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

e-Hardcopy 2.0
Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC19914

Sampling Dates: 05/06/16 - 05/09/16

Report to:

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

ATTN: Terry Taylor

Total number of pages in report: **1248**

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

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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

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

Table of Contents

-1-

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **8**
Section 4: Sample Results **9**
4.1: JC19914-1: RA6-GWD 10
4.2: JC19914-2: RA-6 (6-7) 15
4.3: JC19914-3: RA-5 GWS 20
4.4: JC19914-4: S-41S 25
4.5: JC19914-5: S-41SD 31
4.6: JC19914-6: RA-5 (5.5-6.5) 37
4.7: JC19914-7: RA-5 (9-10) 42
Section 5: Misc. Forms **47**
5.1: Chain of Custody 48
5.2: Sample Tracking Chronicle 51
5.3: Internal Chain of Custody 53
Section 6: GC/MS Semi-volatiles - QC Data Summaries **57**
6.1: Method Blank Summary 58
6.2: Blank Spike Summary 73
6.3: Matrix Spike/Matrix Spike Duplicate Summary 81
6.4: Instrument Performance Checks (DFTPP) 89
6.5: Internal Standard Area Summaries 115
6.6: Surrogate Recovery Summaries 123
6.7: Initial and Continuing Calibration Summaries 127
Section 7: GC/MS Semi-volatiles - Raw Data **214**
7.1: Samples 215
7.2: Method Blanks 280
7.3: Blank Spikes 294
7.4: Matrix Spike/Matrix Spike Duplicates 310
7.5: Instrument Performance Checks (DFTPP) 344
7.6: Initial and Continuing Calibrations 490
7.7: Instrument Run Logs 898
7.8: Prep Logs 927
Section 8: GC Volatiles - QC Data Summaries **931**
8.1: Method Blank Summary 932
8.2: Blank Spike Summary 937
8.3: Matrix Spike/Matrix Spike Duplicate Summary 940
8.4: GC Identification Summaries (Hits) 943
8.5: Surrogate Recovery Summaries 954
8.6: GC Surrogate Retention Time Summaries 956
8.7: Initial and Continuing Calibration Summaries 961
Section 9: GC Volatiles - Raw Data **973**
9.1: Samples 974

Table of Contents

9.2: Method Blanks 988
9.3: Blank Spikes 998
9.4: Matrix Spike/Matrix Spike Duplicates 1004
9.5: Initial and Continuing Calibrations 1016
9.6: Instrument Run Logs 1082
Section 10: GC Semi-volatiles - QC Data Summaries 1093
10.1: Method Blank Summary 1094
10.2: Blank Spike Summary 1096
10.3: Matrix Spike/Matrix Spike Duplicate Summary 1098
10.4: Internal Standard Area Summaries 1100
10.5: DDT/Endrin Breakdown Checks 1101
10.6: GC Identification Summaries (Hits) 1104
10.7: Surrogate Recovery Summaries 1110
10.8: GC Surrogate Retention Time Summaries 1111
10.9: Initial and Continuing Calibration Summaries 1112
Section 11: GC Semi-volatiles - Raw Data 1126
11.1: Samples 1127
11.2: Method Blanks 1131
11.3: Blank Spikes 1135
11.4: Matrix Spike/Matrix Spike Duplicates 1139
11.5: DDT/Endrin Breakdown Checks 1147
11.6: Initial and Continuing Calibrations 1167
11.7: Instrument Run Logs 1241
11.8: Prep Logs 1245
Section 12: General Chemistry - QC Data Summaries 1247
12.1: Percent Solids Raw Data Summary 1248

SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: JC19914

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC19914-1	05/06/16	16:00	TT	05/10/16	AQ	Ground Water	RA6-GWD
JC19914-2	05/09/16	11:30	TT	05/10/16	SO	Soil	RA-6 (6-7)
JC19914-2D	05/09/16	11:30	TT	05/10/16	SO	Soil Dup/MSD	RA-6 (6-7) MSD
JC19914-2S	05/09/16	11:30	TT	05/10/16	SO	Soil Matrix Spike	RA-6 (6-7) MS
JC19914-3	05/09/16	12:00	TT	05/10/16	AQ	Ground Water	RA-5 GWS
JC19914-4	05/09/16	12:35	NR	05/10/16	AQ	Ground Water	S-41S
JC19914-5	05/09/16	12:53	NR	05/10/16	AQ	Ground Water	S-41SD
JC19914-6	05/09/16	13:55	TT	05/10/16	SO	Soil	RA-5 (5.5-6.5)
JC19914-7	05/09/16	14:30	TT	05/10/16	SO	Soil	RA-5 (9-10)

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC19914
Site:	BMSMC, Building 5 Area, PR	**Report Date**	5/25/2016 12:57:56 P

On 05/10/2016, 7 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 3.5 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC19914 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.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP93784

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19914-1MS, JC19914-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JC19914-1 for 2-Fluorophenol: Outside control limits due to dilution.
- JC19914-1 for 2-Fluorobiphenyl: Outside control limits due to dilution.
- JC19914-1 for Nitrobenzene-d5: Outside control limits due to dilution.
- JC19914-1 for Phenol-d5: Outside control limits due to dilution.
- JC19914-3 for Terphenyl-d14: Outside control limits due to dilution.
- JC19914-3 for 2,4,6-Tribromophenol: Outside control limits due to dilution.
- JC19914-3 for 2-Fluorobiphenyl: Outside control limits due to dilution.
- JC19914-3 for 2-Fluorophenol: Outside control limits due to dilution.
- JC19914-3 for Nitrobenzene-d5: Outside control limits due to dilution.
- JC19914-3 for Phenol-d5: Outside control limits due to dilution.
- JC19914-1 for Terphenyl-d14: Outside control limits due to dilution.
- JC19914-1 for 2,4,6-Tribromophenol: Outside control limits due to dilution.

Matrix: SO **Batch ID:** OP93791

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC19914-2MS, JC19914-2MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4-Nitroaniline, 4-Nitrophenol, Hexachlorocyclopentadiene, Hexachloroethane, Nitrobenzene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Nitroaniline, 2-Nitrophenol, Hexachlorocyclopentadiene, Nitrobenzene, 4-Nitroaniline are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for 3-Nitroaniline, 4-Chloroaniline, 4-Nitroaniline are outside in house control limits for sample OP93791-MSD.
- OP93791-MS/MSD for Nitrobenzene-d5: Outside control limits due to matrix interference.
- JC19914-2 for Nitrobenzene-d5: Outside control limits due to matrix interference, confirmed by MS/MSD.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP93784A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19914-3MS, JC19914-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: SO **Batch ID:** OP93791A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19914-2MS, JC19914-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846-8015C (DAI)

Matrix: AQ **Batch ID:** GGH5285

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC19644-1MS, JC19644-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Isopropyl Alcohol, n-Butyl Alcohol are outside control limits.
- Matrix Spike Recovery(s) for n-Butyl Alcohol are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Duplicate Recovery(s) for Isobutyl Alcohol, n-Butyl Alcohol are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- GGH5285-MB2: Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
- GGH5285-BS: Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
- GGH5285-BS for Isopropyl Alcohol: High percent recoveries and no associated positive found in the QC batch.
- GGH5285-BS for n-Butyl Alcohol: High percent recoveries and no associated positive found in the QC batch.

Matrix: SO **Batch ID:** GGH5290

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC19914-2MS, JC19914-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** GGH5292

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC20464-1MS, JC20464-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8081B

Matrix: AQ	**Batch ID:** OP93785

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19914-4MS, JC19914-4MSD, OP93785-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for 4,4'-DDT, alpha-BHC, delta-BHC, Endrin aldehyde, gamma-BHC (Lindane), Heptachlor, Methoxychlor are outside control limits for sample OP93785-MSD.
- OP93785-MSD for Decachlorobiphenyl: Outside the QC limits.

Matrix: AQ	**Batch ID:** OP93786

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19914-5MS, JC19914-5MSD, OP93786-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) OP93785-MSD have surrogates outside control limits. Probable cause due to matrix interference.

Wet Chemistry By Method SM2540 G-97

Matrix: SO	**Batch ID:** GN45666

- The data for SM2540 G-97 meets quality control requirements.

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: JC19914
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 05/06/16 thru 05/09/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC19914-1	**RA6-GWD**					
1,4-Dioxane		3420	110	73	ug/l	SW846 8270D
JC19914-2	**RA-6 (6-7)**					
1,4-Dioxane		166	50	33	ug/kg	SW846 8270D
Naphthalene		6.82	5.0	0.61	ug/kg	SW846 8270D BY SIM
Methanol		317	300	72	ug/kg	SW846-8015C (DAI)
JC19914-3	**RA-5 GWS**					
1,4-Dioxane		6320	110	73	ug/l	SW846 8270D
Fluorene		0.84 J	1.1	0.19	ug/l	SW846 8270D
1-Methylnaphthalene		3.9	1.1	0.29	ug/l	SW846 8270D
2-Methylnaphthalene		0.61 J	1.1	0.23	ug/l	SW846 8270D
JC19914-4	**S-41S**					
1,4-Dioxane		1.56	0.10	0.050	ug/l	SW846 8270D BY SIM
JC19914-5	**S-41SD**					
1,4-Dioxane		1.54	0.10	0.049	ug/l	SW846 8270D BY SIM
JC19914-6	**RA-5 (5.5-6.5)**					
1,4-Dioxane		2040	40	17	ug/kg	SW846 8270D
Methanol		279	250	59	ug/kg	SW846-8015C (DAI)
JC19914-7	**RA-5 (9-10)**					
1,4-Dioxane		1720	41	17	ug/kg	SW846 8270D
Fluoranthene		63.8	41	19	ug/kg	SW846 8270D
Fluorene		61.9	41	16	ug/kg	SW846 8270D
1-Methylnaphthalene		201	83	7.3	ug/kg	SW846 8270D
Phenanthrene		51.1	41	9.9	ug/kg	SW846 8270D
Pyrene		44.9	41	7.2	ug/kg	SW846 8270D

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	RA6-GWD		
Lab Sample ID:	JC19914-1	**Date Sampled:**	05/06/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124316.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
Run #2	M124343.D	100	05/11/16	AD	05/10/16	OP93784	EM5260

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2	900 ml	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	0.91	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	0.99	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	2.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	11	1.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.2	0.99	ug/l	
	3&4-Methylphenol	ND	2.2	0.98	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	1.1	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.3	ug/l	
87-86-5	Pentachlorophenol	ND	5.6	1.5	ug/l	
108-95-2	Phenol	ND	2.2	0.44	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.6	1.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.6	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	1.0	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.21	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.15	ug/l	
98-86-2	Acetophenone	ND	2.2	0.23	ug/l	
120-12-7	Anthracene	ND	1.1	0.23	ug/l	
1912-24-9	Atrazine	ND	2.2	0.50	ug/l	
100-52-7	Benzaldehyde	ND	5.6	0.32	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.23	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.24	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.23	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.38	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.23	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.45	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.51	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.24	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.26	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	0.38	ug/l	
86-74-8	Carbazole	ND	1.1	0.25	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:	RA6-GWD		
Lab Sample ID:	JC19914-1	**Date Sampled:**	05/06/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.2	0.72	ug/l	
218-01-9	Chrysene	ND	1.1	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.28	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.45	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.41	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.61	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.53	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.56	ug/l	
123-91-1	1,4-Dioxane	3420 [a]	110	73	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.55	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.37	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.31	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.49	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%	0% [b]	14-88%

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:	RA6-GWD		
Lab Sample ID:	JC19914-1	**Date Sampled:**	05/06/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	33%	0% [b]	10-110%
118-79-6	2,4,6-Tribromophenol	87%	0% [b]	39-149%
4165-60-0	Nitrobenzene-d5	70%	0% [b]	32-128%
321-60-8	2-Fluorobiphenyl	69%	0% [b]	35-119%
1718-51-0	Terphenyl-d14	69%	0% [b]	10-126%

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

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:	RA6-GWD		
Lab Sample ID:	JC19914-1	**Date Sampled:**	05/06/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M61224.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.033	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		24-125%
321-60-8	2-Fluorobiphenyl	77%		19-127%
1718-51-0	Terphenyl-d14	85%		10-119%

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:	RA6-GWD		
Lab Sample ID:	JC19914-1	**Date Sampled:**	05/06/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH104976.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	55	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	36	ug/l	
67-63-0	Isopropyl Alcohol	ND	100	68	ug/l	
71-23-8	n-Propyl Alcohol	ND	100	43	ug/l	
71-36-3	n-Butyl Alcohol	ND	100	87	ug/l	
78-92-2	sec-Butyl Alcohol	ND	100	66	ug/l	
67-56-1	Methanol	ND	200	71	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	93%		56-145%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-6 (6-7)		
Lab Sample ID:	JC19914-2	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	66.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P25850.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	100	25	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	250	31	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	250	43	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	250	89	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	250	190	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	250	53	ug/kg	
95-48-7	2-Methylphenol	ND	100	32	ug/kg	
	3&4-Methylphenol	ND	100	41	ug/kg	
88-75-5	2-Nitrophenol	ND	250	33	ug/kg	
100-02-7	4-Nitrophenol	ND	500	130	ug/kg	
87-86-5	Pentachlorophenol	ND	250	47	ug/kg	
108-95-2	Phenol	ND	100	26	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	250	33	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	250	37	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	250	30	ug/kg	
83-32-9	Acenaphthene	ND	50	17	ug/kg	
208-96-8	Acenaphthylene	ND	50	25	ug/kg	
98-86-2	Acetophenone	ND	250	11	ug/kg	
120-12-7	Anthracene	ND	50	31	ug/kg	
1912-24-9	Atrazine	ND	100	21	ug/kg	
56-55-3	Benzo(a)anthracene	ND	50	14	ug/kg	
50-32-8	Benzo(a)pyrene	ND	50	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	50	22	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	50	25	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	50	23	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	100	19	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	100	12	ug/kg	
92-52-4	1,1'-Biphenyl	ND	100	6.8	ug/kg	
100-52-7	Benzaldehyde	ND	250	12	ug/kg	
91-58-7	2-Chloronaphthalene	ND	100	12	ug/kg	
106-47-8	4-Chloroaniline	ND	250	18	ug/kg	
86-74-8	Carbazole	ND	100	7.2	ug/kg	

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

Report of Analysis

Client Sample ID:	RA-6 (6-7)		
Lab Sample ID:	JC19914-2	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	66.5
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	100	20	ug/kg	
218-01-9	Chrysene	ND	50	16	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	100	11	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	100	22	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	100	18	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	100	16	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	50	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	50	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	100	42	ug/kg	
123-91-1	1,4-Dioxane	166	50	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	50	22	ug/kg	
132-64-9	Dibenzofuran	ND	100	20	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	100	8.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	100	12	ug/kg	
84-66-2	Diethyl phthalate	ND	100	11	ug/kg	
131-11-3	Dimethyl phthalate	ND	100	8.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	100	12	ug/kg	
206-44-0	Fluoranthene	ND	50	22	ug/kg	
86-73-7	Fluorene	ND	50	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	100	13	ug/kg	
87-68-3	Hexachlorobutadiene	ND	50	20	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	500	20	ug/kg	
67-72-1	Hexachloroethane	ND	250	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	50	23	ug/kg	
78-59-1	Isophorone	ND	100	11	ug/kg	
90-12-0	1-Methylnaphthalene	ND	100	9.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	100	11	ug/kg	
88-74-4	2-Nitroaniline	ND	250	12	ug/kg	
99-09-2	3-Nitroaniline	ND	250	12	ug/kg	
100-01-6	4-Nitroaniline	ND	250	13	ug/kg	
98-95-3	Nitrobenzene	ND	100	19	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	100	14	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	250	18	ug/kg	
85-01-8	Phenanthrene	ND	50	17	ug/kg	
129-00-0	Pyrene	ND	50	16	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	250	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		30-106%

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

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

Report of Analysis

Client Sample ID:	RA-6 (6-7)		
Lab Sample ID:	JC19914-2	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	66.5
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	59%		30-106%
118-79-6	2,4,6-Tribromophenol	81%		24-140%
4165-60-0	Nitrobenzene-d5	15% [a]		26-122%
321-60-8	2-Fluorobiphenyl	69%		36-112%
1718-51-0	Terphenyl-d14	76%		36-132%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-6 (6-7)		
Lab Sample ID:	JC19914-2	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	66.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P16286.D	1	05/11/16	JJ	05/11/16	OP93791A	E4P857
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	6.82	5.0	0.61	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	19%		15-138%
321-60-8	2-Fluorobiphenyl	37%		12-148%
1718-51-0	Terphenyl-d14	87%		10-157%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-6 (6-7)		
Lab Sample ID:	JC19914-2	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	66.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105056.D	1	05/18/16	XPL	n/a	n/a	GGH5290
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	150	100	ug/kg	
78-83-1	Isobutyl Alcohol	ND	150	88	ug/kg	
67-63-0	Isopropyl Alcohol	ND	150	86	ug/kg	
71-23-8	n-Propyl Alcohol	ND	150	60	ug/kg	
71-36-3	n-Butyl Alcohol	ND	150	82	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	150	80	ug/kg	
67-56-1	Methanol	317	300	72	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	101%		52-141%
111-27-3	Hexanol	104%		52-141%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 GWS		
Lab Sample ID:	JC19914-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124317.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
Run #2	M124344.D	100	05/11/16	AD	05/10/16	OP93784	EM5260

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2	900 ml	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	0.91	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	0.99	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	2.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	11	1.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.2	0.99	ug/l	
	3&4-Methylphenol	ND	2.2	0.98	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	1.1	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.3	ug/l	
87-86-5	Pentachlorophenol	ND	5.6	1.5	ug/l	
108-95-2	Phenol	ND	2.2	0.44	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.6	1.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.6	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	1.0	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.21	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.15	ug/l	
98-86-2	Acetophenone	ND	2.2	0.23	ug/l	
120-12-7	Anthracene	ND	1.1	0.23	ug/l	
1912-24-9	Atrazine	ND	2.2	0.50	ug/l	
100-52-7	Benzaldehyde	ND	5.6	0.32	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.23	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.24	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.23	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.38	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.23	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.45	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.51	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.24	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.26	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	0.38	ug/l	
86-74-8	Carbazole	ND	1.1	0.25	ug/l	

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

Report of Analysis

Client Sample ID:	RA-5 GWS		
Lab Sample ID:	JC19914-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.2	0.72	ug/l	
218-01-9	Chrysene	ND	1.1	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.28	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.45	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.41	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.61	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.53	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.56	ug/l	
123-91-1	1,4-Dioxane	6320 [a]	110	73	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	0.84	1.1	0.19	ug/l	J
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.55	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.37	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
90-12-0	1-Methylnaphthalene	3.9	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	0.61	1.1	0.23	ug/l	J
88-74-4	2-Nitroaniline	ND	5.6	0.31	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.49	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%	0% [b]	14-88%

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

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

Report of Analysis

Client Sample ID:	RA-5 GWS		
Lab Sample ID:	JC19914-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	36%	0% [b]	10-110%
118-79-6	2,4,6-Tribromophenol	92%	0% [b]	39-149%
4165-60-0	Nitrobenzene-d5	76%	0% [b]	32-128%
321-60-8	2-Fluorobiphenyl	72%	0% [b]	35-119%
1718-51-0	Terphenyl-d14	73%	0% [b]	10-126%

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

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 GWS		
Lab Sample ID:	JC19914-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M61225.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.033	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		24-125%
321-60-8	2-Fluorobiphenyl	73%		19-127%
1718-51-0	Terphenyl-d14	85%		10-119%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 GWS		
Lab Sample ID:	JC19914-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH104977.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	55	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	36	ug/l	
67-63-0	Isopropyl Alcohol	ND	100	68	ug/l	
71-23-8	n-Propyl Alcohol	ND	100	43	ug/l	
71-36-3	n-Butyl Alcohol	ND	100	87	ug/l	
78-92-2	sec-Butyl Alcohol	ND	100	66	ug/l	
67-56-1	Methanol	ND	200	71	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	98%		56-145%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41S		
Lab Sample ID:	JC19914-4	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124318.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.84	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	0.91	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.91	ug/l	
	3&4-Methylphenol	ND	2.0	0.90	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	0.98	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.1	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.40	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	0.94	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.22	ug/l	
1912-24-9	Atrazine	ND	2.0	0.46	ug/l	
100-52-7	Benzaldehyde	ND	5.1	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.22	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.35	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.41	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.47	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.22	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.35	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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

Report of Analysis

Client Sample ID:	S-41S		
Lab Sample ID:	JC19914-4	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.66	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.56	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.49	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.52	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.34	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.51	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.24	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.27	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.50	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.40	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.34	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.27	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.45	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.66	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.23	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		14-88%
4165-62-2	Phenol-d5	28%		10-110%

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:	S-41S		
Lab Sample ID:	JC19914-4	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
118-79-6	2,4,6-Tribromophenol	86%		39-149%
4165-60-0	Nitrobenzene-d5	67%		32-128%
321-60-8	2-Fluorobiphenyl	67%		35-119%
1718-51-0	Terphenyl-d14	69%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41S		
Lab Sample ID:	JC19914-4	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M61222.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.030	ug/l	
123-91-1	1,4-Dioxane	1.56	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		24-125%
321-60-8	2-Fluorobiphenyl	73%		19-127%
1718-51-0	Terphenyl-d14	87%		10-119%

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41S		
Lab Sample ID:	JC19914-4	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH104978.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	55	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	36	ug/l	
67-63-0	Isopropyl Alcohol	ND	100	68	ug/l	
71-23-8	n-Propyl Alcohol	ND	100	43	ug/l	
71-36-3	n-Butyl Alcohol	ND	100	87	ug/l	
78-92-2	sec-Butyl Alcohol	ND	100	66	ug/l	
67-56-1	Methanol	ND	200	71	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	97%		56-145%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41S		
Lab Sample ID:	JC19914-4	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G34942.D	1	05/11/16	DS	05/10/16	OP93785	G6G1008
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0060	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0060	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0057	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0046	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.010	0.0046	ug/l	
5103-74-2	gamma-Chlordane	ND	0.010	0.0046	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0036	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0038	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0062	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0050	ug/l	
72-20-8	Endrin	ND	0.010	0.0050	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0053	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0051	ug/l	
53494-70-5	Endrin ketone	ND	0.010	0.0051	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0050	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0043	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0038	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0065	ug/l	
72-43-5	Methoxychlor	ND	0.020	0.0057	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.18	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	53%		26-132%
877-09-8	Tetrachloro-m-xylene	52%		26-132%
2051-24-3	Decachlorobiphenyl	85%		10-118%
2051-24-3	Decachlorobiphenyl	93%		10-118%

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41SD		
Lab Sample ID:	JC19914-5	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124319.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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

Report of Analysis

Client Sample ID:	S-41SD		
Lab Sample ID:	JC19914-5	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		14-88%
4165-62-2	Phenol-d5	28%		10-110%

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:	S-41SD		
Lab Sample ID:	JC19914-5	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
118-79-6	2,4,6-Tribromophenol	84%		39-149%
4165-60-0	Nitrobenzene-d5	67%		32-128%
321-60-8	2-Fluorobiphenyl	65%		35-119%
1718-51-0	Terphenyl-d14	69%		10-126%

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41SD		
Lab Sample ID:	JC19914-5	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M61223.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	
123-91-1	1,4-Dioxane	1.54	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		24-125%
321-60-8	2-Fluorobiphenyl	72%		19-127%
1718-51-0	Terphenyl-d14	84%		10-119%

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41SD		
Lab Sample ID:	JC19914-5	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH104979.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	55	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	36	ug/l	
67-63-0	Isopropyl Alcohol	ND	100	68	ug/l	
71-23-8	n-Propyl Alcohol	ND	100	43	ug/l	
71-36-3	n-Butyl Alcohol	ND	100	87	ug/l	
78-92-2	sec-Butyl Alcohol	ND	100	66	ug/l	
67-56-1	Methanol	ND	200	71	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	101%		56-145%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-41SD		
Lab Sample ID:	JC19914-5	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/10/16
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G34941.D	1	05/11/16	DS	05/10/16	OP93786	G6G1008
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0067	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0067	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0067	0.0038	ug/l	
319-86-8	delta-BHC	ND	0.0067	0.0030	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0067	0.0019	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0067	0.0031	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0067	0.0031	ug/l	
60-57-1	Dieldrin	ND	0.0067	0.0024	ug/l	
72-54-8	4,4'-DDD	ND	0.0067	0.0025	ug/l	
72-55-9	4,4'-DDE	ND	0.0067	0.0041	ug/l	
50-29-3	4,4'-DDT	ND	0.0067	0.0033	ug/l	
72-20-8	Endrin	ND	0.0067	0.0034	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0067	0.0035	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0067	0.0034	ug/l	
53494-70-5	Endrin ketone	ND	0.0067	0.0034	ug/l	
959-98-8	Endosulfan-I	ND	0.0067	0.0033	ug/l	
33213-65-9	Endosulfan-II	ND	0.0067	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.0067	0.0025	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0067	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.013	0.0038	ug/l	
8001-35-2	Toxaphene	ND	0.17	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		26-132%
877-09-8	Tetrachloro-m-xylene	80%		26-132%
2051-24-3	Decachlorobiphenyl	37%		10-118%
2051-24-3	Decachlorobiphenyl	41%		10-118%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 (5.5-6.5)		
Lab Sample ID:	JC19914-6	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124425.D	1	05/13/16	AD	05/11/16	OP93791	EM5264
Run #2							

	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	80	27	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	39	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	96	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	160	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	58	ug/kg	
95-48-7	2-Methylphenol	ND	80	45	ug/kg	
	3&4-Methylphenol	ND	80	45	ug/kg	
88-75-5	2-Nitrophenol	ND	200	35	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	200	34	ug/kg	
108-95-2	Phenol	ND	80	31	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	52	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	57	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	44	ug/kg	
83-32-9	Acenaphthene	ND	40	7.5	ug/kg	
208-96-8	Acenaphthylene	ND	40	5.5	ug/kg	
98-86-2	Acetophenone	ND	200	20	ug/kg	
120-12-7	Anthracene	ND	40	17	ug/kg	
1912-24-9	Atrazine	ND	80	13	ug/kg	
56-55-3	Benzo(a)anthracene	ND	40	6.1	ug/kg	
50-32-8	Benzo(a)pyrene	ND	40	9.8	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	40	8.4	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	40	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	40	11	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	80	18	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	80	23	ug/kg	
92-52-4	1,1'-Biphenyl	ND	80	11	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.7	ug/kg	
91-58-7	2-Chloronaphthalene	ND	80	7.5	ug/kg	
106-47-8	4-Chloroaniline	ND	200	11	ug/kg	
86-74-8	Carbazole	ND	80	7.8	ug/kg	

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

Report of Analysis

Client Sample ID:	RA-5 (5.5-6.5)		
Lab Sample ID:	JC19914-6	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.5
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	80	29	ug/kg	
218-01-9	Chrysene	ND	40	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	80	8.4	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	80	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	80	16	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	80	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	40	14	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	12	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	80	54	ug/kg	
123-91-1	1,4-Dioxane	2040	40	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40	15	ug/kg	
132-64-9	Dibenzofuran	ND	80	7.2	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	80	25	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	80	26	ug/kg	
84-66-2	Diethyl phthalate	ND	80	9.0	ug/kg	
131-11-3	Dimethyl phthalate	ND	80	8.2	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	80	8.7	ug/kg	
206-44-0	Fluoranthene	ND	40	18	ug/kg	
86-73-7	Fluorene	ND	40	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	80	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	24	ug/kg	
67-72-1	Hexachloroethane	ND	200	30	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	40	13	ug/kg	
78-59-1	Isophorone	ND	80	8.8	ug/kg	
90-12-0	1-Methylnaphthalene	ND	80	7.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	80	32	ug/kg	
88-74-4	2-Nitroaniline	ND	200	29	ug/kg	
99-09-2	3-Nitroaniline	ND	200	14	ug/kg	
100-01-6	4-Nitroaniline	ND	200	16	ug/kg	
98-95-3	Nitrobenzene	ND	80	17	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	80	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	23	ug/kg	
85-01-8	Phenanthrene	ND	40	9.5	ug/kg	
129-00-0	Pyrene	ND	40	7.0	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	8.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	80%		30-106%

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

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

Report of Analysis

Client Sample ID:	RA-5 (5.5-6.5)		
Lab Sample ID:	JC19914-6	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.5
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	79%		30-106%
118-79-6	2,4,6-Tribromophenol	92%		24-140%
4165-60-0	Nitrobenzene-d5	59%		26-122%
321-60-8	2-Fluorobiphenyl	83%		36-112%
1718-51-0	Terphenyl-d14	80%		36-132%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 (5.5-6.5)		
Lab Sample ID:	JC19914-6	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	81.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65316.D	1	05/17/16	LK	05/11/16	OP93791A	E4M2922
Run #2							

	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	4.0	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		15-138%
321-60-8	2-Fluorobiphenyl	96%		12-148%
1718-51-0	Terphenyl-d14	82%		10-157%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 (5.5-6.5)		
Lab Sample ID:	JC19914-6	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	81.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105106.D	1	05/19/16	XPL	n/a	n/a	GGH5292
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	120	85	ug/kg	
78-83-1	Isobutyl Alcohol	ND	120	72	ug/kg	
67-63-0	Isopropyl Alcohol	ND	120	70	ug/kg	
71-23-8	n-Propyl Alcohol	ND	120	49	ug/kg	
71-36-3	n-Butyl Alcohol	ND	120	67	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	120	65	ug/kg	
67-56-1	Methanol	279	250	59	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	105%		52-141%
111-27-3	Hexanol	108%		52-141%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 (9-10)		
Lab Sample ID:	JC19914-7	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.2
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124424.D	1	05/13/16	AD	05/11/16	OP93791	EM5264
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	83	28	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	40	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	99	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	210	160	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	60	ug/kg	
95-48-7	2-Methylphenol	ND	83	47	ug/kg	
	3&4-Methylphenol	ND	83	47	ug/kg	
88-75-5	2-Nitrophenol	ND	210	36	ug/kg	
100-02-7	4-Nitrophenol	ND	410	110	ug/kg	
87-86-5	Pentachlorophenol	ND	210	35	ug/kg	
108-95-2	Phenol	ND	83	32	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	54	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	59	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	45	ug/kg	
83-32-9	Acenaphthene	ND	41	7.8	ug/kg	
208-96-8	Acenaphthylene	ND	41	5.7	ug/kg	
98-86-2	Acetophenone	ND	210	21	ug/kg	
120-12-7	Anthracene	ND	41	18	ug/kg	
1912-24-9	Atrazine	ND	83	13	ug/kg	
56-55-3	Benzo(a)anthracene	ND	41	6.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	41	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	41	8.7	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	41	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	41	12	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	83	19	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	83	24	ug/kg	
92-52-4	1,1'-Biphenyl	ND	83	12	ug/kg	
100-52-7	Benzaldehyde	ND	210	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	83	7.8	ug/kg	
106-47-8	4-Chloroaniline	ND	210	12	ug/kg	
86-74-8	Carbazole	ND	83	8.0	ug/kg	

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

Report of Analysis

Client Sample ID:	RA-5 (9-10)		
Lab Sample ID:	JC19914-7	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.2
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	83	30	ug/kg	
218-01-9	Chrysene	ND	41	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	83	8.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	83	24	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	83	16	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	83	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	41	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	41	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	83	56	ug/kg	
123-91-1	1,4-Dioxane	1720	41	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	41	16	ug/kg	
132-64-9	Dibenzofuran	ND	83	7.5	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	83	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	83	27	ug/kg	
84-66-2	Diethyl phthalate	ND	83	9.3	ug/kg	
131-11-3	Dimethyl phthalate	ND	83	8.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	83	9.0	ug/kg	
206-44-0	Fluoranthene	63.8	41	19	ug/kg	
86-73-7	Fluorene	61.9	41	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	83	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	41	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	410	25	ug/kg	
67-72-1	Hexachloroethane	ND	210	31	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	41	14	ug/kg	
78-59-1	Isophorone	ND	83	9.2	ug/kg	
90-12-0	1-Methylnaphthalene	201	83	7.3	ug/kg	
91-57-6	2-Methylnaphthalene	ND	83	34	ug/kg	
88-74-4	2-Nitroaniline	ND	210	30	ug/kg	
99-09-2	3-Nitroaniline	ND	210	15	ug/kg	
100-01-6	4-Nitroaniline	ND	210	16	ug/kg	
98-95-3	Nitrobenzene	ND	83	18	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	83	19	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	24	ug/kg	
85-01-8	Phenanthrene	51.1	41	9.9	ug/kg	
129-00-0	Pyrene	44.9	41	7.2	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	86%		30-106%

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

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

Report of Analysis

Client Sample ID:	RA-5 (9-10)		
Lab Sample ID:	JC19914-7	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.2
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	85%		30-106%
118-79-6	2,4,6-Tribromophenol	96%		24-140%
4165-60-0	Nitrobenzene-d5	76%		26-122%
321-60-8	2-Fluorobiphenyl	89%		36-112%
1718-51-0	Terphenyl-d14	80%		36-132%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 (9-10)		
Lab Sample ID:	JC19914-7	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	79.2
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65317.D	1	05/17/16	LK	05/11/16	OP93791A	E4M2922
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	4.1	0.50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		15-138%
321-60-8	2-Fluorobiphenyl	93%		12-148%
1718-51-0	Terphenyl-d14	72%		10-157%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-5 (9-10)		
Lab Sample ID:	JC19914-7	**Date Sampled:**	05/09/16
Matrix:	SO - Soil	**Date Received:**	05/10/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	79.2
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105107.D	1	05/19/16	XPL	n/a	n/a	GGH5292
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	130	87	ug/kg	
78-83-1	Isobutyl Alcohol	ND	130	74	ug/kg	
67-63-0	Isopropyl Alcohol	ND	130	72	ug/kg	
71-23-8	n-Propyl Alcohol	ND	130	51	ug/kg	
71-36-3	n-Butyl Alcohol	ND	130	69	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	130	67	ug/kg	
67-56-1	Methanol	ND	250	60	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	99%		52-141%
111-27-3	Hexanol	101%		52-141%

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
Non-Foreign

SGS ACCUTEST - NJ

CHAIN OF CUSTODY

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

PAGE 1 OF 1 L SUB

SGS Accutest Quote # 80121953-100

Bottle Order Control #

SGS Accutest Job # JC19914

Client / Reporting Information

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

Project Information

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

Billing Information (If different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SVOC - Method 8270D	LMA - Method 8015B	Pesticides - Method 8081B	1,4 Dioxane & Naphthalene by Method 8270D SIM										
1	RA6-GWD		5/6/16	1600	TT	GW	5	3				2				X	X		X										
2	RA-6 (6-7)		5/9/16	1130	TT	SO	2					2				X	X		X										
	RA-6 (6-7) MS		5/9/16	1130	TT	SO	2					2				X	X		X										
	RA-6 (6-7) MSD		5/9/16	1130	TT	SO	2					2				X	X		X										
3	RA-5 GWS		5/9/16	1200	TT	GW	5	3				2				X	X		X										
4	S-41S		5/9/16	1235	NR	GW	7	3				4				X	X	X	X										
5	S-41SD	☆	5/9/16	1253	NR	GW	7	3				4				X	X	X	X										
6	RA-5 (5.5-6.5)		5/9/16	1355	TT	SO	2					2				X	X		X										
7	RA-5 (9-10)		5/9/16	1430	TT	SO	2					2				X	X		X										

INITIAL ASESSMENT 1B
LABEL VERIFICATION

Matrix Codes

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

LAB USE ONLY

EI
ESI
SUB

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

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

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

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

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

Comments / Special Instructions

Add to Report: 1-Methyl naphthalene with SVOC Method 8270D
* Need 2x30 ml vial for test

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	5/9/16 1500	1 Fed EX	2	5/10/16	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seals # 128/456	Preserved where applicable	On Ice ☑ Cooler Temp. 3.1, 2.8

☐ Intact ☐ Not intact

SGS Accutest Sample Receipt Summary

Job Number: JC19914 **Client:** Anderson Mulholland **Project:** BMS Release

Date / Time Received: 5/10/2016 9:45:00 AM **Delivery Method:** FedEx **Airbill #'s:** 801219536100

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1); Cooler 2: (2.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.5); Cooler 2: (3.2);

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

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

Quality Control Preservation	Y	or	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	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

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

Sample Integrity - Instructions	Y	or	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

1) -4: Rec'd 1 x 950ml for PEST, limited volume.

SGS Accutest Sample Receipt Summary

5/10/2016

Problem Note Response: Proceed with analysis

JC19914: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC19914

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19914-1 RA6-GWD	Collected: 06-MAY-16 16:00 By: TT		Received: 10-MAY-16 By: DDH			
JC19914-1	SW846 8270D	11-MAY-16 01:56	JJ	10-MAY-16	KS	AB8270SL
JC19914-1	SW846 8270D BY SIM	11-MAY-16 12:27	LK	10-MAY-16	KS	BSIM + NAP
JC19914-1	SW846 8270D	11-MAY-16 14:18	AD	10-MAY-16	KS	AB8270SL
JC19914-1	SW846-8015C (DAI)	16-MAY-16 20:17	XPL			D8015LMA
JC19914-2 RA-6 (6-7)	Collected: 09-MAY-16 11:30 By: TT		Received: 10-MAY-16 By: DDH			
JC19914-2	SM2540 G-97	11-MAY-16 17:00	KP			SOL104
JC19914-2	SW846 8270D	11-MAY-16 17:57	AC	11-MAY-16	AQ	AB8270SL
JC19914-2	SW846 8270D BY SIM	11-MAY-16 19:11	JJ	11-MAY-16	FN	BSIM + NAP
JC19914-2	SW846-8015C (DAI)	18-MAY-16 16:18	XPL			D8015LMA
JC19914-3 RA-5 GWS	Collected: 09-MAY-16 12:00 By: TT		Received: 10-MAY-16 By: DDH			
JC19914-3	SW846 8270D	11-MAY-16 02:25	JJ	10-MAY-16	KS	AB8270SL
JC19914-3	SW846 8270D BY SIM	11-MAY-16 12:59	LK	10-MAY-16	KS	BSIM + NAP
JC19914-3	SW846 8270D	11-MAY-16 14:47	AD	10-MAY-16	KS	AB8270SL
JC19914-3	SW846-8015C (DAI)	16-MAY-16 20:31	XPL			D8015LMA
JC19914-4 S-41S	Collected: 09-MAY-16 12:35 By: NR		Received: 10-MAY-16 By: DDH			
JC19914-4	SW846 8270D	11-MAY-16 02:53	JJ	10-MAY-16	KS	AB8270SL
JC19914-4	SW846 8270D BY SIM	11-MAY-16 11:22	LK	10-MAY-16	KS	B8270SIM14DIOX,BSIM + NAP
JC19914-4	SW846 8081B	11-MAY-16 13:32	DS	10-MAY-16	AC	P8081PESTTCL
JC19914-4	SW846-8015C (DAI)	16-MAY-16 20:45	XPL			D8015LMA
JC19914-5 S-41SD	Collected: 09-MAY-16 12:53 By: NR		Received: 10-MAY-16 By: DDH			
JC19914-5	SW846 8270D	11-MAY-16 03:22	JJ	10-MAY-16	KS	AB8270SL
JC19914-5	SW846 8270D BY SIM	11-MAY-16 11:54	LK	10-MAY-16	KS	B8270SIM14DIOX,BSIM + NAP
JC19914-5	SW846 8081B	11-MAY-16 13:15	DS	10-MAY-16	AC	P8081PESTTCL
JC19914-5	SW846-8015C (DAI)	16-MAY-16 21:07	XPL			D8015LMA

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC19914

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19914-6	Collected: 09-MAY-16 13:55 By: TT		Received: 10-MAY-16 By: DDH			
RA-5 (5.5-6.5)						
JC19914-6	SM2540 G-97	11-MAY-16 17:00	KP			SOL104
JC19914-6	SW846 8270D	13-MAY-16 11:38	AD	11-MAY-16	AQ	AB8270SL
JC19914-6	SW846 8270D BY SIM	17-MAY-16 11:20	LK	11-MAY-16	FN	BSIM + NAP
JC19914-6	SW846-8015C (DAI)	19-MAY-16 18:42	XPL			D8015LMA
JC19914-7	Collected: 09-MAY-16 14:30 By: TT		Received: 10-MAY-16 By: DDH			
RA-5 (9-10)						
JC19914-7	SM2540 G-97	11-MAY-16 17:00	KP			SOL104
JC19914-7	SW846 8270D	13-MAY-16 11:10	AD	11-MAY-16	AQ	AB8270SL
JC19914-7	SW846 8270D BY SIM	17-MAY-16 11:50	LK	11-MAY-16	FN	BSIM + NAP
JC19914-7	SW846-8015C (DAI)	19-MAY-16 19:03	XPL			D8015LMA

SGS Accutest Internal Chain of Custody

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/10/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19914-1.1	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-1.1	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-1.1	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage
JC19914-1.1	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-1.1.1	Ryan Fantasia	Organics Prep	05/10/16 15:16	Extract from JC19914-1.1
JC19914-1.1.1	Organics Prep	Kyle Sanford	05/10/16 20:13	Extract from JC19914-1.1
JC19914-1.1.1	Kyle Sanford	Extract Storage	05/10/16 20:13	Return to Storage
JC19914-1.1.1	Extract Storage	Sean Block	05/10/16 23:23	Retrieve from Storage
JC19914-1.1.1	Sean Block	GCMSM	05/10/16 23:23	Load on Instrument
JC19914-1.2	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-1.2	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-1.2	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage
JC19914-1.2	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-1.5	Secured Storage	Xu Liu	05/16/16 13:28	Retrieve from Storage
JC19914-1.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19914-2.1	Secured Storage	Albert Quayson	05/11/16 07:51	Retrieve from Storage
JC19914-2.1	Albert Quayson	Secured Storage	05/11/16 09:25	Return to Storage
JC19914-2.1.1	Albert Quayson	Organics Prep	05/11/16 07:55	Extract from JC19914-2.1
JC19914-2.1.1	Organics Prep	Albert Quayson	05/11/16 13:14	Extract from JC19914-2.1
JC19914-2.1.1	Albert Quayson	Extract Storage	05/11/16 13:14	Return to Storage
JC19914-2.1.1	Extract Storage	Arielle Cocozza	05/11/16 15:16	Retrieve from Storage
JC19914-2.1.1	Arielle Cocozza	GCMS6P	05/11/16 15:16	Load on Instrument
JC19914-2.1.1	Arielle Cocozza	Extract Freezer	05/12/16 12:11	Return to Storage
JC19914-2.1.1	GCMS6P	Arielle Cocozza	05/12/16 12:11	Unload from Instrument
JC19914-2.2	Secured Storage	Alfredo Crespo	05/11/16 07:18	Retrieve from Storage
JC19914-2.2	Alfredo Crespo	Secured Staging Area	05/11/16 07:18	Return to Storage
JC19914-2.2	Secured Staging Area	Alfredo Crespo	05/11/16 08:42	Retrieve from Storage
JC19914-2.2	Alfredo Crespo	Secured Storage	05/11/16 08:42	Return to Storage
JC19914-2.2	Secured Storage	Alfredo Crespo	05/11/16 08:43	Retrieve from Storage
JC19914-2.2	Alfredo Crespo	Secured Staging Area	05/11/16 08:43	Return to Storage
JC19914-2.2	Secured Staging Area	Paula Velatesgui	05/11/16 08:48	Retrieve from Storage
JC19914-2.2	Paula Velatesgui	Secured Storage	05/11/16 11:27	Return to Storage
JC19914-2.2	Secured Storage	Xu Liu	05/18/16 10:45	Retrieve from Storage
JC19914-2.2	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC19914-3.1	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-3.1	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-3.1	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/10/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19914-3.1	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-3.1.1	Ryan Fantasia	Organics Prep	05/10/16 15:16	Extract from JC19914-3.1
JC19914-3.1.1	Organics Prep	Kyle Sanford	05/10/16 20:13	Extract from JC19914-3.1
JC19914-3.1.1	Kyle Sanford	Extract Storage	05/10/16 20:13	Return to Storage
JC19914-3.1.1	Extract Storage	Sean Block	05/10/16 23:23	Retrieve from Storage
JC19914-3.1.1	Sean Block	GCMSM	05/10/16 23:23	Load on Instrument
JC19914-3.2	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-3.2	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-3.2	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage
JC19914-3.2	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-3.5	Secured Storage	Xu Liu	05/16/16 13:28	Retrieve from Storage
JC19914-3.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19914-4.1	Secured Storage	Greg Mayer	05/10/16 18:01	Retrieve from Storage
JC19914-4.1	Greg Mayer		05/10/16 21:47	Depleted
JC19914-4.2	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-4.2	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-4.2	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage
JC19914-4.2	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-4.2.1	Ryan Fantasia	Organics Prep	05/10/16 15:16	Extract from JC19914-4.2
JC19914-4.2.1	Organics Prep	Kyle Sanford	05/10/16 20:13	Extract from JC19914-4.2
JC19914-4.2.1	Kyle Sanford	Extract Storage	05/10/16 20:13	Return to Storage
JC19914-4.2.1	Extract Storage	Sean Block	05/10/16 23:23	Retrieve from Storage
JC19914-4.2.1	Sean Block	GCMSM	05/10/16 23:23	Load on Instrument
JC19914-4.2.2	Ryan Fantasia	Organics Prep	05/10/16 15:32	Extract from JC19914-4.2
JC19914-4.2.2	Organics Prep	Allan Chung-yew	05/10/16 21:14	Extract from JC19914-4.2
JC19914-4.2.2	Allan Chung-yew	Extract Storage	05/10/16 21:14	Return to Storage
JC19914-4.2.2	Extract Storage	Dhara Saparia	05/11/16 12:01	Retrieve from Storage
JC19914-4.2.2	Dhara Saparia	GC6G	05/11/16 12:01	Load on Instrument
JC19914-4.2.2	GC6G	Rebecca Krug	05/22/16 09:23	Unload from Instrument
JC19914-4.2.2	Rebecca Krug	Extract Freezer	05/22/16 09:23	Return to Storage
JC19914-4.3	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-4.3	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-4.3	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage
JC19914-4.3	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-4.5	Secured Storage	Xu Liu	05/16/16 13:28	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/10/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19914-4.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19914-5.2	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-5.2	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-5.2	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage
JC19914-5.2	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-5.2.1	Ryan Fantasia	Organics Prep	05/10/16 15:16	Extract from JC19914-5.2
JC19914-5.2.1	Organics Prep	Kyle Sanford	05/10/16 20:13	Extract from JC19914-5.2
JC19914-5.2.1	Kyle Sanford	Extract Storage	05/10/16 20:13	Return to Storage
JC19914-5.2.1	Extract Storage	Sean Block	05/10/16 23:23	Retrieve from Storage
JC19914-5.2.1	Sean Block	GCMSM	05/10/16 23:23	Load on Instrument
JC19914-5.2.2	Ryan Fantasia	Organics Prep	05/10/16 15:33	Extract from JC19914-5.2
JC19914-5.2.2	Organics Prep	Allan Chung-yew	05/10/16 21:14	Extract from JC19914-5.2
JC19914-5.2.2	Allan Chung-yew	Extract Storage	05/10/16 21:14	Return to Storage
JC19914-5.2.2	Extract Storage	Dhara Saparia	05/11/16 12:01	Retrieve from Storage
JC19914-5.2.2	Dhara Saparia	GC6G	05/11/16 12:01	Load on Instrument
JC19914-5.2.2	GC6G	Rebecca Krug	05/22/16 09:23	Unload from Instrument
JC19914-5.2.2	Rebecca Krug	Extract Freezer	05/22/16 09:23	Return to Storage
JC19914-5.3	Secured Storage	Ryan Fantasia	05/10/16 18:56	Retrieve from Storage
JC19914-5.3	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-5.4	Secured Storage	Todd Shoemaker	05/10/16 14:11	Retrieve from Storage
JC19914-5.4	Todd Shoemaker	Secured Staging Area	05/10/16 14:12	Return to Storage
JC19914-5.4	Secured Staging Area	Ryan Fantasia	05/10/16 15:11	Retrieve from Storage
JC19914-5.4	Ryan Fantasia		05/10/16 21:37	Depleted
JC19914-5.5	Secured Storage	Xu Liu	05/16/16 13:28	Retrieve from Storage
JC19914-5.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19914-6.1	Secured Storage	Albert Quayson	05/11/16 07:51	Retrieve from Storage
JC19914-6.1	Secured Storage	Alfredo Crespo	05/11/16 08:43	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19914-6.1	Alfredo Crespo	Secured Staging Area	05/11/16 08:43	Return to Storage
JC19914-6.1	Secured Staging Area	Paula Velatesgui	05/11/16 08:48	Retrieve from Storage
JC19914-6.1	Paula Velatesgui	Secured Storage	05/11/16 11:27	Return to Storage
JC19914-6.1	Secured Storage	Xu Liu	05/18/16 10:45	Retrieve from Storage
JC19914-6.1	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC19914-6.1.1	Albert Quayson	Organics Prep	05/11/16 07:55	Extract from JC19914-6.1
JC19914-6.1.1	Organics Prep	Albert Quayson	05/11/16 13:14	Extract from JC19914-6.1
JC19914-6.1.1	Albert Quayson	Extract Storage	05/11/16 13:14	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/10/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19914-6.1.1	Extract Storage	Arielle Cocozza	05/11/16 15:16	Retrieve from Storage
JC19914-6.1.1	Arielle Cocozza	GCMS6P	05/11/16 15:16	Load on Instrument
JC19914-6.1.1	Arielle Cocozza	Extract Freezer	05/12/16 12:11	Return to Storage
JC19914-6.1.1	GCMS6P	Arielle Cocozza	05/12/16 12:11	Unload from Instrument
JC19914-7.1	Secured Storage	Albert Quayson	05/11/16 07:51	Retrieve from Storage
JC19914-7.1	Secured Storage	Alfredo Crespo	05/11/16 08:43	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19914-7.1	Alfredo Crespo	Secured Staging Area	05/11/16 08:43	Return to Storage
JC19914-7.1	Secured Staging Area	Paula Velatesgui	05/11/16 08:48	Retrieve from Storage
JC19914-7.1	Paula Velatesgui	Secured Storage	05/11/16 11:27	Return to Storage
JC19914-7.1	Secured Storage	Todd Shoemaker	05/11/16 11:49	Retrieve from Storage
JC19914-7.1	Todd Shoemaker	Secured Staging Area	05/11/16 11:51	Return to Storage
JC19914-7.1	Secured Staging Area	Todd Shoemaker	05/11/16 16:38	Retrieve from Storage
JC19914-7.1	Todd Shoemaker	Secured Storage	05/11/16 16:39	Return to Storage
JC19914-7.1	Secured Storage	Xu Liu	05/18/16 10:45	Retrieve from Storage
JC19914-7.1	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC19914-7.1.1	Albert Quayson	Organics Prep	05/11/16 07:55	Extract from JC19914-7.1

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-MB1	M124310.D	1	05/10/16	JJ	05/10/16	OP93784	EM5259

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-MB1	M124310.D	1	05/10/16	JJ	05/10/16	OP93784	EM5259

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-MB1	M124310.D	1	05/10/16	JJ	05/10/16	OP93784	EM5259

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	55%	14-88%
4165-62-2	Phenol-d5	36%	10-110%
118-79-6	2,4,6-Tribromophenol	102%	39-149%
4165-60-0	Nitrobenzene-d5	82%	32-128%
321-60-8	2-Fluorobiphenyl	80%	35-119%
1718-51-0	Terphenyl-d14	83%	10-126%

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	6P25845.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	23	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	30	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	80	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	49	ug/kg	
95-48-7	2-Methylphenol	ND	67	38	ug/kg	
	3&4-Methylphenol	ND	67	38	ug/kg	
88-75-5	2-Nitrophenol	ND	170	29	ug/kg	
100-02-7	4-Nitrophenol	ND	330	93	ug/kg	
87-86-5	Pentachlorophenol	ND	170	28	ug/kg	
108-95-2	Phenol	ND	67	26	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	43	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	48	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	37	ug/kg	
83-32-9	Acenaphthene	ND	33	6.3	ug/kg	
208-96-8	Acenaphthylene	ND	33	4.6	ug/kg	
98-86-2	Acetophenone	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	33	14	ug/kg	
1912-24-9	Atrazine	ND	67	11	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	5.1	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	8.2	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	7.0	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	8.9	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	9.5	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	19	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	9.4	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	6.3	ug/kg	
106-47-8	4-Chloroaniline	ND	170	9.5	ug/kg	
86-74-8	Carbazole	ND	67	6.5	ug/kg	
105-60-2	Caprolactam	ND	67	24	ug/kg	
218-01-9	Chrysene	ND	33	8.5	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.0	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	19	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	6P25845.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	8.9	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	10	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	45	ug/kg	
123-91-1	1,4-Dioxane	ND	33	14	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	13	ug/kg	
132-64-9	Dibenzofuran	ND	67	6.0	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	21	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	21	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.3	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	13	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	20	ug/kg	
67-72-1	Hexachloroethane	ND	170	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	11	ug/kg	
78-59-1	Isophorone	ND	67	7.4	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	5.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	27	ug/kg	
88-74-4	2-Nitroaniline	ND	170	24	ug/kg	
99-09-2	3-Nitroaniline	ND	170	12	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
98-95-3	Nitrobenzene	ND	67	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	15	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	19	ug/kg	
85-01-8	Phenanthrene	ND	33	8.0	ug/kg	
129-00-0	Pyrene	ND	33	5.8	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	7.5	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	6P25845.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	71%	30-106%
4165-62-2	Phenol-d5	69%	30-106%
118-79-6	2,4,6-Tribromophenol	101%	24-140%
4165-60-0	Nitrobenzene-d5	72%	26-122%
321-60-8	2-Fluorobiphenyl	80%	36-112%
1718-51-0	Terphenyl-d14	90%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.76	210	ug/kg	J
	system artifact	3.01	440	ug/kg	J
	system artifact	3.33	310	ug/kg	J
	system artifact/aldol-condensation	3.38	1100	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	Z110617.D	1	05/12/16	AC	05/11/16	OP93791	EZ5525

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	23	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	30	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	80	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	49	ug/kg	
95-48-7	2-Methylphenol	ND	67	38	ug/kg	
	3&4-Methylphenol	ND	67	38	ug/kg	
88-75-5	2-Nitrophenol	ND	170	29	ug/kg	
100-02-7	4-Nitrophenol	ND	330	93	ug/kg	
87-86-5	Pentachlorophenol	ND	170	28	ug/kg	
108-95-2	Phenol	ND	67	26	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	43	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	48	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	37	ug/kg	
83-32-9	Acenaphthene	ND	33	6.3	ug/kg	
208-96-8	Acenaphthylene	ND	33	4.6	ug/kg	
98-86-2	Acetophenone	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	33	14	ug/kg	
1912-24-9	Atrazine	ND	67	11	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	5.1	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	8.2	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	7.0	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	8.9	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	9.5	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	19	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	9.4	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	6.3	ug/kg	
106-47-8	4-Chloroaniline	ND	170	9.5	ug/kg	
86-74-8	Carbazole	ND	67	6.5	ug/kg	
105-60-2	Caprolactam	ND	67	24	ug/kg	
218-01-9	Chrysene	ND	33	8.5	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.0	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	19	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	Z110617.D	1	05/12/16	AC	05/11/16	OP93791	EZ5525

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	8.9	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	10	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	45	ug/kg	
123-91-1	1,4-Dioxane	ND	33	14	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	13	ug/kg	
132-64-9	Dibenzofuran	ND	67	6.0	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	21	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	21	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.3	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	13	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	20	ug/kg	
67-72-1	Hexachloroethane	ND	170	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	11	ug/kg	
78-59-1	Isophorone	ND	67	7.4	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	5.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	27	ug/kg	
88-74-4	2-Nitroaniline	ND	170	24	ug/kg	
99-09-2	3-Nitroaniline	ND	170	12	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
98-95-3	Nitrobenzene	ND	67	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	15	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	19	ug/kg	
85-01-8	Phenanthrene	ND	33	8.0	ug/kg	
129-00-0	Pyrene	ND	33	5.8	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	7.5	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	Z110617.D	1	05/12/16	AC	05/11/16	OP93791	EZ5525

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	70%	30-106%
4165-62-2	Phenol-d5	71%	30-106%
118-79-6	2,4,6-Tribromophenol	83%	24-140%
4165-60-0	Nitrobenzene-d5	98%	26-122%
321-60-8	2-Fluorobiphenyl	87%	36-112%
1718-51-0	Terphenyl-d14	82%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.50	410	ug/kg	J
	system artifact	2.81	280	ug/kg	J
	system artifact/aldol-condensation	2.92	950	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	M124423.D	1	05/13/16	AD	05/11/16	OP93791	EM5264

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	23	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	30	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	80	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	49	ug/kg	
95-48-7	2-Methylphenol	ND	67	38	ug/kg	
	3&4-Methylphenol	ND	67	38	ug/kg	
88-75-5	2-Nitrophenol	ND	170	29	ug/kg	
100-02-7	4-Nitrophenol	ND	330	93	ug/kg	
87-86-5	Pentachlorophenol	ND	170	28	ug/kg	
108-95-2	Phenol	ND	67	26	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	43	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	48	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	37	ug/kg	
83-32-9	Acenaphthene	ND	33	6.3	ug/kg	
208-96-8	Acenaphthylene	ND	33	4.6	ug/kg	
98-86-2	Acetophenone	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	33	14	ug/kg	
1912-24-9	Atrazine	ND	67	11	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	5.1	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	8.2	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	7.0	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	8.9	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	9.5	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	19	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	9.4	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	6.3	ug/kg	
106-47-8	4-Chloroaniline	ND	170	9.5	ug/kg	
86-74-8	Carbazole	ND	67	6.5	ug/kg	
105-60-2	Caprolactam	ND	67	24	ug/kg	
218-01-9	Chrysene	ND	33	8.5	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.0	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	19	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	M124423.D	1	05/13/16	AD	05/11/16	OP93791	EM5264

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	8.9	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	10	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	45	ug/kg	
123-91-1	1,4-Dioxane	ND	33	14	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	13	ug/kg	
132-64-9	Dibenzofuran	ND	67	6.0	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	21	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	21	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.3	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	13	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	20	ug/kg	
67-72-1	Hexachloroethane	ND	170	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	11	ug/kg	
78-59-1	Isophorone	ND	67	7.4	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	5.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	27	ug/kg	
88-74-4	2-Nitroaniline	ND	170	24	ug/kg	
99-09-2	3-Nitroaniline	ND	170	12	ug/kg	
100-01-6	4-Nitroaniline	ND	170	13	ug/kg	
98-95-3	Nitrobenzene	ND	67	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	15	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	19	ug/kg	
85-01-8	Phenanthrene	ND	33	8.0	ug/kg	
129-00-0	Pyrene	ND	33	5.8	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	7.5	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MB1	M124423.D	1	05/13/16	AD	05/11/16	OP93791	EM5264

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	85%	30-106%
4165-62-2	Phenol-d5	82%	30-106%
118-79-6	2,4,6-Tribromophenol	100%	24-140%
4165-60-0	Nitrobenzene-d5	83%	26-122%
321-60-8	2-Fluorobiphenyl	88%	36-112%
1718-51-0	Terphenyl-d14	83%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.77	140	ug/kg	J
	system artifact	3.04	410	ug/kg	J
	system artifact	3.34	310	ug/kg	J
	system artifact/aldol-condensation	3.40	1100	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784A-MB1	3M61220.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	
123-91-1	1,4-Dioxane	ND	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	70%	24-125%
321-60-8	2-Fluorobiphenyl	79%	19-127%
1718-51-0	Terphenyl-d14	92%	10-119%

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791A-MB1	4P16280A.D	1	05/11/16	JJ	05/11/16	OP93791A	E4P857

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	3.3	0.41	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	99%	15-138%
321-60-8	2-Fluorobiphenyl	71%	12-148%
1718-51-0	Terphenyl-d14	137%	10-157%

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791A-MB1	4M65315.D	1	05/17/16	LK	05/11/16	OP93791A	E4M2922

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	3.3	0.41	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	115%	15-138%
321-60-8	2-Fluorobiphenyl	121%	12-148%
1718-51-0	Terphenyl-d14	108%	10-157%

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-BS1	M124313.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	36.9	74	48-106
59-50-7	4-Chloro-3-methyl phenol	50	34.7	69	49-113
120-83-2	2,4-Dichlorophenol	50	36.0	72	49-111
105-67-9	2,4-Dimethylphenol	50	34.3	69	42-117
51-28-5	2,4-Dinitrophenol	100	87.8	88	37-132
534-52-1	4,6-Dinitro-o-cresol	50	42.6	85	49-119
95-48-7	2-Methylphenol	50	35.3	71	42-103
	3&4-Methylphenol	50	32.6	65	39-110
88-75-5	2-Nitrophenol	50	34.7	69	49-114
100-02-7	4-Nitrophenol	50	18.4	37	16-95
87-86-5	Pentachlorophenol	50	42.7	85	30-136
108-95-2	Phenol	50	21.9	44	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	40.9	82	47-118
95-95-4	2,4,5-Trichlorophenol	50	35.9	72	55-116
88-06-2	2,4,6-Trichlorophenol	50	37.4	75	56-115
83-32-9	Acenaphthene	50	35.2	70	54-112
208-96-8	Acenaphthylene	50	32.6	65	49-99
98-86-2	Acetophenone	50	36.6	73	52-111
120-12-7	Anthracene	50	35.9	72	58-112
1912-24-9	Atrazine	50	52.4	105	62-134
100-52-7	Benzaldehyde	50	43.7	87	40-129
56-55-3	Benzo(a)anthracene	50	35.6	71	44-120
50-32-8	Benzo(a)pyrene	50	35.1	70	41-127
205-99-2	Benzo(b)fluoranthene	50	36.1	72	41-129
191-24-2	Benzo(g,h,i)perylene	50	35.2	70	34-128
207-08-9	Benzo(k)fluoranthene	50	37.4	75	42-122
101-55-3	4-Bromophenyl phenyl ether	50	42.8	86	54-121
85-68-7	Butyl benzyl phthalate	50	34.1	68	20-143
92-52-4	1,1'-Biphenyl	50	35.7	71	51-106
91-58-7	2-Chloronaphthalene	50	34.3	69	48-104
106-47-8	4-Chloroaniline	50	21.6	43	10-110
86-74-8	Carbazole	50	39.0	78	56-110
105-60-2	Caprolactam	50	10.6	21	10-110
218-01-9	Chrysene	50	35.2	70	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	34.0	68	47-117
111-44-4	bis(2-Chloroethyl)ether	50	39.6	79	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-BS1	M124313.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	33.8	68	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	37.7	75	50-117
121-14-2	2,4-Dinitrotoluene	50	38.5	77	57-122
606-20-2	2,6-Dinitrotoluene	50	38.5	77	58-122
91-94-1	3,3'-Dichlorobenzidine	100	55.3	55	10-110
123-91-1	1,4-Dioxane	50	18.7	37	10-110
53-70-3	Dibenzo(a,h)anthracene	50	36.7	73	36-130
132-64-9	Dibenzofuran	50	35.9	72	55-108
84-74-2	Di-n-butyl phthalate	50	39.3	79	45-123
117-84-0	Di-n-octyl phthalate	50	34.3	69	37-144
84-66-2	Diethyl phthalate	50	36.7	73	23-130
131-11-3	Dimethyl phthalate	50	36.9	74	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	34.1	68	36-138
206-44-0	Fluoranthene	50	39.8	80	58-116
86-73-7	Fluorene	50	36.7	73	57-113
118-74-1	Hexachlorobenzene	50	41.6	83	49-122
87-68-3	Hexachlorobutadiene	50	31.1	62	24-112
77-47-4	Hexachlorocyclopentadiene	100	46.5	47	14-119
67-72-1	Hexachloroethane	50	31.1	62	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	43.2	86	34-128
78-59-1	Isophorone	50	35.6	71	52-119
90-12-0	1-Methylnaphthalene	50	33.3	67	46-103
91-57-6	2-Methylnaphthalene	50	32.1	64	45-107
88-74-4	2-Nitroaniline	50	39.4	79	51-127
99-09-2	3-Nitroaniline	50	25.0	50	10-110
100-01-6	4-Nitroaniline	50	39.0	78	50-112
98-95-3	Nitrobenzene	50	33.4	67	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	35.3	71	49-117
86-30-6	N-Nitrosodiphenylamine	50	37.7	75	51-113
85-01-8	Phenanthrene	50	37.0	74	56-111
129-00-0	Pyrene	50	35.2	70	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	44.2	88	36-114

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-BS1	M124313.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	55%	14-88%
4165-62-2	Phenol-d5	36%	10-110%
118-79-6	2,4,6-Tribromophenol	96%	39-149%
4165-60-0	Nitrobenzene-d5	68%	32-128%
321-60-8	2-Fluorobiphenyl	75%	35-119%
1718-51-0	Terphenyl-d14	76%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-BS1	6P25846.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1340	80	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1490	89	52-107
120-83-2	2,4-Dichlorophenol	1670	1390	83	53-105
105-67-9	2,4-Dimethylphenol	1670	1550	93	49-115
51-28-5	2,4-Dinitrophenol	3330	2910	87	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1480	89	41-114
95-48-7	2-Methylphenol	1670	1380	83	53-103
	3&4-Methylphenol	1670	1380	83	53-102
88-75-5	2-Nitrophenol	1670	1530	92	52-104
100-02-7	4-Nitrophenol	1670	1340	80	36-143
87-86-5	Pentachlorophenol	1670	1210	73	29-128
108-95-2	Phenol	1670	1320	79	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1210	73	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1360	82	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1430	86	57-108
83-32-9	Acenaphthene	1670	1490	89	60-108
208-96-8	Acenaphthylene	1670	1500	90	54-94
98-86-2	Acetophenone	1670	1420	85	53-110
120-12-7	Anthracene	1670	1440	86	59-109
1912-24-9	Atrazine	1670	1610	97	59-126
56-55-3	Benzo(a)anthracene	1670	1460	88	52-113
50-32-8	Benzo(a)pyrene	1670	1530	92	56-122
205-99-2	Benzo(b)fluoranthene	1670	1640	98	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1470	88	48-117
207-08-9	Benzo(k)fluoranthene	1670	1550	93	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1550	93	58-114
85-68-7	Butyl benzyl phthalate	1670	1780	107	44-132
92-52-4	1,1'-Biphenyl	1670	1410	85	54-101
100-52-7	Benzaldehyde	1670	1250	75	39-117
91-58-7	2-Chloronaphthalene	1670	1400	84	54-103
106-47-8	4-Chloroaniline	1670	765	46	10-110
86-74-8	Carbazole	1670	1600	96	55-105
105-60-2	Caprolactam	1670	1300	78	42-111
218-01-9	Chrysene	1670	1320	79	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1270	76	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1350	81	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-BS1	6P25846.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	1260	76	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1350	81	54-112
121-14-2	2,4-Dinitrotoluene	1670	1790	107	56-116
606-20-2	2,6-Dinitrotoluene	1670	1750	105	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	2630	79	22-103
123-91-1	1,4-Dioxane	1670	702	42	14-110
53-70-3	Dibenzo(a,h)anthracene	1670	1620	97	49-118
132-64-9	Dibenzofuran	1670	1500	90	55-103
84-74-2	Di-n-butyl phthalate	1670	1760	106	56-117
117-84-0	Di-n-octyl phthalate	1670	1950	117	47-137
84-66-2	Diethyl phthalate	1670	1610	97	54-112
131-11-3	Dimethyl phthalate	1670	1480	89	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1780	107	45-130
206-44-0	Fluoranthene	1670	1480	89	58-110
86-73-7	Fluorene	1670	1530	92	59-108
118-74-1	Hexachlorobenzene	1670	1650	99	55-114
87-68-3	Hexachlorobutadiene	1670	1360	82	44-118
77-47-4	Hexachlorocyclopentadiene	3330	2490	75	41-137
67-72-1	Hexachloroethane	1670	1260	76	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1770	106	48-120
78-59-1	Isophorone	1670	1390	83	54-109
90-12-0	1-Methylnaphthalene	1670	1510	91	50-110
91-57-6	2-Methylnaphthalene	1670	1520	91	48-104
88-74-4	2-Nitroaniline	1670	1540	92	49-124
99-09-2	3-Nitroaniline	1670	1230	74	22-110
100-01-6	4-Nitroaniline	1670	1540	92	50-107
98-95-3	Nitrobenzene	1670	1340	80	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1300	78	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1530	92	53-112
85-01-8	Phenanthrene	1670	1470	88	57-105
129-00-0	Pyrene	1670	1480	89	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1260	76	52-109

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-BS1	6P25846.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	78%	30-106%
4165-62-2	Phenol-d5	77%	30-106%
118-79-6	2,4,6-Tribromophenol	116%	24-140%
4165-60-0	Nitrobenzene-d5	82%	26-122%
321-60-8	2-Fluorobiphenyl	90%	36-112%
1718-51-0	Terphenyl-d14	94%	36-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784A-BS12	3M61221.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.646	65	40-119
123-91-1	1,4-Dioxane	1	0.494	49	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	68%	24-125%
321-60-8	2-Fluorobiphenyl	77%	19-127%
1718-51-0	Terphenyl-d14	85%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791A-BS12	4P16281.D	1	05/11/16	JJ	05/11/16	OP93791A	E4P857

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
91-20-3	Naphthalene	33.3	37.7	113	35-142

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	102%	15-138%
321-60-8	2-Fluorobiphenyl	49%	12-148%
1718-51-0	Terphenyl-d14	124%	10-157%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-MS	M124314.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
OP93784-MSD	M124315.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
JC19914-1	M124316.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
JC19914-1	M124343.D	100	05/11/16	AD	05/10/16	OP93784	EM5260

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	JC19914-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		111	84.5	76	111	87.2	78	3	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		111	78.1	70	111	75.4	68	4	44-121/18
120-83-2	2,4-Dichlorophenol	ND		111	80.5	72	111	80.4	72	0	42-120/19
105-67-9	2,4-Dimethylphenol	ND		111	79.5	72	111	78.7	71	1	33-132/23
51-28-5	2,4-Dinitrophenol	ND		222	211	95	222	210	95	0	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		111	98.1	88	111	95.7	86	2	25-134/27
95-48-7	2-Methylphenol	ND		111	86.4	78	111	88.3	79	2	47-112/18
	3&4-Methylphenol	ND		111	85.1	77	111	85.6	77	1	44-113/19
88-75-5	2-Nitrophenol	ND		111	76.3	69	111	77.6	70	2	45-118/20
100-02-7	4-Nitrophenol	ND		111	65.7	59	111	63.5	57	3	23-144/28
87-86-5	Pentachlorophenol	ND		111	107	96	111	105	95	2	25-151/25
108-95-2	Phenol	ND		111	73.7	66	111	75.0	68	2	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		111	90.1	81	111	90.8	82	1	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		111	79.1	71	111	76.5	69	3	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		111	82.8	75	111	81.5	73	2	53-120/21
83-32-9	Acenaphthene	ND		111	78.4	71	111	78.0	70	1	52-120/23
208-96-8	Acenaphthylene	ND		111	73.0	66	111	72.3	65	1	50-101/22
98-86-2	Acetophenone	ND		111	79.7	72	111	83.3	75	4	31-141/23
120-12-7	Anthracene	ND		111	78.1	70	111	76.9	69	2	54-117/22
1912-24-9	Atrazine	ND		111	112	101	111	109	98	3	42-152/23
100-52-7	Benzaldehyde	ND		111	97.7	88	111	104	94	6	10-164/30
56-55-3	Benzo(a)anthracene	ND		111	74.9	67	111	74.6	67	0	40-123/24
50-32-8	Benzo(a)pyrene	ND		111	71.0	64	111	71.8	65	1	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		111	74.4	67	111	74.0	67	1	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		111	66.7	60	111	71.0	64	6	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		111	76.2	69	111	75.6	68	1	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		111	91.0	82	111	90.7	82	0	51-124/23
85-68-7	Butyl benzyl phthalate	ND		111	72.0	65	111	70.6	64	2	21-146/28
92-52-4	1,1'-Biphenyl	ND		111	79.6	72	111	79.6	72	0	27-142/23
91-58-7	2-Chloronaphthalene	ND		111	76.0	68	111	76.4	69	1	51-109/23
106-47-8	4-Chloroaniline	ND		111	44.5	40	111	42.4	38	5	10-110/55
86-74-8	Carbazole	ND		111	85.4	77	111	84.1	76	2	52-116/22
105-60-2	Caprolactam	ND		111	50.3	45	111	46.8	42	7	10-106/34
218-01-9	Chrysene	ND		111	72.6	65	111	72.3	65	0	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		111	74.0	67	111	74.7	67	1	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		111	85.3	77	111	89.1	80	4	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-MS	M124314.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
OP93784-MSD	M124315.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
JC19914-1	M124316.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
JC19914-1	M124343.D	100	05/11/16	AD	05/10/16	OP93784	EM5260

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	JC19914-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		111	73.1	66	111	76.7	69	5	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		111	82.6	74	111	83.1	75	1	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		111	84.6	76	111	83.9	76	1	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		111	85.8	77	111	84.3	76	2	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		222	52.1	23	222	45.9	21	13	10-107/47
123-91-1	1,4-Dioxane	3420	b	111	3090	648*	a 111	3260	801*	a 5	10-119/31
53-70-3	Dibenzo(a,h)anthracene	ND		111	71.1	64	111	72.8	66	2	35-130/27
132-64-9	Dibenzofuran	ND		111	79.6	72	111	79.6	72	0	53-112/22
84-74-2	Di-n-butyl phthalate	ND		111	79.8	72	111	81.8	74	2	38-129/23
117-84-0	Di-n-octyl phthalate	ND		111	71.8	65	111	68.6	62	5	35-145/26
84-66-2	Diethyl phthalate	ND		111	79.8	72	111	79.4	71	1	16-136/30
131-11-3	Dimethyl phthalate	ND		111	82.1	74	111	80.5	72	2	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		111	70.8	64	111	69.7	63	2	34-141/28
206-44-0	Fluoranthene	ND		111	83.3	75	111	82.2	74	1	47-123/24
86-73-7	Fluorene	ND		111	80.1	72	111	80.6	73	1	56-117/22
118-74-1	Hexachlorobenzene	ND		111	88.0	79	111	87.2	78	1	46-125/24
87-68-3	Hexachlorobutadiene	ND		111	68.5	62	111	69.7	63	2	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		222	116	52	222	116	52	0	10-133/31
67-72-1	Hexachloroethane	ND		111	69.2	62	111	71.5	64	3	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		111	82.7	74	111	86.4	78	4	32-130/30
78-59-1	Isophorone	ND		111	78.0	70	111	78.3	70	0	47-126/23
90-12-0	1-Methylnaphthalene	ND		111	73.7	66	111	73.9	67	0	34-124/25
91-57-6	2-Methylnaphthalene	ND		111	70.2	63	111	70.1	63	0	34-123/24
88-74-4	2-Nitroaniline	ND		111	85.3	77	111	84.4	76	1	46-137/23
99-09-2	3-Nitroaniline	ND		111	52.6	47	111	51.4	46	2	10-110/50
100-01-6	4-Nitroaniline	ND		111	82.1	74	111	78.4	71	5	38-118/25
98-95-3	Nitrobenzene	ND		111	74.0	67	111	74.9	67	1	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		111	76.2	69	111	78.7	71	3	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		111	75.2	68	111	75.3	68	0	46-123/24
85-01-8	Phenanthrene	ND		111	80.5	72	111	79.4	71	1	48-121/23
129-00-0	Pyrene	ND		111	77.9	70	111	76.3	69	2	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		111	97.6	88	111	99.1	89	2	25-142/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784-MS	M124314.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
OP93784-MSD	M124315.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
JC19914-1	M124316.D	1	05/11/16	JJ	05/10/16	OP93784	EM5259
JC19914-1	M124343.D	100	05/11/16	AD	05/10/16	OP93784	EM5260

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Surrogate Recoveries	MS	MSD	JC19914-1	JC19914-1	Limits
367-12-4	2-Fluorophenol	71%	72%	41%	0%* c	14-88%
4165-62-2	Phenol-d5	60%	60%	33%	0%* c	10-110%
118-79-6	2,4,6-Tribromophenol	94%	94%	87%	0%* c	39-149%
4165-60-0	Nitrobenzene-d5	66%	68%	70%	0%* c	32-128%
321-60-8	2-Fluorobiphenyl	73%	74%	69%	0%* c	35-119%
1718-51-0	Terphenyl-d14	73%	71%	69%	0%* c	10-126%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.
(c) Outside control limits due to dilution.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MS	6P25848.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206
OP93791-MSD	6P25849.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206
JC19914-2	6P25850.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	JC19914-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		2500	1510	60	2420	1400	58	8	33-106/35
59-50-7	4-Chloro-3-methyl phenol	ND		2500	1620	65	2420	1580	65	3	27-124/34
120-83-2	2,4-Dichlorophenol	ND		2500	1550	62	2420	1480	61	5	25-122/34
105-67-9	2,4-Dimethylphenol	ND		2500	1870	75	2420	1720	71	8	23-133/34
51-28-5	2,4-Dinitrophenol	ND		5000	355	7* [a]	4840	365	8* [a]	3	10-110/51
534-52-1	4,6-Dinitro-o-cresol	ND		2500	242	10	2420	278	11	14	10-113/49
95-48-7	2-Methylphenol	ND		2500	1630	65	2420	1480	61	10	32-111/34
	3&4-Methylphenol	ND		2500	1600	64	2420	1500	62	6	32-113/34
88-75-5	2-Nitrophenol	ND		2500	214	9* [a]	2420	277	11* [a]	26	17-118/37
100-02-7	4-Nitrophenol	ND		2500	286	11* [a]	2420	362	15	23	14-154/39
87-86-5	Pentachlorophenol	ND		2500	1100	44	2420	1010	42	9	10-131/43
108-95-2	Phenol	ND		2500	1470	59	2420	1400	58	5	25-112/33
58-90-2	2,3,4,6-Tetrachlorophenol	ND		2500	1290	52	2420	1230	51	5	19-125/37
95-95-4	2,4,5-Trichlorophenol	ND		2500	1490	60	2420	1420	59	5	30-125/35
88-06-2	2,4,6-Trichlorophenol	ND		2500	1600	64	2420	1500	62	6	26-126/35
83-32-9	Acenaphthene	ND		2500	1690	68	2420	1580	65	7	34-125/36
208-96-8	Acenaphthylene	ND		2500	1630	65	2420	1580	65	3	28-113/34
98-86-2	Acetophenone	ND		2500	1640	66	2420	1490	62	10	26-120/34
120-12-7	Anthracene	ND		2500	1550	62	2420	1550	64	0	31-131/41
1912-24-9	Atrazine	ND		2500	1730	69	2420	1720	71	1	34-138/36
56-55-3	Benzo(a)anthracene	ND		2500	1530	61	2420	1530	63	0	23-136/43
50-32-8	Benzo(a)pyrene	ND		2500	1520	61	2420	1560	65	3	22-144/42
205-99-2	Benzo(b)fluoranthene	ND		2500	1610	64	2420	1630	67	1	18-145/43
191-24-2	Benzo(g,h,i)perylene	ND		2500	1560	62	2420	1570	65	1	20-138/43
207-08-9	Benzo(k)fluoranthene	ND		2500	1630	65	2420	1660	69	2	27-129/43
101-55-3	4-Bromophenyl phenyl ether	ND		2500	1690	68	2420	1650	68	2	39-124/33
85-68-7	Butyl benzyl phthalate	ND		2500	1920	77	2420	1880	78	2	27-143/35
92-52-4	1,1'-Biphenyl	ND		2500	1630	65	2420	1510	62	8	33-116/32
100-52-7	Benzaldehyde	ND		2500	1540	62	2420	1390	57	10	20-129/34
91-58-7	2-Chloronaphthalene	ND		2500	1640	66	2420	1510	62	8	38-110/32
106-47-8	4-Chloroaniline	ND		2500	387	15	2420	995	41	88* [b]	10-110/49
86-74-8	Carbazole	ND		2500	1670	67	2420	1700	70	2	27-129/38
105-60-2	Caprolactam	ND		2500	1140	46	2420	1070	44	6	18-127/35
218-01-9	Chrysene	ND		2500	1410	56	2420	1410	58	0	21-142/43
111-91-1	bis(2-Chloroethoxy)methane	ND		2500	1350	54	2420	1290	53	5	32-116/33
111-44-4	bis(2-Chloroethyl)ether	ND		2500	1800	72	2420	1410	58	24	30-113/37

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MS	6P25848.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206
OP93791-MSD	6P25849.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206
JC19914-2	6P25850.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	JC19914-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		2500	1440	58	2420	1340	55	7	28-110/33
7005-72-3	4-Chlorophenyl phenyl ether	ND		2500	1500	60	2420	1430	59	5	38-119/33
121-14-2	2,4-Dinitrotoluene	ND		2500	320	13* [a]	2420	395	16* [a]	21	28-126/36
606-20-2	2,6-Dinitrotoluene	ND		2500	328	13* [a]	2420	412	17* [a]	23	31-126/34
91-94-1	3,3'-Dichlorobenzidine	ND		5000	2310	46	4840	3110	64	30	10-115/44
123-91-1	1,4-Dioxane	166		2500	1010	40	2420	861	36	16	10-110/38
53-70-3	Dibenzo(a,h)anthracene	ND		2500	1680	67	2420	1690	70	1	25-135/41
132-64-9	Dibenzofuran	ND		2500	1720	69	2420	1610	67	7	30-125/35
84-74-2	Di-n-butyl phthalate	ND		2500	1880	75	2420	1850	77	2	32-131/34
117-84-0	Di-n-octyl phthalate	ND		2500	1890	76	2420	1920	79	2	28-144/35
84-66-2	Diethyl phthalate	ND		2500	1740	70	2420	1690	70	3	35-124/32
131-11-3	Dimethyl phthalate	ND		2500	1650	66	2420	1570	65	5	36-121/33
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2500	1860	74	2420	1820	75	2	25-146/35
206-44-0	Fluoranthene	ND		2500	1580	63	2420	1570	65	1	15-143/46
86-73-7	Fluorene	ND		2500	1730	69	2420	1640	68	5	30-129/37
118-74-1	Hexachlorobenzene	ND		2500	1840	74	2420	1750	72	5	34-125/34
87-68-3	Hexachlorobutadiene	ND		2500	1550	62	2420	1410	58	9	29-120/34
77-47-4	Hexachlorocyclopentadiene	ND		5000	272	5* [a]	4840	230	5* [a]	17	10-127/46
67-72-1	Hexachloroethane	ND		2500	473	19* [a]	2420	512	21	8	21-109/38
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2500	2070	83	2420	2120	88	2	23-141/44
78-59-1	Isophorone	ND		2500	1600	64	2420	1430	59	11	31-124/32
90-12-0	1-Methylnaphthalene	ND		2500	1750	70	2420	1620	67	8	24-122/33
91-57-6	2-Methylnaphthalene	ND		2500	1760	70	2420	1620	67	8	21-125/33
88-74-4	2-Nitroaniline	ND		2500	380	15* [a]	2420	483	20* [a]	24	29-138/33
99-09-2	3-Nitroaniline	ND		2500	91.7	4* [a]	2420	349	14	117* [b]	12-112/38
100-01-6	4-Nitroaniline	ND		2500	96.6	4* [a]	2420	427	18* [a]	126* [b]	21-117/38
98-95-3	Nitrobenzene	ND		2500	297	12* [a]	2420	378	16* [a]	24	28-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		2500	1490	60	2420	1370	57	8	26-121/34
86-30-6	N-Nitrosodiphenylamine	ND		2500	1660	66	2420	1650	68	1	24-142/35
85-01-8	Phenanthrene	ND		2500	1670	67	2420	1660	69	1	14-144/44
129-00-0	Pyrene	ND		2500	1670	67	2420	1650	68	1	16-147/46
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		2500	1470	59	2420	1340	55	9	37-115/32

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791-MS	6P25848.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206
OP93791-MSD	6P25849.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206
JC19914-2	6P25850.D	1	05/11/16	AC	05/11/16	OP93791	E6P1206

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC19914-2, JC19914-6, JC19914-7

CAS No.	Surrogate Recoveries	MS	MSD	JC19914-2	Limits
367-12-4	2-Fluorophenol	58%	56%	60%	30-106%
4165-62-2	Phenol-d5	59%	57%	59%	30-106%
118-79-6	2,4,6-Tribromophenol	82%	80%	81%	24-140%
4165-60-0	Nitrobenzene-d5	12%* [a]	16%* [a]	15%* [c]	26-122%
321-60-8	2-Fluorobiphenyl	69%	66%	69%	36-112%
1718-51-0	Terphenyl-d14	70%	69%	76%	36-132%

(a) Outside control limits due to matrix interference.
(b) Outside of in house control limits.
(c) Outside control limits due to matrix interference, confirmed by MS/MSD.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93784A-MS	3M61226.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879
OP93784A-MSD	3M61227.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879
JC19914-3	3M61225.D	1	05/11/16	LK	05/10/16	OP93784A	E3M2879

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	JC19914-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	ND		2.17	2.08	96	2.17	2.15	99	3	23-140/36
123-91-1	1,4-Dioxane	1810	E	2.17	2590	35880*	[a]2.17	2860	48300*	[a]10	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19914-3	Limits
4165-60-0	Nitrobenzene-d5	72%	74%	75%	24-125%
321-60-8	2-Fluorobiphenyl	74%	75%	73%	19-127%
1718-51-0	Terphenyl-d14	89%	95%	85%	10-119%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93791A-MS	4P16282.D	1	05/11/16	JJ	05/11/16	OP93791A	E4P857
OP93791A-MSD	4P16283.D	1	05/11/16	JJ	05/11/16	OP93791A	E4P857
JC19914-2	4P16286.D	1	05/11/16	JJ	05/11/16	OP93791A	E4P857

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC19914-2, JC19914-6, JC19914-7

CAS No.	Compound	JC19914-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	6.82		49.6	45.8	79	48.2	44.7	79	2	10-190/36

CAS No.	Surrogate Recoveries	MS	MSD	JC19914-2	Limits
4165-60-0	Nitrobenzene-d5	37%	20%	19%	15-138%
321-60-8	2-Fluorobiphenyl	44%	37%	37%	12-148%
1718-51-0	Terphenyl-d14	83%	79%	87%	10-157%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2855-DFTPP
Lab File ID: 3M60762.D
Instrument ID: GCMS3M
Injection Date: 04/21/16
Injection Time: 13:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	238296	36.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	313116	47.6		Pass
70	Less than 2.0% of mass 69	3204	0.49	(1.02) [a]	Pass
127	40.0 - 60.0% of mass 198	329840	50.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	657712	100.0		Pass
199	5.0 - 9.0% of mass 198	45100	6.86		Pass
275	10.0 - 30.0% of mass 198	145467	22.1		Pass
365	1.0 - 100.0% of mass 198	14264	2.17		Pass
441	Present, but less than mass 443	68134	10.4	(81.8) [b]	Pass
442	40.0 - 100.0% of mass 198	425304	64.7		Pass
443	17.0 - 23.0% of mass 442	83298	12.7	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E3M2855-ICC2855	3M60763A.D	04/21/16	14:34	01:03	Initial cal 1
E3M2855-IC2855	3M60764A.D	04/21/16	15:07	01:36	Initial cal 0.5
E3M2855-IC2855	3M60765A.D	04/21/16	15:39	02:08	Initial cal 0.2
E3M2855-IC2855	3M60766.D	04/21/16	16:12	02:41	Initial cal 0.1
E3M2855-IC2855	3M60767.D	04/21/16	16:44	03:13	Initial cal 0.05
E3M2855-IC2855	3M60768.D	04/21/16	17:17	03:46	Initial cal 0.02
E3M2855-IC2855	3M60769.D	04/21/16	17:49	04:18	Initial cal 0.01
E3M2855-IC2855	3M60770.D	04/21/16	18:22	04:51	Initial cal 5.0
E3M2855-IC2855	3M60771.D	04/21/16	18:55	05:24	Initial cal 2.5
E3M2855-ICV2855	3M60772.D	04/21/16	19:27	05:56	Initial cal verification 1.0
E3M2855-ICV2855	3M60773.D	04/21/16	20:00	06:29	Initial cal verification 1.0
E3M2855-ICV2855	3M60774.D	04/21/16	20:35	07:04	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2879-DFTPP
Lab File ID: 3M61218.D
Instrument ID: GCMS3M
Injection Date: 05/11/16
Injection Time: 09:26

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	295679	38.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	388036	50.0		Pass
70	Less than 2.0% of mass 69	2536	0.33	(0.65) [a]	Pass
127	40.0 - 60.0% of mass 198	392725	50.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	775509	100.0		Pass
199	5.0 - 9.0% of mass 198	55163	7.11		Pass
275	10.0 - 30.0% of mass 198	185147	23.9		Pass
365	1.0 - 100.0% of mass 198	19936	2.57		Pass
441	Present, but less than mass 443	104957	13.5	(88.5) [b]	Pass
442	40.0 - 100.0% of mass 198	619115	79.8		Pass
443	17.0 - 23.0% of mass 442	118619	15.3	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E3M2879-CC2855	3M61219.D	05/11/16	09:41	00:15	Continuing cal .5
OP93784A-MB1	3M61220.D	05/11/16	10:17	00:51	Method Blank
OP93784A-BS12	3M61221.D	05/11/16	10:50	01:24	Blank Spike
JC19914-4	3M61222.D	05/11/16	11:22	01:56	S-41S
JC19914-5	3M61223.D	05/11/16	11:54	02:28	S-41SD
JC19914-1	3M61224.D	05/11/16	12:27	03:01	RA6-GWD
JC19914-3	3M61225.D	05/11/16	12:59	03:33	RA-5 GWS
OP93784A-MS	3M61226.D	05/11/16	13:32	04:06	Matrix Spike
OP93784A-MSD	3M61227.D	05/11/16	14:05	04:39	Matrix Spike Duplicate
OP93677A-MSD	3M61228.D	05/11/16	14:37	05:11	Matrix Spike Duplicate
ZZZZZZ	3M61229.D	05/11/16	15:09	05:43	(unrelated sample)
ZZZZZZ	3M61230.D	05/11/16	15:42	06:16	(unrelated sample)
OP93802A-MB1	3M61231.D	05/11/16	16:15	06:49	Method Blank
OP93802A-BS12	3M61232.D	05/11/16	16:47	07:21	Blank Spike
OP93802A-MS	3M61233.D	05/11/16	17:20	07:54	Matrix Spike
OP93802A-MSD	3M61234.D	05/11/16	17:53	08:27	Matrix Spike Duplicate
JC19921-10	3M61235.D	05/11/16	18:26	09:00	(used for QC only; not part of job JC19914)
OP93801A-MB1	3M61236.D	05/11/16	18:58	09:32	Method Blank
OP93801A-BS12	3M61237.D	05/11/16	19:31	10:05	Blank Spike

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2879-DFTPP
Lab File ID: 3M61218.D
Instrument ID: GCMS3M
Injection Date: 05/11/16
Injection Time: 09:26

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP93801A-MS	3M61238.D	05/11/16	20:04	10:38	Matrix Spike
OP93801A-MSD	3M61239.D	05/11/16	20:37	11:11	Matrix Spike Duplicate
ZZZZZZ	3M61240.D	05/11/16	21:09	11:43	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2881-DFTPP
Lab File ID: 4M64720.D
Instrument ID: GCMS4M
Injection Date: 04/14/16
Injection Time: 09:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	258280	36.3		Pass
68	Less than 2.0% of mass 69	4287	0.60	(1.59) [a]	Pass
69	Mass 69 relative abundance	268929	37.8		Pass
70	Less than 2.0% of mass 69	2537	0.36	(0.94) [a]	Pass
127	40.0 - 60.0% of mass 198	305536	42.9		Pass
197	Less than 1.0% of mass 198	4427	0.62		Pass
198	Base peak, 100% relative abundance	711488	100.0		Pass
199	5.0 - 9.0% of mass 198	46648	6.56		Pass
275	10.0 - 30.0% of mass 198	177016	24.9		Pass
365	1.0 - 100.0% of mass 198	24255	3.41		Pass
441	Present, but less than mass 443	100995	14.2	(77.5) [b]	Pass
442	40.0 - 100.0% of mass 198	687531	96.6		Pass
443	17.0 - 23.0% of mass 442	130315	18.3	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E4M2881-IC2881	4M64723A.D	04/14/16	10:42	01:37	Initial cal 0.5
E4M2881-ICC2881	4M64724.D	04/14/16	11:13	02:08	Initial cal 1.0
E4M2881-IC2881	4M64725.D	04/14/16	11:44	02:39	Initial cal 0.2
E4M2881-IC2881	4M64726.D	04/14/16	12:15	03:10	Initial cal 0.1
E4M2881-IC2881	4M64727.D	04/14/16	12:45	03:40	Initial cal 0.05
E4M2881-IC2881	4M64728.D	04/14/16	13:16	04:11	Initial cal 0.02
E4M2881-IC2881	4M64729.D	04/14/16	13:48	04:43	Initial cal 0.01
E4M2881-IC2881	4M64730.D	04/14/16	14:20	05:15	Initial cal 5.0
E4M2881-IC2881	4M64731.D	04/14/16	14:53	05:48	Initial cal 2.5
E4M2881-ICV2881	4M64732.D	04/14/16	15:25	06:20	Initial cal verification 1.0
E4M2881-ICV2881	4M64733.D	04/14/16	15:57	06:52	Initial cal verification 1.0
E4M2881-ICV2881	4M64734.D	04/14/16	16:28	07:23	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2922-DFTPP
Lab File ID: 4M65313.D
Instrument ID: GCMS4M
Injection Date: 05/17/16
Injection Time: 09:58

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	239845	44.1		Pass
68	Less than 2.0% of mass 69	2358	0.43	(1.03) [a]	Pass
69	Mass 69 relative abundance	229434	42.2		Pass
70	Less than 2.0% of mass 69	848	0.16	(0.37) [a]	Pass
127	40.0 - 60.0% of mass 198	245955	45.2		Pass
197	Less than 1.0% of mass 198	3100	0.57		Pass
198	Base peak, 100% relative abundance	543979	100.0		Pass
199	5.0 - 9.0% of mass 198	37261	6.85		Pass
275	10.0 - 30.0% of mass 198	130272	23.9		Pass
365	1.0 - 100.0% of mass 198	19155	3.52		Pass
441	Present, but less than mass 443	71853	13.2	(77.5) [b]	Pass
442	40.0 - 100.0% of mass 198	467093	85.9		Pass
443	17.0 - 23.0% of mass 442	92757	17.1	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E4M2922-CC2881	4M65314.D	05/17/16	10:09	00:11	Continuing cal .5
OP93791A-MB1	4M65315.D	05/17/16	10:50	00:52	Method Blank
JC19914-6	4M65316.D	05/17/16	11:20	01:22	RA-5 (5.5-6.5)
JC19914-7	4M65317.D	05/17/16	11:50	01:52	RA-5 (9-10)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P850-DFTPP
Lab File ID: 4P16219.D
Instrument ID: GCMS4P
Injection Date: 04/28/16
Injection Time: 16:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22319	45.3		Pass
68	Less than 2.0% of mass 69	35	0.07	(0.14) [a]	Pass
69	Mass 69 relative abundance	25111	51.0		Pass
70	Less than 2.0% of mass 69	202	0.41	(0.80) [a]	Pass
127	40.0 - 60.0% of mass 198	25458	51.7		Pass
197	Less than 1.0% of mass 198	150	0.30		Pass
198	Base peak, 100% relative abundance	49264	100.0		Pass
199	5.0 - 9.0% of mass 198	3475	7.05		Pass
275	10.0 - 30.0% of mass 198	10955	22.2		Pass
365	1.0 - 100.0% of mass 198	1108	2.25		Pass
441	Present, but less than mass 443	3342	6.78	(52.3) [b]	Pass
442	40.0 - 100.0% of mass 198	33347	67.7		Pass
443	17.0 - 23.0% of mass 442	6388	13.0	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E4P850-ICC850	4P16220.D	04/28/16	16:22	00:18	Initial cal 1.0
E4P850-IC850	4P16221.D	04/28/16	16:56	00:52	Initial cal 0.5
E4P850-IC850	4P16222.D	04/28/16	17:26	01:22	Initial cal 0.2
E4P850-IC850	4P16223.D	04/28/16	17:56	01:52	Initial cal 0.1
E4P850-IC850	4P16224.D	04/28/16	18:25	02:21	Initial cal 0.05
E4P850-IC850	4P16225.D	04/28/16	18:55	02:51	Initial cal 0.02
E4P850-IC850	4P16226.D	04/28/16	19:24	03:20	Initial cal 0.01
E4P850-IC850	4P16227.D	04/28/16	19:54	03:50	Initial cal 5.0
E4P850-IC850	4P16228.D	04/28/16	20:23	04:19	Initial cal 2.5
E4P850-ICV850	4P16229.D	04/28/16	20:53	04:49	Initial cal verification 1.0
E4P850-ICV850	4P16231.D	04/28/16	21:52	05:48	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P854-DFTPP
Lab File ID: 4P16258.D
Instrument ID: GCMS4P
Injection Date: 05/09/16
Injection Time: 16:56

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	82033	54.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	90132	60.4		Pass
70	Less than 2.0% of mass 69	540	0.36	(0.60) [a]	Pass
127	40.0 - 60.0% of mass 198	80224	53.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	149346	100.0		Pass
199	5.0 - 9.0% of mass 198	10341	6.92		Pass
275	10.0 - 30.0% of mass 198	31946	21.4		Pass
365	1.0 - 100.0% of mass 198	3642	2.44		Pass
441	Present, but less than mass 443	15102	10.1	(88.5) [b]	Pass
442	40.0 - 100.0% of mass 198	91866	61.5		Pass
443	17.0 - 23.0% of mass 442	17067	11.4	(18.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E4P854-ICV850	4P16259.D	05/09/16	17:20	00:24	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P857-DFTPP
Lab File ID: 4P16278.D
Instrument ID: GCMS4P
Injection Date: 05/11/16
Injection Time: 15:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33548	47.0		Pass
68	Less than 2.0% of mass 69	180	0.25	(0.47) [a]	Pass
69	Mass 69 relative abundance	38603	54.0		Pass
70	Less than 2.0% of mass 69	272	0.38	(0.70) [a]	Pass
127	40.0 - 60.0% of mass 198	36171	50.6		Pass
197	Less than 1.0% of mass 198	377	0.53		Pass
198	Base peak, 100% relative abundance	71440	100.0		Pass
199	5.0 - 9.0% of mass 198	4680	6.55		Pass
275	10.0 - 30.0% of mass 198	15324	21.5		Pass
365	1.0 - 100.0% of mass 198	1836	2.57		Pass
441	Present, but less than mass 443	7398	10.4	(82.0) [b]	Pass
442	40.0 - 100.0% of mass 198	48472	67.8		Pass
443	17.0 - 23.0% of mass 442	9017	12.6	(18.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E4P857-CC850	4P16279.D	05/11/16	15:57	00:16	Continuing cal 0.5
OP93791A-MB1	4P16280A.D	05/11/16	17:10	01:29	Method Blank
OP93791A-BS12	4P16281.D	05/11/16	17:40	01:59	Blank Spike
OP93791A-MS	4P16282.D	05/11/16	18:11	02:30	Matrix Spike
OP93791A-MSD	4P16283.D	05/11/16	18:41	03:00	Matrix Spike Duplicate
JC19914-2	4P16286.D	05/11/16	19:11	03:30	RA-6 (6-7)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1155-DFTPP
Lab File ID: 6P24811.D
Instrument ID: GCMS6P
Injection Date: 04/05/16
Injection Time: 16:34

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	48460	47.2		Pass
68	Less than 2.0% of mass 69	223	0.22	(0.45) [a]	Pass
69	Mass 69 relative abundance	50030	48.8		Pass
70	Less than 2.0% of mass 69	440	0.43	(0.88) [a]	Pass
127	40.0 - 60.0% of mass 198	51010	49.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	102584	100.0		Pass
199	5.0 - 9.0% of mass 198	7012	6.84		Pass
275	10.0 - 30.0% of mass 198	25214	24.6		Pass
365	1.0 - 100.0% of mass 198	3390	3.30		Pass
441	Present, but less than mass 443	13622	13.3	(80.3) [b]	Pass
442	40.0 - 100.0% of mass 198	87869	85.7		Pass
443	17.0 - 23.0% of mass 442	16959	16.5	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E6P1155-IC1155	6P24812.D	04/05/16	16:46	00:12	Initial cal 2
E6P1155-IC1155	6P24813.D	04/05/16	17:14	00:40	Initial cal 1
E6P1155-IC1155	6P24814.D	04/05/16	17:41	01:07	Initial cal 100
E6P1155-IC1155	6P24815.D	04/05/16	18:09	01:35	Initial cal 80
E6P1155-IC1155	6P24816.D	04/05/16	18:36	02:02	Initial cal 25
E6P1155-IC1155	6P24817.D	04/05/16	19:04	02:30	Initial cal 10
E6P1155-IC1155	6P24818.D	04/05/16	19:31	02:57	Initial cal 5
E6P1155-ICC1155	6P24819A.D	04/05/16	20:15	03:41	Initial cal 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1156-DFTPP
Lab File ID: 6P24822.D
Instrument ID: GCMS6P
Injection Date: 04/05/16
Injection Time: 21:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	46348	45.6		Pass
68	Less than 2.0% of mass 69	918	0.90	(1.89) [a]	Pass
69	Mass 69 relative abundance	48667	47.9		Pass
70	Less than 2.0% of mass 69	179	0.18	(0.37) [a]	Pass
127	40.0 - 60.0% of mass 198	50835	50.0		Pass
197	Less than 1.0% of mass 198	476	0.47		Pass
198	Base peak, 100% relative abundance	101653	100.0		Pass
199	5.0 - 9.0% of mass 198	6994	6.88		Pass
275	10.0 - 30.0% of mass 198	25561	25.1		Pass
365	1.0 - 100.0% of mass 198	3422	3.37		Pass
441	Present, but less than mass 443	12914	12.7	(72.8) [b]	Pass
442	40.0 - 100.0% of mass 198	88746	87.3		Pass
443	17.0 - 23.0% of mass 442	17735	17.4	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E6P1156-IC1156	6P24823.D	04/05/16	21:30	00:11	Initial cal 100
E6P1156-IC1156	6P24824.D	04/05/16	22:01	00:42	Initial cal 80
E6P1156-ICC1156	6P24825.D	04/05/16	22:28	01:09	Initial cal 50
E6P1156-IC1156	6P24826.D	04/05/16	22:55	01:36	Initial cal 25
E6P1156-IC1156	6P24827.D	04/05/16	23:23	02:04	Initial cal 10
E6P1156-IC1156	6P24828.D	04/05/16	23:50	02:31	Initial cal 5
E6P1156-IC1156	6P24829.D	04/06/16	00:17	02:58	Initial cal 2
E6P1156-IC1156	6P24830.D	04/06/16	00:44	03:25	Initial cal 1
E6P1156-ICV1155	6P24832.D	04/06/16	01:39	04:20	Initial cal verification 50
E6P1156-ICV1155	6P24833.D	04/06/16	02:06	04:47	Initial cal verification 50
E6P1156-ICV1156	6P24834A.D	04/06/16	02:34	05:15	Initial cal verification 50
E6P1156-ICV1155	6P24834.D	04/06/16	02:34	05:15	Initial cal verification 50
E6P1156-ICV1155	6P24835.D	04/06/16	03:01	05:42	Initial cal verification 50
E6P1156-ICV1156	6P24835A.D	04/06/16	03:01	05:42	Initial cal verification 50
E6P1156-ICV1156	6P24836.D	04/06/16	03:29	06:10	Initial cal verification 50
E6P1156-ICV1155	6P24837.D	04/06/16	03:56	06:37	Initial cal verification 50
E6P1156-ICV1156	6P24837A.D	04/06/16	03:56	06:37	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1157-DFTPP
Lab File ID: 6P24838.D
Instrument ID: GCMS6P
Injection Date: 04/06/16
Injection Time: 09:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	46104	44.3		Pass
68	Less than 2.0% of mass 69	489	0.47	(0.99) [a]	Pass
69	Mass 69 relative abundance	49245	47.4		Pass
70	Less than 2.0% of mass 69	219	0.21	(0.44) [a]	Pass
127	40.0 - 60.0% of mass 198	51345	49.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	103997	100.0		Pass
199	5.0 - 9.0% of mass 198	6861	6.60		Pass
275	10.0 - 30.0% of mass 198	26220	25.2		Pass
365	1.0 - 100.0% of mass 198	3077	2.96		Pass
441	Present, but less than mass 443	13068	12.6	(76.2) [b]	Pass
442	40.0 - 100.0% of mass 198	92957	89.4		Pass
443	17.0 - 23.0% of mass 442	17154	16.5	(18.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E6P1157-ICV1155	6P24839.D	04/06/16	09:53	00:12	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1206-DFTPP
Lab File ID: 6P25831.D
Instrument ID: GCMS6P
Injection Date: 05/11/16
Injection Time: 08:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	121609	41.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	128681	44.1		Pass
70	Less than 2.0% of mass 69	646	0.22	(0.50) [a]	Pass
127	40.0 - 60.0% of mass 198	150666	51.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	291720	100.0		Pass
199	5.0 - 9.0% of mass 198	18748	6.43		Pass
275	10.0 - 30.0% of mass 198	84024	28.8		Pass
365	1.0 - 100.0% of mass 198	10525	3.61		Pass
441	Present, but less than mass 443	35604	12.2	(77.5) [b]	Pass
442	40.0 - 100.0% of mass 198	237170	81.3		Pass
443	17.0 - 23.0% of mass 442	45921	15.7	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
E6P1206-CC1155	6P25832A.D	05/11/16	09:27	00:38	Continuing cal 50
E6P1206-CC1156	6P25833A.D	05/11/16	10:47	01:58	Continuing cal 50
ZZZZZZ	6P25837.D	05/11/16	12:07	03:18	(unrelated sample)
ZZZZZZ	6P25838.D	05/11/16	12:33	03:44	(unrelated sample)
ZZZZZZ	6P25839.D	05/11/16	13:00	04:11	(unrelated sample)
ZZZZZZ	6P25840.D	05/11/16	13:27	04:38	(unrelated sample)
OP93791-MB1	6P25845.D	05/11/16	13:54	05:05	Method Blank
OP93791-BS1	6P25846.D	05/11/16	14:21	05:32	Blank Spike
ZZZZZZ	6P25847.D	05/11/16	14:49	06:00	(unrelated sample)
ZZZZZZ	6P25841A.D	05/11/16	15:16	06:27	(unrelated sample)
ZZZZZZ	6P25842.D	05/11/16	15:43	06:54	(unrelated sample)
ZZZZZZ	6P25843.D	05/11/16	16:10	07:21	(unrelated sample)
ZZZZZZ	6P25844.D	05/11/16	16:36	07:47	(unrelated sample)
OP93791-MS	6P25848.D	05/11/16	17:03	08:14	Matrix Spike
OP93791-MSD	6P25849.D	05/11/16	17:30	08:41	Matrix Spike Duplicate
JC19914-2	6P25850.D	05/11/16	17:57	09:08	RA-6 (6-7)
ZZZZZZ	6P25853.D	05/11/16	19:17	10:28	(unrelated sample)
ZZZZZZ	6P25854.D	05/11/16	19:44	10:55	(unrelated sample)
ZZZZZZ	6P25855.D	05/11/16	20:11	11:22	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5217-DFTPP
Lab File ID: M123505.D
Instrument ID: GCMSM
Injection Date: 04/12/16
Injection Time: 17:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	74912	32.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	91845	39.3		Pass
70	Less than 2.0% of mass 69	416	0.18	(0.45) [a]	Pass
127	40.0 - 60.0% of mass 198	112346	48.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	233621	100.0		Pass
199	5.0 - 9.0% of mass 198	15774	6.75		Pass
275	10.0 - 30.0% of mass 198	63400	27.1		Pass
365	1.0 - 100.0% of mass 198	8159	3.49		Pass
441	Present, but less than mass 443	29433	12.6	(79.2) [b]	Pass
442	40.0 - 100.0% of mass 198	194493	83.3		Pass
443	17.0 - 23.0% of mass 442	37146	15.9	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5217-IC5217	M123506.D	04/12/16	18:04	00:26	Initial cal 2
EM5217-IC5217	M123507.D	04/12/16	18:33	00:55	Initial cal 100
EM5217-IC5217	M123508.D	04/12/16	19:02	01:24	Initial cal 80
EM5217-IC5217	M123509.D	04/12/16	19:31	01:53	Initial cal 25
EM5217-IC5217	M123510.D	04/12/16	20:00	02:22	Initial cal 10
EM5217-IC5217	M123511.D	04/12/16	20:29	02:51	Initial cal 5
EM5217-IC5217	M123512.D	04/12/16	20:57	03:19	Initial cal 1
EM5217-ICC5217	M123513.D	04/12/16	21:26	03:48	Initial cal 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5218-DFTPP
Lab File ID: M123514.D
Instrument ID: GCMSM
Injection Date: 04/12/16
Injection Time: 21:57

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	72654	30.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	89061	37.8		Pass
70	Less than 2.0% of mass 69	437	0.19	(0.49) [a]	Pass
127	40.0 - 60.0% of mass 198	113120	48.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	235437	100.0		Pass
199	5.0 - 9.0% of mass 198	15398	6.54		Pass
275	10.0 - 30.0% of mass 198	64960	27.6		Pass
365	1.0 - 100.0% of mass 198	9013	3.83		Pass
441	Present, but less than mass 443	31349	13.3	(78.4) [b]	Pass
442	40.0 - 100.0% of mass 198	214165	91.0		Pass
443	17.0 - 23.0% of mass 442	40010	17.0	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5218-IC5218	M123515.D	04/12/16	22:15	00:18	Initial cal 100
EM5218-IC5218	M123516.D	04/12/16	22:44	00:47	Initial cal 80
EM5218-ICC5218	M123517.D	04/12/16	23:13	01:16	Initial cal 50
EM5218-IC5218	M123518.D	04/12/16	23:41	01:44	Initial cal 25
EM5218-IC5218	M123519.D	04/13/16	00:10	02:13	Initial cal 10
EM5218-IC5218	M123520.D	04/13/16	00:39	02:42	Initial cal 5
EM5218-IC5218	M123521.D	04/13/16	01:08	03:11	Initial cal 2
EM5218-IC5218	M123522.D	04/13/16	01:36	03:39	Initial cal 1
EM5218-ICV5217	M123523.D	04/13/16	02:05	04:08	Initial cal verification 50
EM5218-ICV5217	M123524.D	04/13/16	02:34	04:37	Initial cal verification 50
EM5218-ICV5218	M123526A.D	04/13/16	03:31	05:34	Initial cal verification 50
EM5218-ICV5217	M123526.D	04/13/16	03:31	05:34	Initial cal verification 50
EM5218-ICV5217	M123527.D	04/13/16	03:59	06:02	Initial cal verification 50
EM5218-ICV5218	M123527A.D	04/13/16	03:59	06:02	Initial cal verification 50
EM5218-ICV5218	M123528.D	04/13/16	04:28	06:31	Initial cal verification 50
EM5218-ICV5218	M123529A.D	04/13/16	04:57	07:00	Initial cal verification 50
EM5218-ICV5217	M123529.D	04/13/16	04:57	07:00	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5219-DFTPP
Lab File ID: M123531.D
Instrument ID: GCMSM
Injection Date: 04/13/16
Injection Time: 09:27

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	78247	33.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	93834	39.9		Pass
70	Less than 2.0% of mass 69	568	0.24	(0.61) [a]	Pass
127	40.0 - 60.0% of mass 198	115728	49.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	235442	100.0		Pass
199	5.0 - 9.0% of mass 198	16612	7.06		Pass
275	10.0 - 30.0% of mass 198	59290	25.2		Pass
365	1.0 - 100.0% of mass 198	7084	3.01		Pass
441	Present, but less than mass 443	25886	11.0	(77.7) [b]	Pass
442	40.0 - 100.0% of mass 198	176602	75.0		Pass
443	17.0 - 23.0% of mass 442	33324	14.2	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5219-ICV5217	M123532.D	04/13/16	09:41	00:14	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5239-DFTPP
Lab File ID: M123928.D
Instrument ID: GCMSM
Injection Date: 04/26/16
Injection Time: 23:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	34029	40.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	45368	53.3		Pass
70	Less than 2.0% of mass 69	254	0.30	(0.56) [a]	Pass
127	40.0 - 60.0% of mass 198	45424	53.4		Pass
197	Less than 1.0% of mass 198	257	0.30		Pass
198	Base peak, 100% relative abundance	85050	100.0		Pass
199	5.0 - 9.0% of mass 198	5953	7.00		Pass
275	10.0 - 30.0% of mass 198	21324	25.1		Pass
365	1.0 - 100.0% of mass 198	2923	3.44		Pass
441	Present, but less than mass 443	9960	11.7	(78.3) [b]	Pass
442	40.0 - 100.0% of mass 198	65516	77.0		Pass
443	17.0 - 23.0% of mass 442	12724	15.0	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5239-IC5239	M123929.D	04/26/16	23:25	00:20	Initial cal 100
EM5239-IC5239	M123930.D	04/26/16	23:53	00:48	Initial cal 80
EM5239-ICC5239	M123931.D	04/27/16	00:22	01:17	Initial cal 50
EM5239-IC5239	M123932.D	04/27/16	00:50	01:45	Initial cal 25
EM5239-IC5239	M123933.D	04/27/16	01:19	02:14	Initial cal 10
EM5239-IC5239	M123934.D	04/27/16	01:47	02:42	Initial cal 5
EM5239-IC5239	M123935.D	04/27/16	02:15	03:10	Initial cal 2
EM5239-IC5239	M123936.D	04/27/16	02:44	03:39	Initial cal 1
EM5239-ICV5239	M123937.D	04/27/16	03:12	04:07	Initial cal verification 50
EM5239-ICV5239	M123938.D	04/27/16	03:41	04:36	Initial cal verification 50
EM5239-ICV5239	M123940.D	04/27/16	04:37	05:32	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5240-DFTPP
Lab File ID: M123943.D
Instrument ID: GCMSM
Injection Date: 04/27/16
Injection Time: 10:35

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	46216	42.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	61082	55.5		Pass
70	Less than 2.0% of mass 69	425	0.39	(0.70) [a]	Pass
127	40.0 - 60.0% of mass 198	61005	55.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	110050	100.0		Pass
199	5.0 - 9.0% of mass 198	7381	6.71		Pass
275	10.0 - 30.0% of mass 198	27635	25.1		Pass
365	1.0 - 100.0% of mass 198	4073	3.70		Pass
441	Present, but less than mass 443	12499	11.4	(83.0) [b]	Pass
442	40.0 - 100.0% of mass 198	81226	73.8		Pass
443	17.0 - 23.0% of mass 442	15057	13.7	(18.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5240-ICV5239	M123945.D	04/27/16	11:18	00:43	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5259-DFTPP
Lab File ID: M124307A.D
Instrument ID: GCMSM
Injection Date: 05/10/16
Injection Time: 21:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	30434	36.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	40588	48.1		Pass
70	Less than 2.0% of mass 69	112	0.13	(0.28) [a]	Pass
127	40.0 - 60.0% of mass 198	41970	49.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	84389	100.0		Pass
199	5.0 - 9.0% of mass 198	5963	7.07		Pass
275	10.0 - 30.0% of mass 198	24363	28.9		Pass
365	1.0 - 100.0% of mass 198	3251	3.85		Pass
441	Present, but less than mass 443	12431	14.7	(83.4) [b]	Pass
442	40.0 - 100.0% of mass 198	76346	90.5		Pass
443	17.0 - 23.0% of mass 442	14910	17.7	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5259-CC5217	M124308.D	05/10/16	21:41	00:18	Continuing cal 25
EM5259-CC5239	M124309.D	05/10/16	22:10	00:47	Continuing cal 25
OP93784-MB1	M124310.D	05/10/16	23:04	01:41	Method Blank
OP93782-MB1	M124311.D	05/10/16	23:32	02:09	Method Blank
OP93782-BS1	M124312.D	05/11/16	00:01	02:38	Blank Spike
OP93784-BS1	M124313.D	05/11/16	00:30	03:07	Blank Spike
OP93784-MS	M124314.D	05/11/16	00:59	03:36	Matrix Spike
OP93784-MSD	M124315.D	05/11/16	01:27	04:04	Matrix Spike Duplicate
JC19914-1	M124316.D	05/11/16	01:56	04:33	RA6-GWD
JC19914-3	M124317.D	05/11/16	02:25	05:02	RA-5 GWS
JC19914-4	M124318.D	05/11/16	02:53	05:30	S-41S
JC19914-5	M124319.D	05/11/16	03:22	05:59	S-41SD
ZZZZZZ	M124320.D	05/11/16	03:50	06:27	(unrelated sample)
OP93782-MS	M124321.D	05/11/16	04:18	06:55	Matrix Spike
OP93782-MSD	M124322.D	05/11/16	04:47	07:24	Matrix Spike Duplicate
JC19737-1	M124323.D	05/11/16	05:15	07:52	(used for QC only; not part of job JC19914)
ZZZZZZ	M124324.D	05/11/16	05:44	08:21	(unrelated sample)
ZZZZZZ	M124325.D	05/11/16	06:12	08:49	(unrelated sample)
ZZZZZZ	M124326.D	05/11/16	06:40	09:17	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5259-DFTPP
Lab File ID: M124307A.D
Instrument ID: GCMSM
Injection Date: 05/10/16
Injection Time: 21:23

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M124327.D	05/11/16	07:09	09:46	(unrelated sample)
ZZZZZZ	M124330.D	05/11/16	08:34	11:11	(unrelated sample)
ZZZZZZ	M124331.D	05/11/16	09:03	11:40	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5260-DFTPP
Lab File ID: M124340.D
Instrument ID: GCMSM
Injection Date: 05/11/16
Injection Time: 12:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33862	37.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	45682	50.1		Pass
70	Less than 2.0% of mass 69	67	0.07	(0.15) [a]	Pass
127	40.0 - 60.0% of mass 198	46197	50.6		Pass
197	Less than 1.0% of mass 198	226	0.25		Pass
198	Base peak, 100% relative abundance	91240	100.0		Pass
199	5.0 - 9.0% of mass 198	6567	7.20		Pass
275	10.0 - 30.0% of mass 198	26309	28.8		Pass
365	1.0 - 100.0% of mass 198	3441	3.77		Pass
441	Present, but less than mass 443	12286	13.5	(86.6) [b]	Pass
442	40.0 - 100.0% of mass 198	74269	81.4		Pass
443	17.0 - 23.0% of mass 442	14195	15.6	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5260-CC5217	M124341.D	05/11/16	12:23	00:12	Continuing cal 50
EM5260-CC5239	M124342.D	05/11/16	12:52	00:41	Continuing cal 50
ZZZZZZ	M124355.D	05/11/16	13:21	01:10	(unrelated sample)
ZZZZZZ	M124356.D	05/11/16	13:49	01:38	(unrelated sample)
JC19914-1	M124343.D	05/11/16	14:18	02:07	RA6-GWD
JC19914-3	M124344.D	05/11/16	14:47	02:36	RA-5 GWS
ZZZZZZ	M124345.D	05/11/16	15:16	03:05	(unrelated sample)
ZZZZZZ	M124346.D	05/11/16	15:45	03:34	(unrelated sample)
ZZZZZZ	M124347.D	05/11/16	16:14	04:03	(unrelated sample)
ZZZZZZ	M124348.D	05/11/16	16:43	04:32	(unrelated sample)
ZZZZZZ	M124349.D	05/11/16	17:12	05:01	(unrelated sample)
ZZZZZZ	M124354.D	05/11/16	18:50	06:39	(unrelated sample)
ZZZZZZ	M124357.D	05/11/16	19:19	07:08	(unrelated sample)
ZZZZZZ	M124358.D	05/11/16	19:47	07:36	(unrelated sample)
ZZZZZZ	M124359.D	05/11/16	20:16	08:05	(unrelated sample)
ZZZZZZ	M124360.D	05/11/16	20:45	08:34	(unrelated sample)
ZZZZZZ	M124361.D	05/11/16	21:14	09:03	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5264-DFTPP
Lab File ID: M124420.D
Instrument ID: GCMSM
Injection Date: 05/13/16
Injection Time: 09:20

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	74194	35.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	97501	47.2		Pass
70	Less than 2.0% of mass 69	415	0.20	(0.43) [a]	Pass
127	40.0 - 60.0% of mass 198	97504	47.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	206720	100.0		Pass
199	5.0 - 9.0% of mass 198	14185	6.86		Pass
275	10.0 - 30.0% of mass 198	58642	28.4		Pass
365	1.0 - 100.0% of mass 198	8537	4.13		Pass
441	Present, but less than mass 443	29605	14.3	(80.7) [b]	Pass
442	40.0 - 100.0% of mass 198	186490	90.2		Pass
443	17.0 - 23.0% of mass 442	36682	17.7	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EM5264-CC5217	M124421.D	05/13/16	09:33	00:13	Continuing cal 50
EM5264-CC5239	M124422.D	05/13/16	10:09	00:49	Continuing cal 50
OP93791-MB1	M124423.D	05/13/16	10:41	01:21	Method Blank
JC19914-7	M124424.D	05/13/16	11:10	01:50	RA-5 (9-10)
JC19914-6	M124425.D	05/13/16	11:38	02:18	RA-5 (5.5-6.5)
OP93690-MB1	M124426.D	05/13/16	12:07	02:47	Method Blank
OP93830-MB1	M124427.D	05/13/16	12:36	03:16	Method Blank
OP93830-BS1	M124428.D	05/13/16	13:05	03:45	Blank Spike
ZZZZZZ	M124429.D	05/13/16	13:34	04:14	(unrelated sample)
OP93619-MB1	M124430.D	05/13/16	14:03	04:43	Method Blank
ZZZZZZ	M124431.D	05/13/16	14:31	05:11	(unrelated sample)
OP93830-MS	M124432.D	05/13/16	15:01	05:41	Matrix Spike
OP93830-MSD	M124433.D	05/13/16	15:29	06:09	Matrix Spike Duplicate
JC19983-15Q	M124434.D	05/13/16	16:27	07:07	(used for QC only; not part of job JC19914)
ZZZZZZ	M124435.D	05/13/16	16:56	07:36	(unrelated sample)
ZZZZZZ	M124436.D	05/13/16	17:25	08:05	(unrelated sample)
ZZZZZZ	M124437.D	05/13/16	17:54	08:34	(unrelated sample)
ZZZZZZ	M124438.D	05/13/16	18:23	09:03	(unrelated sample)
ZZZZZZ	M124439.D	05/13/16	18:52	09:32	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5264-DFTPP
Lab File ID: M124420.D
Instrument ID: GCMSM
Injection Date: 05/13/16
Injection Time: 09:20

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M124440.D	05/13/16	19:21	10:01	(unrelated sample)
ZZZZZZ	M124441.D	05/13/16	19:50	10:30	(unrelated sample)
ZZZZZZ	M124442.D	05/13/16	20:19	10:59	(unrelated sample)
ZZZZZZ	M124443.D	05/13/16	20:48	11:28	(unrelated sample)
ZZZZZZ	M124444.D	05/13/16	21:17	11:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5485-DFTPP
Lab File ID: Z109740.D
Instrument ID: GCMSZ
Injection Date: 04/13/16
Injection Time: 21:20

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	64844	35.0		Pass
68	Less than 2.0% of mass 69	1086	0.59	(1.49) [a]	Pass
69	Mass 69 relative abundance	72648	39.2		Pass
70	Less than 2.0% of mass 69	687	0.37	(0.95) [a]	Pass
127	40.0 - 60.0% of mass 198	96690	52.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	185434	100.0		Pass
199	5.0 - 9.0% of mass 198	15348	8.28		Pass
275	10.0 - 30.0% of mass 198	49861	26.9		Pass
365	1.0 - 100.0% of mass 198	4651	2.51		Pass
441	Present, but less than mass 443	8077	4.36	(21.7) [b]	Pass
442	40.0 - 100.0% of mass 198	179106	96.6		Pass
443	17.0 - 23.0% of mass 442	37293	20.1	(20.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EZ5485-IC5485	Z109741.D	04/13/16	21:35	00:15	Initial cal 2
EZ5485-IC5485	Z109742.D	04/13/16	22:06	00:46	Initial cal 100
EZ5485-IC5485	Z109743.D	04/13/16	22:38	01:18	Initial cal 80
EZ5485-IC5485	Z109744.D	04/13/16	23:09	01:49	Initial cal 25
EZ5485-IC5485	Z109745.D	04/13/16	23:41	02:21	Initial cal 10
EZ5485-IC5485	Z109746.D	04/14/16	00:12	02:52	Initial cal 5
EZ5485-IC5485	Z109747.D	04/14/16	00:44	03:24	Initial cal 1
EZ5485-ICC5485	Z109748.D	04/14/16	01:15	03:55	Initial cal 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5486-DFTPP
Lab File ID: Z109749.D
Instrument ID: GCMSZ
Injection Date: 04/14/16
Injection Time: 01:39

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	54978	36.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	55795	36.6		Pass
70	Less than 2.0% of mass 69	212	0.14	(0.38) [a]	Pass
127	40.0 - 60.0% of mass 198	78117	51.3		Pass
197	Less than 1.0% of mass 198	1351	0.89		Pass
198	Base peak, 100% relative abundance	152306	100.0		Pass
199	5.0 - 9.0% of mass 198	11277	7.40		Pass
275	10.0 - 30.0% of mass 198	38480	25.3		Pass
365	1.0 - 100.0% of mass 198	4988	3.27		Pass
441	Present, but less than mass 443	25892	17.0	(98.6) [b]	Pass
442	40.0 - 100.0% of mass 198	136274	89.5		Pass
443	17.0 - 23.0% of mass 442	26264	17.2	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EZ5486-IC5486	Z109750.D	04/14/16	01:54	00:15	Initial cal 100
EZ5486-IC5486	Z109751.D	04/14/16	02:25	00:46	Initial cal 80
EZ5486-IC5486	Z109752.D	04/14/16	02:56	01:17	Initial cal 25
EZ5486-IC5486	Z109753.D	04/14/16	03:27	01:48	Initial cal 10
EZ5486-IC5486	Z109754.D	04/14/16	03:58	02:19	Initial cal 5
EZ5486-IC5486	Z109755.D	04/14/16	04:29	02:50	Initial cal 2
EZ5486-IC5486	Z109756.D	04/14/16	05:00	03:21	Initial cal 1
EZ5486-ICC5486	Z109757.D	04/14/16	05:32	03:53	Initial cal 50
EZ5486-ICV5485	Z109758.D	04/14/16	07:59	06:20	Initial cal verification 50
EZ5486-ICV5485	Z109759.D	04/14/16	08:30	06:51	Initial cal verification 50
EZ5486-ICV5485	Z109760.D	04/14/16	09:01	07:22	Initial cal verification 50
EZ5486-ICV5486	Z109761A.D	04/14/16	09:32	07:53	Initial cal verification 50
EZ5486-ICV5485	Z109761.D	04/14/16	09:32	07:53	Initial cal verification 50
EZ5486-ICV5486	Z109762A.D	04/14/16	10:03	08:24	Initial cal verification 50
EZ5486-ICV5485	Z109762.D	04/14/16	10:03	08:24	Initial cal verification 50
EZ5486-ICV5486	Z109763.D	04/14/16	10:35	08:56	Initial cal verification 50
EZ5486-ICV5485	Z109764.D	04/14/16	11:06	09:27	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5525-DFTPP
Lab File ID: Z110612.D
Instrument ID: GCMSZ
Injection Date: 05/12/16
Injection Time: 10:01

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	61978	40.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	71622	46.9		Pass
70	Less than 2.0% of mass 69	193	0.13	(0.27) [a]	Pass
127	40.0 - 60.0% of mass 198	77139	50.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	152794	100.0		Pass
199	5.0 - 9.0% of mass 198	9830	6.43		Pass
275	10.0 - 30.0% of mass 198	42548	27.8		Pass
365	1.0 - 100.0% of mass 198	5506	3.60		Pass
441	Present, but less than mass 443	20005	13.1	(80.1) [b]	Pass
442	40.0 - 100.0% of mass 198	123648	80.9		Pass
443	17.0 - 23.0% of mass 442	24979	16.3	(20.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

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
EZ5525-CC5485	Z110613.D	05/12/16	10:16	00:15	Continuing cal 25
EZ5525-CC5486	Z110614.D	05/12/16	10:46	00:45	Continuing cal 25
OP93671-MB1	Z110616.D	05/12/16	11:44	01:43	Method Blank
OP93791-MB1	Z110617.D	05/12/16	12:13	02:12	Method Blank
ZZZZZZ	Z110618.D	05/12/16	12:43	02:42	(unrelated sample)
ZZZZZZ	Z110619.D	05/12/16	13:12	03:11	(unrelated sample)
ZZZZZZ	Z110620.D	05/12/16	13:41	03:40	(unrelated sample)
ZZZZZZ	Z110621.D	05/12/16	14:10	04:09	(unrelated sample)
ZZZZZZ	Z110622.D	05/12/16	14:40	04:39	(unrelated sample)
ZZZZZZ	Z110623.D	05/12/16	15:09	05:08	(unrelated sample)
ZZZZZZ	Z110624.D	05/12/16	15:38	05:37	(unrelated sample)
ZZZZZZ	Z110625.D	05/12/16	16:07	06:06	(unrelated sample)
ZZZZZZ	Z110626.D	05/12/16	16:37	06:36	(unrelated sample)
ZZZZZZ	Z110627.D	05/12/16	17:06	07:05	(unrelated sample)
ZZZZZZ	Z110628.D	05/12/16	17:36	07:35	(unrelated sample)
ZZZZZZ	Z110629.D	05/12/16	18:05	08:04	(unrelated sample)
ZZZZZZ	Z110630.D	05/12/16	18:34	08:33	(unrelated sample)
ZZZZZZ	Z110631.D	05/12/16	19:03	09:02	(unrelated sample)
ZZZZZZ	Z110637.D	05/12/16	20:02	10:01	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	EZ5525-DFTPP	**Injection Date:**	05/12/16
Lab File ID:	Z110612.D	**Injection Time:**	10:01
Instrument ID:	GCMSZ		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	Z110633.D	05/12/16	21:01	11:00	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2879-CC2855	**Injection Date:**	05/11/16
Lab File ID:	3M61219.D	**Injection Time:**	09:41
Instrument ID:	GCMS3M	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	477264	10.36	733579	13.37	1306427	17.58	1128106	22.18
Upper Limit [a]	954528	10.86	1467158	13.87	2612854	18.08	2256212	22.68
Lower Limit [b]	238632	9.86	366790	12.87	653214	17.08	564053	21.68

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93784A-MB1	452962	10.36	637075	13.37	1051292	17.58	917297	22.20
OP93784A-BS12	493675	10.36	689266	13.37	1138493	17.58	969578	22.20
JC19914-4	495192	10.36	715243	13.37	1200320	17.58	1011741	22.20
JC19914-5	512608	10.36	723788	13.37	1175759	17.58	994459	22.20
JC19914-1	493111	10.36	714853	13.37	1217079	17.59	1003430	22.20
JC19914-3	506060	10.36	834971	13.37	1311101	17.59	1089158	22.20
OP93784A-MS	456420	10.36	718717	13.37	1167237	17.59	941302	22.20
OP93784A-MSD	451149	10.36	736123	13.37	1158188	17.59	965971	22.20
OP93677A-MSD	454002	10.36	744109	13.37	1176801	17.64	959823	22.20
ZZZZZZ	414275	10.36	657979	13.37	1079130	17.59	958702	22.20
ZZZZZZ	387350	10.39	613072	13.37	1047013	17.59	893753	22.20
OP93802A-MB1	327273	10.36	508182	13.37	863115	17.59	760400	22.20
OP93802A-BS12	345064	10.36	520483	13.37	868221	17.59	737332	22.20
OP93802A-MS	714103	10.39	967846	13.41	1151927	17.70	1257259	22.21
OP93802A-MSD	805021	10.39	1051838	13.41	1346457	17.70	1469770	22.21
JC19921-10	906356	10.39	1231365	13.41	1435797	17.70	1576550	22.21
OP93801A-MB1	571904	10.36	854592	13.37	1415527	17.59	1229926	22.20
OP93801A-BS12	641337	10.37	1016066	13.37	1592630	17.59	1336974	22.20
OP93801A-MS	589713	10.36	942873	13.37	1439479	17.59	1188215	22.20
OP93801A-MSD	548502	10.36	850559	13.37	1328499	17.59	1164579	22.20
ZZZZZZ	528071	10.36	756595	13.37	1266800	17.59	1073114	22.20

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(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.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2922-CC2881	**Injection Date:**	05/17/16
Lab File ID:	4M65314.D	**Injection Time:**	10:09
Instrument ID:	GCMS4M	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	285998	10.46	542095	13.44	878007	17.63	650325	22.23
Upper Limit [a]	571996	10.96	1084190	13.94	1756014	18.13	1300650	22.73
Lower Limit [b]	142999	9.96	271048	12.94	439004	17.13	325163	21.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93791A-MB1	191004	10.46	376323	13.44	563551	17.63	434698	22.23
JC19914-6	225899	10.46	405988	13.44	649754	17.63	440196	22.23
JC19914-7	161047	10.49	296943	13.44	534906	17.63	409808	22.23

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(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.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4P857-CC850	**Injection Date:**	05/11/16
Lab File ID:	4P16279.D	**Injection Time:**	15:57
Instrument ID:	GCMS4P	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	81932	7.95	122375	10.89	167945	15.10	109432	19.73
Upper Limit [a]	163864	8.45	244750	11.39	335890	15.60	218864	20.23
Lower Limit [b]	40966	7.45	61188	10.39	83973	14.60	54716	19.23

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93791A-MB1	65522	7.95	80591	10.89	103093	15.10	58508	19.73
OP93791A-BS12	60246	7.95	101399	10.89	113025	15.10	65220	19.73
OP93791A-MS	79849	7.95	108304	10.89	141533	15.10	91597	19.73
OP93791A-MSD	77560	7.95	118137	10.89	148789	15.10	105388	19.72
JC19914-2	76750	7.95	122924	10.89	143008	15.10	100573	19.72

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(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.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E6P1206-CC1155	**Injection Date:**	05/11/16
Lab File ID:	6P25832A.D	**Injection Time:**	09:27
Instrument ID:	GCMS6P	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	347174	4.62	1437933	5.71	852861	7.75	1441453	9.93	1524175	14.11	1343414	16.23
Upper Limit [a]	694348	5.12	2875866	6.21	1705722	8.25	2882906	10.43	3048350	14.61	2686828	16.73
Lower Limit [b]	173587	4.12	718967	5.21	426431	7.25	720727	9.43	762088	13.61	671707	15.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	378412	4.62	1565999	5.71	933429	7.75	1566985	9.93	1614489	14.10	1511785	16.23
ZZZZZZ	299284	4.62	1231359	5.71	735633	7.75	1257398	9.93	1300607	14.10	1234098	16.22
ZZZZZZ	345593	4.63	1422006	5.71	848828	7.75	1433381	9.92	1513790	14.10	1465459	16.22
ZZZZZZ	359714	4.62	1471645	5.71	876938	7.75	1483411	9.93	1556361	14.10	1479451	16.23
OP93791-MB1	417766	4.62	1707600	5.71	994774	7.75	1631514	9.93	1603126	14.10	1499752	16.22
OP93791-BS1	381418	4.62	1503025	5.71	879746	7.76	1417728	9.93	1459985	14.11	1234644	16.23
ZZZZZZ	290779	4.62	1157129	5.71	905864	7.78	978256	10.07	1536977	14.18	1158468	16.25
ZZZZZZ	419968	4.62	1728428	5.71	1022938	7.75	1735666	9.93	1731482	14.11	1763439	16.23
ZZZZZZ	353519	4.62	1405229	5.71	838086	7.75	1412635	9.93	1442737	14.10	1407418	16.22
ZZZZZZ	416466	4.62	1718808	5.71	1019594	7.75	1715183	9.92	1710060	14.10	1632918	16.23
ZZZZZZ	409989	4.62	1662876	5.71	995944	7.75	1685513	9.93	1700278	14.10	1629161	16.23
OP93791-MS	438752	4.62	1779402	5.71	1021297	7.75	1626806	9.93	1605689	14.11	1450238	16.23
OP93791-MSD	418298	4.62	1677441	5.71	977253	7.75	1566289	9.93	1571516	14.11	1378607	16.23
JC19914-2	376689	4.62	1510125	5.70	876537	7.75	1453503	9.92	1424852	14.10	1343758	16.22
ZZZZZZ	386580	4.65	1579054	5.72	938018	7.75	1423723	9.93	1424237	14.10	1481099	16.23
ZZZZZZ	278980	4.66	1128046	5.73	681134	7.75	1121104	9.92	1058723	14.10	1069027	16.22
ZZZZZZ	353620	4.62	1400691	5.70	799299	7.75	1304680	9.92	1136200	14.10	1155088	16.22

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(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.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5259-CC5217	**Injection Date:**	05/10/16
Lab File ID:	M124308.D	**Injection Time:**	21:41
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	345427	4.69	1326041	5.83	863819	8.16	1493534	10.80	1730770	15.98	1790494	18.62
Upper Limit [a]	690854	5.19	2652082	6.33	1727638	8.66	2987068	11.30	3461540	16.48	3580988	19.12
Lower Limit [b]	172714	4.19	663021	5.33	431910	7.66	746767	10.30	865385	15.48	895247	18.12

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93784-MB1	330381	4.69	1304977	5.82	851034	8.16	1559644	10.79	1783905	15.97	1779405	18.61
OP93782-MB1	343796	4.69	1343215	5.82	883099	8.16	1609822	10.79	1875001	15.97	1841964	18.61
OP93782-BS1	344518	4.69	1410581	5.82	832163	8.16	1446380	10.79	1608970	15.98	1603230	18.61
OP93784-BS1	340670	4.69	1418752	5.83	812686	8.16	1399573	10.79	1605611	15.98	1613283	18.61
OP93784-MS	336057	4.69	1388757	5.83	802273	8.16	1403877	10.79	1552821	15.98	1561717	18.61
OP93784-MSD	314419	4.69	1328768	5.83	753439	8.17	1305372	10.79	1480705	15.97	1496003	18.61
JC19914-1	347766	4.69	1314473	5.82	846303	8.16	1526112	10.79	1711792	15.97	1710240	18.61
JC19914-3	374767	4.69	1387437	5.83	897812	8.16	1640846	10.79	1889398	15.97	1872293	18.61
JC19914-4	412948	4.69	1588161	5.83	976694	8.16	1687115	10.79	1870671	15.97	1805220	18.61
JC19914-5	348261	4.69	1335465	5.82	884074	8.16	1589634	10.78	1771229	15.97	1747667	18.60
ZZZZZZ	321112	4.69	1151155	5.82	733008	8.16	1263670	10.79	1155607	15.99	1129274	18.63
OP93782-MS	309615	4.69	1299373	5.83	753588	8.16	1302880	10.79	1414815	15.97	1417328	18.61
OP93782-MSD	318545	4.69	1330342	5.83	774435	8.16	1343857	10.79	1509361	15.97	1484094	18.61
JC19737-1	384475	4.69	1475183	5.83	937527	8.16	1687744	10.79	1853461	15.97	1874324	18.61
ZZZZZZ	382566	4.69	1436716	5.83	883429	8.16	1559673	10.79	1683255	15.97	1628917	18.61
ZZZZZZ	337142	4.69	1308405	5.82	817085	8.16	1468817	10.79	1651569	15.97	1557060	18.60
ZZZZZZ	333136	4.69	1121424	5.88	749270	8.16	1367195	10.79	1582389	15.97	1542914	18.61
ZZZZZZ	335318	4.70	1166127	5.86	782133	8.16	1419523	10.79	1595191	15.97	1564669	18.60
ZZZZZZ	400821	4.70	1404055	5.86	936872	8.16	1715336	10.79	1972298	15.97	1898974	18.60
ZZZZZZ	409209	4.69	1569249	5.83	1016782	8.16	1836345	10.79	2052615	15.97	2025467	18.61

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(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.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5260-CC5217	**Injection Date:**	05/11/16
Lab File ID:	M124341.D	**Injection Time:**	12:23
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	282918	4.68	1074469	5.81	693692	8.15	1200582	10.78	1446209	15.96	1562777	18.59
Upper Limit [a]	565836	5.18	2148938	6.31	1387384	8.65	2401164	11.28	2892418	16.46	3125554	19.09
Lower Limit [b]	141459	4.18	537235	5.31	346846	7.65	600291	10.28	723105	15.46	781389	18.09

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	315618	4.68	1195212	5.81	761744	8.14	1390491	10.77	1632928	15.95	1607771	18.58
ZZZZZZ	332750	4.68	1254576	5.81	778890	8.15	1400393	10.77	1620320	15.95	1619414	18.58
JC19914-1	262778	4.68	1024404	5.81	651617	8.15	1194319	10.77	1426536	15.95	1464548	18.58
JC19914-3	313519	4.68	1232294	5.81	806827	8.14	1468094	10.77	1723020	15.95	1759621	18.59
ZZZZZZ	261891	4.68	1027544	5.81	699959	8.14	1300236	10.77	1585601	15.95	1648582	18.58
ZZZZZZ	235970	4.68	1011027	5.81	750652	8.15	1408673	10.77	1724833	15.95	1774462	18.58
ZZZZZZ	240683	4.68	1027551	5.81	730853	8.14	1365475	10.77	1652701	15.95	1740039	18.58
ZZZZZZ	289394	4.68	1075847	5.81	692290	8.14	1302879	10.77	1546517	15.95	1571816	18.59
ZZZZZZ	344628	4.68	1338045	5.81	867365	8.14	1593253	10.77	1917210	15.95	1998248	18.59
ZZZZZZ	337526	4.68	1296444	5.81	836421	8.14	1526076	10.77	1869598	15.95	1925163	18.59
ZZZZZZ	352001	4.68	1331237	5.81	832255	8.15	1475486	10.77	1746587	15.95	1820122	18.58
ZZZZZZ	303395	4.68	1153203	5.81	729747	8.15	1318711	10.77	1552616	15.95	1607146	18.58
ZZZZZZ	367372	4.68	1410224	5.81	878849	8.14	1515873	10.78	1526576	15.96	1586804	18.60
ZZZZZZ	373512	4.68	1390273	5.81	873612	8.15	1505153	10.77	1484952	15.96	1442045	18.60
ZZZZZZ	371976	4.68	1415135	5.81	869968	8.15	1464096	10.79	1418852	15.98	1430668	18.61

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(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.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5264-CC5217	**Injection Date:**	05/13/16
Lab File ID:	M124421.D	**Injection Time:**	09:33
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	423077	4.65	1620992	5.78	1050242	8.10	1781719	10.72	2089429	15.90	2171664	18.53
Upper Limit [a]	846154	5.15	3241984	6.28	2100484	8.60	3563438	11.22	4178858	16.40	4343328	19.03
Lower Limit [b]	211539	4.15	810496	5.28	525121	7.60	890860	10.22	1044715	15.40	1085832	18.03

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93791-MB1	489615	4.65	1826350	5.78	1112858	8.10	1944526	10.72	2137552	15.89	2083475	18.52
JC19914-7	446652	4.65	1580069	5.78	934809	8.11	1723748	10.72	1963305	15.89	1915572	18.53
JC19914-6	485727	4.65	1791765	5.78	1101481	8.10	1937802	10.72	2071549	15.89	2068444	18.53
OP93690-MB1	374291	4.65	1403572	5.77	884144	8.10	1587147	10.72	1720089	15.89	1705700	18.53
OP93830-MB1	295334	4.65	1131691	5.78	675653	8.10	1162529	10.72	1310024	15.89	1292236	18.53
OP93830-BS1	392654	4.65	1426474	5.78	897029	8.10	1476385	10.72	1677785	15.90	1747579	18.53
ZZZZZZ	421918	4.65	1590909	5.78	1041912	8.10	1916755	10.72	2379665	15.89	2396646	18.53
OP93619-MB1	304960	4.65	1301201	5.78	813841	8.10	1431077	10.72	1579901	15.89	1598997	18.53
ZZZZZZ	443436	4.65	1681216	5.77	1031032	8.10	1926188	10.72	2264118	15.89	2203915	18.53
OP93830-MS	378115	4.65	1526203	5.78	832655	8.10	1378601	10.72	1499255	15.90	1544780	18.53
OP93830-MSD	351067	4.65	1267466	5.78	798173	8.10	1325343	10.72	1467039	15.90	1527205	18.53
JC19983-15Q	403632	4.65	1503849	5.77	901546	8.10	1526654	10.72	1623113	15.90	1601824	18.53
ZZZZZZ	419929	4.65	1581318	5.78	947763	8.10	1644414	10.72	1759806	15.89	1754277	18.53
ZZZZZZ	499474	4.65	1925395	5.78	1191142	8.10	2102613	10.72	2352526	15.90	2355132	18.53
ZZZZZZ	439985	4.65	1705929	5.77	1041639	8.10	1849538	10.72	2130101	15.90	2160113	18.53
ZZZZZZ	657537	4.65	2589790	5.78	1598069	8.10	2961536	10.72	3305123	15.90	1939696	18.53
ZZZZZZ	642966	4.65	2500789	5.77	1617825	8.10	2971451	10.72	3267947	15.89	3271225	18.53
ZZZZZZ	386366	4.67	1308357	5.79	854188	8.10	1420160	10.72	1595232	15.90	1652809	18.53
ZZZZZZ	392802	4.65	1461299	5.77	865681	8.10	1378757	10.73	1526086	15.90	1615197	18.53
ZZZZZZ	368466	4.65	1386124	5.78	842172	8.10	1372671	10.72	1572769	15.89	1601666	18.52
ZZZZZZ	381482	4.65	1383477	5.77	797054	8.10	1318409	10.72	1343818	15.92	1312255	18.56
ZZZZZZ	359932	4.67	1249247	5.78	775393	8.10	1258237	10.72	1281962	15.96	1259151	18.62

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(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.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EZ5525-CC5485	**Injection Date:**	05/12/16
Lab File ID:	Z110613.D	**Injection Time:**	10:16
Instrument ID:	GCMSZ	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	211716	4.19	822685	5.12	508733	6.39	867947	7.98	936966	12.88	900377	15.85
Upper Limit [a]	423432	4.69	1645370	5.62	1017466	6.89	1735894	8.48	1873932	13.38	1800754	16.35
Lower Limit [b]	105858	3.69	411343	4.62	254367	5.89	433974	7.48	468483	12.38	450189	15.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93671-MB1	175642	4.19	689138	5.12	434687	6.39	704639	7.98	701243	12.87	643704	15.85
OP93791-MB1	205251	4.19	786162	5.12	475562	6.39	803198	7.98	827113	12.87	783769	15.85
ZZZZZZ	201346	4.19	781629	5.12	480051	6.39	801740	7.98	844073	12.87	770024	15.85
ZZZZZZ	196590	4.20	745880	5.12	442386	6.39	718528	7.98	719705	12.87	656268	15.85
ZZZZZZ	185094	4.20	724320	5.12	431018	6.39	740764	7.98	721236	12.87	665411	15.85
ZZZZZZ	195933	4.20	761188	5.12	442426	6.39	743455	7.98	739678	12.87	646616	15.85
ZZZZZZ	203618	4.19	787014	5.12	451095	6.39	780587	7.98	750493	12.88	719925	15.85
ZZZZZZ	193518	4.19	737510	5.12	459051	6.39	752011	7.98	737928	12.88	659143	15.86
ZZZZZZ	218136	4.19	803683	5.12	469262	6.39	781666	7.98	774308	12.88	743033	15.86
ZZZZZZ	212727	4.19	826261	5.12	487438	6.39	770751	7.98	719039	12.87	608619	15.86
ZZZZZZ	246198	4.19	888481	5.12	522586	6.39	794997	7.98	702393	12.89	730973	15.87
ZZZZZZ	183593	4.19	690900	5.12	411455	6.39	694567	7.98	701057	12.88	702779	15.86
ZZZZZZ	197995	4.19	732486	5.12	430307	6.39	701306	7.98	807135	12.90	745765	15.89
ZZZZZZ	188583	4.20	708441	5.12	427434	6.39	707404	7.99	745634	12.89	699676	15.88
ZZZZZZ	171286	4.20	633466	5.12	404485	6.39	658791	7.99	703248	12.91	670568	15.90
ZZZZZZ	175207	4.20	667831	5.12	416023	6.39	684670	7.99	725249	12.89	658736	15.88
ZZZZZZ	204912	4.21	741834	5.13	485771	6.39	816179	7.99	967763	12.90	828558	15.89
ZZZZZZ	206620	4.20	781633	5.13	469708	6.40	857229	8.00	802322	12.91	768318	15.90

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(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.

Semivolatile Surrogate Recovery Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JC19914-1	M124343.D	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]
JC19914-1	M124316.D	41	33	87	70	69	69
JC19914-3	M124344.D	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]
JC19914-3	M124317.D	52	36	92	76	72	73
JC19914-4	M124318.D	42	28	86	67	67	69
JC19914-5	M124319.D	40	28	84	67	65	69
OP93784-BS1	M124313.D	55	36	96	68	75	76
OP93784-MB1	M124310.D	55	36	102	82	80	83
OP93784-MS	M124314.D	71	60	94	66	73	73
OP93784-MSD	M124315.D	72	60	94	68	74	71

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	14-88%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	39-149%
S4 = Nitrobenzene-d5	32-128%
S5 = 2-Fluorobiphenyl	35-119%
S6 = Terphenyl-d14	10-126%

(a) Outside control limits due to dilution.

Semivolatile Surrogate Recovery Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JC19914-2	6P25850.D	60	59	81	15* [a]	69	76
JC19914-6	M124425.D	80	79	92	59	83	80
JC19914-7	M124424.D	86	85	96	76	89	80
OP93791-BS1	6P25846.D	78	77	116	82	90	94
OP93791-MB1	6P25845.D	71	69	101	72	80	90
OP93791-MB1	Z110617.D	70	71	83	98	87	82
OP93791-MB1	M124423.D	85	82	100	83	88	83
OP93791-MS	6P25848.D	58	59	82	12* [b]	69	70
OP93791-MSD	6P25849.D	56	57	80	16* [b]	66	69

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	30-106%
S2 = Phenol-d5	30-106%
S3 = 2,4,6-Tribromophenol	24-140%
S4 = Nitrobenzene-d5	26-122%
S5 = 2-Fluorobiphenyl	36-112%
S6 = Terphenyl-d14	36-132%

(a) Outside control limits due to matrix interference, confirmed by MS/MSD.
(b) Outside control limits due to matrix interference.

Semivolatile Surrogate Recovery Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC19914-1	3M61224.D	69	77	85
JC19914-3	3M61225.D	75	73	85
JC19914-4	3M61222.D	65	73	87
JC19914-5	3M61223.D	63	72	84
OP93784A-BS12	3M61221.D	68	77	85
OP93784A-MB1	3M61220.D	70	79	92
OP93784A-MS	3M61226.D	72	74	89
OP93784A-MSD	3M61227.D	74	75	95

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	24-125%
S2 = 2-Fluorobiphenyl	19-127%
S3 = Terphenyl-d14	10-119%

Semivolatile Surrogate Recovery Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8270D BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC19914-2	4P16286.D	19	37	87
JC19914-6	4M65316.D	66	96	82
JC19914-7	4M65317.D	86	93	72
OP93791A-BS12	4P16281.D	102	49	124
OP93791A-MB1	4M65315.D	115	121	108
OP93791A-MB1	4P16280A.D	99	71	137
OP93791A-MS	4P16282.D	37	44	83
OP93791A-MSD	4P16283.D	20	37	79

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	15-138%
S2 = 2-Fluorobiphenyl	12-148%
S3 = Terphenyl-d14	10-157%

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2855-ICC2855
Lab FileID: 3M60763A.D

```
                        Response Factor Report  MS3M

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Calibration Files
2.5 =3m60771.D   1.0 =3m60763a.D  0.5 =3m60764a.D  0.2 =3m60765a.D
0.1 =3m60766.D   0.05=3m60767.D   0.02=3m60768.D   0.01=3m60769.D
5   =3m60770.D       =                =                =

Compound
            2.5   1.0   0.5   0.2   0.1   0.05  0.02  0.01  5            Avg    %RSD
-----------------------------------------------------------------------------

1) I   1-Methylnaphthalene-d ----------------ISTD---------------------
2)  1,4-dioxane
          0.203 0.208 0.213 0.203 0.229 0.249 0.142 0.206 0.207        0.207   13.87
3)  2-Fluorophenol
          0.491 0.509 0.520 0.520 0.508 0.504 0.493       0.460        0.500    3.90
4)  Phenol-d5
          0.804 0.853 0.878 0.881 0.846 0.829 0.817 0.745 0.800        0.828    5.16
5)  Phenol
          0.851 0.928 0.933 0.920 0.894 0.883 0.866       0.866        0.893    3.51
6)  bis(2-Chloroethyl)ether
          0.591 0.707 0.712 0.713 0.696 0.711 0.696 0.663 0.582        0.675    7.74
7)  Nitrobenzene-d5
          0.638 0.806 0.832 0.805 0.758 0.744             0.807        0.770    8.55
8)  Nitrobenzene
          0.854 0.860 0.836 0.825 0.799 0.811 0.814 0.833 0.887        0.836    3.30
9)  Naphthalene
          2.224 2.193 2.197 2.251 2.235 2.191 2.239 2.236 2.237        2.223    1.02
10)  Hexachlorobutadiene
          0.362 0.402 0.405 0.406 0.389 0.398 0.383 0.361 0.382        0.387    4.43
11)  2-Methylnaphthalene
          1.162 1.204 1.136 1.160 1.133 1.125 1.156 1.137 1.209        1.158    2.63
12)  1-Methylnaphthalene
          1.412 1.400 1.398 1.453 1.441 1.564 1.930 2.020 1.413        1.559   15.54
13)  Hexachlorocyclopentadiene
          0.328 0.354 0.325 0.283 0.244 0.242             0.377        0.308   17.08

14) I   Fluorene-d10          ----------------ISTD---------------------
15)  2-Fluorobiphenyl
          0.947 1.110 1.110 1.165 1.171 1.115 1.098 1.077              1.099    6.31
16)  Acenaphthylene
          1.412 1.536 1.478 1.441 1.385 1.283 1.281 1.283 1.368        1.385    6.61
17)  Acenaphthene
          0.909 0.985 0.947 0.967 0.951 0.914 0.906 0.875 0.867        0.925    4.39
18)  4,6-dinitro-2-methylphenol
          0.154 0.130 0.084 0.056 0.038                   0.176        0.106   52.07
           ---- Quadratic regression ----  Coefficient =  0.9996
             Response Ratio = -0.02319 + 0.14133 *A + 0.00610 *A^2

19)  Fluorene
          1.036 1.189 1.143 1.159 1.121 1.092 1.109 1.147 0.991        1.110    5.63
20)  2,4,6-Tribromophenol
          0.120 0.132 0.134 0.130 0.115                   0.120        0.125    6.09

21) I   Fluoranthene-d10      ----------------ISTD---------------------
```

Initial Calibration Summary

Job Number: JC19914 **Sample:** E3M2855-ICC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60763A.D
Project: BMSMC, Building 5 Area, PR

```
22)  Hexachlorobenzene
           0.191 0.190 0.190 0.190 0.186 0.186 0.187 0.186 0.196        0.189    1.67
23)  Pentachlorophenol
           0.133 0.135 0.123 0.099 0.084 0.077             0.134        0.112   22.28
            ---- Quadratic regression ----  Coefficient =  0.9999
              Response Ratio = -0.00592 + 0.13565 *A + -0.00012 *A^2

24)  Phenanthrene
           0.997 0.998 0.996 0.962 0.938 0.921 0.981 1.013 1.014        0.980    3.36
25)  Anthracene
           0.976 0.941 0.912 0.863 0.787 0.773 0.758 0.766 1.007        0.865   11.30
26)  Fluoranthene
           1.111 1.150 1.092 1.112 1.098 1.149 1.440 1.808 1.123        1.231   19.61
27)  Pyrene
           1.134 1.180 1.158 1.109 1.065 1.078 1.108 1.287 1.178        1.144    5.89
28)  Terphenyl-d14
           0.578 0.563 0.590 0.618 0.600 0.611             0.501        0.580    6.83
29)  Benzo[a]anthracene
           1.009 1.068 1.029 0.987 0.960 1.043 1.216 1.538 1.019        1.097   16.49
30)  Chrysene
           1.077 1.074 1.014 1.032 1.014 1.069             1.077        1.051    2.84

31) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
32)  Benzo[b]fluoranthene
           1.285 1.344 1.281 1.288 1.257 1.317 1.607       1.269        1.331    8.62
33)  Benzo[k]fluoranthene
           1.212 1.238 1.139 1.169 1.261 1.246 1.449 1.113 1.259        1.232    7.92
34)  Benzo[a]pyrene
           1.170 1.217 1.162 1.160 1.081 1.465 1.220 1.504 1.177        1.240   11.69
35)  Indeno[1,2,3-cd]pyrene
           1.291 1.342 1.265 1.286 1.256 1.194 1.201 1.184 1.320        1.260    4.48
36)  Dibenz[a,h]anthracene
           1.076 1.073 0.976 1.048 1.030 0.956 0.902 1.177 1.111        1.039    8.10
37)  Benzo[g,h,i]perylene
           1.122 1.143 1.083 1.090 1.091 1.073 1.041 1.074 1.135        1.095    3.02
-----------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3M2855SIM.M        Fri Apr 22 09:08:14 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2855-ICV2855
Lab FileID: 3M60772.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2855\3m60772.D          Vial: 11
Acq On    : 21 Apr 2016   7:27 pm                    Operator: linseyk
Sample    : icv2855-1.0                              Inst    : MS3M
Misc      : op93052a,e3m2855                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Apr 22 08:34:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	117	0.00	10.64
5		Phenol	0.893	0.813	9.0	102	0.01	6.13
14	I	Fluorene-d10	1.000	1.000	0.0	119	0.00	13.64
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	3.836	23.3	86	0.00	13.85
21	I	Fluoranthene-d10	1.000	1.000	0.0	111	0.00	17.84
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	4.338	13.2	93	0.00	15.20

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 3m60763a.D M3M2855SIM.M       Fri Apr 22 09:06:50 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19914 **Sample:** E3M2855-ICV2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60773.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2855\3m60773.D          Vial: 12
Acq On    : 21 Apr 2016   8:00 pm                    Operator: linseyk
Sample    : icv2855-1.0                              Inst    : MS3M
Misc      : op93052a,e3m2855                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Apr 22 08:34:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	95	0.00	10.64
2	t	1,4-dioxane	0.207	0.220	-6.3	101	0.02	2.32
6	t	bis(2-Chloroethyl)ether	0.675	0.672	0.4	91	0.00	6.29
8	t	Nitrobenzene	0.836	0.685	18.1	76	0.00	7.76
9	t	Naphthalene	2.223	2.523	-13.5	110	0.00	9.14
10	t	Hexachlorobutadiene	0.387	0.431	-11.4	102	0.00	9.42
11	t	2-Methylnaphthalene	1.158	1.207	-4.2	95	0.00	10.52
14	I	Fluorene-d10	1.000	1.000	0.0	91	0.00	13.64
16	t	Acenaphthylene	1.385	1.474	-6.4	87	0.00	12.29
17	t	Acenaphthene	0.925	1.076	-16.3	99	0.00	12.65
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.110	1.199	-8.0	92	0.00	13.68
21	I	Fluoranthene-d10	1.000	1.000	0.0	83	0.00	17.84
22	t	Hexachlorobenzene	0.189	0.213	-12.7	93	0.00	14.78
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.980	1.137	-16.0	94	0.00	15.60
25	t	Anthracene	0.865	0.996	-15.1	88	0.00	15.71
26	t	Fluoranthene	1.231	1.254	-1.9	90	0.00	17.87
27	t	Pyrene	1.144	1.234	-7.9	87	0.00	18.26
29	t	Benzo[a]anthracene	1.097	1.218	-11.0	94	0.01	20.36
30	t	Chrysene	1.051	1.074	-2.2	83	0.00	20.41
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	77	0.00	22.45
32	t	Benzo[b]fluoranthene	1.331	1.246	6.4	71	0.00	22.02
33	t	Benzo[k]fluoranthene	1.232	1.383	-12.3	85	0.00	22.06
34	t	Benzo[a]pyrene	1.240	1.197	3.5	75	0.00	22.46
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.312	-4.1	75	0.00	23.96
36	t	Dibenz[a,h]anthracene	1.039	1.040	-0.1	74	0.00	24.02
37	t	Benzo[g,h,i]perylene	1.095	1.148	-4.8	77	0.00	24.36

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 3m60763a.D M3M2855SIM.M       Fri Apr 22 09:06:52 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2855-ICV2855
Lab FileID: 3M60774.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2855\3m60774.D          Vial: 13
Acq On    : 21 Apr 2016   8:35 pm                    Operator: linseyk
Sample    : icv2855-1.0                              Inst    : MS3M
Misc      : op93052a,e3m2855                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Apr 22 08:34:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	108	0.00	10.64
12 t	1-Methylnaphthalene	1.559	1.488	4.6	115	0.00	10.70
13	Hexachlorocyclopentadiene	0.308	0.322	-4.6	98	0.00	10.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60763a.D M3M2855SIM.M Fri Apr 22 09:07:18 2016 RPT1

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E3M2879-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61219.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2879\3m61219.D          Vial: 2
Acq On    : 11 May 2016   9:41 am                    Operator: linseyk
Sample    : cc2855-.5                                Inst    : MS3M
Misc      : op93756a,e3m2879                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed May 11 12:21:34 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	133	-0.06	10.36
2	t	1,4-dioxane	0.207	0.195	5.8	122	0.00	2.11
3	S	2-Fluorophenol	0.500	0.510	-2.0	131	-0.10	4.32
4	S	Phenol-d5	0.828	0.822	0.7	125	-0.05	5.93
5		Phenol	0.893	0.859	3.8	123	-0.04	5.95
6	t	bis(2-Chloroethyl)ether	0.675	0.623	7.7	116	-0.03	6.06
7	S	Nitrobenzene-d5	0.770	0.653	15.2	105	-0.08	7.49
8	t	Nitrobenzene	0.836	0.708	15.3	113	-0.04	7.51
9	t	Naphthalene	2.223	2.027	8.8	123	0.11	8.89
10	t	Hexachlorobutadiene	0.387	0.404	-4.4	133	-0.06	9.17
11	t	2-Methylnaphthalene	1.158	1.156	0.2	136	-0.06	10.24
12	t	1-Methylnaphthalene	1.559	1.224	21.5#	117	-0.06	10.43
13		Hexachlorocyclopentadiene	0.308	0.276	10.4	113	-0.04	10.59
14	I	Fluorene-d10	1.000	1.000	0.0	128	-0.08	13.37
15	S	2-Fluorobiphenyl	1.099	1.149	-4.5	133	-0.10	11.04
16	t	Acenaphthylene	1.385	1.350	2.5	117	-0.09	12.03
17	t	Acenaphthene	0.925	0.951	-2.8	129	-0.09	12.38
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	2.500	2.646	-5.8	178	-0.05	13.60
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.110	1.097	1.2	123	-0.02	13.41
20	S	2,4,6-Tribromophenol	0.125	0.130	-4.0	124	-0.05	13.92
21	I	Fluoranthene-d10	1.000	1.000	0.0	134	-0.06	17.58
22	t	Hexachlorobenzene	0.189	0.176	6.9	125	-0.11	14.50
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	2.500	1.829	26.8#	98	-0.08	14.95
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.980	0.929	5.2	125	-0.08	15.32
25	t	Anthracene	0.865	0.799	7.6	118	-0.06	15.43
26	t	Fluoranthene	1.231	1.040	15.5	128	-0.06	17.61
27	t	Pyrene	1.144	1.022	10.7	119	-0.06	18.01
28	S	Terphenyl-d14	0.580	0.605	-4.3	138	-0.04	18.40
29	t	Benzo[a]anthracene	1.097	0.908	17.2	119	-0.03	20.10
30	t	Chrysene	1.051	0.992	5.6	132	-0.03	20.16
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	140	-0.06	22.18

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E3M2879-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61219.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.215	8.7	133	-0.05	21.76
33	t	Benzo[k]fluoranthene	1.232	1.136	7.8	140	-0.05	21.81
34	t	Benzo[a]pyrene	1.240	1.068	13.9	129	-0.20	22.21
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.325	-5.2	147	-0.06	23.67
36	t	Dibenz[a,h]anthracene	1.039	1.096	-5.5	158	-0.06	23.71
37	t	Benzo[g,h,i]perylene	1.095	1.184	-8.1	154	-0.08	24.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60764a.D M3M2855SIM.M Wed May 11 15:04:08 2016 RPT1

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICC2881
Lab FileID: 4M64724.D

```
                    Response Factor Report  GCMS4M

Method       : C:\MSDCHEM\1\METHODS\M4M2881SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Thu Apr 14 15:56:58 2016
Response via : Initial Calibration

Calibration Files
0.05=4m64727.D   .2  =4m64725.D   2.5 =4m64731.D   .02 =4m64728.D
.1  =4m64726.D   1   =4m64724.D   .01 =4m64729.D   .5  =4m64723a.D
5   =4m64730.D       =                =                =

Compound
            0.05  .2    2.5   .02   .1    1     .01   .5    5            Avg    %RSD
-----------------------------------------------------------------------------

1) I   1-Methylnaphthalene-d ----------------ISTD---------------------
2)  2-Fluorophenol
          0.546 0.542 0.499 0.538 0.521 0.554       0.499 0.490        0.524    4.73
3)  Phenol-d5
          0.920 0.918 0.849 0.886 0.882 0.935       0.847 0.809        0.881    4.93
4)  Phenol
          0.921 0.933 0.882 0.903 0.892 0.975       0.881 0.831        0.902    4.73
5)  bis(2-Chloroethyl)ether
          0.731 0.697 0.658 0.698 0.673 0.726 0.649 0.646 0.641        0.680    5.09
6)  Nitrobenzene-d5
          0.807 0.820 0.771 0.784 0.791 0.834       0.775 0.735        0.790    3.92
7)  Naphthalene
          2.377 2.320 2.136 2.380 2.288 2.354 2.160 2.151 2.097        2.251    5.08
8)  Hexachlorobutadiene
          0.574 0.561 0.524 0.567 0.544 0.587 0.594 0.533 0.519        0.556    4.93
9)  2-Methylnaphthalene
          0.963 0.950 0.958 1.070 0.930 0.967 1.051 0.941 0.983        0.979    4.97
10)  Hexachlorocyclopentadiene
                0.231 0.354       0.215 0.305       0.293 0.369        0.295   21.23
           ---- Quadratic regression ----  Coefficient =  0.9997
             Response Ratio = -0.01210 + 0.34384 *A + 0.01203 *A^2

11)  2-Fluorobiphenyl
          1.286 1.237 0.964 1.260 1.197 1.090       0.977 1.225        1.155   11.05

12) I   Fluorene-d10          ----------------ISTD---------------------
13)  Acenaphthylene
          0.891 0.905 0.936 0.871 0.908 0.911 0.914 0.999 0.917        0.917    3.87
14)  Acenaphthene
          0.581 0.592 0.589 0.582 0.581 0.581 0.589 0.625 0.594        0.590    2.36
15)  Dibenzofuran
          0.922 0.944 0.820 0.884 0.886 0.957 0.808 0.901 0.793        0.879    6.80
16)  Fluorene
          1.085 1.119 1.007 1.052 1.074 1.134 1.084 1.102 0.948        1.067    5.46
17)  2,4,6-Tribromophenol
          0.215 0.239 0.176       0.226 0.239       0.228 0.170        0.213   13.50
18)  Hexachlorobenzene
          0.418 0.433 0.402 0.433 0.423 0.424 0.417 0.426 0.383        0.418    3.86
19)  Pentachlorophenol
          0.126 0.157 0.194       0.138 0.196       0.196 0.192        0.171   17.80
20)  Phenanthrene
          1.411 1.479 1.384 1.516 1.427 1.459 1.492 1.457 1.318        1.438    4.23
21)  Anthracene
          1.328 1.390 1.372 1.305 1.334 1.445 1.311 1.440 1.332        1.362    3.89
```

Initial Calibration Summary

Job Number: JC19914 **Sample:** E4M2881-ICC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64724.D
Project: BMSMC, Building 5 Area, PR

```
22) I   Fluoranthene-d10      ----------------ISTD---------------------
23)  Fluoranthene
           1.095 1.062 1.122       1.021 1.018       1.129 1.113        1.080    4.36
24)  Pyrene
           1.028 1.068 1.093       1.028 1.078       1.077 1.079        1.065    2.43
25)  Terphenyl-d14
           0.557 0.554 0.538 0.536 0.548 0.543       0.568 0.478        0.540    5.03
26)  Benzo[a]anthracene
           0.980 0.997 1.012       0.928 0.996       0.985 1.006        0.987    2.85
27)  Chrysene
           0.936 0.971 1.010       0.937 0.959       0.956 0.993        0.966    2.89

28) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
29)  Benzo[b]fluoranthene
           1.471 1.473 1.388       1.419 1.490       1.462 1.371        1.439    3.22
30)  Benzo[k]fluoranthene
           1.163 1.191 1.248       1.171 1.164       1.229 1.267        1.205    3.56
31)  Benzo[a]pyrene
           1.118 1.222 1.200       1.136 1.217       1.224 1.232        1.193    3.87
32)  Indeno[1,2,3-cd]pyrene
           1.489 1.513 1.473       1.452 1.504       1.517 1.493        1.492    1.54
33)  Dibenz[a,h]anthracene
           1.242 1.220 1.197       1.164 1.124       1.251 1.205        1.201    3.71
34)  Benzo[g,h,i]perylene
           1.253 1.291 1.253       1.234 1.263       1.286 1.241        1.260    1.72

35) I   1-Methylnaphthalene-d ----------------ISTD---------------------
36)  1,4-Dioxane
                 0.285 0.180       0.440 0.247       0.232 0.174        0.260   37.54
            ---- Quadratic regression ----  Coefficient =  0.9964
              Response Ratio = 0.00763 + 0.18372 *A + -0.01286 *A^2

37)  1-Methylnaphthalene
           0.960 0.877 0.833 1.077 0.868 0.902 1.217 0.829 0.849        0.935   14.08

38) I   Fluorene-d10a         ----------------ISTD---------------------
39)  4,6-dinitro-2-methylphenol
           0.040 0.061 0.140       0.050 0.110       0.085 0.179        0.095   53.81
            ---- Quadratic regression ----  Coefficient =  0.9999
              Response Ratio = -0.00927 + 0.10312 *A + 0.01247 *A^2

40)  1,2-Diphenylhydrazine
                 1.010 0.875       0.954 1.092       0.968 0.781        0.947   11.41
41)  n-nitrosodiphenylamine
                 0.748 0.671       0.719 0.792       0.725 0.559        0.702   11.47
-----------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M2881SIM.M        Fri Apr 15 08:19:27 2016   MANAGER
```

6.7.6

6

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICV2881
Lab FileID: 4M64732.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2881\4m64732.D          Vial: 11
Acq On    : 14 Apr 2016   3:25 pm                    Operator: linseyk
Sample    : icv2881-1.0                              Inst    : GCMS4M
Misc      : op92998a,e4m2881                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4M2881SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Thu Apr 14 15:56:58 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	124	0.00	10.75
4	t	Phenol	0.902	0.843	6.5	107	0.00	6.35
		----------	AvgRF	CCRF	% Dev	----------		
12	I	Fluorene-d10	1.000	1.000	0.0	115	0.00	13.72
19	t	Pentachlorophenol	0.171	0.164	4.1	96	0.00	15.32
22	I	Fluoranthene-d10	1.000	1.000	0.0	111	0.00	17.90
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	115	0.01	22.51
35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	124	0.00	10.75
		----------	AvgRF	CCRF	% Dev	----------		
38	I	Fluorene-d10a	1.000	1.000	0.0	115	0.00	13.72
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	5.000	4.886	2.3	113	0.00	13.96

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 4m64724.D  M4M2881SIM.M       Thu Apr 14 17:06:11 2016   MANAGER
```

Initial Calibration Verification

Job Number: JC19914 **Sample:** E4M2881-ICV2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64733.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2881\4m64733.D          Vial: 12
Acq On    : 14 Apr 2016   3:57 pm                    Operator: linseyk
Sample    : icv2881-1.0                              Inst    : GCMS4M
Misc      : op92998a,e4m2881                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4M2881SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Thu Apr 14 15:56:58 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	96	0.00	10.75
5	t	bis(2-Chloroethyl)ether	0.680	0.767	-12.8	102	0.00	6.43
7	t	Naphthalene	2.251	2.457	-9.2	101	0.00	9.26
8	t	Hexachlorobutadiene	0.556	0.595	-7.0	98	0.00	9.57
9	t	2-Methylnaphthalene	0.979	1.017	-3.9	101	0.00	10.63
		----------	True	Calc.	% Drift		----------	
10	t	Hexachlorocyclopentadiene	2.000	1.760	12.0	82	0.00	10.98
		----------	AvgRF	CCRF	% Dev		----------	
12	I	Fluorene-d10	1.000	1.000	0.0	84	0.00	13.72
13	t	Acenaphthylene	0.917	1.068	-16.5	98	0.00	12.39
14	t	Acenaphthene	0.590	0.723	-22.5	104	0.00	12.74
15	t	Dibenzofuran	0.879	1.056	-20.1	92	0.00	13.10
16	t	Fluorene	1.067	1.254	-17.5	92	0.00	13.77
18	t	Hexachlorobenzene	0.418	0.468	-12.0	92	0.00	14.88
20	t	Phenanthrene	1.438	1.648	-14.6	94	0.00	15.69
21	t	Anthracene	1.362	1.554	-14.1	90	0.00	15.78
22	I	Fluoranthene-d10	1.000	1.000	0.0	80	0.00	17.90
23	t	Fluoranthene	1.080	1.277	-18.2	100	0.00	17.94
24	t	Pyrene	1.065	1.252	-17.6	93	0.00	18.34
26	t	Benzo[a]anthracene	0.987	1.118	-13.3	90	0.00	20.43
27	t	Chrysene	0.966	1.115	-15.4	93	0.00	20.48
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	84	0.00	22.50
29	t	Benzo[b]fluoranthene	1.439	1.416	1.6	80	0.00	22.08
30	t	Benzo[k]fluoranthene	1.205	1.361	-12.9	98	0.00	22.13
31	t	Benzo[a]pyrene	1.193	1.329	-11.4	91	0.00	22.54
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.598	-7.1	89	0.00	24.07
33	t	Dibenz[a,h]anthracene	1.201	1.297	-8.0	97	0.00	24.11
34	t	Benzo[g,h,i]perylene	1.260	1.356	-7.6	90	0.00	24.45
35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	96	0.00	10.75
		----------	True	Calc.	% Drift		----------	
36	t	1,4-Dioxane	1.000	1.015	-1.5	83	0.02	2.48
		----------	AvgRF	CCRF	% Dev		----------	
38	I	Fluorene-d10a	1.000	1.000	0.0	84	0.00	13.72
		----------	AvgRF	CCRF	% Dev		----------	

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICV2881
Lab FileID: 4M64733.D

40	t	1,2-Diphenylhydrazine	0.947	1.116	-17.8	85	0.00	14.13
41	t	n-nitrosodiphenylamine	0.702	0.796	-13.4	84	0.00	14.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Thu Apr 14 17:06:13 2016 MANAGER

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICV2881
Lab FileID: 4M64734.D

```
                    Evaluate Continuing Calibration Report

 Data File : C:\msdchem\1\DATA\E4M2881\4m64734.D          Vial: 13
 Acq On    : 14 Apr 2016   4:28 pm                    Operator: linseyk
 Sample    : icv2881-1.0                              Inst    : GCMS4M
 Misc      : op92998a,e4m2881                         Multiplr: 1.00
 MS Integration Params: lscint.p

 Method       : C:\MSDCHEM\1\METHODS\M4M2881SIM.M (RTE Integrator)
 Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
 Last Update  : Thu Apr 14 15:56:58 2016
 Response via : Multiple Level Calibration

 Min. RRF     :   0.050  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.
 ---------------------------------------------------------------------------
35 I   1-Methylnaphthalene-d10a    1.000   1.000      0.0  118   0.00   10.75

           ----------------------- AvgRF   CCRF     % Dev   -------------
37 t   1-Methylnaphthalene         0.935   0.885      5.3  116   0.00   10.82
---------------------------------------------------------------------------
---------------------------------------------------------------------------

   (#) = Out of Range               SPCC's out = 0  CCC's out = 0
    4m64724.D  M4M2881SIM.M       Thu Apr 14 17:06:15 2016   MANAGER
```

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E4M2922-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65314.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2922\4m65314.D          Vial: 2
Acq On    : 17 May 2016  10:09 am                    Operator: linseyk
Sample    : cc2881-.5                                Inst    : GCMS4M
Misc      : op93881a,e4m2922                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4M2881SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Fri May 13 11:56:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	94	-0.05	10.46
2	S	2-Fluorophenol	0.524	0.563	-7.4	106	-0.12	4.52
3	S	Phenol-d5	0.881	1.003	-13.8	111	-0.09	6.11
4	t	Phenol	0.902	1.065	-18.1	113	-0.09	6.12
5	t	bis(2-Chloroethyl)ether	0.680	0.759	-11.6	110	-0.04	6.19
6	S	Nitrobenzene-d5	0.790	0.982	-24.3#	119	-0.10	7.60
7	t	Naphthalene	2.251	2.450	-8.8	107	-0.07	8.98
8	t	Hexachlorobutadiene	0.556	0.642	-15.5	113	-0.07	9.29
9	t	2-Methylnaphthalene	0.979	1.320	-34.8#	132	-0.05	10.34
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	1.000	1.282	-28.2#	127	-0.04	10.70
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.365	-18.2	131	-0.03	11.13
12	I	Fluorene-d10	1.000	1.000	0.0	107	-0.05	13.44
13	t	Acenaphthylene	0.917	1.010	-10.1	108	-0.07	12.10
14	t	Acenaphthene	0.590	0.638	-8.1	109	-0.07	12.46
15	t	Dibenzofuran	0.879	0.884	-0.6	105	-0.06	12.81
16	t	Fluorene	1.067	1.158	-8.5	113	-0.05	13.49
17	S	2,4,6-Tribromophenol	0.213	0.258	-21.1#	121	-0.04	13.99
18	t	Hexachlorobenzene	0.418	0.431	-3.1	108	-0.03	14.59
19	t	Pentachlorophenol	0.171	0.216	-26.3#	118	-0.01	15.04
20	t	Phenanthrene	1.438	1.530	-6.4	112	-0.04	15.38
21	t	Anthracene	1.362	1.524	-11.9	113	-0.02	15.49
22	I	Fluoranthene-d10	1.000	1.000	0.0	114	-0.04	17.63
23	t	Fluoranthene	1.080	1.060	1.9	107	-0.04	17.67
24	t	Pyrene	1.065	1.097	-3.0	117	-0.05	18.04
25	S	Terphenyl-d14	0.540	0.570	-5.6	115	-0.03	18.44
26	t	Benzo[a]anthracene	0.987	1.030	-4.4	120	-0.04	20.15
27	t	Chrysene	0.966	0.996	-3.1	119	-0.04	20.21
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	112	-0.04	22.23
29	t	Benzo[b]fluoranthene	1.439	1.544	-7.3	118	-0.05	21.80
30	t	Benzo[k]fluoranthene	1.205	1.126	6.6	102	-0.04	21.84
31	t	Benzo[a]pyrene	1.193	1.272	-6.6	116	-0.03	22.26
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.564	-4.8	115	-0.06	23.73
33	t	Dibenz[a,h]anthracene	1.201	1.181	1.7	106	-0.06	23.77
34	t	Benzo[g,h,i]perylene	1.260	1.298	-3.0	113	-0.06	24.10

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E4M2922-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65314.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	94	-0.05	10.46
36	t	1,4-Dioxane		----------NA----------				
37	t	1-Methylnaphthalene	0.935	1.246	-33.3#	141	-0.05	10.53
38	I	Fluorene-d10a	1.000	1.000	0.0	107	-0.05	13.44
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	2.500	4.030	-61.2#	216	-0.04	13.68
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	1.095	-15.6	121	-0.04	13.85
41	t	n-nitrosodiphenylamine	0.702	0.666	5.1	98	-0.04	13.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64723a.D M4M2881SIM.M Wed May 18 11:10:41 2016 MANAGER

6.7.10

6

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P850-ICC850
Lab FileID: 4P16220.D

Response Factor Report MS4P

Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration

Calibration Files
2.5 =4p16228.D 1.0 =4p16220.D 0.5 =4p16221.D 0.2 =4p16222.D
0.1 =4p16223.D 0.05=4p16224.D 0.02=4p16225.D 0.01=4p16226.D
5 =4p16227.D = = =

Compound

	2.5	1.0	0.5	0.2	0.1	0.05	0.02	0.01	5	Avg	%RSD
1) I 1-Methylnaphthalene-d ----------ISTD----------											
2) 1,4-Dioxane	0.157	0.165	0.179	0.188	0.170	0.206			0.180	0.178	8.99
3) 2-Fluorophenol	0.392	0.457	0.504	0.458	0.398	0.435	0.368		0.406	0.427	10.37
4) Phenol-d5	0.728	0.894	1.018	0.859	0.699	0.696	0.584		0.666	0.768	18.59
5) Phenol	0.801	0.946	1.027	0.932	0.795	0.854	0.655		0.936	0.868	13.43
6) bis(2-Chloroethyl)ether	0.547	0.578	0.674	0.596	0.554	0.629	0.578	0.578	0.540	0.586	7.25
7) Nitrobenzene-d5	0.559	0.683	0.809	0.674	0.539	0.648	0.492		0.694	0.637	16.05
8) Naphthalene	2.052	2.197	2.375	2.157	2.025	2.190	2.114		2.057	2.146	5.26
9) Hexachlorobutadiene	0.367	0.415	0.456	0.429	0.377	0.426	0.399	0.478	0.395	0.416	8.65
10) 2-Methylnaphthalene	1.141	1.307	1.393	1.241	1.069	1.314	1.072	1.308	1.265	1.235	9.30
11) 1-Methylnaphthalene	1.247	1.513	1.692	1.542	1.317	1.604	1.695		1.406	1.502	11.07
12) Hexachlorocyclopentadiene	0.181	0.198	0.197	0.106	0.047	0.042			0.269	0.149	57.52
---- Quadratic regression ---- Coefficient = 0.9970											
Response Ratio = 0.00463 + 0.11477 *A + 0.06039 *A^2											
13) I Fluorene-d10 ----------ISTD----------											
14) 2-Fluorobiphenyl	1.246	1.517	1.638	1.714	1.533	1.715	1.514		1.016	1.487	16.29
15) Acenaphthylene	1.415	1.401	1.378	1.266	1.118	1.132			1.362	1.296	9.73
16) Acenaphthene	1.208	1.409	1.473	1.413	1.209	1.288	1.152	1.298	1.274	1.303	8.33
17) Dibenzofuran	1.362	1.488	1.661	1.577	1.372	1.553			1.354	1.481	8.23
18) Fluorene	1.276	1.274	1.223	1.225	1.221	1.155	1.181		1.094	1.206	5.07
19) 4,6-dinitro-2-methylphenol	0.085	0.063	0.049	0.031	0.020				0.109	0.059	56.27
---- Quadratic regression ---- Coefficient = 0.9999											
Response Ratio = -0.00881 + 0.06267 *A + 0.00766 *A^2											
20) n-nitrosodiphenylamine											

Initial Calibration Summary

Job Number: JC19914 **Sample:** E4P850-ICC850
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16220.D
Project: BMSMC, Building 5 Area, PR

```
          0.574 0.689 0.746 0.631 0.506 0.573 0.450       0.689        0.607   16.53
21)  1,2-Diphenylhydrazine
          1.262 1.143 1.049 0.890 0.820 0.758             1.231        1.022   19.74
22)  2,4,6-Tribromophenol
          0.154 0.168 0.177 0.137 0.102                   0.163        0.150   18.12

23)     Fluoranthene-d10      ----------------ISTD---------------------
24)  Hexachlorobenzene
          0.293 0.252 0.274 0.260 0.274 0.328 0.266 0.361 0.275        0.287   12.33
25)  Pentachlorophenol
          0.122 0.106 0.091 0.065 0.044 0.045             0.140        0.088   42.98
           ---- Quadratic regression ----  Coefficient =  0.9999
             Response Ratio = -0.00830 + 0.10628 *A + 0.00560 *A^2

26)  Phenanthrene
          1.186 1.051 1.134 1.032 0.989 1.016 1.034 1.154 1.163        1.084    6.84
27)  Anthracene
          1.100 0.850 0.837 0.778 0.691                   1.107        0.894   19.23
28)  Fluoranthene
          1.225 1.094 1.175 1.135 1.183 1.234 1.357       1.195        1.200    6.52
29)  Pyrene
          1.200 1.062 1.020 0.947 0.907 0.870 0.798       1.219        1.003   15.15
30)  Terphenyl-d14
          0.547 0.518 0.562 0.512 0.466 0.441 0.390 0.355 0.484        0.475   14.67
31)  Benzo[a]anthracene
          0.650 0.707 0.633 0.475 0.383 0.382             0.775        0.572   27.69
           ---- Quadratic regression ----  Coefficient =  0.9989
             Response Ratio = 0.00093 + 0.57141 *A + 0.16049 *A^2

32)  Chrysene
          1.089 1.024 1.040 0.853 0.785 0.743 0.703       1.125        0.920   18.24

33) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
34)  Benzo[b]fluoranthene
          1.561 1.424 1.442 1.249 1.103                   1.800        1.430   16.97
35)  Benzo[k]fluoranthene
          1.568 1.477 1.378 1.208 0.948                   1.605        1.364   18.25
36)  Benzo[a]pyrene
          1.494 1.341 1.390 1.402 1.593 1.614             1.534        1.481    7.15
37)  Indeno[1,2,3-cd]pyrene
          1.452 1.430 1.261 1.035 0.937                                1.223   18.91
38)  Dibenz[a,h]anthracene
          1.229 1.167 0.993 0.894 0.733 0.708             1.362        1.012   24.83
           ---- Quadratic regression ----  Coefficient =  0.9999
             Response Ratio = -0.01007 + 1.12580 *A + 0.19552 *A^2

39)  Benzo[g,h,i]perylene
          1.426 1.354 1.293 1.196 1.099 1.000             1.509        1.268   14.28
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

         M4P850SIM.M        Tue May 03 17:11:29 2016
```

Initial Calibration Verification

Job Number: JC19914 **Sample:** E4P850-ICV850
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16229.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P850\4p16229.D          Vial: 11
Acq On    : 28 Apr 2016   8:53 pm                   Operator: ashleyd
Sample    : icv850-1.0                              Inst    : MS4P
Misc      : op93004a,e4p850                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P850SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue May 03 17:05:00 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	132	0.00	8.03
2	t	1,4-Dioxane	0.178	0.225	-26.4	180	0.01	1.56
6	t	bis(2-Chloroethyl)ether	0.586	0.611	-4.3	140	0.00	4.06
8	t	Naphthalene	2.146	2.183	-1.7	131	0.00	6.59
9	t	Hexachlorobutadiene	0.416	0.406	2.4	129	0.00	6.90
10	t	2-Methylnaphthalene	1.235	1.178	4.6	119	0.00	7.91
		----------	AvgRF	CCRF	% Dev	----------		
13	I	Fluorene-d10	1.000	1.000	0.0	111	0.00	10.97
15	t	Acenaphthylene	1.296	1.342	-3.5	107	0.00	9.63
16	t	Acenaphthene	1.303	1.430	-9.7	113	0.00	10.00
17		Dibenzofuran	1.481	1.592	-7.5	119	0.00	10.34
18	t	Fluorene	1.206	1.410	-16.9	123	0.00	11.02
		----------	AvgRF	CCRF	% Dev	----------		
20		n-nitrosodiphenylamine	0.607	0.555	8.6	90	0.00	11.37
21		1,2-Diphenylhydrazine	1.022	1.147	-12.2	112	0.00	11.39
23		Fluoranthene-d10	1.000	1.000	0.0	91	0.00	15.19
24	t	Hexachlorobenzene	0.287	0.329	-14.6	119	0.00	12.13
		----------	AvgRF	CCRF	% Dev	----------		
26	t	Phenanthrene	1.084	1.240	-14.4	108	0.02	12.92
27	t	Anthracene	0.894	0.901	-0.8	97	0.00	13.01
28	t	Fluoranthene	1.200	1.346	-12.2	112	0.00	15.23
29	t	Pyrene	1.003	1.139	-13.6	98	0.00	15.60
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[a]anthracene	1.000	0.791	20.9	62	0.00	17.73
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Chrysene	0.920	1.061	-15.3	95	0.00	17.78
33	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	65	0.00	19.81
34	t	Benzo[b]fluoranthene	1.430	1.112	22.2	50	0.00	19.40
35	t	Benzo[k]fluoranthene	1.364	1.584	-16.1	69	0.00	19.43
36	t	Benzo[a]pyrene	1.481	1.651	-11.5	80	0.00	19.83
37	t	Indeno[1,2,3-cd]pyrene	1.223	1.172	4.2	53	0.00	21.26
		----------	True	Calc.	% Drift	----------		
38	t	Dibenz[a,h]anthracene	1.000	0.839	16.1	52	0.00	21.31

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P850-ICV850
Lab FileID: 4P16229.D

```
            ----------------------- AvgRF   CCRF     % Dev   -------------
39 t   Benzo[g,h,i]perylene         1.268   1.345     -6.1   64   0.00   21.57
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range                SPCC's out = 0  CCC's out = 0
    4p16220.D  M4P850SIM.M       Tue May 03 17:11:16 2016
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P850-ICV850
Lab FileID: 4P16231.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P850\4p16231.D          Vial: 13
Acq On    : 28 Apr 2016   9:52 pm                   Operator: ashleyd
Sample    : icv850-1.0                              Inst    : MS4P
Misc      : op93004a,e4p850                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P850SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue May 03 17:05:00 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	166	0.00	8.03
11	t	1-Methylnaphthalene	1.502	1.341	10.7	147	0.00	8.10
		----------	True	Calc.	% Drift	----------		
12		Hexachlorocyclopentadiene	1.000	0.836	16.4	104	0.00	8.28

```
---------------------------------------------------------------------------
---------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    4p16220.D  M4P850SIM.M       Tue May 03 17:11:18 2016
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P854-ICV850
Lab FileID: 4P16259.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P854\4p16259.D          Vial: 2
Acq On    :  9 May 2016   5:20 pm                   Operator: ashleyd
Sample    : icv850-1.0                              Inst    : MS4P
Misc      : op93648a,e4p854                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P850SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue May 03 17:05:00 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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   1-Methylnaphthalene-d10      1.000   1.000      0.0  104  -0.03    8.00
5     Phenol                       0.868   0.921     -6.1  101  -0.02    3.94

          ------------------------ AvgRF   CCRF     % Dev   -------------
13 I  Fluorene-d10                 1.000   1.000      0.0   99  -0.03   10.94

          ------------------------ True    Calc.   % Drift  ------------
19    4,6-dinitro-2-methylpheno    5.000   6.598    -32.0# 145   0.00   11.19

          ------------------------ AvgRF   CCRF     % Dev   -------------
23    Fluoranthene-d10             1.000   1.000      0.0   98  -0.02   15.17
          ------------------------ True    Calc.   % Drift  ------------
25 t  Pentachlorophenol            5.000   4.351     13.0   84  -0.02   12.53
-----------------------------------------------------------------------------
-----------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    4p16220.D  M4P850SIM.M       Mon May 09 18:01:52 2016
```

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E4P857-CC850
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16279.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P857\4p16279.D          Vial: 2
Acq On    : 11 May 2016   3:57 pm                   Operator: juliusj
Sample    : cc850-0.5                               Inst    : MS4P
Misc      : op93668a,e4p857                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P850SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu May 19 11:38:03 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1-Methylnaphthalene-d10	1.000	1.000	0.0	168	-0.08	7.95
2	t	1,4-Dioxane	0.178	0.193	-8.4	181	-0.03	1.52
3	S	2-Fluorophenol	0.427	0.539	-26.2#	179	-0.05	2.74
4	S	Phenol-d5	0.768	0.804	-4.7	132	-0.07	3.87
5		Phenol	0.868	0.984	-13.4	161	-0.07	3.89
6	t	bis(2-Chloroethyl)ether	0.586	0.598	-2.0	149	-0.07	3.99
7	S	Nitrobenzene-d5	0.637	0.656	-3.0	136	-0.08	5.24
8	t	Naphthalene	2.146	2.410	-12.3	170	-0.08	6.52
9	t	Hexachlorobutadiene	0.416	0.396	4.8	145	-0.08	6.82
10	t	2-Methylnaphthalene	1.235	1.105	10.5	133	-0.08	7.84
11	t	1-Methylnaphthalene	1.502	1.094	27.2#	109	-0.08	8.02
		----------	True	Calc.	% Drift	----------		
12		Hexachlorocyclopentadiene	1.000	0.827	17.3	105	-0.10	8.18
		----------	AvgRF	CCRF	% Dev	----------		
13	I	Fluorene-d10	1.000	1.000	0.0	205#	-0.08	10.89
14	S	2-Fluorobiphenyl	1.487	0.891	40.1#	112	-0.08	8.61
15	t	Acenaphthylene	1.296	1.238	4.5	184	-0.08	9.55
16	t	Acenaphthene	1.303	0.796	38.9#	111	-0.08	9.92
17		Dibenzofuran	1.481	1.466	1.0	181	-0.08	10.26
18	t	Fluorene	1.206	1.207	-0.1	203#	-0.08	10.94
		----------	True	Calc.	% Drift	----------		
19		4,6-dinitro-2-methylpheno	2.500	2.216	11.4	190	-0.06	11.14
		----------	AvgRF	CCRF	% Dev	----------		
20		n-nitrosodiphenylamine	0.607	0.440	27.5#	121	-0.08	11.29
21		1,2-Diphenylhydrazine	1.022	0.814	20.4#	159	-0.08	11.31
22	S	2,4,6-Tribromophenol	0.150	0.117	22.0#	136	-0.09	11.43
23		Fluoranthene-d10	1.000	1.000	0.0	153	-0.09	15.10
24	t	Hexachlorobenzene	0.287	0.223	22.3#	125	-0.09	12.03
		----------	True	Calc.	% Drift	----------		
25	t	Pentachlorophenol	2.500	1.796	28.2#	109	-0.08	12.48
		----------	AvgRF	CCRF	% Dev	----------		
26	t	Phenanthrene	1.084	1.129	-4.2	152	-0.08	12.83
27	t	Anthracene	0.894	0.864	3.4	158	-0.08	12.93
28	t	Fluoranthene	1.200	1.236	-3.0	161	-0.09	15.13

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E4P857-CC850
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16279.D
Project: BMSMC, Building 5 Area, PR

29	t	Pyrene	1.003	1.127	-12.4	169	-0.08	15.53
30	S	Terphenyl-d14	0.475	0.606	-27.6#	165	-0.09	15.94
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[a]anthracene	0.500	0.539	-7.8	156	-0.08	17.65
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Chrysene	0.920	1.057	-14.9	156	-0.15	17.70
33	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	157	-0.07	19.73
34	t	Benzo[b]fluoranthene	1.430	1.279	10.6	139	-0.09	19.31
35	t	Benzo[k]fluoranthene	1.364	1.271	6.8	145	-0.07	19.35
36	t	Benzo[a]pyrene	1.481	1.136	23.3#	128	-0.09	19.75
37	t	Indeno[1,2,3-cd]pyrene	1.223	1.221	0.2	152	-0.09	21.17
		----------	True	Calc.	% Drift	----------		
38	t	Dibenz[a,h]anthracene	0.500	0.498	0.4	168	-0.08	21.22
		----------	AvgRF	CCRF	% Dev	----------		
39	t	Benzo[g,h,i]perylene	1.268	1.264	0.3	153	-0.09	21.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16221.D M4P850SIM.M Thu May 19 11:38:57 2016

6.7.15

6

Initial Calibration Summary

Job Number: JC19914 **Sample:** E6P1155-ICC1155
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P24819A.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MS6P

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Calibration Files
2 =6p24812.D 5 =6p24818.D 25 =6p24816.D 80 =6p24815.D
100 =6p24814.D 50 =6p24819A.D 1 =6p24813.D 10 =6p24817.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------									
2) 1,4-Dioxane	0.717	0.735	0.713	0.696	0.677	0.708	0.780	0.714	0.718	4.23
3) Pyridine	1.769	1.826	1.818	1.810	1.724	1.765	1.912	1.827	1.806	3.10
4) N-Nitrosodim	1.173	1.114	1.107	1.075	1.036	1.093	1.195	1.075	1.108	4.76
5) 2-Fluorophen	1.426	1.443	1.440	1.391	1.336	1.414	1.476	1.425	1.419	2.93
6) Indene	2.583	2.738	2.499	2.198	2.060	2.322	2.699	2.609	2.463	9.96
7) Cumene	4.058	4.078	3.874	3.628	3.437	3.800	4.020	3.933	3.853	5.83
8) Phenol-d5	1.803	1.941	1.919	1.821	1.720	1.832	1.987	1.897	1.865	4.64
9) Phenol	2.258	2.294	2.178	1.978	1.871	2.081	2.164	2.172	2.125	6.68
10) Aniline	2.648	2.556	2.177	1.832	1.709	1.955	2.505	2.333	2.214	15.95
11) bis(2-Chloro	1.601	1.634	1.550	1.468	1.401	1.490	1.609	1.551	1.538	5.19
12) 2-Chlorophen	1.626	1.585	1.546	1.438	1.371	1.488	1.499	1.538	1.511	5.39
13) Decane	1.943	1.952	1.810	1.656	1.589	1.710	1.866	1.839	1.796	7.38
14) 1,3-Dichloro	1.691	1.707	1.600	1.493	1.413	1.550	1.717	1.615	1.598	6.79
15) 1,4-Dichloro	1.748	1.654	1.619	1.490	1.434	1.553	1.685	1.673	1.607	6.62
16) Benzyl alcoh	1.028	1.041	1.016	0.970	0.916	1.004	0.984	1.005	0.995	3.94
17) 1,2-Dichloro	1.547	1.592	1.493	1.379	1.303	1.437	1.528	1.545	1.478	6.63
18) Acetophenone	2.251	2.287	2.124	1.873	1.772	1.961	2.371	2.204	2.105	10.17
19) 2-Methylphen	1.405	1.426	1.392	1.211	1.134	1.251	1.323	1.385	1.316	8.08
20) 2,2'-oxybis(	0.538	0.544	0.529	0.480	0.456	0.505	0.554	0.540	0.518	6.68
21) 3&4-Methylph	1.512	1.475	1.418	1.258	1.182	1.298	1.430	1.467	1.380	8.61
22) n-Nitroso-di	1.329	1.326	1.249	1.101	1.053	1.152	1.401	1.304	1.239	10.00
23) Hexachloroet	0.585	0.578	0.571	0.556	0.526	0.559	0.593	0.582	0.569	3.74
24) I Naphthalene-d8	----------ISTD----------									
25) Nitrobenzene	0.448	0.442	0.441	0.431	0.416	0.432	0.448	0.447	0.438	2.56
26) Nitrobenzene	0.467	0.483	0.475	0.443	0.424	0.449	0.473	0.471	0.461	4.29
27) Quinoline	0.707	0.731	0.707	0.690	0.665	0.679	0.707	0.714	0.700	2.95
28) Isophorone	0.815	0.809	0.780	0.742	0.710	0.747	0.760	0.799	0.770	4.78
29) 2-Nitropheno	0.167	0.183	0.193	0.183	0.174	0.187	0.174	0.188	0.181	4.86
30) 2,4-Dimethyl	0.330	0.335	0.354	0.368	0.357	0.359	0.294	0.338	0.342	6.81
31) Benzoic acid	0.197	0.223	0.286	0.324	0.311	0.299		0.245	0.269	17.86
32) bis(2-Chloro	0.475	0.478	0.453	0.427	0.411	0.437	0.483	0.470	0.454	5.88
33) 2,4-Dichloro	0.302	0.296	0.296	0.276	0.268	0.284	0.280	0.294	0.287	4.12
34) 2,6-Dichloro	0.297	0.299	0.290	0.266	0.256	0.274	0.293	0.289	0.283	5.62
35) 1,3,5-Trichl	0.381	0.372	0.341	0.307	0.295	0.327	0.351	0.361	0.342	8.88
36) 1,2,4-Trichl	0.344	0.357	0.335	0.308	0.295	0.321	0.355	0.345	0.332	6.73
37) 1,2,3-Trichl	0.337	0.339	0.322	0.297	0.286	0.307	0.330	0.340	0.320	6.47
38) Naphthalene	1.154	1.139	1.070	0.987	0.949	1.022	1.112	1.093	1.066	6.88
39) 4-Chloroanil	0.459	0.472	0.445	0.391	0.368	0.410	0.434	0.467	0.431	8.76
40) 2,3-Dichloro	0.360	0.371	0.357	0.334	0.316	0.338	0.351	0.374	0.350	5.65
41) Caprolactam	0.175	0.173	0.186	0.185	0.179	0.178	0.173	0.179	0.178	2.70
42) Hexachlorobu	0.203	0.198	0.184	0.173	0.167	0.180	0.192	0.199	0.187	6.95
43) 4-Chloro-3-m	0.329	0.340	0.346	0.342	0.331	0.338	0.345	0.343	0.339	1.87
44) 2-Methylnaph	0.603	0.607	0.582	0.541	0.518	0.554	0.590	0.595	0.574	5.62
45) 1-Methylnaph	0.663	0.642	0.605	0.554	0.537	0.573	0.588	0.624	0.598	7.26

```
46) Dimethylnaph 0.696 0.704 0.681 0.627 0.597 0.634 0.667 0.691 0.662   5.81

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.298 0.315 0.339 0.336 0.321 0.351 0.278 0.335 0.322   7.51
49) 2,4,6-Trichl 0.357 0.364 0.352 0.338 0.322 0.346 0.312 0.346 0.342   5.11
50) 2,4,5-Trichl 0.345 0.388 0.380 0.377 0.357 0.379 0.351 0.387 0.370   4.57
51) 2-Fluorobiph 1.378 1.378 1.281 1.199 1.149 1.253 1.307 1.333 1.285   6.40
52) 2-Chloronaph 1.211 1.225 1.152 1.060 1.006 1.107 1.161 1.172 1.137   6.57
53) Biphenyl     1.625 1.650 1.527 1.429 1.360 1.512 1.609 1.593 1.538   6.62
54) 2-Nitroanili 0.407 0.383 0.429 0.438 0.416 0.438 0.387 0.408 0.413   5.16
55) Dimethylphth 1.395 1.377 1.311 1.259 1.209 1.281 1.314 1.328 1.309   4.62
56) Acenaphthyle 1.779 1.824 1.771 1.677 1.610 1.726 1.754 1.783 1.740   3.94
57) 2,6-Dinitrot 0.237 0.248 0.270 0.287 0.271 0.286 0.209 0.262 0.259  10.14
58) 3-Nitroanili 0.309 0.303 0.332 0.328 0.316 0.327 0.259 0.329 0.313   7.66
59) Acenaphthene 1.231 1.250 1.195 1.110 1.057 1.144 1.217 1.216 1.178   5.72
60) 2,4-Dinitrop 0.068 0.077 0.142 0.177 0.167 0.165       0.101 0.128  35.44
         ----- Quadratic regression -----                Coefficient =  0.9970
              Response Ratio = -0.02860 + 0.18075 *A + -0.00098 *A^2

61) 4-Nitropheno 0.169 0.182 0.205 0.217 0.209 0.217 0.162 0.192 0.194  11.04
62) Dibenzofuran 1.702 1.698 1.564 1.406 1.355 1.502 1.684 1.616 1.566   8.57
63) 2,4-Dinitrot 0.321 0.329 0.380 0.362 0.347 0.369 0.258 0.360 0.341  11.41
64) 2,3,4,6-Tetr 0.314 0.302 0.328 0.330 0.311 0.331 0.286 0.313 0.314   4.93
65) Diethylphtha 1.299 1.298 1.282 1.243 1.190 1.274 1.194 1.319 1.262   3.85
66) Fluorene     1.371 1.395 1.337 1.243 1.192 1.296 1.300 1.367 1.313   5.29
67) 4-Chlorophen 0.721 0.726 0.696 0.629 0.602 0.660 0.737 0.704 0.684   7.13
68) 4-Nitroanili 0.296 0.300 0.330 0.335 0.320 0.331 0.262 0.315 0.311   7.87

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.079 0.126 0.148 0.144 0.138       0.092 0.121  24.00
            ----- Linear regression -----  Coefficient =  0.9988
              Response Ratio = -0.01264 + 0.15054 *A

71) n-Nitrosodip 0.558 0.582 0.560 0.538 0.515 0.548 0.526 0.564 0.549   3.97
72) 1,2-Diphenyl 0.899 0.907 0.905 0.864 0.838 0.890 0.839 0.901 0.880   3.31
73) 2,4,6-Tribro 0.090 0.088 0.100 0.098 0.096 0.101 0.083 0.091 0.093   6.78
74) 4-Bromopheny 0.225 0.223 0.219 0.207 0.201 0.213 0.203 0.218 0.214   4.38
75) Hexachlorobe 0.222 0.236 0.223 0.208 0.202 0.214 0.216 0.226 0.219   4.89
76) Pentachlorop 0.135 0.126 0.149 0.147 0.140 0.148 0.107 0.137 0.136  10.37
77) Phenanthrene 1.242 1.227 1.152 1.076 1.044 1.109 1.191 1.180 1.153   6.15
78) Anthracene   1.194 1.207 1.168 1.099 1.054 1.134 1.095 1.196 1.143   4.93
79) Carbazole    1.040 1.053 1.023 0.980 0.940 1.004 0.966 1.040 1.006   4.03
80) Di-n-butylph 1.188 1.204 1.259 1.204 1.160 1.227 1.046 1.240 1.191   5.56
81) Fluoranthene 1.288 1.271 1.280 1.226 1.191 1.259 1.194 1.281 1.249   3.18
82) Octadecane   0.544 0.557 0.567 0.527 0.512 0.552 0.515 0.570 0.543   4.16

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.302 1.315 1.284 1.276 1.221 1.255 1.132 1.271 1.257   4.61
85) Terphenyl-d1 0.742 0.767 0.780 0.774 0.738 0.751 0.706 0.755 0.752   3.14
86) Butylbenzylp 0.485 0.452 0.525 0.540 0.520 0.531 0.409 0.485 0.493   9.16
87) Butyl steara 0.322 0.322 0.370 0.372 0.355 0.362 0.262 0.334 0.337  10.87
88) Benzo[a]anth 1.177 1.122 1.139 1.136 1.083 1.114 1.183 1.106 1.132   3.02
89) 3,3'-Dichlor 0.349 0.348 0.389 0.390 0.377 0.380 0.328 0.365 0.366   6.07
90) Chrysene     1.152 1.148 1.149 1.136 1.093 1.130 1.131 1.146 1.136   1.69
91) bis(2-Ethylh 0.634 0.634 0.731 0.751 0.713 0.733 0.540 0.679 0.677  10.47

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.150 1.132 1.357 1.348 1.290 1.324 0.969 1.245 1.227  10.95
94) Benzo[b]fluo 1.135 1.265 1.228 1.189 1.153 1.196 1.108 1.224 1.187   4.43
95) Benzo[k]fluo 1.154 1.207 1.176 1.108 1.075 1.123 1.011 1.180 1.129   5.69
```

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1155-ICC1155
Lab FileID: 6P24819A.D

```
 96) Benzo[a]pyre 1.024 1.049 1.084 1.055 1.026 1.062 0.898 1.065 1.033   5.62
 97) Indeno[1,2,3 0.905 0.923 1.008 1.085 1.064 1.068 0.758 0.973 0.973  11.28
 98) Dibenz(a,h)a 0.863 0.841 0.938 0.953 0.922 0.949 0.770 0.903 0.892   7.14
 99) Dibenz[a,h]a 1.006 1.065 1.099 1.079 1.051 1.099 0.972 1.073 1.056   4.27
100) 7,12-Dimethy 0.421 0.452 0.531 0.518 0.500 0.520 0.373 0.474 0.474  11.69
101) Benzo[g,h,i] 1.065 1.034 1.088 1.083 1.052 1.103 1.036 1.063 1.065   2.34
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M6P1155.M         Wed Apr 06 10:20:24 2016   ACLIMS
```

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICC1156
Lab FileID: 6P24825.D

```
                          Response Factor Report  MS6P

  Method       : C:\MSDCHEM\1\METHODS\M6P1156.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
  Last Update  : Wed Apr 06 09:04:01 2016
  Response via : Initial Calibration

  Calibration Files
  2   =6p24829.D  5   =6p24828.D  25  =6p24826.D  80  =6p24824.D
  100 =6p24823.D  50  =6p24825.D  1   =6p24830.D  10  =6p24827.D

   Compound          2     5     25    80    100   50    1     10    Avg %RSD
  ---------------------------------------------------------------------------
102)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.410 1.378 1.247 1.107 0.905 1.205 1.399 1.255 1.238  13.81

104)     Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.688 0.694 0.617 0.583 0.557 0.597 0.716 0.620 0.634   9.18

106)     Phenanthrene-d10a     ----------------ISTD---------------------
107) Atrazine     0.098 0.112 0.116 0.110 0.109 0.114 0.097 0.108 0.108   6.57
108) o-Terphenyl  0.623 0.657 0.589 0.547 0.545 0.569 0.626 0.603 0.595   6.75
109) 1-Chloroocta 0.288 0.346 0.350 0.337 0.327 0.353 0.266 0.334 0.325   9.64

110) I   Chrysene-d12a         ----------------ISTD---------------------
111) benzidine    0.462 0.595 0.584 0.461 0.384 0.599 0.357 0.574 0.502  19.64

112) I   Naphthalene-d8a       ----------------ISTD---------------------
113) Hydroquinone 0.216 0.269 0.340 0.362 0.351 0.364       0.298 0.314  17.72
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M6P1155.M         Wed Apr 06 10:18:46 2016   ACLIMS
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1155
Lab FileID: 6P24832.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1156\6p24832.D Vial: 11
Acq On : 6 Apr 2016 1:39 am Operator: sarad
Sample : icv1155-50 Inst : MS6P
Misc : op92208,e6p1156 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	4.68
3	t	Pyridine	1.806	1.665	7.8	103	0.11	2.67
10		Aniline	2.214	2.309	-4.3	129	0.01	4.44
16	t	Benzyl alcohol	0.995	0.941	5.4	103	0.00	4.79
24	I	Naphthalene-d8	1.000	1.000	0.0	111	0.00	5.76
39	t	4-Chloroaniline	0.431	0.400	7.2	109	0.00	5.83
44	t	2-Methylnaphthalene	0.574	0.514	10.5	103	0.00	6.51
47	I	Acenaphthene-d10	1.000	1.000	0.0	113	0.00	7.82
54	t	2-Nitroaniline	0.413	0.369	10.7	95	0.00	7.22
58	t	3-Nitroaniline	0.313	0.275	12.1	95	0.00	7.77
62	t	Dibenzofuran	1.566	1.437	8.2	109	0.00	8.11
68	t	4-Nitroaniline	0.311	0.255	18.0	88	0.00	8.63
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	0.00	9.98
79	t	Carbazole	1.006	0.897	10.8	100	0.01	10.37

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:08 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1155
Lab FileID: 6P24833.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1156\6p24833.D Vial: 12
Acq On : 6 Apr 2016 2:06 am Operator: sarad
Sample : icv1155-50 Inst : MS6P
Misc : op92208,e6p1156 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	117	0.00	4.67
5	S	2-Fluorophenol	1.419	1.253	11.7	103	0.00	3.70
8	S	Phenol-d5	1.865	1.623	13.0	103	0.00	4.41
24	I	Naphthalene-d8	1.000	1.000	0.0	114	0.00	5.76
25	S	Nitrobenzene-d5	0.438	0.390	11.0	103	0.00	5.11
47	I	Acenaphthene-d10	1.000	1.000	0.0	113	0.00	7.82
51	S	2-Fluorobiphenyl	1.285	1.170	8.9	105	0.00	6.95
69	I	Phenanthrene-d10	1.000	1.000	0.0	111	0.00	9.98
73	S	2,4,6-Tribromophenol	0.093	0.080	14.0	89	0.00	8.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:10 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1156
Lab FileID: 6P24834A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E6P1156\6p24834a.D         Vial: 13
Acq On    :  6 Apr 2016   2:34 am                    Operator: sarad
Sample    : icv1156-50                               Inst    : MS6P
Misc      : op92208,e6p1156                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update  : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
104	Acenaphthene-d10a	1.000	1.000	0.0	116	0.00	7.82
105	1,2,4,5-Tetrachlorobenzen	0.634	0.600	5.4	117	0.00	6.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:14 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19914 **Sample:** E6P1156-ICV1155
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P24834.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1156\6p24834.D Vial: 13
Acq On : 6 Apr 2016 2:34 am Operator: sarad
Sample : icv1155-50 Inst : MS6P
Misc : op92208,e6p1156 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	4.67
4	t	N-Nitrosodimethylamine	1.108	1.022	7.8	97	0.02	2.54
11	t	bis(2-Chloroethyl)ether	1.538	1.506	2.1	105	0.00	4.48
14	t	1,3-Dichlorobenzene	1.598	1.479	7.4	99	0.00	4.63
15	t	1,4-Dichlorobenzene	1.607	1.521	5.4	102	0.00	4.69
17	t	1,2-Dichlorobenzene	1.478	1.405	4.9	102	0.00	4.81
20	t	2,2'-oxybis(1-Chloropropa	0.518	0.465	10.2	96	0.00	4.88
22	t	n-Nitroso-di-n-propylamin	1.239	1.186	4.3	107	0.00	4.99
23	t	Hexachloroethane	0.569	0.549	3.5	102	0.00	5.08
24	I	Naphthalene-d8	1.000	1.000	0.0	103	0.00	5.76
26	t	Nitrobenzene	0.461	0.424	8.0	97	0.00	5.13
28	t	Isophorone	0.770	0.773	-0.4	106	0.00	5.33
32	t	bis(2-Chloroethoxy)methan	0.454	0.413	9.0	97	0.00	5.52
36	t	1,2,4-Trichlorobenzene	0.332	0.313	5.7	100	0.00	5.71
38	t	Naphthalene	1.066	1.016	4.7	102	0.00	5.78
42	t	Hexachlorobutadiene	0.187	0.180	3.7	103	0.00	5.91
47	I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00	7.82
48	t	Hexachlorocyclopentadiene	0.322	0.292	9.3	84	0.00	6.71
52	t	2-Chloronaphthalene	1.137	1.102	3.1	100	0.00	7.09
55	t	Dimethylphthalate	1.309	1.198	8.5	94	0.00	7.48
56	t	Acenaphthylene	1.740	1.645	5.5	96	0.00	7.63
57	t	2,6-Dinitrotoluene	0.259	0.252	2.7	89	0.01	7.55
59	t	Acenaphthene	1.178	1.132	3.9	100	0.00	7.87
		----------	AvgRF	CCRF	% Dev		----------	
63	t	2,4-Dinitrotoluene	0.341	0.309	9.4	84	0.00	8.10
65	t	Diethylphthalate	1.262	1.160	8.1	92	0.00	8.48
66	t	Fluorene	1.313	1.246	5.1	97	0.00	8.59
67	t	4-Chlorophenyl-phenylethe	0.684	0.623	8.9	95	0.00	8.61
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00	9.98
		----------	AvgRF	CCRF	% Dev		----------	
71	t	n-Nitrosodiphenylamine	0.549	0.514	6.4	92	0.00	8.79
72	t	1,2-Diphenylhydrazine	0.880	0.878	0.2	97	0.00	8.84
74	t	4-Bromophenyl-phenylether	0.214	0.208	2.8	95	0.00	9.33
75	t	Hexachlorobenzene	0.219	0.211	3.7	96	0.00	9.41
77	t	Phenanthrene	1.153	1.090	5.5	96	0.00	10.02
78	t	Anthracene	1.143	1.076	5.9	93	0.00	10.10
80	t	Di-n-butylphthalate	1.191	1.124	5.6	90	0.00	11.00

Initial Calibration Verification

Job Number: JC19914 **Sample:** E6P1156-ICV1155
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P24834.D
Project: BMSMC, Building 5 Area, PR

81	t	Fluoranthene	1.249	1.176	5.8	91	0.00	11.87
83	I	Chrysene-d12	1.000	1.000	0.0	91	0.00	14.15
84	t	Pyrene	1.257	1.272	-1.2	92	0.00	12.22
86	t	Butylbenzylphthalate	0.493	0.490	0.6	84	0.00	13.37
88	t	Benzo[a]anthracene	1.132	1.066	5.8	87	0.00	14.13
90	t	Chrysene	1.136	1.069	5.9	86	0.01	14.19
91	t	bis(2-Ethylhexyl)phthalat	0.677	0.673	0.6	84	0.00	14.34
92	I	Perylene-d12	1.000	1.000	0.0	86	0.00	16.25
93	t	Di-n-octylphthalate	1.227	1.270	-3.5	83	0.00	15.32
94	t	Benzo[b]fluoranthene	1.187	1.127	5.1	81	0.00	15.73
95	t	Benzo[k]fluoranthene	1.129	1.144	-1.3	88	0.01	15.78
96	t	Benzo[a]pyrene	1.033	1.068	-3.4	87	0.01	16.18
97	t	Indeno[1,2,3-cd]pyrene	0.973	0.975	-0.2	79	0.01	17.60
99	t	Dibenz[a,h]anthracene	1.056	1.050	0.6	82	0.01	17.63
101	t	Benzo[g,h,i]perylene	1.065	1.046	1.8	82	0.01	17.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:12 2016 ACLIMS

6.7.21
6

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1156
Lab FileID: 6P24835A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E6P1156\6p24835a.D         Vial: 14
Acq On    :  6 Apr 2016   3:01 am                    Operator: sarad
Sample    : icv1156-50                               Inst    : MS6P
Misc      : op92208,e6p1156                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update  : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	116	0.00	4.67
103	Benzaldehyde	1.238	1.151	7.0	110	0.00	4.35
106	Phenanthrene-d10a	1.000	1.000	0.0	106	0.00	9.98
107	Atrazine	0.108	0.110	-1.9	102	0.02	9.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:18 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1155
Lab FileID: 6P24835.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1156\6p24835.D Vial: 14
Acq On : 6 Apr 2016 3:01 am Operator: sarad
Sample : icv1155-50 Inst : MS6P
Misc : op92208,e6p1156 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	4.67
2	t	1,4-Dioxane	0.718	0.623	13.2	97	0.02	2.26
6	t	Indene	2.463	2.336	5.2	111	0.00	4.87
7	t	Cumene	3.853	3.395	11.9	99	0.00	4.08
13	t	Decane	1.796	1.579	12.1	102	0.00	4.56
18	t	Acetophenone	2.105	1.940	7.8	109	0.00	4.98
24	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00	5.76
27	t	Quinoline	0.700	0.612	12.6	98	0.00	6.11
40	t	2,3-Dichloroaniline	0.350	0.268	23.4	86	0.00	6.84
41	t	Caprolactam	0.178	0.151	15.2	92	0.00	6.17
45	t	1-Methylnaphthalene	0.598	0.514	14.0	97	0.00	6.63
46	t	Dimethylnaphthalene	0.662	0.574	13.3	98	0.00	7.27
47	I	Acenaphthene-d10	1.000	1.000	0.0	110	0.00	7.82
53	t	Biphenyl	1.538	1.357	11.8	98	0.00	7.07
69	I	Phenanthrene-d10	1.000	1.000	0.0	104	0.00	9.98
82	t	Octadecane	0.543	0.514	5.3	97	0.00	9.95
92	I	Perylene-d12	1.000	1.000	0.0	89	0.00	16.25
100	t	7,12-Dimethylbenz(a)anthr	0.474	0.440	7.2	76	0.00	15.73

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:16 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1156
Lab FileID: 6P24836.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E6P1156\6p24836.D          Vial: 15
Acq On    :  6 Apr 2016   3:29 am                    Operator: sarad
Sample    : icv1156-50                               Inst    : MS6P
Misc      : op92208,e6p1156                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update  : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
112 I	Naphthalene-d8a	1.000	1.000	0.0	92	0.00	5.76
113 T	Hydroquinone	0.314	0.375	-19.4	95	0.00	6.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:20 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1155
Lab FileID: 6P24837.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1156\6p24837.D Vial: 16
Acq On : 6 Apr 2016 3:56 am Operator: sarad
Sample : icv1155-50 Inst : MS6P
Misc : op92208,e6p1156 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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.
83 I	Chrysene-d12	1.000	1.000	0.0	93	0.00	14.14
89 t	3,3'-Dichlorobenzidine	0.366	0.360	1.6	88	0.00	14.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 09:32:22 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1156-ICV1156
Lab FileID: 6P24837A.D

```
                    Evaluate Continuing Calibration Report

  Data File : C:\msdchem\1\DATA\E6P1156\6p24837a.D         Vial: 16
  Acq On    :  6 Apr 2016   3:56 am                    Operator: sarad
  Sample    : icv1156-50                               Inst    : MS6P
  Misc      : op92208,e6p1156                          Multiplr: 1.00
  MS Integration Params: lscint.p

  Method       : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
  Last Update  : Wed Apr 06 09:04:01 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  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.
  ---------------------------------------------------------------------------
110 I   Chrysene-d12a               1.000   1.000      0.0   91   0.00   14.14
111 T   benzidine                   0.502   0.724    -44.2# 110   0.00   12.13
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range               SPCC's out = 0  CCC's out = 0
     6p24825a.D M6P1155.M        Wed Apr 06 09:32:24 2016   ACLIMS
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1157-ICV1155
Lab FileID: 6P24839.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1157\6p24839.D Vial: 2
Acq On : 6 Apr 2016 9:53 am Operator: ashleyd
Sample : icv1155-50 Inst : MS6P
Misc : op92208,e6p1157 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
Last Update : Wed Apr 06 09:04:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	0.00	4.67
9	t	Phenol	2.125	1.765	16.9	95	0.00	4.42
12	t	2-Chlorophenol	1.511	1.336	11.6	100	0.00	4.52
19	t	2-Methylphenol	1.316	1.291	1.9	115	0.00	4.87
21	t	3&4-Methylphenol	1.380	1.360	1.4	117	0.00	4.99
24	I	Naphthalene-d8	1.000	1.000	0.0	112	0.00	5.75
29	t	2-Nitrophenol	0.181	0.175	3.3	104	0.00	5.40
30	t	2,4-Dimethylphenol	0.342	0.356	-4.1	111	0.00	5.44
31	t	Benzoic acid	0.269	0.281	-4.5	105	0.05	5.56
33	t	2,4-Dichlorophenol	0.287	0.262	8.7	103	0.00	5.62
34	t	2,6-Dichlorophenol	0.283	0.260	8.1	106	0.00	5.84
43	t	4-Chloro-3-methylphenol	0.339	0.311	8.3	103	0.00	6.34
47	I	Acenaphthene-d10	1.000	1.000	0.0	113	0.00	7.81
49	t	2,4,6-Trichlorophenol	0.342	0.328	4.1	107	0.00	6.84
50	t	2,4,5-Trichlorophenol	0.370	0.336	9.2	100	0.00	6.88
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	39.194	21.6	80	0.00	7.90
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.194	0.190	2.1	99	0.00	8.03
64		2,3,4,6-Tetrachlorophenol	0.314	0.293	6.7	100	0.00	8.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	113	0.00	9.98
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	41.015	18.0	93	0.00	8.67
		----------	AvgRF	CCRF	% Dev	----------		
76	t	Pentachlorophenol	0.136	0.134	1.5	102	0.00	9.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed Apr 06 10:15:58 2016 ACLIMS

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E6P1206-CC1155
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25832A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1206\6p25832a.D Vial: 2
Acq On : 11 May 2016 9:27 am Operator: ariellec
Sample : cc1155-50 Inst : MS6P
Misc : op93693,e6p1206 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
Last Update : Wed May 11 14:05:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	4.62
2	t	1,4-Dioxane	0.718	0.533	25.8#	99	-0.04	2.18
3	t	Pyridine	1.806	1.396	22.7#	104	-0.02	2.52
4	t	N-Nitrosodimethylamine	1.108	0.835	24.6#	100	0.08	2.49
5	S	2-Fluorophenol	1.419	1.281	9.7	119	0.03	3.68
6	t	Indene	2.463	2.559	-3.9	144	0.00	4.82
7	t	Cumene	3.853	3.664	4.9	126	-0.01	4.03
8	S	Phenol-d5	1.865	1.742	6.6	124	0.01	4.41
9	t	Phenol	2.125	2.039	4.0	128	0.05	4.42
10		Aniline	2.214	1.705	23.0#	114	0.02	4.39
11	t	bis(2-Chloroethyl)ether	1.538	1.368	11.1	120	0.00	4.43
12	t	2-Chlorophenol	1.511	1.479	2.1	130	0.02	4.49
13	t	Decane	1.796	1.536	14.5	118	0.00	4.50
14	t	1,3-Dichlorobenzene	1.598	1.574	1.5	133	0.00	4.58
15	t	1,4-Dichlorobenzene	1.607	1.588	1.2	134	0.00	4.64
16	t	Benzyl alcohol	0.995	0.957	3.8	125	0.02	4.75
17	t	1,2-Dichlorobenzene	1.478	1.515	-2.5	138	0.00	4.76
18	t	Acetophenone	2.105	2.156	-2.4	144	0.01	4.95
19	t	2-Methylphenol	1.316	1.322	-0.5	138	0.00	4.86
20	t	2,2'-oxybis(1-Chloropropa	0.518	0.507	2.1	131	0.00	4.83
21	t	3&4-Methylphenol	1.380	1.447	-4.9	146	-0.01	4.98
22	t	n-Nitroso-di-n-propylamin	1.239	1.192	3.8	135	0.02	4.95
23	t	Hexachloroethane	0.569	0.511	10.2	120	0.00	5.02
24	I	Naphthalene-d8	1.000	1.000	0.0	133	0.00	5.71
25	S	Nitrobenzene-d5	0.438	0.409	6.6	126	0.00	5.07
26	t	Nitrobenzene	0.461	0.423	8.2	126	0.00	5.08
27	t	Quinoline	0.700	0.714	-2.0	140	0.02	6.08
28	t	Isophorone	0.770	0.693	10.0	124	0.00	5.29
29	t	2-Nitrophenol	0.181	0.203	-12.2	144	0.02	5.36
30	t	2,4-Dimethylphenol	0.342	0.360	-5.3	134	0.00	5.42
31	t	Benzoic acid	0.269	0.295	-9.7	132	0.12	5.57
32	t	bis(2-Chloroethoxy)methan	0.454	0.392	13.7	120	0.00	5.48
33	t	2,4-Dichlorophenol	0.287	0.281	2.1	132	0.03	5.60
34	t	2,6-Dichlorophenol	0.283	0.277	2.1	135	0.02	5.80
35		1,3,5-Trichlorobenzene	0.342	0.315	7.9	128	0.00	5.36
36	t	1,2,4-Trichlorobenzene	0.332	0.299	9.9	124	0.00	5.65
37		1,2,3-Trichlorobenzene	0.320	0.291	9.1	126	0.00	5.87
38	t	Naphthalene	1.066	1.078	-1.1	141	-0.02	5.73
39	t	4-Chloroaniline	0.431	0.405	6.0	132	0.02	5.79
40	t	2,3-Dichloroaniline	0.350	0.353	-0.9	140	0.02	6.79
41	t	Caprolactam	0.178	0.164	7.9	124	0.06	6.18

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E6P1206-CC1155
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25832A.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.187	0.169	9.6	125	0.00	5.84
43	t	4-Chloro-3-methylphenol	0.339	0.354	-4.4	140	0.06	6.34
44	t	2-Methylnaphthalene	0.574	0.608	-5.9	147	-0.02	6.45
45	t	1-Methylnaphthalene	0.598	0.637	-6.5	148	0.00	6.57
46	t	Dimethylnaphthalene	0.662	0.650	1.8	137	0.00	7.21
47	I	Acenaphthene-d10	1.000	1.000	0.0	139	0.00	7.75
48	t	Hexachlorocyclopentadiene	0.322	0.286	11.2	113	0.00	6.64
49	t	2,4,6-Trichlorophenol	0.342	0.336	1.8	135	0.00	6.81
50	t	2,4,5-Trichlorophenol	0.370	0.370	0.0	136	-0.05	6.88
51	S	2-Fluorobiphenyl	1.285	1.278	0.5	142	0.00	6.89
52	t	2-Chloronaphthalene	1.137	1.094	3.8	137	0.00	7.04
53	t	Biphenyl	1.538	1.499	2.5	138	0.00	7.01
54	t	2-Nitroaniline	0.413	0.436	-5.6	138	0.03	7.19
55	t	Dimethylphthalate	1.309	1.312	-0.2	142	0.00	7.42
56	t	Acenaphthylene	1.740	1.889	-8.6	152	0.00	7.57
57	t	2,6-Dinitrotoluene	0.259	0.303	-17.0	147	0.02	7.50
58	t	3-Nitroaniline	0.313	0.341	-8.9	145	0.04	7.74
59	t	Acenaphthene	1.178	1.201	-2.0	146	0.00	7.80
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	96.984	3.0	136	0.00	7.90
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.194	0.183	5.7	117	0.00	8.09
62	t	Dibenzofuran	1.566	1.610	-2.8	149	0.00	8.04
63	t	2,4-Dinitrotoluene	0.341	0.429	-25.8#	161	0.04	8.07
64		2,3,4,6-Tetrachlorophenol	0.314	0.275	12.4	115	0.00	8.25
65	t	Diethylphthalate	1.262	1.380	-9.4	150	0.01	8.41
66	t	Fluorene	1.313	1.389	-5.8	149	0.01	8.53
67	t	4-Chlorophenyl-phenylethe	0.684	0.629	8.0	132	0.00	8.55
68	t	4-Nitroaniline	0.311	0.340	-9.3	143	0.09	8.62
69	I	Phenanthrene-d10	1.000	1.000	0.0	136	0.00	9.93
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	52.096	-4.2	145	0.01	8.66
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.549	0.551	-0.4	137	0.00	8.73
72	t	1,2-Diphenylhydrazine	0.880	0.862	2.0	132	0.00	8.78
73	S	2,4,6-Tribromophenol	0.093	0.120	-29.0#	163	0.00	8.89
74	t	4-Bromophenyl-phenylether	0.214	0.210	1.9	134	0.00	9.27
75	t	Hexachlorobenzene	0.219	0.240	-9.6	153	0.00	9.35
76	t	Pentachlorophenol	0.136	0.137	-0.7	126	0.04	9.69
77	t	Phenanthrene	1.153	1.133	1.7	139	0.00	9.96
78	t	Anthracene	1.143	1.150	-0.6	138	0.00	10.04
79	t	Carbazole	1.006	1.047	-4.1	142	0.03	10.33
80	t	Di-n-butylphthalate	1.191	1.398	-17.4	155	0.00	10.93
81	t	Fluoranthene	1.249	1.250	-0.1	135	0.04	11.82
82	t	Octadecane	0.543	0.538	0.9	133	-0.02	9.87
83	I	Chrysene-d12	1.000	1.000	0.0	136	0.01	14.11
84	t	Pyrene	1.257	1.232	2.0	134	0.02	12.17
85	S	Terphenyl-d14	0.752	0.799	-6.3	145	0.00	12.47
86	t	Butylbenzylphthalate	0.493	0.601	-21.9#	154	-0.02	13.30
87		Butyl stearate	0.337	0.362	-7.4	136	0.00	13.47
88	t	Benzo[a]anthracene	1.132	1.116	1.4	137	0.01	14.10
89	t	3,3'-Dichlorobenzidine	0.366	0.459	-25.4#	165	0.00	14.10
90	t	Chrysene	1.136	1.053	7.3	127	0.01	14.15

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E6P1206-CC1155
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25832A.D
Project: BMSMC, Building 5 Area, PR

91	t	bis(2-Ethylhexyl)phthalat	0.677	0.812	-19.9	151	-0.03	14.26
92	I	Perylene-d12	1.000	1.000	0.0	127	0.00	16.23
93	t	Di-n-octylphthalate	1.227	1.605	-30.8#	154	0.03	15.24
94	t	Benzo[b]fluoranthene	1.187	1.322	-11.4	140	0.01	15.71
95	t	Benzo[k]fluoranthene	1.129	1.223	-8.3	138	0.02	15.75
96	t	Benzo[a]pyrene	1.033	1.096	-6.1	131	0.04	16.15
97	t	Indeno[1,2,3-cd]pyrene	0.973	1.164	-19.6	138	0.02	17.58
98	t	Dibenz(a,h)acridine	0.892	1.026	-15.0	137	-0.03	17.30
99	t	Dibenz[a,h]anthracene	1.056	1.233	-16.8	142	0.00	17.60
100	t	7,12-Dimethylbenz(a)anthr	0.474	0.589	-24.3#	144	0.06	15.70
101	t	Benzo[g,h,i]perylene	1.065	1.122	-5.4	129	0.02	17.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed May 11 14:06:03 2016 ACLIMS

Continuing Calibration Summary

Job Number: JC19914 **Sample:** E6P1206-CC1156
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25833A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1206\6p25833a.D Vial: 3
Acq On : 11 May 2016 10:47 am Operator: ariellec
Sample : cc1156-50 Inst : MS6P
Misc : op93693,e6p1206 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
Last Update : Wed May 11 14:05:01 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	147	0.00	4.62
103	Benzaldehyde	1.238	1.047	15.4	128	0.00	4.30
104	Acenaphthene-d10a	1.000	1.000	0.0	183	0.00	7.75
105	1,2,4,5-Tetrachlorobenzen	0.634	0.444	30.0#	137	0.00	6.65
106	Phenanthrene-d10a	1.000	1.000	0.0	164	0.00	9.93
107	Atrazine	0.108	0.106	1.9	152	0.02	9.58
108 I	Chrysene-d12a	1.000	1.000	0.0	163	0.00	14.10
109 T	benzidine	0.502	0.502	0.0	136	0.00	12.09
110 I	Naphthalene-d8a	1.000	1.000	0.0	152	0.00	5.71
111 T	Hydroquinone	0.314	0.338	-7.6	141	0.08	6.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p24825a.D M6P1155.M Wed May 11 14:06:05 2016 ACLIMS

Initial Calibration Summary

Job Number: JC19914 **Sample:** EM5217-ICC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123513.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report Instrument #1

Method : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Calibration Files
2 =M123506.D 5 =M123511.D 100 =M123507.D 50 =M123513.D
1 =M123512.D 10 =M123510.D 80 =M123508.D 25 =M123509.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.595	0.565	0.513	0.513	0.695	0.524	0.520	0.512	0.555	11.59
3) Pyridine	1.484	1.472	1.323	1.367	1.121	1.300	1.400	1.335	1.350	8.46
4) N-Nitrosodim	0.632	0.611	0.578	0.596	0.600	0.522	0.607	0.584	0.591	5.49
5) 2-Fluorophen	1.281	1.245	1.276	1.234	1.126	1.127	1.286	1.211	1.223	5.30
6) Indene	2.485	2.498	2.066	2.135	2.506	2.153	2.145	2.213	2.275	8.24
7) Cumene	3.351	3.372	2.780	2.935	3.199	2.904	2.889	2.985	3.052	7.37
8) Phenol-d5	1.557	1.661	1.524	1.537	1.398	1.484	1.570	1.560	1.536	4.89
9) Phenol	1.680	1.749	1.688	1.724	1.458	1.531	1.725	1.615	1.646	6.29
10) Aniline	1.955	2.033	1.838	1.880	1.883	1.835	1.941	1.954	1.915	3.55
11) bis(2-Chloro	1.368	1.442	1.109	1.159	1.578	1.257	1.131	1.213	1.282	12.97
12) 2-Chlorophen	1.517	1.461	1.292	1.302	1.413	1.323	1.311	1.350	1.371	6.06
13) Decane	1.545	1.478	1.050	1.138	1.615	1.256	1.088	1.227	1.300	16.75
14) 1,3-Dichloro	1.692	1.730	1.423	1.476	1.747	1.476	1.465	1.498	1.563	8.61
15) 1,4-Dichloro	1.660	1.703	1.413	1.461	1.734	1.483	1.447	1.492	1.549	8.26
16) Benzyl alcoh	0.825	0.846	0.795	0.803	0.686	0.782	0.816	0.800	0.794	6.02
17) 1,2-Dichloro	1.591	1.661	1.282	1.357	1.621	1.412	1.325	1.417	1.458	9.96
18) Acetophenone	1.969	2.050	1.690	1.734	1.886	1.768	1.725	1.745	1.821	7.22
19) 2-Methylphen	1.203	1.245	1.106	1.118	1.058	1.091	1.134	1.135	1.136	5.34
20) 2,2'-oxybis(	0.451	0.493	0.371	0.376	0.496	0.398	0.388	0.414	0.424	11.89
21) 3&4-Methylph	1.344	1.337	1.219	1.223	1.189	1.165	1.240	1.242	1.245	5.15
22) n-Nitroso-di	1.085	1.087	0.867	0.908	1.102	0.976	0.899	0.943	0.983	9.66
23) Hexachloroet	0.633	0.647	0.530	0.549	0.676	0.561	0.532	0.556	0.586	9.77
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.366	0.383	0.332	0.343	0.397	0.342	0.342	0.341	0.356	6.58
26) Nitrobenzene	0.401	0.406	0.328	0.340	0.379	0.346	0.338	0.343	0.360	8.56
27) Quinoline	0.832	0.840	0.696	0.726	0.811	0.733	0.722	0.739	0.763	7.36
28) Isophorone	0.700	0.709	0.596	0.613	0.697	0.622	0.619	0.624	0.647	7.12
29) 2-Nitropheno	0.204	0.222	0.197	0.200	0.206	0.194	0.203	0.206	0.204	4.16
30) 2,4-Dimethyl	0.365	0.373	0.308	0.306	0.378	0.311	0.313	0.315	0.333	9.64
31) Benzoic acid		0.197	0.247	0.233		0.175	0.250	0.211	0.219	13.70
32) bis(2-Chloro	0.427	0.427	0.365	0.368	0.427	0.381	0.373	0.376	0.393	7.26
33) 2,4-Dichloro	0.330	0.344	0.291	0.299	0.276	0.296	0.298	0.304	0.305	7.16
34) 2,6-Dichloro	0.343	0.345	0.272	0.286	0.363	0.284	0.279	0.292	0.308	11.72
35) 1,3,5-Trichl	0.397	0.414	0.320	0.342	0.405	0.352	0.326	0.353	0.364	10.10
36) 1,2,4-Trichl	0.385	0.401	0.319	0.339	0.403	0.344	0.324	0.346	0.358	9.43
37) 1,2,3-Trichl	0.387	0.385	0.308	0.330	0.373	0.335	0.312	0.337	0.346	9.09
38) Naphthalene	1.148	1.146	0.942	0.984	1.191	0.993	0.964	1.013	1.048	9.32
39) 4-Chloroanil	0.466	0.497	0.422	0.442	0.467	0.432	0.437	0.448	0.451	5.36
40) 2,3-Dichloro	0.433	0.437	0.364	0.381	0.417	0.389	0.373	0.384	0.397	6.99
41) Caprolactam	0.206	0.165	0.148	0.150	0.190	0.154	0.153	0.152	0.165	12.99
42) Hexachlorobu	0.224	0.230	0.183	0.194	0.228	0.202	0.186	0.198	0.206	9.31
43) 4-Chloro-3-m	0.330	0.325	0.284	0.289	0.342	0.283	0.294	0.291	0.305	7.75
44) 2-Methylnaph	0.679	0.682	0.553	0.590	0.733	0.604	0.569	0.601	0.626	10.15
45) 1-Methylnaph	0.814	0.792	0.654	0.692	0.775	0.714	0.677	0.707	0.728	8.00

Initial Calibration Summary

Job Number: JC19914 **Sample:** EM5217-ICC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123513.D
Project: BMSMC, Building 5 Area, PR

```
46) Dimethylnaph 0.740 0.754 0.595 0.636 0.759 0.660 0.614 0.648 0.676   9.73

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.128 0.156 0.285 0.266 0.060 0.173 0.286 0.241 0.199  41.60
            ---- Quadratic regression ----  Coefficient =  0.9992
              Response Ratio = -0.02428 + 0.26071 *A + 0.00634 *A^2

49) 2,4,6-Trichl 0.420 0.416 0.360 0.365 0.407 0.364 0.349 0.372 0.382   7.39
50) 2,4,5-Trichl 0.469 0.453 0.381 0.401 0.448 0.389 0.393 0.389 0.415   8.46
51) 2-Fluorobiph 1.509 1.448 1.136 1.201 1.518 1.264 1.169 1.262 1.313  11.79
52) 2-Chloronaph 1.324 1.277 1.024 1.072 1.348 1.114 1.042 1.120 1.165  11.22
53) Biphenyl     1.633 1.618 1.329 1.376 1.735 1.417 1.370 1.429 1.488  10.13
54) 2-Nitroanili 0.366 0.347 0.318 0.319 0.349 0.309 0.326 0.322 0.332   5.86
55) Dimethylphth 1.486 1.446 1.257 1.294 1.543 1.278 1.276 1.318 1.362   8.19
56) Acenaphthyle 2.104 2.123 1.711 1.787 2.218 1.832 1.767 1.871 1.927   9.97
57) 2,6-Dinitrot 0.316 0.319 0.296 0.301 0.304 0.286 0.305 0.296 0.303   3.58
58) 3-Nitroanili 0.343 0.346 0.335 0.336 0.333 0.316 0.345 0.327 0.335   2.94
59) Acenaphthene 1.295 1.257 1.049 1.066 1.339 1.092 1.063 1.125 1.161  10.10
60) 2,4-Dinitrop 0.051 0.072 0.156 0.140       0.072 0.161 0.111 0.109  40.80
            ---- Quadratic regression ----  Coefficient =  0.9966
              Response Ratio = -0.02283 + 0.13710 *A + 0.00548 *A^2

61) 4-Nitropheno 0.143 0.119 0.130 0.121       0.093 0.128 0.125 0.123  12.53
62) Dibenzofuran 1.934 1.880 1.543 1.624 1.938 1.643 1.580 1.670 1.726   9.47
63) 2,4-Dinitrot 0.400 0.420 0.390 0.402 0.374 0.390 0.400 0.402 0.397   3.34
64) 2,3,4,6-Tetr 0.317 0.340 0.316 0.321 0.336 0.308 0.326 0.307 0.321   3.72
65) Diethylphtha 1.477 1.475 1.249 1.279 1.496 1.292 1.283 1.300 1.356   7.79
66) Fluorene     1.520 1.541 1.255 1.316 1.541 1.347 1.295 1.351 1.396   8.50
67) 4-Chlorophen 0.732 0.752 0.581 0.623 0.748 0.655 0.594 0.642 0.666  10.38
68) 4-Nitroanili 0.308 0.341 0.336 0.338 0.300 0.308 0.345 0.330 0.326   5.42

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.080 0.100 0.142 0.130 0.064 0.094 0.143 0.120 0.109  26.71
            ---- Quadratic regression ----  Coefficient =  0.9993
              Response Ratio = -0.00398 + 0.12485 *A + 0.00815 *A^2

71) n-Nitrosodip 0.571 0.597 0.496 0.505 0.605 0.494 0.511 0.518 0.537   8.62
72) 1,2-Diphenyl 0.738 0.746 0.633 0.654 0.756 0.646 0.668 0.666 0.688   7.22
73) 2,4,6-Tribro 0.140 0.152 0.136 0.138 0.134 0.130 0.140 0.137 0.138   4.67
74) 4-Bromopheny 0.266 0.275 0.227 0.238 0.273 0.231 0.231 0.239 0.247   8.20
75) Hexachlorobe 0.315 0.331 0.257 0.273 0.338 0.274 0.265 0.276 0.291  10.85
76) Pentachlorop 0.090 0.100 0.133 0.131 0.052 0.086 0.137 0.116 0.106  27.84
            ---- Quadratic regression ----  Coefficient =  0.9987
              Response Ratio = -0.01057 + 0.13150 *A + 0.00113 *A^2

77) Phenanthrene 1.231 1.247 1.006 1.049 1.233 1.051 1.032 1.072 1.115   9.22
78) Anthracene   1.258 1.272 1.043 1.092 1.259 1.122 1.070 1.123 1.155   8.08
79) Carbazole    1.140 1.175 0.989 1.019 1.113 1.010 1.019 1.046 1.064   6.50
80) Di-n-butylph 1.404 1.427 1.250 1.288 1.370 1.256 1.277 1.292 1.321   5.26
81) Fluoranthene 1.406 1.455 1.163 1.246 1.459 1.233 1.209 1.283 1.307   8.92
82) Octadecane   0.462 0.473 0.401 0.416 0.443 0.417 0.411 0.420 0.430   6.01

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.418 1.423 1.202 1.244 1.412 1.257 1.220 1.259 1.304   7.34
85) Butyl steara 0.326 0.304 0.292 0.289 0.314 0.271 0.299 0.290 0.298   5.68
86) Terphenyl-d1 0.984 0.961 0.846 0.872 0.949 0.844 0.863 0.859 0.897   6.38
87) Butylbenzylp 0.577 0.582 0.573 0.570 0.561 0.527 0.586 0.561 0.567   3.29
88) Benzo[a]anth 1.347 1.307 1.128 1.153 1.400 1.125 1.166 1.158 1.223   9.01
89) 3,3'-Dichlor 0.458 0.473 0.432 0.436 0.472 0.414 0.449 0.437 0.447   4.59
90) Chrysene     1.232 1.271 1.065 1.091 1.234 1.061 1.099 1.084 1.142   7.66
```

Initial Calibration Summary

Job Number: JC19914 **Sample:** EM5217-ICC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123513.D
Project: BMSMC, Building 5 Area, PR

```
 91) bis(2-Ethylh 0.796 0.807 0.759 0.746 0.763 0.704 0.796 0.746 0.765   4.44

 92) I   Perylene-d12          ----------------ISTD---------------------
 93) Di-n-octylph 1.415 1.434 1.196 1.276 1.300 1.245 1.237 1.283 1.298   6.52
 94) Benzo[b]fluo 1.421 1.355 1.076 1.135 1.338 1.217 1.108 1.182 1.229  10.37
 95) Benzo[k]fluo 1.364 1.355 0.984 1.099 1.396 1.141 1.007 1.130 1.185  13.91
 96) Benzo[a]pyre 1.277 1.255 0.992 1.069 1.274 1.096 1.015 1.101 1.135  10.30
 97) Indeno[1,2,3 1.312 1.209 1.055 1.085 1.272 1.051 1.097 1.107 1.149   8.84
 98) Dibenz(a,h)a 1.135 1.110 0.907 0.945 1.143 0.956 0.945 1.004 1.018   9.44
 99) Dibenz[a,h]a 1.348 1.290 1.021 1.073 1.282 1.116 1.064 1.150 1.168  10.48
100) 7,12-Dimethy 0.632 0.614 0.481 0.515 0.606 0.540 0.494 0.542 0.553  10.40
101) Benzo[g,h,i] 1.412 1.305 1.042 1.096 1.360 1.112 1.086 1.164 1.197  11.78
 ------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MM5217.M          Wed Apr 13 13:06:13 2016   MSM
```

6.7.30

6

Initial Calibration Verification

Job Number: JC19914 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123523.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123523.D          Vial: 10
Acq On    : 13 Apr 2016   2:05 am                   Operator: sarad
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5218                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 13 09:13:31 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	4.73
9	t	Phenol	1.646	1.612	2.1	95	0.00	4.52
12	t	2-Chlorophenol	1.371	1.373	-0.1	107	0.00	4.60
19	t	2-Methylphenol	1.136	1.184	-4.2	108	0.00	4.96
21	t	3&4-Methylphenol	1.245	1.274	-2.3	106	0.00	5.09
24	I	Naphthalene-d8	1.000	1.000	0.0	98	0.00	5.88
29	t	2-Nitrophenol	0.204	0.207	-1.5	101	0.00	5.50
30	t	2,4-Dimethylphenol	0.333	0.343	-3.0	110	0.00	5.56
31	t	Benzoic acid	0.219	0.222	-1.4	93	0.00	5.70
33	t	2,4-Dichlorophenol	0.305	0.319	-4.6	104	0.00	5.76
34	t	2,6-Dichlorophenol	0.308	0.310	-0.6	106	0.00	5.98
43	t	4-Chloro-3-methylphenol	0.305	0.301	1.3	102	-0.01	6.57
47	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	8.23
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.386	-1.0	108	0.00	7.12
50	t	2,4,5-Trichlorophenol	0.415	0.390	6.0	99	0.00	7.20
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	44.008	12.0	78	0.00	8.39
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.121	1.6	102	0.00	8.64
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.311	3.1	99	0.00	8.83
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	10.87
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	47.835	4.3	98	-0.01	9.31
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	44.297	11.4	84	0.00	10.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:19:50 2016 MSM

Initial Calibration Verification

Job Number: JC19914 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123524.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123524.D          Vial: 11
Acq On    : 13 Apr 2016   2:34 am                   Operator: sarad
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5218                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 13 09:13:31 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	4.74
3	t	Pyridine	1.350	1.344	0.4	90	0.06	2.70
10	t	Aniline	1.915	1.978	-3.3	97	0.00	4.50
16	t	Benzyl alcohol	0.794	0.848	-6.8	97	0.00	4.86
24	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	5.88
39	t	4-Chloroaniline	0.451	0.438	2.9	91	0.00	5.96
44	t	2-Methylnaphthalene	0.626	0.559	10.7	87	0.00	6.71
47	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	8.23
		----------	AvgRF	CCRF	% Dev	----------		
54	t	2-Nitroaniline	0.332	0.314	5.4	88	0.00	7.56
58	t	3-Nitroaniline	0.335	0.337	-0.6	90	0.00	8.20
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.726	1.652	4.3	91	0.00	8.58
68	t	4-Nitroaniline	0.326	0.323	0.9	86	-0.01	9.25
69	I	Phenanthrene-d10	1.000	1.000	0.0	95	-0.01	10.86
		----------	AvgRF	CCRF	% Dev	----------		
79	t	Carbazole	1.064	0.996	6.4	93	0.00	11.36

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 M123517a.D MM5217.M         Wed Apr 13 12:19:52 2016   MSM
```

