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Automated Report

Technical Report for

Pilot Travel Centers LLC

SCNJCH: #290, Heather Lane, Perryville, MD

PL1203.500

SGS Accutest Job Number: JC18331

Sampling Date: 04/13/16

Report to:

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Total number of pages in report: 330

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
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Table of Contents

-1-

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **6**
Section 4: Sample Results **10**
4.1: JC18331-1: MW-1 11
4.2: JC18331-2: MW-2 16
4.3: JC18331-3: MW-3 21
4.4: JC18331-4: MW-4R 26
4.5: JC18331-5: MW-5 31
4.6: JC18331-6: MW-6 36
4.7: JC18331-7: MW-7 41
4.8: JC18331-8: MW-8 46
4.9: JC18331-9: MW-9 51
4.10: JC18331-10: MW-10R 56
4.11: JC18331-11: TF-1 61
4.12: JC18331-12: TF-2 66
Section 5: Misc. Forms **71**
5.1: Certification Exceptions 72
5.2: Chain of Custody 73
5.3: Sample Tracking Chronicle 77
5.4: Internal Chain of Custody 80
Section 6: GC/MS Volatiles - QC Data Summaries **89**
6.1: Method Blank Summary 90
6.2: Blank Spike Summary 93
6.3: Matrix Spike Summary 96
6.4: Duplicate Summary 99
6.5: Instrument Performance Checks (BFB) 102
6.6: Internal Standard Area Summaries 104
6.7: Surrogate Recovery Summaries 105
6.8: Initial and Continuing Calibration Summaries 106
Section 7: GC/MS Volatiles - Raw Data **117**
7.1: Samples 118
7.2: Method Blanks 203
Section 8: GC Volatiles - QC Data Summaries **205**
8.1: Method Blank Summary 206
8.2: Blank Spike Summary 209
8.3: Matrix Spike/Matrix Spike Duplicate Summary 210
8.4: Surrogate Recovery Summaries 211
8.5: GC Surrogate Retention Time Summaries 212
8.6: Initial and Continuing Calibration Summaries 216
Section 9: GC Volatiles - Raw Data **223**
9.1: Samples 224

Table of Contents

9.2: Method Blanks 252
Section 10: GC Semi-volatiles - QC Data Summaries 256
10.1: Method Blank Summary 257
10.2: Blank Spike Summary 258
10.3: Matrix Spike/Matrix Spike Duplicate Summary 259
10.4: Surrogate Recovery Summaries 260
10.5: GC Surrogate Retention Time Summaries 261
10.6: Initial and Continuing Calibration Summaries 264
Section 11: GC Semi-volatiles - Raw Data 271
11.1: Samples 272
11.2: Method Blanks 328

SGS Accutest

Sample Summary

Pilot Travel Centers LLC

Job No: JC18331

SCNJCH: #290, Heather Lane, Perryville, MD
Project No: PL1203.500

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC18331-1	04/13/16	11:30	JK/DS	04/14/16	AQ	Ground Water	MW-1
JC18331-2	04/13/16	13:00	JK/DS	04/14/16	AQ	Ground Water	MW-2
JC18331-3	04/13/16	12:20	JK/DS	04/14/16	AQ	Ground Water	MW-3
JC18331-4	04/13/16	10:15	JK/DS	04/14/16	AQ	Ground Water	MW-4R
JC18331-5	04/13/16	10:55	JK/DS	04/14/16	AQ	Ground Water	MW-5
JC18331-6	04/13/16	10:10	JK/DS	04/14/16	AQ	Ground Water	MW-6
JC18331-7	04/13/16	12:25	JK/DS	04/14/16	AQ	Ground Water	MW-7
JC18331-8	04/13/16	13:15	JK/DS	04/14/16	AQ	Ground Water	MW-8
JC18331-9	04/13/16	11:35	JK/DS	04/14/16	AQ	Ground Water	MW-9
JC18331-10	04/13/16	10:50	JK/DS	04/14/16	AQ	Ground Water	MW-10R
JC18331-11	04/13/16	14:10	JK/DS	04/14/16	AQ	Ground Water	TF-1
JC18331-12	04/13/16	14:15	JK/DS	04/14/16	AQ	Ground Water	TF-2

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Pilot Travel Centers LLC	**Job No**	JC18331
Site:	SCNJCH: #290, Heather Lane, Perryville, MD	**Report Date**	4/28/2016 3:05:28 PM

On 04/14/2016, 12 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 3 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC18331 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Please refer to certification exceptions summary for additional certification information.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** V2D6501

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC18331-3MS, JC18331-4DUP were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GUV5246

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC18306-2MS, JC18306-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP93107

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC18331-1MS, JC18331-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for TPH-DRO (C10-C28) are outside control limits. Outside the QC limits.
- Matrix Spike Duplicate Recovery(s) for TPH-DRO (C10-C28) are outside control limits. Outside the QC limits.
- JC18331-11 for o-Terphenyl: Outside control limits due to matrix interference.

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

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

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

Summary of Hits

Job Number: JC18331
Account: Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Collected: 04/13/16

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC18331-1	**MW-1**					
Chloroform		0.30 J	1.0	0.19	ug/l	SW846 8260C
TPH-DRO (C10-C28)		9.65	0.083	0.064	mg/l	SW846 8015C
JC18331-2	**MW-2**					
Acetone		8.1 J	10	3.3	ug/l	SW846 8260C
Benzene		1.3	0.50	0.24	ug/l	SW846 8260C
n-Butylbenzene		6.5	2.0	0.14	ug/l	SW846 8260C
sec-Butylbenzene		10.3	2.0	0.21	ug/l	SW846 8260C
tert-Butylbenzene		1.7 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		13.5	1.0	0.23	ug/l	SW846 8260C
p-Isopropyltoluene		0.90 J	2.0	0.21	ug/l	SW846 8260C
Methyl Tert Butyl Ether		0.27 J	1.0	0.24	ug/l	SW846 8260C
Naphthalene		132	5.0	0.20	ug/l	SW846 8260C
n-Propylbenzene		18.8	2.0	0.21	ug/l	SW846 8260C
Toluene		0.17 J	1.0	0.16	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		131	2.0	0.22	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		2.0	2.0	0.29	ug/l	SW846 8260C
o-Xylene		0.36 J	1.0	0.17	ug/l	SW846 8260C
Xylene (total)		0.36 J	1.0	0.17	ug/l	SW846 8260C
TPH-GRO (C6-C10)		0.559	0.20	0.055	mg/l	SW846 8015C
TPH-DRO (C10-C28)		325	0.83	0.64	mg/l	SW846 8015C
JC18331-3	**MW-3**					
Benzene		1.2	0.50	0.24	ug/l	SW846 8260C
sec-Butylbenzene		2.2	2.0	0.21	ug/l	SW846 8260C
tert-Butylbenzene		0.53 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		0.62 J	1.0	0.23	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		0.25 J	2.0	0.22	ug/l	SW846 8260C
TPH-DRO (C10-C28)		1.46	0.083	0.064	mg/l	SW846 8015C
JC18331-4	**MW-4R**					
Benzene		2.0	0.50	0.24	ug/l	SW846 8260C
n-Butylbenzene		0.22 J	2.0	0.14	ug/l	SW846 8260C
sec-Butylbenzene		2.0	2.0	0.21	ug/l	SW846 8260C
tert-Butylbenzene		0.40 J	2.0	0.28	ug/l	SW846 8260C
Methyl Tert Butyl Ether		2.4	1.0	0.24	ug/l	SW846 8260C
Naphthalene		2.5 J	5.0	0.20	ug/l	SW846 8260C
Toluene		1.6	1.0	0.16	ug/l	SW846 8260C
TPH-DRO (C10-C28)		8.26	0.083	0.064	mg/l	SW846 8015C

Summary of Hits

Job Number: JC18331
Account: Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Collected: 04/13/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC18331-5	**MW-5**					
sec-Butylbenzene		3.2	2.0	0.21	ug/l	SW846 8260C
tert-Butylbenzene		0.39 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene		0.61 J	1.0	0.23	ug/l	SW846 8260C
Methyl Tert Butyl Ether		0.74 J	1.0	0.24	ug/l	SW846 8260C
TPH-DRO (C10-C28)		2.49	0.083	0.064	mg/l	SW846 8015C
JC18331-6	**MW-6**					
Chloroform		0.19 J	1.0	0.19	ug/l	SW846 8260C
TPH-DRO (C10-C28)		5.50	0.083	0.064	mg/l	SW846 8015C
JC18331-7	**MW-7**					
Acetone		4.5 J	10	3.3	ug/l	SW846 8260C
Benzene		3.3	0.50	0.24	ug/l	SW846 8260C
n-Butylbenzene		1.5 J	2.0	0.14	ug/l	SW846 8260C
sec-Butylbenzene		3.9	2.0	0.21	ug/l	SW846 8260C
tert-Butylbenzene		0.99 J	2.0	0.28	ug/l	SW846 8260C
Ethylbenzene		2.1	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene		6.8	1.0	0.23	ug/l	SW846 8260C
Naphthalene		5.5	5.0	0.20	ug/l	SW846 8260C
n-Propylbenzene		5.6	2.0	0.21	ug/l	SW846 8260C
Toluene		0.19 J	1.0	0.16	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		2.7	2.0	0.22	ug/l	SW846 8260C
m,p-Xylene		0.62 J	1.0	0.38	ug/l	SW846 8260C
o-Xylene		0.33 J	1.0	0.17	ug/l	SW846 8260C
Xylene (total)		0.94 J	1.0	0.17	ug/l	SW846 8260C
TPH-DRO (C10-C28)		9.80	0.083	0.064	mg/l	SW846 8015C
JC18331-8	**MW-8**					
Benzene		0.47 J	0.50	0.24	ug/l	SW846 8260C
sec-Butylbenzene		0.76 J	2.0	0.21	ug/l	SW846 8260C
Isopropylbenzene		0.67 J	1.0	0.23	ug/l	SW846 8260C
Methyl Tert Butyl Ether		0.28 J	1.0	0.24	ug/l	SW846 8260C
TPH-DRO (C10-C28)		2.74	0.083	0.064	mg/l	SW846 8015C
JC18331-9	**MW-9**					
Acetone		6.1 J	10	3.3	ug/l	SW846 8260C
Benzene		1.3	0.50	0.24	ug/l	SW846 8260C
n-Butylbenzene		1.8 J	2.0	0.14	ug/l	SW846 8260C
sec-Butylbenzene		4.2	2.0	0.21	ug/l	SW846 8260C

Summary of Hits

Job Number: JC18331
Account: Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Collected: 04/13/16

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
tert-Butylbenzene	0.60 J	2.0	0.28	ug/l	SW846 8260C
Isopropylbenzene	1.8	1.0	0.23	ug/l	SW846 8260C
p-Isopropyltoluene	0.23 J	2.0	0.21	ug/l	SW846 8260C
Naphthalene	0.95 J	5.0	0.20	ug/l	SW846 8260C
n-Propylbenzene	0.73 J	2.0	0.21	ug/l	SW846 8260C
1,2,4-Trimethylbenzene	0.73 J	2.0	0.22	ug/l	SW846 8260C
TPH-DRO (C10-C28)	9.23	0.083	0.064	mg/l	SW846 8015C
JC18331-10 MW-10R					
Acetone	7.8 J	10	3.3	ug/l	SW846 8260C
Benzene	2.7	0.50	0.24	ug/l	SW846 8260C
sec-Butylbenzene	1.4 J	2.0	0.21	ug/l	SW846 8260C
tert-Butylbenzene	1.1 J	2.0	0.28	ug/l	SW846 8260C
Methyl Tert Butyl Ether	0.33 J	1.0	0.24	ug/l	SW846 8260C
Naphthalene	0.92 J	5.0	0.20	ug/l	SW846 8260C
Toluene	0.22 J	1.0	0.16	ug/l	SW846 8260C
TPH-GRO (C6-C10)	1.37	0.20	0.055	mg/l	SW846 8015C
TPH-DRO (C10-C28)	86.2	0.083	0.064	mg/l	SW846 8015C
JC18331-11 TF-1					
Acetone	8.9 J	10	3.3	ug/l	SW846 8260C
Benzene	7.3	0.50	0.24	ug/l	SW846 8260C
n-Butylbenzene	4.0	2.0	0.14	ug/l	SW846 8260C
sec-Butylbenzene	4.9	2.0	0.21	ug/l	SW846 8260C
tert-Butylbenzene	0.31 J	2.0	0.28	ug/l	SW846 8260C
Ethylbenzene	41.8	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene	7.4	1.0	0.23	ug/l	SW846 8260C
p-Isopropyltoluene	4.1	2.0	0.21	ug/l	SW846 8260C
Naphthalene	14.1	5.0	0.20	ug/l	SW846 8260C
n-Propylbenzene	12.3	2.0	0.21	ug/l	SW846 8260C
Toluene	69.6	1.0	0.16	ug/l	SW846 8260C
1,2,4-Trimethylbenzene	78.7	2.0	0.22	ug/l	SW846 8260C
1,3,5-Trimethylbenzene	29.1	2.0	0.29	ug/l	SW846 8260C
m,p-Xylene	73.9	1.0	0.38	ug/l	SW846 8260C
o-Xylene	103	1.0	0.17	ug/l	SW846 8260C
Xylene (total)	177	1.0	0.17	ug/l	SW846 8260C
TPH-GRO (C6-C10)	1.36	0.20	0.055	mg/l	SW846 8015C
TPH-DRO (C10-C28)	196	0.42	0.32	mg/l	SW846 8015C
JC18331-12 TF-2					
Acetone	20.5	10	3.3	ug/l	SW846 8260C
Benzene	12.4	0.50	0.24	ug/l	SW846 8260C

Summary of Hits

Job Number: JC18331
Account: Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Collected: 04/13/16

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
n-Butylbenzene	3.6	2.0	0.14	ug/l	SW846 8260C
sec-Butylbenzene	4.2	2.0	0.21	ug/l	SW846 8260C
Chloroform	0.34 J	1.0	0.19	ug/l	SW846 8260C
Ethylbenzene	26.9	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene	7.1	1.0	0.23	ug/l	SW846 8260C
p-Isopropyltoluene	3.3	2.0	0.21	ug/l	SW846 8260C
Naphthalene	13.5	5.0	0.20	ug/l	SW846 8260C
n-Propylbenzene	12.1	2.0	0.21	ug/l	SW846 8260C
Toluene	57.0	1.0	0.16	ug/l	SW846 8260C
1,2,4-Trimethylbenzene	93.0	2.0	0.22	ug/l	SW846 8260C
1,3,5-Trimethylbenzene	28.5	2.0	0.29	ug/l	SW846 8260C
m,p-Xylene	94.8	1.0	0.38	ug/l	SW846 8260C
o-Xylene	69.7	1.0	0.17	ug/l	SW846 8260C
Xylene (total)	164	1.0	0.17	ug/l	SW846 8260C
TPH-GRO (C6-C10)	1.03	0.20	0.055	mg/l	SW846 8015C
TPH-DRO (C10-C28)	15.9	0.083	0.064	mg/l	SW846 8015C

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC18331-1	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154766.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	0.30	1.0	0.19	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC18331-1	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	ND	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC18331-1	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JC18331-1	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130744.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	86%		55-130%

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:	MW-1		
Lab Sample ID:	JC18331-1	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54546.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	9.65	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		36-144%
16416-32-3	Tetracosane-d50	76%		32-138%
438-22-2	5a-Androstane	77%		31-136%

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:	MW-2		
Lab Sample ID:	JC18331-2	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154772.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.1	10	3.3	ug/l	J
71-43-2	Benzene	1.3	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	6.5	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	10.3	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	1.7	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC18331-2	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	13.5	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	0.90	2.0	0.21	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	0.27	1.0	0.24	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	132	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	18.8	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	0.17	1.0	0.16	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	131	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	2.0	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	0.36	1.0	0.17	ug/l	J
1330-20-7	Xylene (total)	0.36	1.0	0.17	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC18331-2	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	87%		73-122%
2037-26-5	Toluene-D8	97%		84-119%
460-00-4	4-Bromofluorobenzene	110%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JC18331-2	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130756.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.559	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	93%		55-130%

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:	MW-2		
Lab Sample ID:	JC18331-2	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54547.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2	2Z54571.D	10	04/18/16	TL	04/17/16	OP93107	G2Z2061

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	325 [a]	0.83	0.64	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	54%	93%	36-144%
16416-32-3	Tetracosane-d50	48%	66%	32-138%
438-22-2	5a-Androstane	43%	104%	31-136%

(a) Result is from Run# 2

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:	MW-3		
Lab Sample ID:	JC18331-3	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154760.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	1.2	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	2.2	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.53	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC18331-3	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	0.62	1.0	0.23	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	ND	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.25	2.0	0.22	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC18331-3	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC18331-3	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130745.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	87%		55-130%

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:	MW-3		
Lab Sample ID:	JC18331-3	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54548.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.46	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		36-144%
16416-32-3	Tetracosane-d50	76%		32-138%
438-22-2	5a-Androstane	77%		31-136%

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:	MW-4R		
Lab Sample ID:	JC18331-4	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154761.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	2.0	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	0.22	2.0	0.14	ug/l	J
135-98-8	sec-Butylbenzene	2.0	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.40	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC18331-4	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.4	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	2.5	5.0	0.20	ug/l	J
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	1.6	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC18331-4	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC18331-4	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130746.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	86%		55-130%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-4R		
Lab Sample ID:	JC18331-4	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54549.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	8.26	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		36-144%
16416-32-3	Tetracosane-d50	68%		32-138%
438-22-2	5a-Androstane	66%		31-136%

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:	MW-5		
Lab Sample ID:	JC18331-5	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154762.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	3.2	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.39	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC18331-5	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	0.61	1.0	0.23	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.74	1.0	0.24	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	ND	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC18331-5	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC18331-5	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130747.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	88%		55-130%

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:	MW-5		
Lab Sample ID:	JC18331-5	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54552.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	2.49	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		36-144%
16416-32-3	Tetracosane-d50	86%		32-138%
438-22-2	5a-Androstane	89%		31-136%

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:	MW-6		
Lab Sample ID:	JC18331-6	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154767.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	0.19	1.0	0.19	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC18331-6	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	ND	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC18331-6	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC18331-6	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130748.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	84%		55-130%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JC18331-6	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54553.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	5.50	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		36-144%
16416-32-3	Tetracosane-d50	80%		32-138%
438-22-2	5a-Androstane	82%		31-136%

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:	MW-7		
Lab Sample ID:	JC18331-7	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154768.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.5	10	3.3	ug/l	J
71-43-2	Benzene	3.3	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	1.5	2.0	0.14	ug/l	J
135-98-8	sec-Butylbenzene	3.9	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.99	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC18331-7	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	2.1	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	6.8	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	5.5	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	5.6	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	0.19	1.0	0.16	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	2.7	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	0.62	1.0	0.38	ug/l	J
95-47-6	o-Xylene	0.33	1.0	0.17	ug/l	J
1330-20-7	Xylene (total)	0.94	1.0	0.17	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC18331-7	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JC18331-7	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130749.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	91%		55-130%

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:	MW-7		
Lab Sample ID:	JC18331-7	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54554.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	9.80	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		36-144%
16416-32-3	Tetracosane-d50	79%		32-138%
438-22-2	5a-Androstane	82%		31-136%

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:	MW-8		
Lab Sample ID:	JC18331-8	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154769.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	0.47	0.50	0.24	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	0.76	2.0	0.21	ug/l	J
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC18331-8	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	0.67	1.0	0.23	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.28	1.0	0.24	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	ND	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC18331-8	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JC18331-8	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130750.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	87%		55-130%

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:	MW-8		
Lab Sample ID:	JC18331-8	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54555.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	2.74	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		36-144%
16416-32-3	Tetracosane-d50	78%		32-138%
438-22-2	5a-Androstane	80%		31-136%

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:	MW-9		
Lab Sample ID:	JC18331-9	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154770.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	6.1	10	3.3	ug/l	J
71-43-2	Benzene	1.3	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	1.8	2.0	0.14	ug/l	J
135-98-8	sec-Butylbenzene	4.2	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.60	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC18331-9	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	1.8	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	0.23	2.0	0.21	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	0.95	5.0	0.20	ug/l	J
103-65-1	n-Propylbenzene	0.73	2.0	0.21	ug/l	J
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.73	2.0	0.22	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC18331-9	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC18331-9	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130751.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	90%		55-130%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC18331-9	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54556.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	9.23	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		36-144%
16416-32-3	Tetracosane-d50	76%		32-138%
438-22-2	5a-Androstane	80%		31-136%

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:	MW-10R		
Lab Sample ID:	JC18331-10	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154774.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	7.8	10	3.3	ug/l	J
71-43-2	Benzene	2.7	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	1.4	2.0	0.21	ug/l	J
98-06-6	tert-Butylbenzene	1.1	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC18331-10	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.33	1.0	0.24	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	0.92	5.0	0.20	ug/l	J
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	0.22	1.0	0.16	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%

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

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

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC18331-10	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	86%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	104%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC18331-10	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130754.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.37	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		55-130%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-10R		
Lab Sample ID:	JC18331-10	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54557.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	86.2	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		36-144%
16416-32-3	Tetracosane-d50	61%		32-138%
438-22-2	5a-Androstane	80%		31-136%

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:	TF-1		
Lab Sample ID:	JC18331-11	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154773.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.9	10	3.3	ug/l	J
71-43-2	Benzene	7.3	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	4.0	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	4.9	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.31	2.0	0.28	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TF-1		
Lab Sample ID:	JC18331-11	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	41.8	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	7.4	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	4.1	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	14.1	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	12.3	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	69.6	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	78.7	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	29.1	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	73.9	1.0	0.38	ug/l	
95-47-6	o-Xylene	103	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	177	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%

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

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

Report of Analysis

Client Sample ID:	TF-1		
Lab Sample ID:	JC18331-11	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	85%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	TF-1		
Lab Sample ID:	JC18331-11	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130755.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.36	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	93%		55-130%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	TF-1		
Lab Sample ID:	JC18331-11	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54558.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2	2Z54572.D	5	04/18/16	TL	04/17/16	OP93107	G2Z2061

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	196 [a]	0.42	0.32	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	118%	183% [b]	36-144%
16416-32-3	Tetracosane-d50	76%	77%	32-138%
438-22-2	5a-Androstane	134%	88%	31-136%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

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:	TF-2		
Lab Sample ID:	JC18331-12	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D154771.D	1	04/16/16	AM	n/a	n/a	V2D6501
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	20.5	10	3.3	ug/l	
71-43-2	Benzene	12.4	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	3.6	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	4.2	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	0.34	1.0	0.19	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TF-2		
Lab Sample ID:	JC18331-12	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	26.9	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	7.1	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	3.3	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	13.5	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	12.1	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	57.0	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	93.0	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	28.5	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	94.8	1.0	0.38	ug/l	
95-47-6	o-Xylene	69.7	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	164	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%

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

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

Report of Analysis

Client Sample ID:	TF-2		
Lab Sample ID:	JC18331-12	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	TF-2		
Lab Sample ID:	JC18331-12	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV130757.D	1	04/15/16	JC	n/a	n/a	GUV5246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.03	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	94%		55-130%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	TF-2		
Lab Sample ID:	JC18331-12	**Date Sampled:**	04/13/16
Matrix:	AQ - Ground Water	**Date Received:**	04/14/16
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	SCNJCH: #290, Heather Lane, Perryville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z54559.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	15.9	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		36-144%
16416-32-3	Tetracosane-d50	79%		32-138%
438-22-2	5a-Androstane	82%		31-136%

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:

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

Parameter Certification Exceptions

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Methylene bromide	74-95-3	SW846 8260C	AQ	Accutest is not certified for this parameter.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

ACCUTEST

GW

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

L

Accutest Job #: JC18331

Client / Reporting Information

Consultants Name: Sovereign Consulting Inc.
Address: 100 Dobbs Lane, Suite 212
City: Cherry Hill, NJ Zip: 08034
Project Contact: Jennifer Williams
Phone #: 856-325-2099
email : jwilliams@sovcon.com
Collected by:

Project Information

Project Name: Pilot Perryville, Center SS#290
Street:
City: Perryville State: MD
Project Manager: Jennifer Williams
Project PL203.500
Location ID #:
Client Purchase Order #:

Analytical Information

Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	B8015DRO (TPH DRO)	V8015GRO (TPH GRO)	V8260MDVO (MD VOCs, Oxygenates, Naphthalene)											
MW - 1	4-13-16	1130	JK/DS	GW	7	X					X	X	X	1										
MW - 2		1300		GW	7	X					X	X	X	2										
MW - 3		1220		GW	7	X					X	X	X	3										
MW - 4R		1015		GW	7	X					X	X	X	4										
MW - 5		1055		GW	7	X					X	X	X	5										
MW - 6		1610		GW	7	X					X	X	X	6										
MW - 7		1225		GW	7	X					X	X	X	7										

Turnaround Information

- [x] Std. 15 Day Turnaround
- [ ] 7 Day *EMERGENCY*
- [ ] 4 Day *EMERGENCY*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By:

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] NJ Reduced
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format
- [ ] EDD Format

NJ Reduce = Results + QC Summary + Partial Raw data

Accutest Log-in Information

2X 300 ml DPO @ 4/13/16 E86 V10161

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
	4-13-16 1615	1	2	4-14-16 1620	2
Relinquished by Sampler:	4/13/16 1620	3	4		4
Relinquished by Sampler:		5	Seal #	Preserve where applicable	On Ice ☑ Temp. 2.4 HPC

2.6

INITIAL ASESSMENT 3B Dom

LABEL VERIFICATION JV

5.2 5

JC18331: Chain of Custody
Page 1 of 4

CHAIN OF CUSTODY

ACCUTEST

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

Accutest Job #:

Client / Reporting Information

Consultants Name: Sovereign Consulting Inc.
Address: 100 Dobbs Lane, Suite 212
City: Cherry Hill, NJ Zip: 08034
Project Contact: Jennifer Williams
Phone #: 856-325-2099
email : jwilliams@sovcon.com
Collected by:

Project Information

Project Name: Pilot Perryville, Center SS#290
Street:
City: Perryville State: MD
Project Manager: Jennifer Williams
Project PL203.500
Location ID #:
Client Purchase Order #:

Analytical Information

Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	B8015DRO (TPH DRO)	V8015GRO (TPH GRO)	V8260MDVO (MD VOCs, Oxygenates, Naphthalene)	VOA QC VIAL	
MW - 8 ●	4-13-16	1315	JK/DS	GW	7	x					X	X	X		8
MW - 9	↓	1135	↓	GW	7	x					X	X	X		9
MW - 10R ●		1050		GW	7	x					X	X	X		10
TF - 1 ✕		1410		GW	8	x					X	X	X	●	11
TF - 2 ●		1415		GW	7	x					X	X	X		12

Turnaround Information

- ☐ Std. 15 Day Turnaround
- ☐ 7 Day *EMERGENCY*
- ☐ 4 Day *EMERGENCY*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Approved By:

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ Full Deliverables
- ☐ NJ Reduced
- ☐ FULL CLP
- ☐ State Forms
- ☐ Disk Deliverable Format
- ☐ EDD Format

NJ Reduce = Results + QC Summary + Partial Raw data

Accutest Log-in Information

● 2x 300mL DRO
✕ 1x 300mL DRO @ 4/18/16

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	4-13-16 1615	1	2	4-14-16	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
	4-14-16 1600	3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserve where applicable ☐	On Ice ☐ Temp. 2.9
		5			

Page 1

5.2 5

JC18331: Chain of Custody
Page 2 of 4

SGS Accutest Sample Receipt Summary

Job Number: JC18331 **Client:** SOVEREIGN **Project:** Pilot Perryville Center SS# 290

Date / Time Received: 4/14/2016 4:20:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4); Cooler 2: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.8); Cooler 2: (3.0);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No, Coolers	2	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☑	☐
2. Trip Blank listed on COC:	☐	☑	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Broken / Leaking	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments -11 1 of 2 DRO bottles rec'd broken. Limited volume.

5.2

5

JC18331: Chain of Custody

Page 3 of 4

Sample Receipt Summary - Problem Resolution

Job Number: JC18331

Initiator: ANDREWS

CSR: MV

Response Date: 4/15/2016

Response: Proceed as noted.

Internal Sample Tracking Chronicle

Pilot Travel Centers LLC

Job No: JC18331

SCNJCH: #290, Heather Lane, Perryville, MD
Project No: PL1203.500

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18331-1 MW-1	Collected: 13-APR-16 11:30 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-1	SW846 8015C	15-APR-16 16:11	JC			V8015GRO
JC18331-1	SW846 8260C	16-APR-16 14:08	AM			V8260MDVO
JC18331-1	SW846 8015C	18-APR-16 02:31	KD	17-APR-16	FA	B8015DRO
JC18331-2 MW-2	Collected: 13-APR-16 13:00 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-2	SW846 8015C	15-APR-16 22:27	JC			V8015GRO
JC18331-2	SW846 8260C	16-APR-16 17:12	AM			V8260MDVO
JC18331-2	SW846 8015C	18-APR-16 03:04	KD	17-APR-16		
JC18331-2	SW846 8015C	18-APR-16 16:35	TL	17-APR-16	FA	B8015DRO
JC18331-3 MW-3	Collected: 13-APR-16 12:20 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-3	SW846 8015C	15-APR-16 16:40	JC			V8015GRO
JC18331-3	SW846 8260C	16-APR-16 11:05	AM			V8260MDVO
JC18331-3	SW846 8015C	18-APR-16 03:37	KD	17-APR-16	FA	B8015DRO
JC18331-4 MW-4R	Collected: 13-APR-16 10:15 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-4	SW846 8015C	15-APR-16 17:16	JC			V8015GRO
JC18331-4	SW846 8260C	16-APR-16 11:35	AM			V8260MDVO
JC18331-4	SW846 8015C	18-APR-16 04:10	KD	17-APR-16	FA	B8015DRO
JC18331-5 MW-5	Collected: 13-APR-16 10:55 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-5	SW846 8015C	15-APR-16 17:45	JC			V8015GRO
JC18331-5	SW846 8260C	16-APR-16 12:06	AM			V8260MDVO
JC18331-5	SW846 8015C	18-APR-16 05:49	KD	17-APR-16	FA	B8015DRO
JC18331-6 MW-6	Collected: 13-APR-16 10:10 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-6	SW846 8015C	15-APR-16 18:14	JC			V8015GRO

Internal Sample Tracking Chronicle

Pilot Travel Centers LLC

Job No: JC18331

SCNJCH: #290, Heather Lane, Perryville, MD
Project No: PL1203.500

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18331-6	SW846 8260C	16-APR-16 14:38	AM			V8260MDVO
JC18331-6	SW846 8015C	18-APR-16 06:22	KD	17-APR-16	FA	B8015DRO
JC18331-7 MW-7	Collected: 13-APR-16 12:25 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-7	SW846 8015C	15-APR-16 18:50	JC			V8015GRO
JC18331-7	SW846 8260C	16-APR-16 15:09	AM			V8260MDVO
JC18331-7	SW846 8015C	18-APR-16 06:55	KD	17-APR-16	FA	B8015DRO
JC18331-8 MW-8	Collected: 13-APR-16 13:15 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-8	SW846 8015C	15-APR-16 19:19	JC			V8015GRO
JC18331-8	SW846 8260C	16-APR-16 15:40	AM			V8260MDVO
JC18331-8	SW846 8015C	18-APR-16 07:28	KD	17-APR-16	FA	B8015DRO
JC18331-9 MW-9	Collected: 13-APR-16 11:35 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-9	SW846 8015C	15-APR-16 19:48	JC			V8015GRO
JC18331-9	SW846 8260C	16-APR-16 16:10	AM			V8260MDVO
JC18331-9	SW846 8015C	18-APR-16 08:01	KD	17-APR-16	FA	B8015DRO
JC18331-10 MW-10R	Collected: 13-APR-16 10:50 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-10	SW846 8015C	15-APR-16 21:22	JC			V8015GRO
JC18331-10	SW846 8260C	16-APR-16 18:13	AM			V8260MDVO
JC18331-10	SW846 8015C	18-APR-16 08:34	KD	17-APR-16	FA	B8015DRO
JC18331-11 TF-1	Collected: 13-APR-16 14:10 By: JK/DS		Received: 14-APR-16 By: AS			
JC18331-11	SW846 8015C	15-APR-16 21:58	JC			V8015GRO
JC18331-11	SW846 8260C	16-APR-16 17:42	AM			V8260MDVO
JC18331-11	SW846 8015C	18-APR-16 09:07	KD	17-APR-16		
JC18331-11	SW846 8015C	18-APR-16 17:09	TL	17-APR-16	FA	B8015DRO

Internal Sample Tracking Chronicle

Pilot Travel Centers LLC

Job No: JC18331

SCNJCH: #290, Heather Lane, Perryville, MD
Project No: PL1203.500

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18331-12 Collected: 13-APR-16 14:15 By: JK/DS Received: 14-APR-16 By: AS						
TF-2						
JC18331-12	SW846 8015C	15-APR-16 22:56	JC			V8015GRO
JC18331-12	SW846 8260C	16-APR-16 16:41	AM			V8260MDVO
JC18331-12	SW846 8015C	18-APR-16 09:40	KD	17-APR-16	FA	B8015DRO

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-1.1	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-1.1	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-1.1	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-1.1	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-1.1	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-1.1	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-1.1	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-1.1.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-1.1
JC18331-1.1.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-1.1
JC18331-1.1.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-1.1.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-1.1.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-1.1.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-1.1.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-1.2	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-1.2	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-1.2	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-1.2	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-1.2	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-1.2	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-1.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-1.2.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-1.2
JC18331-1.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-1.2
JC18331-1.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-1.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-1.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-1.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-1.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-1.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-1.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-1.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-1.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-1.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-1.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-1.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-1.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-2.2	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-2.2	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-2.2	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-2.2	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-2.2	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-2.2	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-2.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-2.2.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-2.2
JC18331-2.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-2.2
JC18331-2.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-2.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-2.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-2.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-2.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-2.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-2.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-2.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-2.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-2.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-2.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-2.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-2.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-3.1	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-3.1	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-3.1	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-3.1	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-3.1	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-3.1	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-3.1	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-3.1.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-3.1
JC18331-3.1.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-3.1
JC18331-3.1.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-3.1.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-3.1.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-3.1.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-3.1.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-3.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-3.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-3.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-3.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-3.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-3.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-3.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-3.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-3.5	Secured Storage	Adil Malik	04/15/16 16:33	Retrieve from Storage
JC18331-3.5	Adil Malik	GCMS2D	04/15/16 16:33	Load on Instrument
JC18331-3.5	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-3.5	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-4.1	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-4.1	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-4.1	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-4.1	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-4.1	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-4.1	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-4.1	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-4.1.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-4.1
JC18331-4.1.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-4.1
JC18331-4.1.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-4.1.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-4.1.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-4.1.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-4.1.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-4.2	Secured Storage	Folarin Adedeji	04/17/16 16:34	Retrieve from Storage
JC18331-4.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-4.2.1	Folarin Adedeji	Organics Prep	04/17/16 16:34	Extract from JC18331-4.2
JC18331-4.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-4.2
JC18331-4.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-4.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-4.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-4.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-4.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-4.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-4.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-4.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-4.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-4.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-4.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-4.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-4.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-4.5	Secured Storage	Adil Malik	04/15/16 16:33	Retrieve from Storage
JC18331-4.5	Adil Malik	GCMS2D	04/15/16 16:33	Load on Instrument
JC18331-4.5	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-4.5	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-5.1	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-5.1	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-5.1	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-5.1	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-5.1	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-5.1	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-5.1	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-5.1.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-5.1
JC18331-5.1.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-5.1
JC18331-5.1.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-5.1.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-5.1.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-5.1.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-5.1.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-5.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-5.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-5.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-5.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-5.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-5.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-5.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-5.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-5.5	Secured Storage	Adil Malik	04/15/16 16:33	Retrieve from Storage
JC18331-5.5	Adil Malik	GCMS2D	04/15/16 16:33	Load on Instrument
JC18331-5.5	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-5.5	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-6.2	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-6.2	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-6.2	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-6.2	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-6.2	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-6.2	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-6.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-6.2.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-6.2
JC18331-6.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-6.2
JC18331-6.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-6.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-6.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-6.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-6.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-6.3	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-6.3	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-6.3	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-6.3	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-6.4	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-6.4	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-6.4	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-6.4	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-7.2	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-7.2	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-7.2	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-7.2	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-7.2	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-7.2	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-7.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-7.2.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-7.2
JC18331-7.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-7.2
JC18331-7.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-7.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-7.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-7.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-7.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-7.3	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-7.3	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-7.3	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-7.3	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-7.4	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-7.4	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-7.4	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-7.4	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-8.1	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-8.1	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-8.1	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-8.1	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-8.1	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-8.1	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-8.1	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-8.1.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-8.1
JC18331-8.1.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-8.1
JC18331-8.1.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-8.1.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-8.1.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-8.1.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-8.1.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-8.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-8.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-8.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-8.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-8.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-8.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-8.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-8.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-9.2	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-9.2	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-9.2	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-9.2	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-9.2	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-9.2	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-9.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-9.2.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-9.2
JC18331-9.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-9.2
JC18331-9.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-9.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-9.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-9.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-9.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-9.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-9.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-9.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-9.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-9.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-9.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-9.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-9.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-10.2	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-10.2	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-10.2	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-10.2	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-10.2	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-10.2	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-10.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-10.2.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-10.2
JC18331-10.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-10.2
JC18331-10.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-10.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-10.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-10.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-10.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-10.3	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-10.3	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-10.3	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-10.3	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-10.5	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-10.5	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-10.5	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-10.5	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-11.1	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-11.1	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-11.1	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-11.1	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-11.1	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-11.1	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-11.1	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-11.1.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-11.1
JC18331-11.1.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-11.1
JC18331-11.1.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage
JC18331-11.1.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-11.1.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-11.1.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-11.1.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-11.2	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-11.2	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-11.2	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-11.2	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-11.4	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-11.4	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-11.4	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-11.4	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage
JC18331-12.2	Secured Storage	Sahara Feliciano	04/16/16 08:00	Retrieve from Storage
JC18331-12.2	Sahara Feliciano	Secured Staging Area	04/16/16 08:00	Return to Storage
JC18331-12.2	Luis Villanueva	Secured Storage	04/16/16 10:15	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC18331-12.2	Secured Storage	Sahara Feliciano	04/17/16 07:38	Retrieve from Storage
JC18331-12.2	Sahara Feliciano	Secured Staging Area	04/17/16 07:38	Return to Storage
JC18331-12.2	Secured Staging Area	Folarin Adedeji	04/17/16 11:29	Retrieve from Storage
JC18331-12.2	Folarin Adedeji		04/17/16 16:35	Depleted
JC18331-12.2.1	Folarin Adedeji	Organics Prep	04/17/16 11:30	Extract from JC18331-12.2
JC18331-12.2.1	Organics Prep	Folarin Adedeji	04/17/16 16:35	Extract from JC18331-12.2
JC18331-12.2.1	Folarin Adedeji	Extract Storage	04/17/16 16:35	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Received: 04/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18331-12.2.1	Extract Storage	Khaliah Douglas	04/17/16 23:24	Retrieve from Storage
JC18331-12.2.1	Khaliah Douglas	GC2Z	04/17/16 23:24	Load on Instrument
JC18331-12.2.1	GC2Z	Khaliah Douglas	04/23/16 15:59	Unload from Instrument
JC18331-12.2.1	Khaliah Douglas	Extract Freezer	04/23/16 15:59	Return to Storage
JC18331-12.5	Secured Storage	Adil Malik	04/15/16 14:44	Retrieve from Storage
JC18331-12.5	Adil Malik	GCMS2D	04/15/16 14:44	Load on Instrument
JC18331-12.5	GCMS2D	Adil Malik	04/18/16 10:26	Unload from Instrument
JC18331-12.5	Adil Malik	Secured Storage	04/18/16 10:26	Return to Storage
JC18331-12.6	Secured Storage	Jay Chao	04/15/16 14:37	Retrieve from Storage
JC18331-12.6	Jay Chao	GCUV	04/15/16 16:50	Load on Instrument
JC18331-12.6	GCUV	Jay Chao	04/18/16 15:50	Unload from Instrument
JC18331-12.6	Jay Chao	Secured Storage	04/18/16 15:50	Return to Storage

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: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6501-MB	2D154757.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.19	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.14	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.15	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6501-MB	2D154757.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.26	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.27	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
91-20-3	Naphthalene	ND	5.0	0.20	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.21	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	2.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.19	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.62	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.45	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

Method Blank Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6501-MB	2D154757.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	90%	73-122%
2037-26-5	Toluene-D8	99%	84-119%
460-00-4	4-Bromofluorobenzene	101%	78-117%

Blank Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6501-BS	2D154758.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	46.6	93	47-144
71-43-2	Benzene	50	44.0	88	81-119
108-86-1	Bromobenzene	50	45.4	91	83-118
74-97-5	Bromochloromethane	50	46.4	93	84-120
75-27-4	Bromodichloromethane	50	42.7	85	81-125
75-25-2	Bromoform	50	42.0	84	74-128
74-83-9	Bromomethane	50	53.2	106	52-146
78-93-3	2-Butanone (MEK)	50	44.1	88	68-130
104-51-8	n-Butylbenzene	50	44.8	90	79-127
135-98-8	sec-Butylbenzene	50	45.6	91	78-124
98-06-6	tert-Butylbenzene	50	46.2	92	77-127
56-23-5	Carbon tetrachloride	50	41.3	83	77-140
108-90-7	Chlorobenzene	50	45.2	90	84-116
75-00-3	Chloroethane	50	54.1	108	70-148
67-66-3	Chloroform	50	45.2	90	81-120
74-87-3	Chloromethane	50	46.8	94	50-143
95-49-8	o-Chlorotoluene	50	46.2	92	82-118
106-43-4	p-Chlorotoluene	50	43.6	87	80-116
108-20-3	Di-Isopropyl ether	50	48.6	97	66-128
96-12-8	1,2-Dibromo-3-chloropropane	50	40.7	81	66-132
124-48-1	Dibromochloromethane	50	44.0	88	81-122
106-93-4	1,2-Dibromoethane	50	43.0	86	81-120
95-50-1	1,2-Dichlorobenzene	50	44.6	89	80-117
541-73-1	1,3-Dichlorobenzene	50	43.6	87	81-116
106-46-7	1,4-Dichlorobenzene	50	44.2	88	80-115
75-71-8	Dichlorodifluoromethane	50	39.6	79	36-169
75-34-3	1,1-Dichloroethane	50	45.1	90	80-125
107-06-2	1,2-Dichloroethane	50	39.0	78	78-131
75-35-4	1,1-Dichloroethene	50	42.0	84	73-127
156-59-2	cis-1,2-Dichloroethene	50	45.6	91	77-118
156-60-5	trans-1,2-Dichloroethene	50	42.7	85	75-118
78-87-5	1,2-Dichloropropane	50	43.2	86	80-124
142-28-9	1,3-Dichloropropane	50	43.5	87	78-119
594-20-7	2,2-Dichloropropane	50	39.3	79	62-138
563-58-6	1,1-Dichloropropene	50	45.0	90	77-119
10061-01-5	cis-1,3-Dichloropropene	50	43.3	87	72-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6501-BS	2D154758.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	40.4	81	73-122
100-41-4	Ethylbenzene	50	43.7	87	80-118
87-68-3	Hexachlorobutadiene	50	40.9	82	70-136
98-82-8	Isopropylbenzene	50	46.3	93	78-125
99-87-6	p-Isopropyltoluene	50	45.5	91	81-124
1634-04-4	Methyl Tert Butyl Ether	100	86.4	86	73-122
108-10-1	4-Methyl-2-pentanone(MIBK)	50	41.9	84	73-129
74-95-3	Methylene bromide	50	42.1	84	84-123
75-09-2	Methylene chloride	50	44.6	89	75-122
91-20-3	Naphthalene	50	40.7	81	66-136
103-65-1	n-Propylbenzene	50	46.3	93	81-126
100-42-5	Styrene	50	44.3	89	81-121
75-65-0	Tert Butyl Alcohol	250	223	89	79-121
994-05-8	tert-Amyl Methyl Ether	50	43.6	87	75-123
637-92-3	tert-Butyl Ethyl Ether	50	46.7	93	72-127
630-20-6	1,1,1,2-Tetrachloroethane	50	44.3	89	81-123
79-34-5	1,1,2,2-Tetrachloroethane	50	43.3	87	69-116
127-18-4	Tetrachloroethene	50	44.9	90	69-138
108-88-3	Toluene	50	45.0	90	80-122
87-61-6	1,2,3-Trichlorobenzene	50	44.0	88	74-137
120-82-1	1,2,4-Trichlorobenzene	50	45.6	91	75-135
71-55-6	1,1,1-Trichloroethane	50	44.2	88	80-131
79-00-5	1,1,2-Trichloroethane	50	42.4	85	78-122
79-01-6	Trichloroethene	50	45.1	90	83-122
75-69-4	Trichlorofluoromethane	50	44.3	89	66-143
96-18-4	1,2,3-Trichloropropane	50	42.5	85	76-120
95-63-6	1,2,4-Trimethylbenzene	50	46.1	92	82-125
108-67-8	1,3,5-Trimethylbenzene	50	45.2	90	79-123
75-01-4	Vinyl chloride	50	47.0	94	57-138
	m,p-Xylene	100	90.8	91	82-119
95-47-6	o-Xylene	50	47.6	95	82-119
1330-20-7	Xylene (total)	150	138	92	82-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D6501-BS	2D154758.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	73-122%
2037-26-5	Toluene-D8	99%	84-119%
460-00-4	4-Bromofluorobenzene	102%	78-117%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18331-3MS	2D154764.D	1	04/16/16	AM	n/a	n/a	V2D6501
JC18331-3	2D154760.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	JC18331-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		50	46.8	94	33-158
71-43-2	Benzene	1.2		50	46.6	91	43-138
108-86-1	Bromobenzene	ND		50	45.8	92	72-126
74-97-5	Bromochloromethane	ND		50	46.9	94	75-127
75-27-4	Bromodichloromethane	ND		50	43.0	86	72-128
75-25-2	Bromoform	ND		50	42.5	85	70-131
74-83-9	Bromomethane	ND		50	53.4	107	47-142
78-93-3	2-Butanone (MEK)	ND		50	44.5	89	56-146
104-51-8	n-Butylbenzene	ND		50	45.3	91	50-142
135-98-8	sec-Butylbenzene	2.2		50	47.5	91	52-138
98-06-6	tert-Butylbenzene	0.53	J	50	46.4	92	55-137
56-23-5	Carbon tetrachloride	ND		50	44.3	89	45-149
108-90-7	Chlorobenzene	ND		50	45.7	91	70-124
75-00-3	Chloroethane	ND		50	55.0	110	47-139
67-66-3	Chloroform	ND		50	46.7	93	66-126
74-87-3	Chloromethane	ND		50	46.4	93	41-140
95-49-8	o-Chlorotoluene	ND		50	45.8	92	66-128
106-43-4	p-Chlorotoluene	ND		50	43.7	87	66-124
108-20-3	Di-Isopropyl ether	ND		50	49.6	99	59-131
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	42.6	85	64-136
124-48-1	Dibromochloromethane	ND		50	43.7	87	75-126
106-93-4	1,2-Dibromoethane	ND		50	42.9	86	77-124
95-50-1	1,2-Dichlorobenzene	ND		50	44.2	88	71-124
541-73-1	1,3-Dichlorobenzene	ND		50	43.3	87	69-125
106-46-7	1,4-Dichlorobenzene	ND		50	43.7	87	69-122
75-71-8	Dichlorodifluoromethane	ND		50	45.9	92	24-161
75-34-3	1,1-Dichloroethane	ND		50	46.7	93	60-129
107-06-2	1,2-Dichloroethane	ND		50	39.1	78	72-133
75-35-4	1,1-Dichloroethene	ND		50	49.0	98	40-137
156-59-2	cis-1,2-Dichloroethene	ND		50	47.0	94	57-128
156-60-5	trans-1,2-Dichloroethene	ND		50	45.8	92	53-128
78-87-5	1,2-Dichloropropane	ND		50	43.3	87	69-127
142-28-9	1,3-Dichloropropane	ND		50	43.0	86	73-123
594-20-7	2,2-Dichloropropane	ND		50	47.8	96	49-140
563-58-6	1,1-Dichloropropene	ND		50	48.4	97	47-137
10061-01-5	cis-1,3-Dichloropropene	ND		50	45.2	90	67-129

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18331-3MS	2D154764.D	1	04/16/16	AM	n/a	n/a	V2D6501
JC18331-3	2D154760.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	JC18331-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		50	41.0	82	68-130
100-41-4	Ethylbenzene	ND		50	44.0	88	38-139
87-68-3	Hexachlorobutadiene	ND		50	40.2	80	40-149
98-82-8	Isopropylbenzene	0.62	J	50	47.3	93	54-137
99-87-6	p-Isopropyltoluene	ND		50	46.0	92	57-135
1634-04-4	Methyl Tert Butyl Ether	ND		100	88.6	89	64-132
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	45.9	92	68-139
74-95-3	Methylene bromide	ND		50	42.5	85	77-127
75-09-2	Methylene chloride	ND		50	46.9	94	63-128
91-20-3	Naphthalene	ND		50	43.0	86	57-149
103-65-1	n-Propylbenzene	ND		50	46.4	93	49-136
100-42-5	Styrene	ND		50	44.4	89	61-134
75-65-0	Tert Butyl Alcohol	ND		250	242	97	67-138
994-05-8	tert-Amyl Methyl Ether	ND		50	45.4	91	67-132
637-92-3	tert-Butyl Ethyl Ether	ND		50	48.1	96	65-133
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	44.7	89	72-130
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	44.3	89	67-126
127-18-4	Tetrachloroethene	ND		50	46.2	92	43-145
108-88-3	Toluene	ND		50	45.5	91	51-136
87-61-6	1,2,3-Trichlorobenzene	ND		50	42.7	85	66-140
120-82-1	1,2,4-Trichlorobenzene	ND		50	43.9	88	65-138
71-55-6	1,1,1-Trichloroethane	ND		50	47.0	94	51-141
79-00-5	1,1,2-Trichloroethane	ND		50	41.9	84	71-127
79-01-6	Trichloroethene	ND		50	46.4	93	55-136
75-69-4	Trichlorofluoromethane	ND		50	47.1	94	33-157
96-18-4	1,2,3-Trichloropropane	ND		50	43.8	88	74-127
95-63-6	1,2,4-Trimethylbenzene	0.25	J	50	44.4	88	40-143
108-67-8	1,3,5-Trimethylbenzene	ND		50	43.6	87	54-135
75-01-4	Vinyl chloride	ND		50	49.1	98	34-147
	m,p-Xylene	ND		100	91.2	91	42-139
95-47-6	o-Xylene	ND		50	47.1	94	56-134
1330-20-7	Xylene (total)	ND		150	138	92	46-137

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18331-3MS	2D154764.D	1	04/16/16	AM	n/a	n/a	V2D6501
JC18331-3	2D154760.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Surrogate Recoveries	MS	JC18331-3	Limits
1868-53-7	Dibromofluoromethane	104%	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	90%	92%	73-122%
2037-26-5	Toluene-D8	98%	100%	84-119%
460-00-4	4-Bromofluorobenzene	102%	101%	78-117%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18331-4DUP	2D154763.D	1	04/16/16	AM	n/a	n/a	V2D6501
JC18331-4	2D154761.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	JC18331-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	30
71-43-2	Benzene	2.0		2.0		0	30
108-86-1	Bromobenzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	30
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	30
78-93-3	2-Butanone (MEK)	ND		ND		nc	30
104-51-8	n-Butylbenzene	0.22	J	0.22	J	0	30
135-98-8	sec-Butylbenzene	2.0		2.1		5	30
98-06-6	tert-Butylbenzene	0.40	J	0.40	J	0	10
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	30
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
95-49-8	o-Chlorotoluene	ND		ND		nc	30
106-43-4	p-Chlorotoluene	ND		ND		nc	30
108-20-3	Di-Isopropyl ether	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	30
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	30
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	30
107-06-2	1,2-Dichloroethane	ND		ND		nc	30
75-35-4	1,1-Dichloroethene	ND		ND		nc	30
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	30
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	30
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
142-28-9	1,3-Dichloropropane	ND		ND		nc	30
594-20-7	2,2-Dichloropropane	ND		ND		nc	30
563-58-6	1,1-Dichloropropene	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18331-4DUP	2D154763.D	1	04/16/16	AM	n/a	n/a	V2D6501
JC18331-4	2D154761.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	JC18331-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
87-68-3	Hexachlorobutadiene	ND		ND		nc	30
98-82-8	Isopropylbenzene	ND		ND		nc	30
99-87-6	p-Isopropyltoluene	ND		ND		nc	30
1634-04-4	Methyl Tert Butyl Ether	2.4		2.4		0	30
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
74-95-3	Methylene bromide	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	30
91-20-3	Naphthalene	2.5	J	2.7	J	8	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
100-42-5	Styrene	ND		ND		nc	30
75-65-0	Tert Butyl Alcohol	ND		ND		nc	30
994-05-8	tert-Amyl Methyl Ether	ND		ND		nc	30
637-92-3	tert-Butyl Ethyl Ether	ND		ND		nc	30
630-20-6	1,1,1,2-Tetrachloroethane	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	30
108-88-3	Toluene	1.6		1.6		0	30
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	30
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	30
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	30
	m,p-Xylene	ND		ND		nc	30
95-47-6	o-Xylene	ND		ND		nc	30
1330-20-7	Xylene (total)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18331-4DUP	2D154763.D	1	04/16/16	AM	n/a	n/a	V2D6501
JC18331-4	2D154761.D	1	04/16/16	AM	n/a	n/a	V2D6501

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

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Surrogate Recoveries	DUP	JC18331-4	Limits
1868-53-7	Dibromofluoromethane	104%	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	90%	91%	73-122%
2037-26-5	Toluene-D8	98%	99%	84-119%
460-00-4	4-Bromofluorobenzene	101%	101%	78-117%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6450-BFB
Lab File ID: 2D153387.D
Instrument ID: GCMS2D
Injection Date: 03/03/16
Injection Time: 16:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	30941	17.2		Pass
75	30.0 - 60.0% of mass 95	85194	47.5		Pass
95	Base peak, 100% relative abundance	179520	100.0		Pass
96	5.0 - 9.0% of mass 95	11364	6.33		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	179904	100.2		Pass
175	5.0 - 9.0% of mass 174	13737	7.65	(7.64) [a]	Pass
176	95.0 - 101.0% of mass 174	176725	98.4	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	11667	6.50	(6.60) [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
V2D6450-IC6450	2D153389.D	03/03/16	17:04	01:01	Initial cal 0.5
V2D6450-IC6450	2D153390.D	03/03/16	17:35	01:32	Initial cal 1
V2D6450-IC6450	2D153391.D	03/03/16	18:05	02:02	Initial cal 2
V2D6450-IC6450	2D153392.D	03/03/16	18:35	02:32	Initial cal 5
V2D6450-IC6450	2D153393.D	03/03/16	19:06	03:03	Initial cal 10
V2D6450-IC6450	2D153394.D	03/03/16	19:36	03:33	Initial cal 20
V2D6450-ICC6450	2D153395.D	03/03/16	20:07	04:04	Initial cal 50
V2D6450-IC6450	2D153396.D	03/03/16	20:37	04:34	Initial cal 100
V2D6450-IC6450	2D153397.D	03/03/16	21:07	05:04	Initial cal 200
V2D6450-ICV6450	2D153400.D	03/03/16	22:38	06:35	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6501-BFB
Lab File ID: 2D154754.D
Instrument ID: GCMS2D
Injection Date: 04/16/16
Injection Time: 07:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	33725	15.6		Pass
75	30.0 - 60.0% of mass 95	94344	43.6		Pass
95	Base peak, 100% relative abundance	216256	100.0		Pass
96	5.0 - 9.0% of mass 95	14270	6.60		Pass
173	Less than 2.0% of mass 174	1813	0.84	(0.82) [a]	Pass
174	50.0 - 120.0% of mass 95	222443	102.9		Pass
175	5.0 - 9.0% of mass 174	15822	7.32	(7.11) [a]	Pass
176	95.0 - 101.0% of mass 174	219051	101.3	(98.5) [a]	Pass
177	5.0 - 9.0% of mass 176	14081	6.51	(6.43) [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
V2D6501-CC6450	2D154755.D	04/16/16	08:08	00:38	Continuing cal 20
V2D6501-MB	2D154757.D	04/16/16	09:21	01:51	Method Blank
V2D6501-BS	2D154758.D	04/16/16	09:51	02:21	Blank Spike
JC18331-3	2D154760.D	04/16/16	11:05	03:35	MW-3
JC18331-4	2D154761.D	04/16/16	11:35	04:05	MW-4R
JC18331-5	2D154762.D	04/16/16	12:06	04:36	MW-5
JC18331-4DUP	2D154763.D	04/16/16	12:36	05:06	Duplicate
JC18331-3MS	2D154764.D	04/16/16	13:07	05:37	Matrix Spike
JC18331-1	2D154766.D	04/16/16	14:08	06:38	MW-1
JC18331-6	2D154767.D	04/16/16	14:38	07:08	MW-6
JC18331-7	2D154768.D	04/16/16	15:09	07:39	MW-7
JC18331-8	2D154769.D	04/16/16	15:40	08:10	MW-8
JC18331-9	2D154770.D	04/16/16	16:10	08:40	MW-9
JC18331-12	2D154771.D	04/16/16	16:41	09:11	TF-2
JC18331-2	2D154772.D	04/16/16	17:12	09:42	MW-2
JC18331-11	2D154773.D	04/16/16	17:42	10:12	TF-1
JC18331-10	2D154774.D	04/16/16	18:13	10:43	MW-10R

Volatile Internal Standard Area Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	V2D6501-CC6450	**Injection Date:**	04/16/16
Lab File ID:	2D154755.D	**Injection Time:**	08:08
Instrument ID:	GCMS2D	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	197951	7.42	601743	10.13	836391	11.29	798792	15.51	449080	18.29
Upper Limit [a]	395902	7.92	1203486	10.63	1672782	11.79	1597584	16.01	898160	18.79
Lower Limit [b]	98976	6.92	300872	9.63	418196	10.79	399396	15.01	224540	17.79

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2D6501-MB	179308	7.42	625977	10.14	856590	11.29	805187	15.51	454662	18.29
V2D6501-BS	170638	7.42	586307	10.13	821314	11.29	778927	15.51	428374	18.29
JC18331-3	191150	7.42	608815	10.14	833836	11.29	785652	15.51	445261	18.29
JC18331-4	184158	7.42	618127	10.13	845895	11.29	794805	15.51	456086	18.29
JC18331-5	189139	7.42	621580	10.14	854437	11.29	801059	15.51	462616	18.30
JC18331-4DUP	182919	7.42	621147	10.14	853123	11.29	795234	15.51	456805	18.30
JC18331-3MS	179875	7.43	597606	10.14	835329	11.29	789433	15.51	433215	18.30
JC18331-1	187314	7.42	631167	10.14	863910	11.29	799718	15.51	451720	18.30
JC18331-6	191243	7.42	633137	10.14	873418	11.29	813977	15.51	461645	18.30
JC18331-7	197106	7.42	627078	10.14	859800	11.29	802991	15.51	458974	18.30
JC18331-8	197065	7.43	653305	10.14	889123	11.29	829716	15.51	468533	18.30
JC18331-9	199763	7.42	649133	10.14	892092	11.29	822924	15.51	475235	18.30
JC18331-12	200471	7.43	670538	10.14	911363	11.30	851471	15.51	481587	18.30
JC18331-2	217171	7.43	665071	10.14	897011	11.29	827484	15.51	467966	18.30
JC18331-11	175877	7.42	667996	10.14	907855	11.29	831308	15.51	468920	18.30
JC18331-10	194880	7.42	670229	10.14	905197	11.29	833612	15.51	474601	18.30

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

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

Volatile Surrogate Recovery Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

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
JC18331-1	2D154766.D	103	90	98	102
JC18331-2	2D154772.D	102	87	97	110
JC18331-3	2D154760.D	104	92	100	101
JC18331-4	2D154761.D	104	91	99	101
JC18331-5	2D154762.D	105	91	99	101
JC18331-6	2D154767.D	104	92	98	102
JC18331-7	2D154768.D	104	91	99	100
JC18331-8	2D154769.D	103	90	98	102
JC18331-9	2D154770.D	104	91	98	100
JC18331-10	2D154774.D	100	86	98	104
JC18331-11	2D154773.D	100	85	98	100
JC18331-12	2D154771.D	102	88	98	101
JC18331-3MS	2D154764.D	104	90	98	102
JC18331-4DUP	2D154763.D	104	90	98	101
V2D6501-BS	2D154758.D	103	91	99	102
V2D6501-MB	2D154757.D	104	90	99	101

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

Initial Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: V2D6450-ICC6450
Lab FileID: 2D153395.D

Response Factor Report MS2D

```
Method       : C:\MSDCHEM\1\METHODS\M2D6450.M (RTE Integrator)
Title        : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update  : Fri Mar 04 09:34:09 2016
Response via : Initial Calibration

Calibration Files
1   =2D153390.D  2   =2D153391.D  100 =2D153396.D  50  =2D153395.D
20  =2D153394.D  200 =2D153397.D  5   =2D153392.D  0.5 =2D153389.D
10  =2D153393.D      =
```

Compound	1	2	100	50	20	200	5	0.5	10	Avg	%RSD
1) I tert butyl alcohol-d9 ----------ISTD----------											
2) tertiary butyl alcohol	0.943	0.951	0.883	0.902	0.890	0.934			0.931	0.919	2.93
3) ethyl alcohol	0.119	0.104	0.090	0.085	0.090	0.063	0.091		0.092	0.092	17.38
4) 1,4-dioxane	0.080	0.097	0.090	0.092	0.095	0.087			0.096	0.091	6.52
5) I pentafluorobenzene ----------ISTD----------											
6) chlorodifluoromethane	0.408	0.532	0.478	0.449	0.508	0.347			0.429	0.450	13.99
7) dichlorodifluoromethane	0.357	0.558	0.506	0.451	0.513	0.462			0.416	0.466	14.40
8) chloromethane	0.387	0.502	0.665	0.615	0.567	0.589	0.577		0.549	0.556	14.97
9) vinyl chloride	0.312	0.437	0.608	0.567	0.517	0.554	0.519		0.494	0.501	18.34
10) bromomethane	0.281	0.322	0.334	0.334	0.321	0.259	0.346		0.327	0.316	9.46
11) chloroethane	0.167	0.212	0.284	0.267	0.247	0.240	0.249		0.247	0.239	14.99
12) trichlorofluoromethane	0.418	0.667	0.610	0.553	0.605	0.561			0.546	0.566	13.71
13) ethyl ether	0.146	0.165	0.190	0.175	0.172	0.180	0.168	0.158	0.174	0.170	7.46
14) acrolein	0.064	0.061		0.058	0.054		0.056		0.062	0.059	6.06
15) 1,1-dichloroethene	0.224	0.258	0.352	0.312	0.316	0.326	0.283	0.289	0.328	0.299	13.30
16) 2-chloropropane	0.550	0.684	0.618	0.612	0.634	0.540			0.617	0.608	8.11
17) acetone			0.025	0.023	0.022	0.023	0.023		0.022	0.023	3.91
18) allyl chloride	0.158	0.218	0.196	0.196	0.202	0.177			0.203	0.193	10.15
19) acetonitrile			0.027	0.025	0.027	0.026	0.032		0.029	0.028	8.47
20) iodomethane	0.554	0.767	0.697	0.683	0.708	0.615			0.686	0.673	10.25
21) carbon disulfide	0.755	0.876	1.253	1.130	1.110	1.159	0.990	1.010	1.109	1.043	14.72
22) methylene chloride	0.332	0.333	0.398	0.370	0.365	0.370	0.345	0.349	0.374	0.360	6.02
23) methyl acetate											

Initial Calibration Summary

Job Number: JC18331 **Sample:** V2D6450-ICC6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D153395.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

			0.049	0.044	0.045	0.046	0.045		0.048	0.046	3.84
24)	1-chloropropane										
		0.185	0.236	0.216	0.225	0.218	0.217		0.237	0.219	7.93
25)	methyl tert butyl ether										
		0.805	0.905	1.057	0.979	0.970	0.957	0.925	0.864	0.971	0.937	7.80
26)	trans-1,2-dichloroethene										
		0.274	0.307	0.376	0.346	0.348	0.343	0.330	0.354	0.364	0.338	9.15
27)	di-isopropyl ether										
		0.700	1.133	1.162	1.100	1.109	1.091	0.984	1.150	1.135	1.063	13.69
28)	2-butanone										
			0.034	0.032	0.031	0.033	0.027		0.029	0.031	8.39
29)	1,1-dichloroethane										
		0.513	0.536	0.712	0.650	0.648	0.655	0.601	0.570	0.661	0.616	10.61
30)	chloroprene										
		0.281	0.501	0.538	0.496	0.498	0.518	0.382	0.501	0.500	0.468	17.66
31)	acrylonitrile										
		0.092	0.104	0.118	0.109	0.105	0.109	0.101	0.086	0.108	0.104	9.18
32)	vinyl acetate										
			0.058	0.054	0.055	0.056	0.050		0.053	0.054	5.17
33)	ethyl tert-butyl ether										
		0.681	1.080	1.187	1.099	1.089	1.137	0.984	1.016	1.095	1.041	14.16
34)	ethyl acetate										
			0.037	0.036	0.037	0.036	0.032		0.038	0.036	5.28
35)	2,2-dichloropropane										
		0.393	0.437	0.585	0.535	0.528	0.516	0.502	0.531	0.559	0.510	11.73
36)	cis-1,2-dichloroethene										
		0.305	0.349	0.437	0.405	0.393	0.403	0.362	0.383	0.410	0.383	10.26
37)	propionitrile										
		0.039	0.043	0.043	0.040	0.040	0.041	0.039		0.041	0.041	4.28
38)	tert-Butyl Formate										
		0.157	0.292	0.307	0.282	0.275	0.298	0.250	0.253	0.272	0.265	16.90
39)	bromochloromethane										
		0.173	0.182	0.222	0.204	0.205	0.202	0.187	0.184	0.208	0.196	7.95
40)	tetrahydrofuran										
			0.086	0.078	0.078	0.079	0.093		0.081	0.083	7.26
41)	chloroform										
		0.525	0.570	0.697	0.647	0.640	0.634	0.602	0.560	0.666	0.616	9.01
42)	dibromofluoromethane (s)										
		0.434	0.437	0.440	0.444	0.430	0.440	0.433	0.435	0.435	0.437	0.97
43)	1,2-dichloroethane-d4 (s)										
		0.467	0.470	0.460	0.463	0.463	0.461	0.463	0.465	0.466	0.464	0.65
44)	freon 113										
		0.269	0.318	0.288	0.289	0.302	0.212		0.281	0.280	12.12
45)	methacrylonitrile										
		0.101	0.132	0.120	0.116	0.126	0.107		0.119	0.117	9.24
46)	1,1,1-trichloroethane										
		0.357	0.435	0.619	0.562	0.543	0.566	0.480	0.499	0.538	0.511	15.40
47)	cyclohexane										
		0.378	0.566	0.499	0.488	0.524	0.428		0.487	0.481	12.84
48)	isobutyl alcohol										
			0.005	0.004	0.004	0.004	0.004		0.004	0.004	5.04
49)	iso-octane										
		1.208	1.293	1.157	1.146	1.254	0.911		1.117	1.155	10.75
50)	tert-amyl alcohol										
		0.016	0.016	0.015	0.014	0.016	0.015		0.015	0.015	5.81
51)	I 1,4-difluorobenzene	----------ISTD----------									
52)	epichlorohydrin										
		0.019	0.022	0.020	0.021	0.021	0.019		0.020	0.020	4.91
53)	n-butyl alcohol										

```
                  0.005 0.006 0.006 0.005 0.006 0.005       0.005   0.005    6.07
54)  carbon tetrachloride
            0.265 0.321 0.427 0.394 0.397 0.381 0.365 0.360 0.405   0.368   13.36
55)  1,1-dichloropropene
            0.238 0.264 0.368 0.333 0.330 0.337 0.300 0.296 0.335   0.311   13.04
56)  hexane
                  0.309 0.327 0.291 0.292 0.314 0.221       0.296   0.293   11.73
57)  benzene
            0.778 0.885 1.053 0.975 0.991 0.953 0.906 0.908 1.005   0.939    8.61
58)  tert-amyl methyl ether
            0.484 0.739 0.729 0.690 0.713 0.680 0.664 0.706 0.726   0.681   11.41
59)  heptane
                  0.163 0.179 0.159 0.163 0.172 0.132       0.165   0.162    8.98
60)  isopropyl acetate
                  0.411 0.401 0.372 0.376 0.384 0.364       0.380   0.384    4.30
61)  1,2-dichloroethane
            0.296 0.325 0.357 0.340 0.345 0.320 0.331       0.354   0.333    6.01
62)  trichloroethene
            0.218 0.237 0.318 0.287 0.287 0.288 0.255 0.263 0.282   0.271   11.24
63)  2-nitropropane
                  0.049 0.063 0.057 0.061 0.059 0.056       0.061   0.058    8.07
64)  2-chloroethyl vinyl ether
            0.093 0.142 0.154 0.145 0.148 0.143 0.131 0.118 0.147   0.136   14.06
65)  methyl methacrylate
                  0.137 0.152 0.141 0.139 0.140 0.125       0.141   0.139    5.69
66)  1,2-dichloropropane
            0.219 0.248 0.284 0.265 0.269 0.258 0.247       0.270   0.257    7.69
67)  dibromomethane
            0.146 0.157 0.177 0.164 0.168 0.159 0.155 0.140 0.169   0.159    7.30
68)  methylcyclohexane
                  0.421 0.464 0.423 0.422 0.442 0.324       0.404   0.414   10.69
69)  bromodichloromethane
            0.304 0.333 0.406 0.376 0.374 0.370 0.346 0.315 0.383   0.356    9.49
70)  cis-1,3-dichloropropene
            0.354 0.407 0.485 0.445 0.444 0.437 0.400 0.365 0.446   0.420   10.05
71)  toluene-d8 (s)
            1.148 1.168 1.146 1.159 1.156 1.141 1.155 1.147 1.164   1.154    0.78
72)  4-methyl-2-pentanone
            0.069 0.069 0.090 0.083 0.081 0.084 0.076       0.084   0.080    9.23
73)  toluene
            0.475 0.548 0.683 0.629 0.625 0.622 0.560 0.513 0.633   0.587   11.45
74)  3-methyl-1-butanol
            0.005 0.008 0.010 0.009 0.009 0.009 0.009       0.009   0.008   17.80
75)  trans-1,3-dichloropropene
            0.349 0.362 0.442 0.408 0.400 0.401 0.372       0.399   0.392    7.59
76)  ethyl methacrylate
                  0.261 0.315 0.292 0.283 0.289 0.253       0.284   0.283    7.31
77)  1,1,2-trichloroethane
            0.176 0.188 0.214 0.200 0.197 0.194 0.190       0.199   0.195    5.60
78)  2-hexanone
                  0.059 0.076 0.070 0.067 0.072 0.063       0.069   0.068    8.30

79) I   chlorobenzene-d5      ----------------ISTD--------------------
80)  3,3-Dimethyl-1-butanol
                  0.018 0.023 0.021 0.021 0.022 0.020       0.019   0.021    8.86
81)  tetrachloroethene
            0.201 0.217 0.286 0.265 0.265 0.256 0.241 0.238 0.277   0.250   11.17
82)  1,3-dichloropropane
            0.349 0.375 0.399 0.380 0.387 0.358 0.378 0.355 0.402   0.376    5.02
83)  butyl acetate
```

```
                  0.139 0.148 0.137 0.141 0.143 0.129       0.143   0.140    4.31
 84)  dibromochloromethane
            0.287 0.297 0.346 0.326 0.326 0.309 0.307 0.275 0.334   0.312    7.45
 85)  1,2-dibromoethane
            0.236 0.243 0.277 0.259 0.256 0.251 0.247 0.230 0.262   0.251    5.63
 86)  n-butyl ether
            0.873 0.959 1.251 1.157 1.132 1.129 1.026       1.145   1.084   11.26
 87)  chlorobenzene
            0.622 0.677 0.816 0.765 0.767 0.737 0.710 0.716 0.790   0.733    8.17
 88)  1,1,1,2-tetrachloroethane
            0.261 0.301 0.346 0.328 0.321 0.311 0.305 0.274 0.324   0.308    8.70
 89)  ethylbenzene
            0.982 1.069 1.338 1.255 1.290 1.198 1.175 1.140 1.308   1.195    9.84
 90)  m,p-xylene
            0.377 0.416 0.530 0.494 0.501 0.479 0.465 0.436 0.510   0.467   10.56
 91)  o-xylene
            0.391 0.430 0.563 0.526 0.526 0.512 0.483 0.434 0.532   0.489   11.82
 92)  styrene
            0.631 0.722 0.899 0.851 0.874 0.813 0.790       0.888   0.809   11.44
 93)  bromoform
            0.204 0.224 0.264 0.244 0.244 0.241 0.230 0.213 0.246   0.235    7.90

 94) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 95)  isopropylbenzene
            1.686 1.933 2.652 2.427 2.443 2.383 2.138 2.108 2.440   2.245   13.51
 96)  4-bromofluorobenzene (s)
            0.808 0.816 0.813 0.809 0.827 0.813 0.799 0.818 0.811   0.813    0.93
 97)  cyclohexanone
                        0.019 0.014 0.015 0.015 0.016       0.016   0.016   10.14
 98)  cis-1,4-dichloro-2-butene
                                                                    0.000   -1.00
 99)  bromobenzene
            0.584 0.606 0.736 0.680 0.694 0.660 0.628       0.711   0.662    8.00
100)  1,1,2,2-tetrachloroethane
            0.507 0.531 0.626 0.575 0.569 0.570 0.535 0.500 0.577   0.554    7.18
101)  trans-1,4-dichloro-2-butene
            0.115 0.128 0.145 0.133 0.129 0.135 0.113       0.133   0.129    8.14
102)  1,2,3-trichloropropane
            0.137 0.131 0.152 0.142 0.145 0.136 0.140 0.131 0.144   0.140    4.91
103)  n-propylbenzene
            2.023 2.174 2.930 2.679 2.749 2.643 2.411 2.385 2.790   2.532   11.93
104)  2-chlorotoluene
            0.475 0.522 0.678 0.623 0.621 0.613 0.562       0.619   0.589   11.09
105)  4-chlorotoluene
            1.384 1.477 1.817 1.658 1.720 1.667 1.550       1.744   1.627    8.96
106)  1,3,5-trimethylbenzene
            1.513 1.682 2.236 2.053 2.070 2.003 1.848 1.857 2.085   1.927   11.68
107)  tert-butylbenzene
            1.357 1.445 2.115 1.918 1.896 1.906 1.614 1.701 1.875   1.758   14.08
108)  pentachloroethane
            0.380 0.423 0.511 0.474 0.478 0.456 0.453 0.413 0.491   0.453    9.13
109)  1,2,4-trimethylbenzene
            1.591 1.752 2.282 2.114 2.160 2.046 1.931 1.758 2.146   1.976   11.71
110)  sec-butylbenzene
            1.940 2.163 3.117 2.826 2.811 2.772 2.427 2.435 2.815   2.589   14.45
111)  1,3-dichlorobenzene
            1.122 1.190 1.398 1.305 1.340 1.260 1.254 1.216 1.375   1.273    7.07
112)  p-isopropyltoluene
            1.725 1.947 2.692 2.444 2.441 2.397 2.137 2.074 2.433   2.254   13.45
113)  1,4-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC18331 **Sample:** V2D6450-ICC6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D153395.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

