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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, Humacao, PR

SM04.00.06

SGS Accutest Job Number: FA35235

Sampling Dates: 06/27/16 - 07/05/16

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: **184**

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

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SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: FA35235

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA35235-1	06/30/16	15:10	TT	07/06/16	AQ	Ground Water	OSGP4-GWD
FA35235-2	06/30/16	17:15	TT	07/06/16	AQ	Ground Water	OSGP4-GWS
FA35235-3	07/01/16	13:45	TT	07/06/16	AQ	Ground Water	OSGP5-GWD
FA35235-4	07/05/16	11:00	TT	07/06/16	AQ	Ground Water	OSGP5-GWS
FA35235-5	07/05/16	13:40	TT	07/06/16	AQ	Ground Water	OSGP6-GWD
FA35235-6	06/30/16	15:45	TT	07/06/16	AQ	Equipment Blank	BPEB-1
FA35235-7	07/01/16	14:25	TT	07/06/16	AQ	Equipment Blank	BPEB-2
FA35235-8	07/05/16	12:05	TT	07/06/16	AQ	Equipment Blank	BPEB-3
FA35235-9	06/27/16	07:30	TT	07/06/16	AQ	Trip Blank Water	TB070516

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Anderson, Mulholland & Associates **Job No:** FA35235

Site: BMSMC, Building 5 Area, Humacao, PR **Report Date** 7/8/2016 3:42:54 PM

8 Samples and 1 Trip Blank were collected on/between 06/27/2016 and 07/05/2016 and were received at SGS Accutest Southeast (SASE) on 07/06/2016 properly preserved, at 3.5 Deg. C and intact. These Samples received an SASE job number of FA35235. 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:** VN4344

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA35235-1MS, FA35235-1MSD were used as the QC samples indicated.

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: July 8, 2016

Lovelie Metzgar, QA Officer (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA35235-1MS	MSVOA	N0095751.D	1,2-Dichloroethane-D4, Carbon Tetrachloride
FA35235-1MSD	MSVOA	N0095752.D	1,2-Dichloroethane-D4, Carbon Tetrachloride
VN4343-IC4343	MSVOA	N0095701.D	1,4-Dichlorobenzene, Acrylonitrile, Carbon Tetrachloride, Trichlorofluoromethane
VN4343-IC4343	MSVOA	N0095702.D	Carbon Tetrachloride, Trichlorofluoromethane
VN4343-IC4343	MSVOA	N0095703.D	Carbon Tetrachloride
VN4343-IC4343	MSVOA	N0095704.D	Carbon Tetrachloride
VN4343-IC4343	MSVOA	N0095706.D	Carbon Tetrachloride
VN4343-IC4343	MSVOA	N0095707.D	Carbon Tetrachloride, Trichlorofluoromethane
VN4343-ICC4343	MSVOA	N0095705.D	Carbon Tetrachloride
VN4343-ICV4343	MSVOA	N0095710.D	1,2-Dichloroethane-D4, Carbon Tetrachloride
VN4344-BS	MSVOA	N0095730.D	1,2-Dichloroethane-D4, Carbon Tetrachloride
VN4344-CC4343	MSVOA	N0095729.D	1,2-Dichloroethane-D4, Carbon Tetrachloride

12 Manual Integrations were found for FA35235

Summary of Hits

Job Number: FA35235
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR
Collected: 06/27/16 thru 07/05/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

FA35235-1 **OSGP4-GWD**

No hits reported in this sample.

FA35235-2 **OSGP4-GWS**

No hits reported in this sample.

FA35235-3 **OSGP5-GWD**

No hits reported in this sample.

FA35235-4 **OSGP5-GWS**

No hits reported in this sample.

FA35235-5 **OSGP6-GWD**

No hits reported in this sample.

FA35235-6 **BPEB-1**

No hits reported in this sample.

FA35235-7 **BPEB-2**

No hits reported in this sample.

FA35235-8 **BPEB-3**

No hits reported in this sample.

FA35235-9 **TB070516**

No hits reported in this sample.

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	OSGP4-GWD		
Lab Sample ID:	FA35235-1	**Date Sampled:**	06/30/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	N0095742.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	104%		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:	OSGP4-GWS		
Lab Sample ID:	FA35235-2	**Date Sampled:**	06/30/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	N0095743.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	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	104%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	105%		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:	OSGP5-GWD		
Lab Sample ID:	FA35235-3	**Date Sampled:**	07/01/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	N0095744.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	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	104%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	104%		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:	OSGP5-GWS		
Lab Sample ID:	FA35235-4	**Date Sampled:**	07/05/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	N0095745.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	104%		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:	OSGP6-GWD		
Lab Sample ID:	FA35235-5	**Date Sampled:**	07/05/16
Matrix:	AQ - Ground Water	**Date Received:**	07/06/16
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	N0095746.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	106%		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:	BPEB-1		
Lab Sample ID:	FA35235-6	**Date Sampled:**	06/30/16
Matrix:	AQ - Equipment Blank	**Date Received:**	07/06/16
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	N0095747.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	106%		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:	BPEB-2		
Lab Sample ID:	FA35235-7	**Date Sampled:**	07/01/16
Matrix:	AQ - Equipment Blank	**Date Received:**	07/06/16
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	N0095748.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	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	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	108%		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:	BPEB-3		
Lab Sample ID:	FA35235-8	**Date Sampled:**	07/05/16
Matrix:	AQ - Equipment Blank	**Date Received:**	07/06/16
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	N0095749.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	107%		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:	TB070516		
Lab Sample ID:	FA35235-9	**Date Sampled:**	06/27/16
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/06/16
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	N0095750.D	1	07/07/16	KM	n/a	n/a	VN4344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	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	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	106%		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

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

FA35235

PAGE 1 OF 1

FL

4405 Vineland Road, Suite C-15, Orlando, Florida 32811
TEL. 407-425-6700 FAX. 407-425-0707
www.accutest.com

F 809960562230 Bottle Order Control #

Accutest Quote #

Accutest Job # Got from NJ

Client / Reporting Information

Company Name: Anderson Mulholland & Associates

Street Address: 2700 Westchester Avenue, Suite 417

City: Purchase State: NY Zip: 10577

Project Contact: Terry Taylor E-mail:

Phone #: 914-251-0400 Fax #:

Sampler(s) Name(s): N. Rivera, R. Stuart, R. O'Reilly, T. Taylor Phone #:

Project Information

Project Name: BMSMC Phase 2A Release Assessment

Street:

City: Humacao State: PR

Project #: 021

Client Purchase Order #:

Project Manager: Terry Taylor

Billing Information (if different from Report to)

Company Name:

Street Address:

City State Zip

Attention:

Requested Analysis (see TEST CODE sheet)

8260C: Benzene, MTBE, and tert-Amyl Alcohol ONLY

Matrix Codes

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	8260C: Benzene, MTBE, and tert-Amyl Alcohol ONLY	LAB USE ONLY
1	OSGP 4 - GWD		6/30/16	1510	TT	GW	3	3								X	
2	OSGP 4 - GWS		6/30/16	1715	TT	GW	3	3								X	
3	OSGP 5 - GWD		7/1/16	1345	TT	GW	3	3								X	
4	OSGP 5 - GWS		7/5/16	1100	TT	GW	3	3								X	
5	OSGP 6 - GWD		7/5/16	1340	TT	GW	3	3								X	
	~~OSGP~~ AX				AX	~~GW~~	~~3~~	~~3~~								X	
																X	
																X	
6	BPEB-1		6/30/16	1545	TT	EB	3	3								X	
7	BPEB-2		7/1/16	1425	TT	EB	3	3								X	
8	BPEB-3		7/5/16	1205	TT	EB	3	3								X	
9	TB070516		6/27/16	0730		TB	2	2								X	

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [x] 1 Day *EMERGENCY*

Approved By (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"
- [ ] 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

Only report Benzene, MTBE, and tert-Amyl Alcohol

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]	7/5/16 1700	1 Fed EX	2 FX		2 [signature] 7/6/16 400
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 # 196	Intact / Not intact	Preserved where applicable / On Ice (1) Cooler Temp. 3.5

5.1

5

FA35235: Chain of Custody
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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA35235 CLIENT: Anderson Mulholland PROJECT: BUSMC Phase 2A

DATE/TIME RECEIVED: 7/6/16 900 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8099 6056 2230

COOLER INFORMATION

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

TRIP BLANK INFORMATION

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

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.0
- [ ] OBSERVED TEMPS: 3.5
- [ ] CORRECTED TEMPS: 3.5 (USED FOR LIMS)

SAMPLE INFORMATION

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

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

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

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 7/6/16 REVIEWER SIGNATURE/DATE 7-6-16

NF 11/15 RECEIPTLOG040416.xls

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FedEx Express International Air Waybill

Origin Copy

1 From
Date 070516 Sender's FedEx Account Number
Sender's Name David Lindstrand Phone 787-487-4290
Company Anderson Mulholland Assoc. Inc.
Address BMS in care of
Address Rd #3, Km 77.5
City Humacao State/Province PR
Country USA ZIP/Postal Code 00791

2 To
Recipient's Name Sample Receiving Phone 407-425-6700
Company SGS Accutest - Florida
Address 4405 Vineland Rd.
Dept/Floor
Address
City Orlando State/Province FL
Country USA ZIP/Postal Code 32811
Recipient's Tax ID Number for Customs Purposes
e.g., GST/RFC/VAT/IN/EIN/ABN, or as locally required.

3 Shipment Information
For EU Only: Tick here if goods are not in free circulation and provide C.I.
Total Packages 1 Total Weight 15 lbs kg DIM 15,10,13 cm

Commodity Description	Harmonized Code	Country of Manufacture	Value for Customs
Groundwater Samples		USA	0

Has EEI been filed in AES? For U.S. Export Only: Check One
No EEI required, value $2,500 or less per Sch. B Number, no license required (NLR), not subject to ITAR.
If other than NLR, enter License Exception:
No EEI required, enter exemption number:
Yes – Enter AES proof of filing citation:
Total Declared Value for Carriage
Total Value for Customs (Specify Currency) $0

4 Express Package Service
Packages up to 150 lbs. / 68 kg. For packages over 150 lbs. (68 kg), use the FedEx Expanded Service Intl. Air Waybill.
Not all services and options are available to all destinations. Dangerous goods cannot be shipped using this Air Waybill.
1 FedEx Intl. Priority
6 FedEx Intl. First Available to select locations.
3 FedEx Intl. Economy FedEx Envelope and FedEx Pak rate not available.

5 Packaging
*These unique brown boxes with special pricing are provided by FedEx for FedEx Intl. Priority only.
6 FedEx Envelope 2 FedEx Pak 3 FedEx Box 4 FedEx Tube
1 Other PW FedEx 10kg Box* PX FedEx 25kg Box*

6 Special Handling
1 HOLD at FedEx Location 3 SATURDAY Delivery Available to select locations for FedEx Intl. Priority only.
Disregard

7 Payment
Complete payment options for both transportation charges and duties and taxes.
Bill transportation charges to:
Enter FedEx Account or Credit Card No. below.
1 Sender Acct. No. in Section 1 will be billed. 2 Recipient 3 Third Party 4 Credit Card 5 Cash Check/Cheque
Total Transportation
FedEx Acct. No. 3620-6423-6 [redacted]
Credit Card Exp. Date
Specify Currency
Bill duties and taxes to:
ALL shipments may be subject to Customs charges, which FedEx does not estimate prior to clearance.
Enter FedEx Acct. No. below.
1 Sender Acct. No. in Section 1 will be billed. 2 Recipient 3 Third Party 5 Cash Check/Cheque
FedEx Acct. No.

8 Your Internal Billing Reference
First 24 characters will appear on invoice.
BMS Phase 2A

9 Required Signature
Use of this Air Waybill constitutes your agreement to the Conditions of Contract on the back of this Air Waybill, and you represent that this shipment does not require a U.S. State Department License or contain dangerous goods. Certain international treaties, including the Warsaw Convention, may apply to this shipment and limit our liability for damage, loss, or delay, as described in the Conditions of Contract. WARNING: These commodities, technology, or software were exported from the United States in accordance with Export Administration Regulations. Diversion contrary to U.S. law prohibited.
Sender's Signature:
This is not authorization to deliver this shipment without a recipient signature.
Received above shipment in good order and condition. We agree to pay all charges, including Customs duties and taxes as applicable, and we agree to the Conditions of Carriage as stated on the reverse side of the Recipient's Copy.
Recipient's Signature:

568
PART: 158410 Rev. Date 11/09 ©1994-2009 FedEx PRINTED IN U.S.A. RRDA
Form ID No. RRDA 12/15

FedEx Tracking Number 8099 6056 2230 0402

Origin Station ID	Country Code/Destination Station ID	URSA Routing	Handling Units
WIIBC	XH TIXN	TIXN	Total Volume (cm)

Received At: 1 Reg. Stop 2 On-Call Stop 3 Drop Box 4 World Service Center 5 Station
Forms Attached: CI CO
Base Charge FedEx Emp. # 823737 Declared Val. Chrg. Other Audit Emp. # Date 7-5-16 Time 1641 ODA/OPA Del. Courier Emp. # Date Time Credit Card Auth.
Non-Negotiable International Air Waybill • ©1994-2008 FedEx

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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: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4344-MB	N0095732.D	1	07/07/16	KM	n/a	n/a	VN4344

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

FA35235-1, FA35235-2, FA35235-3, FA35235-4, FA35235-5, FA35235-6, FA35235-7, FA35235-8, FA35235-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
75-85-4	Tert-Amyl Alcohol	ND	20	6.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	104%	83-118%

Blank Spike Summary

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4344-BS	N0095730.D	1	07/07/16	KM	n/a	n/a	VN4344

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

FA35235-1, FA35235-2, FA35235-3, FA35235-4, FA35235-5, FA35235-6, FA35235-7, FA35235-8, FA35235-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.7	107	81-122
1634-04-4	Methyl Tert Butyl Ether	25	23.2	93	72-117
75-85-4	Tert-Amyl Alcohol	250	205	82	65-124

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35235-1MS	N0095751.D	1	07/07/16	KM	n/a	n/a	VN4344
FA35235-1MSD	N0095752.D	1	07/07/16	KM	n/a	n/a	VN4344
FA35235-1	N0095742.D	1	07/07/16	KM	n/a	n/a	VN4344

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

FA35235-1, FA35235-2, FA35235-3, FA35235-4, FA35235-5, FA35235-6, FA35235-7, FA35235-8, FA35235-9

CAS No.	Compound	FA35235-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		25	25.5	102	25	25.7	103	1	81-122/14
1634-04-4	Methyl Tert Butyl Ether	ND		25	22.6	90	25	22.5	90	0	72-117/14
75-85-4	Tert-Amyl Alcohol	ND		250	183	73	250	187	75	2	65-124/23

CAS No.	Surrogate Recoveries	MS	MSD	FA35235-1	Limits
1868-53-7	Dibromofluoromethane	101%	102%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	103%	102%	79-125%
2037-26-5	Toluene-D8	101%	101%	100%	85-112%
460-00-4	4-Bromofluorobenzene	104%	104%	104%	83-118%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VN4343-BFB
Lab File ID: N0095700.D
Instrument ID: GCMSN
Injection Date: 07/06/16
Injection Time: 08:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	84288	28.3		Pass
75	30.0 - 60.0% of mass 95	143027	48.0		Pass
95	Base peak, 100% relative abundance	298133	100.0		Pass
96	5.0 - 9.0% of mass 95	19629	6.58		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	227819	76.4		Pass
175	5.0 - 9.0% of mass 174	17465	5.86	(7.67) [a]	Pass
176	95.0 - 101.0% of mass 174	218069	73.1	(95.7) [a]	Pass
177	5.0 - 9.0% of mass 176	15068	5.05	(6.91) [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
VN4343-IC4343	N0095701.D	07/06/16	09:13	00:32	Initial cal 1
VN4343-IC4343	N0095702.D	07/06/16	09:42	01:01	Initial cal 2
VN4343-IC4343	N0095703.D	07/06/16	10:11	01:30	Initial cal 3
VN4343-IC4343	N0095704.D	07/06/16	10:40	01:59	Initial cal 4
VN4343-ICC4343	N0095705.D	07/06/16	11:07	02:26	Initial cal 5
VN4343-IC4343	N0095706.D	07/06/16	11:36	02:55	Initial cal 6
VN4343-IC4343	N0095707.D	07/06/16	12:05	03:24	Initial cal 7
VN4343-ICV4343	N0095710.D	07/06/16	13:34	04:53	Initial cal verification 5
VN4343-BS	N0095711.D	07/06/16	14:09	05:28	Blank Spike
VN4343-MB	N0095712.D	07/06/16	14:50	06:09	Method Blank
ZZZZZZ	N0095713.D	07/06/16	15:20	06:39	(unrelated sample)
FA34965-1	N0095714.D	07/06/16	15:49	07:08	(used for QC only; not part of job FA35235)
ZZZZZZ	N0095715.D	07/06/16	16:18	07:37	(unrelated sample)
ZZZZZZ	N0095716.D	07/06/16	16:47	08:06	(unrelated sample)
ZZZZZZ	N0095717.D	07/06/16	17:15	08:34	(unrelated sample)
ZZZZZZ	N0095718.D	07/06/16	17:44	09:03	(unrelated sample)
ZZZZZZ	N0095719.D	07/06/16	18:11	09:30	(unrelated sample)
ZZZZZZ	N0095720.D	07/06/16	18:40	09:59	(unrelated sample)
ZZZZZZ	N0095721.D	07/06/16	19:09	10:28	(unrelated sample)
ZZZZZZ	N0095722.D	07/06/16	19:36	10:55	(unrelated sample)
ZZZZZZ	N0095723.D	07/06/16	20:05	11:24	(unrelated sample)
FA34965-1MS	N0095724.D	07/06/16	20:33	11:52	Matrix Spike
FA34965-1MSD	N0095725.D	07/06/16	21:00	12:19	Matrix Spike Duplicate
VN4343-ECC4343	N0095726.D	07/06/16	21:28	12:47	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VN4344-BFB
Lab File ID: N0095728.D
Instrument ID: GCMSN
Injection Date: 07/07/16
Injection Time: 07:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	80115	27.6		Pass
75	30.0 - 60.0% of mass 95	141320	48.6		Pass
95	Base peak, 100% relative abundance	290517	100.0		Pass
96	5.0 - 9.0% of mass 95	19675	6.77		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	216832	74.6		Pass
175	5.0 - 9.0% of mass 174	16284	5.61	(7.51) [a]	Pass
176	95.0 - 101.0% of mass 174	206123	71.0	(95.1) [a]	Pass
177	5.0 - 9.0% of mass 176	13673	4.71	(6.63) [b]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VN4344-CC4343	N0095729.D	07/07/16	08:10	00:29	Continuing cal 5
VN4344-BS	N0095730.D	07/07/16	08:40	00:59	Blank Spike
VN4345-BS	N0095731.D	07/07/16	09:11	01:30	Blank Spike
VN4344-MB	N0095732.D	07/07/16	09:40	01:59	Method Blank
OP60973-LB	N0095734.D	07/07/16	10:38	02:57	Leachate Blank
FA35012-5	N0095736.D	07/07/16	11:43	04:02	(used for QC only; not part of job FA35235)
FA35012-5DUP	N0095737.D	07/07/16	12:12	04:31	Duplicate
FA35012-6	N0095738.D	07/07/16	12:41	05:00	(used for QC only; not part of job FA35235)
ZZZZZZ	N0095739.D	07/07/16	13:10	05:29	(unrelated sample)
ZZZZZZ	N0095740.D	07/07/16	13:39	05:58	(unrelated sample)
ZZZZZZ	N0095741.D	07/07/16	14:08	06:27	(unrelated sample)
FA35235-1	N0095742.D	07/07/16	14:37	06:56	OSGP4-GWD
FA35235-2	N0095743.D	07/07/16	15:06	07:25	OSGP4-GWS
FA35235-3	N0095744.D	07/07/16	15:35	07:54	OSGP5-GWD
FA35235-4	N0095745.D	07/07/16	16:04	08:23	OSGP5-GWS
FA35235-5	N0095746.D	07/07/16	16:32	08:51	OSGP6-GWD
FA35235-6	N0095747.D	07/07/16	16:59	09:18	BPEB-1
FA35235-7	N0095748.D	07/07/16	17:27	09:46	BPEB-2
FA35235-8	N0095749.D	07/07/16	17:56	10:15	BPEB-3
FA35235-9	N0095750.D	07/07/16	18:25	10:44	TB070516
FA35235-1MS	N0095751.D	07/07/16	18:55	11:14	Matrix Spike
FA35235-1MSD	N0095752.D	07/07/16	19:19	11:38	Matrix Spike Duplicate
FA35012-6MS	N0095753.D	07/07/16	19:46	12:05	Matrix Spike
FA35012-6MSD	N0095754.D	07/07/16	20:13	12:32	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Sample: VN4344-BFB
Lab File ID: N0095728.D
Instrument ID: GCMSN
Injection Date: 07/07/16
Injection Time: 07:41

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VN4344-ECC4343	N0095755.D	07/07/16	20:41	13:00	Ending cal 5

Volatile Internal Standard Area Summary

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VN4344-CC4343	**Injection Date:**	07/07/16
Lab File ID:	N0095729.D	**Injection Time:**	08:10
Instrument ID:	GCMSN	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	1340475	7.28	977930	10.37	534471	12.73	109181	4.93
Check Std [b]	1375751	7.28	993579	10.37	542600	12.73	103159	4.92
Upper Limit [c]	2751502	7.78	1987158	10.87	1085200	13.23	206318	5.42
Lower Limit [d]	687876	6.78	496790	9.87	271300	12.23	51580	4.42

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VN4344-BS	1358654	7.28	980229	10.37	530346	12.73	101365	4.92
VN4345-BS	1344458	7.28	971675	10.37	529999	12.73	91793	4.92
VN4344-MB	1315730	7.28	948050	10.37	498444	12.73	97683	4.92
OP60973-LB	1314304	7.28	960633	10.37	504292	12.73	93930	4.92
FA35012-5	1336349	7.28	971215	10.37	512491	12.73	95186	4.92
FA35012-5DUP [e]	1302364	7.28	950668	10.37	498839	12.73	97020	4.92
FA35012-6	1309443	7.28	951243	10.37	499446	12.73	95040	4.93
ZZZZZZ	1315558	7.28	953261	10.37	497399	12.73	93672	4.92
ZZZZZZ	1316083	7.28	956008	10.37	503137	12.73	100253	4.92
ZZZZZZ	1305711	7.28	953772	10.37	499369	12.73	101922	4.93
FA35235-1	1306525	7.28	944927	10.37	500219	12.73	98363	4.93
FA35235-2	1318773	7.28	966830	10.37	495497	12.73	104139	4.94
FA35235-3	1322035	7.28	957164	10.37	497665	12.73	103525	4.94
FA35235-4	1312496	7.28	957621	10.37	499036	12.73	104508	4.92
FA35235-5	1309984	7.28	946951	10.37	494194	12.73	104744	4.92
FA35235-6	1299663	7.28	939760	10.37	479247	12.73	101544	4.93
FA35235-7	1317548	7.28	949383	10.37	482633	12.73	102815	4.92
FA35235-8	1302794	7.28	945192	10.37	477137	12.73	97991	4.93
FA35235-9	1322284	7.28	947994	10.37	490652	12.73	96087	4.93
FA35235-1MS	1334590	7.28	958484	10.37	515410	12.73	103820	4.93
FA35235-1MSD	1348280	7.28	959240	10.37	507286	12.73	111435	4.92
FA35012-6MS [e]	1355196	7.28	961310	10.37	518651	12.73	107647	4.93
FA35012-6MSD [e]	1291739	7.28	920322	10.37	488535	12.73	109061	4.92
VN4344-ECC4343	1376743	7.28	989339	10.37	534467	12.73	110583	4.93

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

(a) Initial Cal is: VN4343-ICC4343 N0095705.D 07/06/16 11:07
(b) Check Std Limit = -50 to +100% of initial cal area.
(c) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR

Check Std:	VN4344-CC4343	**Injection Date:**	07/07/16
Lab File ID:	N0095729.D	**Injection Time:**	08:10
Instrument ID:	GCMSN	**Method:**	SW846 8260C

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

(d) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(e) Sample was treated with an anti-foaming agent.

Volatile Surrogate Recovery Summary

Job Number: FA35235
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
FA35235-1	N0095742.D	100	102	100	104
FA35235-2	N0095743.D	98	104	98	105
FA35235-3	N0095744.D	99	104	99	104
FA35235-4	N0095745.D	101	105	100	104
FA35235-5	N0095746.D	100	104	100	106
FA35235-6	N0095747.D	100	103	100	106
FA35235-7	N0095748.D	99	104	101	108
FA35235-8	N0095749.D	100	105	101	107
FA35235-9	N0095750.D	99	104	100	106
FA35235-1MS	N0095751.D	101	99	101	104
FA35235-1MSD	N0095752.D	102	103	101	104
VN4344-BS	N0095730.D	100	98	101	101
VN4344-MB	N0095732.D	98	100	100	104

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%

Initial Calibration Summary

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR
Sample: VN4343-ICC4343
Lab FileID: N0095705.D

Response Factor Report MSVOA8

Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Calibration Files
1 =N0095701.D 2 =N0095702.D 3 =N0095703.D 4 =N0095704.D
5 =N0095705.D 6 =N0095706.D 7 =N0095707.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.428	0.429	0.434	0.452	0.448	0.415	0.428	0.433	2.90
3)P Chloromethane	0.786	0.659	0.683	0.695	0.686	0.671	0.668	0.693	6.19
4)C Vinyl Chloride	0.510	0.479	0.488	0.509	0.497	0.484	0.490	0.494	2.46
5) Bromomethane	0.327	0.254	0.241	0.211	0.191	0.171	0.159	0.222	26.07
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9990									
Response Ratio = 0.00000 + 0.21656 *A + -0.02962 *A^2									
6) Chloroethane	0.255	0.224	0.229	0.199	0.164	0.120	0.095	0.184	32.49
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9928									
Response Ratio = 0.00000 + 0.21083 *A + -0.05914 *A^2									
7) Trichlorofluorome	0.450	0.423	0.438	0.432	0.412	0.354	0.335	0.406	10.88
8) Ethyl Ether	0.313	0.329	0.316	0.299	0.302	0.276	0.257	0.299	8.26
9) 1,2-Dichlorotrifl	0.375	0.411	0.355	0.358	0.362	0.365	0.297	0.360	9.35
10)C 1,1-Dichloroethen	0.604	0.643	0.569	0.588	0.587	0.572	0.496	0.580	7.70
11) Freon 113	0.323	0.341	0.315	0.319	0.316	0.308	0.295	0.317	4.44
12) Carbon Disulfide	0.975	1.046	0.967	0.976	0.987	0.961	0.938	0.979	3.42
13) Iodomethane	0.559	0.621	0.567	0.571	0.591	0.580	0.576	0.581	3.48
14) Methylene Chlorid	0.955	0.815	0.692	0.662	0.667	0.642	0.631	0.723	16.45
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.68295 *A + -0.02638 *A^2									
15) Acetone	0.025	0.028	0.026	0.026	0.027	0.028	0.026	0.027	3.87
16) Methyl acetate	0.029	0.037	0.034	0.034	0.036	0.036	0.036	0.035	8.00
17) trans-1,2-Dichlor	0.576	0.603	0.558	0.553	0.562	0.541	0.534	0.561	4.12
18) Hexane	0.498	0.501	0.446	0.457	0.450	0.426	0.421	0.457	6.92
19) Methyl Tert Butyl	0.821	0.889	0.836	0.832	0.861	0.836	0.823	0.843	2.91
20) Di-isopropyl ethe	1.713	1.821	1.715	1.717	1.762	1.709	1.665	1.729	2.86
21)P 1,1-Dichloroethan	0.677	0.731	0.676	0.691	0.706	0.680	0.663	0.689	3.32
22) Acrylonitrile	0.109	0.115	0.128	0.124	0.133	0.134	0.135	0.126	8.18
23) ETBE	1.275	1.419	1.330	1.342	1.386	1.343	1.305	1.343	3.58
24) Vinyl acetate	0.859	0.884	0.966	0.951	0.969	0.915	0.854	0.914	5.40
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995									
Response Ratio = 0.00000 + 0.99303 *A + -0.01291 *A^2									
25) cis-1,2-Dichloroe	0.375	0.395	0.363	0.363	0.378	0.364	0.363	0.372	3.23
26) 2,2-Dichloropropa	0.447	0.489	0.457	0.469	0.464	0.450	0.442	0.460	3.48
27) Bromochloromethan	0.164	0.183	0.168	0.170	0.177	0.172	0.171	0.172	3.56
28) Cyclohexane	0.808	0.869	0.805	0.825	0.819	0.798	0.787	0.816	3.27
29)C Chloroform	0.639	0.650	0.603	0.601	0.608	0.585	0.566	0.608	4.76
30) Tetrahydrofuran	0.173	0.097	0.093	0.089	0.092	0.093	0.093	0.104	29.24
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.09117 *A + 0.00080 *A^2									
31)S Dibromofluorometh	0.263	0.262	0.263	0.258	0.259	0.259	0.257	0.260	0.91

Initial Calibration Summary

Job Number: FA35235 **Sample:** VN4343-ICC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095705.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
32)  Carbon Tetrachlor 0.437 0.458 0.426 0.445 0.458 0.444 0.456 0.446   2.68
33)  1,1,1-Trichloroet 0.531 0.579 0.549 0.551 0.558 0.537 0.532 0.548   3.12
34)  2-Butanone        0.125 0.136 0.138 0.141 0.151 0.156 0.150 0.143   7.43
35)  1,1-Dichloroprope 0.453 0.494 0.441 0.450 0.454 0.441 0.430 0.452   4.48
36)  Benzene           1.243 1.321 1.224 1.215 1.234 1.184 1.147 1.224   4.41
37)  TAME              0.812 0.878 0.815 0.832 0.854 0.831 0.815 0.834   2.95
38)S 1,2-Dichloroethan 0.346 0.346 0.346 0.349 0.353 0.326 0.331 0.342   2.93
39)  1,2-Dichloroethan 0.628 0.598 0.552 0.540 0.551 0.528 0.509 0.558   7.35
40)  Trichloroethene   0.379 0.367 0.337 0.343 0.340 0.332 0.319 0.345   5.97
41)  Methylcyclohexane 0.575 0.628 0.584 0.596 0.590 0.562 0.554 0.584   4.18
42)  Dibromomethane    0.157 0.186 0.171 0.174 0.179 0.176 0.172 0.174   5.08
43)C 1,2-Dichloropropa 0.390 0.410 0.382 0.390 0.401 0.390 0.385 0.392   2.44
44)  Bromodichlorometh 0.363 0.431 0.403 0.424 0.442 0.430 0.423 0.416   6.36
45)  2-Chloroethyl vin 0.174 0.207 0.218 0.221 0.221 0.214 0.208 0.209   7.84
46)  cis-1,3-Dichlorop 0.423 0.495 0.477 0.500 0.516 0.508 0.496 0.488   6.32

47) I   Chlorobenzene-d5      ----------------ISTD---------------------
48)S Toluene-d8        1.315 1.333 1.327 1.323 1.325 1.332 1.345 1.329   0.72
49)C Toluene           1.888 1.988 1.835 1.809 1.827 1.763 1.713 1.832   4.83
50)  2-Nitropropane    0.072 0.079 0.082 0.096 0.108 0.111 0.113 0.094  17.67
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
              Response Ratio = 0.00000 + 0.09888 *A + 0.00145 *A^2

51)  4-Methyl-2-pentan 0.536 0.481 0.485 0.476 0.488 0.481 0.444 0.484   5.56
52)  trans-1,3-Dichlor 0.416 0.540 0.531 0.558 0.575 0.560 0.541 0.532   9.97
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 0.58488 *A + -0.02095 *A^2

53)  Tetrachloroethene 0.503 0.527 0.506 0.520 0.533 0.565 0.523 0.525   3.91
54)  1,1,2-Trichloroet 0.251 0.301 0.285 0.291 0.299 0.293 0.285 0.287   5.82
55)  Dibromochlorometh 0.282 0.393 0.387 0.418 0.441 0.446 0.446 0.402  14.53
56)  1,3-Dichloropropa 0.587 0.644 0.610 0.618 0.634 0.622 0.606 0.617   3.01
57)  1,2-Dibromoethane 0.288 0.356 0.345 0.353 0.366 0.364 0.358 0.347   7.83
58)  2-hexanone        0.345 0.317 0.328 0.324 0.336 0.339 0.318 0.330   3.31
59)  1-Chlorohexane    0.556 0.651 0.614 0.622 0.636 0.611 0.608 0.614   4.82
60)C Ethylbenzene      2.199 2.234 2.052 2.044 2.020 1.918 1.813 2.040   7.21
61)P Chlorobenzene     1.247 1.344 1.250 1.228 1.254 1.210 1.162 1.242   4.43
62)  1,1,1,2-Tetrachlo 0.384 0.444 0.431 0.447 0.460 0.451 0.451 0.438   5.81
63)  m,p-Xylene        1.627 1.754 1.623 1.584 1.569 1.457 1.353 1.567   8.25
64)  o-Xylene          1.569 1.766 1.650 1.632 1.664 1.582 1.530 1.628   4.76
65)  Styrene           1.077 1.304 1.248 1.289 1.323 1.298 1.256 1.256   6.65
66)P Bromoform         0.158 0.186 0.188 0.209 0.238 0.246 0.249 0.210  16.79
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9992
              Response Ratio = 0.00000 + 0.21917 *A + 0.01595 *A^2

67)  Isopropylbenzene  2.004 2.159 2.041 2.023 2.033 1.927 1.868 2.008   4.59

68) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
69)S 4-Bromofluorobenz 0.982 0.984 0.977 0.960 0.957 0.955 0.956 0.967   1.35
70)  n-Propylbenzene   4.328 4.754 4.366 4.288 4.298 3.990 3.736 4.252   7.49
71)  Bromobenzene      0.926 1.049 0.963 0.961 0.997 0.967 0.946 0.973   4.07
72)P 1,1,2,2-Tetrachlo 0.671 0.738 0.716 0.714 0.755 0.735 0.709 0.720   3.74
73)  1,3,5-Trimethylbe 3.183 3.529 3.280 3.274 3.252 3.048 2.848 3.202   6.62
74)  2-Chlorotoluene   3.093 3.209 3.002 2.932 2.892 2.694 2.521 2.906   8.06
75)  trans-1,4-Dichlor 0.201 0.279 0.266 0.285 0.307 0.311 0.309 0.280  13.85
76)  1,2,3-Trichloropr 0.194 0.219 0.216 0.219 0.224 0.224 0.216 0.216   4.72
77)  Cyclohexanone     0.025 0.026 0.026 0.027 0.028 0.029 0.027 0.027   4.64
78)  4-Chlorotoluene   2.816 3.058 2.797 2.788 2.786 2.655 2.537 2.777   5.76
79)  tert-Butylbenzene 2.094 2.117 1.900 1.865 1.859 1.761 1.692 1.898   8.33
80)  1,2,4-Trimethylbe 3.221 3.536 3.250 3.230 3.249 3.106 2.928 3.217   5.67
```

Initial Calibration Summary

Job Number: FA35235 **Sample:** VN4343-ICC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095705.D
Project: BMSMC, Building 5 Area, Humacao, PR

```
81)  sec-Butylbenzene  4.005 4.488 4.145 4.121 4.054 3.842 3.643 4.043   6.52
82)  4-Isopropyltoluen 3.514 4.021 3.726 3.733 3.737 3.535 3.370 3.662   5.76
83)  1,3-Dichlorobenze 1.859 2.014 1.851 1.875 1.918 1.848 1.792 1.880   3.72
84)  1,4-Dichlorobenze 2.053 2.128 1.948 1.918 1.957 1.902 1.838 1.963   4.97
85)  n-Butylbenzene    1.700 2.050 1.940 1.944 1.958 1.876 1.789 1.894   6.16
86)  Benzyl Chloride   0.115 0.217 0.235 0.277 0.305 0.312 0.312 0.253  28.35
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
              Response Ratio = 0.00000 + 0.28718 *A + 0.01364 *A^2

87)  1,2-Dichlorobenze 1.726 1.869 1.753 1.753 1.800 1.743 1.688 1.762   3.29
88)  1,2-Dibromo-3-Chl 0.109 0.106 0.108 0.122 0.127 0.130 0.128 0.119   8.75
89)  Hexachlorobutadie 0.642 0.709 0.638 0.647 0.643 0.637 0.622 0.648   4.28
90)  1,2,4-Trichlorobe 1.116 1.244 1.179 1.192 1.226 1.218 1.178 1.193   3.54
91)  Naphthalene       1.856 2.092 2.048 2.092 2.214 2.169 2.100 2.082   5.48
92)  1,2,3-Trichlorobe 0.981 1.075 1.030 1.026 1.046 1.044 1.024 1.032   2.76

93) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
94)  acrolein          3.790 3.146 3.378 3.219 3.248 3.140 3.251 3.311   6.83
95)  Tert Butyl Alcoho 1.766 1.769 1.478 1.516 1.536 1.505 1.496 1.581   8.14
96)  tert Amyl alcohol 1.117 1.245 1.263 1.263 1.325 1.357 1.344 1.274   6.41
97)  1,4-Dioxane       0.067 0.136 0.138 0.138 0.140 0.138 0.137 0.127  20.98
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  1.0000
              Response Ratio = 0.00000 + 0.13974 *A + -0.00035 *A^2

--------------------------------------------------------------------------------
(#) = Out of Range