Initial Calibration Verification

Job Number: JC19914 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123526.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM5218\M123526.D Vial: 13
Acq On : 13 Apr 2016 3:31 am Operator: sarad
Sample : icv5217-50 Inst : Instrument #1
Misc : op92514,em5218 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 13 09:13:31 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	4.73
4	t	N-Nitrosodimethylamine	0.591	0.550	6.9	91	0.00	2.59
11	t	bis(2-Chloroethyl)ether	1.282	1.236	3.6	105	0.00	4.53
14	t	1,3-Dichlorobenzene	1.563	1.494	4.4	99	0.00	4.69
15	t	1,4-Dichlorobenzene	1.549	1.494	3.6	100	0.00	4.75
17	t	1,2-Dichlorobenzene	1.458	1.427	2.1	103	0.00	4.87
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.365	13.9	95	0.00	4.95
22	t	n-Nitroso-di-n-propylamin	0.983	0.878	10.7	95	0.00	5.05
23	t	Hexachloroethane	0.586	0.558	4.8	100	0.00	5.15
24	I	Naphthalene-d8	1.000	1.000	0.0	97	0.00	5.88
26	t	Nitrobenzene	0.360	0.339	5.8	97	0.00	5.21
28	t	Isophorone	0.647	0.630	2.6	100	0.00	5.42
32	t	bis(2-Chloroethoxy)methan	0.393	0.377	4.1	100	0.00	5.62
36	t	1,2,4-Trichlorobenzene	0.358	0.350	2.2	100	0.00	5.82
38	t	Naphthalene	1.048	1.000	4.6	99	0.00	5.90
42	t	Hexachlorobutadiene	0.206	0.199	3.4	100	0.00	6.03
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00	8.24
		----------	AvgRF	CCRF	% Dev	----------		
52	t	2-Chloronaphthalene	1.165	1.127	3.3	103	0.00	7.38
55	t	Dimethylphthalate	1.362	1.260	7.5	96	0.00	7.84
56	t	Acenaphthylene	1.927	1.679	12.9	92	0.00	8.01
57	t	2,6-Dinitrotoluene	0.303	0.285	5.9	93	0.00	7.93
59	t	Acenaphthene	1.161	1.061	8.6	98	0.00	8.29
		----------	AvgRF	CCRF	% Dev	----------		
63	t	2,4-Dinitrotoluene	0.397	0.375	5.5	92	0.00	8.60
65	t	Diethylphthalate	1.356	1.231	9.2	95	0.00	9.03
66	t	Fluorene	1.396	1.244	10.9	93	0.00	9.17
67	t	4-Chlorophenyl-phenylethe	0.666	0.611	8.3	96	0.00	9.19
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	10.87
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.474	11.7	96	0.00	9.41
72	t	1,2-Diphenylhydrazine	0.688	0.598	13.1	93	0.00	9.47
74	t	4-Bromophenyl-phenylether	0.247	0.224	9.3	96	0.00	10.07
75	t	Hexachlorobenzene	0.291	0.248	14.8	92	0.00	10.17

Initial Calibration Verification

Job Number: JC19914 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123526.D
Project: BMSMC, Building 5 Area, PR

			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.115	0.989	11.3	96	0.00	10.91
78	t	Anthracene	1.155	0.988	14.5	92	0.00	11.00
80	t	Di-n-butylphthalate	1.321	1.207	8.6	96	0.00	12.14
81	t	Fluoranthene	1.307	1.172	10.3	96	0.00	13.21
83	I	Chrysene-d12	1.000	1.000	0.0	99	0.00	16.05
84	t	Pyrene	1.304	1.219	6.5	97	0.00	13.63
87	t	Butylbenzylphthalate	0.567	0.540	4.8	94	0.00	15.08
88	t	Benzo[a]anthracene	1.223	1.105	9.6	95	0.00	16.02
90	t	Chrysene	1.142	1.021	10.6	92	0.00	16.09
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.708	7.5	94	0.00	16.29
92	I	Perylene-d12	1.000	1.000	0.0	97	0.00	18.67
93	t	Di-n-octylphthalate	1.298	1.148	11.6	87	0.00	17.52
94	t	Benzo[b]fluoranthene	1.229	1.064	13.4	91	0.00	18.03
95	t	Benzo[k]fluoranthene	1.185	1.065	10.1	94	0.00	18.08
96	t	Benzo[a]pyrene	1.135	1.036	8.7	94	0.00	18.57
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.048	8.8	94	0.00	20.40
99	t	Dibenz[a,h]anthracene	1.168	1.053	9.8	95	0.00	20.45
101	t	Benzo[g,h,i]perylene	1.197	1.076	10.1	95	0.00	20.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:19:54 2016 MSM

6.7.33

6

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5217
Lab FileID: M123527.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123527.D          Vial: 14
Acq On    : 13 Apr 2016   3:59 am                   Operator: sarad
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5218                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 13 09:13:31 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	4.73
2	t	1,4-Dioxane	0.555	0.498	10.3	99	-0.01	2.29
6	t	Indene	2.275	2.225	2.2	106	0.00	4.94
7	t	Cumene	3.052	2.880	5.6	100	0.00	4.13
13	t	Decane	1.300	1.185	8.8	106	0.00	4.61
18	t	Acetophenone	1.821	1.637	10.1	96	0.00	5.06
24	I	Naphthalene-d8	1.000	1.000	0.0	96	0.00	5.88
27	t	Quinoline	0.763	0.717	6.0	95	-0.02	6.27
40	t	2,3-Dichloroaniline	0.397	0.345	13.1	87	0.00	7.10
41	t	Caprolactam	0.165	0.145	12.1	92	-0.04	6.34
45	t	1-Methylnaphthalene	0.728	0.705	3.2	98	0.00	6.84
46	t	Dimethylnaphthalene	0.676	0.658	2.7	99	0.00	7.59
47	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00	8.23
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	45.891	8.2	84	0.00	6.92
		----------	AvgRF	CCRF	% Dev	----------		
53	t	Biphenyl	1.488	1.394	6.3	100	0.00	7.35
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.01	10.86
		----------	AvgRF	CCRF	% Dev	----------		
82	t	Octadecane	0.430	0.433	-0.7	98	0.00	10.83
83	I	Chrysene-d12	1.000	1.000	0.0	102	-0.02	16.03
92	I	Perylene-d12	1.000	1.000	0.0	94	-0.01	18.66
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.522	5.6	95	-0.02	18.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:19:58 2016 MSM

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5217
Lab FileID: M123529.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123529.D          Vial: 16
Acq On    : 13 Apr 2016   4:57 am                   Operator: sarad
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5218                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 13 09:13:31 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
83	I	Chrysene-d12	1.000	1.000	0.0	107	-0.01	16.04
89	t	3,3'-Dichlorobenzidine	0.447	0.392	12.3	96	0.00	16.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:20:04 2016 MSM

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5219-ICV5217
Lab FileID: M123532.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5219\M123532.D          Vial: 2
Acq On    : 13 Apr 2016   9:41 am                   Operator: seanb1
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5219                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 13 09:13:31 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	0.00	4.73
5	S	2-Fluorophenol	1.223	1.279	-4.6	116	-0.01	3.79
8	S	Phenol-d5	1.536	1.572	-2.3	114	-0.01	4.50
24	I	Naphthalene-d8	1.000	1.000	0.0	107	-0.01	5.87
25	S	Nitrobenzene-d5	0.356	0.366	-2.8	115	-0.01	5.19
47	I	Acenaphthene-d10	1.000	1.000	0.0	104	-0.02	8.22
		----------	AvgRF	CCRF	% Dev	----------		
51	S	2-Fluorobiphenyl	1.313	1.365	-4.0	118	-0.02	7.20
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	-0.02	10.85
		----------	AvgRF	CCRF	% Dev	----------		
73	S	2,4,6-Tribromophenol	0.138	0.139	-0.7	102	-0.02	9.60
		----------	AvgRF	CCRF	% Dev	----------		
83	I	Chrysene-d12	1.000	1.000	0.0	105	-0.02	16.03
86	S	Terphenyl-d14	0.897	0.859	4.2	103	-0.02	14.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 13:02:35 2016 MSM

Initial Calibration Summary

Job Number: JC19914 **Sample:** EM5239-ICC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123931.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  Instrument #1

  Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Wed Apr 27 12:36:54 2016
  Response via : Initial Calibration

  Calibration Files
  2   =M123935.D  5   =M123934.D  100 =M123929.D  50  =M123931.D
  1   =M123936.D  10  =M123933.D  80  =M123930.D  25  =M123932.D

   Compound          2     5     100   50    1     10    80    25    Avg %RSD
  ---------------------------------------------------------------------------
102) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 0.920 0.895 0.964 0.999 0.667 0.911 0.932 0.945 0.904  11.17

104) I   Acenaphthene-d10     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.507 0.515 0.490 0.536 0.487 0.561 0.497 0.531 0.516   4.96
106) Atrazine     0.165 0.168 0.179 0.172 0.132 0.190 0.169 0.177 0.169  10.03

107) I   Chrysene-d12a         ----------------ISTD---------------------
108) Benzidine    0.173 0.274 0.398 0.499       0.354 0.445 0.379 0.360  30.17
             ---- Quadratic regression ----  Coefficient =  0.9939
               Response Ratio = -0.04759 + 0.59733 *A + -0.06928 *A^2

109) 1-chloroocta 0.266 0.258 0.244 0.270 0.218 0.292 0.245 0.272 0.258   8.67

110) I   Phenanthrene-d10     ----------------ISTD---------------------
111) o-terphenyl  0.514 0.538 0.518 0.541 0.516 0.592 0.523 0.582 0.540   5.65

112) I   Naphthalene-d8       ----------------ISTD---------------------
113) Hydroquinone             0.343 0.327       0.250 0.323 0.309 0.310  11.60
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MM5239.M          Wed Apr 27 14:52:47 2016   MSM
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5239-ICV5239
Lab FileID: M123937.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5239\M123937.D          Vial: 10
  Acq On    : 27 Apr 2016   3:12 am                   Operator: seanb1
  Sample    : icv5239-50                              Inst    : Instrument #1
  Misc      : op93324,em5239                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Wed Apr 27 12:56:11 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  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.
104 I	Acenaphthene-d10a	1.000	1.000	0.0	82	-0.03	8.05
105 I	1,2,4,5-Tetrachlorobenzen	0.516	0.618	-19.8	94	0.00	6.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed Apr 27 14:46:04 2016 MSM

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5239-ICV5239
Lab FileID: M123938.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5239\M123938.D          Vial: 11
Acq On    : 27 Apr 2016   3:41 am                   Operator: seanb1
Sample    : icv5239-50                              Inst    : Instrument #1
Misc      : op93324,em5239                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 27 12:56:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	96	-0.02	4.62
103	t	Benzaldehyde	0.904	0.967	-7.0	93	-0.03	4.30
104	I	Acenaphthene-d10a	1.000	1.000	0.0	86	-0.03	8.05
106	t	Atrazine	0.169	0.177	-4.7	88	0.00	10.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed Apr 27 14:46:06 2016 MSM

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5239-ICV5239
Lab FileID: M123940.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5239\M123940.D          Vial: 13
  Acq On    : 27 Apr 2016   4:37 am                   Operator: seanb1
  Sample    : icv5239-50                              Inst    : Instrument #1
  Misc      : op93324,em5239                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Wed Apr 27 12:56:11 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  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.
112 I	Naphthalene-d8a	1.000	1.000	0.0	78	-0.03	5.73
113	Hydroquinone	0.310	0.326	-5.2	77	-0.04	6.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed Apr 27 14:46:08 2016 MSM

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5240-ICV5239
Lab FileID: M123945.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5240\M123945.D          Vial: 3
  Acq On    : 27 Apr 2016  11:18 am                   Operator: ashleyd
  Sample    : icv5239-50                              Inst    : Instrument #1
  Misc      : op93324,em5240                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Wed Apr 27 12:36:54 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  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.
  ---------------------------------------------------------------------------
107 I   Chrysene-d12a              1.000   1.000      0.0   86   0.11   15.92

            ----------------------- True    Calc.   % Drift  ------------
108 t   Benzidine                 50.000  63.945    -27.9  101   0.06   13.43
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     M123931a.D MM5239.M         Wed Apr 27 14:51:42 2016   MSM
```

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5259-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124308.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5259\M124308.D          Vial: 2
Acq On    : 10 May 2016   9:41 pm                   Operator: juliusj
Sample    : cc5217-25                               Inst    : Instrument #1
Misc      : op93478,em5259                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed May 11 09:00:08 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	-0.02	4.69
2	t	1,4-Dioxane	0.555	0.527	5.0	114	0.00	2.26
3	t	Pyridine	1.350	1.348	0.1	112	0.02	2.61
4	t	N-Nitrosodimethylamine	0.591	0.725	-22.7#	138	0.02	2.58
5	S	2-Fluorophenol	1.223	1.227	-0.3	112	0.00	3.76
6	t	Indene	2.275	2.335	-2.6	117	-0.02	4.89
7	t	Cumene	3.052	3.201	-4.9	119	-0.01	4.09
8	S	Phenol-d5	1.536	1.622	-5.6	115	0.00	4.47
9	t	Phenol	1.646	1.876	-14.0	129	0.00	4.48
10	t	Aniline	1.915	1.646	14.0	94	-0.02	4.46
11	t	bis(2-Chloroethyl)ether	1.282	1.430	-11.5	131	-0.01	4.49
12	t	2-Chlorophenol	1.371	1.446	-5.5	119	0.00	4.56
13	t	Decane	1.300	1.493	-14.8	135	-0.02	4.56
14	t	1,3-Dichlorobenzene	1.563	1.555	0.5	115	-0.02	4.65
15	t	1,4-Dichlorobenzene	1.549	1.564	-1.0	116	-0.01	4.71
16	t	Benzyl alcohol	0.794	0.851	-7.2	118	0.00	4.82
17	t	1,2-Dichlorobenzene	1.458	1.501	-2.9	118	-0.02	4.82
18	t	Acetophenone	1.821	1.904	-4.6	121	0.00	5.02
19	t	2-Methylphenol	1.136	1.227	-8.0	120	-0.03	4.93
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.462	-9.0	124	-0.01	4.90
21	t	3&4-Methylphenol	1.245	1.330	-6.8	119	-0.03	5.05
22	t	n-Nitroso-di-n-propylamin	0.983	1.029	-4.7	121	-0.01	5.02
23	t	Hexachloroethane	0.586	0.588	-0.3	117	-0.02	5.10
24	I	Naphthalene-d8	1.000	1.000	0.0	110	-0.02	5.83
25	S	Nitrobenzene-d5	0.356	0.374	-5.1	121	-0.02	5.15
26	t	Nitrobenzene	0.360	0.385	-6.9	124	-0.02	5.17
27	t	Quinoline	0.763	0.766	-0.4	114	0.00	6.23
28	t	Isophorone	0.647	0.699	-8.0	124	-0.01	5.37
29	t	2-Nitrophenol	0.204	0.220	-7.8	118	-0.02	5.45
30	t	2,4-Dimethylphenol	0.333	0.335	-0.6	117	0.00	5.51
31	t	Benzoic acid	0.219	0.244	-11.4	127	0.00	5.65
32	t	bis(2-Chloroethoxy)methan	0.393	0.409	-4.1	120	-0.02	5.57
33	t	2,4-Dichlorophenol	0.305	0.326	-6.9	118	0.00	5.72
34	t	2,6-Dichlorophenol	0.308	0.314	-1.9	118	-0.02	5.93
35	t	1,3,5-Trichlorobenzene	0.364	0.386	-6.0	120	-0.02	5.46
36	t	1,2,4-Trichlorobenzene	0.358	0.368	-2.8	117	-0.02	5.77
37	t	1,2,3-Trichlorobenzene	0.346	0.350	-1.2	115	-0.02	6.01
38	t	Naphthalene	1.048	1.063	-1.4	116	-0.02	5.85
39	t	4-Chloroaniline	0.451	0.423	6.2	104	-0.02	5.92
40	t	2,3-Dichloroaniline	0.397	0.405	-2.0	116	-0.01	7.05
41	t	Caprolactam	0.165	0.179	-8.5	129	0.00	6.33

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5259-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124308.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.224	-8.7	124	-0.02	5.98
43	t	4-Chloro-3-methylphenol	0.305	0.317	-3.9	120	0.00	6.53
44	t	2-Methylnaphthalene	0.626	0.643	-2.7	118	-0.02	6.66
45	t	1-Methylnaphthalene	0.728	0.737	-1.2	115	-0.02	6.78
46	t	Dimethylnaphthalene	0.676	0.696	-3.0	118	-0.03	7.52
47	I	Acenaphthene-d10	1.000	1.000	0.0	117	-0.03	8.16
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	40.435	19.1	95	-0.02	6.86
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.389	-1.8	122	0.00	7.07
50	t	2,4,5-Trichlorophenol	0.415	0.419	-1.0	126	0.00	7.15
51	S	2-Fluorobiphenyl	1.313	1.319	-0.5	122	-0.01	7.15
52	t	2-Chloronaphthalene	1.165	1.104	5.2	115	-0.02	7.32
53	t	Biphenyl	1.488	1.453	2.4	119	-0.02	7.29
54	t	2-Nitroaniline	0.332	0.340	-2.4	123	0.00	7.51
55	t	Dimethylphthalate	1.362	1.361	0.1	121	-0.02	7.77
56	t	Acenaphthylene	1.927	1.876	2.6	117	-0.02	7.94
57	t	2,6-Dinitrotoluene	0.303	0.311	-2.6	123	-0.01	7.87
58	t	3-Nitroaniline	0.335	0.312	6.9	112	0.00	8.16
59	t	Acenaphthene	1.161	1.119	3.6	116	-0.02	8.22
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	46.023	8.0	120	0.00	8.36
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.108	12.2	101	-0.04	8.64
62	t	Dibenzofuran	1.726	1.699	1.6	119	-0.02	8.51
63	t	2,4-Dinitrotoluene	0.397	0.425	-7.1	124	-0.01	8.55
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.363	-13.1	138	0.00	8.77
65	t	Diethylphthalate	1.356	1.364	-0.6	123	-0.03	8.96
66	t	Fluorene	1.396	1.419	-1.6	123	-0.03	9.09
67	t	4-Chlorophenyl-phenylethe	0.666	0.689	-3.5	126	-0.03	9.11
68	t	4-Nitroaniline	0.326	0.307	5.8	109	0.00	9.21
69	I	Phenanthrene-d10	1.000	1.000	0.0	114	-0.03	10.80
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	26.562	-6.2	124	0.00	9.28
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.560	-4.3	123	-0.02	9.34
72	t	1,2-Diphenylhydrazine	0.688	0.722	-4.9	123	-0.03	9.40
73	S	2,4,6-Tribromophenol	0.138	0.177	-28.3#	147	-0.02	9.54
74	t	4-Bromophenyl-phenylether	0.247	0.283	-14.6	134	-0.03	9.99
75	t	Hexachlorobenzene	0.291	0.331	-13.7	136	-0.03	10.09
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	61.338	-22.7#	152	-0.01	10.51
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.125	-0.9	119	-0.03	10.84
78	t	Anthracene	1.155	1.175	-1.7	119	-0.03	10.93
79	t	Carbazole	1.064	1.081	-1.6	117	-0.02	11.30
80	t	Di-n-butylphthalate	1.321	1.385	-4.8	122	-0.05	12.06
81	t	Fluoranthene	1.307	1.396	-6.8	124	-0.04	13.14
82	t	Octadecane	0.430	0.476	-10.7	129	-0.04	10.75

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5259-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124308.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	126	-0.03	15.98
84	t	Pyrene	1.304	1.244	4.6	124	-0.02	13.56
85		Butyl stearate	0.298	0.306	-2.7	133	-0.06	15.23
86	S	Terphenyl-d14	0.897	0.913	-1.8	134	-0.04	13.96
87	t	Butylbenzylphthalate	0.567	0.539	4.9	121	-0.05	15.00
88	t	Benzo[a]anthracene	1.223	1.210	1.1	132	-0.04	15.96
89	t	3,3'-Dichlorobenzidine	0.447	0.450	-0.7	130	-0.04	15.98
90	t	Chrysene	1.142	1.142	0.0	133	-0.03	16.03
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.729	4.7	123	-0.05	16.21
92	I	Perylene-d12	1.000	1.000	0.0	128	-0.03	18.62
93	t	Di-n-octylphthalate	1.298	1.209	6.9	120	-0.06	17.43
94	t	Benzo[b]fluoranthene	1.229	1.239	-0.8	134	-0.03	17.97
95	t	Benzo[k]fluoranthene	1.185	1.210	-2.1	137	-0.03	18.02
96	t	Benzo[a]pyrene	1.135	1.154	-1.7	134	-0.03	18.52
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.388	-20.8#	160	-0.01	20.36
98	t	Dibenz(a,h)acridine	1.018	1.062	-4.3	135	-0.03	19.98
99	t	Dibenz[a,h]anthracene	1.168	1.182	-1.2	131	-0.02	20.39
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.592	-7.1	140	-0.04	17.95
101	t	Benzo[g,h,i]perylene	1.197	1.183	1.2	130	0.00	20.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123947.D MM5239.M Wed May 11 09:23:57 2016 MSM

6.7.42

6

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5259-CC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124309.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5259\M124309.D          Vial: 3
Acq On    : 10 May 2016  10:10 pm                   Operator: juliusj
Sample    : cc5239-25                               Inst    : Instrument #1
Misc      : op93478,em5259                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed May 11 09:00:08 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	158	-0.01	4.69
103	t	Benzaldehyde	0.904	0.947	-4.8	158	-0.01	4.37
104	I	Acenaphthene-d10a	1.000	1.000	0.0	160	-0.02	8.17
105	I	1,2,4,5-Tetrachlorobenzen	0.516	0.629	-21.9#	190	0.05	6.88
106	t	Atrazine	0.169	0.242	-43.2#	219#	-0.02	10.39
107	I	Chrysene-d12a	1.000	1.000	0.0	172	-0.04	15.97
		----------	True	Calc.	% Drift	----------		
108	t	Benzidine	25.000	17.870	28.5#	149	-0.02	13.48
		----------	AvgRF	CCRF	% Dev	----------		
109	s	1-chlorooctadecane	0.258	0.267	-3.5	168	-0.02	13.09
110	I	Phenanthrene-d10a	1.000	1.000	0.0	168	-0.03	10.79
111	s	o-terphenyl	0.540	0.674	-24.8#	195	0.06	11.58
112	I	Naphthalene-d8a	1.000	1.000	0.0	155	-0.02	5.83
113		Hydroquinone	0.310	0.330	-6.5	165	0.00	6.37

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123947.D MM5239.M Wed May 11 09:24:00 2016 MSM

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5260-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124341.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5260\M124341.D          Vial: 2
Acq On    : 11 May 2016  12:23 pm                   Operator: ashleyd
Sample    : cc5217-50                               Inst    : Instrument #1
Misc      : op93478,em5260                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed May 11 14:10:35 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.03	4.68
2	t	1,4-Dioxane	0.555	0.534	3.8	95	0.00	2.24
3	t	Pyridine	1.350	1.383	-2.4	93	0.01	2.60
4	t	N-Nitrosodimethylamine	0.591	0.731	-23.7#	112	0.00	2.56
5	S	2-Fluorophenol	1.223	1.318	-7.8	98	0.00	3.75
6	t	Indene	2.275	2.275	0.0	97	-0.03	4.88
7	t	Cumene	3.052	3.180	-4.2	99	-0.02	4.08
8	S	Phenol-d5	1.536	1.622	-5.6	96	-0.01	4.45
9	t	Phenol	1.646	1.865	-13.3	99	-0.01	4.46
10	t	Aniline	1.915	1.514	20.9#	74	-0.03	4.45
11	t	bis(2-Chloroethyl)ether	1.282	1.575	-22.9#	124	-0.03	4.48
12	t	2-Chlorophenol	1.371	1.425	-3.9	100	-0.02	4.54
13	t	Decane	1.300	1.429	-9.9	115	-0.03	4.55
14	t	1,3-Dichlorobenzene	1.563	1.537	1.7	95	-0.03	4.64
15	t	1,4-Dichlorobenzene	1.549	1.543	0.4	97	-0.03	4.69
16	t	Benzyl alcohol	0.794	0.819	-3.1	93	-0.02	4.81
17	t	1,2-Dichlorobenzene	1.458	1.481	-1.6	100	-0.03	4.82
18	t	Acetophenone	1.821	1.859	-2.1	98	-0.02	5.01
19	t	2-Methylphenol	1.136	1.192	-4.9	98	-0.04	4.92
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.444	-4.7	108	-0.02	4.90
21	t	3&4-Methylphenol	1.245	1.310	-5.2	98	-0.05	5.04
22	t	n-Nitroso-di-n-propylamin	0.983	0.999	-1.6	101	-0.02	5.01
23	t	Hexachloroethane	0.586	0.587	-0.2	98	-0.03	5.09
24	I	Naphthalene-d8	1.000	1.000	0.0	90	-0.03	5.81
25	S	Nitrobenzene-d5	0.356	0.367	-3.1	97	-0.03	5.14
26	t	Nitrobenzene	0.360	0.377	-4.7	100	-0.03	5.16
27	t	Quinoline	0.763	0.754	1.2	94	0.00	6.22
28	t	Isophorone	0.647	0.665	-2.8	98	-0.02	5.37
29	t	2-Nitrophenol	0.204	0.220	-7.8	100	-0.03	5.45
30	t	2,4-Dimethylphenol	0.333	0.329	1.2	98	-0.02	5.50
31	t	Benzoic acid	0.219	0.278	-26.9#	108	0.00	5.66
32	t	bis(2-Chloroethoxy)methan	0.393	0.400	-1.8	98	-0.03	5.56
33	t	2,4-Dichlorophenol	0.305	0.322	-5.6	97	-0.02	5.70
34	t	2,6-Dichlorophenol	0.308	0.320	-3.9	101	-0.03	5.92
35	t	1,3,5-Trichlorobenzene	0.364	0.384	-5.5	102	-0.03	5.45
36	t	1,2,4-Trichlorobenzene	0.358	0.364	-1.7	97	-0.03	5.76
37	t	1,2,3-Trichlorobenzene	0.346	0.351	-1.4	96	-0.03	6.00
38	t	Naphthalene	1.048	1.043	0.5	96	-0.03	5.84
39	t	4-Chloroaniline	0.451	0.432	4.2	88	-0.03	5.91
40	t	2,3-Dichloroaniline	0.397	0.391	1.5	93	-0.03	7.03
41	t	Caprolactam	0.165	0.174	-5.5	105	0.00	6.33

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5260-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124341.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.220	-6.8	102	-0.03	5.96
43	t	4-Chloro-3-methylphenol	0.305	0.310	-1.6	97	-0.02	6.51
44	t	2-Methylnaphthalene	0.626	0.625	0.2	96	-0.03	6.64
45	t	1-Methylnaphthalene	0.728	0.743	-2.1	97	-0.04	6.76
46	t	Dimethylnaphthalene	0.676	0.681	-0.7	97	-0.04	7.51
47	I	Acenaphthene-d10	1.000	1.000	0.0	94	-0.04	8.15
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	88.904	11.1	83	-0.03	6.84
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.380	0.5	98	-0.03	7.05
50	t	2,4,5-Trichlorophenol	0.415	0.433	-4.3	101	-0.01	7.13
51	S	2-Fluorobiphenyl	1.313	1.306	0.5	102	-0.03	7.13
52	t	2-Chloronaphthalene	1.165	1.089	6.5	95	-0.03	7.30
53	t	Biphenyl	1.488	1.429	4.0	98	-0.04	7.28
54	t	2-Nitroaniline	0.332	0.341	-2.7	100	-0.02	7.49
55	t	Dimethylphthalate	1.362	1.328	2.5	96	-0.03	7.76
56	t	Acenaphthylene	1.927	1.810	6.1	95	-0.03	7.92
57	t	2,6-Dinitrotoluene	0.303	0.313	-3.3	98	-0.03	7.86
58	t	3-Nitroaniline	0.335	0.325	3.0	91	-0.02	8.14
59	t	Acenaphthene	1.161	1.098	5.4	97	-0.04	8.20
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	120.614	-20.6#	118	-0.02	8.34
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.105	14.6	82	-0.08	8.60
62	t	Dibenzofuran	1.726	1.663	3.7	96	-0.04	8.49
63	t	2,4-Dinitrotoluene	0.397	0.424	-6.8	99	-0.03	8.54
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.378	-17.8	110	-0.03	8.75
65	t	Diethylphthalate	1.356	1.314	3.1	96	-0.04	8.95
66	t	Fluorene	1.396	1.375	1.5	98	-0.04	9.08
67	t	4-Chlorophenyl-phenylethe	0.666	0.671	-0.8	101	-0.04	9.10
68	t	4-Nitroaniline	0.326	0.335	-2.8	93	-0.01	9.21
69	I	Phenanthrene-d10	1.000	1.000	0.0	91	-0.05	10.78
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	57.423	-14.8	107	-0.03	9.26
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.537	0.0	97	-0.04	9.33
72	t	1,2-Diphenylhydrazine	0.688	0.702	-2.0	98	-0.04	9.38
73	S	2,4,6-Tribromophenol	0.138	0.183	-32.6#	121	-0.04	9.52
74	t	4-Bromophenyl-phenylether	0.247	0.273	-10.5	105	-0.05	9.97
75	t	Hexachlorobenzene	0.291	0.323	-11.0	108	-0.04	10.08
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	131.269	-31.3#	120	-0.03	10.49
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.101	1.3	96	-0.05	10.82
78	t	Anthracene	1.155	1.169	-1.2	97	-0.05	10.91
79	t	Carbazole	1.064	1.081	-1.6	97	-0.04	11.28
80	t	Di-n-butylphthalate	1.321	1.368	-3.6	97	-0.07	12.04
81	t	Fluoranthene	1.307	1.394	-6.7	102	-0.06	13.12
82	t	Octadecane	0.430	0.457	-6.3	100	-0.06	10.73

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5260-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124341.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.06	15.96
84	t	Pyrene	1.304	1.162	10.9	102	-0.04	13.54
85		Butyl stearate	0.298	0.290	2.7	109	-0.08	15.20
86	S	Terphenyl-d14	0.897	0.892	0.6	111	-0.06	13.94
87	t	Butylbenzylphthalate	0.567	0.525	7.4	100	-0.07	14.98
88	t	Benzo[a]anthracene	1.223	1.173	4.1	111	-0.06	15.94
89	t	3,3'-Dichlorobenzidine	0.447	0.477	-6.7	119	-0.06	15.96
90	t	Chrysene	1.142	1.104	3.3	110	-0.05	16.01
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.699	8.6	102	-0.08	16.18
92	I	Perylene-d12	1.000	1.000	0.0	110	-0.06	18.59
93	t	Di-n-octylphthalate	1.298	1.158	10.8	99	-0.08	17.41
94	t	Benzo[b]fluoranthene	1.229	1.193	2.9	115	-0.05	17.95
95	t	Benzo[k]fluoranthene	1.185	1.162	1.9	116	-0.05	18.00
96	t	Benzo[a]pyrene	1.135	1.130	0.4	116	-0.06	18.49
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.378	-19.9	139	-0.04	20.33
98	t	Dibenz(a,h)acridine	1.018	1.063	-4.4	123	-0.06	19.95
99	t	Dibenz[a,h]anthracene	1.168	1.186	-1.5	121	-0.06	20.36
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.585	-5.8	125	-0.06	17.93
101	t	Benzo[g,h,i]perylene	1.197	1.201	-0.3	120	-0.04	20.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed May 11 14:16:19 2016 MSM

6.7.44

6

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5260-CC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124342.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5260\M124342.D          Vial: 3
Acq On    : 11 May 2016  12:52 pm                   Operator: ashleyd
Sample    : cc5239-50                               Inst    : Instrument #1
Misc      : op93478,em5260                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed May 11 14:10:35 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	123	-0.03	4.68
103 t	Benzaldehyde	0.904	0.743	17.8	92	-0.02	4.36
104 I	Acenaphthene-d10a	1.000	1.000	0.0	115	-0.04	8.15
105 I	1,2,4,5-Tetrachlorobenzen	0.516	0.601	-16.5	128	0.03	6.86
106 t	Atrazine	0.169	0.234	-38.5#	157	-0.04	10.37
107 I	Chrysene-d12a	1.000	1.000	0.0	136	-0.06	15.95
	----------	True	Calc.	% Drift	----------		
108 t	Benzidine	50.000	46.735	6.5	121	-0.04	13.47
	----------	AvgRF	CCRF	% Dev	----------		
109 s	1-chlorooctadecane	0.258	0.238	7.8	120	-0.04	13.07
110 I	Phenanthrene-d10a	1.000	1.000	0.0	127	-0.05	10.77
111 s	o-terphenyl	0.540	0.629	-16.5	148	0.04	11.56
112 I	Naphthalene-d8a	1.000	1.000	0.0	114	-0.03	5.81
113	Hydroquinone	0.310	0.341	-10.0	119	-0.01	6.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed May 11 14:16:21 2016 MSM

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5264-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124421.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM5264\M124421.D Vial: 2
Acq On : 13 May 2016 9:33 am Operator: ashleyd
Sample : cc5217-50 Inst : Instrument #1
Misc : op93478,em5264 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu May 12 17:05:14 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	137	-0.02	4.65
2	t	1,4-Dioxane	0.555	0.564	-1.6	150	-0.03	2.20
3	t	Pyridine	1.350	1.336	1.0	134	0.00	2.57
4	t	N-Nitrosodimethylamine	0.591	0.684	-15.7	157	0.00	2.52
5	S	2-Fluorophenol	1.223	1.342	-9.7	149	0.00	3.71
6	t	Indene	2.275	2.250	1.1	144	-0.01	4.85
7	t	Cumene	3.052	3.211	-5.2	150	-0.02	4.05
8	S	Phenol-d5	1.536	1.619	-5.4	144	0.00	4.42
9	t	Phenol	1.646	1.820	-10.6	144	0.00	4.43
10	t	Aniline	1.915	1.516	20.8#	110	-0.02	4.42
11	t	bis(2-Chloroethyl)ether	1.282	1.473	-14.9	174	-0.01	4.45
12	t	2-Chlorophenol	1.371	1.438	-4.9	151	-0.01	4.51
13	t	Decane	1.300	1.352	-4.0	162	-0.02	4.52
14	t	1,3-Dichlorobenzene	1.563	1.527	2.3	141	-0.02	4.61
15	t	1,4-Dichlorobenzene	1.549	1.550	-0.1	145	0.00	4.67
16	t	Benzyl alcohol	0.794	0.821	-3.4	140	0.00	4.78
17	t	1,2-Dichlorobenzene	1.458	1.450	0.5	146	-0.01	4.78
18	t	Acetophenone	1.821	1.867	-2.5	147	0.00	4.98
19	t	2-Methylphenol	1.136	1.188	-4.6	145	-0.03	4.88
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.437	-3.1	159	0.00	4.86
21	t	3&4-Methylphenol	1.245	1.314	-5.5	147	-0.03	5.01
22	t	n-Nitroso-di-n-propylamin	0.983	0.957	2.6	144	0.00	4.98
23	t	Hexachloroethane	0.586	0.590	-0.7	147	-0.01	5.06
24	I	Naphthalene-d8	1.000	1.000	0.0	136	0.00	5.78
25	S	Nitrobenzene-d5	0.356	0.359	-0.8	143	0.00	5.11
26	t	Nitrobenzene	0.360	0.366	-1.7	147	0.00	5.12
27	t	Quinoline	0.763	0.759	0.5	143	0.02	6.19
28	t	Isophorone	0.647	0.656	-1.4	146	0.00	5.33
29	t	2-Nitrophenol	0.204	0.213	-4.4	146	-0.01	5.41
30	t	2,4-Dimethylphenol	0.333	0.320	3.9	143	0.00	5.47
31	t	Benzoic acid	0.219	0.288	-31.5#	169	0.03	5.63
32	t	bis(2-Chloroethoxy)methan	0.393	0.401	-2.0	149	0.00	5.53
33	t	2,4-Dichlorophenol	0.305	0.315	-3.3	143	0.00	5.66
34	t	2,6-Dichlorophenol	0.308	0.317	-2.9	152	0.00	5.88
35	t	1,3,5-Trichlorobenzene	0.364	0.377	-3.6	150	-0.01	5.41
36	t	1,2,4-Trichlorobenzene	0.358	0.351	2.0	141	0.00	5.72
37	t	1,2,3-Trichlorobenzene	0.346	0.344	0.6	142	0.00	5.96
38	t	Naphthalene	1.048	1.038	1.0	144	0.00	5.80
39	t	4-Chloroaniline	0.451	0.439	2.7	135	0.00	5.87
40	t	2,3-Dichloroaniline	0.397	0.399	-0.5	143	0.00	6.98
41	t	Caprolactam	0.165	0.165	0.0	149	0.03	6.30

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5264-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124421.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.216	-4.9	152	0.00	5.93
43	t	4-Chloro-3-methylphenol	0.305	0.309	-1.3	146	0.00	6.48
44	t	2-Methylnaphthalene	0.626	0.624	0.3	144	0.00	6.60
45	t	1-Methylnaphthalene	0.728	0.761	-4.5	150	-0.01	6.72
46	t	Dimethylnaphthalene	0.676	0.679	-0.4	146	-0.01	7.46
47	I	Acenaphthene-d10	1.000	1.000	0.0	142	-0.02	8.10
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	103.612	-3.6	148	-0.01	6.80
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.378	1.0	147	0.00	7.00
50	t	2,4,5-Trichlorophenol	0.415	0.427	-2.9	152	0.00	7.09
51	S	2-Fluorobiphenyl	1.313	1.290	1.8	153	0.00	7.10
52	t	2-Chloronaphthalene	1.165	1.089	6.5	144	0.00	7.26
53	t	Biphenyl	1.488	1.425	4.2	147	-0.01	7.23
54	t	2-Nitroaniline	0.332	0.321	3.3	143	0.00	7.45
55	t	Dimethylphthalate	1.362	1.331	2.3	146	0.00	7.71
56	t	Acenaphthylene	1.927	1.767	8.3	141	-0.01	7.88
57	t	2,6-Dinitrotoluene	0.303	0.314	-3.6	149	0.00	7.82
58	t	3-Nitroaniline	0.335	0.322	3.9	136	0.01	8.10
59	t	Acenaphthene	1.161	1.076	7.3	144	0.00	8.15
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	126.762	-26.8#	190	0.00	8.29
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.102	17.1	120	-0.05	8.55
62	t	Dibenzofuran	1.726	1.659	3.9	145	0.00	8.44
63	t	2,4-Dinitrotoluene	0.397	0.411	-3.5	145	0.00	8.49
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.374	-16.5	166	0.00	8.70
65	t	Diethylphthalate	1.356	1.309	3.5	145	0.00	8.91
66	t	Fluorene	1.396	1.365	2.2	148	-0.01	9.02
67	t	4-Chlorophenyl-phenylethe	0.666	0.659	1.1	150	-0.01	9.04
68	t	4-Nitroaniline	0.326	0.340	-4.3	143	0.02	9.16
69	I	Phenanthrene-d10	1.000	1.000	0.0	135	-0.02	10.72
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	62.067	-24.1#	174	0.00	9.22
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.541	-0.7	145	-0.01	9.28
72	t	1,2-Diphenylhydrazine	0.688	0.687	0.1	142	-0.02	9.33
73	S	2,4,6-Tribromophenol	0.138	0.179	-29.7#	176	-0.01	9.47
74	t	4-Bromophenyl-phenylether	0.247	0.281	-13.8	159	-0.02	9.92
75	t	Hexachlorobenzene	0.291	0.317	-8.9	157	-0.02	10.02
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	138.116	-38.1#	188	0.00	10.44
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.092	2.1	141	-0.02	10.76
78	t	Anthracene	1.155	1.154	0.1	143	0.00	10.87
79	t	Carbazole	1.064	1.057	0.7	140	0.00	11.23
80	t	Di-n-butylphthalate	1.321	1.336	-1.1	140	-0.02	11.99
81	t	Fluoranthene	1.307	1.373	-5.0	149	0.00	13.06
82	t	Octadecane	0.430	0.456	-6.0	148	-0.03	10.68

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5264-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124421.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	157	0.00	15.90
84	t	Pyrene	1.304	1.167	10.5	147	-0.01	13.49
85		Butyl stearate	0.298	0.281	5.7	153	-0.03	15.16
86	S	Terphenyl-d14	0.897	0.884	1.4	159	-0.02	13.88
87	t	Butylbenzylphthalate	0.567	0.510	10.1	141	-0.03	14.93
88	t	Benzo[a]anthracene	1.223	1.151	5.9	157	-0.02	15.88
89	t	3,3'-Dichlorobenzidine	0.447	0.480	-7.4	173	-0.02	15.90
90	t	Chrysene	1.142	1.095	4.1	158	0.00	15.95
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.705	7.8	149	-0.03	16.13
92	I	Perylene-d12	1.000	1.000	0.0	152	-0.02	18.53
93	t	Di-n-octylphthalate	1.298	1.172	9.7	140	-0.04	17.36
94	t	Benzo[b]fluoranthene	1.229	1.163	5.4	156	0.00	17.90
95	t	Benzo[k]fluoranthene	1.185	1.143	3.5	158	-0.02	17.94
96	t	Benzo[a]pyrene	1.135	1.111	2.1	158	-0.02	18.44
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.350	-17.5	190	0.00	20.27
98	t	Dibenz(a,h)acridine	1.018	1.060	-4.1	171	-0.01	19.89
99	t	Dibenz[a,h]anthracene	1.168	1.186	-1.5	168	-0.01	20.29
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.566	-2.4	168	-0.03	17.87
101	t	Benzo[g,h,i]perylene	1.197	1.182	1.3	164	0.00	20.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Fri May 13 15:21:02 2016 MSM

6.7.46

6

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EM5264-CC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124422.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5264\M124422.D          Vial: 3
Acq On    : 13 May 2016  10:09 am                   Operator: ashleyd
Sample    : cc5239-50                               Inst    : Instrument #1
Misc      : op93478,em5264                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu May 12 17:05:14 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	189	-0.01	4.65
103	t	Benzaldehyde	0.904	0.794	12.2	151	-0.01	4.33
104	I	Acenaphthene-d10a	1.000	1.000	0.0	174	-0.01	8.10
105	I	1,2,4,5-Tetrachlorobenzen	0.516	0.604	-17.1	196	0.06	6.82
106	t	Atrazine	0.169	0.228	-34.9#	231#	0.01	10.33
107	I	Chrysene-d12a	1.000	1.000	0.0	200	-0.01	15.90
		----------	True	Calc.	% Drift		----------	
108	t	Benzidine	50.000	49.917	0.2	189	0.00	13.41
		----------	AvgRF	CCRF	% Dev		----------	
109	s	1-chlorooctadecane	0.258	0.242	6.2	180	0.00	13.02
110	I	Phenanthrene-d10a	1.000	1.000	0.0	191	-0.02	10.72
111	s	o-terphenyl	0.540	0.628	-16.3	222#	0.08	11.51
112	I	Naphthalene-d8a	1.000	1.000	0.0	178	0.00	5.78
113		Hydroquinone	0.310	0.339	-9.4	184	0.02	6.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Fri May 13 15:21:04 2016 MSM

Initial Calibration Summary

Job Number: JC19914 **Sample:** EZ5485-ICC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109748.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSZ

Method : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Calibration Files
100 =z109750A.D 80 =z109751A.D 50 =z109757.D 25 =z109752a.D
10 =z109753a.D 5 =z109754a.D 2 =z109755a.D 1 =z109756a.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.548	0.562	0.575	0.547	0.610	0.627	0.743	0.538	0.594	11.50
3) Pyridine	1.184	1.145	0.899	1.025	0.845	0.506			0.934	26.56
4) N-Nitrosodim	0.717	0.691	0.831	0.798	0.699	0.807	1.046	0.633	0.778	16.45
5) 2-Fluorophen	1.335	1.373	1.366	1.301	1.279	1.529	1.481	1.385	1.381	6.19
6) Indene	2.223	2.348	2.354	2.413	2.397	2.803	2.933	2.869	2.542	10.93
7) Cumene	2.932	3.070	3.148	3.110	3.075	3.640	3.421	3.549	3.243	7.94
8) Phenol-d5	1.486	1.561	1.602	1.560	1.553	1.784	1.691	1.712	1.619	6.20
9) Phenol	1.479	1.535	1.599	1.578	1.518	1.851	1.797	1.786	1.643	8.85
10) Aniline	1.669	1.750	1.782	1.875	1.878	2.004	2.161	2.004	1.890	8.49
11) bis(2-Chloro	1.013	1.043	1.051	1.005	1.074	1.306	1.227	1.280	1.125	11.09
12) 2-Chlorophen	1.293	1.330	1.387	1.365	1.465	1.677	1.781	1.824	1.515	14.05
13) Decane	1.153	1.209	1.251	1.318	1.301	1.559	1.568	1.811	1.396	16.22
14) 1,3-Dichloro	1.441	1.510	1.564	1.571	1.552	1.885	1.891	1.773	1.648	10.61
15) 1,4-Dichloro	1.401	1.487	1.504	1.487	1.508	1.797	1.568	1.756	1.564	8.92
16) Benzyl alcoh	0.683	0.743	0.735	0.685	0.624	0.635	0.714	0.727	0.693	6.52
17) 1,2-Dichloro	1.297	1.377	1.417	1.414	1.400	1.664	1.735	1.814	1.515	12.72
18) Acetophenone	1.603	1.685	1.736	1.675	1.682	1.946	2.034	1.745	1.763	8.41
19) 2-Methylphen	1.193	1.235	1.235	1.149	1.209	1.473	1.351	1.429	1.284	9.22
20) 2,2'-oxybis(	0.341	0.355	0.377	0.348	0.369	0.422	0.504	0.432	0.393	14.14
21) 3&4-Methylph	1.153	1.237	1.323	1.242	1.274	1.540	1.451	1.497	1.340	10.43
22) n-Nitroso-di	0.783	0.802	0.828	0.867	0.842	1.047	1.075	1.054	0.912	13.58
23) Hexachloroet	0.399	0.426	0.441	0.451	0.456	0.551	0.475	0.447	0.456	9.76
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.298	0.300	0.305	0.310	0.299	0.342	0.353	0.375	0.323	9.26
26) Nitrobenzene	0.284	0.288	0.294	0.315	0.302	0.353	0.385	0.382	0.325	12.87
27) Quinoline	0.707	0.710	0.725	0.727	0.705	0.799	0.823	0.860	0.757	8.07
28) Isophorone	0.541	0.542	0.543	0.551	0.531	0.621	0.607	0.595	0.566	6.23
29) 2-Nitropheno	0.190	0.190	0.195	0.201	0.187	0.210	0.219	0.225	0.202	7.09
30) 2,4-Dimethyl	0.305	0.305	0.303	0.314	0.317	0.325	0.350	0.325	0.318	4.92
31) Benzoic Acid	0.251	0.256	0.240	0.234	0.190	0.202	0.234		0.229	10.61
32) bis(2-Chloro	0.316	0.322	0.326	0.331	0.332	0.382	0.368	0.435	0.351	11.70
33) 2,4-Dichloro	0.269	0.275	0.271	0.279	0.284	0.304	0.286	0.274	0.280	4.04
34) 2,6-Dichloro	0.258	0.262	0.259	0.272	0.270	0.305	0.281	0.285	0.274	5.86
35) 1,3,5-Trichl	0.283	0.285	0.292	0.306	0.321	0.368	0.338	0.310	0.313	9.26
36) 1,2,4-Trichl	0.260	0.262	0.269	0.278	0.299	0.323	0.324	0.320	0.292	9.59
37) 1,2,3-Trichl	0.249	0.252	0.264	0.276	0.271	0.335	0.300	0.322	0.284	11.25
38) Naphthalene	0.976	1.012	1.003	1.056	1.030	1.181	1.204	1.322	1.098	11.21
39) 4-Chloroanil	0.365	0.374	0.387	0.412	0.411	0.514	0.494	0.541	0.437	15.67
40) 2,3-Dichloro	0.312	0.313	0.322	0.338	0.330	0.383	0.399	0.415	0.352	11.68
41) Caprolactam	0.140	0.134	0.137	0.135	0.133	0.149	0.169	0.141	0.142	8.42
42) Hexachlorobu	0.123	0.124	0.123	0.133	0.141	0.132	0.147	0.114	0.130	8.27
43) 4-Chloro-3-m	0.279	0.292	0.285	0.297	0.275	0.329	0.305	0.314	0.297	6.23
44) 2-Methylnaph	0.547	0.557	0.586	0.606	0.615	0.713	0.634	0.634	0.611	8.55
45) 1-Methylnaph	0.565	0.574	0.611	0.635	0.629	0.724	0.658	0.839	0.654	13.71

```
46) Dimethylnaph 0.582 0.593 0.587 0.611 0.600 0.705 0.693 0.688 0.632   8.37

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.251 0.274 0.268 0.282 0.275 0.311 0.248 0.225 0.267   9.67
49) 2,4,6-Trichl 0.290 0.313 0.319 0.324 0.350 0.376 0.344 0.326 0.330   7.90
50) 2,4,5-Trichl 0.307 0.319 0.316 0.354 0.345 0.408 0.424 0.390 0.358  12.52
51) 2-Fluorobiph 1.067 1.143 1.161 1.254 1.258 1.490 1.373 1.509 1.282  12.66
52) 2-Chloronaph 0.931 0.997 1.021 1.063 1.109 1.258 1.350 1.340 1.133  14.27
53) Biphenyl     1.329 1.416 1.445 1.495 1.550 1.806 1.772 1.891 1.588  13.04
54) 2-Nitroanili 0.279 0.300 0.296 0.309 0.322 0.303 0.368 0.268 0.306   9.89
55) Dimethylphth 1.136 1.184 1.202 1.245 1.230 1.422 1.411 1.351 1.273   8.49
56) Acenaphthyle 1.727 1.858 1.864 1.929 1.958 2.279 2.116 2.199 1.991   9.49
57) 2,6-Dinitrot 0.263 0.270 0.274 0.271 0.288 0.307 0.249 0.309 0.279   7.59
58) 3-Nitroanili 0.310 0.323 0.328 0.336 0.334 0.348 0.357 0.360 0.337   5.07
59) Acenaphthene 1.033 1.086 1.122 1.143 1.176 1.333 1.302 1.333 1.191   9.83
60) 2,4-Dinitrop 0.156 0.160 0.150 0.139 0.104 0.095 0.097       0.129  22.59
            ---- Quadratic regression ----  Coefficient =  0.9991
              Response Ratio = -0.01641 + 0.15554 *A + 0.00109 *A^2

61) 4-Nitropheno 0.137 0.148 0.143 0.142 0.156 0.164 0.177 0.175 0.155   9.88
62) Dibenzofuran 1.421 1.496 1.537 1.573 1.604 1.843 1.795 1.890 1.645  10.59
63) 2,4-Dinitrot 0.343 0.354 0.364 0.362 0.378 0.353 0.438 0.311 0.363   9.98
64) 2,3,4,6-Tetr 0.253 0.264 0.263 0.282 0.252 0.322 0.313 0.322 0.284  10.72
65) Diethylphtha 1.115 1.167 1.194 1.211 1.231 1.474 1.461 1.595 1.306  13.55
66) Fluorene     1.129 1.186 1.246 1.282 1.364 1.559 1.488 1.579 1.354  12.68
67) 4-Chlorophen 0.484 0.507 0.521 0.548 0.538 0.622 0.643 0.604 0.558  10.35
68) 4-Nitroanili 0.328 0.333 0.339 0.354 0.349 0.360 0.337 0.299 0.337   5.61

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.139 0.138 0.140 0.116 0.112 0.101 0.088       0.119  17.12
71) n-Nitrosodip 0.521 0.536 0.550 0.554 0.591 0.632 0.700 0.569 0.582  10.14
72) 1,2-Diphenyl 0.610 0.637 0.658 0.668 0.689 0.772 0.755 0.772 0.695   9.12
73) 2,4,6-Tribro 0.113 0.115 0.114 0.115 0.117 0.124 0.127 0.158 0.123  12.34
74) 4-Bromopheny 0.185 0.190 0.200 0.199 0.191 0.230 0.225 0.240 0.208  10.18
75) Hexachlorobe 0.204 0.212 0.220 0.216 0.223 0.254 0.239 0.294 0.233  12.59
76) Pentachlorop 0.134 0.137 0.131 0.124 0.115 0.119 0.112 0.118 0.124   7.36
77) Phenanthrene 1.027 1.069 1.070 1.071 1.106 1.273 1.230 1.312 1.145   9.55
78) Anthracene   1.056 1.093 1.123 1.130 1.167 1.276 1.324 1.267 1.179   8.24
79) Carbazole    1.024 1.075 1.103 1.093 1.071 1.219 1.253 1.158 1.125   7.03
80) Di-n-butylph 1.290 1.335 1.355 1.337 1.354 1.468 1.537 1.397 1.384   5.84
81) Fluoranthene 1.093 1.092 1.126 1.127 1.123 1.226 1.277 1.498 1.195  11.63
82) Octadecane   0.434 0.445 0.469 0.470 0.480 0.559 0.581 0.533 0.496  10.94

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.204 1.255 1.243 1.268 1.284 1.542 1.541 1.453 1.349  10.37
85) Butyl steara 0.360 0.377 0.371 0.359 0.335 0.398 0.403 0.315 0.365   8.14
86) Terphenyl-d1 0.778 0.801 0.800 0.784 0.795 0.896 0.962 0.909 0.840   8.41
87) Butylbenzylp 0.631 0.658 0.652 0.632 0.603 0.668 0.677 0.628 0.644   3.79
88) Benzo[a]anth 1.089 1.140 1.117 1.116 1.076 1.234 1.289 1.284 1.168   7.47
89) 3,3'-Dichlor 0.387 0.409 0.406 0.420 0.387 0.493 0.454 0.417 0.422   8.46
90) Chrysene     1.008 1.062 1.064 1.085 1.060 1.229 1.361 1.255 1.140  10.92
91) bis(2-Ethylh 0.885 0.922 0.906 0.880 0.830 0.993 0.971 0.861 0.906   6.06

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.530 1.582 1.617 1.582 1.460 1.591 1.594 1.375 1.541   5.41
94) Benzo[b]fluo 1.132 1.196 1.207 1.183 1.170 1.370 1.332 1.511 1.263  10.26
95) Benzo[k]fluo 0.996 1.027 1.079 1.100 1.123 1.281 1.243 1.219 1.134   9.15
96) Benzo[a]pyre 1.025 1.055 1.079 1.114 1.055 1.200 1.194 1.271 1.124   7.80
97) Indeno[1,2,3 1.006 1.049 1.089 1.078 1.068 1.241 1.205 1.252 1.124   8.41
98) Dibenz(a,h)a 0.935 0.988 1.010 1.025 0.996 1.076 1.204 1.277 1.064  11.04
```

Initial Calibration Summary

Job Number: JC19914 **Sample:** EZ5485-ICC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109748.D
Project: BMSMC, Building 5 Area, PR

```
 99) Dibenz[a,h]a 1.078 1.120 1.128 1.133 1.117 1.309 1.323 1.252 1.183   8.15
100) 7,12-Dimethy 0.509 0.534 0.539 0.535 0.509 0.617 0.627 0.726 0.575  13.24
101) Benzo[g,h,i] 1.029 1.090 1.141 1.142 1.102 1.309 1.338 1.509 1.208  13.41


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

          MZ5485.M          Thu Apr 14 15:14:55 2016   RTE
```

Initial Calibration Summary

Job Number: JC19914 **Sample:** EZ5486-ICC5486
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109757.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSZ

Method : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Thu Apr 14 12:08:11 2016
Response via : Initial Calibration

Calibration Files
100 =z109750.D 80 =z109751.D 50 =z109757.D 25 =z109752.D
10 =z109753.D 5 =z109754.D 2 =z109755.D 1 =z109756.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
102) 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	0.755	0.920	1.044	1.065	1.092	1.158	1.046	1.371	1.056	16.78
104) Phenanthrene-d10a	ISTD									
105) 1-chloroocta	0.297	0.298	0.285	0.310	0.301	0.332	0.327	0.275	0.303	6.42
106) o-terphenyl	0.462	0.477	0.477	0.505	0.486	0.586	0.554	0.621	0.521	11.29
107) Atrazine	0.090	0.088	0.090	0.094	0.097	0.115	0.104	0.118	0.100	11.72
108) Chrysene-d12a	ISTD									
109) Benzidine	0.410	0.566	0.568	0.588	0.678	0.602	0.424	0.548		17.68
110) Acenaphthene-d10a	ISTD									
111) 1,2,4,5-Tetr	0.454	0.461	0.495	0.513	0.475	0.577	0.553	0.574	0.513	9.70
112) I Naphthalene-d8a	ISTD									
113) Hydroquinone	0.309	0.287	0.296	0.286	0.203	0.280	0.173	0.299	0.267	18.75

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

MZ5485.M Thu Apr 14 12:08:40 2016 RTE

Initial Calibration Verification

Job Number: JC19914 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109758.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109758.D          Vial: 20
Acq On    : 14 Apr 2016   7:59 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	4.33
9	t	Phenol	1.643	1.649	-0.4	127	0.00	4.16
12	t	2-Chlorophenol	1.515	1.469	3.0	130	0.00	4.20
19	t	2-Methylphenol	1.284	1.268	1.2	126	0.00	4.58
21	t	3&4-Methylphenol	1.340	1.330	0.7	124	0.00	4.69
24	I	Naphthalene-d8	1.000	1.000	0.0	117	0.00	5.25
29	t	2-Nitrophenol	0.202	0.207	-2.5	124	0.00	5.00
30	t	2,4-Dimethylphenol	0.318	0.324	-1.9	125	0.00	5.05
31		Benzoic Acid	0.229	0.220	3.9	108	0.02	5.19
33	t	2,4-Dichlorophenol	0.280	0.289	-3.2	125	0.00	5.18
34		2,6-Dichlorophenol	0.274	0.266	2.9	120	0.00	5.34
43	t	4-Chloro-3-methylphenol	0.297	0.302	-1.7	124	0.00	5.71
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	6.56
49	t	2,4,6-Trichlorophenol	0.330	0.337	-2.1	123	0.00	5.98
50	t	2,4,5-Trichlorophenol	0.358	0.318	11.2	117	0.00	6.02
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	46.150	7.7	101	0.00	6.64
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.158	-1.9	129	0.00	6.79
64		2,3,4,6-Tetrachlorophenol	0.284	0.262	7.7	116	0.00	6.89
69	I	Phenanthrene-d10	1.000	1.000	0.0	117	0.00	8.22
70	t	4,6-Dinitro-2-methylpheno	0.119	0.131	-10.1	110	0.00	7.16
76	t	Pentachlorophenol	0.124	0.132	-6.5	118	0.00	8.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 12:50:21 2016 RTE

Initial Calibration Verification

Job Number: JC19914 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109759.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109759.D          Vial: 21
Acq On    : 14 Apr 2016   8:30 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	4.33
10	t	Aniline	1.890	1.827	3.3	116	0.00	4.12
16	t	Benzyl alcohol	0.693	0.799	-15.3	123	0.00	4.47
24	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	5.25
39	t	4-Chloroaniline	0.437	0.393	10.1	116	0.00	5.34
44	t	2-Methylnaphthalene	0.611	0.566	7.4	111	0.00	5.75
47	I	Acenaphthene-d10	1.000	1.000	0.0	110	0.00	6.55
54	t	2-Nitroaniline	0.306	0.288	5.9	107	0.00	6.22
58	t	3-Nitroaniline	0.337	0.325	3.6	109	0.00	6.57
62	t	Dibenzofuran	1.645	1.546	6.0	110	0.00	6.74
68	t	4-Nitroaniline	0.337	0.315	6.5	102	0.00	7.17
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	0.00	8.22
79	t	Carbazole	1.125	1.068	5.1	108	0.00	8.63