```
            1.096 1.149 1.421 1.292 1.303 1.288 1.186 1.218 1.315   1.252    7.91
114)  1,2-dichlorobenzene
            1.138 1.184 1.434 1.330 1.355 1.275 1.266 1.157 1.368   1.278    8.02
115)  benzyl chloride
            0.824 1.102 1.177 1.069 1.087 1.098 1.004       1.082   1.056    9.92
116)  n-butylbenzene
            0.818 0.906 1.381 1.242 1.225 1.244 1.030 1.047 1.198   1.122   16.25
117)  1,2-dibromo-3-chloropropane
            0.127 0.126 0.160 0.145 0.138 0.146 0.125       0.142   0.139    8.96
118)  1,3,5-trichlorobenzene
            0.955 1.014 1.375 1.295 1.271 1.184 1.088       1.239   1.178   12.43
119)  hexachlorobutadiene
            0.498 0.485 0.671 0.642 0.642 0.573 0.567 0.590 0.631   0.589   11.04
120)  naphthalene
                  1.366 1.994 1.834 1.745 1.773 1.440       1.636   1.684   13.12
121)  1,2,4-trichlorobenzene
            0.725 0.795 1.170 1.093 1.033 1.033 0.871       0.961   0.960   15.89
122)  1,2,3-trichlorobenzene
            0.630 0.686 0.995 0.926 0.884 0.884 0.743       0.832   0.822   15.23
123)  hexachloroethane
            0.356 0.401 0.587 0.533 0.516 0.519 0.452       0.509   0.484   15.65
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2D6450.M         Fri Mar 04 09:44:21 2016   MS2D
```

Initial Calibration Verification

Job Number: JC18331 **Sample:** V2D6450-ICV6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D153400.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2D153400.D Vial: 14
Acq On : 3 Mar 2016 10:38 pm Operator: Adilm
Sample : icv6450-50 Inst : MS2D
Misc : ms99022,v2d6450,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2D6450.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Fri Mar 04 09:34:09 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	98	0.00	7.43
2		tertiary butyl alcohol	0.919	0.886	3.6	99	0.00	7.57
3		ethyl alcohol	0.092	0.091	1.1	105	0.01	6.05
4		1,4-dioxane	0.091	0.092	-1.1	100	0.00	12.25
5	I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	10.15
6		chlorodifluoromethane	0.450	0.489	-8.7	103	0.00	3.87
7		dichlorodifluoromethane	0.466	0.482	-3.4	95	0.00	3.84
8		chloromethane	0.556	0.560	-0.7	91	0.00	4.22
9		vinyl chloride	0.501	0.520	-3.8	92	0.00	4.48
10		bromomethane	0.316	0.344	-8.9	103	0.00	5.13
11		chloroethane	0.239	0.254	-6.3	96	0.00	5.30
12		trichlorofluoromethane	0.566	0.579	-2.3	95	0.00	5.79
13		ethyl ether	0.170	0.182	-7.1	104	0.00	6.23
14		acrolein	0.059	0.059	0.0	102	0.00	6.48
15		1,1-dichloroethene	0.299	0.324	-8.4	104	0.00	6.66
16	m	2-chloropropane	0.608	0.650	-6.9	105	0.00	6.42
17		acetone	0.023	0.024	-4.3	106	0.01	6.74
18		allyl chloride	0.193	0.197	-2.1	101	0.00	7.25
19		acetonitrile	0.028	0.025	10.7	100	0.04	7.25
20		iodomethane	0.673	0.689	-2.4	99	0.00	6.95
21		carbon disulfide	1.043	1.163	-11.5	103	0.00	7.08
22		methylene chloride	0.360	0.371	-3.1	100	0.00	7.45
23		methyl acetate	0.046	0.045	2.2	101	0.00	7.25
24	m	1-chloropropane	0.219	0.245	-11.9	114	0.00	7.51
25		methyl tert butyl ether	0.937	0.965	-3.0	99	0.00	7.86
26		trans-1,2-dichloroethene	0.338	0.341	-0.9	99	0.00	7.89
27		di-isopropyl ether	1.063	1.115	-4.9	102	0.00	8.59
28		2-butanone	0.031	0.033	-6.5	103	0.00	9.45
29		1,1-dichloroethane	0.616	0.675	-9.6	104	0.00	8.56
30		chloroprene	0.468	0.490	-4.7	99	0.00	8.69
31		acrylonitrile	0.104	0.112	-7.7	103	0.00	7.84
32		vinyl acetate	0.054	0.055	-1.9	103	0.00	8.58
33		ethyl tert-butyl ether	1.041	1.116	-7.2	102	0.00	9.15
34		ethyl acetate	0.036	0.036	0.0	100	0.00	9.48
35		2,2-dichloropropane	0.510	0.506	0.8	95	0.00	9.47
36		cis-1,2-dichloroethene	0.383	0.397	-3.7	98	0.00	9.45
37		propionitrile	0.041	0.040	2.4	101	0.00	9.56
38		tert-Butyl Formate	0.265	0.234	11.7	83	0.00	10.00
39		bromochloromethane	0.196	0.204	-4.1	100	0.00	9.83
40		tetrahydrofuran	0.083	0.082	1.2	105	0.00	9.90
41		chloroform	0.616	0.657	-6.7	102	0.00	9.91

Initial Calibration Verification

Job Number: JC18331 **Sample:** V2D6450-ICV6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D153400.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

42	S	dibromofluoromethane (s)	0.437	0.440	-0.7	99	0.00	10.16
43	S	1,2-dichloroethane-d4 (s)	0.464	0.465	-0.2	101	0.00	10.70
44		freon 113	0.280	0.301	-7.5	105	0.00	6.67
45		methacrylonitrile	0.117	0.119	-1.7	99	0.00	9.79
46		1,1,1-trichloroethane	0.511	0.569	-11.4	102	0.00	10.24
47		cyclohexane	0.481	0.502	-4.4	101	0.00	10.34
48		isobutyl alcohol	0.004	0.004	0.0	105	0.00	10.47
49	m	iso-octane	1.155	1.185	-2.6	103	0.00	10.86
50		tert-amyl alcohol	0.015	0.015	0.0	95	0.00	10.68
51	I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	11.31
52		epichlorohydrin	0.020	0.020	0.0	105	0.00	12.98
53		n-butyl alcohol	0.005	0.005	0.0	101	0.00	11.49
54		carbon tetrachloride	0.368	0.382	-3.8	99	0.00	10.50
55		1,1-dichloropropene	0.311	0.349	-12.2	106	0.00	10.47
56		hexane	0.293	0.254	13.3	89	0.00	8.28
57		benzene	0.939	0.976	-3.9	102	0.00	10.80
58		tert-amyl methyl ether	0.681	0.702	-3.1	104	0.00	10.89
59		heptane	0.162	0.153	5.6	98	0.00	11.09
60		isopropyl acetate	0.384	0.373	2.9	102	0.00	10.77
61		1,2-dichloroethane	0.333	0.335	-0.6	100	0.00	10.82
62		trichloroethene	0.271	0.286	-5.5	102	0.00	11.74
63		2-nitropropane	0.058	0.057	1.7	101	0.00	12.80
64		2-chloroethyl vinyl ether	0.136	0.147	-8.1	103	0.00	12.84
65		methyl methacrylate	0.139	0.139	0.0	101	0.00	12.15
66		1,2-dichloropropane	0.257	0.256	0.4	98	0.00	12.09
67		dibromomethane	0.159	0.158	0.6	98	0.00	12.28
68		methylcyclohexane	0.414	0.409	1.2	98	0.00	12.05
69		bromodichloromethane	0.356	0.362	-1.7	98	0.00	12.47
70		cis-1,3-dichloropropene	0.420	0.435	-3.6	99	0.00	13.11
71	S	toluene-d8 (s)	1.154	1.148	0.5	101	0.00	13.51
72		4-methyl-2-pentanone	0.080	0.081	-1.3	99	0.00	13.29
73		toluene	0.587	0.612	-4.3	99	0.00	13.61
74		3-methyl-1-butanol	0.008	0.009	-12.5	101	0.00	13.31
75		trans-1,3-dichloropropene	0.392	0.384	2.0	96	0.00	13.88
76		ethyl methacrylate	0.283	0.282	0.4	98	0.00	13.93
77		1,1,2-trichloroethane	0.195	0.191	2.1	97	0.00	14.15
78		2-hexanone	0.068	0.070	-2.9	101	0.00	14.45
79	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	15.53
80		3,3-Dimethyl-1-butanol	0.021	0.021	0.0	99	0.00	14.67
81		tetrachloroethene	0.250	0.264	-5.6	100	0.00	14.38
82		1,3-dichloropropane	0.376	0.374	0.5	99	0.00	14.40
83		butyl acetate	0.140	0.147	-5.0	107	0.00	14.57
84		dibromochloromethane	0.312	0.317	-1.6	97	0.00	14.73
85		1,2-dibromoethane	0.251	0.249	0.8	96	0.00	14.93
86	m	n-butyl ether	1.084	1.154	-6.5	100	0.00	15.56
87		chlorobenzene	0.733	0.759	-3.5	99	0.00	15.57
88		1,1,1,2-tetrachloroethane	0.308	0.309	-0.3	95	0.00	15.65
89		ethylbenzene	1.195	1.247	-4.4	100	0.00	15.68
90		m,p-xylene	0.467	0.489	-4.7	99	0.00	15.82
91		o-xylene	0.489	0.528	-8.0	101	0.00	16.36
92		styrene	0.809	0.833	-3.0	98	0.00	16.37
93		bromoform	0.235	0.234	0.4	96	0.00	16.66
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	18.31
95		isopropylbenzene	2.245	2.387	-6.3	97	0.00	16.81
96	S	4-bromofluorobenzene (s)	0.813	0.822	-1.1	100	0.00	17.02
97	m	cyclohexanone	0.016	0.014	12.5	92	0.00	16.98
98		cis-1,4-dichloro-2-butene		----------NA----------				

6.8.2

6

Initial Calibration Verification

Job Number: JC18331 **Sample:** V2D6450-ICV6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D153400.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

99		bromobenzene	0.662	0.669	-1.1	97	0.00	17.24
100		1,1,2,2-tetrachloroethane	0.554	0.558	-0.7	96	0.00	17.15
101		trans-1,4-dichloro-2-bute	0.129	0.134	-3.9	99	0.00	17.22
102		1,2,3-trichloropropane	0.140	0.138	1.4	96	0.00	17.24
103		n-propylbenzene	2.532	2.734	-8.0	101	0.00	17.30
104		2-chlorotoluene	0.589	0.596	-1.2	94	0.00	17.43
105		4-chlorotoluene	1.627	1.654	-1.7	98	0.00	17.55
106		1,3,5-trimethylbenzene	1.927	2.019	-4.8	97	0.00	17.47
107		tert-butylbenzene	1.758	1.892	-7.6	97	0.00	17.86
108		pentachloroethane	0.453	0.463	-2.2	96	0.00	17.91
109		1,2,4-trimethylbenzene	1.976	2.089	-5.7	97	0.00	17.90
110		sec-butylbenzene	2.589	2.771	-7.0	97	0.00	18.09
111		1,3-dichlorobenzene	1.273	1.268	0.4	96	0.00	18.24
112		p-isopropyltoluene	2.254	2.458	-9.1	99	0.00	18.22
113		1,4-dichlorobenzene	1.252	1.272	-1.6	97	0.00	18.33
114		1,2-dichlorobenzene	1.278	1.306	-2.2	97	0.00	18.72
115		benzyl chloride	1.056	1.038	1.7	96	0.00	18.46
116		n-butylbenzene	1.122	1.207	-7.6	96	0.00	18.63
117		1,2-dibromo-3-chloropropa	0.139	0.143	-2.9	97	0.00	19.46
118		1,3,5-trichlorobenzene	1.178	1.249	-6.0	95	0.00	19.63
119		hexachlorobutadiene	0.589	0.638	-8.3	98	0.00	20.33
120		naphthalene	1.684	1.783	-5.9	96	0.00	20.47
121		1,2,4-trichlorobenzene	0.960	1.077	-12.2	97	0.00	20.21
122	m	1,2,3-trichlorobenzene	0.822	0.892	-8.5	95	0.00	20.68
123		hexachloroethane	0.484	0.527	-8.9	97	0.00	18.97

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D153395.D M2D6450.M Fri Mar 04 09:44:02 2016 MS2D

6.8.2

6

Continuing Calibration Summary

Job Number: JC18331 **Sample:** V2D6501-CC6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D154755.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2D...10\v2d6501\2D154755.D Vial: 1
Acq On : 16 Apr 2016 8:08 am Operator: Adilm
Sample : cc6450-20 Inst : MS2D
Misc : ms1001,v2d6501,w,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M2D6450.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Fri Mar 04 09:51:15 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	tert butyl alcohol-d9	1.000	1.000	0.0	123	-0.02	7.42
2		tertiary butyl alcohol	0.919	0.837	8.9	114	-0.02	7.55
3		ethyl alcohol	0.092	0.096	-4.3	131	-0.02	6.03
4		1,4-dioxane	0.091	0.083	8.8	110	-0.02	12.23
5	I	pentafluorobenzene	1.000	1.000	0.0	124	-0.02	10.13
6		chlorodifluoromethane	0.450	0.403	10.4	111	0.00	3.86
7		dichlorodifluoromethane	0.466	0.402	13.7	110	0.00	3.84
8		chloromethane	0.556	0.542	2.5	118	-0.02	4.20
9		vinyl chloride	0.501	0.495	1.2	118	-0.02	4.46
10		bromomethane	0.316	0.310	1.9	119	-0.02	5.11
11		chloroethane	0.239	0.248	-3.8	124	-0.01	5.29
12		trichlorofluoromethane	0.566	0.524	7.4	117	-0.01	5.78
13		ethyl ether	0.170	0.178	-4.7	128	-0.02	6.21
14		acrolein	0.059	0.063	-6.8	142	-0.02	6.46
15		1,1-dichloroethene	0.299	0.309	-3.3	121	-0.02	6.64
16	m	2-chloropropane	0.608	0.606	0.3	122	-0.02	6.41
17		acetone	0.023	0.023	0.0	128	-0.02	6.72
18		allyl chloride	0.193	0.202	-4.7	127	-0.02	7.23
19		acetonitrile	0.028	0.025	10.7	116	-0.03	7.18
20		iodomethane	0.673	0.681	-1.2	123	-0.02	6.93
21		carbon disulfide	1.043	1.092	-4.7	122	-0.02	7.06
22		methylene chloride	0.360	0.375	-4.2	127	-0.02	7.43
23		methyl acetate	0.046	0.045	2.2	124	-0.02	7.23
24	m	1-chloropropane	0.219	0.201	8.2	110	-0.01	7.49
25		methyl tert butyl ether	0.937	0.922	1.6	117	-0.02	7.84
26		trans-1,2-dichloroethene	0.338	0.355	-5.0	126	-0.02	7.87
27		di-isopropyl ether	1.063	1.113	-4.7	124	-0.02	8.57
28		2-butanone	0.031	0.030	3.2	123	-0.02	9.42
29		1,1-dichloroethane	0.616	0.632	-2.6	120	-0.02	8.53
30		chloroprene	0.468	0.455	2.8	113	-0.02	8.67
31		acrylonitrile	0.104	0.106	-1.9	125	-0.02	7.82
32		vinyl acetate	0.054	0.052	3.7	117	-0.03	8.55
33		ethyl tert-butyl ether	1.041	1.038	0.3	118	-0.02	9.13
34		ethyl acetate	0.036	0.036	0.0	121	-0.02	9.47
35		2,2-dichloropropane	0.510	0.544	-6.7	127	-0.03	9.45
36		cis-1,2-dichloroethene	0.383	0.398	-3.9	125	-0.02	9.43
37		propionitrile	0.041	0.038	7.3	118	-0.02	9.54
38		tert-Butyl Formate	0.265	0.296	-11.7	133	-0.03	9.98
39		bromochloromethane	0.196	0.206	-5.1	124	-0.02	9.81
40		tetrahydrofuran	0.083	0.079	4.8	125	-0.03	9.87
41		chloroform	0.616	0.614	0.3	118	-0.02	9.89

Continuing Calibration Summary

Job Number: JC18331 **Sample:** V2D6501-CC6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D154755.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

42	S	dibromofluoromethane (s)	0.437	0.453	-3.7	130	-0.02	10.14
43	S	1,2-dichloroethane-d4 (s)	0.464	0.429	7.5	114	-0.02	10.68
44		freon 113	0.280	0.286	-2.1	122	-0.02	6.65
45		methacrylonitrile	0.117	0.112	4.3	119	-0.02	9.77
46		1,1,1-trichloroethane	0.511	0.504	1.4	115	-0.02	10.22
47		cyclohexane	0.481	0.510	-6.0	129	-0.02	10.32
48		isobutyl alcohol	0.004	0.004	0.0	108	-0.02	10.45
49	m	iso-octane	1.155	1.184	-2.5	128	-0.02	10.84
50		tert-amyl alcohol	0.015	0.011	26.7#	101	-0.02	10.66
51	I	1,4-difluorobenzene	1.000	1.000	0.0	127	-0.02	11.29
52		epichlorohydrin	0.020	0.018	10.0	112	-0.02	12.96
53		n-butyl alcohol	0.005	0.005	0.0	114	-0.02	11.47
54		carbon tetrachloride	0.368	0.361	1.9	115	-0.02	10.47
55		1,1-dichloropropene	0.311	0.311	0.0	120	-0.02	10.45
56		hexane	0.293	0.298	-1.7	129	-0.02	8.26
57		benzene	0.939	0.960	-2.2	123	-0.03	10.78
58		tert-amyl methyl ether	0.681	0.647	5.0	115	-0.02	10.87
59		heptane	0.162	0.159	1.9	123	-0.02	11.07
60		isopropyl acetate	0.384	0.345	10.2	116	-0.02	10.75
61		1,2-dichloroethane	0.333	0.297	10.8	109	-0.02	10.79
62		trichloroethene	0.271	0.274	-1.1	121	-0.02	11.71
63		2-nitropropane	0.058	0.043	25.9#	89	-0.02	12.78
64		2-chloroethyl vinyl ether	0.136	0.140	-2.9	120	-0.02	12.82
65		methyl methacrylate	0.139	0.128	7.9	116	-0.02	12.13
66		1,2-dichloropropane	0.257	0.250	2.7	118	-0.03	12.07
67		dibromomethane	0.159	0.155	2.5	117	-0.02	12.26
68		methylcyclohexane	0.414	0.430	-3.9	129	-0.01	12.03
69		bromodichloromethane	0.356	0.337	5.3	114	-0.02	12.45
70		cis-1,3-dichloropropene	0.420	0.405	3.6	116	-0.02	13.09
71	S	toluene-d8 (s)	1.154	1.143	1.0	125	-0.02	13.49
72		4-methyl-2-pentanone	0.080	0.076	5.0	119	-0.02	13.27
73		toluene	0.587	0.586	0.2	119	-0.02	13.59
74		3-methyl-1-butanol	0.008	0.008	0.0	113	-0.02	13.29
75		trans-1,3-dichloropropene	0.392	0.356	9.2	113	-0.02	13.86
76		ethyl methacrylate	0.283	0.255	9.9	114	-0.02	13.91
77		1,1,2-trichloroethane	0.195	0.185	5.1	119	-0.02	14.13
78		2-hexanone	0.068	0.063	7.4	119	-0.02	14.43
79	I	chlorobenzene-d5	1.000	1.000	0.0	125	-0.02	15.51
80		3,3-Dimethyl-1-butanol	0.021	0.018	14.3	108	-0.01	14.66
81		tetrachloroethene	0.250	0.253	-1.2	119	-0.02	14.36
82		1,3-dichloropropane	0.376	0.368	2.1	119	-0.02	14.38
83		butyl acetate	0.140	0.134	4.3	118	-0.02	14.55
84		dibromochloromethane	0.312	0.304	2.6	116	-0.02	14.71
85		1,2-dibromoethane	0.251	0.242	3.6	118	-0.02	14.91
86	m	n-butyl ether	1.084	1.036	4.4	114	-0.02	15.54
87		chlorobenzene	0.733	0.743	-1.4	121	-0.02	15.55
88		1,1,1,2-tetrachloroethane	0.308	0.303	1.6	117	-0.02	15.63
89		ethylbenzene	1.195	1.186	0.8	115	-0.02	15.65
90		m,p-xylene	0.467	0.477	-2.1	119	-0.02	15.80
91		o-xylene	0.489	0.492	-0.6	117	-0.02	16.34
92		styrene	0.809	0.800	1.1	114	-0.02	16.36
93		bromoform	0.235	0.224	4.7	114	-0.02	16.65
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	121	-0.02	18.29
95		isopropylbenzene	2.245	2.306	-2.7	115	-0.01	16.79
96	S	4-bromofluorobenzene (s)	0.813	0.830	-2.1	122	-0.02	17.01
97	m	cyclohexanone	0.016	0.022	-37.5#	178	-0.02	16.96
98		cis-1,4-dichloro-2-butene		----------NA----------				

Continuing Calibration Summary

Job Number: JC18331 **Sample:** V2D6501-CC6450
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2D154755.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

99		bromobenzene	0.662	0.667	-0.8	117	-0.02	17.22
100		1,1,2,2-tetrachloroethane	0.554	0.547	1.3	117	-0.02	17.14
101		trans-1,4-dichloro-2-bute	0.129	0.114	11.6	107	-0.02	17.20
102		1,2,3-trichloropropane	0.140	0.140	0.0	117	-0.02	17.22
103		n-propylbenzene	2.532	2.564	-1.3	113	-0.02	17.27
104		2-chlorotoluene	0.589	0.599	-1.7	117	-0.02	17.42
105		4-chlorotoluene	1.627	1.579	3.0	111	-0.02	17.53
106		1,3,5-trimethylbenzene	1.927	1.926	0.1	113	-0.02	17.46
107		tert-butylbenzene	1.758	1.735	1.3	111	-0.01	17.84
108		pentachloroethane	0.453	0.460	-1.5	117	-0.01	17.90
109		1,2,4-trimethylbenzene	1.976	1.982	-0.3	111	-0.01	17.89
110		sec-butylbenzene	2.589	2.613	-0.9	113	-0.01	18.07
111		1,3-dichlorobenzene	1.273	1.267	0.5	115	-0.01	18.23
112		p-isopropyltoluene	2.254	2.219	1.6	110	-0.01	18.20
113		1,4-dichlorobenzene	1.252	1.229	1.8	114	-0.02	18.32
114		1,2-dichlorobenzene	1.278	1.263	1.2	113	-0.02	18.71
115		benzyl chloride	1.056	1.068	-1.1	119	-0.02	18.44
116		n-butylbenzene	1.122	1.117	0.4	111	-0.01	18.62
117		1,2-dibromo-3-chloropropa	0.139	0.125	10.1	110	-0.01	19.44
118		1,3,5-trichlorobenzene	1.178	1.132	3.9	108	-0.02	19.61
119		hexachlorobutadiene	0.589	0.553	6.1	105	-0.02	20.31
120		naphthalene	1.684	1.473	12.5	102	-0.02	20.45
121		1,2,4-trichlorobenzene	0.960	0.919	4.3	108	-0.02	20.19
122	m	1,2,3-trichlorobenzene	0.822	0.758	7.8	104	-0.01	20.67
123		hexachloroethane	0.484	0.470	2.9	111	-0.02	18.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D153394.D M2D6450.M Mon Apr 18 13:19:40 2016 ACC-VOA-DP

6.8.3

6

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154766.D
Acq On : 16 Apr 2016 2:08 pm
Operator : Adilm
Sample : jc18331-1
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 13:25:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.423	65	187314	500.00 ug/L	-0.02
5) pentafluorobenzene	10.139	168	631167	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.292	114	863910	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	799718	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	451720	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.144	113	284541	51.64 ug/L	-0.02
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.28%		
43) 1,2-dichloroethane-d4 (s)	10.684	65	262550	44.80 ug/L	-0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 89.60%		
71) toluene-d8 (s)	13.494	98	979125	49.11 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.22%		
96) 4-bromofluorobenzene (s)	17.007	95	373372	50.85 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.70%		
Target Compounds					Qvalue
41) chloroform	9.898	83	2349	0.30 ug/L	91

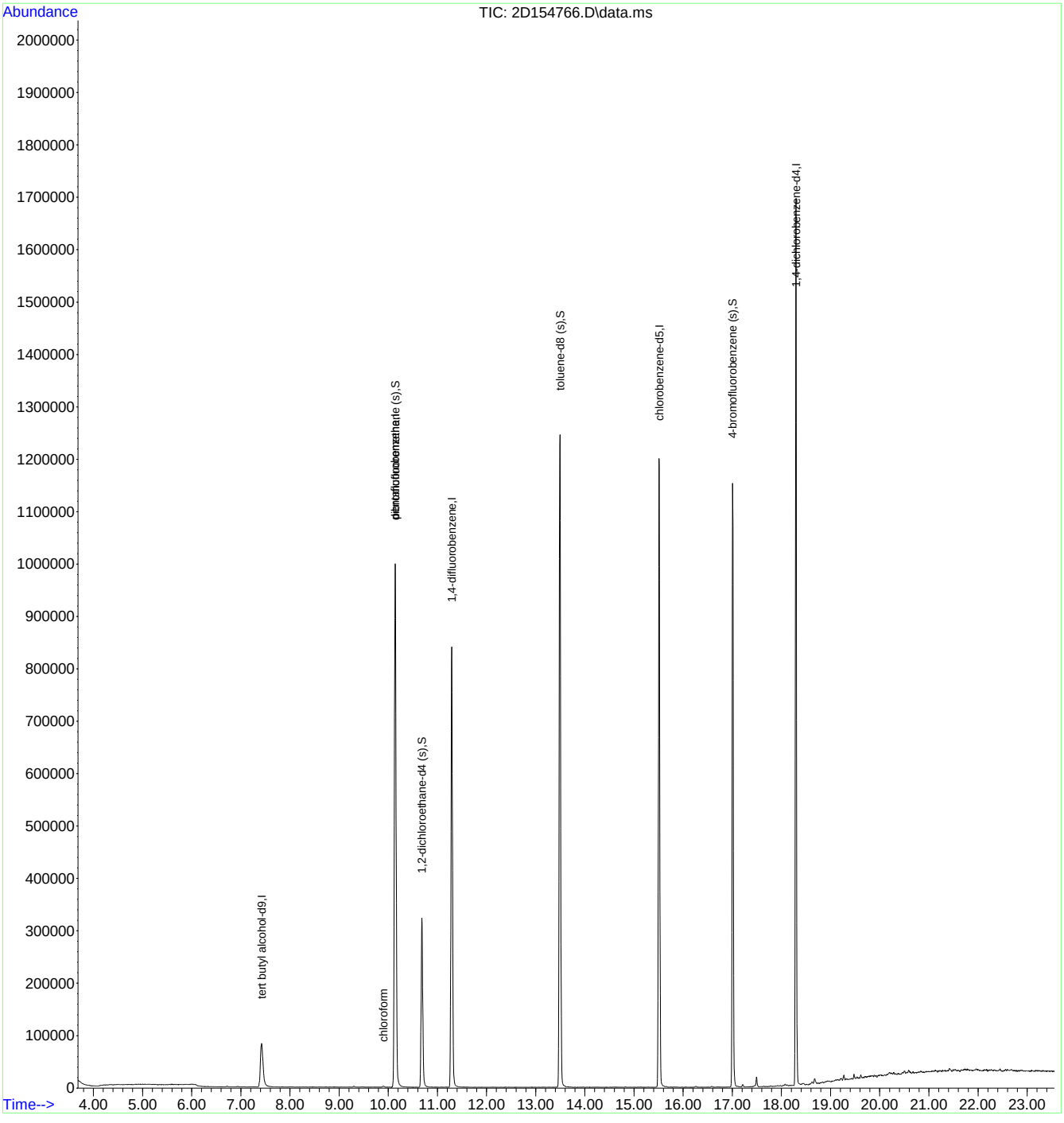
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18331

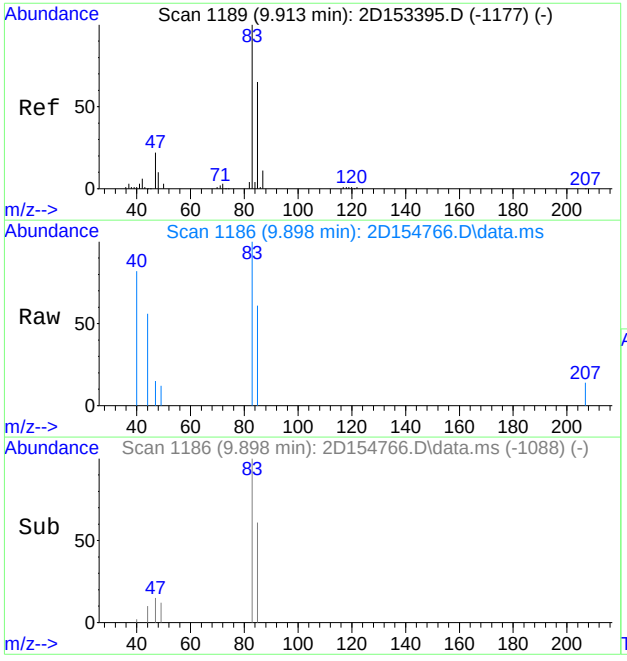
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154766.D
Acq On : 16 Apr 2016 2:08 pm
Operator : Adilm
Sample : jc18331-1
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 13:25:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



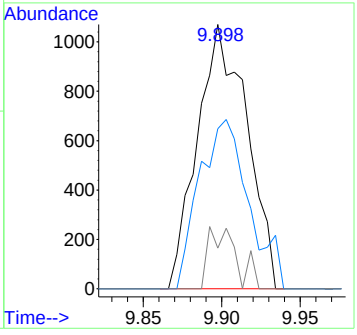
M2D6450.M Mon Apr 18 13:41:09 2016 ACC-VOA-DP Page: 2



#41
chloroform
Concen: 0.30 ug/L
RT: 9.898 min Scan# 1186
Delta R.T. -0.016 min
Lab File: 2D154766.D
Acq: 16 Apr 2016 2:08 pm

Tgt Ion: 83 Resp: 2349

Ion	Ratio	Lower	Upper
83	100		
85	60.5	35.0	95.0
47	15.4	0.0	53.8



7.1.1

7

Manual Integrations
APPROVED
(compounds with "m" flag)
MoHui Huang
04/25/16 17:15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154772.D
Acq On : 16 Apr 2016 5:12 pm
Operator : Adilm
Sample : jc18331-2
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 25 17:04:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.428	65	217171	500.00 ug/L	-0.01
5) pentafluorobenzene	10.144	168	665071	50.00 ug/L	-0.01
51) 1,4-difluorobenzene	11.292	114	897011	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	827484	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	467966	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.149	113	296446	51.06 ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.12%		
43) 1,2-dichloroethane-d4 (s)	10.689	65	268055	43.41 ug/L	-0.01
Spiked Amount 50.000	Range 73 - 122		Recovery = 86.82%		
71) toluene-d8 (s)	13.494	98	1009014	48.74 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.48%		
96) 4-bromofluorobenzene (s)	17.012	95	416581	54.76 ug/L	-0.01
Spiked Amount 50.000	Range 78 - 117		Recovery = 109.52%		
Target Compounds					Qvalue
17) acetone	6.726	58	2478	8.13 ug/L #	68
21) carbon disulfide	7.072	76	4105	0.30 ug/L	89
25) methyl tert butyl ether	7.853	73	3372	0.27 ug/L #	1
47) cyclohexane	10.322	84	72115	11.27 ug/L	83
57) benzene	10.789	78	22194	1.32 ug/L	93
68) methylcyclohexane	12.037	83	137341	18.47 ug/L	96
73) toluene	13.594	92	1819	0.17 ug/L #	69
91) o-xylene	16.347	106	2889	0.36 ug/L	94
95) isopropylbenzene	16.798	105	284089	13.52 ug/L	97
103) n-propylbenzene	17.285	91	445826	18.81 ug/L	96
106) 1,3,5-trimethylbenzene	17.463	105	36235	2.01 ug/L	89
107) tert-butylbenzene	17.846	119	27919	1.70 ug/L	83
109) 1,2,4-trimethylbenzene	17.893	105	2427059	131.26 ug/L	96
110) sec-butylbenzene	18.077	105	249471	10.29 ug/L	98
112) p-isopropyltoluene	18.208	119	18929	0.90 ug/L	95
116) n-butylbenzene	18.622	92	68049	6.48 ug/L	96