          N-JUL06-2016.m        Thu Jul 07 10:39:58 2016
```

Initial Calibration Verification

Job Number: FA35235
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, Humacao, PR
Sample: VN4343-ICV4343
Lab FileID: N0095710.D

Evaluate Continuing Calibration Report

Data File : C:\MSDchem\2\DATA\070616\N0095710.D Vial: 10
Acq On : 6 Jul 2016 1:34 pm Operator: katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,, Multiplr: 1.00
MS Integration Params: Tiny.p

Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Jul 07 07:57:29 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	98	0.00	7.28
2		Dichlorodifluoromethane	0.433	0.390	9.9	85	0.00	2.57
3	P	Chloromethane	0.693	0.655	5.5	93	-0.01	2.75
4	C	Vinyl Chloride	0.494	0.432	12.6	85	0.00	2.89
		----------	Amount	Calc.	%Drift		----------	
5		Bromomethane	40.000	38.500	3.8	96	0.00	3.23
6		Chloroethane	40.000	34.727	13.2	88	0.00	3.37
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.406	0.362	10.8	86	0.00	3.57
8		Ethyl Ether	0.299	0.288	3.7	93	0.00	3.82
9		1,2-Dichlorotrifluoroetha	0.360	0.376	-4.4	102	0.00	4.04
10	C	1,1-Dichloroethene	0.580	0.653	-12.6	109	0.00	4.07
11		Freon 113	0.317	0.305	3.8	94	0.00	4.13
12		Carbon Disulfide	0.979	0.951	2.9	94	0.00	4.13
13		Iodomethane	0.581	0.570	1.9	95	0.00	4.24
		----------	Amount	Calc.	%Drift		----------	
14		Methylene Chloride	40.000	43.062	-7.7	104	0.00	4.67
		----------	AvgRF	CCRF	%Dev		----------	
15		Acetone	0.027	0.026	3.7	93	0.00	4.70
16		Methyl acetate	0.035	0.037	-5.7	101	0.00	4.81
17		trans-1,2-Dichloroethene	0.561	0.652	-16.2	114	0.00	4.83
18		Hexane	0.457	0.462	-1.1	100	0.00	4.88
19		Methyl Tert Butyl Ether	0.843	0.854	-1.3	97	0.00	4.94
20		Di-isopropyl ether	1.729	1.729	0.0	96	0.00	5.29
21	P	1,1-Dichloroethane	0.689	0.766	-11.2	106	0.00	5.46
22		Acrylonitrile	0.126	0.126	0.0	93	0.00	5.51
23		ETBE	1.343	1.329	1.0	94	0.00	5.67
24		Vinyl acetate	0.914	0.882	3.5	89	0.00	5.67
25		cis-1,2-Dichloroethene	0.372	0.381	-2.4	99	0.00	6.02
26		2,2-Dichloropropane	0.460	0.512	-11.3	108	-0.01	6.13
27		Bromochloromethane	0.172	0.176	-2.3	97	0.00	6.22
28		Cyclohexane	0.816	0.817	-0.1	98	0.00	6.25
29	C	Chloroform	0.608	0.630	-3.6	102	0.00	6.28
		----------	Amount	Calc.	%Drift		----------	
30		Tetrahydrofuran	40.000	42.783	-7.0	105	0.00	6.46
		----------	AvgRF	CCRF	%Dev		----------	

Initial Calibration Verification

Job Number: FA35235 **Sample:** VN4343-ICV4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095710.D
Project: BMSMC, Building 5 Area, Humacao, PR

31	S	Dibromofluoromethane	0.260	0.259	0.4	98	0.00	6.47
32		Carbon Tetrachloride	0.446	0.490	-9.9	105	0.00	6.46
33		1,1,1-Trichloroethane	0.548	0.554	-1.1	97	0.00	6.52
34		2-Butanone	0.143	0.152	-6.3	98	0.00	6.57
35		1,1-Dichloropropene	0.452	0.467	-3.3	101	0.00	6.63
36		Benzene	1.224	1.289	-5.3	102	0.00	6.88
37		TAME	0.834	0.827	0.8	95	0.00	6.97
38	S	1,2-Dichloroethane-d4	0.342	0.339	0.9	94	0.00	7.01
39		1,2-Dichloroethane	0.558	0.579	-3.8	103	0.00	7.08
40		Trichloroethene	0.345	0.359	-4.1	103	0.00	7.45
41		Methylcyclohexane	0.584	0.598	-2.4	99	0.00	7.46
42		Dibromomethane	0.174	0.188	-8.0	103	0.00	7.89
43	C	1,2-Dichloropropane	0.392	0.415	-5.9	102	0.00	7.97
44		Bromodichloromethane	0.416	0.461	-10.8	102	0.00	8.03
45		2-Chloroethyl vinyl ether	0.209	0.216	-3.3	96	0.00	8.55
46		cis-1,3-Dichloropropene	0.488	0.548	-12.3	104	0.00	8.64
47	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00	10.37
48	S	Toluene-d8	1.329	1.326	0.2	98	0.00	8.82
49	C	Toluene	1.832	1.892	-3.3	102	0.00	8.88
		----------	Amount	Calc.	%Drift		----------	
50		2-Nitropropane	200.000	188.680	5.7	90	0.00	9.10
		----------	AvgRF	CCRF	%Dev		----------	
51		4-Methyl-2-pentanone	0.484	0.480	0.8	97	0.00	9.22
		----------	Amount	Calc.	%Drift		----------	
52		trans-1,3-Dichloropropene	40.000	46.138	-15.3	112	0.00	9.28
		----------	AvgRF	CCRF	%Dev		----------	
53		Tetrachloroethene	0.525	0.552	-5.1	102	0.00	9.27
54		1,1,2-Trichloroethane	0.287	0.316	-10.1	104	0.00	9.44
55		Dibromochloromethane	0.402	0.468	-16.4	104	0.00	9.63
56		1,3-Dichloropropane	0.617	0.629	-1.9	98	0.00	9.72
57		1,2-Dibromoethane	0.347	0.388	-11.8	104	0.00	9.89
58		2-hexanone	0.330	0.327	0.9	96	0.00	10.04
59		1-Chlorohexane	0.614	0.631	-2.8	98	0.00	10.33
60	C	Ethylbenzene	2.040	2.102	-3.0	102	0.00	10.39
61	P	Chlorobenzene	1.242	1.327	-6.8	104	0.00	10.39
62		1,1,1,2-Tetrachloroethane	0.438	0.493	-12.6	105	0.00	10.44
63		m,p-Xylene	1.567	1.631	-4.1	102	0.00	10.53
64		o-Xylene	1.628	1.710	-5.0	101	0.00	10.97
65		Styrene	1.256	1.387	-10.4	103	0.00	11.02
		----------	Amount	Calc.	%Drift		----------	
66	P	Bromoform	40.000	42.811	-7.0	103	0.00	11.08
		----------	AvgRF	CCRF	%Dev		----------	
67		Isopropylbenzene	2.008	2.152	-7.2	104	0.00	11.27
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	12.73
69	S	4-Bromofluorobenzene	0.967	0.957	1.0	99	0.00	11.58
70		n-Propylbenzene	4.252	4.475	-5.2	103	0.00	11.69
71		Bromobenzene	0.973	1.017	-4.5	101	0.00	11.71
72	P	1,1,2,2-Tetrachloroethane	0.720	0.775	-7.6	102	0.00	11.77
73		1,3,5-Trimethylbenzene	3.202	3.282	-2.5	100	0.00	11.88
74		2-Chlorotoluene	2.906	2.998	-3.2	103	0.00	11.88
75		trans-1,4-Dichloro-2-Bute	0.280	0.306	-9.3	99	0.00	11.94
76		1,2,3-Trichloropropane	0.216	0.239	-10.6	106	0.00	11.92

Initial Calibration Verification

Job Number: FA35235 **Sample:** VN4343-ICV4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095710.D
Project: BMSMC, Building 5 Area, Humacao, PR

77	Cyclohexanone	0.027	0.026	3.7	92	0.00	11.98
78	4-Chlorotoluene	2.777	2.874	-3.5	102	0.00	12.05
79	tert-Butylbenzene	1.898	1.933	-1.8	103	0.00	12.21
80	1,2,4-Trimethylbenzene	3.217	3.339	-3.8	102	0.00	12.28
81	sec-Butylbenzene	4.043	4.232	-4.7	103	0.00	12.40
82	4-Isopropyltoluene	3.662	3.880	-6.0	103	0.00	12.53
83	1,3-Dichlorobenzene	1.880	1.991	-5.9	103	0.00	12.66
84	1,4-Dichlorobenzene	1.963	2.024	-3.1	103	0.00	12.75
85	n-Butylbenzene	1.894	1.995	-5.3	101	0.00	12.97
	----------	Amount	Calc.	%Drift		----------	
86	Benzyl Chloride	40.000	42.427	-6.1	103	0.00	12.99
	----------	AvgRF	CCRF	%Dev		----------	
87	1,2-Dichlorobenzene	1.762	1.858	-5.4	102	0.00	13.19
88	1,2-Dibromo-3-Chloropropa	0.119	0.133	-11.8	104	0.00	13.96
89	Hexachlorobutadiene	0.648	0.660	-1.9	102	0.00	14.52
90	1,2,4-Trichlorobenzene	1.193	1.268	-6.3	103	0.00	14.57
91	Naphthalene	2.082	2.486	-19.4	111	0.00	14.85
92	1,2,3-Trichlorobenzene	1.032	1.104	-7.0	105	0.00	15.01
93 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	100	0.00	4.93
94	acrolein	3.311	3.928	-18.6	121	0.00	4.41
95	Tert Butyl Alcohol	1.581	1.520	3.9	99	0.00	5.00
96	tert Amyl alcohol	1.274	1.267	0.5	96	0.00	7.13
	----------	Amount	Calc.	%Drift		----------	
97	1,4-Dioxane	800.000	780.436	2.4	97	0.00	8.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0095705.D N-JUL06-2016.m Thu Jul 07 10:39:49 2016

6.7.2

6

Continuing Calibration Summary

Job Number: FA35235 **Sample:** VN4344-CC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095729.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDchem\2\DATA\070716\N0095729.D          Vial: 1
Acq On    :  7 Jul 2016   8:10 am                    Operator: katiem
Sample    : CC4343-5                                 Inst    : MSVOA8
Misc      : MS34337,VN4344,,,,,                      Multiplr: 1.00
MS Integration Params: Tiny.p

Method       : C:\MSDchem\2\METHODS\N-JUL06-2016.m (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Thu Jul 07 07:57:29 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	103	0.00	7.28
2		Dichlorodifluoromethane	0.433	0.433	0.0	99	0.00	2.58
3	P	Chloromethane	0.693	0.712	-2.7	106	0.00	2.75
4	C	Vinyl Chloride	0.494	0.498	-0.8	103	0.00	2.89
		----------	Amount	Calc.	%Drift		----------	
5		Bromomethane	40.000	43.146	-7.9	111	0.00	3.23
6		Chloroethane	40.000	46.414	-16.0	113	0.00	3.37
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.406	0.421	-3.7	105	0.00	3.58
8		Ethyl Ether	0.299	0.288	3.7	98	0.00	3.82
9		1,2-Dichlorotrifluoroetha	0.360	0.340	5.6	96	0.00	4.03
10	C	1,1-Dichloroethene	0.580	0.557	4.0	97	0.00	4.07
11		Freon 113	0.317	0.302	4.7	98	0.00	4.13
12		Carbon Disulfide	0.979	0.953	2.7	99	0.00	4.13
13		Iodomethane	0.581	0.555	4.5	96	0.00	4.24
		----------	Amount	Calc.	%Drift		----------	
14		Methylene Chloride	40.000	38.929	2.7	99	0.00	4.67
		----------	AvgRF	CCRF	%Dev		----------	
15		Acetone	0.027	0.025	7.4	94	0.00	4.70
16		Methyl acetate	0.035	0.034	2.9	97	0.00	4.81
17		trans-1,2-Dichloroethene	0.561	0.537	4.3	98	0.00	4.83
18		Hexane	0.457	0.431	5.7	98	0.00	4.88
19		Methyl Tert Butyl Ether	0.843	0.804	4.6	96	0.00	4.94
20		Di-isopropyl ether	1.729	1.657	4.2	97	0.00	5.29
21	P	1,1-Dichloroethane	0.689	0.662	3.9	96	0.00	5.46
22		Acrylonitrile	0.126	0.125	0.8	96	0.00	5.51
23		ETBE	1.343	1.294	3.6	96	0.00	5.67
24		Vinyl acetate	0.914	0.933	-2.1	99	0.00	5.67
25		cis-1,2-Dichloroethene	0.372	0.364	2.2	99	0.00	6.02
26		2,2-Dichloropropane	0.460	0.462	-0.4	102	0.00	6.14
27		Bromochloromethane	0.172	0.166	3.5	96	0.00	6.22
28		Cyclohexane	0.816	0.776	4.9	97	0.00	6.25
29	C	Chloroform	0.608	0.594	2.3	100	0.00	6.28
		----------	Amount	Calc.	%Drift		----------	
30		Tetrahydrofuran	40.000	36.630	8.4	94	0.00	6.46
		----------	AvgRF	CCRF	%Dev		----------	

Continuing Calibration Summary

Job Number: FA35235 **Sample:** VN4344-CC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095729.D
Project: BMSMC, Building 5 Area, Humacao, PR

31	S	Dibromofluoromethane	0.260	0.264	-1.5	104	0.00	6.47
32		Carbon Tetrachloride	0.446	0.441	1.1	99	0.00	6.46
33		1,1,1-Trichloroethane	0.548	0.537	2.0	99	0.00	6.52
34		2-Butanone	0.143	0.138	3.5	94	0.00	6.57
35		1,1-Dichloropropene	0.452	0.442	2.2	100	0.00	6.63
36		Benzene	1.224	1.211	1.1	101	0.00	6.88
37		TAME	0.834	0.798	4.3	96	0.00	6.96
38	S	1,2-Dichloroethane-d4	0.342	0.340	0.6	99	0.00	7.01
39		1,2-Dichloroethane	0.558	0.517	7.3	96	0.00	7.08
40		Trichloroethene	0.345	0.324	6.1	98	0.00	7.45
41		Methylcyclohexane	0.584	0.557	4.6	97	0.00	7.46
42		Dibromomethane	0.174	0.172	1.1	98	0.00	7.89
43	C	1,2-Dichloropropane	0.392	0.386	1.5	99	0.00	7.97
44		Bromodichloromethane	0.416	0.426	-2.4	99	0.00	8.03
45		2-Chloroethyl vinyl ether	0.209	0.211	-1.0	98	0.00	8.55
46		cis-1,3-Dichloropropene	0.488	0.502	-2.9	100	0.00	8.64
47	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.37
48	S	Toluene-d8	1.329	1.339	-0.8	103	0.00	8.82
49	C	Toluene	1.832	1.789	2.3	100	0.00	8.88
		----------	Amount	Calc.	%Drift		----------	
50		2-Nitropropane	200.000	197.871	1.1	98	0.00	9.10
		----------	AvgRF	CCRF	%Dev		----------	
51		4-Methyl-2-pentanone	0.484	0.456	5.8	95	0.00	9.22
		----------	Amount	Calc.	%Drift		----------	
52		trans-1,3-Dichloropropene	40.000	39.481	1.3	99	0.00	9.28
		----------	AvgRF	CCRF	%Dev		----------	
53		Tetrachloroethene	0.525	0.474	9.7	90	0.00	9.27
54		1,1,2-Trichloroethane	0.287	0.286	0.3	97	0.00	9.44
55		Dibromochloromethane	0.402	0.422	-5.0	97	0.00	9.63
56		1,3-Dichloropropane	0.617	0.612	0.8	98	0.00	9.72
57		1,2-Dibromoethane	0.347	0.349	-0.6	97	0.00	9.89
58		2-hexanone	0.330	0.311	5.8	94	0.00	10.04
59		1-Chlorohexane	0.614	0.609	0.8	97	0.00	10.33
60	C	Ethylbenzene	2.040	1.970	3.4	99	0.00	10.39
61	P	Chlorobenzene	1.242	1.204	3.1	98	0.00	10.39
62		1,1,1,2-Tetrachloroethane	0.438	0.442	-0.9	98	0.00	10.44
63		m,p-Xylene	1.567	1.516	3.3	98	0.00	10.53
64		o-Xylene	1.628	1.615	0.8	99	0.00	10.97
65		Styrene	1.256	1.280	-1.9	98	0.00	11.02
		----------	Amount	Calc.	%Drift		----------	
66	P	Bromoform	40.000	38.945	2.6	96	0.00	11.08
		----------	AvgRF	CCRF	%Dev		----------	
67		Isopropylbenzene	2.008	1.978	1.5	99	0.00	11.27
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	12.73
69	S	4-Bromofluorobenzene	0.967	0.975	-0.8	103	0.00	11.58
70		n-Propylbenzene	4.252	4.194	1.4	99	0.00	11.69
71		Bromobenzene	0.973	0.958	1.5	98	0.00	11.71
72	P	1,1,2,2-Tetrachloroethane	0.720	0.718	0.3	97	0.00	11.77
73		1,3,5-Trimethylbenzene	3.202	3.177	0.8	99	0.00	11.88
74		2-Chlorotoluene	2.906	2.832	2.5	99	0.00	11.88
75		trans-1,4-Dichloro-2-Bute	0.280	0.276	1.4	91	0.00	11.95
76		1,2,3-Trichloropropane	0.216	0.213	1.4	96	0.00	11.92

Continuing Calibration Summary

Job Number: FA35235 **Sample:** VN4344-CC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095729.D
Project: BMSMC, Building 5 Area, Humacao, PR

77	Cyclohexanone	0.027	0.026	3.7	96	0.00	11.98
78	4-Chlorotoluene	2.777	2.756	0.8	100	0.00	12.05
79	tert-Butylbenzene	1.898	1.812	4.5	99	0.00	12.21
80	1,2,4-Trimethylbenzene	3.217	3.157	1.9	99	0.00	12.28
81	sec-Butylbenzene	4.043	3.944	2.4	99	0.00	12.40
82	4-Isopropyltoluene	3.662	3.600	1.7	98	0.00	12.53
83	1,3-Dichlorobenzene	1.880	1.836	2.3	97	0.00	12.66
84	1,4-Dichlorobenzene	1.963	1.896	3.4	98	0.00	12.75
85	n-Butylbenzene	1.894	1.912	-1.0	99	0.00	12.97
	----------	Amount	Calc.	%Drift	----------		
86	Benzyl Chloride	40.000	39.067	2.3	97	0.00	13.00
	----------	AvgRF	CCRF	%Dev	----------		
87	1,2-Dichlorobenzene	1.762	1.717	2.6	97	0.00	13.19
88	1,2-Dibromo-3-Chloropropa	0.119	0.117	1.7	94	0.00	13.96
89	Hexachlorobutadiene	0.648	0.605	6.6	95	0.00	14.52
90	1,2,4-Trichlorobenzene	1.193	1.157	3.0	96	0.00	14.57
91	Naphthalene	2.082	2.021	2.9	93	0.00	14.85
92	1,2,3-Trichlorobenzene	1.032	0.985	4.6	96	0.00	15.01
93 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	94	0.00	4.92
94	acrolein	3.311	3.598	-8.7	105	0.00	4.41
95	Tert Butyl Alcohol	1.581	1.425	9.9	88	0.00	5.00
96	tert Amyl alcohol	1.274	1.248	2.0	89	0.00	7.13
	----------	Amount	Calc.	%Drift	----------		
97	1,4-Dioxane	800.000	831.228	-3.9	97	0.00	8.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0095705.D N-JUL06-2016.m Fri Jul 08 10:21:59 2016

6.7.3

6

Continuing Calibration Summary

Job Number: FA35235 **Sample:** VN4344-ECC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095755.D
Project: BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDchem\2\DATA\070716\N0095755.D          Vial: 25
Acq On    :  7 Jul 2016   8:41 pm                     Operator: katiem
Sample    : ECC4343-5                                 Inst    : MSVOA8
Misc      : MS34348,VN4344,,,,,                       Multiplr: 1.00
MS Integration Params: Tiny.p

Method       : C:\MSDchem\2\METHODS\N-JUL06-2016.m (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Thu Jul 07 07:57:29 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	103	0.00	7.28
2		Dichlorodifluoromethane	0.433	0.406	6.2	93	0.00	2.58
3	P	Chloromethane	0.693	0.682	1.6	102	0.00	2.75
4	C	Vinyl Chloride	0.494	0.481	2.6	99	0.00	2.88
		----------	Amount	Calc.	%Drift		----------	
5		Bromomethane	40.000	39.542	1.1	103	-0.01	3.23
6		Chloroethane	40.000	41.367	-3.4	105	0.00	3.36
		----------	AvgRF	CCRF	%Dev		----------	
7		Trichlorofluoromethane	0.406	0.411	-1.2	103	0.00	3.57
8		Ethyl Ether	0.299	0.303	-1.3	103	0.00	3.82
9		1,2-Dichlorotrifluoroetha	0.360	0.320	11.1	91	0.00	4.03
10	C	1,1-Dichloroethene	0.580	0.508	12.4	89	0.00	4.07
11		Freon 113	0.317	0.300	5.4	97	0.00	4.13
12		Carbon Disulfide	0.979	0.938	4.2	98	0.00	4.13
13		Iodomethane	0.581	0.553	4.8	96	0.00	4.24
		----------	Amount	Calc.	%Drift		----------	
14		Methylene Chloride	40.000	40.873	-2.2	104	0.00	4.67
		----------	AvgRF	CCRF	%Dev		----------	
15		Acetone	0.027	0.027	0.0	104	0.00	4.70
16		Methyl acetate	0.035	0.038	-8.6	108	-0.01	4.81
17		trans-1,2-Dichloroethene	0.561	0.541	3.6	99	0.00	4.83
18		Hexane	0.457	0.421	7.9	96	0.00	4.88
19		Methyl Tert Butyl Ether	0.843	0.841	0.2	100	-0.01	4.93
20		Di-isopropyl ether	1.729	1.700	1.7	99	0.00	5.29
21	P	1,1-Dichloroethane	0.689	0.663	3.8	96	0.00	5.46
22		Acrylonitrile	0.126	0.130	-3.2	100	0.00	5.51
23		ETBE	1.343	1.331	0.9	99	0.00	5.67
24		Vinyl acetate	0.914	0.713	22.0	76	0.00	5.67
25		cis-1,2-Dichloroethene	0.372	0.368	1.1	100	0.00	6.02
26		2,2-Dichloropropane	0.460	0.384	16.5	85	0.00	6.14
27		Bromochloromethane	0.172	0.173	-0.6	100	0.00	6.22
28		Cyclohexane	0.816	0.782	4.2	98	0.00	6.25
29	C	Chloroform	0.608	0.604	0.7	102	0.00	6.28
		----------	Amount	Calc.	%Drift		----------	
30		Tetrahydrofuran	40.000	39.617	1.0	102	0.00	6.46
		----------	AvgRF	CCRF	%Dev		----------	

Continuing Calibration Summary

Job Number: FA35235 **Sample:** VN4344-ECC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095755.D
Project: BMSMC, Building 5 Area, Humacao, PR

31	S	Dibromofluoromethane	0.260	0.260	0.0	103	0.00	6.47
32		Carbon Tetrachloride	0.446	0.434	2.7	97	0.00	6.46
33		1,1,1-Trichloroethane	0.548	0.537	2.0	99	0.00	6.52
34		2-Butanone	0.143	0.145	-1.4	98	0.00	6.57
35		1,1-Dichloropropene	0.452	0.449	0.7	102	0.00	6.63
36		Benzene	1.224	1.231	-0.6	102	0.00	6.88
37		TAME	0.834	0.819	1.8	99	0.00	6.96
38	S	1,2-Dichloroethane-d4	0.342	0.339	0.9	99	0.00	7.01
39		1,2-Dichloroethane	0.558	0.540	3.2	101	0.00	7.08
40		Trichloroethene	0.345	0.345	0.0	104	0.00	7.45
41		Methylcyclohexane	0.584	0.569	2.6	99	0.00	7.46
42		Dibromomethane	0.174	0.178	-2.3	102	0.00	7.89
43	C	1,2-Dichloropropane	0.392	0.391	0.3	100	0.00	7.97
44		Bromodichloromethane	0.416	0.430	-3.4	100	0.00	8.03
45		2-Chloroethyl vinyl ether	0.209	0.216	-3.3	100	0.00	8.55
46		cis-1,3-Dichloropropene	0.488	0.493	-1.0	98	0.00	8.64
47	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	10.37
48	S	Toluene-d8	1.329	1.344	-1.1	103	0.00	8.83
49	C	Toluene	1.832	1.817	0.8	101	0.00	8.88
		----------	Amount	Calc.	%Drift		----------	
50		2-Nitropropane	200.000	180.236	9.9	88	0.00	9.10
		----------	AvgRF	CCRF	%Dev		----------	
51		4-Methyl-2-pentanone	0.484	0.476	1.7	99	0.00	9.22
		----------	Amount	Calc.	%Drift		----------	
52		trans-1,3-Dichloropropene	40.000	39.651	0.9	99	0.00	9.28
		----------	AvgRF	CCRF	%Dev		----------	
53		Tetrachloroethene	0.525	0.483	8.0	92	0.00	9.27
54		1,1,2-Trichloroethane	0.287	0.303	-5.6	103	0.00	9.44
55		Dibromochloromethane	0.402	0.427	-6.2	98	0.00	9.63
56		1,3-Dichloropropane	0.617	0.648	-5.0	103	0.00	9.72
57		1,2-Dibromoethane	0.347	0.366	-5.5	101	0.00	9.89
58		2-hexanone	0.330	0.327	0.9	99	0.00	10.04
59		1-Chlorohexane	0.614	0.615	-0.2	98	0.00	10.33
60	C	Ethylbenzene	2.040	1.991	2.4	100	0.00	10.39
61	P	Chlorobenzene	1.242	1.222	1.6	99	0.00	10.39
62		1,1,1,2-Tetrachloroethane	0.438	0.447	-2.1	98	0.00	10.45
63		m,p-Xylene	1.567	1.538	1.9	99	0.00	10.53
64		o-Xylene	1.628	1.641	-0.8	100	0.00	10.97
65		Styrene	1.256	1.282	-2.1	98	0.00	11.02
		----------	Amount	Calc.	%Drift		----------	
66	P	Bromoform	40.000	38.470	3.8	95	0.00	11.08
		----------	AvgRF	CCRF	%Dev		----------	
67		Isopropylbenzene	2.008	1.977	1.5	98	0.00	11.27
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	12.73
69	S	4-Bromofluorobenzene	0.967	0.989	-2.3	103	0.00	11.58
70		n-Propylbenzene	4.252	4.228	0.6	98	0.00	11.69
71		Bromobenzene	0.973	0.972	0.1	97	0.00	11.71
72	P	1,1,2,2-Tetrachloroethane	0.720	0.734	-1.9	97	0.00	11.77
73		1,3,5-Trimethylbenzene	3.202	3.204	-0.1	99	0.00	11.88
74		2-Chlorotoluene	2.906	2.882	0.8	100	0.00	11.88
75		trans-1,4-Dichloro-2-Bute	0.280	0.263	6.1	86	0.00	11.95
76		1,2,3-Trichloropropane	0.216	0.229	-6.0	102	0.00	11.92

Continuing Calibration Summary

Job Number: FA35235 **Sample:** VN4344-ECC4343
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** N0095755.D
Project: BMSMC, Building 5 Area, Humacao, PR

77	Cyclohexanone	0.027	0.028	-3.7	102	0.00	11.99
78	4-Chlorotoluene	2.777	2.782	-0.2	100	0.00	12.05
79	tert-Butylbenzene	1.898	1.875	1.2	101	0.00	12.22
80	1,2,4-Trimethylbenzene	3.217	3.204	0.4	99	0.00	12.28
81	sec-Butylbenzene	4.043	4.024	0.5	99	0.00	12.40
82	4-Isopropyltoluene	3.662	3.623	1.1	97	0.00	12.53
83	1,3-Dichlorobenzene	1.880	1.846	1.8	96	0.00	12.66
84	1,4-Dichlorobenzene	1.963	1.922	2.1	98	0.00	12.75
85	n-Butylbenzene	1.894	1.901	-0.4	97	0.00	12.98
	----------	Amount	Calc.	%Drift		----------	
86	Benzyl Chloride	40.000	29.746	25.6	72	0.00	13.00
	----------	AvgRF	CCRF	%Dev		----------	
87	1,2-Dichlorobenzene	1.762	1.753	0.5	97	0.00	13.19
88	1,2-Dibromo-3-Chloropropa	0.119	0.126	-5.9	99	0.00	13.96
89	Hexachlorobutadiene	0.648	0.606	6.5	94	0.00	14.52
90	1,2,4-Trichlorobenzene	1.193	1.192	0.1	97	0.00	14.57
91	Naphthalene	2.082	2.179	-4.7	98	0.00	14.85
92	1,2,3-Trichlorobenzene	1.032	1.020	1.2	98	0.00	15.01
93 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	101	0.00	4.93
94	acrolein	3.311	2.968	10.4	93	0.00	4.41
95	Tert Butyl Alcohol	1.581	1.478	6.5	97	0.00	5.00
96	tert Amyl alcohol	1.274	1.281	-0.5	98	0.00	7.13
	----------	Amount	Calc.	%Drift		----------	
97	1,4-Dioxane	800.000	843.712	-5.5	106	0.00	8.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
N0095705.D N-JUL06-2016.m Fri Jul 08 10:32:15 2016

6.7.4

6

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095742.D
Acq On : 7 Jul 2016 2:37 pm
Operator : katiem
Sample : FA35235-1 ma Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 07 14:54:04 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.277	96	1306525	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	944927	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	500219	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	98363	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	339242	49.92	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.84%			
38) 1,2-Dichloroethane-d4	7.010	65	455207	50.90	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.80%			