```
   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    z109757a.D MZ5485.M         Thu Apr 14 13:02:29 2016   RTE
```

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5485
Lab FileID: Z109760.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\ez5486\z109760.D Vial: 22
Acq On : 14 Apr 2016 9:01 am Operator: sarad
Sample : icv5485-50 Inst : MSZ
Misc : op92825,ez5486 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	134	0.00	4.33
5	S	2-Fluorophenol	1.381	1.437	-4.1	141	0.00	3.41
8	S	Phenol-d5	1.619	1.666	-2.9	140	0.00	4.15
24	I	Naphthalene-d8	1.000	1.000	0.0	131	0.00	5.25
25	S	Nitrobenzene-d5	0.323	0.325	-0.6	140	0.00	4.75
47	I	Acenaphthene-d10	1.000	1.000	0.0	125	0.00	6.55
51	S	2-Fluorobiphenyl	1.282	1.356	-5.8	146	0.00	6.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	122	0.00	8.22
73	S	2,4,6-Tribromophenol	0.123	0.121	1.6	130	0.00	7.35
83	I	Chrysene-d12	1.000	1.000	0.0	117	-0.02	13.20
86	S	Terphenyl-d14	0.840	0.905	-7.7	133	0.00	11.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:06:59 2016 RTE

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5486
Lab FileID: Z109761A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109761a.D          Vial: 23
Acq On    : 14 Apr 2016   9:32 am                    Operator: sarad
Sample    : icv5486-50                               Inst    : MSZ
Misc      : op92825,ez5486                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
108	Chrysene-d12a	1.000	1.000	0.0	80	0.00	13.21
109	Benzidine	0.548	0.851	-55.3#	120	0.00	10.63
110	Acenaphthene-d10a	1.000	1.000	0.0	105	0.00	6.56
111	1,2,4,5-Tetrachlorobenzen	0.513	0.522	-1.8	110	0.00	5.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:35:22 2016 RTE

Initial Calibration Verification

Job Number: JC19914 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109761.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\ez5486\z109761.D Vial: 23
Acq On : 14 Apr 2016 9:32 am Operator: sarad
Sample : icv5485-50 Inst : MSZ
Misc : op92825,ez5486 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	0.00	4.33
4	t	N-Nitrosodimethylamine	0.778	0.798	-2.6	107	0.02	2.15
11	t	bis(2-Chloroethyl)ether	1.125	1.231	-9.4	131	0.00	4.15
14	t	1,3-Dichlorobenzene	1.648	1.645	0.2	118	0.00	4.28
15	t	1,4-Dichlorobenzene	1.564	1.597	-2.1	119	0.00	4.34
17	t	1,2-Dichlorobenzene	1.515	1.550	-2.3	122	0.00	4.46
20	t	2,2'-oxybis(1-Chloropropa	0.393	0.306	22.1	91	0.00	4.54
22	t	n-Nitroso-di-n-propylamin	0.912	0.910	0.2	123	0.00	4.64
23	t	Hexachloroethane	0.456	0.468	-2.6	119	0.00	4.70
24	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00	5.25
26	t	Nitrobenzene	0.325	0.331	-1.8	120	0.00	4.77
28	t	Isophorone	0.566	0.600	-6.0	118	0.00	4.92
32	t	bis(2-Chloroethoxy)methan	0.351	0.364	-3.7	119	0.00	5.09
36	t	1,2,4-Trichlorobenzene	0.292	0.305	-4.5	121	0.00	5.21
38	t	Naphthalene	1.098	1.085	1.2	115	0.00	5.27
42	t	Hexachlorobutadiene	0.130	0.152	-16.9	132	0.00	5.35
47	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00	6.56
48	t	Hexachlorocyclopentadiene	0.267	0.278	7.1	104	0.00	5.87
52	t	2-Chloronaphthalene	1.133	1.174	-3.6	116	0.00	6.11
55	t	Dimethylphthalate	1.273	1.315	-3.3	110	0.00	6.34
56	t	Acenaphthylene	1.991	1.900	4.6	102	0.00	6.44
57	t	2,6-Dinitrotoluene	0.279	0.288	-3.2	106	0.00	6.39
59	t	Acenaphthene	1.191	1.254	-5.3	112	0.00	6.58
63	t	2,4-Dinitrotoluene	0.363	0.368	-1.4	102	0.00	6.75
65	t	Diethylphthalate	1.306	1.327	-1.6	112	0.00	6.97
66	t	Fluorene	1.354	1.314	3.0	106	0.00	7.07
67	t	4-Chlorophenyl-phenylethe	0.558	0.560	-0.4	108	0.00	7.07
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	8.22
71	t	n-Nitrosodiphenylamine	0.582	0.596	-2.4	110	0.00	7.22
72	t	1,2-Diphenylhydrazine	0.695	0.700	-0.7	108	0.00	7.24
74	t	4-Bromophenyl-phenylether	0.208	0.201	3.4	102	0.00	7.63
75	t	Hexachlorobenzene	0.233	0.227	2.6	105	0.00	7.70
77	t	Phenanthrene	1.145	1.121	2.1	107	0.00	8.25
78	t	Anthracene	1.179	1.131	4.1	102	0.00	8.32
80	t	Di-n-butylphthalate	1.384	1.425	-3.0	107	0.00	9.21
81	t	Fluoranthene	1.195	1.171	2.0	106	0.00	10.23
83	I	Chrysene-d12	1.000	1.000	0.0	91	-0.01	13.21
84	t	Pyrene	1.349	1.453	-7.7	106	0.00	10.65

Initial Calibration Verification

Job Number: JC19914 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109761.D
Project: BMSMC, Building 5 Area, PR

87	t	Butylbenzylphthalate	0.644	0.709	-10.1	99	0.00	12.19
88	t	Benzo[a]anthracene	1.168	1.205	-3.2	98	0.00	13.18
90	t	Chrysene	1.140	1.103	3.2	94	0.00	13.26
91	t	bis(2-Ethylhexyl)phthalat	0.906	0.982	-8.4	99	0.00	13.53
92	I	Perylene-d12	1.000	1.000	0.0	85	-0.01	16.19
93	t	Di-n-octylphthalate	1.541	1.818	-18.0	95	0.00	14.93
94	t	Benzo[b]fluoranthene	1.263	1.259	0.3	88	0.00	15.45
95	t	Benzo[k]fluoranthene	1.134	1.239	-9.3	97	0.00	15.50
96	t	Benzo[a]pyrene	1.124	1.171	-4.2	92	0.00	16.08
97	t	Indeno[1,2,3-cd]pyrene	1.124	1.169	-4.0	91	0.00	18.11
99	t	Dibenz[a,h]anthracene	1.183	1.184	-0.1	89	0.00	18.16
101	t	Benzo[g,h,i]perylene	1.208	1.176	2.6	87	0.00	18.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:01 2016 RTE

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5486
Lab FileID: Z109762A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109762.D          Vial: 24
Acq On    : 14 Apr 2016  10:03 am                   Operator: sarad
Sample    : icv5486-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	104	0.00	4.33
103	Benzaldehyde	1.056	1.064	-0.8	106	0.00	4.02
104	Phenanthrene-d10a	1.000	1.000	0.0	95	0.00	8.22
107	Atrazine	0.100	0.101	-1.0	107	0.00	7.89

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:03 2016 RTE

Initial Calibration Verification

Job Number: JC19914 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109762.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109762.D          Vial: 24
Acq On    : 14 Apr 2016  10:03 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	0.00	4.33
2		1,4-Dioxane	0.594	0.532	10.4	109	0.02	1.81
6	t	Indene	2.542	2.429	4.4	122	0.00	4.52
7	t	Cumene	3.243	3.003	7.4	113	0.00	3.72
13	t	Decane	1.396	1.291	7.5	122	0.00	4.19
18	t	Acetophenone	1.763	1.643	6.8	112	0.00	4.64
24	I	Naphthalene-d8	1.000	1.000	0.0	114	0.00	5.25
27	t	Quinoline	0.757	0.703	7.1	110	0.00	5.51
40	t	2,3-Dichloroaniline	0.352	0.275	21.9	97	0.00	5.98
41	t	Caprolactam	0.142	0.116	18.3	96	-0.02	5.58
45	t	1-Methylnaphthalene	0.654	0.578	11.6	107	0.00	5.82
46	t	Dimethylnaphthalene	0.632	0.586	7.3	113	0.00	6.21
47	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.00	6.55
53	t	Biphenyl	1.588	1.444	9.1	108	0.00	6.09
69	I	Phenanthrene-d10	1.000	1.000	0.0	105	0.00	8.22
82	t	Octadecane	0.496	0.480	3.2	108	0.00	8.07
92	I	Perylene-d12	1.000	1.000	0.0	93	-0.01	16.19
100	t	7,12-Dimethylbenz(a)anthr	0.575	0.511	11.1	88	-0.01	15.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:03 2016 RTE

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5486
Lab FileID: Z109763.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109763.D          Vial: 25
Acq On    : 14 Apr 2016  10:35 am                   Operator: sarad
Sample    : icv5486-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
112 I	Naphthalene-d8a	1.000	1.000	0.0	93	0.00	5.25
113	Hydroquinone	0.267	0.303	-13.5	95	0.00	5.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:05 2016 RTE

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5485
Lab FileID: Z109764.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109764.D          Vial: 26
Acq On    : 14 Apr 2016  11:06 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
83	I	Chrysene-d12	1.000	1.000	0.0	101	-0.02	13.20
89	t	3,3'-Dichlorobenzidine	0.422	0.405	4.0	101	-0.01	13.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:07 2016 RTE

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EZ5525-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110613.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5525\Z110613.D          Vial: 2
Acq On    : 12 May 2016  10:16 am                   Operator: ariellec
Sample    : cc5485-25                               Inst    : MSZ
Misc      : op93793,ez5525                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu May 12 15:43:00 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	-0.01	4.19
2		1,4-Dioxane	0.594	0.466	21.5#	64	0.06	1.65
3	t	Pyridine	0.934	0.822	12.0	60	-0.12	1.99
4	t	N-Nitrosodimethylamine	0.778	0.508	34.7#	48#	0.00	1.97
5	S	2-Fluorophenol	1.381	1.154	16.4	67	0.00	3.28
6	t	Indene	2.542	2.231	12.2	70	0.00	4.38
7	t	Cumene	3.243	3.126	3.6	76	-0.01	3.58
8	S	Phenol-d5	1.619	1.437	11.2	69	0.00	4.04
9	t	Phenol	1.643	1.455	11.4	69	-0.02	4.05
10	t	Aniline	1.890	1.421	24.8#	57	-0.01	3.99
11	t	bis(2-Chloroethyl)ether	1.125	1.242	-10.4	93	-0.01	4.02
12	t	2-Chlorophenol	1.515	1.239	18.2	68	0.00	4.08
13	t	Decane	1.396	1.194	14.5	68	-0.01	4.06
14	t	1,3-Dichlorobenzene	1.648	1.526	7.4	73	-0.01	4.15
15	t	1,4-Dichlorobenzene	1.564	1.522	2.7	77	0.00	4.21
16	t	Benzyl alcohol	0.693	0.667	3.8	73	0.00	4.35
17	t	1,2-Dichlorobenzene	1.515	1.395	7.9	74	0.00	4.33
18	t	Acetophenone	1.763	1.735	1.6	78	0.00	4.51
19	t	2-Methylphenol	1.284	1.150	10.4	75	-0.02	4.46
20	t	2,2'-oxybis(1-Chloropropa	0.393	0.343	12.7	74	0.00	4.40
21	t	3&4-Methylphenol	1.340	1.266	5.5	77	-0.01	4.58
22	t	n-Nitroso-di-n-propylamin	0.912	1.049	-15.0	91	-0.01	4.51
23	t	Hexachloroethane	0.456	0.561	-23.0#	94	0.00	4.56
24	I	Naphthalene-d8	1.000	1.000	0.0	77	-0.01	5.12
25	S	Nitrobenzene-d5	0.323	0.376	-16.4	94	0.00	4.62
26	t	Nitrobenzene	0.325	0.375	-15.4	92	0.00	4.64
27	t	Quinoline	0.757	0.650	14.1	69	-0.02	5.38
28	t	Isophorone	0.566	0.600	-6.0	84	-0.01	4.80
29	t	2-Nitrophenol	0.202	0.186	7.9	71	0.00	4.87
30	t	2,4-Dimethylphenol	0.318	0.308	3.1	76	0.00	4.93
31		Benzoic Acid	0.229	0.182	20.5#	60	0.01	5.06
32	t	bis(2-Chloroethoxy)methan	0.351	0.319	9.1	75	0.00	4.96
33	t	2,4-Dichlorophenol	0.280	0.302	-7.9	84	0.00	5.06
34		2,6-Dichlorophenol	0.274	0.302	-10.2	86	0.00	5.21
35	t	1,3,5-Trichlorobenzene	0.313	0.344	-9.9	87	-0.02	4.84
36	t	1,2,4-Trichlorobenzene	0.292	0.325	-11.3	90	0.00	5.08
37	t	1,2,3-Trichlorobenzene	0.284	0.314	-10.6	88	0.00	5.24
38	t	Naphthalene	1.098	1.001	8.8	73	-0.01	5.13
39	t	4-Chloroaniline	0.437	0.402	8.0	75	0.00	5.21
40	t	2,3-Dichloroaniline	0.352	0.382	-8.5	87	0.00	5.85
41	t	Caprolactam	0.142	0.121	14.8	69	0.00	5.46

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EZ5525-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110613.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.130	0.192	-47.7#	112	0.00	5.22
43	t	4-Chloro-3-methylphenol	0.297	0.342	-15.2	89	-0.01	5.59
44	t	2-Methylnaphthalene	0.611	0.592	3.1	75	-0.02	5.62
45	t	1-Methylnaphthalene	0.654	0.653	0.2	79	0.00	5.69
46	t	Dimethylnaphthalene	0.632	0.666	-5.4	84	0.00	6.06
47	I	Acenaphthene-d10	1.000	1.000	0.0	86	0.00	6.39
48	t	Hexachlorocyclopentadiene	0.267	0.275	-3.0	84	0.00	5.73
49	t	2,4,6-Trichlorophenol	0.330	0.369	-11.8	98	-0.01	5.85
50	t	2,4,5-Trichlorophenol	0.358	0.364	-1.7	88	0.00	5.90
51	S	2-Fluorobiphenyl	1.282	1.278	0.3	87	0.00	5.89
52	t	2-Chloronaphthalene	1.133	1.022	9.8	83	0.00	5.97
53	t	Biphenyl	1.588	1.330	16.2	76	0.00	5.95
54	t	2-Nitroaniline	0.306	0.329	-7.5	92	0.03	6.08
55	t	Dimethylphthalate	1.273	1.332	-4.6	92	0.00	6.20
56	t	Acenaphthylene	1.991	1.823	8.4	81	0.00	6.28
57	t	2,6-Dinitrotoluene	0.279	0.291	-4.3	92	0.00	6.25
58	t	3-Nitroaniline	0.337	0.274	18.7	70	0.00	6.41
59	t	Acenaphthene	1.191	1.175	1.3	88	-0.01	6.41
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	34.420	31.2#	58	-0.02	6.49
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.209	-34.8#	126	-0.03	6.65
62	t	Dibenzofuran	1.645	1.562	5.0	85	-0.01	6.57
63	t	2,4-Dinitrotoluene	0.363	0.388	-6.9	92	0.00	6.59
64		2,3,4,6-Tetrachlorophenol	0.284	0.326	-14.8	99	0.00	6.71
65	t	Diethylphthalate	1.306	1.353	-3.6	96	-0.02	6.79
66	t	Fluorene	1.354	1.311	3.2	88	-0.01	6.88
67	t	4-Chlorophenyl-phenylethe	0.558	0.648	-16.1	101	-0.02	6.88
68	t	4-Nitroaniline	0.337	0.287	14.8	69	-0.02	7.00
69	I	Phenanthrene-d10	1.000	1.000	0.0	91	-0.10	7.98
70	t	4,6-Dinitro-2-methylpheno	0.119	0.118	0.8	93	-0.11	6.99
71	t	n-Nitrosodiphenylamine	0.582	0.520	10.7	86	-0.07	7.02
72	t	1,2-Diphenylhydrazine	0.695	0.749	-7.8	102	-0.05	7.05
73	S	2,4,6-Tribromophenol	0.123	0.113	8.1	89	-0.07	7.15
74	t	4-Bromophenyl-phenylether	0.208	0.216	-3.8	99	-0.09	7.41
75	t	Hexachlorobenzene	0.233	0.255	-9.4	108	-0.08	7.49
76	t	Pentachlorophenol	0.124	0.130	-4.8	96	-0.08	7.79
77	t	Phenanthrene	1.145	1.094	4.5	93	-0.10	8.02
78	t	Anthracene	1.179	1.114	5.5	90	-0.10	8.09
79	t	Carbazole	1.125	1.022	9.2	85	-0.10	8.39
80	t	Di-n-butylphthalate	1.384	1.394	-0.7	95	-0.12	8.94
81	t	Fluoranthene	1.195	1.231	-3.0	100	-0.07	9.94
82	t	Octadecane	0.496	0.401	19.2	78	-0.10	7.83
83	I	Chrysene-d12	1.000	1.000	0.0	108	-0.10	12.88
84	t	Pyrene	1.349	1.225	9.2	105	-0.03	10.35
85		Butyl stearate	0.365	0.271	25.8#	82	-0.02	12.06
86	S	Terphenyl-d14	0.840	0.799	4.9	110	0.02	10.75
87	t	Butylbenzylphthalate	0.644	0.590	8.4	101	-0.09	11.86
88	t	Benzo[a]anthracene	1.168	1.115	4.5	108	-0.10	12.86
89	t	3,3'-Dichlorobenzidine	0.422	0.389	7.8	100	-0.08	12.96
90	t	Chrysene	1.140	1.102	3.3	110	-0.10	12.93
91	t	bis(2-Ethylhexyl)phthalat	0.906	0.784	13.5	97	-0.06	13.18
92	I	Perylene-d12	1.000	1.000	0.0	105	-0.06	15.85
93	t	Di-n-octylphthalate	1.541	1.448	6.0	96	-0.06	14.57

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EZ5525-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110613.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.263	1.228	2.8	109	-0.05	15.12
95	t	Benzo[k]fluoranthene	1.134	1.121	1.1	107	-0.06	15.16
96	t	Benzo[a]pyrene	1.124	1.093	2.8	103	-0.05	15.74
97	t	Indeno[1,2,3-cd]pyrene	1.124	1.018	9.4	99	-0.04	17.77
98	t	Dibenz(a,h)acridine	1.064	0.945	11.2	97	-0.08	17.41
99	t	Dibenz[a,h]anthracene	1.183	1.095	7.4	101	-0.05	17.81
100	t	7,12-Dimethylbenz(a)anthr	0.575	0.536	6.8	105	-0.08	15.11
101	t	Benzo[g,h,i]perylene	1.208	1.118	7.5	103	-0.06	18.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110097.D MZ5485.M Fri May 13 09:28:28 2016 RTE

Continuing Calibration Summary

Job Number: JC19914 **Sample:** EZ5525-CC5486
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110614.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5525\Z110614.D          Vial: 3
Acq On    : 12 May 2016  10:46 am                   Operator: ariellec
Sample    : cc5486-25                               Inst    : MSZ
Misc      : op93793,ez5525                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu May 12 15:43:00 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	64	-0.01	4.19
103	Benzaldehyde	1.056	0.874	17.2	53	0.08	3.89
104	Phenanthrene-d10a	1.000	1.000	0.0	82	-0.02	7.98
105	Atrazine	0.100	0.124	-24.0#	108	0.00	7.66
106	Chrysene-d12a	1.000	1.000	0.0	92	-0.03	12.87
107	Benzidine	0.547	0.406	25.8#	66	0.04	10.34
108	Acenaphthene-d10a	1.000	1.000	0.0	84	-0.01	6.39
109	1,2,4,5-Tetrachlorobenzen	0.513	0.531	-3.5	87	0.00	5.74
110 I	Naphthalene-d8a	1.000	1.000	0.0	64	-0.01	5.12
111	Hydroquinone	0.264	0.267	-1.1	60	0.03	5.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110097.D MZ5485.M Fri May 13 09:28:30 2016 RTE

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124316.D
Acq On : 11 May 2016 1:56 am
Operator : juliusj
Sample : jc19914-1
Misc : op93784,em5259,900
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 11 09:18:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration

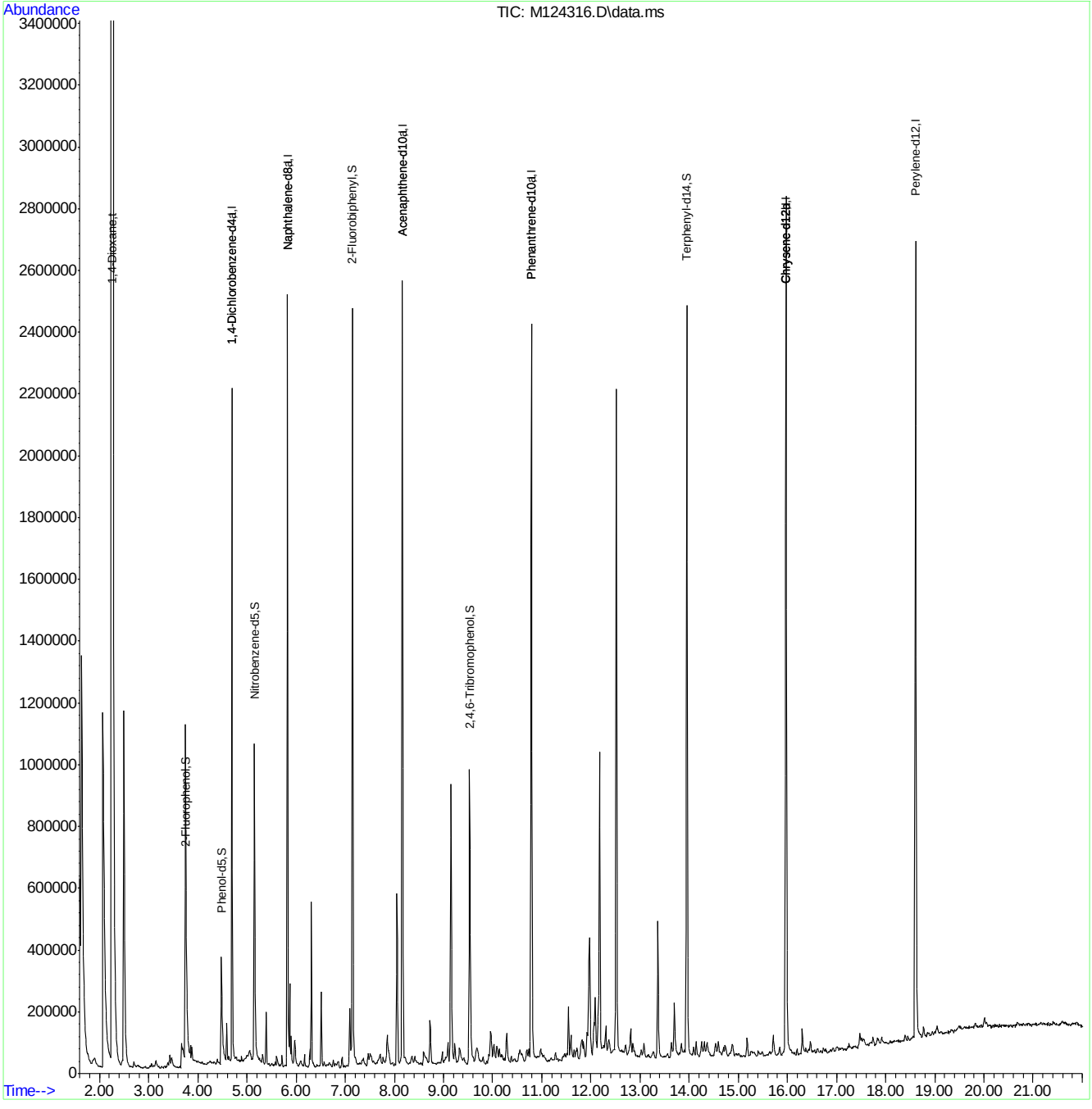
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.691	152	347766	40.00	ppm	-0.02
24) Naphthalene-d8	5.823	136	1314473	40.00	ppm	-0.02
47) Acenaphthene-d10	8.163	164	846303	40.00	ppm	-0.03
69) Phenanthrene-d10	10.791	188	1526112	40.00	ppm	-0.03
83) Chrysene-d12	15.971	240	1711792	40.00	ppm	-0.04
92) Perylene-d12	18.610	264	1710240	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.691	152	347766	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.163	164	846303	40.00	ppm	-0.03
107) Chrysene-d12a	15.971	240	1707330	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.791	188	1526112	40.00	ppm	-0.03
112) Naphthalene-d8a	5.823	136	1314473	40.00	ppm	-0.02
114) Chrysene-d12b	15.971	240	1711792	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.762	112	216334	20.34	ppm	0.01
Spiked Amount 50.000			Recovery = 40.68%			
8) Phenol-d5	4.477	99	218905	16.39	ppm	0.01
Spiked Amount 50.000			Recovery = 32.78%			
25) Nitrobenzene-d5	5.150	82	407735	34.88	ppm	-0.02
Spiked Amount 50.000			Recovery = 69.76%			
51) 2-Fluorobiphenyl	7.148	172	964851	34.72	ppm	-0.02
Spiked Amount 50.000			Recovery = 69.44%			
73) 2,4,6-Tribromophenol	9.535	330	230051	43.61	ppm	-0.02
Spiked Amount 50.000			Recovery = 87.22%			
86) Terphenyl-d14	13.953	244	1322228	34.44	ppm	-0.04
Spiked Amount 50.000			Recovery = 68.88%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.266	88	10287182	2133.37	ppm	96

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

Quantitation Report (QT Reviewed)

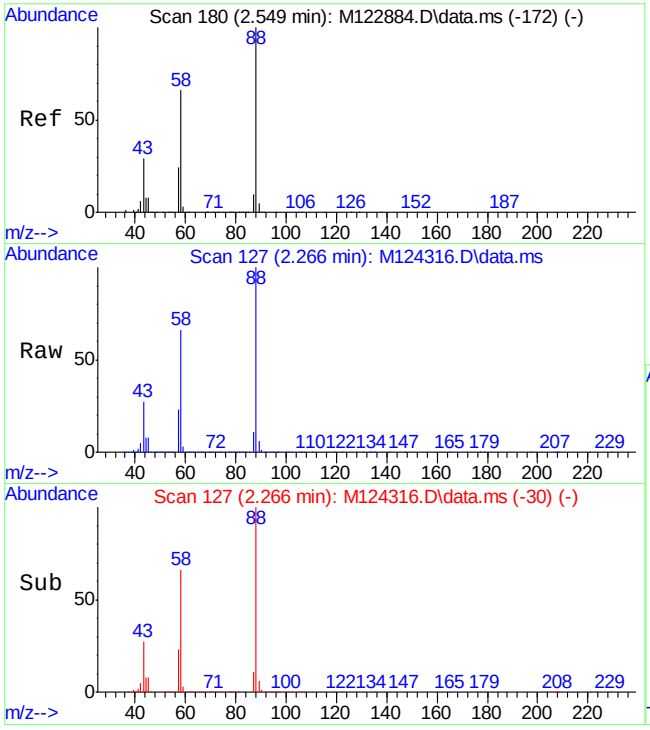
Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124316.D
Acq On : 11 May 2016 1:56 am
Operator : juliusj
Sample : jc19914-1
Misc : op93784,em5259,900
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 11 09:18:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:18:38 2016 MSM

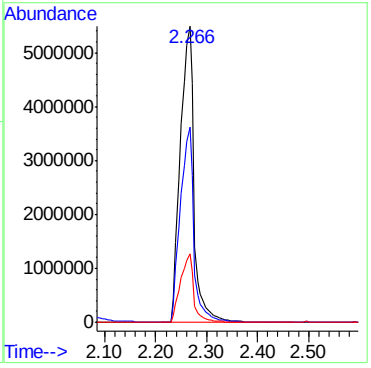
Page: 2



#2
1,4-Dioxane
Concen: 2133.37 ppm
RT: 2.266 min Scan# 127
Delta R.T. 0.017 min
Lab File: M124316.D
Acq: 11 May 2016 1:56 am

Tgt Ion: 88 Resp:10287182

Ion	Ratio	Lower	Upper
88	100		
58	65.8	33.2	93.2
57	23.0	0.0	50.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124343.D
Acq On : 11 May 2016 2:18 pm
Operator : ashleyd
Sample : jc19914-1
Misc : op93784,em5260,900,,,1,100
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 11 14:49:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.681	152	262778	40.00	ppm	-0.03
24) Naphthalene-d8	5.813	136	1024404	40.00	ppm	-0.03
47) Acenaphthene-d10	8.147	164	651617	40.00	ppm	-0.04
69) Phenanthrene-d10	10.770	188	1194319	40.00	ppm	-0.05
83) Chrysene-d12	15.950	240	1426536	40.00	ppm	-0.06
92) Perylene-d12	18.584	264	1464548	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4a	4.681	152	262778	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.147	164	651617	40.00	ppm	-0.04
107) Chrysene-d12a	15.950	240	1426595	40.00	ppm	-0.06
110) Phenanthrene-d10a	10.770	188	1194319	40.00	ppm	-0.05
112) Naphthalene-d8a	5.813	136	1024717	40.00	ppm	-0.03
114) Chrysene-d12b	15.950	240	1426536	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.240	88	112212	30.80	ppm	91

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

7.1.2

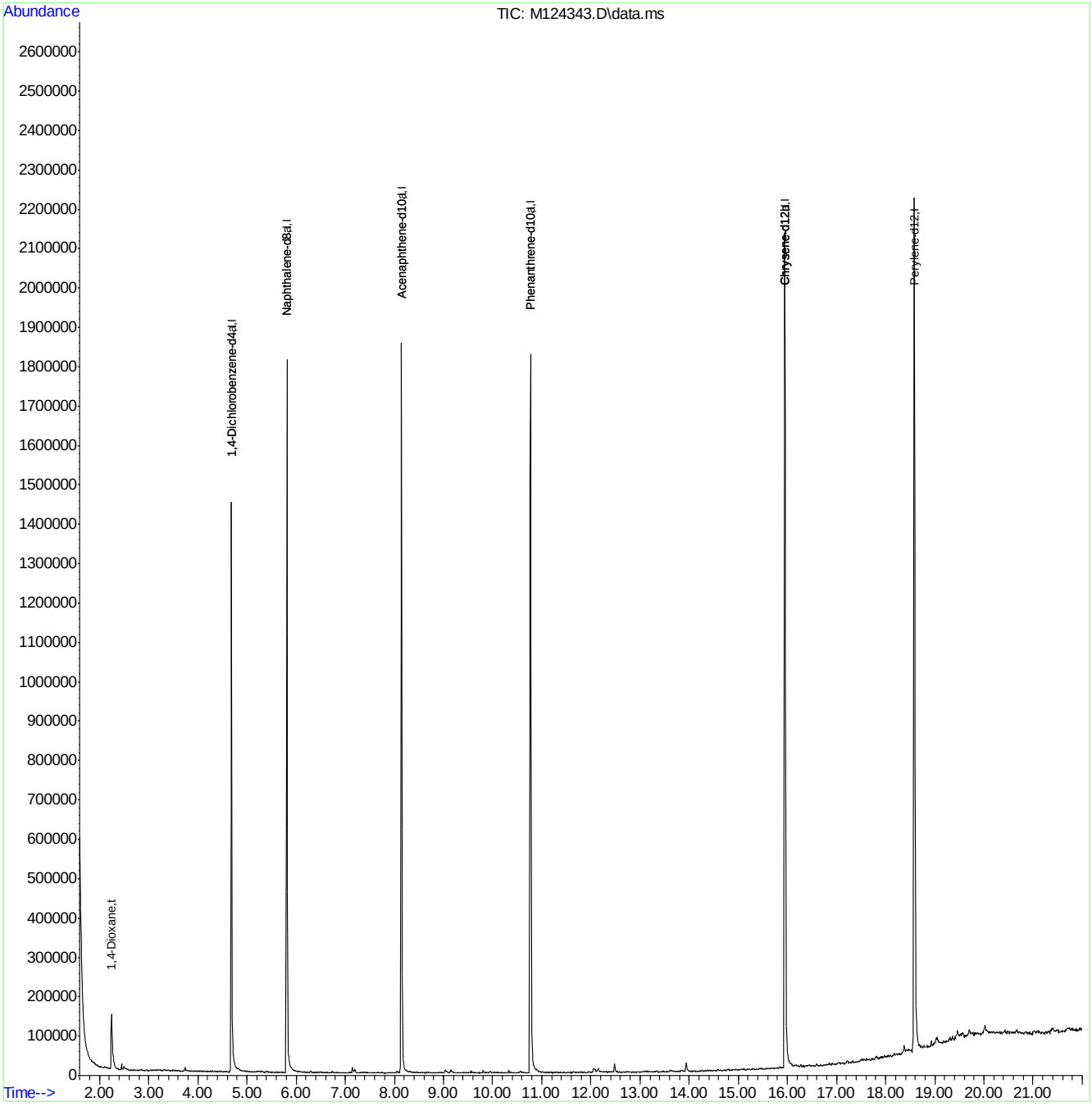
7

SGS ACCUTEST JC19914

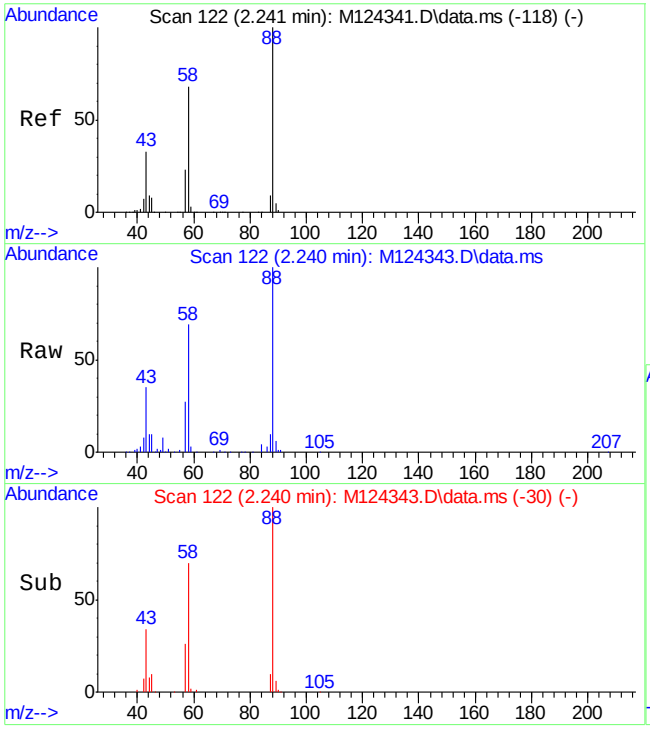
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124343.D
Acq On : 11 May 2016 2:18 pm
Operator : ashleyd
Sample : jc19914-1
Misc : op93784,em5260,900,,,1,100
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 11 14:49:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration



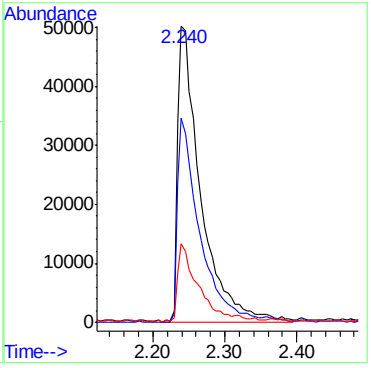
MM5239.M Wed May 11 14:50:29 2016 MSM



#2
1,4-Dioxane
Concen: 30.80 ppm
RT: 2.240 min Scan# 122
Delta R.T. -0.009 min
Lab File: M124343.D
Acq: 11 May 2016 2:18 pm

Tgt Ion: 88 Resp: 112212

Ion	Ratio	Lower	Upper
88	100		
58	68.9	33.2	93.2
57	26.3	0.0	50.5



7.1.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25850.D
Acq On : 11 May 2016 5:57 pm
Operator : ariellec
Sample : jc19914-2
Misc : op93791,e6p1206,30.1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 24 17:43:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuThu May 12 12:26:52 2016
QLast Update : Thu May 12 12:26:52 2016
Response via : Initial Calibration

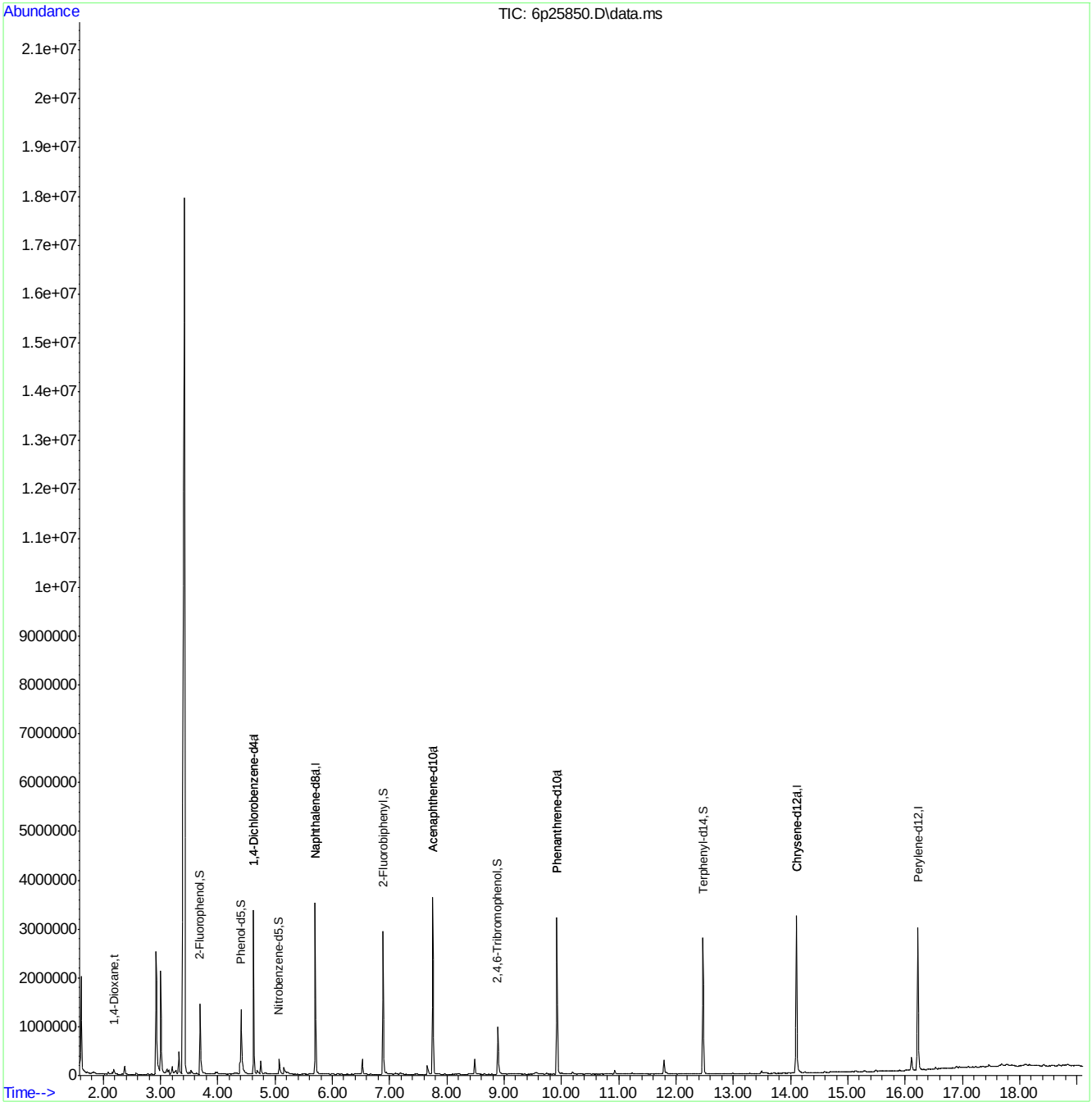
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.625	152	376689	40.00 ppm	0.00
24) Naphthalene-d8	5.700	136	1510125	40.00 ppm	0.00
47) Acenaphthene-d10	7.754	164	876537	40.00 ppm	0.00
69) Phenanthrene-d10	9.920	188	1453503	40.00 ppm	0.00
83) Chrysene-d12	14.103	240	1424852	40.00 ppm	0.00
92) Perylene-d12	16.221	264	1343758	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.625	152	376689	40.00 ppm	0.00
104) Acenaphthene-d10a	7.754	164	876537	40.00 ppm	0.00
106) Phenanthrene-d10a	9.920	188	1453503	40.00 ppm	0.00
108) Chrysene-d12a	14.103	240	1424852	40.00 ppm	0.00
110) Naphthalene-d8a	5.700	136	1510125	40.00 ppm	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	3.689	112	400430	29.97 ppm	0.03
Spiked Amount 50.000			Recovery	= 59.94%	
8) Phenol-d5	4.406	99	522352	29.74 ppm	0.01
Spiked Amount 50.000			Recovery	= 59.48%	
25) Nitrobenzene-d5	5.069	82	125115	7.57 ppm	0.00
Spiked Amount 50.000			Recovery	= 15.14%	
51) 2-Fluorobiphenyl	6.882	172	973542	34.58 ppm	-0.01
Spiked Amount 50.000			Recovery	= 69.16%	
73) 2,4,6-Tribromophenol	8.888	330	138236	40.75 ppm	0.00
Spiked Amount 50.000			Recovery	= 81.50%	
85) Terphenyl-d14	12.471	244	1021980	38.17 ppm	-0.14
Spiked Amount 50.000			Recovery	= 76.34%	
Target Compounds					Qvalue
2) 1,4-Dioxane	2.186	88	22488	3.33 ppm	90

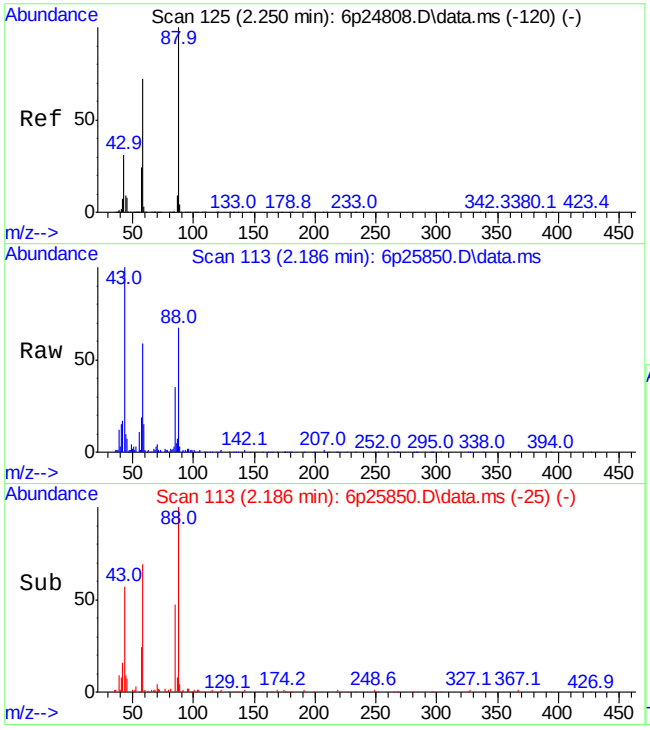
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25850.D
Acq On : 11 May 2016 5:57 pm
Operator : ariellec
Sample : jc19914-2
Misc : op93791,e6p1206,30.1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 24 17:43:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuThu May 12 12:26:52 2016
QLast Update : Thu May 12 12:26:52 2016
Response via : Initial Calibration

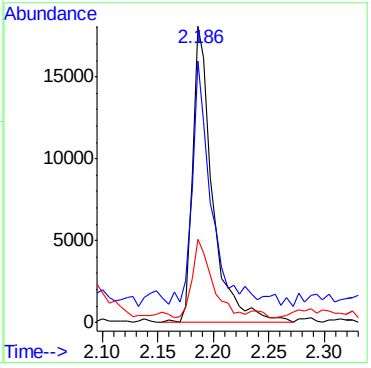




#2
1,4-Dioxane
Concen: 3.33 ppm
RT: 2.186 min Scan# 113
Delta R.T. -0.030 min
Lab File: 6p25850.D
Acq: 11 May 2016 5:57 pm

Tgt Ion: 88 Resp: 22488

Ion	Ratio	Lower	Upper
88	100		
58	81.4	41.3	101.3
57	24.6	0.0	52.6



7.1.3

7

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/11/16 15:59

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124317.D
Acq On : 11 May 2016 2:25 am
Operator : juliusj
Sample : jc19914-3
Misc : op93784,em5259,900
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 11 09:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.689	152	374767	40.00	ppm	-0.02
24) Naphthalene-d8	5.827	136	1387437	40.00	ppm	-0.02
47) Acenaphthene-d10	8.161	164	897812	40.00	ppm	-0.03
69) Phenanthrene-d10	10.789	188	1640846	40.00	ppm	-0.03
83) Chrysene-d12	15.970	240	1889398	40.00	ppm	-0.04
92) Perylene-d12	18.608	264	1872293	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.689	152	374767	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.161	164	897812	40.00	ppm	-0.03
107) Chrysene-d12a	15.970	240	1889398	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.789	188	1640846	40.00	ppm	-0.03
112) Naphthalene-d8a	5.827	136	1387437	40.00	ppm	-0.02
114) Chrysene-d12b	15.970	240	1889398	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.760	112	298373	26.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	52.06%	
8) Phenol-d5	4.481	99	255851	17.77	ppm	0.02
Spiked Amount 50.000			Recovery	=	35.54%	
25) Nitrobenzene-d5	5.149	82	469495	38.05	ppm	-0.02
Spiked Amount 50.000			Recovery	=	76.10%	
51) 2-Fluorobiphenyl	7.151	172	1065539	36.14	ppm	-0.02
Spiked Amount 50.000			Recovery	=	72.28%	
73) 2,4,6-Tribromophenol	9.534	330	260541	45.94	ppm	-0.03
Spiked Amount 50.000			Recovery	=	91.88%	
86) Terphenyl-d14	13.956	244	1536831	36.26	ppm	-0.04
Spiked Amount 50.000			Recovery	=	72.52%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.286	88	17729663	3411.90	ppm	94
44) 2-Methylnaphthalene	6.655	141	11898m	0.55	ppm	
45) 1-Methylnaphthalene	6.778	142	87881	3.48	ppm	98
66) Fluorene	9.090	166	23544	0.75	ppm	93

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

7.1.4

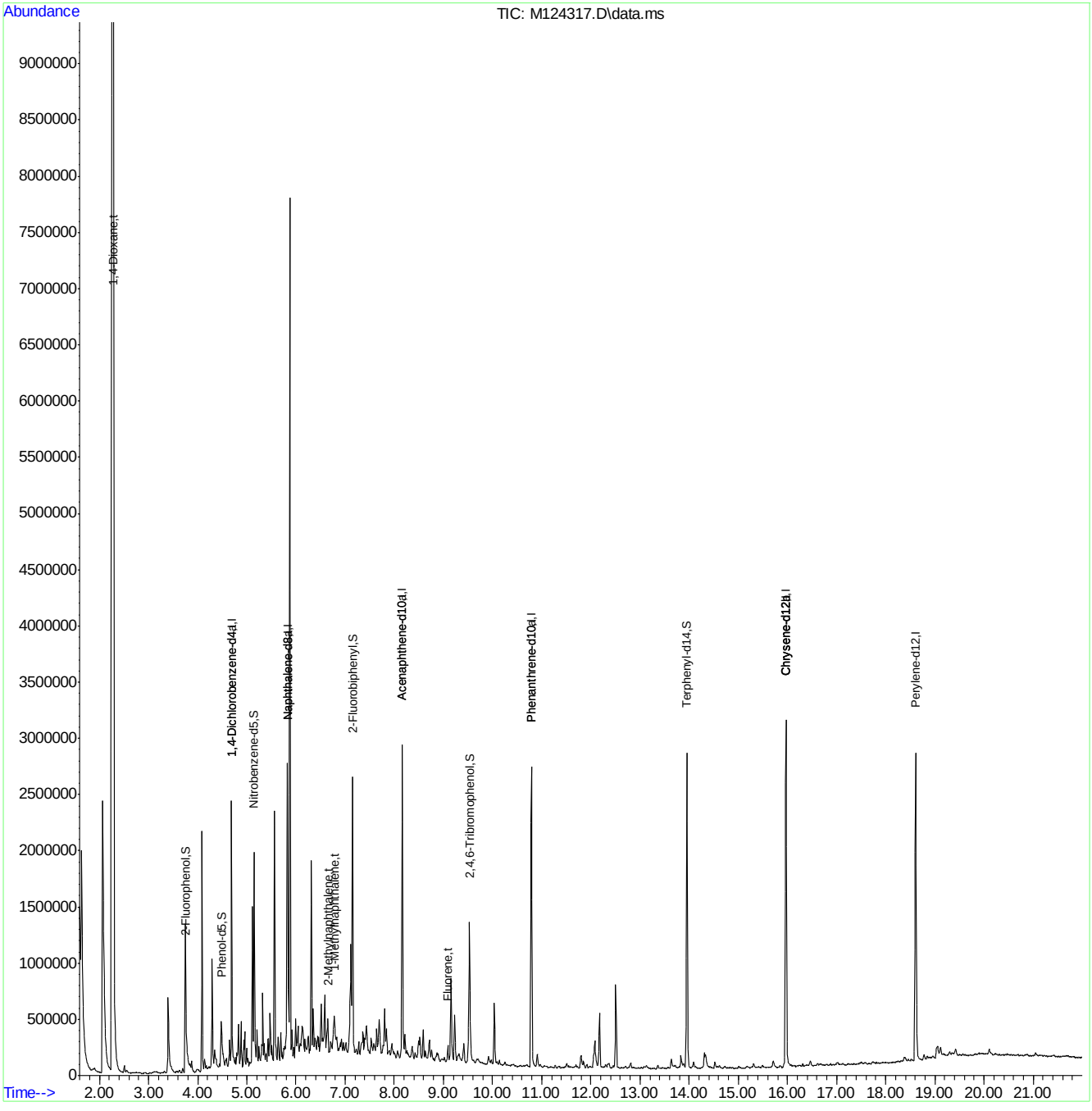
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

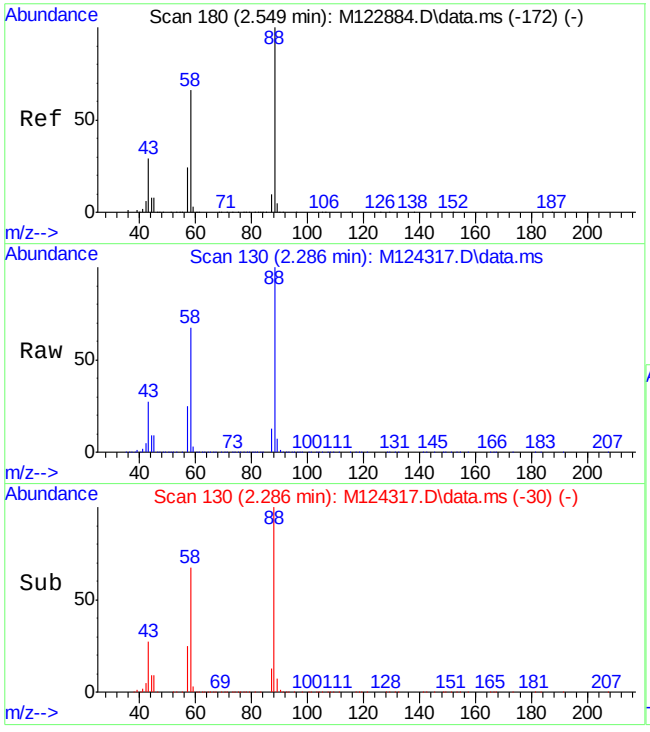
Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124317.D
Acq On : 11 May 2016 2:25 am
Operator : juliusj
Sample : jc19914-3
Misc : op93784,em5259,900
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 11 09:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:21:21 2016 MSM

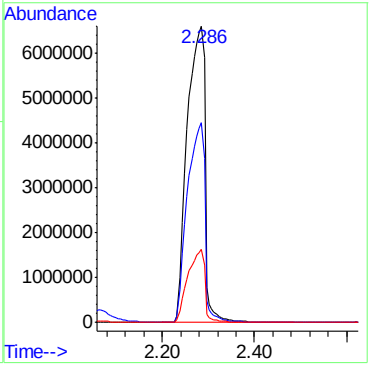
Page: 2

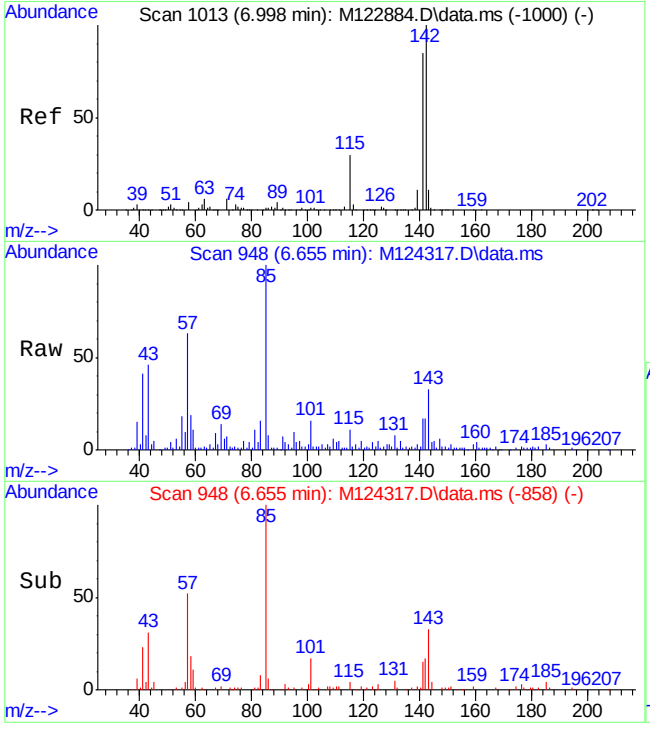


#2
1,4-Dioxane
Concen: 3411.90 ppm
RT: 2.286 min Scan# 130
Delta R.T. 0.036 min
Lab File: M124317.D
Acq: 11 May 2016 2:25 am

Tgt Ion: 88 Resp:17729663

Ion	Ratio	Lower	Upper
88	100		
58	67.4	33.2	93.2
57	24.8	0.0	50.5

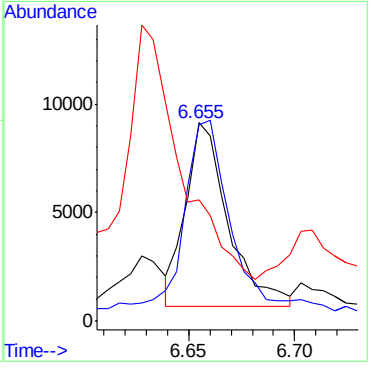


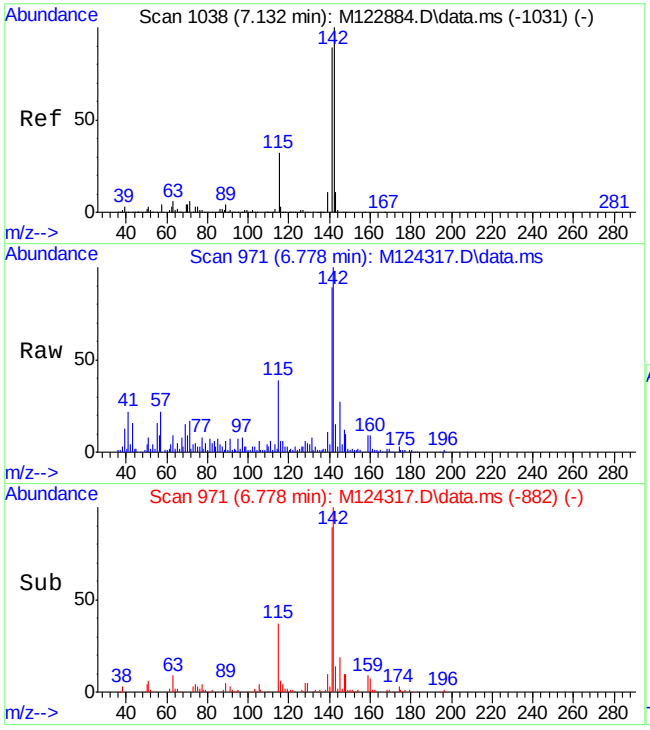


#44
2-Methylnaphthalene
Concen: 0.55 ppm m
RT: 6.655 min Scan# 948
Delta R.T. -0.019 min
Lab File: M124317.D
Acq: 11 May 2016 2:25 am

Tgt Ion:141 Resp: 11898

Ion	Ratio	Lower	Upper
141	100		
142	99.4	89.4	149.4
115	61.0	5.3	65.3

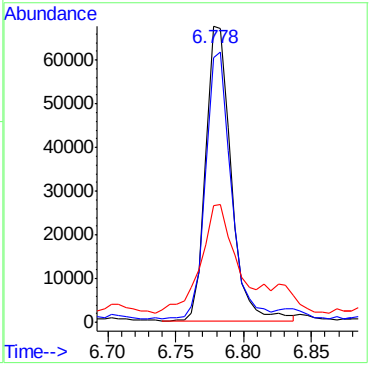


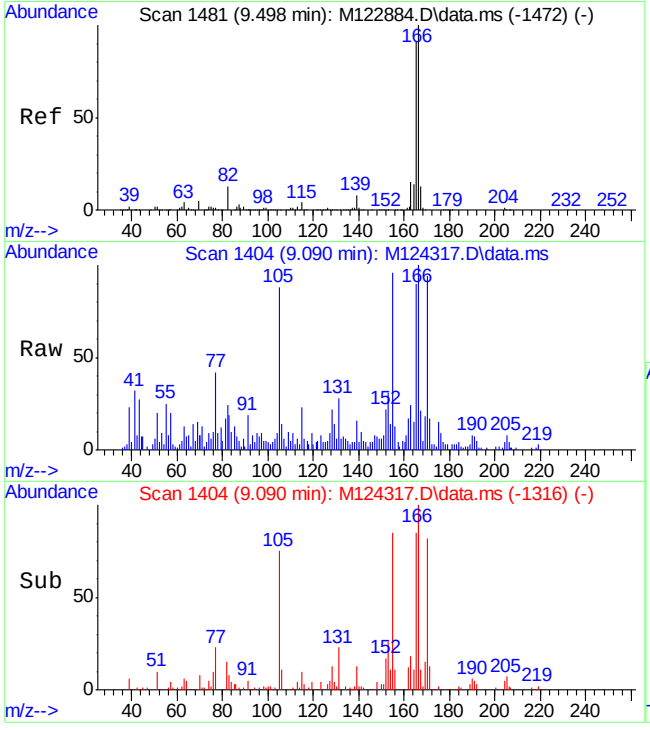


#45
1-Methylnaphthalene
Concen: 3.48 ppm
RT: 6.778 min Scan# 971
Delta R.T. -0.025 min
Lab File: M124317.D
Acq: 11 May 2016 2:25 am

Tgt Ion:142 Resp: 87881

Ion	Ratio	Lower	Upper
142	100		
141	87.8	56.8	116.8
115	33.0	1.2	61.2

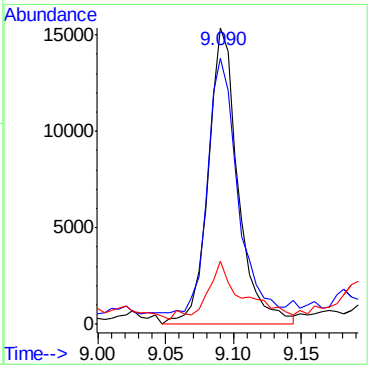




#66
Fluorene
Concen: 0.75 ppm
RT: 9.090 min Scan# 1404
Delta R.T. -0.030 min
Lab File: M124317.D
Acq: 11 May 2016 2:25 am

Tgt Ion:166 Resp: 23544

Ion	Ratio	Lower	Upper
166	100		
165	85.1	61.2	121.2
167	18.8	0.0	43.3



Manual Integration Approval Summary

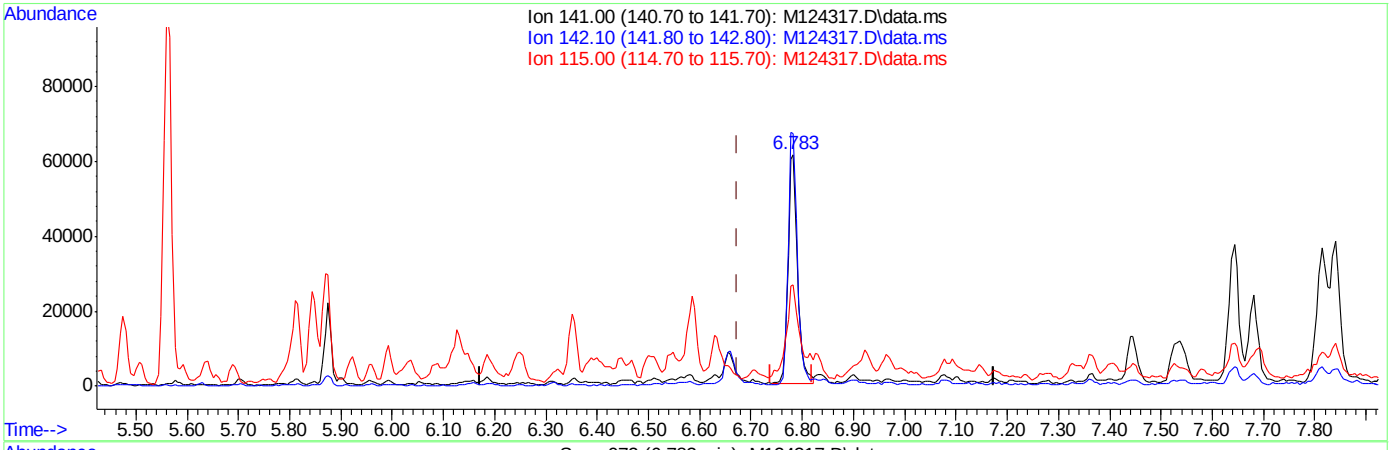
Sample Number:	JC19914-3	**Method:**	SW846 8270D
Lab FileID:	M124317.D	**Analyst approved:**	05/11/16 09:25 Ashley Dye
Injection Time:	05/11/16 02:25	**Supervisor approved:**	05/11/16 15:59 Kristi Schollenberger

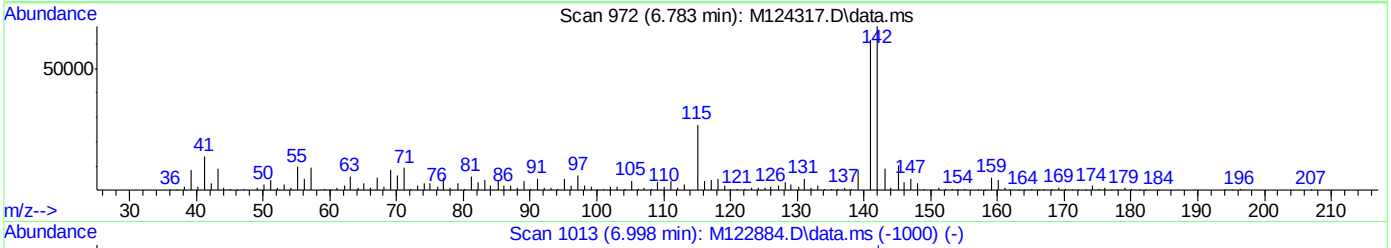
Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Methylnaphthalene	91-57-6		6.65	Poor instrument integration

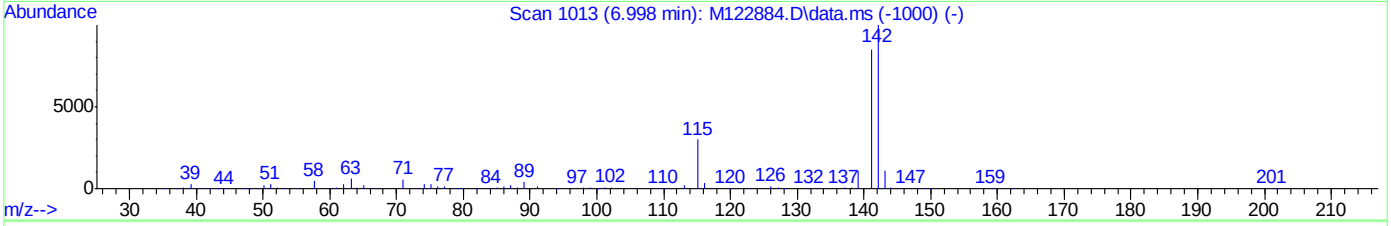
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124317.D
Acq On : 11 May 2016 2:25 am
Operator : juliusj
Sample : jc19914-3
Misc : op93784,em5259,900
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 11 02:47:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration







TIC: M124317.D\data.ms

(44) 2-Methylnaphthalene (t)

6.783min (+0.109) 3.67ppm

response 79792

Ion	Exp%	Act%
141.00	100	100
142.10	119.40	109.86
115.00	35.30	36.40
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124344.D
Acq On : 11 May 2016 2:47 pm
Operator : ashleyd
Sample : jc19914-3
Misc : op93784,em5260,900,,,1,100
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 11 15:25:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 14:10:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.683	152	313519	40.00 ppm	-0.02
24) Naphthalene-d8	5.810	136	1232294	40.00 ppm	-0.03
47) Acenaphthene-d10	8.144	164	806827	40.00 ppm	-0.05
69) Phenanthrene-d10	10.772	188	1468094	40.00 ppm	-0.05
83) Chrysene-d12	15.947	240	1723020	40.00 ppm	-0.07
92) Perylene-d12	18.586	264	1759621	40.00 ppm	-0.06
102) 1,4-Dichlorobenzene-d4a	4.683	152	313519	40.00 ppm	-0.02
104) Acenaphthene-d10a	8.144	164	806827	40.00 ppm	-0.05
107) Chrysene-d12a	15.947	240	1722798	40.00 ppm	-0.07
110) Phenanthrene-d10a	10.772	188	1468540	40.00 ppm	-0.05
112) Naphthalene-d8a	5.810	136	1232294	40.00 ppm	-0.03
114) Chrysene-d12b	15.947	240	1722545	40.00 ppm	-0.07
System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
86) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
109) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-Dioxane	2.242	88	247264	56.88 ppm	93

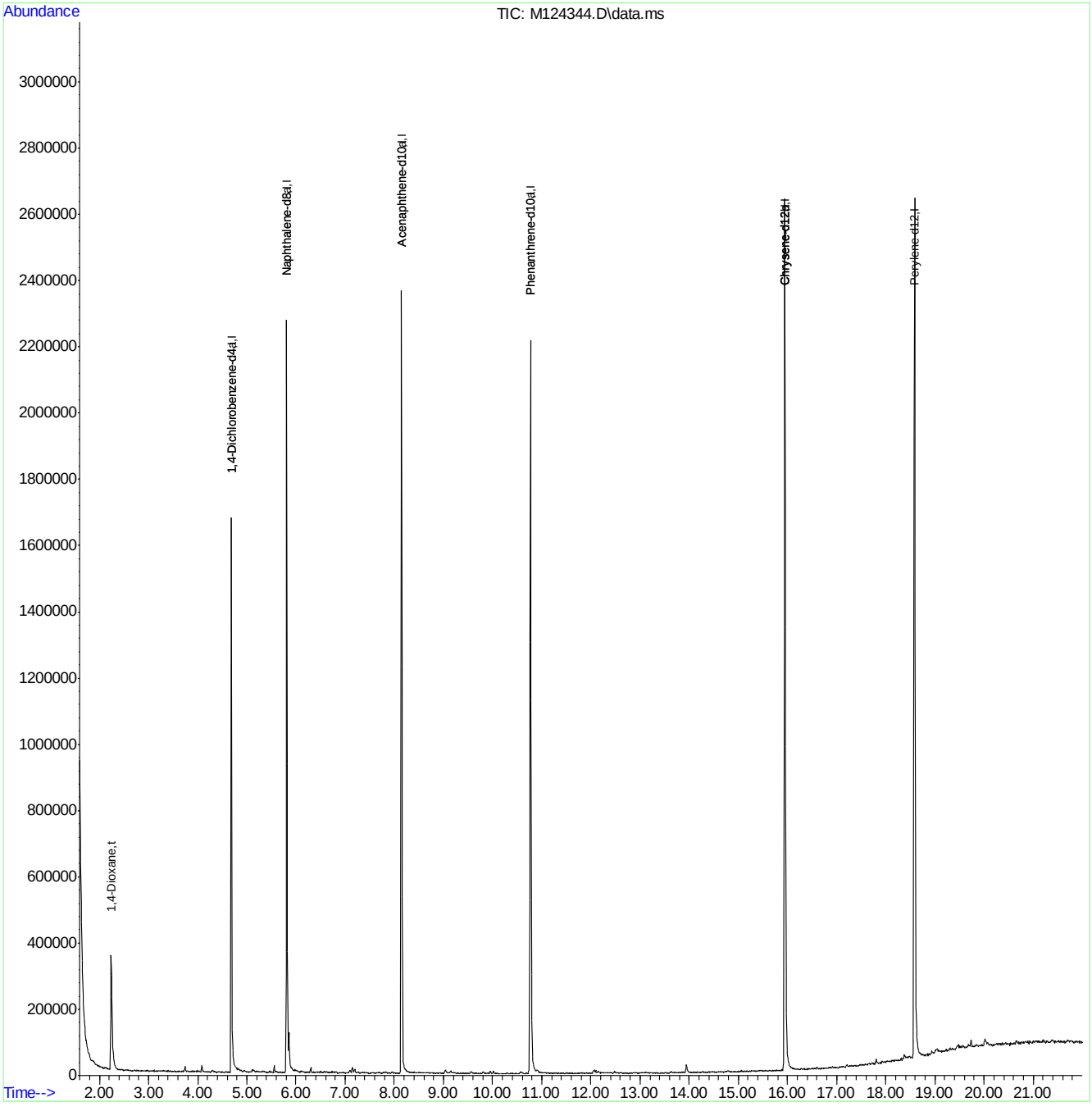
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

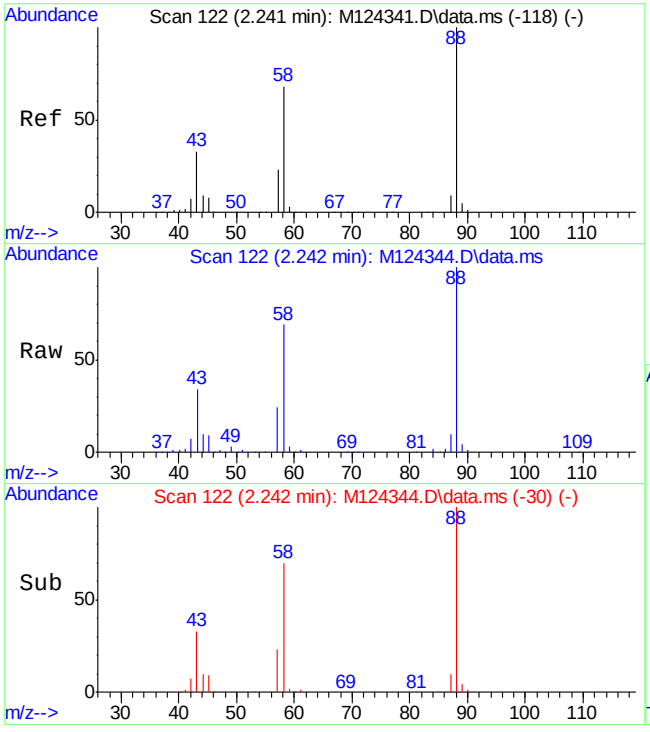
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124344.D
Acq On : 11 May 2016 2:47 pm
Operator : ashleyd
Sample : jc19914-3
Misc : op93784,em5260,900,,,1,100
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 11 15:25:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 14:10:35 2016
Response via : Initial Calibration



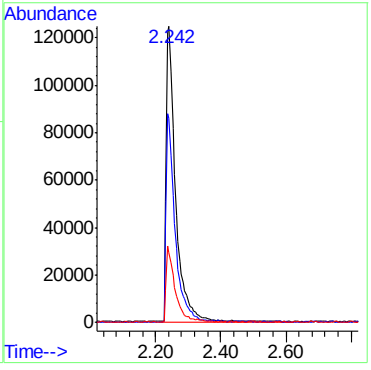
MM5239.M Wed May 11 15:25:46 2016 MSM



#2
1,4-Dioxane
Concen: 56.88 ppm
RT: 2.242 min Scan# 122
Delta R.T. -0.007 min
Lab File: M124344.D
Acq: 11 May 2016 2:47 pm

Tgt Ion: 88 Resp: 247264

Ion	Ratio	Lower	Upper
88	100		
58	69.2	33.2	93.2
57	23.4	0.0	50.5



7.1.5

7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124318.D
Acq On : 11 May 2016 2:53 am
Operator : juliusj
Sample : jc19914-4
Misc : op93784,em5259,980
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 11 09:22:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration

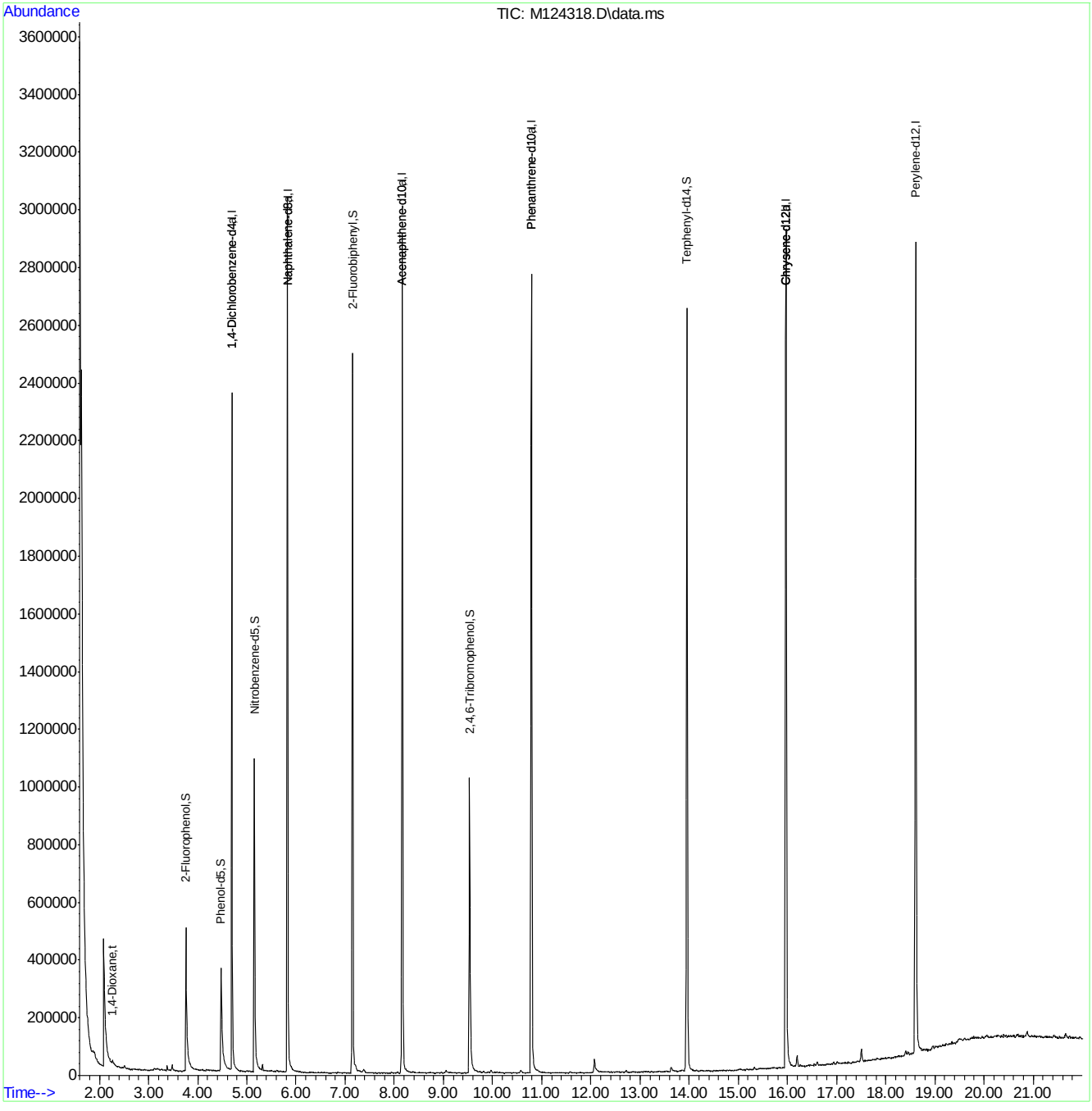
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.694	152	412948	40.00	ppm	-0.01
24) Naphthalene-d8	5.826	136	1588161	40.00	ppm	-0.02
47) Acenaphthene-d10	8.160	164	976694	40.00	ppm	-0.03
69) Phenanthrene-d10	10.788	188	1687115	40.00	ppm	-0.04
83) Chrysene-d12	15.969	240	1870671	40.00	ppm	-0.05
92) Perylene-d12	18.607	264	1805220	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.694	152	412948	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.160	164	976694	40.00	ppm	-0.03
107) Chrysene-d12a	15.969	240	1870671	40.00	ppm	-0.05
110) Phenanthrene-d10a	10.788	188	1687115	40.00	ppm	-0.04
112) Naphthalene-d8a	5.826	136	1588161	40.00	ppm	-0.02
114) Chrysene-d12b	15.969	240	1870671	40.00	ppm	-0.05
System Monitoring Compounds						
5) 2-Fluorophenol	3.759	112	262187	20.76	ppm	0.00
Spiked Amount 50.000			Recovery = 41.52%			
8) Phenol-d5	4.475	99	223960	14.12	ppm	0.00
Spiked Amount 50.000			Recovery = 28.24%			
25) Nitrobenzene-d5	5.153	82	470024	33.28	ppm	-0.01
Spiked Amount 50.000			Recovery = 66.56%			
51) 2-Fluorobiphenyl	7.151	172	1079810	33.67	ppm	-0.02
Spiked Amount 50.000			Recovery = 67.34%			
73) 2,4,6-Tribromophenol	9.533	330	251024	43.04	ppm	-0.03
Spiked Amount 50.000			Recovery = 86.08%			
86) Terphenyl-d14	13.955	244	1449098	34.53	ppm	-0.04
Spiked Amount 50.000			Recovery = 69.06%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	9056	1.58	ppm	93

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

Quantitation Report (QT Reviewed)

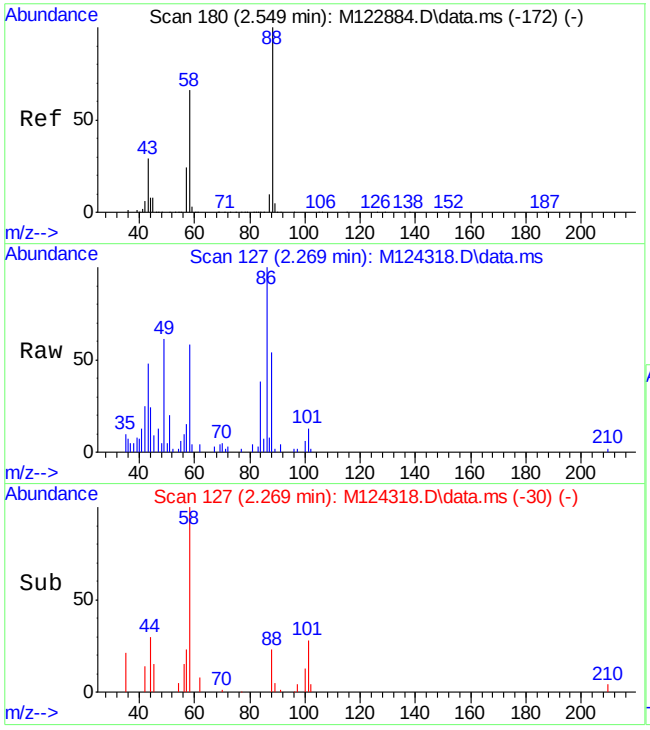
Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124318.D
Acq On : 11 May 2016 2:53 am
Operator : juliusj
Sample : jc19914-4
Misc : op93784,em5259,980
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 11 09:22:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:22:13 2016 MSM

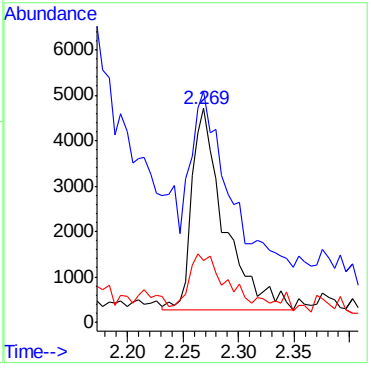
SGS ACCUTEST JC19914



#2
1,4-Dioxane
Concen: 1.58 ppm
RT: 2.269 min Scan# 127
Delta R.T. 0.020 min
Lab File: M124318.D
Acq: 11 May 2016 2:53 am

Tgt Ion: 88 Resp: 9056

Ion	Ratio	Lower	Upper
88	100		
58	70.0	33.2	93.2
57	21.4	0.0	50.5



7.1.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124319.D
Acq On : 11 May 2016 3:22 am
Operator : juliusj
Sample : jc19914-5
Misc : op93784,em5259,1000
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 11 09:22:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration

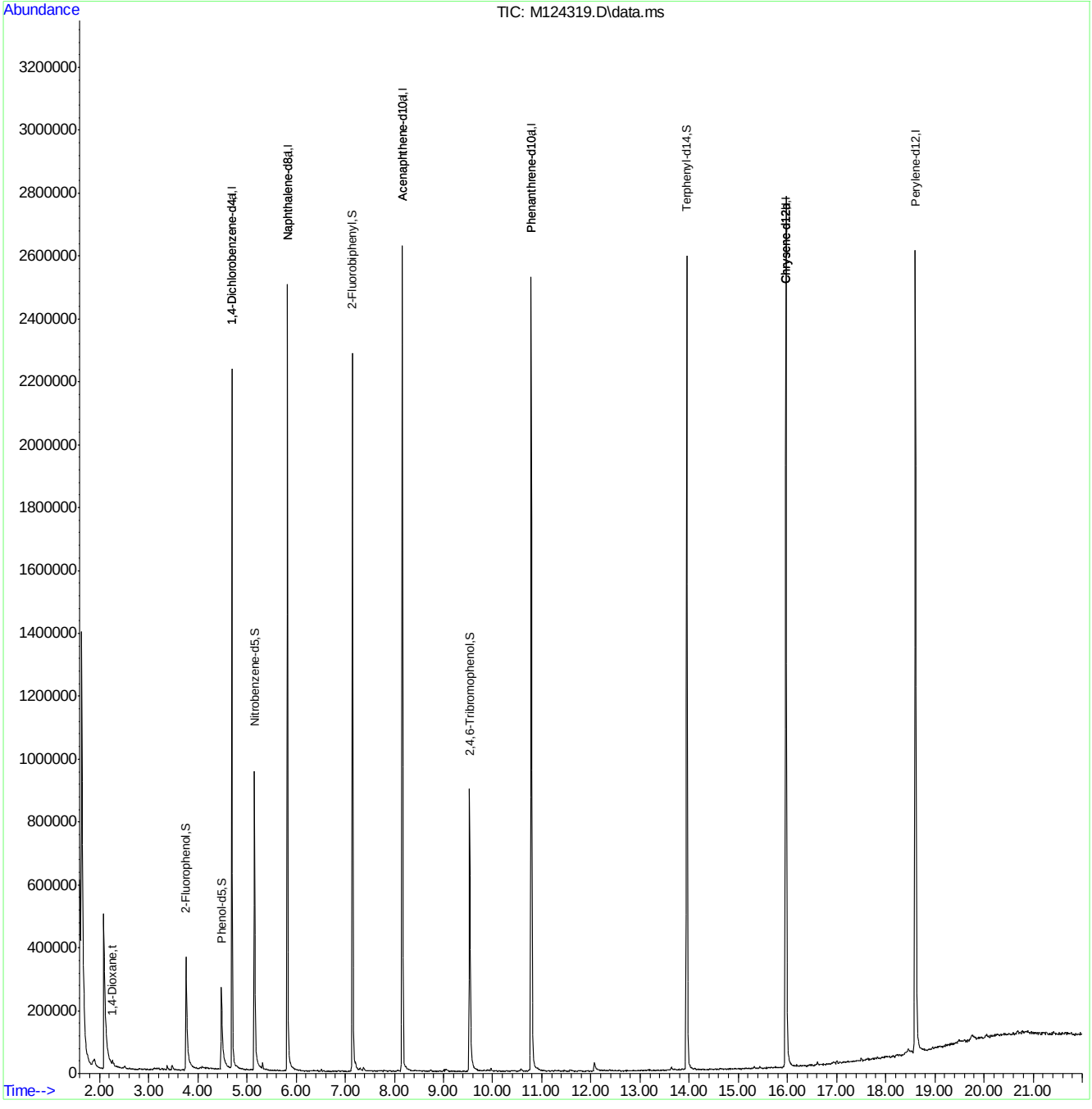
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.690	152	348261	40.00	ppm	-0.02
24) Naphthalene-d8	5.823	136	1335465	40.00	ppm	-0.02
47) Acenaphthene-d10	8.162	164	884074	40.00	ppm	-0.03
69) Phenanthrene-d10	10.785	188	1589634	40.00	ppm	-0.04
83) Chrysene-d12	15.971	240	1771229	40.00	ppm	-0.04
92) Perylene-d12	18.604	264	1747667	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.690	152	348261	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.162	164	884074	40.00	ppm	-0.03
107) Chrysene-d12a	15.971	240	1771229	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.785	188	1589634	40.00	ppm	-0.04
112) Naphthalene-d8a	5.823	136	1335465	40.00	ppm	-0.02
114) Chrysene-d12b	15.971	240	1771229	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.761	112	210747	19.79	ppm	0.01
Spiked Amount 50.000			Recovery	=	39.58%	
8) Phenol-d5	4.477	99	186609	13.95	ppm	0.01
Spiked Amount 50.000			Recovery	=	27.90%	
25) Nitrobenzene-d5	5.150	82	396131	33.36	ppm	-0.02
Spiked Amount 50.000			Recovery	=	66.72%	
51) 2-Fluorobiphenyl	7.147	172	949281	32.70	ppm	-0.02
Spiked Amount 50.000			Recovery	=	65.40%	
73) 2,4,6-Tribromophenol	9.535	330	229911	41.84	ppm	-0.02
Spiked Amount 50.000			Recovery	=	83.68%	
86) Terphenyl-d14	13.952	244	1370515	34.49	ppm	-0.04
Spiked Amount 50.000			Recovery	=	68.98%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.260	88	8362	1.73	ppm	80

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

Quantitation Report (QT Reviewed)

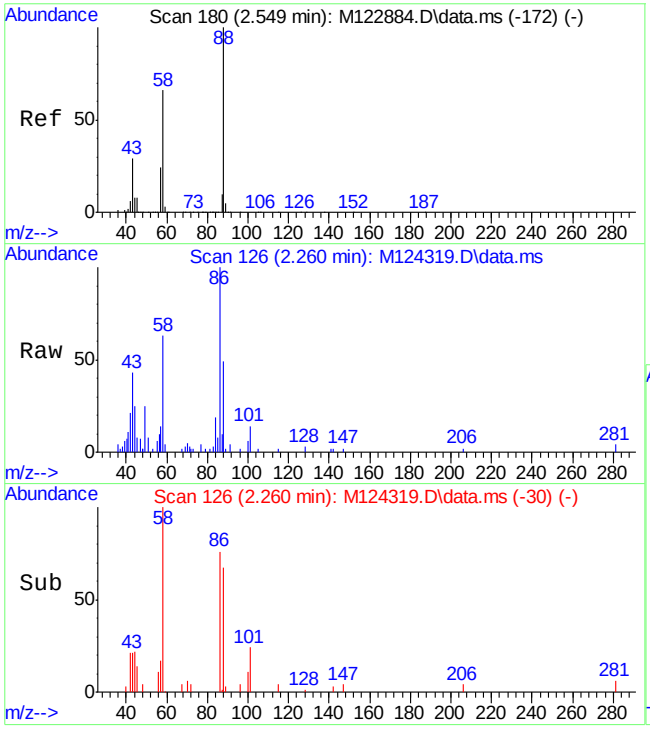
Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124319.D
Acq On : 11 May 2016 3:22 am
Operator : juliusj
Sample : jc19914-5
Misc : op93784,em5259,1000
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 11 09:22:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:23:06 2016 MSM

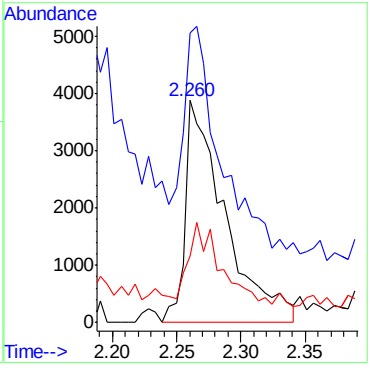
SGS ACCUTEST JC19914



#2
1,4-Dioxane
Concen: 1.73 ppm
RT: 2.260 min Scan# 126
Delta R.T. 0.011 min
Lab File: M124319.D
Acq: 11 May 2016 3:22 am

Tgt Ion: 88 Resp: 8362

Ion	Ratio	Lower	Upper
88	100		
58	84.0	33.2	93.2
57	20.9	0.0	50.5



7.1.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124425.D
Acq On : 13 May 2016 11:38 am
Operator : ashleyd
Sample : jc19914-6
Misc : op93791,em5264,30.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 15:02:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	485727	40.00	ppm	-0.02
24) Naphthalene-d8	5.776	136	1791765	40.00	ppm	0.00
47) Acenaphthene-d10	8.099	164	1101481	40.00	ppm	-0.02
69) Phenanthrene-d10	10.716	188	1937802	40.00	ppm	-0.02
83) Chrysene-d12	15.892	240	2071549	40.00	ppm	-0.02
92) Perylene-d12	18.525	264	2068444	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.649	152	485727	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.099	164	1101481	40.00	ppm	-0.02
107) Chrysene-d12a	15.892	240	2071549	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.716	188	1937802	40.00	ppm	-0.02
112) Naphthalene-d8a	5.776	136	1791765	40.00	ppm	0.00
114) Chrysene-d12b	15.892	240	2071549	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.709	112	597256	40.21	ppm	0.00
Spiked Amount 50.000			Recovery = 80.42%			
8) Phenol-d5	4.425	99	735943	39.45	ppm	0.00
Spiked Amount 50.000			Recovery = 78.90%			
25) Nitrobenzene-d5	5.108	82	468904	29.43	ppm	0.00
Spiked Amount 50.000			Recovery = 58.86%			
51) 2-Fluorobiphenyl	7.090	172	1506862	41.66	ppm	-0.01
Spiked Amount 50.000			Recovery = 83.32%			
73) 2,4,6-Tribromophenol	9.467	330	306585	45.77	ppm	-0.02
Spiked Amount 50.000			Recovery = 91.54%			
86) Terphenyl-d14	13.878	244	1869183	40.23	ppm	-0.03
Spiked Amount 50.000			Recovery = 80.46%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.203	88	345156	51.25	ppm	92

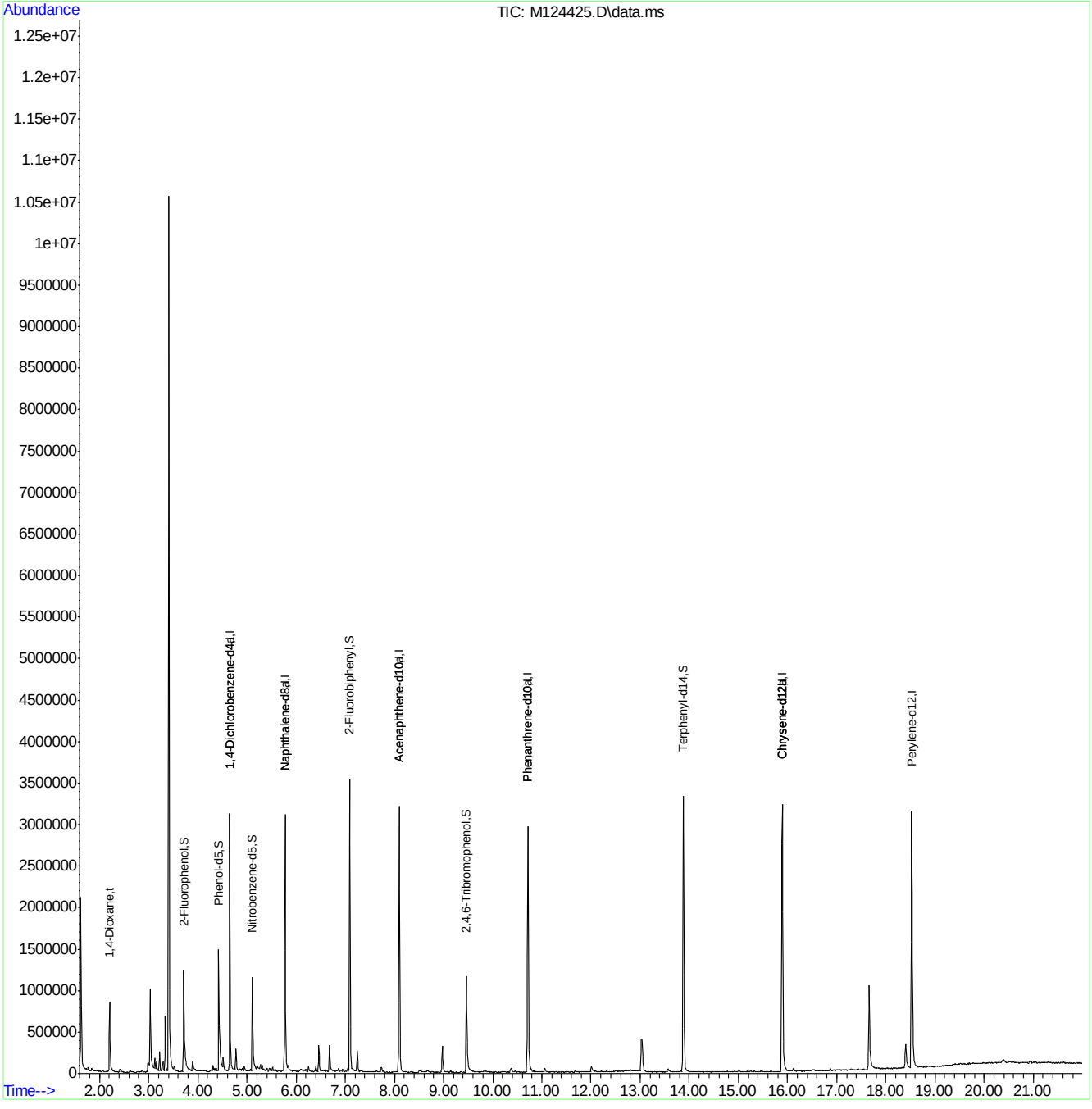
(#) = qualifier out of range (m) = manual integration (+) = signals summed

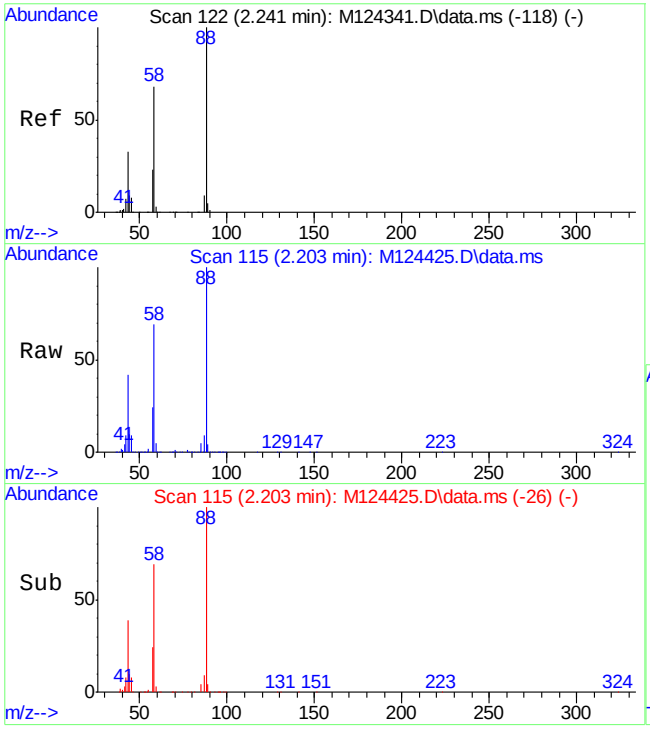
SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124425.D
Acq On : 13 May 2016 11:38 am
Operator : ashleyd
Sample : jc19914-6
Misc : op93791,em5264,30.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 15:02:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

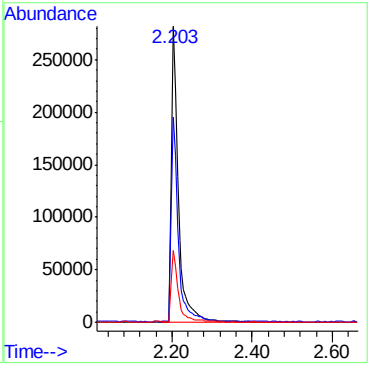




#2
1,4-Dioxane
Concen: 51.25 ppm
RT: 2.203 min Scan# 115
Delta R.T. -0.026 min
Lab File: M124425.D
Acq: 13 May 2016 11:38 am

Tgt Ion: 88 Resp: 345156

Ion	Ratio	Lower	Upper
88	100		
58	69.2	33.2	93.2
57	24.1	0.0	50.5



7.1.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124424.D
Acq On : 13 May 2016 11:10 am
Operator : ashleyd
Sample : jc19914-7
Misc : op93791,em5264,30.6
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 13 15:01:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.651	152	446652	40.00	ppm	-0.01
24) Naphthalene-d8	5.778	136	1580069	40.00	ppm	0.00
47) Acenaphthene-d10	8.107	164	934809	40.00	ppm	0.00
69) Phenanthrene-d10	10.719	188	1723748	40.00	ppm	-0.02
83) Chrysene-d12	15.894	240	1963305	40.00	ppm	-0.02
92) Perylene-d12	18.527	264	1915572	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.651	152	446652	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.107	164	934183	40.00	ppm	0.00
107) Chrysene-d12a	15.894	240	1963389	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.719	188	1723748	40.00	ppm	-0.02
112) Naphthalene-d8a	5.778	136	1579939	40.00	ppm	0.00
114) Chrysene-d12b	15.894	240	1963305	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.711	112	588359	43.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	86.14%	
8) Phenol-d5	4.427	99	724967	42.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	84.52%	
25) Nitrobenzene-d5	5.105	82	534818	38.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	76.12%	
51) 2-Fluorobiphenyl	7.097	172	1362524	44.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	88.78%	
73) 2,4,6-Tribromophenol	9.469	330	285279	47.88	ppm	-0.02
Spiked Amount 50.000			Recovery	=	95.76%	
86) Terphenyl-d14	13.880	244	1756820	39.89	ppm	-0.03
Spiked Amount 50.000			Recovery	=	79.78%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.205	88	257848	41.63	ppm	89
45) 1-Methylnaphthalene	6.734	142	140413	4.88	ppm	97
66) Fluorene	9.031	166	48964	1.50	ppm	86
77) Phenanthrene	10.772	178	59459	1.24	ppm	98
81) Fluoranthene	13.069	202	87096	1.55	ppm	98
84) Pyrene	13.496	202	69595	1.09	ppm	93

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

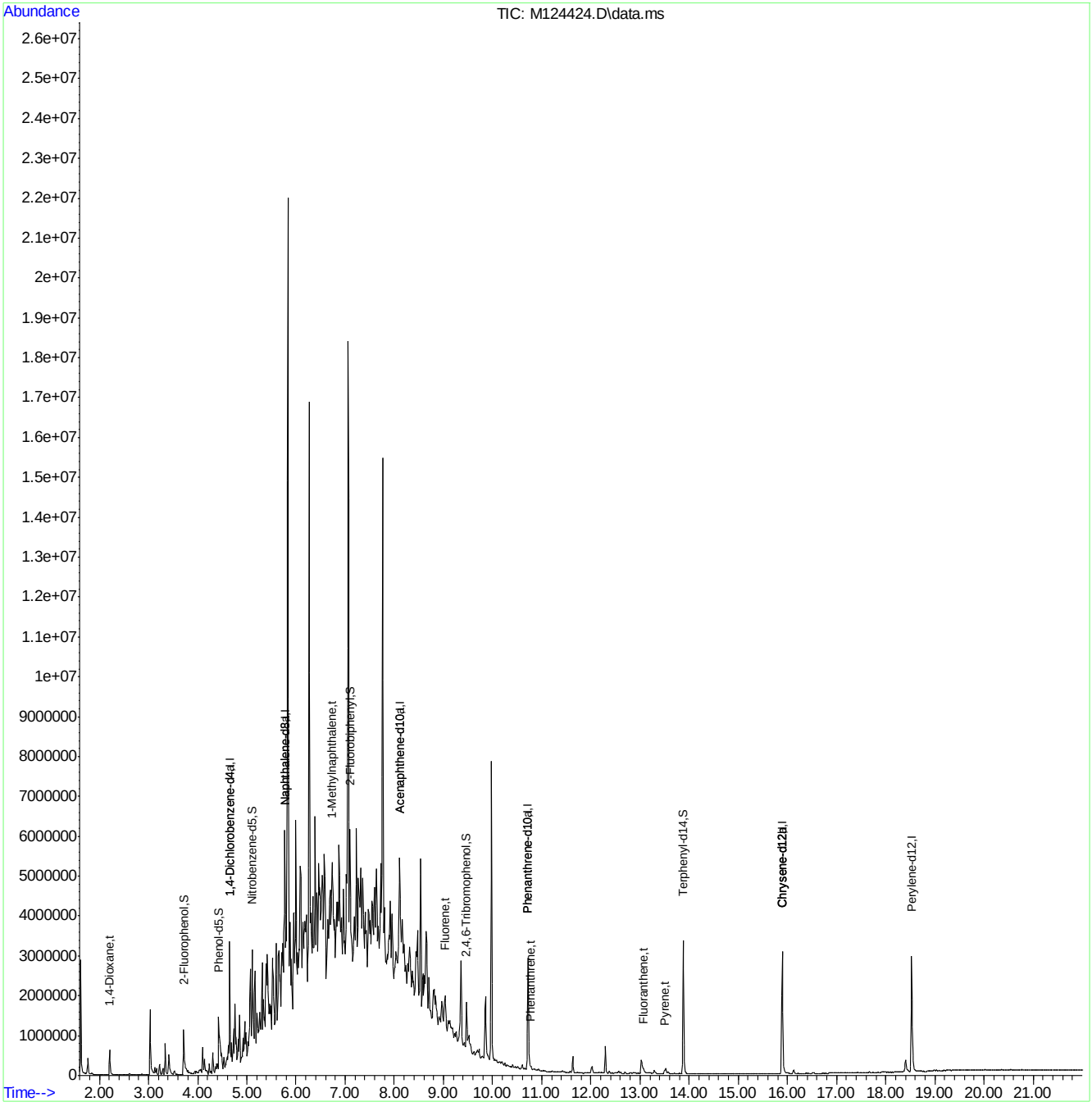
7.1.9

7

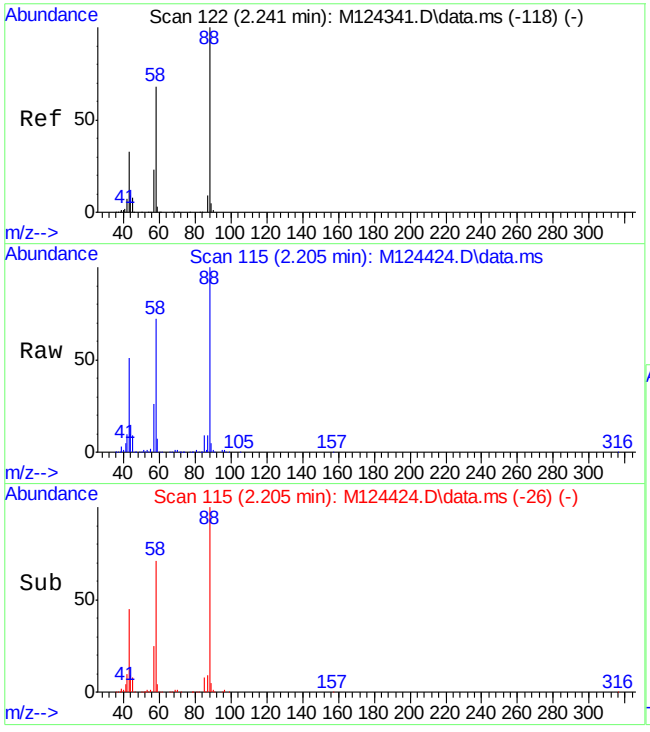
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124424.D
Acq On : 13 May 2016 11:10 am
Operator : ashleyd
Sample : jc19914-7
Misc : op93791,em5264,30.6
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 13 15:01:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration



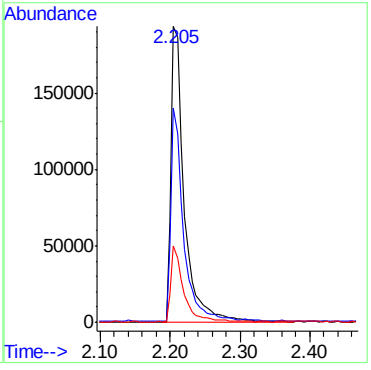
MM5239.M Fri May 13 15:02:59 2016 MSM

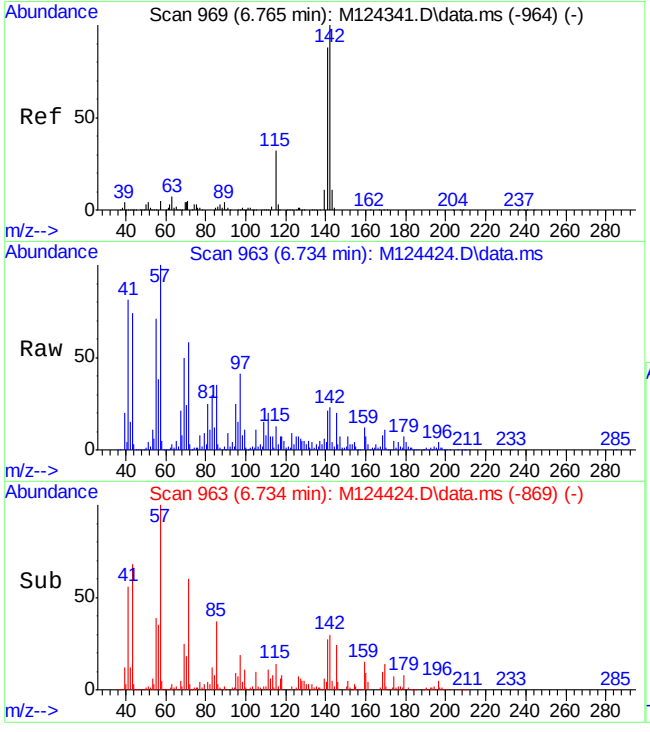


#2
1,4-Dioxane
Concen: 41.63 ppm
RT: 2.205 min Scan# 115
Delta R.T. -0.024 min
Lab File: M124424.D
Acq: 13 May 2016 11:10 am

Tgt Ion: 88 Resp: 257848

Ion	Ratio	Lower	Upper
88	100		
58	72.0	33.2	93.2
57	25.4	0.0	50.5

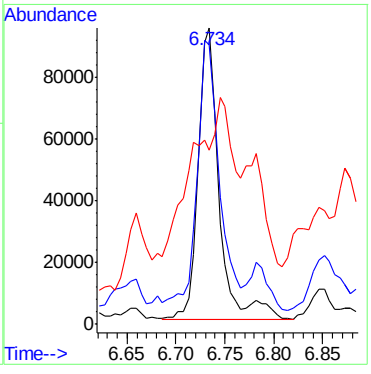


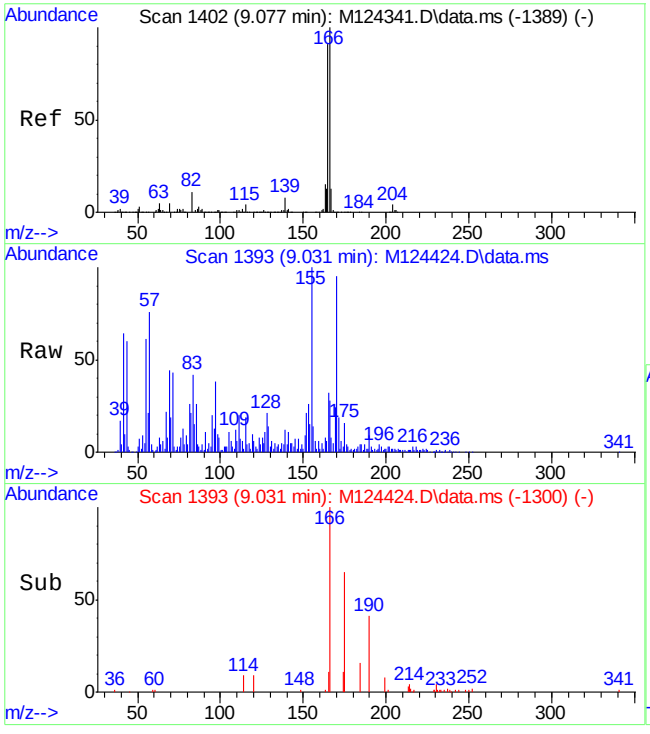


#45
1-Methylnaphthalene
Concen: 4.88 ppm
RT: 6.734 min Scan# 963
Delta R.T. 0.000 min
Lab File: M124424.D
Acq: 13 May 2016 11:10 am

Tgt Ion:142 Resp: 140413

Ion	Ratio	Lower	Upper
142	100		
141	89.7	56.8	116.8
115	32.8	1.2	61.2

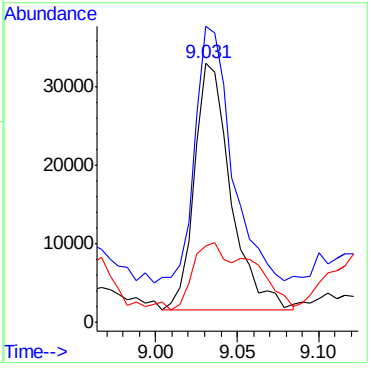


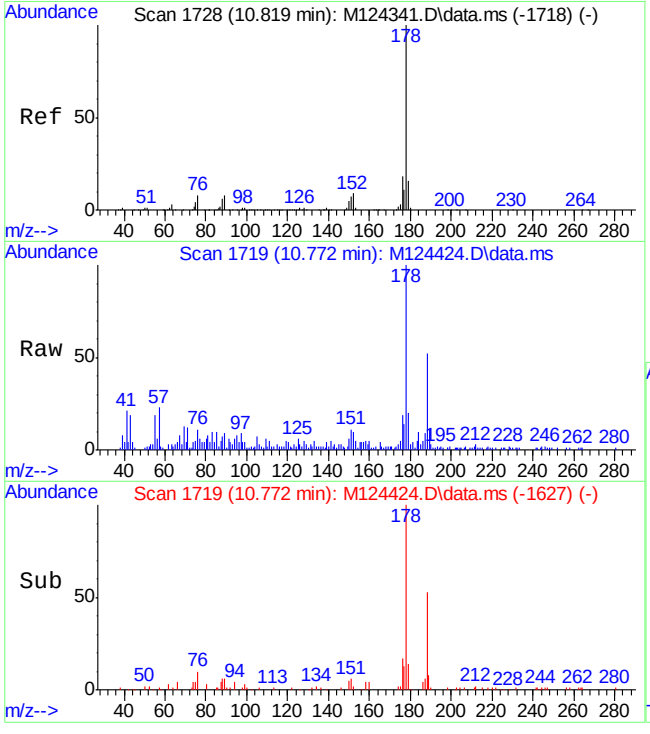


#66
Fluorene
Concen: 1.50 ppm
RT: 9.031 min Scan# 1393
Delta R.T. -0.005 min
Lab File: M124424.D
Acq: 13 May 2016 11:10 am

Tgt Ion:166 Resp: 48964

Ion	Ratio	Lower	Upper
166	100		
165	102.8	61.2	121.2
167	23.7	0.0	43.3

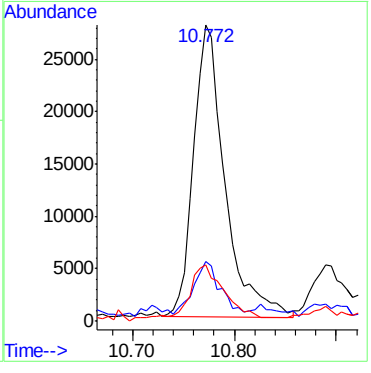


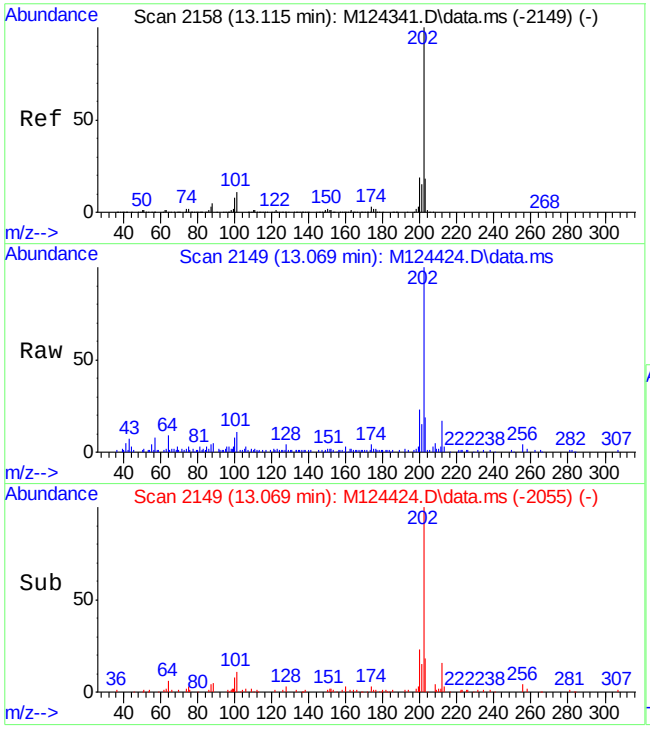


#77
Phenanthrene
Concen: 1.24 ppm
RT: 10.772 min Scan# 1719
Delta R.T. -0.008 min
Lab File: M124424.D
Acq: 13 May 2016 11:10 am

Tgt Ion:178 Resp: 59459

Ion	Ratio	Lower	Upper
178	100		
179	17.2	0.0	46.0
176	17.5	0.0	48.4

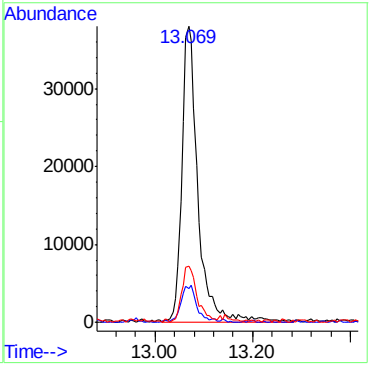


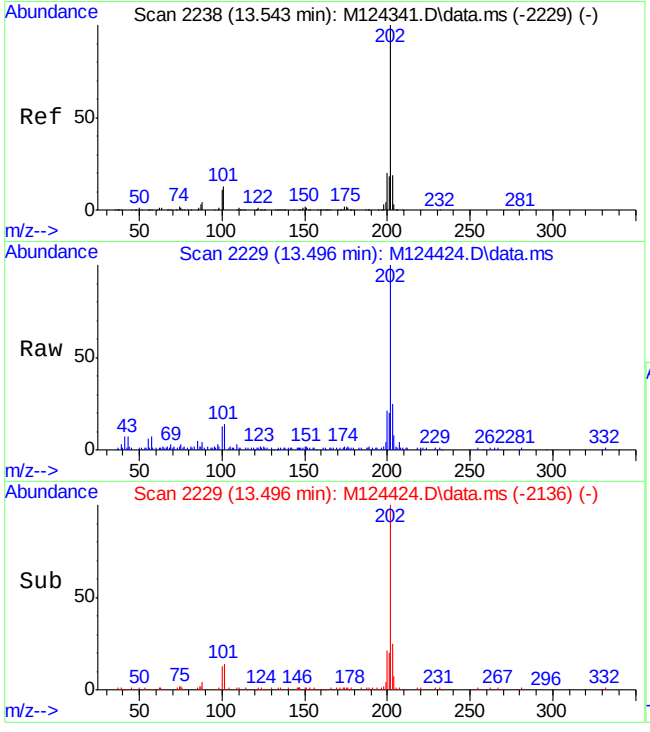


#81
Fluoranthene
Concen: 1.55 ppm
RT: 13.069 min Scan# 2149
Delta R.T. 0.001 min
Lab File: M124424.D
Acq: 13 May 2016 11:10 am

Tgt Ion:202 Resp: 87096

Ion	Ratio	Lower	Upper
202	100		
101	11.1	0.0	41.8
203	18.5	0.0	47.5

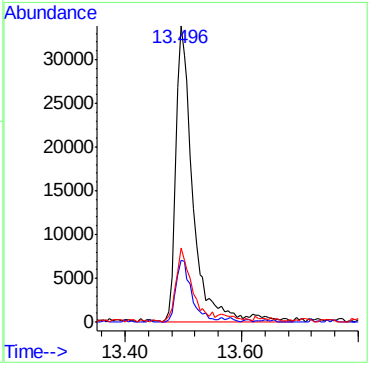




#84
Pyrene
Concen: 1.09 ppm
RT: 13.496 min Scan# 2229
Delta R.T. -0.005 min
Lab File: M124424.D
Acq: 13 May 2016 11:10 am

Tgt Ion:202 Resp: 69595

Ion	Ratio	Lower	Upper
202	100		
200	20.8	0.0	50.4
203	25.0	0.0	48.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61224.D
Acq On : 11 May 2016 12:27 pm
Operator : linseyk
Sample : jc19914-1
Misc : op93784a,e3m2879,900
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 11 15:01:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.365	150	493111	4.00	ppm	-0.06
14) Fluorene-d10	13.373	176	714853	4.00	ppm	-0.08
21) Fluoranthene-d10	17.592	212	1217079	4.00	ppm	-0.05
31) Benzo(a)pyrene-d12	22.197	264	1003430	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	4.337	112	1501010	24.33	ppm	-0.09
Spiked Amount 50.000			Recovery = 48.66%			
4) Phenol-d5	5.939	99	1690203	16.56	ppm	-0.04
Spiked Amount 50.000			Recovery = 33.12%			
7) Nitrobenzene-d5	7.493	82	3273588	34.49	ppm	-0.08
Spiked Amount 50.000			Recovery = 68.98%			
15) 2-Fluorobiphenyl	11.052	172	7568332	38.53	ppm	-0.09
Spiked Amount 50.000			Recovery = 77.06%			
20) 2,4,6-Tribromophenol	13.919	330	854053	38.17	ppm	-0.05
Spiked Amount 50.000			Recovery = 76.34%			
28) Terphenyl-d14	18.411	244	7516393	42.57	ppm	-0.02
Spiked Amount 50.000			Recovery = 85.14%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	28121157	1103.78	ppm #	80

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

7.1.10

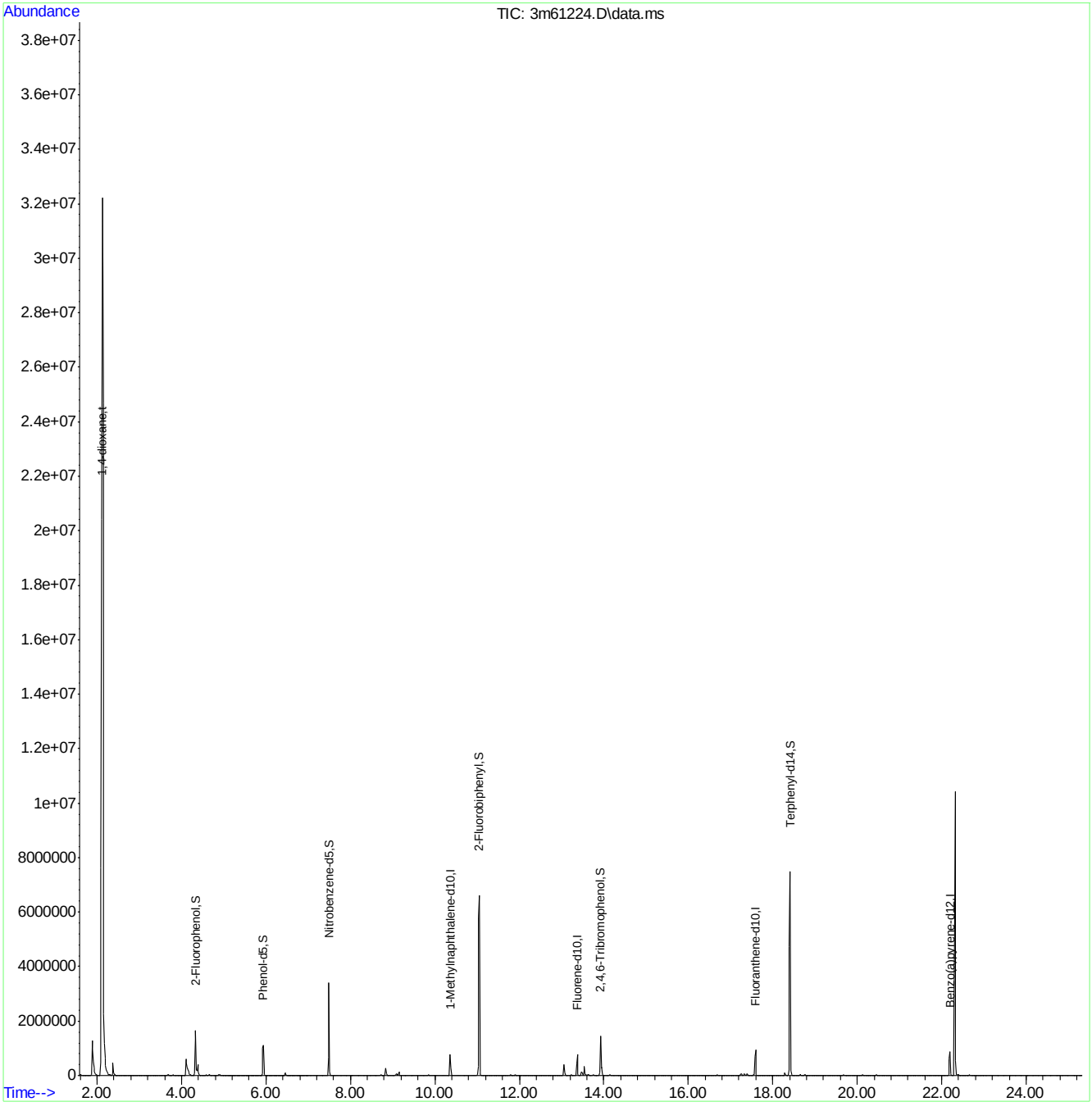
7

SGS ACCUTEST JC19914

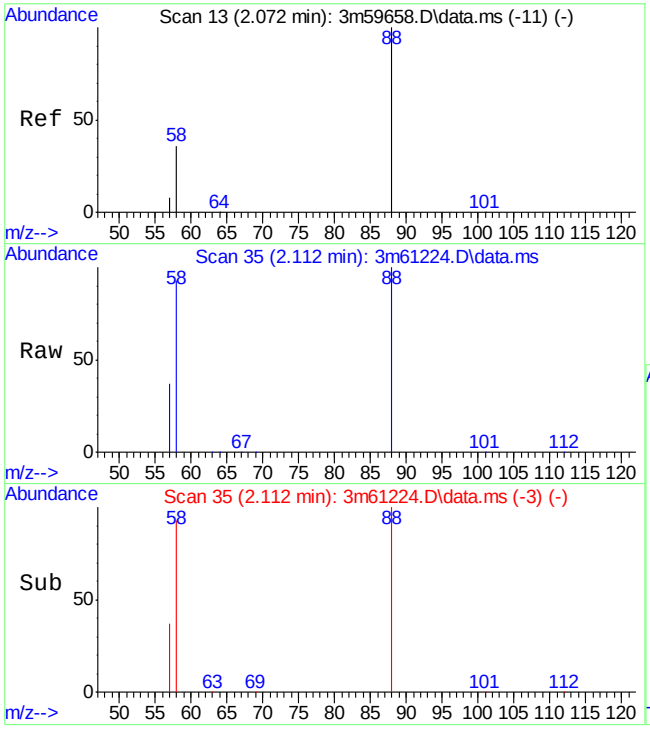
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61224.D
Acq On : 11 May 2016 12:27 pm
Operator : linseyk
Sample : jc19914-1
Misc : op93784a,e3m2879,900
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 11 15:01:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration



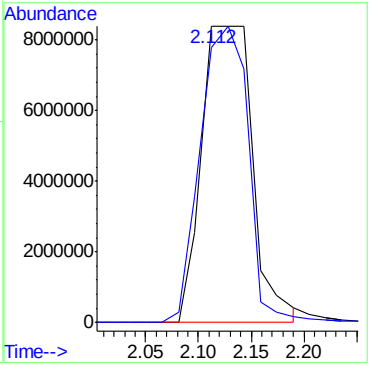
M3M2855SIM.M Wed May 11 15:01:45 2016 RPT1 Page: 2



#2
1,4-dioxane
Concen: 1103.78 ppm
RT: 2.112 min Scan# 35
Delta R.T. -0.000 min
Lab File: 3m61224.D
Acq: 11 May 2016 12:27 pm

Tgt Ion: 88 Resp:28121157

Ion	Ratio	Lower	Upper
88	100		
58	94.0	95.4	135.4#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16286.D
Acq On : 11 May 2016 7:11 pm
Operator : juliusj
Sample : jc19914-2
Misc : op93791a,e4p857,30.1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 24 17:39:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:44:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.950	150	76750	4.00 ppm	-0.08
13) Fluorene-d10	10.889	176	122924	4.00 ppm	-0.08
23) Fluoranthene-d10	15.098	212	143008	4.00 ppm	-0.09
33) Benzo(a)pyrene-d12	19.720	264	100573	4.00 ppm	-0.09
System Monitoring Compounds					
3) 2-Fluorophenol	2.749	112	308367	37.60 ppm	-0.04
Spiked Amount 50.000			Recovery	= 75.20%	
4) Phenol-d5	3.871	99	477554	32.41 ppm	-0.07
Spiked Amount 50.000			Recovery	= 64.82%	
7) Nitrobenzene-d5	5.236	82	113648	9.29 ppm	-0.08
Spiked Amount 50.000			Recovery	= 18.58%	
14) 2-Fluorobiphenyl	8.614	172	848441	18.57 ppm	-0.08
Spiked Amount 50.000			Recovery	= 37.14%	
22) 2,4,6-Tribromophenol	11.431	330	120159	26.04 ppm	-0.09
Spiked Amount 50.000			Recovery	= 52.08%	
30) Terphenyl-d14	15.941	244	734887	43.26 ppm	-0.09
Spiked Amount 50.000			Recovery	= 86.52%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.516	88	20302	5.96 ppm	# 1
8) Naphthalene	6.517	128	5623	0.14 ppm	95

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

7.1.11

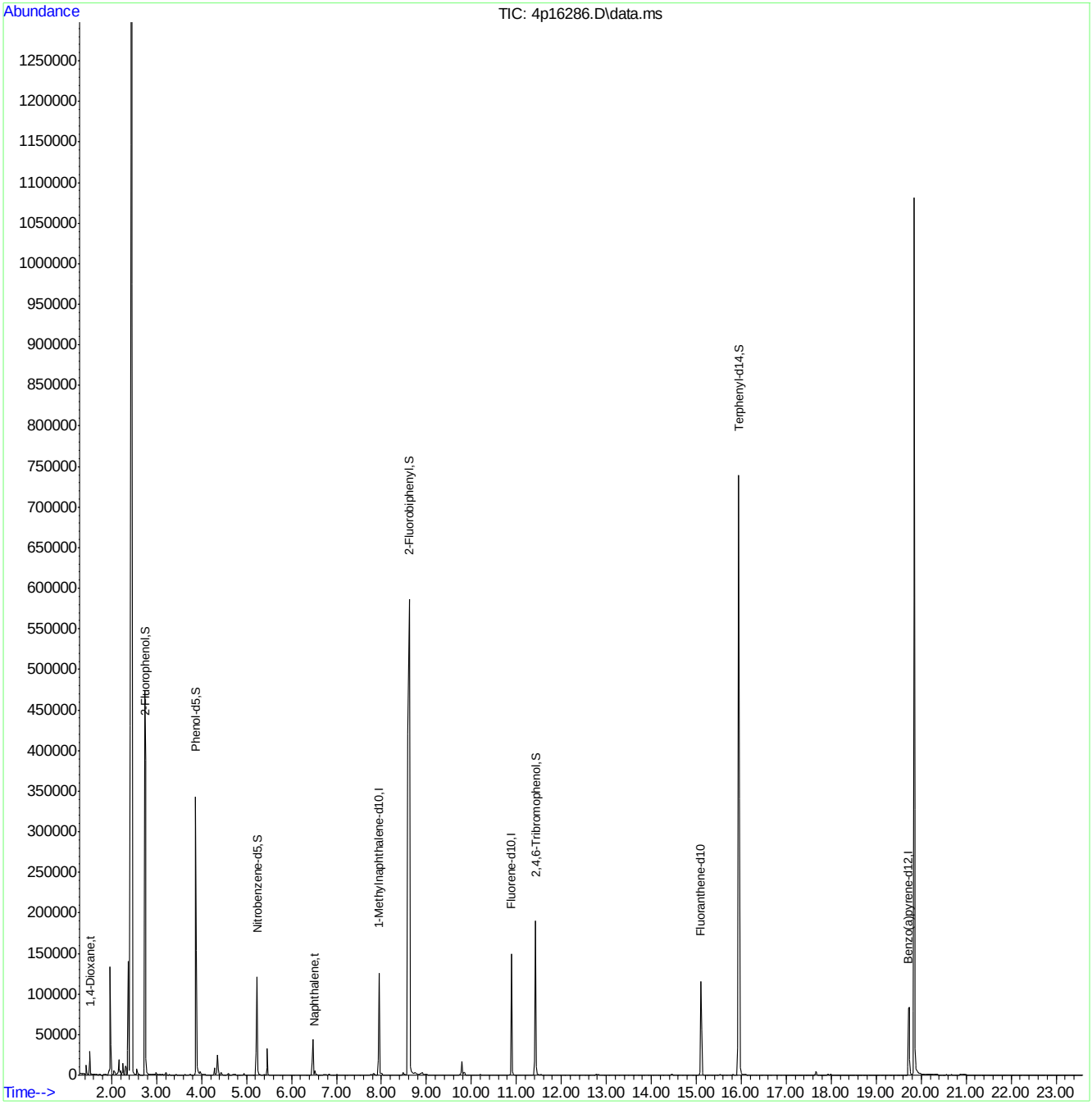
7

SGS ACCUTEST JC19914

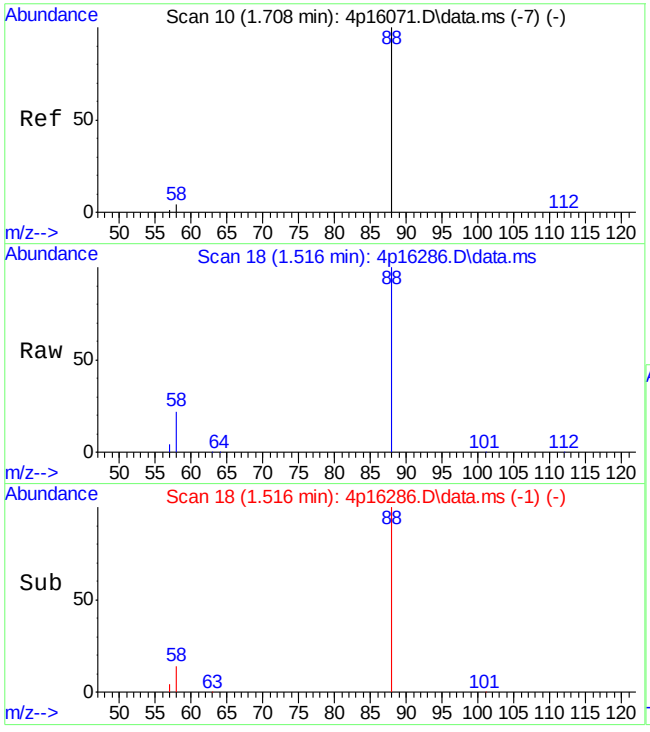
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16286.D
Acq On : 11 May 2016 7:11 pm
Operator : juliusj
Sample : jc19914-2
Misc : op93791a,e4p857,30.1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 24 17:39:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:44:30 2016
Response via : Initial Calibration



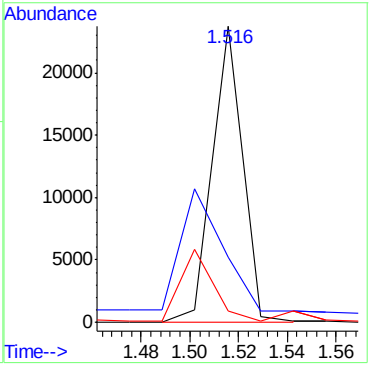
SGS ACCUTEST JC19914

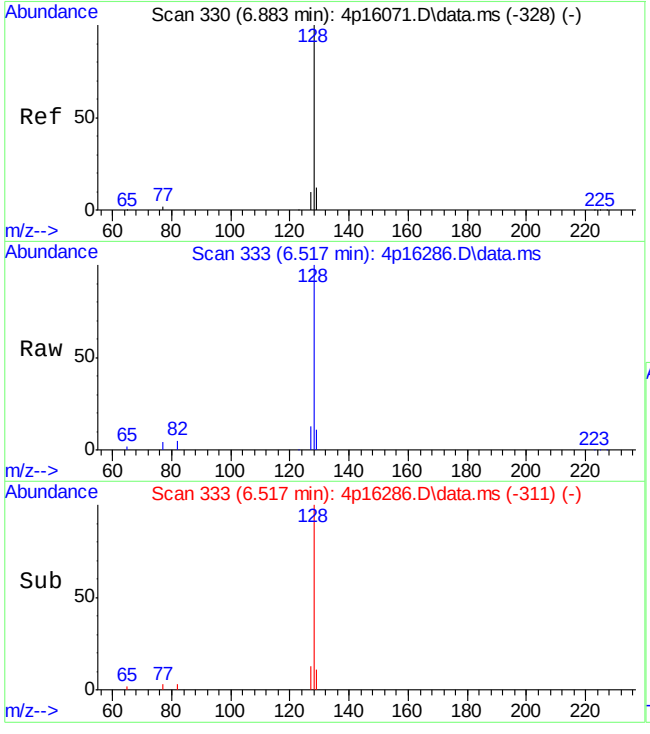


#2
1,4-Dioxane
Concen: 5.96 ppm
RT: 1.516 min Scan# 18
Delta R.T. -0.027 min
Lab File: 4p16286.D
Acq: 11 May 2016 7:11 pm

Tgt Ion: 88 Resp: 20302

Ion	Ratio	Lower	Upper
88	100		
58	17.8	143.7	183.7#
57	1.8	32.5	72.5#

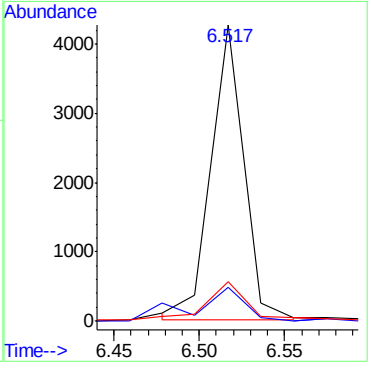




#8
Naphthalene
Concen: 0.14 ppm
RT: 6.517 min Scan# 333
Delta R.T. -0.076 min
Lab File: 4p16286.D
Acq: 11 May 2016 7:11 pm

Tgt Ion:128 Resp: 5623

Ion	Ratio	Lower	Upper
128	100		
129	8.4	0.0	40.0
127	12.1	0.0	44.2



Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/11/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61225.D
Acq On : 11 May 2016 12:59 pm
Operator : linseyk
Sample : jc19914-3
Misc : op93784a,e3m2879,900
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 11 15:02:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.365	150	506060	4.00	ppm	-0.06
14) Fluorene-d10	13.373	176	834971	4.00	ppm	-0.08
21) Fluoranthene-d10	17.592	212	1311101	4.00	ppm	-0.05
31) Benzo(a)pyrene-d12	22.197	264	1089158	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	4.337	112	1704850	26.93	ppm	-0.09
Spiked Amount 50.000			Recovery = 53.86%			
4) Phenol-d5	5.939	99	1808136	17.26	ppm	-0.04
Spiked Amount 50.000			Recovery = 34.52%			
7) Nitrobenzene-d5	7.493	82	3639462	37.36	ppm	-0.08
Spiked Amount 50.000			Recovery = 74.72%			
15) 2-Fluorobiphenyl	11.052	172	8354301	36.41	ppm	-0.09
Spiked Amount 50.000			Recovery = 72.82%			
20) 2,4,6-Tribromophenol	13.919	330	887482	33.96	ppm	-0.05
Spiked Amount 50.000			Recovery = 67.92%			
28) Terphenyl-d14	18.411	244	8122869	42.71	ppm	-0.02
Spiked Amount 50.000			Recovery = 85.42%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	42652133m	1631.29	ppm	
17) Acenaphthene	12.381	153	42081	0.22	ppm	83
19) Fluorene	13.430	166	158545	0.68	ppm #	55
24) Phenanthrene	15.336	178	79209	0.25	ppm	95
26) Fluoranthene	17.608	202	69552	0.17	ppm	99
27) Pyrene	18.009	202	45163	0.12	ppm	96

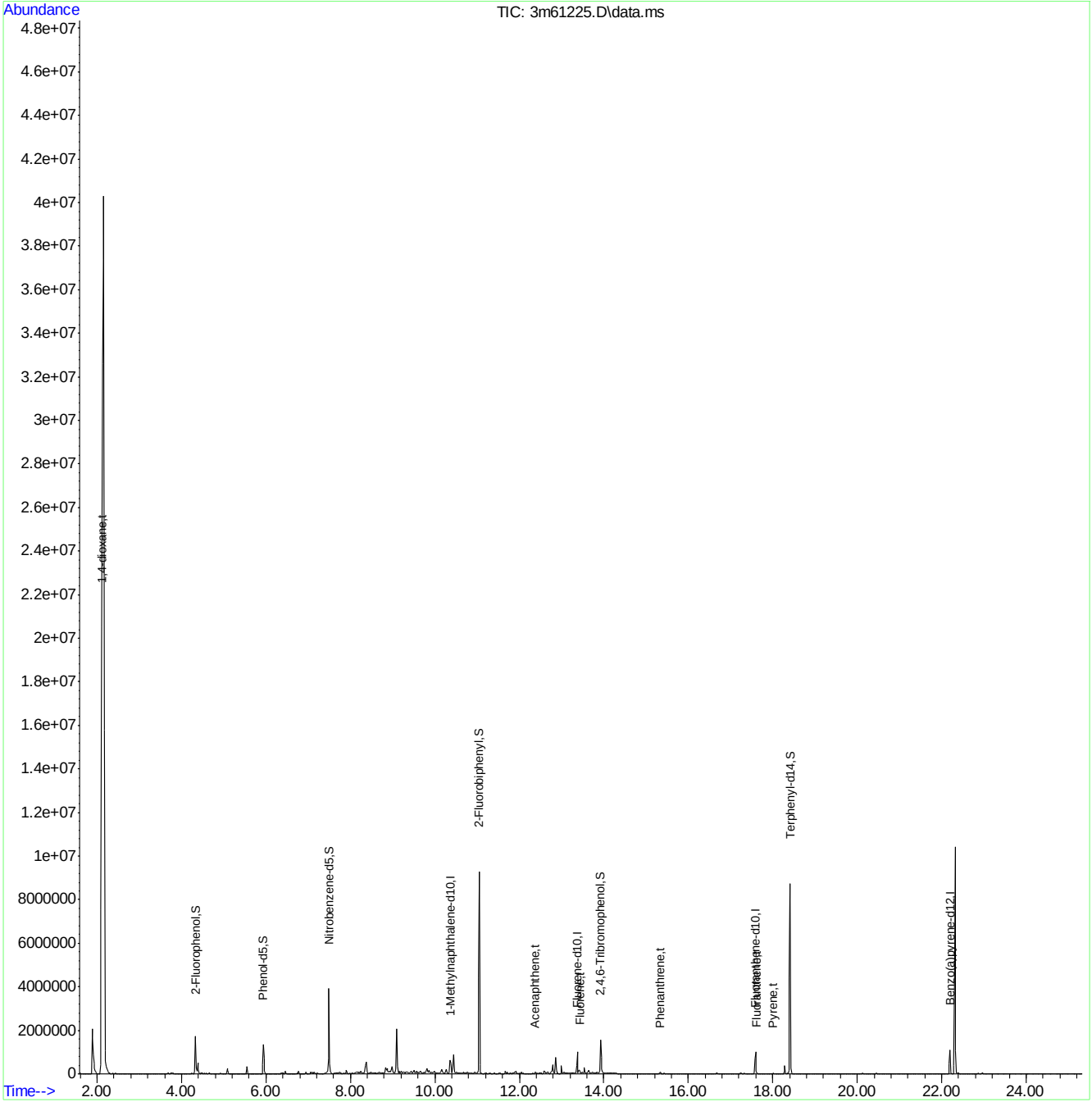
(#) = qualifier out of range (m) = manual integration (+) = signals summed

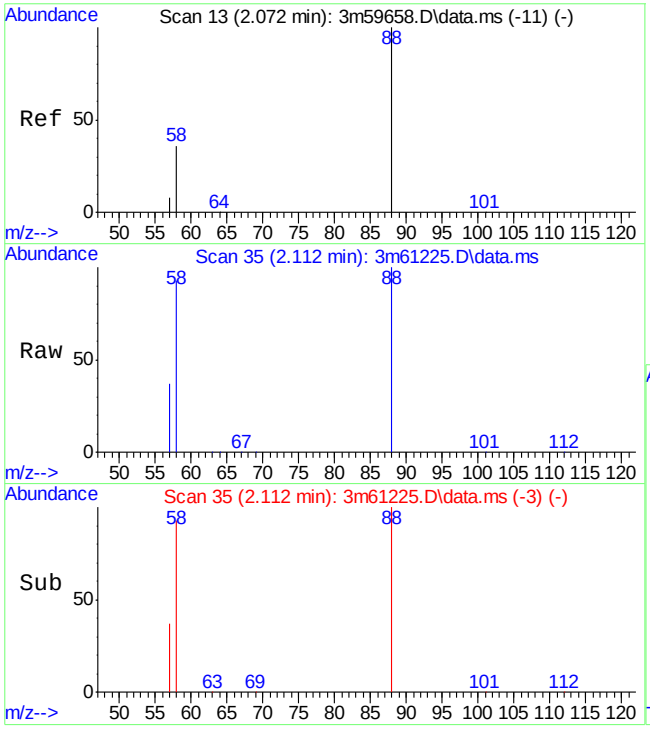
7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61225.D
Acq On : 11 May 2016 12:59 pm
Operator : linseyk
Sample : jc19914-3
Misc : op93784a,e3m2879,900
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 11 15:02:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

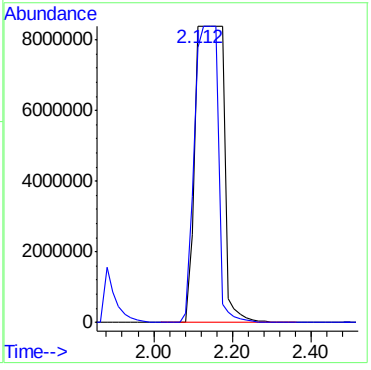


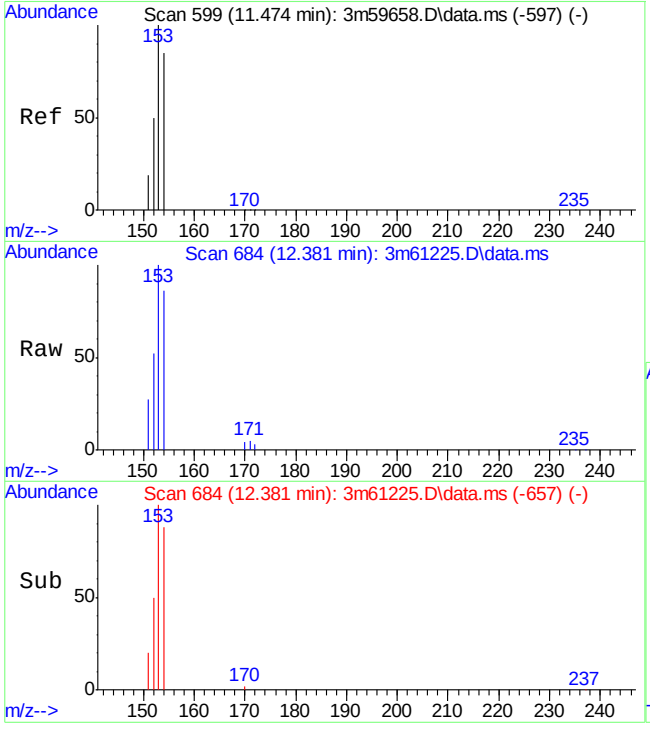


#2
1,4-dioxane
Concen: 1631.29 ppm m
RT: 2.112 min Scan# 35
Delta R.T. -0.000 min
Lab File: 3m61225.D
Acq: 11 May 2016 12:59 pm

Tgt Ion: 88 Resp:42652133

Ion	Ratio	Lower	Upper
88	100		
58	92.8	95.4	135.4#

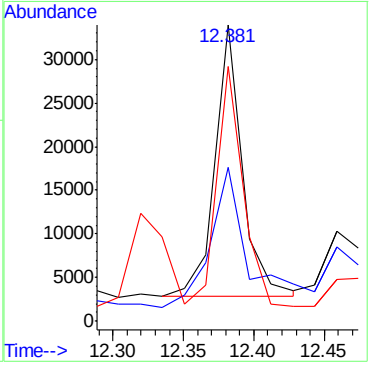


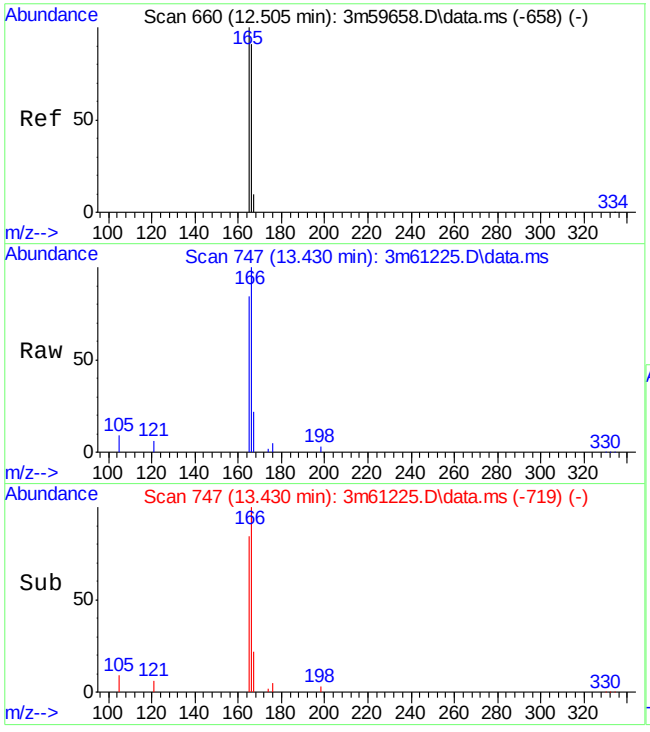


#17
Acenaphthene
Concen: 0.22 ppm
RT: 12.381 min Scan# 684
Delta R.T. -0.086 min
Lab File: 3m61225.D
Acq: 11 May 2016 12:59 pm

Tgt Ion:153 Resp: 42081

Ion	Ratio	Lower	Upper
153	100		
152	47.7	13.5	73.5
154	76.4	67.7	127.7

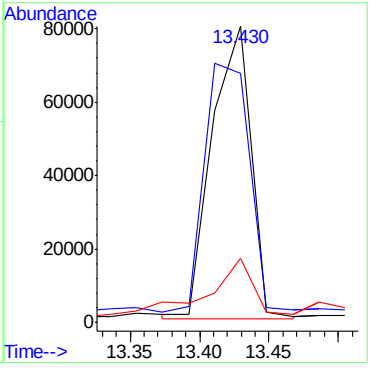


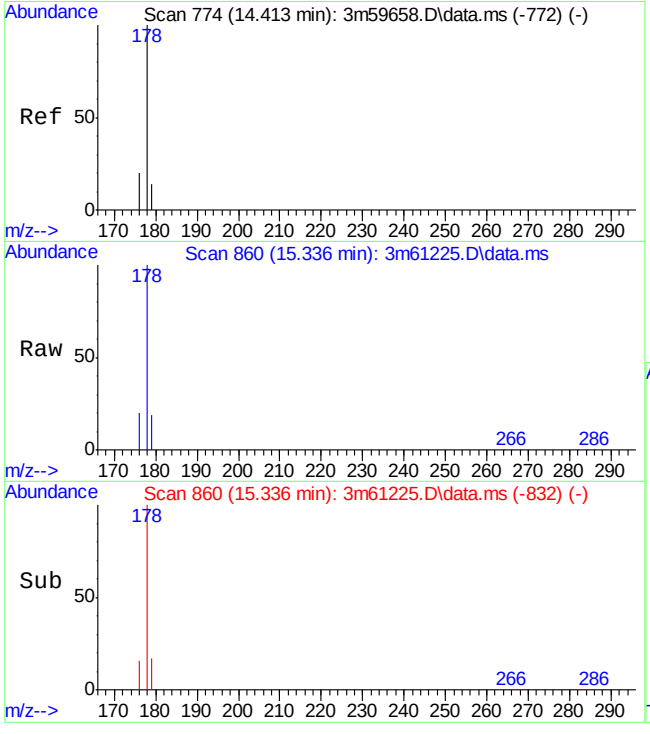


#19
Fluorene
Concen: 0.68 ppm
RT: 13.430 min Scan# 747
Delta R.T. -0.000 min
Lab File: 3m61225.D
Acq: 11 May 2016 12:59 pm

Tgt Ion:166 Resp: 158545

Ion	Ratio	Lower	Upper
166	100		
165	82.5	98.1	158.1#
167	17.3	31.2	91.2#

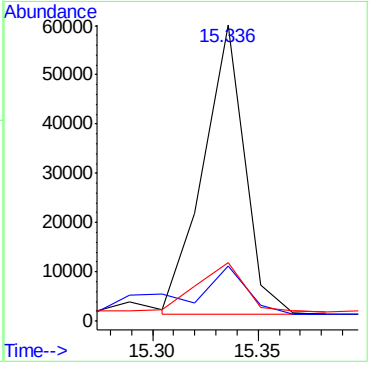


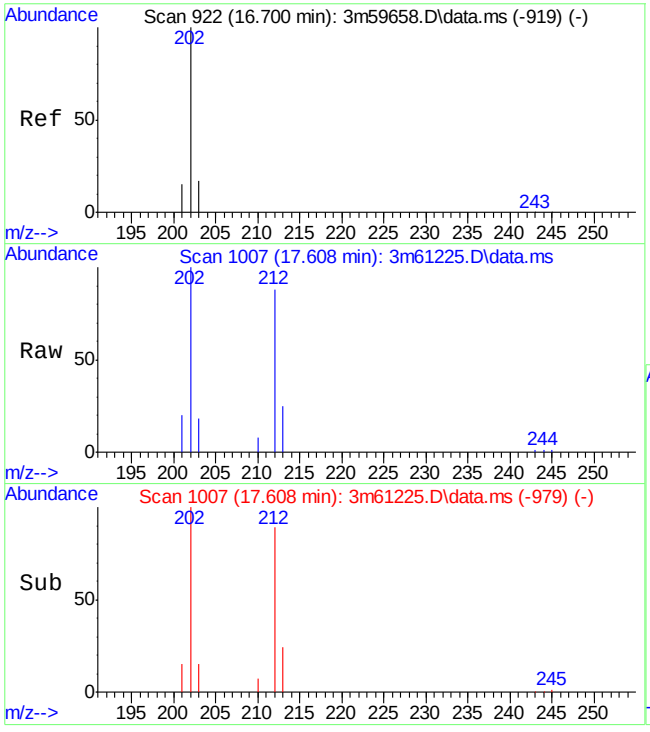


#24
Phenanthrene
Concen: 0.25 ppm
RT: 15.336 min Scan# 860
Delta R.T. -0.061 min
Lab File: 3m61225.D
Acq: 11 May 2016 12:59 pm

Tgt Ion:178 Resp: 79209

Ion	Ratio	Lower	Upper
178	100		
179	13.3	0.0	47.0
176	16.8	0.0	46.0

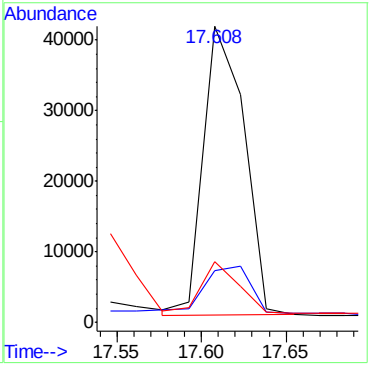


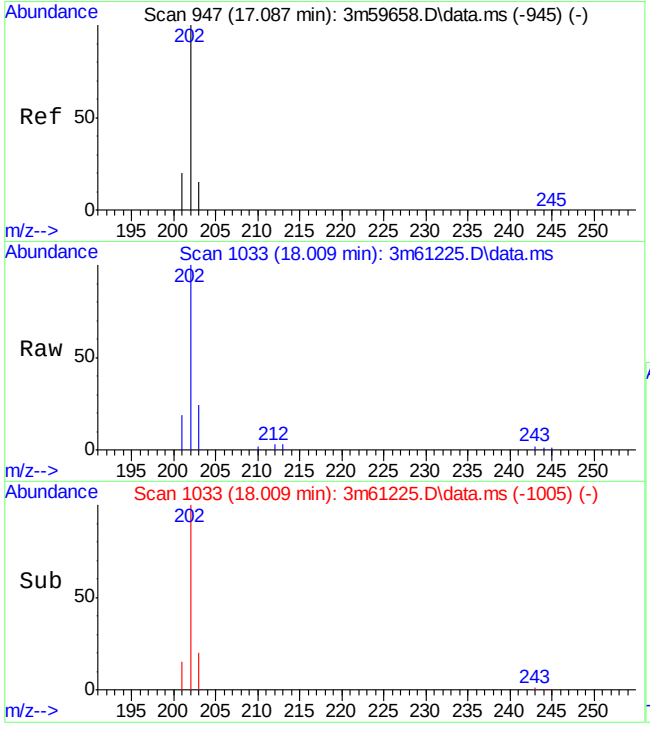


#26
Fluoranthene
Concen: 0.17 ppm
RT: 17.608 min Scan# 1007
Delta R.T. -0.061 min
Lab File: 3m61225.D
Acq: 11 May 2016 12:59 pm

Tgt Ion:202 Resp: 69552

Ion	Ratio	Lower	Upper
202	100		
203	14.5	0.0	45.6
201	17.6	0.0	47.6

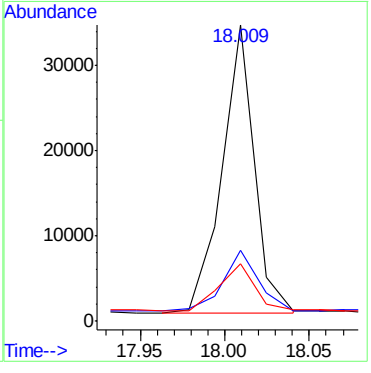




#27
Pyrene
Concen: 0.12 ppm
RT: 18.009 min Scan# 1033
Delta R.T. -0.061 min
Lab File: 3m61225.D
Acq: 11 May 2016 12:59 pm

Tgt Ion:202 Resp: 45163

Ion	Ratio	Lower	Upper
202	100		
203	21.1	0.0	52.9
201	16.2	0.0	44.8



Manual Integration Approval Summary

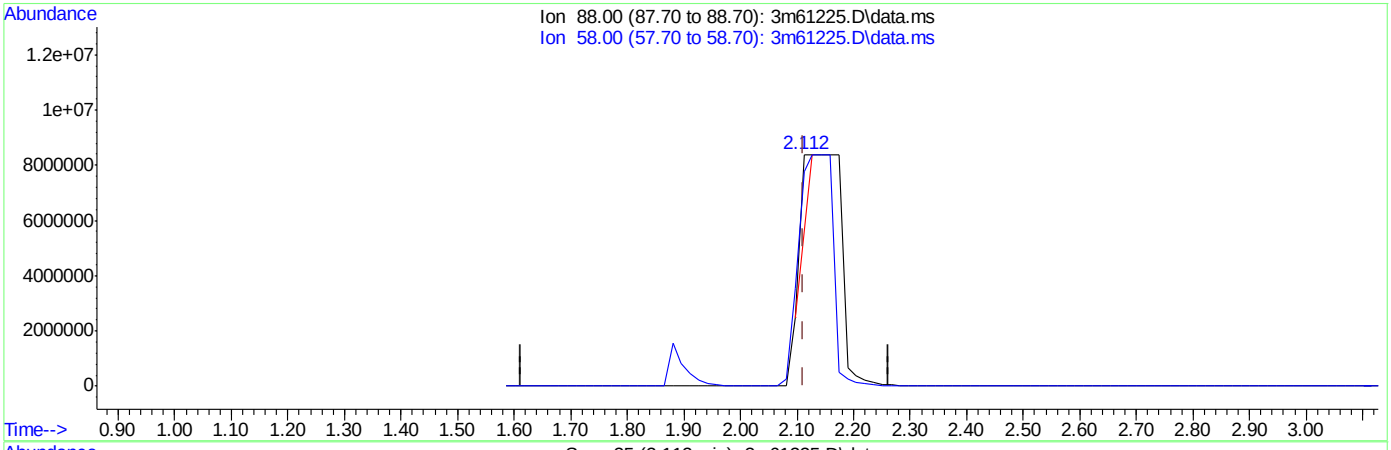
Sample Number:	JC19914-3	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M61225.D	**Analyst approved:**	05/11/16 15:04 Ashley Dye
Injection Time:	05/11/16 12:59	**Supervisor approved:**	05/11/16 15:27 Kristi Schollenberger

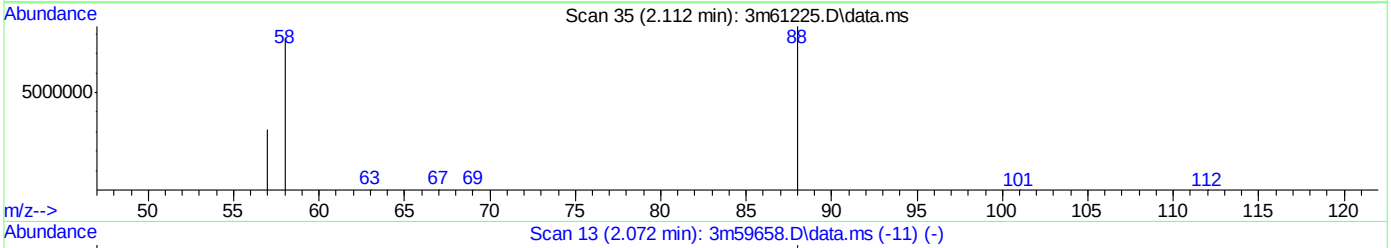
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.11	Poor instrument integration

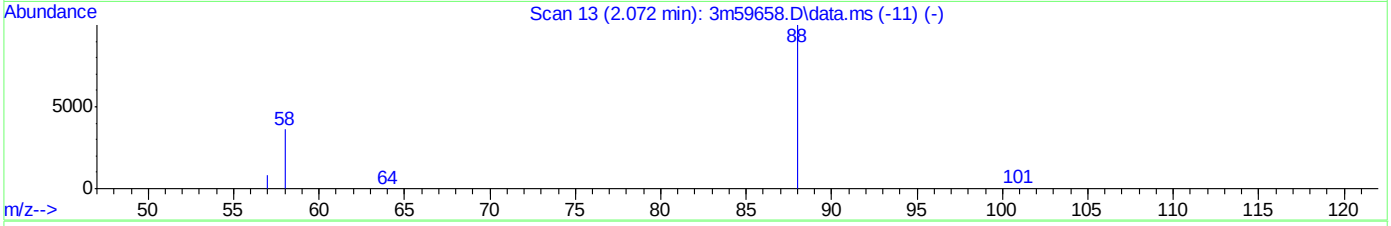
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61225.D
Acq On : 11 May 2016 12:59 pm
Operator : linseyk
Sample : jc19914-3
Misc : op93784a,e3m2879,900
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 11 15:01:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration







TIC: 3m61225.D\data.ms

(2) 1,4-dioxane (t)

2.112min (-0.000) 297.35ppm

response 7774599

Ion	Exp%	Act%
88.00	100	100
58.00	115.40	61.25#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61222.D
Acq On : 11 May 2016 11:22 am
Operator : linseyk
Sample : jc19914-4
Misc : op93784a,e3m2879,980
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 11 15:00:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.365	150	495192	4.00	ppm	-0.06
14) Fluorene-d10	13.373	176	715243	4.00	ppm	-0.08
21) Fluoranthene-d10	17.577	212	1200320	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	22.197	264	1011741	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	4.322	112	1371757	22.14	ppm	-0.10
Spiked Amount 50.000			Recovery = 44.28%			
4) Phenol-d5	5.940	99	1469027	14.33	ppm	-0.04
Spiked Amount 50.000			Recovery = 28.66%			
7) Nitrobenzene-d5	7.493	82	3099228	32.51	ppm	-0.08
Spiked Amount 50.000			Recovery = 65.02%			
15) 2-Fluorobiphenyl	11.052	172	7183373	36.55	ppm	-0.09
Spiked Amount 50.000			Recovery = 73.10%			
20) 2,4,6-Tribromophenol	13.920	330	872756	38.99	ppm	-0.05
Spiked Amount 50.000			Recovery = 77.98%			
28) Terphenyl-d14	18.411	244	7601747	43.66	ppm	-0.02
Spiked Amount 50.000			Recovery = 87.32%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	39060	1.53	ppm #	18

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

7.1.13

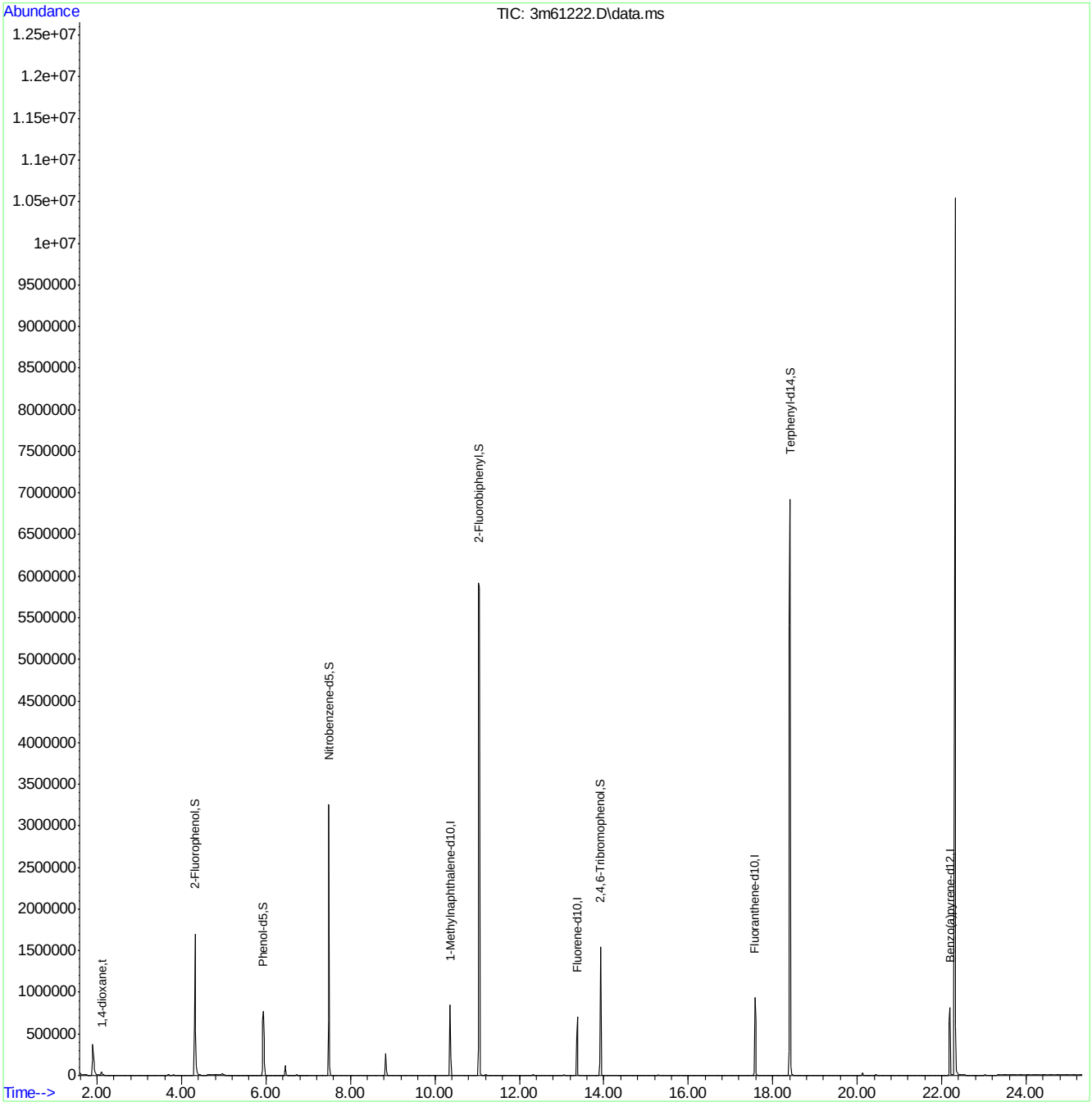
7

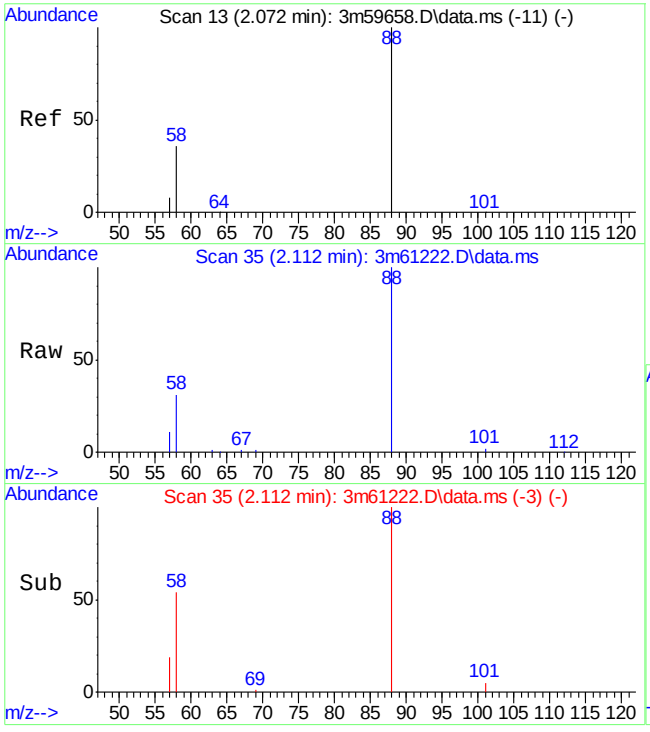
SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61222.D
Acq On : 11 May 2016 11:22 am
Operator : linseyk
Sample : jc19914-4
Misc : op93784a,e3m2879,980
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 11 15:00:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

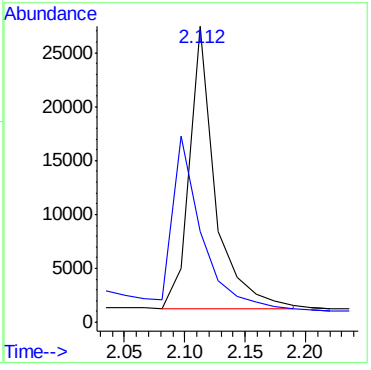




#2
1,4-dioxane
Concen: 1.53 ppm
RT: 2.112 min Scan# 35
Delta R.T. -0.000 min
Lab File: 3m61222.D
Acq: 11 May 2016 11:22 am

Tgt Ion: 88 Resp: 39060

Ion	Ratio	Lower	Upper
88	100		
58	26.3	95.4	135.4#



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61223.D
Acq On : 11 May 2016 11:54 am
Operator : linseyk
Sample : jc19914-5
Misc : op93784a,e3m2879,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 11 15:00:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.365	150	512608	4.00	ppm	-0.06
14) Fluorene-d10	13.373	176	723788	4.00	ppm	-0.08
21) Fluoranthene-d10	17.577	212	1175759	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	22.197	264	994459	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	4.322	112	1360788	21.22	ppm	-0.10
Spiked Amount 50.000			Recovery = 42.44%			
4) Phenol-d5	5.939	99	1431713	13.49	ppm	-0.04
Spiked Amount 50.000			Recovery = 26.98%			
7) Nitrobenzene-d5	7.493	82	3097874	31.40	ppm	-0.08
Spiked Amount 50.000			Recovery = 62.80%			
15) 2-Fluorobiphenyl	11.052	172	7168212	36.04	ppm	-0.09
Spiked Amount 50.000			Recovery = 72.08%			
20) 2,4,6-Tribromophenol	13.919	330	884648	39.05	ppm	-0.05
Spiked Amount 50.000			Recovery = 78.10%			
28) Terphenyl-d14	18.411	244	7181113	42.10	ppm	-0.02
Spiked Amount 50.000			Recovery = 84.20%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	40750	1.54	ppm	# 15

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

7.1.14

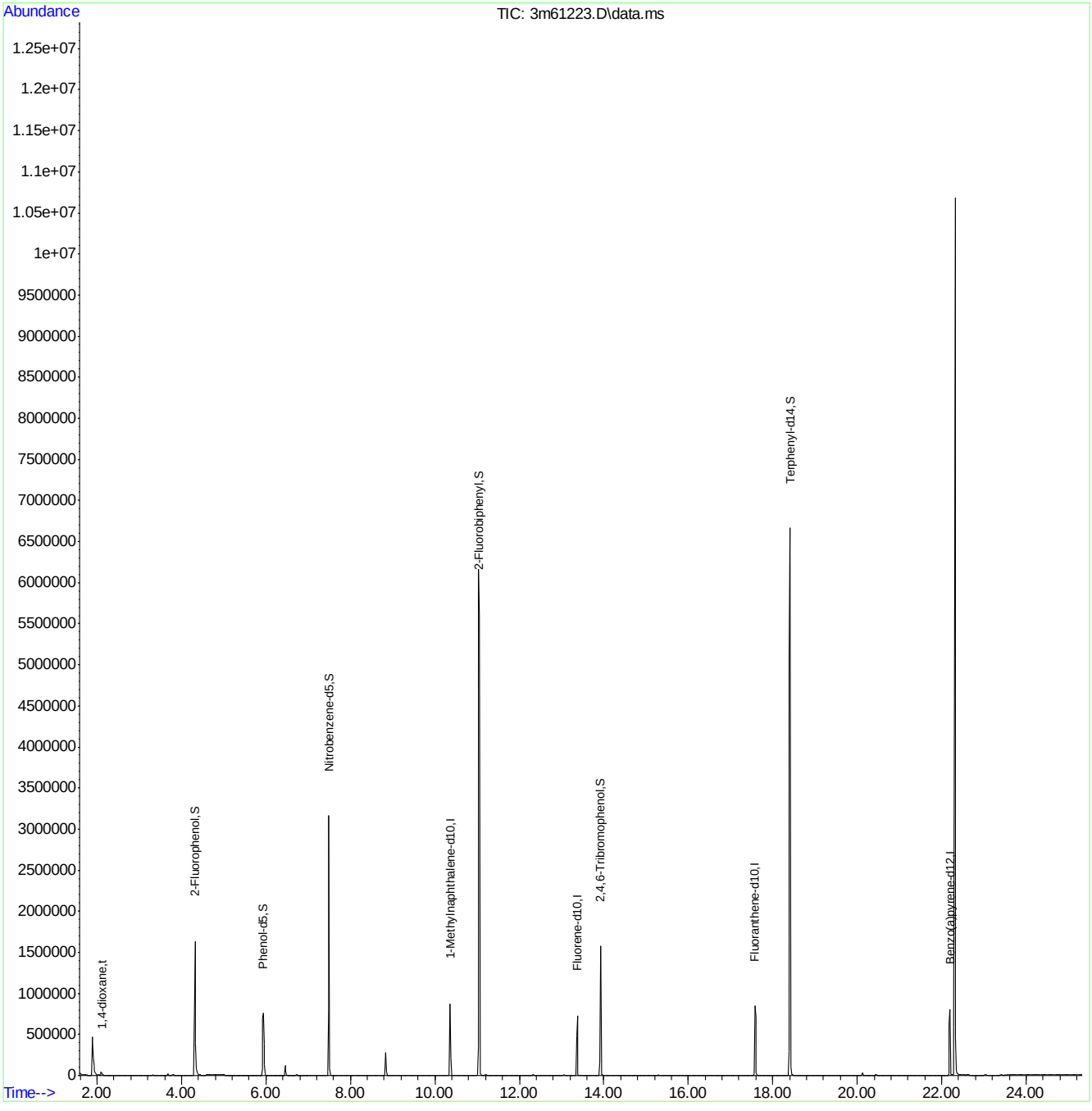
7

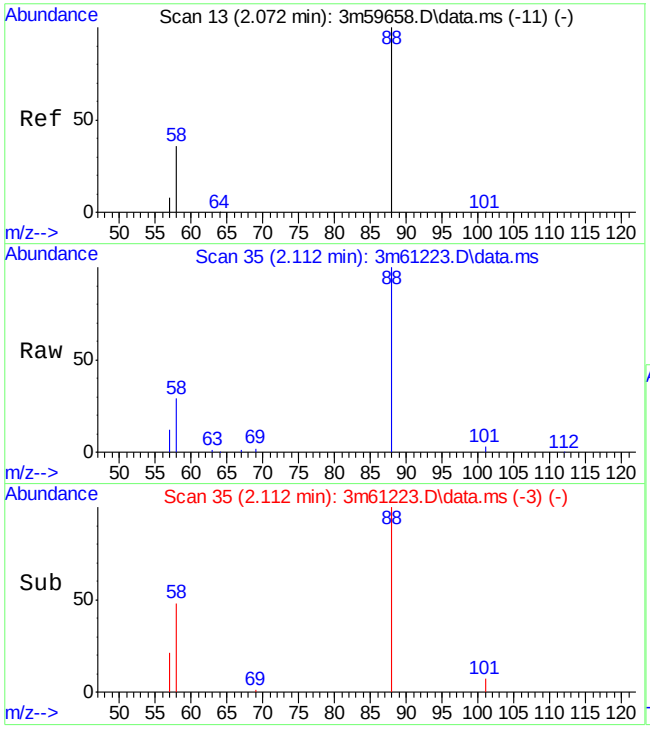
SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61223.D
Acq On : 11 May 2016 11:54 am
Operator : linseyk
Sample : jc19914-5
Misc : op93784a,e3m2879,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 11 15:00:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

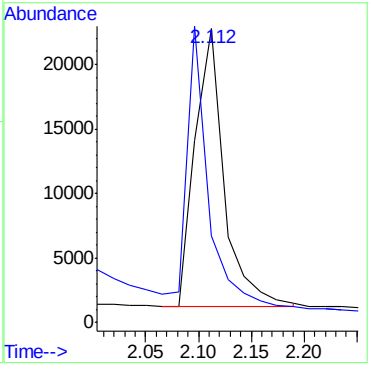




#2
1,4-dioxane
Concen: 1.54 ppm
RT: 2.112 min Scan# 35
Delta R.T. -0.000 min
Lab File: 3m61223.D
Acq: 11 May 2016 11:54 am

Tgt Ion: 88 Resp: 40750

Ion	Ratio	Lower	Upper
88	100		
58	23.2	95.4	135.4#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65316.D
Acq On : 17 May 2016 11:20 am
Operator : linseyk
Sample : jc19914-6
Misc : op93791a,e4m2922,30.8
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 11:14:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.463	152	225899	4.00	ppm	#-0.05
12) Fluorene-d10	13.441	176	405988	4.00	ppm	-0.05
22) Fluoranthene-d10	17.629	212	649754	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.229	264	440196	4.00	ppm	-0.04
35) 1-Methylnaphthalene-d10a	10.463	152	225899	4.00	ppm	#-0.05
38) Fluorene-d10a	13.441	176	405988	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.527	112	1073515	36.29	ppm	-0.11
Spiked Amount 50.000	Range 11 - 58		Recovery = 72.58%#			
3) Phenol-d5	6.108	99	1895170	38.10	ppm	-0.09
Spiked Amount 50.000			Recovery = 76.20%			
6) Nitrobenzene-d5	7.605	82	1477199	33.12	ppm	-0.10
Spiked Amount 50.000			Recovery = 66.24%			
11) 2-Fluorobiphenyl	11.131	172	3115243	47.78	ppm	-0.03
Spiked Amount 50.000			Recovery = 95.56%			
17) 2,4,6-Tribromophenol	13.990	330	996107	46.00	ppm	-0.04
Spiked Amount 50.000			Recovery = 92.00%			
25) Terphenyl-d14	18.438	244	3589758	40.89	ppm	-0.03
Spiked Amount 50.000			Recovery = 81.78%			
Target Compounds						Qvalue
36) 1,4-Dioxane	2.236	88	477752	32.55	ppm	99

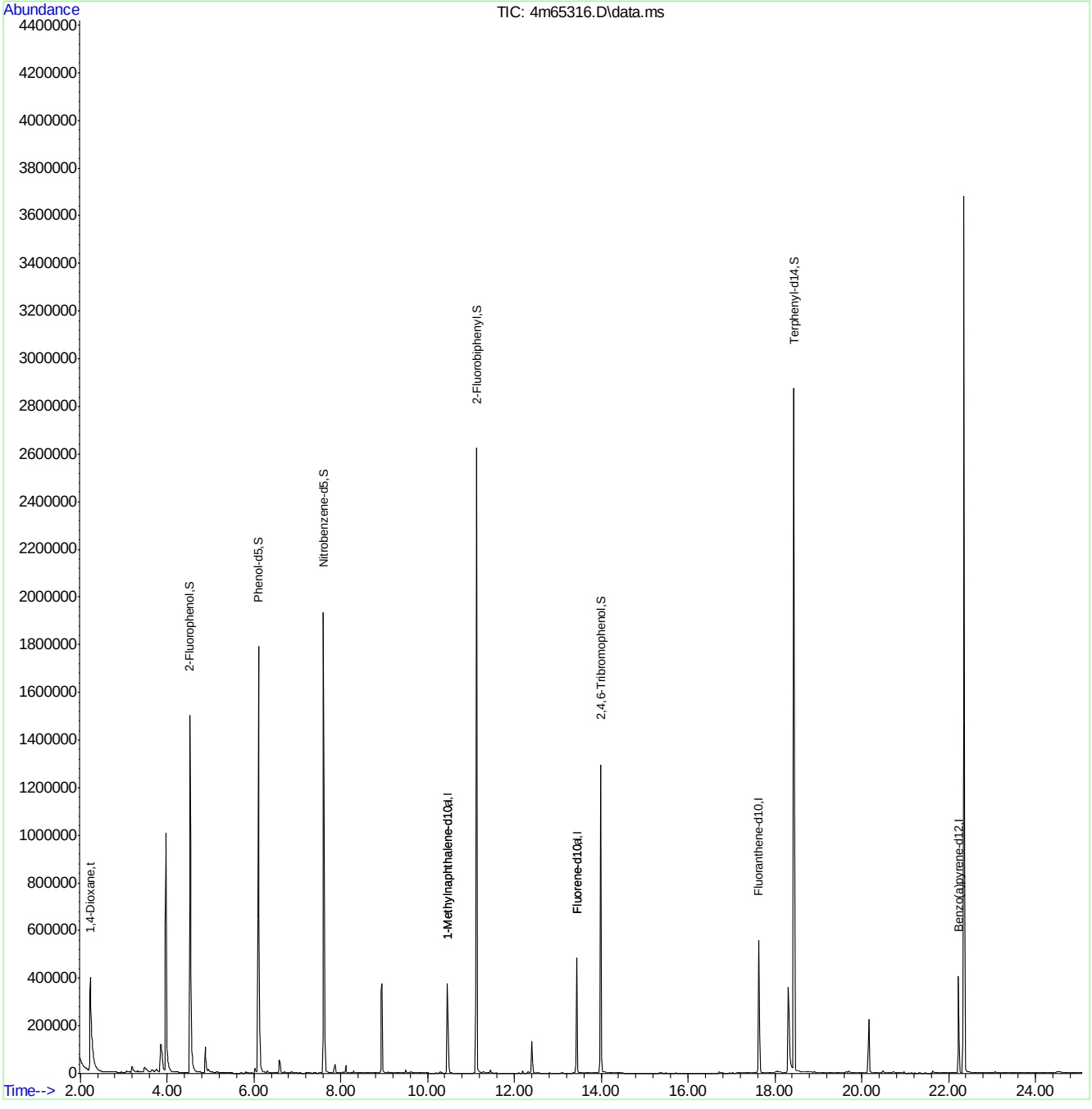
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

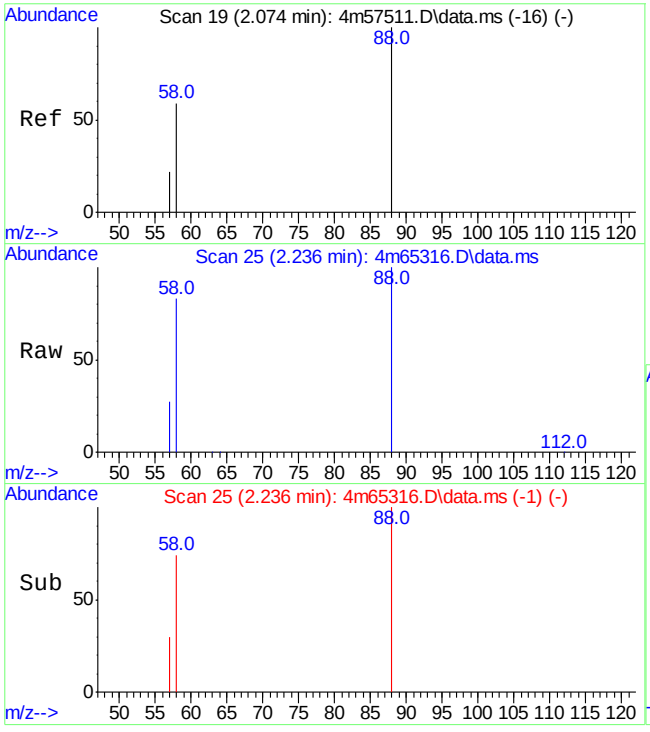
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65316.D
Acq On : 17 May 2016 11:20 am
Operator : linseyk
Sample : jc19914-6
Misc : op93791a,e4m2922,30.8
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 11:14:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration



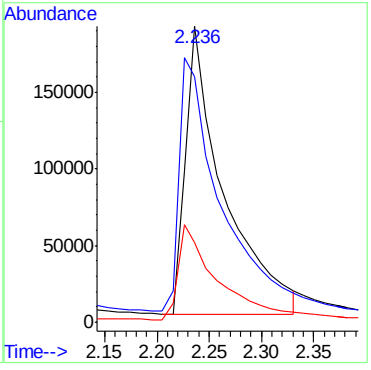
SGS ACCUTEST JC19914



#36
1,4-Dioxane
Concen: 32.55 ppm
RT: 2.236 min Scan# 25
Delta R.T. 0.000 min
Lab File: 4m65316.D
Acq: 17 May 2016 11:20 am

Tgt Ion: 88 Resp: 477752

Ion	Ratio	Lower	Upper
88	100		
58	81.7	63.0	103.0
57	26.5	6.8	46.8



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/24/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65317.D
Acq On : 17 May 2016 11:50 am
Operator : linseyk
Sample : jc19914-7
Misc : op93791a,e4m2922,30.6
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 11:17:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.487	152	161047	4.00	ppm	-0.02
12) Fluorene-d10	13.441	176	296943	4.00	ppm	#-0.05
22) Fluoranthene-d10	17.629	212	534906	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.229	264	409808	4.00	ppm	-0.04
35) 1-Methylnaphthalene-d10a	10.487	152	164834	4.00	ppm	-0.02
38) Fluorene-d10a	13.441	176	296943	4.00	ppm	#-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.527	112	841748	39.92	ppm	-0.11
Spiked Amount 50.000	Range 11 - 58		Recovery = 79.84%#			
3) Phenol-d5	6.108	99	1395809	39.36	ppm	-0.09
Spiked Amount 50.000			Recovery = 78.72%			
6) Nitrobenzene-d5	7.605	82	1366167	42.96	ppm	-0.10
Spiked Amount 50.000			Recovery = 85.92%			
11) 2-Fluorobiphenyl	11.132	172	2164659	46.57	ppm	-0.03
Spiked Amount 50.000			Recovery = 93.14%			
17) 2,4,6-Tribromophenol	13.991	330	577171	36.44	ppm	-0.04
Spiked Amount 50.000			Recovery = 72.88%			
25) Terphenyl-d14	18.438	244	2596492	35.93	ppm	-0.03
Spiked Amount 50.000			Recovery = 71.86%			
Target Compounds						Qvalue
16) Fluorene	13.489	166	94310	1.19	ppm	88
20) Phenanthrene	15.397	178	123993	1.16	ppm	98
21) Anthracene	15.490	178	29890	0.30	ppm	91
23) Fluoranthene	17.666	202	189190	1.31	ppm	95
24) Pyrene	18.043	202	137532	0.97	ppm	82
26) Benzo[a]anthracene	20.152	228	32320m	0.24	ppm	
29) Benzo[b]fluoranthene	21.816	252	32341m	0.22	ppm	
30) Benzo[k]fluoranthene	21.830	252	11729m	0.10	ppm	
31) Benzo[a]pyrene	22.257	252	17761	0.15	ppm	99
36) 1,4-Dioxane	2.237	88	314158	29.34	ppm	96

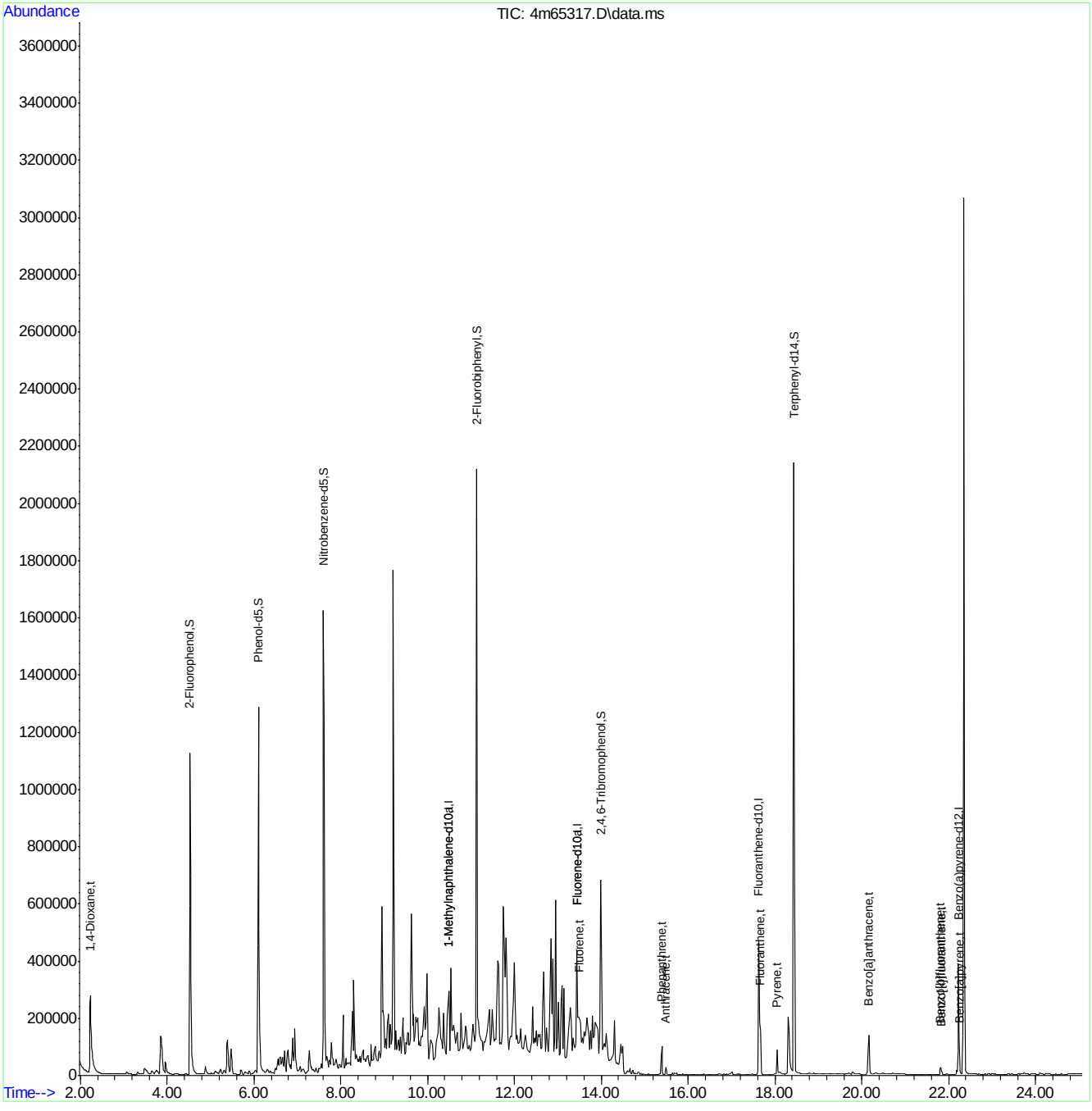
(#) = qualifier out of range (m) = manual integration (+) = signals summed

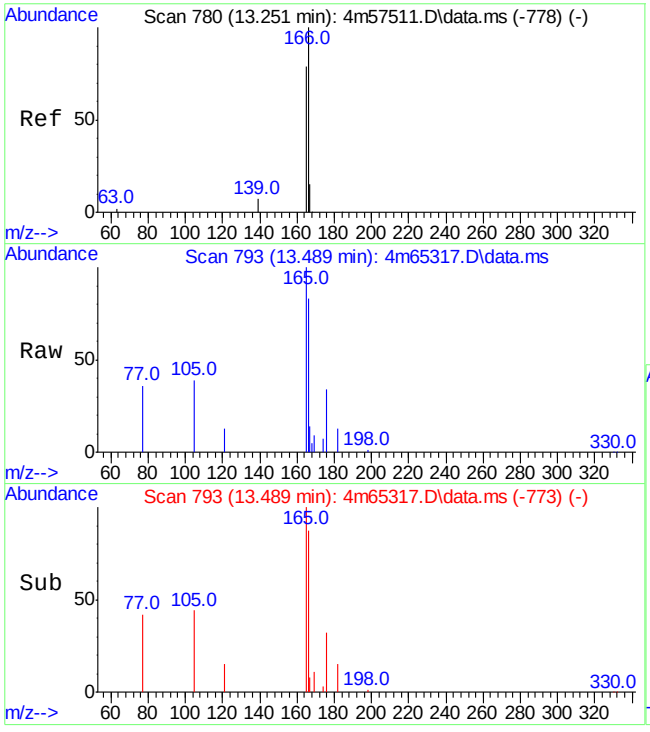
7.1.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65317.D
Acq On : 17 May 2016 11:50 am
Operator : linseyk
Sample : jc19914-7
Misc : op93791a,e4m2922,30.6
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 11:17:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration

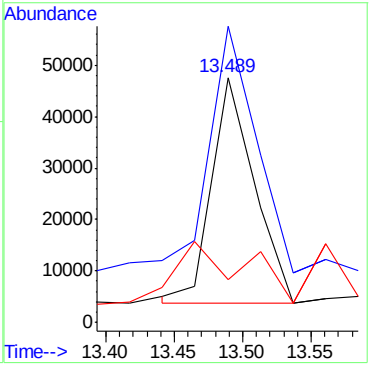


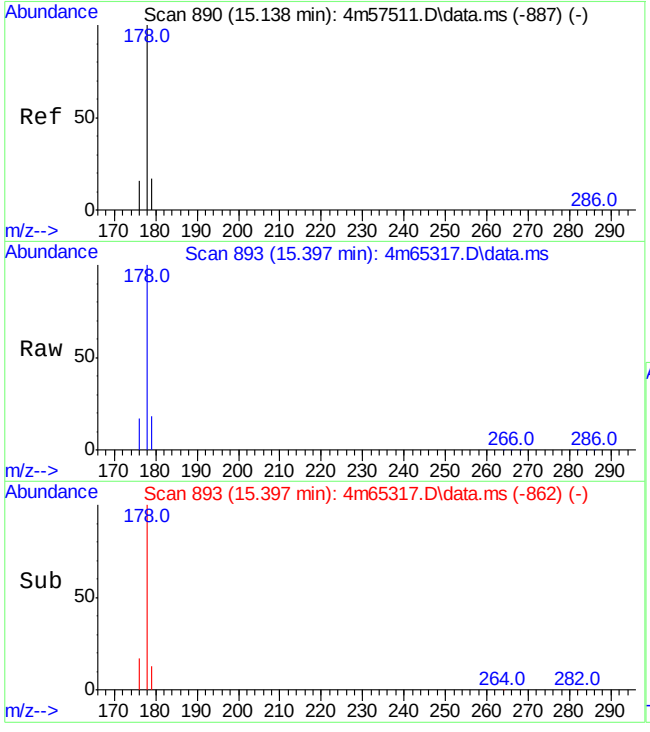


#16
Fluorene
Concen: 1.19 ppm
RT: 13.489 min Scan# 793
Delta R.T. -0.047 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:166 Resp: 94310

Ion	Ratio	Lower	Upper
166	100		
165	108.1	67.0	127.0
167	6.9	0.0	42.4

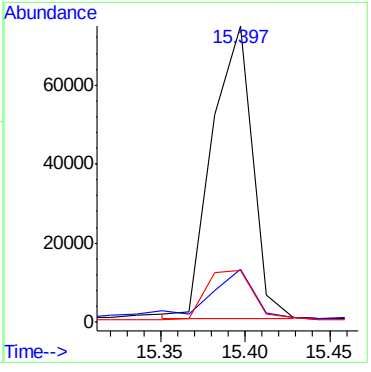


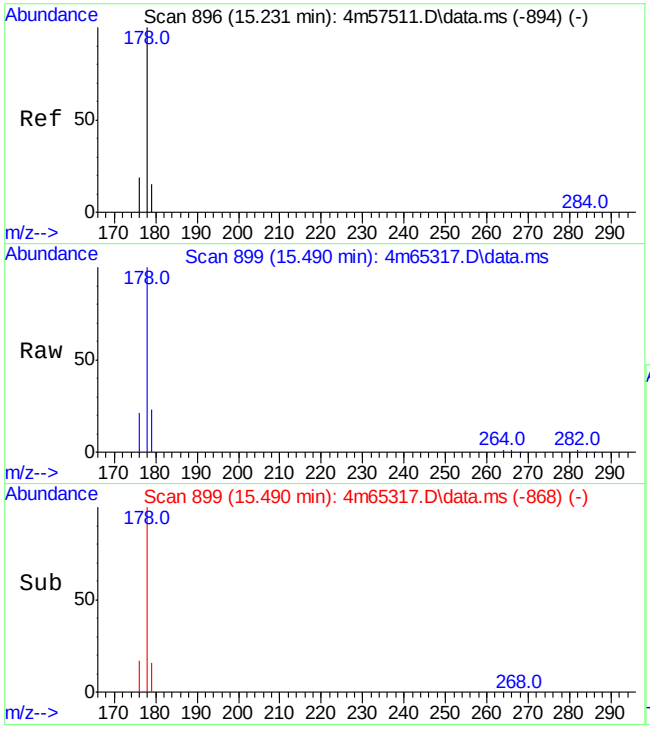


#20
Phenanthrene
Concen: 1.16 ppm
RT: 15.397 min Scan# 893
Delta R.T. -0.021 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:178 Resp: 123993

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	46.6
176	16.5	0.0	46.3

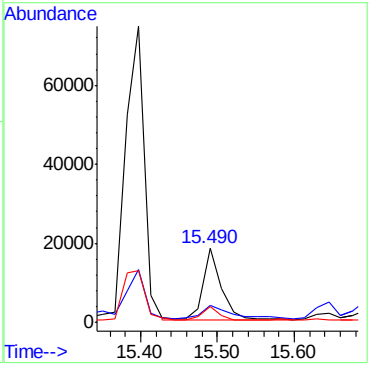


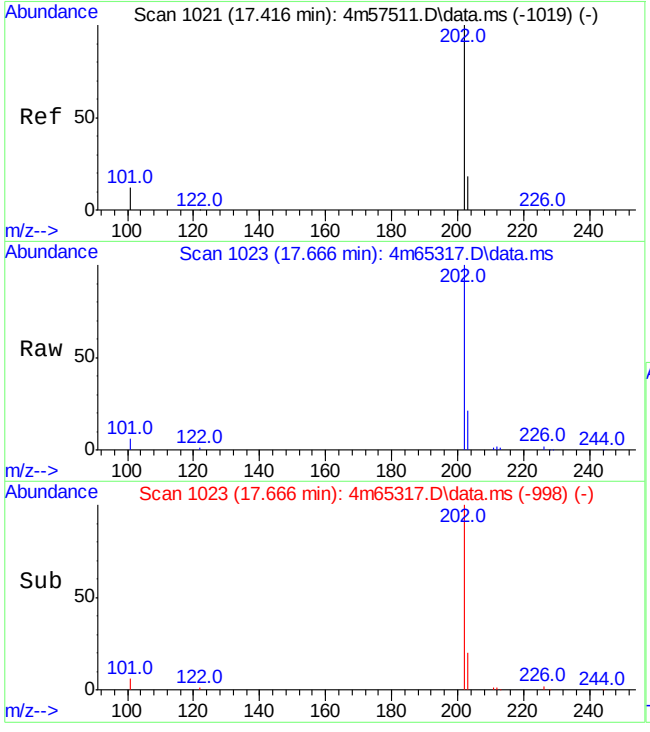


#21
Anthracene
Concen: 0.30 ppm
RT: 15.490 min Scan# 899
Delta R.T. -0.020 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:178 Resp: 29890

Ion	Ratio	Lower	Upper
178	100		
179	19.2	0.0	44.4
176	16.3	0.0	49.3

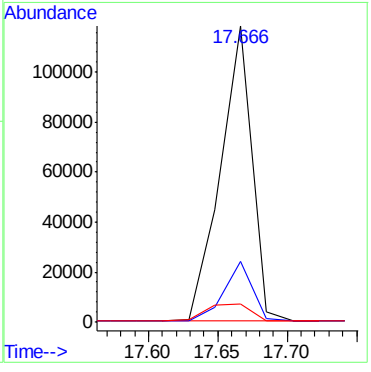


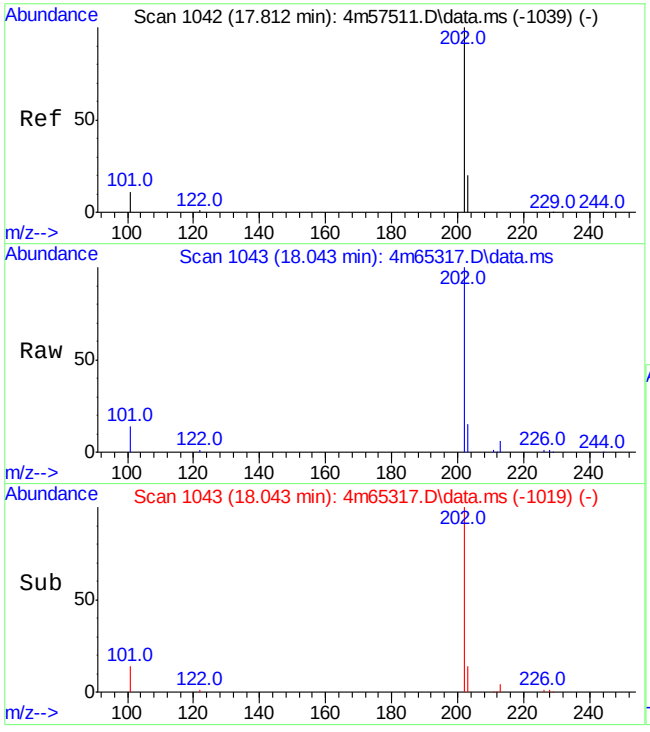


#23
Fluoranthene
Concen: 1.31 ppm
RT: 17.666 min Scan# 1023
Delta R.T. -0.037 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:202 Resp: 189190

Ion	Ratio	Lower	Upper
202	100		
203	20.3	0.0	48.5
101	5.8	0.0	37.9

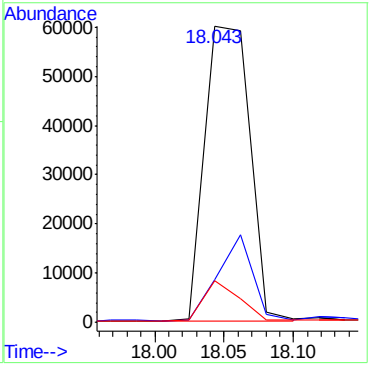


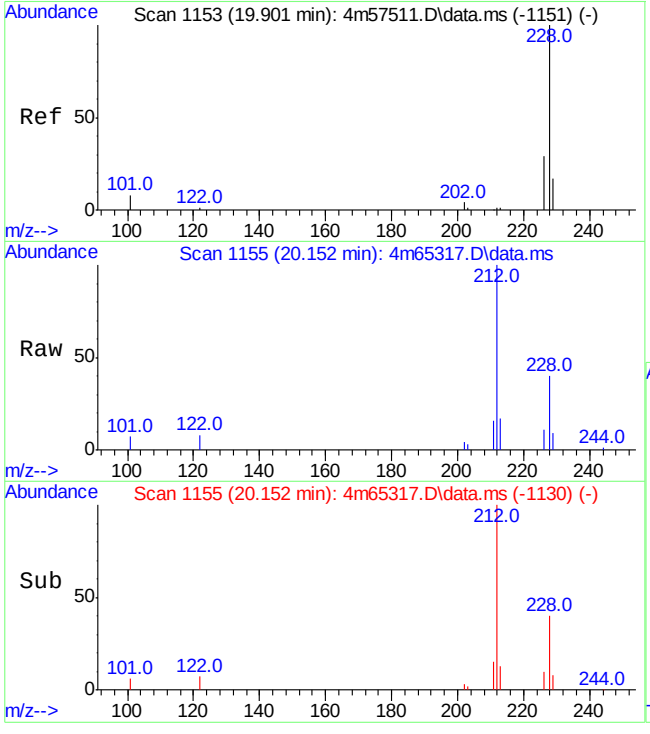


#24
Pyrene
Concen: 0.97 ppm
RT: 18.043 min Scan# 1043
Delta R.T. -0.051 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:202 Resp: 137532

Ion	Ratio	Lower	Upper
202	100		
203	14.0	0.0	52.2
101	13.8	0.0	37.1

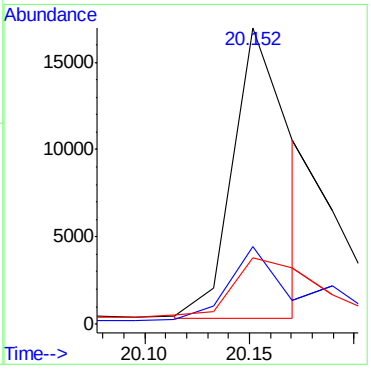


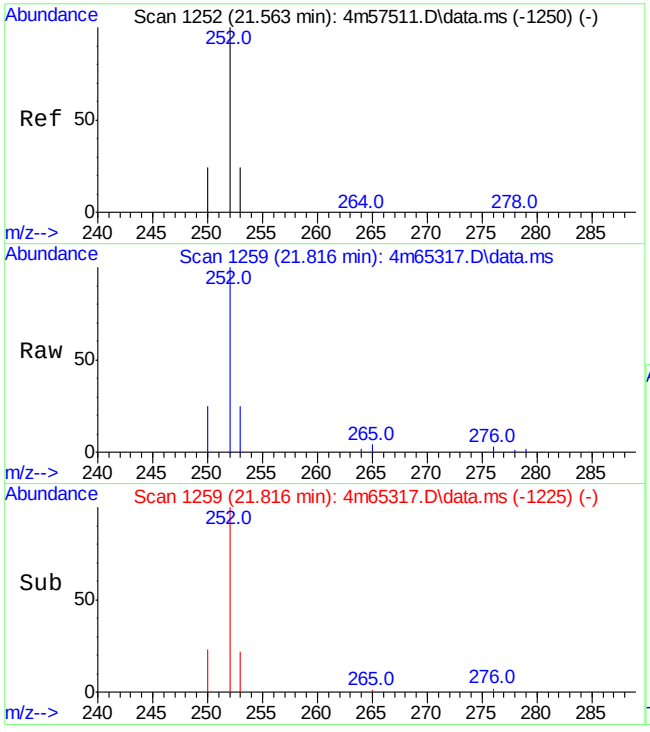


#26
Benzo[a]anthracene
Concen: 0.24 ppm m
RT: 20.152 min Scan# 1155
Delta R.T. -0.038 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:228 Resp: 32320

Ion	Ratio	Lower	Upper
228	100		
226	26.3	0.0	54.7
229	22.2	18.3	22.3

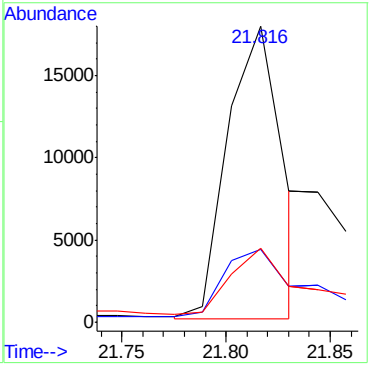


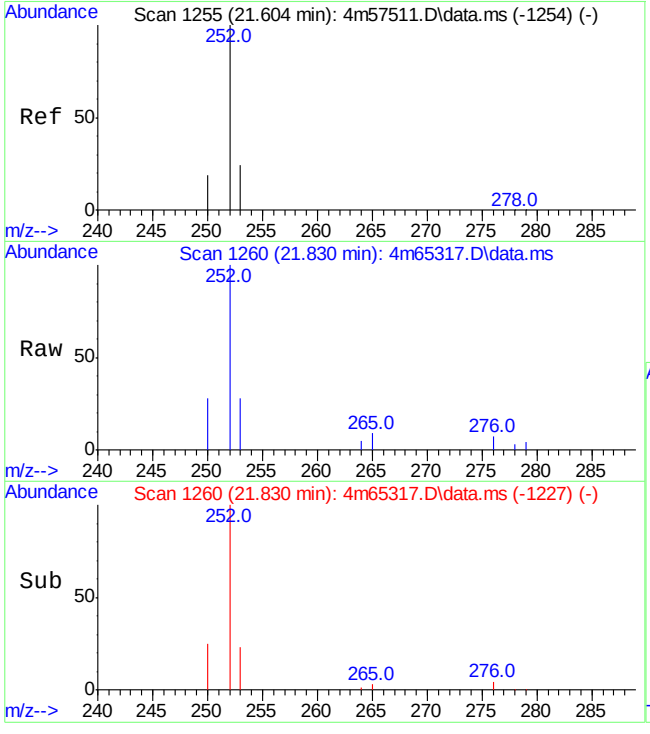


#29
Benzo[b]fluoranthene
Concen: 0.22 ppm m
RT: 21.816 min Scan# 1259
Delta R.T. -0.036 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:252 Resp: 32341

Ion	Ratio	Lower	Upper
252	100		
250	24.7	0.0	54.4
253	25.1	0.0	56.6

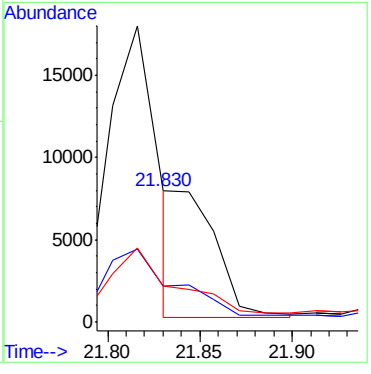


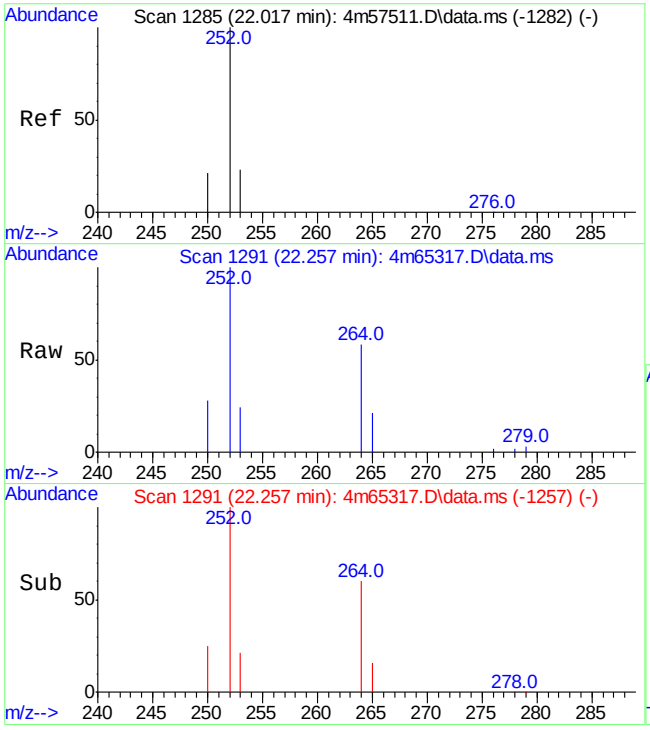


#30
Benzo[k]fluoranthene
Concen: 0.10 ppm m
RT: 21.830 min Scan# 1260
Delta R.T. -0.050 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:252 Resp: 11729

Ion	Ratio	Lower	Upper
252	100		
250	27.5	0.0	58.6
253	27.9	0.0	54.5

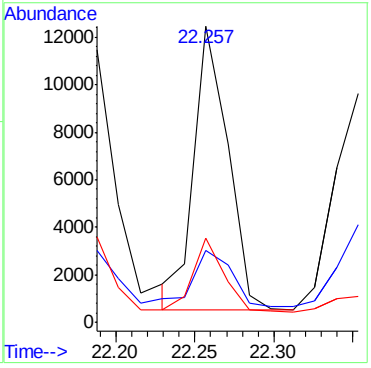


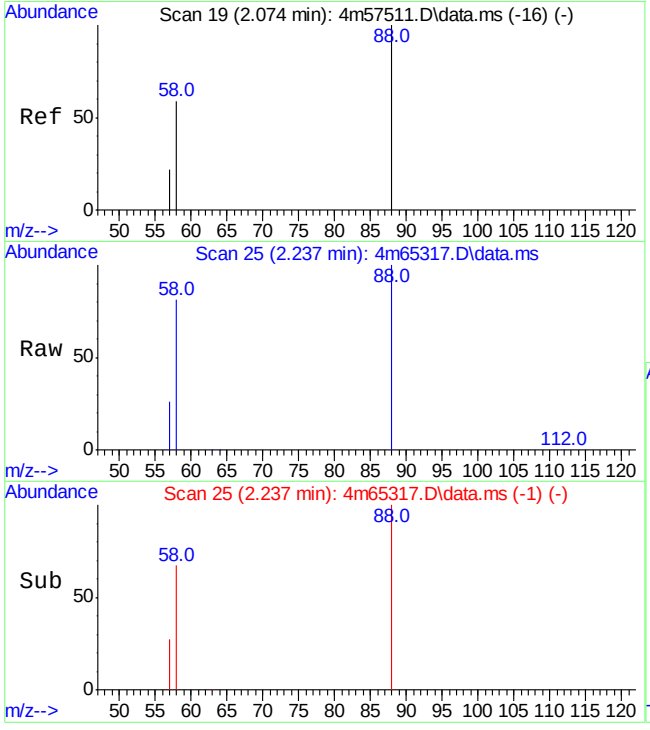


#31
Benzo[a]pyrene
Concen: 0.15 ppm
RT: 22.257 min Scan# 1291
Delta R.T. -0.033 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion:252 Resp: 17761

Ion	Ratio	Lower	Upper
252	100		
253	19.0	0.0	48.6
250	26.7	0.0	57.0

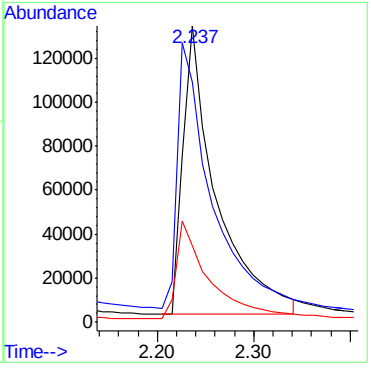




#36
1,4-Dioxane
Concen: 29.34 ppm
RT: 2.237 min Scan# 25
Delta R.T. 0.001 min
Lab File: 4m65317.D
Acq: 17 May 2016 11:50 am

Tgt Ion: 88 Resp: 314158

Ion	Ratio	Lower	Upper
88	100		
58	79.0	63.0	103.0
57	25.3	6.8	46.8



Manual Integration Approval Summary

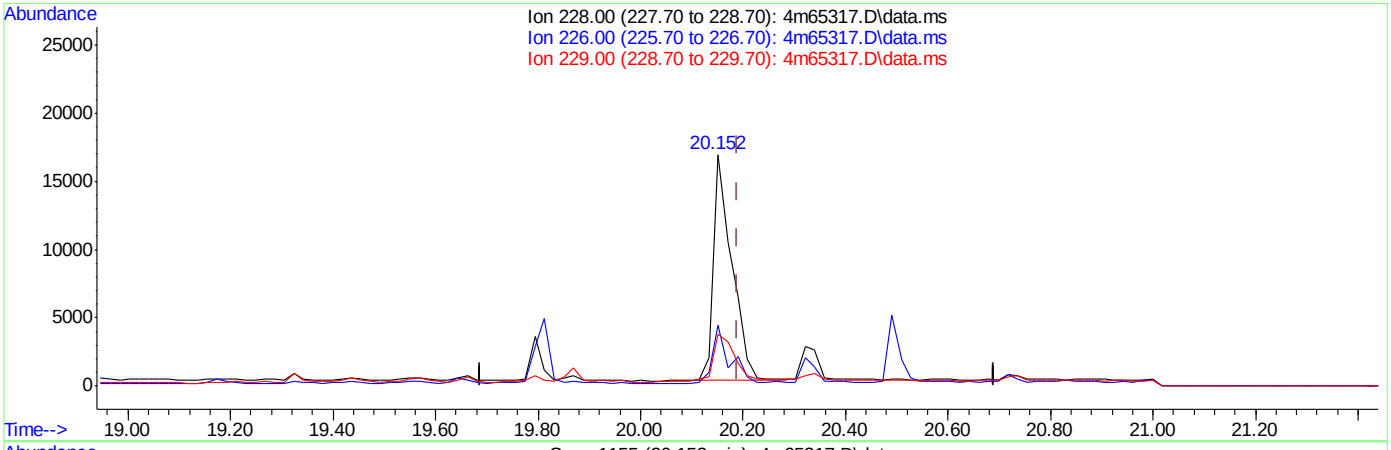
Sample Number:	JC19914-7	**Method:**	SW846 8270D BY SIM
Lab FileID:	4M65317.D	**Analyst approved:**	05/18/16 11:18 Linsey Kirschmann
Injection Time:	05/17/16 11:50	**Supervisor approved:**	05/24/16 17:31 Nina Pandya

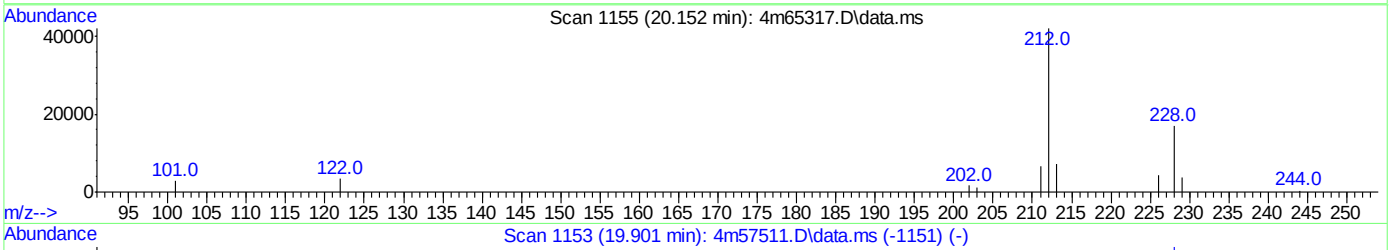
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(a)anthracene	56-55-3		20.15	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		21.82	Poor instrument integration
Benzo(k)fluoranthene	207-08-9		21.83	Poor instrument integration

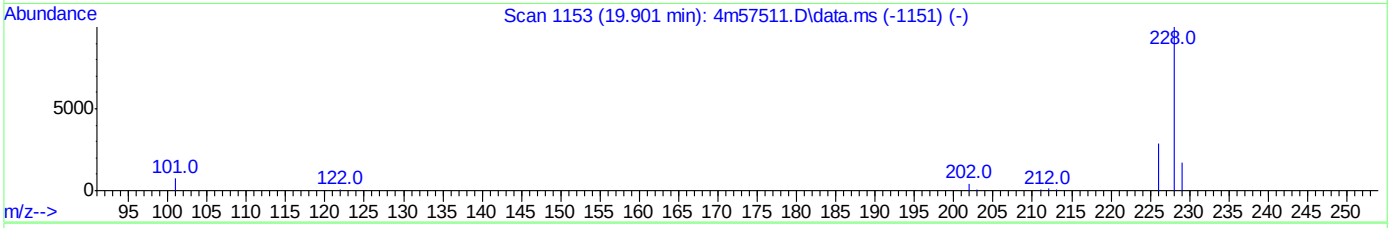
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65317.D
Acq On : 17 May 2016 11:50 am
Operator : linseyk
Sample : jc19914-7
Misc : op93791a,e4m2922,30.6
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 11:15:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration







TIC: 4m65317.D\data.ms

(26) Benzo[a]anthracene (t)

20.152min (-0.038) 0.31ppm

response 41131

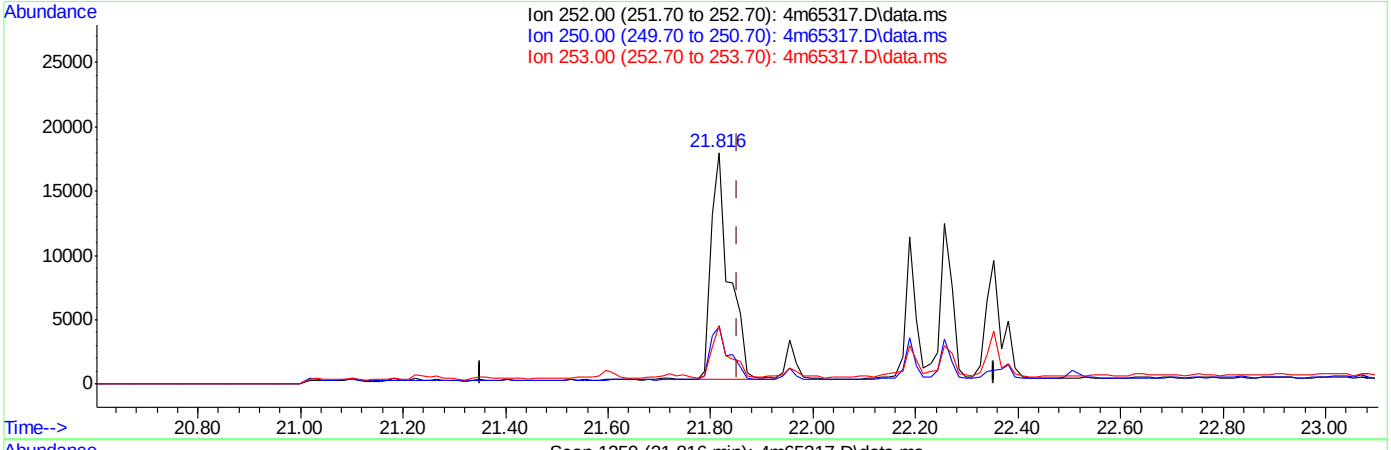
Ion	Exp%	Act%
228.00	100	100
226.00	24.70	25.44
229.00	20.30	19.91
0.00	0.00	0.00

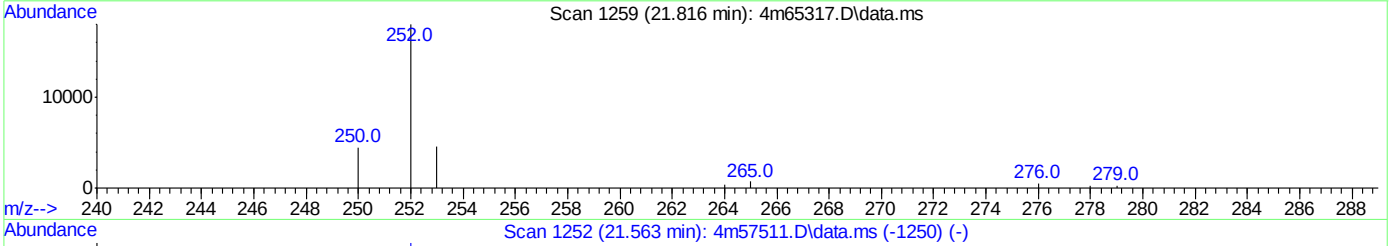
SGS ACCUTEST JC19914

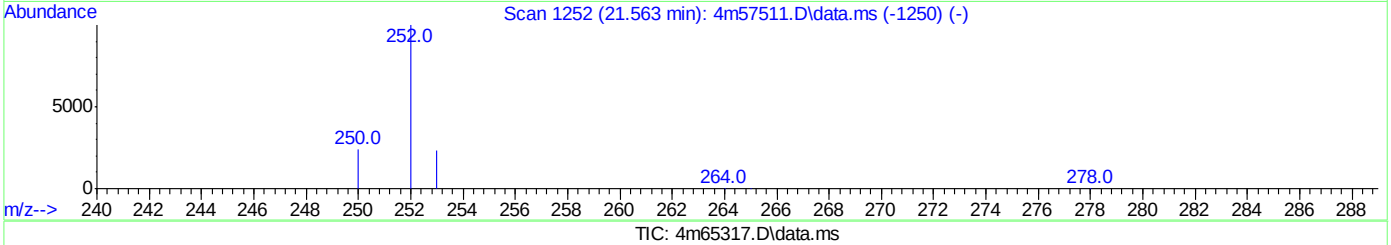
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65317.D
Acq On : 17 May 2016 11:50 am
Operator : linseyk
Sample : jc19914-7
Misc : op93791a,e4m2922,30.6
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 11:15:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration







TIC: 4m65317.D\data.ms

(29) Benzo[b]fluoranthene (t)

21.816min (-0.036) 0.30ppm

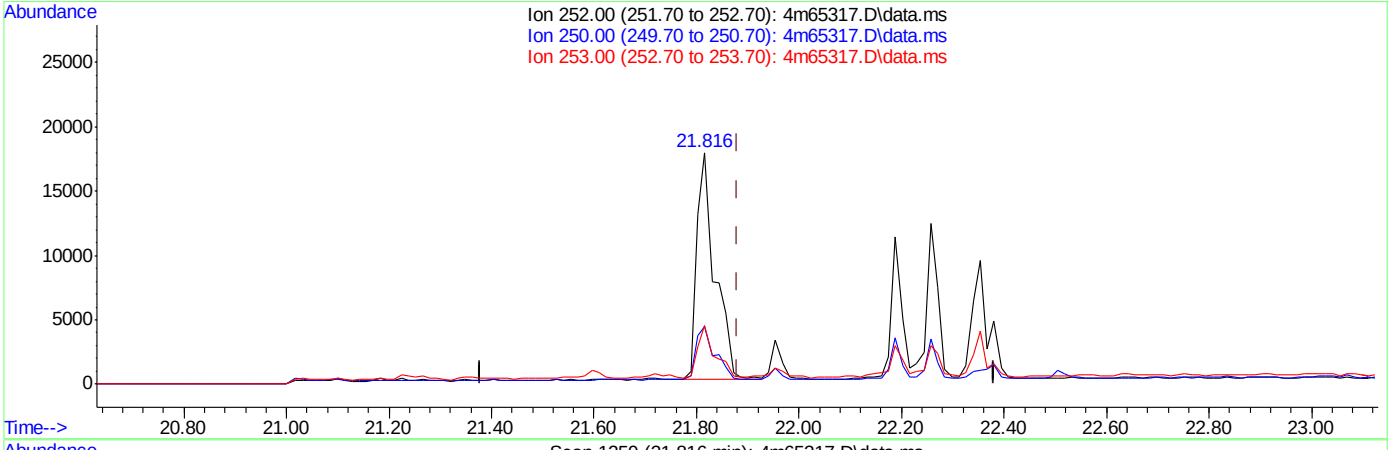
response 43570

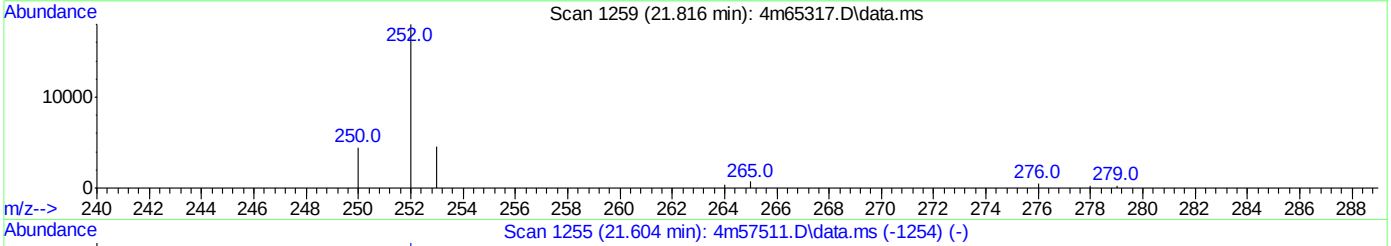
Ion	Exp%	Act%
252.00	100	100
250.00	24.40	23.18
253.00	26.60	22.60
0.00	0.00	0.00

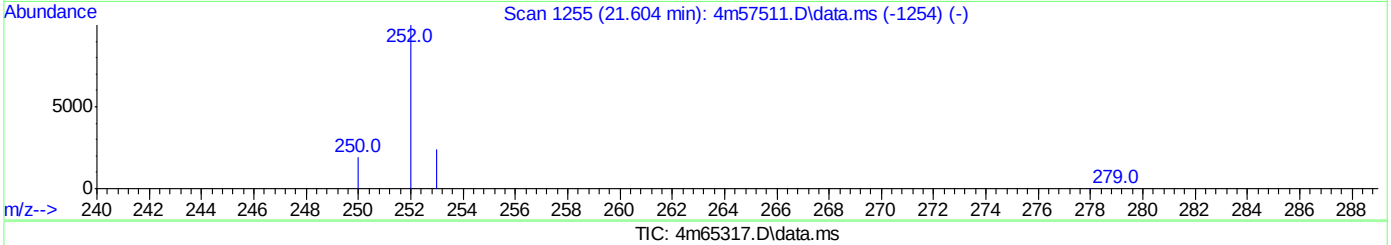
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65317.D
Acq On : 17 May 2016 11:50 am
Operator : linseyk
Sample : jc19914-7
Misc : op93791a,e4m2922,30.6
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 11:15:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration







TIC: 4m65317.D\data.ms

(30) Benzo[k]fluoranthene (t)

21.816min (-0.064) 0.35ppm

response 43570

Ion	Exp%	Act%
252.00	100	100
250.00	28.60	23.18
253.00	24.50	22.60
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124310.D
Acq On : 10 May 2016 11:04 pm
Operator : juliusj
Sample : op93784-mb1
Misc : op93784,em5259,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 11 09:03:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.691	152	330381	40.00	ppm	-0.02
24) Naphthalene-d8	5.824	136	1304977	40.00	ppm	-0.02
47) Acenaphthene-d10	8.163	164	851034	40.00	ppm	-0.03
69) Phenanthrene-d10	10.791	188	1559644	40.00	ppm	-0.03
83) Chrysene-d12	15.972	240	1783905	40.00	ppm	-0.04
92) Perylene-d12	18.610	264	1779405	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.691	152	330381	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.163	164	851034	40.00	ppm	-0.03
107) Chrysene-d12a	15.972	240	1783905	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.791	188	1559644	40.00	ppm	-0.03
112) Naphthalene-d8a	5.824	136	1304977	40.00	ppm	-0.02
114) Chrysene-d12b	15.972	240	1783905	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.751	112	275997	27.32	ppm	0.00
Spiked Amount 50.000			Recovery = 54.64%			
8) Phenol-d5	4.472	99	227597	17.94	ppm	0.00
Spiked Amount 50.000			Recovery = 35.88%			
25) Nitrobenzene-d5	5.151	82	476954	41.10	ppm	-0.02
Spiked Amount 50.000			Recovery = 82.20%			
51) 2-Fluorobiphenyl	7.148	172	1112451	39.81	ppm	-0.02
Spiked Amount 50.000			Recovery = 79.62%			
73) 2,4,6-Tribromophenol	9.536	330	275607	51.12	ppm	-0.02
Spiked Amount 50.000			Recovery = 102.24%			
86) Terphenyl-d14	13.958	244	1666426	41.64	ppm	-0.04
Spiked Amount 50.000			Recovery = 83.28%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

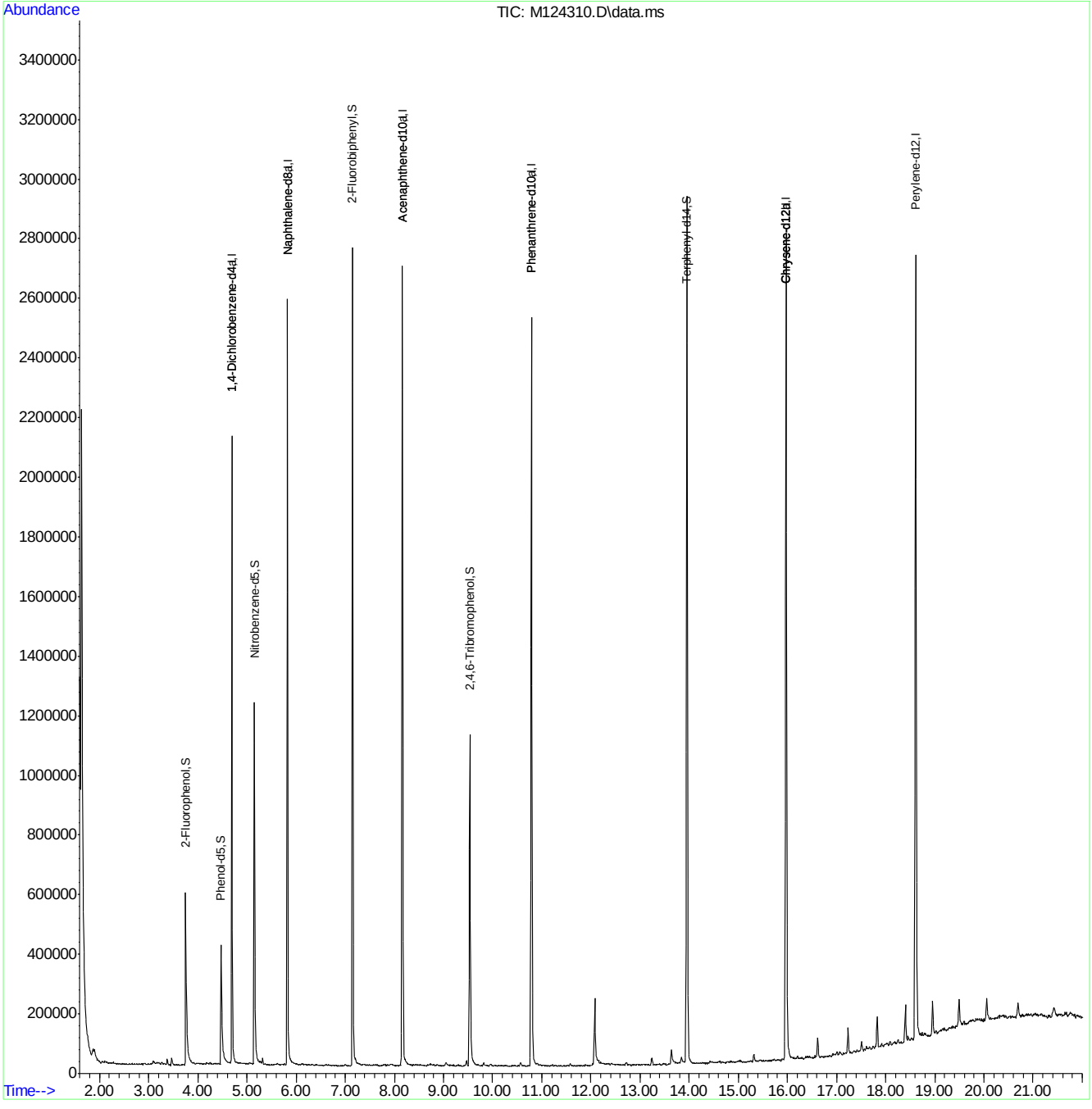
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124310.D
Acq On : 10 May 2016 11:04 pm
Operator : juliusj
Sample : op93784-mb1
Misc : op93784,em5259,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 11 09:03:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:03:56 2016 MSM

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25845.D
Acq On : 11 May 2016 1:54 pm
Operator : ariellec
Sample : op93791-mb1
Misc : op93791,e6p1206,30.0
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 11 14:17:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	417766	40.00	ppm	0.00
24) Naphthalene-d8	5.705	136	1707600	40.00	ppm	0.00
47) Acenaphthene-d10	7.754	164	994774	40.00	ppm	0.00
69) Phenanthrene-d10	9.925	188	1631514	40.00	ppm	0.00
83) Chrysene-d12	14.103	240	1603126	40.00	ppm	0.00
92) Perylene-d12	16.221	264	1499752	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.625	152	417766	40.00	ppm	0.00
104) Acenaphthene-d10a	7.754	164	994774	40.00	ppm	0.00
106) Phenanthrene-d10a	9.925	188	1631514	40.00	ppm	0.00
108) Chrysene-d12a	14.103	240	1603126	40.00	ppm	0.00
110) Naphthalene-d8a	5.705	136	1707600	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.684	112	524881	35.42	ppm	0.03
Spiked Amount 50.000			Recovery = 70.84%			
8) Phenol-d5	4.400	99	675362	34.67	ppm	0.00
Spiked Amount 50.000			Recovery = 69.34%			
25) Nitrobenzene-d5	5.069	82	673344	36.01	ppm	0.00
Spiked Amount 50.000			Recovery = 72.02%			
51) 2-Fluorobiphenyl	6.887	172	1277975	40.00	ppm	0.00
Spiked Amount 50.000			Recovery = 80.00%			
73) 2,4,6-Tribromophenol	8.893	330	191944	50.40	ppm	0.00
Spiked Amount 50.000			Recovery = 100.80%			
85) Terphenyl-d14	12.471	244	1354305	44.96	ppm	0.00
Spiked Amount 50.000			Recovery = 89.92%			

Target Compounds Qvalue

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

7.2.2

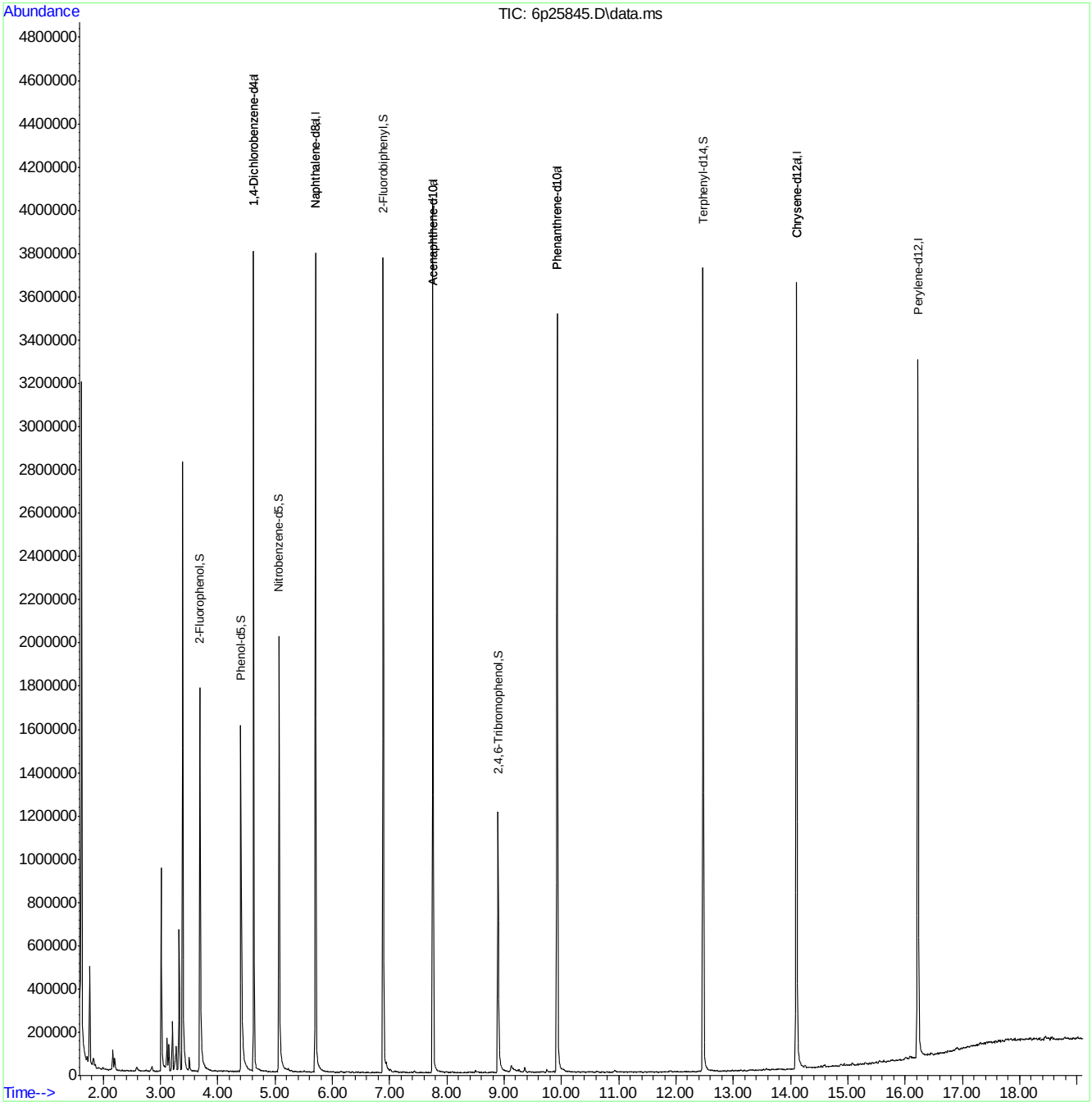
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25845.D
Acq On : 11 May 2016 1:54 pm
Operator : ariellec
Sample : op93791-mb1
Misc : op93791,e6p1206,30.0
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 11 14:17:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110617.D
Acq On : 12 May 2016 12:13 pm
Operator : ariellec
Sample : OP93791-MB1
Misc : op93791,ez5525
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 15:43:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 15:43:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.192	152	205251	40.00	ppm	-0.01
24) Naphthalene-d8	5.116	136	786162	40.00	ppm	-0.01
47) Acenaphthene-d10	6.387	164	475562	40.00	ppm	-0.01
69) Phenanthrene-d10	7.979	188	803198	40.00	ppm	-0.10
83) Chrysene-d12	12.873	240	827113	40.00	ppm	-0.11
92) Perylene-d12	15.854	264	783769	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4a	4.192	152	205251	40.00	ppm	-0.01
104) Phenanthrene-d10a	7.979	188	803198	40.00	ppm	-0.02
106) Chrysene-d12a	12.873	240	827113	40.00	ppm	-0.03
108) Acenaphthene-d10a	6.387	164	475562	40.00	ppm	-0.01
110) Naphthalene-d8a	5.116	136	786162	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.278	112	246604	34.79	ppm	0.00
Spiked Amount 50.000			Recovery = 69.58%			
8) Phenol-d5	4.037	99	293921	35.39	ppm	0.00
Spiked Amount 50.000			Recovery = 70.78%			
25) Nitrobenzene-d5	4.624	82	312035	49.18	ppm	0.00
Spiked Amount 50.000			Recovery = 98.36%			
51) 2-Fluorobiphenyl	5.880	172	660554	43.34	ppm	0.00
Spiked Amount 50.000			Recovery = 86.68%			
73) 2,4,6-Tribromophenol	7.151	330	101972	41.31	ppm	-0.07
Spiked Amount 50.000			Recovery = 82.62%			
86) Terphenyl-d14	10.752	244	710730	40.90	ppm	0.02
Spiked Amount 50.000			Recovery = 81.80%			

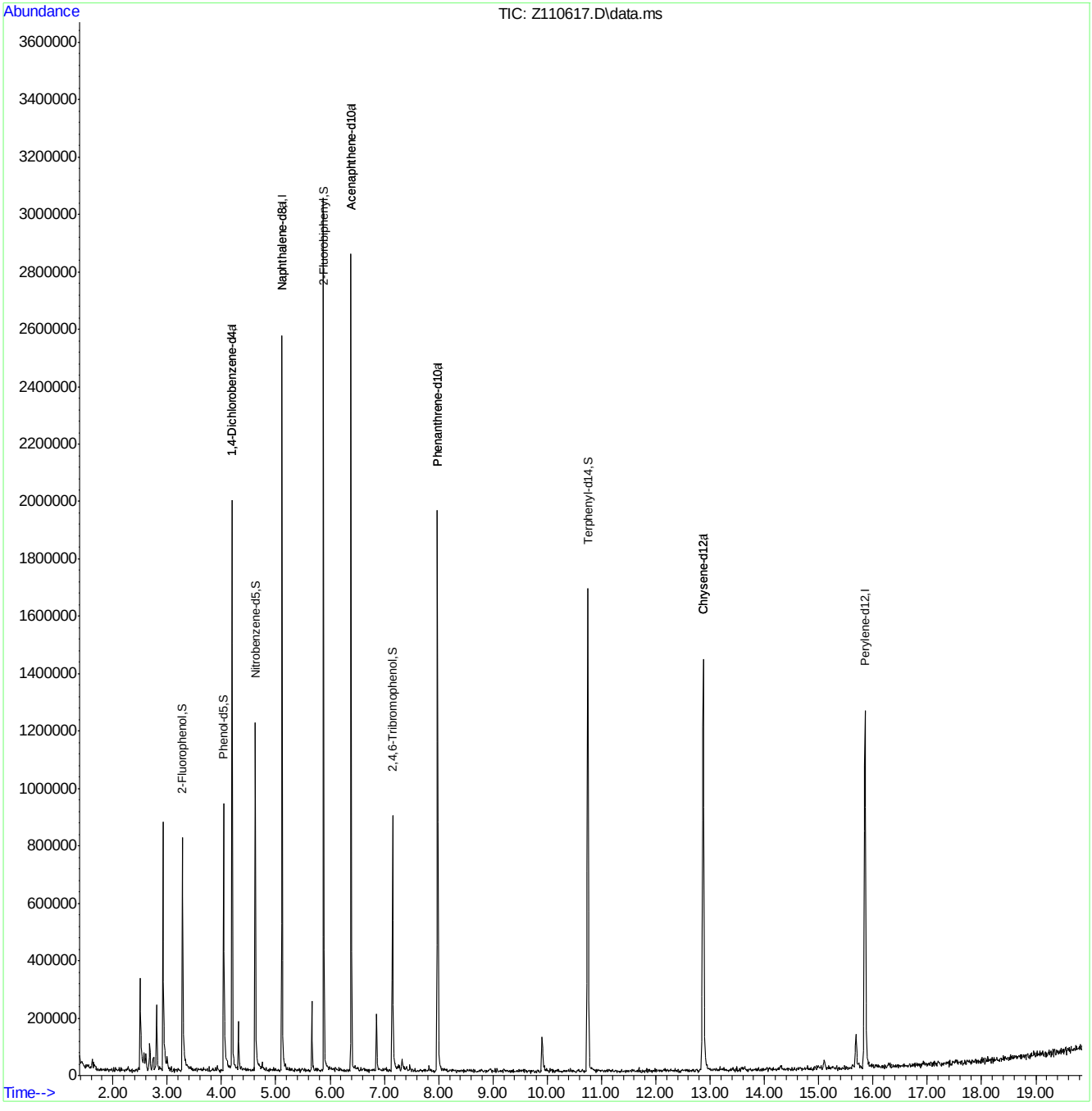
Target Compounds Qvalue

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

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110617.D
Acq On : 12 May 2016 12:13 pm
Operator : ariellec
Sample : OP93791-MB1
Misc : op93791,ez5525
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 15:43:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 15:43:00 2016
Response via : Initial Calibration



MZ5485.M Thu May 12 15:49:33 2016 RTE

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124423.D
Acq On : 13 May 2016 10:41 am
Operator : ashleyd
Sample : op93791-mb1
Misc : op93791,em5264,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 14:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	489615	40.00	ppm	-0.02
24) Naphthalene-d8	5.776	136	1826350	40.00	ppm	-0.01
47) Acenaphthene-d10	8.099	164	1112858	40.00	ppm	-0.02
69) Phenanthrene-d10	10.716	188	1944526	40.00	ppm	-0.02
83) Chrysene-d12	15.892	240	2137552	40.00	ppm	-0.02
92) Perylene-d12	18.525	264	2083475	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.649	152	489615	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.099	164	1112858	40.00	ppm	-0.02
107) Chrysene-d12a	15.892	240	2141130	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.716	188	1944526	40.00	ppm	-0.02
112) Naphthalene-d8a	5.776	136	1826697	40.00	ppm	-0.01
114) Chrysene-d12b	15.892	240	2137552	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.709	112	635201	42.42	ppm	0.00
Spiked Amount 50.000			Recovery = 84.84%			
8) Phenol-d5	4.425	99	771944	41.05	ppm	0.00
Spiked Amount 50.000			Recovery = 82.10%			
25) Nitrobenzene-d5	5.108	82	676361	41.64	ppm	0.00
Spiked Amount 50.000			Recovery = 83.28%			
51) 2-Fluorobiphenyl	7.090	172	1613519	44.15	ppm	-0.01
Spiked Amount 50.000			Recovery = 88.30%			
73) 2,4,6-Tribromophenol	9.467	330	334450	49.76	ppm	-0.02
Spiked Amount 50.000			Recovery = 99.52%			
86) Terphenyl-d14	13.878	244	1987643	41.45	ppm	-0.03
Spiked Amount 50.000			Recovery = 82.90%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds Qvalue

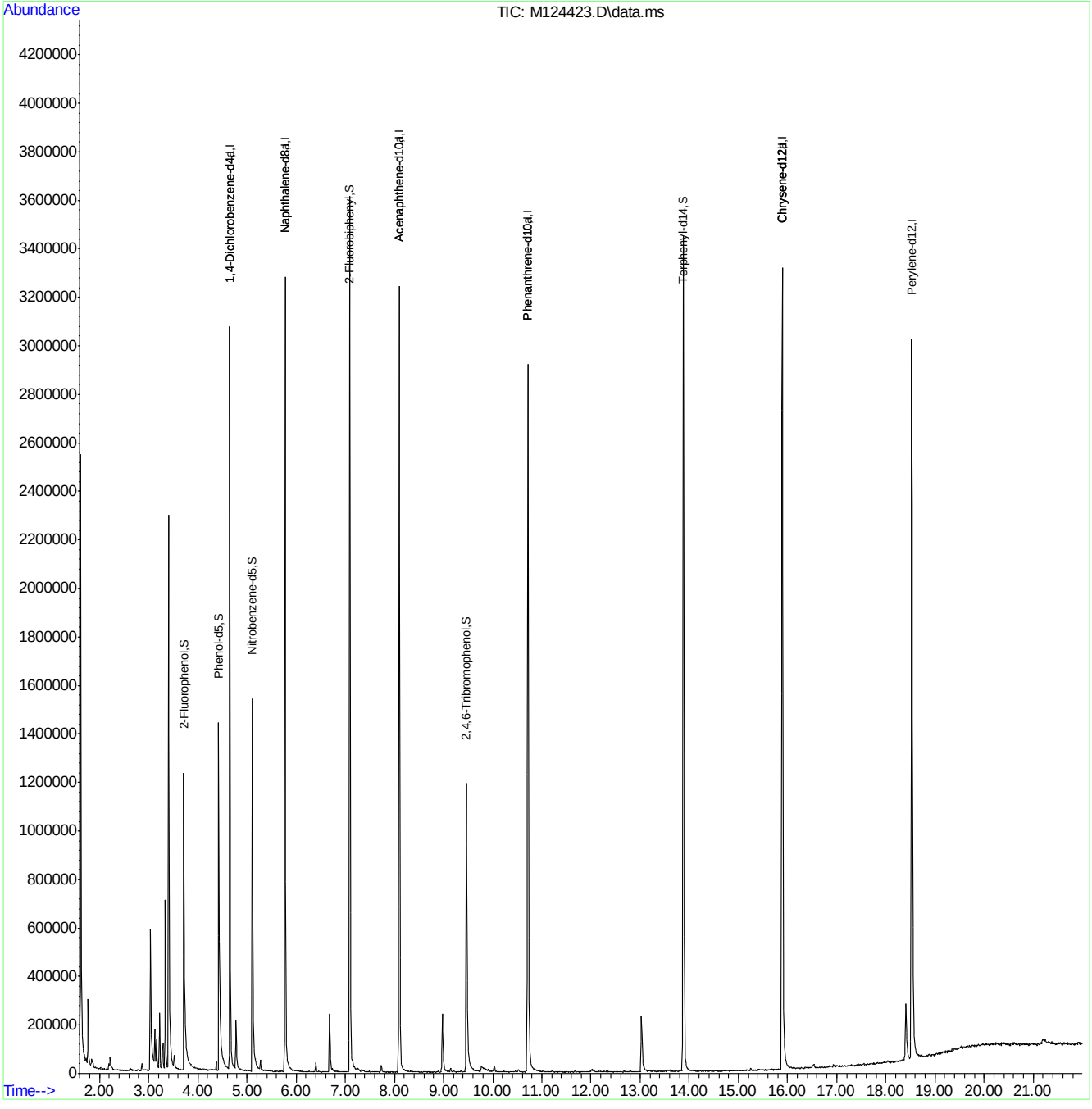
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124423.D
Acq On : 13 May 2016 10:41 am
Operator : ashleyd
Sample : op93791-mb1
Misc : op93791,em5264,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 14:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration



MM5239.M Fri May 13 14:53:48 2016 MSM

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61220.D
Acq On : 11 May 2016 10:17 am
Operator : linseyk
Sample : op93784a-mb1
Misc : op93784a,e3m2879,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 14:55:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:04:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.365	150	452962	4.00	ppm	-0.06
14) Fluorene-d10	13.373	176	637075	4.00	ppm	-0.06
21) Fluoranthene-d10	17.577	212	1051292	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	22.197	264	917297	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	4.322	112	1335297	23.56	ppm	-0.10
Spiked Amount 50.000			Recovery = 47.12%			
4) Phenol-d5	5.928	99	1370668	14.62	ppm	-0.05
Spiked Amount 50.000			Recovery = 29.24%			
7) Nitrobenzene-d5	7.493	82	3071705	35.23	ppm	-0.08
Spiked Amount 50.000			Recovery = 70.46%			
15) 2-Fluorobiphenyl	11.052	172	6872954	39.26	ppm	-0.07
Spiked Amount 50.000			Recovery = 78.52%			
20) 2,4,6-Tribromophenol	13.920	330	814689	40.86	ppm	-0.03
Spiked Amount 50.000			Recovery = 81.72%			
28) Terphenyl-d14	18.411	244	6977989	45.76	ppm	-0.02
Spiked Amount 50.000			Recovery = 91.52%			

Target Compounds Qvalue

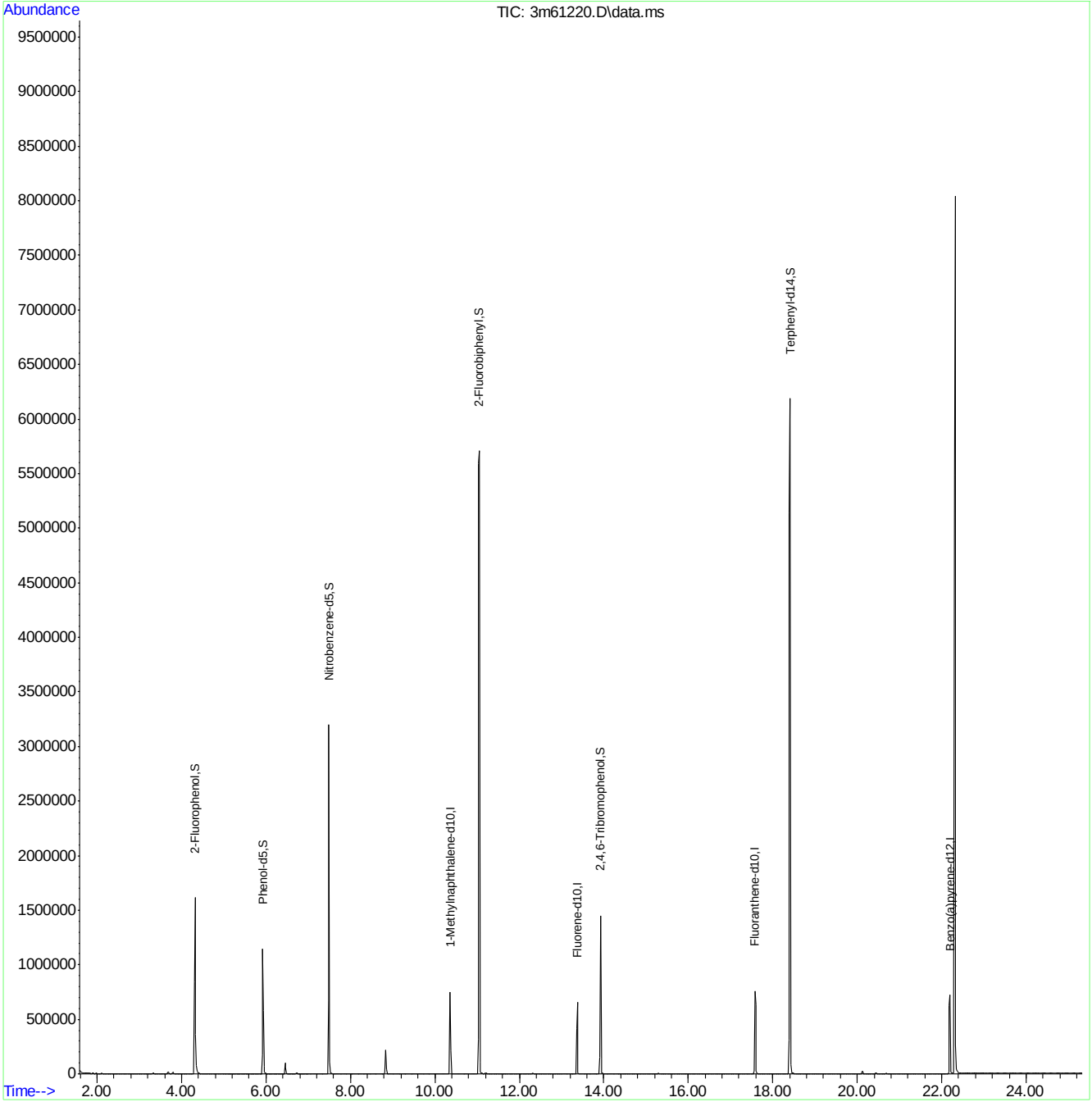
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61220.D
Acq On : 11 May 2016 10:17 am
Operator : linseyk
Sample : op93784a-mb1
Misc : op93784a,e3m2879,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 14:55:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:04:11 2016
Response via : Initial Calibration



M3M2855SIM.M Wed May 11 14:55:14 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16280a.D
Acq On : 11 May 2016 5:10 pm
Operator : juliusj
Sample : op93791a-mb1
Misc : op93791a,e4p857,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 24 17:39:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.950	150	65522	4.00	ppm	-0.08
13) Fluorene-d10	10.888	176	80591	4.00	ppm	-0.08
23) Fluoranthene-d10	15.098	212	103093	4.00	ppm	-0.09
33) Benzo(a)pyrene-d12	19.729	264	58508	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	2.749	112	342626	48.93	ppm	-0.04
Spiked Amount 50.000			Recovery = 97.86%			
4) Phenol-d5	3.871	99	527060	41.90	ppm	-0.07
Spiked Amount 50.000			Recovery = 83.80%			
7) Nitrobenzene-d5	5.236	82	517856	49.61	ppm	-0.08
Spiked Amount 50.000			Recovery = 99.22%			
14) 2-Fluorobiphenyl	8.614	172	1065003	35.55	ppm	-0.08
Spiked Amount 50.000			Recovery = 71.10%			
22) 2,4,6-Tribromophenol	11.431	330	130883	43.26	ppm	-0.09
Spiked Amount 50.000			Recovery = 86.52%			
30) Terphenyl-d14	15.941	244	841184	68.69	ppm	-0.09
Spiked Amount 50.000			Recovery = 137.38%			

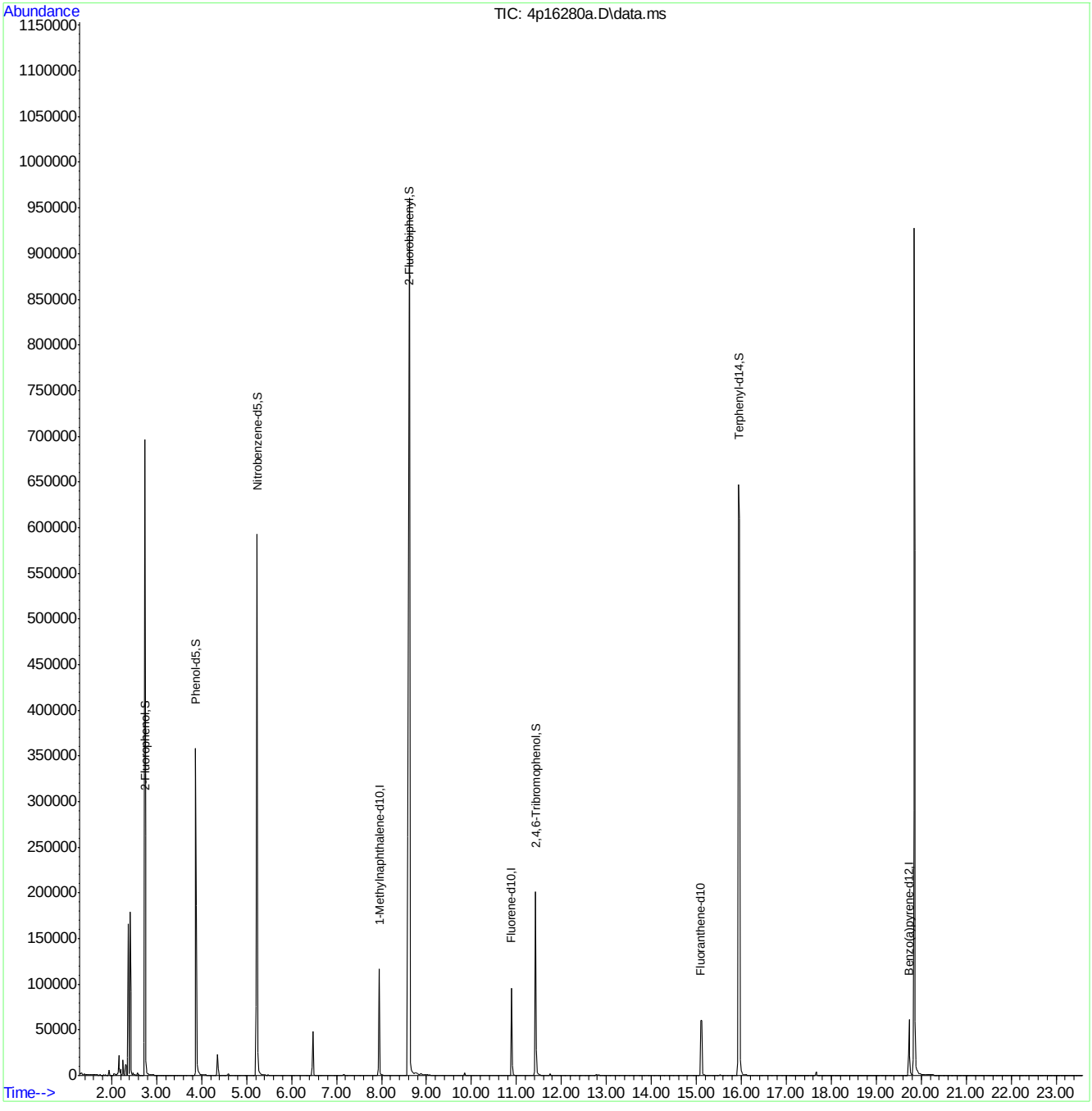
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16280a.D
Acq On : 11 May 2016 5:10 pm
Operator : juliusj
Sample : op93791a-mb1
Misc : op93791a,e4p857,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 24 17:39:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65315.D
Acq On : 17 May 2016 10:50 am
Operator : linseyk
Sample : op93791a-mb1
Misc : op93791a,e4m2922,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 11:13:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue May 17 10:20:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.463	152	191004	4.00	ppm	#-0.05
12) Fluorene-d10	13.441	176	376323	4.00	ppm	-0.05
22) Fluoranthene-d10	17.629	212	563551	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.229	264	434698	4.00	ppm	-0.04
35) 1-Methylnaphthalene-d10a	10.463	152	191004	4.00	ppm	#-0.05
38) Fluorene-d10a	13.441	176	376323	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.527	112	1146532	45.84	ppm	-0.11
Spiked Amount 50.000	Range 11 - 58		Recovery = 91.68%#			
3) Phenol-d5	6.108	99	2141566	50.92	ppm	-0.09
Spiked Amount 50.000			Recovery = 101.84%			
6) Nitrobenzene-d5	7.605	82	2167923	57.48	ppm	-0.10
Spiked Amount 50.000			Recovery = 114.96%			
11) 2-Fluorobiphenyl	11.132	172	3324017	60.29	ppm	-0.03
Spiked Amount 50.000			Recovery = 120.58%			
17) 2,4,6-Tribromophenol	13.991	330	1016719	50.65	ppm	-0.04
Spiked Amount 50.000			Recovery = 101.30%			
25) Terphenyl-d14	18.438	244	4114046	54.04	ppm	-0.03
Spiked Amount 50.000			Recovery = 108.08%			

Target Compounds Qvalue

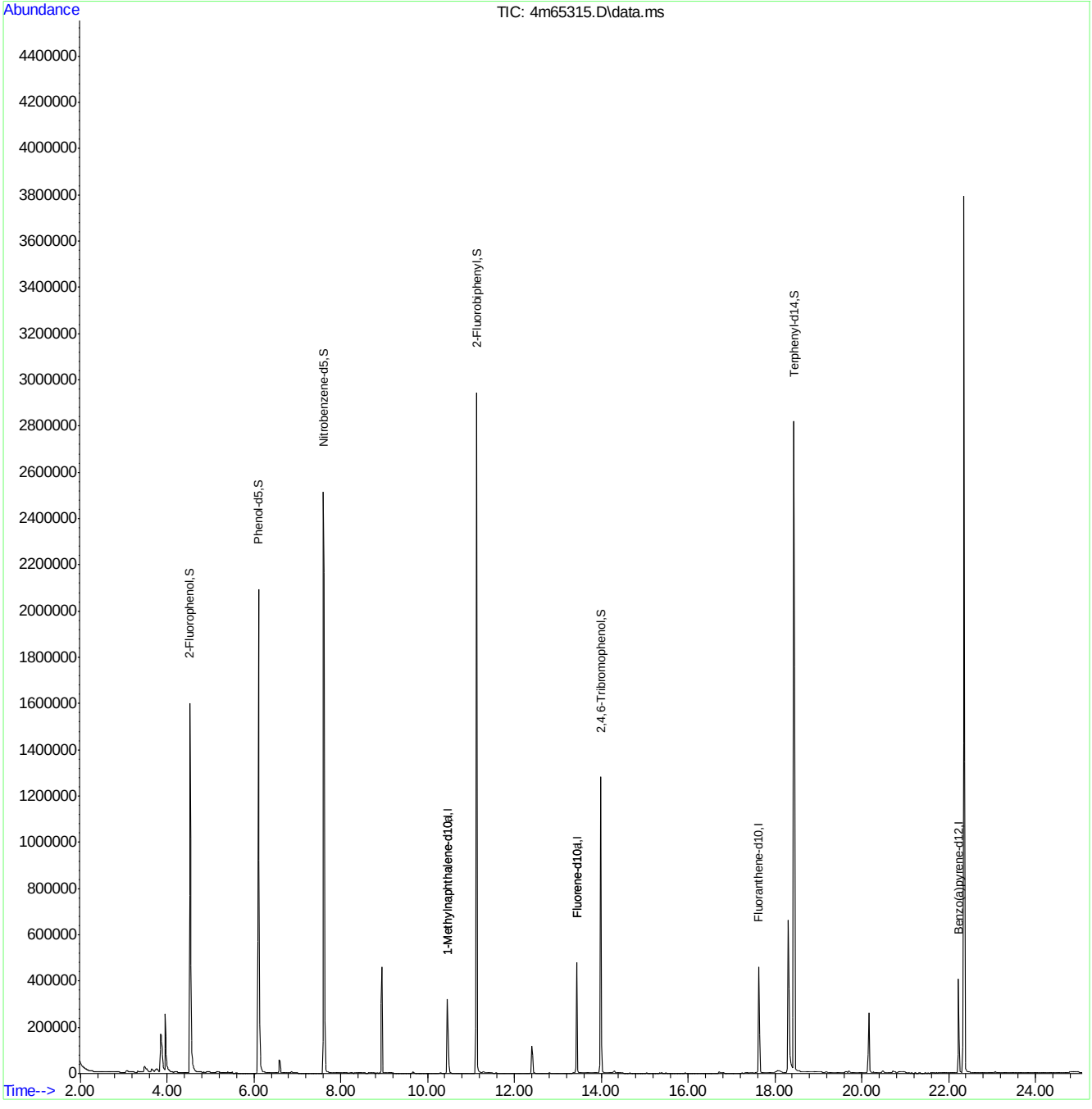
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65315.D
Acq On : 17 May 2016 10:50 am
Operator : linseyk
Sample : op93791a-mb1
Misc : op93791a,e4m2922,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 11:13:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue May 17 10:20:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124313.D
Acq On : 11 May 2016 12:30 am
Operator : juliusj
Sample : op93784-bs1
Misc : op93784,em5259,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 11 09:13:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.691	152	340670	40.00	ppm	-0.02
24) Naphthalene-d8	5.829	136	1418752	40.00	ppm	-0.02
47) Acenaphthene-d10	8.163	164	812686	40.00	ppm	-0.03
69) Phenanthrene-d10	10.791	188	1399573	40.00	ppm	-0.03
83) Chrysene-d12	15.977	240	1605611	40.00	ppm	-0.04
92) Perylene-d12	18.610	264	1613283	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.691	152	340670	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.163	164	812686	40.00	ppm	-0.03
107) Chrysene-d12a	15.977	240	1605611	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.791	188	1399573	40.00	ppm	-0.03
112) Naphthalene-d8a	5.829	136	1418752	40.00	ppm	-0.02
114) Chrysene-d12b	15.977	240	1605611	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.756	112	286409	27.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	54.98%	
8) Phenol-d5	4.467	99	232608	17.78	ppm	0.00
Spiked Amount 50.000			Recovery	=	35.56%	
25) Nitrobenzene-d5	5.150	82	429312	34.03	ppm	-0.02
Spiked Amount 50.000			Recovery	=	68.06%	
51) 2-Fluorobiphenyl	7.153	172	998963	37.43	ppm	-0.01
Spiked Amount 50.000			Recovery	=	74.86%	
73) 2,4,6-Tribromophenol	9.535	330	232611	48.08	ppm	-0.02
Spiked Amount 50.000			Recovery	=	96.16%	
86) Terphenyl-d14	13.958	244	1364029	37.87	ppm	-0.04
Spiked Amount 50.000			Recovery	=	75.74%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.256	88	88544	18.74	ppm	92
3) Pyridine	2.608	79	215638	18.75	ppm	96
4) N-Nitrosodimethylamine	2.576	42	150735	29.93	ppm	80
6) Indene	4.894	116	718878	37.10	ppm	99
7) Cumene	4.088	105	875518	33.68	ppm	98
9) Phenol	4.477	94	306939	21.89	ppm	85
10) Aniline	4.456	93	346027	21.22	ppm	81
11) bis(2-Chloroethyl)ether	4.488	93	432605	39.62	ppm	98
12) 2-Chlorophenol	4.558	128	430565	36.87	ppm	98
13) Decane	4.558	43	389835	35.22	ppm	90
14) 1,3-Dichlorobenzene	4.648	146	409967	30.79	ppm	98
15) 1,4-Dichlorobenzene	4.707	146	430159	32.60	ppm	98
16) Benzyl alcohol	4.819	108	231966	34.30	ppm	98
17) 1,2-Dichlorobenzene	4.825	146	420679	33.87	ppm	98
18) Acetophenone	5.017	105	567046	36.57	ppm	98
19) 2-Methylphenol	4.926	108	341966	35.34	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.905	121	122028	33.83	ppm	95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124313.D
Acq On : 11 May 2016 12:30 am
Operator : juliusj
Sample : op93784-bs1
Misc : op93784,em5259,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 11 09:13:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.054	108	345927	32.63	ppm	#	86
22) n-Nitroso-di-n-propyla...	5.017	70	295215	35.25	ppm		89
23) Hexachloroethane	5.097	201	155230	31.12	ppm		93
26) Nitrobenzene	5.166	77	426938	33.43	ppm		98
27) Quinoline	6.229	129	921328	34.06	ppm		99
28) Isophorone	5.375	82	816887	35.58	ppm		95
29) 2-Nitrophenol	5.455	139	250823	34.71	ppm	#	60
30) 2,4-Dimethylphenol	5.508	107	405960	34.32	ppm		95
31) Benzoic acid	5.652	105	139490	17.98	ppm		97
32) bis(2-Chloroethoxy)met...	5.572	93	473370	33.95	ppm		98
33) 2,4-Dichlorophenol	5.717	162	389114	35.98	ppm		99
34) 2,6-Dichlorophenol	5.930	162	377642	34.56	ppm		99
36) 1,2,4-Trichlorobenzene	5.770	180	383909	30.26	ppm		98
38) Naphthalene	5.850	128	1190427	32.04	ppm		100
39) 4-Chloroaniline	5.925	127	345321	21.57	ppm		97
40) 2,3-Dichloroaniline	7.041	161	437987	31.08	ppm		99
41) Caprolactam	6.331	55	62094	10.62	ppm		96
42) Hexachlorobutadiene	5.978	225	226654	31.06	ppm		99
43) 4-Chloro-3-methylphenol	6.523	107	375078	34.70	ppm		100
44) 2-Methylnaphthalene	6.657	141	712338	32.06	ppm		97
45) 1-Methylnaphthalene	6.779	142	860141	33.31	ppm		97
46) Dimethylnaphthalene	7.527	156	793596	33.11	ppm		99
48) Hexachlorocyclopentadiene	6.860	237	233575	46.51	ppm		99
49) 2,4,6-Trichlorophenol	7.063	196	289827	37.38	ppm		99
50) 2,4,5-Trichlorophenol	7.143	196	302886	35.89	ppm		99
52) 2-Chloronaphthalene	7.319	162	811311	34.27	ppm		97
53) Biphenyl	7.292	154	1079597	35.70	ppm		99
54) 2-Nitroaniline	7.506	65	265733	39.37	ppm		97
55) Dimethylphthalate	7.773	163	1020133	36.86	ppm		99
56) Acenaphthylene	7.938	152	1276635	32.61	ppm		99
57) 2,6-Dinitrotoluene	7.874	165	236787	38.48	ppm		97
58) 3-Nitroaniline	8.157	138	170165	25.00	ppm		96
59) Acenaphthene	8.216	153	830883	35.24	ppm		99
60) 2,4-Dinitrophenol	8.355	184	247334	87.76	ppm		94
61) 4-Nitrophenol	8.633	109	45749	18.38	ppm		96
62) Dibenzofuran	8.510	168	1259878	35.92	ppm		99
63) 2,4-Dinitrotoluene	8.553	165	310828	38.51	ppm		96
64) 2,3,4,6-Tetrachlorophenol	8.766	232	267199	40.93	ppm		97
65) Diethylphthalate	8.964	149	1010813	36.68	ppm		98
66) Fluorene	9.092	166	1040975	36.71	ppm		98
67) 4-Chlorophenyl-phenyle...	9.114	204	509689	37.68	ppm		97
68) 4-Nitroaniline	9.215	138	258103	38.98	ppm		99
70) 4,6-Dinitro-2-methylph...	9.279	198	193569	42.62	ppm		99
71) n-Nitrosodiphenylamine	9.343	169	708960	37.71	ppm		99
72) 1,2-Diphenylhydrazine	9.397	77	937016	38.91	ppm		98
74) 4-Bromophenyl-phenylether	9.989	248	370343	42.78	ppm		96
75) Hexachlorobenzene	10.091	284	424072	41.60	ppm		97
76) Pentachlorophenol	10.513	266	183558	42.72	ppm		98
77) Phenanthrene	10.839	178	1443677	37.00	ppm		100
78) Anthracene	10.935	178	1449411	35.87	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124313.D
Acq On : 11 May 2016 12:30 am
Operator : juliusj
Sample : op93784-bs1
Misc : op93784,em5259,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 11 09:13:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
79) Carbazole	11.298	167	1452489	39.02	ppm		99
80) Di-n-butylphthalate	12.062	149	1816622	39.32	ppm		100
81) Fluoranthene	13.135	202	1820682	39.83	ppm		99
82) Octadecane	10.753	57	604484	40.15	ppm		96
84) Pyrene	13.563	202	1844880	35.24	ppm		98
87) Butylbenzylphthalate	14.999	149	776664	34.12	ppm		97
88) Benzo[a]anthracene	15.961	228	1749560	35.64	ppm		98
89) 3,3'-Dichlorobenzidine	15.977	252	991646	55.32	ppm		100
90) Chrysene	16.030	228	1615410	35.24	ppm		100
91) bis(2-Ethylhexyl)phtha...	16.201	149	1047114	34.12	ppm		97
93) Di-n-octylphthalate	17.430	149	1797789	34.33	ppm		97
94) Benzo[b]fluoranthene	17.974	252	1789995	36.11	ppm		92
95) Benzo[k]fluoranthene	18.017	252	1786447	37.39	ppm		99
96) Benzo[a]pyrene	18.519	252	1605407	35.07	ppm		98
97) Indeno[1,2,3-cd]pyrene	20.362	276	2002239	43.22	ppm		99
99) Dibenz[a,h]anthracene	20.383	278	1730305	36.73	ppm		97
100) 7,12-Dimethylbenz(a)an...	17.953	256	790744	35.45	ppm		98
101) Benzo[g,h,i]perylene	20.826	276	1699327	35.19	ppm		97
103) Benzaldehyde	4.371	105	336782	43.74	ppm		98
105) 1,2,4,5-Tetrachloroben...	6.881	216	463433	44.24	ppm		95
106) Atrazine	10.390	215	179880	52.39	ppm	#	67
108) Benzidine	13.488	184	420599	22.15	ppm		98

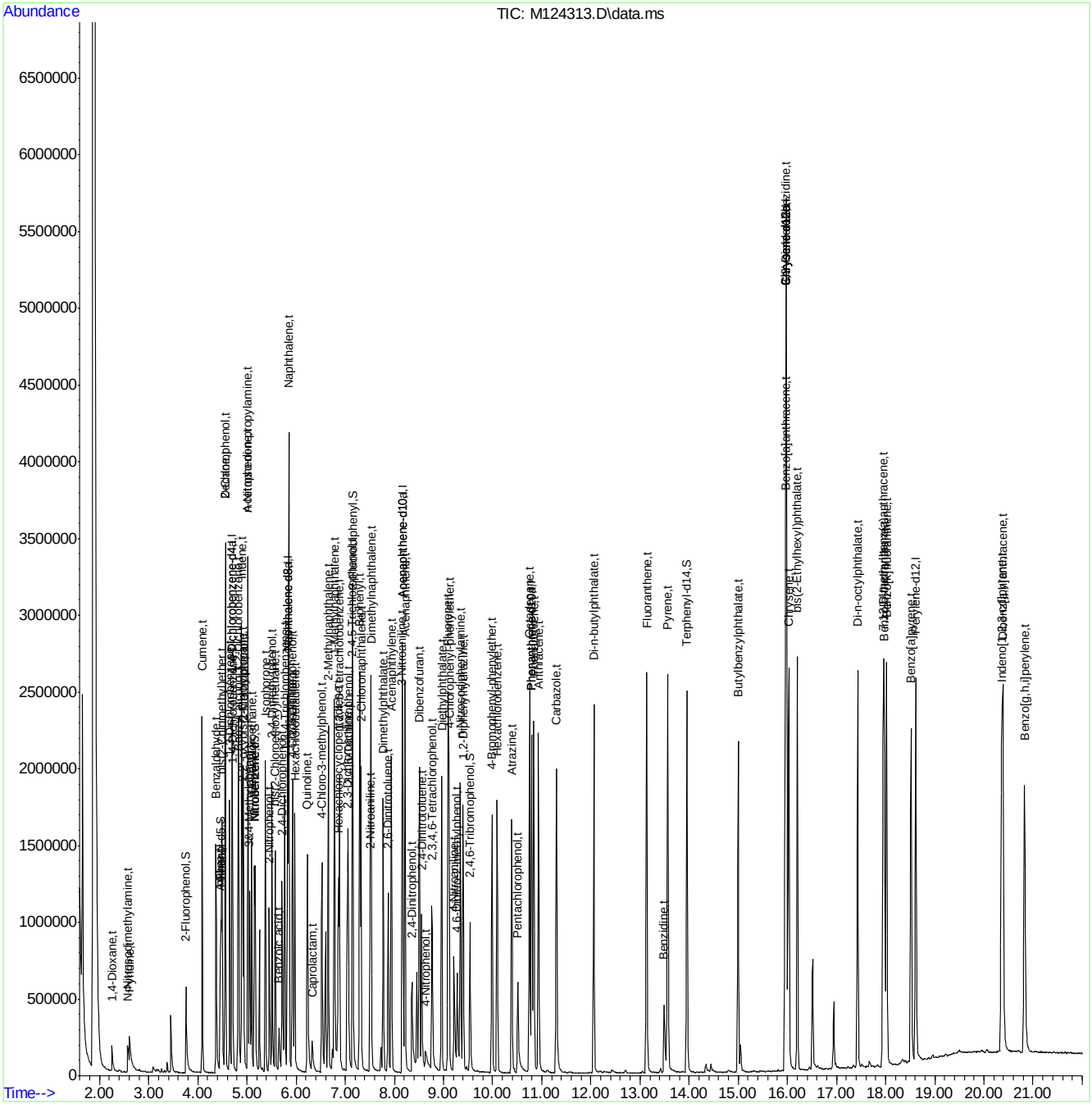
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124313.D
Acq On : 11 May 2016 12:30 am
Operator : juliusj
Sample : op93784-bs1
Misc : op93784,em5259,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 11 09:13:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:13:55 2016 MSM

Page: 4

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/11/16 16:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25846.D
Acq On : 11 May 2016 2:21 pm
Operator : ariellec
Sample : op93791-bs1
Misc : op93791,e6p1206,30.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 11 15:09:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	381418	40.00	ppm	0.00
24) Naphthalene-d8	5.705	136	1503025	40.00	ppm	0.00
47) Acenaphthene-d10	7.759	164	879746	40.00	ppm	0.00
69) Phenanthrene-d10	9.925	188	1417728	40.00	ppm	0.00
83) Chrysene-d12	14.108	240	1459985	40.00	ppm	0.00
92) Perylene-d12	16.226	264	1234644	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.625	152	381418	40.00	ppm	0.00
104) Acenaphthene-d10a	7.759	164	879746	40.00	ppm	0.00
106) Phenanthrene-d10a	9.925	188	1417728	40.00	ppm	0.00
108) Chrysene-d12a	14.108	240	1459985	40.00	ppm	0.00
110) Naphthalene-d8a	5.705	136	1503025	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.689	112	524320	38.76	ppm	0.03
Spiked Amount 50.000			Recovery = 77.52%			
8) Phenol-d5	4.405	99	686160	38.58	ppm	0.01
Spiked Amount 50.000			Recovery = 77.16%			
25) Nitrobenzene-d5	5.069	82	673136	40.90	ppm	0.00
Spiked Amount 50.000			Recovery = 81.80%			
51) 2-Fluorobiphenyl	6.887	172	1268989	44.91	ppm	0.00
Spiked Amount 50.000			Recovery = 89.82%			
73) 2,4,6-Tribromophenol	8.893	330	192211	58.08	ppm	0.00
Spiked Amount 50.000			Recovery = 116.16%			
85) Terphenyl-d14	12.471	244	1283061	46.77	ppm	0.00
Spiked Amount 50.000			Recovery = 93.54%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.196	88	144114	21.06	ppm	91
3) Pyridine	2.523	79	433768	25.18	ppm	95
4) N-Nitrosodimethylamine	2.491	74	313711	29.68	ppm	80
6) Indene	4.823	116	1063343	45.27	ppm	97
7) Cumene	4.031	105	1404591	38.23	ppm	99
9) Phenol	4.411	94	800480	39.51	ppm	93
10) Aniline	4.389	93	649328	30.75	ppm	66
11) bis(2-Chloroethyl)ether	4.432	93	593703	40.48	ppm	93
12) 2-Chlorophenol	4.491	128	577521	40.07	ppm	92
13) Decane	4.502	43	578626	33.79	ppm	99
14) 1,3-Dichlorobenzene	4.587	146	621227	40.76	ppm	98
15) 1,4-Dichlorobenzene	4.641	146	639804	41.75	ppm	99
16) Benzyl alcohol	4.753	108	378605	39.89	ppm	83
17) 1,2-Dichlorobenzene	4.758	146	597992	42.43	ppm	98
18) Acetophenone	4.946	105	852935	42.49	ppm	78
19) 2-Methylphenol	4.855	108	517737	41.26	ppm	91
20) 2,2'-oxybis(1-Chloropr...	4.833	121	186414	37.72	ppm #	81
21) 3&4-Methylphenol	4.978	108	544378	41.36	ppm	99
22) n-Nitroso-di-n-propyla...	4.951	70	460291	38.95	ppm	98
23) Hexachloroethane	5.021	201	205569	37.90	ppm	91
26) Nitrobenzene	5.085	77	696099	40.23	ppm	99
27) Quinoline	6.074	129	1142117	43.43	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25846.D
Acq On : 11 May 2016 2:21 pm
Operator : ariellec
Sample : op93791-bs1
Misc : op93791,e6p1206,30.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 11 15:09:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	5.288	82	1208963	41.76	ppm		98
29) 2-Nitrophenol	5.358	139	313258	46.03	ppm	#	70
30) 2,4-Dimethylphenol	5.416	107	597962	46.55	ppm		98
31) Benzoic acid	5.561	105	423597	41.86	ppm		96
32) bis(2-Chloroethoxy)met...	5.475	93	650656	38.12	ppm		99
33) 2,4-Dichlorophenol	5.598	162	449112	41.65	ppm		97
34) 2,6-Dichlorophenol	5.801	162	448892	42.21	ppm		99
36) 1,2,4-Trichlorobenzene	5.652	180	494280	39.56	ppm		97
38) Naphthalene	5.727	128	1807399	45.13	ppm		98
39) 4-Chloroaniline	5.791	127	371521	22.96	ppm		99
40) 2,3-Dichloroaniline	6.791	161	486292	36.98	ppm		96
41) Caprolactam	6.176	55	261769	39.06	ppm		99
42) Hexachlorobutadiene	5.844	225	286390	40.73	ppm		98
43) 4-Chloro-3-methylphenol	6.342	107	567842	44.57	ppm	#	36
44) 2-Methylnaphthalene	6.454	141	983740	45.63	ppm		96
45) 1-Methylnaphthalene	6.566	141	1021326	45.44	ppm		98
46) Dimethylnaphthalene	7.208	156	1051440	42.26	ppm		91
48) Hexachlorocyclopentadiene	6.636	237	528363	74.72	ppm		97
49) 2,4,6-Trichlorophenol	6.812	196	323697	43.03	ppm		94
50) 2,4,5-Trichlorophenol	6.882	196	331933	40.74	ppm		95
52) 2-Chloronaphthalene	7.037	162	1052994	42.11	ppm		97
53) Biphenyl	7.010	154	1433777	42.38	ppm		99
54) 2-Nitroaniline	7.187	65	419040	46.10	ppm		95
55) Dimethylphthalate	7.422	163	1279444	44.43	ppm		99
56) Acenaphthylene	7.567	152	1719944	44.93	ppm		99
57) 2,6-Dinitrotoluene	7.502	165	298309	52.40	ppm		94
58) 3-Nitroaniline	7.738	138	253760	36.87	ppm		96
59) Acenaphthene	7.802	153	1155338	44.61	ppm		97
60) 2,4-Dinitrophenol	7.898	184	318157	87.40	ppm		92
61) 4-Nitrophenol	8.091	109	171108	40.11	ppm		92
62) Dibenzofuran	8.043	168	1553195	45.10	ppm		95
63) 2,4-Dinitrotoluene	8.069	165	403253	53.80	ppm		91
64) 2,3,4,6-Tetrachlorophenol	8.251	232	251515	36.37	ppm		93
65) Diethylphthalate	8.412	149	1342721	48.36	ppm		96
66) Fluorene	8.529	166	1321369	45.76	ppm		98
67) 4-Chlorophenyl-phenyle...	8.545	204	607995	40.39	ppm		91
68) 4-Nitroaniline	8.620	138	316551	46.26	ppm		98
70) 4,6-Dinitro-2-methylph...	8.663	198	218880	44.38	ppm		93
71) n-Nitrosodiphenylamine	8.733	169	892763	45.89	ppm		99
72) 1,2-Diphenylhydrazine	8.781	77	1424161	45.65	ppm		99
74) 4-Bromophenyl-phenylether	9.267	248	351844	46.44	ppm		95
75) Hexachlorobenzene	9.353	284	384500	49.65	ppm		97
76) Pentachlorophenol	9.690	266	175686	36.41	ppm		97
77) Phenanthrene	9.963	178	1806187	44.21	ppm		99
78) Anthracene	10.043	178	1755266	43.31	ppm		98
79) Carbazole	10.326	167	1710142	47.97	ppm		98
80) Di-n-butylphthalate	10.931	149	2234591	52.94	ppm		99
81) Fluoranthene	11.824	202	1962610	44.35	ppm		99
82) Octadecane	9.866	57	910056	47.28	ppm		99
84) Pyrene	12.172	202	2034534	44.34	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25846.D
Acq On : 11 May 2016 2:21 pm
Operator : ariellec
Sample : op93791-bs1
Misc : op93791,e6p1206,30.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 11 15:09:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
86) Butylbenzylphthalate	13.300	149	959383	53.28 ppm	98
88) Benzo[a]anthracene	14.092	228	1807869	43.74 ppm	98
89) 3,3'-Dichlorobenzidine	14.103	252	1054611	78.98 ppm	98
90) Chrysene	14.151	228	1636691	39.48 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.258	149	1319545	53.42 ppm	98
93) Di-n-octylphthalate	15.242	149	2220319	58.63 ppm	99
94) Benzo[b]fluoranthene	15.713	252	1803823	49.23 ppm	100
95) Benzo[k]fluoranthene	15.750	252	1620408	46.49 ppm	98
96) Benzo[a]pyrene	16.151	252	1463713	45.91 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.579	276	1594569m	53.10 ppm	
99) Dibenz[a,h]anthracene	17.601	278	1584694	48.64 ppm	95
100) 7,12-Dimethylbenz(a)an...	15.702	256	857376	58.66 ppm	96
101) Benzo[g,h,i]perylene	17.921	276	1451841	44.15 ppm	97
103) Benzaldehyde	4.304	105	441904	37.43 ppm	98
105) 1,2,4,5-Tetrachloroben...	6.652	216	528249	37.89 ppm	99
107) Atrazine	9.583	215	184526	48.22 ppm	95
109) benzidine	12.091	184	481137	26.26 ppm	99

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

7.3.2

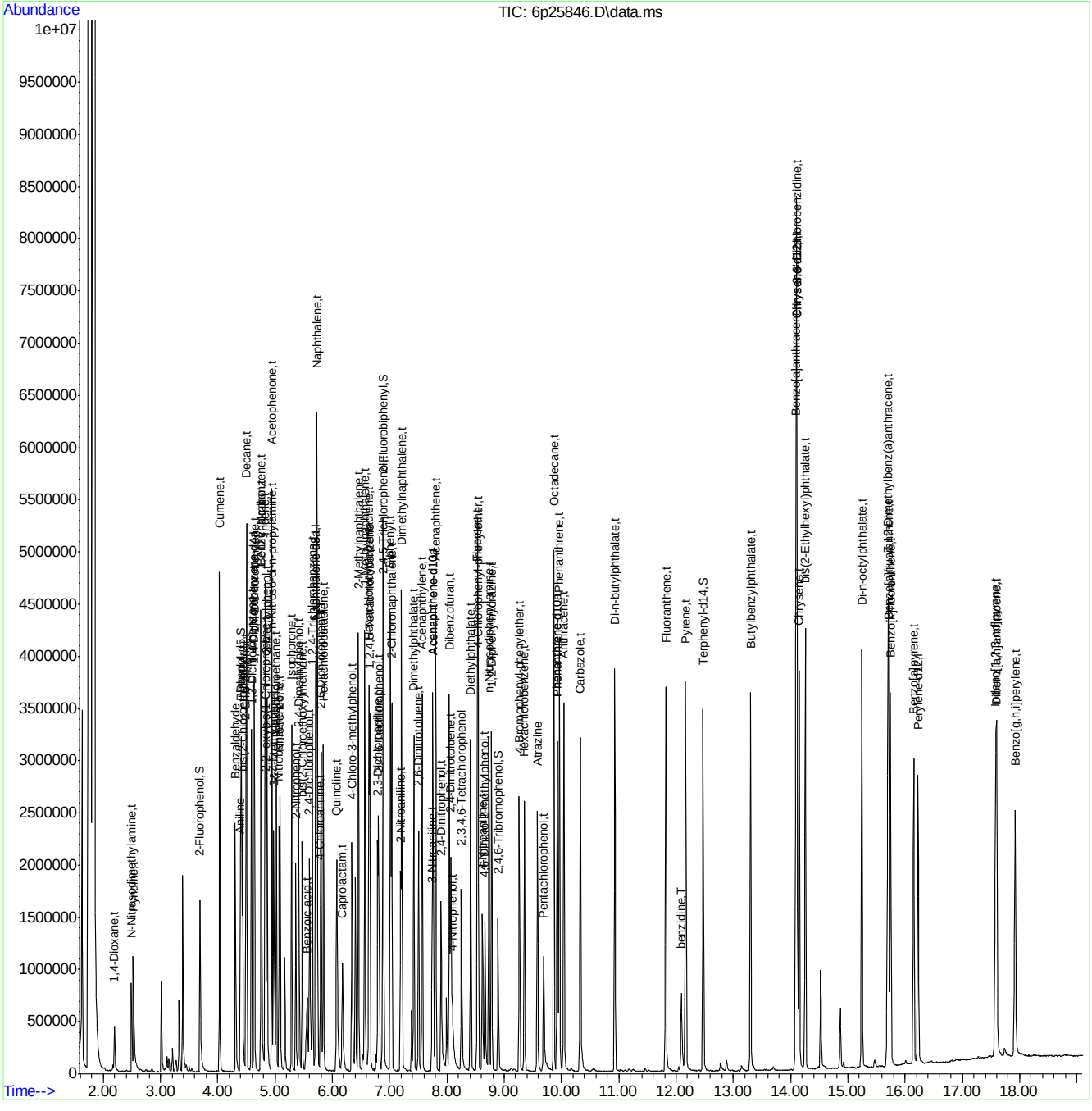
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25846.D
Acq On : 11 May 2016 2:21 pm
Operator : ariellec
Sample : op93791-bs1
Misc : op93791,e6p1206,30.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 11 15:09:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

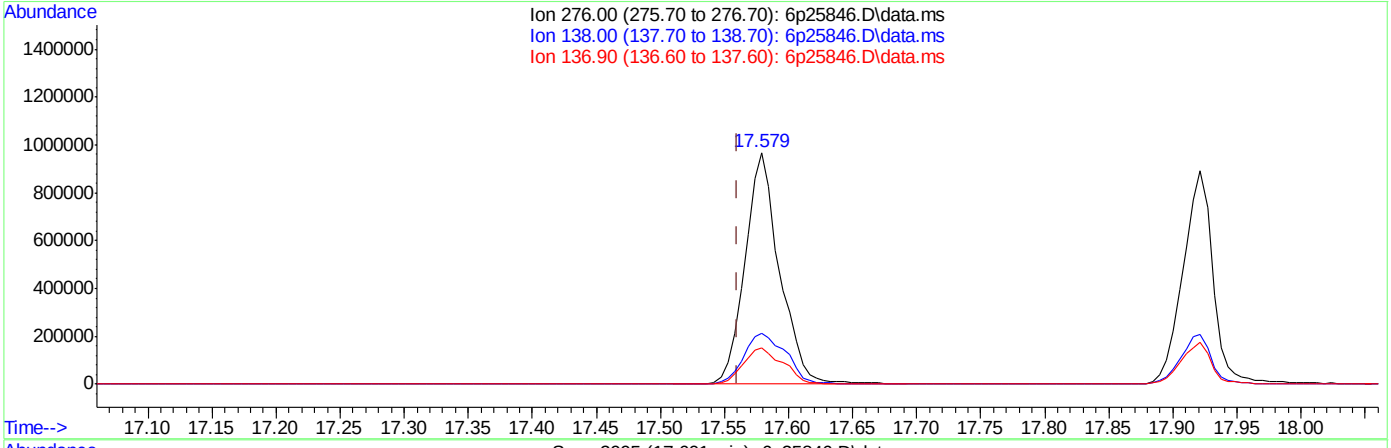
Sample Number:	OP93791-BS1	**Method:**	SW846 8270D
Lab FileID:	6P25846.D	**Analyst approved:**	05/11/16 15:10 Arielle Cocozza
Injection Time:	05/11/16 14:21	**Supervisor approved:**	05/11/16 16:12 Nina Pandya

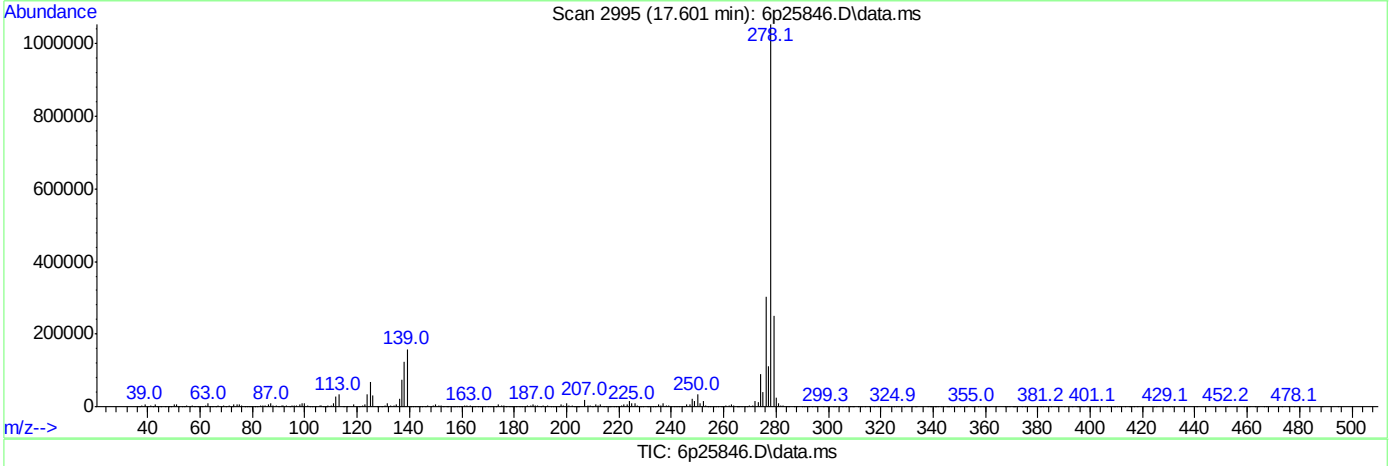
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		17.58	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25846.D
Acq On : 11 May 2016 2:21 pm
Operator : ariellec
Sample : op93791-bs1
Misc : op93791,e6p1206,30.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 11 14:40:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration





TIC: 6p25846.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.579min (+0.019) 60.79ppm

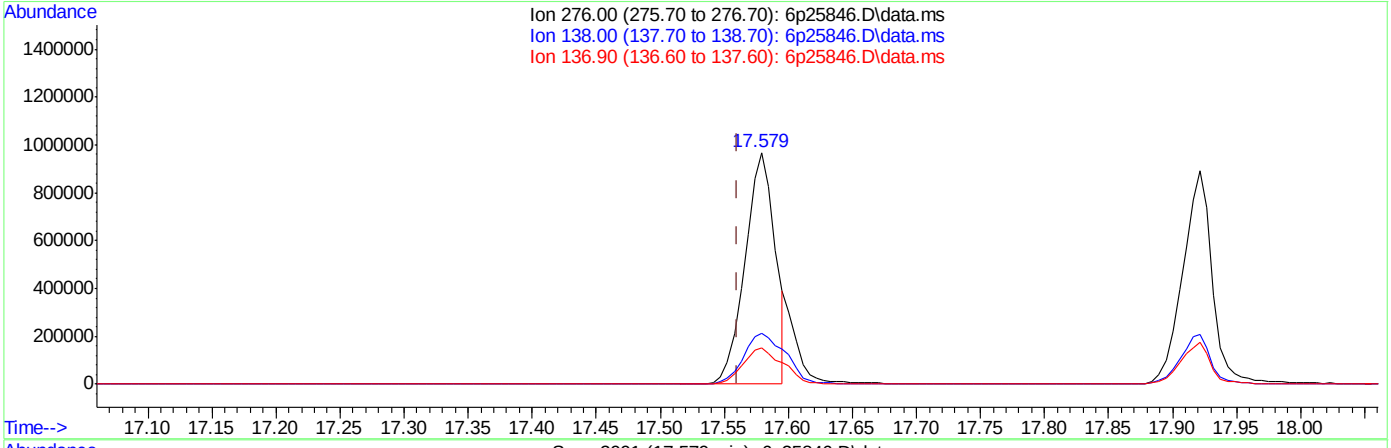
response 1825600

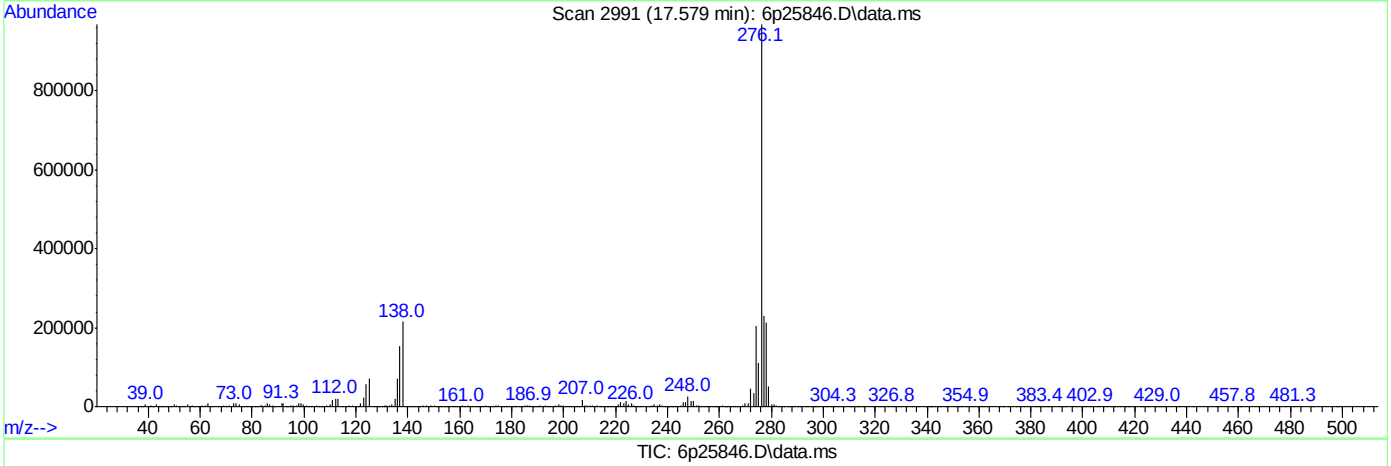
Ion	Exp%	Act%
276.00	100	100
138.00	23.50	22.11
136.90	16.60	15.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25846.D
Acq On : 11 May 2016 2:21 pm
Operator : ariellec
Sample : op93791-bs1
Misc : op93791,e6p1206,30.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 11 14:40:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration





TIC: 6p25846.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.579min (+0.019) 53.10ppm m

response 1594569

Ion	Exp%	Act%
276.00	100	100
138.00	23.50	22.15
136.90	16.60	15.85
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61221.D
Acq On : 11 May 2016 10:50 am
Operator : linseyk
Sample : op93784a-bs12
Misc : op93784a,e3m2879,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 11 14:55:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:04:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.365	150	493675	4.00 ppm	-0.06
14) Fluorene-d10	13.373	176	689266	4.00 ppm	-0.06
21) Fluoranthene-d10	17.577	212	1138493	4.00 ppm	-0.06
31) Benzo(a)pyrene-d12	22.197	264	969578	4.00 ppm	-0.05
System Monitoring Compounds					
3) 2-Fluorophenol	4.322	112	1445039	23.40 ppm	-0.10
Spiked Amount 50.000			Recovery	= 46.80%	
4) Phenol-d5	5.927	99	1516022	14.83 ppm	-0.05
Spiked Amount 50.000			Recovery	= 29.66%	
7) Nitrobenzene-d5	7.493	82	3253145	34.23 ppm	-0.08
Spiked Amount 50.000			Recovery	= 68.46%	
15) 2-Fluorobiphenyl	11.052	172	7260147	38.33 ppm	-0.07
Spiked Amount 50.000			Recovery	= 76.66%	
20) 2,4,6-Tribromophenol	13.920	330	863414	40.02 ppm	-0.03
Spiked Amount 50.000			Recovery	= 80.04%	
28) Terphenyl-d14	18.411	244	7018401	42.50 ppm	-0.02
Spiked Amount 50.000			Recovery	= 85.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.112	88	12590	0.49 ppm	96
5) Phenol	5.952	94	222241	2.02 ppm #	85
6) bis(2-Chloroethyl)ether	6.060	93	53603	0.64 ppm #	25
8) Nitrobenzene	7.512	77	69303	0.67 ppm #	48
9) Naphthalene	8.868	128	177177	0.65 ppm	88
10) Hexachlorobutadiene	9.169	225	33314	0.70 ppm	80
11) 2-Methylnaphthalene	10.242	141	95668	0.67 ppm #	54
13) Hexachlorocyclopentadiene	10.590	237	15951	0.42 ppm	82
16) Acenaphthylene	12.026	152	171626	0.72 ppm	98
17) Acenaphthene	12.381	153	122732	0.77 ppm	99
18) 4,6-dinitro-2-methylph...	13.599	198	121520	5.34 ppm	50
19) Fluorene	13.411	166	145811	0.76 ppm	93
22) Hexachlorobenzene	14.501	284	42184	0.78 ppm	80
23) Pentachlorophenol	14.949	266	143573	3.90 ppm	99
24) Phenanthrene	15.320	178	222212	0.80 ppm	89
25) Anthracene	15.428	178	185811	0.76 ppm	97
26) Fluoranthene	17.608	202	256407	0.73 ppm	98
27) Pyrene	18.010	202	249596	0.77 ppm	94
29) Benzo[a]anthracene	20.095	228	214644	0.69 ppm	93
30) Chrysene	20.157	228	238376	0.80 ppm	88
32) Benzo[b]fluoranthene	21.764	252	210877	0.65 ppm	97
33) Benzo[k]fluoranthene	21.810	252	224700	0.75 ppm	95
34) Benzo[a]pyrene	22.212	252	201052	0.67 ppm	100
35) Indeno[1,2,3-cd]pyrene	23.674	276	232256	0.76 ppm	98
36) Dibenz[a,h]anthracene	23.712	278	182672	0.73 ppm	69
37) Benzo[g,h,i]perylene	24.031	276	199926	0.75 ppm	93

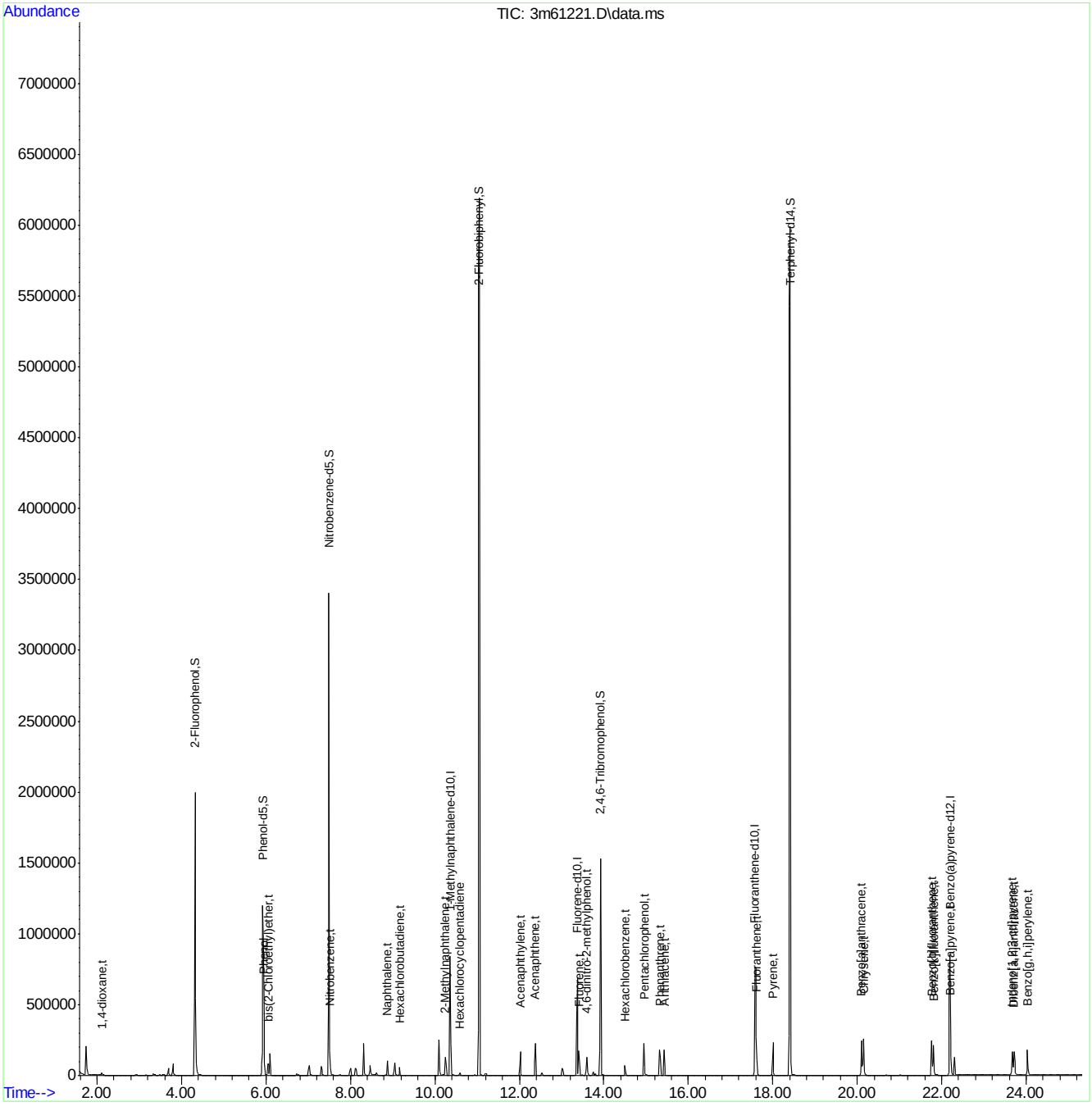
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61221.D
Acq On : 11 May 2016 10:50 am
Operator : linseyk
Sample : op93784a-bs12
Misc : op93784a,e3m2879,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 11 14:55:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:04:11 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16281.D
Acq On : 11 May 2016 5:40 pm
Operator : juliusj
Sample : op93791a-bs12
Misc : op93791a,e4p857,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 11:41:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:38:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.950	150	60246	4.00	ppm	-0.08
13) Fluorene-d10	10.888	176	101399	4.00	ppm	-0.08
23) Fluoranthene-d10	15.098	212	113025	4.00	ppm	-0.09
33) Benzo(a)pyrene-d12	19.729	264	65220	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	2.735	112	357221	55.48	ppm	-0.05
Spiked Amount 50.000			Recovery = 110.96%			
4) Phenol-d5	3.871	99	583509	50.45	ppm	-0.07
Spiked Amount 50.000			Recovery = 100.90%			
7) Nitrobenzene-d5	5.236	82	489935	51.04	ppm	-0.08
Spiked Amount 50.000			Recovery = 102.08%			
14) 2-Fluorobiphenyl	8.614	172	930668	24.69	ppm	-0.08
Spiked Amount 50.000			Recovery = 49.38%			
22) 2,4,6-Tribromophenol	11.431	330	141250	37.11	ppm	-0.09
Spiked Amount 50.000			Recovery = 74.22%			
30) Terphenyl-d14	15.941	244	835786	62.25	ppm	-0.09
Spiked Amount 50.000			Recovery = 124.50%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.515	88	2729	1.02	ppm #	9
5) Phenol	3.888	94	87962	6.73	ppm #	71
6) bis(2-Chloroethyl)ether	3.991	93	9876	1.12	ppm #	79
8) Naphthalene	6.516	128	36601	1.13	ppm	95
9) Hexachlorobutadiene	6.822	225	5768	0.92	ppm	82
10) 2-Methylnaphthalene	7.835	141	15334	0.82	ppm	76
12) Hexachlorocyclopentadiene	8.179	237	1661	0.73	ppm	86
15) Acenaphthylene	9.554	152	26310	0.80	ppm	88
16) Acenaphthene	9.898	153	18696	0.57	ppm	75
17) Dibenzofuran	10.264	168	34251	0.91	ppm #	17
18) Fluorene	10.938	166	27780	0.91	ppm	85
19) 4,6-dinitro-2-methylph...	11.137	198	6888	4.33	ppm #	32
20) n-nitrosodiphenylamine	11.261	169	11819	0.77	ppm #	37
21) 1,2-Diphenylhydrazine	11.310	77	22704	0.88	ppm	96
24) Hexachlorobenzene	12.035	284	7386	0.91	ppm	94
25) Pentachlorophenol	12.482	266	11058	3.80	ppm	88
26) Phenanthrene	12.826	178	34068	1.11	ppm	86
27) Anthracene	12.930	178	23920	0.95	ppm	87
28) Fluoranthene	15.132	202	38264	1.13	ppm	94
29) Pyrene	15.528	202	32118	1.13	ppm	89
31) Benzo[a]anthracene	17.650	228	16708	0.96	ppm	99
32) Chrysene	17.698	228	30343	1.17	ppm	100
34) Benzo[b]fluoranthene	19.304	252	19435	0.83	ppm	95
35) Benzo[k]fluoranthene	19.350	252	21431	0.96	ppm	92
36) Benzo[a]pyrene	19.752	252	22694	0.94	ppm	96
37) Indeno[1,2,3-cd]pyrene	21.170	276	19138	0.96	ppm	94
38) Dibenz[a,h]anthracene	21.218	278	16374	0.89	ppm	72
39) Benzo[g,h,i]perylene	21.487	276	20334	0.98	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16281.D
Acq On : 11 May 2016 5:40 pm
Operator : juliusj
Sample : op93791a-bs12
Misc : op93791a,e4p857,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 11:41:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:38:03 2016
Response via : Initial Calibration

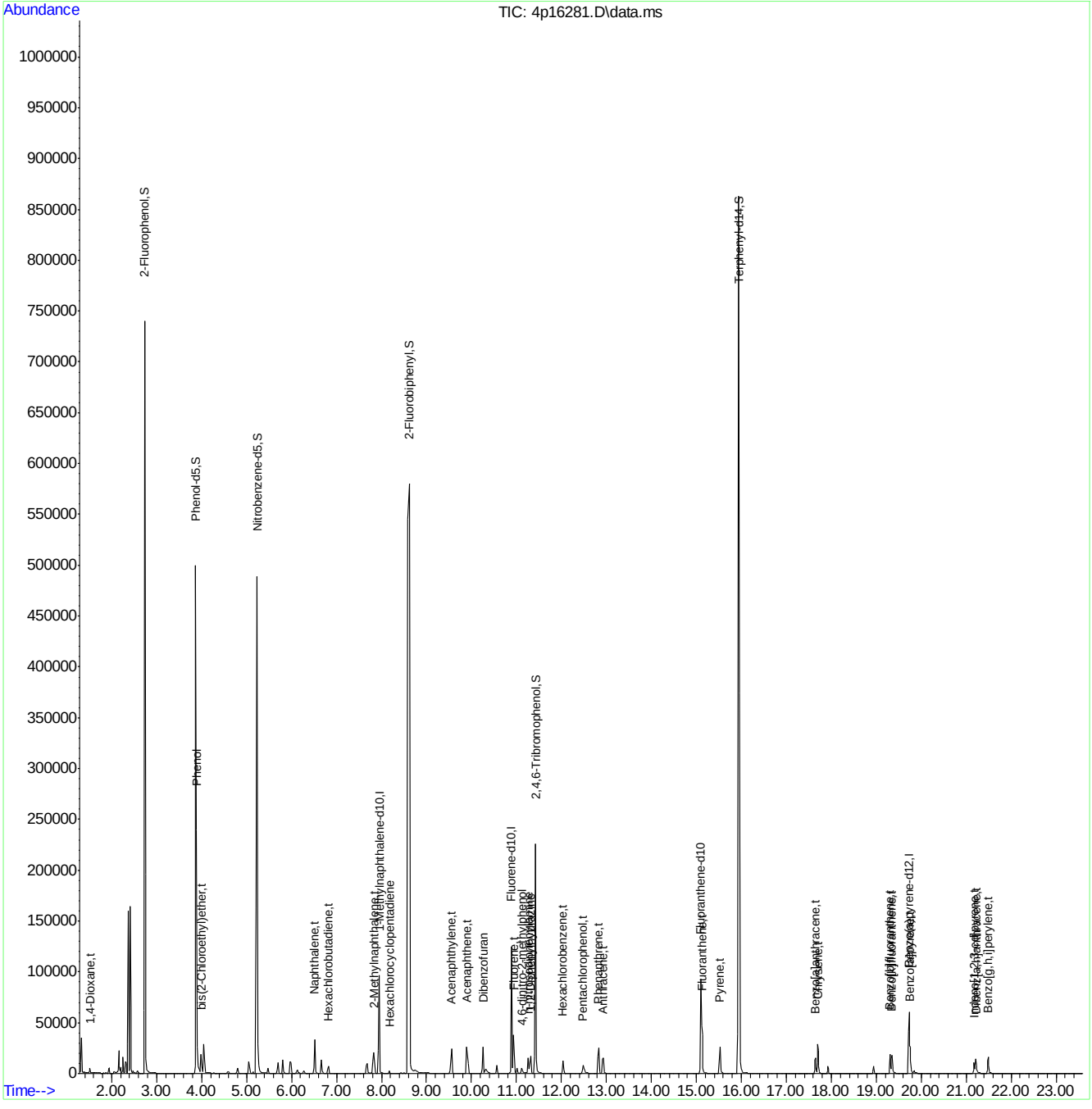
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16281.D
Acq On : 11 May 2016 5:40 pm
Operator : juliusj
Sample : op93791a-bs12
Misc : op93791a,e4p857,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 11:41:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:38:03 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124314.D
Acq On : 11 May 2016 12:59 am
Operator : juliusj
Sample : op93784-ms
Misc : op93784,em5259,450
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 11 09:16:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.691	152	336057	40.00	ppm	-0.02
24) Naphthalene-d8	5.828	136	1388757	40.00	ppm	-0.02
47) Acenaphthene-d10	8.162	164	802273	40.00	ppm	-0.03
69) Phenanthrene-d10	10.790	188	1403877	40.00	ppm	-0.03
83) Chrysene-d12	15.976	240	1552821	40.00	ppm	-0.04
92) Perylene-d12	18.615	264	1561717	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.691	152	336057	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.162	164	802273	40.00	ppm	-0.03
107) Chrysene-d12a	15.976	240	1552821	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.790	188	1403877	40.00	ppm	-0.03
112) Naphthalene-d8a	5.828	136	1388757	40.00	ppm	-0.02
114) Chrysene-d12b	15.976	240	1552821	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.756	112	362388	35.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	70.52%	
8) Phenol-d5	4.466	99	385640	29.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	59.76%	
25) Nitrobenzene-d5	5.150	82	408689	33.09	ppm	-0.02
Spiked Amount 50.000			Recovery	=	66.18%	
51) 2-Fluorobiphenyl	7.153	172	965638	36.65	ppm	-0.02
Spiked Amount 50.000			Recovery	=	73.30%	
73) 2,4,6-Tribromophenol	9.535	330	226871	46.75	ppm	-0.02
Spiked Amount 50.000			Recovery	=	93.50%	
86) Terphenyl-d14	13.958	244	1273187	36.55	ppm	-0.04
Spiked Amount 50.000			Recovery	=	73.10%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.261	88	6477174	1390.05	ppm	98
3) Pyridine	2.613	79	111455	9.83	ppm	88
4) N-Nitrosodimethylamine	2.570	42	184323	37.10	ppm	82
6) Indene	4.894	116	691380	36.17	ppm	99
7) Cumene	4.087	105	841878	32.83	ppm	99
9) Phenol	4.477	94	458887	33.18	ppm	93
10) Aniline	4.456	93	292606	18.19	ppm	66
11) bis(2-Chloroethyl)ether	4.493	93	413449	38.38	ppm	99
12) 2-Chlorophenol	4.557	128	437761	38.00	ppm	99
13) Decane	4.557	43	344978	31.60	ppm	90
14) 1,3-Dichlorobenzene	4.648	146	409359	31.17	ppm	99
15) 1,4-Dichlorobenzene	4.707	146	424206	32.59	ppm	98
16) Benzyl alcohol	4.819	108	257673	38.62	ppm	99
17) 1,2-Dichlorobenzene	4.830	146	408133	33.31	ppm	97
18) Acetophenone	5.022	105	548803	35.88	ppm	97
19) 2-Methylphenol	4.926	108	371075	38.87	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.904	121	117052	32.89	ppm	91

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124314.D
Acq On : 11 May 2016 12:59 am
Operator : juliusj
Sample : op93784-ms
Misc : op93784,em5259,450
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 11 09:16:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.054	108	400297	38.27	ppm		94
22) n-Nitroso-di-n-propyla...	5.017	70	283253	34.29	ppm		88
23) Hexachloroethane	5.097	201	153126	31.12	ppm		94
26) Nitrobenzene	5.166	77	416260	33.29	ppm		97
27) Quinoline	6.229	129	796117	30.07	ppm		100
28) Isophorone	5.374	82	788384	35.08	ppm		94
29) 2-Nitrophenol	5.455	139	242973	34.35	ppm	#	68
30) 2,4-Dimethylphenol	5.513	107	414341	35.79	ppm		97
32) bis(2-Chloroethoxy)met...	5.572	93	454271	33.29	ppm		97
33) 2,4-Dichlorophenol	5.716	162	383605	36.24	ppm		98
34) 2,6-Dichlorophenol	5.930	162	366589	34.27	ppm		99
36) 1,2,4-Trichlorobenzene	5.770	180	373701	30.09	ppm		98
38) Naphthalene	5.850	128	1156778	31.80	ppm		99
39) 4-Chloroaniline	5.925	127	313753	20.03	ppm		97
40) 2,3-Dichloroaniline	7.046	161	439034	31.83	ppm		99
41) Caprolactam	6.336	55	129572	22.63	ppm		93
42) Hexachlorobutadiene	5.978	225	220224	30.83	ppm		99
43) 4-Chloro-3-methylphenol	6.523	107	371576	35.12	ppm		99
44) 2-Methylnaphthalene	6.656	141	687498	31.61	ppm		98
45) 1-Methylnaphthalene	6.784	142	838733	33.19	ppm		99
46) Dimethylnaphthalene	7.527	156	778150	33.16	ppm		100
48) Hexachlorocyclopentadiene	6.859	237	263334	52.42	ppm		99
49) 2,4,6-Trichlorophenol	7.062	196	285116	37.25	ppm		99
50) 2,4,5-Trichlorophenol	7.148	196	296469	35.58	ppm		99
52) 2-Chloronaphthalene	7.319	162	798788	34.18	ppm		96
53) Biphenyl	7.292	154	1068782	35.80	ppm		99
54) 2-Nitroaniline	7.506	65	255604	38.36	ppm		99
55) Dimethylphthalate	7.773	163	1009250	36.94	ppm		99
56) Acenaphthylene	7.938	152	1269803	32.86	ppm		100
57) 2,6-Dinitrotoluene	7.874	165	234478	38.60	ppm		96
58) 3-Nitroaniline	8.157	138	158946	23.65	ppm		93
59) Acenaphthene	8.216	153	821479	35.29	ppm		99
60) 2,4-Dinitrophenol	8.355	184	268056	95.11	ppm		95
61) 4-Nitrophenol	8.622	109	72641	29.56	ppm		90
62) Dibenzofuran	8.510	168	1240064	35.81	ppm		100
63) 2,4-Dinitrotoluene	8.552	165	303219	38.06	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.766	232	261245	40.53	ppm		97
65) Diethylphthalate	8.964	149	976366	35.89	ppm		98
66) Fluorene	9.092	166	1009141	36.05	ppm		98
67) 4-Chlorophenyl-phenyle...	9.113	204	496353	37.17	ppm		95
68) 4-Nitroaniline	9.215	138	241578	36.96	ppm		94
70) 4,6-Dinitro-2-methylph...	9.273	198	201697	44.13	ppm		99
71) n-Nitrosodiphenylamine	9.343	169	638203	33.84	ppm		99
72) 1,2-Diphenylhydrazine	9.396	77	895107	37.06	ppm		96
74) 4-Bromophenyl-phenylether	9.989	248	355656	40.96	ppm		95
75) Hexachlorobenzene	10.091	284	404934	39.60	ppm		98
76) Pentachlorophenol	10.513	266	209068	48.02	ppm		97
77) Phenanthrene	10.838	178	1417172	36.21	ppm		99
78) Anthracene	10.934	178	1425072	35.16	ppm		99
79) Carbazole	11.298	167	1433967	38.41	ppm		99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124314.D
Acq On : 11 May 2016 12:59 am
Operator : juliusj
Sample : op93784-ms
Misc : op93784,em5259,450
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 11 09:16:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

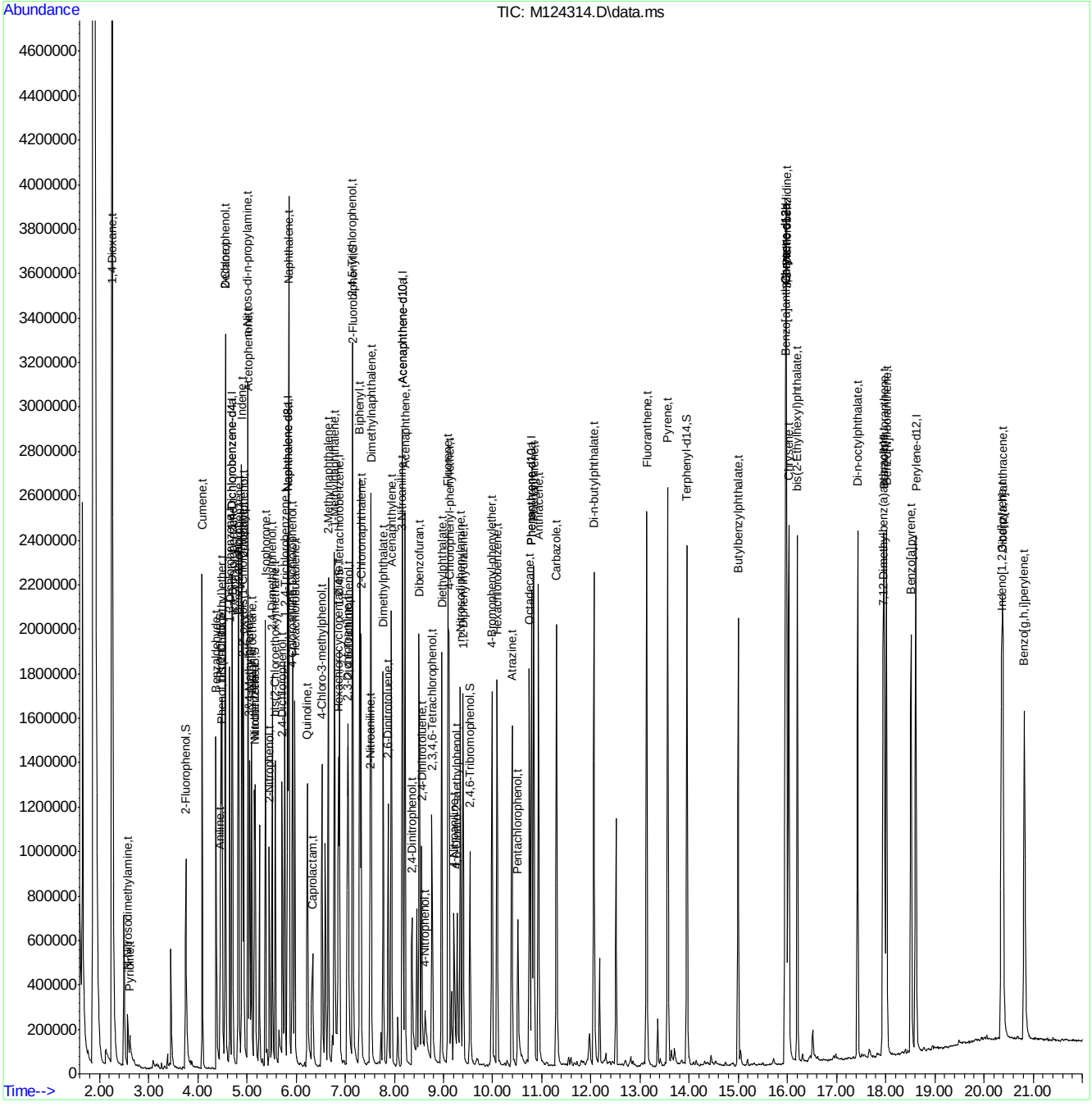
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) Di-n-butylphthalate	12.061	149	1663624	35.89	ppm		99
81) Fluoranthene	13.135	202	1718998	37.49	ppm		99
82) Octadecane	10.748	57	432808	28.66	ppm		93
84) Pyrene	13.562	202	1773757	35.03	ppm		98
87) Butylbenzylphthalate	14.999	149	713050	32.39	ppm		98
88) Benzo[a]anthracene	15.960	228	1600381	33.71	ppm		99
89) 3,3'-Dichlorobenzidine	15.982	252	406028	23.42	ppm		99
90) Chrysene	16.025	228	1448305	32.67	ppm		99
91) bis(2-Ethylhexyl)phtha...	16.201	149	946271	31.88	ppm		97
93) Di-n-octylphthalate	17.429	149	1637161	32.30	ppm		98
94) Benzo[b]fluoranthene	17.969	252	1605603	33.46	ppm		93
95) Benzo[k]fluoranthene	18.017	252	1584910	34.27	ppm		99
96) Benzo[a]pyrene	18.519	252	1416568	31.97	ppm		98
97) Indeno[1,2,3-cd]pyrene	20.356	276	1668394	37.21	ppm		100
99) Dibenz[a,h]anthracene	20.383	278	1459896	32.02	ppm		98
100) 7,12-Dimethylbenz(a)an...	17.947	256	624072	28.90	ppm		99
101) Benzo[g,h,i]perylene	20.821	276	1402846	30.01	ppm		97
103) Benzaldehyde	4.370	105	333840	43.95	ppm		97
105) 1,2,4,5-Tetrachloroben...	6.881	216	454136	43.91	ppm		94
106) Atrazine	10.395	215	170746	50.38	ppm	#	67

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124314.D
Acq On : 11 May 2016 12:59 am
Operator : juliusj
Sample : op93784-ms
Misc : op93784,em5259,450
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 11 09:16:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124315.D
Acq On : 11 May 2016 1:27 am
Operator : juliusj
Sample : op93784-msd
Misc : op93784,em5259,450
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 11 09:16:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.694	152	314419	40.00	ppm	-0.01
24) Naphthalene-d8	5.827	136	1328768	40.00	ppm	-0.02
47) Acenaphthene-d10	8.166	164	753439	40.00	ppm	-0.02
69) Phenanthrene-d10	10.794	188	1305372	40.00	ppm	-0.03
83) Chrysene-d12	15.975	240	1480705	40.00	ppm	-0.04
92) Perylene-d12	18.608	264	1496003	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.694	152	314419	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.166	164	753439	40.00	ppm	-0.02
107) Chrysene-d12a	15.975	240	1480704	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.794	188	1305372	40.00	ppm	-0.03
112) Naphthalene-d8a	5.827	136	1328768	40.00	ppm	-0.02
114) Chrysene-d12b	15.975	240	1480705	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.754	112	343894	35.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	71.54%	
8) Phenol-d5	4.470	99	363359	30.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	60.18%	
25) Nitrobenzene-d5	5.154	82	399881	33.84	ppm	-0.01
Spiked Amount 50.000			Recovery	=	67.68%	
51) 2-Fluorobiphenyl	7.151	172	918696	37.13	ppm	-0.02
Spiked Amount 50.000			Recovery	=	74.26%	
73) 2,4,6-Tribromophenol	9.533	330	211982	46.98	ppm	-0.03
Spiked Amount 50.000			Recovery	=	93.96%	
86) Terphenyl-d14	13.956	244	1186586	35.73	ppm	-0.04
Spiked Amount 50.000			Recovery	=	71.46%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.259	88	6392220	1466.22	ppm	98
3) Pyridine	2.611	79	144388	13.61	ppm	92
4) N-Nitrosodimethylamine	2.568	42	183338	39.44	ppm	82
6) Indene	4.892	116	670733	37.50	ppm	98
7) Cumene	4.091	105	809822	33.76	ppm	99
9) Phenol	4.475	94	436641	33.74	ppm	89
10) Aniline	4.454	93	269186	17.88	ppm	63
11) bis(2-Chloroethyl)ether	4.491	93	403865	40.08	ppm	97
12) 2-Chlorophenol	4.555	128	422765	39.23	ppm	96
13) Decane	4.561	43	338759	33.16	ppm	94
14) 1,3-Dichlorobenzene	4.651	146	394738	32.12	ppm	99
15) 1,4-Dichlorobenzene	4.705	146	407915	33.50	ppm	98
16) Benzyl alcohol	4.817	108	244717	39.21	ppm	98
17) 1,2-Dichlorobenzene	4.828	146	401241	35.00	ppm	99
18) Acetophenone	5.020	105	536501	37.49	ppm	98
19) 2-Methylphenol	4.924	108	354981	39.75	ppm	93
20) 2,2'-oxybis(1-Chloropr...	4.903	121	114987	34.54	ppm	90

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124315.D
Acq On : 11 May 2016 1:27 am
Operator : juliusj
Sample : op93784-msd
Misc : op93784,em5259,450
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 11 09:16:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.057	108	376903	38.52	ppm		96
22) n-Nitroso-di-n-propyla...	5.020	70	273697	35.41	ppm		90
23) Hexachloroethane	5.100	201	148107	32.17	ppm		99
26) Nitrobenzene	5.170	77	403056	33.69	ppm		100
27) Quinoline	6.227	129	730638	28.84	ppm		99
28) Isophorone	5.373	82	758116	35.26	ppm		93
29) 2-Nitrophenol	5.458	139	236493	34.94	ppm	#	67
30) 2,4-Dimethylphenol	5.511	107	392255	35.41	ppm		97
32) bis(2-Chloroethoxy)met...	5.570	93	439067	33.63	ppm		98
33) 2,4-Dichlorophenol	5.720	162	366328	36.17	ppm		99
34) 2,6-Dichlorophenol	5.933	162	351939	34.39	ppm		99
36) 1,2,4-Trichlorobenzene	5.768	180	367638	30.94	ppm		98
38) Naphthalene	5.848	128	1126929	32.38	ppm		99
39) 4-Chloroaniline	5.923	127	286083	19.08	ppm		96
40) 2,3-Dichloroaniline	7.044	161	406768	30.82	ppm		99
41) Caprolactam	6.334	55	115266	21.04	ppm		94
42) Hexachlorobutadiene	5.976	225	214314	31.36	ppm		99
43) 4-Chloro-3-methylphenol	6.526	107	343587	33.94	ppm		99
44) 2-Methylnaphthalene	6.654	141	656366	31.54	ppm		99
45) 1-Methylnaphthalene	6.783	142	804556	33.27	ppm		99
46) Dimethylnaphthalene	7.525	156	728247	32.44	ppm		100
48) Hexachlorocyclopentadiene	6.863	237	247282	52.41	ppm		99
49) 2,4,6-Trichlorophenol	7.060	196	263514	36.65	ppm		99
50) 2,4,5-Trichlorophenol	7.146	196	269225	34.41	ppm		96
52) 2-Chloronaphthalene	7.317	162	754662	34.38	ppm		97
53) Biphenyl	7.290	154	1004621	35.83	ppm		99
54) 2-Nitroaniline	7.504	65	237546	37.97	ppm		97
55) Dimethylphthalate	7.771	163	929175	36.21	ppm		99
56) Acenaphthylene	7.936	152	1181034	32.55	ppm		99
57) 2,6-Dinitrotoluene	7.872	165	216448	37.95	ppm		96
58) 3-Nitroaniline	8.161	138	146048	23.14	ppm		94
59) Acenaphthene	8.214	153	766813	35.08	ppm		99
60) 2,4-Dinitrophenol	8.353	184	250550	94.72	ppm		94
61) 4-Nitrophenol	8.636	109	65979	28.59	ppm		96
62) Dibenzofuran	8.508	168	1165070	35.83	ppm		98
63) 2,4-Dinitrotoluene	8.550	165	282571	37.76	ppm		96
64) 2,3,4,6-Tetrachlorophenol	8.764	232	247436	40.88	ppm		95
65) Diethylphthalate	8.962	149	912779	35.73	ppm		98
66) Fluorene	9.090	166	953342	36.27	ppm		99
67) 4-Chlorophenyl-phenyle...	9.111	204	468737	37.38	ppm		95
68) 4-Nitroaniline	9.213	138	216520	35.27	ppm		96
70) 4,6-Dinitro-2-methylph...	9.271	198	182662	43.08	ppm		98
71) n-Nitrosodiphenylamine	9.341	169	593788	33.86	ppm		99
72) 1,2-Diphenylhydrazine	9.394	77	836221	37.23	ppm		98
74) 4-Bromophenyl-phenylether	9.987	248	329467	40.81	ppm		96
75) Hexachlorobenzene	10.089	284	373111	39.24	ppm		97
76) Pentachlorophenol	10.511	266	190366	47.10	ppm		98
77) Phenanthrene	10.836	178	1299786	35.72	ppm		99
78) Anthracene	10.933	178	1304687	34.62	ppm		99
79) Carbazole	11.301	167	1313686	37.84	ppm		99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124315.D
Acq On : 11 May 2016 1:27 am
Operator : juliusj
Sample : op93784-msd
Misc : op93784,em5259,450
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 11 09:16:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) Di-n-butylphthalate	12.060	149	1585580	36.79	ppm		99
81) Fluoranthene	13.133	202	1577018	36.98	ppm		99
82) Octadecane	10.746	57	394066	28.06	ppm		94
84) Pyrene	13.560	202	1656622	34.31	ppm		98
87) Butylbenzylphthalate	14.997	149	667222	31.79	ppm		97
88) Benzo[a]anthracene	15.959	228	1519872	33.58	ppm		99
89) 3,3'-Dichlorobenzidine	15.980	252	341713	20.67	ppm		99
90) Chrysene	16.028	228	1375612	32.54	ppm		100
91) bis(2-Ethylhexyl)phtha...	16.199	149	887353	31.35	ppm		98
93) Di-n-octylphthalate	17.427	149	1499854	30.89	ppm		97
94) Benzo[b]fluoranthene	17.967	252	1529701	33.28	ppm		93
95) Benzo[k]fluoranthene	18.015	252	1508118	34.04	ppm		99
96) Benzo[a]pyrene	18.512	252	1370764	32.29	ppm		98
97) Indeno[1,2,3-cd]pyrene	20.354	276	1669147	38.86	ppm		99
99) Dibenz[a,h]anthracene	20.381	278	1431864	32.78	ppm		98
100) 7,12-Dimethylbenz(a)an...	17.945	256	597036	28.86	ppm		99
101) Benzo[g,h,i]perylene	20.819	276	1430136	31.94	ppm		96
103) Benzaldehyde	4.368	105	334033	47.00	ppm		99
105) 1,2,4,5-Tetrachloroben...	6.884	216	433039	44.58	ppm		94
106) Atrazine	10.393	215	156436	49.15	ppm	#	64

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

7.4.2

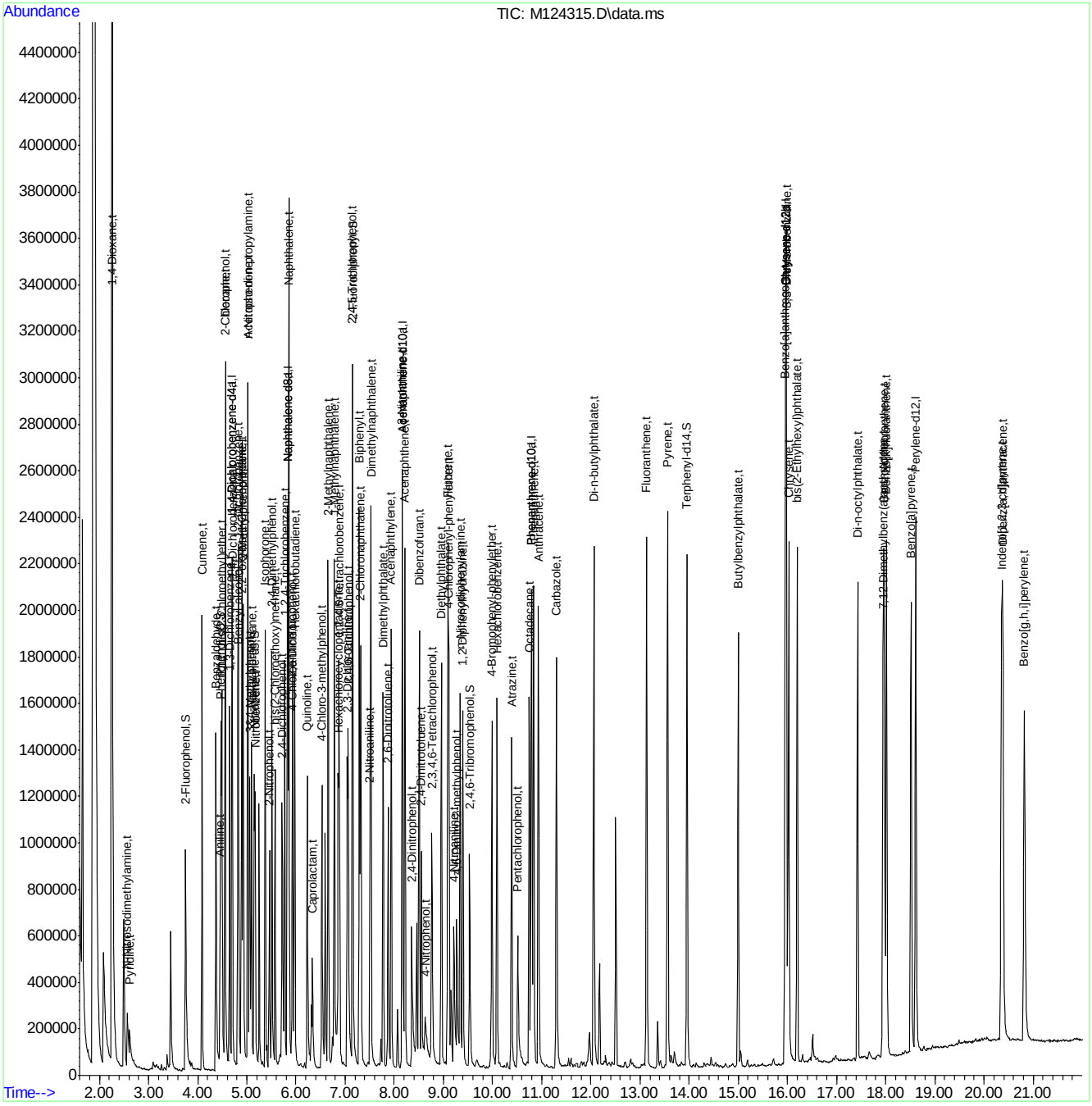
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124315.D
Acq On : 11 May 2016 1:27 am
Operator : juliusj
Sample : op93784-msd
Misc : op93784,em5259,450
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 11 09:16:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:16:15 2016 MSM

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/12/16 16:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 11:23:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	438752	40.00	ppm	0.00
24) Naphthalene-d8	5.705	136	1779402	40.00	ppm	0.00
47) Acenaphthene-d10	7.754	164	1021297	40.00	ppm	0.00
69) Phenanthrene-d10	9.925	188	1626806	40.00	ppm	-0.14
83) Chrysene-d12	14.108	240	1605689	40.00	ppm	0.00
92) Perylene-d12	16.226	264	1450238	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.625	152	438752	40.00	ppm	0.00
104) Acenaphthene-d10a	7.754	164	1021297	40.00	ppm	0.00
106) Phenanthrene-d10a	9.925	188	1626806	40.00	ppm	0.00
108) Chrysene-d12a	14.108	240	1605689	40.00	ppm	0.00
110) Naphthalene-d8a	5.705	136	1779402	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	454567	29.21	ppm	0.04
Spiked Amount 50.000			Recovery	=	58.42%	
8) Phenol-d5	4.406	99	600629	29.36	ppm	0.01
Spiked Amount 50.000			Recovery	=	58.72%	
25) Nitrobenzene-d5	5.069	82	115764	5.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.88%	
51) 2-Fluorobiphenyl	6.887	172	1126692	34.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	68.70%	
73) 2,4,6-Tribromophenol	8.893	330	155184	40.87	ppm	-0.12
Spiked Amount 50.000			Recovery	=	81.74%	
85) Terphenyl-d14	12.471	244	1050036	34.80	ppm	-0.13
Spiked Amount 50.000			Recovery	=	69.60%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.191	88	158888	20.19	ppm	93
3) Pyridine	2.523	79	350907	17.71	ppm	94
4) N-Nitrosodimethylamine	2.496	74	263250	21.65	ppm #	73
6) Indene	4.823	116	942508	34.88	ppm	98
7) Cumene	4.031	105	1268470	30.01	ppm	99
9) Phenol	4.416	94	684163	29.36	ppm	97
10) Aniline	4.395	93	450253	18.54	ppm #	47
11) bis(2-Chloroethyl)ether	4.432	93	607862	36.03	ppm	92
12) 2-Chlorophenol	4.491	128	500365	30.18	ppm	94
13) Decane	4.502	43	506510	25.72	ppm	97
14) 1,3-Dichlorobenzene	4.587	146	553256	31.56	ppm	97
15) 1,4-Dichlorobenzene	4.641	146	579225	32.86	ppm	99
16) Benzyl alcohol	4.753	108	332779	30.48	ppm	85
17) 1,2-Dichlorobenzene	4.759	146	540535	33.34	ppm	99
18) Acetophenone	4.946	105	759251	32.88	ppm	77
19) 2-Methylphenol	4.855	108	469643	32.54	ppm	94
20) 2,2'-oxybis(1-Chloropr...	4.833	121	163662	28.79	ppm #	79
21) 3&4-Methylphenol	4.978	108	483950	31.97	ppm	98
22) n-Nitroso-di-n-propyla...	4.946	70	406296	29.89	ppm	97
23) Hexachloroethane	5.021	201	59122	9.48	ppm	93
26) Nitrobenzene	5.085	77	121751	5.94	ppm	95
27) Quinoline	6.069	129	980056	31.48	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 11:23:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	5.288	82	1099967	32.10	ppm		97
29) 2-Nitrophenol	5.363	139	34557	4.29	ppm	#	50
30) 2,4-Dimethylphenol	5.411	107	568121	37.36	ppm		97
31) Benzoic acid	5.539	105	217265m	18.14	ppm		
32) bis(2-Chloroethoxy)met...	5.470	93	547568	27.10	ppm		99
33) 2,4-Dichlorophenol	5.604	162	395722	31.00	ppm		98
34) 2,6-Dichlorophenol	5.802	162	386166	30.67	ppm		100
36) 1,2,4-Trichlorobenzene	5.652	180	444140	30.03	ppm		97
38) Naphthalene	5.727	128	1659622	35.01	ppm		99
39) 4-Chloroaniline	5.850	127	148423	7.75	ppm		92
40) 2,3-Dichloroaniline	6.802	161	405546	26.05	ppm		99
41) Caprolactam	6.165	55	180670	22.77	ppm		98
42) Hexachlorobutadiene	5.844	225	258227	31.02	ppm		98
43) 4-Chloro-3-methylphenol	6.336	107	488413	32.38	ppm		96
44) 2-Methylnaphthalene	6.454	141	900384	35.28	ppm		94
45) 1-Methylnaphthalene	6.566	141	933081	35.06	ppm		97
46) Dimethylnaphthalene	7.208	156	948201	32.19	ppm		92
48) Hexachlorocyclopentadiene	6.636	237	44764	5.45	ppm		94
49) 2,4,6-Trichlorophenol	6.807	196	278990	31.95	ppm		92
50) 2,4,5-Trichlorophenol	6.877	196	281500	29.76	ppm		94
52) 2-Chloronaphthalene	7.032	162	953861	32.86	ppm		95
53) Biphenyl	7.010	154	1281924	32.64	ppm		98
54) 2-Nitroaniline	7.203	65	80166	7.60	ppm		93
55) Dimethylphthalate	7.417	163	1103627	33.01	ppm		98
56) Acenaphthylene	7.561	152	1453444	32.71	ppm		99
57) 2,6-Dinitrotoluene	7.502	165	43360	6.56	ppm		90
58) 3-Nitroaniline	7.791	138	14663m	1.84	ppm		
59) Acenaphthene	7.802	153	1015956	33.79	ppm		97
60) 2,4-Dinitrophenol	7.936	184	3587	7.11	ppm		73
61) 4-Nitrophenol	8.123	109	28381	5.73	ppm		91
62) Dibenzofuran	8.043	168	1378942	34.49	ppm		95
63) 2,4-Dinitrotoluene	8.069	165	55778	6.41	ppm		92
64) 2,3,4,6-Tetrachlorophenol	8.251	232	207981	25.91	ppm		98
65) Diethylphthalate	8.406	149	1122818	34.84	ppm		95
66) Fluorene	8.529	166	1163134	34.70	ppm		97
67) 4-Chlorophenyl-phenyle...	8.540	204	523129	29.94	ppm		90
68) 4-Nitroaniline	8.642	138	15361	1.93	ppm		90
70) 4,6-Dinitro-2-methylph...	8.668	198	9045	4.84	ppm		98
71) n-Nitrosodiphenylamine	8.727	169	740150	33.16	ppm		99
72) 1,2-Diphenylhydrazine	8.775	77	874407	24.42	ppm		98
74) 4-Bromophenyl-phenylether	9.262	248	294838	33.92	ppm		90
75) Hexachlorobenzene	9.353	284	326523	36.74	ppm		98
76) Pentachlorophenol	9.685	266	122092	22.05	ppm		96
77) Phenanthrene	9.963	178	1562632	33.33	ppm		98
78) Anthracene	10.038	178	1443508	31.04	ppm		99
79) Carbazole	10.326	167	1363794	33.34	ppm		98
80) Di-n-butylphthalate	10.931	149	1819510	37.56	ppm		100
81) Fluoranthene	11.819	202	1610612	31.72	ppm		98
82) Octadecane	9.867	57	766743	34.72	ppm		97
84) Pyrene	12.166	202	1686758	33.43	ppm		98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 11:23:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
86)	Butylbenzylphthalate	13.300	149	760046	38.38	ppm	97
88)	Benzo[a]anthracene	14.092	228	1391322	30.61	ppm	99
89)	3,3'-Dichlorobenzidine	14.097	252	678756	46.22	ppm	98
90)	Chrysene	14.145	228	1282545	28.13	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.258	149	1010986	37.21	ppm	93
93)	Di-n-octylphthalate	15.242	149	1681971	37.81	ppm	98
94)	Benzo[b]fluoranthene	15.707	252	1391218	32.32	ppm	100
95)	Benzo[k]fluoranthene	15.745	252	1333126	32.56	ppm	99
96)	Benzo[a]pyrene	16.146	252	1136530	30.35	ppm	96
97)	Indeno[1,2,3-cd]pyrene	17.574	276	1459699	41.38	ppm	97
99)	Dibenz[a,h]anthracene	17.595	278	1283275	33.53	ppm	97
100)	7,12-Dimethylbenz(a)an...	15.697	256	682154	39.73	ppm	96
101)	Benzo[g,h,i]perylene	17.916	276	1202771	31.14	ppm	97
103)	Benzaldehyde	4.309	105	417984	30.78	ppm	95
105)	1,2,4,5-Tetrachloroben...	6.652	216	476831	29.46	ppm	98
107)	Atrazine	9.578	215	152397	34.70	ppm	95

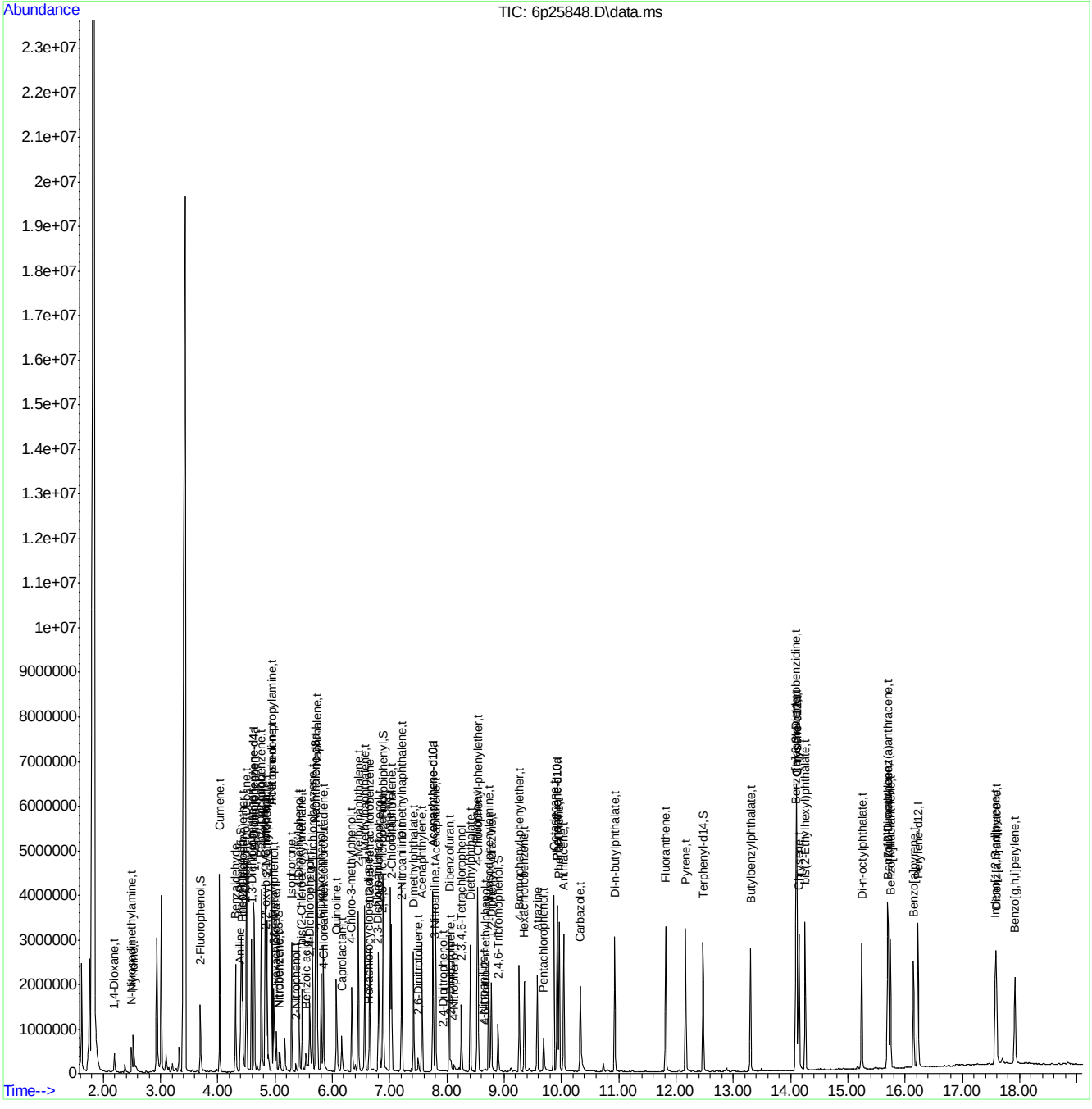
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 11:23:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

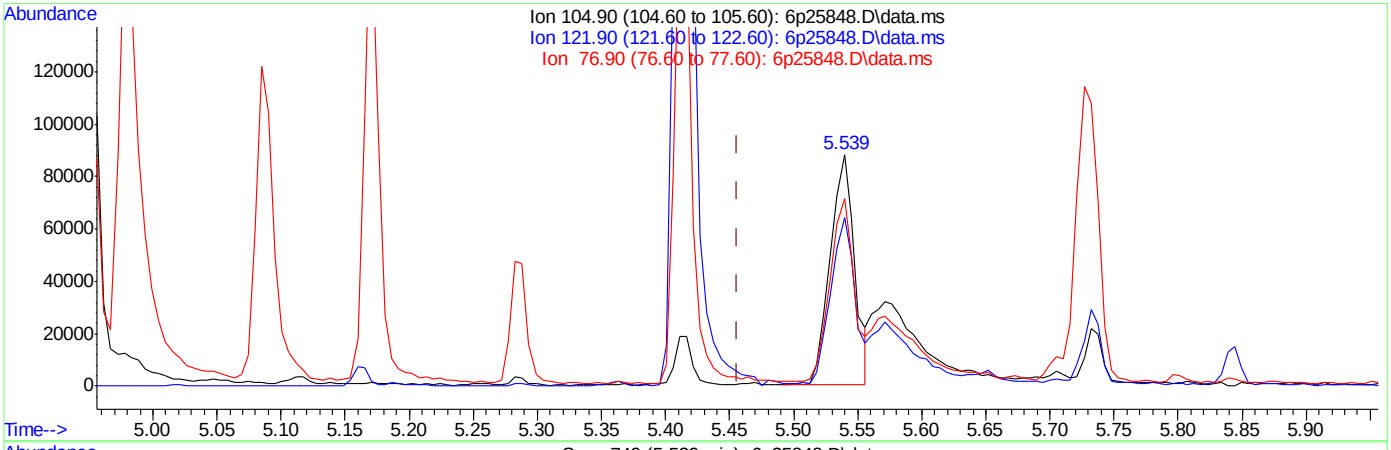
Sample Number:	OP93791-MS	**Method:**	SW846 8270D
Lab FileID:	6P25848.D	**Analyst approved:**	05/12/16 12:22 Arielle Cocozza
Injection Time:	05/11/16 17:03	**Supervisor approved:**	05/12/16 16:39 Kristi Schollenberger

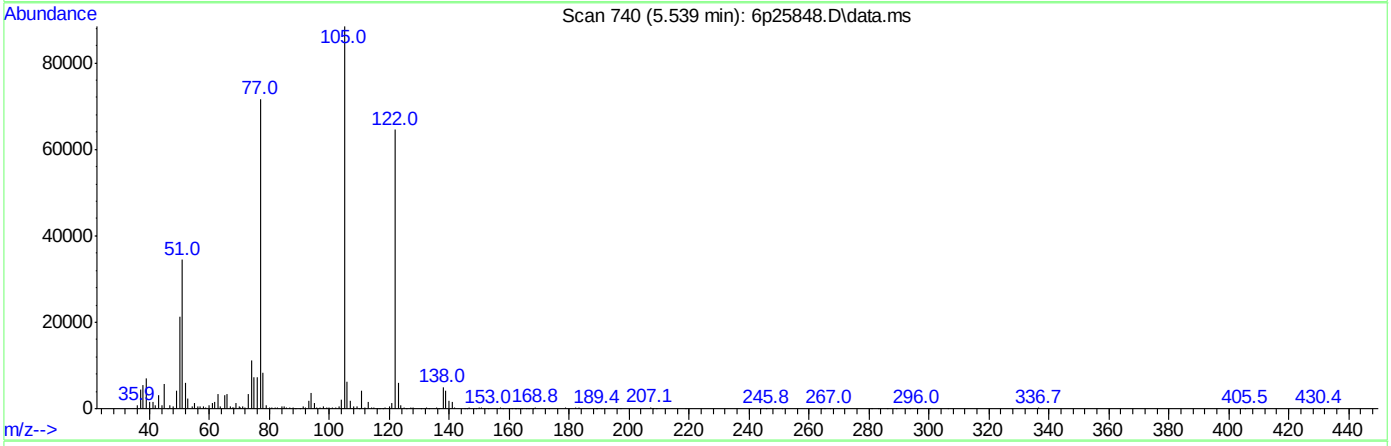
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.54	Poor instrument integration
3-Nitroaniline	99-09-2		7.79	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 11 17:22:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration





TIC: 6p25848.D\data.ms

(31) Benzoic acid (t)

5.539min (+0.083) 9.57ppm

response 114695

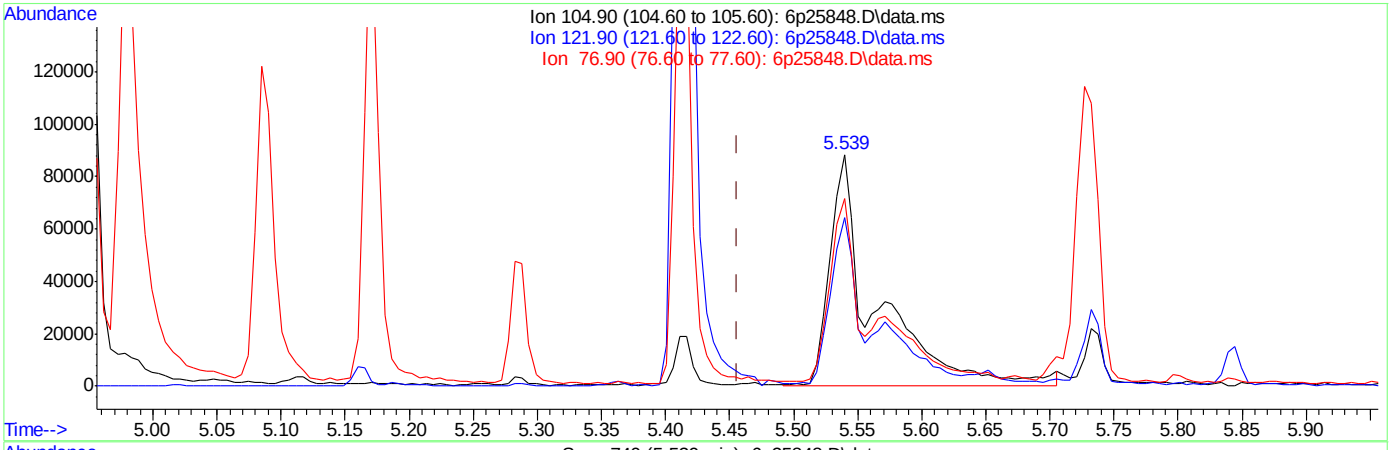
Ion	Exp%	Act%
104.90	100	100
121.90	71.70	72.26
76.90	84.30	79.29
0.00	0.00	0.00

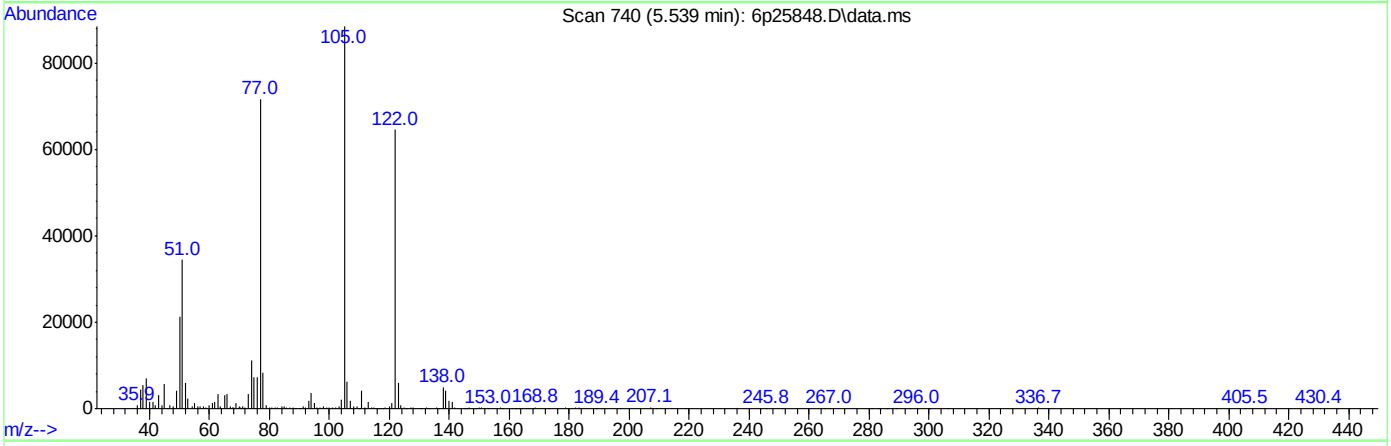
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 11 17:22:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration





TIC: 6p25848.D\data.ms

(31) Benzoic acid (t)

5.539min (+0.083) 18.14ppm m

response 217265

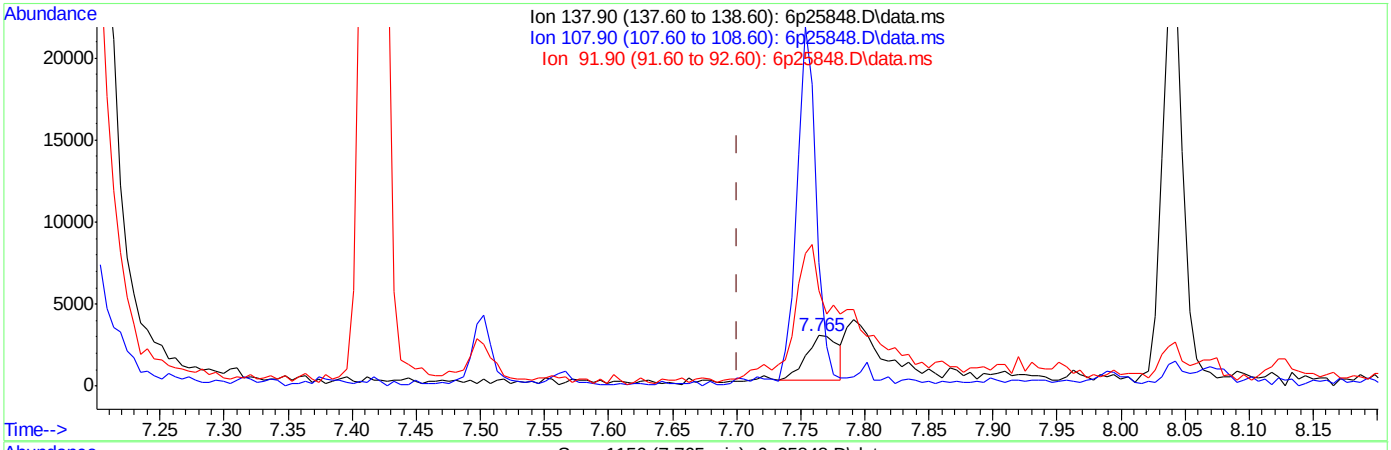
Ion	Exp%	Act%
104.90	100	100
121.90	71.70	72.91
76.90	84.30	80.99
0.00	0.00	0.00

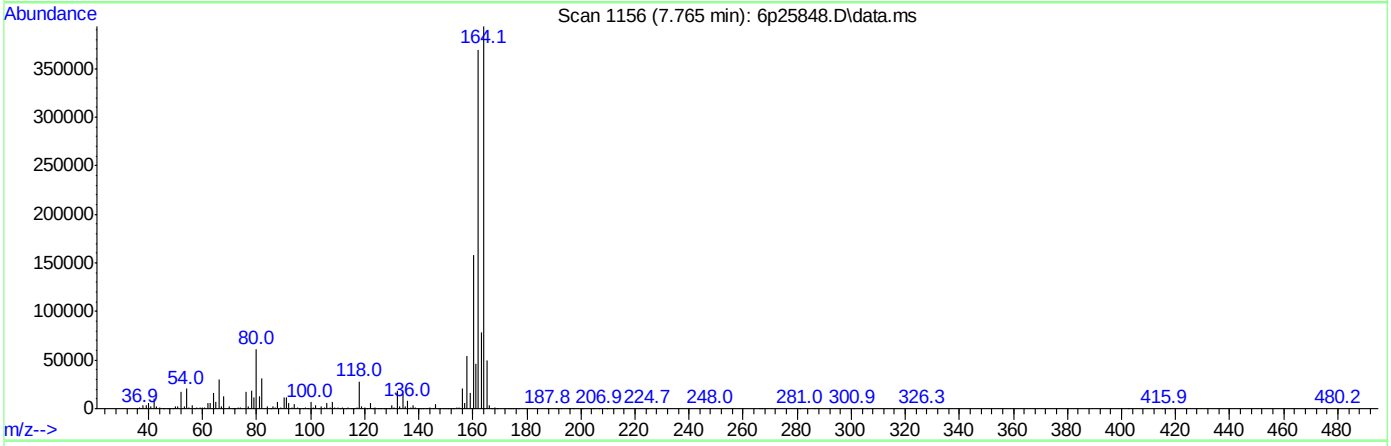
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 11:21:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration





TIC: 6p25848.D\data.ms

(58) 3-Nitroaniline (t)

7.765min (+0.064) 0.59ppm

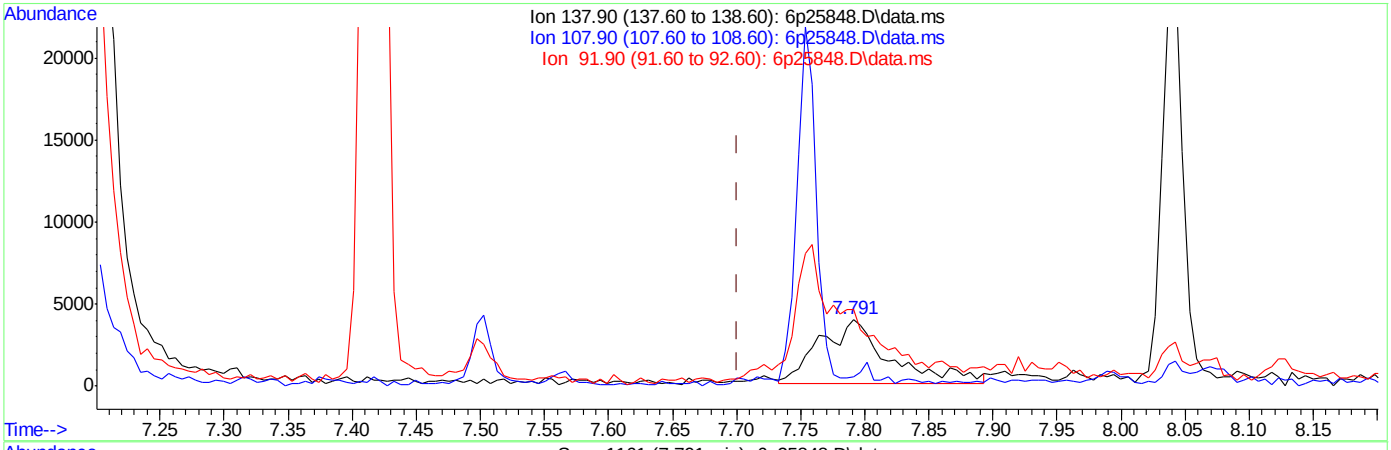
response 4727

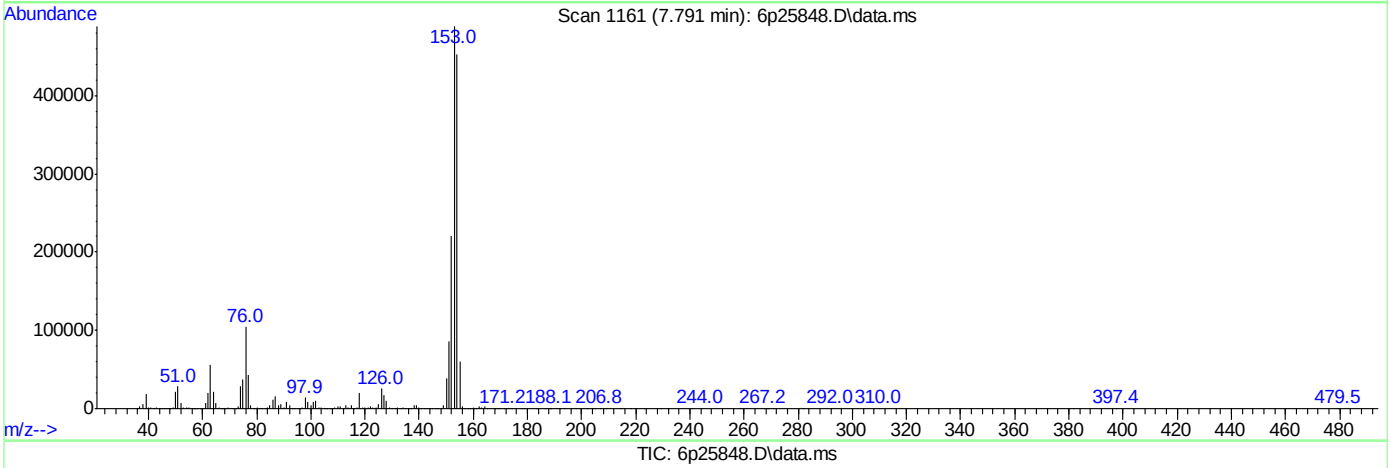
Ion	Exp%	Act%
137.90	100	100
107.90	12.80	424.27#
91.90	129.70	177.25#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25848.D
Acq On : 11 May 2016 5:03 pm
Operator : ariellec
Sample : op93791-ms
Misc : op93791,e6p1206,30.1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 11:21:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration





TIC: 6p25848.D\data.ms

(58) 3-Nitroaniline (t)

7.791min (+0.091) 1.84ppm m

response 14663

Ion	Exp%	Act%
137.90	100	100
107.90	12.80	14.84
91.90	129.70	114.79
0.00	0.00	0.00

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/12/16 16:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25849.D
Acq On : 11 May 2016 5:30 pm
Operator : ariellec
Sample : op93791-msd
Misc : op93791,e6p1206,31.1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 12 12:27:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuThu May 12 12:26:52 2016
QLast Update : Thu May 12 12:26:52 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	418298	40.00	ppm	0.00
24) Naphthalene-d8	5.705	136	1677441	40.00	ppm	0.00
47) Acenaphthene-d10	7.754	164	977253	40.00	ppm	0.00
69) Phenanthrene-d10	9.925	188	1566289	40.00	ppm	0.00
83) Chrysene-d12	14.108	240	1571516	40.00	ppm	0.00
92) Perylene-d12	16.226	264	1378607	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.625	152	418298	40.00	ppm	0.00
104) Acenaphthene-d10a	7.754	164	977253	40.00	ppm	0.00
106) Phenanthrene-d10a	9.925	188	1566289	40.00	ppm	0.00
108) Chrysene-d12a	14.108	240	1571516	40.00	ppm	0.00
110) Naphthalene-d8a	5.705	136	1677441	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.689	112	414768	27.96	ppm	0.03
Spiked Amount 50.000			Recovery	=	55.92%	
8) Phenol-d5	4.406	99	555437	28.48	ppm	0.01
Spiked Amount 50.000			Recovery	=	56.96%	
25) Nitrobenzene-d5	5.069	82	145820	7.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	15.88%	
51) 2-Fluorobiphenyl	6.887	172	1035171	32.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	65.96%	
73) 2,4,6-Tribromophenol	8.893	330	145336	39.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	79.50%	
85) Terphenyl-d14	12.471	244	1025501	34.73	ppm	-0.14
Spiked Amount 50.000			Recovery	=	69.46%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.191	88	133579	17.80	ppm	97
3) Pyridine	2.523	79	334506	17.71	ppm	96
4) N-Nitrosodimethylamine	2.491	74	235079	20.28	ppm #	74
6) Indene	4.823	116	857299	33.28	ppm	98
7) Cumene	4.031	105	1141499	28.33	ppm	98
9) Phenol	4.416	94	644818	29.02	ppm	98
10) Aniline	4.390	93	811404	35.04	ppm	78
11) bis(2-Chloroethyl)ether	4.432	93	467972	29.10	ppm	94
12) 2-Chlorophenol	4.491	128	458875	29.03	ppm	93
13) Decane	4.502	43	471649	25.12	ppm	97
14) 1,3-Dichlorobenzene	4.582	146	498086	29.80	ppm	99
15) 1,4-Dichlorobenzene	4.641	146	516690	30.75	ppm	99
16) Benzyl alcohol	4.753	108	298168	28.64	ppm	84
17) 1,2-Dichlorobenzene	4.759	146	484486	31.35	ppm	100
18) Acetophenone	4.946	105	677902	30.79	ppm	77
19) 2-Methylphenol	4.855	108	420364	30.55	ppm	91
20) 2,2'-oxybis(1-Chloropr...	4.834	121	150426	27.75	ppm #	74
21) 3&4-Methylphenol	4.983	108	446988	30.97	ppm	96
22) n-Nitroso-di-n-propyla...	4.946	70	367292	28.34	ppm	98
23) Hexachloroethane	5.021	201	62993	10.59	ppm	94
26) Nitrobenzene	5.085	77	151146	7.83	ppm	96
27) Quinoline	6.069	129	909903	31.00	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25849.D
Acq On : 11 May 2016 5:30 pm
Operator : ariellec
Sample : op93791-msd
Misc : op93791,e6p1206,31.1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 12 12:27:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuThu May 12 12:26:52 2016
QLast Update : Thu May 12 12:26:52 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	5.283	82	958743	29.68	ppm		98
29) 2-Nitrophenol	5.363	139	43583	5.74	ppm	#	67
30) 2,4-Dimethylphenol	5.411	107	509887	35.57	ppm		97
31) Benzoic acid	5.529	105	45758	4.05	ppm		93
32) bis(2-Chloroethoxy)met...	5.470	93	509673	26.76	ppm		100
33) 2,4-Dichlorophenol	5.604	162	368263	30.60	ppm		98
34) 2,6-Dichlorophenol	5.802	162	362593	30.55	ppm		99
36) 1,2,4-Trichlorobenzene	5.652	180	401985	28.83	ppm		96
38) Naphthalene	5.727	128	1461781	32.71	ppm		99
39) 4-Chloroaniline	5.791	127	371731	20.58	ppm		98
40) 2,3-Dichloroaniline	6.797	161	440965	30.05	ppm		97
41) Caprolactam	6.160	55	165911	22.18	ppm		96
42) Hexachlorobutadiene	5.844	225	228039	29.06	ppm		96
43) 4-Chloro-3-methylphenol	6.337	107	464208	32.65	ppm	#	52
44) 2-Methylnaphthalene	6.449	141	803768	33.41	ppm		98
45) 1-Methylnaphthalene	6.567	141	841324	33.54	ppm		99
46) Dimethylnaphthalene	7.208	156	874452	31.49	ppm		92
48) Hexachlorocyclopentadiene	6.636	237	37364	4.76	ppm		95
49) 2,4,6-Trichlorophenol	6.807	196	259830	31.10	ppm		96
50) 2,4,5-Trichlorophenol	6.877	196	266749	29.47	ppm		93
52) 2-Chloronaphthalene	7.032	162	867792	31.24	ppm		96
53) Biphenyl	7.010	154	1170084	31.13	ppm		98
54) 2-Nitroaniline	7.192	65	100845	9.99	ppm		95
55) Dimethylphthalate	7.417	163	1039039	32.48	ppm		99
56) Acenaphthylene	7.561	152	1389698	32.68	ppm		99
57) 2,6-Dinitrotoluene	7.497	165	53910	8.53	ppm		88
58) 3-Nitroaniline	7.749	138	55177	7.22	ppm	#	84
59) Acenaphthene	7.797	153	940788	32.70	ppm		99
60) 2,4-Dinitrophenol	7.925	184	5327	7.54	ppm		87
61) 4-Nitrophenol	8.123	109	35433	7.48	ppm		91
62) Dibenzofuran	8.043	168	1274797	33.33	ppm		96
63) 2,4-Dinitrotoluene	8.069	165	68005	8.17	ppm	#	39
64) 2,3,4,6-Tetrachlorophenol	8.251	232	194803	25.36	ppm		95
65) Diethylphthalate	8.406	149	1075236	34.86	ppm		96
66) Fluorene	8.529	166	1086598	33.88	ppm		97
67) 4-Chlorophenyl-phenyle...	8.540	204	493300	29.50	ppm		86
68) 4-Nitroaniline	8.615	138	67089	8.83	ppm		94
70) 4,6-Dinitro-2-methylph...	8.663	198	14146	5.76	ppm		87
71) n-Nitrosodiphenylamine	8.727	169	731832	34.05	ppm		99
72) 1,2-Diphenylhydrazine	8.775	77	988126	28.67	ppm		98
74) 4-Bromophenyl-phenylether	9.262	248	286379	34.22	ppm		91
75) Hexachlorobenzene	9.353	284	309609	36.18	ppm		97
76) Pentachlorophenol	9.690	266	111830	20.98	ppm		96
77) Phenanthrene	9.963	178	1545709	34.25	ppm		98
78) Anthracene	10.038	178	1434918	32.05	ppm		99
79) Carbazole	10.327	167	1383764	35.13	ppm		98
80) Di-n-butylphthalate	10.931	149	1780407	38.18	ppm		99
81) Fluoranthene	11.819	202	1591135	32.54	ppm		98
82) Octadecane	9.867	57	732864m	34.46	ppm		
84) Pyrene	12.167	202	1685993	34.14	ppm		99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25849.D
Acq On : 11 May 2016 5:30 pm
Operator : ariellec
Sample : op93791-msd
Misc : op93791,e6p1206,31.1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 12 12:27:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuThu May 12 12:26:52 2016
QLast Update : Thu May 12 12:26:52 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
86) Butylbenzylphthalate	13.300	149	752886	38.84 ppm	96
88) Benzo[a]anthracene	14.092	228	1408259	31.65 ppm	99
89) 3,3'-Dichlorobenzidine	14.103	252	923061	64.22 ppm	98
90) Chrysene	14.146	228	1299793	29.13 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.253	149	1000796	37.64 ppm	92
93) Di-n-octylphthalate	15.242	149	1674930	39.61 ppm	98
94) Benzo[b]fluoranthene	15.707	252	1382933	33.80 ppm	97
95) Benzo[k]fluoranthene	15.745	252	1338841	34.40 ppm	99
96) Benzo[a]pyrene	16.146	252	1146771	32.21 ppm	98
97) Indeno[1,2,3-cd]pyrene	17.574	276	1471400	43.88 ppm	98
99) Dibenz[a,h]anthracene	17.595	278	1273893	35.02 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.697	256	671464	41.14 ppm	98
101) Benzo[g,h,i]perylene	17.916	276	1195378	32.55 ppm	97
103) Benzaldehyde	4.309	105	371615	28.70 ppm	94
105) 1,2,4,5-Tetrachloroben...	6.652	216	429976	27.76 ppm	99
107) Atrazine	9.578	215	150265	35.54 ppm	93
109) benzidine	12.097	184	213644	10.83 ppm	99

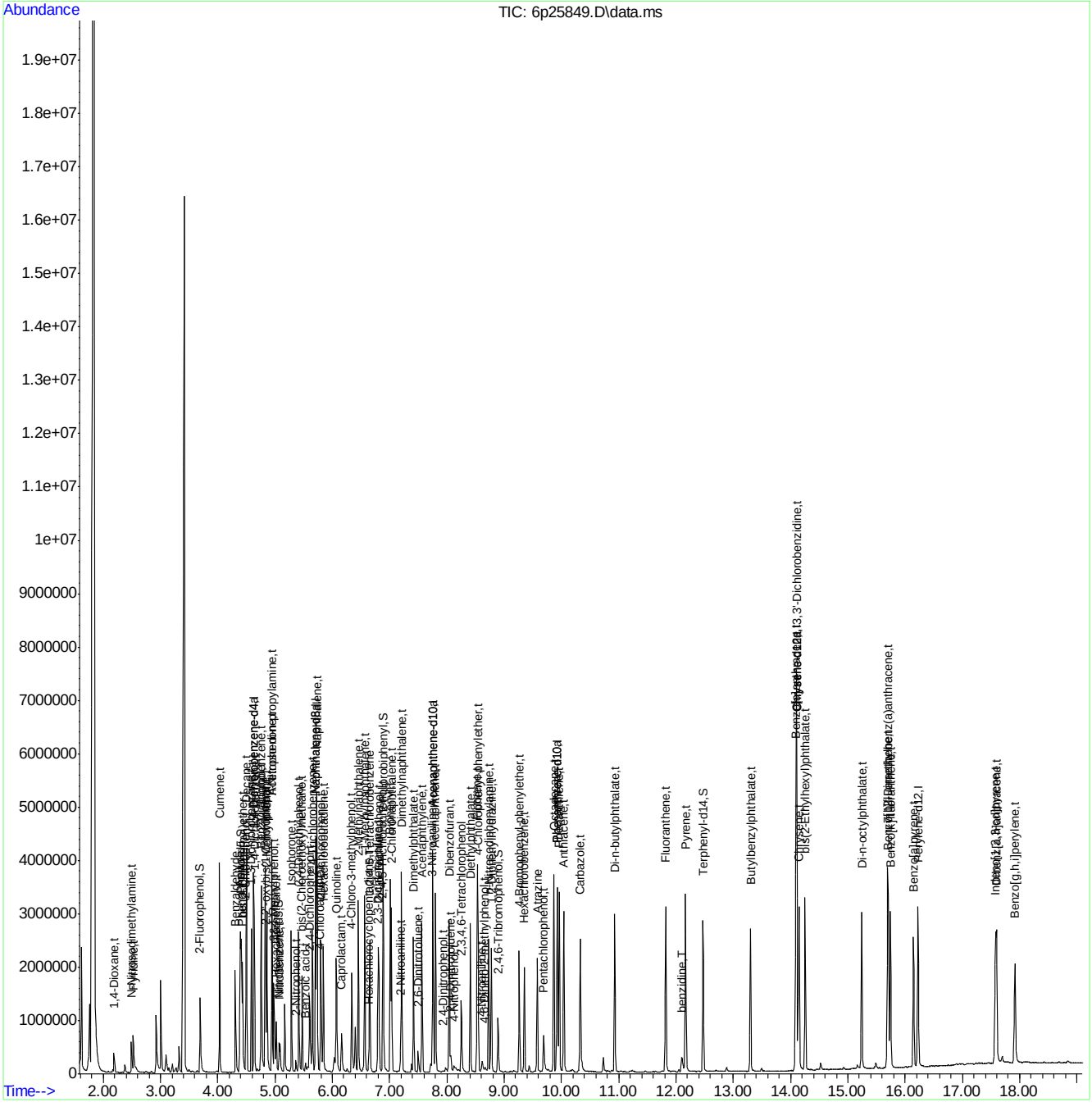
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25849.D
Acq On : 11 May 2016 5:30 pm
Operator : ariellec
Sample : op93791-msd
Misc : op93791,e6p1206,31.1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 12 12:27:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuThu May 12 12:26:52 2016
QLast Update : Thu May 12 12:26:52 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

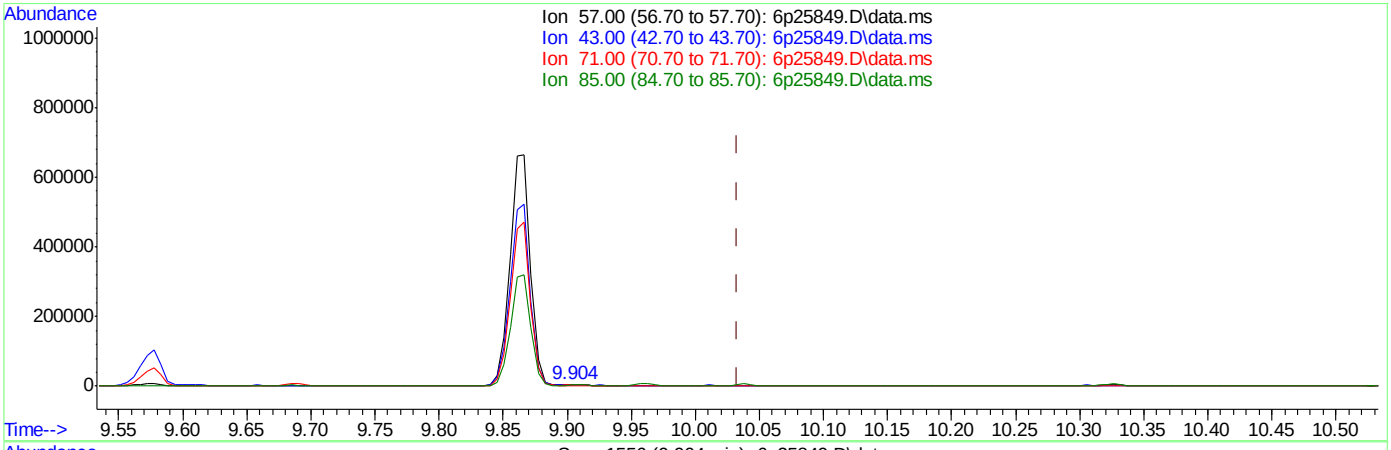
Sample Number:	OP93791-MSD	**Method:**	SW846 8270D
Lab FileID:	6P25849.D	**Analyst approved:**	05/12/16 12:28 Arielle Cocozza
Injection Time:	05/11/16 17:30	**Supervisor approved:**	05/12/16 16:39 Kristi Schollenberger

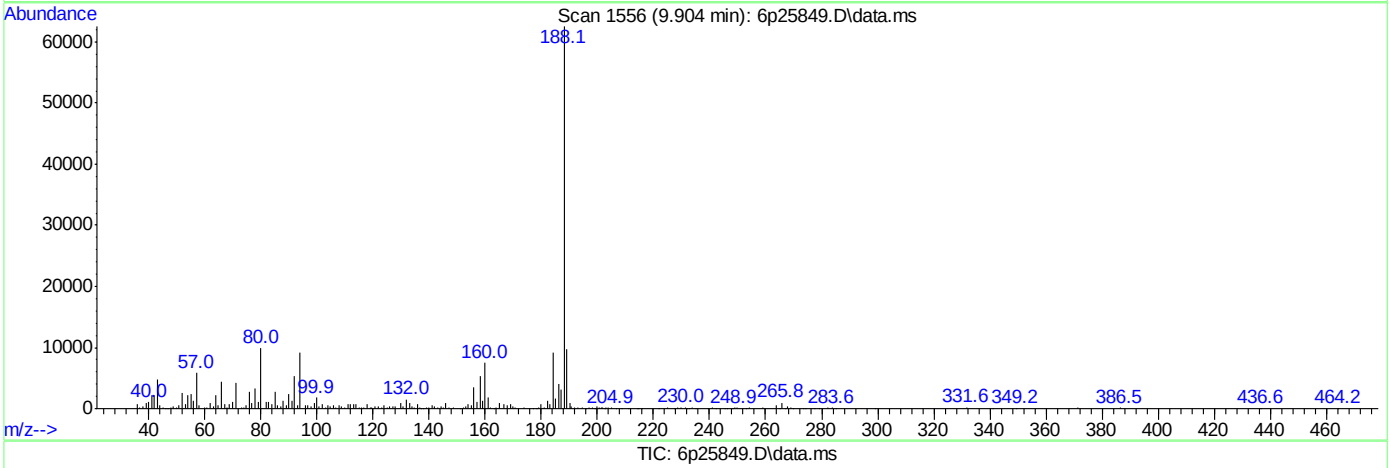
Parameter	CAS	Sig#	R.T. (min.)	Reason
Octadecane	593-45-3		9.87	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25849.D
Acq On : 11 May 2016 5:30 pm
Operator : ariellec
Sample : op93791-msd
Misc : op93791,e6p1206,31.1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 11 17:49:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:21:59 2016
QLast Update : Wed May 11 15:21:59 2016
Response via : Initial Calibration





TIC: 6p25849.D\data.ms

(82) Octadecane (t)

9.904min (-0.129) 0.30ppm

response 6361

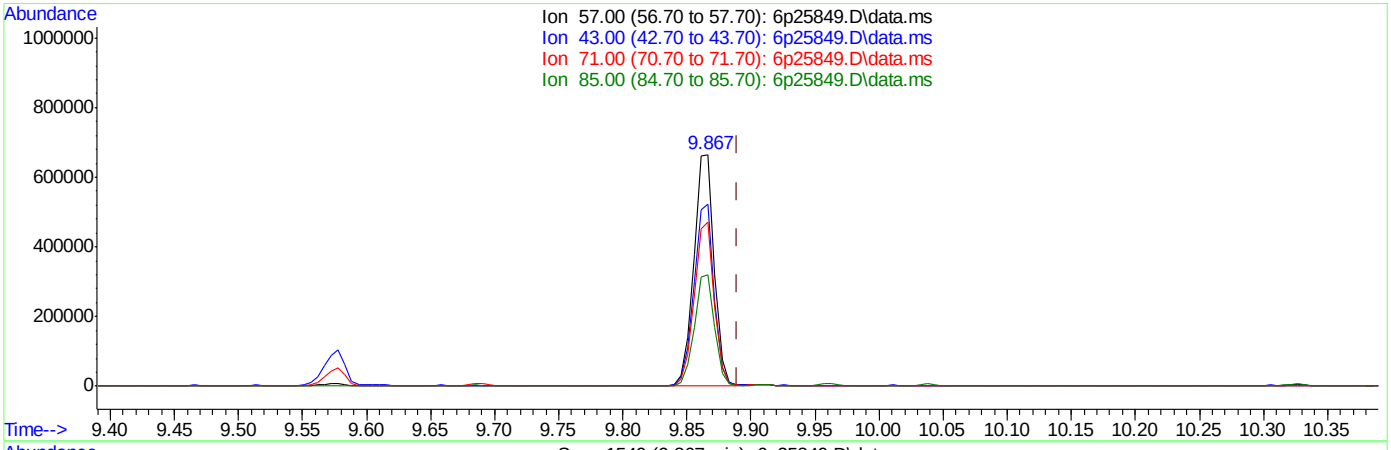
Ion	Exp%	Act%
57.00	100	100
43.00	76.70	49.62
71.00	68.20	65.85
85.00	47.90	38.35

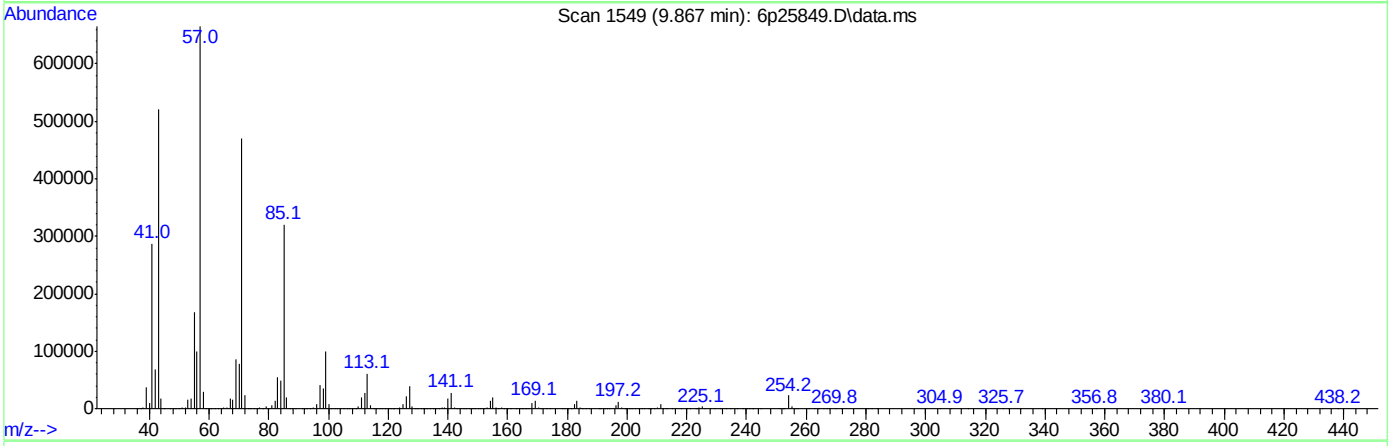
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25849.D
Acq On : 11 May 2016 5:30 pm
Operator : ariellec
Sample : op93791-msd
Misc : op93791,e6p1206,31.1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 12 12:26:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuThu May 12 12:26:52 2016
QLast Update : Thu May 12 12:26:52 2016
Response via : Initial Calibration





TIC: 6p25849.D\data.ms

(82) Octadecane (t)

9.867min (-0.023) 34.46ppm m

response 732864

Ion	Exp%	Act%
57.00	100	100
43.00	76.70	78.44
71.00	68.20	70.59
85.00	47.90	48.17

SGS ACCUTEST JC19914

6P25849.D edits: Octadecane

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61226.D
Acq On : 11 May 2016 1:32 pm
Operator : linseyk
Sample : op93784a-ms
Misc : op93784a,e3m2879,460
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 11 15:03:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.365	150	456420	4.00	ppm		-0.06
14) Fluorene-d10	13.373	176	718717	4.00	ppm		-0.08
21) Fluoranthene-d10	17.592	212	1167237	4.00	ppm		-0.05
31) Benzo(a)pyrene-d12	22.197	264	941302	4.00	ppm		-0.05
System Monitoring Compounds							
3) 2-Fluorophenol	4.337	112	1893454	33.16	ppm		-0.09
Spiked Amount 50.000			Recovery = 66.32%				
4) Phenol-d5	5.939	99	2486847	26.32	ppm		-0.04
Spiked Amount 50.000			Recovery = 52.64%				
7) Nitrobenzene-d5	7.493	82	3167615	36.06	ppm		-0.08
Spiked Amount 50.000			Recovery = 72.12%				
15) 2-Fluorobiphenyl	11.052	172	7308263	37.01	ppm		-0.09
Spiked Amount 50.000			Recovery = 74.02%				
20) 2,4,6-Tribromophenol	13.920	330	850147	37.79	ppm		-0.05
Spiked Amount 50.000			Recovery = 75.58%				
28) Terphenyl-d14	18.411	244	7523486	44.43	ppm		-0.02
Spiked Amount 50.000			Recovery = 88.86%				
Target Compounds							Qvalue
2) 1,4-dioxane	2.128	88	28064479	1190.10	ppm		87
5) Phenol	5.964	94	367250	3.61	ppm		95
6) bis(2-Chloroethyl)ether	6.060	93	52280	0.68	ppm	#	47
8) Nitrobenzene	7.531	77	59000	0.62	ppm		90
9) Naphthalene	8.886	128	242689	0.96	ppm		85
10) Hexachlorobutadiene	9.169	225	34480	0.78	ppm		87
11) 2-Methylnaphthalene	10.262	141	143522	1.09	ppm	#	85
13) Hexachlorocyclopentadiene	10.590	237	20712	0.59	ppm		84
16) Acenaphthylene	12.026	152	218718	0.88	ppm		94
17) Acenaphthene	12.381	153	154714	0.93	ppm		96
18) 4,6-dinitro-2-methylph...	13.599	198	156147	6.37	ppm	#	9
19) Fluorene	13.430	166	227884	1.14	ppm	#	51
22) Hexachlorobenzene	14.501	284	43978	0.80	ppm		76
23) Pentachlorophenol	14.949	266	181345	4.76	ppm		90
24) Phenanthrene	15.336	178	286349	1.00	ppm		99
25) Anthracene	15.428	178	254583	1.01	ppm		98
26) Fluoranthene	17.608	202	315527	0.88	ppm		98
27) Pyrene	18.009	202	319947	0.96	ppm		92
29) Benzo[a]anthracene	20.095	228	259120	0.81	ppm		95
30) Chrysene	20.157	228	258460	0.84	ppm		95
32) Benzo[b]fluoranthene	21.764	252	225379	0.72	ppm		98
33) Benzo[k]fluoranthene	21.810	252	227387	0.78	ppm		97
34) Benzo[a]pyrene	22.227	252	214576	0.74	ppm		85
35) Indeno[1,2,3-cd]pyrene	23.674	276	225363	0.76	ppm		97
36) Dibenz[a,h]anthracene	23.711	278	166260	0.68	ppm		69
37) Benzo[g,h,i]perylene	24.031	276	188940	0.73	ppm		92

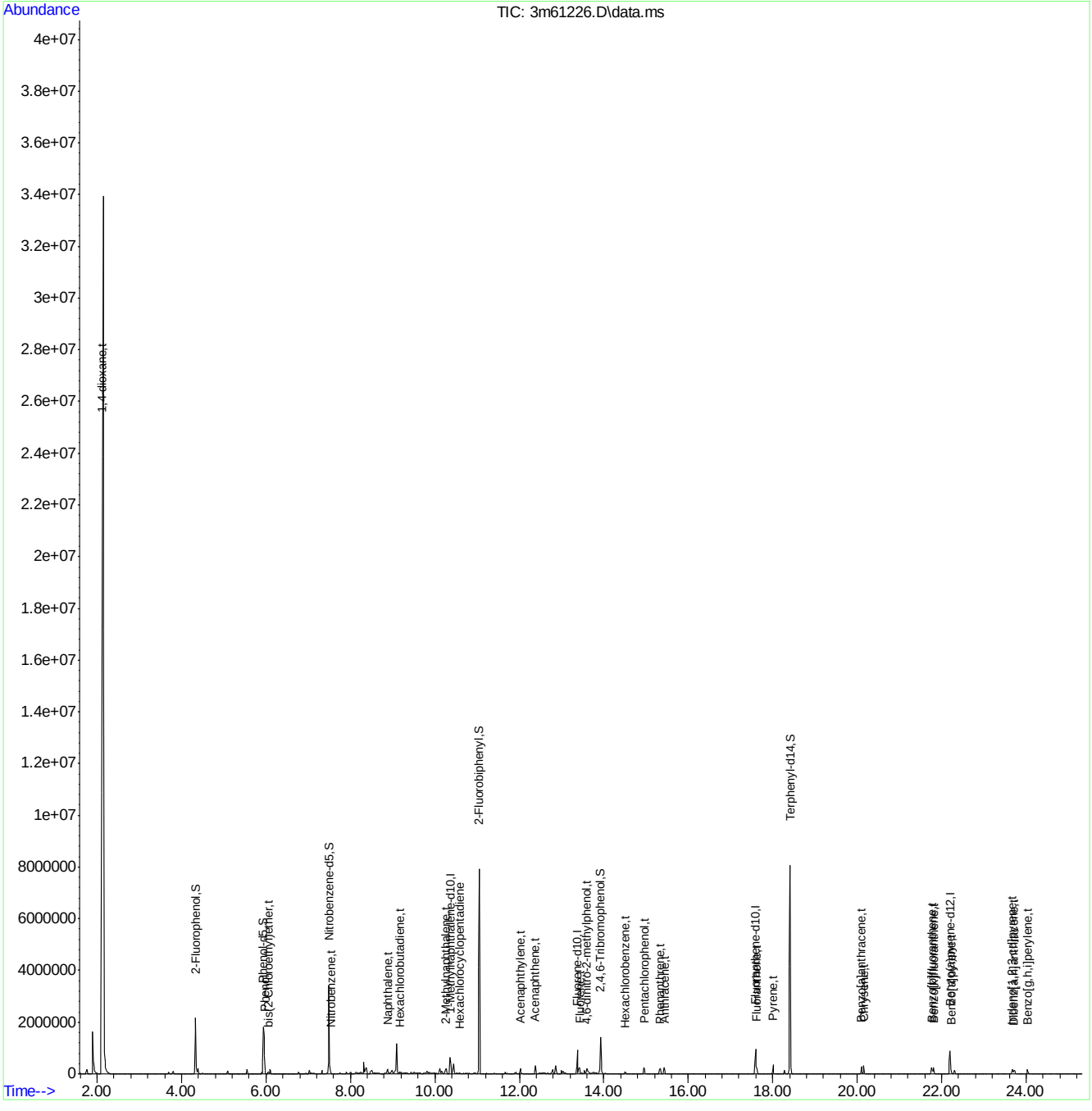
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61226.D
Acq On : 11 May 2016 1:32 pm
Operator : linseyk
Sample : op93784a-ms
Misc : op93784a,e3m2879,460
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 11 15:03:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61227.D
Acq On : 11 May 2016 2:05 pm
Operator : linseyk
Sample : op93784a-msd
Misc : op93784a,e3m2879,460
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 11 15:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.365	150	451149	4.00	ppm	-0.06
14) Fluorene-d10	13.373	176	736123	4.00	ppm	-0.08
21) Fluoranthene-d10	17.592	212	1158188	4.00	ppm	-0.05
31) Benzo(a)pyrene-d12	22.197	264	965971	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	4.338	112	1928114	34.16	ppm	-0.09
Spiked Amount 50.000			Recovery = 68.32%			
4) Phenol-d5	5.940	99	2553831	27.35	ppm	-0.04
Spiked Amount 50.000			Recovery = 54.70%			
7) Nitrobenzene-d5	7.493	82	3196096	36.80	ppm	-0.08
Spiked Amount 50.000			Recovery = 73.60%			
15) 2-Fluorobiphenyl	11.052	172	7568467	37.42	ppm	-0.09
Spiked Amount 50.000			Recovery = 74.84%			
20) 2,4,6-Tribromophenol	13.920	330	879764	38.19	ppm	-0.05
Spiked Amount 50.000			Recovery = 76.38%			
28) Terphenyl-d14	18.411	244	8021409	47.74	ppm	-0.02
Spiked Amount 50.000			Recovery = 95.48%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.128	88	30632973	1314.20	ppm	87
5) Phenol	5.964	94	354497	3.52	ppm #	92
6) bis(2-Chloroethyl)ether	6.061	93	53447	0.70	ppm #	49
8) Nitrobenzene	7.531	77	62966	0.67	ppm	92
9) Naphthalene	8.886	128	248156	0.99	ppm	86
10) Hexachlorobutadiene	9.169	225	34482	0.79	ppm	86
11) 2-Methylnaphthalene	10.262	141	145957	1.12	ppm #	84
13) Hexachlorocyclopentadiene	10.591	237	21904	0.63	ppm	85
16) Acenaphthylene	12.026	152	224902	0.88	ppm	94
17) Acenaphthene	12.382	153	160526	0.94	ppm	95
18) 4,6-dinitro-2-methylph...	13.599	198	155831	6.23	ppm #	9
19) Fluorene	13.430	166	238786	1.17	ppm #	51
22) Hexachlorobenzene	14.501	284	46302	0.85	ppm	75
23) Pentachlorophenol	14.949	266	182405	4.82	ppm	89
24) Phenanthrene	15.336	178	297555	1.05	ppm	99
25) Anthracene	15.429	178	266084	1.06	ppm	98
26) Fluoranthene	17.608	202	331678	0.93	ppm	98
27) Pyrene	18.010	202	337803	1.02	ppm	92
29) Benzo[a]anthracene	20.095	228	269505	0.85	ppm	95
30) Chrysene	20.157	228	272037	0.89	ppm	95
32) Benzo[b]fluoranthene	21.764	252	300137	0.93	ppm	95
33) Benzo[k]fluoranthene	21.811	252	194856	0.65	ppm	93
34) Benzo[a]pyrene	22.228	252	223958	0.75	ppm	85
35) Indeno[1,2,3-cd]pyrene	23.674	276	250807	0.82	ppm	97
36) Dibenz[a,h]anthracene	23.712	278	181568	0.72	ppm	69
37) Benzo[g,h,i]perylene	24.031	276	202843	0.77	ppm	92

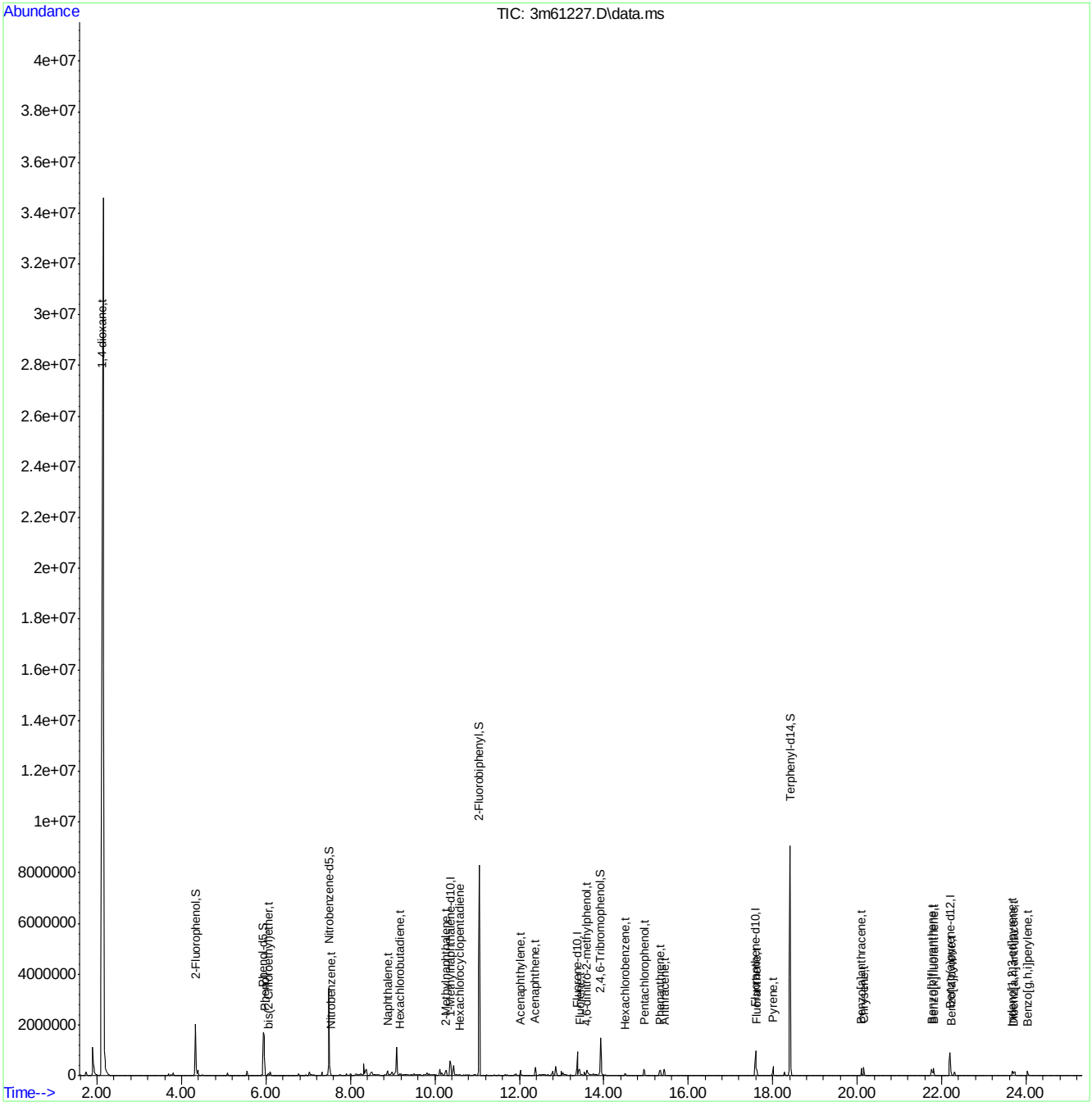
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61227.D
Acq On : 11 May 2016 2:05 pm
Operator : linseyk
Sample : op93784a-msd
Misc : op93784a,e3m2879,460
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 11 15:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 11 12:21:34 2016
Response via : Initial Calibration



M3M2855SIM.M Wed May 11 15:03:27 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16282.D
Acq On : 11 May 2016 6:11 pm
Operator : juliusj
Sample : op93791a-ms
Misc : op93791a,e4p857,30.3
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 11:42:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:42:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.948	150	79849	4.00	ppm	-0.08
13) Fluorene-d10	10.887	176	108304	4.00	ppm	-0.08
23) Fluoranthene-d10	15.096	212	141533	4.00	ppm	-0.10
33) Benzo(a)pyrene-d12	19.729	264	91597	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	2.749	112	291657	34.18	ppm	-0.04
Spiked Amount 50.000			Recovery = 68.36%			
4) Phenol-d5	3.871	99	466321	30.42	ppm	-0.07
Spiked Amount 50.000			Recovery = 60.84%			
7) Nitrobenzene-d5	5.234	82	235483	18.51	ppm	-0.08
Spiked Amount 50.000			Recovery = 37.02%			
14) 2-Fluorobiphenyl	8.612	172	890128	22.11	ppm	-0.08
Spiked Amount 50.000			Recovery = 44.22%			
22) 2,4,6-Tribromophenol	11.429	330	116270	28.60	ppm	-0.09
Spiked Amount 50.000			Recovery = 57.20%			
30) Terphenyl-d14	15.939	244	694718	41.32	ppm	-0.10
Spiked Amount 50.000			Recovery = 82.64%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.515	88	23174	6.53	ppm #	1
5) Phenol	3.888	94	66052	3.81	ppm #	49
6) bis(2-Chloroethyl)ether	3.991	93	8254	0.71	ppm #	47
8) Naphthalene	6.515	128	39562	0.92	ppm	97
9) Hexachlorobutadiene	6.820	225	5564	0.67	ppm	91
10) 2-Methylnaphthalene	7.833	141	18418	0.75	ppm	81
15) Acenaphthylene	9.552	152	24875	0.71	ppm	90
16) Acenaphthene	9.896	153	15789	0.45	ppm #	68
17) Dibenzofuran	10.262	168	29993	0.75	ppm #	30
18) Fluorene	10.936	166	23740	0.73	ppm	89
19) 4,6-dinitro-2-methylph...	11.135	198	954	1.09	ppm #	33
20) n-nitrosodiphenylamine	11.259	169	9180	0.56	ppm #	23
21) 1,2-Diphenylhydrazine	11.308	77	16013	0.58	ppm	99
24) Hexachlorobenzene	12.033	284	6262	0.62	ppm	88
25) Pentachlorophenol	12.480	266	9998	2.86	ppm	99
26) Phenanthrene	12.824	178	29767	0.78	ppm	88
27) Anthracene	12.928	178	22245	0.70	ppm	87
28) Fluoranthene	15.131	202	34154	0.80	ppm	92
29) Pyrene	15.526	202	31117	0.88	ppm	91
31) Benzo[a]anthracene	17.650	228	19001	0.88	ppm	100
32) Chrysene	17.698	228	26224	0.81	ppm	98
34) Benzo[b]fluoranthene	19.304	252	22022	0.67	ppm	98
35) Benzo[k]fluoranthene	19.350	252	22116	0.71	ppm	90
36) Benzo[a]pyrene	19.752	252	20680	0.61	ppm	96
37) Indeno[1,2,3-cd]pyrene	21.170	276	22623	0.81	ppm	95
38) Dibenz[a,h]anthracene	21.218	278	18018	0.71	ppm	72
39) Benzo[g,h,i]perylene	21.487	276	21374	0.74	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16282.D
Acq On : 11 May 2016 6:11 pm
Operator : juliusj
Sample : op93791a-ms
Misc : op93791a,e4p857,30.3
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 11:42:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:42:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.4.7

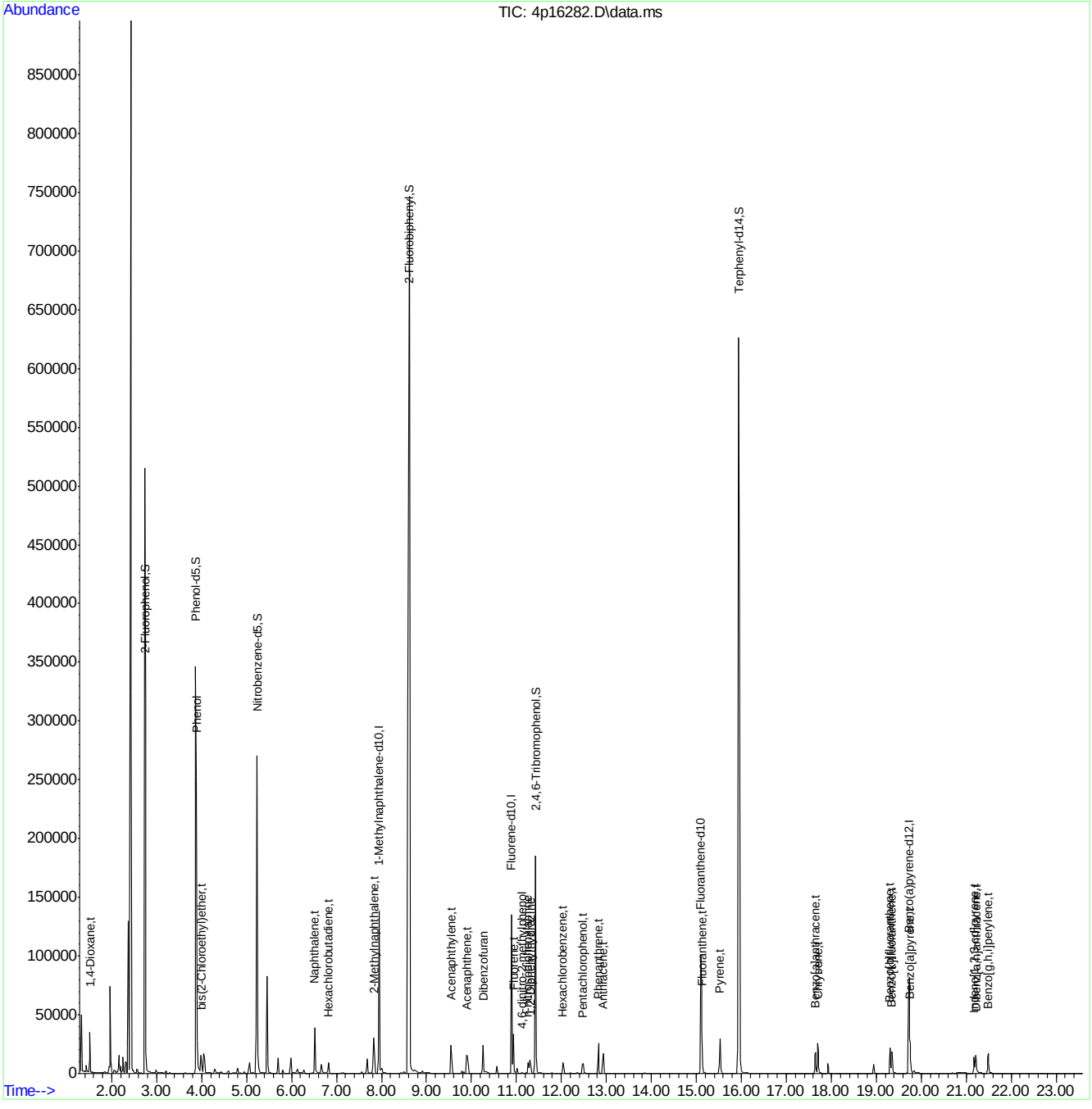
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16282.D
Acq On : 11 May 2016 6:11 pm
Operator : juliusj
Sample : op93791a-ms
Misc : op93791a,e4p857,30.3
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 11:42:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:42:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16283.D
Acq On : 11 May 2016 6:41 pm
Operator : juliusj
Sample : op93791a-msd
Misc : op93791a,e4p857,31.2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 11:43:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:43:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.950	150	77560	4.00	ppm	-0.08
13) Fluorene-d10	10.889	176	118137	4.00	ppm	-0.08
23) Fluoranthene-d10	15.098	212	148789	4.00	ppm	-0.09
33) Benzo(a)pyrene-d12	19.720	264	105388	4.00	ppm	-0.09
System Monitoring Compounds						
3) 2-Fluorophenol	2.749	112	303480	36.61	ppm	-0.04
Spiked Amount 50.000			Recovery = 73.22%			
4) Phenol-d5	3.871	99	465356	31.25	ppm	-0.07
Spiked Amount 50.000			Recovery = 62.50%			
7) Nitrobenzene-d5	5.236	82	120817	9.78	ppm	-0.08
Spiked Amount 50.000			Recovery = 19.56%			
14) 2-Fluorobiphenyl	8.614	172	810952	18.47	ppm	-0.08
Spiked Amount 50.000			Recovery = 36.94%			
22) 2,4,6-Tribromophenol	11.431	330	116256	26.22	ppm	-0.09
Spiked Amount 50.000			Recovery = 52.44%			
30) Terphenyl-d14	15.941	244	696745	39.42	ppm	-0.09
Spiked Amount 50.000			Recovery = 78.84%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.515	88	25528	7.41	ppm #	2
5) Phenol	3.888	94	72951	4.33	ppm #	36
6) bis(2-Chloroethyl)ether	3.991	93	8489	0.75	ppm #	53
8) Naphthalene	6.517	128	38561	0.93	ppm	95
9) Hexachlorobutadiene	6.822	225	5452	0.68	ppm	84
10) 2-Methylnaphthalene	7.835	141	16272	0.68	ppm #	73
15) Acenaphthylene	9.554	152	25374	0.66	ppm	88
16) Acenaphthene	9.898	153	16799	0.44	ppm	74
17) Dibenzofuran	10.264	168	30541	0.70	ppm #	27
18) Fluorene	10.938	166	25638	0.72	ppm	85
19) 4,6-dinitro-2-methylph...	11.137	198	637	0.88	ppm #	34
20) n-nitrosodiphenylamine	11.261	169	11300	0.63	ppm #	35
21) 1,2-Diphenylhydrazine	11.310	77	16935	0.56	ppm	96
24) Hexachlorobenzene	12.035	284	34640	3.25	ppm	92
25) Pentachlorophenol	12.465	266	13140	3.48	ppm	76
26) Phenanthrene	12.826	178	33335	0.83	ppm	87
27) Anthracene	12.930	178	26157	0.79	ppm	86
28) Fluoranthene	15.132	202	36001	0.81	ppm	93
29) Pyrene	15.528	202	34899	0.94	ppm	89
31) Benzo[a]anthracene	17.642	228	22898	1.00	ppm	89
32) Chrysene	17.700	228	28718	0.84	ppm	97
34) Benzo[b]fluoranthene	19.306	252	25608	0.68	ppm	99
35) Benzo[k]fluoranthene	19.340	252	23426	0.65	ppm	99
36) Benzo[a]pyrene	19.754	252	22479	0.58	ppm	98
37) Indeno[1,2,3-cd]pyrene	21.172	276	25081	0.78	ppm	96
38) Dibenz[a,h]anthracene	21.210	278	19422	0.67	ppm	73
39) Benzo[g,h,i]perylene	21.489	276	23148	0.69	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16283.D
Acq On : 11 May 2016 6:41 pm
Operator : juliusj
Sample : op93791a-msd
Misc : op93791a,e4p857,31.2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 11:43:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:43:28 2016
Response via : Initial Calibration

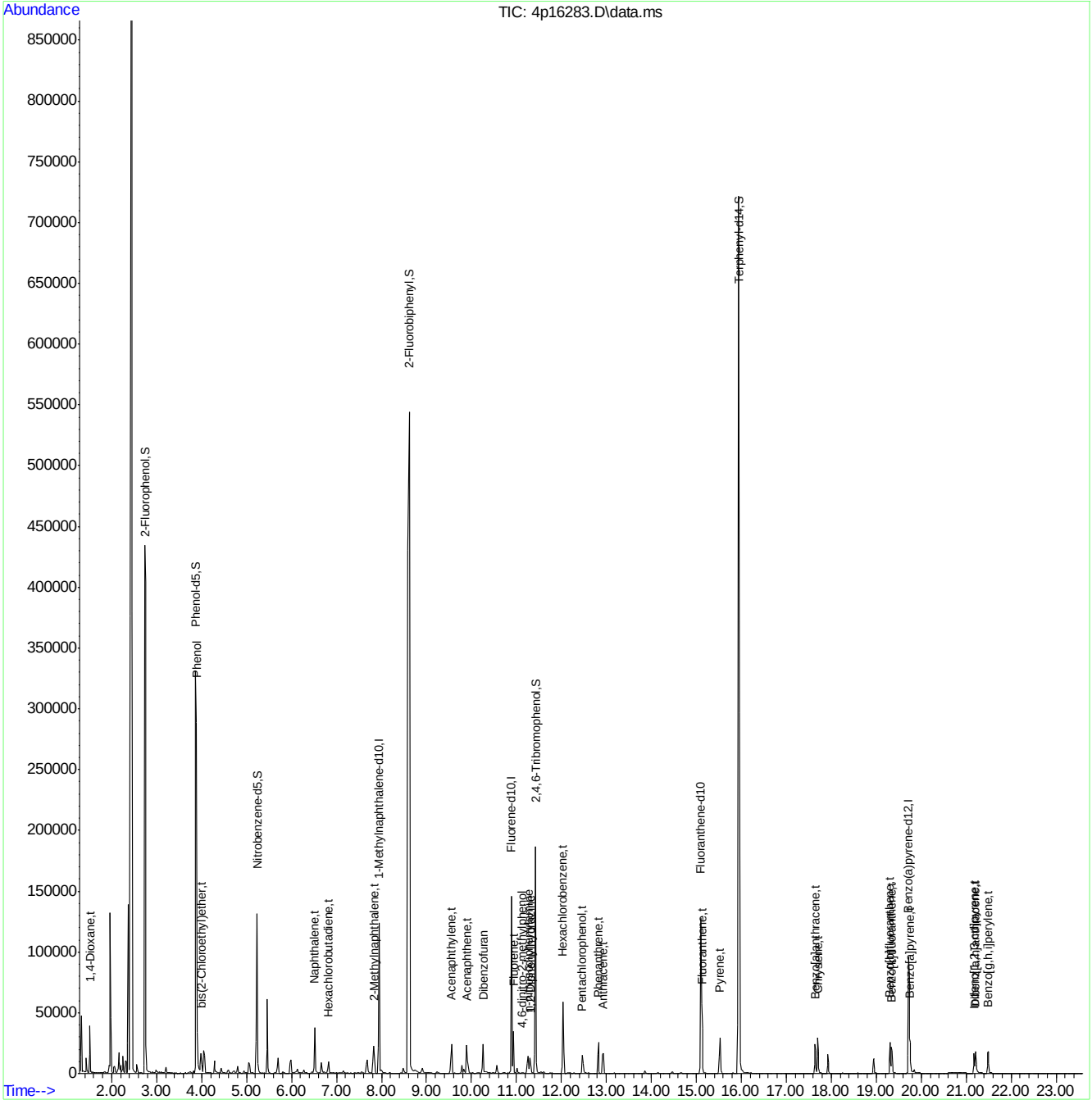
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16283.D
Acq On : 11 May 2016 6:41 pm
Operator : juliusj
Sample : op93791a-msd
Misc : op93791a,e4p857,31.2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 11:43:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:43:28 2016
Response via : Initial Calibration

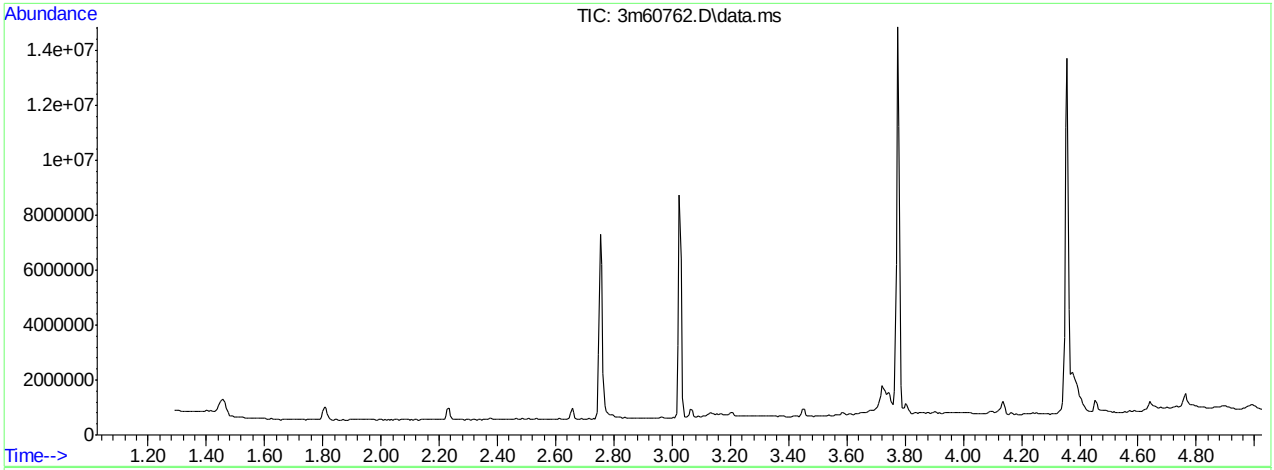


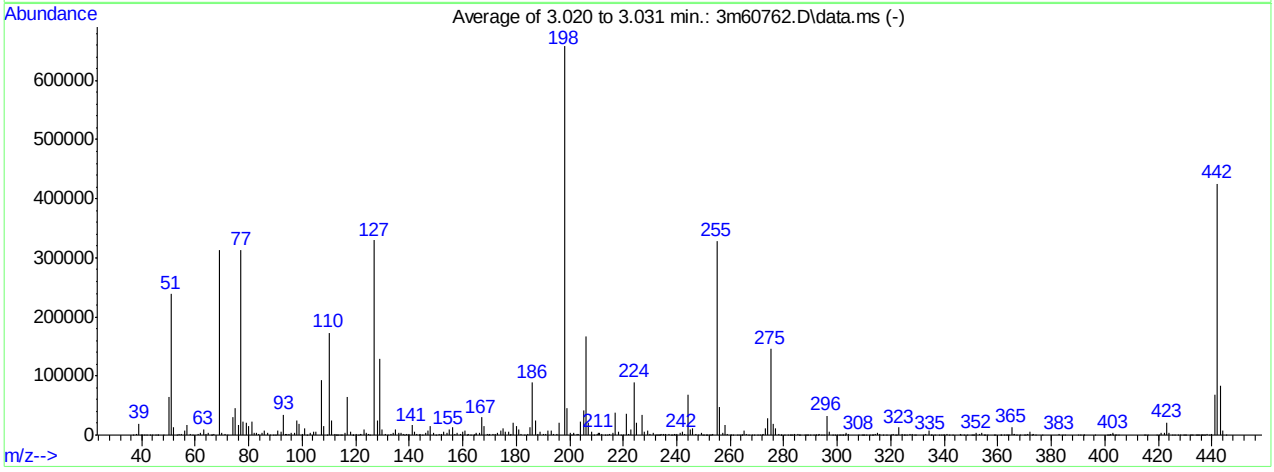
M4P850SIM.M Thu May 19 11:44:05 2016 Page: 3

DFTPP

Data File : C:\msdchem\1\DATA\E3M2855\3m60762.D Vial: 1
Acq On : 21 Apr 2016 1:31 pm Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93052a,e3m2855 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M (RTE Integrator)
Title : DFTPP, RXI-5MS 30m x .25mm x .25um





AutoFind: Scans 324, 325, 326; Background Corrected with Scan 320

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	238296	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	313116	PASS
70	69	0.00	2	1.0	3204	PASS
127	198	40	60	50.1	329840	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	657712	PASS
199	198	5	9	6.9	45100	PASS
275	198	10	30	22.1	145467	PASS
365	198	1	100	2.2	14264	PASS
441	443	0.10	100	81.8	68134	PASS
442	198	40	100	64.7	425304	PASS
443	442	17	23	19.6	83298	PASS

3m60762.D DFTPP3M.M Fri Apr 22 08:16:22 2016 RPT1

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	661	46.20	436	58.95	251	71.05	1475
38.05	2794	48.00	244	61.00	2709	72.05	358
39.00	19760	50.00	65143	62.10	4250	74.05	29550
39.90	449	51.00	238296	63.00	10102	75.00	46243
40.00	755	52.00	12545	64.10	1997	76.10	17126
41.00	329	53.00	307	65.00	4739	77.05	313473
42.00	277	54.15	1115	65.95	419	78.00	22267
43.05	106	55.00	1105	66.20	319	79.00	21188
44.00	839	56.00	7453	66.95	1508	79.95	15917
45.10	137	57.00	17977	69.00	313116	81.00	21946
45.90	229	58.00	1593	70.05	3204	81.95	3804

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.95	3997	93.95	1295	104.05	6580	114.10	398
83.90	2325	94.20	1080	105.00	6653	114.80	426
85.10	3907	95.00	1155	107.00	92226	116.00	4552
85.95	7333	95.95	2921	108.00	15158	117.00	65517
87.05	3225	97.15	3059	109.10	399	117.95	5021
87.95	160	98.00	25203	110.00	173137	118.85	1004
89.00	451	99.00	19270	111.00	25260	119.10	235
90.05	395	100.00	1366	112.05	2622	120.05	1481
90.95	6840	100.95	10715	112.70	729	120.85	926
92.00	6037	101.90	978	113.00	737	121.85	2893
93.00	35134	102.95	4167	113.60	216	122.05	1962

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	8863	134.05	4029	143.80	49	154.05	4207
124.00	3789	134.95	9126	144.15	1336	154.95	9598
124.90	2681	136.00	4526	144.90	554	156.05	12971
125.20	659	137.05	4746	146.00	3191	157.05	2135
127.00	329840	137.80	1581	147.00	6974	158.00	2979
127.95	25688	138.05	8	147.95	15969	159.05	1815
129.00	128464	139.15	1213	149.00	3586	160.00	5213
129.95	10423	140.05	2181	149.90	649	160.90	6930
131.00	2043	141.00	16241	151.05	2905	161.80	620
131.90	739	142.05	4918	151.90	1498	162.10	1571
133.10	1078	142.95	2672	152.95	5232	162.90	286

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.00	491	171.95	2596	181.95	1754	193.00	6861
164.10	623	173.05	4093	182.90	780	194.05	2190
164.80	1232	174.05	6735	184.10	2113	195.05	1948
165.00	4676	175.05	10999	185.00	13065	196.00	21652
166.05	4746	176.05	4833	186.00	88408	198.00	657712
166.95	29813	176.95	6189	187.05	24010	199.00	45100
167.95	14663	177.70	742	188.10	2813	200.00	3024
169.05	2335	178.00	1490	188.90	5044	200.70	236
169.70	466	179.00	21463	190.05	1319	201.35	3553
170.15	1305	180.00	14698	191.00	2618	201.65	2514
171.10	1248	181.00	9205	191.95	7793	202.80	1702

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.00	2781	213.05	528	224.10	89368	233.80	461
204.10	23086	214.00	433	225.05	21868	234.10	1557
205.10	41149	215.05	1578	227.05	34358	234.80	391
206.05	167835	216.05	4006	228.00	4859	235.05	2665

207.00	21445	217.00	38342	229.00	6933	235.95	2072
208.00	6458	218.05	5162	229.85	1303	237.05	2533
209.00	896	219.20	990	231.00	3173	237.90	238
210.15	1189	220.00	429	231.90	223	238.15	279
210.75	4358	221.05	36080	232.30	136	238.95	1672
211.10	3392	221.80	1095	232.90	149	239.30	482
211.85	2397	223.00	9572	233.10	789	240.10	1273

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.05	3311	250.80	152	259.90	493	269.00	206
242.05	4890	251.15	707	260.20	97	270.05	831
243.10	2235	251.95	870	261.00	468	271.05	922
244.10	68677	252.40	139	262.60	86	271.70	207
245.05	9760	252.90	981	263.25	515	272.10	1838
246.00	12142	253.40	1728	264.10	501	273.05	11001
247.00	2344	255.05	329205	264.30	560	274.05	29108
248.00	837	256.00	47298	265.00	7222	275.10	145467
249.05	3015	257.15	4289	265.90	1481	276.05	18900
249.80	449	258.00	17582	266.75	355	277.00	11300
250.25	600	259.00	2516	268.20	147	278.00	1854

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.80	205	287.70	119	294.70	95	303.10	3964
279.15	477	288.15	310	296.05	32985	304.05	1309
280.10	279	288.60	87	297.00	5136	307.90	846
281.60	120	289.15	281	298.10	167	309.00	398
282.10	626	289.95	519	298.90	166	309.70	112
282.90	419	291.10	296	300.00	85	310.15	371
283.10	836	291.80	318	300.90	148	310.95	354
284.15	1540	292.10	662	301.15	590	312.00	87
285.15	2843	292.80	196	301.80	536	312.80	156
285.80	310	293.05	2426	302.10	353	313.10	231
286.10	133	294.10	917	302.80	384	313.95	1898

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.00	3718	325.20	137	336.25	305	348.30	141
316.00	2484	325.95	441	338.10	80	350.05	338
317.05	541	327.05	2247	339.00	94	350.60	76
318.20	109	328.00	1248	339.70	149	351.10	136
320.15	285	328.80	179	339.90	100	352.05	3729
321.00	1507	329.20	147	341.00	1301	353.10	2441
321.70	413	332.05	947	341.95	432	354.00	4692
322.00	251	332.95	1265	343.20	134	354.95	265
323.10	12425	334.10	8059	345.90	234	355.20	159
324.15	2124	334.90	772	346.05	2044	356.15	415
324.90	281	335.10	980	347.05	266	358.40	195

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
359.10	253	368.00	93	385.05	288	403.05	3094
360.90	94	369.90	367	390.05	558	403.80	336
361.25	176	370.40	117	391.00	594	404.05	985
362.50	298	371.05	1415	391.90	84	405.05	371
363.10	278	372.10	6694	392.20	500	414.80	78
363.40	159	372.90	577	396.30	97	415.10	95
364.00	309	373.10	1038	400.75	279	416.00	104
365.05	14264	374.00	194	401.20	249	419.25	304
365.90	1395	376.70	189	401.90	271	420.30	329
366.10	1077	382.95	1487	402.05	2235	421.05	4050
366.90	270	384.00	498	402.80	202	422.15	3505

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms

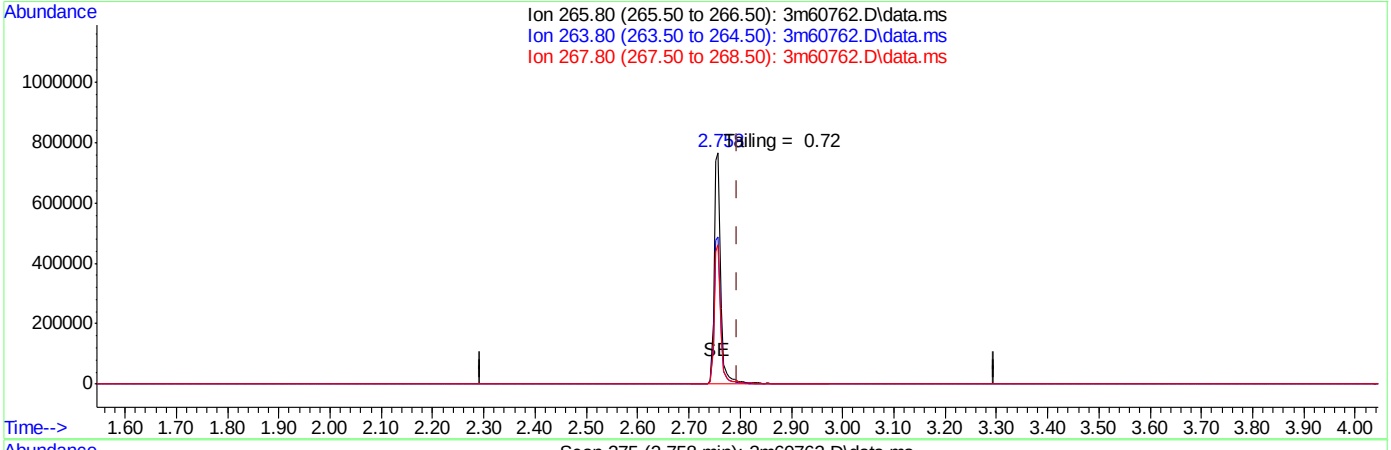
dftpp
Modified:subtracted

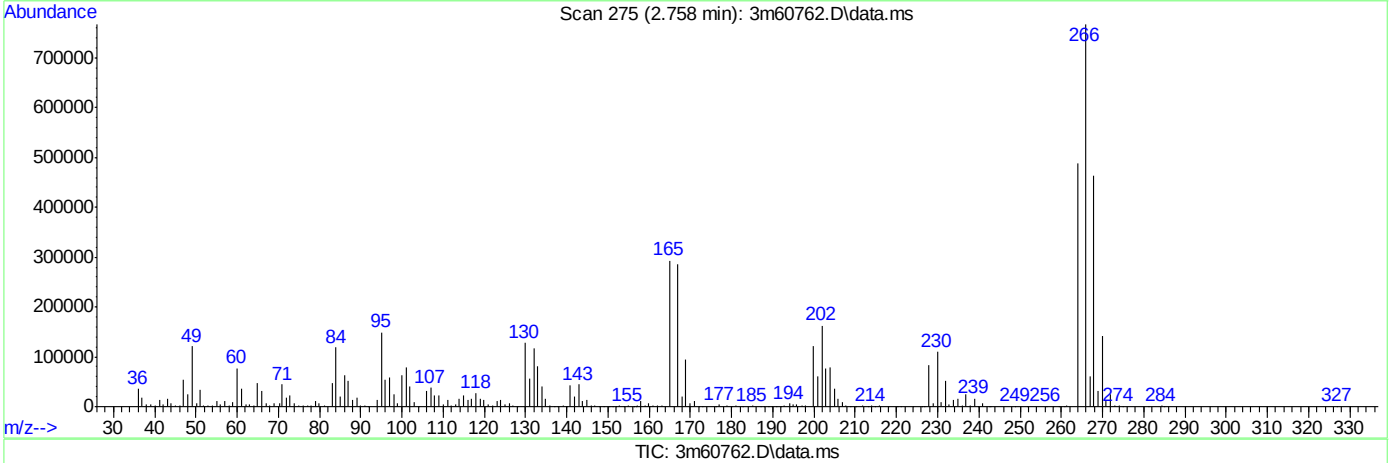
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	21736	432.90	494	438.80	912		
424.10	4461	433.85	400	439.90	2031		
425.00	512	434.50	189	441.10	68134		
426.10	183	434.80	226	442.10	425304		
427.20	203	435.40	731	443.10	83298		
428.30	259	435.90	455	444.10	7637		
429.50	82	436.25	476	445.10	306		
429.70	297	436.60	319				
430.25	389	436.95	928				
431.75	392	437.50	435				
432.50	347	438.30	1141				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(1) Pentachlorophenol (t)

2.758min (-0.037) 190.28ppb

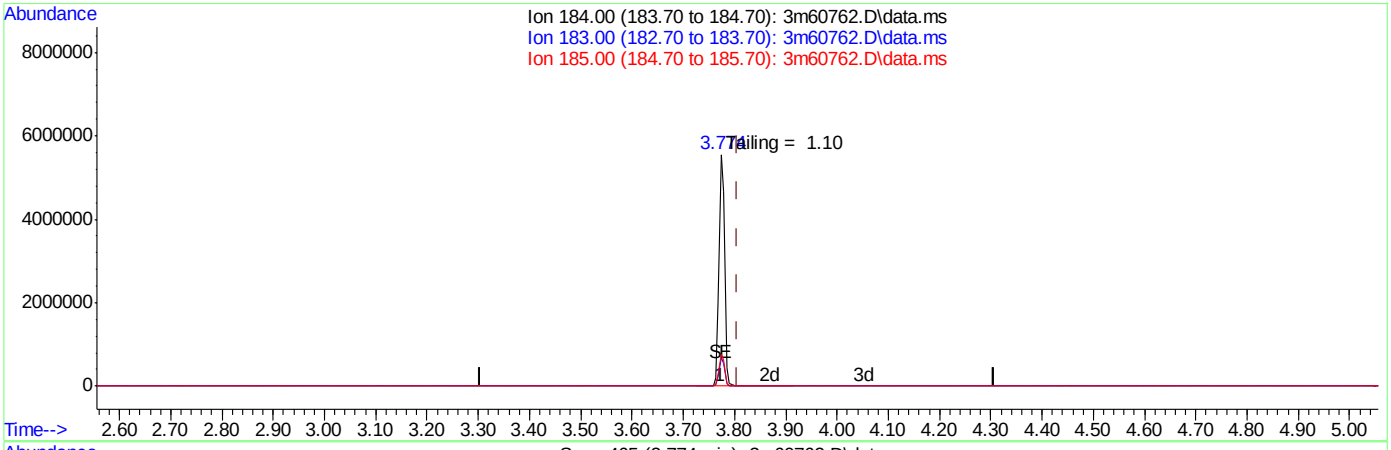
response 701808

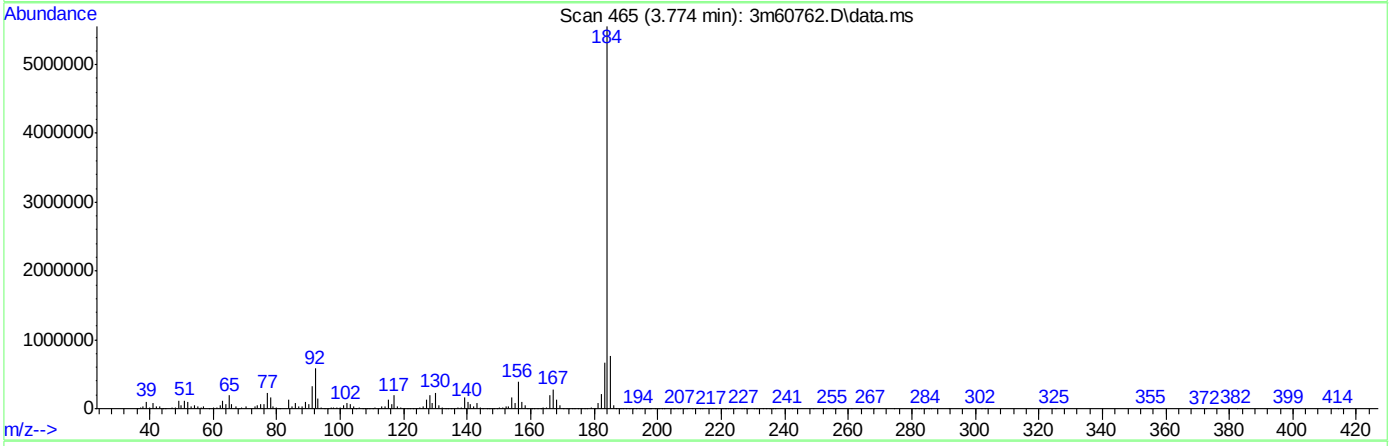
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.64
267.80	64.10	60.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(2) Benzidine (t)

3.774min (-0.032) 229.17ppb

response 4170192

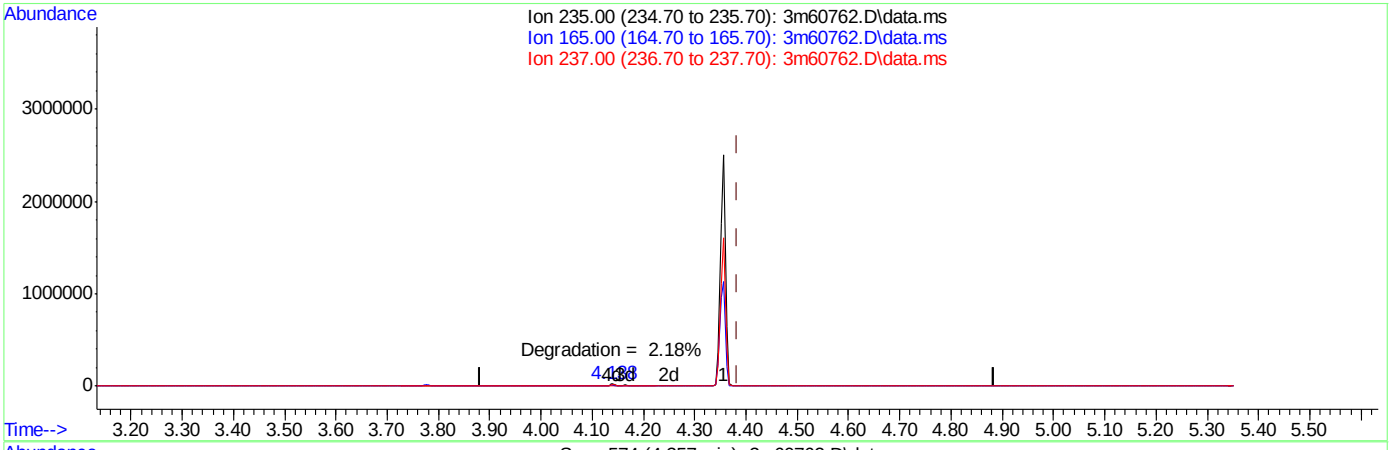
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.07
185.00	14.40	13.67
0.00	0.00	0.00

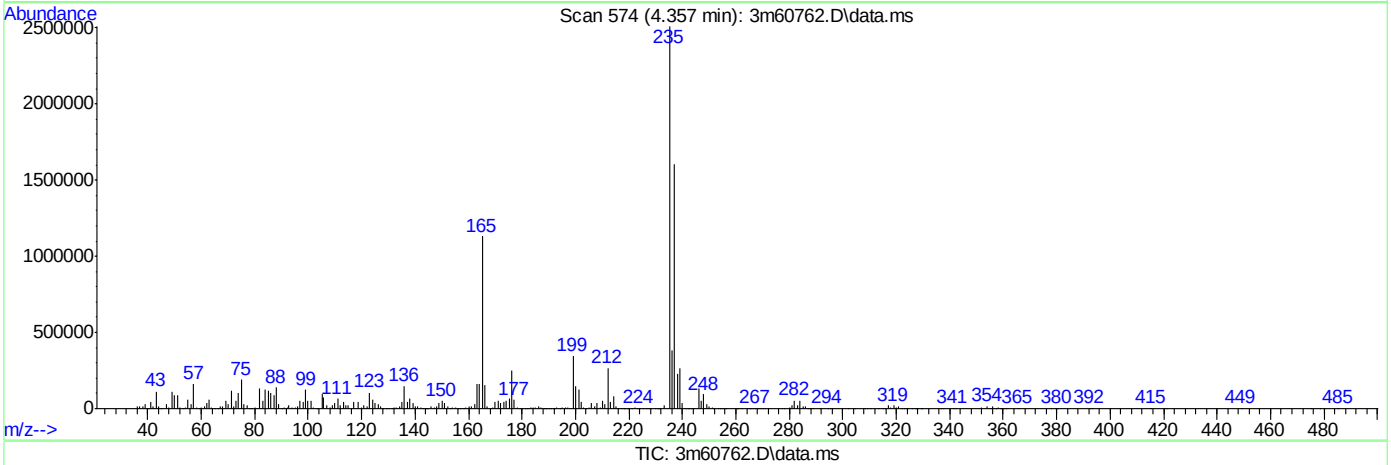
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On    : 21 Apr 2016   1:31 pm
Operator  : linseyk
Sample    : dftpp
Misc      : op93052a,e3m2855
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title  : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration
```





