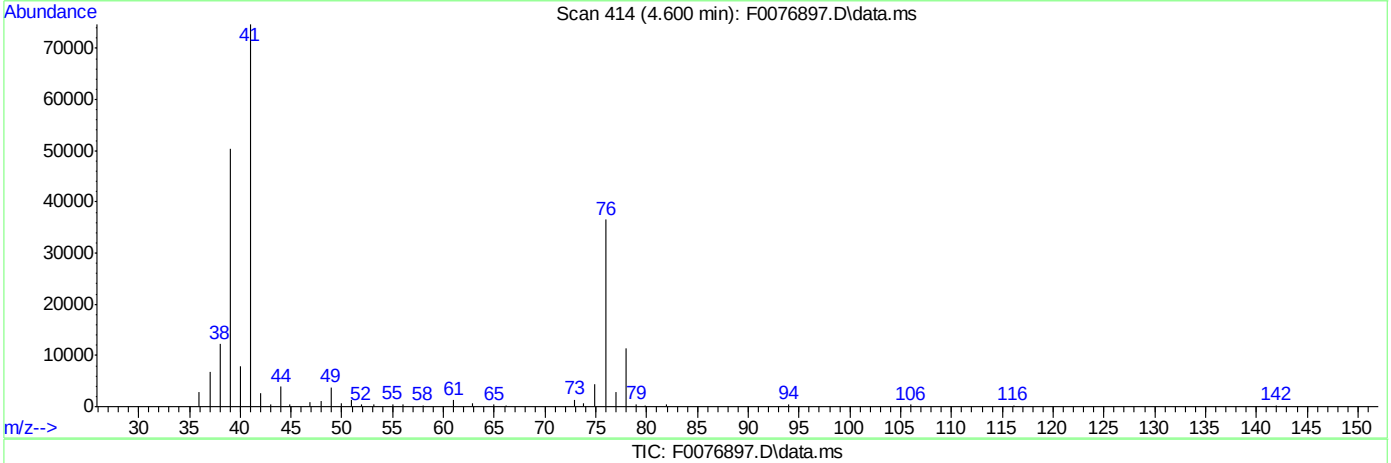
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	63.75
38.00	10.90	15.54
76.00	31.30	44.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076897.D
Acq On : 23 Apr 2016 10:08 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33665,vf2639,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 23 10:24:12 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076897.D\data.ms

(14) Allyl chloride

4.600min (+0.037) 45.96ug/Kg m

response 253533

Ion	Exp%	Act%
41.00	100	100
39.00	59.80	67.41
38.00	10.90	16.32
76.00	31.30	48.86

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 04/26/16 09:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076924.D
Acq On : 23 Apr 2016 9:42 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33673,vf2639,5.00,,,5,,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Apr 25 08:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	820755	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	640315	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.873	152	315928	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.965	65	84173	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	192432	50.51	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.02%			
44) 1,2-Dichloroethane-d4	7.118	65	210086	52.47	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 104.94%			
55) Toluene-d8	8.950	98	805213	47.17	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 94.34%			
77) 4-Bromofluorobenzene	11.724	174	221967	52.04	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 104.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.404	85	367781	51.14	ug/Kg	95
3) Chloromethane	2.635	50	392671	50.15	ug/Kg	97
4) Vinyl Chloride	2.756	62	404547	50.95	ug/Kg	99
5) Bromomethane	3.158	94	199294	48.20	ug/Kg	96
6) Chloroethane	3.316	64	161188	59.33	ug/Kg	97
7) Trichlorofluoromethane	3.486	101	360235	50.54	ug/Kg	94
8) Ethyl Ether	3.797	59	171415	51.53	ug/Kg	88
9) 1,2-Dichlorotrifluoroe...	4.028	67	326763	49.20	ug/Kg	98
10) 1,1-Dichloroethene	4.058	61	453756	48.82	ug/Kg	93
11) Freon 113	4.089	101	286260	49.35	ug/Kg	95
12) Carbon Disulfide	4.131	76	919309	48.66	ug/Kg	95
13) Iodomethane	4.241	142	505606	55.00	ug/Kg	93
14) Allyl chloride	4.600	41	260194m	51.89	ug/Kg	
15) Methylene Chloride	4.703	49	318732	51.85	ug/Kg	83
16) Acetone	4.734	43	236465	214.97	ug/Kg	89
17) Methyl acetate	4.849	43	569183	227.97	ug/Kg	86
18) trans-1,2-Dichloroethene	4.874	61	338927	48.10	ug/Kg	92
19) Hexane	4.922	56	179962	42.72	ug/Kg	95
20) Methyl Tert Butyl Ether	4.953	73	594935	51.43	ug/Kg	93
21) Acetonitrile	5.251	41	198248	443.01	ug/Kg	96
22) Di-isopropyl ether	5.336	45	650721	51.93	ug/Kg	87
23) Chloroprene	5.488	53	374472	49.57	ug/Kg	96
24) 1,1-Dichloroethane	5.518	63	422945	48.92	ug/Kg	99
25) Acrylonitrile	5.573	53	296186	208.73	ug/Kg	93
26) ETBE	5.731	59	671518	52.87	ug/Kg	95
27) Vinyl acetate	5.750	43	1139527	165.20	ug/Kg	90
28) cis-1,2-Dichloroethene	6.090	96	287826	52.81	ug/Kg	94
29) 2,2-Dichloropropane	6.206	77	158977	51.83	ug/Kg	98
30) Bromochloromethane	6.303	128	124625	53.51	ug/Kg	93
31) Cyclohexane	6.321	56	478714	50.47	ug/Kg	87
32) Chloroform	6.358	83	446011	51.82	ug/Kg	100
33) Ethyl acetate	6.455	43	784205	231.31	ug/Kg	100
34) Tetrahydrofuran	6.547	42	46080	49.64	ug/Kg	91

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076924.D
Acq On : 23 Apr 2016 9:42 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33673,vf2639,5.00,,,5,,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Apr 25 08:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.528	117	241090	47.37	ug/Kg	96
37)	1,1,1-Trichloroethane	6.595	97	288710	51.66	ug/Kg	94
38)	2-Butanone	6.680	43	412688	228.50	ug/Kg	90
39)	1,1-Dichloropropene	6.717	75	317109	48.24	ug/Kg	96
40)	Propionitrile	7.003	54	275575	462.56	ug/Kg	98
41)	Methacrylonitrile	7.015	41	1106880	534.45	ug/Kg	96
42)	Benzene	6.978	78	995227	50.44	ug/Kg	98
43)	TAME	7.064	73	649602	54.25	ug/Kg	96
45)	1,2-Dichloroethane	7.185	62	281348	53.13	ug/Kg	91
46)	Trichloroethene	7.563	95	240868	47.85	ug/Kg	92
47)	Methylcyclohexane	7.563	83	459403	49.38	ug/Kg	95
48)	Dibromomethane	8.001	93	120563	49.20	ug/Kg	92
49)	1,2-Dichloropropane	8.092	63	237884	50.89	ug/Kg	91
50)	Bromodichloromethane	8.140	83	258971	50.06	ug/Kg	98
51)	Methyl methacrylate	8.256	41	143718	51.23	ug/Kg	85
52)	2-Chloroethyl vinyl ether	8.676	63	605019	240.68	ug/Kg	91
53)	cis-1,3-Dichloropropene	8.767	75	333267	51.37	ug/Kg	96
56)	Toluene	9.004	91	977819	45.18	ug/Kg	95
57)	2-Nitropropane	9.235	41	117819	160.82	ug/Kg	96
58)	4-Methyl-2-pentanone	9.351	43	811927	197.35	ug/Kg	92
59)	trans-1,3-Dichloropropene	9.406	75	265449	45.35	ug/Kg	85
60)	Tetrachloroethene	9.394	166	211586	42.75	ug/Kg	92
61)	Ethyl methacrylate	9.521	69	216372	42.52	ug/Kg	94
62)	1,1,2-Trichloroethane	9.570	83	157700	43.90	ug/Kg	95
63)	Dibromochloromethane	9.759	129	152045	43.30	ug/Kg	95
64)	1,3-Dichloropropane	9.850	76	308815	44.59	ug/Kg	95
65)	1,2-Dibromoethane	10.020	107	171750	44.93	ug/Kg	94
66)	2-hexanone	10.178	43	577375	198.41	ug/Kg	94
67)	1-Chlorohexane	10.464	91	272656	44.49	ug/Kg	95
68)	Ethylbenzene	10.525	91	1016671	46.21	ug/Kg	97
69)	Chlorobenzene	10.525	112	576987	45.32	ug/Kg	91
70)	1,1,1,2-Tetrachloroethane	10.580	131	183525	49.10	ug/Kg	97
71)	m,p-Xylene	10.665	91	1499890	89.08	ug/Kg	96
72)	o-Xylene	11.103	91	787857	48.62	ug/Kg	95
73)	Styrene	11.158	104	557179	44.70	ug/Kg	97
74)	Bromoform	11.213	173	78740	37.44	ug/Kg	96
75)	Isopropylbenzene	11.413	105	935744	47.75	ug/Kg	96
78)	cis-1,4-Dichloro-2-butene	11.772	53	59399	38.98	ug/Kg	85
79)	n-Propylbenzene	11.833	91	1040355	43.83	ug/Kg	59
80)	Bromobenzene	11.845	156	230799	45.76	ug/Kg	98
81)	1,1,2,2-Tetrachloroethane	11.906	83	230053	40.82	ug/Kg	97
82)	1,3,5-Trimethylbenzene	12.022	105	776790	45.40	ug/Kg	85
83)	2-Chlorotoluene	12.016	91	740143	44.90	ug/Kg	90
84)	trans-1,4-Dichloro-2-B...	12.089	53	56072	39.32	ug/Kg	87
85)	1,2,3-Trichloropropane	12.064	110	56491	42.24	ug/Kg	95
86)	Cyclohexanone	12.131	55	49155	222.67	ug/Kg	86
87)	4-Chlorotoluene	12.186	91	614663	42.17	ug/Kg	91
88)	tert-Butylbenzene	12.356	91	508550	48.49	ug/Kg	95
89)	1,2,4-Trimethylbenzene	12.429	105	723689	43.95	ug/Kg	97
90)	Pentachloroethane	12.405	167	104456	42.60	ug/Kg	85

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076924.D
Acq On : 23 Apr 2016 9:42 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33673,vf2639,5.00,,,5,,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Apr 25 08:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1042904	45.60	ug/Kg	97
92)	4-Isopropyltoluene	12.679	119	745030	42.94	ug/Kg	99
93)	1,3-Dichlorobenzene	12.800	146	374414	41.09	ug/Kg	95
94)	1,4-Dichlorobenzene	12.892	146	367805	39.52	ug/Kg	95
95)	n-Butylbenzene	13.117	92	384184	37.75	ug/Kg	100
96)	Benzyl Chloride	13.135	126	57415	33.74	ug/Kg#	83
97)	1,2-Dichlorobenzene	13.330	146	381767	43.39	ug/Kg	96
98)	1,2-Dibromo-3-Chloropr...	14.096	75	35549	37.63	ug/Kg	94
99)	Hexachlorobutadiene	14.650	225	121152	38.59	ug/Kg	87
100)	1,2,4-Trichlorobenzene	14.692	180	207172	36.64	ug/Kg	97
101)	Naphthalene	14.972	128	629881	44.25	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	235321	40.37	ug/Kg	99
104)	Ethanol	3.991	45	46838	1169.99	ug/Kg	87
105)	Acrolein	4.417	56	141792	244.52	ug/Kg	97
106)	Tert butyl alcohol	5.044	59	201929	538.86	ug/Kg	92
107)	Isobutyl alcohol	7.137	42	98950	1074.31	ug/Kg	86
108)	Tert Amyl Alcohol	7.246	59	164764	524.40	ug/Kg	91
109)	1,4-Dioxane	8.347	88	47730	1269.65	ug/Kg	76

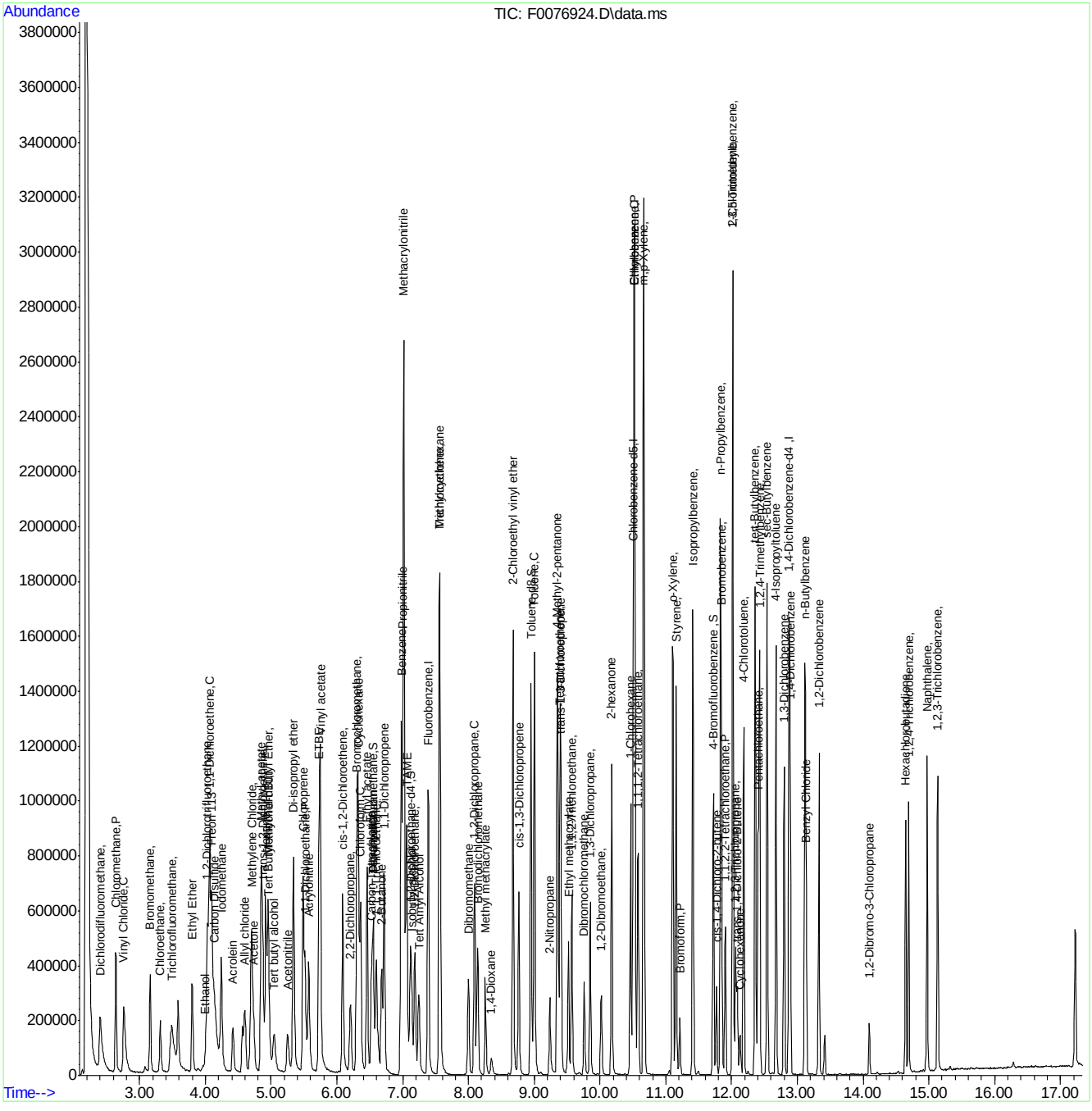
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076924.D
Acq On : 23 Apr 2016 9:42 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33673,vf2639,5.00,,,5,,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Apr 25 08:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



041316APP9-F.m Mon Apr 25 09:39:56 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

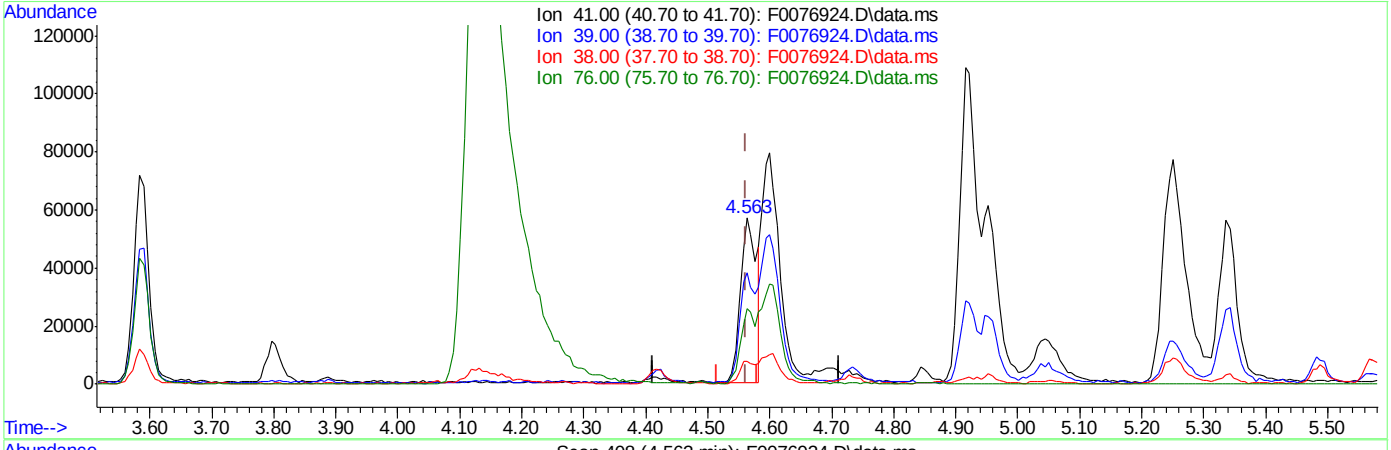
Sample Number:	VF2639-ECC2628	**Method:**	SW846 8260B
Lab FileID:	F0076924.D	**Analyst approved:**	04/25/16 09:42 Eric Parrish
Injection Time:	04/23/16 21:42	**Supervisor approved:**	04/26/16 09:09 Melissa Mangual

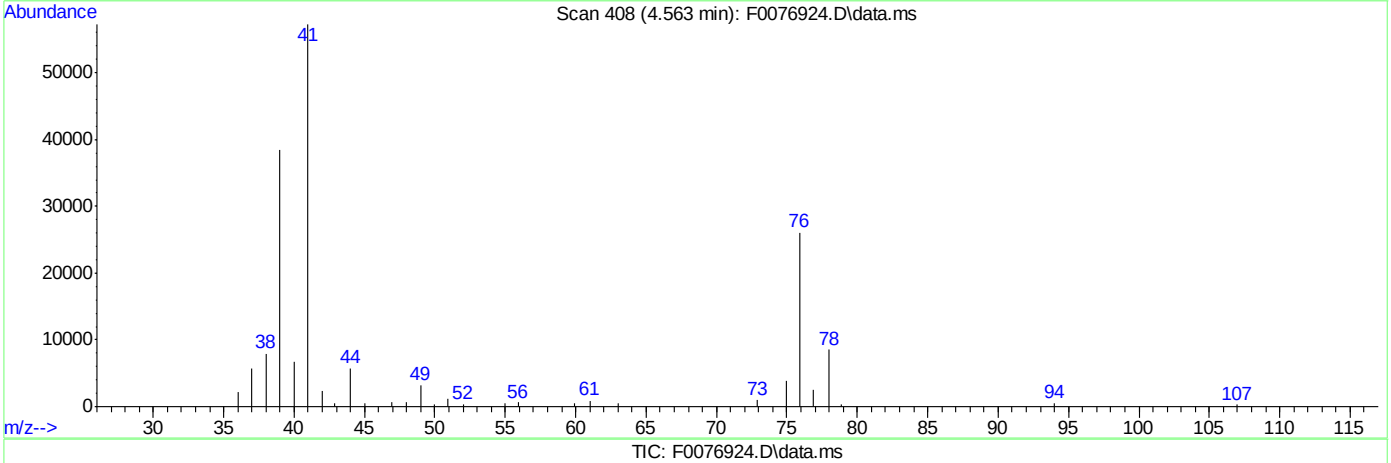
Parameter	CAS	Sig#	R.T. (min.)	Reason
Allyl chloride	107-05-1		4.60	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076924.D
Acq On : 23 Apr 2016 9:42 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33673,vf2639,5.00,,,5,,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Apr 25 08:23:11 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076924.D\data.ms

(14) Allyl chloride

4.563min (+0.000) 20.83ug/Kg

response 104439

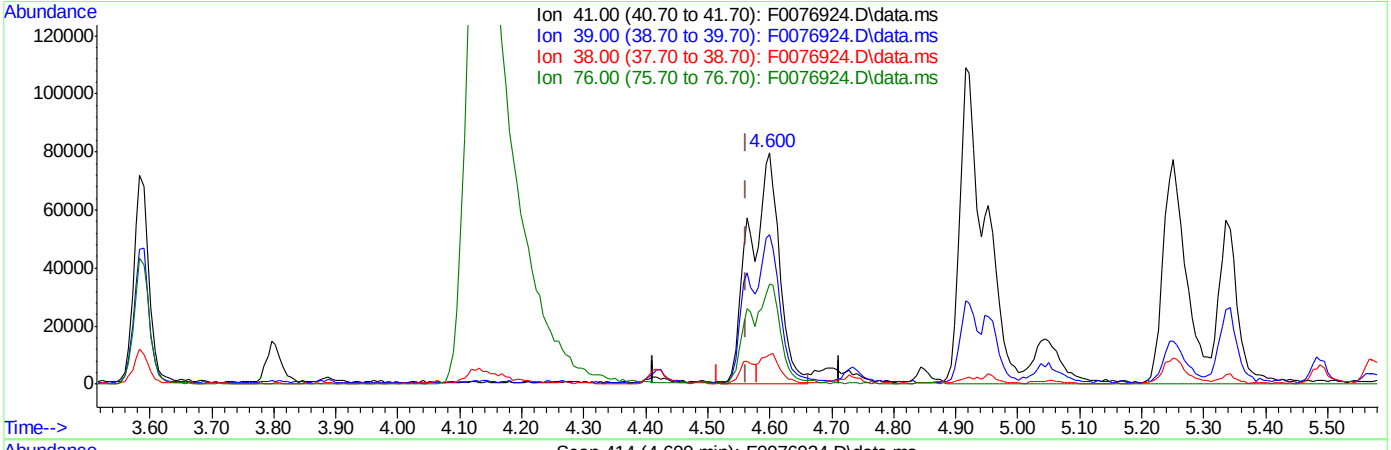
Ion	Exp%	Act%
41.00	100	100
39.00	59.80	66.52
38.00	10.90	14.06
76.00	31.30	45.20

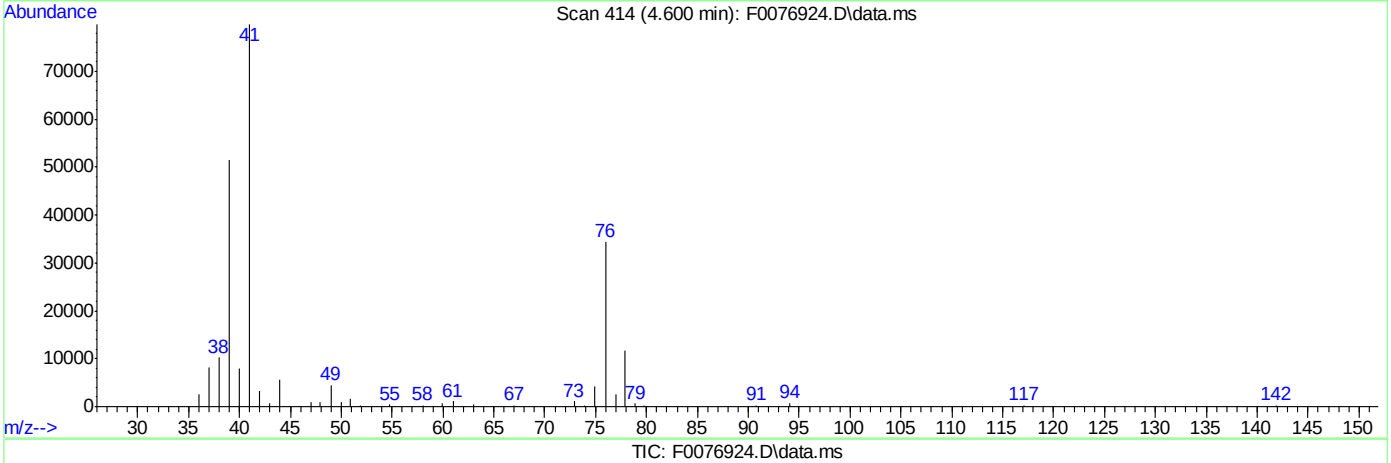
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042316\
Data File : F0076924.D
Acq On : 23 Apr 2016 9:42 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33673,vf2639,5.00,,,5,,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Apr 25 08:23:11 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076924.D\data.ms

(14) Allyl chloride

4.600min (+0.037) 51.89ug/Kg m

response 260194

Ion	Exp%	Act%
41.00	100	100
39.00	59.80	64.43
38.00	10.90	12.80
76.00	31.30	43.05

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076931.D
Acq On : 25 Apr 2016 9:34 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:51:55 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1091485	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	856746	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	428209	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	136003	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	260344	51.39	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.78%			
44) 1,2-Dichloroethane-d4	7.119	65	288673	54.22	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 108.44%			
55) Toluene-d8	8.950	98	1077715	47.19	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 94.38%			
77) 4-Bromofluorobenzene	11.724	174	306073	52.94	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 105.88%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	515573	53.90	ug/Kg	99
3) Chloromethane	2.635	50	563331	54.10	ug/Kg	100
4) Vinyl Chloride	2.757	62	572785	54.25	ug/Kg	97
5) Bromomethane	3.164	94	301372	54.81	ug/Kg	96
6) Chloroethane	3.316	64	213470	59.00	ug/Kg	95
7) Trichlorofluoromethane	3.481	101	537534	56.71	ug/Kg	97
8) Ethyl Ether	3.797	59	252451	57.07	ug/Kg	85
9) 1,2-Dichlorotrifluoroe...	4.028	67	495794	56.13	ug/Kg	97
10) 1,1-Dichloroethene	4.059	61	671844	54.35	ug/Kg	96
11) Freon 113	4.089	101	394165	51.10	ug/Kg	95
12) Carbon Disulfide	4.125	76	1378016	54.85	ug/Kg	95
13) Iodomethane	4.241	142	686404	56.15	ug/Kg	92
14) Allyl chloride	4.600	41	342140	51.31	ug/Kg	84
15) Methylene Chloride	4.703	49	497128	60.81	ug/Kg	86
16) Acetone	4.734	43	327375	223.80	ug/Kg	82
17) Methyl acetate	4.849	43	820477	247.11	ug/Kg	84
18) trans-1,2-Dichloroethene	4.874	61	555613	59.29	ug/Kg	94
19) Hexane	4.916	56	300562	53.65	ug/Kg	96
20) Methyl Tert Butyl Ether	4.953	73	875470	56.90	ug/Kg	93
21) Acetonitrile	5.251	41	263222	442.30	ug/Kg	95
22) Di-isopropyl ether	5.336	45	954986	57.31	ug/Kg	86
23) Chloroprene	5.488	53	516056	51.36	ug/Kg	96
24) 1,1-Dichloroethane	5.513	63	667029	58.01	ug/Kg	99
25) Acrylonitrile	5.573	53	502384	266.23	ug/Kg	95
26) ETBE	5.725	59	998124	59.09	ug/Kg	97
27) Vinyl acetate	5.744	43	2990689	326.02	ug/Kg	94
28) cis-1,2-Dichloroethene	6.090	96	376401	51.93	ug/Kg	98
29) 2,2-Dichloropropane	6.206	77	231072	56.65	ug/Kg	94
30) Bromochloromethane	6.303	128	165296	53.37	ug/Kg	89
31) Cyclohexane	6.322	56	698806	55.40	ug/Kg	95
32) Chloroform	6.358	83	642649	56.15	ug/Kg	95
33) Ethyl acetate	6.455	43	1300701	288.50	ug/Kg	99
34) Tetrahydrofuran	6.547	42	74532	58.81	ug/Kg	92

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076931.D
Acq On : 25 Apr 2016 9:34 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:51:55 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.529	117	344686	50.92	ug/Kg	96
37)	1,1,1-Trichloroethane	6.595	97	401553	54.03	ug/Kg	94
38)	2-Butanone	6.675	43	596044	248.17	ug/Kg	91
39)	1,1-Dichloropropene	6.717	75	498031	56.98	ug/Kg	97
40)	Propionitrile	6.997	54	394380	497.78	ug/Kg	83
41)	Methacrylonitrile	7.015	41	1617412	587.25	ug/Kg	96
42)	Benzene	6.979	78	1450666	55.29	ug/Kg	95
43)	TAME	7.058	73	886305	55.66	ug/Kg	95
45)	1,2-Dichloroethane	7.186	62	418428	59.41	ug/Kg	92
46)	Trichloroethene	7.563	95	365788	54.64	ug/Kg	90
47)	Methylcyclohexane	7.563	83	683553	55.25	ug/Kg	94
48)	Dibromomethane	7.995	93	191004	58.61	ug/Kg	84
49)	1,2-Dichloropropane	8.092	63	358448	57.67	ug/Kg	91
50)	Bromodichloromethane	8.141	83	405226	58.90	ug/Kg	100
51)	Methyl methacrylate	8.256	41	207113	55.52	ug/Kg	80
52)	2-Chloroethyl vinyl ether	8.676	63	944485	282.53	ug/Kg	93
53)	cis-1,3-Dichloropropene	8.761	75	515575	59.75	ug/Kg	92
56)	Toluene	9.005	91	1449613	50.06	ug/Kg	97
57)	2-Nitropropane	9.236	41	165134	168.46	ug/Kg	99
58)	4-Methyl-2-pentanone	9.351	43	1272204	231.11	ug/Kg	92
59)	trans-1,3-Dichloropropene	9.406	75	458369	58.53	ug/Kg	93
60)	Tetrachloroethene	9.394	166	339064	51.20	ug/Kg	97
61)	Ethyl methacrylate	9.516	69	292849	43.01	ug/Kg	96
62)	1,1,2-Trichloroethane	9.570	83	241842	50.32	ug/Kg	92
63)	Dibromochloromethane	9.759	129	237982	50.65	ug/Kg	98
64)	1,3-Dichloropropane	9.850	76	455455	49.15	ug/Kg	95
65)	1,2-Dibromoethane	10.014	107	259274	50.70	ug/Kg	98
66)	2-hexanone	10.173	43	870549	223.58	ug/Kg	96
67)	1-Chlorohexane	10.465	91	450126	54.90	ug/Kg	96
68)	Ethylbenzene	10.525	91	1608975	54.66	ug/Kg	97
69)	Chlorobenzene	10.525	112	921701	54.10	ug/Kg	90
70)	1,1,1,2-Tetrachloroethane	10.580	131	269767	53.94	ug/Kg	99
71)	m,p-Xylene	10.665	91	2407215	108.15	ug/Kg	96
72)	o-Xylene	11.103	91	1219186	56.23	ug/Kg	96
73)	Styrene	11.158	104	913164	54.76	ug/Kg	96
74)	Bromoform	11.213	173	121047	43.01	ug/Kg	97
75)	Isopropylbenzene	11.414	105	1476450	56.31	ug/Kg	99
78)	cis-1,4-Dichloro-2-butene	11.773	53	87991	42.61	ug/Kg	84
79)	n-Propylbenzene	11.833	91	1802420	56.02	ug/Kg	60
80)	Bromobenzene	11.846	156	352178	51.52	ug/Kg	99
81)	1,1,2,2-Tetrachloroethane	11.906	83	345113	45.18	ug/Kg	96
82)	1,3,5-Trimethylbenzene	12.022	105	1271575	54.83	ug/Kg	85
83)	2-Chlorotoluene	12.016	91	1224820	54.82	ug/Kg	91
84)	trans-1,4-Dichloro-2-B...	12.083	53	89306	46.21	ug/Kg	77
85)	1,2,3-Trichloropropane	12.065	110	85830	47.35	ug/Kg	94
86)	Cyclohexanone	12.125	55	59461	198.73	ug/Kg	97
87)	4-Chlorotoluene	12.186	91	1092940	55.32	ug/Kg	93
88)	tert-Butylbenzene	12.357	91	774448	54.48	ug/Kg	95
89)	1,2,4-Trimethylbenzene	12.430	105	1257536	56.35	ug/Kg	96
90)	Pentachloroethane	12.405	167	157272	47.32	ug/Kg	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076931.D
Acq On : 25 Apr 2016 9:34 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:51:55 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1702156	54.91	ug/Kg	99
92)	4-Isopropyltoluene	12.673	119	1306310	55.55	ug/Kg	97
93)	1,3-Dichlorobenzene	12.801	146	694047	56.20	ug/Kg	95
94)	1,4-Dichlorobenzene	12.892	146	686328	54.41	ug/Kg	99
95)	n-Butylbenzene	13.117	92	771571	55.94	ug/Kg	98
96)	Benzyl Chloride	13.135	126	113587	49.24	ug/Kg#	65
97)	1,2-Dichlorobenzene	13.330	146	639882	53.65	ug/Kg	97
98)	1,2-Dibromo-3-Chloropr...	14.090	75	56329	43.99	ug/Kg	78
99)	Hexachlorobutadiene	14.644	225	226503	53.23	ug/Kg	96
100)	1,2,4-Trichlorobenzene	14.693	180	446836	58.30	ug/Kg	98
101)	Naphthalene	14.973	128	1104240	57.24	ug/Kg	99
102)	1,2,3-Trichlorobenzene	15.137	180	439877	55.68	ug/Kg	99
104)	Ethanol	4.016	45	65222	1008.33	ug/Kg	99
105)	Acrolein	4.417	56	253493	270.55	ug/Kg	92
106)	Tert butyl alcohol	5.044	59	314243	519.00	ug/Kg	93
107)	Isobutyl alcohol	7.131	42	132137	887.90	ug/Kg	91
108)	Tert Amyl Alcohol	7.240	59	246262	485.09	ug/Kg	85
109)	1,4-Dioxane	8.347	88	70068	1153.55	ug/Kg	86

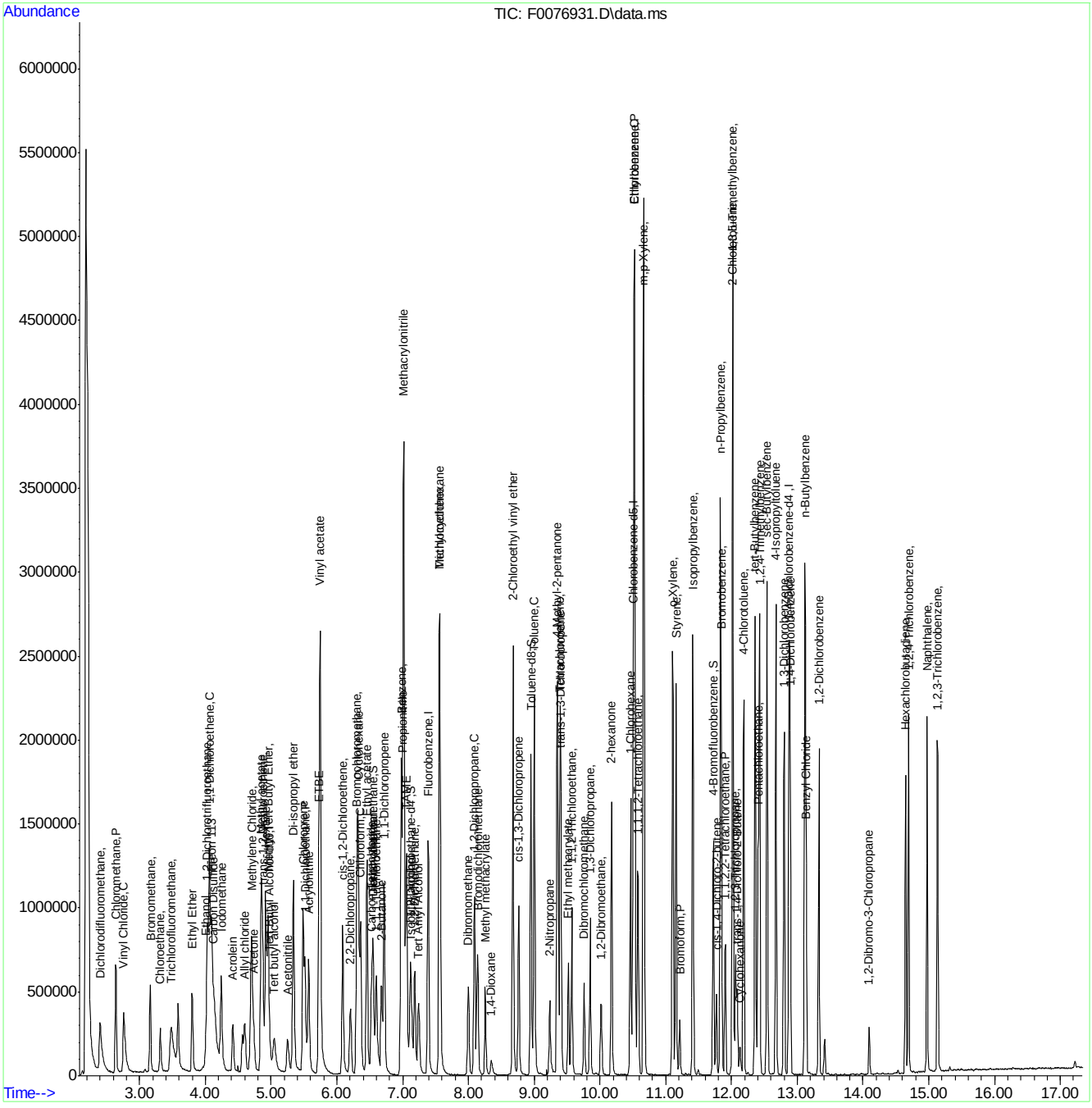
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076931.D
Acq On : 25 Apr 2016 9:34 am
Operator : ericp
Sample : CC2628-4 Inst : MSVOA9
Misc : MS33673,vf2641,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:51:55 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integrations
APPROVED
(compounds with "m" flag)
Juan Garcia
04/26/16 11:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076955.D
Acq On : 25 Apr 2016 7:52 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33682,vf2641,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 26 07:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.386	96	1087975	50.00	ug/Kg	0.00
54) Chlorobenzene-d5	10.507	117	866928	50.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	12.874	152	436019	50.00	ug/Kg	0.00
103) Tert Butyl Alcohol-d10	4.971	65	139445	250.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	6.553	113	289371	57.30	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 114.60%			
44) 1,2-Dichloroethane-d4	7.119	65	296625	55.89	ug/Kg	0.00
Spiked Amount 50.000	Range 72 - 135		Recovery = 111.78%			
55) Toluene-d8	8.950	98	1074266	46.48	ug/Kg	0.00
Spiked Amount 50.000	Range 75 - 126		Recovery = 92.96%			
77) 4-Bromofluorobenzene	11.724	174	312881	53.15	ug/Kg	0.00
Spiked Amount 50.000	Range 71 - 133		Recovery = 106.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.398	85	476188	49.95	ug/Kg	95
3) Chloromethane	2.635	50	504878	48.64	ug/Kg	99
4) Vinyl Chloride	2.757	62	514001	48.84	ug/Kg	99
5) Bromomethane	3.164	94	304905	55.63	ug/Kg	99
6) Chloroethane	3.316	64	199480	54.26	ug/Kg	94
7) Trichlorofluoromethane	3.487	101	496229	52.52	ug/Kg	97
8) Ethyl Ether	3.797	59	257786	58.46	ug/Kg	87
9) 1,2-Dichlorotrifluoroe...	4.028	67	460219	52.27	ug/Kg	97
10) 1,1-Dichloroethene	4.059	61	663282	53.83	ug/Kg	96
11) Freon 113	4.095	101	398945	51.89	ug/Kg	94
12) Carbon Disulfide	4.132	76	1297595	51.81	ug/Kg	97
13) Iodomethane	4.241	142	697596	57.25	ug/Kg	93
14) Allyl chloride	4.600	41	363954	54.75	ug/Kg	86
15) Methylene Chloride	4.703	49	457824	56.18	ug/Kg	80
16) Acetone	4.734	43	366112	251.09	ug/Kg	94
17) Methyl acetate	4.849	43	856418	258.76	ug/Kg	85
18) trans-1,2-Dichloroethene	4.874	61	489660	52.42	ug/Kg	91
19) Hexane	4.922	56	254160	45.52	ug/Kg	94
20) Methyl Tert Butyl Ether	4.953	73	902030	58.82	ug/Kg	93
21) Acetonitrile	5.251	41	289952	488.79	ug/Kg	99
22) Di-isopropyl ether	5.336	45	964450	58.06	ug/Kg	88
23) Chloroprene	5.488	53	525474	52.47	ug/Kg	95
24) 1,1-Dichloroethane	5.519	63	613566	53.53	ug/Kg	100
25) Acrylonitrile	5.573	53	440548	234.21	ug/Kg	91
26) ETBE	5.731	59	1014787	60.27	ug/Kg	95
27) Vinyl acetate	5.750	43	2132798	233.25	ug/Kg	90
28) cis-1,2-Dichloroethene	6.090	96	408496	56.54	ug/Kg	96
29) 2,2-Dichloropropane	6.206	77	223728	55.02	ug/Kg	94
30) Bromochloromethane	6.303	128	182154	59.00	ug/Kg	94
31) Cyclohexane	6.322	56	663603	52.78	ug/Kg	87
32) Chloroform	6.358	83	634269	55.60	ug/Kg	100
33) Ethyl acetate	6.455	43	1066192	237.25	ug/Kg	99
34) Tetrahydrofuran	6.553	42	65037	52.42	ug/Kg	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076955.D
Acq On : 25 Apr 2016 7:52 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33682,vf2641,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 26 07:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36)	Carbon Tetrachloride	6.535	117	356544	52.84	ug/Kg	96
37)	1,1,1-Trichloroethane	6.595	97	411915	55.61	ug/Kg	94
38)	2-Butanone	6.681	43	574961	240.16	ug/Kg	84
39)	1,1-Dichloropropene	6.717	75	455181	52.24	ug/Kg	93
40)	Propionitrile	7.003	54	392962	497.59	ug/Kg	98
41)	Methacrylonitrile	7.015	41	1570498	572.06	ug/Kg	95
42)	Benzene	6.979	78	1343382	51.36	ug/Kg	95
43)	TAME	7.058	73	928674	58.51	ug/Kg	96
45)	1,2-Dichloroethane	7.185	62	404970	57.69	ug/Kg	91
46)	Trichloroethene	7.557	95	323406	48.46	ug/Kg	86
47)	Methylcyclohexane	7.563	83	620992	50.36	ug/Kg	91
48)	Dibromomethane	8.001	93	176481	54.33	ug/Kg	91
49)	1,2-Dichloropropane	8.092	63	324710	52.41	ug/Kg	89
50)	Bromodichloromethane	8.141	83	367083	53.53	ug/Kg	98
51)	Methyl methacrylate	8.256	41	202432	54.44	ug/Kg	82
52)	2-Chloroethyl vinyl ether	8.676	63	872494	261.83	ug/Kg	93
53)	cis-1,3-Dichloropropene	8.767	75	448726	52.17	ug/Kg	95
56)	Toluene	9.004	91	1290219	44.03	ug/Kg	98
57)	2-Nitropropane	9.236	41	163174	164.51	ug/Kg	94
58)	4-Methyl-2-pentanone	9.351	43	1232488	221.27	ug/Kg	94
59)	trans-1,3-Dichloropropene	9.406	75	380876	48.06	ug/Kg	97
60)	Tetrachloroethene	9.394	166	275202	41.07	ug/Kg	91
61)	Ethyl methacrylate	9.522	69	324826	47.15	ug/Kg	92
62)	1,1,2-Trichloroethane	9.570	83	225589	46.39	ug/Kg	92
63)	Dibromochloromethane	9.759	129	217691	45.79	ug/Kg	99
64)	1,3-Dichloropropane	9.850	76	434305	46.31	ug/Kg	94
65)	1,2-Dibromoethane	10.020	107	243324	47.02	ug/Kg	98
66)	2-hexanone	10.179	43	885659	224.79	ug/Kg	94
67)	1-Chlorohexane	10.465	91	366828	44.21	ug/Kg	95
68)	Ethylbenzene	10.525	91	1355498	45.51	ug/Kg	98
69)	Chlorobenzene	10.525	112	766584	44.47	ug/Kg	89
70)	1,1,1,2-Tetrachloroethane	10.580	131	247584	48.92	ug/Kg	98
71)	m,p-Xylene	10.665	91	1996185	87.48	ug/Kg	96
72)	o-Xylene	11.103	91	1048634	47.80	ug/Kg	96
73)	Styrene	11.158	104	759942	45.03	ug/Kg	95
74)	Bromoform	11.213	173	111991	39.33	ug/Kg	95
75)	Isopropylbenzene	11.414	105	1261430	47.55	ug/Kg	97
78)	cis-1,4-Dichloro-2-butene	11.772	53	88800	42.23	ug/Kg	85
79)	n-Propylbenzene	11.833	91	1362311	41.58	ug/Kg	61
80)	Bromobenzene	11.845	156	311685	44.78	ug/Kg	96
81)	1,1,2,2-Tetrachloroethane	11.906	83	335475	43.13	ug/Kg	96
82)	1,3,5-Trimethylbenzene	12.022	105	1060161	44.89	ug/Kg	84
83)	2-Chlorotoluene	12.016	91	981930	43.16	ug/Kg	91
84)	trans-1,4-Dichloro-2-B...	12.089	53	83105	42.23	ug/Kg	90
85)	1,2,3-Trichloropropane	12.065	110	82241	44.56	ug/Kg	93
86)	Cyclohexanone	12.131	55	63310	207.80	ug/Kg	89
87)	4-Chlorotoluene	12.186	91	816962	40.61	ug/Kg	93
88)	tert-Butylbenzene	12.357	91	687923	47.52	ug/Kg	95
89)	1,2,4-Trimethylbenzene	12.430	105	993555	43.72	ug/Kg	96
90)	Pentachloroethane	12.405	167	151301	44.71	ug/Kg	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076955.D
Acq On : 25 Apr 2016 7:52 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33682,vf2641,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 26 07:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91)	sec-Butylbenzene	12.539	105	1393584	44.15	ug/Kg	98
92)	4-Isopropyltoluene	12.679	119	979511	40.91	ug/Kg	99
93)	1,3-Dichlorobenzene	12.801	146	490563	39.01	ug/Kg	96
94)	1,4-Dichlorobenzene	12.892	146	491582	38.27	ug/Kg	98
95)	n-Butylbenzene	13.117	92	498328	35.48	ug/Kg	98
96)	Benzyl Chloride	13.135	126	91329	38.88	ug/Kg#	66
97)	1,2-Dichlorobenzene	13.330	146	522456	43.02	ug/Kg	98
98)	1,2-Dibromo-3-Chloropr...	14.090	75	54656	41.92	ug/Kg#	76
99)	Hexachlorobutadiene	14.650	225	155813	35.96	ug/Kg	86
100)	1,2,4-Trichlorobenzene	14.693	180	280908	35.99	ug/Kg	97
101)	Naphthalene	14.972	128	895992	45.61	ug/Kg	100
102)	1,2,3-Trichlorobenzene	15.137	180	316952	39.40	ug/Kg	97
104)	Ethanol	4.010	45	61713m	930.53	ug/Kg	
105)	Acrolein	4.417	56	229693	239.10	ug/Kg	91
106)	Tert butyl alcohol	5.050	59	316631	510.03	ug/Kg	92
107)	Isobutyl alcohol	7.137	42	144075	944.22	ug/Kg	87
108)	Tert Amyl Alcohol	7.246	59	250946	482.12	ug/Kg	94
109)	1,4-Dioxane	8.354	88	61339	984.92	ug/Kg	76

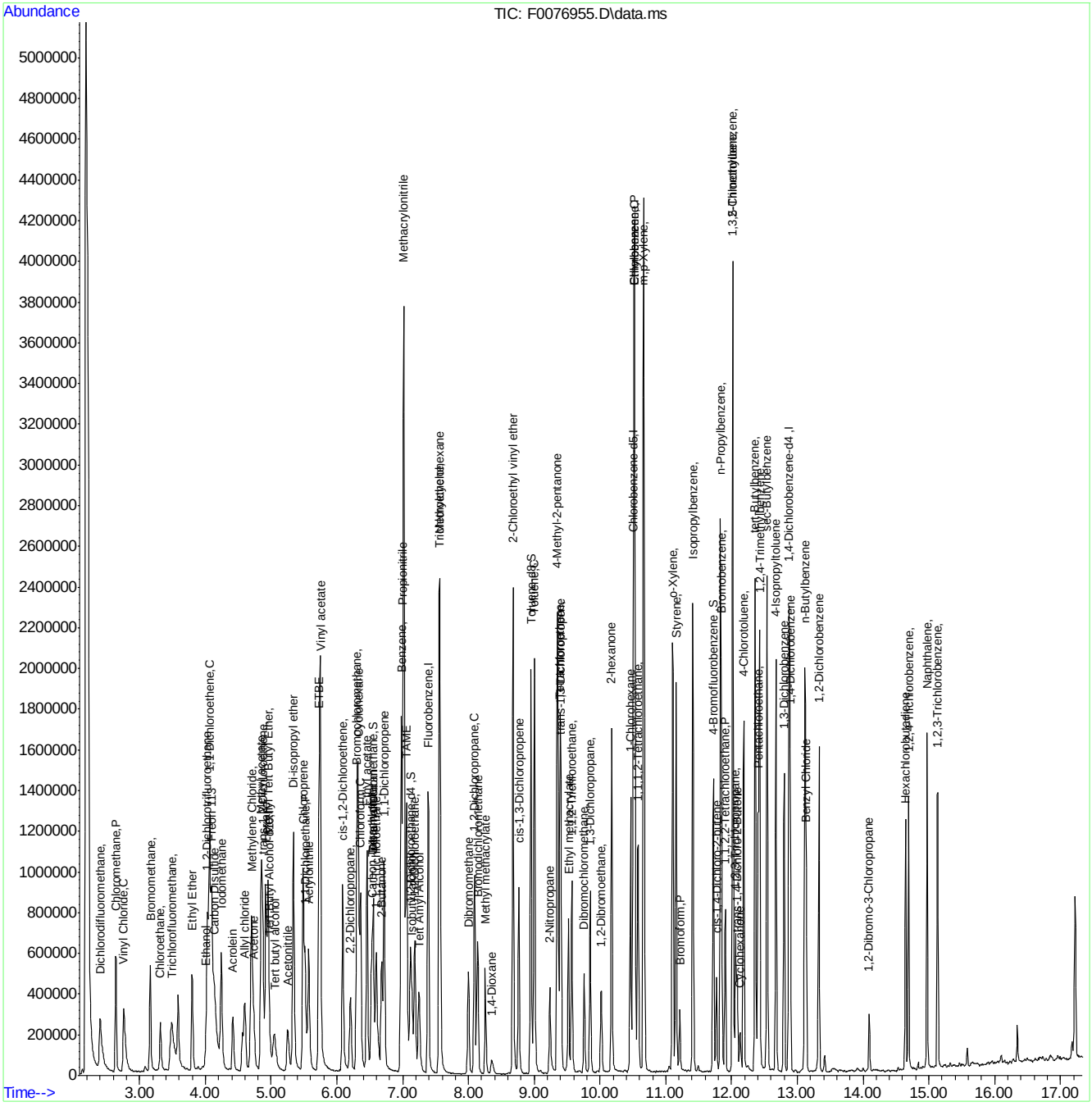
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076955.D
Acq On : 25 Apr 2016 7:52 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33682,vf2641,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 26 07:23:29 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration



041316APP9-F.m Tue Apr 26 07:26:10 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

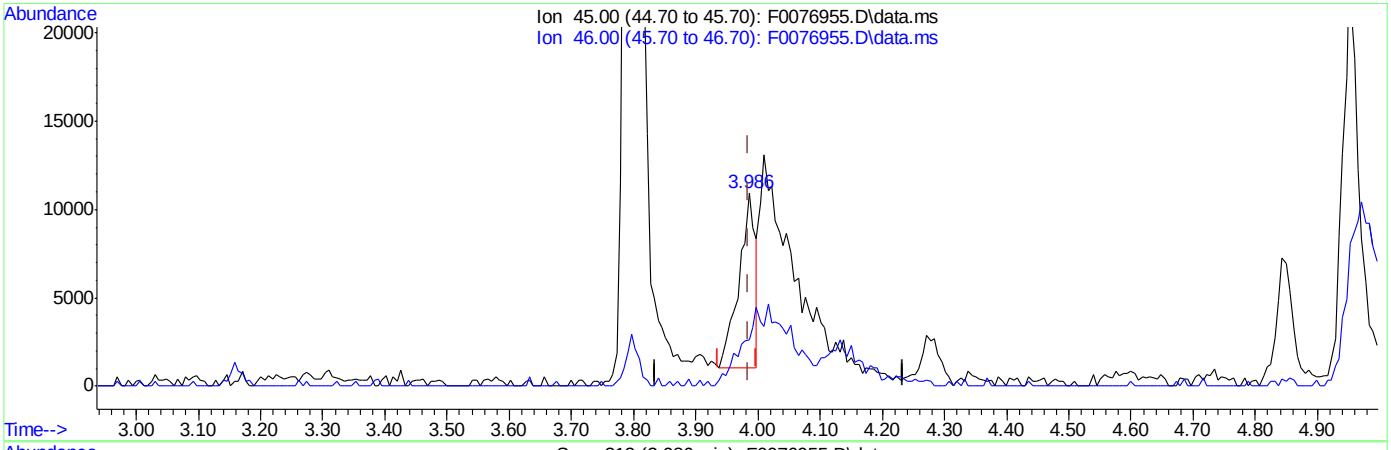
Sample Number:	VF2641-ECC2628	**Method:**	SW846 8260B
Lab FileID:	F0076955.D	**Analyst approved:**	04/26/16 07:30 Eric Parrish
Injection Time:	04/25/16 19:52	**Supervisor approved:**	04/26/16 11:07 Juan Garcia