48) Toluene-d8	8.822	98	1250852	49.82	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.64%			
69) 4-Bromofluorobenzene	11.584	95	502397	51.92	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.84%			

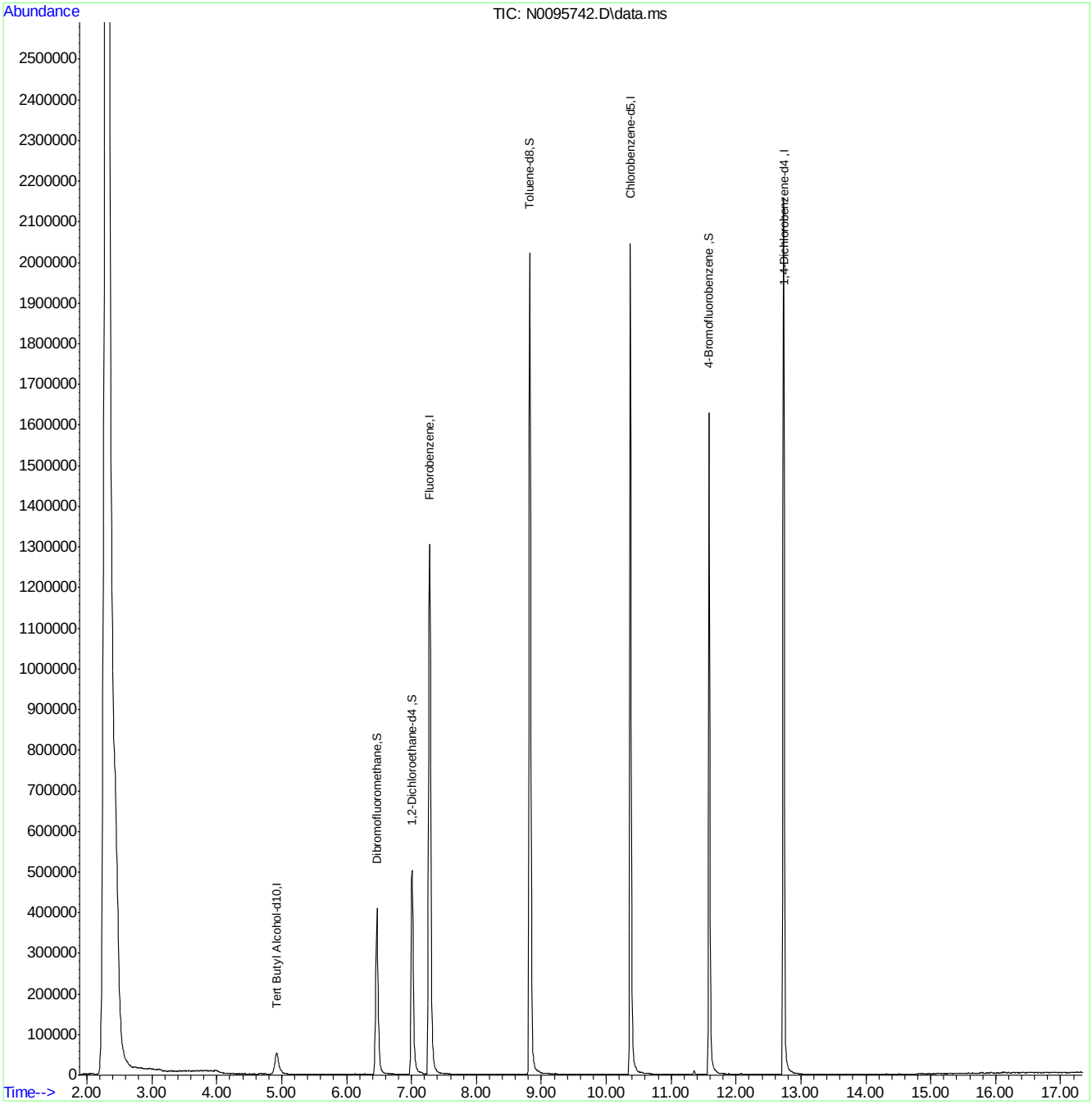
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095742.D
Acq On : 7 Jul 2016 2:37 pm
Operator : katiem
Sample : FA35235-1 ma Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 07 14:54:04 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



N-JUL06-2016.m Fri Jul 08 13:28:33 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095743.D
Acq On : 7 Jul 2016 3:06 pm
Operator : katiem
Sample : FA35235-2 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 08 07:20:33 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1318773	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	966830	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	495497	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.935	65	104139	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	337561	49.21	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.42%			
38) 1,2-Dichloroethane-d4	7.010	65	468352	51.88	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.76%			
48) Toluene-d8	8.829	98	1259984	49.05	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.10%			
69) 4-Bromofluorobenzene	11.584	95	503485	52.53	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.06%			

Target Compounds Qvalue

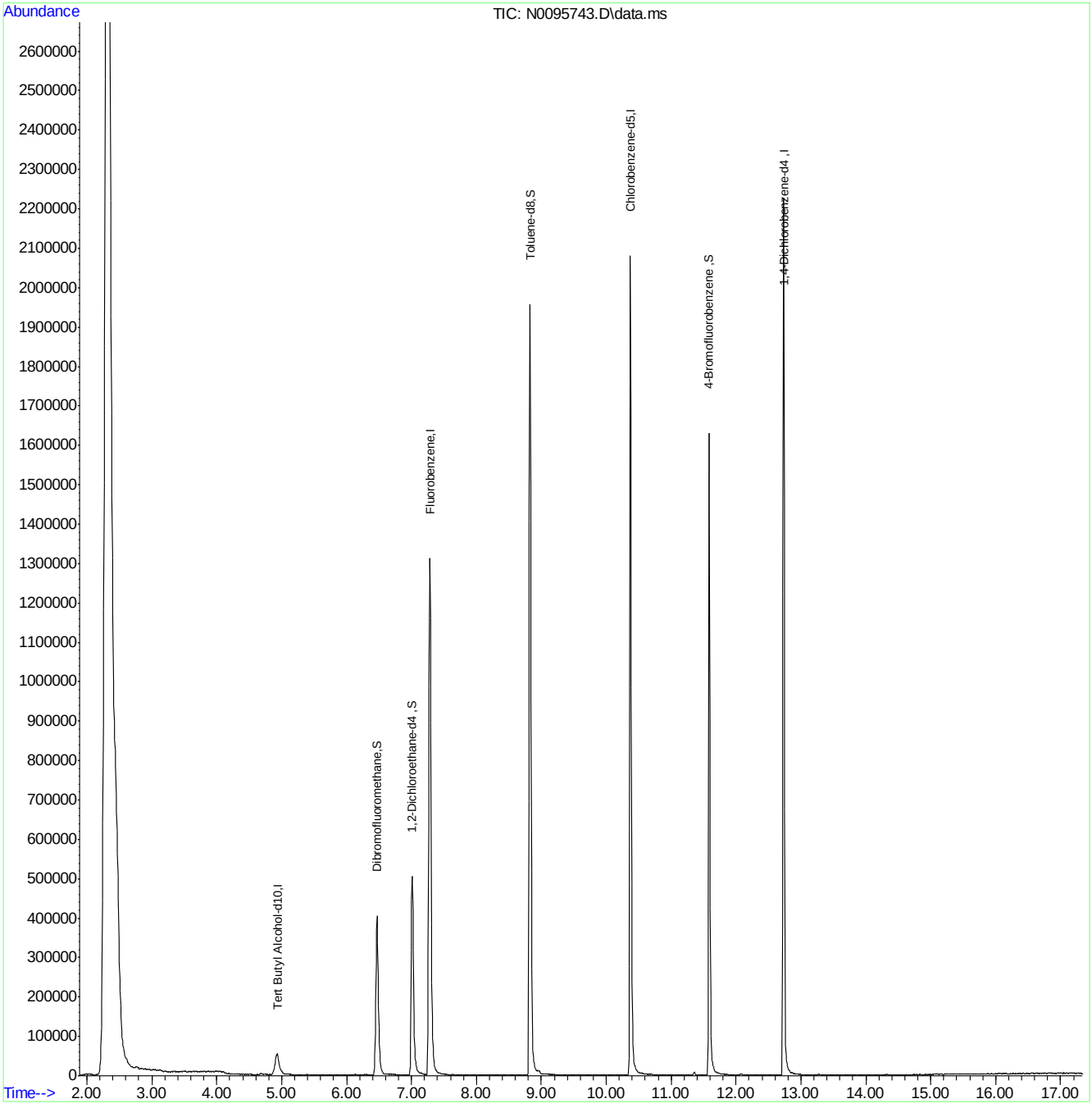
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095743.D
Acq On : 7 Jul 2016 3:06 pm
Operator : katiem
Sample : FA35235-2 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 08 07:20:33 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095744.D
Acq On : 7 Jul 2016 3:35 pm
Operator : katiem
Sample : FA35235-3 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 08 07:20:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1322035	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	957164	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	497665	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.935	65	103525	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	340820	49.56	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.12%			
38) 1,2-Dichloroethane-d4	7.016	65	469103	51.84	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.68%			
48) Toluene-d8	8.829	98	1260802	49.57	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.14%			
69) 4-Bromofluorobenzene	11.584	95	501887	52.13	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.26%			
Target Compounds						Qvalue

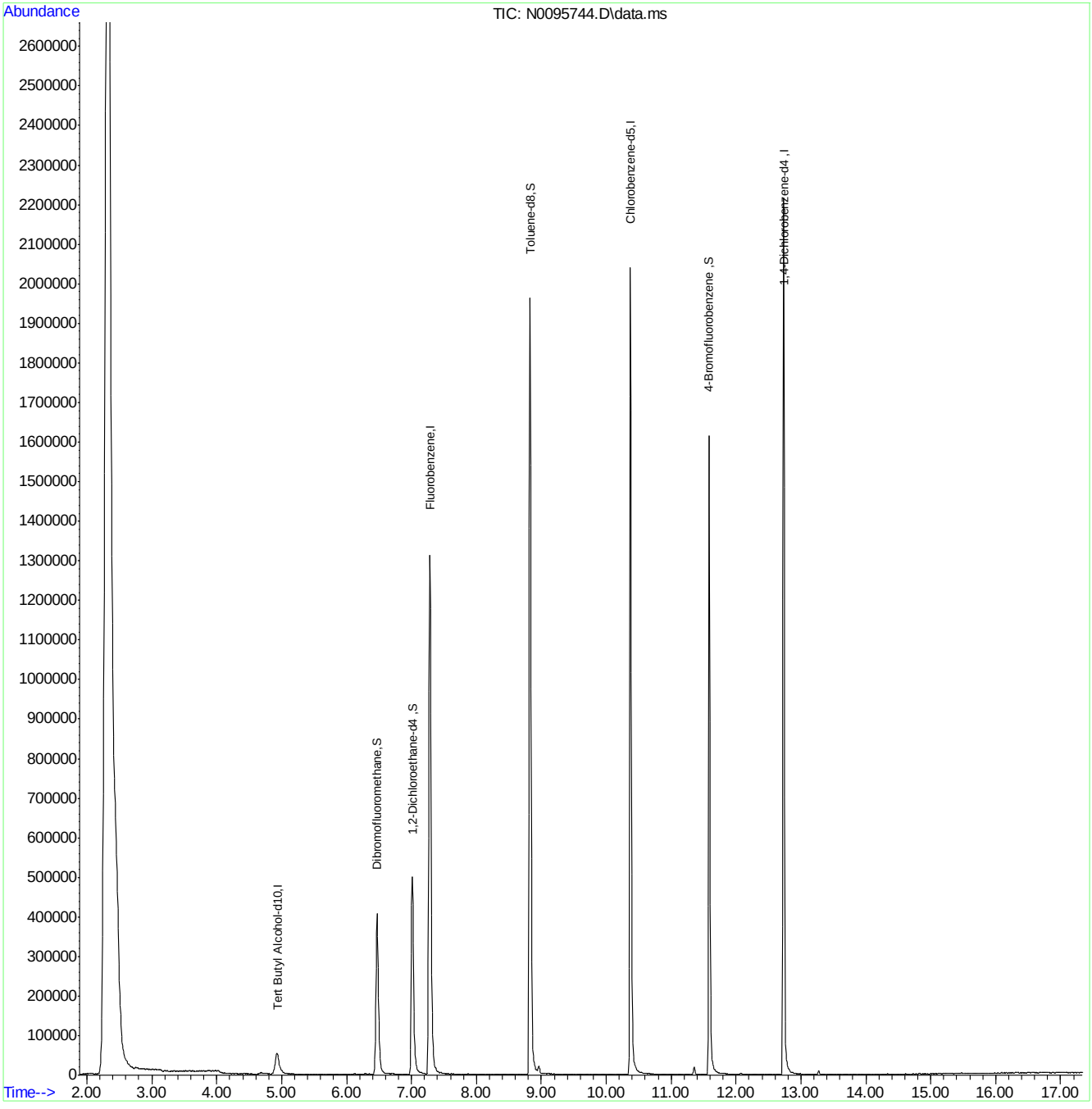
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095744.D
Acq On : 7 Jul 2016 3:35 pm
Operator : katiem
Sample : FA35235-3 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 08 07:20:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



N-JUL06-2016.m Fri Jul 08 13:28:37 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095745.D
Acq On : 7 Jul 2016 4:04 pm
Operator : katiem
Sample : FA35235-4 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 08 07:21:37 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1312496	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	957621	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	499036	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.923	65	104508	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	343501	50.32	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.64%			
38) 1,2-Dichloroethane-d4	7.010	65	469684	52.28	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.56%			
48) Toluene-d8	8.822	98	1273881	50.06	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.12%			
69) 4-Bromofluorobenzene	11.584	95	500535	51.85	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.70%			
Target Compounds						Qvalue
97) 1,4-Dioxane	8.220	88	7208	123.54	ug/L	77

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

7.1.4

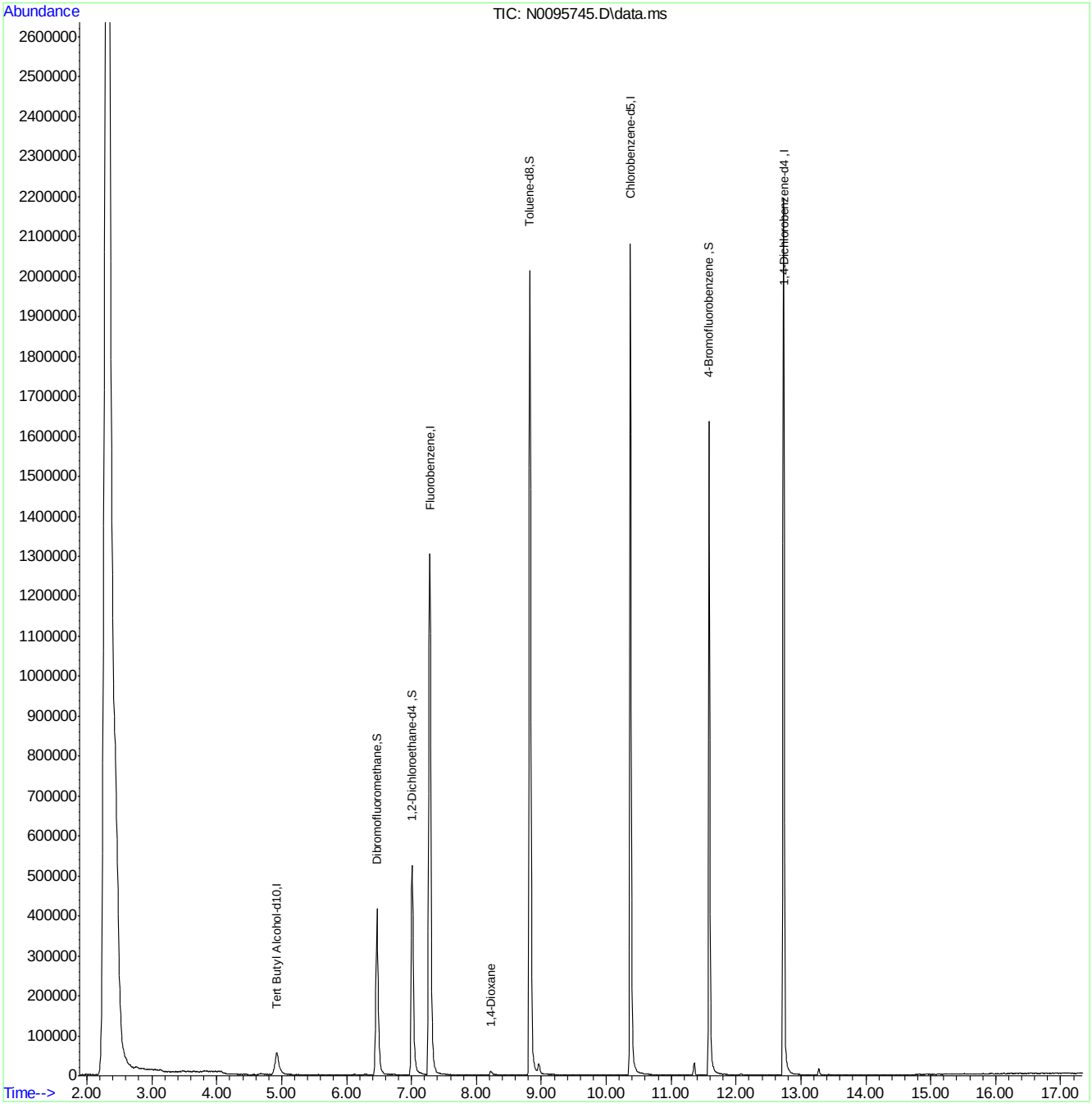
7

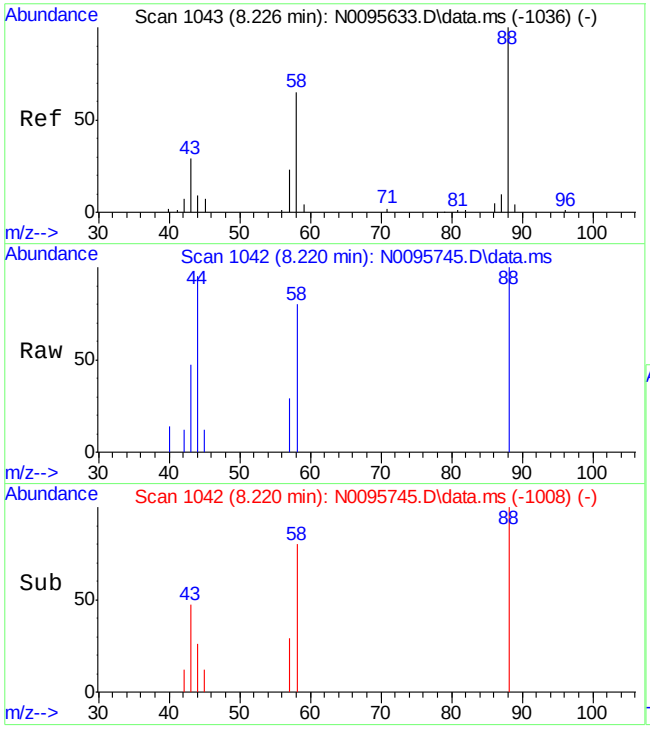
SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095745.D
Acq On : 7 Jul 2016 4:04 pm
Operator : katiem
Sample : FA35235-4 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 08 07:21:37 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

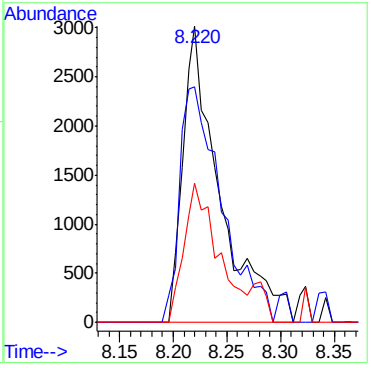




#97
1,4-Dioxane
Concen: 123.54 ug/L
RT: 8.220 min Scan# 1042
Delta R.T. 0.006 min
Lab File: N0095745.D
Acq: 7 Jul 2016 4:04 pm

Tgt Ion: 88 Resp: 7208

Ion	Ratio	Lower	Upper
88	100		
58	79.7	35.4	95.4
43	46.9	0.0	58.9



7.1.4

7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095746.D
Acq On : 7 Jul 2016 4:32 pm
Operator : katiem
Sample : FA35235-5 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 08 07:22:14 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1309984	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	946951	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	494194	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.923	65	104744	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	340417	49.96	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.92%			
38) 1,2-Dichloroethane-d4	7.010	65	468464	52.24	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.48%			
48) Toluene-d8	8.829	98	1264091	50.24	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.48%			
69) 4-Bromofluorobenzene	11.584	95	506678	53.00	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.00%			

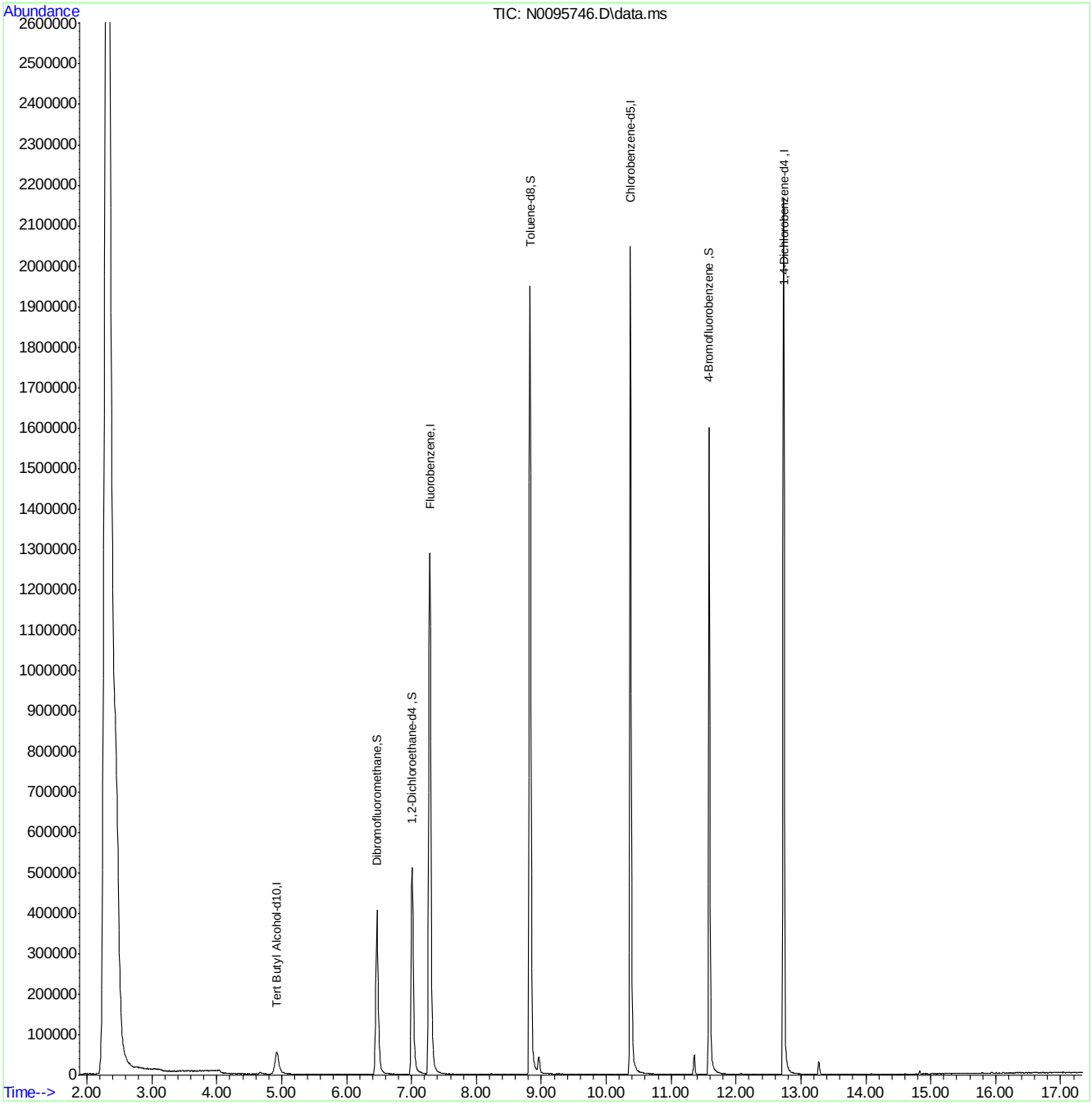
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095746.D
Acq On : 7 Jul 2016 4:32 pm
Operator : katiem
Sample : FA35235-5 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 08 07:22:14 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095747.D
Acq On : 7 Jul 2016 4:59 pm
Operator : katiem
Sample : FA35235-6 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 08 07:22:45 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

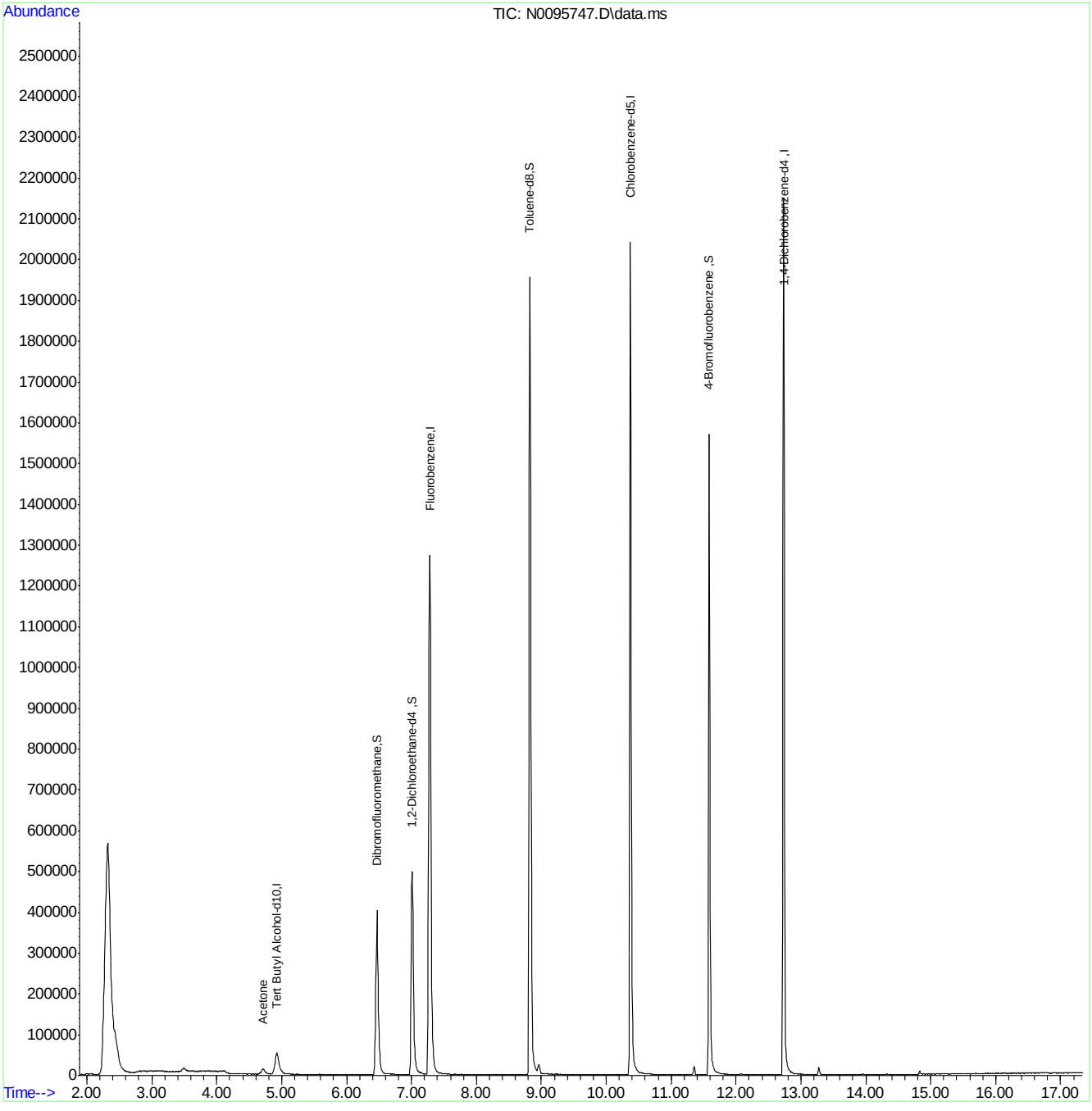
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1299663	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	939760	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	479247	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	101544	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	337361	49.90	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.80%			
38) 1,2-Dichloroethane-d4	7.009	65	458940	51.59	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.18%			
48) Toluene-d8	8.822	98	1251263	50.11	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.22%			
69) 4-Bromofluorobenzene	11.584	95	489893	52.84	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.68%			
Target Compounds						Qvalue
15) Acetone	4.716	58	7490	10.81	ug/L #	42

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

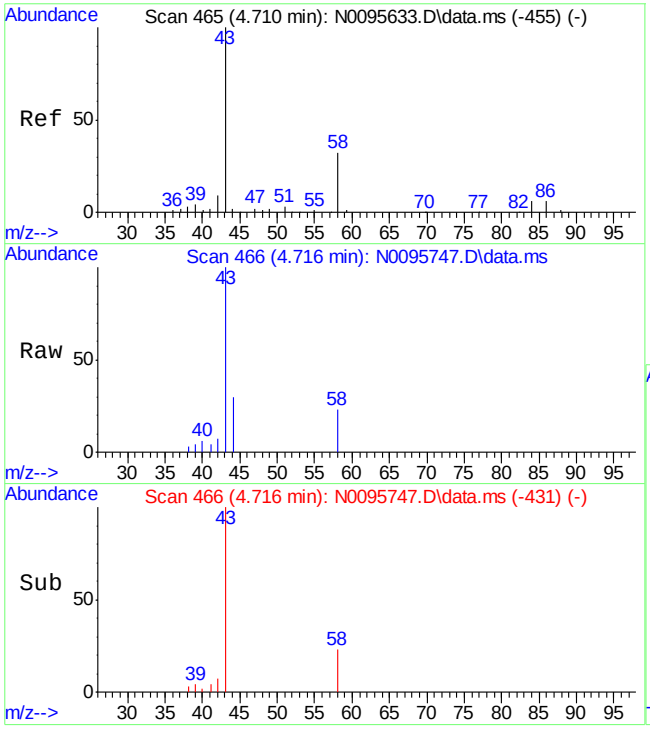
Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095747.D
Acq On : 7 Jul 2016 4:59 pm
Operator : katiem
Sample : FA35235-6 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 08 07:22:45 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



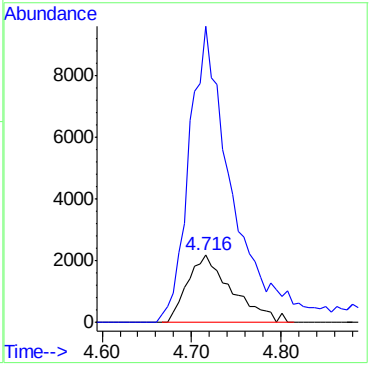
N-JUL06-2016.m Fri Jul 08 13:28:43 2016 Page: 2



#15
Acetone
Concen: 10.81 ug/L
RT: 4.716 min Scan# 466
Delta R.T. 0.012 min
Lab File: N0095747.D
Acq: 7 Jul 2016 4:59 pm

Tgt Ion: 58 Resp: 7490

Ion	Ratio	Lower	Upper
58	100		
43	429.6	282.4	342.4#



7.T.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095748.D
Acq On : 7 Jul 2016 5:27 pm
Operator : katiem
Sample : FA35235-7 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 08 07:23:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1317548	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	949383	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	482633	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.923	65	102815	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	338235	49.35	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.70%			
38) 1,2-Dichloroethane-d4	7.010	65	468178	51.91	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.82%			
48) Toluene-d8	8.822	98	1271152	50.39	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.78%			
69) 4-Bromofluorobenzene	11.584	95	502150	53.78	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 107.56%			
Target Compounds						Qvalue
15) Acetone	4.716	58	7323	10.43	ug/L #	79

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

7.1.7

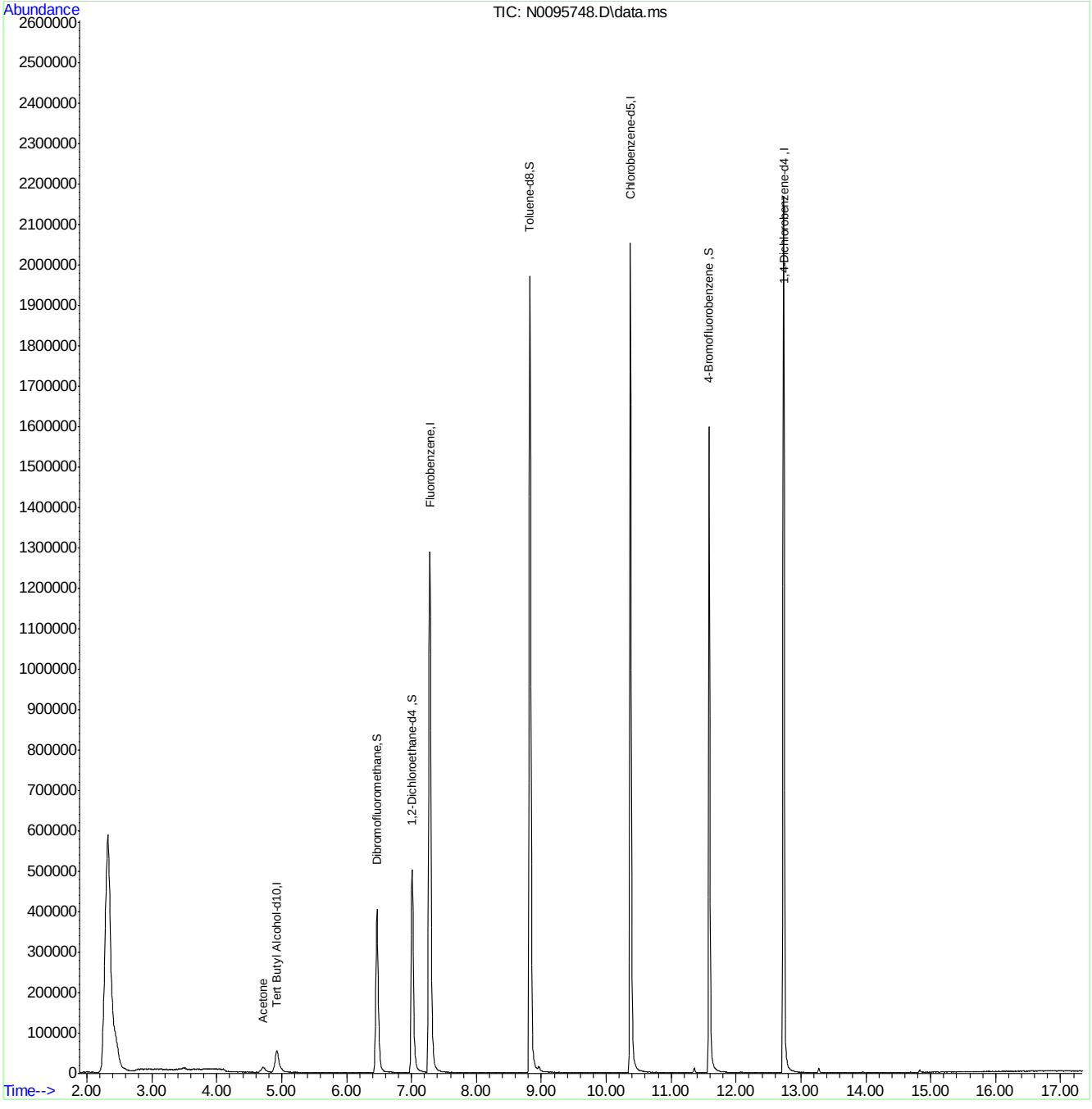
7

SGS ACCUTEST FA35235

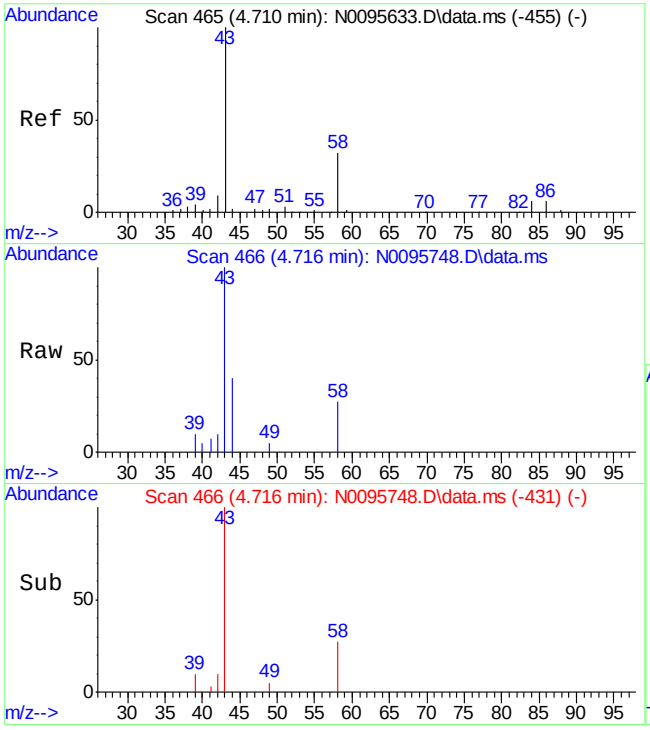
Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095748.D
Acq On : 7 Jul 2016 5:27 pm
Operator : katiem
Sample : FA35235-7 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 08 07:23:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



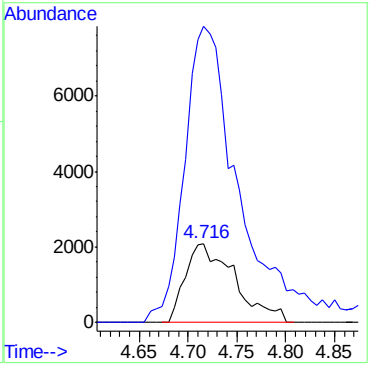
N-JUL06-2016.m Fri Jul 08 13:28:45 2016 Page: 2



#15
Acetone
Concen: 10.43 ug/L
RT: 4.716 min Scan# 466
Delta R.T. 0.012 min
Lab File: N0095748.D
Acq: 7 Jul 2016 5:27 pm

Tgt Ion: 58 Resp: 7323

Ion	Ratio	Lower	Upper
58	100		
43	354.1	282.4	342.4#



7.1.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095749.D
Acq On : 7 Jul 2016 5:56 pm
Operator : katiem
Sample : FA35235-8 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 08 07:23:28 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

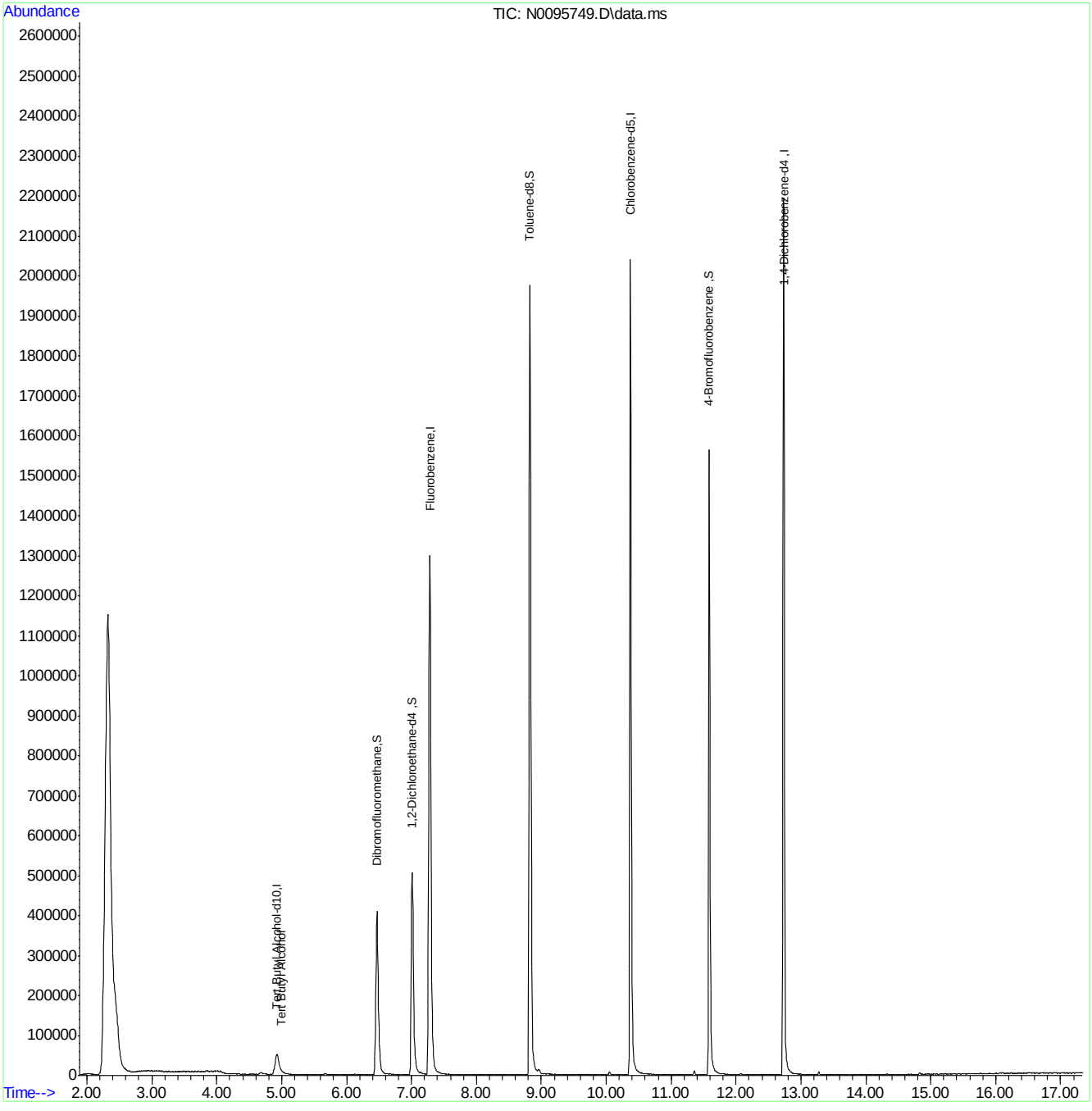
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1302794	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	945192	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	477137	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	97991	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	338872	50.01	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.02%			
38) 1,2-Dichloroethane-d4	7.010	65	465965	52.25	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.50%			
48) Toluene-d8	8.822	98	1271425	50.62	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.24%			
69) 4-Bromofluorobenzene	11.584	95	494522	53.58	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 107.16%			
Target Compounds						Qvalue
95) Tert Butyl Alcohol	4.996	59	5448	8.79	ug/L	80

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

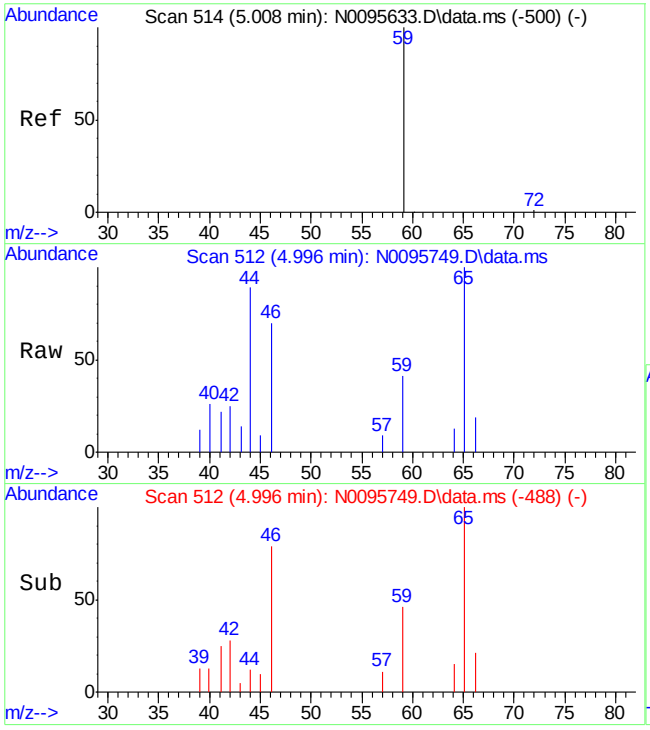
Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095749.D
Acq On : 7 Jul 2016 5:56 pm
Operator : katiem
Sample : FA35235-8 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 08 07:23:28 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



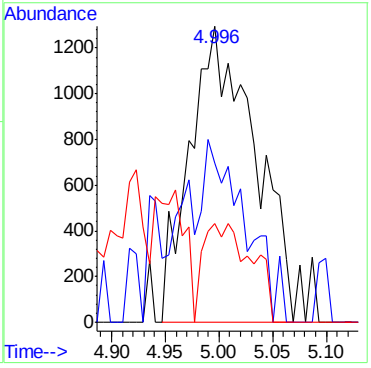
SGS ACCUTEST FA35235



#95
Tert Butyl Alcohol
Concen: 8.79 ug/L
RT: 4.996 min Scan# 512
Delta R.T. -0.006 min
Lab File: N0095749.D
Acq: 7 Jul 2016 5:56 pm

Tgt Ion: 59 Resp: 5448

Ion	Ratio	Lower	Upper
59	100		
41	53.7	16.3	56.3
43	33.3	9.0	49.0



7.1.8

7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095750.D
Acq On : 7 Jul 2016 6:25 pm
Operator : katiem
Sample : FA35235-9 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 08 07:23:49 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1322284	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	947994	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	490652	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	96087	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	340673	49.53	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.06%			
38) 1,2-Dichloroethane-d4	7.010	65	469800	51.90	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.80%			
48) Toluene-d8	8.829	98	1263804	50.17	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.34%			
69) 4-Bromofluorobenzene	11.585	95	504365	53.14	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.28%			

Target Compounds Qvalue

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

7.1.9

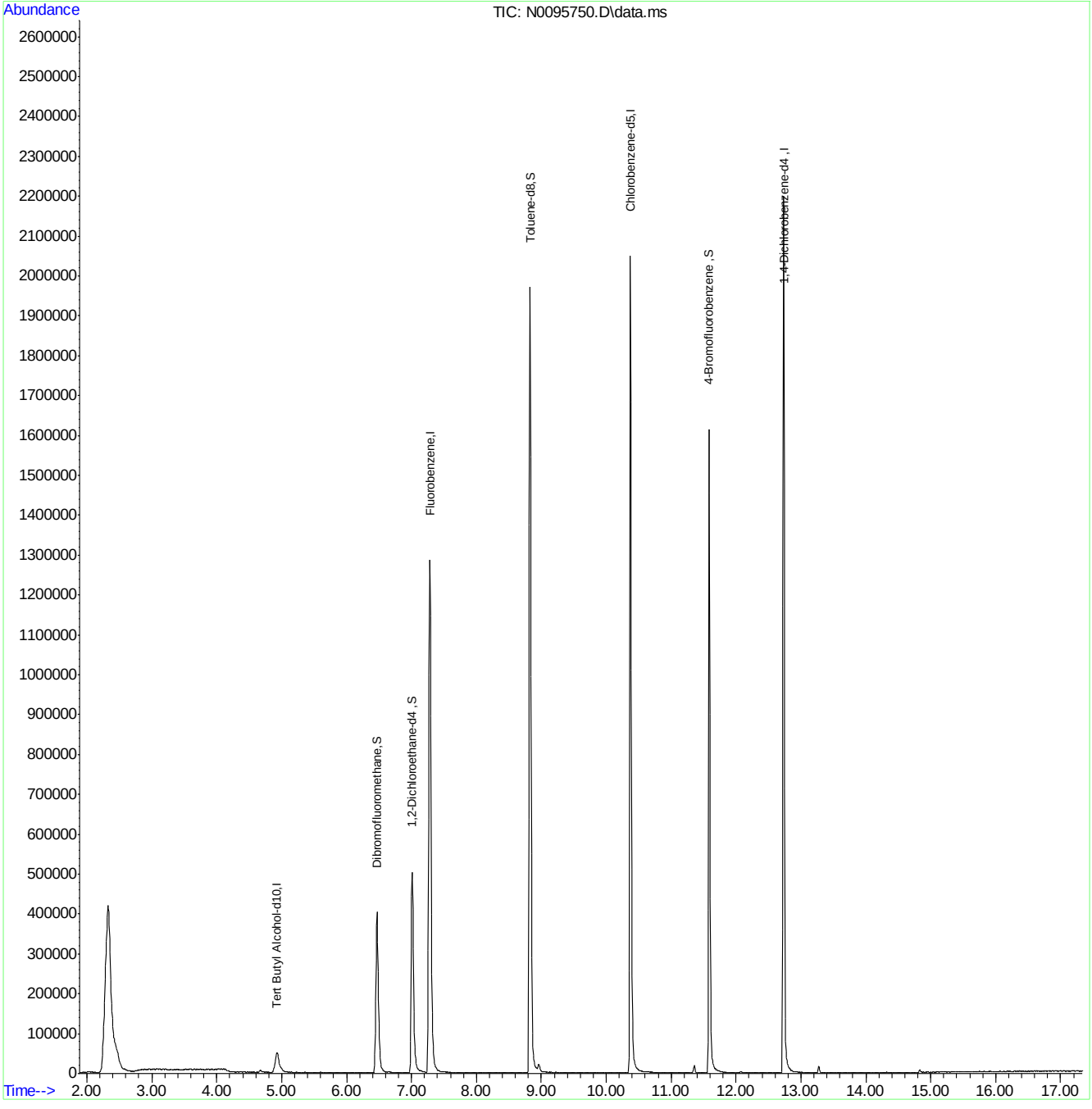
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095750.D
Acq On : 7 Jul 2016 6:25 pm
Operator : katiem
Sample : FA35235-9 MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 08 07:23:49 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095732.D
Acq On : 7 Jul 2016 9:40 am
Operator : katiem
Sample : MB MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 07 14:10:17 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.277	96	1315730	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	948050	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	498444	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.917	65	97683	250.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	336433	49.16	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.32%			
38) 1,2-Dichloroethane-d4	7.010	65	451759	50.16	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.32%			
48) Toluene-d8	8.823	98	1262473	50.12	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.24%			
69) 4-Bromofluorobenzene	11.585	95	501504	52.01	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.02%			

Target Compounds Qvalue

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

7.2.1

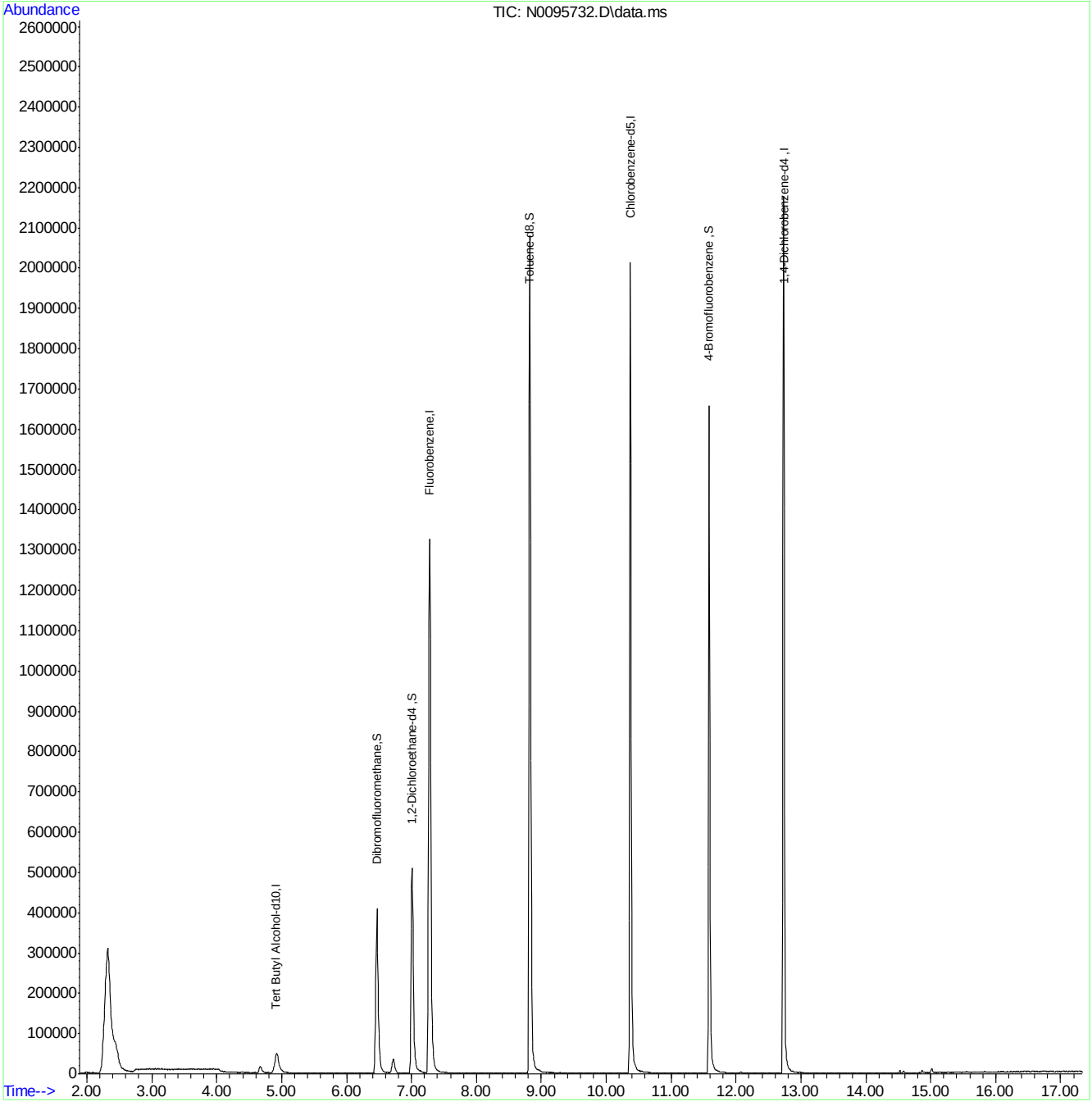
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095732.D
Acq On : 7 Jul 2016 9:40 am
Operator : katiem
Sample : MB MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 07 14:10:17 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



N-JUL06-2016.m Fri Jul 08 13:28:31 2016 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/08/16 15:04

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 14:09:31 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1358654	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	980229	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	530346	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.923	65	101365	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	352086	49.82	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.64%			
38) 1,2-Dichloroethane-d4	7.010	65	455263m	48.95	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.90%			
48) Toluene-d8	8.823	98	1316232	50.54	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.08%			
69) 4-Bromofluorobenzene	11.584	95	518745	50.56	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.12%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.581	85	268057	22.76	ug/L	99
3) Chloromethane	2.751	50	438708	23.30	ug/L	99
4) Vinyl Chloride	2.885	62	304729	22.71	ug/L	99
5) Bromomethane	3.232	94	139699	25.52	ug/L	99
6) Chloroethane	3.372	64	130865	26.90	ug/L	96
7) Trichlorofluoromethane	3.579	101	278553	25.23	ug/L	97
8) Ethyl Ether	3.816	59	190934	23.50	ug/L #	87
9) 1,2-Dichlorotrifluoroe...	4.035	67	259354	26.48	ug/L	98
10) 1,1-Dichloroethene	4.065	61	439052	27.87	ug/L	87
11) Freon 113	4.132	101	219415	25.50	ug/L	96
12) Carbon Disulfide	4.138	76	665559	25.03	ug/L	85
13) Iodomethane	4.242	142	377175	23.91	ug/L	96
14) Methylene Chloride	4.674	49	464877	25.55	ug/L	78
15) Acetone	4.710	58	83023	114.64	ug/L #	65
16) Methyl acetate	4.813	74	114310	121.92	ug/L #	27
17) trans-1,2-Dichloroethene	4.838	61	443603	29.11	ug/L	85
18) Hexane	4.880	56	314429	25.32	ug/L #	90
19) Methyl Tert Butyl Ether	4.935	73	531457	23.21	ug/L	75
20) Di-isopropyl ether	5.288	45	1110343	23.63	ug/L	93
21) 1,1-Dichloroethane	5.464	63	507546	27.10	ug/L	94
22) Acrylonitrile	5.513	53	416662	122.17	ug/L	97
23) ETBE	5.671	59	837758	22.96	ug/L	89
24) Vinyl acetate	5.671	43	3095845	124.64	ug/L	98
25) cis-1,2-Dichloroethene	6.024	96	250140	24.78	ug/L #	77
26) 2,2-Dichloropropane	6.146	77	352382	28.20	ug/L	100
27) Bromochloromethane	6.231	128	114577	24.50	ug/L #	68
28) Cyclohexane	6.249	56	564752	25.47	ug/L #	83
29) Chloroform	6.280	83	428636	25.97	ug/L	90
30) Tetrahydrofuran	6.456	42	58779	23.63	ug/L	86
32) Carbon Tetrachloride	6.456	117	333052m	27.47	ug/L	
33) 1,1,1-Trichloroethane	6.523	97	385348	25.87	ug/L	94
34) 2-Butanone	6.572	43	471906	121.81	ug/L	84
35) 1,1-Dichloropropene	6.626	75	326634	26.60	ug/L #	79

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 14:09:31 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.882	78	887761	26.70	ug/L		75
37) TAME	6.967	73	512894	22.64	ug/L		75
39) 1,2-Dichloroethane	7.077	62	376600	24.84	ug/L		96
40) Trichloroethene	7.460	95	241821	25.79	ug/L		98
41) Methylcyclohexane	7.466	83	424088	26.73	ug/L	#	74
42) Dibromomethane	7.886	93	122337	25.94	ug/L		97
43) 1,2-Dichloropropane	7.971	63	272216	25.53	ug/L		91
44) Bromodichloromethane	8.026	83	302131	26.70	ug/L	#	94
45) 2-Chloroethyl vinyl ether	8.549	63	705462	124.28	ug/L		82
46) cis-1,3-Dichloropropene	8.640	75	354884	26.77	ug/L	#	74
49) Toluene	8.877	91	945178	26.32	ug/L		98
50) 2-Nitropropane	9.102	41	216129	108.07	ug/L		95
51) 4-Methyl-2-pentanone	9.218	43	1122491	118.18	ug/L		97
52) trans-1,3-Dichloropropene	9.279	75	308167	27.41	ug/L		77
53) Tetrachloroethene	9.273	166	260570	25.31	ug/L		92
54) 1,1,2-Trichloroethane	9.443	83	146152	26.02	ug/L		93
55) Dibromochloromethane	9.632	129	212447	26.98	ug/L		96
56) 1,3-Dichloropropane	9.717	76	299262	24.73	ug/L	#	67
57) 1,2-Dibromoethane	9.887	107	175698	25.82	ug/L		99
58) 2-hexanone	10.039	43	746391	115.54	ug/L		96
59) 1-Chlorohexane	10.331	91	318715	26.47	ug/L	#	57
60) Ethylbenzene	10.392	91	1046088	26.16	ug/L		100
61) Chlorobenzene	10.392	112	637597	26.18	ug/L		91
62) 1,1,1,2-Tetrachloroethane	10.441	131	230038	26.77	ug/L		95
63) m,p-Xylene	10.532	91	1653330	53.82	ug/L		98
64) o-Xylene	10.970	91	850140	26.64	ug/L		98
65) Styrene	11.019	104	660367	26.81	ug/L		89
66) Bromoform	11.080	173	106518	23.95	ug/L		94
67) Isopropylbenzene	11.274	105	1078523	27.40	ug/L		100
70) n-Propylbenzene	11.694	91	1251914	27.76	ug/L		99
71) Bromobenzene	11.706	156	264773	25.66	ug/L		96
72) 1,1,2,2-Tetrachloroethane	11.767	83	188992	24.75	ug/L		98
73) 1,3,5-Trimethylbenzene	11.877	105	895548	26.37	ug/L		99
74) 2-Chlorotoluene	11.877	91	826358	26.81	ug/L		98
75) trans-1,4-Dichloro-2-B...	11.950	53	69175	23.31	ug/L	#	44
76) 1,2,3-Trichloropropane	11.919	110	58516	25.53	ug/L	#	75
77) Cyclohexanone	11.986	55	34047	119.60	ug/L		80
78) 4-Chlorotoluene	12.047	91	788455	26.77	ug/L		97
79) tert-Butylbenzene	12.211	91	536788	26.66	ug/L		90
80) 1,2,4-Trimethylbenzene	12.284	105	901078	26.41	ug/L		99
81) sec-Butylbenzene	12.400	105	1181911	27.56	ug/L		98
82) 4-Isopropyltoluene	12.534	119	1056629	27.20	ug/L		98
83) 1,3-Dichlorobenzene	12.661	146	514679	25.82	ug/L		97
84) 1,4-Dichlorobenzene	12.746	146	533529	25.62	ug/L		93
85) n-Butylbenzene	12.978	92	545058	27.13	ug/L		96
86) Benzyl Chloride	12.996	126	66954	21.54	ug/L	#	90
87) 1,2-Dichlorobenzene	13.191	146	479697	25.67	ug/L		95
88) 1,2-Dibromo-3-Chloropr...	13.963	75	29879	23.74	ug/L	#	82
89) Hexachlorobutadiene	14.523	225	176756	25.70	ug/L		84
90) 1,2,4-Trichlorobenzene	14.572	180	321295	25.39	ug/L		98

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 14:09:31 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

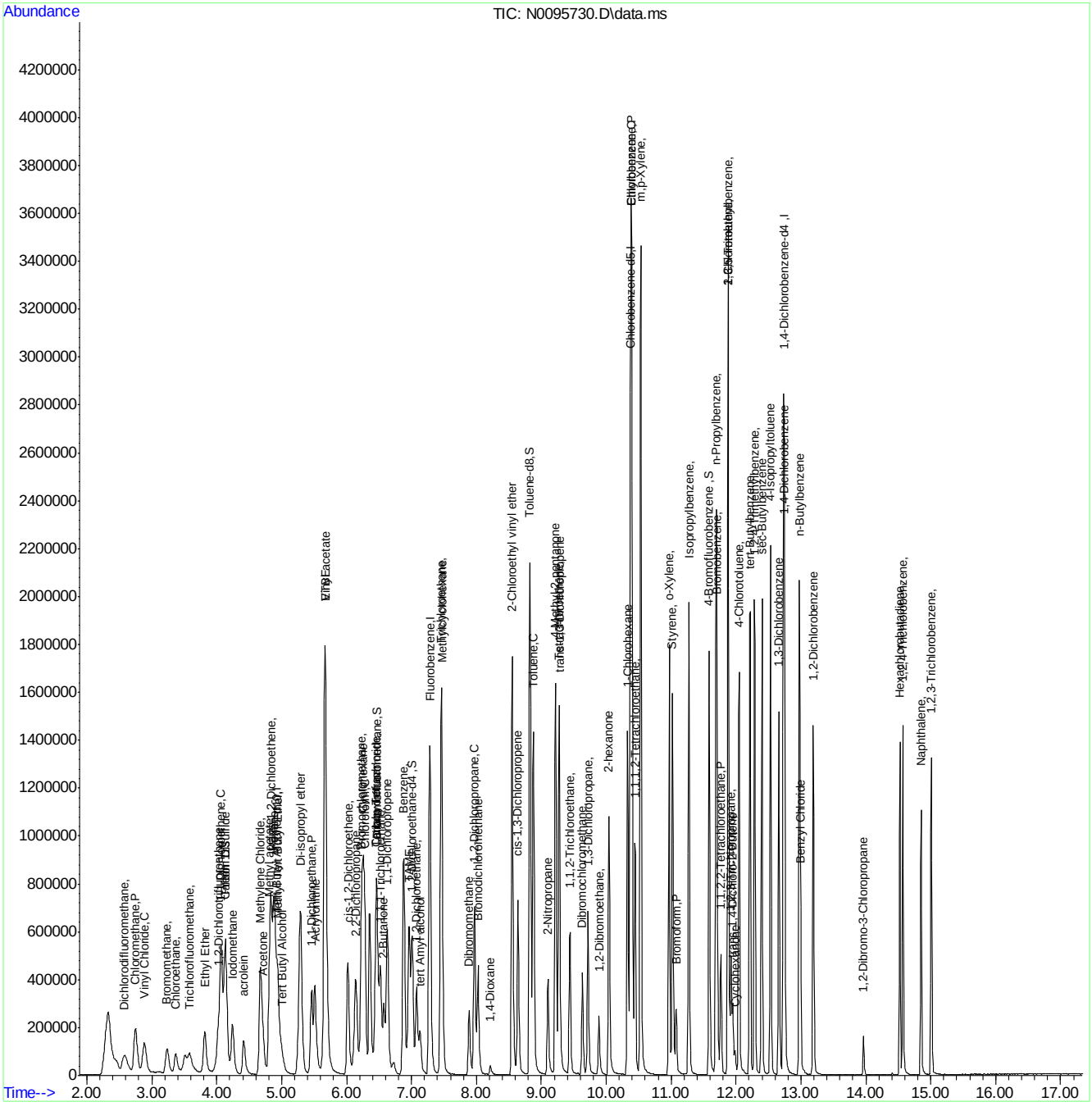
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	593929	26.90	ug/L	99
92) 1,2,3-Trichlorobenzene	15.010	180	273271	24.96	ug/L	96
94) acrolein	4.418	56	208230	155.13	ug/L	94
95) Tert Butyl Alcohol	5.008	59	139231	217.23	ug/L	93
96) tert Amyl alcohol	7.131	59	105894	205.08	ug/L	83
97) 1,4-Dioxane	8.214	88	28478	505.19	ug/L	64

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 14:09:31 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

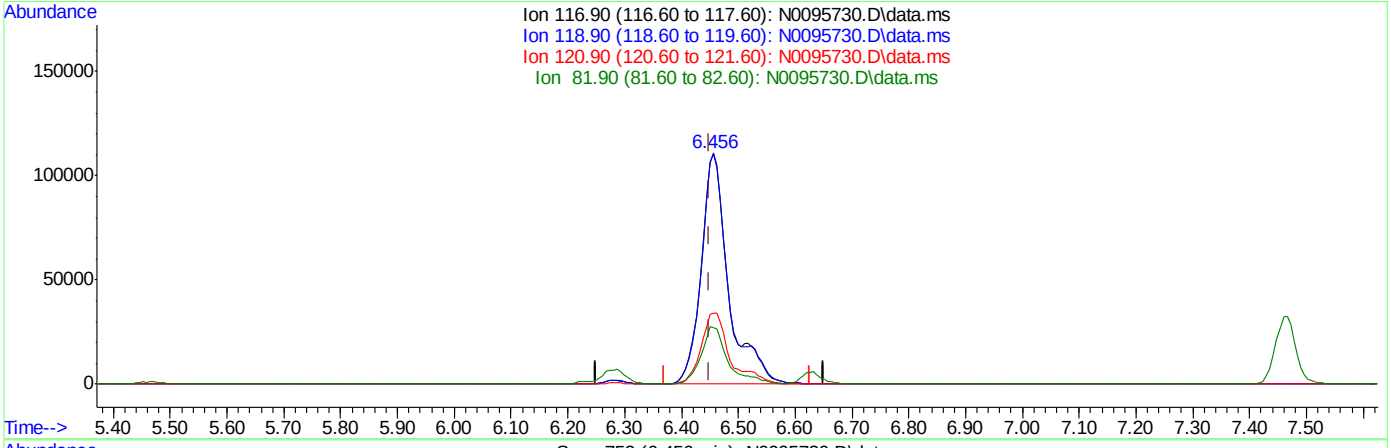
Sample Number:	VN4344-BS	**Method:**	SW846 8260C
Lab FileID:	N0095730.D	**Analyst approved:**	07/08/16 13:26 Kathleen McNatt
Injection Time:	07/07/16 08:40	**Supervisor approved:**	07/08/16 15:04 Juan Garcia

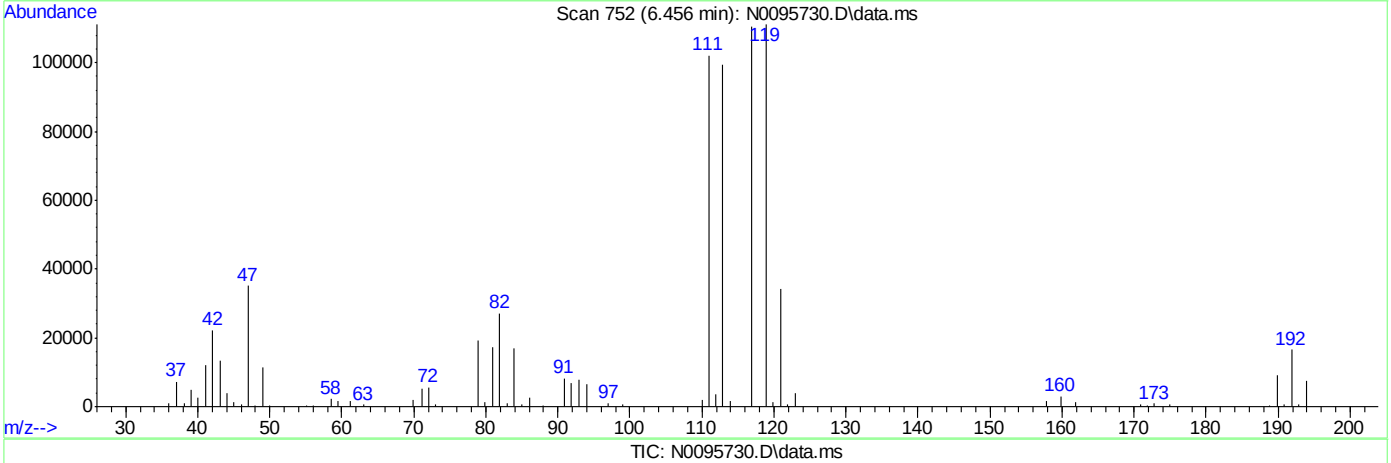
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.46	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		7.01	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 08:56:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095730.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.006) 31.10ug/L

response 377118

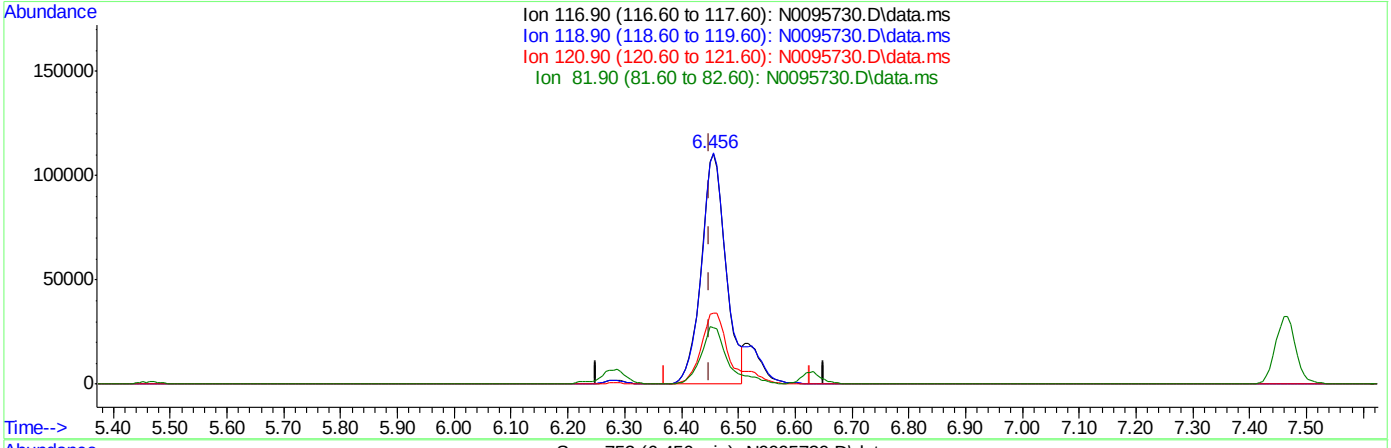
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	100.47
120.90	29.40	30.90
81.90	22.70	24.57

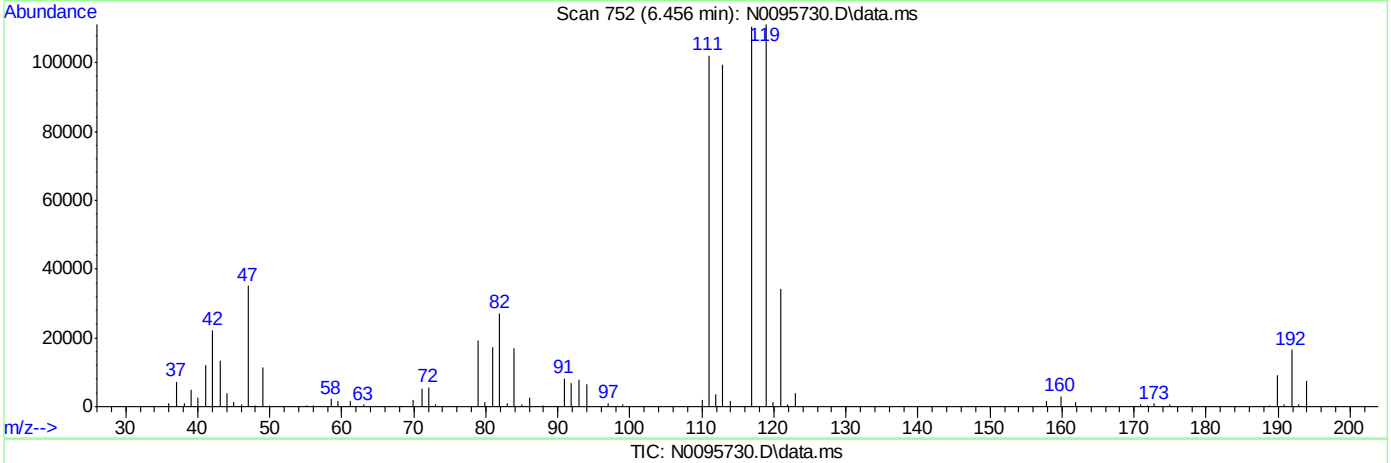
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 08:56:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095730.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.006) 27.47ug/L m

response 333052

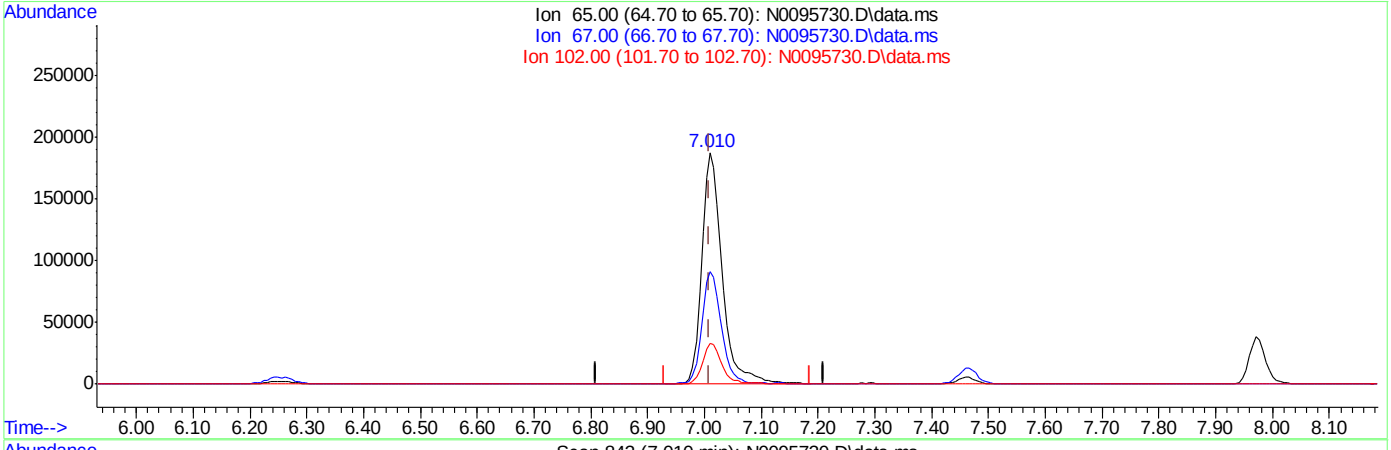
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	100.47
120.90	29.40	30.90
81.90	22.70	24.57

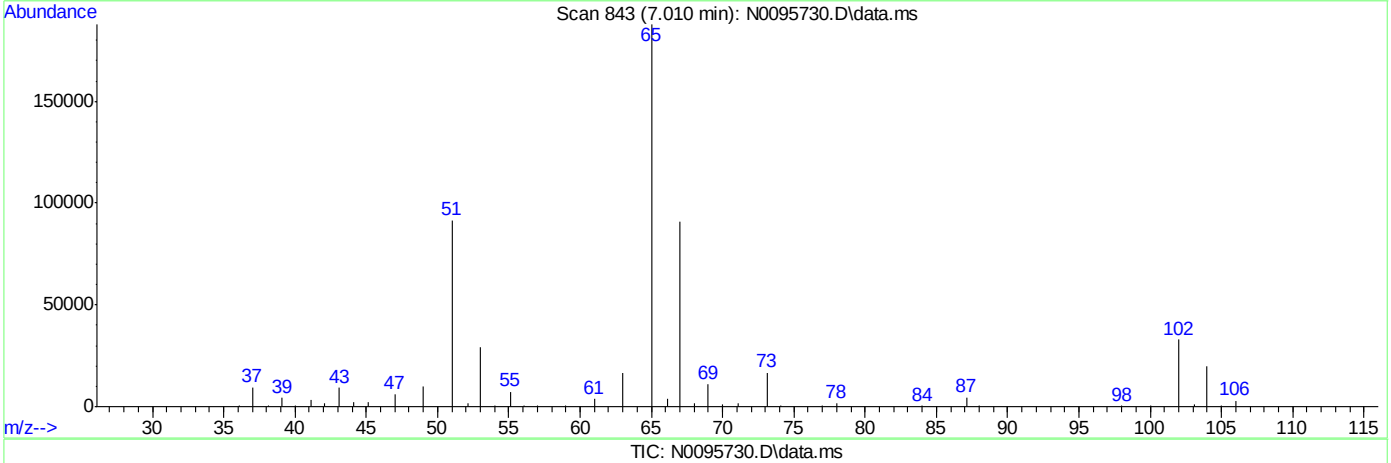
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 08:56:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095730.D\data.ms

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

7.010min (-0.000) 51.16ug/L

response 475787

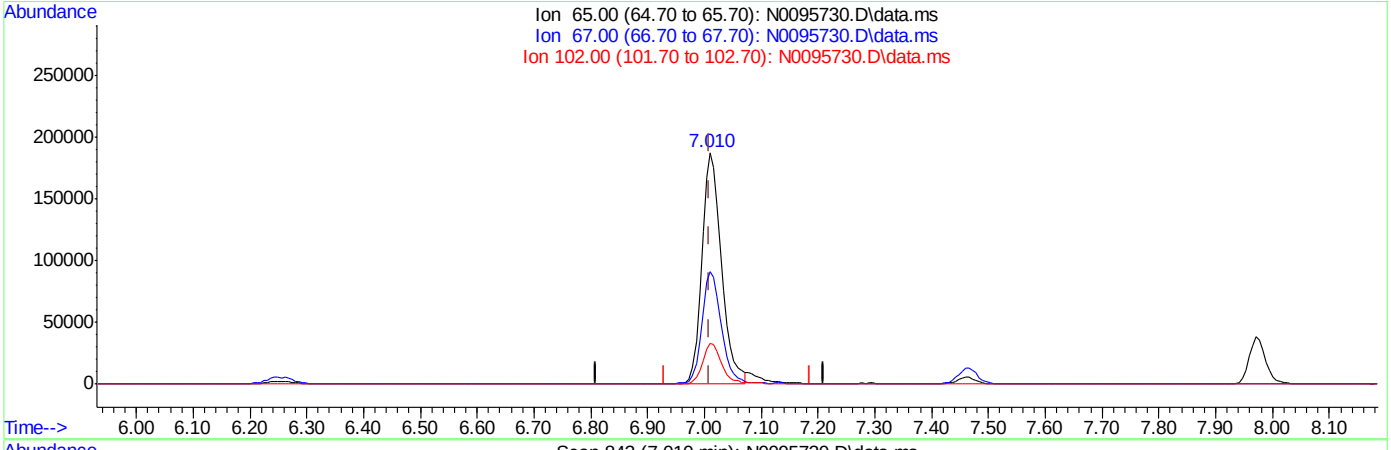
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	48.15
102.00	21.50	17.50
0.00	0.00	0.00

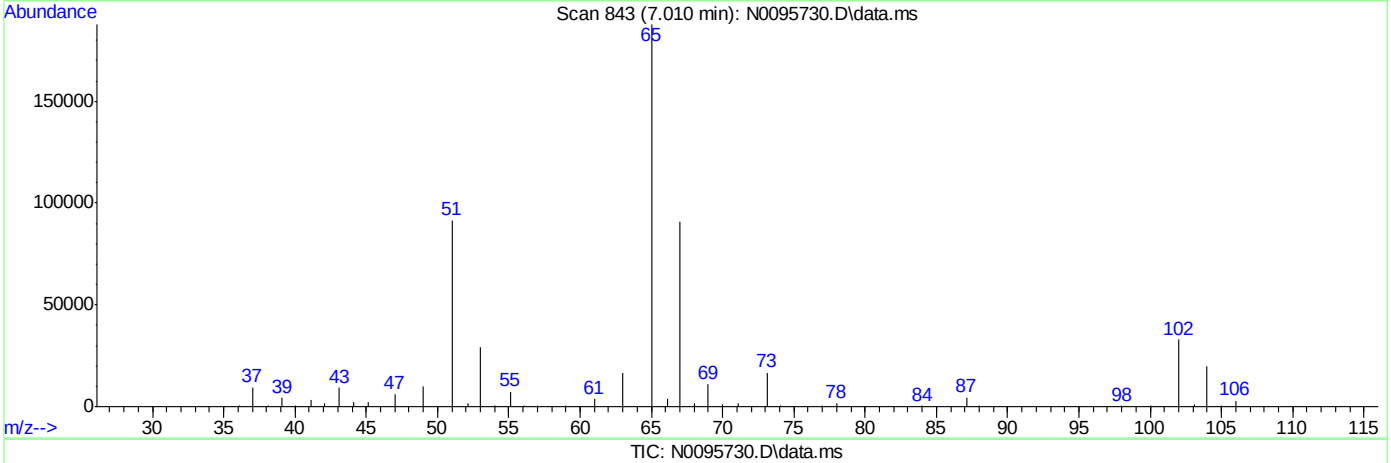
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095730.D
Acq On : 7 Jul 2016 8:40 am
Operator : katiem
Sample : BS Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 08:56:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095730.D\data.ms