TIC: 3m60762.D\data.ms

(3) PP-DDT (t)

4.357min (-0.027) 229.70ppb

response 1710972

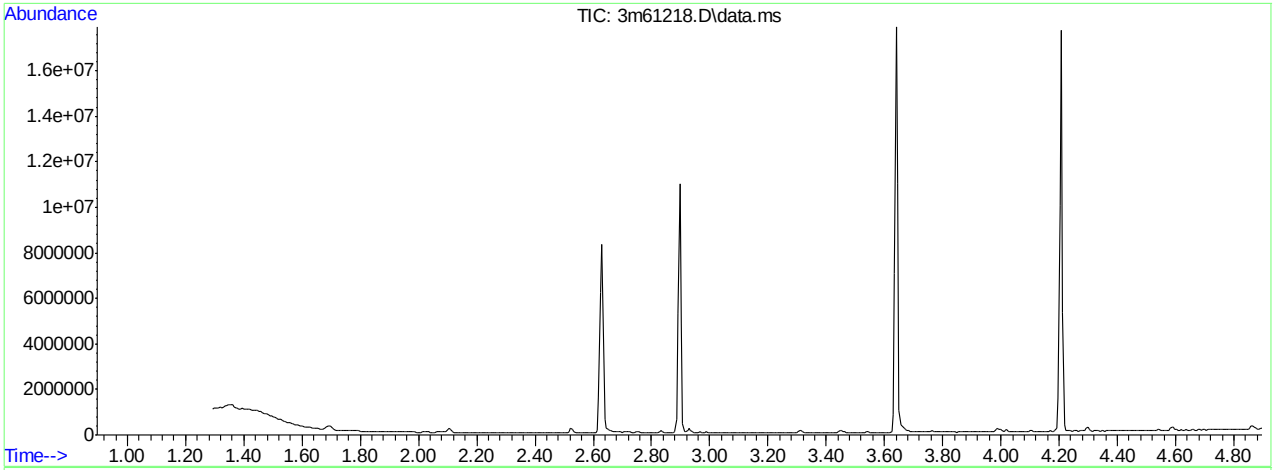
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.45#
237.00	0.00	63.48#
0.00	0.00	0.00

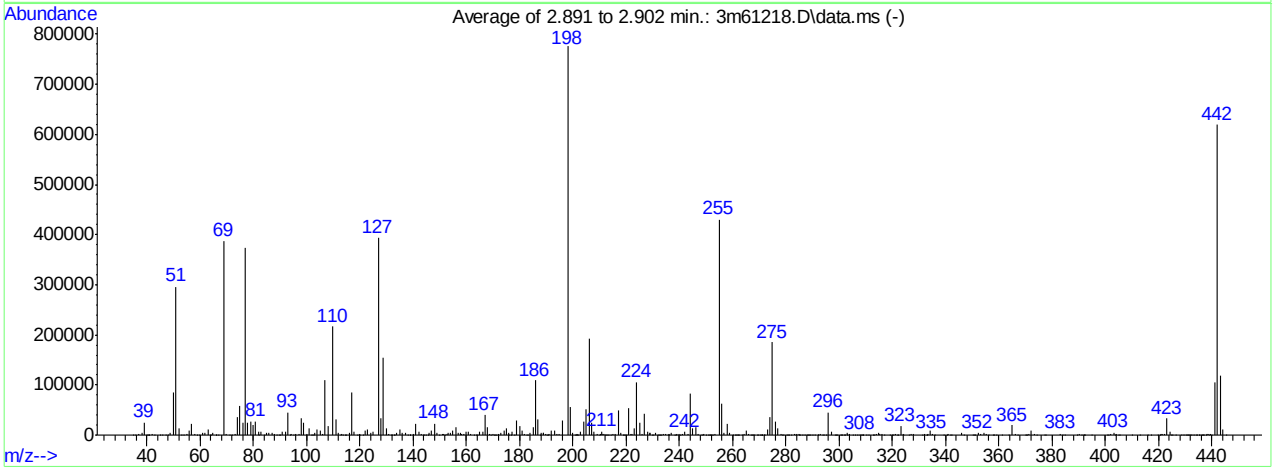
SGS ACCUTEST JC19914

DFTPP

Data File : C:\msdchem\1\DATA\E3M2879\3m61218.D Vial: 1
Acq On : 11 May 2016 9:26 am Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93756a,e3m2879 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M (RTE Integrator)
Title : DFTPP, RXI-5MS 30m x .25mm x .25um





AutoFind: Scans 300, 301, 302; Background Corrected with Scan 294

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.1	295679	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.0	388036	PASS
70	69	0.00	2	0.7	2536	PASS
127	198	40	60	50.6	392725	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	775509	PASS
199	198	5	9	7.1	55163	PASS
275	198	10	30	23.9	185147	PASS
365	198	1	100	2.6	19936	PASS
441	443	0.10	100	88.5	104957	PASS
442	198	40	100	79.8	619115	PASS
443	442	17	23	19.2	118619	PASS

3m61218.D DFTPP3M.M Wed May 11 14:52:52 2016 RPT1

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	649	45.00	1018	55.95	9771	65.95	395
35.90	780	45.85	262	57.00	21421	66.20	271
36.95	2208	47.00	119	58.05	1247	67.00	207
38.10	5116	47.95	459	58.90	474	69.00	388036
39.00	25413	49.00	4253	59.70	172	70.00	2536
39.90	36	50.00	85992	61.00	4119	70.95	822
40.20	549	51.00	295679	62.00	4706	71.95	396
40.60	512	52.00	14601	63.00	11461	73.10	3100
41.00	705	52.95	873	63.80	590	74.05	36197
41.95	1294	53.85	511	64.10	1002	75.00	57490
42.95	130	54.95	2049	64.90	5331	76.10	24777

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
77.05	373785	86.90	4343	95.95	2222	105.05	8907
78.00	24509	87.95	1455	97.05	1242	105.90	3423
79.00	28049	88.85	432	97.95	32573	107.00	110417
80.05	19740	89.80	188	98.90	24551	108.00	18039
80.95	28046	90.25	424	99.95	2303	110.00	216853
81.95	6676	90.95	5890	100.90	14582	111.00	31694
82.20	1126	92.05	7843	102.00	59	111.95	3947
83.05	6324	92.95	44918	102.20	447	112.60	154
84.00	336	94.00	790	102.80	783	113.00	2005
85.00	4681	94.20	1728	103.10	4440	113.70	227
85.95	5511	95.00	803	104.00	10895	114.50	286

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.05	742	124.95	5757	133.95	5372	143.80	324
116.10	4530	127.00	392725	134.95	11390	144.05	883
116.95	85221	128.00	32706	135.95	4754	144.85	1214
117.95	5889	128.95	153793	137.05	4952	145.80	501
119.00	1123	130.00	13190	137.90	805	146.05	4067
119.85	1757	130.20	1447	138.80	470	147.00	8831
120.10	242	131.00	2660	139.00	973	148.00	23518
121.00	1015	131.75	343	140.05	1280	149.00	3822
121.95	8636	132.10	598	140.95	21404	150.00	1059
122.95	10983	132.80	160	142.05	6684	151.05	2551
124.05	5040	133.05	12	143.00	3290	151.60	1956

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.10	1187	160.90	7238	170.00	1492	177.05	5803
152.90	1546	161.80	2600	170.50	509	177.90	466
153.10	4408	162.95	1137	170.80	1045	178.95	28329
154.05	4146	163.70	281	171.10	905	180.00	17468
155.00	9430	164.20	1112	172.00	3286	181.10	9051
156.10	15141	165.00	7569	173.00	4378	182.00	1893
157.05	3487	166.10	6017	174.05	8706	182.80	1113
157.85	3495	166.95	39265	175.10	14189	183.10	284
158.25	1436	168.00	16409	175.90	4521	184.05	3524
158.95	2989	168.95	2697	176.10	858	185.05	15847
160.05	5907	169.20	440	176.80	1174	186.00	109101

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
187.05	30912	193.95	1926	203.00	6626	211.85	1586
187.80	696	194.95	2220	203.95	27754	212.20	357
188.10	3890	196.00	28381	205.05	50992	212.50	209
188.90	3531	198.00	775509	206.00	192098	212.95	881

189.10	3574	199.00	55163	207.05	23929	213.30	183
190.00	1350	200.05	3899	208.05	6082	214.20	156
190.20	733	200.80	245	208.95	1901	215.00	2447
190.60	539	201.30	777	209.80	942	215.95	1632
191.05	1517	201.50	2801	210.35	2292	217.00	49917
191.95	10105	201.70	1113	210.95	7516	218.05	5551
193.00	9419	202.20	826	211.40	1238	218.80	215

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
219.10	1005	228.00	6708	235.00	3309	242.00	6002
219.50	267	228.90	4923	235.75	978	243.10	2262
219.90	229	229.10	4584	236.00	1346	244.10	83803
221.10	53109	229.90	388	236.20	568	245.05	13634
221.80	2483	230.15	799	237.00	3661	246.00	14640
222.20	1353	231.05	3953	238.15	582	247.10	2500
223.05	12856	231.90	479	238.80	375	248.20	1130
224.05	105995	232.15	739	239.10	2065	248.80	605
225.05	24938	232.90	227	239.85	1744	249.10	2804
226.10	1991	233.10	997	240.30	174	250.10	564
227.00	41680	234.05	2257	241.05	2621	250.90	373

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
251.20	308	259.95	959	267.30	427	273.05	12176
251.60	137	260.95	406	267.85	348	274.05	35923
251.80	408	261.20	539	268.10	185	275.00	185147
252.05	1095	261.65	400	269.25	599	276.05	27410
252.70	527	262.10	101	269.50	159	277.05	13401
253.15	2633	262.30	158	270.00	130	278.05	2741
255.00	430251	263.40	85	270.50	142	278.80	117
256.05	62792	264.10	1733	271.00	712	279.15	883
256.90	4481	264.95	8508	271.20	296	280.20	85
258.05	21551	265.95	1984	271.70	603	280.90	154
259.00	4052	266.85	326	271.95	755	281.15	154

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
281.95	701	288.90	83	297.05	5735	304.05	1981
283.15	2573	289.05	672	298.20	960	305.00	188
283.75	768	289.85	673	298.70	150	306.05	186
284.20	1260	290.90	383	299.30	90	306.90	75
284.80	828	291.95	601	300.40	139	307.75	673
285.10	1915	292.20	486	300.80	182	308.10	192
285.40	664	292.95	3394	301.05	738	308.30	249
286.10	775	293.80	110	301.70	339	308.80	134
287.10	87	294.25	916	302.10	770	309.10	317
287.90	129	294.90	128	302.80	604	310.05	600
288.30	77	296.00	45123	303.10	5213	311.20	92

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
312.60	223	321.90	689	332.90	147	346.85	984
313.10	640	322.10	426	333.15	1528	350.10	103
314.15	3128	323.05	17947	334.00	8889	350.70	476
314.90	4051	324.00	2163	334.95	3004	351.00	252
315.10	1361	324.20	1043	336.00	513	352.05	4192
316.05	3427	326.10	394	339.15	293	353.15	3027
317.05	929	326.95	3086	340.40	163	354.15	5088
318.90	95	328.00	2095	341.05	2143	355.05	1438
319.65	295	331.10	105	341.70	203	355.90	109
320.40	181	332.00	1698	342.15	581	357.90	74
321.05	1724	332.70	774	346.00	3669	358.30	96

Average of 2.891 to 2.902 min.: 3m61218.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
359.05	617	373.20	2211	392.00	374	409.90	121
360.90	127	373.95	212	392.20	428	413.00	150
363.50	139	377.00	79	394.90	126	416.00	236
365.00	19936	377.40	94	400.60	217	417.00	122
366.10	2996	383.05	2385	401.10	334	419.80	81
367.10	310	383.90	937	402.10	3257	420.40	573
369.85	312	384.75	285	403.05	4597	421.00	2639
370.20	285	389.10	92	403.80	743	421.20	1703
370.40	280	390.05	1240	404.15	1270	422.00	2668
371.10	1392	390.95	940	404.90	112	423.10	33239
372.10	9801	391.80	87	405.25	338	424.05	6851

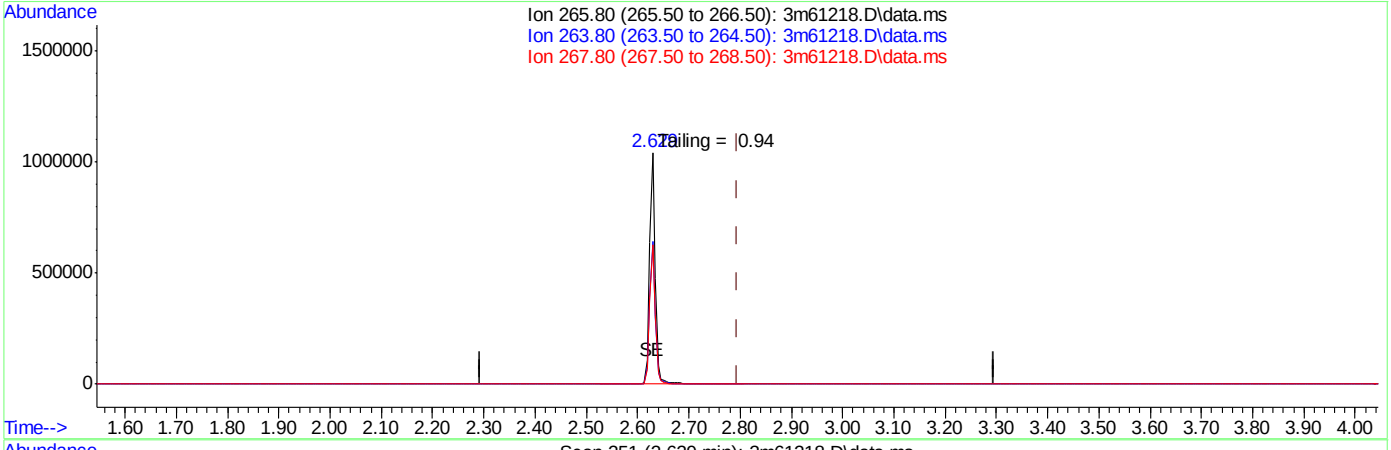
Average of 2.891 to 2.902 min.: 3m61218.D\data.ms
dftpp
Modified:subtracted

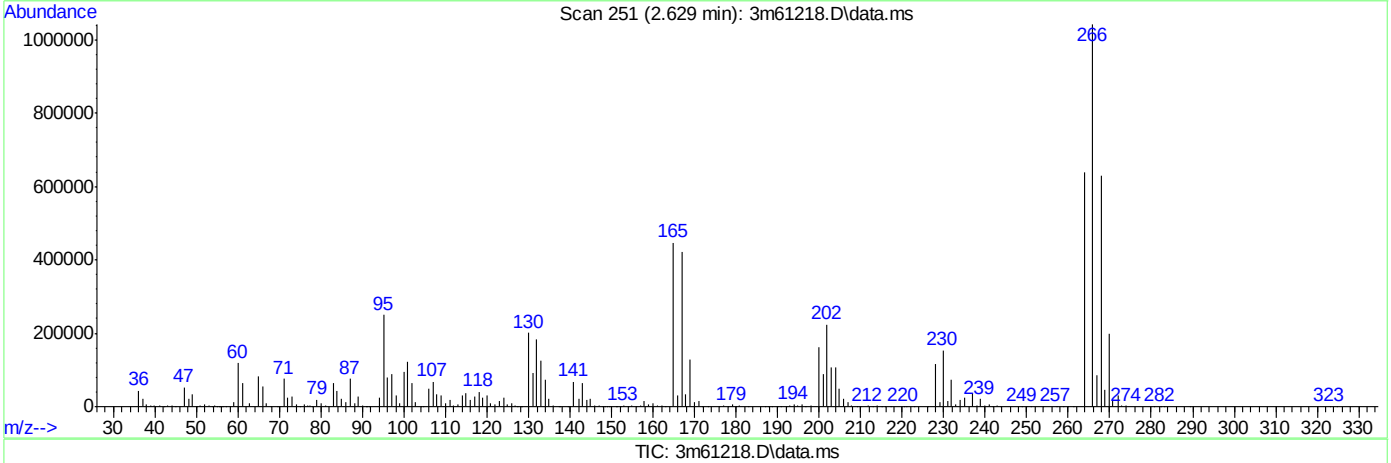
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
424.85	436	433.20	183	438.45	1917		
425.20	609	433.75	366	439.10	240		
426.20	131	434.45	629	439.30	1222		
428.35	450	435.00	385	439.70	459		
429.40	397	435.30	385	441.10	104957		
430.20	200	435.80	541	442.10	619115		
430.65	310	436.35	337	443.10	118619		
431.10	115	436.60	347	444.10	11473		
431.40	220	437.00	211	445.10	541		
431.60	98	437.60	734				
432.30	567	438.00	1253				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61218.D
Acq On : 11 May 2016 9:26 am
Operator : linseyk
Sample : dftpp
Misc : op93756a,e3m2879
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 09:30:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





(1) Pentachlorophenol (t)

2.629min (-0.166) 212.27ppb

response 782919

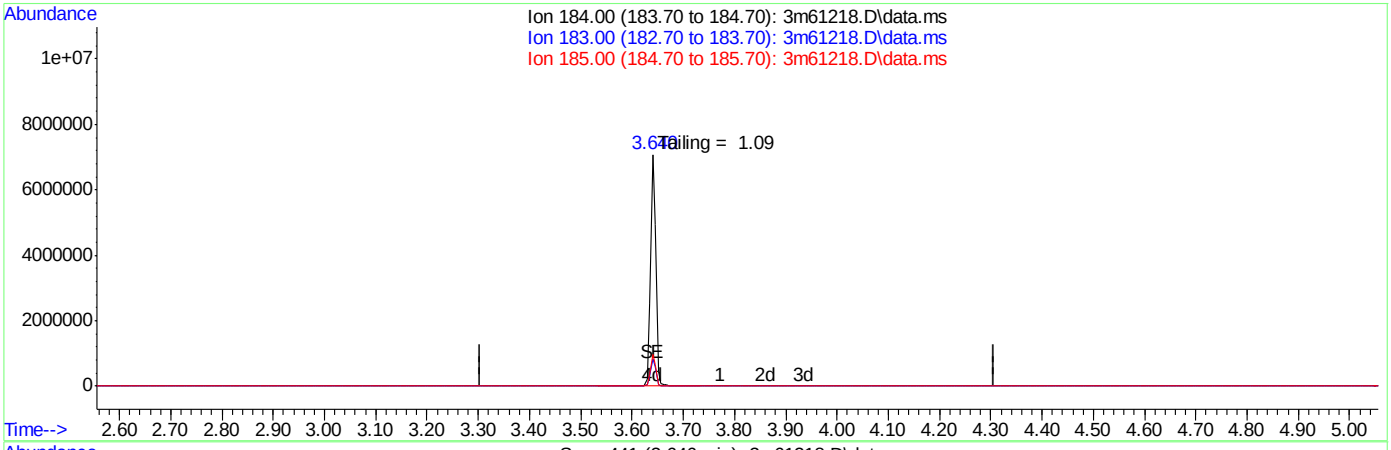
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	61.34
267.80	64.10	60.40
0.00	0.00	0.00

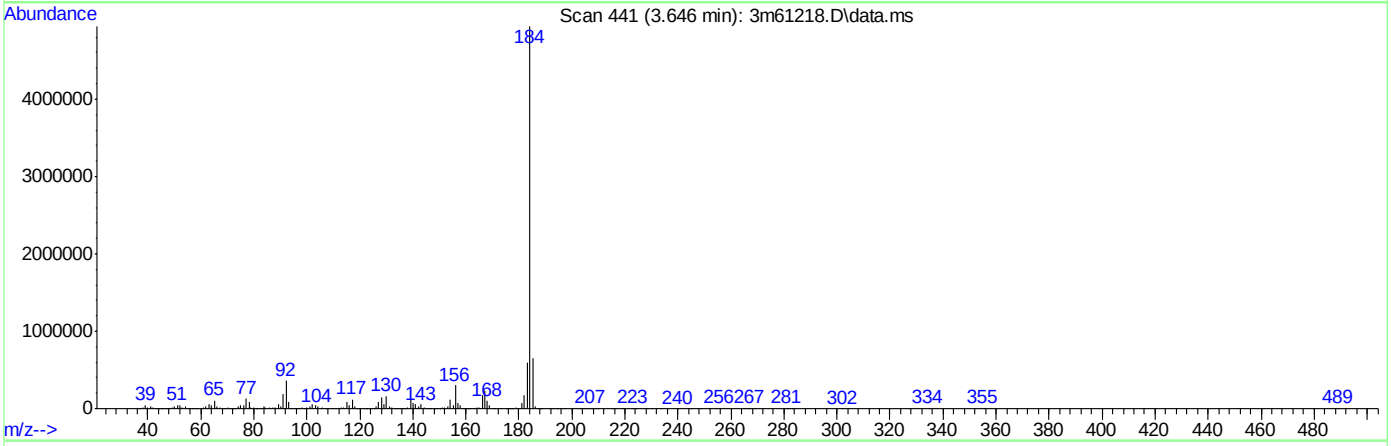
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61218.D
Acq On : 11 May 2016 9:26 am
Operator : linseyk
Sample : dftpp
Misc : op93756a,e3m2879
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 09:30:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m61218.D\data.ms

(2) Benzidine (t)

3.806min 0.00ppb d

response 0

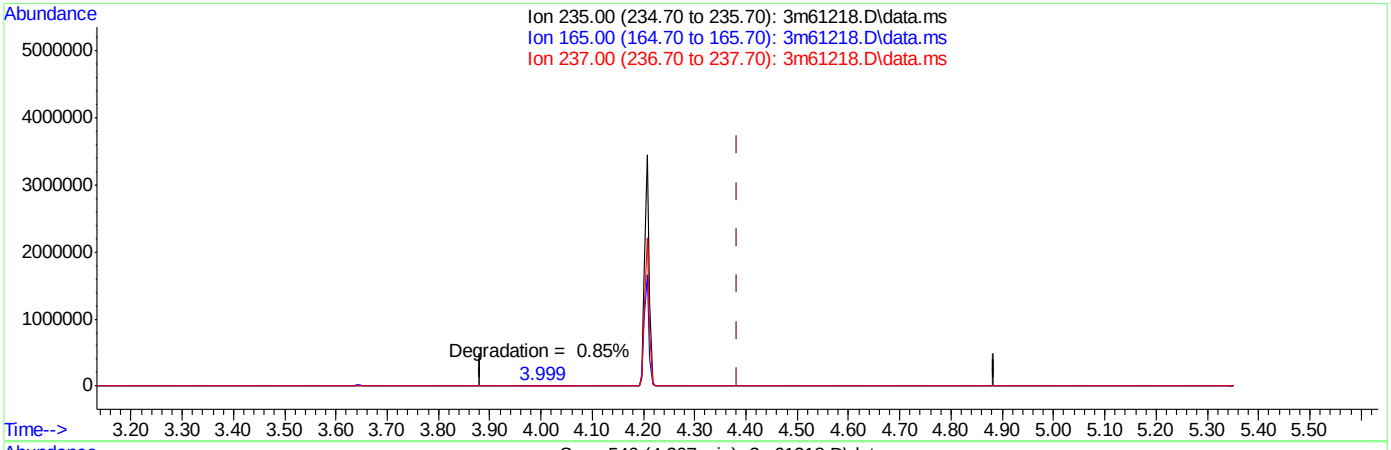
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.50	0.00
185.00	14.40	0.00
0.00	0.00	0.00

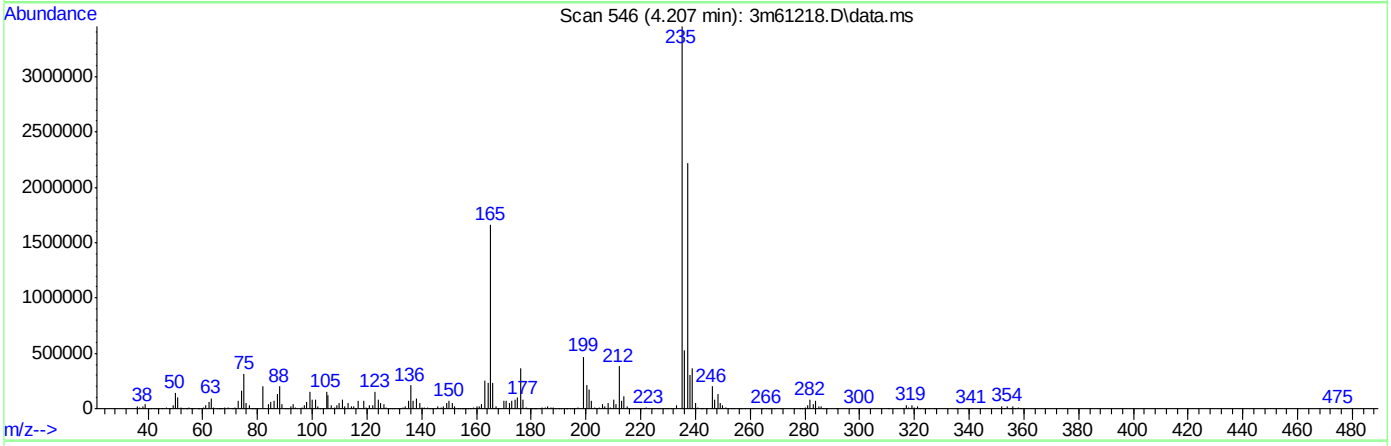
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61218.D
Acq On : 11 May 2016 9:26 am
Operator : linseyk
Sample : dftpp
Misc : op93756a,e3m2879
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 09:30:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m61218.D\data.ms

(3) PP-DDT (t)

4.207min (-0.176) 282.48ppb

response 2104142

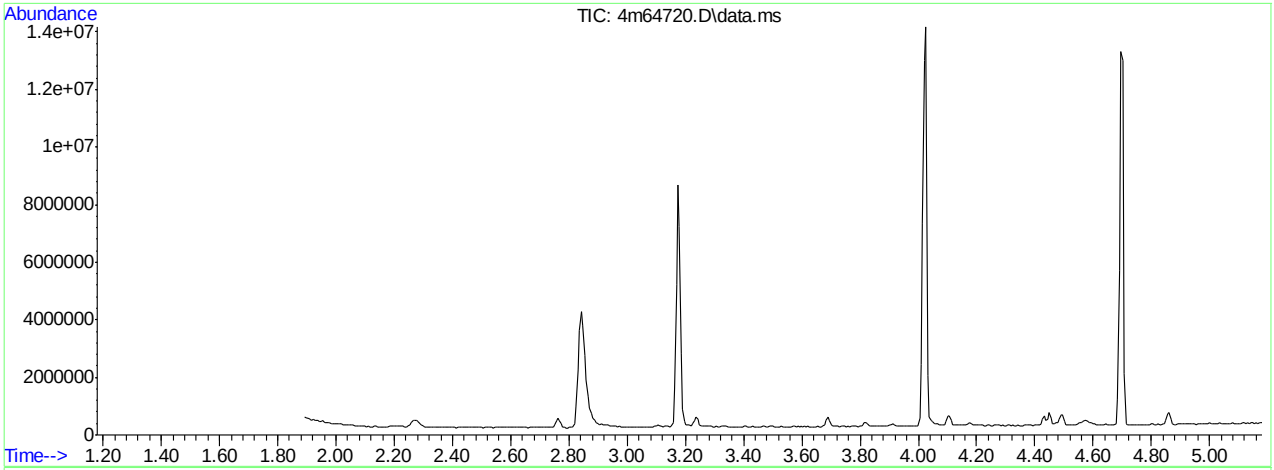
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.54#
237.00	0.00	64.18#
0.00	0.00	0.00

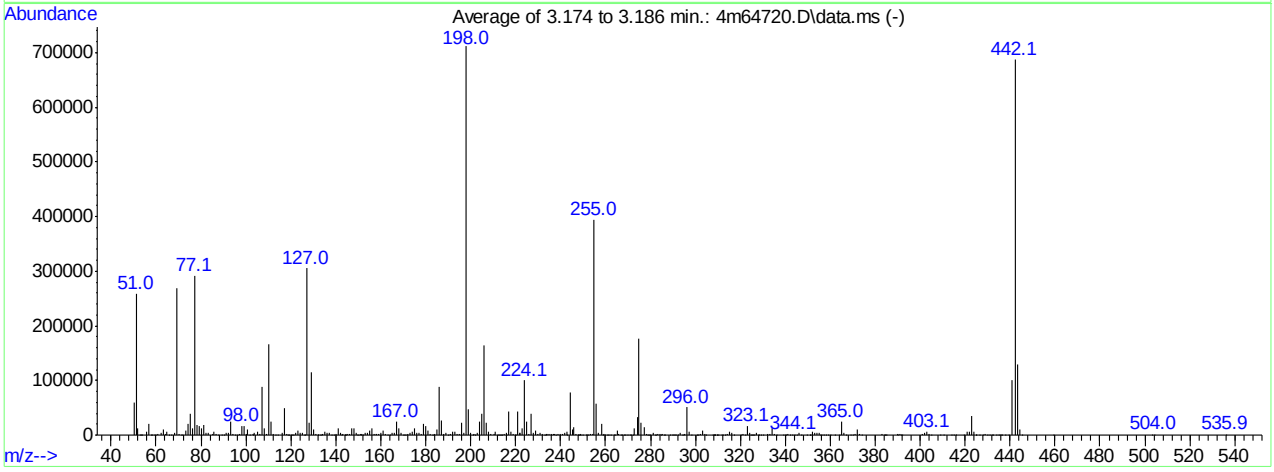
SGS ACCUTEST JC19914

DFTPP

Data File : C:\msdchem\1\DATA\E4M2881\4m64720.D Vial: 1
Acq On : 14 Apr 2016 9:05 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op92998a,e4m2881 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um





AutoFind: Scans 225, 226, 227; Background Corrected with Scan 208

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	258280	PASS
68	69	0.00	2	1.6	4287	PASS
69	198	0.00	100	37.8	268929	PASS
70	69	0.00	2	0.9	2537	PASS
127	198	40	60	42.9	305536	PASS
197	198	0.00	1	0.6	4427	PASS
198	198	100	100	100.0	711488	PASS
199	198	5	9	6.6	46648	PASS
275	198	10	30	24.9	177016	PASS
365	198	1	100	3.4	24255	PASS
441	443	0.01	100	77.5	100995	PASS
442	198	40	100	96.6	687531	PASS
443	442	17	23	19.0	130315	PASS

4m64720.D DFTPP4M.M Thu Apr 14 17:23:44 2016 MANAGER

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.05	59733	60.00	457	71.05	45	82.00	3891
51.05	258280	60.95	2678	71.90	622	83.00	5071
51.95	12358	62.05	3823	73.00	9177	85.00	2914
53.00	186	63.05	10823	74.00	20144	85.95	7237
53.20	923	64.05	1402	75.00	38614	86.90	2228
53.85	408	65.00	5253	76.05	12303	87.90	789
56.00	7193	66.00	478	77.10	291176	89.10	798
57.00	20601	67.00	82	78.00	19044	90.00	181
57.95	640	68.05	4287	79.00	17419	91.05	4835
58.20	383	69.00	268929	80.05	12571	92.00	3669
59.05	543	70.00	2537	81.00	18508	93.00	24515

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	2541	103.90	4777	116.05	3605	125.00	3741
95.00	895	105.00	5877	117.00	48560	125.95	348
95.95	779	106.00	2485	118.05	3075	126.20	636
97.15	2316	106.95	88755	118.80	620	127.00	305536
98.00	16613	108.05	12214	119.20	215	128.00	23012
99.00	16199	109.05	2422	120.05	375	129.00	114200
99.95	1254	110.00	166575	120.70	174	129.90	9530
100.90	9998	111.00	24379	121.15	456	131.05	2380
101.85	176	112.05	3159	122.00	4961	131.90	114
103.00	2632	112.90	992	123.00	7911	132.20	424
103.20	406	114.05	581	123.95	3501	132.90	482

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.70	311	143.00	1643	151.00	2319	158.95	2293
133.95	1878	143.85	195	151.20	262	159.95	4700
135.00	7204	144.15	596	151.70	1172	161.00	7679
136.00	4006	144.60	357	152.10	379	162.00	2024
137.05	4208	145.15	1487	153.00	4763	162.95	887
137.85	196	145.95	2061	154.00	3534	164.05	614
138.85	503	147.00	12335	155.10	7868	165.00	4310
140.05	1684	148.00	12963	156.00	12995	165.95	4544
141.00	12121	149.00	4103	157.00	2880	167.00	24350
142.00	4450	149.80	169	157.80	1810	168.00	11917
142.80	799	150.00	706	158.00	1559	169.05	3197

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.20	1030	180.00	15550	190.05	860	200.95	38
170.60	727	181.00	7487	190.95	2833	201.40	2324
171.00	742	182.00	1147	191.95	7105	201.80	329
172.00	2495	183.00	730	193.05	6769	202.95	4648
173.05	3867	183.50	555	194.05	1386	204.05	23832
174.05	6120	184.00	1539	195.00	1415	205.10	38998
175.00	12082	185.05	11088	196.05	22627	206.10	163456
176.00	3990	186.00	88595	197.00	4427	207.10	23332
177.00	3562	187.00	25789	198.00	711488	208.00	5882
178.05	2032	188.05	2540	199.00	46648	209.00	1628
178.95	20312	189.00	4726	199.95	4431	210.20	3008

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.05	7001	219.10	1376	228.00	4753	236.00	1429
211.80	264	219.70	317	229.00	7916	236.95	1291
212.50	118	220.10	811	229.90	1145	237.20	1406
213.10	343	221.10	43960	231.05	4425	238.00	703

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 0

213.50	160	221.80	3763	232.00	1293	238.90	1387
214.10	203	222.05	3811	232.80	756	240.00	1127
215.00	1974	223.00	11574	233.20	189	241.00	2142
215.80	726	224.05	100086	233.90	1180	242.05	4545
216.10	3291	225.10	24836	234.10	1520	242.80	559
217.00	42592	226.05	2623	235.00	3019	243.05	5893
218.00	6216	227.00	39165	235.70	174	244.10	77501

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.10	10548	252.10	944	261.15	295	271.00	706
246.00	13587	253.15	1948	262.10	97	271.30	600
247.00	2554	254.10	1469	263.90	841	272.10	1096
247.60	95	255.00	393813	264.10	85	273.00	12304
247.90	655	256.00	58016	265.05	8314	274.05	32919
248.15	385	257.00	4804	265.95	1264	275.00	177016
248.70	1297	258.05	20468	266.90	170	276.00	21876
248.95	397	258.80	334	267.30	236	277.05	13725
249.90	937	259.10	3164	268.20	135	278.05	1847
251.15	1085	259.85	844	268.90	160	278.80	508
251.60	120	261.00	398	269.95	781	279.10	487

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.90	97	289.65	492	298.00	371	308.90	180
281.15	3645	290.05	414	300.70	209	309.50	68
282.00	571	290.80	189	301.05	509	309.80	136
282.20	320	291.05	458	302.00	1242	310.00	228
283.00	3052	292.05	1119	303.05	7446	311.50	189
284.10	1574	293.05	3652	303.95	1659	312.30	438
284.70	625	294.00	550	304.90	120	313.05	655
285.05	2194	294.80	223	307.60	77	314.05	3006
286.00	243	295.10	1890	307.95	828	315.00	5281
286.20	82	296.00	50648	308.20	185	316.05	3288
288.95	296	297.10	6591	308.60	117	317.00	557

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
319.90	249	328.20	555	340.95	2487	353.00	4422
321.00	1400	328.90	433	342.10	910	354.10	5044
322.05	1021	330.00	185	343.00	381	355.05	4717
323.10	17235	332.05	1488	344.05	473	355.80	350
324.10	3221	333.05	1447	345.00	91	356.10	958
324.80	308	334.10	13095	346.00	4050	357.00	1042
325.15	381	335.05	2912	347.10	989	358.15	194
325.60	169	336.00	564	349.80	109	359.10	315
326.00	204	339.05	501	350.90	148	359.90	75
327.10	3992	339.90	84	351.20	323	361.90	82
327.95	875	340.05	154	352.20	5622	363.80	101

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.00	24255	384.30	311	404.10	2425	424.05	6189
366.00	3411	384.70	108	405.05	334	424.90	213
367.00	289	385.00	105	409.15	192	425.05	410
369.20	430	389.80	374	410.20	74	426.40	190
370.05	894	390.05	1404	414.10	70	428.00	89
371.00	1350	391.05	1482	414.95	322	429.05	1531
372.10	11350	391.70	321	416.10	70	430.05	705
373.20	2681	392.15	272	419.60	100	431.05	478
374.10	120	401.05	1198	421.00	5303	431.80	78
383.05	2662	402.00	4961	422.10	6085	432.40	297
383.90	339	403.10	6080	423.10	34179	433.90	84

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 1

dftpp
Modified:subtracted

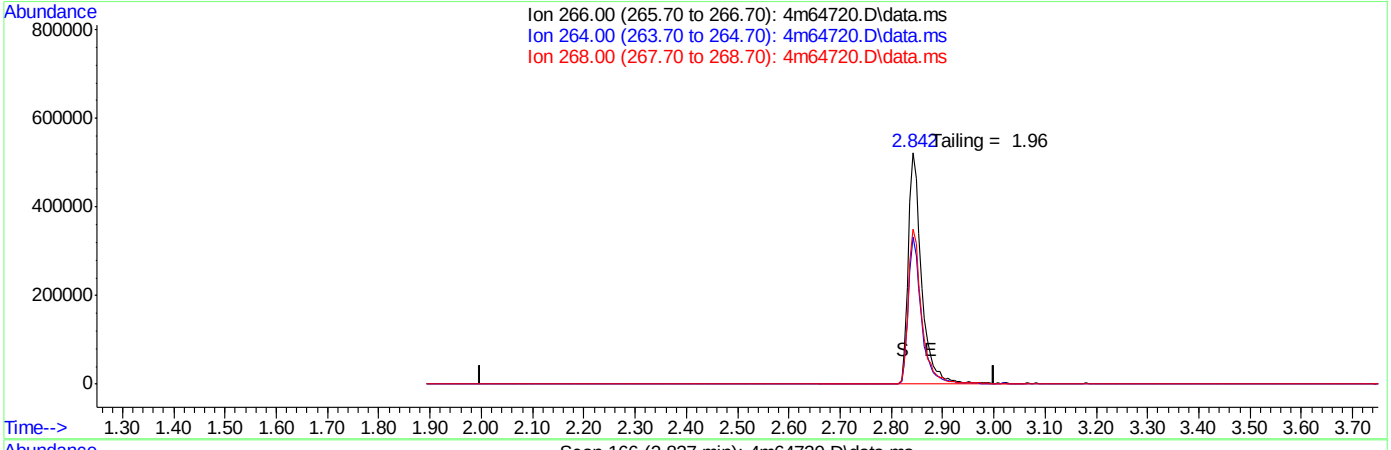
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.90	128	459.15	493				
435.30	158	503.00	77				
435.95	261	504.00	208				
436.40	88	535.90	70				
438.00	91						
439.15	323						
441.10	100995						
442.10	687531						
443.10	130315						
444.10	11143						
445.10	553						

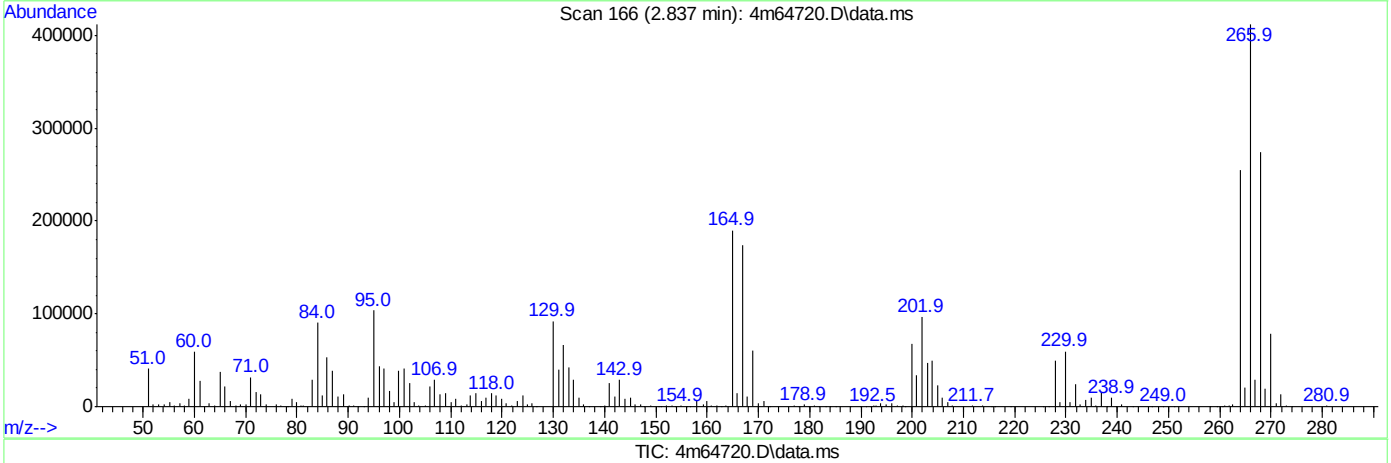
SGS ACCUTEST
JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m64720.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

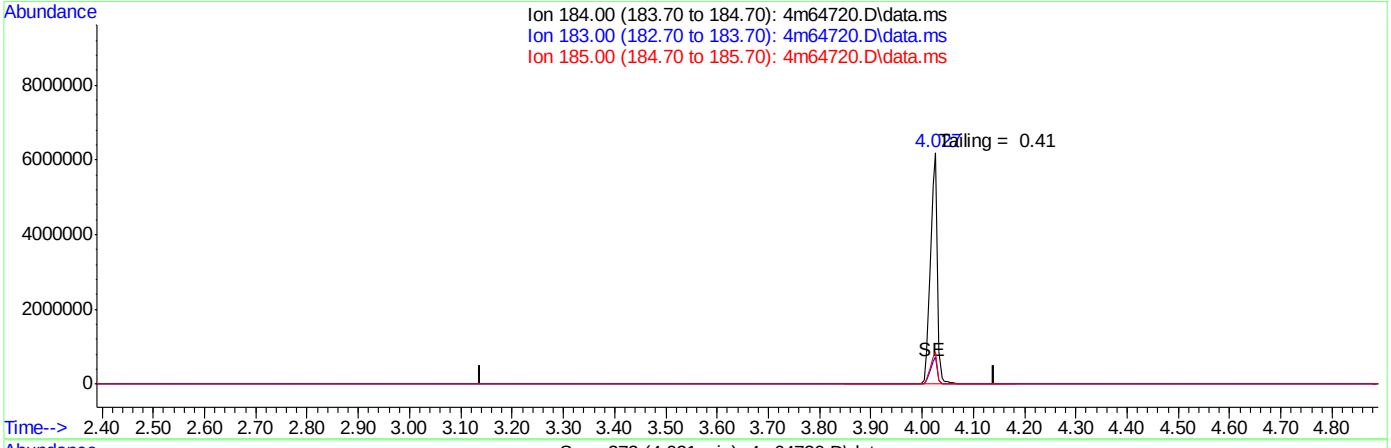
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

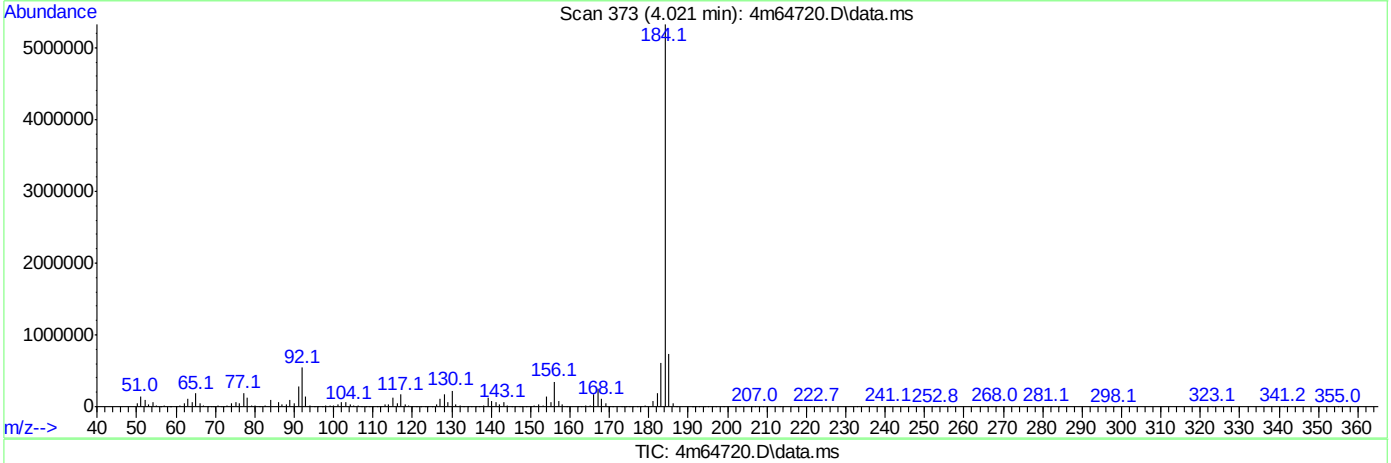
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





(2) benzidine (t)

3.640min (-3.640) 0.00ppb

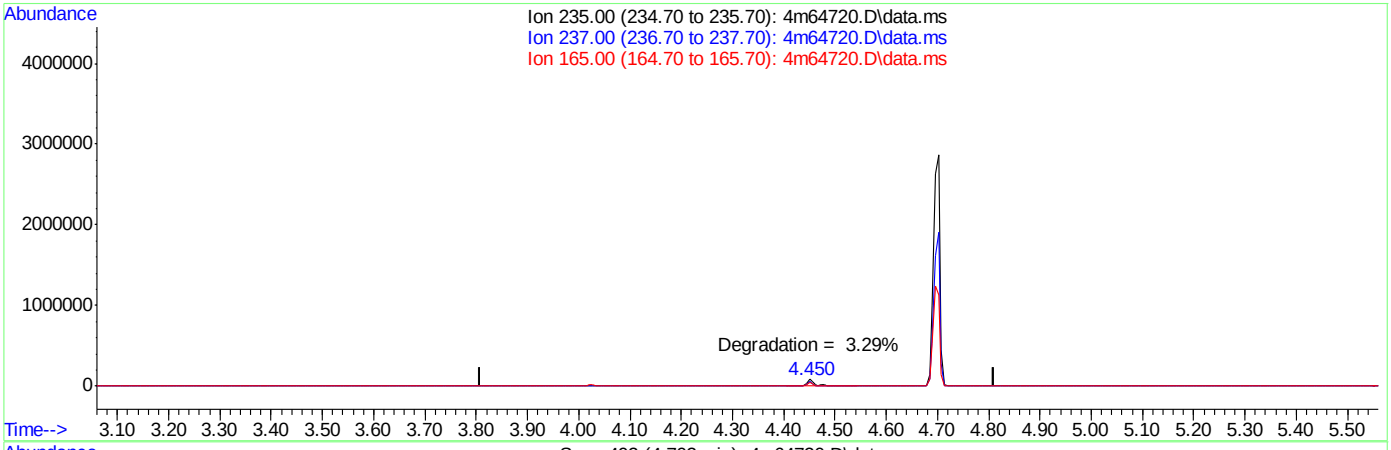
response 0

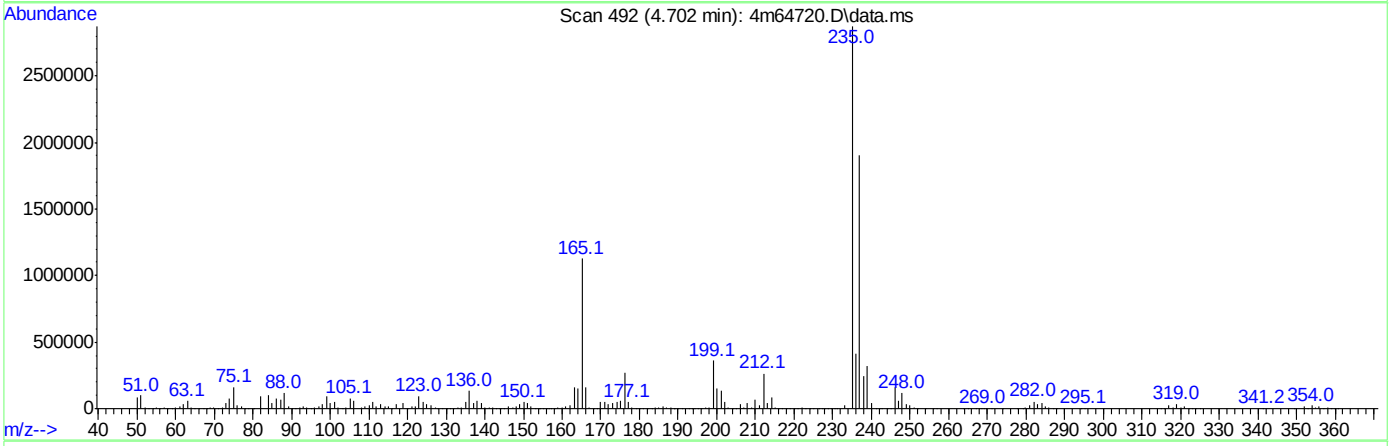
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m64720.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

response 0

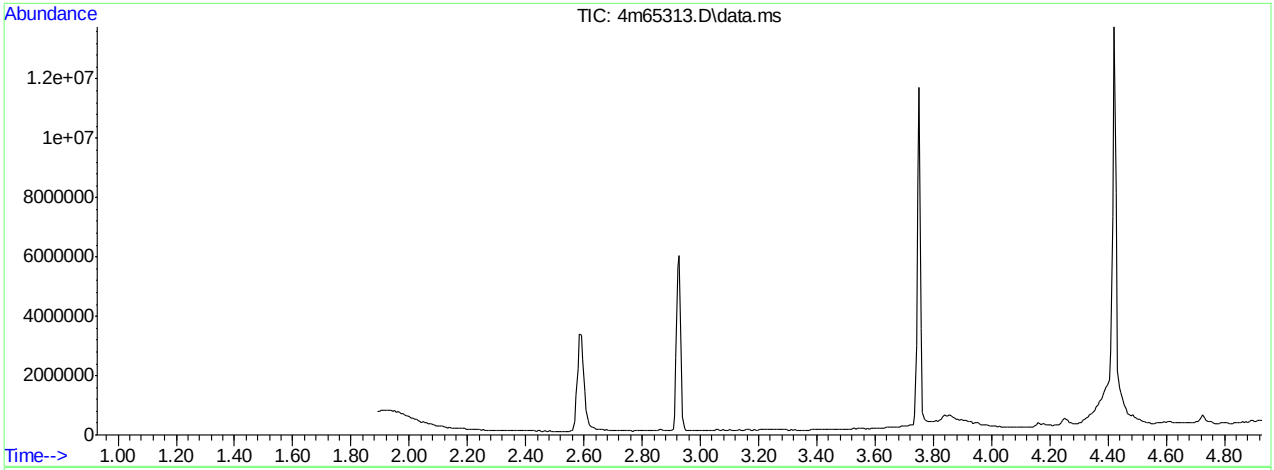
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

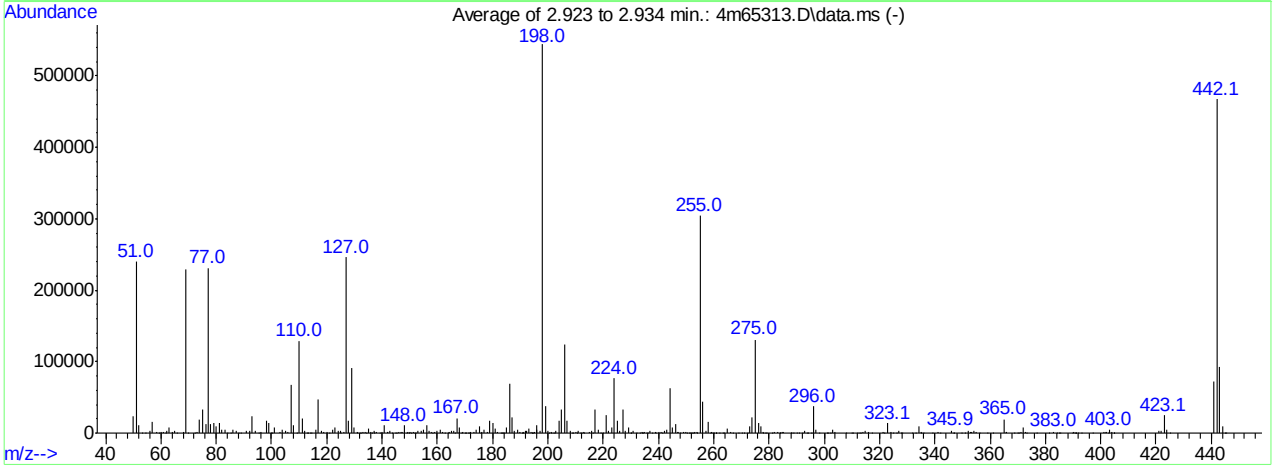
SGS ACCUTEST JC19914

DFTPP

Data File : C:\msdchem\1\DATA\E4M2922\4m65313.D Vial: 1
Acq On : 17 May 2016 9:58 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op93881a,e4m2922 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um





AutoFind: Scans 181, 182, 183; Background Corrected with Scan 173

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.1	239845	PASS
68	69	0.00	2	1.0	2358	PASS
69	198	0.00	100	42.2	229434	PASS
70	69	0.00	2	0.4	848	PASS
127	198	40	60	45.2	245955	PASS
197	198	0.00	1	0.6	3100	PASS
198	198	100	100	100.0	543979	PASS
199	198	5	9	6.8	37261	PASS
275	198	10	30	23.9	130272	PASS
365	198	1	100	3.5	19155	PASS
441	443	0.01	100	77.5	71853	PASS
442	198	40	100	85.9	467093	PASS
443	442	17	23	19.9	92757	PASS

4m65313.D DFTPP4M.M Wed May 18 11:08:31 2016 MANAGER

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	23315	61.80	263	74.00	19252	85.05	210
51.00	239845	62.05	2506	74.95	33506	85.95	4436
52.00	11735	63.05	8495	76.10	11841	87.05	3063
53.20	624	63.95	1059	77.00	231424	87.90	688
54.20	93	64.95	3861	78.00	12520	88.95	74
56.00	3933	65.85	366	79.00	14054	91.05	3903
57.00	15036	68.05	2358	79.95	9340	92.00	3439
58.25	1359	69.00	229434	81.00	14357	93.05	22919
59.10	168	69.95	848	81.95	4240	94.00	2846
60.00	1610	72.20	215	83.00	4593	95.20	327
60.90	2108	73.00	1123	83.95	392	96.10	1529

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
98.00	17549	109.05	137	119.05	1031	129.00	90456
99.00	13848	110.00	128824	119.90	1251	130.00	7433
99.90	748	111.05	20122	120.90	675	131.00	1073
100.20	624	111.95	2613	122.05	4468	131.20	391
101.00	7570	112.90	741	123.00	7293	131.90	452
102.95	1687	113.10	700	124.00	3129	132.20	480
104.00	5065	113.90	167	124.90	2645	133.05	921
105.00	3908	114.30	297	125.10	347	133.90	1919
105.95	1332	116.05	4064	126.10	1490	134.20	421
107.00	68276	117.00	47160	127.00	245955	135.00	6766
107.95	11456	118.05	3520	127.95	18045	135.85	1197

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.20	500	144.90	787	151.15	1289	159.95	3207
137.05	2961	145.10	358	151.75	535	161.00	4946
137.30	520	146.05	1794	152.00	521	162.00	1789
138.05	1640	146.80	2296	153.00	3124	162.75	531
139.05	711	147.10	2204	154.05	3280	163.70	263
139.90	1042	148.00	10612	155.00	5057	164.15	1720
140.95	11244	148.90	395	156.05	10600	164.95	3701
141.90	1454	149.10	1527	157.00	2534	166.00	3065
142.10	1865	149.80	309	157.90	1750	166.20	412
142.95	2885	150.05	1010	158.10	591	167.00	20923
143.80	708	150.65	728	158.95	1492	167.80	1268

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.05	8659	175.80	282	184.10	350	192.10	3347
168.90	329	176.05	2287	185.00	8703	193.10	5725
169.20	928	177.00	5054	186.00	69371	193.85	1023
170.00	727	178.10	1712	187.00	21808	194.15	767
170.50	255	178.90	16564	188.00	2699	194.40	437
171.00	736	180.00	14217	189.00	4530	194.70	269
171.60	530	181.00	6489	189.95	1138	195.00	1190
172.10	1979	181.80	1134	190.70	207	195.80	4949
173.05	2428	182.80	617	190.90	465	196.00	10593
174.05	4092	183.20	328	191.15	1698	196.95	3100
175.05	10261	183.80	699	191.80	2630	198.00	543979

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
199.00	37261	207.05	18064	214.95	1456	225.00	17032
199.85	2523	207.95	3962	215.90	3640	226.05	2616
200.30	374	208.80	349	216.10	617	227.00	33469
201.00	402	209.10	509	216.95	32995	227.95	3832

M4M2881SIM.M Wed May 18 11:03:15 2016 MANAGER Page: 0

201.40	1728	210.25	2154	218.05	4553	229.00	7306
202.00	215	210.70	785	218.95	734	229.80	215
202.25	734	211.00	3499	219.70	160	230.05	457
203.00	3403	211.65	566	221.00	25726	231.00	3414
204.05	17699	212.30	151	222.05	2817	231.90	490
205.00	32935	212.80	300	223.05	7864	233.05	359
206.10	124787	213.05	1473	224.00	76283	233.85	1237

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.10	584	241.20	328	250.10	95	257.00	3493
234.60	244	242.05	3408	250.90	810	258.00	16248
235.00	1893	243.05	4689	251.35	347	258.70	650
235.80	738	244.05	62051	251.85	682	259.00	2186
236.00	453	245.00	7759	252.10	300	259.80	482
237.05	2658	246.05	12130	252.60	125	260.00	651
237.80	282	246.90	921	253.05	1352	260.80	175
238.80	237	247.05	1733	253.80	484	261.00	74
239.10	1075	247.95	456	254.05	1870	262.05	309
240.00	900	248.95	1882	255.00	304277	263.10	123
240.85	1787	249.90	1116	256.00	44389	263.85	839

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.00	6574	276.95	9135	285.20	907	296.00	37379
265.90	1000	277.80	155	287.80	106	297.00	4850
266.70	131	278.05	1163	288.10	201	298.15	381
269.10	81	278.75	322	288.70	365	300.85	493
270.05	526	279.10	123	290.10	334	301.50	221
271.15	432	281.20	352	291.00	82	302.20	529
272.10	611	281.90	1164	291.95	355	303.05	4709
273.05	9741	283.05	2060	293.00	2744	304.00	1020
274.00	21615	283.90	293	293.85	485	308.00	208
275.00	130272	284.05	406	294.10	86	309.70	226
276.05	14607	284.95	886	295.15	705	310.10	295

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
312.00	90	325.10	124	339.10	89	354.05	3862
312.85	216	326.10	254	341.00	1543	355.10	950
313.10	94	326.95	2627	342.00	429	356.00	107
314.00	1635	327.75	568	345.95	3360	359.15	216
314.95	2931	328.15	718	346.70	102	360.90	84
316.10	1803	331.90	852	346.95	507	365.00	19155
317.00	203	333.15	788	349.70	145	365.90	908
321.05	1514	334.05	9937	350.95	451	366.05	2232
321.85	470	335.00	2025	352.00	3968	368.55	347
323.05	13878	335.20	276	352.90	906	369.95	479
324.00	1744	336.00	139	353.15	2001	370.50	121

Average of 2.923 to 2.934 min.: 4m65313.D\data.ms
dftpp
Modified:subtracted

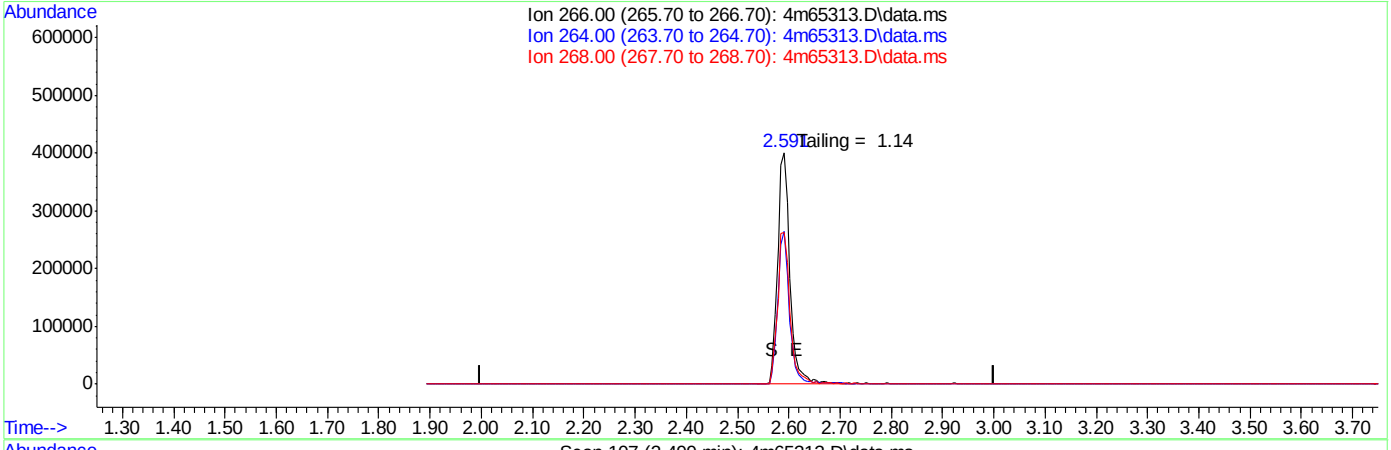
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.95	1145	390.10	1074	403.00	4374	443.00	92757
372.05	7213	390.70	133	404.05	1862	444.00	9780
372.85	1010	390.90	194	404.70	126	444.95	765
373.10	371	391.15	506	405.00	70	445.20	155
376.90	240	391.95	296	421.00	3373		
381.20	115	393.20	216	422.00	3814		
383.00	1813	397.00	88	423.05	24533		
384.05	688	401.00	876	424.05	4169		
384.80	137	401.80	927	425.00	737		
385.15	337	402.00	2141	441.05	71853		
389.80	521	402.70	592	442.05	467093		

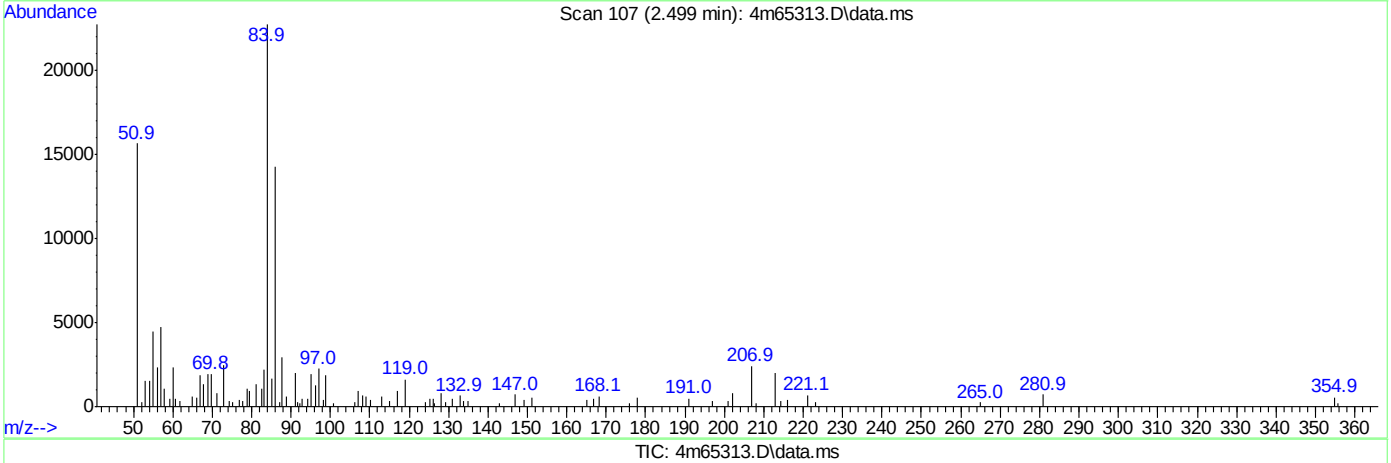
M4M2881SIM.M Wed May 18 11:03:15 2016 MANAGER Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65313.D
Acq On : 17 May 2016 9:58 am
Operator : linseyk
Sample : dftpp
Misc : op93881a,e4m2922
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 10:04:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m65313.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

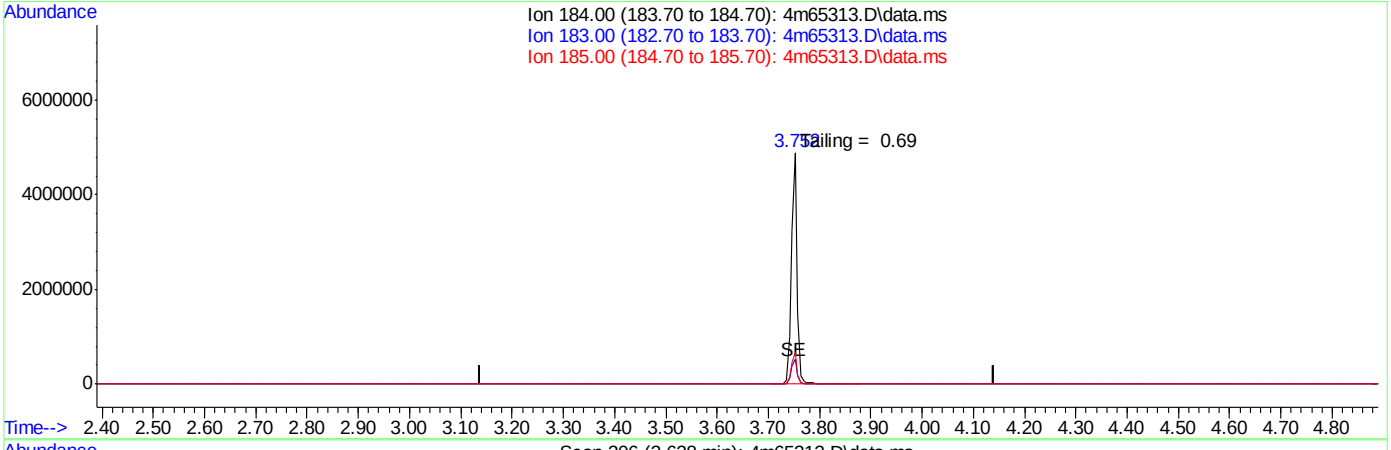
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

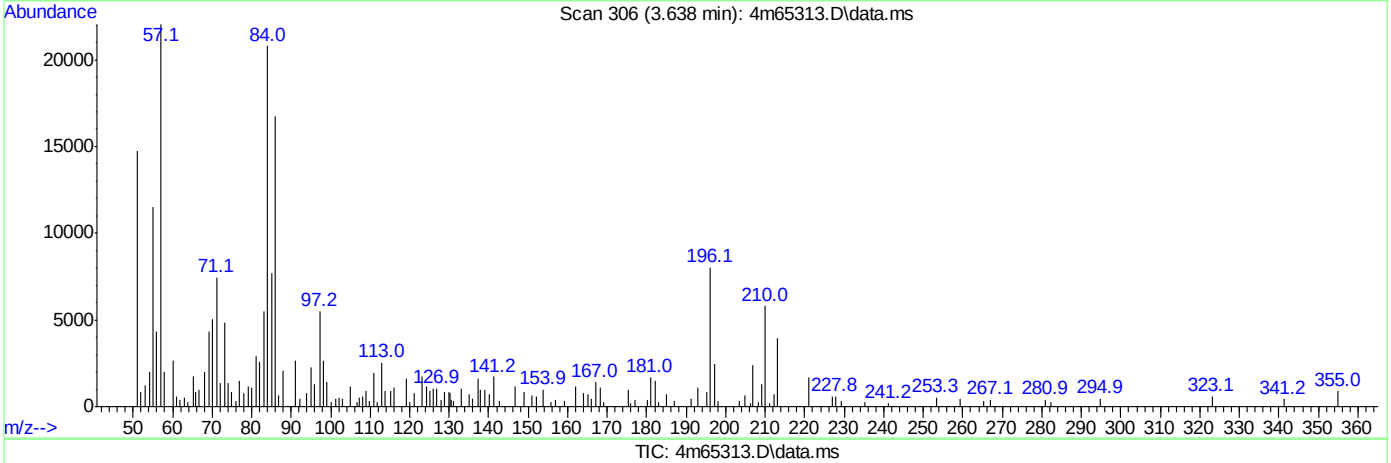
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65313.D
Acq On : 17 May 2016 9:58 am
Operator : linseyk
Sample : dftpp
Misc : op93881a,e4m2922
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 10:04:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m65313.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

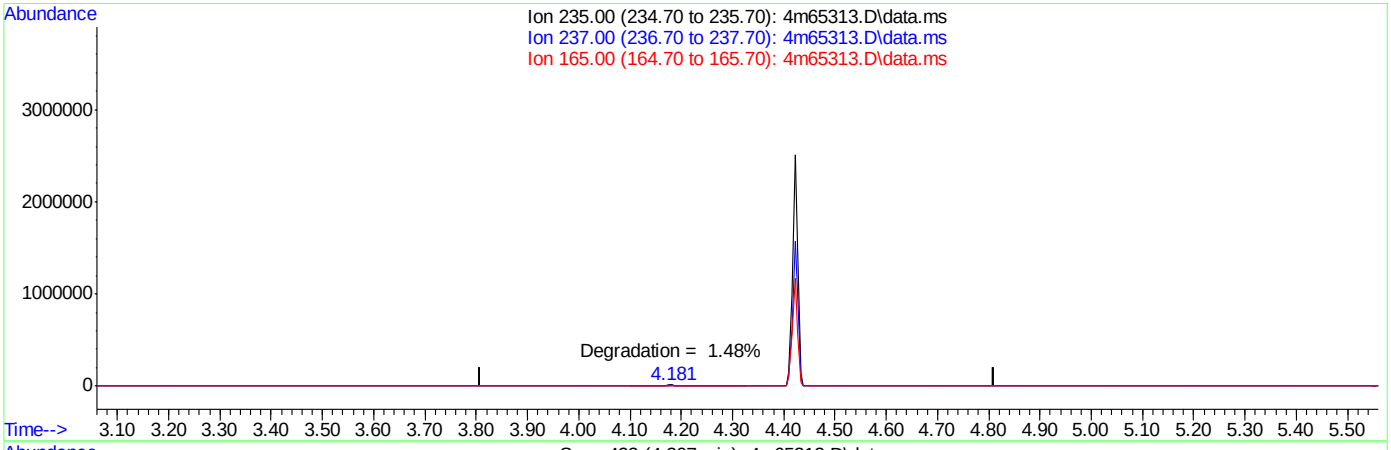
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

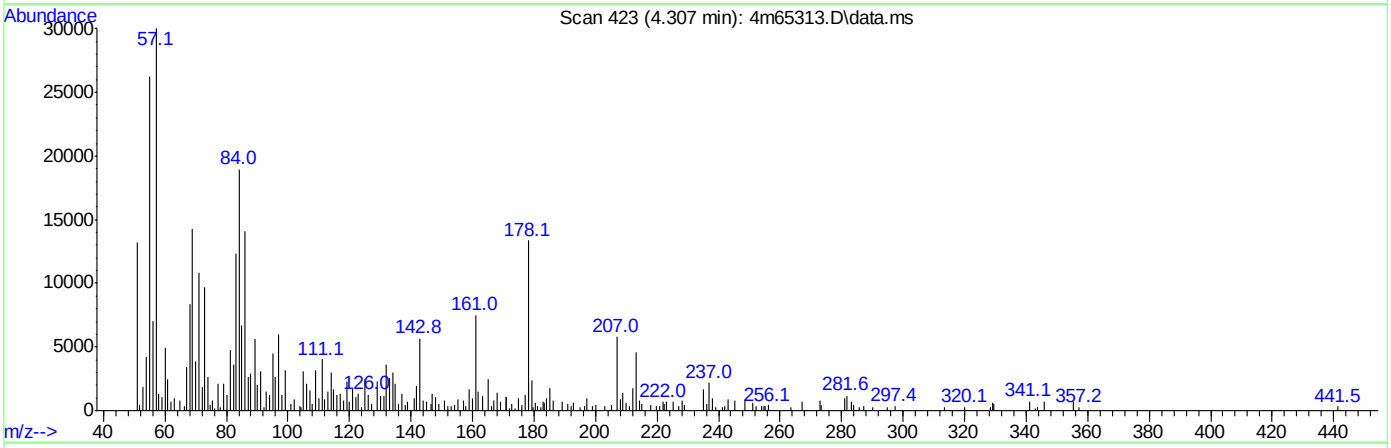
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65313.D
Acq On : 17 May 2016 9:58 am
Operator : linseyk
Sample : dftpp
Misc : op93881a,e4m2922
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 10:04:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m65313.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

response 0

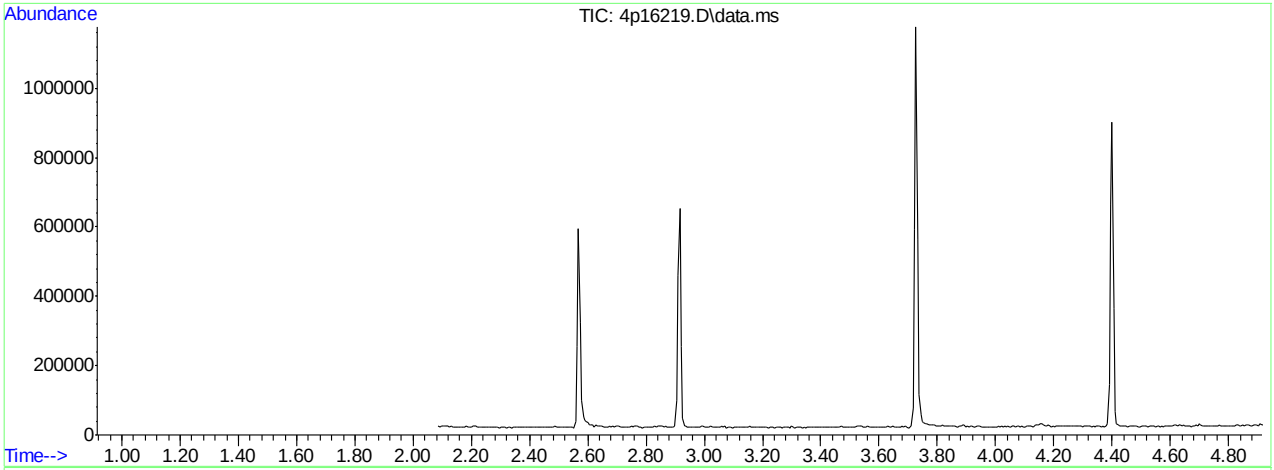
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

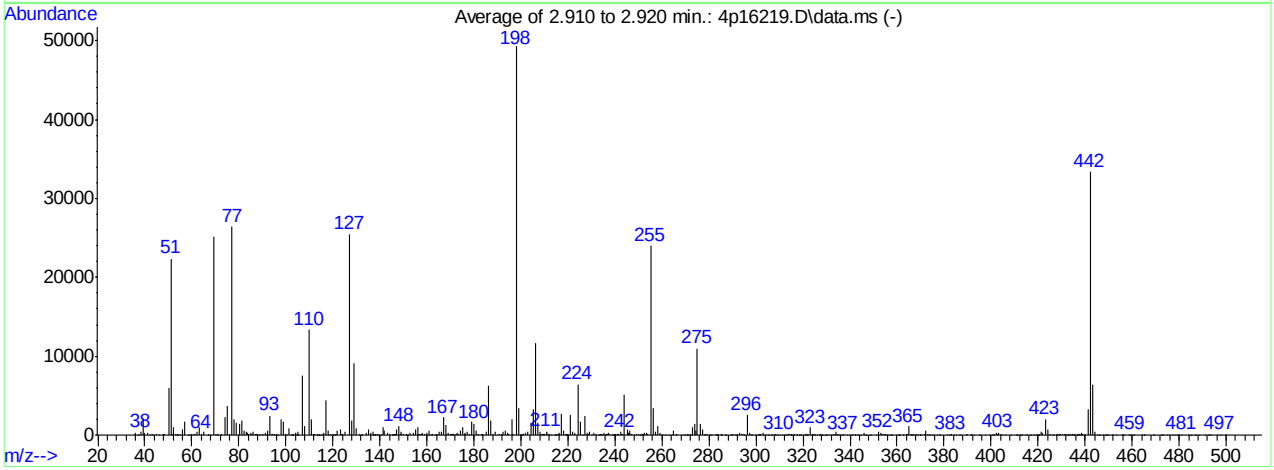
SGS ACCUTEST JC19914

DFTPPR

Data File : C:\msdchem\1\DATA\E4P850\4p16219.D Vial: 1
Acq On : 28 Apr 2016 4:04 pm Operator: ashleyd
Sample : dftpp Inst : MS4P
Misc : op93004a,e4p850 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS





AutoFind: Scans 155, 156, 157; Background Corrected with Scan 150

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.3	22319	PASS
68	69	0.00	2	0.1	35	PASS
69	198	0.00	100	51.0	25111	PASS
70	69	0.00	2	0.8	202	PASS
127	198	40	60	51.7	25458	PASS
197	198	0.00	1	0.3	150	PASS
198	198	100	100	100.0	49264	PASS
199	198	5	9	7.1	3475	PASS
275	198	10	30	22.2	10955	PASS
365	198	1	100	2.2	1108	PASS
441	443	0.10	100	52.3	3342	PASS
442	198	40	100	67.7	33347	PASS
443	442	17	23	19.2	6388	PASS

4p16219.D DFTPP4P.M Tue May 03 17:11:46 2016

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.25	74	45.00	117	54.25	19	63.05	1034
36.00	238	46.10	25	55.20	123	63.95	174
36.90	45	47.90	88	56.15	664	65.15	446
37.35	67	48.20	124	57.15	1680	66.80	65
38.15	378	50.20	5930	58.60	31	67.15	45
39.15	2181	51.10	22319	59.00	63	67.70	35
40.00	279	51.90	142	59.65	92	69.10	25111
41.10	262	52.20	979	60.20	50	70.25	202
42.15	69	52.95	99	61.05	165	70.90	56
42.90	102	53.40	16	61.30	164	71.10	16
43.40	55	53.80	26	62.10	437	72.60	101

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
74.15	2298	84.20	115	91.85	67	99.90	78
75.10	3758	85.20	278	92.15	515	100.25	63
75.80	128	85.40	130	93.05	2464	101.15	815
77.15	26403	86.00	373	93.90	101	102.20	18
78.15	1955	87.00	136	94.20	122	102.50	24
79.10	1505	87.30	80	94.85	117	102.95	54
80.15	1402	87.85	131	95.00	33	103.30	173
81.10	1923	88.20	67	95.95	117	104.00	144
82.15	570	89.25	129	96.30	29	104.20	248
83.10	460	90.25	83	98.10	2048	104.70	37
83.85	235	91.05	253	99.10	1758	105.05	437

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.30	64	114.35	37	121.00	38	131.20	181
107.15	7541	114.90	34	121.25	106	131.75	46
108.10	1136	115.15	72	122.00	509	132.25	54
110.10	13355	116.10	284	123.05	707	132.50	25
111.05	1945	117.10	4441	123.90	126	134.10	296
111.90	189	117.80	47	124.15	108	135.10	721
112.10	182	118.10	545	125.05	408	136.00	315
113.05	54	119.00	119	127.10	25458	136.90	42
113.30	32	119.20	24	128.05	1829	137.15	380
113.90	47	119.80	22	129.10	9134	137.60	21
114.10	24	120.20	125	130.10	895	138.00	95

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
138.20	19	145.50	20	152.00	74	160.05	328
138.85	79	146.00	166	153.00	356	160.70	49
139.30	50	146.20	30	154.10	291	161.10	515
139.65	65	146.60	122	154.30	52	161.70	54
140.20	68	147.20	785	155.05	666	162.15	180
141.15	1061	148.10	1203	156.15	978	163.05	52
142.05	560	148.80	184	156.80	78	163.60	37
143.15	225	149.15	397	157.10	118	164.15	161
144.05	196	150.05	132	157.40	112	165.00	398
145.00	38	151.05	42	158.20	234	166.05	403
145.30	22	151.45	92	158.95	115	167.05	2235

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.10	1338	175.10	985	183.90	128	194.20	238
169.15	296	176.00	241	185.10	427	194.70	96
169.85	110	176.20	159	186.05	6260	196.10	2029
170.45	99	176.90	417	187.15	1856	196.70	150

170.90	41	177.95	126	188.05	201	198.10	49264
171.15	92	179.10	1759	189.15	370	199.10	3475
171.60	87	180.10	1440	190.05	72	200.05	194
172.15	212	181.15	544	191.00	196	200.30	43
173.00	241	182.05	146	192.00	177	200.80	168
173.20	166	183.25	103	192.20	361	201.00	93
174.15	549	183.50	39	193.15	571	201.75	281

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.10	475	211.10	301	218.10	527	227.10	2454
204.15	1612	211.70	45	219.00	150	228.15	332
205.15	3334	212.15	123	219.20	39	228.80	148
206.10	11633	212.90	40	219.50	79	229.05	499
207.10	1557	214.30	25	220.00	116	229.90	68
208.10	361	214.70	69	221.15	2548	231.05	297
208.70	30	214.95	78	221.75	476	231.95	94
209.00	89	215.90	85	223.00	255	233.00	61
209.40	79	216.10	241	224.10	6438	233.40	17
210.15	178	216.30	146	225.20	1740	233.80	82
210.85	465	217.10	2755	226.15	38	234.15	80

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.50	55	240.10	98	246.80	200	253.45	323
235.20	354	240.85	83	247.05	118	253.90	202
235.80	42	241.15	189	248.00	73	255.10	23986
236.20	154	241.40	79	249.15	206	256.10	3348
236.80	98	242.25	369	249.85	97	257.10	364
237.15	338	242.80	90	250.65	68	258.00	1075
237.85	117	243.00	86	250.90	33	259.05	244
238.75	69	244.10	5145	251.65	107	259.70	43
239.30	28	245.15	787	251.90	31	260.30	33
239.70	33	246.00	306	252.20	87	260.80	26
239.90	86	246.15	551	252.65	244	261.70	17

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
262.80	18	272.05	131	280.10	28	287.10	52
264.15	66	272.30	56	280.70	73	289.00	32
265.05	540	273.05	975	281.10	45	289.50	40
266.00	53	274.05	1449	282.75	90	290.30	79
266.15	107	274.30	565	283.10	64	291.30	23
268.20	54	275.10	10955	283.40	49	291.50	22
269.00	38	276.10	1380	283.95	111	292.20	70
269.60	33	277.10	700	284.90	34	293.15	236
270.60	20	278.00	114	285.15	117	294.15	103
270.80	29	278.20	67	285.40	45	294.60	98
271.30	20	279.20	106	286.60	22	295.00	29

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.10	2553	303.10	350	311.30	26	317.20	16
297.15	329	304.20	55	311.85	38	317.40	33
297.90	26	304.70	39	312.70	26	318.30	17
298.40	24	305.30	23	313.05	74	318.90	22
299.80	20	306.20	25	313.80	91	319.40	21
300.60	53	306.60	27	314.15	160	320.30	44
301.10	31	307.70	17	314.80	100	320.95	136
301.35	117	308.10	95	315.05	75	321.20	21
301.70	34	308.70	29	315.60	60	321.40	34
302.00	127	309.15	70	316.10	31	321.80	43
302.80	68	310.00	75	316.25	94	321.95	3

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
323.10	931	329.20	25	336.10	38	344.30	17
323.90	128	329.50	28	336.50	64	345.85	268
324.35	139	330.00	31	337.35	84	346.30	38
324.90	18	331.15	53	338.80	28	347.00	66
325.10	17	332.00	43	339.70	40	348.50	24
326.10	17	333.00	94	340.80	56	348.80	38
326.70	61	333.30	41	341.10	182	351.00	51
327.20	207	334.00	365	341.90	27	351.95	417
327.70	41	334.30	49	342.20	42	353.15	329
328.00	73	335.20	169	343.00	25	353.80	193
328.20	31	335.60	37	343.40	28	354.10	153

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.30	70	362.40	31	368.80	31	377.00	25
355.00	138	362.60	19	369.70	17	377.70	25
355.40	64	363.90	84	369.90	53	378.50	21
356.00	16	364.50	78	370.25	53	381.05	43
356.90	46	365.00	1108	371.90	169	382.30	30
357.40	16	365.80	6	372.20	519	382.60	21
358.00	23	366.00	90	372.95	168	383.10	142
359.80	21	366.50	33	373.60	17	384.05	62
360.50	32	366.95	79	374.30	57	385.10	22
360.70	35	367.40	17	374.95	70	386.30	34
361.10	34	368.15	79	375.50	17	387.10	20

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
389.10	22	401.40	28	412.20	28	420.10	28
389.95	116	402.05	218	412.50	40	420.50	58
391.05	67	402.50	88	413.20	18	421.05	375
391.70	119	403.05	336	414.60	47	421.90	285
392.80	25	404.20	121	415.20	60	423.10	2011
395.00	49	404.65	44	416.40	26	424.10	728
395.20	28	406.10	23	417.00	21	425.20	131
397.30	18	408.40	31	417.90	20	425.90	51
399.30	18	410.60	56	418.90	59	426.65	55
400.10	16	410.80	24	419.50	37	427.75	118
400.80	28	411.20	32	419.80	35	428.00	37

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
428.70	79	434.55	93	438.50	263	447.50	37
428.90	24	434.90	46	438.90	143	448.40	16
429.50	151	435.20	31	439.50	31	448.80	18
430.25	90	435.50	47	439.90	54	449.50	19
431.10	116	435.70	32	441.20	3342	450.00	24
431.75	157	436.35	71	442.10	33347	451.30	48
432.40	45	436.70	44	443.10	6388	451.60	20
432.90	50	437.10	21	444.05	492	453.05	57
433.20	55	437.30	121	445.10	33	455.70	21
433.65	173	437.60	95	446.00	19	456.10	21
434.00	38	438.10	58	446.20	21	456.50	20

Average of 2.910 to 2.920 min.: 4p16219.D\data.ms
dftpp
Modified:subtracted

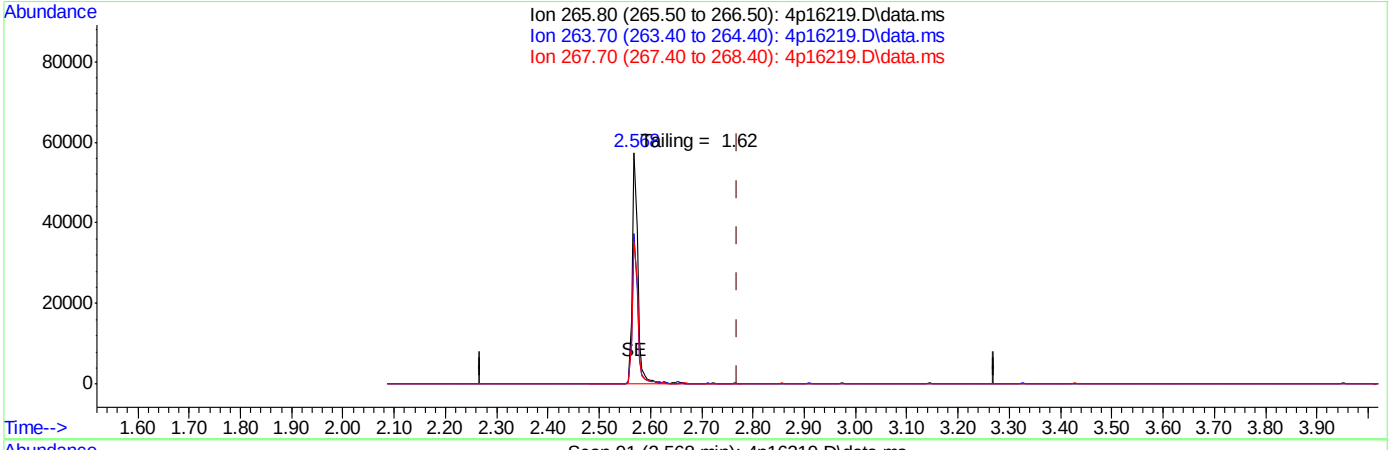
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
458.30	17	472.25	41	483.55	35	497.60	25
459.15	57	472.90	22	484.60	21	499.50	23
459.65	47	473.50	28	485.00	28	499.80	16
460.20	34	474.80	22	486.80	22		
461.10	18	475.60	41	487.00	16		

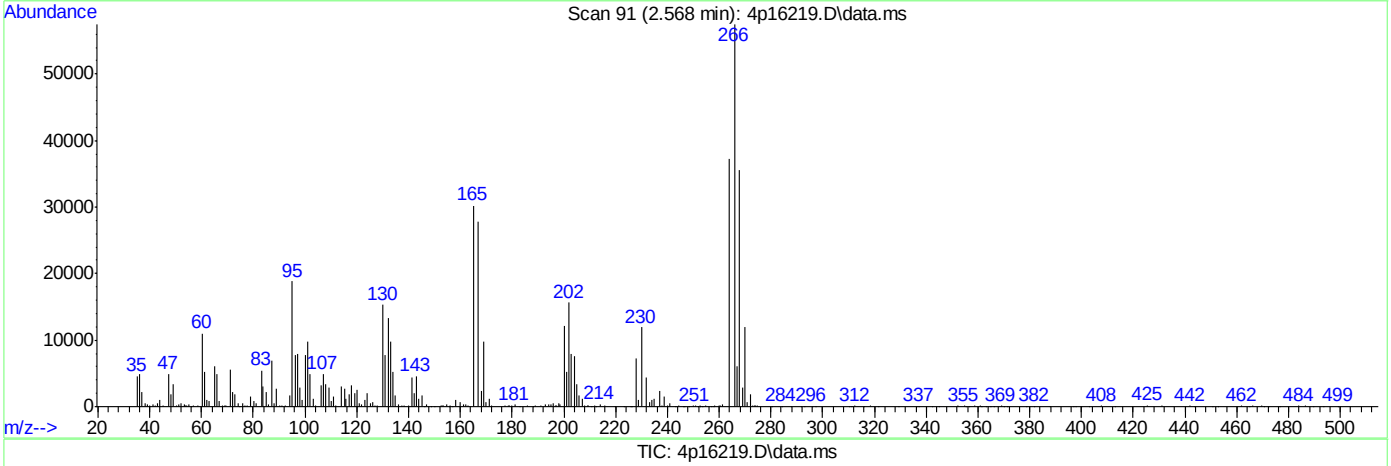
464.00	18	477.10	29	488.60	26
464.40	20	477.90	16	490.70	27
465.00	32	478.95	46	492.50	25
465.20	41	479.50	27	492.80	20
469.00	23	480.00	26	493.30	50
469.60	16	480.95	56	496.10	18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16219.D
Acq On : 28 Apr 2016 4:04 pm
Operator : ashleyd
Sample : dftpp
Misc : op93004a,e4p850
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 16:10:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





(1) Pentachlorophenol (MC)

2.568min (-0.202) 22.98ng

response 42974

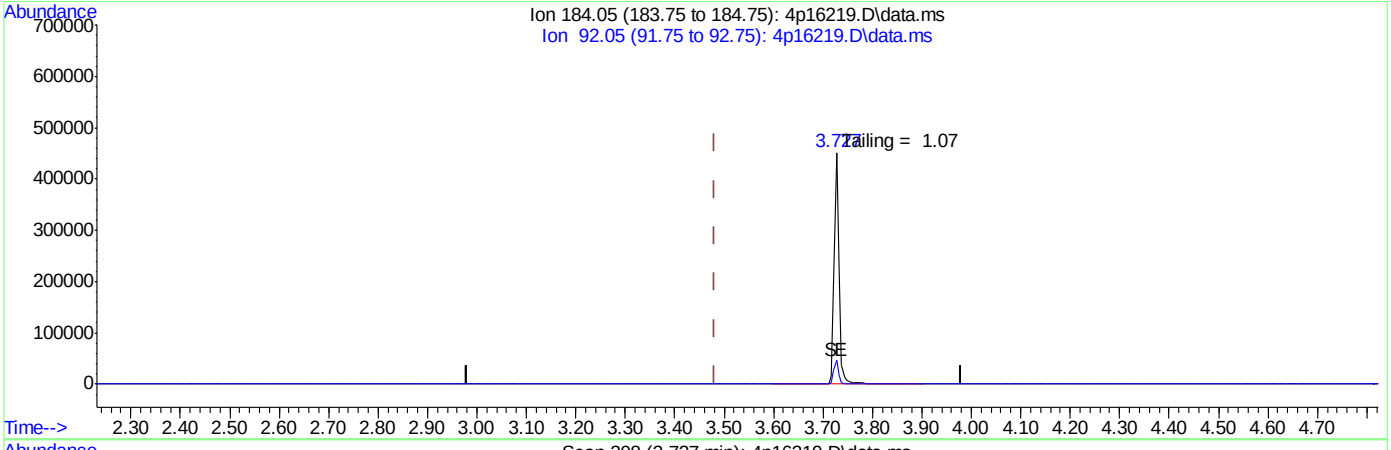
Ion	Exp%	Act%
265.80	100	100
263.70	64.70	64.78
267.70	64.60	61.76
0.00	0.00	0.00

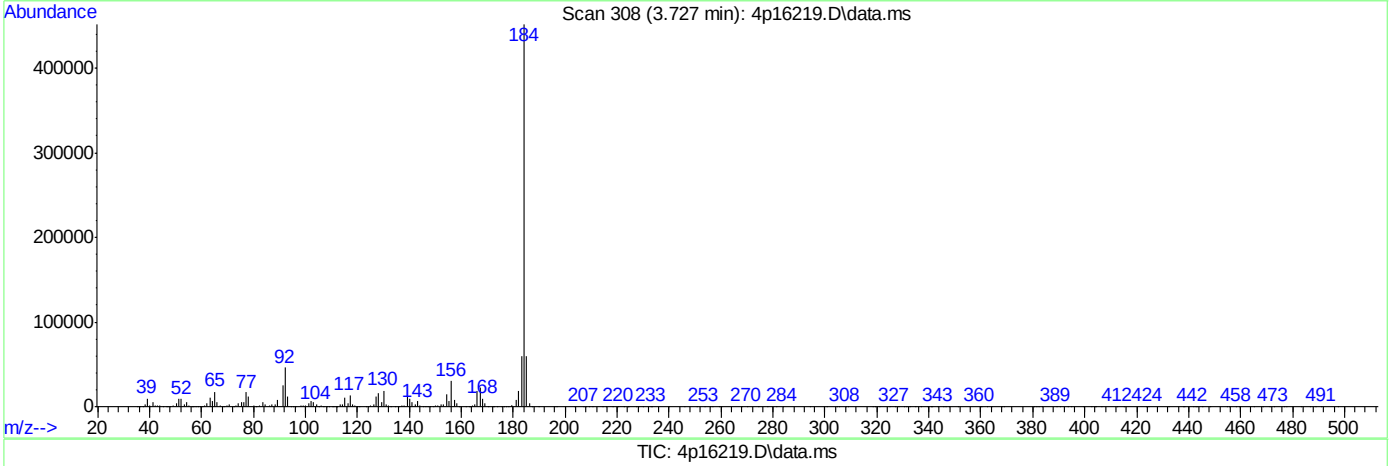
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16219.D
Acq On : 28 Apr 2016 4:04 pm
Operator : ashleyd
Sample : dftpp
Misc : op93004a,e4p850
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 16:10:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16219.D\data.ms

(2) Benzidine (M)

3.727min (+0.246) 67.31ng

response 313451

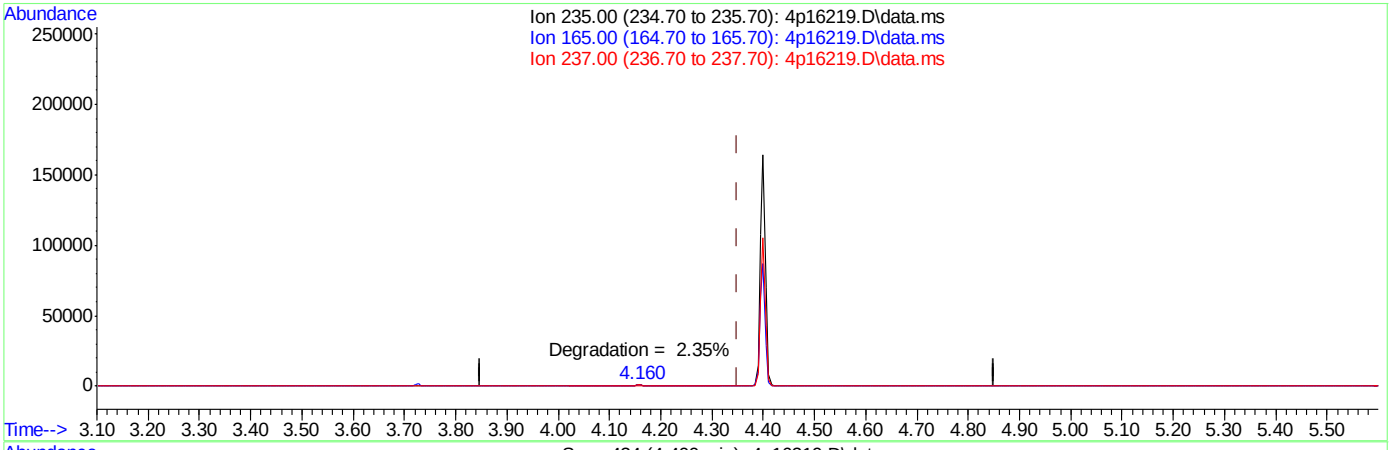
Ion	Exp%	Act%
184.05	100	100
92.05	11.10	10.13
0.00	0.00	0.00
0.00	0.00	0.00

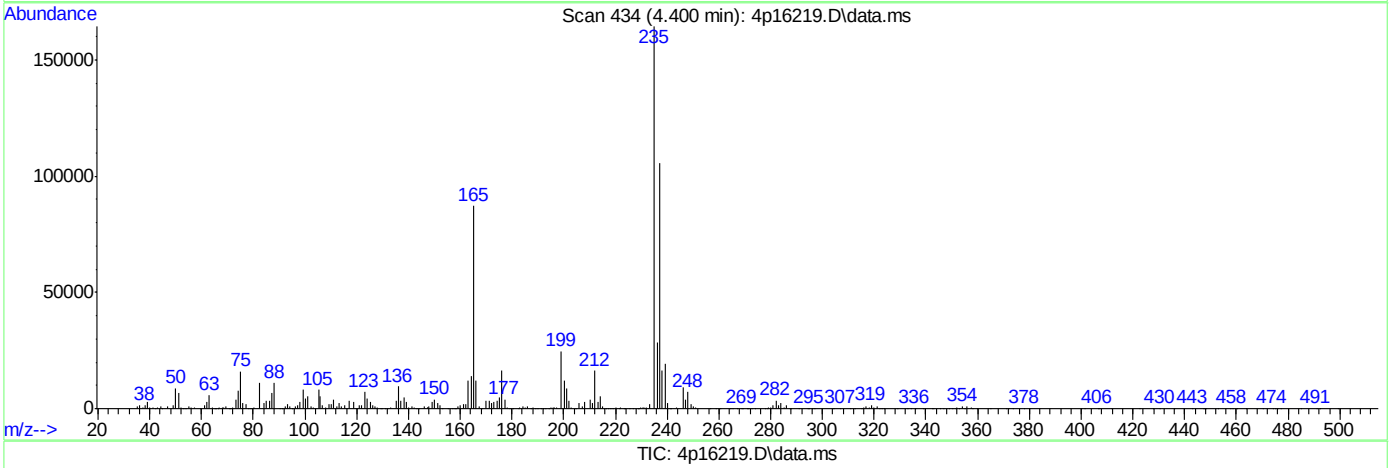
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16219.D
Acq On : 28 Apr 2016 4:04 pm
Operator : ashleyd
Sample : dftpp
Misc : op93004a,e4p850
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 16:10:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16219.D\data.ms

(3) PP-DDT (MC)

4.400min (+0.050) 63.07ppb

response 117930

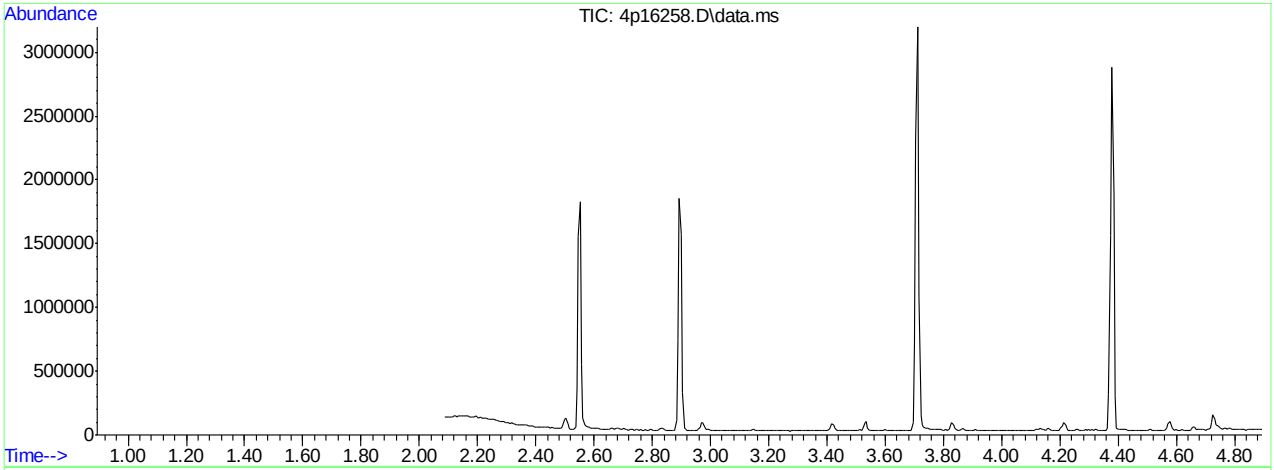
Ion	Exp%	Act%
235.00	100	100
165.00	58.00	52.97
237.00	62.20	64.15
0.00	0.00	0.00

SGS ACCUTEST JC19914

DFTPPR

Data File : C:\msdchem\1\DATA\E4P854\4p16258.D Vial: 1
Acq On : 9 May 2016 4:56 pm Operator: ashleyd
Sample : dftpp Inst : MS4P
Misc : op93648a,e4p854 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS



AutoFind: Scans 151, 152, 153; Background Corrected with Scan 147

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.9	82033	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	60.4	90132	PASS
70	69	0.00	2	0.6	540	PASS
127	198	40	60	53.7	80224	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	149346	PASS
199	198	5	9	6.9	10341	PASS
275	198	10	30	21.4	31946	PASS
365	198	1	100	2.4	3642	PASS
441	443	0.10	100	88.5	15102	PASS
442	198	40	100	61.5	91866	PASS
443	442	17	23	18.6	17067	PASS

4p16258.D DFTPP4P.M Mon May 09 18:01:33 2016

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	226	50.05	22367	61.05	1272	72.15	99
37.15	431	51.10	82033	62.05	1165	73.10	857
38.10	1407	52.05	3276	63.05	3369	74.05	7971
39.05	6953	52.85	197	64.00	366	75.05	12510
40.15	447	54.00	288	65.00	1496	77.10	87513
41.10	36	55.10	677	65.90	76	78.10	6308
42.00	116	56.00	2178	66.10	60	79.05	5376
44.05	33	57.05	5310	69.00	90132	80.10	4246
44.90	140	58.00	292	70.15	540	81.05	5567
45.05	328	58.95	128	70.80	72	82.10	1265
47.15	385	59.95	49	71.70	42	83.00	1292

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
84.05	111	93.05	8635	103.05	1209	114.20	74
85.00	766	94.05	801	104.00	2001	114.70	113
86.10	1925	95.15	186	105.05	2333	115.15	26
86.85	488	96.15	443	105.90	165	116.10	779
87.05	697	96.90	250	107.05	21791	117.00	14304
88.00	352	98.00	6330	108.00	3987	117.85	80
88.95	143	99.00	5243	110.00	45300	118.10	841
89.20	94	99.90	552	111.05	6177	119.10	64
89.80	91	101.05	2843	111.90	460	119.40	71
91.05	1639	101.80	95	112.10	212	120.10	340
92.05	1734	102.15	216	113.10	286	121.10	128

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
121.75	152	132.00	113	139.95	266	148.00	4036
122.05	1135	132.20	168	141.05	3089	149.00	792
122.40	202	132.60	137	142.00	1267	150.15	170
123.05	2076	134.00	1028	142.70	96	150.95	615
124.00	795	135.05	2142	143.00	793	151.20	113
125.05	1438	136.05	938	143.90	44	151.70	76
127.10	80224	137.10	1190	144.10	149	152.20	232
128.15	6538	137.95	255	144.95	154	153.05	1291
129.10	29872	138.20	178	145.30	77	154.05	897
130.10	2338	138.90	104	146.25	712	155.15	2036
131.00	429	139.25	111	147.05	2125	156.10	3143

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
156.80	181	163.90	230	171.90	315	179.00	5044
157.15	802	165.00	1157	172.10	262	180.05	3332
158.00	324	166.10	730	172.40	80	181.05	1563
158.20	235	167.10	6940	173.10	461	182.10	284
159.10	500	168.00	3374	173.90	195	183.20	65
160.05	1078	169.10	428	174.10	1120	184.10	650
161.05	1783	169.90	163	175.10	2856	185.15	2854
161.85	454	170.20	109	176.10	302	186.10	20087
162.10	294	170.60	79	176.40	368	187.10	5596
162.95	121	170.90	114	177.00	1437	188.05	633
163.40	77	171.15	291	178.05	49	189.00	1367

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
190.40	302	200.05	883	210.15	533	217.05	8842
191.10	529	201.50	525	210.50	508	218.05	1124
191.45	92	201.70	444	211.00	1724	218.80	111
191.95	1721	202.40	240	212.10	60	219.00	92

193.10	2109	203.05	1231	212.60	43	219.80	73
193.95	497	204.05	5556	212.95	110	221.05	8926
194.90	276	205.05	8867	213.20	79	223.10	511
195.20	143	206.10	38405	213.60	16	224.05	19838
196.10	5760	207.05	3849	214.40	61	225.05	4964
198.00	149346	208.00	1215	214.95	314	226.95	7005
199.00	10341	209.05	548	215.30	347	227.95	988

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
229.05	1619	239.05	435	248.00	129	257.95	3984
230.00	252	239.80	217	249.05	433	259.05	638
230.40	19	240.30	82	250.15	162	259.85	139
231.00	760	240.80	345	250.80	73	260.20	93
232.05	257	241.00	456	251.15	286	260.95	174
233.15	119	242.05	1182	251.70	69	262.00	37
234.00	418	244.10	14943	252.10	302	262.45	16
234.95	627	245.00	2230	253.05	1027	262.80	44
236.05	505	246.00	2488	255.10	72442	263.20	146
237.00	800	247.15	596	256.10	10677	264.20	224
238.05	159	247.70	40	257.10	1074	265.05	1266

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.80	62	276.00	4726	282.15	122	286.90	58
266.05	422	277.05	2311	282.60	43	287.70	25
267.25	129	277.70	110	282.90	149	288.80	175
268.05	159	278.05	493	283.15	79	289.50	43
269.90	94	278.35	14	283.50	86	289.80	17
270.15	128	278.80	95	284.00	58	290.05	191
270.95	242	279.50	25	284.15	226	290.60	53
271.40	121	279.70	29	284.80	26	291.30	48
273.05	2734	280.20	65	285.05	408	291.60	69
274.10	7353	280.95	167	286.00	67	291.95	190
275.05	31946	281.80	25	286.20	63	292.60	40

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
292.90	266	299.90	25	306.50	61	313.00	87
293.20	342	300.20	36	307.50	24	313.20	87
293.50	92	300.70	44	308.25	56	314.00	58
293.75	250	301.00	26	308.75	46	314.20	546
294.05	166	301.20	118	309.25	22	314.60	104
294.90	132	301.50	27	309.80	146	315.05	1052
296.10	7534	302.10	198	310.10	85	315.90	95
297.00	1099	303.10	946	310.40	32	316.15	510
297.75	128	303.80	67	311.30	39	317.10	137
298.20	56	303.95	309	312.10	46	317.50	33
298.75	159	305.20	160	312.60	48	317.80	52

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
319.40	18	328.05	255	338.90	53	347.05	120
320.20	247	329.15	81	339.10	71	347.70	21
321.00	368	330.05	51	339.80	39	348.20	25
321.60	267	332.10	121	340.05	97	348.85	58
322.10	76	332.30	182	340.60	59	349.55	129
323.05	2798	333.20	29	340.85	46	350.90	43
323.90	60	334.10	1769	341.10	284	351.15	94
324.20	458	335.05	372	342.00	155	352.05	804
325.80	51	336.30	97	342.30	45	353.05	865
326.10	87	336.90	42	343.10	43	354.05	856
326.95	448	337.90	16	346.00	801	354.85	123

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
355.10	221	362.90	35	368.20	22	374.20	64
356.20	51	363.30	105	368.70	68	374.70	20
357.05	79	363.55	93	369.60	33	375.80	22
357.55	87	363.90	22	369.80	60	377.00	63
358.40	36	364.10	210	370.20	47	377.90	52
358.90	112	365.00	3642	371.10	119	379.20	50
359.70	21	365.90	78	372.05	1629	379.90	17
360.90	82	366.10	724	372.80	43	380.90	24
361.40	106	366.60	18	373.05	348	381.85	51
361.90	85	366.80	66	373.60	84	382.60	103
362.65	146	367.10	45	374.00	27	382.85	181

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
383.20	119	392.10	123	404.20	41	411.20	21
383.85	13	392.90	37	405.10	53	411.50	26
384.10	86	393.90	41	405.60	60	411.80	30
385.05	100	394.60	38	406.30	51	413.00	34
385.80	37	395.10	29	406.70	27	413.40	67
388.70	50	398.90	26	407.90	19	414.00	100
389.10	31	399.90	50	408.50	73	415.05	30
389.50	30	401.00	180	409.00	37	415.70	53
390.10	273	402.05	677	410.25	94	416.00	53
391.00	105	403.05	936	410.50	19	416.45	47
391.50	35	404.00	308	410.90	25	416.90	68

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
418.15	56	426.60	69	430.80	36	435.30	378
419.80	45	426.90	119	431.50	110	435.70	49
420.20	99	427.10	77	431.80	107	436.20	82
420.90	63	427.60	26	432.10	89	436.60	199
421.05	724	427.90	193	432.40	114	437.15	423
422.05	231	428.20	84	432.65	235	437.55	371
423.05	4897	428.60	117	433.30	229	438.20	508
424.10	1006	429.20	35	433.70	94	438.60	234
424.95	178	429.55	84	434.40	163	438.90	377
425.40	29	430.20	69	434.80	34	439.40	158
425.65	72	430.40	145	435.00	104	441.10	15102

Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.10	91866	453.70	28	476.70	19	489.50	18
443.10	17067	456.30	36	477.45	34	490.10	25
443.95	1567	463.40	20	477.90	67	492.20	24
445.20	218	464.40	26	478.90	45	492.50	20
445.95	56	465.90	24	480.30	22	493.10	57
446.60	42	467.40	30	481.60	18	494.50	24
447.05	87	468.70	26	482.20	17	494.80	20
447.90	52	471.00	29	482.80	39	495.75	40
449.30	18	471.20	52	483.20	41	496.50	19
449.90	17	475.00	35	488.60	33	497.00	24
453.30	45	476.20	21	488.90	18	497.40	21

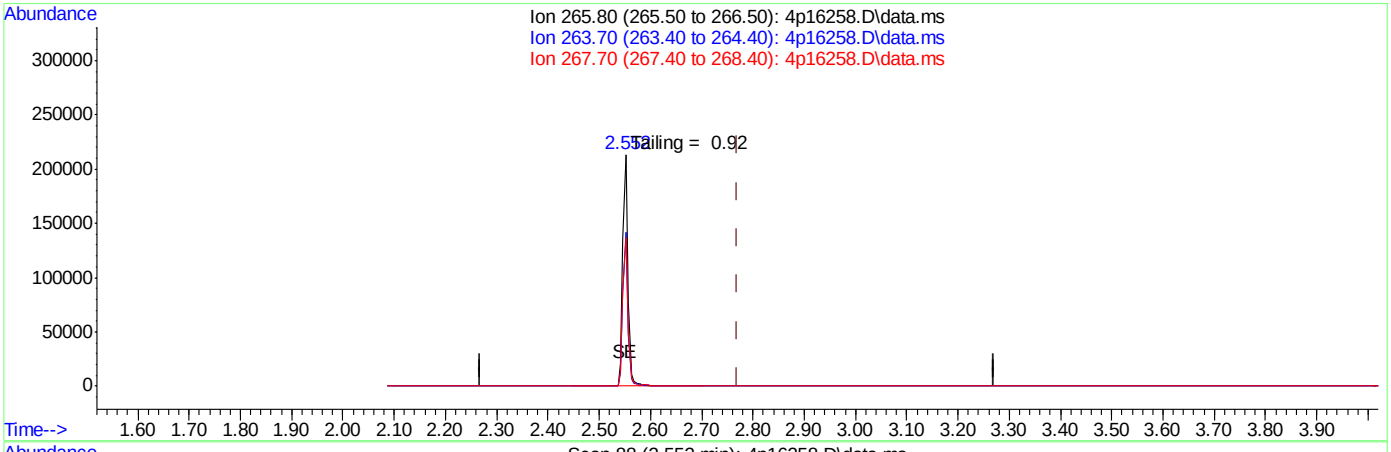
Average of 2.889 to 2.899 min.: 4p16258.D\data.ms
dftpp
Modified:subtracted

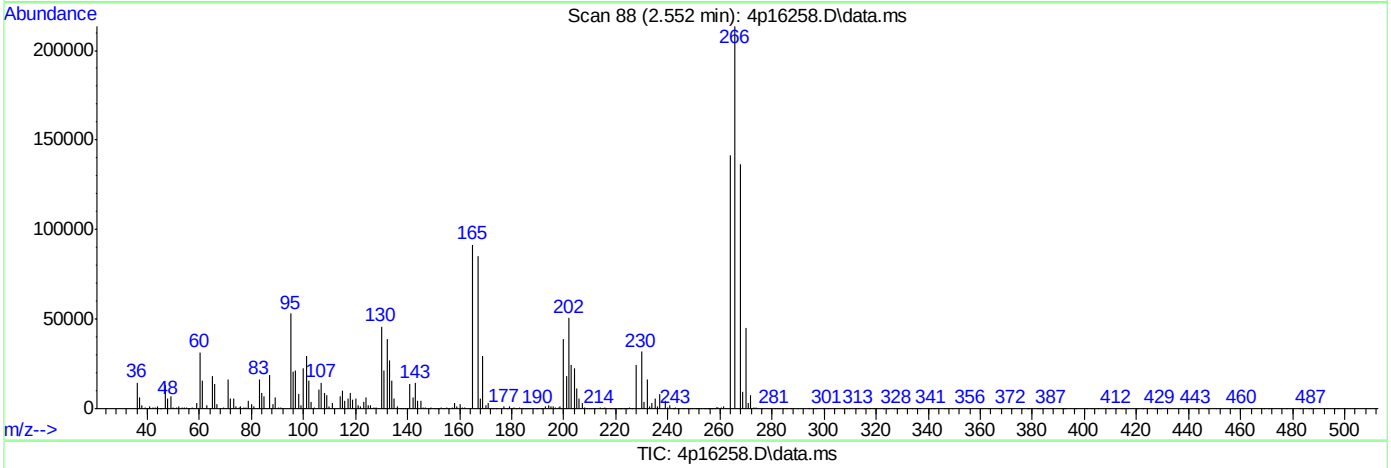
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
497.80	45						
499.00	18						
499.50	42						
499.70	29						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P854\
Data File : 4p16258.D
Acq On : 9 May 2016 4:56 pm
Operator : ashleyd
Sample : dftpp
Misc : op93648a,e4p854
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 17:02:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





(1) Pentachlorophenol (MC)

2.552min (-0.218) 81.03ng

response 151509

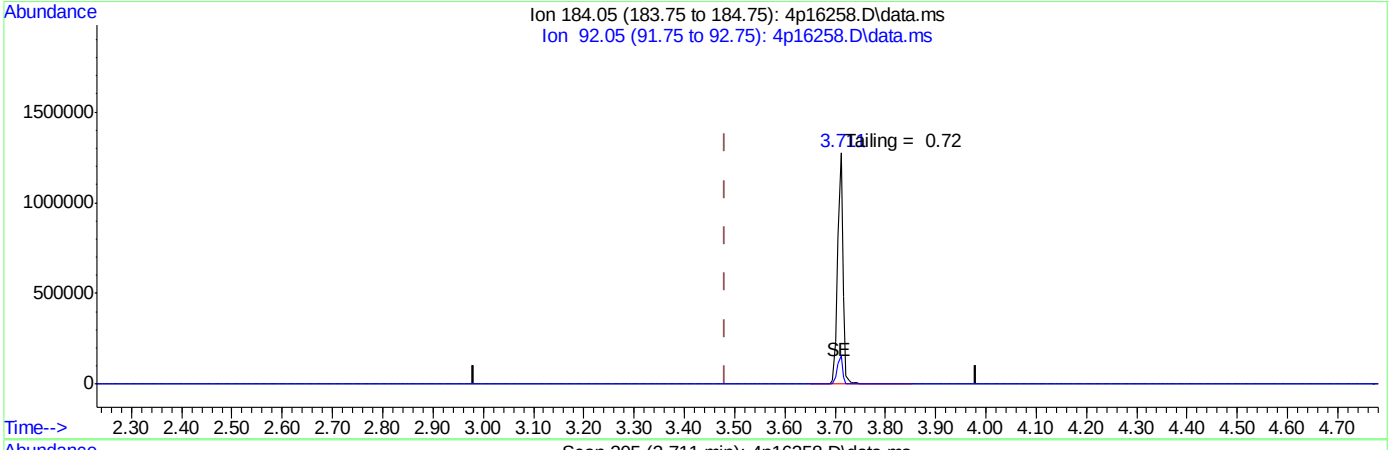
Ion	Exp%	Act%
265.80	100	100
263.70	64.70	66.26
267.70	64.60	63.89
0.00	0.00	0.00

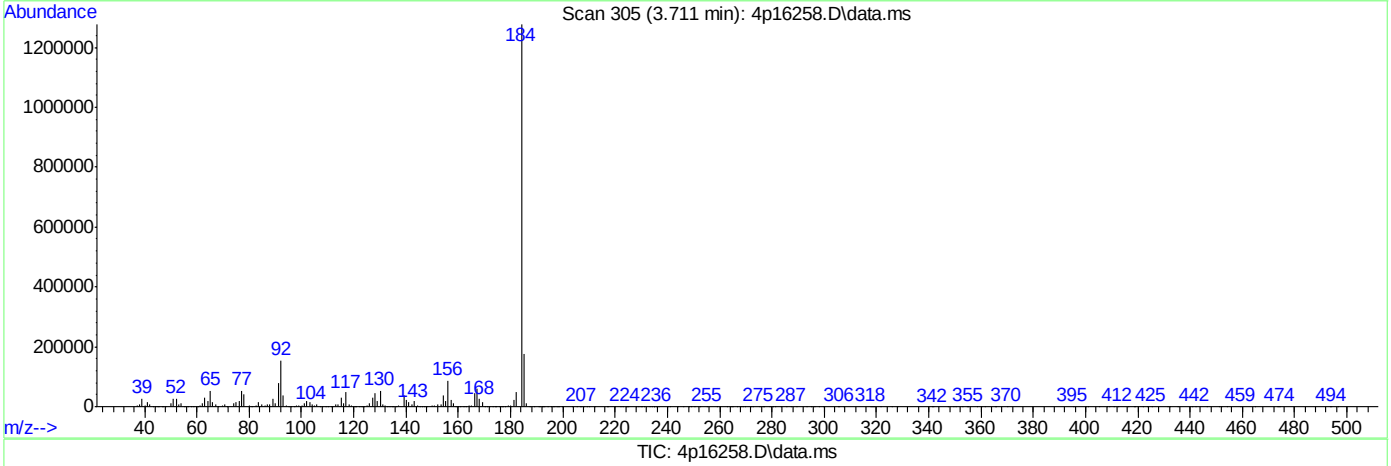
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P854\
Data File : 4p16258.D
Acq On : 9 May 2016 4:56 pm
Operator : ashleyd
Sample : dftpp
Misc : op93648a,e4p854
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 17:02:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16258.D\data.ms

(2) Benzidine (M)

3.711min (+0.230) 202.83ng

response 944581

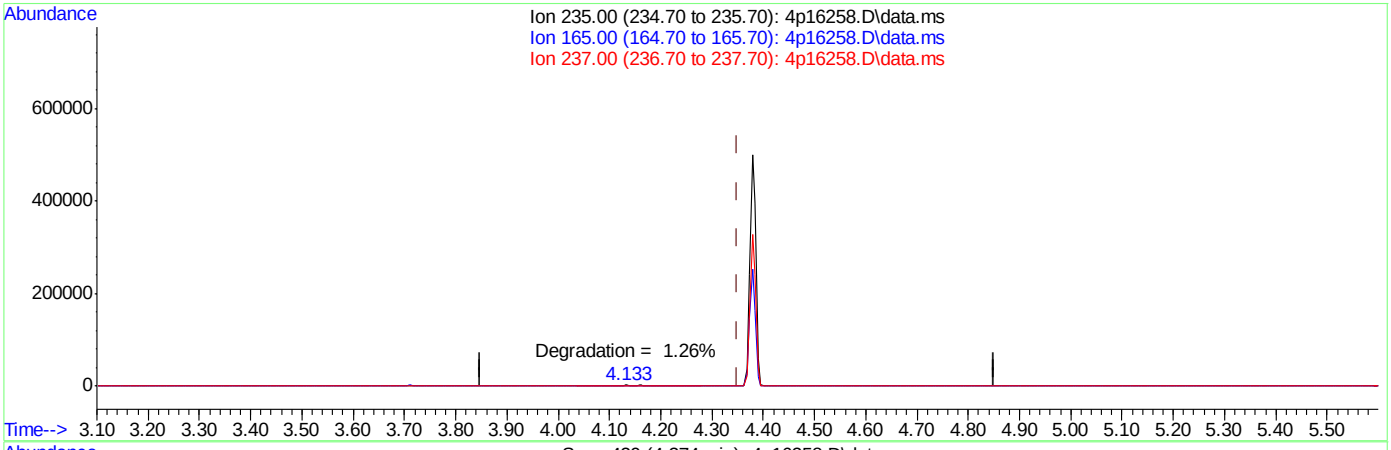
Ion	Exp%	Act%
184.05	100	100
92.05	11.10	12.10
0.00	0.00	0.00
0.00	0.00	0.00

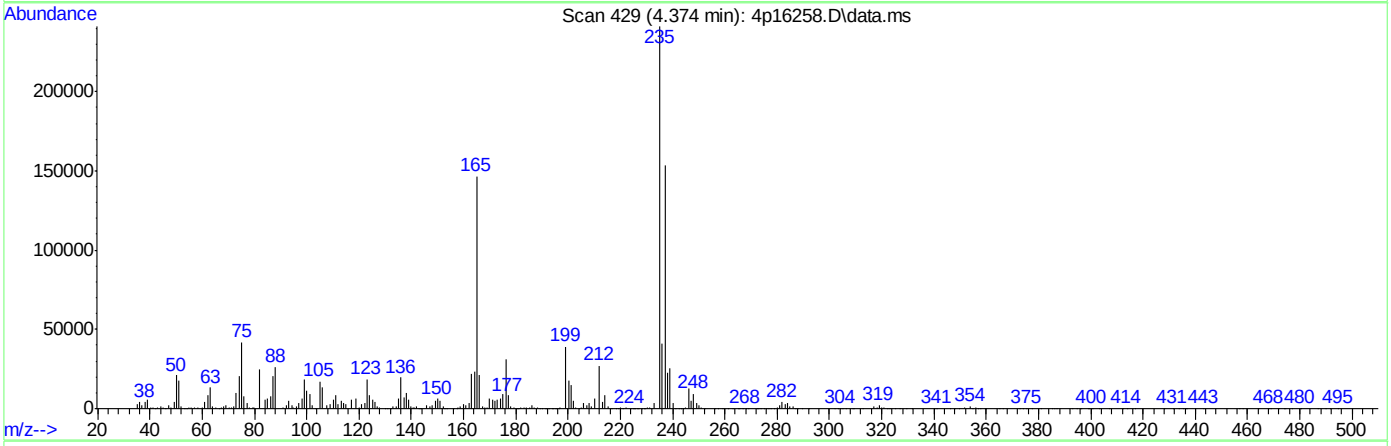
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P854\
Data File : 4p16258.D
Acq On : 9 May 2016 4:56 pm
Operator : ashleyd
Sample : dftpp
Misc : op93648a,e4p854
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 17:02:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16258.D\data.ms

(3) PP-DDT (MC)

4.379min (+0.029) 212.29ppb

response 396952

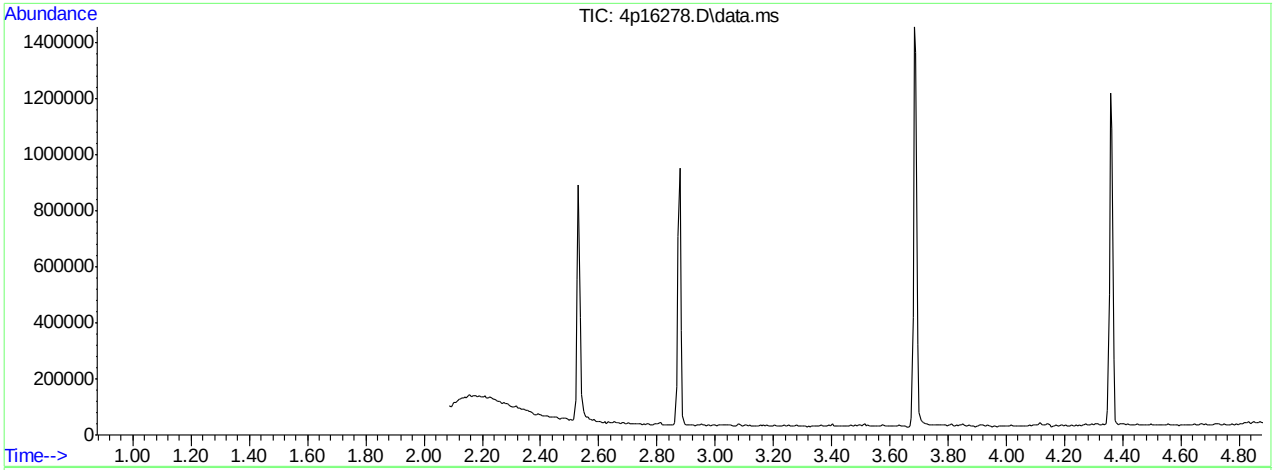
Ion	Exp%	Act%
235.00	100	100
165.00	58.00	50.35
237.00	62.20	65.59
0.00	0.00	0.00

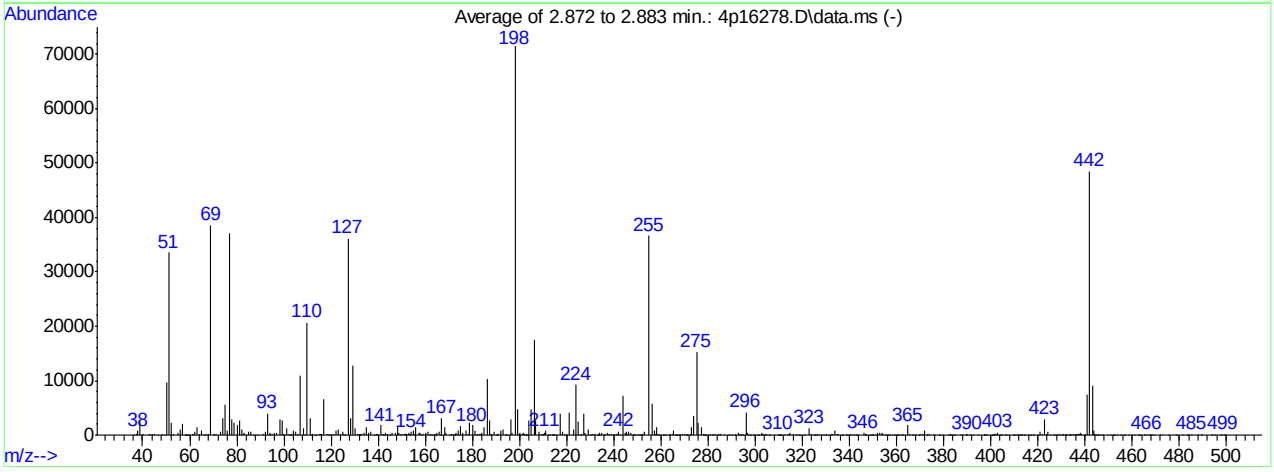
SGS ACCUTEST JC19914

DFTPPR

Data File : C:\msdchem\1\DATA\E4P857\4p16278.D Vial: 1
Acq On : 11 May 2016 3:41 pm Operator: juliusj
Sample : dftpp Inst : MS4P
Misc : op93668a,e4p857 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS





AutoFind: Scans 148, 149, 150; Background Corrected with Scan 140

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.0	33548	PASS
68	69	0.00	2	0.5	180	PASS
69	198	0.00	100	54.0	38603	PASS
70	69	0.00	2	0.7	272	PASS
127	198	40	60	50.6	36171	PASS
197	198	0.00	1	0.5	377	PASS
198	198	100	100	100.0	71440	PASS
199	198	5	9	6.6	4680	PASS
275	198	10	30	21.5	15324	PASS
365	198	1	100	2.6	1836	PASS
441	443	0.10	100	82.0	7398	PASS
442	198	40	100	67.8	48472	PASS
443	442	17	23	18.6	9017	PASS

4p16278.D DFTPP4P.M Thu May 19 11:36:34 2016

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.20	77	49.10	71	58.85	27	67.90	180
37.20	186	50.10	9603	59.20	52	69.00	38603
38.10	824	51.05	33548	59.60	48	70.00	272
39.05	2773	52.10	2286	60.95	219	70.30	65
40.05	284	53.10	234	61.25	25	71.25	306
42.40	88	55.10	390	62.05	620	73.05	568
43.30	201	56.05	1069	63.05	1488	74.10	3055
44.00	277	57.00	2045	64.00	240	75.05	5596
45.15	279	57.90	46	65.10	890	76.10	930
46.30	31	58.20	20	66.10	48	77.10	37098
48.45	115	58.55	79	67.00	113	78.05	2868

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.00	2181	88.95	50	99.85	137	108.10	1324
80.05	1880	91.00	166	100.30	28	108.75	7
81.00	2684	92.00	541	101.05	1200	109.95	20676
82.15	1026	93.05	3962	102.25	112	111.05	3091
82.75	310	93.85	86	102.60	38	111.70	18
83.10	483	94.25	331	103.00	179	112.10	249
83.90	65	95.10	249	103.20	78	113.10	40
85.00	529	95.95	396	104.05	867	113.75	90
86.10	720	97.00	388	104.95	673	115.05	180
87.10	35	98.10	2922	106.00	164	115.50	130
87.90	94	99.10	2622	107.00	10956	116.05	226

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.05	6664	125.05	620	132.75	274	141.95	219
118.10	130	125.50	276	133.10	190	142.30	103
118.90	44	125.70	32	134.10	490	142.80	36
119.20	109	127.10	36171	135.00	1516	143.10	350
119.50	44	128.15	3194	136.00	435	144.15	155
120.30	123	129.05	12849	137.00	621	144.70	28
120.95	236	130.00	1215	138.20	63	145.00	68
122.05	740	131.00	232	139.05	176	146.10	430
123.10	1056	131.40	44	139.50	52	147.15	450
124.00	240	131.95	230	139.90	264	148.05	1644
124.20	194	132.30	40	141.10	1844	148.90	413

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
149.15	9	155.00	865	163.20	98	170.90	121
149.95	124	155.20	239	163.85	91	171.20	82
151.00	299	156.10	1537	164.20	195	171.95	272
151.55	218	157.15	339	164.50	98	172.30	26
151.70	94	157.85	470	165.00	400	172.60	64
151.90	136	158.20	48	166.10	700	172.90	210
152.10	159	159.00	219	166.30	52	173.20	322
152.90	362	160.00	488	167.05	3154	173.75	7
153.10	246	161.00	697	168.05	1509	174.10	789
153.50	64	161.95	256	168.95	429	175.10	1637
154.15	524	162.60	54	170.05	101	175.95	377

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.05	851	186.10	10255	194.25	187	202.15	309
178.30	186	187.05	2741	195.10	49	202.60	100
178.95	2294	187.85	259	196.10	2867	203.00	312
180.05	1777	188.35	230	196.80	377	203.20	69

181.05	900	189.05	574	198.00	71440	204.10	2651
182.00	152	190.25	14	199.00	4680	205.10	4684
182.20	75	190.80	160	199.80	93	206.10	17552
183.20	115	191.05	247	200.10	469	207.00	2749
183.45	216	192.10	827	201.20	154	208.05	641
184.05	394	193.15	996	201.55	376	208.95	296
185.05	1423	193.90	81	201.80	125	209.50	80

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
209.95	284	215.10	276	225.90	94	233.50	67
210.20	150	215.60	92	226.20	118	233.70	67
210.40	371	217.10	3842	227.05	3884	233.95	316
210.70	163	218.05	723	227.95	503	234.90	425
211.05	743	219.05	143	229.10	955	235.60	23
212.65	176	219.40	46	230.00	51	236.35	166
213.00	44	220.00	93	230.20	65	237.10	460
213.80	23	221.10	4150	231.05	270	237.90	17
214.00	29	222.95	944	232.20	128	238.25	153
214.20	22	224.10	9215	232.90	61	239.15	197
214.50	45	225.10	2417	233.20	94	240.00	314

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.10	302	248.60	3	255.05	36676	261.70	39
241.60	122	248.90	213	256.05	5799	261.90	46
242.05	701	249.20	95	257.10	860	263.20	101
242.65	67	249.95	94	257.80	290	263.95	192
244.10	7129	250.45	82	258.05	1489	264.90	188
245.00	446	250.90	43	258.85	166	265.10	886
245.25	538	251.30	47	259.10	50	265.90	97
245.90	278	251.50	58	259.30	54	266.10	67
246.05	724	252.10	94	260.05	99	266.50	23
247.00	371	252.40	202	260.80	63	266.80	27
248.00	84	253.15	528	261.10	18	267.15	1

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
267.85	89	275.10	15324	283.05	265	293.05	358
268.25	58	276.00	2246	284.15	185	293.40	64
269.25	120	277.05	1374	285.00	99	293.90	36
270.15	128	278.00	255	285.20	173	294.35	198
270.50	55	278.20	102	286.85	71	294.90	108
271.10	100	278.50	40	288.50	65	296.05	4216
271.45	133	279.20	108	289.15	81	296.90	423
272.30	100	280.15	52	289.90	65	297.15	11
272.70	211	281.20	202	291.50	74	297.80	64
273.10	1426	281.80	32	291.70	60	298.20	98
274.10	3521	282.10	25	292.70	93	299.05	78

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
299.55	50	304.70	30	313.85	129	323.70	118
300.00	26	305.60	17	314.15	111	323.95	273
301.15	100	306.30	39	314.95	442	324.80	61
301.40	64	308.00	83	316.10	303	325.10	52
301.70	16	309.50	18	317.10	32	325.50	57
302.35	93	309.85	91	317.60	44	325.90	44
302.80	331	310.10	48	318.40	18	326.40	48
303.10	266	310.40	31	318.90	46	326.95	245
303.30	81	310.80	29	320.75	108	327.90	81
304.10	233	311.20	28	321.15	91	328.00	62
304.30	101	312.60	44	323.05	1337	329.10	17

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
329.80	27	338.60	23	346.90	31	354.00	421
330.05	44	338.90	108	347.40	134	354.30	161
331.20	21	339.40	56	348.40	55	355.05	88
332.25	189	340.70	174	349.10	28	355.80	19
332.95	238	341.20	77	349.40	29	356.20	19
334.05	834	341.90	44	349.80	16	356.50	22
334.90	133	342.90	61	350.25	82	357.05	37
335.15	182	343.15	74	351.10	73	358.15	56
336.60	22	343.50	32	352.00	147	358.95	104
337.10	31	346.05	383	352.15	348	359.30	21
337.40	17	346.60	49	353.00	394	359.90	51

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
360.30	26	368.20	20	376.30	23	387.00	26
360.50	79	369.35	39	377.90	60	387.70	33
361.15	87	370.10	130	378.80	35	388.00	22
361.70	41	370.90	157	379.70	105	389.40	57
362.40	28	371.30	16	381.90	25	389.70	27
362.75	74	372.05	851	382.80	83	390.10	130
365.00	1836	372.90	105	383.00	121	391.05	63
365.90	295	373.20	172	383.30	106	391.30	35
366.80	29	373.70	29	383.80	20	392.40	32
367.20	22	375.50	22	384.20	40	394.60	16
367.40	71	375.80	64	384.95	48	396.90	20

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
397.20	38	403.40	73	411.60	18	418.30	21
397.70	52	403.95	89	412.10	61	419.80	19
398.20	35	404.50	37	412.40	36	421.05	694
398.60	17	404.75	69	412.85	56	422.10	243
400.30	48	406.10	68	413.20	21	423.05	2945
400.50	17	406.40	20	414.10	36	423.80	270
401.05	24	407.00	46	414.40	18	424.05	581
401.40	26	409.70	27	415.60	24	425.00	23
401.90	132	410.00	29	416.60	37	426.65	96
402.20	75	410.30	31	417.05	50	426.90	20
402.90	435	411.20	39	418.00	80	427.40	18

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
428.00	39	434.30	92	441.05	7398	449.50	40
428.95	212	435.00	249	442.05	48472	451.05	78
429.70	19	435.90	68	443.10	9017	452.00	23
430.35	48	436.20	83	443.95	741	452.30	21
430.85	150	436.60	117	444.20	143	452.65	49
431.35	84	436.90	260	444.80	16	453.70	22
432.00	29	437.50	147	445.25	42	455.30	28
432.40	178	438.10	322	445.80	19	456.60	39
433.20	109	438.75	284	446.10	61	457.20	47
433.75	156	439.30	105	446.90	18	458.50	18
434.00	60	439.80	36	447.40	64	460.10	19

Average of 2.872 to 2.883 min.: 4p16278.D\data.ms
dftpp
Modified:subtracted

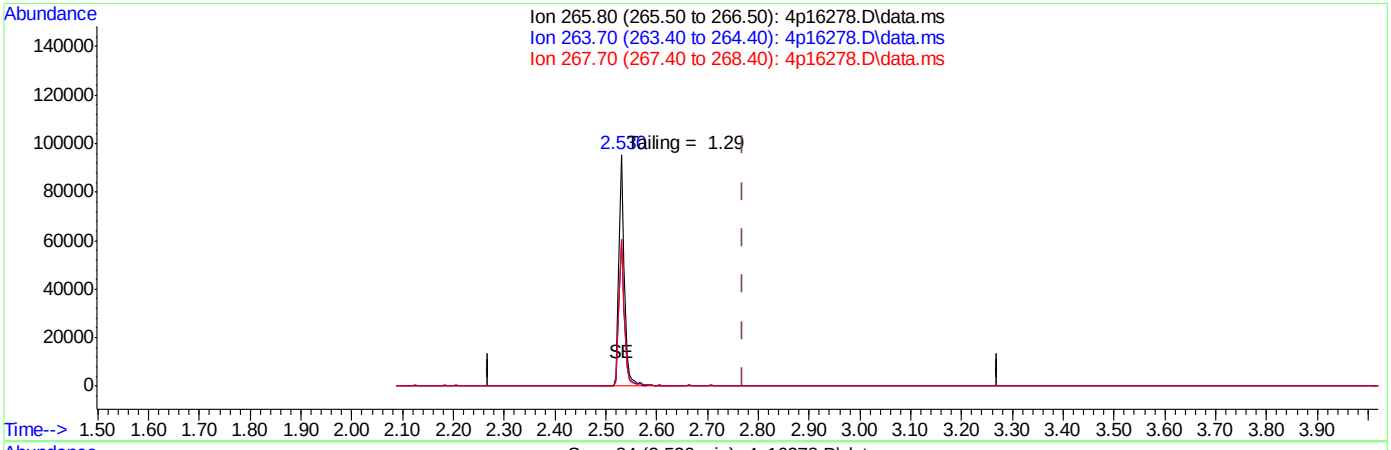
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
461.00	45	469.60	23	487.80	32		
462.60	26	471.80	25	489.30	25		
462.90	31	473.00	63	489.50	52		
463.50	20	475.00	61	493.70	22		
465.10	20	478.50	24	494.15	59		

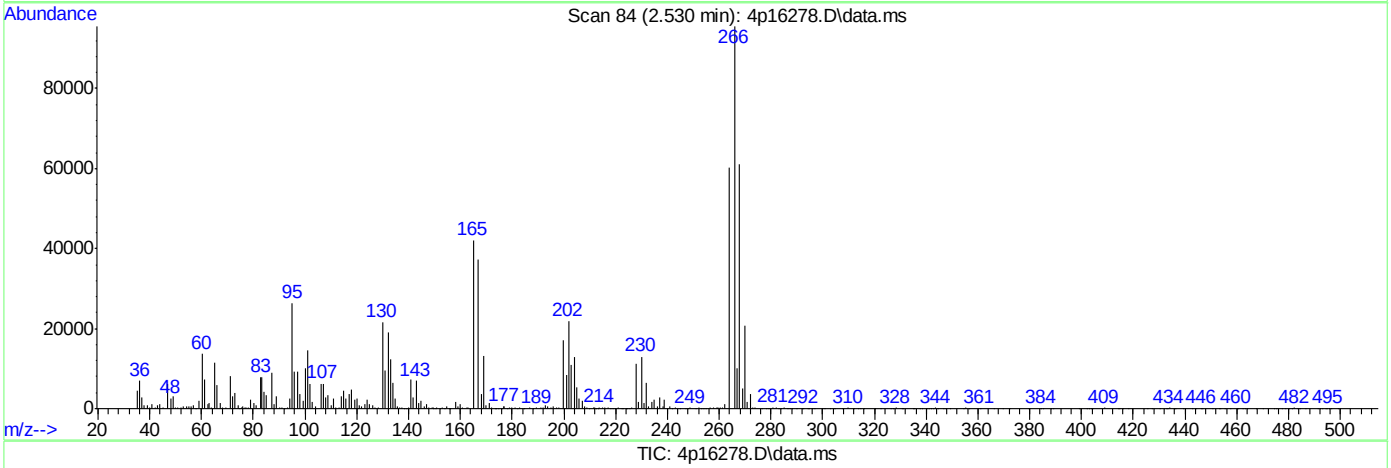
465.40	18	479.20	18	495.20	18
466.20	87	481.40	42	497.60	29
467.10	23	483.40	19	497.90	33
467.70	22	483.90	31	498.90	20
468.25	59	484.20	18	499.40	17
468.60	17	485.20	101	499.70	17

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16278.D
Acq On : 11 May 2016 3:41 pm
Operator : juliusj
Sample : dftpp
Misc : op93668a,e4p857
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 15:47:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





(1) Pentachlorophenol (MC)

2.530min (-0.240) 37.92ng

response 70902

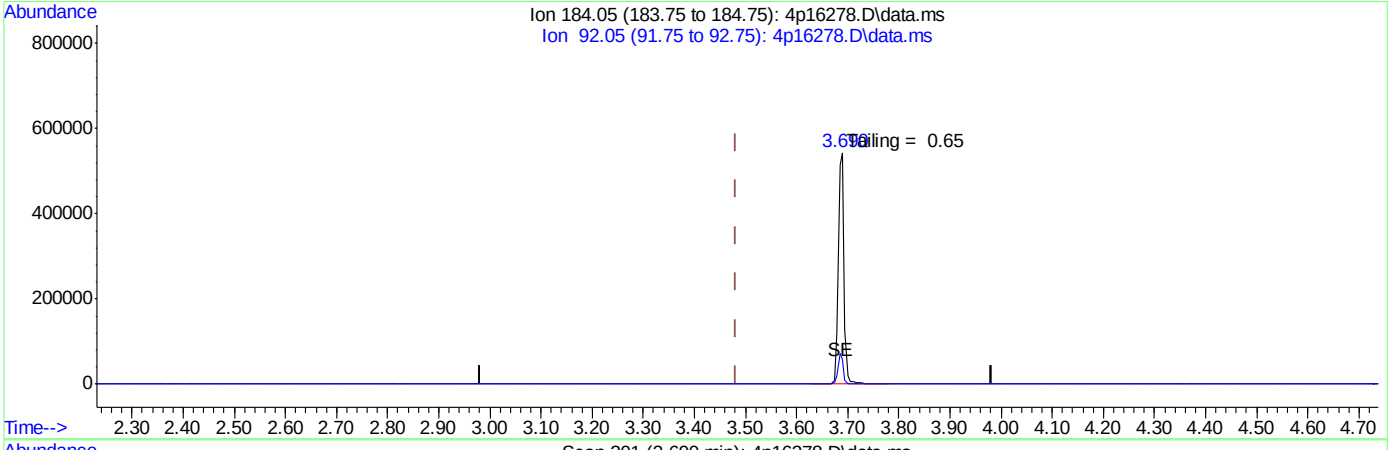
Ion	Exp%	Act%
265.80	100	100
263.70	64.70	63.17
267.70	64.60	63.79
0.00	0.00	0.00

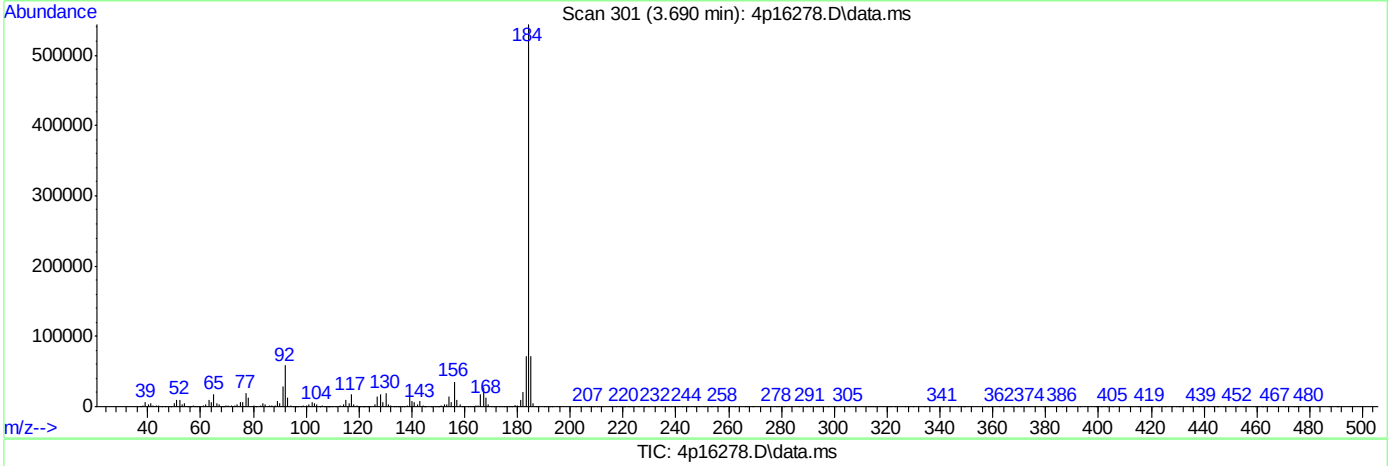
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16278.D
Acq On : 11 May 2016 3:41 pm
Operator : juliusj
Sample : dftpp
Misc : op93668a,e4p857
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 15:47:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16278.D\data.ms

(2) Benzidine (M)

3.690min (+0.208) 93.36ng

response 434761

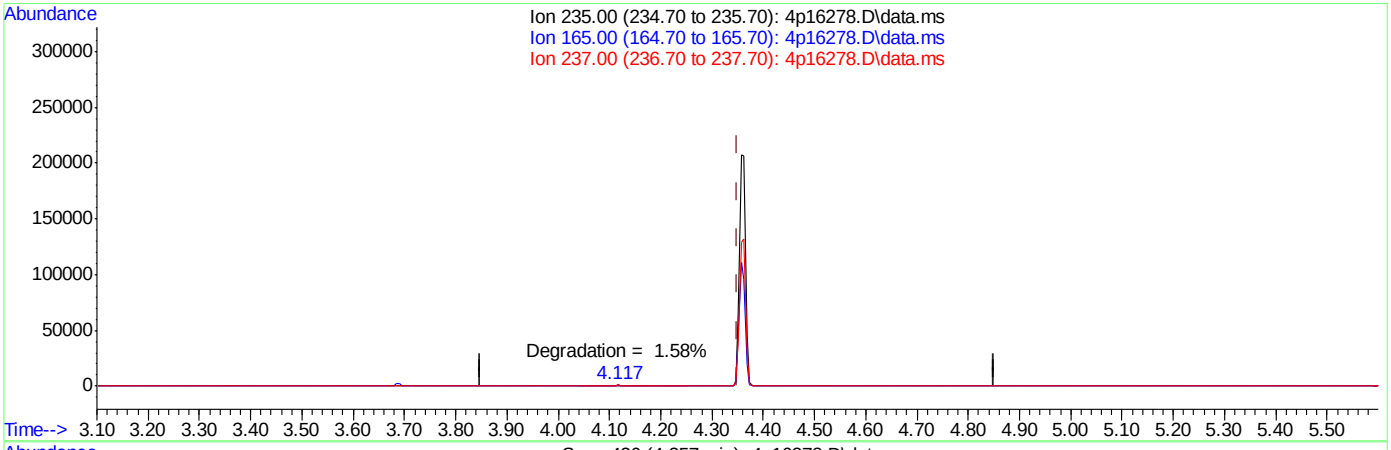
Ion	Exp%	Act%
184.05	100	100
92.05	11.10	10.77
0.00	0.00	0.00
0.00	0.00	0.00

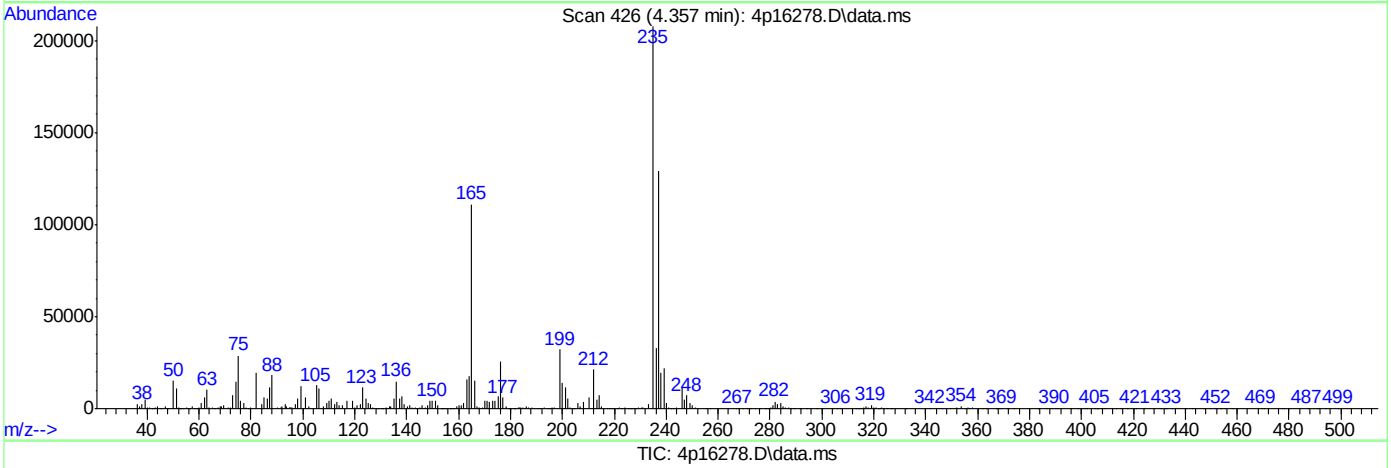
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16278.D
Acq On : 11 May 2016 3:41 pm
Operator : juliusj
Sample : dftpp
Misc : op93668a,e4p857
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 15:47:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16278.D\data.ms

(3) PP-DDT (MC)

4.357min (+0.007) 91.89ppb

response 171811

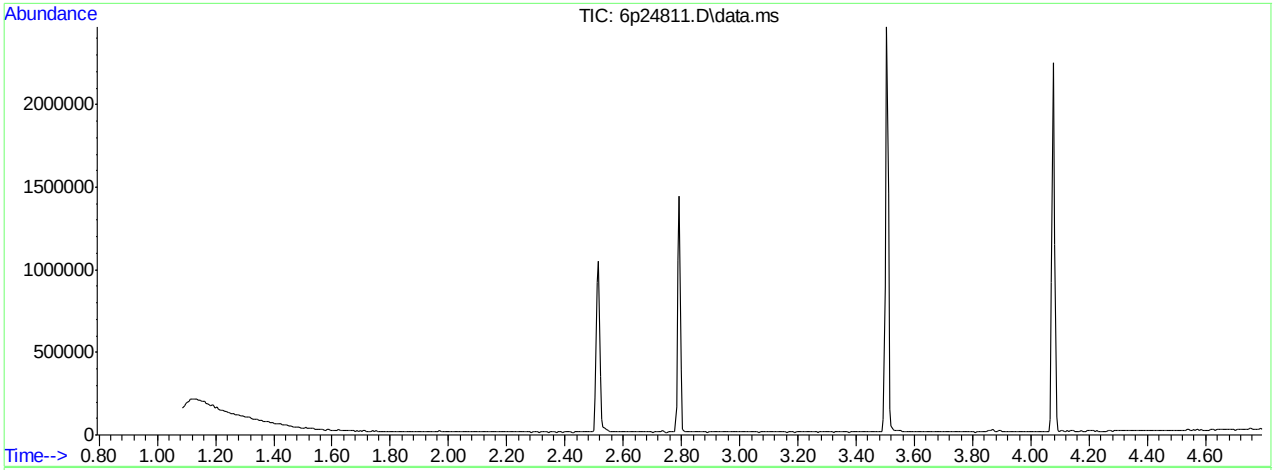
Ion	Exp%	Act%
235.00	100	100
165.00	58.00	53.30
237.00	62.20	62.24
0.00	0.00	0.00

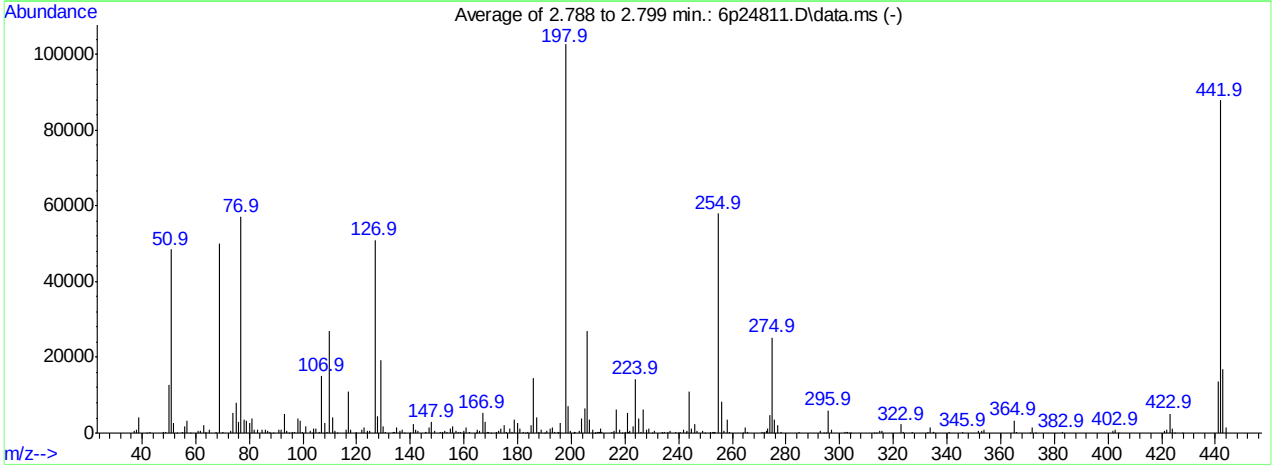
SGS ACCUTEST JC19914

DFTPP

Data File : C:\msdchem\1\DATA\E6P1155\6p24811.D Vial: 1
Acq On : 5 Apr 2016 4:34 pm Operator: sarad
Sample : dftpp Inst : MS6P
Misc : op92208,e6p1155 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1155.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016





AutoFind: Scans 319, 320, 321; Background Corrected with Scan 314

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.2	48460	PASS
68	69	0.00	2	0.4	223	PASS
69	198	0.00	100	48.8	50030	PASS
70	69	0.00	2	0.9	440	PASS
127	198	40	60	49.7	51010	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	102584	PASS
199	198	5	9	6.8	7012	PASS
275	198	10	30	24.6	25214	PASS
365	198	1	100	3.3	3390	PASS
441	443	0.10	100	80.3	13622	PASS
442	198	40	100	85.7	87869	PASS
443	442	17	23	19.3	16959	PASS

6p24811.D M6P1155.M Wed Apr 06 09:46:33 2016 ACLIMS

Average of 2.788 to 2.799 min.: 6p24811.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	580	54.90	414	69.90	440	82.85	1033
37.85	871	55.90	1677	72.90	498	84.90	971
38.85	4246	56.90	3203	73.90	5289	85.80	983
41.85	43	57.80	105	74.90	7880	86.90	623
42.90	249	60.85	743	75.95	2904	87.80	428
47.75	175	61.90	601	76.90	57006	88.90	105
48.90	173	62.90	2104	77.90	3544	90.90	879
49.90	12758	63.85	272	78.90	3403	91.90	786
50.85	48460	64.90	910	79.90	2686	92.90	5180
51.90	2643	67.75	223	80.90	3793	93.90	494
52.80	107	68.90	50030	81.90	834	94.90	105

Average of 2.788 to 2.799 min.: 6p24811.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.90	369	106.90	15022	121.80	893	134.90	1364
96.80	248	107.90	2586	122.90	1564	135.95	548
97.90	3967	108.95	428	123.85	613	136.95	783
98.90	3328	109.90	26857	124.85	695	137.80	101
99.90	413	110.90	4167	126.90	51010	139.80	154
100.85	1851	111.95	502	127.90	4419	140.90	2330
102.85	535	112.80	113	128.90	19344	141.90	818
103.60	108	115.85	897	129.95	1778	142.90	565
103.85	1070	116.90	10865	130.85	220	145.70	197
104.90	1254	117.90	786	133.70	177	145.90	228
105.85	293	119.80	289	133.90	296	146.95	1481

Average of 2.788 to 2.799 min.: 6p24811.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.90	2896	159.85	490	171.85	421	183.00	107
148.90	531	160.90	1345	172.85	505	183.90	346
150.95	321	161.85	328	173.85	1131	184.90	2045
151.90	179	164.60	111	174.90	2171	185.90	14485
152.85	677	164.90	892	175.90	447	186.90	4018
153.85	386	165.85	747	176.90	1055	187.85	388
154.95	1336	166.90	5243	177.90	364	188.80	897
155.90	1935	167.85	2877	178.85	3491	189.80	117
156.90	504	168.80	219	179.90	2729	190.75	525
157.85	397	169.00	178	180.90	1329	191.90	1313
158.85	396	169.90	156	181.90	319	192.90	1443

Average of 2.788 to 2.799 min.: 6p24811.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
193.90	190	202.85	662	210.90	1089	222.85	1905
194.80	144	203.95	3971	211.50	193	223.90	14263
195.00	285	204.90	6463	214.90	247	224.90	3858
195.70	341	205.90	27007	215.95	726	225.80	206
195.95	2747	206.90	3504	216.80	6280	226.90	6357
197.90	102584	207.90	811	217.85	849	227.90	990
198.90	7012	208.70	140	219.00	116	228.90	1239
199.80	619	208.90	125	220.00	163	229.90	130
200.80	108	209.80	418	220.90	5253	230.85	535
201.10	280	210.10	160	221.50	200	233.70	107
201.45	454	210.50	262	221.90	603	233.85	383

Average of 2.788 to 2.799 min.: 6p24811.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.90	233	245.90	2469	256.85	654	274.90	25214
235.75	348	246.80	539	257.90	3619	275.85	3591
236.80	575	248.80	510	258.80	407	276.90	2126
238.80	199	249.90	105	263.90	135	277.95	364

239.80	117	251.95	271	264.85	1361	284.85	381
240.75	361	252.50	169	265.80	271	292.90	460
241.95	808	252.90	127	271.00	179	293.90	116
242.70	158	253.20	283	271.90	182	294.80	107
242.90	610	253.70	169	272.80	572	295.90	5953
243.95	10818	254.90	57949	272.95	1324	296.85	977
244.90	1233	255.90	8266	273.90	4881	301.80	214

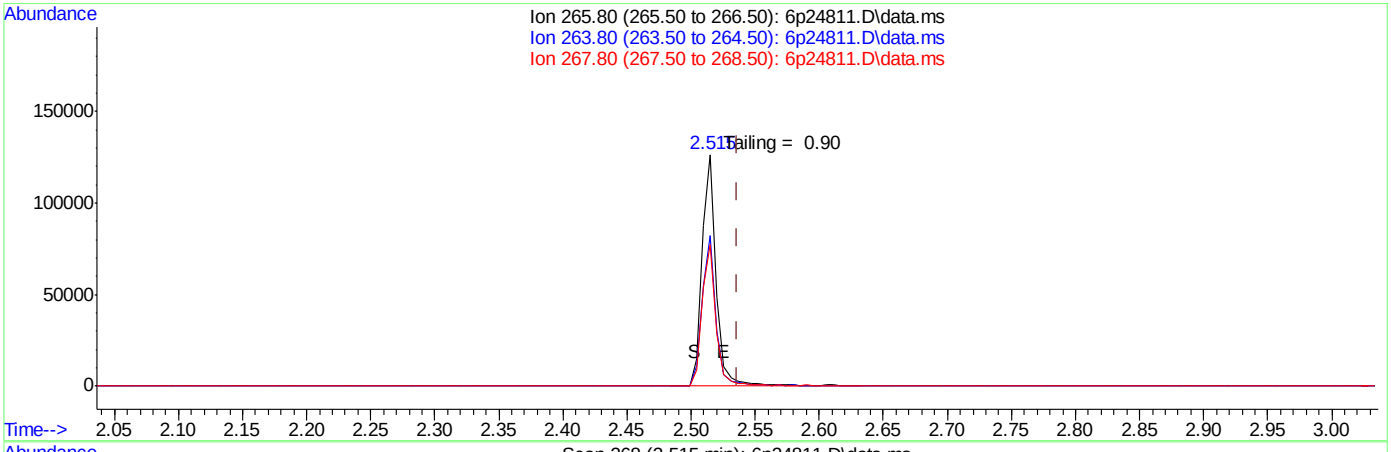
Average of 2.788 to 2.799 min.: 6p24811.D\data.ms
dftpp
Modified:subtracted

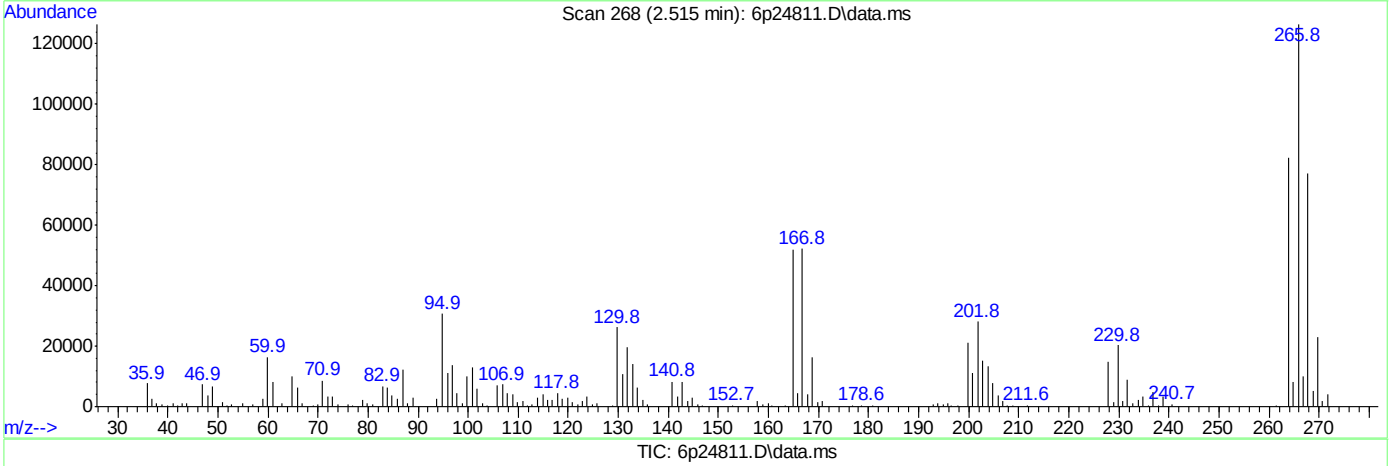
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
302.70	366	333.00	174	370.90	148	424.80	104
302.90	400	333.90	1608	371.80	1437	427.90	104
303.70	114	334.80	266	372.90	139	440.90	13622
304.00	129	335.00	185	382.90	187	441.90	87869
312.80	100	340.85	257	401.90	621	442.90	16959
313.80	155	345.85	399	402.85	843	443.85	1414
314.85	701	351.80	603	403.70	149		
315.85	595	352.75	552	420.90	621		
322.95	2285	353.85	993	421.95	829		
323.70	165	364.85	3390	422.95	5062		
326.90	315	365.90	307	423.90	1101		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24811.D
Acq On : 5 Apr 2016 4:34 pm
Operator : sarad
Sample : dftpp
Misc : op92208,e6p1155
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 05 19:32:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24811.D\data.ms

(1) Pentachlorophenol (t)

2.515min (-0.021) 0.00ppb

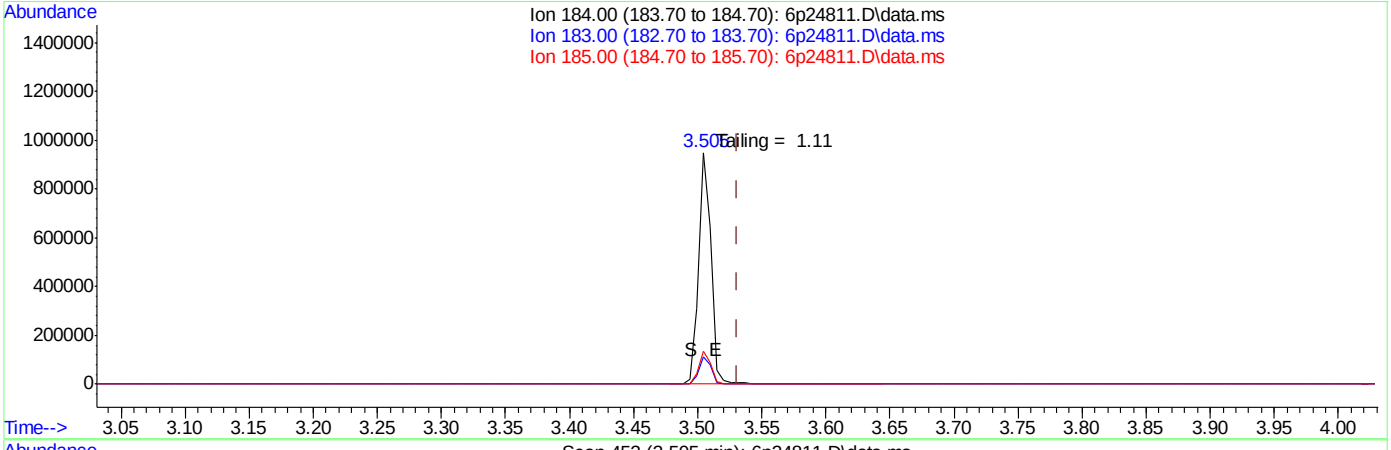
response 98756

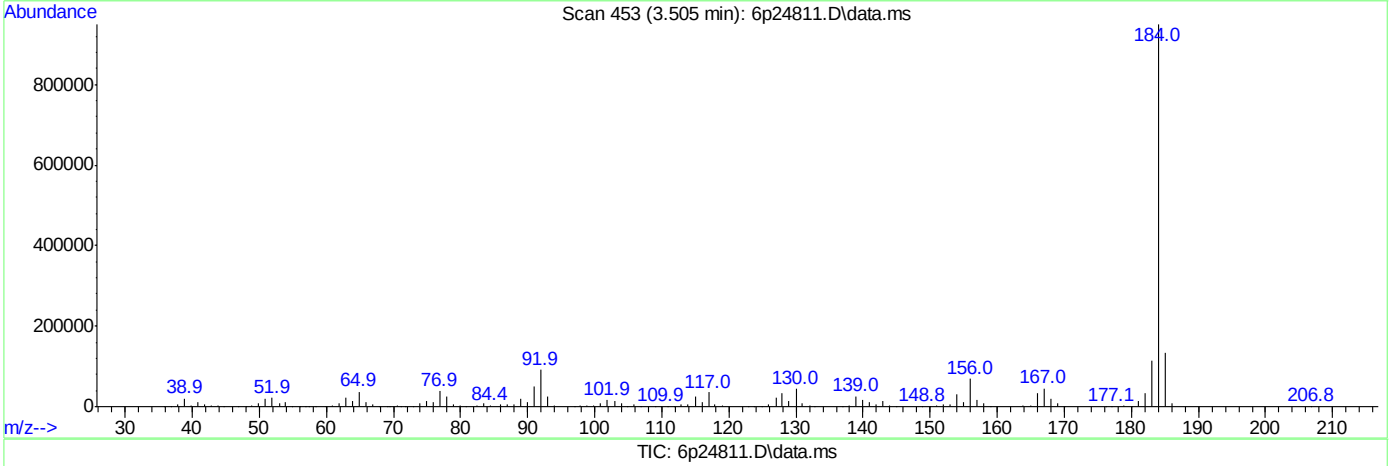
Ion	Exp%	Act%
265.80	100	100
263.80	62.70	65.22
267.80	62.60	60.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24811.D
Acq On : 5 Apr 2016 4:34 pm
Operator : sarad
Sample : dftpp
Misc : op92208,e6p1155
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 05 19:32:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24811.D\data.ms

(2) Benzidine (t)

3.505min (-0.027) 0.00ppb

response 654397

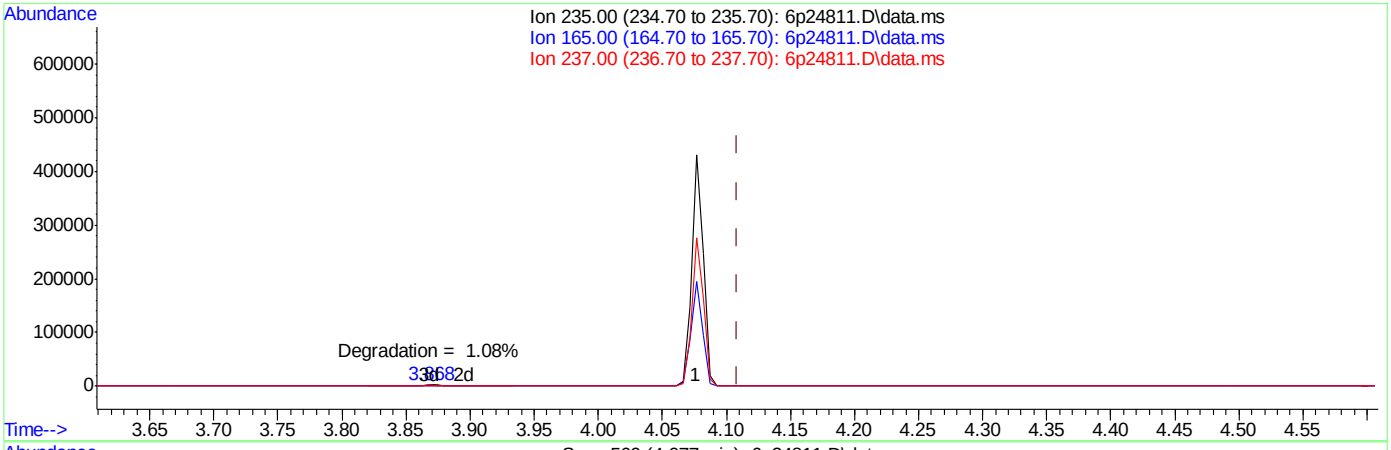
Ion	Exp%	Act%
184.00	100	100
183.00	11.10	11.92
185.00	13.90	13.99
0.00	0.00	0.00

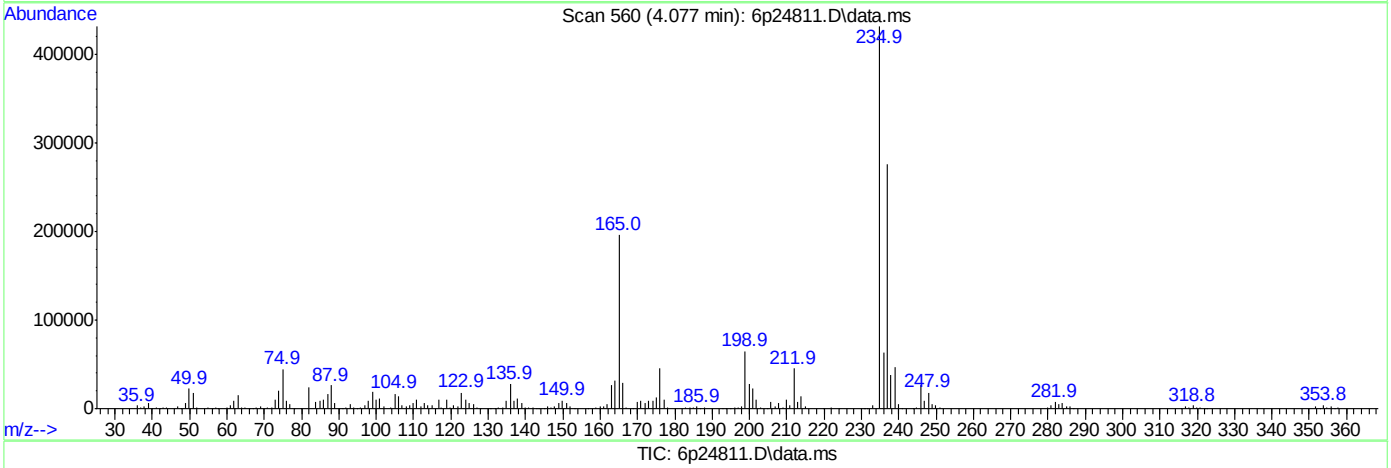
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24811.D
Acq On : 5 Apr 2016 4:34 pm
Operator : sarad
Sample : dftpp
Misc : op92208,e6p1155
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 05 19:32:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24811.D\data.ms

(3) PP-DDT (t)

4.077min (-0.032) 0.00ppb

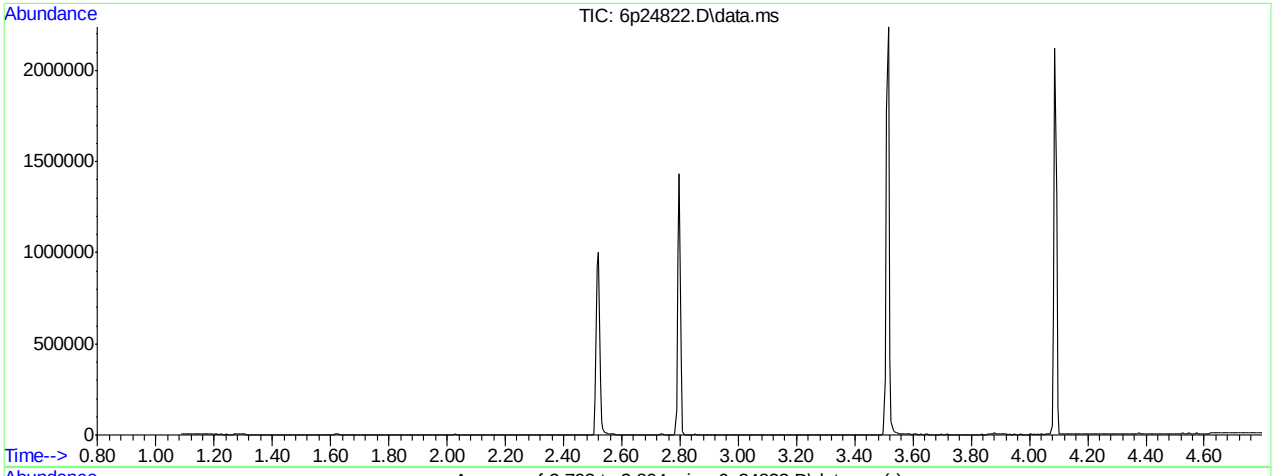
response 274308

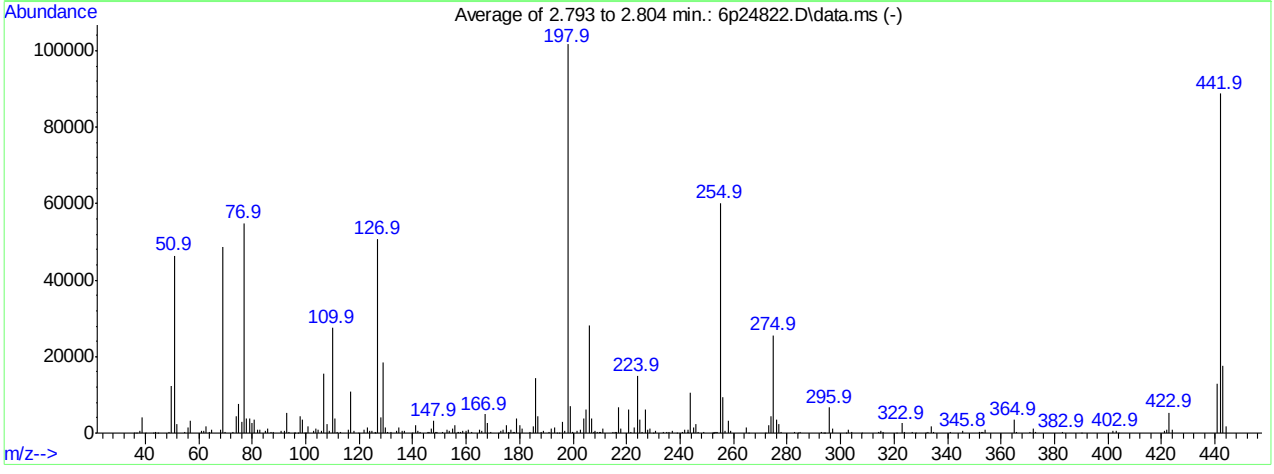
Ion	Exp%	Act%
235.00	100	100
165.00	93.70	45.57#
237.00	85.60	64.21
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\E6P1156\6p24822.D Vial: 1
Acq On : 5 Apr 2016 9:19 pm Operator: sarad
Sample : dftpp Inst : MS6P
Misc : op92208,e6p1156 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um





AutoFind: Scans 320, 321, 322; Background Corrected with Scan 315

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.6	46348	PASS
68	69	0.00	2	1.9	918	PASS
69	198	0.00	100	47.9	48667	PASS
70	69	0.00	2	0.4	179	PASS
127	198	40	60	50.0	50835	PASS
197	198	0.00	1	0.5	476	PASS
198	198	100	100	100.0	101653	PASS
199	198	5	9	6.9	6994	PASS
275	198	10	30	25.1	25561	PASS
365	198	1	100	3.4	3422	PASS
441	443	0.10	100	72.8	12914	PASS
442	198	40	100	87.3	88746	PASS
443	442	17	23	20.0	17735	PASS

6p24822.D DFTPP6P.M Wed Apr 06 09:31:15 2016 ACLIMS

Average of 2.793 to 2.804 min.: 6p24822.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.70	104	51.90	2489	69.70	179	82.85	965
36.80	124	54.75	402	72.90	392	84.85	631
37.90	547	55.90	1332	73.90	4507	85.85	1042
38.95	4064	56.90	3196	74.90	7605	86.90	430
39.90	140	60.85	507	75.90	2831	87.85	263
42.90	129	61.85	600	76.90	54936	90.80	661
43.80	199	62.90	1865	77.90	3918	91.85	735
44.80	116	63.95	261	78.90	3738	92.90	5385
48.90	228	64.90	898	79.90	2683	93.80	346
49.90	12371	67.95	918	80.90	3498	95.70	110
50.90	46348	68.90	48667	81.85	865	95.90	118

Average of 2.793 to 2.804 min.: 6p24822.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.10	100	107.90	2469	122.90	1432	133.85	633
97.85	4300	108.95	623	123.80	583	134.85	1496
98.90	3406	109.90	27485	124.85	529	135.90	471
99.70	106	110.90	3862	125.80	201	136.85	741
100.00	120	111.80	439	126.10	138	139.70	118
100.90	1900	112.80	249	126.90	50835	140.90	2169
102.90	480	116.00	871	127.95	4182	141.85	734
103.90	1281	116.90	10842	128.90	18558	142.90	430
104.80	1027	117.90	639	129.85	1502	145.70	165
106.00	495	119.90	139	130.80	229	145.90	326
106.90	15613	121.85	809	131.80	176	146.90	1173

Average of 2.793 to 2.804 min.: 6p24822.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.90	3194	158.85	458	173.90	861	184.90	1885
148.70	238	159.85	622	174.90	1923	185.90	14274
148.90	299	160.95	914	175.70	116	186.90	4403
151.00	391	161.90	300	176.00	279	187.85	333
152.90	920	164.85	948	176.90	1001	188.90	627
153.85	627	165.85	660	177.70	170	190.90	393
154.85	1241	166.90	4907	178.00	202	191.90	1252
155.95	1988	167.90	2522	178.90	3769	192.90	1464
156.80	180	169.00	233	179.90	2186	193.80	126
157.00	244	171.90	129	180.90	1255	194.90	154
157.90	301	172.85	579	183.90	419	195.90	2828

Average of 2.793 to 2.804 min.: 6p24822.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
196.70	476	207.80	241	220.90	6041	233.75	346
197.90	101653	207.95	522	221.60	184	234.90	441
198.80	6994	208.85	285	222.90	1594	235.80	378
199.70	175	209.90	268	223.90	14855	236.90	538
199.90	367	210.20	191	224.90	3653	238.80	131
201.35	554	210.95	1163	225.90	402	240.85	310
202.80	798	214.95	370	226.90	6106	241.85	931
203.90	3915	215.60	186	227.80	983	242.80	337
204.90	6313	215.90	320	228.80	1147	243.00	759
205.95	28041	216.90	6883	230.00	142	243.90	10477
206.90	3701	217.95	1045	230.85	625	244.90	1377

Average of 2.793 to 2.804 min.: 6p24822.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.10	166	255.90	9369	276.90	2403	302.85	1033
245.90	2280	256.90	657	277.75	360	304.00	251
246.80	360	257.90	3276	282.95	307	308.00	110
248.75	405	258.85	488	284.00	133	314.00	166

252.00	138	264.85	1333	284.70	418	314.60	127
252.30	149	265.70	133	292.90	366	314.90	649
252.70	138	272.00	141	293.70	141	315.80	355
253.00	244	272.90	2052	294.10	102	320.90	123
253.60	230	273.90	4480	295.90	6612	322.95	2504
254.00	199	274.90	25561	296.85	1125	323.70	201
254.90	60200	275.90	3493	302.00	148	326.85	449

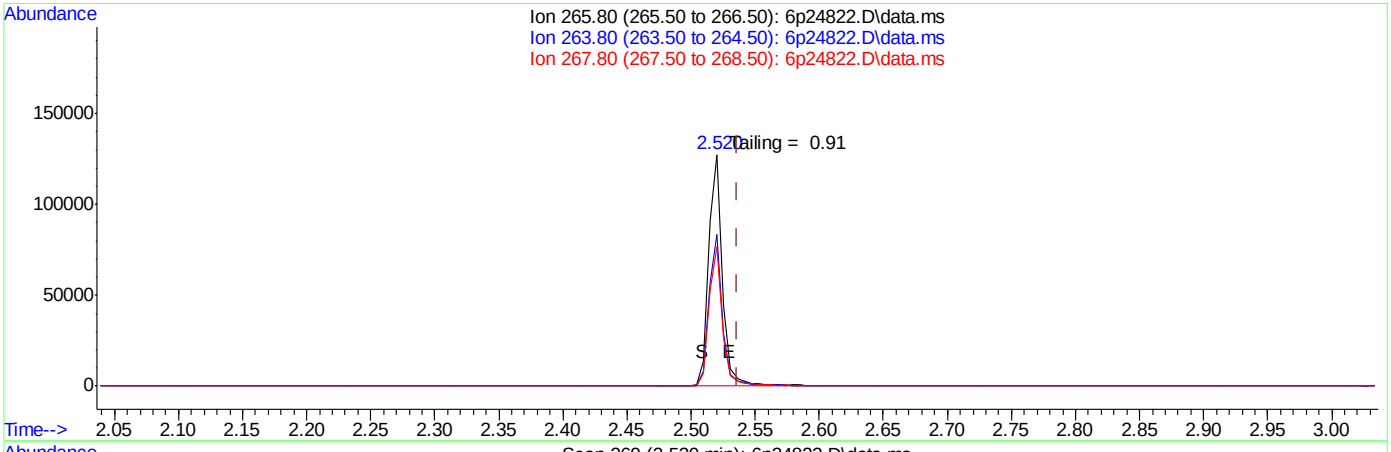
Average of 2.793 to 2.804 min.: 6p24822.D\data.ms
dftpp
Modified:subtracted

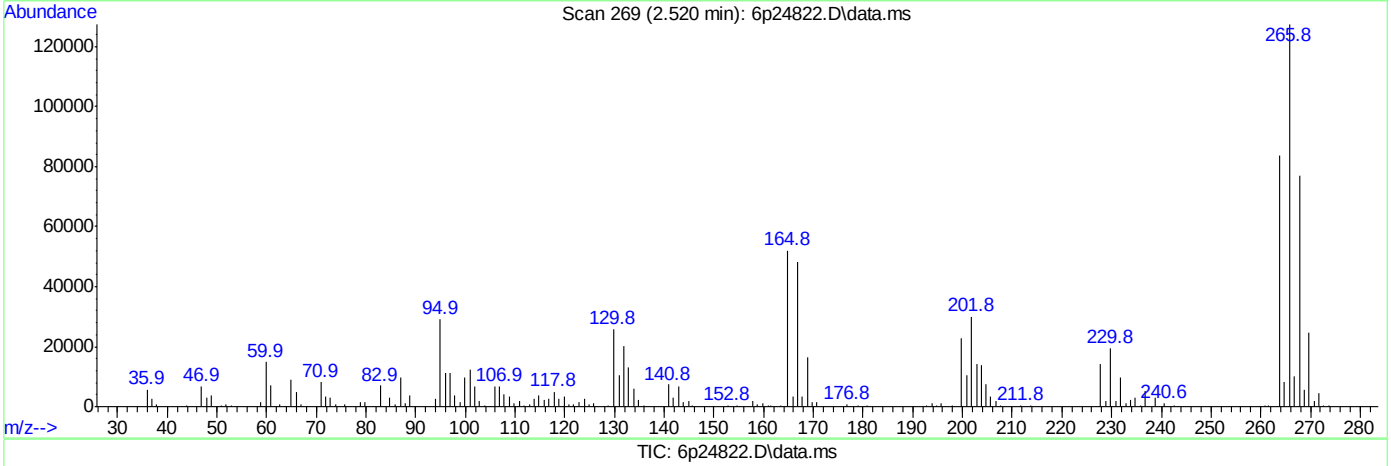
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
328.00	112	353.90	779	420.90	728		
331.80	112	364.85	3422	421.85	871		
332.80	177	365.80	301	422.90	5342		
333.85	1781	370.80	198	423.85	982		
334.80	312	371.90	1327	440.90	12914		
340.85	288	372.95	262	441.90	88746		
345.80	555	382.90	211	442.90	17735		
351.80	369	390.00	115	443.95	1694		
352.00	351	401.85	554				
352.80	336	402.85	574				
353.00	163	403.80	125				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24822.D
Acq On : 5 Apr 2016 9:19 pm
Operator : sarad
Sample : dftpp
Misc : op92208,e6p1156
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:31:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24822.D\data.ms

(1) Pentachlorophenol (t)

2.520min (-0.016) 0.00ppb

response 97156

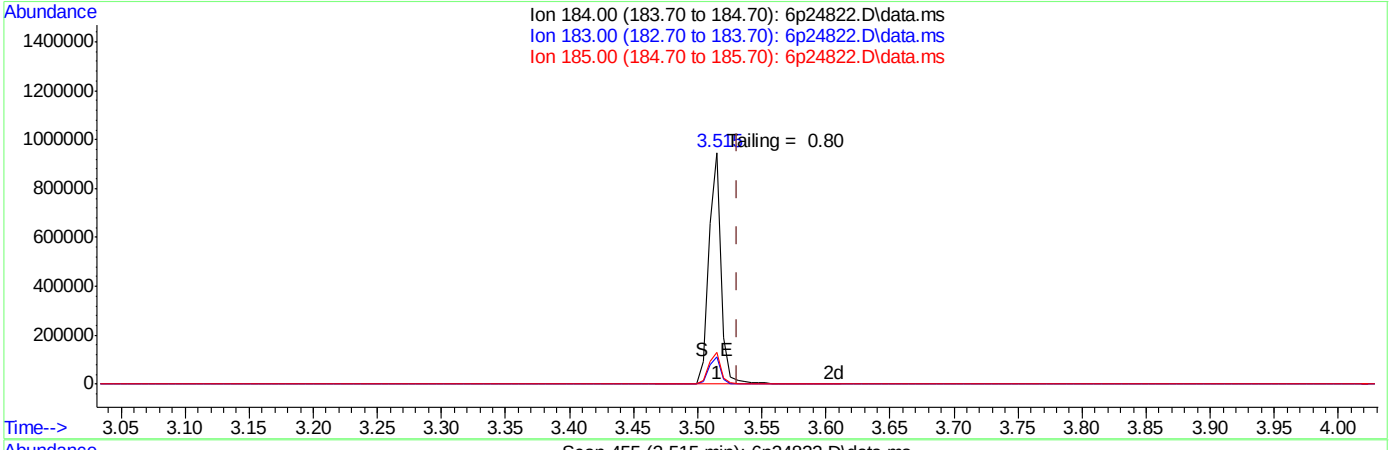
Ion	Exp%	Act%
265.80	100	100
263.80	62.70	65.71
267.80	62.60	60.39
0.00	0.00	0.00

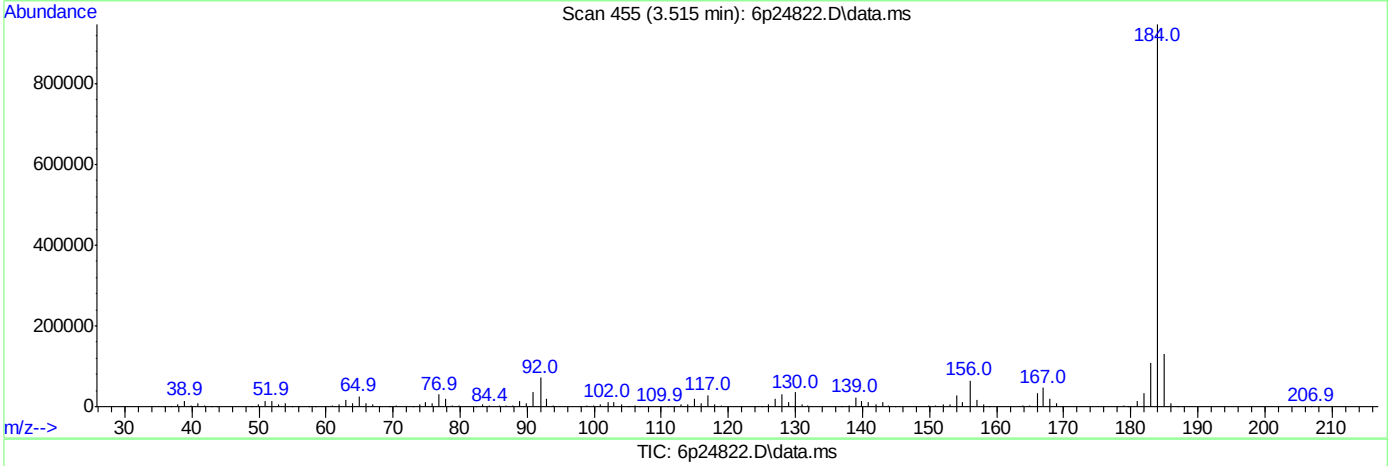
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24822.D
Acq On : 5 Apr 2016 9:19 pm
Operator : sarad
Sample : dftpp
Misc : op92208,e6p1156
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:31:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24822.D\data.ms

(2) Benzidine (t)

3.515min (-0.016) 0.00ppb

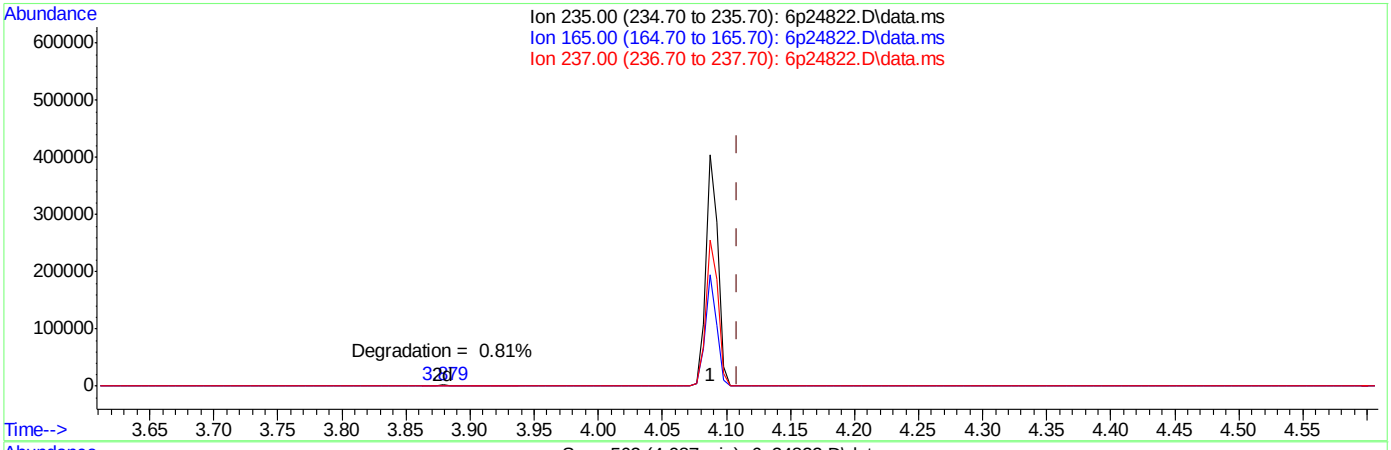
response 635380

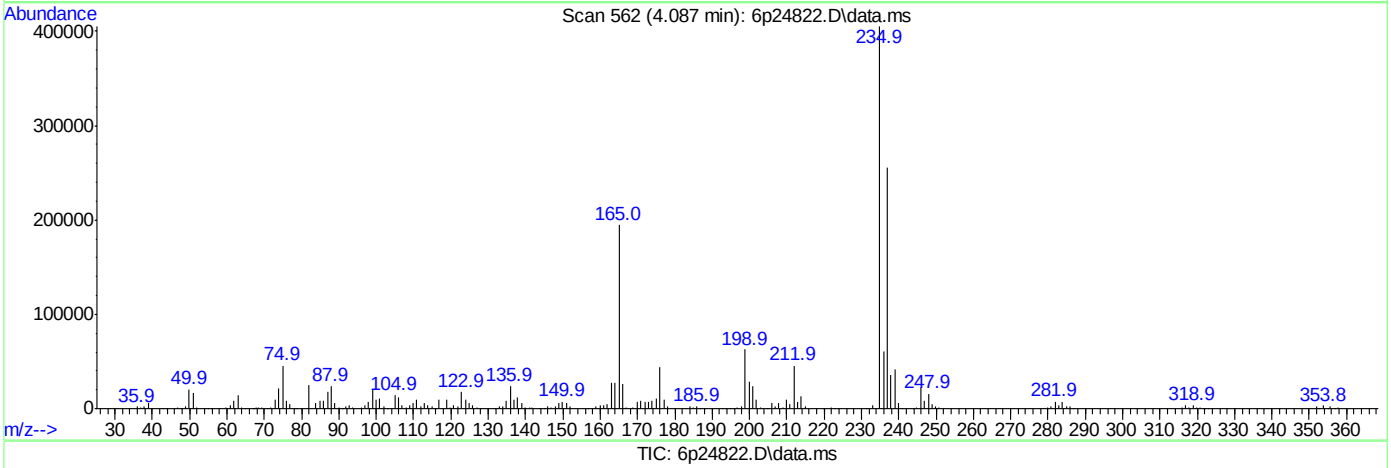
Ion	Exp%	Act%
184.00	100	100
183.00	11.10	11.57
185.00	13.90	13.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24822.D
Acq On : 5 Apr 2016 9:19 pm
Operator : sarad
Sample : dftpp
Misc : op92208,e6p1156
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:31:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24822.D\data.ms

(3) PP-DDT (t)

4.087min (-0.021) 0.00ppb

response 270234

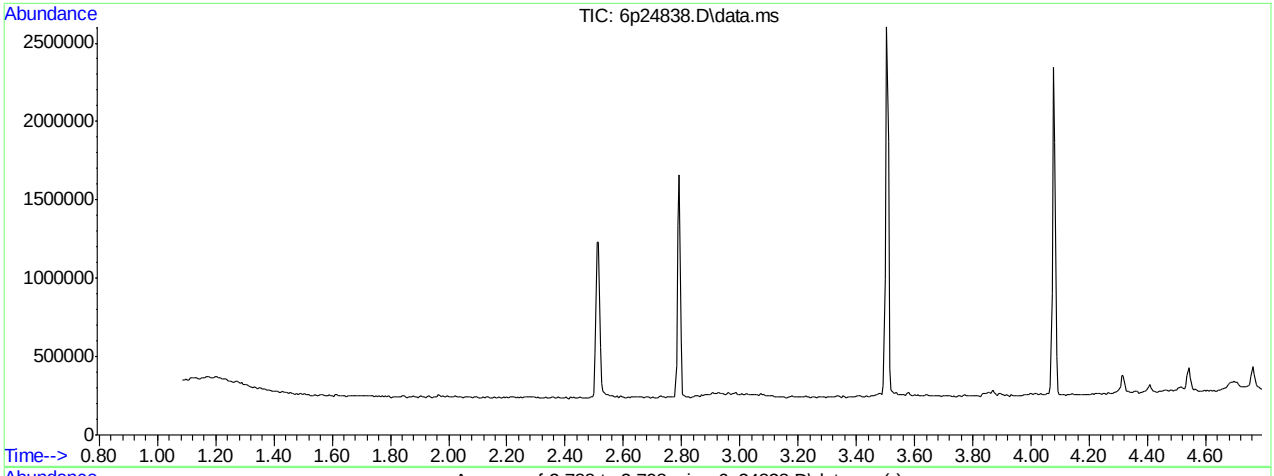
Ion	Exp%	Act%
235.00	100	100
165.00	93.70	45.46#
237.00	85.60	64.01
0.00	0.00	0.00

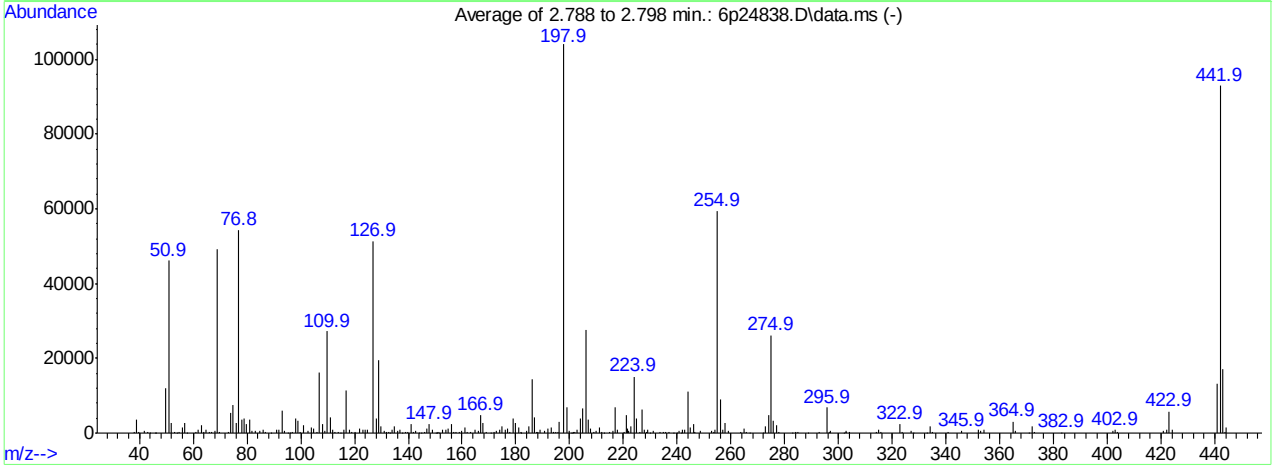
SGS ACCUTEST JC19914

DFTPP

Data File : C:\msdchem\1\DATA\E6P1157\6p24838.D Vial: 1
Acq On : 6 Apr 2016 9:41 am Operator: ashleyd
Sample : dftpp Inst : MS6P
Misc : op92208,e6p1157 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um





AutoFind: Scans 319, 320, 321; Background Corrected with Scan 314

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.3	46104	PASS
68	69	0.00	2	1.0	489	PASS
69	198	0.00	100	47.4	49245	PASS
70	69	0.00	2	0.4	219	PASS
127	198	40	60	49.4	51345	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	103997	PASS
199	198	5	9	6.6	6861	PASS
275	198	10	30	25.2	26220	PASS
365	198	1	100	3.0	3077	PASS
441	443	0.10	100	76.2	13068	PASS
442	198	40	100	89.4	92957	PASS
443	442	17	23	18.5	17154	PASS

6p24838.D DFTPP6P.M Wed Apr 06 10:12:05 2016 ACLIMS

Average of 2.788 to 2.798 min.: 6p24838.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.85	427	52.90	222	65.95	294	78.85	3775
38.90	3532	53.90	65	66.80	329	79.85	2330
39.85	372	54.90	316	67.95	489	80.85	3595
41.80	530	55.90	1473	68.90	49245	81.85	635
42.90	382	56.90	2851	69.90	219	82.90	700
43.90	65	57.85	54	72.90	202	84.90	679
45.90	117	60.85	361	73.85	5293	85.80	1037
46.10	110	61.90	890	74.90	7563	86.80	445
49.90	11958	62.90	2076	75.95	2708	88.80	119
50.90	46104	63.80	279	76.85	54363	90.90	762
51.90	2592	64.85	960	77.90	3733	91.90	1021

Average of 2.788 to 2.798 min.: 6p24838.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.90	6063	104.85	1315	115.90	893	128.90	19641
93.90	498	105.90	342	116.90	11402	129.90	1700
95.00	151	106.90	16104	117.90	851	130.85	467
95.90	135	107.90	2524	118.90	238	131.90	226
96.90	350	108.90	719	120.00	316	132.75	269
97.90	3991	109.90	27212	121.90	1229	133.00	120
98.90	3195	110.90	4254	122.90	916	133.90	886
99.90	376	111.90	935	123.90	953	134.85	1747
100.90	2087	112.75	239	124.90	903	135.90	659
102.85	737	113.85	378	126.90	51345	136.95	965
103.85	1496	114.85	68	127.90	4006	137.90	129

Average of 2.788 to 2.798 min.: 6p24838.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
138.95	270	150.00	111	159.90	748	172.90	543
139.95	277	150.70	144	160.95	1561	173.90	1003
140.90	2304	151.00	200	161.85	337	174.90	1949
141.85	300	151.40	150	163.00	172	175.90	772
142.90	463	152.90	1009	164.85	1047	176.95	1105
144.00	101	153.90	901	165.90	755	177.80	354
144.80	107	154.95	1357	166.95	4853	178.90	4036
145.90	395	155.95	2437	167.90	2757	179.90	2820
146.80	1235	156.90	362	168.90	410	180.85	1502
147.90	2501	157.65	419	170.80	143	181.70	117
148.85	857	158.90	450	171.90	345	181.95	361

Average of 2.788 to 2.798 min.: 6p24838.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.90	513	194.00	320	202.85	912	214.90	352
184.95	1798	194.95	270	203.90	4003	215.90	717
185.90	14286	195.70	336	204.90	6603	216.90	6823
186.90	4157	195.95	2872	205.90	27601	217.90	935
187.80	212	197.90	103997	206.90	3634	220.10	219
188.00	312	198.85	6861	207.90	1068	220.90	4841
188.85	761	199.90	482	208.85	342	221.55	1092
190.75	478	200.70	100	210.00	538	221.90	618
191.90	1243	201.10	131	210.90	1411	222.85	1784
192.95	1365	201.45	374	211.80	163	223.90	15058
193.80	199	201.95	294	212.90	107	224.90	3930

Average of 2.788 to 2.798 min.: 6p24838.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.95	452	238.80	137	252.80	537	267.10	106
226.90	6427	239.80	131	253.60	245	271.90	158
227.85	1026	240.75	573	254.00	788	272.85	1931
228.70	457	241.60	105	254.90	59552	273.90	4875

228.90	918	241.95	770	255.90	8918	274.90	26220
229.80	101	242.95	958	256.85	859	275.90	3215
230.90	589	243.90	11247	257.85	2815	276.90	2115
233.75	283	244.90	1397	258.85	512	277.90	174
234.90	450	245.90	2328	263.75	241	282.80	118
235.85	413	246.70	455	264.90	1330	283.90	161
236.85	444	248.80	504	265.70	187	284.80	382

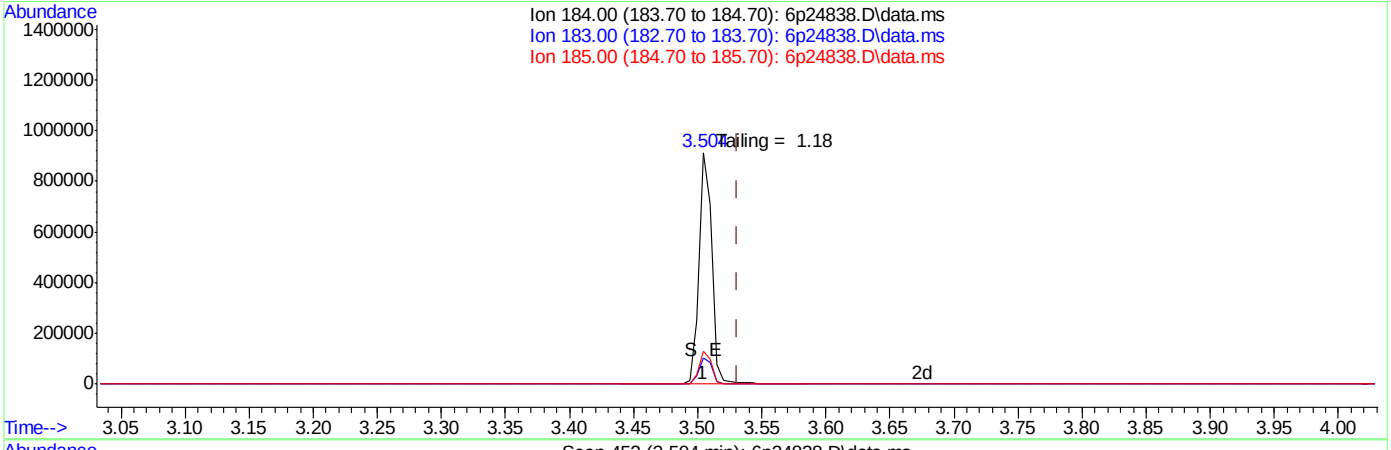
Average of 2.788 to 2.798 min.: 6p24838.D\data.ms
dftpp
Modified:subtracted

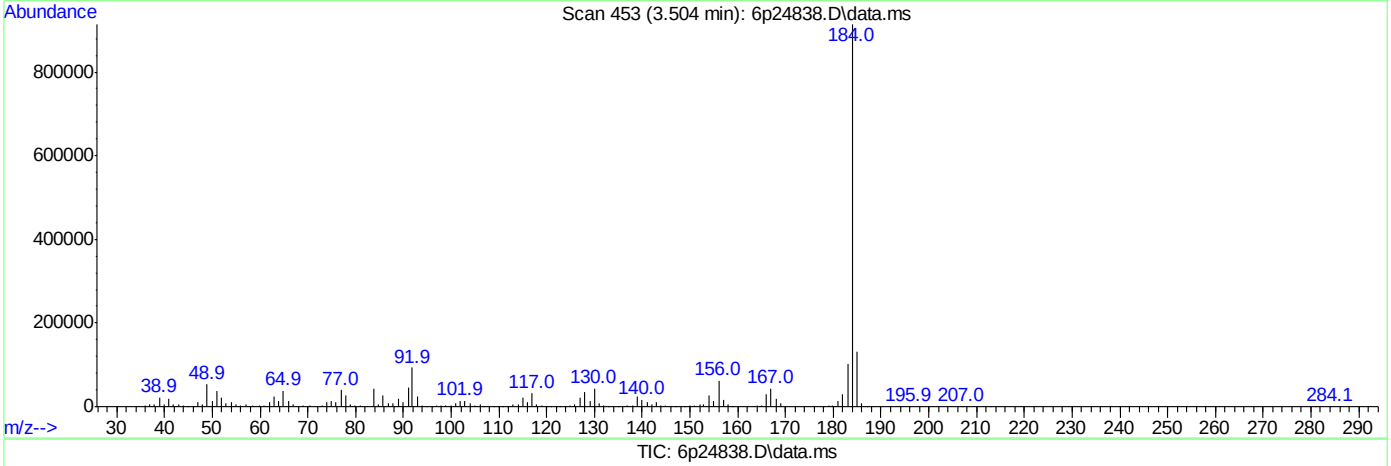
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
288.80	106	315.85	396	352.85	569	420.95	637
292.75	353	322.90	2402	353.90	945	421.85	903
295.90	6783	323.80	389	364.90	3077	422.90	5734
296.70	252	326.80	566	365.85	469	423.95	1024
296.90	526	327.70	122	370.80	133	440.90	13068
302.10	118	332.90	116	371.95	1663	441.90	92957
302.70	194	333.95	1908	372.90	311	442.90	17154
302.90	731	334.75	392	382.90	155	443.80	240
303.90	194	340.75	287	401.85	600	444.00	1467
313.90	212	345.85	546	402.95	769		
314.85	941	351.90	953	403.85	363		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1157\
Data File : 6p24838.D
Acq On : 6 Apr 2016 9:41 am
Operator : ashleyd
Sample : dftpp
Misc : op92208,e6p1157
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:46:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





(2) Benzidine (t)

3.504min (-0.027) 0.00ppb

response 649828

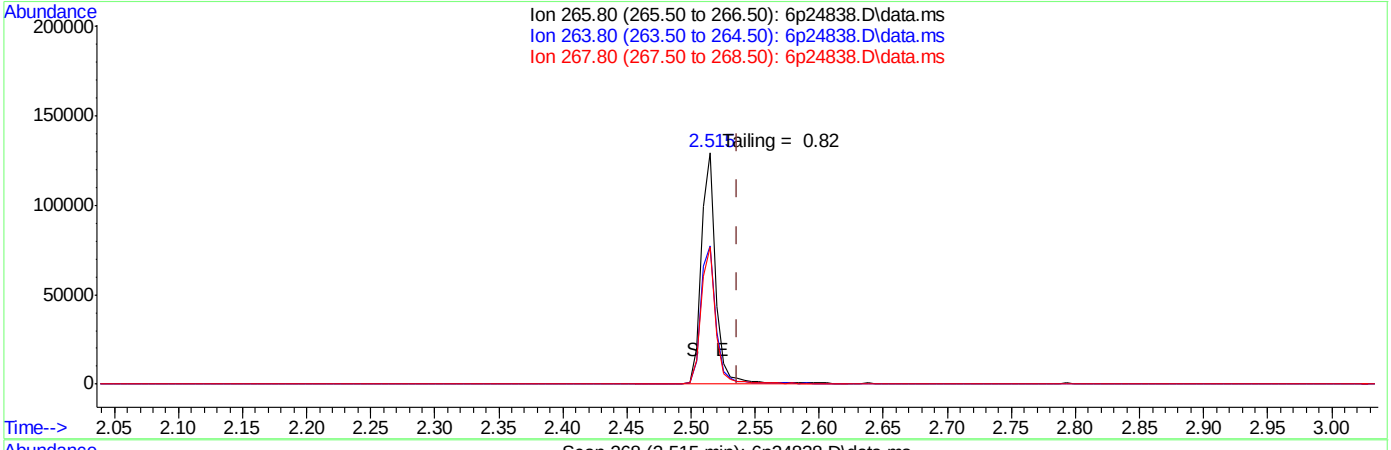
Ion	Exp%	Act%
184.00	100	100
183.00	11.10	11.30
185.00	13.90	14.39
0.00	0.00	0.00

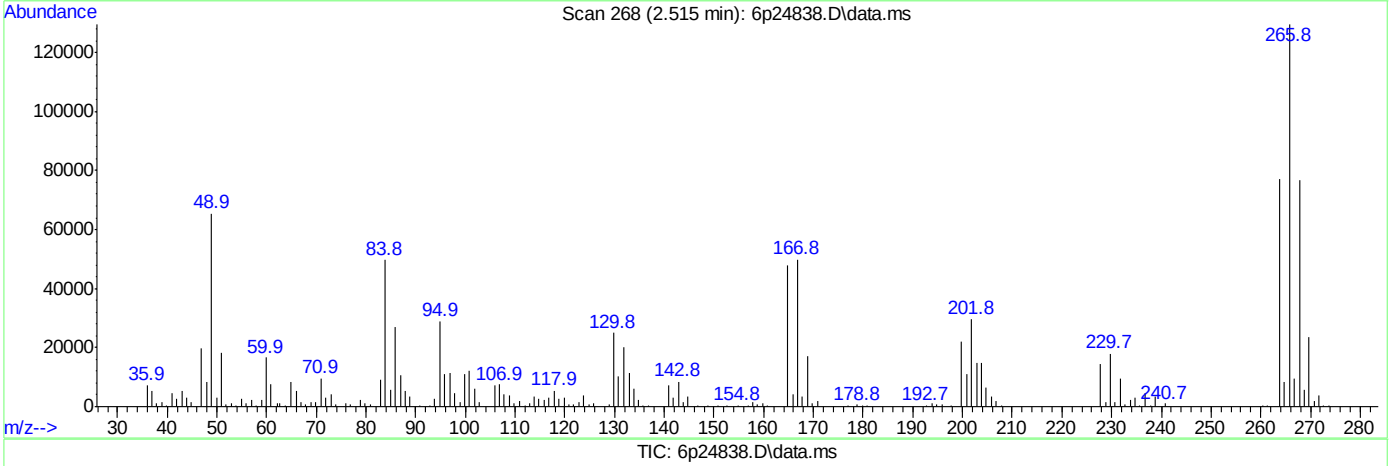
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1157\
Data File : 6p24838.D
Acq On : 6 Apr 2016 9:41 am
Operator : ashleyd
Sample : dftpp
Misc : op92208,e6p1157
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:46:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24838.D\data.ms

(1) Pentachlorophenol (t)

2.515min (-0.021) 0.00ppb

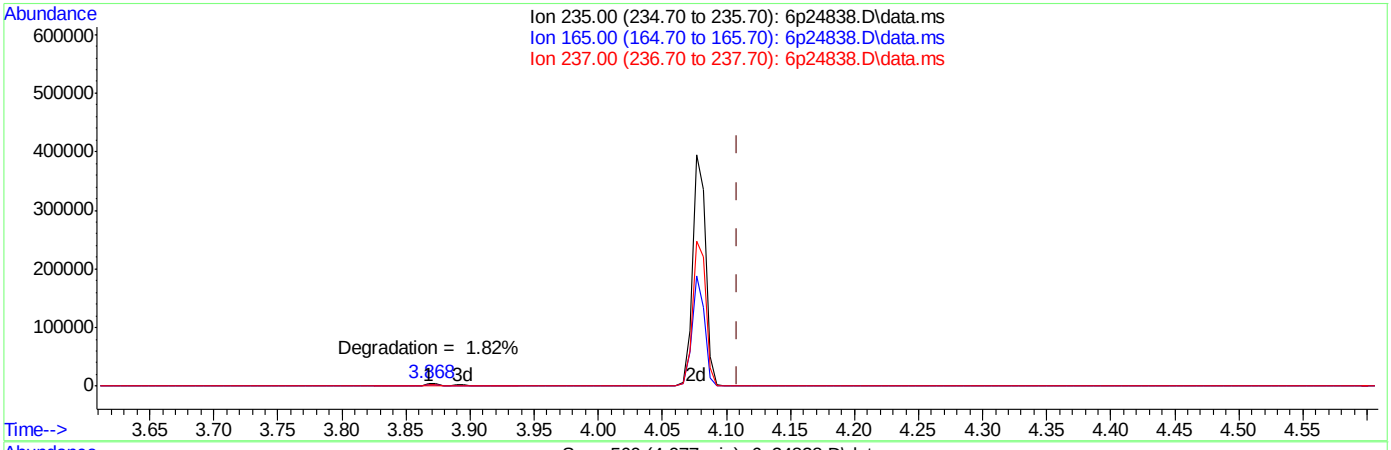
response 105362

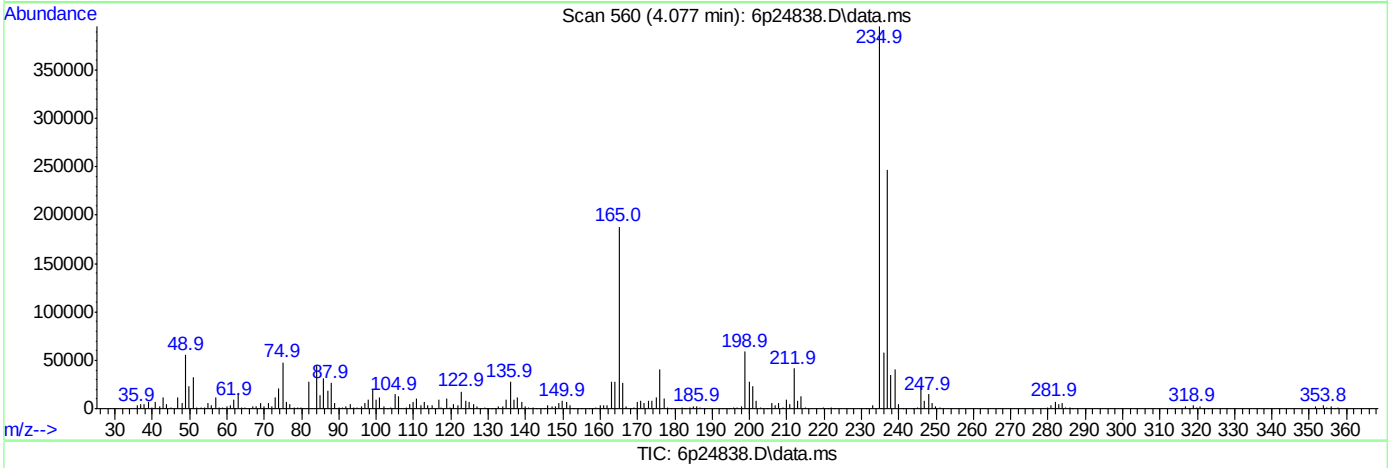
Ion	Exp%	Act%
265.80	100	100
263.80	62.70	59.53
267.80	62.60	59.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1157\
Data File : 6p24838.D
Acq On : 6 Apr 2016 9:41 am
Operator : ashleyd
Sample : dftpp
Misc : op92208,e6p1157
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 06 09:46:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p24838.D\data.ms

(3) PP-DDT (t)

4.077min (-0.032) 0.00ppb m

response 283457

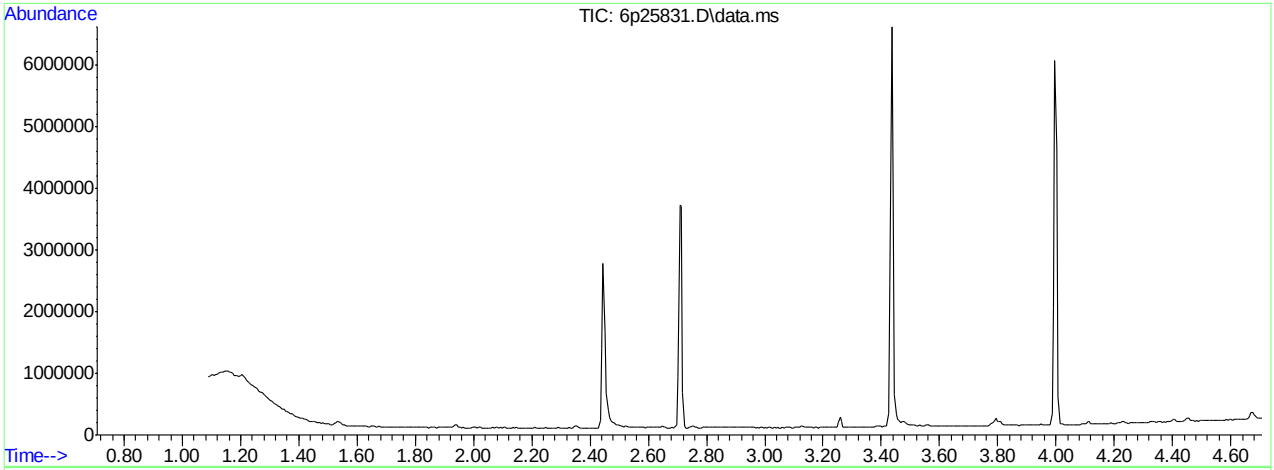
Ion	Exp%	Act%
235.00	100	100
165.00	93.70	0.91#
237.00	85.60	0.81#
0.00	0.00	0.00

SGS ACCUTEST JC19914

DFTPP

Data File : C:\msdchem\1\DATA\e6p1206\6p25831.D Vial: 1
Acq On : 11 May 2016 8:49 am Operator: ariellec
Sample : dftpp Inst : MS6P
Misc : op93693,e6p1206 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um



AutoFind: Scans 303, 304, 305; Background Corrected with Scan 299

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.7	121609	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	128681	PASS
70	69	0.00	2	0.5	646	PASS
127	198	40	60	51.6	150666	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	291720	PASS
199	198	5	9	6.4	18748	PASS
275	198	10	30	28.8	84024	PASS
365	198	1	100	3.6	10525	PASS
441	443	0.10	100	77.5	35604	PASS
442	198	40	100	81.3	237170	PASS
443	442	17	23	19.4	45921	PASS

6p25831.D DFTPP6P.M Wed May 11 08:55:01 2016 ACLIMS

Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	517	50.95	121609	62.00	1788	74.90	19847
37.90	1674	52.00	6455	62.95	5458	76.00	8019
38.95	9374	52.95	566	63.95	889	77.00	142991
39.90	455	54.95	234	65.00	2577	78.00	10623
41.00	237	55.95	3807	65.95	478	78.90	9450
41.95	431	56.95	8365	67.10	840	79.90	7898
43.00	445	57.95	292	68.90	128681	80.90	10104
43.90	461	59.00	107	70.00	646	81.95	2313
44.90	206	59.80	111	71.95	63	82.95	1438
48.90	1322	59.95	29	72.95	872	84.90	1995
49.95	32392	60.90	1591	73.95	13161	85.90	2404

Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.90	1412	98.90	8918	109.95	79977	120.00	763
87.85	629	99.95	1130	110.95	11939	121.00	501
88.90	287	100.90	4773	111.95	1797	121.90	2838
90.95	2236	101.90	310	112.90	656	122.90	4215
91.90	2855	102.90	1835	113.80	185	123.90	2101
92.90	15592	103.90	3332	114.70	225	124.90	2367
93.95	1259	104.95	2999	116.00	2853	127.00	150666
94.90	224	105.60	117	116.90	34674	128.00	11618
95.95	1310	105.90	509	117.90	2498	128.90	58265
97.00	472	106.90	42299	118.80	141	129.90	5072
97.90	12650	108.00	6718	119.05	19	130.95	1213

Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.95	808	141.95	2204	151.85	299	160.95	3402
133.05	360	142.85	1881	152.10	340	161.95	1011
133.95	1842	143.95	526	152.95	2000	162.95	372
134.95	4725	145.05	501	153.90	1570	163.70	201
135.90	2273	145.95	1550	154.95	3793	164.00	265
136.95	2382	146.90	3557	156.00	6361	164.95	3098
137.60	142	147.90	8155	157.00	1588	165.90	2431
137.95	566	148.90	1360	157.70	242	166.90	14441
138.90	343	150.05	740	157.90	1060	167.90	6595
139.85	1158	151.00	1034	158.95	1081	168.95	1164
140.90	7861	151.50	332	159.95	2231	169.95	477

Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.80	104	180.90	3619	189.90	558	199.95	1610
171.00	707	181.85	524	190.90	1224	201.10	596
171.90	1282	182.80	121	191.95	3851	201.55	1683
172.95	1622	183.20	314	192.80	408	202.90	2607
174.00	2899	183.85	754	193.00	3755	204.00	10712
175.00	5612	184.95	4980	193.90	800	205.00	18360
176.00	1722	186.00	41045	194.95	522	206.00	77458
176.90	2680	187.00	11910	196.00	8810	207.00	9589
177.95	1058	187.80	100	196.50	383	207.90	2841
178.90	10229	188.00	1151	197.90	291720	208.95	1141
180.00	7186	188.90	2499	198.90	18748	209.85	973

Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
210.95	2689	221.70	1901	230.95	1719	243.00	2434
212.75	284	222.00	198	231.95	277	244.00	31197
213.10	101	222.95	4544	233.00	375	244.95	4318
215.00	1011	224.00	39419	233.95	966	246.00	5717

215.90	1777	225.00	9698	234.95	1246	246.90	1049
216.90	19937	226.00	1337	235.85	984	247.80	114
217.95	2277	226.95	16573	236.90	1146	248.10	138
218.90	107	227.90	2367	238.95	827	248.95	1202
219.10	137	228.90	3498	240.00	491	250.10	131
219.60	383	229.80	276	240.85	817	250.80	341
220.95	16039	230.10	272	241.95	2458	251.80	393

Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
252.80	116	263.60	107	275.00	84024	288.90	198
253.00	988	264.90	3677	275.95	11415	289.90	161
253.70	120	265.90	944	276.95	6220	291.95	482
255.00	163962	266.85	237	278.00	1003	292.95	1690
255.95	24982	267.20	147	278.80	119	293.70	111
256.95	2304	268.90	119	279.10	155	294.00	354
257.95	9093	269.90	331	281.00	166	294.40	136
259.00	1432	271.05	392	282.85	799	295.95	20533
259.90	100	272.05	752	283.95	431	296.80	129
260.85	310	272.90	5652	285.00	1112	296.95	2754
263.10	101	273.95	15650	286.10	151	297.90	281

Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
300.80	131	316.00	1388	333.95	5128	353.70	165
302.10	496	317.00	159	334.70	124	354.00	2717
303.00	2731	321.00	677	334.95	1364	355.05	643
303.95	805	323.00	7064	336.20	220	356.70	117
307.80	315	324.00	1249	340.80	104	358.90	157
308.95	247	327.00	1285	340.95	738	363.00	111
309.80	182	327.90	708	345.95	1803	363.90	166
310.90	120	329.00	136	346.95	359	364.90	10525
313.00	104	331.80	270	350.80	141	365.95	1707
313.95	1088	332.00	291	352.00	2446	366.90	207
315.00	2332	333.00	658	353.00	1653	370.10	142

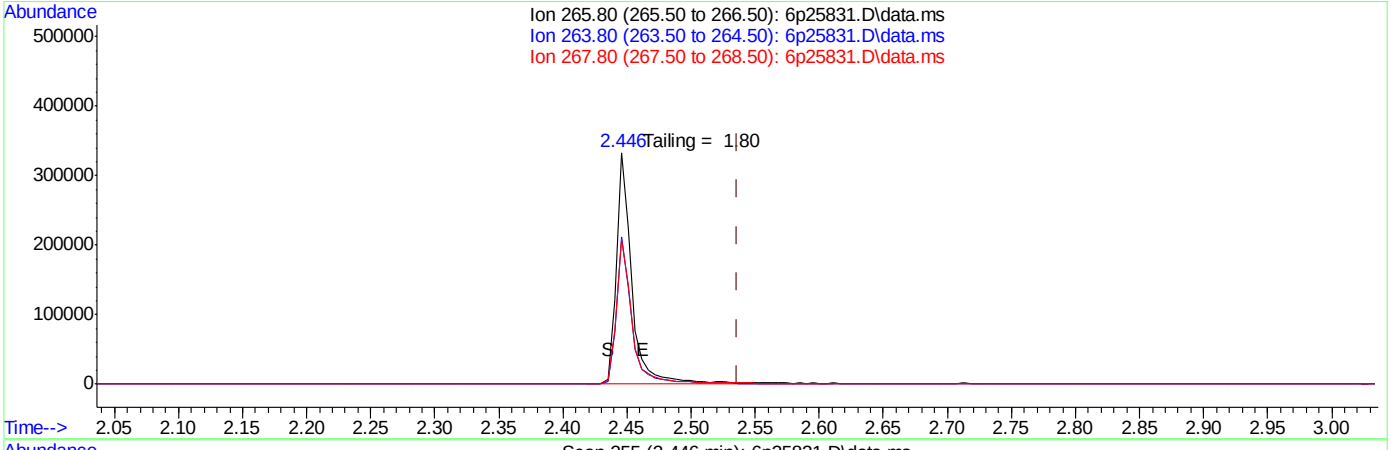
Average of 2.702 to 2.713 min.: 6p25831.D\data.ms
dftpp
Modified:subtracted

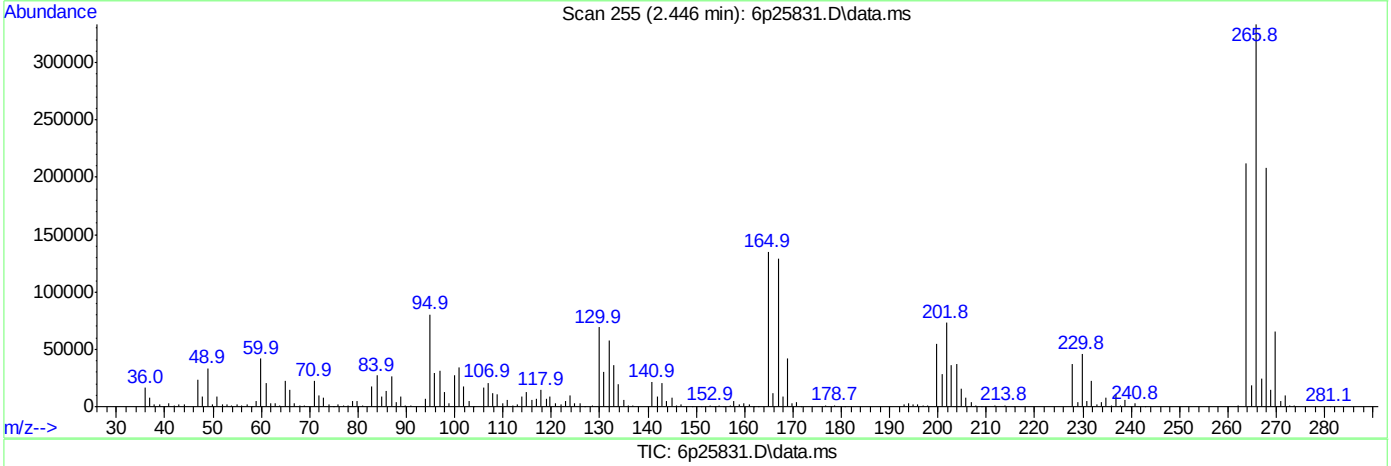
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.75	595	404.00	720	438.00	350		
372.00	4155	414.80	130	438.40	179		
373.00	1126	421.00	2576	438.80	135		
382.95	1136	422.00	1442	439.60	562		
383.90	415	423.00	16790	441.00	35604		
390.05	582	423.95	2835	442.00	237170		
390.85	563	424.90	430	443.00	45921		
391.85	299	429.00	102	444.00	4080		
401.80	555	434.60	125	445.10	119		
402.00	1247	435.40	154				
402.95	2902	437.60	107				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25831.D
Acq On : 11 May 2016 8:49 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1206
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 08:54:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25831.D\data.ms

(1) Pentachlorophenol (t)

2.446min (-0.091) 0.00ppb

response 291759

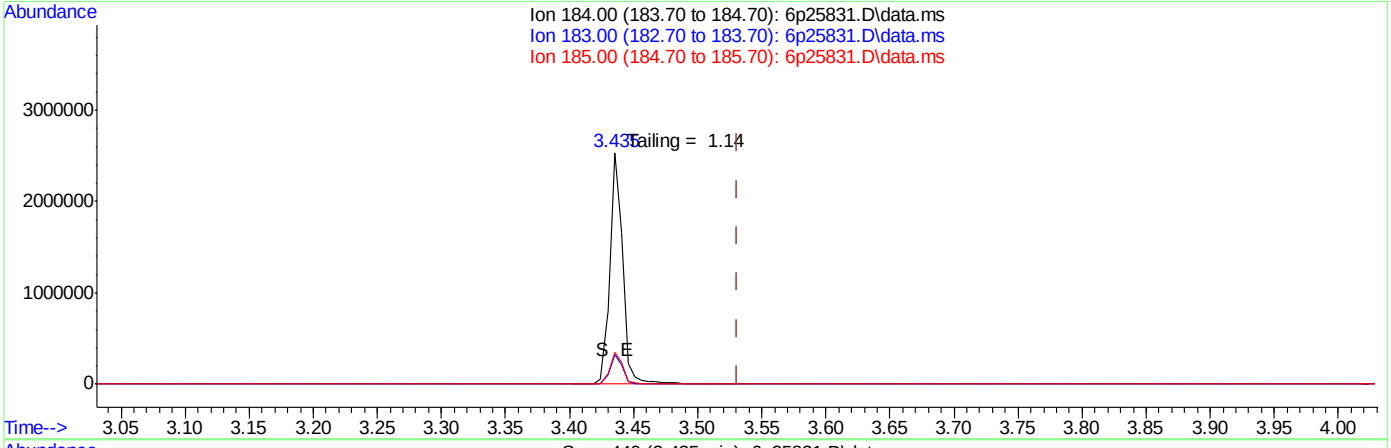
Ion	Exp%	Act%
265.80	100	100
263.80	62.70	63.50
267.80	62.60	62.39
0.00	0.00	0.00