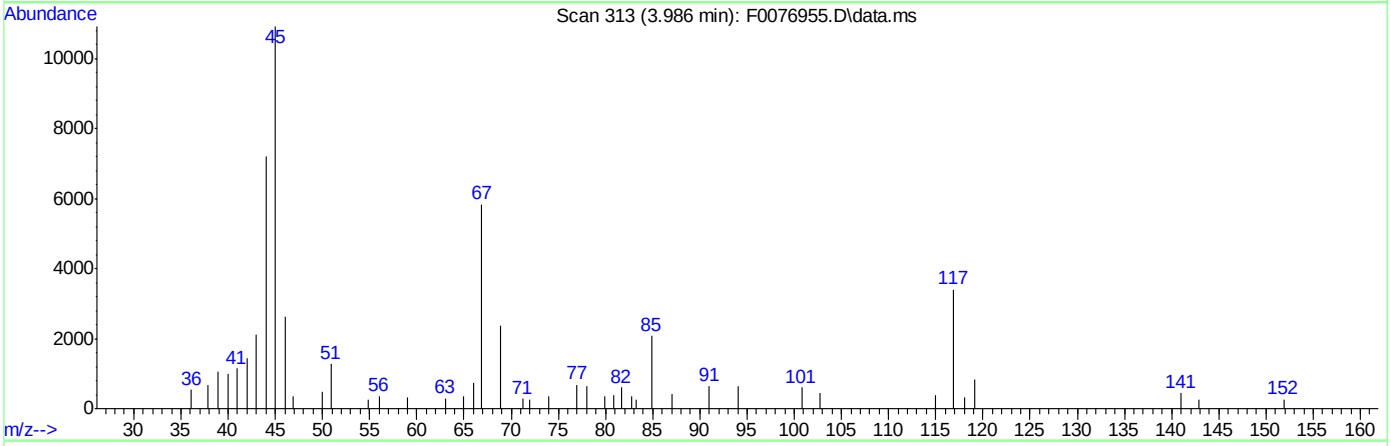
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		4.01	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076955.D
Acq On : 25 Apr 2016 7:52 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33682,vf2641,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 26 07:23:07 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





TIC: F0076955.D\data.ms

(104) Ethanol

3.986min (+0.001) 279.00ug/Kg

response 18503

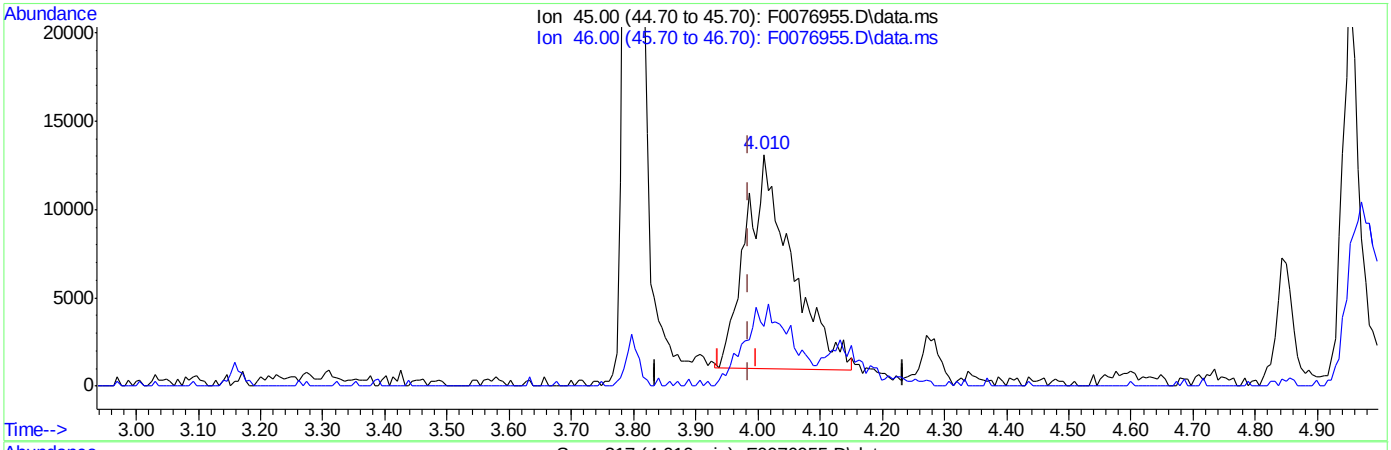
Ion	Exp%	Act%
45.00	100	100
46.00	35.00	23.19
0.00	0.00	0.00
0.00	0.00	0.00

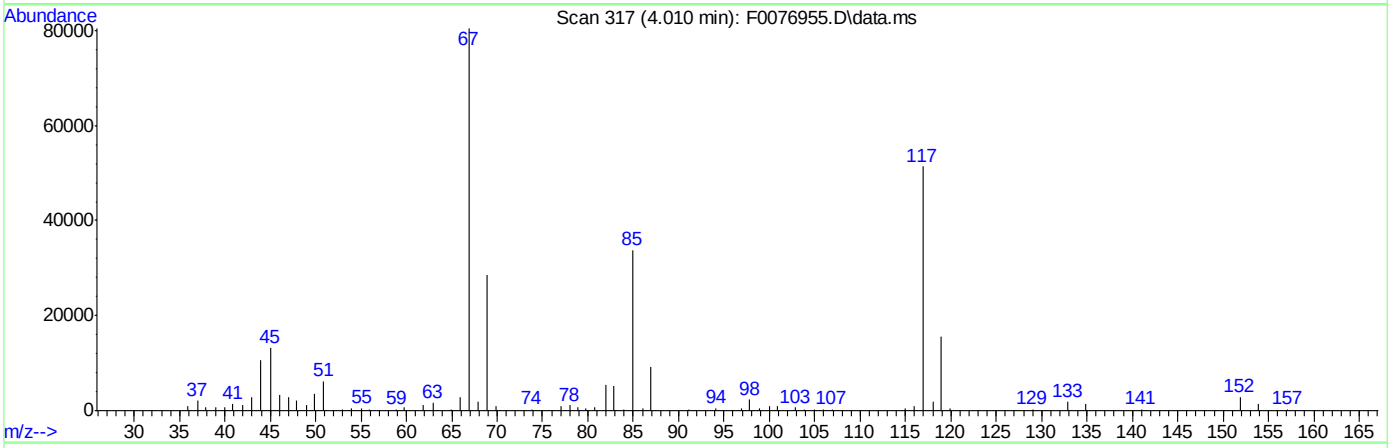
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : F0076955.D
Acq On : 25 Apr 2016 7:52 pm
Operator : ericp
Sample : ECC2628-4 Inst : MSVOA9
Misc : MS33682,vf2641,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 26 07:23:07 2016
Quant Method : C:\msdchem\1\METHODS\041316APP9-F.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Apr 13 12:21:03 2016
Response via : Initial Calibration





(104) Ethanol

4.010min (+0.025) 930.53ug/Kg m

response 61713

Ion	Exp%	Act%
45.00	100	100
46.00	35.00	25.59
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:41:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.147	96	523300	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.238	117	385062	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.598	152	182393	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.799	65	46875	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.326	113	126633	48.47	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.94%			
38) 1,2-Dichloroethane-d4	6.867	65	172281	55.85	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 111.70%			
48) Toluene-d8	8.692	98	529814	52.45	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 104.90%			
69) 4-Bromofluorobenzene	11.454	95	181039	57.18	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 114.36%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.530	85	10717	4.37	ug/L	91
3) Chloromethane	2.682	50	20830	5.44	ug/L	93
4) Vinyl Chloride	2.816	62	17745	4.92	ug/L	94
5) Bromomethane	3.163	94	10311	4.31	ug/L	82
6) Chloroethane	3.303	64	11800	3.89	ug/L	95
7) Trichlorofluoromethane	3.515	101	20087m	4.37	ug/L	
8) Ethyl Ether	3.728	59	14990	4.85	ug/L	91
9) 1,2-Dichlorotrifluoroe...	3.953	67	17204	4.89	ug/L	86
10) 1,1-Dichloroethene	3.990	61	23242	5.00	ug/L	93
11) Freon 113	4.045	101	11522	4.14	ug/L	89
12) Carbon Disulfide	4.051	76	43902	4.75	ug/L	74
13) Iodomethane	4.148	142	19554	4.38	ug/L	92
14) Methylene Chloride	4.562	49	23323	5.65	ug/L	93
15) Acetone	4.574	58	7057	32.94	ug/L #	82
16) Methyl acetate	4.696	74	10577	24.06	ug/L #	44
17) trans-1,2-Dichloroethene	4.726	61	20494	5.23	ug/L	95
18) Hexane	4.787	56	16019	5.16	ug/L	93
19) Methyl Tert Butyl Ether	4.823	73	39639	4.91	ug/L	97
20) Di-isopropyl ether	5.176	45	58045	5.61	ug/L	98
21) 1,1-Dichloroethane	5.340	63	27484	5.21	ug/L	91
22) Acrylonitrile	5.371	53	27178	27.80	ug/L	93
23) ETBE	5.553	59	50478	5.04	ug/L	99
24) Vinyl acetate	5.535	43	183351	27.07	ug/L	98
25) cis-1,2-Dichloroethene	5.882	96	14916	4.65	ug/L	92
26) 2,2-Dichloropropane	6.016	77	19924	4.80	ug/L	99
27) Bromochloromethane	6.095	128	7074	4.35	ug/L	93
28) Cyclohexane	6.137	56	27362	5.07	ug/L	94
29) Chloroform	6.144	83	25995	4.77	ug/L	97
30) Tetrahydrofuran	6.314	42	4985	6.77	ug/L	92
32) Carbon Tetrachloride	6.326	117	20202m	4.72	ug/L	
33) 1,1,1-Trichloroethane	6.393	97	21281	4.76	ug/L	99
34) 2-Butanone	6.423	43	37366	33.50	ug/L	94
35) 1,1-Dichloropropene	6.502	75	20531	4.97	ug/L	96
36) Benzene	6.746	78	60333	4.98	ug/L	99

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:41:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) TAME	6.837	73	41130	4.87	ug/L		94
39) 1,2-Dichloroethane	6.934	62	22075	5.13	ug/L		98
40) Trichloroethene	7.324	95	14449	4.71	ug/L		89
41) Methylcyclohexane	7.348	83	24656	4.57	ug/L		96
42) Dibromomethane	7.743	93	8373	4.64	ug/L		94
43) 1,2-Dichloropropane	7.835	63	17145	5.16	ug/L		95
44) Bromodichloromethane	7.883	83	19421	4.65	ug/L		98
45) 2-Chloroethyl vinyl ether	8.419	63	52494	23.65	ug/L		94
46) cis-1,3-Dichloropropene	8.504	75	24358	4.63	ug/L		91
49) Toluene	8.747	91	64684	4.83	ug/L		96
50) 2-Nitropropane	8.948	41	20363	26.76	ug/L		92
51) 4-Methyl-2-pentanone	9.082	43	81003	31.93	ug/L		95
52) trans-1,3-Dichloropropene	9.137	75	21332	4.76	ug/L		93
53) Tetrachloroethene	9.149	166	13567	4.20	ug/L		96
54) 1,1,2-Trichloroethane	9.301	83	10899	4.77	ug/L		89
55) Dibromochloromethane	9.496	129	13332	4.28	ug/L		92
56) 1,3-Dichloropropane	9.581	76	23948	4.96	ug/L		91
57) 1,2-Dibromoethane	9.751	107	11569	4.44	ug/L		92
58) 2-hexanone	9.903	43	53102	30.30	ug/L		90
59) 1-Chlorohexane	10.207	91	19468	4.62	ug/L		91
60) Ethylbenzene	10.268	91	69545	4.59	ug/L		98
61) Chlorobenzene	10.256	112	41396	4.58	ug/L		93
62) 1,1,1,2-Tetrachloroethane	10.311	131	14023	4.57	ug/L		97
63) m,p-Xylene	10.408	91	103193	9.05	ug/L		99
64) o-Xylene	10.846	91	50107	4.54	ug/L		96
65) Styrene	10.895	104	37971	4.20	ug/L		96
66) Bromoform	10.937	173	8227	4.13	ug/L		94
67) Isopropylbenzene	11.150	105	61665	4.37	ug/L		98
70) n-Propylbenzene	11.570	91	76558	4.86	ug/L		96
71) Bromobenzene	11.570	156	15564	4.31	ug/L		97
72) 1,1,2,2-Tetrachloroethane	11.631	83	15627	5.02	ug/L		97
73) 1,3,5-Trimethylbenzene	11.759	105	54739	4.62	ug/L		100
74) 2-Chlorotoluene	11.752	91	50110	4.83	ug/L		93
75) trans-1,4-Dichloro-2-B...	11.813	53	3997	5.43	ug/L	#	84
76) 1,2,3-Trichloropropane	11.783	110	4490	5.03	ug/L		90
77) Cyclohexanone	11.838	55	2541	37.93	ug/L		89
78) 4-Chlorotoluene	11.917	91	46524	4.86	ug/L		99
79) tert-Butylbenzene	12.093	91	30032	4.88	ug/L		90
80) 1,2,4-Trimethylbenzene	12.166	105	52742	4.54	ug/L		93
81) sec-Butylbenzene	12.276	105	66627	4.59	ug/L		98
82) 4-Isopropyltoluene	12.416	119	53629	4.40	ug/L		97
83) 1,3-Dichlorobenzene	12.531	146	29407	4.40	ug/L		98
84) 1,4-Dichlorobenzene	12.616	146	30671	4.35	ug/L		91
85) n-Butylbenzene	12.854	92	30306	4.71	ug/L		96
86) Benzyl Chloride	12.860	126	5753	4.41	ug/L	#	58
87) 1,2-Dichlorobenzene	13.054	146	27498	4.42	ug/L		98
88) 1,2-Dibromo-3-Chloropr...	13.833	75	2276	4.94	ug/L		80
89) Hexachlorobutadiene	14.417	225	8829	4.71	ug/L		91
90) 1,2,4-Trichlorobenzene	14.454	180	15435	4.01	ug/L		92
91) Naphthalene	14.733	128	28615	4.01	ug/L		98

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:41:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.892	180	14139	4.17	ug/L	95
94) acrolein	4.288	56	12866	21.48	ug/L	91
95) Tert Butyl Alcohol	4.866	59	12777	55.65	ug/L	89
96) tert Amyl alcohol	6.989	59	9667	43.63	ug/L	86
97) 1,4-Dioxane	8.066	88	2206	81.06	ug/L	82

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

7.6.13

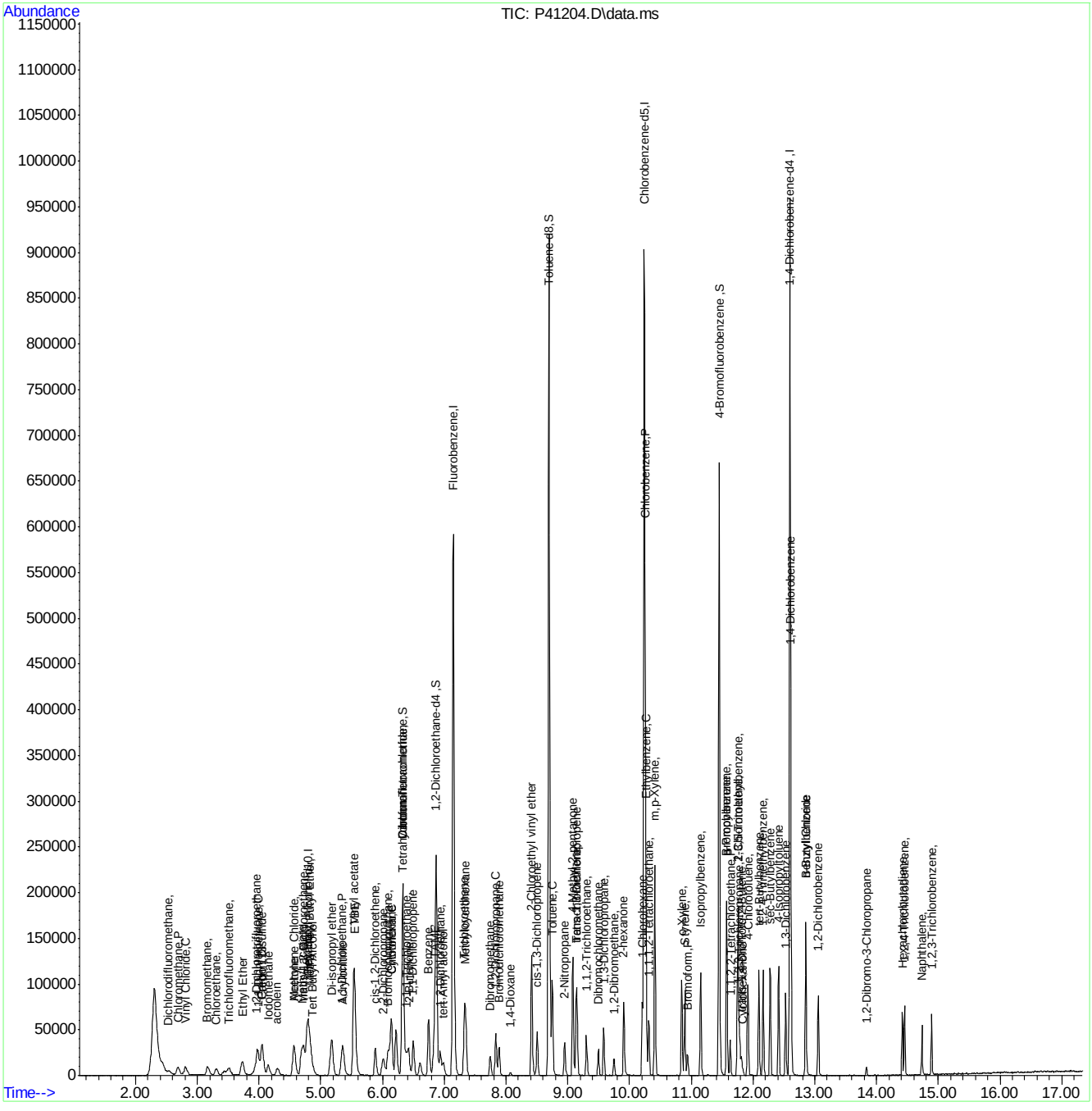
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:41:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration



8260P042116.M Fri Apr 22 08:38:29 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

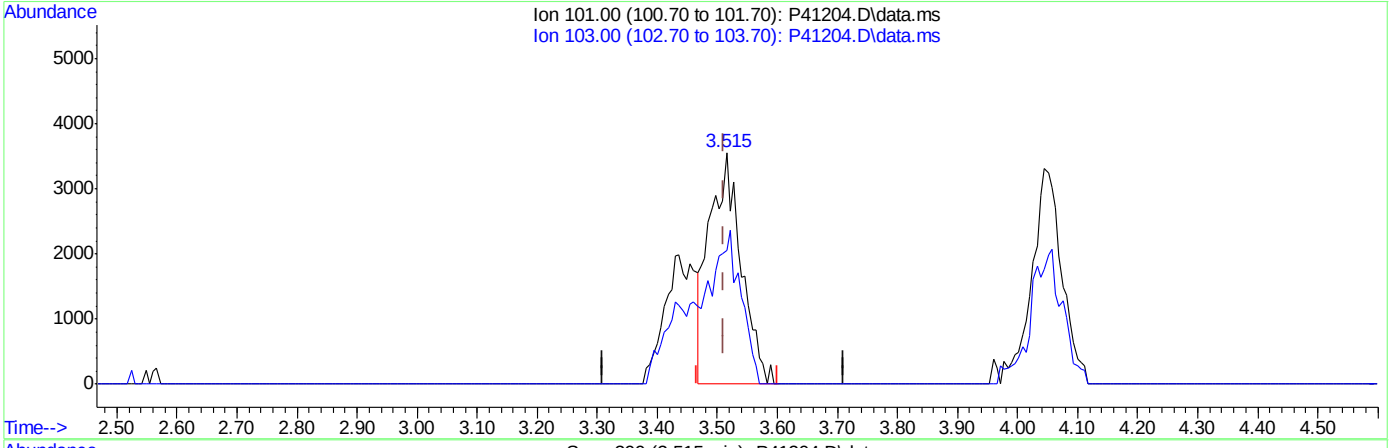
Sample Number:	VP1531-IC1531	**Method:**	SW846 8260B
Lab FileID:	P41204.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 11:03	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

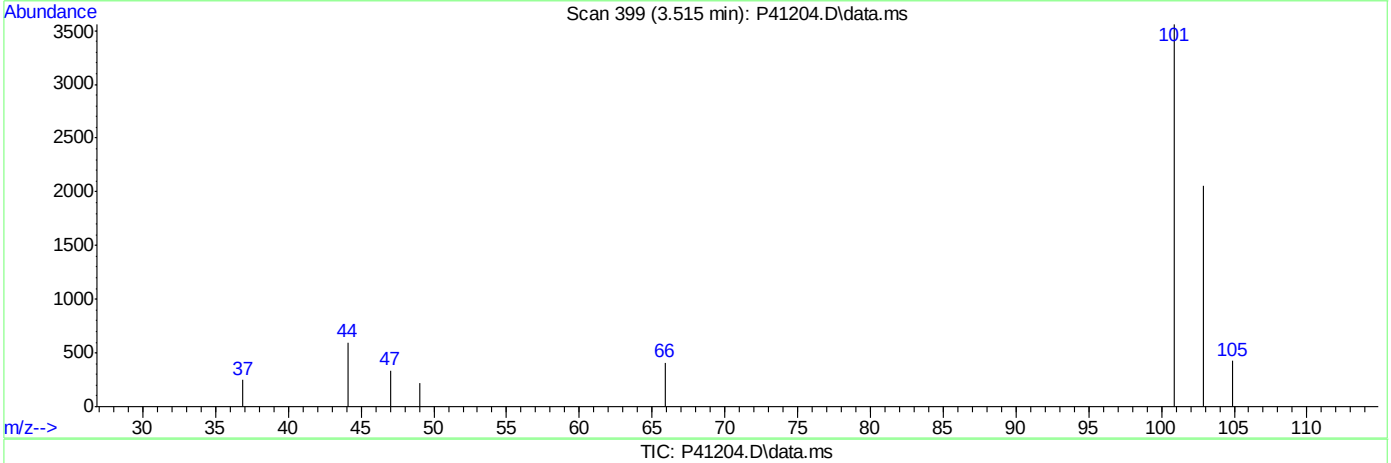
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.52	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:37:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41204.D\data.ms

(7) Trichlorofluoromethane ( )

3.515min (+0.005) 2.85ug/L

response 13112

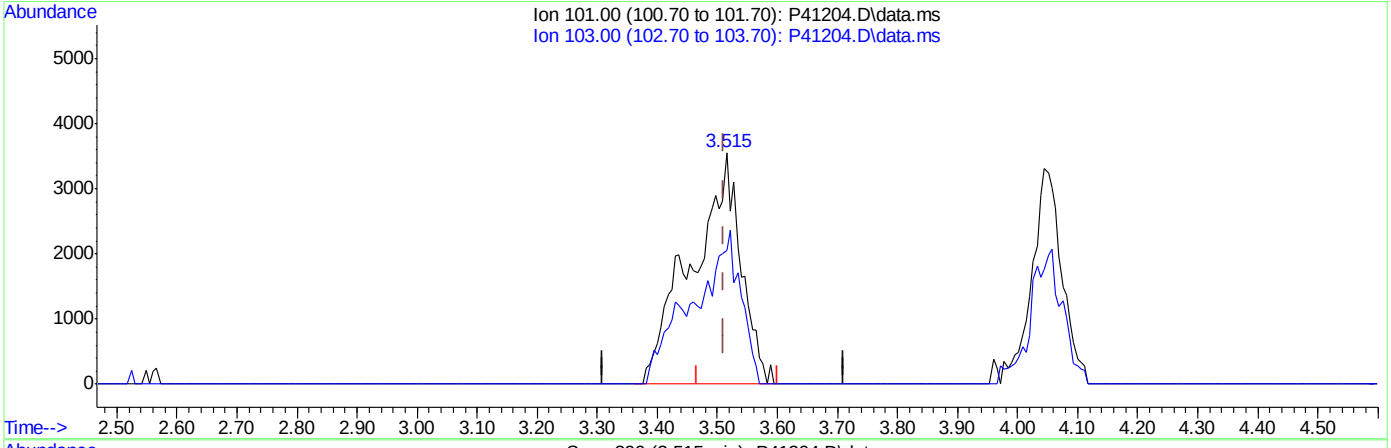
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	57.64
0.00	0.00	0.00
0.00	0.00	0.00

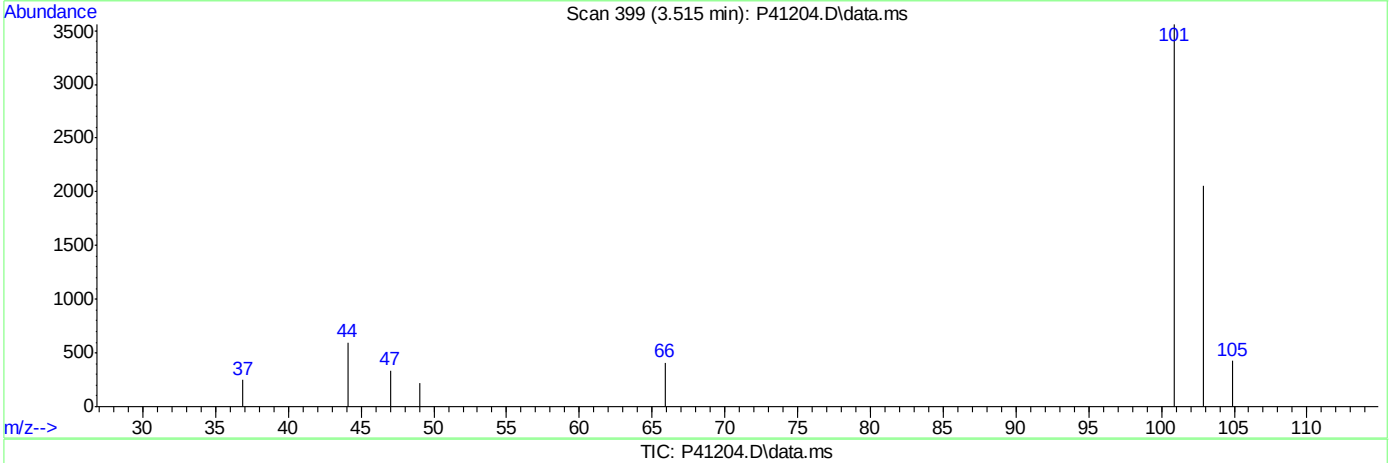
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:37:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41204.D\data.ms

(7) Trichlorofluoromethane ( )

3.515min (+0.005) 4.37ug/L m

response 20087

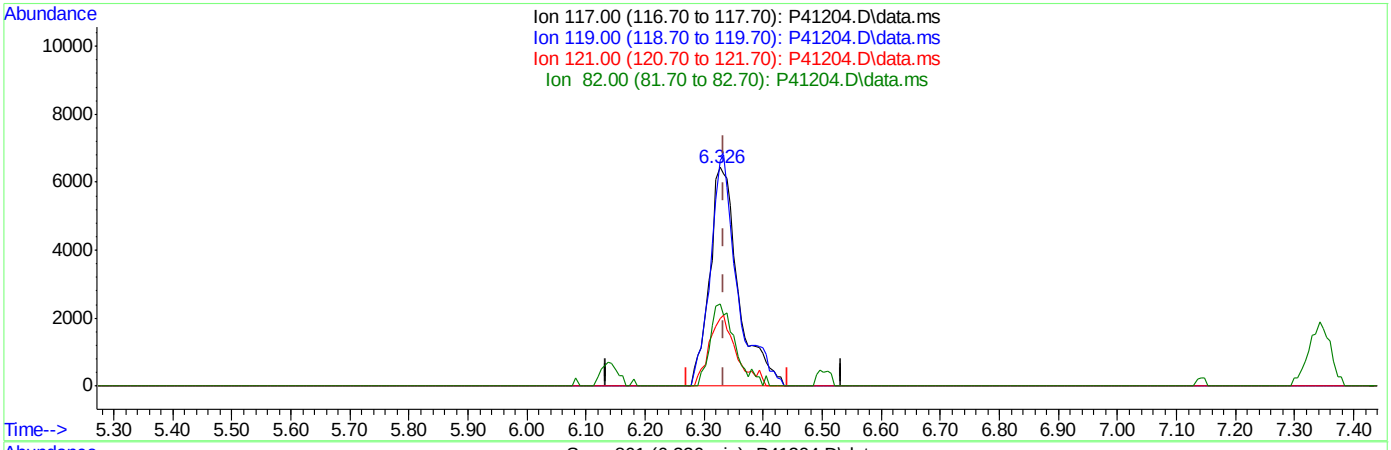
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	57.64
0.00	0.00	0.00
0.00	0.00	0.00

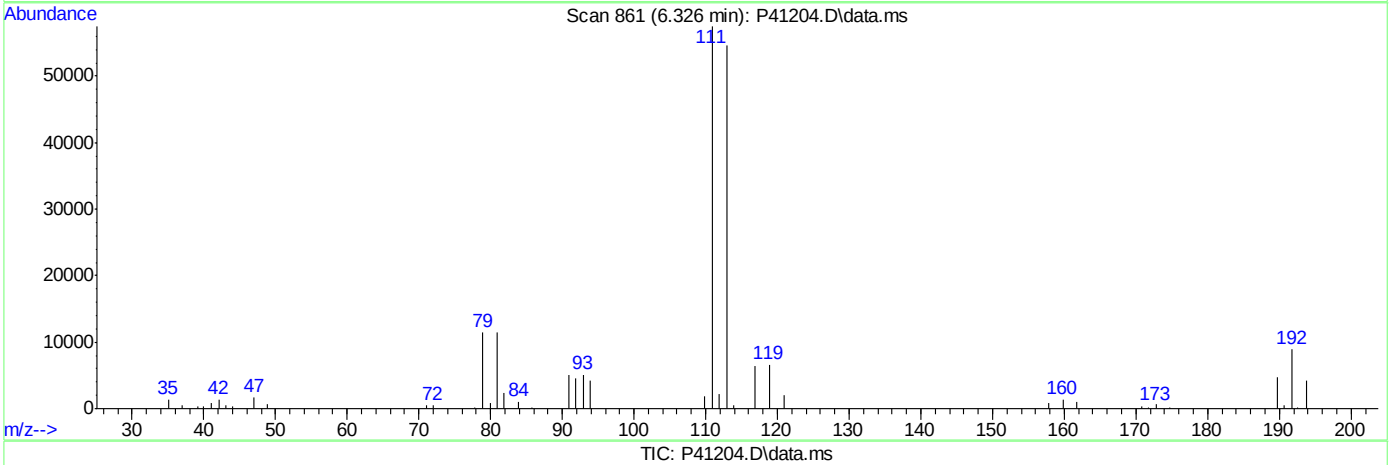
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:37:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41204.D\data.ms

(32) Carbon Tetrachloride ( )

6.326min (-0.007) 5.09ug/L

response 21773

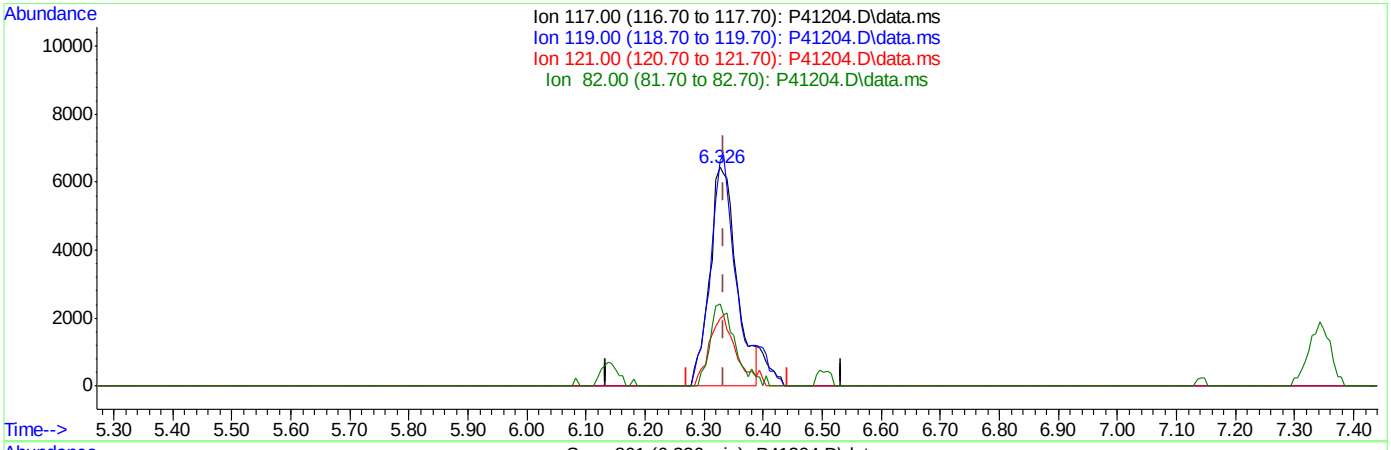
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	102.86
121.00	30.70	30.94
82.00	25.90	37.57

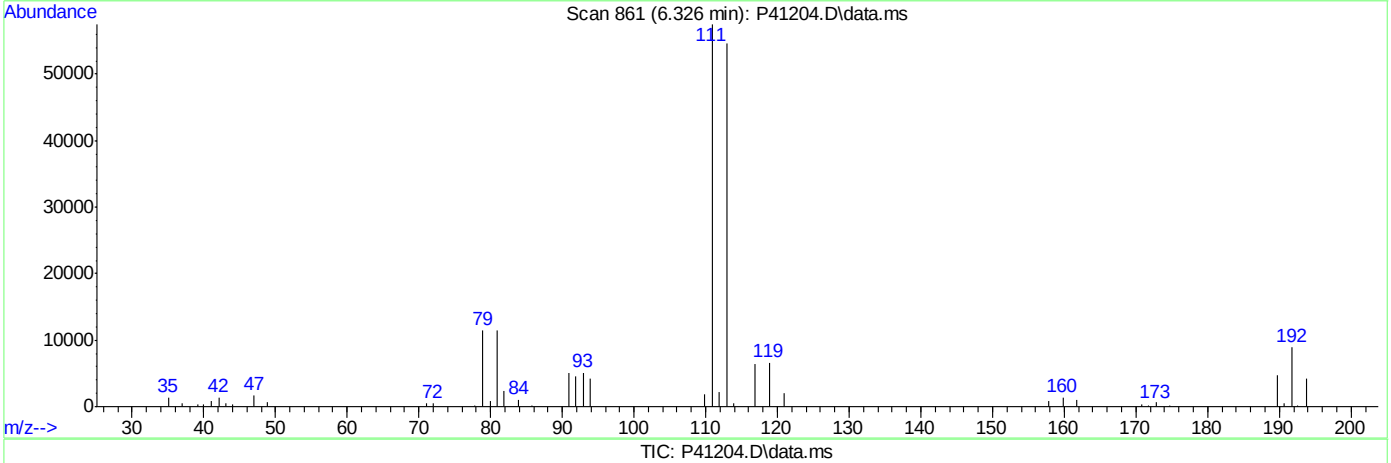
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41204.D
Acq On : 21 Apr 2016 11:03 am
Operator : katiem
Sample : IC1531-2 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 12:37:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41204.D\data.ms

(32) Carbon Tetrachloride ( )

6.326min (-0.007) 4.72ug/L m

response 20202

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	102.86
121.00	30.70	30.94
82.00	25.90	37.57

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:43:48 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.147	96	520206	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.244	117	383738	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.598	152	186933	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.793	65	47652	250.00	ug/L	-0.01

System Monitoring Compounds						
31) Dibromofluoromethane	6.326	113	124793	48.05	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.10%			
38) 1,2-Dichloroethane-d4	6.867	65	169506m	55.27	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 110.54%			
48) Toluene-d8	8.698	98	518499	51.51	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.02%			
69) 4-Bromofluorobenzene	11.454	95	180682	55.68	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 111.36%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.530	85	22848	9.37	ug/L	97
3) Chloromethane	2.694	50	41216	10.84	ug/L	98
4) Vinyl Chloride	2.822	62	34488	9.62	ug/L	96
5) Bromomethane	3.175	94	20883	8.78	ug/L	96
6) Chloroethane	3.308	64	23214	7.71	ug/L	96
7) Trichlorofluoromethane	3.527	101	40600m	8.89	ug/L	
8) Ethyl Ether	3.728	59	32236	10.48	ug/L	90
9) 1,2-Dichlorotrifluoroe...	3.947	67	36077	10.31	ug/L #	83
10) 1,1-Dichloroethene	3.990	61	49225	10.65	ug/L	90
11) Freon 113	4.051	101	25767	9.32	ug/L	98
12) Carbon Disulfide	4.051	76	91942	10.00	ug/L	90
13) Iodomethane	4.154	142	41196	9.29	ug/L	97
14) Methylene Chloride	4.568	49	49703	12.11	ug/L	91
15) Acetone	4.580	58	14370	67.47	ug/L	95
16) Methyl acetate	4.696	74	23322	53.37	ug/L #	31
17) trans-1,2-Dichloroethene	4.726	61	43141	11.07	ug/L	93
18) Hexane	4.781	56	33560	10.88	ug/L	98
19) Methyl Tert Butyl Ether	4.829	73	85643	10.68	ug/L	94
20) Di-isopropyl ether	5.182	45	126313	12.28	ug/L	96
21) 1,1-Dichloroethane	5.334	63	59668	11.37	ug/L	97
22) Acrylonitrile	5.365	53	57585	59.25	ug/L	96
23) ETBE	5.553	59	113507	11.39	ug/L	95
24) Vinyl acetate	5.535	43	410823	61.02	ug/L	96
25) cis-1,2-Dichloroethene	5.882	96	32403	10.17	ug/L	86
26) 2,2-Dichloropropane	6.016	77	45220	10.96	ug/L	96
27) Bromochloromethane	6.083	128	15159	9.38	ug/L	93
28) Cyclohexane	6.137	56	61452	11.46	ug/L	97
29) Chloroform	6.149	83	56350	10.40	ug/L	93
30) Tetrahydrofuran	6.314	42	11171	15.26	ug/L	91
32) Carbon Tetrachloride	6.332	117	43092m	10.13	ug/L	
33) 1,1,1-Trichloroethane	6.393	97	46809	10.53	ug/L	95
34) 2-Butanone	6.423	43	72406	65.30	ug/L	98
35) 1,1-Dichloropropene	6.502	75	44118	10.74	ug/L	93
36) Benzene	6.746	78	127479	10.57	ug/L	97

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:43:48 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.837	73	90241	10.75 ug/L	93
39) 1,2-Dichloroethane	6.940	62	47383	11.08 ug/L	98
40) Trichloroethene	7.324	95	31635	10.38 ug/L	97
41) Methylcyclohexane	7.342	83	55365	10.33 ug/L	94
42) Dibromomethane	7.749	93	17970	10.03 ug/L	98
43) 1,2-Dichloropropane	7.835	63	36318	11.00 ug/L	97
44) Bromodichloromethane	7.889	83	41766	10.06 ug/L	94
45) 2-Chloroethyl vinyl ether	8.419	63	102934	46.66 ug/L	97
46) cis-1,3-Dichloropropene	8.504	75	52152	9.98 ug/L	86
49) Toluene	8.747	91	137321	10.28 ug/L	97
50) 2-Nitropropane	8.954	41	44590	58.80 ug/L	95
51) 4-Methyl-2-pentanone	9.082	43	165225	65.36 ug/L	95
52) trans-1,3-Dichloropropene	9.136	75	45584	10.20 ug/L	89
53) Tetrachloroethene	9.149	166	29952	9.30 ug/L	97
54) 1,1,2-Trichloroethane	9.301	83	22686	9.96 ug/L	95
55) Dibromochloromethane	9.495	129	29430	9.47 ug/L	98
56) 1,3-Dichloropropane	9.581	76	50852	10.57 ug/L	90
57) 1,2-Dibromoethane	9.745	107	25320	9.76 ug/L	98
58) 2-hexanone	9.903	43	109648	62.79 ug/L	92
59) 1-Chlorohexane	10.207	91	41719	9.93 ug/L	82
60) Ethylbenzene	10.268	91	150765	9.98 ug/L	98
61) Chlorobenzene	10.256	112	86770	9.62 ug/L	90
62) 1,1,1,2-Tetrachloroethane	10.311	131	29428	9.61 ug/L	96
63) m,p-Xylene	10.408	91	229561	20.21 ug/L	97
64) o-Xylene	10.846	91	111582	10.16 ug/L	98
65) Styrene	10.895	104	85749	9.52 ug/L	97
66) Bromoform	10.943	173	17878	9.01 ug/L	94
67) Isopropylbenzene	11.156	105	139582	9.92 ug/L	99
70) n-Propylbenzene	11.570	91	170592	10.56 ug/L	98
71) Bromobenzene	11.576	156	34755	9.40 ug/L	99
72) 1,1,2,2-Tetrachloroethane	11.631	83	33264	10.42 ug/L	93
73) 1,3,5-Trimethylbenzene	11.758	105	124615	10.25 ug/L	99
74) 2-Chlorotoluene	11.752	91	111796	10.51 ug/L	98
75) trans-1,4-Dichloro-2-B...	11.807	53	9794	12.97 ug/L #	79
76) 1,2,3-Trichloropropane	11.783	110	9437	10.31 ug/L	92
77) Cyclohexanone	11.838	55	5836	84.99 ug/L	93
78) 4-Chlorotoluene	11.917	91	103102	10.50 ug/L	96
79) tert-Butylbenzene	12.093	91	67649	10.72 ug/L	90
80) 1,2,4-Trimethylbenzene	12.166	105	121031	10.16 ug/L	98
81) sec-Butylbenzene	12.276	105	154103	10.35 ug/L	98
82) 4-Isopropyltoluene	12.415	119	125388	10.04 ug/L	98
83) 1,3-Dichlorobenzene	12.525	146	65442	9.55 ug/L	97
84) 1,4-Dichlorobenzene	12.616	146	68528	9.49 ug/L	97
85) n-Butylbenzene	12.853	92	69256	10.50 ug/L	93
86) Benzyl Chloride	12.853	126	13294	9.94 ug/L #	27
87) 1,2-Dichlorobenzene	13.054	146	59900	9.40 ug/L	94
88) 1,2-Dibromo-3-Chloropr...	13.833	75	4984	10.56 ug/L #	81
89) Hexachlorobutadiene	14.417	225	18815	9.79 ug/L	99
90) 1,2,4-Trichlorobenzene	14.453	180	36991	9.37 ug/L	95
91) Naphthalene	14.733	128	67773	9.26 ug/L	95

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:43:48 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.891	180	31648	9.10	ug/L	98
94) acrolein	4.306	56	27259	44.76	ug/L	95
95) Tert Butyl Alcohol	4.866	59	27692	118.64	ug/L	84
96) tert Amyl alcohol	6.983	59	21984	97.59	ug/L	93
97) 1,4-Dioxane	8.066	88	5014	181.23	ug/L	92

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

7.6.14

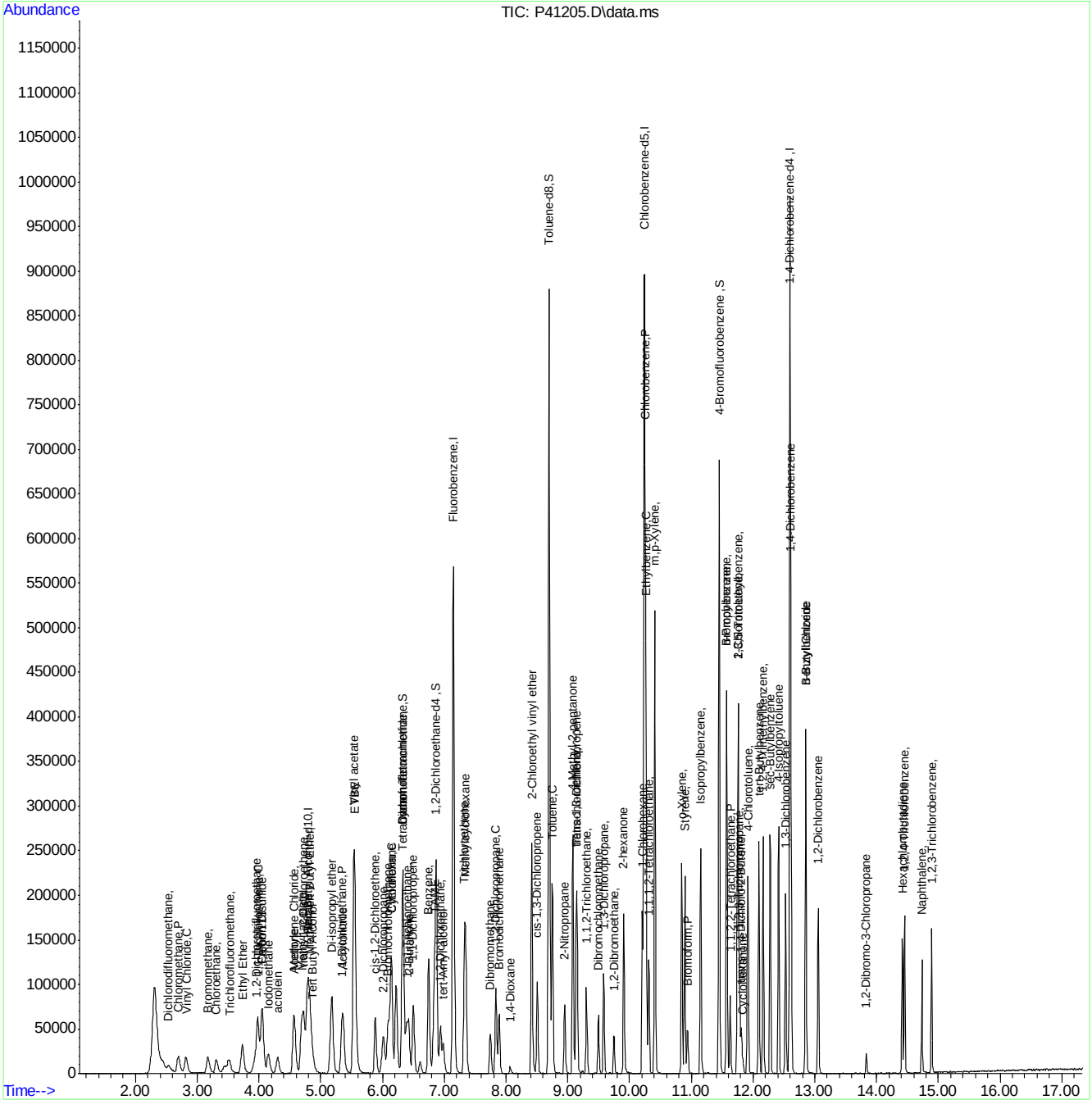
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:43:48 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

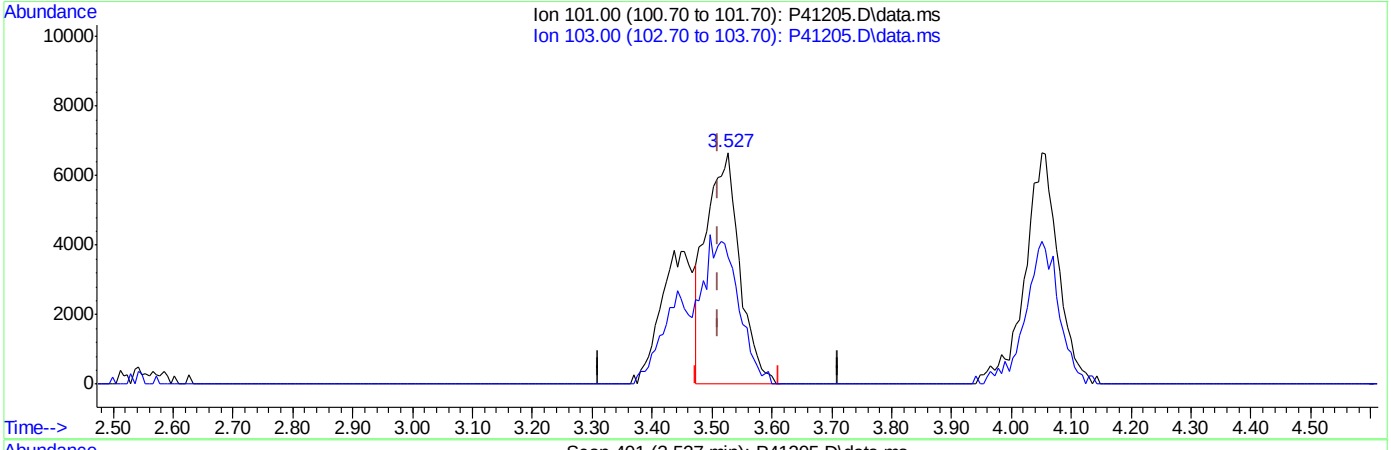
Sample Number:	VP1531-IC1531	**Method:**	SW846 8260B
Lab FileID:	P41205.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 11:28	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

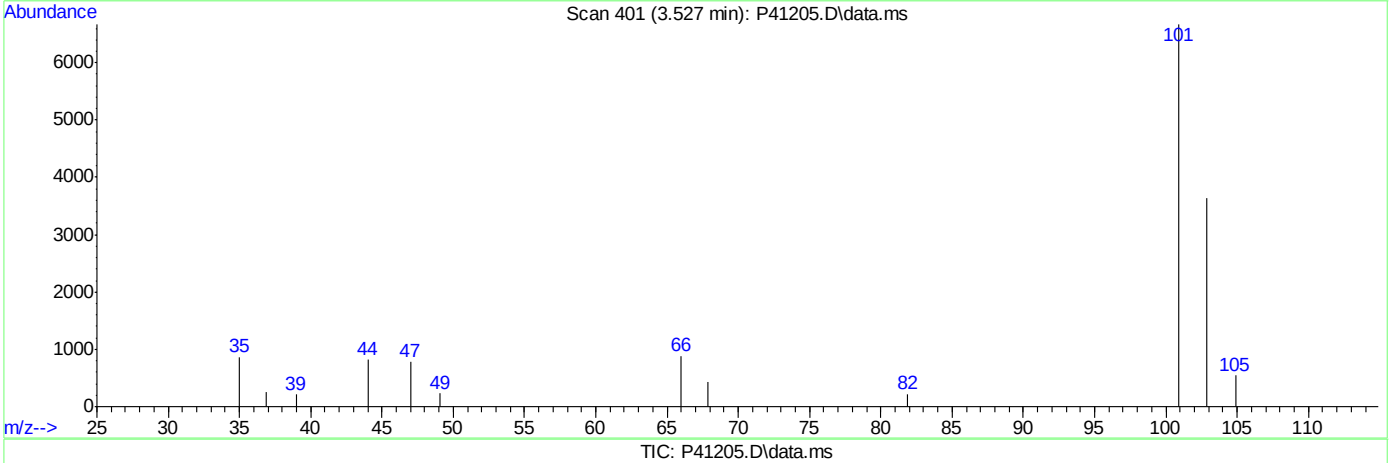
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.53	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		6.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:37:54 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41205.D\data.ms

(7) Trichlorofluoromethane ( )

3.527min (+0.017) 5.63ug/L

response 25716

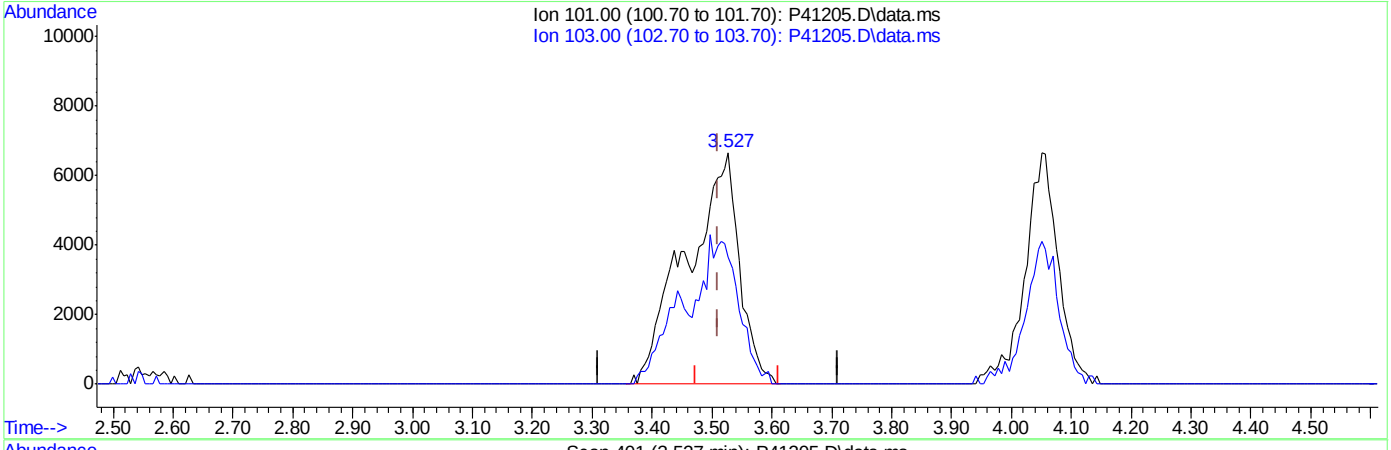
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	54.62
0.00	0.00	0.00
0.00	0.00	0.00