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

7.010min (-0.000) 48.92ug/L m

response 454981

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	48.38
102.00	21.50	17.50
0.00	0.00	0.00

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/08/16 15:04

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:24:20 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.277	96	1334590	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	958484	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	515410	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	103820	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.462	113	351636	50.65	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.30%			
38) 1,2-Dichloroethane-d4	7.010	65	454233m	49.72	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.44%			
48) Toluene-d8	8.822	98	1291487	50.71	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.42%			
69) 4-Bromofluorobenzene	11.584	95	519096	52.06	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.12%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.569	85	274216	23.70	ug/L	92
3) Chloromethane	2.739	50	447765	24.21	ug/L	98
4) Vinyl Chloride	2.879	62	304388	23.10	ug/L	96
5) Bromomethane	3.226	94	139393	25.96	ug/L	98
6) Chloroethane	3.359	64	131719	27.72	ug/L	97
7) Trichlorofluoromethane	3.572	101	280870	25.90	ug/L	97
8) Ethyl Ether	3.804	59	181053	22.68	ug/L #	86
9) 1,2-Dichlorotrifluoroe...	4.023	67	233359	24.25	ug/L	99
10) 1,1-Dichloroethene	4.059	61	378422	24.45	ug/L	87
11) Freon 113	4.126	101	195172	23.10	ug/L	96
12) Carbon Disulfide	4.126	76	521296	19.96	ug/L	86
13) Iodomethane	4.235	142	334051	21.55	ug/L	95
14) Methylene Chloride	4.661	49	425266	23.77	ug/L	78
15) Acetone	4.698	58	79299	111.47	ug/L #	72
16) Methyl acetate	4.807	74	102104	110.87	ug/L #	33
17) trans-1,2-Dichloroethene	4.826	61	406733	27.17	ug/L	87
18) Hexane	4.880	56	277146	22.72	ug/L #	89
19) Methyl Tert Butyl Ether	4.935	73	508155	22.60	ug/L	83
20) Di-isopropyl ether	5.282	45	982319	21.29	ug/L	93
21) 1,1-Dichloroethane	5.458	63	469840	25.54	ug/L	97
22) Acrylonitrile	5.507	53	373326	111.44	ug/L	96
23) ETBE	5.665	59	767922	21.43	ug/L	88
24) Vinyl acetate	5.665	43	2449093	100.38	ug/L	97
25) cis-1,2-Dichloroethene	6.012	96	236570	23.86	ug/L #	77
26) 2,2-Dichloropropane	6.134	77	297806	24.26	ug/L	98
27) Bromochloromethane	6.225	128	105625	22.99	ug/L #	67
28) Cyclohexane	6.243	56	502442	23.07	ug/L #	84
29) Chloroform	6.273	83	407092	25.10	ug/L	91
30) Tetrahydrofuran	6.450	42	53016	21.70	ug/L	90
32) Carbon Tetrachloride	6.450	117	291634m	24.49	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	354106	24.21	ug/L	93
34) 2-Butanone	6.572	43	460063	120.89	ug/L	85
35) 1,1-Dichloropropene	6.626	75	304919	25.28	ug/L	81

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:24:20 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.876	78	833642	25.52	ug/L		77
37) TAME	6.961	73	474301	21.31	ug/L		72
39) 1,2-Dichloroethane	7.076	62	356377	23.93	ug/L		98
40) Trichloroethene	7.454	95	228262	24.79	ug/L		99
41) Methylcyclohexane	7.460	83	381807	24.49	ug/L	#	76
42) Dibromomethane	7.886	93	113699	24.54	ug/L		95
43) 1,2-Dichloropropane	7.971	63	252075	24.06	ug/L		90
44) Bromodichloromethane	8.026	83	270651	24.35	ug/L	#	93
45) 2-Chloroethyl vinyl ether	8.646	63	2161	0.39	ug/L	#	46
46) cis-1,3-Dichloropropene	8.646	75	309844	23.80	ug/L		77
49) Toluene	8.877	91	858977	24.46	ug/L		99
50) 2-Nitropropane	9.102	41	174292	89.60	ug/L		94
51) 4-Methyl-2-pentanone	9.218	43	1103889	118.86	ug/L		98
52) trans-1,3-Dichloropropene	9.279	75	275871	25.05	ug/L		80
53) Tetrachloroethene	9.273	166	233051	23.15	ug/L		96
54) 1,1,2-Trichloroethane	9.443	83	143069	26.05	ug/L		91
55) Dibromochloromethane	9.632	129	174245	22.63	ug/L		97
56) 1,3-Dichloropropane	9.717	76	288943	24.42	ug/L	#	69
57) 1,2-Dibromoethane	9.887	107	163529	24.58	ug/L		94
58) 2-hexanone	10.039	43	722238	114.34	ug/L		94
59) 1-Chlorohexane	10.331	91	281719	23.93	ug/L	#	59
60) Ethylbenzene	10.392	91	944284	24.15	ug/L		99
61) Chlorobenzene	10.392	112	585656	24.59	ug/L		90
62) 1,1,1,2-Tetrachloroethane	10.441	131	207324	24.67	ug/L		95
63) m,p-Xylene	10.532	91	1439899	47.94	ug/L		98
64) o-Xylene	10.970	91	736874	23.62	ug/L		98
65) Styrene	11.025	104	442681	18.38	ug/L		91
66) Bromoform	11.079	173	78665	18.24	ug/L		97
67) Isopropylbenzene	11.274	105	957178	24.87	ug/L		100
70) n-Propylbenzene	11.694	91	1133806	25.87	ug/L		99
71) Bromobenzene	11.706	156	236763	23.61	ug/L		99
72) 1,1,2,2-Tetrachloroethane	11.767	83	188248	25.37	ug/L		100
73) 1,3,5-Trimethylbenzene	11.883	105	707830	21.45	ug/L		98
74) 2-Chlorotoluene	11.876	91	755111	25.21	ug/L		97
75) trans-1,4-Dichloro-2-B...	11.949	53	51936	18.01	ug/L	#	50
76) 1,2,3-Trichloropropane	11.919	110	56941	25.57	ug/L	#	79
77) Cyclohexanone	11.986	55	29275	105.82	ug/L		83
78) 4-Chlorotoluene	12.047	91	719993	25.15	ug/L		99
79) tert-Butylbenzene	12.217	91	491127	25.10	ug/L		94
80) 1,2,4-Trimethylbenzene	12.284	105	745329	22.48	ug/L		99
81) sec-Butylbenzene	12.400	105	1060733	25.45	ug/L		98
82) 4-Isopropyltoluene	12.533	119	898777	23.81	ug/L		97
83) 1,3-Dichlorobenzene	12.661	146	466637	24.08	ug/L		96
84) 1,4-Dichlorobenzene	12.746	146	472398	23.34	ug/L		92
85) n-Butylbenzene	12.978	92	478844	24.53	ug/L		98
86) Benzyl Chloride	12.996	126	48376	16.10	ug/L		95
87) 1,2-Dichlorobenzene	13.190	146	426790	23.50	ug/L		94
88) 1,2-Dibromo-3-Chloropr...	13.963	75	29349	24.00	ug/L		78
89) Hexachlorobutadiene	14.523	225	136315	20.39	ug/L		81
90) 1,2,4-Trichlorobenzene	14.571	180	271211	22.05	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:24:20 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	541222	25.22	ug/L	99
92) 1,2,3-Trichlorobenzene	15.009	180	234177	22.01	ug/L	95
94) acrolein	4.406	56	181292	131.87	ug/L	94
95) Tert Butyl Alcohol	4.996	59	131445	200.23	ug/L	90
96) tert Amyl alcohol	7.131	59	96885	183.19	ug/L #	79
97) 1,4-Dioxane	8.214	88	24708	427.61	ug/L #	58

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

7.4.1

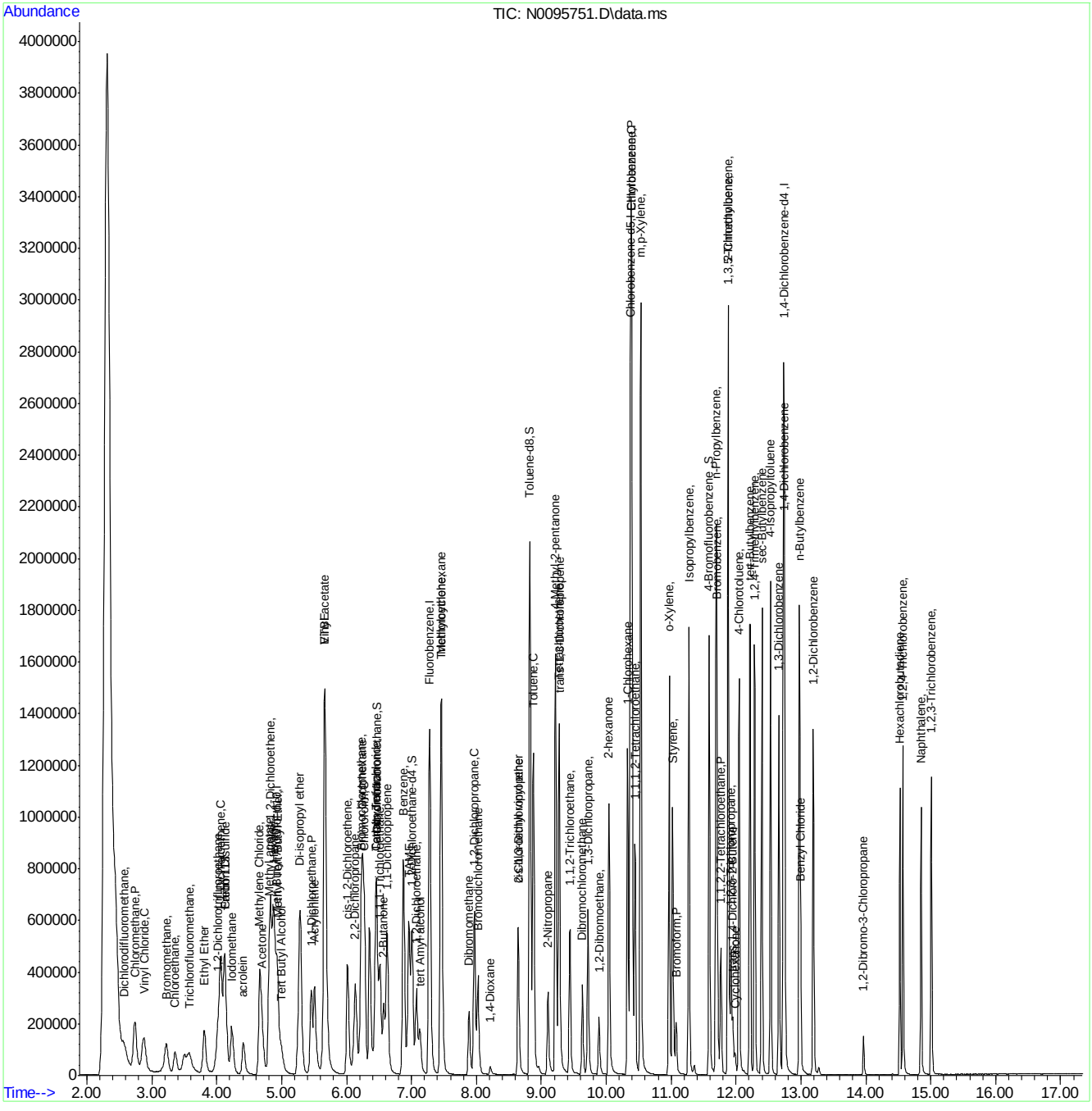
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:24:20 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

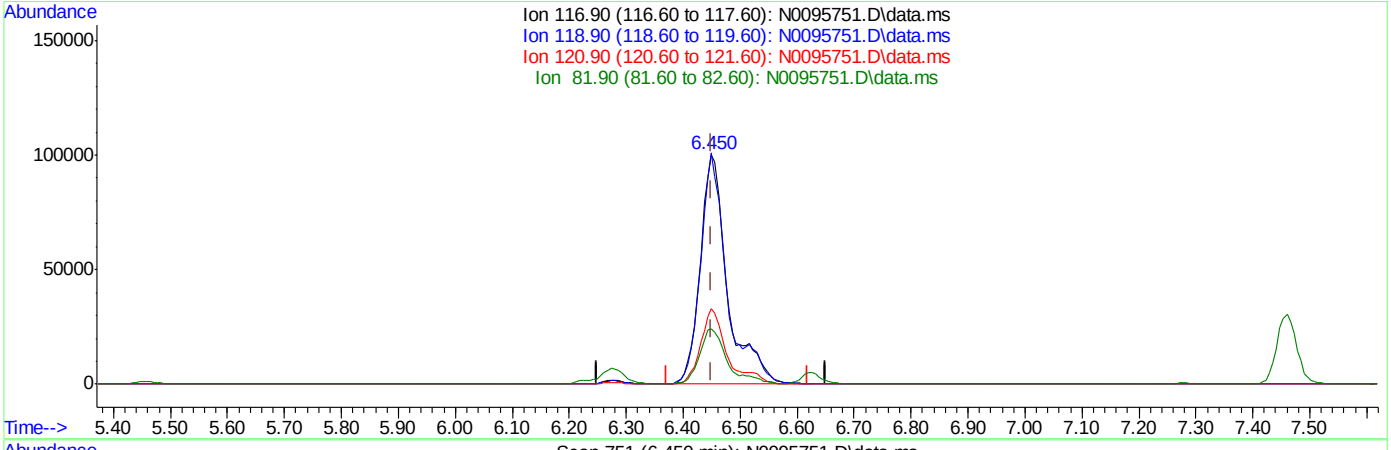
Sample Number:	FA35235-1MS	**Method:**	SW846 8260C
Lab FileID:	N0095751.D	**Analyst approved:**	07/08/16 13:26 Kathleen McNatt
Injection Time:	07/07/16 18:55	**Supervisor approved:**	07/08/16 15:04 Juan Garcia

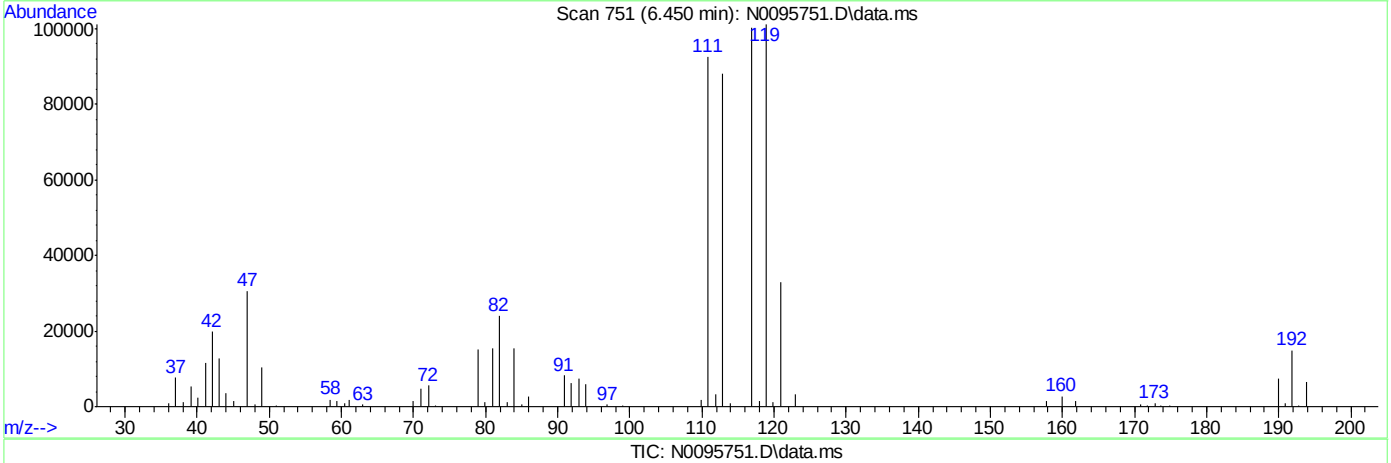
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.45	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		7.01	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:19:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095751.D\data.ms

(32) Carbon Tetrachloride ( )

6.450min (-0.000) 28.00ug/L

response 333455

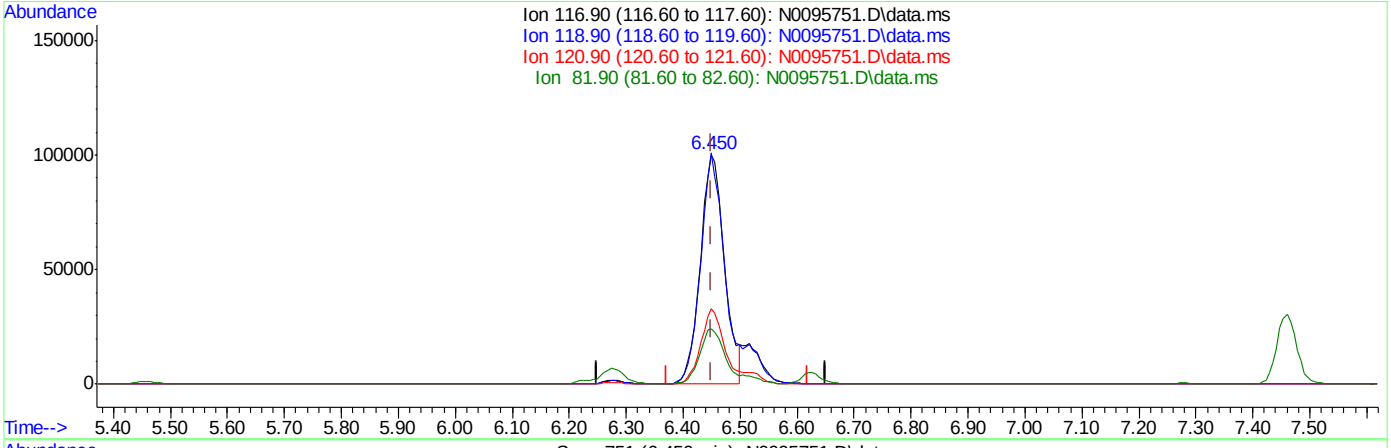
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	100.95
120.90	29.40	32.88
81.90	22.70	23.92

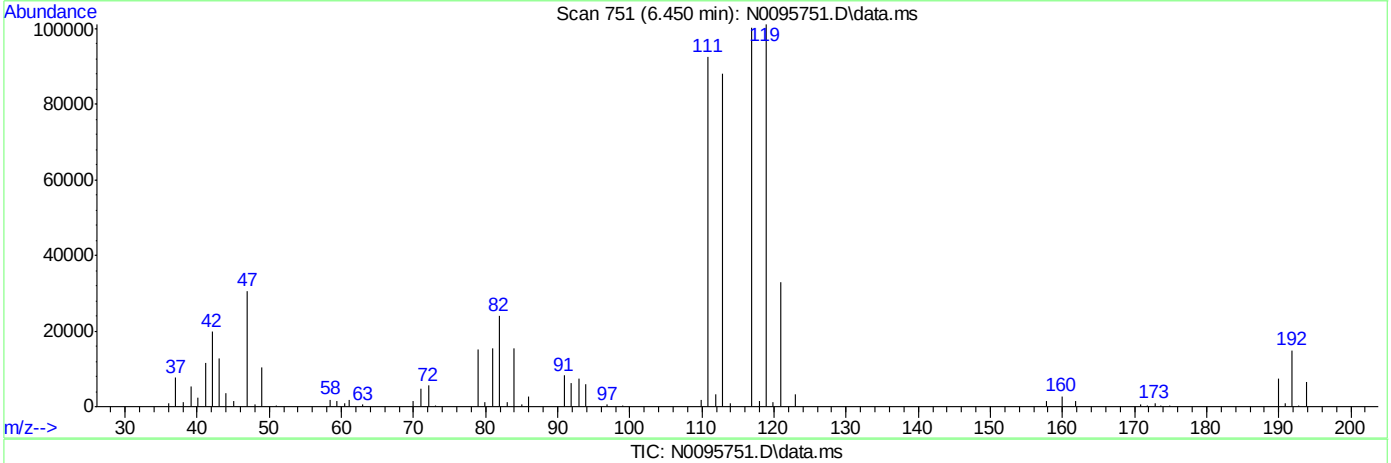
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:19:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.450min (-0.000) 24.49ug/L m

response 291634

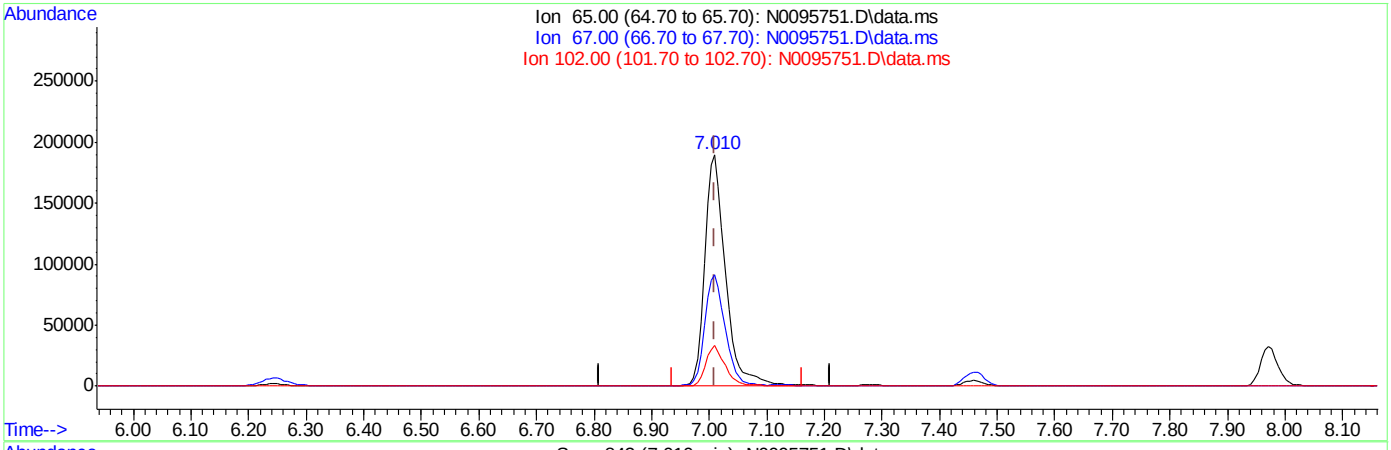
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	100.95
120.90	29.40	32.88
81.90	22.70	23.92

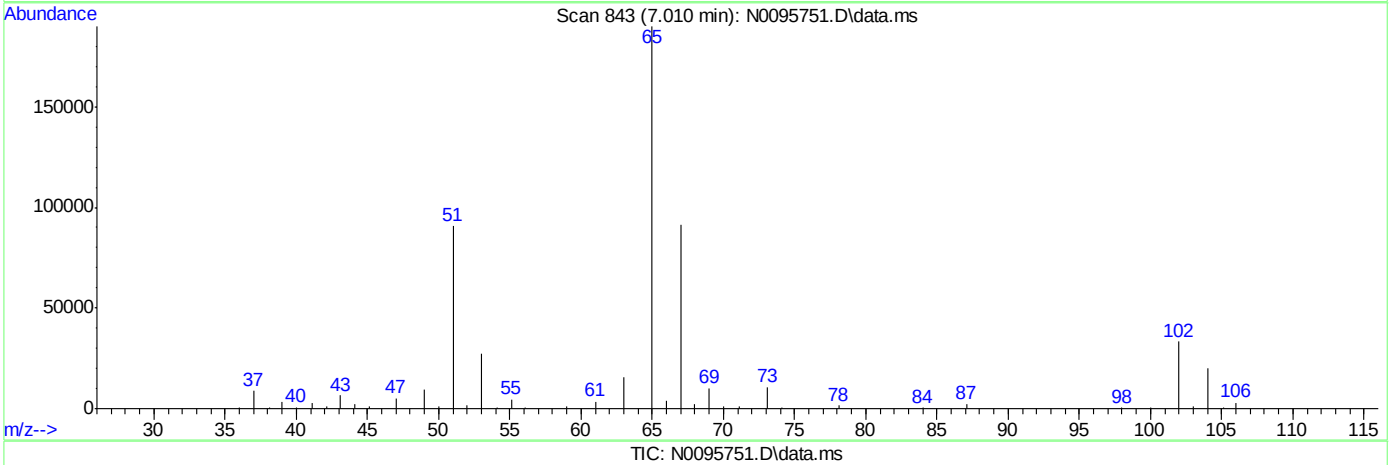
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:19:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095751.D\data.ms

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

7.010min (-0.000) 52.44ug/L

response 479044

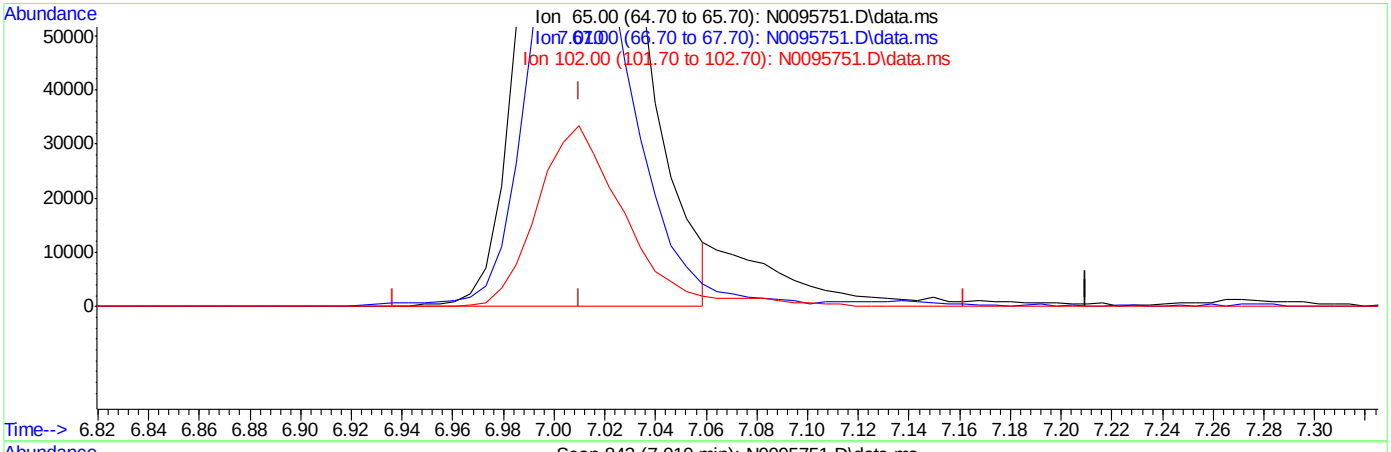
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.68
102.00	21.50	17.53
0.00	0.00	0.00

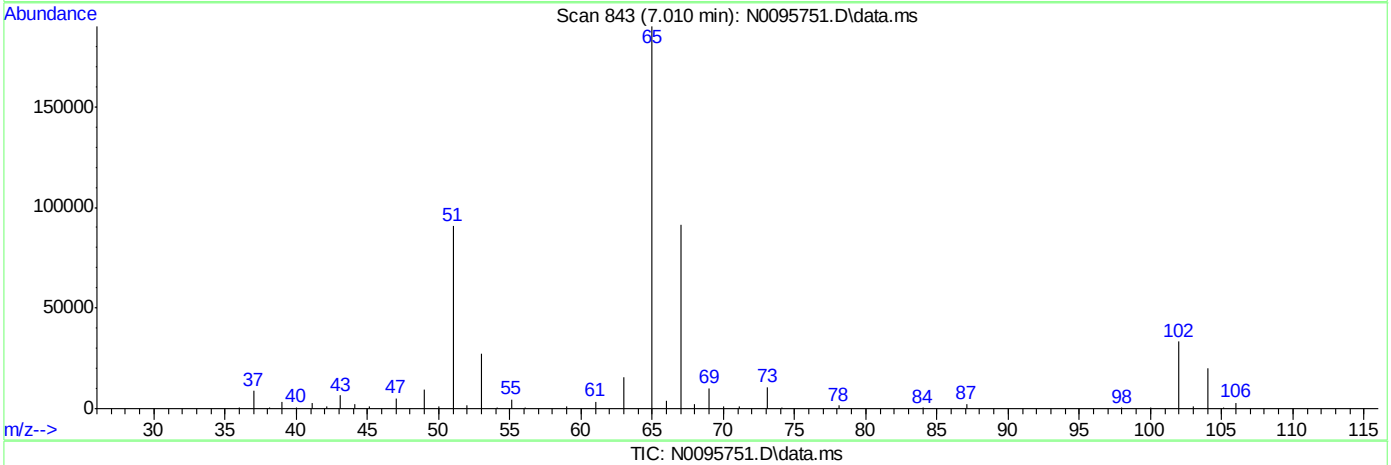
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095751.D
Acq On : 7 Jul 2016 6:55 pm
Operator : katiem
Sample : FA35235-1MS MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:19:57 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095751.D\data.ms

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

7.010min (-0.000) 49.72ug/L m

response 454233

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.97
102.00	21.50	17.53
0.00	0.00	0.00

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/08/16 15:04

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:25:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1348280	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	959240	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	507286	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.917	65	111435	250.00	ug/L	-0.01
System Monitoring Compounds						
31) Dibromofluoromethane	6.462	113	358366	51.10	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.20%			
38) 1,2-Dichloroethane-d4	7.010	65	473765m	51.33	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.66%			
48) Toluene-d8	8.822	98	1290240	50.62	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.24%			
69) 4-Bromofluorobenzene	11.584	95	511477	52.12	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.24%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.575	85	268008	22.93	ug/L	98
3) Chloromethane	2.745	50	442167	23.67	ug/L	99
4) Vinyl Chloride	2.873	62	299958	22.53	ug/L	98
5) Bromomethane	3.226	94	125875	23.00	ug/L	97
6) Chloroethane	3.359	64	125987	25.93	ug/L	94
7) Trichlorofluoromethane	3.505	101	285396	26.05	ug/L	99
8) Ethyl Ether	3.810	59	182650	22.65	ug/L #	86
9) 1,2-Dichlorotrifluoroe...	4.029	67	231545	23.82	ug/L	98
10) 1,1-Dichloroethene	4.059	61	366287	23.43	ug/L	89
11) Freon 113	4.126	101	178699	20.93	ug/L	94
12) Carbon Disulfide	4.126	76	500964	18.98	ug/L	81
13) Iodomethane	4.235	142	330660	21.12	ug/L	95
14) Methylene Chloride	4.667	49	427892	23.67	ug/L	77
15) Acetone	4.698	58	82077	114.21	ug/L #	69
16) Methyl acetate	4.807	74	107516	115.56	ug/L #	35
17) trans-1,2-Dichloroethene	4.832	61	406538	26.88	ug/L	87
18) Hexane	4.880	56	277299	22.50	ug/L #	87
19) Methyl Tert Butyl Ether	4.929	73	511506	22.51	ug/L	75
20) Di-isopropyl ether	5.288	45	1007125	21.60	ug/L	94
21) 1,1-Dichloroethane	5.458	63	476153	25.62	ug/L	96
22) Acrylonitrile	5.507	53	370710	109.54	ug/L	98
23) ETBE	5.665	59	775351	21.41	ug/L	88
24) Vinyl acetate	5.665	43	2448609	99.34	ug/L	97
25) cis-1,2-Dichloroethene	6.012	96	238718	23.83	ug/L #	79
26) 2,2-Dichloropropane	6.140	77	294110	23.72	ug/L	99
27) Bromochloromethane	6.225	128	106183	22.88	ug/L #	66
28) Cyclohexane	6.249	56	502259	22.83	ug/L #	87
29) Chloroform	6.273	83	410434	25.05	ug/L	92
30) Tetrahydrofuran	6.456	42	57007	23.09	ug/L	92
32) Carbon Tetrachloride	6.450	117	271899m	22.60	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	357948	24.22	ug/L	90
34) 2-Butanone	6.572	43	481478	125.23	ug/L	85
35) 1,1-Dichloropropene	6.626	75	304714	25.01	ug/L #	78

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:25:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	Benzene	6.876	78	848916	25.72	ug/L		75
37)	TAME	6.961	73	481093	21.40	ug/L		75
39)	1,2-Dichloroethane	7.077	62	357916	23.79	ug/L		97
40)	Trichloroethene	7.454	95	229084	24.62	ug/L		99
41)	Methylcyclohexane	7.460	83	379262	24.08	ug/L	#	76
42)	Dibromomethane	7.886	93	116861	24.97	ug/L		98
43)	1,2-Dichloropropane	7.971	63	255119	24.11	ug/L		90
44)	Bromodichloromethane	8.026	83	251583	22.40	ug/L	#	93
45)	2-Chloroethyl vinyl ether	8.640	63	1682	0.30	ug/L	#	63
46)	cis-1,3-Dichloropropene	8.646	75	291602	22.17	ug/L		76
49)	Toluene	8.877	91	866545	24.66	ug/L		100
50)	2-Nitropropane	9.102	41	178513	91.64	ug/L		95
51)	4-Methyl-2-pentanone	9.218	43	1142215	122.89	ug/L		97
52)	trans-1,3-Dichloropropene	9.279	75	260133	23.58	ug/L		78
53)	Tetrachloroethene	9.273	166	231496	22.97	ug/L		94
54)	1,1,2-Trichloroethane	9.443	83	143656	26.14	ug/L		90
55)	Dibromochloromethane	9.632	129	164545	21.35	ug/L		97
56)	1,3-Dichloropropane	9.717	76	288569	24.37	ug/L	#	68
57)	1,2-Dibromoethane	9.887	107	168236	25.26	ug/L		95
58)	2-hexanone	10.039	43	750140	118.66	ug/L		94
59)	1-Chlorohexane	10.331	91	287661	24.42	ug/L	#	61
60)	Ethylbenzene	10.392	91	949462	24.26	ug/L		100
61)	Chlorobenzene	10.392	112	593991	24.92	ug/L		90
62)	1,1,1,2-Tetrachloroethane	10.441	131	202395	24.07	ug/L		97
63)	m,p-Xylene	10.532	91	1435566	47.75	ug/L		97
64)	o-Xylene	10.970	91	741026	23.73	ug/L		98
65)	Styrene	11.025	104	423692	17.58	ug/L		91
66)	Bromoform	11.079	173	76343	17.70	ug/L		97
67)	Isopropylbenzene	11.274	105	964629	25.04	ug/L		100
70)	n-Propylbenzene	11.694	91	1132749	26.26	ug/L		99
71)	Bromobenzene	11.706	156	241677	24.49	ug/L		99
72)	1,1,2,2-Tetrachloroethane	11.767	83	189792	25.99	ug/L		97
73)	1,3,5-Trimethylbenzene	11.876	105	692774	21.33	ug/L		99
74)	2-Chlorotoluene	11.876	91	752084	25.51	ug/L		98
75)	trans-1,4-Dichloro-2-B...	11.949	53	48162	16.97	ug/L	#	47
76)	1,2,3-Trichloropropane	11.919	110	56817	25.92	ug/L		77
77)	Cyclohexanone	11.986	55	33465	122.90	ug/L		86
78)	4-Chlorotoluene	12.047	91	718615	25.51	ug/L		99
79)	tert-Butylbenzene	12.217	91	491854	25.54	ug/L		94
80)	1,2,4-Trimethylbenzene	12.284	105	732293	22.44	ug/L		99
81)	sec-Butylbenzene	12.400	105	1059540	25.83	ug/L		98
82)	4-Isopropyltoluene	12.533	119	893371	24.04	ug/L		98
83)	1,3-Dichlorobenzene	12.661	146	469366	24.61	ug/L		96
84)	1,4-Dichlorobenzene	12.746	146	478437	24.02	ug/L		94
85)	n-Butylbenzene	12.978	92	482199	25.10	ug/L		98
86)	Benzyl Chloride	12.996	126	46916	15.86	ug/L		97
87)	1,2-Dichlorobenzene	13.191	146	437644	24.49	ug/L		94
88)	1,2-Dibromo-3-Chloropr...	13.963	75	28016	23.27	ug/L	#	80
89)	Hexachlorobutadiene	14.523	225	141361	21.49	ug/L		84
90)	1,2,4-Trichlorobenzene	14.571	180	277550	22.93	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:25:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	572880	27.13	ug/L	100
92) 1,2,3-Trichlorobenzene	15.009	180	246535	23.54	ug/L	97
94) acrolein	4.406	56	173087	117.30	ug/L	96
95) Tert Butyl Alcohol	5.002	59	145525	206.53	ug/L	88
96) tert Amyl alcohol	7.131	59	106261	187.19	ug/L	78
97) 1,4-Dioxane	8.214	88	29749	479.93	ug/L	78

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

7.4.2

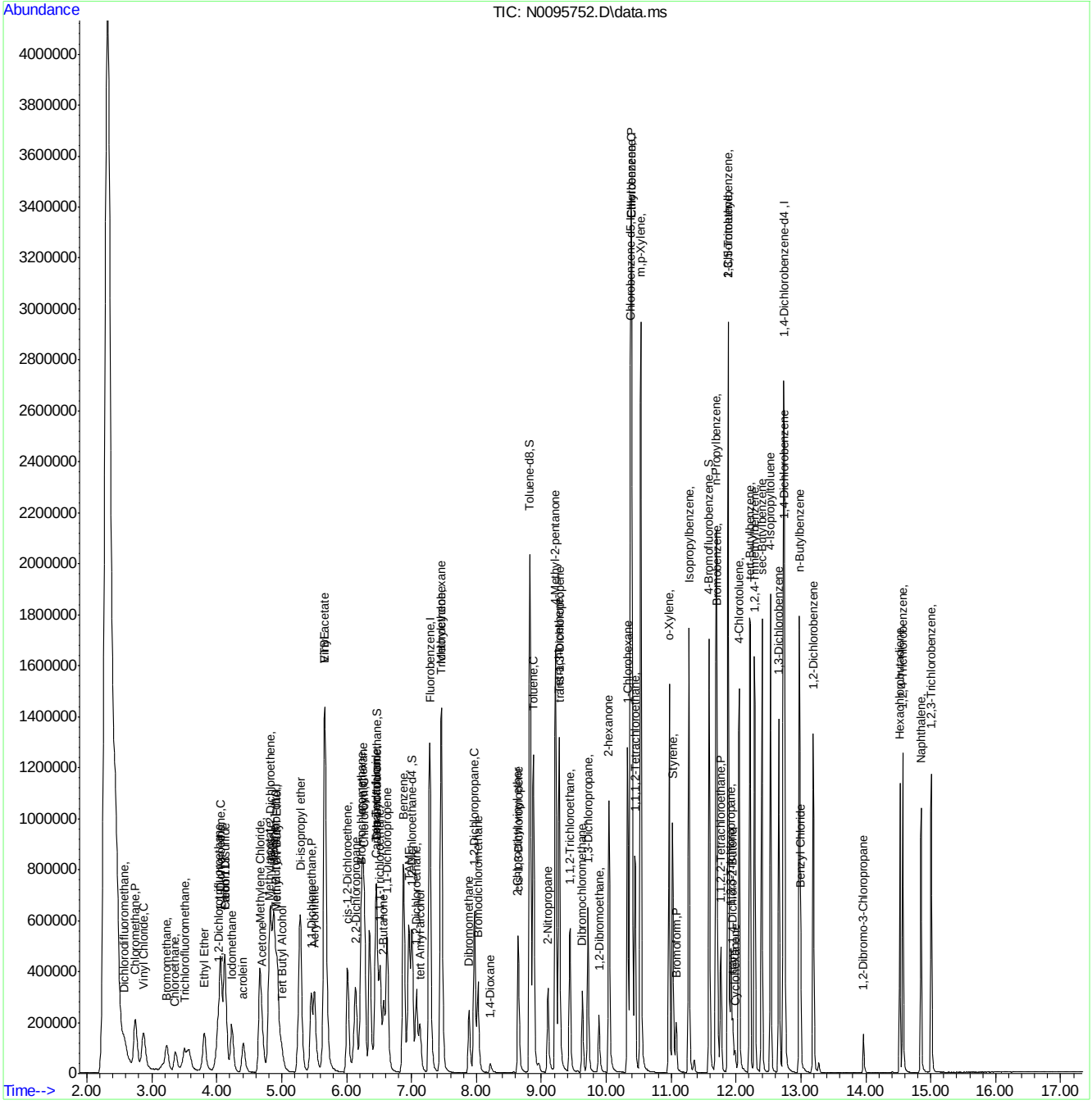
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:25:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

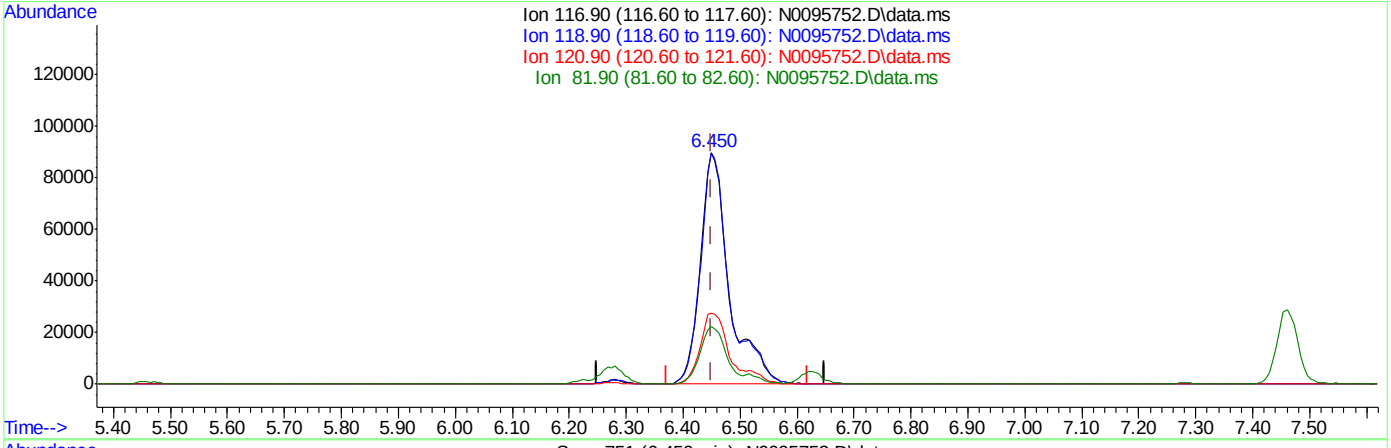
Sample Number:	FA35235-1MSD	**Method:**	SW846 8260C
Lab FileID:	N0095752.D	**Analyst approved:**	07/08/16 13:26 Kathleen McNatt
Injection Time:	07/07/16 19:19	**Supervisor approved:**	07/08/16 15:04 Juan Garcia

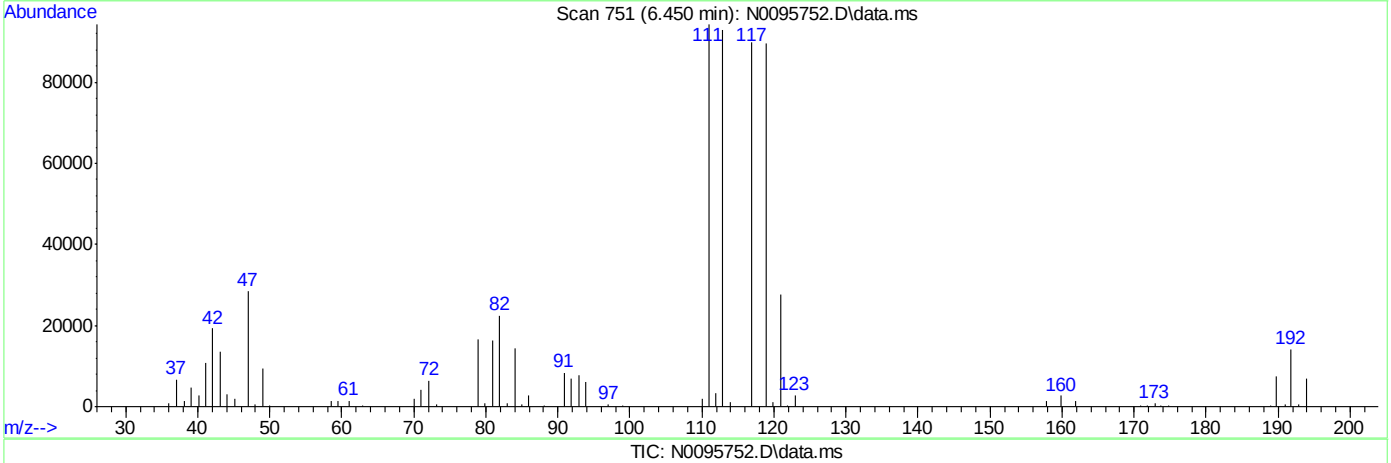
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.45	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		7.01	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:20:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.450min (-0.000) 26.15ug/L

response 314607

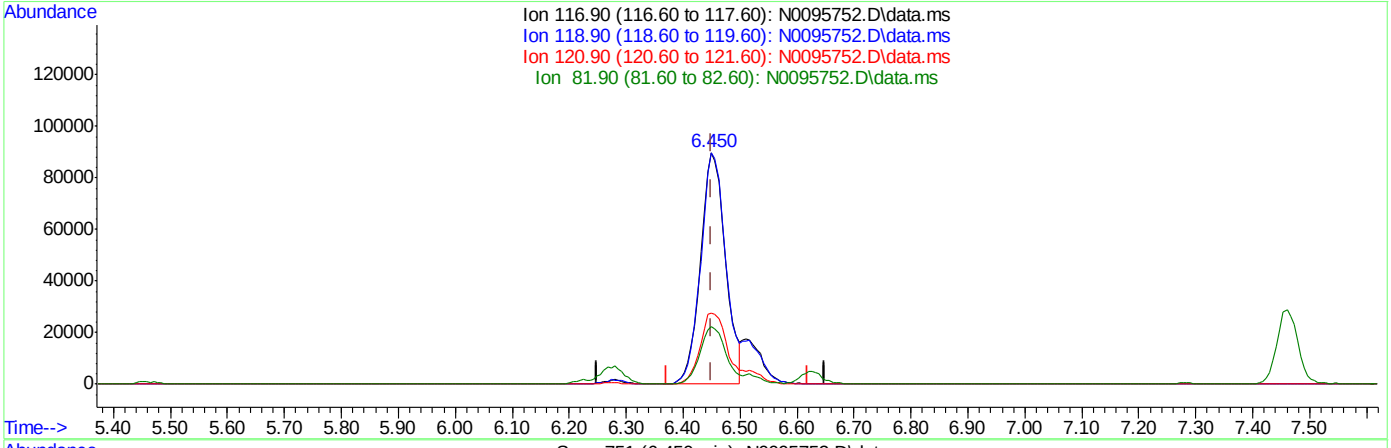
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.72
120.90	29.40	30.71
81.90	22.70	25.08

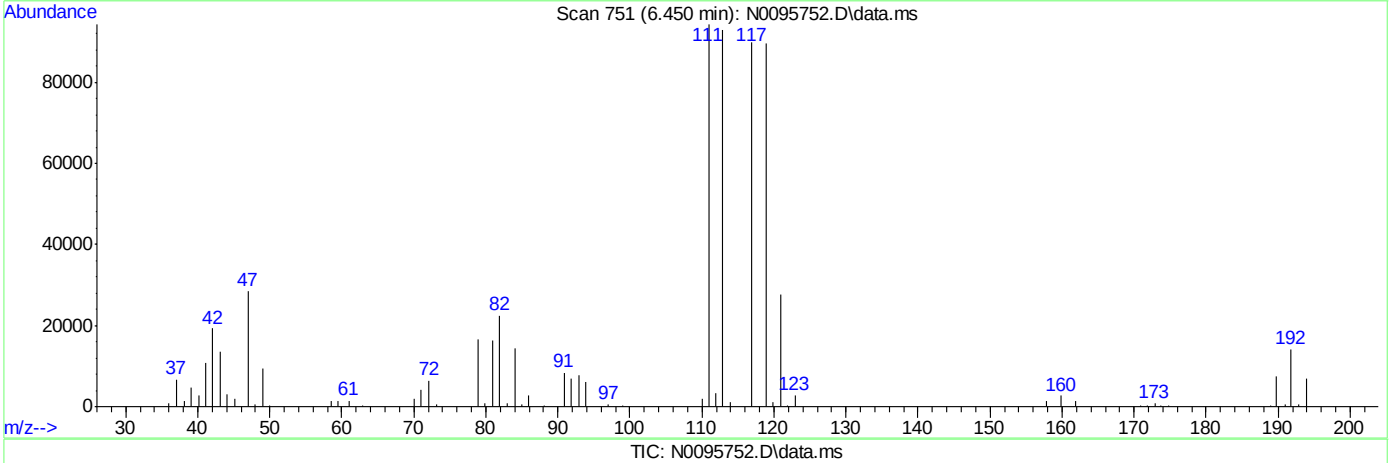
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:20:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.450min (-0.000) 22.60ug/L m

response 271899

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.72
120.90	29.40	30.71
81.90	22.70	25.08

SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:20:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
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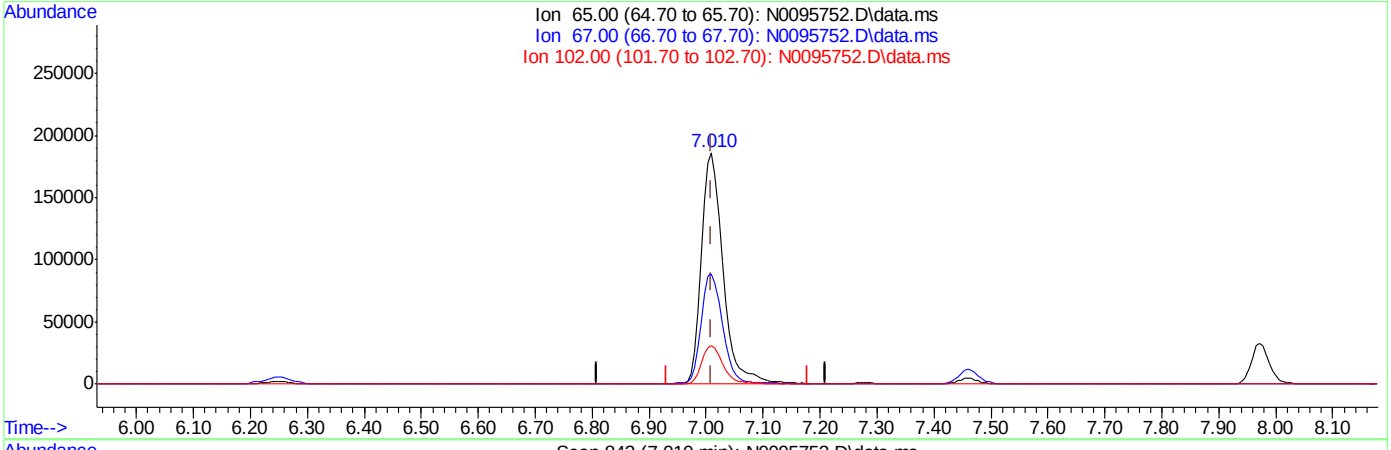
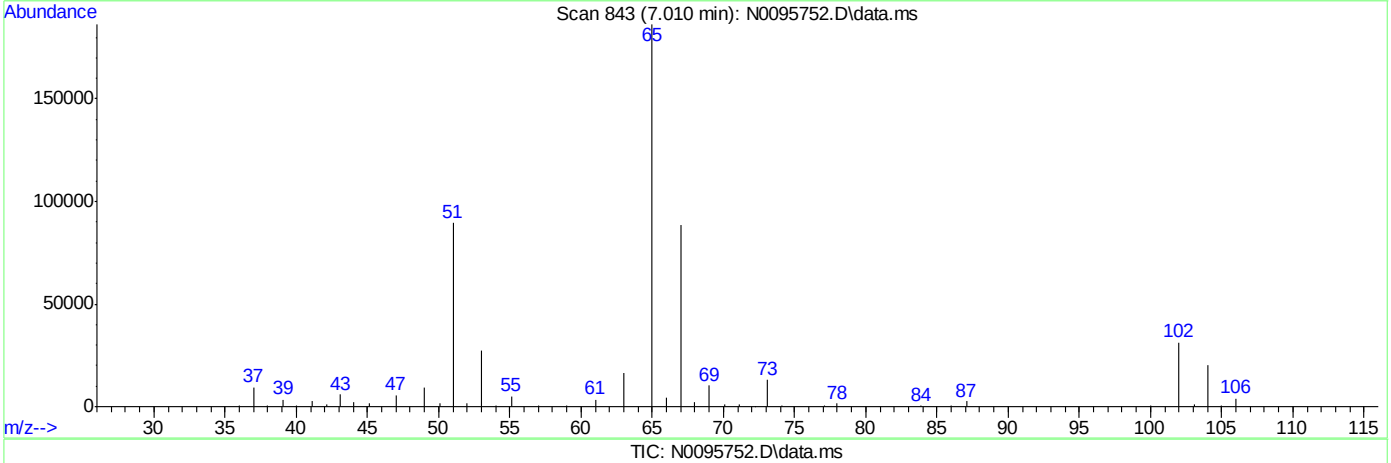




TIC: N0095752.D\data.ms

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

7.010min (-0.000) 53.32ug/L

response 492068

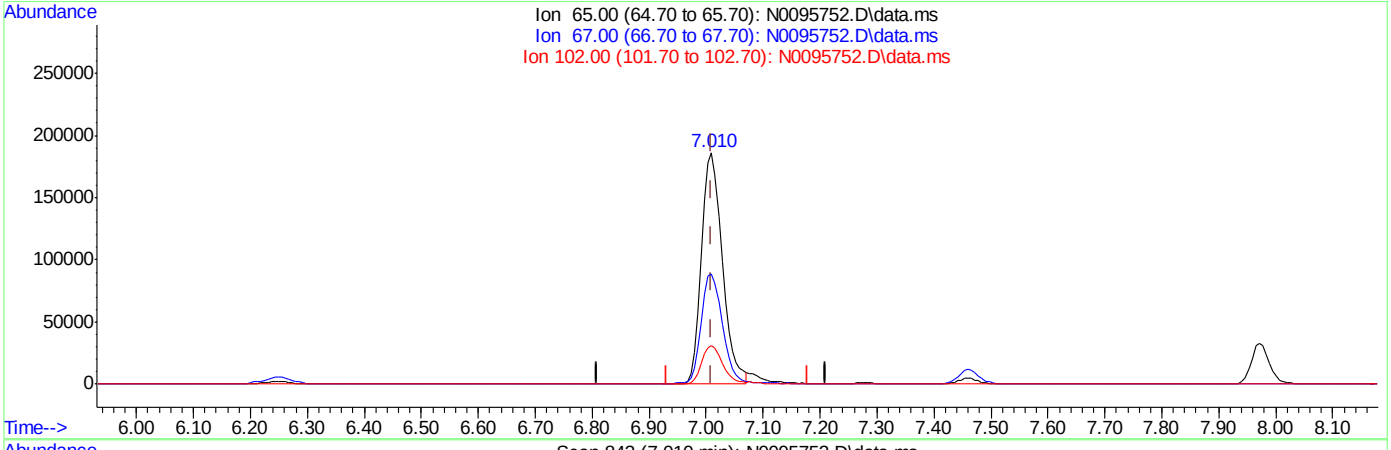
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.45
102.00	21.50	16.73
0.00	0.00	0.00

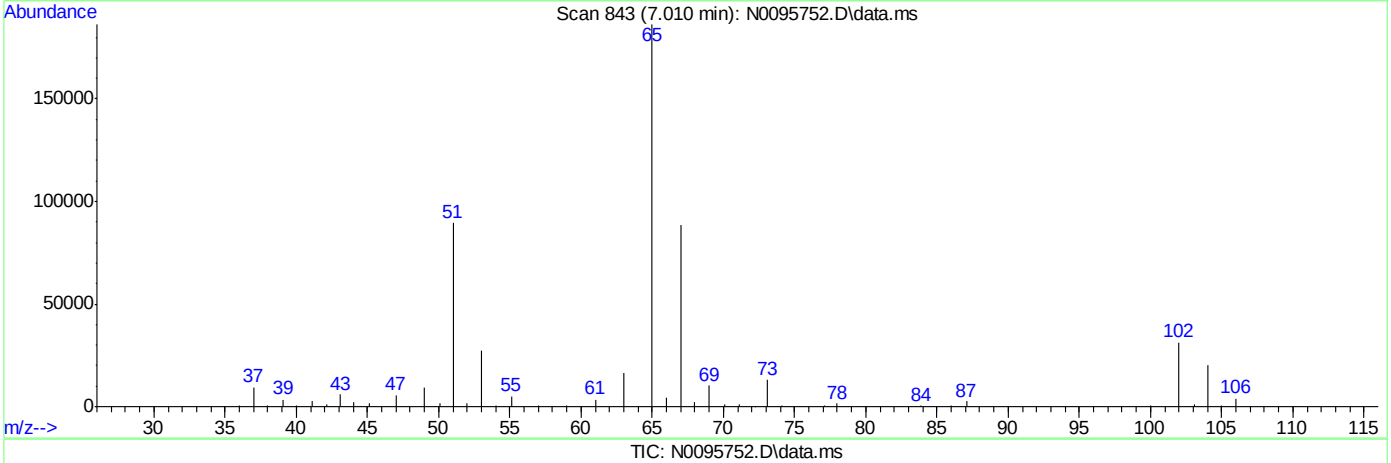
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095752.D
Acq On : 7 Jul 2016 7:19 pm
Operator : katiem
Sample : FA35235-1MSD MA Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 08 07:20:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095752.D\data.ms

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

7.010min (-0.000) 51.33ug/L m

response 473765

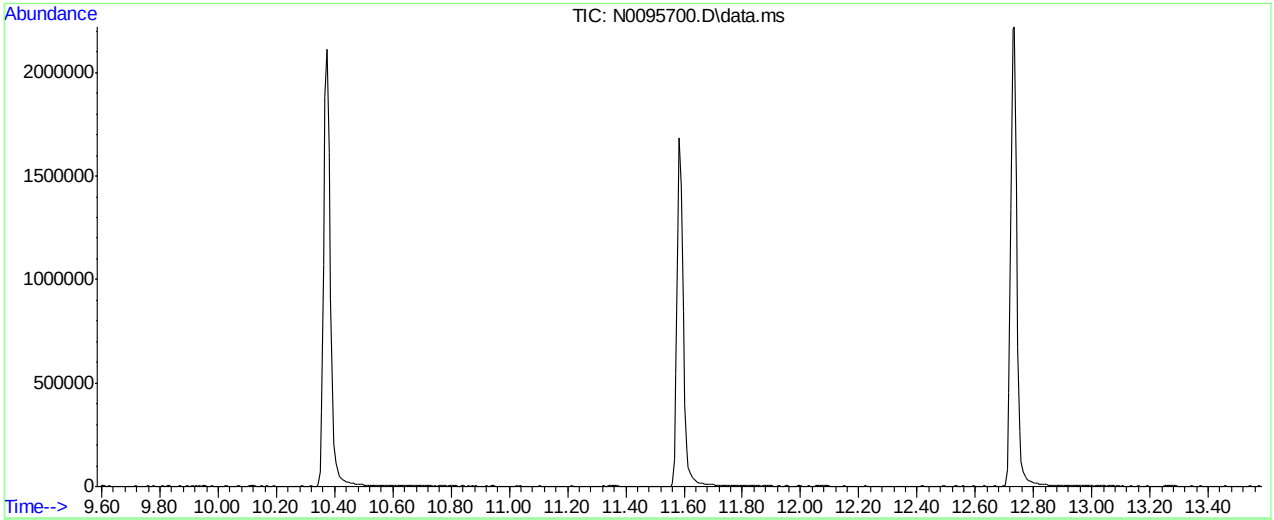
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.62
102.00	21.50	16.73
0.00	0.00	0.00

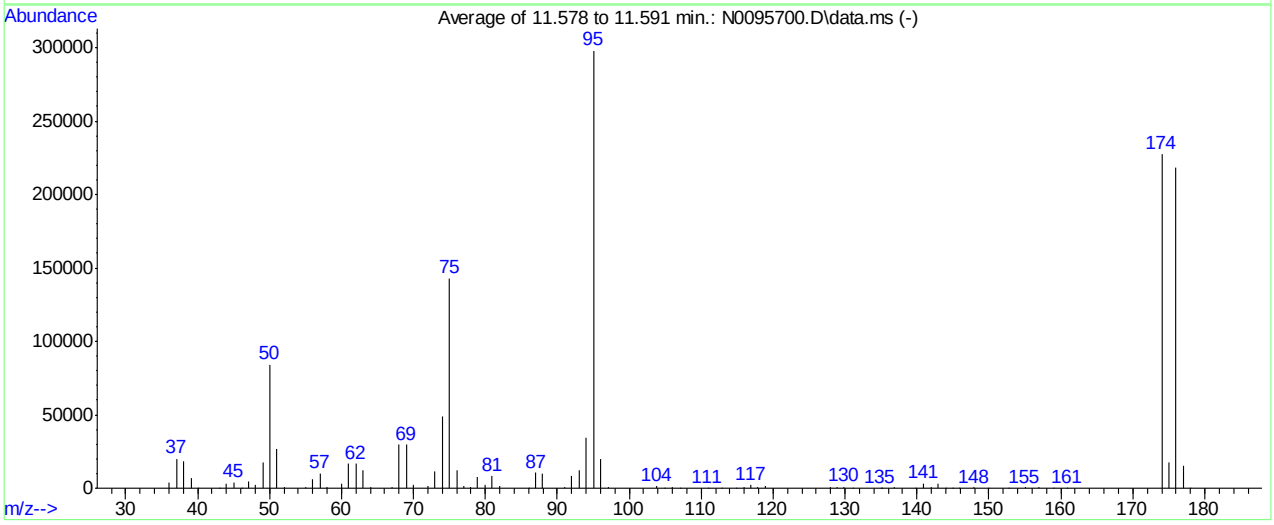
SGS ACCUTEST FA35235

Methods: SW-846 8260B

Data File : C:\MSDchem\2\DATA\070616\N0095700.D Vial: 1
Acq On : 6 Jul 2016 8:41 am Operator: katiem
Sample : bfb Inst : MSVOA8
Misc : MS34327,VN4343,,,,, Multiplr: 1.00
MS Integration Params: Tiny.p

Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624





AutoFind: Scans 1594, 1595, 1596; Background Corrected with Scan 1588

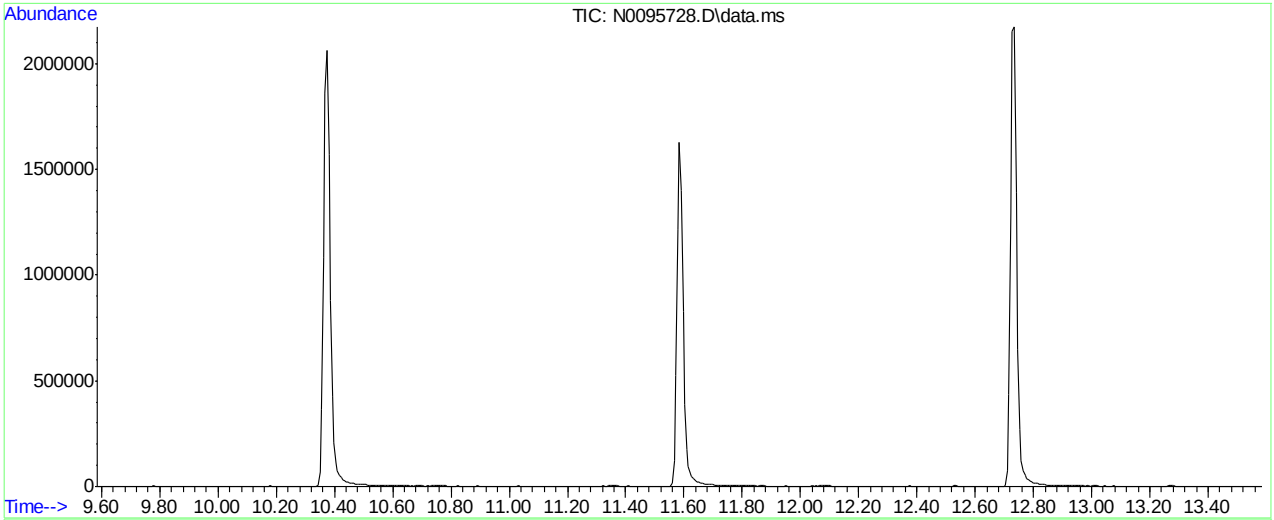
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	28.3	84288	PASS
75	95	30	60	48.0	143027	PASS
95	95	100	100	100.0	298133	PASS
96	95	5	9	6.6	19629	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.4	227819	PASS
175	174	5	9	7.7	17465	PASS
176	174	95	101	95.7	218069	PASS
177	176	5	9	6.9	15068	PASS

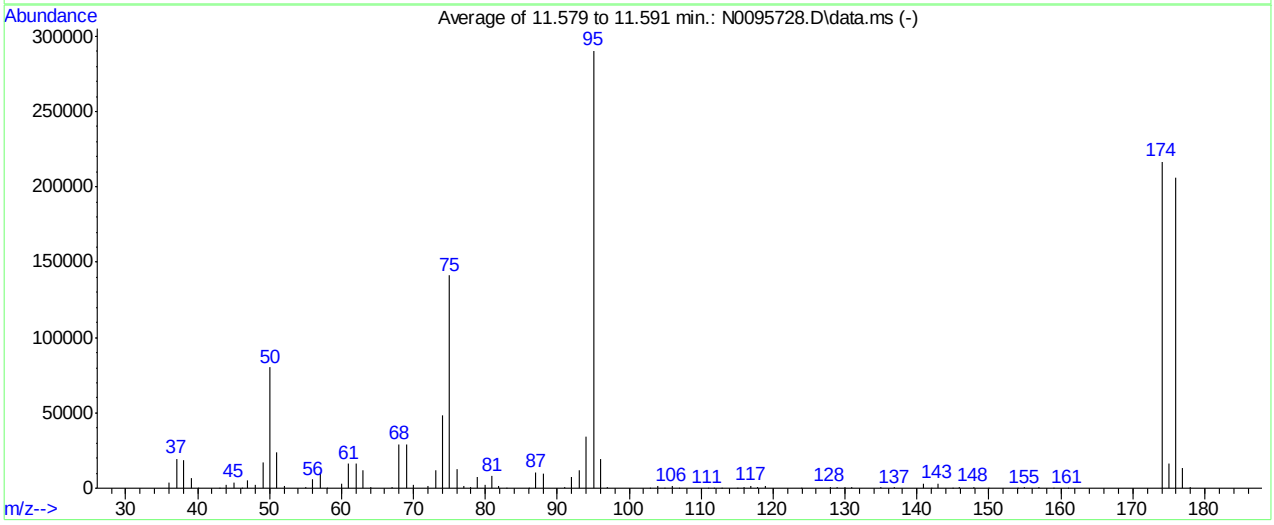
N0095700.D N-JUL06-2016.m Thu Jul 07 08:46:55 2016

Methods: SW-846 8260B

Data File : C:\MSDchem\2\DATA\070716\N0095728.D Vial: 1
Acq On : 7 Jul 2016 7:41 am Operator: katiem
Sample : bfb Inst : MSVOA8
Misc : MS34337,VN4344,,,,, Multiplr: 1.00
MS Integration Params: Tiny.p

Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624





AutoFind: Scans 1594, 1595, 1596; Background Corrected with Scan 1587

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.6	80115	PASS
75	95	30	60	48.6	141320	PASS
95	95	100	100	100.0	290517	PASS
96	95	5	9	6.8	19675	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	74.6	216832	PASS
175	174	5	9	7.5	16284	PASS
176	174	95	101	95.1	206123	PASS
177	176	5	9	6.6	13673	PASS

N0095728.D N-JUL06-2016.m Thu Jul 07 13:59:06 2016

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:37:43 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1330496	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	982527	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	520973	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.917	65	99804	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	349939	50.99	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.98%			
38) 1,2-Dichloroethane-d4	7.010	65	460218	50.90	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.80%			
48) Toluene-d8	8.822	98	1291543	49.57	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.14%			
69) 4-Bromofluorobenzene	11.584	95	511646	50.66	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.32%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.587	85	11389	2.17	ug/L	92
3) Chloromethane	2.727	50	20918	1.67	ug/L	96
4) Vinyl Chloride	2.861	62	13575	1.19	ug/L	94
5) Bromomethane	3.226	94	8700	1.76	ug/L	99
6) Chloroethane	3.366	64	6798	1.34	ug/L	92
7) Trichlorofluoromethane	3.524	101	11984m	1.30	ug/L	
8) Ethyl Ether	3.816	59	8324	1.03	ug/L #	83
9) 1,2-Dichlorotrifluoroe...	4.041	67	9971	1.01	ug/L	81
10) 1,1-Dichloroethene	4.065	61	16066	1.02	ug/L	95
11) Freon 113	4.132	101	8584	0.99	ug/L #	74
12) Carbon Disulfide	4.138	76	25951	0.97	ug/L	85
13) Iodomethane	4.242	142	14880	0.94	ug/L	91
14) Methylene Chloride	4.673	49	25402	1.30	ug/L	78
15) Acetone	4.722	58	3372	5.22	ug/L	91
16) Methyl acetate	4.826	74	3803	4.11	ug/L #	75
17) trans-1,2-Dichloroethene	4.844	61	15315	1.01	ug/L	82
18) Hexane	4.880	56	13245	1.08	ug/L #	90
19) Methyl Tert Butyl Ether	4.941	73	21835	0.96	ug/L	85
20) Di-isopropyl ether	5.288	45	45581	0.98	ug/L	90
21) 1,1-Dichloroethane	5.464	63	18016	0.98	ug/L	94
22) Acrylonitrile	5.537	53	14495m	4.44	ug/L	
23) ETBE	5.671	59	33922	0.93	ug/L	89
24) Vinyl acetate	5.683	43	114308	4.71	ug/L	95
25) cis-1,2-Dichloroethene	6.030	96	9973	1.00	ug/L #	76
26) 2,2-Dichloropropane	6.152	77	11899	0.94	ug/L	100
27) Bromochloromethane	6.237	128	4375	0.95	ug/L #	68
28) Cyclohexane	6.249	56	21502	0.97	ug/L #	81
29) Chloroform	6.286	83	17001	1.05	ug/L	87
30) Tetrahydrofuran	6.462	42	4607	1.74	ug/L #	68
32) Carbon Tetrachloride	6.450	117	11635m	0.98	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	14129	0.96	ug/L	88
34) 2-Butanone	6.596	43	16666	4.93	ug/L	82
35) 1,1-Dichloropropene	6.632	75	12067	0.99	ug/L #	70

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:37:43 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) Benzene	6.882	78	33074	1.00 ug/L	68
37) TAME	6.967	73	21594	0.95 ug/L	75
39) 1,2-Dichloroethane	7.089	62	16705	1.12 ug/L	92
40) Trichloroethene	7.460	95	10072	1.11 ug/L	95
41) Methylcyclohexane	7.466	83	15296	0.97 ug/L #	72
42) Dibromomethane	7.898	93	4179	0.89 ug/L	88
43) 1,2-Dichloropropane	7.977	63	10391	0.98 ug/L	94
44) Bromodichloromethane	8.026	83	9647	0.85 ug/L #	87
45) 2-Chloroethyl vinyl ether	8.567	63	23176	4.17 ug/L #	77
46) cis-1,3-Dichloropropene	8.652	75	11269	0.84 ug/L #	65
49) Toluene	8.883	91	37110	1.03 ug/L	99
50) 2-Nitropropane	9.102	41	7120	3.43 ug/L	95
51) 4-Methyl-2-pentanone	9.224	43	52629	6.14 ug/L	95
52) trans-1,3-Dichloropropene	9.297	75	8180	0.70 ug/L	95
53) Tetrachloroethene	9.279	166	9880	1.01 ug/L	93
54) 1,1,2-Trichloroethane	9.449	83	4936	0.85 ug/L	92