120) naphthalene	20.457	128	2085841m	132.33 ug/L	

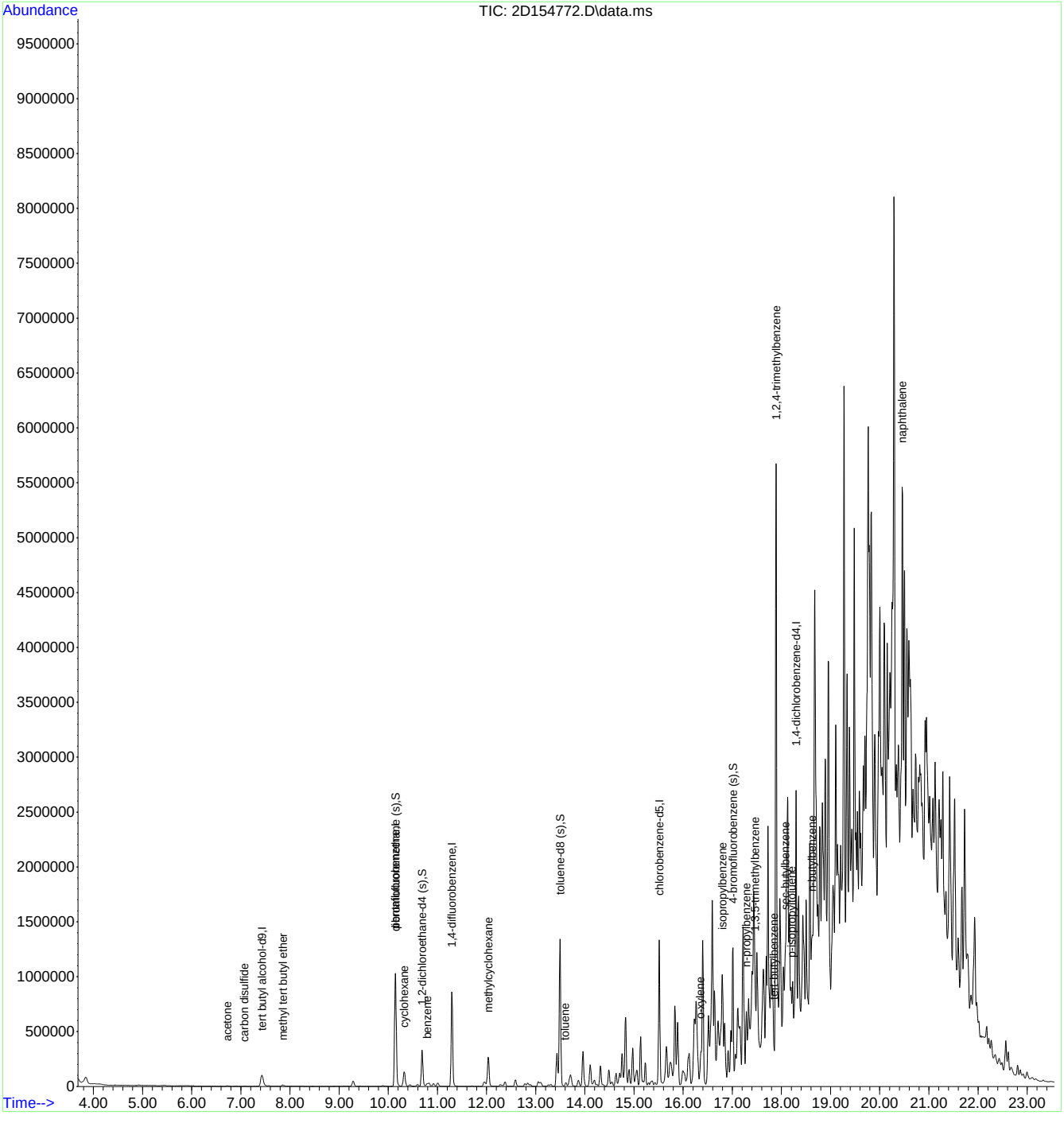
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.2
7

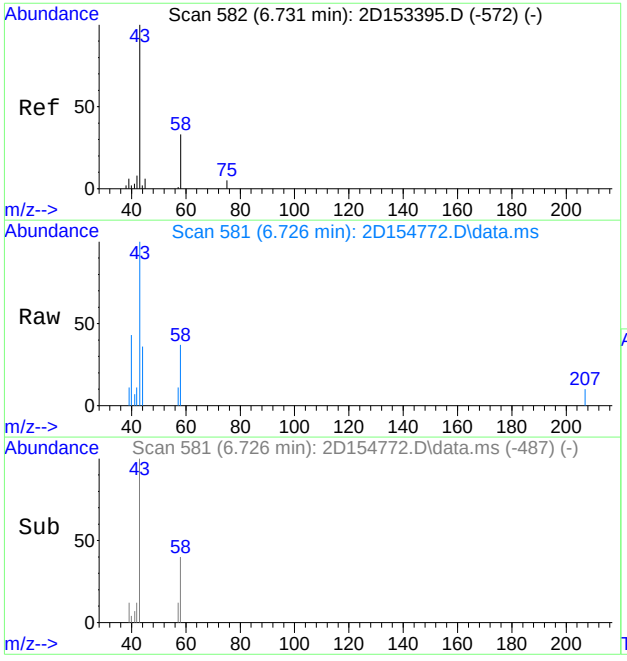
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154772.D
Acq On : 16 Apr 2016 5:12 pm
Operator : Adilm
Sample : jc18331-2
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 25 17:04:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



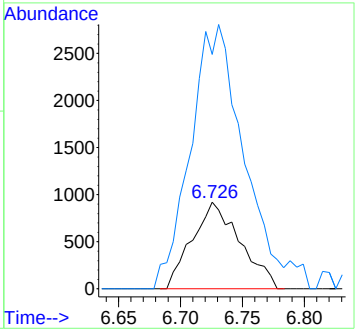
SGS ACCUTEST JC18331

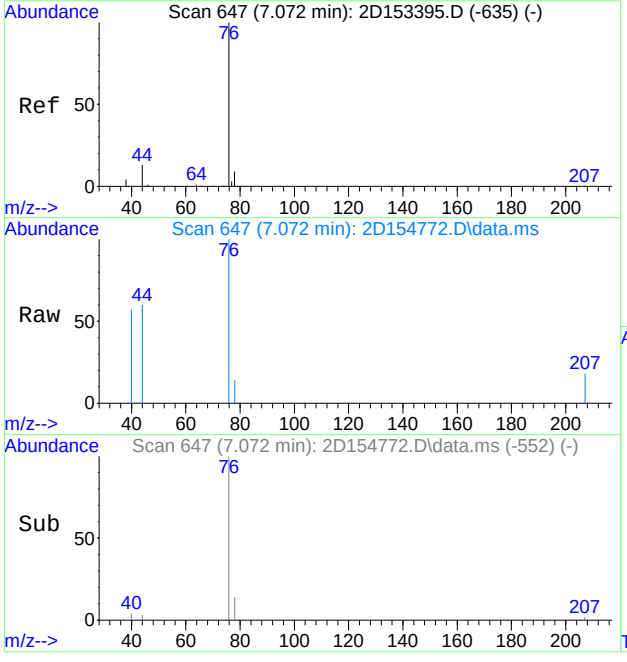


#17
acetone
Concen: 8.13 ug/L
RT: 6.726 min Scan# 581
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 58 Resp: 2478

Ion	Ratio	Lower	Upper
58	100		
43	246.1	280.0	340.0#

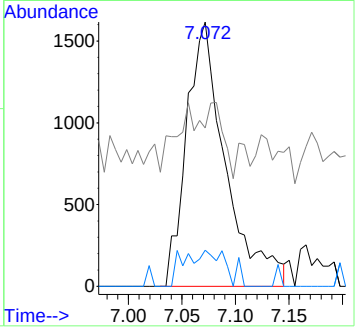




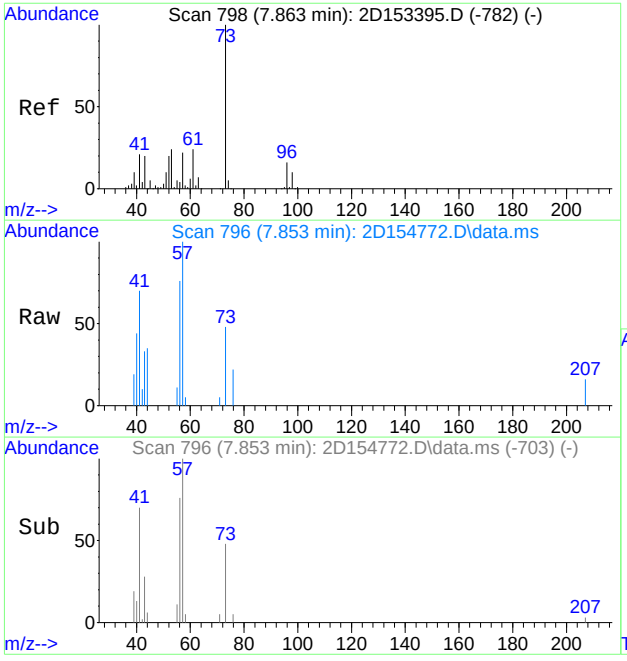
#21
carbon disulfide
Concen: 0.30 ug/L
RT: 7.072 min Scan# 647
Delta R.T. 0.000 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 76 Resp: 4105

Ion	Ratio	Lower	Upper
76	100		
78	13.7	0.0	38.9
44	16.7	0.0	43.0



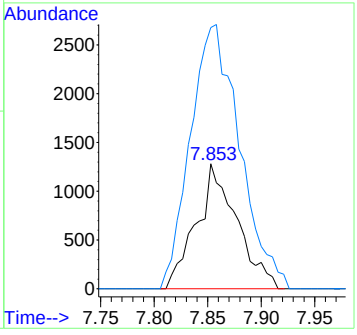
SGS ACCUTEST JC18331

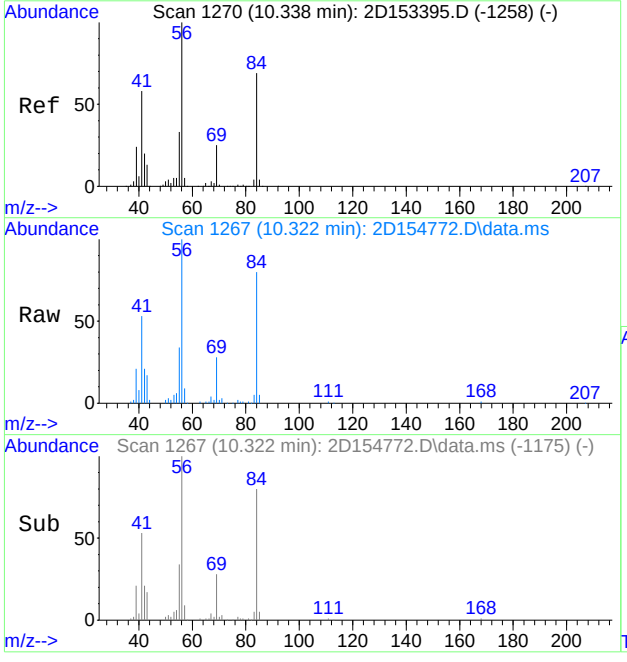


#25
methyl tert butyl ether
Concen: 0.27 ug/L
RT: 7.853 min Scan# 796
Delta R.T. -0.010 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 73 Resp: 3372

Ion	Ratio	Lower	Upper
73	100		
57	208.7	0.0	51.6#

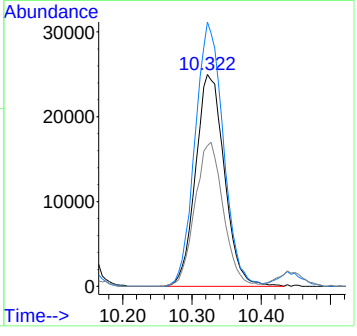


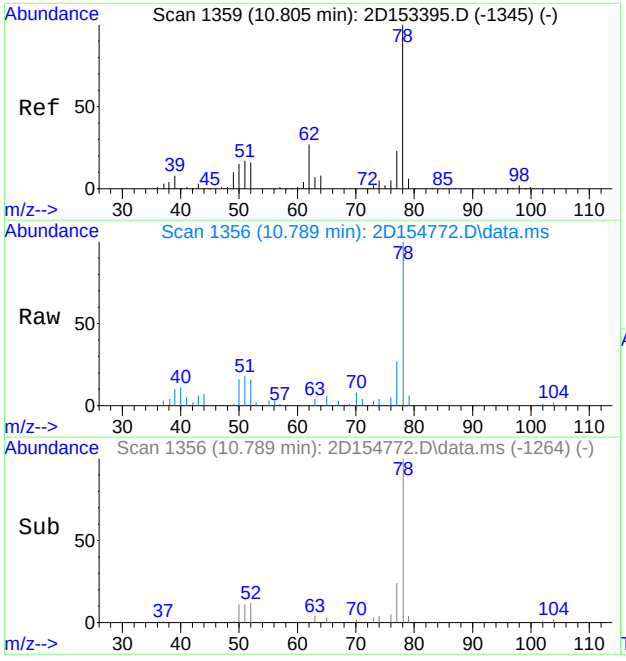


#47
cyclohexane
Concen: 11.27 ug/L
RT: 10.322 min Scan# 1267
Delta R.T. -0.016 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 84 Resp: 72115

Ion	Ratio	Lower	Upper
84	100		
56	124.8	101.0	187.6
41	66.4	58.4	108.6

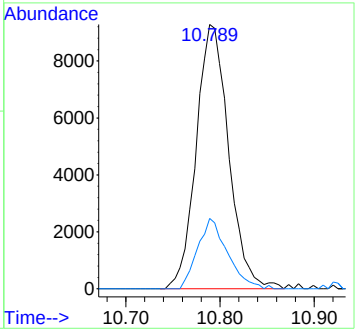


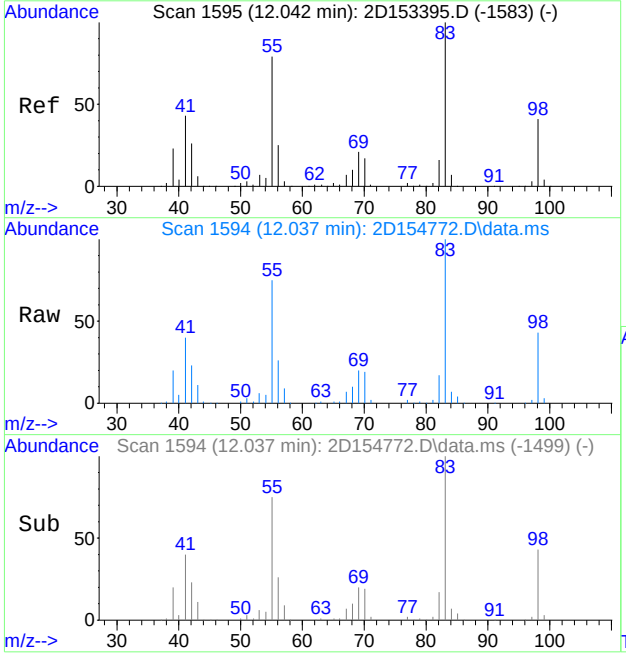


#57
benzene
Concen: 1.32 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. -0.016 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 78 Resp: 22194

Ion	Ratio	Lower	Upper
78	100		
77	26.6	0.0	53.0

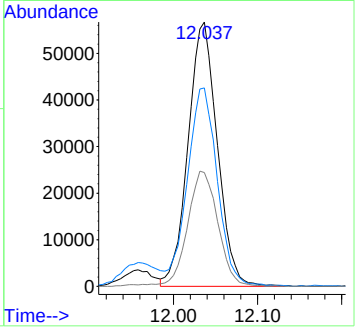




#68
methylcyclohexane
Concen: 18.47 ug/L
RT: 12.037 min Scan# 1594
Delta R.T. -0.004 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

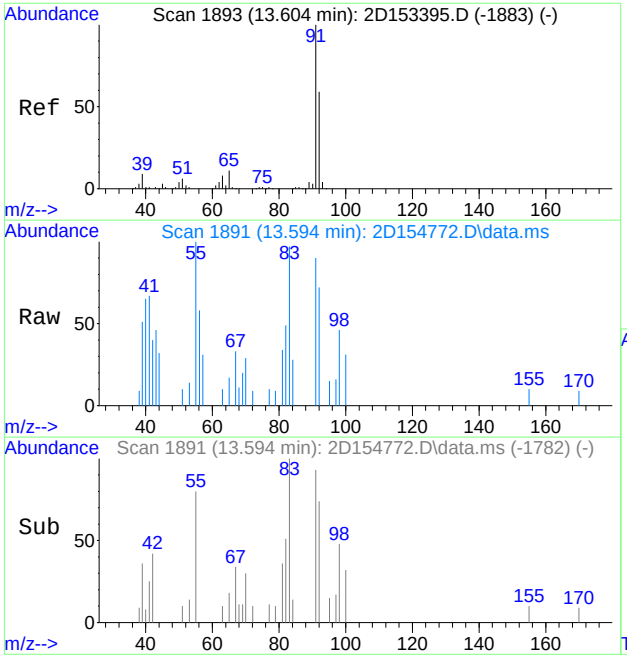
Tgt Ion: 83 Resp: 137341

Ion	Ratio	Lower	Upper
83	100		
55	74.6	49.1	109.1
98	43.0	11.3	71.3



7.1.2

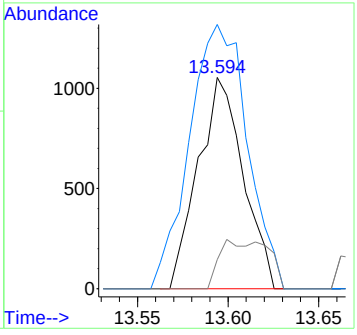
7

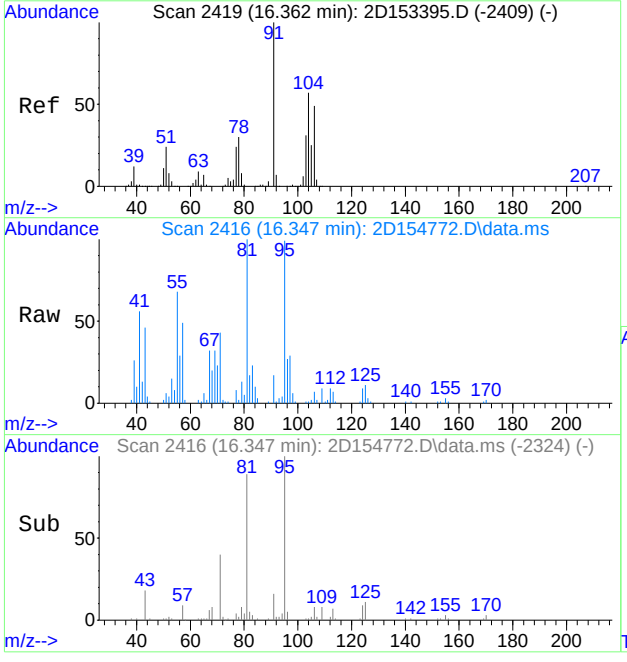


#73
toluene
Concen: 0.17 ug/L
RT: 13.594 min Scan# 1891
Delta R.T. -0.010 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 92 Resp: 1819

Ion	Ratio	Lower	Upper
92	100		
91	125.1	140.3	200.3#
51	13.8	0.0	40.9

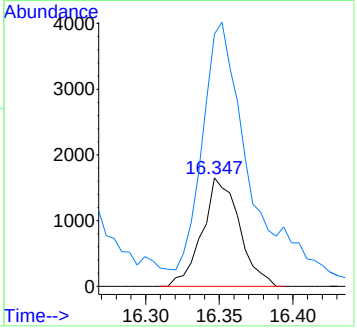




#91
o-xylene
Concen: 0.36 ug/L
RT: 16.347 min Scan# 2416
Delta R.T. -0.016 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion:106 Resp: 2889

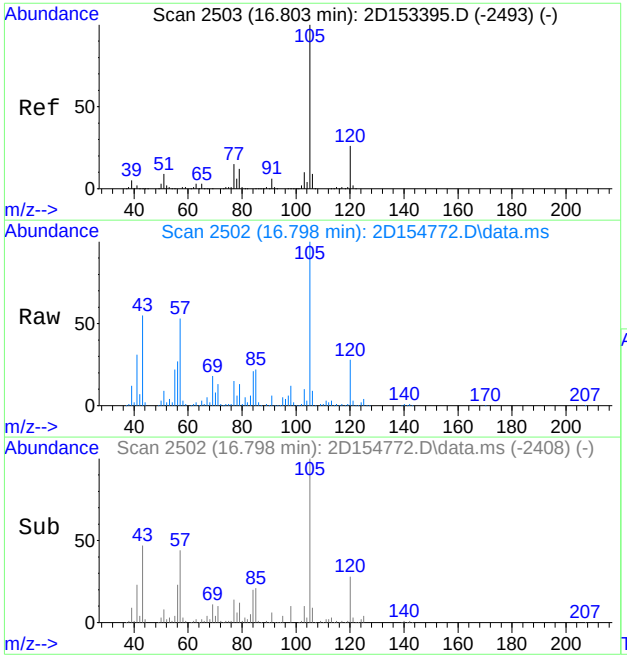
Ion	Ratio	Lower	Upper
106	100		
91	215.4	175.8	235.8



7.1.2

7

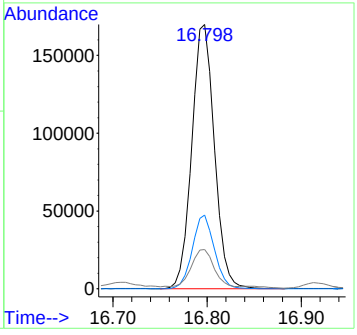
SGS ACCUTEST JC18331

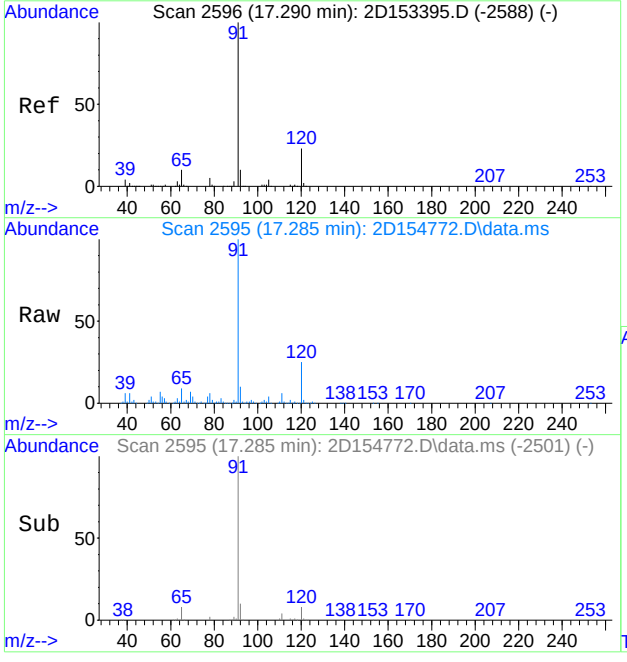


#95
isopropylbenzene
Concen: 13.52 ug/L
RT: 16.798 min Scan# 2502
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion:105 Resp: 284089

Ion	Ratio	Lower	Upper
105	100		
120	27.9	0.0	56.2
77	14.6	0.0	45.1

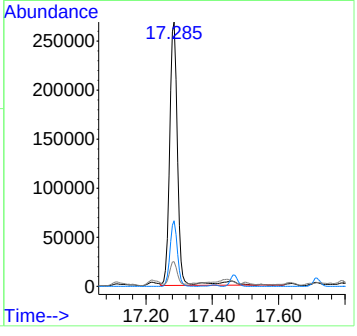




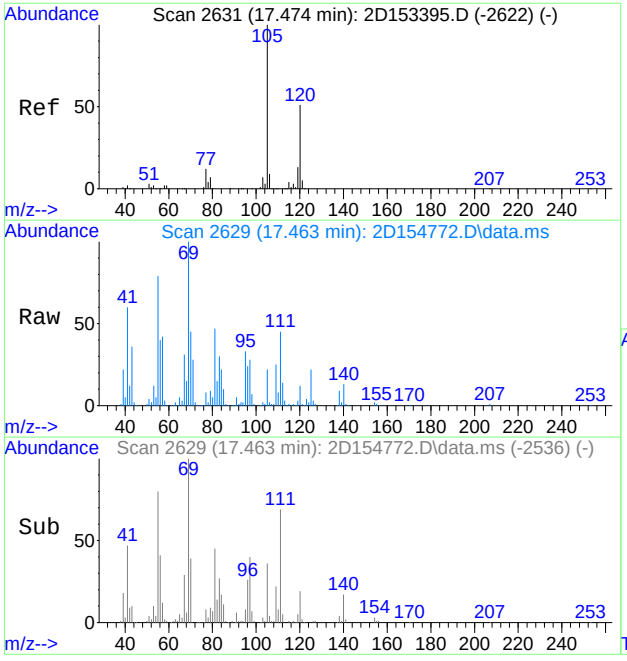
#103
n-propylbenzene
Concen: 18.81 ug/L
RT: 17.285 min Scan# 2595
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 91 Resp: 445826

Ion	Ratio	Lower	Upper
91	100		
120	24.9	0.0	53.4
65	8.5	0.0	40.2



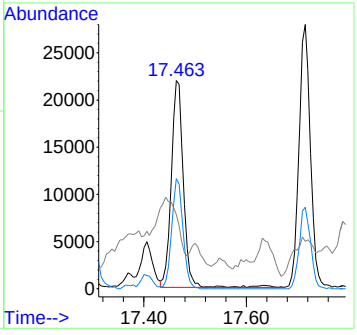
SGS ACCUTEST JC18331

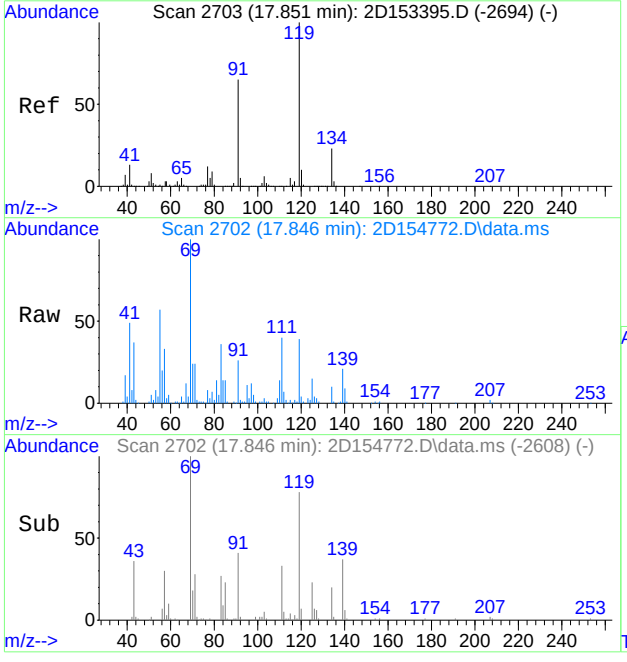


#106
1,3,5-trimethylbenzene
Concen: 2.01 ug/L
RT: 17.463 min Scan# 2629
Delta R.T. -0.010 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion:105 Resp: 36235

Ion	Ratio	Lower	Upper
105	100		
120	53.2	20.7	80.7
77	29.0	0.0	42.0

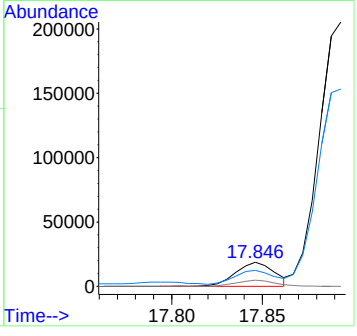




#107
tert-butylbenzene
Concen: 1.70 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

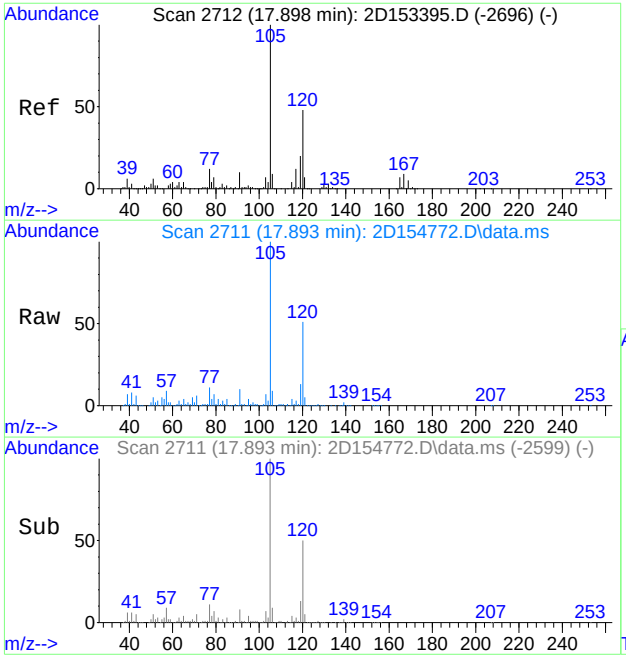
Tgt Ion:119 Resp: 27919

Ion	Ratio	Lower	Upper
119	100		
91	48.1	35.1	95.1
134	26.2	0.0	53.2



7.1.2

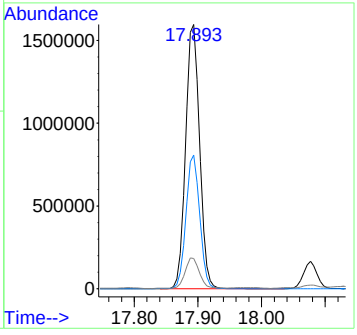
7

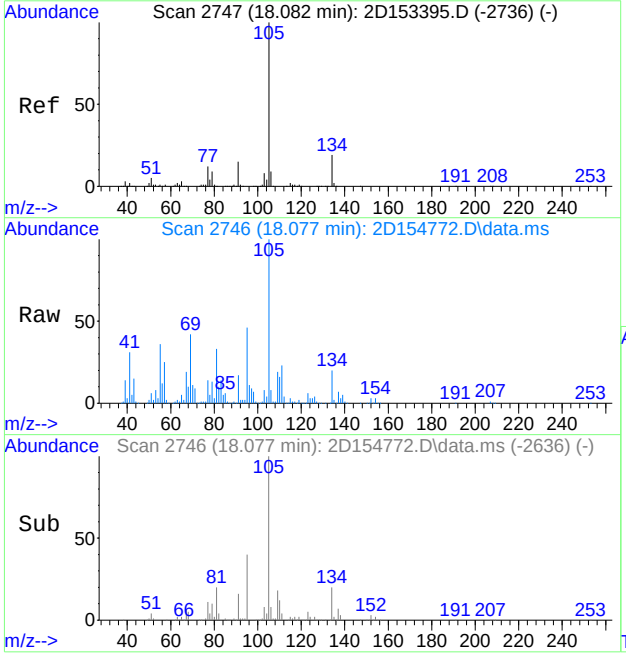


#109
1,2,4-trimethylbenzene
Concen: 131.26 ug/L
RT: 17.893 min Scan# 2711
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion:105 Resp: 2427059

Ion	Ratio	Lower	Upper
105	100		
120	50.5	17.8	77.8
77	11.3	0.0	41.9

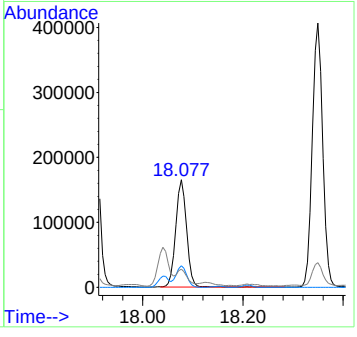


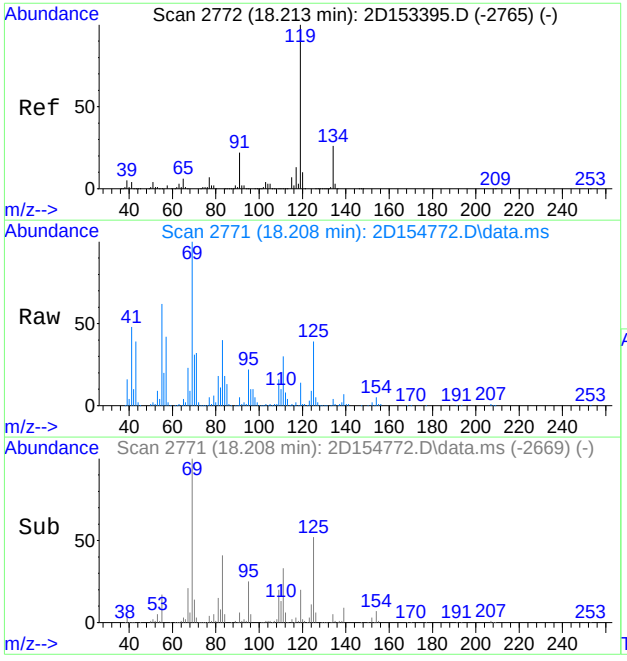


#110
sec-butylbenzene
Concen: 10.29 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion:105 Resp: 249471

Ion	Ratio	Lower	Upper
105	100		
134	20.2	0.0	48.9
91	15.4	0.0	45.2

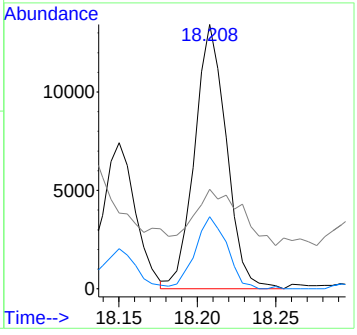


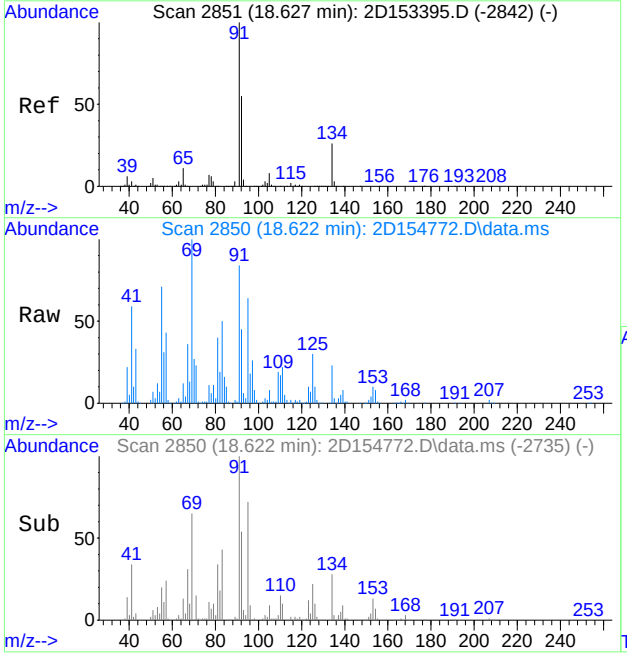


#112
p-isopropyltoluene
Concen: 0.90 ug/L
RT: 18.208 min Scan# 2771
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion:119 Resp: 18929

Ion	Ratio	Lower	Upper
119	100		
134	27.3	0.0	55.7
91	18.5	0.0	51.5

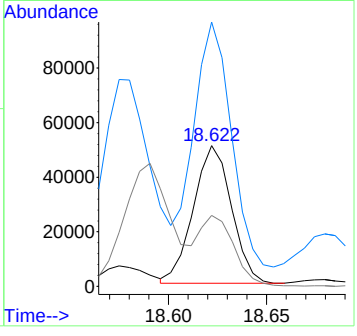


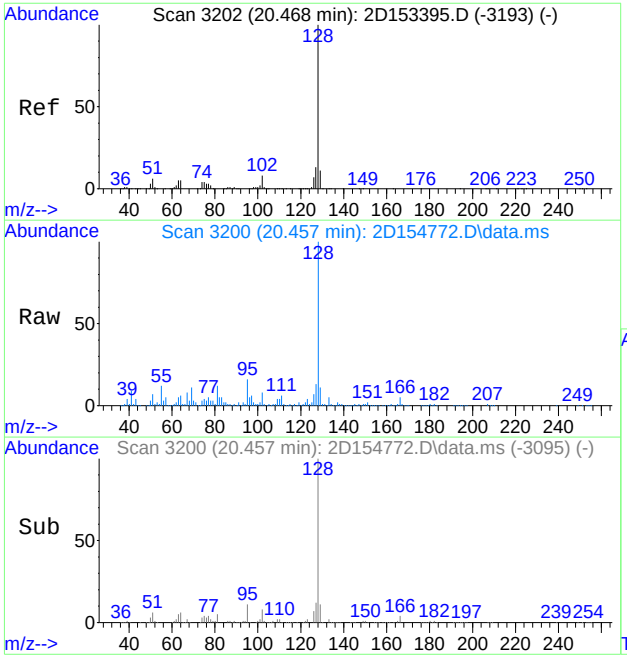


#116
n-butylbenzene
Concen: 6.48 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. -0.005 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion: 92 Resp: 68049

Ion	Ratio	Lower	Upper
92	100		
91	175.9	151.0	211.0
134	51.2	17.8	77.8

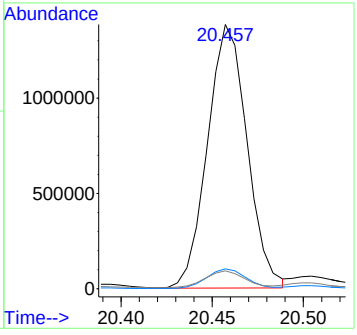




#120
naphthalene
Concen: 132.33 ug/L m
RT: 20.457 min Scan# 3200
Delta R.T. -0.010 min
Lab File: 2D154772.D
Acq: 16 Apr 2016 5:12 pm

Tgt Ion:128 Resp: 2085841

Ion	Ratio	Lower	Upper
128	100		
102	7.6	0.0	37.5
51	6.8	0.0	36.4



7.1.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154760.D
Acq On : 16 Apr 2016 11:05 am
Operator : Adilm
Sample : jc18331-3
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 18 13:21:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

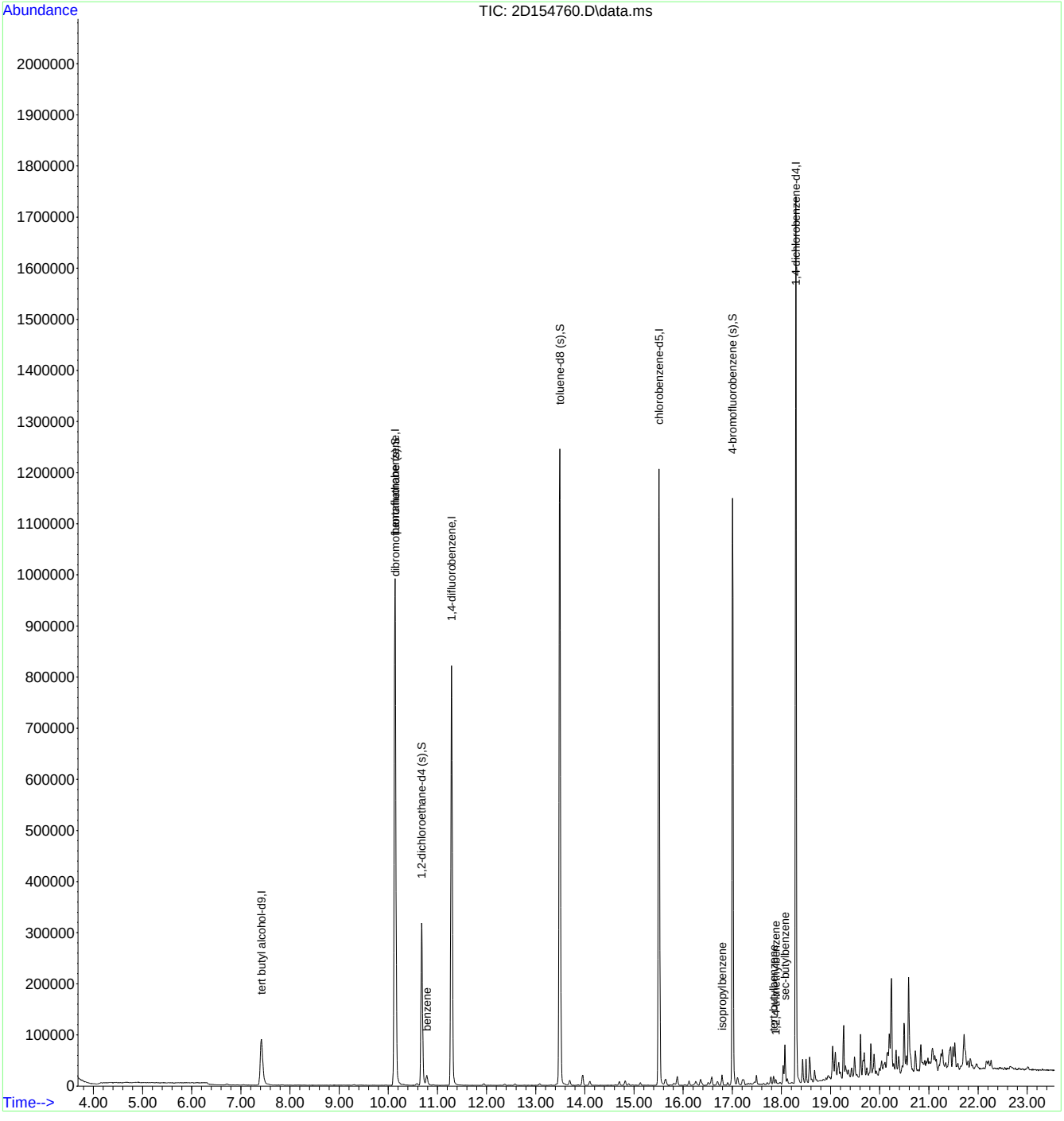
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.418	65	191150	500.00 ug/L	-0.02
5) pentafluorobenzene	10.139	168	608815	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.287	114	833836	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.508	117	785652	50.00 ug/L	-0.02
94) 1,4-dichlorobenzene-d4	18.292	152	445261	50.00 ug/L	-0.02
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.144	113	275491	51.83 ug/L	-0.02
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.66%		
43) 1,2-dichloroethane-d4 (s)	10.679	65	259368	45.88 ug/L	-0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 91.76%		
71) toluene-d8 (s)	13.489	98	961666	49.97 ug/L	-0.02
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.94%		
96) 4-bromofluorobenzene (s)	17.007	95	366146	50.59 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.18%		
Target Compounds					Qvalue
57) benzene	10.784	78	19557	1.25 ug/L	99
95) isopropylbenzene	16.792	105	12403	0.62 ug/L	96
107) tert-butylbenzene	17.841	119	8299	0.53 ug/L	98
109) 1,2,4-trimethylbenzene	17.883	105	4319	0.25 ug/L	95
110) sec-butylbenzene	18.071	105	49979	2.17 ug/L	94

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

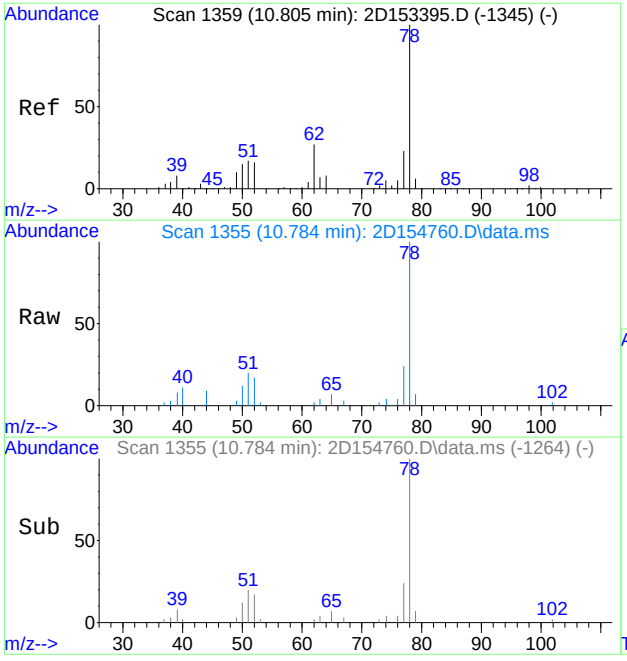
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154760.D
Acq On : 16 Apr 2016 11:05 am
Operator : Adilm
Sample : jc18331-3
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 18 13:21:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



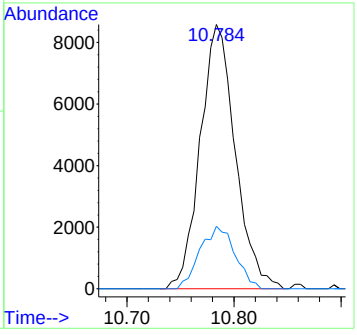
M2D6450.M Mon Apr 18 13:40:57 2016 ACC-VOA-DP Page: 2

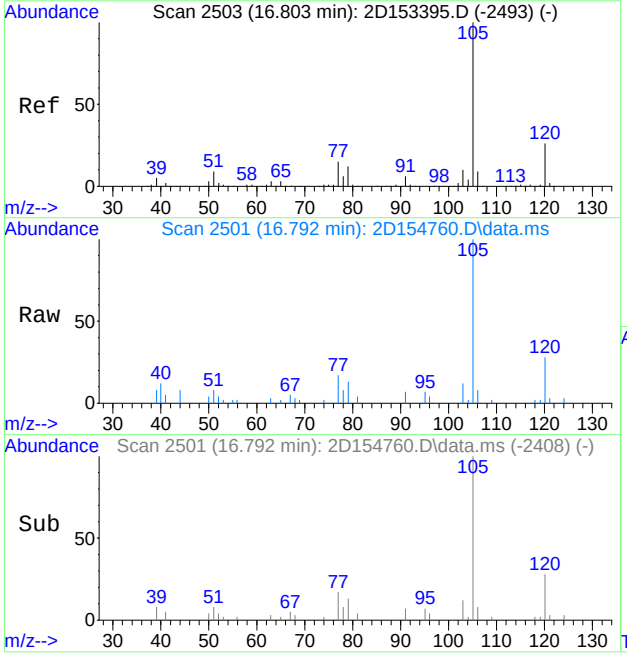


#57
benzene
Concen: 1.25 ug/L
RT: 10.784 min Scan# 1355
Delta R.T. -0.021 min
Lab File: 2D154760.D
Acq: 16 Apr 2016 11:05 am

Tgt Ion: 78 Resp: 19557

Ion	Ratio	Lower	Upper
78	100		
77	23.7	0.0	53.0

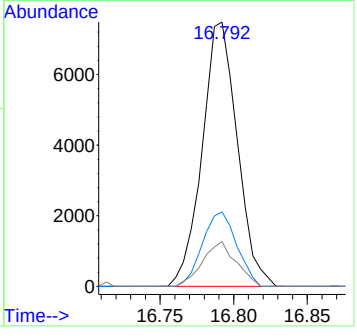


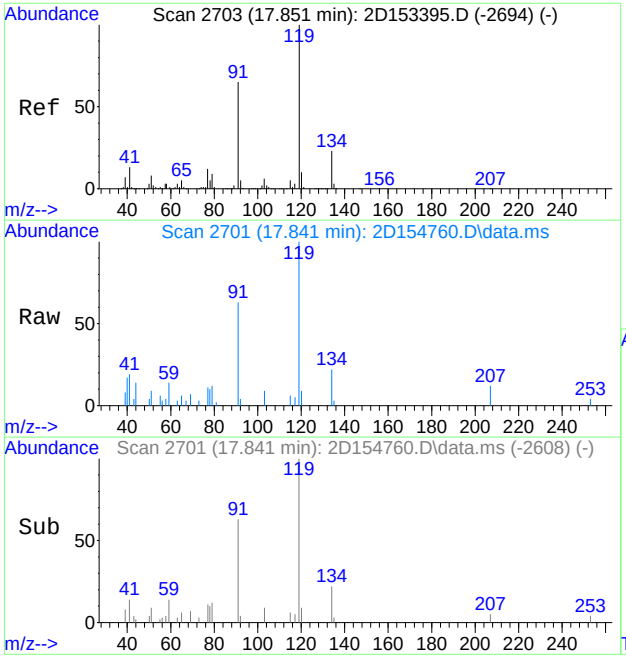


#95
isopropylbenzene
Concen: 0.62 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. -0.011 min
Lab File: 2D154760.D
Acq: 16 Apr 2016 11:05 am

Tgt Ion:105 Resp: 12403

Ion	Ratio	Lower	Upper
105	100		
120	28.2	0.0	56.2
77	17.0	0.0	45.1

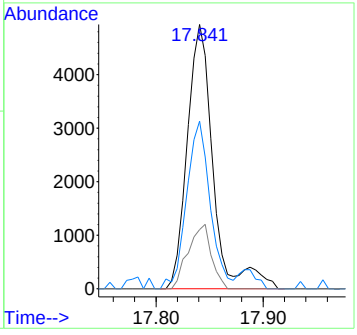


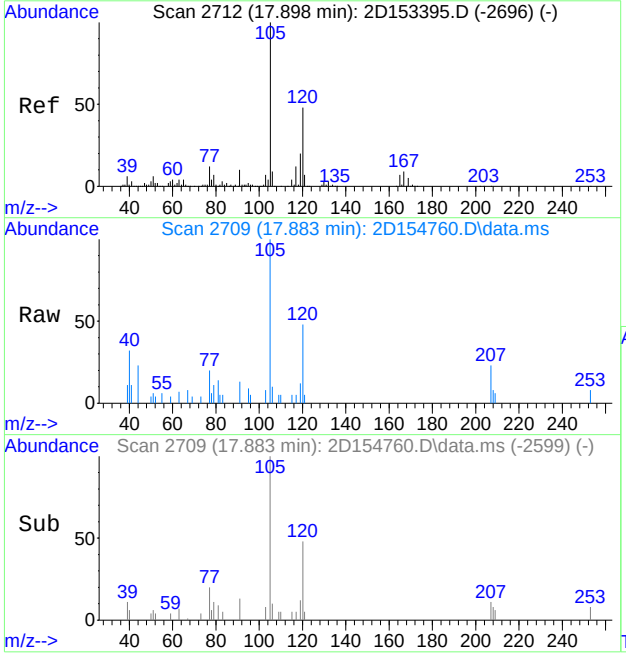


#107
tert-butylbenzene
Concen: 0.53 ug/L
RT: 17.841 min Scan# 2701
Delta R.T. -0.011 min
Lab File: 2D154760.D
Acq: 16 Apr 2016 11:05 am

Tgt Ion:119 Resp: 8299

Ion	Ratio	Lower	Upper
119	100		
91	63.4	35.1	95.1
134	22.4	0.0	53.2

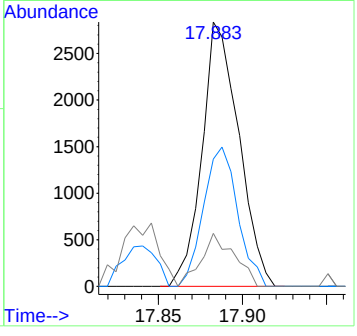


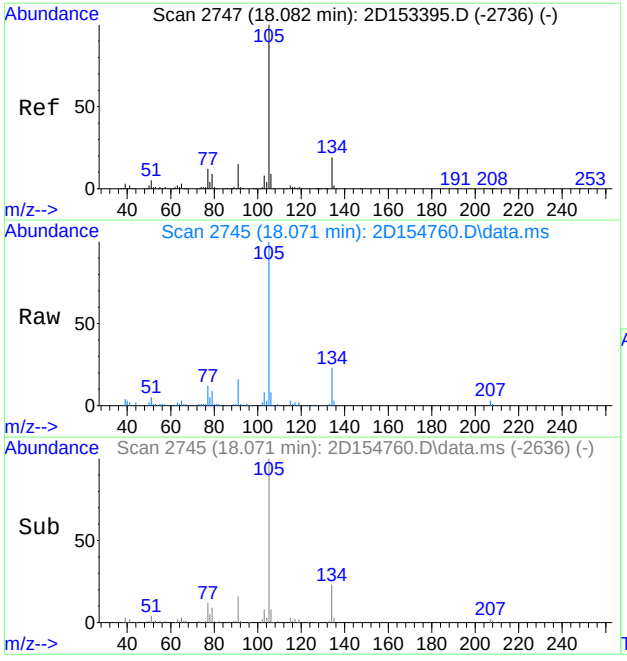


#109
1,2,4-trimethylbenzene
Concen: 0.25 ug/L
RT: 17.883 min Scan# 2709
Delta R.T. -0.016 min
Lab File: 2D154760.D
Acq: 16 Apr 2016 11:05 am

Tgt Ion:105 Resp: 4319

Ion	Ratio	Lower	Upper
105	100		
120	48.1	17.8	77.8
77	20.0	0.0	41.9

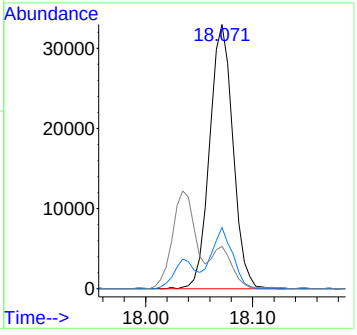




#110
sec-butylbenzene
Concen: 2.17 ug/L
RT: 18.071 min Scan# 2745
Delta R.T. -0.011 min
Lab File: 2D154760.D
Acq: 16 Apr 2016 11:05 am

Tgt Ion:105 Resp: 49979

Ion	Ratio	Lower	Upper
105	100		
134	23.2	0.0	48.9
91	15.5	0.0	45.2



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 04/20/16 13:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154761.D
Acq On : 16 Apr 2016 11:35 am
Operator : Adilm
Sample : jc18331-4
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 19 16:40:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.418	65	184158	500.00 ug/L	-0.02
5) pentafluorobenzene	10.134	168	618127	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.287	114	845895	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.508	117	794805	50.00 ug/L	-0.02
94) 1,4-dichlorobenzene-d4	18.292	152	456086	50.00 ug/L	-0.02
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.144	113	280502	51.98 ug/L	-0.02
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.96%		
43) 1,2-dichloroethane-d4 (s)	10.679	65	261543	45.57 ug/L	-0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 91.14%		
71) toluene-d8 (s)	13.489	98	961824	49.27 ug/L	-0.02
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.54%		
96) 4-bromofluorobenzene (s)	17.007	95	374256	50.48 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.96%		
Target Compounds					Qvalue
25) methyl tert butyl ether	7.848	73	28157	2.43 ug/L	98
57) benzene	10.784	78	32369	2.04 ug/L	99
73) toluene	13.589	92	15733	1.58 ug/L	96
107) tert-butylbenzene	17.841	119	6385	0.40 ug/L	93
110) sec-butylbenzene	18.072	105	47454	2.01 ug/L	99
116) n-butylbenzene	18.617	92	2251	0.22 ug/L	91
120) naphthalene	20.452	128	38895m	2.53 ug/L	

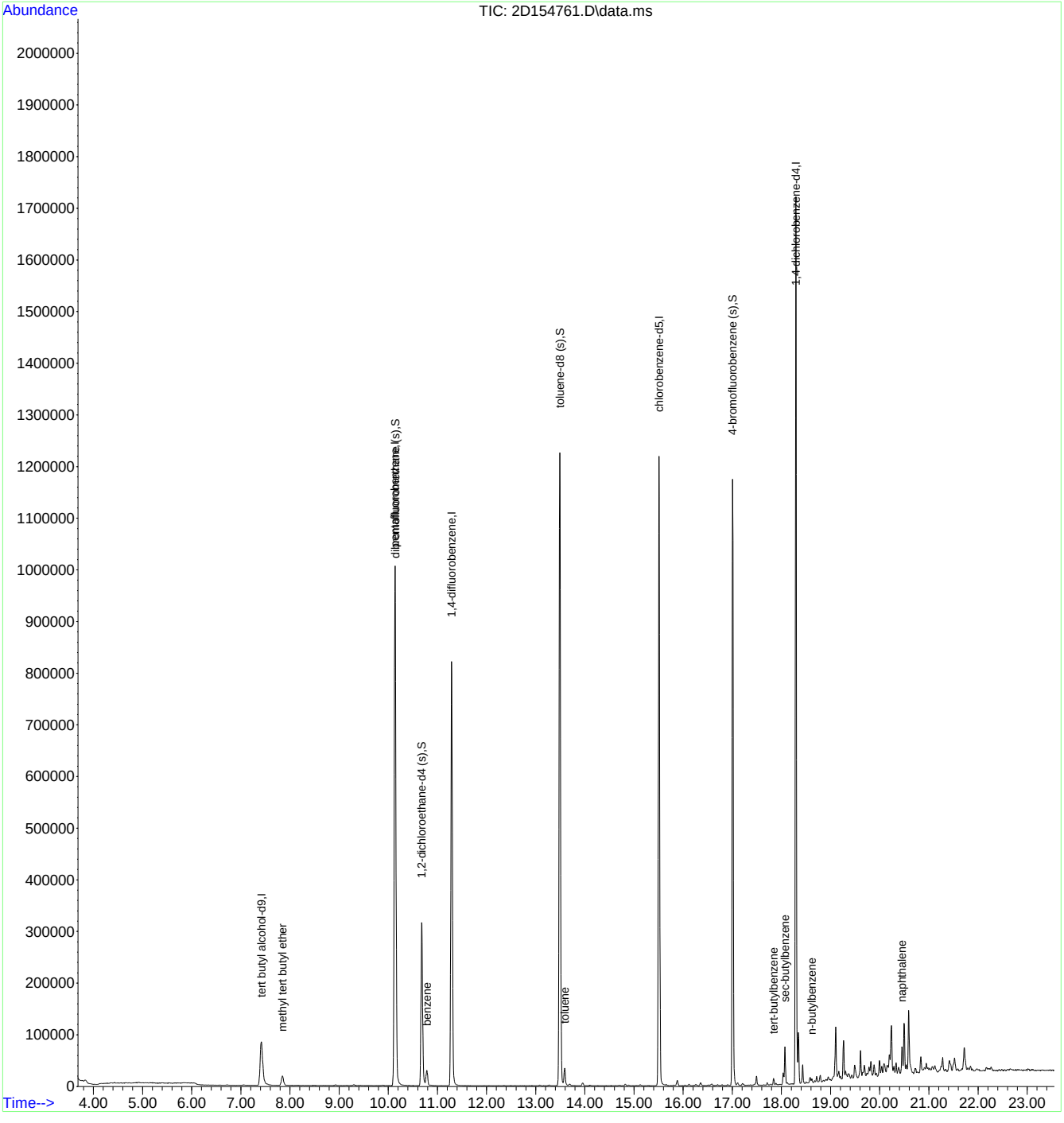
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.4
7

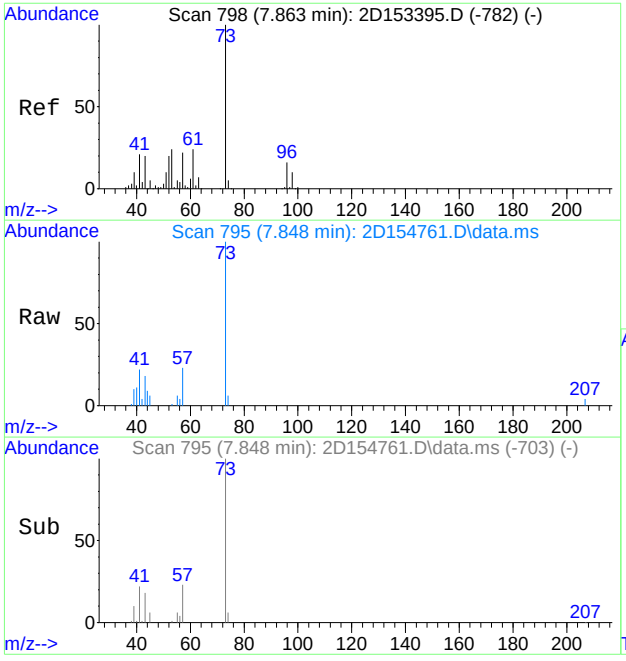
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154761.D
Acq On : 16 Apr 2016 11:35 am
Operator : Adilm
Sample : jc18331-4
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 19 16:40:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



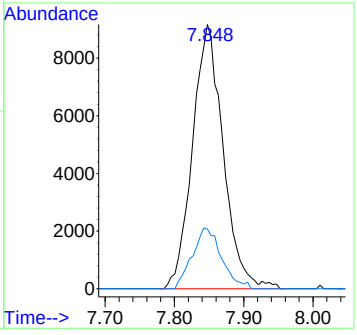
SGS ACCUTEST JC18331

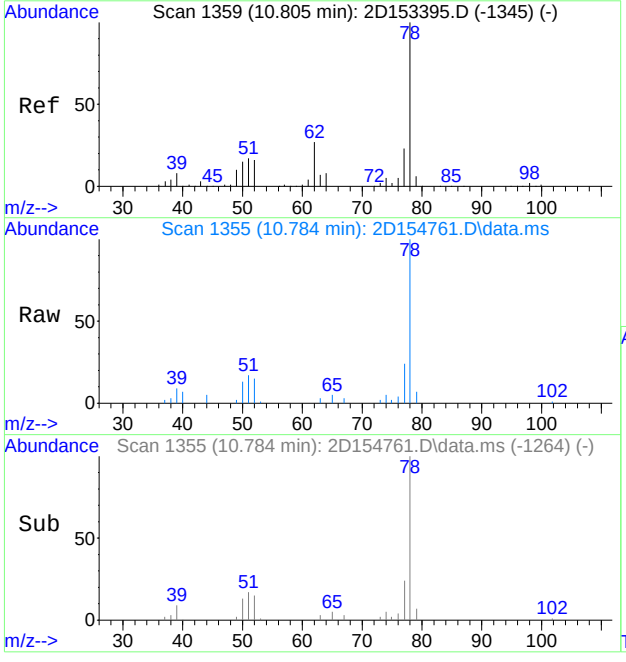


#25
methyl tert butyl ether
Concen: 2.43 ug/L
RT: 7.848 min Scan# 795
Delta R.T. -0.016 min
Lab File: 2D154761.D
Acq: 16 Apr 2016 11:35 am

Tgt Ion: 73 Resp: 28157

Ion	Ratio	Lower	Upper
73	100		
57	22.6	0.0	51.6

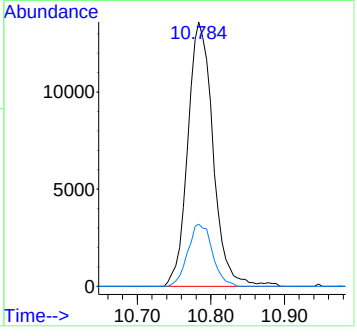




#57
benzene
Concen: 2.04 ug/L
RT: 10.784 min Scan# 1355
Delta R.T. -0.021 min
Lab File: 2D154761.D
Acq: 16 Apr 2016 11:35 am

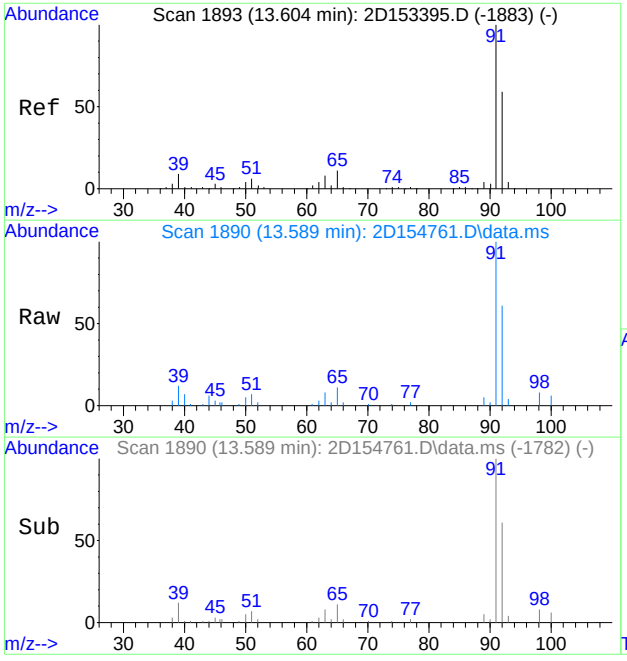
Tgt Ion: 78 Resp: 32369

Ion	Ratio	Lower	Upper
78	100		
77	23.5	0.0	53.0



7.1.4

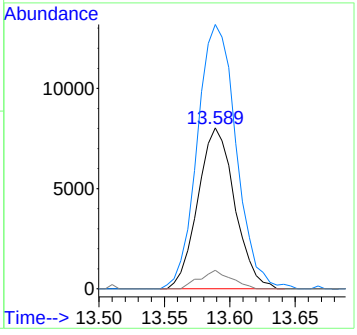
7

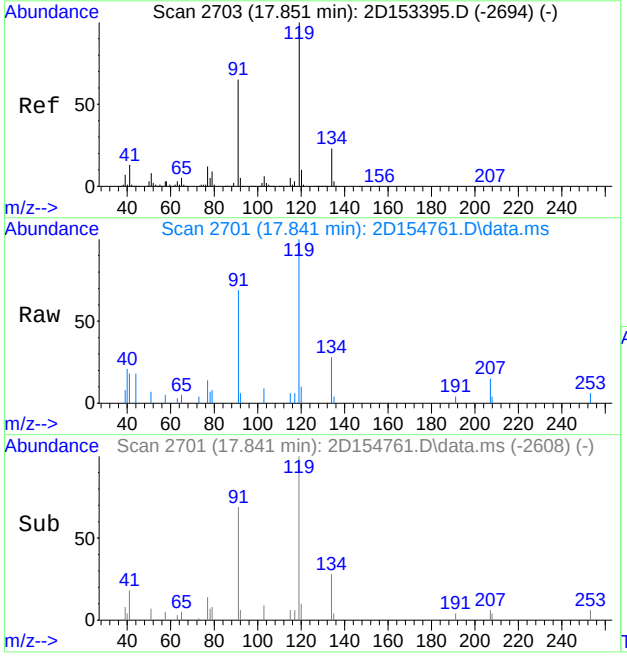


#73
toluene
Concen: 1.58 ug/L
RT: 13.589 min Scan# 1890
Delta R.T. -0.016 min
Lab File: 2D154761.D
Acq: 16 Apr 2016 11:35 am

Tgt Ion: 92 Resp: 15733

Ion	Ratio	Lower	Upper
92	100		
91	164.2	140.3	200.3
51	11.5	0.0	40.9

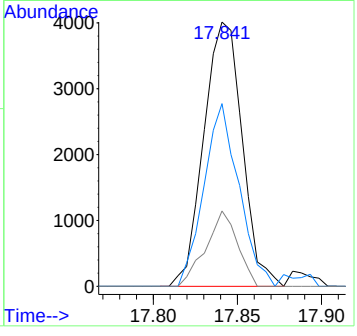




#107
tert-butylbenzene
Concen: 0.40 ug/L
RT: 17.841 min Scan# 2701
Delta R.T. -0.010 min
Lab File: 2D154761.D
Acq: 16 Apr 2016 11:35 am

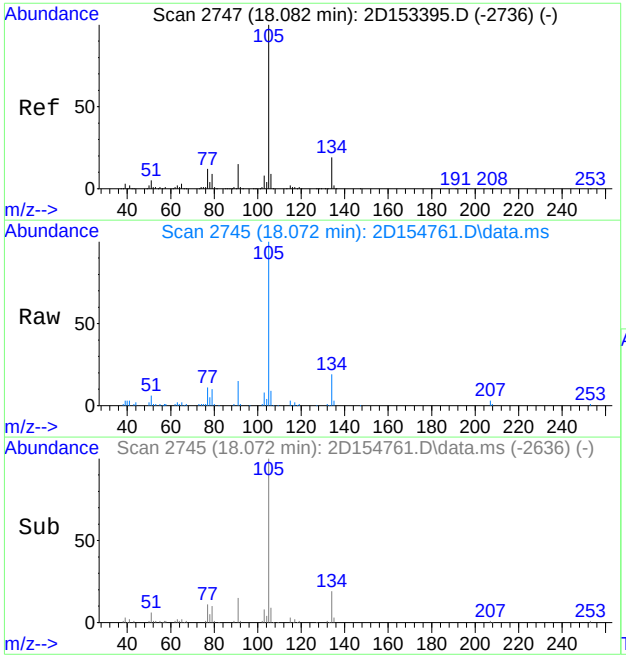
Tgt Ion:119 Resp: 6385

Ion	Ratio	Lower	Upper
119	100		
91	69.1	35.1	95.1
134	28.5	0.0	53.2



7.1.4

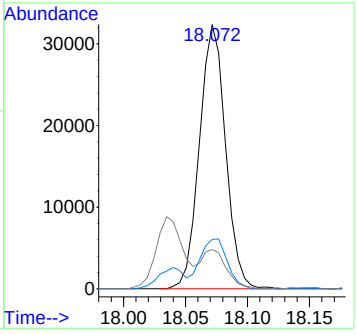
7

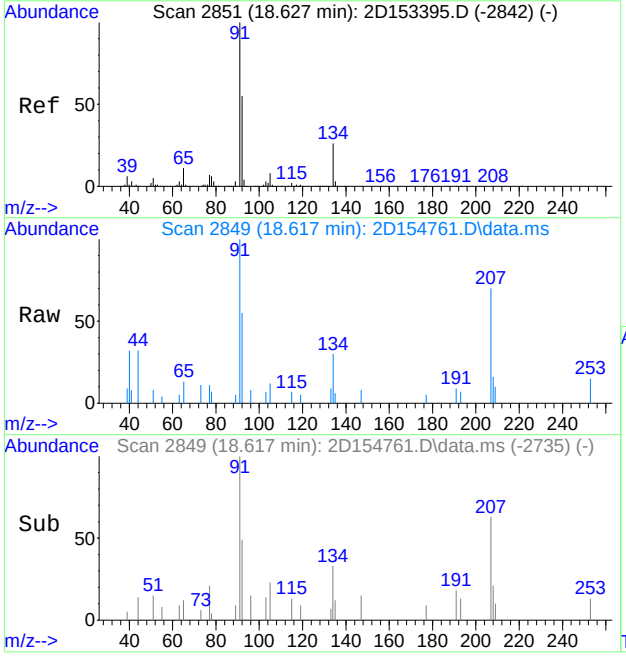


#110
sec-butylbenzene
Concen: 2.01 ug/L
RT: 18.072 min Scan# 2745
Delta R.T. -0.010 min
Lab File: 2D154761.D
Acq: 16 Apr 2016 11:35 am

Tgt Ion:105 Resp: 47454

Ion	Ratio	Lower	Upper
105	100		
134	18.7	0.0	48.9
91	14.9	0.0	45.2

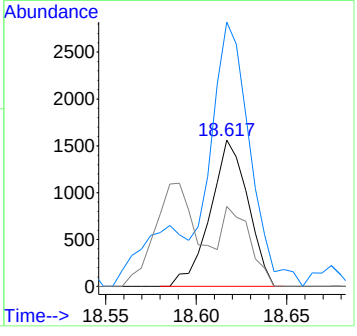




#116
n-butylbenzene
Concen: 0.22 ug/L
RT: 18.617 min Scan# 2849
Delta R.T. -0.010 min
Lab File: 2D154761.D
Acq: 16 Apr 2016 11:35 am

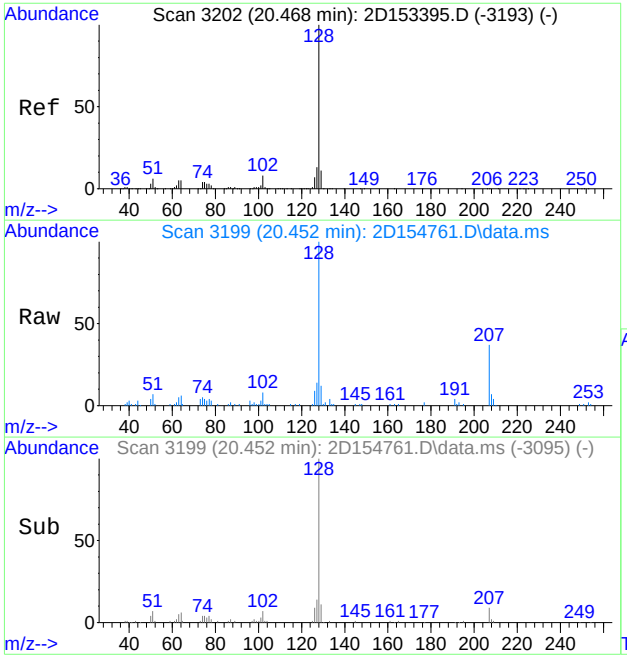
Tgt Ion: 92 Resp: 2251

Ion	Ratio	Lower	Upper
92	100		
91	169.3	151.0	211.0
134	54.6	17.8	77.8



7.1.4

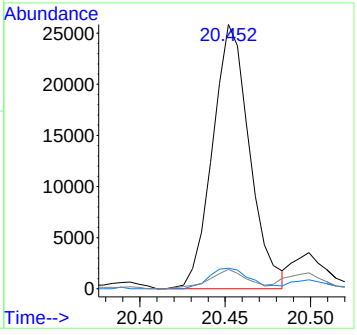
7



#120
naphthalene
Concen: 2.53 ug/L m
RT: 20.452 min Scan# 3199
Delta R.T. -0.016 min
Lab File: 2D154761.D
Acq: 16 Apr 2016 11:35 am

Tgt Ion:128 Resp: 38895

Ion	Ratio	Lower	Upper
128	100		
102	7.8	0.0	37.5
51	7.4	0.0	36.4



7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154762.D
Acq On : 16 Apr 2016 12:06 pm
Operator : Adilm
Sample : jc18331-5
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 18 13:23:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

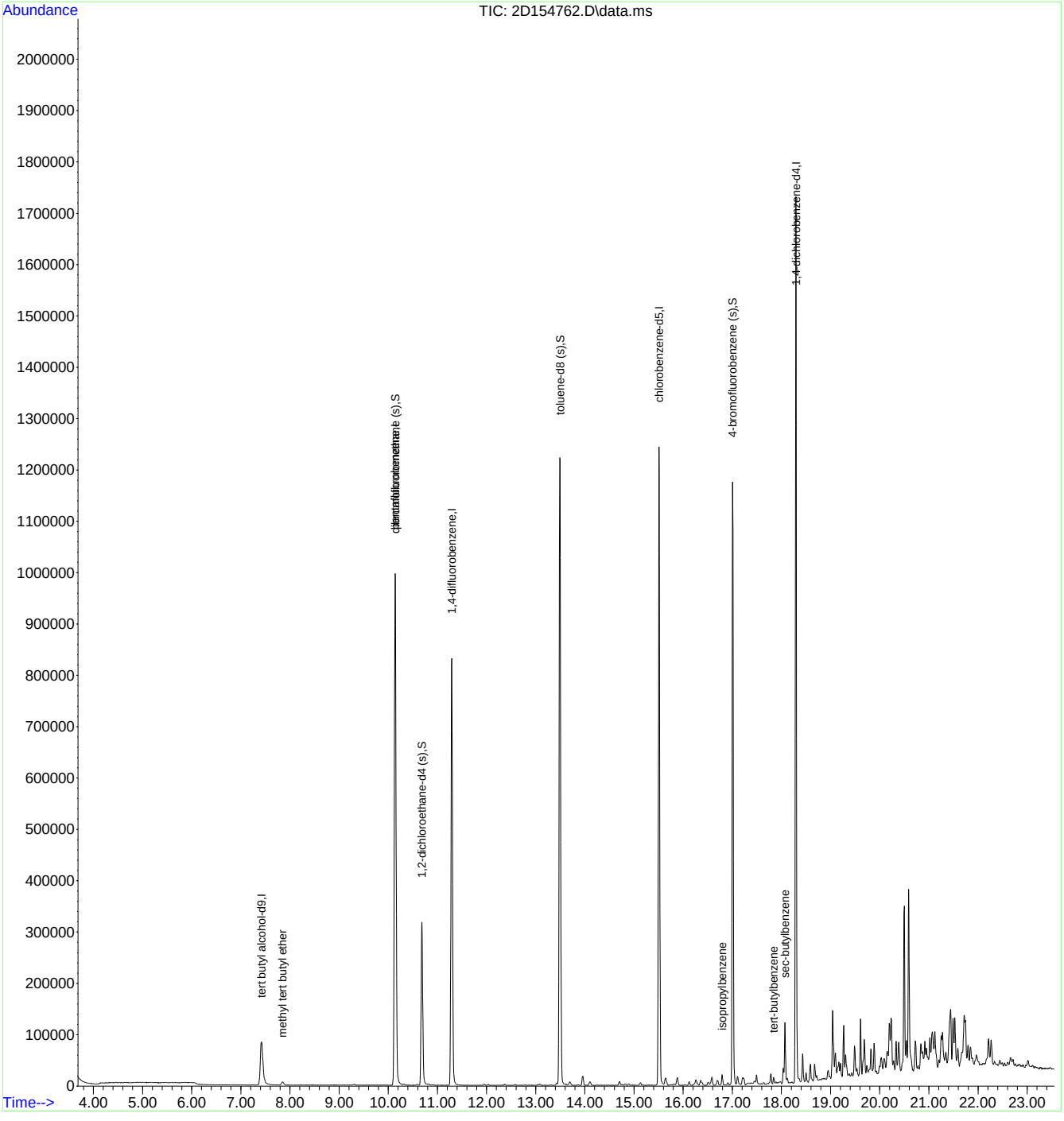
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.418	65	189139	500.00 ug/L	-0.02
5) pentafluorobenzene	10.139	168	621580	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.292	114	854437	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.508	117	801059	50.00 ug/L	-0.02
94) 1,4-dichlorobenzene-d4	18.297	152	462616	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.144	113	285198	52.56 ug/L	-0.02
Spiked Amount 50.000	Range 76 - 120		Recovery	= 105.12%	
43) 1,2-dichloroethane-d4 (s)	10.684	65	262750	45.53 ug/L	-0.02
Spiked Amount 50.000	Range 73 - 122		Recovery	= 91.06%	
71) toluene-d8 (s)	13.494	98	974229	49.41 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery	= 98.82%	
96) 4-bromofluorobenzene (s)	17.007	95	378906	50.39 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery	= 100.78%	
Target Compounds					Qvalue
25) methyl tert butyl ether	7.848	73	8664	0.74 ug/L	87
95) isopropylbenzene	16.792	105	12623	0.61 ug/L	96
107) tert-butylbenzene	17.841	119	6374	0.39 ug/L	98
110) sec-butylbenzene	18.072	105	77154	3.22 ug/L	98

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

Quantitation Report (QT Reviewed)

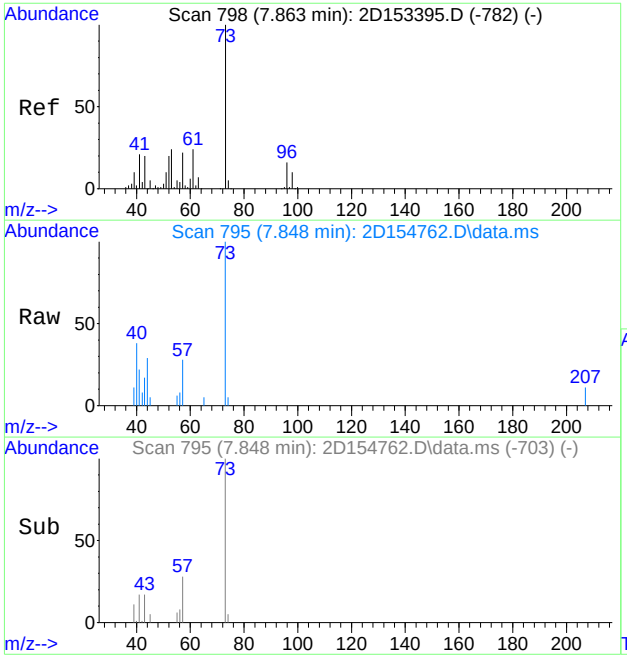
Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154762.D
Acq On : 16 Apr 2016 12:06 pm
Operator : Adilm
Sample : jc18331-5
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 18 13:23:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



M2D6450.M Mon Apr 18 13:41:03 2016 ACC-VOA-DP

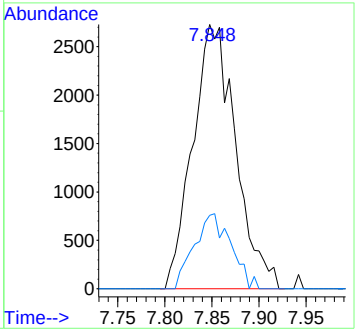
SGS ACCUTEST JC18331

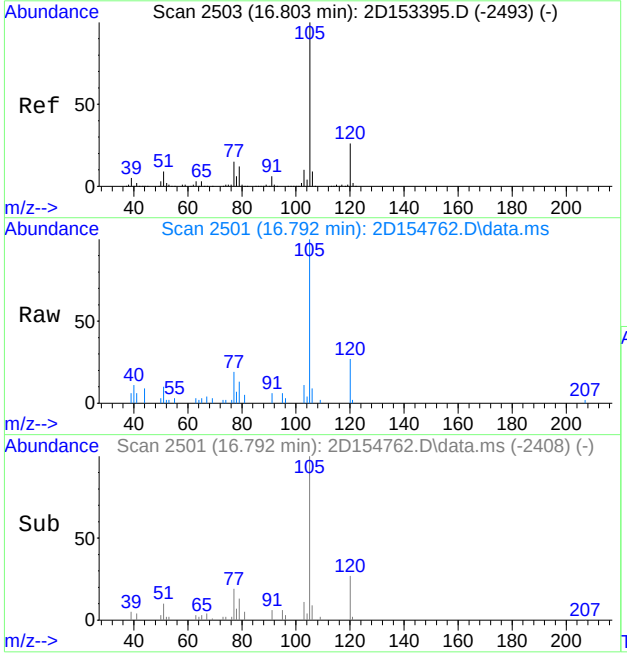


#25
methyl tert butyl ether
Concen: 0.74 ug/L
RT: 7.848 min Scan# 795
Delta R.T. -0.016 min
Lab File: 2D154762.D
Acq: 16 Apr 2016 12:06 pm

Tgt Ion: 73 Resp: 8664

Ion	Ratio	Lower	Upper
73	100		
57	27.8	0.0	51.6

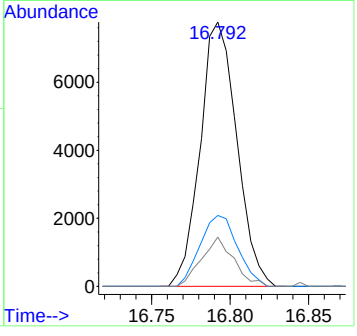


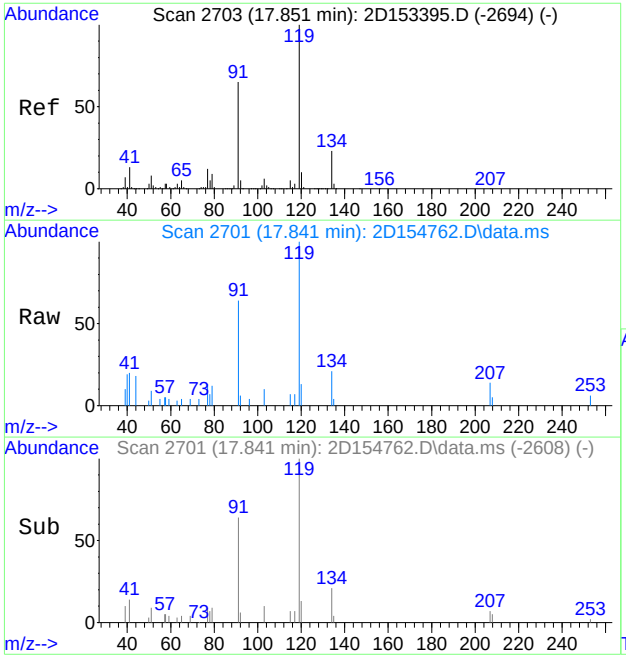


#95
isopropylbenzene
Concen: 0.61 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. -0.010 min
Lab File: 2D154762.D
Acq: 16 Apr 2016 12:06 pm

Tgt Ion:105 Resp: 12623

Ion	Ratio	Lower	Upper
105	100		
120	26.8	0.0	56.2
77	18.7	0.0	45.1

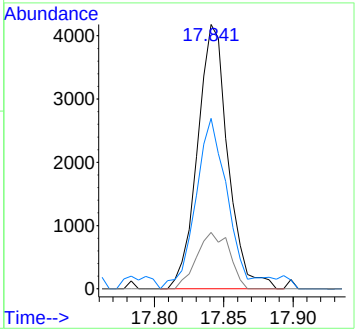


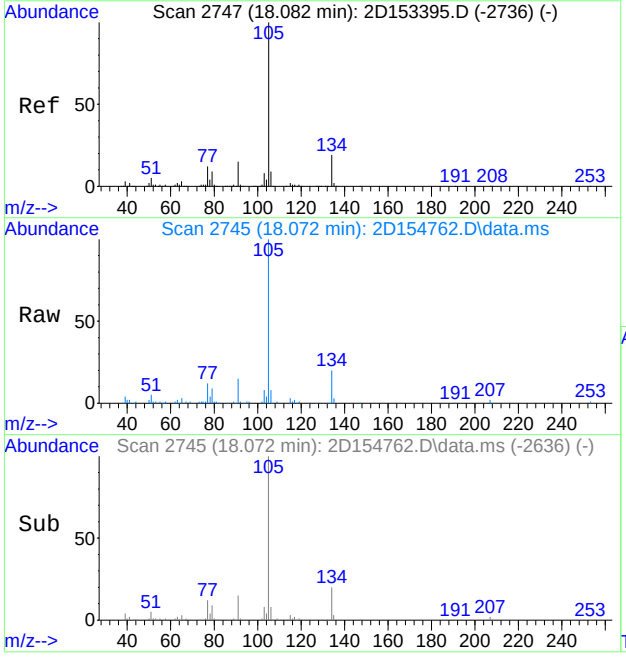


#107
tert-butylbenzene
Concen: 0.39 ug/L
RT: 17.841 min Scan# 2701
Delta R.T. -0.010 min
Lab File: 2D154762.D
Acq: 16 Apr 2016 12:06 pm

Tgt Ion:119 Resp: 6374

Ion	Ratio	Lower	Upper
119	100		
91	64.5	35.1	95.1
134	21.4	0.0	53.2

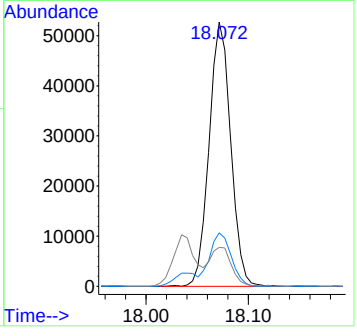




#110
sec-butylbenzene
Concen: 3.22 ug/L
RT: 18.072 min Scan# 2745
Delta R.T. -0.010 min
Lab File: 2D154762.D
Acq: 16 Apr 2016 12:06 pm

Tgt Ion:105 Resp: 77154

Ion	Ratio	Lower	Upper
105	100		
134	20.3	0.0	48.9
91	14.7	0.0	45.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154767.D
Acq On : 16 Apr 2016 2:38 pm
Operator : Adilm
Sample : jc18331-6
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 13:26:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.423	65	191243	500.00 ug/L	-0.02
5) pentafluorobenzene	10.139	168	633137	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.292	114	873418	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	813977	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	461645	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.149	113	287094	51.94 ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.88%		
43) 1,2-dichloroethane-d4 (s)	10.689	65	269425	45.83 ug/L	-0.01
Spiked Amount 50.000	Range 73 - 122		Recovery = 91.66%		
71) toluene-d8 (s)	13.494	98	988618	49.05 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.10%		
96) 4-bromofluorobenzene (s)	17.007	95	381966	50.90 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.80%		
Target Compounds					Qvalue
41) chloroform	9.903	83	1488	0.19 ug/L	91
57) benzene	10.794	78	2472	0.15 ug/L	72

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

7.1.6

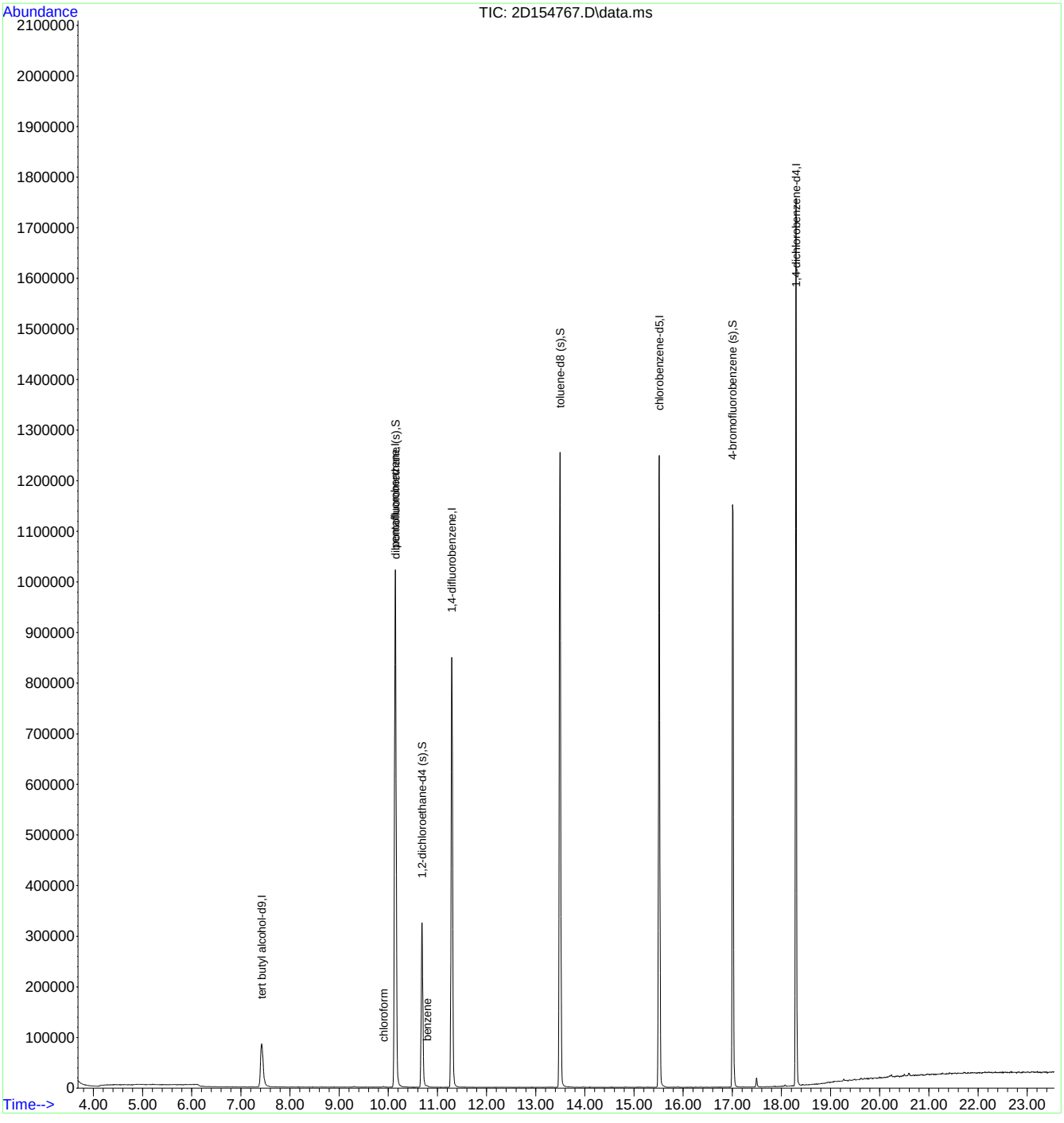
7

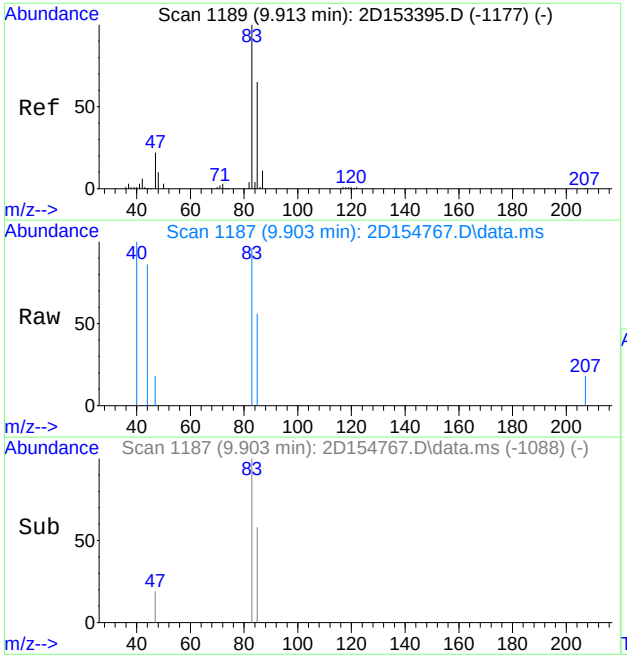
SGS ACCUTEST JC18331

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154767.D
Acq On : 16 Apr 2016 2:38 pm
Operator : Adilm
Sample : jc18331-6
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 13:26:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

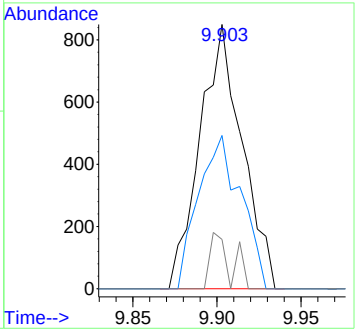


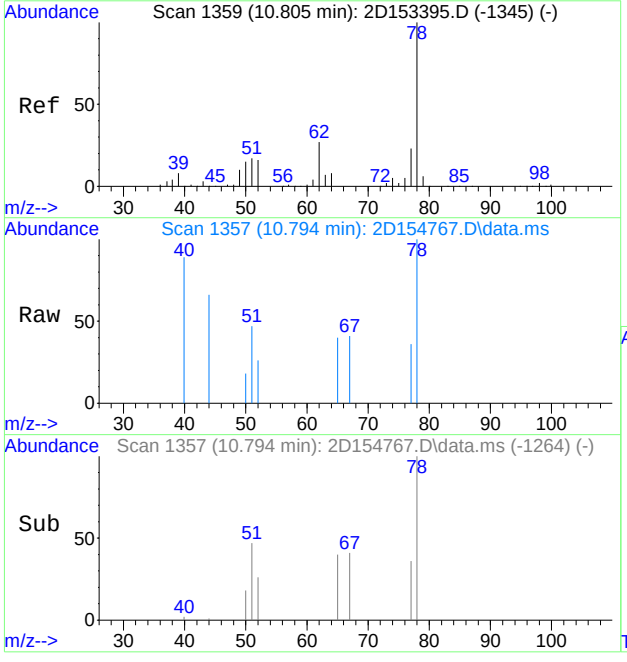


#41
chloroform
Concen: 0.19 ug/L
RT: 9.903 min Scan# 1187
Delta R.T. -0.010 min
Lab File: 2D154767.D
Acq: 16 Apr 2016 2:38 pm

Tgt Ion: 83 Resp: 1488

Ion	Ratio	Lower	Upper
83	100		
85	58.0	35.0	95.0
47	18.6	0.0	53.8

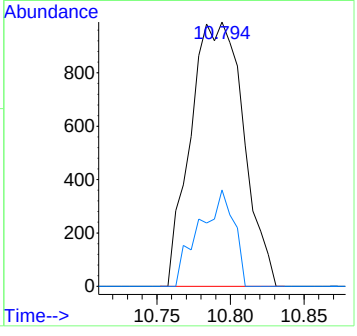




#57
benzene
Concen: 0.15 ug/L
RT: 10.794 min Scan# 1357
Delta R.T. -0.010 min
Lab File: 2D154767.D
Acq: 16 Apr 2016 2:38 pm

Tgt Ion: 78 Resp: 2472

Ion	Ratio	Lower	Upper
78	100		
77	36.4	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154768.D
Acq On : 16 Apr 2016 3:09 pm
Operator : Adilm
Sample : jc18331-7
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 18 13:27:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

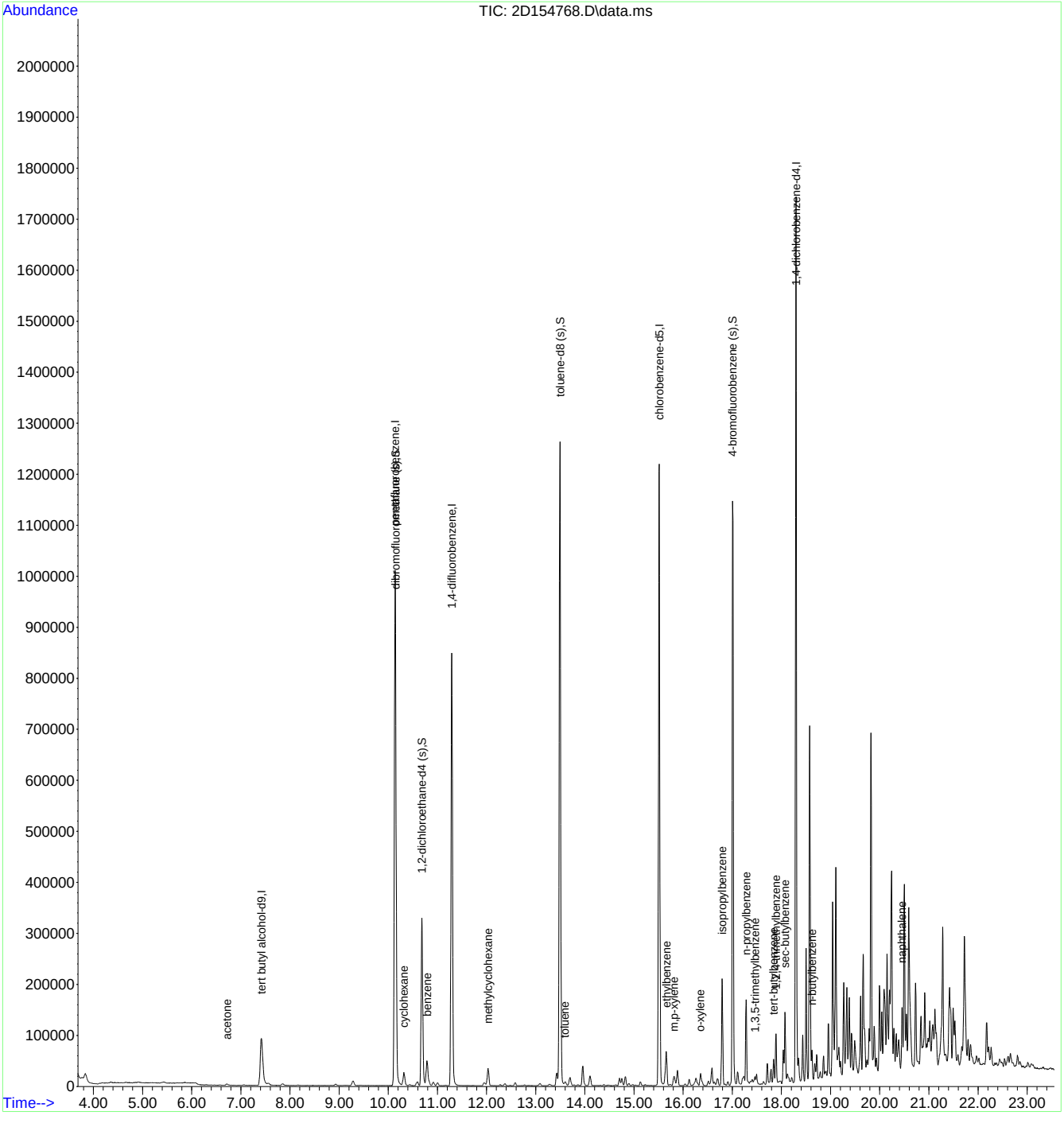
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.418	65	197106	500.00 ug/L	-0.02
5) pentafluorobenzene	10.139	168	627078	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.292	114	859800	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	802991	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	458974	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.149	113	285231	52.10 ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.20%		
43) 1,2-dichloroethane-d4 (s)	10.684	65	265578	45.61 ug/L	-0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 91.22%		
71) toluene-d8 (s)	13.494	98	978877	49.33 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.66%		
96) 4-bromofluorobenzene (s)	17.007	95	374871	50.25 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.50%		
Target Compounds					Qvalue
17) acetone	6.715	58	1289	4.49 ug/L #	57
47) cyclohexane	10.317	84	11687	1.94 ug/L	89
57) benzene	10.789	78	53095	3.29 ug/L	100
68) methylcyclohexane	12.032	83	16237	2.28 ug/L	93
73) toluene	13.589	92	1963	0.19 ug/L	84
89) ethylbenzene	15.660	91	41221	2.15 ug/L	99
90) m,p-xylene	15.812	106	4622	0.62 ug/L	88
91) o-xylene	16.347	106	2562	0.33 ug/L	90
95) isopropylbenzene	16.792	105	141004	6.84 ug/L	99
103) n-propylbenzene	17.280	91	131036	5.64 ug/L	99
106) 1,3,5-trimethylbenzene	17.463	105	4820	0.27 ug/L	91
107) tert-butylbenzene	17.841	119	16051	0.99 ug/L	99
109) 1,2,4-trimethylbenzene	17.888	105	49807	2.75 ug/L	98
110) sec-butylbenzene	18.072	105	92372	3.89 ug/L	97
116) n-butylbenzene	18.622	92	15892	1.54 ug/L	97
120) naphthalene	20.452	128	84266	5.45 ug/L	100

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

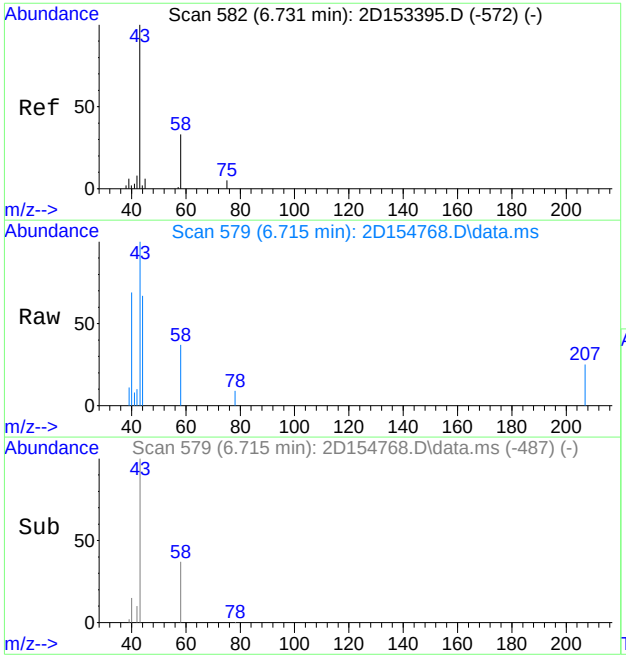
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154768.D
Acq On : 16 Apr 2016 3:09 pm
Operator : Adilm
Sample : jc18331-7