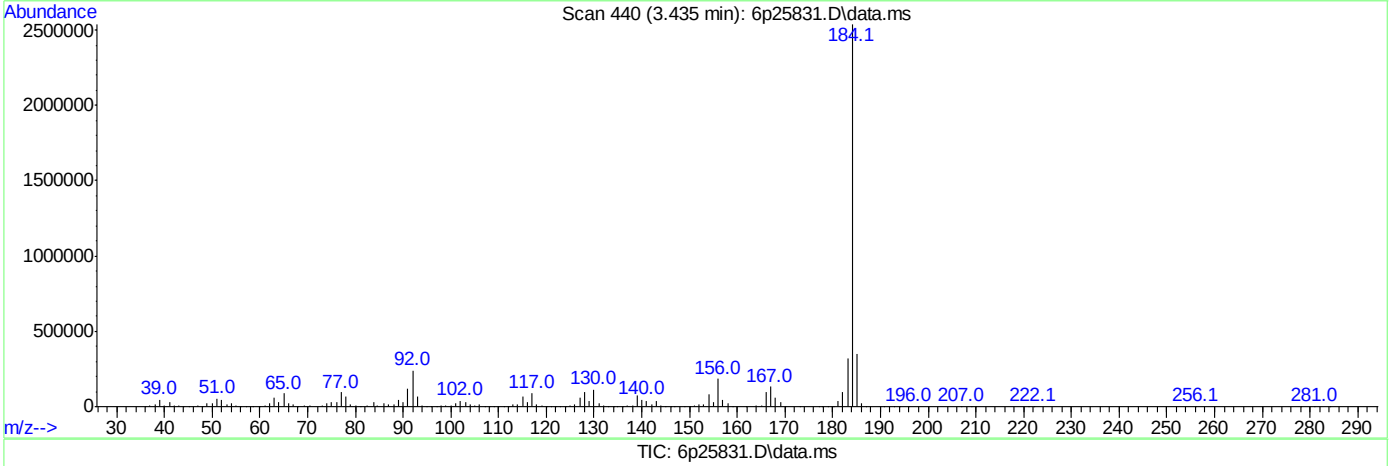
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25831.D
Acq On    : 11 May 2016   8:49 am
Operator  : ariellec
Sample    : dftpp
Misc      : op93693,e6p1206
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 11 08:54:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title  : Semi Volatile  GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration
```





TIC: 6p25831.D\data.ms

(2) Benzidine (t)

3.435min (-0.096) 0.00ppb

response 1829115

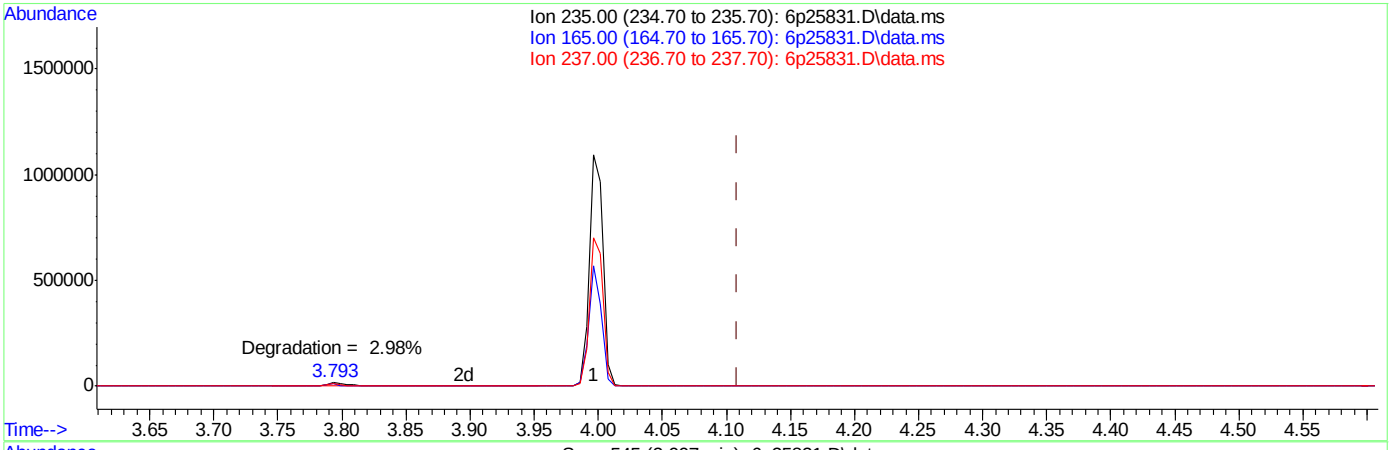
Ion	Exp%	Act%
184.00	100	100
183.00	11.10	12.70
185.00	13.90	13.89
0.00	0.00	0.00

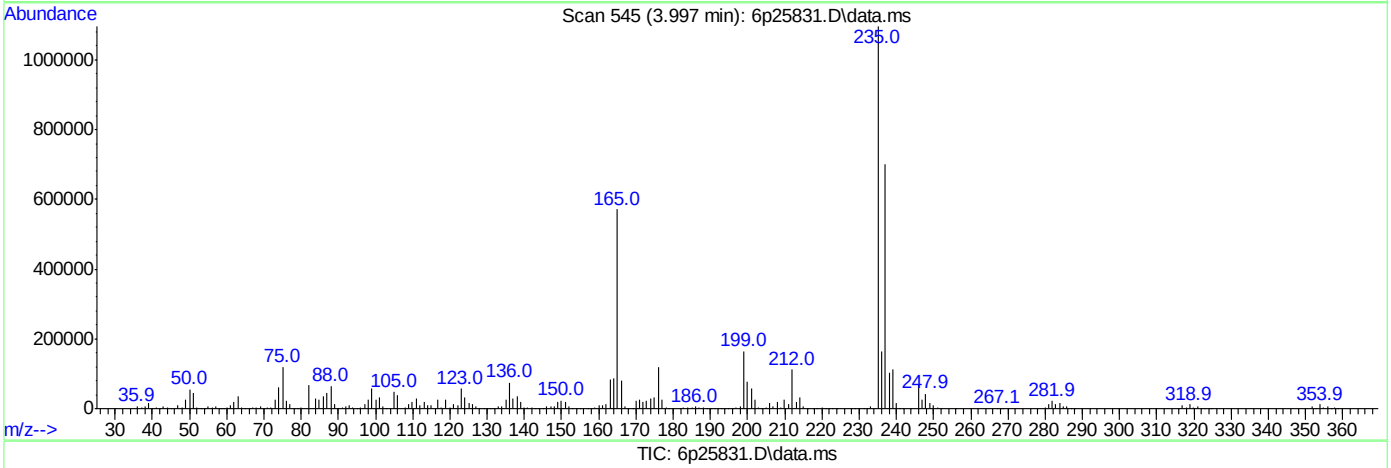
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25831.D
Acq On : 11 May 2016 8:49 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1206
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 08:54:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25831.D\data.ms

(3) PP-DDT (t)

3.997min (-0.112) 0.00ppb

response 795029

Ion	Exp%	Act%
235.00	100	100
165.00	93.70	49.03#
237.00	85.60	64.32
0.00	0.00	0.00

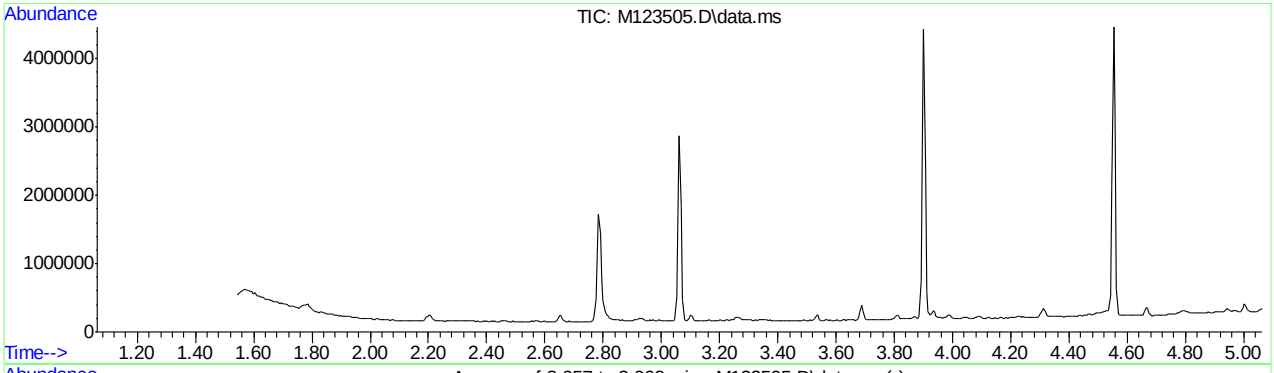
SGS ACCUTEST JC19914

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
Last Update : Mon Mar 28 09:49:46 2016



AutoFind: Scans 284, 285, 286; Background Corrected with Scan 279

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.1	74912	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	91845	PASS
70	69	0.00	2	0.5	416	PASS
127	198	40	60	48.1	112346	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	233621	PASS
199	198	5	9	6.8	15774	PASS
275	198	10	30	27.1	63400	PASS
365	198	1	100	3.5	8159	PASS
441	443	0.10	100	79.2	29433	PASS
442	198	40	100	83.3	194493	PASS
443	442	17	23	19.1	37146	PASS

SGS ACCUTEST JC19914

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	278	52.15	3777	64.10	631	78.10	5891
38.10	839	54.15	32	65.10	1521	79.05	5501
39.15	6220	55.15	49	66.10	26	80.05	4669
40.05	613	56.10	2317	67.10	431	81.05	6533
41.15	350	57.10	4924	69.05	91845	82.05	1443
43.15	137	58.05	71	70.05	416	83.10	1460
45.05	41	59.10	131	73.10	204	84.05	353
46.15	76	60.10	117	74.05	8024	85.15	1051
47.05	251	61.05	1043	75.00	13540	86.05	391
50.10	19074	62.10	1057	76.10	4298	87.05	911
51.10	74912	63.10	3396	77.15	94109	89.05	46

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.00	1469	102.05	461	115.05	386	128.00	8480
92.05	2019	103.00	927	116.10	1629	129.05	41444
93.05	9782	104.05	2170	117.05	19895	130.05	3823
94.10	645	105.05	2460	118.05	1420	131.00	715
95.10	324	107.05	29030	119.05	152	131.95	278
96.10	245	108.05	4951	120.00	495	133.05	227
97.10	248	110.05	54952	122.10	1968	134.05	1109
98.05	6713	111.05	7584	123.05	2719	135.05	3150
99.05	5791	112.05	796	124.00	1038	136.05	1087
100.10	724	113.10	224	125.05	1229	137.00	1466
101.00	3204	114.10	180	127.05	112346	138.05	401

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.00	526	150.15	491	160.00	1799	171.00	589
140.10	685	151.05	696	161.05	2478	172.00	987
141.00	4846	152.00	434	162.00	407	173.05	1568
142.05	1264	153.00	1795	163.15	203	174.05	2314
143.05	1007	154.00	1184	164.00	463	175.05	4157
144.05	468	155.05	2751	165.00	2030	176.05	980
145.00	204	156.05	4439	166.05	1425	177.05	1618
146.00	963	156.95	243	167.00	10879	178.05	815
147.05	2558	157.10	749	168.05	5213	179.05	8255
148.05	6216	158.00	942	169.00	836	180.05	6155
149.05	1210	159.10	973	170.05	402	181.00	2488

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
182.00	525	193.05	2651	204.00	7785	213.05	117
183.10	214	194.10	721	205.00	14180	214.95	787
184.00	867	195.05	370	206.05	59442	216.10	1383
185.10	3713	196.05	7120	207.05	7486	217.05	15893
186.05	30402	198.00	233621	208.05	1788	217.95	2128
187.05	8478	199.00	15774	209.00	436	218.95	112
188.05	1098	200.10	1348	210.25	1329	219.10	224
189.00	1646	201.40	844	210.45	653	219.85	132
190.05	219	201.65	303	210.95	666	221.05	10612
191.05	669	202.05	31	211.10	1726	223.00	3810
192.05	2612	203.05	1250	211.95	153	224.05	32424

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.05	8638	235.00	1271	246.00	4974	258.05	7557
226.15	529	236.00	664	247.05	1026	259.00	1400
227.05	12942	237.10	1292	247.95	339	259.90	227
228.05	1919	237.85	163	249.00	1062	261.00	347

DFTPPM.M Wed Apr 13 12:08:44 2016 MSM Page: 2

229.00	2696	238.95	554	250.05	215	262.85	74
229.90	237	239.95	461	251.00	263	263.85	143
231.00	1249	241.10	843	251.95	402	265.05	3119
231.85	72	242.05	1907	253.05	597	265.80	315
232.00	233	243.10	2266	255.05	136557	266.90	194
233.10	367	244.05	26362	256.05	20847	268.95	93
234.05	877	245.05	3846	257.10	1363	269.80	243

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.15	74	281.95	151	293.85	137	309.05	71
270.90	220	283.05	383	294.15	162	309.95	204
271.85	101	284.10	507	296.00	17758	310.15	116
272.00	438	285.10	1137	297.05	2426	312.90	231
273.00	4503	285.95	93	297.85	153	314.05	1008
274.05	11631	286.15	133	300.95	321	315.00	1778
275.05	63400	289.00	215	302.05	272	316.00	1259
276.05	8279	290.05	161	303.05	2155	316.95	247
277.00	5248	291.10	135	304.05	659	321.05	601
278.00	1029	292.10	176	305.95	69	321.75	86
279.00	256	293.00	984	308.05	350	322.15	160

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
323.05	5658	336.05	200	366.05	1347	400.95	252
324.00	1110	339.95	75	369.95	197	402.00	1431
324.95	67	341.05	682	371.00	595	403.05	2296
325.85	112	342.00	232	372.05	3110	404.00	625
326.95	1188	346.00	1366	373.05	783	405.15	68
328.00	666	347.00	216	383.00	976	410.05	73
329.10	161	352.00	2155	384.05	245	414.95	154
332.05	725	353.10	1432	384.95	75	421.00	1580
333.00	576	354.05	1785	390.00	351	422.05	1469
334.05	3819	355.05	296	391.00	256	423.05	12013
335.05	1094	365.00	8159	392.00	240	423.95	2624

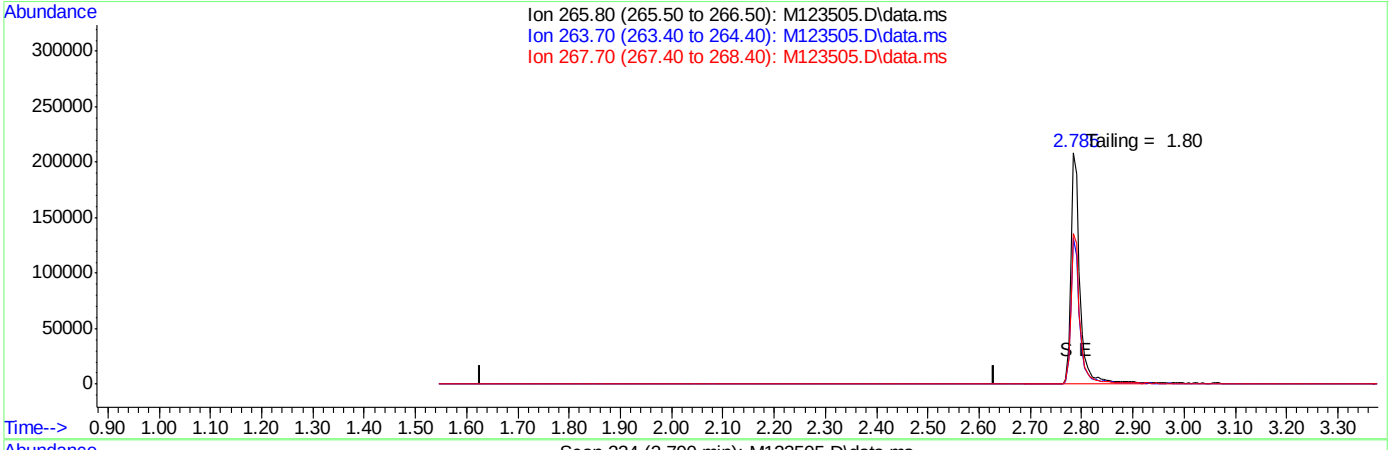
Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

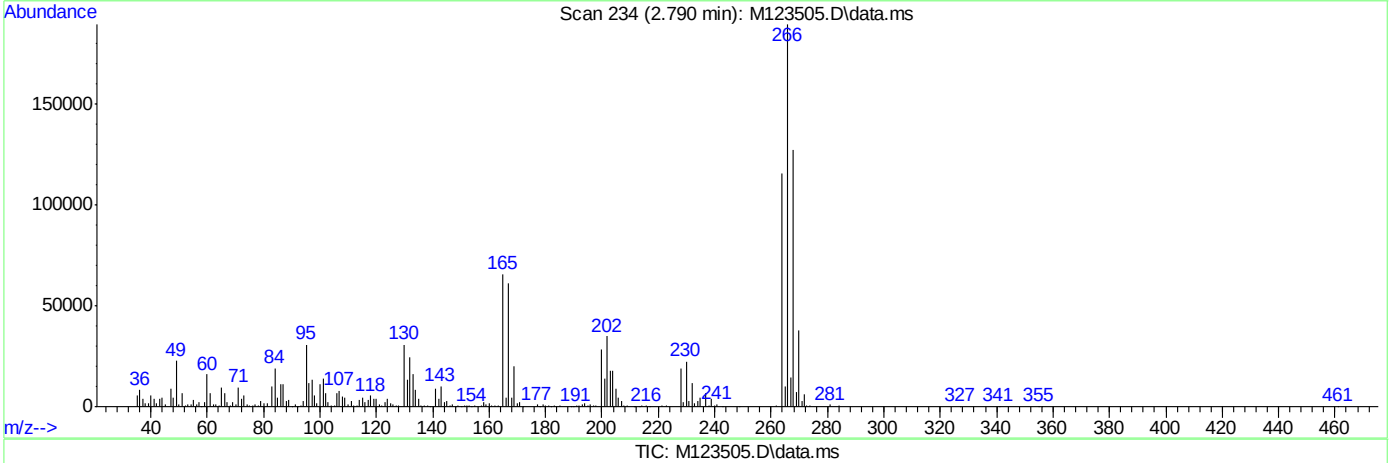
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
425.10	188						
436.85	99						
437.45	88						
438.45	87						
438.75	86						
439.35	103						
441.05	29433						
442.05	194493						
443.05	37146						
444.05	3208						
445.10	243						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 17:54:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123505.D\data.ms

(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

response 0

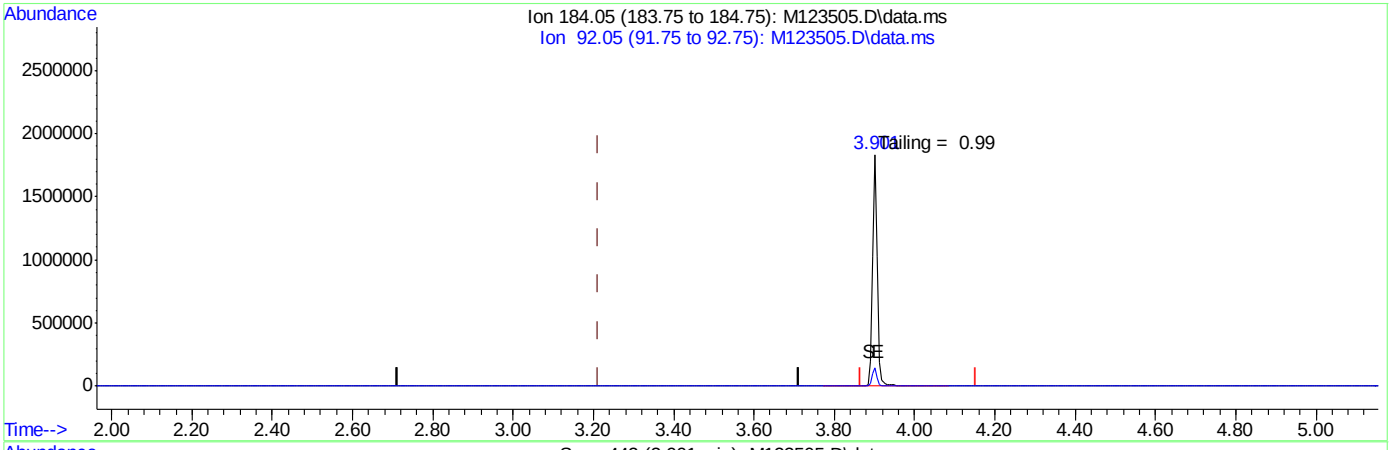
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

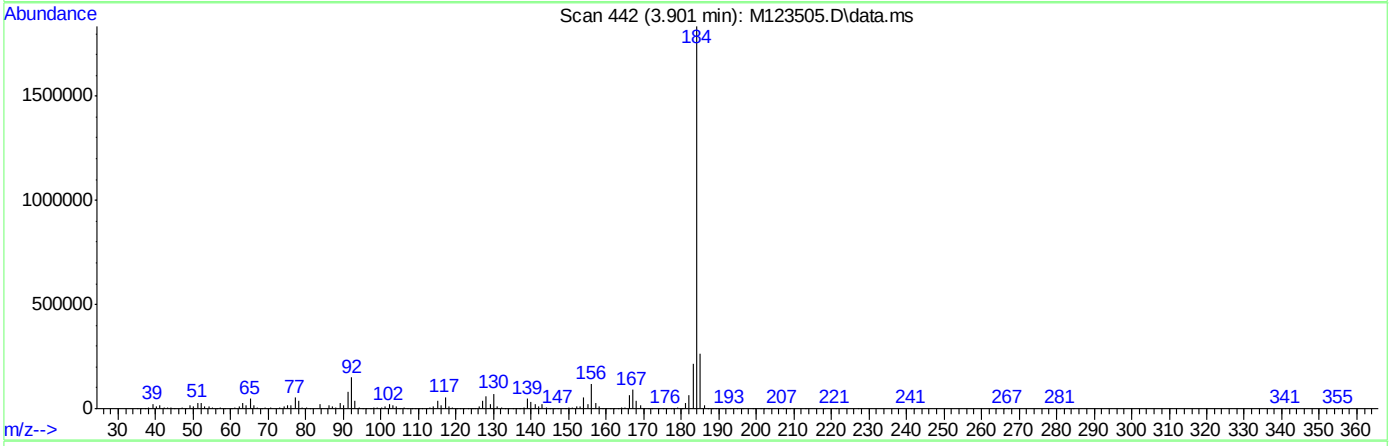
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 17:54:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123505.D\data.ms

(2) Benzidine (M)

3.901min (+0.688) 0.00ppm m

response 1448333

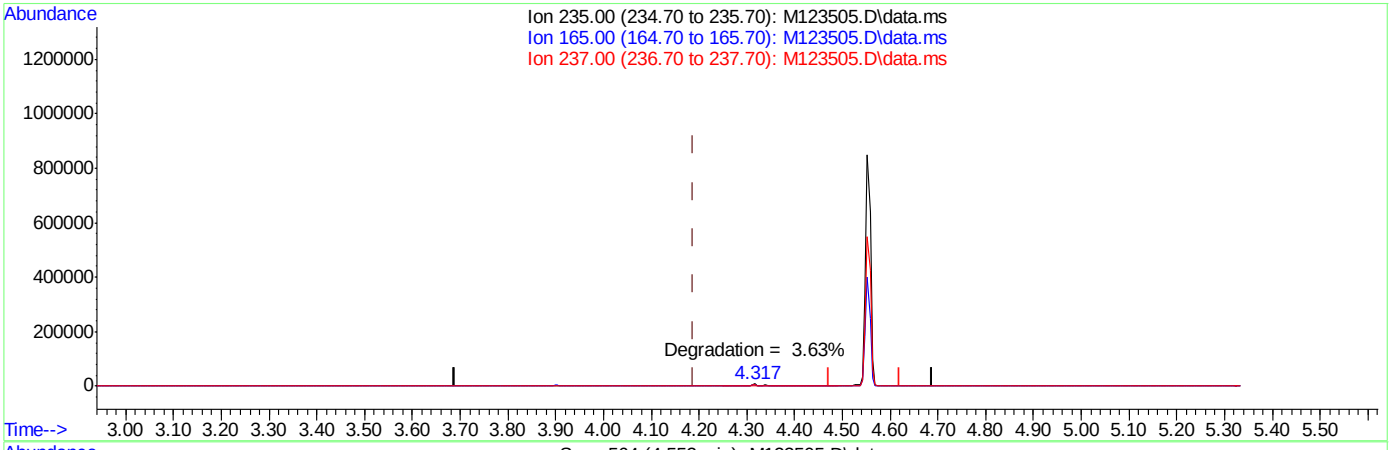
Ion	Exp%	Act%
184.05	100	100
92.05	10.70	8.15
0.00	0.00	0.00
0.00	0.00	0.00

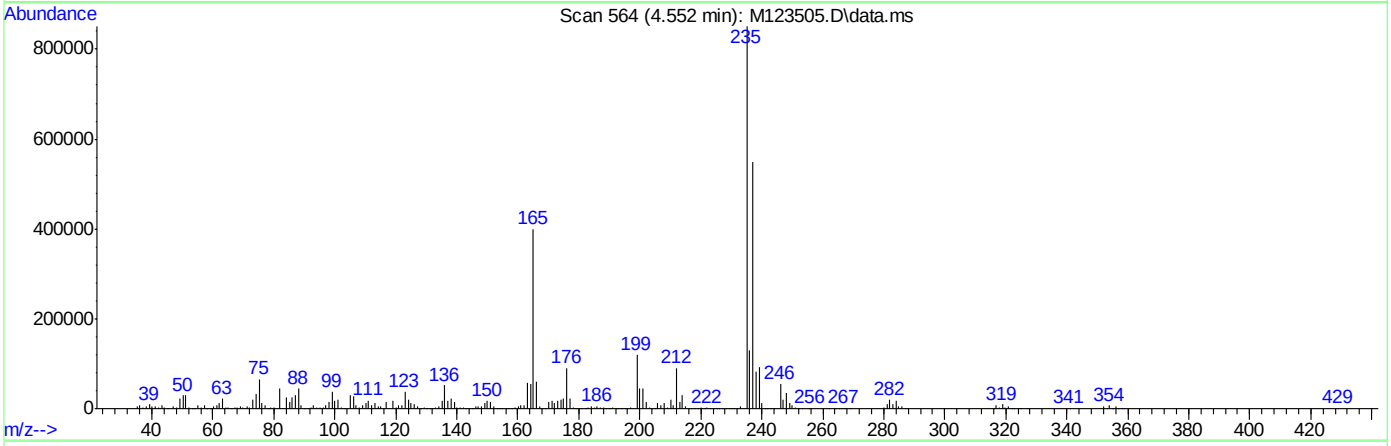
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 17:54:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123505.D\data.ms

(3) PP-DDT (MC)

4.552min (+0.363) 0.00ppm m

response 643812

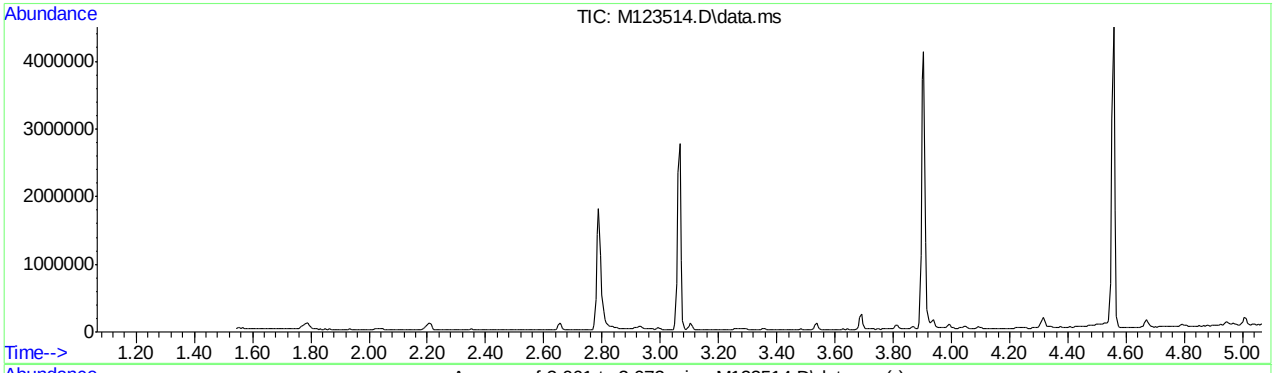
Ion	Exp%	Act%
235.00	100	100
165.00	46.90	47.07
237.00	64.20	64.49
0.00	0.00	0.00

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
Last Update : Mon Mar 28 09:49:46 2016



AutoFind: Scans 285, 286, 287; Background Corrected with Scan 280

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.9	72654	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.8	89061	PASS
70	69	0.00	2	0.5	437	PASS
127	198	40	60	48.0	113120	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	235437	PASS
199	198	5	9	6.5	15398	PASS
275	198	10	30	27.6	64960	PASS
365	198	1	100	3.8	9013	PASS
441	443	0.10	100	78.4	31349	PASS
442	198	40	100	91.0	214165	PASS
443	442	17	23	18.7	40010	PASS

SGS ACCUTEST JC19914

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	248	55.10	160	69.05	89061	82.05	1712
38.10	886	56.10	2073	70.05	437	83.05	1612
39.15	6141	57.05	5361	73.10	433	85.15	677
44.05	334	58.10	253	74.05	7823	86.05	1649
45.10	241	59.15	84	75.05	12686	87.10	960
48.10	215	61.10	955	76.15	4558	88.05	515
49.05	749	62.10	1017	77.15	93821	89.10	252
50.15	19579	63.15	3214	78.15	6651	91.10	1302
51.10	72654	64.10	438	79.05	5041	92.10	1620
52.15	3665	65.10	1697	80.05	4394	93.05	9310
53.00	168	66.05	344	81.05	6393	94.05	701

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.15	277	107.05	28706	118.05	1293	130.05	3675
96.05	130	108.05	4564	119.05	78	131.10	746
97.00	8	110.05	52957	120.05	373	132.00	550
98.05	7117	111.00	7803	121.15	125	133.05	122
99.05	5957	111.95	988	122.05	1913	134.05	902
100.10	582	113.05	403	123.05	2779	135.05	3237
101.05	3458	113.25	121	124.10	1306	136.05	1464
102.15	265	114.10	166	125.05	1358	137.05	1829
103.05	1271	115.15	228	127.05	113120	138.10	540
104.05	2276	116.05	1553	128.05	8419	139.05	245
105.05	2136	117.05	20105	129.05	43086	140.10	610

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.05	5144	151.85	159	162.95	186	173.05	1307
142.05	1705	153.05	1449	163.15	75	174.05	2292
143.05	1044	154.05	1146	163.95	425	175.05	4315
144.05	431	155.05	3070	164.95	1731	176.05	1324
145.05	395	156.05	4389	166.15	1836	177.05	1827
146.05	971	157.10	1055	167.00	11191	178.05	862
147.00	2727	158.00	1095	168.05	5146	179.05	8953
148.05	5722	159.00	896	169.00	853	180.05	5370
149.05	1359	160.05	1759	170.15	381	181.05	2568
149.95	516	161.05	2506	171.00	618	182.05	568
151.10	867	162.10	785	172.00	1028	183.15	293

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
184.05	701	194.05	627	205.05	14255	215.00	571
185.05	3993	195.00	640	206.05	59037	216.05	1044
186.05	32046	196.05	7474	207.00	8477	217.00	15582
187.05	8911	198.00	235437	208.00	1693	218.00	1877
188.05	996	199.00	15398	209.00	465	219.00	295
188.95	1923	200.05	1262	210.05	241	221.05	11374
189.85	195	200.75	69	210.95	1050	221.95	1161
190.05	126	201.25	441	211.10	1473	223.05	3598
191.00	815	201.55	983	211.75	364	224.05	33861
192.05	2727	203.05	1615	212.95	97	225.05	8177
193.10	3103	204.05	8751	214.75	115	226.10	927

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.05	14316	237.85	66	248.05	246	258.95	1156
228.05	2028	238.05	72	249.00	1208	259.95	169
229.05	2777	239.00	478	250.05	281	261.10	289
230.00	619	240.05	558	250.95	103	263.95	117

DFTPPM.M Wed Apr 13 12:14:50 2016 MSM Page: 2

231.05	1294	241.00	800	251.25	82	265.00	3456
231.95	185	242.05	1897	252.00	317	265.85	123
233.05	184	243.10	2060	253.05	740	269.85	363
233.95	918	244.05	28279	255.05	144258	270.85	204
235.00	1216	245.05	3897	256.05	21867	271.10	246
235.90	694	246.05	5087	257.00	1638	272.10	508
237.00	1226	247.00	991	258.05	8107	273.00	4291

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.05	11576	285.95	93	297.05	2741	313.95	1040
275.05	64960	289.05	202	298.00	166	315.00	2399
276.05	8839	290.15	116	300.90	375	316.05	1204
277.00	4786	291.05	70	301.85	113	317.05	115
278.00	873	291.75	94	302.15	266	319.75	84
279.15	96	292.05	103	303.00	2013	321.00	708
281.95	90	293.05	1337	304.05	594	322.05	419
282.10	173	294.05	320	308.05	416	323.05	6798
283.05	794	294.45	70	309.10	163	324.05	1443
284.10	420	294.95	157	310.00	359	325.05	102
285.10	1064	296.05	18548	312.90	208	326.95	1161

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
327.95	545	350.95	77	370.65	78	392.05	204
331.95	567	352.00	2053	371.10	517	400.90	190
333.05	726	353.05	1422	372.05	3166	402.00	1728
334.05	4024	354.05	2093	373.00	1062	403.05	2140
334.95	572	354.85	142	373.95	98	404.05	778
335.15	521	355.05	253	376.85	68	405.15	76
336.05	67	358.95	150	383.00	1025	417.15	73
341.00	754	364.95	9013	384.00	293	421.00	1703
342.00	223	366.00	1347	389.95	693	422.00	1952
346.00	1385	366.95	68	390.90	167	423.05	12883
346.95	335	369.90	180	391.15	183	424.05	2230

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

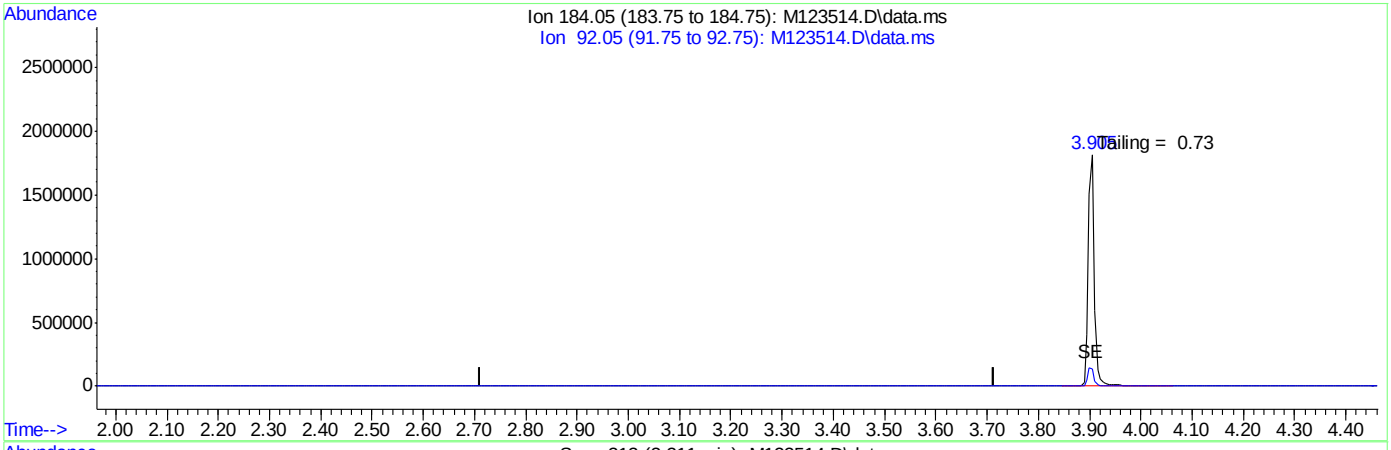
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
424.80	173	444.05	3985				
425.15	223	445.05	127				
433.85	84						
436.05	70						
437.05	96						
438.35	168						
439.25	81						
439.85	112						
441.05	31349						
442.05	214165						
443.05	40010						

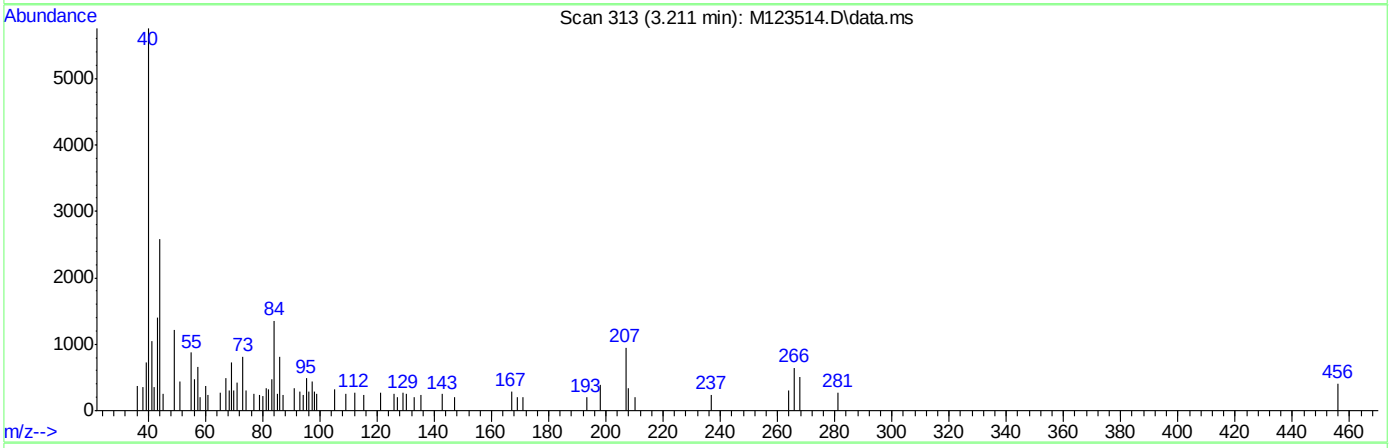
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:02:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123514.D\data.ms

(2) Benzidine (M)

3.213min (-3.213) 0.00ppm

response 0

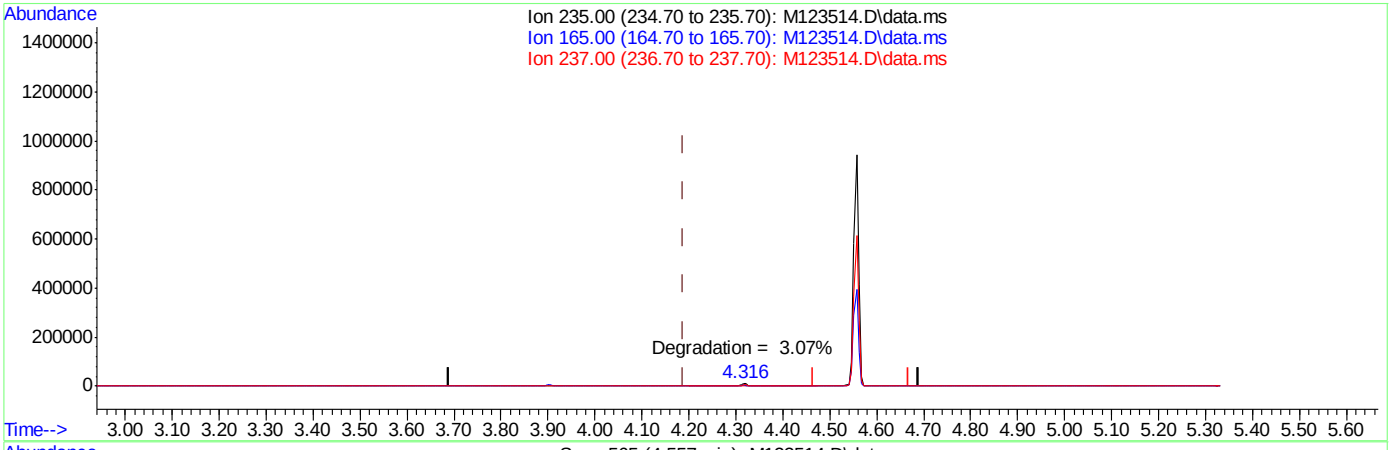
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

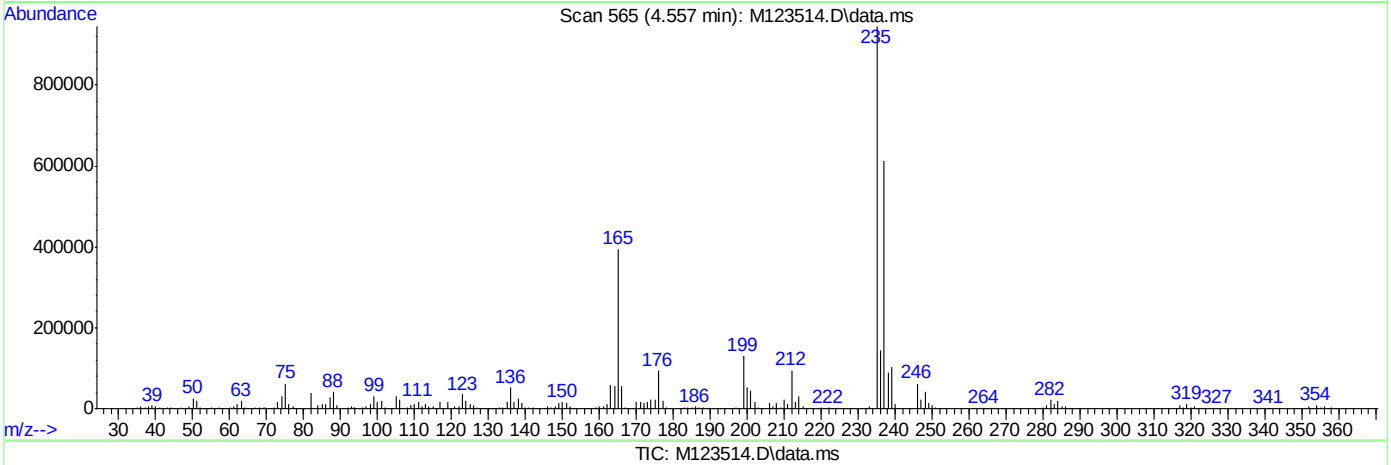
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:02:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123514.D\data.ms

(3) PP-DDT (MC)

4.557min (+0.367) 0.00ppm m

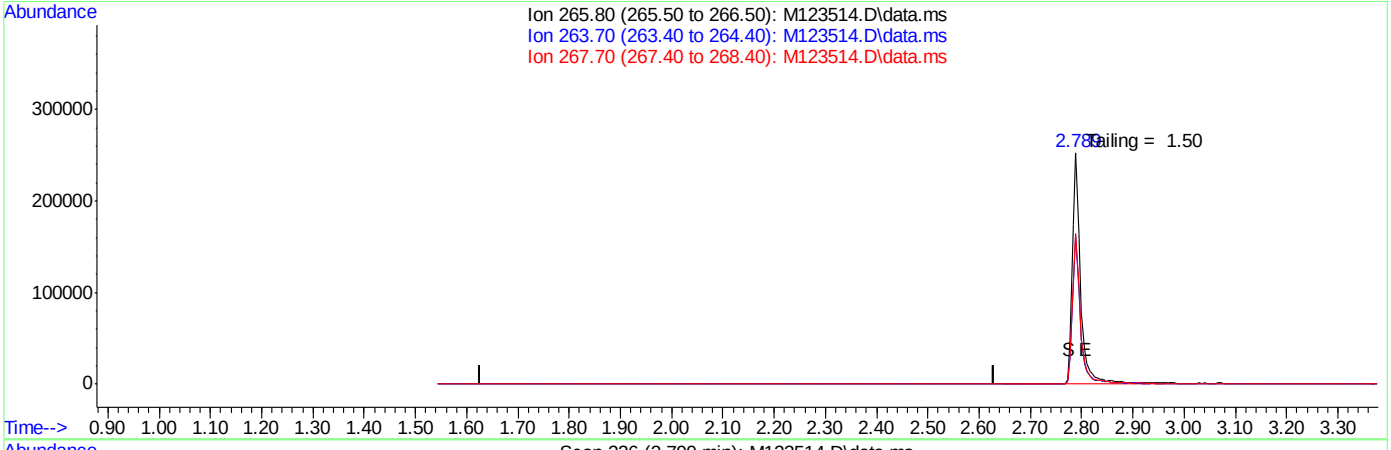
response 682383

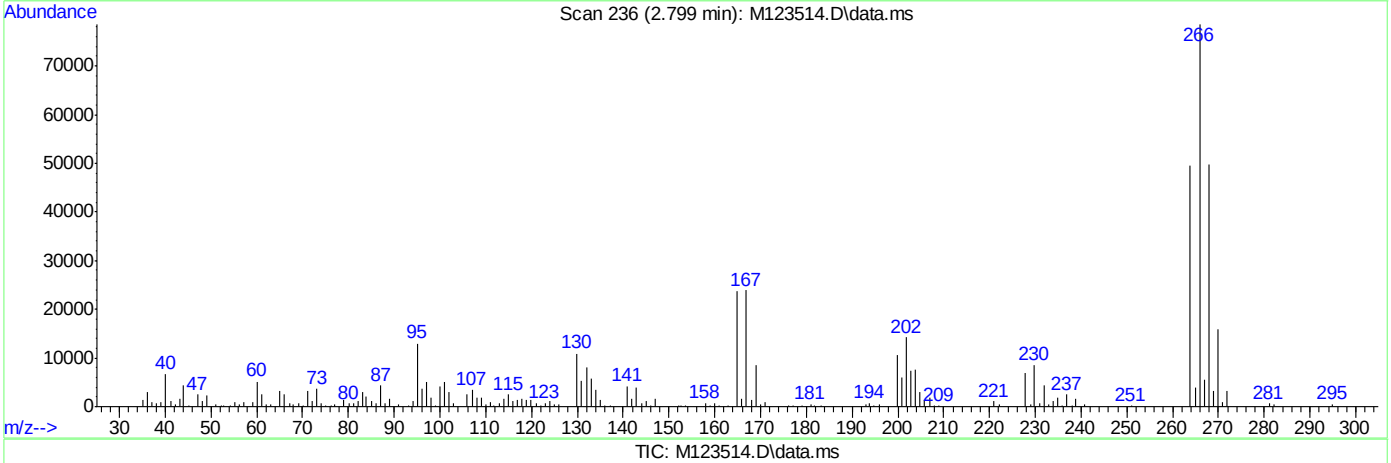
Ion	Exp%	Act%
235.00	100	100
165.00	46.90	41.76
237.00	64.20	64.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:10:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

response 0

Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

DFTPPM.M Wed Apr 13 12:14:58 2016 MSM

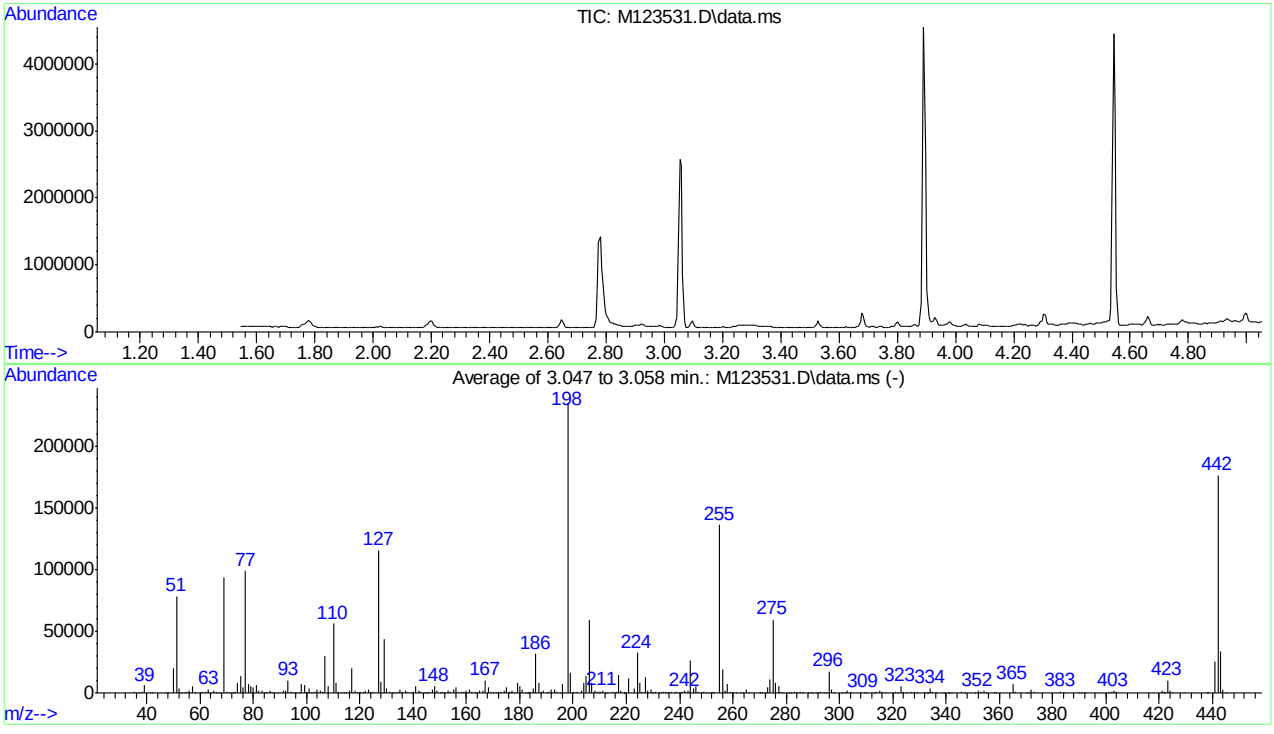
SGS ACCUTEST JC19914

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
Last Update : Mon Mar 28 09:49:46 2016



AutoFind: Scans 282, 283, 284; Background Corrected with Scan 277

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.2	78247	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.9	93834	PASS
70	69	0.00	2	0.6	568	PASS
127	198	40	60	49.2	115728	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	235442	PASS
199	198	5	9	7.1	16612	PASS
275	198	10	30	25.2	59290	PASS
365	198	1	100	3.0	7084	PASS
441	443	0.10	100	77.7	25886	PASS
442	198	40	100	75.0	176602	PASS
443	442	17	23	18.9	33324	PASS

SGS ACCUTEST JC19914

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	723	53.05	72	65.15	1545	77.10	98799
37.10	362	54.05	175	66.15	14	78.15	7069
38.10	688	55.15	572	67.05	179	79.05	5315
39.15	6098	56.10	2157	69.05	93834	80.05	4552
41.15	173	57.10	5282	70.10	568	81.05	6225
42.10	3	58.15	315	71.05	50	82.10	1777
47.05	28	60.10	194	72.15	151	83.10	1498
48.10	271	61.10	1164	73.15	671	84.05	122
50.10	19925	62.10	1287	74.05	7863	85.05	999
51.10	78247	63.15	3183	75.05	13424	86.00	1692
52.10	3905	64.05	420	76.15	4823	87.05	882

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.00	260	100.10	595	112.05	1246	122.05	1761
89.05	71	101.00	3789	113.05	478	123.05	2979
91.10	1654	101.95	285	114.05	67	124.00	1293
92.05	1856	103.05	1192	115.00	162	125.05	1350
93.05	10053	104.05	2357	116.05	1985	127.05	115728
94.05	665	105.05	2059	117.05	20003	128.05	8741
95.05	168	106.15	737	118.05	1615	129.05	43585
96.05	405	107.00	29703	119.10	304	130.05	3755
97.15	93	108.05	5093	119.85	185	131.05	643
98.05	7407	110.00	56266	120.05	299	131.95	231
99.05	6430	111.05	8406	121.00	217	133.05	274

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.05	1168	145.05	145	156.05	4409	167.00	10249
135.05	3171	146.05	985	157.00	841	168.05	4782
136.05	1314	147.05	2842	158.00	874	169.00	847
137.05	1411	148.05	5793	159.05	859	170.05	349
138.10	491	149.05	1612	160.00	1574	171.00	487
139.10	309	150.10	442	161.00	2714	172.00	973
140.10	594	151.05	537	162.05	902	173.00	1336
141.05	5390	151.65	486	163.10	316	174.00	2167
142.05	1915	153.05	1888	164.05	436	175.05	4415
143.00	1327	154.05	1376	164.95	1862	175.95	274
144.05	449	155.05	3106	166.00	1583	176.10	1001

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.00	1824	187.05	8200	199.00	16612	210.35	592
178.00	204	188.10	930	200.05	1384	211.05	2186
179.05	8509	189.00	1645	201.55	1351	211.95	75
180.05	5361	190.05	406	203.00	1642	213.00	212
181.05	3015	191.05	964	204.05	8637	214.95	657
182.05	469	192.00	2366	205.05	14047	216.05	853
182.85	137	193.05	3074	206.05	59165	217.00	14740
183.05	90	194.05	857	207.05	7982	218.00	1946
184.00	627	195.00	451	208.05	1873	218.95	81
185.05	4027	196.00	6989	209.05	833	219.35	132
186.05	31765	198.00	235442	210.10	691	221.05	11769

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
223.05	3310	232.90	216	242.05	1794	252.85	118
224.05	32528	234.00	862	243.10	1572	253.00	593
225.05	8288	234.90	744	244.05	26592	255.05	136101
226.10	865	235.15	164	245.10	3623	256.05	19340

227.05	13162	236.05	637	246.05	5047	257.05	1686
228.05	2050	237.00	1276	247.00	1058	258.05	7590
229.05	2791	237.95	76	248.00	216	259.05	1329
229.85	109	239.00	652	249.00	987	259.85	179
230.05	403	239.95	152	250.00	198	260.05	110
231.05	1173	240.15	183	251.05	269	261.10	205
232.00	395	241.00	851	252.05	226	262.95	80

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
263.85	152	277.05	5184	290.00	160	303.05	2193
265.00	3088	278.05	808	290.95	73	304.05	303
265.85	298	279.10	196	291.95	252	307.90	220
269.90	271	281.05	50	293.00	1291	309.05	299
270.15	132	282.05	115	294.00	283	310.00	217
271.00	463	283.00	507	295.05	88	312.95	87
272.00	484	284.00	470	296.05	17400	314.00	922
273.05	4644	285.05	882	297.05	2520	314.95	1972
274.05	11026	286.15	176	297.95	145	316.05	1321
275.05	59290	288.05	71	301.00	184	317.05	210
276.05	8187	289.05	353	302.10	386	321.00	633

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
322.00	280	335.00	1060	354.05	1618	384.00	313
323.05	5625	336.05	99	355.05	421	390.05	454
324.05	1175	338.95	67	358.05	74	391.00	291
325.05	72	340.95	365	358.95	176	392.10	200
326.95	1229	341.15	239	365.05	7084	401.00	241
328.10	520	342.05	229	366.00	1258	402.00	1206
329.05	88	346.00	1168	370.05	205	403.05	1704
332.10	418	347.00	188	371.10	339	404.00	782
332.85	88	351.05	96	372.05	2893	421.05	1393
333.05	381	352.05	1741	373.05	830	421.85	82
334.05	3718	353.05	1152	383.00	947	422.00	1116

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

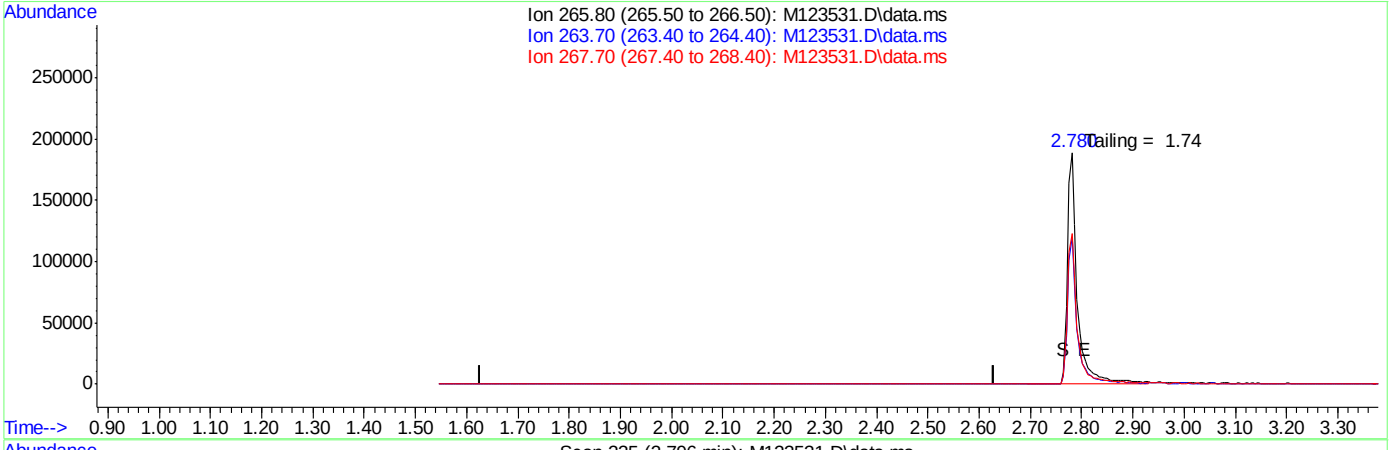
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.05	10276						
424.00	1908						
425.05	231						
429.25	67						
437.95	107						
438.55	101						
441.05	25886						
442.05	176602						
443.05	33324						
444.05	3133						
444.95	87						

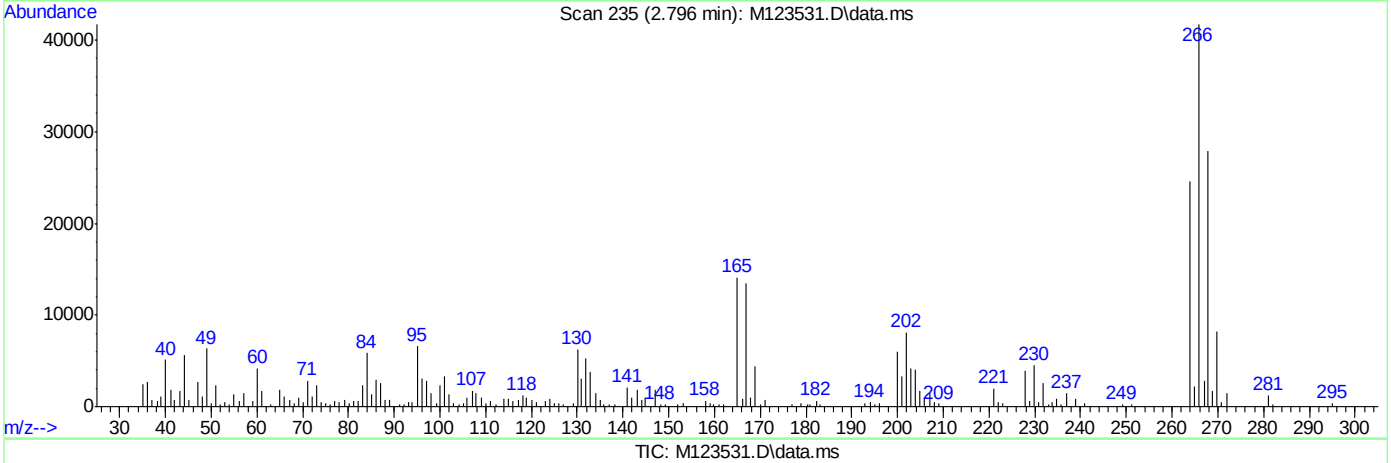
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 09:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123531.D\data.ms

(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

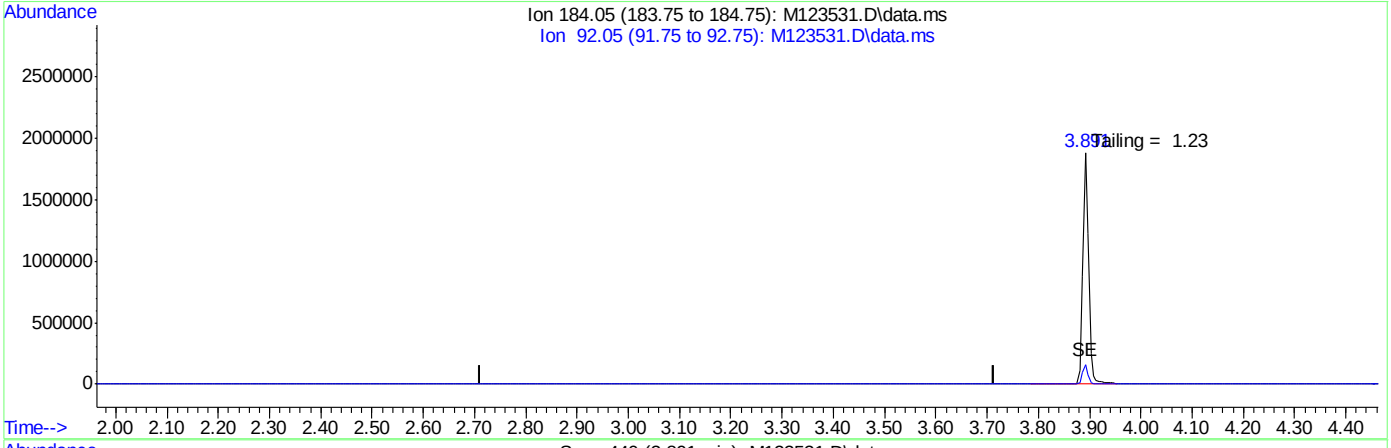
response 0

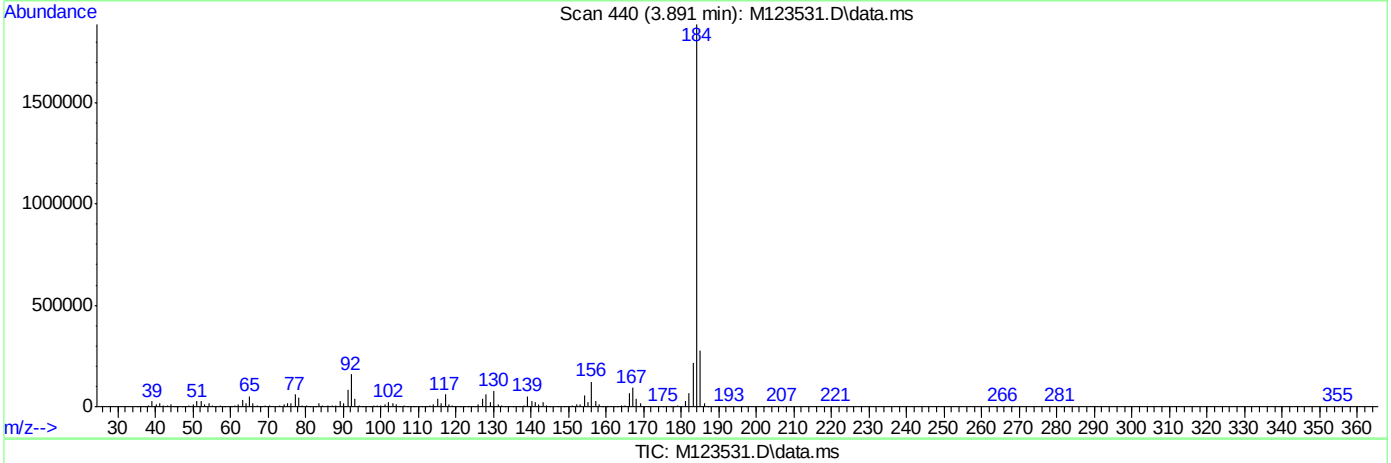
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 09:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





(2) Benzidine (M)

3.213min (-3.213) 0.00ppm

response 0

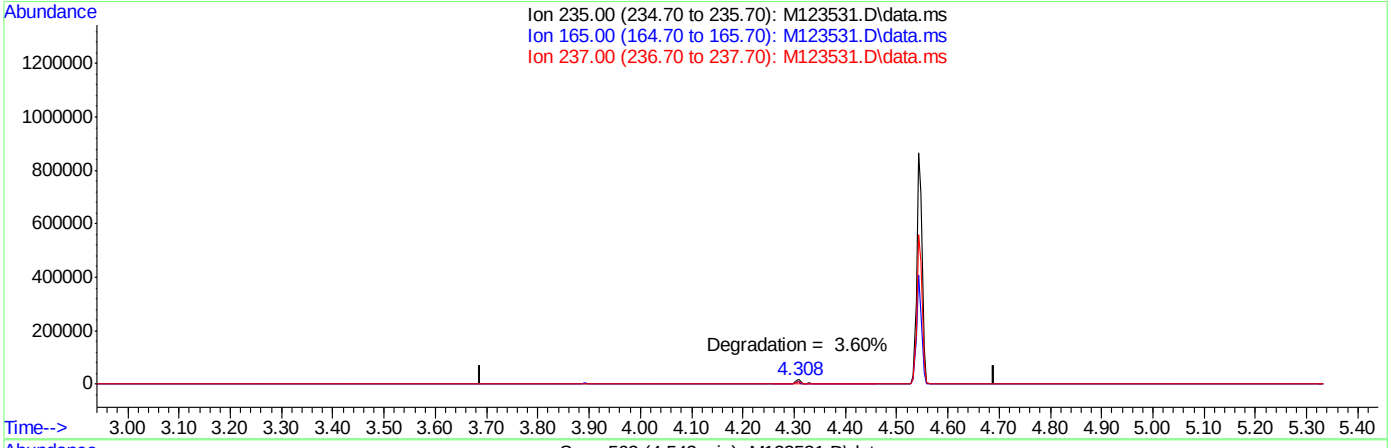
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

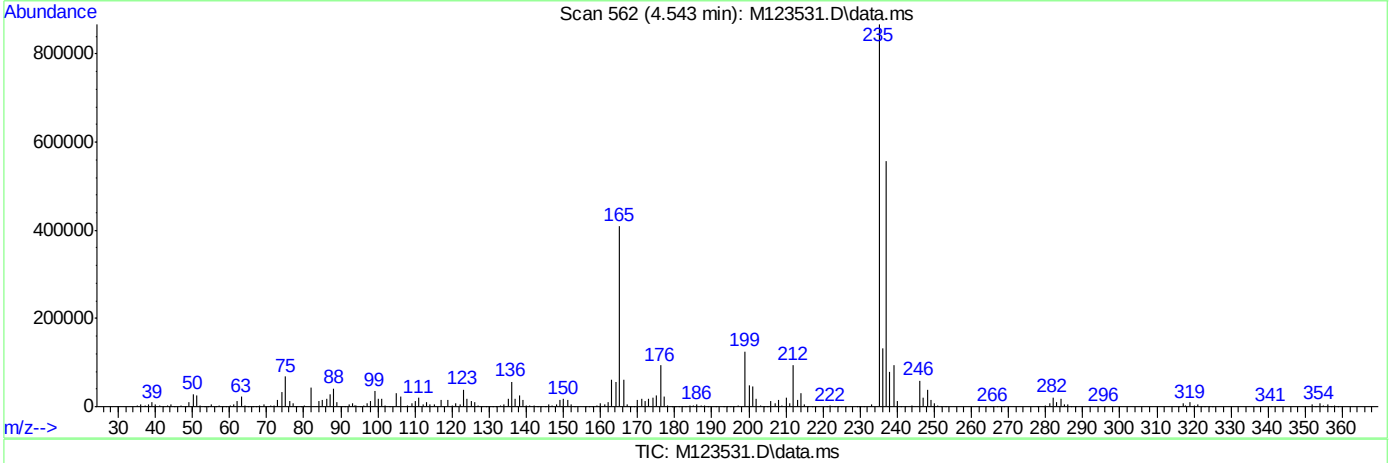
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 09:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123531.D\data.ms

(3) PP-DDT (MC)

4.190min 0.00ppm d

response 0

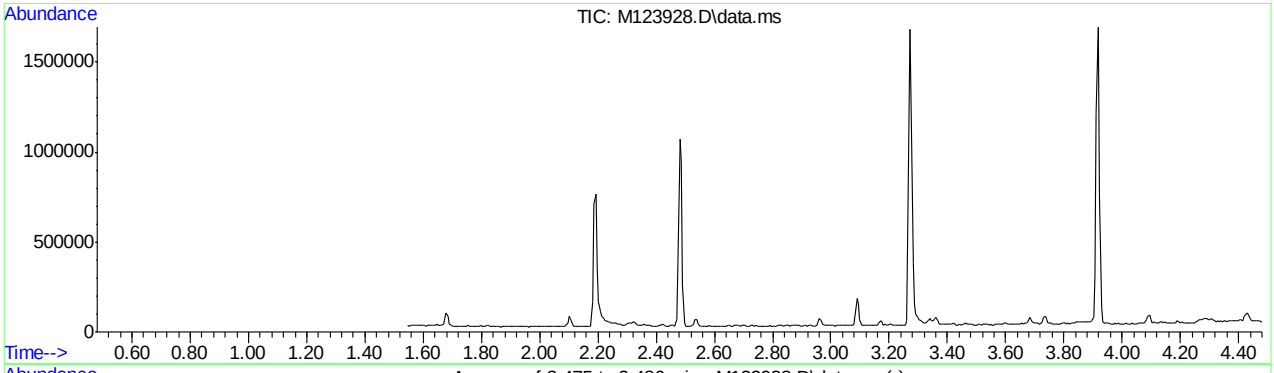
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00
237.00	64.20	0.00
0.00	0.00	0.00

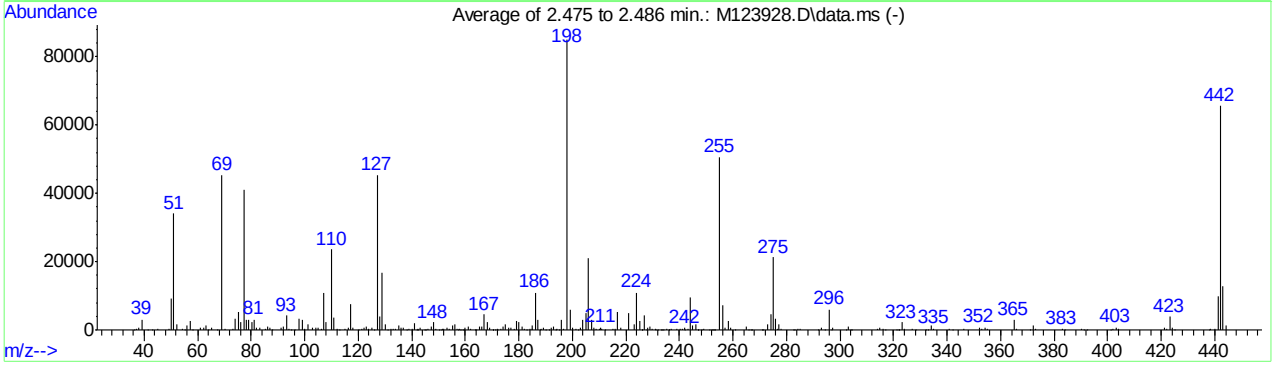
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





AutoFind: Scans 175, 176, 177; Background Corrected with Scan 171

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.0	34029	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	53.3	45368	PASS
70	69	0.00	2	0.6	254	PASS
127	198	40	60	53.4	45424	PASS
197	198	0.00	1	0.3	257	PASS
198	198	100	100	100.0	85050	PASS
199	198	5	9	7.0	5953	PASS
275	198	10	30	25.1	21324	PASS
365	198	1	100	3.4	2923	PASS
441	443	0.10	100	78.3	9960	PASS
442	198	40	100	77.0	65516	PASS
443	442	17	23	19.4	12724	PASS

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	69	54.20	191	69.00	45368	82.05	615
37.05	331	55.15	117	70.10	254	83.10	601
38.10	546	56.10	1406	73.10	459	85.10	432
39.15	3005	57.10	2604	74.10	3258	86.05	1006
41.15	160	58.05	108	75.10	5295	87.10	513
43.15	108	61.10	556	76.20	2441	87.95	35
45.20	349	62.10	564	77.15	41213	91.05	618
49.10	394	63.10	1452	78.15	3111	92.10	868
50.15	9072	64.05	174	79.10	2929	93.10	4271
51.15	34029	65.05	535	80.10	2273	94.05	448
52.10	1806	67.15	132	81.10	2975	94.95	122

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	160	110.05	23573	123.00	1130	134.00	462
98.05	3256	111.05	3667	124.00	410	135.10	1228
99.05	2831	112.00	436	125.10	581	136.05	628
100.05	203	113.15	162	125.75	66	137.00	767
101.05	1605	115.10	249	127.05	45424	138.05	134
103.05	620	116.20	771	128.05	4020	139.10	258
104.00	830	117.05	7459	129.05	16666	140.10	251
105.10	722	118.00	599	130.05	1488	141.05	1842
106.15	269	120.15	110	131.00	120	141.75	160
107.00	10806	121.30	229	132.05	181	142.05	432
108.05	2153	122.00	683	133.00	254	142.25	147

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
143.00	614	153.05	575	161.00	875	171.00	149
144.95	109	154.05	452	162.05	319	171.85	68
145.35	76	155.05	1287	163.75	112	172.10	244
146.05	451	156.10	1804	164.05	91	173.05	405
147.10	1017	157.05	321	165.10	904	174.05	1010
148.00	2241	157.25	154	166.10	847	175.10	1682
149.15	495	157.95	327	167.00	4554	176.10	638
150.05	166	158.25	79	168.05	2156	177.00	723
151.05	102	158.95	110	169.10	511	178.10	227
151.45	219	159.25	101	170.25	97	179.05	2636
152.05	313	160.00	571	170.45	102	180.05	2305

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.05	994	190.05	100	200.00	591	210.70	766
182.15	211	191.05	116	201.50	470	211.10	484
183.05	71	192.05	691	202.05	69	212.05	73
184.00	208	193.05	1082	203.05	686	215.05	185
184.95	306	193.85	92	204.00	2899	216.15	263
185.10	1211	194.15	196	205.05	4931	217.00	5350
186.05	10899	194.95	74	206.05	21078	218.00	730
187.05	3074	196.05	2989	207.05	3124	221.05	5042
188.05	95	196.75	257	208.00	791	223.05	1640
188.20	287	198.05	85050	209.00	298	224.05	10992
189.05	631	199.05	5953	209.95	243	225.05	2628

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.85	76	233.75	71	243.05	379	252.85	68
226.15	72	233.95	119	244.05	9451	253.15	105
227.00	4303	235.05	343	245.05	1451	255.05	50650
227.85	149	235.95	93	246.10	1569	256.05	7167

DFTPPM.M Wed Apr 27 14:47:48 2016 MSM Page: 2

228.00	577	236.15	148	246.75	113	257.05	618
229.00	1045	237.05	400	246.95	157	258.05	2743
229.95	243	239.10	219	248.05	67	258.90	540
230.85	69	240.05	180	248.95	291	260.95	78
231.00	396	240.95	369	251.05	67	264.95	1032
232.05	74	241.85	101	251.95	169	265.85	156
233.25	68	242.05	644	252.25	79	266.75	153

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
267.15	70	283.15	102	303.95	104	326.95	381
270.85	96	284.10	237	304.15	86	328.05	137
271.05	129	285.00	391	314.05	355	332.05	108
273.00	1543	291.90	165	314.95	774	332.95	107
274.05	4615	293.00	548	315.95	294	334.00	1358
275.05	21324	294.25	70	316.85	88	335.00	367
276.05	3236	296.05	5934	321.05	135	340.90	287
276.85	208	296.85	80	321.85	71	341.95	69
277.05	1556	297.05	788	322.05	89	346.05	371
278.00	331	302.05	79	323.00	2181	352.00	786
282.75	70	303.05	897	324.00	295	353.00	349

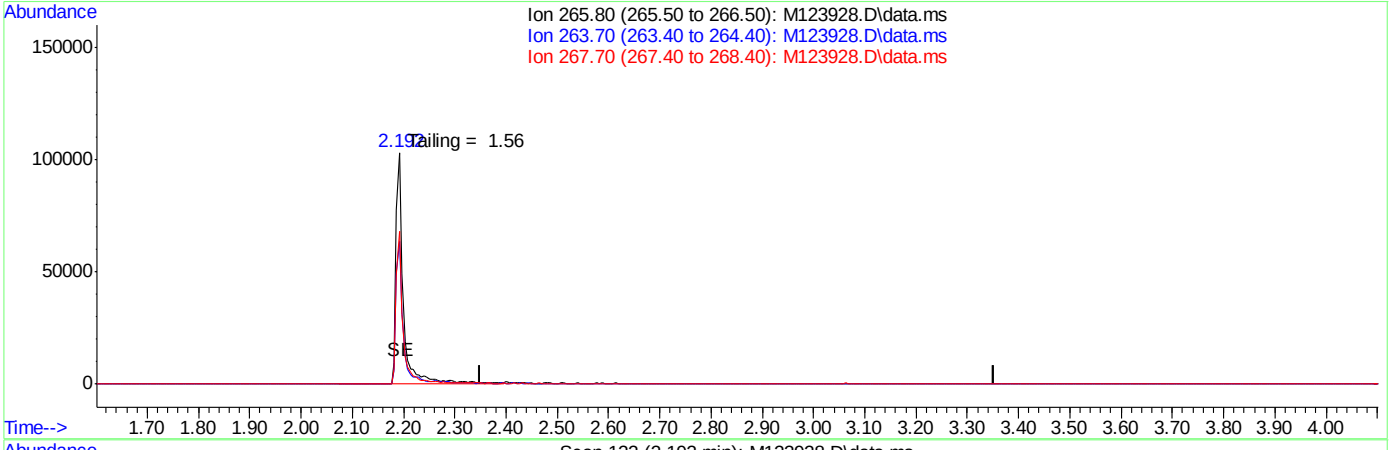
Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

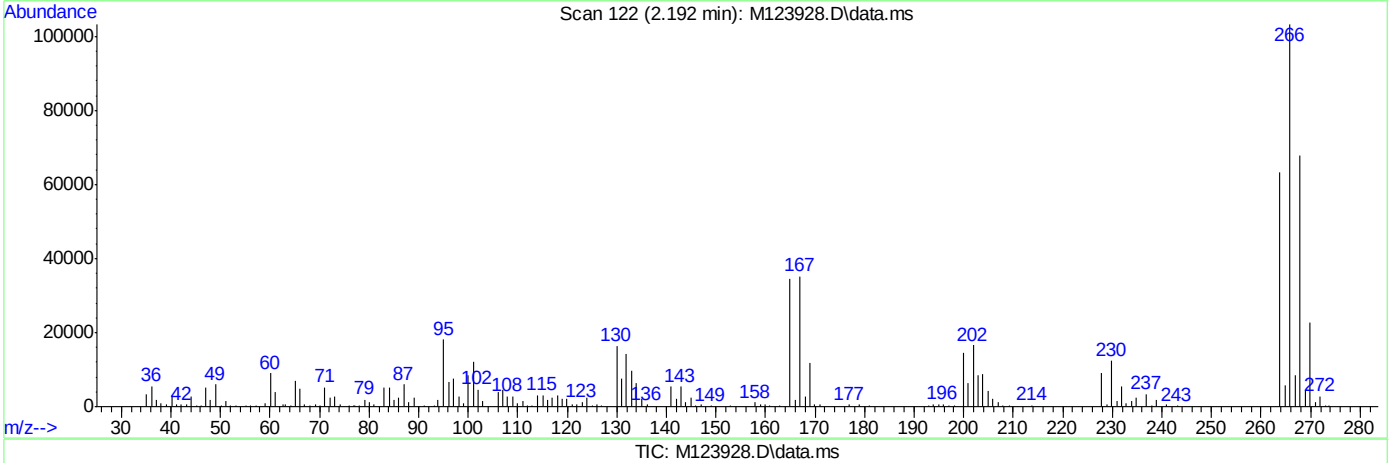
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.05	791	392.25	91	438.35	179		
354.90	178	401.15	75	439.95	292		
365.05	2923	401.90	356	441.05	9960		
366.00	434	403.00	804	442.05	65516		
371.00	156	403.95	348	443.05	12724		
372.00	1307	420.95	582	444.05	1182		
373.10	372	422.00	417				
383.00	274	423.05	3802				
383.95	87	424.05	750				
390.00	220	425.05	85				
391.15	70	437.75	78				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 23:11:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123928.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

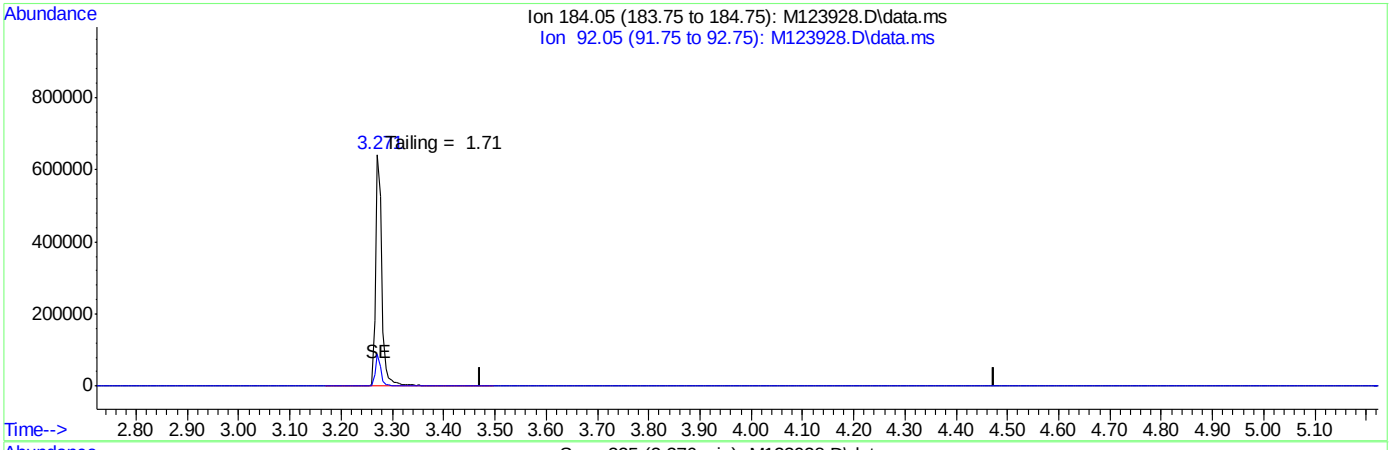
response 0

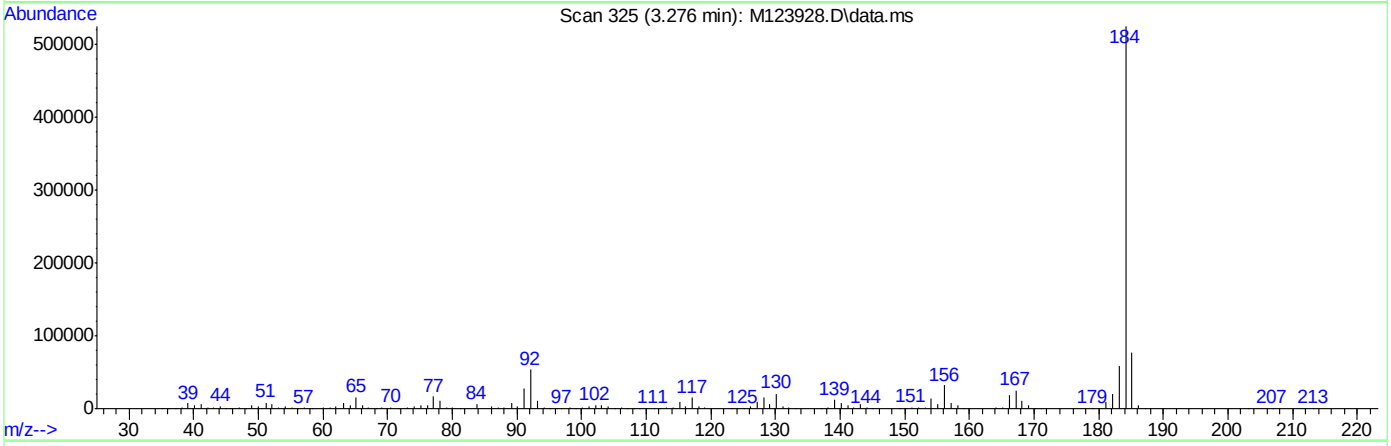
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 23:11:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123928.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

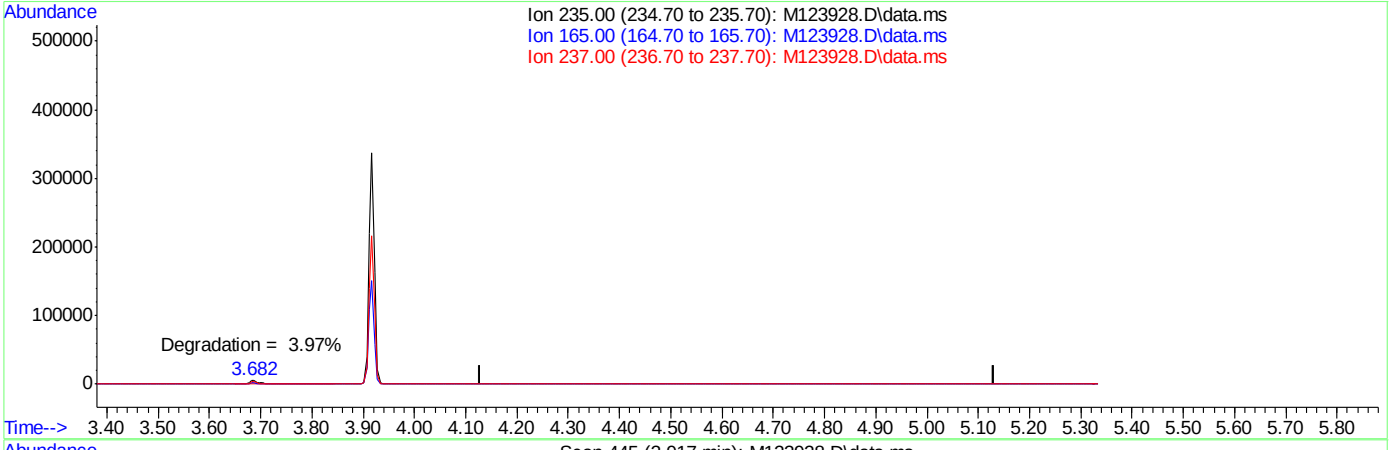
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

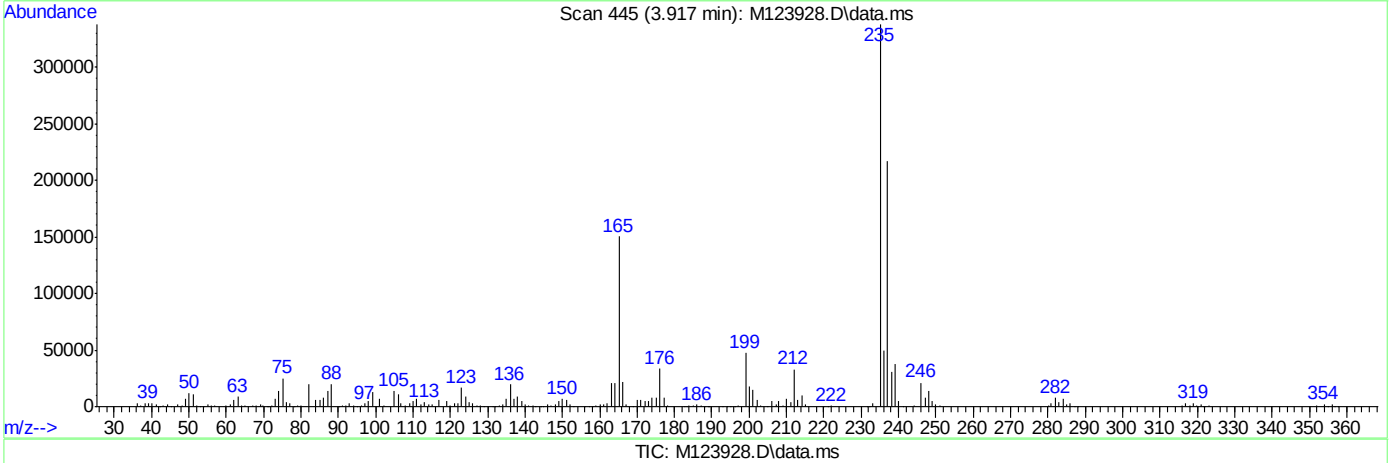
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 23:11:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123928.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

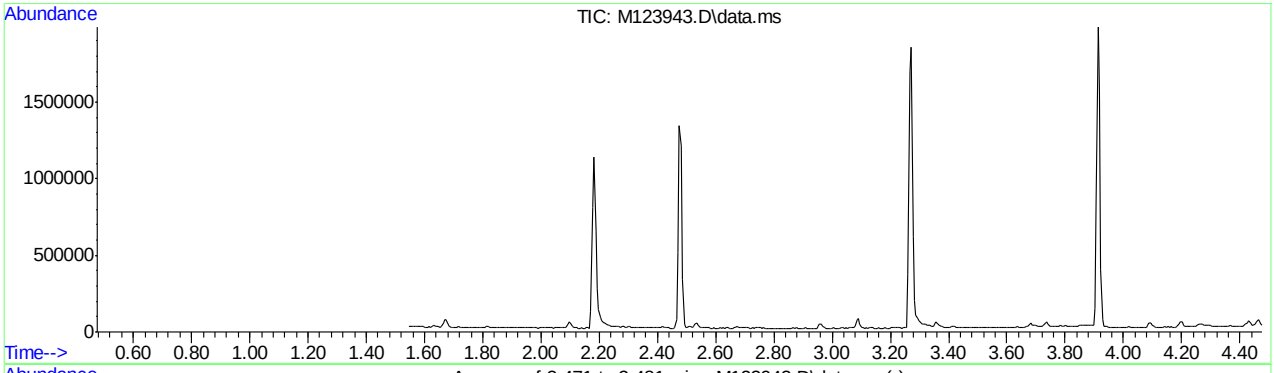
SGS ACCUTEST JC19914

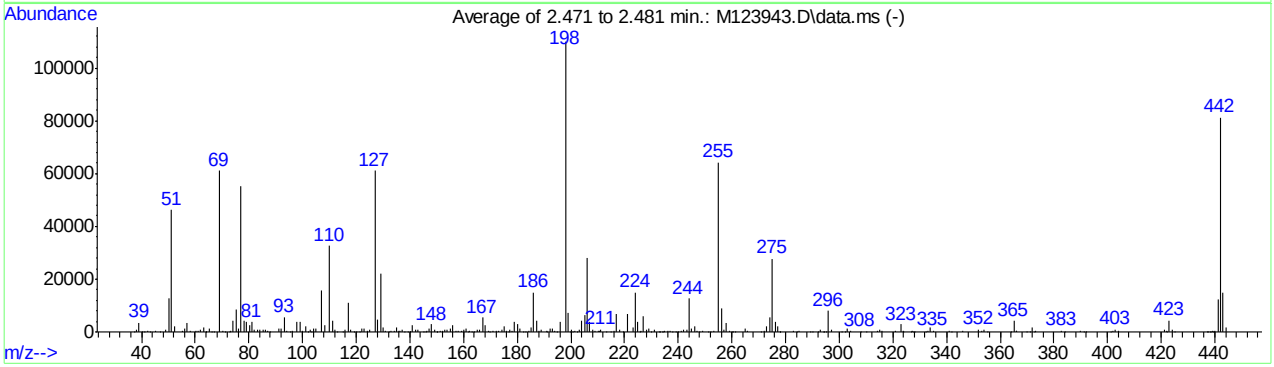
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





AutoFind: Scans 174, 175, 176; Background Corrected with Scan 169

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.0	46216	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	55.5	61082	PASS
70	69	0.00	2	0.7	425	PASS
127	198	40	60	55.4	61005	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	110050	PASS
199	198	5	9	6.7	7381	PASS
275	198	10	30	25.1	27635	PASS
365	198	1	100	3.7	4073	PASS
441	443	0.10	100	83.0	12499	PASS
442	198	40	100	73.8	81226	PASS
443	442	17	23	18.5	15057	PASS

SGS ACCUTEST JC19914

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	81	51.10	46216	64.15	71	76.15	1384
38.10	744	52.15	2254	65.10	1223	77.15	55118
39.10	3527	55.15	362	66.15	86	78.15	4442
40.05	207	56.05	1389	67.05	21	79.05	3663
41.10	198	57.10	3577	69.00	61082	80.10	2698
42.20	325	58.15	276	70.20	425	81.05	3654
43.10	64	60.15	291	71.05	80	82.10	1043
45.10	396	61.10	556	72.95	173	83.10	857
47.00	150	62.10	734	73.25	248	84.05	733
49.10	787	63.10	1766	74.10	4448	85.15	692
50.15	12623	63.95	202	75.10	8459	86.05	852

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.05	550	101.10	1992	113.05	192	125.00	790
88.00	213	102.10	142	114.95	89	127.05	61005
91.10	1140	103.00	759	116.00	725	128.10	4672
92.10	1212	103.25	115	117.05	11047	129.05	22318
93.05	5676	104.10	1161	118.00	697	130.00	1829
94.10	618	105.05	1090	119.15	72	131.05	430
95.25	108	107.05	15766	119.95	164	132.05	195
96.10	442	108.10	2603	121.05	188	133.10	319
98.05	3856	110.05	32594	122.10	1104	134.10	634
99.05	3688	111.05	4320	123.05	1313	135.05	1699
100.10	369	112.05	678	124.05	642	135.85	358

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.10	383	146.10	402	156.10	2507	166.10	857
137.10	909	147.05	1361	157.10	547	167.05	5418
137.75	67	148.05	2953	158.10	561	168.10	2366
139.05	78	149.05	810	159.05	371	169.10	385
140.05	201	149.95	88	160.05	806	169.85	133
140.25	147	150.15	68	161.10	1343	171.05	277
141.05	2517	151.15	465	161.75	70	172.00	259
142.05	944	152.15	268	162.10	307	173.00	599
143.10	693	153.00	854	163.05	97	174.10	1042
145.05	85	154.00	656	164.05	70	175.05	2025
145.85	90	155.05	1270	165.00	890	176.15	615

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.85	150	187.05	4328	199.05	7381	208.00	859
177.05	824	188.05	486	199.75	123	209.10	387
178.05	392	189.05	917	200.05	716	210.15	241
179.05	3860	190.85	76	200.75	76	210.60	595
180.05	2890	191.05	436	201.50	572	211.10	1038
181.05	1371	192.10	1168	202.15	95	213.15	73
182.15	175	193.10	1427	203.10	661	214.95	172
182.95	113	194.10	296	204.05	4103	216.05	474
184.20	429	194.85	130	205.05	6515	217.05	6650
185.10	1900	196.05	3693	206.05	27932	218.00	1034
186.05	14895	198.05	110050	207.05	3646	219.55	92

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.05	6611	232.95	95	242.05	702	255.05	64253
223.05	1624	233.25	85	243.10	1040	256.05	9077
224.05	14895	233.95	114	244.05	12700	257.00	841
225.05	3901	234.25	107	245.05	1440	258.05	3494

DFTPPM.M Wed Apr 27 14:50:43 2016 MSM Page: 2

225.85	73	234.95	318	246.05	2317	259.00	646
226.10	348	236.05	385	247.05	410	259.85	71
227.00	5962	237.10	512	247.95	159	260.25	81
228.05	931	237.85	71	249.00	457	261.05	155
229.05	1321	239.05	207	251.15	103	265.10	1406
230.00	210	240.05	223	252.15	74	265.80	265
231.10	677	241.00	287	253.15	287	270.95	136

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
272.10	277	289.25	83	303.10	1109	326.85	171
273.05	2186	290.05	78	304.05	391	327.05	268
274.05	5497	292.05	90	307.85	72	327.75	140
275.05	27635	293.00	739	310.05	67	328.05	110
276.05	3689	294.05	88	314.10	442	332.15	193
277.05	2023	294.25	70	315.00	795	333.05	368
277.85	146	294.95	105	316.05	446	334.05	1711
278.05	186	296.05	7966	321.10	333	335.00	519
282.85	270	297.00	1067	323.05	2865	341.05	397
284.05	154	300.85	85	323.85	130	341.95	104
285.00	375	302.15	83	324.00	447	346.00	570

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

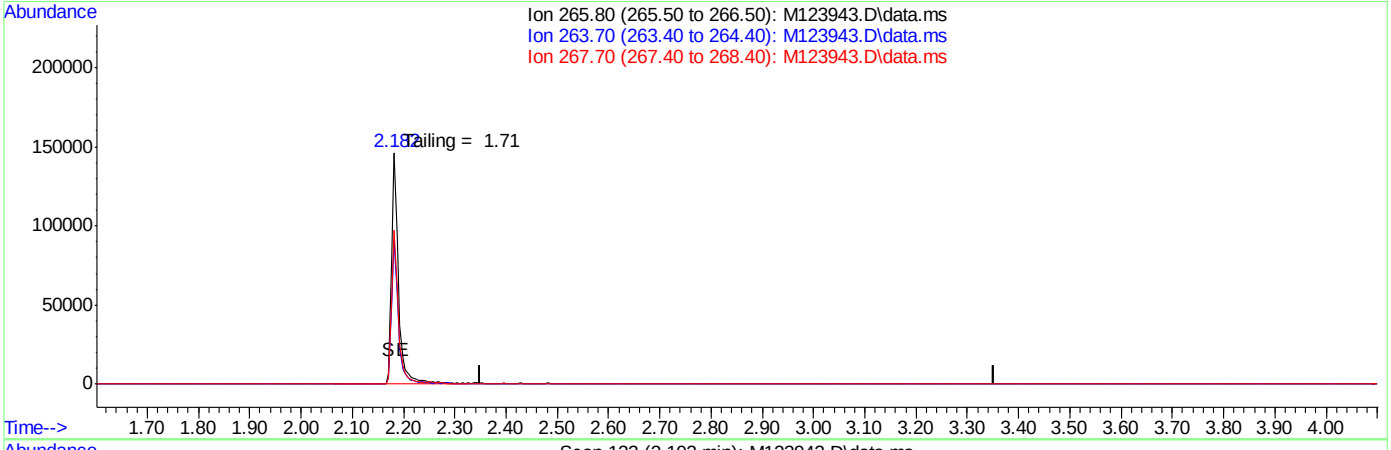
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.05	914	372.85	116	421.00	667	439.25	117
353.05	560	373.05	250	421.95	76	439.45	173
354.05	963	382.95	435	422.10	611	439.90	283
355.10	194	384.05	96	423.05	4450	441.05	12499
363.95	83	389.95	231	424.00	977	442.05	81226
365.05	4073	391.05	68	425.05	76	443.05	15057
365.85	331	392.15	82	437.25	83	444.00	1504
366.10	367	401.05	90	437.65	90		
369.85	72	402.05	585	438.15	95		
370.95	220	403.00	939	438.35	113		
372.05	1563	404.05	342	438.95	255		

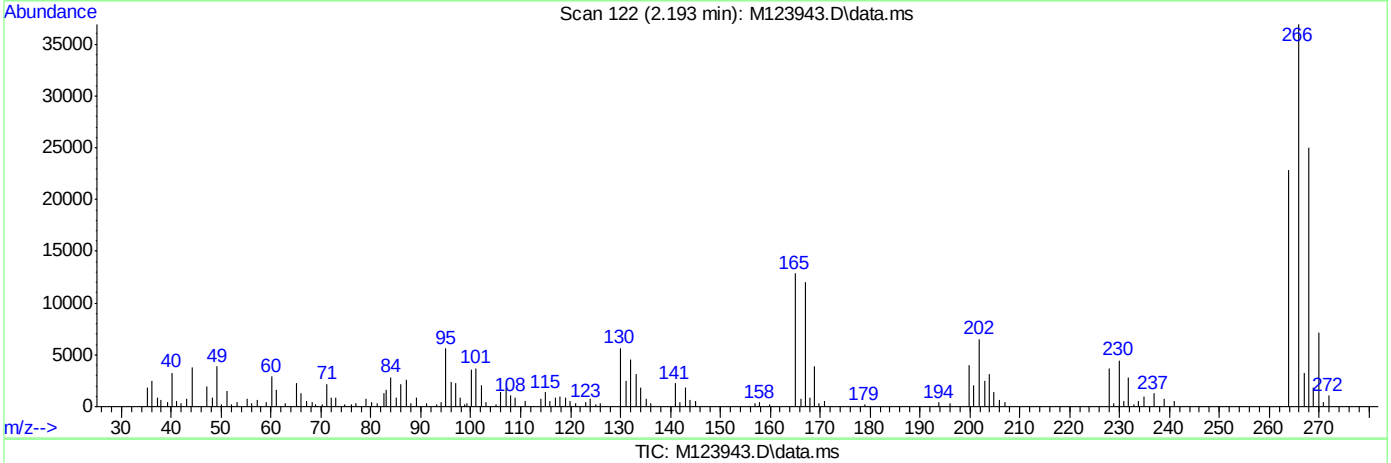
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 11:04:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

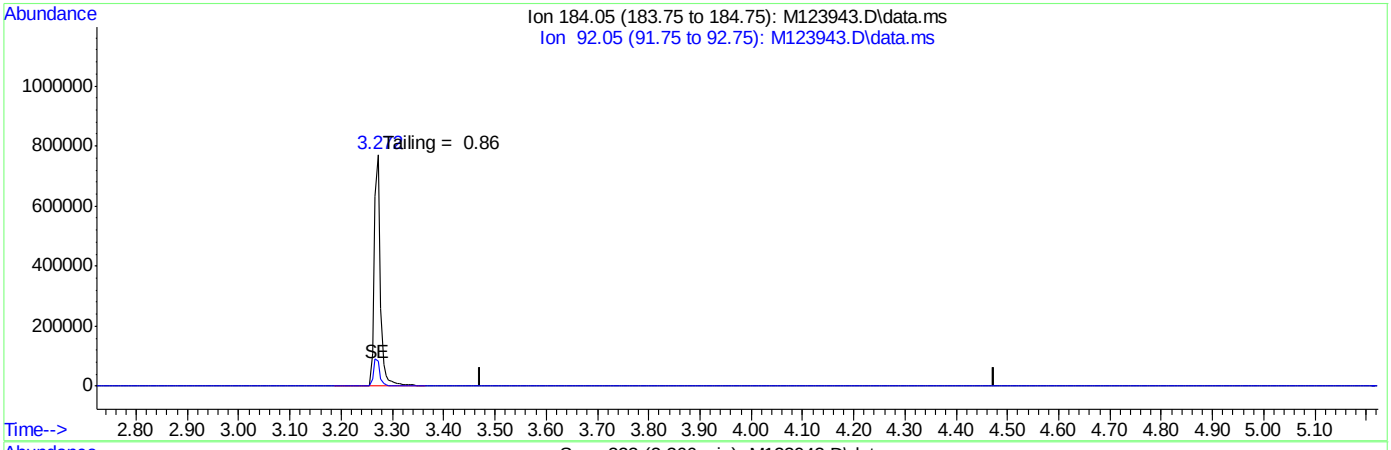
response 0

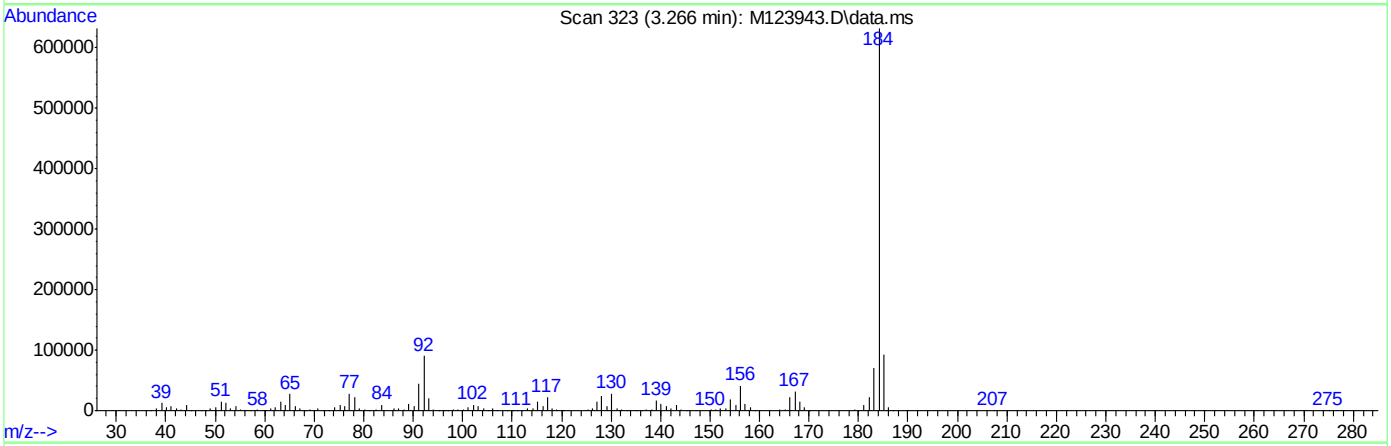
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 11:04:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123943.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

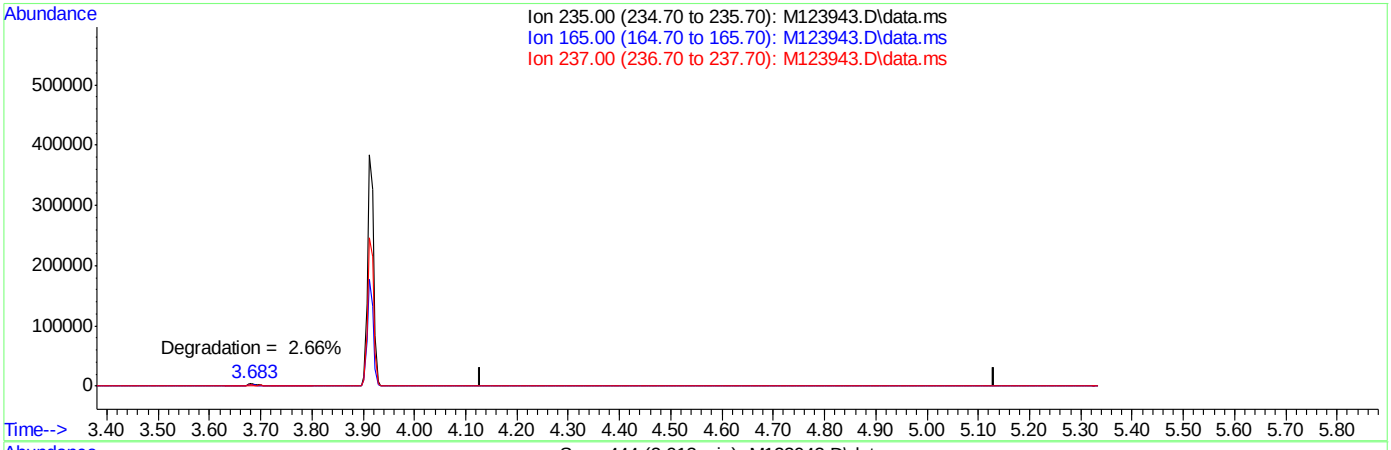
response 0

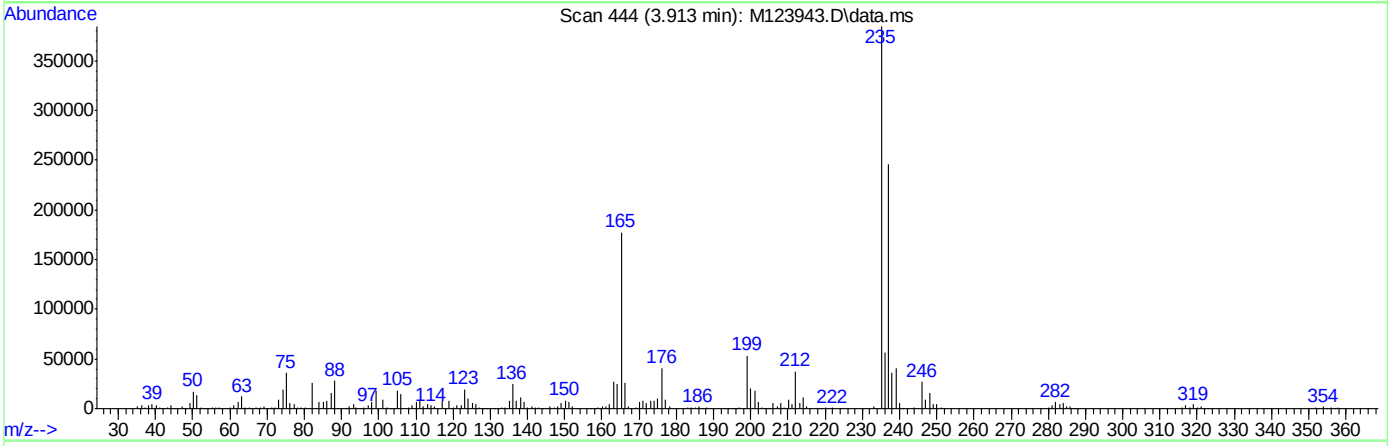
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 11:04:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123943.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

response 0

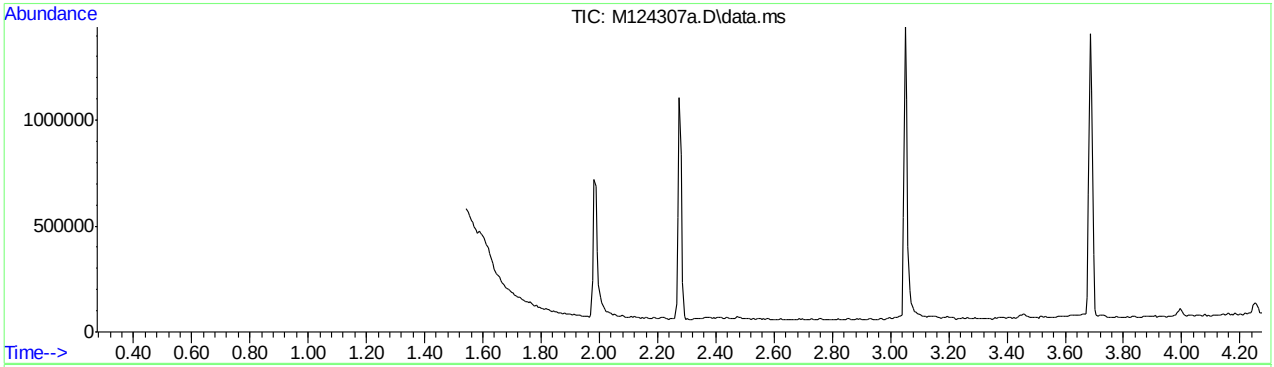
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

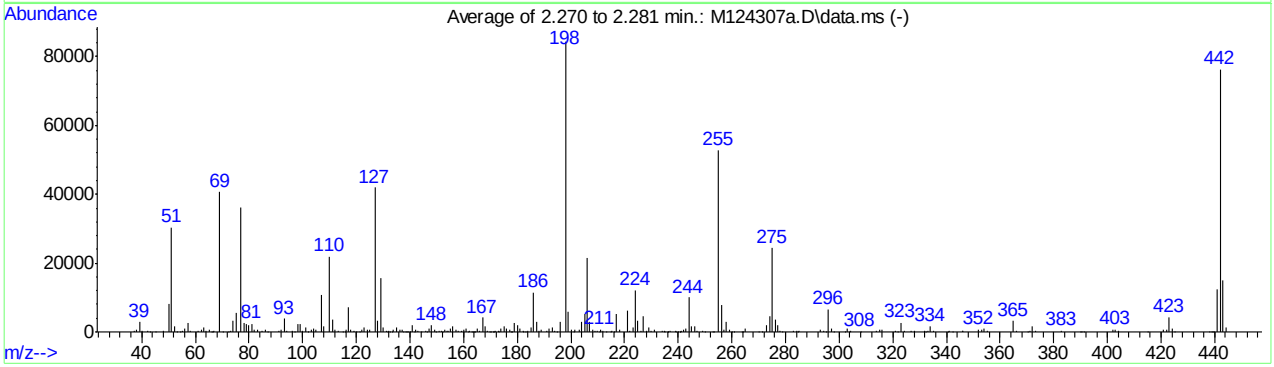
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124307a.D
Acq On : 10 May 2016 9:23 pm
Operator : juliusj
Sample : dftpp
Misc : op93478,em5259
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





AutoFind: Scans 137, 138, 139; Background Corrected with Scan 132

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	30434	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.1	40588	PASS
70	69	0.00	2	0.3	112	PASS
127	198	40	60	49.7	41970	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	84389	PASS
199	198	5	9	7.1	5963	PASS
275	198	10	30	28.9	24363	PASS
365	198	1	100	3.9	3251	PASS
441	443	0.10	100	83.4	12431	PASS
442	198	40	100	90.5	76346	PASS
443	442	17	23	19.5	14910	PASS

SGS ACCUTEST JC19914

Average of 2.270 to 2.281 min.: M124307a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	435	53.10	44	66.15	139	79.05	2328
38.05	537	54.15	86	66.35	78	80.05	1979
39.15	2913	55.10	342	67.10	176	81.05	2325
40.10	195	56.10	906	69.00	40588	82.10	523
42.10	223	57.15	2643	70.05	112	83.10	507
43.15	165	58.05	329	72.15	138	85.05	311
45.10	99	61.10	267	73.00	456	86.00	803
48.15	191	62.10	555	74.10	3226	87.10	99
50.10	8225	63.15	1472	75.05	5502	91.05	465
51.10	30434	64.10	272	77.10	36331	92.10	678
52.10	1540	65.10	650	78.05	2718	93.05	3792

Average of 2.270 to 2.281 min.: M124307a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.20	342	107.05	10804	119.10	265	131.05	373
96.00	416	108.05	1569	119.95	118	131.85	123
97.05	167	110.05	21906	121.10	22	132.20	189
98.10	2415	111.05	3456	122.05	792	132.55	78
99.05	2248	112.00	544	123.05	1227	133.15	148
100.00	338	113.10	283	124.05	629	133.95	513
101.05	1395	115.05	130	125.00	605	135.00	1373
102.15	135	115.95	162	127.05	41970	136.05	516
103.10	561	116.20	511	128.05	3393	137.00	697
104.05	1091	117.05	7309	129.05	15808	137.55	85
105.00	718	118.05	723	130.05	1219	138.15	157

Average of 2.270 to 2.281 min.: M124307a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
138.85	93	148.10	2066	157.15	511	165.00	956
139.15	89	149.10	540	158.05	422	166.05	401
140.15	79	149.75	76	159.05	316	167.00	4098
141.00	1847	151.05	407	159.90	623	168.05	1786
141.75	103	151.65	377	161.05	957	169.00	494
142.15	665	151.95	102	161.85	90	169.65	77
143.05	299	153.05	597	162.10	256	170.05	141
144.10	158	153.95	185	163.15	95	170.95	121
146.00	250	154.10	385	163.45	74	171.25	144
146.35	101	155.05	978	163.85	84	171.90	265
147.10	919	156.05	1605	164.15	67	172.95	120

Average of 2.270 to 2.281 min.: M124307a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.10	388	182.35	71	194.10	423	206.05	21393
174.05	914	182.95	139	194.95	115	207.00	3000
175.10	1642	184.05	213	196.00	3052	208.00	746
176.10	867	185.05	1433	197.95	84389	209.00	204
177.00	718	186.05	11492	199.00	5963	210.00	386
177.75	111	187.05	3003	200.00	561	210.45	131
178.15	132	188.10	399	200.95	107	210.90	669
178.95	2509	189.05	581	201.50	774	211.15	371
180.05	1939	191.00	358	203.10	634	211.75	303
181.05	1049	192.00	886	204.05	3059	213.05	127
182.15	176	193.00	1219	205.00	5192	214.85	70

Average of 2.270 to 2.281 min.: M124307a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
215.10	271	228.00	434	239.15	110	249.00	284
215.95	160	229.05	1265	240.05	71	249.95	71
216.95	5286	229.95	242	240.65	108	252.85	125
218.05	619	231.05	561	240.85	154	253.05	139

DFTPPM.M Wed May 11 08:58:30 2016 MSM Page: 2

221.05	6120	234.05	335	241.15	194	255.05	52797
221.95	213	234.75	79	242.10	695	256.00	7686
223.10	1378	234.95	395	242.95	861	257.00	697
224.05	12202	235.95	72	244.05	10086	258.05	2817
225.00	3116	236.25	104	245.10	1576	258.95	522
226.15	313	237.00	475	246.00	1663	260.05	69
227.05	4418	238.95	192	247.00	415	260.95	78

Average of 2.270 to 2.281 min.: M124307a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
263.85	110	278.95	78	302.15	80	324.10	425
264.15	112	283.00	328	303.00	870	327.00	499
265.00	1001	284.10	197	303.95	69	327.90	280
269.85	87	284.75	86	304.10	204	332.00	263
271.05	172	285.05	374	307.95	86	332.35	77
273.00	2046	292.95	591	314.05	284	333.15	280
274.05	4661	294.10	241	315.00	754	334.05	1678
275.05	24363	294.85	135	316.05	605	335.00	424
276.05	3483	296.00	6570	320.95	217	340.75	77
277.10	1825	296.95	1078	321.85	138	341.05	247
278.00	355	298.15	67	323.05	2705	342.15	72

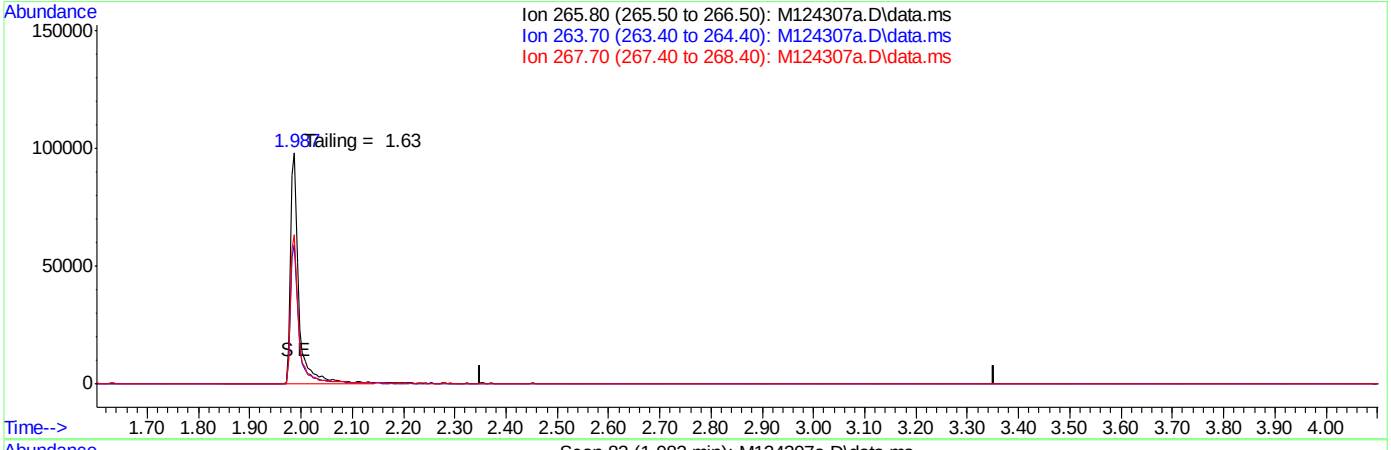
Average of 2.270 to 2.281 min.: M124307a.D\data.ms
dftpp
Modified:subtracted

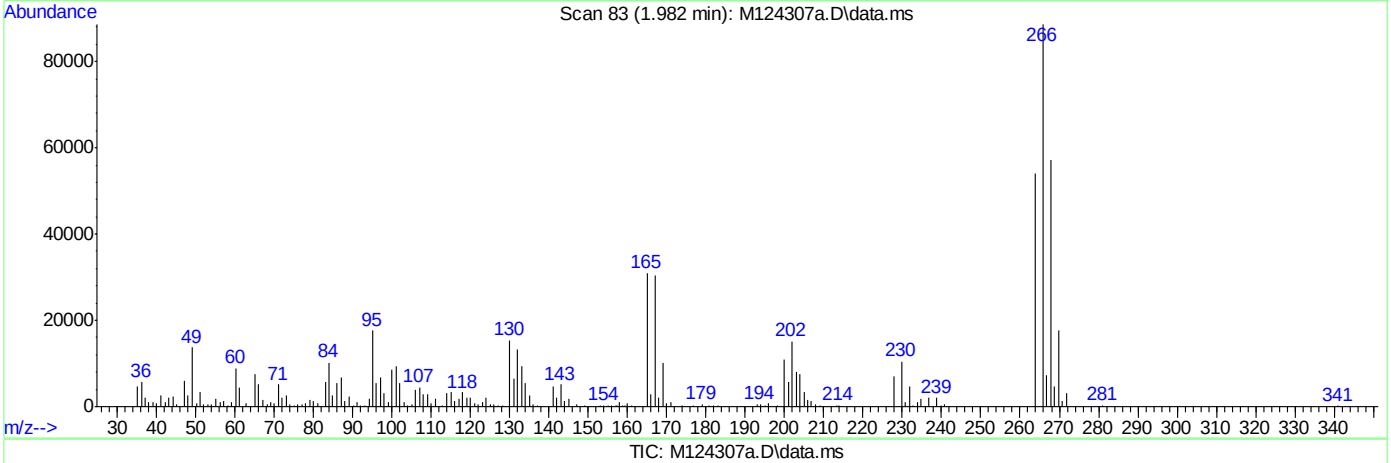
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
345.85	333	373.00	244	423.05	4328		
346.05	195	383.00	472	424.05	970		
352.05	821	389.85	72	424.95	88		
353.05	707	390.25	78	437.75	104		
354.05	872	390.95	68	438.65	89		
355.15	221	402.05	707	439.15	81		
365.00	3251	403.00	807	439.45	122		
366.00	466	403.90	263	441.05	12431		
370.05	71	415.15	68	442.05	76346		
370.95	191	421.00	775	443.05	14910		
372.05	1518	422.05	706	444.05	1215		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124307a.D
Acq On : 10 May 2016 9:23 pm
Operator : juliusj
Sample : dftpp
Misc : op93478,em5259
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 21:29:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M124307a.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

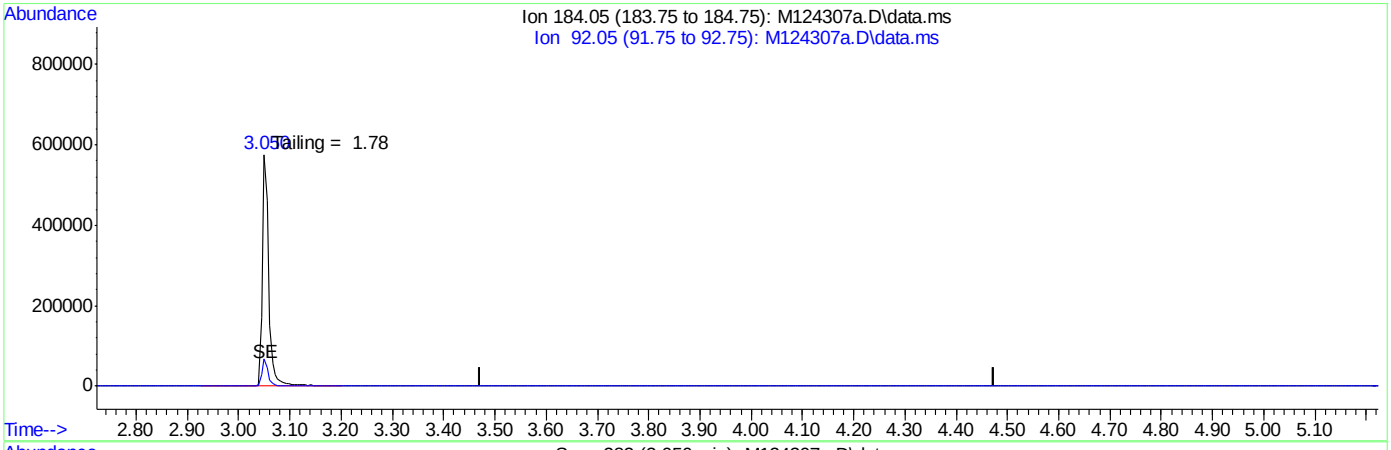
response 0

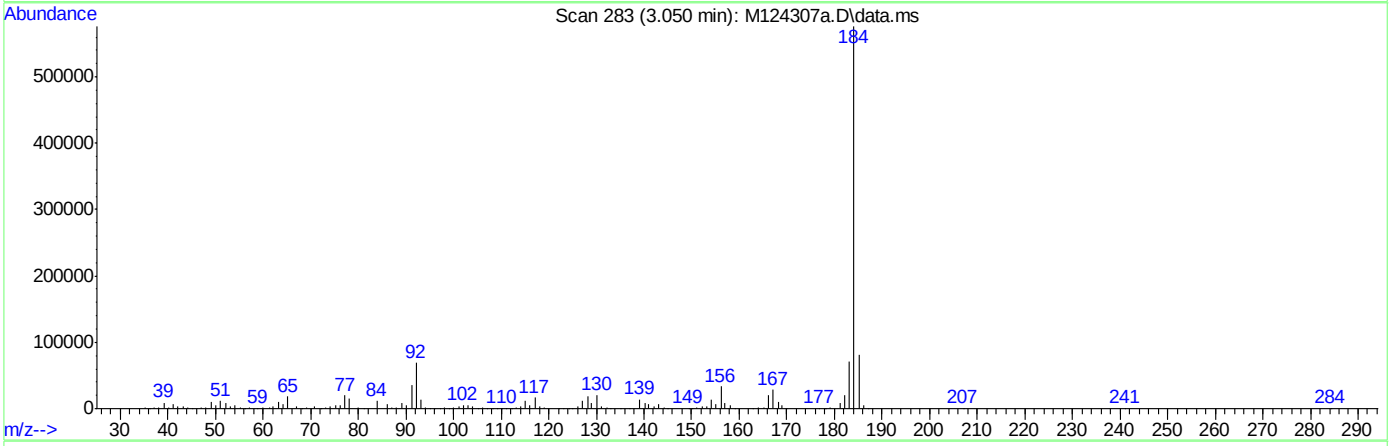
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124307a.D
Acq On : 10 May 2016 9:23 pm
Operator : juliusj
Sample : dftpp
Misc : op93478,em5259
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 21:29:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M124307a.D\data.ms

(2) Benzidine (M)

3.973min (-3.973) 0.00ppm

response 0

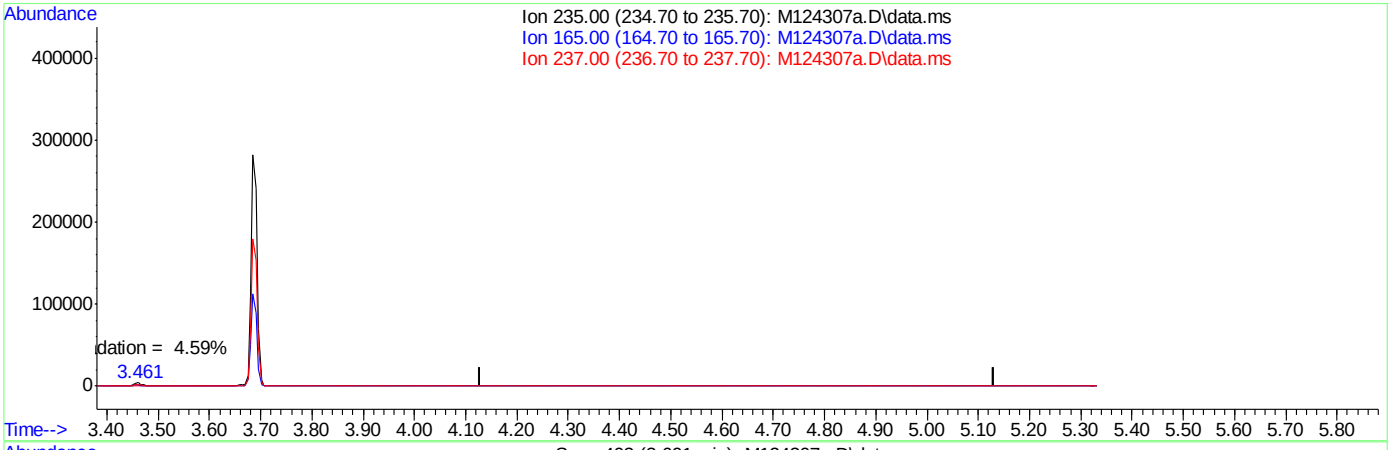
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

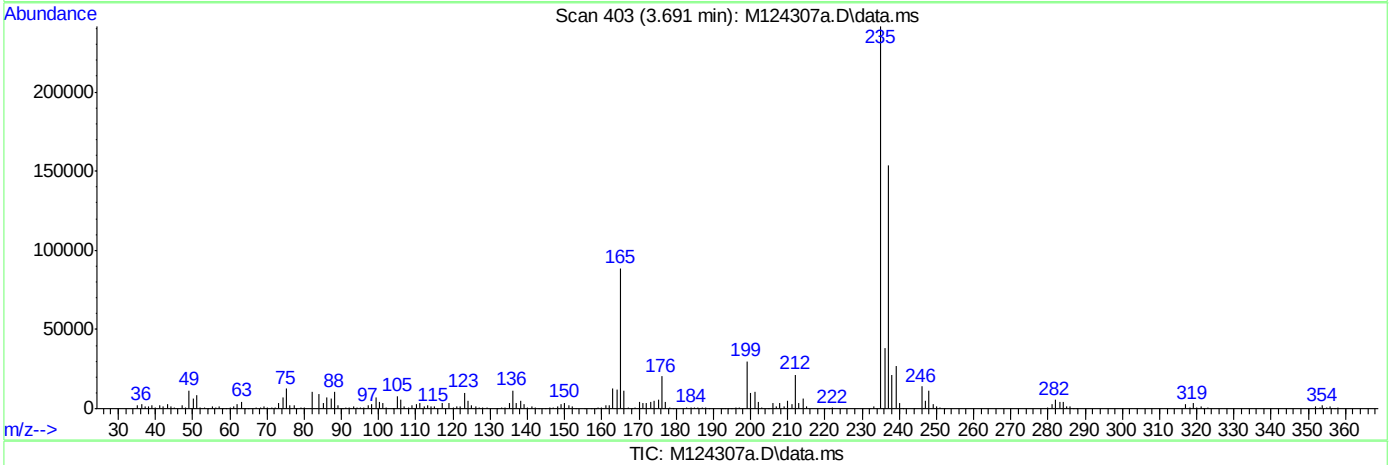
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124307a.D
Acq On : 10 May 2016 9:23 pm
Operator : juliusj
Sample : dftpp
Misc : op93478,em5259
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 21:29:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M124307a.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

DFTPPM.M Wed May 11 08:58:51 2016 MSM

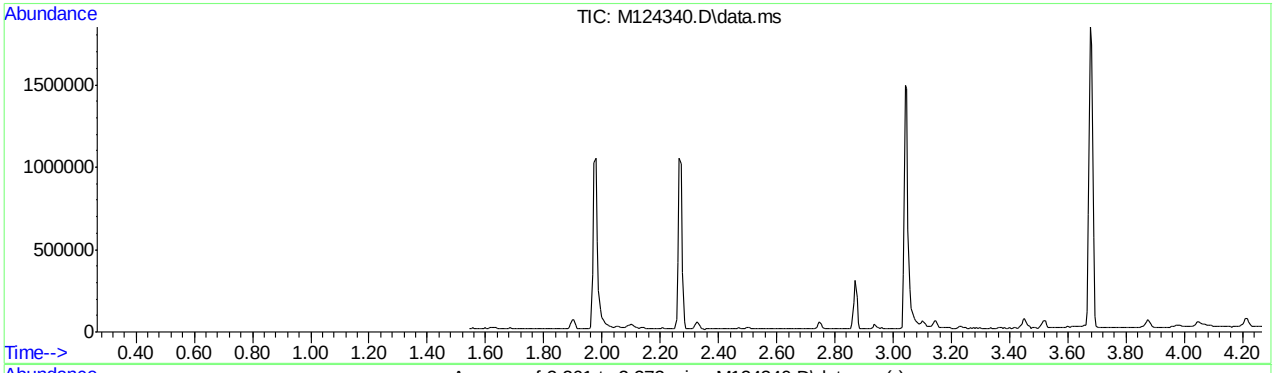
SGS ACCUTEST JC19914

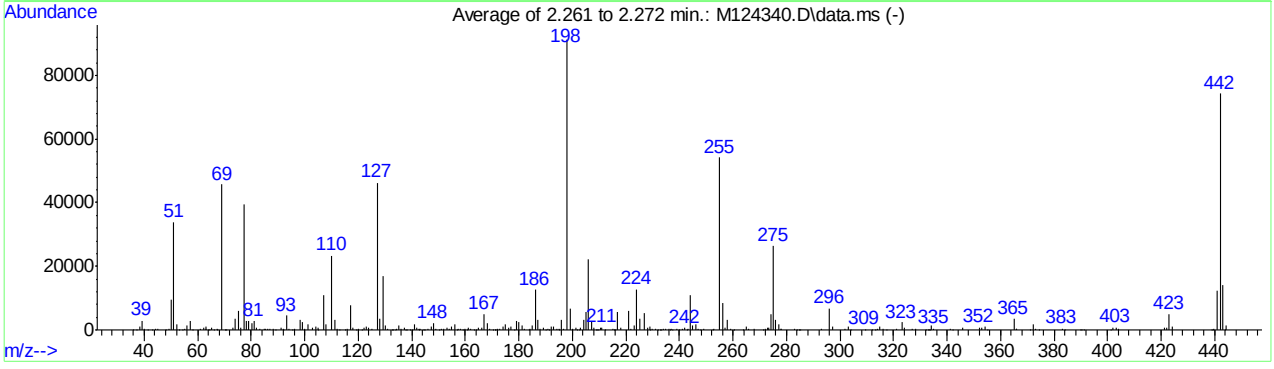
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124340.D
Acq On : 11 May 2016 12:11 pm
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5260
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





AutoFind: Scans 135, 136, 137; Background Corrected with Scan 130

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.1	33862	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.1	45682	PASS
70	69	0.00	2	0.2	89	PASS
127	198	40	60	50.6	46197	PASS
197	198	0.00	1	0.2	226	PASS
198	198	100	100	100.0	91240	PASS
199	198	5	9	7.2	6567	PASS
275	198	10	30	28.8	26309	PASS
365	198	1	100	3.8	3441	PASS
441	443	0.10	100	86.6	12286	PASS
442	198	40	100	81.4	74269	PASS
443	442	17	23	19.1	14195	PASS

Average of 2.261 to 2.272 min.: M124340.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	157	50.10	9348	62.95	236	73.10	610
37.10	65	51.10	33862	63.15	1143	74.10	3430
38.15	893	52.15	1762	63.95	80	75.05	6134
39.05	2927	53.15	83	64.20	173	76.25	872
40.05	239	54.25	89	65.10	646	77.15	39380
41.15	106	55.15	256	66.05	68	78.10	2729
43.10	4	56.10	1334	67.15	106	79.10	2773
44.05	201	57.05	2724	67.30	258	80.05	2015
45.05	248	58.05	104	69.05	45682	81.05	2818
48.10	149	61.05	498	70.05	67	82.05	734
49.10	195	62.10	627	70.45	89	83.05	480

Average of 2.261 to 2.272 min.: M124340.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.05	278	95.25	112	108.05	1816	121.15	74
85.25	234	96.10	282	110.05	23428	122.10	739
86.05	492	98.05	3201	111.05	3326	123.00	1027
87.10	412	99.00	2536	112.00	477	124.00	584
88.05	272	100.05	384	113.00	179	125.00	439
89.15	124	101.05	1667	115.15	93	127.05	46197
91.10	708	103.05	634	116.05	516	128.10	3420
91.85	181	104.10	1004	117.05	7926	129.05	16929
92.15	275	104.85	183	118.05	606	130.00	1398
93.05	4422	105.05	714	119.15	68	131.05	445
94.00	334	107.05	11033	120.10	193	132.65	70

Average of 2.261 to 2.272 min.: M124340.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.15	96	142.00	690	151.00	272	160.85	116
133.95	92	142.45	195	151.80	300	161.05	706
134.10	406	142.75	116	152.95	644	162.00	239
135.05	1254	143.10	421	154.05	492	163.05	74
136.05	424	144.15	68	155.00	1236	164.15	82
137.15	626	144.95	79	156.05	1756	165.00	862
137.65	106	145.95	324	156.95	150	166.00	712
138.15	73	147.10	981	157.20	296	167.00	5067
139.15	141	148.00	2131	157.95	206	168.05	2202
140.15	173	149.05	535	158.95	172	169.05	288
141.00	1850	150.05	91	160.00	485	170.25	79

Average of 2.261 to 2.272 min.: M124340.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.95	113	181.05	1346	191.25	127	201.50	740
171.15	82	182.00	255	192.05	956	201.75	135
172.05	312	183.75	173	193.10	964	202.35	132
173.00	481	184.00	201	194.00	258	203.10	864
174.00	961	185.00	1364	194.90	235	204.05	3275
175.00	1714	186.05	12578	195.15	127	205.05	5480
176.15	615	187.05	3210	196.05	3132	206.05	22043
177.00	931	188.05	349	196.85	226	207.05	2962
178.15	136	189.00	817	197.95	91240	208.00	753
178.95	2824	190.00	145	199.00	6567	208.75	86
180.05	2450	191.00	289	200.05	472	209.05	79

Average of 2.261 to 2.272 min.: M124340.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
209.85	80	223.05	1369	233.05	70	242.95	114
210.45	691	224.05	12864	234.00	345	243.15	435
211.05	865	225.05	3388	235.00	384	244.05	10901
212.05	179	227.00	5225	235.85	212	245.05	1530

DFTPPM.M Wed May 11 13:47:39 2016 MSM Page: 2

215.05	221	227.95	872	236.35	85	246.00	1881
215.55	107	228.75	131	236.95	326	247.00	228
216.05	184	229.00	1027	237.15	175	247.95	67
216.95	5504	229.90	270	238.95	293	248.95	336
218.05	759	231.05	429	239.95	137	252.25	96
221.05	6152	231.95	72	241.05	191	253.00	333
221.95	199	232.85	75	242.00	683	255.05	54122

Average of 2.261 to 2.272 min.: M124340.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
256.05	8306	272.95	856	285.05	181	314.95	965
257.00	632	273.15	803	293.00	519	316.10	481
258.00	3114	274.00	5036	296.05	6855	317.15	69
258.95	488	275.05	26309	297.05	997	321.00	275
260.15	100	276.00	3344	302.00	204	323.05	2362
263.90	82	277.05	1860	303.05	967	324.05	580
264.95	1151	277.80	218	304.05	115	326.95	376
266.00	482	278.05	256	309.15	73	328.10	242
267.95	212	283.00	272	311.95	72	332.00	162
271.10	154	284.00	154	312.95	78	332.95	107
272.15	192	284.85	181	314.00	360	333.25	112

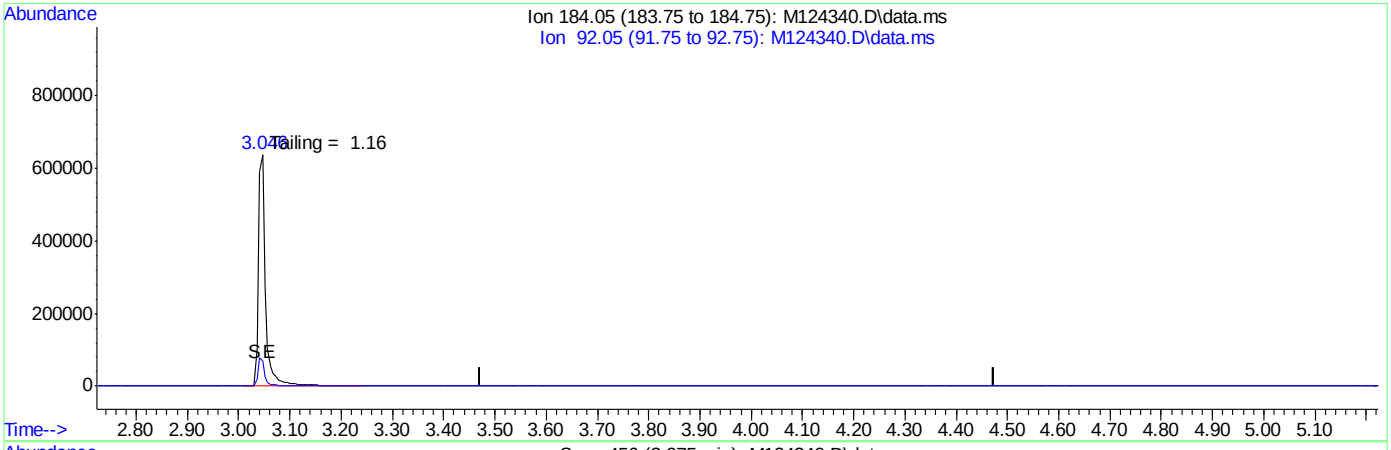
Average of 2.261 to 2.272 min.: M124340.D\data.ms
dftpp
Modified:subtracted

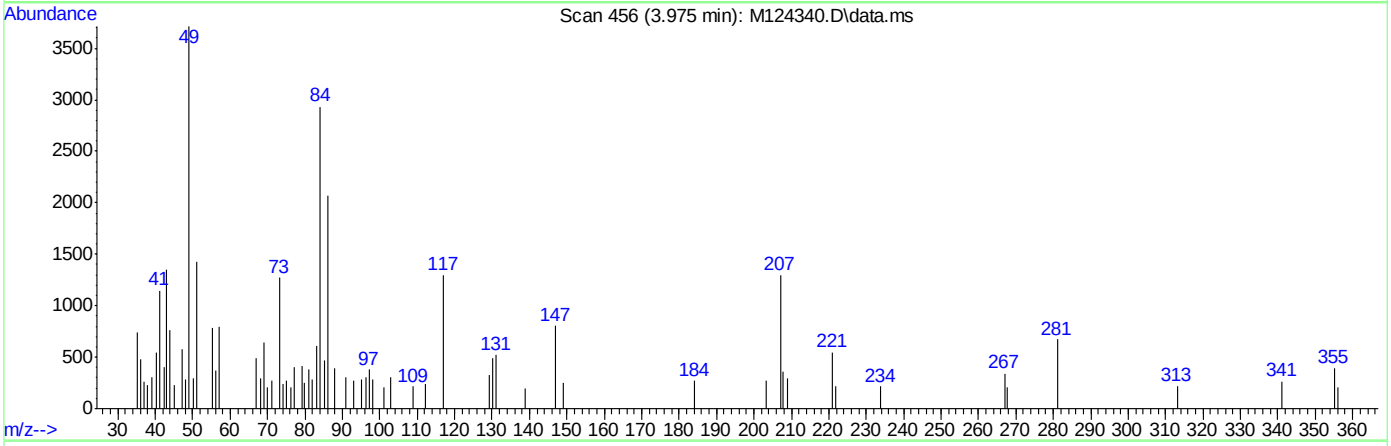
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
333.85	160	365.85	247	401.05	93	441.05	12286
334.05	1277	366.05	300	402.00	638	442.05	74269
335.05	446	370.95	106	403.05	866	443.05	14195
341.00	323	372.05	1609	404.05	227	443.85	123
342.05	83	373.00	347	421.00	720	444.05	1284
345.95	629	374.15	79	421.90	587		
352.05	860	383.00	408	423.05	4982		
353.05	561	384.05	121	424.05	1116		
354.00	958	389.85	173	438.75	94		
354.95	102	390.15	78	439.05	92		
364.95	3441	391.15	109	439.50	217		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124340.D
Acq On : 11 May 2016 12:11 pm
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5260
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 12:16:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M124340.D\data.ms

(2) Benzidine (M)

3.973min (-3.973) 0.00ppm

response 0

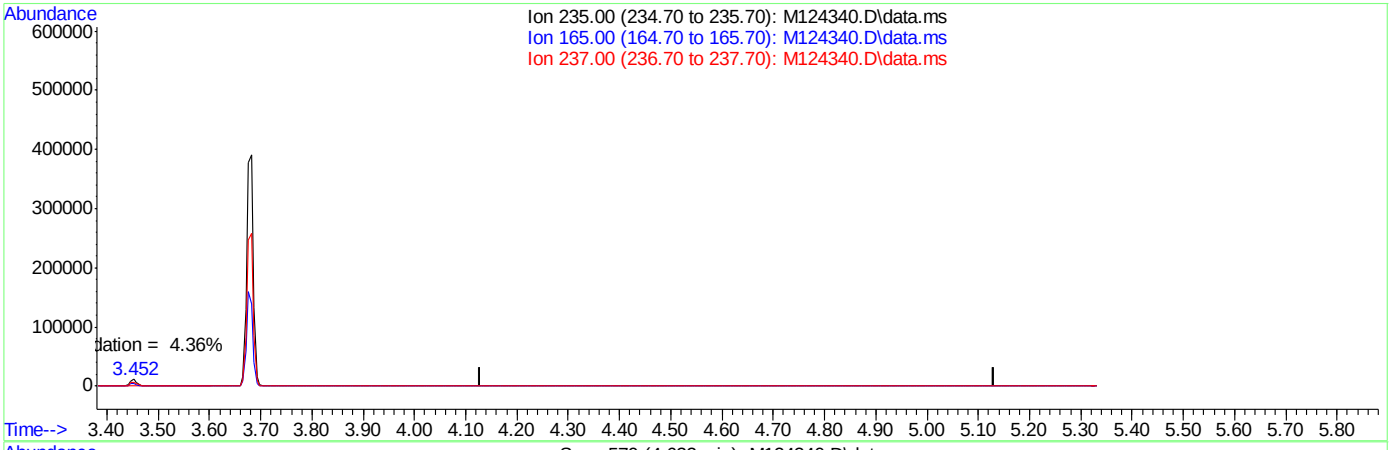
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

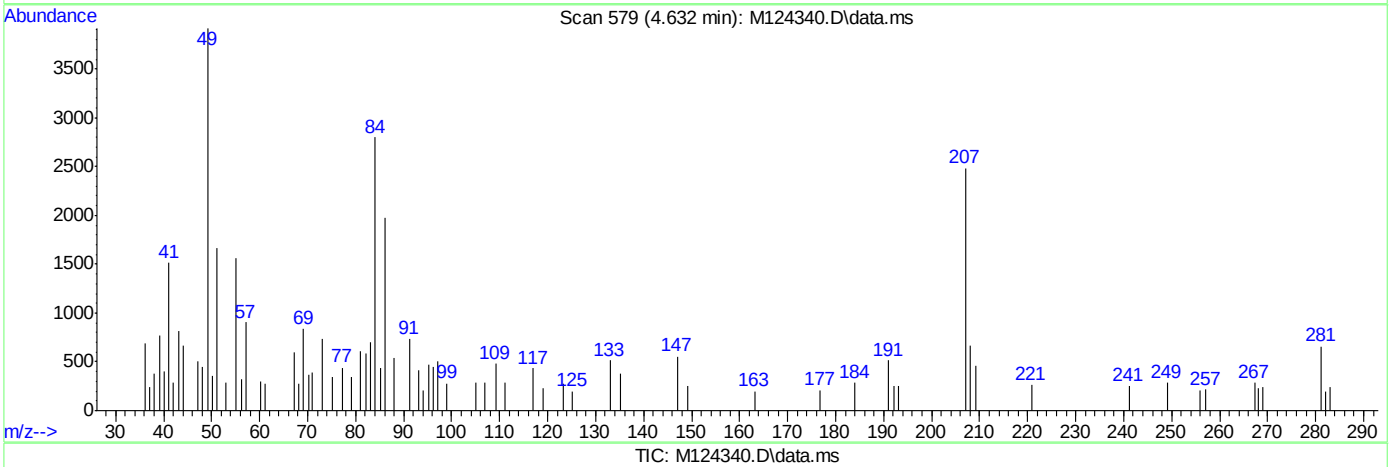
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124340.D
Acq On : 11 May 2016 12:11 pm
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5260
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 12:16:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M124340.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

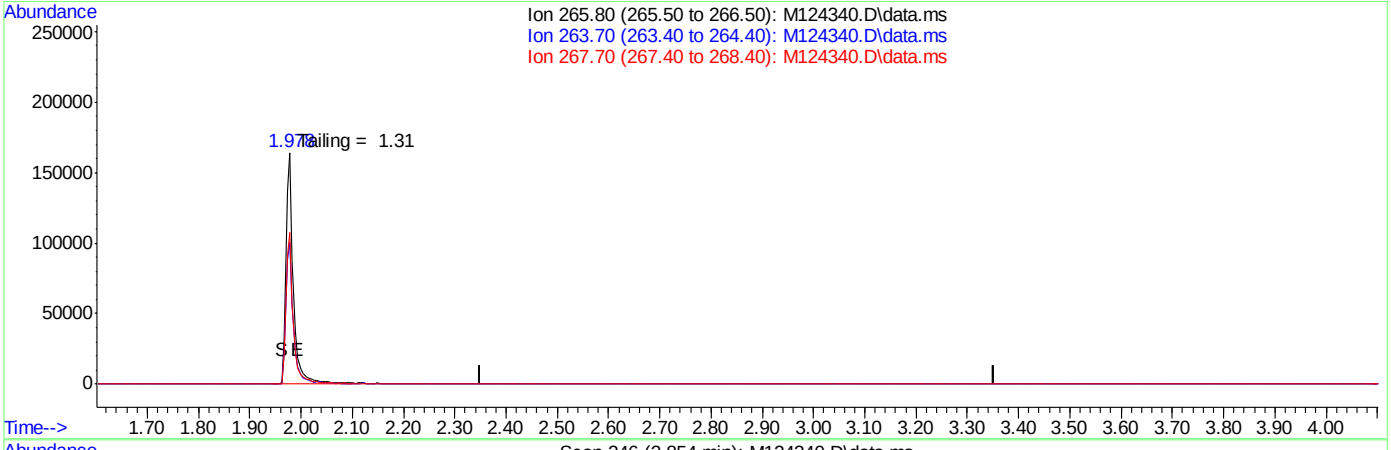
response 0

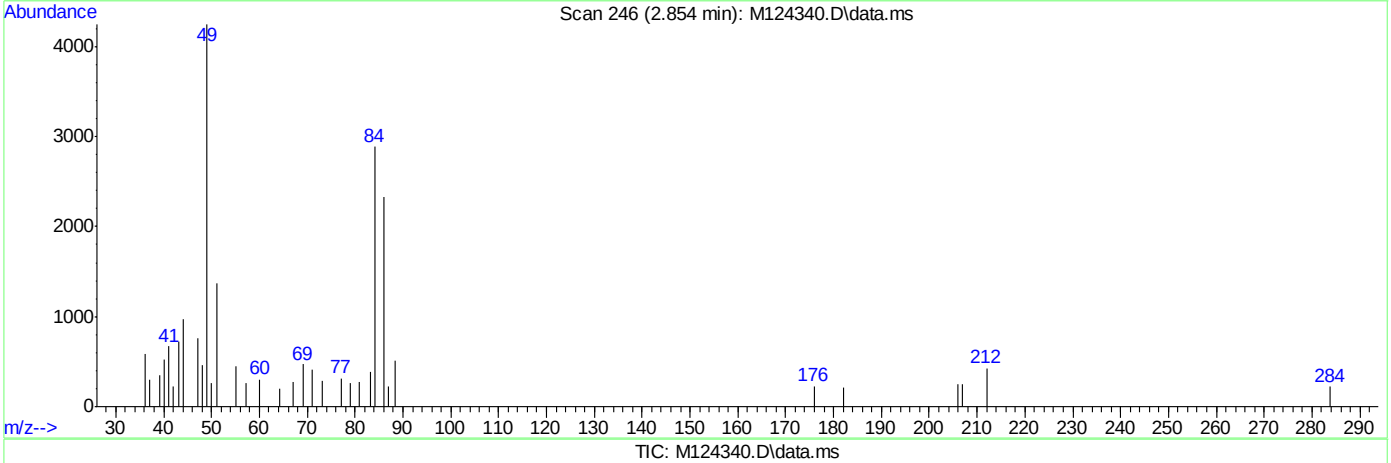
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124340.D
Acq On    : 11 May 2016  12:11 pm
Operator  : ashleyd
Sample    : dftpp
Misc      : op93478,em5260
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 11 12:16:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title  : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:
```



TIC: M124340.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

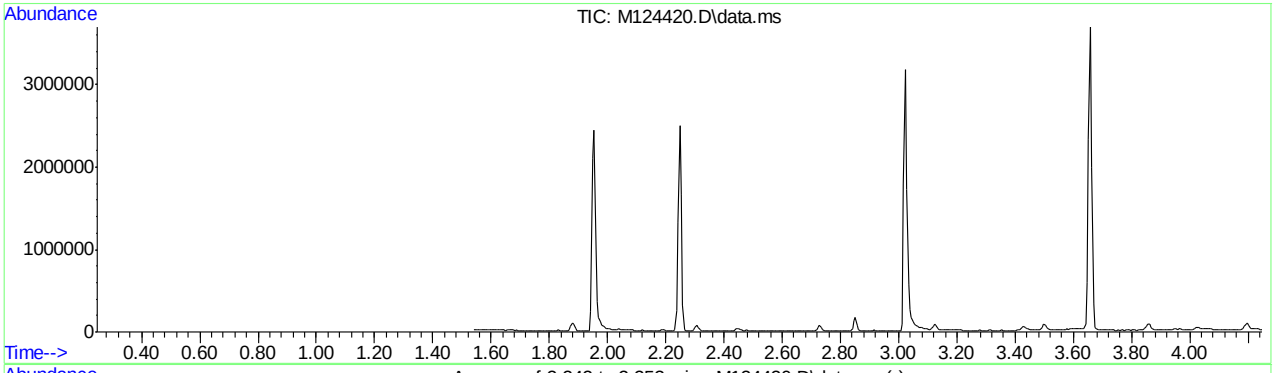
SGS ACCUTEST JC19914

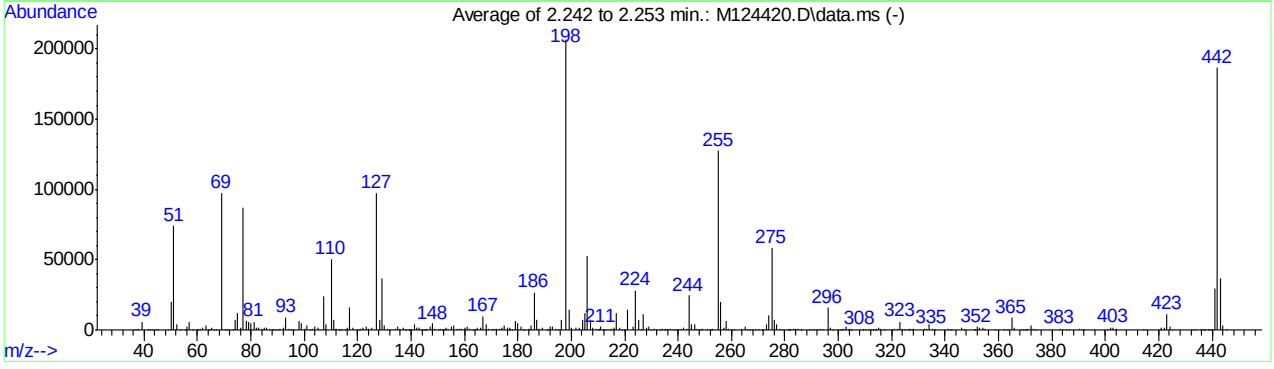
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124420.D
Acq On : 13 May 2016 9:20 am
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5264
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
Last Update : Thu May 12 09:34:28 2016





AutoFind: Scans 132, 133, 134; Background Corrected with Scan 127

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.9	74194	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.2	97501	PASS
70	69	0.00	2	0.4	415	PASS
127	198	40	60	47.2	97504	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	206720	PASS
199	198	5	9	6.9	14185	PASS
275	198	10	30	28.4	58642	PASS
365	198	1	100	4.1	8537	PASS
441	443	0.10	100	80.7	29605	PASS
442	198	40	100	90.2	186490	PASS
443	442	17	23	19.7	36682	PASS

SGS ACCUTEST JC19914

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	225	51.15	74194	63.10	2864	75.05	12359
37.05	393	52.15	3843	64.00	402	76.05	1374
38.10	998	53.30	313	64.25	105	77.15	87199
39.15	5799	55.15	115	65.10	1520	78.10	6259
41.15	30	56.05	2599	66.05	322	79.05	5612
42.25	114	57.05	5815	67.10	332	80.05	4434
43.05	93	58.00	402	69.05	97501	81.05	5751
44.10	21	59.85	83	70.10	415	82.10	1675
45.05	214	60.30	207	71.00	218	83.10	1706
49.05	49	61.10	1001	73.05	126	84.00	601
50.15	19950	62.10	1253	74.10	7415	85.05	1376

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.00	1242	96.10	294	110.05	50520	121.05	443
87.15	796	98.05	6293	111.05	7019	122.05	1715
87.90	246	99.05	5066	112.00	914	123.05	2285
88.15	101	100.15	562	112.95	130	124.10	1221
89.05	87	101.05	2990	113.25	162	125.10	1291
90.15	81	102.10	315	114.05	169	127.05	97504
91.05	1126	103.05	1192	115.15	83	128.05	7327
92.10	1664	104.05	2062	116.10	1579	129.05	36490
93.05	9097	105.00	1556	117.05	16100	130.05	3215
94.05	662	107.05	23710	118.05	1283	131.10	734
95.10	177	108.05	3855	120.10	271	132.00	238

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.05	1012	142.10	1733	150.00	304	159.05	575
135.00	2576	143.00	1241	151.10	767	160.00	1536
136.00	760	143.85	99	151.75	188	161.10	2184
137.10	1301	144.05	146	151.95	334	162.00	650
137.75	95	144.75	92	152.25	154	163.15	71
138.00	45	145.10	241	153.05	1306	163.75	104
138.95	203	145.35	97	154.00	1155	164.05	185
139.15	126	146.00	630	155.05	2366	164.95	1368
139.85	196	147.05	2068	156.05	3542	166.10	1299
140.15	333	148.05	4684	157.00	684	167.00	9974
141.05	3926	149.00	924	158.00	876	168.05	4166

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.05	716	179.00	6806	189.00	1528	201.55	1465
170.10	360	180.05	5041	190.95	383	203.00	1407
171.05	458	181.00	2352	191.15	422	204.05	7248
172.05	592	182.05	311	192.05	2111	205.05	11859
173.05	1018	182.25	77	193.05	2173	206.05	52805
174.10	1718	183.95	523	194.10	465	207.10	7030
175.00	3264	184.15	127	195.10	241	208.00	1549
176.10	1355	185.05	3257	196.05	7318	209.10	580
176.85	359	186.05	26482	198.05	206720	210.05	264
177.00	1391	187.05	7579	199.00	14185	210.50	1190
177.85	226	188.05	729	200.00	1268	211.10	2182

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.75	136	223.00	2786	234.05	815	244.05	24601
212.05	151	224.05	28328	234.95	143	245.05	3697
213.05	69	225.05	7137	235.10	760	246.00	3952
214.25	183	226.15	221	236.05	644	247.00	964

DFTPPM.M Fri May 13 14:51:25 2016 MSM Page: 2

215.05	524	227.00	11176	237.00	1063	247.95	200
216.10	1396	228.00	1775	238.05	96	248.25	112
216.95	11865	229.05	2300	239.10	254	249.05	762
218.05	1660	230.00	325	239.95	314	251.00	240
218.85	80	231.10	1055	241.00	754	252.10	305
219.65	83	232.05	102	242.05	1433	252.35	72
221.05	14515	233.10	221	243.10	1085	253.00	617

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
255.05	127618	267.80	107	278.85	195	289.95	161
256.05	19581	268.85	73	281.05	91	290.85	91
257.10	1524	270.05	144	281.45	69	291.85	274
258.05	6262	271.25	146	282.05	83	293.05	1032
259.00	1141	272.00	383	283.05	590	294.00	195
260.05	262	273.05	4272	283.45	68	296.05	15736
261.00	278	274.05	10043	284.05	499	297.00	1994
263.90	506	275.05	58642	284.90	878	298.05	148
265.00	2370	276.05	7307	286.00	184	299.85	74
265.85	352	277.00	4037	286.25	84	300.85	163
266.65	109	278.05	838	289.10	178	301.15	105

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
302.05	425	312.10	171	323.05	5991	335.05	1046
303.00	2043	312.85	82	324.00	958	336.25	105
303.85	79	313.10	172	324.75	70	341.05	732
304.00	439	313.85	121	325.85	78	341.95	76
304.55	91	314.05	723	326.65	179	342.15	117
305.05	103	315.00	1877	327.00	1022	346.00	1237
308.05	229	316.05	1118	327.65	174	347.00	216
309.05	87	317.15	90	328.10	528	350.85	95
309.35	182	320.15	142	332.10	563	351.25	78
310.05	96	321.00	534	333.05	631	352.00	2077
311.15	80	322.00	468	334.05	3853	353.00	1379

Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.05	1939	370.95	643	400.90	243	424.10	2598
355.05	520	372.05	3523	402.00	1630	425.00	255
358.85	80	373.00	1128	403.00	1945	432.75	75
362.05	71	373.95	72	403.85	306	433.55	74
363.25	73	383.05	1041	404.10	445	435.65	90
365.00	8537	383.85	85	414.25	79	436.55	116
366.00	1362	385.00	165	415.15	116	436.75	276
368.55	93	386.55	74	420.85	178	437.20	216
369.25	71	390.00	562	421.05	1314	438.35	396
369.85	83	391.15	268	422.05	1926	439.05	108
370.15	101	392.00	246	423.05	11443	439.55	186

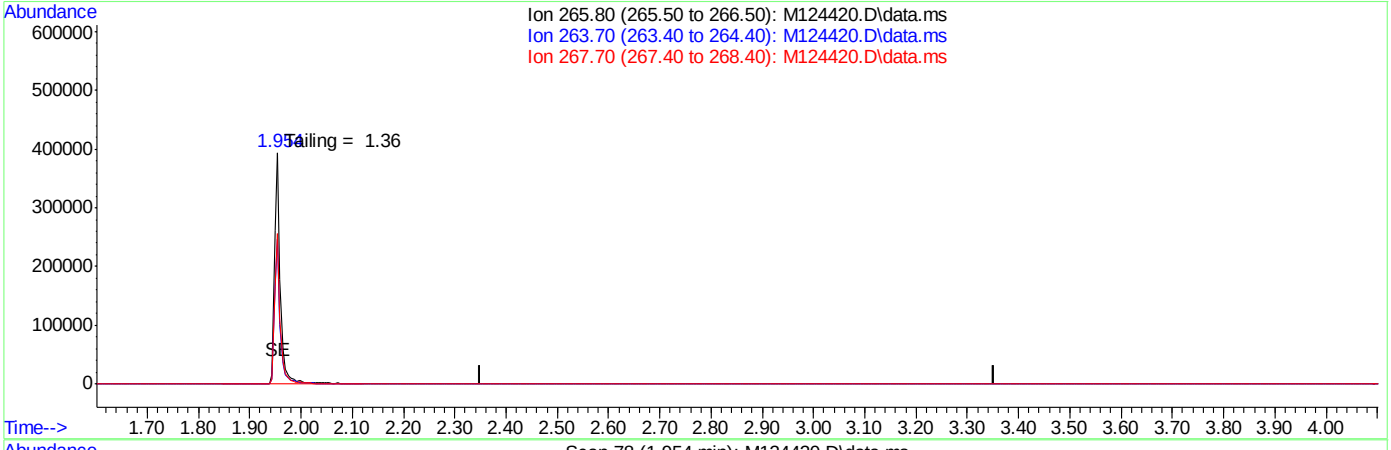
Average of 2.242 to 2.253 min.: M124420.D\data.ms
dftpp
Modified:subtracted

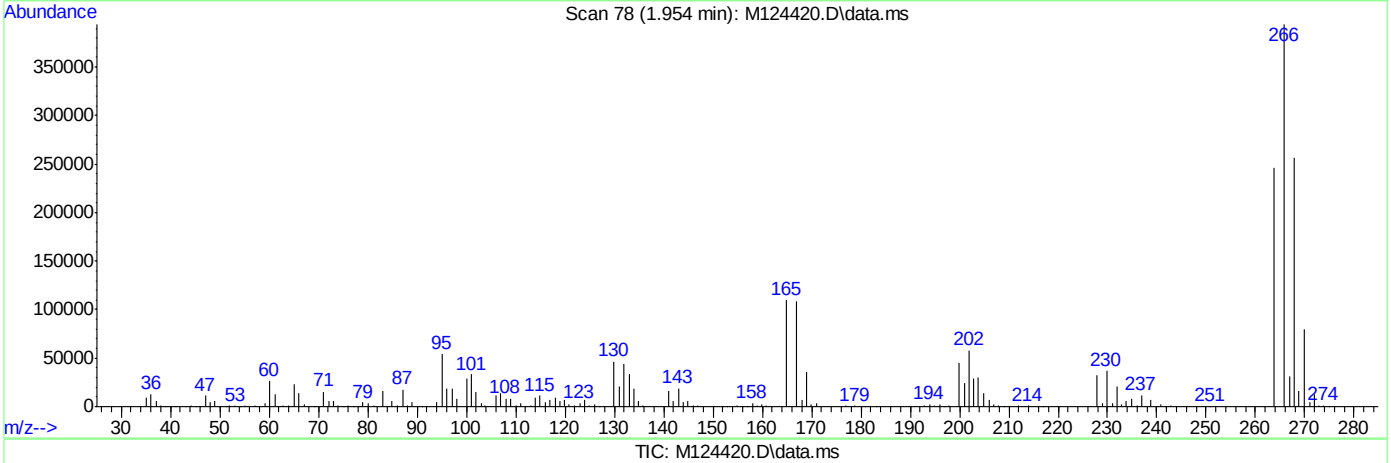
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
439.75	287						
441.05	29605						
442.05	186490						
443.05	36682						
444.00	3284						
445.05	89						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124420.D
Acq On : 13 May 2016 9:20 am
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5264
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 09:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M124420.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

DFTPPM.M Fri May 13 14:51:06 2016 MSM

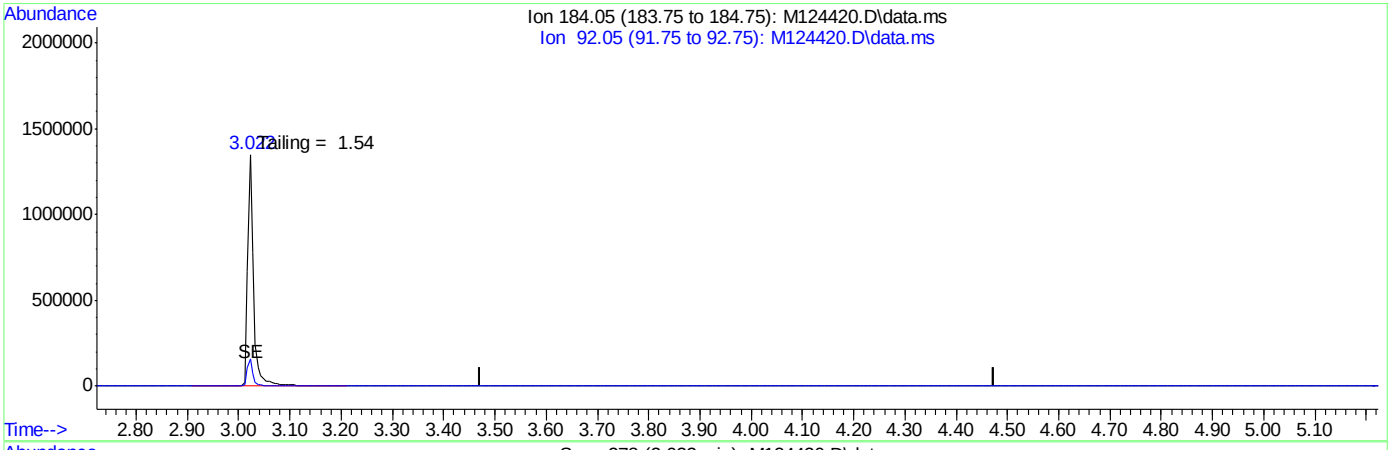
Page: 1

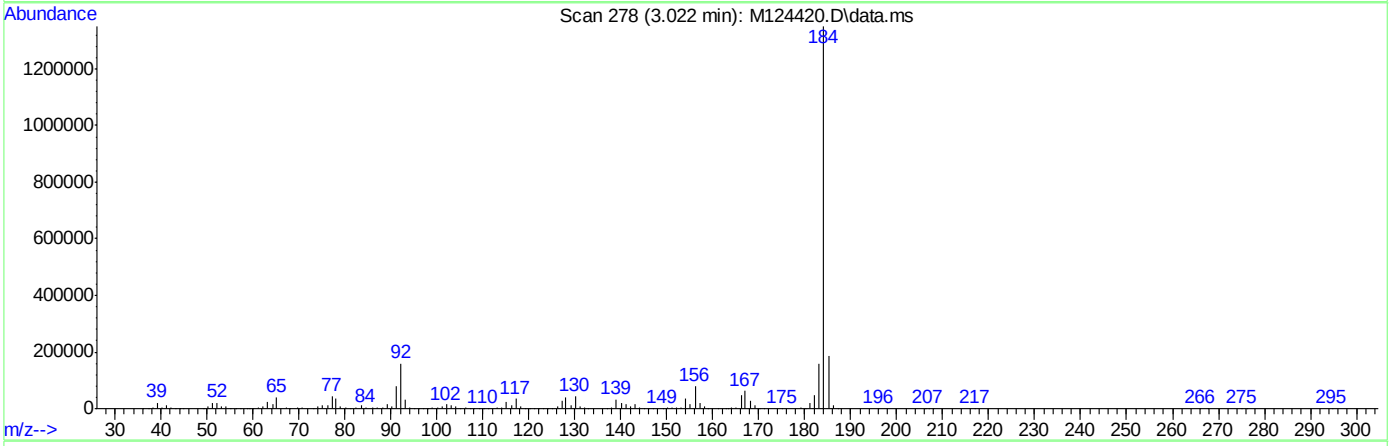
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124420.D
Acq On    : 13 May 2016   9:20 am
Operator  : ashleyd
Sample    : dftpp
Misc      : op93478,em5264
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 13 09:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title  : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:
```





TIC: M124420.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

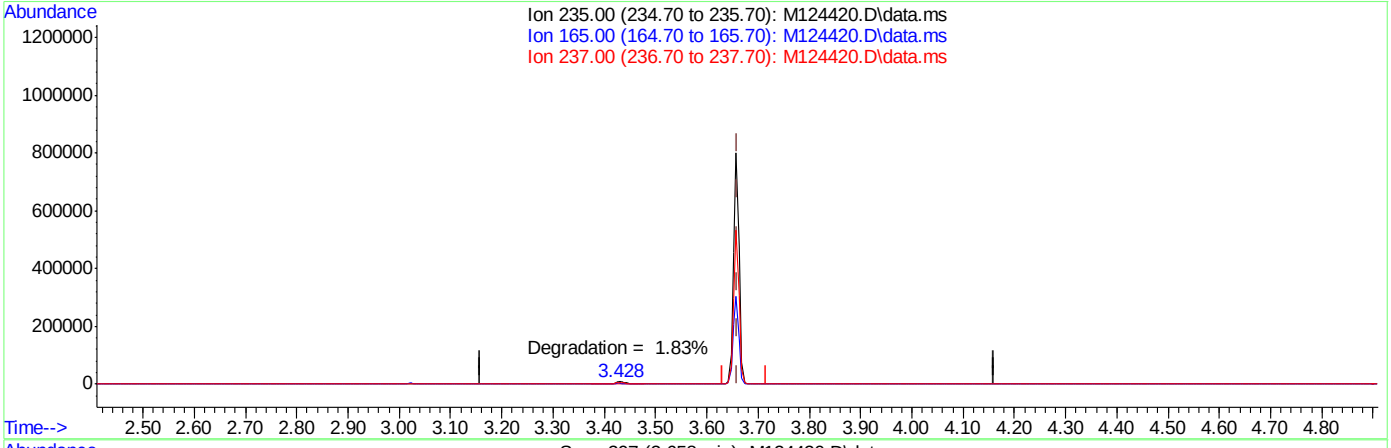
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

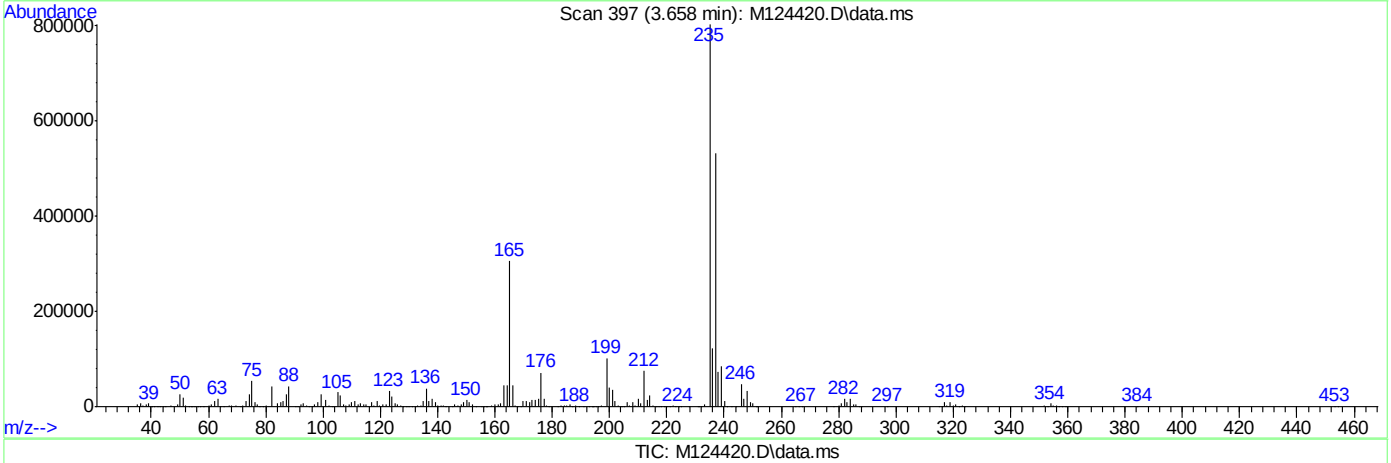
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124420.D
Acq On : 13 May 2016 9:20 am
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5264
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 09:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M124420.D\data.ms

(3) PP-DDT (MC)

3.658min (-0.002) 0.00ppm

response 620482

Ion	Exp%	Act%
235.00	100	100
165.00	46.90	38.02
237.00	64.20	66.44
0.00	0.00	0.00

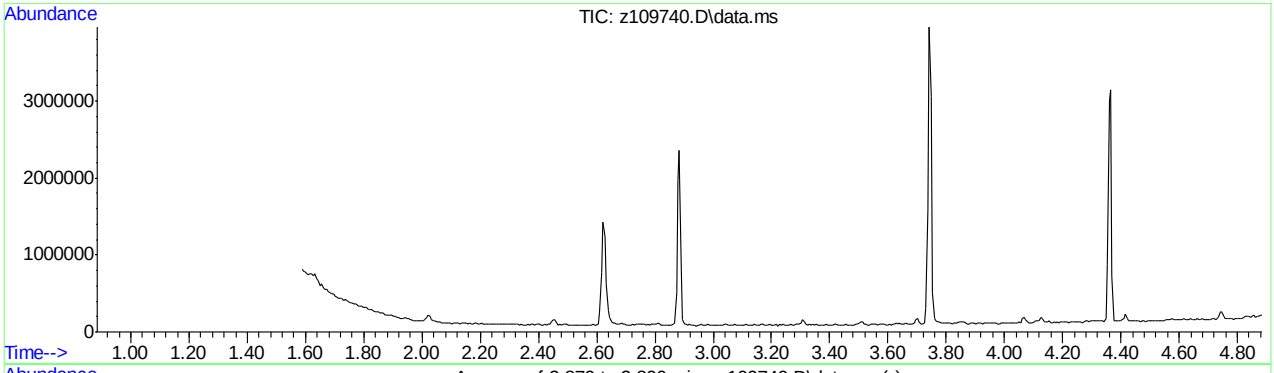
SGS ACCUTEST JC19914

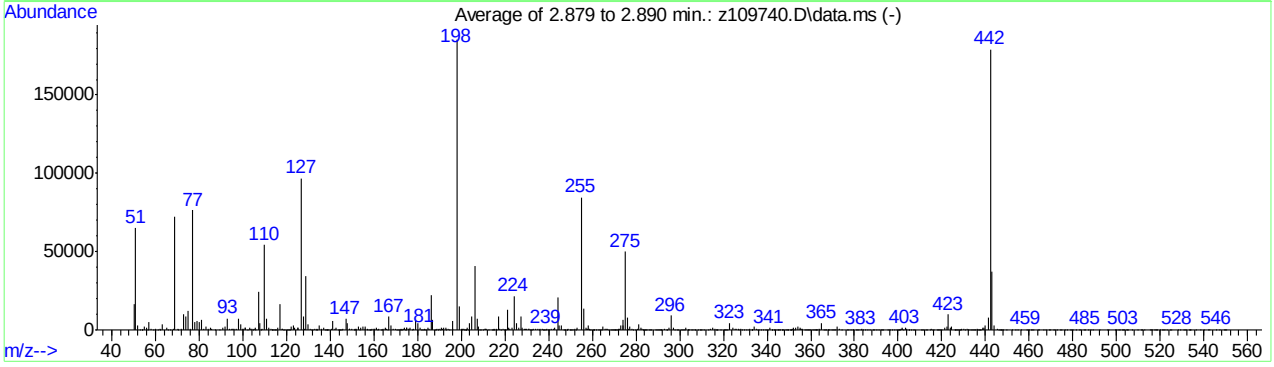
DFTPP

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Title : column rtx-5msi 30mx0.25mmx0.25um
Last Update : Thu Sep 10 14:02:56 2015





AutoFind: Scans 227, 228, 229; Background Corrected with Scan 221

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.0	64844	PASS
68	69	0.00	2	1.5	1086	PASS
69	198	0.00	100	39.2	72648	PASS
70	69	0.00	2	0.9	687	PASS
127	198	40	60	52.1	96690	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	185434	PASS
199	198	5	9	8.3	15348	PASS
275	198	10	30	26.9	49861	PASS
365	198	1	100	2.5	4651	PASS
441	443	0.01	100	21.7	8077	PASS
442	198	40	100	96.6	179106	PASS
443	442	17	23	20.8	37293	PASS

DFTPPZ.M Thu Apr 14 15:04:59 2016 RTE

Page: 1

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	16760	58.95	53	70.10	687	81.05	6219
51.05	64844	60.10	448	70.40	193	82.00	434
52.00	3172	61.00	211	71.85	534	83.00	1897
52.70	306	61.95	648	73.05	10132	84.00	606
53.80	52	62.20	69	74.05	8408	85.05	1460
54.05	367	63.10	3256	75.00	12495	85.85	1032
55.05	1970	65.05	1810	76.00	484	87.15	355
56.00	1481	65.90	217	77.10	76578	89.10	159
56.30	307	66.90	352	78.05	5056	91.00	1669
56.95	4765	68.20	1086	78.95	5693	92.10	1862
57.85	528	69.00	72648	80.00	4730	93.00	7324

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	388	101.95	313	109.05	670	115.90	1400
94.95	755	102.95	1294	110.00	54393	116.95	16659
95.70	484	103.90	1049	111.00	7000	118.00	666
95.95	651	104.10	1099	111.95	1149	118.20	391
97.10	522	104.90	175	112.85	384	118.80	159
97.95	7533	105.10	942	113.20	87	119.10	228
99.00	3855	105.70	139	113.60	48	120.00	78
99.85	522	105.95	1326	114.10	57	120.60	118
100.15	433	107.05	24083	114.60	261	120.90	282
100.95	1590	108.00	4192	114.90	142	121.40	310
101.20	1619	108.20	160	115.10	210	122.10	1918

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	2849	132.05	280	138.80	311	146.00	1101
123.90	1279	133.10	914	139.10	274	147.05	6825
125.00	1613	133.40	213	140.40	553	147.95	4137
125.30	1214	133.90	242	141.00	5532	148.80	605
126.95	96690	134.20	406	142.05	1035	149.05	429
128.00	8331	135.05	2958	142.90	1348	150.05	802
128.20	696	136.15	783	143.80	67	150.90	83
129.00	34554	137.05	1510	144.10	169	151.30	622
129.95	3439	137.70	15	144.30	290	151.55	194
130.95	623	138.20	227	144.85	20	152.00	671
131.30	141	138.60	176	145.20	91	152.95	1831

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
153.40	339	160.00	842	165.75	1065	172.40	189
154.05	1384	160.20	588	166.30	98	173.10	338
155.05	2349	160.90	859	167.00	8295	173.30	431
155.80	484	161.20	1215	168.05	2906	174.00	1666
156.05	2252	161.50	105	168.95	809	174.30	237
156.85	375	162.05	491	170.10	642	174.60	330
157.30	492	163.05	243	170.40	219	174.90	1472
157.90	376	163.90	90	171.00	105	175.10	1453
158.10	333	164.20	561	171.35	277	175.80	408
158.50	55	165.10	1198	171.90	354	176.10	571
159.15	710	165.50	801	172.20	599	176.80	1677

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.70	96	184.95	1594	191.30	593	200.20	163
178.10	669	185.20	750	192.05	1723	200.80	417
179.05	6022	186.10	22575	192.80	258	201.00	427
180.05	4533	187.05	6613	193.05	1536	201.30	122

DFTPPZ.M Thu Apr 14 15:04:59 2016 RTE Page: 2

181.00	1564	187.95	11	194.10	661	201.75	282
181.70	77	188.30	205	194.60	263	202.10	301
182.10	182	189.00	944	195.80	1014	202.40	324
182.80	296	189.25	113	196.10	5759	202.90	1418
183.10	303	189.90	486	198.00	185434	203.20	236
183.30	426	190.20	227	199.00	15348	204.00	4614
183.80	189	191.05	1163	200.00	744	205.00	8882

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.10	40733	214.35	179	220.30	350	229.20	735
207.10	6842	215.00	58	221.05	13144	230.05	613
207.95	1842	215.15	747	221.70	1220	230.70	450
208.60	297	216.00	291	222.10	466	231.05	520
208.95	280	216.20	452	223.05	1583	231.40	163
210.10	59	217.00	8640	224.10	21539	232.10	90
210.70	991	217.85	1045	225.05	4615	232.40	210
211.00	516	218.20	289	226.10	1105	233.05	386
211.45	1047	219.20	387	227.10	8855	234.05	465
212.70	34	219.50	221	228.05	1758	234.90	607
214.10	225	220.10	162	228.80	789	235.75	370

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
236.10	698	242.90	1317	250.10	56	258.00	2948
237.00	692	244.05	20557	250.30	148	258.40	268
237.60	85	245.00	2536	250.95	346	258.90	750
237.80	48	246.00	2975	251.80	661	259.40	137
238.20	26	246.90	356	252.45	216	260.00	218
238.40	75	247.15	2	253.10	1517	260.60	27
239.00	1001	247.50	163	255.00	84600	260.90	127
239.80	125	248.20	36	256.05	13722	261.60	22
240.05	264	248.40	49	257.05	1808	262.90	65
241.00	787	248.90	902	257.50	394	263.20	263
242.00	952	249.90	133	257.70	425	263.70	172

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
264.50	79	270.40	55	277.05	2125	284.10	139
264.95	2147	271.10	270	278.05	722	284.40	369
265.90	414	271.30	279	278.85	275	284.85	40
266.25	441	272.05	500	279.45	204	285.95	116
267.10	501	272.70	831	280.60	414	286.30	63
267.30	214	273.15	2859	281.05	3435	286.70	206
268.25	213	274.00	2538	282.05	1266	288.80	54
268.85	314	274.15	6187	282.80	623	289.25	182
269.20	97	275.10	49861	283.10	358	290.10	27
269.75	60	276.00	8050	283.30	166	290.40	73
270.20	260	276.80	656	283.90	186	290.90	118

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
291.40	125	300.75	209	307.10	57	317.00	60
291.70	65	301.10	80	308.30	236	317.40	45
292.90	635	301.90	124	309.25	191	318.60	26
293.90	131	302.20	105	309.70	74	320.35	302
294.20	238	303.00	1596	310.20	182	320.85	361
295.10	1173	303.70	131	310.80	57	321.20	248
296.05	9131	304.00	366	312.80	216	321.60	325
297.00	1698	304.30	209	313.95	557	323.00	4641
297.90	272	305.10	47	315.15	1540	324.15	1163
298.90	114	306.10	104	316.00	853	325.20	399
299.10	78	306.90	29	316.80	53	326.10	556

Average of 2.879 to 2.890 min.: z109740.D\data.ms

DFTPPZ.M Thu Apr 14 15:04:59 2016 RTE Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.80	178	334.10	2135	342.30	38	348.40	80
327.10	823	335.05	852	343.10	93	349.10	89
327.85	504	335.40	117	343.40	132	349.30	76
328.30	139	336.20	139	343.90	22	349.70	21
329.60	56	337.40	118	344.90	175	350.50	104
330.30	156	338.20	173	345.10	19	350.80	119
331.40	79	339.00	84	345.60	195	351.20	100
332.05	764	339.60	146	346.00	270	351.70	398
332.80	246	340.10	107	346.70	45	352.05	1409
333.10	371	341.05	1420	347.00	171	352.60	123
333.30	298	342.10	321	347.60	30	353.00	1137

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.20	1856	361.00	71	367.05	149	376.80	118
355.00	1158	361.50	67	367.70	58	377.20	109
355.20	819	361.80	95	368.00	241	378.40	159
355.50	474	362.10	75	368.70	84	379.10	50
356.10	821	362.40	29	369.40	29	379.45	100
357.05	168	363.00	46	370.10	281	380.55	122
357.80	53	363.60	64	370.40	75	381.30	87
358.05	185	363.80	495	371.00	299	381.70	67
358.80	53	365.00	4651	372.10	2342	382.70	54
359.25	205	365.95	375	373.15	849	383.10	486
359.90	86	366.60	44	374.00	96	384.10	28

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
384.90	168	395.90	283	401.95	1152	411.70	33
385.95	233	396.20	32	402.50	155	412.50	31
387.00	34	397.20	20	403.10	1216	413.35	204
388.50	89	398.40	56	403.75	480	414.80	172
388.90	103	399.20	211	404.80	69	415.05	453
390.20	321	399.60	75	405.10	46	415.70	116
391.05	187	400.20	60	406.10	79	416.40	69
392.05	310	400.50	52	406.70	25	417.50	99
392.55	88	400.90	23	407.35	173	418.30	40
393.20	44	401.05	491	410.40	25	418.80	18
395.00	116	401.80	432	411.05	51	419.40	150

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
419.90	229	428.00	169	434.20	105	439.20	1302
421.10	1683	428.30	67	434.90	149	439.60	2725
422.15	2229	428.65	86	435.15	182	441.10	8077
423.05	9966	429.15	1065	436.10	26	442.10	179106
424.00	1268	430.10	638	436.35	515	443.10	37293
424.15	1882	430.35	6	436.80	258	444.00	3188
425.70	41	431.45	389	437.10	233	445.30	593
425.95	119	432.00	70	437.40	217	445.70	24
426.50	120	432.20	63	437.90	217	446.35	288
427.00	229	432.90	22	438.70	751	446.80	95
427.70	85	433.80	150	439.00	1375	447.00	115

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
447.30	47	461.10	97	474.00	54	485.55	158
448.10	145	461.95	113	474.90	129	486.80	32
449.50	43	463.85	82	476.10	38	488.20	53
452.30	207	464.60	48	477.20	29	489.30	32
453.85	170	466.50	26	478.70	48	492.20	47

454.75	74	467.60	22	479.40	51	495.70	44
456.25	101	469.00	19	479.70	100	496.40	20
458.70	279	469.70	91	481.10	109	499.40	19
459.40	37	471.30	61	482.90	41	500.05	64
459.90	51	471.60	150	483.60	98	500.70	32
460.60	58	472.70	26	485.10	51	501.20	49

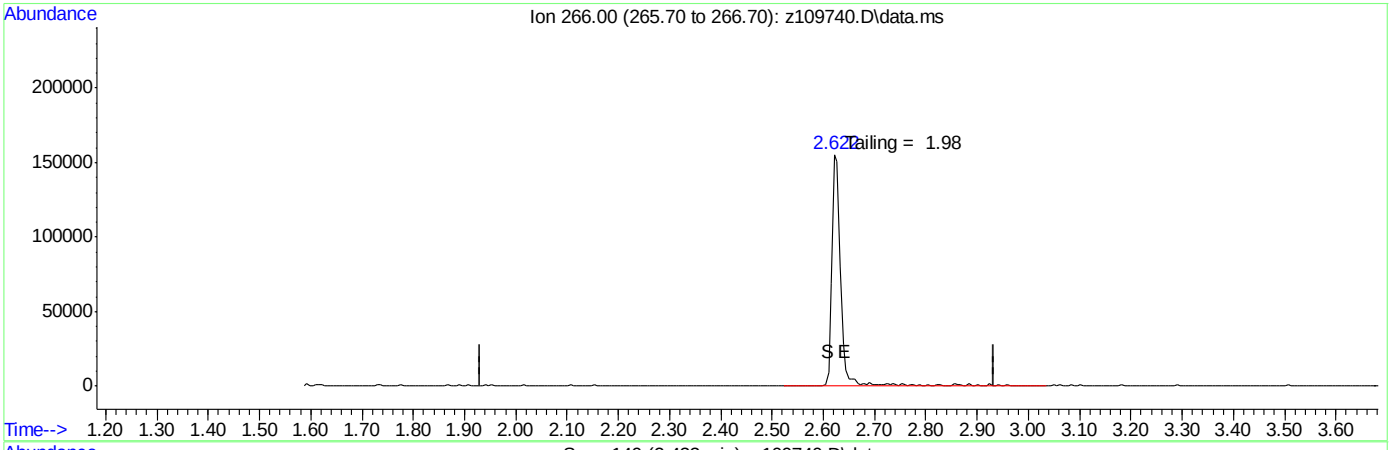
Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

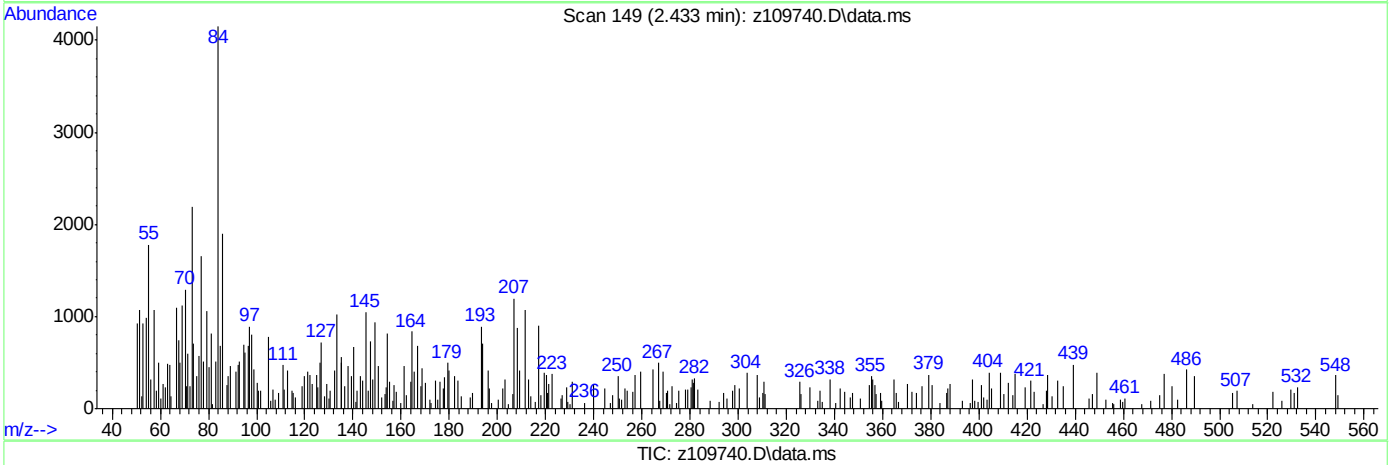
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
502.40	30	515.05	50	522.80	55	536.30	22
502.70	62	515.90	19	524.30	63	538.30	46
503.30	381	516.30	31	524.80	35	539.60	28
504.35	104	517.10	36	527.90	90	541.70	105
504.90	31	517.70	25	528.90	77	542.50	37
505.15	125	518.20	26	530.40	39	545.70	221
507.20	25	518.40	54	530.90	53	547.10	81
509.75	72	519.90	17	531.70	28	549.10	35
511.00	25	520.70	51	533.20	144	549.70	50
511.70	36	521.20	67	533.50	38	549.90	54
512.80	119	522.00	30	533.90	83		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 21:26:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109740.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

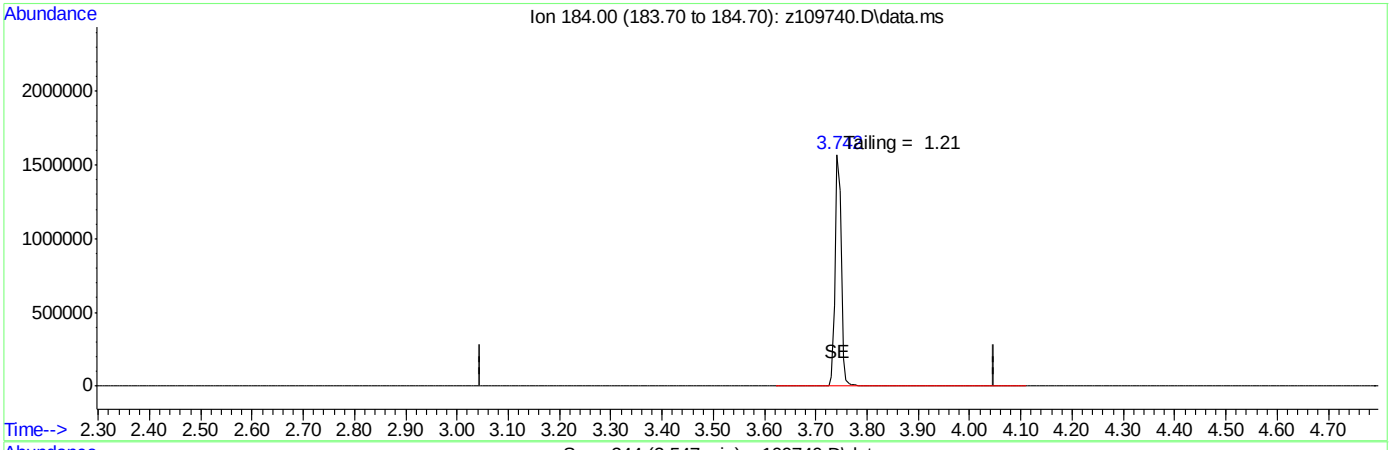
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

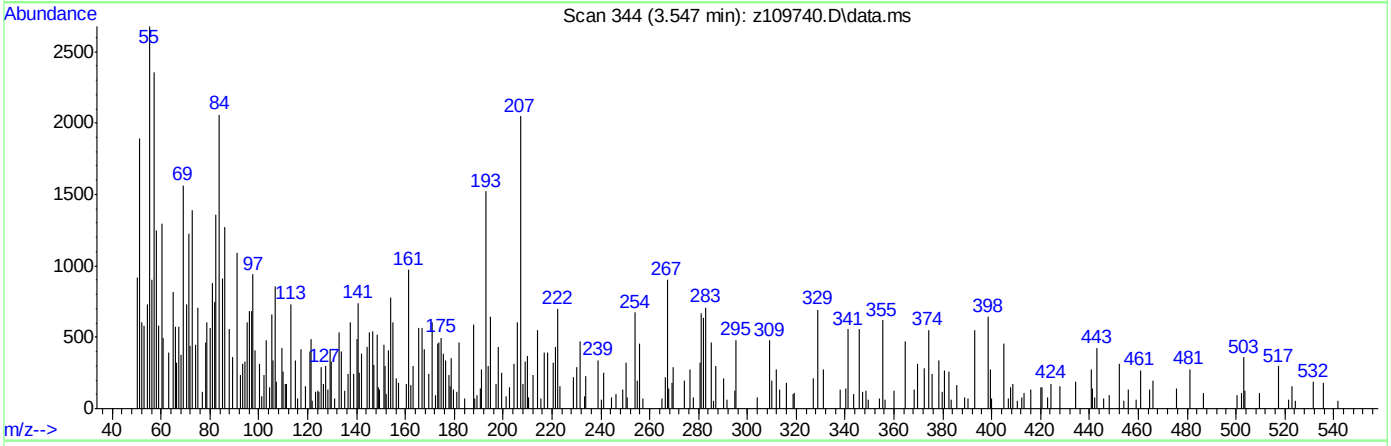
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 21:26:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109740.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

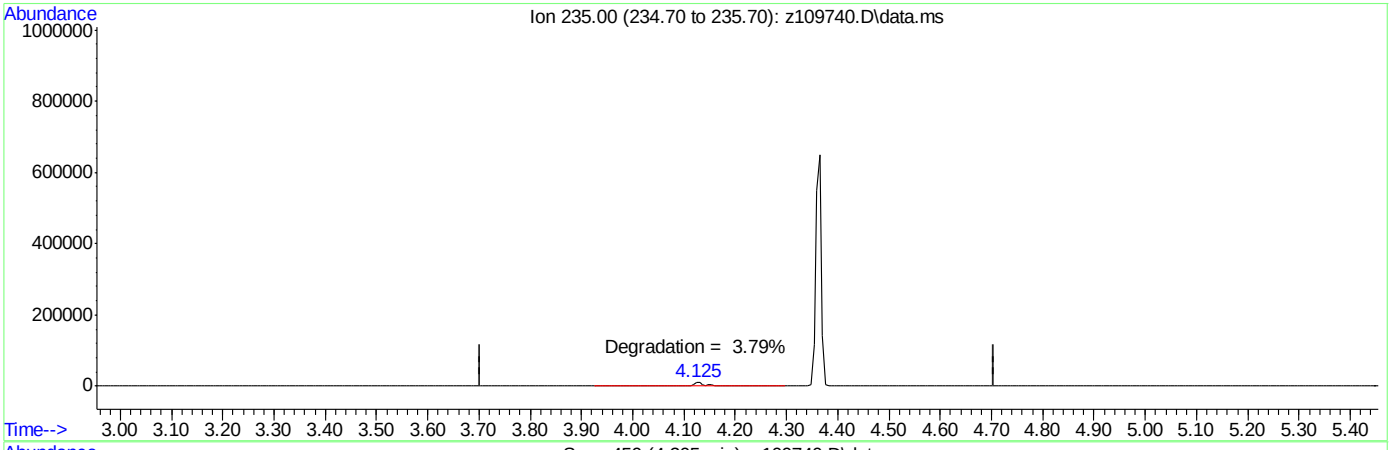
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

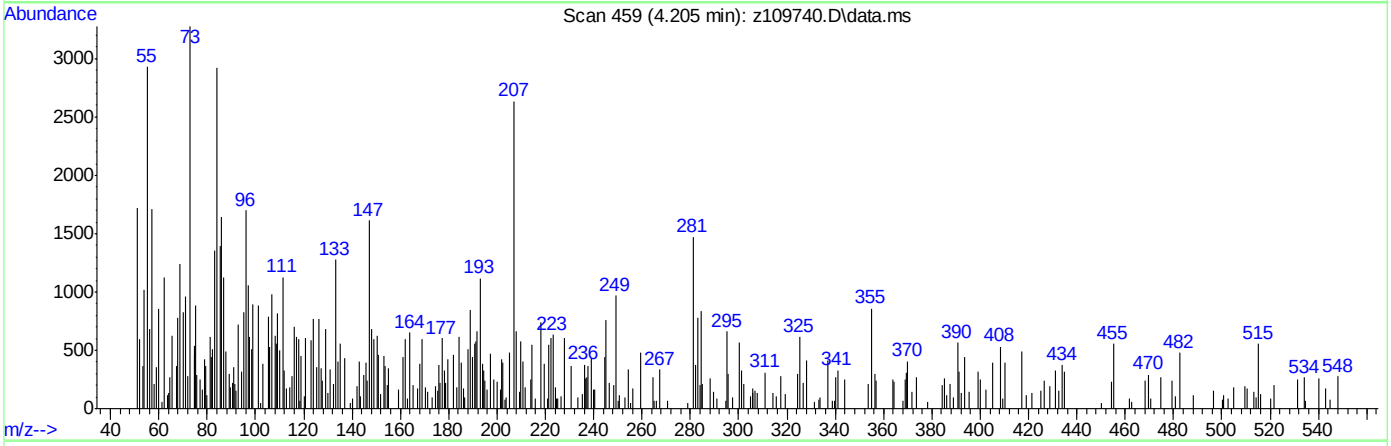
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 21:26:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109740.D\data.ms

(3) PP-DDT

4.205min (-4.205) 0.00

response 0

Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

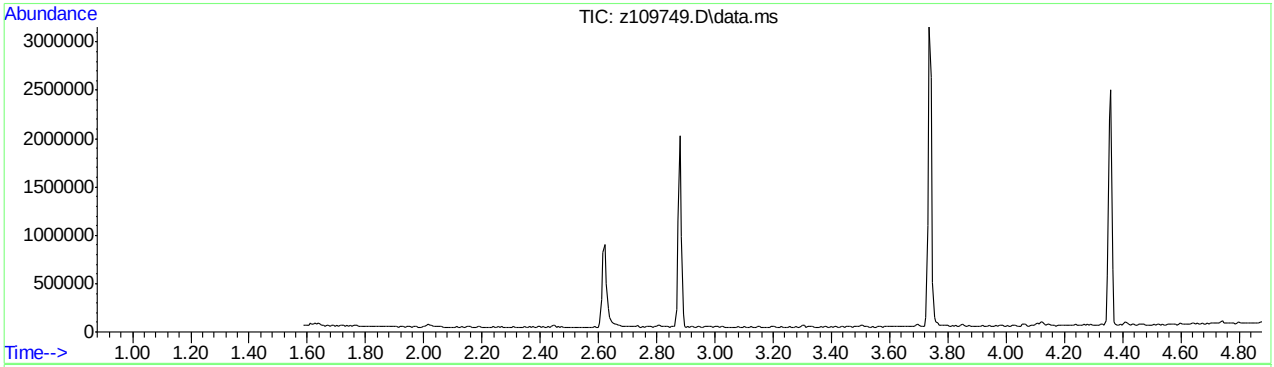
SGS ACCUTEST JC19914

DFTPP

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Title : column rtx-5msi 30mx0.25mmx0.25um
Last Update : Thu Sep 10 14:02:56 2015



AutoFind: Scans 226, 227, 228; Background Corrected with Scan 223

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	55293	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.2	56725	PASS
70	69	0.00	2	0.5	306	PASS
127	198	40	60	51.1	77761	PASS
197	198	0.00	1	0.9	1351	PASS
198	198	100	100	100.0	152306	PASS
199	198	5	9	7.4	11277	PASS
275	198	10	30	25.1	38268	PASS
365	198	1	100	3.3	4988	PASS
441	443	0.01	100	99.3	25892	PASS
442	198	40	100	89.5	136274	PASS
443	442	17	23	19.1	26080	PASS

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE

Page: 1

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	14743	63.00	2297	71.00	324	81.00	4326
51.10	55293	64.05	238	72.10	91	82.05	868
52.05	3733	64.50	366	72.90	92	83.00	691
53.00	288	65.05	1695	73.15	2976	83.30	506
55.00	902	65.90	56	74.05	5967	85.05	1423
56.10	2243	66.05	155	75.05	8930	86.15	1194
57.05	4171	67.00	219	76.20	897	86.80	211
57.90	87	67.40	465	77.05	58640	87.15	525
59.25	172	68.95	56725	78.05	4288	87.70	83
61.10	702	69.85	121	78.95	4586	88.00	270
62.10	1336	70.30	306	80.00	2964	88.50	124

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
89.15	487	96.30	248	103.15	1384	111.00	5925
90.60	236	97.00	486	103.40	624	111.85	165
90.90	249	98.00	4833	104.00	1010	112.10	246
91.15	554	98.25	557	104.30	456	113.40	2
91.95	1008	99.00	5535	104.70	142	113.80	61
92.30	1139	99.95	692	105.10	1272	115.15	529
93.10	7521	100.80	426	105.85	169	115.85	78
94.15	715	101.05	1428	107.00	18870	116.20	864
95.30	473	101.70	254	108.05	3213	117.00	12926
95.85	330	101.90	126	108.85	365	117.80	320
96.05	34	102.45	70	109.95	43779	118.10	409

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.95	51	129.95	3330	138.30	88	146.10	210
119.30	32	131.00	569	138.70	89	147.10	2453
120.05	86	131.90	438	140.10	829	148.00	4618
120.90	316	132.45	350	140.40	204	149.10	1354
122.00	1374	133.00	174	141.00	4312	149.80	43
123.05	1698	133.90	865	142.10	1454	150.00	40
123.95	866	135.00	1911	142.90	472	150.80	145
125.05	1229	135.40	704	143.20	369	151.35	427
126.95	77761	135.90	1588	144.00	592	151.85	762
128.05	7808	137.05	1592	144.70	47	152.85	665
129.00	29240	137.90	125	145.80	445	153.80	561

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.10	444	160.10	739	165.75	655	172.80	1135
154.30	634	161.00	2611	166.00	547	173.20	474
155.00	2259	161.80	404	167.05	6730	174.05	1694
155.90	1769	162.10	116	168.10	3196	175.00	2803
156.10	2097	162.40	166	169.10	313	176.05	1374
156.80	67	162.70	235	169.40	11	177.00	1911
157.10	407	163.00	166	170.40	189	177.80	205
158.05	400	163.70	174	170.95	631	178.20	191
158.30	113	164.20	501	171.20	102	178.85	530
159.15	562	164.70	120	171.90	330	179.05	3141
159.90	629	165.15	1227	172.10	400	180.05	3912

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.05	1675	187.80	165	195.90	907	206.05	30000
181.95	673	188.05	304	196.15	4613	206.95	4682
182.55	577	189.00	1356	196.80	1351	208.05	1614
182.90	231	189.70	194	198.00	152306	209.10	773

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE Page: 2

183.50	258	190.00	121	199.00	11277	210.15	582
183.70	221	190.95	1273	200.50	85	210.80	989
183.95	373	192.15	1347	200.80	391	211.15	1162
184.80	412	193.00	1559	201.50	1017	211.50	493
185.25	2625	193.80	163	203.10	1597	212.05	385
185.95	18698	194.10	295	204.05	5901	212.75	268
187.05	5743	194.40	196	205.05	8004	213.20	66

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
214.10	136	223.30	1837	231.50	48	239.20	365
215.15	211	224.10	18917	231.90	92	239.95	342
215.95	996	225.05	5319	233.15	340	240.30	80
216.20	719	226.10	211	234.20	551	240.60	158
217.00	6511	227.00	6560	235.00	892	241.00	687
218.00	1517	228.00	1285	235.80	129	242.10	1024
219.00	206	228.95	888	236.00	462	242.90	610
219.90	179	229.20	373	236.60	115	243.15	245
221.10	8285	230.05	283	237.35	152	244.10	17026
222.00	818	230.80	100	238.20	141	245.05	1582
223.10	1513	231.00	302	238.70	125	246.00	1785

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.20	789	253.30	923	263.65	140	272.00	87
246.70	161	255.00	71501	264.20	9	272.15	548
247.00	475	256.00	9628	265.05	1600	273.15	3077
247.60	49	256.95	884	266.10	271	274.05	7344
248.00	176	257.20	326	266.70	56	275.05	38268
249.00	934	258.10	3677	268.55	161	275.90	1453
249.50	80	259.15	869	269.05	126	276.05	4419
251.00	111	260.20	253	269.75	224	277.00	2561
251.30	64	260.70	27	270.50	131	278.00	165
252.40	453	261.00	37	270.70	71	278.25	409
252.95	461	262.80	43	271.40	293	279.10	150

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.60	40	289.20	100	298.60	140	309.00	17
281.05	658	290.15	226	299.00	102	309.20	18
282.50	132	290.70	81	300.50	173	311.00	56
282.90	198	292.10	309	301.05	518	312.60	67
283.90	353	292.30	70	302.10	531	312.90	25
284.20	212	293.10	1104	302.70	69	313.60	95
284.70	340	293.80	109	303.00	1653	314.00	373
284.95	328	294.10	129	303.50	61	314.60	90
285.90	54	295.20	397	303.95	238	315.05	1675
286.40	29	296.05	9174	304.20	215	316.05	884
288.70	140	297.70	159	307.95	157	317.40	171

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
318.35	97	325.00	396	332.35	286	339.70	44
318.80	34	326.00	483	332.70	101	340.20	132
319.15	269	327.00	566	333.30	229	340.50	40
319.80	56	327.70	121	334.00	2919	340.90	149
320.60	35	327.90	150	335.20	846	341.25	521
321.00	340	328.10	126	336.00	107	342.10	403
321.70	37	329.30	107	337.35	114	342.95	178
322.00	328	329.60	92	338.00	25	343.20	60
323.05	4178	331.00	31	338.40	51	343.90	35
324.10	361	331.20	127	339.15	274	344.70	81
324.30	149	331.90	284	339.40	86	345.80	301

Average of 2.873 to 2.884 min.: z109749.D\data.ms

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
346.10	714	351.70	142	357.85	259	365.80	317
346.70	114	352.00	735	358.70	57	366.10	399
347.00	32	352.35	382	359.00	130	366.60	111
347.15	167	353.05	1204	359.65	153	367.15	279
347.80	59	354.05	1966	360.30	180	369.05	117
348.40	63	354.70	290	360.80	25	370.00	180
348.90	103	355.00	118	362.50	201	370.90	298
349.40	76	355.20	98	362.70	29	371.20	165
350.00	116	356.15	209	363.70	25	372.05	3137
350.40	20	356.90	176	364.30	224	373.05	950
350.80	360	357.10	80	364.90	4988	373.60	193

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.90	75	385.55	188	393.15	144	401.95	742
374.30	62	386.80	24	394.60	70	402.30	194
377.20	298	387.30	218	395.55	59	403.15	1548
378.05	170	388.50	164	396.30	18	403.80	150
378.70	18	389.40	95	397.20	104	404.20	353
380.00	53	389.80	161	398.30	45	404.50	242
381.80	45	390.30	197	398.70	166	405.60	137
382.20	56	390.80	37	399.30	67	406.70	144
383.10	408	391.10	117	399.60	184	407.60	75
383.90	146	391.40	156	401.00	226	408.40	59
384.15	513	392.20	273	401.70	343	408.60	148

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
410.95	18	420.00	42	425.60	48	432.70	86
411.40	49	420.20	201	425.90	97	433.50	254
412.00	184	420.60	438	426.25	144	434.40	137
412.40	122	421.10	1003	426.80	44	434.80	252
413.00	20	422.00	343	427.50	126	435.40	93
415.10	308	422.25	1829	429.15	517	435.60	120
415.85	108	423.05	7353	429.95	95	436.20	499
416.90	35	423.90	370	431.00	134	436.70	526
417.10	147	424.15	1687	431.35	192	437.10	380
418.20	146	424.70	122	432.20	137	437.60	800
419.35	72	425.20	129	432.50	164	438.10	507

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
438.50	653	447.20	18	458.50	81	468.50	19
439.00	541	447.50	33	459.80	25	470.70	27
439.60	1868	449.40	39	460.10	18	471.90	149
441.15	25892	449.90	42	461.90	84	472.40	98
442.10	136274	450.20	161	462.90	65	477.30	80
443.10	26080	450.80	74	464.10	20	479.50	95
443.80	1412	454.00	27	464.60	46	480.90	21
444.15	1496	455.80	36	465.95	130	481.90	42
445.25	302	456.00	21	467.00	71	483.30	16
446.00	256	457.50	38	467.30	71	484.20	25
447.00	106	457.90	56	467.60	88	487.20	50

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
489.10	119	503.20	84	521.40	159	533.10	28
490.30	66	504.00	240	523.00	19	535.05	62
491.65	146	506.60	150	524.40	120	537.50	40
494.10	20	507.20	61	525.10	92	537.80	62
494.60	69	510.50	43	526.10	162	539.30	59

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE Page: 4

496.80	42	511.00	43	527.60	31	540.20	18
499.50	20	512.10	38	528.20	76	541.20	114
501.10	19	512.30	54	528.50	129	542.70	106
501.90	89	514.20	183	529.10	30	543.10	74
502.20	33	518.00	64	529.80	19	545.50	76
502.90	112	519.50	39	530.40	18	546.10	166

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
548.10	35						
548.90	16						
549.45	132						

7.5.21

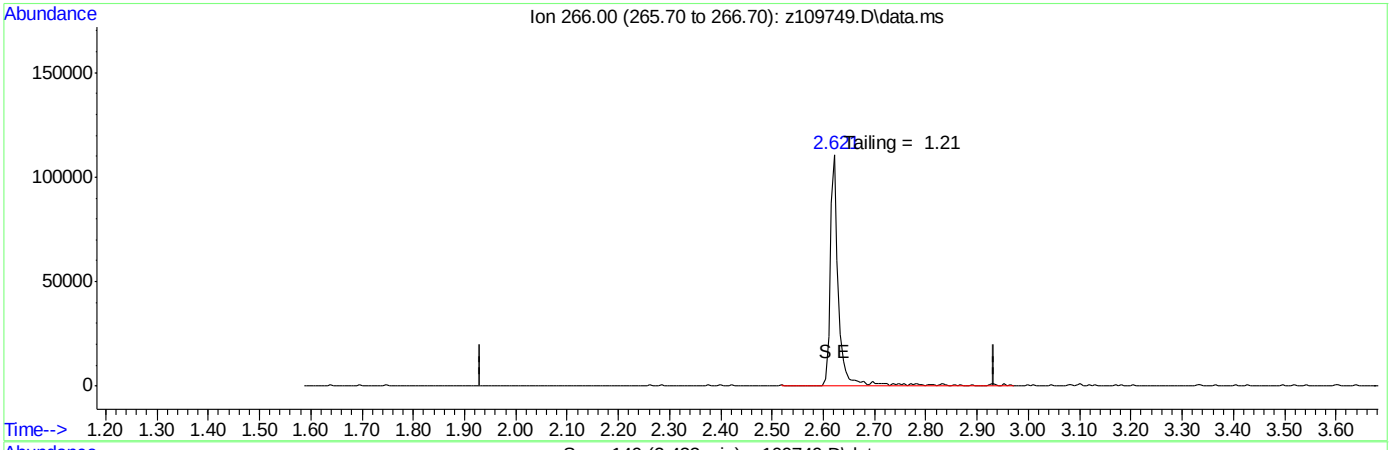
7

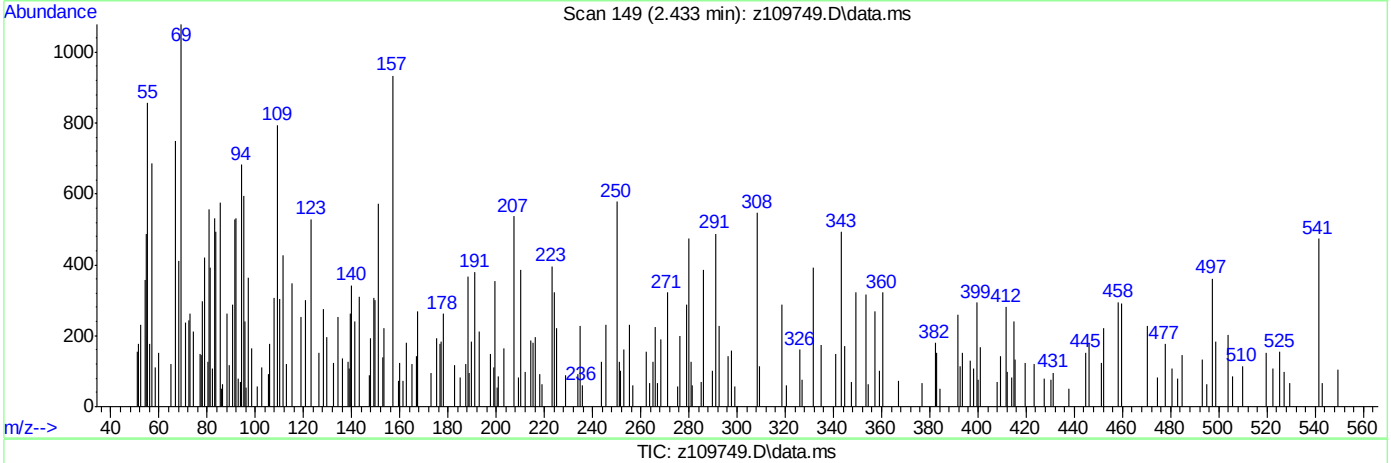
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 01:45:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109749.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

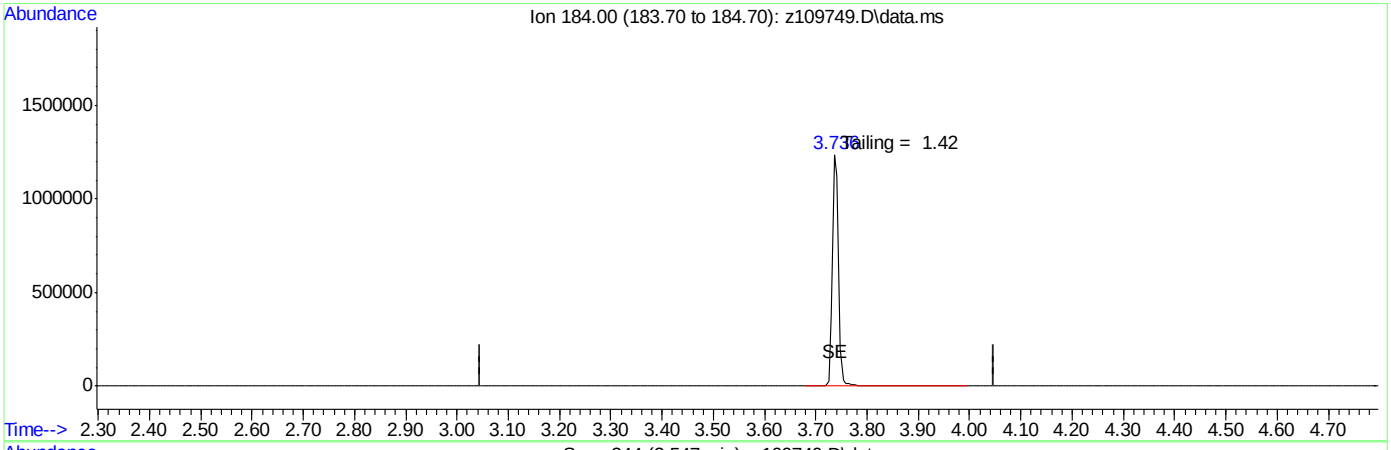
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

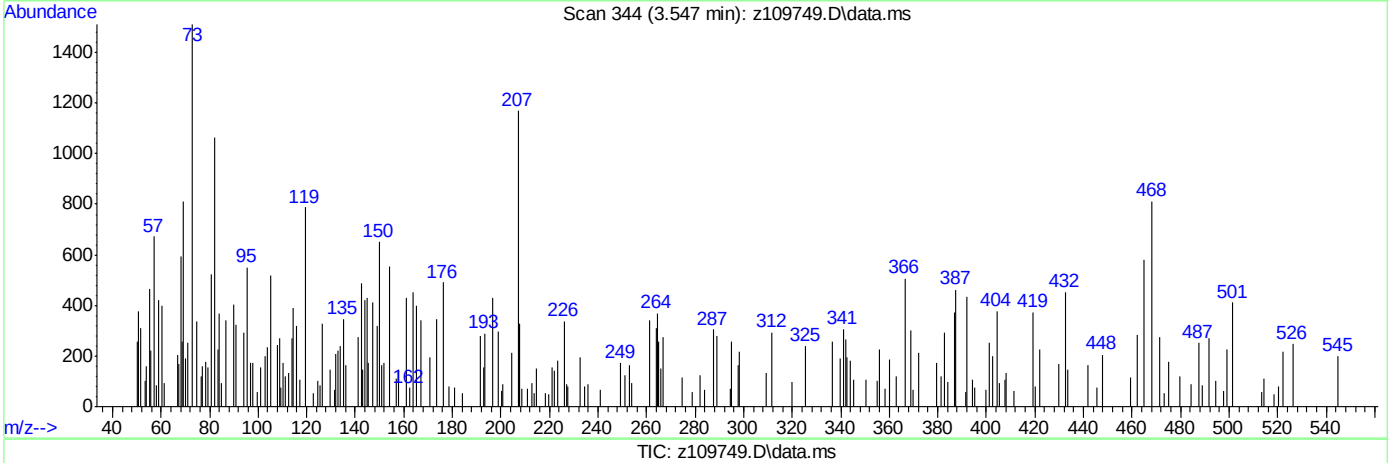
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 01:45:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109749.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

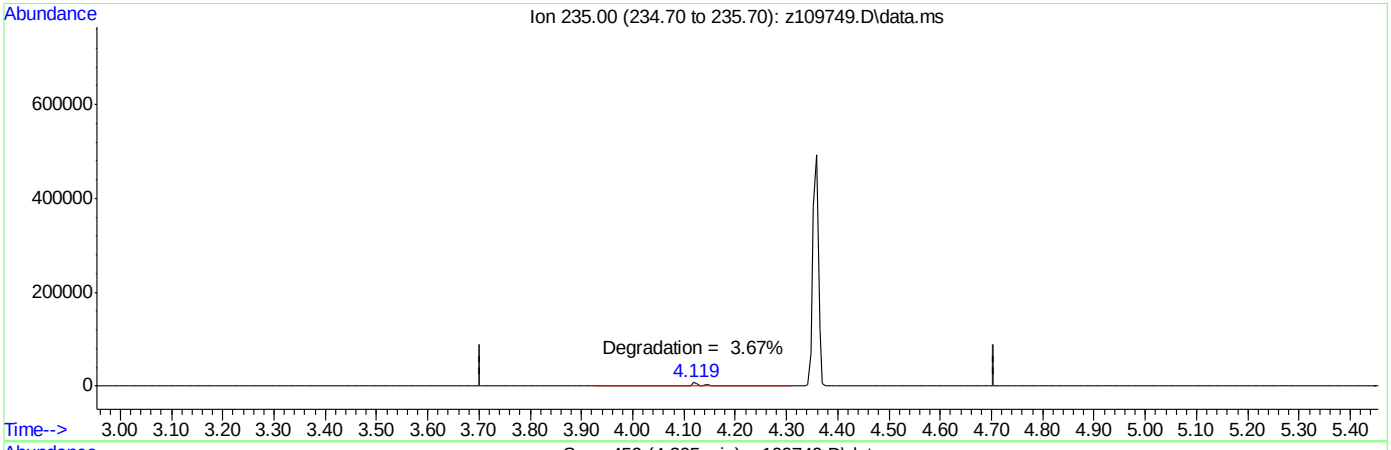
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

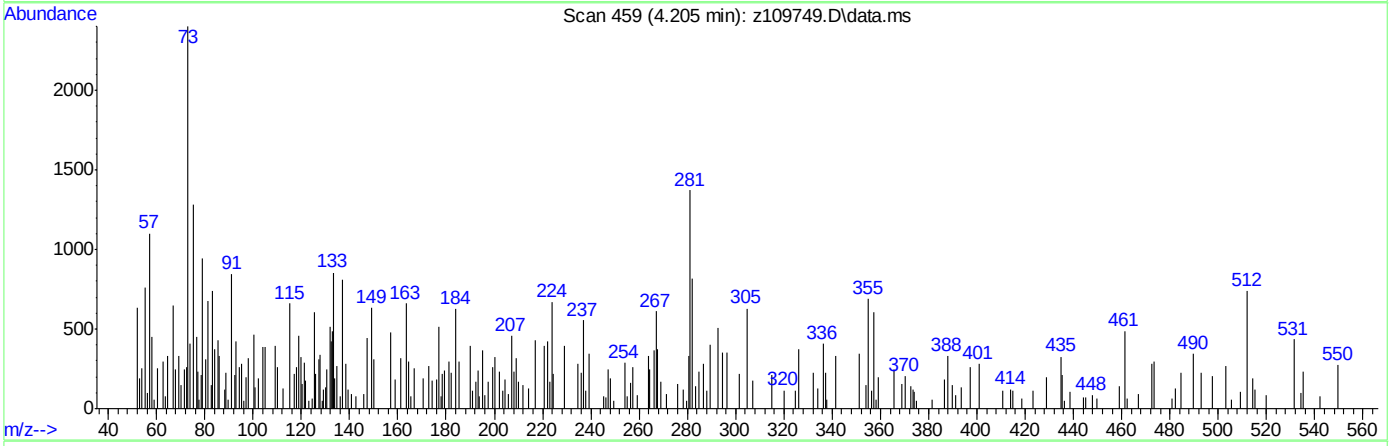
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 01:45:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109749.D\data.ms

(3) PP-DDT

4.205min (-4.205) 0.00

response 0

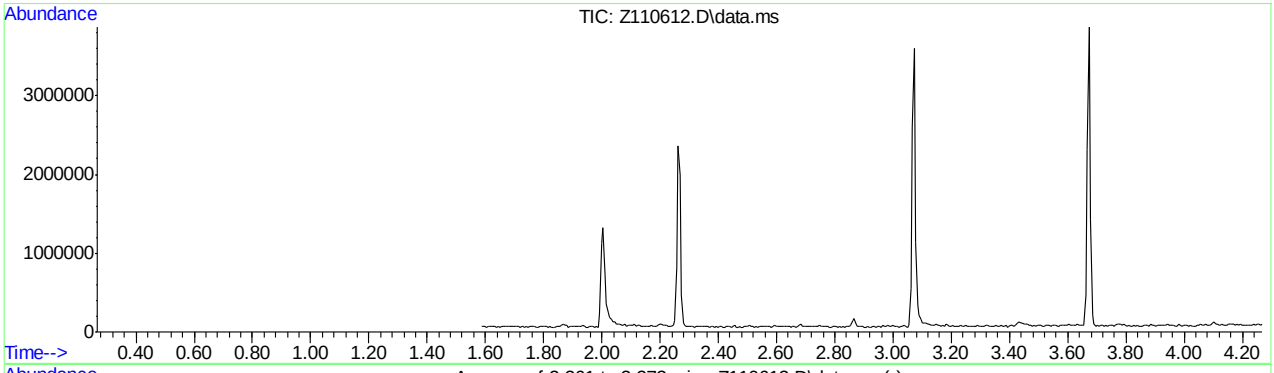
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

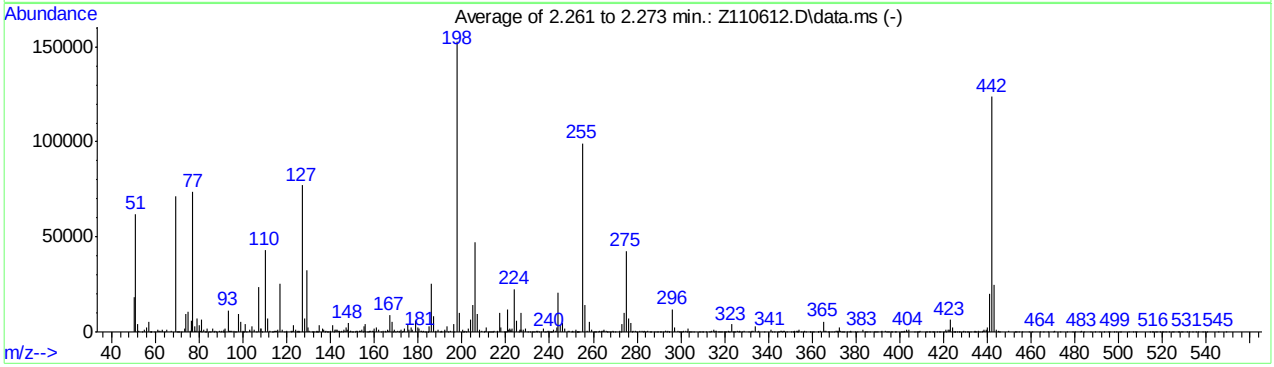
DFTPP

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110612.D
Acq On : 12 May 2016 10:01 am
Operator : ariellec
Sample : dftpp
Misc : op93793,ez5525
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Title : column rtx-5msi 30mx0.25mmx0.25um
Last Update : Thu Sep 10 14:02:56 2015





AutoFind: Scans 119, 120, 121; Background Corrected with Scan 114

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.6	61978	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.9	71622	PASS
70	69	0.00	2	0.3	193	PASS
127	198	40	60	50.5	77139	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	152794	PASS
199	198	5	9	6.4	9830	PASS
275	198	10	30	27.8	42548	PASS
365	198	1	100	3.6	5506	PASS
441	443	0.01	100	80.1	20005	PASS
442	198	40	100	80.9	123648	PASS
443	442	17	23	20.2	24979	PASS

DFTPPZ.M Fri May 13 10:10:53 2016 RTE

Page: 1

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	18167	59.60	33	70.40	162	78.60	387
51.05	61978	60.95	1271	70.60	143	79.05	7191
52.05	4123	61.80	442	71.95	255	79.80	407
52.30	421	62.10	479	73.15	1626	80.05	3637
53.70	63	63.00	1436	74.10	9562	80.60	328
55.10	1042	63.20	868	75.10	10898	80.80	300
56.05	2505	63.90	138	75.90	336	81.10	6388
57.00	5080	65.20	974	76.30	5640	82.10	1240
57.30	210	67.40	869	77.10	73538	82.60	47
58.00	83	69.05	71622	77.80	483	83.15	305
58.25	314	70.00	193	78.15	3128	83.80	1714

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
84.80	187	91.30	49	99.80	248	108.00	2076
85.15	314	92.00	2077	100.00	469	108.20	1970
86.00	1724	93.10	11292	100.30	253	108.80	138
86.80	95	94.00	610	101.05	4159	110.10	43287
87.10	787	94.50	361	101.60	100	111.00	6914
87.60	165	95.05	434	103.00	1083	112.05	530
89.20	449	95.95	812	103.20	503	113.10	282
89.70	311	96.30	284	104.10	3017	113.60	284
90.45	760	96.80	271	105.05	1485	114.15	357
90.80	99	98.15	9590	106.00	214	114.95	396
91.10	1278	99.10	5235	107.05	23418	115.50	640

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.90	950	124.85	535	132.20	188	139.05	266
117.00	25588	125.10	52	133.05	135	140.00	672
117.95	921	125.40	314	133.70	182	141.00	3725
118.90	318	125.75	343	134.00	497	141.40	208
120.10	595	127.05	77139	134.50	22	142.10	1135
121.90	615	128.00	7274	135.00	3425	142.40	1286
122.10	114	129.05	32518	136.15	1501	143.10	977
122.50	764	129.90	2456	137.00	1281	143.30	322
123.05	3383	130.20	508	137.40	191	144.00	338
124.00	1180	131.60	149	138.10	326	144.40	172
124.40	97	131.80	30	138.30	303	145.10	509

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.40	259	151.10	165	156.80	179	164.80	38
146.00	1358	151.45	357	157.25	293	165.10	834
146.60	382	152.20	380	157.90	818	166.10	907
147.10	2553	153.00	837	158.40	357	166.40	511
147.40	1439	153.20	665	159.20	710	167.00	9085
148.05	4704	153.70	453	159.50	400	168.15	5443
148.70	173	154.20	1166	160.00	2061	168.70	231
148.95	841	154.70	303	161.05	2262	169.00	1216
149.30	477	155.05	3147	161.90	1295	169.80	159
149.70	140	155.70	585	162.80	60	170.90	483
150.20	26	156.05	4060	164.00	829	171.20	256

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
171.60	448	180.00	2244	186.10	25368	194.50	473
172.10	1200	180.20	1927	187.05	8094	196.00	3934
172.80	289	181.20	793	188.10	766	196.50	293
173.00	339	181.40	449	189.00	1447	198.00	152794

DFTPPZ.M Fri May 13 10:10:53 2016 RTE Page: 2

173.95	1530	181.90	34	190.20	252	198.95	9830
175.10	4409	182.30	372	190.40	373	200.10	1386
175.95	1062	182.80	106	190.80	159	200.40	171
176.95	2434	183.30	42	191.90	548	200.90	57
177.55	1059	184.30	290	192.10	962	201.30	323
178.80	546	184.70	48	193.05	3137	202.10	73
179.05	5837	185.05	2950	193.80	310	203.05	1662

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
204.05	6357	213.20	21	221.20	1392	228.00	968
205.05	13974	213.70	31	221.80	1514	229.05	2027
206.10	47150	214.10	130	222.10	548	230.25	224
207.05	9355	214.80	535	222.40	907	231.05	216
208.10	1389	216.05	711	222.95	1947	232.10	35
208.90	591	217.05	10082	224.05	22527	232.60	153
209.95	230	217.95	2237	225.10	6085	232.90	188
210.40	852	219.25	12	226.00	39	234.00	454
211.05	2285	219.70	81	226.40	1011	234.30	229
212.20	297	220.30	25	227.00	9890	234.60	341
212.40	157	221.00	11906	227.20	1263	235.40	245

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
235.95	206	242.00	1249	250.75	467	258.10	5066
237.05	1704	242.60	427	251.30	91	259.10	1110
237.80	25	243.15	2173	251.85	923	260.30	44
238.30	231	244.00	20501	252.45	257	260.80	90
239.00	197	245.00	3374	252.70	85	261.30	208
239.25	339	246.05	4613	253.00	173	262.30	69
240.00	355	247.00	1500	253.30	304	262.90	329
240.50	41	248.50	328	253.50	72	263.40	242
240.80	205	249.05	640	255.05	99253	263.85	457
241.00	192	249.80	124	256.05	14077	264.20	349
241.20	173	250.50	292	257.10	817	264.90	1371

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.10	830	273.05	4224	282.80	70	292.20	185
266.00	727	274.10	10067	283.20	388	293.00	567
266.30	213	275.05	42548	283.70	215	293.10	420
266.60	286	276.05	7261	285.05	842	293.70	57
267.30	226	276.95	4835	286.00	172	293.90	360
267.75	314	277.50	113	286.30	289	294.40	130
268.75	397	278.05	807	288.10	273	294.80	244
269.10	22	279.00	446	288.80	68	296.10	11946
270.00	229	279.70	62	289.40	42	296.95	2379
271.95	503	281.10	559	290.50	109	297.20	490
272.40	29	282.10	870	291.10	78	298.65	329

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
299.30	159	305.60	144	315.85	451	322.20	113
299.50	39	308.30	19	316.20	344	323.00	3884
300.40	180	309.10	228	317.20	131	323.85	198
300.60	47	309.70	255	317.60	26	324.40	144
301.15	506	310.00	18	317.90	90	325.00	67
302.20	489	311.50	51	318.50	24	325.70	424
302.50	149	313.15	289	319.80	58	326.30	57
303.05	1578	313.60	113	320.10	17	326.60	180
303.60	118	314.00	449	320.70	50	327.05	650
304.15	305	314.90	227	321.50	496	328.00	217
305.00	239	315.10	1279	321.70	114	328.90	455

Average of 2.261 to 2.273 min.: Z110612.D\data.ms

DFTPPZ.M Fri May 13 10:10:53 2016 RTE Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
330.80	68	344.00	78	352.00	786	359.30	267
332.00	66	344.60	85	352.70	292	360.10	218
332.25	701	345.60	627	352.90	496	360.70	120
333.00	612	345.90	416	353.20	330	362.40	243
334.10	3097	346.30	101	353.50	208	362.70	69
335.10	210	346.60	320	353.90	1244	363.75	588
335.40	599	347.20	412	355.00	268	365.00	5506
338.20	63	348.10	133	356.10	18	365.65	705
341.15	988	350.10	39	356.40	440	366.00	395
341.80	157	351.20	67	356.80	21	367.10	107
342.70	104	351.50	143	358.90	152	367.60	273

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
369.00	64	376.20	153	388.20	85	396.50	110
369.60	230	376.80	63	388.70	235	397.80	35
370.90	492	377.40	163	389.50	57	398.00	51
371.10	63	377.70	379	389.70	103	400.30	33
371.40	683	379.30	166	391.20	17	401.10	139
371.80	667	380.50	124	391.60	401	401.50	158
372.20	2363	382.95	1044	393.25	471	402.10	505
372.85	605	384.00	92	393.70	291	402.30	283
373.20	319	384.40	79	394.40	166	402.90	323
374.00	88	385.20	55	395.00	171	403.00	246
374.30	111	386.00	294	395.70	117	403.15	1006

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
404.10	1076	415.20	155	424.00	2285	431.20	86
406.60	28	415.60	286	424.40	236	432.50	152
407.50	114	416.70	29	424.90	256	433.80	55
408.05	71	417.70	190	425.10	46	434.10	41
408.80	38	418.60	67	426.10	221	434.50	348
409.45	361	419.85	231	427.00	203	434.70	31
411.80	46	420.90	95	427.30	239	436.00	324
412.30	177	421.20	1413	428.80	18	436.50	55
413.50	95	421.90	918	429.10	453	437.20	143
414.05	285	422.30	974	429.90	89	438.00	378
415.00	144	423.05	6476	430.90	115	438.20	347

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
438.65	1167	445.70	196	467.80	114	489.30	60
439.20	445	449.80	371	470.00	169	491.15	198
439.35	1033	452.60	263	470.90	463	492.95	257
439.70	703	452.90	96	473.00	19	495.10	60
440.20	2469	453.40	172	476.10	72	495.80	28
441.05	20005	454.40	73	478.80	103	497.90	25
442.10	123648	455.90	23	479.90	125	498.80	190
443.05	24979	458.90	123	482.50	253	500.60	38
443.90	970	460.30	112	483.20	523	500.80	81
445.00	361	464.05	186	484.00	72	504.30	50
445.30	162	465.40	42	487.00	91	506.30	20

Average of 2.261 to 2.273 min.: Z110612.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
507.70	125	522.70	169	536.00	19		
508.20	83	524.30	18	538.40	35		
514.30	78	525.00	228	539.10	47		
515.30	40	526.80	114	540.20	22		
515.80	242	527.60	29	545.60	294		

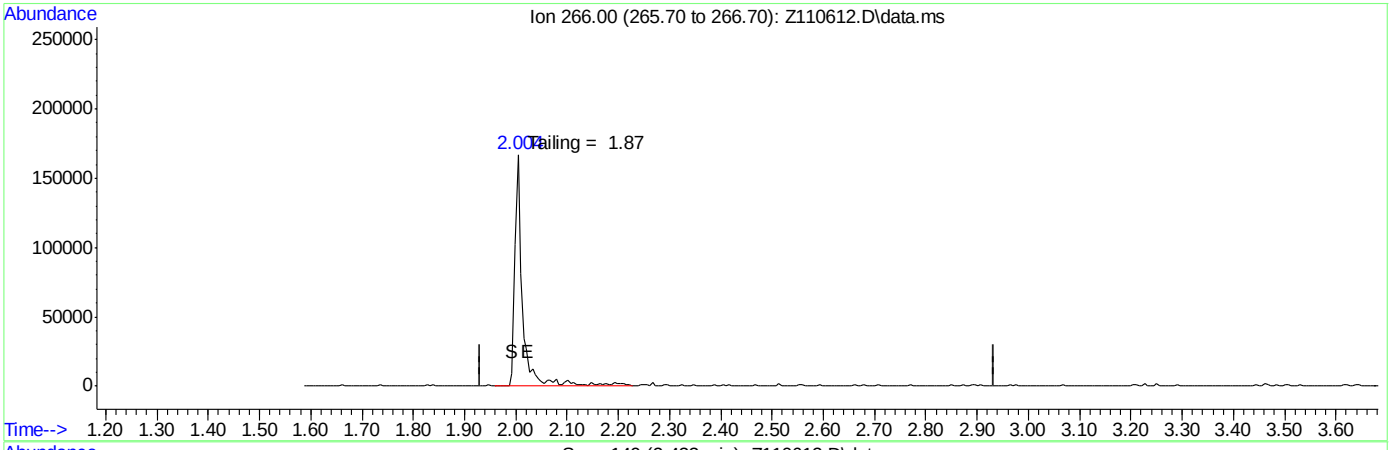
DFTPPZ.M Fri May 13 10:10:53 2016 RTE Page: 4

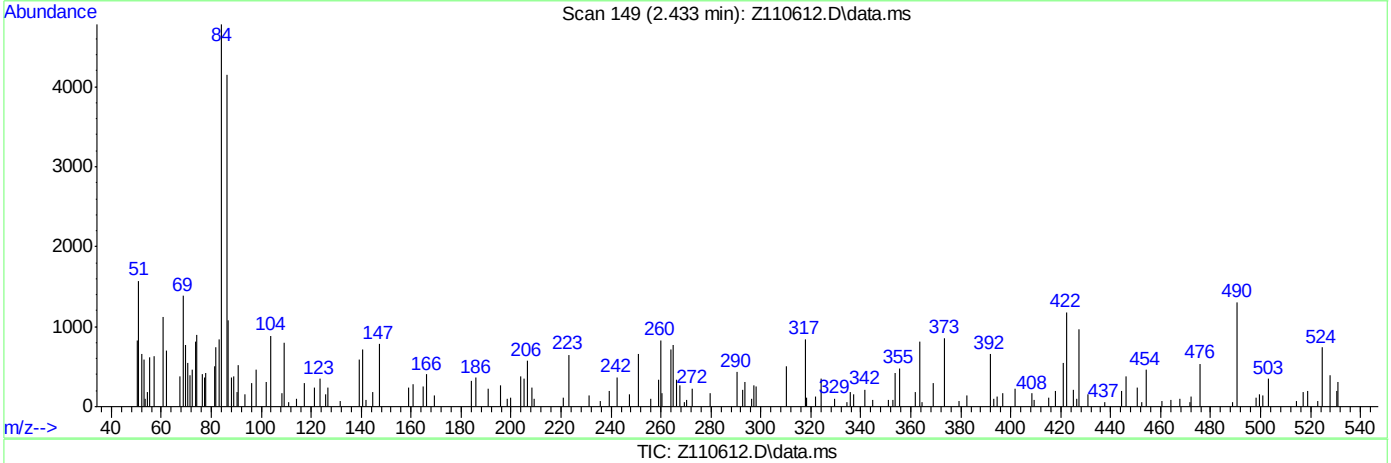
516.90	153	528.60	49	548.80	28
517.50	106	529.20	77		
518.80	138	531.10	42		
520.00	141	532.30	100		
520.50	61	533.60	80		
521.30	213	535.20	76		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110612.D
Acq On : 12 May 2016 10:01 am
Operator : ariellec
Sample : dftpp
Misc : op93793,ez5525
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 12 10:07:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: Z110612.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

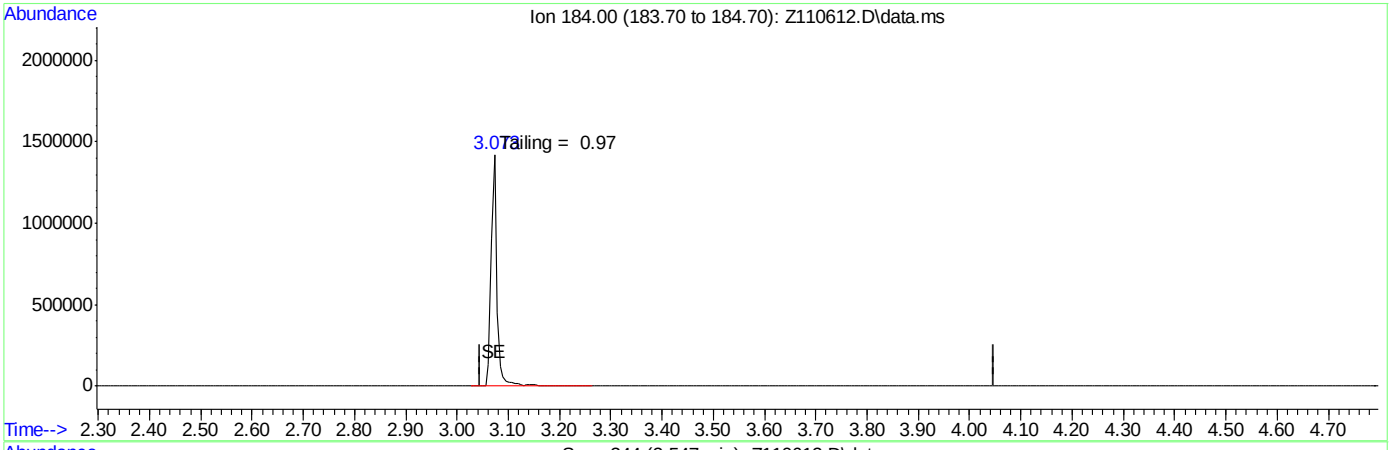
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

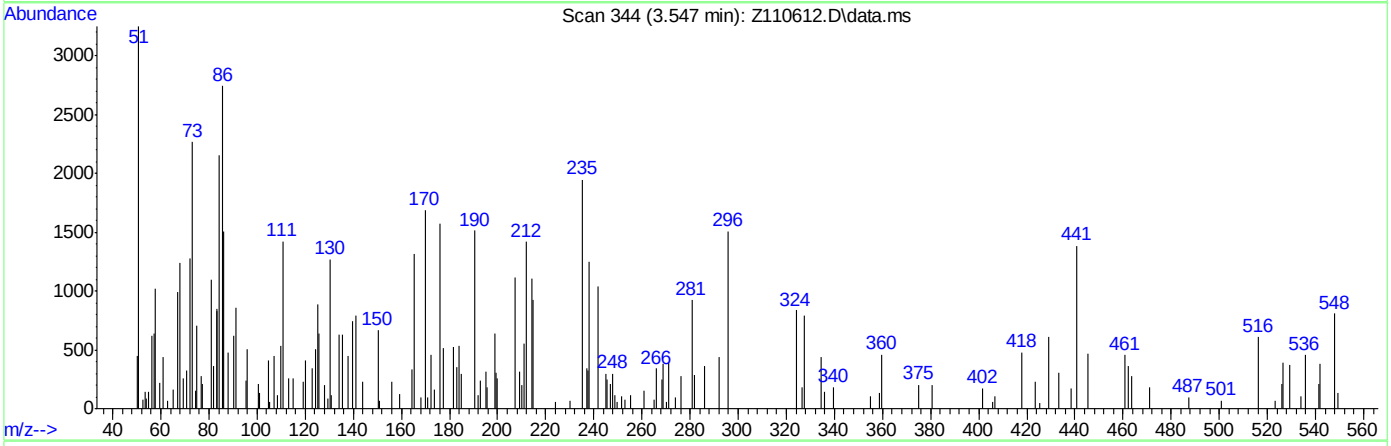
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110612.D
Acq On : 12 May 2016 10:01 am
Operator : ariellec
Sample : dftpp
Misc : op93793,ez5525
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 12 10:07:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: Z110612.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

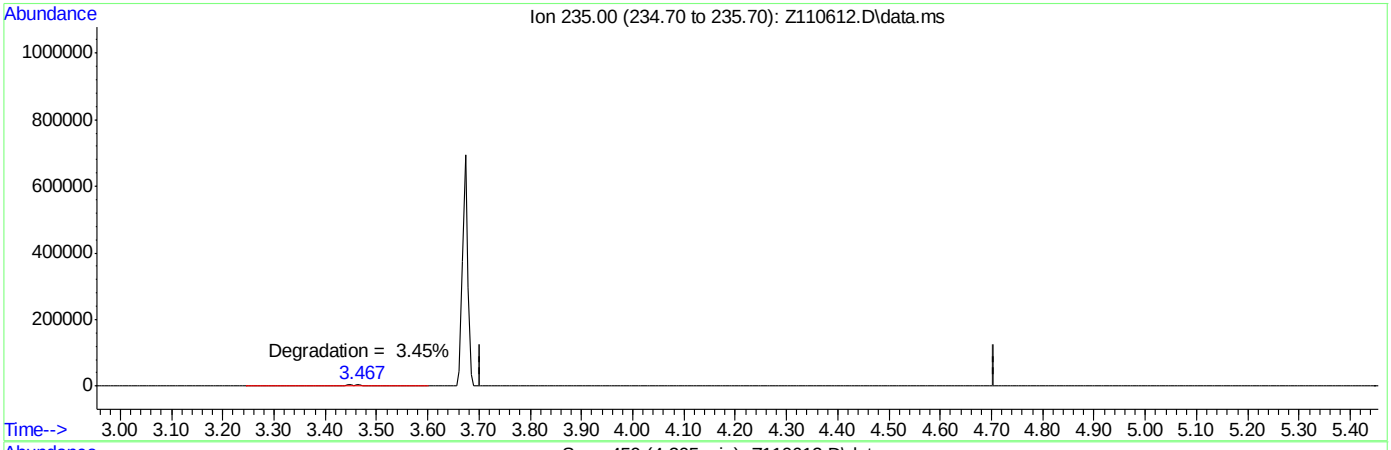
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

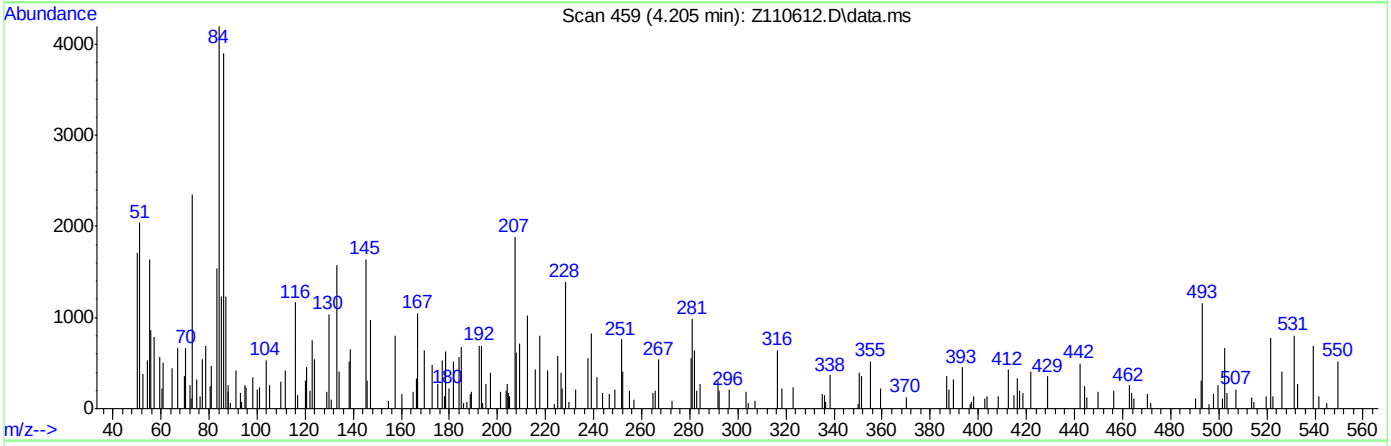
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110612.D
Acq On    : 12 May 2016  10:01 am
Operator  : ariellec
Sample    : dftpp
Misc      : op93793,ez5525
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 12 10:07:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title  : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration
```





TIC: Z110612.D\data.ms

(3) PP-DDT

4.205min (-4.205) 0.00

response 0

Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	400870	4.00	ppm	0.00
14) Fluorene-d10	13.625	176	625702	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	1077133	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	871075	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	1020090	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
4) Phenol-d5	6.104	99	1710029	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
7) Nitrobenzene-d5	7.726	82	1614929	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
15) 2-Fluorobiphenyl	11.303	172	3472226	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
20) 2,4,6-Tribromophenol	14.172	330	412126	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
28) Terphenyl-d14	18.647	244	3034780	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.289	88	20871	1.00	ppm	100
5) Phenol	6.128	94	465092	5.00	ppm	100
6) bis(2-Chloroethyl)ether	6.285	93	70869	1.00	ppm	100
8) Nitrobenzene	7.764	77	86151	1.00	ppm	100
9) Naphthalene	9.138	128	219827	1.00	ppm	100
10) Hexachlorobutadiene	9.421	225	40324	1.00	ppm	100
11) 2-Methylnaphthalene	10.517	141	120636	1.00	ppm	100
12) 1-Methylnaphthalene	10.702	141	140296	1.00	ppm	100
13) Hexachlorocyclopentadiene	10.846	237	70869	2.00	ppm	100
16) Acenaphthylene	12.293	152	240199	1.00	ppm	100
17) Acenaphthene	12.648	153	154130	1.00	ppm	100
18) 4,6-dinitro-2-methylph...	13.851	198	102012	5.00	ppm	100
19) Fluorene	13.682	166	186031	1.00	ppm	100
22) Hexachlorobenzene	14.783	284	51035	1.00	ppm	100
23) Pentachlorophenol	15.200	266	181848	5.00	ppm	100
24) Phenanthrene	15.602	178	268689	1.00	ppm	100
25) Anthracene	15.711	178	253406	1.00	ppm	100
26) Fluoranthene	17.874	202	309707	1.00	ppm	100
27) Pyrene	18.261	202	317795	1.00	ppm	100
29) Benzo[a]anthracene	20.346	228	287712	1.00	ppm	100
30) Chrysene	20.408	228	289281	1.00	ppm	100
32) Benzo[b]fluoranthene	22.015	252	292603	1.00	ppm	100
33) Benzo[k]fluoranthene	22.061	252	269694	0.99	ppm	100
34) Benzo[a]pyrene	22.463	252	265091	1.00	ppm	100
35) Indeno[1,2,3-cd]pyrene	23.963	276	292264	1.00	ppm	100
36) Dibenz[a,h]anthracene	24.020	278	233740	0.93	ppm	81
37) Benzo[g,h,i]perylene	24.358	276	248979	1.00	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.1