55) Dibromochloromethane	9.638	129	5533	0.66 ug/L	99
56) 1,3-Dichloropropane	9.723	76	11543	0.96 ug/L #	64
57) 1,2-Dibromoethane	9.899	107	5651	0.80 ug/L	99
58) 2-hexanone	10.057	43	33914	5.92 ug/L	92
59) 1-Chlorohexane	10.331	91	10935	0.90 ug/L #	60
60) Ethylbenzene	10.398	91	43213	1.07 ug/L	97
61) Chlorobenzene	10.392	112	24511	1.00 ug/L	88
62) 1,1,1,2-Tetrachloroethane	10.447	131	7546	0.86 ug/L #	81
63) m,p-Xylene	10.538	91	63962	2.07 ug/L	93
64) o-Xylene	10.976	91	30827	0.95 ug/L	95
65) Styrene	11.031	104	21154	0.83 ug/L	87
66) Bromoform	11.079	173	3096	0.72 ug/L	83
67) Isopropylbenzene	11.274	105	39376	0.99 ug/L	96
70) n-Propylbenzene	11.700	91	45093	1.00 ug/L	99
71) Bromobenzene	11.712	156	9653	0.93 ug/L	98
72) 1,1,2,2-Tetrachloroethane	11.773	83	6989	0.89 ug/L	99
73) 1,3,5-Trimethylbenzene	11.883	105	33160	0.97 ug/L	98
74) 2-Chlorotoluene	11.883	91	32227	1.05 ug/L	98
75) trans-1,4-Dichloro-2-B...	11.968	53	2094	0.72 ug/L #	41
76) 1,2,3-Trichloropropane	11.931	110	2025	0.87 ug/L #	79
77) Cyclohexanone	11.986	55	1295	2.93 ug/L #	51
78) 4-Chlorotoluene	12.053	91	29337	0.98 ug/L	95
79) tert-Butylbenzene	12.217	91	21814	1.10 ug/L	92
80) 1,2,4-Trimethylbenzene	12.290	105	33558	0.99 ug/L	97
81) sec-Butylbenzene	12.400	105	41735	0.98 ug/L	98
82) 4-Isopropyltoluene	12.533	119	36618	0.93 ug/L	98
83) 1,3-Dichlorobenzene	12.667	146	19366	0.96 ug/L	95
84) 1,4-Dichlorobenzene	12.746	146	21395m	1.01 ug/L	
85) n-Butylbenzene	12.978	92	17717	0.87 ug/L	91
86) Benzyl Chloride	13.002	126	1199	0.37 ug/L #	91
87) 1,2-Dichlorobenzene	13.197	146	17980	0.94 ug/L	91
88) 1,2-Dibromo-3-Chloropr...	13.969	75	1140	0.88 ug/L #	64
89) Hexachlorobutadiene	14.523	225	6685	0.96 ug/L	80
90) 1,2,4-Trichlorobenzene	14.578	180	11623	0.89 ug/L	92

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:37:43 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.857	128	19334	0.83	ug/L	94
92) 1,2,3-Trichlorobenzene	15.016	180	10219	0.90	ug/L	94
94) acrolein	4.430	56	7566	5.30	ug/L	96
95) Tert Butyl Alcohol	4.996	59	7049	10.66	ug/L	77
96) tert Amyl alcohol	7.137	59	4461	7.99	ug/L	87
97) 1,4-Dioxane	8.232	88	534	11.77	ug/L	58

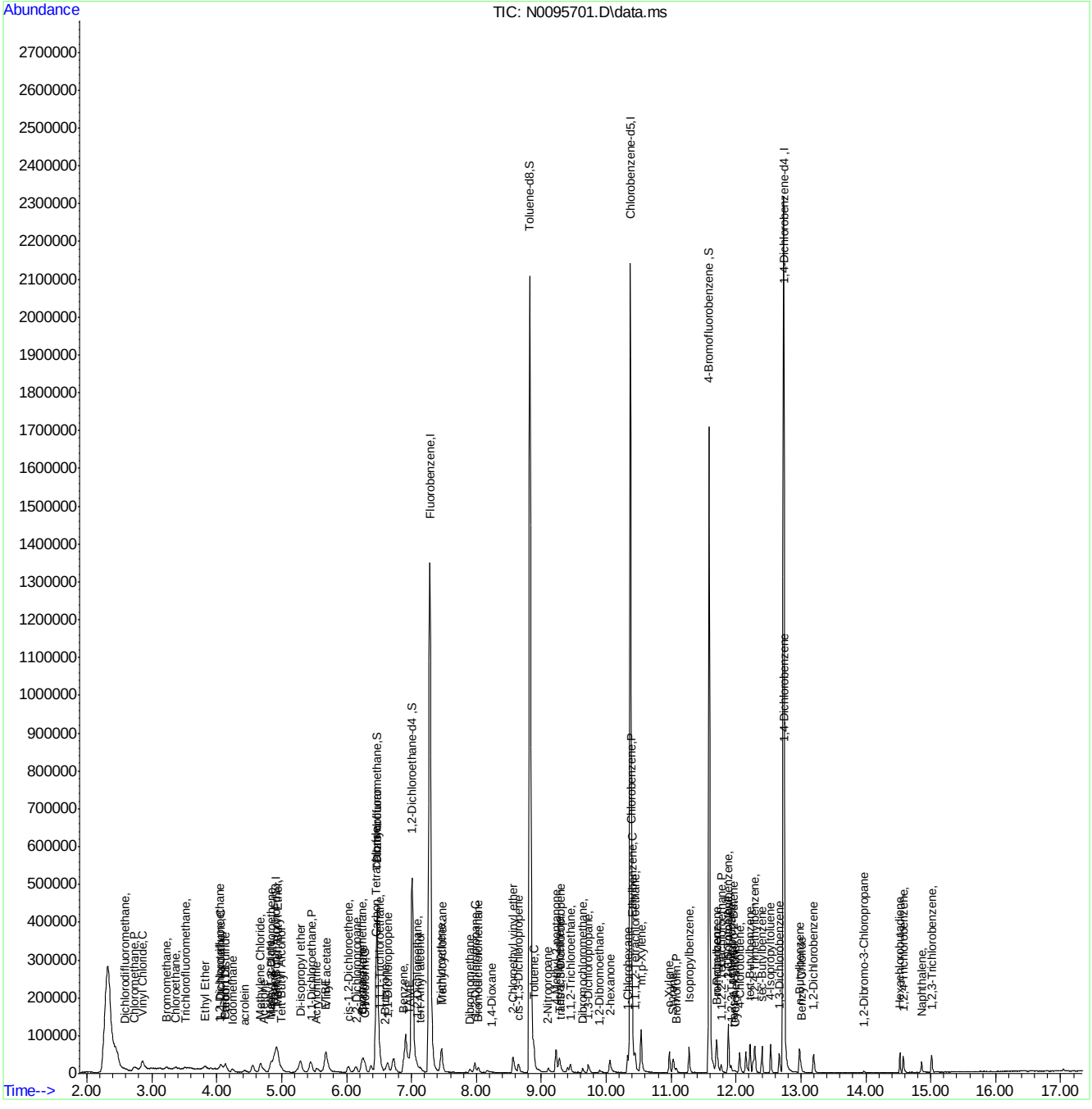
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:37:43 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration



N-JUL06-2016.m Thu Jul 07 11:04:45 2016 Page: 4

SGS ACCUTEST FA35235

Manual Integration Approval Summary

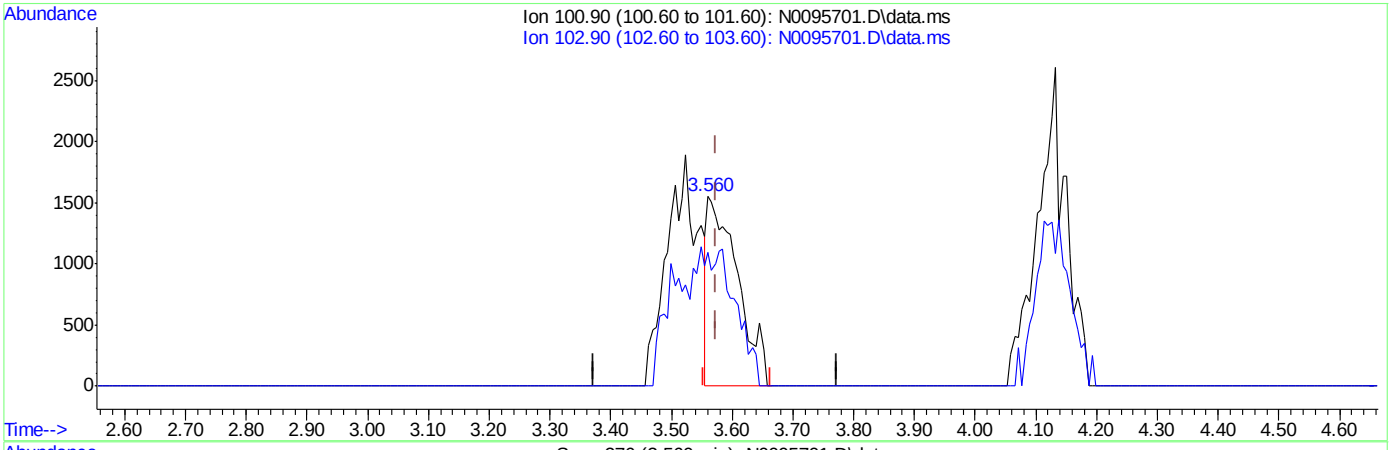
Sample Number:	VN4343-IC4343	**Method:**	SW846 8260B
Lab FileID:	N0095701.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 09:13	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

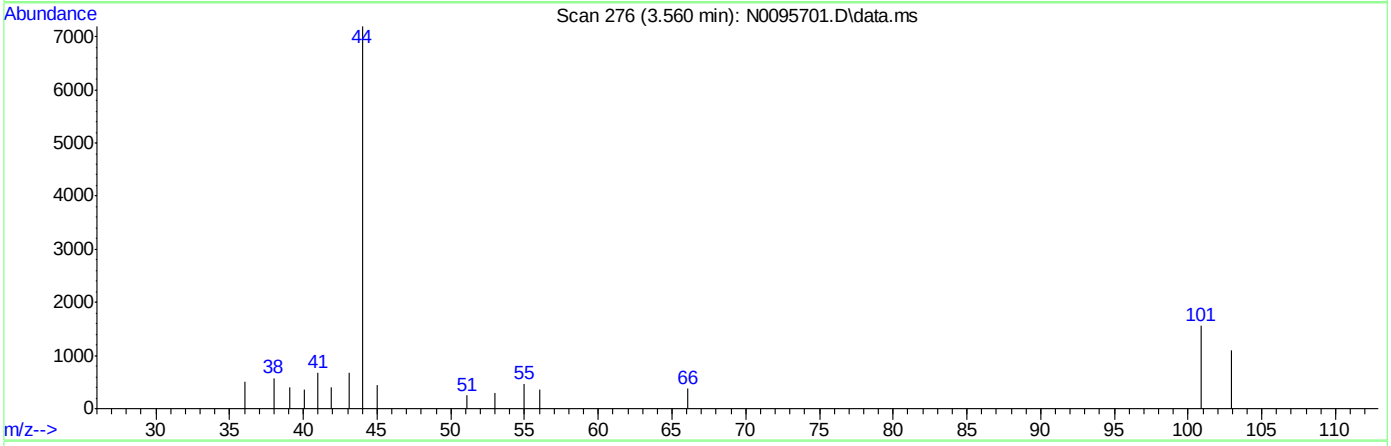
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.52	Split peak
Acrylonitrile	107-13-1		5.54	Poor instrument integration
Carbon Tetrachloride	56-23-5		6.45	Overlapping peak
1,4-Dichlorobenzene	106-46-7		12.75	Missed peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095701.D\data.ms

(7) Trichlorofluoromethane ( )

3.560min (-0.013) 0.58ug/L

response 5370

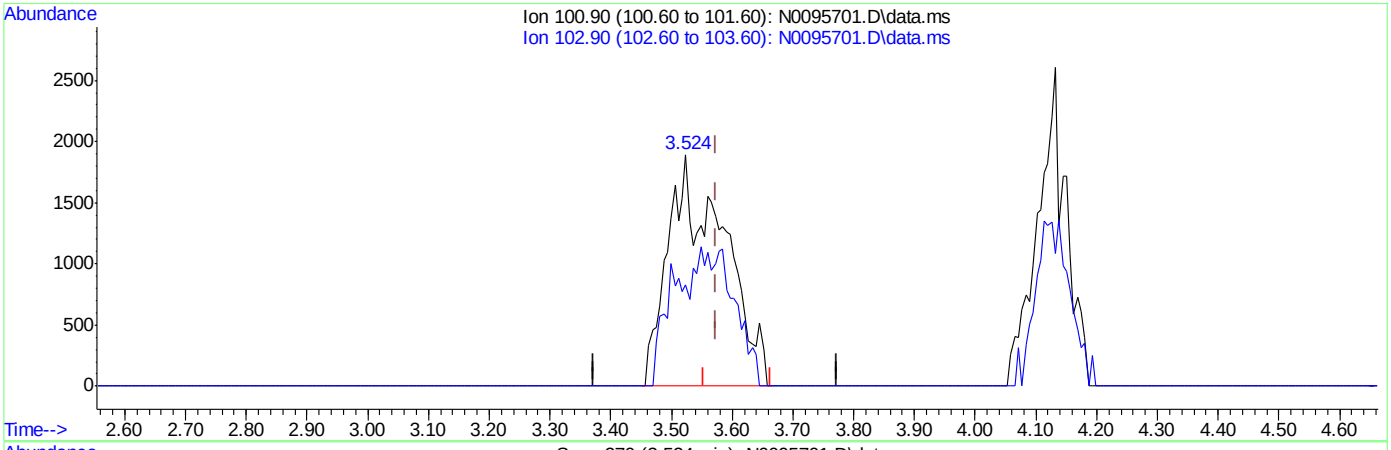
Ion	Exp%	Act%
100.90	100	100
102.90	67.90	70.48
0.00	0.00	0.00
0.00	0.00	0.00

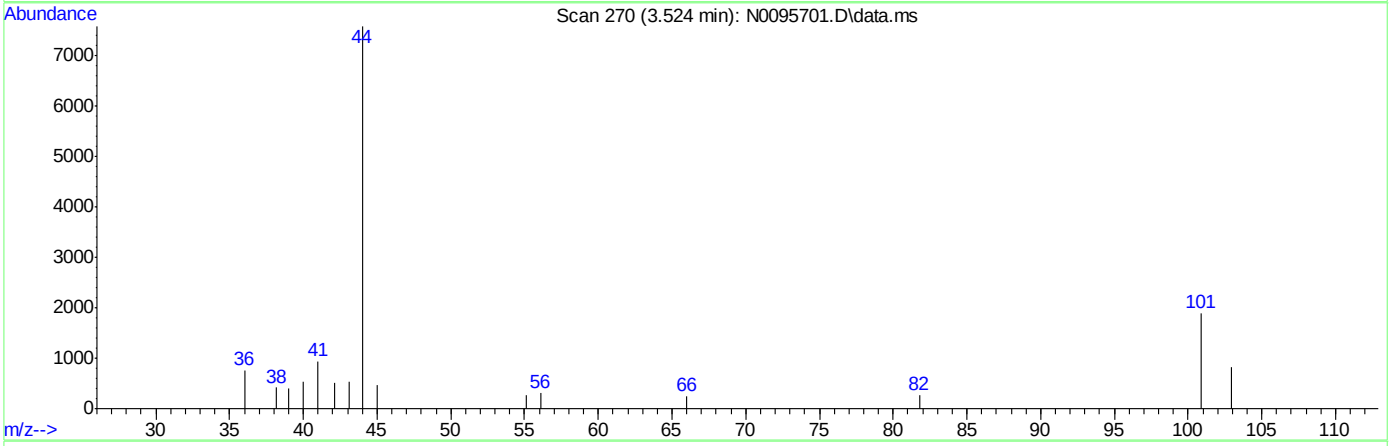
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095701.D\data.ms

(7) Trichlorofluoromethane ( )

3.524min (-0.049) 1.30ug/L m

response 11984

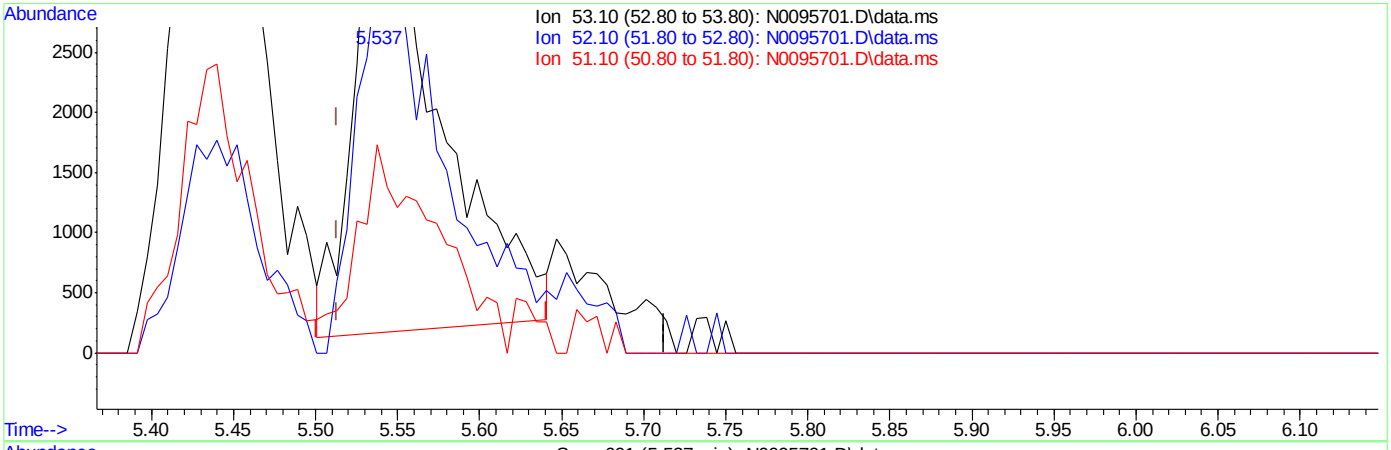
Ion	Exp%	Act%
100.90	100	100
102.90	67.90	43.98
0.00	0.00	0.00
0.00	0.00	0.00

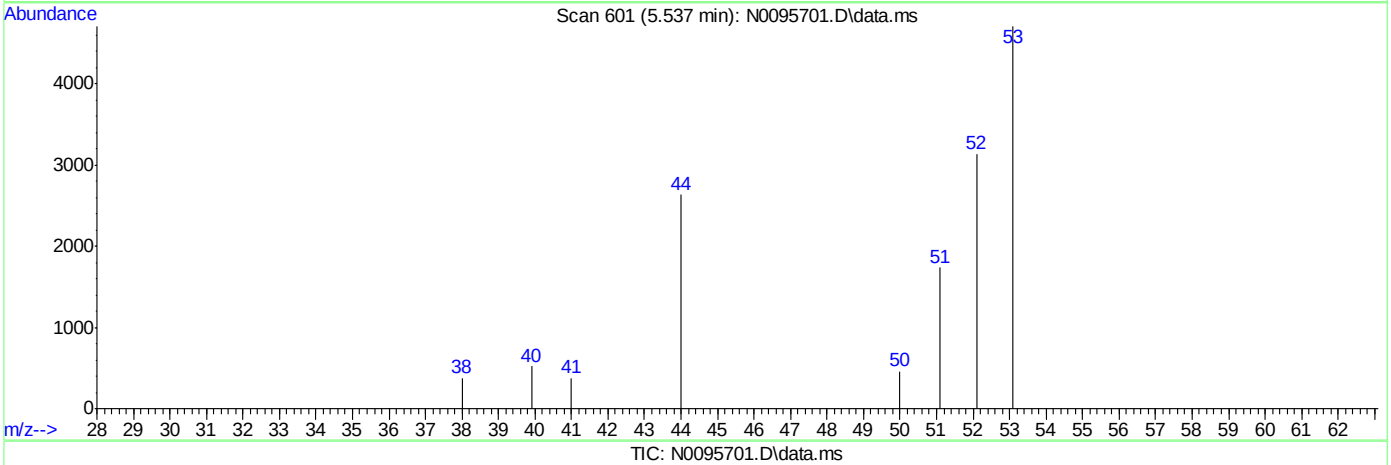
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095701.D\data.ms

(22) Acrylonitrile

5.537min (+0.024) 4.27ug/L

response 13954

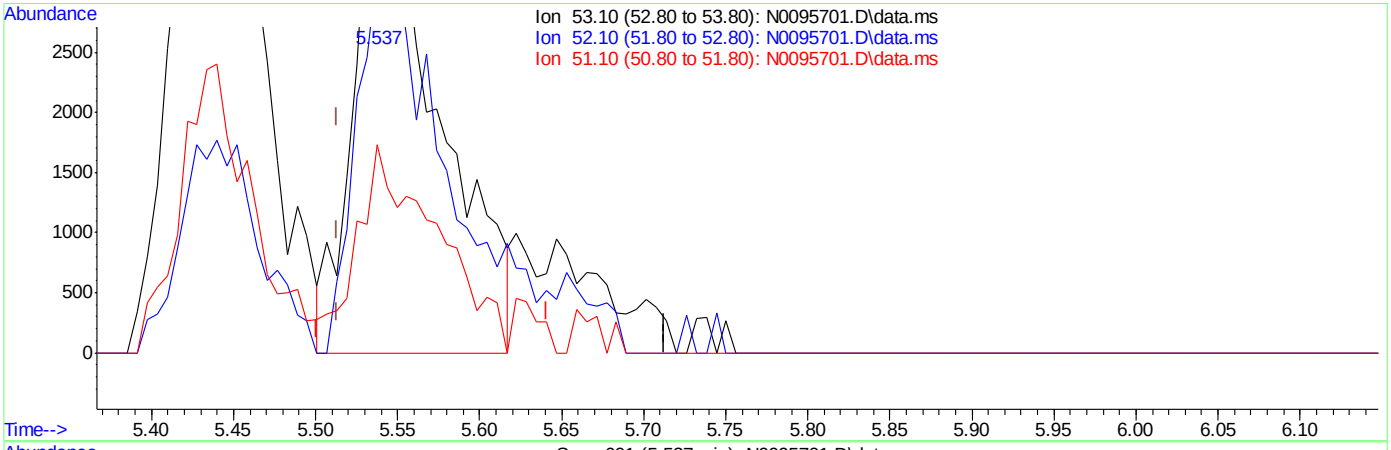
Ion	Exp%	Act%
53.10	100	100
52.10	82.10	75.55
51.10	34.60	35.52
0.00	0.00	0.00

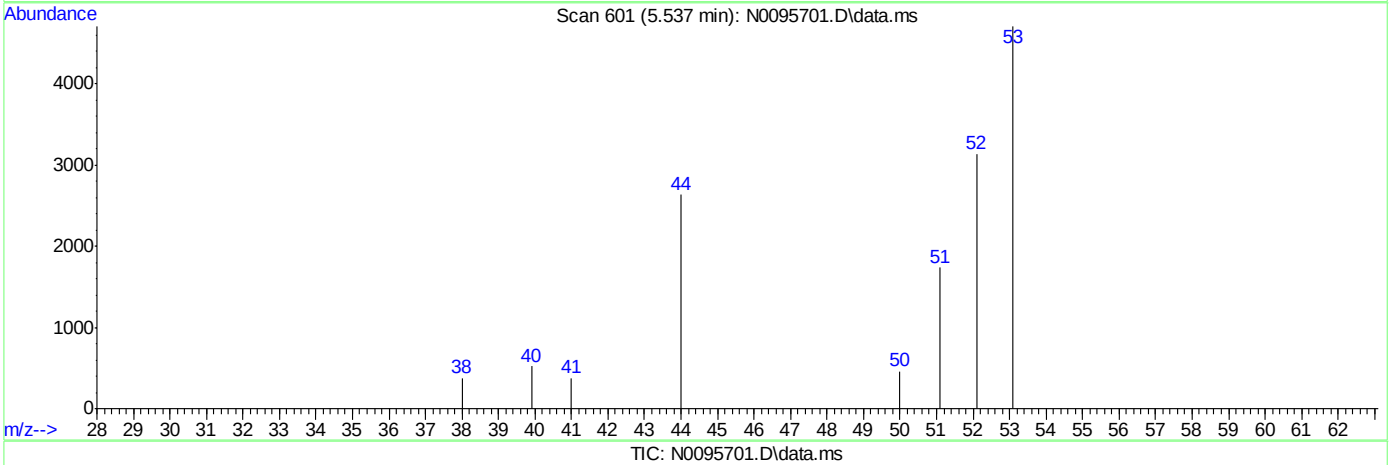
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095701.D\data.ms

(22) Acrylonitrile

5.537min (+0.024) 4.44ug/L m

response 14495

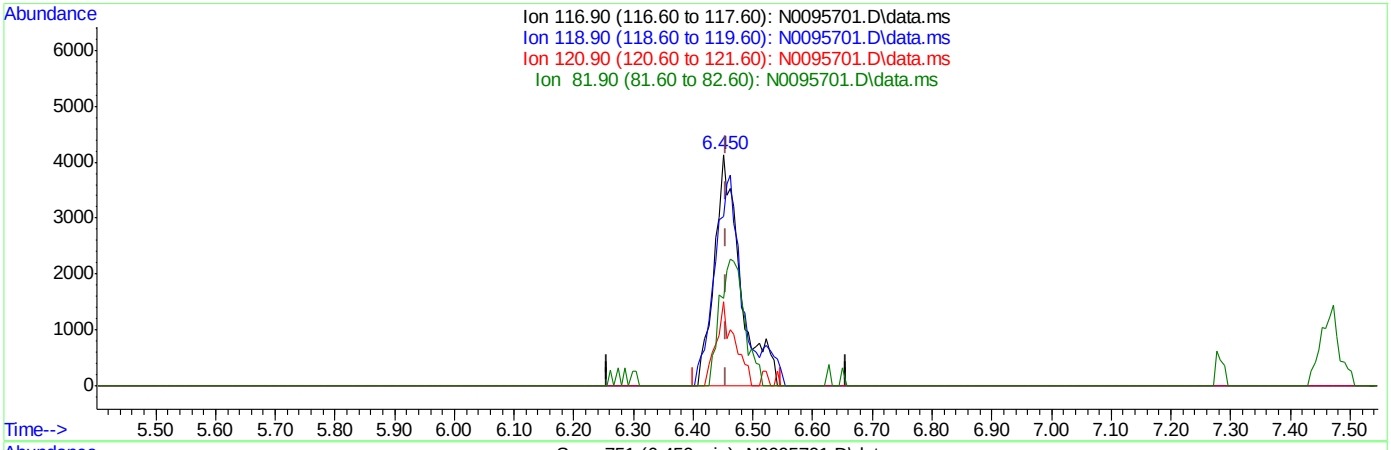
Ion	Exp%	Act%
53.10	100	100
52.10	82.10	66.60
51.10	34.60	36.84
0.00	0.00	0.00

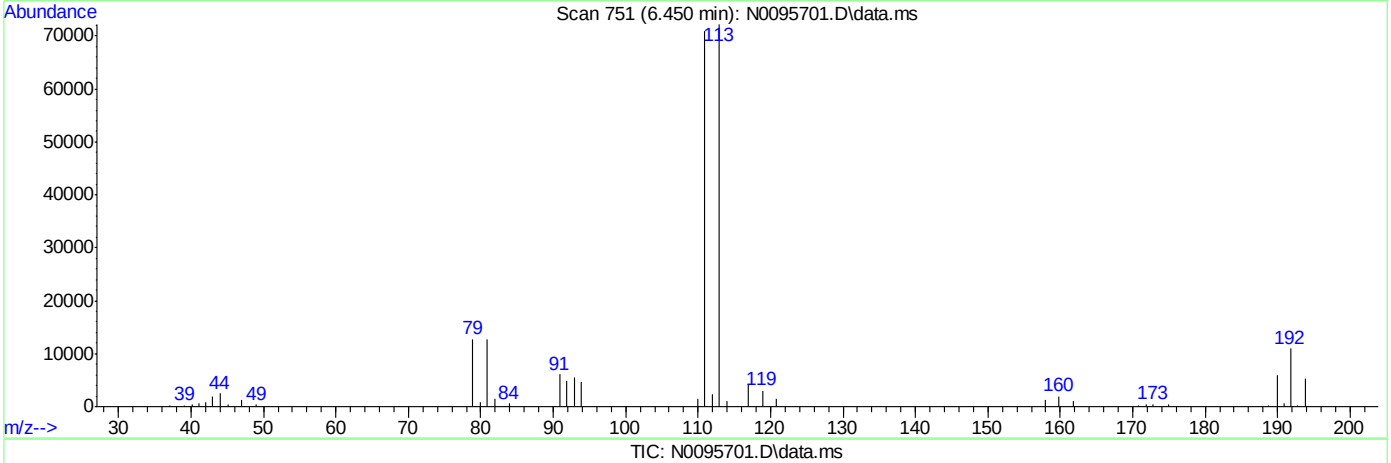
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095701.D\data.ms

(32) Carbon Tetrachloride ( )

6.450min (-0.006) 1.06ug/L

response 12540

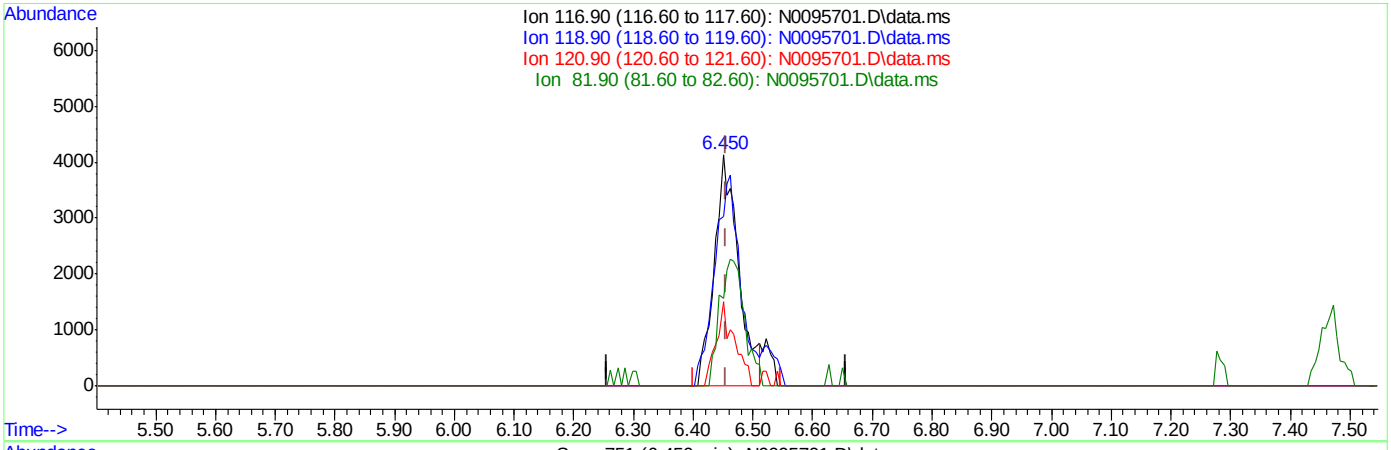
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	73.29
120.90	29.40	36.50
81.90	22.70	37.97

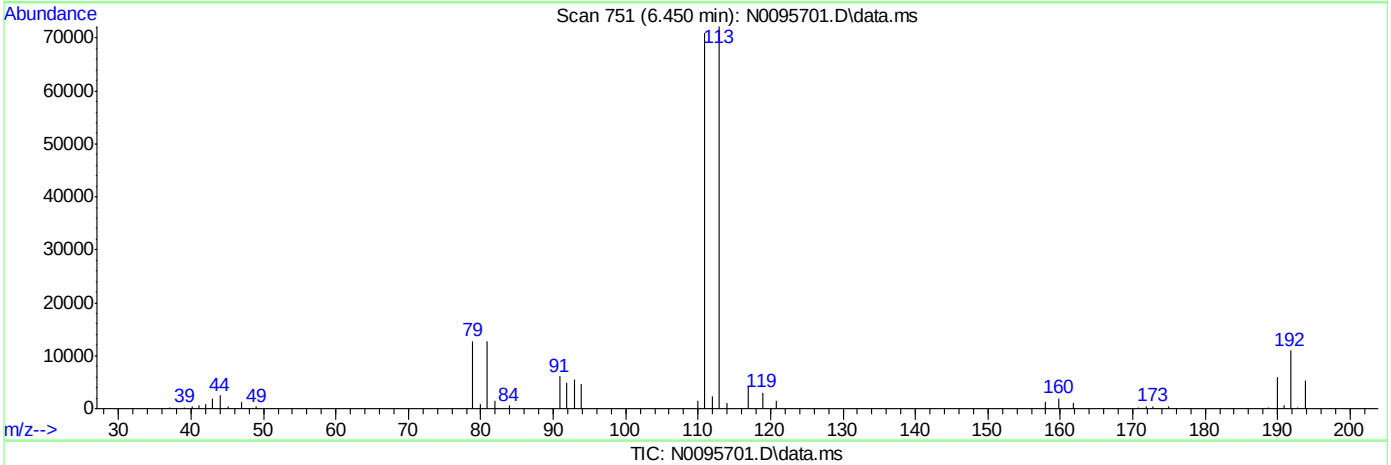
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095701.D\data.ms

(32) Carbon Tetrachloride ( )

6.450min (-0.006) 0.98ug/L m

response 11635

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	73.29
120.90	29.40	36.50
81.90	22.70	37.97

SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
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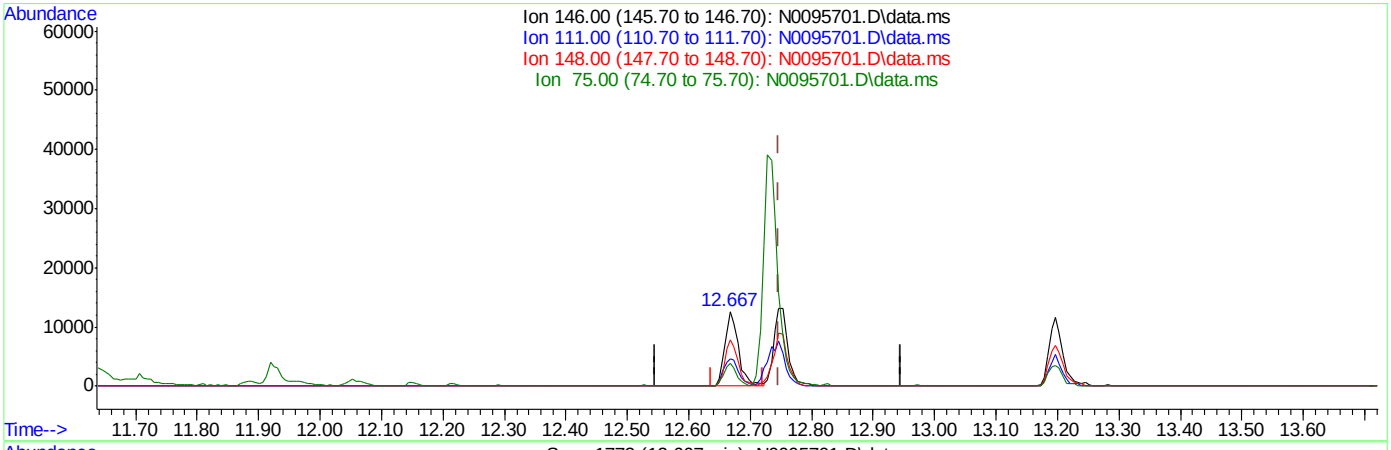
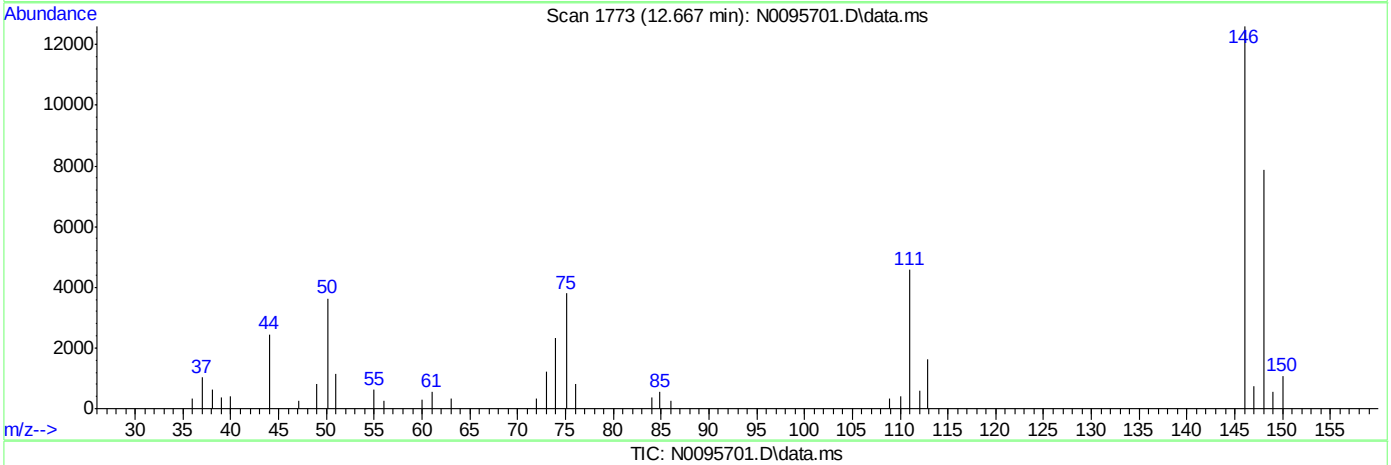
Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095701.D\data.ms

(84) 1,4-Dichlorobenzene

12.667min (-0.079) 0.92ug/L

response 19366

Ion	Exp%	Act%
146.00	100	100
111.00	36.30	36.23
148.00	66.00	62.51
75.00	26.60	30.08

SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095701.D
Acq On : 6 Jul 2016 9:13 am
Operator : katiem
Sample : IC4343-1 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 11:34:02 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
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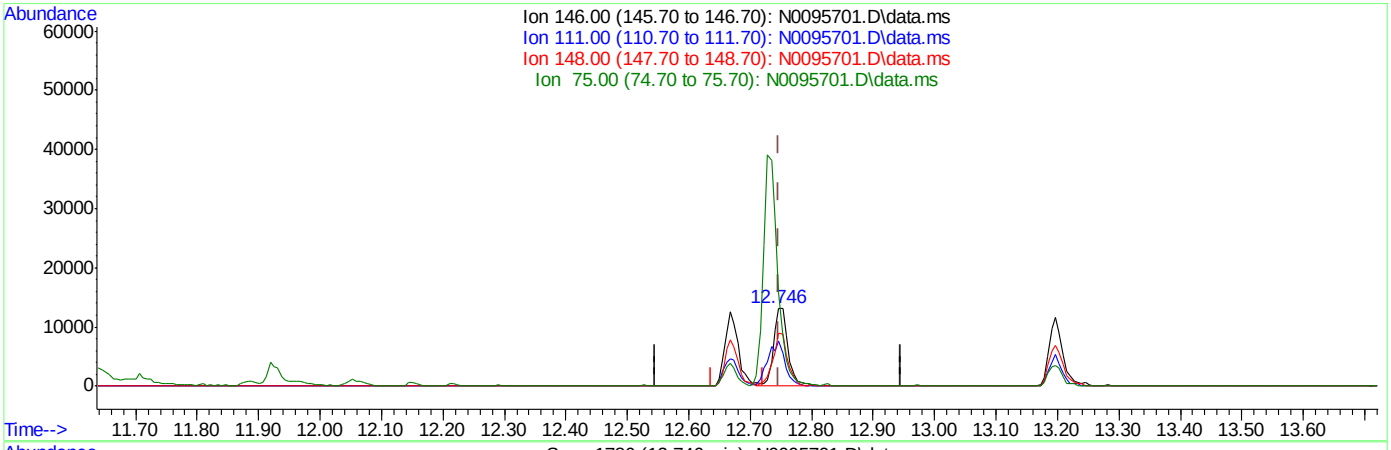
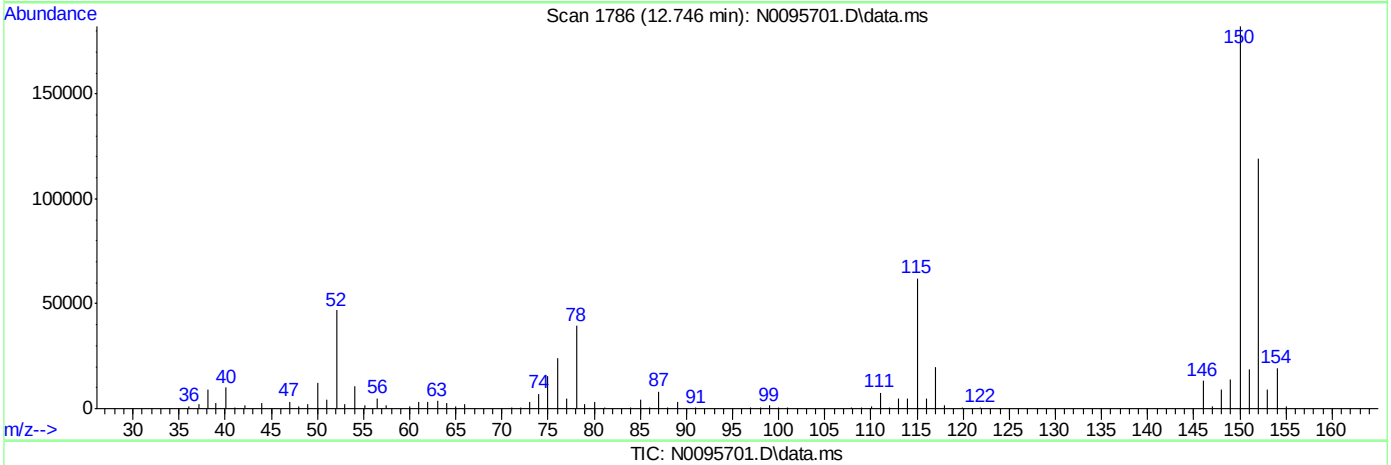




TIC: N0095701.D\data.ms

(84) 1,4-Dichlorobenzene

12.746min (-0.000) 1.01ug/L m

response 21395

Ion	Exp%	Act%
146.00	100	100
111.00	36.30	57.70
148.00	66.00	68.15
75.00	26.60	119.48#

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 11:38:42 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1308971	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	951849	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	510708	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	97854	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	342398	50.71	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.42%			
38) 1,2-Dichloroethane-d4	7.010	65	452698	50.89	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.78%			
48) Toluene-d8	8.823	98	1269146	50.28	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.56%			
69) 4-Bromofluorobenzene	11.584	95	502430	50.75	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.587	85	56203	10.89	ug/L	96
3) Chloromethane	2.739	50	86317	7.02	ug/L	98
4) Vinyl Chloride	2.873	62	62641	6.68	ug/L	96
5) Bromomethane	3.232	94	33185	6.90	ug/L	96
6) Chloroethane	3.372	64	29371	6.05	ug/L	93
7) Trichlorofluoromethane	3.572	101	55316m	6.10	ug/L	
8) Ethyl Ether	3.816	59	43052	5.40	ug/L #	83
9) 1,2-Dichlorotrifluoroe...	4.029	67	53829	5.54	ug/L	96
10) 1,1-Dichloroethene	4.065	61	84157	5.43	ug/L	89
11) Freon 113	4.126	101	44673	5.26	ug/L	96
12) Carbon Disulfide	4.138	76	136905	5.20	ug/L	80
13) Iodomethane	4.242	142	81237	5.22	ug/L	96
14) Methylene Chloride	4.674	49	106729	5.56	ug/L	73
15) Acetone	4.722	58	18497	29.12	ug/L #	83
16) Methyl acetate	4.820	74	24052	26.39	ug/L #	40
17) trans-1,2-Dichloroethene	4.838	61	78973	5.30	ug/L	87
18) Hexane	4.880	56	65552	5.45	ug/L #	87
19) Methyl Tert Butyl Ether	4.935	73	116407	5.20	ug/L	71
20) Di-isopropyl ether	5.288	45	238372	5.21	ug/L	92
21) 1,1-Dichloroethane	5.464	63	95702	5.28	ug/L	98
22) Acrylonitrile	5.519	53	75058	23.37	ug/L	93
23) ETBE	5.671	59	185737	5.17	ug/L	85
24) Vinyl acetate	5.677	43	578324	24.22	ug/L	97
25) cis-1,2-Dichloroethene	6.024	96	51671	5.26	ug/L #	80
26) 2,2-Dichloropropane	6.140	77	64022	5.12	ug/L	99
27) Bromochloromethane	6.231	128	23909	5.27	ug/L #	64
28) Cyclohexane	6.249	56	113805	5.19	ug/L #	86
29) Chloroform	6.280	83	85052	5.33	ug/L	93
30) Tetrahydrofuran	6.468	42	12750	4.90	ug/L	89
32) Carbon Tetrachloride	6.456	117	59992m	5.14	ug/L	
33) 1,1,1-Trichloroethane	6.523	97	75819	5.22	ug/L	94
34) 2-Butanone	6.584	43	89034	26.61	ug/L	84
35) 1,1-Dichloropropene	6.626	75	64609	5.41	ug/L	81

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 11:38:42 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Benzene	6.882	78	172859	5.31	ug/L	50
37) TAME	6.967	73	114991	5.14	ug/L #	73
39) 1,2-Dichloroethane	7.083	62	78251	5.31	ug/L	97
40) Trichloroethene	7.460	95	47985	5.37	ug/L	96
41) Methylcyclohexane	7.460	83	82198	5.28	ug/L #	71
42) Dibromomethane	7.892	93	24329	5.24	ug/L	96
43) 1,2-Dichloropropane	7.971	63	53631	5.14	ug/L	87
44) Bromodichloromethane	8.026	83	56470	5.07	ug/L #	91
45) 2-Chloroethyl vinyl ether	8.555	63	135369	24.76	ug/L	81
46) cis-1,3-Dichloropropene	8.646	75	64770	4.88	ug/L	76
49) Toluene	8.877	91	189200	5.40	ug/L	98
50) 2-Nitropropane	9.102	41	37492	18.63	ug/L	96
51) 4-Methyl-2-pentanone	9.218	43	228986	27.57	ug/L	96
52) trans-1,3-Dichloropropene	9.285	75	51430	4.58	ug/L #	68
53) Tetrachloroethene	9.279	166	50166	5.31	ug/L	94
54) 1,1,2-Trichloroethane	9.443	83	28645	5.11	ug/L #	90
55) Dibromochloromethane	9.638	129	37381	4.59	ug/L	99
56) 1,3-Dichloropropane	9.723	76	61271	5.24	ug/L #	67
57) 1,2-Dibromoethane	9.893	107	33850	4.96	ug/L	93
58) 2-hexanone	10.045	43	150831	27.18	ug/L	92
59) 1-Chlorohexane	10.331	91	61977	5.26	ug/L #	45
60) Ethylbenzene	10.392	91	212606	5.45	ug/L	97
61) Chlorobenzene	10.392	112	127911	5.37	ug/L	90
62) 1,1,1,2-Tetrachloroethane	10.441	131	42301	5.00	ug/L	96
63) m,p-Xylene	10.532	91	333972	11.15	ug/L	97
64) o-Xylene	10.970	91	168084	5.35	ug/L	98
65) Styrene	11.025	104	124124	5.01	ug/L	89
66) Bromoform	11.080	173	17666	4.21	ug/L	97
67) Isopropylbenzene	11.274	105	205494	5.32	ug/L	98
70) n-Propylbenzene	11.694	91	242800	5.50	ug/L	99
71) Bromobenzene	11.706	156	53549	5.25	ug/L	93
72) 1,1,2,2-Tetrachloroethane	11.767	83	37702	4.91	ug/L	98
73) 1,3,5-Trimethylbenzene	11.877	105	180226	5.40	ug/L	100
74) 2-Chlorotoluene	11.883	91	163866	5.46	ug/L	99
75) trans-1,4-Dichloro-2-B...	11.950	53	14266	4.99	ug/L #	39
76) 1,2,3-Trichloropropane	11.925	110	11177	4.92	ug/L	74
77) Cyclohexanone	11.986	55	6683	27.24	ug/L	82
78) 4-Chlorotoluene	12.047	91	156173	5.35	ug/L	99
79) tert-Butylbenzene	12.211	91	108097	5.58	ug/L	89
80) 1,2,4-Trimethylbenzene	12.290	105	180570	5.41	ug/L	99
81) sec-Butylbenzene	12.400	105	229202	5.48	ug/L	96
82) 4-Isopropyltoluene	12.534	119	205371	5.33	ug/L	98
83) 1,3-Dichlorobenzene	12.661	146	102837	5.21	ug/L	95
84) 1,4-Dichlorobenzene	12.746	146	108680	5.26	ug/L	89
85) n-Butylbenzene	12.978	92	104684	5.26	ug/L	98
86) Benzyl Chloride	12.996	126	11059	3.47	ug/L #	79
87) 1,2-Dichlorobenzene	13.191	146	95435	5.10	ug/L	92
88) 1,2-Dibromo-3-Chloropr...	13.963	75	5418	4.28	ug/L #	70
89) Hexachlorobutadiene	14.523	225	36200	5.31	ug/L	85
90) 1,2,4-Trichlorobenzene	14.572	180	63523	4.94	ug/L	94

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 11:38:42 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.857	128	106824	4.67	ug/L	98
92) 1,2,3-Trichlorobenzene	15.010	180	54894	4.95	ug/L	96
94) acrolein	4.424	56	30789	22.04	ug/L	97
95) Tert Butyl Alcohol	5.002	59	34624	53.38	ug/L	82
96) tert Amyl alcohol	7.137	59	24374	44.52	ug/L	87
97) 1,4-Dioxane	8.226	88	5309	119.36	ug/L	97

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

7.6.2

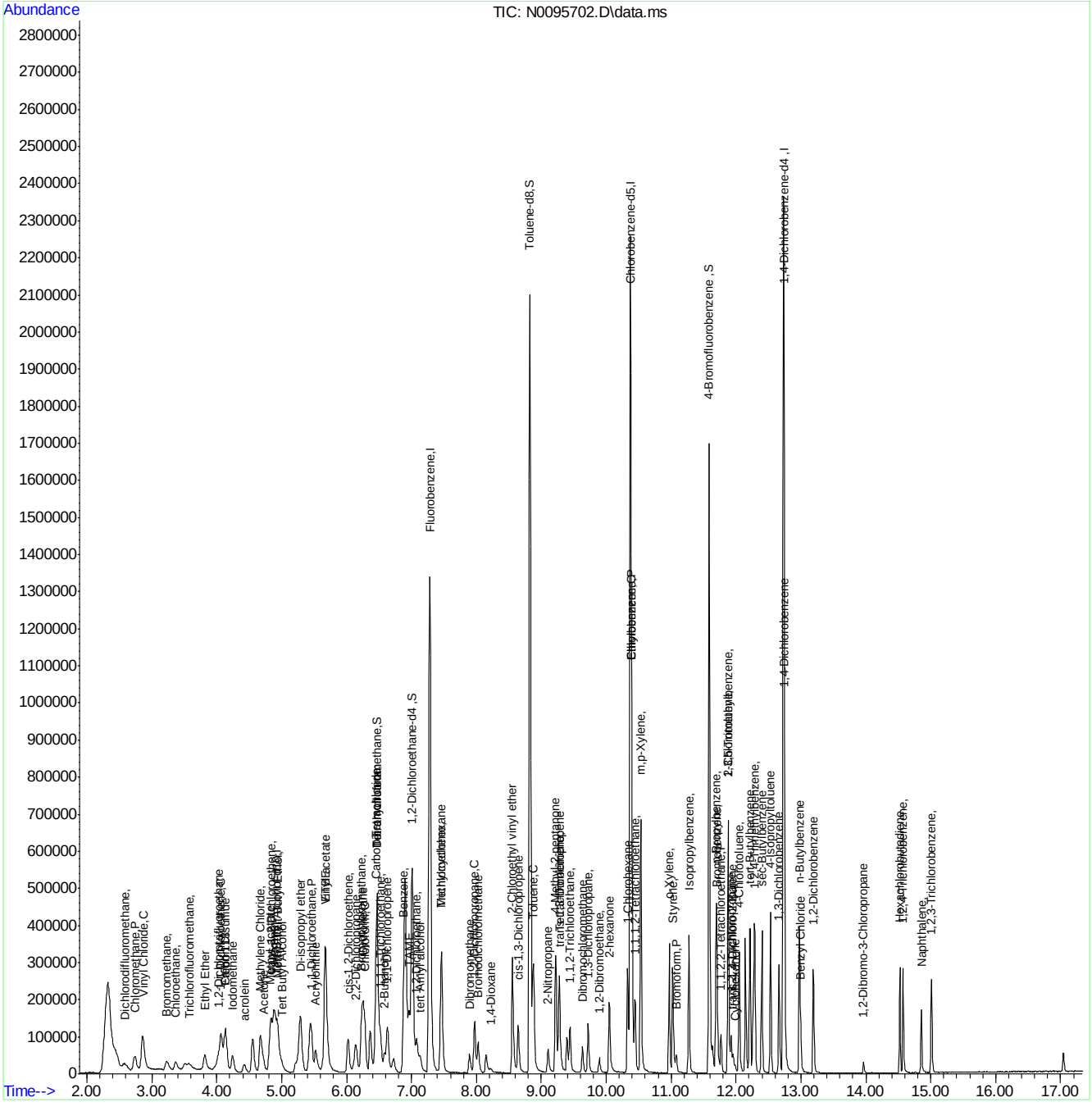
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 11:38:42 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

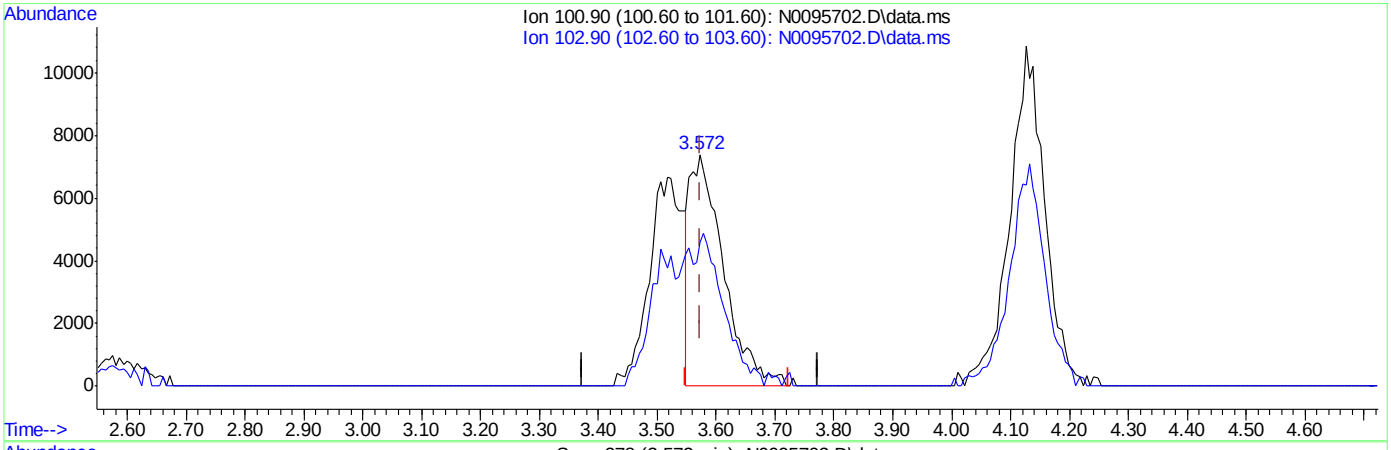
Sample Number:	VN4343-IC4343	**Method:**	SW846 8260B
Lab FileID:	N0095702.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 09:42	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

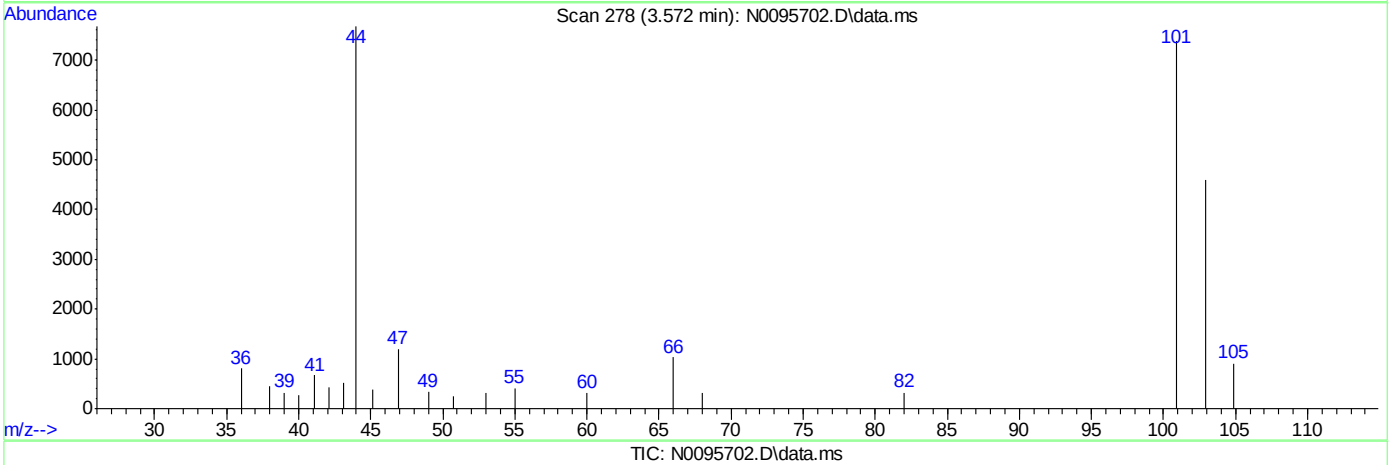
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.57	Split peak
Carbon Tetrachloride	56-23-5		6.46	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 11:34:05 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095702.D\data.ms

(7) Trichlorofluoromethane ( )

3.572min (-0.001) 3.25ug/L

response 29437

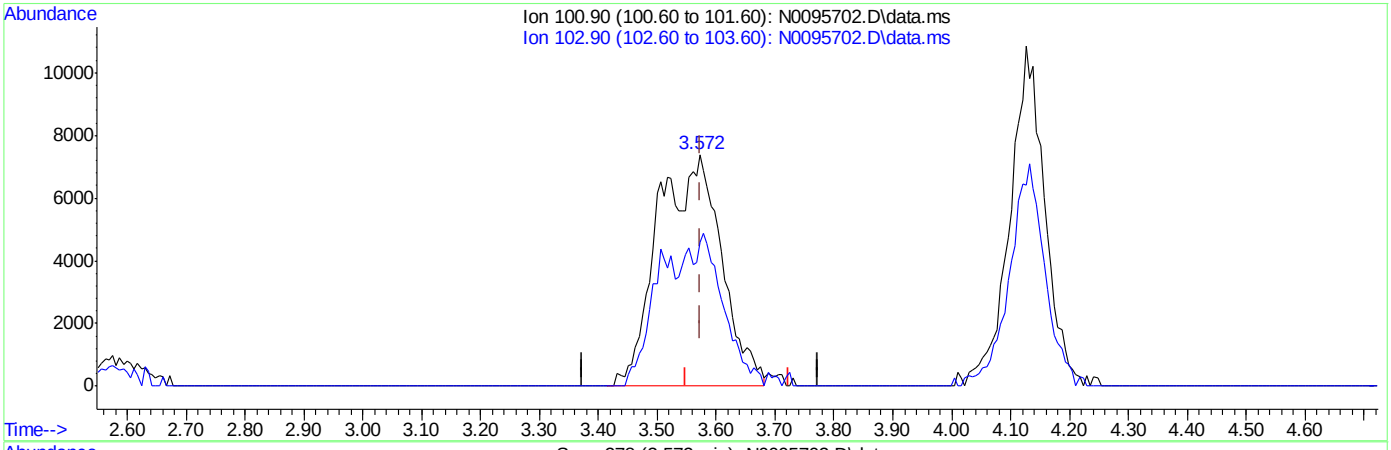
Ion	Exp%	Act%
100.90	100	100
102.90	67.90	55.85
0.00	0.00	0.00
0.00	0.00	0.00

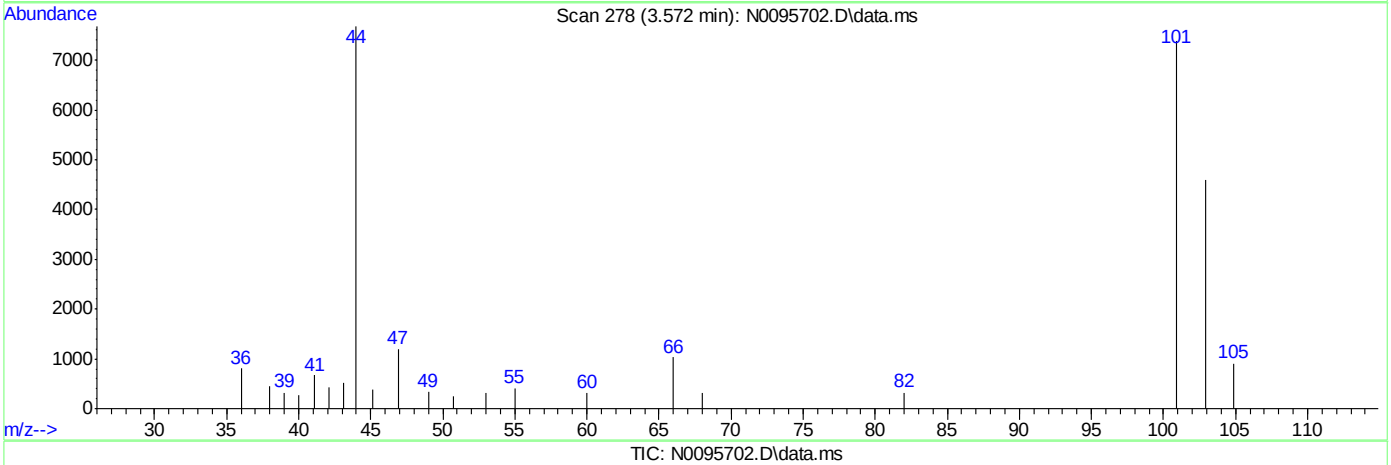
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 11:34:05 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095702.D\data.ms

(7) Trichlorofluoromethane ( )

3.572min (-0.001) 6.10ug/L m

response 55316

Ion	Exp%	Act%
100.90	100	100
102.90	67.90	62.03
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 11:34:05 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
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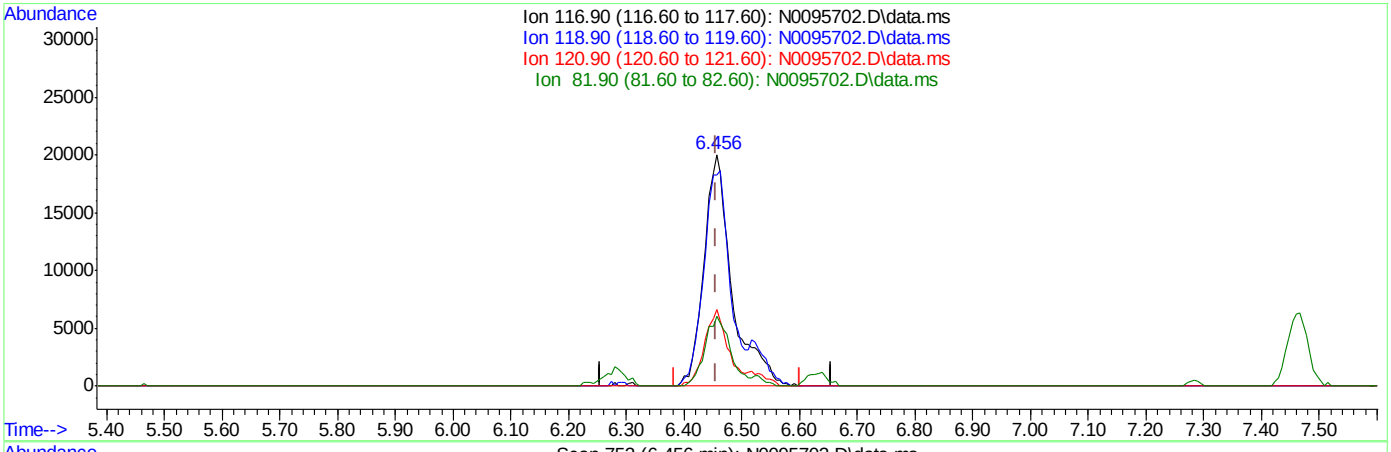

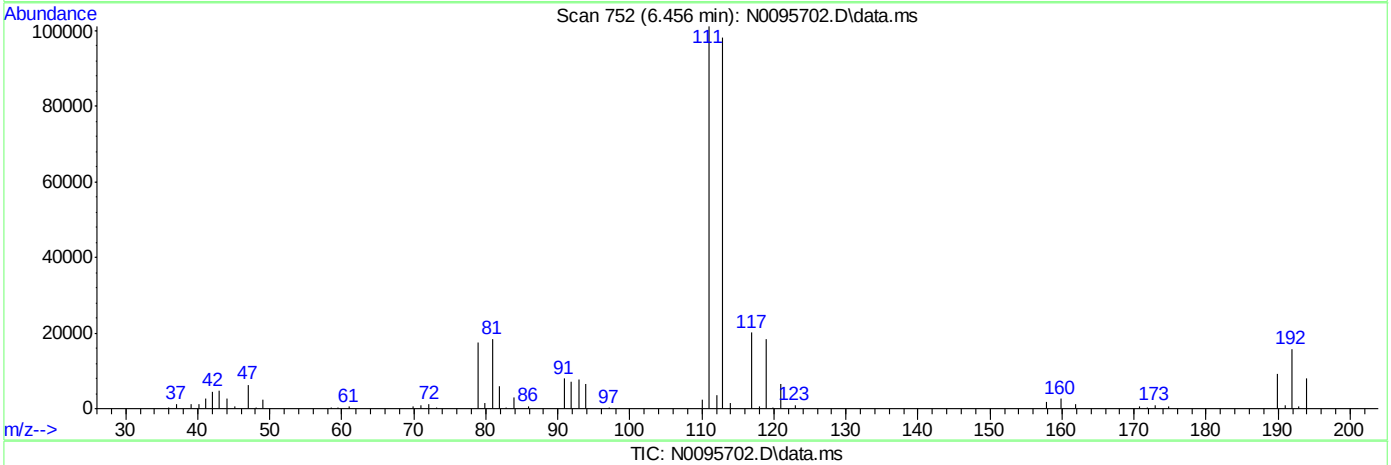

TIC: N0095702.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.000) 5.84ug/L

response 68106

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	91.22
120.90	29.40	33.19
81.90	22.70	30.03

SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095702.D
Acq On : 6 Jul 2016 9:42 am
Operator : katiem
Sample : IC4343-2 Inst : MSVOA8
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Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
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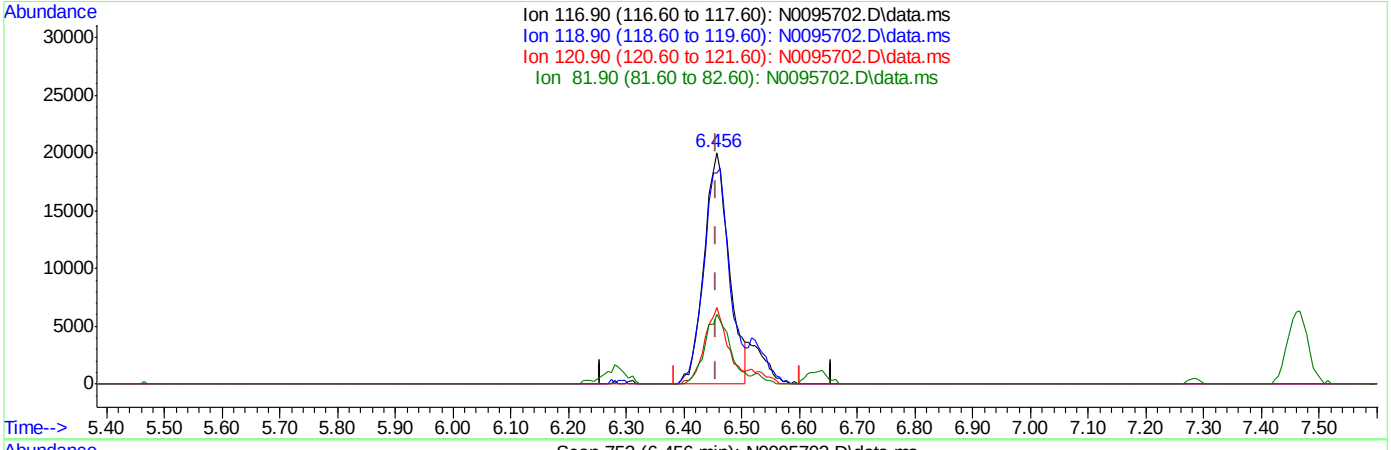
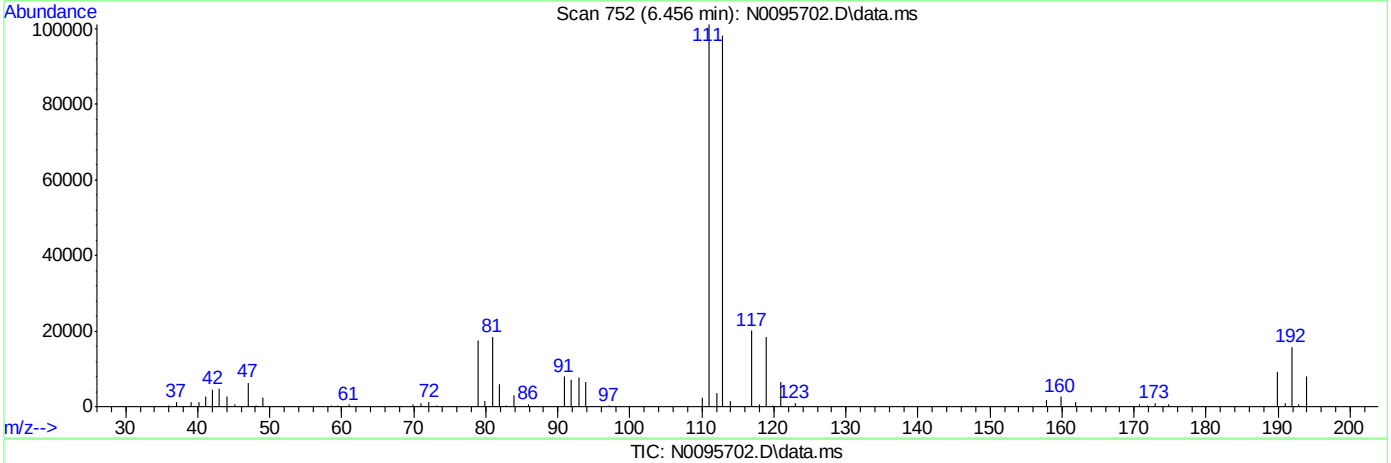
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.456min (+0.000) 5.14ug/L m

response 59992

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	91.22
120.90	29.40	33.19
81.90	22.70	30.03

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095703.D
Acq On : 6 Jul 2016 10:11 am
Operator : katiem
Sample : IC4343-3 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 11:39:45 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.284	96	1327771	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	958573	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	521017	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.917	65	101968	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	348975	50.95	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.90%			
38) 1,2-Dichloroethane-d4	7.010	65	459224	50.89	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.78%			
48) Toluene-d8	8.823	98	1271972	50.04	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.08%			
69) 4-Bromofluorobenzene	11.585	95	508916	50.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.575	85	115375	22.04	ug/L	98
3) Chloromethane	2.739	50	181492	14.56	ug/L	98
4) Vinyl Chloride	2.873	62	129529	13.93	ug/L	99
5) Bromomethane	3.238	94	63936	13.32	ug/L	96
6) Chloroethane	3.366	64	60729	12.78	ug/L	95
7) Trichlorofluoromethane	3.579	101	116421	12.66	ug/L	96
8) Ethyl Ether	3.816	59	84038	10.39	ug/L #	83
9) 1,2-Dichlorotrifluoroe...	4.035	67	94153	9.56	ug/L	94
10) 1,1-Dichloroethene	4.071	61	151034	9.61	ug/L	86
11) Freon 113	4.132	101	83535	9.70	ug/L	96
12) Carbon Disulfide	4.132	76	256885	9.62	ug/L	73
13) Iodomethane	4.242	142	150689	9.54	ug/L	96
14) Methylene Chloride	4.668	49	183796	9.44	ug/L	75
15) Acetone	4.704	58	34373	53.35	ug/L #	71
16) Methyl acetate	4.820	74	45412	49.12	ug/L #	23
17) trans-1,2-Dichloroethene	4.838	61	148125	9.80	ug/L	85
18) Hexane	4.887	56	118430	9.70	ug/L #	90
19) Methyl Tert Butyl Ether	4.935	73	221968	9.77	ug/L	76
20) Di-isopropyl ether	5.288	45	455550	9.82	ug/L	94
21) 1,1-Dichloroethane	5.458	63	179632	9.77	ug/L	93
22) Acrylonitrile	5.513	53	170229	52.24	ug/L	97
23) ETBE	5.665	59	353223	9.69	ug/L	88
24) Vinyl acetate	5.671	43	1282868	52.97	ug/L	98
25) cis-1,2-Dichloroethene	6.018	96	96413	9.67	ug/L #	77
26) 2,2-Dichloropropane	6.140	77	121386	9.57	ug/L	98
27) Bromochloromethane	6.225	128	44560	9.68	ug/L #	68
28) Cyclohexane	6.249	56	213687	9.61	ug/L #	84
29) Chloroform	6.280	83	160261	9.91	ug/L	89
30) Tetrahydrofuran	6.456	42	24589	9.32	ug/L	88
32) Carbon Tetrachloride	6.456	117	113136m	9.56	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	145917	9.91	ug/L	93
34) 2-Butanone	6.578	43	183822	53.80	ug/L	85
35) 1,1-Dichloropropene	6.633	75	117200	9.68	ug/L	80

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095703.D
Acq On : 6 Jul 2016 10:11 am
Operator : katiem
Sample : IC4343-3 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 11:39:45 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Benzene	6.882	78	325132	9.85	ug/L	42
37) TAME	6.961	73	216318	9.54	ug/L #	72
39) 1,2-Dichloroethane	7.083	62	146499	9.80	ug/L	98
40) Trichloroethene	7.460	95	89539	9.88	ug/L	98
41) Methylcyclohexane	7.460	83	154999	9.81	ug/L #	72
42) Dibromomethane	7.892	93	45425	9.64	ug/L	90
43) 1,2-Dichloropropane	7.971	63	101420	9.57	ug/L	87
44) Bromodichloromethane	8.026	83	107065	9.47	ug/L #	92
45) 2-Chloroethyl vinyl ether	8.549	63	288856	52.09	ug/L	81
46) cis-1,3-Dichloropropene	8.646	75	126611	9.41	ug/L	72
49) Toluene	8.877	91	351738	9.96	ug/L	99
50) 2-Nitropropane	9.102	41	78345	38.66	ug/L	93
51) 4-Methyl-2-pentanone	9.218	43	465021	55.59	ug/L	96
52) trans-1,3-Dichloropropene	9.279	75	101884	9.03	ug/L	76
53) Tetrachloroethene	9.273	166	96994	10.20	ug/L	98
54) 1,1,2-Trichloroethane	9.443	83	54680	9.69	ug/L	91
55) Dibromochloromethane	9.632	129	74155	9.02	ug/L	93
56) 1,3-Dichloropropane	9.717	76	116939	9.94	ug/L #	65
57) 1,2-Dibromoethane	9.893	107	66115	9.61	ug/L	100
58) 2-hexanone	10.045	43	314521	56.28	ug/L	95
59) 1-Chlorohexane	10.331	91	117777	9.92	ug/L #	56
60) Ethylbenzene	10.392	91	393465	10.01	ug/L	99
61) Chlorobenzene	10.392	112	239720	10.00	ug/L	90
62) 1,1,1,2-Tetrachloroethane	10.441	131	82606	9.69	ug/L	97
63) m,p-Xylene	10.532	91	622412	20.63	ug/L	96
64) o-Xylene	10.970	91	316390	10.00	ug/L	99
65) Styrene	11.025	104	239226	9.59	ug/L	90
66) Bromoform	11.080	173	35956	8.43	ug/L	97
67) Isopropylbenzene	11.274	105	391262	10.05	ug/L	99
70) n-Propylbenzene	11.694	91	454974	10.10	ug/L	100
71) Bromobenzene	11.706	156	100390	9.65	ug/L	97
72) 1,1,2,2-Tetrachloroethane	11.767	83	74602	9.52	ug/L	97
73) 1,3,5-Trimethylbenzene	11.877	105	341764	10.03	ug/L	98
74) 2-Chlorotoluene	11.877	91	312812	10.22	ug/L	98
75) trans-1,4-Dichloro-2-B...	11.950	53	27697	9.50	ug/L #	44
76) 1,2,3-Trichloropropane	11.925	110	22489	9.70	ug/L	77
77) Cyclohexanone	11.986	55	13635	57.01	ug/L #	80
78) 4-Chlorotoluene	12.047	91	291487	9.78	ug/L	99
79) tert-Butylbenzene	12.211	91	197954	10.01	ug/L	88
80) 1,2,4-Trimethylbenzene	12.284	105	338702	9.95	ug/L	99
81) sec-Butylbenzene	12.394	105	431960	10.12	ug/L	100
82) 4-Isopropyltoluene	12.534	119	388257	9.87	ug/L	98
83) 1,3-Dichlorobenzene	12.661	146	192931	9.57	ug/L	94
84) 1,4-Dichlorobenzene	12.747	146	202946	9.62	ug/L	91
85) n-Butylbenzene	12.978	92	202142	9.96	ug/L	99
86) Benzyl Chloride	12.996	126	24522	7.53	ug/L #	95
87) 1,2-Dichlorobenzene	13.191	146	182681	9.58	ug/L	94
88) 1,2-Dibromo-3-Chloropr...	13.963	75	11287	8.75	ug/L #	76
89) Hexachlorobutadiene	14.523	225	66530	9.57	ug/L	83
90) 1,2,4-Trichlorobenzene	14.572	180	122820	9.35	ug/L	93

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095703.D
Acq On : 6 Jul 2016 10:11 am
Operator : katiem
Sample : IC4343-3 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 11:39:45 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	213408	9.15	ug/L	100
92) 1,2,3-Trichlorobenzene	15.010	180	107356	9.49	ug/L	93
94) acrolein	4.418	56	68891	47.50	ug/L	99
95) Tert Butyl Alcohol	5.002	59	60290	89.20	ug/L	96
96) tert Amyl alcohol	7.138	59	51507	90.28	ug/L	90
97) 1,4-Dioxane	8.214	88	11236	242.42	ug/L #	65

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

7.6.3

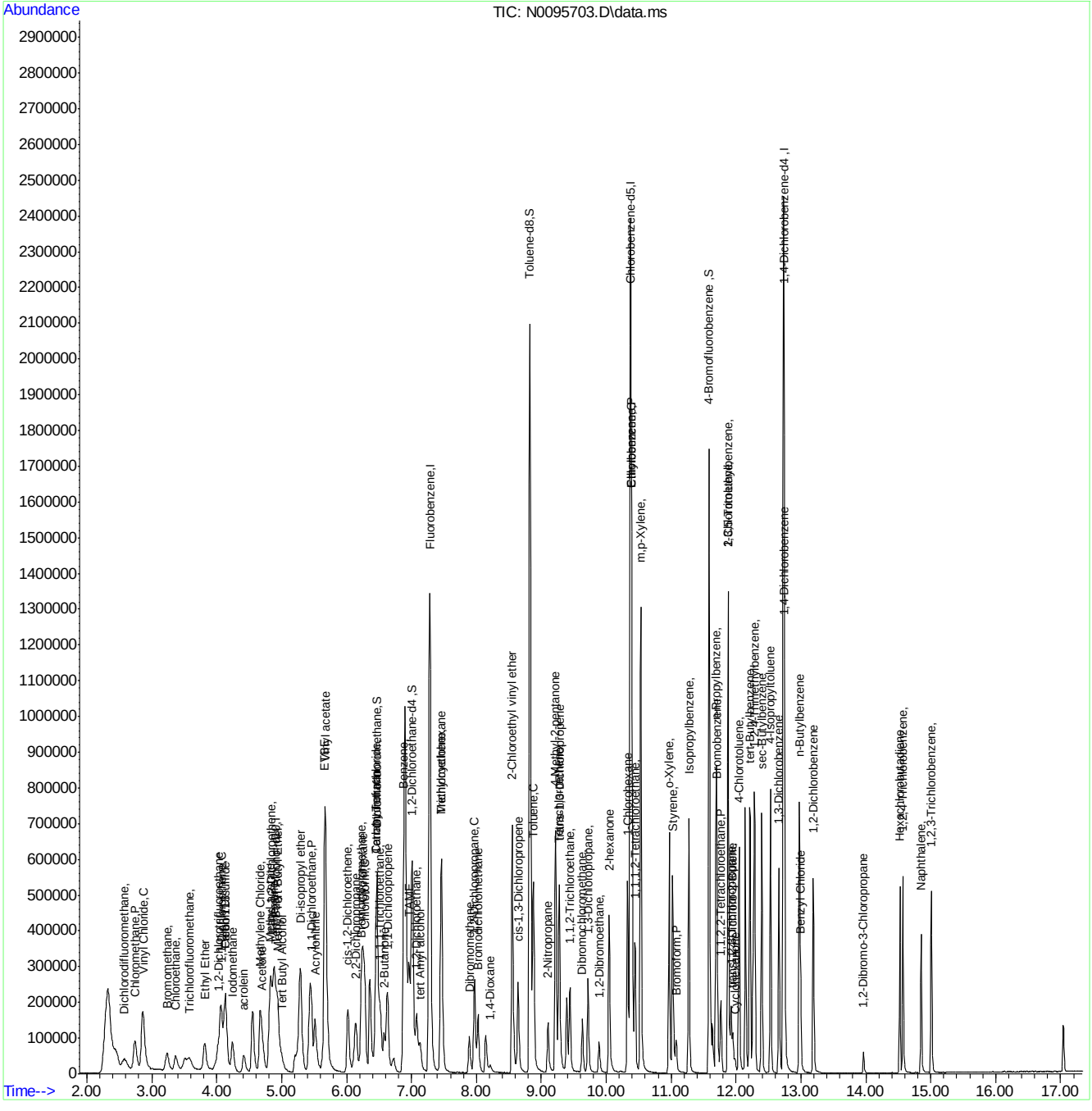
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095703.D
Acq On : 6 Jul 2016 10:11 am
Operator : katiem
Sample : IC4343-3 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 11:39:45 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

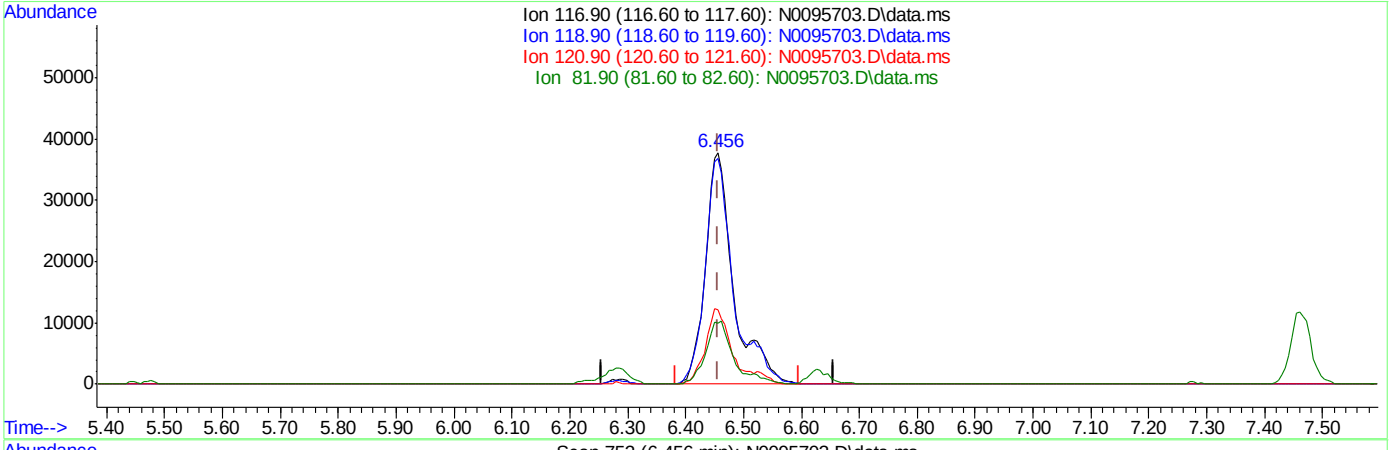
Sample Number:	VN4343-IC4343	**Method:**	SW846 8260B
Lab FileID:	N0095703.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 10:11	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

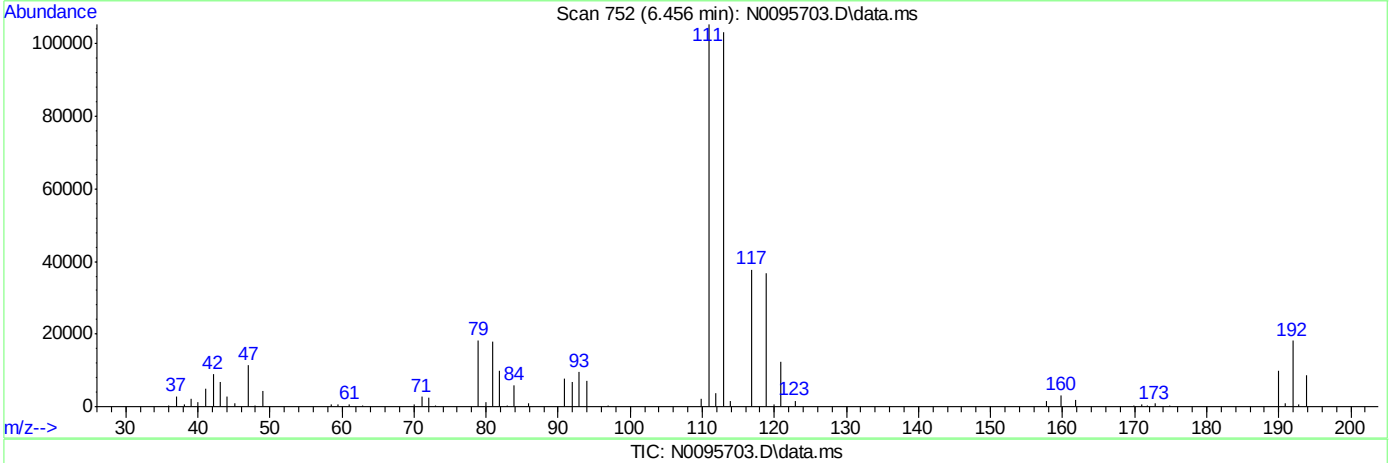
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.46	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095703.D
Acq On : 6 Jul 2016 10:11 am
Operator : katiem
Sample : IC4343-3 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 11:34:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095703.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.000) 10.90ug/L

response 128988

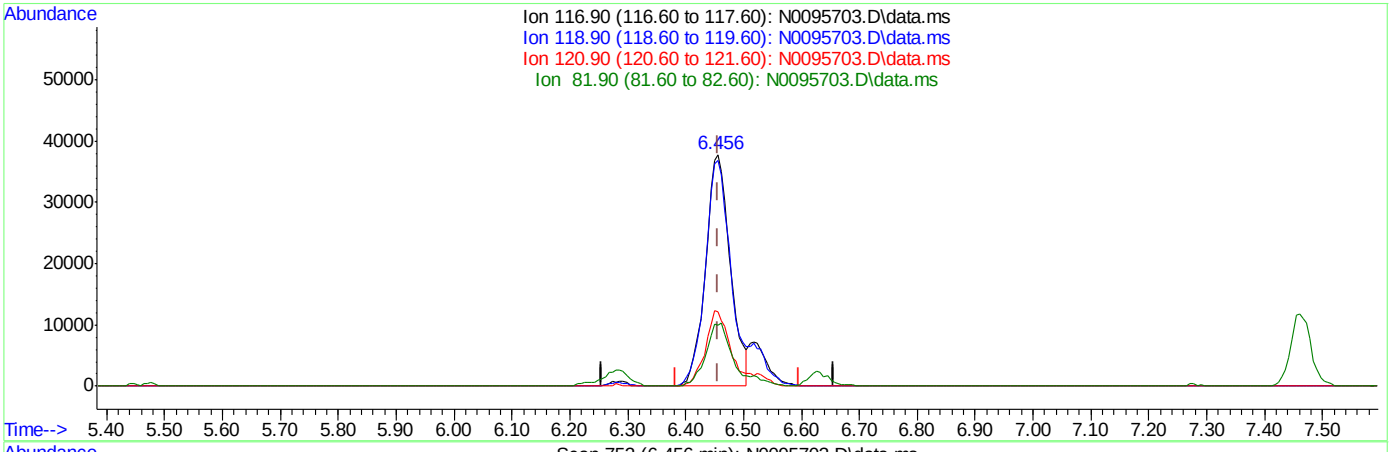
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	97.33
120.90	29.40	32.32
81.90	22.70	26.31

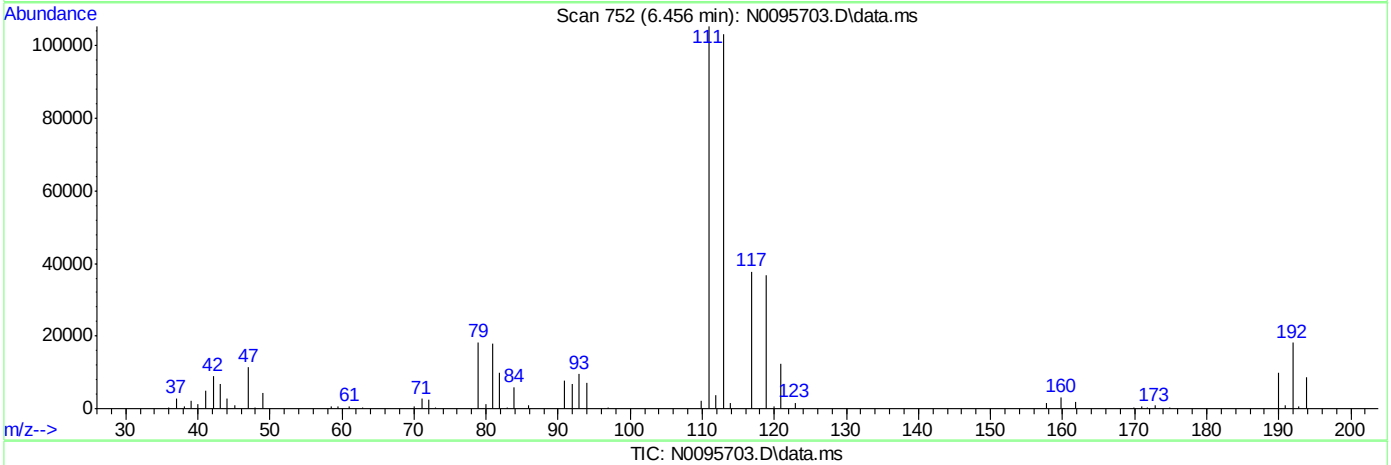
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095703.D
Acq On : 6 Jul 2016 10:11 am
Operator : katiem
Sample : IC4343-3 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 11:34:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095703.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.000) 9.56ug/L m

response 113136

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	97.33
120.90	29.40	32.32
81.90	22.70	26.31

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095704.D
Acq On : 6 Jul 2016 10:40 am
Operator : katiem