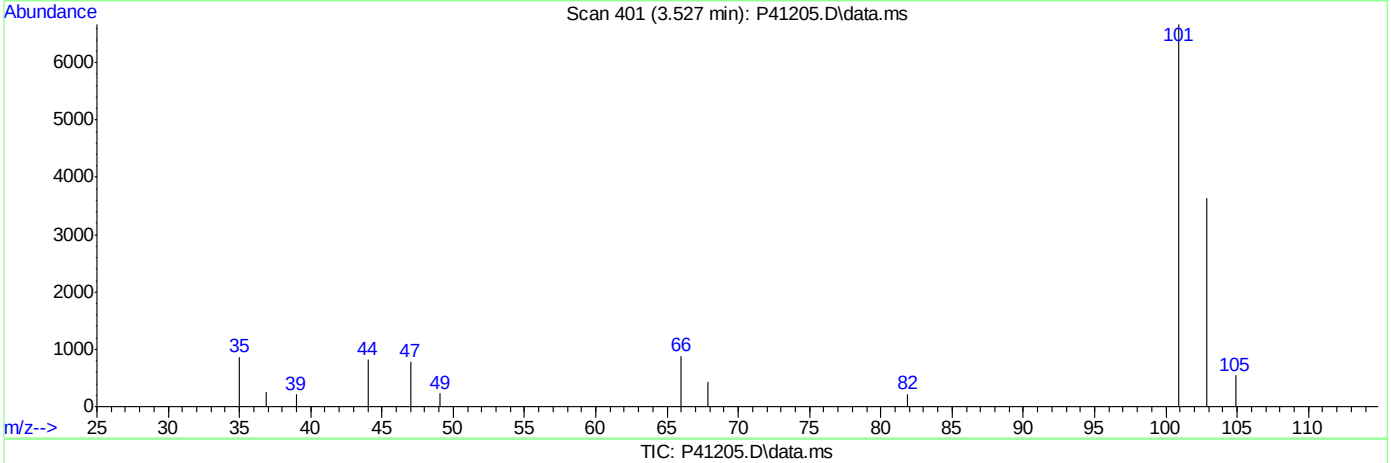
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:37:54 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41205.D\data.ms

(7) Trichlorofluoromethane ( )

3.527min (+0.017) 8.89ug/L m

response 40600

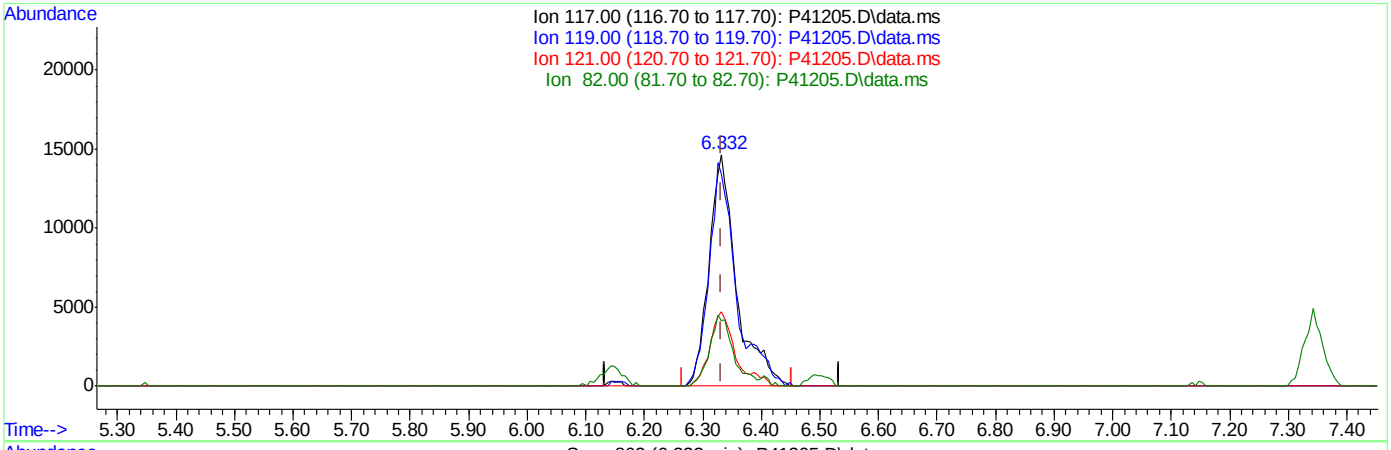
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	54.62
0.00	0.00	0.00
0.00	0.00	0.00

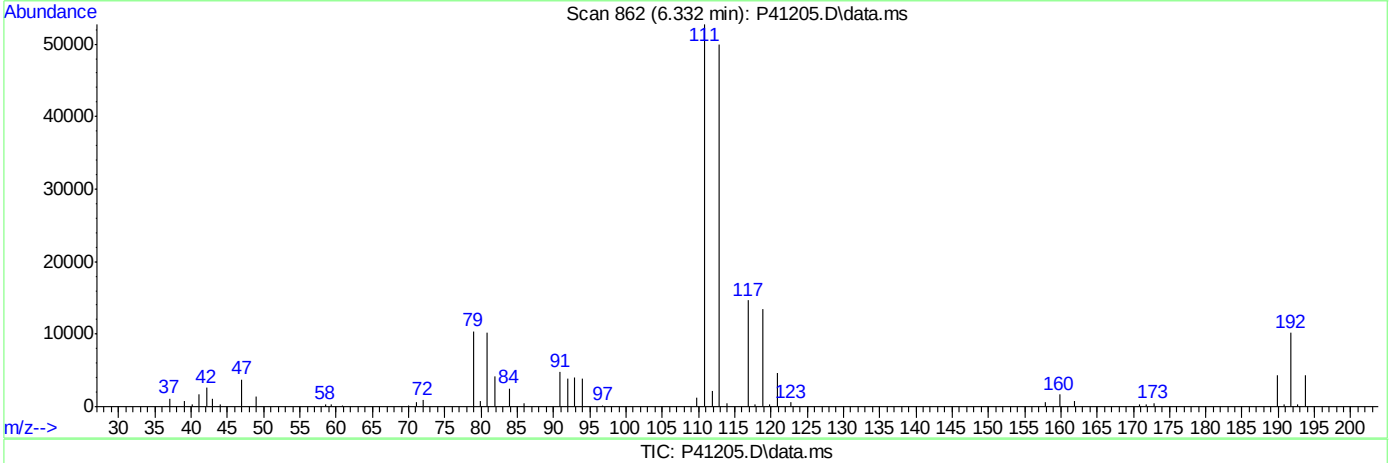
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:37:54 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41205.D\data.ms

(32) Carbon Tetrachloride ( )

6.332min (-0.001) 11.27ug/L

response 47944

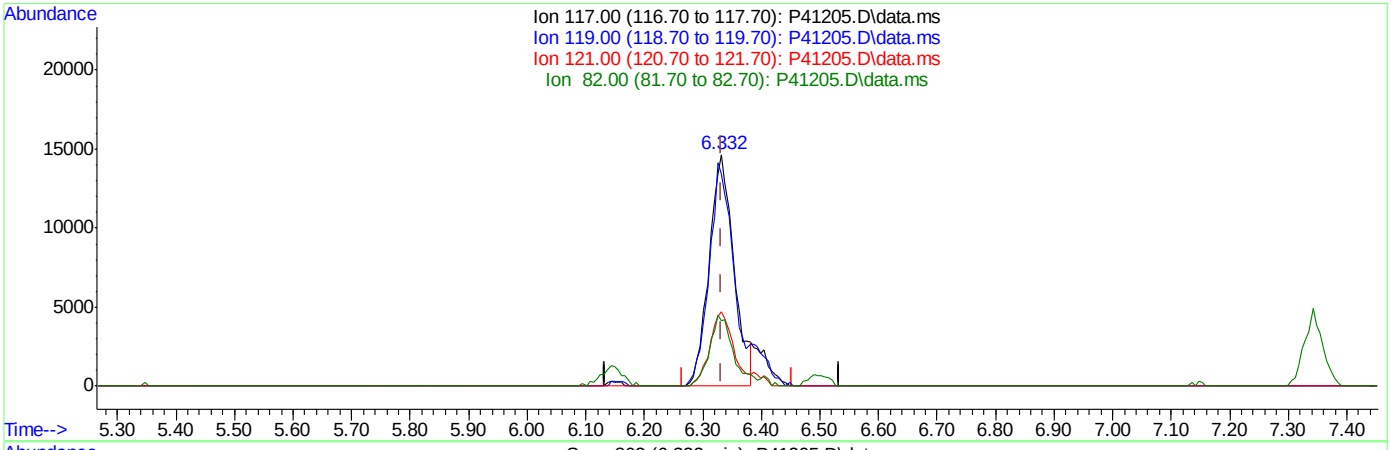
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	91.69
121.00	30.70	31.89
82.00	25.90	28.06

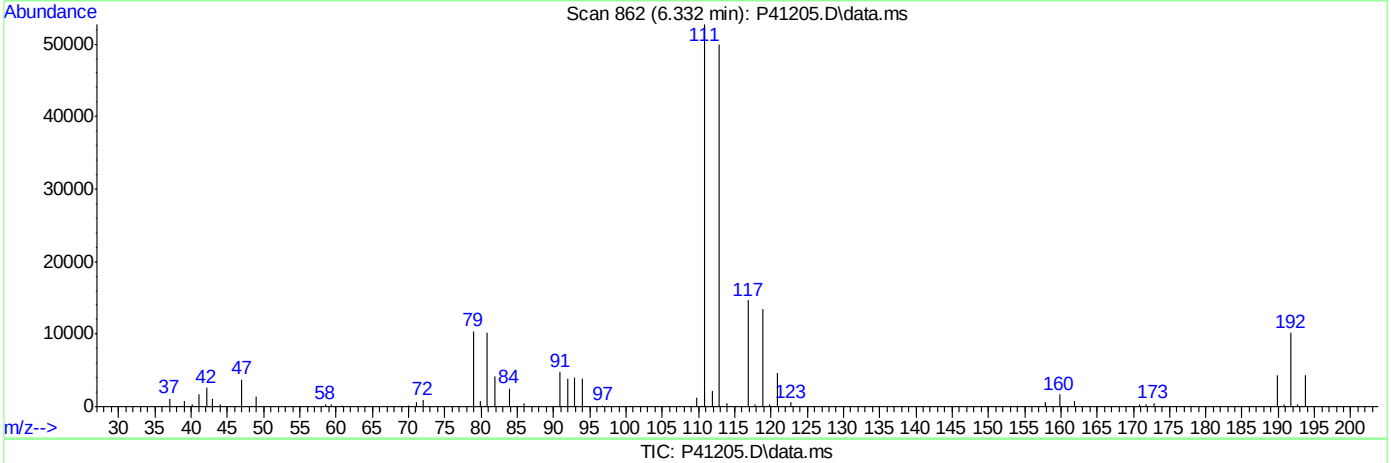
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:37:54 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41205.D\data.ms

(32) Carbon Tetrachloride ( )

6.332min (-0.001) 10.13ug/L m

response 43092

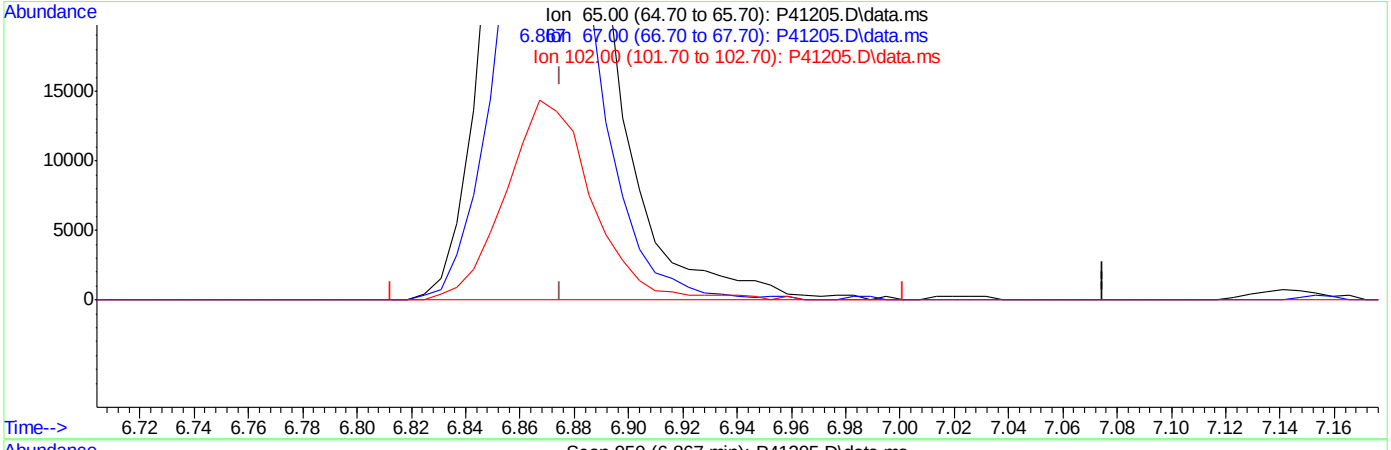
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	91.69
121.00	30.70	31.89
82.00	25.90	28.06

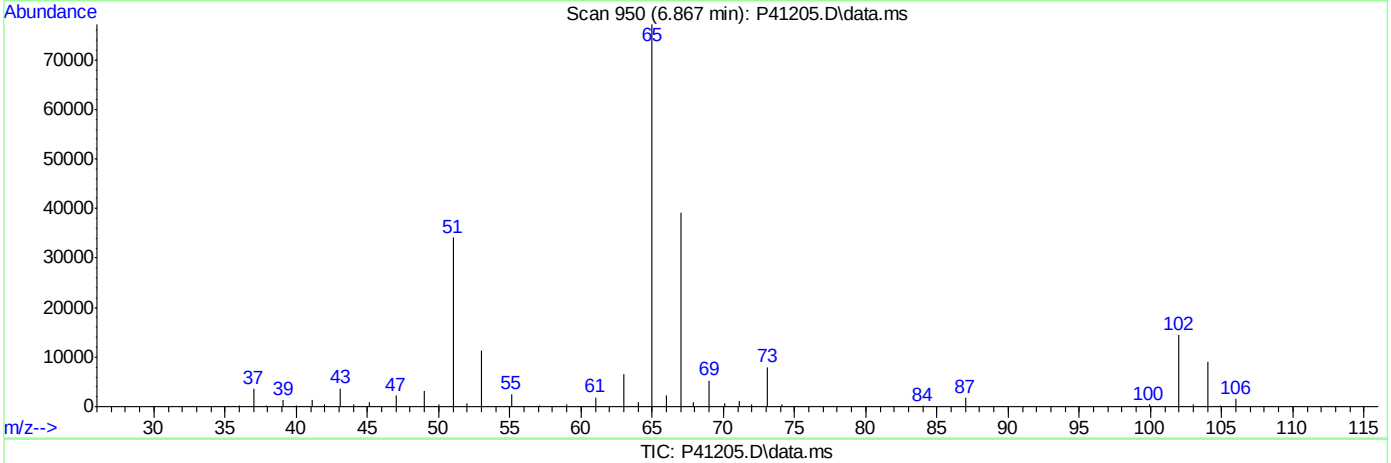
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:37:54 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41205.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.867min (-0.007) 56.42ug/L

response 173014

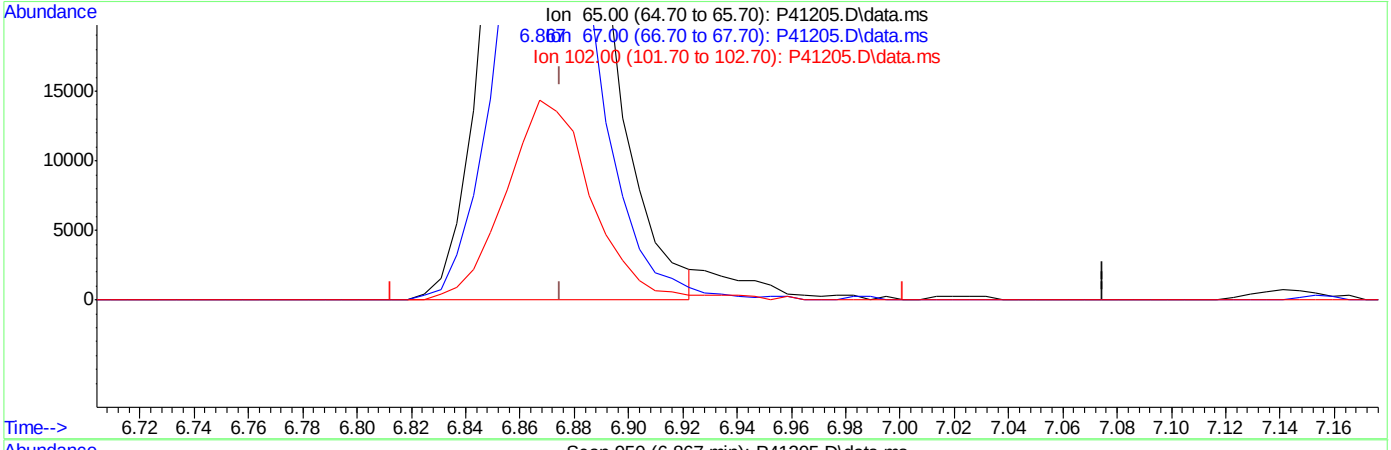
Ion	Exp%	Act%
65.00	100	100
67.00	51.40	50.61
102.00	19.40	18.65
0.00	0.00	0.00

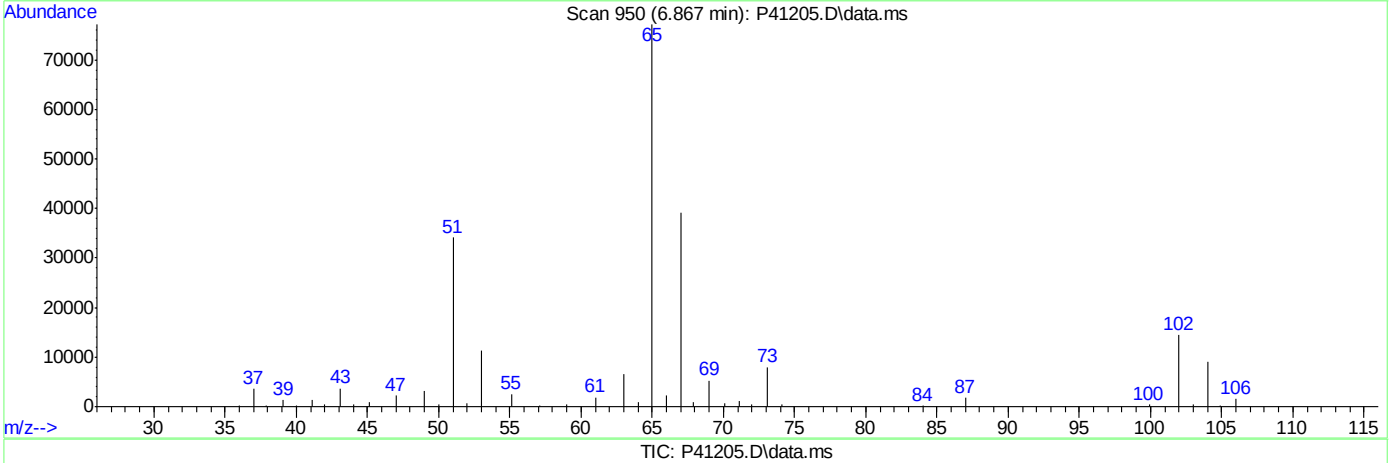
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41205.D
Acq On : 21 Apr 2016 11:28 am
Operator : katiem
Sample : IC1531-3 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 12:37:54 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41205.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.867min (-0.007) 55.27ug/L m

response 169506

Ion	Exp%	Act%
65.00	100	100
67.00	51.40	50.61
102.00	19.40	18.65
0.00	0.00	0.00

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:44:45 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.149	96	539340	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.239	117	395327	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.599	152	193744	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.800	65	49870	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.333	113	131302	48.76	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.52%			
38) 1,2-Dichloroethane-d4	6.869	65	177591m	55.86	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 111.72%			
48) Toluene-d8	8.700	98	536749	51.76	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.52%			
69) 4-Bromofluorobenzene	11.450	95	188877	56.16	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 112.32%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.543	85	60196	23.80	ug/L	97
3) Chloromethane	2.708	50	112382	28.50	ug/L	96
4) Vinyl Chloride	2.835	62	93056	25.04	ug/L	99
5) Bromomethane	3.170	94	58004	23.51	ug/L	96
6) Chloroethane	3.304	64	67279	21.55	ug/L	93
7) Trichlorofluoromethane	3.511	101	108320m	22.88	ug/L	
8) Ethyl Ether	3.736	59	86779	27.22	ug/L	92
9) 1,2-Dichlorotrifluoroe...	3.955	67	91427	25.19	ug/L	91
10) 1,1-Dichloroethene	3.985	61	127735	26.65	ug/L	92
11) Freon 113	4.052	101	65432	22.82	ug/L	95
12) Carbon Disulfide	4.052	76	227318	23.84	ug/L	87
13) Iodomethane	4.156	142	106980	23.26	ug/L	100
14) Methylene Chloride	4.569	49	128054	30.09	ug/L	90
15) Acetone	4.587	58	33895	153.49	ug/L	96
16) Methyl acetate	4.697	74	62599	138.16	ug/L #	45
17) trans-1,2-Dichloroethene	4.727	61	115691	28.63	ug/L	97
18) Hexane	4.788	56	90660	28.34	ug/L	91
19) Methyl Tert Butyl Ether	4.825	73	232380	27.95	ug/L	95
20) Di-isopropyl ether	5.184	45	345729	32.41	ug/L	98
21) 1,1-Dichloroethane	5.342	63	155783	28.63	ug/L	99
22) Acrylonitrile	5.360	53	150479	149.33	ug/L	95
23) ETBE	5.555	59	302129	29.25	ug/L	98
24) Vinyl acetate	5.537	43	1112360	159.37	ug/L	96
25) cis-1,2-Dichloroethene	5.883	96	86656	26.24	ug/L	90
26) 2,2-Dichloropropane	6.011	77	118798	27.78	ug/L	98
27) Bromochloromethane	6.090	128	40687	24.27	ug/L	90
28) Cyclohexane	6.133	56	163132	29.35	ug/L	95
29) Chloroform	6.145	83	151468	26.96	ug/L	97
30) Tetrahydrofuran	6.309	42	24750	32.60	ug/L	87
32) Carbon Tetrachloride	6.333	117	113213m	25.67	ug/L	
33) 1,1,1-Trichloroethane	6.394	97	122171	26.50	ug/L	94
34) 2-Butanone	6.425	43	191320	166.42	ug/L	99
35) 1,1-Dichloropropene	6.498	75	117569	27.61	ug/L	92
36) Benzene	6.747	78	340131	27.21	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:44:45 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.838	73	239202	27.49 ug/L	91
39) 1,2-Dichloroethane	6.936	62	123054	27.76 ug/L	93
40) Trichloroethene	7.325	95	82116	25.99 ug/L	96
41) Methylcyclohexane	7.349	83	145084	26.10 ug/L	98
42) Dibromomethane	7.745	93	48566	26.13 ug/L	95
43) 1,2-Dichloropropane	7.836	63	96765	28.27 ug/L	96
44) Bromodichloromethane	7.885	83	113334	26.33 ug/L	97
45) 2-Chloroethyl vinyl ether	8.414	63	285004	124.60 ug/L	98
46) cis-1,3-Dichloropropene	8.505	75	145919	26.94 ug/L	93
49) Toluene	8.749	91	360839	26.22 ug/L	98
50) 2-Nitropropane	8.949	41	119653	153.16 ug/L	98
51) 4-Methyl-2-pentanone	9.083	43	438485	168.37 ug/L	95
52) trans-1,3-Dichloropropene	9.138	75	126477	27.46 ug/L	94
53) Tetrachloroethene	9.150	166	76153	22.96 ug/L	97
54) 1,1,2-Trichloroethane	9.302	83	61565	26.23 ug/L	93
55) Dibromochloromethane	9.497	129	78364	24.48 ug/L	98
56) 1,3-Dichloropropane	9.582	76	135061	27.25 ug/L	93
57) 1,2-Dibromoethane	9.746	107	68483	25.62 ug/L	97
58) 2-hexanone	9.904	43	289032	160.65 ug/L	96
59) 1-Chlorohexane	10.209	91	113163	26.14 ug/L	85
60) Ethylbenzene	10.269	91	401322	25.80 ug/L	98
61) Chlorobenzene	10.257	112	228416	24.59 ug/L	92
62) 1,1,1,2-Tetrachloroethane	10.312	131	77118	24.45 ug/L	99
63) m,p-Xylene	10.409	91	616497	52.68 ug/L	99
64) o-Xylene	10.841	91	301866	26.67 ug/L	97
65) Styrene	10.890	104	241257	25.99 ug/L	97
66) Bromoform	10.939	173	49753	24.34 ug/L	95
67) Isopropylbenzene	11.152	105	373102	25.73 ug/L	100
70) n-Propylbenzene	11.571	91	452717	27.04 ug/L	100
71) Bromobenzene	11.571	156	92081	24.02 ug/L	99
72) 1,1,2,2-Tetrachloroethane	11.632	83	88490	26.75 ug/L	93
73) 1,3,5-Trimethylbenzene	11.760	105	332245	26.37 ug/L	100
74) 2-Chlorotoluene	11.748	91	299173	27.13 ug/L	98
75) trans-1,4-Dichloro-2-B...	11.809	53	25881	33.08 ug/L	89
76) 1,2,3-Trichloropropane	11.784	110	25127	26.49 ug/L	96
77) Cyclohexanone	11.833	55	14387	202.15 ug/L	92
78) 4-Chlorotoluene	11.918	91	280605	27.58 ug/L	98
79) tert-Butylbenzene	12.094	91	179199	27.39 ug/L	92
80) 1,2,4-Trimethylbenzene	12.161	105	322845	26.14 ug/L	98
81) sec-Butylbenzene	12.277	105	405507	26.28 ug/L	99
82) 4-Isopropyltoluene	12.417	119	338006	26.10 ug/L	97
83) 1,3-Dichlorobenzene	12.526	146	172279	24.25 ug/L	99
84) 1,4-Dichlorobenzene	12.618	146	175945	23.50 ug/L	98
85) n-Butylbenzene	12.855	92	188290	27.55 ug/L	87
86) Benzyl Chloride	12.855	126	35280	25.45 ug/L #	19
87) 1,2-Dichlorobenzene	13.056	146	160961	24.37 ug/L	97
88) 1,2-Dibromo-3-Chloropr...	13.834	75	13668	27.93 ug/L	86
89) Hexachlorobutadiene	14.418	225	49912	25.07 ug/L	97
90) 1,2,4-Trichlorobenzene	14.455	180	101828	24.88 ug/L	99
91) Naphthalene	14.735	128	188031	24.80 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:44:45 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.893	180	87144	24.19	ug/L	98
94) acrolein	4.308	56	70703	110.93	ug/L	99
95) Tert Butyl Alcohol	4.867	59	67762	277.39	ug/L	89
96) tert Amyl alcohol	6.984	59	59799	253.66	ug/L	90
97) 1,4-Dioxane	8.067	88	14070	485.95	ug/L	98

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

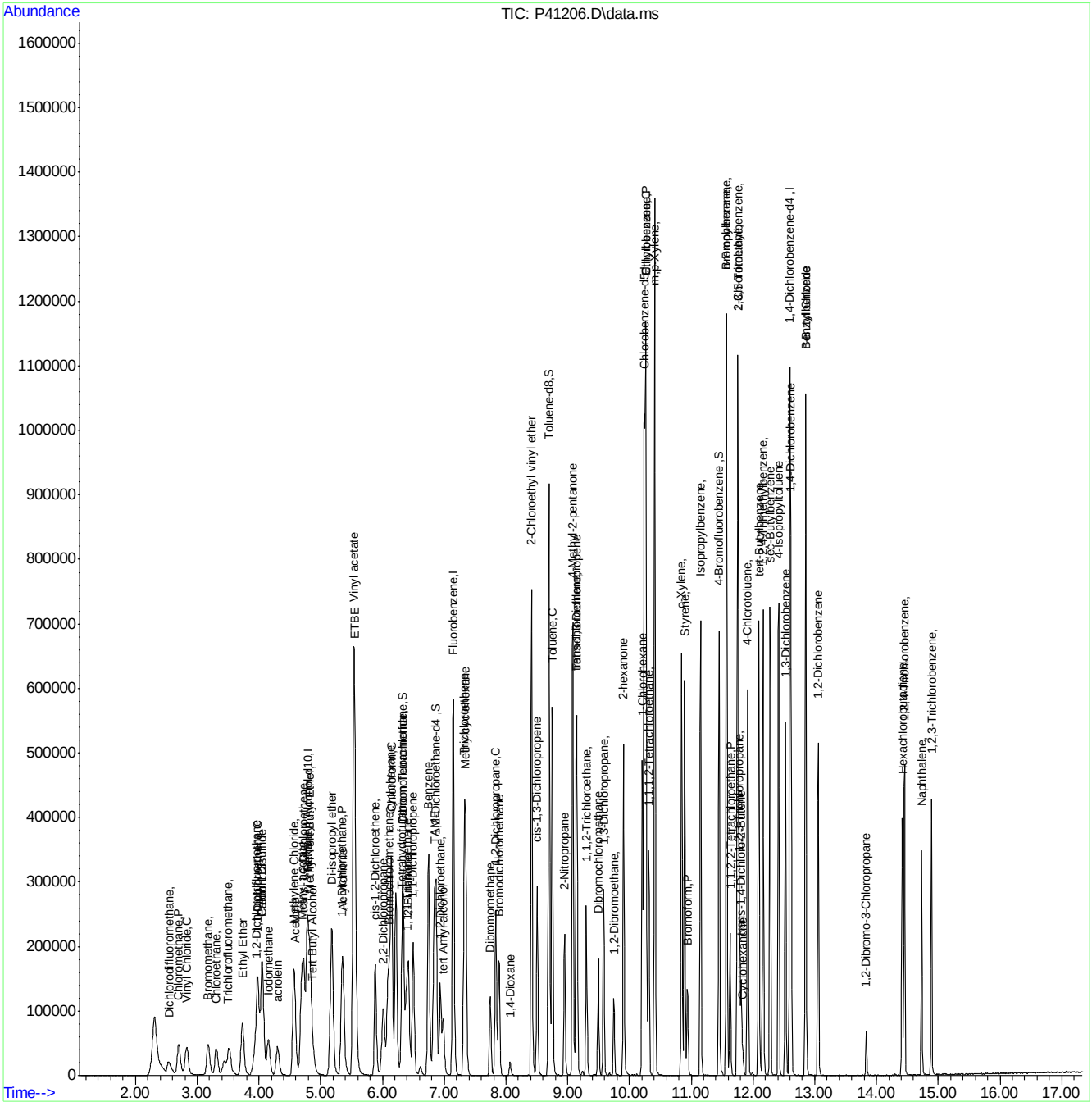
7.6.15

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:44:45 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

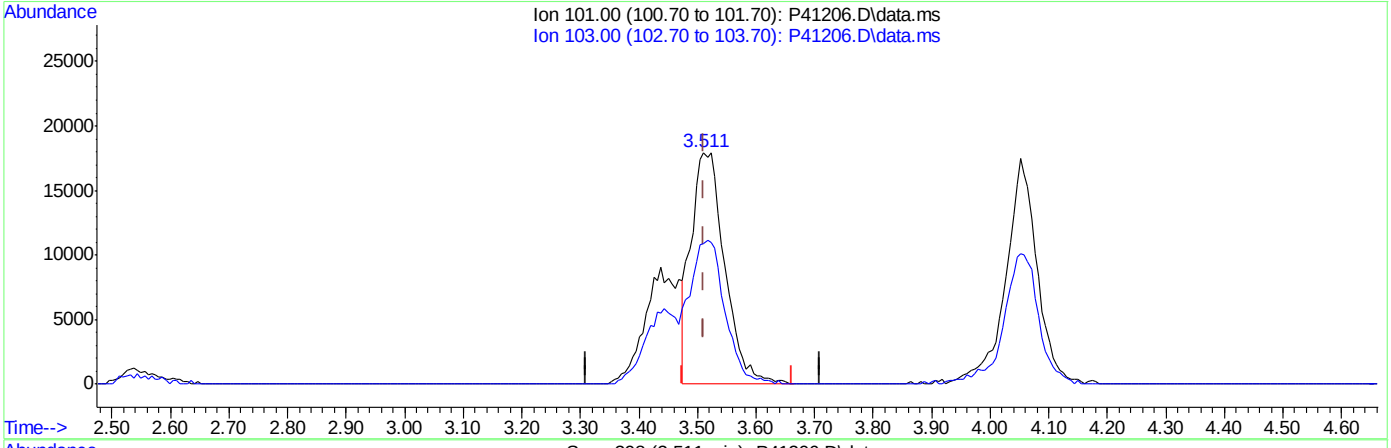
Sample Number:	VP1531-IC1531	**Method:**	SW846 8260B
Lab FileID:	P41206.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 11:53	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

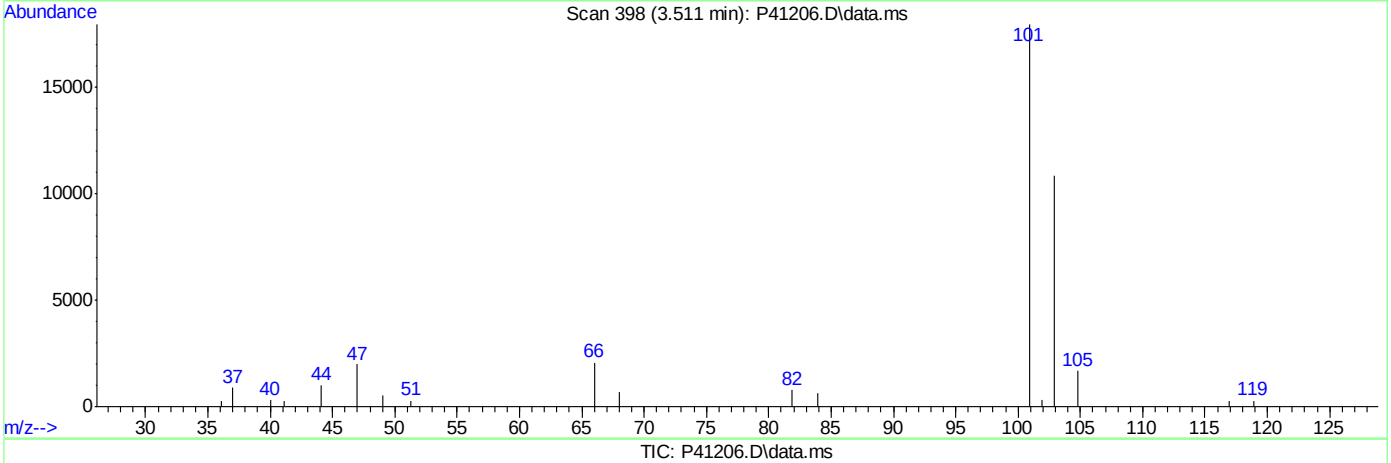
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.51	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		6.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:37:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41206.D\data.ms

(7) Trichlorofluoromethane ( )

3.511min (+0.000) 15.08ug/L

response 71409

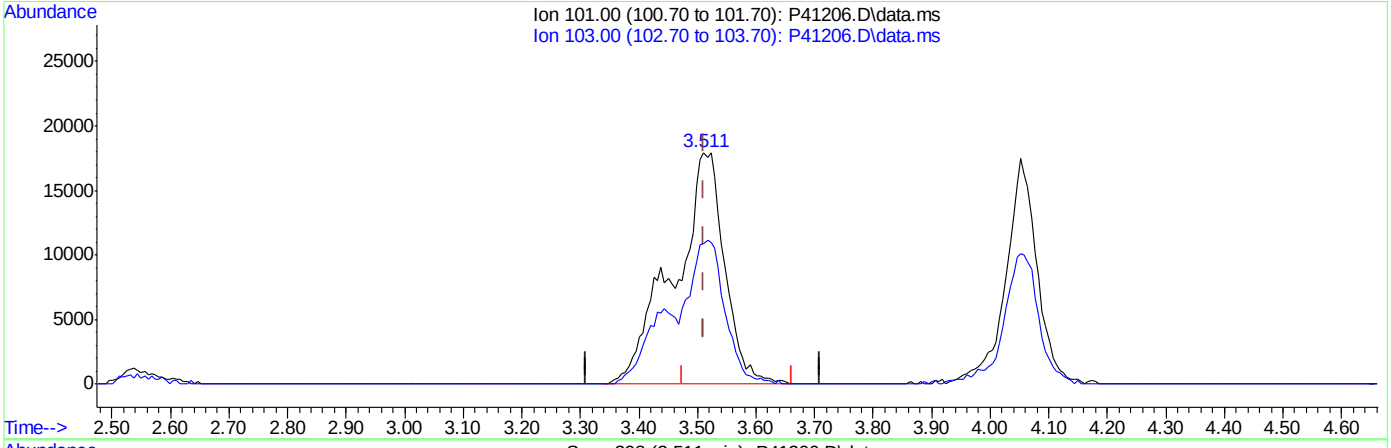
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	60.51
0.00	0.00	0.00
0.00	0.00	0.00

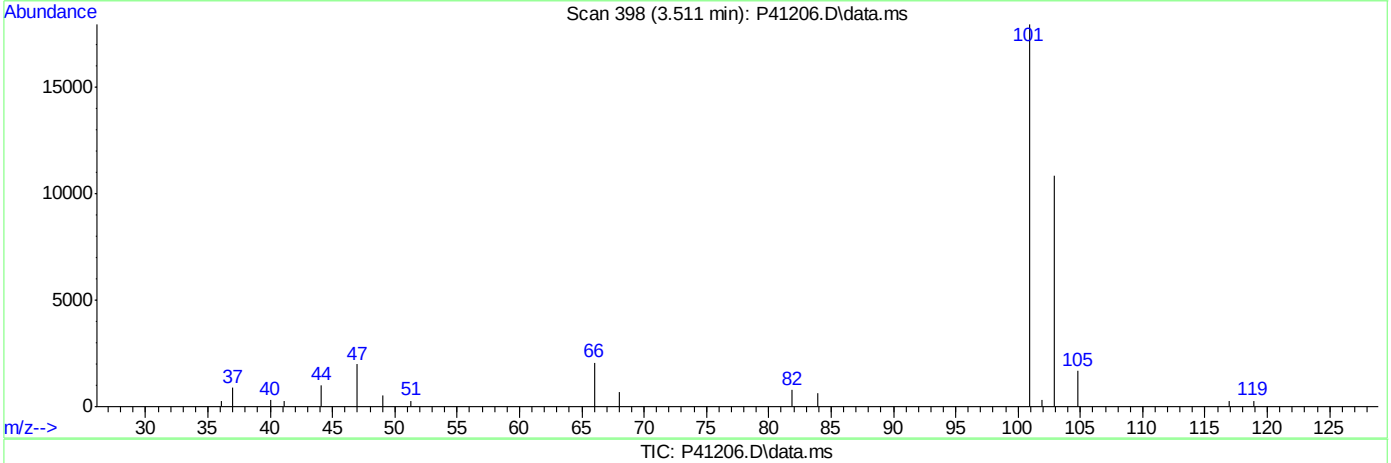
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:37:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41206.D\data.ms

(7) Trichlorofluoromethane ( )

3.511min (+0.000) 22.88ug/L m

response 108320

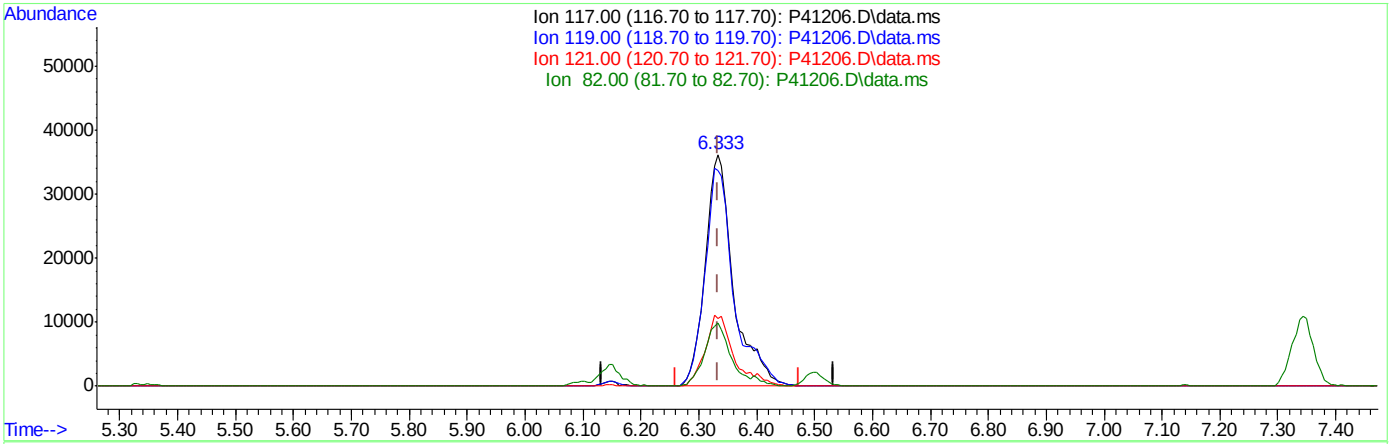
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	60.51
0.00	0.00	0.00
0.00	0.00	0.00

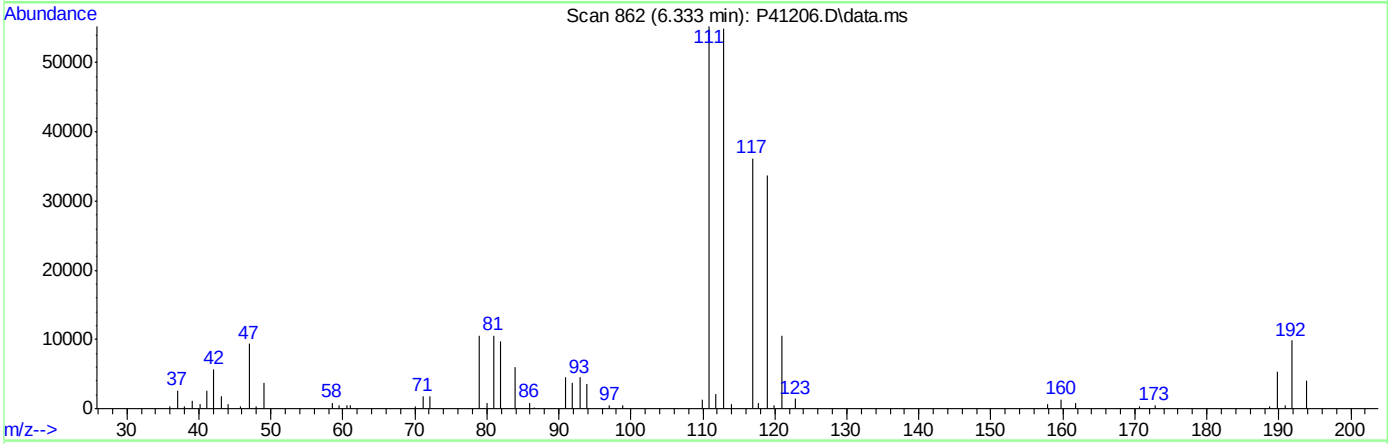
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:37:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41206.D\data.ms

(32) Carbon Tetrachloride ( )

6.333min (+0.000) 27.85ug/L

response 122822

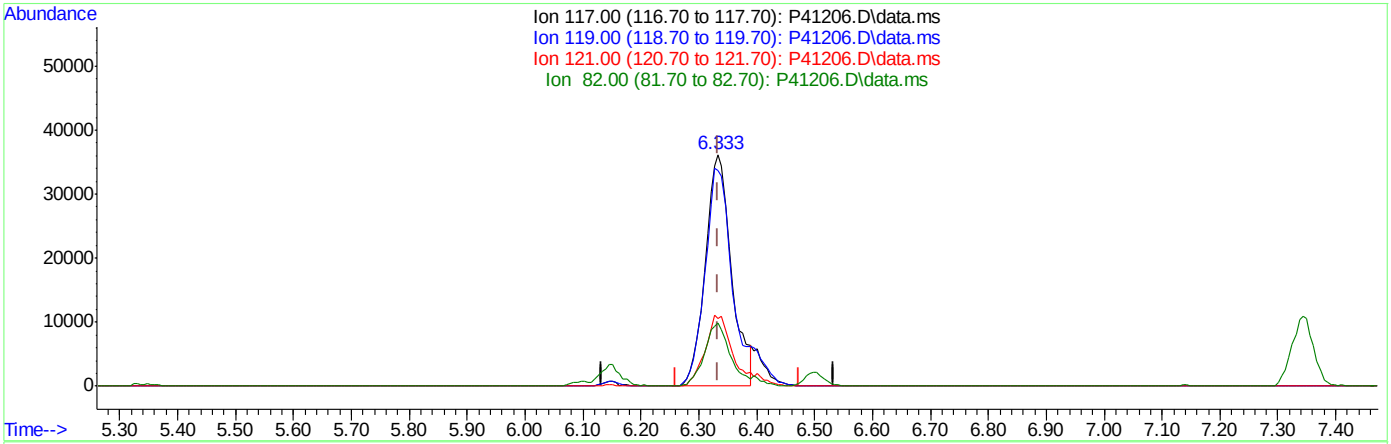
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	91.32
121.00	30.70	28.68
82.00	25.90	26.47

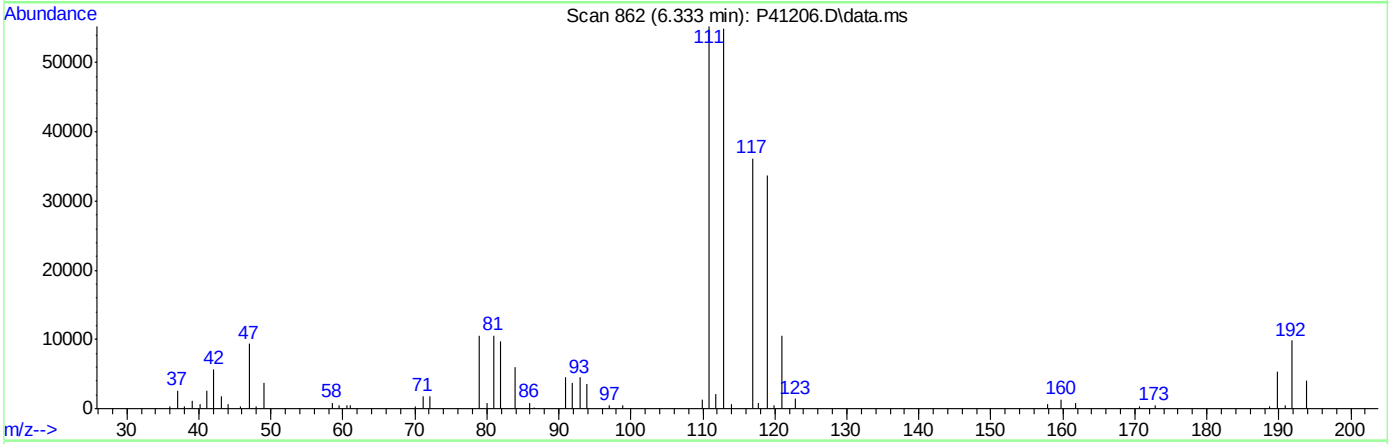
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:37:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41206.D\data.ms

(32) Carbon Tetrachloride ( )

6.333min (+0.000) 25.67ug/L m

response 113213

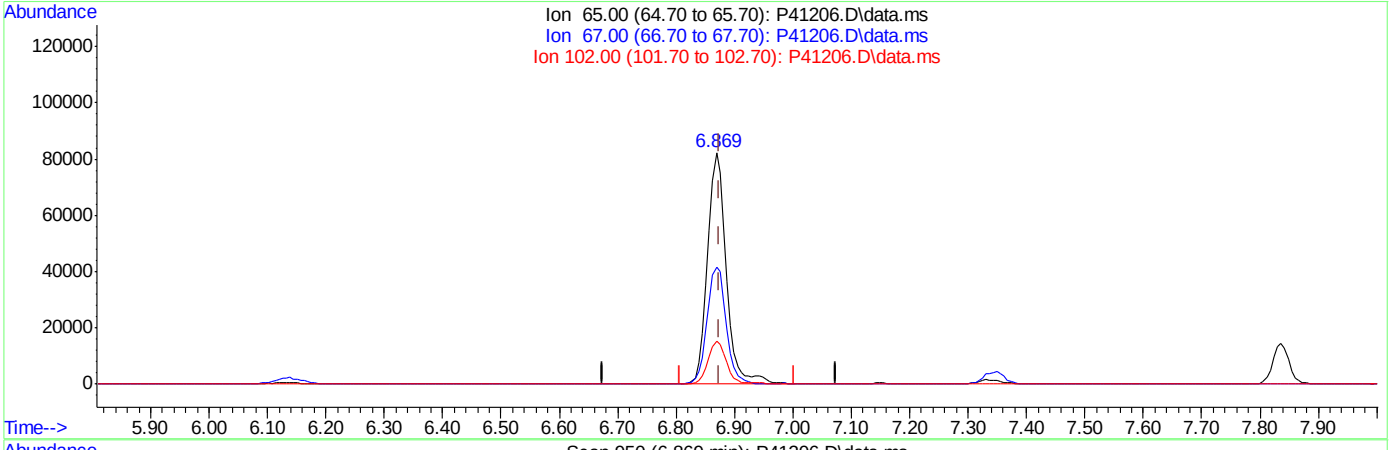
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	93.30
121.00	30.70	29.30
82.00	25.90	27.05

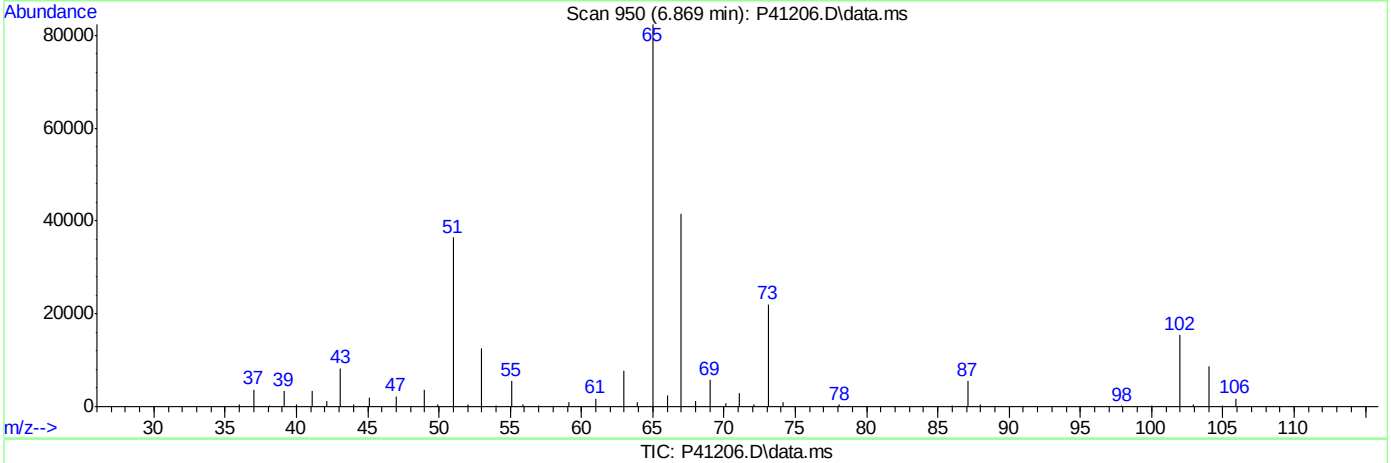
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:37:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41206.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.869min (-0.006) 57.96ug/L

response 184276

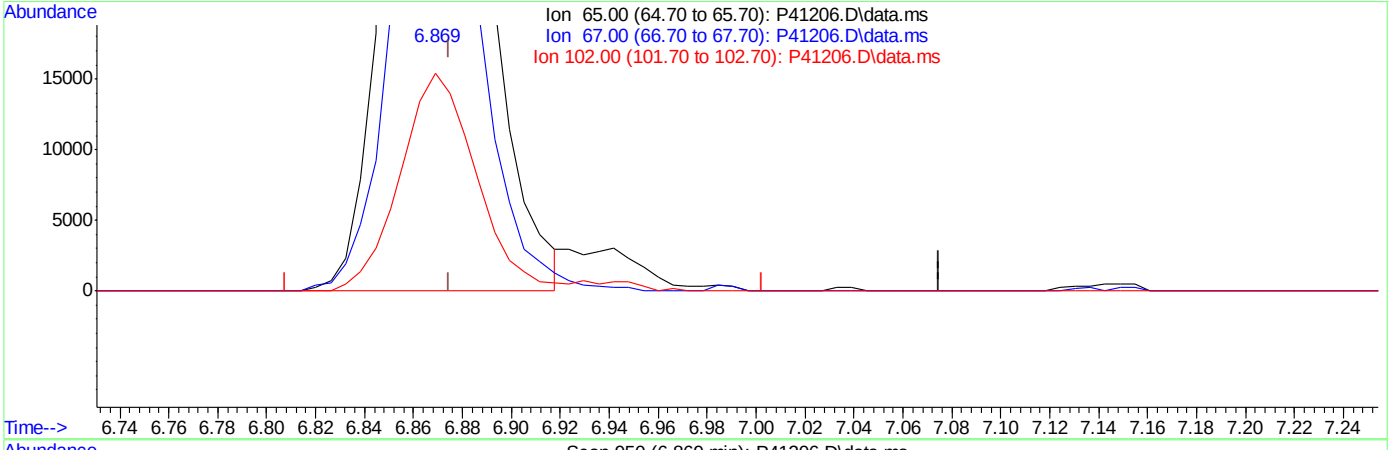
Ion	Exp%	Act%
65.00	100	100
67.00	51.40	50.48
102.00	19.40	18.76
0.00	0.00	0.00