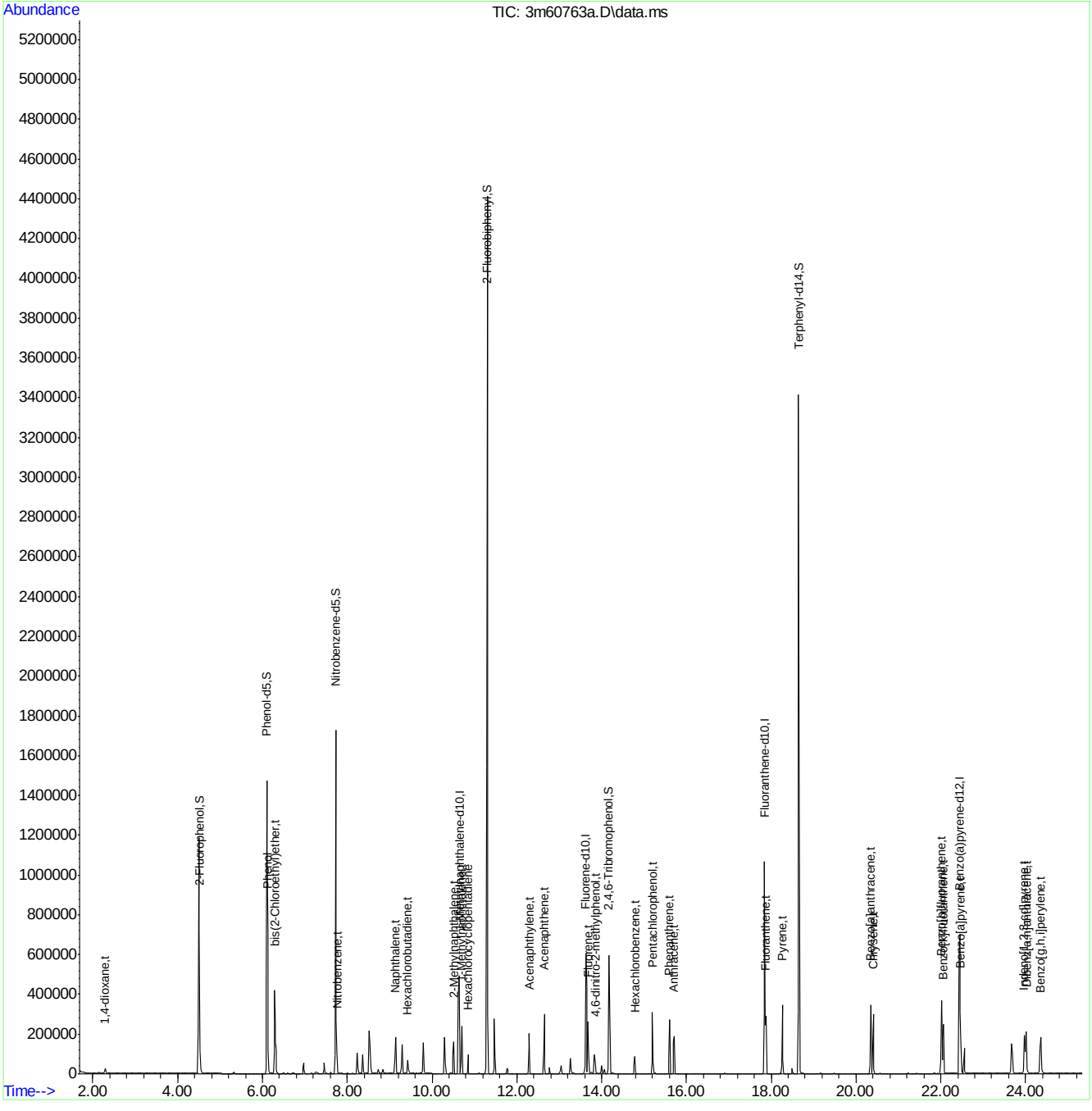
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60764a.D
Acq On : 21 Apr 2016 3:07 pm
Operator : linseyk
Sample : ic2855-0.5
Misc : op93052a,e3m2855
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 22 08:26:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.620	150	358247	4.00	ppm	-0.02
14) Fluorene-d10	13.625	176	572881	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	971465	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.432	264	803329	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	465758	10.22	ppm	0.00
Spiked Amount 50.000			Recovery = 20.44%			
4) Phenol-d5	6.104	99	786231	10.29	ppm	0.00
Spiked Amount 50.000			Recovery = 20.58%			
7) Nitrobenzene-d5	7.726	82	745253	10.33	ppm	0.00
Spiked Amount 50.000			Recovery = 20.66%			
15) 2-Fluorobiphenyl	11.303	172	1590025	10.00	ppm	0.00
Spiked Amount 50.000			Recovery = 20.00%			
20) 2,4,6-Tribromophenol	14.172	330	191850	10.17	ppm	0.00
Spiked Amount 50.000			Recovery = 20.34%			
28) Terphenyl-d14	18.647	244	1433884	10.48	ppm	0.00
Spiked Amount 50.000			Recovery = 20.96%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.289	88	9527	0.51	ppm	66
5) Phenol	6.116	94	208854	2.51	ppm #	64
6) bis(2-Chloroethyl)ether	6.285	93	31897	0.50	ppm	98
8) Nitrobenzene	7.764	77	37433	0.49	ppm	96
9) Naphthalene	9.138	128	98367	0.50	ppm	99
10) Hexachlorobutadiene	9.421	225	18124	0.50	ppm	97
11) 2-Methylnaphthalene	10.517	141	50870	0.47	ppm	97
12) 1-Methylnaphthalene	10.702	141	62617	0.50	ppm	98
13) Hexachlorocyclopentadiene	10.845	237	29084	0.92	ppm	100
16) Acenaphthylene	12.293	152	105827	0.48	ppm	99
17) Acenaphthene	12.648	153	67805	0.48	ppm	97
18) 4,6-dinitro-2-methylph...	13.851	198	30000	1.61	ppm	98
19) Fluorene	13.682	166	81831	0.48	ppm	98
22) Hexachlorobenzene	14.783	284	23082	0.50	ppm	99
23) Pentachlorophenol	15.200	266	74585	2.27	ppm	96
24) Phenanthrene	15.602	178	120971	0.50	ppm	98
25) Anthracene	15.695	178	110700	0.48	ppm	87
26) Fluoranthene	17.874	202	132546	0.47	ppm	98
27) Pyrene	18.261	202	140572	0.49	ppm	100
29) Benzo[a]anthracene	20.346	228	124954	0.48	ppm	99
30) Chrysene	20.408	228	123107	0.47	ppm	98
32) Benzo[b]fluoranthene	22.015	252	128656	0.48	ppm	98
33) Benzo[k]fluoranthene	22.061	252	114388	0.46	ppm	97
34) Benzo[a]pyrene	22.463	252	116726	0.48	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	127053	0.47	ppm	99
36) Dibenz[a,h]anthracene	24.020	278	97979	0.45	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	108758	0.47	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60764a.D
Acq On : 21 Apr 2016 3:07 pm
Operator : linseyk
Sample : ic2855-0.5
Misc : op93052a,e3m2855
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 22 08:26:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:05 2016
Response via : Initial Calibration

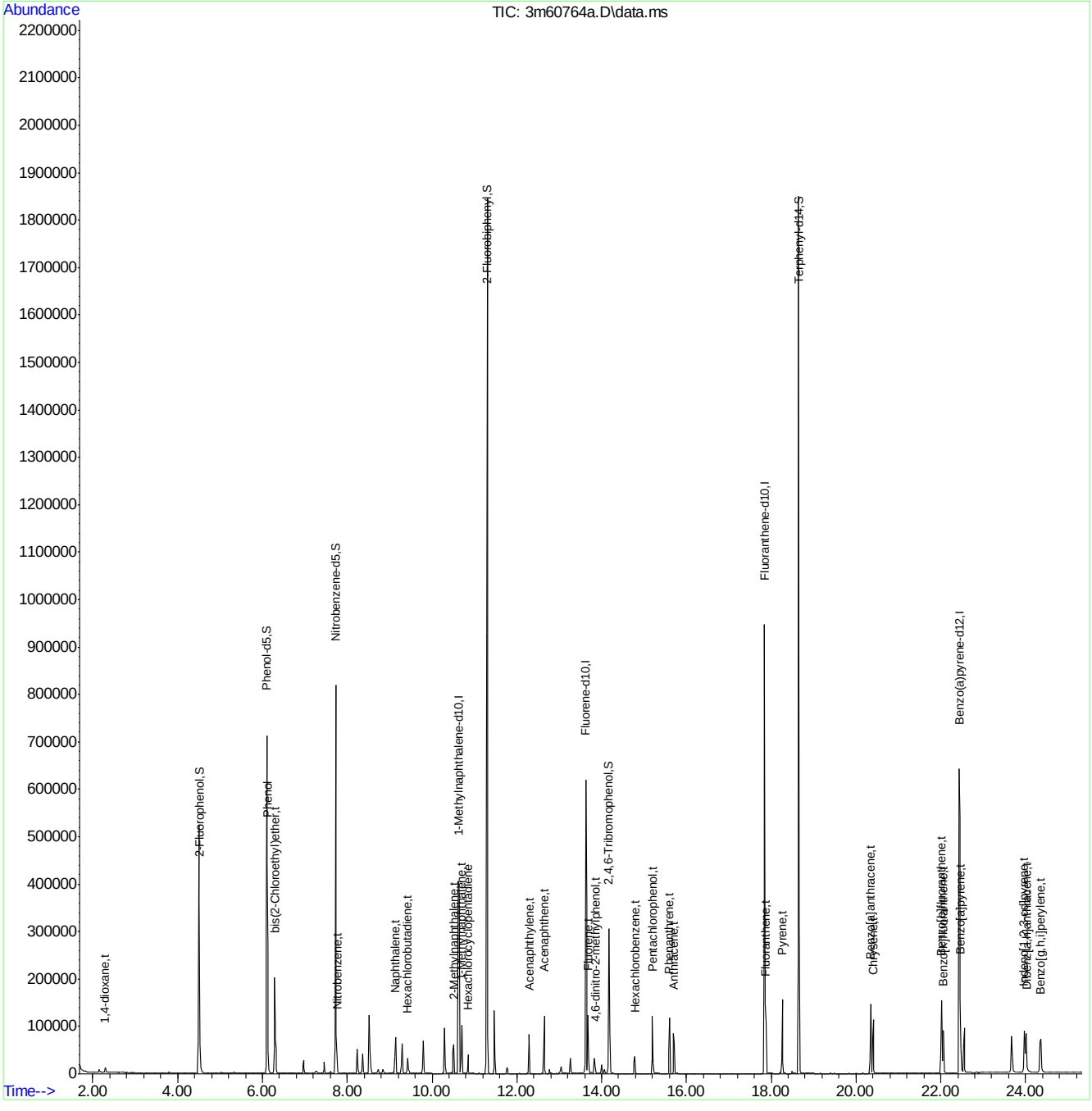
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60764a.D
Acq On : 21 Apr 2016 3:07 pm
Operator : linseyk
Sample : ic2855-0.5
Misc : op93052a,e3m2855
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 22 08:26:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.641	150	350963	4.00 ppm	0.02
14) Fluorene-d10	13.625	176	541559	4.00 ppm	0.00
21) Fluoranthene-d10	17.844	212	945802	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.432	264	762324	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.515	112	182333	4.04 ppm	0.00
Spiked Amount 50.000			Recovery	= 8.08%	
4) Phenol-d5	6.104	99	309088	4.07 ppm	0.00
Spiked Amount 50.000			Recovery	= 8.14%	
7) Nitrobenzene-d5	7.726	82	282457	3.93 ppm	0.00
Spiked Amount 50.000			Recovery	= 7.86%	
15) 2-Fluorobiphenyl	11.303	172	631033	4.20 ppm	0.00
Spiked Amount 50.000			Recovery	= 8.40%	
20) 2,4,6-Tribromophenol	14.172	330	70258	3.91 ppm	0.00
Spiked Amount 50.000			Recovery	= 7.82%	
28) Terphenyl-d14	18.647	244	584275	4.28 ppm	0.00
Spiked Amount 50.000			Recovery	= 8.56%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.290	88	3559	0.19 ppm #	20
5) Phenol	6.116	94	80728	0.99 ppm #	72
6) bis(2-Chloroethyl)ether	6.285	93	12510	0.20 ppm	96
8) Nitrobenzene	7.764	77	14471	0.19 ppm	100
9) Naphthalene	9.139	128	39500	0.21 ppm	99
10) Hexachlorobutadiene	9.421	225	7119	0.20 ppm	100
11) 2-Methylnaphthalene	10.517	141	20355	0.20 ppm	100
12) 1-Methylnaphthalene	10.702	141	25492	0.21 ppm	98
13) Hexachlorocyclopentadiene	10.846	237	9938	0.33 ppm	99
16) Acenaphthylene	12.293	152	39006	0.19 ppm	99
17) Acenaphthene	12.648	153	26171	0.20 ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	7553	0.52 ppm	92
19) Fluorene	13.682	166	31388	0.20 ppm	99
22) Hexachlorobenzene	14.783	284	8969	0.20 ppm	98
23) Pentachlorophenol	15.200	266	23466	0.77 ppm	99
24) Phenanthrene	15.602	178	45498	0.19 ppm	100
25) Anthracene	15.711	178	40800	0.19 ppm	99
26) Fluoranthene	17.874	202	52573	0.20 ppm	99
27) Pyrene	18.261	202	52427	0.19 ppm	99
29) Benzo[a]anthracene	20.347	228	46665	0.19 ppm	99
30) Chrysene	20.408	228	48799	0.20 ppm	99
32) Benzo[b]fluoranthene	22.015	252	49094	0.20 ppm	98
33) Benzo[k]fluoranthene	22.062	252	44557	0.20 ppm	99
34) Benzo[a]pyrene	22.463	252	44223	0.20 ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	49013	0.20 ppm	100
36) Dibenz[a,h]anthracene	24.020	278	39930	0.20 ppm	100
37) Benzo[g,h,i]perylene	24.358	276	41535	0.20 ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration

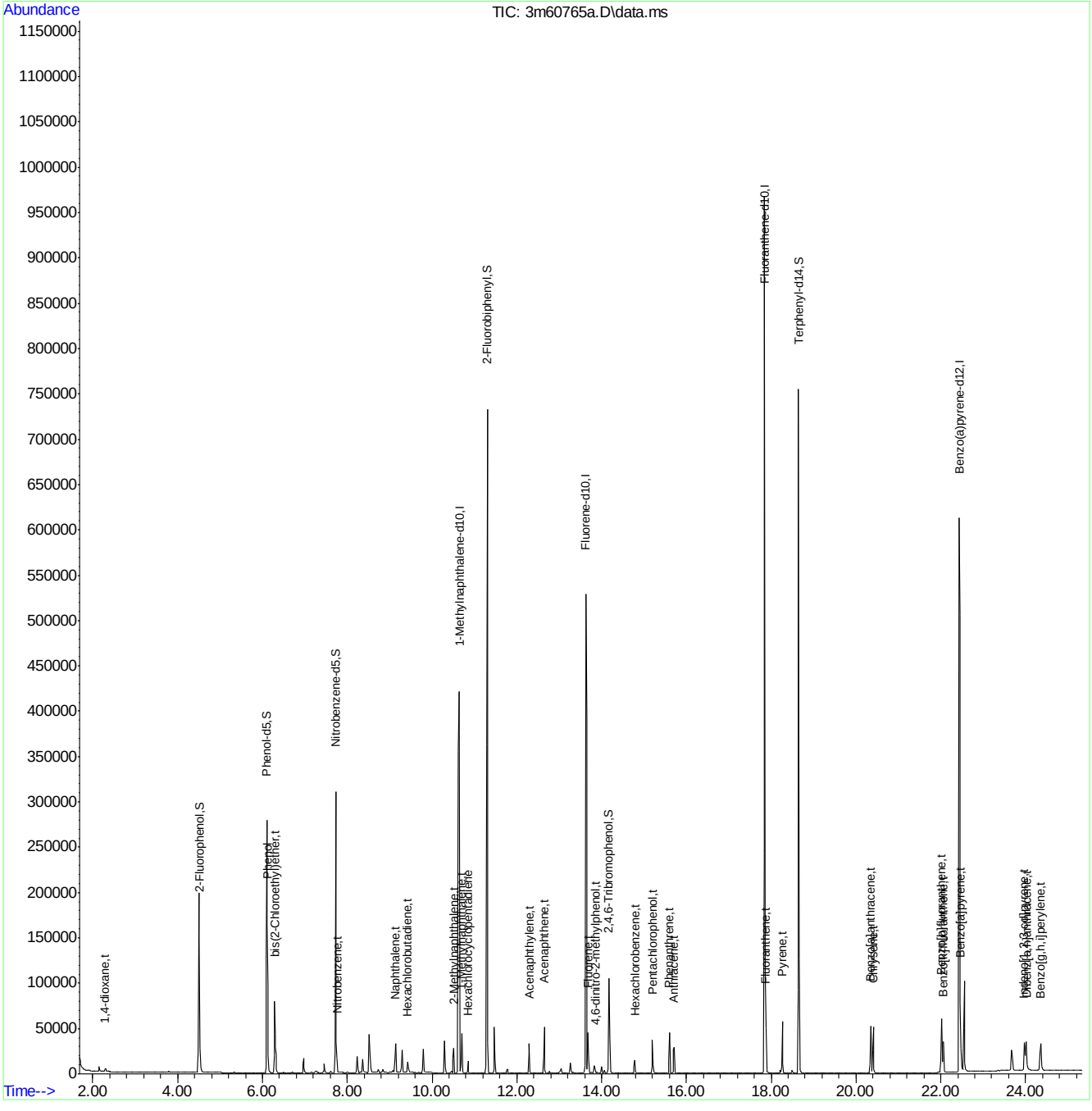
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	340968	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	502575	4.00	ppm	0.02
21) Fluoranthene-d10	17.844	212	887342	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	703545	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	86528	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
4) Phenol-d5	6.104	99	144256	1.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.88%	
7) Nitrobenzene-d5	7.726	82	129224	1.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.72%	
15) 2-Fluorobiphenyl	11.303	172	294276	2.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.16%	
20) 2,4,6-Tribromophenol	14.172	330	28910	1.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.50%	
28) Terphenyl-d14	18.647	244	266058	2.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.06%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	1953	0.11	ppm	93
5) Phenol	6.116	94	38102	0.48	ppm #	73
6) bis(2-Chloroethyl)ether	6.285	93	5932	0.10	ppm	92
8) Nitrobenzene	7.764	77	6815	0.10	ppm	96
9) Naphthalene	9.139	128	19053	0.10	ppm	99
10) Hexachlorobutadiene	9.421	225	3313	0.10	ppm	99
11) 2-Methylnaphthalene	10.517	141	9659	0.10	ppm	97
12) 1-Methylnaphthalene	10.702	141	12284	0.10	ppm	94
13) Hexachlorocyclopentadiene	10.846	237	4166	0.15	ppm	100
16) Acenaphthylene	12.293	152	17405	0.09	ppm	100
17) Acenaphthene	12.648	153	11953	0.10	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	2417	0.21	ppm	96
19) Fluorene	13.682	166	14084	0.10	ppm	100
22) Hexachlorobenzene	14.783	284	4120	0.10	ppm	99
23) Pentachlorophenol	15.201	266	9313	0.35	ppm	100
24) Phenanthrene	15.602	178	20817	0.10	ppm	100
25) Anthracene	15.711	178	17457	0.09	ppm	100
26) Fluoranthene	17.874	202	24361	0.10	ppm	99
27) Pyrene	18.261	202	23618	0.09	ppm	99
29) Benzo[a]anthracene	20.347	228	21304	0.09	ppm	99
30) Chrysene	20.408	228	22498	0.10	ppm	99
32) Benzo[b]fluoranthene	22.015	252	22115	0.10	ppm	99
33) Benzo[k]fluoranthene	22.062	252	22174	0.11	ppm	99
34) Benzo[a]pyrene	22.463	252	19014	0.09	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	22099	0.10	ppm	98
36) Dibenz[a,h]anthracene	24.020	278	18120	0.10	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	19184	0.10	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.4

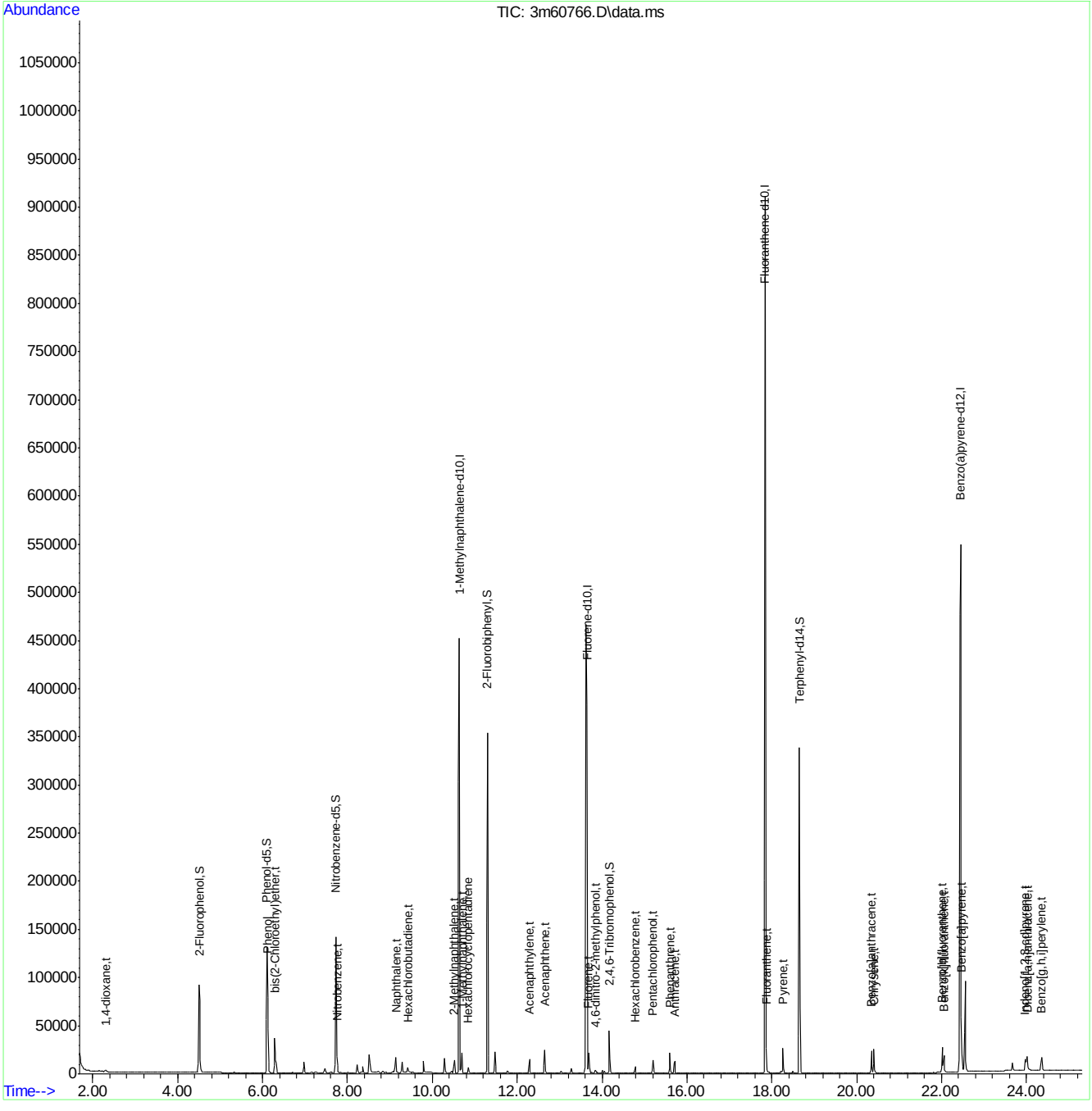
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.641	150	339033	4.00 ppm	0.00
14) Fluorene-d10	13.626	176	520555	4.00 ppm	-0.02
21) Fluoranthene-d10	17.844	212	888983	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.432	264	706519	4.00 ppm	-0.02
System Monitoring Compounds					
3) 2-Fluorophenol	4.515	112	42704	1.01 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.02%	
4) Phenol-d5	6.104	99	70262	1.00 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.00%	
7) Nitrobenzene-d5	7.726	82	63026	0.97 ppm	0.00
Spiked Amount 50.000			Recovery	= 1.94%	
15) 2-Fluorobiphenyl	11.303	172	145045	1.01 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.02%	
20) 2,4,6-Tribromophenol	14.172	330	13489	0.83 ppm	0.00
Spiked Amount 50.000			Recovery	= 1.66%	
28) Terphenyl-d14	18.647	244	135801	1.05 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.10%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.305	88	1056	0.06 ppm	90
5) Phenol	6.116	94	18706	0.25 ppm #	73
6) bis(2-Chloroethyl)ether	6.285	93	3013	0.05 ppm	88
8) Nitrobenzene	7.764	77	3438	0.05 ppm	92
9) Naphthalene	9.139	128	9285	0.05 ppm	99
10) Hexachlorobutadiene	9.421	225	1685	0.05 ppm	99
11) 2-Methylnaphthalene	10.518	141	4767	0.05 ppm	96
12) 1-Methylnaphthalene	10.702	141	6629	0.05 ppm	95
13) Hexachlorocyclopentadiene	10.846	237	2049	0.08 ppm	97
16) Acenaphthylene	12.293	152	8346	0.05 ppm	99
17) Acenaphthene	12.648	153	5946	0.05 ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	948	0.07 ppm	91
19) Fluorene	13.682	166	7106	0.05 ppm	100
22) Hexachlorobenzene	14.783	284	2065	0.05 ppm	96
23) Pentachlorophenol	15.201	266	4271	0.17 ppm	98
24) Phenanthrene	15.603	178	10238	0.05 ppm	99
25) Anthracene	15.711	178	8587	0.04 ppm	98
26) Fluoranthene	17.875	202	12772	0.05 ppm	99
27) Pyrene	18.261	202	11982	0.05 ppm	98
29) Benzo[a]anthracene	20.347	228	11591	0.05 ppm	100
30) Chrysene	20.408	228	11884	0.05 ppm	99
32) Benzo[b]fluoranthene	22.015	252	11635	0.04 ppm	99
33) Benzo[k]fluoranthene	22.062	252	11007	0.05 ppm	100
34) Benzo[a]pyrene	22.463	252	12936	0.06 ppm	98
35) Indeno[1,2,3-cd]pyrene	23.963	276	10547	0.05 ppm	100
36) Dibenz[a,h]anthracene	24.020	278	8444	0.05 ppm	100
37) Benzo[g,h,i]perylene	24.358	276	9475	0.05 ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration

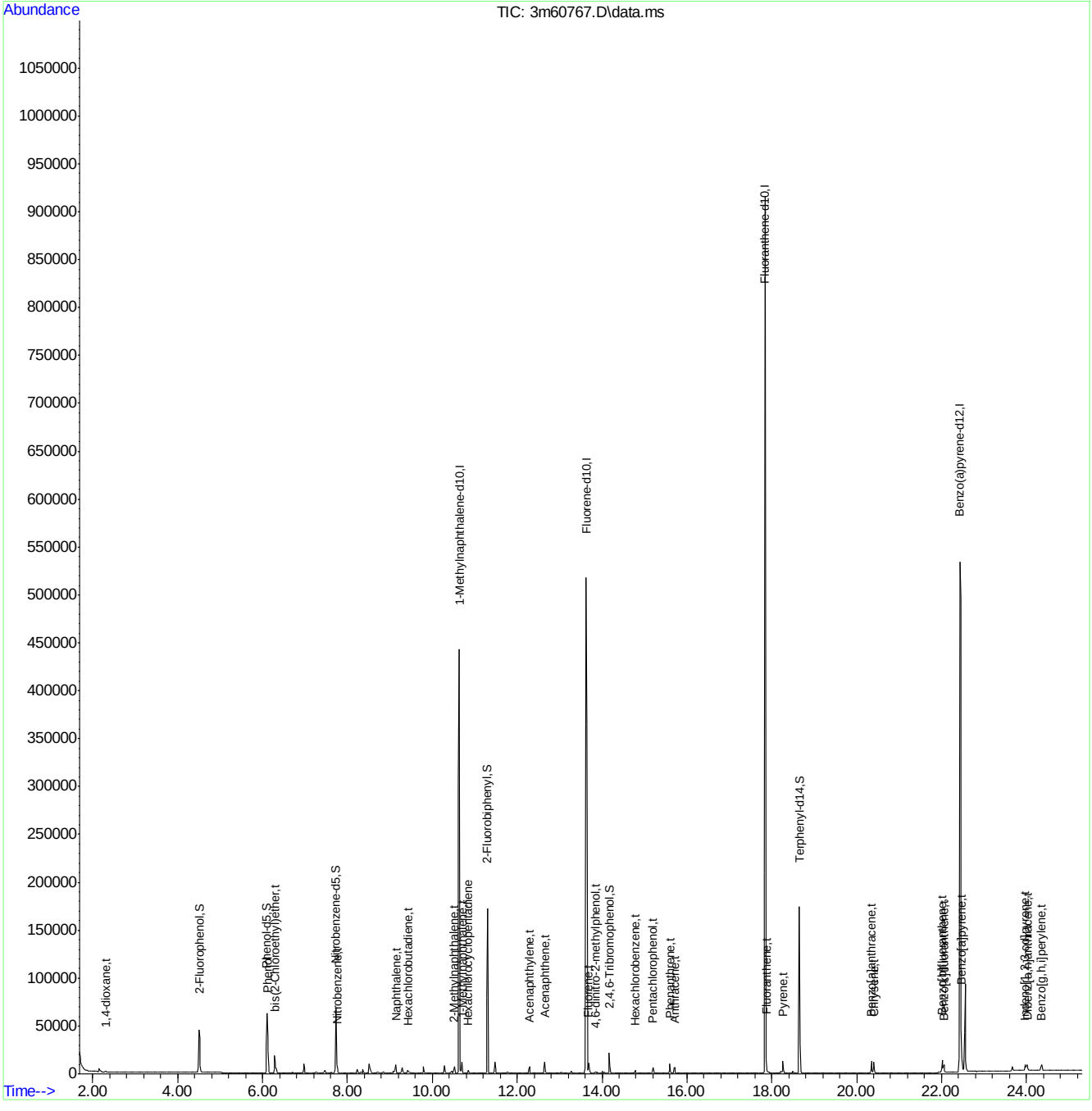
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/22/16 12:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	345303	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	525823	4.00	ppm	0.02
21) Fluoranthene-d10	17.843	212	917656	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	713000	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	17018	0.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.78%	
4) Phenol-d5	6.104	99	28195	0.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.76%	
7) Nitrobenzene-d5	7.726	82	25103	0.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.74%	
15) 2-Fluorobiphenyl	11.303	172	57726	0.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.78%	
20) 2,4,6-Tribromophenol	14.172	330	4756	0.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.56%	
28) Terphenyl-d14	18.647	244	56137	0.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.82%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	245m	0.01	ppm	
5) Phenol	6.116	94	7474	0.09	ppm #	72
6) bis(2-Chloroethyl)ether	6.285	93	1201	0.02	ppm	90
8) Nitrobenzene	7.764	77	1406	0.02	ppm	86
9) Naphthalene	9.138	128	3866	0.02	ppm	100
10) Hexachlorobutadiene	9.421	225	661	0.02	ppm	97
11) 2-Methylnaphthalene	10.517	141	1996	0.02	ppm	93
12) 1-Methylnaphthalene	10.702	141	3332	0.03	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	791	0.03	ppm	99
16) Acenaphthylene	12.293	152	3367	0.02	ppm	98
17) Acenaphthene	12.648	153	2382	0.02	ppm	98
18) 4,6-dinitro-2-methylph...	13.852	198	336	0.03	ppm	95
19) Fluorene	13.682	166	2916	0.02	ppm	97
22) Hexachlorobenzene	14.783	284	860	0.02	ppm	95
23) Pentachlorophenol	15.200	266	1647	0.07	ppm	97
24) Phenanthrene	15.602	178	4501	0.02	ppm	99
25) Anthracene	15.711	178	3476	0.02	ppm	96
26) Fluoranthene	17.874	202	6605	0.03	ppm	99
27) Pyrene	18.261	202	5085	0.02	ppm	97
29) Benzo[a]anthracene	20.346	228	5580	0.02	ppm	99
30) Chrysene	20.408	228	6534	0.03	ppm	99
32) Benzo[b]fluoranthene	22.015	252	5729	0.02	ppm	96
33) Benzo[k]fluoranthene	22.061	252	5167	0.02	ppm	95
34) Benzo[a]pyrene	22.463	252	4349m	0.02	ppm	
35) Indeno[1,2,3-cd]pyrene	23.963	276	4283	0.02	ppm	99
36) Dibenz[a,h]anthracene	24.020	278	3214	0.02	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	3711	0.02	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

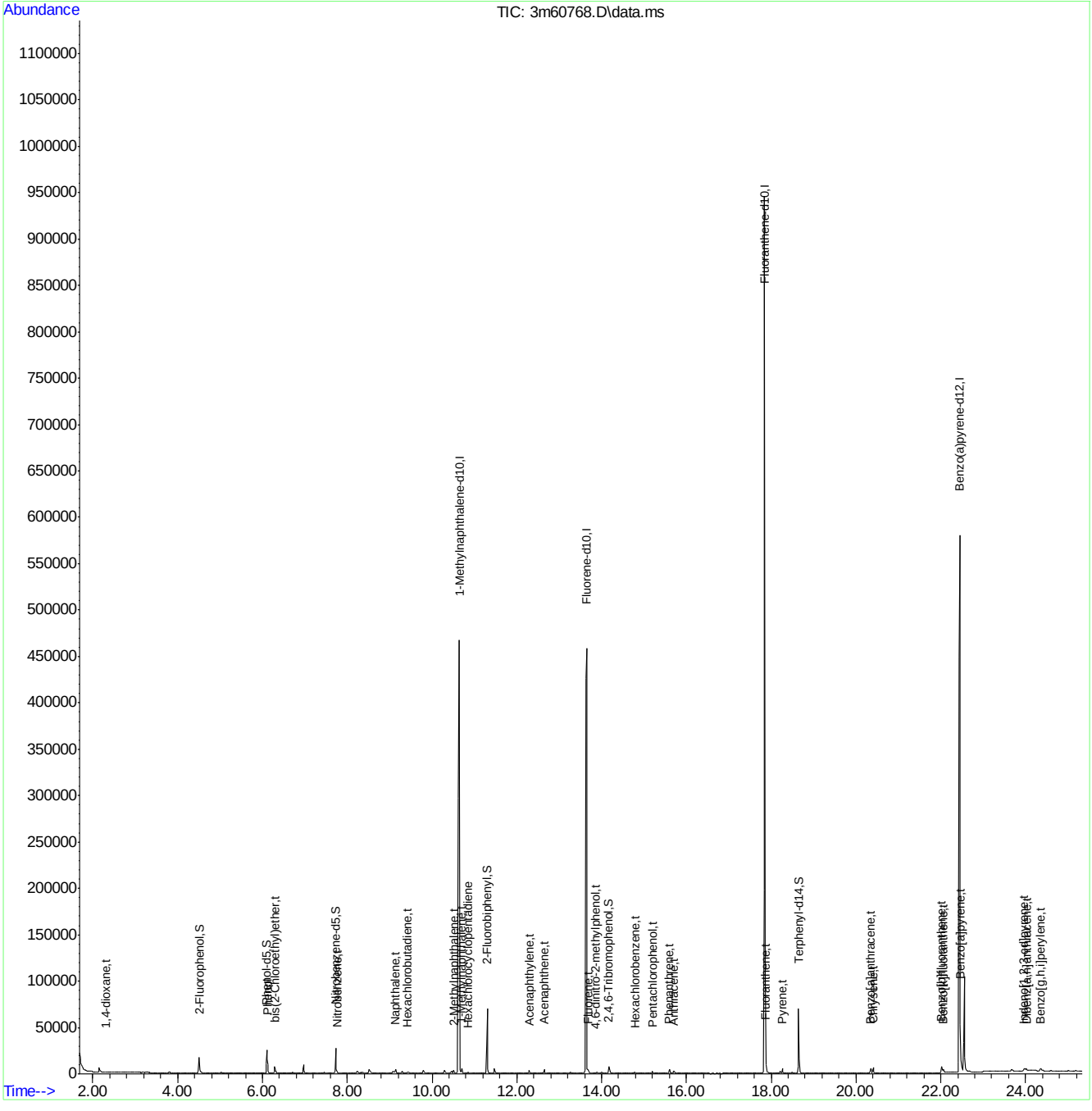
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration



Manual Integration Approval Summary

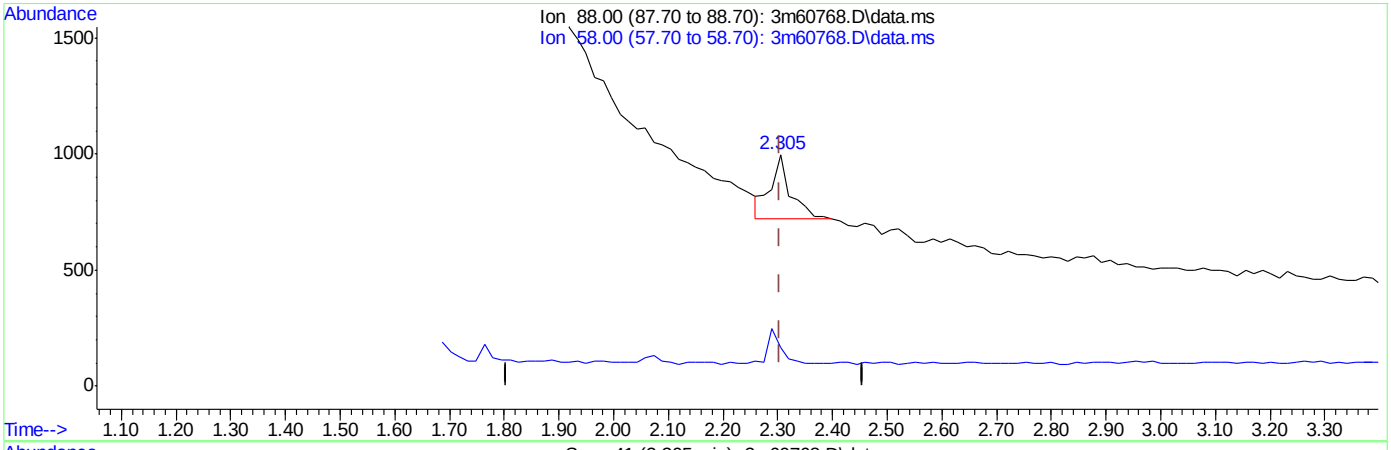
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60768.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:17	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

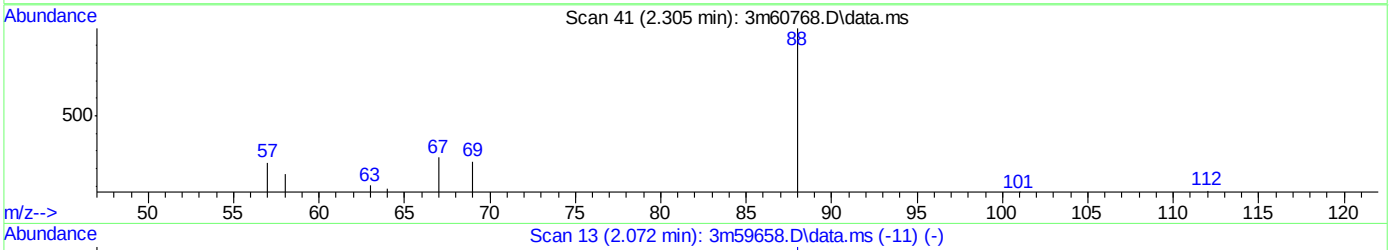
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.30	Baseline ripple
Benzo(a)pyrene	50-32-8		22.46	Baseline ripple

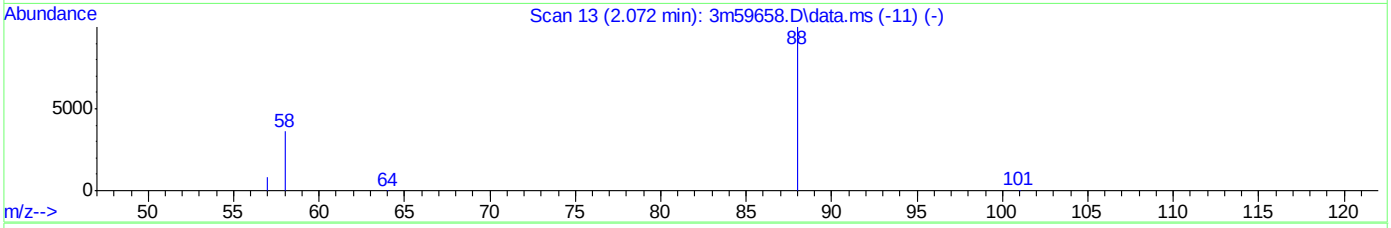
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.04ppm

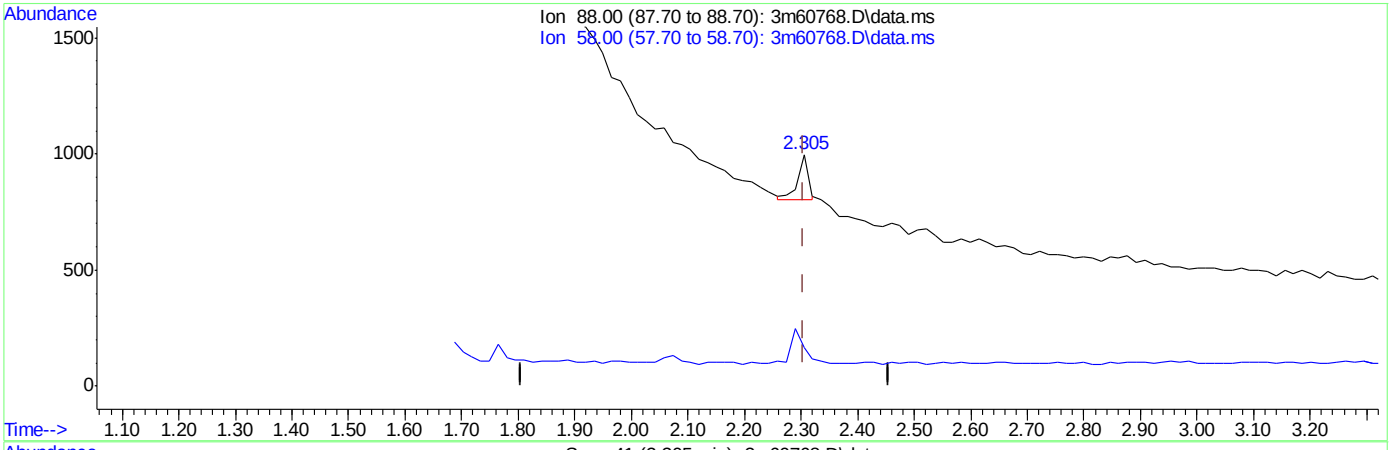
response 710

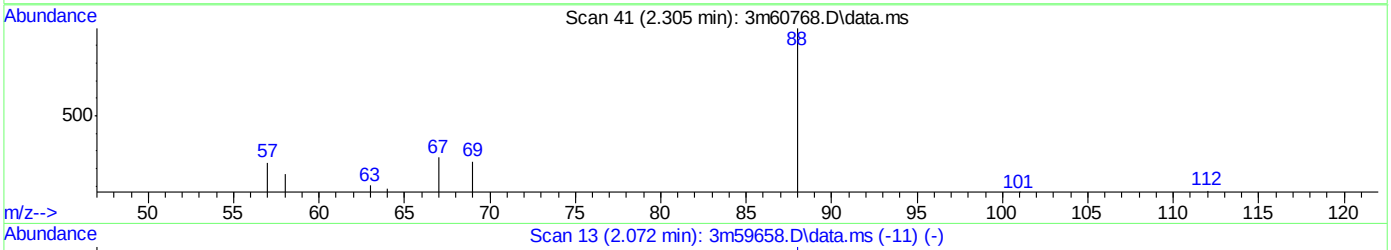
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	28.23
0.00	0.00	0.00
0.00	0.00	0.00

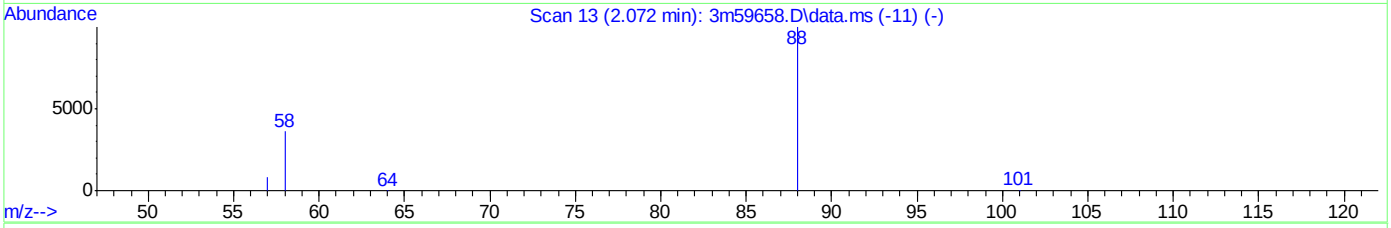
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.01ppm m

response 245

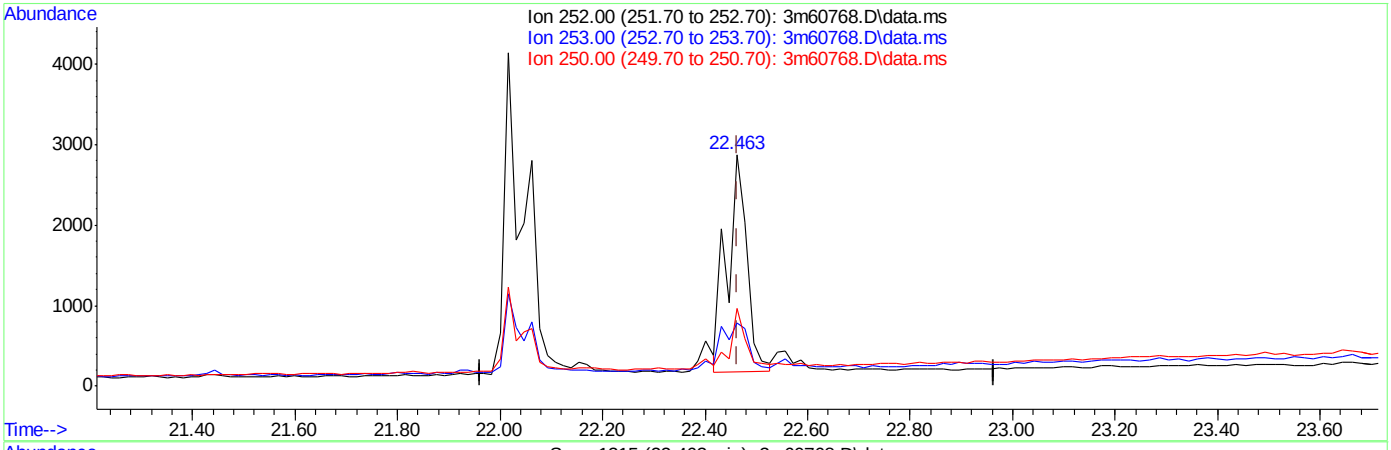
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	16.63
0.00	0.00	0.00
0.00	0.00	0.00

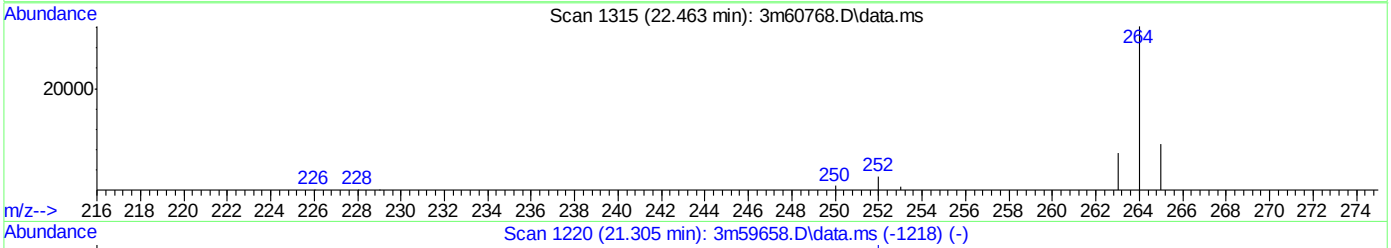
SGS ACCUTEST JC19914

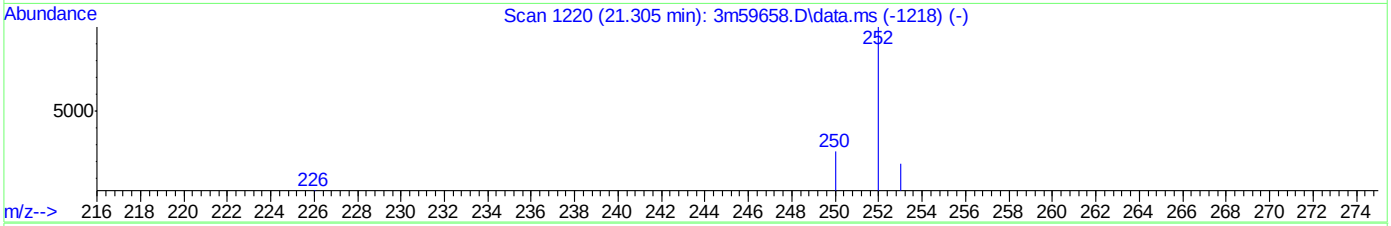
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(34) Benzo[a]pyrene (t)

22.463min (-0.000) 0.03ppm

response 7218

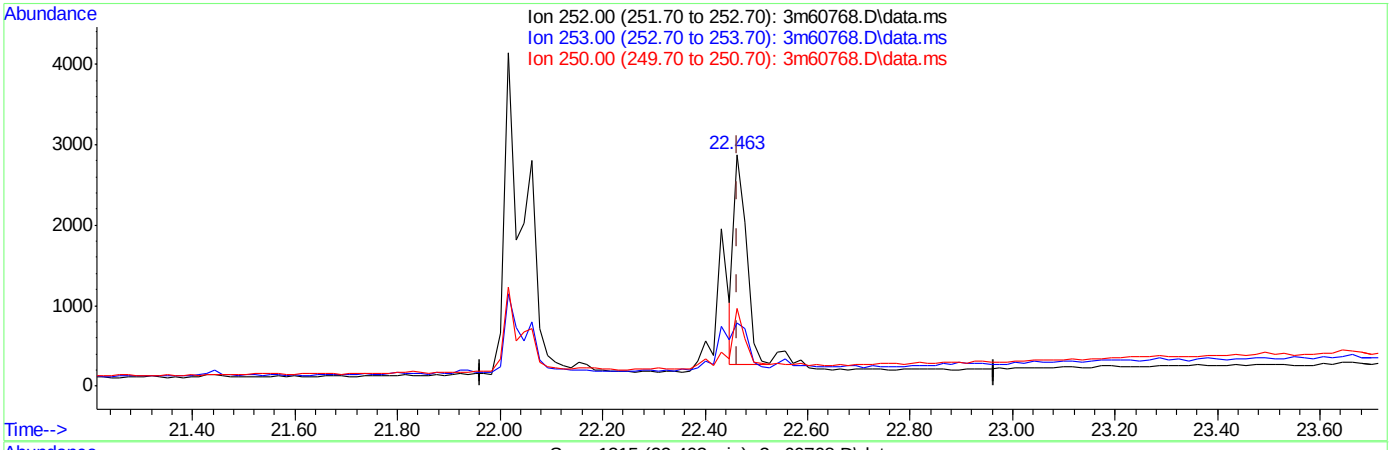
Ion	Exp%	Act%
252.00	100	100
253.00	18.80	20.93
250.00	26.10	27.47
0.00	0.00	0.00

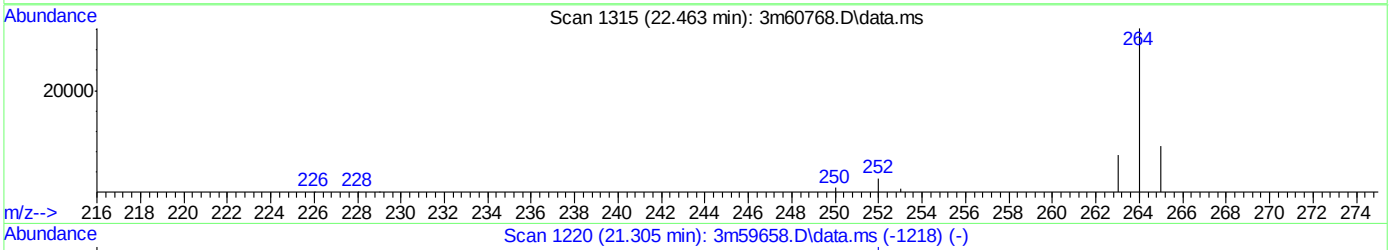
SGS ACCUTEST JC19914

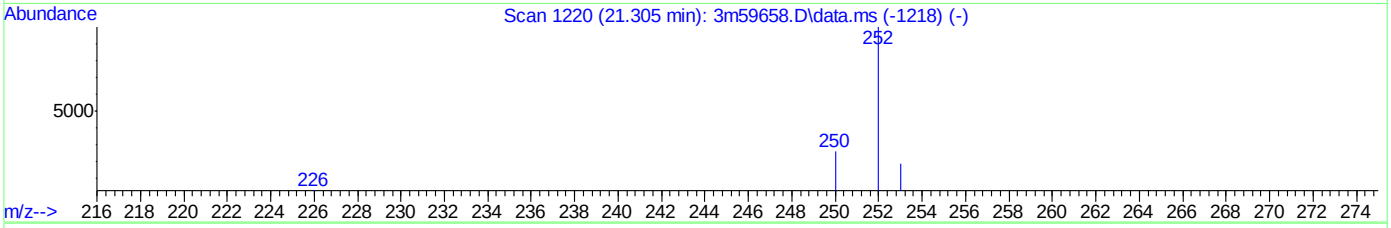
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(34) Benzo[a]pyrene (t)

22.463min (-0.000) 0.02ppm m

response 4349

Ion	Exp%	Act%
252.00	100	100
253.00	18.80	27.27
250.00	26.10	33.41
0.00	0.00	0.00

SGS ACCUTEST JC19914

3M60769.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya 04/22/16 12:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	341727	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	510798	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	894999	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	717706	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	7703	0.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.36%	
4) Phenol-d5	6.104	99	12728	0.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.36%	
7) Nitrobenzene-d5	7.726	82	11420	0.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.34%	
15) 2-Fluorobiphenyl	11.303	172	27514	0.19	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.38%	
20) 2,4,6-Tribromophenol	14.172	330	2174	0.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.26%	
28) Terphenyl-d14	18.647	244	28577	0.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.42%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	176m	0.01	ppm	
5) Phenol	6.116	94	3362	0.04	ppm	# 69
6) bis(2-Chloroethyl)ether	6.285	93	566	0.01	ppm	89
8) Nitrobenzene	7.764	77	712	0.01	ppm	83
9) Naphthalene	9.139	128	1910	0.01	ppm	98
10) Hexachlorobutadiene	9.421	225	308	0.01	ppm	98
11) 2-Methylnaphthalene	10.517	141	971	0.01	ppm	94
12) 1-Methylnaphthalene	10.702	141	1726	0.01	ppm	95
13) Hexachlorocyclopentadiene	10.846	237	382	0.02	ppm	97
16) Acenaphthylene	12.293	152	1639	0.01	ppm	99
17) Acenaphthene	12.648	153	1117	0.01	ppm	98
18) 4,6-dinitro-2-methylph...	13.852	198	146	0.01	ppm	70
19) Fluorene	13.682	166	1465	0.01	ppm	99
22) Hexachlorobenzene	14.783	284	417	0.01	ppm	95
23) Pentachlorophenol	15.200	266	877	0.04	ppm	98
24) Phenanthrene	15.602	178	2267	0.01	ppm	98
25) Anthracene	15.711	178	1713	0.01	ppm	97
26) Fluoranthene	17.874	202	4045	0.02	ppm	99
27) Pyrene	18.261	202	2880	0.01	ppm	98
29) Benzo[a]anthracene	20.347	228	3441	0.02	ppm	98
30) Chrysene	20.408	228	4214	0.02	ppm	97
32) Benzo[b]fluoranthene	22.015	252	4562	0.02	ppm	88
33) Benzo[k]fluoranthene	22.062	252	1997	0.01	ppm	94
34) Benzo[a]pyrene	22.463	252	2699	0.01	ppm	86
35) Indeno[1,2,3-cd]pyrene	23.963	276	2125	0.01	ppm	100
36) Dibenz[a,h]anthracene	24.020	278	2112	0.01	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	1927	0.01	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.7

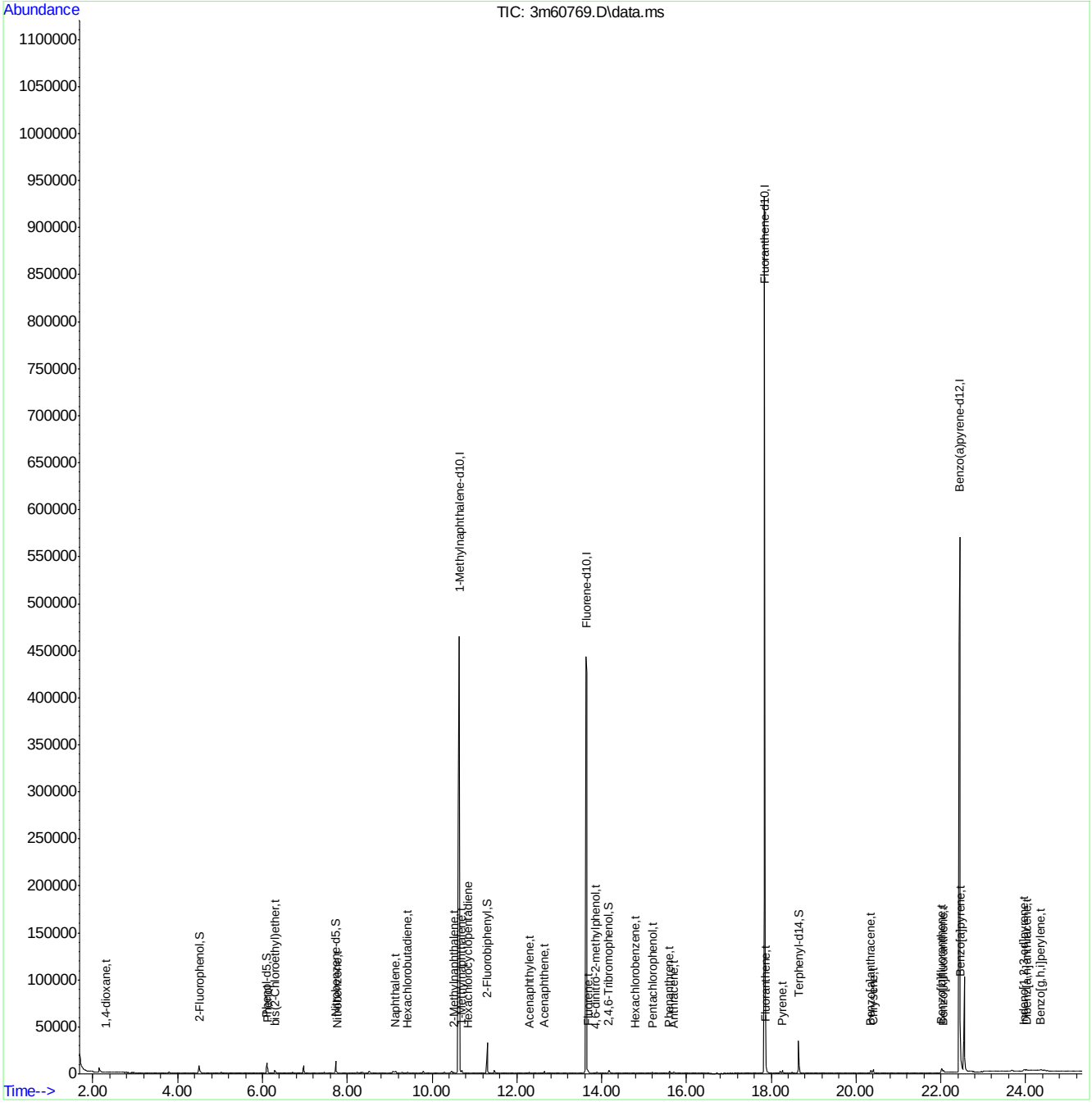
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

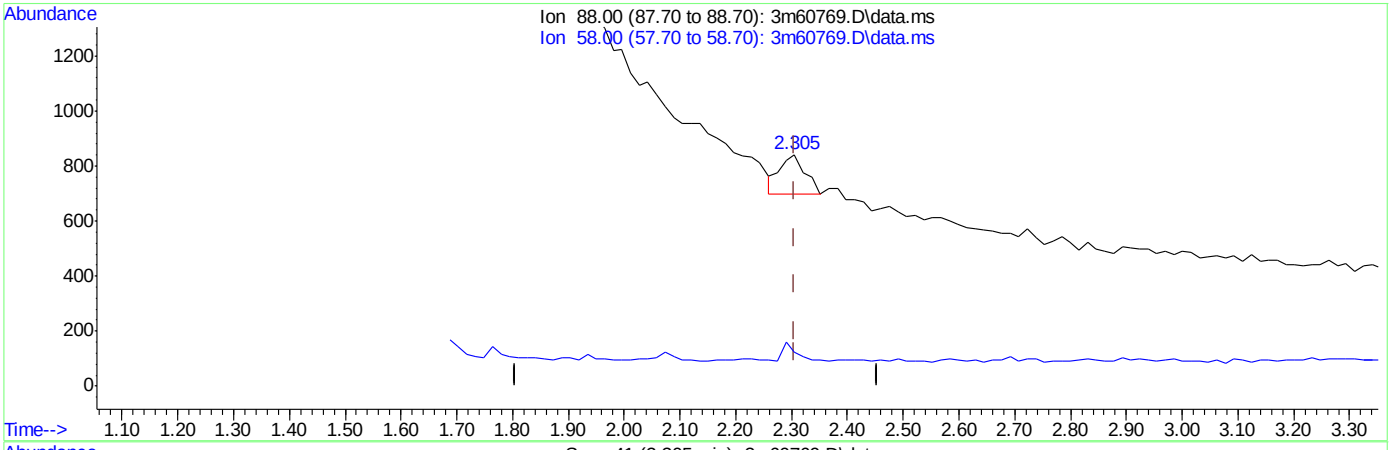
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60769.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:49	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

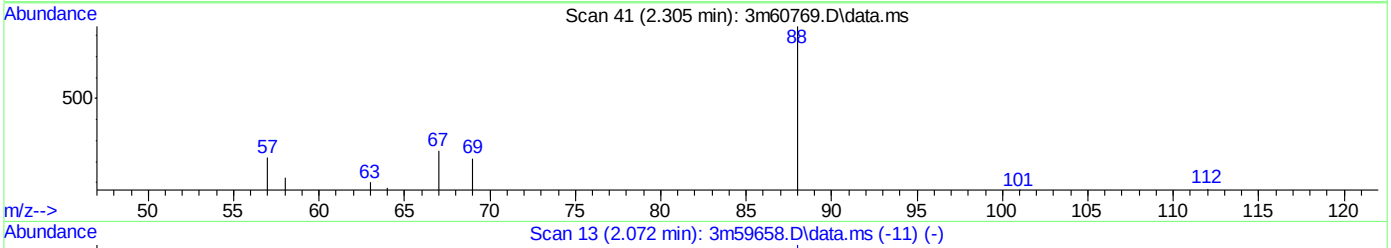
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.31	Baseline ripple

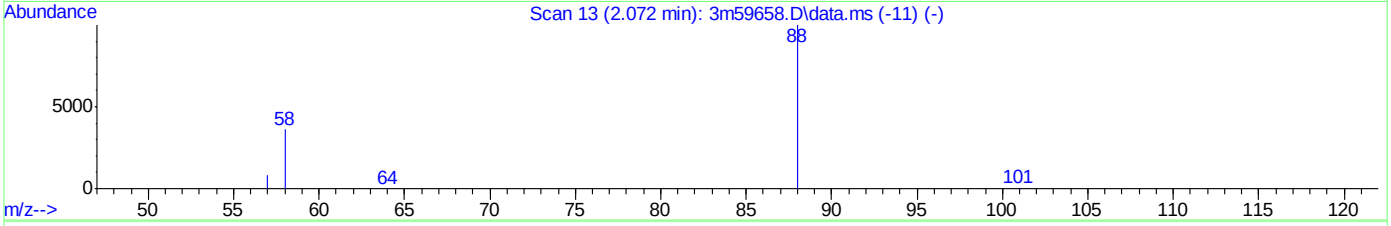
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration







TIC: 3m60769.D\data.ms

(2) 1,4-dioxane (t)

2.305min (+0.000) 0.02ppm

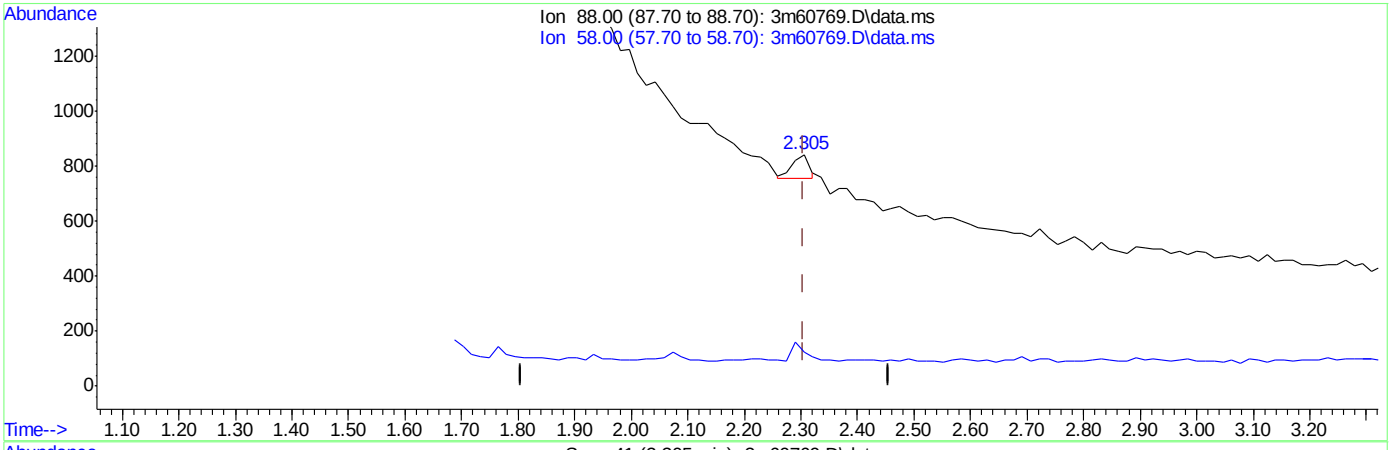
response 450

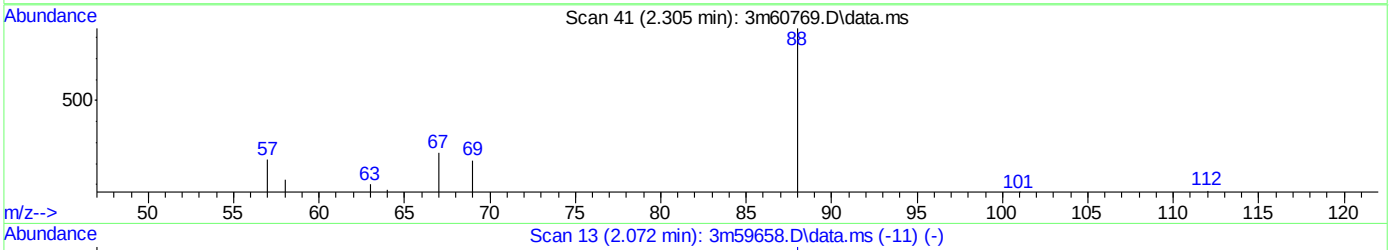
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	25.45
0.00	0.00	0.00
0.00	0.00	0.00

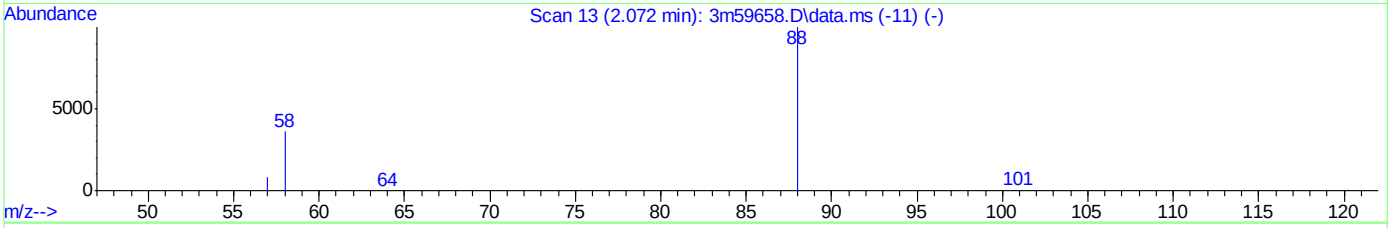
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration







TIC: 3m60769.D\data.ms

(2) 1,4-dioxane (t)

2.305min (+0.000) 0.01ppm m

response 176

Ion	Exp%	Act%
88.00	100	100
58.00	32.40	14.85
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	366417	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	628480	4.00	ppm	0.00
21) Fluoranthene-d10	17.844	212	939162	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	756981	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	4214444	90.43	ppm	0.00
Spiked Amount 50.000			Recovery	=	180.86%	
4) Phenol-d5	6.128	99	7328789	95.76	ppm	0.02
Spiked Amount 50.000			Recovery	=	191.52%	
7) Nitrobenzene-d5	7.745	82	7395086	102.34	ppm	0.02
Spiked Amount 50.000			Recovery	=	204.68%	
15) 2-Fluorobiphenyl	11.319	172	14347827	81.47	ppm	0.02
Spiked Amount 50.000			Recovery	=	162.94%	
20) 2,4,6-Tribromophenol	14.191	330	1892615	94.39	ppm	0.02
Spiked Amount 50.000			Recovery	=	188.78%	
28) Terphenyl-d14	18.662	244	11761490	83.98	ppm	0.02
Spiked Amount 50.000			Recovery	=	167.96%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.290	88	94789	4.85	ppm	75
5) Phenol	6.140	94	1983163	23.95	ppm #	79
6) bis(2-Chloroethyl)ether	6.298	93	266705	4.16	ppm #	60
8) Nitrobenzene	7.764	77	406472	5.38	ppm #	58
9) Naphthalene	9.139	128	1024731	5.04	ppm	98
10) Hexachlorobutadiene	9.421	225	174841	4.87	ppm	95
11) 2-Methylnaphthalene	10.517	141	553815	5.26	ppm	96
12) 1-Methylnaphthalene	10.702	141	647057	4.41	ppm	93
13) Hexachlorocyclopentadiene	10.846	237	345119	13.01	ppm	95
16) Acenaphthylene	12.293	152	1074573	4.94	ppm	99
17) Acenaphthene	12.648	153	680855	4.63	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	689664	56.92	ppm	74
19) Fluorene	13.682	166	778408	4.36	ppm	94
22) Hexachlorobenzene	14.783	284	229525	5.21	ppm	94
23) Pentachlorophenol	15.201	266	786510	32.34	ppm	95
24) Phenanthrene	15.603	178	1190802	5.25	ppm	99
25) Anthracene	15.711	178	1181627	5.75	ppm	98
26) Fluoranthene	17.874	202	1318777	5.01	ppm	99
27) Pyrene	18.261	202	1382848	5.27	ppm	98
29) Benzo[a]anthracene	20.347	228	1195931	5.01	ppm	96
30) Chrysene	20.408	228	1263858	5.17	ppm	98
32) Benzo[b]fluoranthene	22.015	252	1201158	4.18	ppm	95
33) Benzo[k]fluoranthene	22.062	252	1191473	5.12	ppm	97
34) Benzo[a]pyrene	22.463	252	1113412	4.67	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.982	276	1248948	5.29	ppm	89
36) Dibenz[a,h]anthracene	24.020	278	1051200	5.43	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	1074162	5.23	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.8

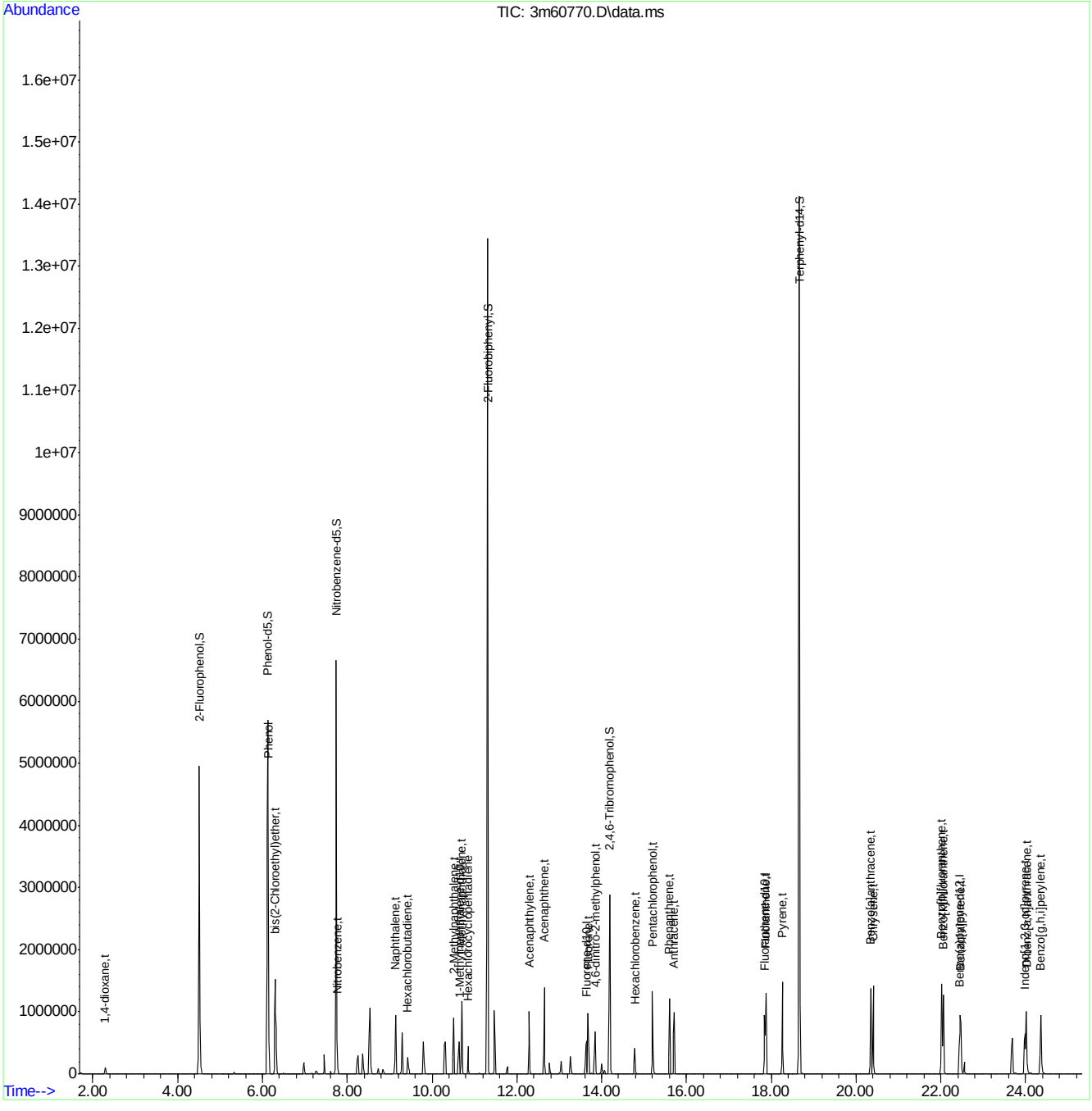
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:31:12 2016 RPT1 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60771.D
Acq On : 21 Apr 2016 6:55 pm
Operator : linseyk
Sample : ic2855-2.5
Misc : op93052a,e3m2855
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:31:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:31:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	385250	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	616747	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	966990	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	773663	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	2363254	48.90	ppm	0.00
Spiked Amount 50.000			Recovery = 97.80%			
4) Phenol-d5	6.116	99	3871836	48.37	ppm	-0.01
Spiked Amount 50.000			Recovery = 96.74%			
7) Nitrobenzene-d5	7.726	82	3072767	40.29	ppm	-0.02
Spiked Amount 50.000			Recovery = 80.58%			
15) 2-Fluorobiphenyl	11.303	172	7301000	42.25	ppm	-0.02
Spiked Amount 50.000			Recovery = 84.50%			
20) 2,4,6-Tribromophenol	14.191	330	926725	47.63	ppm	0.00
Spiked Amount 50.000			Recovery = 95.26%			
28) Terphenyl-d14	18.662	244	6991573	49.82	ppm	0.00
Spiked Amount 50.000			Recovery = 99.64%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.289	88	48881	2.39	ppm #	59
5) Phenol	6.128	94	1024552	11.84	ppm #	67
6) bis(2-Chloroethyl)ether	6.285	93	142356	2.16	ppm	77
8) Nitrobenzene	7.764	77	205619	2.56	ppm	76
9) Naphthalene	9.138	128	535435	2.50	ppm	98
10) Hexachlorobutadiene	9.421	225	87273	2.32	ppm	94
11) 2-Methylnaphthalene	10.517	141	279805	2.51	ppm	94
12) 1-Methylnaphthalene	10.702	141	340057	2.24	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	158162	5.40	ppm	93
16) Acenaphthylene	12.293	152	544103	2.55	ppm	98
17) Acenaphthene	12.648	153	350568	2.45	ppm	95
18) 4,6-dinitro-2-methylph...	13.851	198	297531	19.93	ppm	92
19) Fluorene	13.682	166	399367	2.31	ppm	96
22) Hexachlorobenzene	14.783	284	115675	2.53	ppm	95
23) Pentachlorophenol	15.200	266	400828	15.26	ppm	98
24) Phenanthrene	15.602	178	602735	2.56	ppm	99
25) Anthracene	15.711	178	589914	2.71	ppm	98
26) Fluoranthene	17.874	202	671708	2.48	ppm	99
27) Pyrene	18.261	202	685271	2.51	ppm	99
29) Benzo[a]anthracene	20.346	228	610065	2.48	ppm	98
30) Chrysene	20.408	228	651165	2.57	ppm	98
32) Benzo[b]fluoranthene	22.015	252	621501	2.16	ppm	98
33) Benzo[k]fluoranthene	22.061	252	586018	2.45	ppm	99
34) Benzo[a]pyrene	22.463	252	565533	2.34	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	624468	2.57	ppm	97
36) Dibenz[a,h]anthracene	24.020	278	520048	2.60	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	542545	2.57	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60771.D
Acq On : 21 Apr 2016 6:55 pm
Operator : linseyk
Sample : ic2855-2.5
Misc : op93052a,e3m2855
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:31:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:31:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.9

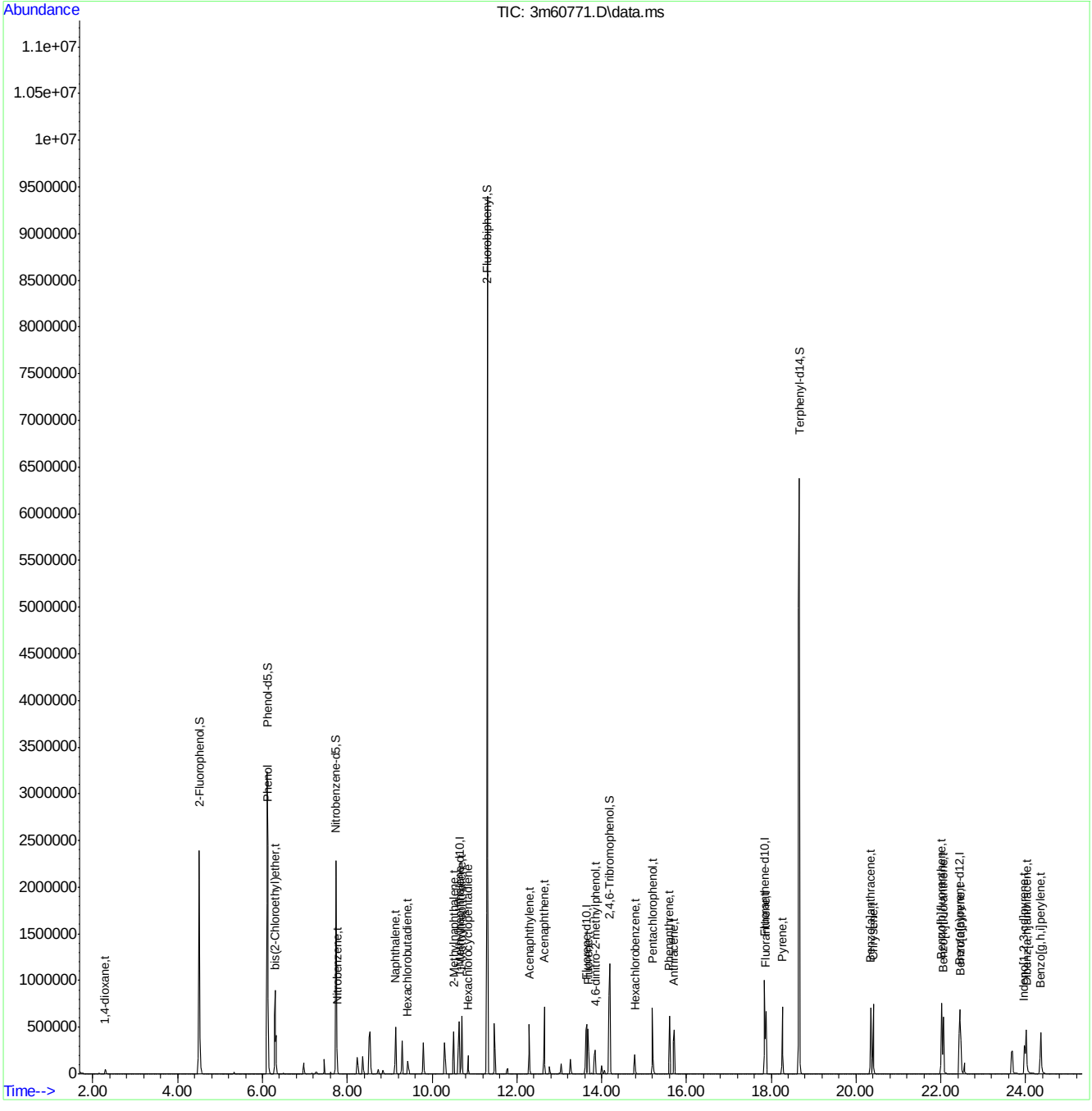
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60771.D
Acq On : 21 Apr 2016 6:55 pm
Operator : linseyk
Sample : ic2855-2.5
Misc : op93052a,e3m2855
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:31:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:31:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60772.D
Acq On : 21 Apr 2016 7:27 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 22 08:56:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.641	150	468880	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	745589	4.00 ppm	0.00
21) Fluoranthene-d10	17.844	212	1195677	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	940216	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
5) Phenol	6.128	94	476638	4.56 ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	87949	3.84 ppm	95
23) Pentachlorophenol	15.201	266	168629	4.34 ppm	92

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

7.6.10

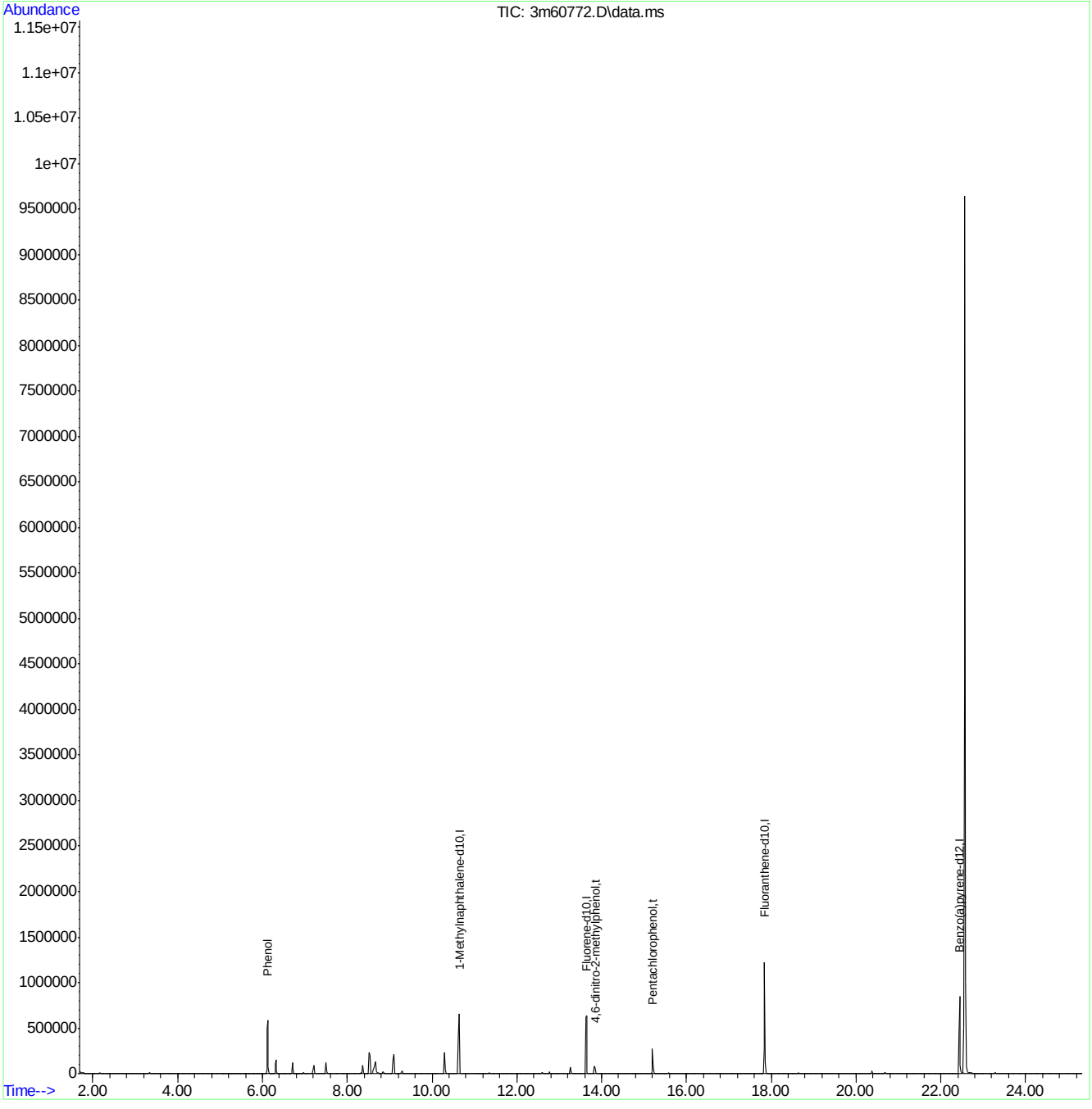
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60772.D
Acq On : 21 Apr 2016 7:27 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 22 08:56:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:56:16 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60773.D
Acq On : 21 Apr 2016 8:00 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 08:58:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.640	150	381667	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	568016	4.00 ppm	0.00
21) Fluoranthene-d10	17.843	212	891736	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	666840	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.320	88	21008	1.07 ppm	93
6) bis(2-Chloroethyl)ether	6.285	93	64147	1.00 ppm	87
8) Nitrobenzene	7.764	77	65386	0.82 ppm	100
9) Naphthalene	9.138	128	240749	1.14 ppm	99
10) Hexachlorobutadiene	9.421	225	41080	1.11 ppm	99
11) 2-Methylnaphthalene	10.517	141	115129	1.04 ppm	98
16) Acenaphthylene	12.293	152	209375	1.06 ppm	99
17) Acenaphthene	12.648	153	152795	1.16 ppm	96
19) Fluorene	13.682	166	170302	1.08 ppm	100
22) Hexachlorobenzene	14.783	284	47590	1.13 ppm	96
24) Phenanthrene	15.602	178	253476	1.16 ppm	95
25) Anthracene	15.711	178	221984	1.15 ppm	98
26) Fluoranthene	17.874	202	279548	1.02 ppm	99
27) Pyrene	18.261	202	275135	1.08 ppm	98
29) Benzo[a]anthracene	20.362	228	271481	1.11 ppm	94
30) Chrysene	20.408	228	239361	1.02 ppm	94
32) Benzo[b]fluoranthene	22.015	252	207742	0.94 ppm	97
33) Benzo[k]fluoranthene	22.061	252	230502	1.12 ppm	98
34) Benzo[a]pyrene	22.463	252	199534	0.97 ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	218688	1.04 ppm	98
36) Dibenz[a,h]anthracene	24.020	278	173448	1.00 ppm	100
37) Benzo[g,h,i]perylene	24.358	276	191304	1.05 ppm	100

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

7.6.11

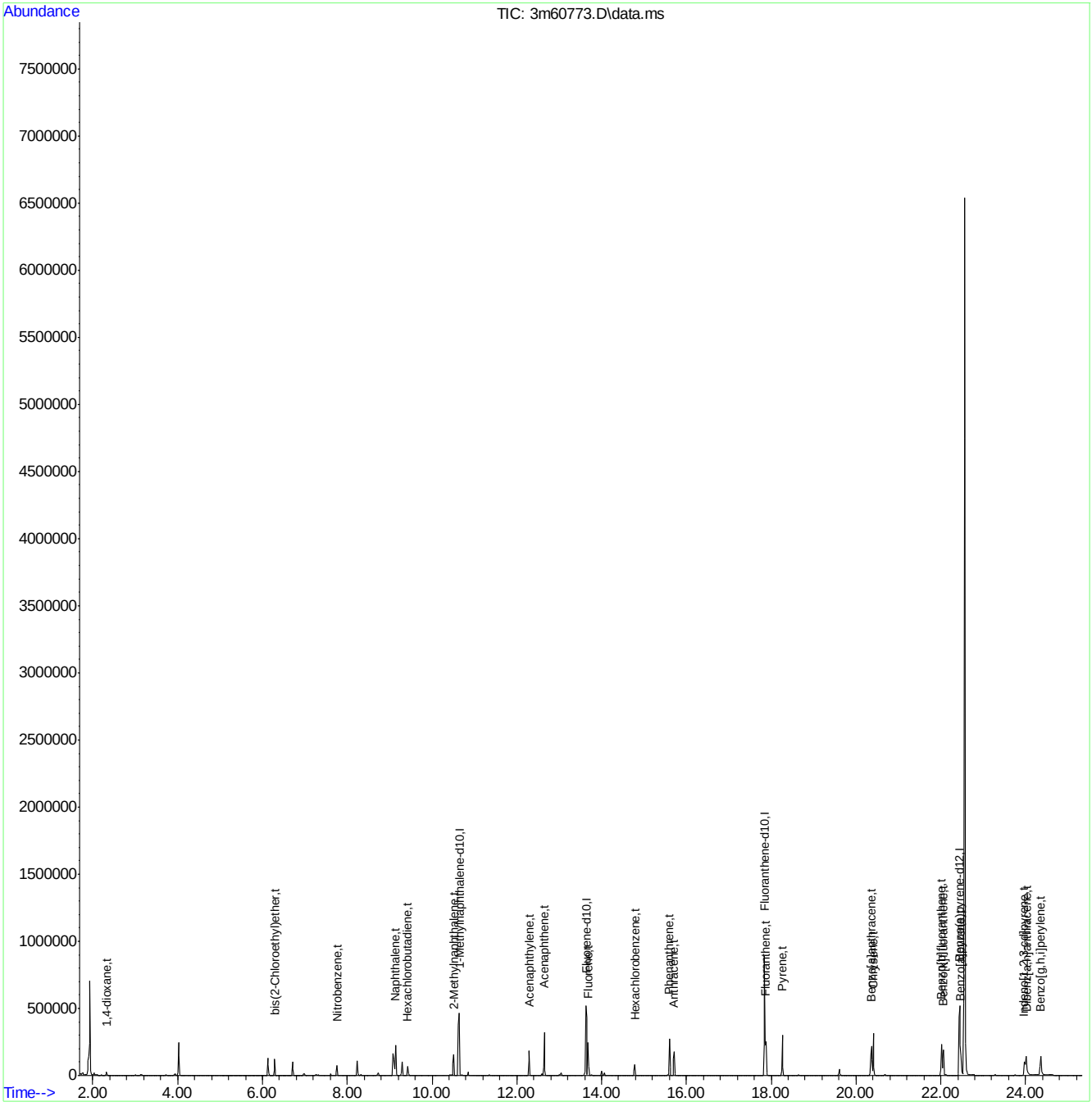
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60773.D
Acq On : 21 Apr 2016 8:00 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 08:58:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:58:28 2016 RPT1 Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60774.D
Acq On : 21 Apr 2016 8:35 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 22 08:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.640	150	433101	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	614407	4.00 ppm	0.00
21) Fluoranthene-d10	17.843	212	1087112	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	854436	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.289	88	25472	1.14 ppm	95
12) 1-Methylnaphthalene	10.702	141	161130	0.95 ppm	94
13) Hexachlorocyclopentadiene	10.845	237	34911	1.05 ppm	99

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

7.6.12

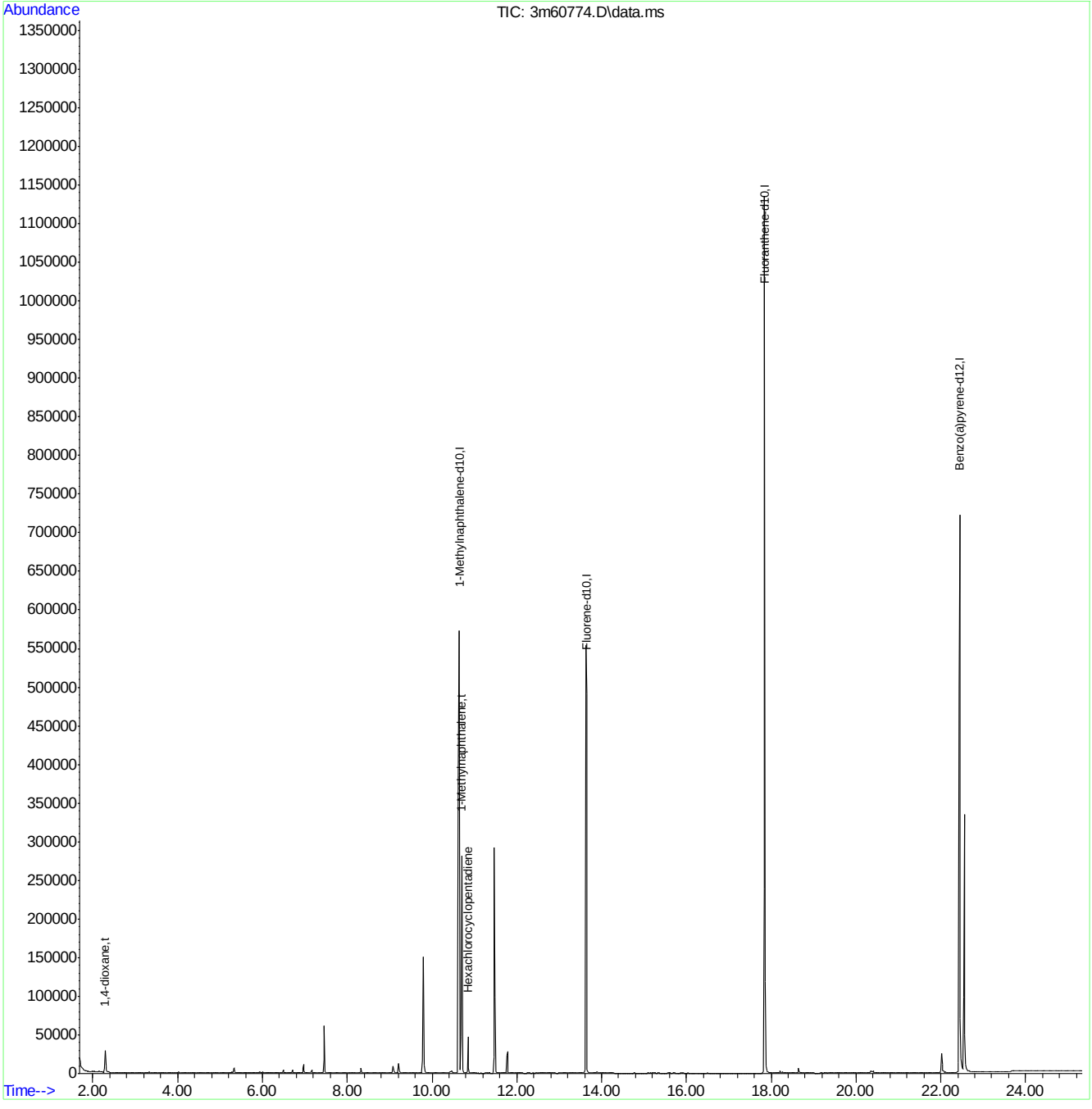
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60774.D
Acq On : 21 Apr 2016 8:35 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 22 08:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:58:16 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61219.D
Acq On : 11 May 2016 9:41 am
Operator : linseyk
Sample : cc2855-.5
Misc : op93756a,e3m2879
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 10:05:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:04:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.365	150	477264	4.00	ppm	-0.06
14) Fluorene-d10	13.373	176	733579	4.00	ppm	-0.06
21) Fluoranthene-d10	17.577	212	1306427	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	22.181	264	1128106	4.00	ppm	-0.06
System Monitoring Compounds						
3) 2-Fluorophenol	4.322	112	608365	10.19	ppm	-0.10
Spiked Amount 50.000			Recovery = 20.38%			
4) Phenol-d5	5.927	99	981030	9.93	ppm	-0.05
Spiked Amount 50.000			Recovery = 19.86%			
7) Nitrobenzene-d5	7.493	82	779376	8.48	ppm	-0.08
Spiked Amount 50.000			Recovery = 16.96%			
15) 2-Fluorobiphenyl	11.037	172	2107407	10.45	ppm	-0.09
Spiked Amount 50.000			Recovery = 20.90%			
20) 2,4,6-Tribromophenol	13.919	330	238051	10.37	ppm	-0.03
Spiked Amount 50.000			Recovery = 20.74%			
28) Terphenyl-d14	18.396	244	1975612	10.42	ppm	-0.04
Spiked Amount 50.000			Recovery = 20.84%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	11653	0.47	ppm	99
5) Phenol	5.952	94	256248	2.41	ppm	93
6) bis(2-Chloroethyl)ether	6.060	93	37148	0.46	ppm #	25
8) Nitrobenzene	7.512	77	42257	0.42	ppm #	55
9) Naphthalene	8.886	128	120955	0.46	ppm	97
10) Hexachlorobutadiene	9.169	225	24081	0.52	ppm	80
11) 2-Methylnaphthalene	10.242	141	68970	0.50	ppm #	53
12) 1-Methylnaphthalene	10.426	141	73018	0.39	ppm #	55
13) Hexachlorocyclopentadiene	10.590	237	32921	0.90	ppm	82
16) Acenaphthylene	12.026	152	123772	0.49	ppm	97
17) Acenaphthene	12.381	153	87177	0.51	ppm	99
18) 4,6-dinitro-2-methylph...	13.599	198	53531	2.65	ppm	51
19) Fluorene	13.411	166	100585	0.49	ppm	91
22) Hexachlorobenzene	14.501	284	28744	0.47	ppm	81
23) Pentachlorophenol	14.949	266	73270	1.83	ppm	98
24) Phenanthrene	15.320	178	151779	0.47	ppm	89
25) Anthracene	15.428	178	130403	0.46	ppm	96
26) Fluoranthene	17.608	202	169774	0.42	ppm	98
27) Pyrene	18.009	202	166907	0.45	ppm	96
29) Benzo[a]anthracene	20.095	228	148284	0.41	ppm	92
30) Chrysene	20.157	228	162014	0.47	ppm	88
32) Benzo[b]fluoranthene	21.764	252	171371	0.46	ppm	96
33) Benzo[k]fluoranthene	21.810	252	160127	0.46	ppm	95
34) Benzo[a]pyrene	22.212	252	150620	0.43	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.674	276	186797	0.53	ppm	99
36) Dibenz[a,h]anthracene	23.711	278	154506	0.53	ppm	69
37) Benzo[g,h,i]perylene	24.031	276	166987	0.54	ppm	93

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61219.D
Acq On : 11 May 2016 9:41 am
Operator : linseyk
Sample : cc2855-.5
Misc : op93756a,e3m2879
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 10:05:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:04:11 2016
Response via : Initial Calibration

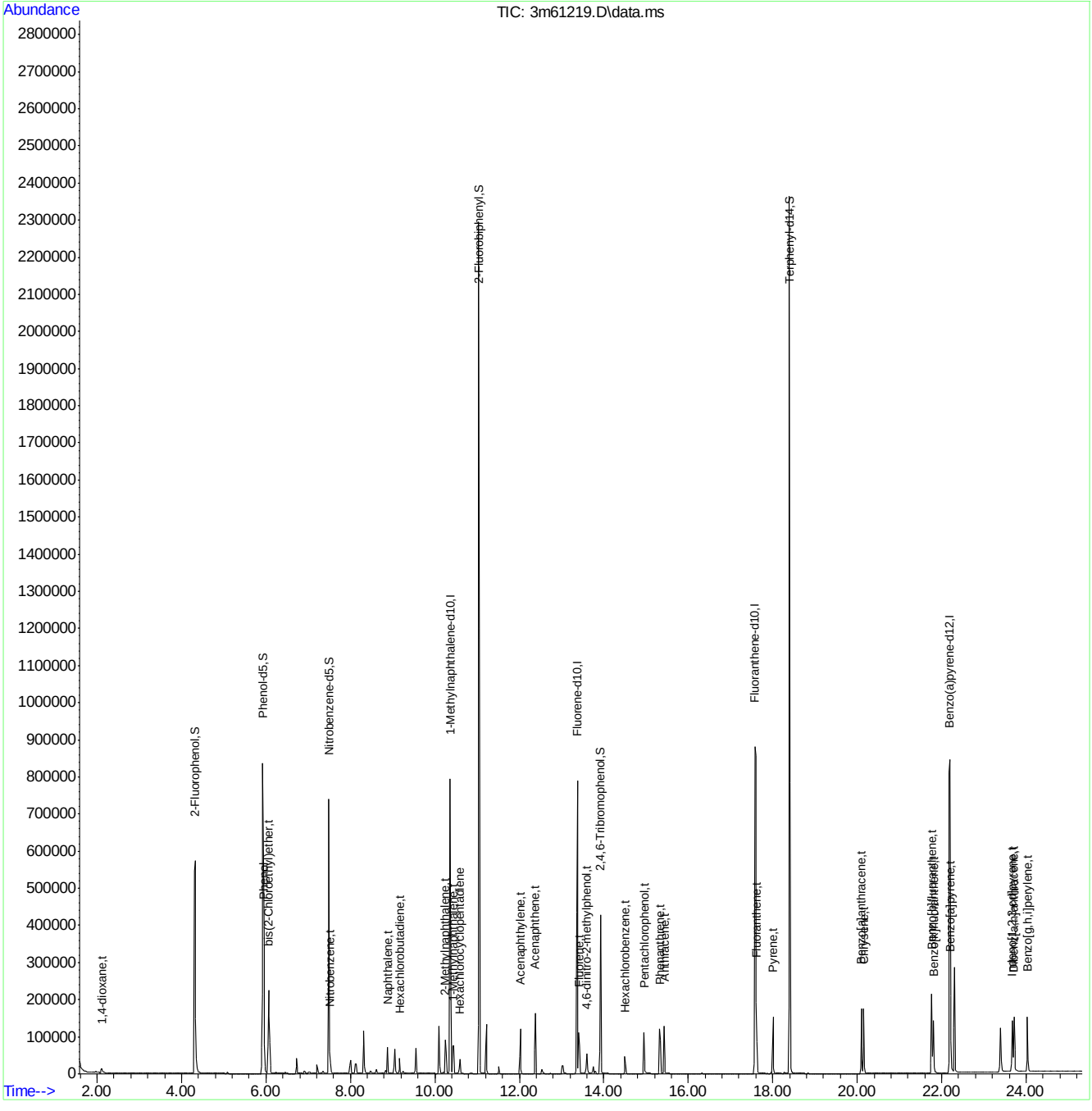
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2879\
Data File : 3m61219.D
Acq On : 11 May 2016 9:41 am
Operator : linseyk
Sample : cc2855-.5
Misc : op93756a,e3m2879
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 10:05:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:04:11 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:17:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:16:44 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	304949	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506081	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	767119	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	581862	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	304949	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506081	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	380175	9.47	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	18.94%	
3) Phenol-d5	6.338	99	645414	9.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.02%	
6) Nitrobenzene-d5	7.864	82	590917	9.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.26%	
11) 2-Fluorobiphenyl	11.390	172	745134	9.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.90%	
17) 2,4,6-Tribromophenol	14.273	330	288798	9.78	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.56%	
25) Terphenyl-d14	18.713	244	1089277	10.22	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.44%	
Target Compounds						Qvalue
4) Phenol	6.352	94	167829	2.37	ppm	81
5) bis(2-Chloroethyl)ether	6.434	93	24641	0.47	ppm	94
7) Naphthalene	9.256	128	81990	0.48	ppm	98
8) Hexachlorobutadiene	9.565	225	20318	0.48	ppm	70
9) 2-Methylnaphthalene	10.626	142	35852	0.49	ppm	97
10) Hexachlorocyclopentadiene	10.984	237	22364	0.98	ppm	97
13) Acenaphthylene	12.388	152	63175	0.52	ppm	98
14) Acenaphthene	12.743	153	39533	0.52	ppm	96
15) Dibenzofuran	13.097	168	57029	0.49	ppm	100
16) Fluorene	13.771	166	69734	0.49	ppm	96
18) Hexachlorobenzene	14.883	284	26922	0.50	ppm	97
19) Pentachlorophenol	15.316	266	62025	2.50	ppm	94
20) Phenanthrene	15.687	178	92171	0.50	ppm	90
21) Anthracene	15.780	178	91094	0.50	ppm	98
23) Fluoranthene	17.941	202	108295	0.53	ppm	96
24) Pyrene	18.318	202	103308	0.50	ppm	97
26) Benzo[a]anthracene	20.408	228	94498	0.50	ppm	97
27) Chrysene	20.464	228	91651	0.50	ppm	96
29) Benzo[b]fluoranthene	22.084	252	106371	0.50	ppm	87
30) Benzo[k]fluoranthene	22.112	252	89387	0.51	ppm	96
31) Benzo[a]pyrene	22.525	252	89044	0.50	ppm	97
32) Indeno[1,2,3-cd]pyrene	24.067	276	110300	0.50	ppm	95
33) Dibenz[a,h]anthracene	24.094	278	91024	0.53	ppm	96
34) Benzo[g,h,i]perylene	24.452	276	93565	0.50	ppm	100
36) 1,4-Dioxane	2.472	88	8856	0.54	ppm	95
37) 1-Methylnaphthalene	10.817	142	31583	0.48	ppm #	59
39) 4,6-dinitro-2-methylph...	13.963	198	26903	2.18	ppm #	29

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:17:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:16:44 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	61246	0.47	ppm	97
41) n-nitrosodiphenylamine	14.082	169	45895	0.48	ppm	94

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

7.6.14

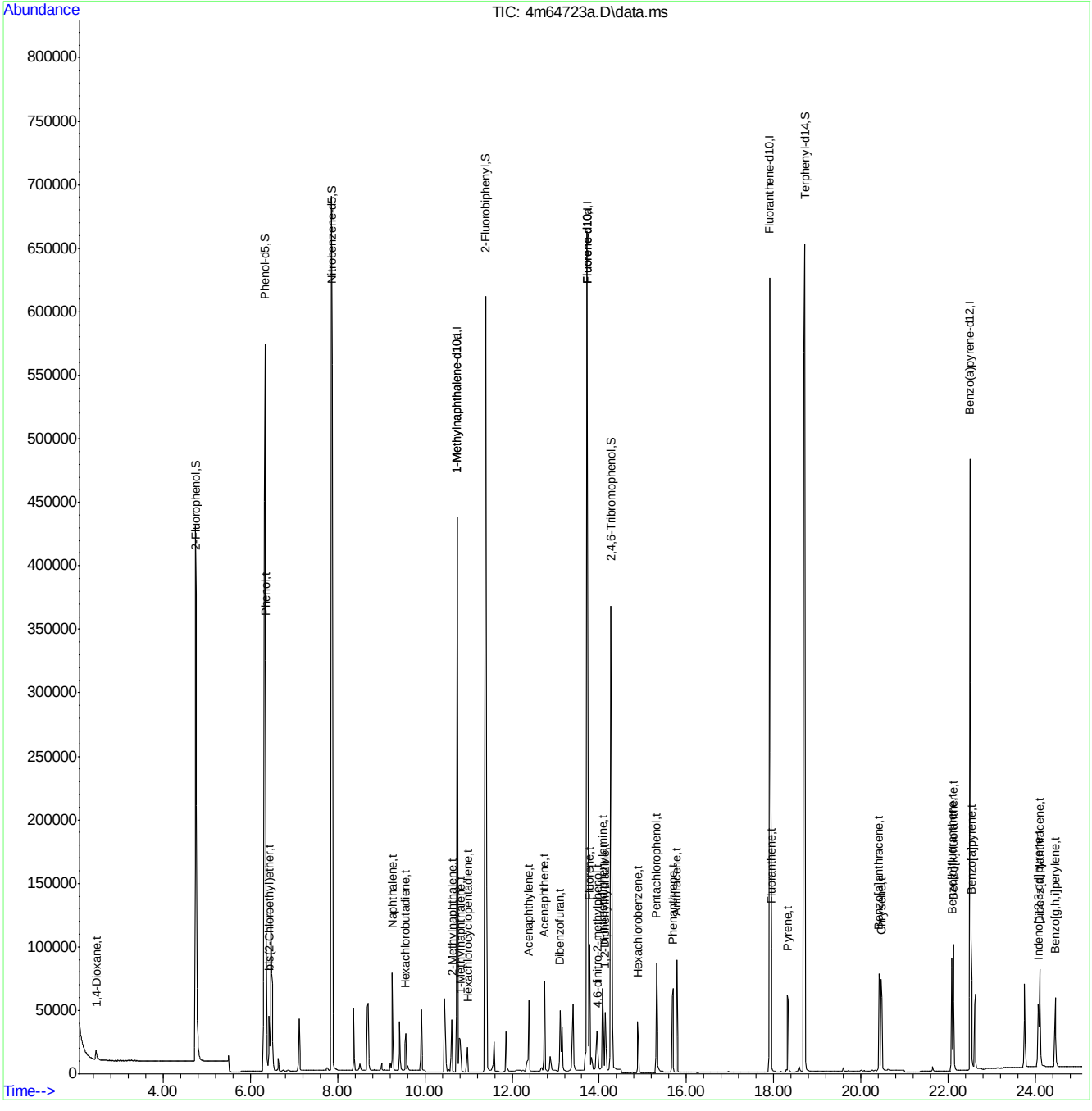
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

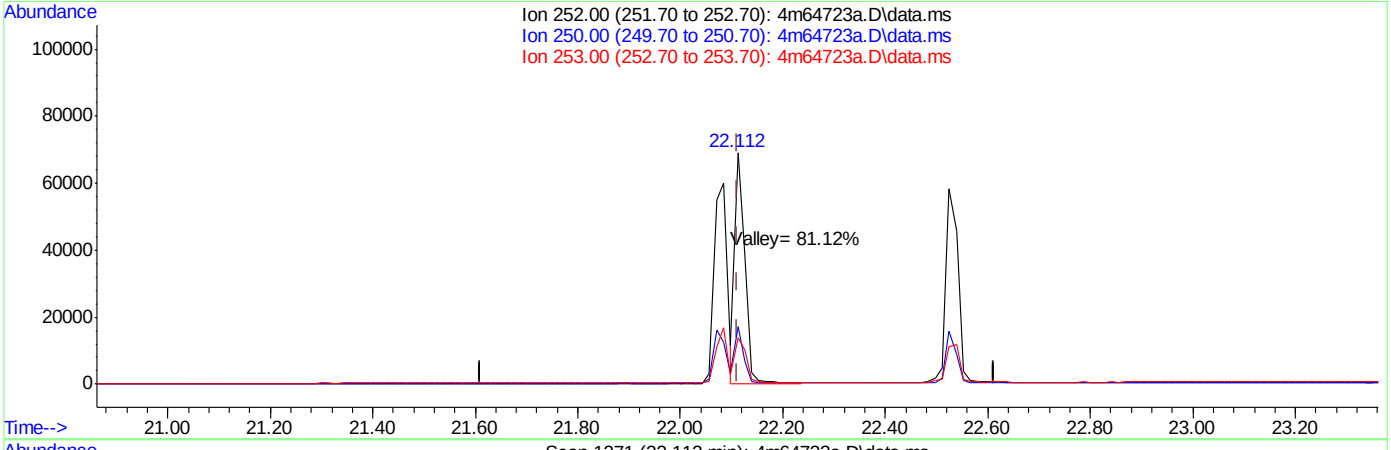
Quant Time: Apr 14 15:17:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:16:44 2016
Response via : Initial Calibration

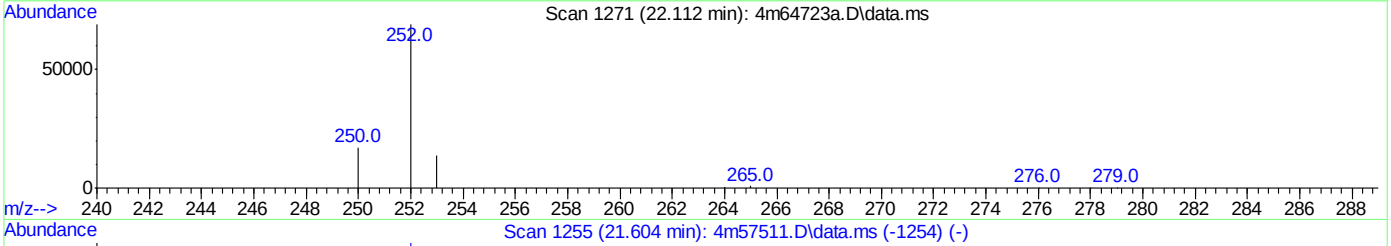


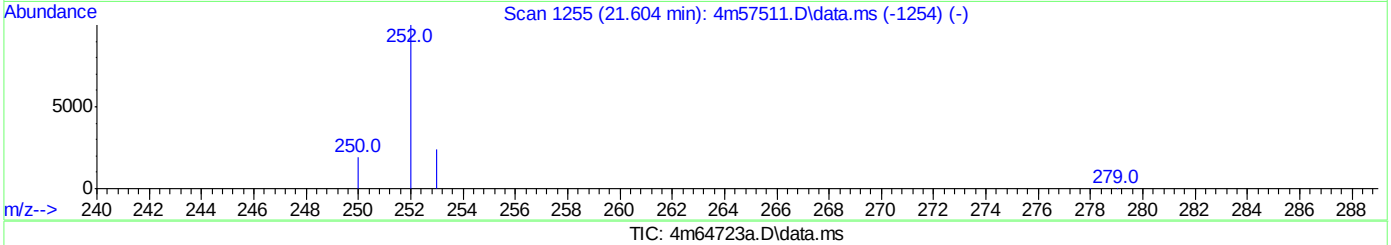
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:11:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:11:05 2016
Response via : Initial Calibration







TIC: 4m64723a.D\data.ms

(30) Benzo[k]fluoranthene (t)

22.112min (0.000) 0.48ppm

response 89387

Ion	Exp%	Act%
252.00	100	100
250.00	24.80	24.21
253.00	19.80	18.89
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:13:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	314071	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	575712	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	896605	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	668555	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	314071	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	575712	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	870474	21.06	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 42.12%			
3) Phenol-d5	6.338	99	1467617	20.99	ppm	0.00
Spiked Amount 50.000			Recovery = 41.98%			
6) Nitrobenzene-d5	7.864	82	1309697	20.73	ppm	0.00
Spiked Amount 50.000			Recovery = 41.46%			
11) 2-Fluorobiphenyl	11.390	172	1712072	21.09	ppm	0.00
Spiked Amount 50.000			Recovery = 42.18%			
17) 2,4,6-Tribromophenol	14.273	330	687312	20.45	ppm	0.00
Spiked Amount 50.000			Recovery = 40.90%			
25) Terphenyl-d14	18.713	244	2436254	19.56	ppm	0.00
Spiked Amount 50.000			Recovery = 39.12%			
Target Compounds						Qvalue
4) Phenol	6.352	94	382897	5.26	ppm	100
5) bis(2-Chloroethyl)ether	6.434	93	57037	1.06	ppm	100
7) Naphthalene	9.256	128	184826	1.05	ppm	100
8) Hexachlorobutadiene	9.550	225	46074	1.05	ppm	100
9) 2-Methylnaphthalene	10.626	142	75929	1.01	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	47859	2.04	ppm	100
13) Acenaphthylene	12.387	152	131086	0.95	ppm	100
14) Acenaphthene	12.742	153	83653	0.96	ppm	100
15) Dibenzofuran	13.097	168	137682	1.03	ppm	100
16) Fluorene	13.771	166	163177	1.01	ppm	100
18) Hexachlorobenzene	14.883	284	61023	1.00	ppm	100
19) Pentachlorophenol	15.316	266	141117	5.00	ppm	100
20) Phenanthrene	15.671	178	210035	1.00	ppm	100
21) Anthracene	15.780	178	207976	1.00	ppm	100
23) Fluoranthene	17.941	202	228185	0.95	ppm	100
24) Pyrene	18.318	202	241719	1.00	ppm	100
26) Benzo[a]anthracene	20.408	228	223352	1.01	ppm	100
27) Chrysene	20.464	228	214850	1.00	ppm	100
29) Benzo[b]fluoranthene	22.070	252	249096	1.01	ppm	100
30) Benzo[k]fluoranthene	22.112	252	194533	0.97	ppm	100
31) Benzo[a]pyrene	22.525	252	203335	1.00	ppm	100
32) Indeno[1,2,3-cd]pyrene	24.053	276	251378	1.00	ppm	100
33) Dibenz[a,h]anthracene	24.094	278	187914	0.95	ppm	100
34) Benzo[g,h,i]perylene	24.452	276	211099	0.99	ppm	100
36) 1,4-Dioxane	2.472	88	19420	1.36	ppm	98
37) 1-Methylnaphthalene	10.793	142	70806	1.04	ppm	100
39) 4,6-dinitro-2-methylph...	13.938	198	79406	5.65	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:13:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	157240	1.06	ppm	100
41) n-nitrosodiphenylamine	14.082	169	114035	1.04	ppm	100

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

7.6.15

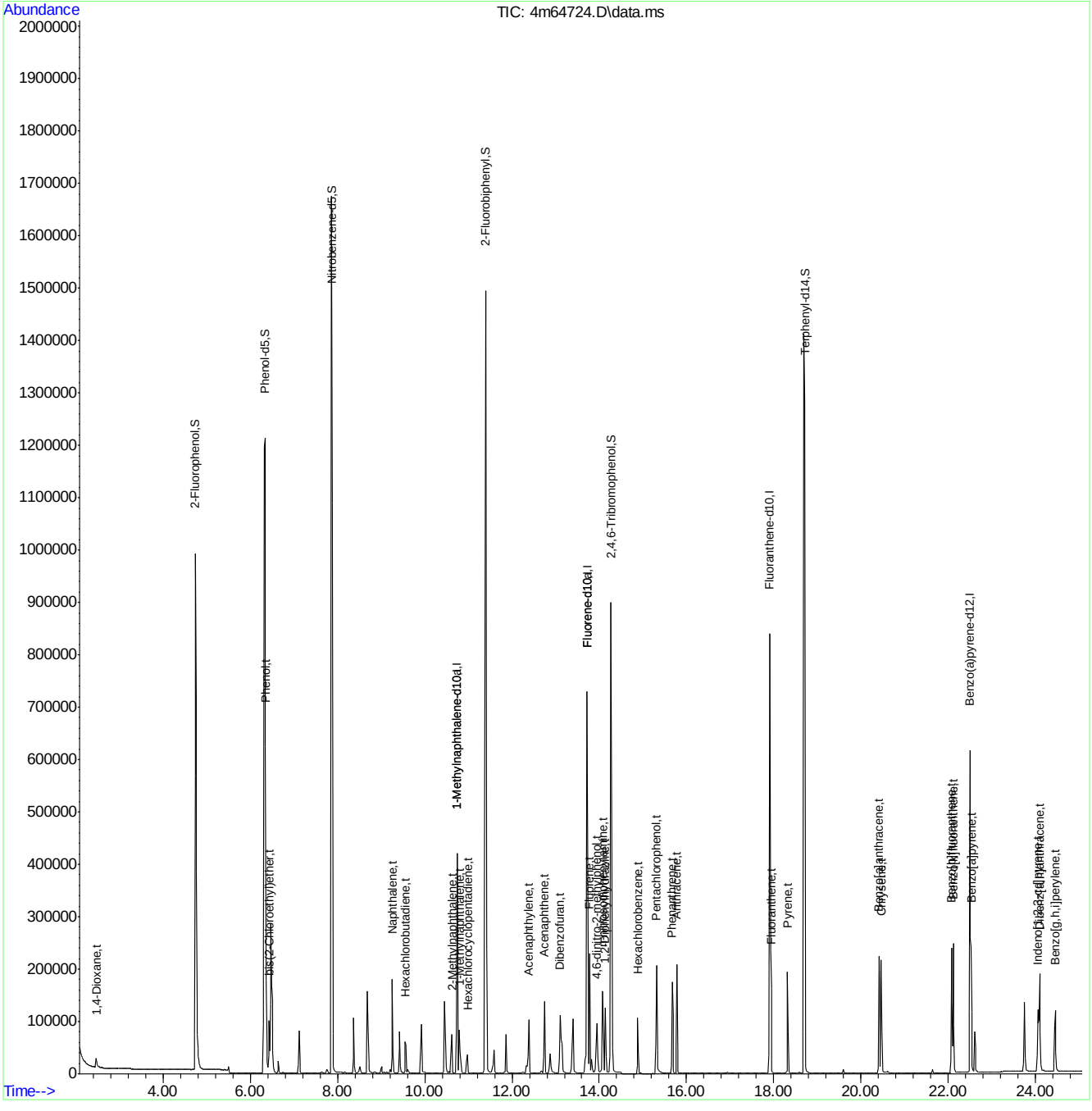
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:13:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:42 2016
Response via : Initial Calibration

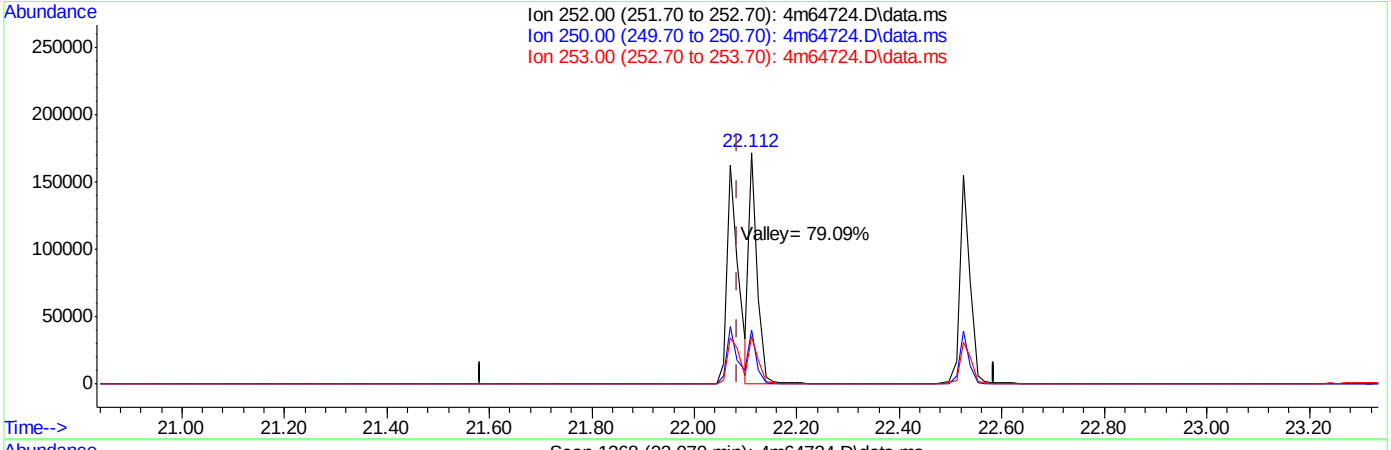


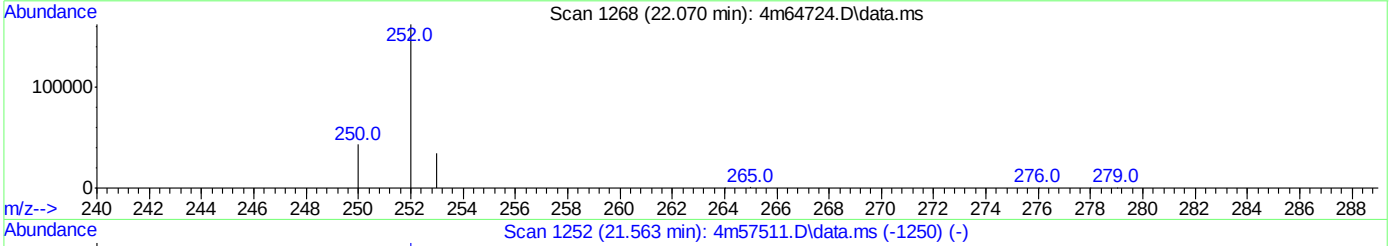
SGS ACCUTEST JC19914

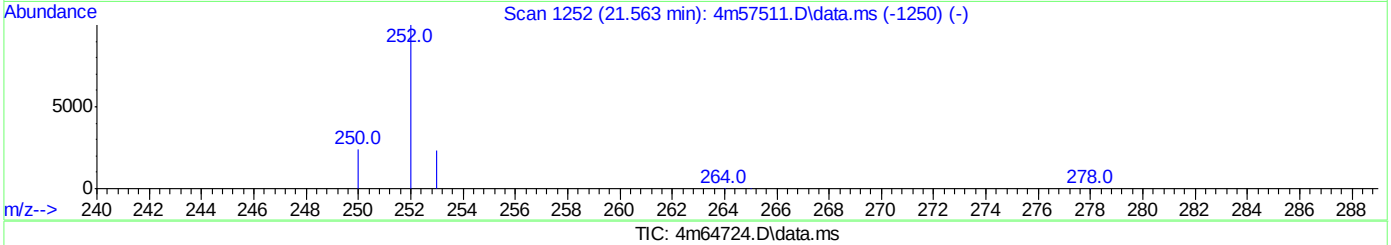
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:12:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:00 2016
Response via : Initial Calibration







TIC: 4m64724.D\data.ms

(29) Benzo[b]fluoranthene (t)

22.070min (-0.014) 1.02ppm

response 249096

Ion	Exp%	Act%
252.00	100	100
250.00	19.90	25.97
253.00	27.70	21.20
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64725.D
Acq On : 14 Apr 2016 11:44 am
Operator : linseyk
Sample : ic2881-0.2
Misc : op92998a,e4m2881
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 15:28:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:28:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	284988	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506257	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790251	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	600983	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	284988	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506257	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	154379	4.07	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 8.14%#			
3) Phenol-d5	6.338	99	261565	4.08	ppm	0.00
Spiked Amount 50.000			Recovery = 8.16%			
6) Nitrobenzene-d5	7.864	82	233647	4.07	ppm	0.00
Spiked Amount 50.000			Recovery = 8.14%			
11) 2-Fluorobiphenyl	11.390	172	352568	4.28	ppm	0.00
Spiked Amount 50.000			Recovery = 8.56%			
17) 2,4,6-Tribromophenol	14.273	330	121131	4.17	ppm	0.00
Spiked Amount 50.000			Recovery = 8.34%			
25) Terphenyl-d14	18.694	244	437958	4.00	ppm	0.00
Spiked Amount 50.000			Recovery = 8.00%			
Target Compounds						Qvalue
4) Phenol	6.352	94	66443	1.01	ppm	94
5) bis(2-Chloroethyl)ether	6.434	93	9934	0.20	ppm	94
7) Naphthalene	9.256	128	33060	0.20	ppm	99
8) Hexachlorobutadiene	9.565	225	7994	0.20	ppm	99
9) 2-Methylnaphthalene	10.626	142	13532	0.20	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	6597	0.35	ppm	100
13) Acenaphthylene	12.388	152	22912	0.20	ppm	99
14) Acenaphthene	12.743	153	14986	0.20	ppm	98
15) Dibenzofuran	13.097	168	23893	0.20	ppm	97
16) Fluorene	13.771	166	28326	0.20	ppm	99
18) Hexachlorobenzene	14.883	284	10972	0.20	ppm	98
19) Pentachlorophenol	15.316	266	19930	0.97	ppm	97
20) Phenanthrene	15.671	178	37427	0.20	ppm	100
21) Anthracene	15.780	178	35181	0.20	ppm	99
23) Fluoranthene	17.941	202	41945	0.20	ppm	99
24) Pyrene	18.318	202	42201	0.20	ppm	99
26) Benzo[a]anthracene	20.408	228	39404	0.20	ppm	98
27) Chrysene	20.464	228	38354	0.20	ppm	99
29) Benzo[b]fluoranthene	22.070	252	44250	0.20	ppm	99
30) Benzo[k]fluoranthene	22.112	252	35796	0.20	ppm	98
31) Benzo[a]pyrene	22.525	252	36721	0.21	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.053	276	45470	0.20	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	36670	0.20	ppm	99
34) Benzo[g,h,i]perylene	24.452	276	38801	0.20	ppm	100
36) 1,4-Dioxane	2.472	88	4064	0.17	ppm	80
37) 1-Methylnaphthalene	10.793	142	12503	0.20	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	7678	0.88	ppm	96

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64725.D
Acq On : 14 Apr 2016 11:44 am
Operator : linseyk
Sample : ic2881-0.2
Misc : op92998a,e4m2881
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 15:28:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:28:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	25564	0.20	ppm	100
41) n-nitrosodiphenylamine	14.082	169	18939	0.20	ppm	99

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

7.6.16

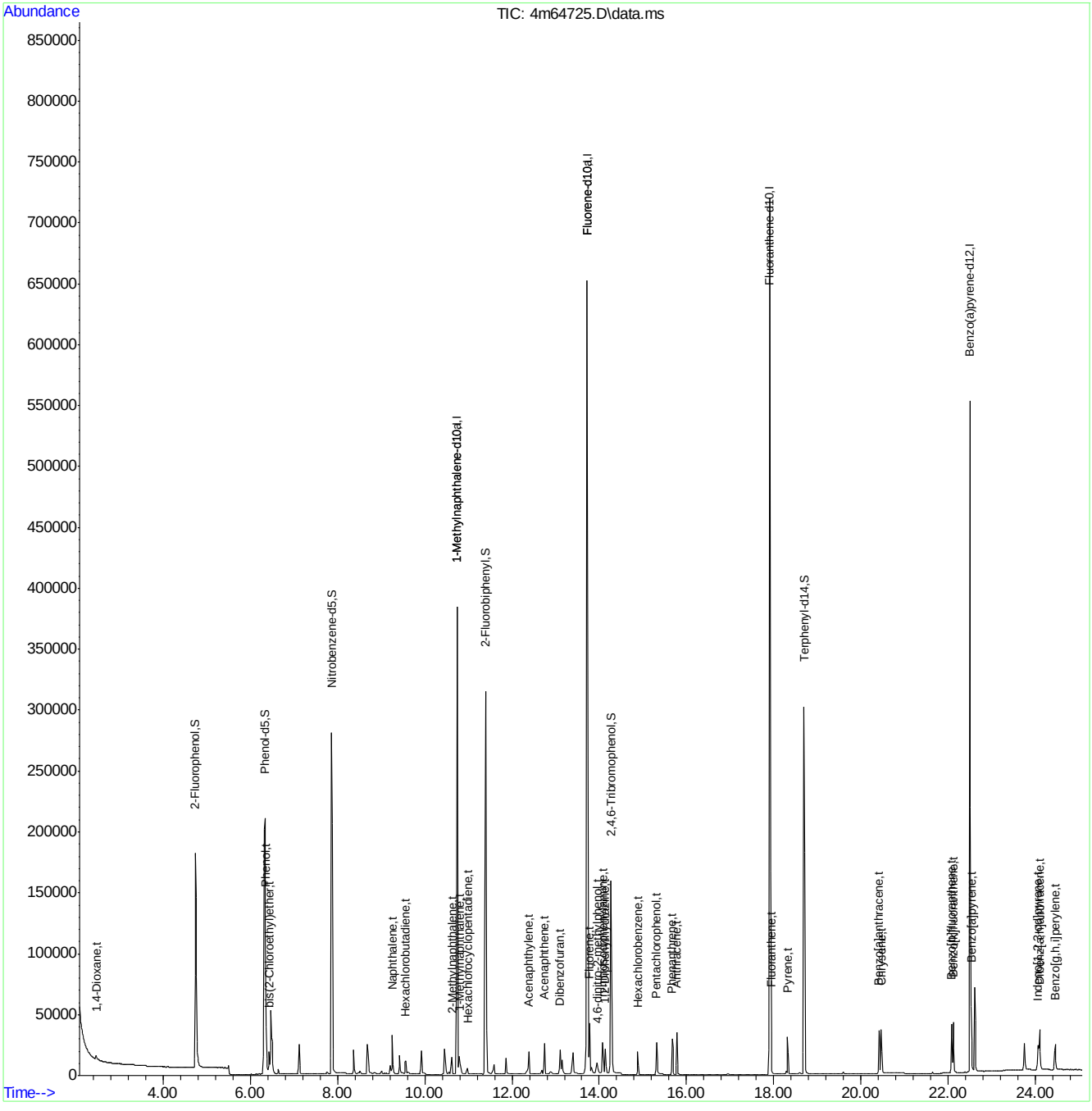
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64725.D
Acq On : 14 Apr 2016 11:44 am
Operator : linseyk
Sample : ic2881-0.2
Misc : op92998a,e4m2881
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 15:28:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:28:49 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	282673	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506012	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	798340	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	598363	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	282673	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506012	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	73705	1.96	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	3.92%#	
3) Phenol-d5	6.338	99	124726	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
6) Nitrobenzene-d5	7.864	82	111828	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
11) 2-Fluorobiphenyl	11.390	172	169128	2.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.14%	
17) 2,4,6-Tribromophenol	14.273	330	57224	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
25) Terphenyl-d14	18.694	244	218853	1.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.96%	
Target Compounds						Qvalue
4) Phenol	6.352	94	31501	0.48	ppm	95
5) bis(2-Chloroethyl)ether	6.434	93	4753	0.10	ppm #	64
7) Naphthalene	9.256	128	16167	0.10	ppm	99
8) Hexachlorobutadiene	9.565	225	3842	0.10	ppm	97
9) 2-Methylnaphthalene	10.626	142	6570	0.10	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	3033	0.16	ppm	98
13) Acenaphthylene	12.387	152	11490	0.10	ppm	98
14) Acenaphthene	12.742	153	7351	0.10	ppm	97
15) Dibenzofuran	13.097	168	11211	0.10	ppm	86
16) Fluorene	13.771	166	13581	0.10	ppm	98
18) Hexachlorobenzene	14.883	284	5347	0.10	ppm	96
19) Pentachlorophenol	15.316	266	8706	0.42	ppm	98
20) Phenanthrene	15.671	178	18048	0.10	ppm	99
21) Anthracene	15.780	178	16875	0.10	ppm	98
23) Fluoranthene	17.941	202	20368	0.10	ppm	98
24) Pyrene	18.318	202	20517	0.10	ppm	100
26) Benzo[a]anthracene	20.408	228	18521	0.09	ppm	97
27) Chrysene	20.464	228	18694	0.10	ppm	97
29) Benzo[b]fluoranthene	22.070	252	21229	0.10	ppm	99
30) Benzo[k]fluoranthene	22.112	252	17514	0.10	ppm	98
31) Benzo[a]pyrene	22.525	252	16991	0.10	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	21723	0.10	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	17411	0.10	ppm	70
34) Benzo[g,h,i]perylene	24.452	276	18457	0.10	ppm	99
36) 1,4-Dioxane	2.461	88	3108	0.11	ppm	87
37) 1-Methylnaphthalene	10.793	142	6136	0.10	ppm	99
39) 4,6-dinitro-2-methylph...	13.962	198	3170	0.36	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	12073	0.09	ppm	98
41) n-nitrosodiphenylamine	14.082	169	9095	0.10	ppm	95

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

7.6.17

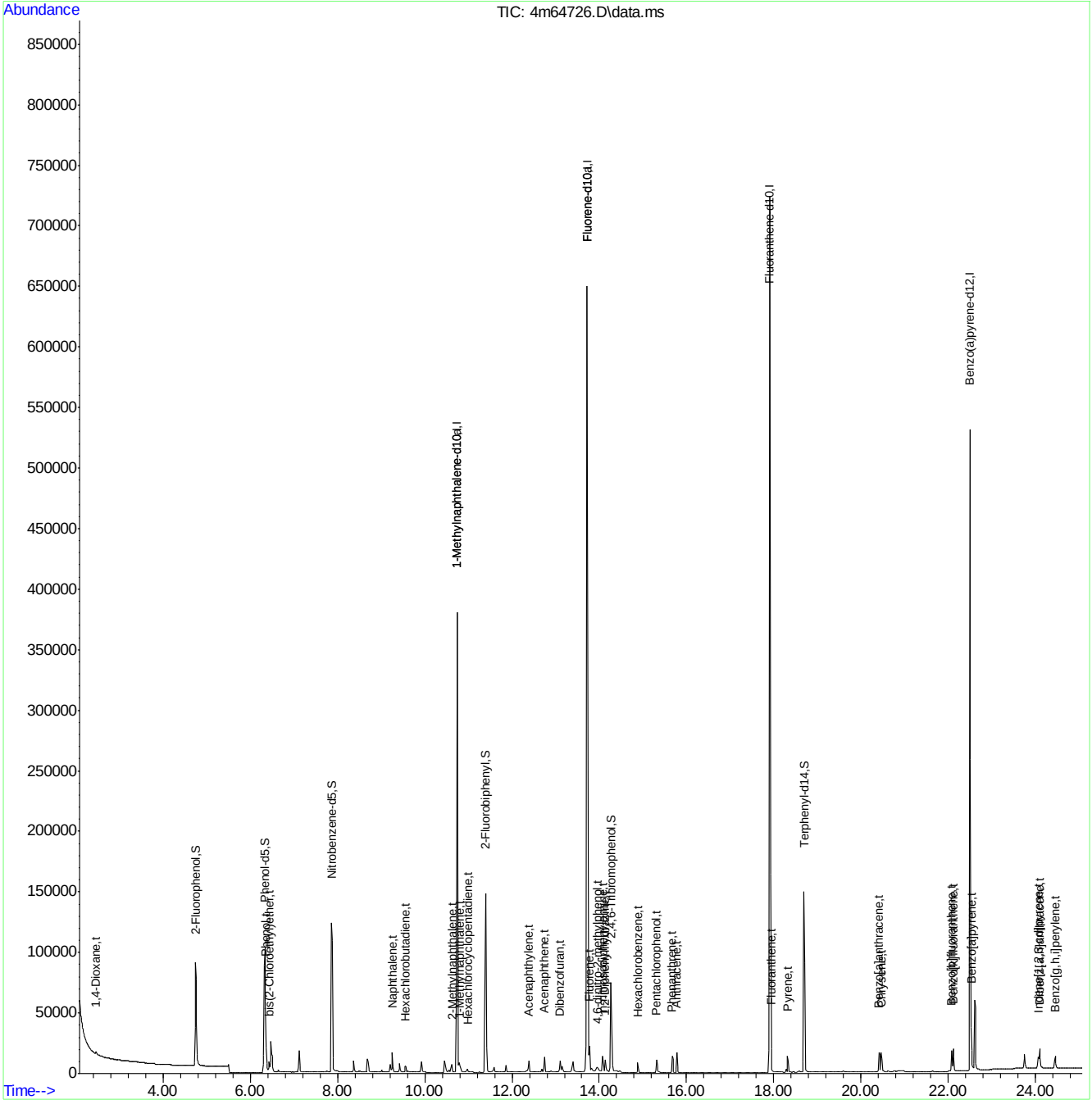
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:28:46 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	282253	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	531280	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	824889	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	597391	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	282253	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	531280	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	38504	1.03	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	2.06%#	
3) Phenol-d5	6.338	99	64951	1.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.06%	
6) Nitrobenzene-d5	7.864	82	56961	1.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.00%	
11) 2-Fluorobiphenyl	11.390	172	90764	1.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.28%	
17) 2,4,6-Tribromophenol	14.273	330	28553	0.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.84%	
25) Terphenyl-d14	18.695	244	114865	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	
Target Compounds						Qvalue
4) Phenol	6.352	94	16247	0.25	ppm	95
5) bis(2-Chloroethyl)ether	6.435	93	2580	0.05	ppm #	69
7) Naphthalene	9.256	128	8387	0.05	ppm	99
8) Hexachlorobutadiene	9.566	225	2025	0.05	ppm	97
9) 2-Methylnaphthalene	10.626	142	3398	0.05	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	1337	0.07	ppm	98
13) Acenaphthylene	12.388	152	5918	0.05	ppm	98
14) Acenaphthene	12.743	153	3857	0.05	ppm	97
15) Dibenzofuran	13.098	168	6123	0.05	ppm	89
16) Fluorene	13.772	166	7203	0.05	ppm	98
18) Hexachlorobenzene	14.883	284	2778	0.05	ppm	96
19) Pentachlorophenol	15.316	266	4171	0.18	ppm	98
20) Phenanthrene	15.672	178	9370	0.05	ppm	99
21) Anthracene	15.780	178	8817	0.05	ppm	98
23) Fluoranthene	17.941	202	11294	0.05	ppm	97
24) Pyrene	18.318	202	10604	0.05	ppm	100
26) Benzo[a]anthracene	20.408	228	10103	0.05	ppm	97
27) Chrysene	20.464	228	9648	0.05	ppm	97
29) Benzo[b]fluoranthene	22.070	252	10982	0.05	ppm	99
30) Benzo[k]fluoranthene	22.112	252	8686	0.05	ppm	99
31) Benzo[a]pyrene	22.525	252	8351	0.05	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.053	276	11120	0.05	ppm	92
33) Dibenz[a,h]anthracene	24.094	278	9277	0.05	ppm	100
34) Benzo[g,h,i]perylene	24.452	276	9354	0.05	ppm	99
37) 1-Methylnaphthalene	10.793	142	3386	0.06	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	1330	0.13	ppm	96
40) 1,2-Diphenylhydrazine	14.130	77	6256	0.05	ppm	98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	4526	0.05	ppm	95

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

7.6.18

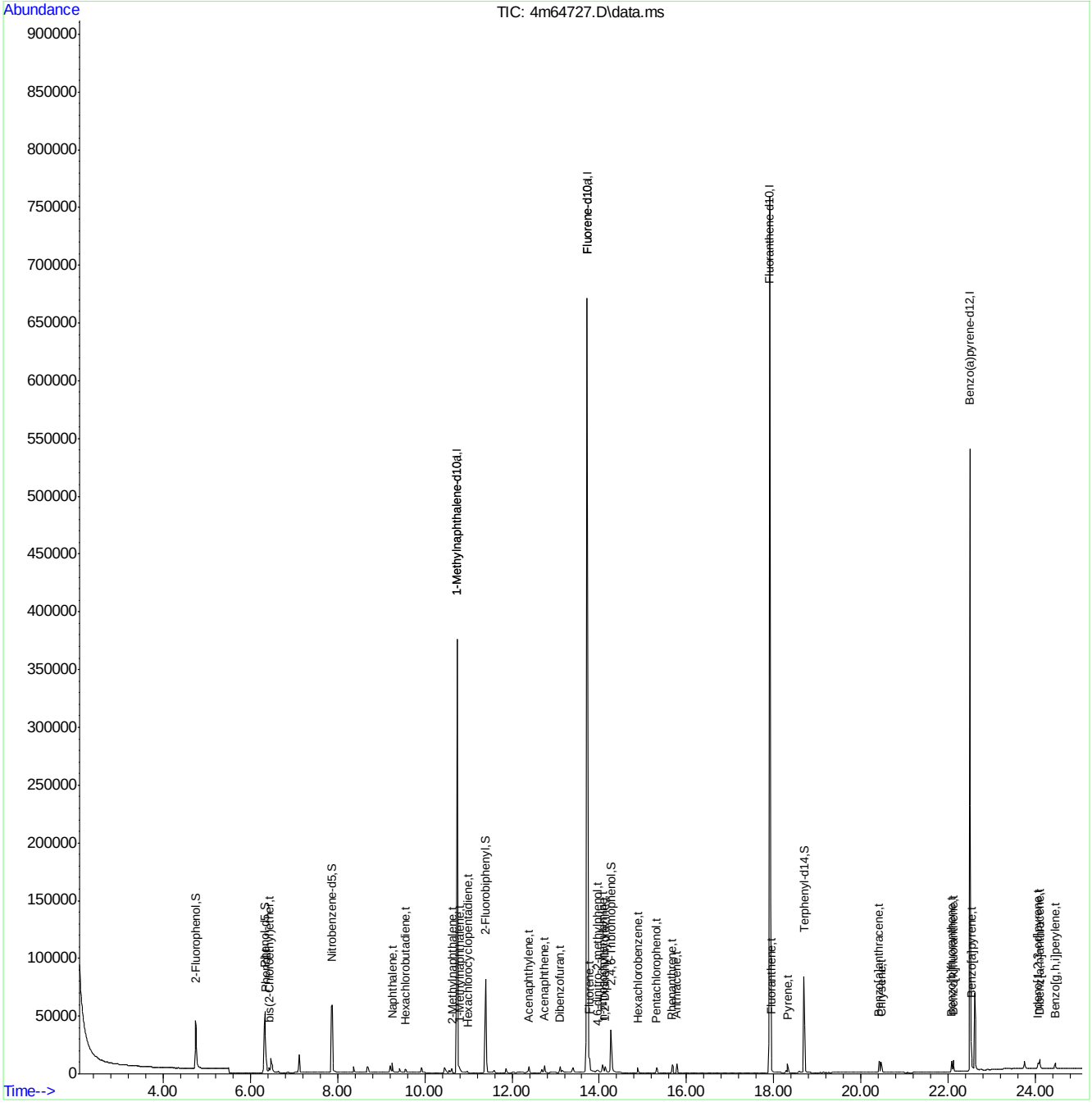
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	280672	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	514038	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790910	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	599819	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	280672	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	514038	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	15109	0.40	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.80%#			
3) Phenol-d5	6.338	99	24875	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
6) Nitrobenzene-d5	7.879	82	22009	0.39	ppm	0.02
Spiked Amount 50.000			Recovery = 0.78%			
11) 2-Fluorobiphenyl	11.390	172	35367	0.44	ppm	0.00
Spiked Amount 50.000			Recovery = 0.88%			
17) 2,4,6-Tribromophenol	14.273	330	10404	0.35	ppm	0.00
Spiked Amount 50.000			Recovery = 0.70%			
25) Terphenyl-d14	18.694	244	42409	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
Target Compounds						Qvalue
4) Phenol	6.352	94	6339	0.10	ppm	72
5) bis(2-Chloroethyl)ether	6.434	93	980	0.02	ppm	83
7) Naphthalene	9.256	128	3340	0.02	ppm	98
8) Hexachlorobutadiene	9.565	225	796	0.02	ppm	97
9) 2-Methylnaphthalene	10.626	142	1501	0.02	ppm	97
10) Hexachlorocyclopentadiene	10.984	237	450	0.02	ppm	95
13) Acenaphthylene	12.388	152	2239	0.02	ppm	98
14) Acenaphthene	12.743	153	1496	0.02	ppm	97
15) Dibenzofuran	13.097	168	2271	0.02	ppm	100
16) Fluorene	13.771	166	2703	0.02	ppm	97
18) Hexachlorobenzene	14.883	284	1113	0.02	ppm	99
19) Pentachlorophenol	15.316	266	1632	0.08	ppm	94
20) Phenanthrene	15.671	178	3896	0.02	ppm	96
21) Anthracene	15.780	178	3355	0.02	ppm	99
23) Fluoranthene	17.941	202	4884	0.02	ppm	99
24) Pyrene	18.318	202	4158	0.02	ppm	99
26) Benzo[a]anthracene	20.408	228	4066	0.02	ppm	99
27) Chrysene	20.464	228	3857	0.02	ppm	99
29) Benzo[b]fluoranthene	22.070	252	4712	0.02	ppm	95
30) Benzo[k]fluoranthene	22.112	252	3502	0.02	ppm	99
31) Benzo[a]pyrene	22.525	252	3641	0.02	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	4414	0.02	ppm	95
33) Dibenz[a,h]anthracene	24.094	278	3705	0.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	3835	0.02	ppm	99
37) 1-Methylnaphthalene	10.793	142	1512	0.02	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	582	0.07	ppm	79
40) 1,2-Diphenylhydrazine	14.130	77	2462	0.02	ppm	95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	1877	0.02	ppm	95

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

7.6.19

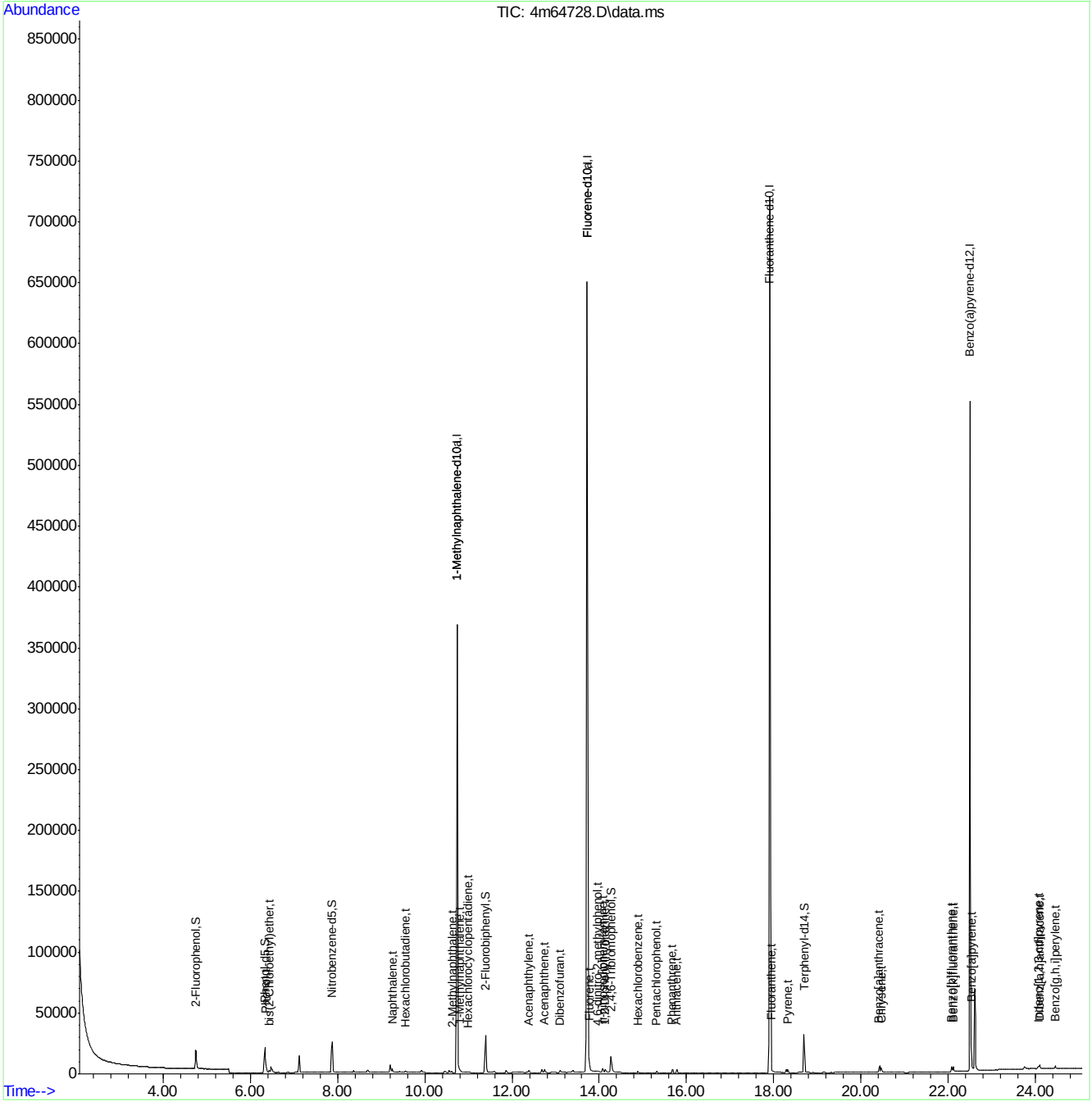
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64729.D
Acq On : 14 Apr 2016 1:48 pm
Operator : linseyk
Sample : ic2881-0.01
Misc : op92998a,e4m2881
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 15:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:30:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	278671	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	502963	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	766446	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	581818	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	278671	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	502963	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	7014	0.19	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.38%#			
3) Phenol-d5	6.338	99	11584	0.19	ppm	0.00
Spiked Amount 50.000			Recovery = 0.38%			
6) Nitrobenzene-d5	7.879	82	10272	0.18	ppm	0.00
Spiked Amount 50.000			Recovery = 0.36%			
11) 2-Fluorobiphenyl	11.390	172	15314	0.19	ppm	0.00
Spiked Amount 50.000			Recovery = 0.38%			
17) 2,4,6-Tribromophenol	14.273	330	4935	0.17	ppm	0.00
Spiked Amount 50.000			Recovery = 0.34%			
25) Terphenyl-d14	18.713	244	20354	0.19	ppm	0.02
Spiked Amount 50.000			Recovery = 0.38%			
Target Compounds						Qvalue
4) Phenol	6.352	94	2912	0.05	ppm	90
5) bis(2-Chloroethyl)ether	6.435	93	452	0.01	ppm	74
7) Naphthalene	9.256	128	1505	0.01	ppm	99
8) Hexachlorobutadiene	9.566	225	414	0.01	ppm	90
9) 2-Methylnaphthalene	10.626	142	732	0.01	ppm	94
10) Hexachlorocyclopentadiene	10.984	237	223	0.01	ppm	93
13) Acenaphthylene	12.388	152	1149	0.01	ppm	95
14) Acenaphthene	12.743	153	740	0.01	ppm	98
15) Dibenzofuran	13.098	168	1016	0.01	ppm	84
16) Fluorene	13.772	166	1363	0.01	ppm	95
18) Hexachlorobenzene	14.883	284	524	0.01	ppm	92
19) Pentachlorophenol	15.316	266	886	0.04	ppm	95
20) Phenanthrene	15.687	178	1876	0.01	ppm	95
21) Anthracene	15.780	178	1649	0.01	ppm	99
23) Fluoranthene	17.942	202	2784	0.01	ppm	97
24) Pyrene	18.337	202	1985	0.01	ppm	79
26) Benzo[a]anthracene	20.427	228	2108	0.01	ppm #	80
27) Chrysene	20.483	228	1852	0.01	ppm	83
29) Benzo[b]fluoranthene	22.084	252	2507	0.01	ppm	90
30) Benzo[k]fluoranthene	22.112	252	1760	0.01	ppm	93
31) Benzo[a]pyrene	22.539	252	1798	0.01	ppm	97
32) Indeno[1,2,3-cd]pyrene	24.067	276	2193	0.01	ppm	95
33) Dibenz[a,h]anthracene	24.108	278	1808	0.01	ppm	93
34) Benzo[g,h,i]perylene	24.453	276	1848	0.01	ppm	94
37) 1-Methylnaphthalene	10.817	142	848	0.01	ppm #	55
39) 4,6-dinitro-2-methylph...	13.963	198	234	0.03	ppm	87
40) 1,2-Diphenylhydrazine	14.130	77	1052	0.01	ppm	97

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64729.D
Acq On : 14 Apr 2016 1:48 pm
Operator : linseyk
Sample : ic2881-0.01
Misc : op92998a,e4m2881
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 15:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:30:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	834	0.01 ppm	95

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

7.6.20

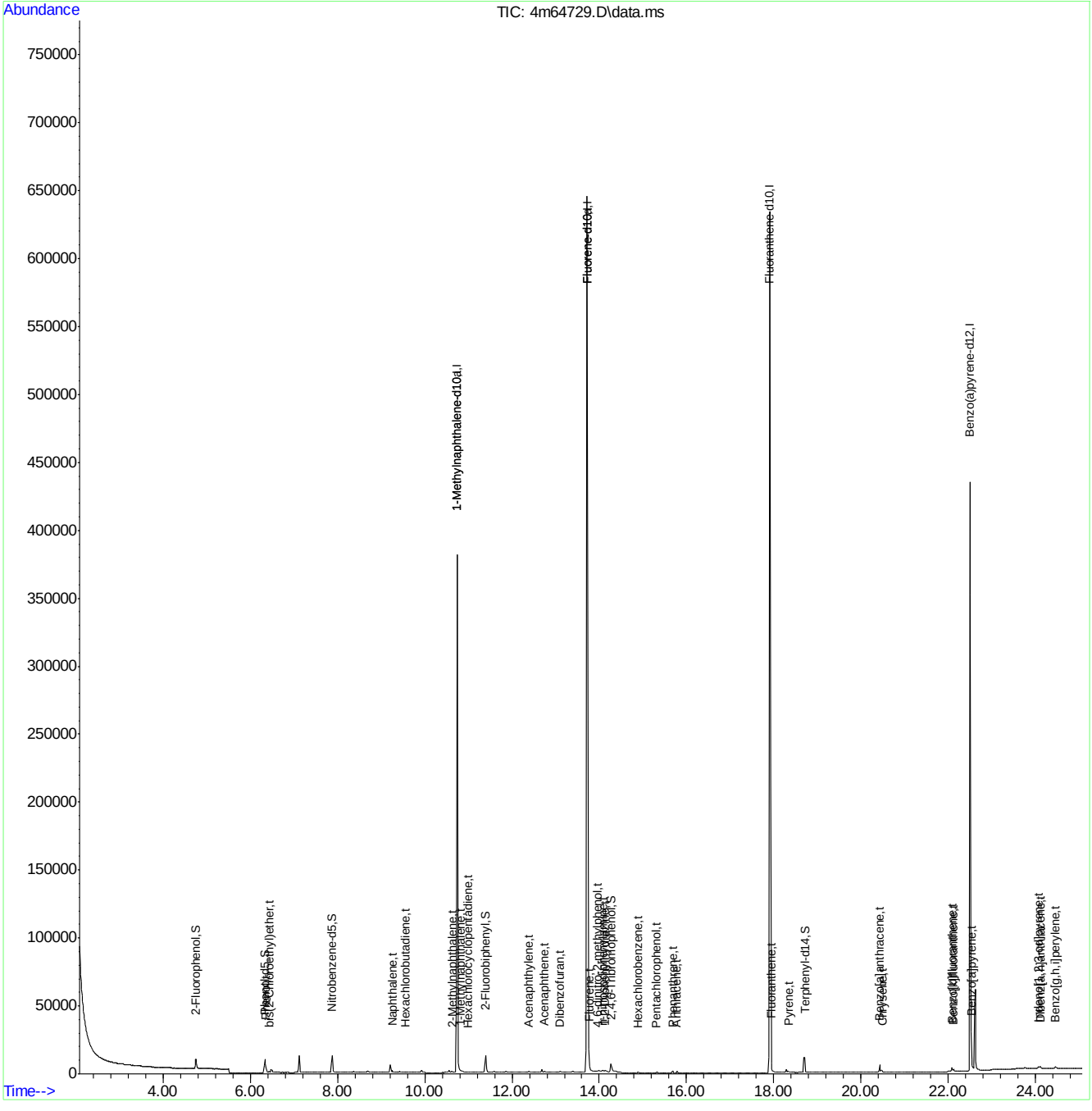
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64729.D
Acq On : 14 Apr 2016 1:48 pm
Operator : linseyk
Sample : ic2881-0.01
Misc : op92998a,e4m2881
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 15:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:30:56 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64730.D
Acq On : 14 Apr 2016 2:20 pm
Operator : linseyk
Sample : ic2881-5.0
Misc : op92998a,e4m2881
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 15:53:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:53:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	294505	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	539967	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	760249	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	580666	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.745	152	294505	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	539967	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	3610118	91.93	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	183.86%#	
3) Phenol-d5	6.338	99	5956548	90.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	180.18%	
6) Nitrobenzene-d5	7.879	82	5414807	91.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	183.42%	
11) 2-Fluorobiphenyl	11.414	172	9016987	104.26	ppm	0.02
Spiked Amount 50.000			Recovery	=	208.52%	
17) 2,4,6-Tribromophenol	14.297	330	2295112	74.09	ppm	0.02
Spiked Amount 50.000			Recovery	=	148.18%	
25) Terphenyl-d14	18.713	244	9092042	86.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	173.58%	
Target Compounds						Qvalue
4) Phenol	6.352	94	1528983	22.64	ppm	75
5) bis(2-Chloroethyl)ether	6.448	93	235976	4.65	ppm	70
7) Naphthalene	9.256	128	771791	4.58	ppm	99
8) Hexachlorobutadiene	9.565	225	190954	4.58	ppm	92
9) 2-Methylnaphthalene	10.626	142	361705	5.01	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	271381	14.12	ppm	96
13) Acenaphthylene	12.387	152	618832	5.01	ppm	92
14) Acenaphthene	12.742	153	401217	5.04	ppm	97
15) Dibenzofuran	13.097	168	535298	4.40	ppm	50
16) Fluorene	13.771	166	639751	4.34	ppm	89
18) Hexachlorobenzene	14.883	284	258380	4.51	ppm	98
19) Pentachlorophenol	15.316	266	648135	29.53	ppm	93
20) Phenanthrene	15.687	178	889577	4.50	ppm	97
21) Anthracene	15.780	178	899214	4.88	ppm	97
23) Fluoranthene	17.941	202	1057860	5.23	ppm	99
24) Pyrene	18.337	202	1025148	5.11	ppm	97
26) Benzo[a]anthracene	20.426	228	956396	5.15	ppm	97
27) Chrysene	20.483	228	944067	5.22	ppm	99
29) Benzo[b]fluoranthene	22.084	252	995427	4.69	ppm	90
30) Benzo[k]fluoranthene	22.125	252	919603	5.35	ppm	85
31) Benzo[a]pyrene	22.538	252	893992	5.20	ppm	89
32) Indeno[1,2,3-cd]pyrene	24.067	276	1083965	4.99	ppm	98
33) Dibenz[a,h]anthracene	24.108	278	874305	5.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	900771	4.90	ppm	92
36) 1,4-Dioxane	2.461	88	64218	2.90	ppm #	67
37) 1-Methylnaphthalene	10.817	142	312404	4.41	ppm	97
39) 4,6-dinitro-2-methylph...	13.962	198	605702	64.80	ppm	65

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64730.D
Acq On : 14 Apr 2016 2:20 pm
Operator : linseyk
Sample : ic2881-5.0
Misc : op92998a,e4m2881
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 15:53:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:53:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	527083	3.88	ppm	97
41) n-nitrosodiphenylamine	14.082	169	377507	3.75	ppm	84

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

7.6.21

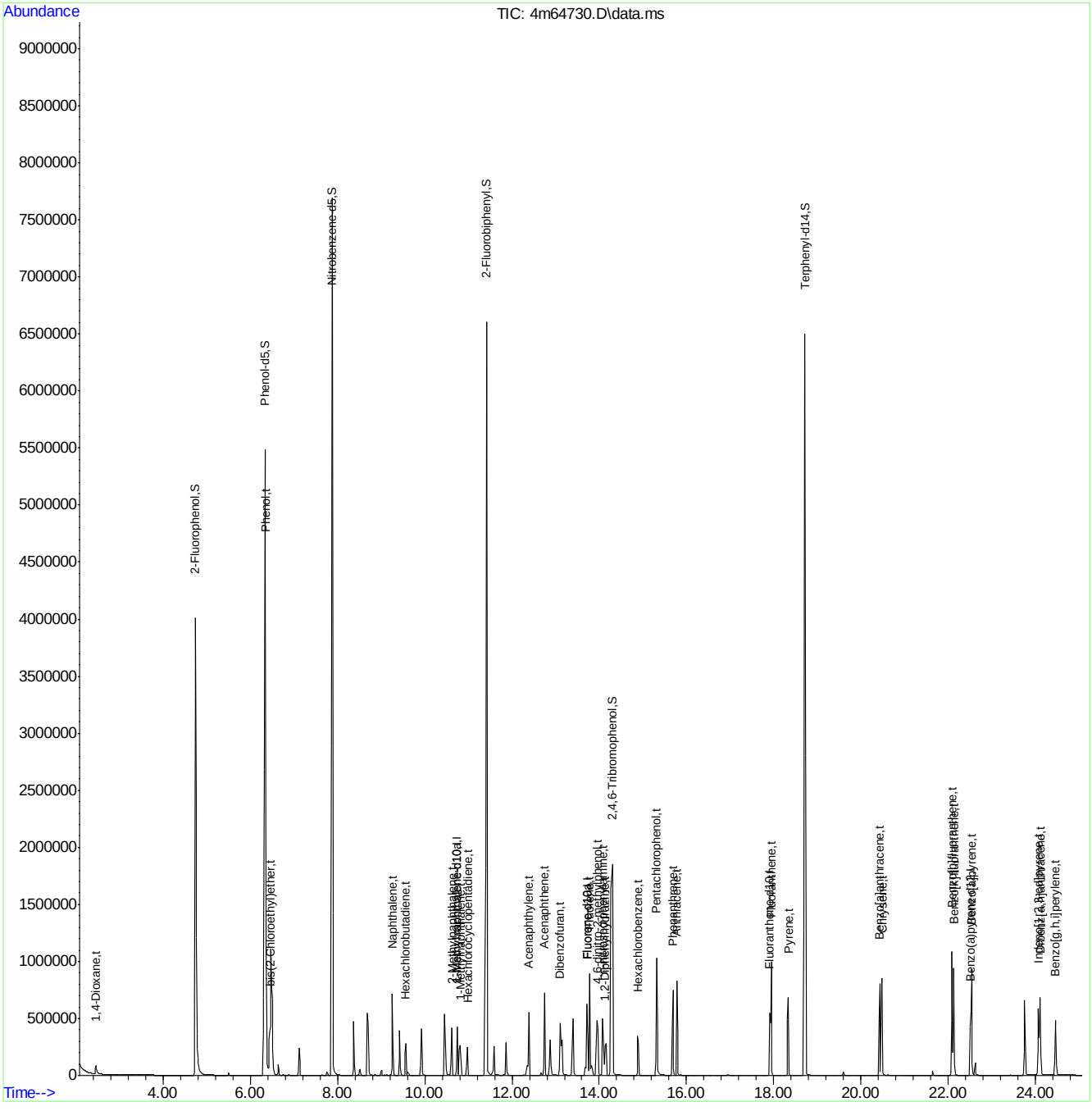
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64730.D
Acq On : 14 Apr 2016 2:20 pm
Operator : linseyk
Sample : ic2881-5.0
Misc : op92998a,e4m2881
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 15:53:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:53:47 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64731.D
Acq On : 14 Apr 2016 2:53 pm
Operator : linseyk
Sample : ic2881-2.5
Misc : op92998a,e4m2881
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 14 15:54:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	324649	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	581080	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	845045	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	670517	4.00	ppm	-0.01
35) 1-Methylnaphthalene-d10a	10.746	152	324649	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	581080	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.742	112	2026720	47.36	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 94.72%#			
3) Phenol-d5	6.338	99	3444661	47.94	ppm	0.00
Spiked Amount 50.000			Recovery = 95.88%			
6) Nitrobenzene-d5	7.879	82	3129845	48.66	ppm	0.00
Spiked Amount 50.000			Recovery = 97.32%			
11) 2-Fluorobiphenyl	11.414	172	3910650	40.77	ppm	0.00
Spiked Amount 50.000			Recovery = 81.54%			
17) 2,4,6-Tribromophenol	14.273	330	1278690	40.09	ppm	-0.02
Spiked Amount 50.000			Recovery = 80.18%			
25) Terphenyl-d14	18.713	244	5679415	49.71	ppm	0.00
Spiked Amount 50.000			Recovery = 99.42%			
Target Compounds						Qvalue
4) Phenol	6.352	94	894753	12.18	ppm	# 57
5) bis(2-Chloroethyl)ether	6.435	93	133511	2.41	ppm	# 28
7) Naphthalene	9.256	128	433332	2.36	ppm	100
8) Hexachlorobutadiene	9.566	225	106234	2.34	ppm	98
9) 2-Methylnaphthalene	10.626	142	194348	2.44	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	143850	6.27	ppm	98
13) Acenaphthylene	12.388	152	339981	2.56	ppm	100
14) Acenaphthene	12.743	153	213873	2.49	ppm	97
15) Dibenzofuran	13.098	168	297774	2.31	ppm	70
16) Fluorene	13.772	166	365612	2.34	ppm	96
18) Hexachlorobenzene	14.883	284	145932	2.39	ppm	99
19) Pentachlorophenol	15.316	266	351671	14.45	ppm	97
20) Phenanthrene	15.687	178	502638	2.39	ppm	99
21) Anthracene	15.780	178	498266	2.52	ppm	99
23) Fluoranthene	17.941	202	592841	2.62	ppm	100
24) Pyrene	18.337	202	577158	2.58	ppm	99
26) Benzo[a]anthracene	20.427	228	534703	2.58	ppm	98
27) Chrysene	20.483	228	533551	2.64	ppm	98
29) Benzo[b]fluoranthene	22.084	252	581595	2.40	ppm	97
30) Benzo[k]fluoranthene	22.126	252	522902	2.60	ppm	97
31) Benzo[a]pyrene	22.539	252	502861	2.52	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	617190	2.46	ppm	100
33) Dibenz[a,h]anthracene	24.108	278	501777	2.49	ppm	99
34) Benzo[g,h,i]perylene	24.452	276	525302	2.48	ppm	100
36) 1,4-Dioxane	2.461	88	36555	1.63	ppm	88
37) 1-Methylnaphthalene	10.817	142	169119	2.20	ppm	100
39) 4,6-dinitro-2-methylph...	13.963	198	254485	19.99	ppm	98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64731.D
Acq On : 14 Apr 2016 2:53 pm
Operator : linseyk
Sample : ic2881-2.5
Misc : op92998a,e4m2881
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 14 15:54:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	317816	2.28 ppm	99
41) n-nitrosodiphenylamine	14.082	169	243537	2.37 ppm	95

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

7.6.22

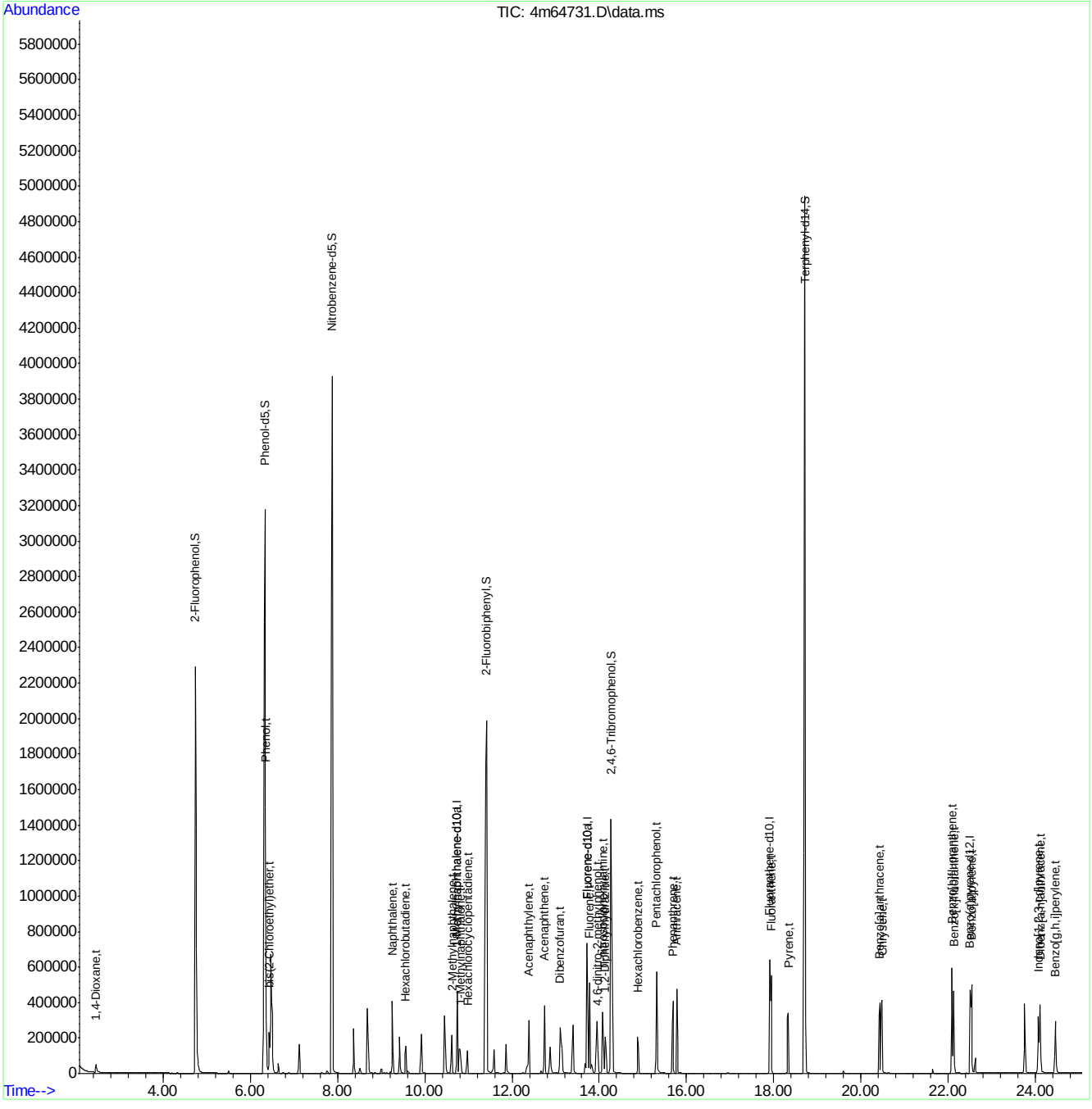
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64731.D
Acq On : 14 Apr 2016 2:53 pm
Operator : linseyk
Sample : ic2881-2.5
Misc : op92998a,e4m2881
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 14 15:54:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:24 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:54:53 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64732.D
Acq On : 14 Apr 2016 3:25 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 14 15:57:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:56:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	390727	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	664300	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	995159	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	771368	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.746	152	390727	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	664300	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
4) Phenol	6.352	94	411546	4.67	ppm	79
19) Pentachlorophenol	15.316	266	135876	4.78	ppm	93
39) 4,6-dinitro-2-methylph...	13.963	198	89891	4.89	ppm	98

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

7.6.23

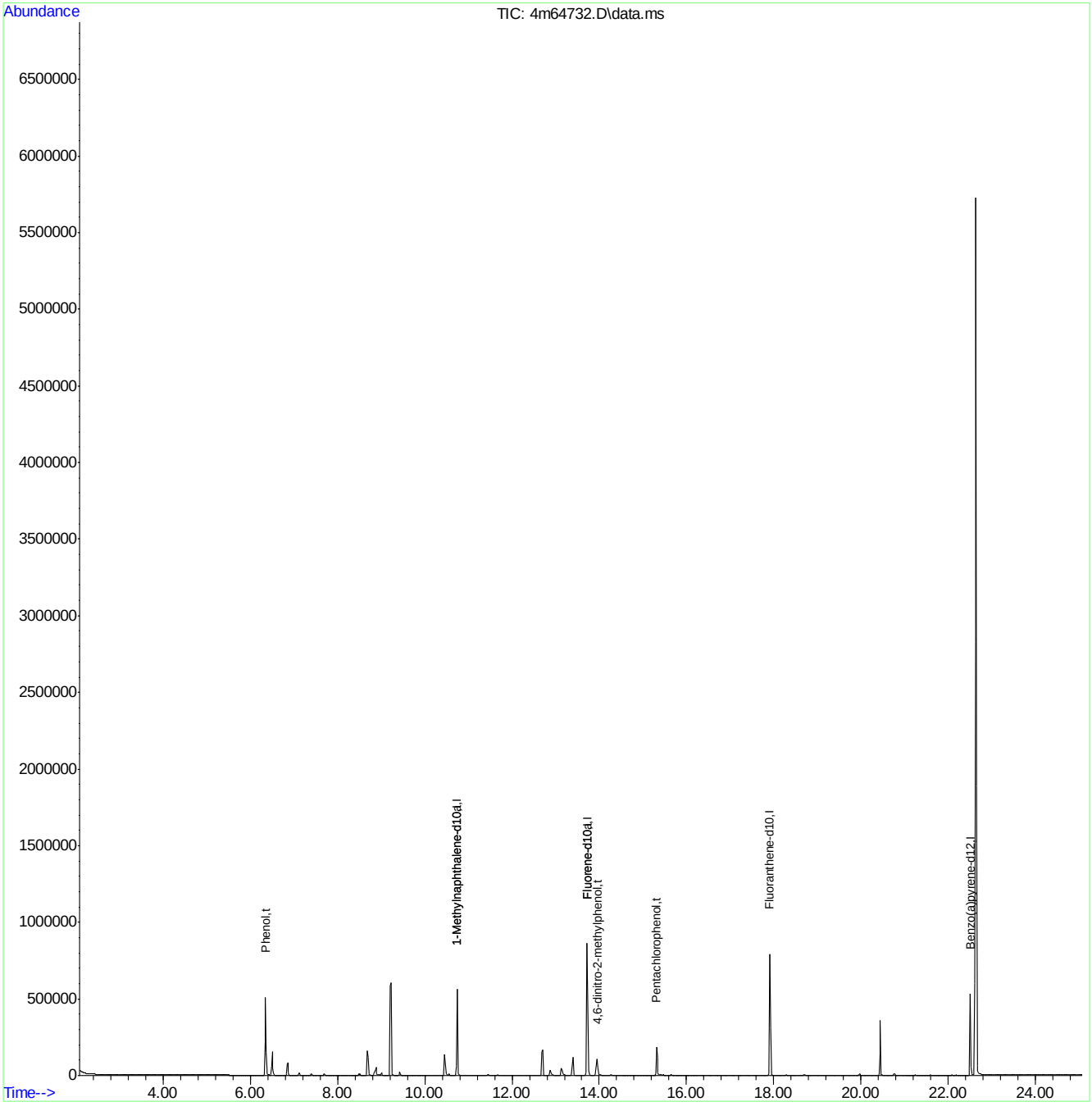
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64732.D
Acq On : 14 Apr 2016 3:25 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 14 15:57:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:56:58 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:58:28 2016 MANAGER

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On : 14 Apr 2016 3:57 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	302632	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	481376	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	716831	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	559592	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	302632	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	481376	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
5) bis(2-Chloroethyl)ether	6.435	93	58005	1.13	ppm	74
7) Naphthalene	9.256	128	185921	1.09	ppm	100
8) Hexachlorobutadiene	9.566	225	45010	1.07	ppm	99
9) 2-Methylnaphthalene	10.626	142	76921	1.04	ppm	98
10) Hexachlorocyclopentadiene	10.984	237	19409	0.88	ppm	98
13) Acenaphthylene	12.388	152	128548	1.17	ppm	100
14) Acenaphthene	12.743	153	86964	1.22	ppm	99
15) Dibenzofuran	13.098	168	127075	1.20	ppm	71
16) Fluorene	13.772	166	150885	1.17	ppm	99
18) Hexachlorobenzene	14.883	284	56380	1.12	ppm	99
20) Phenanthrene	15.687	178	198269	1.15	ppm	99
21) Anthracene	15.780	178	186988	1.14	ppm	99
23) Fluoranthene	17.941	202	228833	1.18	ppm	100
24) Pyrene	18.337	202	224450	1.18	ppm	97
26) Benzo[a]anthracene	20.427	228	200348	1.13	ppm	98
27) Chrysene	20.483	228	199744	1.15	ppm	99
29) Benzo[b]fluoranthene	22.084	252	198138	0.98	ppm	96
30) Benzo[k]fluoranthene	22.126	252	190427	1.13	ppm	99
31) Benzo[a]pyrene	22.539	252	185931	1.11	ppm	100
32) Indeno[1,2,3-cd]pyrene	24.067	276	223528	1.07	ppm	99
33) Dibenz[a,h]anthracene	24.108	278	181394	1.08	ppm	98
34) Benzo[g,h,i]perylene	24.452	276	189752	1.08	ppm	100
36) 1,4-Dioxane	2.482	88	16161	1.01	ppm #	76
40) 1,2-Diphenylhydrazine	14.130	77	134283	1.18	ppm	98
41) n-nitrosodiphenylamine	14.082	169	95765	1.13	ppm	98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On : 14 Apr 2016 3:57 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

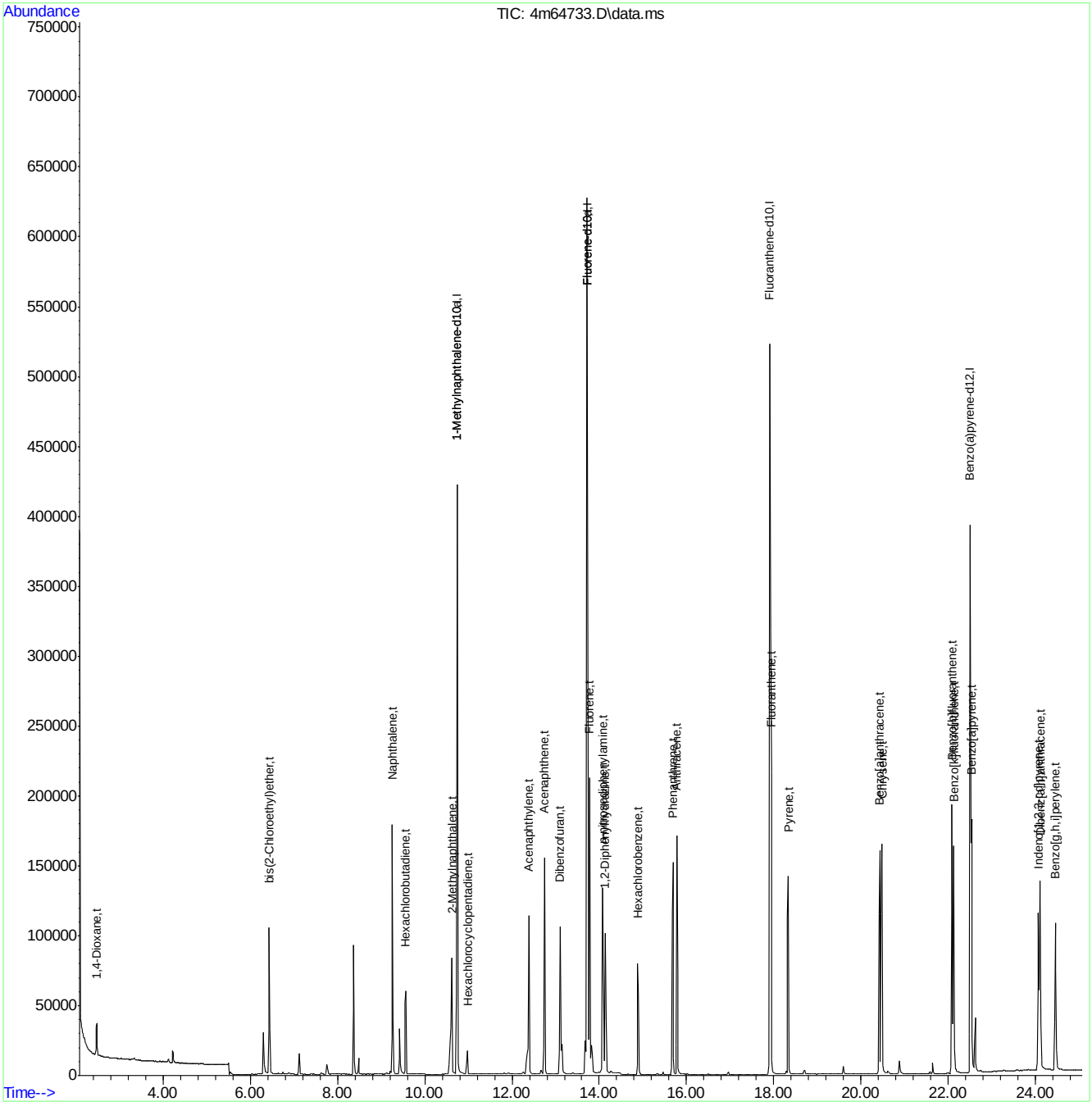
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On : 14 Apr 2016 3:57 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration

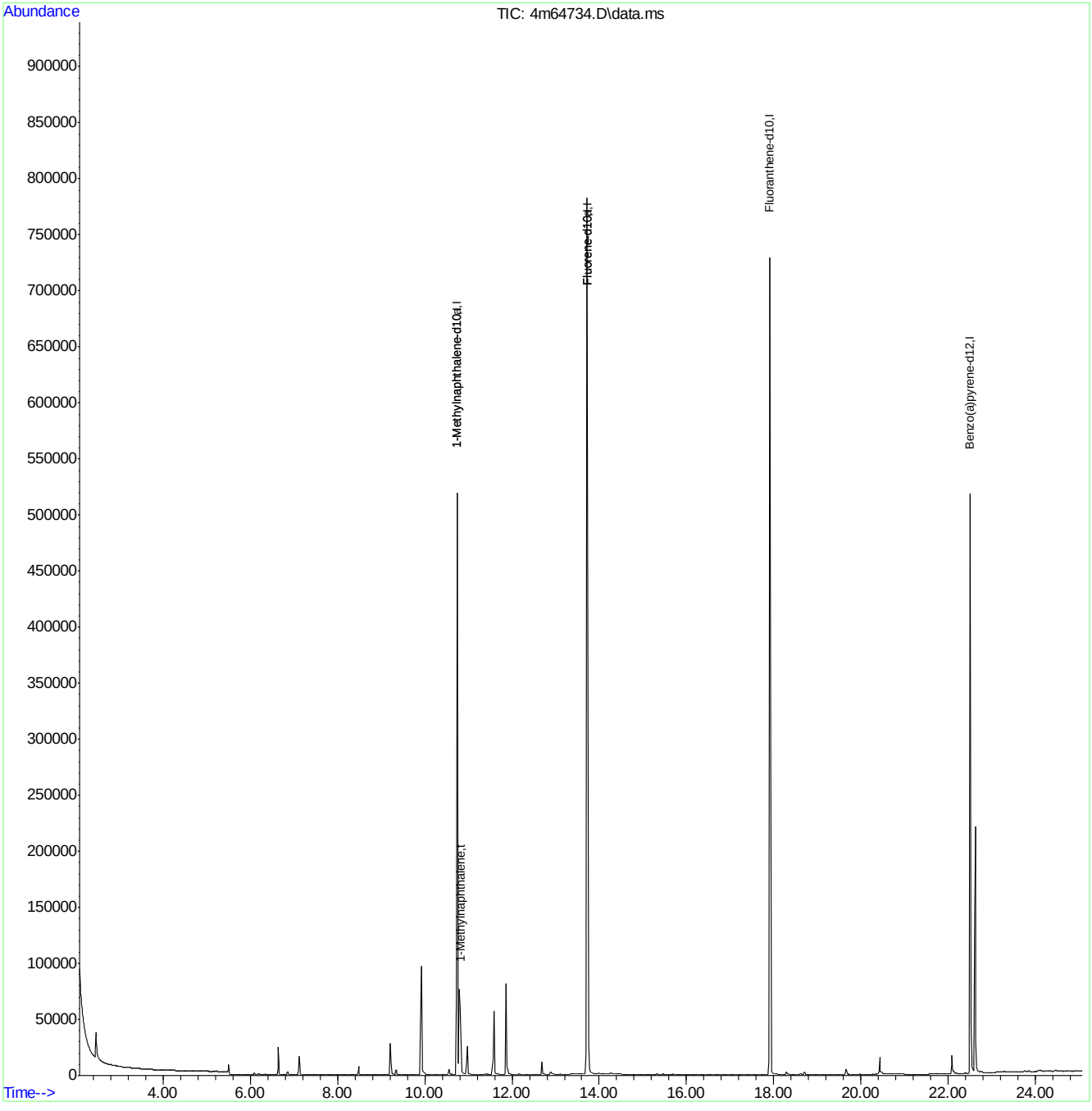
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	371893	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	603684	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	922186	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	751295	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	371893	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	603684	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
37) 1-Methylnaphthalene	10.817	142	82253	0.95	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65314.D
Acq On : 17 May 2016 10:09 am
Operator : linseyk
Sample : cc2881-.5
Misc : op93881a,e4m2922
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 10:34:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue May 17 10:20:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.463	152	285998	4.00	ppm	#-0.05
12) Fluorene-d10	13.441	176	542095	4.00	ppm	-0.05
22) Fluoranthene-d10	17.629	212	878007	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.229	264	650325	4.00	ppm	-0.04
35) 1-Methylnaphthalene-d10a	10.463	152	285998	4.00	ppm	#-0.05
38) Fluorene-d10a	13.441	176	542095	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.517	112	402844	10.76	ppm	-0.12
Spiked Amount 50.000	Range 11 - 58		Recovery = 21.52%			
3) Phenol-d5	6.108	99	717058	11.39	ppm	-0.09
Spiked Amount 50.000			Recovery = 22.78%			
6) Nitrobenzene-d5	7.605	82	701807	12.43	ppm	-0.10
Spiked Amount 50.000			Recovery = 24.86%			
11) 2-Fluorobiphenyl	11.132	172	976114	11.82	ppm	-0.03
Spiked Amount 50.000			Recovery = 23.64%			
17) 2,4,6-Tribromophenol	13.991	330	350288	12.11	ppm	-0.04
Spiked Amount 50.000			Recovery = 24.22%			
25) Terphenyl-d14	18.438	244	1251668	10.55	ppm	-0.03
Spiked Amount 50.000			Recovery = 21.10%			
Target Compounds						Qvalue
4) Phenol	6.122	94	190405	2.95	ppm	48
5) bis(2-Chloroethyl)ether	6.191	93	27127	0.56	ppm #	51
7) Naphthalene	8.982	128	87578	0.54	ppm	97
8) Hexachlorobutadiene	9.291	225	22938	0.58	ppm	88
9) 2-Methylnaphthalene	10.344	142	47190	0.67	ppm	80
10) Hexachlorocyclopentadiene	10.702	237	28415	1.28	ppm	86
13) Acenaphthylene	12.103	152	68445	0.55	ppm	99
14) Acenaphthene	12.458	153	43224	0.54	ppm	97
15) Dibenzofuran	12.813	168	59898	0.50	ppm	66
16) Fluorene	13.489	166	78497	0.54	ppm	92
18) Hexachlorobenzene	14.593	284	29180	0.52	ppm	97
19) Pentachlorophenol	15.042	266	73175	3.15	ppm	86
20) Phenanthrene	15.382	178	103689	0.53	ppm	93
21) Anthracene	15.490	178	103278	0.56	ppm	96
23) Fluoranthene	17.666	202	116289	0.49	ppm	97
24) Pyrene	18.043	202	120446	0.52	ppm	83
26) Benzo[a]anthracene	20.152	228	113051	0.52	ppm	97
27) Chrysene	20.208	228	109277	0.52	ppm	97
29) Benzo[b]fluoranthene	21.803	252	125497	0.54	ppm	92
30) Benzo[k]fluoranthene	21.844	252	91529	0.47	ppm	89
31) Benzo[a]pyrene	22.257	252	103418	0.53	ppm	93
32) Indeno[1,2,3-cd]pyrene	23.730	276	127145	0.52	ppm	98
33) Dibenz[a,h]anthracene	23.771	278	96039	0.49	ppm	74
34) Benzo[g,h,i]perylene	24.102	276	105491	0.51	ppm	100
37) 1-Methylnaphthalene	10.535	142	44548	0.67	ppm	85
39) 4,6-dinitro-2-methylph...	13.680	198	58156	4.03	ppm	70
40) 1,2-Diphenylhydrazine	13.847	77	74187	0.58	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65314.D
Acq On : 17 May 2016 10:09 am
Operator : linseyk
Sample : cc2881-.5
Misc : op93881a,e4m2922
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 10:34:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue May 17 10:20:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) n-nitrosodiphenylamine	13.799	169	45113	0.47 ppm	96

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

7.6.26

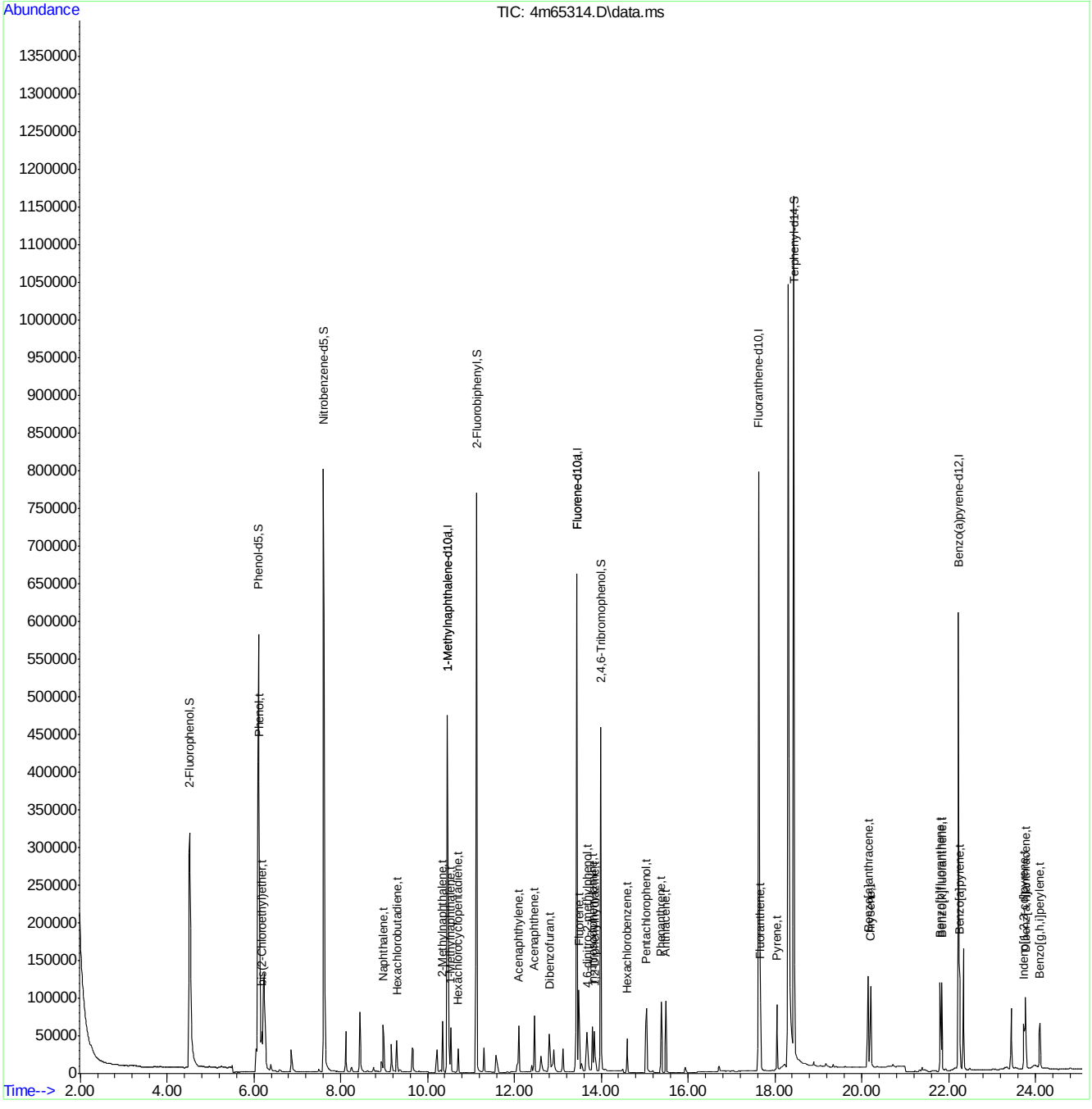
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2922\
Data File : 4m65314.D
Acq On : 17 May 2016 10:09 am
Operator : linseyk
Sample : cc2881-.5
Misc : op93881a,e4m2922
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 10:34:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue May 17 10:20:24 2016
Response via : Initial Calibration



M4M2881SIM.M Wed May 18 11:09:03 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16220.D
Acq On : 28 Apr 2016 4:22 pm
Operator : ashleyd
Sample : icc850-1.0
Misc : op93004a,e4p850
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 16:43:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:43:44 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.026	150	51424	4.00	ppm	0.00
13) Fluorene-d10	10.971	176	58887	4.00	ppm	0.00
23) Fluoranthene-d10	15.192	212	110594	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.810	264	71686	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.803	112	117520	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
4) Phenol-d5	3.940	99	229786	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
7) Nitrobenzene-d5	5.312	82	175672	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
14) 2-Fluorobiphenyl	8.691	172	446651	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
22) 2,4,6-Tribromophenol	11.523	330	49507	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
30) Terphenyl-d14	16.035	244	286295	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.556	88	2121	1.00	ppm	100
5) Phenol	3.957	94	60781	5.00	ppm	100
6) bis(2-Chloroethyl)ether	4.060	93	7431	1.00	ppm	100
8) Naphthalene	6.593	128	28249	1.00	ppm	100
9) Hexachlorobutadiene	6.899	225	5331	1.00	ppm	100
10) 2-Methylnaphthalene	7.912	141	16803	1.00	ppm	100
11) 1-Methylnaphthalene	8.095	141	19447	1.00	ppm	100
12) Hexachlorocyclopentadiene	8.278	237	5097	2.00	ppm	100
15) Acenaphthylene	9.630	152	20625	1.00	ppm	100
16) Acenaphthene	9.997	153	20746	1.00	ppm	100
17) Dibenzofuran	10.364	168	21900	1.00	ppm	100
18) Fluorene	11.020	166	18761	1.00	ppm	100
19) 4,6-dinitro-2-methylph...	11.219	198	4607	5.15	ppm	98
20) n-nitrosodiphenylamine	11.368	169	10149	1.00	ppm	100
21) 1,2-Diphenylhydrazine	11.393	77	16821	1.00	ppm	100
24) Hexachlorobenzene	12.128	284	6960	1.00	ppm	100
25) Pentachlorophenol	12.559	266	14669	5.00	ppm	100
26) Phenanthrene	12.920	178	29068	1.00	ppm	100
27) Anthracene	13.006	178	23496	1.00	ppm	100
28) Fluoranthene	15.226	202	30239	1.00	ppm	100
29) Pyrene	15.605	202	29359	1.00	ppm	100
31) Benzo[a]anthracene	17.727	228	19543	1.00	ppm	100
32) Chrysene	17.784	228	28315	1.00	ppm	100
34) Benzo[b]fluoranthene	19.396	252	25514	1.00	ppm	100
35) Benzo[k]fluoranthene	19.430	252	26478	1.00	ppm	100
36) Benzo[a]pyrene	19.833	252	24029	1.00	ppm	100
37) Indeno[1,2,3-cd]pyrene	21.258	276	25624	1.00	ppm	100
38) Dibenz[a,h]anthracene	21.306	278	20916	1.00	ppm	100
39) Benzo[g,h,i]perylene	21.575	276	24270	1.00	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16220.D
Acq On : 28 Apr 2016 4:22 pm
Operator : ashleyd
Sample : icc850-1.0
Misc : op93004a,e4p850
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 16:43:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:43:44 2016
Response via : Initial Calibration

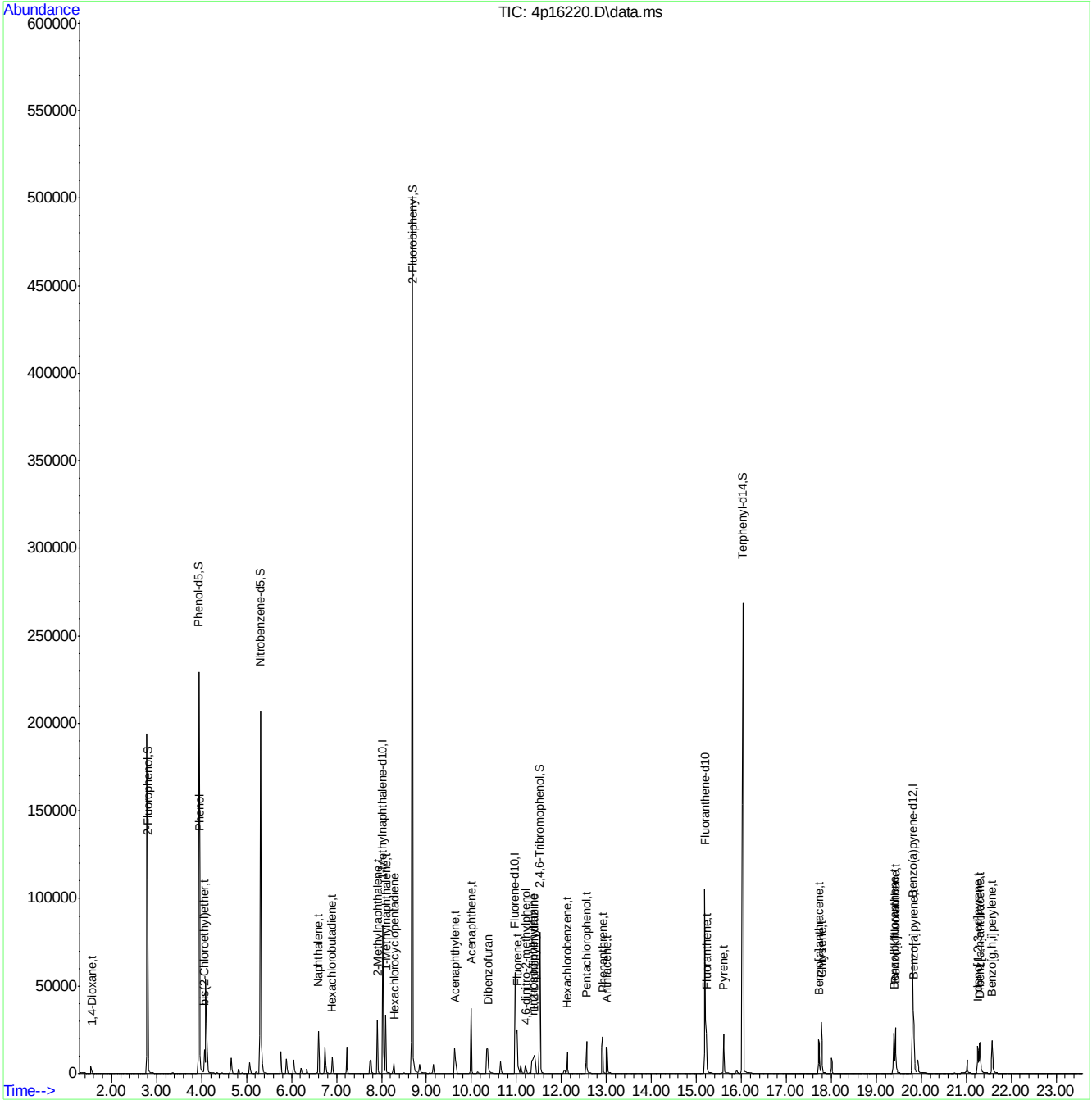
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16220.D
Acq On : 28 Apr 2016 4:22 pm
Operator : ashleyd
Sample : icc850-1.0
Misc : op93004a,e4p850
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 16:43:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:43:44 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16221.D
Acq On : 28 Apr 2016 4:56 pm
Operator : ashleyd
Sample : ic850-0.5
Misc : op93004a,e4p850
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 03 16:44:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:44:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.024	150	48843	4.00	ppm	0.00
13) Fluorene-d10	10.994	176	59618	4.00	ppm	0.02
23) Fluoranthene-d10	15.190	212	109752	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.815	264	69731	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.802	112	61511	11.02	ppm	0.00
Spiked Amount 50.000			Recovery = 22.04%			
4) Phenol-d5	3.939	99	124352	11.40	ppm	0.00
Spiked Amount 50.000			Recovery = 22.80%			
7) Nitrobenzene-d5	5.310	82	98741	11.84	ppm	0.00
Spiked Amount 50.000			Recovery = 23.68%			
14) 2-Fluorobiphenyl	8.689	172	244210	10.80	ppm	0.00
Spiked Amount 50.000			Recovery = 21.60%			
22) 2,4,6-Tribromophenol	11.521	330	26376	10.52	ppm	0.00
Spiked Amount 50.000			Recovery = 21.04%			
30) Terphenyl-d14	16.033	244	154279	10.86	ppm	0.00
Spiked Amount 50.000			Recovery = 21.72%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.556	88	1092	0.54	ppm	97
5) Phenol	3.957	94	31354	2.72	ppm	99
6) bis(2-Chloroethyl)ether	4.060	93	4112	0.58	ppm	93
8) Naphthalene	6.591	128	14498	0.54	ppm	98
9) Hexachlorobutadiene	6.897	225	2787	0.55	ppm	95
10) 2-Methylnaphthalene	7.910	141	8505	0.53	ppm	94
11) 1-Methylnaphthalene	8.093	141	10329	0.56	ppm	96
12) Hexachlorocyclopentadiene	8.276	237	2410	1.00	ppm	98
15) Acenaphthylene	9.651	152	10268	0.49	ppm	80
16) Acenaphthene	9.995	153	10979	0.52	ppm	93
17) Dibenzofuran	10.362	168	12378	0.56	ppm #	32
18) Fluorene	11.018	166	9114	0.48	ppm	95
19) 4,6-dinitro-2-methylph...	11.217	198	1824	1.96	ppm	84
20) n-nitrosodiphenylamine	11.366	169	5560	0.54	ppm	94
21) 1,2-Diphenylhydrazine	11.391	77	7821	0.46	ppm	99
24) Hexachlorobenzene	12.126	284	3756	0.54	ppm	98
25) Pentachlorophenol	12.557	266	6254	2.15	ppm	92
26) Phenanthrene	12.918	178	15557	0.54	ppm	97
27) Anthracene	13.021	178	11485	0.49	ppm	86
28) Fluoranthene	15.224	202	16118	0.54	ppm	98
29) Pyrene	15.620	202	14000	0.48	ppm	85
31) Benzo[a]anthracene	17.732	228	8686	0.45	ppm	92
32) Chrysene	17.790	228	14263	0.51	ppm	92
34) Benzo[b]fluoranthene	19.390	252	12565	0.51	ppm	94
35) Benzo[k]fluoranthene	19.436	252	12015	0.47	ppm	93
36) Benzo[a]pyrene	19.838	252	12118	0.52	ppm	95
37) Indeno[1,2,3-cd]pyrene	21.262	276	10989	0.44	ppm	97
38) Dibenz[a,h]anthracene	21.300	278	8653	0.43	ppm	100
39) Benzo[g,h,i]perylene	21.579	276	11266	0.48	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16221.D
Acq On : 28 Apr 2016 4:56 pm
Operator : ashleyd
Sample : ic850-0.5
Misc : op93004a,e4p850
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 03 16:44:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:44:22 2016
Response via : Initial Calibration

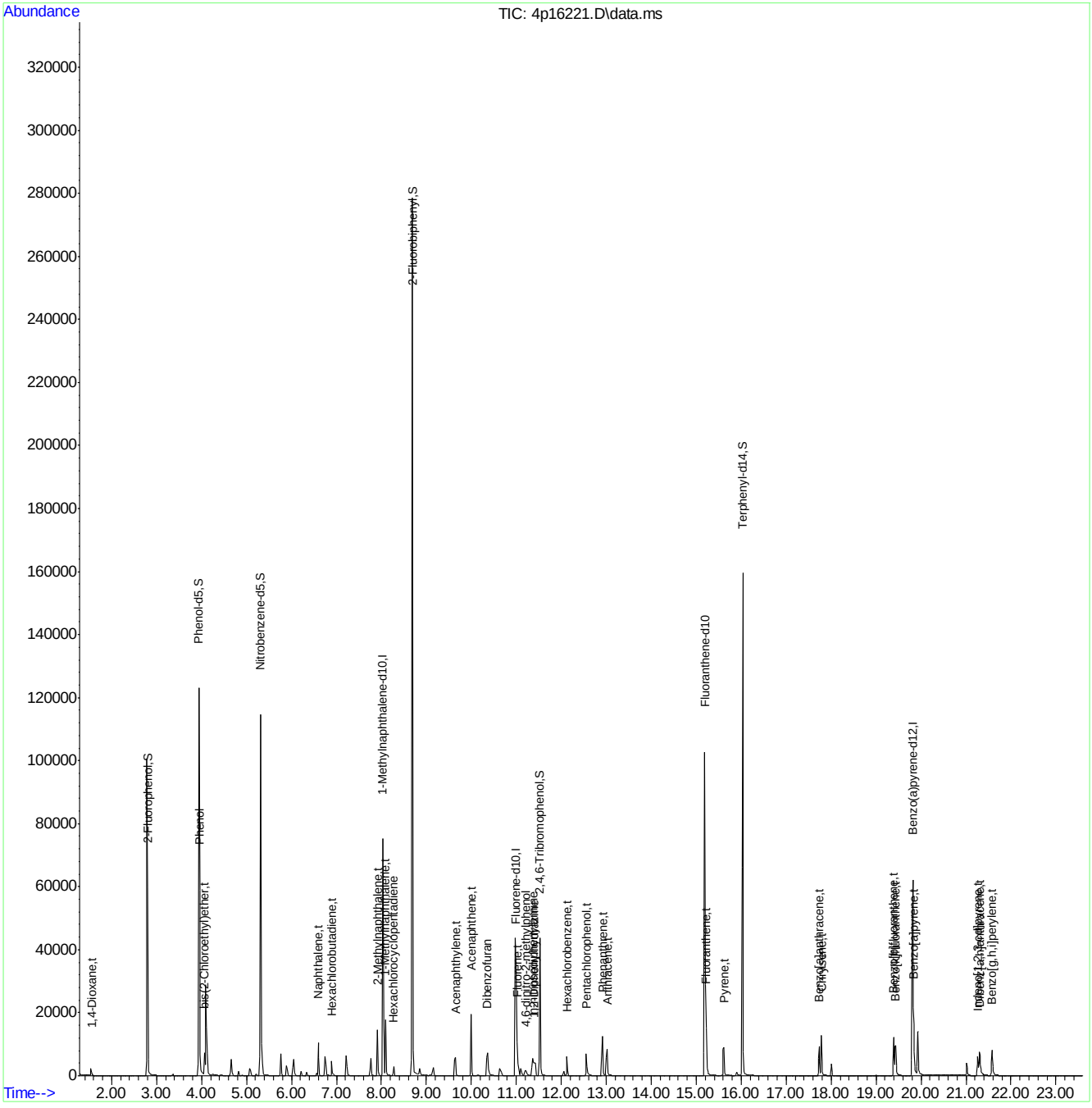
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16221.D
Acq On : 28 Apr 2016 4:56 pm
Operator : ashleyd
Sample : ic850-0.5
Misc : op93004a,e4p850
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 03 16:44:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:44:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16222.D
Acq On : 28 Apr 2016 5:26 pm
Operator : ashleyd
Sample : ic850-0.2
Misc : op93004a,e4p850
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 03 16:45:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:45:54 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.025	150	51894	4.00	ppm	0.00
13) Fluorene-d10	10.969	176	54262	4.00	ppm	-0.02
23) Fluoranthene-d10	15.190	212	103190	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.804	264	58842	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	2.803	112	23788	3.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.64%	
4) Phenol-d5	3.940	99	44557	3.59	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.18%	
7) Nitrobenzene-d5	5.311	82	34983	3.61	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.22%	
14) 2-Fluorobiphenyl	8.689	172	93025	4.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.70%	
22) 2,4,6-Tribromophenol	11.521	330	7425	3.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	6.34%	
30) Terphenyl-d14	16.033	244	52841	3.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.58%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.556	88	487	0.22	ppm	99
5) Phenol	3.957	94	12097	0.95	ppm	94
6) bis(2-Chloroethyl)ether	4.060	93	1546	0.19	ppm	93
8) Naphthalene	6.591	128	5598	0.19	ppm	99
9) Hexachlorobutadiene	6.897	225	1113	0.20	ppm	96
10) 2-Methylnaphthalene	7.910	141	3221	0.18	ppm	96
11) 1-Methylnaphthalene	8.093	141	4000	0.19	ppm	97
12) Hexachlorocyclopentadiene	8.277	237	549	0.21	ppm	97
15) Acenaphthylene	9.629	152	3436	0.18	ppm	78
16) Acenaphthene	9.995	153	3833	0.20	ppm	97
17) Dibenzofuran	10.362	168	4278	0.20	ppm	83
18) Fluorene	11.019	166	3323	0.20	ppm	96
19) 4,6-dinitro-2-methylph...	11.217	198	424	0.56	ppm	84
20) n-nitrosodiphenylamine	11.366	169	1711	0.18	ppm	98
21) 1,2-Diphenylhydrazine	11.391	77	2414	0.16	ppm	97
24) Hexachlorobenzene	12.126	284	1343	0.20	ppm	100
25) Pentachlorophenol	12.557	266	1689	0.66	ppm	96
26) Phenanthrene	12.918	178	5324	0.19	ppm	99
27) Anthracene	13.021	178	4013	0.18	ppm	99
28) Fluoranthene	15.224	202	5858	0.20	ppm	98
29) Pyrene	15.603	202	4884	0.18	ppm	84
31) Benzo[a]anthracene	17.733	228	2452	0.14	ppm	96
32) Chrysene	17.781	228	4399	0.17	ppm	91
34) Benzo[b]fluoranthene	19.390	252	3674	0.17	ppm	99
35) Benzo[k]fluoranthene	19.424	252	3554	0.17	ppm	90
36) Benzo[a]pyrene	19.839	252	4126	0.21	ppm	97
37) Indeno[1,2,3-cd]pyrene	21.262	276	3044	0.15	ppm	97
38) Dibenz[a,h]anthracene	21.300	278	2629	0.17	ppm	78
39) Benzo[g,h,i]perylene	21.579	276	3519	0.18	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16222.D
Acq On : 28 Apr 2016 5:26 pm
Operator : ashleyd
Sample : ic850-0.2
Misc : op93004a,e4p850
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 03 16:45:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:45:54 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

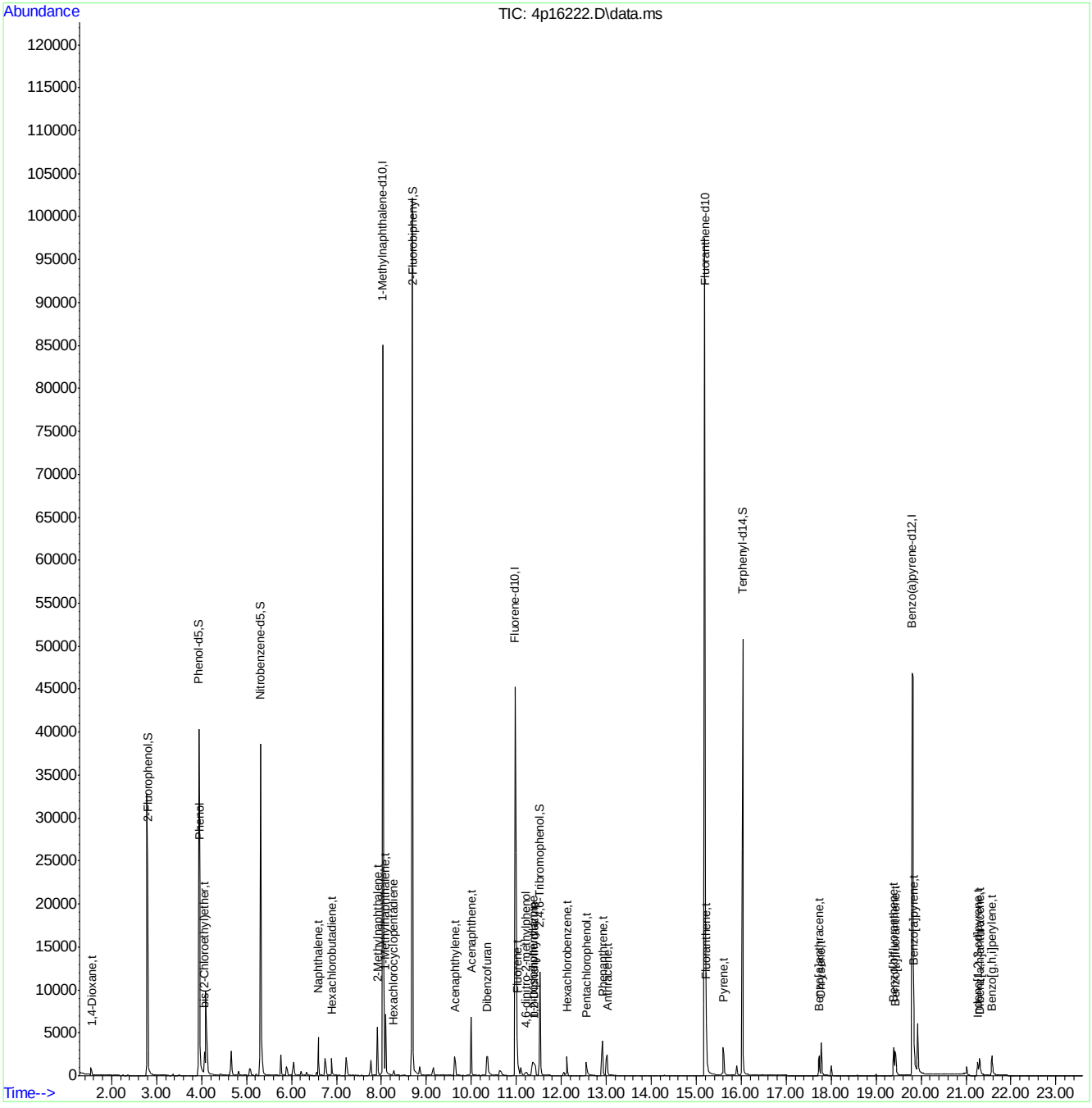
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16222.D
Acq On : 28 Apr 2016 5:26 pm
Operator : ashleyd
Sample : ic850-0.2
Misc : op93004a,e4p850
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 03 16:45:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:45:54 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16223.D
Acq On : 28 Apr 2016 5:56 pm
Operator : ashleyd
Sample : ic850-0.1
Misc : op93004a,e4p850
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 16:46:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:46:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.026	150	56329	4.00	ppm	0.00
13) Fluorene-d10	10.971	176	58163	4.00	ppm	0.00
23) Fluoranthene-d10	15.192	212	101008	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.806	264	51915	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.803	112	11211	1.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.36%	
4) Phenol-d5	3.940	99	19685	1.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.02%	
7) Nitrobenzene-d5	5.312	82	15169	1.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.98%	
14) 2-Fluorobiphenyl	8.691	172	44574	1.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.78%	
22) 2,4,6-Tribromophenol	11.523	330	2972	1.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.54%	
30) Terphenyl-d14	16.035	244	23548	1.76	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.52%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.556	88	239	0.10	ppm	97
5) Phenol	3.957	94	5601	0.41	ppm #	91
6) bis(2-Chloroethyl)ether	4.060	93	780	0.09	ppm #	39
8) Naphthalene	6.593	128	2852	0.09	ppm	99
9) Hexachlorobutadiene	6.899	225	531	0.09	ppm	96
10) 2-Methylnaphthalene	7.912	141	1506	0.08	ppm	94
11) 1-Methylnaphthalene	8.095	141	1855	0.08	ppm	94
12) Hexachlorocyclopentadiene	8.278	237	133	0.06	ppm	91
15) Acenaphthylene	9.630	152	1626	0.08	ppm	98
16) Acenaphthene	9.997	153	1758	0.08	ppm	92
17) Dibenzofuran	10.364	168	1995	0.09	ppm	100
18) Fluorene	11.020	166	1776	0.10	ppm	96
19) 4,6-dinitro-2-methylph...	11.219	198	144	0.21	ppm #	55
20) n-nitrosodiphenylamine	11.368	169	736	0.07	ppm	96
21) 1,2-Diphenylhydrazine	11.393	77	1193	0.08	ppm	100
24) Hexachlorobenzene	12.128	284	692	0.10	ppm	95
25) Pentachlorophenol	12.559	266	555	0.25	ppm	98
26) Phenanthrene	12.920	178	2498	0.09	ppm	97
27) Anthracene	13.006	178	1744	0.08	ppm	85
28) Fluoranthene	15.226	202	2987	0.10	ppm	99
29) Pyrene	15.605	202	2291	0.09	ppm	98
31) Benzo[a]anthracene	17.725	228	966	0.06	ppm	90
32) Chrysene	17.782	228	1983	0.08	ppm	100
34) Benzo[b]fluoranthene	19.392	252	1431	0.08	ppm	95
35) Benzo[k]fluoranthene	19.426	252	1231	0.07	ppm	97
36) Benzo[a]pyrene	19.840	252	2068	0.12	ppm	99
37) Indeno[1,2,3-cd]pyrene	21.264	276	1216	0.08	ppm	98
38) Dibenz[a,h]anthracene	21.302	278	951	0.07	ppm	81
39) Benzo[g,h,i]perylene	21.581	276	1426	0.09	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16223.D
Acq On : 28 Apr 2016 5:56 pm
Operator : ashleyd
Sample : ic850-0.1
Misc : op93004a,e4p850
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 16:46:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:46:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.30

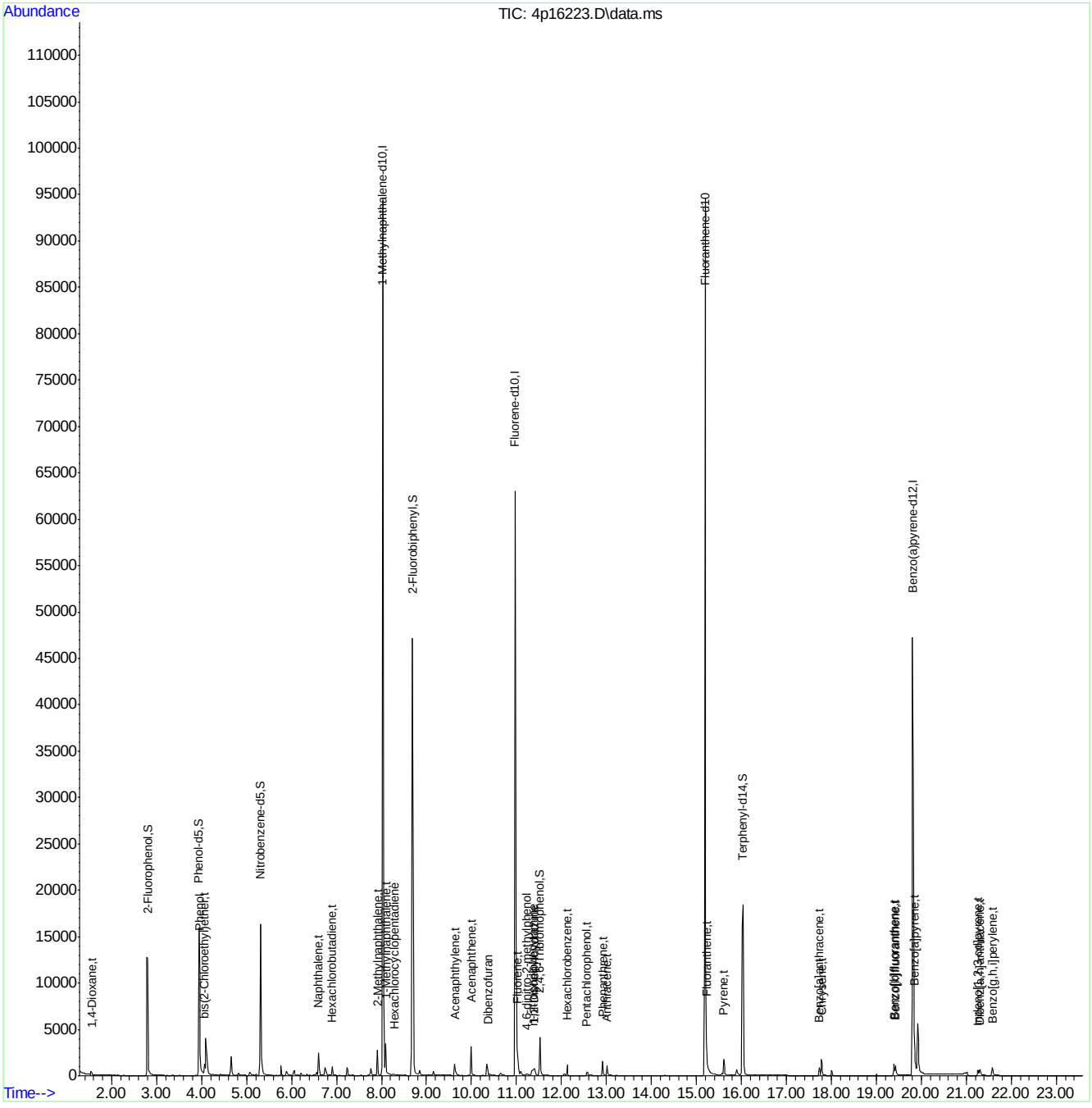
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16223.D
Acq On : 28 Apr 2016 5:56 pm
Operator : ashleyd
Sample : ic850-0.1
Misc : op93004a,e4p850
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 16:46:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:46:51 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16224.D
Acq On : 28 Apr 2016 6:25 pm
Operator : ashleyd
Sample : ic850-0.05
Misc : op93004a,e4p850
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 03 16:47:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:47:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.024	150	57211	4.00	ppm	0.00
13) Fluorene-d10	10.969	176	60978	4.00	ppm	0.00
23) Fluoranthene-d10	15.190	212	113741	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.815	264	57209	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.802	112	6227	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
4) Phenol-d5	3.939	99	9954	0.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.60%	
7) Nitrobenzene-d5	5.310	82	9272	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
14) 2-Fluorobiphenyl	8.689	172	26148	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
22) 2,4,6-Tribromophenol	11.521	330	1493	0.67	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.34%	
30) Terphenyl-d14	16.033	244	12546	0.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.72%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.555	88	147	0.06	ppm	98
5) Phenol	3.957	94	3055	0.23	ppm	91
6) bis(2-Chloroethyl)ether	4.077	93	450	0.05	ppm #	22
8) Naphthalene	6.591	128	1566	0.05	ppm	98
9) Hexachlorobutadiene	6.897	225	305	0.05	ppm	95
10) 2-Methylnaphthalene	7.910	141	940	0.05	ppm	95
11) 1-Methylnaphthalene	8.093	141	1147	0.05	ppm	92
12) Hexachlorocyclopentadiene	8.276	237	60	0.03	ppm	92
15) Acenaphthylene	9.651	152	863	0.04	ppm	79
16) Acenaphthene	9.995	153	982	0.05	ppm	92
17) Dibenzofuran	10.362	168	1184	0.05	ppm	100
18) Fluorene	11.018	166	880	0.05	ppm	88
19) 4,6-dinitro-2-methylph...	11.242	198	60	0.10	ppm	94
20) n-nitrosodiphenylamine	11.366	169	437	0.04	ppm	89
21) 1,2-Diphenylhydrazine	11.391	77	578	0.04	ppm	96
24) Hexachlorobenzene	12.126	284	466	0.06	ppm	94
25) Pentachlorophenol	12.574	266	317	0.15	ppm	89
26) Phenanthrene	12.918	178	1444	0.05	ppm	96
27) Anthracene	13.021	178	935	0.04	ppm	88
28) Fluoranthene	15.224	202	1754	0.05	ppm	99
29) Pyrene	15.603	202	1237	0.04	ppm	98
31) Benzo[a]anthracene	17.732	228	543	0.03	ppm	91
32) Chrysene	17.790	228	1056	0.04	ppm	92
34) Benzo[b]fluoranthene	19.390	252	688	0.04	ppm	97
35) Benzo[k]fluoranthene	19.424	252	625	0.03	ppm	96
36) Benzo[a]pyrene	19.838	252	1154	0.06	ppm	97
37) Indeno[1,2,3-cd]pyrene	21.262	276	595	0.04	ppm	96
38) Dibenz[a,h]anthracene	21.300	278	506	0.04	ppm	88
39) Benzo[g,h,i]perylene	21.579	276	715	0.04	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16224.D
Acq On : 28 Apr 2016 6:25 pm
Operator : ashleyd
Sample : ic850-0.05
Misc : op93004a,e4p850
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 03 16:47:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:47:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.31

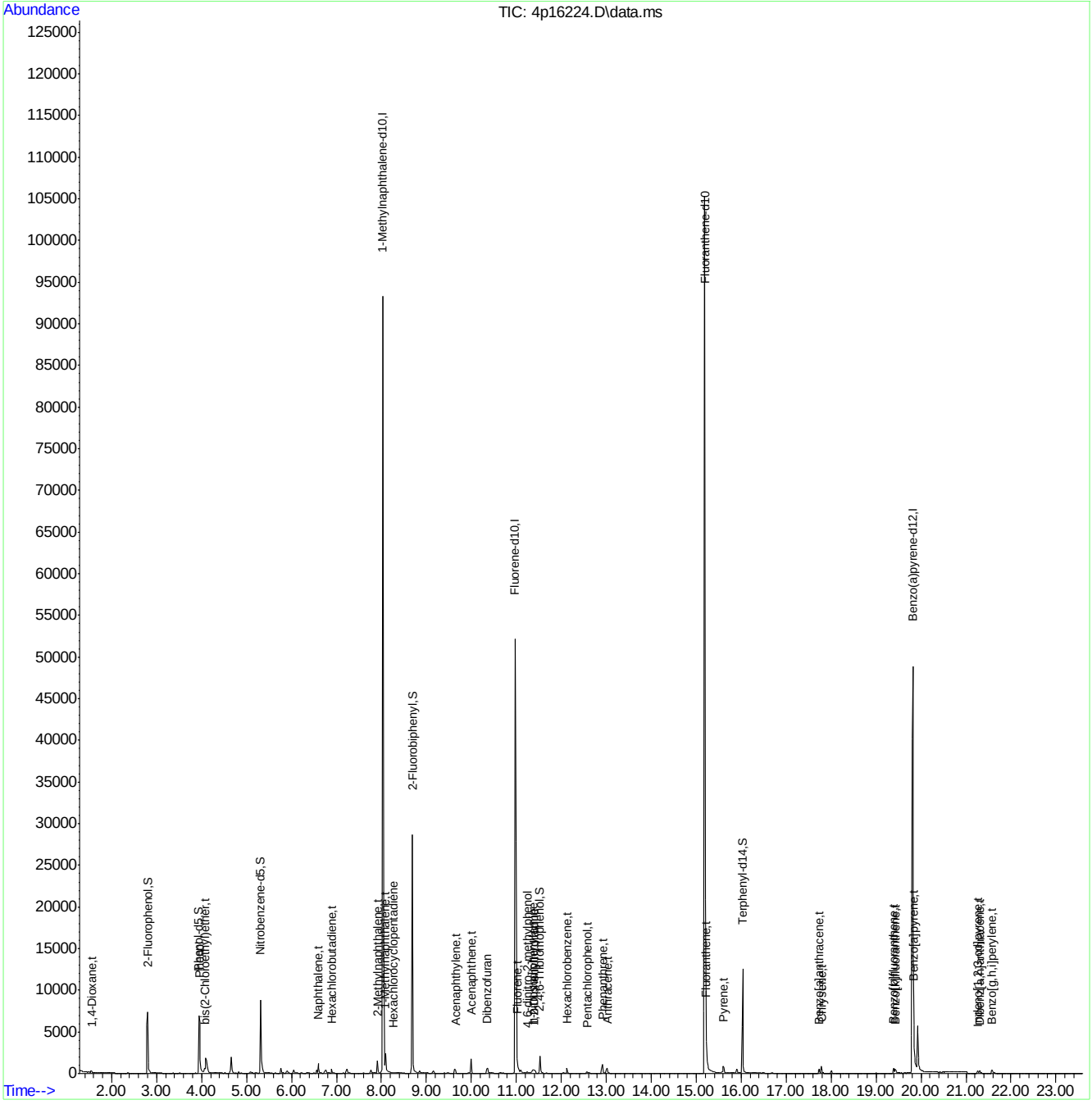
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16224.D
Acq On : 28 Apr 2016 6:25 pm
Operator : ashleyd
Sample : ic850-0.05
Misc : op93004a,e4p850
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 03 16:47:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:47:14 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16225.D
Acq On : 28 Apr 2016 6:55 pm
Operator : ashleyd
Sample : ic850-0.02
Misc : op93004a,e4p850
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 03 16:48:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:47:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	8.026	150	101696	4.00 ppm	0.00
13) Fluorene-d10	10.971	176	107164	4.00 ppm	0.00
23) Fluoranthene-d10	15.192	212	183477	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.806	264	102111	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	2.803	112	3747	0.33 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.66%	
4) Phenol-d5	3.940	99	5935	0.28 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.56%	
7) Nitrobenzene-d5	5.312	82	5000	0.29 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.58%	
14) 2-Fluorobiphenyl	8.691	172	16225	0.37 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.74%	
22) 2,4,6-Tribromophenol	11.523	330	791	0.22 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.44%	
30) Terphenyl-d14	16.035	244	7160	0.31 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.62%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.556	88	133	0.03 ppm	88
5) Phenol	3.957	94	1666	0.07 ppm	95
6) bis(2-Chloroethyl)ether	4.077	93	294	0.02 ppm	100
8) Naphthalene	6.593	128	1075	0.02 ppm	98
9) Hexachlorobutadiene	6.899	225	203	0.02 ppm	97
10) 2-Methylnaphthalene	7.912	141	545	0.02 ppm	97
11) 1-Methylnaphthalene	8.095	141	862	0.02 ppm	96
12) Hexachlorocyclopentadiene	8.278	237	29	0.01 ppm	91
15) Acenaphthylene	9.630	152	547	0.02 ppm	78
16) Acenaphthene	9.997	153	617	0.02 ppm	92
17) Dibenzofuran	10.364	168	715	0.02 ppm	99
18) Fluorene	11.020	166	633	0.02 ppm	91
20) n-nitrosodiphenylamine	11.368	169	241	0.01 ppm	97
21) 1,2-Diphenylhydrazine	11.393	77	425	0.02 ppm	90
24) Hexachlorobenzene	12.128	284	244	0.02 ppm	94
25) Pentachlorophenol	12.576	266	114	0.04 ppm	82
26) Phenanthrene	12.920	178	949	0.02 ppm	99
27) Anthracene	13.006	178	547	0.02 ppm	88
28) Fluoranthene	15.226	202	1245	0.02 ppm	96
29) Pyrene	15.605	202	732	0.02 ppm	98
31) Benzo[a]anthracene	17.725	228	344	0.01 ppm	92
32) Chrysene	17.782	228	645	0.02 ppm	92
34) Benzo[b]fluoranthene	19.392	252	422	0.01 ppm	91
35) Benzo[k]fluoranthene	19.426	252	353	0.01 ppm	97
36) Benzo[a]pyrene	19.841	252	634	0.02 ppm	95
37) Indeno[1,2,3-cd]pyrene	21.264	276	206	0.01 ppm	92
38) Dibenz[a,h]anthracene	21.302	278	202	0.01 ppm	100
39) Benzo[g,h,i]perylene	21.581	276	362	0.01 ppm	93

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16225.D
Acq On : 28 Apr 2016 6:55 pm
Operator : ashleyd
Sample : ic850-0.02
Misc : op93004a,e4p850
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 03 16:48:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:47:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.32

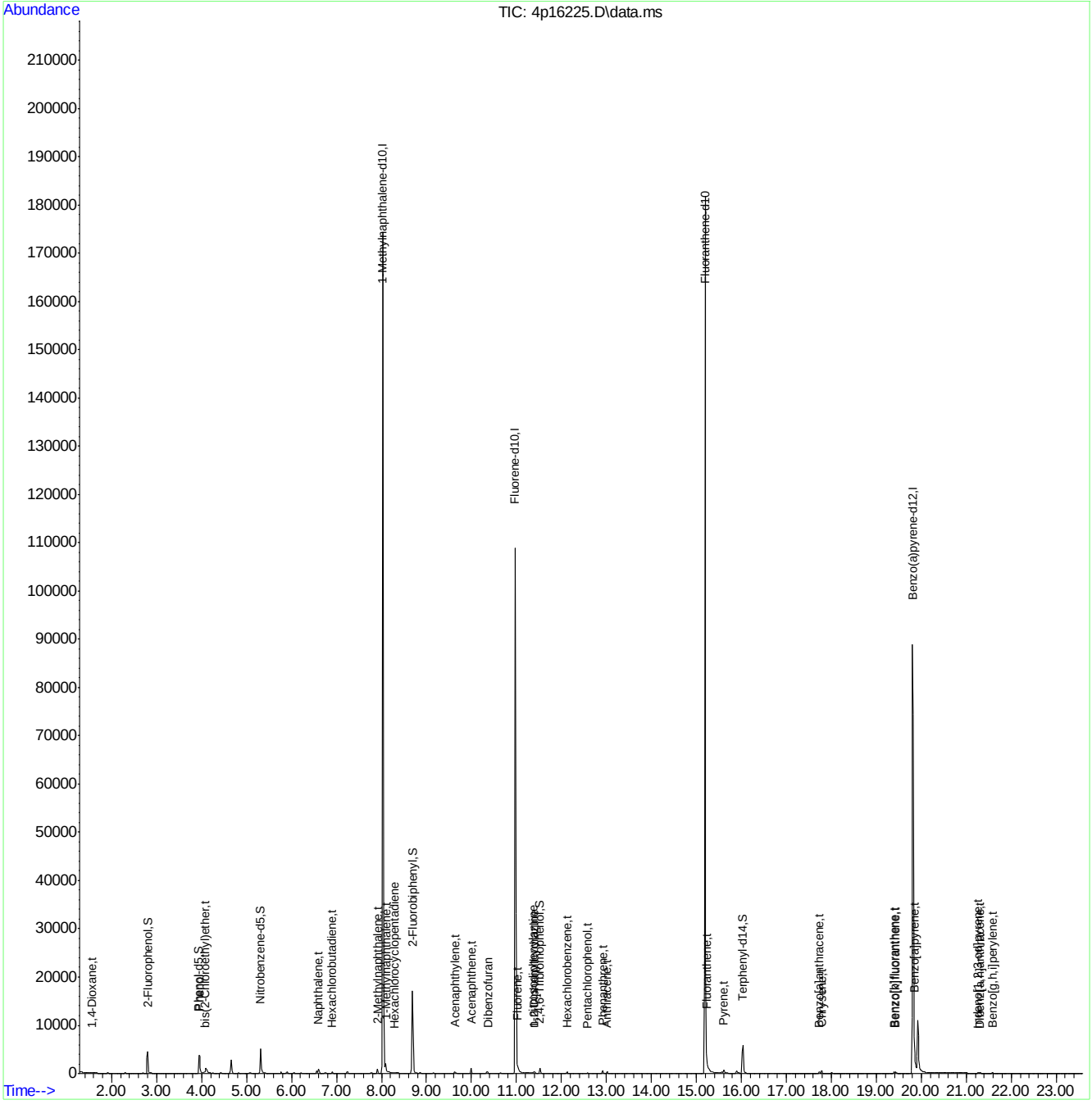
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16225.D
Acq On : 28 Apr 2016 6:55 pm
Operator : ashleyd
Sample : ic850-0.02
Misc : op93004a,e4p850
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 03 16:48:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:47:41 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16226.D
Acq On : 28 Apr 2016 7:24 pm
Operator : ashleyd
Sample : ic850-0.01
Misc : op93004a,e4p850
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 03 16:48:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:48:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	8.024	150	47719	4.00 ppm	0.00
13) Fluorene-d10	10.969	176	47778	4.00 ppm	0.00
23) Fluoranthene-d10	15.190	212	88721	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.806	264	42402	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	2.803	112	887	0.17 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.34%	
4) Phenol-d5	3.957	99	1267	0.13 ppm	0.02
Spiked Amount 50.000			Recovery	= 0.26%	
7) Nitrobenzene-d5	5.310	82	1356	0.18 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.36%	
14) 2-Fluorobiphenyl	8.689	172	3953	0.20 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.40%	
22) 2,4,6-Tribromophenol	11.521	330	180	0.12 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.24%	
30) Terphenyl-d14	16.033	244	1576	0.15 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.30%	
Target Compounds					Qvalue
5) Phenol	3.957	94	385	0.04 ppm #	73
6) bis(2-Chloroethyl)ether	4.077	93	69	0.01 ppm	95
8) Naphthalene	6.591	128	253	0.01 ppm	90
9) Hexachlorobutadiene	6.897	225	57	0.01 ppm	98
10) 2-Methylnaphthalene	7.910	141	156	0.01 ppm	91
11) 1-Methylnaphthalene	8.093	141	279	0.01 ppm	97
15) Acenaphthylene	9.651	152	142	0.01 ppm	78
16) Acenaphthene	9.995	153	155	0.01 ppm	91
17) Dibenzofuran	10.362	168	179	0.01 ppm	83
20) n-nitrosodiphenylamine	11.366	169	66	0.01 ppm	94
21) 1,2-Diphenylhydrazine	11.391	77	104	0.01 ppm	86
24) Hexachlorobenzene	12.126	284	80	0.01 ppm	91
26) Phenanthrene	12.918	178	256	0.01 ppm	97
27) Anthracene	13.021	178	136	0.01 ppm	95
28) Fluoranthene	15.224	202	356	0.01 ppm	92
29) Pyrene	15.603	202	175	0.01 ppm	94
31) Benzo[a]anthracene	17.734	228	97	0.01 ppm	80
32) Chrysene	17.783	228	126	0.01 ppm	91
34) Benzo[b]fluoranthene	19.392	252	110	0.01 ppm	80
35) Benzo[k]fluoranthene	19.426	252	70	0.01 ppm	96
36) Benzo[a]pyrene	19.841	252	167	0.01 ppm	83
37) Indeno[1,2,3-cd]pyrene	21.264	276	50	0.00 ppm	67
38) Dibenz[a,h]anthracene	21.302	278	49	0.00 ppm	83
39) Benzo[g,h,i]perylene	21.581	276	89	0.01 ppm	98

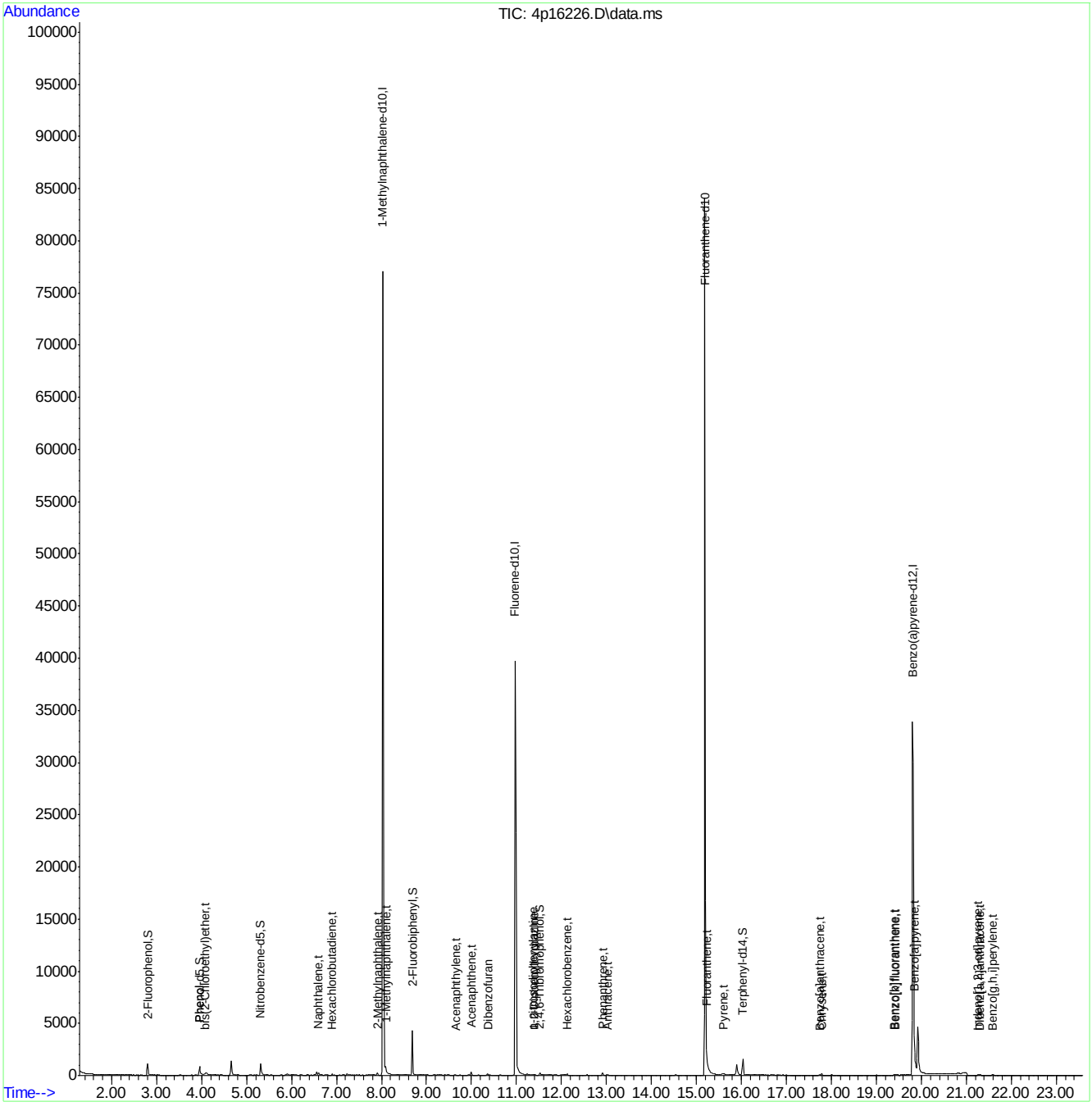
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16226.D
Acq On : 28 Apr 2016 7:24 pm
Operator : ashleyd
Sample : ic850-0.01
Misc : op93004a,e4p850
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 03 16:48:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:48:32 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16227.D
Acq On : 28 Apr 2016 7:54 pm
Operator : ashleyd
Sample : ic850-5.0
Misc : op93004a,e4p850
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 03 16:49:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:49:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.025	150	53969	4.00	ppm	0.00
13) Fluorene-d10	10.969	176	65053	4.00	ppm	0.00
23) Fluoranthene-d10	15.190	212	99809	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.806	264	57749	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.789	112	548304	93.03	ppm	-0.01
Spiked Amount 50.000			Recovery = 186.06%			
4) Phenol-d5	3.940	99	898993	84.18	ppm	-0.02
Spiked Amount 50.000			Recovery = 168.36%			
7) Nitrobenzene-d5	5.311	82	936801	108.36	ppm	0.00
Spiked Amount 50.000			Recovery = 216.72%			
14) 2-Fluorobiphenyl	8.689	172	1651807	62.57	ppm	0.00
Spiked Amount 50.000			Recovery = 125.14%			
22) 2,4,6-Tribromophenol	11.521	330	265197	137.32	ppm	0.00
Spiked Amount 50.000			Recovery = 274.64%			
30) Terphenyl-d14	16.033	244	1207991	104.43	ppm	0.00
Spiked Amount 50.000			Recovery = 208.86%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.542	88	12126	4.96	ppm #	1
5) Phenol	3.957	94	315559	26.93	ppm #	57
6) bis(2-Chloroethyl)ether	4.060	93	36441	4.52	ppm #	49
8) Naphthalene	6.591	128	138743	4.72	ppm	93
9) Hexachlorobutadiene	6.897	225	26667	4.64	ppm	96
10) 2-Methylnaphthalene	7.910	141	85329	5.09	ppm	88
11) 1-Methylnaphthalene	8.093	141	94859	4.51	ppm	95
12) Hexachlorocyclopentadiene	8.277	237	36278	22.76	ppm	81
15) Acenaphthylene	9.629	152	110786	5.41	ppm	78
16) Acenaphthene	9.995	153	103618	4.83	ppm	94
17) Dibenzofuran	10.362	168	110113	4.42	ppm #	1
18) Fluorene	11.019	166	88987	4.51	ppm	99
19) 4,6-dinitro-2-methylph...	11.217	198	44344	67.08	ppm #	47
20) n-nitrosodiphenylamine	11.366	169	56051	5.75	ppm	89
21) 1,2-Diphenylhydrazine	11.391	77	100134	6.77	ppm	90
24) Hexachlorobenzene	12.126	284	34299	4.78	ppm	92
25) Pentachlorophenol	12.557	266	87278	49.78	ppm	89
26) Phenanthrene	12.918	178	145136	5.49	ppm	95
27) Anthracene	13.004	178	138108	7.53	ppm	93
28) Fluoranthene	15.224	202	149139	5.00	ppm	92
29) Pyrene	15.603	202	152142	6.53	ppm	96
31) Benzo[a]anthracene	17.735	228	96683	7.51	ppm	88
32) Chrysene	17.783	228	140405	6.56	ppm	90
34) Benzo[b]fluoranthene	19.392	252	129936	6.90	ppm	83
35) Benzo[k]fluoranthene	19.427	252	115875	7.32	ppm	95
36) Benzo[a]pyrene	19.841	252	110769	5.23	ppm	79
37) Indeno[1,2,3-cd]pyrene	21.264	276	118337	7.03	ppm	77
38) Dibenz[a,h]anthracene	21.302	278	98339	7.20	ppm	100
39) Benzo[g,h,i]perylene	21.581	276	108920	6.81	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16227.D
Acq On : 28 Apr 2016 7:54 pm
Operator : ashleyd
Sample : ic850-5.0
Misc : op93004a,e4p850
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 03 16:49:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:49:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