Sample : IC4343-4 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 11:40:55 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.277	96	1323957	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	964414	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	528340	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	104750	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.462	113	341612	50.02	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.04%			
38) 1,2-Dichloroethane-d4	7.010	65	461970	51.35	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.70%			
48) Toluene-d8	8.823	98	1276092	49.90	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.80%			
69) 4-Bromofluorobenzene	11.584	95	507463	49.54	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.581	85	298934	57.28	ug/L	98
3) Chloromethane	2.739	50	460115	37.01	ug/L	97
4) Vinyl Chloride	2.879	62	336773	36.79	ug/L	99
5) Bromomethane	3.232	94	139945	30.63	ug/L	95
6) Chloroethane	3.366	64	131749	30.81	ug/L	96
7) Trichlorofluoromethane	3.566	101	285744	31.16	ug/L	98
8) Ethyl Ether	3.810	59	198052	24.55	ug/L #	86
9) 1,2-Dichlorotrifluoroe...	4.023	67	237183	24.15	ug/L	99
10) 1,1-Dichloroethene	4.059	61	389367	24.84	ug/L	86
11) Freon 113	4.126	101	210888	24.57	ug/L	93
12) Carbon Disulfide	4.126	76	646074	24.27	ug/L	83
13) Iodomethane	4.236	142	377676	23.99	ug/L	96
14) Methylene Chloride	4.667	49	438186	22.58	ug/L	75
15) Acetone	4.704	58	86319	134.35	ug/L #	67
16) Methyl acetate	4.807	74	113878	123.54	ug/L #	15
17) trans-1,2-Dichloroethene	4.826	61	365752	24.26	ug/L	84
18) Hexane	4.880	56	302753	24.87	ug/L	92
19) Methyl Tert Butyl Ether	4.929	73	550655	24.32	ug/L	77
20) Di-isopropyl ether	5.282	45	1136930	24.59	ug/L	94
21) 1,1-Dichloroethane	5.458	63	457113	24.93	ug/L	95
22) Acrylonitrile	5.507	53	410394	126.32	ug/L	97
23) ETBE	5.665	59	888399	24.43	ug/L	88
24) Vinyl acetate	5.665	43	3147818	130.35	ug/L	98
25) cis-1,2-Dichloroethene	6.012	96	240007	24.15	ug/L #	72
26) 2,2-Dichloropropane	6.140	77	310326	24.54	ug/L	99
27) Bromochloromethane	6.225	128	112279	24.46	ug/L #	65
28) Cyclohexane	6.243	56	546043	24.63	ug/L #	85
29) Chloroform	6.280	83	398121	24.68	ug/L	91
30) Tetrahydrofuran	6.450	42	59102	22.47	ug/L	90
32) Carbon Tetrachloride	6.450	117	294330m	24.94	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	364450	24.81	ug/L	92
34) 2-Butanone	6.572	43	466477	134.33	ug/L	85
35) 1,1-Dichloropropene	6.626	75	298105	24.70	ug/L #	78

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095704.D
Acq On : 6 Jul 2016 10:40 am
Operator : katiem
Sample : IC4343-4 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 11:40:55 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.876	78	804045	24.42	ug/L		45
37) TAME	6.961	73	550992	24.37	ug/L	#	74
39) 1,2-Dichloroethane	7.077	62	357765	24.01	ug/L		96
40) Trichloroethene	7.454	95	226764	25.10	ug/L		97
41) Methylcyclohexane	7.460	83	394454	25.03	ug/L	#	71
42) Dibromomethane	7.886	93	115151	24.51	ug/L		93
43) 1,2-Dichloropropane	7.971	63	258055	24.43	ug/L		91
44) Bromodichloromethane	8.026	83	280481	24.89	ug/L	#	94
45) 2-Chloroethyl vinyl ether	8.549	63	731789	132.33	ug/L		82
46) cis-1,3-Dichloropropene	8.640	75	330928	24.66	ug/L	#	69
49) Toluene	8.877	91	872467	24.56	ug/L		98
50) 2-Nitropropane	9.102	41	230771	113.20	ug/L		99
51) 4-Methyl-2-pentanone	9.218	43	1147667	136.36	ug/L		98
52) trans-1,3-Dichloropropene	9.279	75	269065	23.92	ug/L		79
53) Tetrachloroethene	9.273	166	250663	26.19	ug/L		96
54) 1,1,2-Trichloroethane	9.437	83	140321	24.71	ug/L		90
55) Dibromochloromethane	9.632	129	201488	24.07	ug/L		99
56) 1,3-Dichloropropane	9.717	76	297800	25.15	ug/L	#	66
57) 1,2-Dibromoethane	9.887	107	170318	24.61	ug/L		95
58) 2-hexanone	10.039	43	780028	138.72	ug/L		95
59) 1-Chlorohexane	10.331	91	300039	25.13	ug/L	#	58
60) Ethylbenzene	10.392	91	985766	24.93	ug/L		99
61) Chlorobenzene	10.392	112	591981	24.54	ug/L		90
62) 1,1,1,2-Tetrachloroethane	10.441	131	215552	25.14	ug/L		97
63) m,p-Xylene	10.532	91	1528072	50.34	ug/L		99
64) o-Xylene	10.970	91	786890	24.71	ug/L		100
65) Styrene	11.019	104	621599	24.76	ug/L		89
66) Bromoform	11.080	173	100815	22.86	ug/L		96
67) Isopropylbenzene	11.274	105	975550	24.92	ug/L		98
70) n-Propylbenzene	11.694	91	1132762	24.80	ug/L		97
71) Bromobenzene	11.706	156	253918	24.07	ug/L		98
72) 1,1,2,2-Tetrachloroethane	11.767	83	188698	23.74	ug/L		100
73) 1,3,5-Trimethylbenzene	11.876	105	864800	25.03	ug/L		98
74) 2-Chlorotoluene	11.876	91	774448	24.96	ug/L		99
75) trans-1,4-Dichloro-2-B...	11.949	53	75370	25.49	ug/L	#	51
76) 1,2,3-Trichloropropane	11.919	110	57770	24.58	ug/L	#	72
77) Cyclohexanone	11.980	55	35592	149.13	ug/L		83
78) 4-Chlorotoluene	12.047	91	736638	24.37	ug/L		96
79) tert-Butylbenzene	12.211	91	492780	24.58	ug/L		90
80) 1,2,4-Trimethylbenzene	12.284	105	853268	24.72	ug/L		97
81) sec-Butylbenzene	12.400	105	1088725	25.14	ug/L		98
82) 4-Isopropyltoluene	12.534	119	986234	24.73	ug/L		98
83) 1,3-Dichlorobenzene	12.661	146	495293	24.24	ug/L		97
84) 1,4-Dichlorobenzene	12.746	146	506583	23.69	ug/L		94
85) n-Butylbenzene	12.972	92	513463	24.94	ug/L		97
86) Benzyl Chloride	12.996	126	73112	21.94	ug/L	#	76
87) 1,2-Dichlorobenzene	13.191	146	463041	23.94	ug/L		95
88) 1,2-Dibromo-3-Chloropr...	13.963	75	32127	24.55	ug/L	#	83
89) Hexachlorobutadiene	14.523	225	170985	24.26	ug/L		85
90) 1,2,4-Trichlorobenzene	14.572	180	314937	23.65	ug/L		96

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095704.D
Acq On : 6 Jul 2016 10:40 am
Operator : katiem
Sample : IC4343-4 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 11:40:55 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	552759	23.38	ug/L	100
92) 1,2,3-Trichlorobenzene	15.010	180	271069	23.63	ug/L	95
94) acrolein	4.412	56	168595	114.28	ug/L	96
95) Tert Butyl Alcohol	4.996	59	158765	228.65	ug/L	94
96) tert Amyl alcohol	7.131	59	132262	225.68	ug/L	89
97) 1,4-Dioxane	8.208	88	28863	606.19	ug/L #	61

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

7.6.4

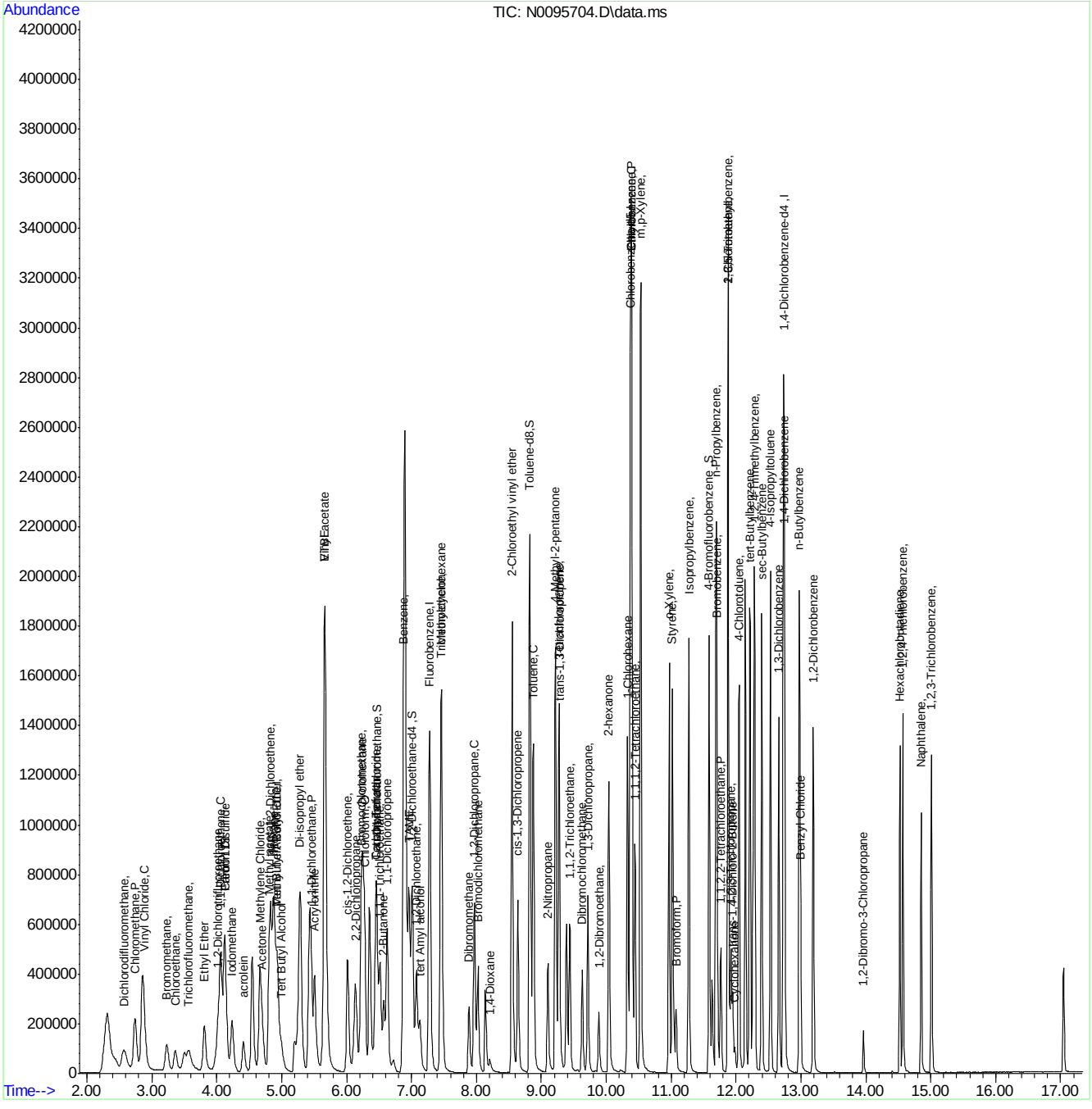
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095704.D
Acq On : 6 Jul 2016 10:40 am
Operator : katiem
Sample : IC4343-4 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 11:40:55 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

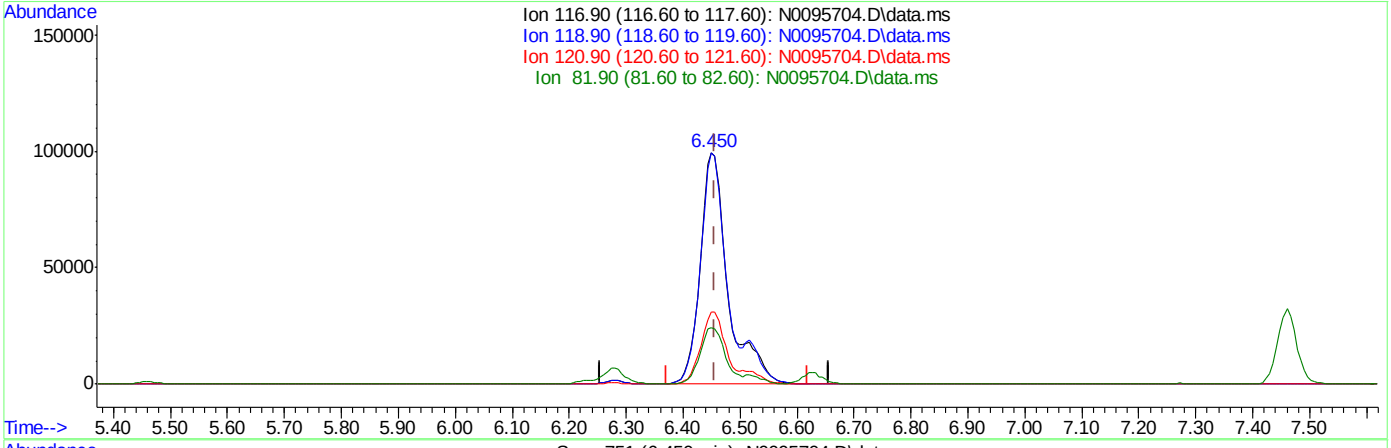
Sample Number:	VN4343-IC4343	**Method:**	SW846 8260B
Lab FileID:	N0095704.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 10:40	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

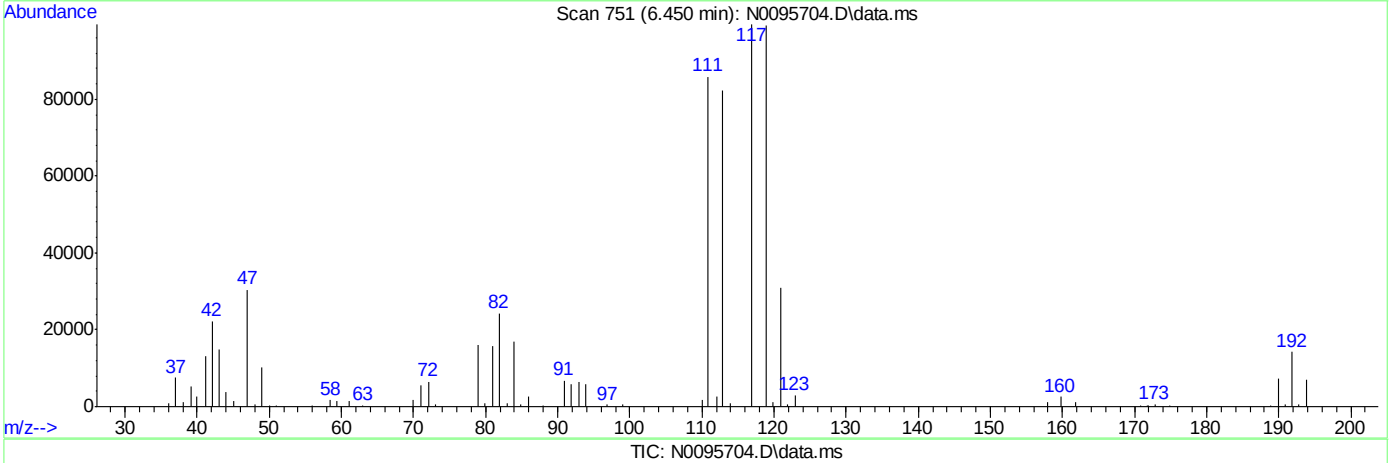
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.45	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095704.D
Acq On : 6 Jul 2016 10:40 am
Operator : katiem
Sample : IC4343-4 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 11:34:11 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.450min (-0.006) 28.59ug/L

response 337391

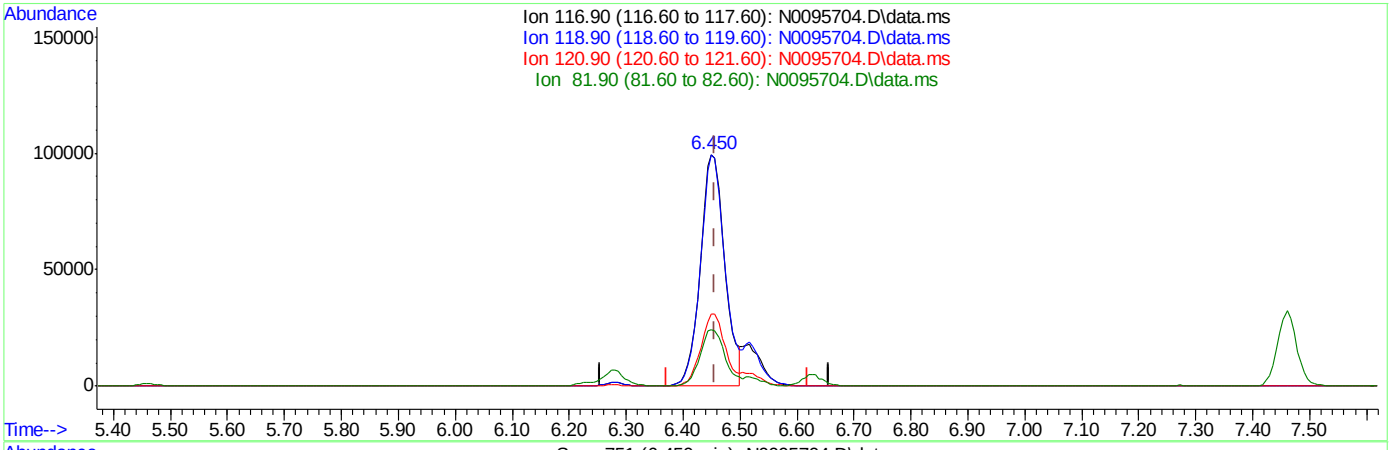
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.84
120.90	29.40	31.13
81.90	22.70	24.34

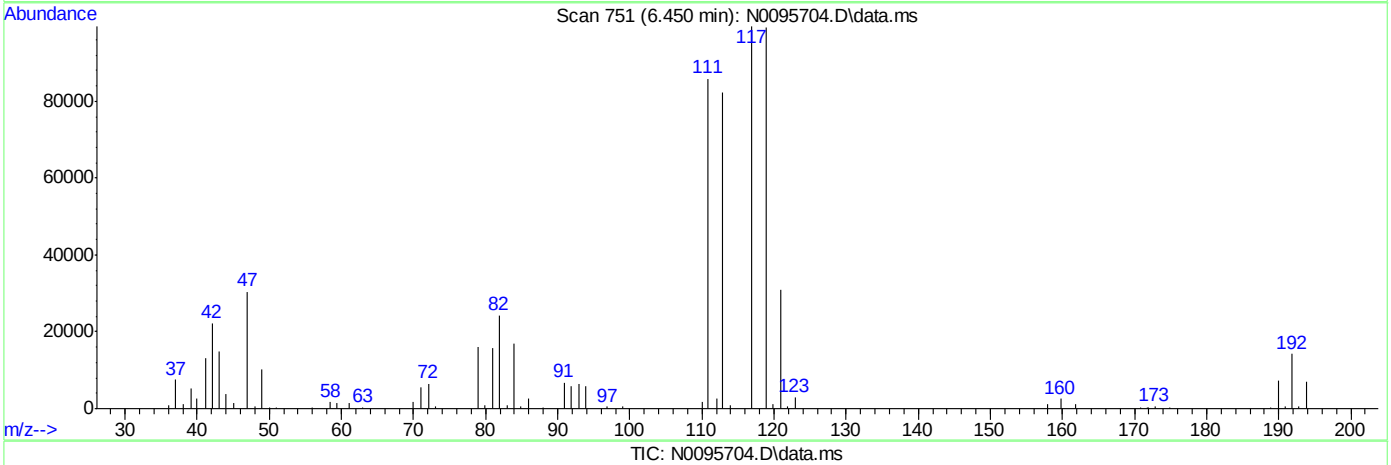
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095704.D
Acq On : 6 Jul 2016 10:40 am
Operator : katiem
Sample : IC4343-4 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 11:34:11 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.450min (-0.006) 24.94ug/L m

response 294330

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.84
120.90	29.40	31.13
81.90	22.70	24.34

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095705.D
Acq On : 6 Jul 2016 11:07 am
Operator : katiem
Sample : ICC4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 11:42:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1340475	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	977930	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	534471	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	109181	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	347603	50.27	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.54%			
38) 1,2-Dichloroethane-d4	7.010	65	472985	51.92	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.84%			
48) Toluene-d8	8.822	98	1295711	49.96	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.92%			
69) 4-Bromofluorobenzene	11.584	95	511649	49.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.581	85	479952	90.83	ug/L	94
3) Chloromethane	2.757	50	736106	58.49	ug/L	99
4) Vinyl Chloride	2.891	62	533146	57.69	ug/L	98
5) Bromomethane	3.238	94	204516	46.18	ug/L	98
6) Chloroethane	3.365	64	176124	44.24	ug/L	93
7) Trichlorofluoromethane	3.572	101	441439	47.54	ug/L	95
8) Ethyl Ether	3.816	59	324051	39.68	ug/L #	87
9) 1,2-Dichlorotrifluoroe...	4.035	67	388590	39.07	ug/L	97
10) 1,1-Dichloroethene	4.065	61	629767	39.68	ug/L	88
11) Freon 113	4.126	101	339155	39.02	ug/L	95
12) Carbon Disulfide	4.132	76	1058975	39.29	ug/L	86
13) Iodomethane	4.242	142	633439	39.73	ug/L	96
14) Methylene Chloride	4.667	49	715648	36.42	ug/L	76
15) Acetone	4.704	58	144302	221.83	ug/L #	72
16) Methyl acetate	4.819	74	192788	206.57	ug/L #	24
17) trans-1,2-Dichloroethene	4.832	61	602494	39.47	ug/L	86
18) Hexane	4.880	56	482647	39.15	ug/L #	90
19) Methyl Tert Butyl Ether	4.941	73	923675	40.29	ug/L	83
20) Di-isopropyl ether	5.288	45	1889493	40.36	ug/L	95
21) 1,1-Dichloroethane	5.464	63	756918	40.77	ug/L	96
22) Acrylonitrile	5.507	53	714004	217.06	ug/L	98
23) ETBE	5.671	59	1486029	40.37	ug/L	89
24) Vinyl acetate	5.671	43	5197799	212.59	ug/L	98
25) cis-1,2-Dichloroethene	6.018	96	405366	40.29	ug/L #	75
26) 2,2-Dichloropropane	6.146	77	497911	38.89	ug/L	97
27) Bromochloromethane	6.231	128	190305	40.94	ug/L #	67
28) Cyclohexane	6.249	56	878770	39.15	ug/L #	85
29) Chloroform	6.279	83	651641	39.91	ug/L	92
30) Tetrahydrofuran	6.456	42	98408	36.96	ug/L	91
32) Carbon Tetrachloride	6.450	117	490630m	41.06	ug/L	
33) 1,1,1-Trichloroethane	6.523	97	598188	40.23	ug/L	94
34) 2-Butanone	6.572	43	811535	225.95	ug/L	84
35) 1,1-Dichloropropene	6.626	75	486604	39.82	ug/L #	77

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095705.D
Acq On : 6 Jul 2016 11:07 am
Operator : katiem
Sample : ICC4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 11:42:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.882	78	1323244	39.69	ug/L		37
37) TAME	6.967	73	915520	40.00	ug/L		75
39) 1,2-Dichloroethane	7.076	62	590629	39.15	ug/L		96
40) Trichloroethene	7.454	95	364692	39.88	ug/L		98
41) Methylcyclohexane	7.466	83	632183	39.63	ug/L	#	73
42) Dibromomethane	7.886	93	191968	40.35	ug/L		90
43) 1,2-Dichloropropane	7.971	63	429684	40.18	ug/L		89
44) Bromodichloromethane	8.025	83	473483	41.50	ug/L	#	92
45) 2-Chloroethyl vinyl ether	8.549	63	1185902	211.81	ug/L		83
46) cis-1,3-Dichloropropene	8.640	75	553146	40.71	ug/L		75
49) Toluene	8.877	91	1429460	39.68	ug/L		100
50) 2-Nitropropane	9.102	41	420740	203.53	ug/L		98
51) 4-Methyl-2-pentanone	9.218	43	1910004	223.80	ug/L		97
52) trans-1,3-Dichloropropene	9.279	75	450054	39.81	ug/L		78
53) Tetrachloroethene	9.273	166	417254	42.99	ug/L		96
54) 1,1,2-Trichloroethane	9.443	83	233725	40.59	ug/L		92
55) Dibromochloromethane	9.632	129	344966	40.16	ug/L		96
56) 1,3-Dichloropropane	9.717	76	495931	41.30	ug/L	#	69
57) 1,2-Dibromoethane	9.887	107	286418	40.82	ug/L		96
58) 2-hexanone	10.039	43	1313068	230.29	ug/L		95
59) 1-Chlorohexane	10.331	91	497280	41.07	ug/L	#	60
60) Ethylbenzene	10.392	91	1580542	39.43	ug/L		99
61) Chlorobenzene	10.392	112	981312	40.12	ug/L		90
62) 1,1,1,2-Tetrachloroethane	10.441	131	359488	41.34	ug/L		96
63) m,p-Xylene	10.532	91	2455674	79.79	ug/L		98
64) o-Xylene	10.970	91	1302087	40.32	ug/L		100
65) Styrene	11.019	104	1034914	40.66	ug/L		90
66) Bromoform	11.079	173	186233	40.32	ug/L		98
67) Isopropylbenzene	11.274	105	1590837	40.07	ug/L		97
70) n-Propylbenzene	11.694	91	1837921	39.77	ug/L		97
71) Bromobenzene	11.706	156	426179	39.93	ug/L		98
72) 1,1,2,2-Tetrachloroethane	11.767	83	322687	40.14	ug/L		99
73) 1,3,5-Trimethylbenzene	11.876	105	1390465	39.78	ug/L		97
74) 2-Chlorotoluene	11.876	91	1236699	39.40	ug/L		99
75) trans-1,4-Dichloro-2-B...	11.949	53	131358	43.92	ug/L	#	53
76) 1,2,3-Trichloropropane	11.919	110	95971	40.37	ug/L	#	77
77) Cyclohexanone	11.980	55	59150	243.48	ug/L		88
78) 4-Chlorotoluene	12.047	91	1191179	38.96	ug/L		95
79) tert-Butylbenzene	12.211	91	794659	39.19	ug/L		92
80) 1,2,4-Trimethylbenzene	12.284	105	1389246	39.79	ug/L		97
81) sec-Butylbenzene	12.400	105	1733427	39.57	ug/L		96
82) 4-Isopropyltoluene	12.533	119	1597649	39.60	ug/L		98
83) 1,3-Dichlorobenzene	12.661	146	820222	39.68	ug/L		98
84) 1,4-Dichlorobenzene	12.746	146	836837	38.68	ug/L		95
85) n-Butylbenzene	12.971	92	837271	40.20	ug/L		97
86) Benzyl Chloride	12.990	126	130442	38.28	ug/L	#	72
87) 1,2-Dichlorobenzene	13.190	146	769507	39.32	ug/L		95
88) 1,2-Dibromo-3-Chloropr...	13.963	75	54241	40.98	ug/L	#	85
89) Hexachlorobutadiene	14.523	225	275080	38.58	ug/L		85
90) 1,2,4-Trichlorobenzene	14.571	180	524044	38.91	ug/L		96

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095705.D
Acq On : 6 Jul 2016 11:07 am
Operator : katiem
Sample : ICC4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 11:42:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	946818	39.58	ug/L	100
92) 1,2,3-Trichlorobenzene	15.009	180	447096	38.54	ug/L	95
94) acrolein	4.412	56	283732	186.52	ug/L	91
95) Tert Butyl Alcohol	5.002	59	268264	370.67	ug/L	93
96) tert Amyl alcohol	7.131	59	231484	378.95	ug/L	88
97) 1,4-Dioxane	8.214	88	48772	982.76	ug/L	72

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

7.6.5

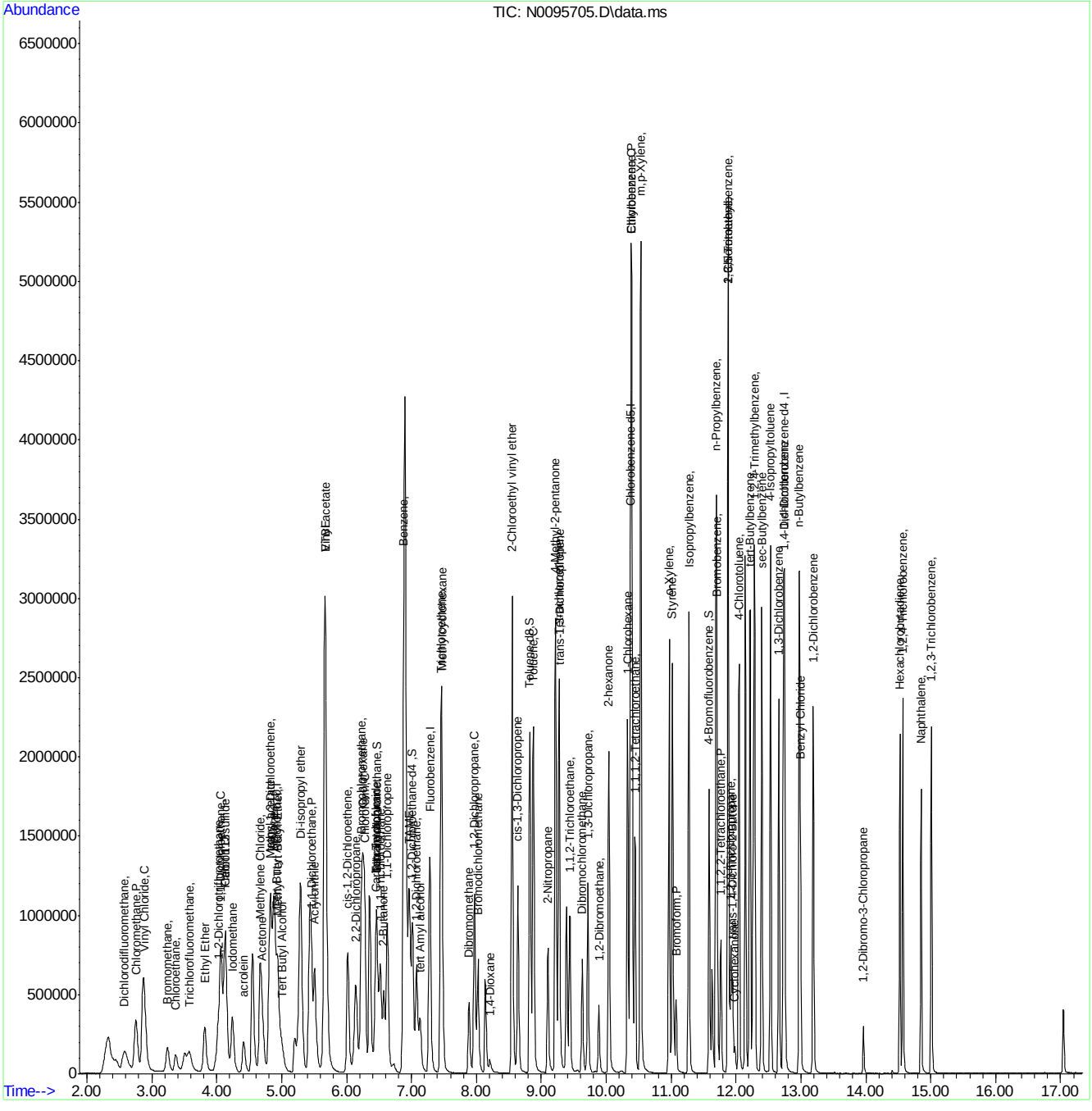
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095705.D
Acq On : 6 Jul 2016 11:07 am
Operator : katiem
Sample : ICC4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 11:42:00 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

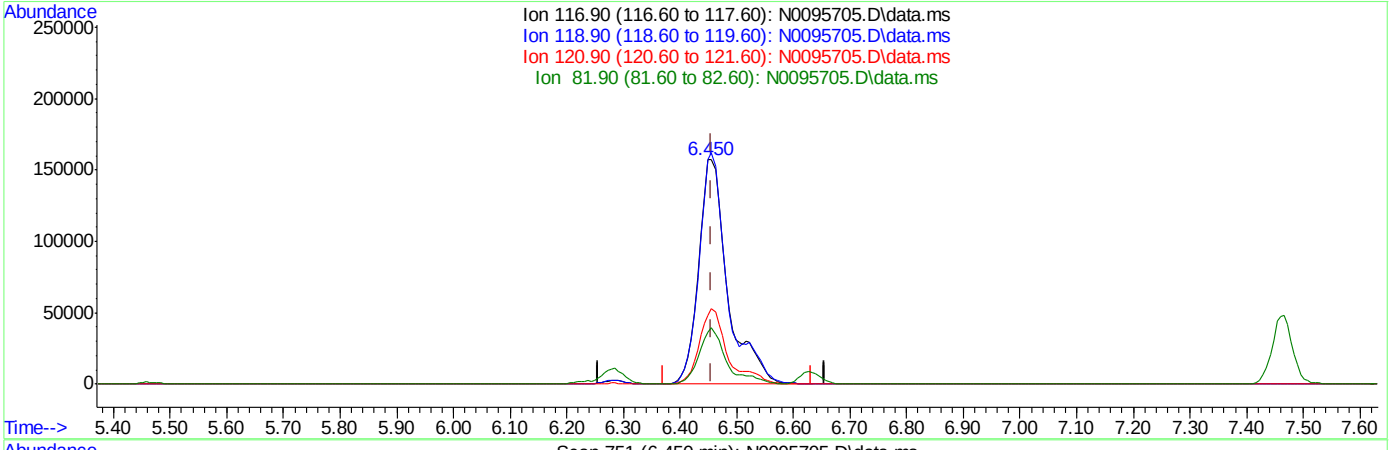
Sample Number:	VN4343-ICC4343	**Method:**	SW846 8260B
Lab FileID:	N0095705.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 11:07	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

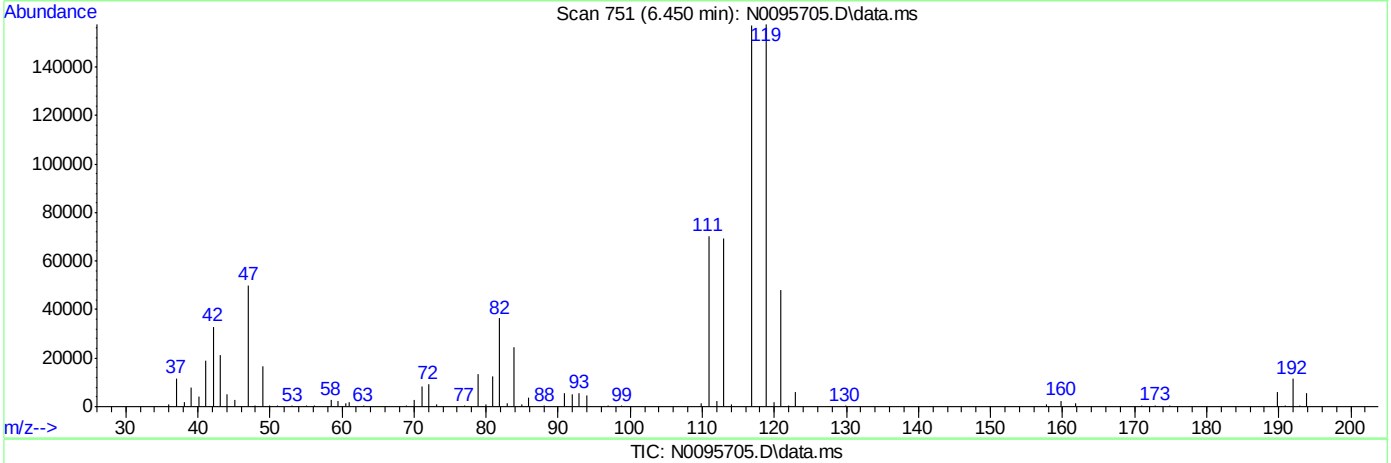
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.45	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095705.D
Acq On : 6 Jul 2016 11:07 am
Operator : katiem
Sample : ICC4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 11:34:14 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.450min (-0.006) 46.67ug/L

response 557701

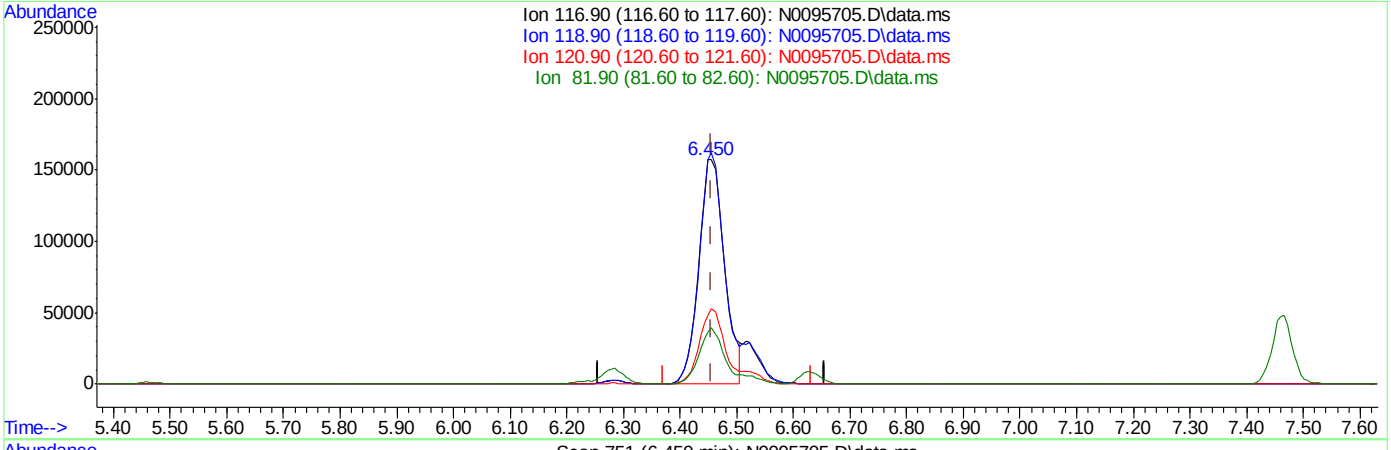
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	100.16
120.90	29.40	30.51
81.90	22.70	23.15

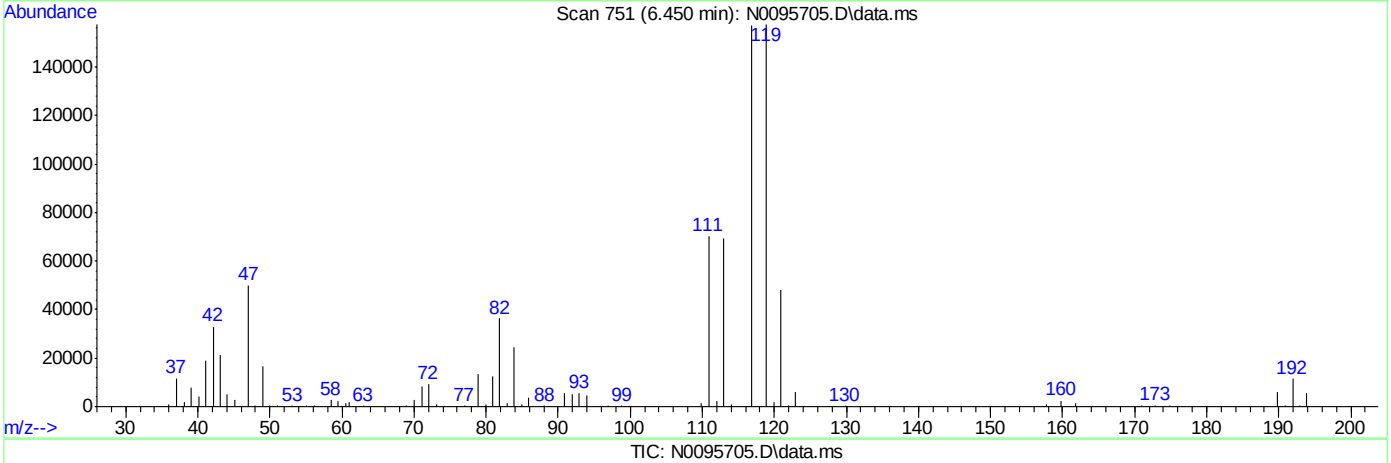
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095705.D
Acq On : 6 Jul 2016 11:07 am
Operator : katiem
Sample : ICC4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 11:34:14 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095705.D\data.ms

(32) Carbon Tetrachloride ( )

6.450min (-0.006) 41.06ug/L m

response 490630

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	100.16
120.90	29.40	30.51
81.90	22.70	23.15

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095706.D
Acq On : 6 Jul 2016 11:36 am
Operator : katiem
Sample : IC4343-6 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 12:06:40 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1336083	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	971013	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	535787	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	110303	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	345386	50.11	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.22%			
38) 1,2-Dichloroethane-d4	7.010	65	434964	47.91	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 95.82%			
48) Toluene-d8	8.822	98	1293392	50.23	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.46%			
69) 4-Bromofluorobenzene	11.584	95	511596	49.25	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.575	85	776020	147.35	ug/L	94
3) Chloromethane	2.757	50	1254934	100.04	ug/L	99
4) Vinyl Chloride	2.897	62	904715	98.42	ug/L	97
5) Bromomethane	3.244	94	319574	80.26	ug/L	99
6) Chloroethane	3.366	64	223949	65.57	ug/L	93
7) Trichlorofluoromethane	3.572	101	662111	71.54	ug/L	96
8) Ethyl Ether	3.816	59	517144	63.53	ug/L #	84
9) 1,2-Dichlorotrifluoroe...	4.035	67	682389	68.84	ug/L	99
10) 1,1-Dichloroethene	4.065	61	1069663	67.62	ug/L	88
11) Freon 113	4.126	101	575502	66.43	ug/L	94
12) Carbon Disulfide	4.126	76	1797468	66.91	ug/L	82
13) Iodomethane	4.235	142	1084481	68.25	ug/L	96
14) Methylene Chloride	4.667	49	1200244	61.28	ug/L	77
15) Acetone	4.710	58	258800	399.15	ug/L #	70
16) Methyl acetate	4.813	74	334799	359.91	ug/L #	27
17) trans-1,2-Dichloroethene	4.832	61	1012127	66.53	ug/L	87
18) Hexane	4.880	56	797043	64.87	ug/L	92
19) Methyl Tert Butyl Ether	4.935	73	1564055	68.44	ug/L	80
20) Di-isopropyl ether	5.288	45	3197448	68.53	ug/L	93
21) 1,1-Dichloroethane	5.464	63	1272579	68.77	ug/L	96
22) Acrylonitrile	5.507	53	1255973	383.07	ug/L	98
23) ETBE	5.671	59	2512323	68.47	ug/L	88
24) Vinyl acetate	5.671	43	8556073	351.09	ug/L	96
25) cis-1,2-Dichloroethene	6.018	96	681639	67.97	ug/L #	76
26) 2,2-Dichloropropane	6.140	77	842474	66.01	ug/L	96
27) Bromochloromethane	6.225	128	321384	69.37	ug/L #	61
28) Cyclohexane	6.249	56	1492889	66.73	ug/L #	86
29) Chloroform	6.280	83	1094473	67.24	ug/L	91
30) Tetrahydrofuran	6.456	42	173610	65.41	ug/L	89
32) Carbon Tetrachloride	6.456	117	830645m	69.75	ug/L	
33) 1,1,1-Trichloroethane	6.523	97	1003639	67.71	ug/L	94
34) 2-Butanone	6.572	43	1457180	392.04	ug/L	84
35) 1,1-Dichloropropene	6.626	75	824760	67.72	ug/L #	79

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095706.D
Acq On : 6 Jul 2016 11:36 am
Operator : katiem
Sample : IC4343-6 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 12:06:40 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.876	78	2214202	66.64	ug/L		48
37) TAME	6.961	73	1555288	68.17	ug/L		76
39) 1,2-Dichloroethane	7.077	62	988522	65.74	ug/L		96
40) Trichloroethene	7.454	95	620192	68.04	ug/L		96
41) Methylcyclohexane	7.460	83	1050860	66.09	ug/L	#	72
42) Dibromomethane	7.886	93	328965	69.37	ug/L		92
43) 1,2-Dichloropropane	7.971	63	728845	68.38	ug/L		90
44) Bromodichloromethane	8.026	83	803828	70.69	ug/L	#	93
45) 2-Chloroethyl vinyl ether	8.549	63	2000833	358.54	ug/L		84
46) cis-1,3-Dichloropropene	8.640	75	949336	70.10	ug/L		75
49) Toluene	8.877	91	2396132	66.99	ug/L		98
50) 2-Nitropropane	9.102	41	753015	366.85	ug/L		99
51) 4-Methyl-2-pentanone	9.218	43	3269871	385.86	ug/L		97
52) trans-1,3-Dichloropropene	9.279	75	761204	68.97	ug/L		79
53) Tetrachloroethene	9.273	166	767546	79.64	ug/L		98
54) 1,1,2-Trichloroethane	9.437	83	398303	69.66	ug/L		89
55) Dibromochloromethane	9.632	129	605973	69.53	ug/L		96
56) 1,3-Dichloropropane	9.717	76	845303	70.90	ug/L	#	69
57) 1,2-Dibromoethane	9.887	107	494603	70.99	ug/L		98
58) 2-hexanone	10.039	43	2306850	407.46	ug/L		97
59) 1-Chlorohexane	10.331	91	830929	69.12	ug/L	#	59
60) Ethylbenzene	10.392	91	2607662	65.51	ug/L		96
61) Chlorobenzene	10.392	112	1645418	67.75	ug/L		90
62) 1,1,1,2-Tetrachloroethane	10.447	131	613427	71.04	ug/L		95
63) m,p-Xylene	10.532	91	3960184	129.59	ug/L		96
64) o-Xylene	10.970	91	2150749	67.08	ug/L		97
65) Styrene	11.019	104	1764269	69.80	ug/L		90
66) Bromoform	11.073	173	334452	69.27	ug/L		97
67) Isopropylbenzene	11.274	105	2619048	66.44	ug/L		96
70) n-Propylbenzene	11.694	91	2992979	64.61	ug/L		93
71) Bromobenzene	11.706	156	725223	67.79	ug/L		98
72) 1,1,2,2-Tetrachloroethane	11.767	83	551480	68.42	ug/L		98
73) 1,3,5-Trimethylbenzene	11.883	105	2286660	65.25	ug/L		92
74) 2-Chlorotoluene	11.876	91	2020782	64.23	ug/L		98
75) trans-1,4-Dichloro-2-B...	11.943	53	233270	77.80	ug/L	#	55
76) 1,2,3-Trichloropropane	11.919	110	168265	70.61	ug/L	#	74
77) Cyclohexanone	11.980	55	107740	433.06	ug/L		85
78) 4-Chlorotoluene	12.047	91	1991283	64.97	ug/L		93
79) tert-Butylbenzene	12.217	91	1321082	64.99	ug/L		93
80) 1,2,4-Trimethylbenzene	12.284	105	2329897	66.57	ug/L		94
81) sec-Butylbenzene	12.400	105	2881540	65.62	ug/L		94
82) 4-Isopropyltoluene	12.533	119	2651900	65.57	ug/L		98
83) 1,3-Dichlorobenzene	12.661	146	1386509	66.91	ug/L		99
84) 1,4-Dichlorobenzene	12.746	146	1426366	65.76	ug/L		96
85) n-Butylbenzene	12.971	92	1407107	67.40	ug/L		94
86) Benzyl Chloride	12.990	126	233906	67.24	ug/L	#	84
87) 1,2-Dichlorobenzene	13.190	146	1307359	66.65	ug/L		96
88) 1,2-Dibromo-3-Chloropr...	13.963	75	97407	73.41	ug/L		87
89) Hexachlorobutadiene	14.523	225	477704	66.82	ug/L		85
90) 1,2,4-Trichlorobenzene	14.571	180	913250	67.63	ug/L		96

SGS ACCUTEST FA35235

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Operator : katiem
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Misc : MS34327,VN4343,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 12:06:40 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	1626831	67.85	ug/L	98
92) 1,2,3-Trichlorobenzene	15.009	180	782896	67.31	ug/L	94
94) acrolein	4.412	56	484933	322.10	ug/L	96
95) Tert Butyl Alcohol	5.008	59	464772	635.67	ug/L	97
96) tert Amyl alcohol	7.131	59	419175	679.23	ug/L	89
97) 1,4-Dioxane	8.208	88	85083	1696.99	ug/L #	64

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

7.6.6