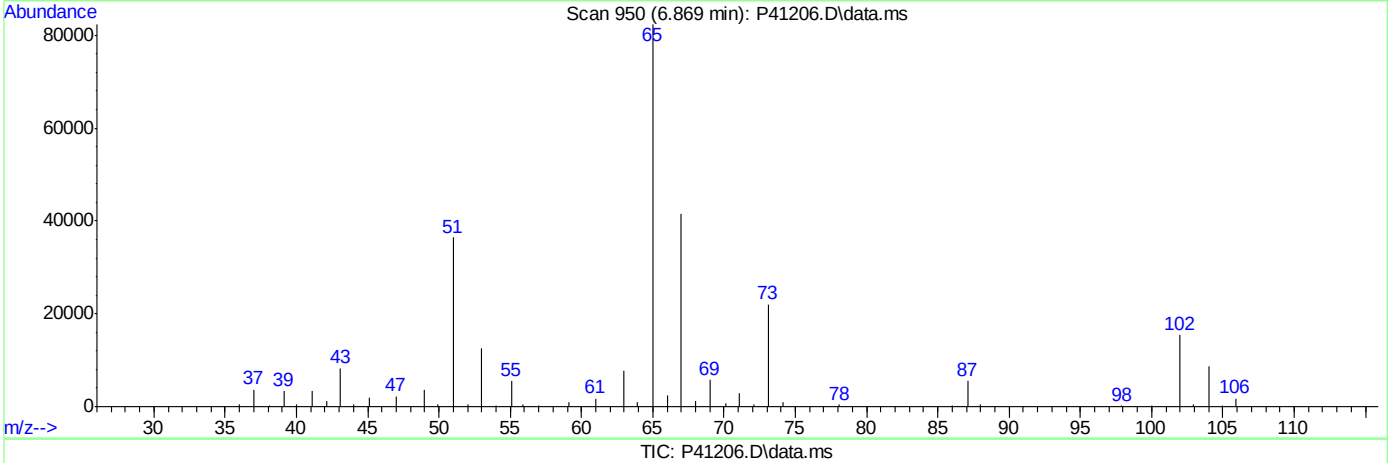
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41206.D
Acq On : 21 Apr 2016 11:53 am
Operator : katiem
Sample : IC1531-4 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 12:37:58 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41206.D\data.ms

(38) 1,2-Dichloroethane-d4 (S)

6.869min (-0.006) 55.86ug/L m

response 177591

Ion	Exp%	Act%
65.00	100	100
67.00	51.40	50.48
102.00	19.40	18.76
0.00	0.00	0.00

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:46:14 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.148	96	547729	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.238	117	415357	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.599	152	202691	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.800	65	53901	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.333	113	136100	49.77	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.54%			
38) 1,2-Dichloroethane-d4	6.868	65	180752	55.98	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 111.96%			
48) Toluene-d8	8.693	98	556555	51.08	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.16%			
69) 4-Bromofluorobenzene	11.449	95	197920	56.25	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 112.50%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.543	85	98547	38.37	ug/L	100
3) Chloromethane	2.707	50	169711	42.38	ug/L	99
4) Vinyl Chloride	2.841	62	149198	39.54	ug/L	100
5) Bromomethane	3.181	94	90639	36.18	ug/L	94
6) Chloroethane	3.303	64	109538	34.54	ug/L	96
7) Trichlorofluoromethane	3.522	101	171709m	35.71	ug/L	
8) Ethyl Ether	3.741	59	134913	41.67	ug/L	93
9) 1,2-Dichlorotrifluoroe...	3.966	67	132154	35.86	ug/L	92
10) 1,1-Dichloroethene	3.984	61	183153	37.63	ug/L	92
11) Freon 113	4.051	101	96035	32.98	ug/L	92
12) Carbon Disulfide	4.051	76	330229	34.10	ug/L	86
13) Iodomethane	4.155	142	157490	33.72	ug/L	99
14) Methylene Chloride	4.562	49	191000	44.19	ug/L	93
15) Acetone	4.581	58	59345	264.63	ug/L	95
16) Methyl acetate	4.696	74	97892	212.75	ug/L #	26
17) trans-1,2-Dichloroethene	4.727	61	166754	40.64	ug/L	96
18) Hexane	4.781	56	129558	39.88	ug/L	97
19) Methyl Tert Butyl Ether	4.824	73	361050	42.76	ug/L	96
20) Di-isopropyl ether	5.183	45	518005	47.82	ug/L	98
21) 1,1-Dichloroethane	5.341	63	230372	41.69	ug/L	97
22) Acrylonitrile	5.365	53	277161	270.84	ug/L	96
23) ETBE	5.554	59	468840	44.69	ug/L	97
24) Vinyl acetate	5.536	43	2013289	284.02	ug/L	96
25) cis-1,2-Dichloroethene	5.883	96	130468	38.90	ug/L	90
26) 2,2-Dichloropropane	6.016	77	172170	39.65	ug/L	97
27) Bromochloromethane	6.089	128	60440	35.50	ug/L #	86
28) Cyclohexane	6.138	56	237521	42.08	ug/L	94
29) Chloroform	6.150	83	221356	38.79	ug/L	95
30) Tetrahydrofuran	6.314	42	39630	51.40	ug/L	92
32) Carbon Tetrachloride	6.333	117	159131m	35.53	ug/L	
33) 1,1,1-Trichloroethane	6.394	97	177617	37.94	ug/L	96
34) 2-Butanone	6.424	43	330074	282.71	ug/L	97
35) 1,1-Dichloropropene	6.497	75	167115	38.65	ug/L	92
36) Benzene	6.746	78	495601	39.05	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:46:14 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.838	73	368828	41.74 ug/L	94
39) 1,2-Dichloroethane	6.935	62	186876	41.52 ug/L	96
40) Trichloroethene	7.324	95	116929	36.44 ug/L	96
41) Methylcyclohexane	7.343	83	210409	37.28 ug/L	94
42) Dibromomethane	7.744	93	74638	39.55 ug/L	97
43) 1,2-Dichloropropane	7.835	63	147208	42.35 ug/L	95
44) Bromodichloromethane	7.884	83	170408	38.99 ug/L	96
45) 2-Chloroethyl vinyl ether	8.413	63	516379	222.30 ug/L	98
46) cis-1,3-Dichloropropene	8.504	75	220610	40.11 ug/L	92
49) Toluene	8.748	91	532412	36.82 ug/L	98
50) 2-Nitropropane	8.949	41	189415	230.76 ug/L	98
51) 4-Methyl-2-pentanone	9.082	43	767156	280.37 ug/L	95
52) trans-1,3-Dichloropropene	9.137	75	199891	41.31 ug/L	94
53) Tetrachloroethene	9.149	166	113258	32.50 ug/L	95
54) 1,1,2-Trichloroethane	9.301	83	95646	38.79 ug/L	96
55) Dibromochloromethane	9.496	129	121721	36.19 ug/L	96
56) 1,3-Dichloropropane	9.575	76	209679	40.27 ug/L	91
57) 1,2-Dibromoethane	9.745	107	107693	38.34 ug/L	100
58) 2-hexanone	9.904	43	521059	275.65 ug/L	96
59) 1-Chlorohexane	10.208	91	171665	37.74 ug/L	90
60) Ethylbenzene	10.269	91	602571	36.86 ug/L	97
61) Chlorobenzene	10.257	112	343830	35.23 ug/L	94
62) 1,1,1,2-Tetrachloroethane	10.311	131	117481	35.46 ug/L	98
63) m,p-Xylene	10.409	91	918229	74.68 ug/L	99
64) o-Xylene	10.841	91	458084	38.52 ug/L	98
65) Styrene	10.895	104	368224	37.75 ug/L	97
66) Bromoform	10.938	173	77489	36.09 ug/L	99
67) Isopropylbenzene	11.151	105	555697	36.48 ug/L	99
70) n-Propylbenzene	11.571	91	677358	38.67 ug/L	99
71) Bromobenzene	11.571	156	140796	35.11 ug/L	100
72) 1,1,2,2-Tetrachloroethane	11.631	83	140527	40.61 ug/L	98
73) 1,3,5-Trimethylbenzene	11.759	105	504405	38.27 ug/L	99
74) 2-Chlorotoluene	11.753	91	453507	39.30 ug/L	97
75) trans-1,4-Dichloro-2-B...	11.808	53	44146	53.93 ug/L	89
76) 1,2,3-Trichloropropane	11.783	110	40222	40.53 ug/L	89
77) Cyclohexanone	11.832	55	27911	374.86 ug/L	92
78) 4-Chlorotoluene	11.917	91	423014	39.74 ug/L	99
79) tert-Butylbenzene	12.094	91	273221	39.92 ug/L	92
80) 1,2,4-Trimethylbenzene	12.161	105	494689	38.28 ug/L	99
81) sec-Butylbenzene	12.276	105	613648	38.01 ug/L	99
82) 4-Isopropyltoluene	12.416	119	515759	38.07 ug/L	97
83) 1,3-Dichlorobenzene	12.526	146	264482	35.59 ug/L	99
84) 1,4-Dichlorobenzene	12.617	146	272345	34.77 ug/L	99
85) n-Butylbenzene	12.854	92	291457	40.77 ug/L	90
86) Benzyl Chloride	12.854	126	55586	38.33 ug/L #	14
87) 1,2-Dichlorobenzene	13.055	146	245622	35.55 ug/L	98
88) 1,2-Dibromo-3-Chloropr...	13.834	75	21459	41.91 ug/L	96
89) Hexachlorobutadiene	14.418	225	76302	36.63 ug/L	98
90) 1,2,4-Trichlorobenzene	14.454	180	162191	37.88 ug/L	98
91) Naphthalene	14.734	128	310829	39.18 ug/L	98

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:46:14 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.892	180	138985	36.87	ug/L	98
94) acrolein	4.301	56	120942	175.56	ug/L	95
95) Tert Butyl Alcohol	4.879	59	112666	426.72	ug/L	92
96) tert Amyl alcohol	6.990	59	95656	375.42	ug/L	95
97) 1,4-Dioxane	8.066	88	23255	743.12	ug/L	95

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

7.6.16

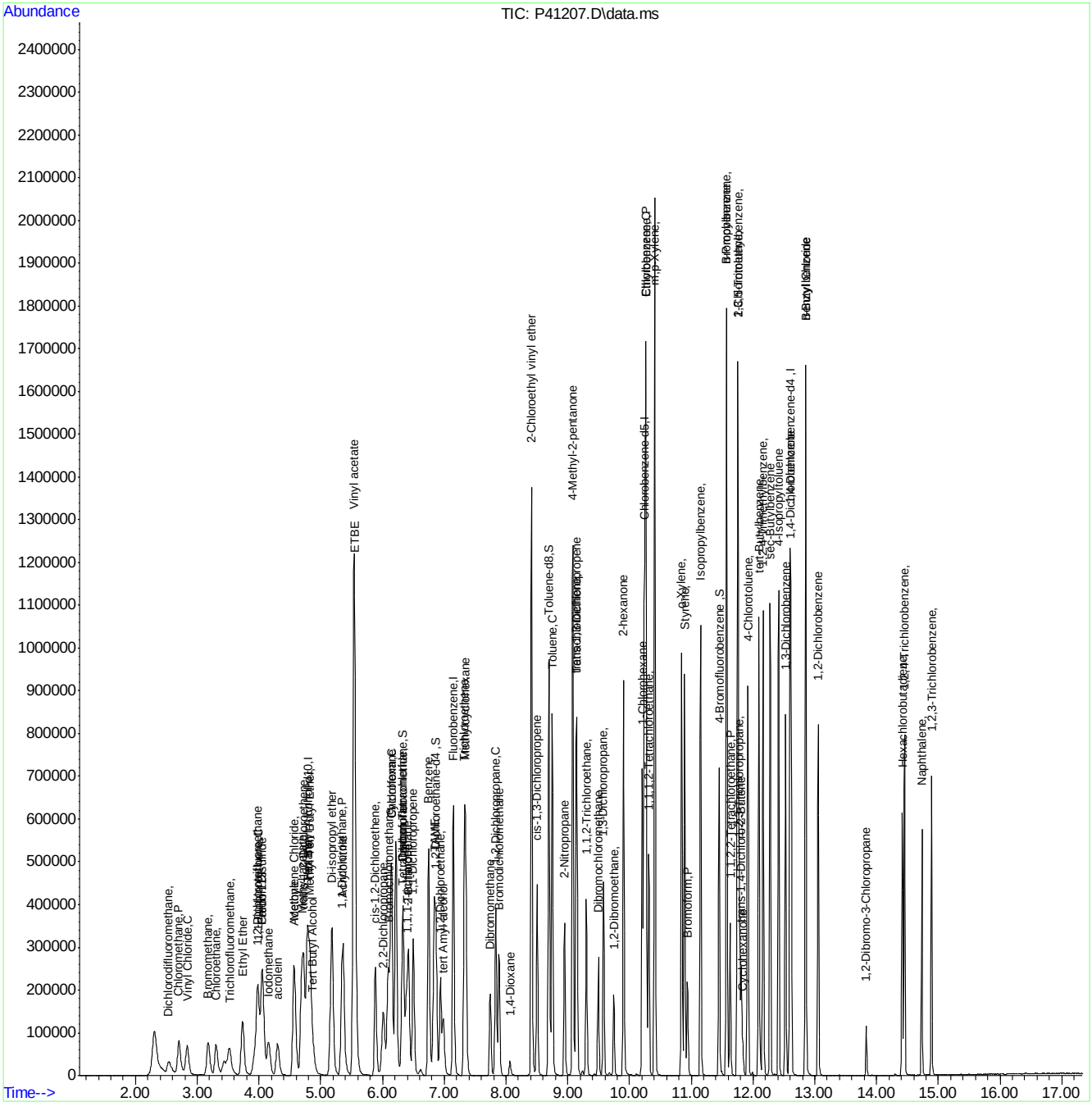
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:46:14 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

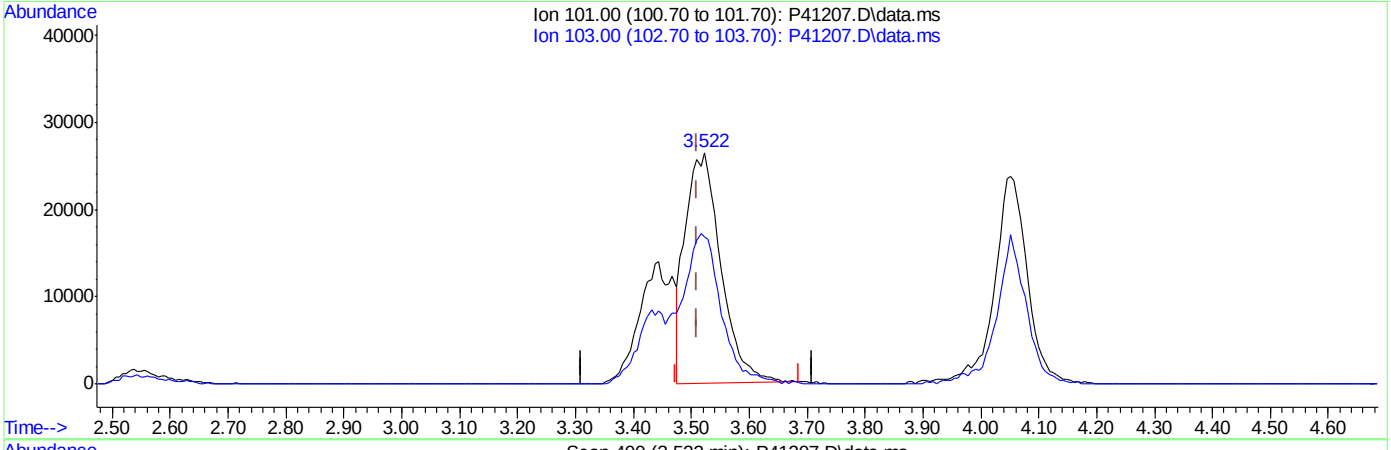
Sample Number:	VP1531-ICC1531	**Method:**	SW846 8260B
Lab FileID:	P41207.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 12:19	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

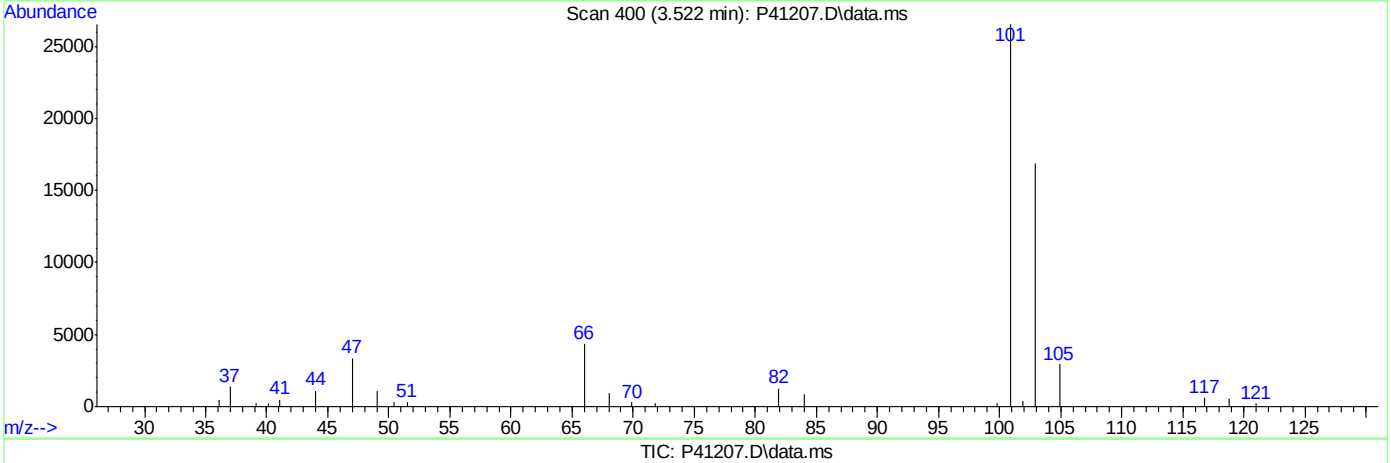
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.52	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:38:01 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41207.D\data.ms

(7) Trichlorofluoromethane ( )

3.522min (+0.012) 23.52ug/L

response 113080

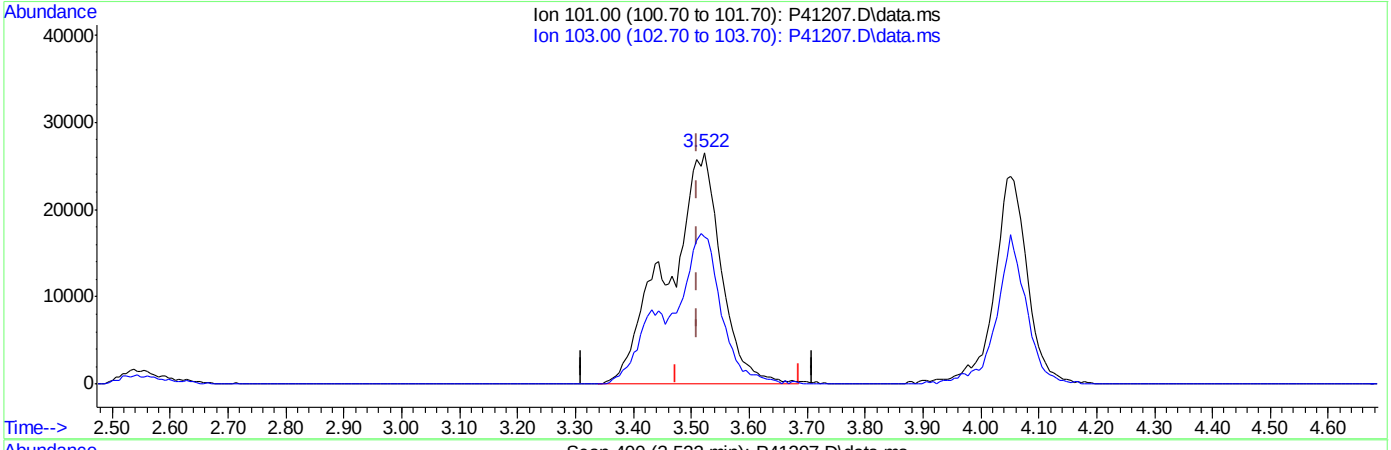
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	63.21
0.00	0.00	0.00
0.00	0.00	0.00

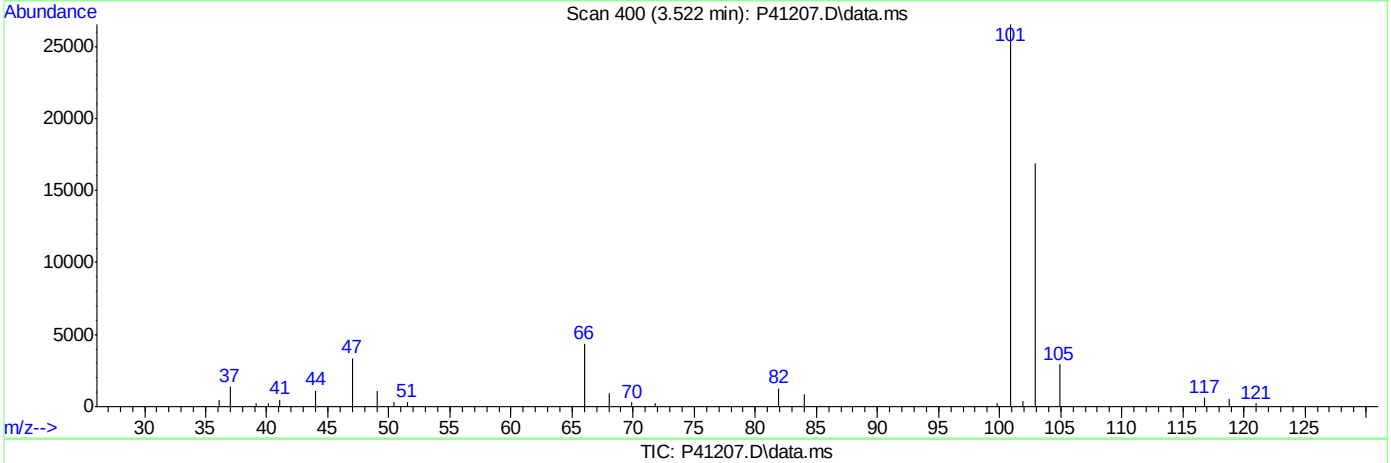
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:38:01 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41207.D\data.ms

(7) Trichlorofluoromethane ( )

3.522min (+0.012) 35.71ug/L m

response 171709

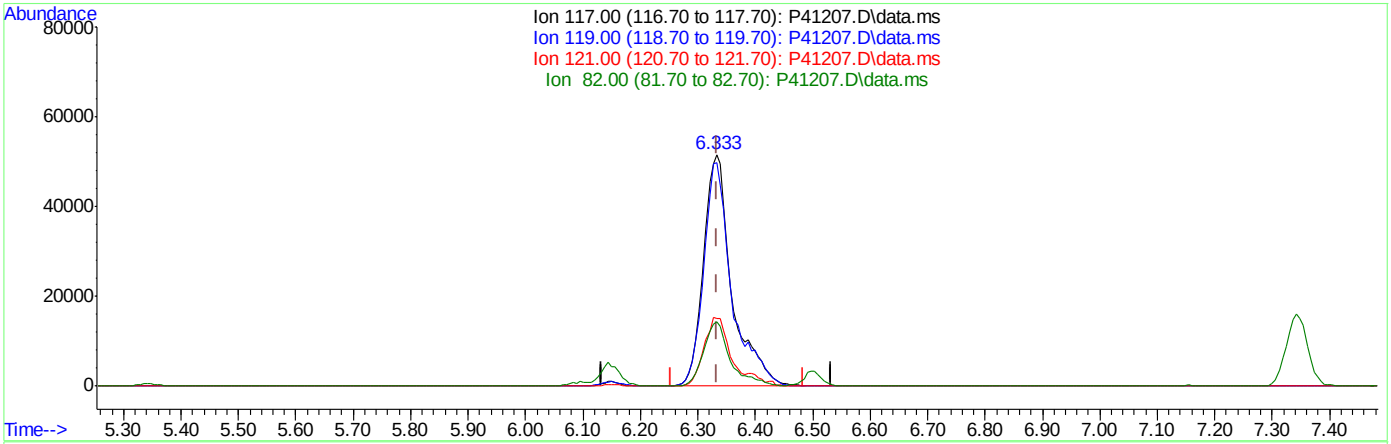
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	63.51
0.00	0.00	0.00
0.00	0.00	0.00

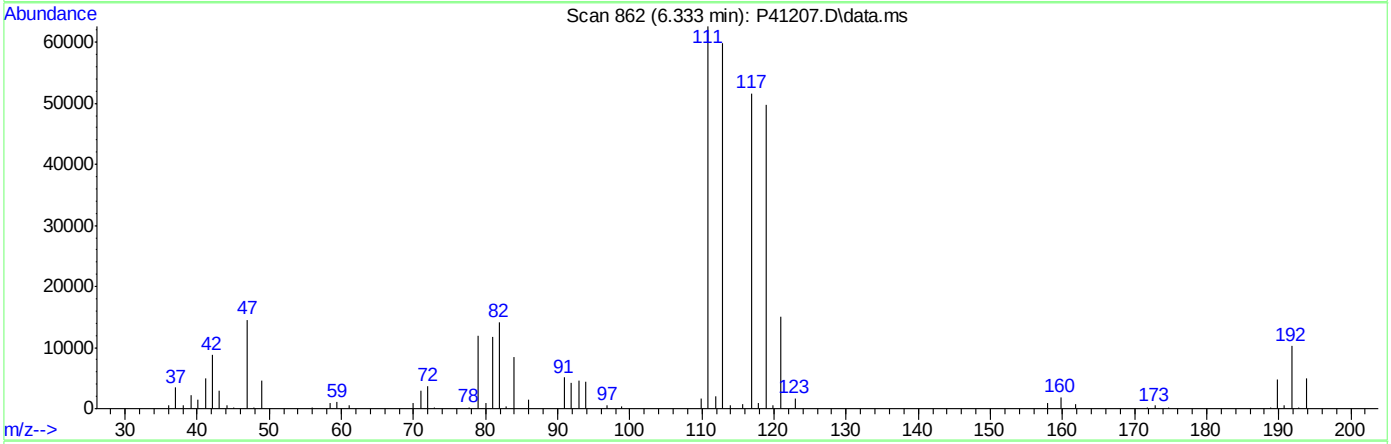
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:38:01 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41207.D\data.ms

(32) Carbon Tetrachloride ( )

6.333min (-0.001) 39.80ug/L

response 178254

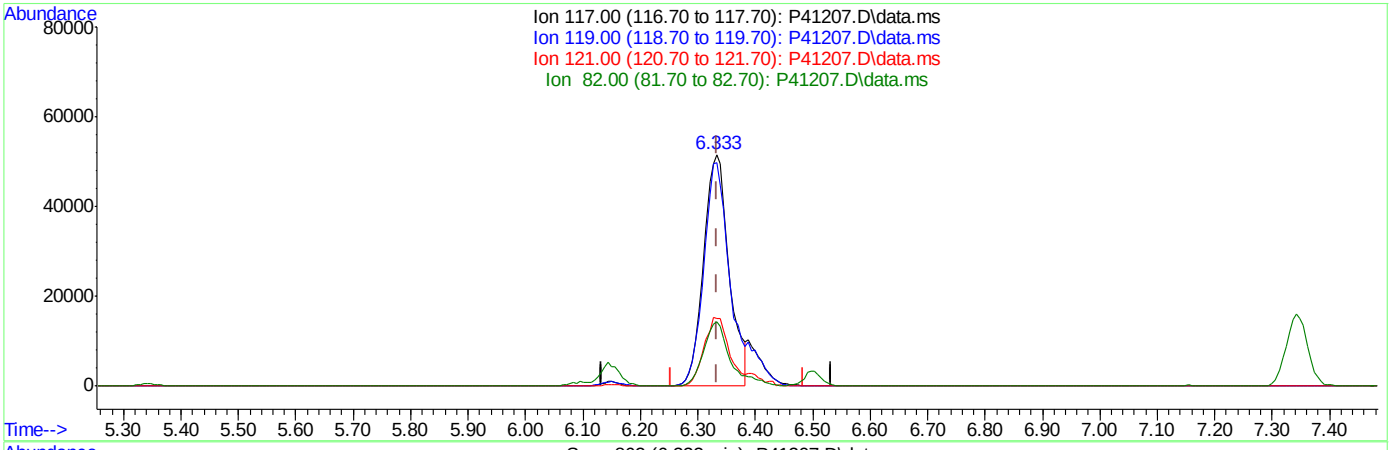
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	96.34
121.00	30.70	29.13
82.00	25.90	27.54

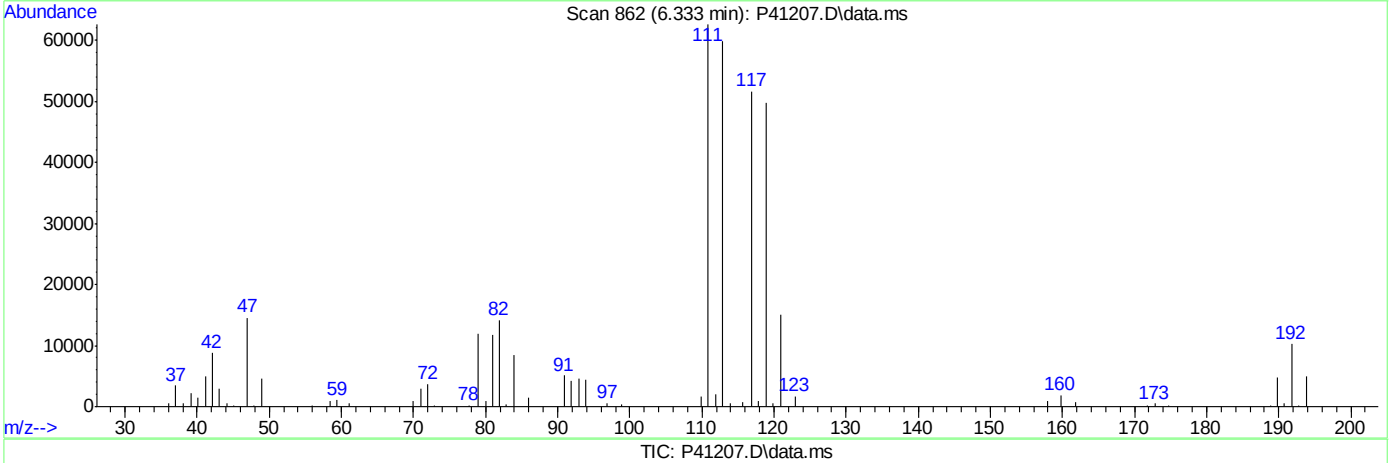
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41207.D
Acq On : 21 Apr 2016 12:19 pm
Operator : katiem
Sample : ICC1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 12:38:01 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41207.D\data.ms

(32) Carbon Tetrachloride ( )

6.333min (-0.001) 35.53ug/L m

response 159131

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	96.34
121.00	30.70	29.13
82.00	25.90	27.54

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:03:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.147	96	589485	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.243	117	436914	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.598	152	209783	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.811	65	57620	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.332	113	144455	49.09	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.18%			
38) 1,2-Dichloroethane-d4	6.873	65	192941	55.52	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 111.04%			
48) Toluene-d8	8.698	98	584537	51.00	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.00%			
69) 4-Bromofluorobenzene	11.454	95	210668	57.85	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 115.70%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.542	85	192213	69.54	ug/L	98
3) Chloromethane	2.712	50	324081	75.20	ug/L	98
4) Vinyl Chloride	2.846	62	284280	70.00	ug/L	98
5) Bromomethane	3.180	94	171740	63.69	ug/L	96
6) Chloroethane	3.302	64	201970	59.18	ug/L	92
7) Trichlorofluoromethane	3.509	101	345734m	66.80	ug/L	
8) Ethyl Ether	3.734	59	270526	77.65	ug/L	92
9) 1,2-Dichlorotrifluoroe...	3.959	67	278024	70.09	ug/L	93
10) 1,1-Dichloroethene	3.983	61	389711	74.40	ug/L	92
11) Freon 113	4.050	101	201974	64.45	ug/L	97
12) Carbon Disulfide	4.050	76	692718	66.47	ug/L	85
13) Iodomethane	4.154	142	304056	60.48	ug/L	99
14) Methylene Chloride	4.561	49	376715	80.98	ug/L	94
15) Acetone	4.580	58	113692	471.06	ug/L	99
16) Methyl acetate	4.689	74	194800	393.37	ug/L #	32
17) trans-1,2-Dichloroethene	4.726	61	346931	78.56	ug/L	97
18) Hexane	4.786	56	275751	78.87	ug/L	93
19) Methyl Tert Butyl Ether	4.829	73	702934	77.35	ug/L	98
20) Di-isopropyl ether	5.182	45	1044588	89.61	ug/L	97
21) 1,1-Dichloroethane	5.340	63	464343	78.09	ug/L	99
22) Acrylonitrile	5.364	53	513940	466.64	ug/L	98
23) ETBE	5.559	59	939392	83.20	ug/L	96
24) Vinyl acetate	5.541	43	3687272	483.33	ug/L	96
25) cis-1,2-Dichloroethene	5.881	96	261608	72.47	ug/L	89
26) 2,2-Dichloropropane	6.015	77	349294	74.73	ug/L	98
27) Bromochloromethane	6.088	128	121169	66.13	ug/L #	81
28) Cyclohexane	6.137	56	510192	83.98	ug/L	94
29) Chloroform	6.149	83	453881	73.90	ug/L	96
30) Tetrahydrofuran	6.313	42	78778	94.94	ug/L	91
32) Carbon Tetrachloride	6.332	117	338796m	70.29	ug/L	
33) 1,1,1-Trichloroethane	6.392	97	369085	73.25	ug/L	95
34) 2-Butanone	6.423	43	622108	495.09	ug/L	97
35) 1,1-Dichloropropene	6.496	75	362766	77.96	ug/L	93
36) Benzene	6.751	78	1012956	74.15	ug/L	96

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:03:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) TAME	6.843	73	732250	76.99	ug/L		94
39) 1,2-Dichloroethane	6.940	62	374666	77.35	ug/L		97
40) Trichloroethene	7.323	95	249093	72.12	ug/L		97
41) Methylcyclohexane	7.347	83	456027	75.07	ug/L		95
42) Dibromomethane	7.743	93	148131	72.93	ug/L		98
43) 1,2-Dichloropropane	7.834	63	298442	79.77	ug/L		95
44) Bromodichloromethane	7.889	83	349371	74.27	ug/L		96
45) 2-Chloroethyl vinyl ether	8.418	63	982658	393.07	ug/L		98
46) cis-1,3-Dichloropropene	8.503	75	445195	75.20	ug/L		93
49) Toluene	8.747	91	1090744	71.72	ug/L		98
50) 2-Nitropropane	8.947	41	377971	437.76	ug/L		99
51) 4-Methyl-2-pentanone	9.081	43	1428187	496.21	ug/L		97
52) trans-1,3-Dichloropropene	9.136	75	399296	78.44	ug/L		92
53) Tetrachloroethene	9.148	166	235958	64.36	ug/L		96
54) 1,1,2-Trichloroethane	9.300	83	187363	72.24	ug/L		94
55) Dibromochloromethane	9.495	129	243522	68.83	ug/L		99
56) 1,3-Dichloropropane	9.580	76	417748	76.28	ug/L		91
57) 1,2-Dibromoethane	9.744	107	216081	73.13	ug/L		98
58) 2-hexanone	9.903	43	981483	493.60	ug/L		95
59) 1-Chlorohexane	10.207	91	361055	75.47	ug/L		85
60) Ethylbenzene	10.268	91	1235379	71.85	ug/L		99
61) Chlorobenzene	10.255	112	689701	67.19	ug/L		93
62) 1,1,1,2-Tetrachloroethane	10.316	131	237003	68.00	ug/L		97
63) m,p-Xylene	10.407	91	1889241	146.08	ug/L		99
64) o-Xylene	10.845	91	940303	75.17	ug/L		98
65) Styrene	10.894	104	748231	72.93	ug/L		97
66) Bromoform	10.943	173	154045	68.20	ug/L		96
67) Isopropylbenzene	11.150	105	1138749	71.07	ug/L		98
70) n-Propylbenzene	11.569	91	1384944	76.40	ug/L		100
71) Bromobenzene	11.575	156	272091	65.55	ug/L		96
72) 1,1,2,2-Tetrachloroethane	11.630	83	273542	76.38	ug/L		95
73) 1,3,5-Trimethylbenzene	11.764	105	1023966	75.07	ug/L		98
74) 2-Chlorotoluene	11.752	91	926127	77.55	ug/L		97
75) trans-1,4-Dichloro-2-B...	11.813	53	91149	107.58	ug/L		92
76) 1,2,3-Trichloropropane	11.782	110	78519	76.44	ug/L		90
77) Cyclohexanone	11.831	55	53157	689.80	ug/L		94
78) 4-Chlorotoluene	11.916	91	853455	77.47	ug/L		99
79) tert-Butylbenzene	12.093	91	559565	78.99	ug/L		93
80) 1,2,4-Trimethylbenzene	12.166	105	999489	74.73	ug/L		99
81) sec-Butylbenzene	12.281	105	1247781	74.68	ug/L		96
82) 4-Isopropyltoluene	12.415	119	1039506	74.14	ug/L		97
83) 1,3-Dichlorobenzene	12.531	146	514287	66.86	ug/L		97
84) 1,4-Dichlorobenzene	12.616	146	534505	65.94	ug/L		98
85) n-Butylbenzene	12.853	92	597671	80.77	ug/L		94
86) Benzyl Chloride	12.859	126	111343	74.17	ug/L	#	38
87) 1,2-Dichlorobenzene	13.054	146	485696	67.93	ug/L		95
88) 1,2-Dibromo-3-Chloropr...	13.832	75	43598	82.28	ug/L		92
89) Hexachlorobutadiene	14.416	225	157792	73.18	ug/L		97
90) 1,2,4-Trichlorobenzene	14.453	180	326538	73.69	ug/L		99
91) Naphthalene	14.733	128	617251	75.18	ug/L		99

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:03:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.891	180	273489	70.11	ug/L	98
94) acrolein	4.300	56	241226	327.57	ug/L	95
95) Tert Butyl Alcohol	4.878	59	214264	759.14	ug/L	89
96) tert Amyl alcohol	6.989	59	196058	719.80	ug/L	94
97) 1,4-Dioxane	8.065	88	47480	1419.30	ug/L	95

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

7.6.17

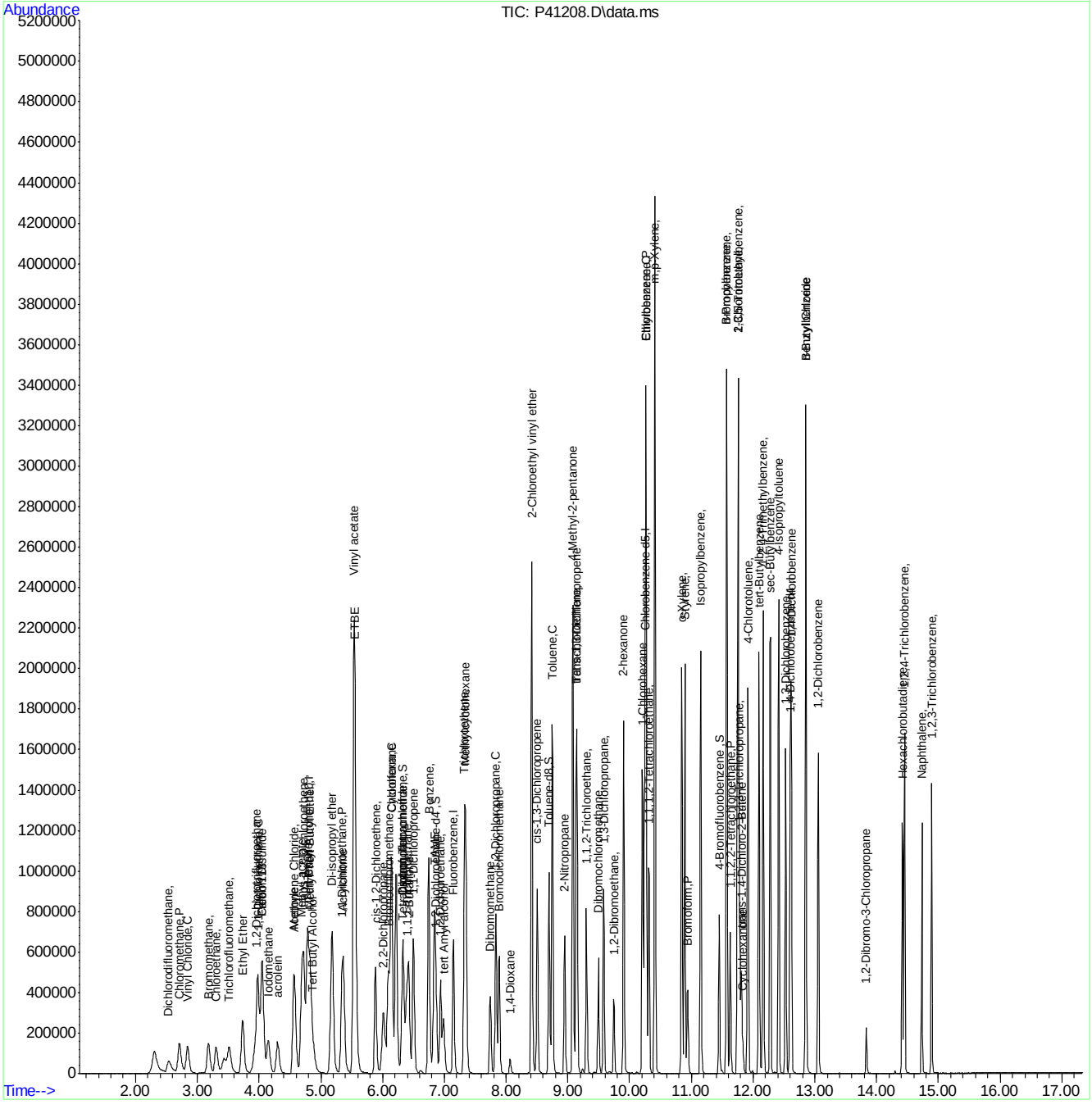
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:03:23 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration



8260P042116.M Fri Apr 22 08:38:41 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

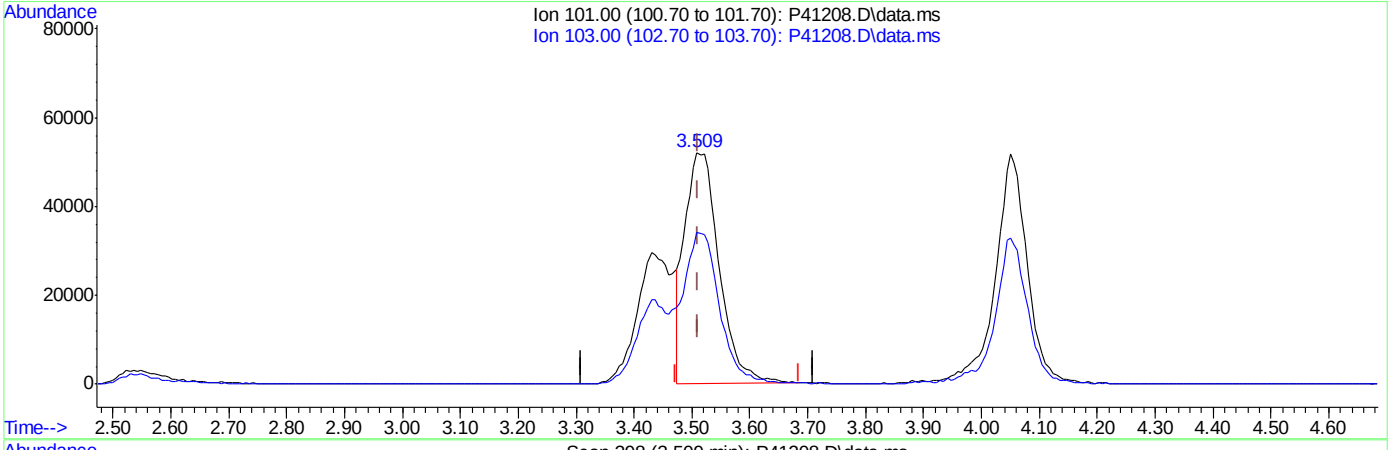
Sample Number:	VP1531-IC1531	**Method:**	SW846 8260B
Lab FileID:	P41208.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 12:44	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

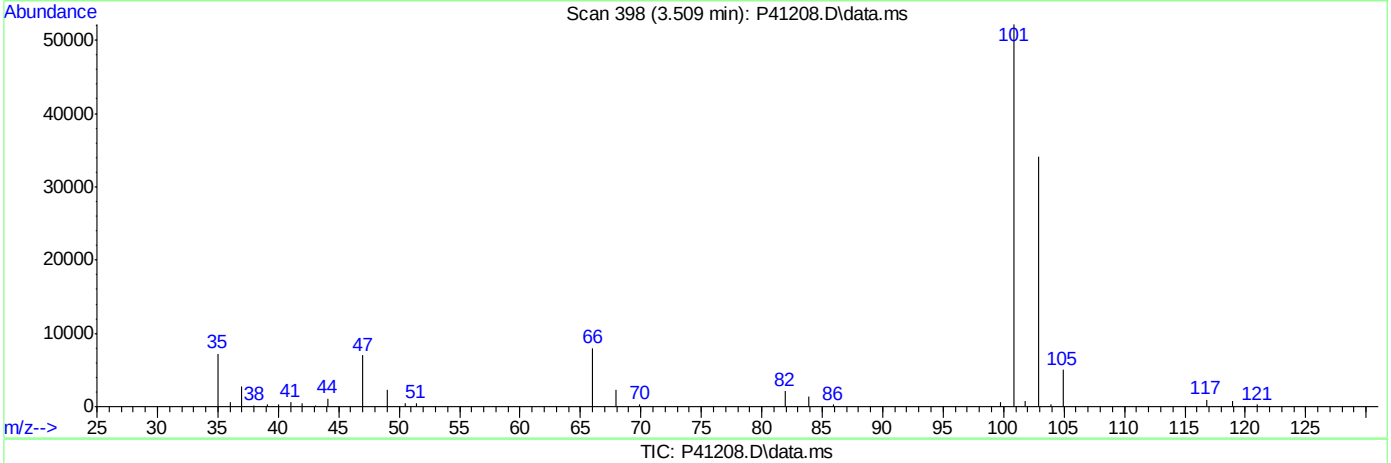
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.51	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:02:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41208.D\data.ms

(7) Trichlorofluoromethane ( )

3.509min (-0.002) 41.53ug/L

response 214924

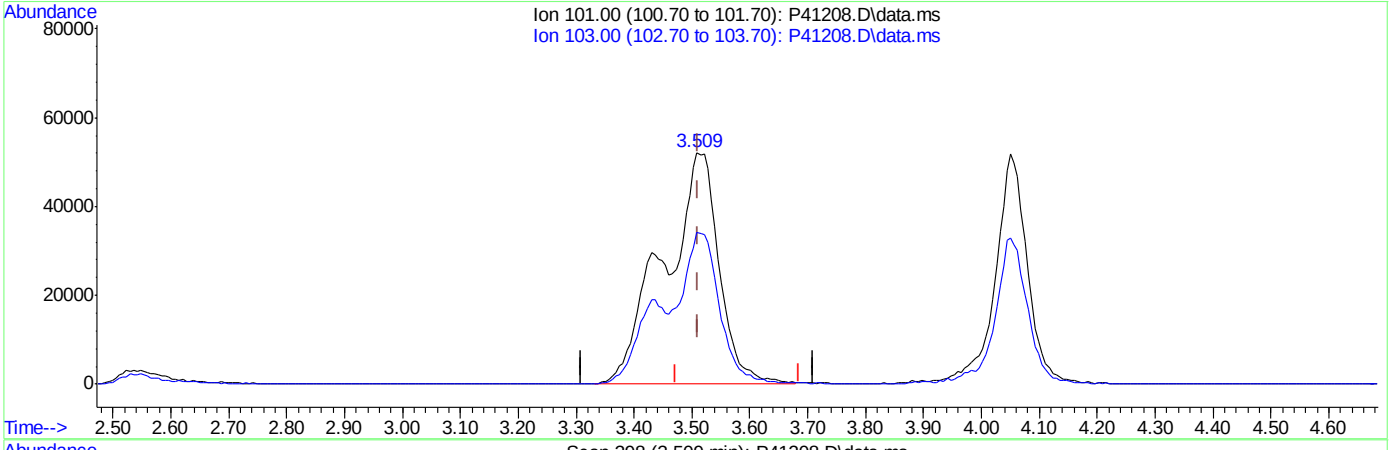
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	65.35
0.00	0.00	0.00
0.00	0.00	0.00

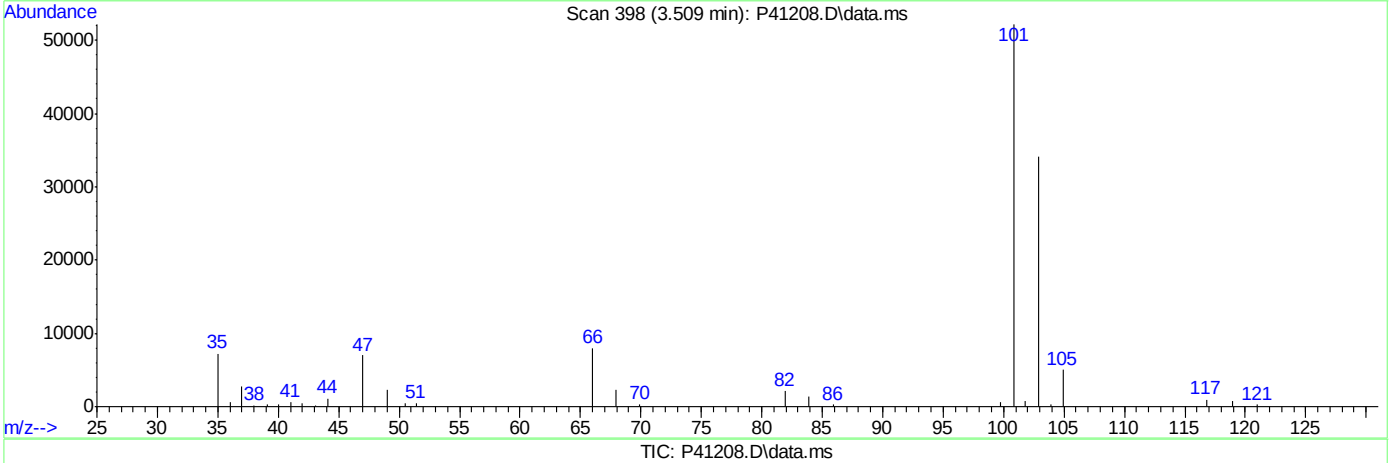
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:02:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41208.D\data.ms

(7) Trichlorofluoromethane ( )

3.509min (-0.002) 66.80ug/L m

response 345734

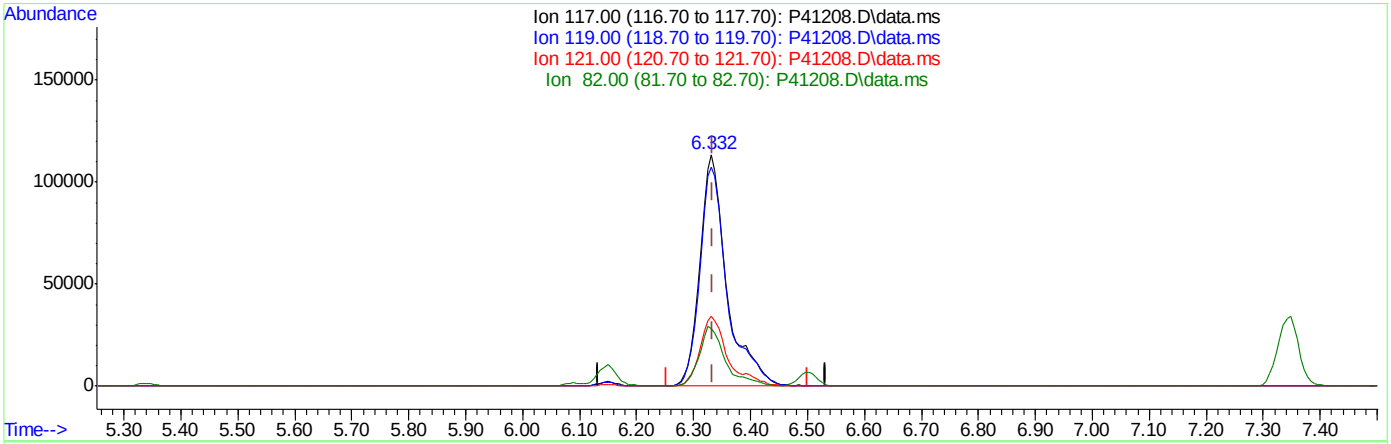
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	65.53
0.00	0.00	0.00
0.00	0.00	0.00