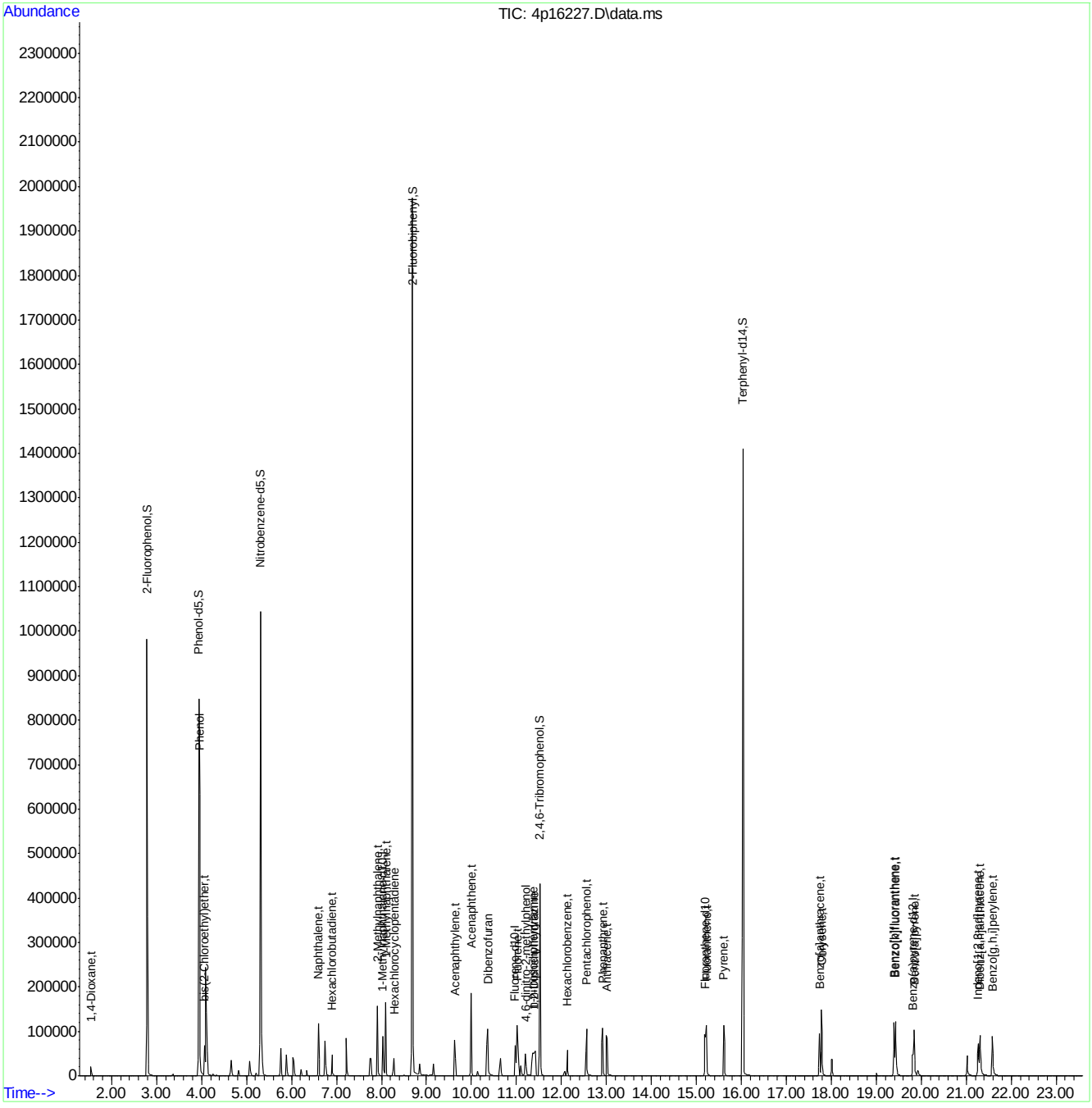
7.6.34

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16227.D
Acq On : 28 Apr 2016 7:54 pm
Operator : ashleyd
Sample : ic850-5.0
Misc : op93004a,e4p850
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 03 16:49:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:49:10 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16228.D
Acq On : 28 Apr 2016 8:23 pm
Operator : ashleyd
Sample : ic850-2.5
Misc : op93004a,e4p850
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 03 17:00:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:49:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.026	150	59737	4.00	ppm	0.00
13) Fluorene-d10	10.971	176	64675	4.00	ppm	0.00
23) Fluoranthene-d10	15.192	212	96173	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.806	264	54490	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.789	112	292889	45.35	ppm	0.00
Spiked Amount 50.000			Recovery = 90.70%			
4) Phenol-d5	3.940	99	543441	47.04	ppm	0.00
Spiked Amount 50.000			Recovery = 94.08%			
7) Nitrobenzene-d5	5.312	82	417708	43.14	ppm	0.00
Spiked Amount 50.000			Recovery = 86.28%			
14) 2-Fluorobiphenyl	8.691	172	1007514	42.35	ppm	0.00
Spiked Amount 50.000			Recovery = 84.70%			
22) 2,4,6-Tribromophenol	11.523	330	124250	61.83	ppm	0.00
Spiked Amount 50.000			Recovery = 123.66%			
30) Terphenyl-d14	16.035	244	657977	58.71	ppm	0.00
Spiked Amount 50.000			Recovery = 117.42%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.542	88	5866	2.17	ppm #	82
5) Phenol	3.957	94	149557	11.41	ppm #	88
6) bis(2-Chloroethyl)ether	4.060	93	20428	2.31	ppm #	68
8) Naphthalene	6.593	128	76631	2.38	ppm	97
9) Hexachlorobutadiene	6.899	225	13704	2.17	ppm	94
10) 2-Methylnaphthalene	7.912	141	42609	2.29	ppm	94
11) 1-Methylnaphthalene	8.095	141	46574	2.03	ppm	94
12) Hexachlorocyclopentadiene	8.279	237	13489	6.31	ppm	96
15) Acenaphthylene	9.630	152	57181	2.81	ppm	97
16) Acenaphthene	9.997	153	48830	2.30	ppm	96
17) Dibenzofuran	10.341	168	55044	2.27	ppm #	50
18) Fluorene	11.020	166	51566	2.67	ppm	95
19) 4,6-dinitro-2-methylph...	11.194	198	17114	19.48	ppm #	1
20) n-nitrosodiphenylamine	11.368	169	23219	2.35	ppm	96
21) 1,2-Diphenylhydrazine	11.393	77	51000	3.30	ppm	96
24) Hexachlorobenzene	12.128	284	17618	2.56	ppm	97
25) Pentachlorophenol	12.559	266	36574	18.58	ppm	100
26) Phenanthrene	12.903	178	71310	2.77	ppm	84
27) Anthracene	13.006	178	66101	3.49	ppm	99
28) Fluoranthene	15.226	202	73661	2.56	ppm	99
29) Pyrene	15.605	202	72144	3.08	ppm	98
31) Benzo[a]anthracene	17.734	228	39055	3.15	ppm	99
32) Chrysene	17.782	228	65470	3.04	ppm	100
34) Benzo[b]fluoranthene	19.392	252	53167	2.78	ppm	98
35) Benzo[k]fluoranthene	19.426	252	53409	3.35	ppm	98
36) Benzo[a]pyrene	19.841	252	50867	2.52	ppm	99
37) Indeno[1,2,3-cd]pyrene	21.264	276	49436	2.88	ppm	99
38) Dibenz[a,h]anthracene	21.302	278	41863	2.98	ppm	98
39) Benzo[g,h,i]perylene	21.581	276	48554	3.06	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16228.D
Acq On : 28 Apr 2016 8:23 pm
Operator : ashleyd
Sample : ic850-2.5
Misc : op93004a,e4p850
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 03 17:00:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:49:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

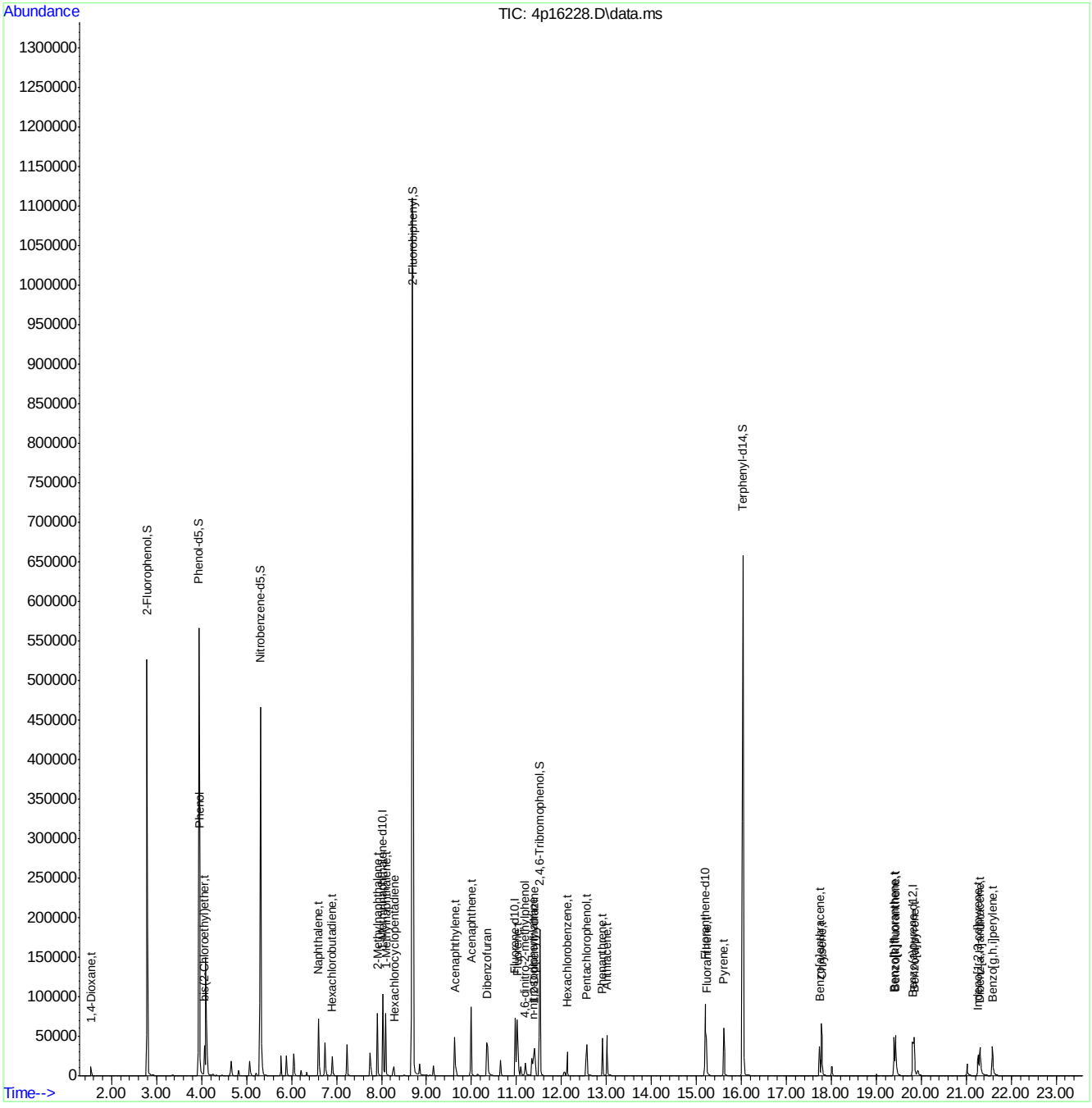
7.6.35

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16228.D
Acq On : 28 Apr 2016 8:23 pm
Operator : ashleyd
Sample : ic850-2.5
Misc : op93004a,e4p850
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 03 17:00:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 16:49:55 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16229.D
Acq On : 28 Apr 2016 8:53 pm
Operator : ashleyd
Sample : icv850-1.0
Misc : op93004a,e4p850
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 03 17:05:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	8.026	150	67827	4.00 ppm	0.00
13) Fluorene-d10	10.971	176	65591	4.00 ppm	0.00
23) Fluoranthene-d10	15.192	212	100994	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.810	264	46305	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
14) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
22) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
30) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.556	88	3813	1.27 ppm #	17
6) bis(2-Chloroethyl)ether	4.060	93	10367	1.04 ppm #	55
8) Naphthalene	6.593	128	37024	1.02 ppm	99
9) Hexachlorobutadiene	6.899	225	6879	0.98 ppm	99
10) 2-Methylnaphthalene	7.912	141	19981	0.95 ppm	99
15) Acenaphthylene	9.630	152	22008	1.04 ppm	99
16) Acenaphthene	9.997	153	23441	1.10 ppm	100
17) Dibenzofuran	10.341	168	26109	1.08 ppm	87
18) Fluorene	11.020	166	23124	1.17 ppm	98
20) n-nitrosodiphenylamine	11.368	169	9107	0.91 ppm	95
21) 1,2-Diphenylhydrazine	11.393	77	18811	1.12 ppm	99
24) Hexachlorobenzene	12.128	284	8306	1.15 ppm	99
26) Phenanthrene	12.920	178	31318	1.14 ppm	85
27) Anthracene	13.006	178	22746	1.01 ppm	100
28) Fluoranthene	15.226	202	33981	1.12 ppm	99
29) Pyrene	15.605	202	28768	1.14 ppm	100
31) Benzo[a]anthracene	17.727	228	12139	0.79 ppm	88
32) Chrysene	17.784	228	26778	1.15 ppm	99
34) Benzo[b]fluoranthene	19.396	252	12872	0.78 ppm	97
35) Benzo[k]fluoranthene	19.430	252	18335	1.16 ppm	97
36) Benzo[a]pyrene	19.833	252	19114	1.11 ppm	92
37) Indeno[1,2,3-cd]pyrene	21.258	276	13571	0.96 ppm	95
38) Dibenz[a,h]anthracene	21.306	278	10865	0.84 ppm	73
39) Benzo[g,h,i]perylene	21.575	276	15571	1.06 ppm	99

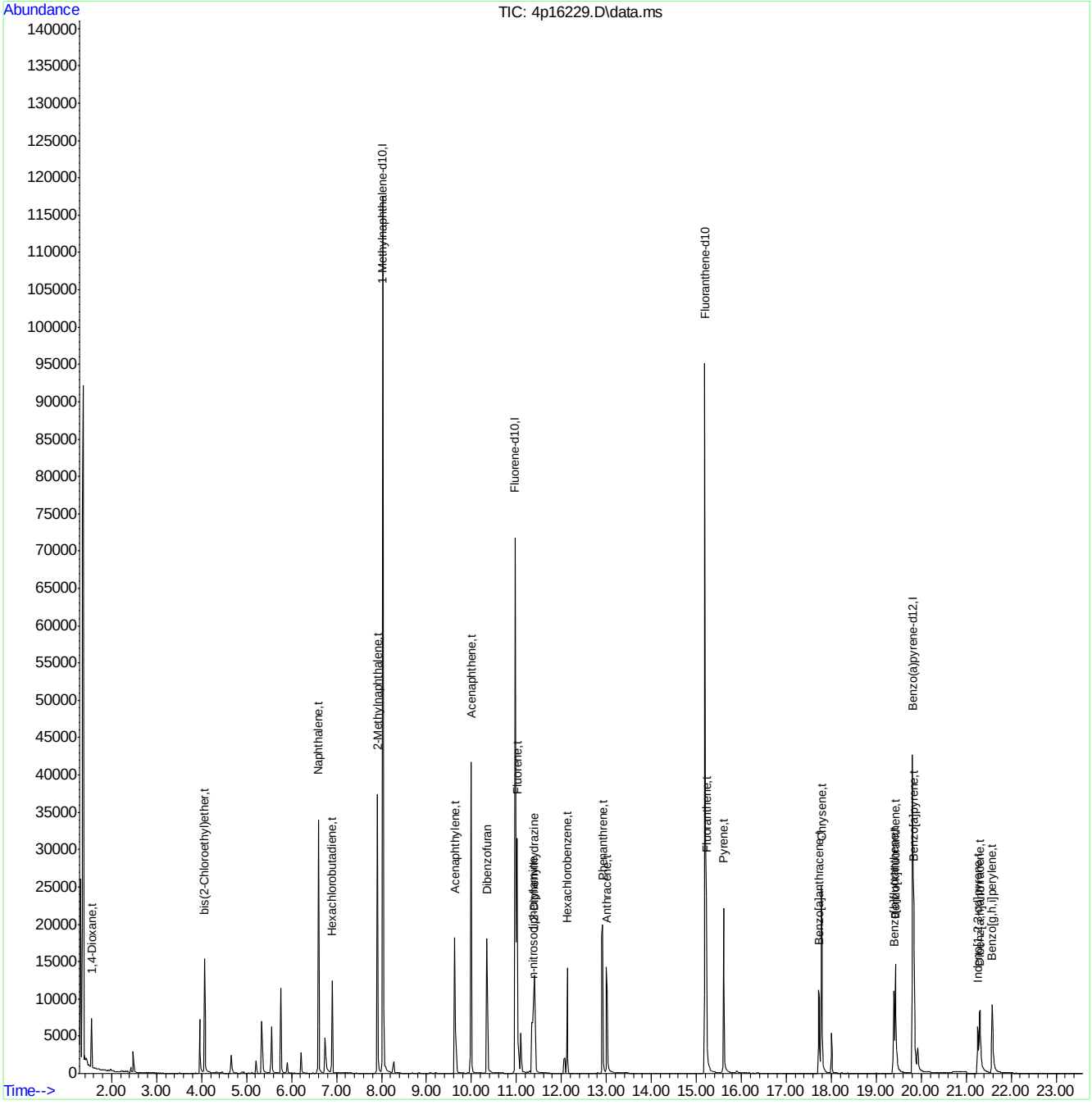
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16229.D
Acq On : 28 Apr 2016 8:53 pm
Operator : ashleyd
Sample : icv850-1.0
Misc : op93004a,e4p850
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 03 17:05:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration



M4P850SIM.M Tue May 03 17:06:12 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16231.D
Acq On : 28 Apr 2016 9:52 pm
Operator : ashleyd
Sample : icv850-1.0
Misc : op93004a,e4p850
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 03 17:07:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	8.026	150	85275	4.00 ppm	0.00
13) Fluorene-d10	10.971	176	80757	4.00 ppm	0.00
23) Fluoranthene-d10	15.192	212	137242	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.810	264	62494	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
14) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
22) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
30) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
11) 1-Methylnaphthalene	8.095	141	28581	0.89 ppm	99
12) Hexachlorocyclopentadiene	8.278	237	2665	0.84 ppm	99

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

7.6.37

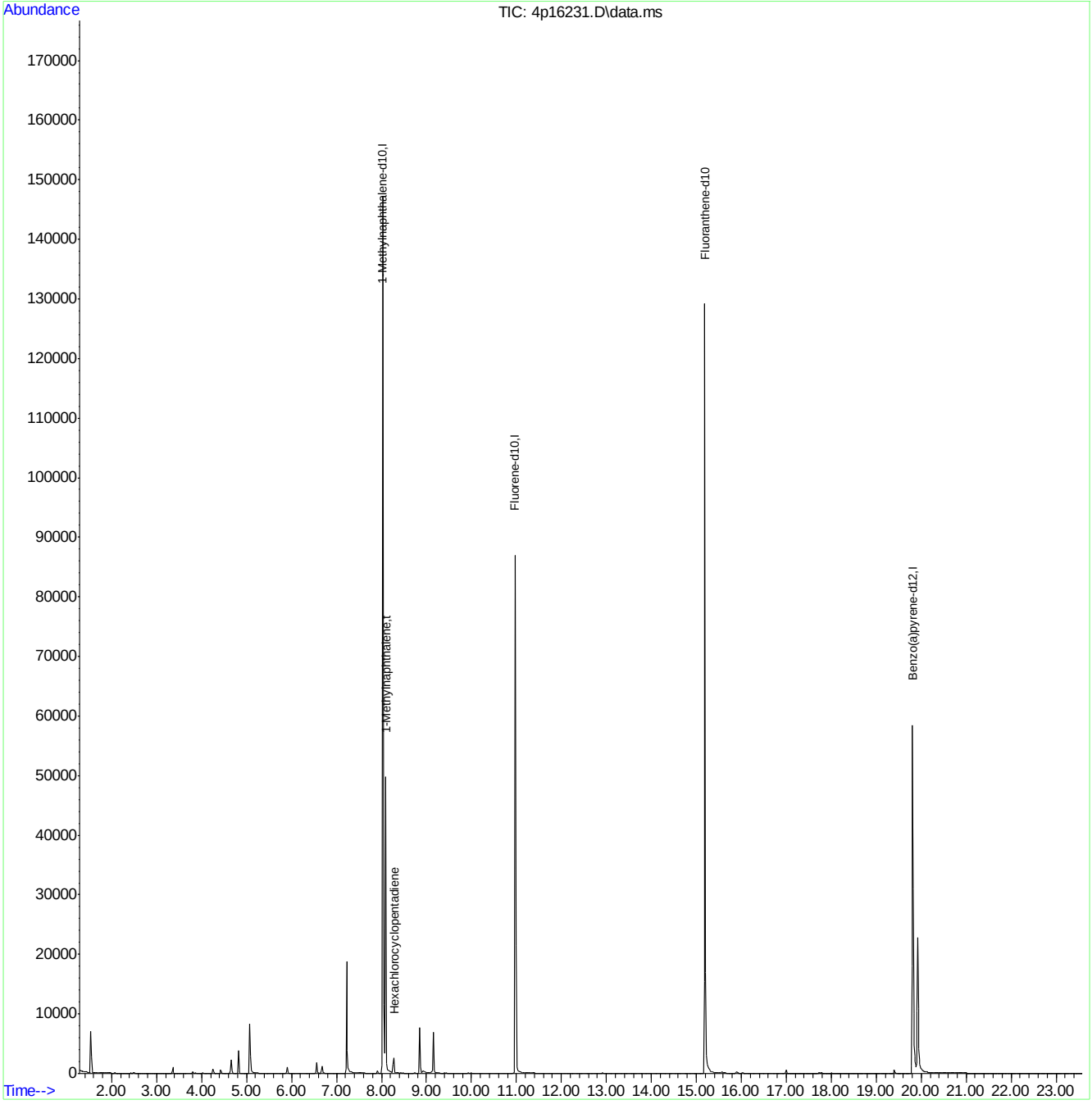
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P850\
Data File : 4p16231.D
Acq On : 28 Apr 2016 9:52 pm
Operator : ashleyd
Sample : icv850-1.0
Misc : op93004a,e4p850
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 03 17:07:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration



M4P850SIM.M Tue May 03 17:12:13 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P854\
Data File : 4p16259.D
Acq On : 9 May 2016 5:20 pm
Operator : ashleyd
Sample : icv850-1.0
Misc : op93648a,e4p854
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 18:00:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.996	150	53265	4.00	ppm	-0.03
13) Fluorene-d10	10.938	176	58014	4.00	ppm	-0.03
23) Fluoranthene-d10	15.167	212	108166	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.775	264	78026	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
4) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
14) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
22) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
30) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
5) Phenol	3.940	94	61320	5.30	ppm	96
19) 4,6-dinitro-2-methylph...	11.186	198	6696	6.60	ppm #	24
25) Pentachlorophenol	12.534	266	12322	4.35	ppm	98

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

7.6.38

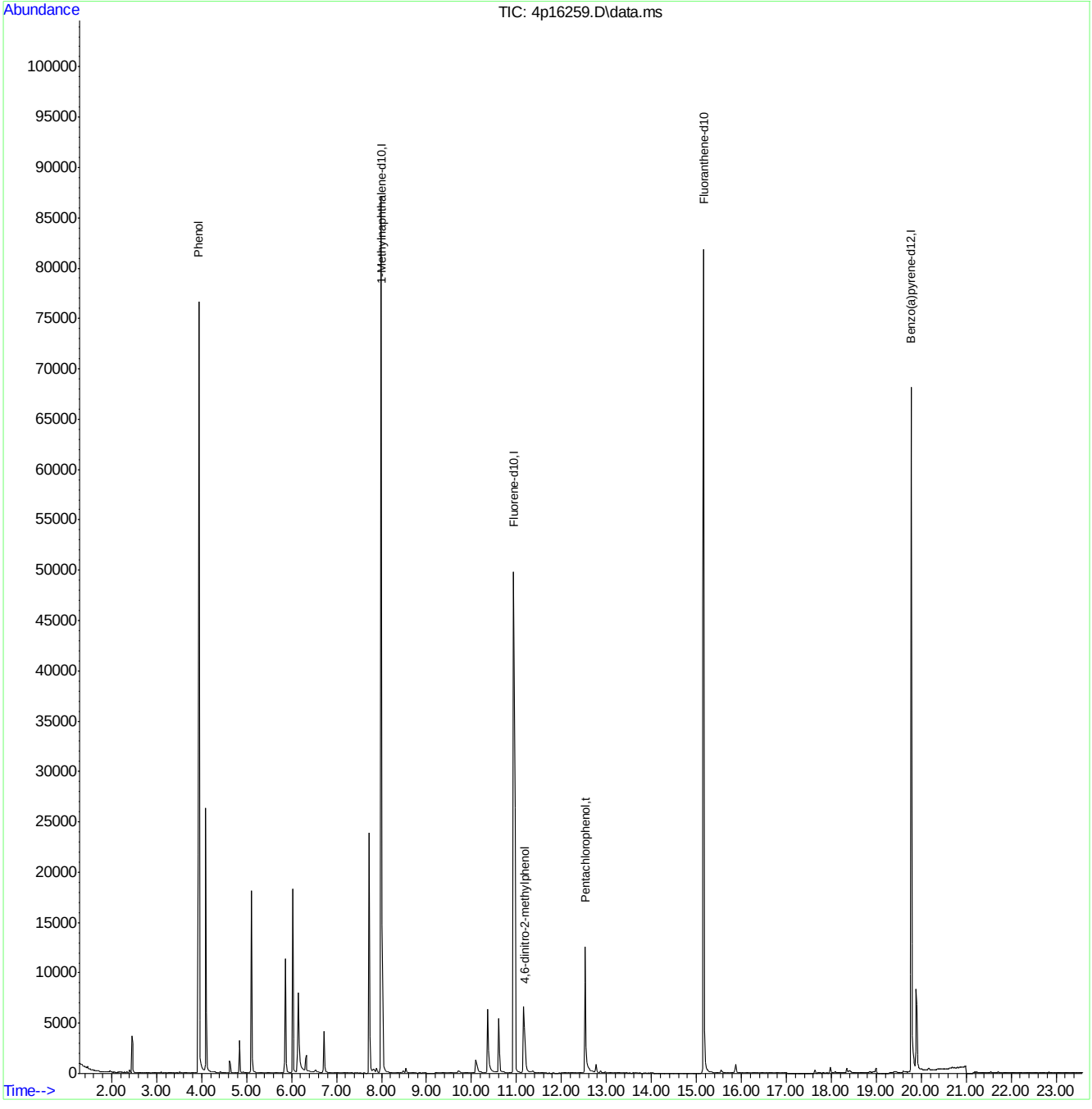
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P854\
Data File : 4p16259.D
Acq On : 9 May 2016 5:20 pm
Operator : ashleyd
Sample : icv850-1.0
Misc : op93648a,e4p854
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 18:00:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue May 03 17:05:00 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16279.D
Acq On : 11 May 2016 3:57 pm
Operator : juliusj
Sample : cc850-0.5
Misc : op93668a,e4p857
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 11:38:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:38:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.950	150	81932	4.00	ppm	-0.08
13) Fluorene-d10	10.889	176	122375	4.00	ppm	-0.08
23) Fluoranthene-d10	15.098	212	167945	4.00	ppm	-0.09
33) Benzo(a)pyrene-d12	19.731	264	109432	4.00	ppm	-0.07
System Monitoring Compounds						
3) 2-Fluorophenol	2.736	112	110333	12.60	ppm	-0.05
Spiked Amount 50.000			Recovery = 25.20%			
4) Phenol-d5	3.871	99	164672	10.47	ppm	-0.07
Spiked Amount 50.000			Recovery = 20.94%			
7) Nitrobenzene-d5	5.236	82	134404	10.30	ppm	-0.08
Spiked Amount 50.000			Recovery = 20.60%			
14) 2-Fluorobiphenyl	8.614	172	272658	5.99	ppm	-0.08
Spiked Amount 50.000			Recovery = 11.98%			
22) 2,4,6-Tribromophenol	11.431	330	35833	7.80	ppm	-0.09
Spiked Amount 50.000			Recovery = 15.60%			
30) Terphenyl-d14	15.941	244	254448	12.75	ppm	-0.09
Spiked Amount 50.000			Recovery = 25.50%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.515	88	1973	0.54	ppm #	5
5) Phenol	3.888	94	50366	2.83	ppm #	49
6) bis(2-Chloroethyl)ether	3.991	93	6122	0.51	ppm	86
8) Naphthalene	6.517	128	24678	0.56	ppm	98
9) Hexachlorobutadiene	6.822	225	4051	0.48	ppm	91
10) 2-Methylnaphthalene	7.835	141	11317	0.45	ppm	84
11) 1-Methylnaphthalene	8.019	141	11208	0.36	ppm	82
12) Hexachlorocyclopentadiene	8.179	237	2535	0.83	ppm	87
15) Acenaphthylene	9.554	152	18933	0.48	ppm	91
16) Acenaphthene	9.921	153	12180	0.31	ppm	79
17) Dibenzofuran	10.264	168	22432	0.50	ppm #	33
18) Fluorene	10.938	166	18469	0.50	ppm	90
19) 4,6-dinitro-2-methylph...	11.137	198	3459	2.22	ppm #	35
20) n-nitrosodiphenylamine	11.286	169	6726	0.36	ppm	96
21) 1,2-Diphenylhydrazine	11.310	77	12456	0.40	ppm	99
24) Hexachlorobenzene	12.035	284	4684	0.39	ppm	86
25) Pentachlorophenol	12.482	266	6809	1.80	ppm	85
26) Phenanthrene	12.826	178	23707	0.52	ppm	89
27) Anthracene	12.930	178	18132	0.48	ppm	89
28) Fluoranthene	15.133	202	25938	0.51	ppm	91
29) Pyrene	15.528	202	23665	0.56	ppm	91
31) Benzo[a]anthracene	17.652	228	13566	0.54	ppm	98
32) Chrysene	17.700	228	22195	0.57	ppm	100
34) Benzo[b]fluoranthene	19.306	252	17489	0.45	ppm	93
35) Benzo[k]fluoranthene	19.352	252	17384	0.47	ppm	92
36) Benzo[a]pyrene	19.754	252	15540	0.38	ppm	95
37) Indeno[1,2,3-cd]pyrene	21.172	276	16698	0.50	ppm	94
38) Dibenz[a,h]anthracene	21.220	278	14579	0.50	ppm	72
39) Benzo[g,h,i]perylene	21.489	276	17291	0.50	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16279.D
Acq On : 11 May 2016 3:57 pm
Operator : juliusj
Sample : cc850-0.5
Misc : op93668a,e4p857
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 11:38:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:38:03 2016
Response via : Initial Calibration

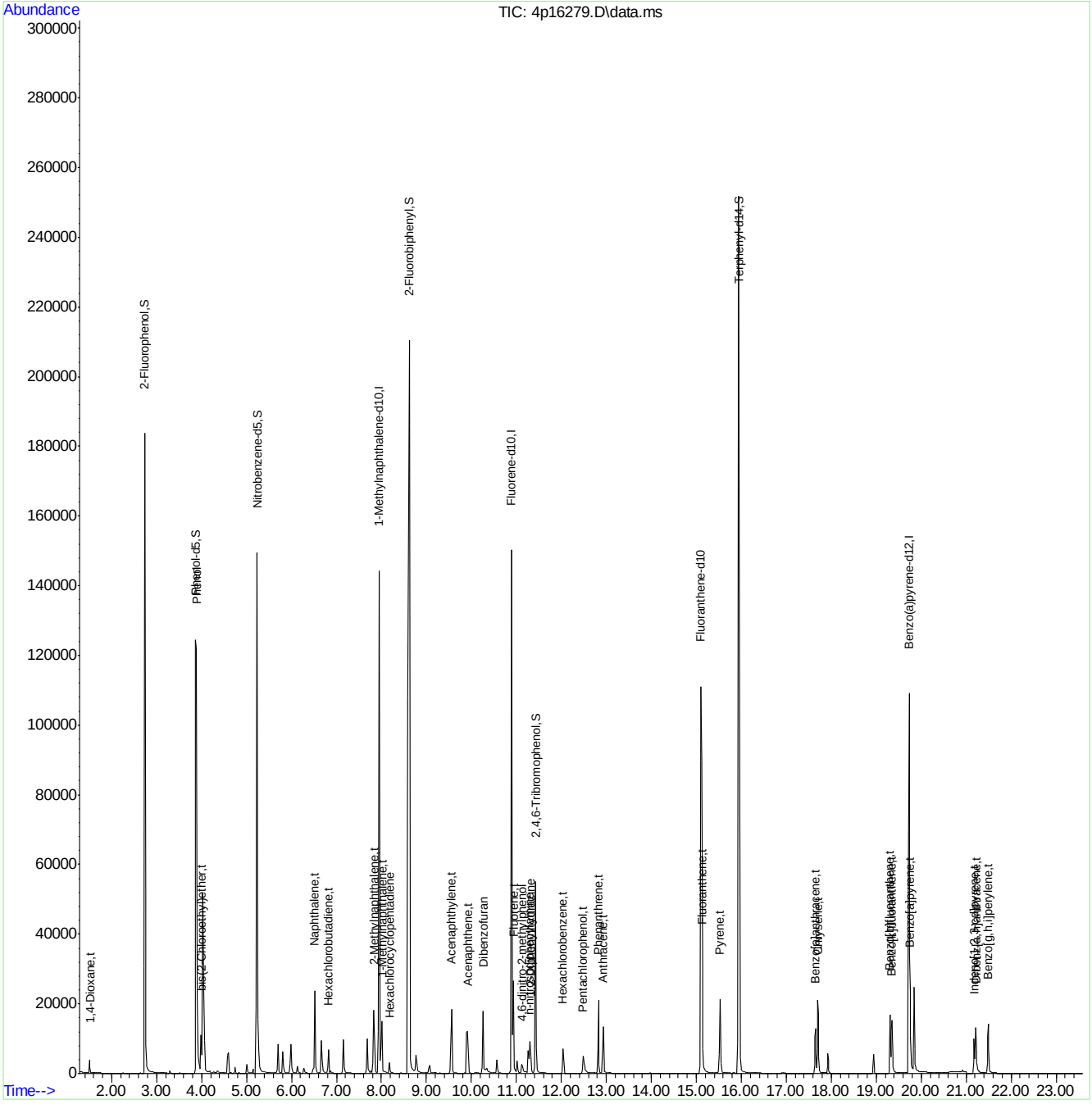
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P857\
Data File : 4p16279.D
Acq On : 11 May 2016 3:57 pm
Operator : juliusj
Sample : cc850-0.5
Misc : op93668a,e4p857
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 11:38:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P850SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 11:38:03 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24812.D
Acq On : 5 Apr 2016 4:46 pm
Operator : sarad
Sample : ic1155-2
Misc : op92208,e6p1155
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 18:31:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 15:56:31 2016
QLast Update : Tue Apr 05 15:56:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	268196	40.00	ppm	-0.02
24) Naphthalene-d8	5.759	136	1061032	40.00	ppm	-0.02
47) Acenaphthene-d10	7.818	164	613928	40.00	ppm	-0.02
69) Phenanthrene-d10	9.984	188	1061677	40.00	ppm	-0.02
83) Chrysene-d12	14.145	240	1131592	40.00	ppm	-0.03
92) Perylene-d12	16.253	264	1042901	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.673	152	268196	40.00	ppm	-0.02
104) Acenaphthene-d10a	7.818	164	613928	40.00	ppm	-0.02
106) Phenanthrene-d10a	9.984	188	1061677	40.00	ppm	-0.02
110) Chrysene-d12a	14.145	240	1131592	40.00	ppm	-0.03
112) Naphthalene-d8a	5.759	136	1061032	40.00	ppm	-0.02
114) Chrysene-d12b	14.145	240	1131592	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	19128	1.97	ppm	-0.01
Spiked Amount 50.000			Recovery	=	3.94%	
8) Phenol-d5	4.406	99	24183	1.85	ppm	-0.01
Spiked Amount 50.000			Recovery	=	3.70%	
25) Nitrobenzene-d5	5.112	82	23763	2.03	ppm	-0.02
Spiked Amount 50.000			Recovery	=	4.06%	
51) 2-Fluorobiphenyl	6.946	172	42313	2.07	ppm	-0.02
Spiked Amount 50.000			Recovery	=	4.14%	
73) 2,4,6-Tribromophenol	8.936	330	4784	2.06	ppm	-0.02
Spiked Amount 50.000			Recovery	=	4.12%	
85) Terphenyl-d14	12.530	244	41970	1.94	ppm	-0.03
Spiked Amount 50.000			Recovery	=	3.88%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.245	88	9621	1.97	ppm	98
3) Pyridine	2.582	79	23721	1.92	ppm	94
4) N-Nitrosodimethylamine	2.534	74	15734	2.11	ppm	85
6) Indene	4.871	116	34641	2.01	ppm	97
7) Cumene	4.079	105	54412	2.04	ppm	97
9) Phenol	4.411	94	30284	2.01	ppm	95
10) Aniline	4.427	93	35503	2.23	ppm	97
11) bis(2-Chloroethyl)ether	4.470	93	21465	2.02	ppm	98
12) 2-Chlorophenol	4.518	128	21808	2.09	ppm	94
13) Decane	4.555	43	26053	2.06	ppm	95
14) 1,3-Dichlorobenzene	4.630	146	22681	2.04	ppm	94
15) 1,4-Dichlorobenzene	4.684	146	23446	2.10	ppm	97
16) Benzyl alcohol	4.780	108	13785	1.97	ppm	83
17) 1,2-Dichlorobenzene	4.807	146	20742	2.01	ppm	95
18) Acetophenone	4.983	105	30185	2.00	ppm	98
19) 2-Methylphenol	4.866	108	18840	1.99	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.882	121	7212	1.98	ppm #	76

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24812.D
Acq On : 5 Apr 2016 4:46 pm
Operator : sarad
Sample : ic1155-2
Misc : op92208,e6p1155
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 18:31:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 15:56:31 2016
QLast Update : Tue Apr 05 15:56:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.989	108	20281	2.04	ppm	93
22) n-Nitroso-di-n-propyla...	4.983	70	17827	2.05	ppm	91
23) Hexachloroethane	5.080	201	7850	2.09	ppm	90
26) Nitrobenzene	5.128	77	24762	2.00	ppm	98
27) Quinoline	6.112	129	37490	1.95	ppm	96
28) Isophorone	5.331	82	43258	2.03	ppm	98
29) 2-Nitrophenol	5.400	139	8858	1.91	ppm	94
30) 2,4-Dimethylphenol	5.438	107	17529	1.92	ppm	95
31) Benzoic acid	5.486	105	10438	2.26	ppm	95
32) bis(2-Chloroethoxy)met...	5.518	93	25174	2.03	ppm	98
33) 2,4-Dichlorophenol	5.625	162	16001	2.06	ppm	95
34) 2,6-Dichlorophenol	5.839	162	15750	2.05	ppm	97
35) 1,3,5-Trichlorobenzene	5.411	180	20194	2.10	ppm	96
36) 1,2,4-Trichlorobenzene	5.705	180	18268	2.02	ppm	96
37) 1,2,3-Trichlorobenzene	5.925	180	17855	2.05	ppm	96
38) Naphthalene	5.780	128	61207	2.09	ppm	96
39) 4-Chloroaniline	5.828	127	24354	1.98	ppm	99
40) 2,3-Dichloroaniline	6.839	161	19101	1.96	ppm	92
41) Caprolactam	6.155	55	9294	1.89	ppm	91
42) Hexachlorobutadiene	5.909	225	10768	2.15	ppm	98
43) 4-Chloro-3-methylphenol	6.342	107	17449	1.90	ppm	91
44) 2-Methylnaphthalene	6.508	141	31993	2.00	ppm	99
45) 1-Methylnaphthalene	6.620	141	35151	2.14	ppm	92
46) Dimethylnaphthalene	7.267	156	36926	2.03	ppm	98
48) Hexachlorocyclopentadiene	6.706	237	18274	4.53	ppm	99
49) 2,4,6-Trichlorophenol	6.845	196	10945	2.04	ppm	92
50) 2,4,5-Trichlorophenol	6.887	196	10585	1.86	ppm	97
52) 2-Chloronaphthalene	7.085	162	37176	2.02	ppm	98
53) Biphenyl	7.069	154	49893	2.01	ppm	98
54) 2-Nitroaniline	7.219	65	12505	2.04	ppm	92
55) Dimethylphthalate	7.476	163	42810	2.07	ppm	96
56) Acenaphthylene	7.620	152	54601	1.98	ppm	98
57) 2,6-Dinitrotoluene	7.540	165	7290	1.96	ppm	87
58) 3-Nitroaniline	7.765	138	9490	2.02	ppm	83
59) Acenaphthene	7.861	153	37787	2.02	ppm	94
60) 2,4-Dinitrophenol	7.909	184	4198	5.04	ppm	78
61) 4-Nitrophenol	8.027	109	5185	1.88	ppm	89
62) Dibenzofuran	8.102	168	52230	2.11	ppm	98
63) 2,4-Dinitrotoluene	8.091	165	9857	2.01	ppm	87
64) 2,3,4,6-Tetrachlorophenol	8.283	232	9634	2.12	ppm	93
65) Diethylphthalate	8.471	149	39873	1.98	ppm	98
66) Fluorene	8.588	166	42091	2.01	ppm	99
67) 4-Chlorophenyl-phenyle...	8.610	204	22118	2.07	ppm	95
68) 4-Nitroaniline	8.620	138	9101	2.01	ppm	95
70) 4,6-Dinitro-2-methylph...	8.674	198	3399	2.38	ppm	95
71) n-Nitrosodiphenylamine	8.781	169	29639	1.97	ppm	99
72) 1,2-Diphenylhydrazine	8.840	77	47716	1.99	ppm	95
74) 4-Bromophenyl-phenylether	9.332	248	11968	2.06	ppm	90
75) Hexachlorobenzene	9.407	284	11787	1.98	ppm	96
76) Pentachlorophenol	9.711	266	14356	4.64	ppm	95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24812.D
Acq On : 5 Apr 2016 4:46 pm
Operator : sarad
Sample : ic1155-2
Misc : op92208,e6p1155
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 18:31:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 15:56:31 2016
QLast Update : Tue Apr 05 15:56:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.016	178	65916	2.07 ppm	99
78) Anthracene	10.091	178	63372	2.02 ppm	98
79) Carbazole	10.359	167	55208	2.00 ppm	100
80) Di-n-butylphthalate	11.000	149	63073	1.93 ppm	98
81) Fluoranthene	11.867	202	68351	2.01 ppm	97
82) Octadecane	9.947	57	28904	1.97 ppm	98
84) Pyrene	12.215	202	73650	2.02 ppm	97
86) Butylbenzylphthalate	13.365	149	27469	1.97 ppm	95
87) Butyl stearate	13.546	56	18239	1.95 ppm	96
88) Benzo[a]anthracene	14.129	228	66599	2.09 ppm	99
89) 3,3'-Dichlorobenzidine	14.135	252	19744	2.00 ppm	93
90) Chrysene	14.183	228	65200	2.01 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.333	149	35855	1.91 ppm	99
93) Di-n-octylphthalate	15.311	149	59985	1.91 ppm	98
94) Benzo[b]fluoranthene	15.723	252	59187	1.96 ppm	97
95) Benzo[k]fluoranthene	15.766	252	60152	1.96 ppm	97
96) Benzo[a]pyrene	16.167	252	53379	2.01 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.579	276	47168	2.02 ppm	96
98) Dibenz(a,h)acridine	17.307	279	45011	2.09 ppm	100
99) Dibenz[a,h]anthracene	17.617	278	52440	2.00 ppm	97
100) 7,12-Dimethylbenz(a)an...	15.734	256	21933	1.85 ppm	94
101) Benzo[g,h,i]perylene	17.922	276	55557	2.10 ppm	97

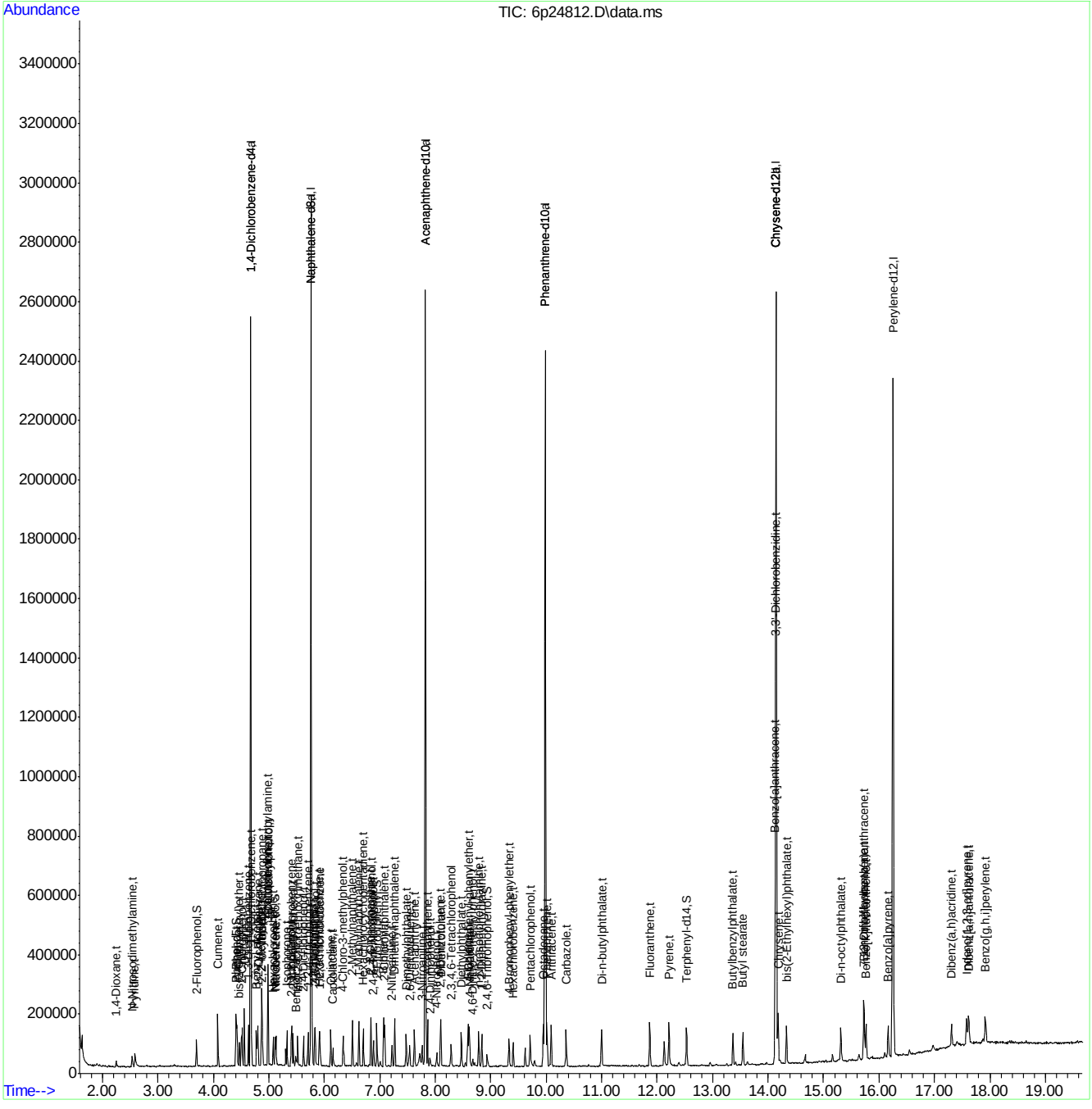
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24812.D
Acq On : 5 Apr 2016 4:46 pm
Operator : sarad
Sample : ic1155-2
Misc : op92208,e6p1155
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 05 18:31:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 15:56:31 2016
QLast Update : Tue Apr 05 15:56:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/06/16 16:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24813.D
Acq On : 5 Apr 2016 5:14 pm
Operator : sarad
Sample : ic1155-1
Misc : op92208,e6p1155
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 18:33:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:32:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	269126	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1074672	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	617655	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1069720	40.00	ppm	0.00
83) Chrysene-d12	14.145	240	1130503	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1033899	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	269126	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	617655	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1069720	40.00	ppm	0.00
110) Chrysene-d12a	14.145	240	1130503	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1074672	40.00	ppm	0.00
114) Chrysene-d12b	14.145	240	1130503	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	9929	1.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.06%	
8) Phenol-d5	4.406	99	13371	1.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.20%	
25) Nitrobenzene-d5	5.112	82	12027	1.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.00%	
51) 2-Fluorobiphenyl	6.946	172	20185	0.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.90%	
73) 2,4,6-Tribromophenol	8.936	330	2218	0.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.84%	
85) Terphenyl-d14	12.530	244	19955	0.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.90%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.245	88	5249	1.09	ppm	90
3) Pyridine	2.587	79	12865	1.08	ppm	99
4) N-Nitrosodimethylamine	2.534	74	8039	1.02	ppm	99
6) Indene	4.871	116	18157	1.04	ppm	99
7) Cumene	4.079	105	27044	0.99	ppm	98
9) Phenol	4.411	94	14562	0.96	ppm	98
10) Aniline	4.427	93	16852	0.95	ppm	95
11) bis(2-Chloroethyl)ether	4.470	93	10826	1.01	ppm	98
12) 2-Chlorophenol	4.518	128	10086	0.92	ppm	93
13) Decane	4.555	43	12557	0.96	ppm	93
14) 1,3-Dichlorobenzene	4.630	146	11555	1.02	ppm	93
15) 1,4-Dichlorobenzene	4.684	146	11339	0.96	ppm	93
16) Benzyl alcohol	4.780	108	6620	0.96	ppm	91
17) 1,2-Dichlorobenzene	4.807	146	10282	0.99	ppm	94
18) Acetophenone	4.983	105	15953	1.05	ppm	98
19) 2-Methylphenol	4.866	108	8903	0.94	ppm	85
20) 2,2'-oxybis(1-Chloropr...	4.882	121	3729	1.03	ppm #	65

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24813.D
Acq On : 5 Apr 2016 5:14 pm
Operator : sarad
Sample : ic1155-1
Misc : op92208,e6p1155
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 18:33:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:32:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.989	108	9624	0.95	ppm		94
22) n-Nitroso-di-n-propyla...	4.989	70	9428	1.05	ppm		90
23) Hexachloroethane	5.080	201	3989	1.01	ppm		94
26) Nitrobenzene	5.128	77	12698	1.01	ppm		93
27) Quinoline	6.117	129	18983	1.00	ppm		96
28) Isophorone	5.331	82	20416	0.93	ppm		96
29) 2-Nitrophenol	5.400	139	4670	1.04	ppm		97
30) 2,4-Dimethylphenol	5.438	107	7905	0.89	ppm		84
31) Benzoic acid	5.481	105	4109	0.78	ppm		93
32) bis(2-Chloroethoxy)met...	5.518	93	12990	1.02	ppm		93
33) 2,4-Dichlorophenol	5.625	162	7525	0.93	ppm		96
34) 2,6-Dichlorophenol	5.839	162	7876	0.99	ppm		91
35) 1,3,5-Trichlorobenzene	5.411	180	9420	0.92	ppm		97
36) 1,2,4-Trichlorobenzene	5.705	180	9532	1.03	ppm		88
37) 1,2,3-Trichlorobenzene	5.925	180	8857	0.98	ppm		95
38) Naphthalene	5.775	128	29885	0.96	ppm		95
39) 4-Chloroaniline	5.828	127	11662	0.95	ppm		98
40) 2,3-Dichloroaniline	6.839	161	9423	0.97	ppm		97
41) Caprolactam	6.155	55	4643	0.99	ppm		94
42) Hexachlorobutadiene	5.909	225	5151	0.94	ppm		92
43) 4-Chloro-3-methylphenol	6.336	107	9281	1.05	ppm		81
44) 2-Methylnaphthalene	6.508	141	15851	0.98	ppm		96
45) 1-Methylnaphthalene	6.620	141	15805	0.89	ppm		89
46) Dimethylnaphthalene	7.267	156	17925	0.96	ppm		96
48) Hexachlorocyclopentadiene	6.700	237	8580	1.87	ppm		92
49) 2,4,6-Trichlorophenol	6.845	196	4816	0.87	ppm		94
50) 2,4,5-Trichlorophenol	6.887	196	5425	1.02	ppm		93
52) 2-Chloronaphthalene	7.085	162	17929	0.96	ppm		97
53) Biphenyl	7.069	154	24851	0.99	ppm		98
54) 2-Nitroaniline	7.219	65	5976	0.95	ppm		96
55) Dimethylphthalate	7.476	163	20290	0.94	ppm		96
56) Acenaphthylene	7.620	152	27090	0.99	ppm		92
57) 2,6-Dinitrotoluene	7.540	165	3234	0.88	ppm		95
58) 3-Nitroaniline	7.759	138	4006	0.84	ppm		77
59) Acenaphthene	7.861	153	18797	0.99	ppm		99
60) 2,4-Dinitrophenol	7.909	184	1440	1.36	ppm	#	68
61) 4-Nitrophenol	8.027	109	2498	0.96	ppm	#	79
62) Dibenzofuran	8.102	168	25998	0.99	ppm		99
63) 2,4-Dinitrotoluene	8.091	165	3988	0.80	ppm		84
64) 2,3,4,6-Tetrachlorophenol	8.289	232	4409	0.91	ppm		91
65) Diethylphthalate	8.471	149	18437	0.92	ppm		97
66) Fluorene	8.588	166	20072	0.95	ppm		91
67) 4-Chlorophenyl-phenyle...	8.610	204	11378	1.02	ppm		94
68) 4-Nitroaniline	8.620	138	4039	0.88	ppm		87
70) 4,6-Dinitro-2-methylph...	8.674	198	1445	0.84	ppm		83
71) n-Nitrosodiphenylamine	8.781	169	14070	0.94	ppm		92
72) 1,2-Diphenylhydrazine	8.834	77	22446	0.93	ppm		91
74) 4-Bromophenyl-phenylether	9.332	248	5417	0.90	ppm		86
75) Hexachlorobenzene	9.407	284	5786	0.97	ppm		90
76) Pentachlorophenol	9.717	266	5712	1.58	ppm		96

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24813.D
Acq On : 5 Apr 2016 5:14 pm
Operator : sarad
Sample : ic1155-1
Misc : op92208,e6p1155
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 18:33:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:32:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.011	178	31844	0.96 ppm	95
78) Anthracene	10.091	178	29273	0.92 ppm	99
79) Carbazole	10.359	167	25837	0.93 ppm	98
80) Di-n-butylphthalate	11.000	149	27971	0.88 ppm	95
81) Fluoranthene	11.867	202	31923	0.93 ppm	95
82) Octadecane	9.947	57	13760	0.94 ppm	95
84) Pyrene	12.215	202	32003	0.87 ppm	90
86) Butylbenzylphthalate	13.365	149	11556	0.84 ppm	96
87) Butyl stearate	13.541	56	7392	0.81 ppm	90
88) Benzo[a]anthracene	14.129	228	33431	1.00 ppm	99
89) 3,3'-Dichlorobenzidine	14.140	252	9280	0.94 ppm	81
90) Chrysene	14.183	228	31966	0.98 ppm	96
91) bis(2-Ethylhexyl)phtha...	14.333	149	15271	0.85 ppm	96
93) Di-n-octylphthalate	15.317	149	25059	0.84 ppm	97
94) Benzo[b]fluoranthene	15.729	252	28628	0.98 ppm	97
95) Benzo[k]fluoranthene	15.766	252	26127	0.88 ppm	94
96) Benzo[a]pyrene	16.167	252	23211	0.88 ppm	91
97) Indeno[1,2,3-cd]pyrene	17.579	276	19596m	0.84 ppm	
98) Dibenz(a,h)acridine	17.307	279	19892	0.89 ppm	91
99) Dibenz[a,h]anthracene	17.617	278	25124	0.97 ppm	96
100) 7,12-Dimethylbenz(a)an...	15.729	256	9646	0.89 ppm	91
101) Benzo[g,h,i]perylene	17.922	276	26766	0.97 ppm	94

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

7.6.41

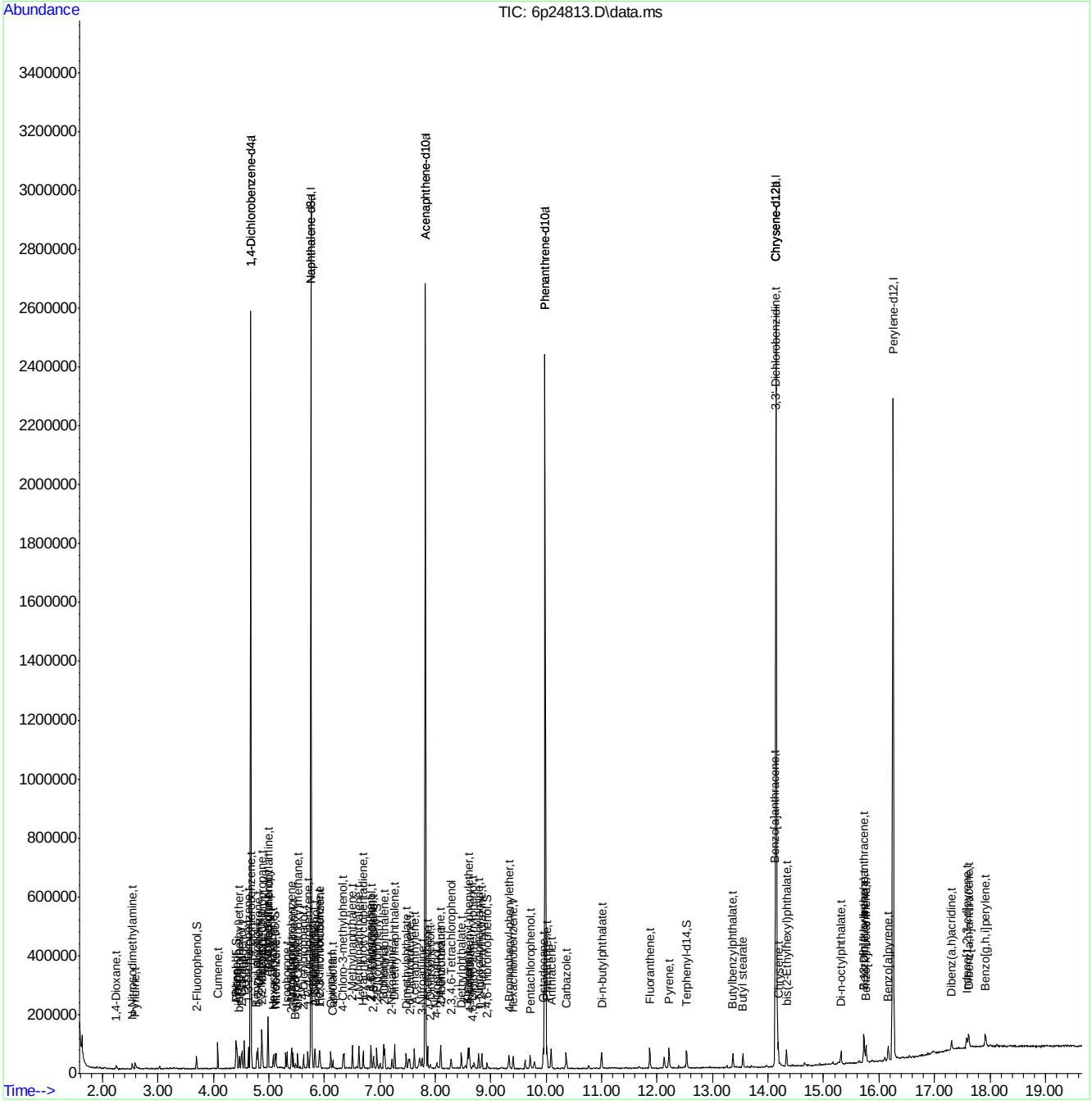
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24813.D
Acq On : 5 Apr 2016 5:14 pm
Operator : sarad
Sample : ic1155-1
Misc : op92208,e6p1155
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 18:33:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:32:08 2016
Response via : Initial Calibration



M6P1155.M Tue Apr 05 19:54:30 2016 ACLIMS Page: 4

SGS ACCUTEST JC19914

Manual Integration Approval Summary

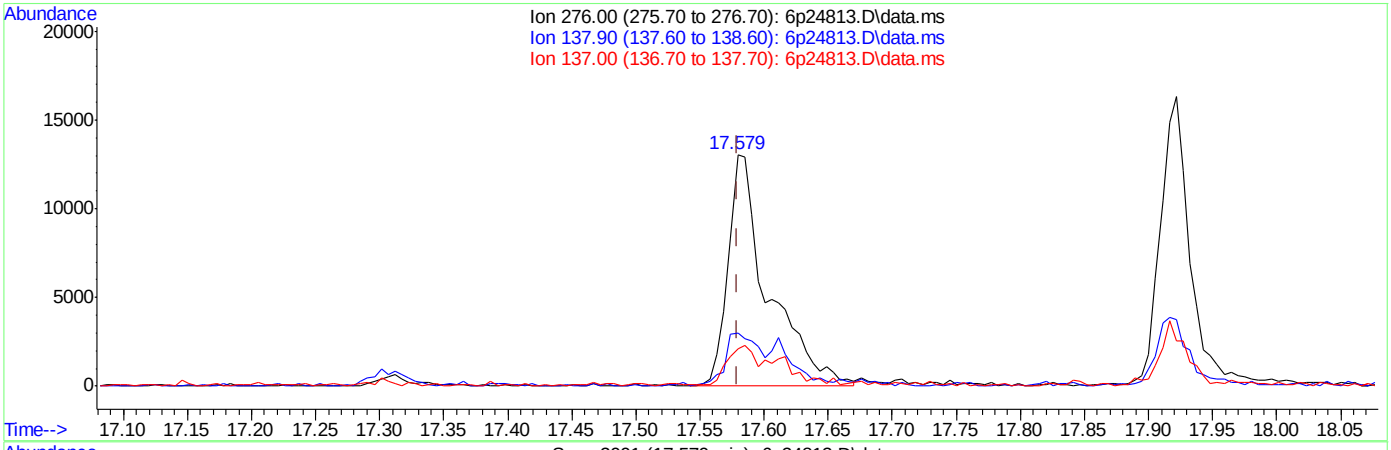
Sample Number:	E6P1155-IC1155	**Method:**	SW846 8270D
Lab FileID:	6P24813.D	**Analyst approved:**	04/06/16 09:50 Ashley Dye
Injection Time:	04/05/16 17:14	**Supervisor approved:**	04/06/16 16:06 Kristi Schollenberger

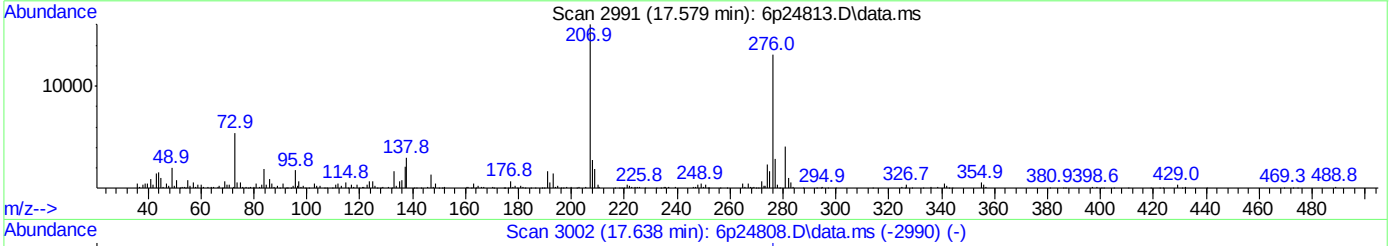
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		17.58	Overlapping peak

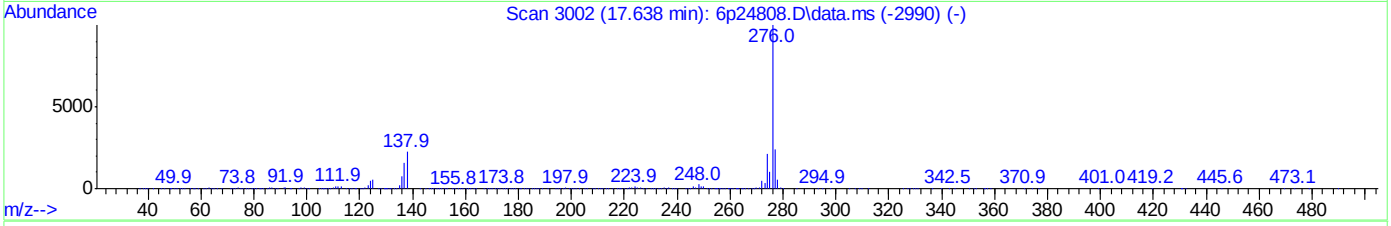
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24813.D
Acq On : 5 Apr 2016 5:14 pm
Operator : sarad
Sample : ic1155-1
Misc : op92208,e6p1155
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 18:32:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:32:08 2016
Response via : Initial Calibration







TIC: 6p24813.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.579min (+0.000) 1.21ppm

response 28278

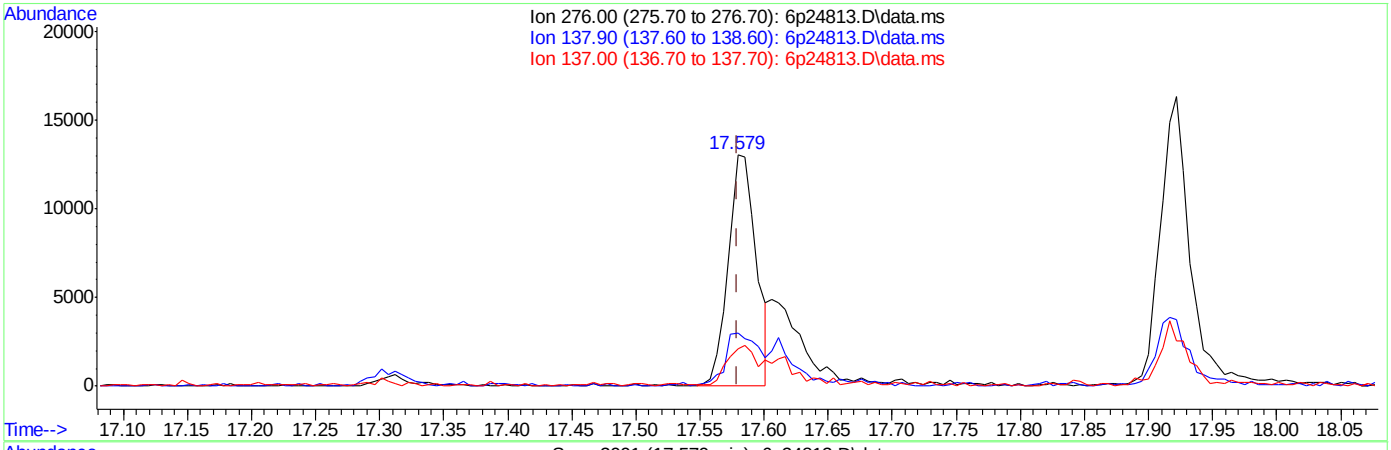
Ion	Exp%	Act%
276.00	100	100
137.90	20.00	22.18
137.00	16.80	14.46
0.00	0.00	0.00

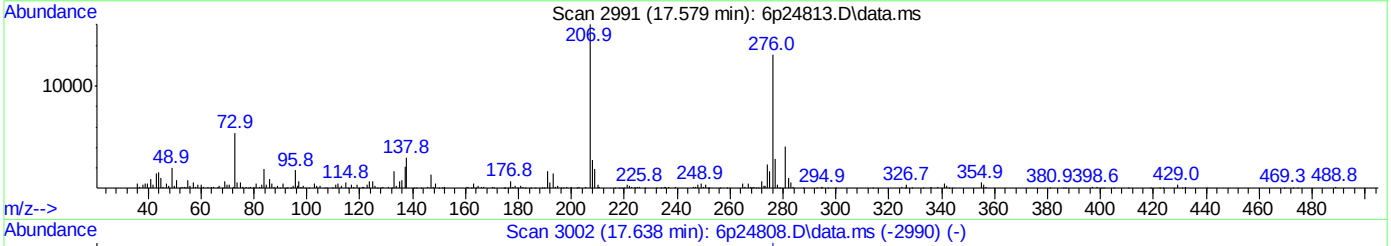
SGS ACCUTEST JC19914

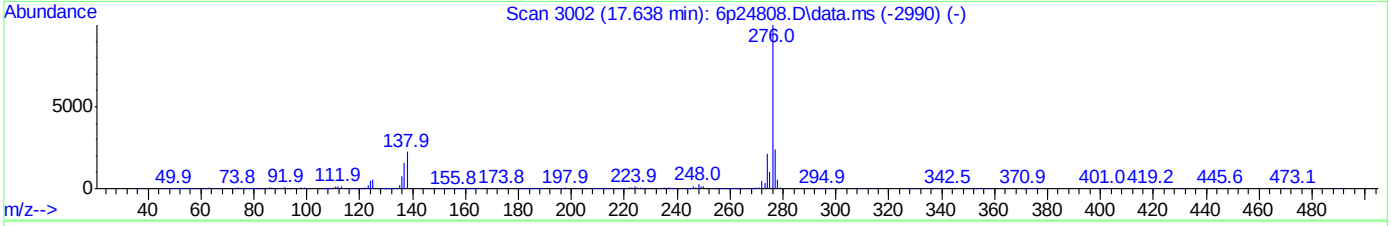
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24813.D
Acq On : 5 Apr 2016 5:14 pm
Operator : sarad
Sample : ic1155-1
Misc : op92208,e6p1155
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 05 18:32:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:32:08 2016
Response via : Initial Calibration







TIC: 6p24813.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.579min (+0.000) 0.84ppm m

response 19596

Ion	Exp%	Act%
276.00	100	100
137.90	20.00	22.71
137.00	16.80	16.08
0.00	0.00	0.00

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/06/16 16:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 19:54:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	250424	40.00	ppm	0.00
24) Naphthalene-d8	5.764	136	1023604	40.00	ppm	0.00
47) Acenaphthene-d10	7.823	164	602552	40.00	ppm	0.00
69) Phenanthrene-d10	9.990	188	1035631	40.00	ppm	0.01
83) Chrysene-d12	14.162	240	1049500	40.00	ppm	0.02
92) Perylene-d12	16.264	264	1010541	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4a	4.673	152	250424	40.00	ppm	0.00
104) Acenaphthene-d10a	7.823	164	602552	40.00	ppm	0.00
106) Phenanthrene-d10a	9.990	188	1035631	40.00	ppm	0.01
110) Chrysene-d12a	14.162	240	1049500	40.00	ppm	0.02
112) Naphthalene-d8a	5.764	136	1023604	40.00	ppm	0.00
114) Chrysene-d12b	14.162	240	1049500	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	836221	92.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	184.10%	
8) Phenol-d5	4.416	99	1076951	90.76	ppm	0.01
Spiked Amount 50.000			Recovery	=	181.52%	
25) Nitrobenzene-d5	5.117	82	1063947	92.85	ppm	0.00
Spiked Amount 50.000			Recovery	=	185.70%	
51) 2-Fluorobiphenyl	6.957	172	1730406	85.55	ppm	0.01
Spiked Amount 50.000			Recovery	=	171.10%	
73) 2,4,6-Tribromophenol	8.952	330	247316	110.39	ppm	0.02
Spiked Amount 50.000			Recovery	=	220.78%	
85) Terphenyl-d14	12.541	244	1936383	101.95	ppm	0.01
Spiked Amount 50.000			Recovery	=	203.90%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.234	88	423592	90.36	ppm	94
3) Pyridine	2.555	79	1079454	93.68	ppm	95
4) N-Nitrosodimethylamine	2.523	74	648531	87.49	ppm	82
6) Indene	4.876	116	1289468	77.99	ppm	97
7) Cumene	4.085	105	2151607	85.10	ppm	96
9) Phenol	4.427	94	1171156	84.59	ppm	73
10) Aniline	4.432	93	1069963	66.34	ppm	82
11) bis(2-Chloroethyl)ether	4.481	93	877059	87.29	ppm	98
12) 2-Chlorophenol	4.523	128	858301	87.73	ppm	97
13) Decane	4.555	43	994653	83.42	ppm	89
14) 1,3-Dichlorobenzene	4.636	146	884915	82.93	ppm	97
15) 1,4-Dichlorobenzene	4.689	146	898043	83.55	ppm	93
16) Benzyl alcohol	4.785	108	573497	91.06	ppm	88
17) 1,2-Dichlorobenzene	4.807	146	815562	84.73	ppm	96
18) Acetophenone	4.994	105	1109337	76.67	ppm	97
19) 2-Methylphenol	4.876	108	709671	83.10	ppm	91
20) 2,2'-oxybis(1-Chloropr...	4.887	121	285602	83.55	ppm #	72

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 19:54:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.999	108	740122	80.34	ppm		89
22) n-Nitroso-di-n-propyla...	4.999	70	659453	77.15	ppm		100
23) Hexachloroethane	5.080	201	329532	89.34	ppm		94
26) Nitrobenzene	5.133	77	1085098	90.28	ppm		98
27) Quinoline	6.139	129	1702938	94.18	ppm		90
28) Isophorone	5.342	82	1817562	90.18	ppm		97
29) 2-Nitrophenol	5.411	139	445051	102.07	ppm		83
30) 2,4-Dimethylphenol	5.449	107	912749	114.20	ppm		91
31) Benzoic acid	5.593	105	796497m	178.02	ppm		
32) bis(2-Chloroethoxy)met...	5.529	93	1052121	85.83	ppm		94
33) 2,4-Dichlorophenol	5.630	162	684557	91.98	ppm		92
34) 2,6-Dichlorophenol	5.850	162	655071	86.77	ppm		94
35) 1,3,5-Trichlorobenzene	5.422	180	753978	80.58	ppm		97
36) 1,2,4-Trichlorobenzene	5.711	180	755898	84.50	ppm		92
37) 1,2,3-Trichlorobenzene	5.930	180	731358	85.80	ppm		97
38) Naphthalene	5.786	128	2429586	83.79	ppm		98
39) 4-Chloroaniline	5.839	127	940733	82.32	ppm		97
40) 2,3-Dichloroaniline	6.850	161	807956	88.84	ppm		94
41) Caprolactam	6.235	55	457168	102.67	ppm		94
42) Hexachlorobutadiene	5.914	225	427418	84.63	ppm		94
43) 4-Chloro-3-methylphenol	6.363	107	846270	98.08	ppm		83
44) 2-Methylnaphthalene	6.518	141	1326395	86.89	ppm		97
45) 1-Methylnaphthalene	6.631	141	1373726	85.83	ppm		96
46) Dimethylnaphthalene	7.278	156	1527130	87.55	ppm		98
48) Hexachlorocyclopentadiene	6.711	237	967885	223.30	ppm		90
49) 2,4,6-Trichlorophenol	6.855	196	484978	96.33	ppm		88
50) 2,4,5-Trichlorophenol	6.903	196	537316	102.47	ppm		95
52) 2-Chloronaphthalene	7.101	162	1516008	84.85	ppm		97
53) Biphenyl	7.080	154	2048955	84.10	ppm		98
54) 2-Nitroaniline	7.240	65	625954	104.62	ppm		89
55) Dimethylphthalate	7.492	163	1821779	89.30	ppm		100
56) Acenaphthylene	7.636	152	2424554	91.11	ppm		93
57) 2,6-Dinitrotoluene	7.561	165	408324	121.30	ppm		90
58) 3-Nitroaniline	7.786	138	476693	111.31	ppm	#	51
59) Acenaphthene	7.872	153	1591670	86.31	ppm		97
60) 2,4-Dinitrophenol	7.930	184	501812	579.31	ppm	#	63
61) 4-Nitrophenol	8.053	109	315418	126.64	ppm	#	86
62) Dibenzofuran	8.112	168	2041417	80.07	ppm		96
63) 2,4-Dinitrotoluene	8.112	165	522827	119.81	ppm		98
64) 2,3,4,6-Tetrachlorophenol	8.299	232	469192	103.93	ppm		97
65) Diethylphthalate	8.492	149	1793269	95.51	ppm		98
66) Fluorene	8.599	166	1795302	89.24	ppm		91
67) 4-Chlorophenyl-phenyle...	8.620	204	907406	82.66	ppm		90
68) 4-Nitroaniline	8.663	138	482087	114.69	ppm		92
70) 4,6-Dinitro-2-methylph...	8.701	198	371727	243.22	ppm		83
71) n-Nitrosodiphenylamine	8.802	169	1333012	94.95	ppm		90
72) 1,2-Diphenylhydrazine	8.850	77	2168481	96.37	ppm		94
74) 4-Bromophenyl-phenylether	9.342	248	520745	93.98	ppm		93
75) Hexachlorobenzene	9.423	284	523938	92.32	ppm		90
76) Pentachlorophenol	9.728	266	727390	232.17	ppm		90

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 19:54:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
77) Phenanthrene	10.032	178	2703181	85.84	ppm		97
78) Anthracene	10.107	178	2729889	92.15	ppm		97
79) Carbazole	10.380	167	2433343	93.70	ppm		98
80) Di-n-butylphthalate	11.011	149	3003020	103.83	ppm		96
81) Fluoranthene	11.883	202	3083289	95.99	ppm		98
82) Octadecane	9.958	57	1326519	96.76	ppm		94
84) Pyrene	12.231	202	3204640	100.36	ppm		94
86) Butylbenzylphthalate	13.381	149	1363108	116.18	ppm		93
87) Butyl stearate	13.557	56	930323	121.45	ppm		88
88) Benzo[a]anthracene	14.146	228	2840500	91.75	ppm		97
89) 3,3'-Dichlorobenzidine	14.156	252	989353	111.35	ppm	#	79
90) Chrysene	14.210	228	2868158	95.75	ppm		96
91) bis(2-Ethylhexyl)phtha...	14.343	149	1870622	121.45	ppm		96
93) Di-n-octylphthalate	15.328	149	3258623	121.69	ppm		99
94) Benzo[b]fluoranthene	15.761	252	2911867	102.79	ppm		97
95) Benzo[k]fluoranthene	15.804	252	2715395m	99.32	ppm		
96) Benzo[a]pyrene	16.194	252	2592704	106.81	ppm		91
97) Indeno[1,2,3-cd]pyrene	17.617	276	2687952	127.98	ppm		93
98) Dibenz(a,h)acridine	17.333	279	2328381	112.89	ppm		91
99) Dibenz[a,h]anthracene	17.649	278	2655494	106.30	ppm		97
100) 7,12-Dimethylbenz(a)an...	15.766	256	1262365	125.89	ppm		96
101) Benzo[g,h,i]perylene	17.970	276	2657625	100.14	ppm		94

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

7.6.42

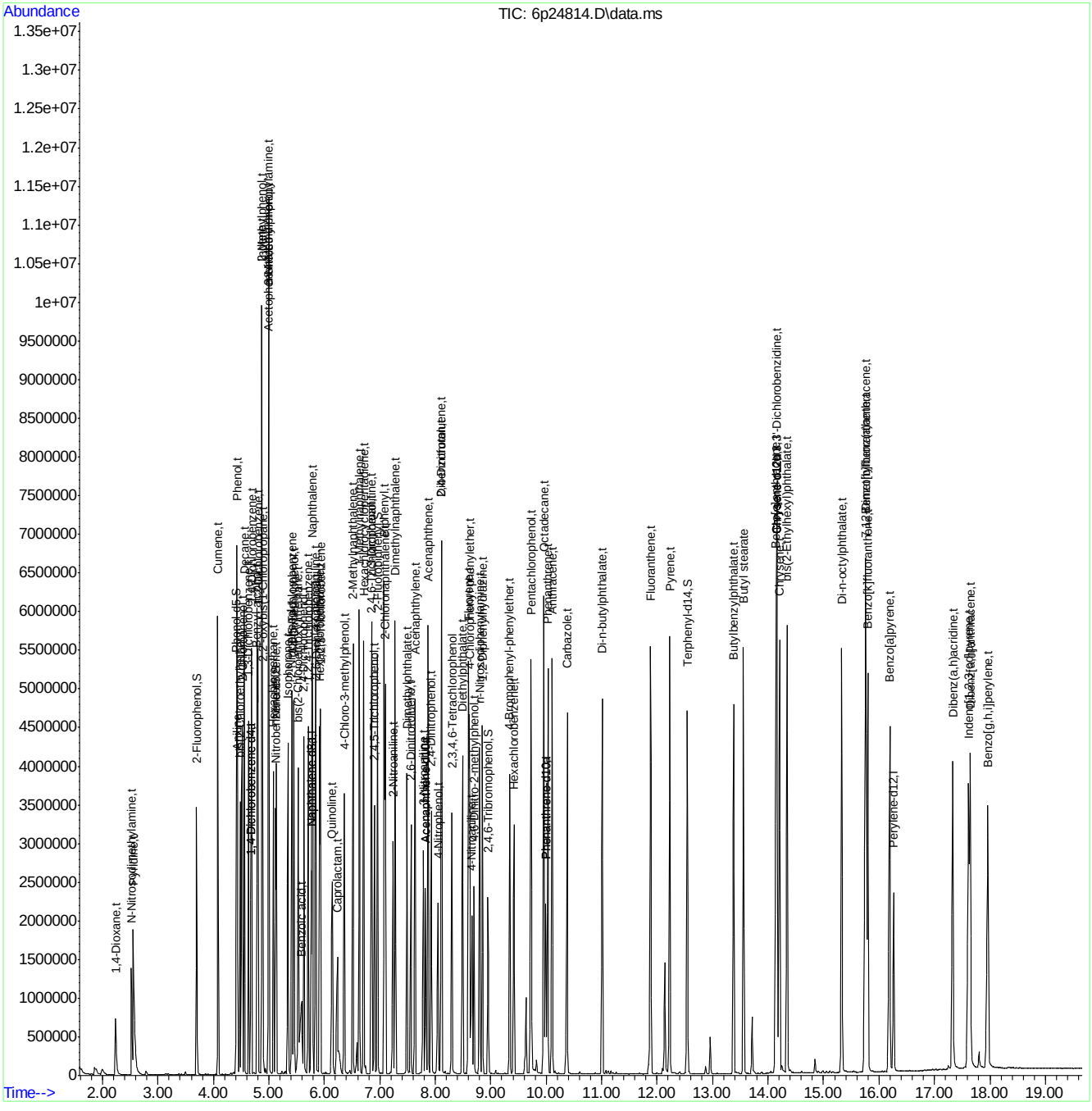
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 19:54:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

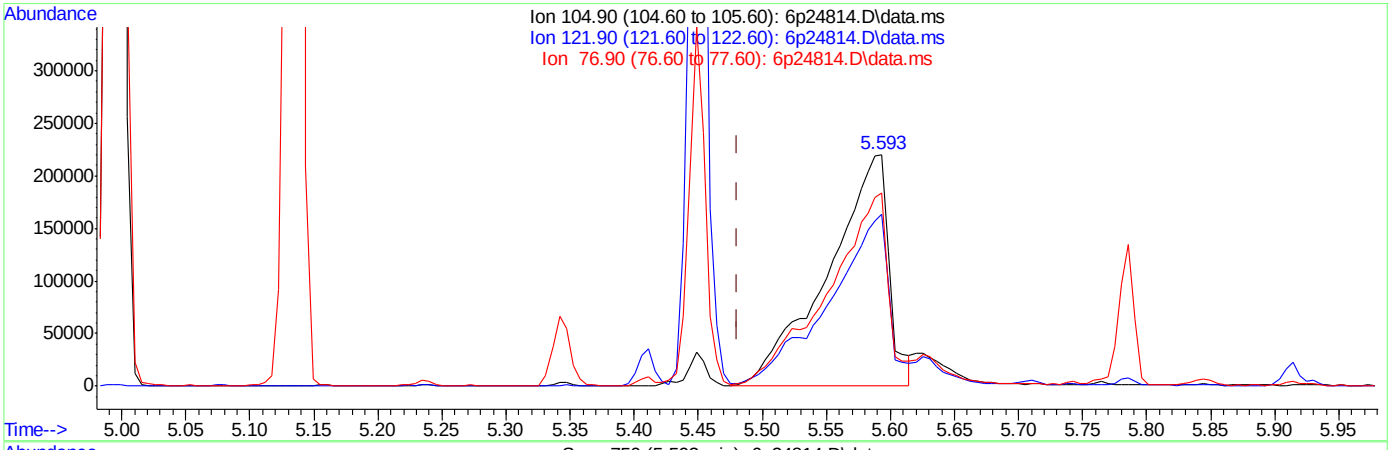
Sample Number:	E6P1155-IC1155	**Method:**	SW846 8270D
Lab FileID:	6P24814.D	**Analyst approved:**	04/06/16 09:50 Ashley Dye
Injection Time:	04/05/16 17:41	**Supervisor approved:**	04/06/16 16:06 Kristi Schollenberger

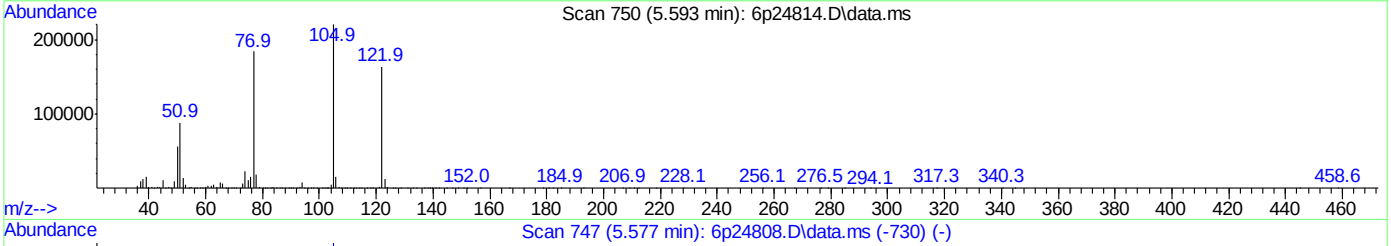
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.59	Split peak
Benzo(k)fluoranthene	207-08-9		15.80	Overlapping peak

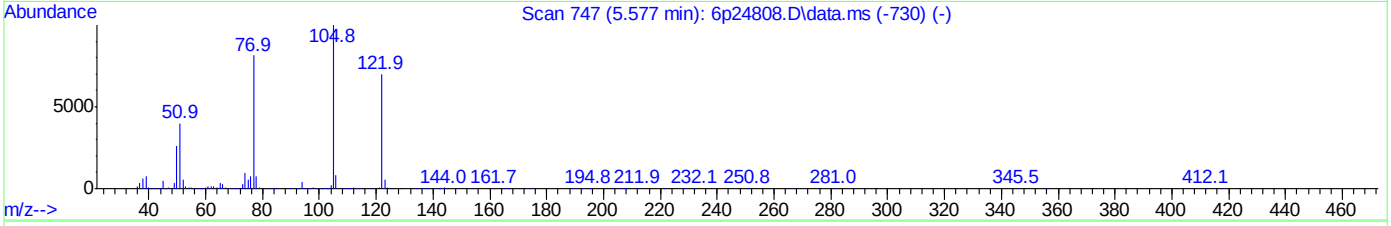
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 18:33:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration







TIC: 6p24814.D\data.ms

(31) Benzoic acid (t)

5.593min (+0.112) 162.37ppm

response 726508

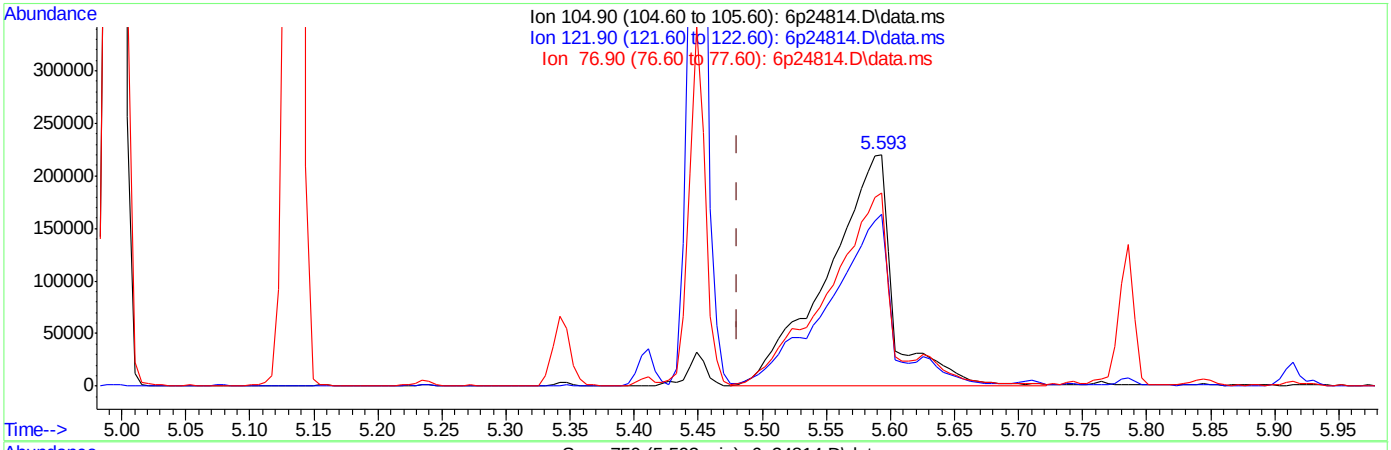
Ion	Exp%	Act%
104.90	100	100
121.90	59.90	73.36
76.90	76.20	83.45
0.00	0.00	0.00

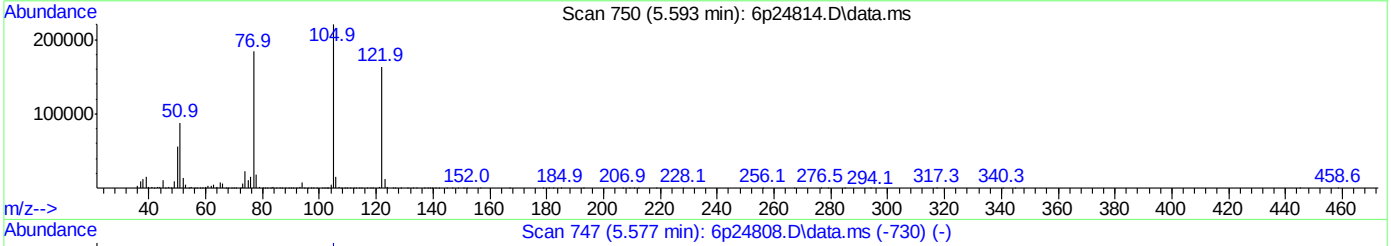
SGS ACCUTEST JC19914

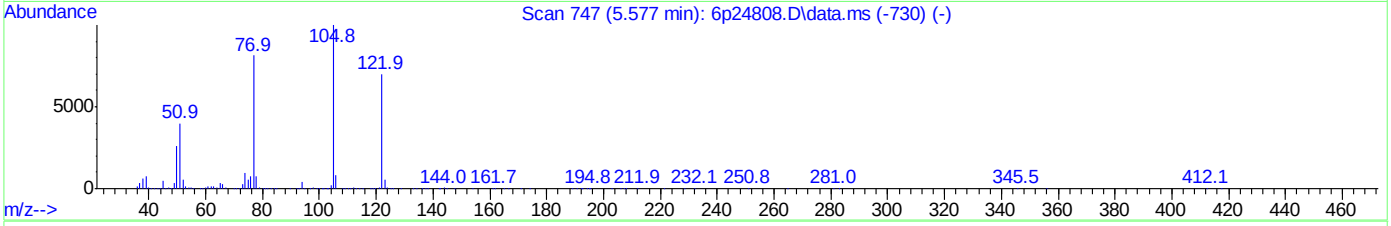
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 18:33:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration







TIC: 6p24814.D\data.ms

(31) Benzoic acid (t)

5.593min (+0.112) 178.02ppm m

response 796497

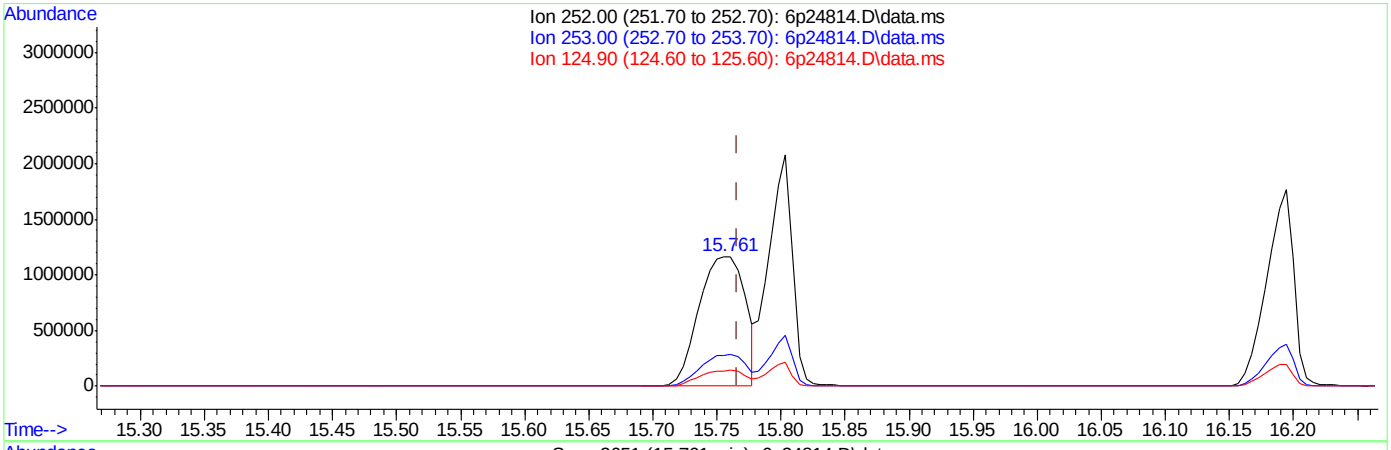
Ion	Exp%	Act%
104.90	100	100
121.90	59.90	74.04
76.90	76.20	83.57
0.00	0.00	0.00

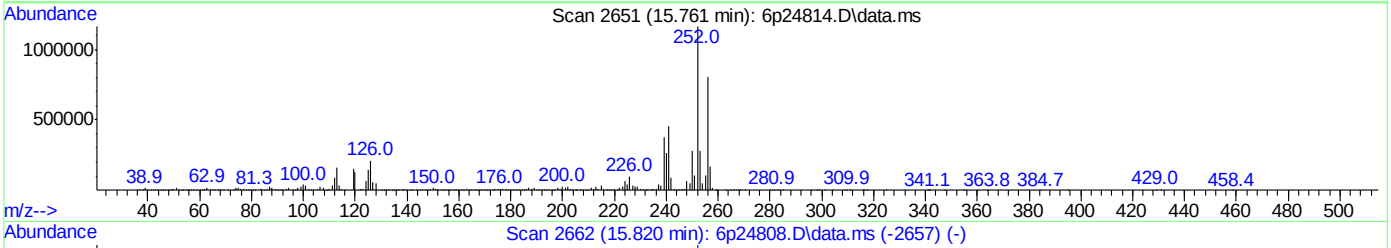
SGS ACCUTEST JC19914

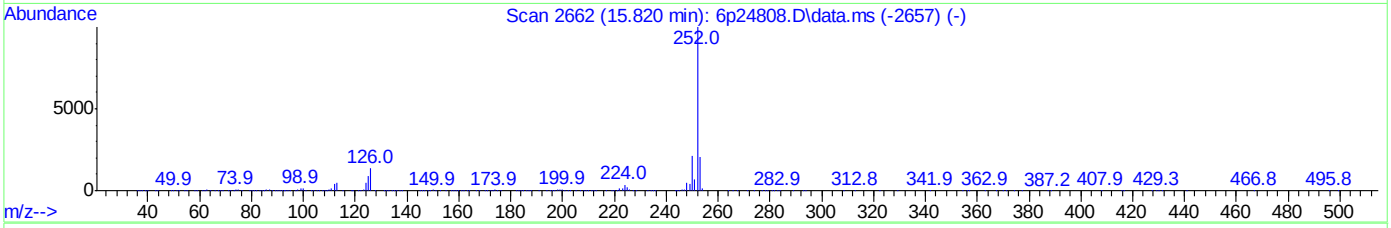
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 18:33:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration







TIC: 6p24814.D\data.ms

(95) Benzo[k]fluoranthene (t)

15.761min (-0.005) 106.51ppm

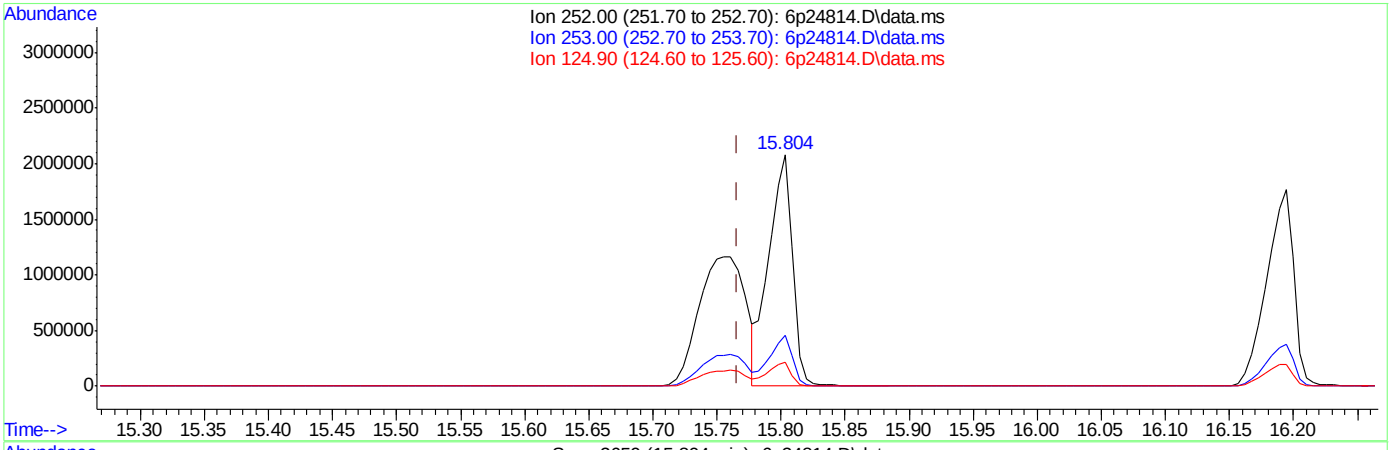
response 2911867

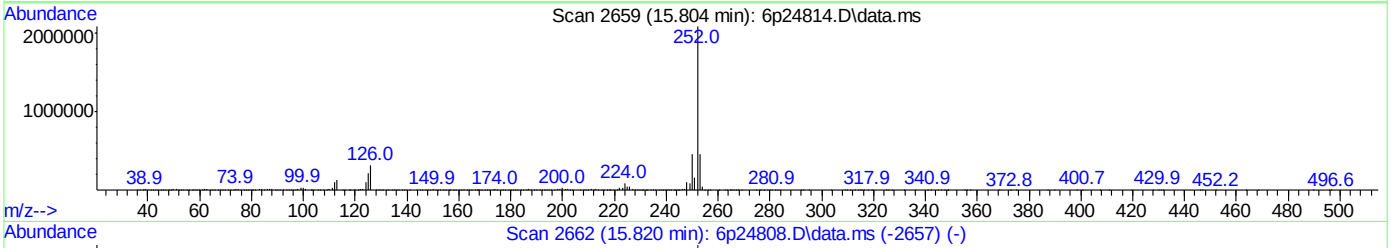
Ion	Exp%	Act%
252.00	100	100
253.00	26.50	24.56
124.90	10.50	13.18
0.00	0.00	0.00

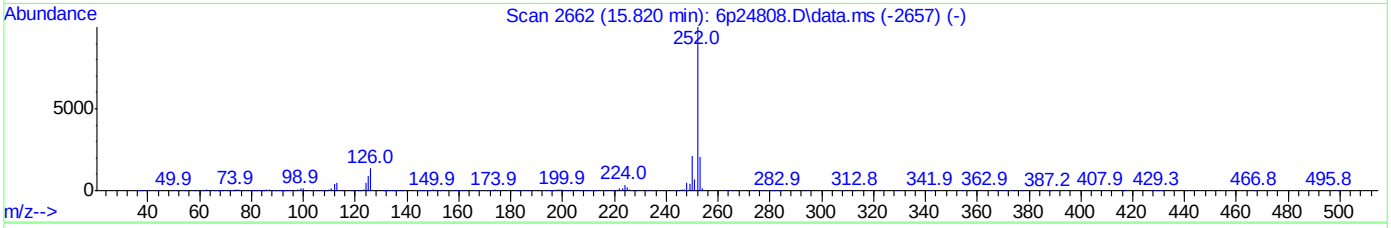
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24814.D
Acq On : 5 Apr 2016 5:41 pm
Operator : sarad
Sample : ic1155-100
Misc : op92208,e6p1155
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 05 18:33:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:32:08 2016
QLast Update : Tue Apr 05 18:33:31 2016
Response via : Initial Calibration







TIC: 6p24814.D\data.ms

(95) Benzo[k]fluoranthene (t)

15.804min (+0.037) 99.32ppm m

response 2715395

Ion	Exp%	Act%
252.00	100	100
253.00	26.50	21.73
124.90	10.50	10.18
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24815.D
Acq On : 5 Apr 2016 6:09 pm
Operator : sarad
Sample : ic1155-80
Misc : op92208,e6p1155
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 05 18:35:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:34:49 2016
QLast Update : Tue Apr 05 18:34:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	274588	40.00	ppm	0.00
24) Naphthalene-d8	5.764	136	1133601	40.00	ppm	0.00
47) Acenaphthene-d10	7.823	164	663369	40.00	ppm	0.00
69) Phenanthrene-d10	9.990	188	1148896	40.00	ppm	0.00
83) Chrysene-d12	14.162	240	1154347	40.00	ppm	0.00
92) Perylene-d12	16.258	264	1116735	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	274588	40.00	ppm	0.00
104) Acenaphthene-d10a	7.823	164	663369	40.00	ppm	0.00
106) Phenanthrene-d10a	9.990	188	1148896	40.00	ppm	0.00
110) Chrysene-d12a	14.162	240	1154347	40.00	ppm	0.00
112) Naphthalene-d8a	5.764	136	1133601	40.00	ppm	0.00
114) Chrysene-d12b	14.162	240	1154347	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	763631	78.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	157.50%	
8) Phenol-d5	4.411	99	999841	79.29	ppm	0.00
Spiked Amount 50.000			Recovery	=	158.58%	
25) Nitrobenzene-d5	5.117	82	978058	78.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	157.90%	
51) 2-Fluorobiphenyl	6.957	172	1590835	75.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	150.10%	
73) 2,4,6-Tribromophenol	8.952	330	225764	87.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	175.60%	
85) Terphenyl-d14	12.541	244	1786864	84.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	169.96%	
108) o-Terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.234	88	382446	76.87	ppm	99
3) Pyridine	2.555	79	993764	80.35	ppm	100
4) N-Nitrosodimethylamine	2.523	74	590114	75.76	ppm	99
6) Indene	4.876	116	1206919	71.84	ppm	98
7) Cumene	4.085	105	1992345	75.62	ppm	99
9) Phenol	4.422	94	1086542	75.45	ppm	89
10) Aniline	4.432	93	1005953	64.07	ppm	93
11) bis(2-Chloroethyl)ether	4.481	93	806146	76.41	ppm	98
12) 2-Chlorophenol	4.523	128	789596	76.74	ppm	99
13) Decane	4.555	43	909330	73.62	ppm	99
14) 1,3-Dichlorobenzene	4.636	146	819699	74.29	ppm	100
15) 1,4-Dichlorobenzene	4.689	146	818145	73.45	ppm	99
16) Benzyl alcohol	4.785	108	532742	79.52	ppm	99
17) 1,2-Dichlorobenzene	4.807	146	757267	75.60	ppm	99
18) Acetophenone	4.994	105	1028710	70.31	ppm	97
19) 2-Methylphenol	4.876	108	665153	75.27	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.887	121	263842	74.47	ppm	96

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24815.D
Acq On : 5 Apr 2016 6:09 pm
Operator : sarad
Sample : ic1155-80
Misc : op92208,e6p1155
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 05 18:35:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:34:49 2016
QLast Update : Tue Apr 05 18:34:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.999	108	690944	73.20	ppm	98
22) n-Nitroso-di-n-propyla...	4.999	70	604372	69.80	ppm	100
23) Hexachloroethane	5.080	201	305248	78.26	ppm	97
26) Nitrobenzene	5.133	77	1004803	78.01	ppm	99
27) Quinoline	6.144	129	1565493	79.72	ppm	99
28) Isophorone	5.342	82	1682573	77.93	ppm	99
29) 2-Nitrophenol	5.406	139	415426	85.44	ppm	88
30) 2,4-Dimethylphenol	5.449	107	833906	89.96	ppm	99
31) Benzoic acid	5.588	105	734124	117.58	ppm	96
32) bis(2-Chloroethoxy)met...	5.529	93	967152	74.78	ppm	99
33) 2,4-Dichlorophenol	5.630	162	626657	78.12	ppm	97
34) 2,6-Dichlorophenol	5.850	162	602101	75.34	ppm	98
35) 1,3,5-Trichlorobenzene	5.422	180	697012	71.92	ppm	99
36) 1,2,4-Trichlorobenzene	5.705	180	697681	74.26	ppm	97
37) 1,2,3-Trichlorobenzene	5.930	180	673400	74.88	ppm	98
38) Naphthalene	5.786	128	2237367	73.66	ppm	99
39) 4-Chloroaniline	5.839	127	887220	74.49	ppm	98
40) 2,3-Dichloroaniline	6.845	161	756948	78.06	ppm	98
41) Caprolactam	6.230	55	418305	84.08	ppm	97
42) Hexachlorobutadiene	5.914	225	392671	74.00	ppm	100
43) 4-Chloro-3-methylphenol	6.358	107	774272	81.55	ppm	99
44) 2-Methylnaphthalene	6.513	141	1226870	75.89	ppm	99
45) 1-Methylnaphthalene	6.631	141	1255956	74.37	ppm	99
46) Dimethylnaphthalene	7.278	156	1422403	76.82	ppm	99
48) Hexachlorocyclopentadiene	6.706	237	891259	179.79	ppm	100
49) 2,4,6-Trichlorophenol	6.855	196	448214	81.87	ppm	98
50) 2,4,5-Trichlorophenol	6.903	196	500497	85.99	ppm	98
52) 2-Chloronaphthalene	7.096	162	1406910	75.33	ppm	99
53) Biphenyl	7.080	154	1896122	74.65	ppm	99
54) 2-Nitroaniline	7.235	65	581568	86.95	ppm	96
55) Dimethylphthalate	7.486	163	1670275	77.12	ppm	99
56) Acenaphthylene	7.631	152	2224698	78.25	ppm	99
57) 2,6-Dinitrotoluene	7.556	165	381348	96.08	ppm	97
58) 3-Nitroaniline	7.781	138	435464	89.01	ppm	99
59) Acenaphthene	7.872	153	1472647	76.01	ppm	98
60) 2,4-Dinitrophenol	7.925	184	470847	302.50	ppm	96
61) 4-Nitrophenol	8.048	109	287430	96.27	ppm	94
62) Dibenzofuran	8.112	168	1865182	71.18	ppm	100
63) 2,4-Dinitrotoluene	8.112	165	480730	93.86	ppm	98
64) 2,3,4,6-Tetrachlorophenol	8.294	232	437353	86.86	ppm	97
65) Diethylphthalate	8.487	149	1649102	80.99	ppm	100
66) Fluorene	8.599	166	1648954	77.22	ppm	99
67) 4-Chlorophenyl-phenyle...	8.615	204	834849	73.32	ppm	99
68) 4-Nitroaniline	8.658	138	444990	91.67	ppm	98
70) 4,6-Dinitro-2-methylph...	8.701	198	341158	136.19	ppm	94
71) n-Nitrosodiphenylamine	8.797	169	1235751	80.70	ppm	99
72) 1,2-Diphenylhydrazine	8.850	77	1985493	80.51	ppm	98
74) 4-Bromophenyl-phenylether	9.337	248	474873	78.84	ppm	95
75) Hexachlorobenzene	9.417	284	477907	77.90	ppm	97
76) Pentachlorophenol	9.728	266	673680	183.97	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24815.D
Acq On : 5 Apr 2016 6:09 pm
Operator : sarad
Sample : ic1155-80
Misc : op92208,e6p1155
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 05 18:35:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:34:49 2016
QLast Update : Tue Apr 05 18:34:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.027	178	2473281	74.31 ppm	99
78) Anthracene	10.107	178	2526372	78.94 ppm	99
79) Carbazole	10.375	167	2250887	79.80 ppm	98
80) Di-n-butylphthalate	11.006	149	2766731	85.14 ppm	100
81) Fluoranthene	11.878	202	2816067	80.10 ppm	99
82) Octadecane	9.952	57	1211323	80.52 ppm	99
84) Pyrene	12.225	202	2945857	83.78 ppm	99
86) Butylbenzylphthalate	13.375	149	1247487	91.72 ppm	98
87) Butyl stearate	13.552	56	859487	95.20 ppm	98
88) Benzo[a]anthracene	14.140	228	2623760	79.23 ppm	98
89) 3,3'-Dichlorobenzidine	14.156	252	901331	88.86 ppm	100
90) Chrysene	14.204	228	2622665	80.74 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.338	149	1733765	95.51 ppm	100
93) Di-n-octylphthalate	15.328	149	3010998	94.89 ppm	98
94) Benzo[b]fluoranthene	15.750	252	2655374	84.04 ppm	98
95) Benzo[k]fluoranthene	15.798	252	2475479	82.12 ppm	99
96) Benzo[a]pyrene	16.189	252	2357380	85.93 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.611	276	2423606	95.51 ppm	98
98) Dibenz(a,h)acridine	17.328	279	2127909	89.51 ppm	100
99) Dibenz[a,h]anthracene	17.644	278	2410883	85.53 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.761	256	1156721	96.09 ppm	98
101) Benzo[g,h,i]perylene	17.959	276	2418552	82.43 ppm	99

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

7.6.43

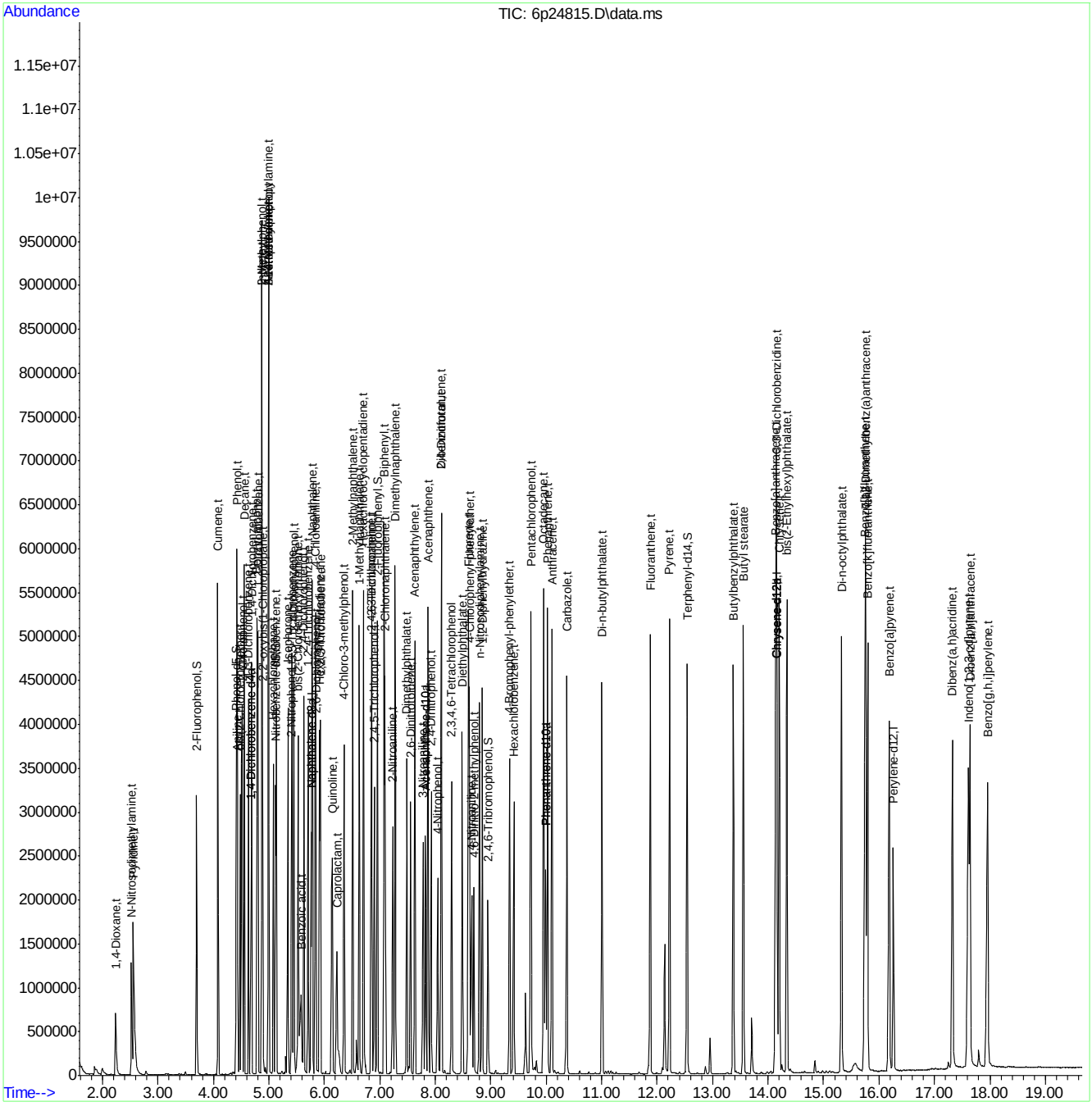
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24815.D
Acq On : 5 Apr 2016 6:09 pm
Operator : sarad
Sample : ic1155-80
Misc : op92208,e6p1155
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 05 18:35:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:34:49 2016
QLast Update : Tue Apr 05 18:34:49 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/06/16 16:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24816.D
Acq On : 5 Apr 2016 6:36 pm
Operator : sarad
Sample : ic1155-25
Misc : op92208,e6p1155
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 19:14:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:35:55 2016
QLast Update : Tue Apr 05 18:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	268180	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1090291	40.00	ppm	0.00
47) Acenaphthene-d10	7.823	164	639792	40.00	ppm	0.00
69) Phenanthrene-d10	9.990	188	1094586	40.00	ppm	0.00
83) Chrysene-d12	14.156	240	1154708	40.00	ppm	0.00
92) Perylene-d12	16.264	264	1067918	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	268180	40.00	ppm	0.00
104) Acenaphthene-d10a	7.823	164	639792	40.00	ppm	0.00
106) Phenanthrene-d10a	9.990	188	1094586	40.00	ppm	0.00
110) Chrysene-d12a	14.156	240	1154708	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1090291	40.00	ppm	0.00
114) Chrysene-d12b	14.156	240	1154708	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	241418	25.59	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.18%	
8) Phenol-d5	4.406	99	321570	26.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	52.34%	
25) Nitrobenzene-d5	5.112	82	300171	25.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.56%	
51) 2-Fluorobiphenyl	6.952	172	512186	25.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.90%	
73) 2,4,6-Tribromophenol	8.947	330	68648	27.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	54.70%	
85) Terphenyl-d14	12.536	244	562828	26.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	52.70%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.239	88	119458	24.83	ppm	99
3) Pyridine	2.560	79	304733	25.20	ppm	98
4) N-Nitrosodimethylamine	2.523	74	185521	24.71	ppm	97
6) Indene	4.876	116	418944	26.20	ppm	97
7) Cumene	4.079	105	649313	25.58	ppm	98
9) Phenol	4.416	94	365036	26.33	ppm	82
10) Aniline	4.427	93	364962	25.05	ppm	99
11) bis(2-Chloroethyl)ether	4.475	93	259809	25.50	ppm	99
12) 2-Chlorophenol	4.518	128	259145	26.05	ppm	97
13) Decane	4.555	43	303384	25.66	ppm	99
14) 1,3-Dichlorobenzene	4.630	146	268207	25.34	ppm	97
15) 1,4-Dichlorobenzene	4.689	146	271311	25.46	ppm	98
16) Benzyl alcohol	4.780	108	170336	26.07	ppm	98
17) 1,2-Dichlorobenzene	4.807	146	250201	25.93	ppm	99
18) Acetophenone	4.989	105	355928	25.69	ppm	98
19) 2-Methylphenol	4.871	108	233353	27.44	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.887	121	88598	26.06	ppm	91

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24816.D
Acq On : 5 Apr 2016 6:36 pm
Operator : sarad
Sample : ic1155-25
Misc : op92208,e6p1155
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 19:14:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:35:55 2016
QLast Update : Tue Apr 05 18:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.989	108	237650	26.34	ppm		99
22) n-Nitroso-di-n-propyla...	4.989	70	209270	25.56	ppm		96
23) Hexachloroethane	5.080	201	95699	25.26	ppm		94
26) Nitrobenzene	5.128	77	323450	26.27	ppm		99
27) Quinoline	6.123	129	481543	25.52	ppm		99
28) Isophorone	5.331	82	531501	25.76	ppm		99
29) 2-Nitrophenol	5.406	139	131733	27.70	ppm		84
30) 2,4-Dimethylphenol	5.443	107	240969	26.21	ppm		98
31) Benzoic acid	5.534	105	194833	29.03	ppm		98
32) bis(2-Chloroethoxy)met...	5.523	93	308463	25.21	ppm		99
33) 2,4-Dichlorophenol	5.625	162	201860	26.32	ppm		99
34) 2,6-Dichlorophenol	5.844	162	197850	26.12	ppm		97
35) 1,3,5-Trichlorobenzene	5.417	180	232708	25.61	ppm		99
36) 1,2,4-Trichlorobenzene	5.705	180	228429	25.74	ppm		98
37) 1,2,3-Trichlorobenzene	5.925	180	219340	25.77	ppm		98
38) Naphthalene	5.780	128	728820	25.45	ppm		100
39) 4-Chloroaniline	5.834	127	303194	26.93	ppm		98
40) 2,3-Dichloroaniline	6.845	161	243029	26.22	ppm		98
41) Caprolactam	6.187	55	126717	26.15	ppm		99
42) Hexachlorobutadiene	5.909	225	125667	25.09	ppm		98
43) 4-Chloro-3-methylphenol	6.347	107	235512	25.67	ppm		99
44) 2-Methylnaphthalene	6.513	141	396301	25.82	ppm		99
45) 1-Methylnaphthalene	6.625	141	412509	25.85	ppm		99
46) Dimethylnaphthalene	7.273	156	463837	26.31	ppm		98
48) Hexachlorocyclopentadiene	6.706	237	270781	54.94	ppm		98
49) 2,4,6-Trichlorophenol	6.850	196	140740	26.50	ppm		98
50) 2,4,5-Trichlorophenol	6.893	196	151896	26.56	ppm		97
52) 2-Chloronaphthalene	7.096	162	460598	25.95	ppm		96
53) Biphenyl	7.075	154	610674	25.35	ppm		99
54) 2-Nitroaniline	7.224	65	171484	26.02	ppm		97
55) Dimethylphthalate	7.481	163	524369	25.33	ppm		99
56) Acenaphthylene	7.625	152	708236	25.97	ppm		100
57) 2,6-Dinitrotoluene	7.551	165	107774	26.81	ppm		97
58) 3-Nitroaniline	7.770	138	132579	27.33	ppm		96
59) Acenaphthene	7.866	153	477671	25.88	ppm		99
60) 2,4-Dinitrophenol	7.914	184	113280	61.72	ppm	#	98
61) 4-Nitrophenol	8.032	109	82067	27.12	ppm		96
62) Dibenzofuran	8.107	168	625256	25.44	ppm		99
63) 2,4-Dinitrotoluene	8.102	165	152131	29.52	ppm		93
64) 2,3,4,6-Tetrachlorophenol	8.289	232	131162	26.44	ppm		98
65) Diethylphthalate	8.481	149	512595	26.02	ppm		99
66) Fluorene	8.594	166	534716	26.19	ppm		99
67) 4-Chlorophenyl-phenyle...	8.615	204	278369	25.89	ppm		96
68) 4-Nitroaniline	8.636	138	131776	27.16	ppm		99
70) 4,6-Dinitro-2-methylph...	8.685	198	86280	30.75	ppm		97
71) n-Nitrosodiphenylamine	8.791	169	383081	26.20	ppm		97
72) 1,2-Diphenylhydrazine	8.845	77	619131	26.31	ppm		100
74) 4-Bromophenyl-phenylether	9.337	248	150027	26.24	ppm		96
75) Hexachlorobenzene	9.412	284	152295	26.23	ppm		99
76) Pentachlorophenol	9.717	266	203687	56.27	ppm		98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24816.D
Acq On : 5 Apr 2016 6:36 pm
Operator : sarad
Sample : ic1155-25
Misc : op92208,e6p1155
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 19:14:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:35:55 2016
QLast Update : Tue Apr 05 18:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.022	178	788122	25.30 ppm	100
78) Anthracene	10.097	178	799176	26.30 ppm	99
79) Carbazole	10.369	167	700164	26.07 ppm	98
80) Di-n-butylphthalate	11.006	149	861371	27.38 ppm	100
81) Fluoranthene	11.872	202	875647	26.13 ppm	99
82) Octadecane	9.952	57	388002	27.03 ppm	99
84) Pyrene	12.220	202	926652	26.04 ppm	99
86) Butylbenzylphthalate	13.375	149	378864	26.86 ppm	99
87) Butyl stearate	13.552	56	266734	28.20 ppm	99
88) Benzo[a]anthracene	14.140	228	821659	24.86 ppm	99
89) 3,3'-Dichlorobenzidine	14.146	252	280622	26.91 ppm	96
90) Chrysene	14.194	228	829530	25.47 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.343	149	527222	27.69 ppm	99
93) Di-n-octylphthalate	15.322	149	905701	28.52 ppm	98
94) Benzo[b]fluoranthene	15.739	252	819636	26.79 ppm	99
95) Benzo[k]fluoranthene	15.782	252	784805	27.05 ppm	100
96) Benzo[a]pyrene	16.178	252	723616	27.08 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.601	276	672788m	26.44 ppm	
98) Dibenz(a,h)acridine	17.323	279	626225	26.75 ppm	99
99) Dibenz[a,h]anthracene	17.633	278	733302	26.74 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.750	256	354585	29.33 ppm	99
101) Benzo[g,h,i]perylene	17.943	276	725990	25.68 ppm	100

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

7.6.44

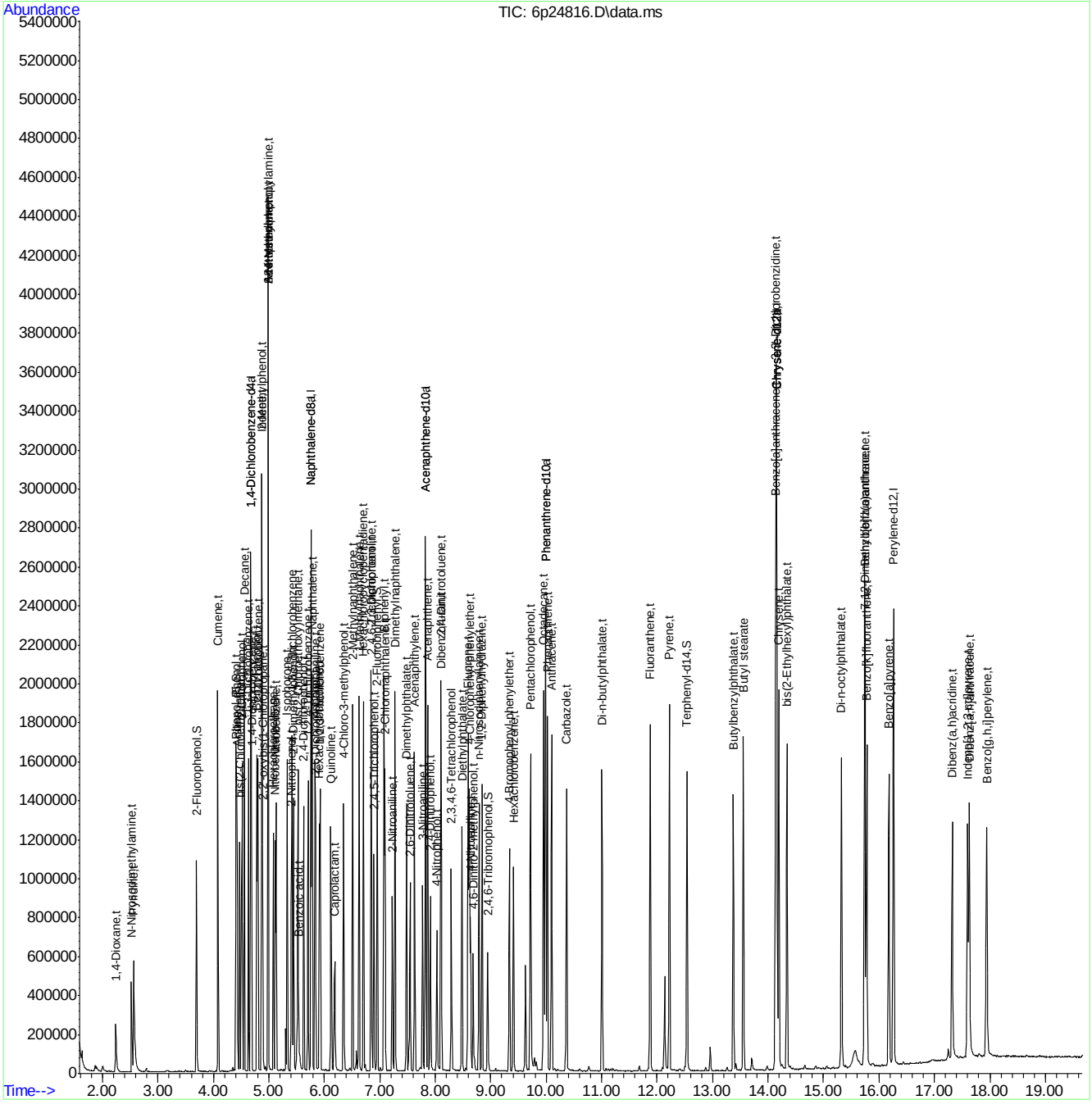
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24816.D
Acq On : 5 Apr 2016 6:36 pm
Operator : sarad
Sample : ic1155-25
Misc : op92208,e6p1155
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 19:14:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:35:55 2016
QLast Update : Tue Apr 05 18:35:55 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

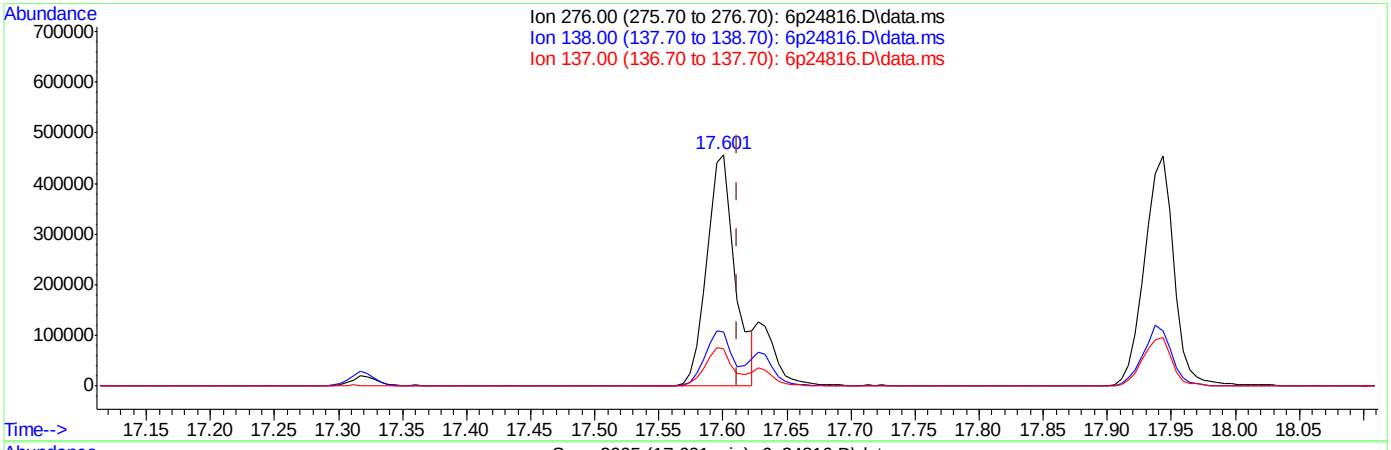
Sample Number:	E6P1155-IC1155	**Method:**	SW846 8270D
Lab FileID:	6P24816.D	**Analyst approved:**	04/06/16 09:50 Ashley Dye
Injection Time:	04/05/16 18:36	**Supervisor approved:**	04/06/16 16:06 Kristi Schollenberger

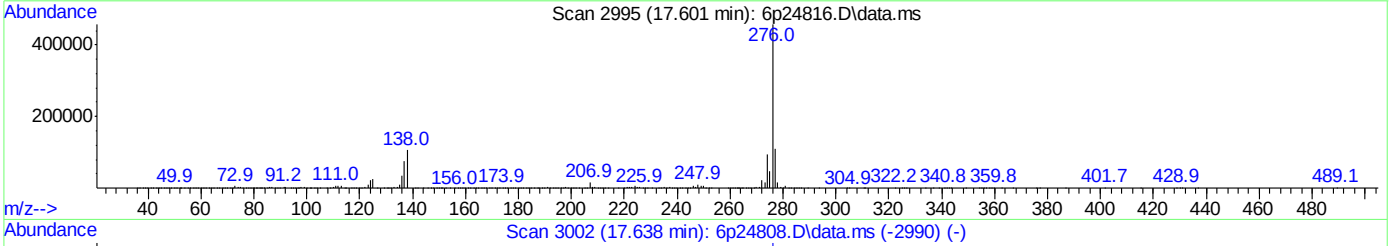
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		17.60	Overlapping peak

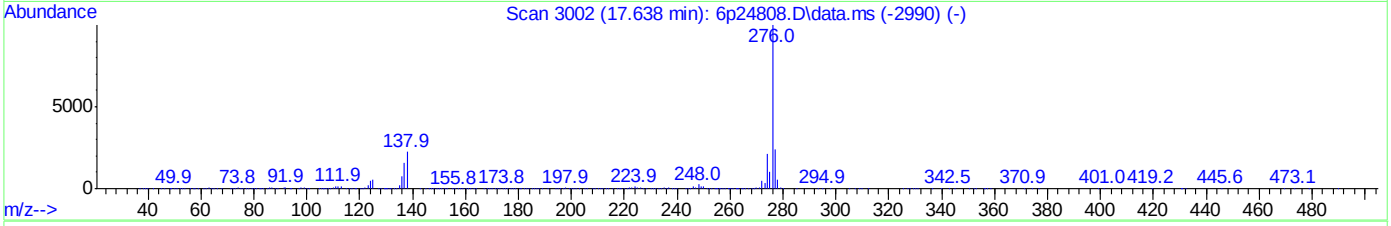
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24816.D
Acq On : 5 Apr 2016 6:36 pm
Operator : sarad
Sample : ic1155-25
Misc : op92208,e6p1155
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 19:13:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:35:55 2016
QLast Update : Tue Apr 05 18:35:55 2016
Response via : Initial Calibration







TIC: 6p24816.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.601min (-0.011) 27.83ppm

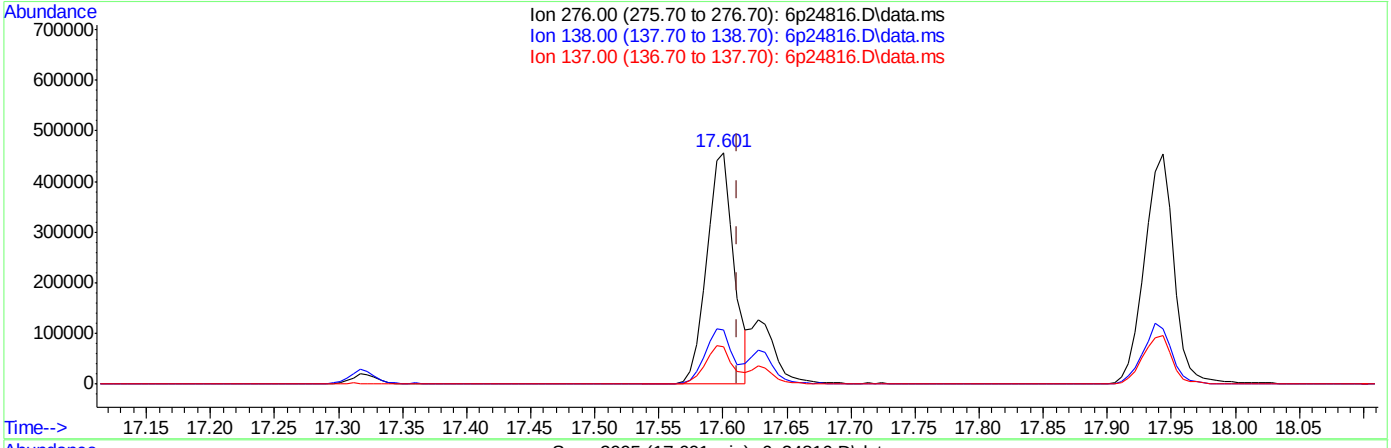
response 707948

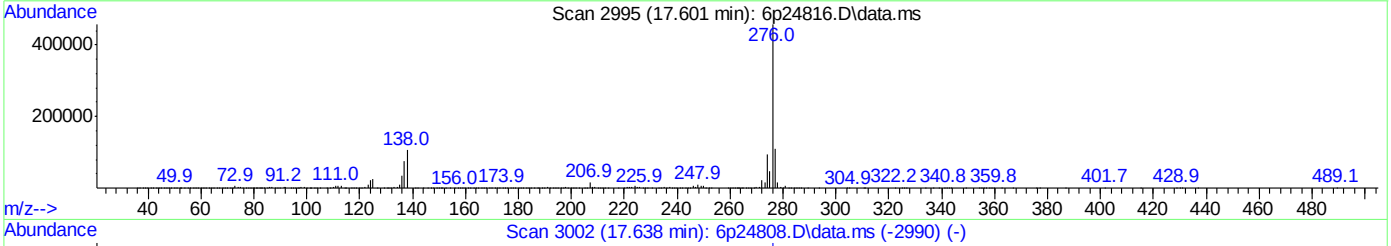
Ion	Exp%	Act%
276.00	100	100
138.00	19.60	19.53
137.00	14.40	14.96
0.00	0.00	0.00

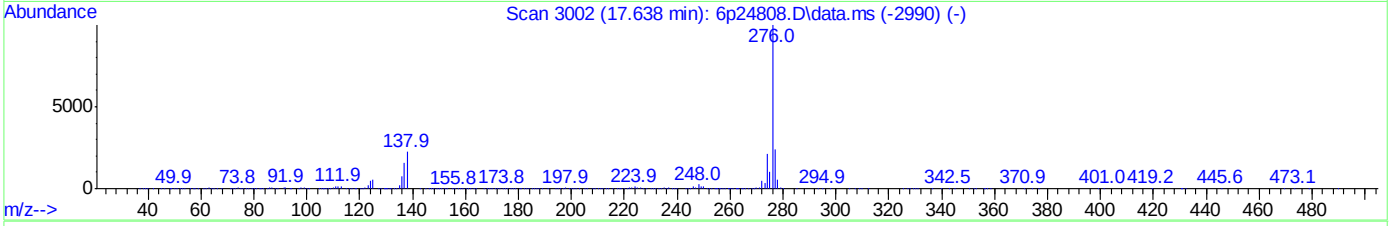
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24816.D
Acq On : 5 Apr 2016 6:36 pm
Operator : sarad
Sample : ic1155-25
Misc : op92208,e6p1155
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 05 19:13:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 18:35:55 2016
QLast Update : Tue Apr 05 18:35:55 2016
Response via : Initial Calibration







TIC: 6p24816.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.601min (-0.011) 26.44ppm m

response 672788

Ion	Exp%	Act%
276.00	100	100
138.00	19.60	23.17
137.00	14.40	16.25
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24817.D
Acq On : 5 Apr 2016 7:04 pm
Operator : sarad
Sample : ic1155-10
Misc : op92208,e6p1155
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 05 19:28:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:14:19 2016
QLast Update : Tue Apr 05 19:14:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	269986	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1075899	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	625731	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	1080327	40.00	ppm	0.00
83) Chrysene-d12	14.146	240	1161024	40.00	ppm	-0.01
92) Perylene-d12	16.253	264	1054625	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.673	152	269986	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	625731	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	1080327	40.00	ppm	0.00
110) Chrysene-d12a	14.146	240	1161024	40.00	ppm	-0.01
112) Naphthalene-d8a	5.759	136	1075899	40.00	ppm	0.00
114) Chrysene-d12b	14.146	240	1161024	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	96182	10.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.16%	
8) Phenol-d5	4.400	99	128059	10.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.52%	
25) Nitrobenzene-d5	5.112	82	120269	10.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.48%	
51) 2-Fluorobiphenyl	6.952	172	208546	10.56	ppm	0.00
Spiked Amount 50.000			Recovery	=	21.12%	
73) 2,4,6-Tribromophenol	8.936	330	24603	9.75	ppm	-0.01
Spiked Amount 50.000			Recovery	=	19.50%	
85) Terphenyl-d14	12.530	244	219130	10.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.18%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.239	88	48179	9.96	ppm	98
3) Pyridine	2.566	79	123332	10.11	ppm	96
4) N-Nitrosodimethylamine	2.523	74	72561	9.62	ppm	96
6) Indene	4.871	116	176086	10.84	ppm	98
7) Cumene	4.079	105	265471	10.34	ppm	99
9) Phenol	4.411	94	146627	10.39	ppm	96
10) Aniline	4.427	93	157458	10.73	ppm	98
11) bis(2-Chloroethyl)ether	4.470	93	104718	10.17	ppm	97
12) 2-Chlorophenol	4.518	128	103804	10.28	ppm	98
13) Decane	4.555	43	124102	10.37	ppm	99
14) 1,3-Dichlorobenzene	4.630	146	109007	10.20	ppm	98
15) 1,4-Dichlorobenzene	4.684	146	112923	10.49	ppm	98
16) Benzyl alcohol	4.780	108	67833	10.23	ppm	93
17) 1,2-Dichlorobenzene	4.807	146	104290	10.66	ppm	99
18) Acetophenone	4.983	105	148779	10.61	ppm	100
19) 2-Methylphenol	4.866	108	93483	10.71	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.882	121	36472	10.57	ppm #	86

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24817.D
Acq On : 5 Apr 2016 7:04 pm
Operator : sarad
Sample : ic1155-10
Misc : op92208,e6p1155
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 05 19:28:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:14:19 2016
QLast Update : Tue Apr 05 19:14:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.989	108	99029	10.79	ppm	99
22) n-Nitroso-di-n-propyla...	4.983	70	87989	10.63	ppm	99
23) Hexachloroethane	5.080	201	39281	10.28	ppm	94
26) Nitrobenzene	5.128	77	126614	10.32	ppm	94
27) Quinoline	6.112	129	191978	10.27	ppm	98
28) Isophorone	5.331	82	214837	10.49	ppm	97
29) 2-Nitrophenol	5.400	139	50499	10.53	ppm	90
30) 2,4-Dimethylphenol	5.438	107	90888	9.92	ppm	99
31) Benzoic acid	5.507	105	65889	9.64	ppm	97
32) bis(2-Chloroethoxy)met...	5.518	93	126288	10.44	ppm	100
33) 2,4-Dichlorophenol	5.625	162	79117	10.34	ppm	96
34) 2,6-Dichlorophenol	5.839	162	77835	10.32	ppm	96
35) 1,3,5-Trichlorobenzene	5.417	180	97042	10.77	ppm	99
36) 1,2,4-Trichlorobenzene	5.705	180	92815	10.54	ppm	97
37) 1,2,3-Trichlorobenzene	5.925	180	91376	10.81	ppm	95
38) Naphthalene	5.780	128	293983	10.37	ppm	99
39) 4-Chloroaniline	5.828	127	125496	11.12	ppm	97
40) 2,3-Dichloroaniline	6.839	161	100465	10.88	ppm	99
41) Caprolactam	6.171	55	48090	9.96	ppm	98
42) Hexachlorobutadiene	5.909	225	53510	10.82	ppm	94
43) 4-Chloro-3-methylphenol	6.342	107	92245	10.13	ppm	98
44) 2-Methylnaphthalene	6.508	141	159928	10.49	ppm	99
45) 1-Methylnaphthalene	6.620	141	167744	10.58	ppm	99
46) Dimethylnaphthalene	7.267	156	185845	10.57	ppm	98
48) Hexachlorocyclopentadiene	6.700	237	104771	21.31	ppm	96
49) 2,4,6-Trichlorophenol	6.845	196	54101	10.29	ppm	99
50) 2,4,5-Trichlorophenol	6.887	196	60510	10.69	ppm	93
52) 2-Chloronaphthalene	7.091	162	183287	10.48	ppm	97
53) Biphenyl	7.069	154	249246	10.55	ppm	98
54) 2-Nitroaniline	7.219	65	63854	9.83	ppm	97
55) Dimethylphthalate	7.476	163	207798	10.24	ppm	99
56) Acenaphthylene	7.620	152	278923	10.38	ppm	99
57) 2,6-Dinitrotoluene	7.540	165	40932	10.26	ppm	95
58) 3-Nitroaniline	7.765	138	51440	10.64	ppm	94
59) Acenaphthene	7.861	153	190283	10.47	ppm	97
60) 2,4-Dinitrophenol	7.909	184	31599	16.81	ppm	98
61) 4-Nitrophenol	8.027	109	29963	9.96	ppm	99
62) Dibenzofuran	8.102	168	252775	10.48	ppm	98
63) 2,4-Dinitrotoluene	8.091	165	56263	10.77	ppm	99
64) 2,3,4,6-Tetrachlorophenol	8.283	232	48992	9.98	ppm	98
65) Diethylphthalate	8.471	149	206278	10.62	ppm	99
66) Fluorene	8.588	166	213919	10.61	ppm	100
67) 4-Chlorophenyl-phenyle...	8.610	204	110147	10.40	ppm	98
68) 4-Nitroaniline	8.626	138	49308	10.21	ppm	99
70) 4,6-Dinitro-2-methylph...	8.674	198	24759	8.55	ppm	91
71) n-Nitrosodiphenylamine	8.781	169	152356	10.46	ppm	100
72) 1,2-Diphenylhydrazine	8.840	77	243219	10.36	ppm	96
74) 4-Bromophenyl-phenylether	9.332	248	58885	10.33	ppm	94
75) Hexachlorobenzene	9.407	284	61045	10.55	ppm	94
76) Pentachlorophenol	9.711	266	74123	20.24	ppm	98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24817.D
Acq On : 5 Apr 2016 7:04 pm
Operator : sarad
Sample : ic1155-10
Misc : op92208,e6p1155
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 05 19:28:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:14:19 2016
QLast Update : Tue Apr 05 19:14:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.016	178	318684	10.34 ppm	100
78) Anthracene	10.091	178	322956	10.66 ppm	98
79) Carbazole	10.359	167	280920	10.51 ppm	99
80) Di-n-butylphthalate	11.001	149	334803	10.58 ppm	98
81) Fluoranthene	11.867	202	346059	10.37 ppm	99
82) Octadecane	9.947	57	153891	10.69 ppm	99
84) Pyrene	12.215	202	369009	10.23 ppm	99
86) Butylbenzylphthalate	13.365	149	140754	9.78 ppm	98
87) Butyl stearate	13.546	56	96912	9.93 ppm	98
88) Benzo[a]anthracene	14.129	228	321029	9.67 ppm	97
89) 3,3'-Dichlorobenzidine	14.140	252	105998	9.96 ppm	95
90) Chrysene	14.183	228	332636	10.12 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.333	149	197161	10.08 ppm	99
93) Di-n-octylphthalate	15.317	149	328124	10.18 ppm	97
94) Benzo[b]fluoranthene	15.729	252	322743	10.53 ppm	98
95) Benzo[k]fluoranthene	15.766	252	311225	10.69 ppm	99
96) Benzo[a]pyrene	16.167	252	280880	10.47 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.585	276	256496	10.09 ppm	94
98) Dibenz(a,h)acridine	17.312	279	238158	10.16 ppm	100
99) Dibenz[a,h]anthracene	17.617	278	283034	10.31 ppm	97
100) 7,12-Dimethylbenz(a)an...	15.734	256	125021	10.12 ppm	97
101) Benzo[g,h,i]perylene	17.927	276	280200	9.98 ppm	98

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

7.6.45

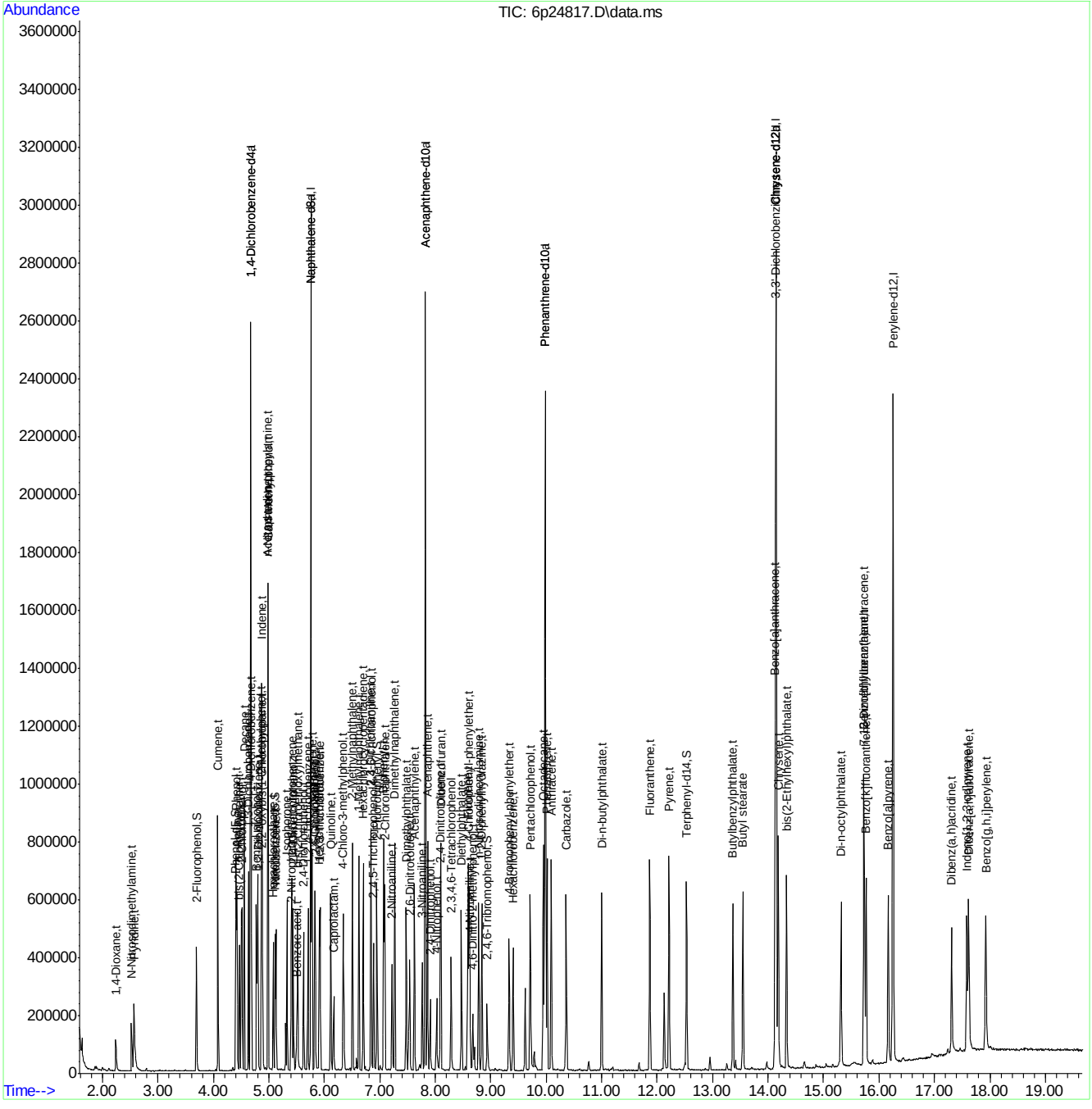
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24817.D
Acq On : 5 Apr 2016 7:04 pm
Operator : sarad
Sample : ic1155-10
Misc : op92208,e6p1155
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 05 19:28:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:14:19 2016
QLast Update : Tue Apr 05 19:14:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24818.D
Acq On : 5 Apr 2016 7:31 pm
Operator : sarad
Sample : ic1155-5
Misc : op92208,e6p1155
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 05 19:53:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:30:46 2016
QLast Update : Tue Apr 05 19:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	293901	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1169923	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	678874	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	1168257	40.00	ppm	0.00
83) Chrysene-d12	14.151	240	1253126	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1109044	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	293901	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	678874	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	1168257	40.00	ppm	0.00
110) Chrysene-d12a	14.151	240	1253126	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1169923	40.00	ppm	0.00
114) Chrysene-d12b	14.151	240	1253126	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	52998	5.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.20%	
8) Phenol-d5	4.400	99	71290	5.22	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.44%	
25) Nitrobenzene-d5	5.112	82	64671	5.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.08%	
51) 2-Fluorobiphenyl	6.946	172	116973	5.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.82%	
73) 2,4,6-Tribromophenol	8.936	330	12867	4.73	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.46%	
85) Terphenyl-d14	12.530	244	120167	5.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.24%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.239	88	26992	5.13	ppm	93
3) Pyridine	2.571	79	67085	5.04	ppm	97
4) N-Nitrosodimethylamine	2.528	74	40943	5.02	ppm	97
6) Indene	4.871	116	100585	5.61	ppm	95
7) Cumene	4.079	105	149808	5.33	ppm	99
9) Phenol	4.411	94	84269	5.45	ppm	96
10) Aniline	4.427	93	93900	5.81	ppm	98
11) bis(2-Chloroethyl)ether	4.470	93	60045	5.34	ppm	98
12) 2-Chlorophenol	4.518	128	58227	5.27	ppm	97
13) Decane	4.555	43	71720	5.47	ppm	98
14) 1,3-Dichlorobenzene	4.630	146	62696	5.37	ppm	99
15) 1,4-Dichlorobenzene	4.684	146	60761	5.14	ppm	98
16) Benzyl alcohol	4.775	108	38232	5.27	ppm	96
17) 1,2-Dichlorobenzene	4.807	146	58487	5.43	ppm	98
18) Acetophenone	4.983	105	84018	5.45	ppm	93
19) 2-Methylphenol	4.866	108	52381	5.45	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.882	121	19990	5.27	ppm #	86

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24818.D
Acq On : 5 Apr 2016 7:31 pm
Operator : sarad
Sample : ic1155-5
Misc : op92208,e6p1155
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 05 19:53:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:30:46 2016
QLast Update : Tue Apr 05 19:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.989	108	54203	5.35	ppm	98
22) n-Nitroso-di-n-propyla...	4.983	70	48701	5.35	ppm	97
23) Hexachloroethane	5.080	201	21219	5.08	ppm	93
26) Nitrobenzene	5.128	77	70579	5.26	ppm	98
27) Quinoline	6.112	129	106850	5.23	ppm	98
28) Isophorone	5.331	82	118366	5.27	ppm	97
29) 2-Nitrophenol	5.400	139	26705	5.08	ppm	87
30) 2,4-Dimethylphenol	5.438	107	48994	4.93	ppm	95
31) Benzoic acid	5.497	105	32635	4.42	ppm	89
32) bis(2-Chloroethoxy)met...	5.518	93	69956	5.28	ppm	97
33) 2,4-Dichlorophenol	5.625	162	43255	5.17	ppm	95
34) 2,6-Dichlorophenol	5.839	162	43748	5.31	ppm	99
35) 1,3,5-Trichlorobenzene	5.416	180	54353	5.48	ppm	100
36) 1,2,4-Trichlorobenzene	5.705	180	52142	5.40	ppm	98
37) 1,2,3-Trichlorobenzene	5.925	180	49577	5.32	ppm	97
38) Naphthalene	5.775	128	166524	5.37	ppm	97
39) 4-Chloroaniline	5.828	127	68997	5.52	ppm	98
40) 2,3-Dichloroaniline	6.839	161	54292	5.33	ppm	97
41) Caprolactam	6.160	55	25356	4.83	ppm	92
42) Hexachlorobutadiene	5.909	225	28985	5.32	ppm	99
43) 4-Chloro-3-methylphenol	6.342	107	49659	5.01	ppm	94
44) 2-Methylnaphthalene	6.508	141	88837	5.32	ppm	98
45) 1-Methylnaphthalene	6.620	141	93882	5.39	ppm	97
46) Dimethylnaphthalene	7.267	156	102953	5.33	ppm	97
48) Hexachlorocyclopentadiene	6.706	237	53436	9.91	ppm	97
49) 2,4,6-Trichlorophenol	6.845	196	30856	5.38	ppm	94
50) 2,4,5-Trichlorophenol	6.887	196	32962	5.30	ppm	95
52) 2-Chloronaphthalene	7.091	162	103966	5.44	ppm	99
53) Biphenyl	7.069	154	140026	5.41	ppm	97
54) 2-Nitroaniline	7.219	65	32487	4.62	ppm	99
55) Dimethylphthalate	7.476	163	116883	5.29	ppm	99
56) Acenaphthylene	7.620	152	154822	5.28	ppm	98
57) 2,6-Dinitrotoluene	7.540	165	21064	4.85	ppm	87
58) 3-Nitroaniline	7.765	138	25710	4.85	ppm	97
59) Acenaphthene	7.861	153	106082	5.34	ppm	98
60) 2,4-Dinitrophenol	7.909	184	13084	6.59	ppm	89
61) 4-Nitrophenol	8.027	109	15416	4.72	ppm	93
62) Dibenzofuran	8.101	168	144051	5.46	ppm	99
63) 2,4-Dinitrotoluene	8.091	165	27879	4.86	ppm	99
64) 2,3,4,6-Tetrachlorophenol	8.283	232	25662	4.82	ppm	92
65) Diethylphthalate	8.471	149	110157	5.17	ppm	98
66) Fluorene	8.588	166	118409	5.36	ppm	95
67) 4-Chlorophenyl-phenyle...	8.610	204	61600	5.33	ppm	99
68) 4-Nitroaniline	8.620	138	25456	4.84	ppm	98
70) 4,6-Dinitro-2-methylph...	8.674	198	11513	3.77	ppm	92
71) n-Nitrosodiphenylamine	8.781	169	84960	5.35	ppm	98
72) 1,2-Diphenylhydrazine	8.840	77	132500	5.19	ppm	97
74) 4-Bromophenyl-phenylether	9.332	248	32615	5.26	ppm	94
75) Hexachlorobenzene	9.407	284	34520	5.47	ppm	97
76) Pentachlorophenol	9.717	266	36808	9.28	ppm	98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24818.D
Acq On : 5 Apr 2016 7:31 pm
Operator : sarad
Sample : ic1155-5
Misc : op92208,e6p1155
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 05 19:53:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:30:46 2016
QLast Update : Tue Apr 05 19:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.016	178	179207	5.35 ppm	97
78) Anthracene	10.091	178	176253	5.32 ppm	99
79) Carbazole	10.359	167	153763	5.27 ppm	98
80) Di-n-butylphthalate	11.000	149	175878	5.09 ppm	100
81) Fluoranthene	11.867	202	185565	5.11 ppm	98
82) Octadecane	9.947	57	81354	5.17 ppm	98
84) Pyrene	12.215	202	206028	5.27 ppm	99
86) Butylbenzylphthalate	13.365	149	70765	4.57 ppm	95
87) Butyl stearate	13.546	56	50379	4.79 ppm	97
88) Benzo[a]anthracene	14.129	228	175786	4.93 ppm	98
89) 3,3'-Dichlorobenzidine	14.140	252	54555	4.75 ppm	93
90) Chrysene	14.183	228	179798	5.06 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.333	149	99309	4.70 ppm	98
93) Di-n-octylphthalate	15.317	149	156883	4.61 ppm	98
94) Benzo[b]fluoranthene	15.729	252	175343	5.39 ppm	98
95) Benzo[k]fluoranthene	15.766	252	168048	5.42 ppm	100
96) Benzo[a]pyrene	16.167	252	145391	5.11 ppm	100
97) Indeno[1,2,3-cd]pyrene	17.585	276	128021	4.78 ppm	90
98) Dibenz(a,h)acridine	17.307	279	116618	4.72 ppm	100
99) Dibenz[a,h]anthracene	17.617	278	147608	5.09 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.734	256	62628	4.81 ppm	99
101) Benzo[g,h,i]perylene	17.922	276	143288	4.86 ppm	93

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

7.6.46

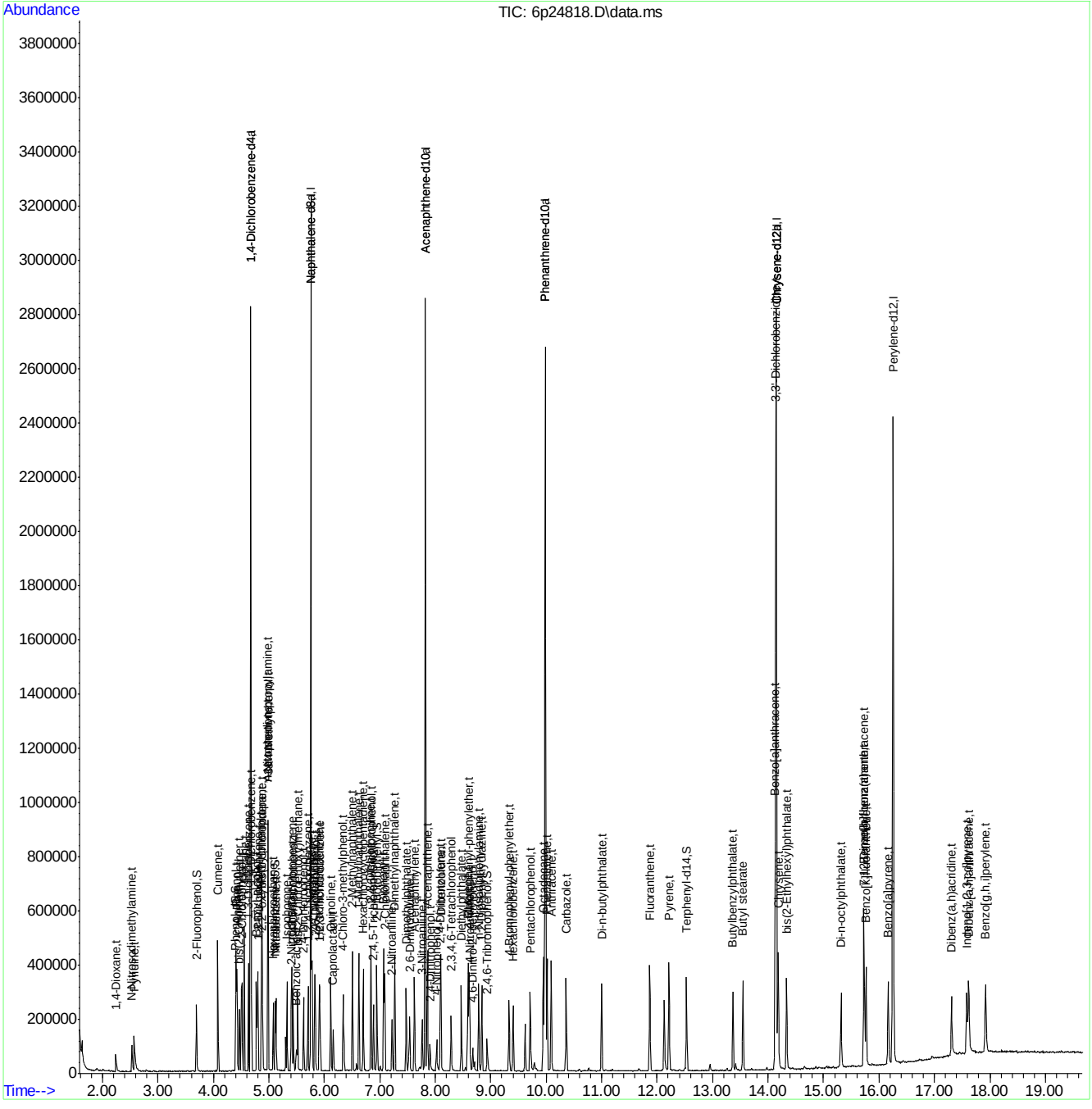
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24818.D
Acq On : 5 Apr 2016 7:31 pm
Operator : sarad
Sample : ic1155-5
Misc : op92208,e6p1155
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 05 19:53:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:30:46 2016
QLast Update : Tue Apr 05 19:30:46 2016
Response via : Initial Calibration



M6P1155.M Tue Apr 05 20:45:59 2016 ACLIMS Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24819a.D
Acq On : 5 Apr 2016 8:15 pm
Operator : sarad
Sample : icc1155-50
Misc : op92208,e6p1155
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 05 20:44:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:53:57 2016
QLast Update : Tue Apr 05 19:53:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	265196	40.00	ppm	0.00
24) Naphthalene-d8	5.764	136	1077189	40.00	ppm	0.00
47) Acenaphthene-d10	7.823	164	614474	40.00	ppm	0.00
69) Phenanthrene-d10	9.990	188	1057811	40.00	ppm	0.00
83) Chrysene-d12	14.161	240	1117116	40.00	ppm	0.01
92) Perylene-d12	16.264	264	1059578	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4a	4.673	152	265196	40.00	ppm	0.00
104) Acenaphthene-d10a	7.823	164	614474	40.00	ppm	0.00
106) Phenanthrene-d10a	9.990	188	1057811	40.00	ppm	0.00
110) Chrysene-d12a	14.161	240	1117116	40.00	ppm	0.01
112) Naphthalene-d8a	5.764	136	1077189	40.00	ppm	0.00
114) Chrysene-d12b	14.161	240	1117116	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.694	112	468575	49.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.58%	
8) Phenol-d5	4.406	99	607238	48.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	97.98%	
25) Nitrobenzene-d5	5.112	82	581222	49.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.34%	
51) 2-Fluorobiphenyl	6.957	172	962050	48.57	ppm	0.01
Spiked Amount 50.000			Recovery	=	97.14%	
73) 2,4,6-Tribromophenol	8.947	330	132928	54.43	ppm	0.01
Spiked Amount 50.000			Recovery	=	108.86%	
85) Terphenyl-d14	12.541	244	1049154	49.98	ppm	0.01
Spiked Amount 50.000			Recovery	=	99.96%	
108) o-Terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.234	88	234862	49.28	ppm	99
3) Pyridine	2.555	79	585092	48.70	ppm	98
4) N-Nitrosodimethylamine	2.518	74	362186	49.18	ppm	99
6) Indene	4.876	116	769633	46.74	ppm	99
7) Cumene	4.079	105	1259820	49.22	ppm	99
9) Phenol	4.416	94	689768	48.83	ppm	93
10) Aniline	4.427	93	647929	43.41	ppm	98
11) bis(2-Chloroethyl)ether	4.475	93	493880	48.22	ppm	98
12) 2-Chlorophenol	4.518	128	493167	49.11	ppm	97
13) Decane	4.555	43	566875	47.30	ppm	99
14) 1,3-Dichlorobenzene	4.630	146	513864	48.28	ppm	99
15) 1,4-Dichlorobenzene	4.684	146	514666	48.07	ppm	99
16) Benzyl alcohol	4.780	108	332797	50.49	ppm	97
17) 1,2-Dichlorobenzene	4.807	146	476233	48.41	ppm	99
18) Acetophenone	4.989	105	650184	46.13	ppm	99
19) 2-Methylphenol	4.871	108	414793	47.21	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.887	121	167374	48.53	ppm	94

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24819a.D
Acq On : 5 Apr 2016 8:15 pm
Operator : sarad
Sample : icc1155-50
Misc : op92208,e6p1155
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 05 20:44:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:53:57 2016
QLast Update : Tue Apr 05 19:53:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.994	108	430190	46.62	ppm		98
22) n-Nitroso-di-n-propyla...	4.994	70	382026	46.03	ppm		96
23) Hexachloroethane	5.080	201	185374	49.04	ppm		94
26) Nitrobenzene	5.128	77	605216	48.64	ppm		98
27) Quinoline	6.128	129	914412	48.31	ppm		98
28) Isophorone	5.336	82	1006385	48.30	ppm		98
29) 2-Nitrophenol	5.406	139	252226	51.97	ppm		88
30) 2,4-Dimethylphenol	5.443	107	483458	52.90	ppm		99
31) Benzoic acid	5.561	105	402750	60.21	ppm		97
32) bis(2-Chloroethoxy)met...	5.523	93	588793	47.88	ppm		99
33) 2,4-Dichlorophenol	5.625	162	382276	49.39	ppm		98
34) 2,6-Dichlorophenol	5.844	162	368508	48.12	ppm		98
35) 1,3,5-Trichlorobenzene	5.416	180	440827	47.60	ppm		99
36) 1,2,4-Trichlorobenzene	5.705	180	431956	48.00	ppm		99
37) 1,2,3-Trichlorobenzene	5.925	180	413093	47.73	ppm		98
38) Naphthalene	5.780	128	1376228	47.67	ppm		99
39) 4-Chloroaniline	5.834	127	551493	47.23	ppm		96
40) 2,3-Dichloroaniline	6.845	161	454566	48.00	ppm		99
41) Caprolactam	6.208	55	239075	49.74	ppm		95
42) Hexachlorobutadiene	5.909	225	242942	47.97	ppm		97
43) 4-Chloro-3-methylphenol	6.352	107	454639	49.77	ppm		99
44) 2-Methylnaphthalene	6.513	141	745663	48.02	ppm		99
45) 1-Methylnaphthalene	6.625	141	771481	47.60	ppm		99
46) Dimethylnaphthalene	7.278	156	853841	47.60	ppm		100
48) Hexachlorocyclopentadiene	6.705	237	539686	110.73	ppm		99
49) 2,4,6-Trichlorophenol	6.855	196	266000	50.72	ppm		97
50) 2,4,5-Trichlorophenol	6.898	196	290828	51.26	ppm		97
52) 2-Chloronaphthalene	7.096	162	850490	48.52	ppm		97
53) Biphenyl	7.075	154	1161201	49.02	ppm		98
54) 2-Nitroaniline	7.230	65	336737	53.50	ppm		98
55) Dimethylphthalate	7.486	163	983692	48.75	ppm		100
56) Acenaphthylene	7.631	152	1325622	49.52	ppm		100
57) 2,6-Dinitrotoluene	7.551	165	219498	56.04	ppm		94
58) 3-Nitroaniline	7.775	138	251127	52.57	ppm		96
59) Acenaphthene	7.871	153	878760	48.38	ppm		98
60) 2,4-Dinitrophenol	7.920	184	253973	148.61	ppm	#	66
61) 4-Nitrophenol	8.037	109	166337	56.77	ppm		99
62) Dibenzofuran	8.112	168	1153903	47.70	ppm		98
63) 2,4-Dinitrotoluene	8.107	165	283540	54.81	ppm		94
64) 2,3,4,6-Tetrachlorophenol	8.294	232	254325	53.06	ppm		97
65) Diethylphthalate	8.487	149	978554	50.53	ppm		98
66) Fluorene	8.599	166	995814	49.29	ppm		98
67) 4-Chlorophenyl-phenyle...	8.615	204	507023	47.98	ppm		96
68) 4-Nitroaniline	8.647	138	253923	53.61	ppm		99
70) 4,6-Dinitro-2-methylph...	8.690	198	182820	68.47	ppm		95
71) n-Nitrosodiphenylamine	8.797	169	724519	49.90	ppm		99
72) 1,2-Diphenylhydrazine	8.850	77	1176176	50.60	ppm		98
74) 4-Bromophenyl-phenylether	9.337	248	282194	49.91	ppm		98
75) Hexachlorobenzene	9.417	284	283390	48.91	ppm		98
76) Pentachlorophenol	9.722	266	391168	110.01	ppm		99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24819a.D
Acq On : 5 Apr 2016 8:15 pm
Operator : sarad
Sample : icc1155-50
Misc : op92208,e6p1155
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 05 20:44:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:53:57 2016
QLast Update : Tue Apr 05 19:53:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.027	178	1466863	47.86 ppm	98
78) Anthracene	10.102	178	1498893	49.51 ppm	99
79) Carbazole	10.375	167	1328040	49.92 ppm	99
80) Di-n-butylphthalate	11.011	149	1621921	51.72 ppm	100
81) Fluoranthene	11.878	202	1664821	50.48 ppm	98
82) Octadecane	9.957	57	730329	50.97 ppm	99
84) Pyrene	12.225	202	1752305	49.90 ppm	99
86) Butylbenzylphthalate	13.381	149	741500	54.41 ppm	96
87) Butyl stearate	13.557	56	506049	54.30 ppm	99
88) Benzo[a]anthracene	14.145	228	1555724	49.07 ppm	99
89) 3,3'-Dichlorobenzidine	14.156	252	530252	52.18 ppm	94
90) Chrysene	14.204	228	1577256	49.69 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.343	149	1023235	54.78 ppm	98
93) Di-n-octylphthalate	15.327	149	1752966	54.56 ppm	100
94) Benzo[b]fluoranthene	15.750	252	1583572	50.41 ppm	99
95) Benzo[k]fluoranthene	15.793	252	1486830	49.63 ppm	99
96) Benzo[a]pyrene	16.189	252	1406798	51.62 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.611	276	1413884	55.63 ppm	95
98) Dibenz(a,h)acridine	17.333	279	1256431	53.64 ppm	100
99) Dibenz[a,h]anthracene	17.643	278	1456015	52.38 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.761	256	688484	55.66 ppm	97
101) Benzo[g,h,i]perylene	17.959	276	1461348	52.05 ppm	99

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

7.6.47

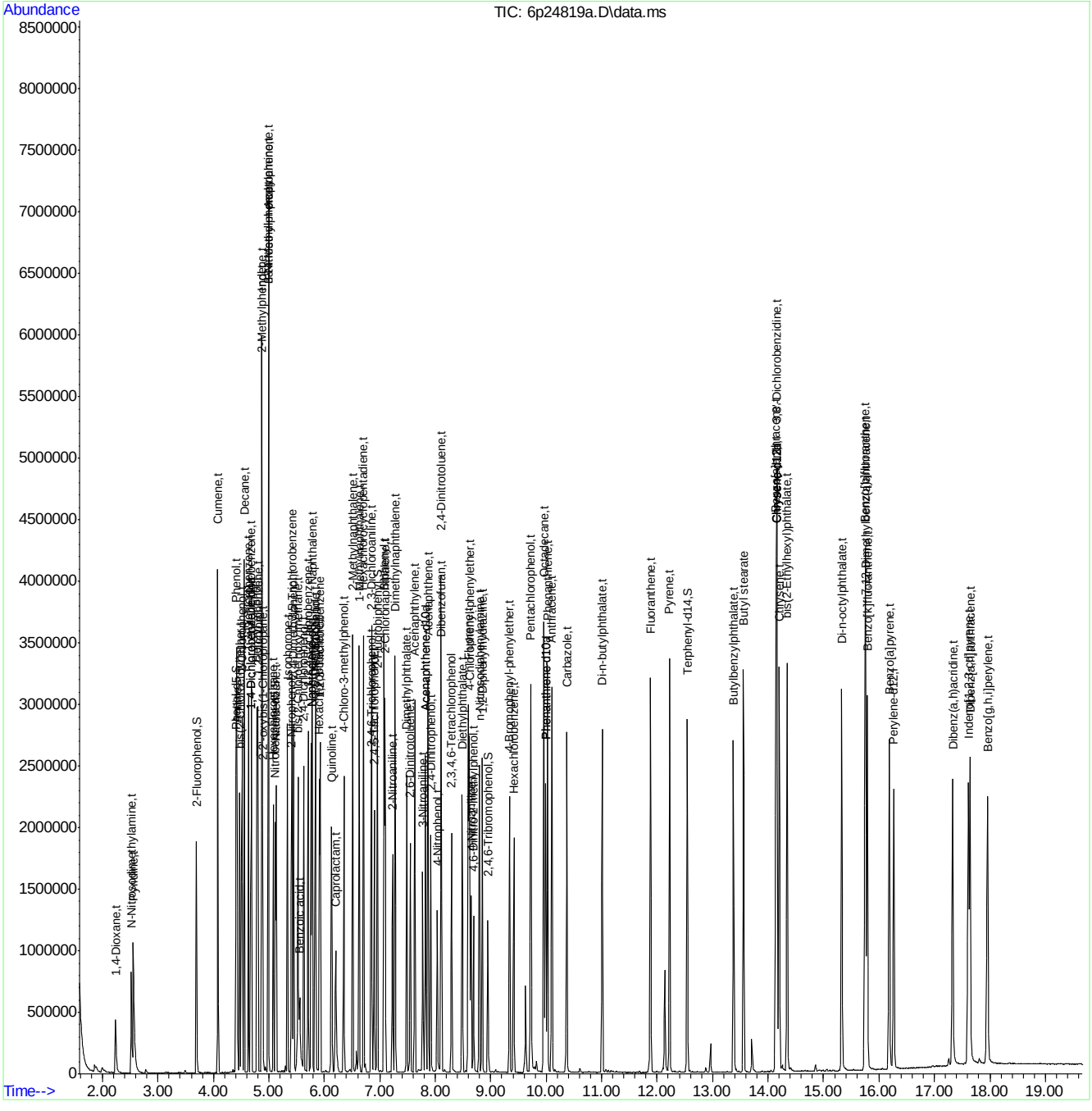
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1155\
Data File : 6p24819a.D
Acq On : 5 Apr 2016 8:15 pm
Operator : sarad
Sample : icc1155-50
Misc : op92208,e6p1155
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 05 20:44:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue Apr 05 19:53:57 2016
QLast Update : Tue Apr 05 19:53:57 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24823.D
Acq On : 5 Apr 2016 9:30 pm
Operator : sarad
Sample : ic1156-100
Misc : op92208,e6p1156
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 08:46:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	249153	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1023612	40.00	ppm	0.00
47) Acenaphthene-d10	7.823	164	518883	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	994813	40.00	ppm	0.00
83) Chrysene-d12	14.151	240	1065203	40.00	ppm	0.00
92) Perylene-d12	16.263	264	1045755	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4a	4.673	152	249153	40.00	ppm	0.00
104) Acenaphthene-d10a	7.823	164	518883	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	994813	40.00	ppm	0.00
110) Chrysene-d12a	14.151	240	1065203	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1023612	40.00	ppm	0.00
114) Chrysene-d12b	14.151	240	1065203	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.637	230	1355016	100.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.08%	
109) 1-Chlorooctadecane	11.846	57	814273	99.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	199.88%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	564013	100.04	ppm	100
105) 1,2,4,5-Tetrachloroben...	6.711	216	722127	100.02	ppm	100
107) Atrazine	9.642	215	271131	100.00	ppm	100
111) benzidine	12.140	184	1023619	100.00	ppm	100
113) Hydroquinone	6.192	110	898771	100.00	ppm	100

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

7.6.48

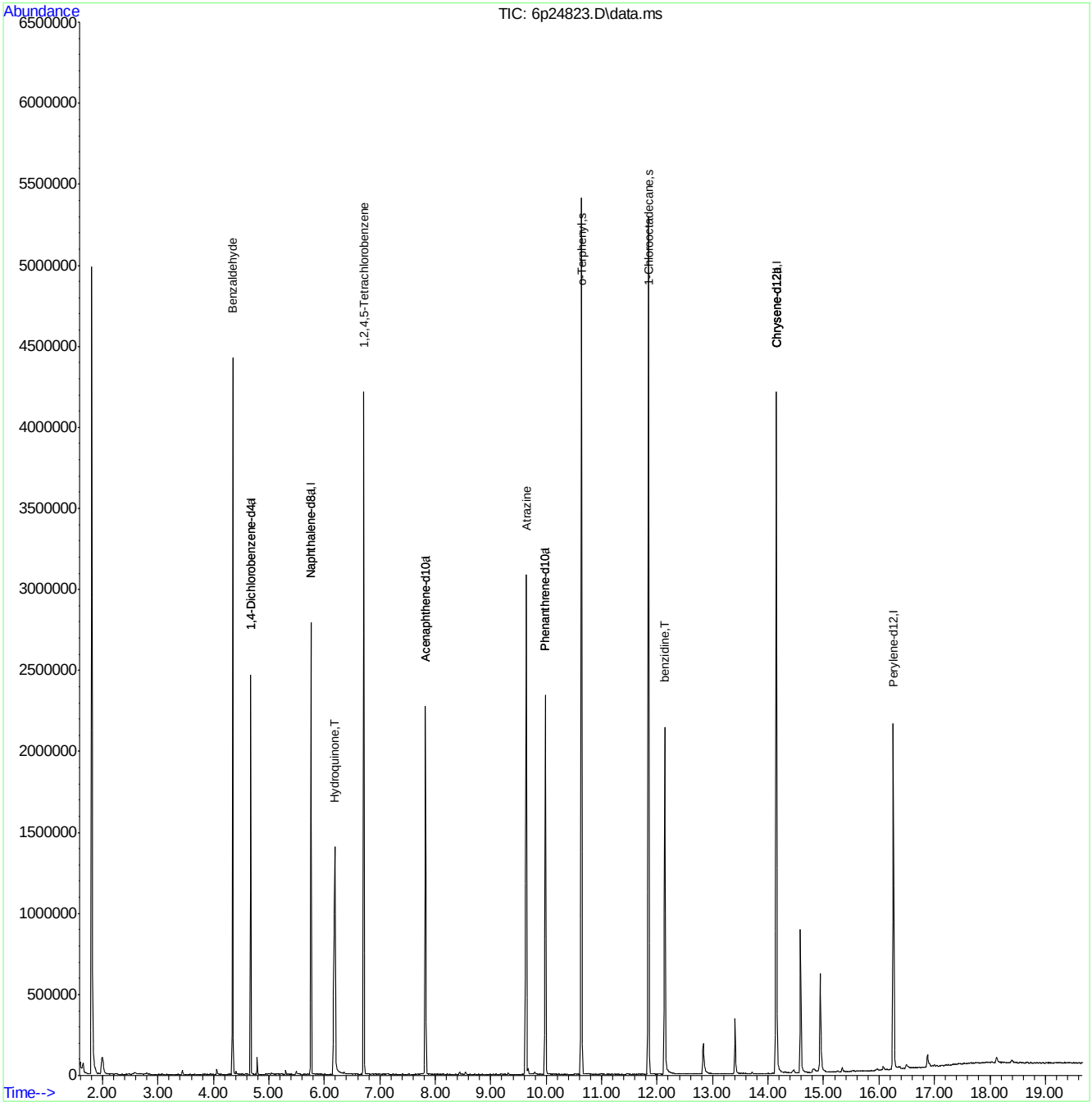
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24823.D
Acq On : 5 Apr 2016 9:30 pm
Operator : sarad
Sample : ic1156-100
Misc : op92208,e6p1156
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 08:46:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24824.D
Acq On : 5 Apr 2016 10:01 pm
Operator : sarad
Sample : ic1156-80
Misc : op92208,e6p1156
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 08:47:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	249978	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1045711	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	533376	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	1030315	40.00	ppm	0.00
83) Chrysene-d12	14.145	240	1116009	40.00	ppm	0.00
92) Perylene-d12	16.258	264	1093239	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	249978	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	533376	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	1030315	40.00	ppm	0.00
110) Chrysene-d12a	14.145	240	1116009	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1045711	40.00	ppm	0.00
114) Chrysene-d12b	14.145	240	1116009	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.637	230	1126512	80.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	160.62%	
109) 1-Chlorooctadecane	11.840	57	694083	82.25	ppm	0.00
Spiked Amount 50.000			Recovery	=	164.50%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	553275	97.81	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.711	216	622238	83.84	ppm	99
107) Atrazine	9.637	215	227081	80.87	ppm	97
111) benzidine	12.134	184	1029469	95.99	ppm	99
113) Hydroquinone	6.187	110	756312	82.37	ppm	99

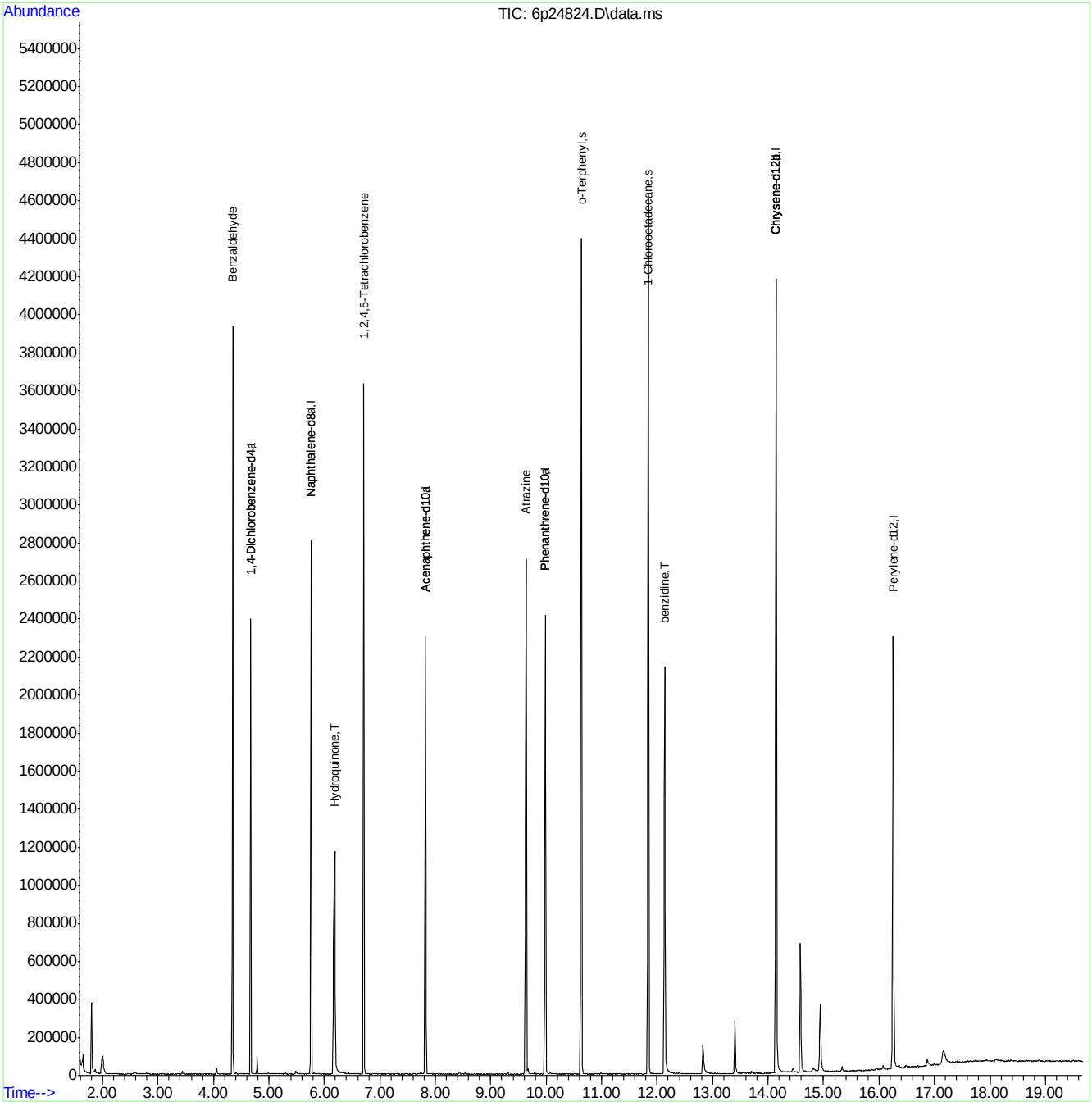
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24824.D
Acq On : 5 Apr 2016 10:01 pm
Operator : sarad
Sample : ic1156-80
Misc : op92208,e6p1156
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 06 08:47:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24825.D
Acq On : 5 Apr 2016 10:28 pm
Operator : sarad
Sample : icc1156-50
Misc : op92208,e6p1156
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 08:48:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

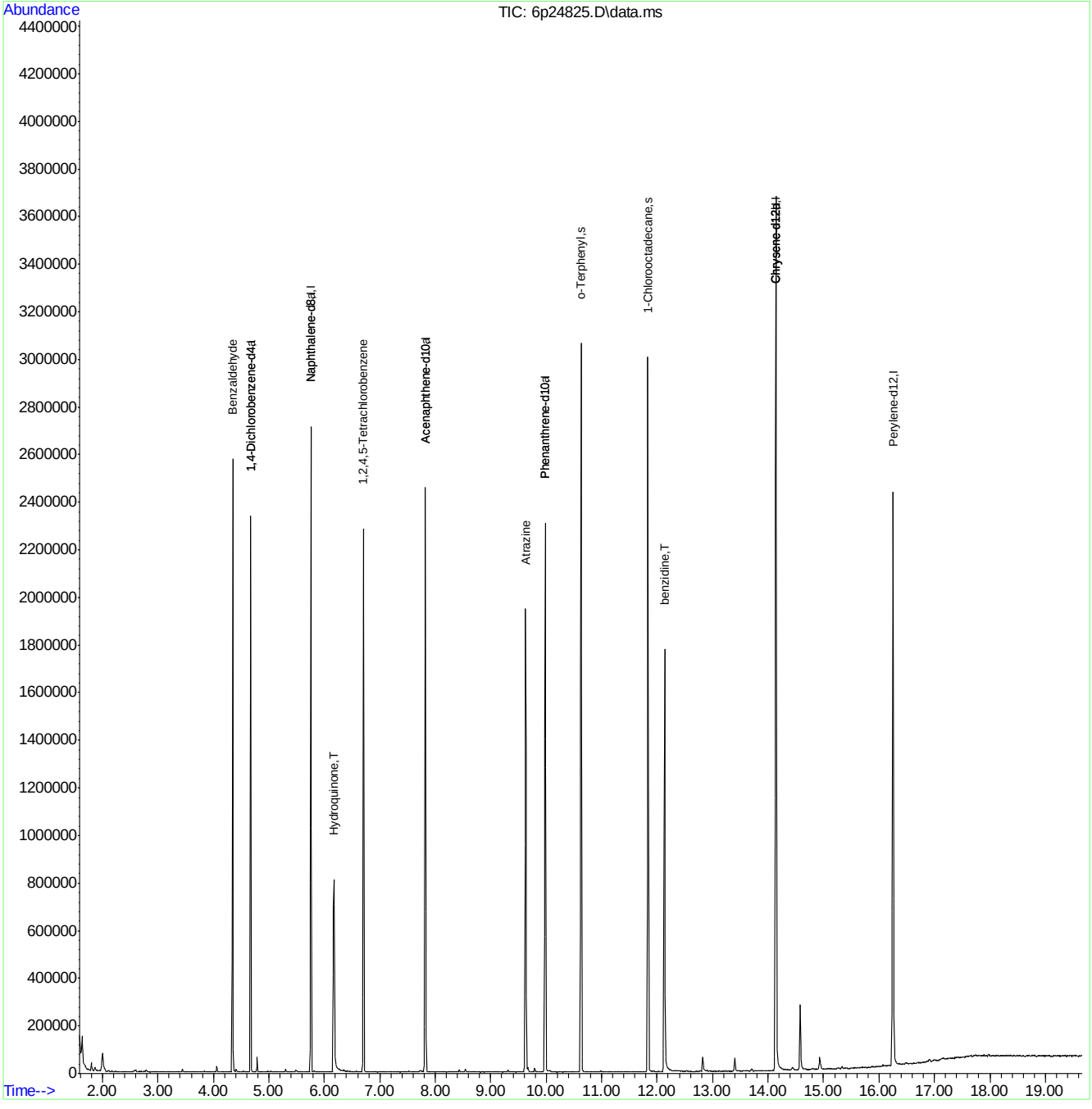
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	253302	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1044241	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	533139	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	1036777	40.00	ppm	0.00
83) Chrysene-d12	14.145	240	1140042	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1119065	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	253302	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	533139	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	1036777	40.00	ppm	0.00
110) Chrysene-d12a	14.145	240	1140042	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1044241	40.00	ppm	0.00
114) Chrysene-d12b	14.145	240	1140042	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.631	230	737849	52.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.54%	
109) 1-Chlorooctadecane	11.835	57	457254	53.85	ppm	-0.01
Spiked Amount 50.000			Recovery	=	107.70%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	381423	66.55	ppm	96
105) 1,2,4,5-Tetrachloroben...	6.705	216	397579	53.60	ppm	99
107) Atrazine	9.631	215	147915	52.35	ppm	97
111) benzidine	12.134	184	852949	77.86	ppm	99
113) Hydroquinone	6.176	110	474529	51.75	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24825.D
Acq On : 5 Apr 2016 10:28 pm
Operator : sarad
Sample : icc1156-50
Misc : op92208,e6p1156
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 06 08:48:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24826.D
Acq On : 5 Apr 2016 10:55 pm
Operator : sarad
Sample : ic1156-25
Misc : op92208,e6p1156
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 06 08:48:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	259375	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1089131	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	551643	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	1057593	40.00	ppm	0.00
83) Chrysene-d12	14.146	240	1174732	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1140031	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	259375	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	551643	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	1057593	40.00	ppm	0.00
110) Chrysene-d12a	14.146	240	1174732	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1089131	40.00	ppm	0.00
114) Chrysene-d12b	14.146	240	1174732	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.626	230	389413	27.04	ppm	-0.01
Spiked Amount 50.000			Recovery	=	54.08%	
109) 1-Chlorooctadecane	11.835	57	231324	26.71	ppm	-0.01
Spiked Amount 50.000			Recovery	=	53.42%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	202126	34.44	ppm	96
105) 1,2,4,5-Tetrachloroben...	6.706	216	212793	27.72	ppm	99
107) Atrazine	9.626	215	76645	26.59	ppm	98
111) benzidine	12.134	184	429052	38.01	ppm	100
113) Hydroquinone	6.165	110	231598	24.22	ppm	99

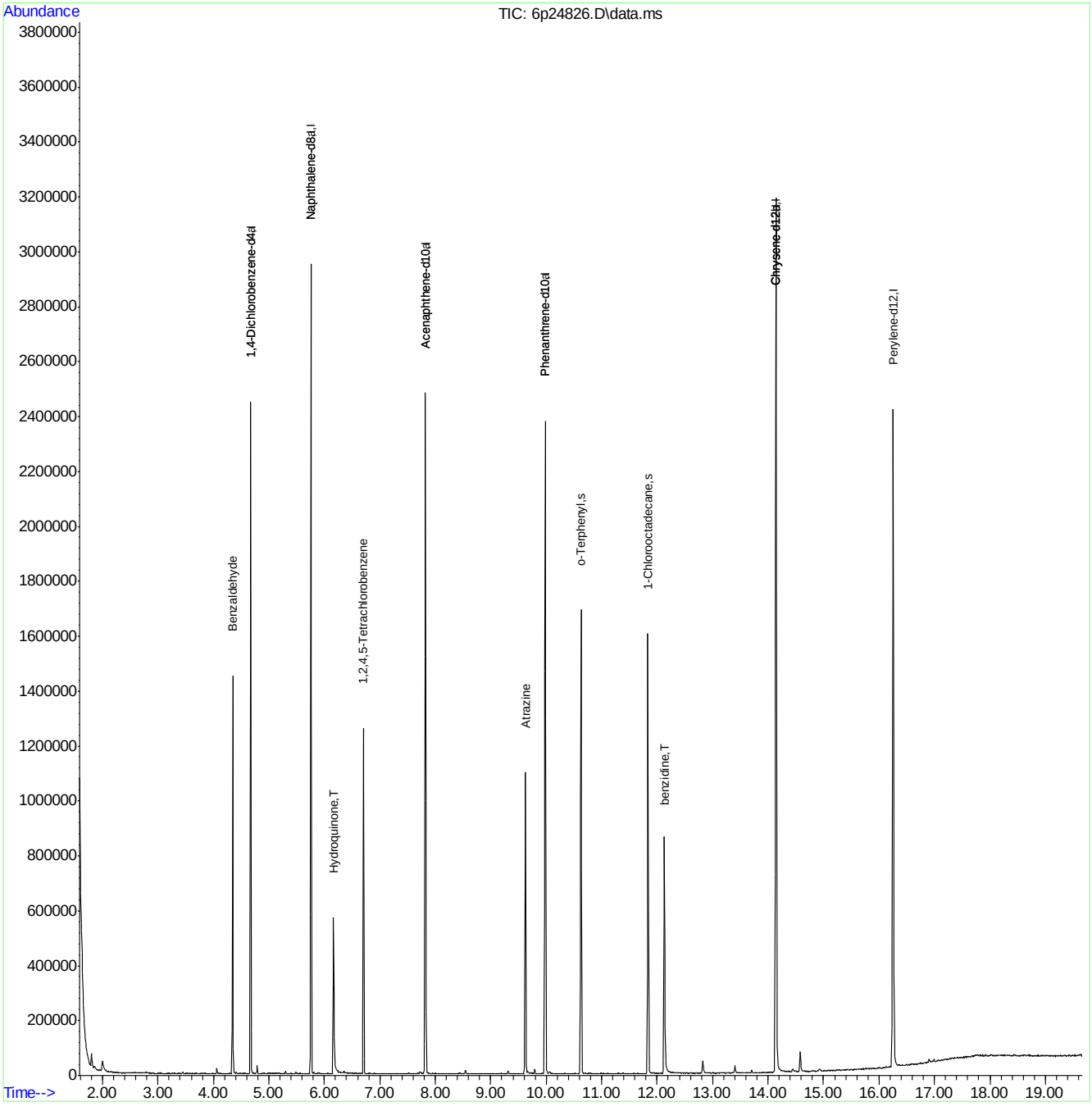
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24826.D
Acq On : 5 Apr 2016 10:55 pm
Operator : sarad
Sample : ic1156-25
Misc : op92208,e6p1156
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 06 08:48:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24827.D
Acq On : 5 Apr 2016 11:23 pm
Operator : sarad
Sample : ic1156-10
Misc : op92208,e6p1156
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 06 08:49:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

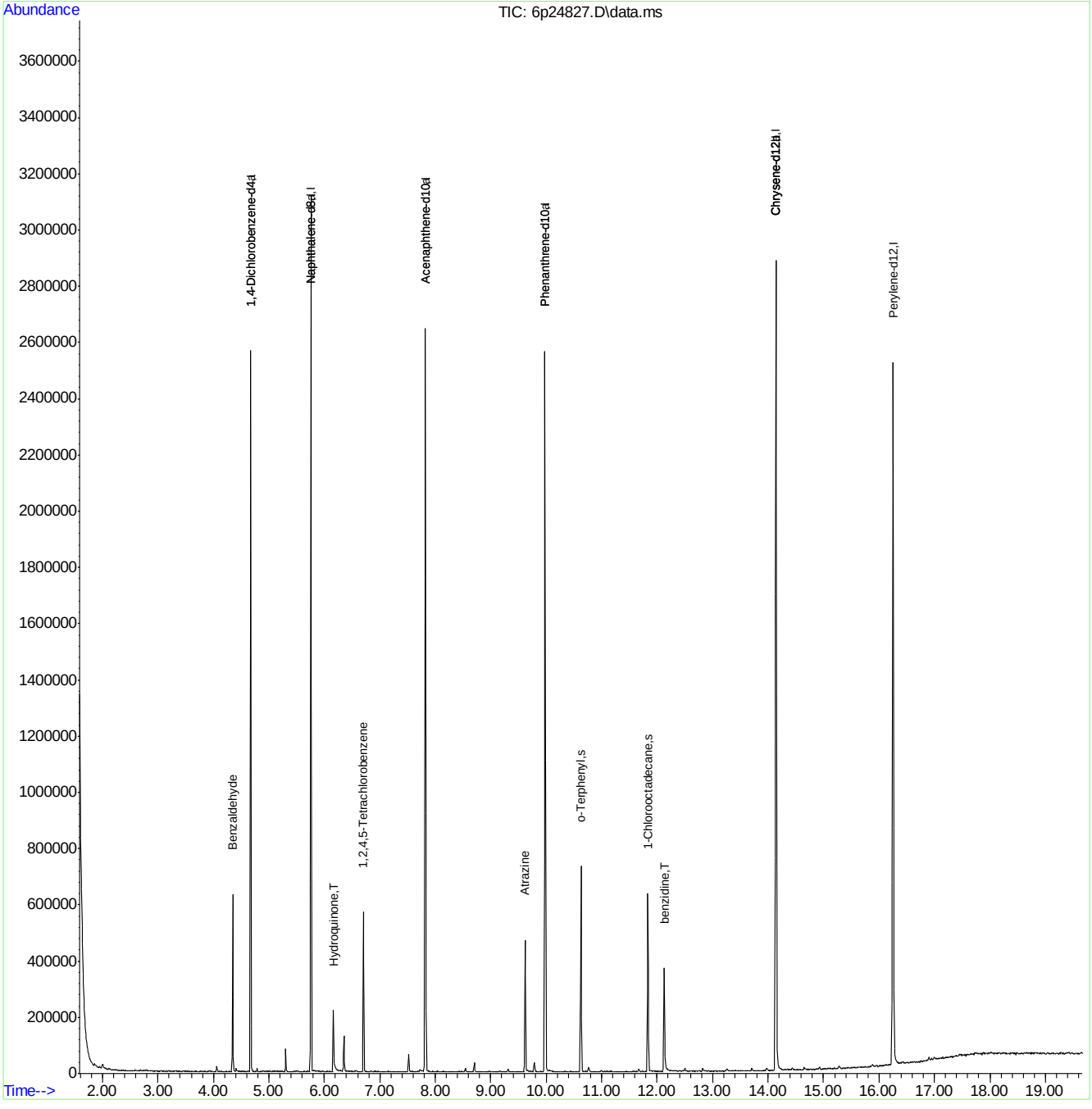
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	278465	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1147069	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	589323	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1115532	40.00	ppm	0.00
83) Chrysene-d12	14.145	240	1250289	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1183037	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	278465	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	589323	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1115532	40.00	ppm	0.00
110) Chrysene-d12a	14.145	240	1250289	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1147069	40.00	ppm	0.00
114) Chrysene-d12b	14.145	240	1250289	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.626	230	168088	11.07	ppm	-0.01
Spiked Amount 50.000			Recovery	=	22.14%	
109) 1-Chlorooctadecane	11.835	57	93116	10.19	ppm	-0.01
Spiked Amount 50.000			Recovery	=	20.38%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	87342	13.86	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.705	216	91296	11.13	ppm	99
107) Atrazine	9.620	215	30132	9.91	ppm	99
111) benzidine	12.129	184	179309	14.92	ppm	99
113) Hydroquinone	6.165	110	85497	8.49	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24827.D
Acq On : 5 Apr 2016 11:23 pm
Operator : sarad
Sample : ic1156-10
Misc : op92208,e6p1156
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 06 08:49:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24828.D
Acq On : 5 Apr 2016 11:50 pm
Operator : sarad
Sample : ic1156-5
Misc : op92208,e6p1156
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 06 08:49:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	273348	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1115965	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	575993	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1099104	40.00	ppm	0.00
83) Chrysene-d12	14.145	240	1207239	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1150906	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	273348	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	575993	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1099104	40.00	ppm	0.00
110) Chrysene-d12a	14.145	240	1207239	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1115965	40.00	ppm	0.00
114) Chrysene-d12b	14.145	240	1207239	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.626	230	90332	6.04	ppm	-0.01
Spiked Amount 50.000			Recovery	=	12.08%	
109) 1-Chlorooctadecane	11.835	57	47477	5.27	ppm	-0.01
Spiked Amount 50.000			Recovery	=	10.54%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	47083	7.61	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.705	216	49996	6.24	ppm	98
107) Atrazine	9.620	215	15380	5.13	ppm	95
111) benzidine	12.129	184	89744	7.74	ppm	99
113) Hydroquinone	6.165	110	37548	3.83	ppm	93

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

7.6.53

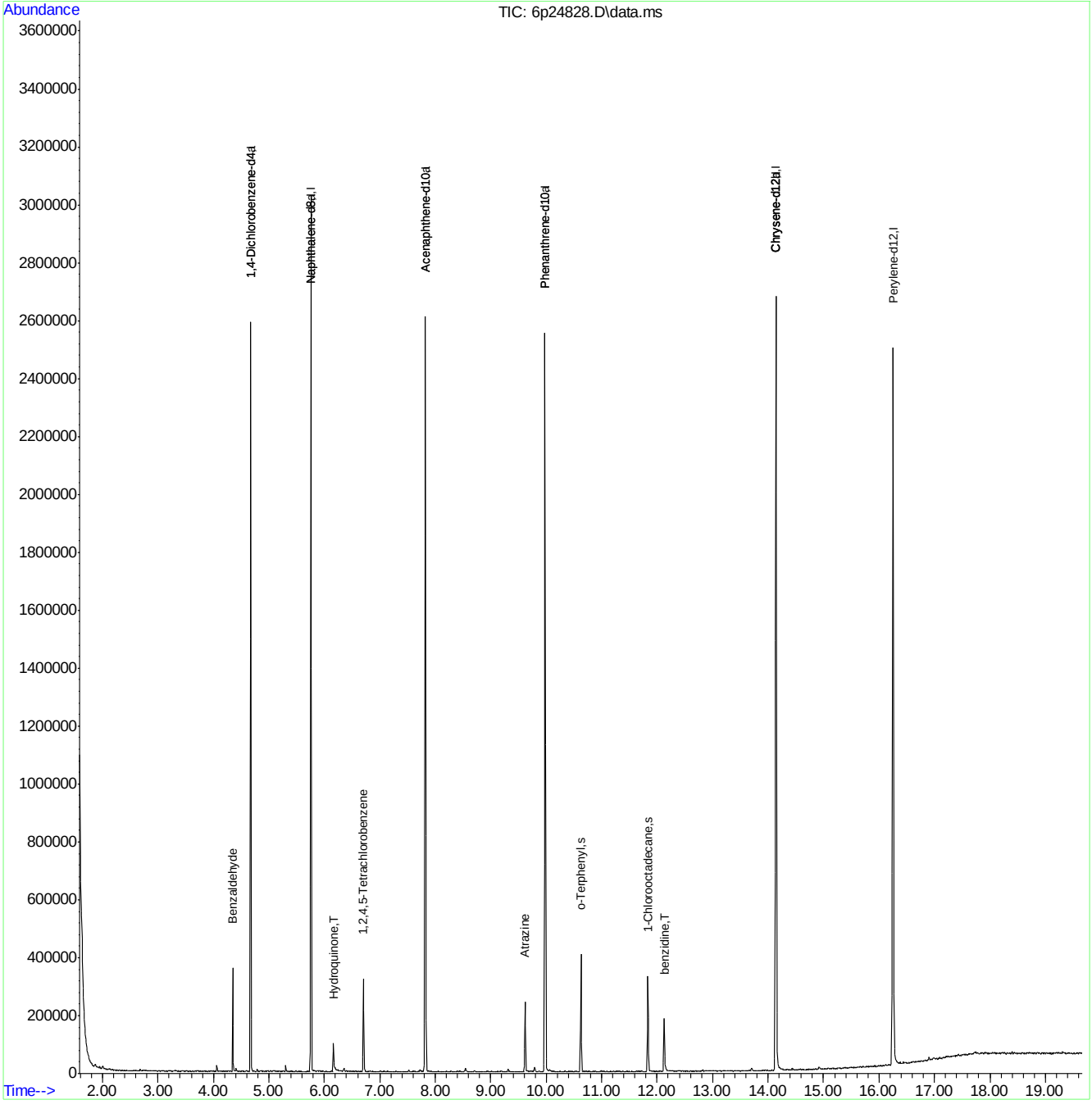
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24828.D
Acq On : 5 Apr 2016 11:50 pm
Operator : sarad
Sample : ic1156-5
Misc : op92208,e6p1156
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 06 08:49:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24829.D
Acq On : 6 Apr 2016 12:17 am
Operator : sarad
Sample : ic1156-2
Misc : op92208,e6p1156
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 06 08:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	273196	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1125385	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	580306	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1119807	40.00	ppm	0.00
83) Chrysene-d12	14.146	240	1243268	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1177302	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	273196	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	580306	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1119807	40.00	ppm	0.00
110) Chrysene-d12a	14.146	240	1243268	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1125385	40.00	ppm	0.00
114) Chrysene-d12b	14.146	240	1243268	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.626	230	34877	2.29	ppm	-0.01
Spiked Amount 50.000			Recovery	=	4.58%	
109) 1-Chlorooctadecane	11.830	57	16142	1.76	ppm	-0.02
Spiked Amount 50.000			Recovery	=	3.52%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	19266	3.12	ppm	95
105) 1,2,4,5-Tetrachloroben...	6.706	216	19958	2.47	ppm	94
107) Atrazine	9.621	215	5461	1.79	ppm	89
111) benzidine	12.129	184	28722	2.40	ppm	99
113) Hydroquinone	6.171	110	12170	1.23	ppm	88

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

7.6.54

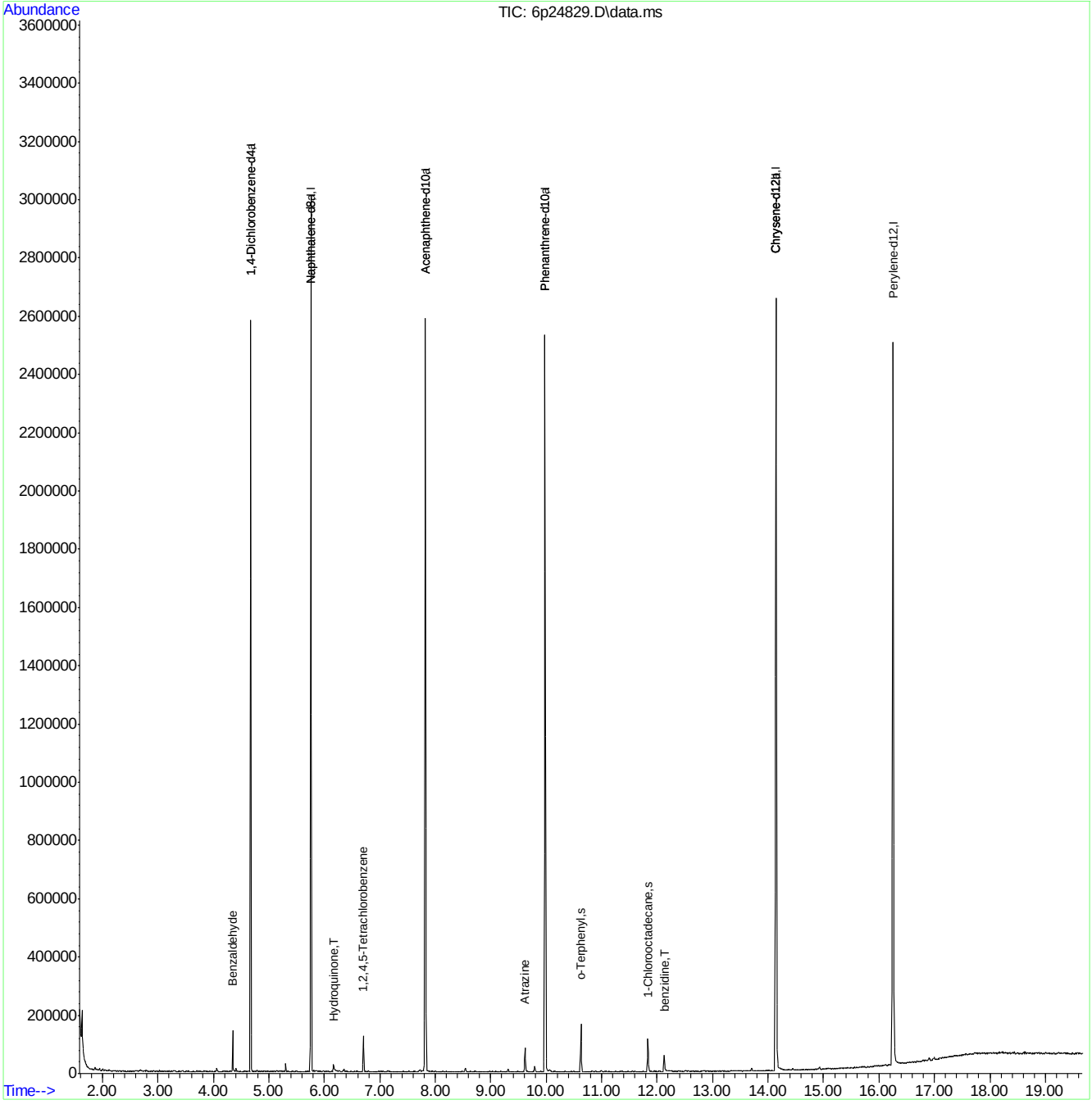
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24829.D
Acq On : 6 Apr 2016 12:17 am
Operator : sarad
Sample : ic1156-2
Misc : op92208,e6p1156
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 06 08:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



M6P1155.M Wed Apr 06 08:50:44 2016 ACLIMS Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24830.D
Acq On : 6 Apr 2016 12:44 am
Operator : sarad
Sample : ic1156-1
Misc : op92208,e6p1156
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 06 08:51:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration

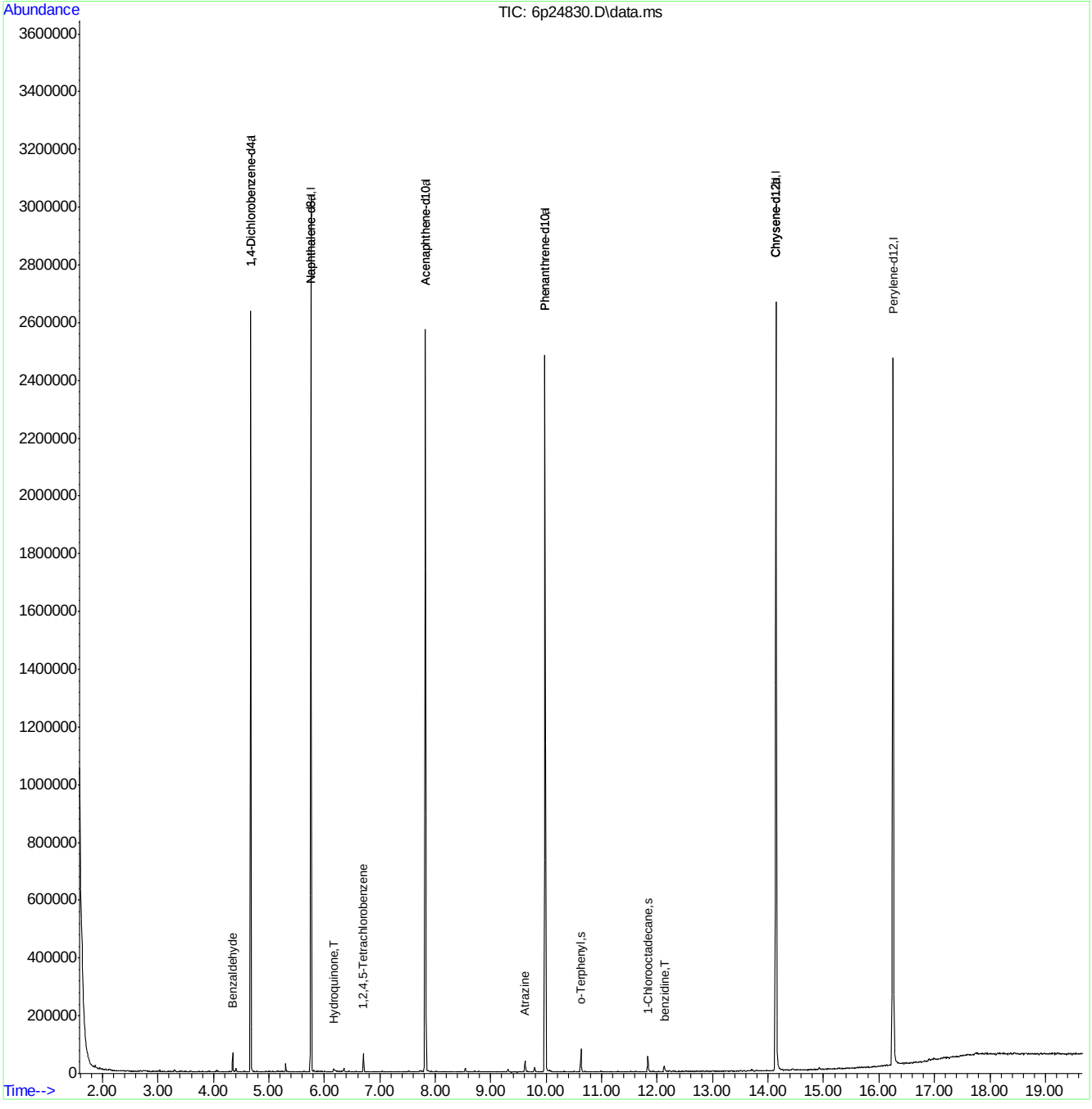
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	269424	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1106265	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	569821	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1100993	40.00	ppm	0.00
83) Chrysene-d12	14.145	240	1217500	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1141185	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	269424	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	569821	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1100993	40.00	ppm	0.00
110) Chrysene-d12a	14.145	240	1217500	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1106265	40.00	ppm	0.00
114) Chrysene-d12b	14.145	240	1217500	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.626	230	17244	1.15	ppm	-0.01
Spiked Amount 50.000			Recovery	=	2.30%	
109) 1-Chlorooctadecane	11.829	57	7321	0.81	ppm	-0.02
Spiked Amount 50.000			Recovery	=	1.62%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	9424	1.55	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.705	216	10198	1.29	ppm	95
107) Atrazine	9.615	215	2670	0.89	ppm #	76
111) benzidine	12.129	184	10861	0.93	ppm	98
113) Hydroquinone	6.170	110	5409	0.56	ppm	91

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24830.D
Acq On : 6 Apr 2016 12:44 am
Operator : sarad
Sample : ic1156-1
Misc : op92208,e6p1156
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 06 08:51:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 08:46:12 2016
QLast Update : Wed Apr 06 08:46:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24832.D
Acq On : 6 Apr 2016 1:39 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 06 09:15:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.678	152	290226	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1199622	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	697399	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1187458	40.00	ppm	0.00
83) Chrysene-d12	14.145	240	1164316	40.00	ppm	0.00
92) Perylene-d12	16.253	264	1006140	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.678	152	290226	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	697399	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1187458	40.00	ppm	0.00
110) Chrysene-d12a	14.145	240	1164316	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1199622	40.00	ppm	0.00
114) Chrysene-d12b	14.145	240	1164316	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
3) Pyridine	2.673	79	603948	46.08	ppm	97
10) Aniline	4.438	93	837795	52.15	ppm	93
16) Benzyl alcohol	4.785	108	341557	47.29	ppm	99
39) 4-Chloroaniline	5.834	127	599990	46.46	ppm	95
44) 2-Methylnaphthalene	6.513	141	771306	44.83	ppm	100
54) 2-Nitroaniline	7.224	65	321457	44.61	ppm	99
58) 3-Nitroaniline	7.770	138	239416	43.88	ppm	99
62) Dibenzofuran	8.107	168	1252702	45.89	ppm	99
68) 4-Nitroaniline	8.631	138	222449	41.01	ppm	95
79) Carbazole	10.369	167	1332080	44.61	ppm	100

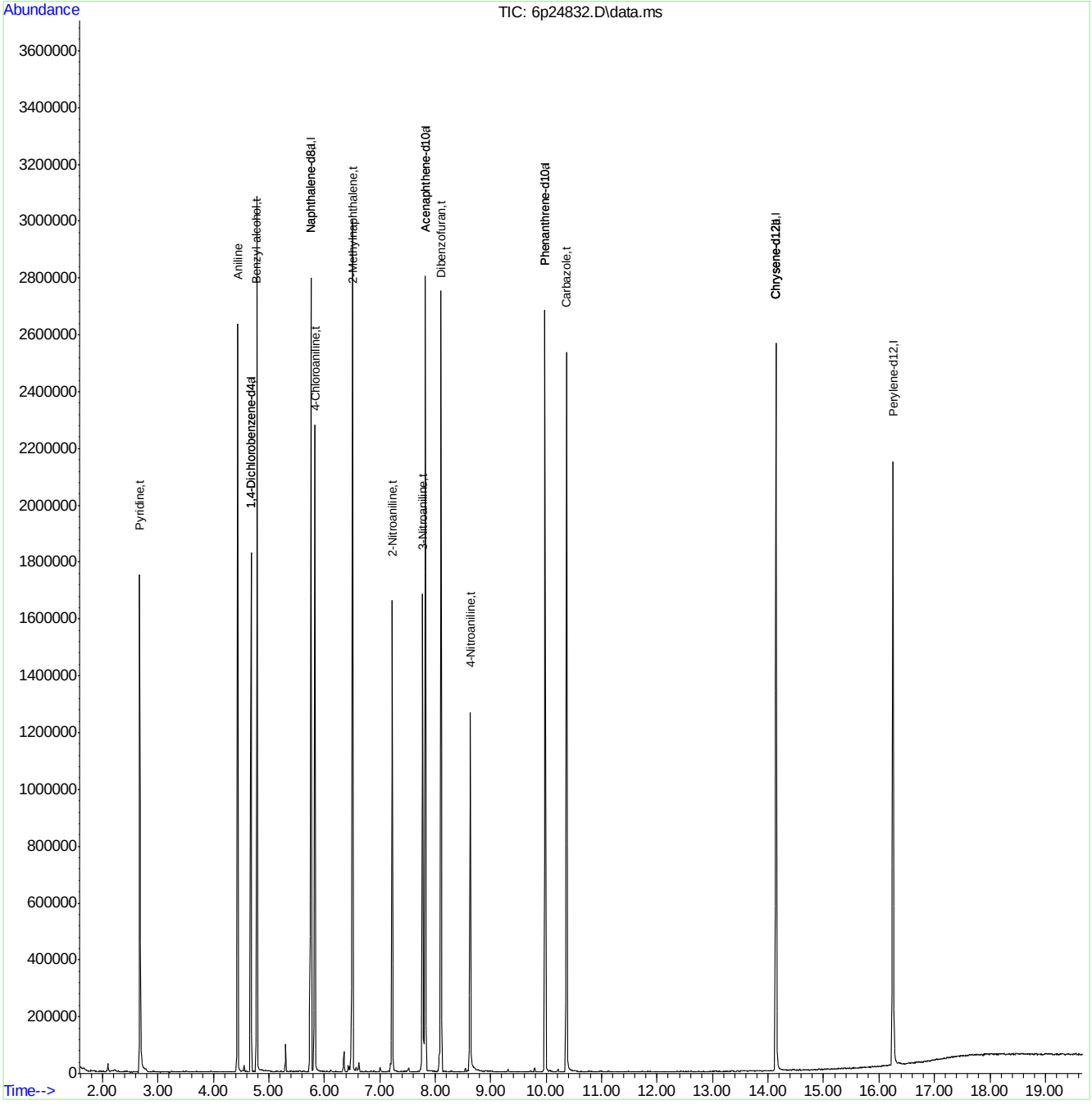
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24832.D
Acq On : 6 Apr 2016 1:39 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 06 09:15:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24833.D
Acq On : 6 Apr 2016 2:06 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 06 09:15:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.673	152	309492	40.00 ppm	0.00
24) Naphthalene-d8	5.759	136	1227425	40.00 ppm	0.00
47) Acenaphthene-d10	7.818	164	692289	40.00 ppm	0.00
69) Phenanthrene-d10	9.979	188	1177525	40.00 ppm	0.00
83) Chrysene-d12	14.146	240	1161010	40.00 ppm	0.00
92) Perylene-d12	16.253	264	1050640	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	309492	40.00 ppm	0.00
104) Acenaphthene-d10a	7.818	164	692289	40.00 ppm	0.00
106) Phenanthrene-d10a	9.979	188	1177525	40.00 ppm	0.00
110) Chrysene-d12a	14.146	240	1161010	40.00 ppm	0.00
112) Naphthalene-d8a	5.759	136	1227425	40.00 ppm	0.00
114) Chrysene-d12b	14.146	240	1161010	40.00 ppm	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	3.700	112	484731	44.16 ppm	0.00
Spiked Amount 50.000			Recovery	= 88.32%	
8) Phenol-d5	4.406	99	628044	43.52 ppm	0.00
Spiked Amount 50.000			Recovery	= 87.04%	
25) Nitrobenzene-d5	5.112	82	598983	44.56 ppm	0.00
Spiked Amount 50.000			Recovery	= 89.12%	
51) 2-Fluorobiphenyl	6.952	172	1012363	45.53 ppm	0.00
Spiked Amount 50.000			Recovery	= 91.06%	
73) 2,4,6-Tribromophenol	8.941	330	117728	42.83 ppm	0.00
Spiked Amount 50.000			Recovery	= 85.66%	
85) Terphenyl-d14	12.536	244	1010925	46.34 ppm	0.00
Spiked Amount 50.000			Recovery	= 92.68%	
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

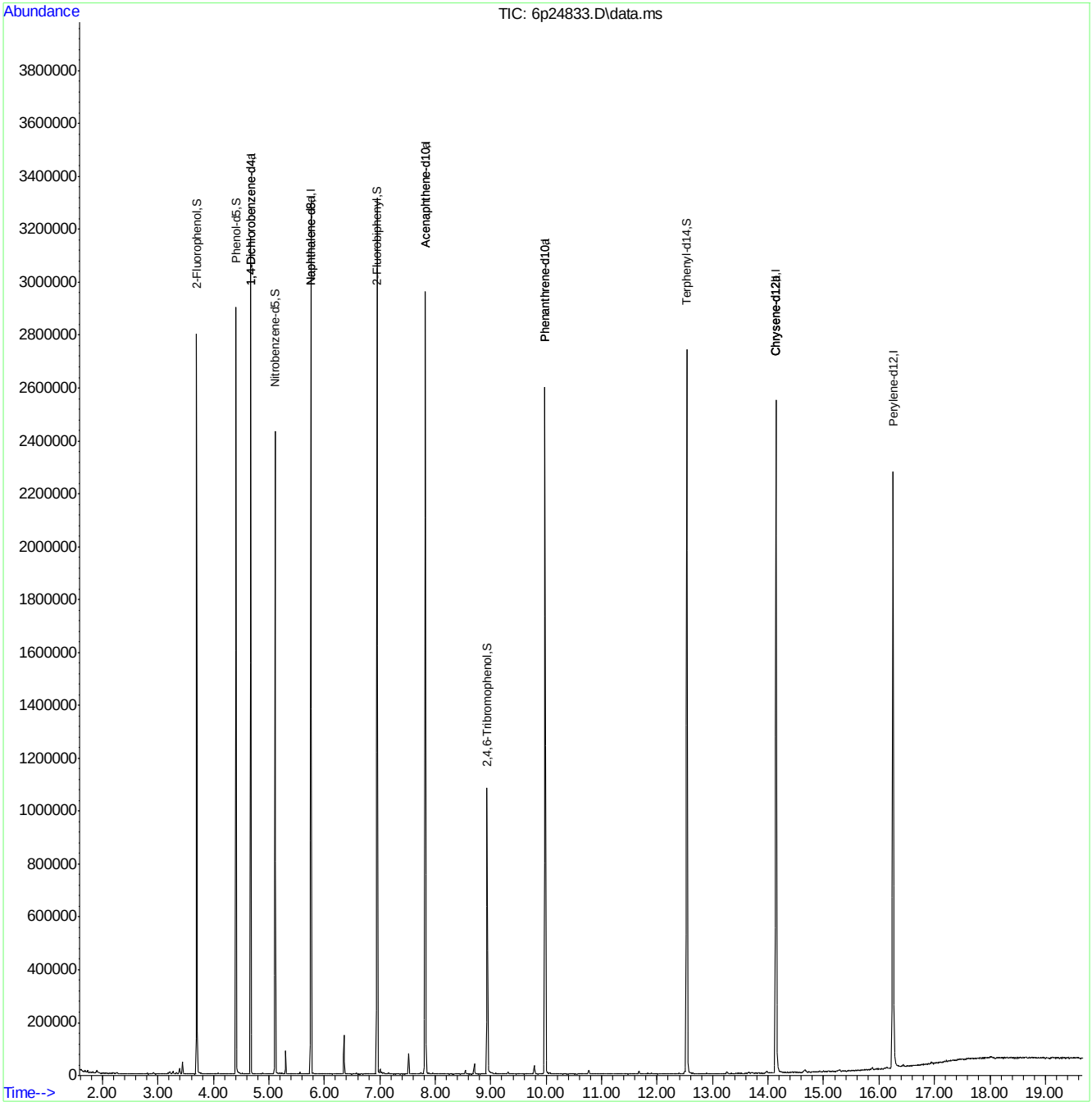
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24833.D
Acq On : 6 Apr 2016 2:06 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 06 09:15:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



M6P1155.M Wed Apr 06 09:27:34 2016 ACLIMS Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24834a.D
Acq On : 6 Apr 2016 2:34 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 09:24:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	275645	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1109192	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	619413	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	1035093	40.00	ppm	0.00
83) Chrysene-d12	14.151	240	1015515	40.00	ppm	0.00
92) Perylene-d12	16.253	264	912221	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	275645	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	619413	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	1035093	40.00	ppm	0.00
110) Chrysene-d12a	14.151	240	1015515	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1109192	40.00	ppm	0.00
114) Chrysene-d12b	14.151	240	1015515	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
105) 1,2,4,5-Tetrachloroben...	6.711	216	464598	47.33	ppm	99

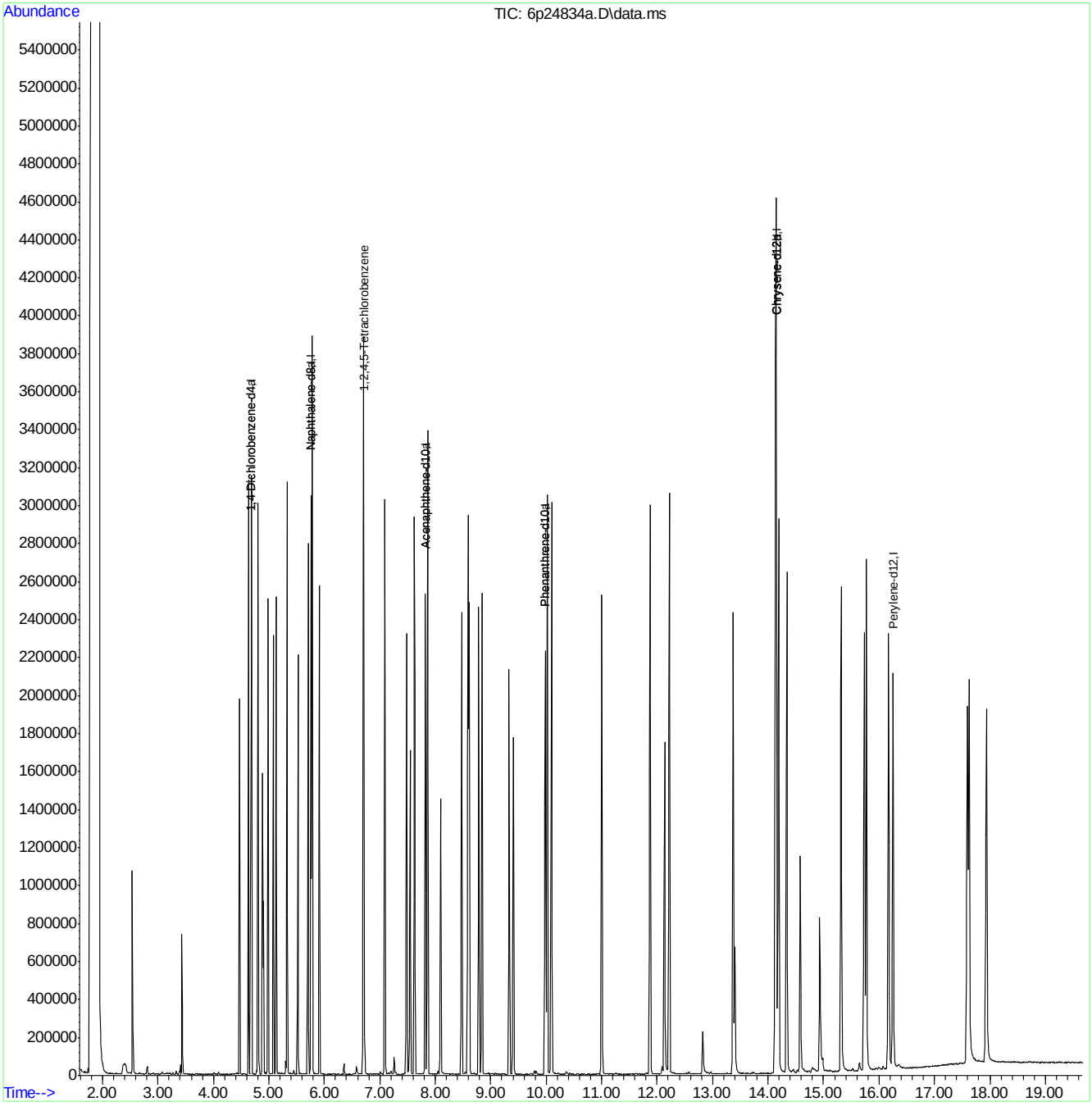
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24834a.D
Acq On : 6 Apr 2016 2:34 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 09:24:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/06/16 16:26

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24834.D
Acq On : 6 Apr 2016 2:34 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 09:23:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	275645	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1109192	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	619413	40.00	ppm	0.00
69) Phenanthrene-d10	9.984	188	1035093	40.00	ppm	0.00
83) Chrysene-d12	14.151	240	1015515	40.00	ppm	0.00
92) Perylene-d12	16.253	264	912221	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	275645	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	619413	40.00	ppm	0.00
106) Phenanthrene-d10a	9.984	188	1035093	40.00	ppm	0.00
110) Chrysene-d12a	14.151	240	1015515	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1109192	40.00	ppm	0.00
114) Chrysene-d12b	14.151	240	1015515	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.539	74	352031	46.09	ppm	99
11) bis(2-Chloroethyl)ether	4.475	93	518784	48.95	ppm	97
14) 1,3-Dichlorobenzene	4.630	146	509556	46.26	ppm	99
15) 1,4-Dichlorobenzene	4.689	146	524172	47.33	ppm	100
17) 1,2-Dichlorobenzene	4.807	146	484092	47.53	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.882	121	160281	44.87	ppm	99
22) n-Nitroso-di-n-propyla...	4.989	70	408522	47.83	ppm	99
23) Hexachloroethane	5.080	201	189099	48.25	ppm	97
26) Nitrobenzene	5.128	77	587892	46.04	ppm	98
28) Isophorone	5.331	82	1071372	50.15	ppm	99
32) bis(2-Chloroethoxy)met...	5.523	93	573261	45.52	ppm	99
36) 1,2,4-Trichlorobenzene	5.705	180	433465	47.01	ppm	100
38) Naphthalene	5.780	128	1408440	47.66	ppm	100
42) Hexachlorobutadiene	5.909	225	249417	48.07	ppm	97
48) Hexachlorocyclopentadiene	6.706	237	225850	45.36	ppm	97
52) 2-Chloronaphthalene	7.091	162	852866	48.44	ppm	99
55) Dimethylphthalate	7.481	163	927735	45.76	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24834.D
Acq On : 6 Apr 2016 2:34 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 09:23:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

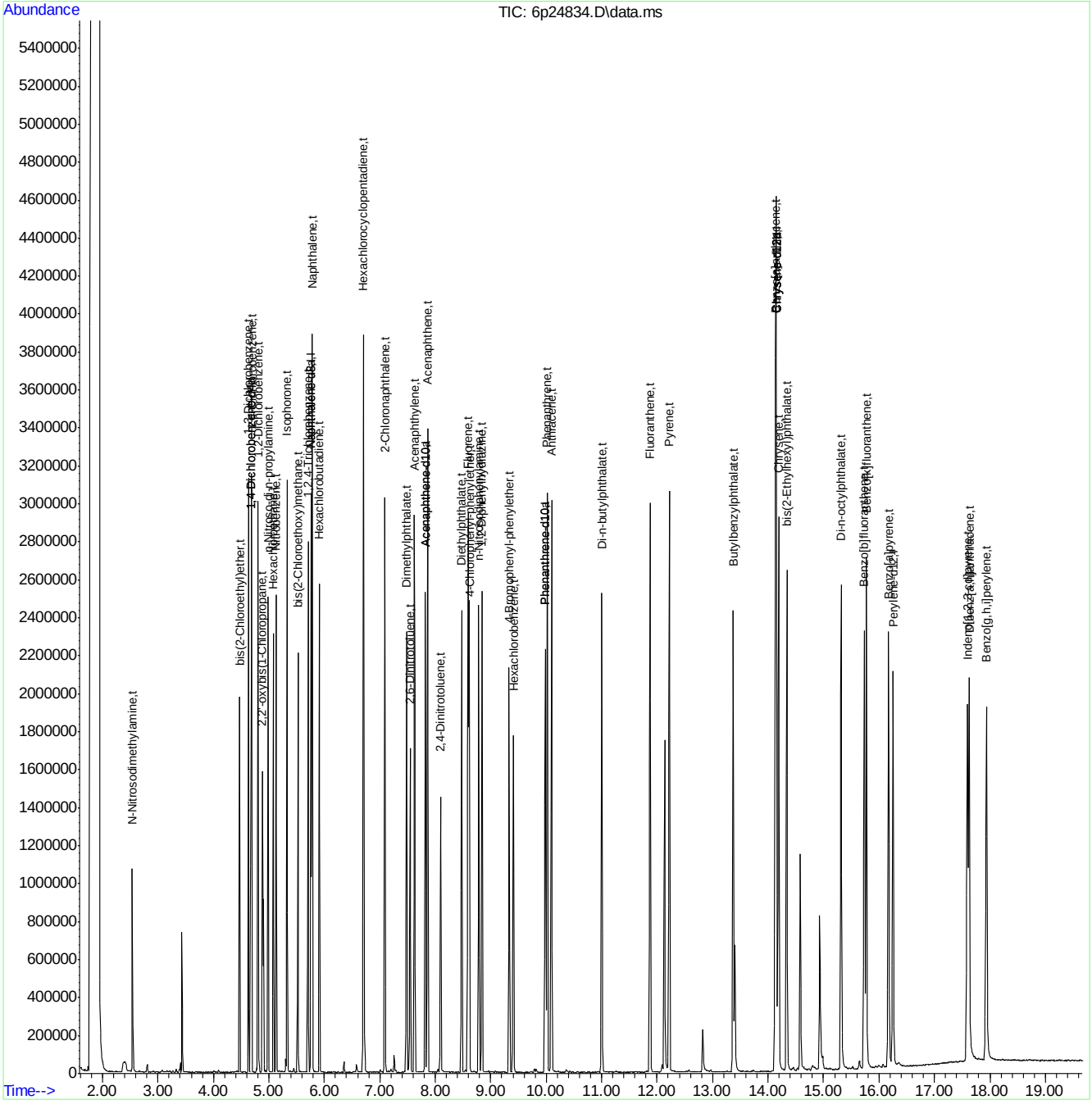
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	Acenaphthylene	7.625	152	1273726	47.26	ppm	100
57)	2,6-Dinitrotoluene	7.551	165	195320	48.73	ppm	97
59)	Acenaphthene	7.866	153	876156	48.05	ppm	99
63)	2,4-Dinitrotoluene	8.096	165	239520	45.38	ppm	81
65)	Diethylphthalate	8.476	149	898344	45.95	ppm	99
66)	Fluorene	8.594	166	964394	47.44	ppm	99
67)	4-Chlorophenyl-phenyle...	8.615	204	482224	45.50	ppm	98
71)	n-Nitrosodiphenylamine	8.786	169	665480	46.85	ppm	100
72)	1,2-Diphenylhydrazine	8.840	77	1135894	49.87	ppm	96
74)	4-Bromophenyl-phenylether	9.332	248	269049	48.64	ppm	98
75)	Hexachlorobenzene	9.412	284	273235	48.32	ppm	97
77)	Phenanthrene	10.016	178	1409840	47.27	ppm	99
78)	Anthracene	10.097	178	1392361	47.06	ppm	99
80)	Di-n-butylphthalate	11.000	149	1454241	47.19	ppm	99
81)	Fluoranthene	11.872	202	1521738	47.10	ppm	99
84)	Pyrene	12.220	202	1615264	50.61	ppm	99
86)	Butylbenzylphthalate	13.370	149	622142	49.67	ppm	96
88)	Benzo[a]anthracene	14.135	228	1352658	47.05	ppm	99
90)	Chrysene	14.194	228	1356639	47.05	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.338	149	854712	49.74	ppm	98
93)	Di-n-octylphthalate	15.317	149	1447614	51.74	ppm	100
94)	Benzo[b]fluoranthene	15.734	252	1284910	47.46	ppm	97
95)	Benzo[k]fluoranthene	15.777	252	1304337	50.65	ppm	98
96)	Benzo[a]pyrene	16.178	252	1217872	51.70	ppm	99
97)	Indeno[1,2,3-cd]pyrene	17.595	276	1112187m	50.12	ppm	
99)	Dibenz[a,h]anthracene	17.627	278	1197527	49.75	ppm	98
101)	Benzo[g,h,i]perylene	17.938	276	1192565	49.08	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24834.D
Acq On : 6 Apr 2016 2:34 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 09:23:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

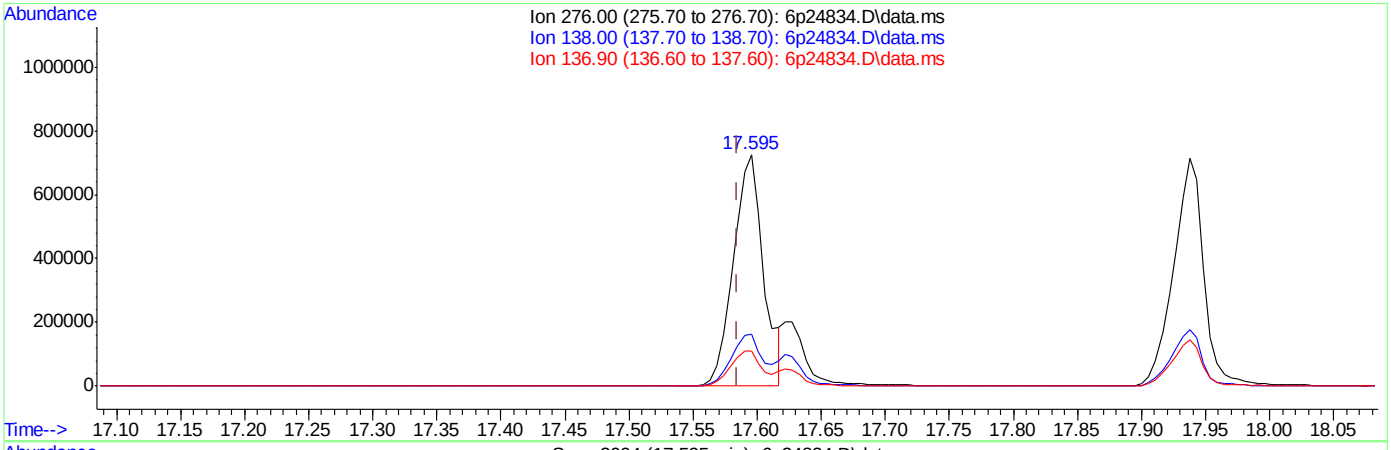
Sample Number:	E6P1156-ICV1155	**Method:**	SW846 8270D
Lab FileID:	6P24834.D	**Analyst approved:**	04/06/16 09:50 Ashley Dye
Injection Time:	04/06/16 02:34	**Supervisor approved:**	04/06/16 16:26 Kristi Schollenberger

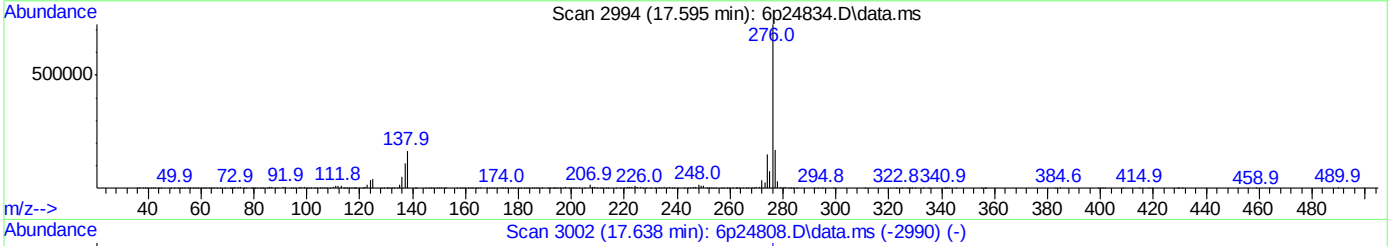
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		17.60	Overlapping peak

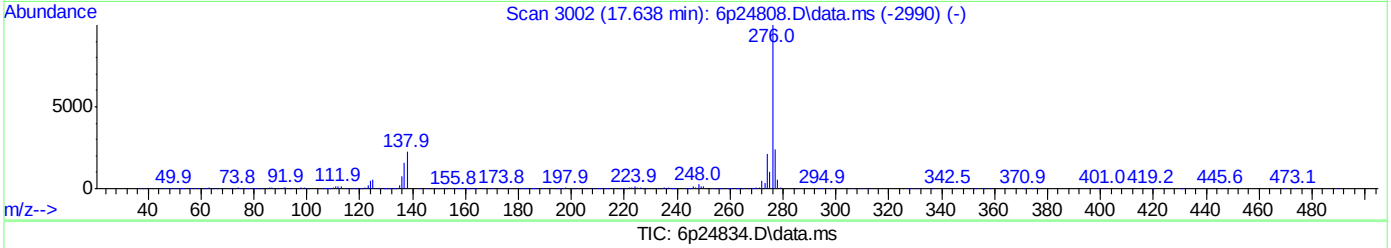
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24834.D
Acq On : 6 Apr 2016 2:34 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 09:16:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration







TIC: 6p24834.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.595min (+0.011) 52.77ppm

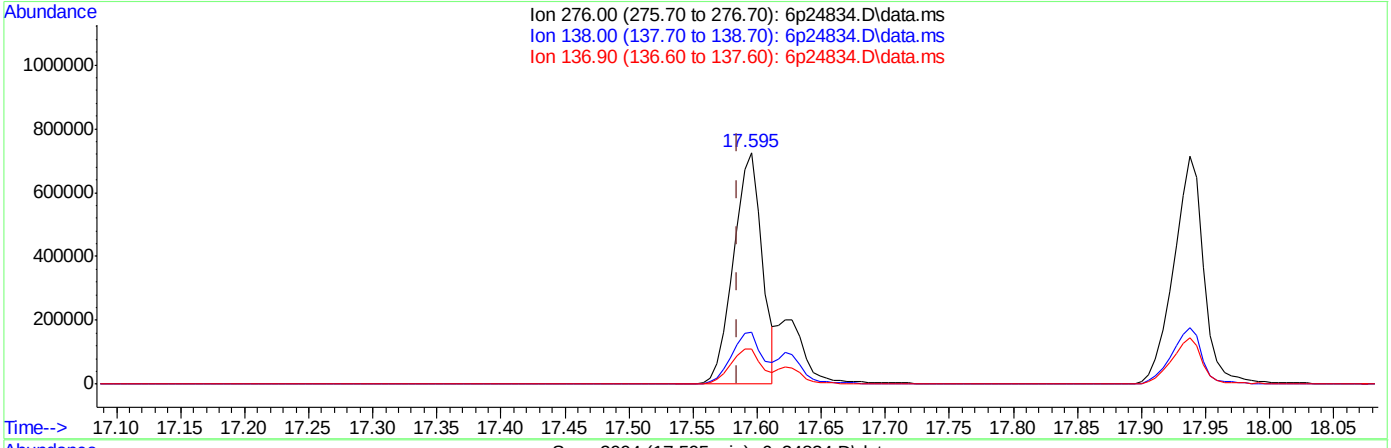
response 1170952

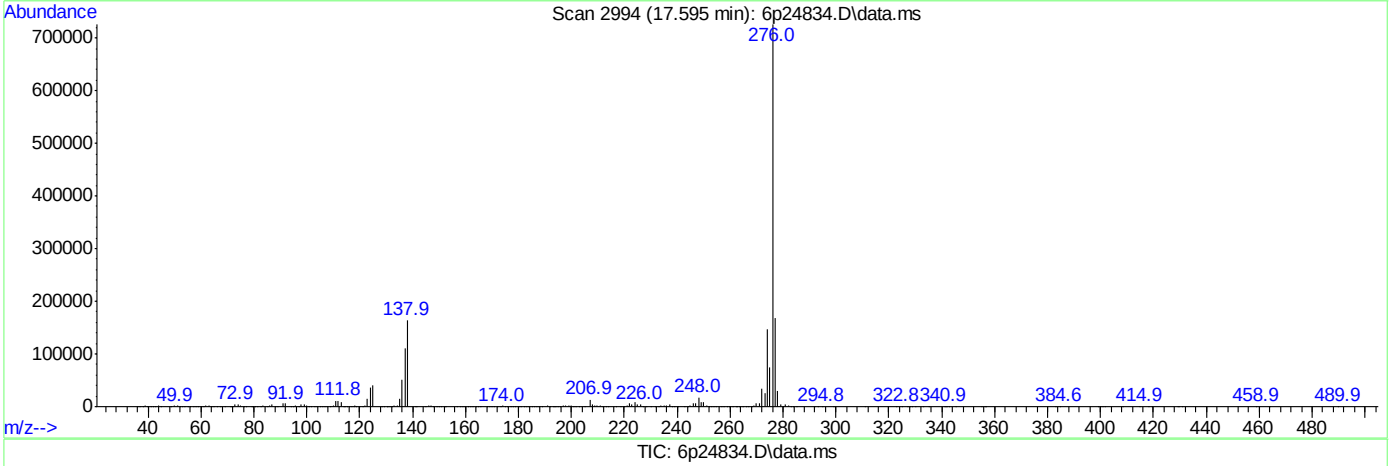
Ion	Exp%	Act%
276.00	100	100
138.00	20.00	19.60
136.90	14.60	13.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24834.D
Acq On : 6 Apr 2016 2:34 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 06 09:18:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration





TIC: 6p24834.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.595min (+0.011) 50.12ppm m

response 1112187

Ion	Exp%	Act%
276.00	100	100
138.00	20.00	22.66
136.90	14.60	15.23
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24835.D
Acq On : 6 Apr 2016 3:01 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 06 09:24:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	292851	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1169567	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	672920	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1102194	40.00	ppm	0.00
83) Chrysene-d12	14.146	240	1104338	40.00	ppm	0.00
92) Perylene-d12	16.248	264	946135	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	292851	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	672920	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1102194	40.00	ppm	0.00
110) Chrysene-d12a	14.146	240	1104338	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1169567	40.00	ppm	0.00
114) Chrysene-d12b	14.146	240	1104338	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.256	88	227923	43.39	ppm	99
6) Indene	4.871	116	855072	47.41	ppm	97
7) Cumene	4.085	105	1242872	44.06	ppm	99
13) Decane	4.555	43	578167	43.98	ppm	97
18) Acetophenone	4.983	105	710125	46.07	ppm	84
27) Quinoline	6.112	129	894144	43.69	ppm	99
40) 2,3-Dichloroaniline	6.839	161	391484	38.26	ppm	97
41) Caprolactam	6.171	55	220876	42.35	ppm	97
45) 1-Methylnaphthalene	6.625	141	751962	42.99	ppm	99
46) Dimethylnaphthalene	7.273	156	839734	43.37	ppm	99
53) Biphenyl	7.069	154	1141783	44.12	ppm	100
82) Octadecane	9.947	57	708040	47.32	ppm	99
100) 7,12-Dimethylbenz(a)an...	15.734	256	520163	46.44	ppm	96