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 18 13:27:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



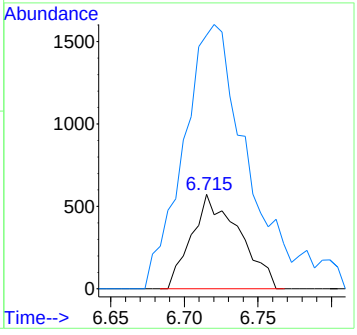
SGS ACCUTEST JC18331

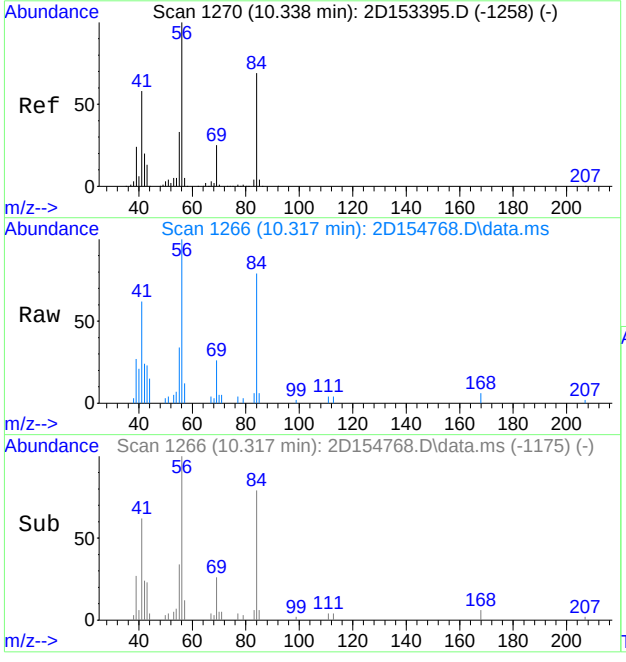


#17
acetone
Concen: 4.49 ug/L
RT: 6.715 min Scan# 579
Delta R.T. -0.016 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 58 Resp: 1289

Ion	Ratio	Lower	Upper
58	100		
43	223.2	280.0	340.0#

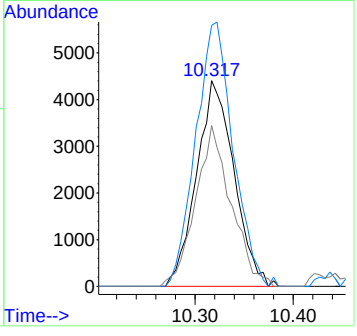


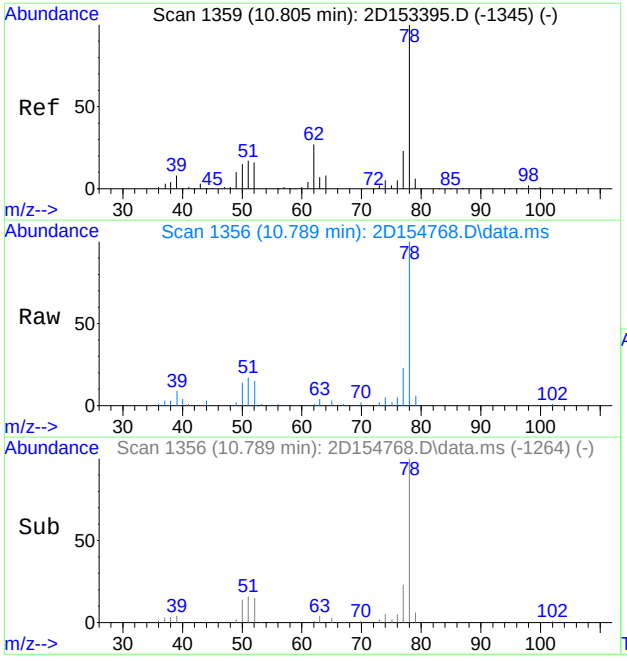


#47
cyclohexane
Concen: 1.94 ug/L
RT: 10.317 min Scan# 1266
Delta R.T. -0.021 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 84 Resp: 11687

Ion	Ratio	Lower	Upper
84	100		
56	126.8	101.0	187.6
41	78.3	58.4	108.6

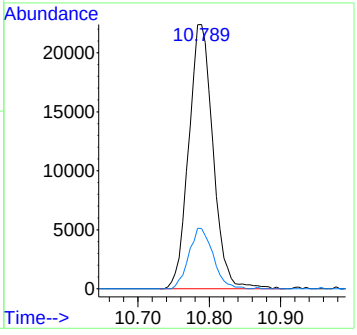


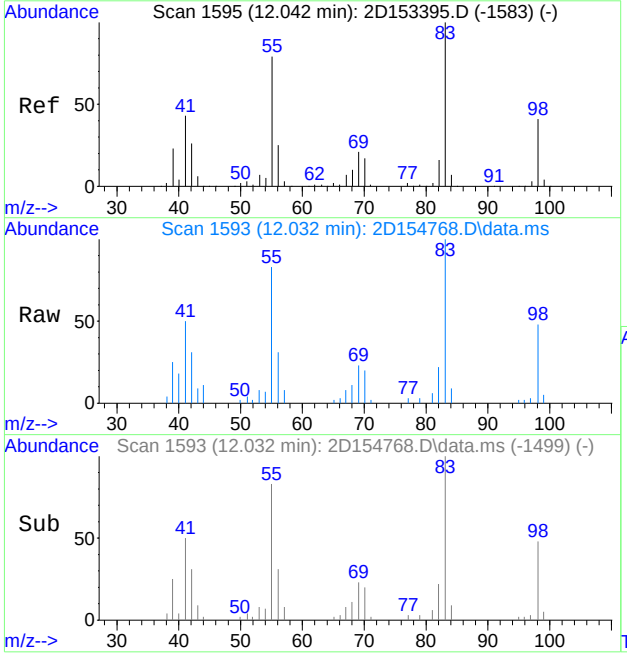


#57
benzene
Concen: 3.29 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. -0.016 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 78 Resp: 53095

Ion	Ratio	Lower	Upper
78	100		
77	22.8	0.0	53.0

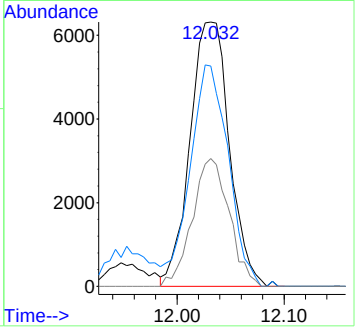


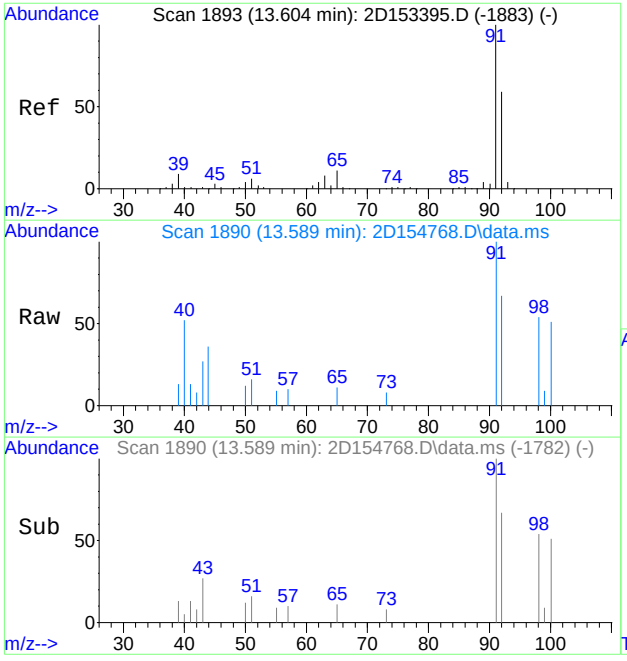


#68
methylcyclohexane
Concen: 2.28 ug/L
RT: 12.032 min Scan# 1593
Delta R.T. -0.009 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 83 Resp: 16237

Ion	Ratio	Lower	Upper
83	100		
55	83.3	49.1	109.1
98	48.3	11.3	71.3

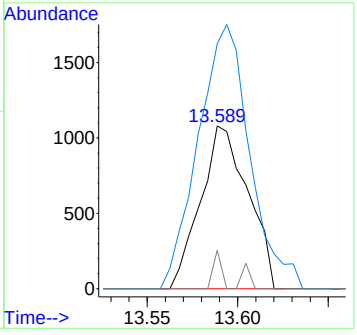


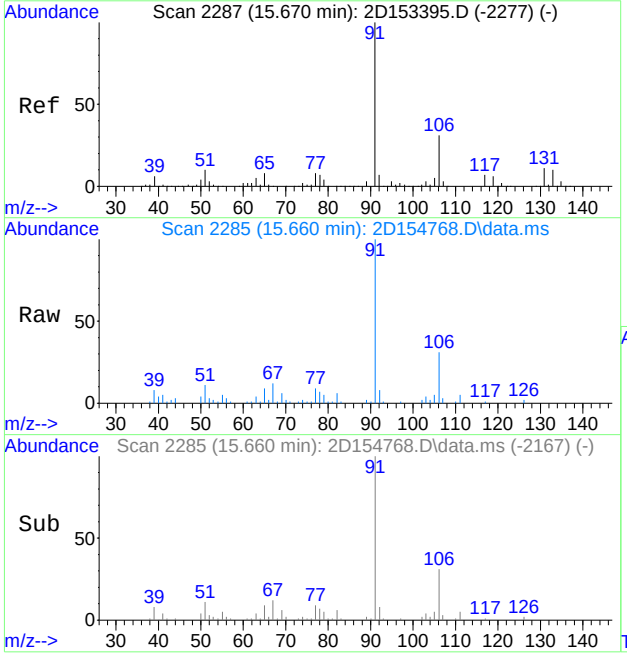


#73
toluene
Concen: 0.19 ug/L
RT: 13.589 min Scan# 1890
Delta R.T. -0.016 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 92 Resp: 1963

Ion	Ratio	Lower	Upper
92	100		
91	150.3	140.3	200.3
51	23.7	0.0	40.9

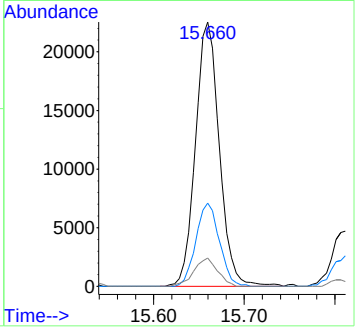




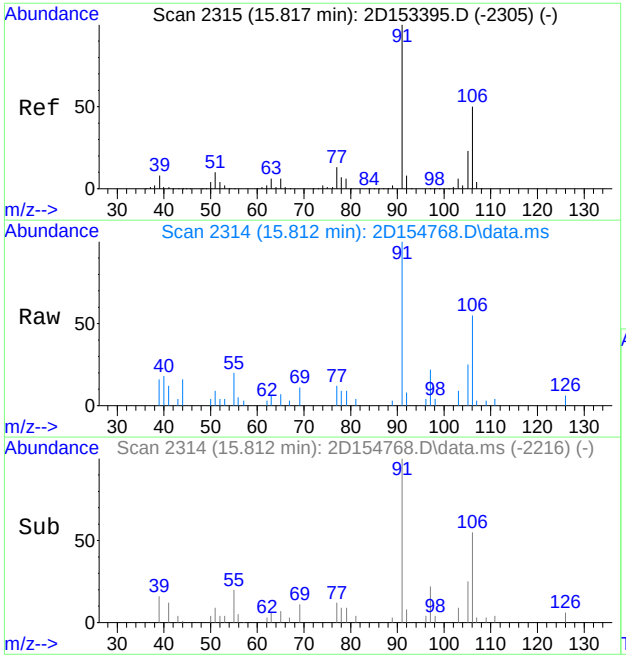
#89
ethylbenzene
Concen: 2.15 ug/L
RT: 15.660 min Scan# 2285
Delta R.T. -0.010 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 91 Resp: 41221

Ion	Ratio	Lower	Upper
91	100		
106	31.5	1.2	61.2
51	10.7	0.0	39.8



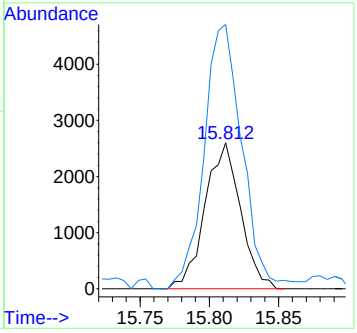
7.1.7

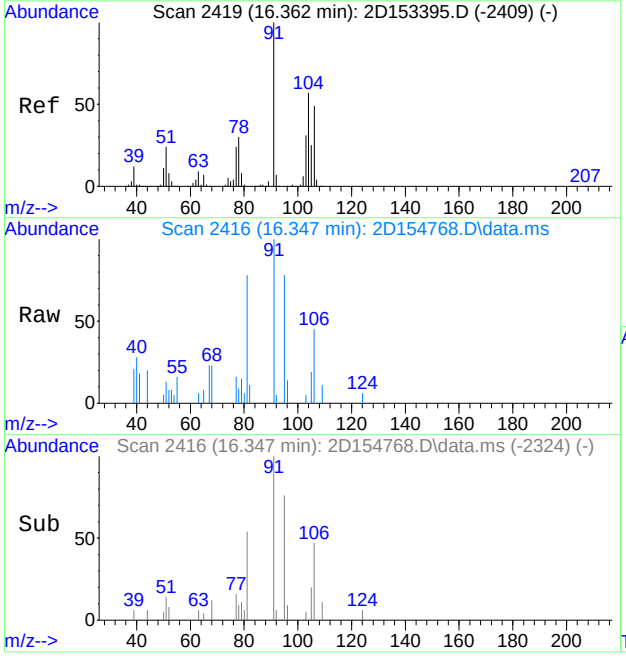


#90
m,p-xylene
Concen: 0.62 ug/L
RT: 15.812 min Scan# 2314
Delta R.T. -0.005 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:106 Resp: 4622

Ion	Ratio	Lower	Upper
106	100		
91	181.2	169.7	229.7

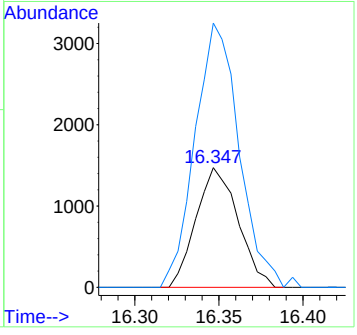


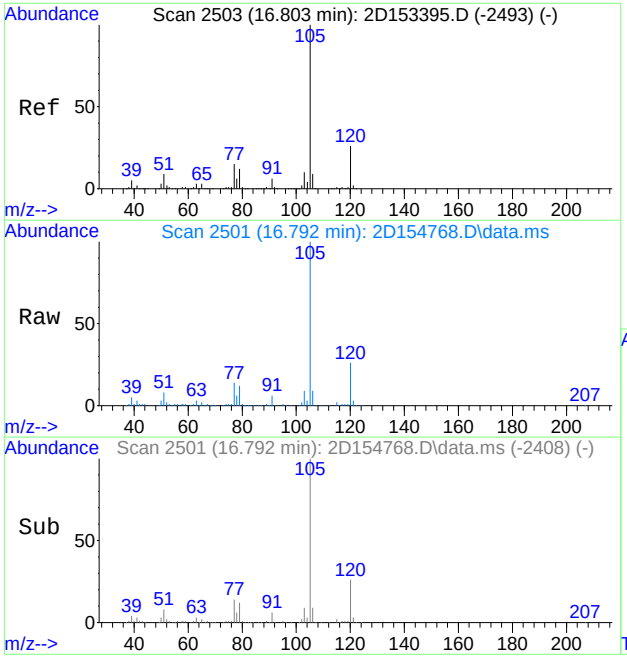


#91
o-xylene
Concen: 0.33 ug/L
RT: 16.347 min Scan# 2416
Delta R.T. -0.016 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:106 Resp: 2562

Ion	Ratio	Lower	Upper
106	100		
91	220.7	175.8	235.8

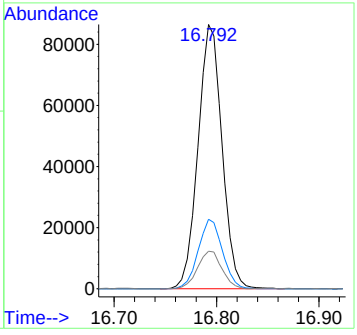


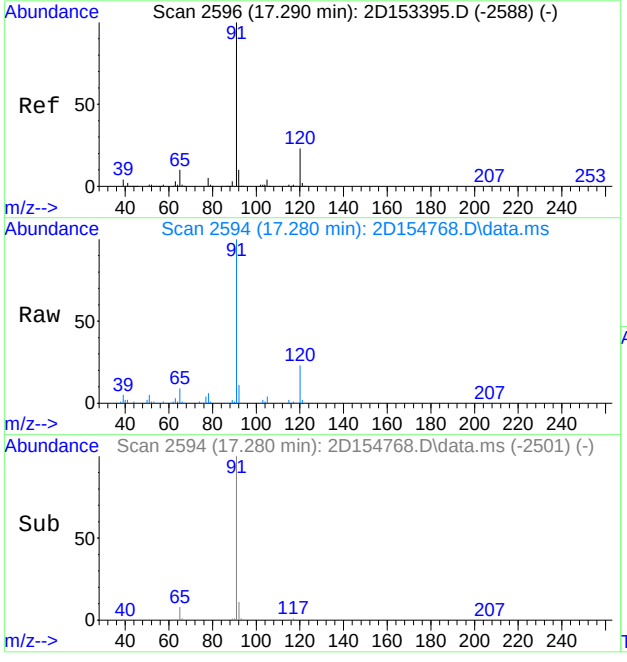


#95
isopropylbenzene
Concen: 6.84 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. -0.010 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:105 Resp: 141004

Ion	Ratio	Lower	Upper
105	100		
120	26.3	0.0	56.2
77	14.2	0.0	45.1

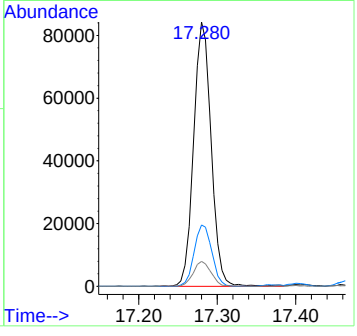


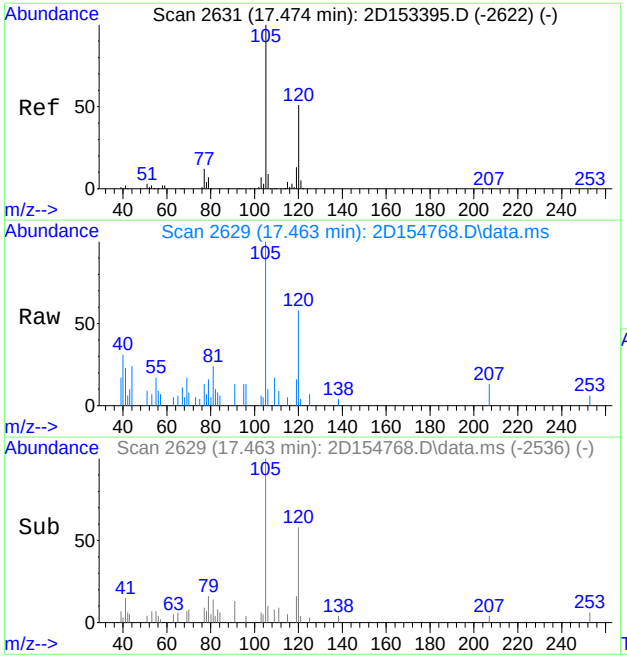


#103
n-propylbenzene
Concen: 5.64 ug/L
RT: 17.280 min Scan# 2594
Delta R.T. -0.010 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 91 Resp: 131036

Ion	Ratio	Lower	Upper
91	100		
120	23.2	0.0	53.4
65	9.5	0.0	40.2

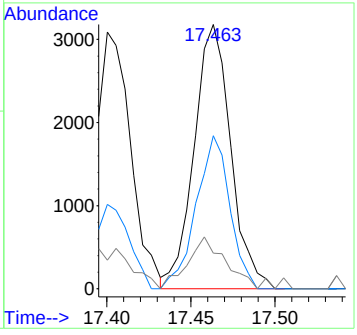


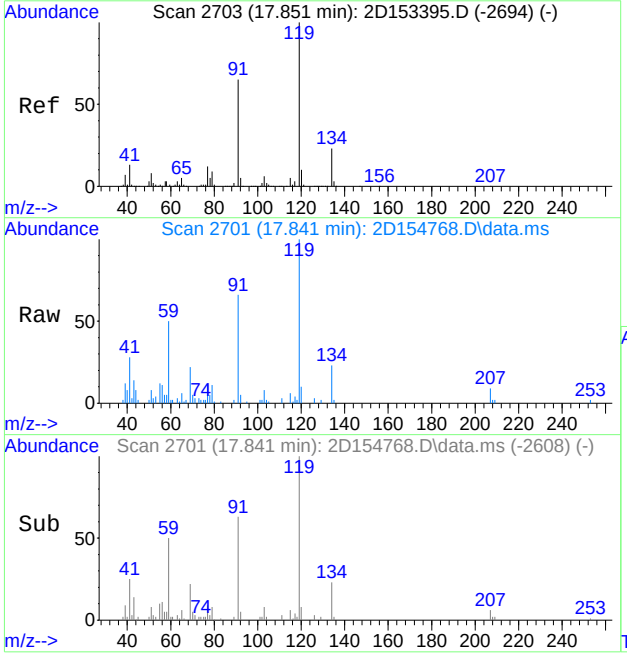


#106
1,3,5-trimethylbenzene
Concen: 0.27 ug/L
RT: 17.463 min Scan# 2629
Delta R.T. -0.010 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:105 Resp: 4820

Ion	Ratio	Lower	Upper
105	100		
120	57.8	20.7	80.7
77	13.5	0.0	42.0

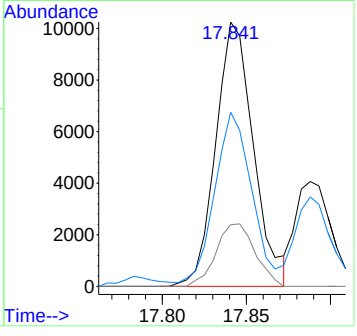


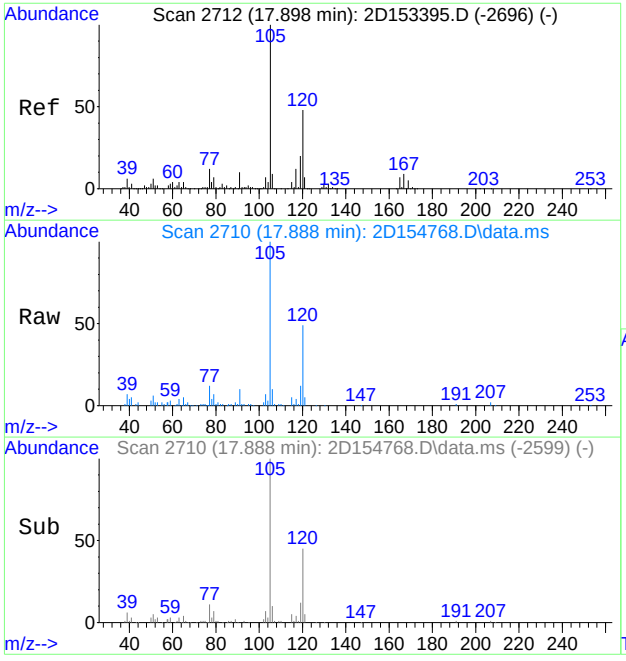


#107
tert-butylbenzene
Concen: 0.99 ug/L
RT: 17.841 min Scan# 2701
Delta R.T. -0.010 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:119 Resp: 16051

Ion	Ratio	Lower	Upper
119	100		
91	63.9	35.1	95.1
134	23.3	0.0	53.2

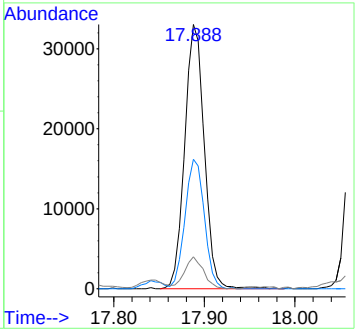


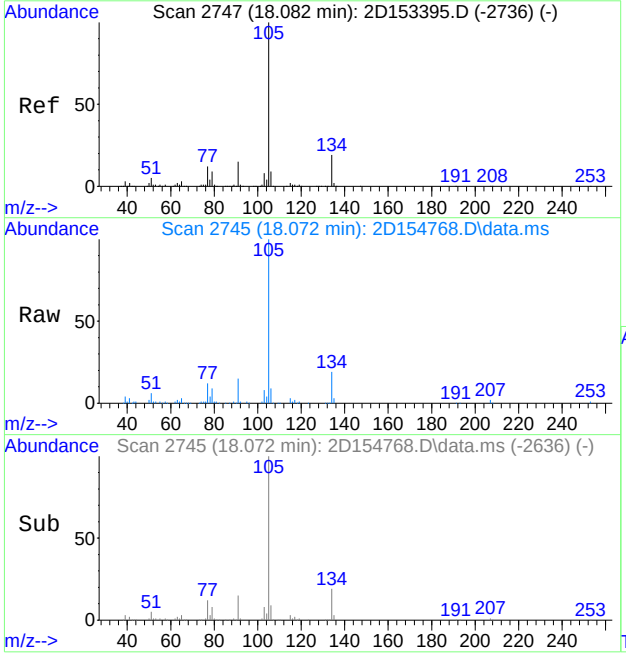


#109
1,2,4-trimethylbenzene
Concen: 2.75 ug/L
RT: 17.888 min Scan# 2710
Delta R.T. -0.010 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:105 Resp: 49807

Ion	Ratio	Lower	Upper
105	100		
120	49.0	17.8	77.8
77	11.6	0.0	41.9

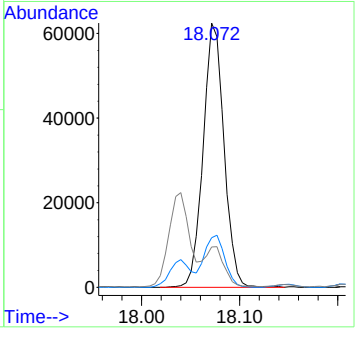


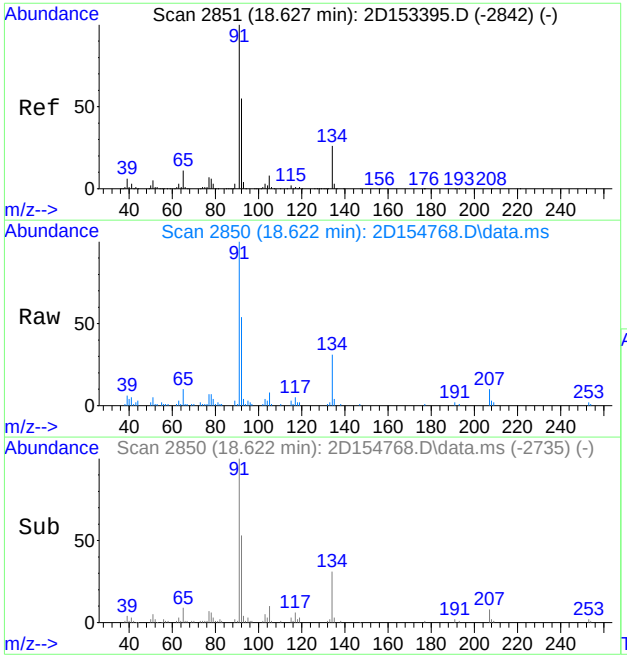


#110
sec-butylbenzene
Concen: 3.89 ug/L
RT: 18.072 min Scan# 2745
Delta R.T. -0.010 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:105 Resp: 92372

Ion	Ratio	Lower	Upper
105	100		
134	17.7	0.0	48.9
91	14.2	0.0	45.2

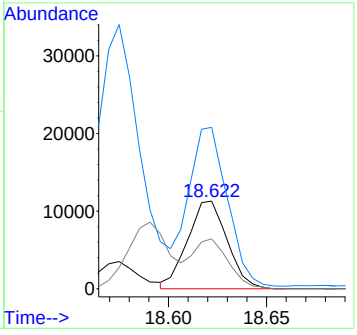


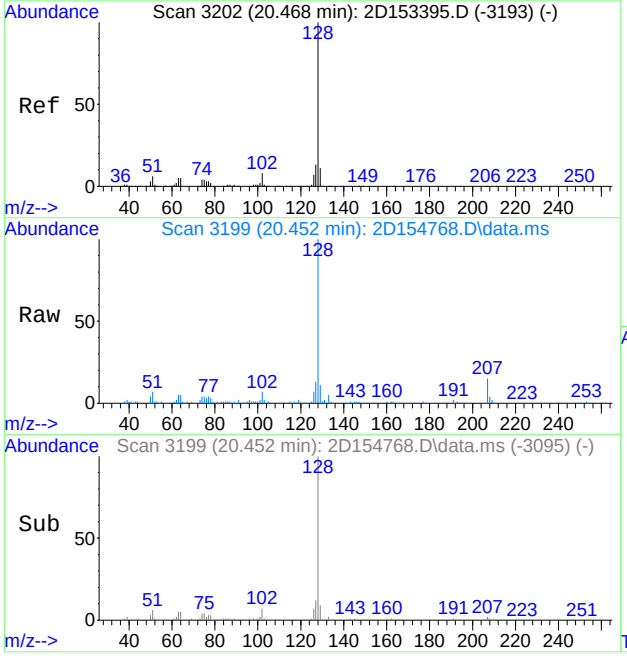


#116
n-butylbenzene
Concen: 1.54 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. -0.005 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion: 92 Resp: 15892

Ion	Ratio	Lower	Upper
92	100		
91	180.9	151.0	211.0
134	57.0	17.8	77.8

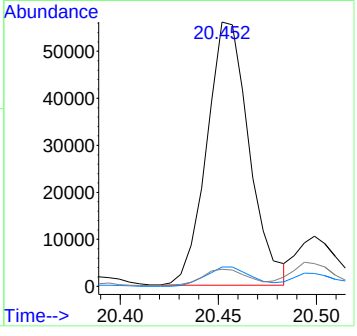




#120
naphthalene
Concen: 5.45 ug/L
RT: 20.452 min Scan# 3199
Delta R.T. -0.016 min
Lab File: 2D154768.D
Acq: 16 Apr 2016 3:09 pm

Tgt Ion:128 Resp: 84266

Ion	Ratio	Lower	Upper
128	100		
102	7.4	0.0	37.5
51	6.3	0.0	36.4



7.1.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154769.D
Acq On : 16 Apr 2016 3:40 pm
Operator : Adilm
Sample : jc18331-8
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 18 13:28:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

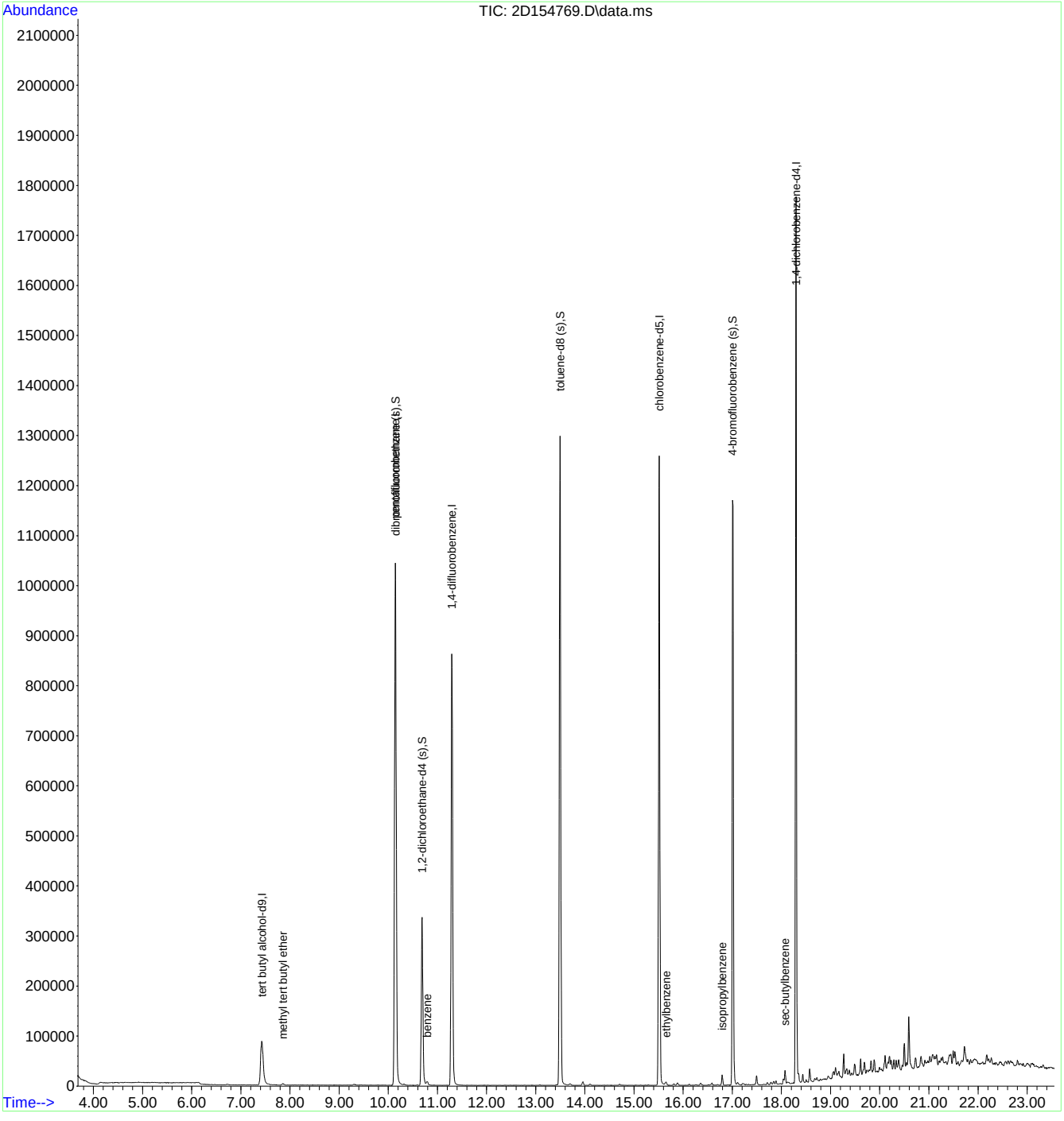
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.428	65	197065	500.00 ug/L	-0.01
5) pentafluorobenzene	10.144	168	653305	50.00 ug/L	-0.01
51) 1,4-difluorobenzene	11.292	114	889123	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	829716	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	468533	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.149	113	294149	51.57 ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery	= 103.14%	
43) 1,2-dichloroethane-d4 (s)	10.689	65	271926	44.83 ug/L	-0.01
Spiked Amount 50.000	Range 73 - 122		Recovery	= 89.66%	
71) toluene-d8 (s)	13.494	98	1008651	49.16 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery	= 98.32%	
96) 4-bromofluorobenzene (s)	17.007	95	389399	51.13 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery	= 102.26%	
Target Compounds					Qvalue
25) methyl tert butyl ether	7.858	73	3384	0.28 ug/L	69
57) benzene	10.794	78	7877	0.47 ug/L	96
89) ethylbenzene	15.655	91	3350	0.17 ug/L	93
95) isopropylbenzene	16.792	105	14066	0.67 ug/L	99
110) sec-butylbenzene	18.072	105	18409	0.76 ug/L	96

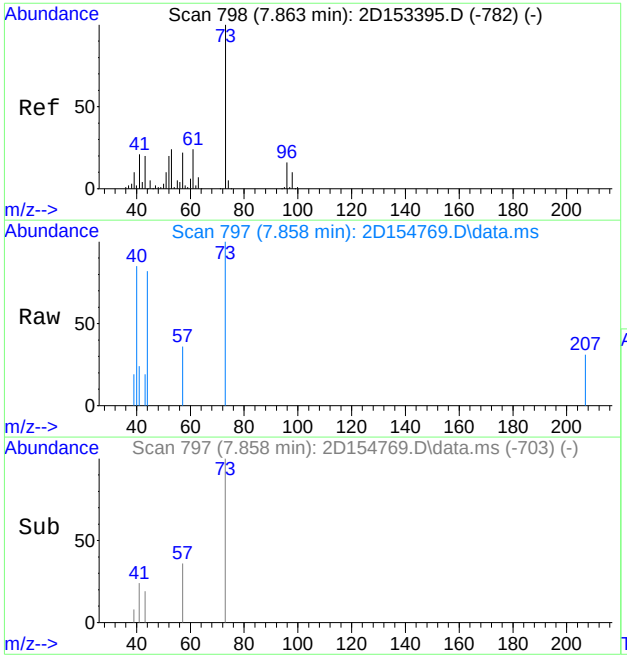
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154769.D
Acq On : 16 Apr 2016 3:40 pm
Operator : Adilm
Sample : jc18331-8
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 18 13:28:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

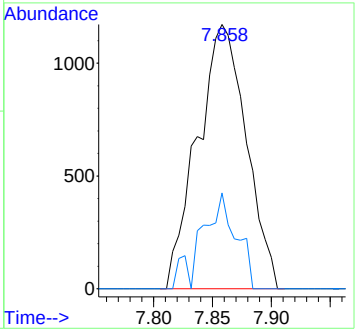


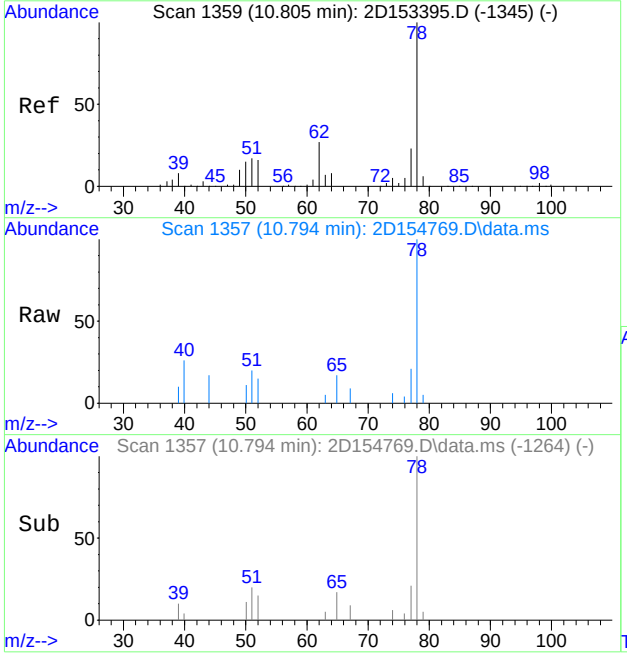


#25
methyl tert butyl ether
Concen: 0.28 ug/L
RT: 7.858 min Scan# 797
Delta R.T. -0.005 min
Lab File: 2D154769.D
Acq: 16 Apr 2016 3:40 pm

Tgt Ion: 73 Resp: 3384

Ion	Ratio	Lower	Upper
73	100		
57	36.3	0.0	51.6

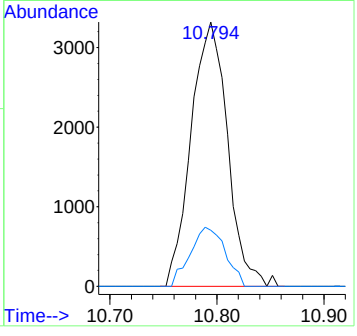


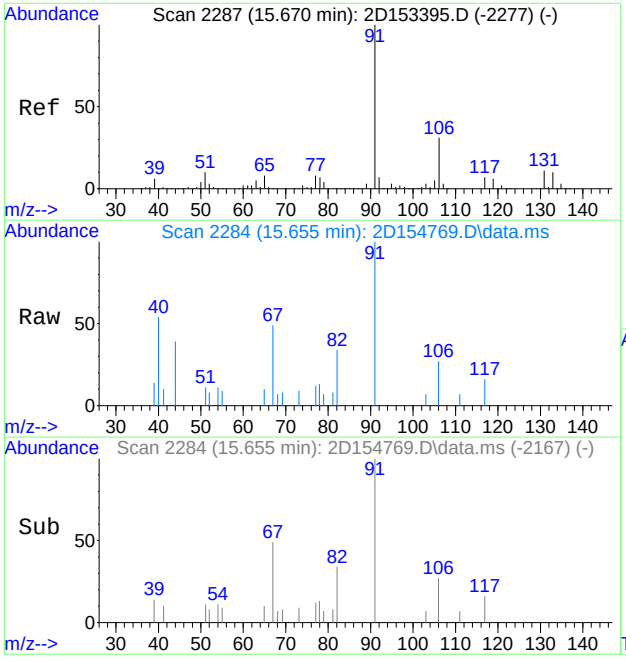


#57
benzene
Concen: 0.47 ug/L
RT: 10.794 min Scan# 1357
Delta R.T. -0.010 min
Lab File: 2D154769.D
Acq: 16 Apr 2016 3:40 pm

Tgt Ion: 78 Resp: 7877

Ion	Ratio	Lower	Upper
78	100		
77	21.2	0.0	53.0

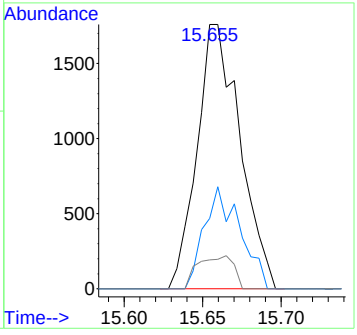


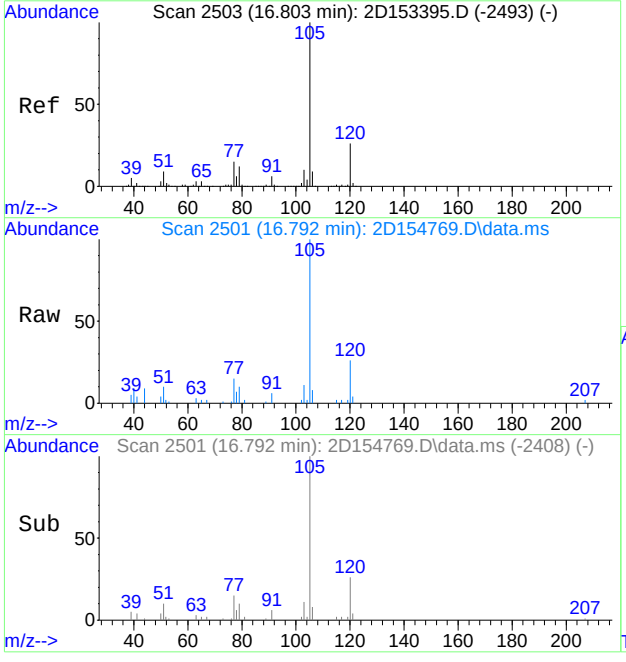


#89
ethylbenzene
Concen: 0.17 ug/L
RT: 15.655 min Scan# 2284
Delta R.T. -0.016 min
Lab File: 2D154769.D
Acq: 16 Apr 2016 3:40 pm

Tgt Ion: 91 Resp: 3350

Ion	Ratio	Lower	Upper
91	100		
106	26.6	1.2	61.2
51	11.0	0.0	39.8

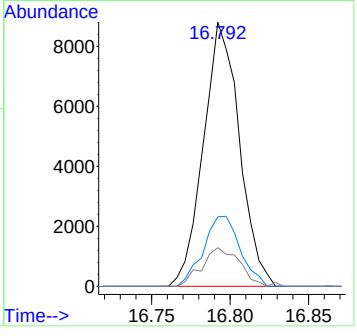


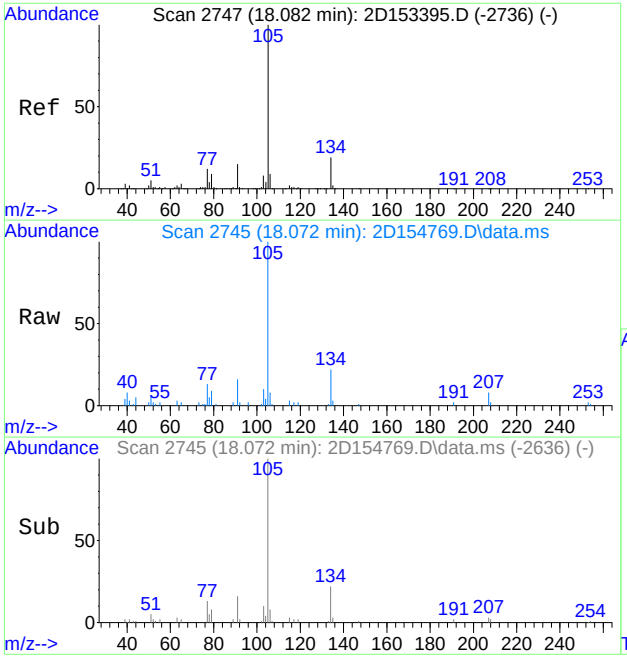


#95
isopropylbenzene
Concen: 0.67 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. -0.010 min
Lab File: 2D154769.D
Acq: 16 Apr 2016 3:40 pm

Tgt Ion:105 Resp: 14066

Ion	Ratio	Lower	Upper
105	100		
120	26.3	0.0	56.2
77	14.6	0.0	45.1

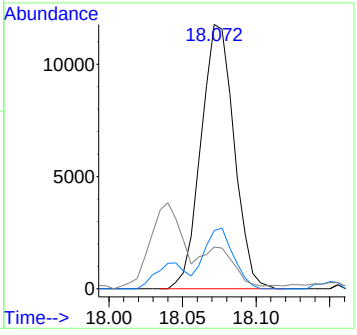




#110
sec-butylbenzene
Concen: 0.76 ug/L
RT: 18.072 min Scan# 2745
Delta R.T. -0.010 min
Lab File: 2D154769.D
Acq: 16 Apr 2016 3:40 pm

Tgt Ion:105 Resp: 18409

Ion	Ratio	Lower	Upper
105	100		
134	22.0	0.0	48.9
91	14.7	0.0	45.2



7.1.8

7

SGS ACCUTEST JC18331

Manual Integrations
APPROVED
(compounds with "m" flag)
MoHui Huang
04/25/16 16:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154770.D
Acq On : 16 Apr 2016 4:10 pm
Operator : Adilm
Sample : jc18331-9
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 25 16:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.423	65	199763	500.00 ug/L	-0.02
5) pentafluorobenzene	10.144	168	649133	50.00 ug/L	-0.01
51) 1,4-difluorobenzene	11.292	114	892092	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	822924	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	475235	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.149	113	294961	52.05 ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.10%		
43) 1,2-dichloroethane-d4 (s)	10.684	65	272870	45.27 ug/L	-0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 90.54%		
71) toluene-d8 (s)	13.494	98	1009854	49.05 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.10%		
96) 4-bromofluorobenzene (s)	17.007	95	387484	50.16 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.32%		
Target Compounds					Qvalue
17) acetone	6.725	58	1809	6.08 ug/L #	53
25) methyl tert butyl ether	7.847	73	2703	0.22 ug/L #	36
47) cyclohexane	10.322	84	1491	0.24 ug/L	96
57) benzene	10.789	78	21083	1.26 ug/L	100
68) methylcyclohexane	12.031	83	4316	0.58 ug/L	94
95) isopropylbenzene	16.792	105	39403	1.85 ug/L	98
103) n-propylbenzene	17.280	91	17637	0.73 ug/L	97
107) tert-butylbenzene	17.846	119	9972m	0.60 ug/L	
109) 1,2,4-trimethylbenzene	17.888	105	13694	0.73 ug/L	94
110) sec-butylbenzene	18.071	105	103480	4.20 ug/L	99
112) p-isopropyltoluene	18.208	119	5004	0.23 ug/L	94
116) n-butylbenzene	18.622	92	19510	1.83 ug/L	95
120) naphthalene	20.452	128	15262	0.95 ug/L	97

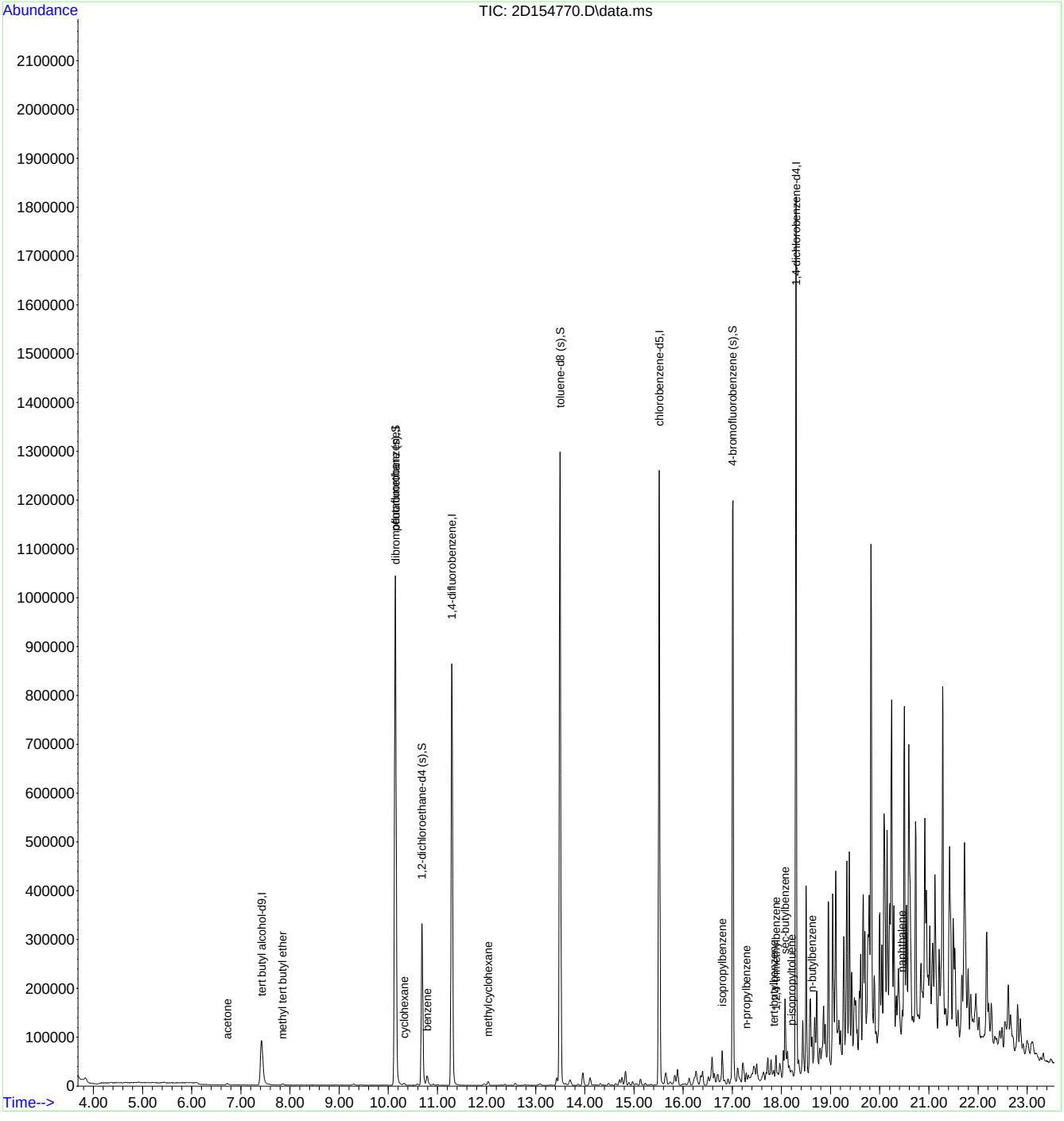
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.9
7

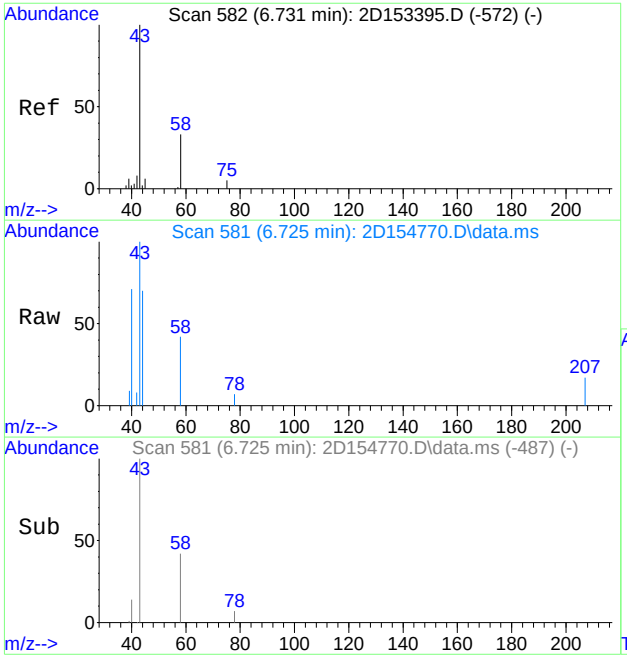
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154770.D
Acq On : 16 Apr 2016 4:10 pm
Operator : Adilm
Sample : jc18331-9
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 25 16:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



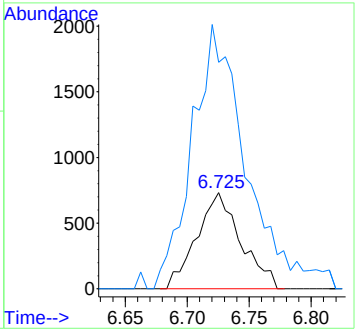
SGS ACCUTEST JC18331

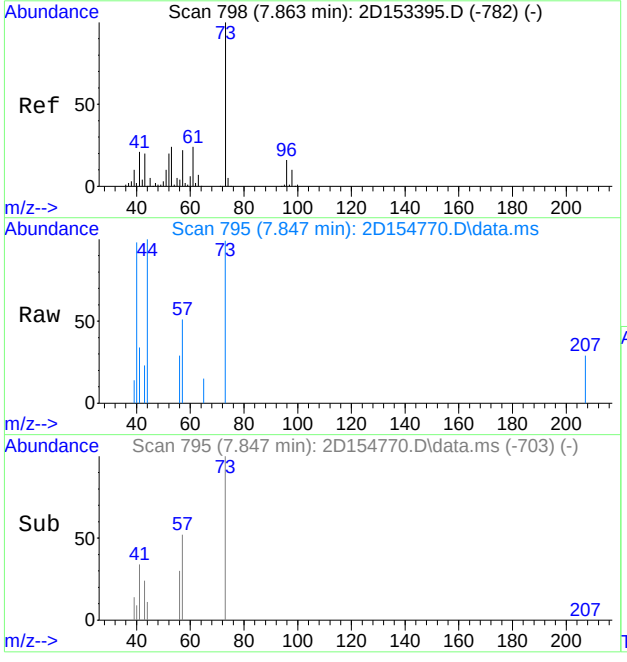


#17
acetone
Concen: 6.08 ug/L
RT: 6.725 min Scan# 581
Delta R.T. -0.005 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion: 58 Resp: 1809

Ion	Ratio	Lower	Upper
58	100		
43	215.7	280.0	340.0#

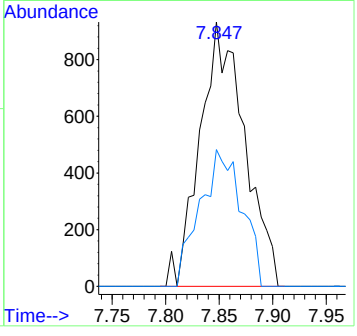


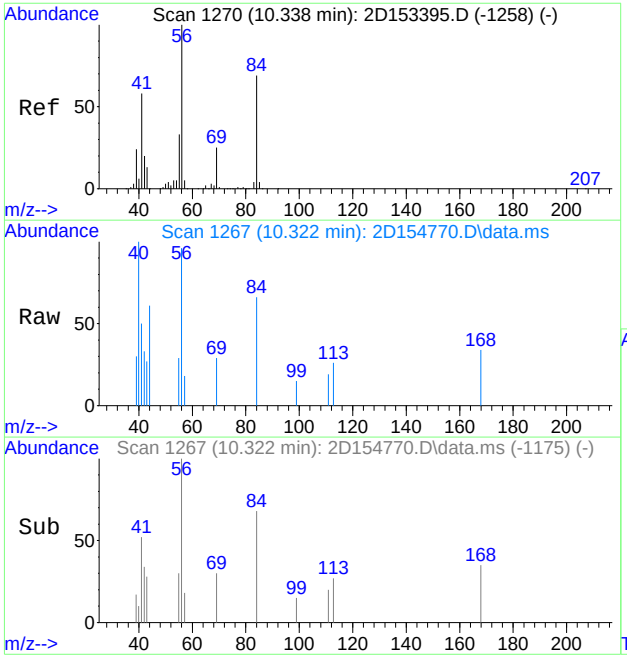


#25
methyl tert butyl ether
Concen: 0.22 ug/L
RT: 7.847 min Scan# 795
Delta R.T. -0.016 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion: 73 Resp: 2703

Ion	Ratio	Lower	Upper
73	100		
57	51.8	0.0	51.6#

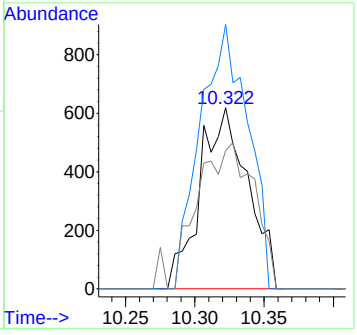


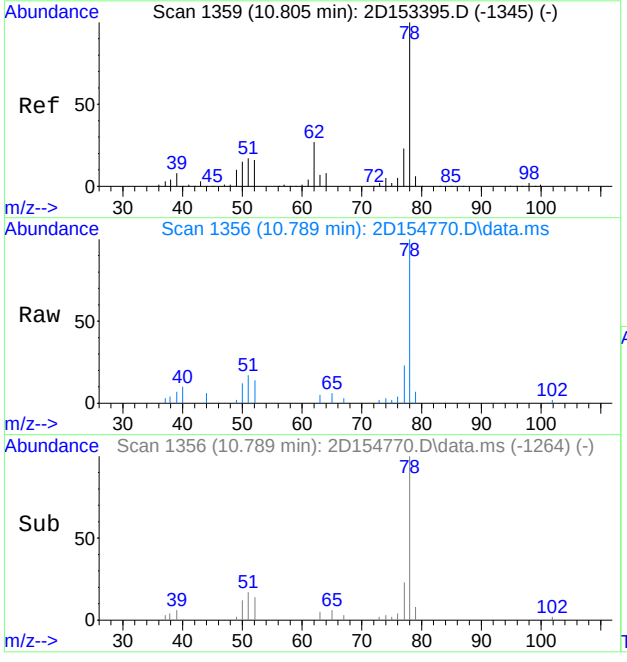


#47
cyclohexane
Concen: 0.24 ug/L
RT: 10.322 min Scan# 1267
Delta R.T. -0.016 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion: 84 Resp: 1491

Ion	Ratio	Lower	Upper
84	100		
56	146.0	101.0	187.6
41	76.4	58.4	108.6

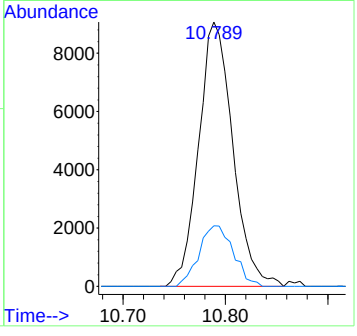




#57
benzene
Concen: 1.26 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. -0.016 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

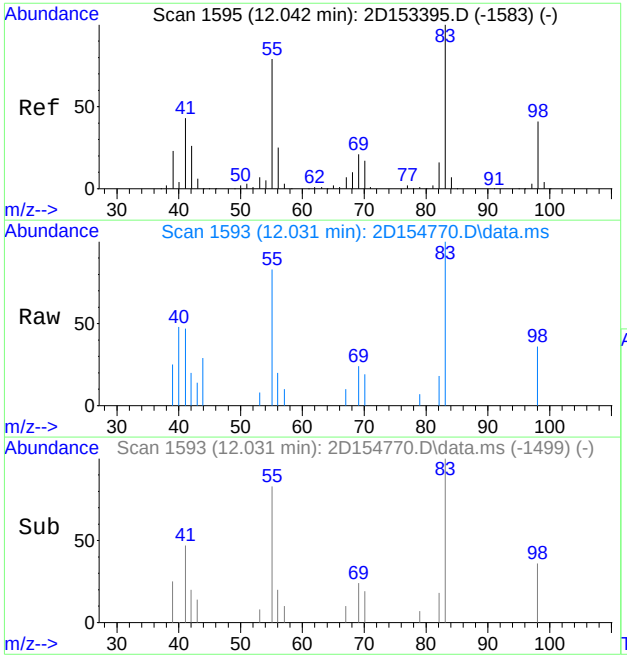
Tgt Ion: 78 Resp: 21083

Ion	Ratio	Lower	Upper
78	100		
77	23.0	0.0	53.0



7.1.9

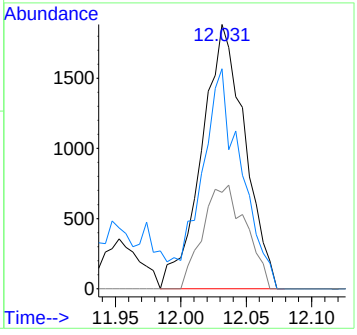
7

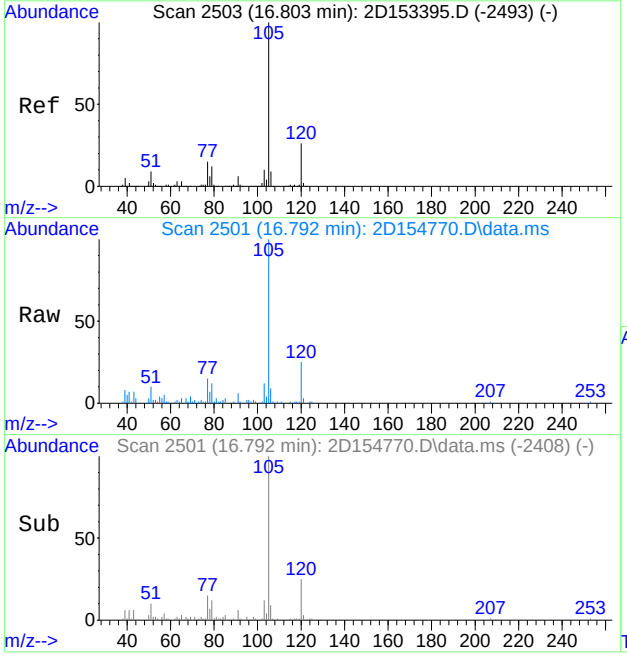


#68
methylcyclohexane
Concen: 0.58 ug/L
RT: 12.031 min Scan# 1593
Delta R.T. -0.010 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion: 83 Resp: 4316

Ion	Ratio	Lower	Upper
83	100		
55	83.2	49.1	109.1
98	36.5	11.3	71.3

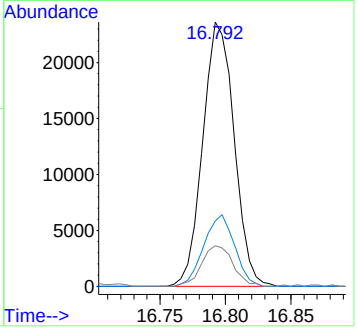


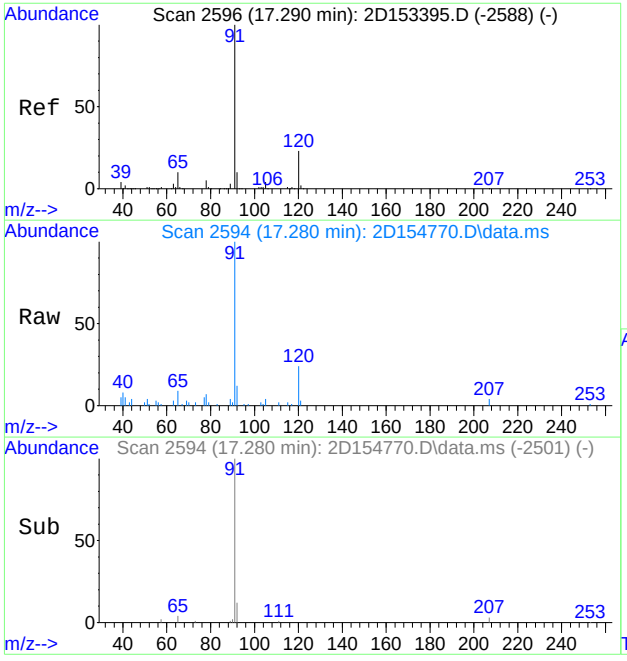


#95
isopropylbenzene
Concen: 1.85 ug/L
RT: 16.792 min Scan# 2501
Delta R.T. -0.011 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion:105 Resp: 39403

Ion	Ratio	Lower	Upper
105	100		
120	24.7	0.0	56.2
77	15.4	0.0	45.1

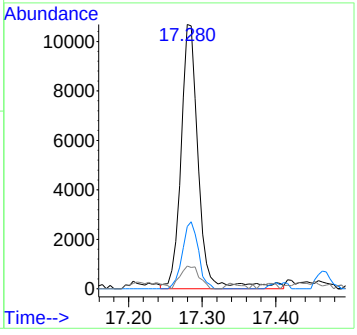


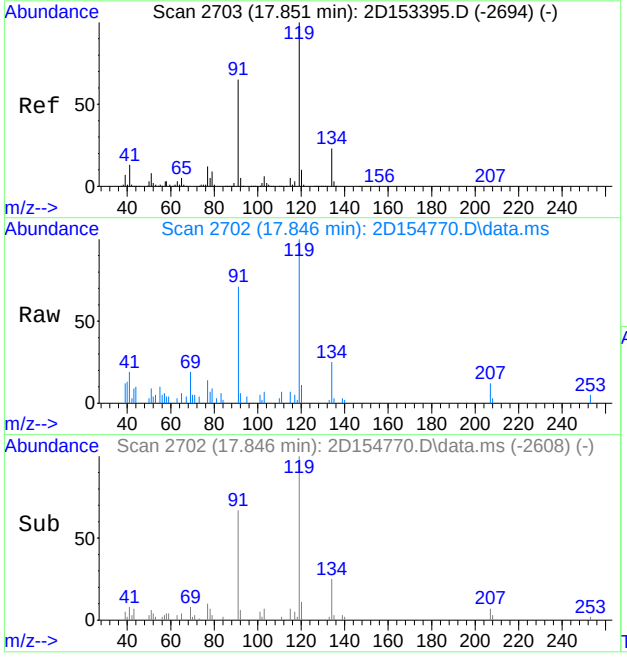


#103
n-propylbenzene
Concen: 0.73 ug/L
RT: 17.280 min Scan# 2594
Delta R.T. -0.011 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion: 91 Resp: 17637

Ion	Ratio	Lower	Upper
91	100		
120	23.8	0.0	53.4
65	7.4	0.0	40.2

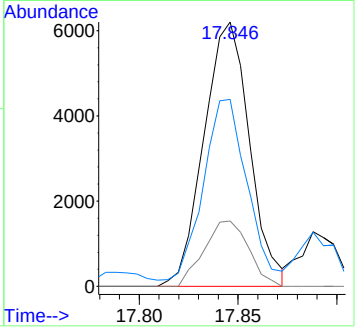


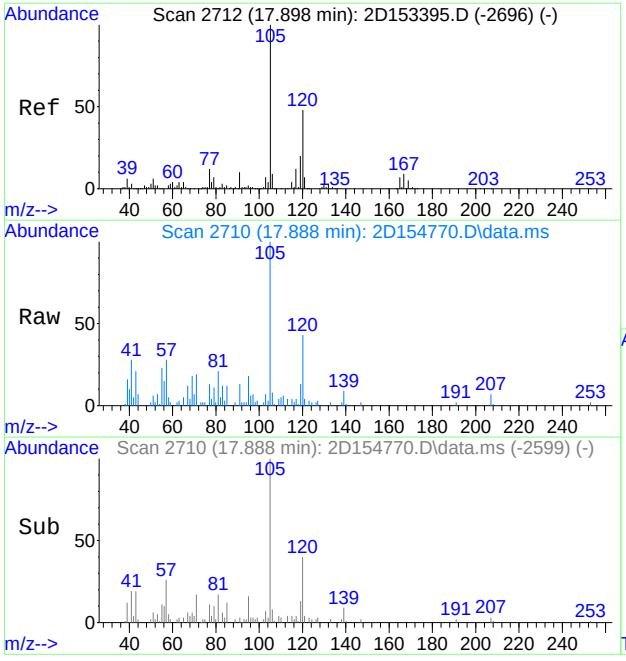


#107
tert-butylbenzene
Concen: 0.60 ug/L m
RT: 17.846 min Scan# 2702
Delta R.T. -0.005 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion:119 Resp: 9972

Ion	Ratio	Lower	Upper
119	100		
91	70.7	35.1	95.1
134	24.7	0.0	53.2

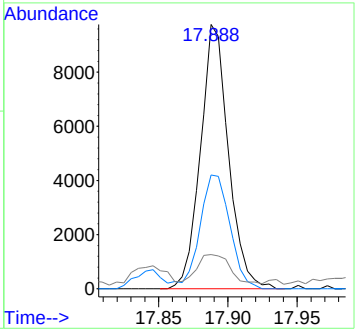


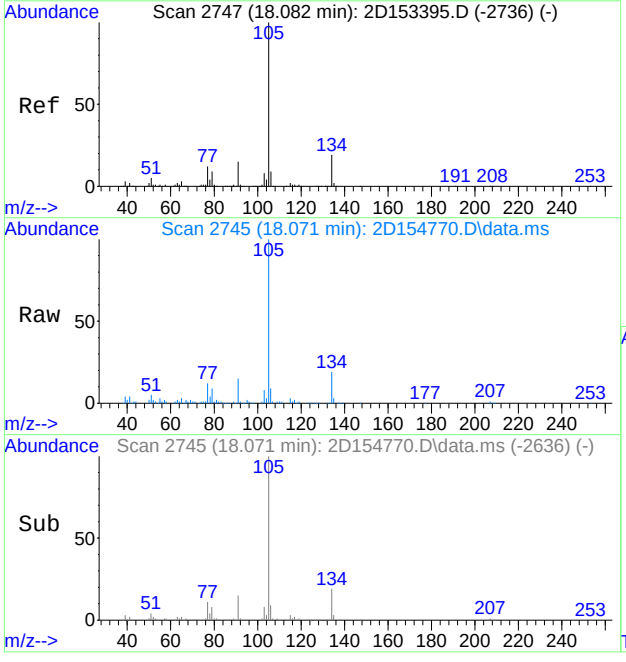


#109
1,2,4-trimethylbenzene
Concen: 0.73 ug/L
RT: 17.888 min Scan# 2710
Delta R.T. -0.011 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion:105 Resp: 13694

Ion	Ratio	Lower	Upper
105	100		
120	43.1	17.8	77.8
77	11.2	0.0	41.9

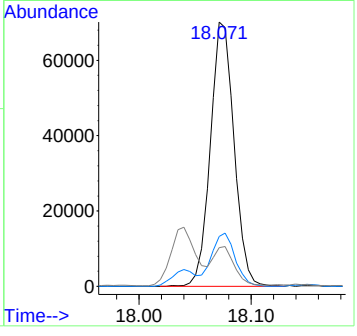


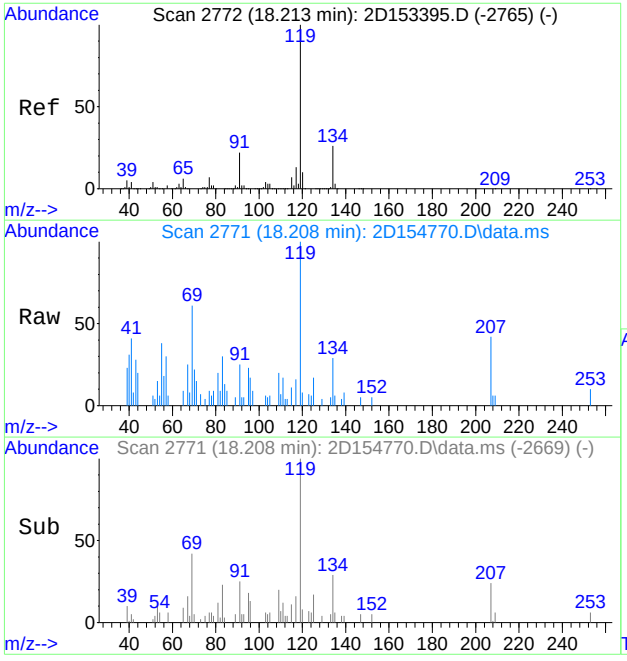


#110
sec-butylbenzene
Concen: 4.20 ug/L
RT: 18.071 min Scan# 2745
Delta R.T. -0.011 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion:105 Resp: 103480

Ion	Ratio	Lower	Upper
105	100		
134	18.9	0.0	48.9
91	14.1	0.0	45.2

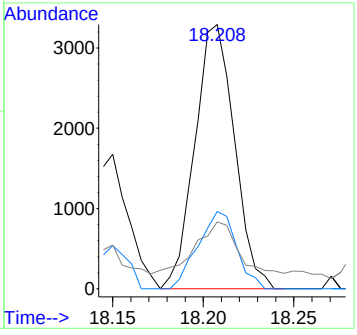


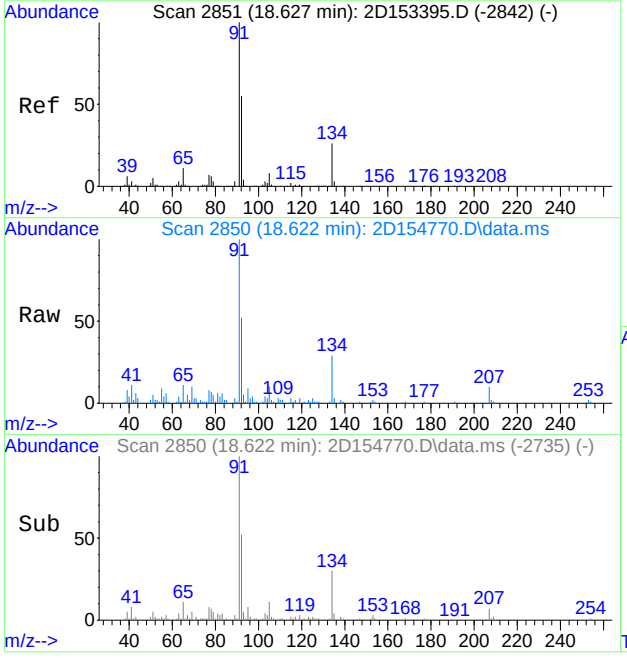


#112
p-isopropyltoluene
Concen: 0.23 ug/L
RT: 18.208 min Scan# 2771
Delta R.T. -0.005 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion:119 Resp: 5004

Ion	Ratio	Lower	Upper
119	100		
134	29.2	0.0	55.7
91	19.5	0.0	51.5

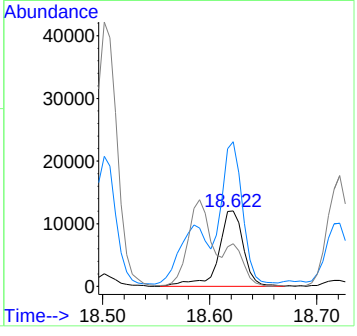


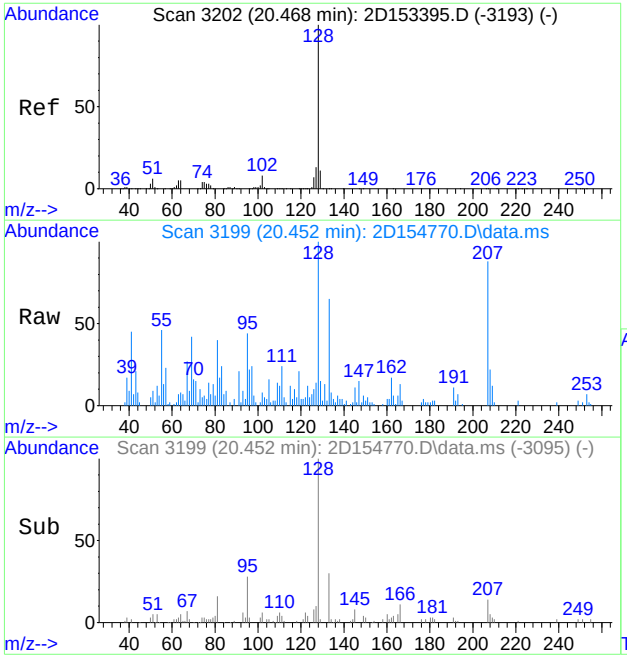


#116
n-butylbenzene
Concen: 1.83 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. -0.005 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion: 92 Resp: 19510

Ion	Ratio	Lower	Upper
92	100		
91	186.4	151.0	211.0
134	55.4	17.8	77.8

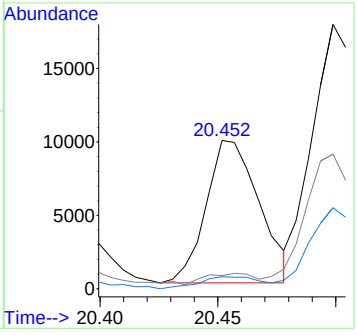




#120
naphthalene
Concen: 0.95 ug/L
RT: 20.452 min Scan# 3199
Delta R.T. -0.016 min
Lab File: 2D154770.D
Acq: 16 Apr 2016 4:10 pm

Tgt Ion:128 Resp: 15262

Ion	Ratio	Lower	Upper
128	100		
102	8.4	0.0	37.5
51	5.1	0.0	36.4



7.1.9

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154774.D
Acq On : 16 Apr 2016 6:13 pm
Operator : Adilm
Sample : jc18331-10
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 18 13:37:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

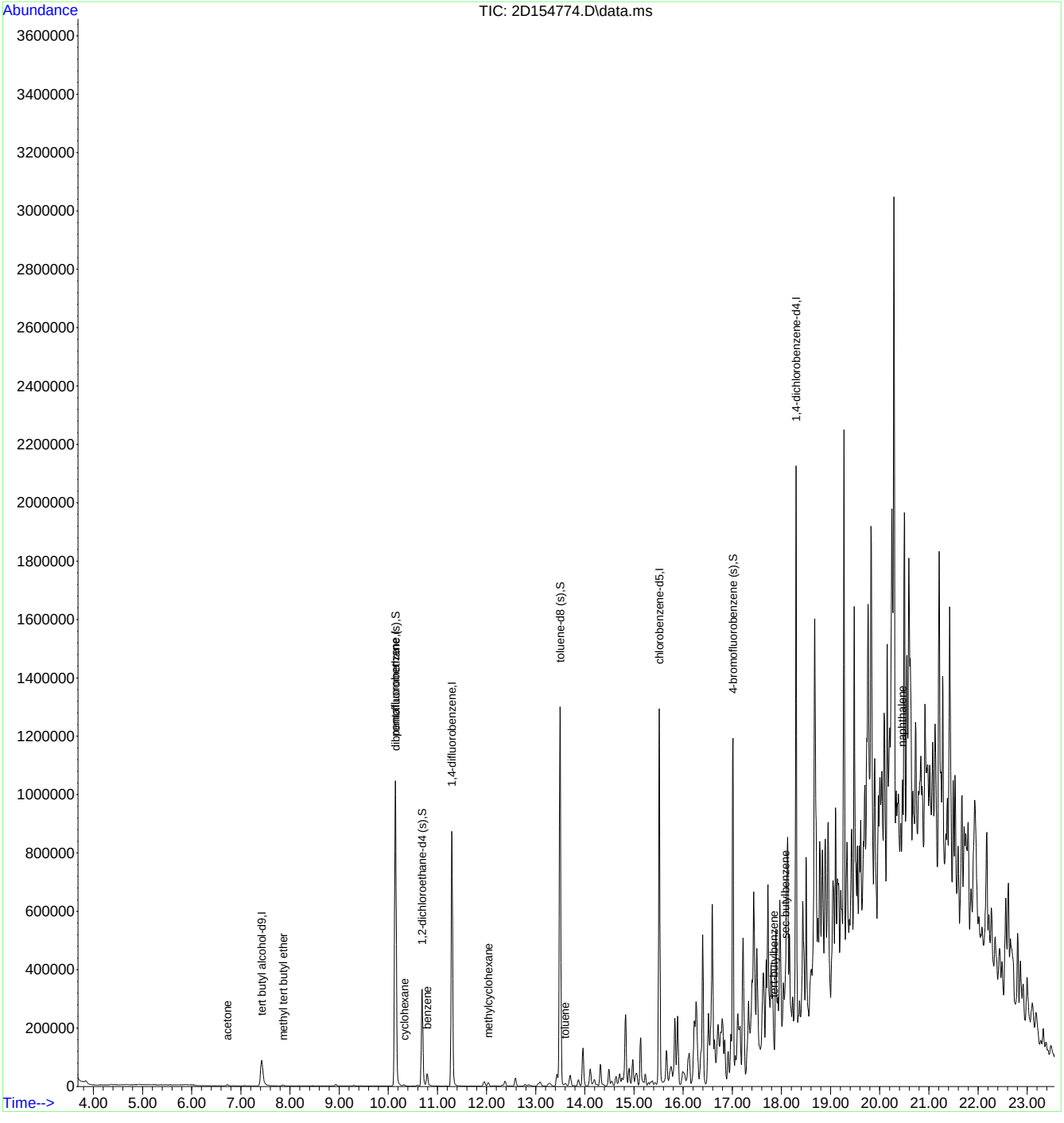
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.423	65	194880	500.00 ug/L	-0.02
5) pentafluorobenzene	10.144	168	670229	50.00 ug/L	-0.01
51) 1,4-difluorobenzene	11.292	114	905197	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	833612	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	474601	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.149	113	293417	50.15 ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.30%		
43) 1,2-dichloroethane-d4 (s)	10.689	65	267071	42.92 ug/L	-0.01
Spiked Amount 50.000	Range 73 - 122		Recovery = 85.84%		
71) toluene-d8 (s)	13.494	98	1021134	48.88 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.76%		
96) 4-bromofluorobenzene (s)	17.012	95	399518	51.79 ug/L	-0.01
Spiked Amount 50.000	Range 78 - 117		Recovery = 103.58%		
Target Compounds					Qvalue
17) acetone	6.725	58	2404	7.83 ug/L #	65
25) methyl tert butyl ether	7.863	73	4091	0.33 ug/L	88
47) cyclohexane	10.327	84	1543	0.24 ug/L	76
57) benzene	10.789	78	45962	2.70 ug/L	94
68) methylcyclohexane	12.037	83	3357	0.45 ug/L	90
73) toluene	13.594	92	2387	0.22 ug/L	97
107) tert-butylbenzene	17.846	119	17682	1.06 ug/L	93
110) sec-butylbenzene	18.077	105	33931	1.38 ug/L	95
120) naphthalene	20.457	128	14644	0.92 ug/L	89

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

Quantitation Report (QT Reviewed)

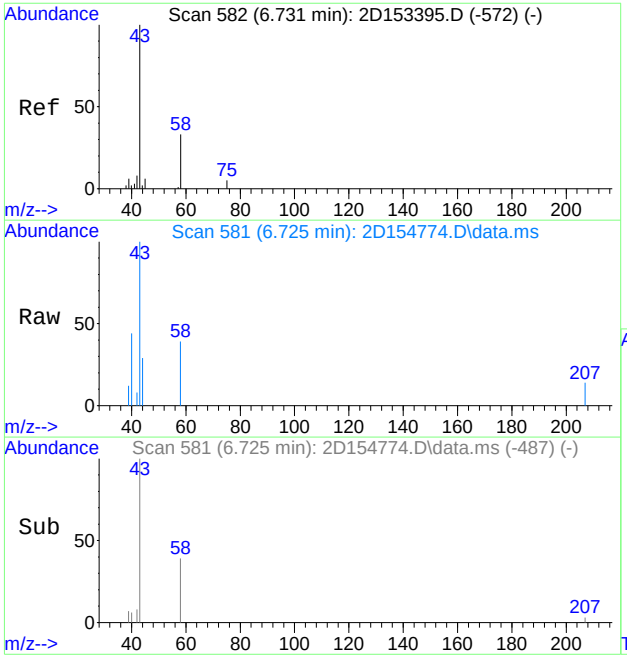
Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154774.D
Acq On : 16 Apr 2016 6:13 pm
Operator : Adilm
Sample : jc18331-10
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 18 13:37:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



M2D6450.M Mon Apr 18 13:41:33 2016 ACC-VOA-DP

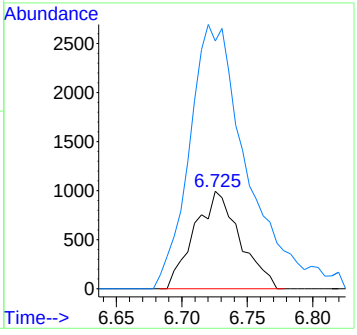
SGS ACCUTEST JC18331

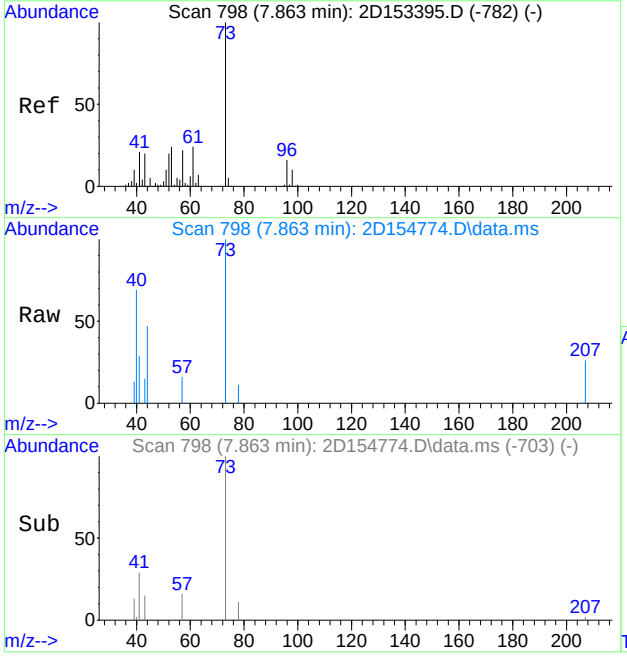


#17
acetone
Concen: 7.83 ug/L
RT: 6.725 min Scan# 581
Delta R.T. -0.005 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion: 58 Resp: 2404

Ion	Ratio	Lower	Upper
58	100		
43	239.8	280.0	340.0#

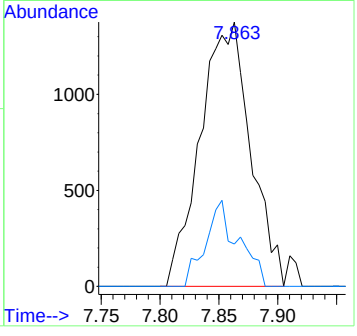


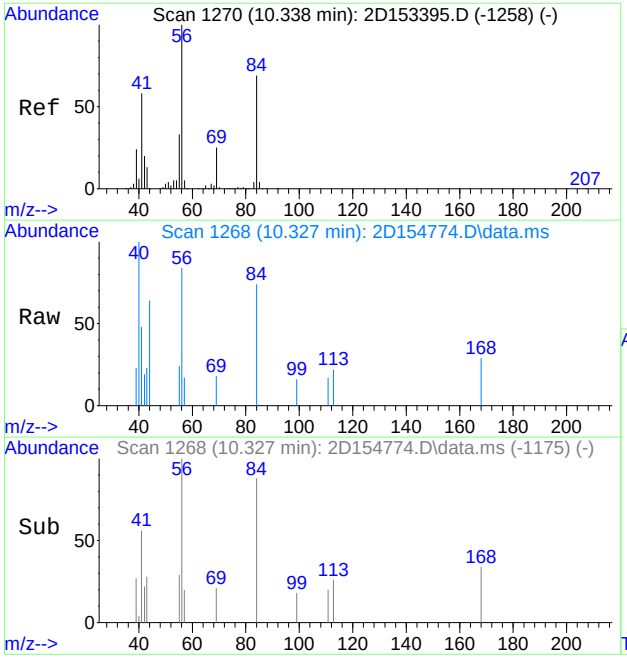


#25
methyl tert butyl ether
Concen: 0.33 ug/L
RT: 7.863 min Scan# 798
Delta R.T. -0.000 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion: 73 Resp: 4091

Ion	Ratio	Lower	Upper
73	100		
57	16.0	0.0	51.6

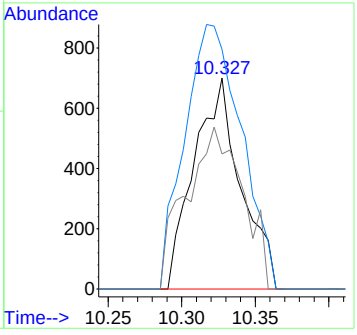


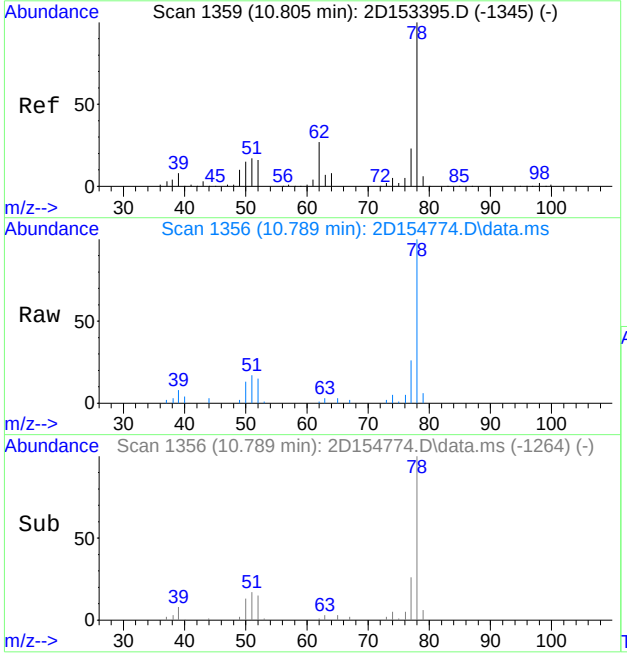


#47
cyclohexane
Concen: 0.24 ug/L
RT: 10.327 min Scan# 1268
Delta R.T. -0.011 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion: 84 Resp: 1543

Ion	Ratio	Lower	Upper
84	100		
56	113.6	101.0	187.6
41	63.9	58.4	108.6

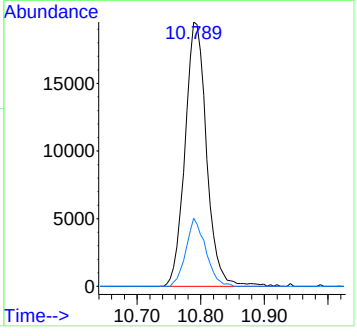


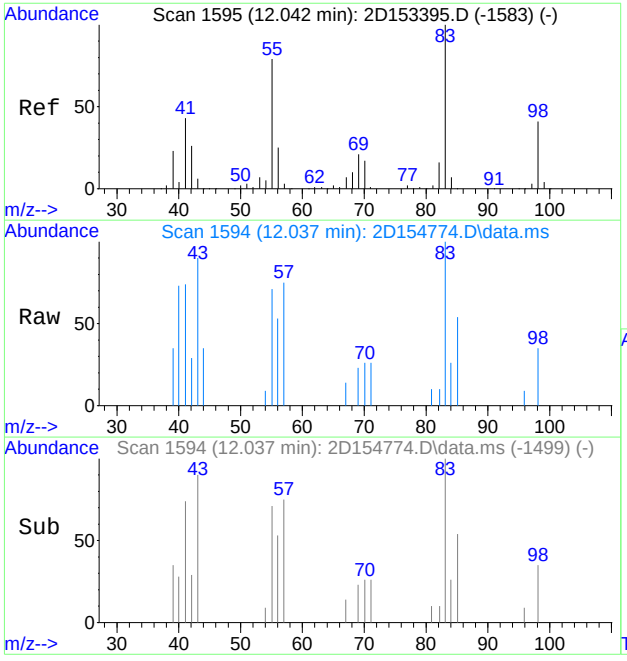


#57
benzene
Concen: 2.70 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. -0.016 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion: 78 Resp: 45962

Ion	Ratio	Lower	Upper
78	100		
77	25.8	0.0	53.0

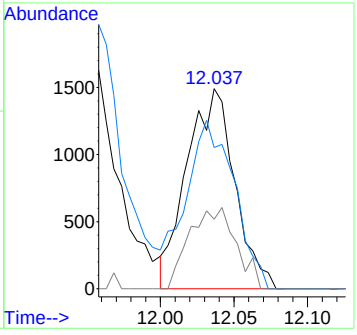


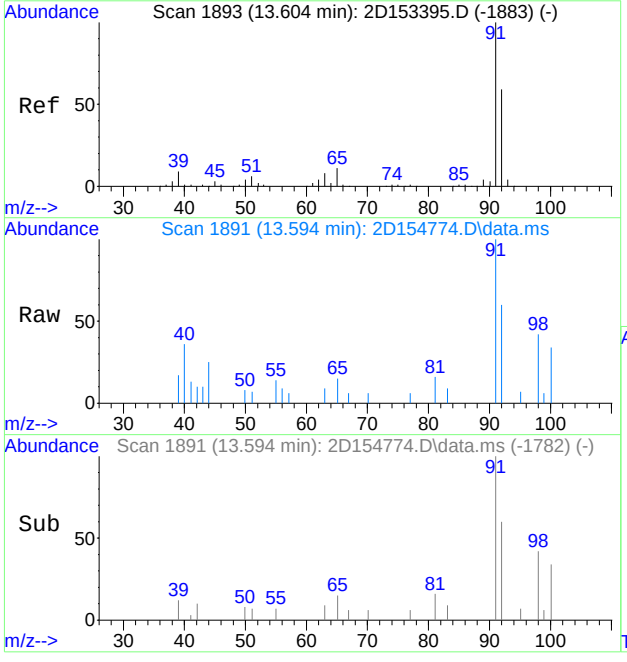


#68
methylcyclohexane
Concen: 0.45 ug/L
RT: 12.037 min Scan# 1594
Delta R.T. -0.004 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion: 83 Resp: 3357

Ion	Ratio	Lower	Upper
83	100		
55	70.6	49.1	109.1
98	34.8	11.3	71.3

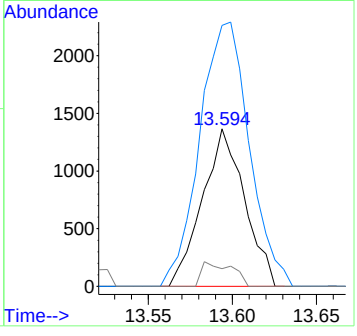




#73
toluene
Concen: 0.22 ug/L
RT: 13.594 min Scan# 1891
Delta R.T. -0.011 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

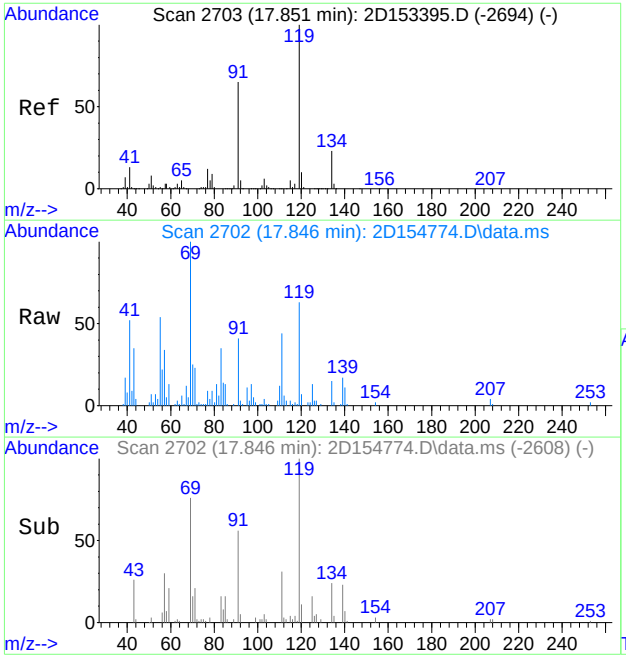
Tgt Ion: 92 Resp: 2387

Ion	Ratio	Lower	Upper
92	100		
91	165.7	140.3	200.3
51	11.2	0.0	40.9



7.1.10

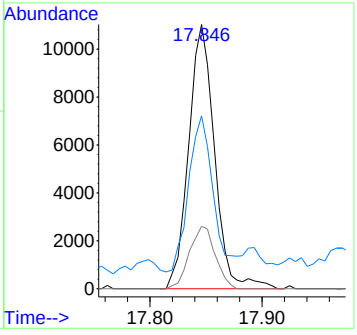
7

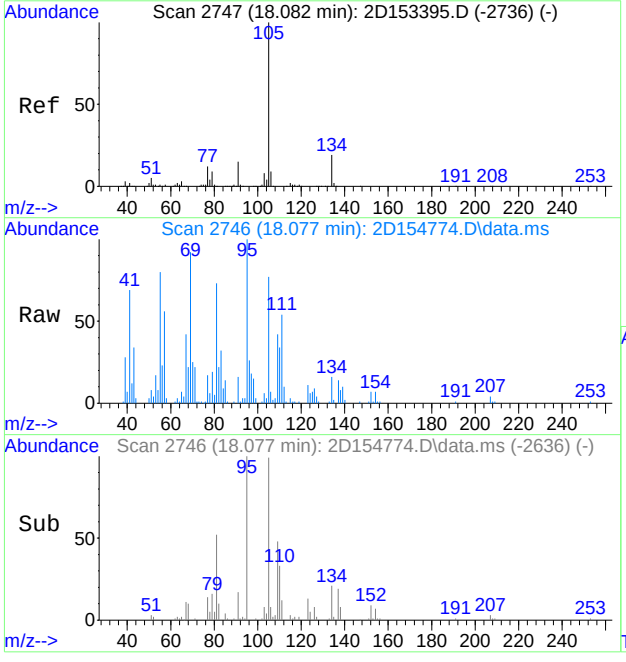


#107
tert-butylbenzene
Concen: 1.06 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. -0.005 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion:119 Resp: 17682

Ion	Ratio	Lower	Upper
119	100		
91	58.4	35.1	95.1
134	23.6	0.0	53.2

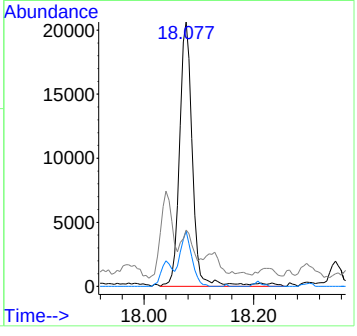


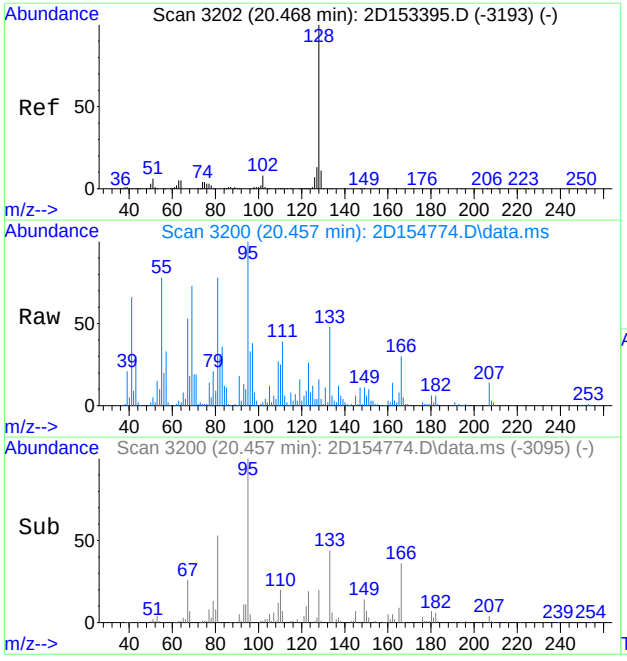


#110
sec-butylbenzene
Concen: 1.38 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. -0.005 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion:105 Resp: 33931

Ion	Ratio	Lower	Upper
105	100		
134	20.9	0.0	48.9
91	17.5	0.0	45.2

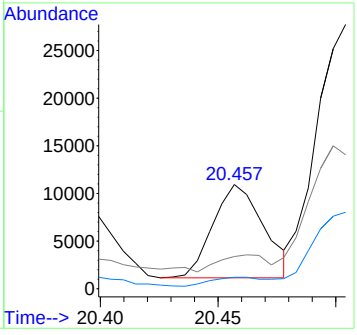




#120
naphthalene
Concen: 0.92 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. -0.011 min
Lab File: 2D154774.D
Acq: 16 Apr 2016 6:13 pm

Tgt Ion:128 Resp: 14644

Ion	Ratio	Lower	Upper
128	100		
102	8.3	0.0	37.5
51	13.6	0.0	36.4



7.1.10

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154773.D
Acq On : 16 Apr 2016 5:42 pm
Operator : Adilm
Sample : jc18331-11
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 18 13:35:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.418	65	175877	500.00 ug/L	-0.02
5) pentafluorobenzene	10.139	168	667996	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.292	114	907855	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.513	117	831308	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	468920	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.149	113	292228	50.11 ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.22%		
43) 1,2-dichloroethane-d4 (s)	10.689	65	263178	42.43 ug/L	-0.01
Spiked Amount 50.000	Range 73 - 122		Recovery = 84.86%		
71) toluene-d8 (s)	13.494	98	1027557	49.04 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.08%		
96) 4-bromofluorobenzene (s)	17.012	95	382387	50.17 ug/L	-0.01
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.34%		
Target Compounds					Qvalue
17) acetone	6.715	58	2727	8.91 ug/L #	62