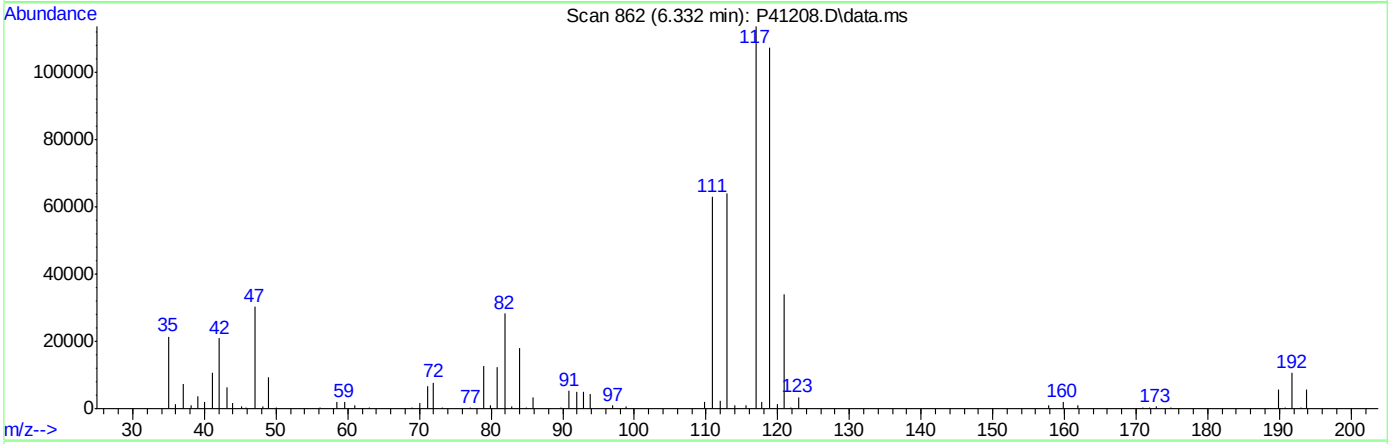
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:02:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41208.D\data.ms

(32) Carbon Tetrachloride ( )

6.332min (-0.002) 77.18ug/L

response 372015

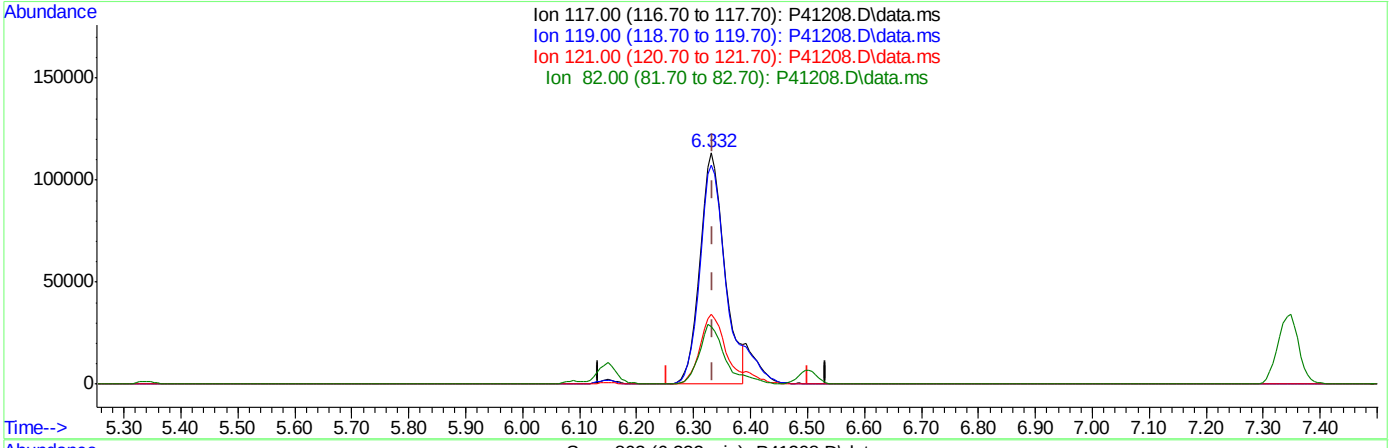
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	94.39
121.00	30.70	30.06
82.00	25.90	24.80

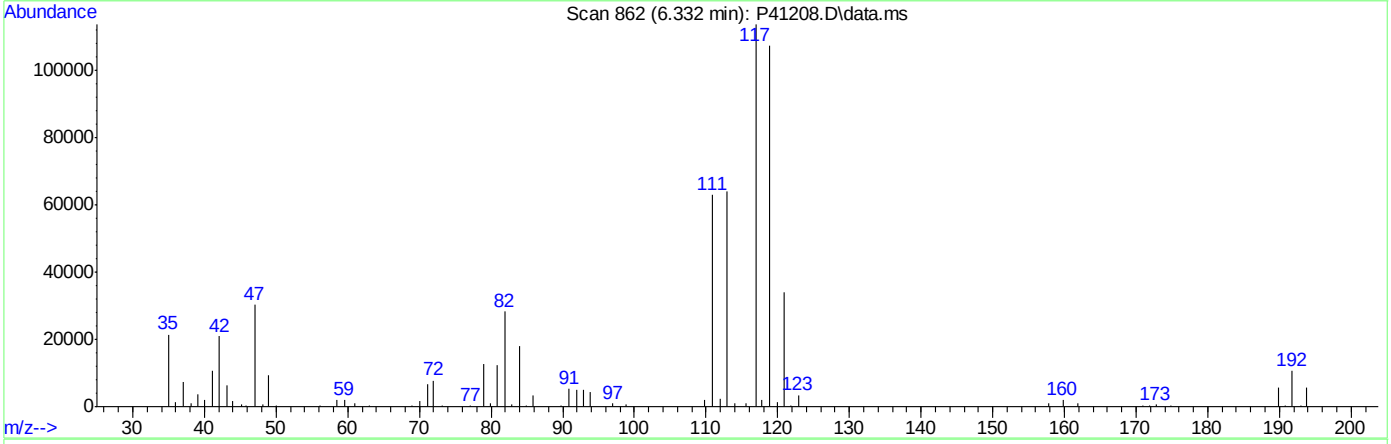
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41208.D
Acq On : 21 Apr 2016 12:44 pm
Operator : katiem
Sample : IC1531-6 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:02:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41208.D\data.ms

(32) Carbon Tetrachloride ( )

6.332min (-0.002) 70.29ug/L m

response 338796

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	94.39
121.00	30.70	30.06
82.00	25.90	24.80

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:27:20 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.146	96	610916	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.242	117	455662	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.603	152	218413	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.816	65	65863	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.330	113	150333	49.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.58%			
38) 1,2-Dichloroethane-d4	6.872	65	198594	55.14	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 110.28%			
48) Toluene-d8	8.697	98	607524	50.82	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.64%			
69) 4-Bromofluorobenzene	11.453	95	219442	57.88	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 115.76%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.540	85	291316	101.70	ug/L	95
3) Chloromethane	2.711	50	482921	108.12	ug/L	99
4) Vinyl Chloride	2.845	62	420393	99.88	ug/L	98
5) Bromomethane	3.179	94	251124	89.86	ug/L	98
6) Chloroethane	3.301	64	279968	79.15	ug/L	93
7) Trichlorofluoromethane	3.508	101	504648m	94.09	ug/L	
8) Ethyl Ether	3.733	59	410821	113.78	ug/L	90
9) 1,2-Dichlorotrifluoroe...	3.964	67	419608	102.07	ug/L	91
10) 1,1-Dichloroethene	3.982	61	589398	108.58	ug/L	89
11) Freon 113	4.049	101	300969	92.67	ug/L	96
12) Carbon Disulfide	4.049	76	1043567	96.62	ug/L	84
13) Iodomethane	4.153	142	477773	91.71	ug/L	97
14) Methylene Chloride	4.560	49	575931	119.46	ug/L	95
15) Acetone	4.585	58	171581	685.97	ug/L	100
16) Methyl acetate	4.694	74	298479	581.58	ug/L #	24
17) trans-1,2-Dichloroethene	4.724	61	528418	115.45	ug/L	94
18) Hexane	4.785	56	406375	112.15	ug/L	95
19) Methyl Tert Butyl Ether	4.828	73	1099090	116.70	ug/L	96
20) Di-isopropyl ether	5.187	45	1579089	130.71	ug/L	99
21) 1,1-Dichloroethane	5.339	63	702959	114.07	ug/L	98
22) Acrylonitrile	5.369	53	781254	684.47	ug/L	99
23) ETBE	5.558	59	1437226	122.83	ug/L	97
24) Vinyl acetate	5.540	43	5483303	693.54	ug/L	97
25) cis-1,2-Dichloroethene	5.886	96	399814	106.87	ug/L	91
26) 2,2-Dichloropropane	6.014	77	523091	107.99	ug/L	99
27) Bromochloromethane	6.087	128	183711	96.75	ug/L #	84
28) Cyclohexane	6.130	56	778492	123.66	ug/L	93
29) Chloroform	6.148	83	674831	106.02	ug/L	97
30) Tetrahydrofuran	6.312	42	122993	143.03	ug/L	91
32) Carbon Tetrachloride	6.330	117	516495m	103.40	ug/L	
33) 1,1,1-Trichloroethane	6.391	97	552851	105.88	ug/L	95
34) 2-Butanone	6.422	43	931392	715.23	ug/L	97
35) 1,1-Dichloropropene	6.501	75	533622	110.65	ug/L	95
36) Benzene	6.750	78	1506748	106.43	ug/L	96

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:27:20 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) TAME	6.841	73	1141730	115.83	ug/L	93
39) 1,2-Dichloroethane	6.939	62	553778	110.31	ug/L	96
40) Trichloroethene	7.322	95	368490	102.95	ug/L	98
41) Methylcyclohexane	7.346	83	679527	107.94	ug/L	95
42) Dibromomethane	7.742	93	227483	108.06	ug/L	98
43) 1,2-Dichloropropane	7.833	63	447729	115.48	ug/L	96
44) Bromodichloromethane	7.888	83	515906	105.82	ug/L	97
45) 2-Chloroethyl vinyl ether	8.417	63	1490304	575.22	ug/L	98
46) cis-1,3-Dichloropropene	8.502	75	671548	109.45	ug/L	94
49) Toluene	8.746	91	1624052	102.39	ug/L	100
50) 2-Nitropropane	8.952	41	571193	634.33	ug/L	99
51) 4-Methyl-2-pentanone	9.080	43	2135601	711.47	ug/L	97
52) trans-1,3-Dichloropropene	9.141	75	611426	115.18	ug/L	95
53) Tetrachloroethene	9.147	166	347874	90.98	ug/L	98
54) 1,1,2-Trichloroethane	9.299	83	286034	105.74	ug/L	94
55) Dibromochloromethane	9.494	129	375781	101.84	ug/L	98
56) 1,3-Dichloropropane	9.579	76	633846	110.97	ug/L	93
57) 1,2-Dibromoethane	9.743	107	333488	108.22	ug/L	98
58) 2-hexanone	9.901	43	1461122	704.59	ug/L	96
59) 1-Chlorohexane	10.212	91	534303	107.08	ug/L	91
60) Ethylbenzene	10.266	91	1851642	103.26	ug/L	97
61) Chlorobenzene	10.260	112	1044241	97.54	ug/L	97
62) 1,1,1,2-Tetrachloroethane	10.315	131	360526	99.18	ug/L	95
63) m,p-Xylene	10.406	91	2825056	209.45	ug/L	99
64) o-Xylene	10.844	91	1405150	107.70	ug/L	97
65) Styrene	10.893	104	1139555	106.51	ug/L	97
66) Bromoform	10.942	173	236774	100.51	ug/L	98
67) Isopropylbenzene	11.155	105	1714712	102.61	ug/L	99
70) n-Propylbenzene	11.574	91	2087225	110.59	ug/L	98
71) Bromobenzene	11.574	156	419958	97.18	ug/L	100
72) 1,1,2,2-Tetrachloroethane	11.629	83	421546	113.06	ug/L	98
73) 1,3,5-Trimethylbenzene	11.763	105	1575925	110.97	ug/L	100
74) 2-Chlorotoluene	11.751	91	1418623	114.10	ug/L	97
75) trans-1,4-Dichloro-2-B...	11.812	53	141620	160.55	ug/L	91
76) 1,2,3-Trichloropropane	11.781	110	122169	114.23	ug/L	90
77) Cyclohexanone	11.836	55	84062	1047.74	ug/L	96
78) 4-Chlorotoluene	11.915	91	1281146	111.69	ug/L	99
79) tert-Butylbenzene	12.098	91	845328	114.61	ug/L	93
80) 1,2,4-Trimethylbenzene	12.165	105	1501353	107.82	ug/L	98
81) sec-Butylbenzene	12.280	105	1877262	107.92	ug/L	97
82) 4-Isopropyltoluene	12.414	119	1581768	108.36	ug/L	97
83) 1,3-Dichlorobenzene	12.530	146	787976	98.39	ug/L	99
84) 1,4-Dichlorobenzene	12.615	146	812385	96.25	ug/L	96
85) n-Butylbenzene	12.858	92	897508	116.50	ug/L	94
86) Benzyl Chloride	12.858	126	171149	109.51	ug/L #	34
87) 1,2-Dichlorobenzene	13.059	146	740786	99.51	ug/L	98
88) 1,2-Dibromo-3-Chloropr...	13.831	75	67487	122.33	ug/L	95
89) Hexachlorobutadiene	14.421	225	240390	107.09	ug/L	94
90) 1,2,4-Trichlorobenzene	14.452	180	497705	107.88	ug/L	98
91) Naphthalene	14.732	128	960317	112.34	ug/L	98

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:27:20 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.890	180	428818	105.58	ug/L	97
94) acrolein	4.305	56	379776	451.16	ug/L	99
95) Tert Butyl Alcohol	4.883	59	344735	1068.54	ug/L	90
96) tert Amyl alcohol	6.987	59	309269	993.33	ug/L	97
97) 1,4-Dioxane	8.064	88	73361	1918.50	ug/L	90

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

7.6.18

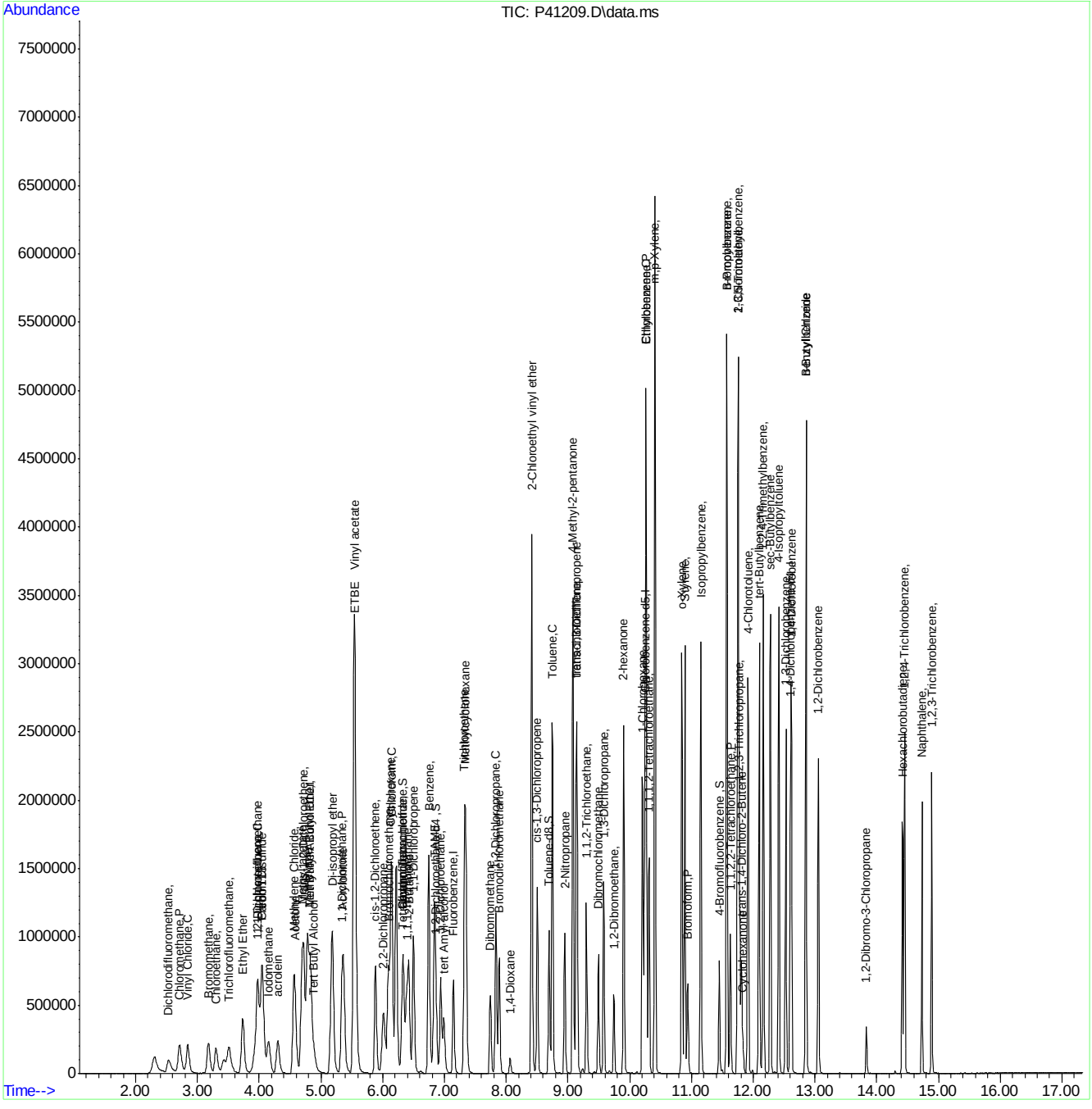
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:27:20 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

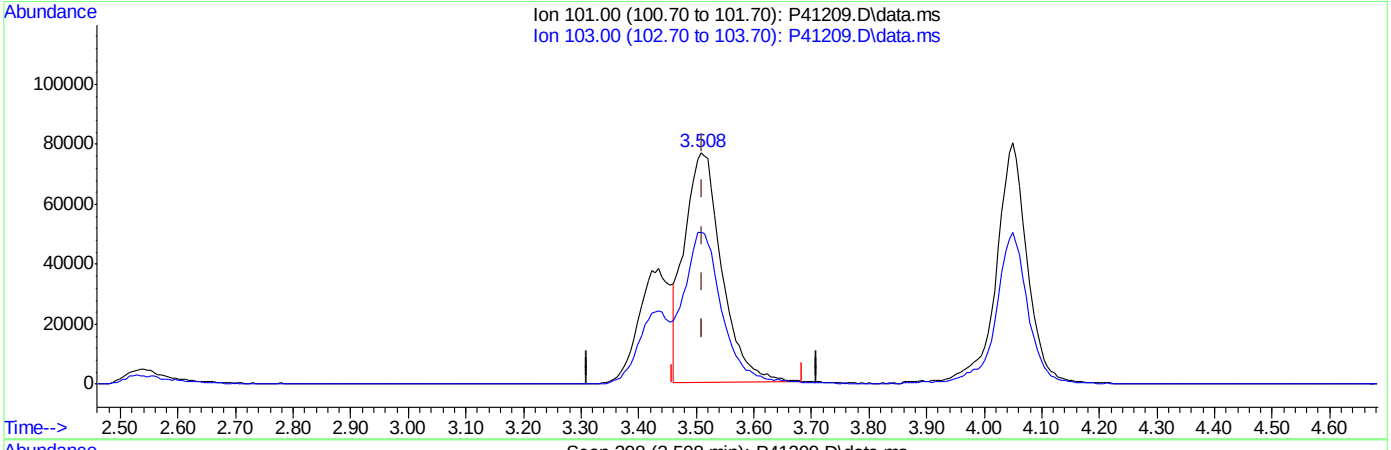
Sample Number:	VP1531-IC1531	**Method:**	SW846 8260B
Lab FileID:	P41209.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 13:09	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

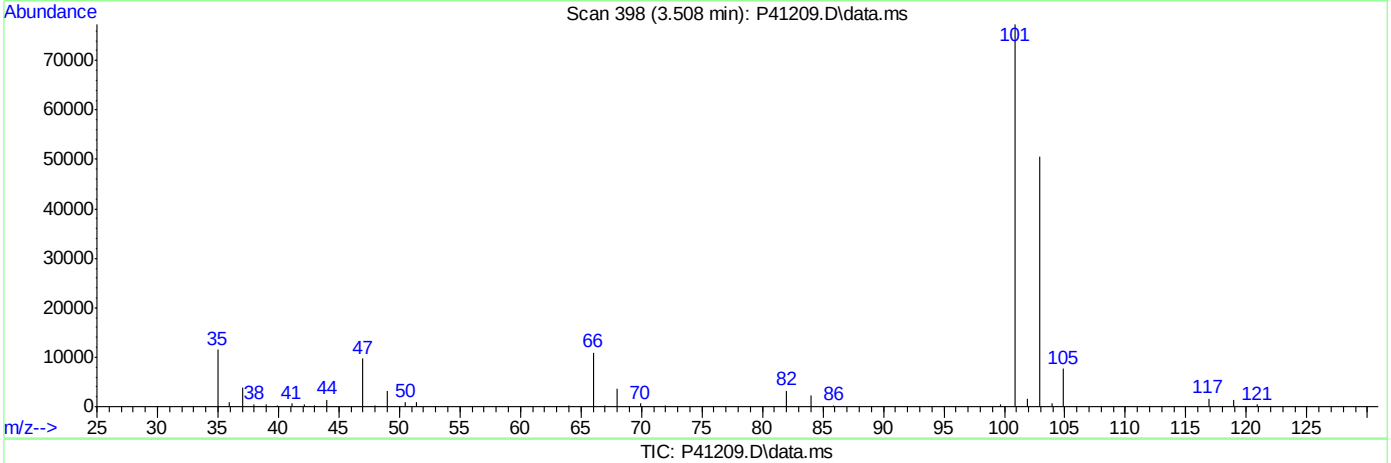
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.51	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:26:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41209.D\data.ms

(7) Trichlorofluoromethane ( )

3.508min (-0.003) 64.57ug/L

response 346328

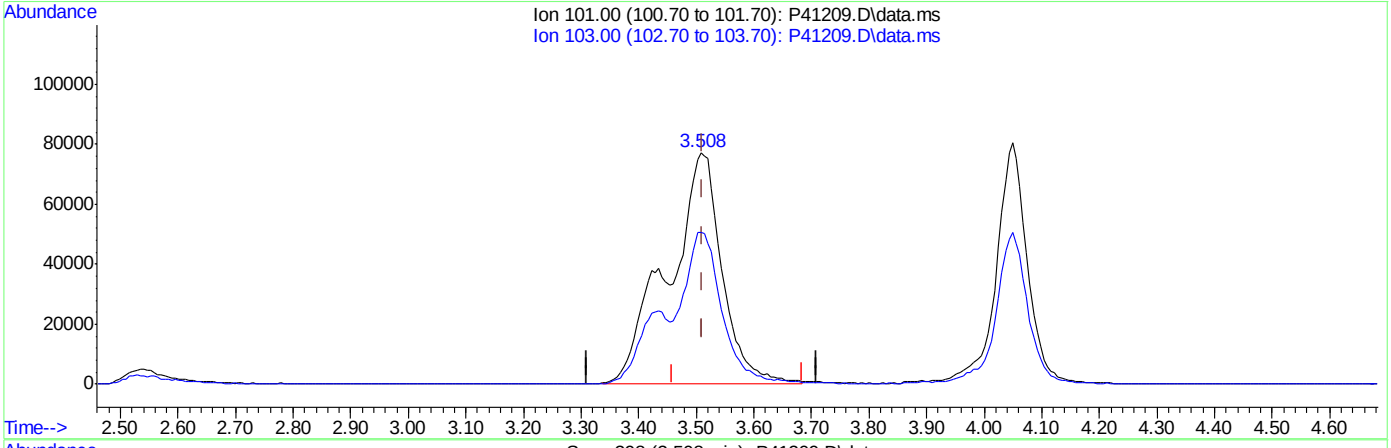
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	65.40
0.00	0.00	0.00
0.00	0.00	0.00

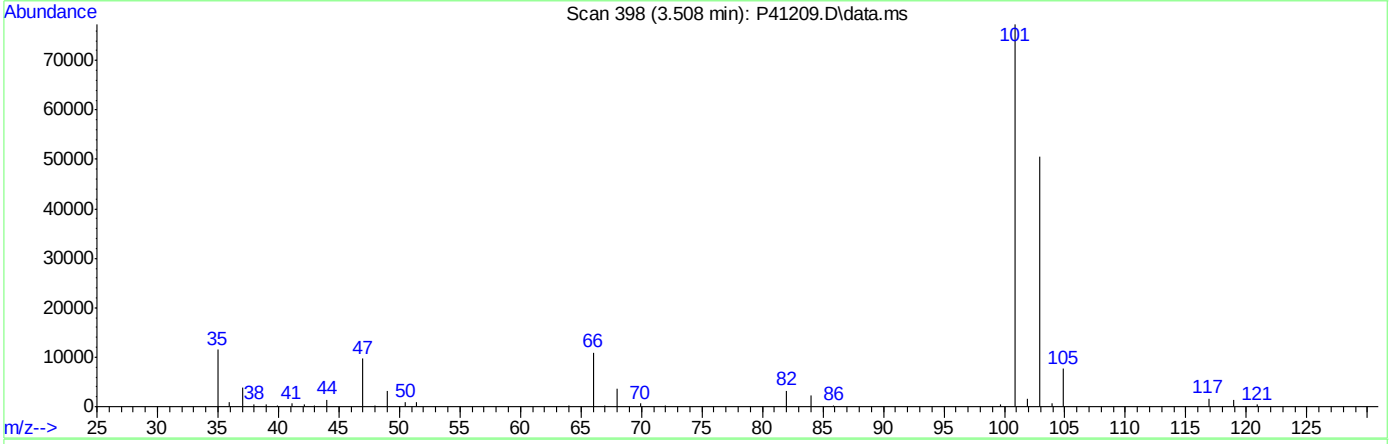
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:26:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





(7) Trichlorofluoromethane ( )

3.508min (-0.003) 94.09ug/L m

response 504648

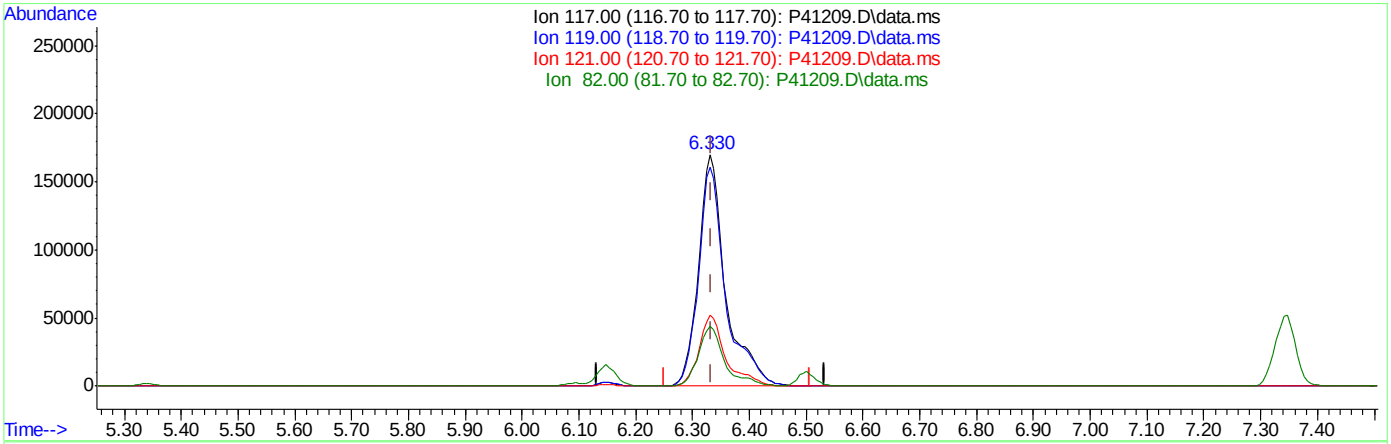
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	65.32
0.00	0.00	0.00
0.00	0.00	0.00

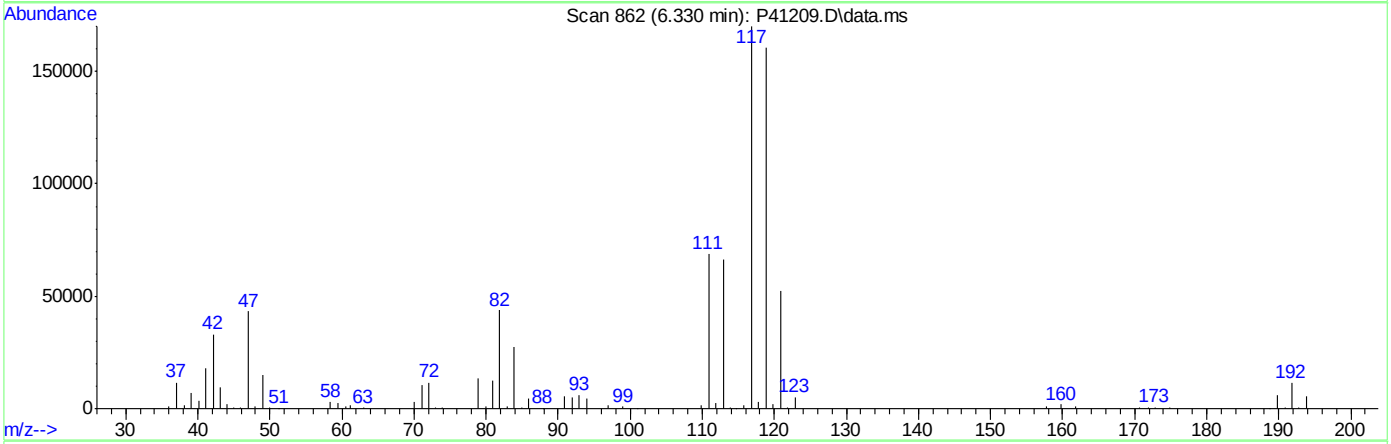
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:26:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41209.D\data.ms

(32) Carbon Tetrachloride ( )

6.330min (-0.003) 113.74ug/L

response 568161

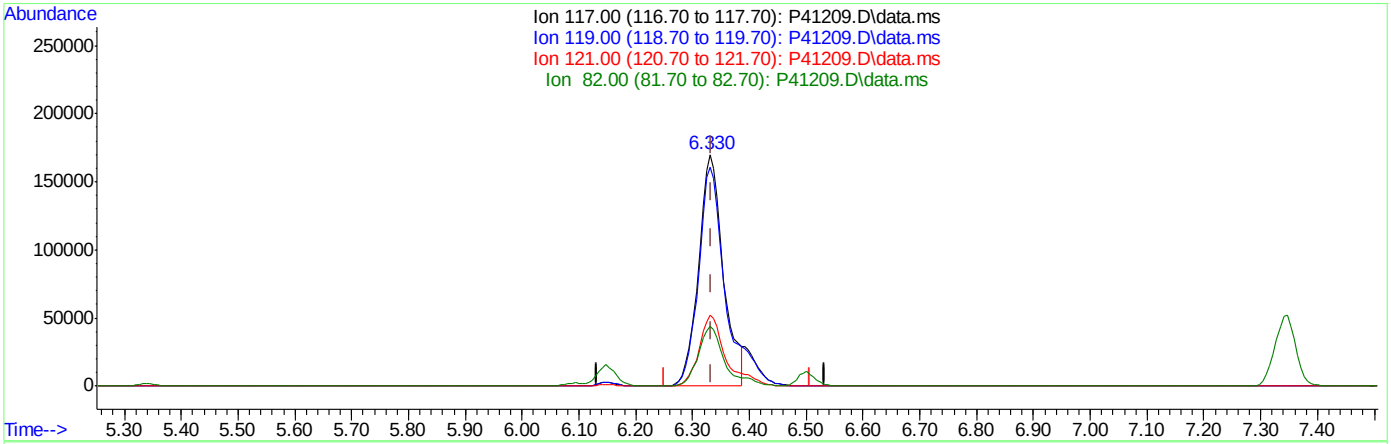
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	94.47
121.00	30.70	30.71
82.00	25.90	25.76

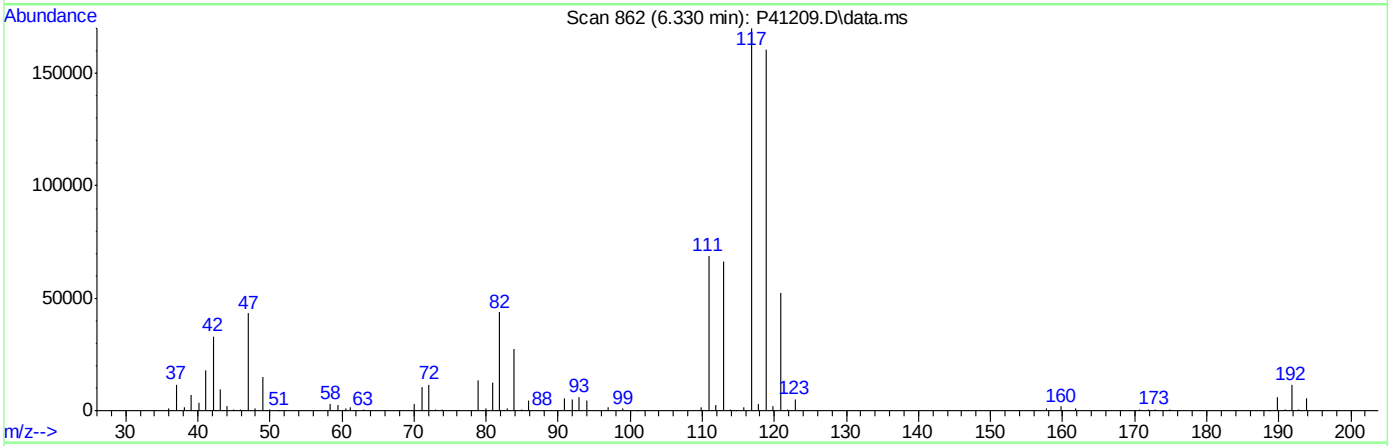
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41209.D
Acq On : 21 Apr 2016 1:09 pm
Operator : katiem
Sample : IC1531-7 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:26:51 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Sat Mar 12 11:28:59 2016
Response via : Initial Calibration





TIC: P41209.D\data.ms

(32) Carbon Tetrachloride ( )

6.330min (-0.003) 103.40ug/L m

response 516495

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	94.47
121.00	30.70	30.71
82.00	25.90	25.76

SGS ACCUTEST FA33359

P41211.D

Manual Integrations APPROVED (compounds with "m" flag)

Melissa Mangual 04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:22:53 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	7.146	96	568054	50.00 ug/L	0.00
47) Chlorobenzene-d5	10.243	117	409975	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.597	152	196297	50.00 ug/L	0.00
93) Tert Butyl Alcohol-d10	4.798	65	52788	250.00 ug/L	0.00

System Monitoring Compounds					
31) Dibromofluoromethane	6.331	113	137048	49.50 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.00%		
38) 1,2-Dichloroethane-d4	6.867	65	183720	49.35 ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.70%		
48) Toluene-d8	8.698	98	563039	50.70 ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.40%		
69) 4-Bromofluorobenzene	11.453	95	193850	50.11 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.22%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.523	85	1886	0.75 ug/L #	44
3) Chloromethane	2.675	50	4293	0.94 ug/L	88
4) Vinyl Chloride	2.797	62	4122	1.06 ug/L	97
5) Bromomethane	3.168	94	2362	1.01 ug/L	84
6) Chloroethane	3.320	64	2299	0.85 ug/L #	62
7) Trichlorofluoromethane	3.508	101	4220m	0.93 ug/L	
8) Ethyl Ether	3.727	59	3171	0.89 ug/L	90
9) 1,2-Dichlorotrifluoroe...	3.959	67	3097	0.83 ug/L	89
10) 1,1-Dichloroethene	3.989	61	4723	0.91 ug/L	84
11) Freon 113	4.044	101	2085	0.80 ug/L	95
12) Carbon Disulfide	4.062	76	8398	0.89 ug/L	77
13) Iodomethane	4.159	142	4070	0.93 ug/L	94
14) Methylene Chloride	4.573	49	5297	0.99 ug/L	89
15) Acetone	4.579	58	1619	5.12 ug/L #	52
16) Methyl acetate	4.689	74	2178	4.30 ug/L #	90
17) trans-1,2-Dichloroethene	4.725	61	4088	0.89 ug/L	89
18) Hexane	4.786	56	3178	0.87 ug/L #	80
19) Methyl Tert Butyl Ether	4.829	73	8334	0.89 ug/L	90
20) Di-isopropyl ether	5.175	45	11778	0.86 ug/L	95
21) 1,1-Dichloroethane	5.352	63	5329	0.85 ug/L	100
22) Acrylonitrile	5.382	53	6154	4.55 ug/L	89
23) ETBE	5.553	59	9912	0.81 ug/L	92
24) Vinyl acetate	5.546	43	40210	4.29 ug/L	99
25) cis-1,2-Dichloroethene	5.887	96	3247	0.94 ug/L	84
26) 2,2-Dichloropropane	6.015	77	3894	0.82 ug/L	90
27) Bromochloromethane	6.088	128	1240	0.76 ug/L #	76
28) Cyclohexane	6.130	56	5177	0.80 ug/L	88
29) Chloroform	6.149	83	5227	0.87 ug/L	84
30) Tetrahydrofuran	6.313	42	1038	0.99 ug/L #	25
32) Carbon Tetrachloride	6.337	117	3998	0.88 ug/L #	87
33) 1,1,1-Trichloroethane	6.398	97	4669	0.95 ug/L	85
34) 2-Butanone	6.429	43	8246	4.97 ug/L	97
35) 1,1-Dichloropropene	6.495	75	3789	0.82 ug/L	93
36) Benzene	6.751	78	11969	0.88 ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:22:53 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.836	73	8780	0.91 ug/L	96
39) 1,2-Dichloroethane	6.940	62	5005	0.99 ug/L	91
40) Trichloroethene	7.323	95	2944	0.89 ug/L	89
41) Methylcyclohexane	7.347	83	4878	0.84 ug/L	92
42) Dibromomethane	7.743	93	1636	0.83 ug/L #	74
43) 1,2-Dichloropropane	7.834	63	3227	0.82 ug/L	85
44) Bromodichloromethane	7.889	83	3824	0.84 ug/L	85
45) 2-Chloroethyl vinyl ether	8.418	63	10694	4.35 ug/L	91
46) cis-1,3-Dichloropropene	8.503	75	4821	0.83 ug/L	91
49) Toluene	8.746	91	14208	0.99 ug/L	97
50) 2-Nitropropane	8.953	41	4434	4.66 ug/L	96
51) 4-Methyl-2-pentanone	9.081	43	16278	4.47 ug/L	98
52) trans-1,3-Dichloropropene	9.142	75	4384	0.88 ug/L	85
53) Tetrachloroethene	9.148	166	2910	0.95 ug/L	94
54) 1,1,2-Trichloroethane	9.306	83	2165	0.89 ug/L	85
55) Dibromochloromethane	9.501	129	2568	0.84 ug/L	82
56) 1,3-Dichloropropane	9.580	76	4551	0.85 ug/L	89
57) 1,2-Dibromoethane	9.750	107	2161	0.79 ug/L	90
58) 2-hexanone	9.908	43	10707	4.44 ug/L	85
59) 1-Chlorohexane	10.206	91	4105	0.94 ug/L #	82
60) Ethylbenzene	10.267	91	14721	0.92 ug/L	96
61) Chlorobenzene	10.255	112	9526	1.04 ug/L	91
62) 1,1,1,2-Tetrachloroethane	10.316	131	2748	0.89 ug/L	92
63) m,p-Xylene	10.407	91	20777	1.74 ug/L	97
64) o-Xylene	10.845	91	9869	0.84 ug/L	94
65) Styrene	10.900	104	7253	0.80 ug/L	93
66) Bromoform	10.942	173	2034	1.04 ug/L	96
67) Isopropylbenzene	11.155	105	12592	0.88 ug/L	98
70) n-Propylbenzene	11.575	91	14989	0.86 ug/L	98
71) Bromobenzene	11.575	156	3567	1.00 ug/L	97
72) 1,1,2,2-Tetrachloroethane	11.630	83	3755	1.06 ug/L	94
73) 1,3,5-Trimethylbenzene	11.764	105	10615	0.83 ug/L	91
74) 2-Chlorotoluene	11.752	91	10638	0.91 ug/L	91
75) trans-1,4-Dichloro-2-B...	11.818	53	932	0.76 ug/L #	71
76) 1,2,3-Trichloropropane	11.788	110	964	0.97 ug/L	92
77) Cyclohexanone	11.843	55	494	3.83 ug/L #	68
78) 4-Chlorotoluene	11.916	91	9973	0.93 ug/L	97
79) tert-Butylbenzene	12.098	91	6259	0.90 ug/L	87
80) 1,2,4-Trimethylbenzene	12.165	105	10978	0.89 ug/L	95
81) sec-Butylbenzene	12.281	105	14376	0.93 ug/L	91
82) 4-Isopropyltoluene	12.415	119	11096	0.87 ug/L	99
83) 1,3-Dichlorobenzene	12.530	146	6363	0.95 ug/L	89
84) 1,4-Dichlorobenzene	12.615	146	7278m	1.04 ug/L	
85) n-Butylbenzene	12.853	92	6450	0.90 ug/L	96
86) Benzyl Chloride	12.865	126	1056	0.75 ug/L	96
87) 1,2-Dichlorobenzene	13.060	146	5954	0.95 ug/L	99
88) 1,2-Dibromo-3-Chloropr...	13.838	75	580	0.98 ug/L	85
89) Hexachlorobutadiene	14.422	225	2406	1.20 ug/L	92
90) 1,2,4-Trichlorobenzene	14.459	180	3986	1.02 ug/L	90
91) Naphthalene	14.732	128	7753	1.06 ug/L	93

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:22:53 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.897	180	3925	1.15	ug/L	99
94) acrolein	4.299	56	3019	4.97	ug/L	89
95) Tert Butyl Alcohol	4.859	59	2997	10.87	ug/L	95
96) tert Amyl alcohol	6.988	59	2239	9.35	ug/L	86
97) 1,4-Dioxane	8.071	88	478	16.91	ug/L #	21

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

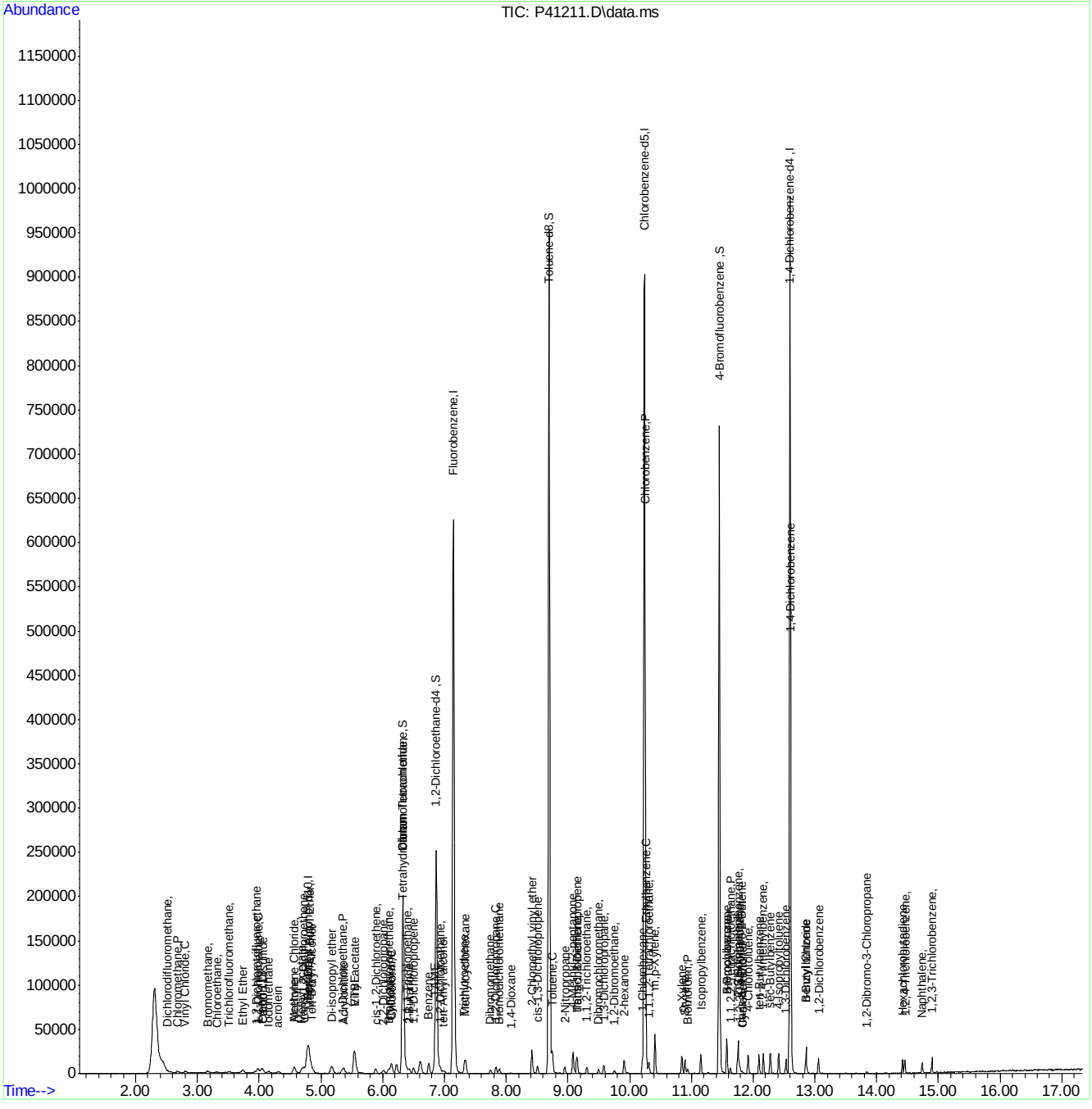
7.6.19

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:22:53 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration



8260P042116.M Fri Apr 22 08:38:48 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

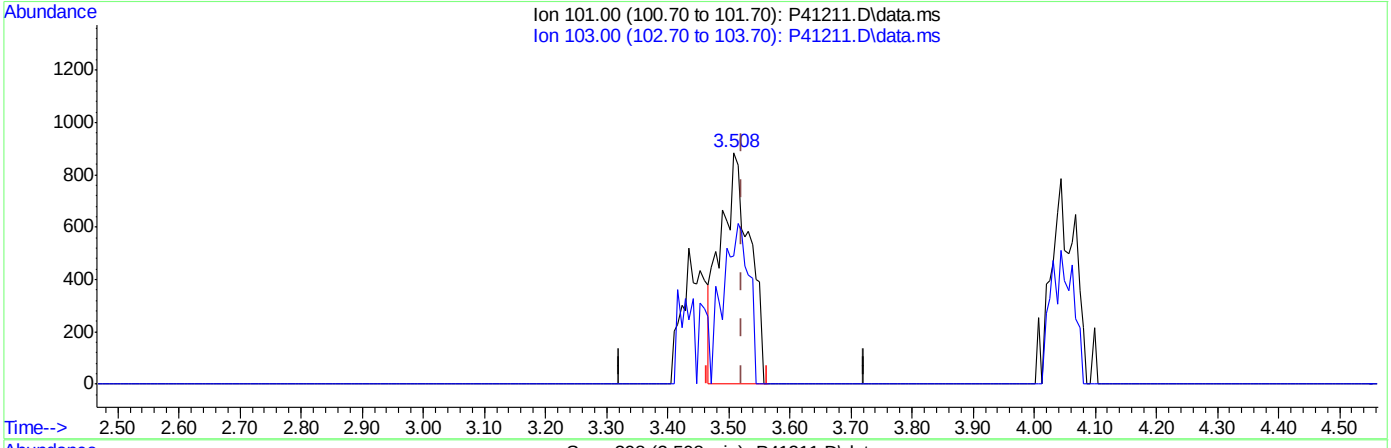
Sample Number:	VP1531-IC1531	**Method:**	SW846 8260B
Lab FileID:	P41211.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 14:03	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

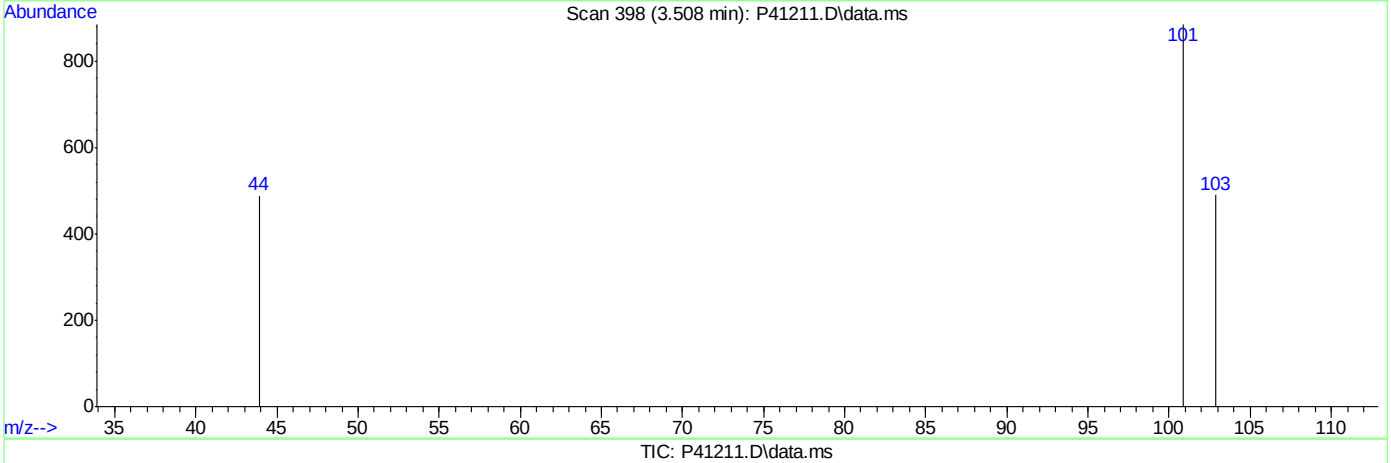
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.51	Split peak
1,4-Dichlorobenzene	106-46-7		12.62	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:21:08 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration





TIC: P41211.D\data.ms

(7) Trichlorofluoromethane ( )

3.508min (-0.014) 0.64ug/L

response 2939

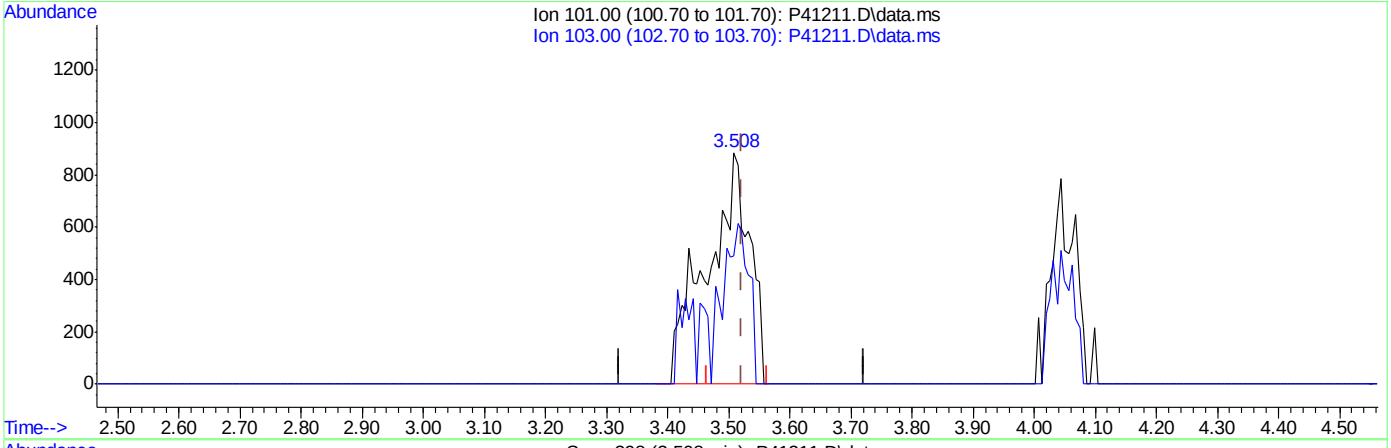
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	55.37
0.00	0.00	0.00
0.00	0.00	0.00

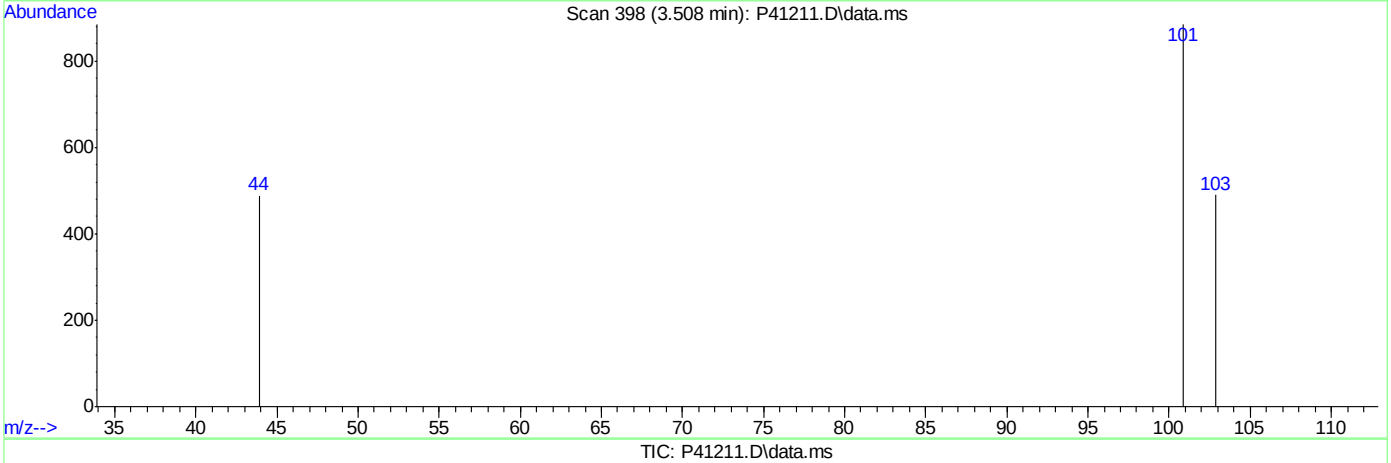
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:21:08 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration





TIC: P41211.D\data.ms

(7) Trichlorofluoromethane ( )

3.508min (-0.014) 0.93ug/L m

response 4220

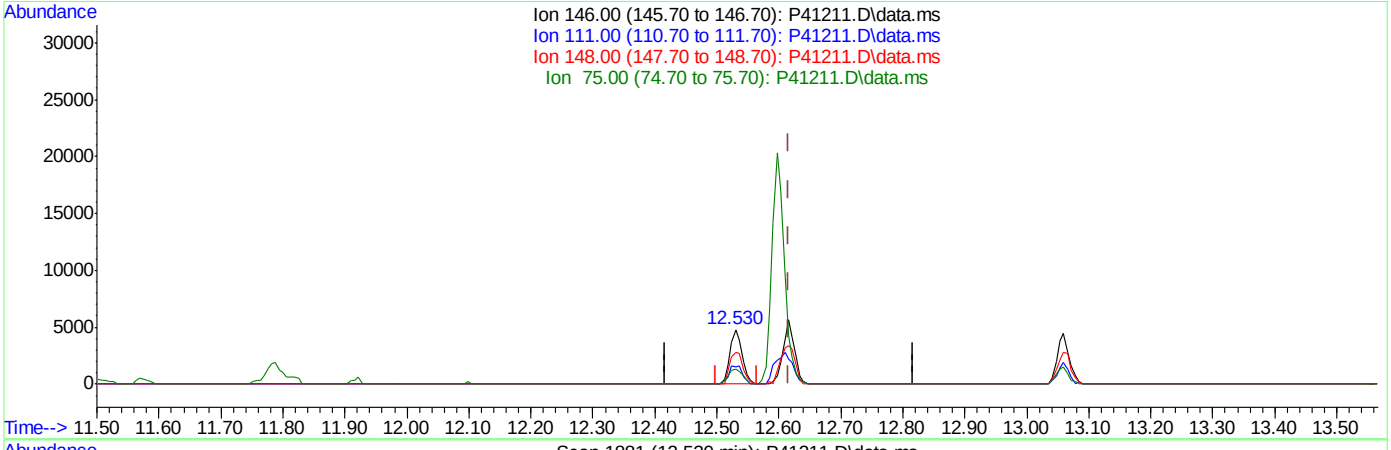
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	55.37
0.00	0.00	0.00
0.00	0.00	0.00

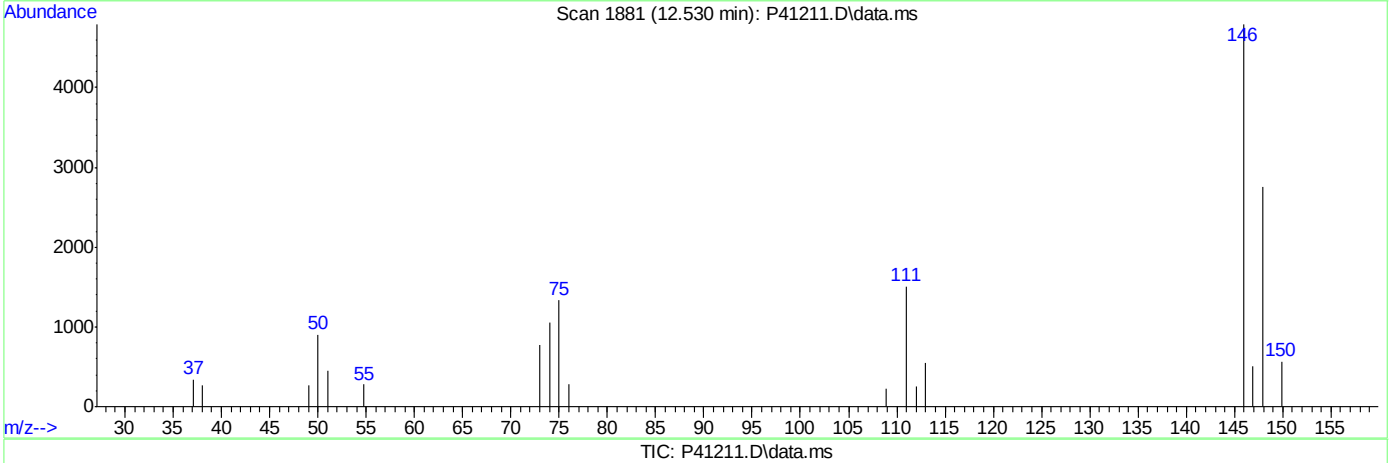
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:21:08 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration





TIC: P41211.D\data.ms

(84) 1,4-Dichlorobenzene

12.530min (-0.087) 0.91ug/L

response 6363

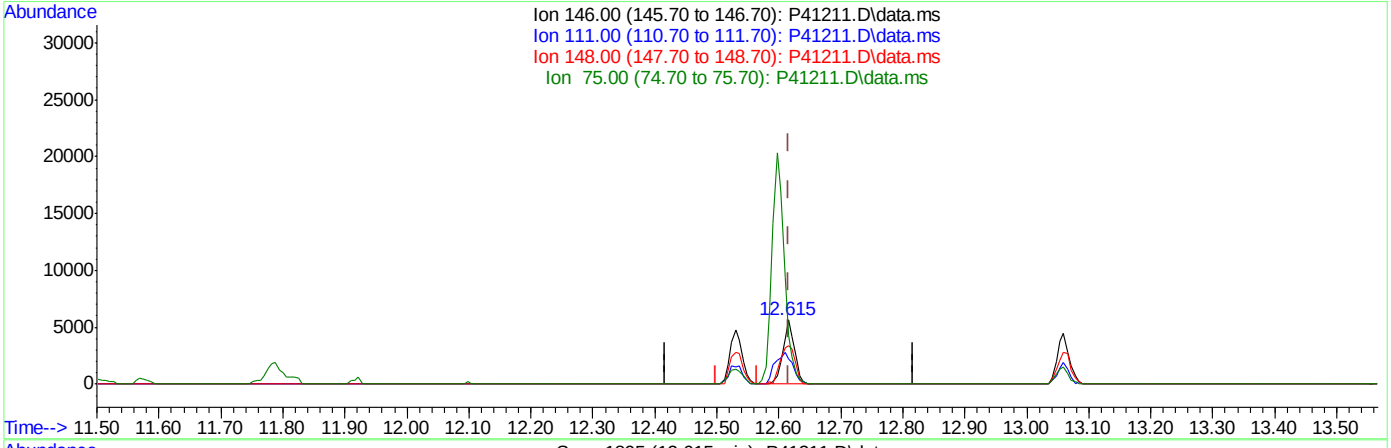
Ion	Exp%	Act%
146.00	100	100
111.00	40.30	31.46
148.00	62.30	57.52
75.00	32.70	27.94

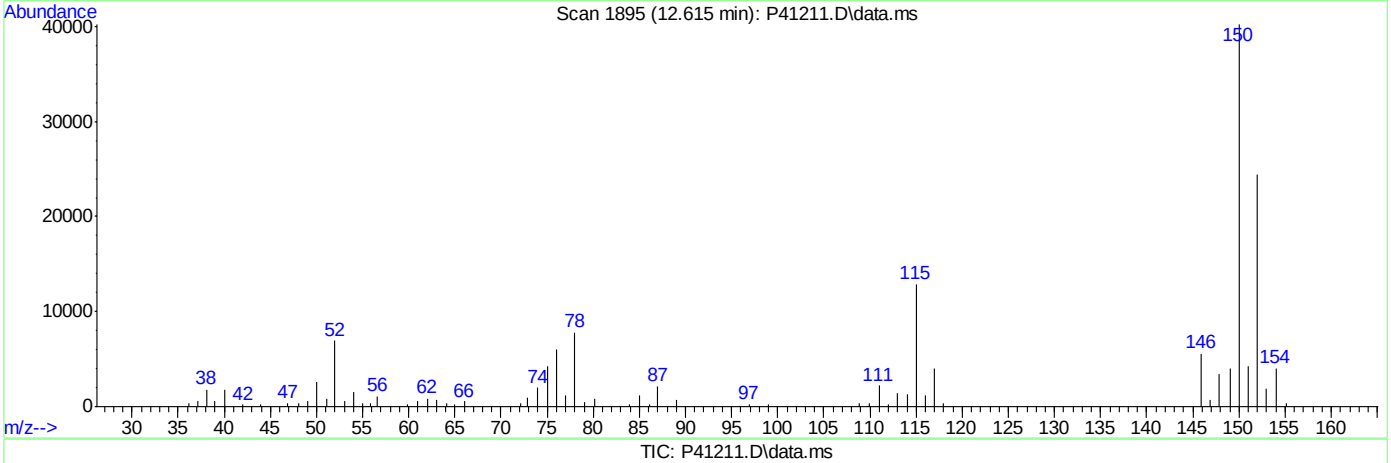
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41211.D
Acq On : 21 Apr 2016 2:03 pm
Operator : katiem
Sample : IC1531-1 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 14:21:08 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 13:33:18 2016
Response via : Initial Calibration





TIC: P41211.D\data.ms

(84) 1,4-Dichlorobenzene

12.615min (-0.001) 1.04ug/L m

response 7278

Ion	Exp%	Act%
146.00	100	100
111.00	40.30	39.65
148.00	62.30	60.15
75.00	32.70	76.50#

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
04/22/16 09:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:40:22 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.146	96	591837	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.242	117	440629	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.597	152	216437	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.798	65	56703	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.331	113	145472	50.42	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.84%			
38) 1,2-Dichloroethane-d4	6.866	65	190263	49.13	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.26%			
48) Toluene-d8	8.697	98	593250	49.76	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.52%			
69) 4-Bromofluorobenzene	11.453	95	209962	49.16	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.32%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.535	85	110792	43.39	ug/L	95
3) Chloromethane	2.699	50	178078	38.10	ug/L	98
4) Vinyl Chloride	2.833	62	164390	40.38	ug/L	100
5) Bromomethane	3.174	94	99982	41.03	ug/L	97
6) Chloroethane	3.301	64	128072	46.63	ug/L	93
7) Trichlorofluoromethane	3.514	101	192714m	41.13	ug/L	
8) Ethyl Ether	3.733	59	156314	42.62	ug/L	92
9) 1,2-Dichlorotrifluoroe...	3.958	67	167092	43.55	ug/L	92
10) 1,1-Dichloroethene	3.983	61	222818	41.45	ug/L	92
11) Freon 113	4.050	101	113357	41.79	ug/L	95
12) Carbon Disulfide	4.043	76	432772	44.50	ug/L	88
13) Iodomethane	4.147	142	192567	43.08	ug/L	98
14) Methylene Chloride	4.561	49	218489	40.02	ug/L	94
15) Acetone	4.585	58	64255	198.99	ug/L	93
16) Methyl acetate	4.694	74	109268	207.93	ug/L #	38
17) trans-1,2-Dichloroethene	4.725	61	208446	43.58	ug/L	99
18) Hexane	4.786	56	153829	41.22	ug/L	97
19) Methyl Tert Butyl Ether	4.828	73	404930	41.64	ug/L	96
20) Di-isopropyl ether	5.181	45	570341	40.24	ug/L	99
21) 1,1-Dichloroethane	5.333	63	274620	42.64	ug/L	99
22) Acrylonitrile	5.364	53	270141	196.39	ug/L	98
23) ETBE	5.558	59	516244	41.07	ug/L	95
24) Vinyl acetate	5.534	43	1867802	192.66	ug/L	96
25) cis-1,2-Dichloroethene	5.887	96	146673	40.43	ug/L	95
26) 2,2-Dichloropropane	6.014	77	215933	44.92	ug/L	99
27) Bromochloromethane	6.087	128	69767	42.27	ug/L	92
28) Cyclohexane	6.136	56	273975	40.80	ug/L	96
29) Chloroform	6.142	83	262924	42.40	ug/L	96
30) Tetrahydrofuran	6.313	42	44429	39.08	ug/L	91
32) Carbon Tetrachloride	6.331	117	193624m	41.36	ug/L	
33) 1,1,1-Trichloroethane	6.392	97	206195	40.30	ug/L	93
34) 2-Butanone	6.422	43	359080	207.59	ug/L	98
35) 1,1-Dichloropropene	6.495	75	203806	42.39	ug/L	94
36) Benzene	6.744	78	579107	41.34	ug/L	96

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:40:22 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.836	73	400773	39.66 ug/L	93
39) 1,2-Dichloroethane	6.933	62	217923	41.47 ug/L	98
40) Trichloroethene	7.322	95	144060	42.30 ug/L	94
41) Methylcyclohexane	7.341	83	251102	41.72 ug/L	97
42) Dibromomethane	7.742	93	89049	44.15 ug/L	98
43) 1,2-Dichloropropane	7.833	63	169358	42.02 ug/L	96
44) Bromodichloromethane	7.882	83	204871	43.84 ug/L	96
45) 2-Chloroethyl vinyl ether	8.411	63	550136	214.62 ug/L	98
46) cis-1,3-Dichloropropene	8.503	75	262763	44.09 ug/L	95
49) Toluene	8.746	91	633451	41.26 ug/L	98
50) 2-Nitropropane	8.947	41	211960	206.80 ug/L	98
51) 4-Methyl-2-pentanone	9.081	43	809361	208.10 ug/L	96
52) trans-1,3-Dichloropropene	9.135	75	253184	47.34 ug/L	95
53) Tetrachloroethene	9.147	166	140848	43.18 ug/L	96
54) 1,1,2-Trichloroethane	9.300	83	110955	42.74 ug/L	94
55) Dibromochloromethane	9.494	129	147088	44.66 ug/L	99
56) 1,3-Dichloropropane	9.579	76	234654	41.12 ug/L	92
57) 1,2-Dibromoethane	9.744	107	125741	43.74 ug/L	98
58) 2-hexanone	9.902	43	535126	205.31 ug/L	95
59) 1-Chlorohexane	10.206	91	195921	40.79 ug/L	87
60) Ethylbenzene	10.267	91	719082	42.43 ug/L	98
61) Chlorobenzene	10.261	112	416114	42.21 ug/L	96
62) 1,1,1,2-Tetrachloroethane	10.315	131	143021	43.53 ug/L	97
63) m,p-Xylene	10.407	91	1101989	86.34 ug/L	99
64) o-Xylene	10.845	91	550342	43.96 ug/L	97
65) Styrene	10.893	104	429626	43.81 ug/L	97
66) Bromoform	10.942	173	95760	44.98 ug/L	97
67) Isopropylbenzene	11.155	105	679784	44.05 ug/L	100
70) n-Propylbenzene	11.575	91	833750	43.60 ug/L	98
71) Bromobenzene	11.575	156	165706	41.88 ug/L	99
72) 1,1,2,2-Tetrachloroethane	11.630	83	158771	40.25 ug/L	100
73) 1,3,5-Trimethylbenzene	11.763	105	599178	42.74 ug/L	98
74) 2-Chlorotoluene	11.751	91	545206	42.52 ug/L	95
75) trans-1,4-Dichloro-2-B...	11.812	53	48791	36.03 ug/L	89
76) 1,2,3-Trichloropropane	11.782	110	47197	42.43 ug/L	93
77) Cyclohexanone	11.836	55	26054	188.88 ug/L	98
78) 4-Chlorotoluene	11.915	91	502551	42.34 ug/L	98
79) tert-Butylbenzene	12.092	91	328435	42.74 ug/L	95
80) 1,2,4-Trimethylbenzene	12.165	105	591261	43.17 ug/L	98
81) sec-Butylbenzene	12.280	105	750381	43.41 ug/L	97
82) 4-Isopropyltoluene	12.414	119	612495	43.16 ug/L	96
83) 1,3-Dichlorobenzene	12.530	146	322863	43.70 ug/L	96
84) 1,4-Dichlorobenzene	12.615	146	332914	42.92 ug/L	98
85) n-Butylbenzene	12.852	92	349887	43.56 ug/L	89
86) Benzyl Chloride	12.858	126	69705	46.62 ug/L #	47
87) 1,2-Dichlorobenzene	13.053	146	297655	43.16 ug/L	96
88) 1,2-Dibromo-3-Chloropr...	13.832	75	25201	41.49 ug/L	93
89) Hexachlorobutadiene	14.422	225	91204	40.15 ug/L	91
90) 1,2,4-Trichlorobenzene	14.452	180	194949	44.07 ug/L	99
91) Naphthalene	14.732	128	390773	46.76 ug/L	97

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:40:22 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.890	180	163012	41.90	ug/L	99
94) acrolein	4.299	56	151759	234.44	ug/L	98
95) Tert Butyl Alcohol	4.877	59	122572	396.66	ug/L	95
96) tert Amyl alcohol	6.988	59	106938	415.55	ug/L	94
97) 1,4-Dioxane	8.065	88	26055	869.67	ug/L	93

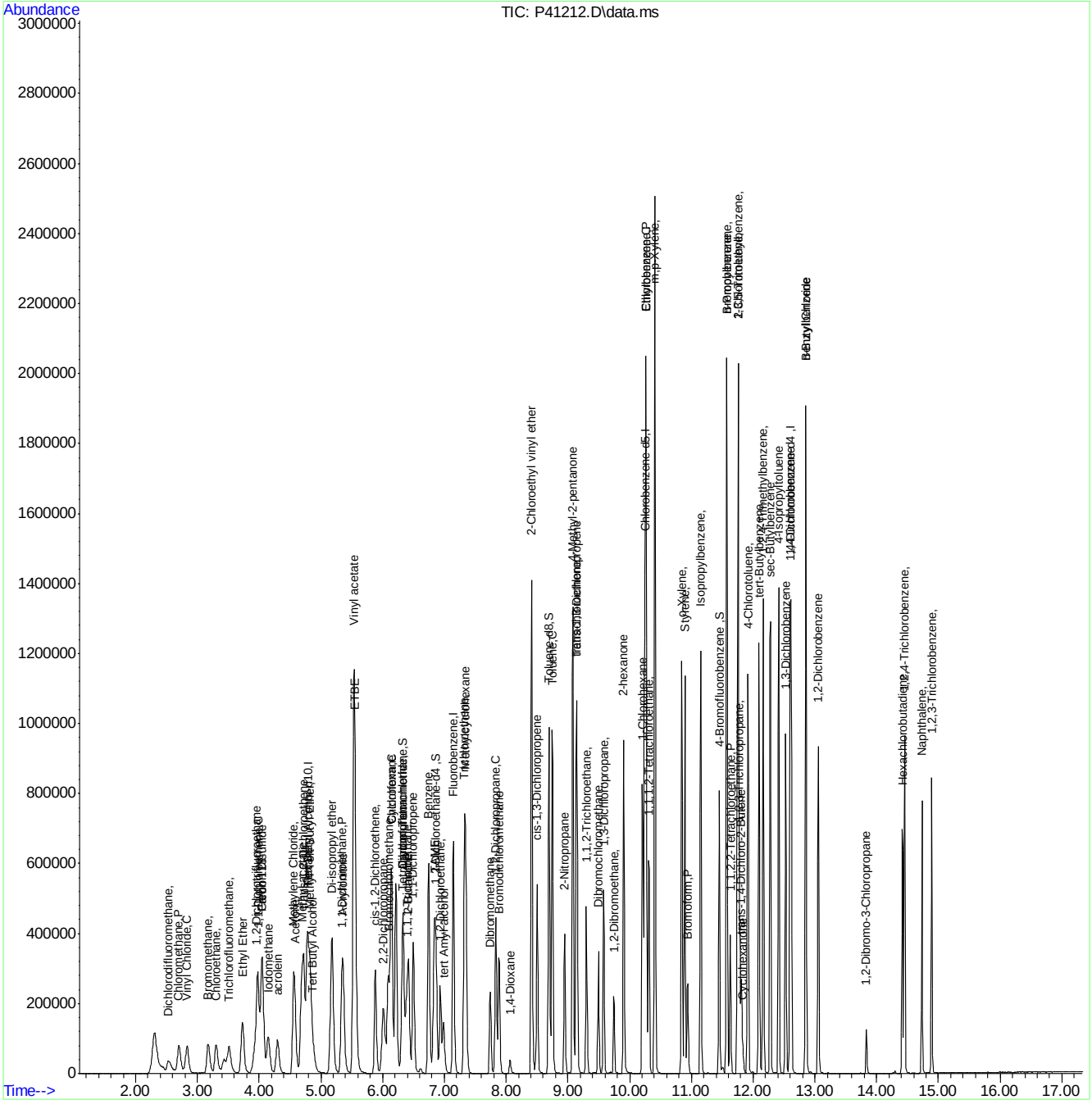
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:40:22 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



SGS ACCUTEST FA33359

Manual Integration Approval Summary

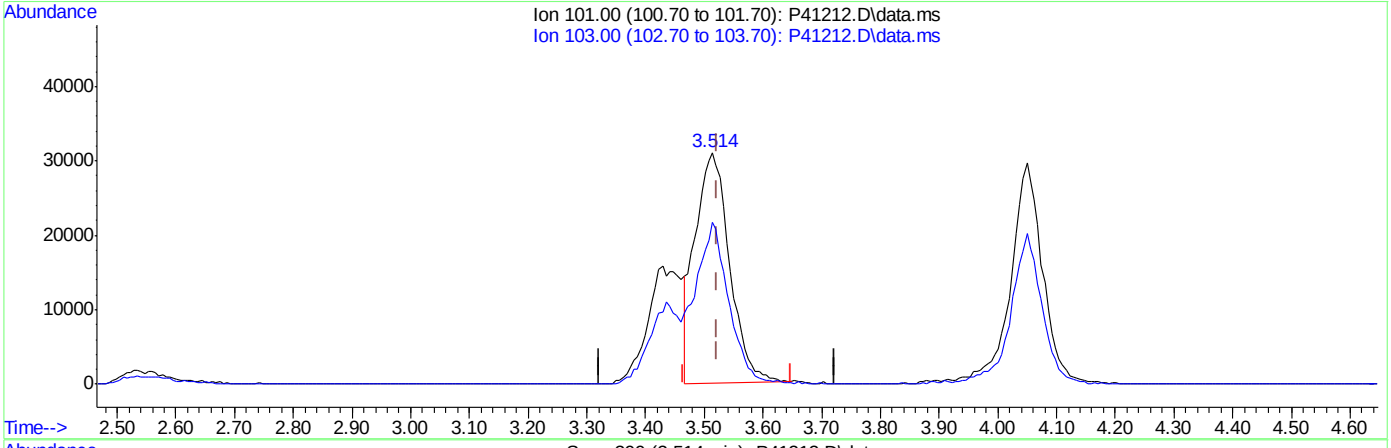
Sample Number:	VP1531-ICV1531	**Method:**	SW846 8260B
Lab FileID:	P41212.D	**Analyst approved:**	04/22/16 08:36 Kathleen McNatt
Injection Time:	04/21/16 14:43	**Supervisor approved:**	04/22/16 09:33 Melissa Mangual

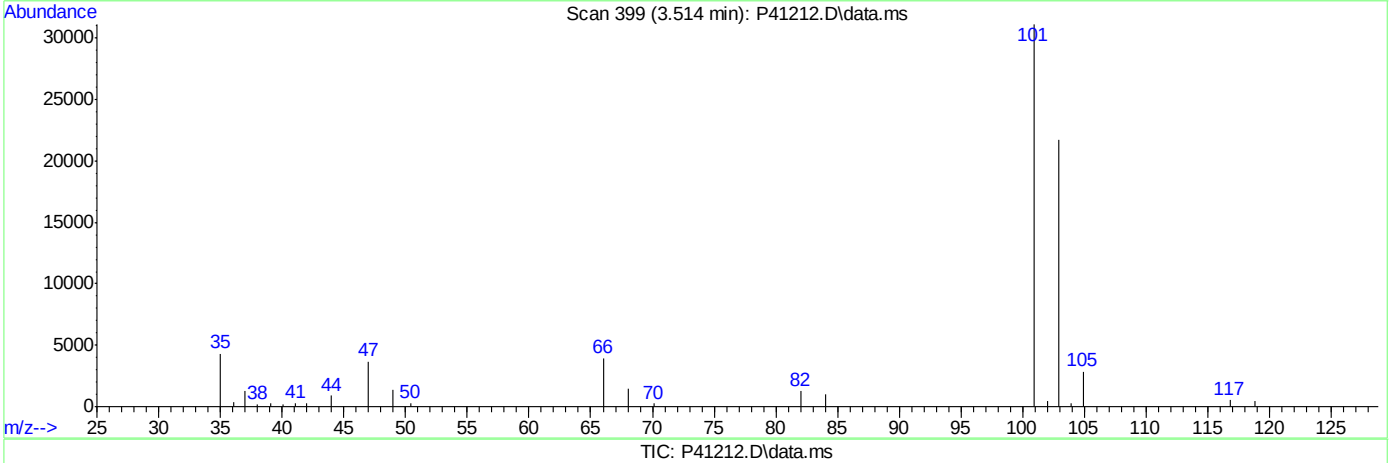
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.51	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 15:01:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41212.D\data.ms

(7) Trichlorofluoromethane ( )

3.514min (-0.008) 26.92ug/L

response 126157

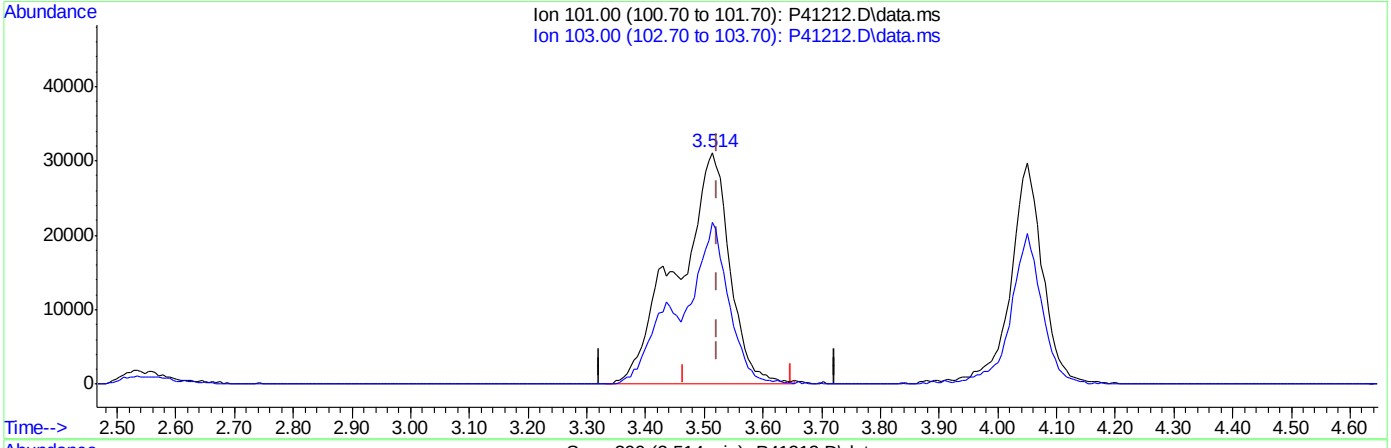
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	69.65
0.00	0.00	0.00
0.00	0.00	0.00

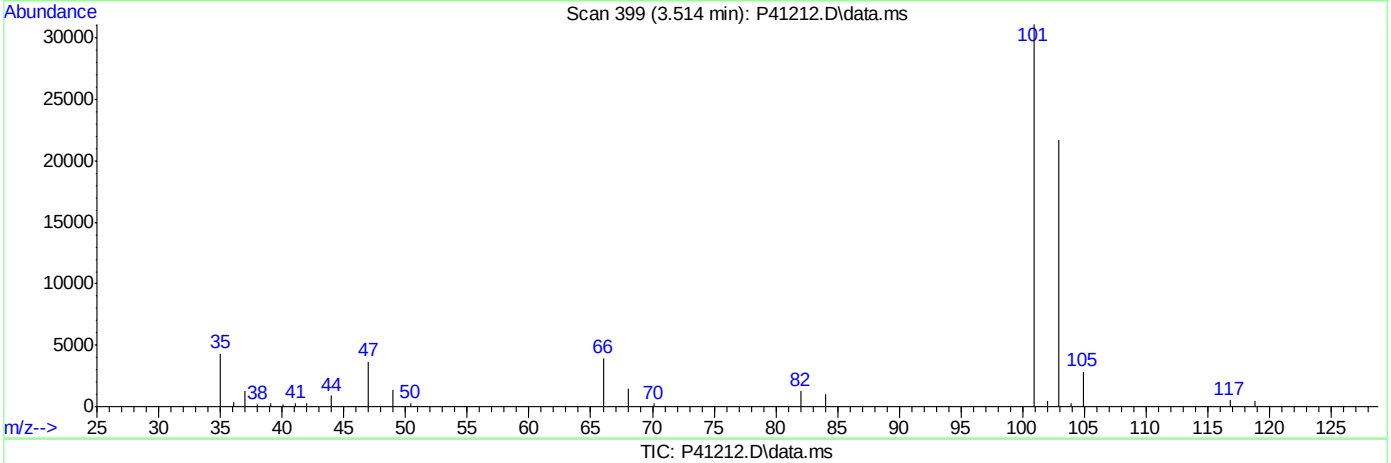
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 15:01:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41212.D\data.ms

(7) Trichlorofluoromethane ( )

3.514min (-0.008) 41.19ug/L m

response 192993

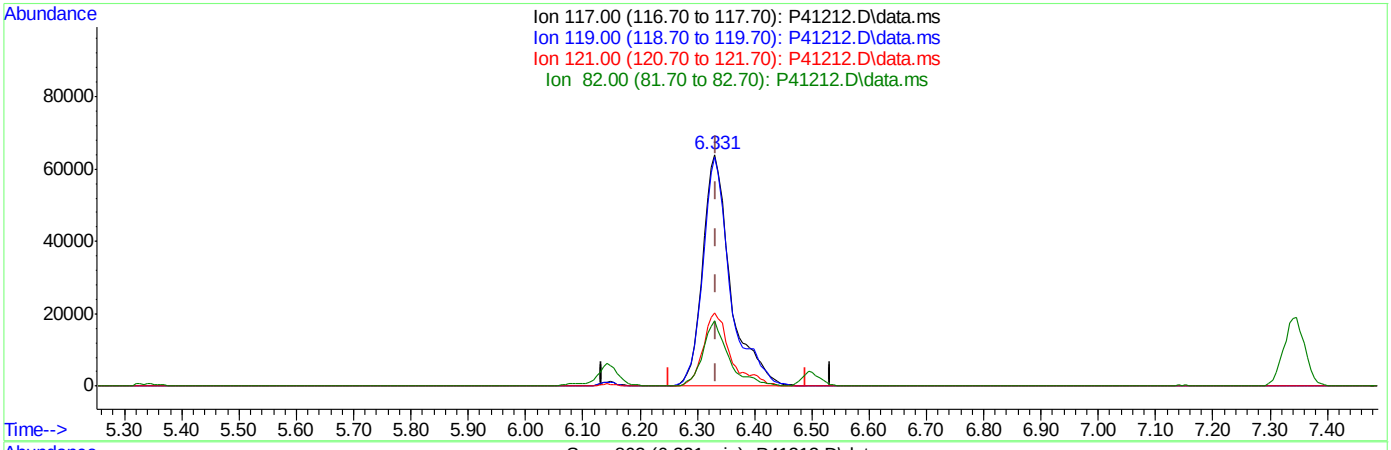
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	69.78
0.00	0.00	0.00
0.00	0.00	0.00

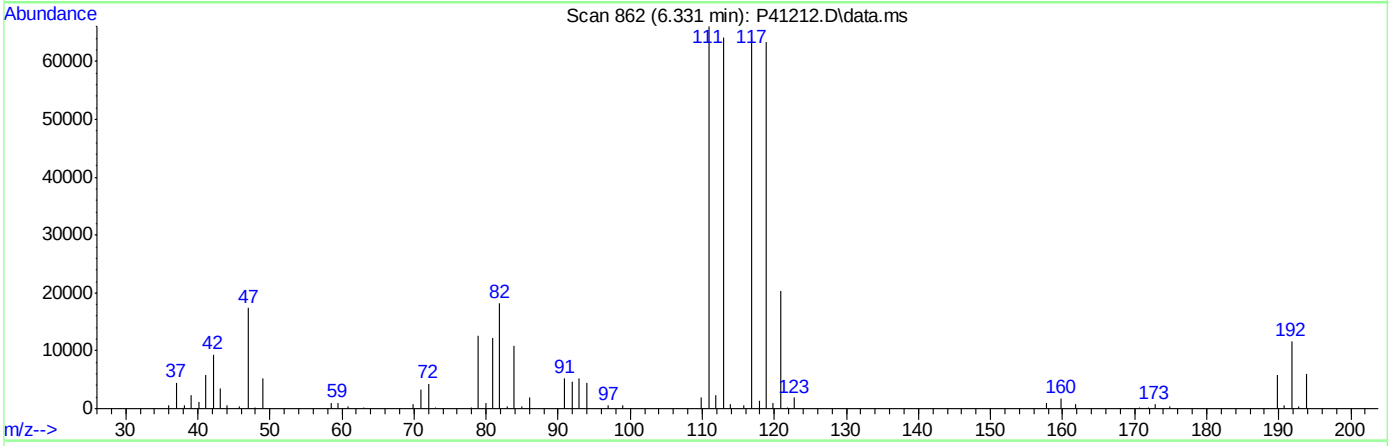
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 15:01:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41212.D\data.ms

(32) Carbon Tetrachloride ( )

6.331min (-0.002) 46.25ug/L

response 216486

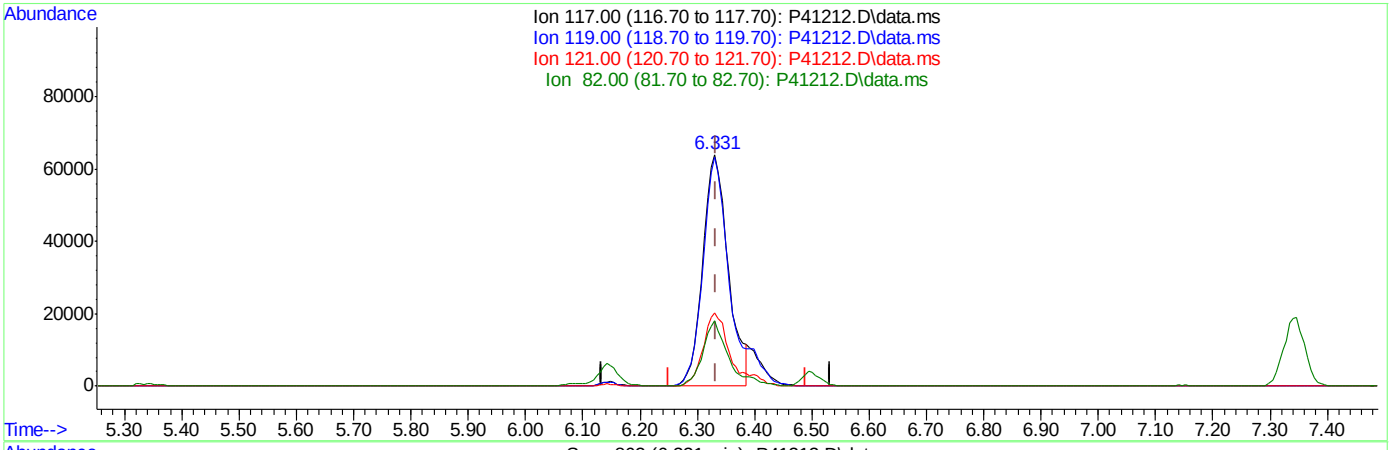
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	99.00
121.00	30.70	31.70
82.00	25.90	28.46

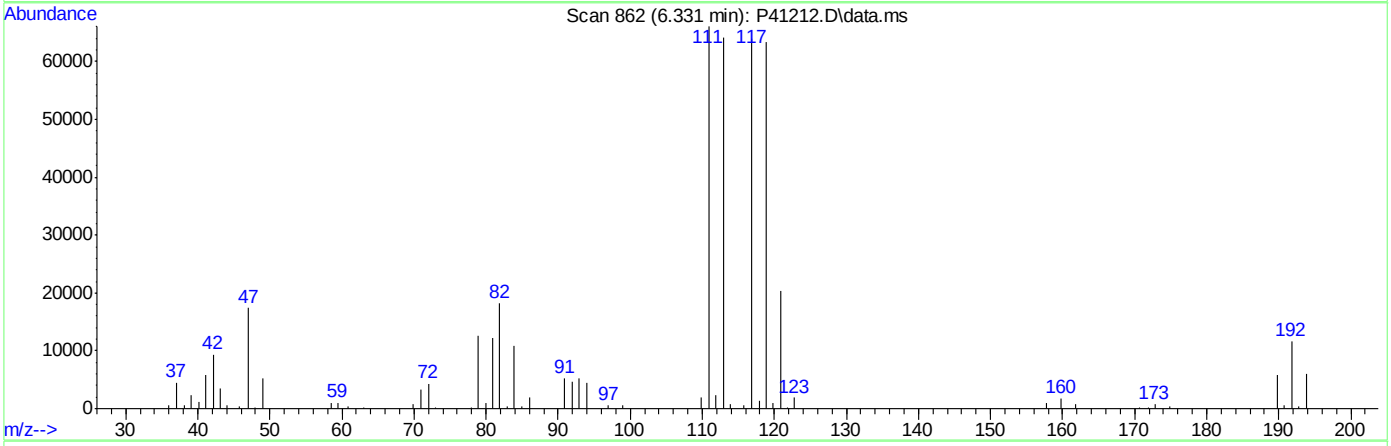
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042116\
Data File : P41212.D
Acq On : 21 Apr 2016 2:43 pm
Operator : katiem
Sample : ICV1531-5 Inst : MSVOA13
Misc : MS33627,VP1531,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 15:01:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41212.D\data.ms

(32) Carbon Tetrachloride ( )

6.331min (-0.002) 42.25ug/L m

response 197796

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	99.00
121.00	30.70	31.70
82.00	25.90	28.46

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 11:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:26:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	7.146	96	619913	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.242	117	469408	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.603	152	228511	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.797	65	55965	250.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	6.330	113	152578	50.49	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.98%			
38) 1,2-Dichloroethane-d4	6.866	65	197818	48.77	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.54%			
48) Toluene-d8	8.697	98	619856	48.81	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 97.62%			
69) 4-Bromofluorobenzene	11.453	95	217563	48.25	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.50%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.534	85	106647	39.88	ug/L	94
3) Chloromethane	2.711	50	178511	36.46	ug/L	95
4) Vinyl Chloride	2.839	62	158377	37.14	ug/L	98
5) Bromomethane	3.173	94	106100	41.56	ug/L	97
6) Chloroethane	3.307	64	118907	41.33	ug/L	99
7) Trichlorofluoromethane	3.520	101	191626m	39.04	ug/L	
8) Ethyl Ether	3.727	59	156210	40.66	ug/L	97
9) 1,2-Dichlorotrifluoroe...	3.958	67	165711	41.23	ug/L	95
10) 1,1-Dichloroethene	3.988	61	226895	40.29	ug/L	93
11) Freon 113	4.049	101	124223	43.72	ug/L	99
12) Carbon Disulfide	4.055	76	417234	40.95	ug/L	87
13) Iodomethane	4.153	142	202249	43.20	ug/L	96
14) Methylene Chloride	4.560	49	212577	37.18	ug/L	95
15) Acetone	4.578	58	66021	195.20	ug/L	97
16) Methyl acetate	4.694	74	113438	206.09	ug/L #	49
17) trans-1,2-Dichloroethene	4.724	61	202732	40.47	ug/L	98
18) Hexane	4.785	56	153488	39.27	ug/L	95
19) Methyl Tert Butyl Ether	4.822	73	420806	41.31	ug/L	96
20) Di-isopropyl ether	5.181	45	574474	38.69	ug/L	99
21) 1,1-Dichloroethane	5.339	63	274275	40.65	ug/L	99
22) Acrylonitrile	5.363	53	280968	195.01	ug/L	99
23) ETBE	5.558	59	533843	40.55	ug/L	97
24) Vinyl acetate	5.534	43	2008078	197.75	ug/L	97
25) cis-1,2-Dichloroethene	5.886	96	157550	41.46	ug/L	96
26) 2,2-Dichloropropane	6.014	77	218336	43.36	ug/L	100
27) Bromochloromethane	6.087	128	75498	43.67	ug/L	97
28) Cyclohexane	6.136	56	280936	39.94	ug/L	97
29) Chloroform	6.148	83	270585	41.65	ug/L	99
30) Tetrahydrofuran	6.312	42	42235	35.47	ug/L	90
32) Carbon Tetrachloride	6.330	117	206278m	42.07	ug/L	
33) 1,1,1-Trichloroethane	6.391	97	221983	41.42	ug/L	96
34) 2-Butanone	6.422	43	350078	193.22	ug/L	100
35) 1,1-Dichloropropene	6.495	75	208053	41.31	ug/L	94
36) Benzene	6.744	78	599198	40.84	ug/L	99

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:26:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.835	73	436379	41.22 ug/L	96
39) 1,2-Dichloroethane	6.939	62	220398	40.04 ug/L	96
40) Trichloroethene	7.322	95	148038	41.50 ug/L	96
41) Methylcyclohexane	7.346	83	258841	41.06 ug/L	99
42) Dibromomethane	7.742	93	88408	41.85 ug/L	93
43) 1,2-Dichloropropane	7.833	63	170959	40.49 ug/L	95
44) Bromodichloromethane	7.882	83	202717	41.41 ug/L	98
45) 2-Chloroethyl vinyl ether	8.417	63	554521	206.53 ug/L	96
46) cis-1,3-Dichloropropene	8.502	75	264203	42.32 ug/L	95
49) Toluene	8.746	91	651238	39.82 ug/L	98
50) 2-Nitropropane	8.946	41	214588	196.53 ug/L	99
51) 4-Methyl-2-pentanone	9.080	43	814553	196.59 ug/L	97
52) trans-1,3-Dichloropropene	9.135	75	233840	41.05 ug/L	95
53) Tetrachloroethene	9.147	166	146244	42.08 ug/L	96
54) 1,1,2-Trichloroethane	9.299	83	110990	40.13 ug/L	94
55) Dibromochloromethane	9.494	129	146114	41.64 ug/L	99
56) 1,3-Dichloropropane	9.579	76	242803	39.94 ug/L	95
57) 1,2-Dibromoethane	9.743	107	129640	42.33 ug/L	100
58) 2-hexanone	9.901	43	551990	198.79 ug/L	97
59) 1-Chlorohexane	10.206	91	208327	40.71 ug/L	93
60) Ethylbenzene	10.266	91	732630	40.58 ug/L	99
61) Chlorobenzene	10.260	112	422498	40.23 ug/L	95
62) 1,1,1,2-Tetrachloroethane	10.315	131	144198	41.20 ug/L	99
63) m,p-Xylene	10.406	91	1123647	82.64 ug/L	98
64) o-Xylene	10.844	91	549104	41.17 ug/L	95
65) Styrene	10.893	104	441861	42.29 ug/L	98
66) Bromoform	10.942	173	92876	40.95 ug/L	98
67) Isopropylbenzene	11.155	105	680526	41.39 ug/L	98
70) n-Propylbenzene	11.568	91	812484	40.24 ug/L	100
71) Bromobenzene	11.574	156	170960	40.93 ug/L	97
72) 1,1,2,2-Tetrachloroethane	11.629	83	162106	38.92 ug/L	99
73) 1,3,5-Trimethylbenzene	11.763	105	606723	40.99 ug/L	97
74) 2-Chlorotoluene	11.751	91	540857	39.96 ug/L	96
75) trans-1,4-Dichloro-2-B...	11.812	53	39289	27.48 ug/L	95
76) 1,2,3-Trichloropropane	11.781	110	47262	40.25 ug/L	94
77) Cyclohexanone	11.830	55	27153	186.44 ug/L	96
78) 4-Chlorotoluene	11.915	91	502751	40.12 ug/L	98
79) tert-Butylbenzene	12.092	91	326880	40.29 ug/L	93
80) 1,2,4-Trimethylbenzene	12.165	105	589001	40.73 ug/L	96
81) sec-Butylbenzene	12.280	105	744285	40.78 ug/L	98
82) 4-Isopropyltoluene	12.414	119	622191	41.52 ug/L	98
83) 1,3-Dichlorobenzene	12.530	146	318677	40.85 ug/L	95
84) 1,4-Dichlorobenzene	12.615	146	328834	40.15 ug/L	98
85) n-Butylbenzene	12.852	92	349372	41.20 ug/L	90
86) Benzyl Chloride	12.858	126	71814	45.49 ug/L #	48
87) 1,2-Dichlorobenzene	13.059	146	297856	40.91 ug/L	98
88) 1,2-Dibromo-3-Chloropr...	13.831	75	24290	37.88 ug/L	94
89) Hexachlorobutadiene	14.422	225	94991	39.61 ug/L	93
90) 1,2,4-Trichlorobenzene	14.452	180	194258	41.59 ug/L	98
91) Naphthalene	14.732	128	353612	40.08 ug/L	96

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:26:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.890	180	161015	39.20	ug/L	99
94) acrolein	4.305	56	135860	212.65	ug/L	98
95) Tert Butyl Alcohol	4.870	59	117701	385.92	ug/L	97
96) tert Amyl alcohol	6.981	59	108290	426.35	ug/L	95
97) 1,4-Dioxane	8.064	88	27547	931.59	ug/L	95

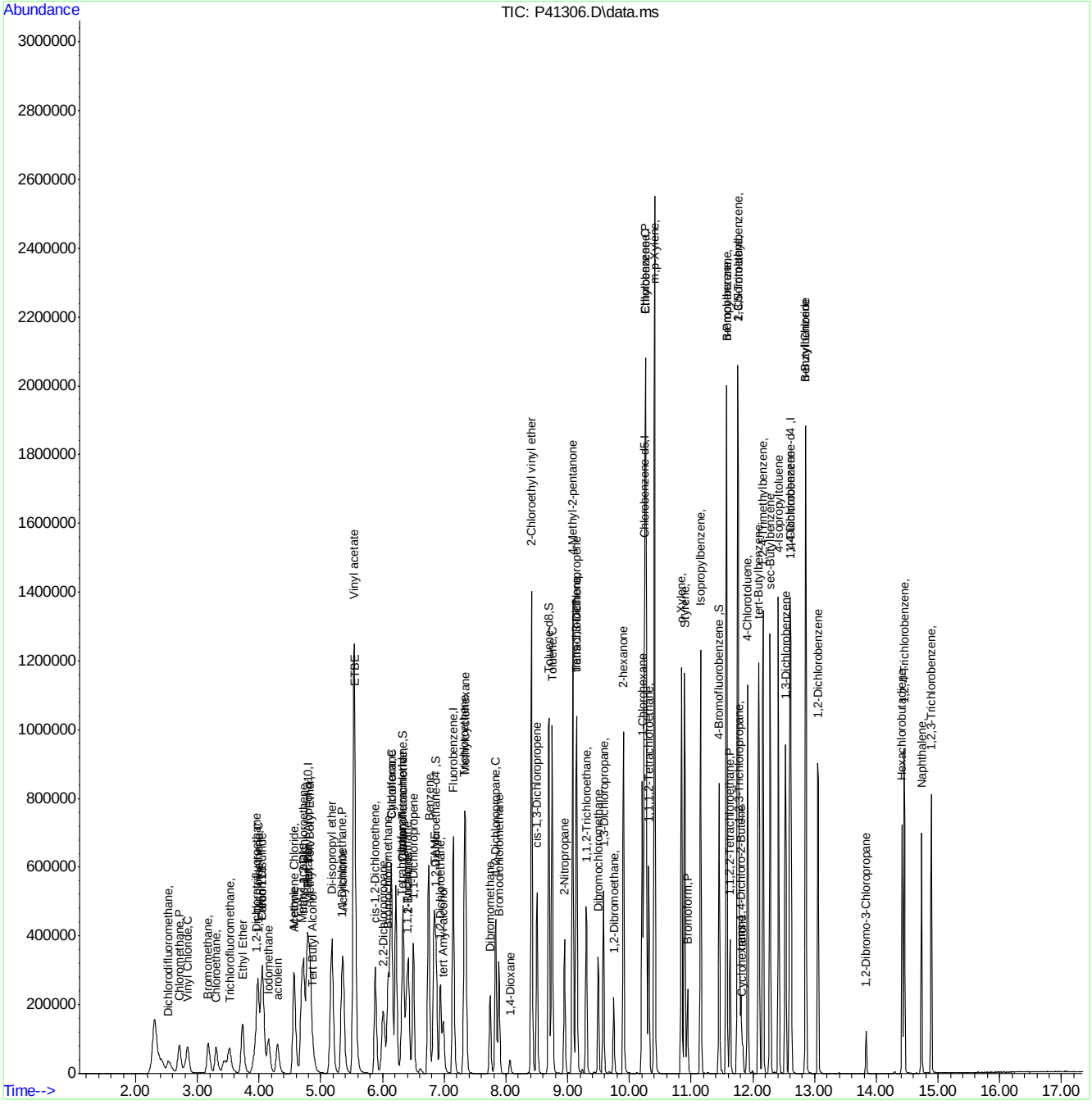
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:26:56 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



8260P042116.M Tue Apr 26 11:03:26 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

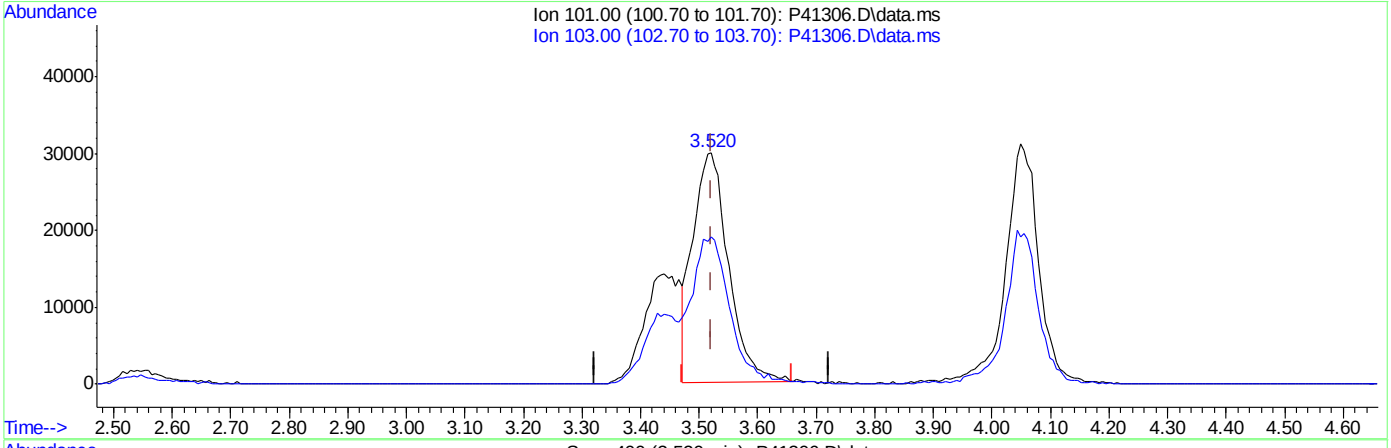
Sample Number:	VP1535-CC1531	**Method:**	SW846 8260B
Lab FileID:	P41306.D	**Analyst approved:**	04/26/16 11:02 Kathleen McNatt
Injection Time:	04/25/16 08:19	**Supervisor approved:**	04/26/16 11:58 Juan Garcia

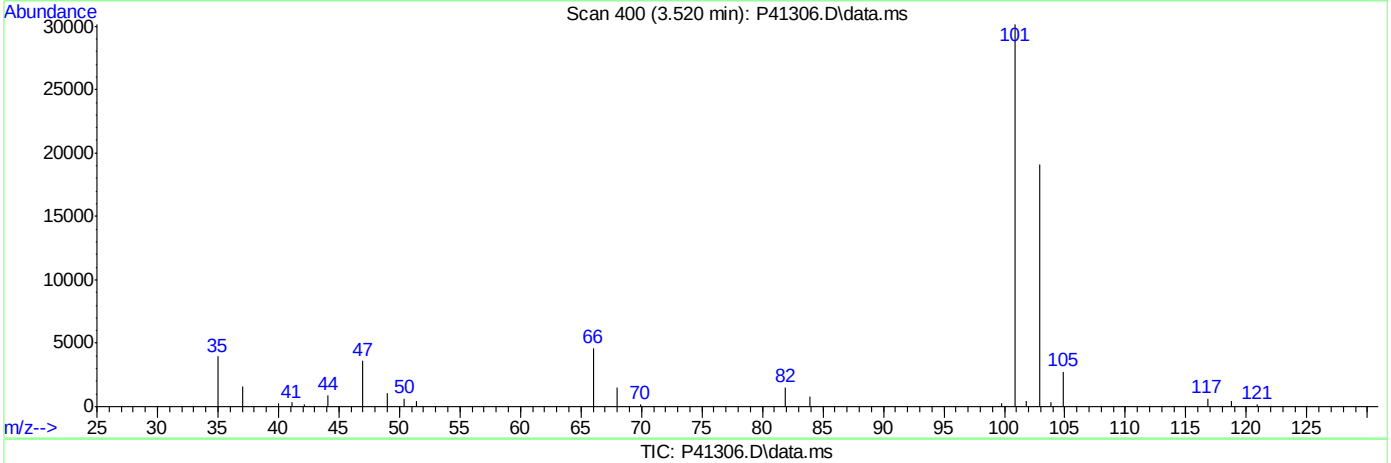
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.52	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:07:44 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41306.D\data.ms