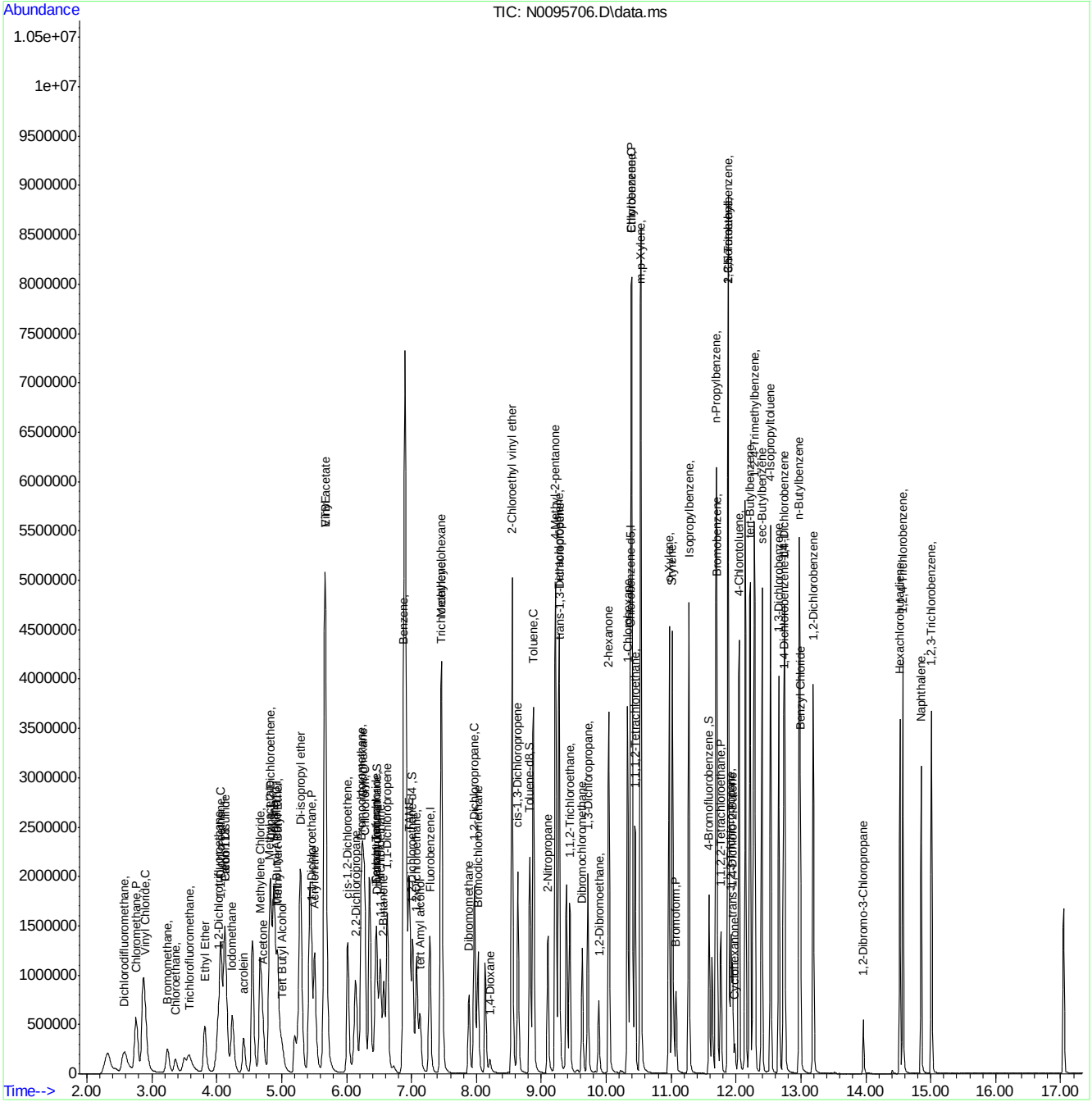
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095706.D
Acq On : 6 Jul 2016 11:36 am
Operator : katiem
Sample : IC4343-6 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 12:06:40 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration


Abundance
TIC: N0095706.D\data.ms
Time-->
Dichlorodifluoromethane,
Chloromethane,P
Vinyl Chloride,C
Bromomethane,
Chloroethane,
Trichlorofluoromethane,
Ethyl Ether
1,2-Dichloroethane,C
Iodomethane
acrolein
Acetone
Methylene Chloride,
Tert Butyl Alcohol
Di-isopropyl ether
Ethyl Acetate
cis-1,2-Dichloroethene,
2,2-Dichloropropane,
Chloroform,
Bromochloromethane,
1,1,1-Trichloroethane,
Carbon tetrachloride,
1,1-Dichloropropene
Benzene,
Tert Amyl alcohol
Fluorobenzene,I
Trichloroethene,
Methylcyclohexane
Dibromomethane
Bromodichloromethane
1,4-Dioxane
2-Chloroethyl vinyl ether
cis-1,3-Dichloropropene
Toluene-d8,S
Toluene,C
2-Nitropropane
trans-1,3-Dichloropropene
4-Methyl-2-pentanone
1,1,2-Trichloroethane,
Dibromochloromethane,
1,3-Dichloropropane,
1,2-Dibromoethane,
2-hexanone
Tetrachloroethene,
Chlorobenzene-d5,I
Ethylbenzene-d5,P
m,p-Xylene,
Bromoform,P
Styrene,
o-Xylene,
Isopropylbenzene,
4-Bromofluorobenzene,S
n-Propylbenzene,
Bromobenzene,
1,1,2,2-Tetrachloroethane,P
Cyclohexanone
trans-1,4-Dichlorobutene
4-Chlorotoluene
tert-Butylbenzene
sec-Butylbenzene
4-Isopropyltoluene
1,4-Dichlorobenzene
1,3-Dichlorobenzene
1,2-Dichlorobenzene
n-Butylbenzene
Benzyl Chloride
1,2-Dibromo-3-Chloropropane
Hexachlorobutadiene
Naphthalene
1,2,3-Trichlorobenzene,
1,2,4-Trichlorobenzene,
1,2,4,5-Tetrachlorobenzene,
1,3,5-Trichlorobenzene,
1,2,4-Trimethylbenzene,
1,3,5-Trimethylbenzene,
1,2,3,5-Tetrachlorobenzene,
1,2,3,4-Tetrachlorobenzene,
Pentachlorobenzene,
Hexachlorobenzene,
1,2,3,4,5,6-Hexachlorobenzene,
1,2,3,4,5,6,7-Heptachlorobenzene,
1,2,3,4,5,6,7,8-Octachlorobenzene,
1,2,3,4,5,6,7,8,9-Nonachlorobenzene,
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1,2,3,4,5,6,7,8,9,10,11-Undecachlorobenzene,
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1,2,3,4,5,6,7,8,9,10,11,12,13-Tridecachlorobenzene,
1,2,3,4,5,6,7,8,9,10,11,12,13,14-Tetradecachlorobenzene,
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15-Pentadecachlorobenzene,
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1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24-Tetracosachlorobenzene,
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1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28-Octacosachlorobenzene,
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29-Nonacosachlorobenzene,
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30-Triacontachlorobenzene,
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1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32-Dotriacontachlorobenzene,
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1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35-Pentatriacontachlorobenzene,
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Manual Integration Approval Summary

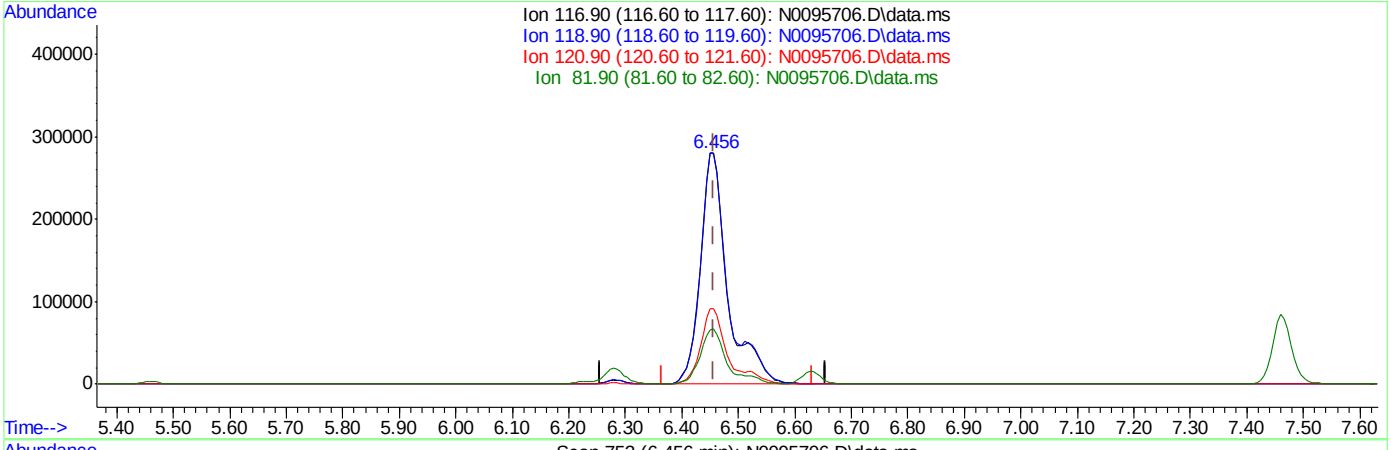
Sample Number:	VN4343-IC4343	**Method:**	SW846 8260B
Lab FileID:	N0095706.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 11:36	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

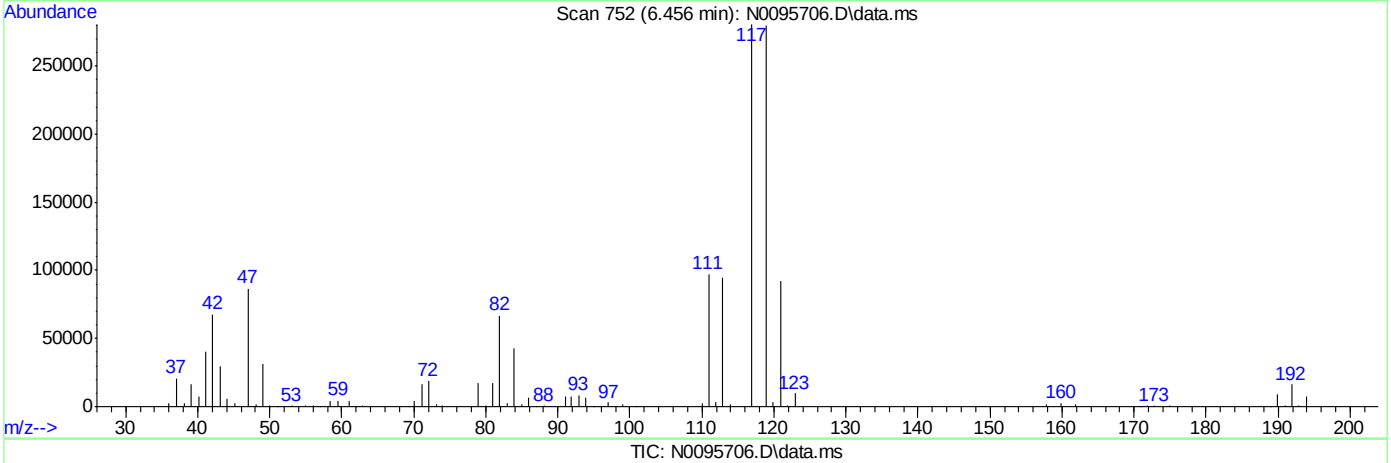
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.46	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095706.D
Acq On : 6 Jul 2016 11:36 am
Operator : katiem
Sample : IC4343-6 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 12:06:07 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.456min (-0.000) 80.52ug/L

response 958925

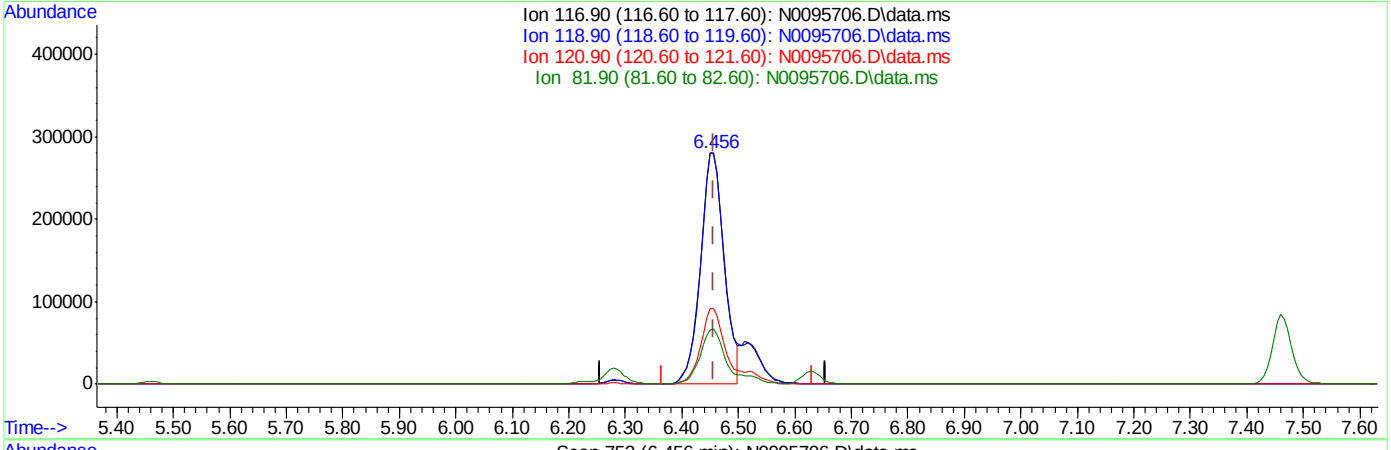
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.59
120.90	29.40	32.88
81.90	22.70	23.81

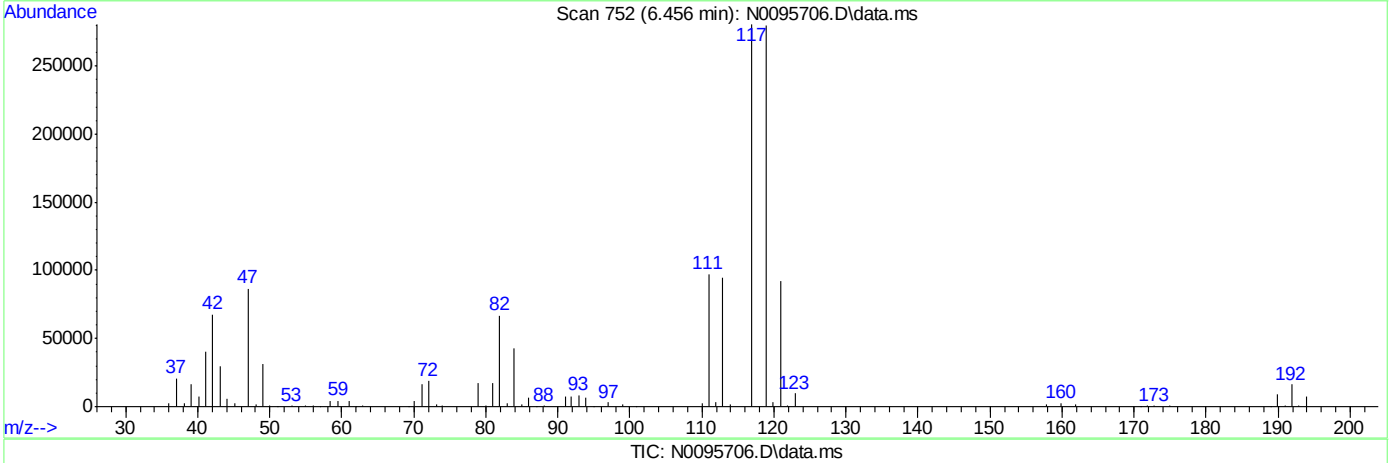
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095706.D
Acq On : 6 Jul 2016 11:36 am
Operator : katiem
Sample : IC4343-6 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 12:06:07 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095706.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (-0.000) 69.75ug/L m

response 830645

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.59
120.90	29.40	32.88
81.90	22.70	23.90

SGS ACCUTEST FA35235

N0095707.D

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:50 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1365707	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	984873	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	549214	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	114054	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	351347	49.87	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.74%			
38) 1,2-Dichloroethane-d4	7.010	65	451919	48.69	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.38%			
48) Toluene-d8	8.823	98	1324543	50.72	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.44%			
69) 4-Bromofluorobenzene	11.584	95	524796	49.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.58%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.569	85	1170156	217.36	ug/L	96
3) Chloromethane	2.757	50	1825132	142.34	ug/L	100
4) Vinyl Chloride	2.897	62	1339348	142.68	ug/L	99
5) Bromomethane	3.238	94	433542	123.57	ug/L	99
6) Chloroethane	3.353	64	259579	Below Cal		96
7) Trichlorofluoromethane	3.566	101	915185m	96.74	ug/L	
8) Ethyl Ether	3.810	59	702285	84.40	ug/L #	84
9) 1,2-Dichlorotrifluoroe...	4.029	67	812464	80.18	ug/L	98
10) 1,1-Dichloroethene	4.059	61	1353508	83.71	ug/L	88
11) Freon 113	4.126	101	806533	91.08	ug/L	94
12) Carbon Disulfide	4.120	76	2561862	93.30	ug/L	84
13) Iodomethane	4.236	142	1574087	96.91	ug/L	97
14) Methylene Chloride	4.661	49	1724663	86.14	ug/L	76
15) Acetone	4.704	58	360556	544.02	ug/L #	77
16) Methyl acetate	4.813	74	489281	514.57	ug/L #	47
17) trans-1,2-Dichloroethene	4.826	61	1459089	93.82	ug/L	86
18) Hexane	4.874	56	1149649	91.54	ug/L	95
19) Methyl Tert Butyl Ether	4.935	73	2247226	96.21	ug/L	83
20) Di-isopropyl ether	5.288	45	4547235	95.34	ug/L	94
21) 1,1-Dichloroethane	5.458	63	1809841	95.68	ug/L	97
22) Acrylonitrile	5.507	53	1847425	551.24	ug/L	98
23) ETBE	5.671	59	3563229	95.01	ug/L	88
24) Vinyl acetate	5.665	43	11669821	468.47	ug/L	94
25) cis-1,2-Dichloroethene	6.012	96	991756	96.75	ug/L #	76
26) 2,2-Dichloropropane	6.140	77	1207190	92.54	ug/L	96
27) Bromochloromethane	6.225	128	467501	98.72	ug/L #	64
28) Cyclohexane	6.243	56	2150636	94.05	ug/L #	86
29) Chloroform	6.280	83	1546747	92.97	ug/L	92
30) Tetrahydrofuran	6.456	42	252988	93.26	ug/L	91
32) Carbon Tetrachloride	6.450	117	1244603m	102.24	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	1453155	95.91	ug/L	94
34) 2-Butanone	6.572	43	2051343	524.51	ug/L	84
35) 1,1-Dichloropropene	6.626	75	1174304	94.33	ug/L	81

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:50 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.876	78	3132307	92.22	ug/L		50
37) TAME	6.961	73	2225725	95.44	ug/L		76
39) 1,2-Dichloroethane	7.077	62	1391185	90.51	ug/L		95
40) Trichloroethene	7.454	95	870618	93.44	ug/L		93
41) Methylcyclohexane	7.460	83	1513698	93.13	ug/L	#	73
42) Dibromomethane	7.886	93	470715	97.12	ug/L		90
43) 1,2-Dichloropropane	7.971	63	1051363	96.50	ug/L		91
44) Bromodichloromethane	8.026	83	1155229	99.38	ug/L	#	94
45) 2-Chloroethyl vinyl ether	8.549	63	2834762	496.96	ug/L		85
46) cis-1,3-Dichloropropene	8.640	75	1355259	97.91	ug/L		75
49) Toluene	8.877	91	3374802	93.02	ug/L		96
50) 2-Nitropropane	9.102	41	1109893	533.11	ug/L		97
51) 4-Methyl-2-pentanone	9.218	43	4373545	508.84	ug/L		96
52) trans-1,3-Dichloropropene	9.273	75	1066300	96.83	ug/L		77
53) Tetrachloroethene	9.273	166	1030173	105.39	ug/L		98
54) 1,1,2-Trichloroethane	9.437	83	562348	96.97	ug/L		91
55) Dibromochloromethane	9.632	129	878225	97.39	ug/L		95
56) 1,3-Dichloropropane	9.717	76	1193182	98.67	ug/L	#	69
57) 1,2-Dibromoethane	9.881	107	706111	99.92	ug/L		97
58) 2-hexanone	10.039	43	3129704	545.02	ug/L		99
59) 1-Chlorohexane	10.331	91	1197453	98.20	ug/L	#	59
60) Ethylbenzene	10.392	91	3570523	88.44	ug/L		95
61) Chlorobenzene	10.392	112	2289087	92.93	ug/L		90
62) 1,1,1,2-Tetrachloroethane	10.441	131	888650	101.47	ug/L		96
63) m,p-Xylene	10.532	91	5329752	171.95	ug/L		92
64) o-Xylene	10.970	91	3014027	92.68	ug/L		96
65) Styrene	11.019	104	2474612	96.53	ug/L		91
66) Bromoform	11.080	173	491377	95.90	ug/L		98
67) Isopropylbenzene	11.274	105	3679713	92.04	ug/L		93
70) n-Propylbenzene	11.694	91	4103953	86.42	ug/L		90
71) Bromobenzene	11.706	156	1039544	94.79	ug/L		99
72) 1,1,2,2-Tetrachloroethane	11.767	83	779249	94.32	ug/L		99
73) 1,3,5-Trimethylbenzene	11.883	105	3128421	87.09	ug/L		90
74) 2-Chlorotoluene	11.877	91	2769449	85.87	ug/L		96
75) trans-1,4-Dichloro-2-B...	11.943	53	339234	110.38	ug/L	#	57
76) 1,2,3-Trichloropropane	11.919	110	237181	97.09	ug/L		77
77) Cyclohexanone	11.980	55	150099	578.04	ug/L		82
78) 4-Chlorotoluene	12.047	91	2786779	88.71	ug/L		91
79) tert-Butylbenzene	12.217	91	1858027	89.17	ug/L		92
80) 1,2,4-Trimethylbenzene	12.284	105	3215864	89.63	ug/L		93
81) sec-Butylbenzene	12.400	105	4001350	88.90	ug/L		92
82) 4-Isopropyltoluene	12.534	119	3701871	89.29	ug/L		97
83) 1,3-Dichlorobenzene	12.661	146	1968439	92.67	ug/L		100
84) 1,4-Dichlorobenzene	12.746	146	2018742	90.80	ug/L		96
85) n-Butylbenzene	12.978	92	1965478	91.84	ug/L		96
86) Benzyl Chloride	12.990	126	343192	94.62	ug/L	#	94
87) 1,2-Dichlorobenzene	13.191	146	1853921	92.20	ug/L		96
88) 1,2-Dibromo-3-Chloropr...	13.963	75	141032	103.68	ug/L		88
89) Hexachlorobutadiene	14.523	225	683771	93.31	ug/L		87
90) 1,2,4-Trichlorobenzene	14.572	180	1293728	93.47	ug/L		97

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:50 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	2307085	93.86	ug/L	98
92) 1,2,3-Trichlorobenzene	15.010	180	1124874	94.35	ug/L	96
94) acrolein	4.406	56	741660	488.94	ug/L	95
95) Tert Butyl Alcohol	5.002	59	682576	902.86	ug/L	98
96) tert Amyl alcohol	7.131	59	613136	960.84	ug/L	90
97) 1,4-Dioxane	8.208	88	124894	2409.10	ug/L	68

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

7.6.7

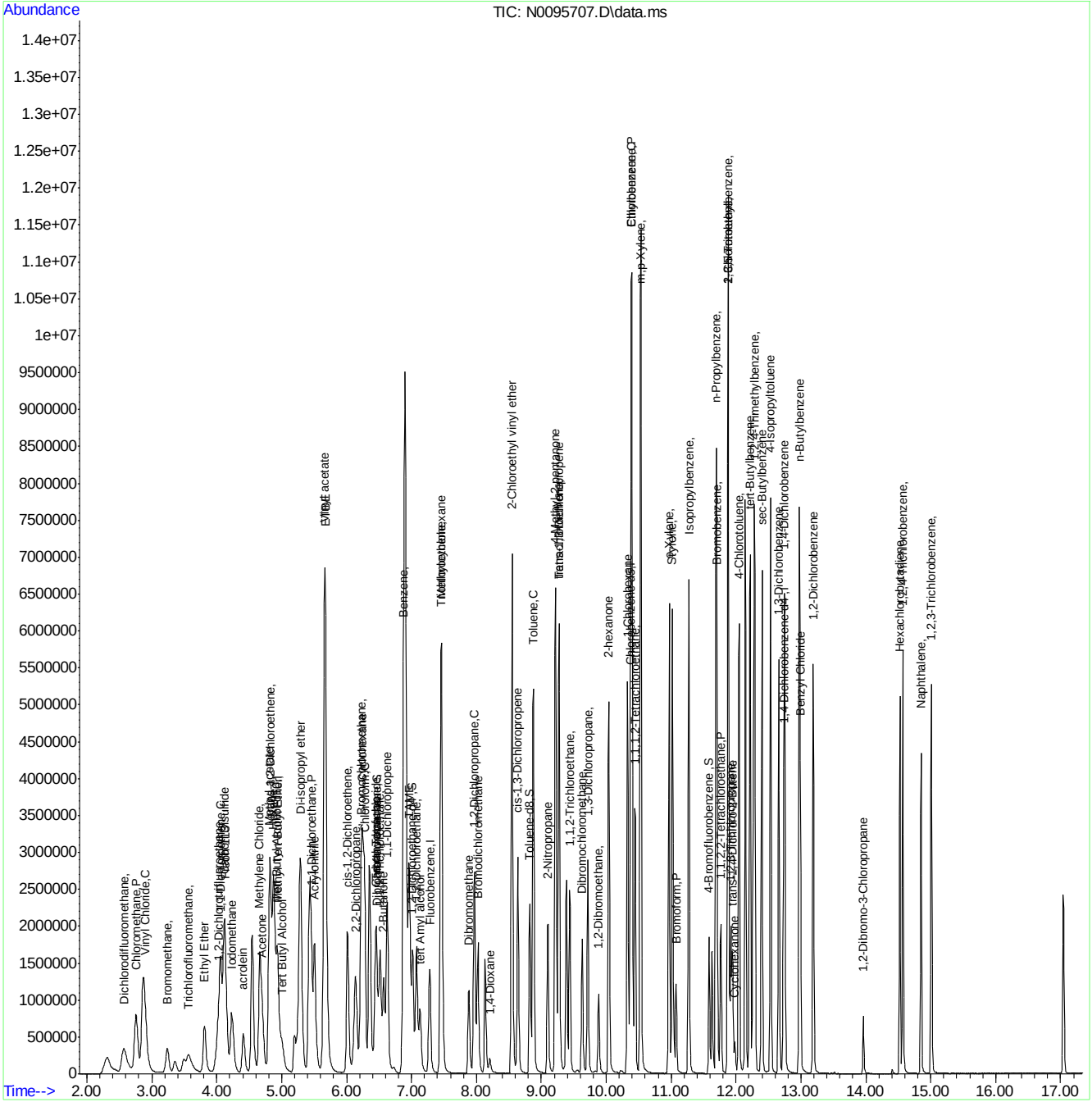
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:50 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration



N-JUL06-2016.m Thu Jul 07 11:05:03 2016 Page: 4

Manual Integration Approval Summary

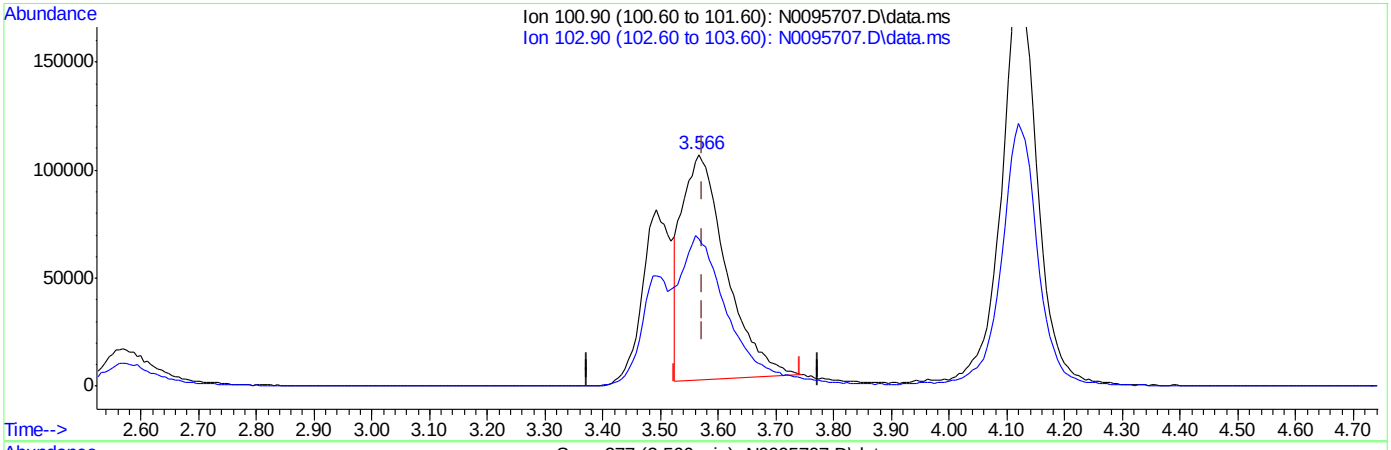
Sample Number:	VN4343-IC4343	**Method:**	SW846 8260B
Lab FileID:	N0095707.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 12:05	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

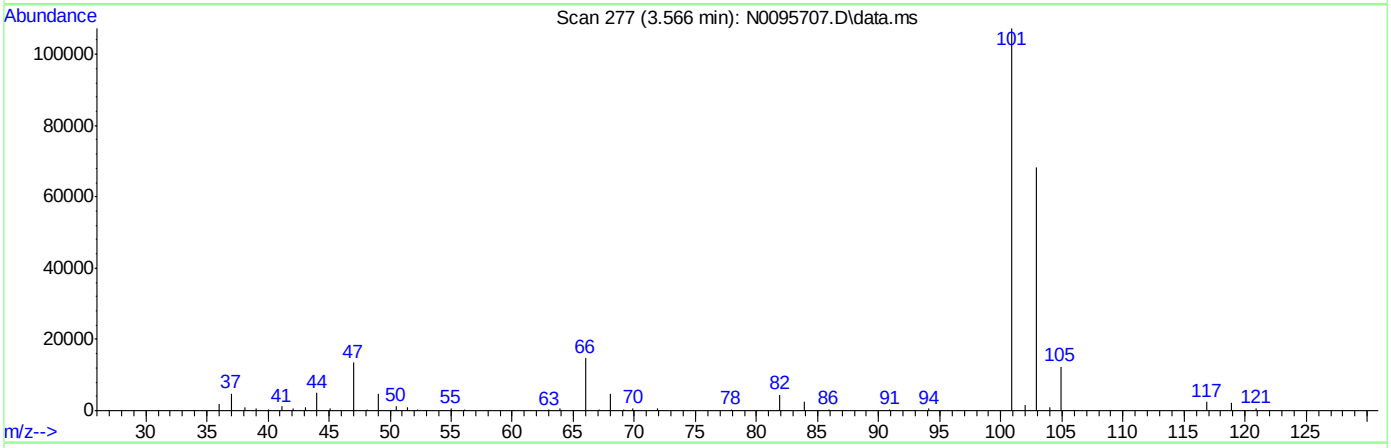
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		3.57	Split peak
Carbon Tetrachloride	56-23-5		6.45	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:15 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095707.D\data.ms

(7) Trichlorofluoromethane ( )

3.566min (-0.007) 58.92ug/L

response 557363

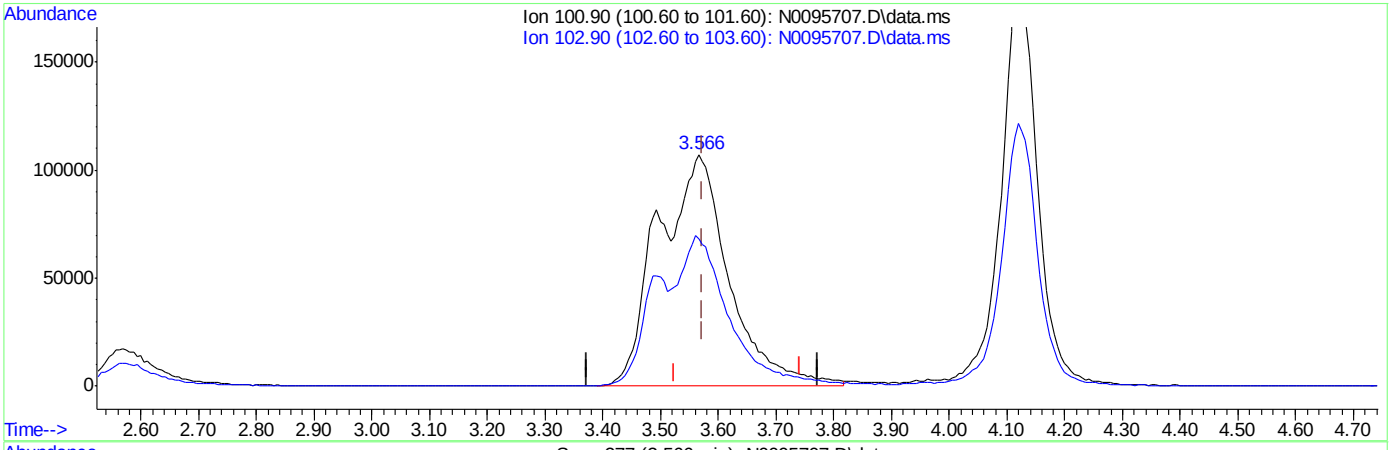
Ion	Exp%	Act%
100.90	100	100
102.90	67.90	63.58
0.00	0.00	0.00
0.00	0.00	0.00

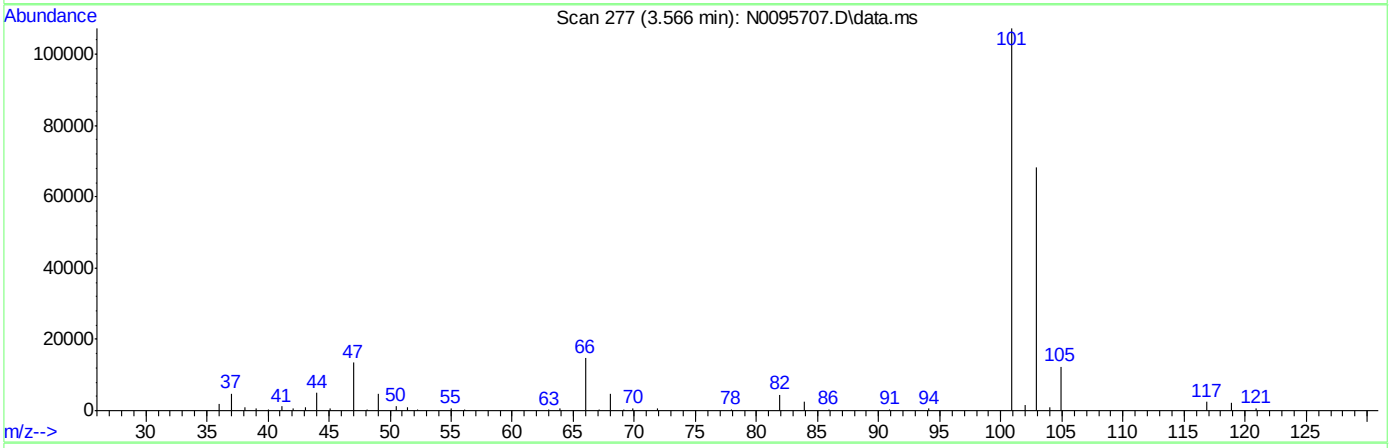
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:15 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095707.D\data.ms

(7) Trichlorofluoromethane ( )

3.566min (-0.007) 96.74ug/L m

response 915185

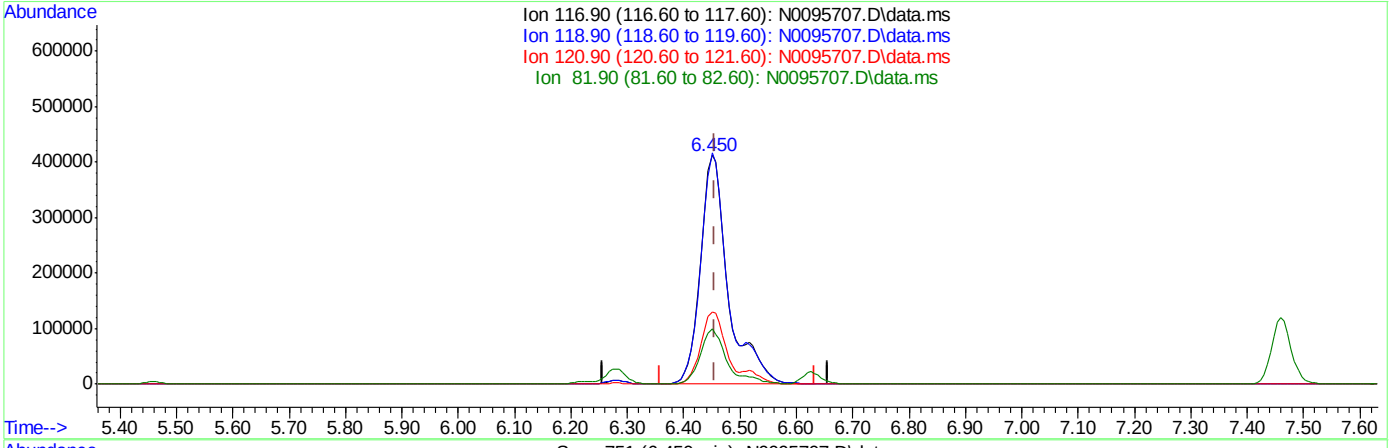
Ion	Exp%	Act%
100.90	100	100
102.90	67.90	63.77
0.00	0.00	0.00
0.00	0.00	0.00

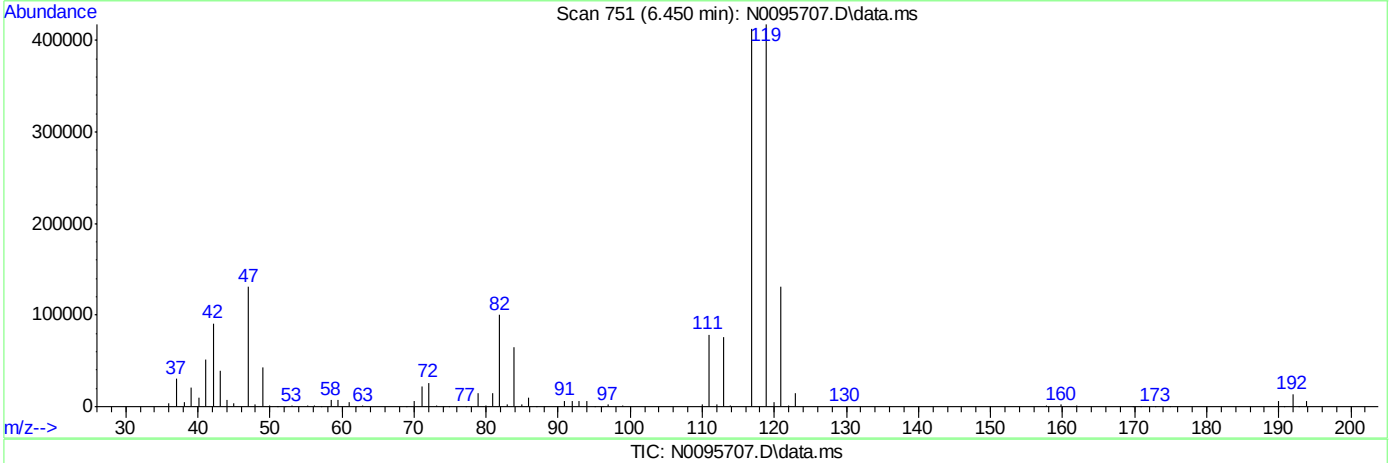
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:15 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





TIC: N0095707.D\data.ms

(32) Carbon Tetrachloride ( )

6.450min (-0.006) 115.08ug/L

response 1400918

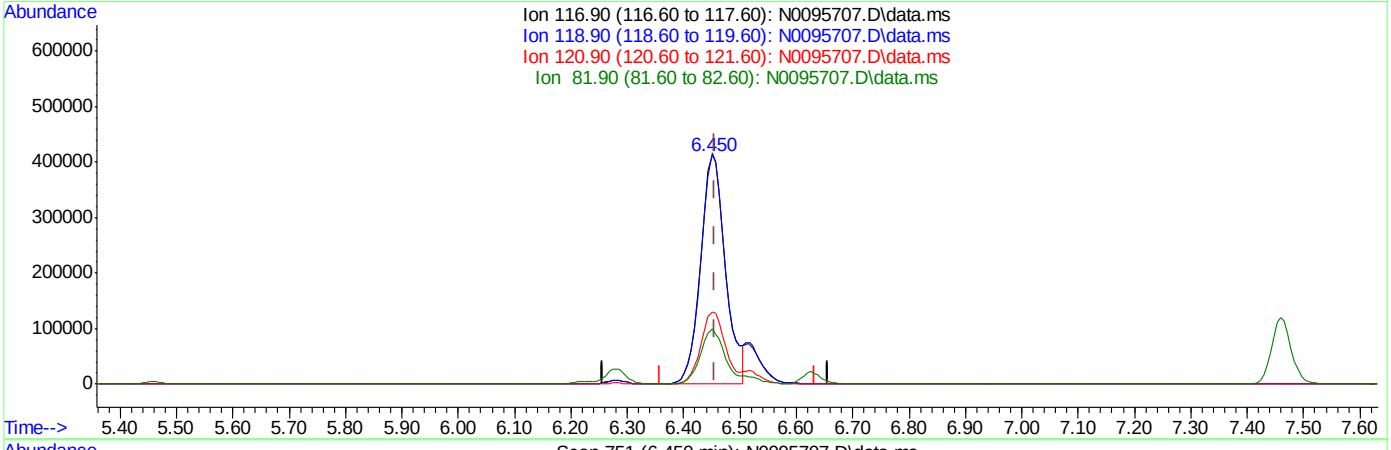
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	101.26
120.90	29.40	31.70
81.90	22.70	24.23

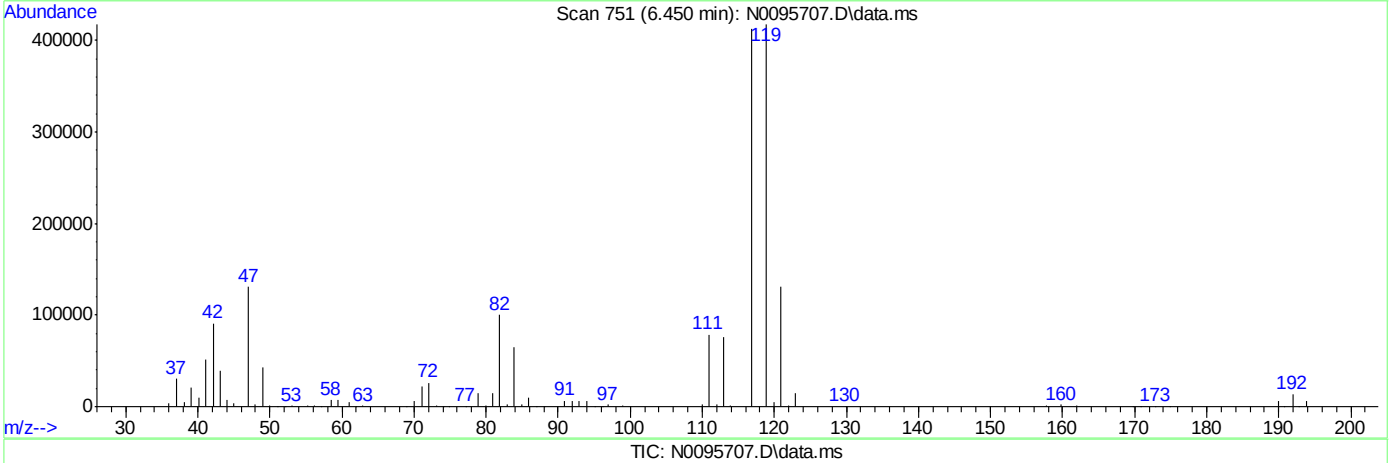
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095707.D
Acq On : 6 Jul 2016 12:05 pm
Operator : katiem
Sample : IC4343-7 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 12:26:15 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 07:57:58 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.450min (-0.006) 102.24ug/L m

response 1244603

Ion	Exp%	Act%
116.90	100	100
118.90	90.10	101.26
120.90	29.40	31.70
81.90	22.70	24.30

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/07/16 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 08:47:54 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1312613	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	961706	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	529850	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	109698	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	339717	49.76	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.52%			
38) 1,2-Dichloroethane-d4	7.010	65	445376m	49.57	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.14%			
48) Toluene-d8	8.823	98	1275456	49.91	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.82%			
69) 4-Bromofluorobenzene	11.584	95	506909	49.45	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.575	85	409270	35.97	ug/L	96
3) Chloromethane	2.745	50	687321	37.79	ug/L	100
4) Vinyl Chloride	2.891	62	454023	35.03	ug/L	99
5) Bromomethane	3.232	94	195826	38.50	ug/L	97
6) Chloroethane	3.366	64	154755	34.73	ug/L	95
7) Trichlorofluoromethane	3.572	101	380110	35.64	ug/L	89
8) Ethyl Ether	3.816	59	302766	38.57	ug/L #	85
9) 1,2-Dichlorotrifluoroe...	4.041	67	395073	41.75	ug/L	98
10) 1,1-Dichloroethene	4.065	61	685242	45.02	ug/L	87
11) Freon 113	4.126	101	320085	38.51	ug/L	92
12) Carbon Disulfide	4.126	76	998242	38.85	ug/L	81
13) Iodomethane	4.236	142	598925	39.29	ug/L	95
14) Methylene Chloride	4.667	49	746365	43.06	ug/L	76
15) Acetone	4.704	58	134820	192.70	ug/L #	68
16) Methyl acetate	4.813	74	194671	214.92	ug/L #	21
17) trans-1,2-Dichloroethene	4.832	61	685008	46.52	ug/L	86
18) Hexane	4.880	56	484916	40.42	ug/L #	89
19) Methyl Tert Butyl Ether	4.935	73	896765	40.54	ug/L	80
20) Di-isopropyl ether	5.288	45	1815799	40.00	ug/L	93
21) 1,1-Dichloroethane	5.458	63	803882	44.44	ug/L	96
22) Acrylonitrile	5.507	53	664068	201.55	ug/L	97
23) ETBE	5.671	59	1395732	39.59	ug/L	88
24) Vinyl acetate	5.671	43	4630977	186.71	ug/L	97
25) cis-1,2-Dichloroethene	6.018	96	399925	41.00	ug/L #	76
26) 2,2-Dichloropropane	6.134	77	538128	44.58	ug/L	96
27) Bromochloromethane	6.225	128	185171	40.98	ug/L #	64
28) Cyclohexane	6.249	56	858225	40.06	ug/L #	85
29) Chloroform	6.280	83	662007	41.51	ug/L	91
30) Tetrahydrofuran	6.456	42	103165	42.78	ug/L	90
32) Carbon Tetrachloride	6.456	117	514384m	43.91	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	581590	40.42	ug/L	93
34) 2-Butanone	6.572	43	799194	213.52	ug/L	85
35) 1,1-Dichloropropene	6.626	75	490741	41.37	ug/L #	80

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 08:47:54 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.876	78	1353292	42.12	ug/L		51
37) TAME	6.967	73	868385	39.67	ug/L		74
39) 1,2-Dichloroethane	7.077	62	607971	41.50	ug/L		96
40) Trichloroethene	7.454	95	377221	41.65	ug/L		95
41) Methylcyclohexane	7.460	83	627509	40.93	ug/L	#	73
42) Dibromomethane	7.886	93	197908	43.43	ug/L		91
43) 1,2-Dichloropropane	7.971	63	436183	42.34	ug/L		90
44) Bromodichloromethane	8.026	83	484345	44.30	ug/L	#	94
45) 2-Chloroethyl vinyl ether	8.549	63	1132731	206.54	ug/L		83
46) cis-1,3-Dichloropropene	8.640	75	575527	44.94	ug/L		73
49) Toluene	8.877	91	1455518	41.31	ug/L		99
50) 2-Nitropropane	9.102	41	378671	188.68	ug/L		98
51) 4-Methyl-2-pentanone	9.218	43	1845924	198.09	ug/L		98
52) trans-1,3-Dichloropropene	9.279	75	501887	46.14	ug/L		78
53) Tetrachloroethene	9.273	166	424433	42.01	ug/L		97
54) 1,1,2-Trichloroethane	9.437	83	242980	44.09	ug/L		89
55) Dibromochloromethane	9.632	129	359693	46.56	ug/L		97
56) 1,3-Dichloropropane	9.717	76	483716	40.75	ug/L	#	66
57) 1,2-Dibromoethane	9.887	107	298472	44.71	ug/L		95
58) 2-hexanone	10.039	43	1258844	198.62	ug/L		96
59) 1-Chlorohexane	10.331	91	485374	41.09	ug/L	#	59
60) Ethylbenzene	10.392	91	1617270	41.22	ug/L		97
61) Chlorobenzene	10.392	112	1020820	42.72	ug/L		90
62) 1,1,1,2-Tetrachloroethane	10.441	131	379135	44.97	ug/L		95
63) m,p-Xylene	10.532	91	2510299	83.29	ug/L		99
64) o-Xylene	10.970	91	1315797	42.03	ug/L		100
65) Styrene	11.019	104	1067469	44.17	ug/L		90
66) Bromoform	11.080	173	191724	42.81	ug/L		96
67) Isopropylbenzene	11.274	105	1655481	42.87	ug/L		97
70) n-Propylbenzene	11.694	91	1896847	42.10	ug/L		95
71) Bromobenzene	11.706	156	430964	41.81	ug/L		96
72) 1,1,2,2-Tetrachloroethane	11.767	83	328317	43.04	ug/L		98
73) 1,3,5-Trimethylbenzene	11.876	105	1391129	41.00	ug/L		95
74) 2-Chlorotoluene	11.876	91	1270887	41.27	ug/L		99
75) trans-1,4-Dichloro-2-B...	11.943	53	129861	43.80	ug/L	#	54
76) 1,2,3-Trichloropropane	11.919	110	101314	44.25	ug/L	#	78
77) Cyclohexanone	11.980	55	54510	191.66	ug/L		84
78) 4-Chlorotoluene	12.047	91	1218313	41.40	ug/L		96
79) tert-Butylbenzene	12.211	91	819565	40.75	ug/L		92
80) 1,2,4-Trimethylbenzene	12.284	105	1415449	41.52	ug/L		97
81) sec-Butylbenzene	12.400	105	1793972	41.88	ug/L		97
82) 4-Isopropyltoluene	12.533	119	1644618	42.38	ug/L		100
83) 1,3-Dichlorobenzene	12.661	146	843912	42.37	ug/L		98
84) 1,4-Dichlorobenzene	12.746	146	857875	41.23	ug/L		95
85) n-Butylbenzene	12.972	92	845736	42.14	ug/L		97
86) Benzyl Chloride	12.990	126	134318	42.43	ug/L	#	71
87) 1,2-Dichlorobenzene	13.191	146	787604	42.19	ug/L		96
88) 1,2-Dibromo-3-Chloropr...	13.963	75	56270	44.75	ug/L		86
89) Hexachlorobutadiene	14.523	225	279671	40.70	ug/L		85
90) 1,2,4-Trichlorobenzene	14.571	180	537367	42.51	ug/L		96

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 08:47:54 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	1053783	47.77	ug/L	99
92) 1,2,3-Trichlorobenzene	15.009	180	467838	42.77	ug/L	95
94) acrolein	4.412	56	344674	237.27	ug/L	93
95) Tert Butyl Alcohol	5.002	59	266779	384.61	ug/L	96
96) tert Amyl alcohol	7.131	59	222446	398.07	ug/L	89
97) 1,4-Dioxane	8.208	88	47477	780.44	ug/L	67

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

7.6.8

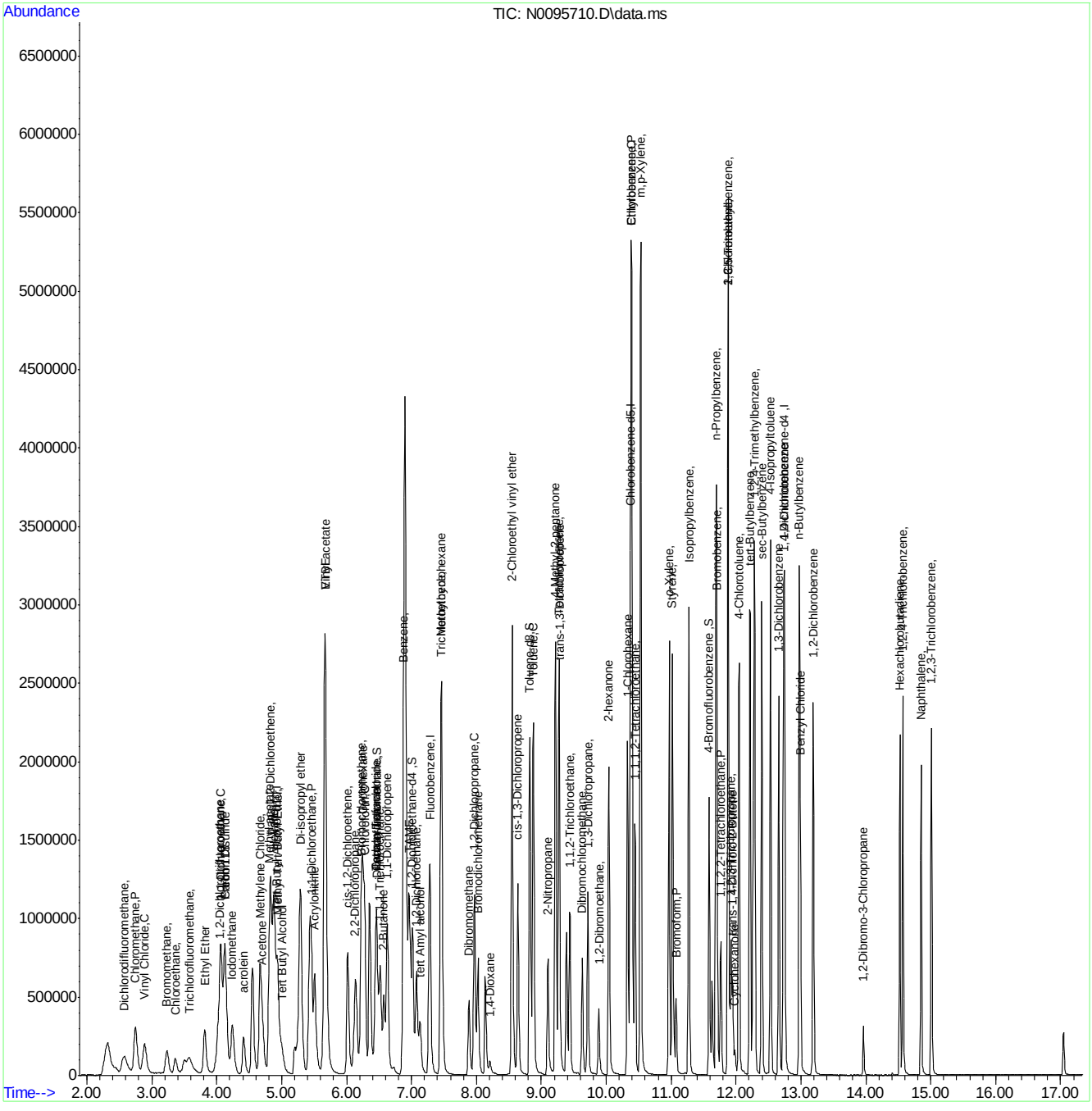
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 08:47:54 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

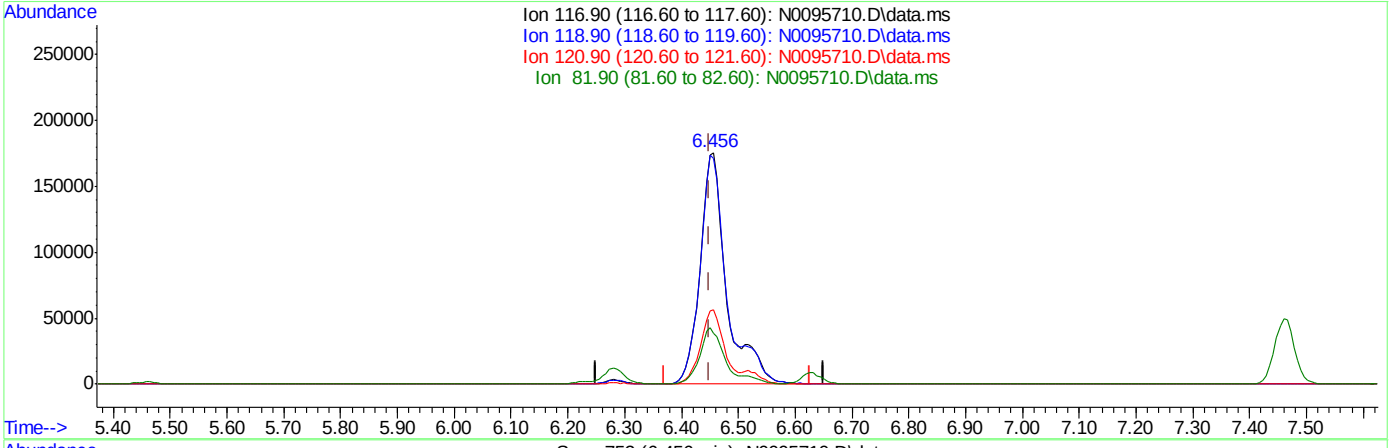
Sample Number:	VN4343-ICV4343	**Method:**	SW846 8260B
Lab FileID:	N0095710.D	**Analyst approved:**	07/07/16 10:48 Kathleen McNatt
Injection Time:	07/06/16 13:34	**Supervisor approved:**	07/07/16 14:20 Juan Garcia

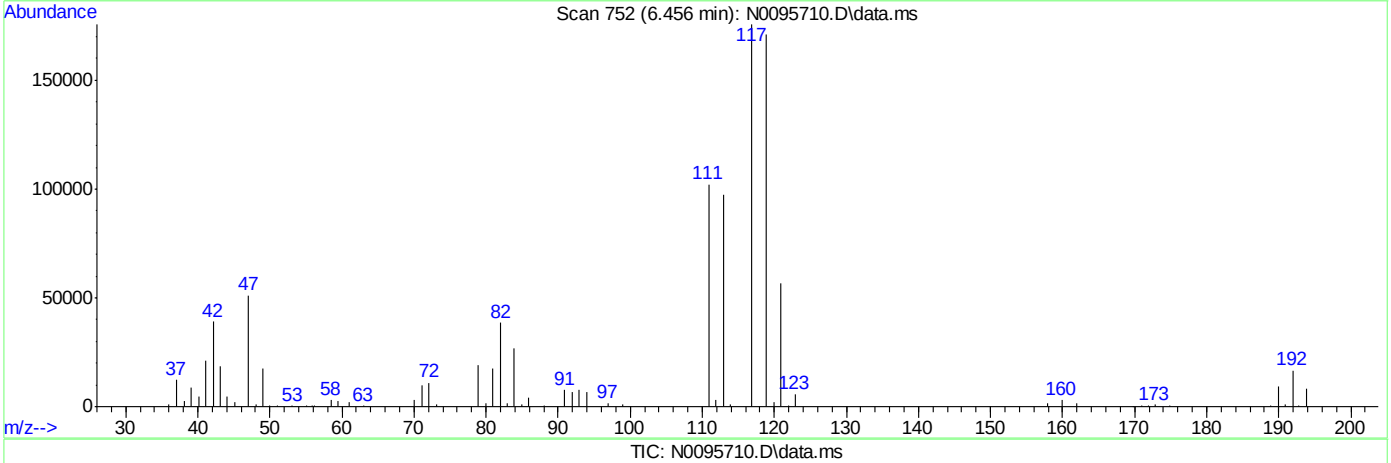
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.46	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		7.01	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 07:57:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration





TIC: N0095710.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.006) 49.53ug/L

response 580228

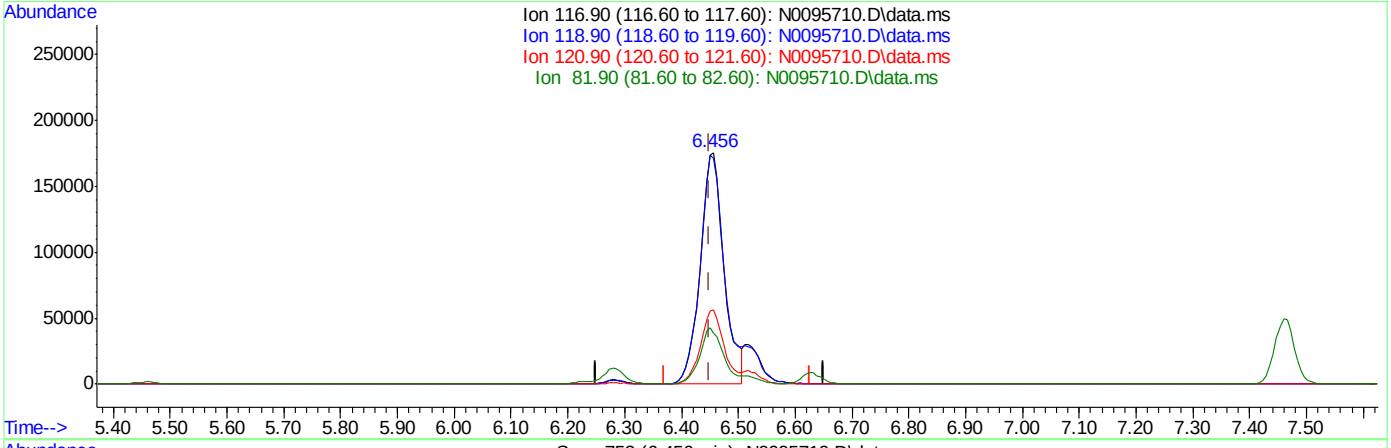
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	97.23
120.90	29.40	32.25
81.90	22.70	21.86

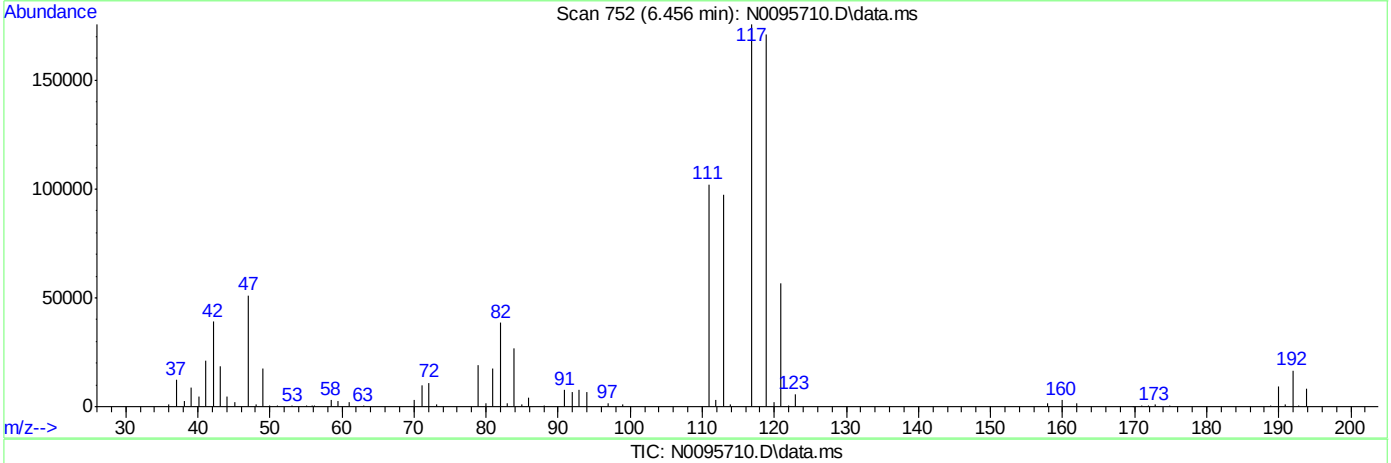
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 07:57:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration





TIC: N0095710.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.006) 43.91ug/L m

response 514384

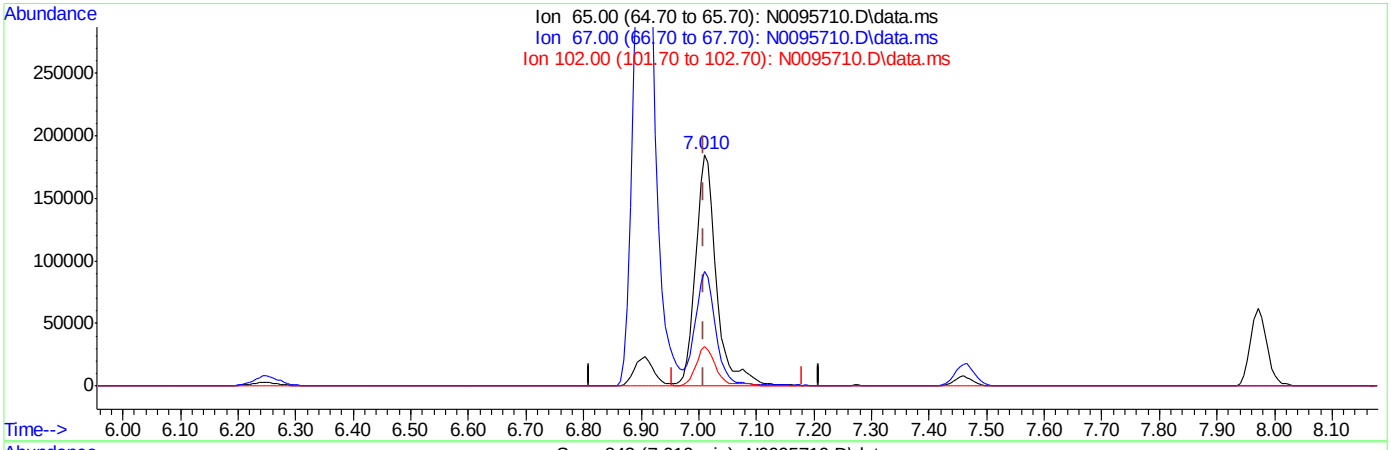
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	97.23
120.90	29.40	32.25
81.90	22.70	21.86

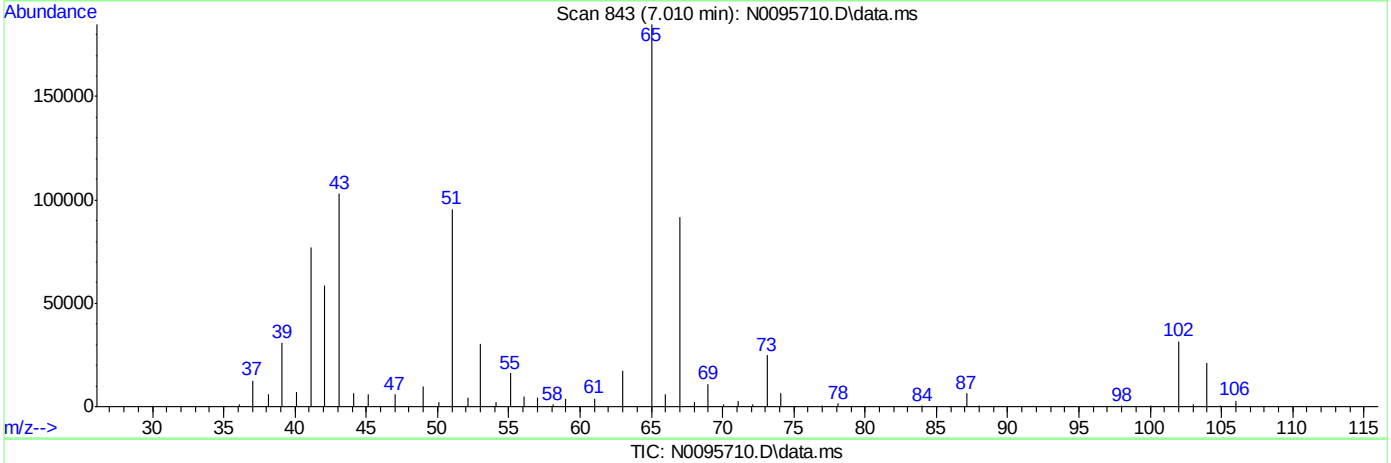
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 07:57:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration





TIC: N0095710.D\data.ms

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

7.010min (-0.000) 52.04ug/L

response 467624

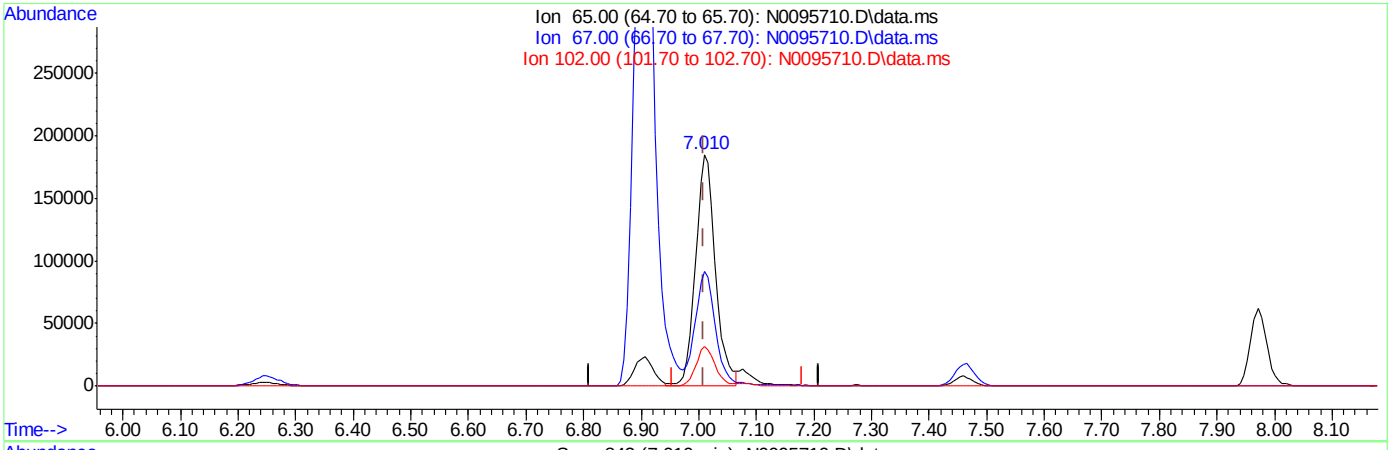
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	49.39
102.00	21.50	17.10
0.00	0.00	0.00

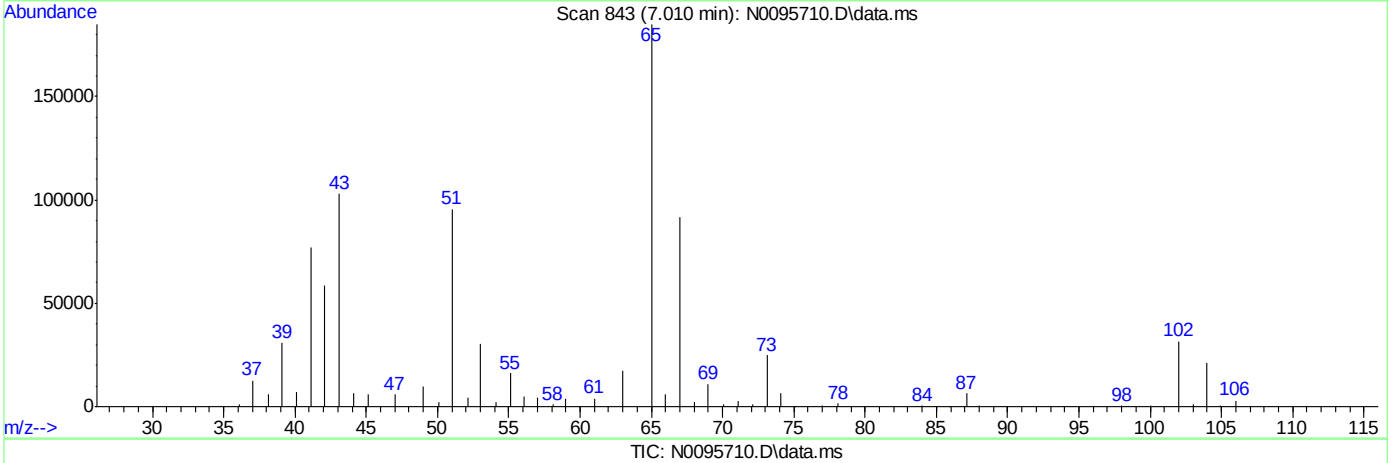
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070616\
Data File : N0095710.D
Acq On : 6 Jul 2016 1:34 pm
Operator : katiem
Sample : ICV4343-5 Inst : MSVOA8
Misc : MS34327,VN4343,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 07 07:57:08 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Jul 06 12:28:00 2016
Response via : Initial Calibration





TIC: N0095710.D\data.ms

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

7.010min (-0.000) 49.57ug/L m

response 445376

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	49.69
102.00	21.50	17.06
0.00	0.00	0.00

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/08/16 15:04

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 14:08:59 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.284	96	1375751	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	993579	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	542600	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.923	65	103159	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	362984	50.72	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.44%			
38) 1,2-Dichloroethane-d4	7.010	65	467135m	49.60	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.20%			