47) cyclohexane	10.322	84	13703	2.13 ug/L	77
57) benzene	10.789	78	124371	7.29 ug/L	98
68) methylcyclohexane	12.031	83	37125	4.93 ug/L	95
73) toluene	13.594	92	742893	69.65 ug/L	97
89) ethylbenzene	15.660	91	831017	41.83 ug/L	97
90) m,p-xylene	15.806	106	574484	73.92 ug/L	96
91) o-xylene	16.346	106	838996	103.29 ug/L	97
95) isopropylbenzene	16.797	105	156661	7.44 ug/L	98
103) n-propylbenzene	17.285	91	292667	12.33 ug/L	97
106) 1,3,5-trimethylbenzene	17.463	105	525914	29.10 ug/L	97
107) tert-butylbenzene	17.846	119	5047	0.31 ug/L	89
109) 1,2,4-trimethylbenzene	17.888	105	1458538	78.72 ug/L	98
110) sec-butylbenzene	18.077	105	118652	4.89 ug/L	96
112) p-isopropyltoluene	18.208	119	86671	4.10 ug/L	96
116) n-butylbenzene	18.622	92	41870	3.98 ug/L	97
120) naphthalene	20.457	128	223242	14.13 ug/L	99

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

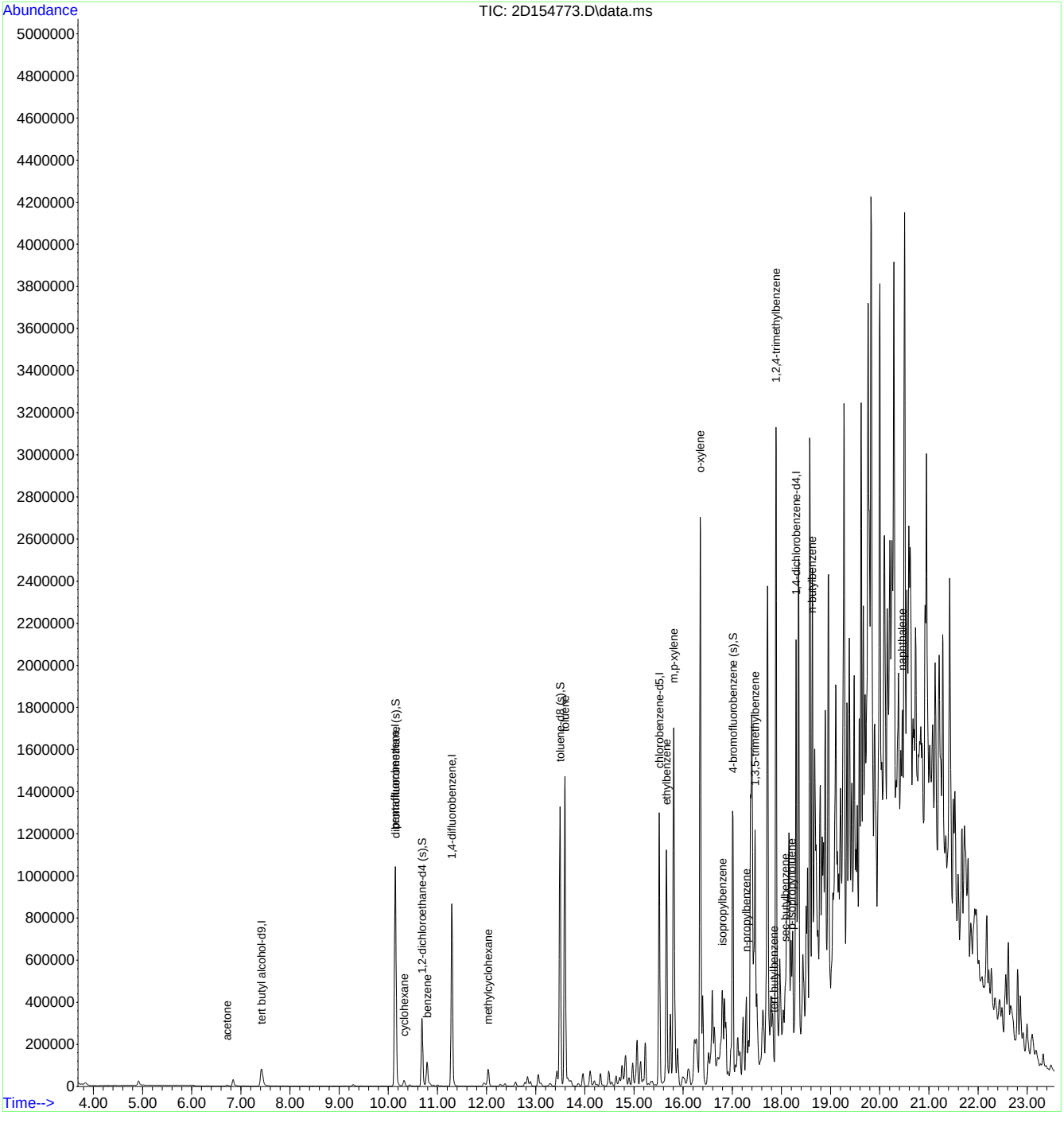
7.1.11
7

SGS ACCUTEST JC18331

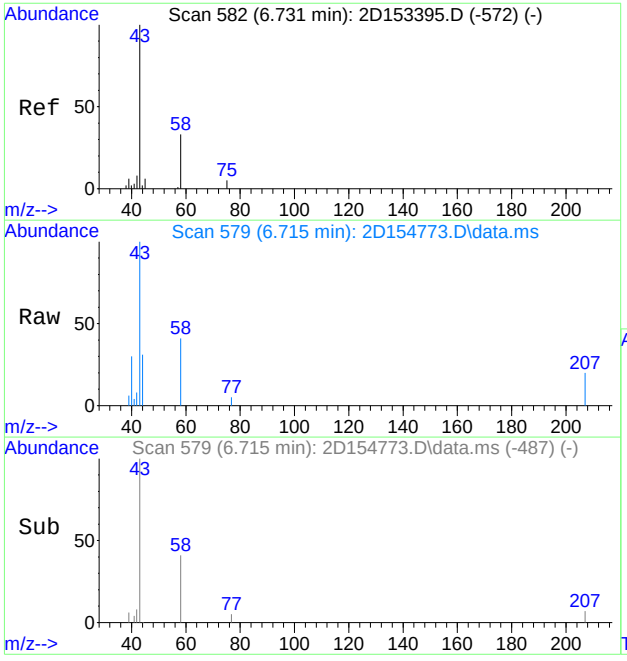
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154773.D
Acq On : 16 Apr 2016 5:42 pm
Operator : Adilm
Sample : jc18331-11
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 18 13:35:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



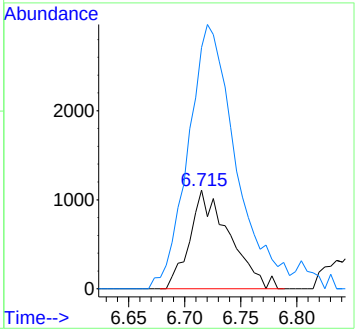
SGS ACCUTEST JC18331

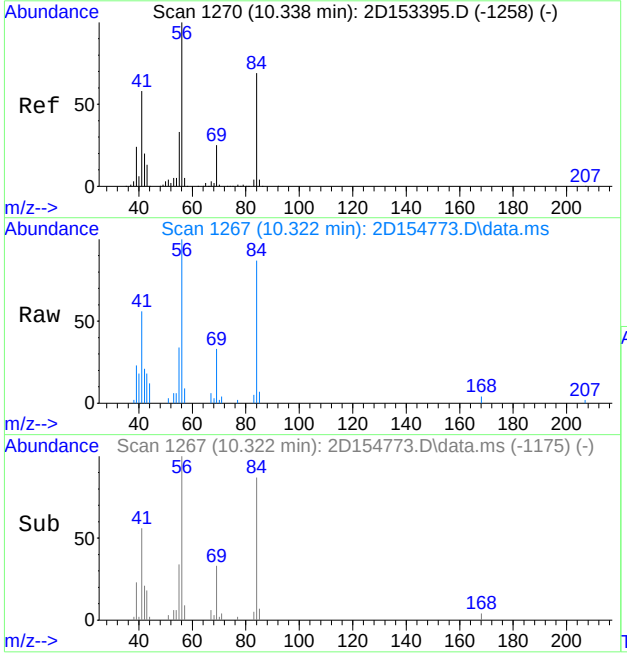


#17
acetone
Concen: 8.91 ug/L
RT: 6.715 min Scan# 579
Delta R.T. -0.016 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 58 Resp: 2727

Ion	Ratio	Lower	Upper
58	100		
43	233.1	280.0	340.0#

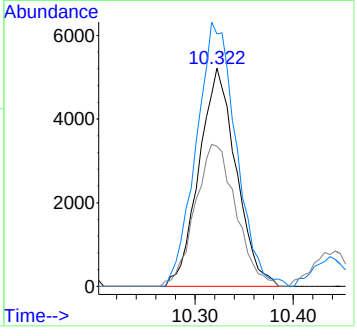


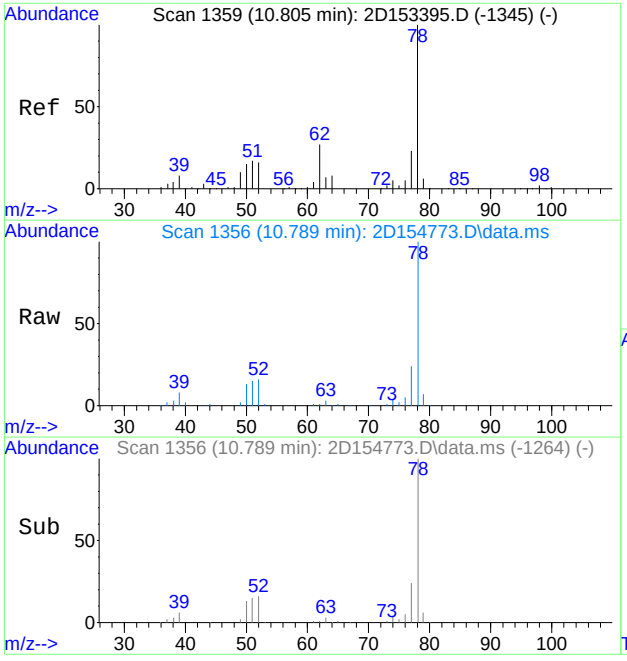


#47
cyclohexane
Concen: 2.13 ug/L
RT: 10.322 min Scan# 1267
Delta R.T. -0.016 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 84 Resp: 13703

Ion	Ratio	Lower	Upper
84	100		
56	115.5	101.0	187.6
41	64.2	58.4	108.6

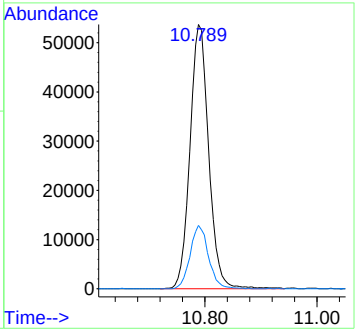


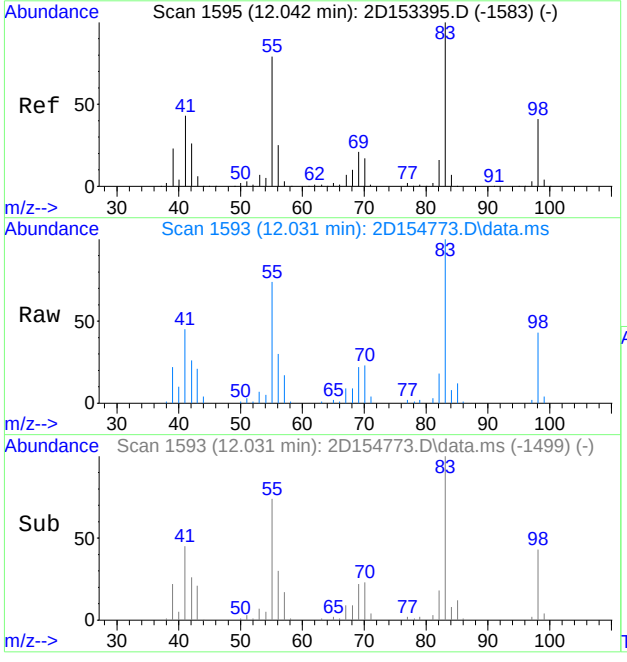


#57
benzene
Concen: 7.29 ug/L
RT: 10.789 min Scan# 1356
Delta R.T. -0.016 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 78 Resp: 124371

Ion	Ratio	Lower	Upper
78	100		
77	23.9	0.0	53.0

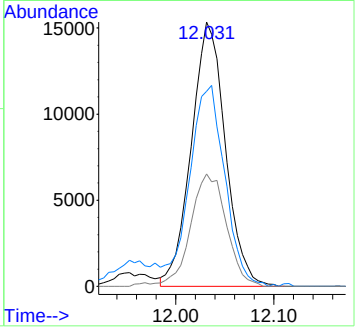


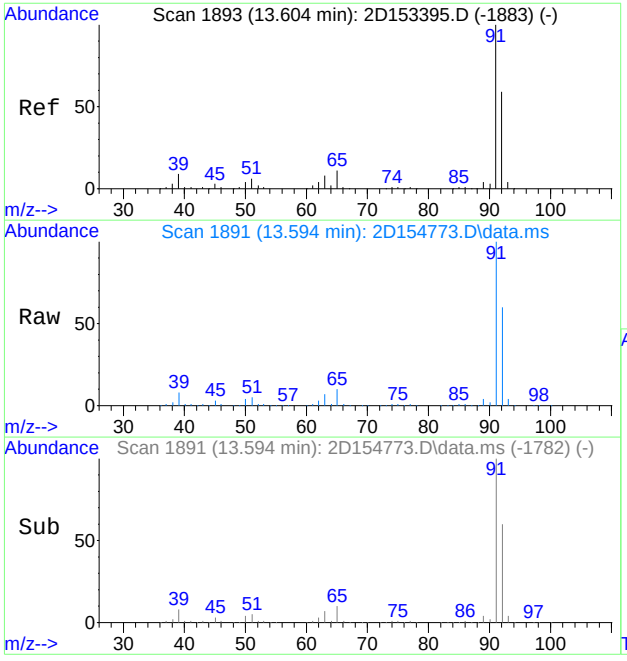


#68
methylcyclohexane
Concen: 4.93 ug/L
RT: 12.031 min Scan# 1593
Delta R.T. -0.010 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 83 Resp: 37125

Ion	Ratio	Lower	Upper
83	100		
55	72.8	49.1	109.1
98	42.5	11.3	71.3

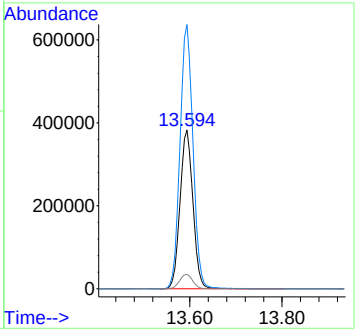


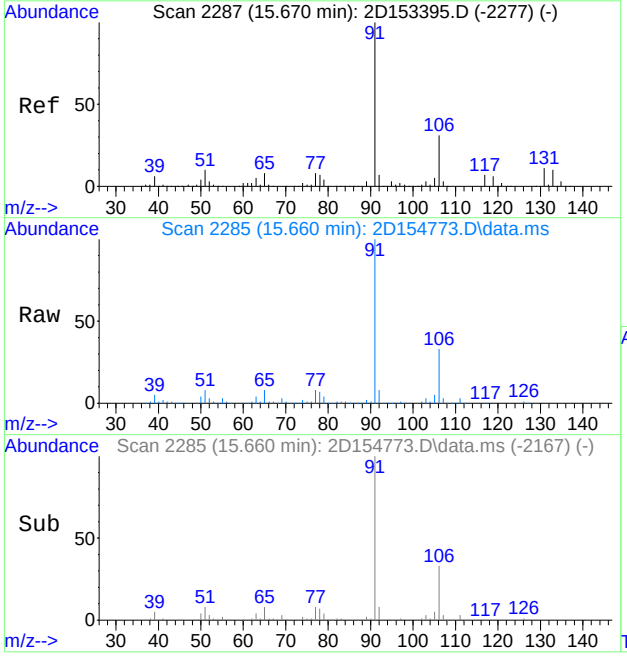


#73
toluene
Concen: 69.65 ug/L
RT: 13.594 min Scan# 1891
Delta R.T. -0.011 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 92 Resp: 742893

Ion	Ratio	Lower	Upper
92	100		
91	166.4	140.3	200.3
51	9.1	0.0	40.9

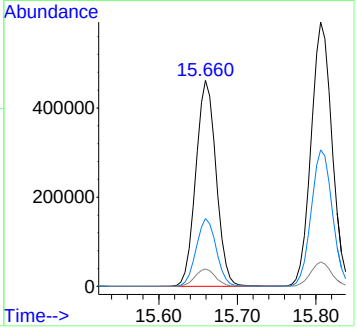


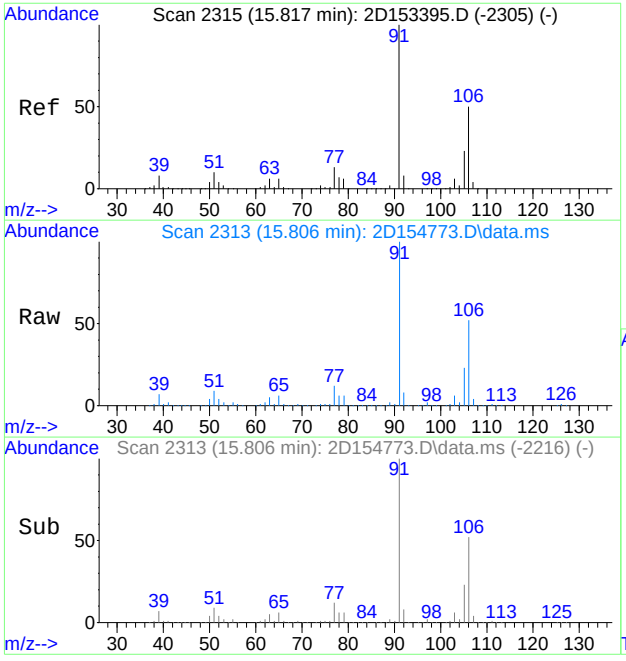


#89
ethylbenzene
Concen: 41.83 ug/L
RT: 15.660 min Scan# 2285
Delta R.T. -0.011 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 91 Resp: 831017

Ion	Ratio	Lower	Upper
91	100		
106	32.9	1.2	61.2
51	8.4	0.0	39.8

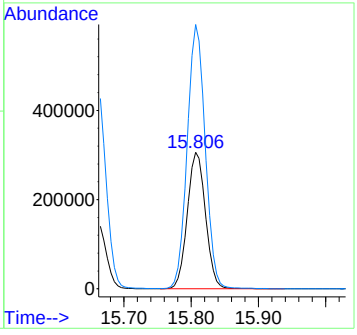


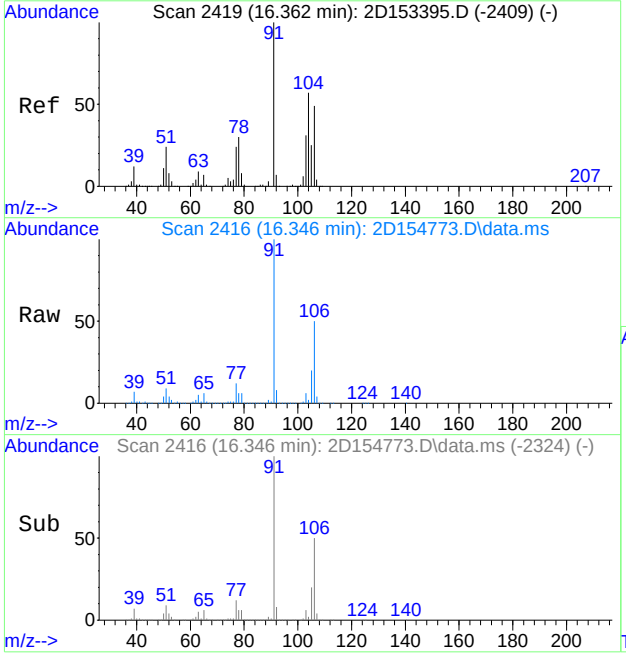


#90
m,p-xylene
Concen: 73.92 ug/L
RT: 15.806 min Scan# 2313
Delta R.T. -0.011 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:106 Resp: 574484

Ion	Ratio	Lower	Upper
106	100		
91	193.5	169.7	229.7

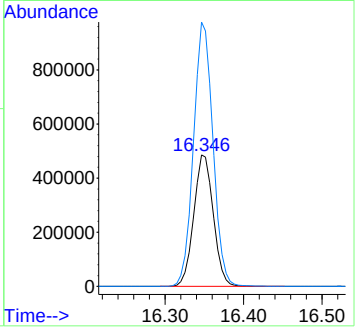


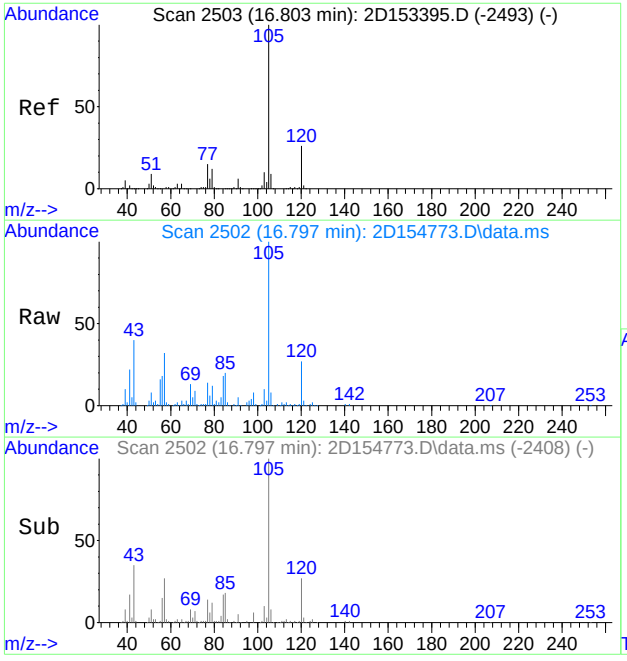


#91
o-xylene
Concen: 103.29 ug/L
RT: 16.346 min Scan# 2416
Delta R.T. -0.016 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:106 Resp: 838996

Ion	Ratio	Lower	Upper
106	100		
91	201.2	175.8	235.8

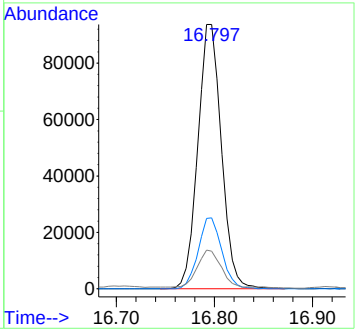


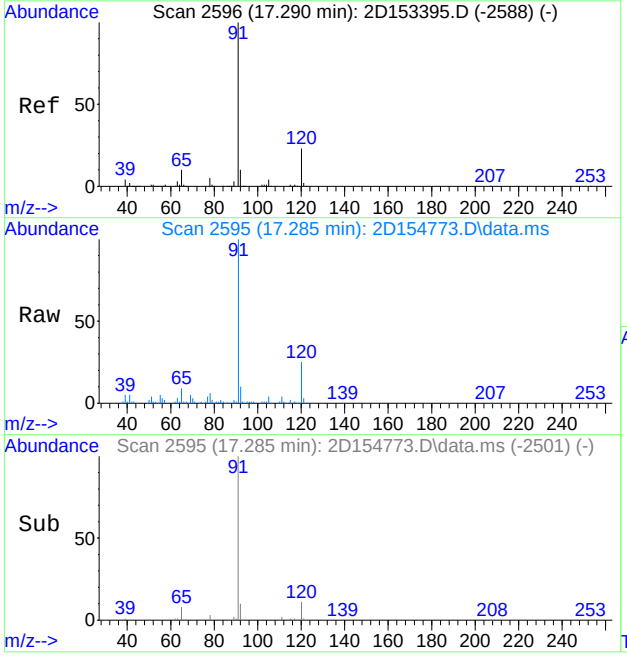


#95
isopropylbenzene
Concen: 7.44 ug/L
RT: 16.797 min Scan# 2502
Delta R.T. -0.005 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:105 Resp: 156661

Ion	Ratio	Lower	Upper
105	100		
120	26.9	0.0	56.2
77	13.9	0.0	45.1

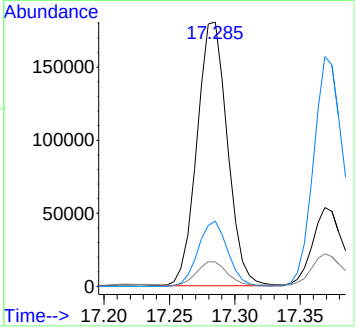


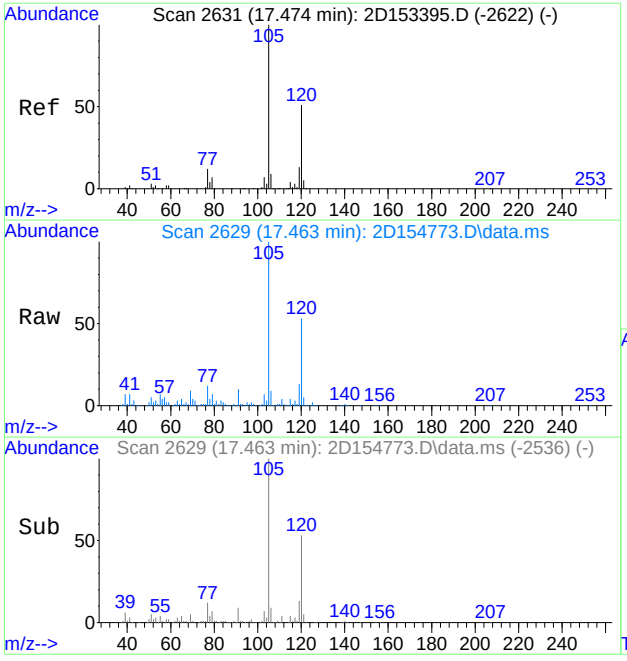


#103
n-propylbenzene
Concen: 12.33 ug/L
RT: 17.285 min Scan# 2595
Delta R.T. -0.005 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 91 Resp: 292667

Ion	Ratio	Lower	Upper
91	100		
120	24.8	0.0	53.4
65	8.7	0.0	40.2

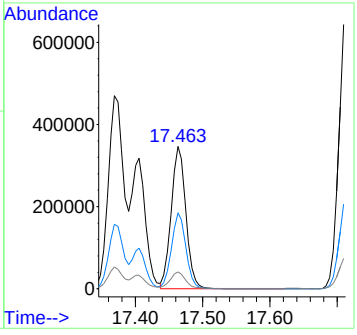


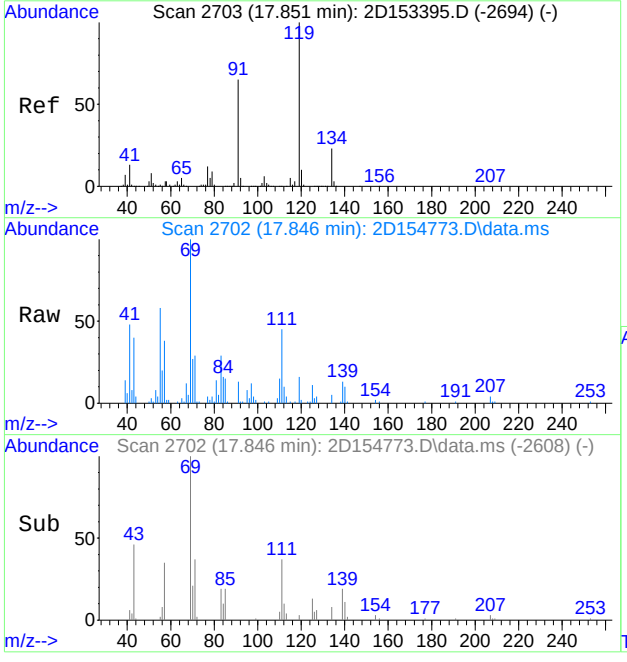


#106
1,3,5-trimethylbenzene
Concen: 29.10 ug/L
RT: 17.463 min Scan# 2629
Delta R.T. -0.011 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:105 Resp: 525914

Ion	Ratio	Lower	Upper
105	100		
120	53.3	20.7	80.7
77	11.5	0.0	42.0

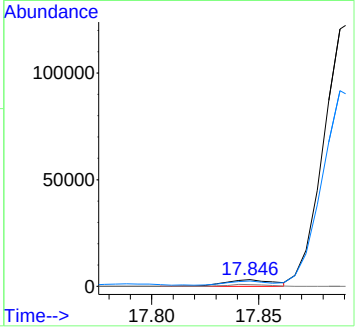


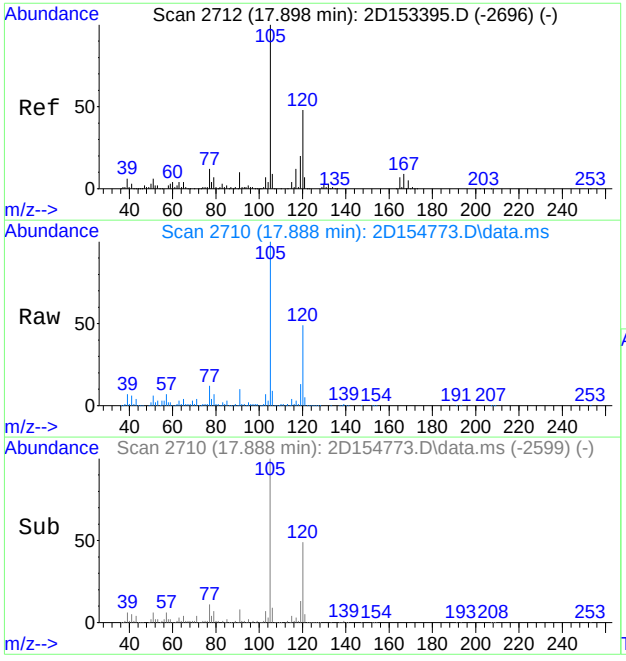


#107
tert-butylbenzene
Concen: 0.31 ug/L
RT: 17.846 min Scan# 2702
Delta R.T. -0.005 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:119 Resp: 5047

Ion	Ratio	Lower	Upper
119	100		
91	56.6	35.1	95.1
134	28.2	0.0	53.2

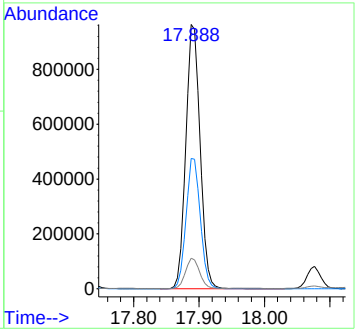


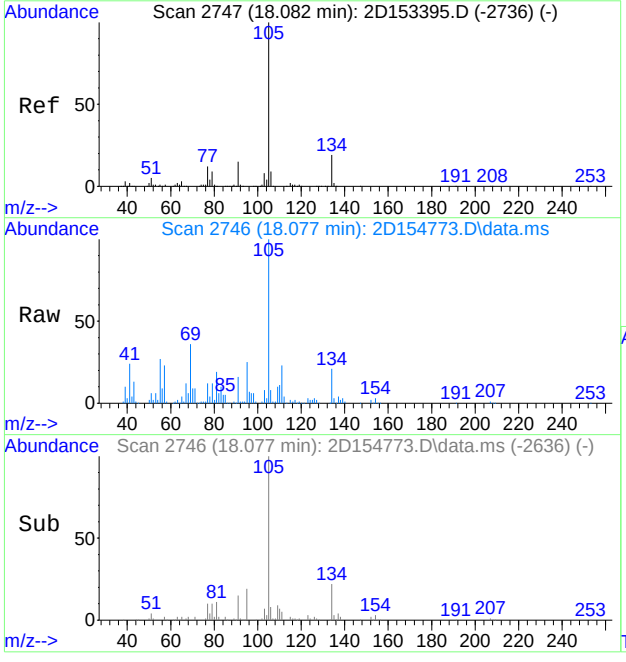


#109
1,2,4-trimethylbenzene
Concen: 78.72 ug/L
RT: 17.888 min Scan# 2710
Delta R.T. -0.011 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:105 Resp: 1458538

Ion	Ratio	Lower	Upper
105	100		
120	49.3	17.8	77.8
77	11.5	0.0	41.9

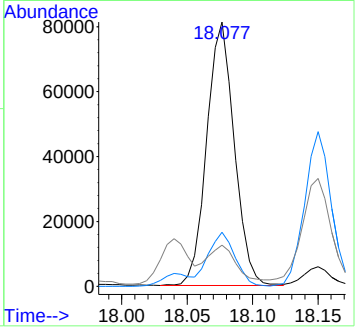


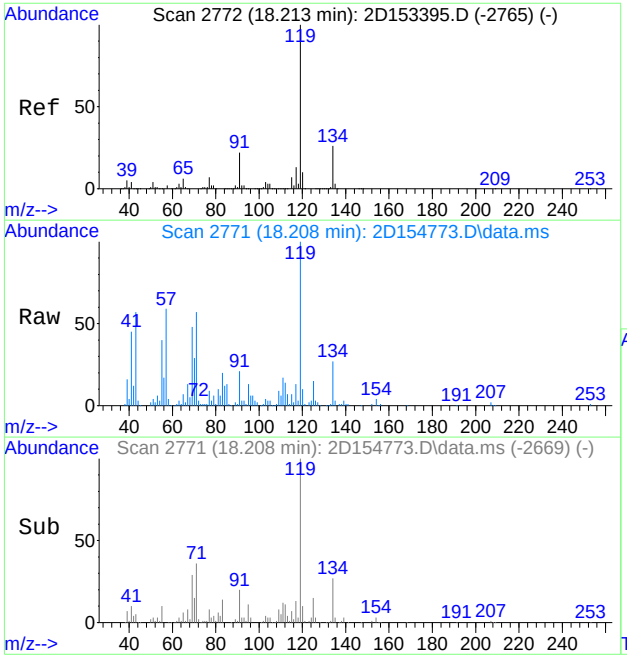


#110
sec-butylbenzene
Concen: 4.89 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. -0.005 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:105 Resp: 118652

Ion	Ratio	Lower	Upper
105	100		
134	19.5	0.0	48.9
91	11.9	0.0	45.2

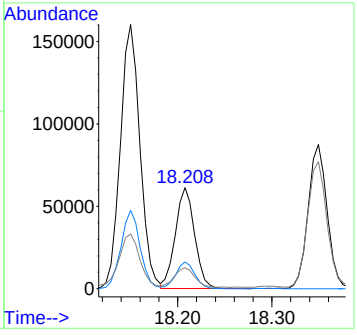


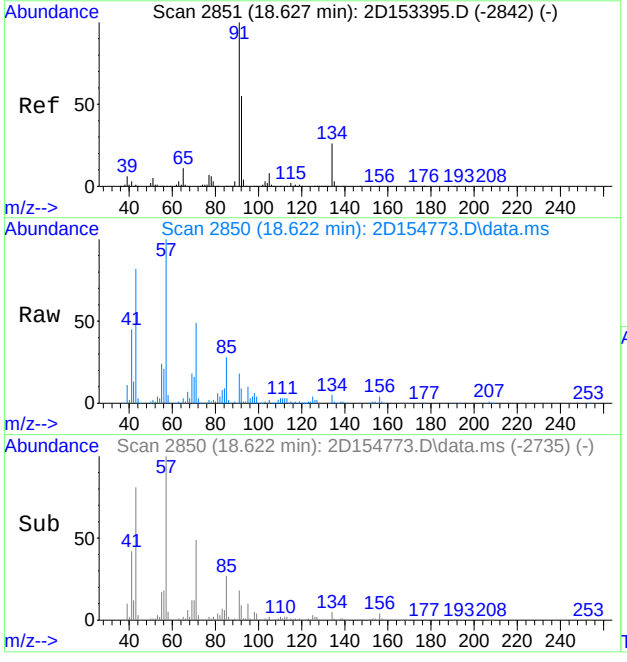


#112
p-isopropyltoluene
Concen: 4.10 ug/L
RT: 18.208 min Scan# 2771
Delta R.T. -0.005 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:119 Resp: 86671

Ion	Ratio	Lower	Upper
119	100		
134	26.7	0.0	55.7
91	18.9	0.0	51.5

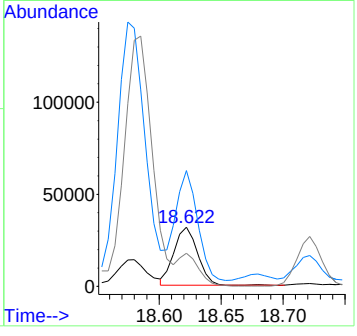


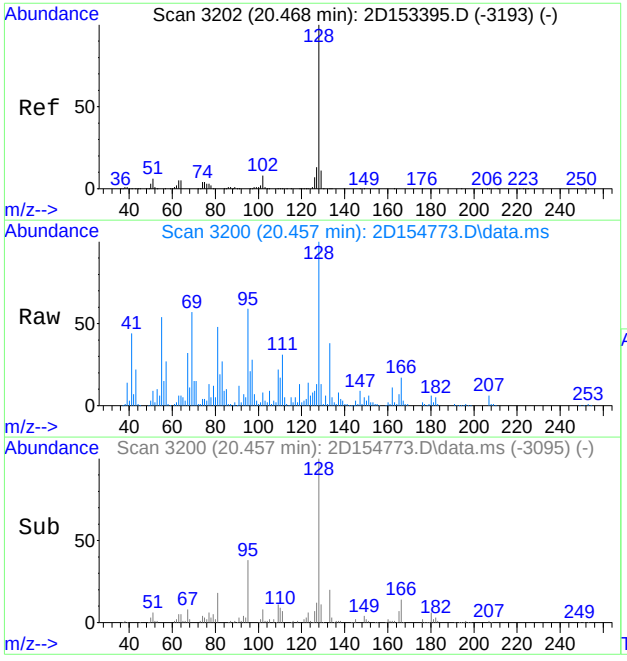


#116
n-butylbenzene
Concen: 3.98 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. -0.005 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion: 92 Resp: 41870

Ion	Ratio	Lower	Upper
92	100		
91	184.8	151.0	211.0
134	50.4	17.8	77.8

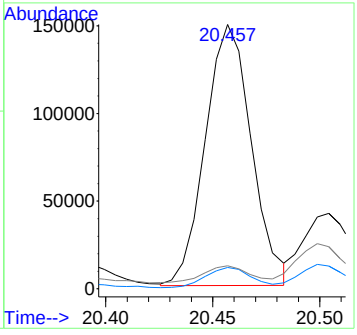




#120
naphthalene
Concen: 14.13 ug/L
RT: 20.457 min Scan# 3200
Delta R.T. -0.011 min
Lab File: 2D154773.D
Acq: 16 Apr 2016 5:42 pm

Tgt Ion:128 Resp: 223242

Ion	Ratio	Lower	Upper
128	100		
102	7.8	0.0	37.5
51	6.5	0.0	36.4



7.1.11

7

Manual Integrations APPROVED (compounds with "m" flag)
MoHui Huang
04/25/16 17:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154771.D
Acq On : 16 Apr 2016 4:41 pm
Operator : Adilm
Sample : jc18331-12
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 25 16:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.428	65	200471	500.00 ug/L	-0.01
5) pentafluorobenzene	10.144	168	670538	50.00 ug/L	-0.01
51) 1,4-difluorobenzene	11.297	114	911363	50.00 ug/L	-0.01
79) chlorobenzene-d5	15.513	117	851471	50.00 ug/L	-0.01
94) 1,4-dichlorobenzene-d4	18.297	152	481587	50.00 ug/L	-0.01
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.154	113	299721	51.20 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery	= 102.40%	
43) 1,2-dichloroethane-d4 (s)	10.689	65	275267	44.21 ug/L	-0.01
Spiked Amount 50.000	Range 73 - 122		Recovery	= 88.42%	
71) toluene-d8 (s)	13.494	98	1034410	49.18 ug/L	-0.01
Spiked Amount 50.000	Range 84 - 119		Recovery	= 98.36%	
96) 4-bromofluorobenzene (s)	17.012	95	395377	50.51 ug/L	-0.01
Spiked Amount 50.000	Range 78 - 117		Recovery	= 101.02%	
Target Compounds					Qvalue
17) acetone	6.725	58	6295	20.49 ug/L #	77
41) chloroform	9.903	83	2775	0.34 ug/L	95
47) cyclohexane	10.327	84	5133	0.80 ug/L	74
57) benzene	10.794	78	212694	12.42 ug/L	100
68) methylcyclohexane	12.031	83	13942	1.85 ug/L	97
73) toluene	13.594	92	610778	57.04 ug/L	98
89) ethylbenzene	15.660	91	547517	26.90 ug/L	98
90) m,p-xylene	15.806	106	754333	94.77 ug/L	93
91) o-xylene	16.352	106	580071	69.72 ug/L	96
95) isopropylbenzene	16.797	105	153524	7.10 ug/L	95
103) n-propylbenzene	17.285	91	296248	12.15 ug/L	98
106) 1,3,5-trimethylbenzene	17.463	105	529208	28.51 ug/L	98
109) 1,2,4-trimethylbenzene	17.888	105	1769674	93.00 ug/L	99
110) sec-butylbenzene	18.077	105	104068	4.17 ug/L	98
112) p-isopropyltoluene	18.208	119	72519	3.34 ug/L	98
116) n-butylbenzene	18.622	92	39200	3.63 ug/L	95
120) naphthalene	20.457	128	219566m	13.54 ug/L	

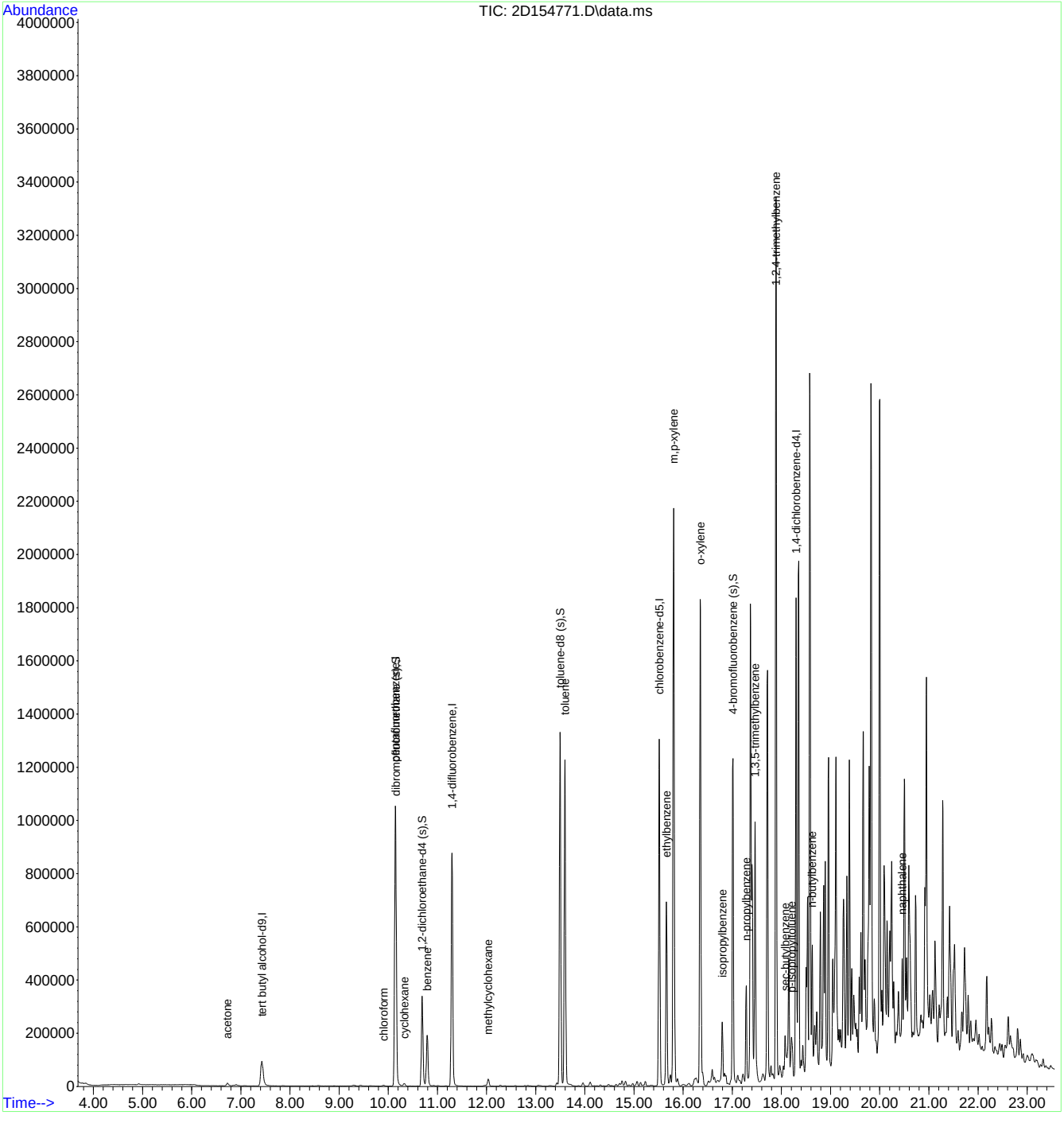
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.12
7

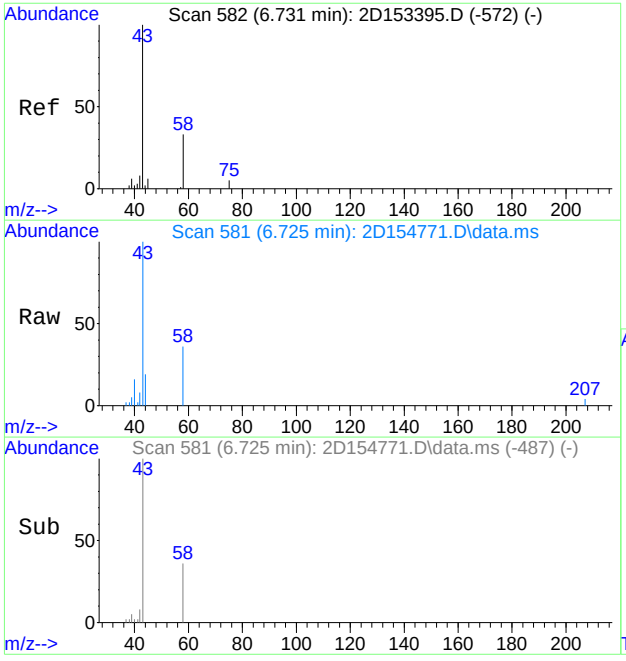
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154771.D
Acq On : 16 Apr 2016 4:41 pm
Operator : Adilm
Sample : jc18331-12
Misc : ms1017,v2d6501,w,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 25 16:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



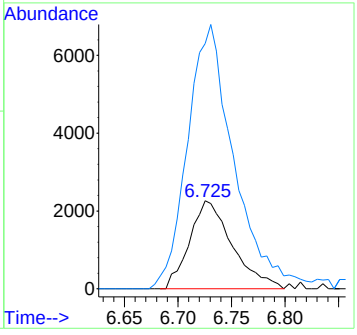
SGS ACCUTEST JC18331

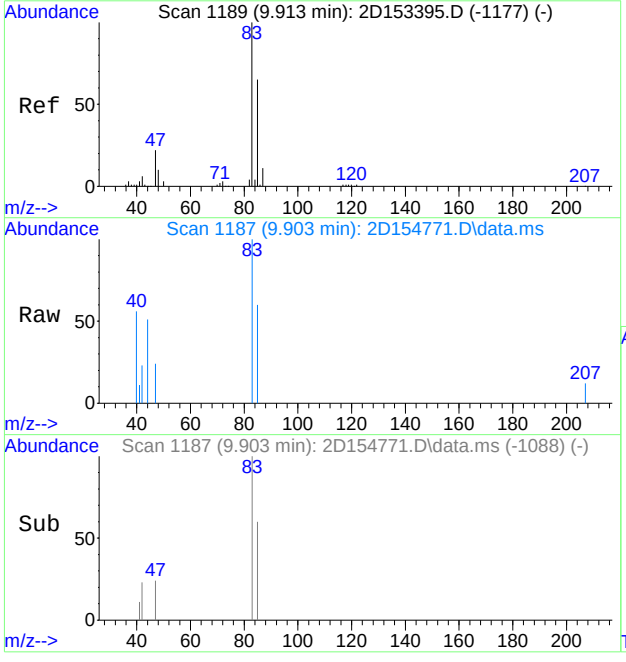


#17
acetone
Concen: 20.49 ug/L
RT: 6.725 min Scan# 581
Delta R.T. -0.005 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 58 Resp: 6295

Ion	Ratio	Lower	Upper
58	100		
43	264.0	280.0	340.0#

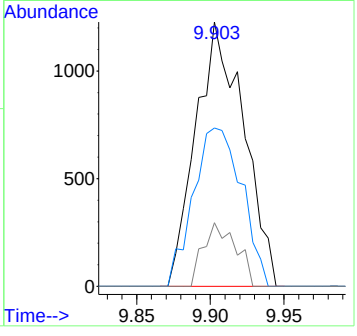




#41
chloroform
Concen: 0.34 ug/L
RT: 9.903 min Scan# 1187
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

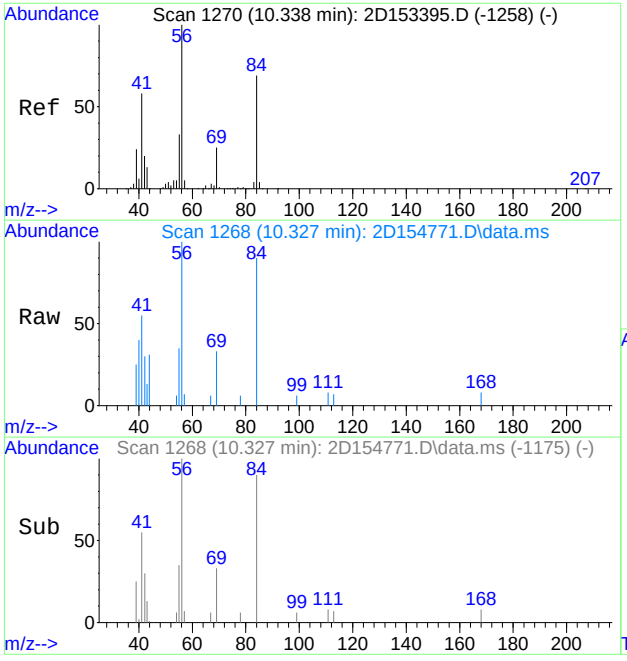
Tgt Ion: 83 Resp: 2775

Ion	Ratio	Lower	Upper
83	100		
85	59.9	35.0	95.0
47	24.0	0.0	53.8



7.1.12

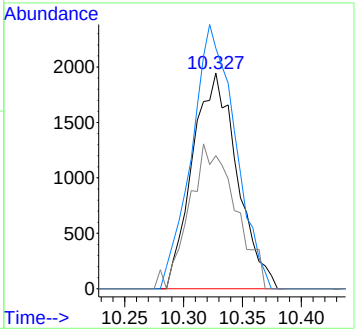
7

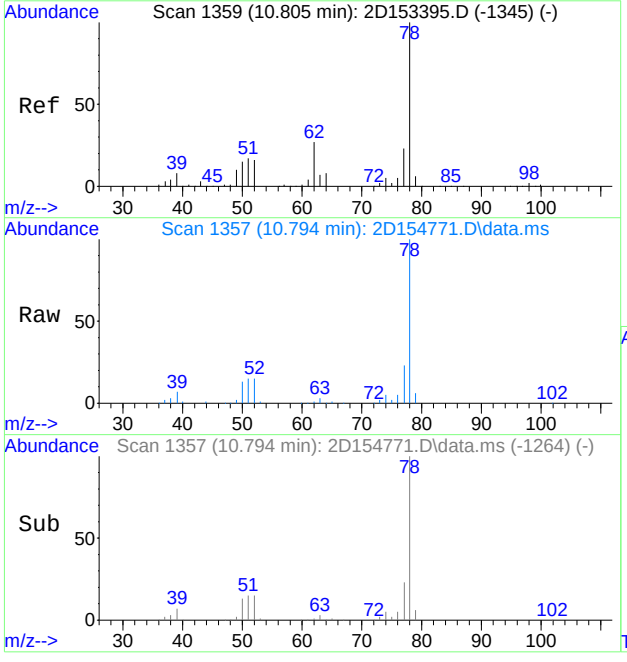


#47
cyclohexane
Concen: 0.80 ug/L
RT: 10.327 min Scan# 1268
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 84 Resp: 5133

Ion	Ratio	Lower	Upper
84	100		
56	111.5	101.0	187.6
41	61.7	58.4	108.6

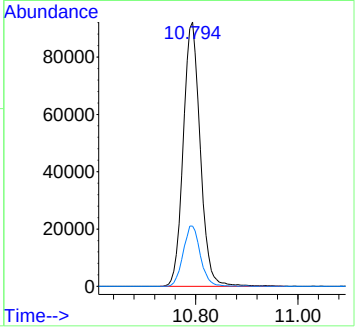


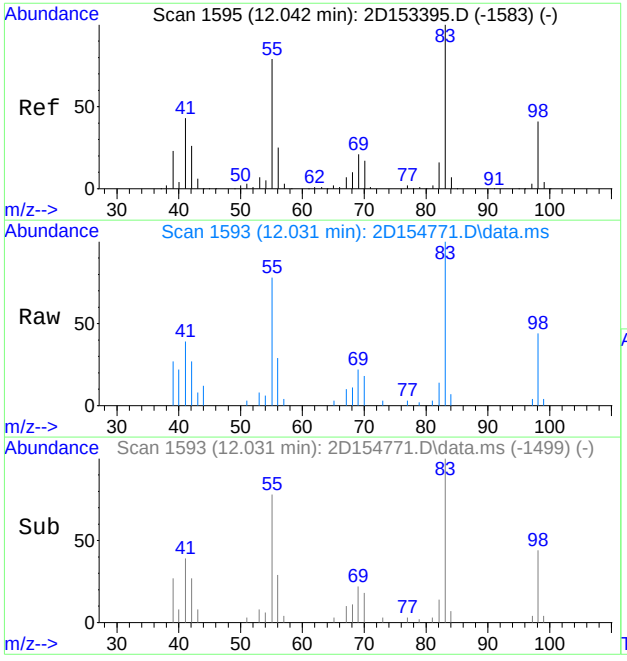


#57
benzene
Concen: 12.42 ug/L
RT: 10.794 min Scan# 1357
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 78 Resp: 212694

Ion	Ratio	Lower	Upper
78	100		
77	22.8	0.0	53.0

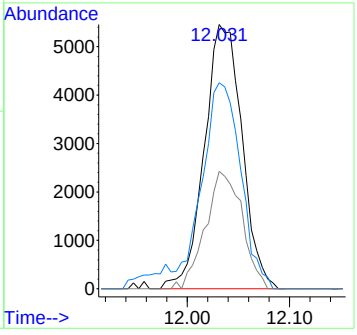


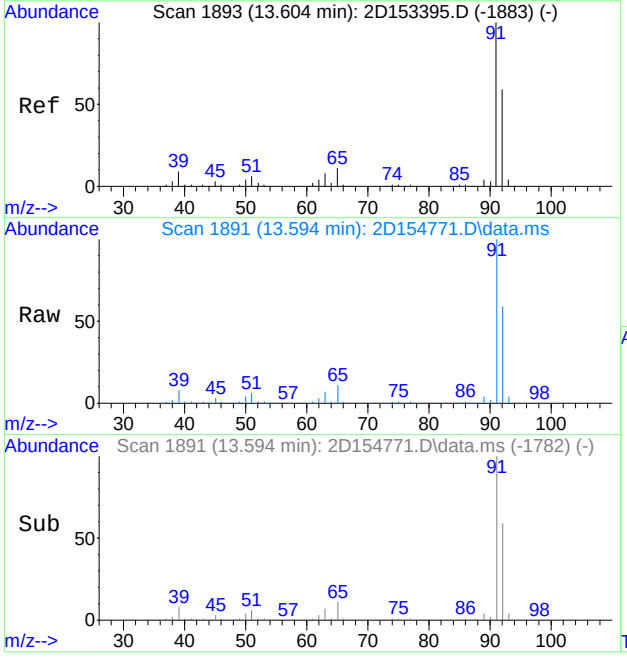


#68
methylcyclohexane
Concen: 1.85 ug/L
RT: 12.031 min Scan# 1593
Delta R.T. -0.010 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 83 Resp: 13942

Ion	Ratio	Lower	Upper
83	100		
55	77.9	49.1	109.1
98	44.4	11.3	71.3

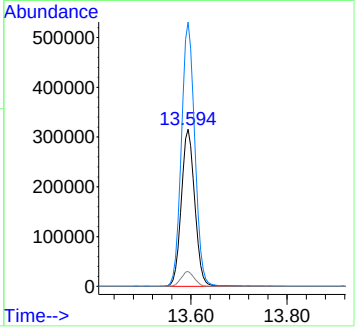


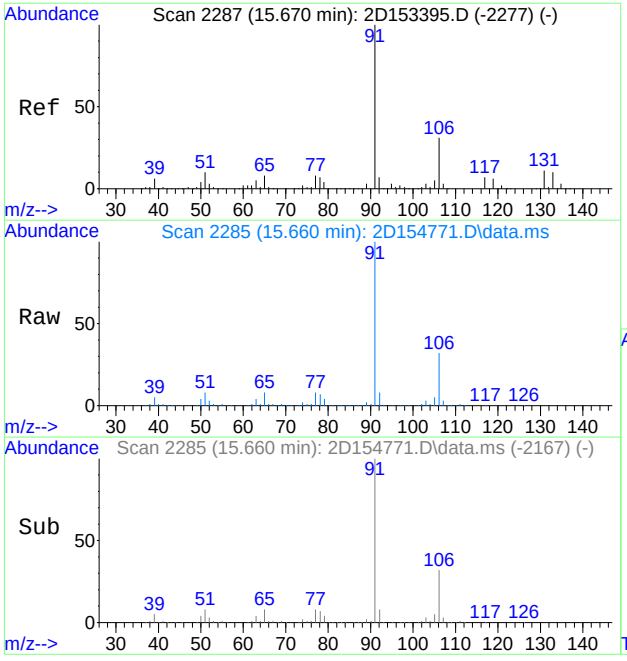


#73
toluene
Concen: 57.04 ug/L
RT: 13.594 min Scan# 1891
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 92 Resp: 610778

Ion	Ratio	Lower	Upper
92	100		
91	168.2	140.3	200.3
51	9.5	0.0	40.9

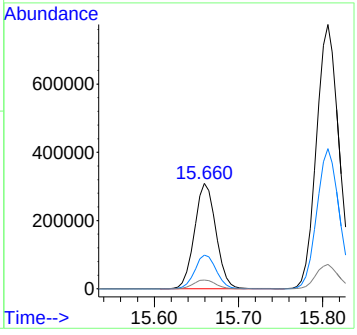


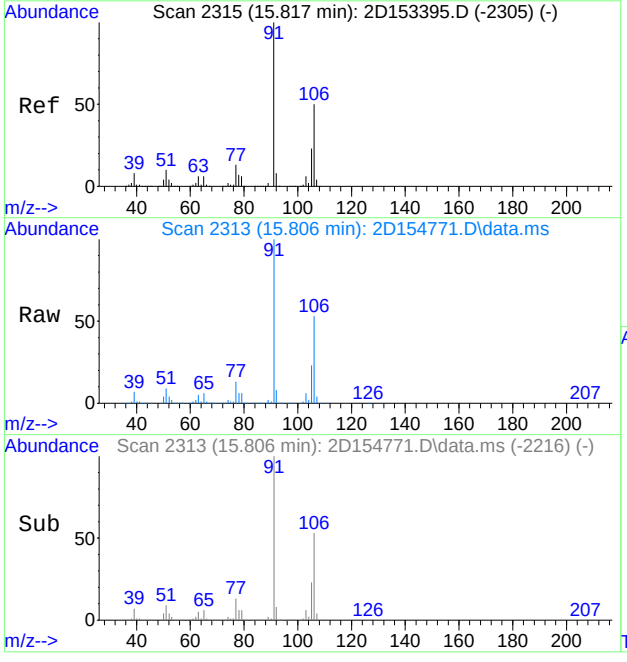


#89
ethylbenzene
Concen: 26.90 ug/L
RT: 15.660 min Scan# 2285
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 91 Resp: 547517

Ion	Ratio	Lower	Upper
91	100		
106	32.0	1.2	61.2
51	8.3	0.0	39.8

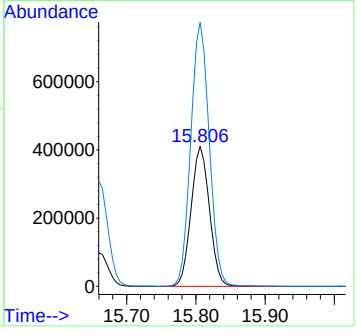


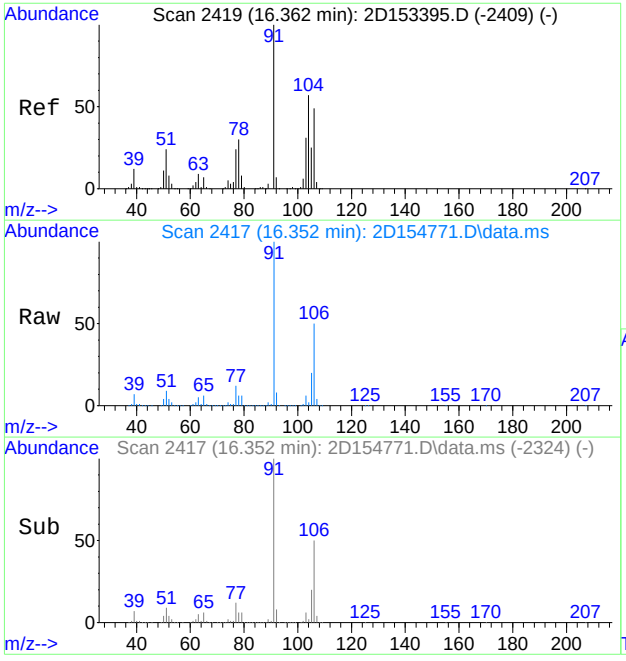


#90
m,p-xylene
Concen: 94.77 ug/L
RT: 15.806 min Scan# 2313
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:106 Resp: 754333

Ion	Ratio	Lower	Upper
106	100		
91	188.5	169.7	229.7

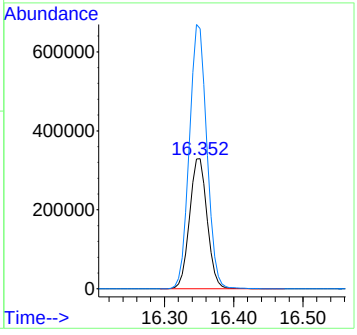


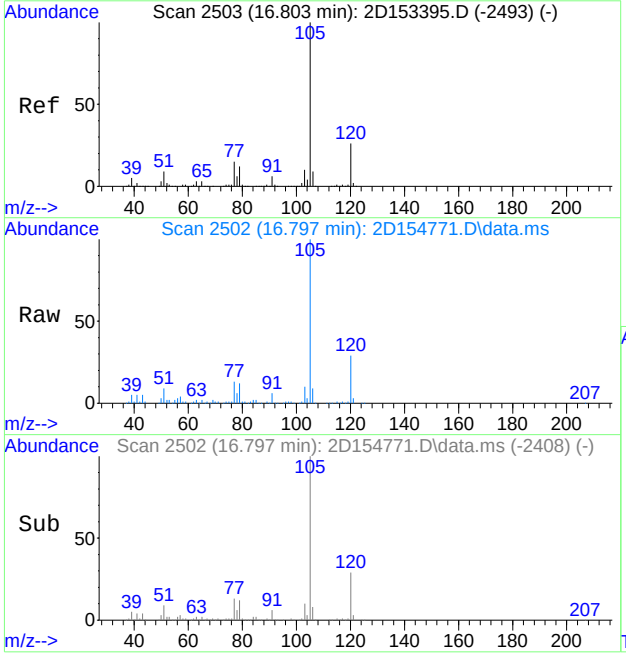


#91
o-xylene
Concen: 69.72 ug/L
RT: 16.352 min Scan# 2417
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:106 Resp: 580071

Ion	Ratio	Lower	Upper
106	100		
91	200.0	175.8	235.8

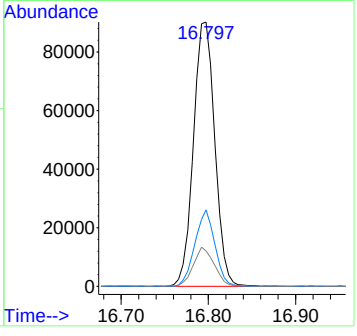


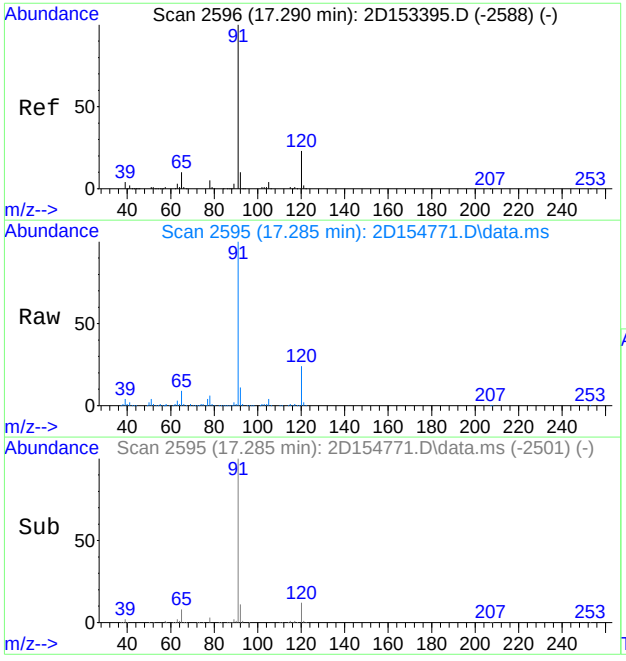


#95
isopropylbenzene
Concen: 7.10 ug/L
RT: 16.797 min Scan# 2502
Delta R.T. -0.005 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:105 Resp: 153524

Ion	Ratio	Lower	Upper
105	100		
120	28.9	0.0	56.2
77	13.3	0.0	45.1

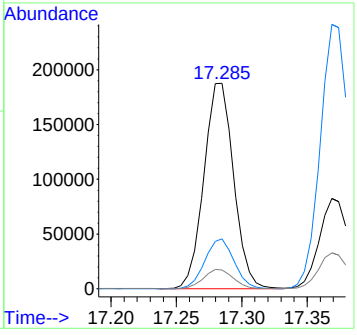


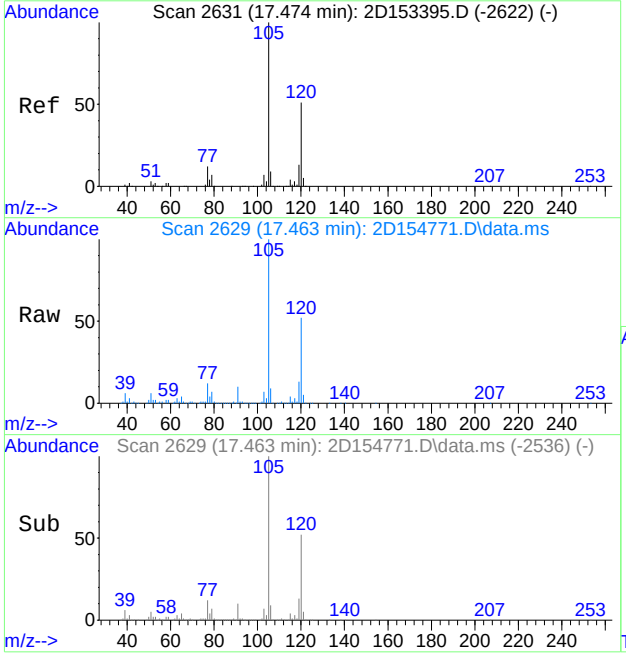


#103
n-propylbenzene
Concen: 12.15 ug/L
RT: 17.285 min Scan# 2595
Delta R.T. -0.005 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 91 Resp: 296248

Ion	Ratio	Lower	Upper
91	100		
120	24.3	0.0	53.4
65	9.0	0.0	40.2

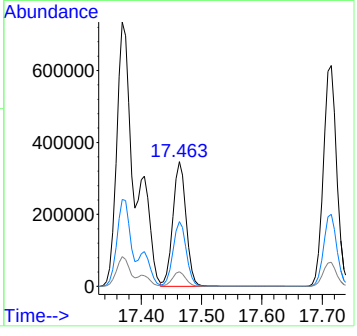


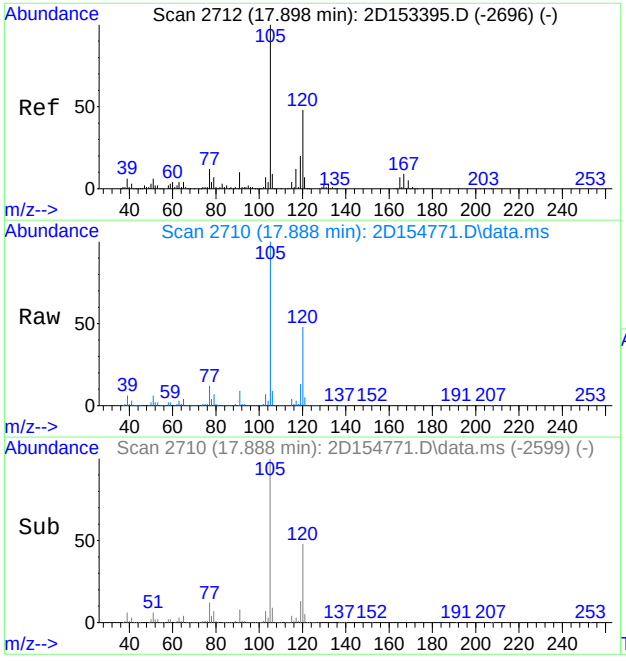


#106
1,3,5-trimethylbenzene
Concen: 28.51 ug/L
RT: 17.463 min Scan# 2629
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:105 Resp: 529208

Ion	Ratio	Lower	Upper
105	100		
120	51.9	20.7	80.7
77	11.7	0.0	42.0

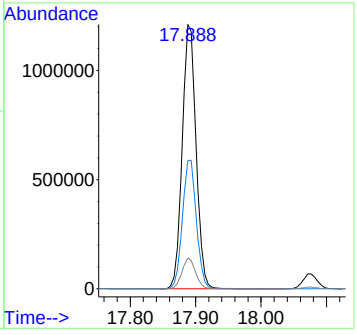


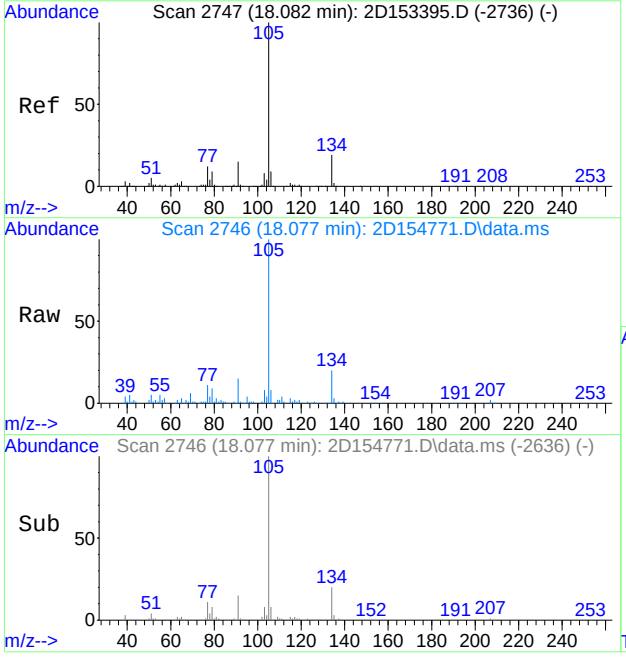


#109
1,2,4-trimethylbenzene
Concen: 93.00 ug/L
RT: 17.888 min Scan# 2710
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:105 Resp: 1769674

Ion	Ratio	Lower	Upper
105	100		
120	48.5	17.8	77.8
77	11.6	0.0	41.9

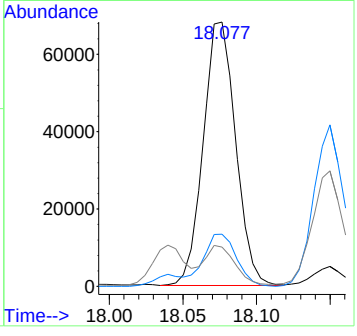


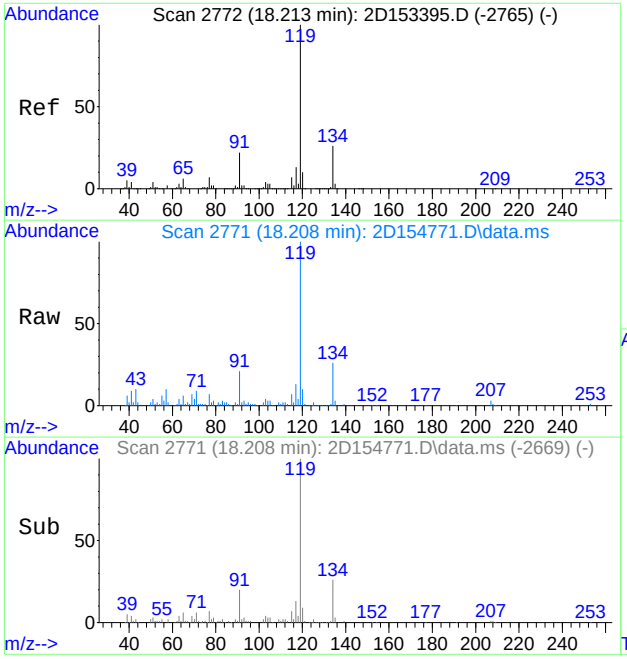


#110
sec-butylbenzene
Concen: 4.17 ug/L
RT: 18.077 min Scan# 2746
Delta R.T. -0.005 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:105 Resp: 104068

Ion	Ratio	Lower	Upper
105	100		
134	19.4	0.0	48.9
91	13.8	0.0	45.2

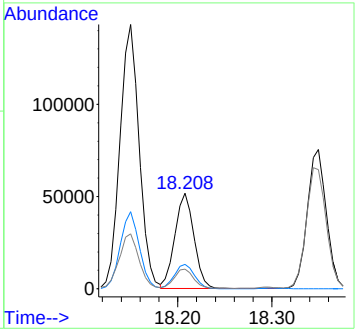


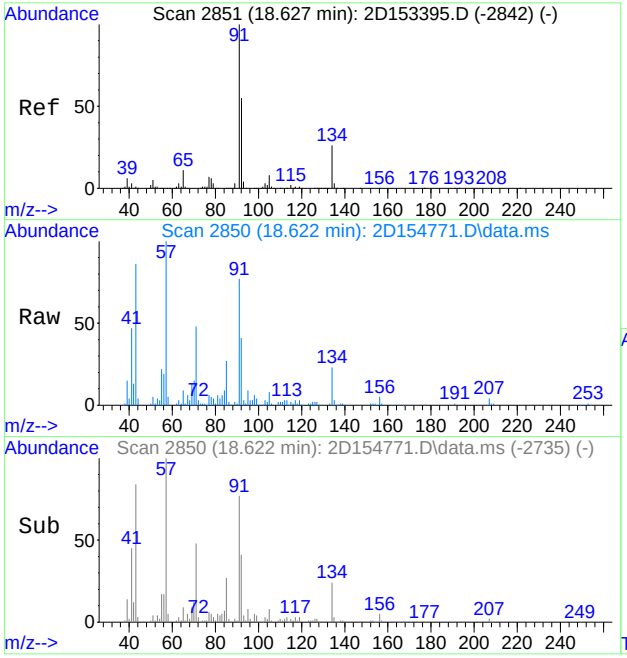


#112
p-isopropyltoluene
Concen: 3.34 ug/L
RT: 18.208 min Scan# 2771
Delta R.T. -0.005 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:119 Resp: 72519

Ion	Ratio	Lower	Upper
119	100		
134	25.5	0.0	55.7
91	19.7	0.0	51.5

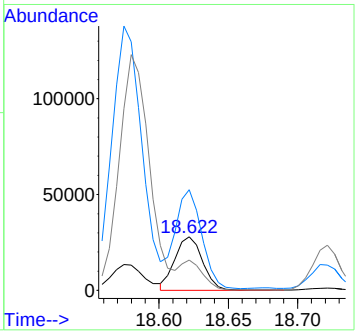


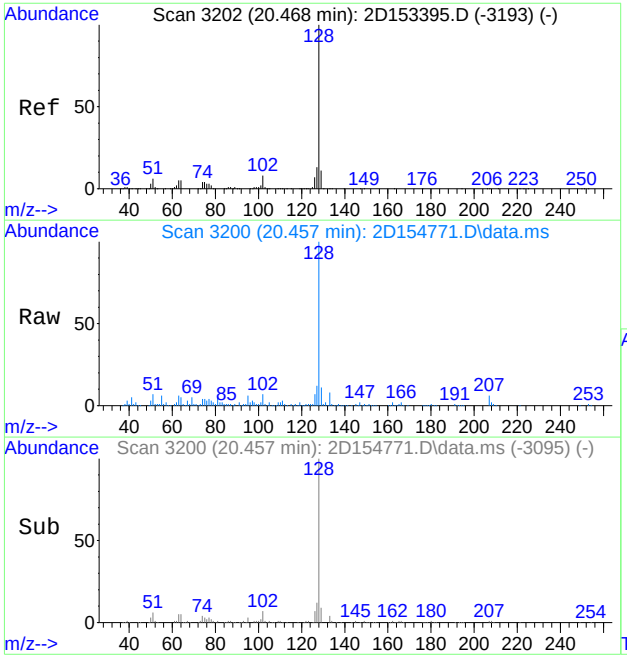


#116
n-butylbenzene
Concen: 3.63 ug/L
RT: 18.622 min Scan# 2850
Delta R.T. -0.005 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion: 92 Resp: 39200

Ion	Ratio	Lower	Upper
92	100		
91	185.1	151.0	211.0
134	56.4	17.8	77.8

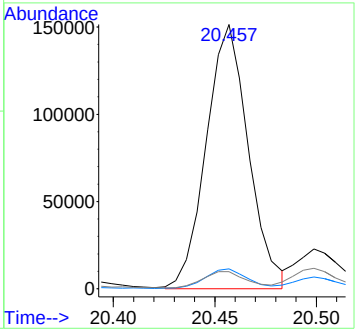




#120
naphthalene
Concen: 13.54 ug/L m
RT: 20.457 min Scan# 3200
Delta R.T. -0.011 min
Lab File: 2D154771.D
Acq: 16 Apr 2016 4:41 pm

Tgt Ion:128 Resp: 219566

Ion	Ratio	Lower	Upper
128	100		
102	7.5	0.0	37.5
51	6.5	0.0	36.4



7.1.12

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154757.D
Acq On : 16 Apr 2016 9:21 am
Operator : Adilm
Sample : mb
Misc : ms914,v2d6501,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 18 13:20:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	7.418	65	179308	500.00 ug/L	-0.02
5) pentafluorobenzene	10.139	168	625977	50.00 ug/L	-0.02
51) 1,4-difluorobenzene	11.287	114	856590	50.00 ug/L	-0.02
79) chlorobenzene-d5	15.508	117	805187	50.00 ug/L	-0.02
94) 1,4-dichlorobenzene-d4	18.292	152	454662	50.00 ug/L	-0.02
System Monitoring Compounds					
42) dibromofluoromethane (s)	10.144	113	283512	51.88 ug/L	-0.02
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.76%		
43) 1,2-dichloroethane-d4 (s)	10.684	65	262538	45.17 ug/L	-0.02
Spiked Amount 50.000	Range 73 - 122		Recovery = 90.34%		
71) toluene-d8 (s)	13.489	98	979687	49.56 ug/L	-0.02
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.12%		
96) 4-bromofluorobenzene (s)	17.007	95	373178	50.49 ug/L	-0.02
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.98%		

Target Compounds Qvalue

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

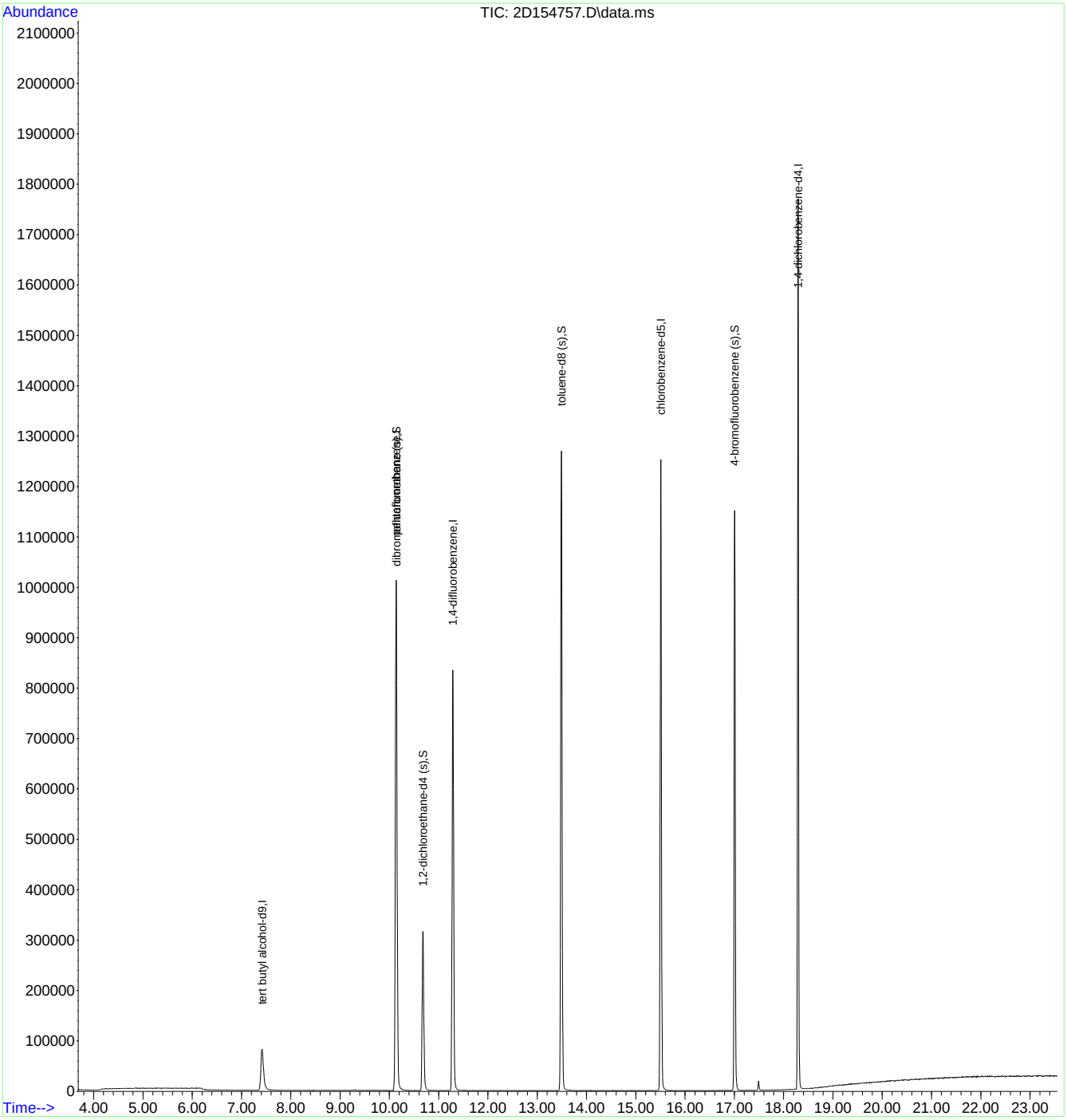
7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2D\v2d6501-6510\v2d6501\
Data File : 2D154757.D
Acq On : 16 Apr 2016 9:21 am
Operator : Adilm
Sample : mb
Misc : ms914,v2d6501,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 18 13:20:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2D6450.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Mar 04 09:51:15 2016
Response via : Initial Calibration



M2D6450.M Mon Apr 18 13:53:14 2016 ACC-VOA-DP

Page: 2

SGS ACCUTEST JC18331

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5246-MB2	UV130743.D	1	04/15/16	JC	n/a	n/a	GUV5246

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18331-1, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	85%	55-130%

Method Blank Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5246-MB3	UV130753.D	1	04/15/16	JC	n/a	n/a	GUV5246

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18331-2, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	85%	55-130%

Method Blank Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5246-MB1	UV130732.D	1	04/15/16	JC	n/a	n/a	GUV5246

The QC reported here applies to the following samples: **Method:** SW846 8015C

GUV5246-BS, JC18306-2MS, JC18306-2MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.20	0.055	mg/l	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	83%	55-130%

Blank Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUV5246-BS	UV130733.D	1	04/15/16	JC	n/a	n/a	GUV5246

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	8	7.22	90	71-132

CAS No.	Surrogate Recoveries	BSP	Limits
98-08-8	aaa-Trifluorotoluene	96%	55-130%

* = Outside of Control Limits.

8.2.1

8

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18306-2MS	UV130740.D	1	04/15/16	JC	n/a	n/a	GUV5246
JC18306-2MSD	UV130741.D	1	04/15/16	JC	n/a	n/a	GUV5246
JC18306-2	UV130735.D	1	04/15/16	JC	n/a	n/a	GUV5246

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	JC18306-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.151	J	8	6.49	79	8	6.55	80	1	49-131/14

CAS No.	Surrogate Recoveries	MS	MSD	JC18306-2	Limits
98-08-8	aaa-Trifluorotoluene	91%	97%	87%	55-130%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Method: SW846 8015C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
JC18331-1	UV130744.D	86
JC18331-2	UV130756.D	93
JC18331-3	UV130745.D	87
JC18331-4	UV130746.D	86
JC18331-5	UV130747.D	88
JC18331-6	UV130748.D	84
JC18331-7	UV130749.D	91
JC18331-8	UV130750.D	87
JC18331-9	UV130751.D	90
JC18331-10	UV130754.D	92
JC18331-11	UV130755.D	93
JC18331-12	UV130757.D	94
GUV5246-BS	UV130733.D	96
GUV5246-MB2	UV130743.D	85
GUV5246-MB3	UV130753.D	85
JC18306-2MS	UV130740.D	91
JC18306-2MSD	UV130741.D	97
GUV5246-MB1	UV130732.D	83

Surrogate Compounds	Recovery Limits
S1 = aaa-Trifluorotoluene	55-130%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	GUV5245-CC5078	**Injection Date:**	04/14/16
Lab File ID:	UV130727.D	**Injection Time:**	18:38
Instrument ID:	GCUV	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.03

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GUV5246-RT	UV130730.D	04/15/16	07:33	11.03

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

8.5.1

8

GC Surrogate Retention Time Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	GUV5246-CC5078	**Injection Date:**	04/15/16
Lab File ID:	UV130731.D	**Injection Time:**	08:13
Instrument ID:	GCUV	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.03

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GUV5246-MB1	UV130732.D	04/15/16	08:49	11.03
GUV5246-BS	UV130733.D	04/15/16	09:18	11.03
ZZZZZZ	UV130734.D	04/15/16	10:09	11.03
JC18306-2	UV130735.D	04/15/16	10:38	11.03
ZZZZZZ	UV130736.D	04/15/16	11:07	11.02
ZZZZZZ	UV130737.D	04/15/16	11:57	11.02
ZZZZZZ	UV130738.D	04/15/16	12:48	11.02
ZZZZZZ	UV130739.D	04/15/16	13:17	11.02
JC18306-2MS	UV130740.D	04/15/16	14:08	11.02
JC18306-2MSD	UV130741.D	04/15/16	14:37	11.02

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	GUV5246-CC5078	**Injection Date:**	04/15/16
Lab File ID:	UV130742.D	**Injection Time:**	15:06
Instrument ID:	GCUV	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.02

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GUV5246-MB2	UV130743.D	04/15/16	15:42	11.03
JC18331-1	UV130744.D	04/15/16	16:11	11.02
JC18331-3	UV130745.D	04/15/16	16:40	11.02
JC18331-4	UV130746.D	04/15/16	17:16	11.02
JC18331-5	UV130747.D	04/15/16	17:45	11.02
JC18331-6	UV130748.D	04/15/16	18:14	11.02
JC18331-7	UV130749.D	04/15/16	18:50	11.02
JC18331-8	UV130750.D	04/15/16	19:19	11.02
JC18331-9	UV130751.D	04/15/16	19:48	11.02

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	GUV5246-CC5078	**Injection Date:**	04/15/16
Lab File ID:	UV130752.D	**Injection Time:**	20:24
Instrument ID:	GCUV	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.02

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GUV5246-MB3	UV130753.D	04/15/16	20:53	11.03
JC18331-10	UV130754.D	04/15/16	21:22	11.02
JC18331-11	UV130755.D	04/15/16	21:58	11.02
JC18331-2	UV130756.D	04/15/16	22:27	11.02
JC18331-12	UV130757.D	04/15/16	22:56	11.02

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: GUV5078-ICC5078
Lab FileID: UV127091.D