(7) Trichlorofluoromethane ( )

3.520min (-0.002) 25.84ug/L

response 126802

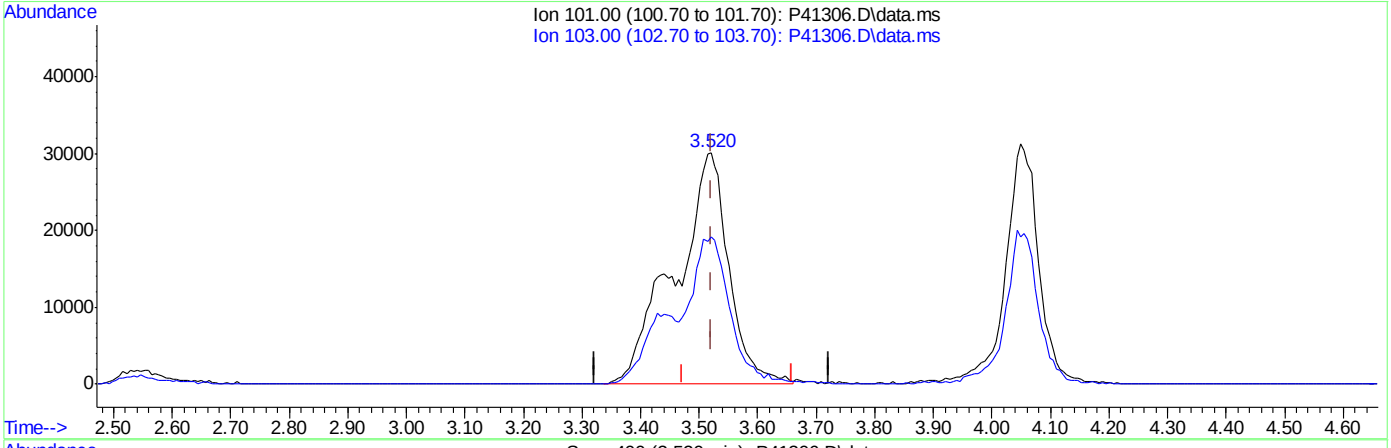
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	62.69
0.00	0.00	0.00
0.00	0.00	0.00

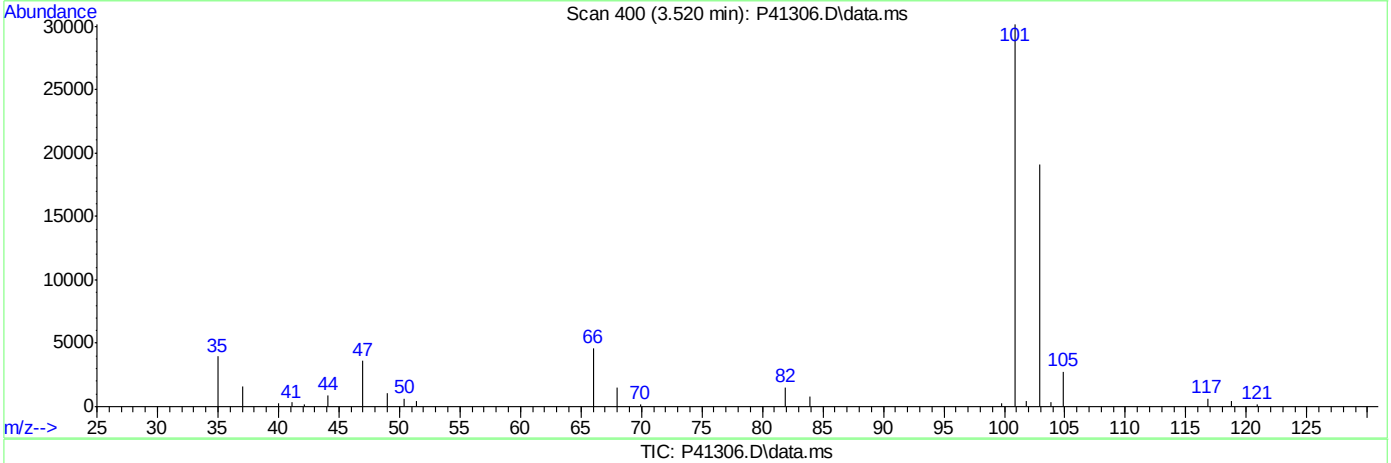
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:07:44 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41306.D\data.ms

(7) Trichlorofluoromethane ( )

3.520min (-0.002) 39.04ug/L m

response 191626

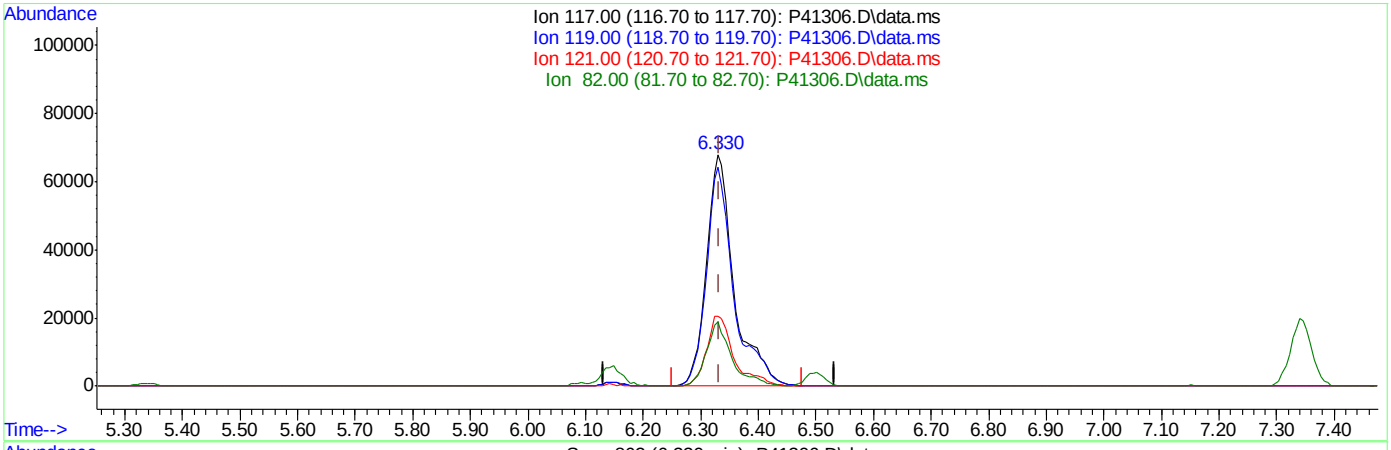
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	63.32
0.00	0.00	0.00
0.00	0.00	0.00

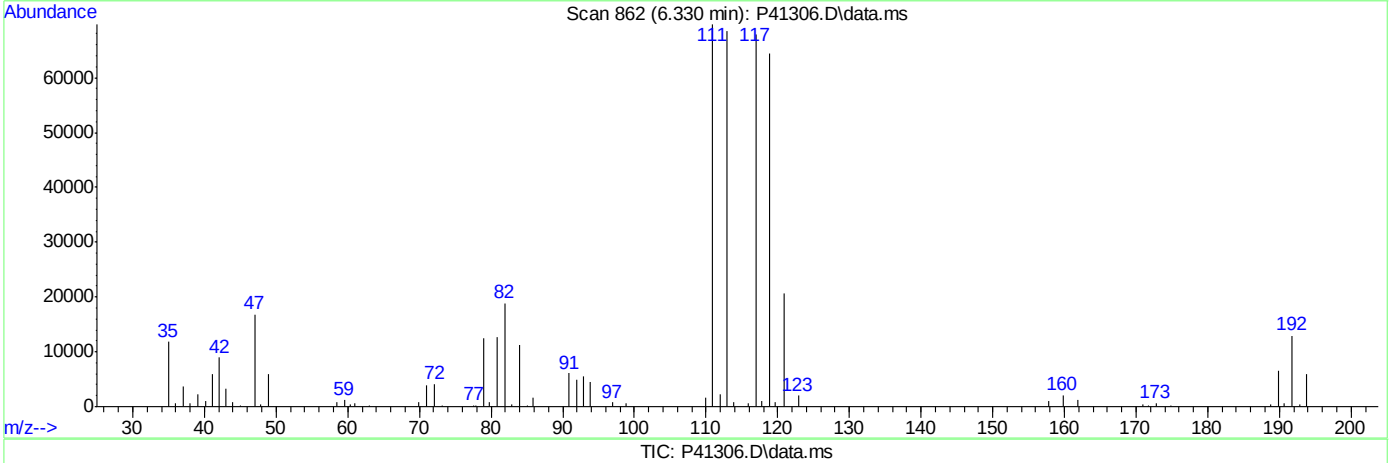
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:07:44 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41306.D\data.ms

(32) Carbon Tetrachloride ( )

6.330min (-0.002) 46.18ug/L

response 226448

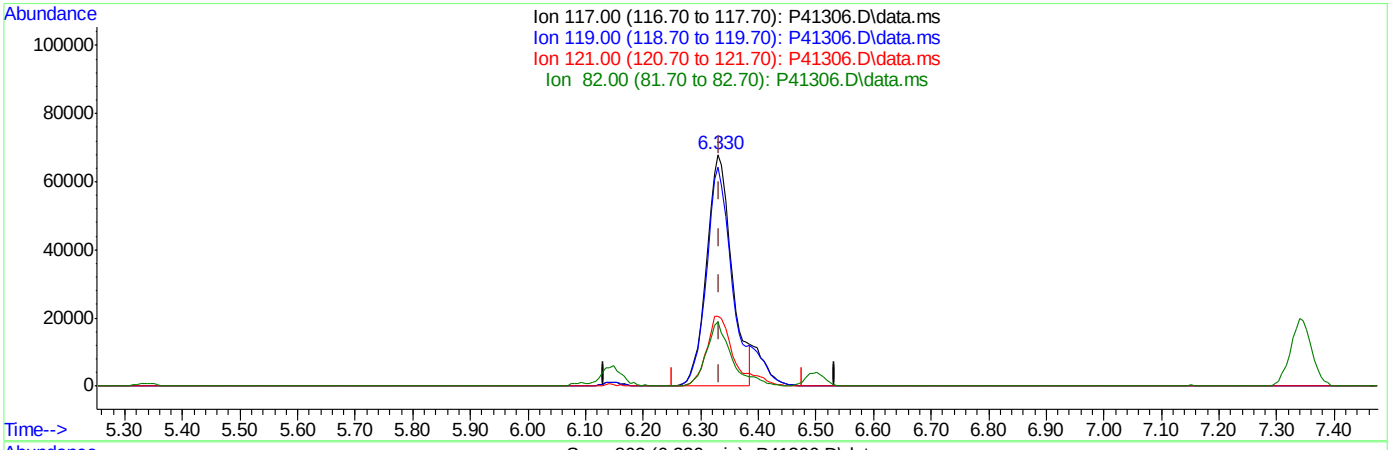
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	95.85
121.00	30.70	30.39
82.00	25.90	27.70

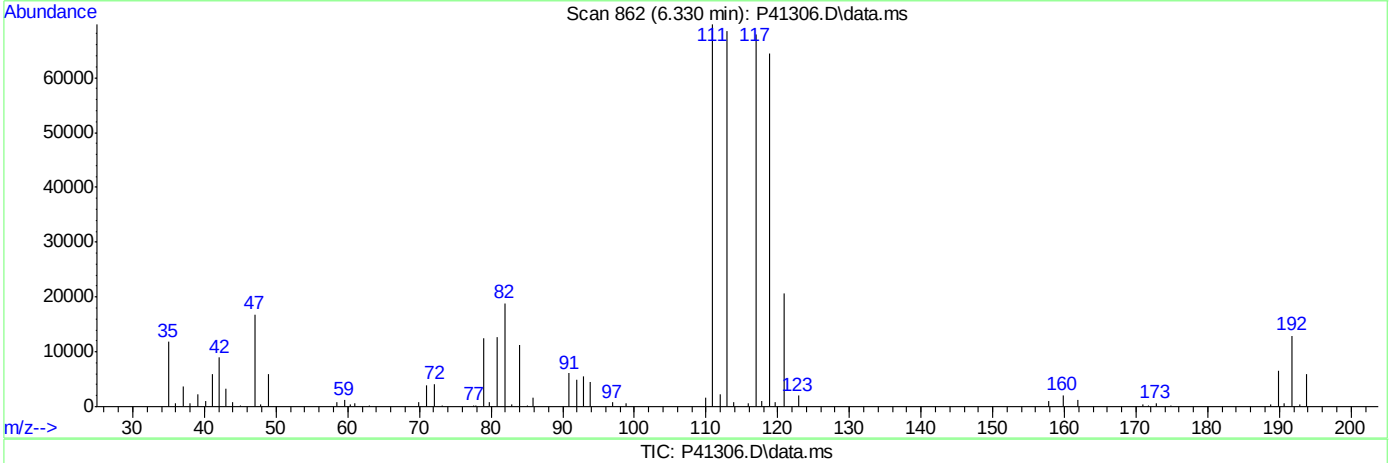
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41306.D
Acq On : 25 Apr 2016 8:19 am
Operator : katiem
Sample : CC1531-5 Inst : MSVOA13
Misc : MS33659,VP1535,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 07:07:44 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41306.D\data.ms

(32) Carbon Tetrachloride ( )

6.330min (-0.002) 42.07ug/L m

response 206278

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	94.62
121.00	30.70	30.39
82.00	25.90	27.70

SGS ACCUTEST FA33359

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 11:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33678,VP1535,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:40:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	7.148	96	592314	50.00 ug/L	0.00
47) Chlorobenzene-d5	10.239	117	436627	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.599	152	210617	50.00 ug/L	0.00
93) Tert Butyl Alcohol-d10	4.800	65	55959	250.00 ug/L	0.00
System Monitoring Compounds					
31) Dibromofluoromethane	6.333	113	144751	50.13 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.26%		
38) 1,2-Dichloroethane-d4	6.869	65	190977	49.28 ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.56%		
48) Toluene-d8	8.694	98	584017	49.44 ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.88%		
69) 4-Bromofluorobenzene	11.449	95	206041	49.57 ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.14%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.537	85	99696	39.02 ug/L	99
3) Chloromethane	2.707	50	188724	40.35 ug/L	97
4) Vinyl Chloride	2.841	62	153228	37.61 ug/L	98
5) Bromomethane	3.176	94	89557	36.72 ug/L	99
6) Chloroethane	3.304	64	105645	38.43 ug/L	94
7) Trichlorofluoromethane	3.517	101	173802m	37.06 ug/L	
8) Ethyl Ether	3.736	59	147177	40.09 ug/L	94
9) 1,2-Dichlorotrifluoroe...	3.955	67	145989	38.02 ug/L	91
10) 1,1-Dichloroethene	3.985	61	204457	38.00 ug/L	90
11) Freon 113	4.046	101	104559	38.51 ug/L	95
12) Carbon Disulfide	4.046	76	342229	35.16 ug/L	84
13) Iodomethane	4.143	142	167564	37.46 ug/L	96
14) Methylene Chloride	4.563	49	214920	39.34 ug/L	96
15) Acetone	4.581	58	66452	205.63 ug/L	97
16) Methyl acetate	4.703	74	111945	212.85 ug/L #	44
17) trans-1,2-Dichloroethene	4.721	61	189501	39.59 ug/L	92
18) Hexane	4.788	56	139989	37.48 ug/L	89
19) Methyl Tert Butyl Ether	4.824	73	396859	40.78 ug/L	97
20) Di-isopropyl ether	5.183	45	567787	40.03 ug/L	98
21) 1,1-Dichloroethane	5.342	63	253826	39.38 ug/L	98
22) Acrylonitrile	5.366	53	279881	203.31 ug/L	98
23) ETBE	5.554	59	508531	40.43 ug/L	96
24) Vinyl acetate	5.536	43	2072058	213.55 ug/L	96
25) cis-1,2-Dichloroethene	5.883	96	143132	39.42 ug/L	89
26) 2,2-Dichloropropane	6.011	77	166376	34.58 ug/L	99
27) Bromochloromethane	6.090	128	64948	39.32 ug/L #	85
28) Cyclohexane	6.132	56	258194	38.42 ug/L	93
29) Chloroform	6.145	83	245268	39.52 ug/L	98
30) Tetrahydrofuran	6.315	42	43122	37.90 ug/L	91
32) Carbon Tetrachloride	6.327	117	171641m	36.64 ug/L	
33) 1,1,1-Trichloroethane	6.394	97	195909	38.26 ug/L	96
34) 2-Butanone	6.424	43	381192	220.20 ug/L	99
35) 1,1-Dichloropropene	6.497	75	190389	39.56 ug/L	95
36) Benzene	6.747	78	552639	39.42 ug/L	97

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33678,VP1535,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:40:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) TAME	6.838	73	405942	40.14 ug/L	92
39) 1,2-Dichloroethane	6.935	62	208249	39.60 ug/L	98
40) Trichloroethene	7.325	95	132424	38.85 ug/L	95
41) Methylcyclohexane	7.343	83	228001	37.85 ug/L	97
42) Dibromomethane	7.745	93	83804	41.51 ug/L	97
43) 1,2-Dichloropropane	7.836	63	162511	40.29 ug/L	97
44) Bromodichloromethane	7.884	83	181308	38.76 ug/L	95
45) 2-Chloroethyl vinyl ether	8.414	63	583533	227.46 ug/L	98
46) cis-1,3-Dichloropropene	8.505	75	212393	35.61 ug/L	94
49) Toluene	8.748	91	590820	38.84 ug/L	99
50) 2-Nitropropane	8.949	41	208660	205.45 ug/L	99
51) 4-Methyl-2-pentanone	9.083	43	908546	235.74 ug/L	95
52) trans-1,3-Dichloropropene	9.138	75	184020	34.73 ug/L	95
53) Tetrachloroethene	9.150	166	126529	39.14 ug/L	95
54) 1,1,2-Trichloroethane	9.302	83	102859	39.98 ug/L	96
55) Dibromochloromethane	9.497	129	115738	35.46 ug/L	99
56) 1,3-Dichloropropane	9.582	76	231252	40.90 ug/L	95
57) 1,2-Dibromoethane	9.746	107	118849	41.72 ug/L	98
58) 2-hexanone	9.904	43	621099	240.48 ug/L	95
59) 1-Chlorohexane	10.208	91	181762	38.19 ug/L	88
60) Ethylbenzene	10.269	91	658249	39.20 ug/L	99
61) Chlorobenzene	10.257	112	371942	38.07 ug/L	94
62) 1,1,1,2-Tetrachloroethane	10.312	131	125689	38.61 ug/L	96
63) m,p-Xylene	10.409	91	1004691	79.44 ug/L	99
64) o-Xylene	10.841	91	493658	39.80 ug/L	97
65) Styrene	10.890	104	392933	40.43 ug/L	97
66) Bromoform	10.938	173	60679	28.76 ug/L	98
67) Isopropylbenzene	11.151	105	602873	39.42 ug/L	100
70) n-Propylbenzene	11.571	91	728653	39.16 ug/L	100
71) Bromobenzene	11.571	156	148037	38.45 ug/L	98
72) 1,1,2,2-Tetrachloroethane	11.632	83	151423	39.44 ug/L	98
73) 1,3,5-Trimethylbenzene	11.760	105	545330	39.97 ug/L	99
74) 2-Chlorotoluene	11.747	91	484327	38.82 ug/L	96
75) trans-1,4-Dichloro-2-B...	11.808	53	2175	1.65 ug/L #	17
76) 1,2,3-Trichloropropane	11.784	110	42659	39.41 ug/L	90
77) Cyclohexanone	11.833	55	21332	158.92 ug/L	89
78) 4-Chlorotoluene	11.912	91	454662	39.37 ug/L	98
79) tert-Butylbenzene	12.094	91	295646	39.54 ug/L	92
80) 1,2,4-Trimethylbenzene	12.161	105	528548	39.66 ug/L	99
81) sec-Butylbenzene	12.277	105	649816	38.63 ug/L	99
82) 4-Isopropyltoluene	12.417	119	543282	39.34 ug/L	98
83) 1,3-Dichlorobenzene	12.526	146	279659	38.90 ug/L	98
84) 1,4-Dichlorobenzene	12.617	146	290672	38.51 ug/L	98
85) n-Butylbenzene	12.855	92	299458	38.32 ug/L	93
86) Benzyl Chloride	12.855	126	48787	33.53 ug/L #	1
87) 1,2-Dichlorobenzene	13.055	146	265293	39.53 ug/L	99
88) 1,2-Dibromo-3-Chloropr...	13.834	75	23293	39.41 ug/L	94
89) Hexachlorobutadiene	14.418	225	79657	36.03 ug/L	95
90) 1,2,4-Trichlorobenzene	14.455	180	173009	40.19 ug/L	98
91) Naphthalene	14.728	128	340050	41.81 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33678,VP1535,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:40:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
92) 1,2,3-Trichlorobenzene	14.893	180	147924	39.07 ug/L	98
94) acrolein	4.301	56	109569	171.51 ug/L	97
95) Tert Butyl Alcohol	4.879	59	112021	367.34 ug/L	84
96) tert Amyl alcohol	6.990	59	106641	419.90 ug/L	98
97) 1,4-Dioxane	8.073	88	21479	726.46 ug/L	85

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

7.6.22

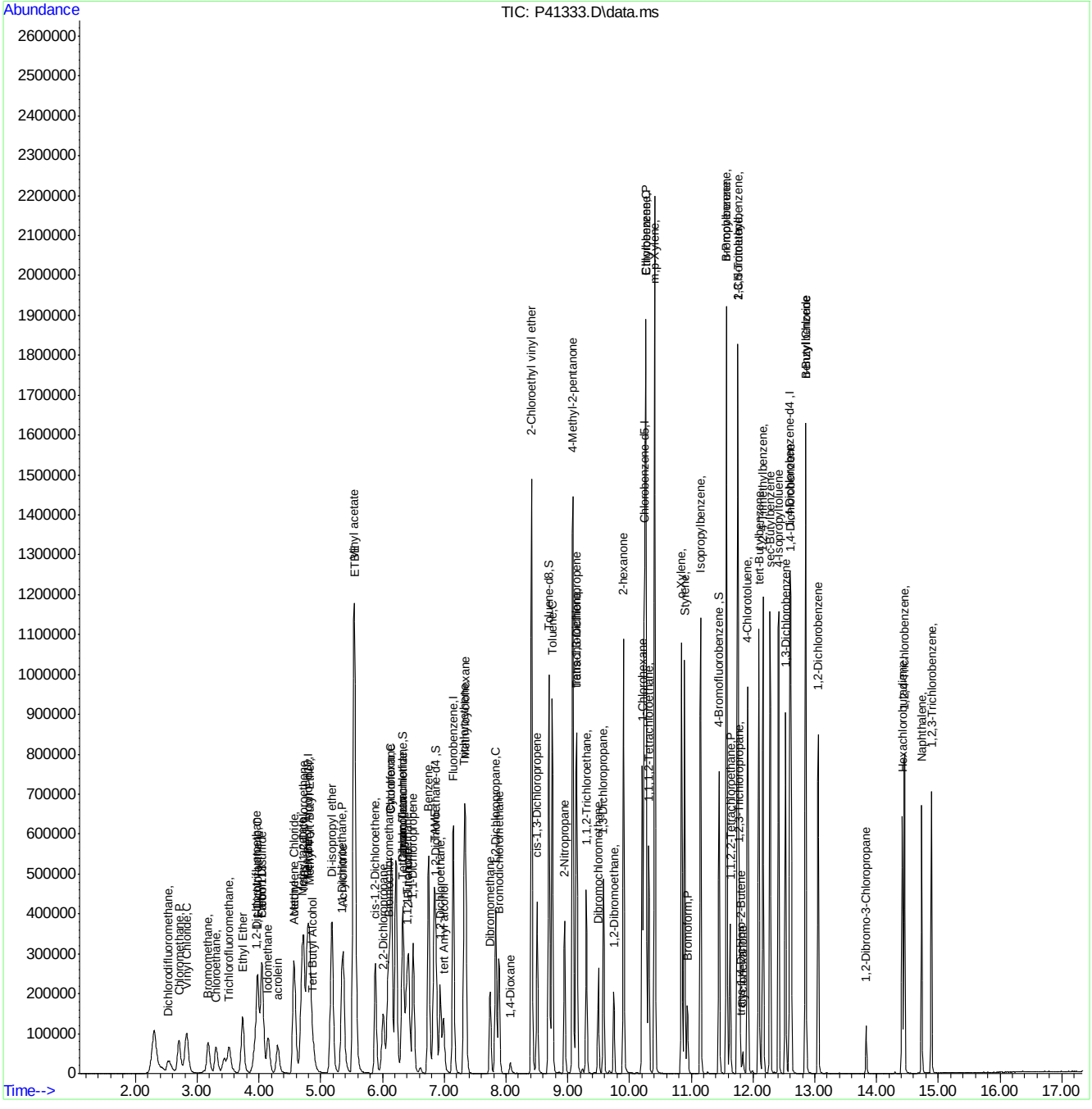
7

SGS ACCUTEST FA33359

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33678,VP1535,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:40:50 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration



8260P042116.M Tue Apr 26 11:03:41 2016 Page: 4

SGS ACCUTEST FA33359

Manual Integration Approval Summary

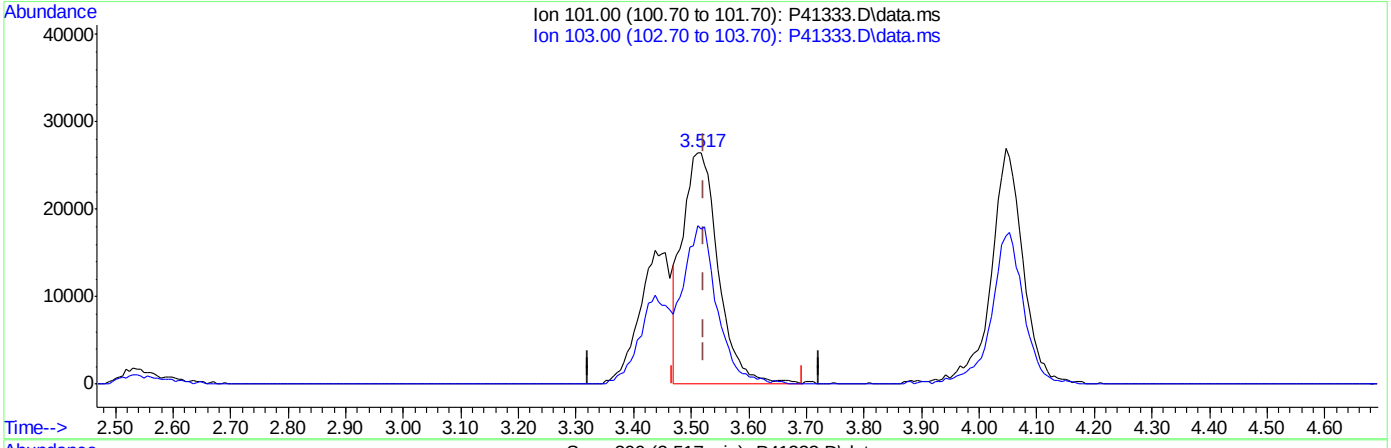
Sample Number:	VP1535-ECC1531	**Method:**	SW846 8260B
Lab FileID:	P41333.D	**Analyst approved:**	04/26/16 11:02 Kathleen McNatt
Injection Time:	04/25/16 20:16	**Supervisor approved:**	04/26/16 11:58 Juan Garcia

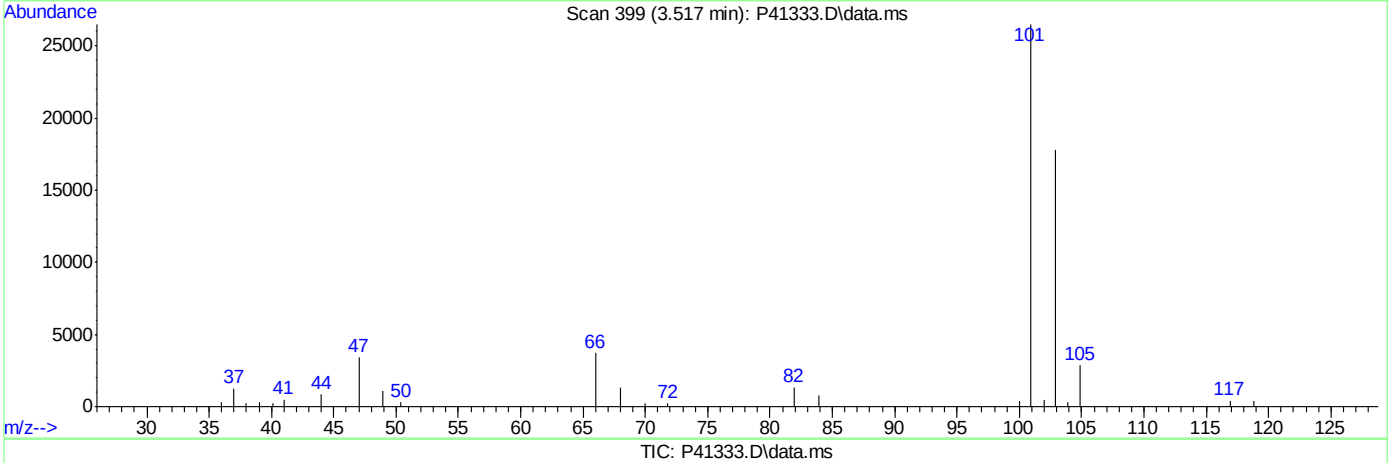
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.52	Split peak
Carbon Tetrachloride	56-23-5		6.33	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33688,VP1536,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:09:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41333.D\data.ms

(7) Trichlorofluoromethane ( )

3.517min (-0.006) 24.51ug/L

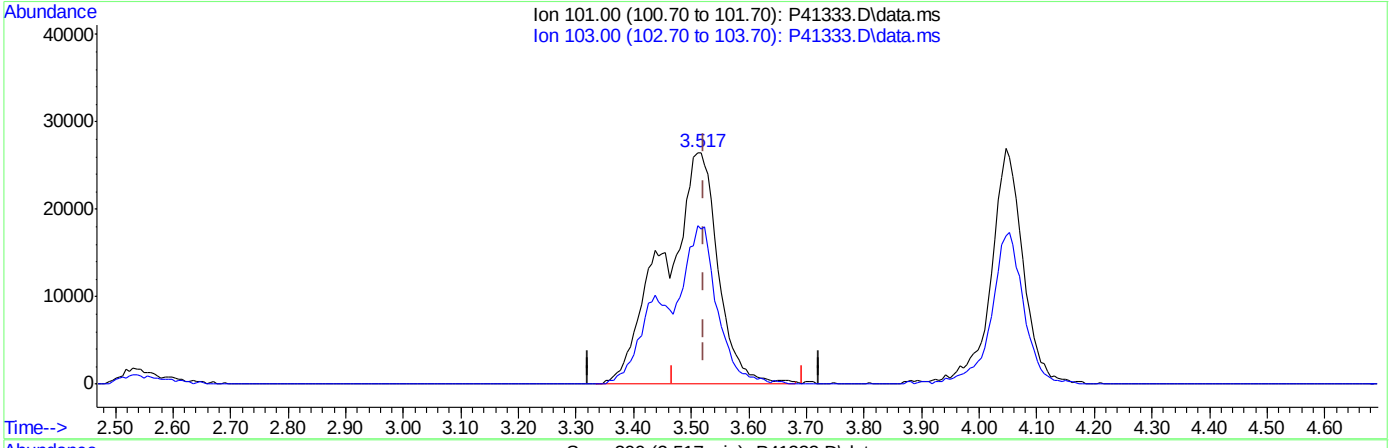
response 114922

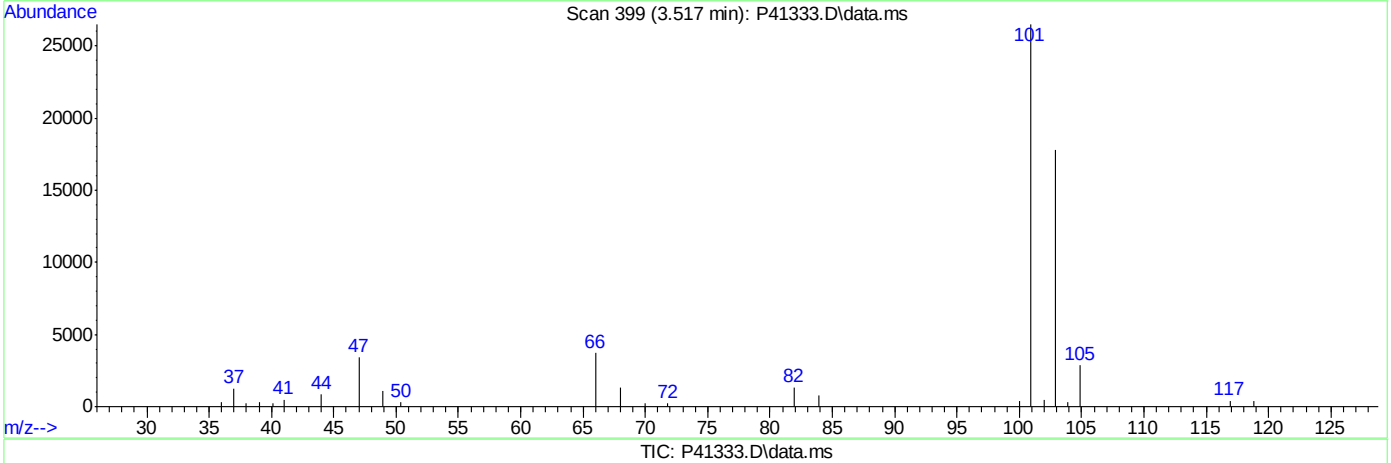
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	67.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33688,VP1536,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:09:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41333.D\data.ms

(7) Trichlorofluoromethane ( )

3.517min (-0.006) 37.06ug/L m

response 173802

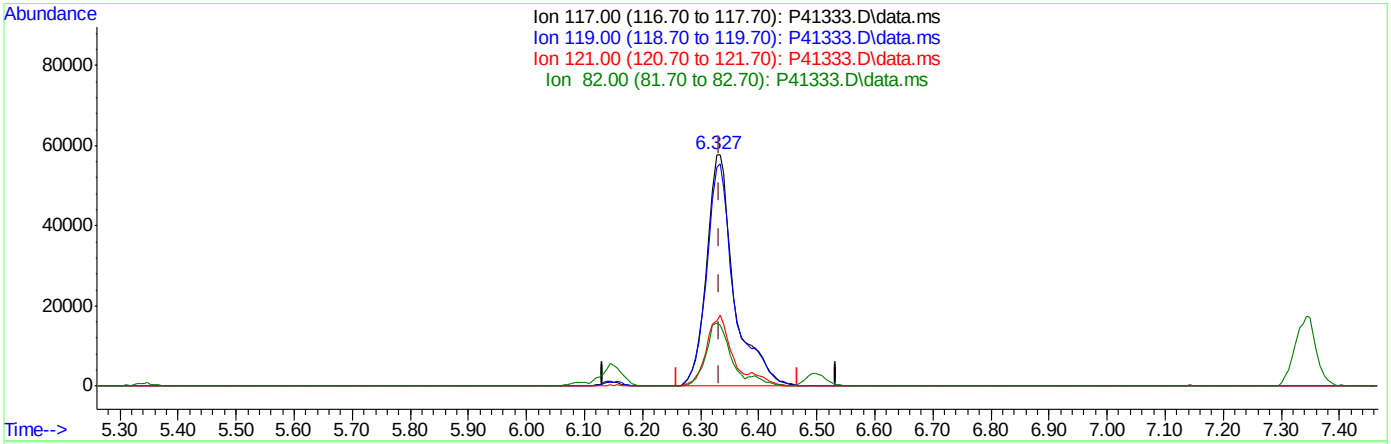
Ion	Exp%	Act%
101.00	100	100
103.00	62.90	67.12
0.00	0.00	0.00
0.00	0.00	0.00

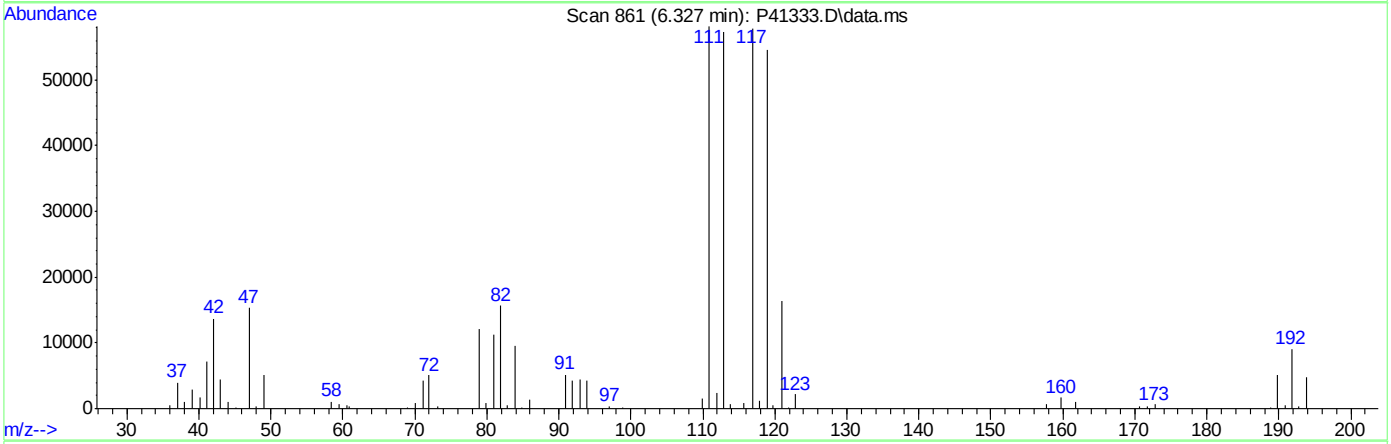
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33688,VP1536,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:09:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41333.D\data.ms

(32) Carbon Tetrachloride ( )

6.327min (-0.006) 40.76ug/L

response 190960

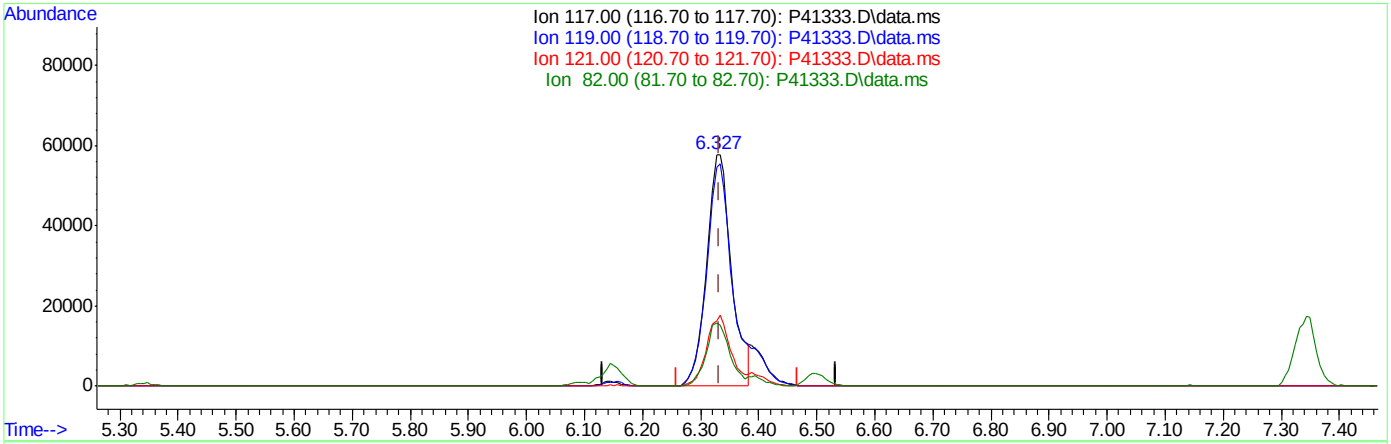
Ion	Exp%	Act%
117.00	100	100
119.00	96.20	94.41
121.00	30.70	28.23
82.00	25.90	27.12

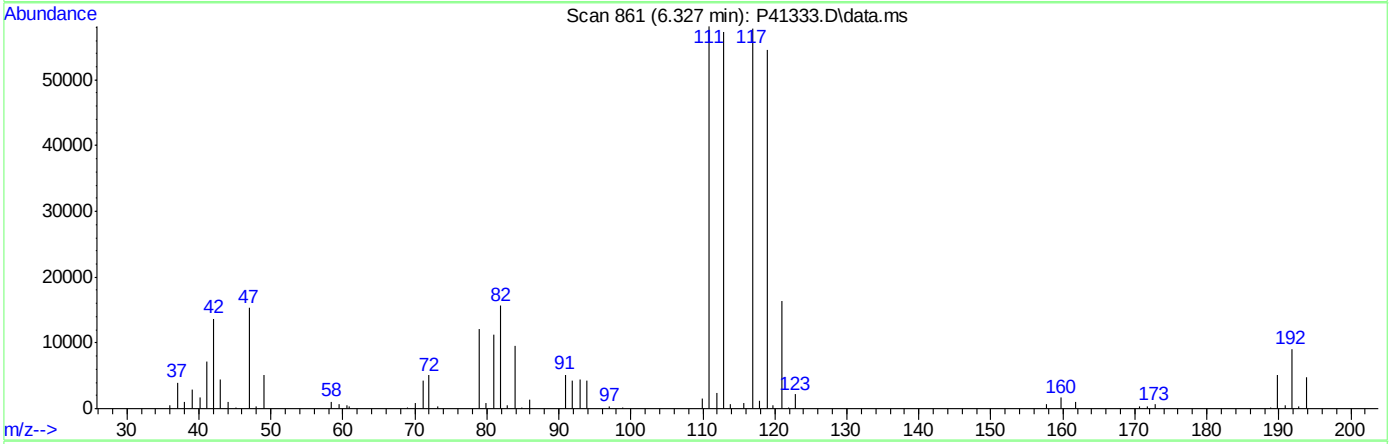
SGS ACCUTEST FA33359

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : P41333.D
Acq On : 25 Apr 2016 8:16 pm
Operator : katiem
Sample : ECC1531-5 Inst : MSVOA13
Misc : MS33688,VP1536,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 26 07:09:02 2016
Quant Method : C:\msdchem\1\METHODS\8260P042116.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Apr 21 14:27:49 2016
Response via : Initial Calibration





TIC: P41333.D\data.ms

(32) Carbon Tetrachloride ( )

6.327min (-0.006) 36.64ug/L m

response 171641

Ion	Exp%	Act%
117.00	100	100
119.00	96.20	94.41
121.00	30.70	28.23
82.00	25.90	27.12

SGS ACCUTEST FA33359

ACCUTEST LABORATORIES SE

DATE:	4-13-16
COLUMN TYPE:	RTX Vm 5
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA9-F
PURGE PRESSURE:	20
ANALYST:	

MS VOA9-F ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	041316AMS9-F
CALIB. DATE:	04-13-16
EM VOLTAGE:	1741
BFB RESPONSE:	1743029
RUN ID:	VF2628

STANDARDS

BFB:	.BFB: V19879
ICAL/CCV:	.ICAL/CCV: V20069,V19987,V20079, .V20076,V20066,V20064
ISTD/SURR:	.ISTD/SURR: V20030
ICV/QC:	.ICV/QC: V20070,V19988,V20080, .V20077,V20067,V20065
STD B = 250 ppm = 75 ug/ml/2ml	
METHANOL LOT #:	157246

DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STD A = 250 ppm = 100 ug/ml/2ml
F 0076704	BFB	—	—	—	✓	5	—		—	All Pass
F 05	IC2628-1	—	—	—	—	6	—	104 SP	—	0.1ml /5ml STD A
F 06	IC2628-2	—	—	—	—	7	—	104 mp	—	0.2ml
F 07	IC2628-3	—	—	—	—	8	—	~~104 SP~~ 4-13-16	—	0.4ml
F 08	ICC2628-4	—	—	—	—	9	—	104 SP	—	1ml
F 09	IC2628-5	—	—	—	—	10	—	14 SP	—	2ml
F 10	IC2628-6	—	—	—	—	11	—	14SP 104SP	—	3ml
F 11	IC2628-7	—	—	—	—	12	—	104SP	—	4ml
F 12	Blank	—	—	—	—	13	—		—	
F 13	ICV2628-4	—	—	—	—	14	—		RN	1ml STD B/5ml
F 14	ICV2628-4,BS	—	—	—	—	15	—		—	1ml STD B/5ml
F 15	mB	—	—	—	100	16	—		—	
3364 F 16	FA33056-1	B0542	S	3.14	—	17	PT		—	
F 17	-2	B0545 4/14/16	S	3.70	—	18	PT		—	
F 18	-3	B0550 4	S	3.61	—	19	PT		—	
F 19	-4	B0558 3	S	3.78	—	20	PT		—	
F 20	-5,50X	B0559	S	4.19	100	21	PT		RN	1X
F 21	-5ms,50X	B0559	S	4.19	100	22	PT	104SP,109 mp	—	1ml STD Added
F 22	-5msD,50X	B0559	S	4.19	100	23	PT	14SP,104SP	—	" " " "
F 23	-6	B0562	S	3.80	—	24	PT		—	
F 24	-7	B0566	S	3.51	—	25	PT		—	
F 25	-7,50X	B0567	S	2.79	100	26	PT		—	
F 26	-8	B0570	S	2.86	—	27	PT		—	
F 27	Room Blk	—	—	—	—	28	—	Vial open ~5 minutes on 4-13-16 @ 1220		
F 28	CCC2628-4	—	—	—	—	29	—		—	1ml STD A/5ml
F 29	Cond Blank	—	—	—	—	1	—		—	See VF2629
F 30,31,32		—	—	—	—	2,3,4	—		—	" " " "

* 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:

msvoa9_f_log.xls NF 07/11

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
B0522	FA33034-1	M	29.76	35.61	5.85	4/12/16	1316	CG	PT	IN
23	FA33042-1	W	30.79	39.45	8.66	4/13/16	10:05	DKM	~~5030A~~ 04/13/16 PT	IN
24	-1	W	30.94	39.52	8.58					
25	-1	M	29.44	37.64	8.20					
26	-2	W	30.83	38.90	8.07					
27	-2	W	30.68	38.81	8.13					
28	-2	M	29.40	37.33	7.93					
29	-3	W	30.79	38.37	7.58					
30	-3	W	30.67	38.61	7.94					
31	-3	M	29.68	37.65	7.97					
32	-4	W	30.89	38.44	7.55					
33	-4	W	30.78	38.81	8.03					
34	-4	M	29.66	37.28	7.62					
35	-5	W	30.69	38.25	7.56					
36	-5	W	30.84	38.18	7.34					
37	-5	M	29.76	36.68	6.92					
38	-6	W	30.57	38.06	7.49					
39	-6	W	30.86	38.20	7.34					
40	-6	M	29.74	37.26	7.52		10:29			
41	FA33056-1	W	31.91	34.92	3.01		10:59			
42	-1	W	30.89	34.03	3.14					
43	-1	M	29.68	32.40	2.72					
B0544	-1	M	29.96	32.46	2.50		11:10			

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
B0545	FA33056-2	W	31.27	34.97	3.70	04/13/16	11:20	DKM	PT	IN
46	-2	W	30.84	33.76	2.92					
47	-2	M	29.66	32.86	3.20					
48	-2	M	29.58	32.68	3.10					
49	-3	W	30.64	34.44	3.80					
50	-3	W	30.96	34.57	3.61					
51	-3	M	29.97	32.99	3.02					
52	-3	M	29.89	33.32	3.43					
53	-4	W	30.88	34.66	3.78					
54	-4	W	30.83	34.35	3.52					
55	-4	M	29.96	32.44	2.48					
56	-4	M	29.81	33.30	3.49					
57	-5	W	30.78	34.90	4.12					
58	-5	W	31.27	35.18	3.91					
59	-5	M	29.60	33.79	4.19					
60	-5	M	29.59	34.02	4.43					
61	-6	W	30.93	35.08	4.15					
62	-6	W	30.98	34.78	-3.80					
63	-6	M	29.86	32.09	2.23					
64	-6	M	29.79	33.53	3.74					
65	-7	W	30.69	33.59	2.90					
66	-7	W	30.95	34.46	3.51					
B0567	-7	M	29.55	32.34	2.79		11:40			

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
B05 68	FA33056-7	M	29.60	32.48	2.88	04/13/26	11:41	DCM	PT	IN
69	-8	W	30.99	35.14	4.15					
70	-8	W	31.12	33.98	2.86					
71	-8	M	29.74	32.43	2.69					
72	-8	M	29.70	33.40	3.70		11:47			
73	FA33063-1	W (AC2481)	—	—	4.69		13:28		5030A	OOH
74	-1	W	—	—	4.57					
75	-1	M (AC2456)	—	—	4.56					
76	-2	W (AC2481)	—	—	4.74		13:33			
77	-2	W	—	—	4.56					
78	-2	M (AC2456)	—	—	4.74					
79	-3	W (AC2481)	—	—	4.64		13:40			
80	-3	W	—	—	4.58					
81	-3	M (AC2456)	—	—	4.53					
82	-4	W (AC2481)	—	—	4.64		13:45			
83	-4	W	—	—	4.83					
84	-4	M (AC2456)	—	—	5.13					
85	-5	W (AC2481)	—	—	4.92		13:56			
86	-5	W	—	—	4.69					
87	-5	M (AC2456)	—	—	4.54					
88	-6	W (AC2481)	—	—	4.59		13:59			
89	-6	W	—	—	4.61					
B05 90	-6	M (AC2456)	—	—	4.89		14:06			

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 VF2628 page 4 of 4

SGS ACCUTEST FA33359

336 of 373

7.7.1 7

ACCUTEST LABORATORIES SE

DATE:	4-23-16
COLUMN TYPE:	RTX Vm 5
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA9-F
PURGE PRESSURE:	26
ANALYST:	

MS VOA9-F ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	0413/Method 9-F
CALIB. DATE:	04-13-16
EM VOLTAGE:	1765
BFB RESPONSE:	1565821
RUN ID:	VF2639

VF2640

STANDARDS

A	BFB:	BFB: V19879
	ICAL/CCV:	ICAL/CCV: V20105,V20084,V20079,
	ISTD/SURR:	ISTD/SURR: V20030
B	ICV/QC:	ICV/QC: V20106,V20085,V20080, V20077,V20067,V20065
	STDB=250 ppm=25 ug/ml	
	METHANOL LOT #:	157260

	DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STDA=250 ppm=10 ug/ml
F	00076895	BFB	—	—	—	—	7	—		—	
F	96	CC2628-4 BFB	—	—	—	—	8	—		RR	1ml STDA/5ml LOOSE CAP
F	97	CC2628-4A	—	—	—	—	9	—	1458	—	1ml STD A/5ml
F	98	BS	—	—	—	—	10	—	1458	—	1ml STDB/5ml
F	99	MB	—	—	—	100	11	—		—	
3365 F	900	FA33308-5	B1060	S	6.15	—	12	PT	NaHSO4	—	
F	01	FA33320-5,50X	B1087	S	5.56	100	13	PT		RR	500X
F	02	-5MS,50X	B1087	S	5.56	100	14	PT	1458, 109 mp	—	1ml STD added
F	03	-5MSD,50X	B1087	S	5.56	100	15	PT	14, 104 58 109 mp	—	" "
3613 F	04	FA33349-1,50X	B1116	S	5.73	100	16	PT		RR	500X
F	05	-1,500X	B1116	S	5.73	10	17	PT	90ul MeOH added	EC	
F	06	-2,50X	B1120	S	5.14	100	18	PT	68 mp	RR	M+P xylene below CAL 500X
F	07	-2,500X	B1120	S	5.14	10	19	PT	90ul MeOH added	RR	2500X
F	08	-3,50X	B1124	S	6.65	100	20	PT		RR	1X
F	09	-4,50X	B1128	S	5.14	100	21	PT		RR	1X
F	10	-6,50X	B1131	S	4.13	100	22	PT		RR	500X
F	11	-7,50X	B1135	S	6.02	100	23	PT		RR	1X
F	12	-8	B1137	S	4.98	—	24	PT		—	organic?
F	13	-9,50X	B1142	S	6.67	100	25	PT		RR	1X
F	14	FA33348-1	B1144	S	4.20	—	26	PT	w. caps	—	
F	15	-2	B1149	S	3.36	—	27	PT		—	
F	16	-3	B1152	S	4.80	—	28	PT		—	
3445 F	17	FA33320-5,500X	B1087	S	5.56	10	29	PT	90ul MeOH added	—	
3673 F	18	FA33351-1,50X	B1113	S	9.36	100	30	PT		—	Pre-burn
07674 F	19	FA33359-1	B1207	S	4.31	—	31	EN	VF2640	RR	554↑, 553↓
F	20	-2	B1210	S	5.70	—	32	EN	VF2640	—	
3673 F	21	FA33361-5,TB	B1204	S	5.20	—	33	PT	VF2639	—	NaHSO4

* 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:

msvoa9_f_log.xls NF 07/11

ACCUTEST LABORATORIES SE

DATE:	4-23-16
COLUMN TYPE:	Rtx Um 5
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA9-F
PURGE PRESSURE:	20
ANALYST:	3

MS VOA9-F ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	0413/LAB09-F
CALIB. DATE:	04-13-16
EM VOLTAGE:	1765
BFB RESPONSE:	1565821
RUN ID:	VF2639,VF2640

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 B=250ppm=7 std A/2ml	
	METHANOL LOT #:	157266

DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STDA=250ppm=10.0ml/2ml
F 1076922	FA33350-1	B1185	S	6.65	—	34	PT		—	
F 23	FA33349-2 250X	B1120	S	5.14	2	35	PT	98% matt add	—	
F 24	ECC2628-4	—	—	—	—	36	—		—	Inj STD A/Sol
F 25	Cond Blw	—	—	—	—	1	—		—	See VF2641
F 26		—	—	—	—	2	—		—	
F 27		—	—	—	—	3	—		—	
F 28		—	—	—	—	4	—		—	
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										

4-25-16

* 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: _____

msvoa9_f_log.xls NF 07/11

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
B1051	FA33308-3	W (NaHSO4)	31.57	36.86	5.29	4/22/16	8:29	CG	PT	IN, preserved
52	-3	M	29.45	34.56	5.11					
53	-3	M	29.55	34.62	5.07					
54	-3	M	29.71	34.02	4.31					
55	-4	W (NaHSO4)	31.64	36.85	5.21					
56	-4	W ↓	31.73	36.59	4.83					
57	-4	M	29.49	34.80	5.31					
58	-4	M	29.61	35.19	5.58					
59	-4	M	29.65	35.10	5.45					
60	-5	W (NaHSO4)	31.70	37.85	6.15					
61	-5	W ↓	31.70	37.62	5.92					
62	-5	M	29.43	35.54	6.11					
63	-5	M	29.55	35.43	5.88					
64	-5	M	29.63	35.70	6.07					
65	-6	W (NaHSO4)	31.48	36.53	5.05					
66	-6	W ↓	31.65	36.81	5.16					
67	-6	M	29.68	33.96	4.28					
68	-6	M	29.72	34.14	4.42					
69	-6	M	29.70	33.62	3.92					
70	-7	W (NaHSO4)	31.58	36.35	4.77					
71	-7	W ↓	31.53	33.22	1.69					low sample
72	-7	M	29.49	34.25	4.76					
B1073	-7	M	29.67	34.21	4.54	↓	8:51	↓	↓	↓

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
B1074	FA33308-7	M	29.55	—	—	4/22/16	8:51	CG	PT	IN, no liq
75	-7	W (AC2481)	—	—	4.49		8:55		5030A	IN, bot #7 reprep
76	FA33320-1	M	29.57	34.50	4.93		10:06		PT	IN
77	-1	M	29.69	34.40	4.71					
78	-2	M	29.60	34.19	4.59					
79	-2	M	29.68	34.46	4.78					
80	-3	M	29.67	33.26	3.59					
81	-3	M	29.52	32.83	3.31					
82	-4	M	29.65	33.85	4.20					
83	-4	M	29.50	33.33	3.83					
84	-5	W	31.15	36.25	5.10					
85	-5	W	31.33	36.30	4.97					
86	-5	M	29.71	34.97	5.26					
87	-5	M	29.77	35.33	5.56					
88	-5	M	29.57	34.09	4.52					
89	-6	M	29.58	32.99	3.41					
90	-6	M	29.43	33.63	4.20					
91	-7	M	29.43	35.78	6.35					
92	-7	M	29.31	32.98	3.67					
93	-8	M	29.83	35.14	5.31					
94	-8	M	29.81	35.44	5.63					
95	-9	M	29.52	33.38	3.86					
B1096	-9	M	29.62	33.87	4.25		10:29			

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
B1097	FA33320-10	M	29.21	35.02	5.81	4/22/16	10:37	CG	PT	IN
98	-10	M	29.60	35.40	5.80		10:38			
99	FA33340-1	M	29.33	33.72	4.39		1439			
B1100	-1	M	29.53	33.82	4.29					
01	-2	M	29.40	~~29.34~~ CG 4/22/16 ~~33.41~~ 4.01						33.41 4.01
02	-2	M	29.34	32.33	2.99					
03	-3	M	29.43	34.15	4.72					
04	-3	M	29.45	34.27	4.82					
05	-4	M	29.67	33.27	3.60					
06	-4	M	29.76	32.04	2.28					
07	-5	M	29.83	34.05	4.22					
08	-5	M	29.89	33.96	4.07		1449			
09	C45463-1	M (AC2456)	—	—	5.04	4/23/16	10:50	SKM	5030A	IN
10	SKM 4/23/16 -2	M			5.05		10:53			
11	FA33351-1	W	30.95	39.25	8.30		10:56		PT	IN Preburn
12	SKM 4/23/16 -1-~~2~~	W	31.02	39.64	8.62					
13	FA -1	M	29.52	38.88	9.36		10:59			
14	FA33349-1	W	30.65	36.54	5.89		11:02			
15	-1	W	30.90	36.92	6.02					
16	-1	M	29.73	35.46	5.73					
17	-1	M	30.04	36.05	6.01					
18	-2	W	30.83	36.58	5.75					
B1119	-2	W	30.65	36.05	5.40		11:08			

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 VF2639 page 5 of 9

SGS ACCUTEST FA33359

341 of 373

7.7.2 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
B1120	FA33349-2	M	29.61	34.75	5.14	04/23/16	11:10	RCM	PT	IN
21	-2	M	29.80	34.83	5.03					
22	-3	W	30.93	37.49	6.56					
23	-3	W	30.89	37.14	6.25					
24	-3	M	29.54	36.19	6.65					
25	-4	W	30.85	36.10	5.25					
26	-4	W	30.85	35.84	4.99					
27	-4	M	29.77	34.76	4.99					
28	-4	M	29.74	34.88	5.14					
29	-6	W	30.71	35.41	4.70					
30	-6	W	30.63	35.27	4.64					
31	-6	M	29.77	33.90	4.13					
32	-6	M	29.69	34.55	4.86					
33	-7	W	30.94	36.95	6.01					
34	-7	W	30.76	36.96	6.20					
35	-7	M	29.68	35.70	6.02					
36	-8	W	31.15	35.98	4.83					
37	-8	W	31.12	36.10	4.98					
38	-8	M	29.82	34.58	4.76					
39	-8	M	29.74	34.49	4.75					
40	-9	W	30.65	37.46	6.81					
41	-9	W	30.70	37.56	6.86					
B1142	-9	M	29.53	36.20	6.67		11:29			

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
B1143	FA33348-1	W	34.75	39.77	5.02	04/23/16	11:35	DKM	PT	IN
44	-1	W	35.43	39.63	4.20					
45	-1	M	33.20	37.36	4.16	DKM 04/23/16				
46	-1	~~M~~ W DKM 04/23/16	34.70	39.46	4.76					
47	-1	W	34.86	39.94	5.08					
48	-2	W	34.85	38.42	3.57					
49	-2	W	34.96	38.32	3.36					
50	DKM 04/23/16 -2 ~~-3~~	M	33.00	37.67	4.67					
51	-3	W	34.78	40.74	5.96					
52	-3	W	34.88	39.68	4.80					
53	-3	M	33.13	37.71	4.58		11:46			
54	FA33363-1	W	30.83	36.93	6.10		11:48			
55	-1	W	30.92	36.67	5.75					
56	-1	M	29.78	35.46	5.68					
57	-2	W	30.96	36.79	5.83					
58	-2	W	30.77	36.09	5.32					
59	-2	M	30.02	35.40	5.38					
60	-3	W	30.92	36.67	5.75					
61	-3	W	31.06	37.55	6.49					
62	-3	M	30.08	35.61	5.53					
63	-4	W	30.96	37.31	6.35					
64	-4	W	30.92	36.38	5.46					
B11 65	-4	M	30.13	35.85	5.72		12:00			

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
B1190	FA33357-1	M	29.77	37.02	7.25	04/23/16	12:23	DKM	PT	IN
91	FA33357-2	W	30.88	38.20	7.32					
92	-2	W	30.85	38.36	7.51					
93	-2	M	30.04	37.00	6.96					
94	-3	W	30.97	38.26	7.29					
95	-3	W	30.89	38.14	7.25					
96	-3	M	30.04	37.03	6.99					
97	-4	W	30.92	37.75	6.83					
98	-4	W	31.00	37.92	6.92					
99	-4	M	29.93	36.72	6.79					
B1200	-5	W	31.16	37.95	6.79					
01	-5	W	30.93	37.61	6.68					
02	-5	M	29.77	36.36	6.59		12:33			
03	FA33361-5	W (NaHSO4)	31.36	31.35	-0.01		12:35			TB
04	-5	W	31.16	31.17	0.01					
05	-5	M	29.68	29.68	0.00		12:36			
06	FA33359-1	W (AC2456)	—	—	4.66		12:46		EN	FS IN P
07	-1	W	—	—	4.31					
08	-1	M (AC2481)	—	—	5.02		12:49			
09	-2	W (AC2456)	—	—	5.68		12:52			
10	-2	W	—	—	5.70					
11	-2	M (AC2481)	—	—	5.35		12:59			
B1212	FA33366-1	W (NaHSO4)	31.03	35.61	4.58	04/23/16	13:29	DKM	PT	IN

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 # JRM 04/23/16	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1166	FA33363-5	W	30.83	36.19	5.36	04/23/16	12:01	JRM	PT	IN
67	-5	W	30.72	36.70	5.98					
68	-5	M	29.72	34.61	4.89					
69	-6	W	31.02	36.75	5.73					
70	-6	W	31.07	36.72	5.65					
71	-6	M	29.94	35.59	5.65					
72	-7	W	30.89	35.50	4.61					
73	-7	W	30.97	35.95	4.98					
74	-7	M	29.91	34.79	4.88					
75	-8	W	30.93	36.63	5.70					
76	-8	W	31.45	37.36	5.91					
77	-8	M	29.87	35.97	6.10					
78	-9	W	30.61	35.61	5.00					
79	-9	W	30.94	36.23	5.29					
80	-9	M	29.90	35.97	6.07					
81	-10	W	30.96	36.23	5.27					
82	-10	W	30.98	36.04	5.06					
83	-10	M	29.87	34.69	4.82		12:13			
84	FA33350-1	W	30.86	37.64	6.78		12:16			
85	-1	W	30.86	37.51	6.65					
86	-1	M	30.06	36.53	6.47		12:18			
87	FA33357-1	W	30.72	37.61	6.89		12:21			
B11 89	-1	W	30.94	38.22	7.28		12:23			

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 LABORATORIES SE

DATE:	4-23-16
COLUMN TYPE:	RTX Vm 5
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA9-F
PURGE PRESSURE:	26
ANALYST:	

MS VOA9-F ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	0413lab#9-F
CALIB. DATE:	04-13-16
EM VOLTAGE:	1765
BFB RESPONSE:	1565821
RUN ID:	VF2639 VF2640

STANDARDS

BFB:	.BFB: V19879
ICAL/CCV:	.ICAL/CCV: V20105,V20084,V20079, .V20076,V20066,V20064
ISTD/SURR:	.ISTD/SURR: V20030
ICV/QC:	.ICV/QC: V20106,V20085,V20080, .V20077,V20067,V20065
STDD=250 ppm=25 ug/ml/2ml	
METHANOL LOT #:	157260

A B

	DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STDA=250 ppm=25 ug/ml/2ml
	F 0076895	BFB	—	—	—	—	7	—		—	
	F 96	CC2628-4 BFB	—	—	—	—	8	—		RR	1ml STDA/5ml Loose CAP
	F 97	CC2628-4A	—	—	—	—	9	—	14SB	—	1ml STDA/5ml
	F 98	BS	—	—	—	—	10	—	14SB	—	1ml STDB/5ml
	F 99	MB	—	—	—	100	11	—		—	
3365	F 900	FA33308-5	B1060	5	6.65	—	12	PT	NaHSO4	—	
	F 01	FA33320-5,50X	B1087	5	5.56	100	13	PT		RR	500X
	F 02	-5MS,50X	B1087	5	5.56	100	14	PT	14SB, 109 MP	—	1ml STD Added
	F 03	-5MSD,50X	B1087	5	5.56	100	15	PT	14,104 SB 109 MP	—	" " "
3613	F 04	FA33349-1,50X	B1116	5	5.73	100	16	PT		RR	500X
	F 05	-1,500X	B1116	5	5.73	10	17	PT	90ul MeOH added	EC	
	F 06	-2,50X	B1120	5	5.14	100	18	PT	68 MP	RR	MP-xylene below CAL 500X
	F 07	-2,500X	B1120	5	5.14	10	19	PT	90ul MeOH added	RR	2500X
	F 08	-3,50X	B1124	5	6.65	100	20	PT		RR	1X
	F 09	-4,50X	B1128	5	5.14	100	21	PT		RR	1X
	F 10	-6,50X	B1131	5	4.13	100	22	PT		RR	500X
	F 11	-7,50X	B1135	5	6.02	100	23	PT		RR	1X
	F 12	-8	B1137	5	4.98	—	24	PT		—	organic?
	F 13	-9,50X	B1142	5	6.67	100	25	PT		RR	1X
	F 14	FA33348-1	B1144	5	4.20	—	26	PT	w. caps	—	
	F 15	-2	B1149	5	3.36	—	27	PT		—	
	F 16	-3	B1152	5	4.80	—	28	PT		—	
3665	F 17	FA33320-5,500X	B1087	5	5.56	10	29	PT	90ul MeOH added	—	
3673	F 18	FA33351-1,50X	B1113	5	9.36	100	30	PT		—	Pre-burn
3674	F 19	FA33349-1	B1207	5	4.31	—	31	EN	VF2640	RR	SS4↑, JS3↓
	F 20	-2	B1210	5	5.70	—	32	EN	VF2640	—	
3673	F 21	FA33361-5,TB	B1204	5	5.20	—	33	PT	VF2639	—	NaHSO4

* 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:

msvoa9_f_log.xls NF 07/11

SGS ACCUTEST FA33359

ACCUTEST LABORATORIES SE

DATE:	4-23-16
COLUMN TYPE:	Rtx Um 5
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA9-F
PURGE PRESSURE:	2
ANALYST:	

MS VOA9-F ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	0413/LAB09-F
CALIB. DATE:	04-13-16
EM VOLTAGE:	1765
BFB RESPONSE:	156582
RUN ID:	VF2639,VF2640

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 B=250 ppm = 7 std A/2 ml	
	METHANOL LOT #:	157266

DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS
										STDA=250 ppm = 10 std A/2 ml
33-73 F 10076922	FA33350-1	B1185	S	6.65	—	34	PT		—	
F 23	FA33049-2 250DX	B1120	S	5.14	2	35	PT	98 int Meth add	—	
F 24	ECC2628-4	—	—	—	—	36	—		—	Int STD A/5 ml
F 25	Cond Blw	—	—	—	—	1	—		—	See VF2641
F 26		—	—	—	—	2	—		—	
F 27		—	—	—	—	3	—		—	
F 28		—	—	—	—	4	—		—	
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										
F										

4-25-16

* 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: _____

msvoa9_f_log.xls NF 07/11

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
B1051	FA33308-3	W (NaHSO4)	31.57	36.86	5.29	4/22/16	8:29	CG	PT	IN, preserved
52	-3	M	29.45	34.56	5.11	↓	↓	↓	↓	↓
53	-3	M	29.55	34.62	5.07	↓	↓	↓	↓	↓
54	-3	M	29.71	34.02	4.31	↓	↓	↓	↓	↓
55	-4	W (NaHSO4)	31.64	36.85	5.21	↓	↓	↓	↓	↓
56	-4	W ↓	31.73	36.59	4.83	↓	↓	↓	↓	↓
57	-4	M	29.49	34.80	5.31	↓	↓	↓	↓	↓
58	-4	M	29.61	35.19	5.58	↓	↓	↓	↓	↓
59	-4	M	29.65	35.10	5.45	↓	↓	↓	↓	↓
60	-5	W (NaHSO4)	31.70	37.85	6.15	↓	↓	↓	↓	↓
61	-5	W ↓	31.70	37.62	5.92	↓	↓	↓	↓	↓
62	-5	M	29.43	35.54	6.11	↓	↓	↓	↓	↓
63	-5	M	29.55	35.43	5.88	↓	↓	↓	↓	↓
64	-5	M	29.63	35.70	6.07	↓	↓	↓	↓	↓
65	-6	W (NaHSO4)	31.48	36.53	5.05	↓	↓	↓	↓	↓
66	-6	W ↓	31.65	36.81	5.16	↓	↓	↓	↓	↓
67	-6	M	29.68	33.96	4.28	↓	↓	↓	↓	↓
68	-6	M	29.72	34.14	4.42	↓	↓	↓	↓	↓
69	-6	M	29.70	33.62	3.92	↓	↓	↓	↓	↓
70	-7	W (NaHSO4)	31.58	36.35	4.77	↓	↓	↓	↓	↓
71	-7	W ↓	31.53	33.22	1.69	↓	↓	↓	↓	low sample
72	-7	M	29.49	34.25	4.76	↓	↓	↓	↓	↓
B1073	-7	M	29.67	34.21	4.54	↓	8:51	↓	↓	↓

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
B1074	FA33308-7	M	29.55	—	—	4/22/16	8:51	CG	PT	IN, no liq
75	-7	W (AC2481)	—	—	4.49		8:55		5030A	IN, bot #7 reprep
76	FA33320-1	M	29.57	34.50	4.93		10:06		PT	IN
77	-1	M	29.69	34.40	4.71					
78	-2	M	29.60	34.19	4.59					
79	-2	M	29.68	34.46	4.78					
80	-3	M	29.67	33.26	3.59					
81	-3	M	29.52	32.83	3.31					
82	-4	M	29.65	33.85	4.20					
83	-4	M	29.50	33.33	3.83					
84	-5	W	31.15	36.25	5.10					
85	-5	W	31.33	36.30	4.97					
86	-5	M	29.71	34.97	5.26					
87	-5	M	29.77	35.33	5.56					
88	-5	M	29.57	34.09	4.52					
89	-6	M	29.58	32.99	3.41					
90	-6	M	29.43	33.63	4.20					
91	-7	M	29.43	35.78	6.35					
92	-7	M	29.31	32.98	3.67					
93	-8	M	29.83	35.14	5.31					
94	-8	M	29.81	35.44	5.63					
95	-9	M	29.52	33.38	3.86					
B1096	-9	M	29.62	33.87	4.25		10:29			

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
B1097	FA33320-10	M	29.21	35.02	5.81	4/22/16	10:37	CG	PT	IN
98	-10	M	29.60	35.40	5.80		10:38			
99	FA33340-1	M	29.33	33.72	4.39		1439			
B1100	-1	M	29.53	33.82	4.29					
01	-2	M	29.40	~~29.34~~ 33.41 CG 4/22/16	~~33.44~~ 4.01					33.41 4.01
02	-2	M	29.34	32.33	2.99					
03	-3	M	29.43	34.15	4.72					
04	-3	M	29.45	34.27	4.82					
05	-4	M	29.67	33.27	3.60					
06	-4	M	29.76	32.04	2.28					
07	-5	M	29.83	34.05	4.22					
08	-5	M	29.89	33.96	4.07		1449			
09	C454163-1	M (AC2456)	—	—	5.04	4/23/16	10:50	SKM	5030A	IN
10	SKM 4/23/16 -2	M		—	5.05		10:53			
11	FA33351-1	W	30.95	39.25	8.30		10:56		PT	IN Preburn
12	SKM 4/23/16 -1-~~2~~	W	31.02	39.64	8.62					
13	FA -1	M	29.52	38.88	9.36		10:59			
14	FA33349-1	W	30.65	36.54	5.89		11:02			
15	-1	W	30.90	36.92	6.02					
16	-1	M	29.73	35.46	5.73					
17	-1	M	30.04	36.05	6.01					
18	-2	W	30.83	36.58	5.75					
B1119	-2	W	30.65	36.05	5.40		11:08			

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
B1120	FA33349-2	M	29.61	34.75	5.14	04/23/16	11:10	RCM	PT	IN
21	-2	M	29.80	34.83	5.03					
22	-3	W	30.93	37.49	6.56					
23	-3	W	30.89	37.14	6.25					
24	-3	M	29.54	36.19	6.65					
25	-4	W	30.85	36.10	5.25					
26	-4	W	30.85	35.84	4.99					
27	-4	M	29.77	34.76	4.99					
28	-4	M	29.74	34.88	5.14					
29	-6	W	30.71	35.41	4.70					
30	-6	W	30.63	35.27	4.64					
31	-6	M	29.77	33.90	4.13					
32	-6	M	29.69	34.55	4.86					
33	-7	W	30.94	36.95	6.01					
34	-7	W	30.76	36.96	6.20					
35	-7	M	29.68	35.70	6.02					
36	-8	W	31.15	35.98	4.83					
37	-8	W	31.12	36.10	4.98					
38	-8	M	29.82	34.58	4.76					
39	-8	M	29.74	34.49	4.75					
40	-9	W	30.65	37.46	6.81					
41	-9	W	30.70	37.56	6.86					
B1142	-9	M	29.53	36.20	6.67		11:29			

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
B1143	FA33348-1	W	34.75	39.77	5.02	04/23/16	11:35	DKM	PT	IN
44	-1	W	35.43	39.63	4.20					
45	-1	M	33.20	37.36	4.16					
46	-1	~~M~~ W	34.70	39.46	4.76					
47	-1	W	34.86	39.94	5.08					
48	-2	W	34.85	38.42	3.57					
49	-2	W	34.96	38.32	3.36					
50	-2 ~~-3~~	M	33.00	37.67	4.67					
51	-3	W	34.78	40.74	5.96					
52	-3	W	34.88	39.68	4.80					
53	-3	M	33.13	37.71	4.58		11:46			
54	FA33363-1	W	30.83	36.93	6.10		11:48			
55	-1	W	30.92	36.67	5.75					
56	-1	M	29.78	35.46	5.68					
57	-2	W	30.96	36.79	5.83					
58	-2	W	30.77	36.09	5.32					
59	-2	M	30.02	35.40	5.38					
60	-3	W	30.92	36.67	5.75					
61	-3	W	31.06	37.55	6.49					
62	-3	M	30.08	35.61	5.53					
63	-4	W	30.96	37.31	6.35					
64	-4	W	30.92	36.38	5.46					
B11 65	-4	M	30.13	35.85	5.72		12:00			

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
B1190	FA33357-1	M	29.77	37.02	7.25	04/23/16	12:23	DKM	PT	IN
91	FA33357-2	W	30.88	38.20	7.32					
92	-2	W	30.85	38.36	7.51					
93	-2	M	30.04	37.00	6.96					
94	-3	W	30.97	38.26	7.29					
95	-3	W	30.89	38.14	7.25					
96	-3	M	30.04	37.03	6.99					
97	-4	W	30.92	37.75	6.83					
98	-4	W	31.00	37.92	6.92					
99	-4	M	29.93	36.72	6.79					
B1200	-5	W	31.16	37.95	6.79					
01	-5	W	30.93	37.61	6.68					
02	-5	M	29.77	36.36	6.59		12:33			
03	FA33361-5	W (NaHSO4)	31.36	31.35	-0.01		12:35			TB
04	-5	W	31.16	31.17	0.01					
05	-5	M	29.68	29.68	0.00		12:36			
06	FA33359-1	W (AC2456)	—	—	4.66		12:46		EN	FS IN P
07	-1	W	—	—	4.31					
08	-1	M (AC2481)	—	—	5.02		12:49			
09	-2	W (AC2456)	—	—	5.68		12:52			
10	-2	W	—	—	5.70					
11	-2	M (AC2481)	—	—	5.35		12:59			
B1212	FA33366-1	W (NaHSO4)	31.03	35.61	4.58	04/23/16	13:29	DKM	PT	IN

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 # JRM 04/23/16	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1166	FA33335	W	30.83	36.19	5.36	04/23/16	12:01	JRM	PT	IN
67	-5	W	30.72	36.70	5.98					
68	-5	M	29.72	34.61	4.89					
69	-6	W	31.02	36.75	5.73					
70	-6	W	31.07	36.72	5.65					
71	-6	M	29.94	35.59	5.65					
72	-7	W	30.89	35.50	4.61					
73	-7	W	30.97	35.95	4.98					
74	-7	M	29.91	34.79	4.88					
75	-8	W	30.93	36.63	5.70					
76	-8	W	31.45	37.36	5.91					
77	-8	M	29.87	35.97	6.10					
78	-9	W	30.61	35.61	5.00					
79	-9	W	30.94	36.23	5.29					
80	-9	M	29.90	35.97	6.07					
81	-10	W	30.96	36.23	5.27					
82	-10	W	30.98	36.04	5.06					
83	-10	M	29.87	34.69	4.82		12:13			
84	FA33350-1	W	30.86	37.64	6.78		12:16			
85	-1	W	30.86	37.51	6.65					
86	-1	M	30.06	36.53	6.47		12:18			
87	FA33357-1	W	30.72	37.61	6.89		12:21			
B11 89	-1	W	30.94	38.22	7.28		12:23			

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 LABORATORIES SE

DATE:	04-25-16
COLUMN TYPE:	RTX 5ms
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA9-F
PURGE PRESSURE:	20
ANALYST:	

MS VOA9-F ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	041316AA9-F
CALIB. DATE:	04-13-16
EM VOLTAGE:	1800
BFB RESPONSE:	1866504
RUN ID:	VF 2641, VF2642

STANDARDS

A	BFB:	.BFB: V20120
A	ICAL/CCV:	.ICAL/CCV: V20105,V20084,V20079, .V20076,V20066,V20064
A	ISTD/SURR:	.ISTD/SURR: V20030
B	ICV/QC:	.ICV/QC: V20106,V20085,V20080, .V20077,V20067,V20065
		STD A=250 ppm = 75 ab/2ml
	METHANOL LOT #:	157266

	DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STD A=250 ppm = 4ab/2ml
	F 1007 1628 29	BFB	—	—	—	—	5	—		—	Ave Pass
	F 29 30	CC2628-4, BFB	—	—	—	—	6	—		RR	1ml STDA/5ml Ave Pass
	F 4/25/16 30 31	CC2628-4A	—	—	—	—	7	—		—	1ml STDA/5ml
	F 31 32	MB	—	—	—	10	8	—		—	
	F 33	BS	—	—	—	—	9	—		—	1ml STDB/5ml
3674	F 34	FA33359-1	B1206	S	4.66	—	10	EN	VF2642	—	
3673	F 35	FA33349-3	B1122	S	6.56	—	11	PT	VF2641 ↓	—	
	F 36	-4	B1126	S	4.99	—	12	PT		—	
	F 37	-7	B1134	S	6.20	—	13	PT		—	
	F 38	-9	B1140	S	6.81	—	14	PT		—	
	F 39	-6,500X	B1191	S	4.13	10	15	PT	90ml MeOH added	RC	
3672	F 40	FA33357-4	B1198	S	6.92	—	16	PT		—	
	F 41	-5	B1201	S	6.68	—	17	PT		—	
	F 42	-1,50X	B1190	S	7.25	10	18	PT		RR	1X Dump
	F 43	-2,50X	B1193	S	6.96	10	19	PT		—	
	F 44	-3,50X	B1196	S	6.99	10	20	PT		RR	1X Dump
3683	F 45	FA33385-1	B1300	S	4.52	—	21	5030A/OH	VF2642 ↓	—	
	F 46	-2	B1303	S	4.13	—	22	↓		—	
	F 47	-3	B1305	S	5.14	—	23	↓		—	
	F 48	-4	B1297	S	5.57	—	24	EN OOH		—	
	F 49	-3MS	—	S	4.02	—	25	—	145p	—	1ml STDB added
	F 50	-3MSD	—	S	4.05	—	26	—	104 58	—	" " "
3673	F 51	FA33349-4MS	—	S	4.56	—	27	—	VF2641 ↓	—	" " "
	F 52	-4MSD	—	S	4.53	—	28	—	145p	—	" " "
3682	F 53	FA33357-1	B1187	S	6.89	—	29	PT		—	
	F 54	-3	B1195	S	7.25	—	30	PT		—	
	F 55	ECC2628-4	—	—	—	—	31	—	104 58	—	1ml STDA/5ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005

Analyst's Signature:

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

msvoa9_f_log.xls NF 07/11

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
B1190	FA33357-1	M	29.77	37.02	7.25	04/23/16	12:23	DKM	PT	IN
91	FA333572	W	30.88	38.20	7.32					
92	-2	W	30.85	38.36	7.51					
93	-2	M	30.04	37.00	6.96					
94	-3	W	30.97	38.26	7.29					
95	-3	W	30.89	38.14	7.25					
96	-3	M	30.04	37.03	6.99					
97	-4	W	30.92	37.75	6.83					
98	-4	W	31.00	37.92	6.92					
99	-4	M	29.93	36.72	6.79					
B1200	-5	W	31.16	37.95	6.79					
01	-5	W	30.93	37.61	6.68					
02	-5	M	29.77	36.36	6.59		12:33			
03	FA33361-5	W (NaHSO4)	31.36	31.35	-0.01		12:35			TB
04	-5	W	31.16	31.17	0.01					
05	-5	M	29.68	29.68	0.00		12:36			
06	FA33359-1	W (AC2456)	—	—	4.66		12:46		EN	FS IN P
07	-1	W	—	—	4.31					
08	-1	M (AC2481)	—	—	5.02		12:49			
09	-2	W (AC2456)	—	—	5.68		12:52			
10	-2	W	—	—	5.70					
11	-2	M (AC2481)	—	—	5.35		12:59			
B1212	FA33366-1	W (NaHSO4)	31.03	35.61	4.58	04/23/16	13:29	DKM	PT	IN

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 VF2641 page 2 of 6

SGS ACCUTEST FA33359

356 of 373

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
B1120	FA33349-2	M	29.61	34.75	5.14	04/23/16	11:10	RCM	PT	IN
21	-2	M	29.80	34.83	5.03					
22	-3	W	30.93	37.49	6.56					
23	-3	W	30.89	37.14	6.25					
24	-3	M	29.54	36.19	6.65					
25	-4	W	30.85	36.10	5.25					
26	-4	W	30.85	35.84	4.99					
27	-4	M	29.77	34.76	4.99					
28	-4	M	29.74	34.88	5.14					
29	-6	W	30.71	35.41	4.70					
30	-6	W	30.63	35.27	4.64					
31	-6	M	29.77	33.90	4.13					
32	-6	M	29.69	34.55	4.86					
33	-7	W	30.94	36.95	6.01					
34	-7	W	30.76	36.96	6.20					
35	-7	M	29.68	35.70	6.02					
36	-8	W	31.15	35.98	4.83					
37	-8	W	31.12	36.10	4.98					
38	-8	M	29.82	34.58	4.76					
39	-8	M	29.74	34.49	4.75					
40	-9	W	30.65	37.46	6.81					
41	-9	W	30.70	37.56	6.86					
B1142	-9	M	29.53	36.20	6.67		11:29			

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
B1282	FA33373-5	W (NaHSO4)	31.23	38.15	6.92	04/23/16	14:39	JCM	PT	IN 38.15
83	-5	W ↓	31.14	37.41	6.27					
84	-5	M	29.74	36.45	6.71					
85	-8	W (NaHSO4)	31.12	38.81	7.69					
86	-8	W ↓	31.06	38.71	7.65					
87	-8	M	29.74	38.34	8.60					
88	-12	W (NaHSO4)	31.10	31.11	0.01					TB
89	-12	W ↓	31.05	31.05	0.00					
90	-12	M	29.93	29.91	-0.02		14:46			29.91
91	FA33385-1	M	40.96	55.40	14.44	4/25/16	9:38	CG	PT	OOH, FS, 15mL
92	-1	M	40.94	56.65	15.71					IN CG 4/25/16
93	-2	M	40.94	56.65	15.71					
94	-2	M	40.76	56.56	15.80					
95	-3	M	40.69	53.75	13.06					
96	-3	M	41.06	55.40	14.34					
97	-4	W (AC2481)	—	—	5.57		9:49		EN	OOH, FS
98	-4	W ↓	—	—	5.06					
99	-4	M (AC2456)	—	—	5.28		9:55			
B1300	-1	W	—	—	4.52	4/25/16	11:28	CG	5030A	OOH, FS, bot #4 prep
01	-1	W	—	—	4.36					
02	-2	W	—	—	4.47		11:34			
03	-2	W	—	—	4.13					
B1304	-3	W	—	—	4.64		11:37			

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
B1305	FA33385-3	W (AC2481)	—	—	5.14	4/25/16	11:40	CG	5030A	OOH, FS, bot 4 prep
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
B1327										

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 # JBM 04/23/16	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1166	FA33335	W	30.83	36.19	5.36	04/23/16	12:01	JBM	PT	IN
67	-5	W	30.72	36.70	5.98					
68	-5	M	29.72	34.61	4.89					
69	-6	W	31.02	36.75	5.73					
70	-6	W	31.07	36.72	5.65					
71	-6	M	29.94	35.59	5.65					
72	-7	W	30.89	35.50	4.61					
73	-7	W	30.97	35.95	4.98					
74	-7	M	29.91	34.79	4.88					
75	-8	W	30.93	36.63	5.70					
76	-8	W	31.45	37.36	5.91					
77	-8	M	29.87	35.97	6.10					
78	-9	W	30.61	35.61	5.00					
79	-9	W	30.94	36.23	5.29					
80	-9	M	29.90	35.97	6.07					
81	-10	W	30.96	36.23	5.27					
82	-10	W	30.98	36.04	5.06					
83	-10	M	29.87	34.69	4.82		12:13			
84	FA33350-1	W	30.86	37.64	6.78		12:16			
85	-1	W	30.86	37.51	6.65					
86	-1	M	30.06	36.53	6.47		12:18			
87	FA33357-1	W	30.72	37.61	6.89		12:21			
B11 89	-1	W	30.94	38.22	7.28		12:23			

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 LABORATORIES SE

DATE:	04-25-16
COLUMN TYPE:	RTX Um 5
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA9-F
PURGE PRESSURE:	20
ANALYST:	G

MS VOA9-F ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	041316AA09-F
CALIB. DATE:	04-13-16
EM VOLTAGE:	1800
BFB RESPONSE:	1866504
RUN ID:	VF 2641, VF2642

STANDARDS

A	BFB:	.BFB: V20120
A	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 B=250 ppm = 75ul std /24ml	
	METHANOL LOT #:	157266

	DATA FILE	SAMPLE ID	Vial #	MATRIX	SAMPLE AMT.	MeOH ALIQ.	ALS POS.	PREP METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	RR	COMMENTS STD A=250ppm = 40ul std /24ml
	F 1207 69 28 29	BFB	—	—	—	—	5	—		—	Ave Pass
	F 29 30	CC2628-4, BFB	—	—	—	—	6	—		RR	1ml STDA / 5ml Ave Pass
	F 4,256 30 31	CC2628-4A	—	—	—	—	7	—		—	1ml STDA / 5ml
	F 31 32	MB	—	—	—	10	8	—		—	
	F 33	BS	—	—	—	—	9	—		—	1ml STDB / 5ml
3674	F 34	FA33359-1	B1206	S	4.66	—	10	EN	VF2642	—	
3673	F 35	FA33349-3	B1122	S	6.56	—	11	PT	VF2641 ↓	—	
	F 36	-4	B1126	S	4.99	—	12	PT		—	
	F 37	-7	B1134	S	6.20	—	13	PT		—	
	F 38	-9	B1140	S	6.81	—	14	PT		—	
	F 39	-6,500X	B1131	S	4.13	10	15	PT	90ul MeOH added	FC	
3682	F 40	FA33357-4	B1198	S	6.92	—	16	PT		—	
	F 41	-5	B1201	S	6.68	—	17	PT		—	
	F 42	-1,50X	B1190	S	7.25	10	18	PT		RR	1X Dump
	F 43	-2,50X	B1193	S	6.96	10	19	PT		—	
	F 44	-3,50X	B1196	S	6.99	10	20	PT		RR	1X Dump
3683	F 45	FA33385-1	B1300	S	4.52	—	21	5030A/EN	VF2642 ↓	—	
	F 46	-2	B1303	S	4.13	—	22	↓		—	
	F 47	-3	B1305	S	5.14	—	23	↓		—	
	F 48	-4	B1297	S	5.57	—	24	EN 00H		—	
	F 49	-3MS	—	S	4.02	—	25	—	14sp	—	1ml STDB added
	F 50	-3MSD	—	S	4.05	—	26	—	10458	—	" "
3673	F 51	FA33349-4MS	—	S	4.56	—	27	—	VF2641 ↓	—	" "
	F 52	-4MSD	—	S	4.53	—	28	—	14sp	—	" "
3682	F 53	FA33357-1	B1187	S	6.89	—	29	PT		—	
	F 54	-3	B1195	S	7.25	—	30	PT		—	
	F 55	ECC2628-4	—	—	—	—	31	—	1045p	—	1ml STDA / 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]

msvoa9_f_log.xls NF 07/11

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
B1190	FA33357-1	M	29.77	37.02	7.25	04/23/16	12:23	DKM	PT	IN
91	FA33357-2	W	30.88	38.20	7.32					
92	-2	W	30.85	38.36	7.51					
93	-2	M	30.04	37.00	6.96					
94	-3	W	30.97	38.26	7.29					
95	-3	W	30.89	38.14	7.25					
96	-3	M	30.04	37.03	6.99					
97	-4	W	30.92	37.75	6.83					
98	-4	W	31.00	37.92	6.92					
99	-4	M	29.93	36.72	6.79					
B1200	-5	W	31.16	37.95	6.79					
01	-5	W	30.93	37.61	6.68		↓			
02	-5	M	29.77	36.36	6.59		12:33			
03	FA33361-5	W ($NaHSO_4$)	31.36	31.35	-0.01		12:35			TB
04	-5	W ↓	31.16	31.17	0.01		↓			
05	-5	M	29.68	29.68	0.00		12:36		↓	↓ ↓
06	FA33359-1	W (AC2456)	—		4.66		12:46		EN	FS IN P
07	-1	W ↓	—		4.31		↓			
08	-1	M (AC2481)	—		5.02		12:49			
09	-2	W (AC2456)	—		5.68		12:52			
10	-2	W ↓	—		5.70		↓			
11	-2	M (AC2481)	—		5.35	↓	12:59	↓	↓	↓ ↓ ↓
B1212	FA33366-1	W ($NaHSO_4$)	31.03	35.61	4.58	04/23/16	13:29	DKM	PT	IN

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 VF2642 page 2 of 6

SGS ACCUTEST FA33359

362 of 373

7.7.5 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
B1120	FA33349-2	M	29.61	34.75	5.14	04/23/16	11:10	RCM	PT	IN
21	-2	M	29.80	34.83	5.03					
22	-3	W	30.93	37.49	6.56					
23	-3	W	30.89	37.14	6.25					
24	-3	M	29.54	36.19	6.65					
25	-4	W	30.85	36.10	5.25					
26	-4	W	30.85	35.84	4.99					
27	-4	M	29.77	34.76	4.99					
28	-4	M	29.74	34.88	5.14					
29	-6	W	30.71	35.41	4.70					
30	-6	W	30.63	35.27	4.64					
31	-6	M	29.77	33.90	4.13					
32	-6	M	29.69	34.55	4.86					
33	-7	W	30.94	36.95	6.01					
34	-7	W	30.76	36.96	6.20					
35	-7	M	29.68	35.70	6.02					
36	-8	W	31.15	35.98	4.83					
37	-8	W	31.12	36.10	4.98					
38	-8	M	29.82	34.58	4.76					
39	-8	M	29.74	34.49	4.75					
40	-9	W	30.65	37.46	6.81					
41	-9	W	30.70	37.56	6.86					
B1142	-9	M	29.53	36.20	6.67		11:29			

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
B1282	FA333735	W (NaHSO4)	31.23	38.15	6.92	04/23/16	14:39	JCM	PT	IN 38.15
83	-5	W ↓	31.14	37.41	6.27					
84	-5	M	29.74	36.45	6.71					
85	-8	W (NaHSO4)	31.12	38.81	7.69					
86	-8	W ↓	31.06	38.71	7.65					
87	-8	M	29.74	38.34	8.60					
88	-12	W (NaHSO4)	31.10	31.11	0.01					TB
89	-12	W ↓	31.05	31.05	0.00					
90	-12	M	29.93	29.91	-0.02		14:46			29.91
91	FA33385 -1	M	40.96	55.40	14.44	4/25/16	9:38	CG	PT	OOH, FS, 15mL IN CG 4/25/16
92	-1	M	40.94	56.65	15.71					
93	-2	M	40.94	56.65	15.71					
94	-2	M	40.76	56.56	15.80					
95	-3	M	40.69	53.75	13.06					
96	-3	M	41.06	55.40	14.34					
97	-4	W (AC2481)	—	—	5.57		9:49		EN	OOH, FS
98	-4	W ↓	—	—	5.06					
99	-4	M (AC2456)	—	—	5.28		9:55			
B1300	-1	W	—	—	4.52	4/25/16	11:28	CG	5030A	OOH, FS, bot #4 prep
01	-1	W	—	—	4.36					
02	-2	W	—	—	4.47		11:34			
03	-2	W	—	—	4.13					
B1304	-3	W	—	—	4.64		11:37			

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
B1305	FA33385-3	W (AC2481)	—	—	5.14	4/25/16	11:40	CG	5030A	OOH, FS, bot 4 prep
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
B1327										

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
B1166	FA33363-5	W	30.83	36.19	5.36	04/23/16	12:01	DKM	PT	IN
67	-5	W	30.72	36.70	5.98					
68	-5	M	29.72	34.61	4.89					
69	-6	W	31.02	36.75	5.73					
70	-6	W	31.07	36.72	5.65					
71	-6	M	29.94	35.59	5.65					
72	-7	W	30.89	35.50	4.61					
73	-7	W	30.97	35.95	4.98					
74	-7	M	29.91	34.79	4.88					
75	-8	W	30.93	36.63	5.70					
76	-8	W	31.45	37.36	5.91					
77	-8	M	29.87	35.97	6.10					
78	-9	W	30.61	35.61	5.00					
79	-9	W	30.94	36.23	5.29					
80	-9	M	29.90	35.97	6.07					
81	-10	W	30.96	36.23	5.27					
82	-10	W	30.98	36.04	5.06					
83	-10	M	29.87	34.69	4.82		12:13			
84	FA33350-1	W	30.86	37.64	6.78		12:16			
85	-1	W	30.86	37.51	6.65					
86	-1	M	30.06	36.53	6.47		12:18			
87	FA33357-1	W	30.72	37.61	6.89		12:21			
B11 89	-1	W	30.94	38.22	7.28		12:23			

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 VF2642 page 6 of 6

SGS ACCUTEST FA3359

366 of 373

7.7.5 7

ACCUTEST LABORATORIES SE

DATE:	4/21/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA13-P
PURGE PRESSURE:	9.9 psi
ANALYST:	Katie M

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

MS VOA13-P ANALYSIS LOG

METHODS:*	8260NEW
METHOD FILE:	8260P 042116.M
CALIB. DATE:	4/21/16
EM VOLTAGE:	1965V
BFB RESPONSE:	887567
RUN ID:	VP 1531

STANDARDS

BFB:	V20060
ICAL/CCV:	V20089, V20090, V20091, V20092, V20093, V20116
ISTD/SURR:	V20060
ICV/QC:	V20111, V20104, V20108, V20096, V20088, V20068
Purge Volume:	5mL

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
P 41196	BFB	—	W	1	8260		—	—		pass on autofind ✓
P 97	Blank	—	W	1	8260		—	—		✓
P 98	CC1485-5	—	W	1	8260		—	—		20µL → 50mL ✓
P 99	BS	—	W	2	8260	#7(SP) #32, #38(OP)	—	—		12.5µL → 40mL X
P 41200	BS	—	W	3	8260	#7(SP) #32, #38(OP)	—	—		12.5µL → 40mL X
P 01	Blank	—	W	~~4~~ 1	8260		—	—		✓
P 02	BFB	—	W	1	8260		—	—		pass on autofind ✓
P 03	IC1531-1	—	W	1	8260	#7(SP) #38(MP) #84(MP) NO #88	—	—		1µL → 100mL X
P 04	IC1531-2	—	W	2	8260	#7(SP) #32(SP)	—	—		5µL → 100mL ✓
P 05	IC1531-3	—	W	3	8260	#7(SP) #32, #38(OP)	—	—		10µL → 100mL ✓
P 06	IC1531-4	—	W	4	8260	#7(SP) #32, #38(OP)	—	—		25µL → 100mL ✓
P 07	ICC1531-5	—	W	5	8260	#7(SP) #32(OP)	—	—		20µL → 50mL ✓
P 08	IC1531-6	—	W	6	8260	#7(SP) #32(OP)	—	—		35µL → 50mL ✓
P 09	IC1531-7	—	W	7	8260	#7(SP) #32(OP)	—	—		50µL → 50mL ✓
P 10	Blank	—	W	8	8260		—	—		✓
P 11	IC1531-1	—	W	9	8260	#7(SP) #84(MP)	—	—		1µL → 100mL ✓
P 12	ICV1531-5	—	W	10	8260	#7(SP) #32(OP)	—	—		25µL → 50mL ✓
P										
P										
P										
P										
P										
P										
P										
P										
P										
P										

KAM 4/21/16

* 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: KAM

msvoa13_p_log.xls NF 07/11

ACCUTEST LABORATORIES SE

DATE:	4/25/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA13-P
PURGE PRESSURE:	9.9 psi
ANALYST:	Katie M

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

MS VOA13-P ANALYSIS LOG

METHODS:*	8260N GW
METHOD FILE:	8260P 042116.M
CALIB. DATE:	4/21/16
EM VOLTAGE:	1965V
BFB RESPONSE:	~~1079444~~ 1079944 KM 4/26/16
RUN ID:	VP 1535/1536

STANDARDS

BFB:	V20060
ICAL/CCV:	V20116, V20093, V20092, V20091, V20090, V20089
AFA:	V19845
ISTD/SURR:	V20060
ICV/QC:	V20111, V20109, V20108, V20096, V20088, V20063
Purge Volume:	5mL

DATA FILE	SAMPLE ID, DIL. (KM 4/25/16)	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
P 41304	~~BFB~~ Blank	—	W	1	8260		—	—		✓
P 05	BFB	—	W	1	8260		—	—		pass on autofind ✓
P 06	CC15531-5	—	W	1	8260	#7(SP) #32(OP)	—	—		20µL → 50mL ✓
P 07	BS	—	W	2	8260	#7(SP) #32(OP)	—	—		12.5µL → 40mL ✓
P 08	MB	—	W	3	8260		—	—		✓ 123-TCB
P 09	FA33359-3	1	W	4	8260C		1	ND		ND
P 10	4	1	W	5	8260C		1	ND		ND
P 11	MC45432-1	1	W	6	8260C	AFA	1	ND		✓
P 12	2	1	W	7	8260C		1	ND		ND
P 13	3	1	W	8	8260C		1	ND		ND
P 14	FA33182-1	1	W	9	8260		1	ND		✓
P 15	2	2	W	10	8260		1	ND		ND
P 16	3	2	W	11	8260		1	ND		ND
P 17	4	2	W	12	8260		1	ND		ND
P 18	5	2	W	13	8260		1	ND		✓
P 19	6	2	W	14	8260		1	ND		✓
P 20	FA33211-3	2	W	15	8260		1	ND		✓
P 21	FA33297-1	2	W	16	8260		1	ND		✓
P 22	3	2	W	17	8260		1	ND		✓
P 23	5	2	W	18	8260		1	ND		ND
P 24	FA33245-3	3	W	19	8260		1	ND		✓
P 25	FA33331-3,5X	2	W	20	8260		1	ND		10mL → 50mL ✓
P 26	FA33330-9,2.5X	2	W	21	8260		1	ND		20mL → 50mL ✓
P 27	FA33245-1,10X	3	W	22	8260		1	ND		5mL → 50mL ✓
P 28	2,2.5X	3	W	23	8260		1	ND		20mL → 50mL ✓
P 29	FA33182-2MS	3	W	24	8260	#7(SP) #32,#38(OP)	1	ND		12.5µL → 40mL ✓
P 30	FA33182-2MSD	3	W	284 (KM 4/25/16)	8260	#7(SP) #32,#38(OP)	1	ND		12.5µL → 40mL ✓

* 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: [signature]

msvoa13_p_log.xls NF 07/11

ACCUTEST LABORATORIES SE

DATE:	4/25/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA13-P
PURGE PRESSURE:	9.9 psi
ANALYST:	Katie M

MS VOA13-P ANALYSIS LOG

METHODS:*	8260NSEW
METHOD FILE:	8260P042116.M
CALIB. DATE:	4/21/16
EM VOLTAGE:	1965V
BFB RESPONSE:	1079944
RUN ID:	VP 1535/1536

STANDARDS

BFB:	V20060
ICAL/CCV:	V20116, V20093, V20092, V20091, V20090, V20089
AFA:	V19845
ISTD/SURR:	V20060
ICV/QC:	V20111, V20109, V20108, V20086, V20088, V20068
Purge Volume:	5mL

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
P 41331	MC45432-3MS	2	W	25	8260C	*7(SP)*32,*38(OP)	1	ND		12.5µL→40mL ✓
P 32	MC45432-3MSD	2	W	25	8260C	*7(SP)*32,*38(OP)	1	ND		12.5µL→40mL ✓
P 33	ECC1531-5	—	W	26	8260	*7(SP)*32(OP)	—	—		20µL→50mL
P 34	Blank AFA	—	W	27	8260		—	—		✓
P 35	Blank AFA	—	W	27	8260	*used as BFB in VA537	—	—		ND
P										
P										
P									

ACCUTEST LABORATORIES SE

DATE:	4/25/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA13-P
PURGE PRESSURE:	9.9 psi
ANALYST:	Katie M

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

MS VOA13-P ANALYSIS LOG

METHODS:*	8260N EW
METHOD FILE:	8260P 042116.M
CALIB. DATE:	4/21/16
EM VOLTAGE:	1965 V
BFB RESPONSE:	~~1079944~~ 1079944
RUN ID:	VP 1535/1536

KM 4/26/16

STANDARDS

BFB:	V20060
ICAL/CCV:	V20116, V20093, V20092, V20091, V20090, V20089
AFA:	V19845
ISTD/SURR:	V20060
ICV/QC:	V20111, V20109, V20100, V20096, V20088, V20068
Purge Volume:	5 mL

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	Cl ?	RR	COMMENTS
P 4/304	~~BFB~~ Blank (KM 4/25/16)	—	W	1	8260		—	—		✓
P 05	BFB	—	W	1	8260		—	—		pass on autofind ✓
P 06	CC1531-5	—	W	1	8260	#7(sp) #32(op)	—	—		20 µL → 50 mL ✓
P 07	BS	—	W	2	8260	#7(sp) #32(op)	—	—		12.5 µL → 40 mL ✓
P 08	MB	—	W	3	8260		—	—		✓ 123-TCB
P 09	FA33359-3	1	W	4	8260C		1	ND		ND
P 10	4	1	W	5	8260C		1	ND		ND
P 11	MC45432-1	1	W	6	8260C	AFA	1	ND		✓
P 12	2	1	W	7	8260C		1	ND		ND
P 13	3	1	W	8	8260C		1	ND		ND
P 14	FA33182-1	1	W	9	8260		1	ND		✓
P 15	2	2	W	10	8260		1	ND		ND
P 16	3	2	W	11	8260		1	ND		ND
P 17	4	2	W	12	8260		1	ND		ND
P 18	5	2	W	13	8260		1	ND		✓
P 19	6	2	W	14	8260		1	ND		✓
P 20	FA33211-3	2	W	15	8260		1	ND		✓
P 21	FA33297-1	2	W	16	8260		1	ND		✓
P 22	3	2	W	17	8260		1	ND		✓
P 23	5	2	W	18	8260		1	ND		ND
P 24	FA33245-3	3	W	19	8260		1	ND		✓
P 25	FA33331-3,5X	2	W	20	8260		1	ND		10 mL → 50 mL ✓
P 26	FA33330-9,2.5X	2	W	21	8260		1	ND		20 mL → 50 mL ✓
P 27	FA33245-1,10X	3	W	22	8260		1	ND		5 mL → 50 mL ✓
P 28	2,2.5X	3	W	23	8260		1	ND		20 mL → 50 mL ✓
P 29	FA33182-2MS	3	W	24	8260	#7(sp) #32,#38(op)	1	ND		12.5 µL → 40 mL ✓
P 30	FA33182-2MSD	3	W	284 (KM 4/25/16)	8260	#7(sp) #32,#38(op)	1	ND		12.5 µL → 40 mL ✓

* 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: [signature]

msvoa13_p_log.xls NF 07/11

ACCUTEST LABORATORIES SE

DATE:	4/25/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA13-P
PURGE PRESSURE:	9.9 psi
ANALYST:	Katie M

MS VOA13-P ANALYSIS LOG

METHODS:*	8260NEW
METHOD FILE:	8260P042116.M
CALIB. DATE:	4/21/16
EM VOLTAGE:	1965V
BFB RESPONSE:	1079944
RUN ID:	VP 1535/1536

STANDARDS

BFB:	V20060
ICAL/CCV:	V20116, V20093, V20092, V20091, V20090, V20089
AFA:	V19845
ISTD/SURR:	V20060
ICV/QC:	V20111, V20109, V20108, V20091, V20088, V20068
Purge Volume:	5mL

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
P 41331	MC45432-3MS	2	W	25	8260C	#7(bp)#32,#38(cp)	1	ND		12.5mL→40mL ✓
P 32	MC45432-3MSD	2	W	25	8260C	#7(bp)#32,#38(cp)	1	ND		12.5mL→40mL ✓
P 33	ECC1531-5	—	W	26	8260	#7(bp)#32(cp)	—	—		20µL→50mL
P 34	Blank AFA	—	W	27	8260		—	—		✓
P 35	Blank AFA	—	W	27	8260	*used as BFB in VP1537	—	—		ND

KM 4/25/16

* 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: [signature]

msvoa13_p_log.xls NF 07/11

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA33359
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: FA33359-2 **Analyzed:** 04-MAY-16 by FN **Method:** SM19 2540G
ClientID: 5-40S (10.5-11.5)

Wet Weight (Total)	9.22	g
Tare Weight	1.11	g
Dry Weight (Total)	7.25	g
Solids, Percent	75.7	%