48) Toluene-d8	8.823	98	1330164	50.38	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.76%			
69) 4-Bromofluorobenzene	11.585	95	529245	50.42	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.84%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.581	85	476733	39.97	ug/L	94
3) Chloromethane	2.751	50	783759	41.12	ug/L	99
4) Vinyl Chloride	2.891	62	547658	40.31	ug/L	99
5) Bromomethane	3.232	94	226745	43.15	ug/L	100
6) Chloroethane	3.366	64	199131	46.41	ug/L	91
7) Trichlorofluoromethane	3.579	101	463292	41.45	ug/L	96
8) Ethyl Ether	3.816	59	316738	38.50	ug/L #	85
9) 1,2-Dichlorotrifluoroe...	4.035	67	374012	37.71	ug/L	96
10) 1,1-Dichloroethene	4.065	61	612770	38.41	ug/L	86
11) Freon 113	4.126	101	332587	38.18	ug/L	95
12) Carbon Disulfide	4.132	76	1049056	38.96	ug/L	85
13) Iodomethane	4.236	142	610456	38.21	ug/L	94
14) Methylene Chloride	4.668	49	709528	38.93	ug/L	77
15) Acetone	4.704	58	135266	184.46	ug/L #	64
16) Methyl acetate	4.814	74	186827	196.80	ug/L #	25
17) trans-1,2-Dichloroethene	4.832	61	591311	38.31	ug/L	87
18) Hexane	4.880	56	474900	37.77	ug/L #	90
19) Methyl Tert Butyl Ether	4.935	73	885216	38.18	ug/L	78
20) Di-isopropyl ether	5.288	45	1824121	38.34	ug/L	94
21) 1,1-Dichloroethane	5.458	63	728638	38.43	ug/L	96
22) Acrylonitrile	5.507	53	686289	198.73	ug/L	98
23) ETBE	5.671	59	1424375	38.55	ug/L	89
24) Vinyl acetate	5.665	43	5134662	204.15	ug/L	97
25) cis-1,2-Dichloroethene	6.018	96	400621	39.19	ug/L #	78
26) 2,2-Dichloropropane	6.140	77	508088	40.16	ug/L	96
27) Bromochloromethane	6.225	128	182883	38.61	ug/L #	59
28) Cyclohexane	6.249	56	853984	38.04	ug/L #	85
29) Chloroform	6.280	83	653732	39.11	ug/L	90
30) Tetrahydrofuran	6.462	42	92477	36.63	ug/L	91
32) Carbon Tetrachloride	6.456	117	485445m	39.54	ug/L	
33) 1,1,1-Trichloroethane	6.523	97	590494	39.16	ug/L	92
34) 2-Butanone	6.572	43	761791	194.19	ug/L	83
35) 1,1-Dichloropropene	6.626	75	486927	39.16	ug/L #	79

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 14:08:59 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) Benzene	6.882	78	1332671	39.58 ug/L	75
37) TAME	6.961	73	878236	38.28 ug/L	74
39) 1,2-Dichloroethane	7.077	62	569140	37.07 ug/L	97
40) Trichloroethene	7.454	95	356908	37.60 ug/L	98
41) Methylcyclohexane	7.460	83	612810	38.14 ug/L #	73
42) Dibromomethane	7.886	93	188844	39.54 ug/L	94
43) 1,2-Dichloropropane	7.971	63	424323	39.29 ug/L	89
44) Bromodichloromethane	8.026	83	469015	40.93 ug/L #	93
45) 2-Chloroethyl vinyl ether	8.549	63	1161523	202.07 ug/L	82
46) cis-1,3-Dichloropropene	8.640	75	552050	41.13 ug/L	75
49) Toluene	8.877	91	1422328	39.07 ug/L	99
50) 2-Nitropropane	9.102	41	411323	197.87 ug/L	97
51) 4-Methyl-2-pentanone	9.218	43	1811367	188.15 ug/L	97
52) trans-1,3-Dichloropropene	9.279	75	445889	39.48 ug/L	78
53) Tetrachloroethene	9.273	166	377117	36.13 ug/L	96
54) 1,1,2-Trichloroethane	9.437	83	227271	39.92 ug/L	90
55) Dibromochloromethane	9.632	129	335515	42.04 ug/L	97
56) 1,3-Dichloropropane	9.717	76	486459	39.67 ug/L #	68
57) 1,2-Dibromoethane	9.887	107	277113	40.18 ug/L	97
58) 2-hexanone	10.039	43	1234081	188.47 ug/L	96
59) 1-Chlorohexane	10.331	91	483703	39.64 ug/L #	59
60) Ethylbenzene	10.392	91	1565552	38.62 ug/L	99
61) Chlorobenzene	10.392	112	957276	38.78 ug/L	92
62) 1,1,1,2-Tetrachloroethane	10.441	131	351400	40.34 ug/L	96
63) m,p-Xylene	10.532	91	2409707	77.39 ug/L	99
64) o-Xylene	10.970	91	1283424	39.68 ug/L	100
65) Styrene	11.019	104	1017367	40.75 ug/L	89
66) Bromoform	11.080	173	179235	38.95 ug/L	98
67) Isopropylbenzene	11.274	105	1572004	39.40 ug/L	98
70) n-Propylbenzene	11.694	91	1820351	39.45 ug/L	97
71) Bromobenzene	11.706	156	415831	39.39 ug/L	98
72) 1,1,2,2-Tetrachloroethane	11.767	83	311880	39.93 ug/L	99
73) 1,3,5-Trimethylbenzene	11.877	105	1379288	39.69 ug/L	97
74) 2-Chlorotoluene	11.877	91	1229165	38.98 ug/L	99
75) trans-1,4-Dichloro-2-B...	11.950	53	119852	39.47 ug/L #	52
76) 1,2,3-Trichloropropane	11.919	110	92391	39.40 ug/L	77
77) Cyclohexanone	11.980	55	56714	194.73 ug/L	84
78) 4-Chlorotoluene	12.047	91	1196499	39.71 ug/L	96
79) tert-Butylbenzene	12.211	91	786357	38.18 ug/L	90
80) 1,2,4-Trimethylbenzene	12.284	105	1370241	39.25 ug/L	99
81) sec-Butylbenzene	12.400	105	1712073	39.03 ug/L	97
82) 4-Isopropyltoluene	12.534	119	1562562	39.31 ug/L	99
83) 1,3-Dichlorobenzene	12.661	146	797030	39.07 ug/L	98
84) 1,4-Dichlorobenzene	12.747	146	823079	38.63 ug/L	94
85) n-Butylbenzene	12.972	92	830127	40.39 ug/L	95
86) Benzyl Chloride	12.996	126	126270	39.07 ug/L #	75
87) 1,2-Dichlorobenzene	13.191	146	745393	38.99 ug/L	95
88) 1,2-Dibromo-3-Chloropr...	13.963	75	50884	39.52 ug/L	84
89) Hexachlorobutadiene	14.523	225	262527	37.31 ug/L	85
90) 1,2,4-Trichlorobenzene	14.572	180	502089	38.78 ug/L	95

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 14:08:59 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) Naphthalene	14.851	128	877384	38.84	ug/L	99
92) 1,2,3-Trichlorobenzene	15.010	180	427502	38.16	ug/L	96
94) acrolein	4.412	56	296942	217.37	ug/L	94
95) Tert Butyl Alcohol	4.996	59	235267	360.68	ug/L	86
96) tert Amyl alcohol	7.131	59	206063	392.13	ug/L	86
97) 1,4-Dioxane	8.208	88	47528	831.23	ug/L	72

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

7.6.9

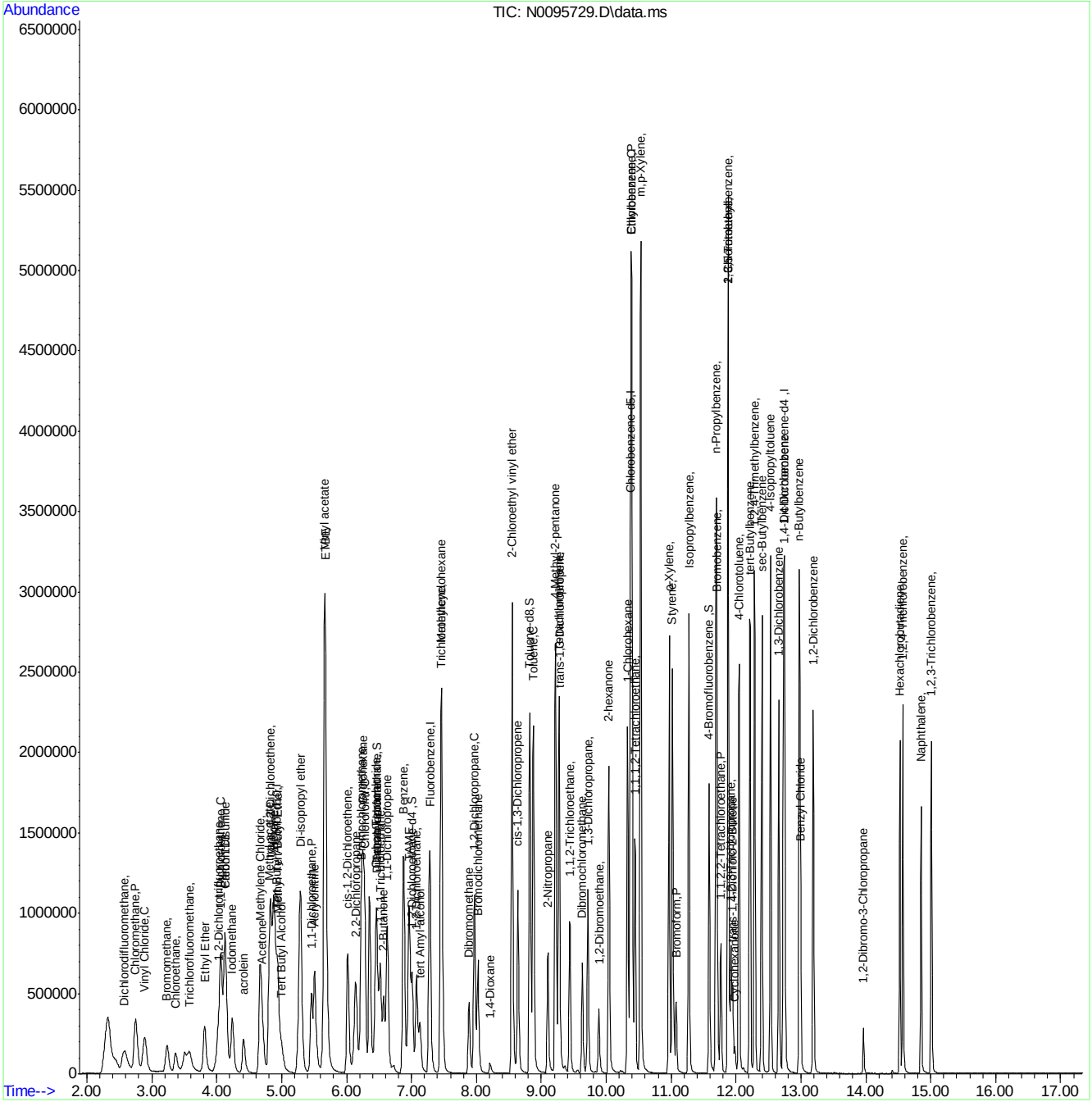
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 14:08:59 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

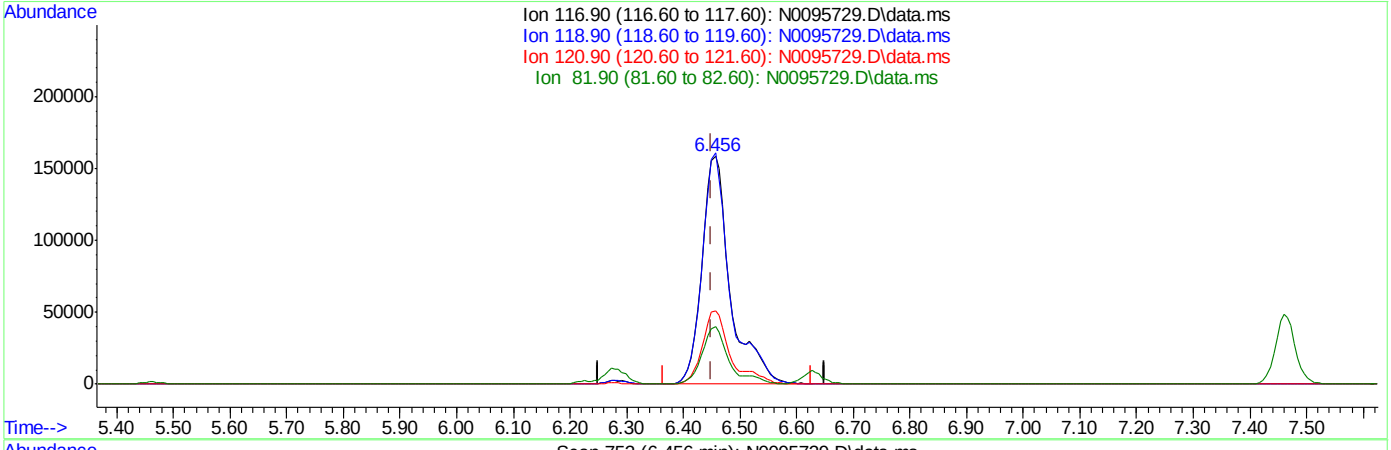
Sample Number:	VN4344-CC4343	**Method:**	SW846 8260B
Lab FileID:	N0095729.D	**Analyst approved:**	07/08/16 13:26 Kathleen McNatt
Injection Time:	07/07/16 08:10	**Supervisor approved:**	07/08/16 15:04 Juan Garcia

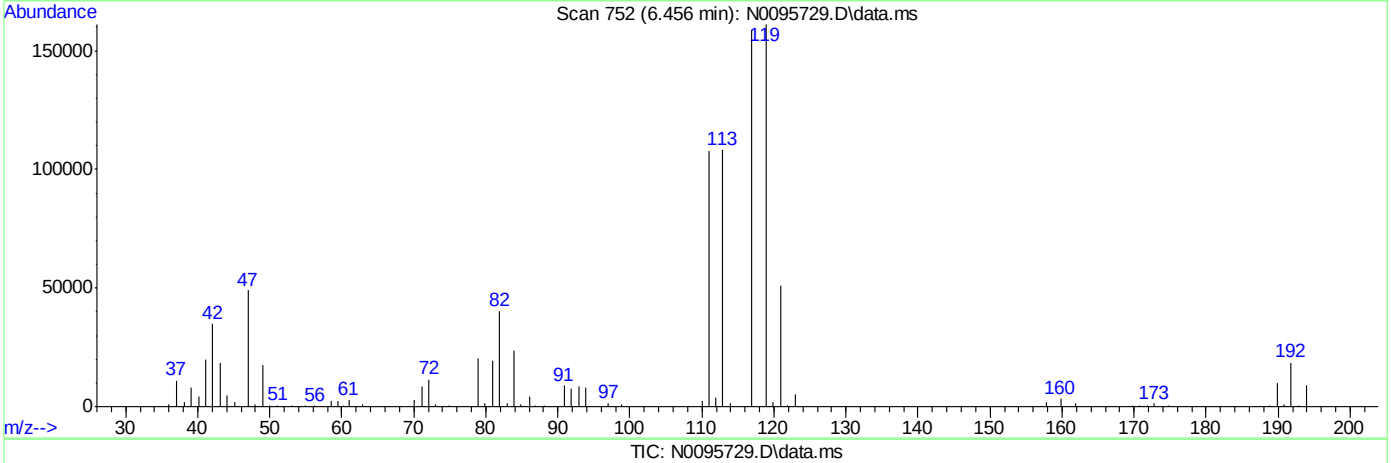
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.46	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		7.01	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 13:59:32 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.456min (+0.006) 44.81ug/L

response 550102

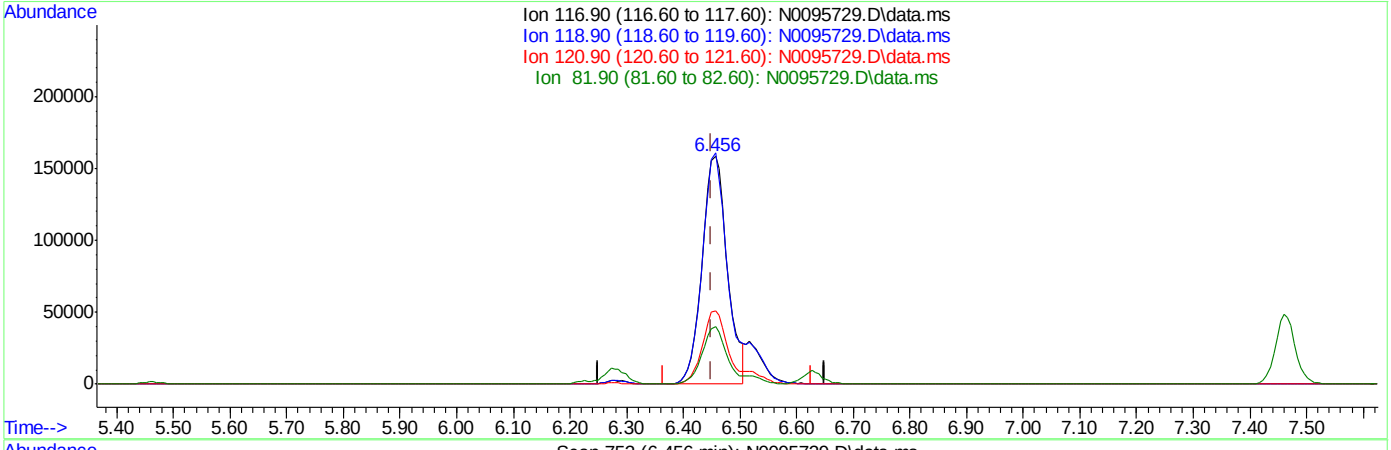
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	101.53
120.90	29.40	32.18
81.90	22.70	25.33

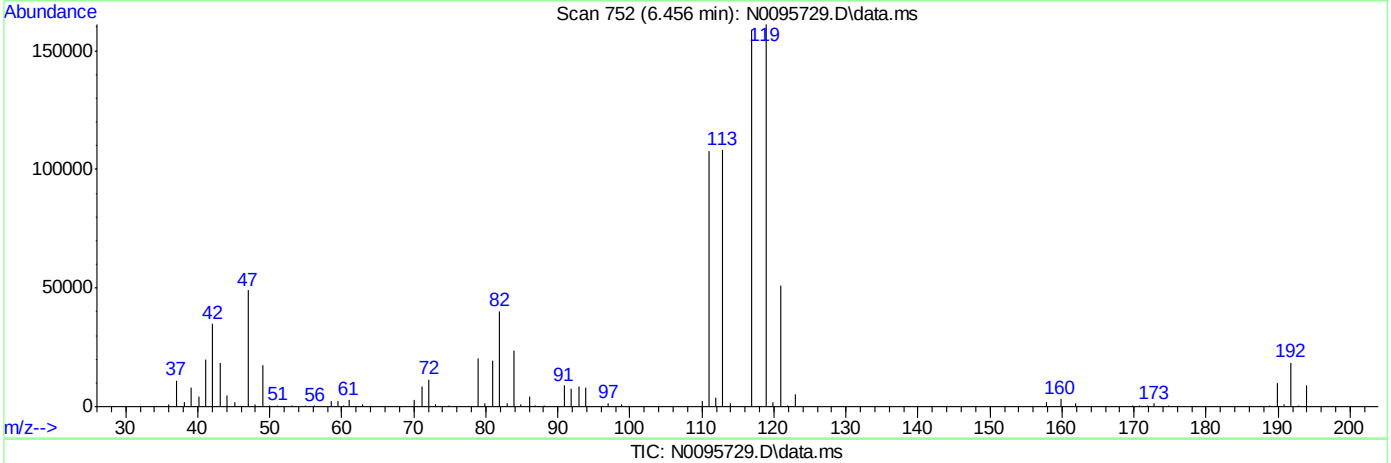
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 13:59:32 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095729.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.006) 39.54ug/L m

response 485445

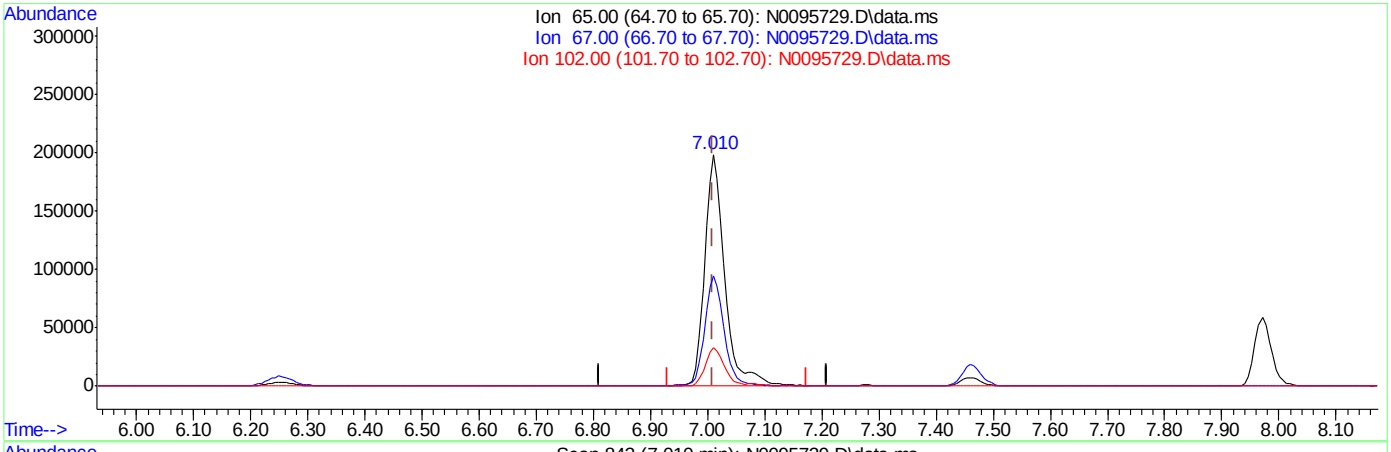
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	101.53
120.90	29.40	32.18
81.90	22.70	25.33

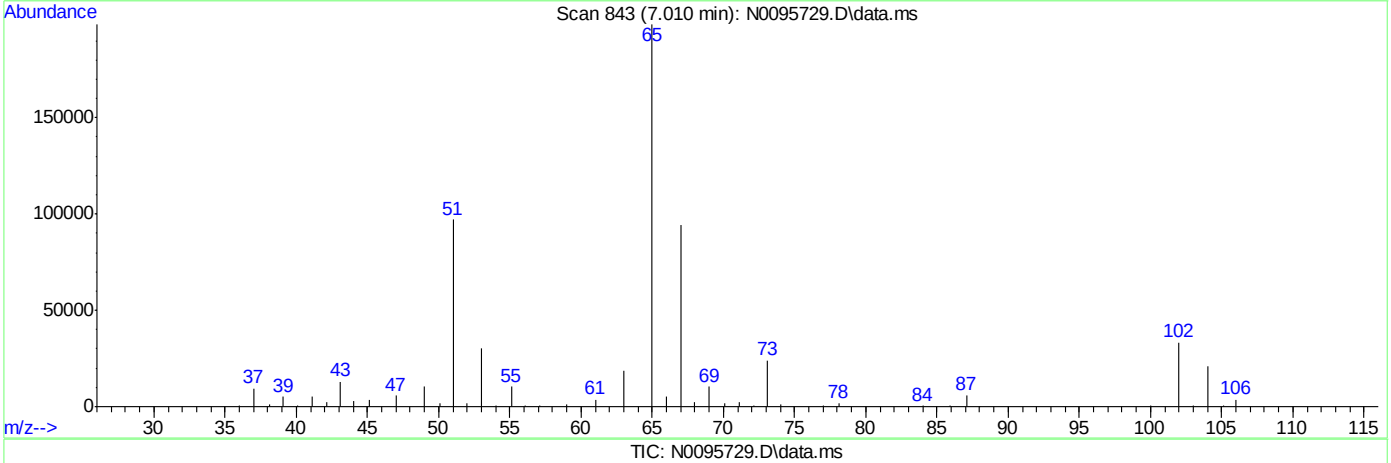
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 13:59:32 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095729.D\data.ms

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

7.010min (-0.000) 51.99ug/L

response 489623

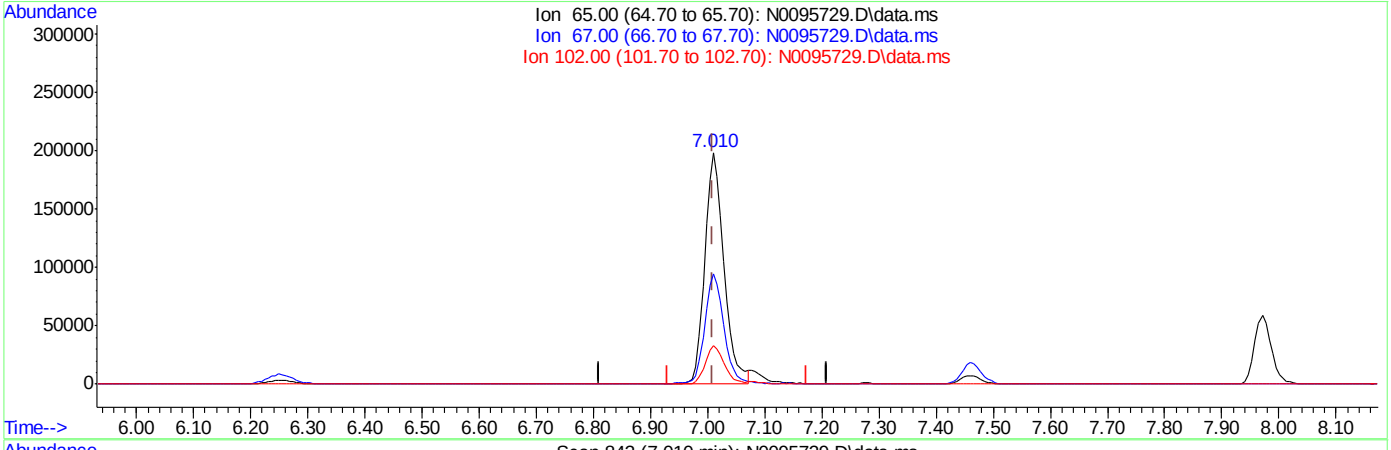
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.18
102.00	21.50	16.85
0.00	0.00	0.00

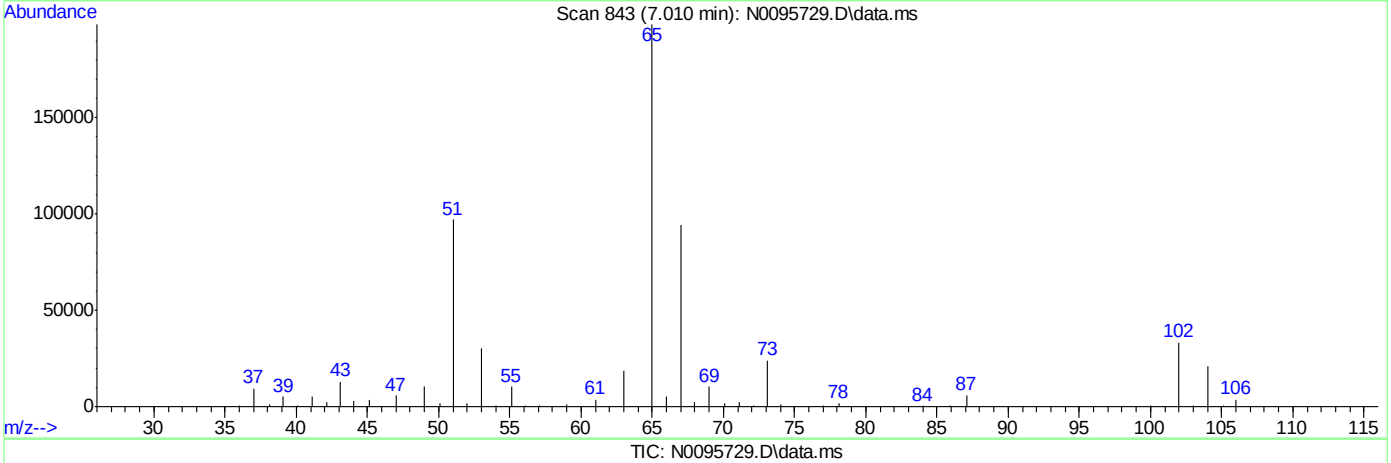
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095729.D
Acq On : 7 Jul 2016 8:10 am
Operator : katiem
Sample : CC4343-5 Inst : MSVOA8
Misc : MS34337,VN4344,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 13:59:32 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095729.D\data.ms

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

7.010min (-0.000) 49.60ug/L m

response 467135

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.37
102.00	21.50	16.85
0.00	0.00	0.00

SGS ACCUTEST FA35235

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
07/08/16 15:04

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:26:38 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.283	96	1376743	50.00	ug/L	0.00
47) Chlorobenzene-d5	10.374	117	989339	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4	12.734	152	534467	50.00	ug/L	0.00
93) Tert Butyl Alcohol-d10	4.929	65	110583	250.00	ug/L	0.00
System Monitoring Compounds						
31) Dibromofluoromethane	6.468	113	358135	50.01	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.02%			
38) 1,2-Dichloroethane-d4	7.010	65	466168m	49.47	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.94%			
48) Toluene-d8	8.829	98	1329515	50.58	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.16%			
69) 4-Bromofluorobenzene	11.584	95	528509	51.12	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.24%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.581	85	447094	37.46	ug/L	97
3) Chloromethane	2.751	50	751001	39.37	ug/L	99
4) Vinyl Chloride	2.885	62	529598	38.95	ug/L	99
5) Bromomethane	3.226	94	210280	39.54	ug/L	97
6) Chloroethane	3.359	64	184406	41.37	ug/L	96
7) Trichlorofluoromethane	3.566	101	452632	40.46	ug/L	94
8) Ethyl Ether	3.816	59	333709	40.53	ug/L #	88
9) 1,2-Dichlorotrifluoroe...	4.029	67	352022	35.46	ug/L	96
10) 1,1-Dichloroethene	4.065	61	559837	35.07	ug/L	89
11) Freon 113	4.126	101	329951	37.85	ug/L	95
12) Carbon Disulfide	4.126	76	1032660	38.32	ug/L	84
13) Iodomethane	4.235	142	609142	38.10	ug/L	95
14) Methylene Chloride	4.667	49	744338	40.87	ug/L	77
15) Acetone	4.704	58	149559	203.81	ug/L #	76
16) Methyl acetate	4.807	74	207600	218.52	ug/L #	34
17) trans-1,2-Dichloroethene	4.832	61	595397	38.55	ug/L	86
18) Hexane	4.880	56	463538	36.84	ug/L	90
19) Methyl Tert Butyl Ether	4.929	73	926005	39.92	ug/L	77
20) Di-isopropyl ether	5.288	45	1872626	39.33	ug/L	95
21) 1,1-Dichloroethane	5.458	63	729790	38.46	ug/L	97
22) Acrylonitrile	5.507	53	716201	207.24	ug/L	97
23) ETBE	5.665	59	1466282	39.66	ug/L	88
24) Vinyl acetate	5.665	43	3926495	156.00	ug/L	97
25) cis-1,2-Dichloroethene	6.018	96	405642	39.65	ug/L #	76
26) 2,2-Dichloropropane	6.140	77	423359	33.44	ug/L	99
27) Bromochloromethane	6.225	128	190588	40.21	ug/L #	64
28) Cyclohexane	6.249	56	861490	38.34	ug/L #	88
29) Chloroform	6.280	83	664995	39.75	ug/L	93
30) Tetrahydrofuran	6.456	42	100143	39.62	ug/L	91
32) Carbon Tetrachloride	6.456	117	478093m	38.91	ug/L	
33) 1,1,1-Trichloroethane	6.517	97	591625	39.20	ug/L	93
34) 2-Butanone	6.572	43	797773	203.21	ug/L	84
35) 1,1-Dichloropropene	6.626	75	495044	39.78	ug/L #	80

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:26:38 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Benzene	6.876	78	1355933	40.24	ug/L		74
37) TAME	6.961	73	902099	39.29	ug/L		73
39) 1,2-Dichloroethane	7.077	62	594209	38.67	ug/L		96
40) Trichloroethene	7.454	95	379537	39.95	ug/L		98
41) Methylcyclohexane	7.460	83	626897	38.99	ug/L	#	71
42) Dibromomethane	7.886	93	196487	41.11	ug/L		94
43) 1,2-Dichloropropane	7.971	63	430169	39.81	ug/L		89
44) Bromodichloromethane	8.026	83	473343	41.28	ug/L	#	95
45) 2-Chloroethyl vinyl ether	8.549	63	1186855	206.33	ug/L		83
46) cis-1,3-Dichloropropene	8.640	75	542938	40.42	ug/L		76
49) Toluene	8.877	91	1437741	39.66	ug/L		99
50) 2-Nitropropane	9.102	41	371245	180.24	ug/L		97
51) 4-Methyl-2-pentanone	9.218	43	1883607	196.49	ug/L		98
52) trans-1,3-Dichloropropene	9.279	75	445849	39.65	ug/L		80
53) Tetrachloroethene	9.273	166	382671	36.82	ug/L		98
54) 1,1,2-Trichloroethane	9.443	83	240171	42.36	ug/L		91
55) Dibromochloromethane	9.632	129	338206	42.56	ug/L		99
56) 1,3-Dichloropropane	9.717	76	513104	42.02	ug/L	#	67
57) 1,2-Dibromoethane	9.887	107	289387	42.14	ug/L		97
58) 2-hexanone	10.039	43	1295285	198.66	ug/L		95
59) 1-Chlorohexane	10.331	91	486822	40.06	ug/L	#	58
60) Ethylbenzene	10.392	91	1575434	39.03	ug/L		98
61) Chlorobenzene	10.392	112	967337	39.35	ug/L		91
62) 1,1,1,2-Tetrachloroethane	10.447	131	354026	40.82	ug/L		96
63) m,p-Xylene	10.532	91	2434598	78.52	ug/L		100
64) o-Xylene	10.970	91	1298910	40.33	ug/L		99
65) Styrene	11.019	104	1014529	40.81	ug/L		90
66) Bromoform	11.079	173	176176	38.47	ug/L		97
67) Isopropylbenzene	11.274	105	1564827	39.39	ug/L		97
70) n-Propylbenzene	11.694	91	1807981	39.78	ug/L		97
71) Bromobenzene	11.706	156	415524	39.96	ug/L		97
72) 1,1,2,2-Tetrachloroethane	11.767	83	314044	40.82	ug/L		100
73) 1,3,5-Trimethylbenzene	11.883	105	1369969	40.03	ug/L		96
74) 2-Chlorotoluene	11.876	91	1232159	39.66	ug/L		99
75) trans-1,4-Dichloro-2-B...	11.949	53	112480	37.61	ug/L	#	52
76) 1,2,3-Trichloropropane	11.919	110	97930	42.40	ug/L		77
77) Cyclohexanone	11.986	55	60551	211.06	ug/L		84
78) 4-Chlorotoluene	12.047	91	1189501	40.08	ug/L		97
79) tert-Butylbenzene	12.217	91	801616	39.51	ug/L		94
80) 1,2,4-Trimethylbenzene	12.284	105	1369921	39.84	ug/L		99
81) sec-Butylbenzene	12.400	105	1720715	39.82	ug/L		98
82) 4-Isopropyltoluene	12.533	119	1549040	39.57	ug/L		99
83) 1,3-Dichlorobenzene	12.661	146	789131	39.28	ug/L		98
84) 1,4-Dichlorobenzene	12.746	146	821719	39.15	ug/L		93
85) n-Butylbenzene	12.978	92	812992	40.16	ug/L		97
86) Benzyl Chloride	12.996	126	93893	29.75	ug/L	#	90
87) 1,2-Dichlorobenzene	13.191	146	749613	39.81	ug/L		94
88) 1,2-Dibromo-3-Chloropr...	13.963	75	53711	42.35	ug/L	#	78
89) Hexachlorobutadiene	14.523	225	258908	37.36	ug/L		84
90) 1,2,4-Trichlorobenzene	14.571	180	509637	39.96	ug/L		97

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:26:38 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
91) Naphthalene	14.851	128	931577	41.87 ug/L	99
92) 1,2,3-Trichlorobenzene	15.009	180	436204	39.53 ug/L	96
94) acrolein	4.412	56	262602	179.33 ug/L	93
95) Tert Butyl Alcohol	5.002	59	261442	373.90 ug/L	93
96) tert Amyl alcohol	7.131	59	226651	402.35 ug/L	85
97) 1,4-Dioxane	8.208	88	51707	843.71 ug/L	65

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

7.6.10

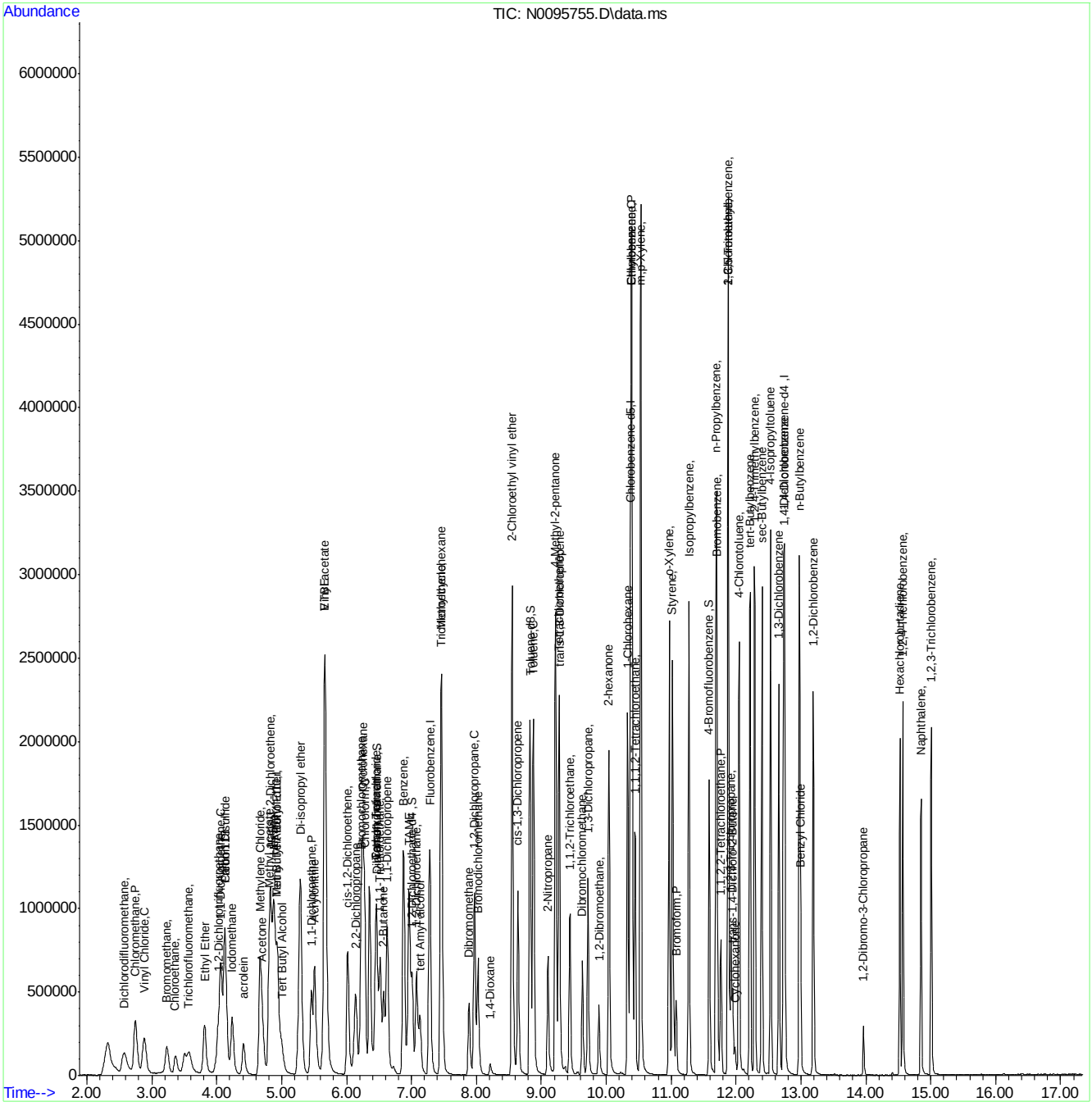
7

SGS ACCUTEST FA35235

Quantitation Report (QT Reviewed)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:26:38 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration



SGS ACCUTEST FA35235

Manual Integration Approval Summary

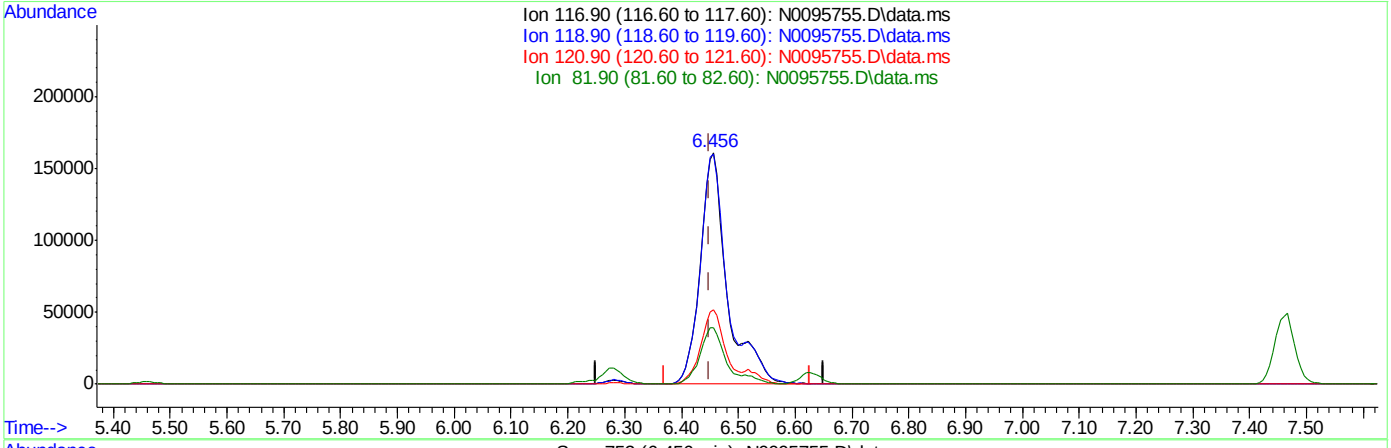
Sample Number:	VN4344-ECC4343	**Method:**	SW846 8260B
Lab FileID:	N0095755.D	**Analyst approved:**	07/08/16 13:26 Kathleen McNatt
Injection Time:	07/07/16 20:41	**Supervisor approved:**	07/08/16 15:04 Juan Garcia

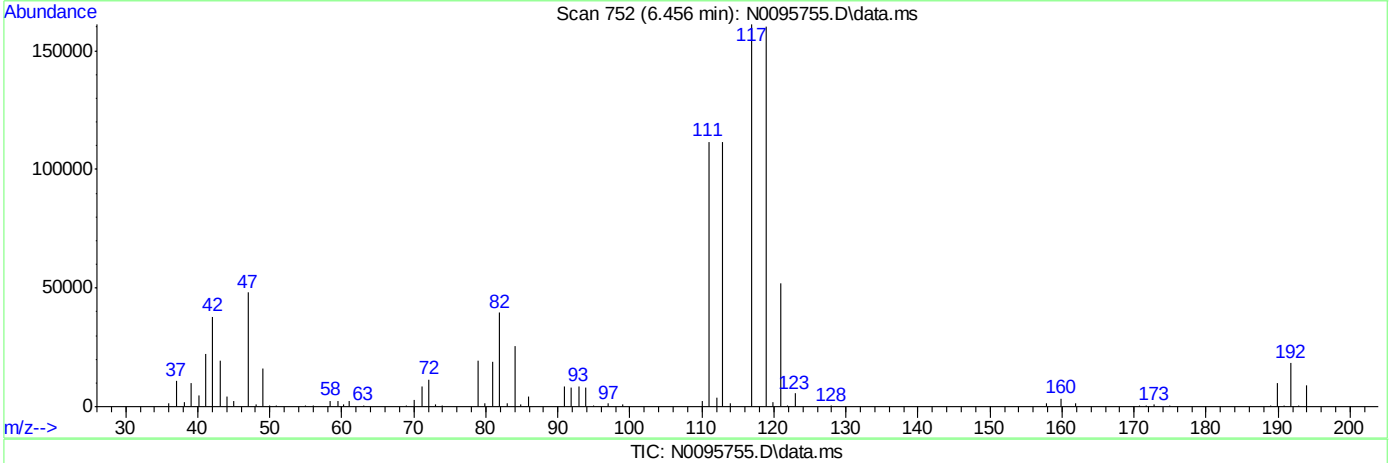
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		6.46	Overlapping peak
1,2-Dichloroethane-D4	17060-07-0		7.01	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:20:09 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





(32) Carbon Tetrachloride ( )

6.456min (+0.006) 44.11ug/L

response 541891

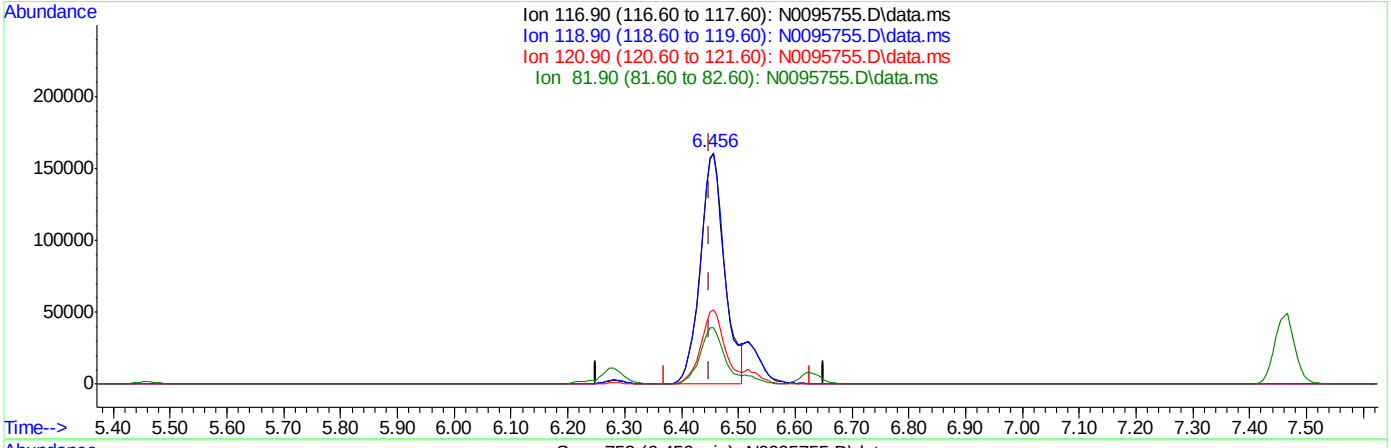
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.48
120.90	29.40	32.32
81.90	22.70	24.50

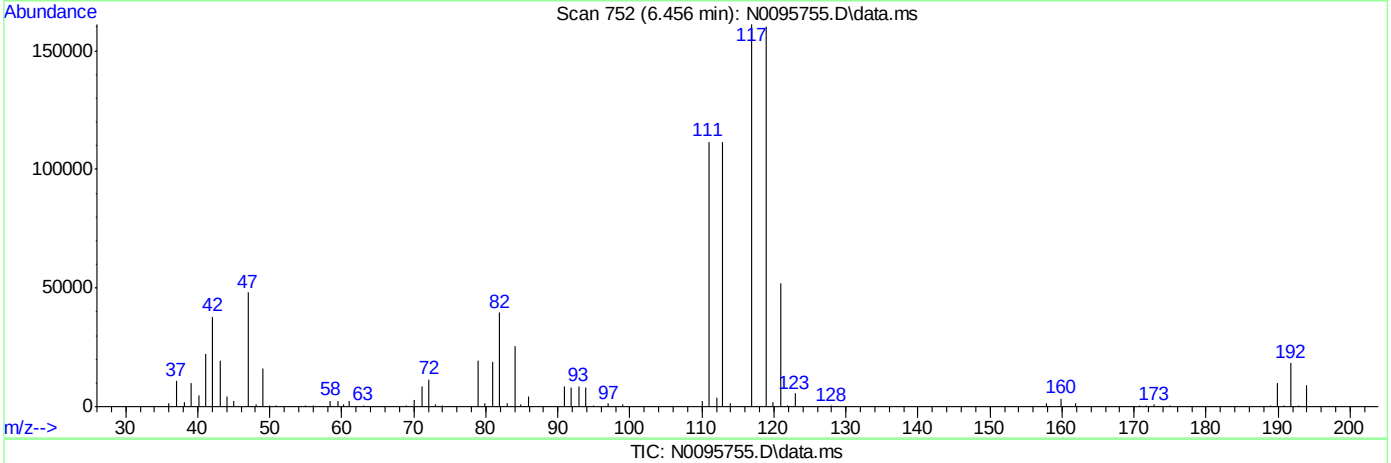
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:20:09 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095755.D\data.ms

(32) Carbon Tetrachloride ( )

6.456min (+0.006) 38.91ug/L m

response 478093

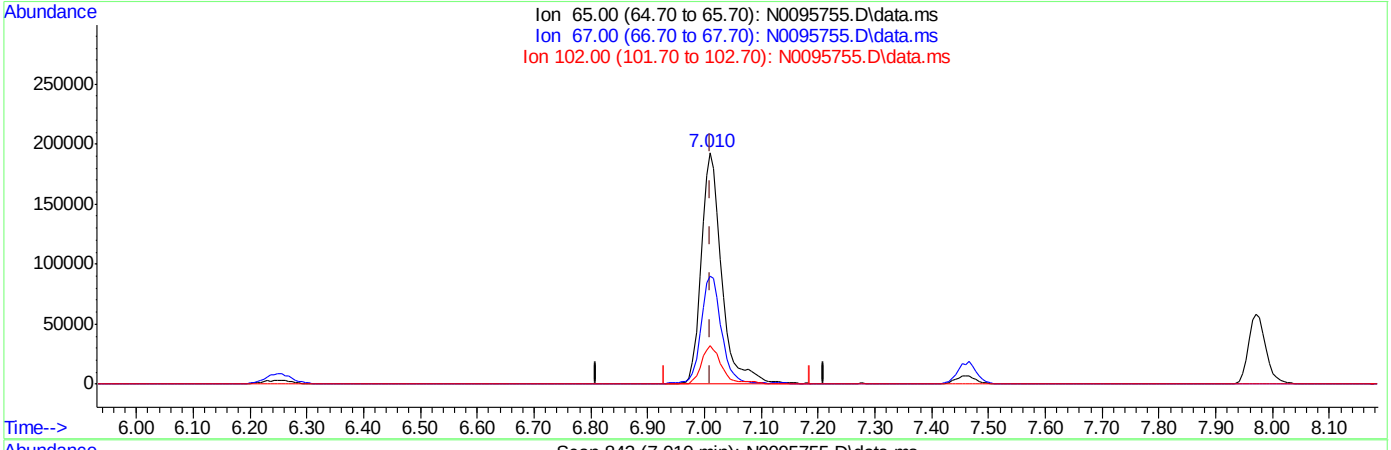
Ion	Exp%	Act%
116.90	100	100
118.90	90.10	99.48
120.90	29.40	32.32
81.90	22.70	24.50

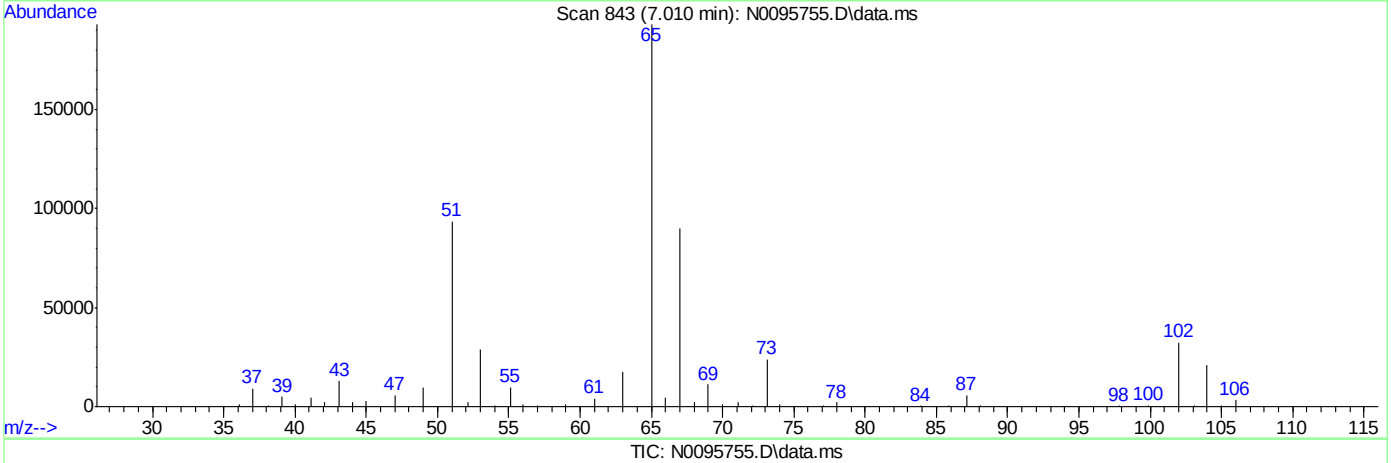
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:20:09 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095755.D\data.ms

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

7.010min (-0.000) 52.44ug/L

response 494216

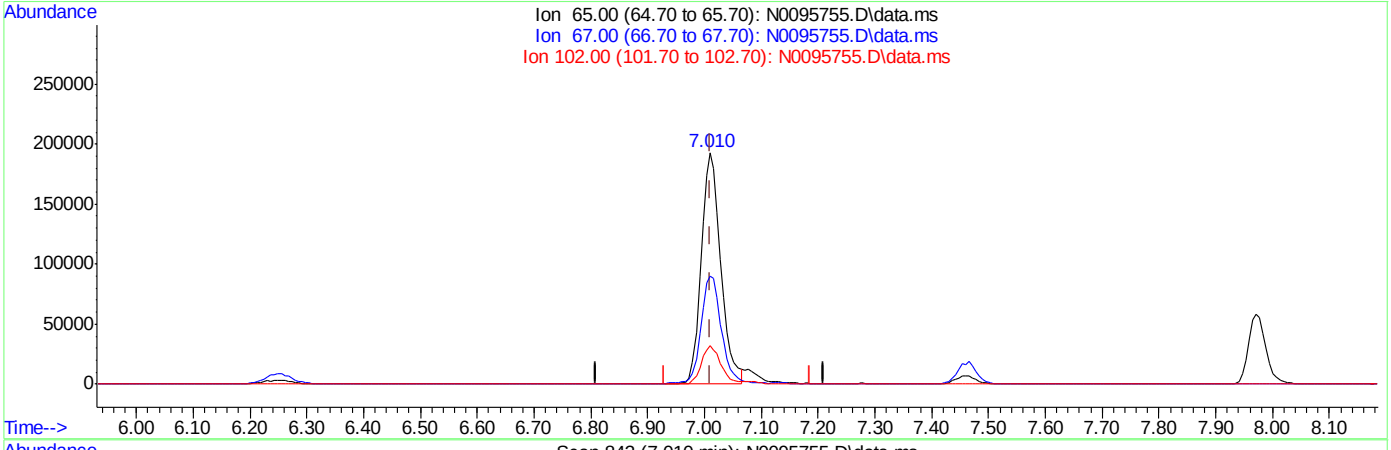
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	46.58
102.00	21.50	16.73
0.00	0.00	0.00

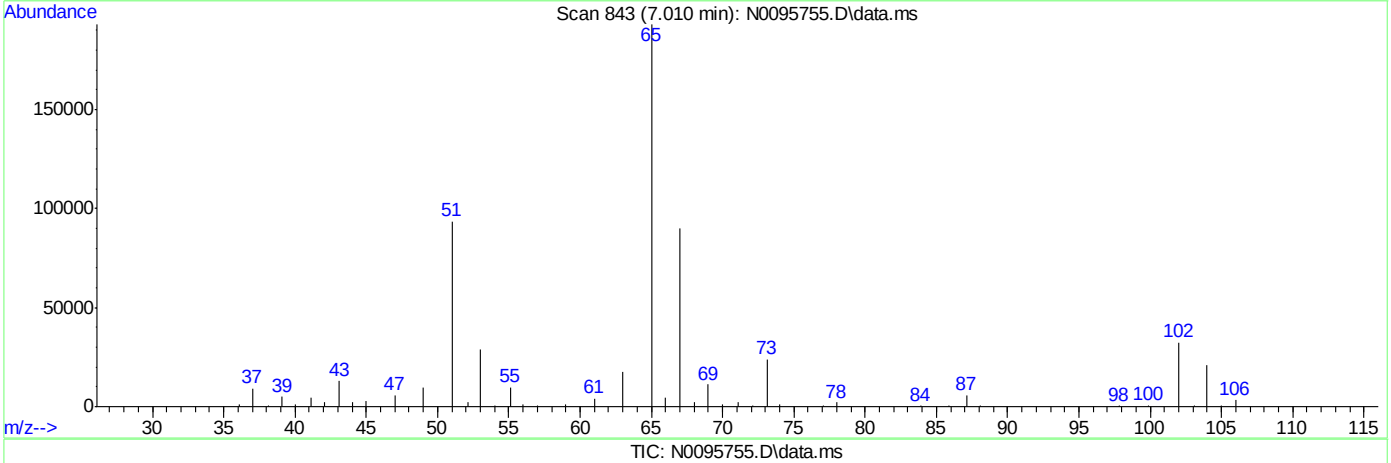
SGS ACCUTEST FA35235

Quantitation Report (Qedit)

Data Path : C:\MSDchem\2\DATA\070716\
Data File : N0095755.D
Acq On : 7 Jul 2016 8:41 pm
Operator : katiem
Sample : ECC4343-5 Inst : MSVOA8
Misc : MS34348,VN4344,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 08 07:20:09 2016
Quant Method : C:\MSDchem\2\METHODS\N-JUL06-2016.m
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Jul 07 07:57:29 2016
Response via : Initial Calibration





TIC: N0095755.D\data.ms

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

7.010min (-0.000) 49.47ug/L m

response 466168

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	46.72
102.00	21.50	16.73
0.00	0.00	0.00

SGS ACCUTEST FA35235

ACCUTEST LABORATORIES SE

DATE:	7/06/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA8-N
PURGE PRESSURE:	8.7 psi
ANALYST:	Katie M

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

MS VOA8-N ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	N-50106-2016.M
CALIB. DATE:	7/06/16
EM VOLTAGE:	2058V
BFB RESPONSE:	2534033
RUN ID:	VN4343

STANDARDS KM 7/6/16

BFB:	V203545
ICAL/CCV:	V20406, V204011, V203943, V204057, V204114, V204116, V203560
ISTD/SURR:	V203445
ICV/QC:	V203490, V203488, V203489, V203497, V204115, V203990, V203662
Purge Volume	5mL

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
N 0095699	B Blk	—	W	1	8260		—	—		✓
N 700	B FB	—	W	1	8260		—	—		pass autofind ✓
N 01	IC4343-1	—	W	1	8260	SP:7 PII:22 OP:32 MP:94	—	—		1µL:100mL ✓
N 02	IC4343-2	—	W	2	8260	SP:7 OP:32	—	—		5µL:100mL ✓
N 03	IC4343-3	—	W	3	8260	OP:32	—	—		10µL:100mL ✓
N 04	IC4343-4	—	W	4	8260	OP:32	—	—		25µL:100mL ✓
N 05	IC4343-5	—	W	5	8260	OP:32	—	—		20µL:50mL ✓
N 06	IC4343-6	—	W	6	8260	OP:32	—	—		35µL:50mL ✓
N 07	IC4343-7	—	W	7	8260	SP:7 OP:32	—	—		50µL:50mL ✓
N 08	Blank	—	W	8	8260		—	—		✓
N 09	KM 7/6/16 ~~Ethanol~~ ~~AA~~ APP9 STD	—	W	9	8260	no ethanol present	—	—		20µL:50mL ✓
N 10	ICV4343-5	—	W	10	8260	OP:32,38	—	—		25µL:50mL ✓
N 11	BS	—	W	11	8260	SP:7 OP:~~3~~32,38 KM 7/7/16	—	—		12.5µL:40mL ✓
N 12	MB	—	W	12	8260		—	—		ND
N 13	FA35098-1	3	W	13	8260		1	ND		ND KM 7/6/16
N 14	FA34965-1,500X	3	W	14	8260		1	ND		✓ 200µL:~~50~~100mL
N 15	FA35161-1	2	W	15	8260		6	ND		ND
N 16	2	2	W	16	8260		6	ND		✓ KM 7/6/16
N 17	3,2X	2	W	17	8260		7	ND		✓ ~~5~~25mL:50mL
N 18	4	2	W	18	8260		6	ND		✓
N 19	5	2	W	19	8260		6	ND		✓
N 20	6	1	W	20	8260		1	ND		✓
N 21	FA35095-1	3	W	21	8260		1	ND		✓
N 22	2	3	W	22	8260		1	ND		✓
N 23	5	3	W	23	8260		1	ND		✓
N 24	FA34965-1MS,500X	3	W	24	8260	OP:32,38	1	ND		12.5µL:~~50~~40mL KM 7/6/16 ✓ 200µL:100mL
N 25	FA34965-1MSD,500X	3	W	24	8260	OP:32,38	1	ND		12.5µL:40mL 200µL:100mL
26	ECC 4343-5		W	25	8260	OP:32,38	—	—		20mL:50mL ✓

* 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:

msvoa8_n_log.xls NF 06/10

ACCUTEST LABORATORIES SE

DATE:	7/07/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA8-N
PURGE PRESSURE:	8-7psi
ANALYST:	Katie M

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

MS VOA8-N ANALYSIS LOG

METHODS:*	~~N-JUL06-2016.M~~ 8260 KM 7/7/16
METHOD FILE:	N-JUL06-2016.M
CALIB. DATE:	7/06/16
EM VOLTAGE:	2058V
BFB RESPONSE:	2456686
RUN ID:	VN 4344/4345

STANDARDS

BFB:	V20345
ICAL/CCV:	V20393, V20401, V20405, V20406, V20414, V20416
AFA:	V19845
ISTD/SURR:	V20345
ICV/QC:	V20388, V20389, V20390, V20397, V20398, V20415
Purge Volume	5mL

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	Cl ?	RR	COMMENTS
N 0095727	Blank	—	W	1	8260		—	—		✓
N 28	BFB	—	W	1	8260		—	—		pass autofind ✓
N 29	CC4343-5	—	W	1	8260	OP:32,38	—	—		20mL:50mL ✓
N 30	BS MA	—	W	2	8260	OP:32,38	—	—		12.5mL:40mL ✓
N 31	LBS	—	~~SPLP~~ ~~TCLP~~ KM 7/7/16	3	8260	SP:7 OP:32,38	—	—		12.5mL:40mL ✓
N 32	MB MA	—	—	4	8260		—	—		ND
N 33	OP60930-LB	—	SPLP	5	8260		—	—		✓
N 34	OP60973-LB	—	SPLP	6	8260		—	—		✓
N 35	OP60990-LB	—	SPLP	7	8260		—	—		ND
N 36	FA35012-5	NA	SPLP	8	8260	AFA	8	ND		✓
N 37	FA35012-5dup	NA	SPLP	9	8260	AFA	8	ND		✓
N 38	FA35012-6	NA	SPLP	10	8260	AFA	8	ND		✓
N 39	FA35012-7	NA	SPLP	11	8260	AFA	8	ND		✓
N 40	FA35905-4R	NA	SPLP	12	8260	AFA	8	ND		✓
N 41	FA35906-2R	NA	SPLP	13	8260	AFA	8	ND		✓
N 42	FA35235-1 MA	2	W	14	8260		1	ND		ND
N 43	2 MA	2	W	15	8260		1	ND		ND
N 44	3 MA	2	W	16	8260		1	ND		ND
N 45	4 MA	2	W	17	8260		1	ND		✓
N 46	5 MA	2	W	18	8260		1	ND		ND
N 47	6 MA	2	W	19	8260		1	ND		✓
N 48	7 MA	2	W	20	8260		1	ND		✓
N 49	8 MA	2	W	21	8260		1	ND		✓
N 50	9 MA	2	W	22	8260		1	ND		ND
N 51	FA35235-MS ~~MA~~ KM 7/7/16	3	W	23	8260	OP:32,38	1	ND		12.5mL:40mL ✓
N 52	FA35235-MSD MA	3	W	23	8260	OP:32,38	1	ND		12.5mL:40mL ✓
N 53	FA35012-6MS ~~AFA~~ KM 7/7/16	NA	SPLP	24	8260	AFA OP:32,38	8	ND		12.5mL:40mL ✓

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Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
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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: KM

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ACCUTEST LABORATORIES SE

DATE:	7/07/16
COLUMN TYPE:	RTX VMS
DETECTOR:	5973 MSD
INSTRUMENT:	MSVOA8-N
PURGE PRESSURE:	9.7 psi
ANALYST:	Katie M

MS VOA8-N ANALYSIS LOG

METHODS:*	8260
METHOD FILE:	N-30606-2016.M
CALIB. DATE:	7/06/16
EM VOLTAGE:	2058V
BFB RESPONSE:	2.456686
RUN ID:	VN 4344/4345

STANDARDS

BFB:	V20345
ICAL/CCV:	V20393, V20401, V20405, V20406, V20414, V20416
AFA:	119845
ISTD/SURR:	V20345
ICV/QC:	V20388, V20389, V20390, V20397, V20398, V20415
Purge Volume	5mL

	DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	CI ?	RR	COMMENTS
N	0095754	FA35012-6MSD	NA	SPLP	24	8260	AFA OP:32,38	8	ND		12.5µL:40mL ✓
N	55	ECC 4343-5	—	W	25	8260	OP:32,38	—	—		20µL:50mL ✓
N	56	Blank AFA	—	W	26	8260		—	—		ND
N	57	Blank AFA	—	W	26	8260		—	—		ND
N											
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KM 7/07/16

* 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
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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]

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