```
                          Response Factor Report  GCUV

 Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
 Title        : Method SW846 8015B (GRO)
 Last Update  : Wed Nov 18 08:28:12 2015
 Response via : Initial Calibration

 Calibration Files
 0.2    =UV127088.D   0.8    =UV127089.D   4      =UV127090.D
 8    =UV127091.D  20   =UV127092.D  40   =UV127094.D  30   =UV127093.D

     Compound           0.2   0.8   4     8     20    40    30     Avg   %RSD
 ---------------------------------------------------------------------------
 1)H TPH-GRO (C6-C10)  1.757 1.745 1.589 1.557 1.573 1.608 1.537 1.624 E4   5.52
 2)H TPH-GRO (C6-C12)  1.676 1.439 1.349 1.364 1.415 1.449 1.396 1.441 E4   7.61
 3)S a,a,a-Trifluoroto 1.719 1.795 1.844 1.910 2.037 2.119 2.128 1.936 E4   8.35
---------------------------------------------------------------------------

                                                   Average  % RSD =   7.2

 ( 100.0 %)  3 of   3 compounds'% RSD >  0
---------------------------------------------------------------------------
(#) = Out of Range

          MUV5078.M         Wed Nov 18 08:29:45 2015   GCSY
```

8.6.1

8

Initial Calibration Verification

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5078-ICV5078
Lab FileID: UV127097.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV127097.D                    Vial: 13
Acq On    : 17 Nov 2015   7:01 pm                     Operator: JAYC
Sample    : ICV5078-8000                              Inst    : GCUV
Misc      : GC47028,GUV5078,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015B (GRO)
Last Update  : Wed Nov 18 08:28:12 2015
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 : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	14.975 E3	7.8	96	0.00
2 H	TPH-GRO (C6-C12)	14.411	14.907 E3	-3.4	109	0.00
3 S	a,a,a-Trifluorotoluene	19.360	18.599 E3	3.9	97	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127091.D MUV5078.M Wed Nov 18 08:33:06 2015 GCSY

8.6.2

8

Continuing Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5245-CC5078
Lab FileID: UV130727.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV130727.D                    Vial: 49
Acq On    : 14 Apr 2016   6:38 pm                     Operator: JAYC
Sample    : CC5078-4000                               Inst    : GCUV
Misc      : GC48141,GUV5245,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
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 : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	15.406 E3	5.1	97	0.00
2 H	TPH-GRO (C6-C12)	14.411	13.745 E3	4.6	102	0.00
3 S	a,a,a-Trifluorotoluene	19.360	18.901 E3	2.4	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127090.D MUV5078.M Fri Apr 15 16:25:52 2016 GCSY

8.6.3

8

Continuing Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5246-CC5078
Lab FileID: UV130731.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV130731.D                    Vial: 4
Acq On    : 15 Apr 2016   8:13 am                     Operator: JAYC
Sample    : CC5078-4000                               Inst    : GCUV
Misc      : GC48223,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
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 : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	14.323 E3	11.8	90	0.00
2 H	TPH-GRO (C6-C12)	14.411	12.260 E3	14.9	91	0.00
3 S	a,a,a-Trifluorotoluene	19.360	17.770 E3	8.2	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127090.D MUV5078.M Mon Apr 18 08:25:27 2016 GCSY

8.6.4

8

Continuing Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5246-CC5078
Lab FileID: UV130742.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV130742.D                    Vial: 15
Acq On    : 15 Apr 2016   3:06 pm                     Operator: JAYC
Sample    : CC5078-8000                               Inst    : GCUV
Misc      : GC48223,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
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 : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	14.898 E3	8.2	96	0.00
2 H	TPH-GRO (C6-C12)	14.411	12.925 E3	10.3	95	0.00
3 S	a,a,a-Trifluorotoluene	19.360	19.782 E3	-2.2	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127091.D MUV5078.M Mon Apr 18 08:25:43 2016 GCSY

8.6.5

8

Continuing Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: GUV5246-CC5078
Lab FileID: UV130752.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV130752.D                    Vial: 25
Acq On    : 15 Apr 2016   8:24 pm                     Operator: JAYC
Sample    : CC5078-4000                               Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
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 : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	H	TPH-GRO (C6-C10)	16.236	14.816 E3	8.7	93	0.00
2	H	TPH-GRO (C6-C12)	14.411	12.626 E3	12.4	94	0.00
3	S	a,a,a-Trifluorotoluene	19.360	18.888 E3	2.4	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127090.D MUV5078.M Mon Apr 18 08:25:27 2016 GCSY

8.6.6

8

Continuing Calibration Summary

Job Number: JC18331 **Sample:** GUV5246-CC5078
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** UV130760.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\UV130760.D                    Vial: 33
Acq On    : 16 Apr 2016  12:30 am                     Operator: JAYC
Sample    : CC5078-8000                               Inst    : GCUV
Misc      : GC48141,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
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 : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 H	TPH-GRO (C6-C10)	16.236	15.526 E3	4.4	100	0.00
2 H	TPH-GRO (C6-C12)	14.411	13.639 E3	5.4	100	0.00
3 S	a,a,a-Trifluorotoluene	19.360	19.881 E3	-2.7	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
UV127091.D MUV5078.M Mon Apr 18 08:25:44 2016 GCSY

8.6.7

8

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130744.D                    Vial: 17
Acq On    : 15 Apr 2016   4:11 pm                     Operator: JAYC
Sample    : JC18331-1                                 Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:22 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	11.02	4982401	257.361 ug/l
Spiked Amount 300.000		Recovery =	85.79%
Target Compounds			

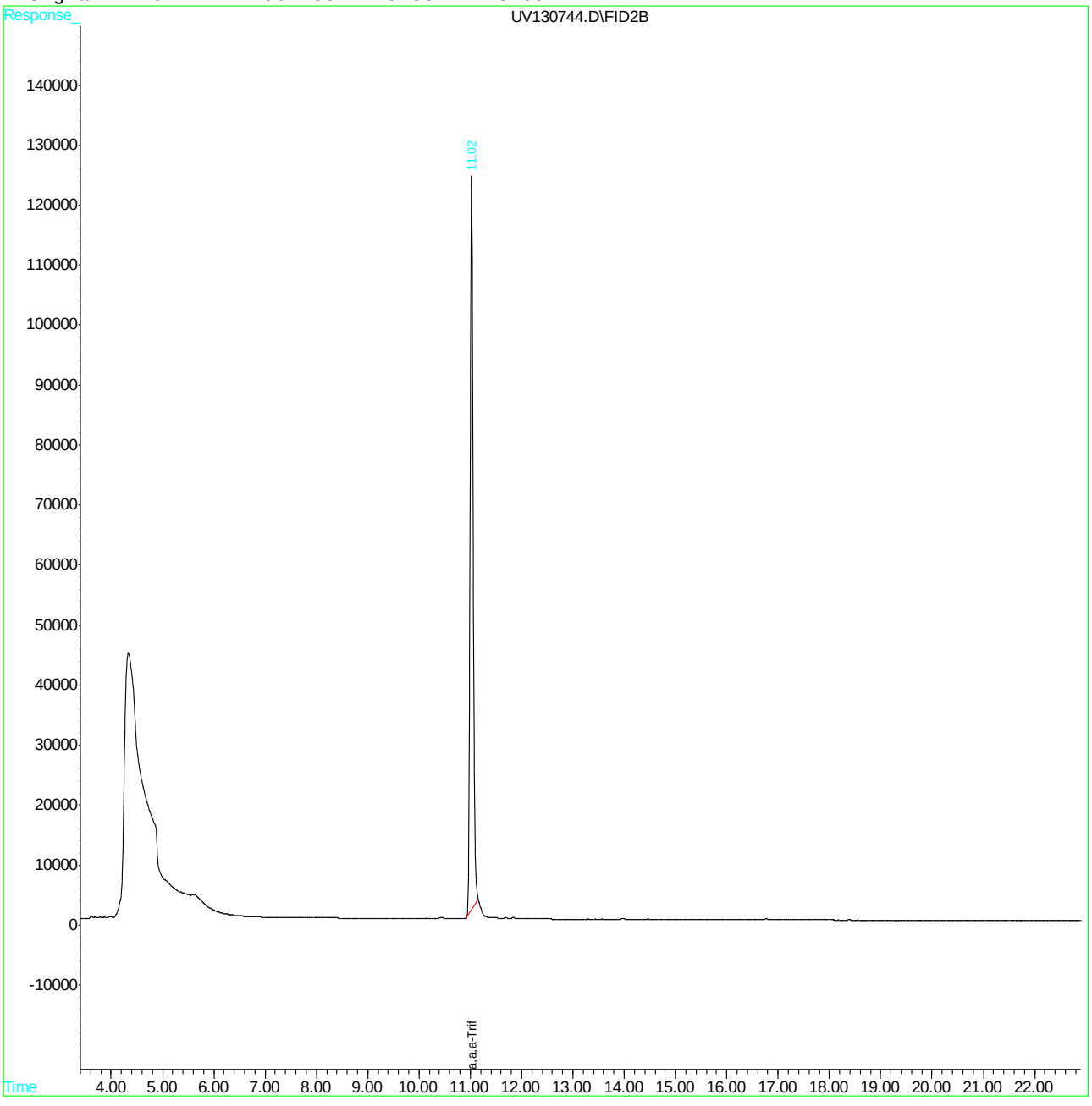
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130744.D Vial: 17
Acq On : 15 Apr 2016 4:11 pm Operator: JAYC
Sample : JC18331-1 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:22 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130756.D                    Vial: 29
Acq On    : 15 Apr 2016  10:27 pm                       Operator: JAYC
Sample    : JC18331-2                                   Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                    Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:24 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5401432  279.005 ug/l
Spiked Amount   300.000                   Recovery      =   93.00%

Target Compounds
 1) H   TPH-GRO (C6-C10)            11.00        9071615  558.718 ug/l
```

9.1.2

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                                (m)=manual int.
UV130756.D  MUV5078.M      Mon Apr 18 08:24:08 2016      GCSY
```

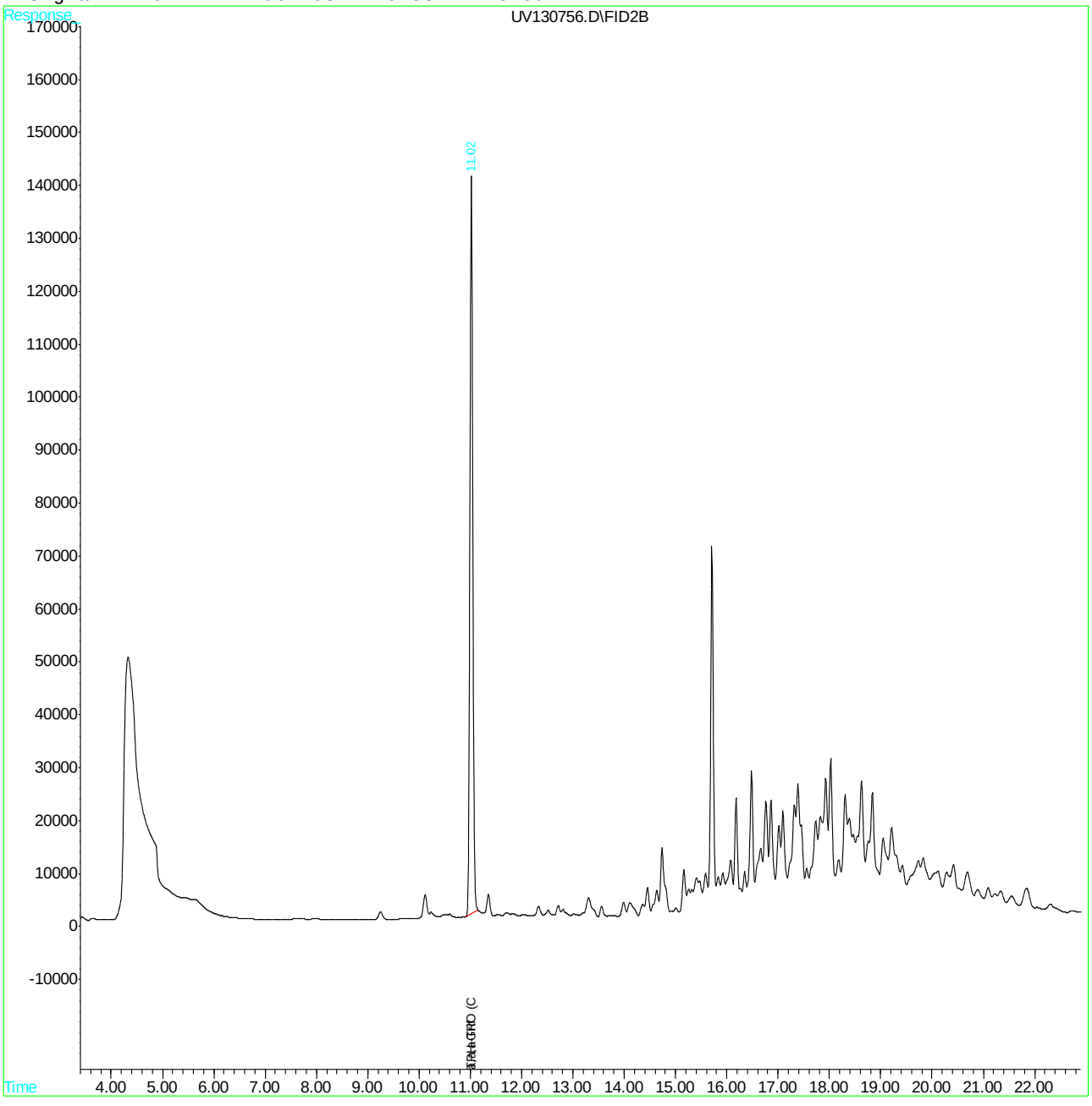

SGS ACCUTEST JC18331

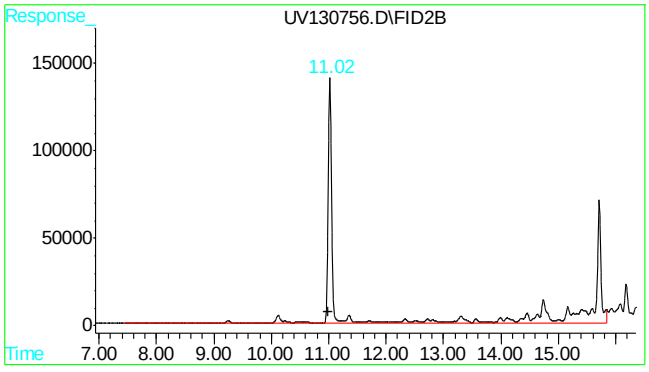
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130756.D Vial: 29
Acq On : 15 Apr 2016 10:27 pm Operator: JAYC
Sample : JC18331-2 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:24 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 11.000 min
Delta R.T.: 0.000 min
Response: 9071615
Conc: 558.72 ug/l m

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130745.D                    Vial: 18
Acq On    : 15 Apr 2016   4:40 pm                     Operator: JAYC
Sample    : JC18331-3                                 Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:22 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5071734  261.975 ug/l
Spiked Amount   300.000                   Recovery      =   87.33%

Target Compounds
```

9.1.3

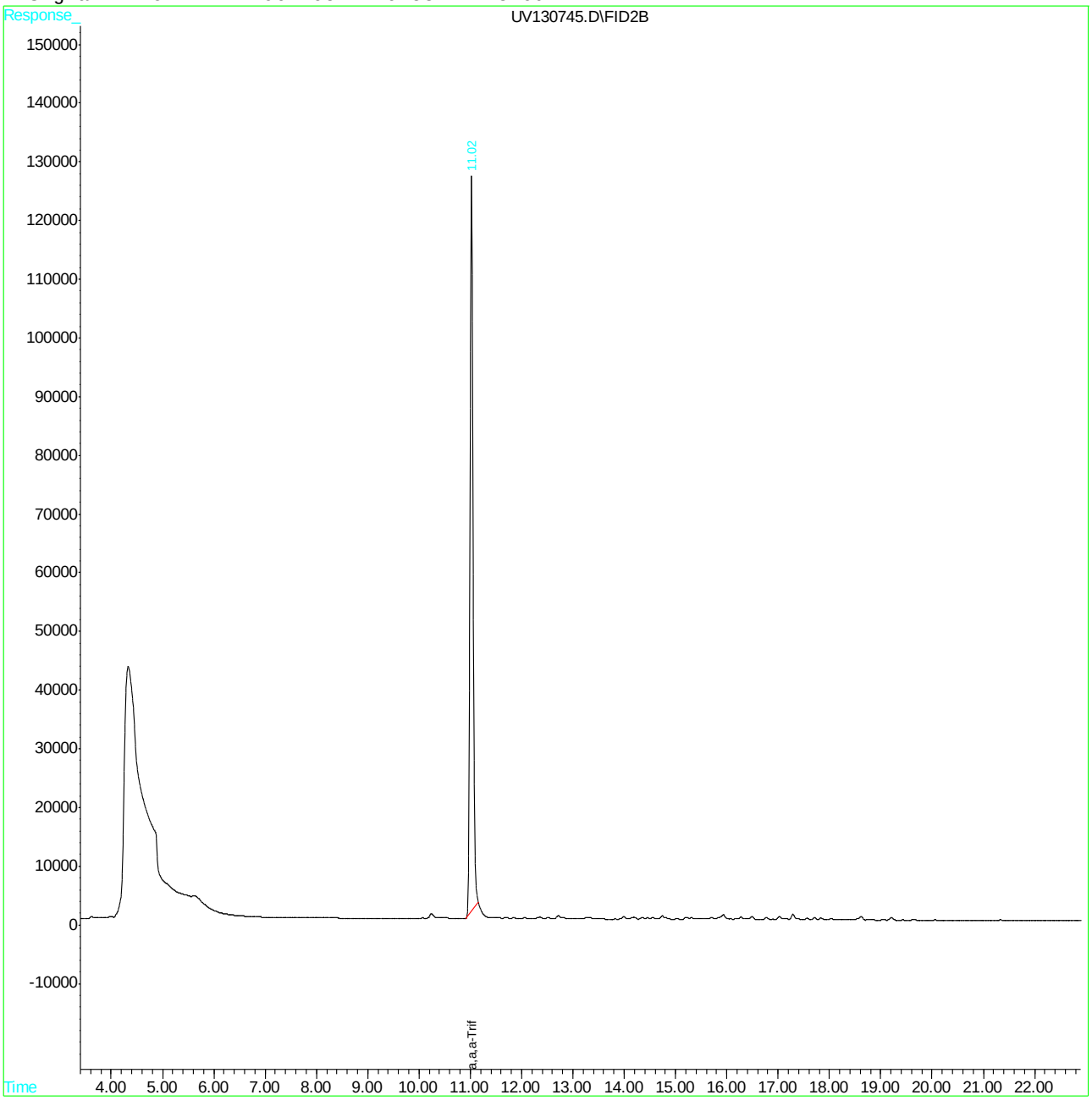
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130745.D Vial: 18
Acq On : 15 Apr 2016 4:40 pm Operator: JAYC
Sample : JC18331-3 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:22 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130746.D                    Vial: 19
Acq On    : 15 Apr 2016   5:16 pm                       Operator: JAYC
Sample    : JC18331-4                                   Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                    Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:22 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5019190  259.261 ug/l
Spiked Amount   300.000                   Recovery      =   86.42%

Target Compounds
```

9.1.4

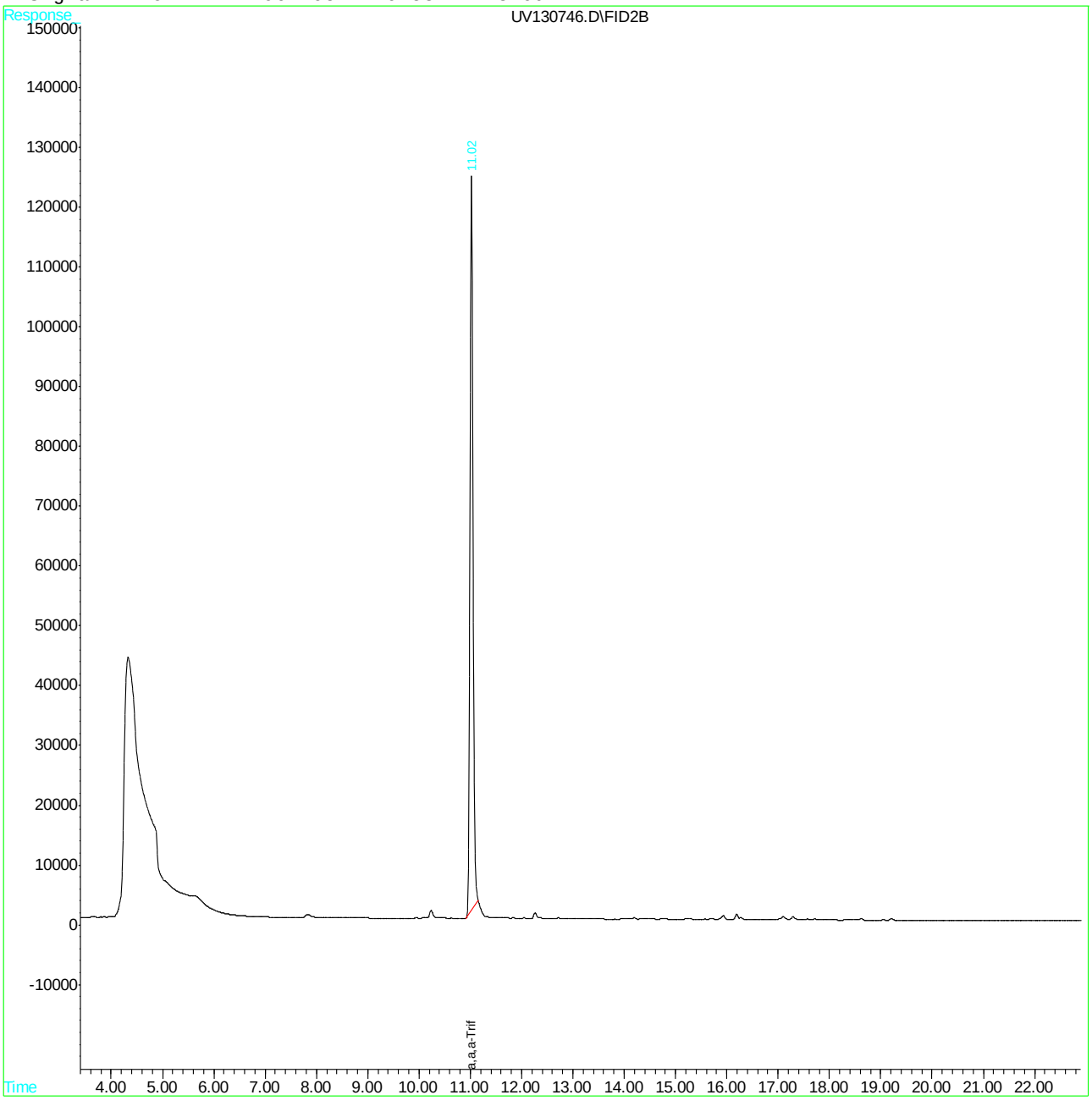
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130746.D Vial: 19
Acq On : 15 Apr 2016 5:16 pm Operator: JAYC
Sample : JC18331-4 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:22 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130747.D                    Vial: 20
Acq On    : 15 Apr 2016   5:45 pm                      Operator: JAYC
Sample    : JC18331-5                                  Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                   Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:22 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) S a,a,a-Trifluorotoluene	11.02	5089480	262.892 ug/l
Spiked Amount 300.000		Recovery =	87.63%
Target Compounds			

9.1.5

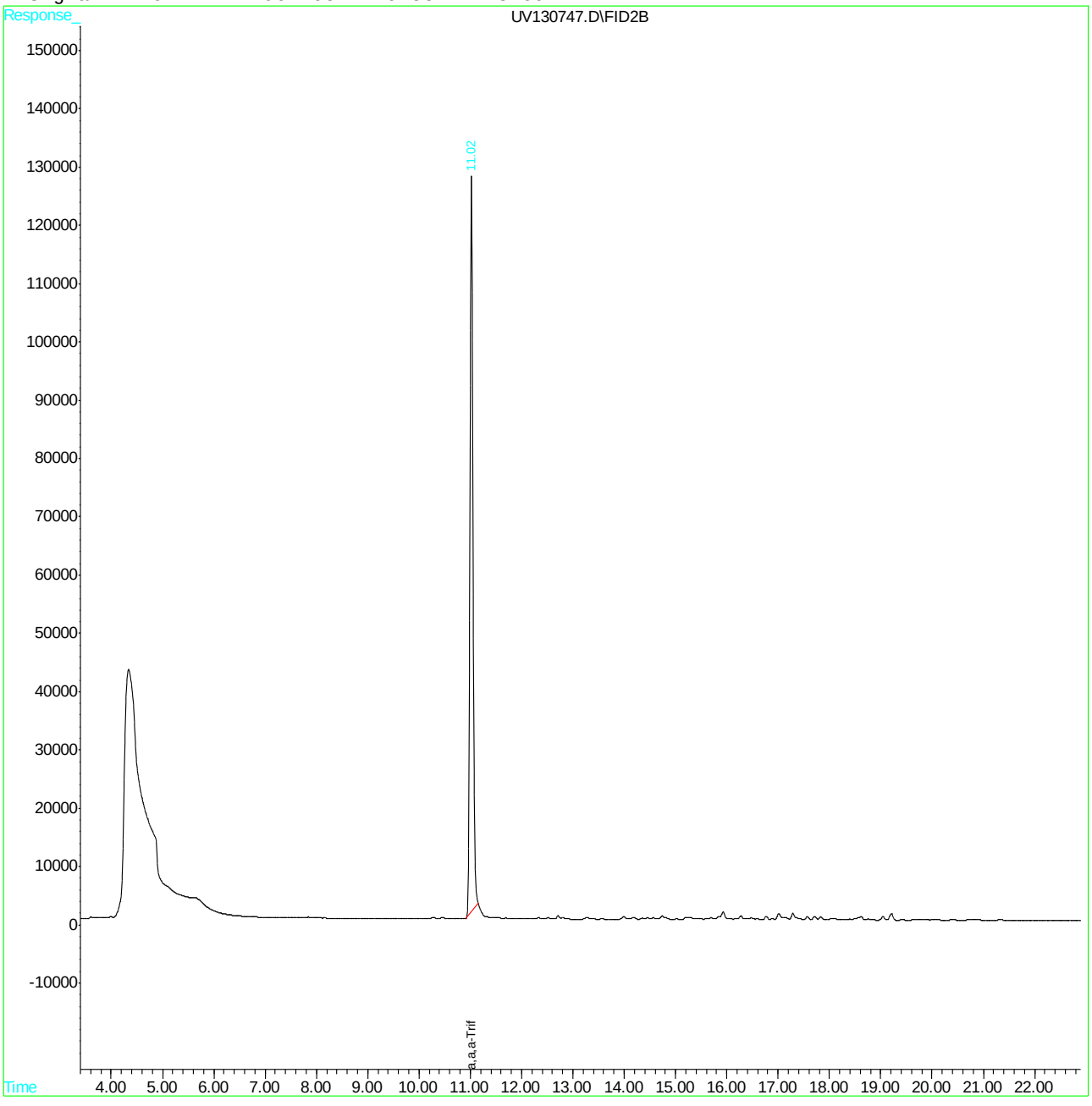
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130747.D Vial: 20
Acq On : 15 Apr 2016 5:45 pm Operator: JAYC
Sample : JC18331-5 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:22 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130748.D                    Vial: 21
Acq On    : 15 Apr 2016   6:14 pm                       Operator: JAYC
Sample    : JC18331-6                                   Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                    Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:22 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        4876504  251.891 ug/l
Spiked Amount   300.000                   Recovery      =   83.96%

Target Compounds
```

9.1.6

6

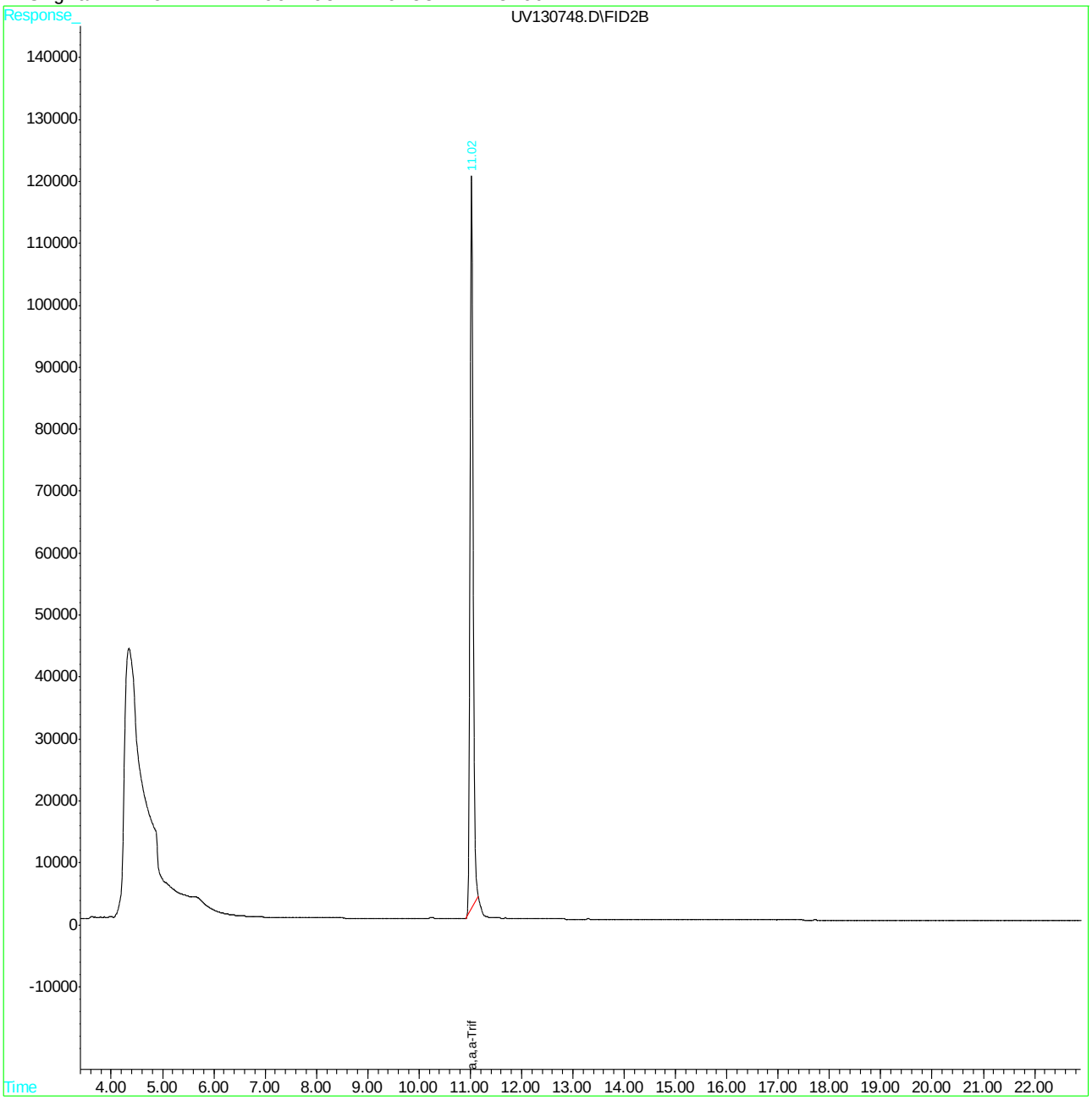
SGS ACCUTEST JC18331

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130748.D Vial: 21
Acq On : 15 Apr 2016 6:14 pm Operator: JAYC
Sample : JC18331-6 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:22 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130749.D                    Vial: 22
Acq On    : 15 Apr 2016   6:50 pm                     Operator: JAYC
Sample    : JC18331-7                                 Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:23 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5262538  271.831 ug/l
Spiked Amount   300.000                   Recovery      =   90.61%

Target Compounds
```

9.1.7

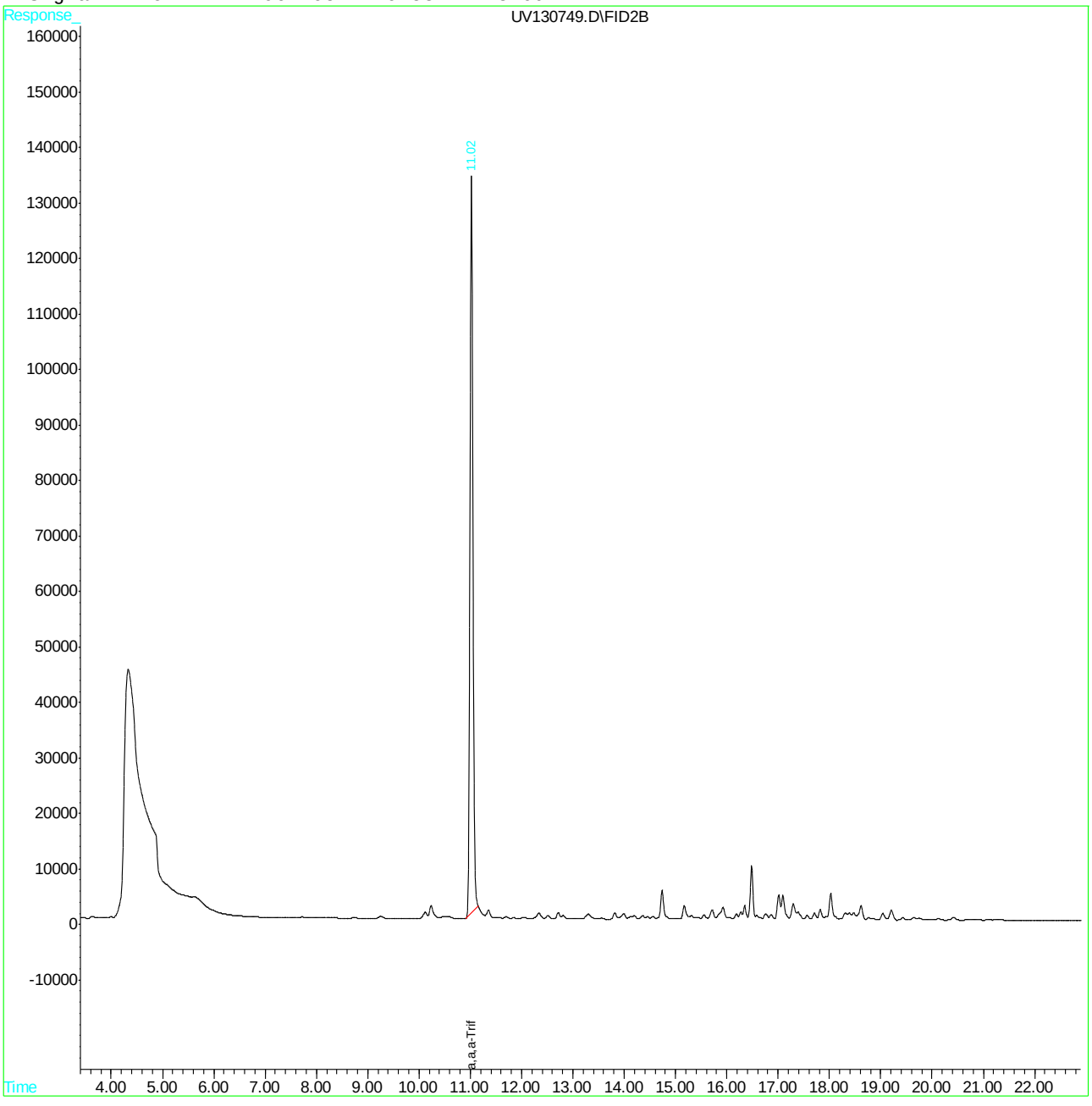
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130749.D Vial: 22
Acq On : 15 Apr 2016 6:50 pm Operator: JAYC
Sample : JC18331-7 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:23 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130750.D                    Vial: 23
Acq On    : 15 Apr 2016   7:19 pm                       Operator: JAYC
Sample    : JC18331-8                                   Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                    Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:23 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5036357  260.148 ug/l
Spiked Amount   300.000                   Recovery      =   86.72%

Target Compounds
```

9.1.8

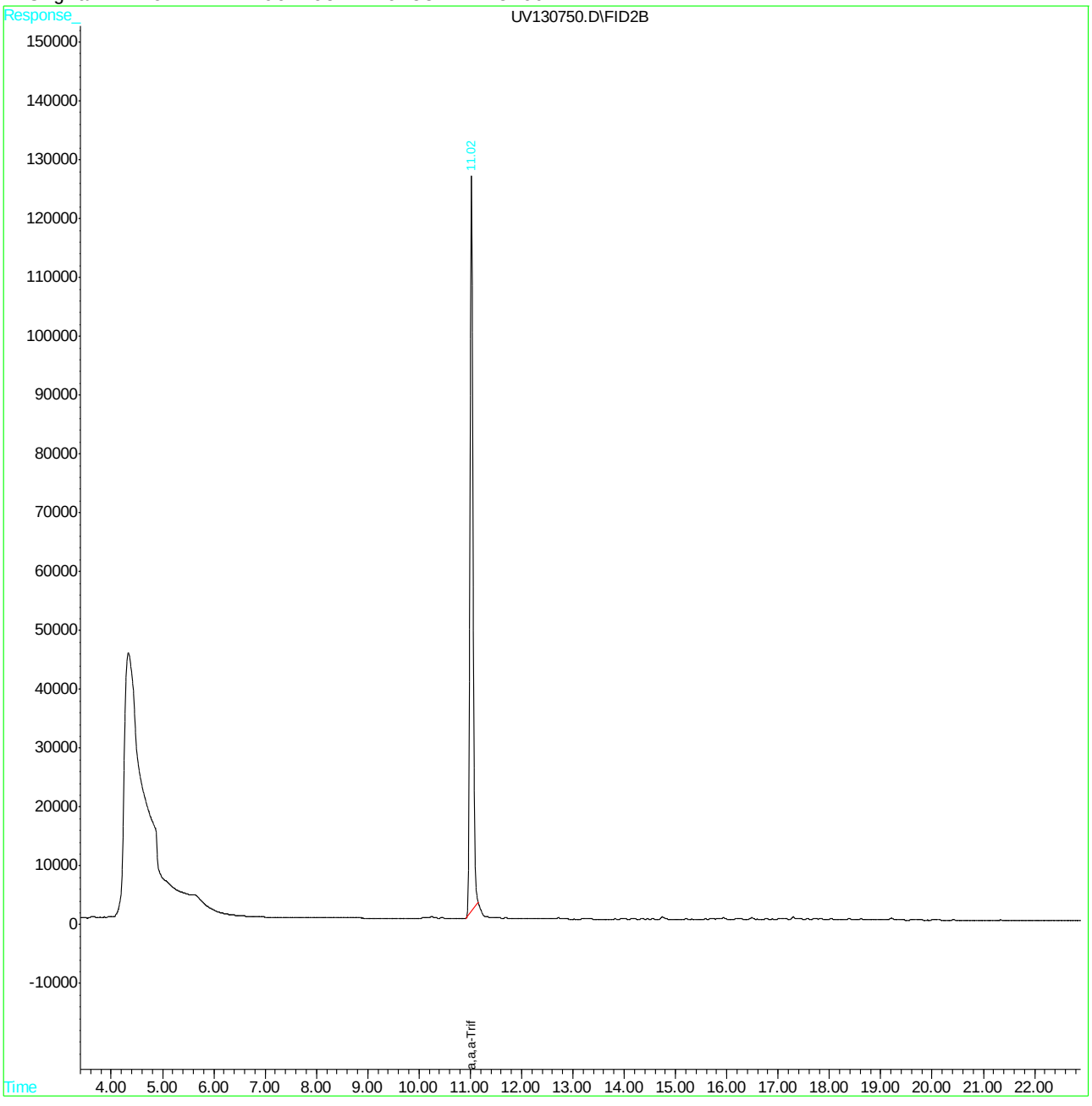
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130750.D Vial: 23
Acq On : 15 Apr 2016 7:19 pm Operator: JAYC
Sample : JC18331-8 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:23 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130751.D                    Vial: 24
Acq On    : 15 Apr 2016   7:48 pm                       Operator: JAYC
Sample    : JC18331-9                                   Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                    Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:23 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5245505  270.951 ug/l
Spiked Amount   300.000                   Recovery      =   90.32%

Target Compounds
```

9.1.9

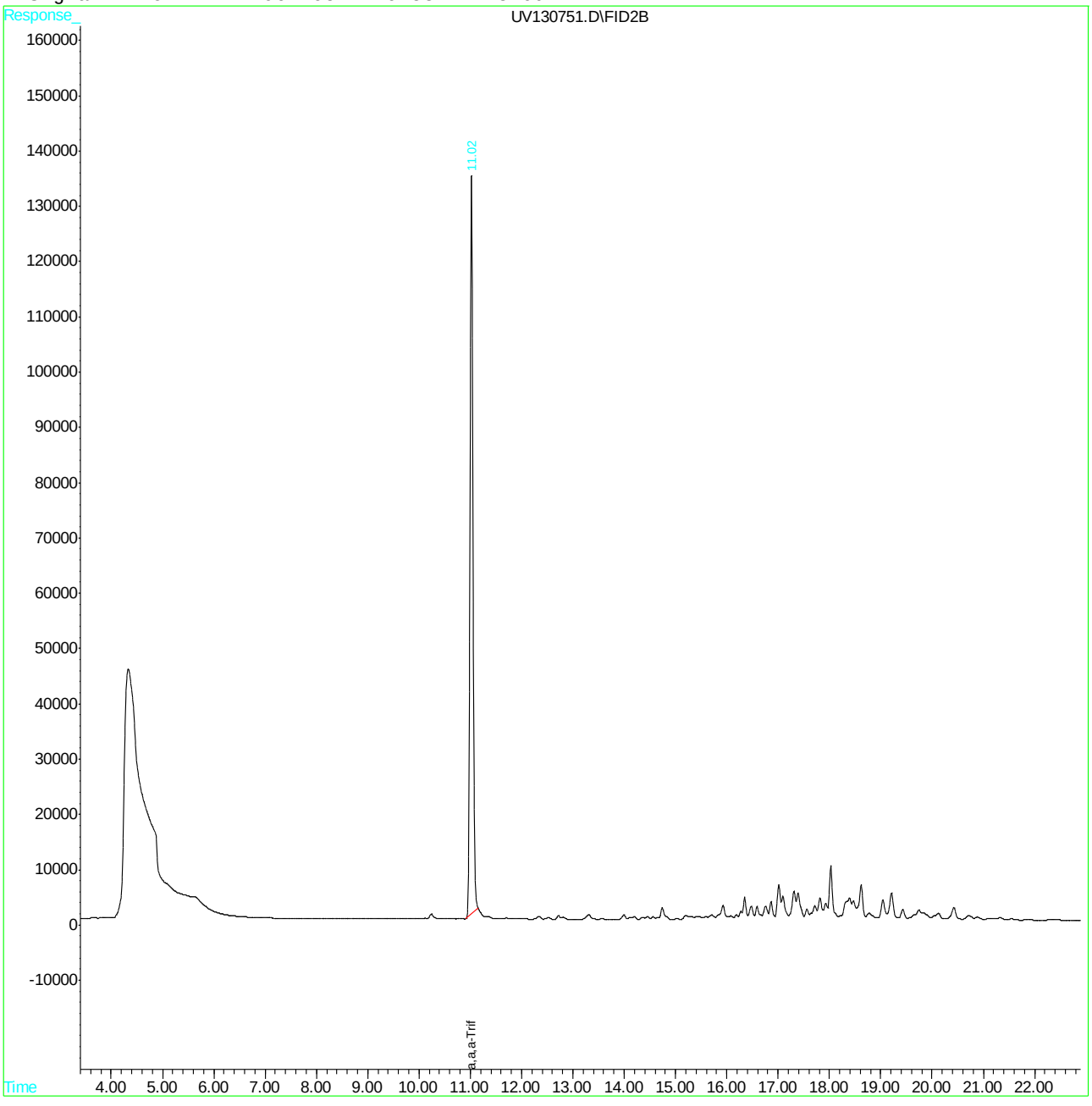
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130751.D Vial: 24
Acq On : 15 Apr 2016 7:48 pm Operator: JAYC
Sample : JC18331-9 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:23 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130754.D                    Vial: 27
Acq On    : 15 Apr 2016   9:22 pm                     Operator: JAYC
Sample    : JC18331-10                                Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:23 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5360170  276.874 ug/l
Spiked Amount   300.000                   Recovery      =   92.29%

Target Compounds
 1) H   TPH-GRO (C6-C10)            11.00       22317896 1374.554 ug/l
```

9.1.10

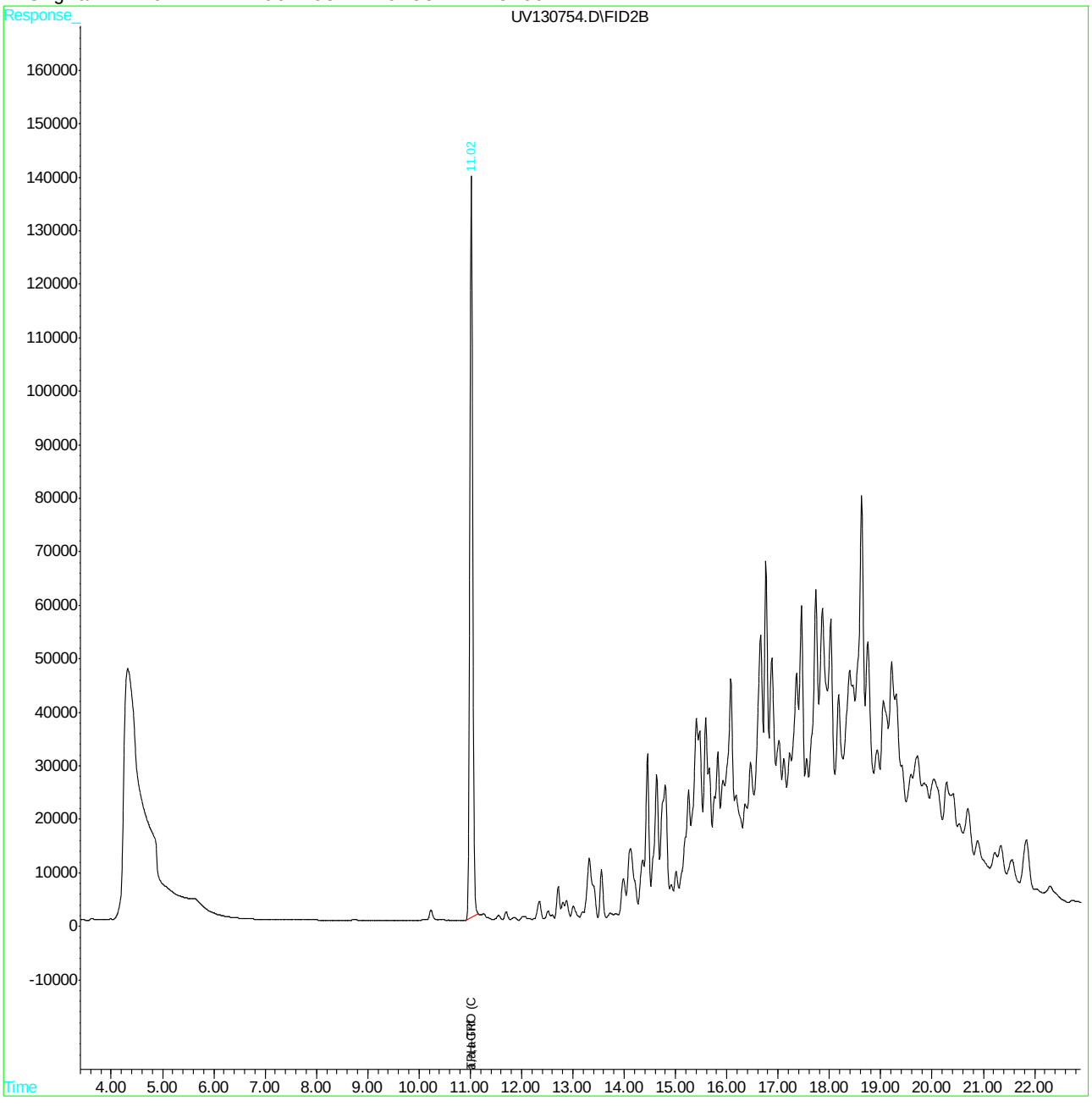
9

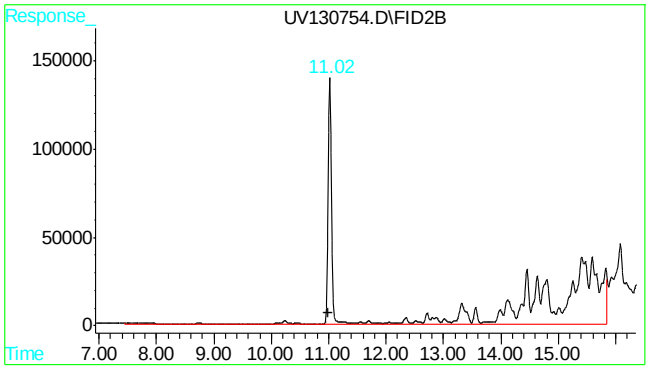
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130754.D Vial: 27
Acq On : 15 Apr 2016 9:22 pm Operator: JAYC
Sample : JC18331-10 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:23 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 11.000 min
Delta R.T.: 0.000 min
Response: 22317896
Conc: 1374.55 ug/l m

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130755.D                    Vial: 28
Acq On    : 15 Apr 2016   9:58 pm                     Operator: JAYC
Sample    : JC18331-11                                Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:23 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5398815  278.870 ug/l
Spiked Amount   300.000                   Recovery      =   92.96%

Target Compounds
 1) H   TPH-GRO (C6-C10)            11.00       22071541 1359.381 ug/l
```

9.1.11

9

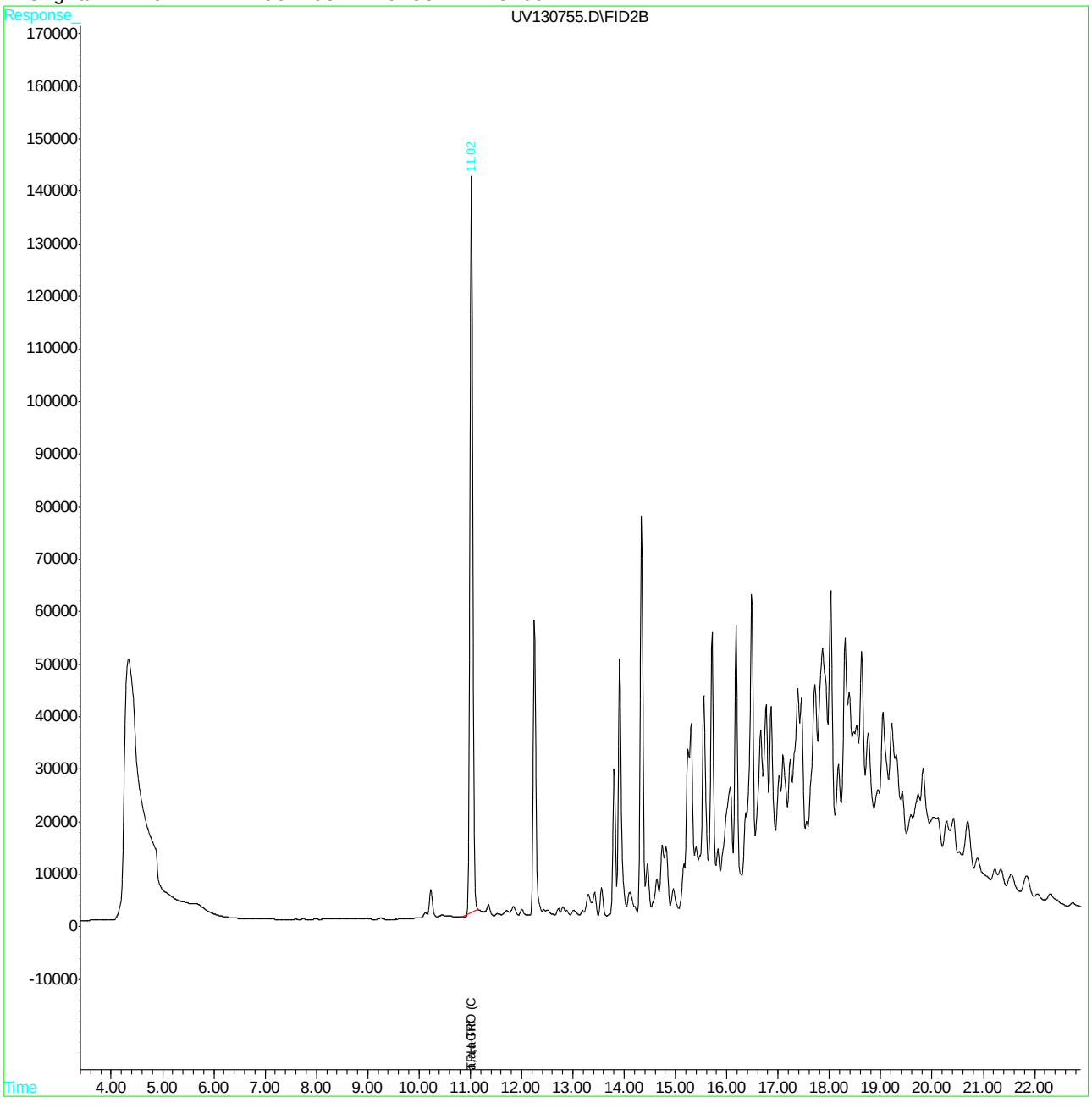
SGS ACCUTEST JC18331

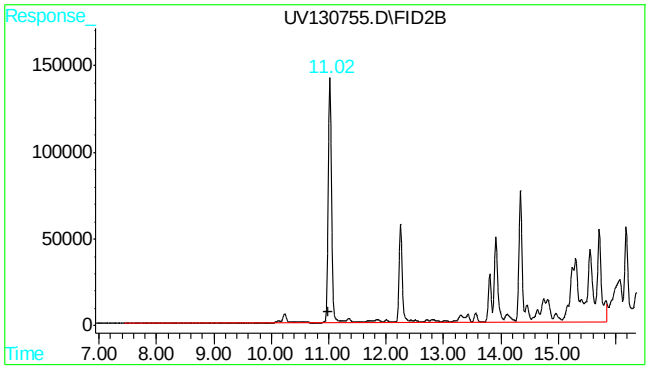
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130755.D Vial: 28
Acq On : 15 Apr 2016 9:58 pm Operator: JAYC
Sample : JC18331-11 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:23 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 11.000 min
Delta R.T.: 0.000 min
Response: 22071541
Conc: 1359.38 ug/l m

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130757.D                    Vial: 30
Acq On    : 15 Apr 2016  10:56 pm                     Operator: JAYC
Sample    : JC18331-12                                Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:24 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.02        5440040  280.999 ug/l
Spiked Amount   300.000                   Recovery      =   93.67%

Target Compounds
 1) H   TPH-GRO (C6-C10)            11.00       16650709 1025.513 ug/l
```

9.1.12

9

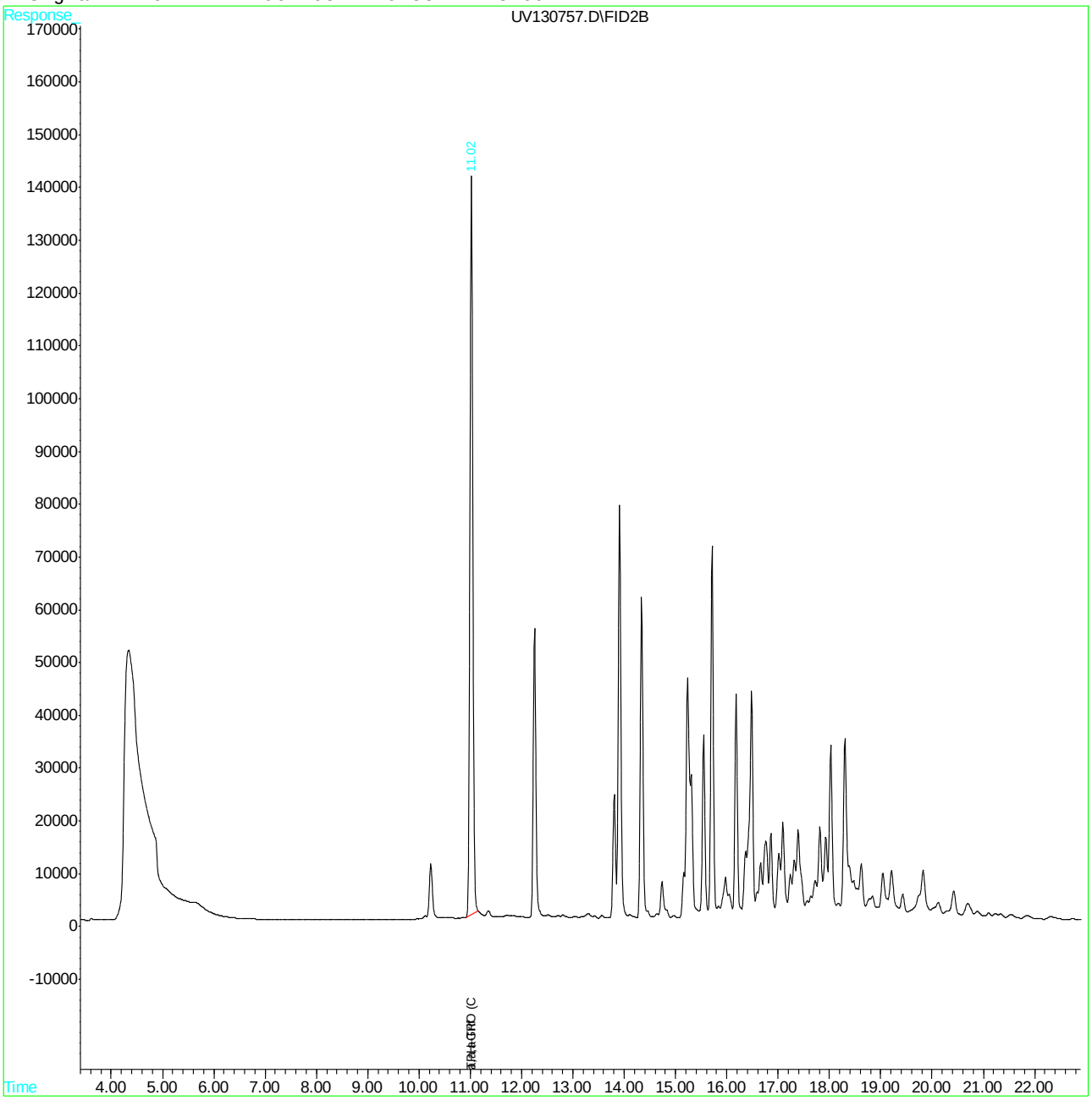
SGS ACCUTEST JC18331

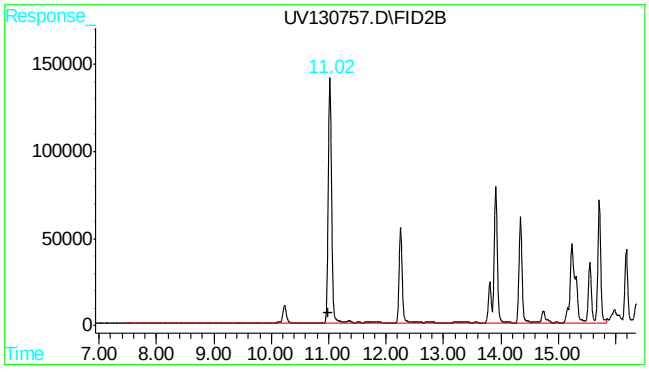
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130757.D Vial: 30
Acq On : 15 Apr 2016 10:56 pm Operator: JAYC
Sample : JC18331-12 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:24 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um





#1 TPH-GRO (C6-C10)

R.T.: 11.000 min
Delta R.T.: 0.000 min
Response: 16650709
Conc: 1025.51 ug/l m

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130743.D                    Vial: 16
Acq On    : 15 Apr 2016   3:42 pm                     Operator: JAYC
Sample    : MB2                                       Inst    : GCUV
Misc      : GC48223,GUV5246,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:22 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.03        4940804  255.212 ug/l
Spiked Amount   300.000                   Recovery      =   85.07%

Target Compounds
```

9.2.1

9

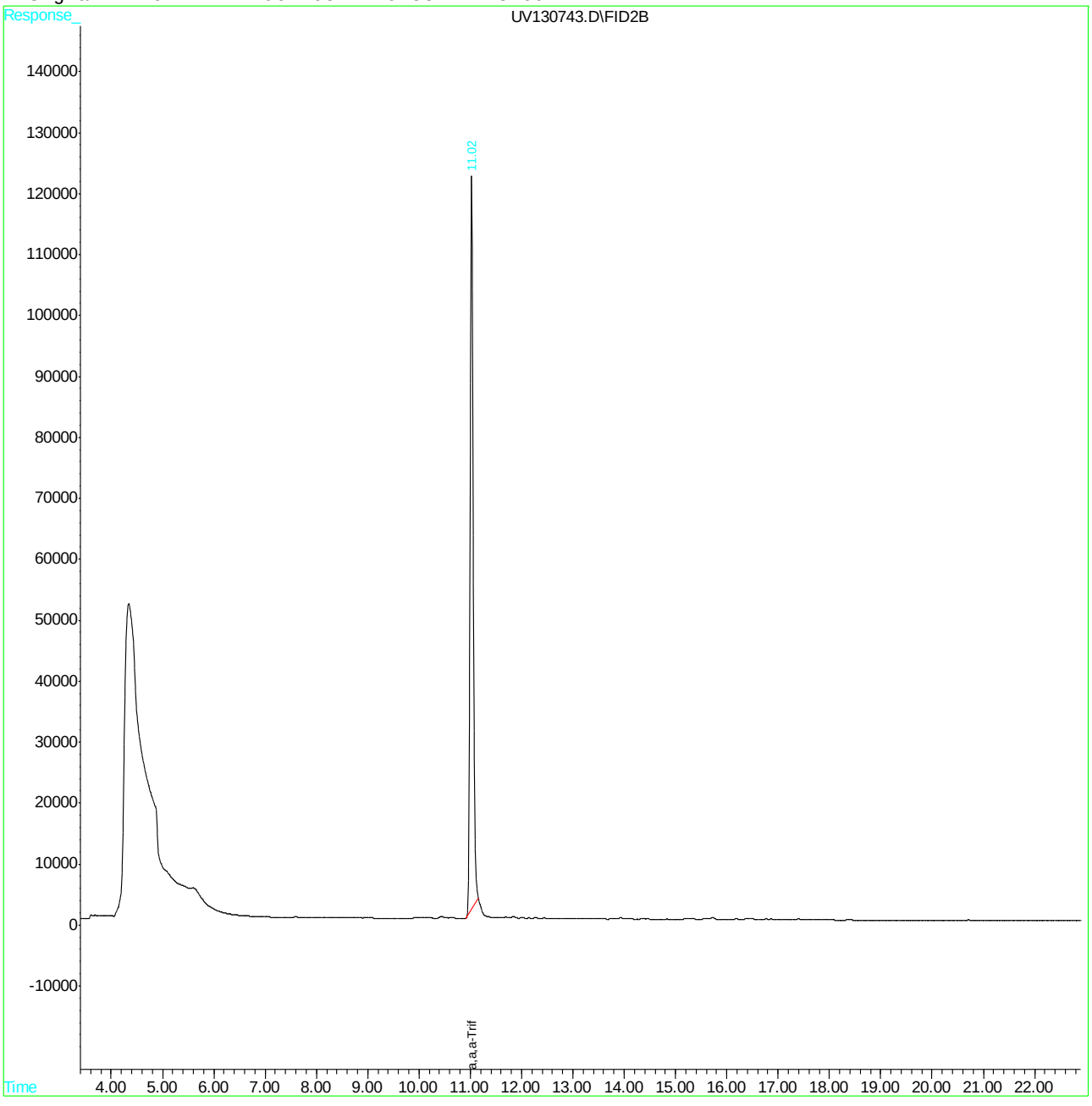
SGS ACCUTEST JC18331

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130743.D Vial: 16
Acq On : 15 Apr 2016 3:42 pm Operator: JAYC
Sample : MB2 Inst : GCUV
Misc : GC48223,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:22 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\UV130753.D                    Vial: 26
Acq On    : 15 Apr 2016   8:53 pm                       Operator: JAYC
Sample    : MB3                                         Inst    : GCUV
Misc      : GC48226,GUV5246,5.0,,,,1                    Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Apr 18  8:23 2016  Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Wed Dec 02 08:25:21 2015
Response via : Initial Calibration
DataAcq Meth : MUV5078.M

Volume Inj.  :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : HP-VOC 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 3) S   a,a,a-Trifluorotoluene      11.03        4919399  254.106 ug/l
Spiked Amount   300.000                   Recovery      =   84.70%

Target Compounds
```

9.2.2

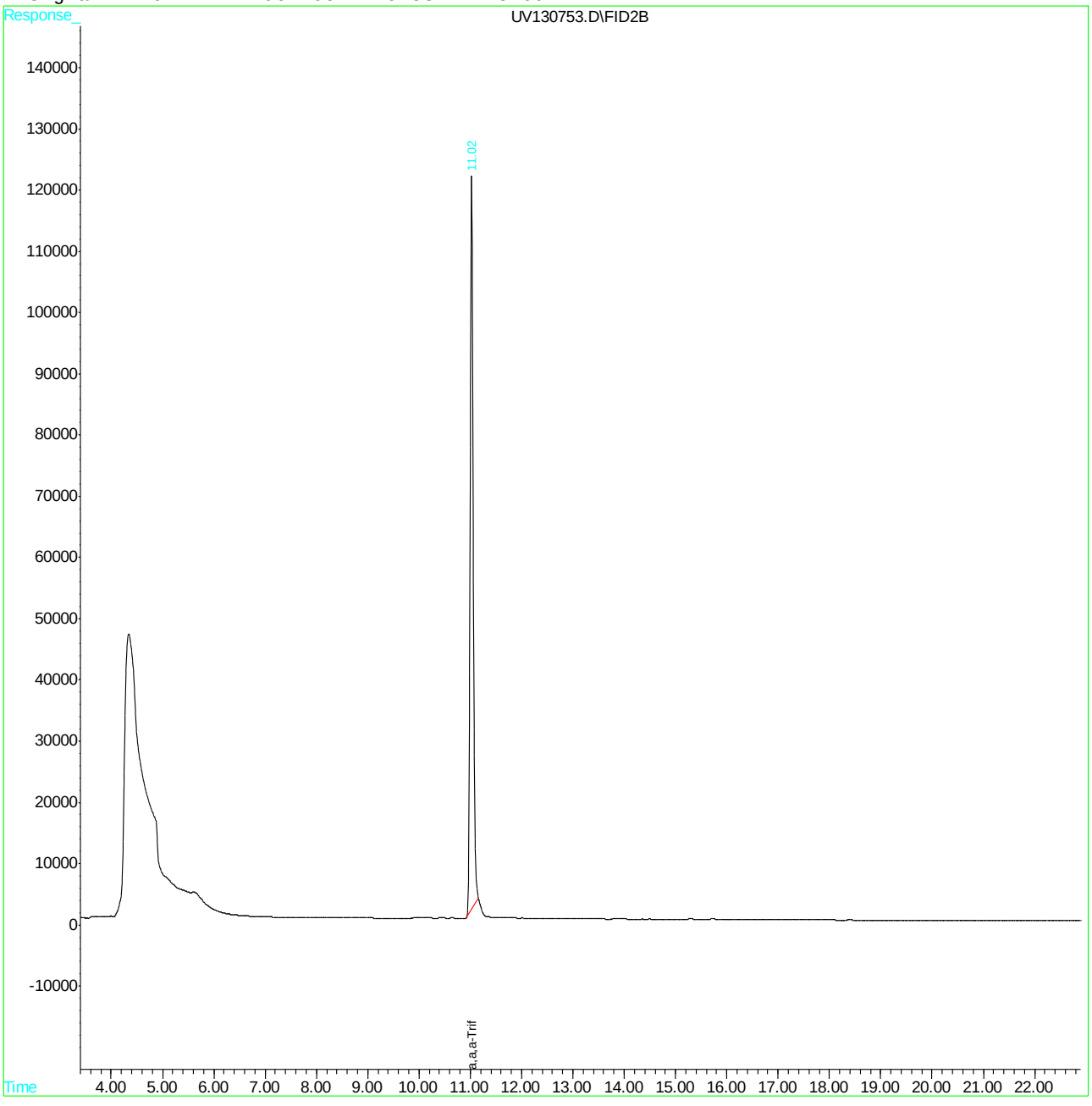
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\UV130753.D Vial: 26
Acq On : 15 Apr 2016 8:53 pm Operator: JAYC
Sample : MB3 Inst : GCUV
Misc : GC48226,GUV5246,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 18 8:23 2016 Quant Results File: MUV5078.RES

Quant Method : C:\HPCHEM\1\METHODS\MUV5078.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Wed Dec 02 08:25:21 2015
Response via : Multiple Level Calibration
DataAcq Meth : MUV5078.M

Volume Inj. :
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : HP-VOC 105m x 0.53mm x 3.0um



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93107-MB1	2Z54542.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	70%	36-144%
16416-32-3	Tetracosane-d50	80%	32-138%
438-22-2	5a-Androstane	81%	31-136%

Blank Spike Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93107-BS1	2Z54543.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-DRO (C10-C28)	3.33	2.40	72	15-111

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	68%	36-144%
16416-32-3	Tetracosane-d50	71%	32-138%
438-22-2	5a-Androstane	74%	31-136%

10.2.1

10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93107-MS	2Z54544.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
OP93107-MSD	2Z54545.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060
JC18331-1	2Z54546.D	1	04/18/16	KD	04/17/16	OP93107	G2Z2060

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18331-1, JC18331-2, JC18331-3, JC18331-4, JC18331-5, JC18331-6, JC18331-7, JC18331-8, JC18331-9, JC18331-10, JC18331-11, JC18331-12

CAS No.	Compound	JC18331-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	9.65		6.67	9.16	-7* a	6.67	7.15	-37* a	25	23-160/31

CAS No.	Surrogate Recoveries	MS	MSD	JC18331-1	Limits
84-15-1	o-Terphenyl	86%	65%	72%	36-144%
16416-32-3	Tetracosane-d50	87%	64%	76%	32-138%
438-22-2	5a-Androstane	89%	65%	77%	31-136%

(a) Outside the QC limits.

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Method: SW846 8015C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]	S3 [a]
JC18331-1	2Z54546.D	72	76	77
JC18331-2	2Z54571.D	93	66	104
JC18331-2	2Z54547.D	54	48	43
JC18331-3	2Z54548.D	71	76	77
JC18331-4	2Z54549.D	101	68	66
JC18331-5	2Z54552.D	72	86	89
JC18331-6	2Z54553.D	69	80	82
JC18331-7	2Z54554.D	81	79	82
JC18331-8	2Z54555.D	68	78	80
JC18331-9	2Z54556.D	70	76	80
JC18331-10	2Z54557.D	69	61	80
JC18331-11	2Z54572.D	183* [b]	77	88
JC18331-11	2Z54558.D	118	76	134
JC18331-12	2Z54559.D	91	79	82
OP93107-BS1	2Z54543.D	68	71	74
OP93107-MB1	2Z54542.D	70	80	81
OP93107-MS	2Z54544.D	86	87	89
OP93107-MSD	2Z54545.D	65	64	65

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	36-144%
S2 = Tetracosane-d50	32-138%
S3 = 5a-Androstane	31-136%

(a) Recovery from GC signal #1
(b) Outside control limits due to matrix interference.

GC Surrogate Retention Time Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Z2060-CC2059	**Injection Date:**	04/17/16
Lab File ID:	2Z54539.D	**Injection Time:**	22:32
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.16	10.23	8.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Z2060-RT	2Z54541.D	04/17/16	23:46			
OP93107-MB1	2Z54542.D	04/18/16	00:19	8.17	10.23	8.85
OP93107-BS1	2Z54543.D	04/18/16	00:52	8.17	10.23	8.85
OP93107-MS	2Z54544.D	04/18/16	01:25	8.17	10.23	8.86
OP93107-MSD	2Z54545.D	04/18/16	01:58	8.17	10.23	8.86
JC18331-1	2Z54546.D	04/18/16	02:31	8.18	10.23	8.86
JC18331-2	2Z54547.D	04/18/16	03:04	8.17	10.25	8.90
JC18331-3	2Z54548.D	04/18/16	03:37	8.17	10.23	8.85
JC18331-4	2Z54549.D	04/18/16	04:10	8.17	10.23	8.86

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Z2060-CC2059	**Injection Date:**	04/18/16
Lab File ID:	2Z54550.D	**Injection Time:**	04:43
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.16	10.23	8.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
JC18331-5	2Z54552.D	04/18/16	05:49	8.17	10.23	8.85
JC18331-6	2Z54553.D	04/18/16	06:22	8.17	10.23	8.86
JC18331-7	2Z54554.D	04/18/16	06:55	8.18	10.23	8.86
JC18331-8	2Z54555.D	04/18/16	07:28	8.17	10.23	8.85
JC18331-9	2Z54556.D	04/18/16	08:01	8.17	10.23	8.86
JC18331-10	2Z54557.D	04/18/16	08:34	8.15	10.24	8.90
JC18331-11	2Z54558.D	04/18/16	09:07	8.20	10.26	8.95
JC18331-12	2Z54559.D	04/18/16	09:40	8.18	10.23	8.86
ZZZZZZ	2Z54560.D	04/18/16	10:13	8.17	10.23	8.85

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Check Std:	G2Z2060-CC2059	**Injection Date:**	04/18/16
Lab File ID:	2Z54568.D	**Injection Time:**	14:40
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.16	10.22	8.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Z2060-RT	2Z54570.D	04/18/16	15:49			
JC18331-2	2Z54571.D	04/18/16	16:35	8.18	10.23	8.87
JC18331-11	2Z54572.D	04/18/16	17:09	8.18	10.23	8.87
OP93146-MB1	2Z54573.D	04/18/16	17:42	8.17	10.23	8.85
OP93146-BS1	2Z54574.D	04/18/16	18:16	8.17	10.23	8.85
JC18439-7	2Z54575.D	04/18/16	18:49	8.16	10.23	8.85
OP93146-MS	2Z54576.D	04/18/16	19:23	8.17	10.23	8.85
OP93146-MSD	2Z54577.D	04/18/16	19:56	8.17	10.23	8.85
ZZZZZZ	2Z54578.D	04/18/16	20:30	8.17	10.23	8.85

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Sample: G2Z2059-ICC2059
Lab FileID: 2Z54533.D

```
                         Response Factor Report  GC2Y2Z

 Method       : C:\MSDCHEM\1\METHODS\DRO2Z2059.M (Chemstation Integrator)
 Title        :
 Last Update  : Fri Apr 15 18:44:22 2016
 Response via : Initial Calibration

 Calibration Files
 250 =2Z54531.D   500 =2Z54532.D   1000=2Z54533.D   2500=2Z54534.D
 5000=2Z54535.D  100 =2Z54530.D  10k =2Z54536.D  50k =2Z54537.D  25  =2Z54528.D  50  =2Z54529.D

 Compound        250   500   1000  2500  5000  100   10k   50k    25     50     Avg   %RSD
 ---------------------------------------------------------------------------
 1) TPH-DRO      1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 2) TPH-DRO (C10 1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 3) TPH (C12-C40 1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 4) TPH-ORO (>C2 1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 5) TPH-HRO (C18 1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 6) TPH-DRO (C10 1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 7) TPH-ORO (C20 1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 8) TPH (C9-C16) 1.657 1.480 1.537 1.470 1.460 1.610 1.790 1.627 2.283 1.644 1.656 E6 14.68
 9) o-Terphenyl  2.800 2.513 2.640 2.512 2.490 2.170             2.958 2.315 2.550 E6  9.87
10) 5a-Androstan 2.034 1.809 1.830 1.766 1.814 1.584             2.303 1.763 1.863 E6 11.59
11) Tetracosane- 1.787 1.569 1.601 1.534 1.516 1.374             2.021 1.526 1.616 E6 12.34
---------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          DRO2Z2059.M        Sat Apr 16 16:41:34 2016   RPT1
```

10.6.1

10

Initial Calibration Verification

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: G2Z2059-ICV2059
Lab FileID: 2Z54538.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2059\2Z54538.D          Vial: 16
Acq On    : 15 Apr 2016   5:53 pm                    Operator: thomasl
Sample    : icv2059-1000                             Inst    : GC2Y2Z
Misc      : op92944,g2z2059,10.0,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2059.M (Chemstation Integrator)
Title        :
Last Update  : Fri Apr 15 18:44:22 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 : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.656	1.594 E6	3.7	104	0.00	2.50-11.95
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl		----------NA----------				
10	S	5a-Androstane		----------NA----------				
11	S	Tetracosane-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z54533.D DRO2Z2059.M Sat Apr 16 16:41:20 2016 RPT1

10.6.2 10

Continuing Calibration Summary

Job Number: JC18331
Account: PILOTSS Pilot Travel Centers LLC
Project: SCNJCH: #290, Heather Lane, Perryville, MD
Sample: G2Z2060-CC2059
Lab FileID: 2Z54539.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2060\2Z54539.D          Vial: 3
Acq On    : 17 Apr 2016  10:32 pm                    Operator: khaliahd
Sample    : cc2059-500                               Inst    : GC2Y2Z
Misc      : op92944,g2z2060,10.0,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2059.M (Chemstation Integrator)
Title        :
Last Update  : Fri Apr 15 18:44:22 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 : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.656	1.378 E6	16.8	93	0.00	2.50-11.95
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.550	2.403 E6	5.8	96	0.00	8.13- 8.19
10	S	5a-Androstane	1.863	1.754 E6	5.9	97	0.00	8.82- 8.88
11	S	Tetracosane-d50	1.616	1.500 E6	7.2	96	0.00	10.20-10.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z54532.D DRO2Z2059.M Mon Apr 18 09:31:39 2016 RPT1

10.6.3 10

Continuing Calibration Summary

Job Number: JC18331 **Sample:** G2Z2060-CC2059
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z54550.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2060\2Z54550.D          Vial: 4
Acq On    : 18 Apr 2016   4:43 am                    Operator: khaliahd
Sample    : cc2059-1000                              Inst    : GC2Y2Z
Misc      : op93107,g2z2060,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2059.M (Chemstation Integrator)
Title        :
Last Update  : Fri Apr 15 18:44:22 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 : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.656	1.366 E6	17.5	89	0.00	2.50-11.95
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.550	2.468 E6	3.2	94	0.00	8.13- 8.19
10	S	5a-Androstane	1.863	1.728 E6	7.2	94	0.00	8.82- 8.88
11	S	Tetracosane-d50	1.616	1.499 E6	7.2	94	0.00	10.20-10.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z54533.D DRO2Z2059.M Mon Apr 18 10:10:31 2016 RPT1

10.6.4 10

Continuing Calibration Summary

Job Number: JC18331 **Sample:** G2Z2060-CC2059
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z54561.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2060\2Z54561.D          Vial: 3
Acq On    : 18 Apr 2016  10:47 am                    Operator: khaliahd
Sample    : cc2059-500                               Inst    : GC2Y2Z
Misc      : op93107,g2z2060,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2059.M (Chemstation Integrator)
Title        :
Last Update  : Fri Apr 15 18:44:22 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 : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.656	1.394 E6	15.8	94	0.00	2.50-11.95
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.550	2.479 E6	2.8	99	0.00	8.13- 8.19
10	S	5a-Androstane	1.863	1.786 E6	4.1	99	0.00	8.82- 8.88
11	S	Tetracosane-d50	1.616	1.545 E6	4.4	98	0.00	10.19-10.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z54532.D DRO2Z2059.M Mon Apr 18 11:35:23 2016 RPT1

10.6.5 10

Continuing Calibration Summary

Job Number: JC18331 **Sample:** G2Z2060-CC2059
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z54568.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2060\2Z54568.D          Vial: 4
Acq On    : 18 Apr 2016   2:40 pm                    Operator: thomasl
Sample    : cc2059-1000                              Inst    : GC2Y2Z
Misc      : op93107,g2z2060,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2059.M (Chemstation Integrator)
Title        :
Last Update  : Fri Apr 15 18:44:22 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 : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.656	1.394 E6	15.8	91	0.00	2.50-11.95
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.550	2.472 E6	3.1	94	0.00	8.13- 8.19
10	S	5a-Androstane	1.863	1.753 E6	5.9	96	0.00	8.82- 8.88
11	S	Tetracosane-d50	1.616	1.508 E6	6.7	94	0.00	10.19-10.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z54533.D DRO2Z2059.M Mon Apr 18 15:16:08 2016 RPT1

10.6.6 10

Continuing Calibration Summary

Job Number: JC18331 **Sample:** G2Z2061-CC2059
Account: PILOTSS Pilot Travel Centers LLC **Lab FileID:** 2Z54579.D
Project: SCNJCH: #290, Heather Lane, Perryville, MD

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z2061\2Z54579.D          Vial: 3
Acq On    : 18 Apr 2016   9:03 pm                    Operator: thomasl
Sample    : cc2059-500                               Inst    : GC2Y2Z
Misc      : op93146,g2z2061,10.0,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z2059.M (Chemstation Integrator)
Title        :
Last Update  : Fri Apr 15 18:44:22 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 : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.656	1.423 E6	14.1	96	0.00	2.50-11.95
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.550	2.523 E6	1.1	100	0.00	8.13- 8.19
10	S	5a-Androstane	1.863	1.830 E6	1.8	101	0.00	8.81- 8.87
11	S	Tetracosane-d50	1.616	1.571 E6	2.8	100	0.00	10.19-10.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z54532.D DRO2Z2059.M Tue Apr 19 12:54:02 2016 RPT1

10.6.7

10

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 15:51

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54546.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 2:31 am
Operator : khaliahd
Sample : jc18331-1
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 09:57:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.18	91928620	36.055	PPM	m
Spiked Amount 50.000		Recovery =	72.11%		
10) S 5a-Androstane	8.86	71757795	38.519	PPM	m
Spiked Amount 50.000		Recovery =	77.04%		
11) S Tetracosane-d50	10.23	61552831	38.088	PPM	
Spiked Amount 50.000		Recovery =	76.18%		
Target Compounds					
1) H TPH-DRO	7.22	4793796388	2894.958	PPM	
2) H TPH-DRO (C10-C44)	11.45	5746552363	3470.324	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.1

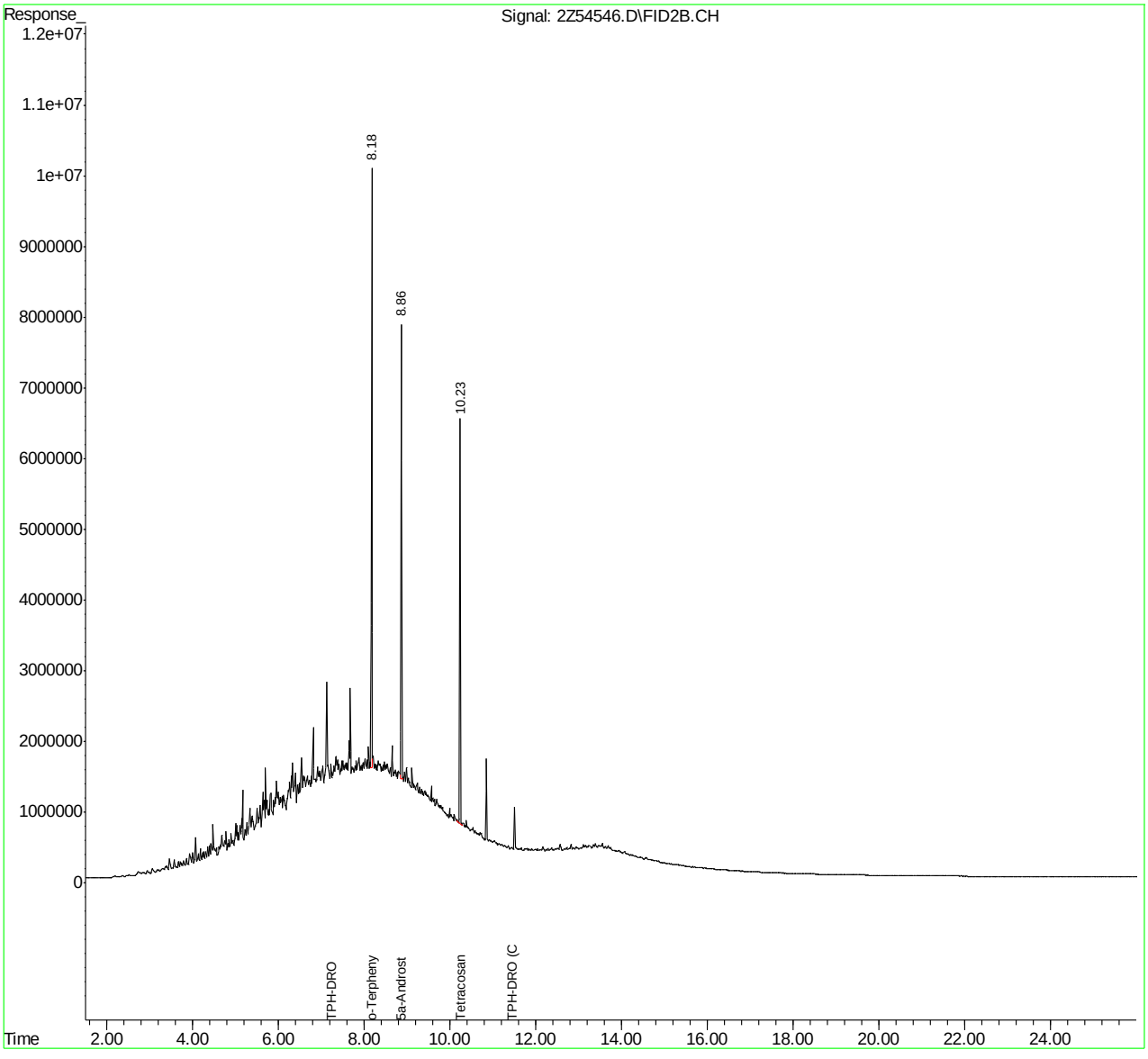
11

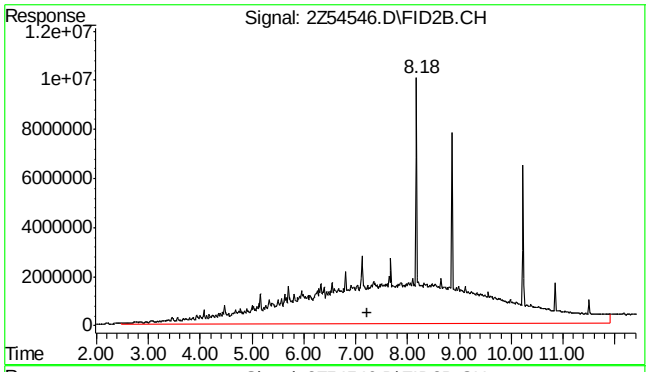
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54546.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 2:31 am
Operator : khaliahd
Sample : jc18331-1
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 09:57:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

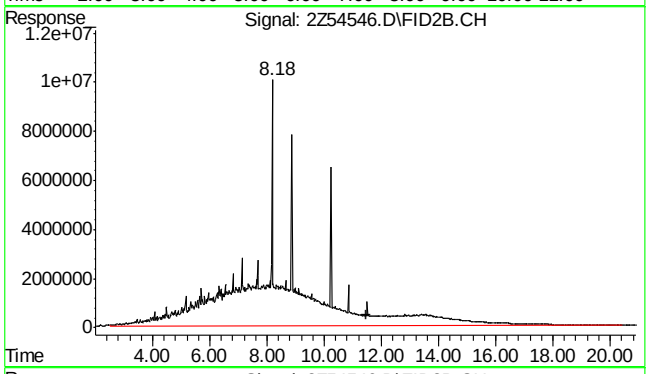
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





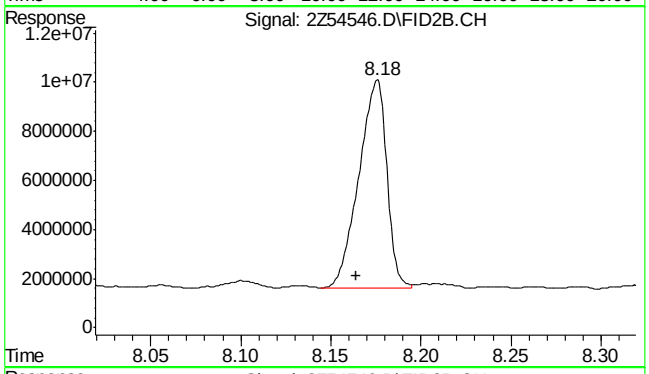
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 4793796388
Conc: 2894.96 PPM m



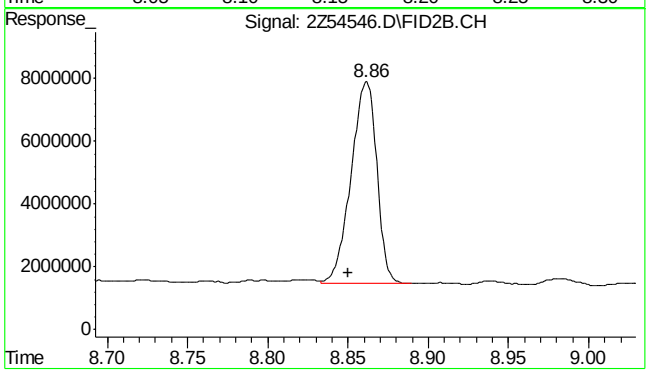
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 5746552363
Conc: 3470.32 PPM m



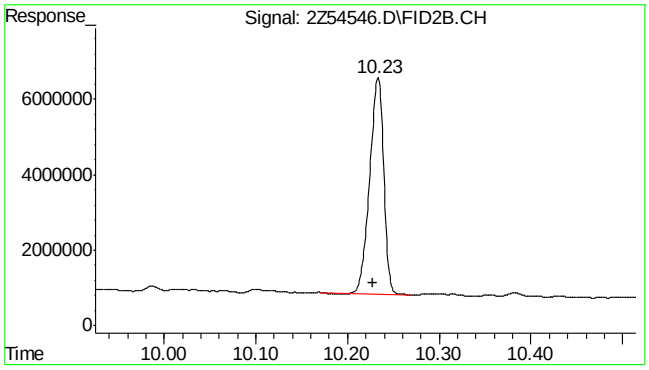
#9 o-Terphenyl

R.T.: 8.176 min
Delta R.T.: 0.012 min
Response: 91928620
Conc: 36.05 PPM m



#10 5a-Androstane

R.T.: 8.861 min
Delta R.T.: 0.011 min
Response: 71757795
Conc: 38.52 PPM m



#11 Tetracosane-d50

R.T.: 10.233 min
Delta R.T.: 0.006 min
Response: 61552831
Conc: 38.09 PPM

11.1.1

11

SGS ACCUTEST JC18331

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/19/16 13:49

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54547.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 3:04 am
Operator : khaliahd
Sample : jc18331-2
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 11:45:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.17	68836849	26.998	PPM	m
Spiked Amount 50.000		Recovery =	54.00%		
10) S 5a-Androstane	8.90f	40141343	21.548	PPM	m
Spiked Amount 50.000		Recovery =	43.10%		
11) S Tetracosane-d50	10.25f	39161273	24.232	PPM	m
Spiked Amount 50.000		Recovery =	48.46%		
Target Compounds					
1) H TPH-DRO	7.22	1.8318e+011	110622.017	PPM	
2) H TPH-DRO (C10-C44)	11.45	1.84217e+011	111247.823	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.2 11

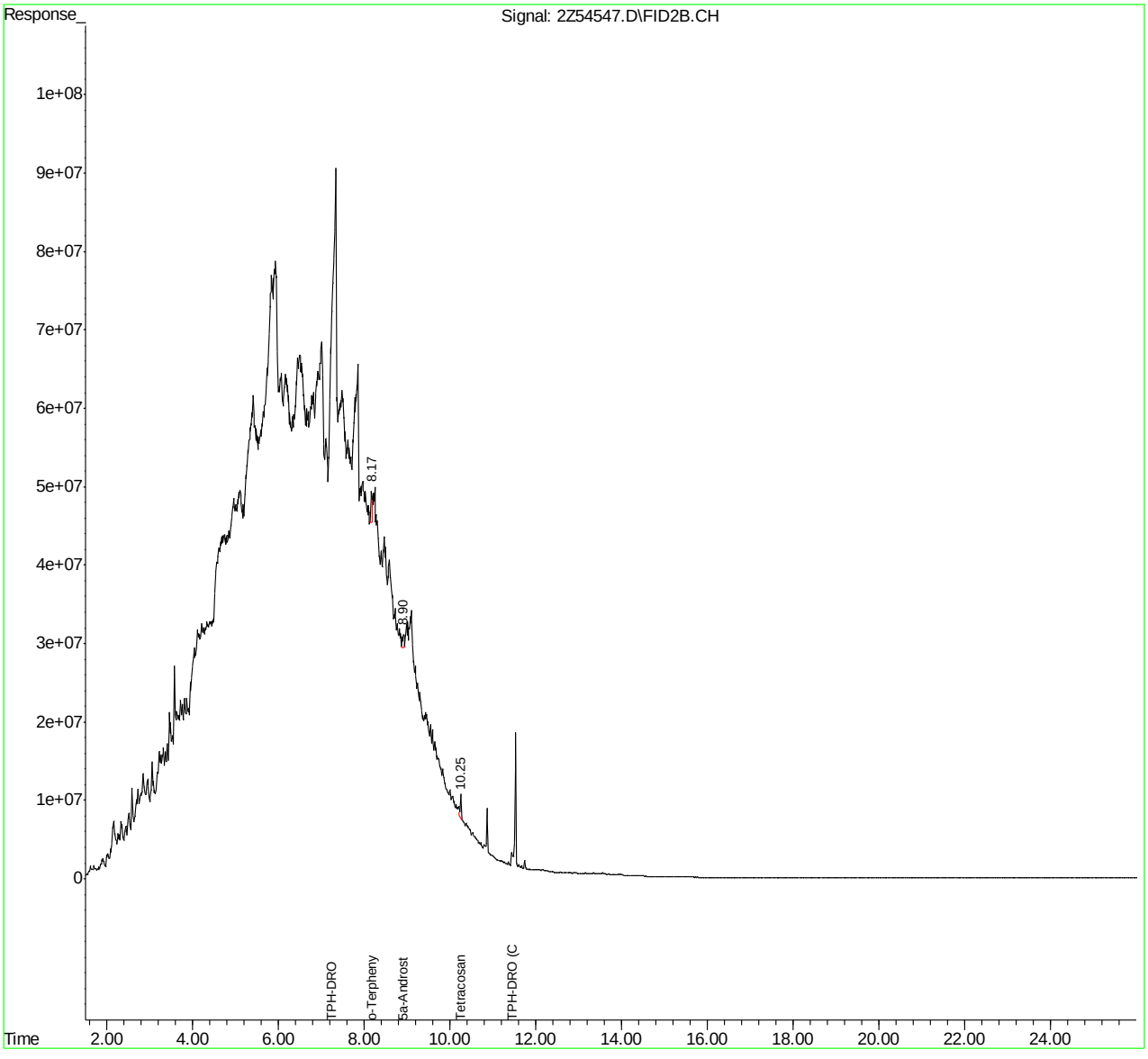
SGS ACCUTEST JC18331

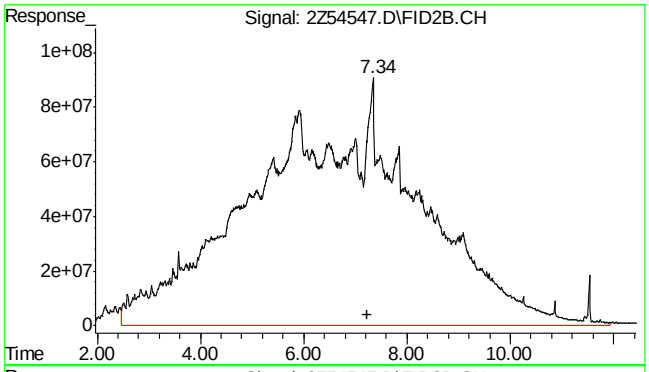
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54547.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 3:04 am
Operator : khaliahd
Sample : jc18331-2
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 11:45:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

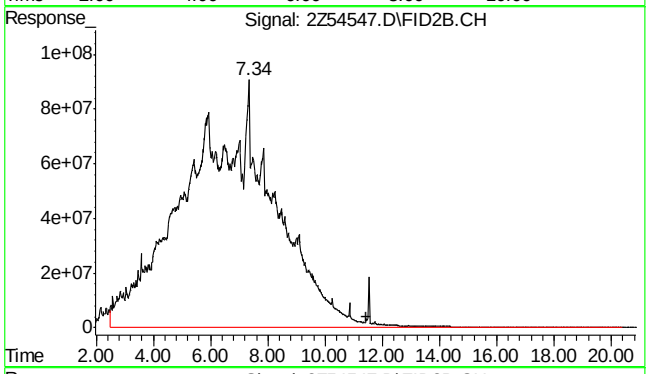
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





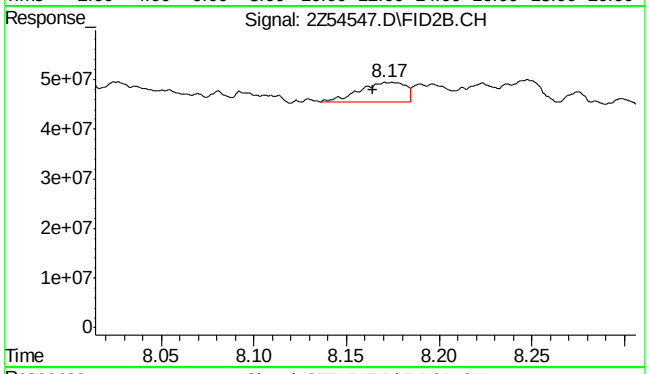
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 1.8318e+011
Conc: 110622.02 PPM m



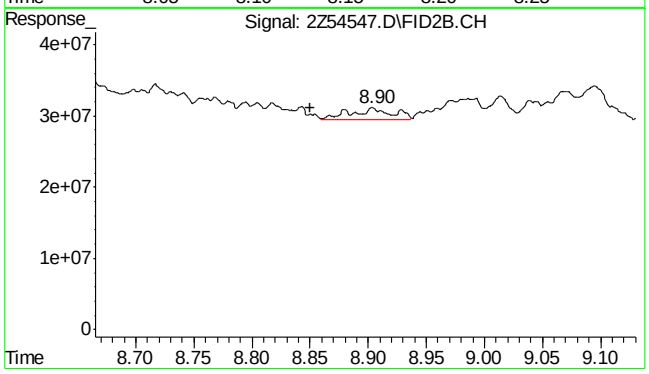
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 1.84217e+011
Conc: 111247.82 PPM m



#9 o-Terphenyl

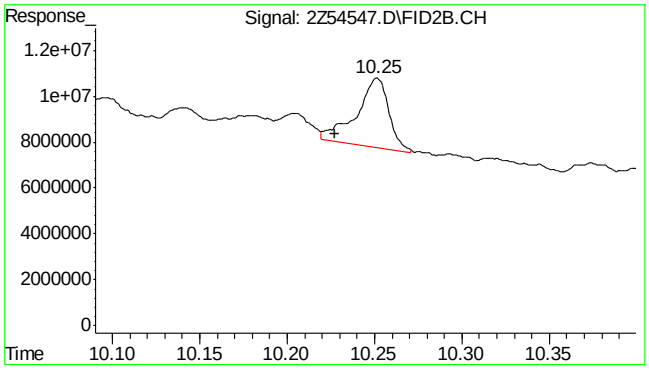
R.T.: 8.171 min
Delta R.T.: 0.006 min
Response: 68836849
Conc: 27.00 PPM m



#10 5a-Androstane

R.T.: 8.904 min
Delta R.T.: 0.054 min
Response: 40141343
Conc: 21.55 PPM m

SGS ACCUTEST JC18331



#11 Tetracosane-d50

R.T.: 10.251 min
Delta R.T.: 0.024 min
Response: 39161273
Conc: 24.23 PPM m

11.1.2

11

SGS ACCUTEST JC18331

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/19/16 13:49

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2061\
Data File : 2Z54571.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 4:35 pm
Operator : thomasl
Sample : jc18331-2
Misc : op93107,g2z2061,300,,,1,10
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 19 13:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.18f	11916712	4.674	PPM	m
Spiked Amount 50.000		Recovery =	9.35%		
10) S 5a-Androstane	8.87f	9665404	5.188	PPM	m
Spiked Amount 50.000		Recovery =	10.38%		
11) S Tetracosane-d50	10.23	5370684	3.323	PPM	m
Spiked Amount 50.000		Recovery =	6.65%		
Target Compounds					
1) H TPH-DRO	7.22	16124121804	9737.303	PPM	
2) H TPH-DRO (C10-C44)	11.45	16294918518	9840.447	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

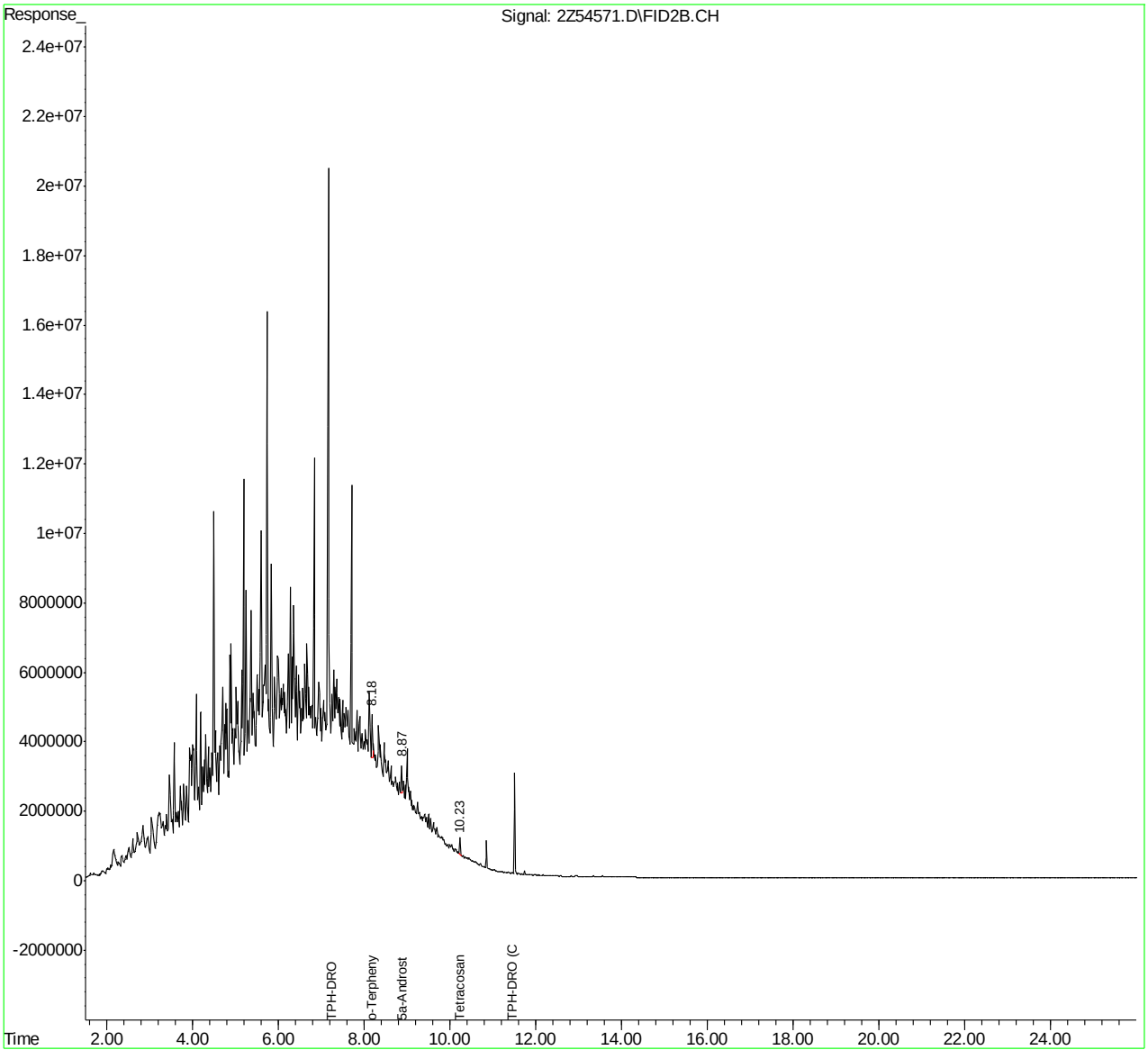
11.1.3 11

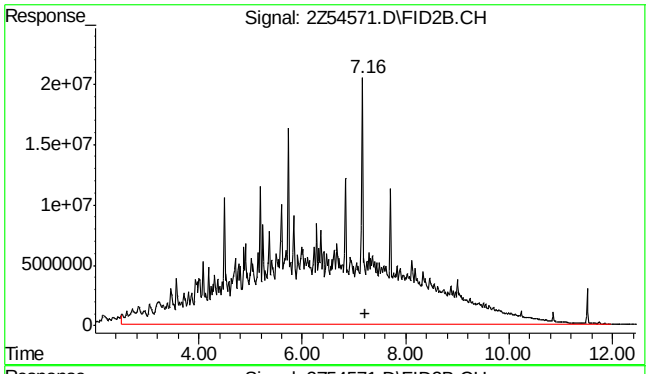
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2061\
Data File : 2Z54571.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 4:35 pm
Operator : thomasl
Sample : jc18331-2
Misc : op93107,g2z2061,300,,,1,10
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 19 13:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

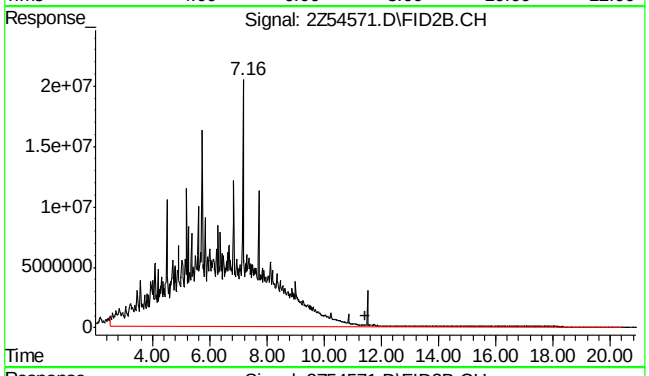
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





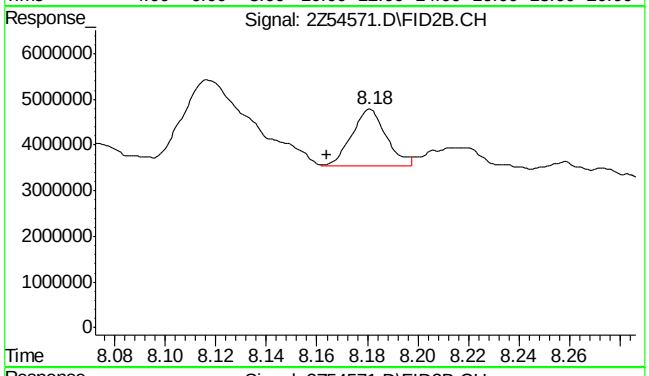
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 16124121804
Conc: 9737.30 PPM m



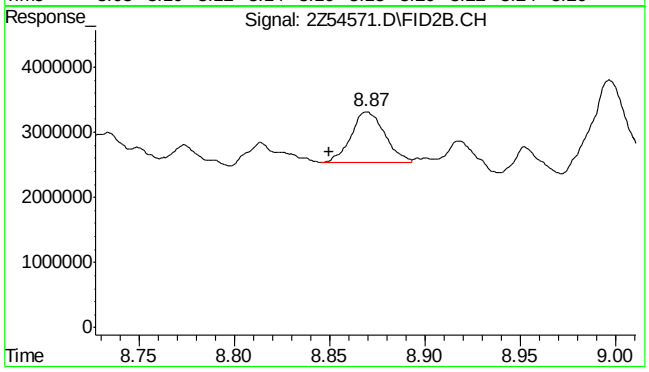
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 16294918518
Conc: 9840.45 PPM m



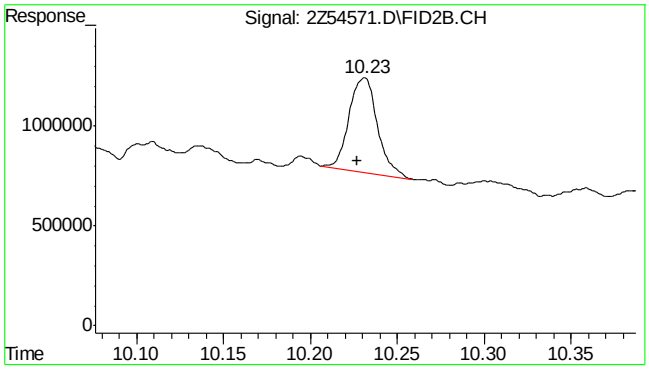
#9 o-Terphenyl

R.T.: 8.181 min
Delta R.T.: 0.017 min
Response: 11916712
Conc: 4.67 PPM m



#10 5a-Androstane

R.T.: 8.869 min
Delta R.T.: 0.019 min
Response: 9665404
Conc: 5.19 PPM m



#11 Tetracosane-d50

R.T.: 10.231 min
Delta R.T.: 0.004 min
Response: 5370684
Conc: 3.32 PPM m

11.1.3

11

SGS ACCUTEST JC18331

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54548.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 3:37 am
Operator : khaliahd
Sample : jc18331-3
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 58 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:04:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	8.17	90915911	35.658 PPM
Spiked Amount 50.000		Recovery	= 71.32%
10) S 5a-Androstane	8.85	72024466	38.662 PPM
Spiked Amount 50.000		Recovery	= 77.32%
11) S Tetracosane-d50	10.23	61780001	38.229 PPM
Spiked Amount 50.000		Recovery	= 76.46%
Target Compounds			
1) H TPH-DRO	7.22	725274658	437.991 PPM
2) H TPH-DRO (C10-C44)	11.45	911184457	550.261 PPM
4) H TPH-ORO (>C28-C40)	14.23	43405518	26.212 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.4

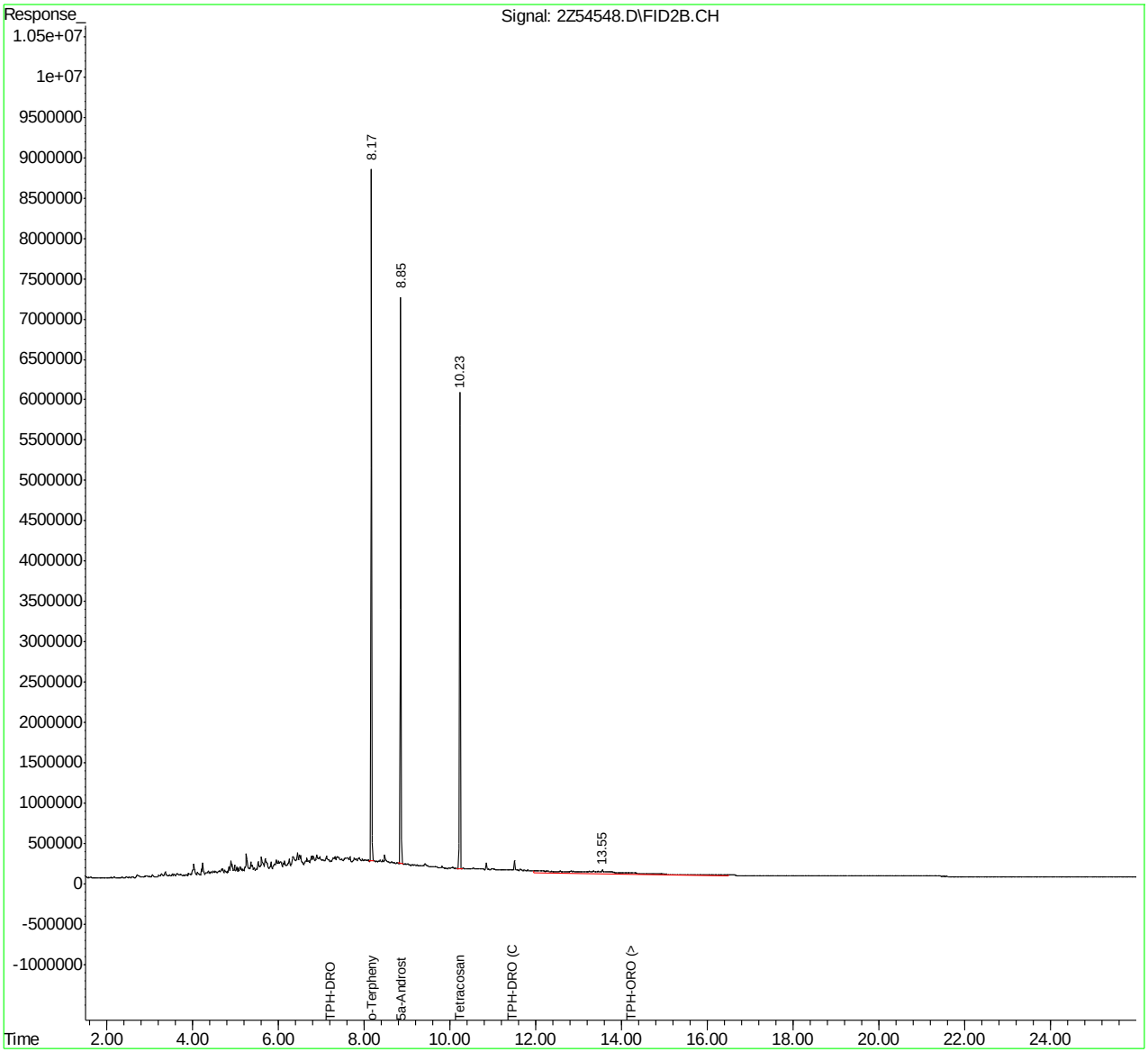
11

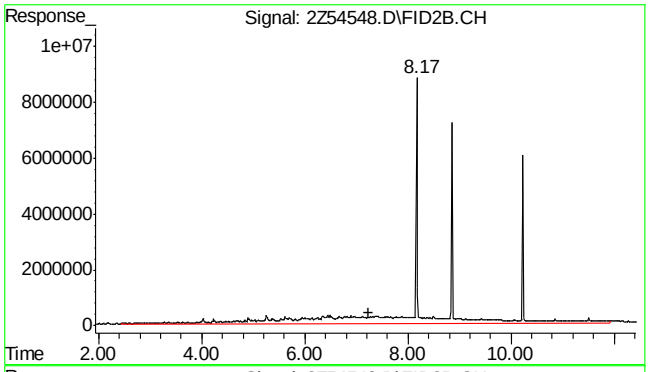
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54548.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 3:37 am
Operator : khaliahd
Sample : jc18331-3
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 58 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:04:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

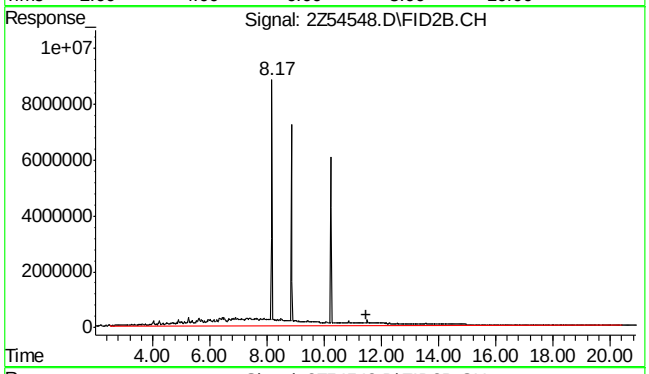
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





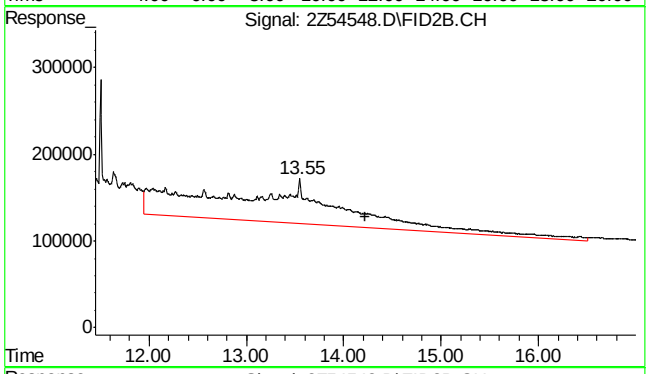
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 725274658
Conc: 437.99 PPM m



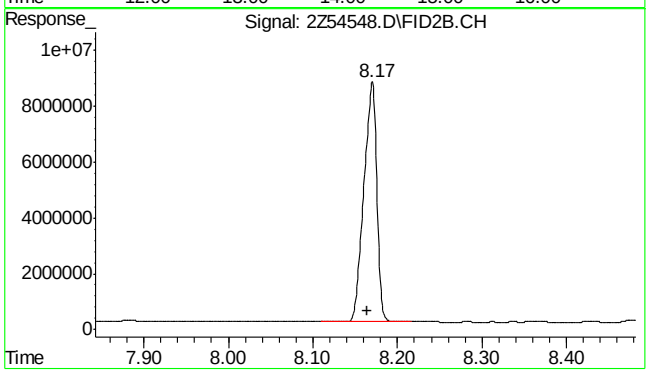
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 911184457
Conc: 550.26 PPM m



#4 TPH-ORO (>C28-C40)

R.T.: 14.225 min
Delta R.T.: 0.000 min
Response: 43405518
Conc: 26.21 PPM m



#9 o-Terphenyl

R.T.: 8.170 min
Delta R.T.: 0.006 min
Response: 90915911
Conc: 35.66 PPM

11.1.4

11

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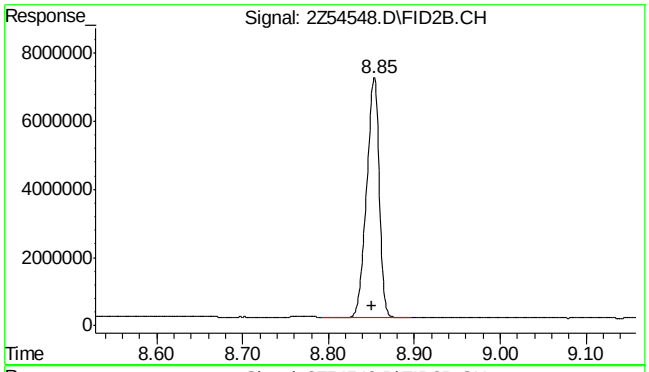
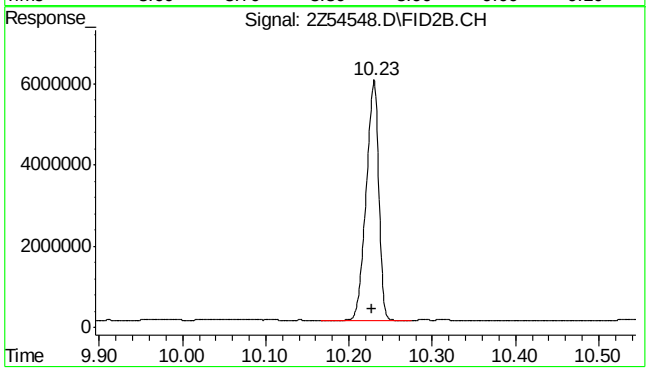


#10 5a-Androstane

R.T.: 8.853 min
Delta R.T.: 0.003 min
Response: 72024466
Conc: 38.66 PPM



#11 Tetracosane-d50

R.T.: 10.230 min
Delta R.T.: 0.002 min
Response: 61780001
Conc: 38.23 PPM

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54549.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 4:10 am
Operator : khaliahd
Sample : jc18331-4
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 59 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:07:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.17	129248702	50.692	PPM	m
Spiked Amount 50.000		Recovery	= 101.38%		
10) S 5a-Androstane	8.86	61901784	33.228	PPM	m
Spiked Amount 50.000		Recovery	= 66.46%		
11) S Tetracosane-d50	10.23	55244189	34.184	PPM	m
Spiked Amount 50.000		Recovery	= 68.37%		
Target Compounds					
1) H TPH-DRO	7.22	4105480610	2479.286	PPM	
2) H TPH-DRO (C10-C44)	11.45	6876367177	4152.615	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

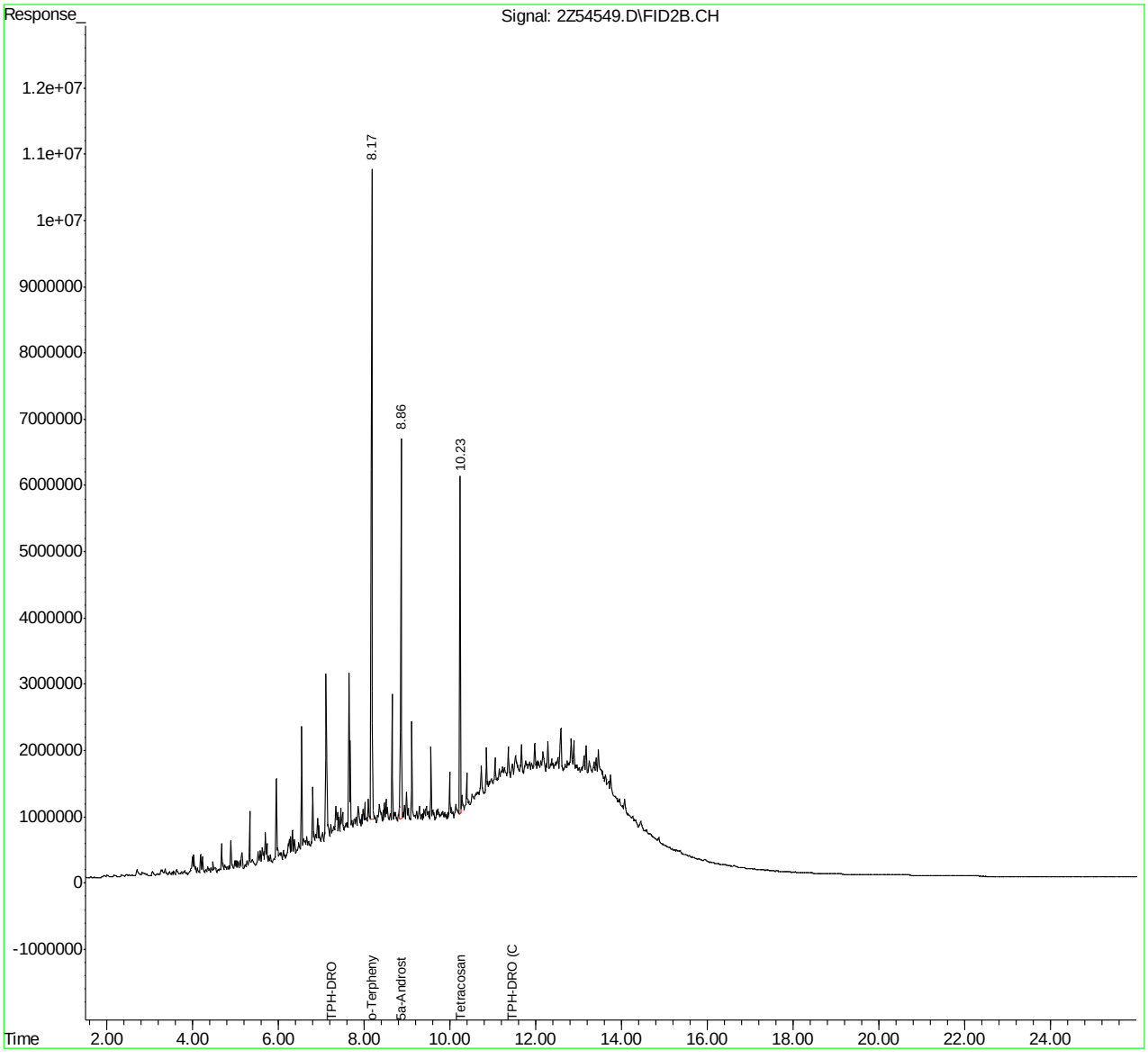
11.1.5 11

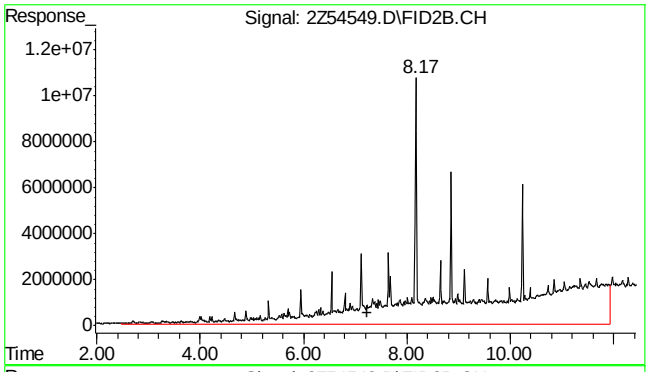
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54549.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 4:10 am
Operator : khaliahd
Sample : jc18331-4
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 59 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:07:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

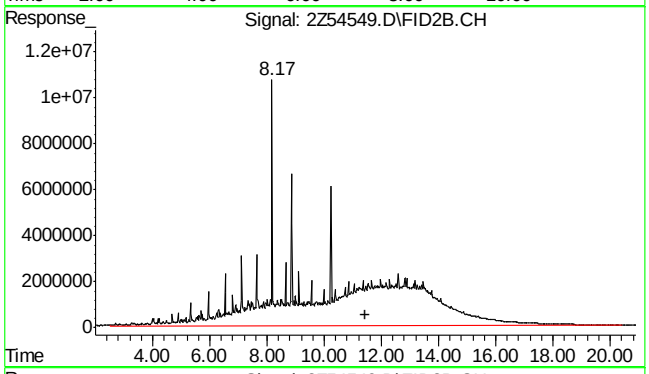
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





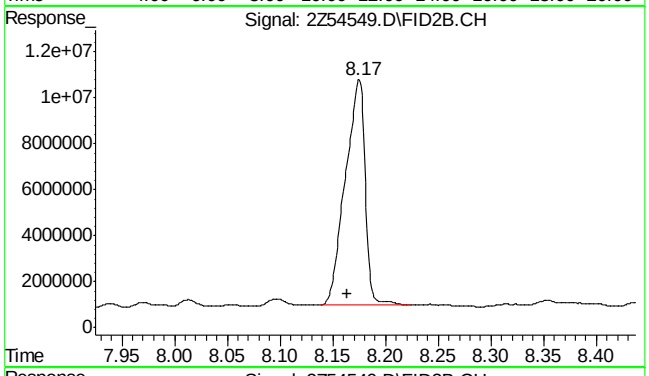
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 4105480610
Conc: 2479.29 PPM m



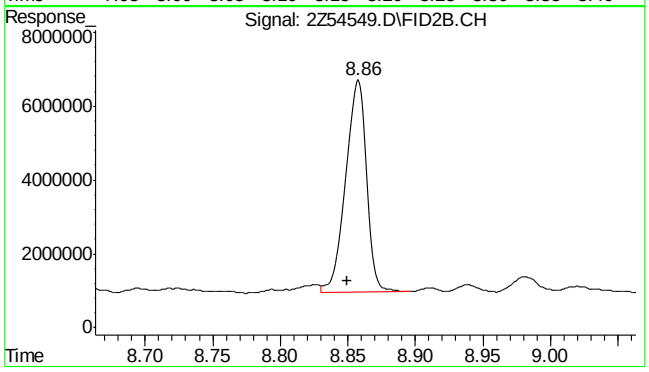
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 6876367177
Conc: 4152.62 PPM m



#9 o-Terphenyl

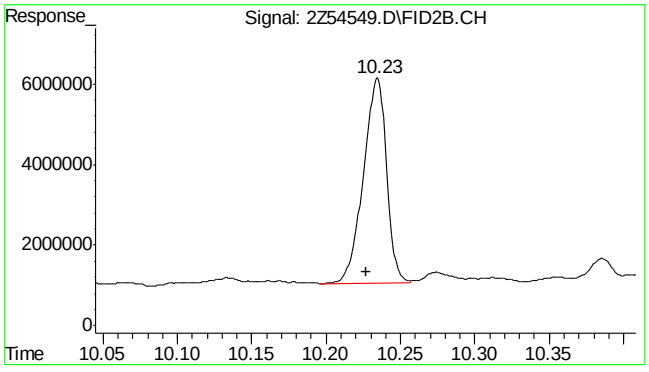
R.T.: 8.175 min
Delta R.T.: 0.010 min
Response: 129248702
Conc: 50.69 PPM m



#10 5a-Androstane

R.T.: 8.857 min
Delta R.T.: 0.007 min
Response: 61901784
Conc: 33.23 PPM m

SGS ACCUTEST JC18331



#11 Tetracosane-d50

R.T.: 10.234 min
Delta R.T.: 0.007 min
Response: 55244189
Conc: 34.18 PPM m

11.1.5

11

SGS ACCUTEST JC18331

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54552.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 5:49 am
Operator : khaliahd
Sample : jc18331-5
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:18:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	8.17	91633308	35.939 PPM
Spiked Amount 50.000		Recovery	= 71.88%
10) S 5a-Androstane	8.85	83266496	44.697 PPM
Spiked Amount 50.000		Recovery	= 89.39%
11) S Tetracosane-d50	10.23	69485948	42.997 PPM
Spiked Amount 50.000		Recovery	= 85.99%
Target Compounds			
1) H TPH-DRO	7.22	1235555087	746.148 PPM
2) H TPH-DRO (C10-C44)	11.45	1605598879	969.616 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.6

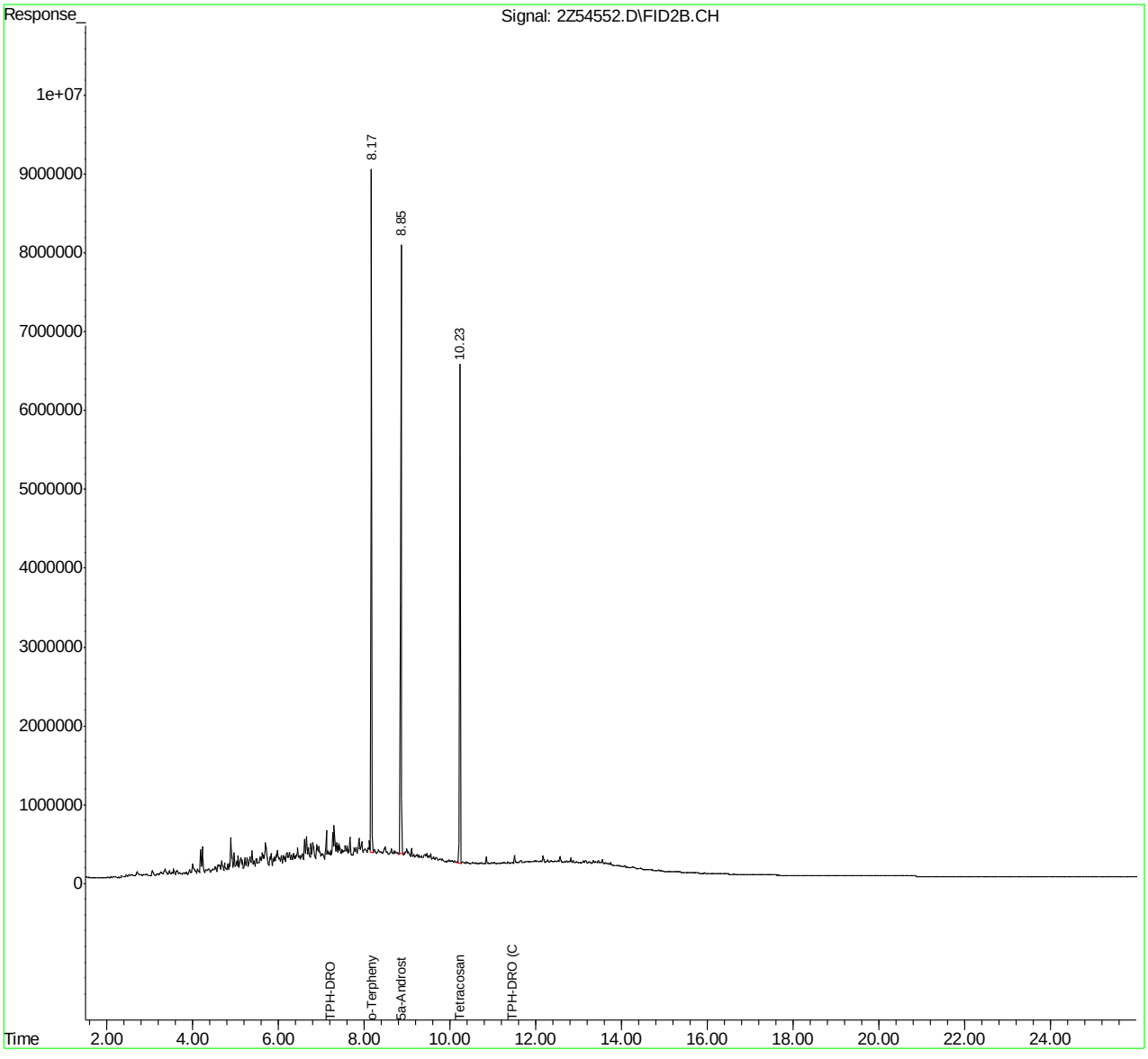
11

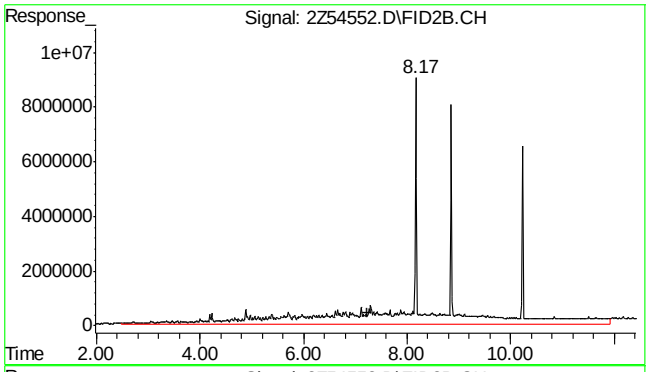
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54552.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 5:49 am
Operator : khaliahd
Sample : jc18331-5
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:18:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

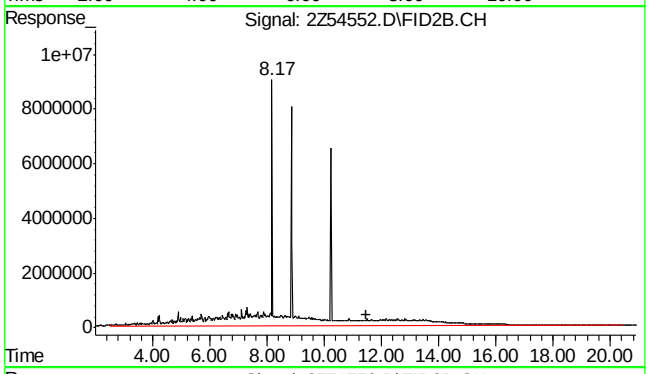
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





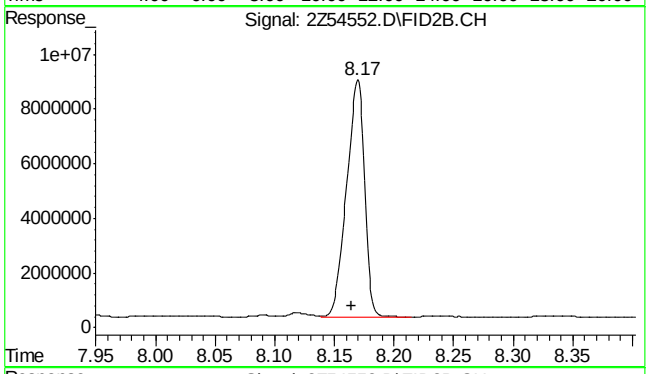
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 1235555087
Conc: 746.15 PPM m



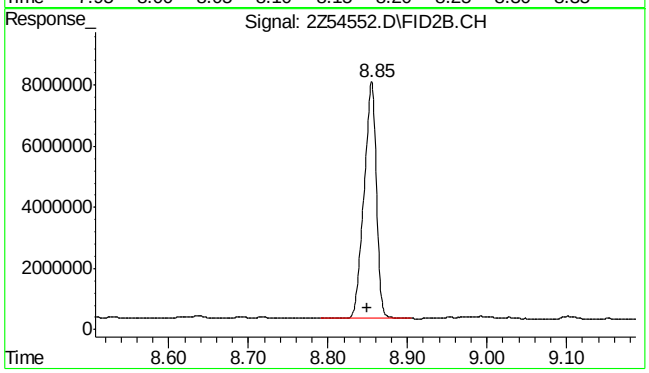
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 1605598879
Conc: 969.62 PPM m



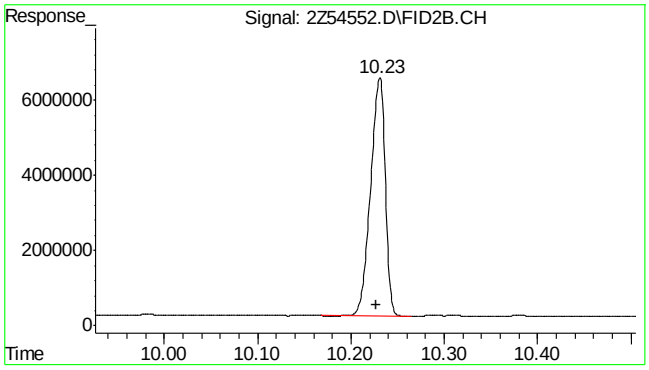
#9 o-Terphenyl

R.T.: 8.169 min
Delta R.T.: 0.005 min
Response: 91633308
Conc: 35.94 PPM



#10 5a-Androstane

R.T.: 8.855 min
Delta R.T.: 0.005 min
Response: 83266496
Conc: 44.70 PPM



#11 Tetracosane-d50

R.T.: 10.230 min
Delta R.T.: 0.003 min
Response: 69485948
Conc: 43.00 PPM

11.1.6

11

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54553.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 6:22 am
Operator : khaliahd
Sample : jc18331-6
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:23:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.17	88600468	34.749	PPM	
Spiked Amount 50.000		Recovery =	69.50%		
10) S 5a-Androstane	8.86	76473863	41.050	PPM	m
Spiked Amount 50.000		Recovery =	82.10%		
11) S Tetracosane-d50	10.23	64438319	39.873	PPM	m
Spiked Amount 50.000		Recovery =	79.75%		
Target Compounds					
1) H TPH-DRO	7.22	2730977645	1649.228	PPM	
2) H TPH-DRO (C10-C44)	11.45	5250235573	3170.600	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

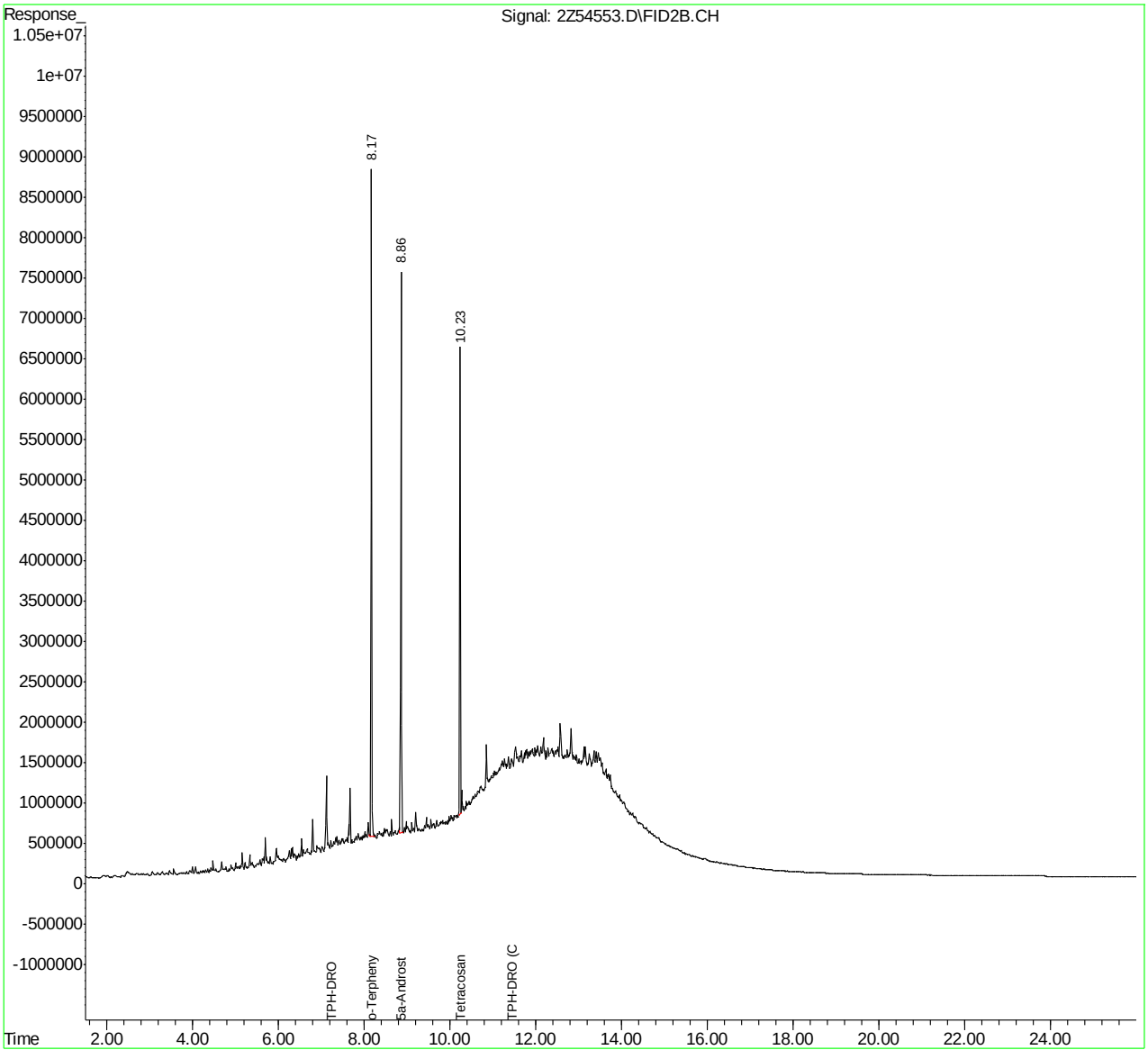
11.1.7 11

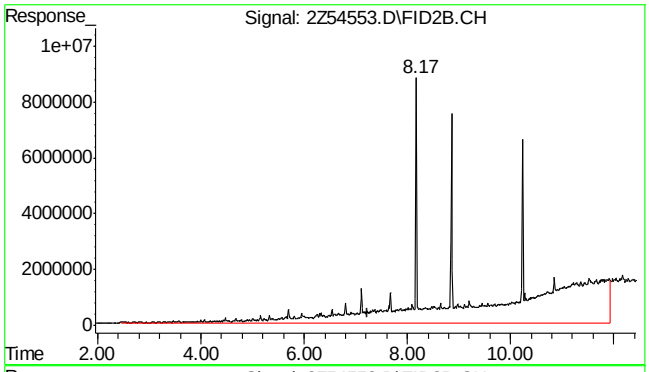
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54553.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 6:22 am
Operator : khaliahd
Sample : jc18331-6
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:23:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

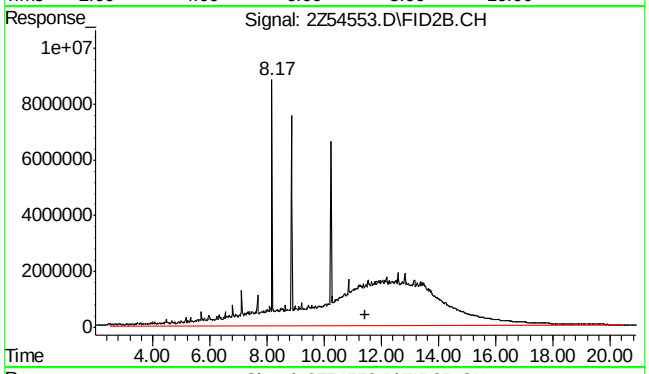
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





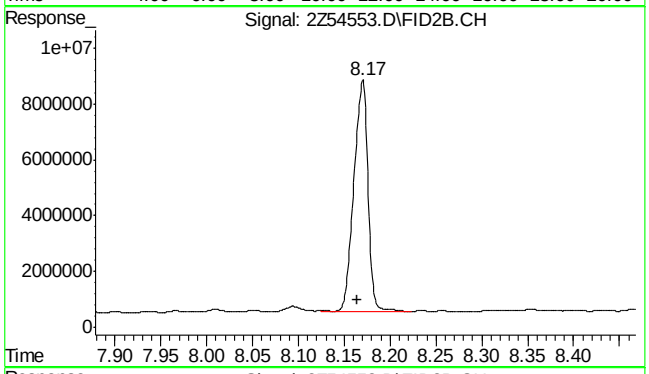
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 2730977645
Conc: 1649.23 PPM m



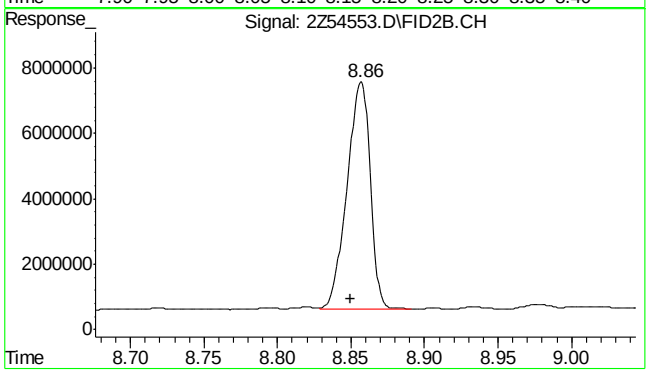
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 5250235573
Conc: 3170.60 PPM m



#9 o-Terphenyl

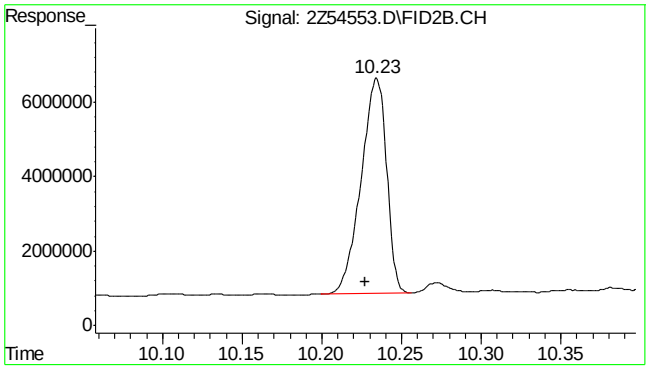
R.T.: 8.170 min
Delta R.T.: 0.005 min
Response: 88600468
Conc: 34.75 PPM



#10 5a-Androstane

R.T.: 8.857 min
Delta R.T.: 0.007 min
Response: 76473863
Conc: 41.05 PPM m

SGS ACCUTEST JC18331



#11 Tetracosane-d50

R.T.: 10.234 min
Delta R.T.: 0.007 min
Response: 64438319
Conc: 39.87 PPM m

11.1.7

11

SGS ACCUTEST JC18331

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54554.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 6:55 am
Operator : khaliahd
Sample : jc18331-7
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:26:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.18	103669405	40.660	PPM	
Spiked Amount 50.000		Recovery =	81.32%		
10) S 5a-Androstane	8.86	76408527	41.015	PPM	m
Spiked Amount 50.000		Recovery =	82.03%		
11) S Tetracosane-d50	10.23	63960158	39.578	PPM	m
Spiked Amount 50.000		Recovery =	79.16%		
Target Compounds					
1) H TPH-DRO	7.22	4870660373	2941.376	PPM	
2) H TPH-DRO (C10-C44)	11.45	5707972827	3447.026	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

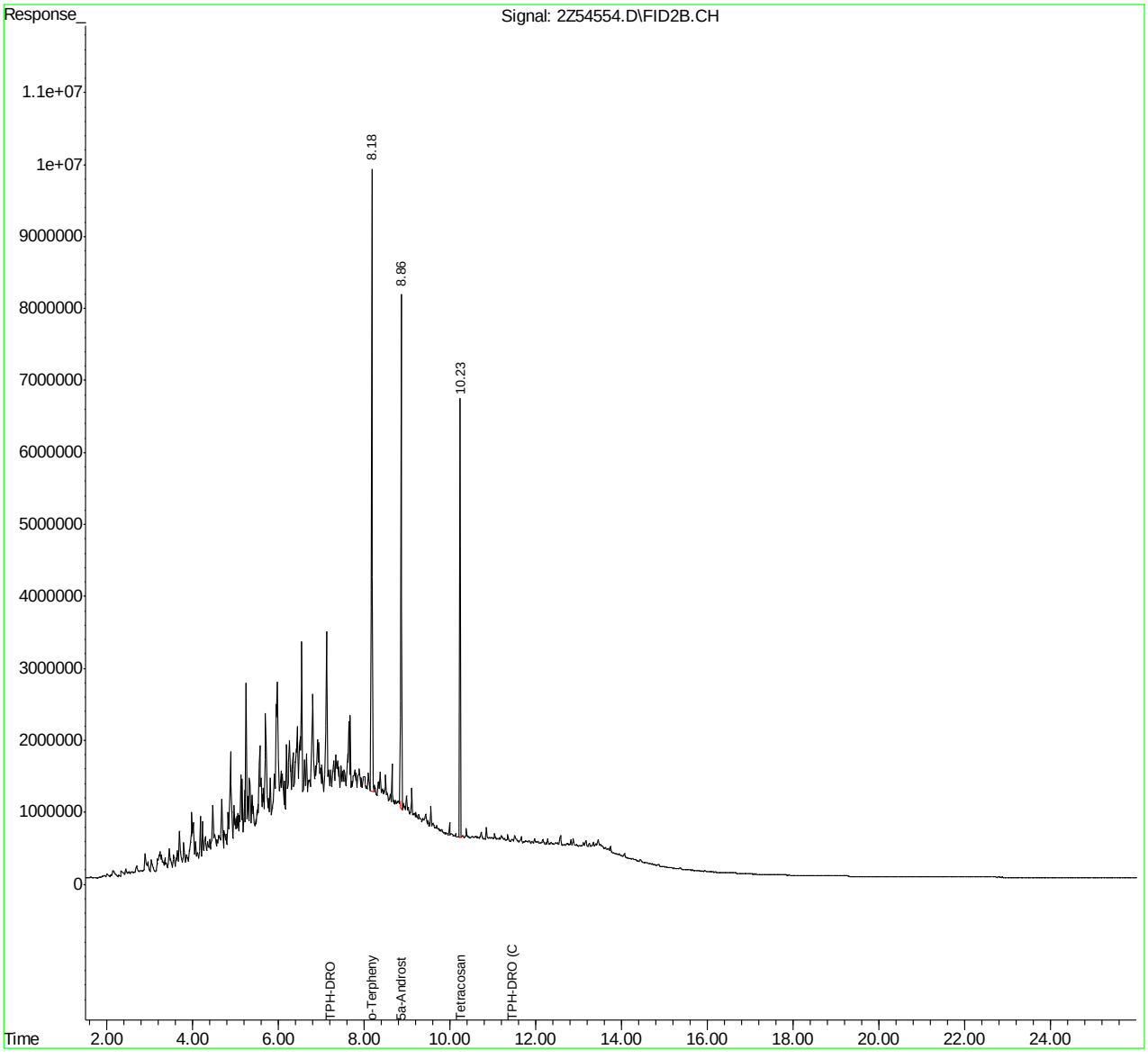
11.1.8 11

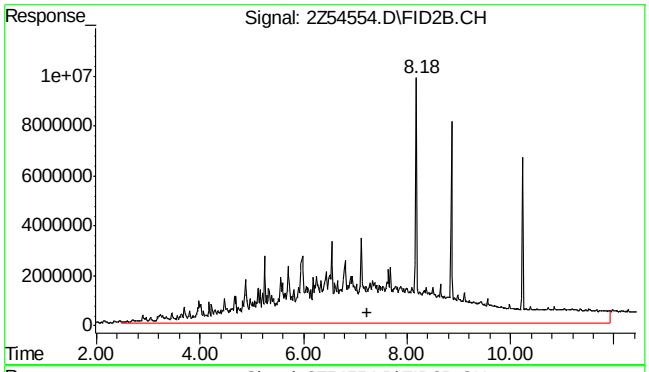
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54554.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 6:55 am
Operator : khaliahd
Sample : jc18331-7
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:26:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

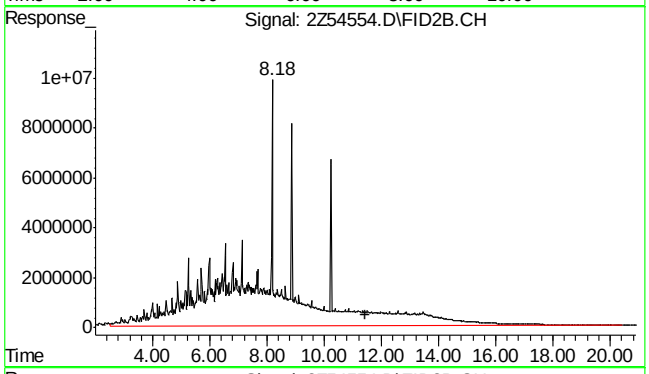
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





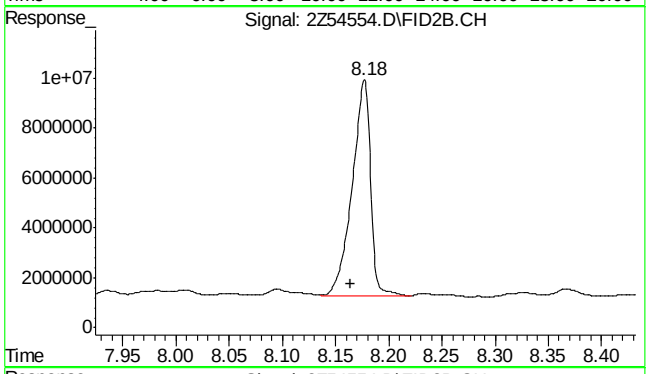
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 4870660373
Conc: 2941.38 PPM m



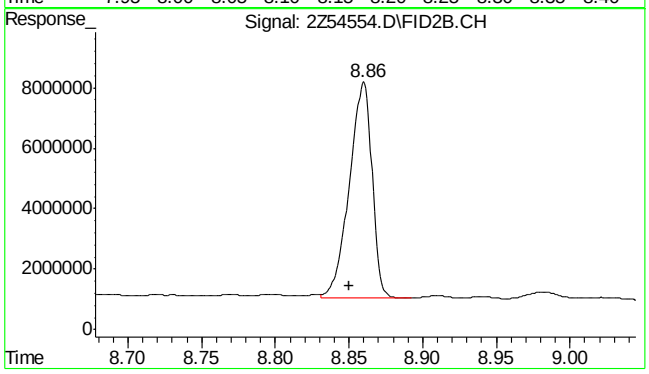
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 5707972827
Conc: 3447.03 PPM m



#9 o-Terphenyl

R.T.: 8.177 min
Delta R.T.: 0.013 min
Response: 103669405
Conc: 40.66 PPM



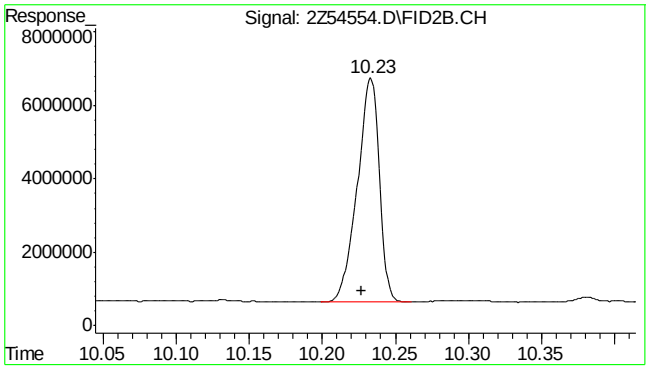
#10 5a-Androstane

R.T.: 8.860 min
Delta R.T.: 0.010 min
Response: 76408527
Conc: 41.02 PPM m

11.1.8

11

SGS ACCUTEST JC18331



#11 Tetracosane-d50

R.T.: 10.233 min
Delta R.T.: 0.006 min
Response: 63960158
Conc: 39.58 PPM m

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54555.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 7:28 am
Operator : khaliahd
Sample : jc18331-8
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:28:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	8.17	86794105	34.041 PPM m
Spiked Amount 50.000		Recovery =	68.08%
10) S 5a-Androstane	8.85	74300444	39.884 PPM
Spiked Amount 50.000		Recovery =	79.77%
11) S Tetracosane-d50	10.23	63346716	39.198 PPM
Spiked Amount 50.000		Recovery =	78.40%
Target Compounds			
1) H TPH-DRO	7.22	1359154341	820.789 PPM
2) H TPH-DRO (C10-C44)	11.45	1520463077	918.203 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

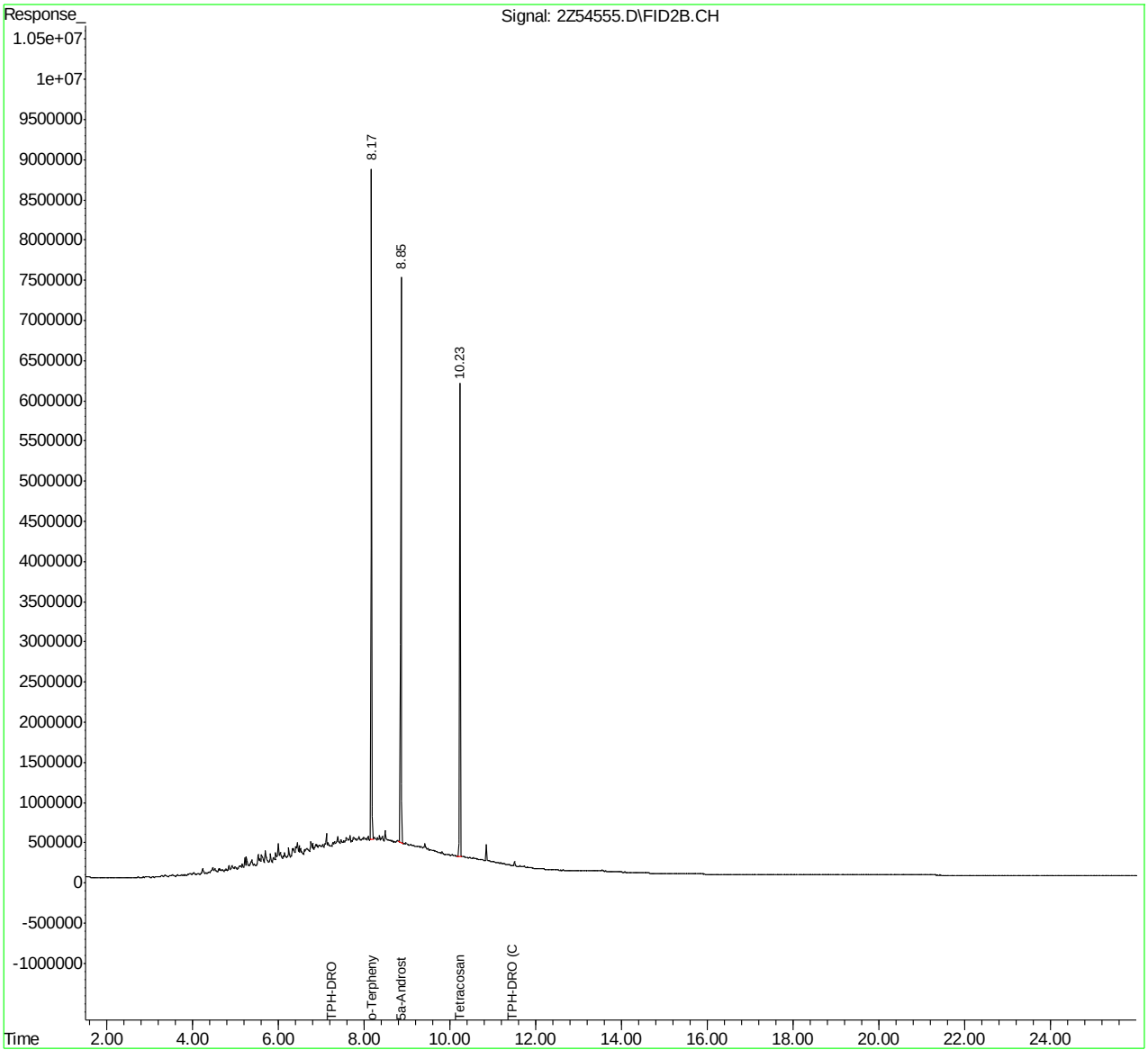
11.1.9 11

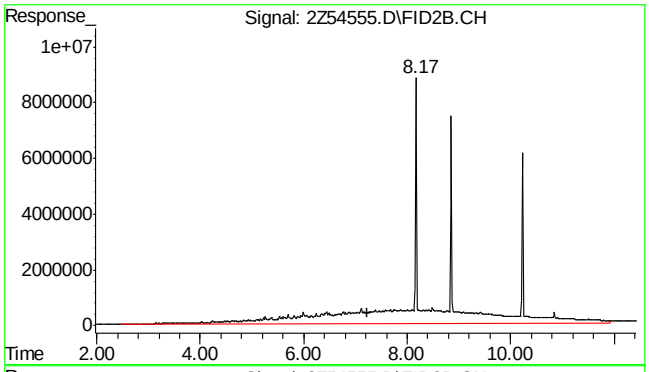
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54555.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 7:28 am
Operator : khaliahd
Sample : jc18331-8
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:28:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

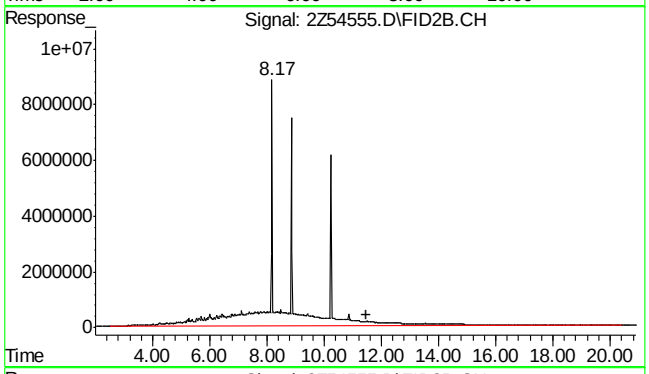
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





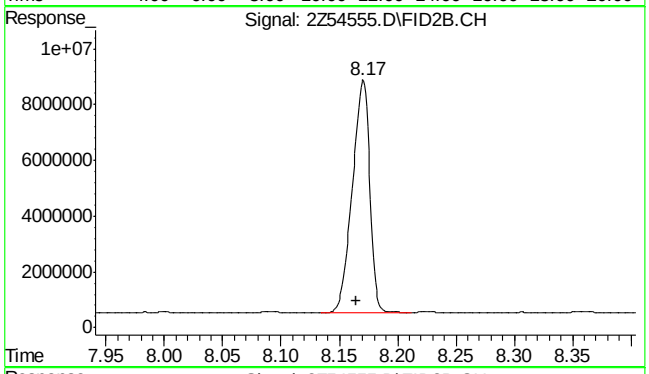
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 1359154341
Conc: 820.79 PPM m



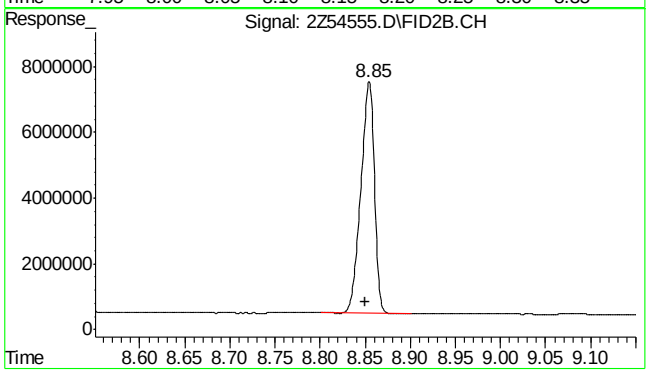
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 1520463077
Conc: 918.20 PPM m



#9 o-Terphenyl

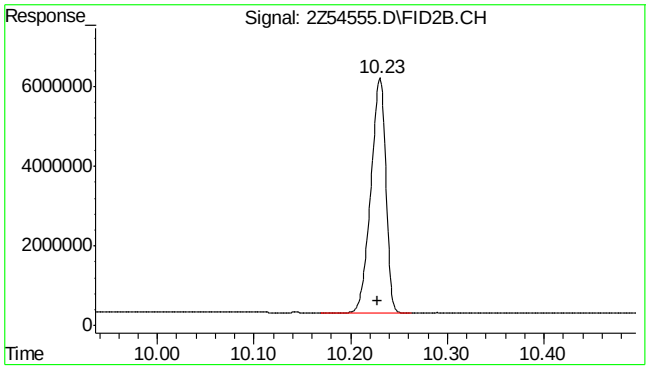
R.T.: 8.170 min
Delta R.T.: 0.006 min
Response: 86794105
Conc: 34.04 PPM m



#10 5a-Androstane

R.T.: 8.854 min
Delta R.T.: 0.004 min
Response: 74300444
Conc: 39.88 PPM

SGS ACCUTEST JC18331



#11 Tetracosane-d50

R.T.: 10.230 min
Delta R.T.: 0.003 min
Response: 63346716
Conc: 39.20 PPM

11.1.9

11

SGS ACCUTEST JC18331

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54556.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 8:01 am
Operator : khaliahd
Sample : jc18331-9
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:30:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.17	89444818	35.081	PPM	
Spiked Amount 50.000		Recovery =	70.16%		
10) S 5a-Androstane	8.86	74524430	40.004	PPM	m
Spiked Amount 50.000		Recovery =	80.01%		
11) S Tetracosane-d50	10.23	61514572	38.064	PPM	m
Spiked Amount 50.000		Recovery =	76.13%		
Target Compounds					
1) H TPH-DRO	7.22	4586528038	2769.789	PPM	
2) H TPH-DRO (C10-C44)	11.45	4938930707	2982.604	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

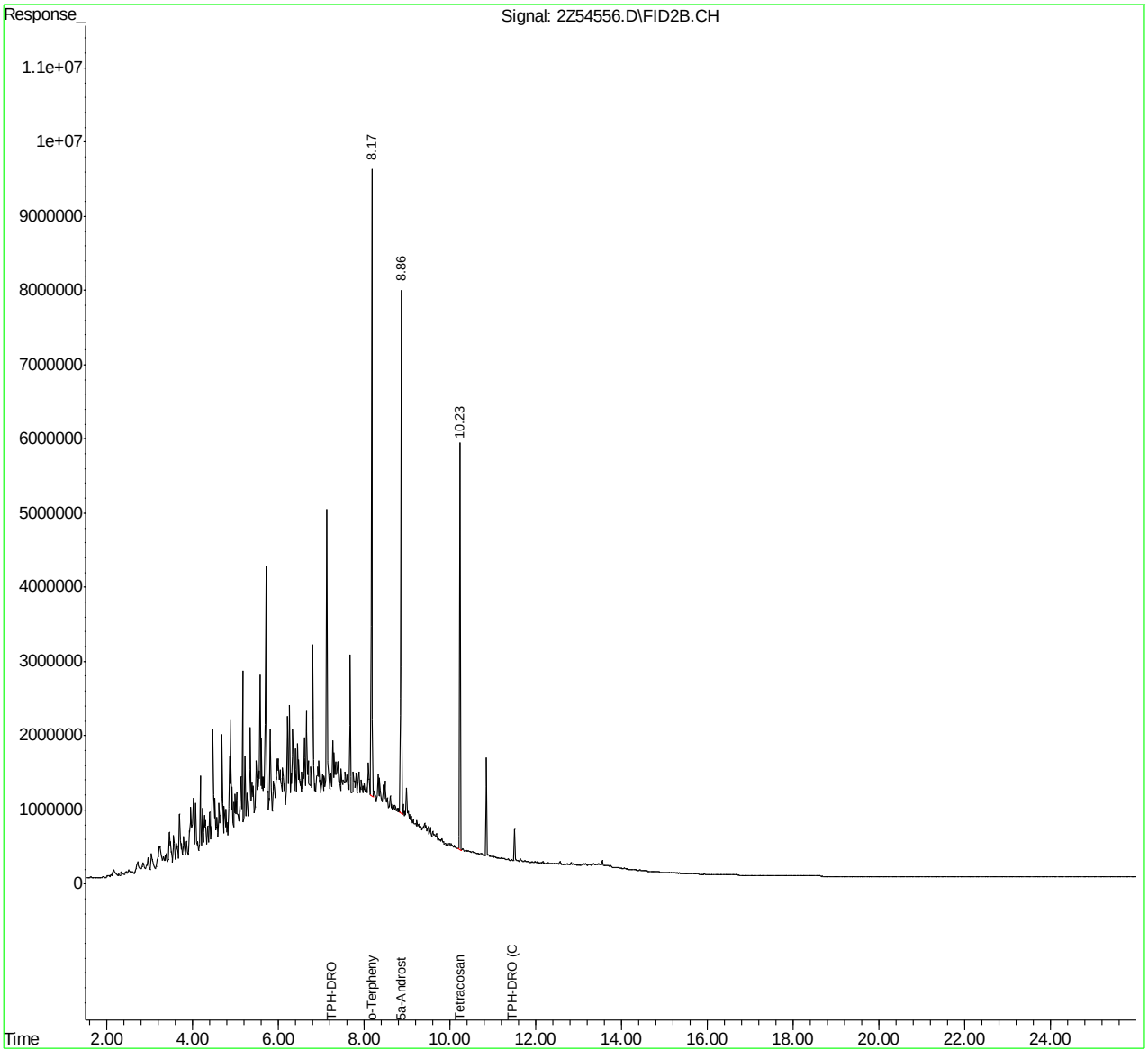
11.1.10 11

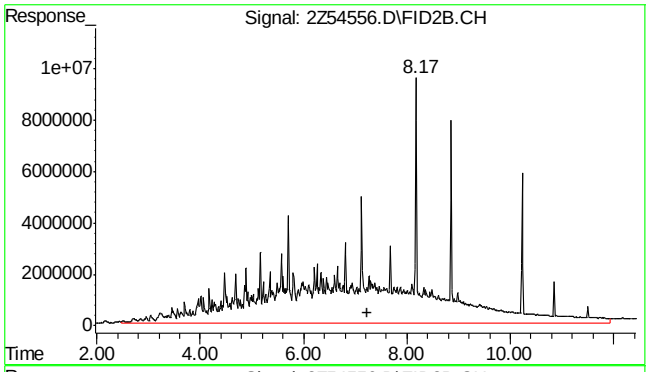
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54556.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 8:01 am
Operator : khaliahd
Sample : jc18331-9
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:30:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

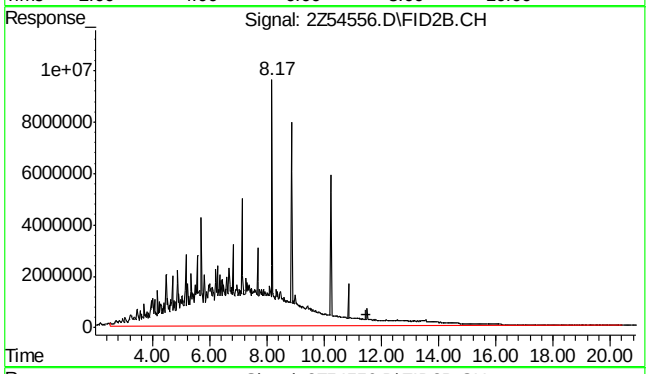
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





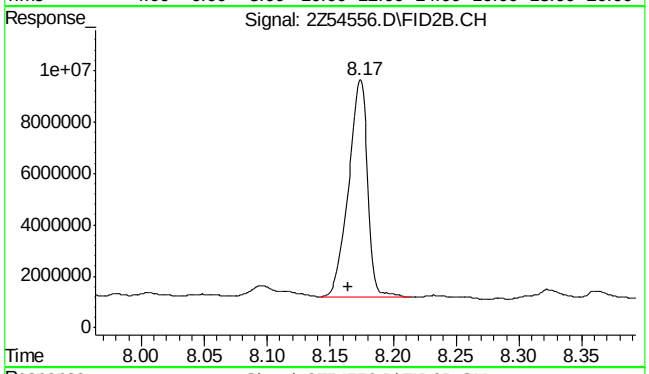
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 4586528038
Conc: 2769.79 PPM m



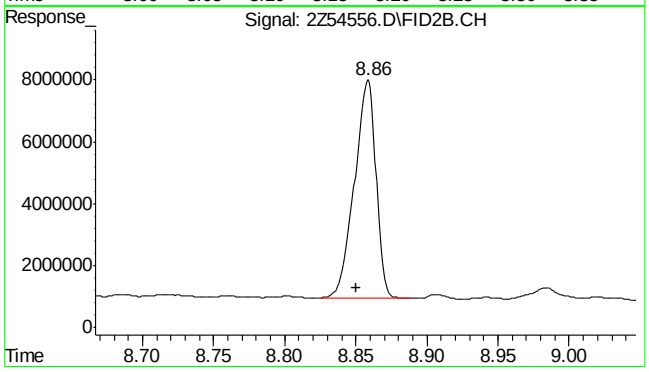
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 4938930707
Conc: 2982.60 PPM m



#9 o-Terphenyl

R.T.: 8.174 min
Delta R.T.: 0.010 min
Response: 89444818
Conc: 35.08 PPM



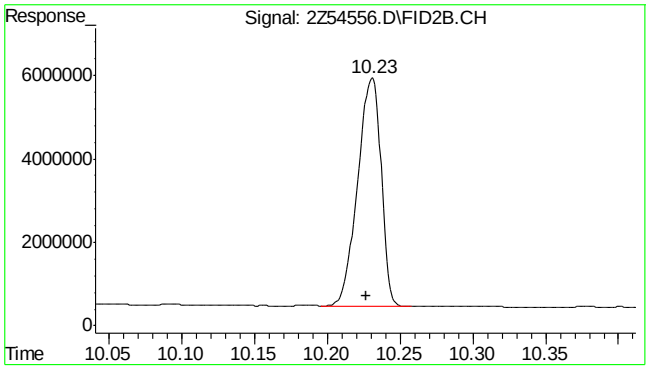
#10 5a-Androstane

R.T.: 8.859 min
Delta R.T.: 0.009 min
Response: 74524430
Conc: 40.00 PPM m

11.1.10

11

SGS ACCUTEST JC18331



#11 Tetracosane-d50

R.T.: 10.231 min
Delta R.T.: 0.004 min
Response: 61514572
Conc: 38.06 PPM m

11.1.10

11

SGS ACCUTEST JC18331

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54557.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 8:34 am
Operator : khaliahd
Sample : jc18331-10
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:32:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.15	87497283	34.317	PPM	m
Spiked Amount 50.000		Recovery	= 68.63%		
10) S 5a-Androstane	8.90f	74916963	40.215	PPM	m
Spiked Amount 50.000		Recovery	= 80.43%		
11) S Tetracosane-d50	10.24	49422788	30.582	PPM	
Spiked Amount 50.000		Recovery	= 61.16%		
Target Compounds					
1) H TPH-DRO	7.22	42840565338	25871.275	PPM	
2) H TPH-DRO (C10-C44)	11.45	44314117653	26761.148	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.11

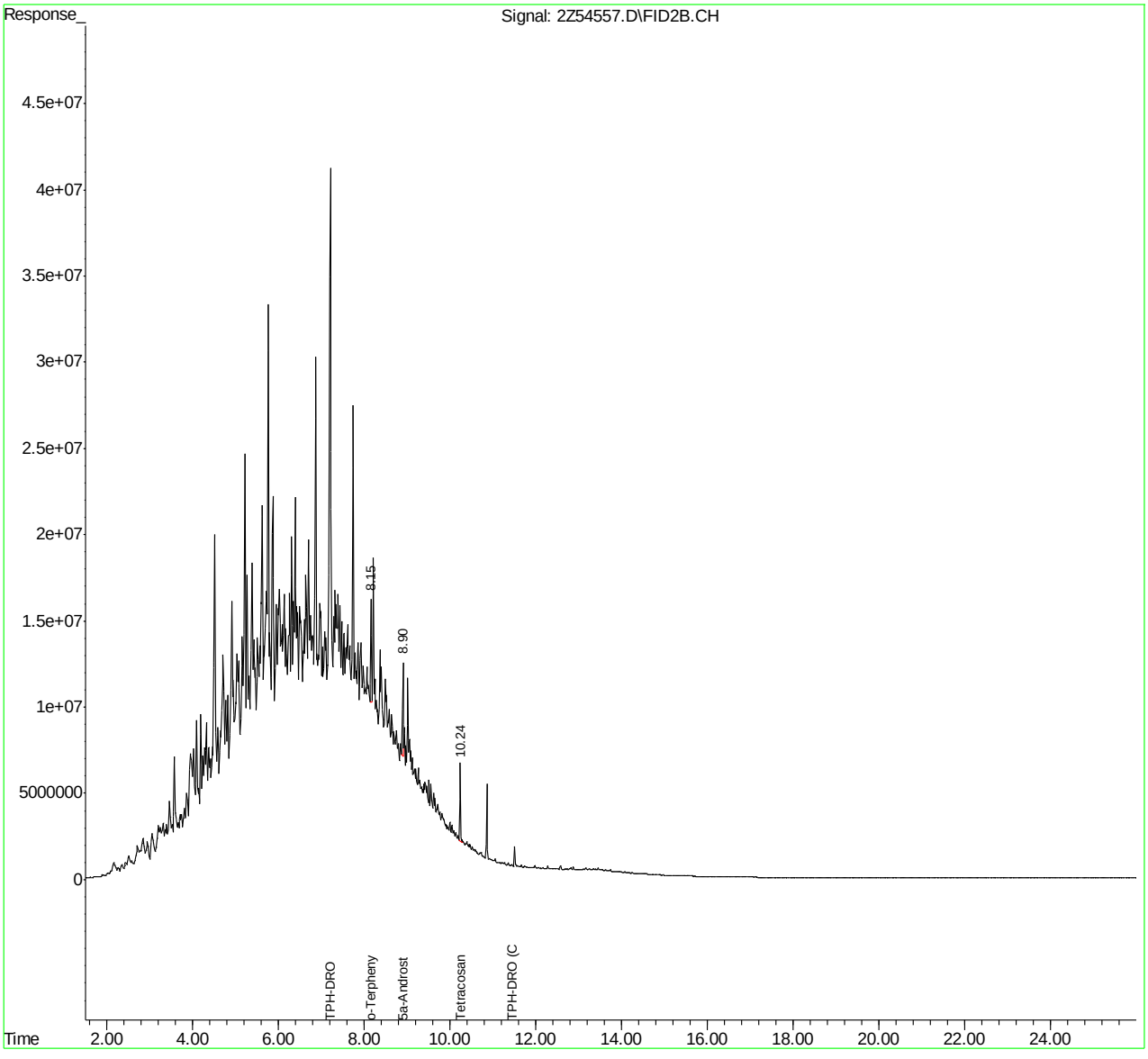
11

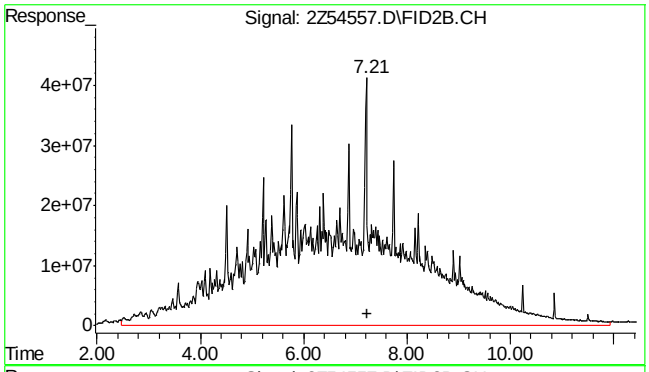
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54557.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 8:34 am
Operator : khaliahd
Sample : jc18331-10
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:32:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

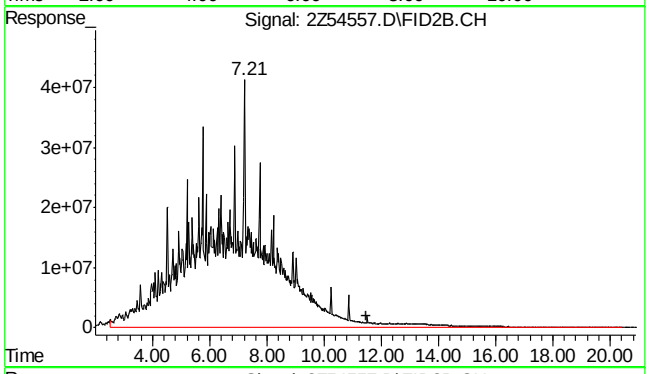
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





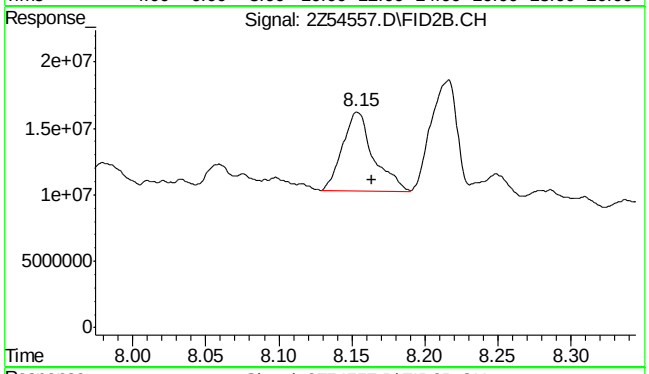
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 42840565338
Conc: 25871.27 PPM m



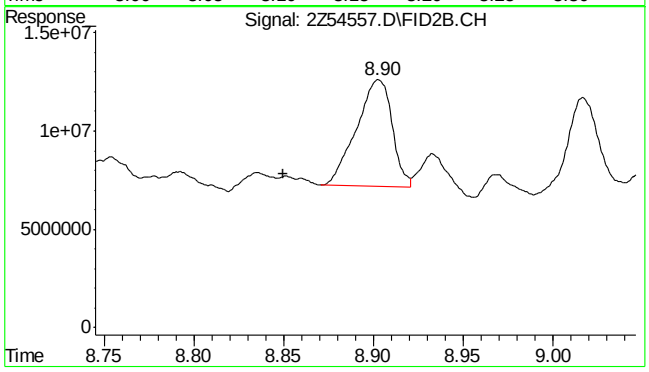
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 44314117653
Conc: 26761.15 PPM m



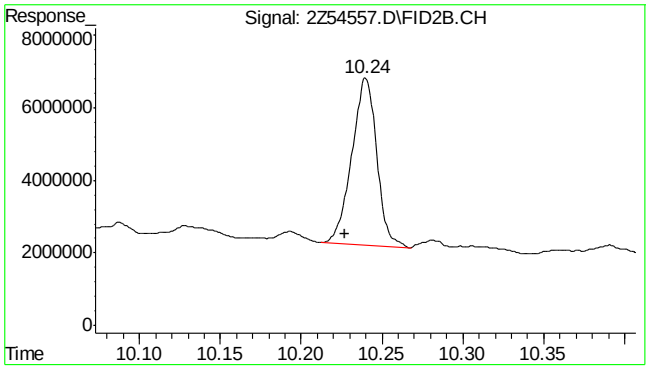
#9 o-Terphenyl

R.T.: 8.153 min
Delta R.T.: -0.011 min
Response: 87497283
Conc: 34.32 PPM m



#10 5a-Androstane

R.T.: 8.903 min
Delta R.T.: 0.053 min
Response: 74916963
Conc: 40.21 PPM m



#11 Tetracosane-d50

R.T.: 10.240 min
Delta R.T.: 0.013 min
Response: 49422788
Conc: 30.58 PPM

11.1.11

11

SGS ACCUTEST JC18331

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/19/16 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54558.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 9:07 am
Operator : khaliahd
Sample : jc18331-11
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:36:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.20f	150373462	58.977	PPM	m
Spiked Amount 50.000		Recovery = 117.95%			
10) S 5a-Androstane	8.95f	124916320	67.054	PPM	m
Spiked Amount 50.000		Recovery = 134.11%			
11) S Tetracosane-d50	10.26f	61612990	38.125	PPM	m
Spiked Amount 50.000		Recovery = 76.25%			
Target Compounds					
1) H TPH-DRO	7.22	1.01179e+011	61101.621	PPM	
2) H TPH-DRO (C10-C44)	11.45	1.01005e+011	60996.876	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.12

11

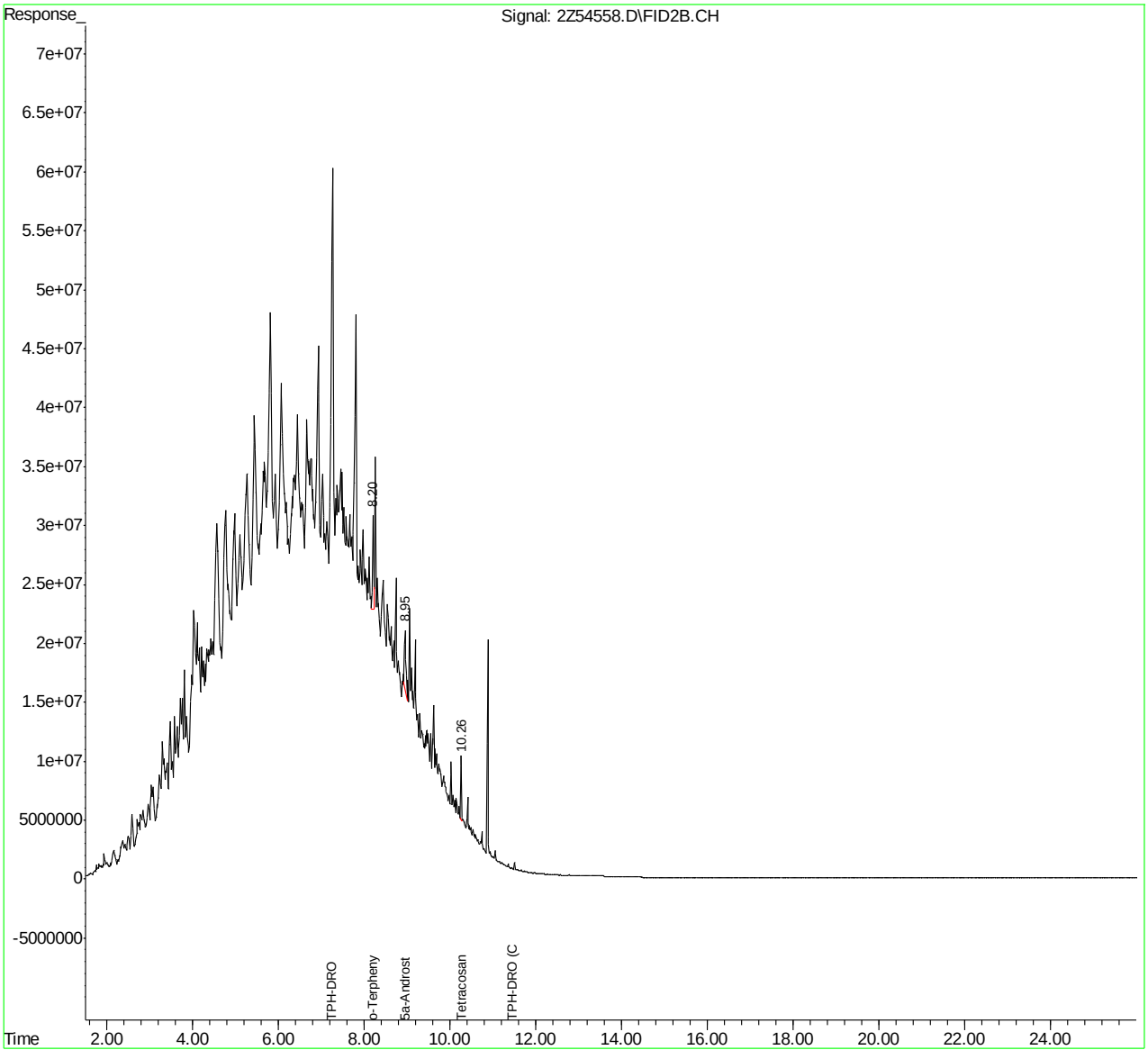
SGS ACCUTEST JC18331

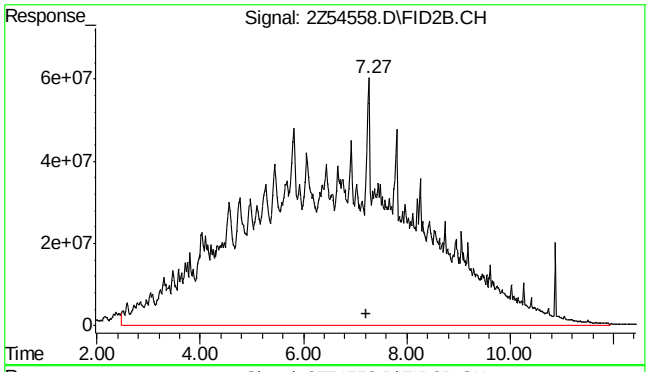
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54558.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 9:07 am
Operator : khaliahd
Sample : jc18331-11
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:36:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

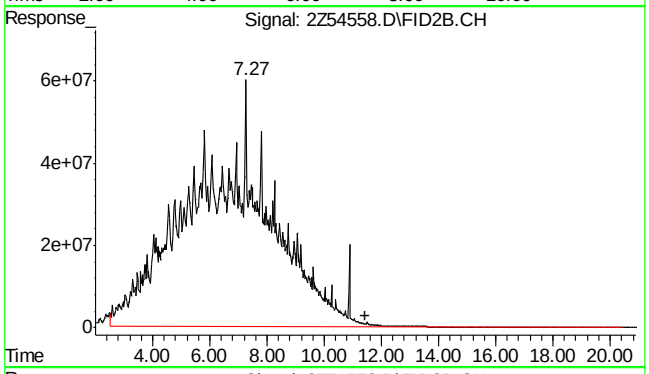
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





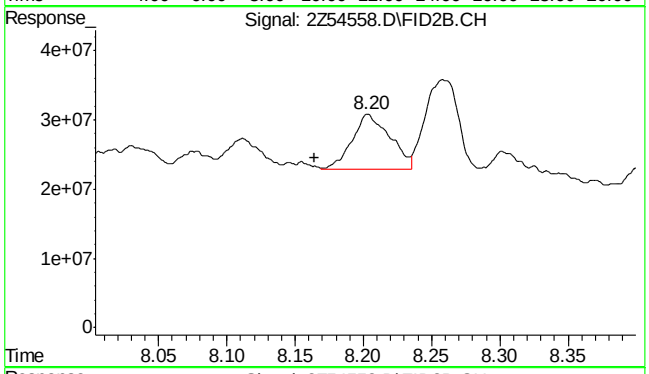
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 1.01179e+011
Conc: 61101.62 PPM m



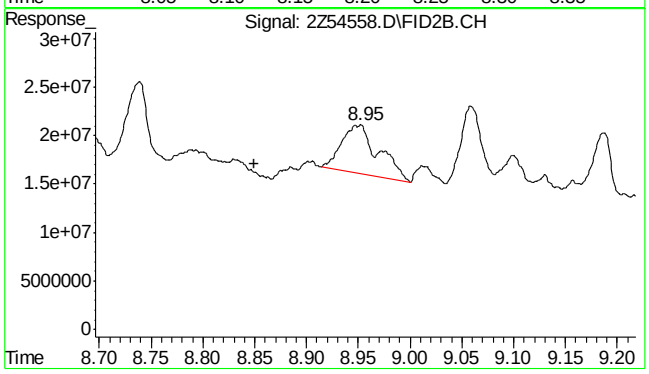
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 1.01005e+011
Conc: 60996.88 PPM m



#9 o-Terphenyl

R.T.: 8.202 min
Delta R.T.: 0.038 min
Response: 150373462
Conc: 58.98 PPM m



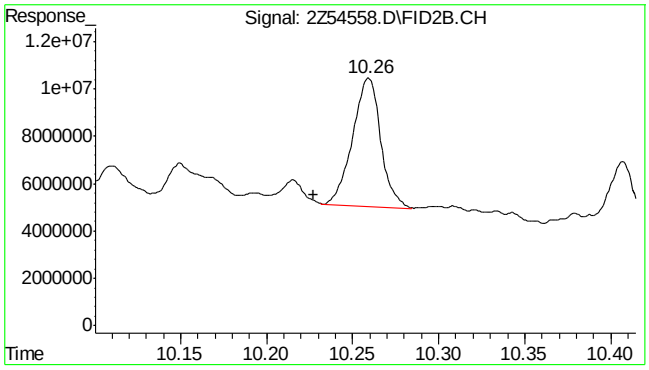
#10 5a-Androstane

R.T.: 8.952 min
Delta R.T.: 0.103 min
Response: 124916320
Conc: 67.05 PPM m

11.1.12

11

SGS ACCUTEST JC18331



#11 Tetracosane-d50

R.T.: 10.259 min
Delta R.T.: 0.032 min
Response: 61612990
Conc: 38.13 PPM m

11.1.12

11

SGS ACCUTEST JC18331

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/19/16 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2061\
Data File : 2Z54572.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 5:09 pm
Operator : thomasl
Sample : jc18331-11
Misc : op93107,g2z2061,300,,,1,5
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 19 13:05:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.18	46598384	18.276	PPM	m
Spiked Amount 50.000		Recovery =	36.55%		
10) S 5a-Androstane	8.87f	16335662	8.769	PPM	m
Spiked Amount 50.000		Recovery =	17.54%		
11) S Tetracosane-d50	10.23	12507771	7.740	PPM	m
Spiked Amount 50.000		Recovery =	15.48%		
Target Compounds					
1) H TPH-DRO	7.22	19472803712	11759.561	PPM	
2) H TPH-DRO (C10-C44)	11.45	19571131028	11818.941	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

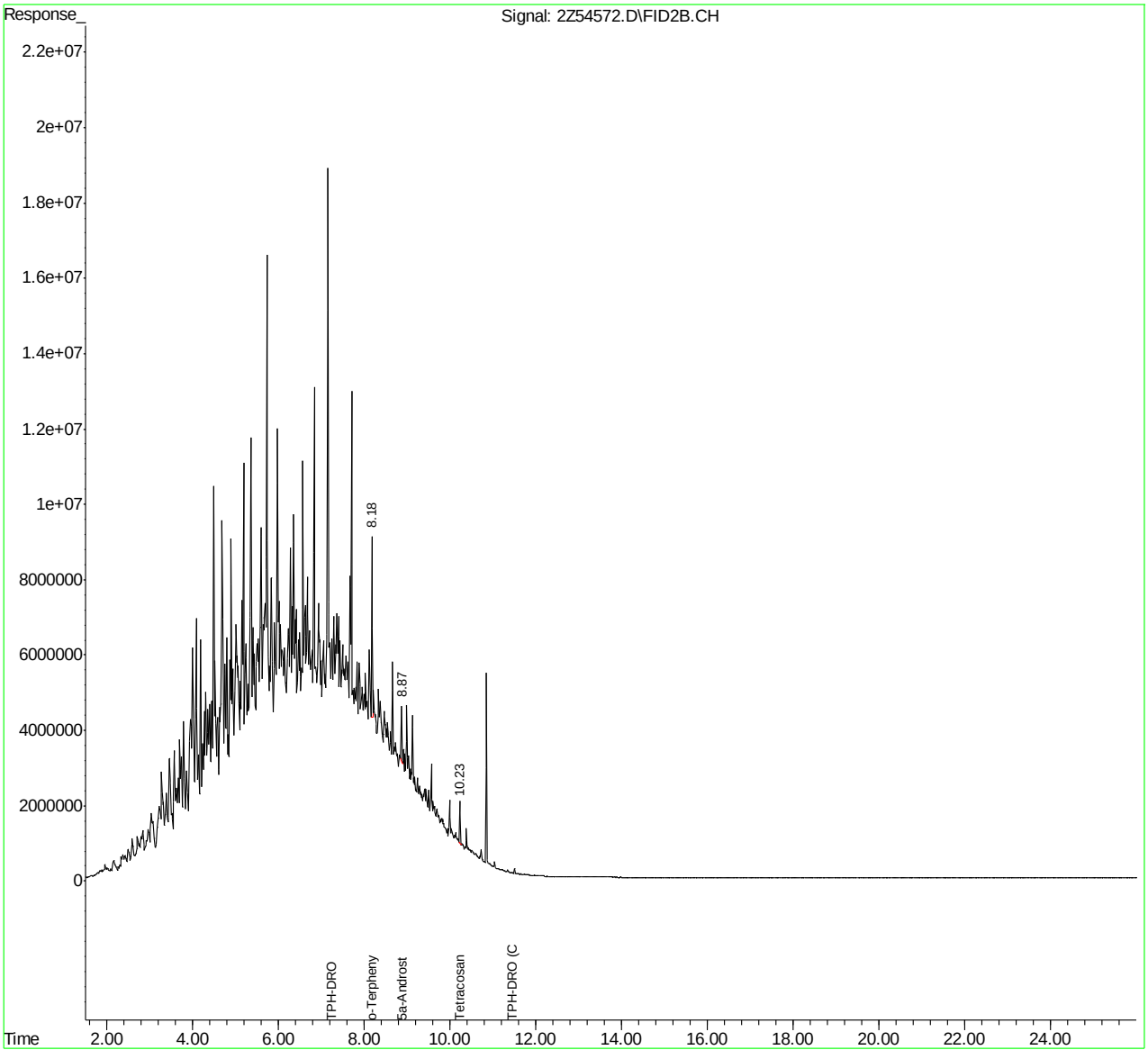
11.1.13 11

Quantitation Report (QT Reviewed)

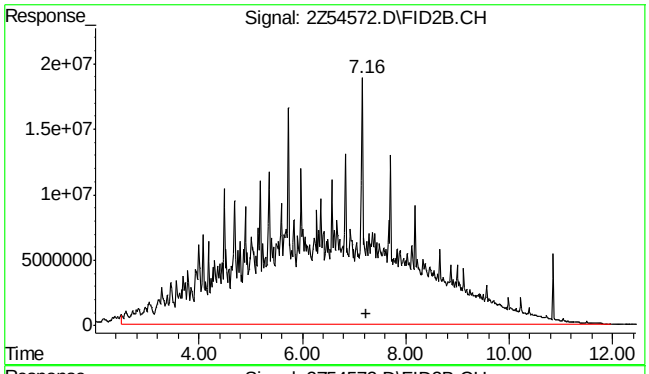
Data Path : C:\MSDCHEM\1\DATA\G2Z2061\
Data File : 2Z54572.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 5:09 pm
Operator : thomasl
Sample : jc18331-11
Misc : op93107,g2z2061,300,,,1,5
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 19 13:05:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

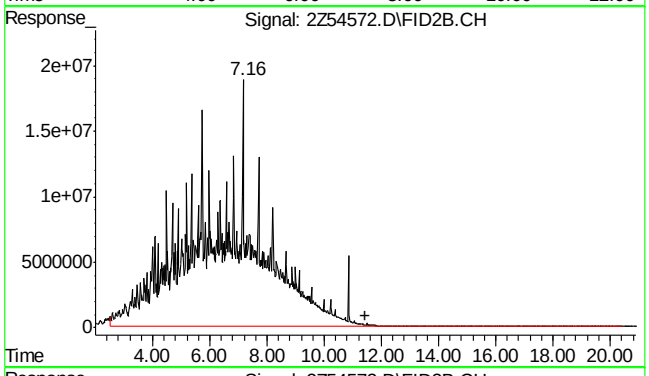


DRO2Z2059.M Tue Apr 19 13:05:18 2016 RPT1 Page: 2



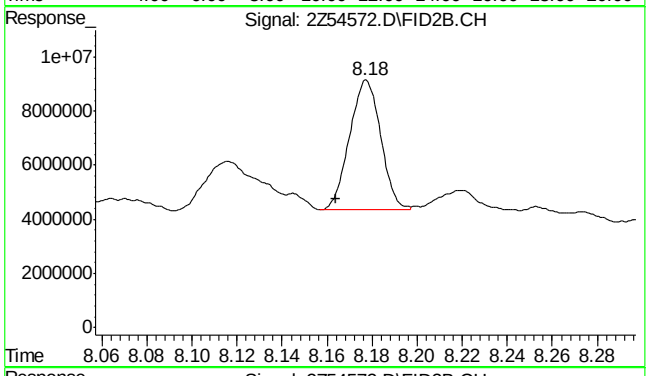
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 19472803712
Conc: 11759.56 PPM m



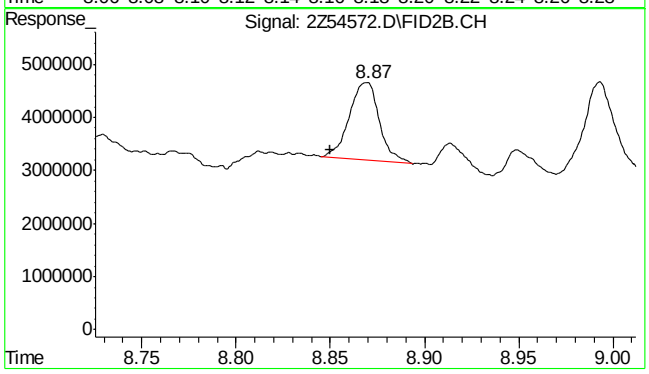
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 19571131028
Conc: 11818.94 PPM m



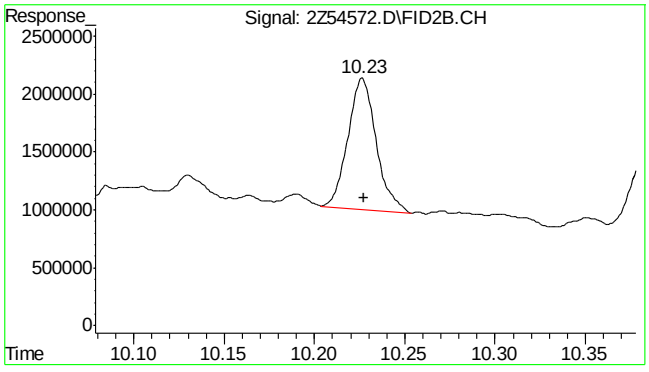
#9 o-Terphenyl

R.T.: 8.177 min
Delta R.T.: 0.013 min
Response: 46598384
Conc: 18.28 PPM m



#10 5a-Androstane

R.T.: 8.870 min
Delta R.T.: 0.020 min
Response: 16335662
Conc: 8.77 PPM m



#11 Tetracosane-d50

R.T.: 10.226 min
Delta R.T.: -0.001 min
Response: 12507771
Conc: 7.74 PPM m

11.1.13 11

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54559.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 9:40 am
Operator : khaliahd
Sample : jc18331-12
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 67 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:39:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.18f	115819890	45.425	PPM	m
Spiked Amount 50.000		Recovery =	90.85%		
10) S 5a-Androstane	8.86	76275005	40.944	PPM	m
Spiked Amount 50.000		Recovery =	81.89%		
11) S Tetracosane-d50	10.23	63551287	39.325	PPM	m
Spiked Amount 50.000		Recovery =	78.65%		
Target Compounds					
1) H TPH-DRO	7.22	7918615754	4782.026	PPM	
2) H TPH-DRO (C10-C44)	11.45	8267709168	4992.842	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

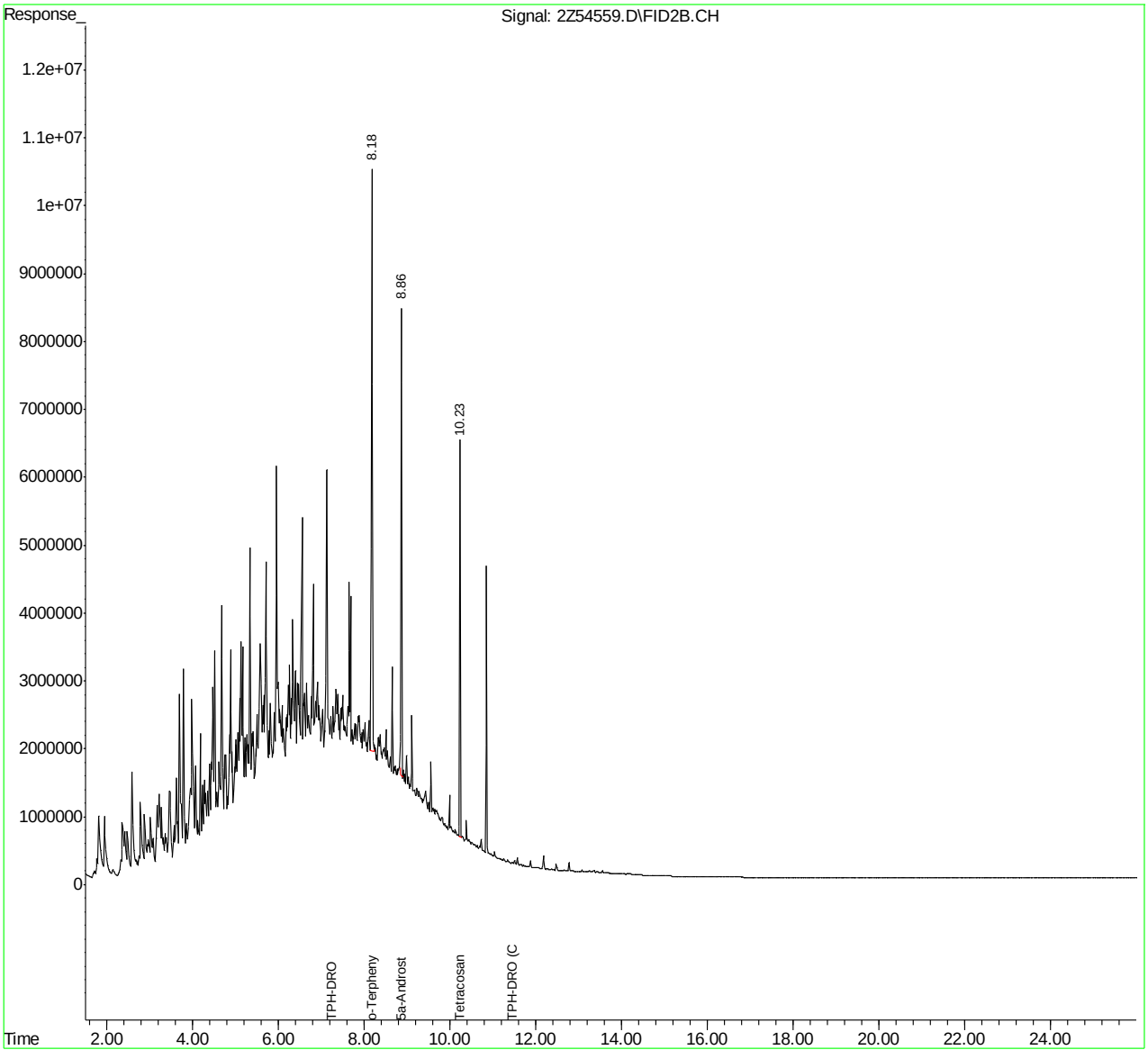
11.1.14 11

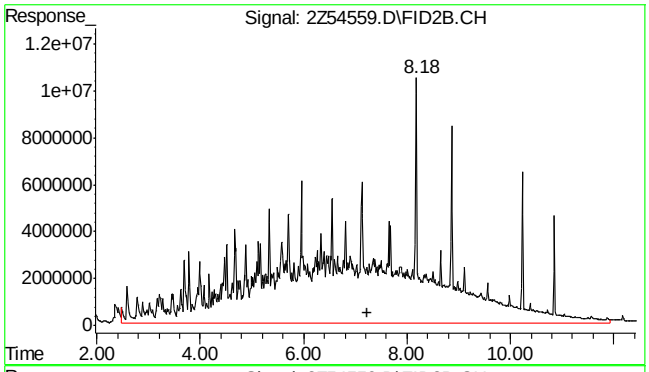
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54559.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 9:40 am
Operator : khaliahd
Sample : jc18331-12
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 67 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 10:39:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

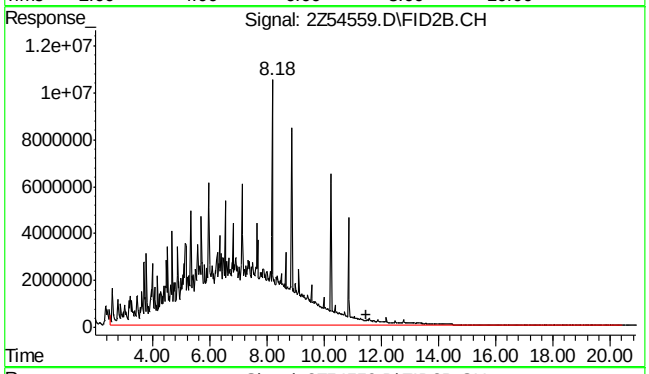
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





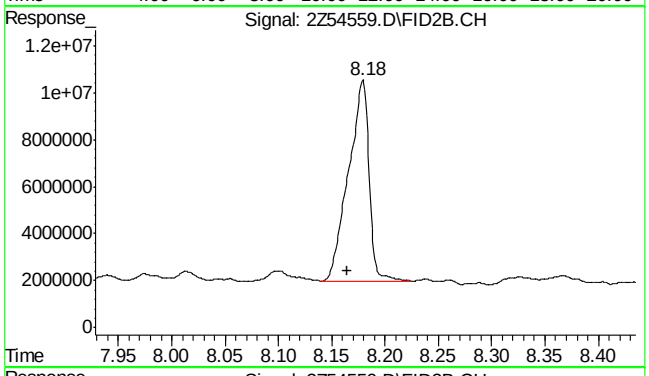
#1 TPH-DRO

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 7918615754
Conc: 4782.03 PPM m



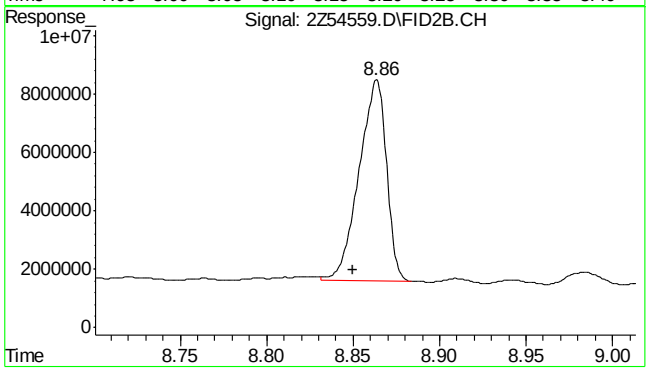
#2 TPH-DRO (C10-C44)

R.T.: 11.450 min
Delta R.T.: 0.000 min
Response: 8267709168
Conc: 4992.84 PPM m



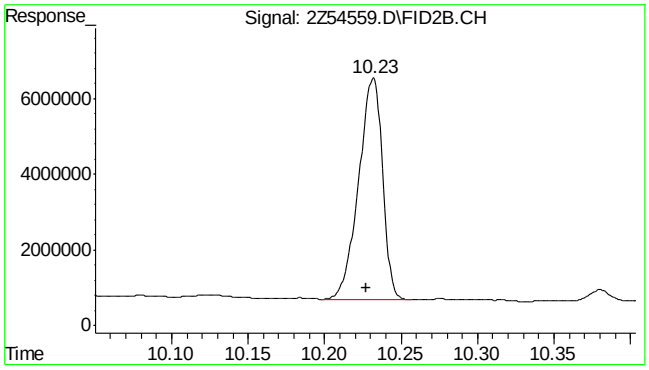
#9 o-Terphenyl

R.T.: 8.179 min
Delta R.T.: 0.015 min
Response: 115819890
Conc: 45.42 PPM m



#10 5a-Androstane

R.T.: 8.863 min
Delta R.T.: 0.013 min
Response: 76275005
Conc: 40.94 PPM m



#11 Tetracosane-d50

R.T.: 10.232 min
Delta R.T.: 0.004 min
Response: 63551287
Conc: 39.32 PPM m

11.1.14

11

SGS ACCUTEST JC18331

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54542.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 12:19 am
Operator : khaliahd
Sample : op93107-mb1
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 09:45:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	8.17	89853131	35.241 PPM
Spiked Amount 50.000		Recovery =	70.48%
10) S 5a-Androstane	8.85	75155192	40.343 PPM
Spiked Amount 50.000		Recovery =	80.69%
11) S Tetracosane-d50	10.23	64327099	39.805 PPM
Spiked Amount 50.000		Recovery =	79.61%
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

11.2.1

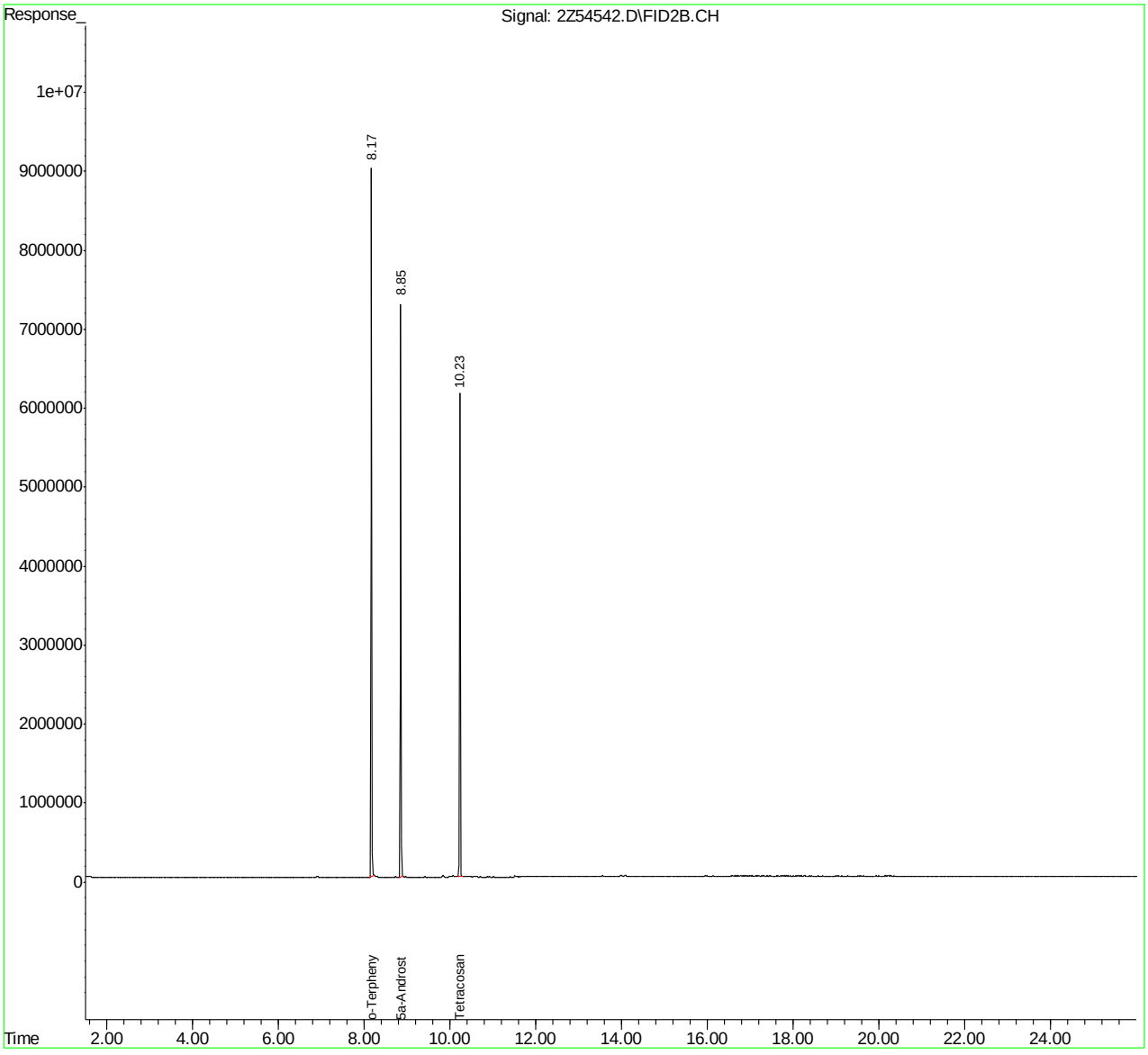
11

Quantitation Report (QT Reviewed)

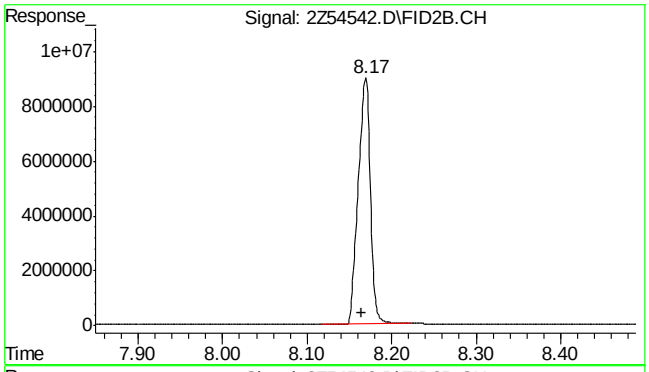
Data Path : C:\MSDCHEM\1\DATA\G2Z2060\
Data File : 2Z54542.D
Signal(s) : FID2B.CH
Acq On : 18 Apr 2016 12:19 am
Operator : khaliahd
Sample : op93107-mb1
Misc : op93107,g2z2060,300,,,1,1
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 18 09:45:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z2059.M
Quant Title :
QLast Update : Fri Apr 15 18:44:22 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

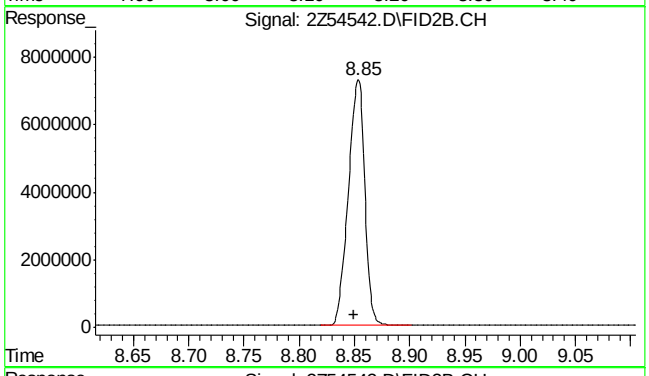


SGS ACCUTEST JC18331



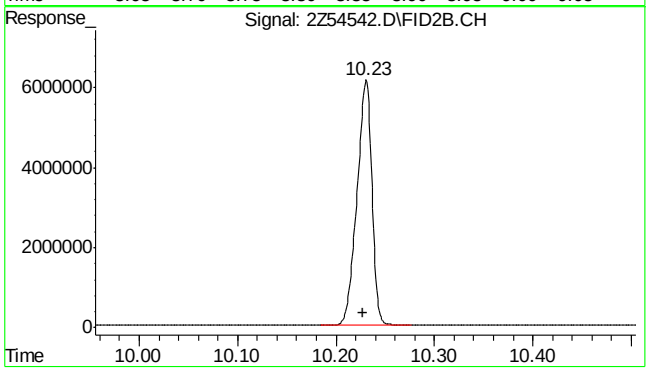
#9 o-Terphenyl

R.T.: 8.169 min
Delta R.T.: 0.005 min
Response: 89853131
Conc: 35.24 PPM



#10 5a-Androstane

R.T.: 8.853 min
Delta R.T.: 0.003 min
Response: 75155192
Conc: 40.34 PPM



#11 Tetracosane-d50

R.T.: 10.230 min
Delta R.T.: 0.003 min
Response: 64327099
Conc: 39.80 PPM

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