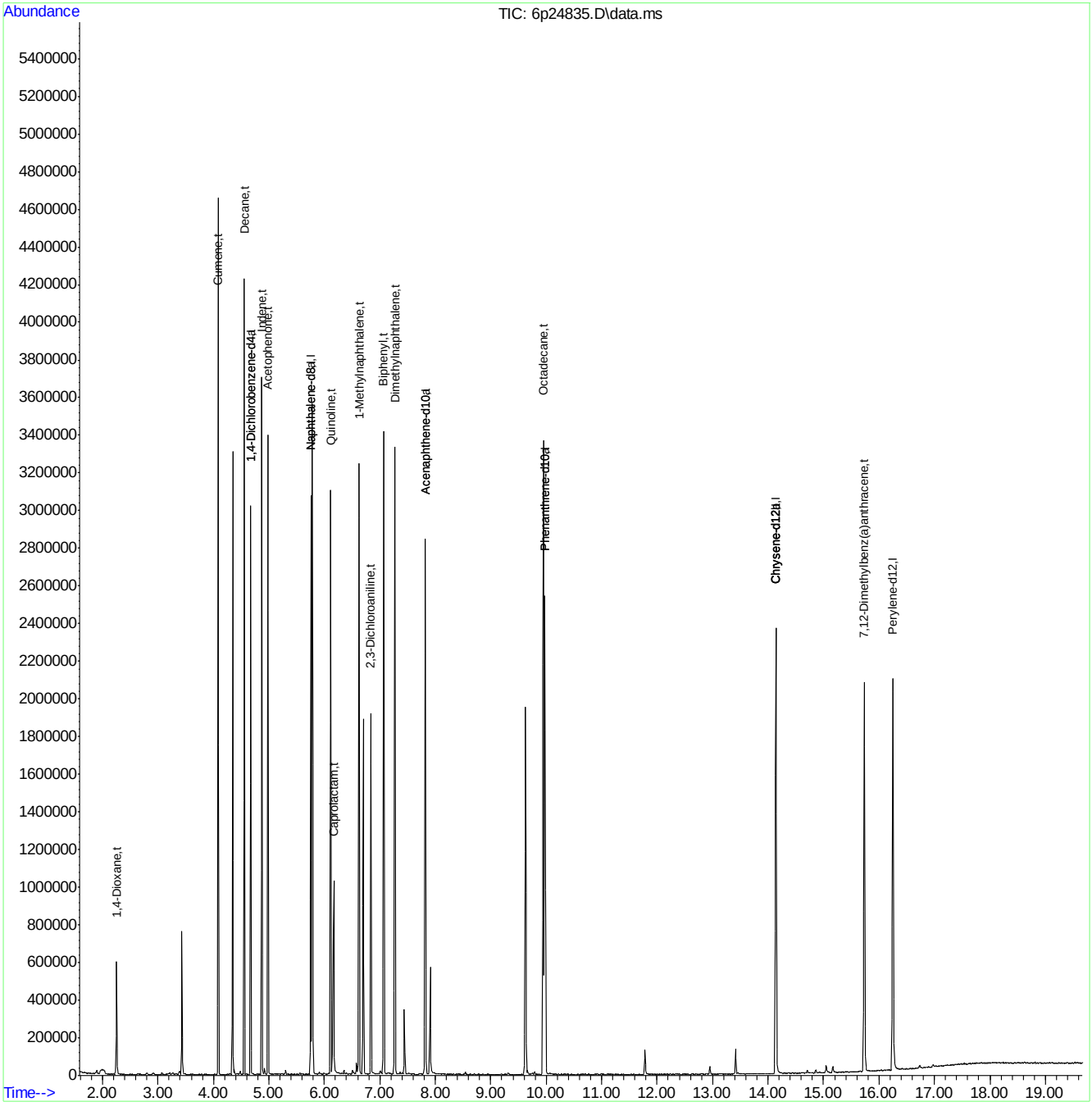
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24835.D
Acq On : 6 Apr 2016 3:01 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 06 09:24:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24835a.D
Acq On : 6 Apr 2016 3:01 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 06 09:25:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	292851	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	1169567	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	672920	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1102194	40.00	ppm	0.00
83) Chrysene-d12	14.146	240	1104338	40.00	ppm	0.00
92) Perylene-d12	16.248	264	946135	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	292851	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	672920	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1102194	40.00	ppm	0.00
110) Chrysene-d12a	14.146	240	1104338	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	1169567	40.00	ppm	0.00
114) Chrysene-d12b	14.146	240	1104338	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.347	105	421253	46.47	ppm	98
107) Atrazine	9.631	215	151147	50.80	ppm	95

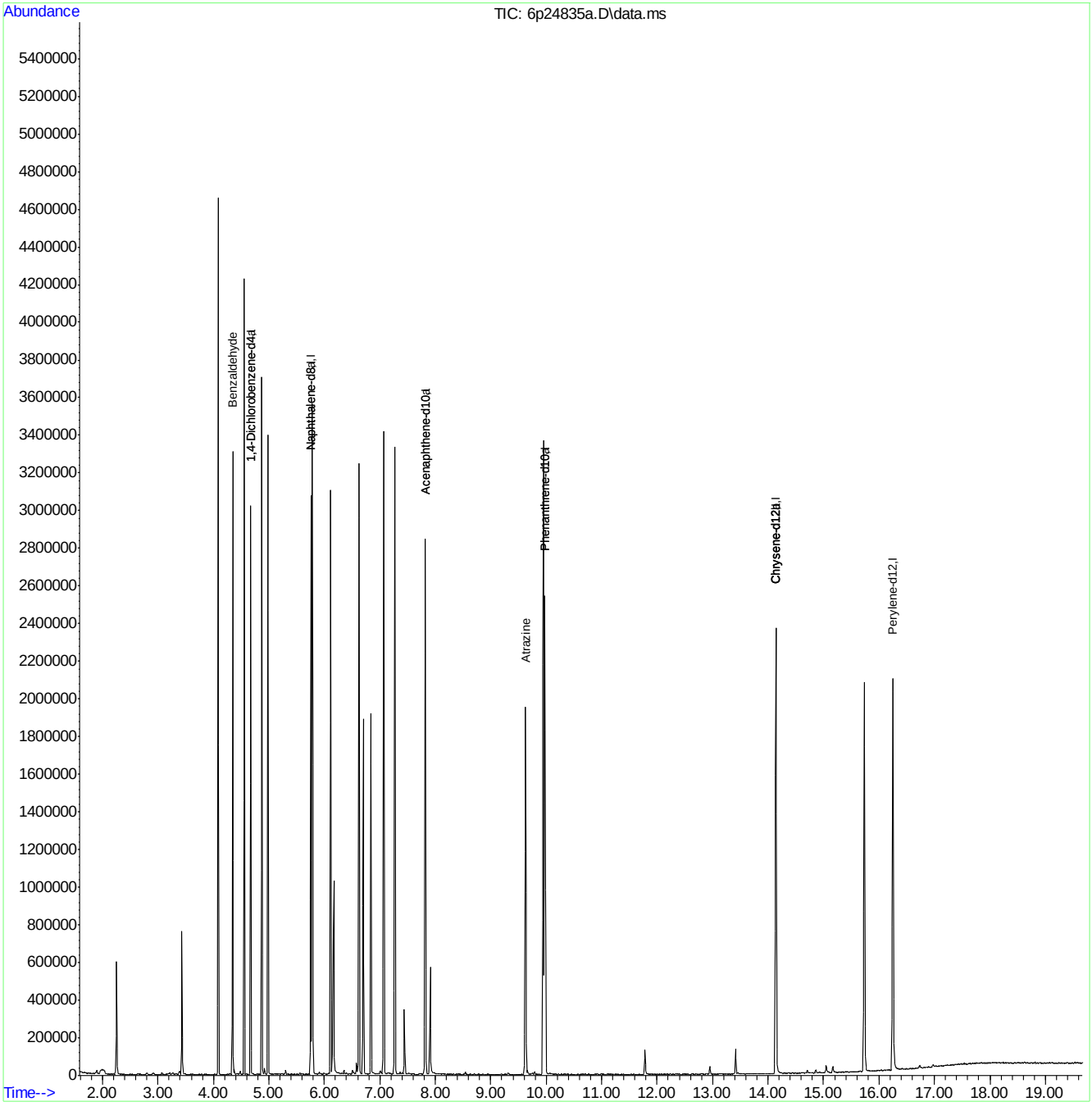
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24835a.D
Acq On : 6 Apr 2016 3:01 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 06 09:25:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



M6P1155.M Wed Apr 06 09:28:31 2016 ACLIMS Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24836.D
Acq On : 6 Apr 2016 3:29 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 06 09:20:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	238825	40.00	ppm	0.00
24) Naphthalene-d8	5.759	136	964488	40.00	ppm	0.00
47) Acenaphthene-d10	7.818	164	560412	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	964306	40.00	ppm	0.00
83) Chrysene-d12	14.140	240	1002943	40.00	ppm	0.00
92) Perylene-d12	16.248	264	917322	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	238825	40.00	ppm	0.00
104) Acenaphthene-d10a	7.818	164	560412	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	964306	40.00	ppm	0.00
110) Chrysene-d12a	14.140	240	1002943	40.00	ppm	0.00
112) Naphthalene-d8a	5.759	136	964488	40.00	ppm	0.00
114) Chrysene-d12b	14.140	240	1002943	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
113) Hydroquinone	6.176	110	452018	59.64	ppm	97

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

7.6.62

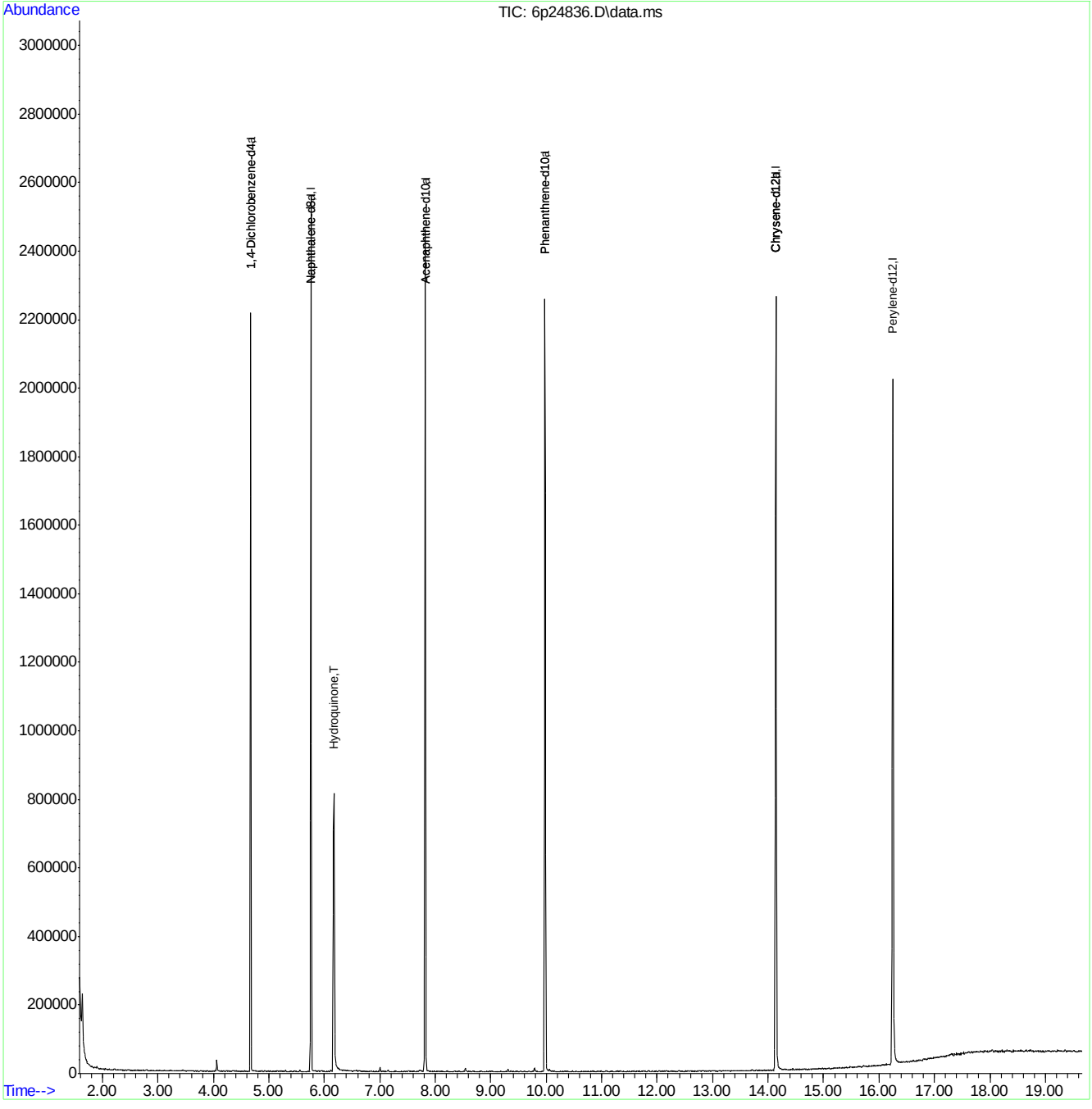
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24836.D
Acq On : 6 Apr 2016 3:29 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 06 09:20:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



M6P1155.M Wed Apr 06 09:28:35 2016 ACLIMS Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24837a.D
Acq On : 6 Apr 2016 3:56 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 06 09:26:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

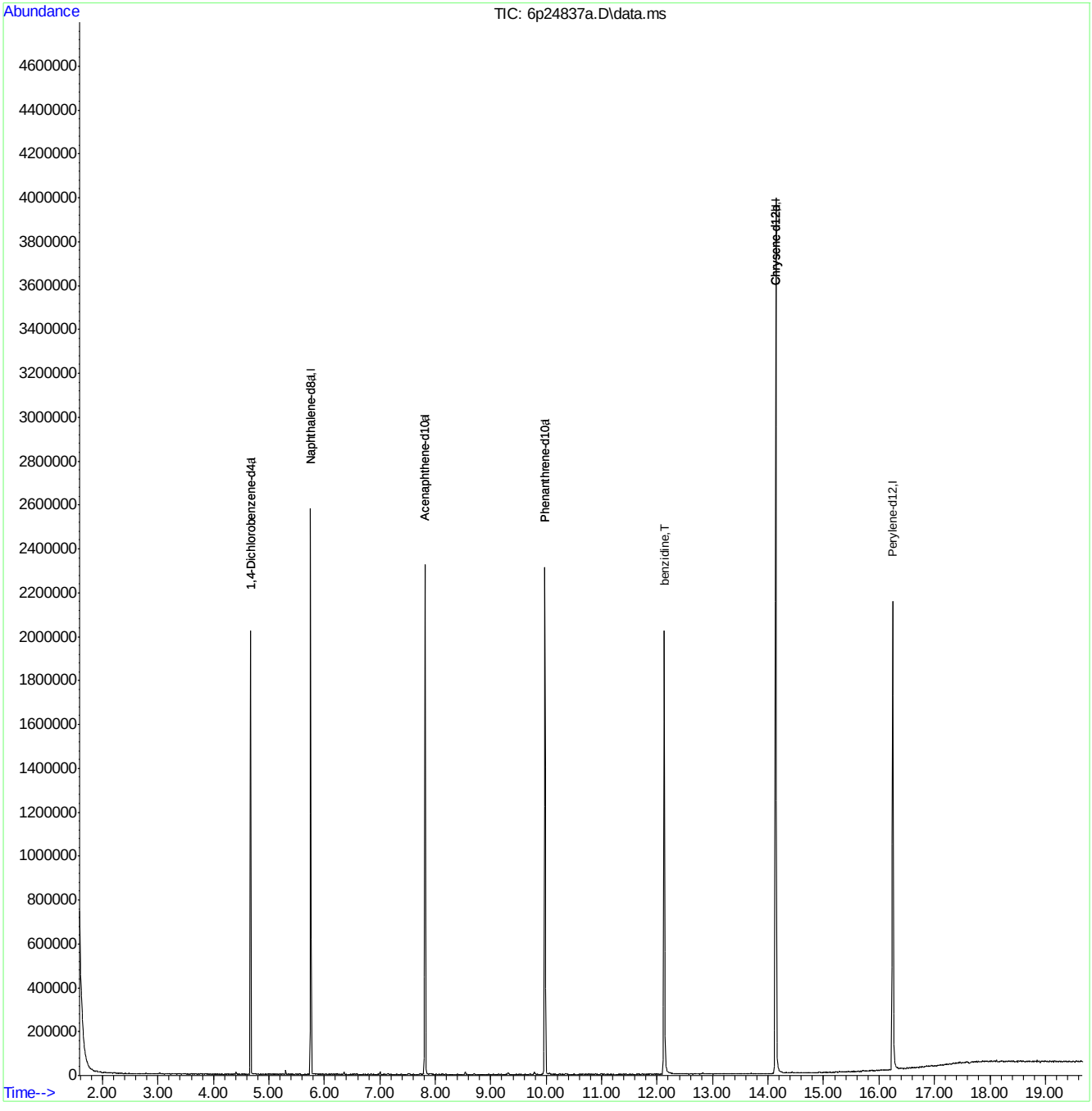
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	248146	40.00	ppm	0.00
24) Naphthalene-d8	5.753	136	986088	40.00	ppm	0.00
47) Acenaphthene-d10	7.813	164	573228	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	994475	40.00	ppm	0.00
83) Chrysene-d12	14.140	240	1035759	40.00	ppm	0.00
92) Perylene-d12	16.248	264	959226	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	248146	40.00	ppm	0.00
104) Acenaphthene-d10a	7.813	164	573228	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	994475	40.00	ppm	0.00
110) Chrysene-d12a	14.140	240	1035759	40.00	ppm	0.00
112) Naphthalene-d8a	5.753	136	986088	40.00	ppm	0.00
114) Chrysene-d12b	14.140	240	1035759	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
111) benzidine	12.129	184	937817	72.15	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24837a.D
Acq On : 6 Apr 2016 3:56 am
Operator : sarad
Sample : icv1156-50
Misc : op92208,e6p1156
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 06 09:26:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



M6P1155.M Wed Apr 06 09:28:42 2016 ACLIMS Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24837.D
Acq On : 6 Apr 2016 3:56 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 06 09:26:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	248146	40.00	ppm	0.00
24) Naphthalene-d8	5.753	136	986088	40.00	ppm	0.00
47) Acenaphthene-d10	7.813	164	573228	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	994475	40.00	ppm	0.00
83) Chrysene-d12	14.140	240	1035759	40.00	ppm	0.00
92) Perylene-d12	16.248	264	959226	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	248146	40.00	ppm	0.00
104) Acenaphthene-d10a	7.813	164	573228	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	994475	40.00	ppm	0.00
110) Chrysene-d12a	14.140	240	1035759	40.00	ppm	0.00
112) Naphthalene-d8a	5.753	136	986088	40.00	ppm	0.00
114) Chrysene-d12b	14.140	240	1035759	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	14.140	252	466656	49.26	ppm	99

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

7.6.64

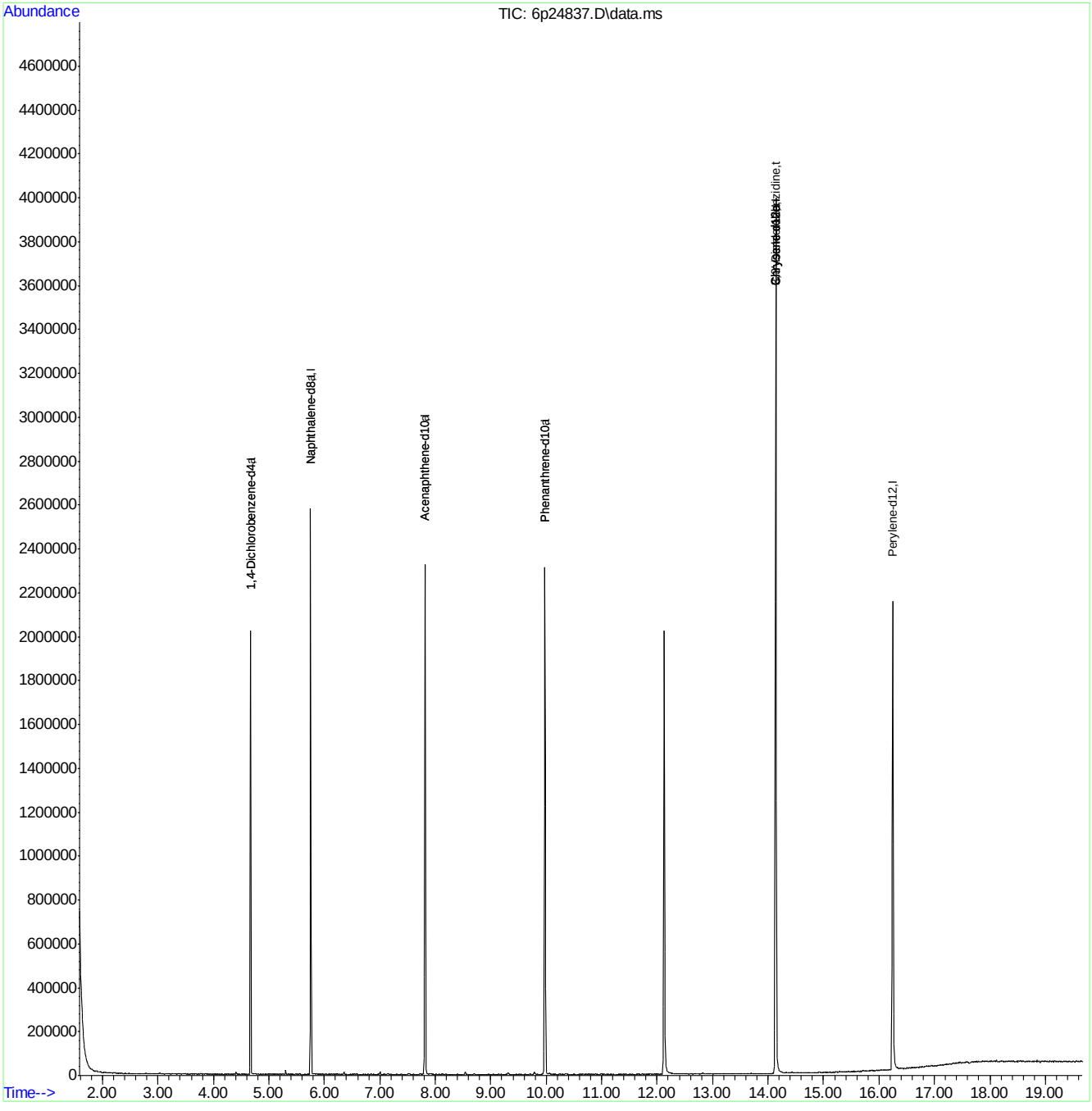
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1156\
Data File : 6p24837.D
Acq On : 6 Apr 2016 3:56 am
Operator : sarad
Sample : icv1155-50
Misc : op92208,e6p1156
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 06 09:26:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1157\
Data File : 6p24839.D
Acq On : 6 Apr 2016 9:53 am
Operator : ashleyd
Sample : icv1155-50
Misc : op92208,e6p1157
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 10:15:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.673	152	296529	40.00	ppm	0.00
24) Naphthalene-d8	5.753	136	1202043	40.00	ppm	0.00
47) Acenaphthene-d10	7.813	164	694540	40.00	ppm	0.00
69) Phenanthrene-d10	9.979	188	1194165	40.00	ppm	0.00
83) Chrysene-d12	14.140	240	1236379	40.00	ppm	0.00
92) Perylene-d12	16.247	264	1094473	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.673	152	296529	40.00	ppm	0.00
104) Acenaphthene-d10a	7.813	164	694540	40.00	ppm	0.00
106) Phenanthrene-d10a	9.979	188	1194165	40.00	ppm	0.00
110) Chrysene-d12a	14.140	240	1236379	40.00	ppm	0.00
112) Naphthalene-d8a	5.753	136	1202043	40.00	ppm	0.00
114) Chrysene-d12b	14.140	240	1236379	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.416	94	654289	41.54	ppm	92
12) 2-Chlorophenol	4.518	128	495320	44.21	ppm	94
19) 2-Methylphenol	4.865	108	478562	49.06	ppm	97
21) 3&4-Methylphenol	4.988	108	504153	49.27	ppm	98
29) 2-Nitrophenol	5.400	139	262439	48.22	ppm	92
30) 2,4-Dimethylphenol	5.438	107	535586	52.14	ppm	95
31) Benzoic acid	5.555	105	421976	52.15	ppm	98
33) 2,4-Dichlorophenol	5.620	162	393007	45.57	ppm	98
34) 2,6-Dichlorophenol	5.839	162	390218	45.88	ppm	98
43) 4-Chloro-3-methylphenol	6.336	107	466629	45.80	ppm	98
49) 2,4,6-Trichlorophenol	6.844	196	284562	47.92	ppm	98
50) 2,4,5-Trichlorophenol	6.882	196	291306	45.28	ppm	99
60) 2,4-Dinitrophenol	7.903	184	102484	39.19	ppm #	85
61) 4-Nitrophenol	8.027	109	165026	49.00	ppm	97
64) 2,3,4,6-Tetrachlorophenol	8.283	232	253953	46.52	ppm	99
70) 4,6-Dinitro-2-methylph...	8.674	198	169236	41.01	ppm	97
76) Pentachlorophenol	9.706	266	199419	49.07	ppm	97

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1157\
Data File : 6p24839.D
Acq On : 6 Apr 2016 9:53 am
Operator : ashleyd
Sample : icv1155-50
Misc : op92208,e6p1157
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 10:15:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

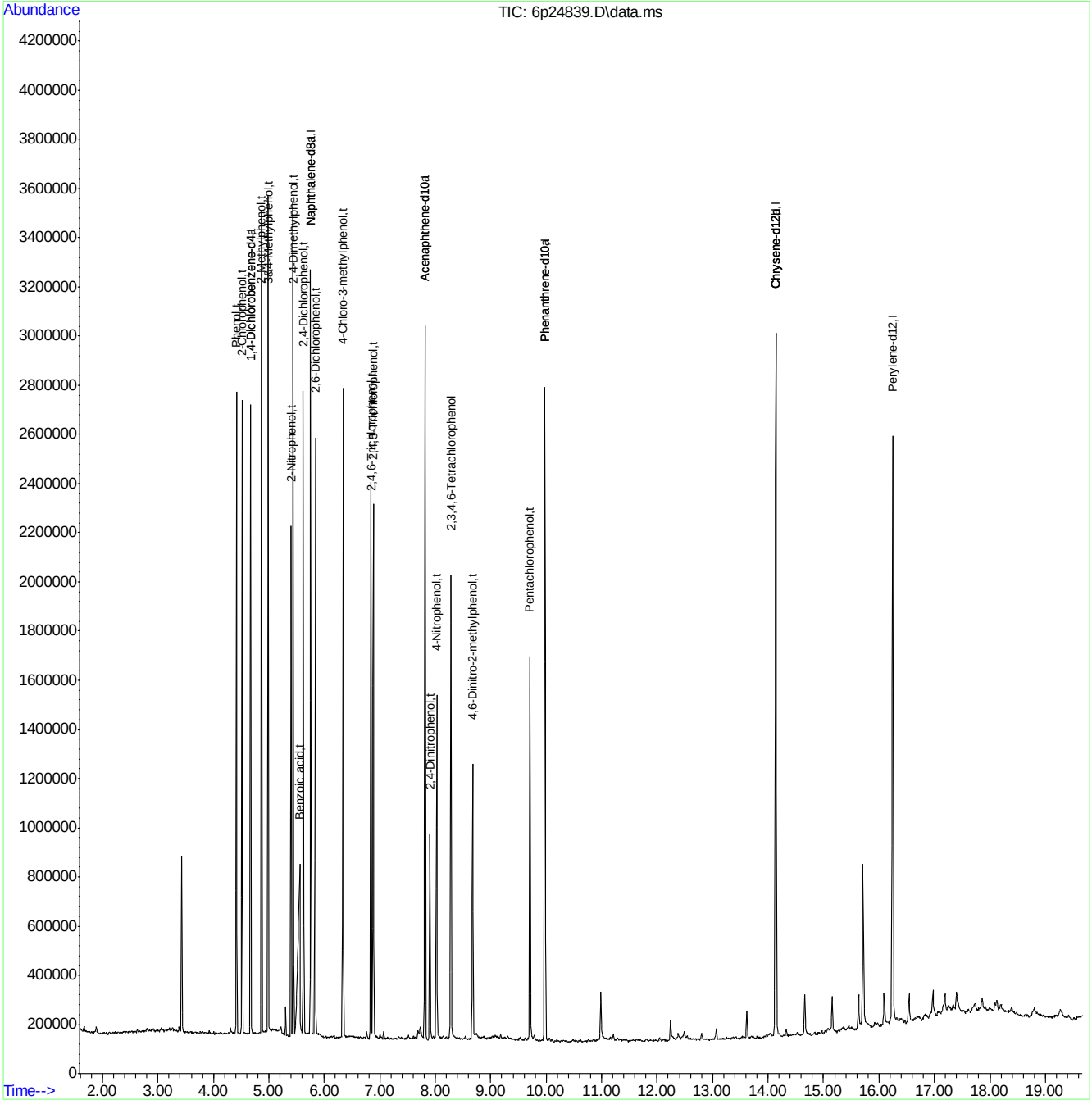
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1157\
Data File : 6p24839.D
Acq On : 6 Apr 2016 9:53 am
Operator : ashleyd
Sample : icv1155-50
Misc : op92208,e6p1157
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 06 10:15:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Apr 06 09:04:01 2016
QLast Update : Wed Apr 06 09:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/11/16 16:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25832a.D
Acq On : 11 May 2016 9:27 am
Operator : ariellec
Sample : cc1155-50
Misc : op93693,e6p1206
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 15:14:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:13:12 2016
QLast Update : Wed May 11 15:13:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	347174	40.00	ppm	0.00
24) Naphthalene-d8	5.705	136	1437933	40.00	ppm	0.00
47) Acenaphthene-d10	7.754	164	852861	40.00	ppm	0.00
69) Phenanthrene-d10	9.925	188	1441453	40.00	ppm	-0.14
83) Chrysene-d12	14.113	240	1524175	40.00	ppm	0.01
92) Perylene-d12	16.226	264	1343414	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.625	152	347174	40.00	ppm	0.00
104) Acenaphthene-d10a	7.754	164	852861	40.00	ppm	0.00
106) Phenanthrene-d10a	9.925	188	1441453	40.00	ppm	0.00
108) Chrysene-d12a	14.113	240	1524175	40.00	ppm	0.01
110) Naphthalene-d8a	5.705	136	1437933	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.684	112	556021	45.15	ppm	0.03
Spiked Amount 50.000			Recovery	=	90.30%	
8) Phenol-d5	4.406	99	755940	46.70	ppm	0.01
Spiked Amount 50.000			Recovery	=	93.40%	
25) Nitrobenzene-d5	5.069	82	735140	46.69	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.38%	
51) 2-Fluorobiphenyl	6.887	172	1362862	49.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.50%	
73) 2,4,6-Tribromophenol	8.893	330	216292	64.29	ppm	-0.12
Spiked Amount 50.000			Recovery	=	128.58%	
85) Terphenyl-d14	12.471	244	1522248	53.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	106.30%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.181	88	231503	37.17	ppm	99
3) Pyridine	2.518	79	605896	38.65	ppm	96
4) N-Nitrosodimethylamine	2.485	74	362579	37.69	ppm	78
6) Indene	4.823	116	1110420	51.94	ppm	97
7) Cumene	4.026	105	1590248	47.55	ppm	100
9) Phenol	4.416	94	884757	47.98	ppm	98
10) Aniline	4.390	93	739848	38.50	ppm	65
11) bis(2-Chloroethyl)ether	4.432	93	593489	44.46	ppm	94
12) 2-Chlorophenol	4.491	128	641744	48.92	ppm	92
13) Decane	4.502	43	666428	42.76	ppm	98
14) 1,3-Dichlorobenzene	4.582	146	683004	49.23	ppm	98
15) 1,4-Dichlorobenzene	4.641	146	689146	49.41	ppm	99
16) Benzyl alcohol	4.753	108	415354	48.07	ppm	77
17) 1,2-Dichlorobenzene	4.759	146	657556	51.26	ppm	100
18) Acetophenone	4.946	105	935636	51.20	ppm	78
19) 2-Methylphenol	4.860	108	573771	50.24	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.834	121	219966	48.89	ppm #	79
21) 3&4-Methylphenol	4.978	108	628120	52.44	ppm	99
22) n-Nitroso-di-n-propyla...	4.951	70	517385	48.10	ppm	98
23) Hexachloroethane	5.021	201	221660	44.90	ppm	90
26) Nitrobenzene	5.085	77	760582	45.94	ppm	97
27) Quinoline	6.080	129	1282507	50.97	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25832a.D
Acq On : 11 May 2016 9:27 am
Operator : ariellec
Sample : cc1155-50
Misc : op93693,e6p1206
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 15:14:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:13:12 2016
QLast Update : Wed May 11 15:13:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	5.288	82	1245404	44.97	ppm		98
29) 2-Nitrophenol	5.363	139	364010	55.91	ppm		94
30) 2,4-Dimethylphenol	5.417	107	646555	52.61	ppm		95
31) Benzoic acid	5.572	105	530934	54.85	ppm		98
32) bis(2-Chloroethoxy)met...	5.475	93	705346	43.20	ppm		99
33) 2,4-Dichlorophenol	5.604	162	505054	48.96	ppm		96
34) 2,6-Dichlorophenol	5.802	162	498231	48.97	ppm		100
35) 1,3,5-Trichlorobenzene	5.363	180	565795	46.04	ppm		98
36) 1,2,4-Trichlorobenzene	5.652	180	537552	44.97	ppm		97
37) 1,2,3-Trichlorobenzene	5.871	180	522341	45.47	ppm		95
38) Naphthalene	5.727	128	1937574	50.58	ppm		99
39) 4-Chloroaniline	5.791	127	727332	46.98	ppm		98
40) 2,3-Dichloroaniline	6.791	161	634448	50.44	ppm		99
41) Caprolactam	6.176	55	295570	46.10	ppm		96
42) Hexachlorobutadiene	5.844	225	303096	45.06	ppm		97
43) 4-Chloro-3-methylphenol	6.342	107	637109	52.27	ppm	#	61
44) 2-Methylnaphthalene	6.454	141	1092974	52.99	ppm		96
45) 1-Methylnaphthalene	6.566	141	1144596	53.23	ppm		98
46) Dimethylnaphthalene	7.208	156	1168578	49.09	ppm		92
48) Hexachlorocyclopentadiene	6.636	237	609880	88.96	ppm		96
49) 2,4,6-Trichlorophenol	6.813	196	358654	49.19	ppm		94
50) 2,4,5-Trichlorophenol	6.882	196	394477	49.94	ppm		94
52) 2-Chloronaphthalene	7.037	162	1166635	48.13	ppm		99
53) Biphenyl	7.010	154	1597851	48.72	ppm		99
54) 2-Nitroaniline	7.192	65	464504	52.71	ppm		86
55) Dimethylphthalate	7.422	163	1398621	50.10	ppm		100
56) Acenaphthylene	7.567	152	2013327	54.25	ppm		99
57) 2,6-Dinitrotoluene	7.503	165	323295	58.58	ppm		91
58) 3-Nitroaniline	7.743	138	363770	54.52	ppm		92
59) Acenaphthene	7.802	153	1280202	50.99	ppm		93
60) 2,4-Dinitrophenol	7.898	184	344428	96.98	ppm		100
61) 4-Nitrophenol	8.091	109	195134	47.18	ppm		94
62) Dibenzofuran	8.043	168	1716201	51.41	ppm		95
63) 2,4-Dinitrotoluene	8.069	165	457553	62.96	ppm		81
64) 2,3,4,6-Tetrachlorophenol	8.251	232	292721	43.67	ppm		95
65) Diethylphthalate	8.412	149	1470764	54.64	ppm		96
66) Fluorene	8.529	166	1481052	52.91	ppm		99
67) 4-Chlorophenyl-phenyle...	8.545	204	670836	45.97	ppm		94
68) 4-Nitroaniline	8.620	138	362817	54.70	ppm		98
70) 4,6-Dinitro-2-methylph...	8.663	198	264396	52.10	ppm	#	63
71) n-Nitrosodiphenylamine	8.733	169	992328	50.17	ppm		100
72) 1,2-Diphenylhydrazine	8.781	77	1553977	48.99	ppm		98
74) 4-Bromophenyl-phenylether	9.268	248	378389	49.13	ppm		97
75) Hexachlorobenzene	9.353	284	432489	54.92	ppm		99
76) Pentachlorophenol	9.690	266	494399	100.78	ppm		97
77) Phenanthrene	9.963	178	2041323	49.14	ppm		99
78) Anthracene	10.043	178	2072391	50.30	ppm		99
79) Carbazole	10.327	167	1886470	52.05	ppm		98
80) Di-n-butylphthalate	10.931	149	2518488	58.68	ppm		99
81) Fluoranthene	11.824	202	2252289	50.06	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25832a.D
Acq On : 11 May 2016 9:27 am
Operator : ariellec
Sample : cc1155-50
Misc : op93693,e6p1206
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 15:14:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:13:12 2016
QLast Update : Wed May 11 15:13:12 2016
Response via : Initial Calibration

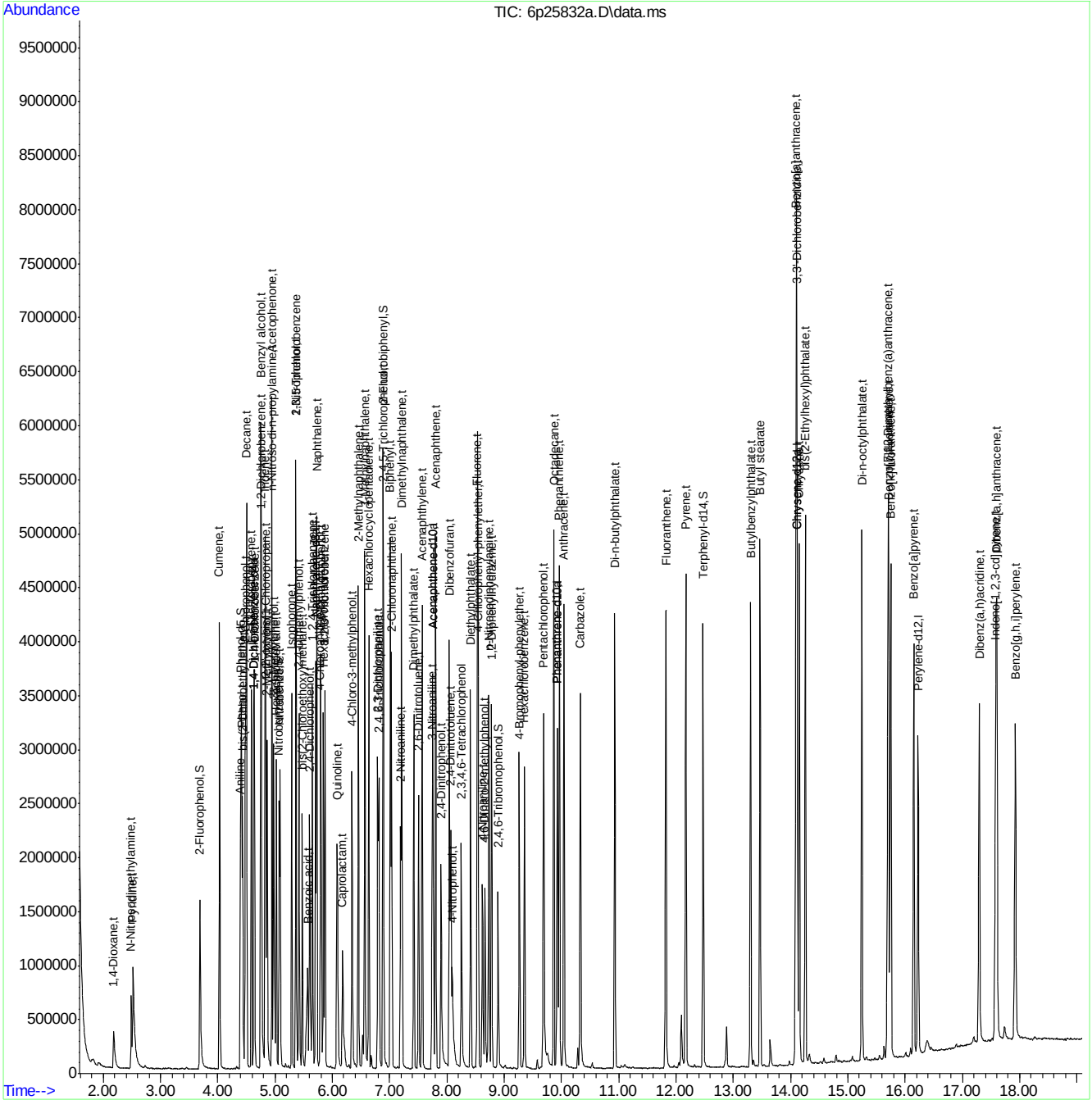
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
82) Octadecane	9.867	57	970177	49.58 ppm	97
84) Pyrene	12.172	202	2347402	49.00 ppm	99
86) Butylbenzylphthalate	13.300	149	1144156	60.86 ppm	97
87) Butyl stearate	13.466	56	689870	53.68 ppm	89
88) Benzo[a]anthracene	14.097	228	2126596	49.28 ppm	100
89) 3,3'-Dichlorobenzidine	14.103	252	874602	62.74 ppm	99
90) Chrysene	14.151	228	2006214	46.36 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.258	149	1547137	59.99 ppm	98
93) Di-n-octylphthalate	15.242	149	2694910	65.41 ppm	99
94) Benzo[b]fluoranthene	15.713	252	2220173	55.69 ppm	99
95) Benzo[k]fluoranthene	15.750	252	2053978	54.16 ppm	99
96) Benzo[a]pyrene	16.151	252	1839950	53.04 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.579	276	1954128m	59.80 ppm	
98) Dibenz(a,h)acridine	17.296	279	1722956	57.49 ppm	99
99) Dibenz[a,h]anthracene	17.601	278	2071034	58.42 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.702	256	989303	62.20 ppm	96
101) Benzo[g,h,i]perylene	17.927	276	1883891	52.65 ppm	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25832a.D
Acq On : 11 May 2016 9:27 am
Operator : ariellec
Sample : cc1155-50
Misc : op93693,e6p1206
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 15:14:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:13:12 2016
QLast Update : Wed May 11 15:13:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

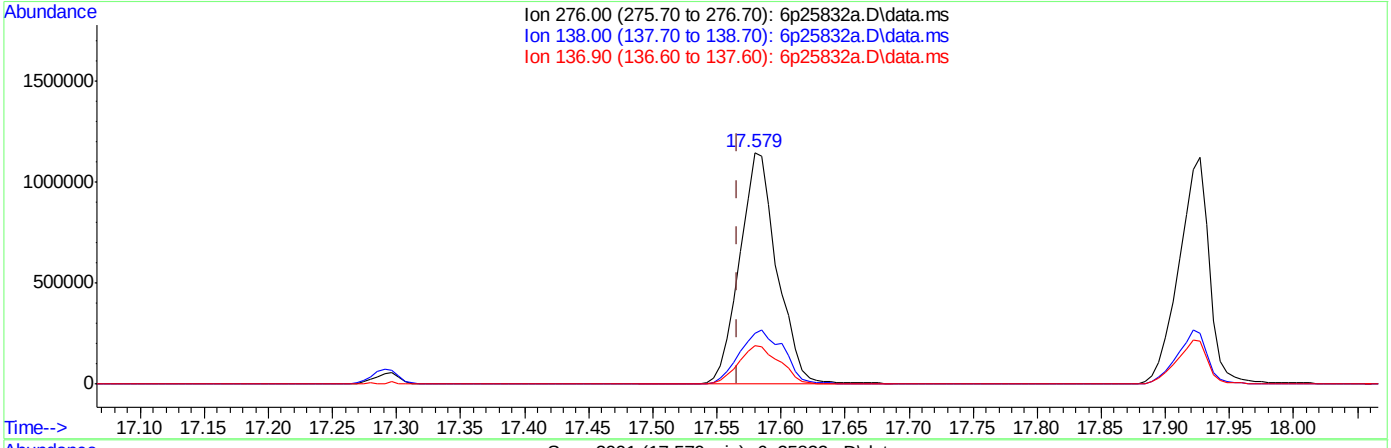
Sample Number:	E6P1206-CC1155	**Method:**	SW846 8270D
Lab FileID:	6P25832A.D	**Analyst approved:**	05/11/16 14:07 Arielle Cocozza
Injection Time:	05/11/16 09:27	**Supervisor approved:**	05/11/16 16:12 Nina Pandya

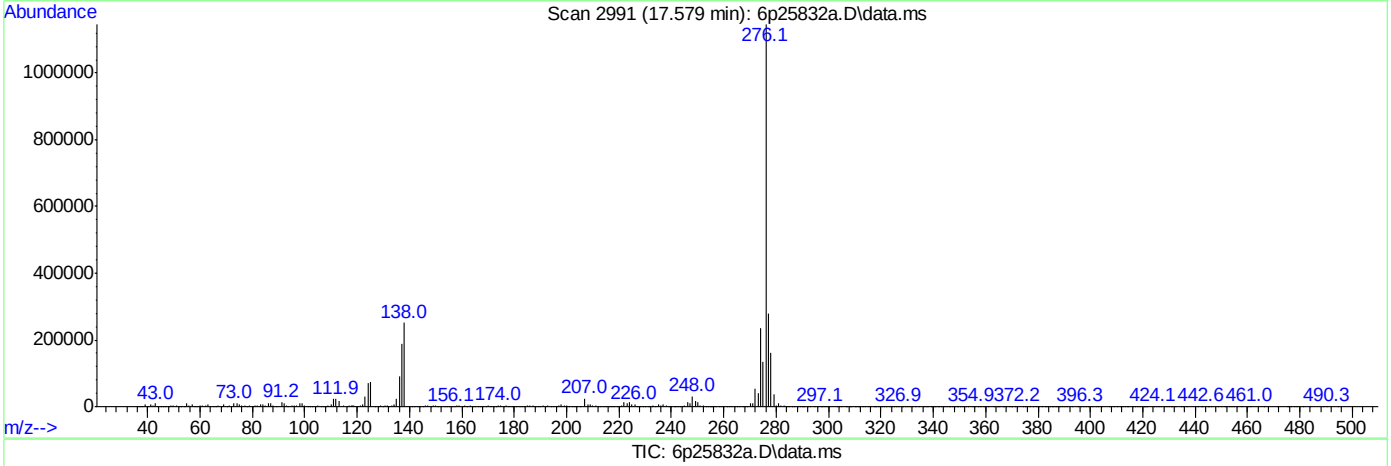
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		17.58	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25832a.D
Acq On : 11 May 2016 9:27 am
Operator : ariellec
Sample : cc1155-50
Misc : op93693,e6p1206
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 09:50:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 09:50:35 2016
QLast Update : Wed May 11 09:50:35 2016
Response via : Initial Calibration





TIC: 6p25832a.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.579min (+0.013) 71.17ppm

response 2325607

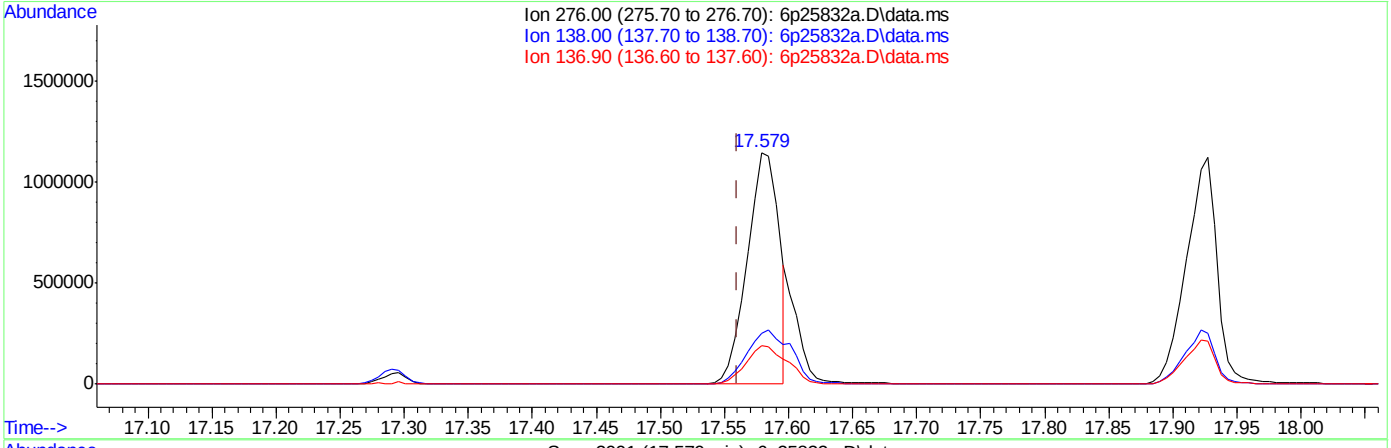
Ion	Exp%	Act%
276.00	100	100
138.00	23.50	21.86
136.90	16.60	16.48
0.00	0.00	0.00

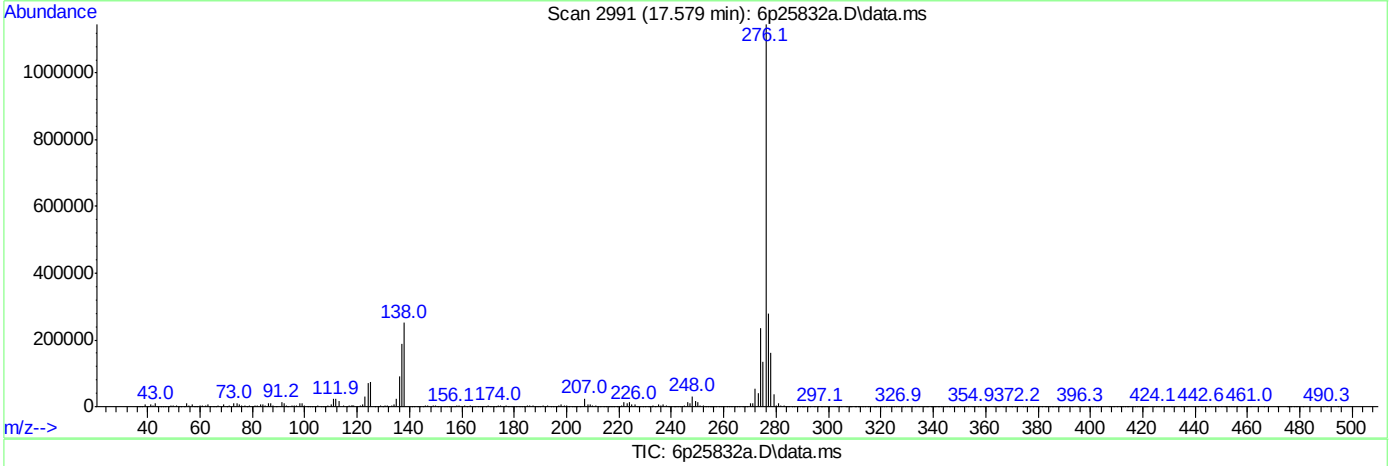
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25832a.D
Acq On : 11 May 2016 9:27 am
Operator : ariellec
Sample : cc1155-50
Misc : op93693,e6p1206
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 15:13:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 15:13:12 2016
QLast Update : Wed May 11 15:13:12 2016
Response via : Initial Calibration





TIC: 6p25832a.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.579min (+0.019) 59.80ppm m

response 1954128

Ion	Exp%	Act%
276.00	100	100
138.00	23.50	21.90
136.90	16.60	16.55
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25833a.D
Acq On : 11 May 2016 10:47 am
Operator : ariellec
Sample : cc1156-50
Misc : op93693,e6p1206
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 14:05:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration

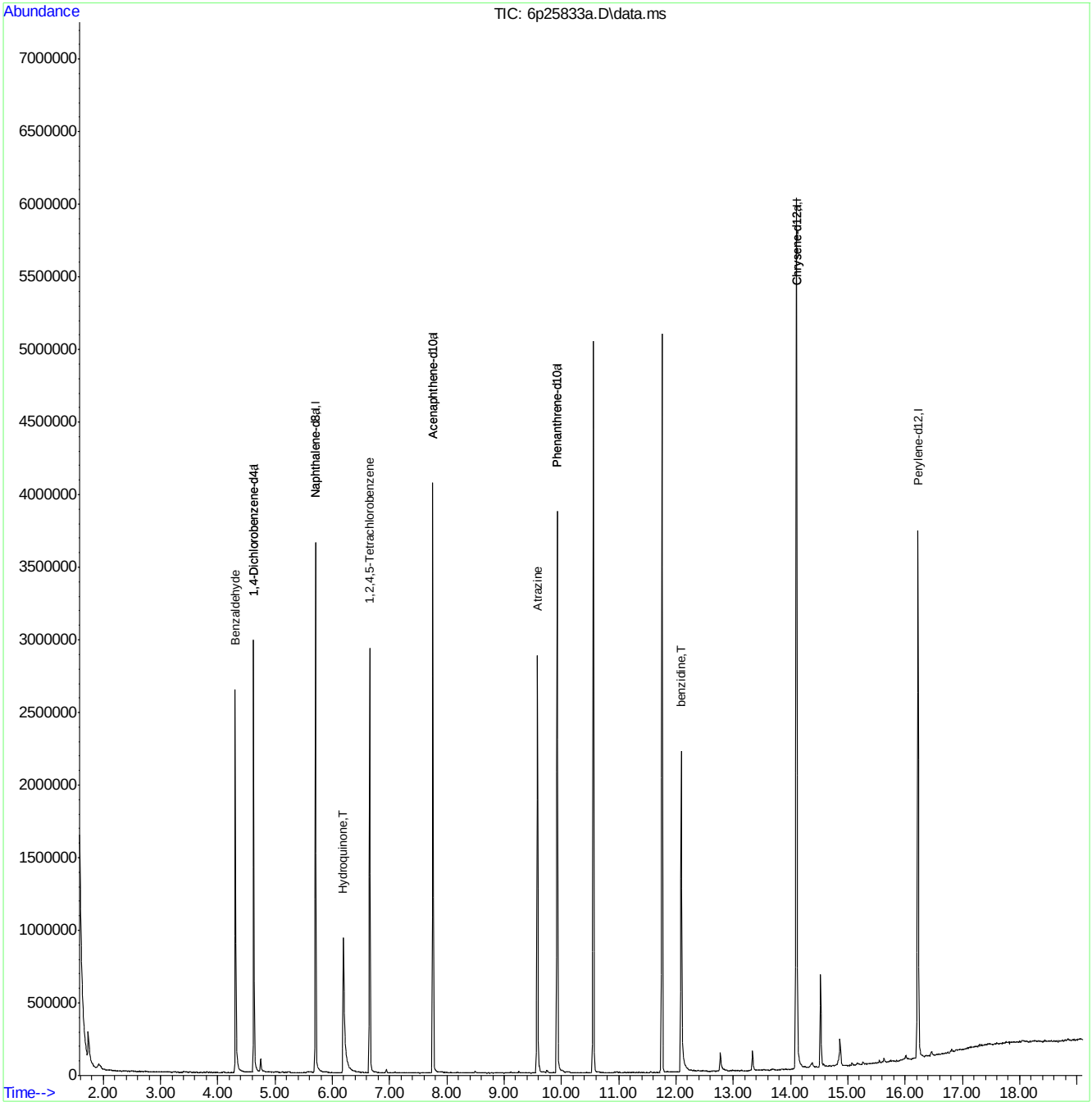
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	372581	40.00	ppm	0.00
24) Naphthalene-d8	5.705	136	1585352	40.00	ppm	0.00
47) Acenaphthene-d10	7.754	164	977958	40.00	ppm	0.00
69) Phenanthrene-d10	9.925	188	1699357	40.00	ppm	0.00
83) Chrysene-d12	14.103	240	1853547	40.00	ppm	0.00
92) Perylene-d12	16.226	264	1682130	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.625	152	372581	40.00	ppm	0.00
104) Acenaphthene-d10a	7.754	164	977958	40.00	ppm	0.00
106) Phenanthrene-d10a	9.925	188	1699357	40.00	ppm	0.00
108) Chrysene-d12a	14.103	240	1853547	40.00	ppm	0.00
110) Naphthalene-d8a	5.705	136	1585352	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.304	105	487535	42.27	ppm	99
105) 1,2,4,5-Tetrachloroben...	6.652	216	543017	35.04	ppm	98
107) Atrazine	9.583	215	224712	48.98	ppm	91
109) benzidine	12.092	184	1163265	50.01	ppm	99
111) Hydroquinone	6.192	110	668905	53.69	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1206\
Data File : 6p25833a.D
Acq On : 11 May 2016 10:47 am
Operator : ariellec
Sample : cc1156-50
Misc : op93693,e6p1206
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 14:05:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1155.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed May 11 14:05:01 2016
QLast Update : Wed May 11 14:05:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.740	152	353054	40.00	ppm	0.00
24) Naphthalene-d8	5.883	136	1349163	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	827850	40.00	ppm	0.00
69) Phenanthrene-d10	10.871	188	1457128	40.00	ppm	0.00
83) Chrysene-d12	16.047	240	1501120	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1487177	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.740	152	353054	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	827850	40.00	ppm	0.00
107) Chrysene-d12a	16.047	240	1501046	40.00	ppm	0.00
110) Phenanthrene-d10a	10.871	188	1457128	40.00	ppm	0.00
112) Naphthalene-d8a	5.883	136	1349163	40.00	ppm	0.00
114) Chrysene-d12b	16.047	240	1501120	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.805	112	22608	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
8) Phenol-d5	4.515	99	27492	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
25) Nitrobenzene-d5	5.194	82	24685	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
51) 2-Fluorobiphenyl	7.218	172	62456	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
73) 2,4,6-Tribromophenol	9.611	330	10165	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
86) Terphenyl-d14	14.039	244	73873	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.315	88	10502	2.00	ppm	100
3) Pyridine	2.683	79	26188	2.00	ppm	100
4) N-Nitrosodimethylamine	2.619	42	11153	2.00	ppm	100
6) Indene	4.943	116	43867	2.00	ppm	100
7) Cumene	4.136	105	59159	2.00	ppm	100
9) Phenol	4.526	94	29661	2.00	ppm	100
10) Aniline	4.494	93	34516	2.00	ppm	100
11) bis(2-Chloroethyl)ether	4.531	93	24153	2.00	ppm	100
12) 2-Chlorophenol	4.601	128	26773	2.00	ppm	100
13) Decane	4.606	43	27279	2.00	ppm	100
14) 1,3-Dichlorobenzene	4.697	146	29862	2.00	ppm	100
15) 1,4-Dichlorobenzene	4.750	146	29310	2.00	ppm	100
16) Benzyl alcohol	4.863	108	14560	2.00	ppm	100
17) 1,2-Dichlorobenzene	4.873	146	28085	2.00	ppm	100
18) Acetophenone	5.066	105	34759	2.00	ppm	100
19) 2-Methylphenol	4.975	108	21233	2.00	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.953	121	7957	2.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.103	108	23720	2.00	ppm	100
22) n-Nitroso-di-n-propyla...	5.060	70	19149	2.00	ppm	100
23) Hexachloroethane	5.151	201	11178	2.00	ppm	100
26) Nitrobenzene	5.210	77	27081	2.00	ppm	100
27) Quinoline	6.283	129	56131	2.00	ppm	100
28) Isophorone	5.423	82	47220	2.00	ppm	100
29) 2-Nitrophenol	5.503	139	13787	2.00	ppm	100
30) 2,4-Dimethylphenol	5.562	107	24589	2.00	ppm	100
31) Benzoic acid	5.674	105	10770	2.00	ppm	100
32) bis(2-Chloroethoxy)met...	5.621	93	28779	2.00	ppm	100
33) 2,4-Dichlorophenol	5.781	162	22290	2.00	ppm	100
34) 2,6-Dichlorophenol	5.984	162	23146	2.00	ppm	100
35) 1,3,5-Trichlorobenzene	5.509	180	26764	2.00	ppm	100
36) 1,2,4-Trichlorobenzene	5.824	180	25945	2.00	ppm	100
37) 1,2,3-Trichlorobenzene	6.064	180	26089	2.00	ppm	100
38) Naphthalene	5.904	128	77451	2.00	ppm	100
39) 4-Chloroaniline	5.973	127	31402	2.00	ppm	100
40) 2,3-Dichloroaniline	7.106	161	29187	2.00	ppm	100
41) Caprolactam	6.347	55	13868	2.00	ppm	100
42) Hexachlorobutadiene	6.032	225	15142	2.00	ppm	100
43) 4-Chloro-3-methylphenol	6.588	107	22283	2.00	ppm	100
44) 2-Methylnaphthalene	6.716	141	45834	2.00	ppm	100
45) 1-Methylnaphthalene	6.844	142	54890	2.00	ppm	100
46) Dimethylnaphthalene	7.592	156	49916	2.00	ppm	100
48) Hexachlorocyclopentadiene	6.930	237	10609	4.00	ppm	100
49) 2,4,6-Trichlorophenol	7.127	196	17392	2.00	ppm	100
50) 2,4,5-Trichlorophenol	7.218	196	19406	2.00	ppm	100
52) 2-Chloronaphthalene	7.384	162	54805	2.00	ppm	100
53) Biphenyl	7.362	154	67614	2.00	ppm	100
54) 2-Nitroaniline	7.560	65	15136	2.00	ppm	100
55) Dimethylphthalate	7.838	163	61502	2.00	ppm	100
56) Acenaphthylene	8.008	152	87080	2.00	ppm	100
57) 2,6-Dinitrotoluene	7.928	165	13081	2.00	ppm	100
58) 3-Nitroaniline	8.211	138	14184	2.00	ppm	100
59) Acenaphthene	8.292	153	53595	2.00	ppm	100
60) 2,4-Dinitrophenol	8.409	184	4262	4.00	ppm	100
61) 4-Nitrophenol	8.697	109	5914	2.00	ppm	100
62) Dibenzofuran	8.580	168	80037	2.00	ppm	100
63) 2,4-Dinitrotoluene	8.601	165	16573	2.00	ppm	100
64) 2,3,4,6-Tetrachlorophenol	8.836	232	13115	2.00	ppm	100
65) Diethylphthalate	9.029	149	61137	2.00	ppm	100
66) Fluorene	9.167	166	62899	2.00	ppm	100
67) 4-Chlorophenyl-phenyle...	9.194	204	30288	2.00	ppm	100
68) 4-Nitroaniline	9.258	138	12733	2.00	ppm	100
70) 4,6-Dinitro-2-methylph...	9.322	198	5814	2.00	ppm	100
71) n-Nitrosodiphenylamine	9.413	169	41611	2.00	ppm	100
72) 1,2-Diphenylhydrazine	9.472	77	53751	2.00	ppm	100
74) 4-Bromophenyl-phenylether	10.070	248	19351	2.00	ppm	100
75) Hexachlorobenzene	10.166	284	22945	2.00	ppm	100
76) Pentachlorophenol	10.588	266	13056	4.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.914	178	89686	2.00	ppm	100
78) Anthracene	11.010	178	91624	2.00	ppm	100
79) Carbazole	11.368	167	83031	2.00	ppm	100
80) Di-n-butylphthalate	12.142	149	102303	2.00	ppm	100
81) Fluoranthene	13.211	202	102466	2.00	ppm	100
82) Octadecane	10.845	57	33688	2.00	ppm	100
84) Pyrene	13.638	202	106409	2.00	ppm	100
85) Butyl stearate	15.320	56	24468	2.00	ppm	100
87) Butylbenzylphthalate	15.085	149	43311	2.00	ppm	100
88) Benzo[a]anthracene	16.031	228	101109	2.00	ppm	100
89) 3,3'-Dichlorobenzidine	16.057	252	34359	2.00	ppm	100
90) Chrysene	16.095	228	92503	2.00	ppm	100
91) bis(2-Ethylhexyl)phtha...	16.298	149	59710	2.00	ppm	100
93) Di-n-octylphthalate	17.521	149	105240	2.00	ppm	100
94) Benzo[b]fluoranthene	18.023	252	105635	2.00	ppm	100
95) Benzo[k]fluoranthene	18.071	252	101433	2.00	ppm	100
96) Benzo[a]pyrene	18.573	252	94954	2.00	ppm	100
97) Indeno[1,2,3-cd]pyrene	20.405	276	97557m	2.00	ppm	
98) Dibenz(a,h)acridine	20.031	279	84434	2.00	ppm	100
99) Dibenz[a,h]anthracene	20.448	278	100256	2.00	ppm	100
100) 7,12-Dimethylbenz(a)an...	18.023	256	46980	2.00	ppm	100
101) Benzo[g,h,i]perylene	20.870	276	104970	2.00	ppm	100

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

7.6.68

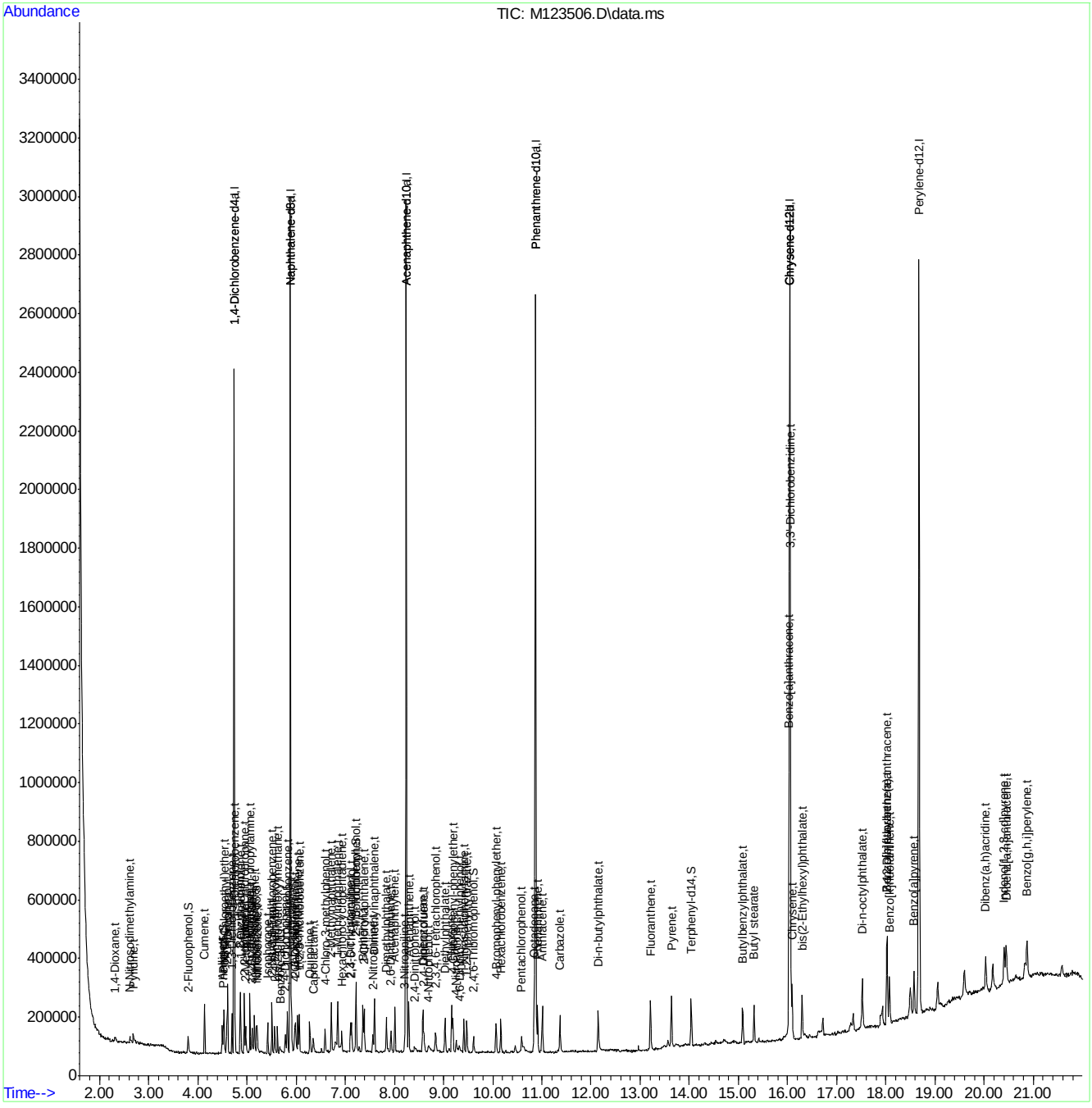
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration



Manual Integration Approval Summary

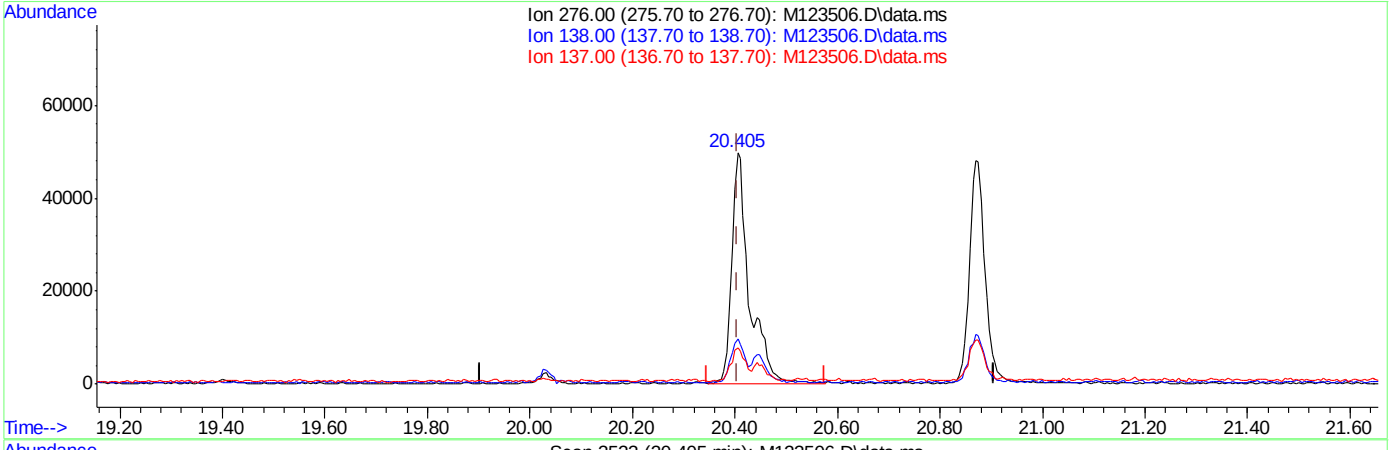
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123506.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:04	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

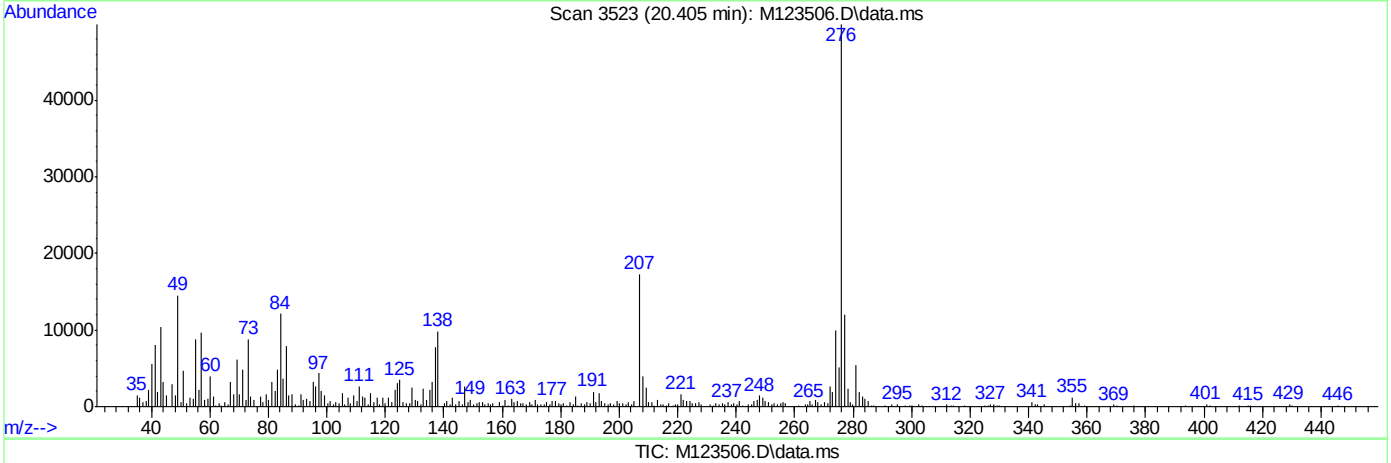
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.41	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:38:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:37:50 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (0.000) 2.49ppm

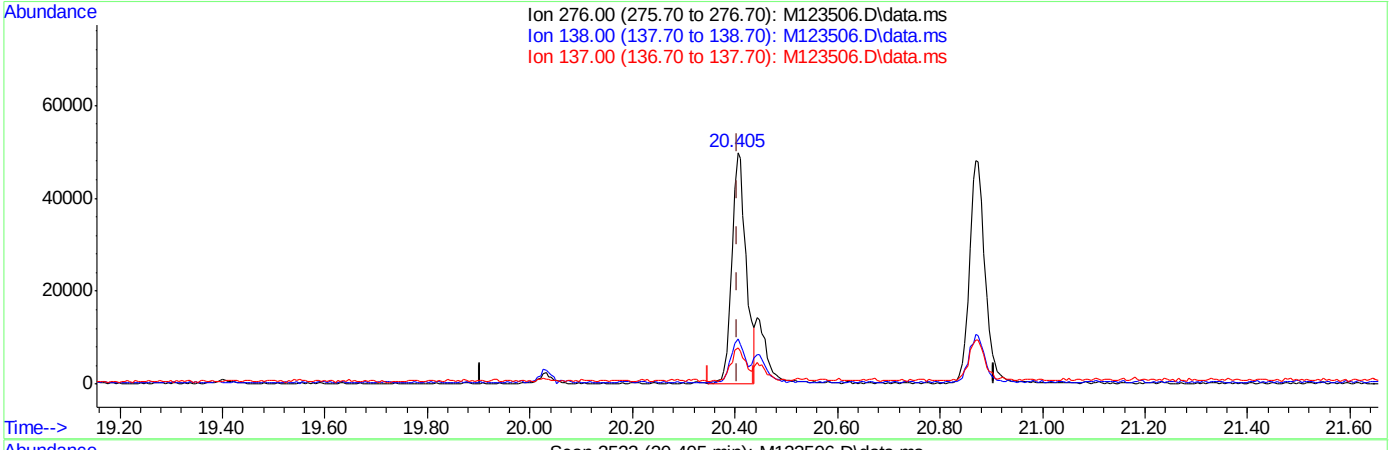
response 121176

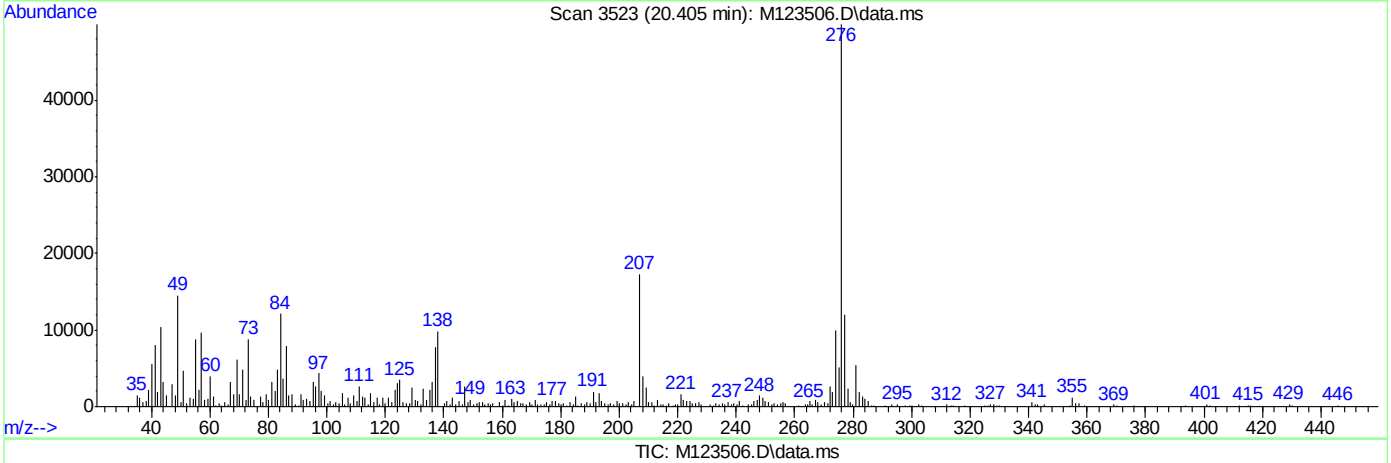
Ion	Exp%	Act%
276.00	100	100
138.00	15.30	18.78
137.00	12.70	13.78
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (0.000) 2.00ppm m

response 97557

Ion	Exp%	Act%
276.00	100	100
138.00	19.70	19.66
137.00	15.40	15.43
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.741	152	298398	40.00	ppm	0.00
24) Naphthalene-d8	5.884	136	1152427	40.00	ppm	0.00
47) Acenaphthene-d10	8.245	164	700074	40.00	ppm	0.00
69) Phenanthrene-d10	10.878	188	1239766	40.00	ppm	0.00
83) Chrysene-d12	16.059	240	1214118	40.00	ppm	0.01
92) Perylene-d12	18.682	264	1368506	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.741	152	298398	40.00	ppm	0.00
104) Acenaphthene-d10a	8.245	164	700074	40.00	ppm	0.00
107) Chrysene-d12a	16.059	240	1214118	40.00	ppm	0.01
110) Phenanthrene-d10a	10.878	188	1239766	40.00	ppm	0.00
112) Naphthalene-d8a	5.884	136	1152427	40.00	ppm	0.00
114) Chrysene-d12b	16.059	240	1214118	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.796	112	951540	99.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	199.20%	
8) Phenol-d5	4.506	99	1136576	97.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	195.66%	
25) Nitrobenzene-d5	5.201	82	956605	90.74	ppm	0.00
Spiked Amount 50.000			Recovery	=	181.48%	
51) 2-Fluorobiphenyl	7.225	172	1988546	75.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	150.60%	
73) 2,4,6-Tribromophenol	9.618	330	422855	97.78	ppm	0.00
Spiked Amount 50.000			Recovery	=	195.56%	
86) Terphenyl-d14	14.051	244	2568843	85.99	ppm	0.01
Spiked Amount 50.000			Recovery	=	171.98%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.306	88	382552	86.20	ppm	98
3) Pyridine	2.637	79	986649	89.15	ppm	97
4) N-Nitrosodimethylamine	2.600	42	431529	91.56	ppm	87
6) Indene	4.944	116	1541587	83.16	ppm	94
7) Cumene	4.138	105	2074156	82.97	ppm	98
9) Phenol	4.517	94	1258943	100.44	ppm	89
10) Aniline	4.496	93	1371300	94.01	ppm	87
11) bis(2-Chloroethyl)ether	4.533	93	827671	81.09	ppm	92
12) 2-Chlorophenol	4.597	128	963903	85.19	ppm	98
13) Decane	4.613	43	783248	67.94	ppm	90
14) 1,3-Dichlorobenzene	4.699	146	1061198	84.09	ppm	96
15) 1,4-Dichlorobenzene	4.752	146	1054411	85.13	ppm	99
16) Benzyl alcohol	4.864	108	592973	96.37	ppm	94
17) 1,2-Dichlorobenzene	4.875	146	956594	80.60	ppm	97
18) Acetophenone	5.067	105	1260578	85.82	ppm	82
19) 2-Methylphenol	4.976	108	825170	91.96	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.955	121	277103	82.41	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.099	108	909113	90.69	ppm		93
22) n-Nitroso-di-n-propyla...	5.073	70	646663	79.91	ppm		95
23) Hexachloroethane	5.153	201	395733	83.77	ppm		94
26) Nitrobenzene	5.217	77	944077	81.63	ppm		96
27) Quinoline	6.290	129	2005928	83.67	ppm		96
28) Isophorone	5.430	82	1715873	85.08	ppm		98
29) 2-Nitrophenol	5.505	139	566158	96.15	ppm		87
30) 2,4-Dimethylphenol	5.564	107	887260	84.49	ppm		96
31) Benzoic acid	5.735	105	711610	154.71	ppm		96
32) bis(2-Chloroethoxy)met...	5.628	93	1051276	85.53	ppm		97
33) 2,4-Dichlorophenol	5.767	162	838581	88.09	ppm		94
34) 2,6-Dichlorophenol	5.991	162	783839	79.29	ppm		100
35) 1,3,5-Trichlorobenzene	5.516	180	921542	80.62	ppm		98
36) 1,2,4-Trichlorobenzene	5.826	180	918334	82.88	ppm		94
37) 1,2,3-Trichlorobenzene	6.066	180	888747	79.76	ppm		97
38) Naphthalene	5.906	128	2714969	82.08	ppm		98
39) 4-Chloroaniline	5.975	127	1215274	90.61	ppm		93
40) 2,3-Dichloroaniline	7.108	161	1048050	84.08	ppm		98
41) Caprolactam	6.403	55	426473	72.00	ppm		96
42) Hexachlorobutadiene	6.039	225	526337	81.39	ppm		95
43) 4-Chloro-3-methylphenol	6.589	107	819254	86.08	ppm	#	28
44) 2-Methylnaphthalene	6.723	141	1594012	81.43	ppm		99
45) 1-Methylnaphthalene	6.851	142	1882961	80.32	ppm		96
46) Dimethylnaphthalene	7.604	156	1714658	80.43	ppm		98
48) Hexachlorocyclopentadiene	6.931	237	995955	444.05	ppm		96
49) 2,4,6-Trichlorophenol	7.134	196	629933	85.66	ppm		98
50) 2,4,5-Trichlorophenol	7.209	196	666926	81.28	ppm		92
52) 2-Chloronaphthalene	7.391	162	1792006	77.33	ppm		98
53) Biphenyl	7.369	154	2325581	81.35	ppm		99
54) 2-Nitroaniline	7.567	65	557169	87.06	ppm		96
55) Dimethylphthalate	7.850	163	2200638	84.62	ppm		96
56) Acenaphthylene	8.016	152	2994283	81.32	ppm		100
57) 2,6-Dinitrotoluene	7.941	165	518352	93.72	ppm		92
58) 3-Nitroaniline	8.224	138	586768	97.84	ppm		98
59) Acenaphthene	8.299	153	1835614	81.00	ppm		92
60) 2,4-Dinitrophenol	8.405	184	547077	607.16	ppm		84
61) 4-Nitrophenol	8.646	109	227031	90.79	ppm		80
62) Dibenzofuran	8.587	168	2701250	79.82	ppm		97
63) 2,4-Dinitrotoluene	8.614	165	682058	97.33	ppm		98
64) 2,3,4,6-Tetrachlorophenol	8.843	232	552694	99.67	ppm		96
65) Diethylphthalate	9.046	149	2185603	84.55	ppm		94
66) Fluorene	9.180	166	2195905	82.57	ppm		96
67) 4-Chlorophenyl-phenyle...	9.201	204	1016641	79.38	ppm		97
68) 4-Nitroaniline	9.281	138	588174	109.25	ppm		77
70) 4,6-Dinitro-2-methylph...	9.335	198	440384	178.05	ppm		93
71) n-Nitrosodiphenylamine	9.431	169	1538073	86.89	ppm		95
72) 1,2-Diphenylhydrazine	9.484	77	1960822	85.75	ppm		98
74) 4-Bromophenyl-phenylether	10.083	248	703778	85.49	ppm		97
75) Hexachlorobenzene	10.179	284	797822	81.73	ppm		97
76) Pentachlorophenol	10.590	266	826172	297.49	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.926	178	3117540	81.71 ppm	99
78) Anthracene	11.023	178	3234215	82.98 ppm	98
79) Carbazole	11.380	167	3064870	86.77 ppm	97
80) Di-n-butylphthalate	12.155	149	3873526	89.00 ppm	99
81) Fluoranthene	13.223	202	3603133	82.66 ppm	97
82) Octadecane	10.852	57	1243246	86.75 ppm	94
84) Pyrene	13.650	202	3648361	84.78 ppm	100
85) Butyl stearate	15.327	56	886841	89.63 ppm	96
87) Butylbenzylphthalate	15.098	149	1739618	99.32 ppm	96
88) Benzo[a]anthracene	16.043	228	3423312	83.72 ppm	98
89) 3,3'-Dichlorobenzidine	16.065	252	1312530	94.46 ppm	98
90) Chrysene	16.118	228	3231698	86.39 ppm	96
91) bis(2-Ethylhexyl)phtha...	16.305	149	2304530	95.44 ppm	98
93) Di-n-octylphthalate	17.533	149	4090162	84.47 ppm	95
94) Benzo[b]fluoranthene	18.062	252	3682371	75.76 ppm	99
95) Benzo[k]fluoranthene	18.105	252	3365217m	72.11 ppm	
96) Benzo[a]pyrene	18.596	252	3393225	77.67 ppm	98
97) Indeno[1,2,3-cd]pyrene	20.439	276	3610192	80.43 ppm	96
98) Dibenz(a,h)acridine	20.054	279	3104766	79.92 ppm	98
99) Dibenz[a,h]anthracene	20.476	278	3491522	75.69 ppm	98
100) 7,12-Dimethylbenz(a)an...	18.051	256	1646711	76.18 ppm	97
101) Benzo[g,h,i]perylene	20.909	276	3563850	73.79 ppm	98

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

7.6.69

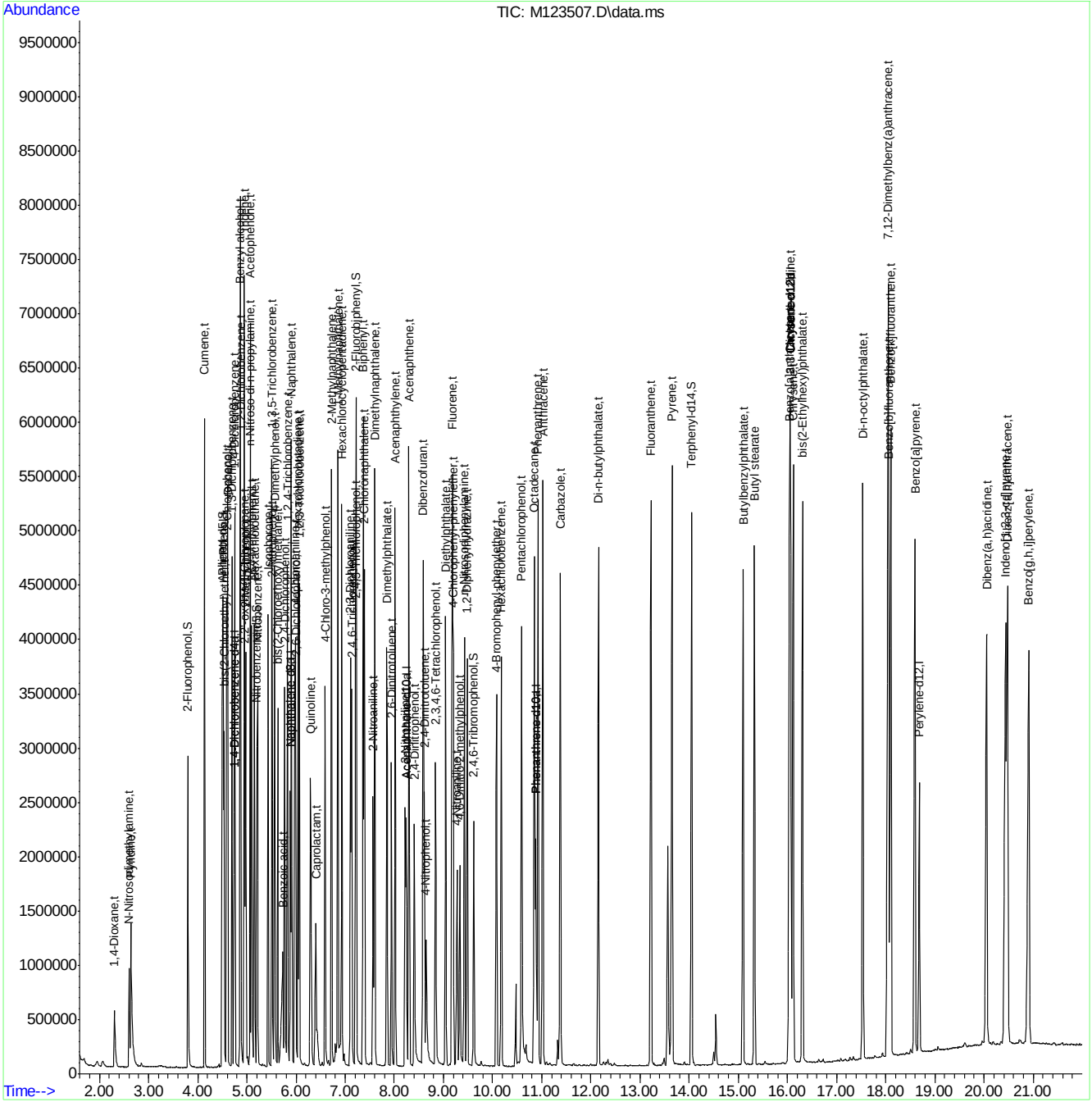
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration



Manual Integration Approval Summary

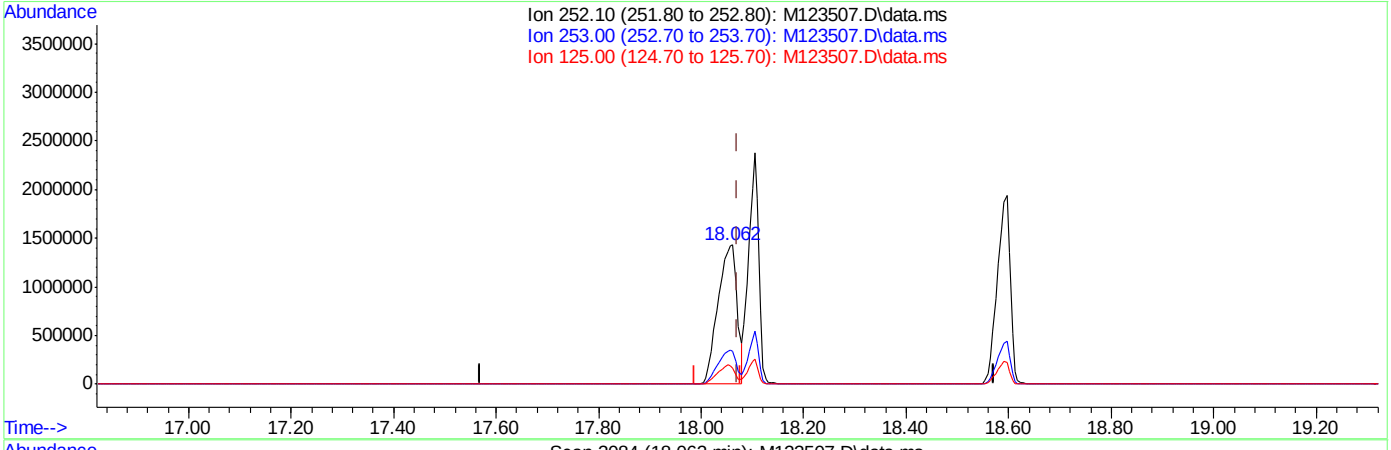
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123507.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:33	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

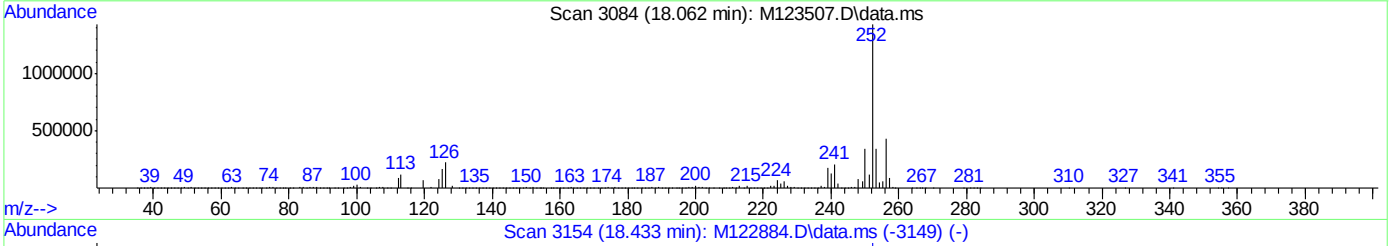
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		18.10	Poor instrument integration

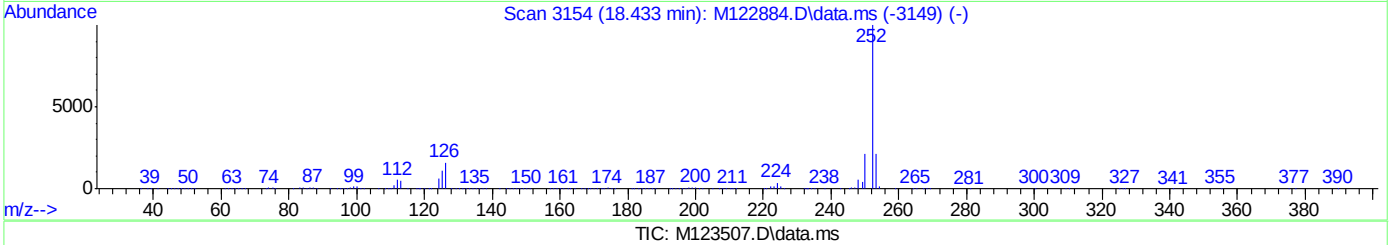
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:42:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration







TIC: M123507.D\data.ms

(95) Benzo[k]fluoranthene (t)

18.062min (-0.009) 78.90ppm

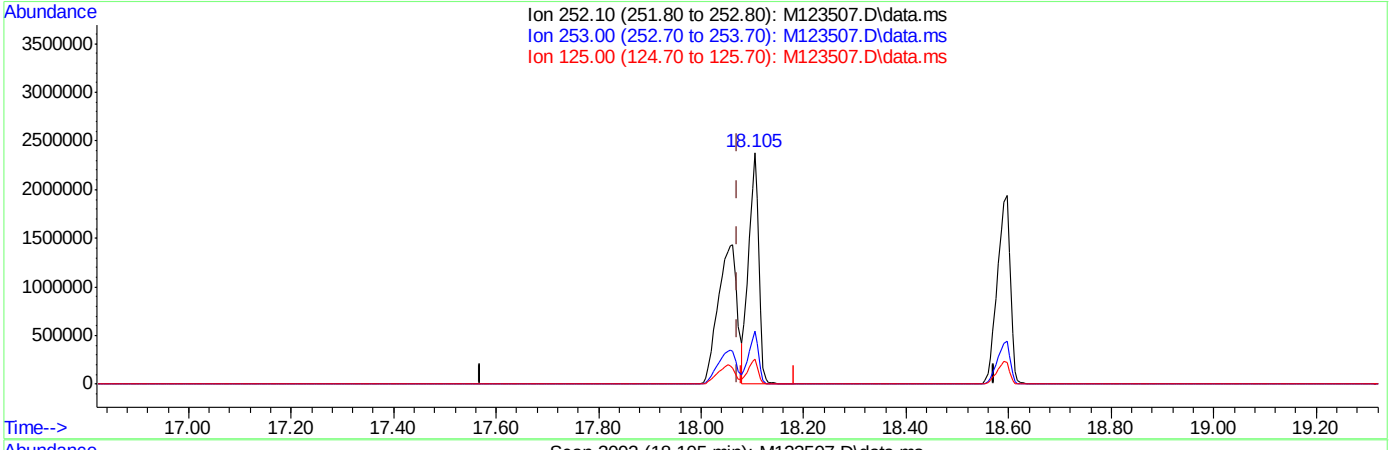
response 3682371

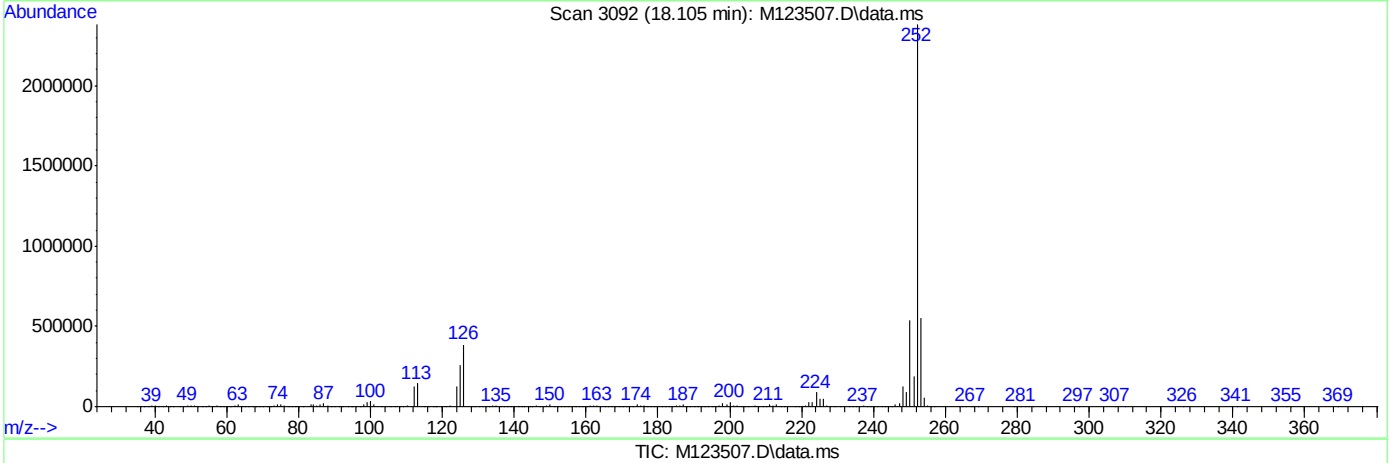
Ion	Exp%	Act%
252.10	100	100
253.00	20.70	23.89
125.00	9.70	11.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration





TIC: M123507.D\data.ms

(95) Benzo[k]fluoranthene (t)

18.105min (+0.034) 72.11ppm m

response 3365217

Ion	Exp%	Act%
252.10	100	100
253.00	20.70	23.03
125.00	9.70	10.83
0.00	0.00	0.00

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.739	152	338996	40.00	ppm	0.00
24) Naphthalene-d8	5.882	136	1304699	40.00	ppm	0.00
47) Acenaphthene-d10	8.243	164	795794	40.00	ppm	0.00
69) Phenanthrene-d10	10.876	188	1395633	40.00	ppm	0.00
83) Chrysene-d12	16.062	240	1398398	40.00	ppm	0.00
92) Perylene-d12	18.685	264	1581079	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.739	152	338996	40.00	ppm	0.00
104) Acenaphthene-d10a	8.243	164	795794	40.00	ppm	0.00
107) Chrysene-d12a	16.062	240	1398398	40.00	ppm	0.00
110) Phenanthrene-d10a	10.876	188	1395633	40.00	ppm	0.00
112) Naphthalene-d8a	5.882	136	1304699	40.00	ppm	0.00
114) Chrysene-d12b	16.062	240	1398398	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.799	112	871890	80.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	160.98%	
8) Phenol-d5	4.510	99	1064454	81.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	163.06%	
25) Nitrobenzene-d5	5.199	82	893645	78.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	157.02%	
51) 2-Fluorobiphenyl	7.223	172	1860771	70.72	ppm	0.00
Spiked Amount 50.000			Recovery	=	141.44%	
73) 2,4,6-Tribromophenol	9.616	330	390687	81.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	162.30%	
86) Terphenyl-d14	14.049	244	2413819	75.44	ppm	0.00
Spiked Amount 50.000			Recovery	=	150.88%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.304	88	352358	75.07	ppm	98
3) Pyridine	2.635	79	949501	79.85	ppm	99
4) N-Nitrosodimethylamine	2.598	42	411585	80.26	ppm	99
6) Indene	4.942	116	1454204	75.40	ppm	99
7) Cumene	4.141	105	1958543	75.38	ppm	100
9) Phenol	4.515	94	1169370	81.94	ppm	97
10) Aniline	4.494	93	1316012	81.87	ppm	94
11) bis(2-Chloroethyl)ether	4.536	93	766690	73.02	ppm	97
12) 2-Chlorophenol	4.601	128	888727	74.67	ppm	95
13) Decane	4.611	43	737596	67.07	ppm	99
14) 1,3-Dichlorobenzene	4.697	146	993442	75.28	ppm	99
15) 1,4-Dichlorobenzene	4.755	146	980894	75.31	ppm	98
16) Benzyl alcohol	4.862	108	553141	80.59	ppm	97
17) 1,2-Dichlorobenzene	4.873	146	898624	73.81	ppm	98
18) Acetophenone	5.065	105	1169422	75.43	ppm	72
19) 2-Methylphenol	4.974	108	768955	78.59	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.953	121	263363	75.59	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.097	108	840983	77.45	ppm		97
22) n-Nitroso-di-n-propyla...	5.071	70	609664	73.72	ppm		99
23) Hexachloroethane	5.151	201	360392	73.09	ppm		96
26) Nitrobenzene	5.215	77	882603	74.22	ppm		98
27) Quinoline	6.288	129	1883841	75.58	ppm		99
28) Isophorone	5.428	82	1616046	76.49	ppm		99
29) 2-Nitrophenol	5.508	139	529040	80.92	ppm		88
30) 2,4-Dimethylphenol	5.562	107	815504	74.36	ppm		99
31) Benzoic acid	5.727	105	652903	98.45	ppm		98
32) bis(2-Chloroethoxy)met...	5.626	93	974076	75.46	ppm		100
33) 2,4-Dichlorophenol	5.765	162	777999	76.76	ppm		99
34) 2,6-Dichlorophenol	5.989	162	727434	72.51	ppm		99
35) 1,3,5-Trichlorobenzene	5.514	180	851013	72.82	ppm		99
36) 1,2,4-Trichlorobenzene	5.824	180	846105	73.76	ppm		99
37) 1,2,3-Trichlorobenzene	6.064	180	814656	71.85	ppm		99
38) Naphthalene	5.909	128	2516406	73.81	ppm		100
39) 4-Chloroaniline	5.973	127	1140137	78.79	ppm		100
40) 2,3-Dichloroaniline	7.111	161	972755	74.89	ppm		98
41) Caprolactam	6.400	55	399201	69.22	ppm		98
42) Hexachlorobutadiene	6.037	225	486523	73.27	ppm		99
43) 4-Chloro-3-methylphenol	6.587	107	766994	76.51	ppm	#	99
44) 2-Methylnaphthalene	6.721	141	1485022	73.87	ppm		99
45) 1-Methylnaphthalene	6.849	142	1767055	73.85	ppm		99
46) Dimethylnaphthalene	7.602	156	1601249	73.54	ppm		100
48) Hexachlorocyclopentadiene	6.929	237	911624	222.07	ppm		99
49) 2,4,6-Trichlorophenol	7.132	196	555171	71.54	ppm		98
50) 2,4,5-Trichlorophenol	7.212	196	626265	74.08	ppm		99
52) 2-Chloronaphthalene	7.394	162	1658900	71.03	ppm		99
53) Biphenyl	7.367	154	2180649	74.00	ppm		99
54) 2-Nitroaniline	7.565	65	519078	76.29	ppm		97
55) Dimethylphthalate	7.848	163	2030273	74.40	ppm		99
56) Acenaphthylene	8.019	152	2812775	74.13	ppm		100
57) 2,6-Dinitrotoluene	7.944	165	484678	79.59	ppm		97
58) 3-Nitroaniline	8.222	138	548411	81.32	ppm		98
59) Acenaphthene	8.297	153	1691495	72.56	ppm		100
60) 2,4-Dinitrophenol	8.403	184	513662	248.53	ppm		98
61) 4-Nitrophenol	8.649	109	203733	75.13	ppm		98
62) Dibenzofuran	8.590	168	2514896	72.71	ppm		95
63) 2,4-Dinitrotoluene	8.612	165	636776	81.02	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.841	232	518427	82.38	ppm		99
65) Diethylphthalate	9.044	149	2042389	75.32	ppm		100
66) Fluorene	9.178	166	2060396	74.66	ppm		100
67) 4-Chlorophenyl-phenyle...	9.199	204	945088	72.38	ppm		98
68) 4-Nitroaniline	9.279	138	549638	85.84	ppm		99
70) 4,6-Dinitro-2-methylph...	9.333	198	398239	102.88	ppm		98
71) n-Nitrosodiphenylamine	9.429	169	1427362	76.65	ppm		98
72) 1,2-Diphenylhydrazine	9.482	77	1863568	77.95	ppm		98
74) 4-Bromophenyl-phenylether	10.080	248	643898	74.92	ppm		99
75) Hexachlorobenzene	10.177	284	740404	74.15	ppm		99
76) Pentachlorophenol	10.588	266	763760	196.43	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.924	178	2879566	73.79	ppm	99
78)	Anthracene	11.020	178	2985438	74.37	ppm	100
79)	Carbazole	11.378	167	2843918	76.59	ppm	100
80)	Di-n-butylphthalate	12.153	149	3564128	76.98	ppm	100
81)	Fluoranthene	13.221	202	3373878	75.28	ppm	100
82)	Octadecane	10.850	57	1148564	76.24	ppm	99
84)	Pyrene	13.648	202	3411303	74.49	ppm	99
85)	Butyl stearate	15.325	56	836866	77.45	ppm	98
87)	Butylbenzylphthalate	15.096	149	1638799	81.51	ppm	99
88)	Benzo[a]anthracene	16.041	228	3260137	75.36	ppm	99
89)	3,3'-Dichlorobenzidine	16.068	252	1257074	80.79	ppm	99
90)	Chrysene	16.116	228	3073370	76.54	ppm	100
91)	bis(2-Ethylhexyl)phtha...	16.303	149	2225457	81.89	ppm	98
93)	Di-n-octylphthalate	17.531	149	3910020	75.78	ppm	100
94)	Benzo[b]fluoranthene	18.055	252	3502266	70.97	ppm	97
95)	Benzo[k]fluoranthene	18.103	252	3185383	68.65	ppm	99
96)	Benzo[a]pyrene	18.594	252	3210405	71.60	ppm	100
97)	Indeno[1,2,3-cd]pyrene	20.437	276	3468372	74.14	ppm	100
98)	Dibenz(a,h)acridine	20.052	279	2988968	74.03	ppm	100
99)	Dibenz[a,h]anthracene	20.474	278	3366031	71.90	ppm	100
100)	7,12-Dimethylbenz(a)an...	18.049	256	1562522	71.03	ppm	99
101)	Benzo[g,h,i]perylene	20.907	276	3434073	70.83	ppm	100

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

7.6.70

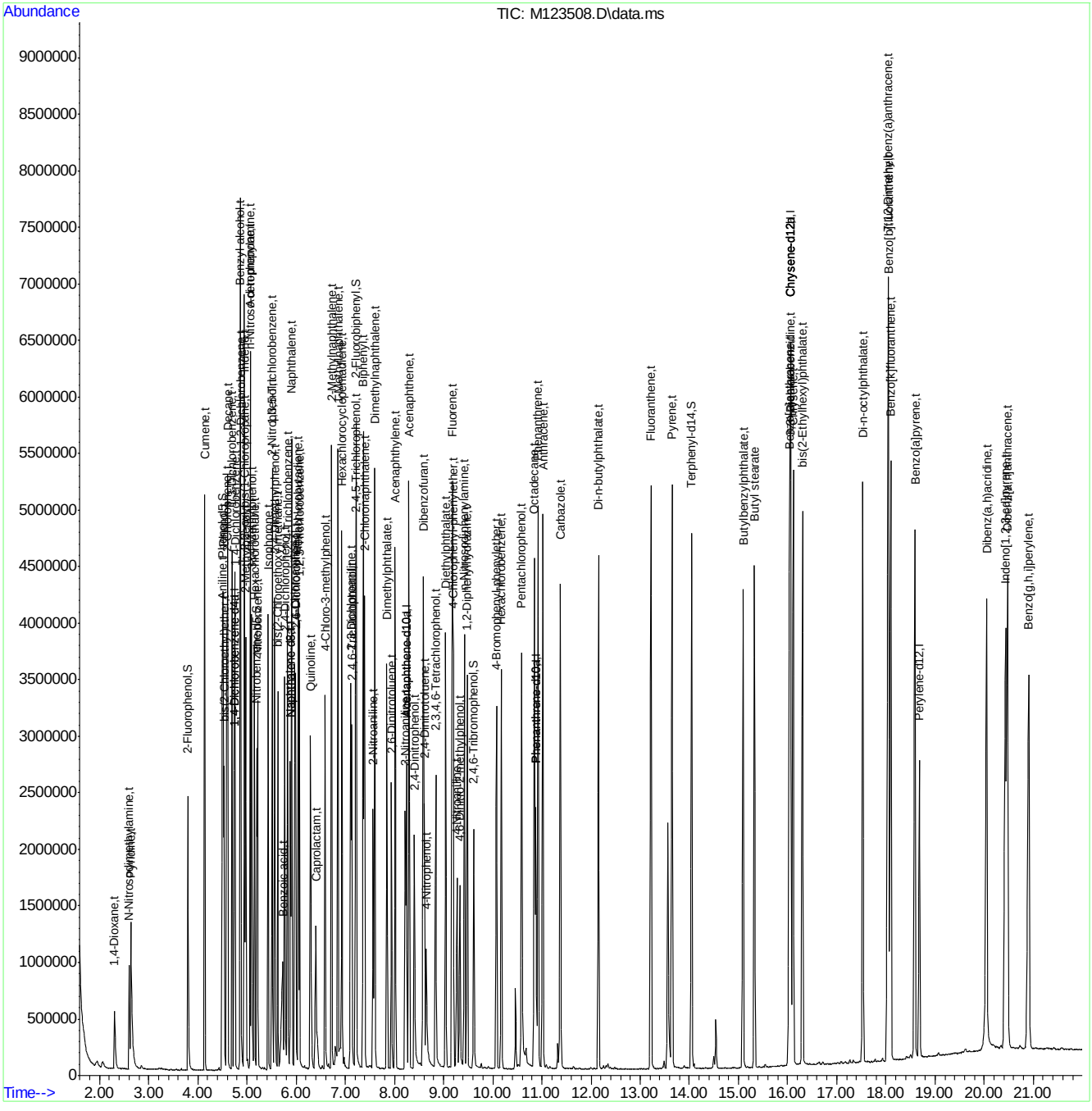
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.739	152	311069	40.00 ppm	0.00
24) Naphthalene-d8	5.882	136	1203874	40.00 ppm	0.00
47) Acenaphthene-d10	8.238	164	738360	40.00 ppm	0.00
69) Phenanthrene-d10	10.871	188	1315790	40.00 ppm	0.00
83) Chrysene-d12	16.052	240	1373892	40.00 ppm	-0.01
92) Perylene-d12	18.674	264	1402025	40.00 ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.739	152	311069	40.00 ppm	0.00
104) Acenaphthene-d10a	8.238	164	738360	40.00 ppm	0.00
107) Chrysene-d12a	16.052	240	1373892	40.00 ppm	-0.01
110) Phenanthrene-d10a	10.871	188	1315790	40.00 ppm	0.00
112) Naphthalene-d8a	5.882	136	1203874	40.00 ppm	0.00
114) Chrysene-d12b	16.052	240	1373892	40.00 ppm	-0.01
System Monitoring Compounds					
5) 2-Fluorophenol	3.799	112	235519	23.65 ppm	0.00
Spiked Amount 50.000			Recovery	= 47.30%	
8) Phenol-d5	4.510	99	303209	25.15 ppm	0.00
Spiked Amount 50.000			Recovery	= 50.30%	
25) Nitrobenzene-d5	5.193	82	256271	24.55 ppm	0.00
Spiked Amount 50.000			Recovery	= 49.10%	
51) 2-Fluorobiphenyl	7.218	172	582573	24.82 ppm	0.00
Spiked Amount 50.000			Recovery	= 49.64%	
73) 2,4,6-Tribromophenol	9.610	330	112332	24.63 ppm	0.00
Spiked Amount 50.000			Recovery	= 49.26%	
86) Terphenyl-d14	14.044	244	737832	23.92 ppm	0.00
Spiked Amount 50.000			Recovery	= 47.84%	
109) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-Dioxane	2.309	88	99531	23.59 ppm	97
3) Pyridine	2.646	79	259510	23.80 ppm	99
4) N-Nitrosodimethylamine	2.603	42	113553	24.10 ppm	97
6) Indene	4.942	116	430211	24.78 ppm	99
7) Cumene	4.136	105	580389	24.82 ppm	97
9) Phenol	4.520	94	314052	23.79 ppm	93
10) Aniline	4.494	93	379827	25.55 ppm	99
11) bis(2-Chloroethyl)ether	4.531	93	235784	25.21 ppm	95
12) 2-Chlorophenol	4.600	128	262416	24.57 ppm	99
13) Decane	4.611	43	238463	24.98 ppm	98
14) 1,3-Dichlorobenzene	4.697	146	291264	24.54 ppm	99
15) 1,4-Dichlorobenzene	4.750	146	289995	24.75 ppm	97
16) Benzyl alcohol	4.857	108	155559	24.64 ppm	93
17) 1,2-Dichlorobenzene	4.873	146	275490	25.31 ppm	97
18) Acetophenone	5.065	105	339345	24.32 ppm	96
19) 2-Methylphenol	4.969	108	220696	24.73 ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.953	121	80492	25.65 ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.097	108	241491	24.50	ppm	96
22) n-Nitroso-di-n-propyla...	5.060	70	183269	24.80	ppm	94
23) Hexachloroethane	5.151	201	108105	24.60	ppm	96
26) Nitrobenzene	5.209	77	257992	24.09	ppm	100
27) Quinoline	6.278	129	556079	24.63	ppm	98
28) Isophorone	5.423	82	469208	24.42	ppm	99
29) 2-Nitrophenol	5.503	139	154697	25.55	ppm	82
30) 2,4-Dimethylphenol	5.562	107	237148	24.00	ppm	96
31) Benzoic acid	5.679	105	158635	24.07	ppm	96
32) bis(2-Chloroethoxy)met...	5.621	93	282750	24.20	ppm	99
33) 2,4-Dichlorophenol	5.765	162	228733	24.79	ppm	98
34) 2,6-Dichlorophenol	5.984	162	219992	24.53	ppm	100
35) 1,3,5-Trichlorobenzene	5.514	180	265254	25.36	ppm	99
36) 1,2,4-Trichlorobenzene	5.824	180	260515	25.27	ppm	99
37) 1,2,3-Trichlorobenzene	6.064	180	253356	25.07	ppm	99
38) Naphthalene	5.904	128	761883	24.86	ppm	100
39) 4-Chloroaniline	5.968	127	336818	25.35	ppm	99
40) 2,3-Dichloroaniline	7.105	161	289303	24.66	ppm	99
41) Caprolactam	6.363	55	114724	22.57	ppm	98
42) Hexachlorobutadiene	6.037	225	149166	25.05	ppm	97
43) 4-Chloro-3-methylphenol	6.582	107	218592	23.98	ppm	99
44) 2-Methylnaphthalene	6.716	141	452432	25.03	ppm	100
45) 1-Methylnaphthalene	6.844	142	531678	24.71	ppm	99
46) Dimethylnaphthalene	7.591	156	487215	24.92	ppm	98
48) Hexachlorocyclopentadiene	6.929	237	222538	51.74	ppm	99
49) 2,4,6-Trichlorophenol	7.127	196	171657	24.71	ppm	98
50) 2,4,5-Trichlorophenol	7.207	196	179593	23.47	ppm	98
52) 2-Chloronaphthalene	7.383	162	516816	24.78	ppm	98
53) Biphenyl	7.362	154	659581	24.74	ppm	100
54) 2-Nitroaniline	7.559	65	148691	23.92	ppm	97
55) Dimethylphthalate	7.843	163	608158	24.59	ppm	99
56) Acenaphthylene	8.008	152	863346	25.14	ppm	99
57) 2,6-Dinitrotoluene	7.933	165	136573	24.21	ppm	99
58) 3-Nitroaniline	8.211	138	150919	23.99	ppm	99
59) Acenaphthene	8.291	153	519008	24.76	ppm	98
60) 2,4-Dinitrophenol	8.398	184	102039	44.92	ppm	95
61) 4-Nitrophenol	8.660	109	57564	23.35	ppm	96
62) Dibenzofuran	8.580	168	770730	24.77	ppm	99
63) 2,4-Dinitrotoluene	8.601	165	185724	25.36	ppm	94
64) 2,3,4,6-Tetrachlorophenol	8.836	232	141890	24.06	ppm	98
65) Diethylphthalate	9.034	149	600044	24.33	ppm	99
66) Fluorene	9.167	166	623407	24.90	ppm	96
67) 4-Chlorophenyl-phenyle...	9.194	204	296190	25.25	ppm	96
68) 4-Nitroaniline	9.253	138	152482	25.06	ppm	99
70) 4,6-Dinitro-2-methylph...	9.322	198	98996	24.77	ppm	98
71) n-Nitrosodiphenylamine	9.418	169	426115	24.62	ppm	98
72) 1,2-Diphenylhydrazine	9.477	77	548062	24.53	ppm	98
74) 4-Bromophenyl-phenylether	10.075	248	196375	24.76	ppm	98
75) Hexachlorobenzene	10.171	284	227241	24.74	ppm	95
76) Pentachlorophenol	10.582	266	190602	48.33	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.914	178	881979	24.61 ppm	100
78) Anthracene	11.010	178	923458	24.99 ppm	99
79) Carbazole	11.368	167	860331	24.93 ppm	99
80) Di-n-butylphthalate	12.147	149	1062444	24.65 ppm	99
81) Fluoranthene	13.210	202	1054816	25.47 ppm	99
82) Octadecane	10.844	57	344993	24.68 ppm	98
84) Pyrene	13.638	202	1080811	24.59 ppm	98
85) Butyl stearate	15.320	56	249160	23.72 ppm	99
87) Butylbenzylphthalate	15.090	149	481413	24.22 ppm	99
88) Benzo[a]anthracene	16.030	228	994023	23.85 ppm	99
89) 3,3'-Dichlorobenzidine	16.057	252	375224	24.46 ppm	99
90) Chrysene	16.100	228	930984	23.94 ppm	99
91) bis(2-Ethylhexyl)phtha...	16.297	149	640423	23.80 ppm	99
93) Di-n-octylphthalate	17.526	149	1124214	25.01 ppm	99
94) Benzo[b]fluoranthene	18.033	252	1035882	24.60 ppm	97
95) Benzo[k]fluoranthene	18.081	252	990302	25.26 ppm	99
96) Benzo[a]pyrene	18.578	252	965192	25.16 ppm	97
97) Indeno[1,2,3-cd]pyrene	20.410	276	970123	23.97 ppm	98
98) Dibenz(a,h)acridine	20.031	279	879381	25.19 ppm	99
99) Dibenz[a,h]anthracene	20.453	278	1007273	25.11 ppm	98
100) 7,12-Dimethylbenz(a)an...	18.028	256	474896	25.29 ppm	99
101) Benzo[g,h,i]perylene	20.880	276	1020269	24.67 ppm	98

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

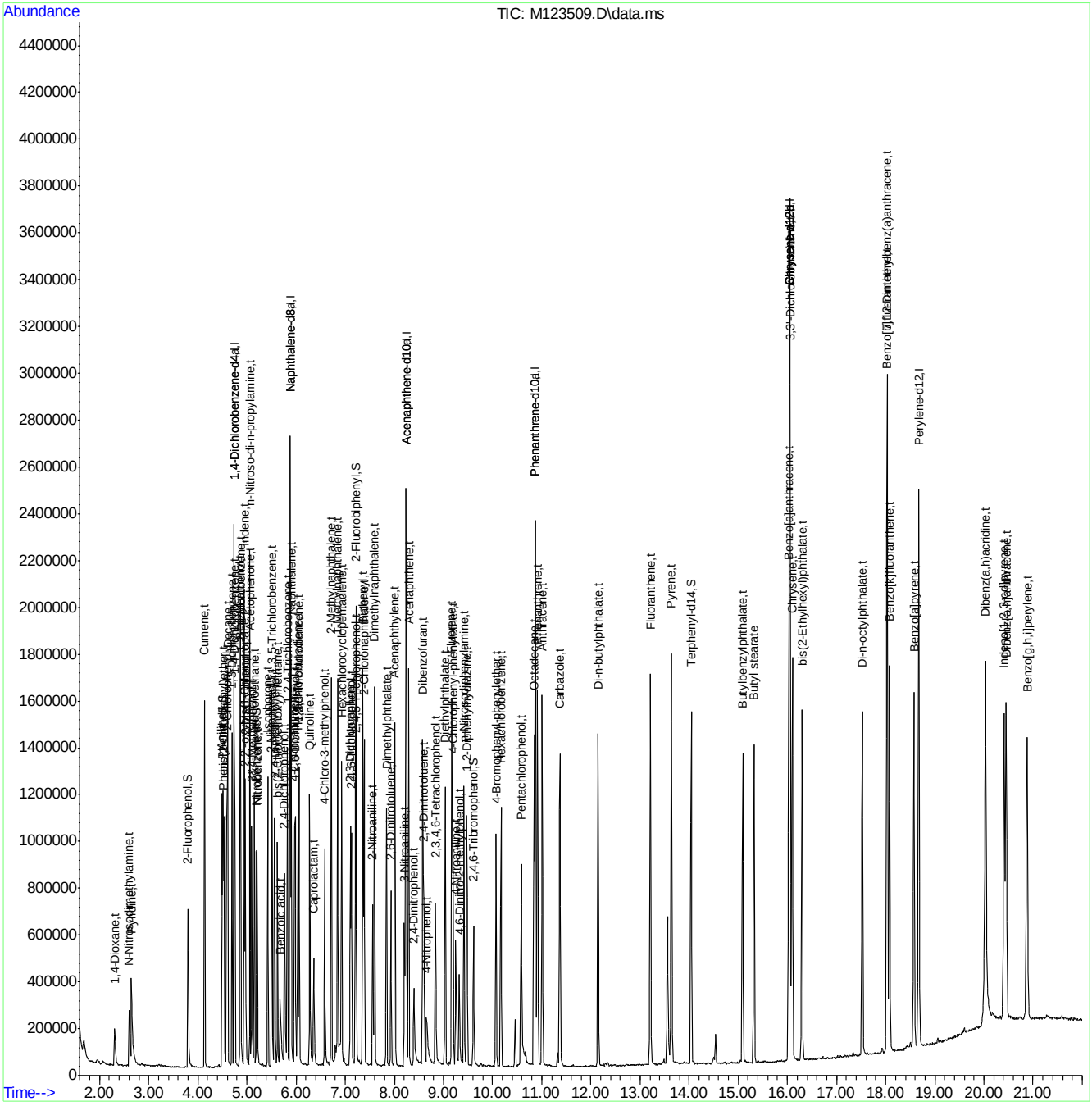
7.6.71

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:10:40 2016 MSM

Page: 4

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.740	152	316034	40.00	ppm	0.00
24) Naphthalene-d8	5.883	136	1220543	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	774010	40.00	ppm	0.00
69) Phenanthrene-d10	10.871	188	1408926	40.00	ppm	0.00
83) Chrysene-d12	16.047	240	1458483	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1471669	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.740	152	316034	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	774010	40.00	ppm	0.00
107) Chrysene-d12a	16.047	240	1458483	40.00	ppm	0.00
110) Phenanthrene-d10a	10.871	188	1408926	40.00	ppm	0.00
112) Naphthalene-d8a	5.883	136	1220543	40.00	ppm	0.00
114) Chrysene-d12b	16.047	240	1458483	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.800	112	89082	8.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	17.84%	
8) Phenol-d5	4.510	99	117277	9.56	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.12%	
25) Nitrobenzene-d5	5.194	82	104421	9.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.82%	
51) 2-Fluorobiphenyl	7.218	172	244577	9.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.92%	
73) 2,4,6-Tribromophenol	9.611	330	45744	9.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.80%	
86) Terphenyl-d14	14.039	244	307655	9.50	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.00%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.310	88	41422	9.80	ppm	97
3) Pyridine	2.657	79	102693	9.38	ppm	98
4) N-Nitrosodimethylamine	2.609	42	41255	8.70	ppm	99
6) Indene	4.943	116	170140	9.67	ppm	95
7) Cumene	4.136	105	229462	9.68	ppm	99
9) Phenol	4.521	94	120984	9.13	ppm	98
10) Aniline	4.494	93	144944	9.54	ppm	94
11) bis(2-Chloroethyl)ether	4.532	93	99279	10.43	ppm	97
12) 2-Chlorophenol	4.601	128	104535	9.68	ppm	98
13) Decane	4.606	43	99239	10.23	ppm	97
14) 1,3-Dichlorobenzene	4.697	146	116578	9.71	ppm	99
15) 1,4-Dichlorobenzene	4.751	146	117147	9.86	ppm	98
16) Benzyl alcohol	4.857	108	61759	9.66	ppm	85
17) 1,2-Dichlorobenzene	4.873	146	111591	10.06	ppm	98
18) Acetophenone	5.060	105	139671	9.92	ppm	96
19) 2-Methylphenol	4.970	108	86191	9.53	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.948	121	31457	9.80	ppm #	85

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.098	108	92069	9.24	ppm	96
22) n-Nitroso-di-n-propyla...	5.055	70	77082	10.29	ppm	98
23) Hexachloroethane	5.151	201	44353	9.97	ppm	93
26) Nitrobenzene	5.210	77	105443	9.80	ppm	98
27) Quinoline	6.278	129	223785	9.81	ppm	99
28) Isophorone	5.418	82	189698	9.80	ppm	99
29) 2-Nitrophenol	5.504	139	59099	9.57	ppm	86
30) 2,4-Dimethylphenol	5.557	107	94872	9.57	ppm	97
31) Benzoic acid	5.675	105	53273	8.05	ppm	97
32) bis(2-Chloroethoxy)met...	5.621	93	116361	9.90	ppm	99
33) 2,4-Dichlorophenol	5.771	162	90347	9.68	ppm	95
34) 2,6-Dichlorophenol	5.984	162	86725	9.58	ppm	97
35) 1,3,5-Trichlorobenzene	5.509	180	107410	10.09	ppm	99
36) 1,2,4-Trichlorobenzene	5.824	180	105015	10.02	ppm	96
37) 1,2,3-Trichlorobenzene	6.064	180	102211	9.97	ppm	99
38) Naphthalene	5.904	128	302955	9.76	ppm	100
39) 4-Chloroaniline	5.968	127	131793	9.75	ppm	98
40) 2,3-Dichloroaniline	7.101	161	118838	10.03	ppm	98
41) Caprolactam	6.348	55	47058	9.36	ppm	96
42) Hexachlorobutadiene	6.032	225	61558	10.19	ppm	96
43) 4-Chloro-3-methylphenol	6.577	107	86333	9.44	ppm	97
44) 2-Methylnaphthalene	6.716	141	184219	10.05	ppm	98
45) 1-Methylnaphthalene	6.844	142	217780	10.01	ppm	99
46) Dimethylnaphthalene	7.592	156	201364	10.17	ppm	96
48) Hexachlorocyclopentadiene	6.930	237	66925	14.71	ppm	97
49) 2,4,6-Trichlorophenol	7.122	196	70449	9.70	ppm	99
50) 2,4,5-Trichlorophenol	7.207	196	75217	9.52	ppm	98
52) 2-Chloronaphthalene	7.384	162	215648	9.88	ppm	98
53) Biphenyl	7.357	154	274239	9.84	ppm	98
54) 2-Nitroaniline	7.555	65	59858	9.29	ppm	93
55) Dimethylphthalate	7.838	163	247314	9.58	ppm	99
56) Acenaphthylene	8.009	152	354425	9.83	ppm	99
57) 2,6-Dinitrotoluene	7.928	165	55361	9.44	ppm	99
58) 3-Nitroaniline	8.206	138	61238	9.38	ppm	96
59) Acenaphthene	8.286	153	211322	9.64	ppm	99
60) 2,4-Dinitrophenol	8.404	184	28023	12.08	ppm	97
61) 4-Nitrophenol	8.671	109	17907	7.05	ppm	90
62) Dibenzofuran	8.580	168	317903	9.77	ppm	98
63) 2,4-Dinitrotoluene	8.601	165	75407	9.79	ppm	90
64) 2,3,4,6-Tetrachlorophenol	8.836	232	59598	9.73	ppm	98
65) Diethylphthalate	9.029	149	249928	9.73	ppm	99
66) Fluorene	9.168	166	260696	9.94	ppm	97
67) 4-Chlorophenyl-phenyle...	9.189	204	126778	10.28	ppm	98
68) 4-Nitroaniline	9.253	138	59622	9.34	ppm	96
70) 4,6-Dinitro-2-methylph...	9.317	198	33101	7.75	ppm	99
71) n-Nitrosodiphenylamine	9.413	169	174054	9.43	ppm	98
72) 1,2-Diphenylhydrazine	9.472	77	227544	9.55	ppm	99
74) 4-Bromophenyl-phenylether	10.070	248	81336	9.60	ppm	93
75) Hexachlorobenzene	10.166	284	96654	9.85	ppm	99
76) Pentachlorophenol	10.583	266	60439	14.43	ppm	98

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration

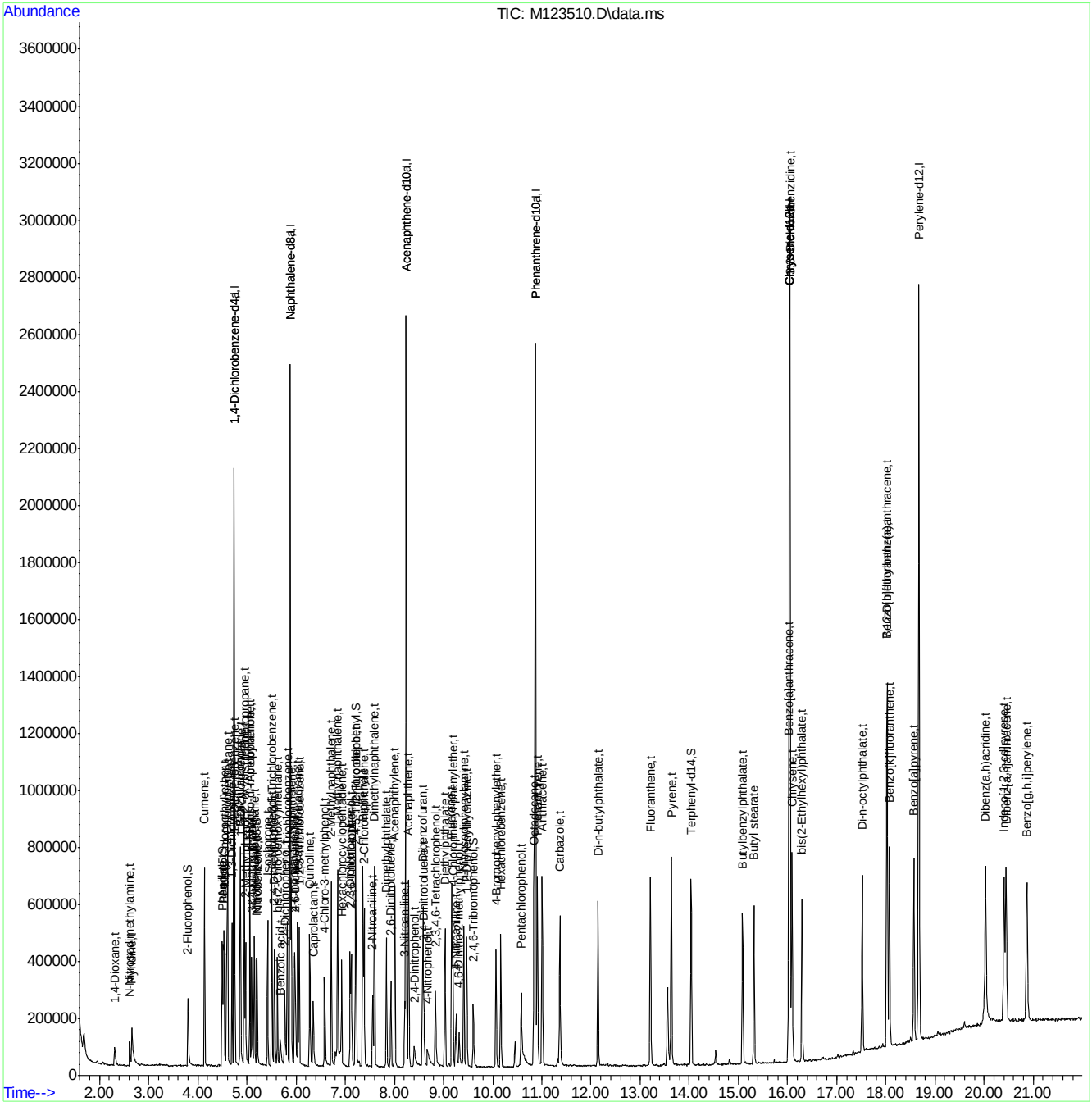
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.914	178	370265	9.69	ppm	99
78)	Anthracene	11.005	178	395169	9.99	ppm	100
79)	Carbazole	11.368	167	355612	9.63	ppm	99
80)	Di-n-butylphthalate	12.143	149	442559	9.62	ppm	99
81)	Fluoranthene	13.211	202	434382	9.75	ppm	99
82)	Octadecane	10.839	57	146883	9.84	ppm	99
84)	Pyrene	13.638	202	458324	9.86	ppm	99
85)	Butyl stearate	15.320	56	98659	8.96	ppm	97
87)	Butylbenzylphthalate	15.085	149	192086	9.17	ppm	100
88)	Benzo[a]anthracene	16.026	228	410079	9.38	ppm	100
89)	3,3'-Dichlorobenzidine	16.052	252	151031	9.33	ppm	97
90)	Chrysene	16.095	228	386697	9.47	ppm	98
91)	bis(2-Ethylhexyl)phtha...	16.293	149	256790	9.10	ppm	99
93)	Di-n-octylphthalate	17.521	149	458050	9.71	ppm	99
94)	Benzo[b]fluoranthene	18.023	252	447932	10.17	ppm	99
95)	Benzo[k]fluoranthene	18.071	252	419916	10.18	ppm	97
96)	Benzo[a]pyrene	18.573	252	403359	10.00	ppm	98
97)	Indeno[1,2,3-cd]pyrene	20.405	276	386672	9.20	ppm	97
98)	Dibenz(a,h)acridine	20.031	279	351759	9.58	ppm	84
99)	Dibenz[a,h]anthracene	20.448	278	410656	9.74	ppm	97
100)	7,12-Dimethylbenz(a)an...	18.023	256	198743	10.05	ppm	98
101)	Benzo[g,h,i]perylene	20.870	276	409140	9.46	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.740	152	350655	40.00	ppm	0.00
24) Naphthalene-d8	5.883	136	1349345	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	854216	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1499661	40.00	ppm	0.00
83) Chrysene-d12	16.047	240	1610256	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1597690	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.740	152	350655	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	854216	40.00	ppm	0.00
107) Chrysene-d12a	16.047	240	1610256	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1499661	40.00	ppm	0.00
112) Naphthalene-d8a	5.883	136	1349345	40.00	ppm	0.00
114) Chrysene-d12b	16.047	240	1610256	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.800	112	54568	5.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.08%	
8) Phenol-d5	4.516	99	72786	5.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.80%	
25) Nitrobenzene-d5	5.194	82	64583	5.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.10%	
51) 2-Fluorobiphenyl	7.218	172	154610	5.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.42%	
73) 2,4,6-Tribromophenol	9.611	330	28504	5.57	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.14%	
86) Terphenyl-d14	14.039	244	193404	5.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.92%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.310	88	24773	5.30	ppm	99
3) Pyridine	2.662	79	64511	5.38	ppm	98
4) N-Nitrosodimethylamine	2.614	42	26770	5.22	ppm	93
6) Indene	4.943	116	109494	5.65	ppm	98
7) Cumene	4.136	105	147820	5.65	ppm	99
9) Phenol	4.521	94	76666	5.31	ppm	95
10) Aniline	4.494	93	89105	5.34	ppm	97
11) bis(2-Chloroethyl)ether	4.532	93	63194	5.93	ppm	97
12) 2-Chlorophenol	4.601	128	64038	5.38	ppm	94
13) Decane	4.607	43	64775	5.99	ppm	99
14) 1,3-Dichlorobenzene	4.697	146	75851	5.73	ppm	96
15) 1,4-Dichlorobenzene	4.751	146	74641	5.68	ppm	99
16) Benzyl alcohol	4.858	108	37072	5.26	ppm	96
17) 1,2-Dichlorobenzene	4.874	146	72802	5.91	ppm	97
18) Acetophenone	5.061	105	89842	5.76	ppm	99
19) 2-Methylphenol	4.970	108	54583	5.49	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.948	121	21615	6.09	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.098	108	58583	5.38	ppm		84
22) n-Nitroso-di-n-propyla...	5.055	70	47658	5.70	ppm		95
23) Hexachloroethane	5.151	201	28351	5.75	ppm		95
26) Nitrobenzene	5.210	77	68563	5.79	ppm		97
27) Quinoline	6.278	129	141740	5.64	ppm		96
28) Isophorone	5.418	82	119534	5.61	ppm		98
29) 2-Nitrophenol	5.504	139	37399	5.53	ppm		99
30) 2,4-Dimethylphenol	5.563	107	62972	5.79	ppm		96
31) Benzoic acid	5.675	105	33179	4.72	ppm		91
32) bis(2-Chloroethoxy)met...	5.621	93	72095	5.56	ppm		98
33) 2,4-Dichlorophenol	5.771	162	58004	5.66	ppm		94
34) 2,6-Dichlorophenol	5.985	162	58181	5.86	ppm		96
35) 1,3,5-Trichlorobenzene	5.509	180	69873	5.93	ppm		97
36) 1,2,4-Trichlorobenzene	5.824	180	67623	5.83	ppm		98
37) 1,2,3-Trichlorobenzene	6.059	180	64928	5.73	ppm		97
38) Naphthalene	5.904	128	193240	5.66	ppm		98
39) 4-Chloroaniline	5.968	127	83829	5.64	ppm		95
40) 2,3-Dichloroaniline	7.101	161	73645	5.62	ppm		96
41) Caprolactam	6.342	55	27822	5.07	ppm		94
42) Hexachlorobutadiene	6.033	225	38837	5.79	ppm		98
43) 4-Chloro-3-methylphenol	6.583	107	54779	5.48	ppm	#	26
44) 2-Methylnaphthalene	6.716	141	115057	5.67	ppm		95
45) 1-Methylnaphthalene	6.844	142	133516	5.55	ppm		96
46) Dimethylnaphthalene	7.592	156	127260	5.79	ppm		97
48) Hexachlorocyclopentadiene	6.925	237	33281	7.00	ppm		98
49) 2,4,6-Trichlorophenol	7.128	196	44456	5.58	ppm		97
50) 2,4,5-Trichlorophenol	7.213	196	48407	5.61	ppm		99
52) 2-Chloronaphthalene	7.384	162	136338	5.68	ppm		96
53) Biphenyl	7.357	154	172753	5.63	ppm		97
54) 2-Nitroaniline	7.555	65	37087	5.29	ppm		97
55) Dimethylphthalate	7.838	163	154381	5.46	ppm		98
56) Acenaphthylene	8.009	152	226669	5.72	ppm		98
57) 2,6-Dinitrotoluene	7.929	165	34093	5.33	ppm		99
58) 3-Nitroaniline	8.206	138	36922	5.19	ppm		100
59) Acenaphthene	8.287	153	134169	5.59	ppm		99
60) 2,4-Dinitrophenol	8.409	184	15475	6.56	ppm		91
61) 4-Nitrophenol	8.692	109	12703	4.81	ppm		83
62) Dibenzofuran	8.580	168	200729	5.61	ppm		98
63) 2,4-Dinitrotoluene	8.602	165	44798	5.29	ppm		98
64) 2,3,4,6-Tetrachlorophenol	8.837	232	36315	5.40	ppm		92
65) Diethylphthalate	9.029	149	157452	5.58	ppm		98
66) Fluorene	9.162	166	164591	5.69	ppm		98
67) 4-Chlorophenyl-phenyle...	9.189	204	80327	5.87	ppm		95
68) 4-Nitroaniline	9.253	138	36416	5.24	ppm		95
70) 4,6-Dinitro-2-methylph...	9.317	198	18774	4.32	ppm		97
71) n-Nitrosodiphenylamine	9.413	169	111912	5.76	ppm		99
72) 1,2-Diphenylhydrazine	9.472	77	139809	5.56	ppm		99
74) 4-Bromophenyl-phenylether	10.070	248	51610	5.77	ppm		97
75) Hexachlorobenzene	10.167	284	62067	5.96	ppm		98
76) Pentachlorophenol	10.583	266	37642	8.94	ppm		94

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.909	178	233787	5.78	ppm	99
78) Anthracene	11.005	178	238517	5.66	ppm	98
79) Carbazole	11.368	167	220302	5.65	ppm	98
80) Di-n-butylphthalate	12.143	149	267571	5.51	ppm	97
81) Fluoranthene	13.206	202	272732	5.78	ppm	97
82) Octadecane	10.840	57	88593	5.60	ppm	98
84) Pyrene	13.633	202	286335	5.60	ppm	99
85) Butyl stearate	15.315	56	61237	5.15	ppm	95
87) Butylbenzylphthalate	15.086	149	117178	5.15	ppm	96
88) Benzo[a]anthracene	16.026	228	263056	5.52	ppm	98
89) 3,3'-Dichlorobenzidine	16.052	252	95203	5.40	ppm	99
90) Chrysene	16.090	228	255761	5.73	ppm	99
91) bis(2-Ethylhexyl)phtha...	16.293	149	162403	5.31	ppm	99
93) Di-n-octylphthalate	17.521	149	286453	5.62	ppm	99
94) Benzo[b]fluoranthene	18.023	252	270518	5.64	ppm	99
95) Benzo[k]fluoranthene	18.071	252	270665	6.02	ppm	99
96) Benzo[a]pyrene	18.568	252	250638	5.72	ppm	99
97) Indeno[1,2,3-cd]pyrene	20.400	276	241525m	5.38	ppm	
98) Dibenz(a,h)acridine	20.026	279	221605	5.61	ppm	99
99) Dibenz[a,h]anthracene	20.443	278	257602	5.66	ppm	98
100) 7,12-Dimethylbenz(a)an...	18.018	256	122710	5.71	ppm	97
101) Benzo[g,h,i]perylene	20.870	276	260602	5.61	ppm	95

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

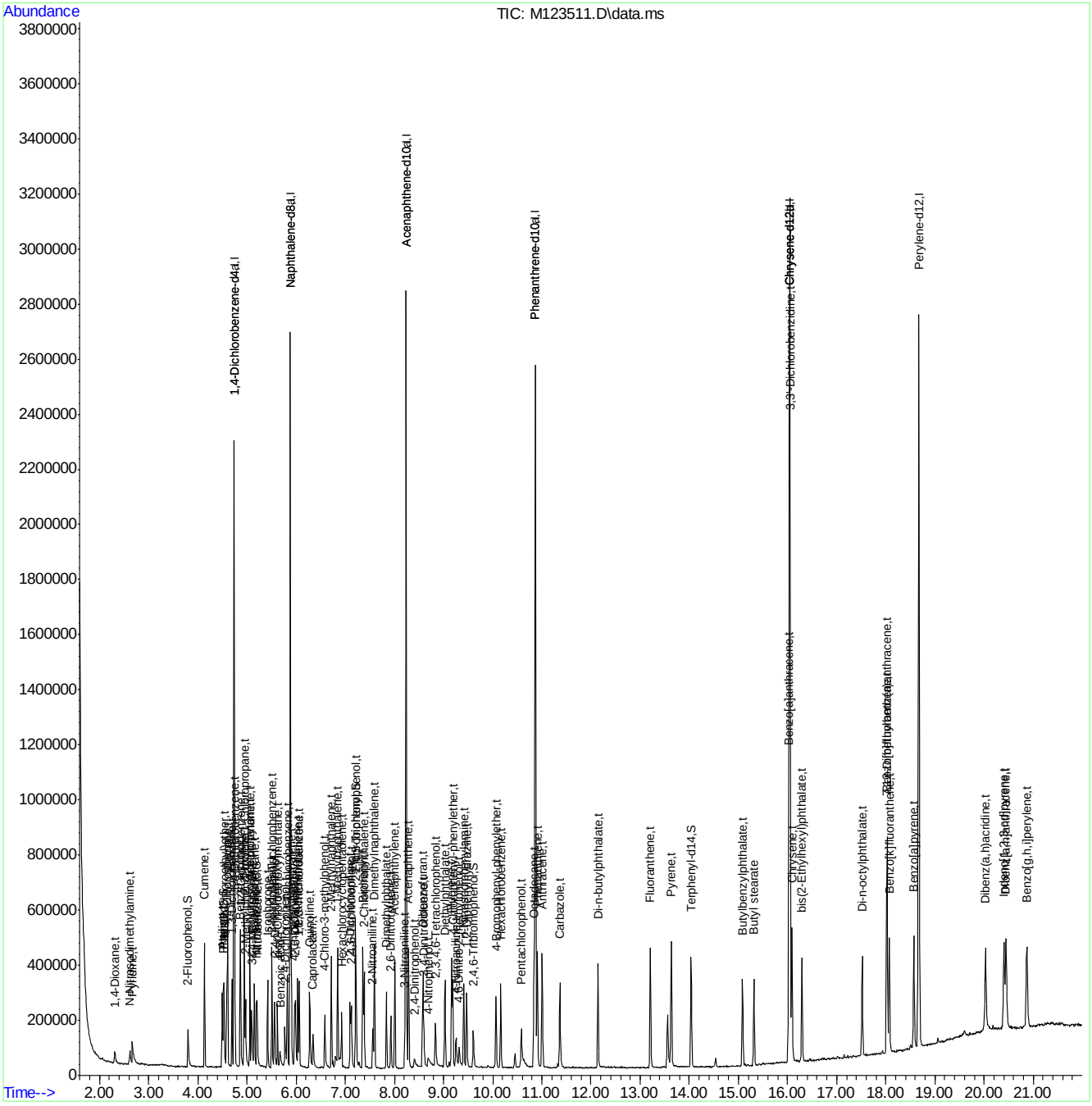
7.6.73

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

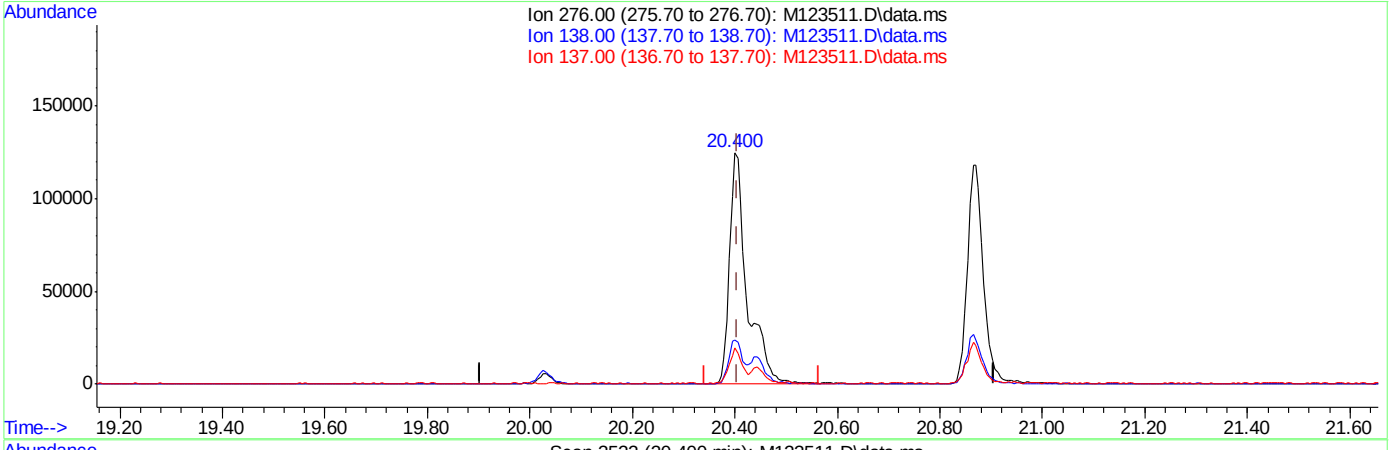
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123511.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:29	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

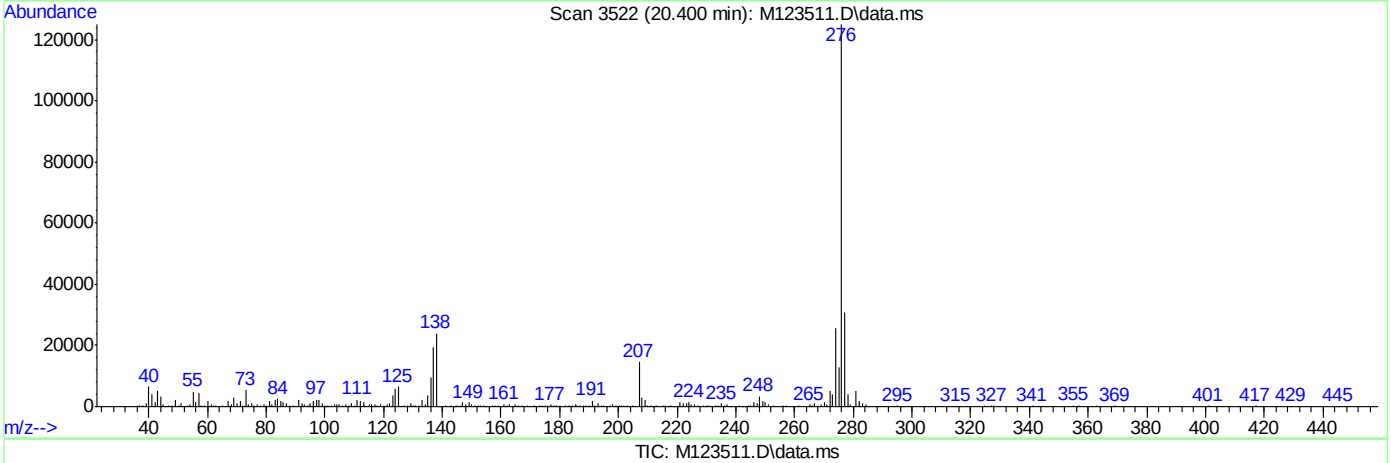
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:48:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration





TIC: M123511.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.400min (-0.005) 6.72ppm

response 301851

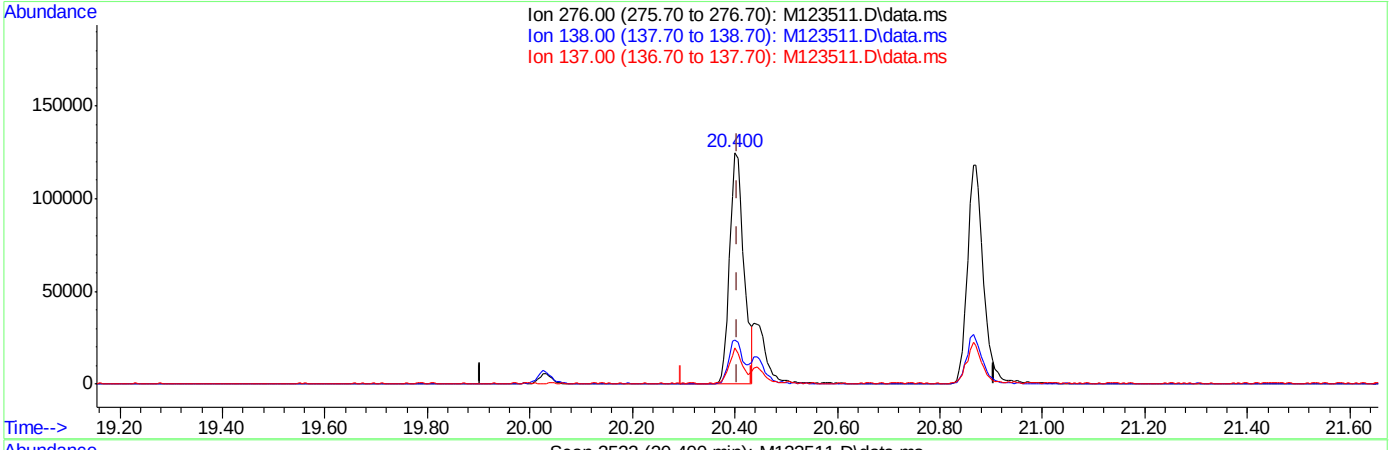
Ion	Exp%	Act%
276.00	100	100
138.00	17.80	19.00
137.00	12.90	15.19
0.00	0.00	0.00

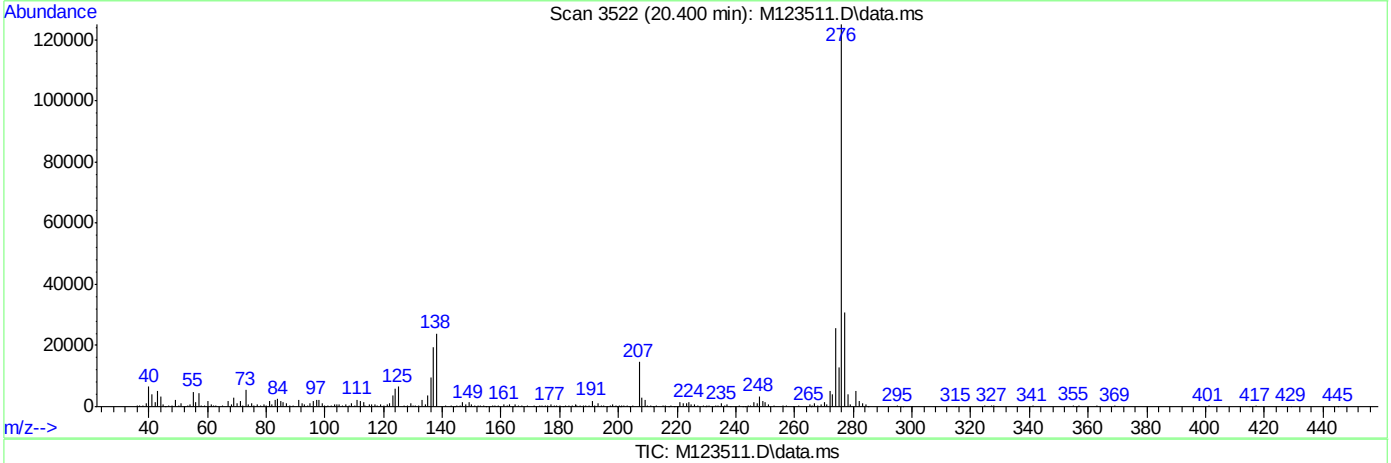
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration





TIC: M123511.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.400min (-0.005) 5.38ppm m

response 241525

Ion	Exp%	Act%
276.00	100	100
138.00	17.80	19.21
137.00	12.90	15.51
0.00	0.00	0.00

M123512.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.737	152	360169	40.00	ppm	0.00
24) Naphthalene-d8	5.880	136	1372967	40.00	ppm	0.00
47) Acenaphthene-d10	8.240	164	830731	40.00	ppm	0.00
69) Phenanthrene-d10	10.868	188	1485058	40.00	ppm	0.00
83) Chrysene-d12	16.044	240	1603028	40.00	ppm	0.00
92) Perylene-d12	18.671	264	1583851	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.737	152	360169	40.00	ppm	0.00
104) Acenaphthene-d10a	8.240	164	830731	40.00	ppm	0.00
107) Chrysene-d12a	16.044	240	1603111	40.00	ppm	0.00
110) Phenanthrene-d10a	10.868	188	1485058	40.00	ppm	0.00
112) Naphthalene-d8a	5.880	136	1372967	40.00	ppm	0.00
114) Chrysene-d12b	16.044	240	1603028	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.807	112	10135	0.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.82%	
8) Phenol-d5	4.523	99	12591	0.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.80%	
25) Nitrobenzene-d5	5.201	82	13616	1.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.26%	
51) 2-Fluorobiphenyl	7.215	172	31523	1.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.34%	
73) 2,4,6-Tribromophenol	9.618	330	4967	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
86) Terphenyl-d14	14.041	244	38019	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.317	88	6259	1.29	ppm	90
3) Pyridine	2.702	79	10097	0.81	ppm	89
4) N-Nitrosodimethylamine	2.632	42	5405	1.02	ppm	90
6) Indene	4.945	116	22568	1.11	ppm	97
7) Cumene	4.138	105	28808	1.05	ppm	98
9) Phenol	4.534	94	13131	0.88	ppm	76
10) Aniline	4.496	93	16952	0.98	ppm	92
11) bis(2-Chloroethyl)ether	4.534	93	14205	1.26	ppm	98
12) 2-Chlorophenol	4.603	128	12722	1.03	ppm	94
13) Decane	4.608	43	14540	1.27	ppm	91
14) 1,3-Dichlorobenzene	4.694	146	15726	1.13	ppm	98
15) 1,4-Dichlorobenzene	4.753	146	15617	1.13	ppm	97
16) Benzyl alcohol	4.875	108	6180	0.85	ppm	85
17) 1,2-Dichlorobenzene	4.875	146	14594	1.12	ppm	95
18) Acetophenone	5.068	105	16979	1.03	ppm	94
19) 2-Methylphenol	4.977	108	9524	0.92	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.956	121	4467	1.18	ppm #	56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.105	108	10710	0.95	ppm		91
22) n-Nitroso-di-n-propyla...	5.062	70	9920	1.13	ppm		93
23) Hexachloroethane	5.153	201	6087	1.17	ppm		85
26) Nitrobenzene	5.217	77	12998	1.05	ppm		96
27) Quinoline	6.285	129	27854	1.07	ppm		95
28) Isophorone	5.420	82	23918	1.08	ppm		98
29) 2-Nitrophenol	5.506	139	7063	1.01	ppm		93
30) 2,4-Dimethylphenol	5.570	107	12968	1.14	ppm		96
31) Benzoic acid	5.698	105	5689	0.80	ppm	#	38
32) bis(2-Chloroethoxy)met...	5.623	93	14659	1.09	ppm		96
33) 2,4-Dichlorophenol	5.794	162	9484	0.89	ppm		91
34) 2,6-Dichlorophenol	5.992	162	12475	1.20	ppm		95
35) 1,3,5-Trichlorobenzene	5.511	180	13917	1.13	ppm		94
36) 1,2,4-Trichlorobenzene	5.826	180	13843	1.14	ppm		98
37) 1,2,3-Trichlorobenzene	6.061	180	12795	1.08	ppm		96
38) Naphthalene	5.901	128	40888	1.15	ppm		99
39) 4-Chloroaniline	5.976	127	16041	1.04	ppm		96
40) 2,3-Dichloroaniline	7.108	161	14316	1.05	ppm		95
41) Caprolactam	6.344	55	6536	1.17	ppm		91
42) Hexachlorobutadiene	6.034	225	7828	1.12	ppm		99
43) 4-Chloro-3-methylphenol	6.595	107	11739	1.14	ppm	#	85
44) 2-Methylnaphthalene	6.718	141	25149	1.19	ppm		89
45) 1-Methylnaphthalene	6.846	142	26616	1.07	ppm		94
46) Dimethylnaphthalene	7.594	156	26067	1.14	ppm		95
48) Hexachlorocyclopentadiene	6.926	237	2486	0.57	ppm		83
49) 2,4,6-Trichlorophenol	7.129	196	8457	1.07	ppm		92
50) 2,4,5-Trichlorophenol	7.226	196	9308	1.09	ppm		95
52) 2-Chloronaphthalene	7.386	162	28001	1.17	ppm		96
53) Biphenyl	7.359	154	36030	1.18	ppm		98
54) 2-Nitroaniline	7.567	65	7250	1.05	ppm		94
55) Dimethylphthalate	7.834	163	32051	1.15	ppm		94
56) Acenaphthylene	8.011	152	46069	1.17	ppm		98
57) 2,6-Dinitrotoluene	7.925	165	6311	1.00	ppm		91
58) 3-Nitroaniline	8.230	138	6916	0.99	ppm	#	1
59) Acenaphthene	8.288	153	27813	1.17	ppm		93
62) Dibenzofuran	8.582	168	40254	1.13	ppm		92
63) 2,4-Dinitrotoluene	8.604	165	7764	0.93	ppm		89
64) 2,3,4,6-Tetrachlorophenol	8.844	232	6973	1.05	ppm		90
65) Diethylphthalate	9.031	149	31068	1.11	ppm		98
66) Fluorene	9.164	166	32000	1.11	ppm		93
67) 4-Chlorophenyl-phenyle...	9.191	204	15525	1.13	ppm		88
68) 4-Nitroaniline	9.282	138	6237	0.92	ppm		86
70) 4,6-Dinitro-2-methylph...	9.335	198	2391	0.57	ppm		84
71) n-Nitrosodiphenylamine	9.415	169	22479	1.14	ppm		93
72) 1,2-Diphenylhydrazine	9.474	77	28053	1.11	ppm		97
74) 4-Bromophenyl-phenylether	10.067	248	10130	1.11	ppm		94
75) Hexachlorobenzene	10.163	284	12552	1.18	ppm		89
76) Pentachlorophenol	10.596	266	3855	0.94	ppm		77
77) Phenanthrene	10.911	178	45781	1.11	ppm		98
78) Anthracene	11.007	178	46745	1.10	ppm		93

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
79) Carbazole	11.370	167	41312	1.05 ppm	96
80) Di-n-butylphthalate	12.145	149	50879	1.04 ppm	95
81) Fluoranthene	13.208	202	54153	1.13 ppm	99
82) Octadecane	10.841	57	16430	1.03 ppm	95
84) Pyrene	13.635	202	56591	1.09 ppm	96
85) Butyl stearate	15.317	56	12583	1.06 ppm	82
87) Butylbenzylphthalate	15.082	149	22472	0.99 ppm	96
88) Benzo[a]anthracene	16.028	228	56102	1.16 ppm	98
89) 3,3'-Dichlorobenzidine	16.060	252	18925	1.06 ppm	96
90) Chrysene	16.092	228	49445	1.09 ppm	98
91) bis(2-Ethylhexyl)phtha...	16.295	149	30565	0.99 ppm	94
93) Di-n-octylphthalate	17.518	149	51488	1.00 ppm	99
94) Benzo[b]fluoranthene	18.025	252	52986	1.09 ppm	97
95) Benzo[k]fluoranthene	18.073	252	55282	1.20 ppm	98
96) Benzo[a]pyrene	18.570	252	50456	1.13 ppm	95
97) Indeno[1,2,3-cd]pyrene	20.402	276	50350m	1.12 ppm	
98) Dibenz(a,h)acridine	20.033	279	45243	1.13 ppm	98
99) Dibenz[a,h]anthracene	20.445	278	50743	1.10 ppm	93
100) 7,12-Dimethylbenz(a)an...	18.020	256	24000	1.10 ppm	93
101) Benzo[g,h,i]perylene	20.867	276	53868	1.15 ppm	96

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

7.6.74

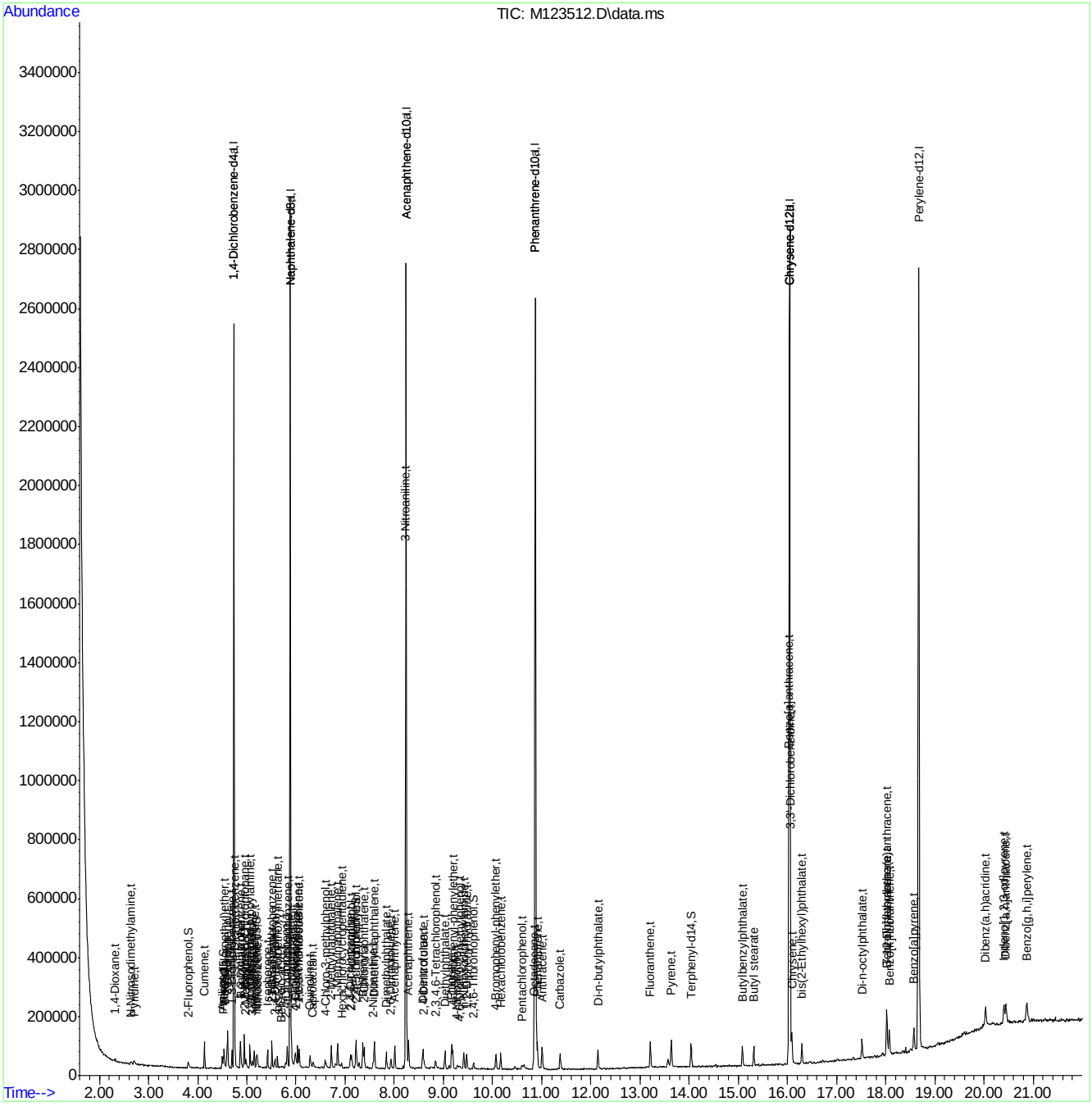
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:12:06 2016 MSM

SGS ACCUTEST JC19914

Manual Integration Approval Summary

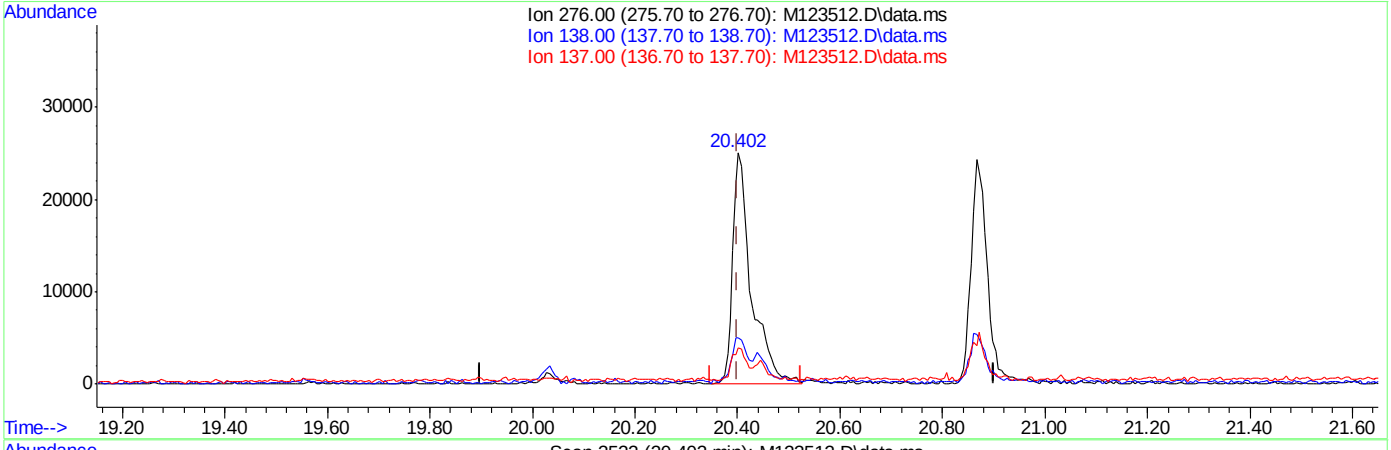
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123512.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:57	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

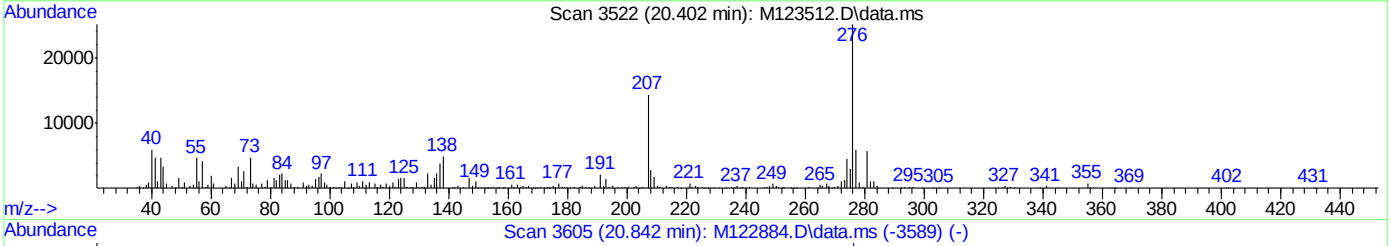
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

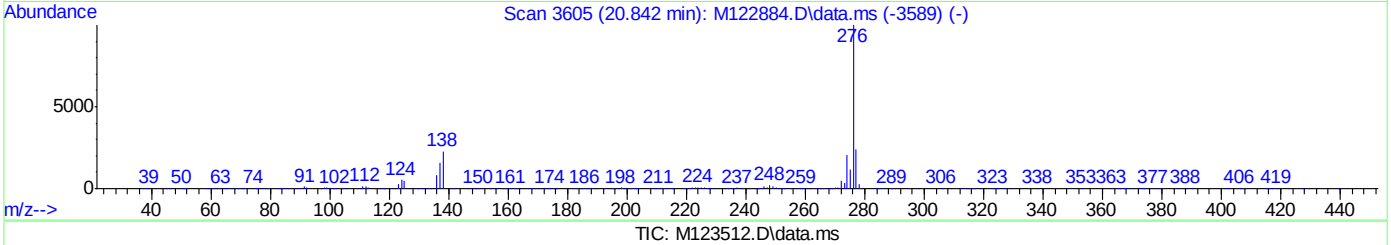
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:49:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration







TIC: M123512.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.402min (+0.002) 1.40ppm

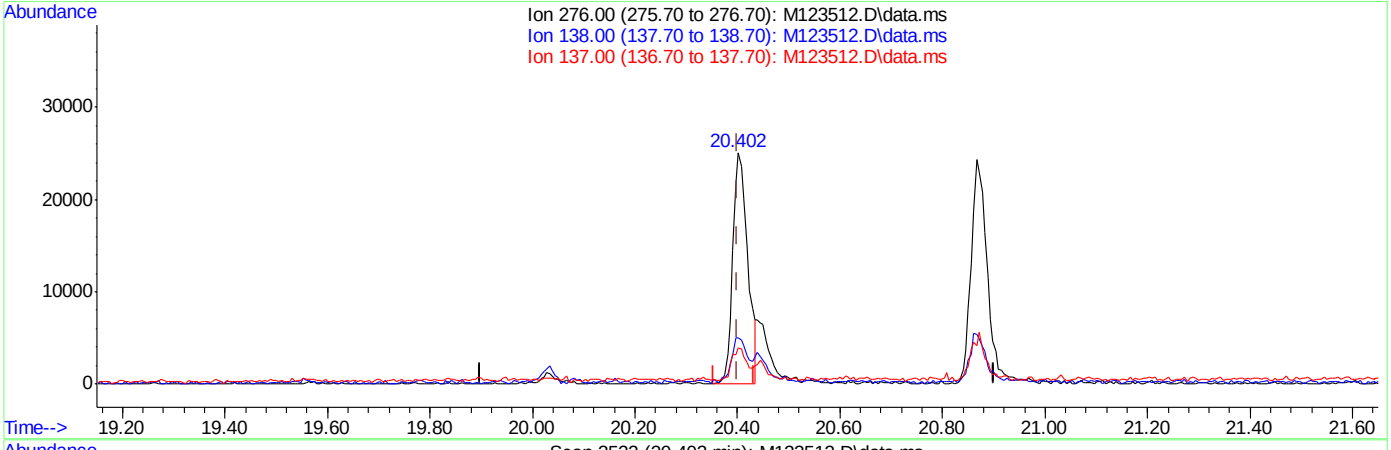
response 63148

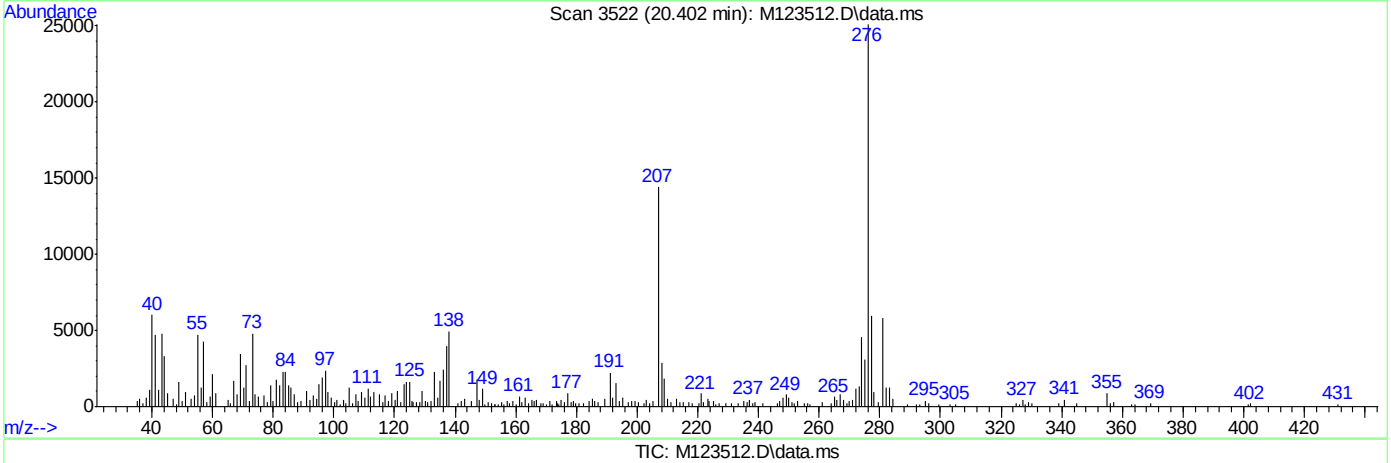
Ion	Exp%	Act%
276.00	100	100
138.00	19.20	19.27
137.00	15.50	14.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration





TIC: M123512.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.402min (+0.002) 1.12ppm m

response 50350

Ion	Exp%	Act%
276.00	100	100
138.00	19.20	19.80
137.00	15.50	15.87
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.737	152	309527	40.00	ppm	0.00
24) Naphthalene-d8	5.880	136	1187893	40.00	ppm	0.00
47) Acenaphthene-d10	8.241	164	738795	40.00	ppm	0.00
69) Phenanthrene-d10	10.874	188	1319007	40.00	ppm	0.00
83) Chrysene-d12	16.049	240	1329148	40.00	ppm	0.00
92) Perylene-d12	18.672	264	1425597	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.737	152	309527	40.00	ppm	0.00
104) Acenaphthene-d10a	8.241	164	738795	40.00	ppm	0.00
107) Chrysene-d12a	16.049	240	1329737	40.00	ppm	0.00
110) Phenanthrene-d10a	10.874	188	1319007	40.00	ppm	0.00
112) Naphthalene-d8a	5.880	136	1187893	40.00	ppm	0.00
114) Chrysene-d12b	16.049	240	1329148	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.797	112	477536	49.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.72%	
8) Phenol-d5	4.507	99	594691	49.29	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.58%	
25) Nitrobenzene-d5	5.196	82	509154	48.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	97.68%	
51) 2-Fluorobiphenyl	7.221	172	1109462	46.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.54%	
73) 2,4,6-Tribromophenol	9.613	330	227393	49.58	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.16%	
86) Terphenyl-d14	14.041	244	1448442	48.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	97.64%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.307	88	198515	47.67	ppm	97
3) Pyridine	2.638	79	528775	49.32	ppm	98
4) N-Nitrosodimethylamine	2.601	42	230624	50.60	ppm	93
6) Indene	4.945	116	826161	47.24	ppm	97
7) Cumene	4.139	105	1135387	48.15	ppm	98
9) Phenol	4.513	94	667086	51.78	ppm	95
10) Aniline	4.491	93	727474	48.81	ppm	99
11) bis(2-Chloroethyl)ether	4.534	93	448581	46.25	ppm	95
12) 2-Chlorophenol	4.598	128	503854	47.34	ppm	96
13) Decane	4.609	43	440420	44.68	ppm	97
14) 1,3-Dichlorobenzene	4.694	146	571259	47.71	ppm	97
15) 1,4-Dichlorobenzene	4.753	146	565255	47.65	ppm	98
16) Benzyl alcohol	4.860	108	310734	49.54	ppm	95
17) 1,2-Dichlorobenzene	4.876	146	525152	46.86	ppm	99
18) Acetophenone	5.063	105	670940	47.52	ppm	99
19) 2-Methylphenol	4.972	108	432382	48.49	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.951	121	145629	44.88	ppm	93

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.095	108	473090	48.61	ppm		90
22) n-Nitroso-di-n-propyla...	5.063	70	351383	46.52	ppm		97
23) Hexachloroethane	5.154	201	212587	47.65	ppm		95
26) Nitrobenzene	5.212	77	504596	47.15	ppm		97
27) Quinoline	6.286	129	1078240	47.74	ppm		98
28) Isophorone	5.426	82	910000	47.52	ppm		98
29) 2-Nitrophenol	5.501	139	296435	48.91	ppm		81
30) 2,4-Dimethylphenol	5.559	107	453804	46.20	ppm		95
31) Benzoic acid	5.698	105	346076	56.43	ppm		91
32) bis(2-Chloroethoxy)met...	5.624	93	546695	47.01	ppm		98
33) 2,4-Dichlorophenol	5.762	162	444557	48.20	ppm		97
34) 2,6-Dichlorophenol	5.981	162	424141	47.20	ppm		99
35) 1,3,5-Trichlorobenzene	5.511	180	508359	47.52	ppm		96
36) 1,2,4-Trichlorobenzene	5.821	180	503459	48.00	ppm		98
37) 1,2,3-Trichlorobenzene	6.062	180	489712	47.94	ppm		98
38) Naphthalene	5.907	128	1460651	47.55	ppm		98
39) 4-Chloroaniline	5.971	127	656204	49.09	ppm		96
40) 2,3-Dichloroaniline	7.103	161	565893	48.04	ppm		96
41) Caprolactam	6.377	55	223443	46.15	ppm		94
42) Hexachlorobutadiene	6.035	225	287891	47.53	ppm		99
43) 4-Chloro-3-methylphenol	6.580	107	428859	47.95	ppm	#	97
44) 2-Methylnaphthalene	6.719	141	876437	48.00	ppm		97
45) 1-Methylnaphthalene	6.847	142	1027227	47.64	ppm		99
46) Dimethylnaphthalene	7.594	156	945030	47.61	ppm		99
48) Hexachlorocyclopentadiene	6.927	237	491238	125.76	ppm		99
49) 2,4,6-Trichlorophenol	7.124	196	336928	47.98	ppm		98
50) 2,4,5-Trichlorophenol	7.205	196	369990	48.57	ppm		97
52) 2-Chloronaphthalene	7.386	162	990048	46.60	ppm		97
53) Biphenyl	7.359	154	1271064	46.94	ppm		98
54) 2-Nitroaniline	7.557	65	294867	48.16	ppm		98
55) Dimethylphthalate	7.840	163	1195310	48.17	ppm		98
56) Acenaphthylene	8.011	152	1650540	47.00	ppm		99
57) 2,6-Dinitrotoluene	7.936	165	277749	49.63	ppm		97
58) 3-Nitroaniline	8.209	138	310116	50.08	ppm		98
59) Acenaphthene	8.294	153	984103	46.47	ppm		99
60) 2,4-Dinitrophenol	8.396	184	258046	134.22	ppm		94
61) 4-Nitrophenol	8.647	109	111661	49.23	ppm	#	69
62) Dibenzofuran	8.583	168	1499433	47.52	ppm		98
63) 2,4-Dinitrotoluene	8.604	165	371457	50.24	ppm		94
64) 2,3,4,6-Tetrachlorophenol	8.834	232	296448	50.32	ppm		92
65) Diethylphthalate	9.037	149	1181333	47.52	ppm		99
66) Fluorene	9.170	166	1215101	47.51	ppm		97
67) 4-Chlorophenyl-phenyle...	9.191	204	575545	47.27	ppm		94
68) 4-Nitroaniline	9.261	138	312224	51.52	ppm		95
70) 4,6-Dinitro-2-methylph...	9.325	198	214965	57.60	ppm		94
71) n-Nitrosodiphenylamine	9.421	169	832281	47.50	ppm		97
72) 1,2-Diphenylhydrazine	9.475	77	1077786	47.87	ppm		98
74) 4-Bromophenyl-phenylether	10.073	248	392504	48.64	ppm		98
75) Hexachlorobenzene	10.174	284	450451	47.67	ppm		98
76) Pentachlorophenol	10.580	266	432163	118.82	ppm		95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.917	178	1729456	47.40	ppm	98
78) Anthracene	11.013	178	1800583	47.57	ppm	98
79) Carbazole	11.371	167	1679850	47.92	ppm	99
80) Di-n-butylphthalate	12.145	149	2123133	48.86	ppm	98
81) Fluoranthene	13.213	202	2053874	48.23	ppm	98
82) Octadecane	10.842	57	685293	48.25	ppm	99
84) Pyrene	13.641	202	2066626	47.98	ppm	98
85) Butyl stearate	15.323	56	479890	48.62	ppm	94
87) Butylbenzylphthalate	15.088	149	946394	50.18	ppm	96
88) Benzo[a]anthracene	16.033	228	1915946	47.85	ppm	98
89) 3,3'-Dichlorobenzidine	16.055	252	724795	49.13	ppm	100
90) Chrysene	16.103	228	1813446	48.07	ppm	100
91) bis(2-Ethylhexyl)phtha...	16.295	149	1239846	48.59	ppm	99
93) Di-n-octylphthalate	17.523	149	2274106	49.02	ppm	99
94) Benzo[b]fluoranthene	18.036	252	2021895	46.26	ppm	95
95) Benzo[k]fluoranthene	18.084	252	1958211	47.22	ppm	96
96) Benzo[a]pyrene	18.576	252	1905062	47.61	ppm	100
97) Indeno[1,2,3-cd]pyrene	20.413	276	1933460	47.65	ppm	95
98) Dibenz(a,h)acridine	20.039	279	1683781	46.80	ppm	99
99) Dibenz[a,h]anthracene	20.456	278	1911886	46.05	ppm	95
100) 7,12-Dimethylbenz(a)an...	18.036	256	917200	46.74	ppm	97
101) Benzo[g,h,i]perylene	20.883	276	1953713	46.19	ppm	97

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

7.6.75

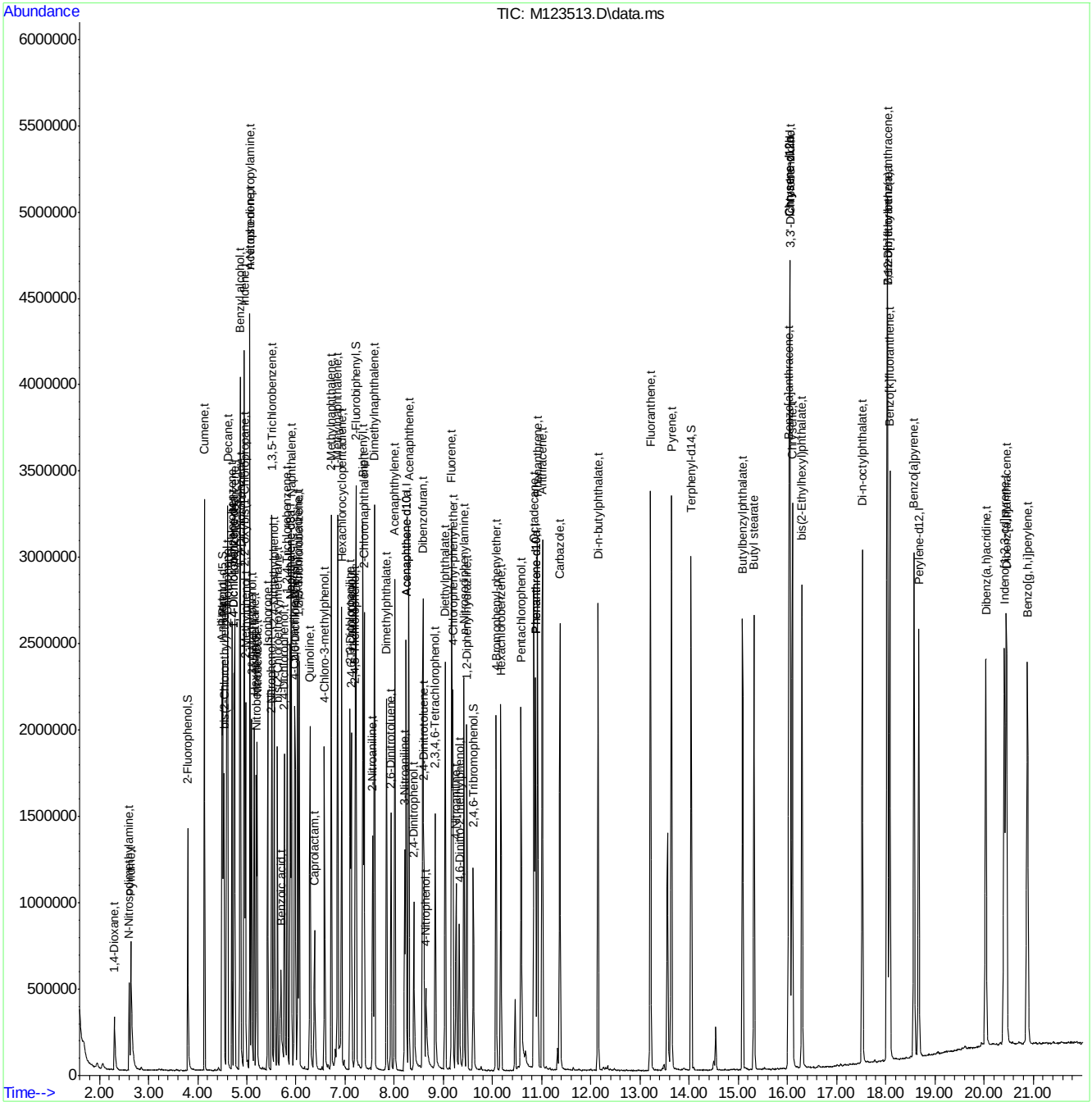
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	314976	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1159891	40.00	ppm	0.00
47) Acenaphthene-d10	8.233	164	752452	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1345328	40.00	ppm	0.00
83) Chrysene-d12	16.041	240	1418559	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1416009	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	314976	40.00	ppm	0.00
104) Acenaphthene-d10a	8.233	164	752452	40.00	ppm	0.00
107) Chrysene-d12a	16.041	240	1418559	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1345328	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1159891	40.00	ppm	0.00
114) Chrysene-d12b	16.041	240	1418559	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.515	94	634812	48.97	ppm	93
12) 2-Chlorophenol	4.595	128	540404	50.05	ppm	99
19) 2-Methylphenol	4.964	108	466299	52.12	ppm	97
21) 3&4-Methylphenol	5.092	108	501664	51.18	ppm #	98
29) 2-Nitrophenol	5.498	139	300290	50.82	ppm	94
30) 2,4-Dimethylphenol	5.557	107	497322	51.43	ppm	99
31) Benzoic acid	5.696	105	321438	50.68	ppm	99
33) 2,4-Dichlorophenol	5.760	162	461986	52.25	ppm	100
34) 2,6-Dichlorophenol	5.979	162	449769	50.35	ppm	99
43) 4-Chloro-3-methylphenol	6.566	107	436970	49.46	ppm	96
49) 2,4,6-Trichlorophenol	7.116	196	363435	50.62	ppm	99
50) 2,4,5-Trichlorophenol	7.196	196	366621	46.91	ppm	100
60) 2,4-Dinitrophenol	8.393	184	101304	44.01	ppm	100
61) 4-Nitrophenol	8.638	109	113792	49.37	ppm	96
64) 2,3,4,6-Tetrachlorophenol	8.831	232	292575	48.40	ppm	99
70) 4,6-Dinitro-2-methylph...	9.311	198	211194	47.84	ppm	100
76) Pentachlorophenol	10.572	266	183549	44.30	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.76

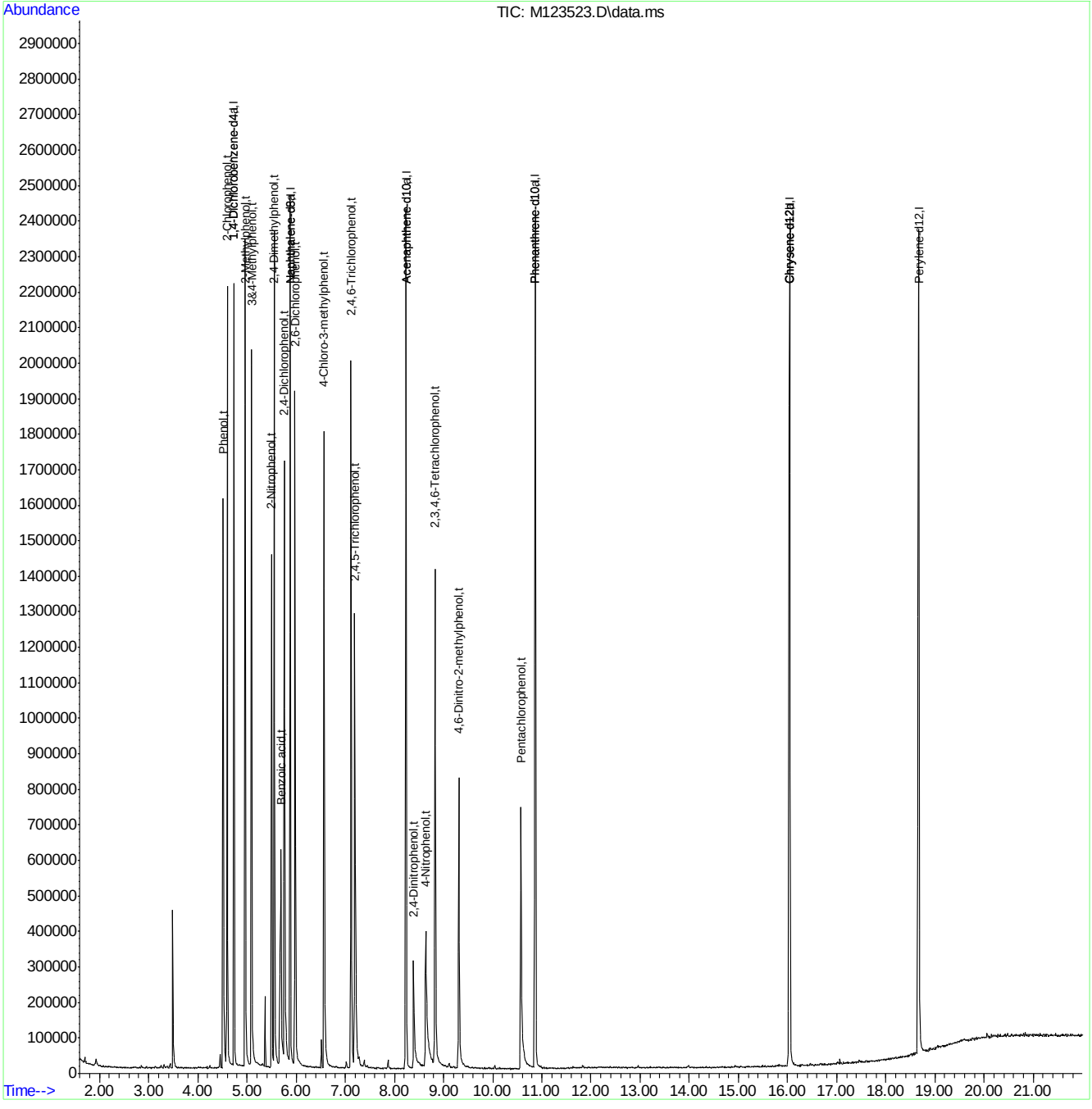
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:15:08 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123524.D
Acq On : 13 Apr 2016 2:34 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 09:18:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.736	152	284462	40.00	ppm	0.00
24) Naphthalene-d8	5.879	136	1094377	40.00	ppm	0.00
47) Acenaphthene-d10	8.235	164	661926	40.00	ppm	0.00
69) Phenanthrene-d10	10.863	188	1254653	40.00	ppm	-0.01
83) Chrysene-d12	16.038	240	1278815	40.00	ppm	-0.01
92) Perylene-d12	18.666	264	1165549	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.736	152	284462	40.00	ppm	0.00
104) Acenaphthene-d10a	8.235	164	661926	40.00	ppm	0.00
107) Chrysene-d12a	16.038	240	1278882	40.00	ppm	0.00
110) Phenanthrene-d10a	10.863	188	1254653	40.00	ppm	0.00
112) Naphthalene-d8a	5.879	136	1094377	40.00	ppm	0.00
114) Chrysene-d12b	16.038	240	1278815	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
3) Pyridine	2.696	79	477835	49.77	ppm	99
10) Aniline	4.496	93	703426	51.66	ppm	83
16) Benzyl alcohol	4.859	108	301469	53.38	ppm	89
39) 4-Chloroaniline	5.965	127	598927	48.51	ppm	97
44) 2-Methylnaphthalene	6.713	141	765334	44.65	ppm	100
54) 2-Nitroaniline	7.556	65	259771	47.26	ppm	90
58) 3-Nitroaniline	8.203	138	279017	50.32	ppm	98
62) Dibenzofuran	8.577	168	1366967	47.85	ppm	98
68) 4-Nitroaniline	9.250	138	267401	49.59	ppm	99
79) Carbazole	11.365	167	1561300	46.79	ppm	99

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

7.6.77

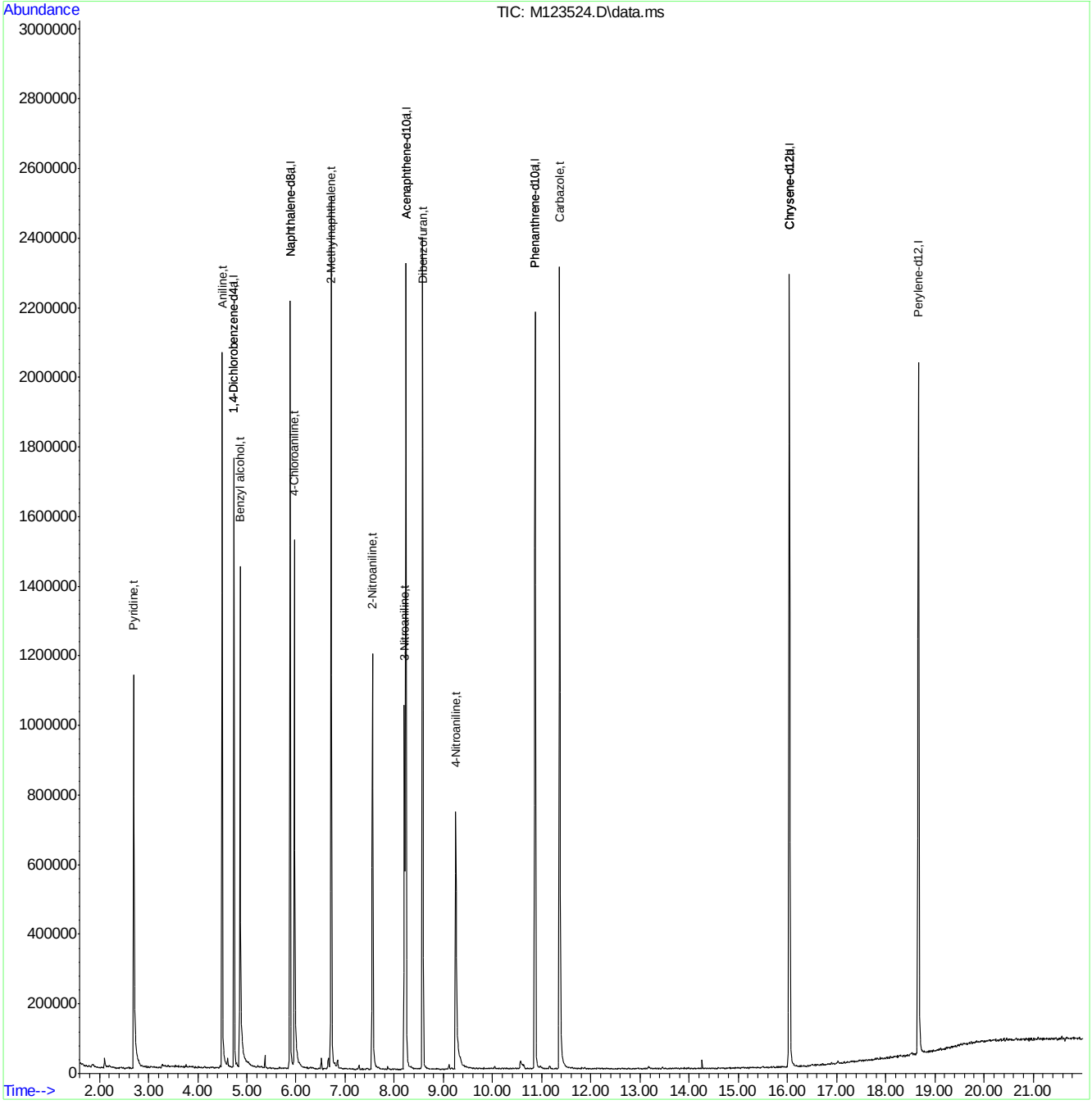
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123524.D
Acq On : 13 Apr 2016 2:34 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 09:18:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:18:47 2016 MSM

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	304041	40.00	ppm	0.00
24) Naphthalene-d8	5.882	136	1156622	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	725951	40.00	ppm	0.00
69) Phenanthrene-d10	10.865	188	1345063	40.00	ppm	0.00
83) Chrysene-d12	16.046	240	1314417	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1385257	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	304041	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	725951	40.00	ppm	0.00
107) Chrysene-d12a	16.046	240	1314417	40.00	ppm	0.00
110) Phenanthrene-d10a	10.865	188	1345063	40.00	ppm	0.00
112) Naphthalene-d8a	5.882	136	1156622	40.00	ppm	0.00
114) Chrysene-d12b	16.046	240	1314417	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.592	42	208903	46.48	ppm	98
11) bis(2-Chloroethyl)ether	4.531	93	469893	48.22	ppm	96
14) 1,3-Dichlorobenzene	4.691	146	567685	47.77	ppm	99
15) 1,4-Dichlorobenzene	4.750	146	567979	48.24	ppm	98
17) 1,2-Dichlorobenzene	4.873	146	542217	48.91	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.947	121	138723	43.09	ppm	98
22) n-Nitroso-di-n-propyla...	5.054	70	333856	44.67	ppm	99
23) Hexachloroethane	5.150	201	211929	47.61	ppm	97
26) Nitrobenzene	5.209	77	489694	47.03	ppm	99
28) Isophorone	5.418	82	910157	48.63	ppm	99
32) bis(2-Chloroethoxy)met...	5.620	93	544719	47.93	ppm	99
36) 1,2,4-Trichlorobenzene	5.823	180	505494	48.88	ppm	98
38) Naphthalene	5.904	128	1446303	47.75	ppm	100
42) Hexachlorobutadiene	6.032	225	287220	48.28	ppm	99
52) 2-Chloronaphthalene	7.383	162	1022899	48.37	ppm	99
55) Dimethylphthalate	7.837	163	1143153	46.24	ppm	99
56) Acenaphthylene	8.008	152	1523476	43.57	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57)	2,6-Dinitrotoluene	7.928	165	258607	47.05	ppm	98
59)	Acenaphthene	8.286	153	962362	45.69	ppm	98
63)	2,4-Dinitrotoluene	8.601	165	340124	47.18	ppm	96
65)	Diethylphthalate	9.033	149	1117366	45.39	ppm	100
66)	Fluorene	9.167	166	1128587	44.56	ppm	99
67)	4-Chlorophenyl-phenyle...	9.188	204	554869	45.92	ppm	99
71)	n-Nitrosodiphenylamine	9.413	169	797630	44.15	ppm	99
72)	1,2-Diphenylhydrazine	9.471	77	1005320	43.44	ppm	98
74)	4-Bromophenyl-phenylether	10.070	248	376706	45.28	ppm	95
75)	Hexachlorobenzene	10.166	284	416395	42.50	ppm	97
77)	Phenanthrene	10.908	178	1662084	44.32	ppm	99
78)	Anthracene	11.004	178	1661429	42.78	ppm	100
80)	Di-n-butylphthalate	12.142	149	2030119	45.72	ppm	100
81)	Fluoranthene	13.210	202	1970724	44.85	ppm	99
84)	Pyrene	13.632	202	2003333	46.74	ppm	99
87)	Butylbenzylphthalate	15.085	149	887482	47.63	ppm	99
88)	Benzo[a]anthracene	16.025	228	1815774	45.19	ppm	99
90)	Chrysene	16.094	228	1677104	44.69	ppm	99
91)	bis(2-Ethylhexyl)phtha...	16.292	149	1162552	46.27	ppm	100
93)	Di-n-octylphthalate	17.520	149	1988513	44.23	ppm	99
94)	Benzo[b]fluoranthene	18.028	252	1842475	43.29	ppm	92
95)	Benzo[k]fluoranthene	18.076	252	1844616	44.96	ppm	98
96)	Benzo[a]pyrene	18.573	252	1794029	45.64	ppm	98
97)	Indeno[1,2,3-cd]pyrene	20.405	276	1815036m	45.63	ppm	
99)	Dibenz[a,h]anthracene	20.447	278	1822856	45.07	ppm	99
101)	Benzo[g,h,i]perylene	20.875	276	1863553	44.95	ppm	100

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

7.6.78

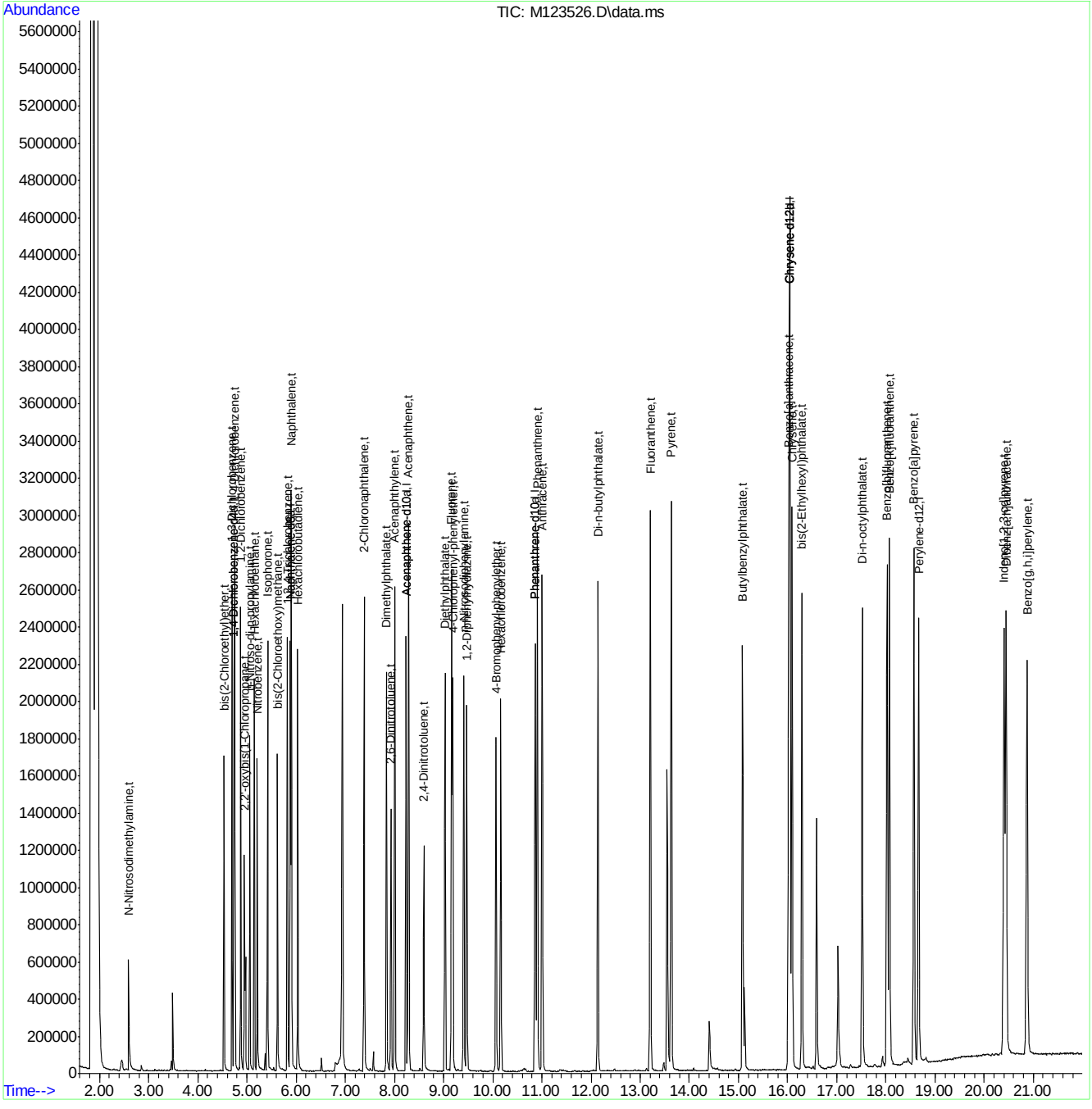
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

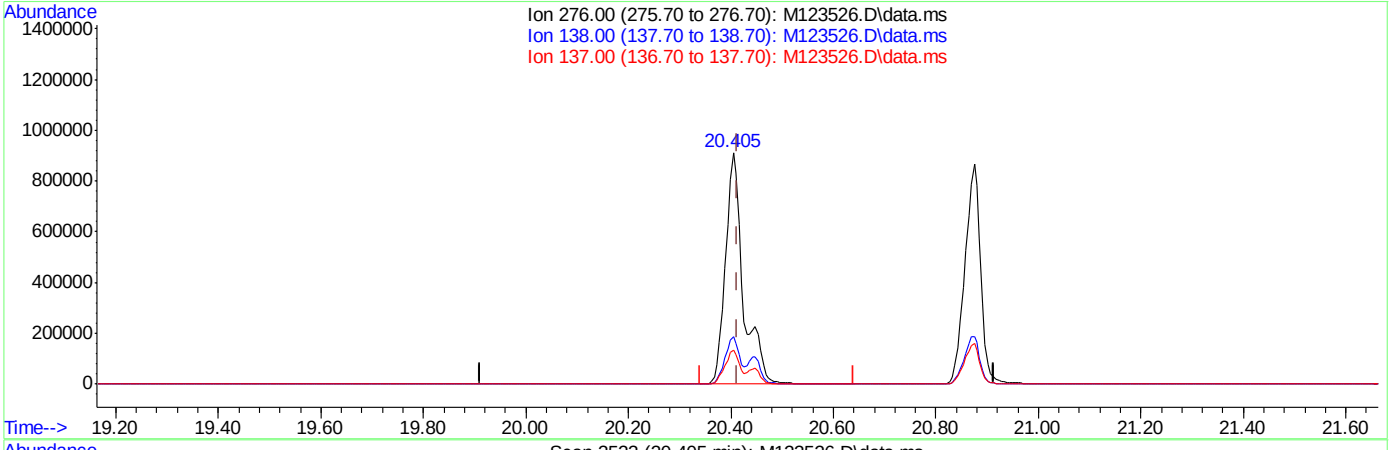
Sample Number:	EM5218-ICV5217	**Method:**	SW846 8270D
Lab FileID:	M123526.D	**Analyst approved:**	04/13/16 13:04 Ashley Dye
Injection Time:	04/13/16 03:31	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

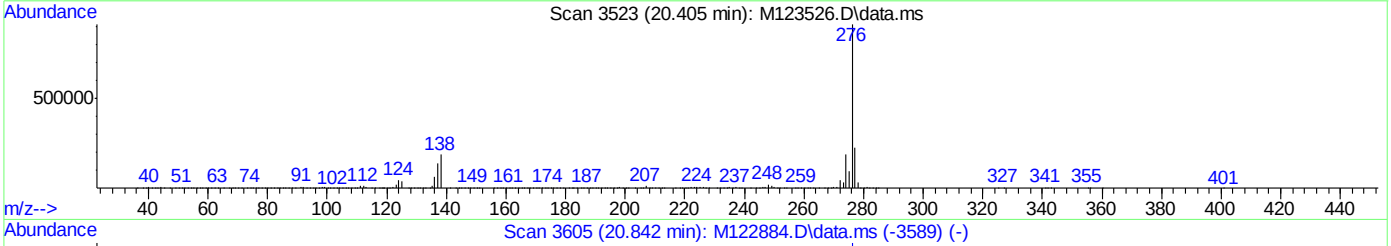
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

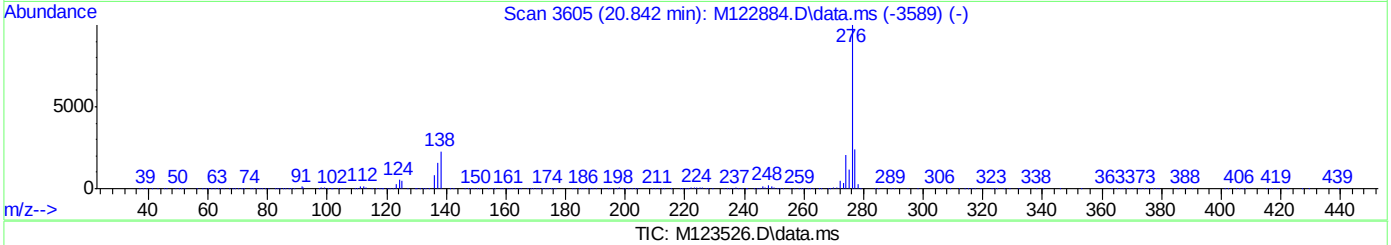
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 09:19:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration







TIC: M123526.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (-0.008) 55.37ppm

response 2202246

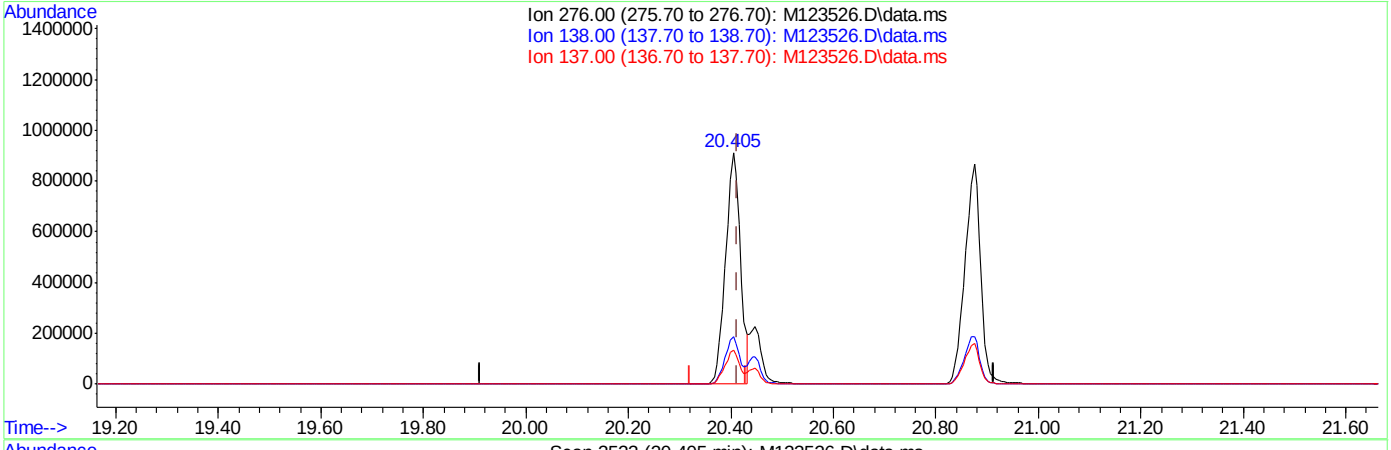
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.52
137.00	13.00	14.84
0.00	0.00	0.00

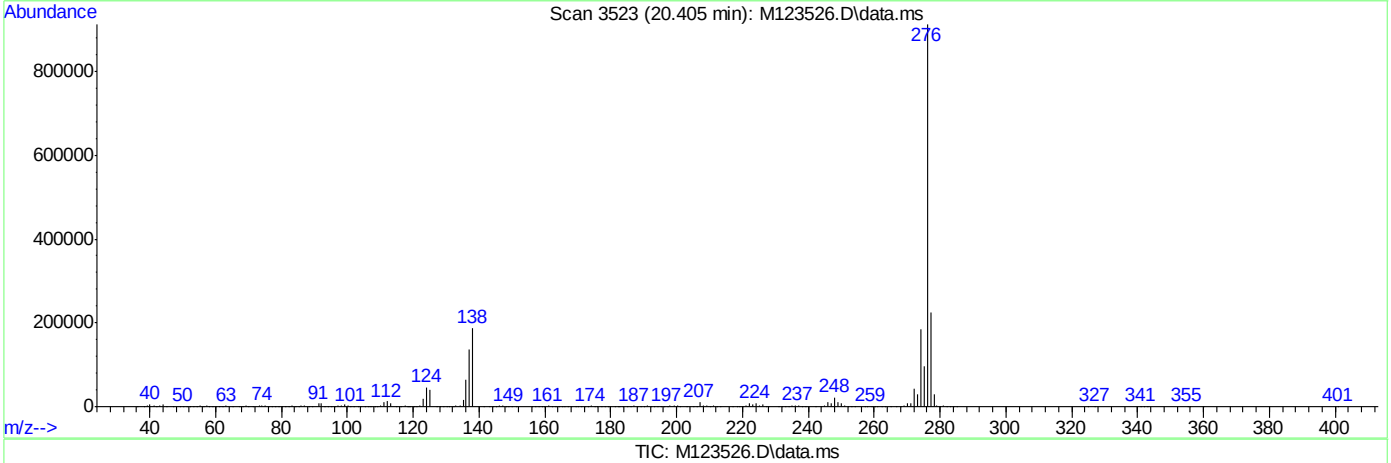
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration





TIC: M123526.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (-0.008) 45.63ppm m

response 1815036

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.54
137.00	13.00	14.86
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123527.D
Acq On : 13 Apr 2016 3:59 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 13 12:17:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.735	152	314565	40.00	ppm	0.00
24) Naphthalene-d8	5.878	136	1141540	40.00	ppm	0.00
47) Acenaphthene-d10	8.233	164	729564	40.00	ppm	0.00
69) Phenanthrene-d10	10.861	188	1242418	40.00	ppm	-0.01
83) Chrysene-d12	16.031	240	1358400	40.00	ppm	-0.02
92) Perylene-d12	18.659	264	1335206	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.735	152	314565	40.00	ppm	0.00
104) Acenaphthene-d10a	8.233	164	729564	40.00	ppm	0.00
107) Chrysene-d12a	16.031	240	1358400	40.00	ppm	0.00
110) Phenanthrene-d10a	10.861	188	1242418	40.00	ppm	0.00
112) Naphthalene-d8a	5.878	136	1141540	40.00	ppm	0.00
114) Chrysene-d12b	16.031	240	1358400	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.294	88	195719	44.87	ppm	99
6) Indene	4.938	116	874747	48.89	ppm	100
7) Cumene	4.131	105	1132317	47.18	ppm	99
13) Decane	4.607	43	465863	45.58	ppm	98
18) Acetophenone	5.055	105	643823	44.96	ppm	98
27) Quinoline	6.268	129	1022890	47.00	ppm	100
40) 2,3-Dichloroaniline	7.095	161	491592	43.36	ppm	99
41) Caprolactam	6.337	55	206377	43.86	ppm	99
45) 1-Methylnaphthalene	6.839	142	1005963	48.42	ppm	100
46) Dimethylnaphthalene	7.587	156	939565	48.72	ppm	99
48) Hexachlorocyclopentadiene	6.925	237	206586	45.89	ppm	100
53) Biphenyl	7.352	154	1271198	46.82	ppm	99
82) Octadecane	10.834	57	672212	50.30	ppm	99
100) 7,12-Dimethylbenz(a)an...	18.018	256	870423	47.15	ppm	97

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

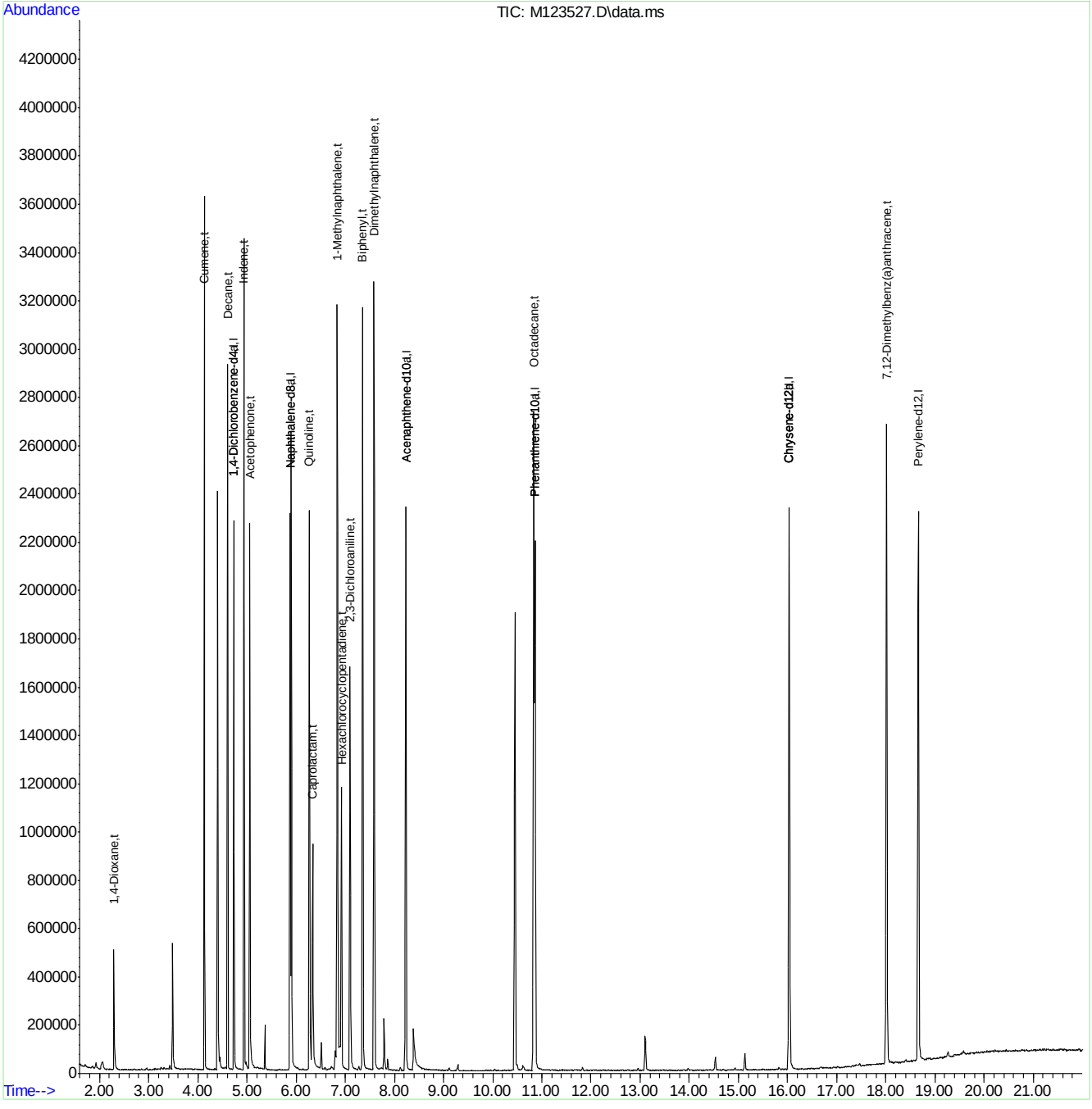
MM5217.M Wed Apr 13 12:17:33 2016 MSM

Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123527.D
Acq On : 13 Apr 2016 3:59 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 13 12:17:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123529.D
Acq On : 13 Apr 2016 4:57 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 13 12:18:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.733	152	303622	40.00	ppm	0.00
24) Naphthalene-d8	5.876	136	1209036	40.00	ppm	0.00
47) Acenaphthene-d10	8.232	164	775029	40.00	ppm	0.00
69) Phenanthrene-d10	10.860	188	1399892	40.00	ppm	-0.01
83) Chrysene-d12	16.035	240	1422338	40.00	ppm	-0.01
92) Perylene-d12	18.663	264	1429361	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.733	152	303622	40.00	ppm	0.00
104) Acenaphthene-d10a	8.232	164	775029	40.00	ppm	0.00
107) Chrysene-d12a	16.035	240	1422338	40.00	ppm	0.00
110) Phenanthrene-d10a	10.860	188	1399892	40.00	ppm	0.00
112) Naphthalene-d8a	5.876	136	1209036	40.00	ppm	0.00
114) Chrysene-d12b	16.035	240	1422338	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	16.046	252	696414	43.86	ppm	99

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

7.6.80

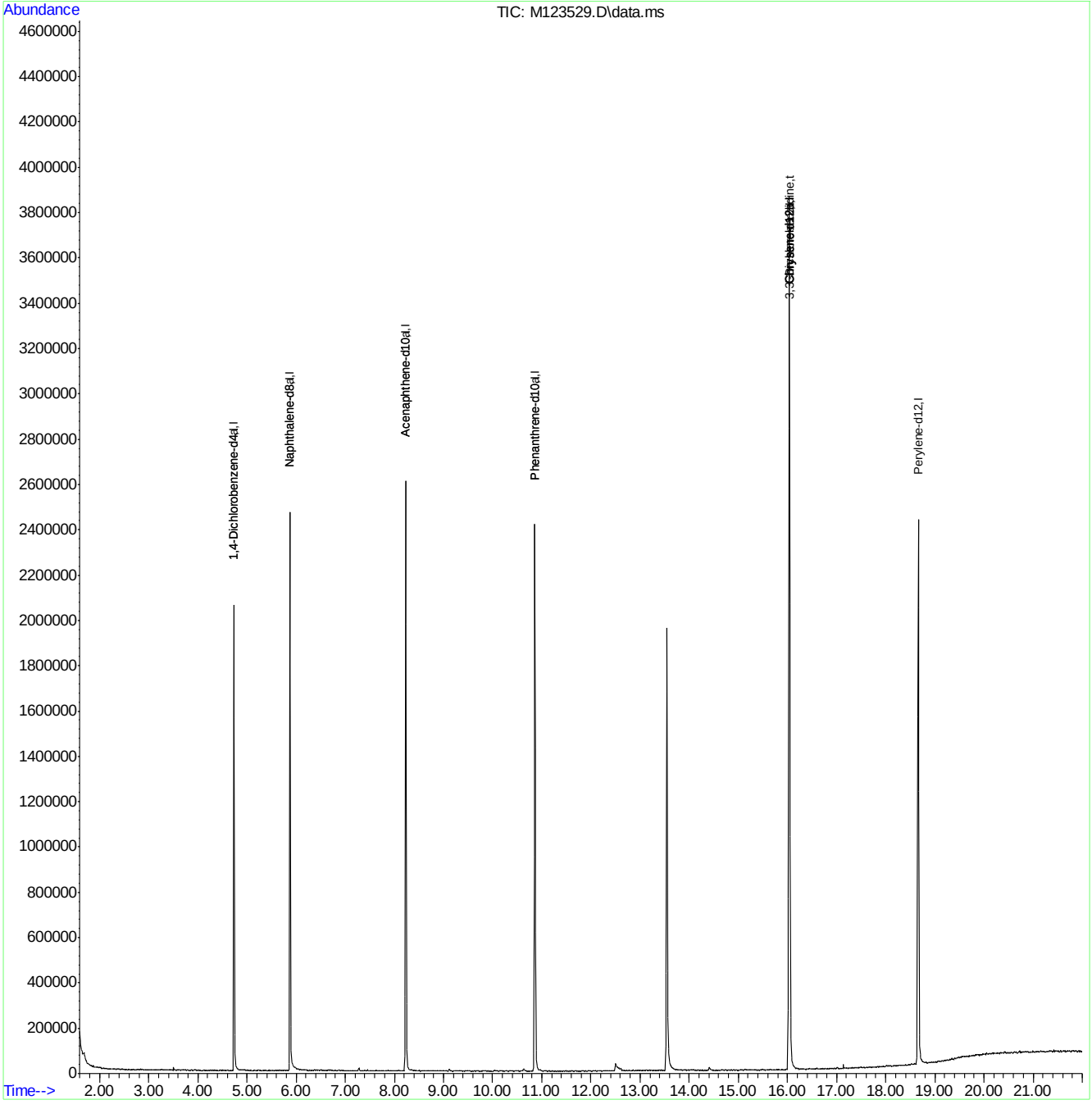
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123529.D
Acq On : 13 Apr 2016 4:57 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 13 12:18:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:18:22 2016 MSM

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123532.D
Acq On : 13 Apr 2016 9:41 am
Operator : seanb1
Sample : icv5217-50
Misc : op92514,em5219
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 10:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.732	152	345103	40.00	ppm	0.00
24) Naphthalene-d8	5.869	136	1274666	40.00	ppm	-0.01
47) Acenaphthene-d10	8.225	164	764854	40.00	ppm	-0.02
69) Phenanthrene-d10	10.853	188	1342778	40.00	ppm	-0.02
83) Chrysene-d12	16.028	240	1390134	40.00	ppm	-0.02
92) Perylene-d12	18.651	264	1353164	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.732	152	345103	40.00	ppm	0.00
104) Acenaphthene-d10a	8.225	164	764854	40.00	ppm	0.00
107) Chrysene-d12a	16.028	240	1390134	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.853	188	1342778	40.00	ppm	-0.01
112) Naphthalene-d8a	5.869	136	1274666	40.00	ppm	0.00
114) Chrysene-d12b	16.028	240	1390134	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.786	112	551767	52.28	ppm	-0.01
Spiked Amount 50.000			Recovery	=	104.56%	
8) Phenol-d5	4.497	99	678049	51.15	ppm	-0.01
Spiked Amount 50.000			Recovery	=	102.30%	
25) Nitrobenzene-d5	5.186	82	583677	51.49	ppm	-0.01
Spiked Amount 50.000			Recovery	=	102.98%	
51) 2-Fluorobiphenyl	7.205	172	1305485	51.98	ppm	-0.02
Spiked Amount 50.000			Recovery	=	103.96%	
73) 2,4,6-Tribromophenol	9.597	330	232986	50.20	ppm	-0.02
Spiked Amount 50.000			Recovery	=	100.40%	
86) Terphenyl-d14	14.025	244	1493290	47.89	ppm	-0.02
Spiked Amount 50.000			Recovery	=	95.78%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds Qvalue

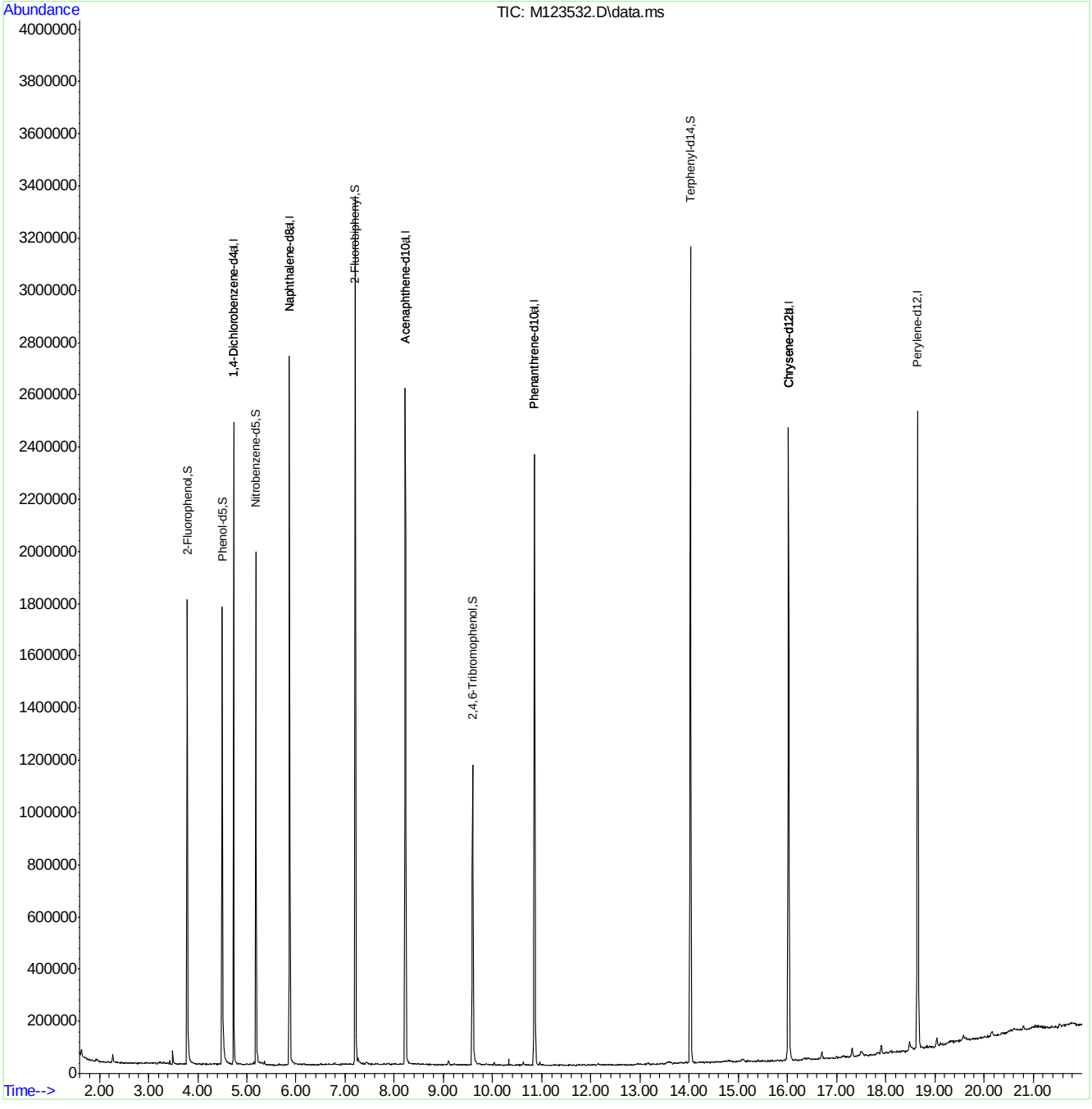
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123532.D
Acq On : 13 Apr 2016 9:41 am
Operator : seanb1
Sample : icv5217-50
Misc : op92514,em5219
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 10:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123929.D
Acq On : 26 Apr 2016 11:25 pm
Operator : seanb1
Sample : ic5239-100
Misc : op93324,em5239
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 08:36:36 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	280584	40.00	ppm	0.00
24) Naphthalene-d8	5.733	136	1102460	40.00	ppm	0.00
47) Acenaphthene-d10	8.046	164	682132	40.00	ppm	0.00
69) Phenanthrene-d10	10.652	188	1214164	40.00	ppm	0.00
83) Chrysene-d12	15.812	240	1383869	40.00	ppm	0.00
92) Perylene-d12	18.434	264	1373496	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.622	152	280584	40.00	ppm	0.00
104) Acenaphthene-d10a	8.046	164	682132	40.00	ppm	0.00
107) Chrysene-d12a	15.812	240	1383869	40.00	ppm	0.00
110) Phenanthrene-d10a	10.652	188	1214164	40.00	ppm	0.00
112) Naphthalene-d8a	5.733	136	1102460	40.00	ppm	0.00
114) Chrysene-d12b	15.812	240	1383869	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.970	57	845702	99.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	198.62%	
111) o-terphenyl	11.453	230	1572968	89.32	ppm	0.00
Spiked Amount 50.000			Recovery	=	178.64%	
Target Compounds						Qvalue
103) Benzaldehyde	4.296	105	676052	95.28	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.780	216	835413	76.27	ppm	99
106) Atrazine	10.273	215	304804	80.09	ppm #	66
108) Benzidine	13.339	184	1377819	85.05	ppm	93
113) Hydroquinone	6.256	110	944505	106.13	ppm	92

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

7.6.82

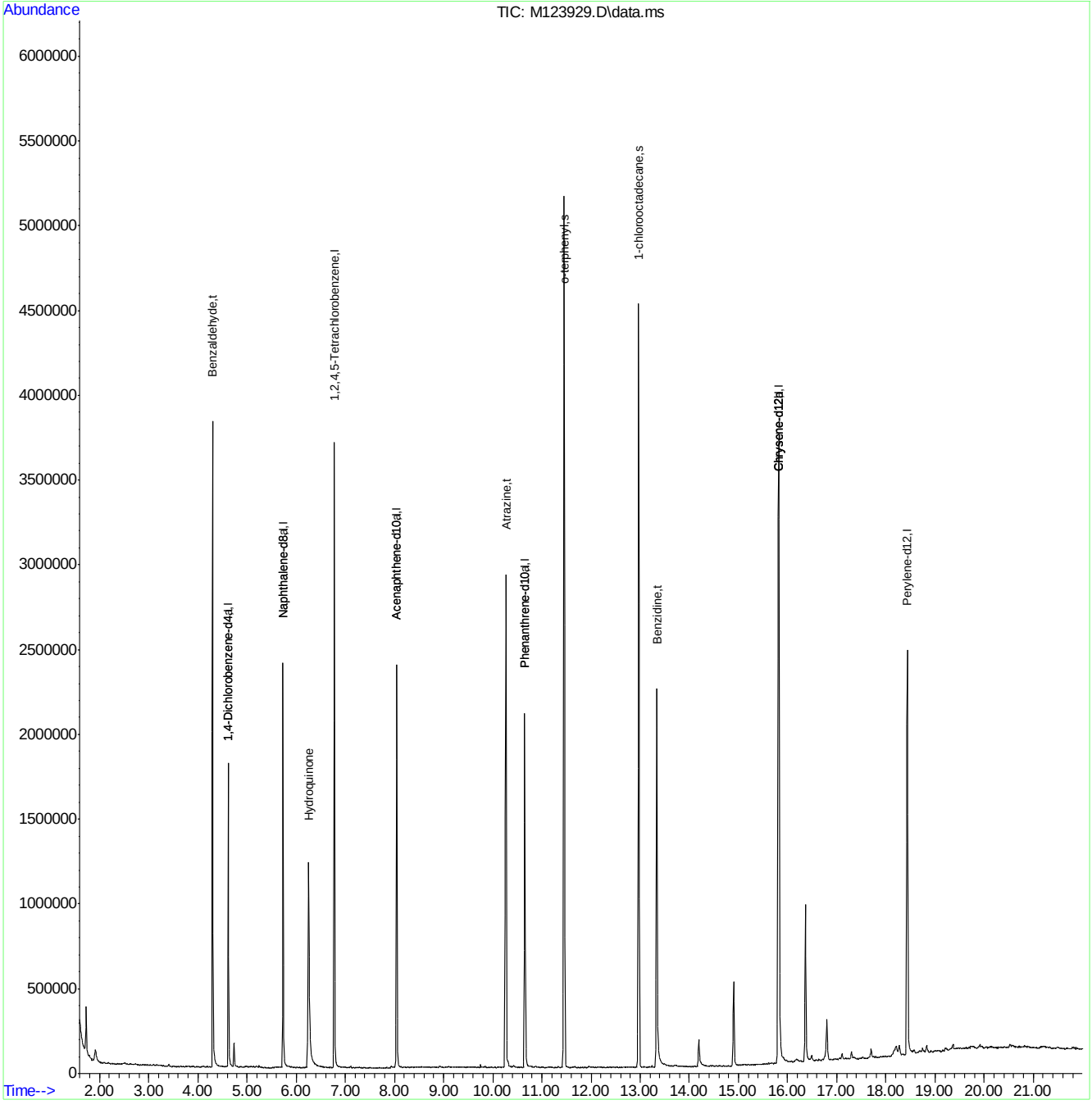
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123929.D
Acq On : 26 Apr 2016 11:25 pm
Operator : seanb1
Sample : ic5239-100
Misc : op93324,em5239
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 08:36:36 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:36:50 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123930.D
Acq On : 26 Apr 2016 11:53 pm
Operator : seanb1
Sample : ic5239-80
Misc : op93324,em5239
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 08:37:27 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	319656	40.00	ppm	0.00
24) Naphthalene-d8	5.736	136	1232857	40.00	ppm	0.00
47) Acenaphthene-d10	8.048	164	759328	40.00	ppm	0.00
69) Phenanthrene-d10	10.655	188	1258673	40.00	ppm	0.00
83) Chrysene-d12	15.814	240	1425352	40.00	ppm	0.00
92) Perylene-d12	18.437	264	1426020	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	319656	40.00	ppm	0.00
104) Acenaphthene-d10a	8.048	164	759328	40.00	ppm	0.00
107) Chrysene-d12a	15.814	240	1425352	40.00	ppm	0.00
110) Phenanthrene-d10a	10.655	188	1258673	40.00	ppm	0.00
112) Naphthalene-d8a	5.736	136	1232857	40.00	ppm	0.00
114) Chrysene-d12b	15.814	240	1425352	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.973	57	697731	79.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	159.10%	
111) o-terphenyl	11.451	230	1316944	72.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	144.28%	
Target Compounds						Qvalue
103) Benzaldehyde	4.299	105	595591	73.68	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.777	216	754176	61.86	ppm	99
106) Atrazine	10.270	215	256006	60.43	ppm #	71
108) Benzidine	13.336	184	1268161	76.00	ppm	94
113) Hydroquinone	6.248	110	796530	80.04	ppm	93

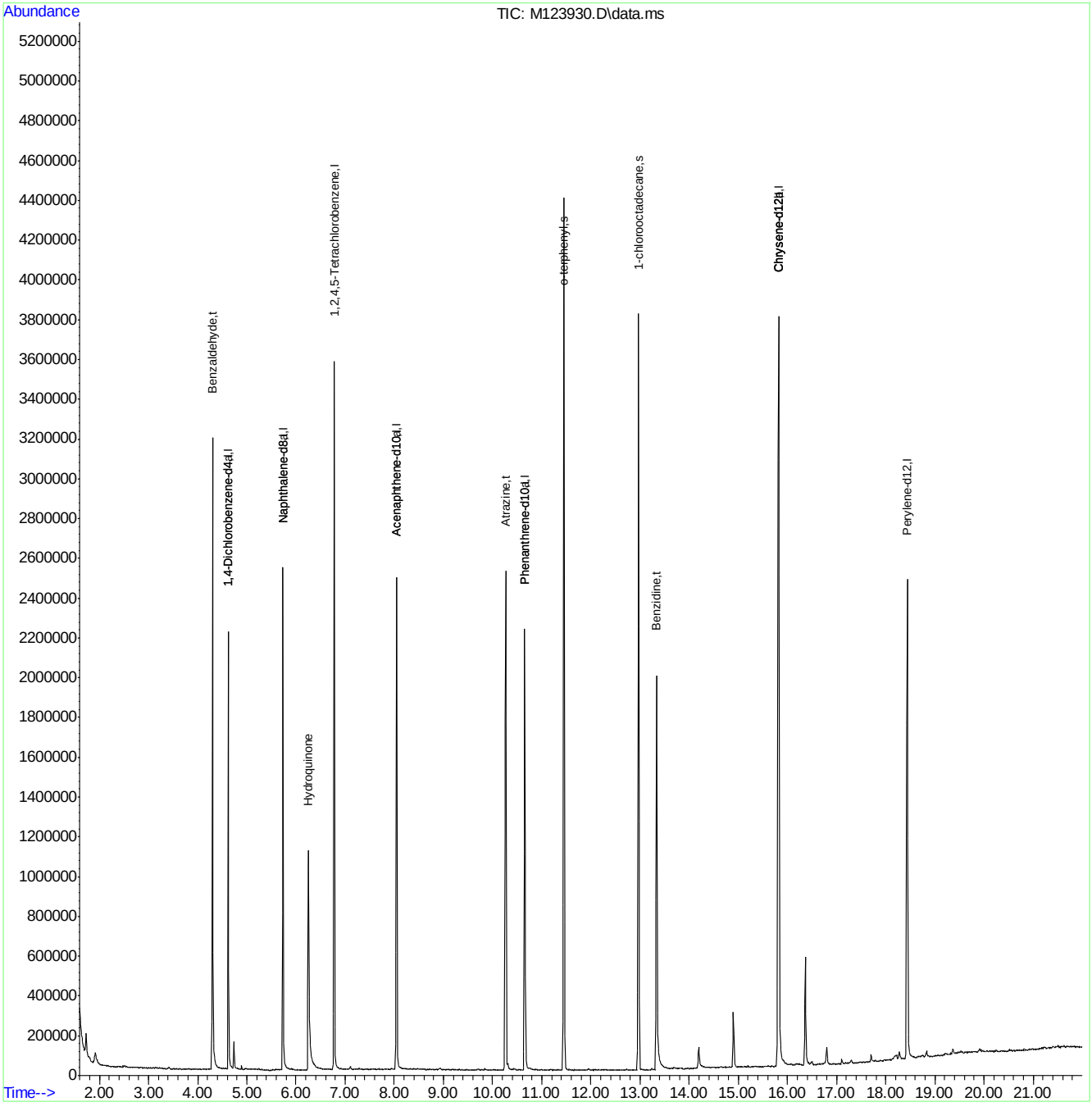
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123930.D
Acq On : 26 Apr 2016 11:53 pm
Operator : seanb1
Sample : ic5239-80
Misc : op93324,em5239
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 08:37:27 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123931.D
Acq On : 27 Apr 2016 12:22 am
Operator : seanb1
Sample : icc5239-50
Misc : op93324,em5239
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 08:38:06 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	322559	40.00	ppm	0.00
24) Naphthalene-d8	5.733	136	1306823	40.00	ppm	0.00
47) Acenaphthene-d10	8.046	164	797097	40.00	ppm	0.00
69) Phenanthrene-d10	10.652	188	1344704	40.00	ppm	0.00
83) Chrysene-d12	15.812	240	1523716	40.00	ppm	0.00
92) Perylene-d12	18.434	264	1523192	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.622	152	322559	40.00	ppm	0.00
104) Acenaphthene-d10a	8.046	164	797097	40.00	ppm	0.00
107) Chrysene-d12a	15.812	240	1523706	40.00	ppm	0.00
110) Phenanthrene-d10a	10.652	188	1344704	40.00	ppm	0.00
112) Naphthalene-d8a	5.733	136	1306823	40.00	ppm	0.00
114) Chrysene-d12b	15.812	240	1523716	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	12.970	57	513548	54.77	ppm	0.00
Spiked Amount 50.000			Recovery = 109.54%			
111) o-terphenyl	11.453	230	908784	46.60	ppm	0.00
Spiked Amount 50.000			Recovery = 93.20%			
Target Compounds						Qvalue
103) Benzaldehyde	4.296	105	402737	49.37	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.775	216	534426	41.75	ppm	98
106) Atrazine	10.262	215	171085	38.47	ppm #	66
108) Benzidine	13.333	184	950940	53.31	ppm	94
113) Hydroquinone	6.246	110	534034	50.62	ppm	93

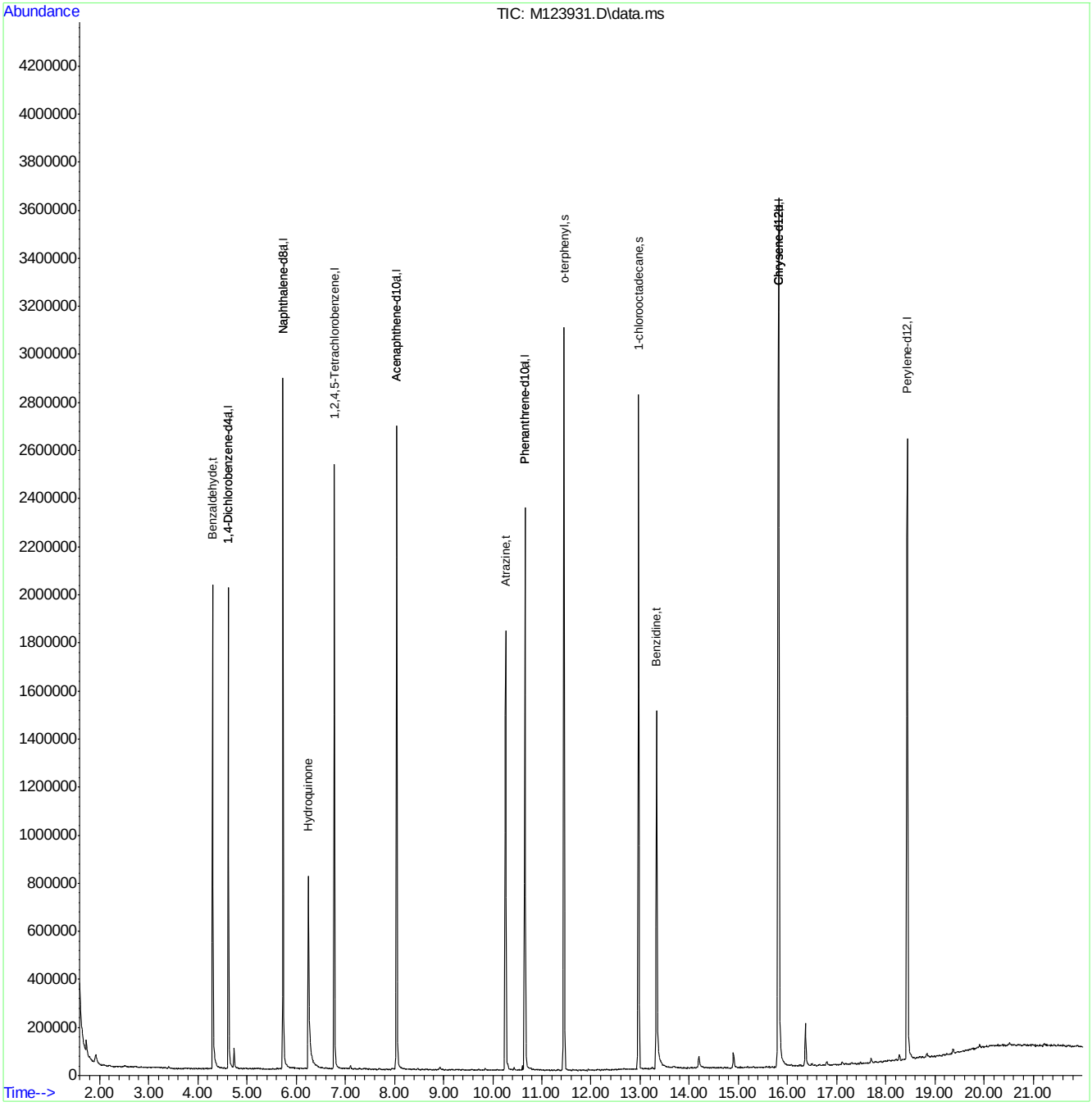
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123931.D
Acq On : 27 Apr 2016 12:22 am
Operator : seanb1
Sample : icc5239-50
Misc : op93324,em5239
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 08:38:06 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:38:17 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123932.D
Acq On : 27 Apr 2016 12:50 am
Operator : seanb1
Sample : ic5239-25
Misc : op93324,em5239
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 08:38:45 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	293504	40.00	ppm	0.00
24) Naphthalene-d8	5.733	136	1140546	40.00	ppm	0.00
47) Acenaphthene-d10	8.046	164	683301	40.00	ppm	0.00
69) Phenanthrene-d10	10.652	188	1201109	40.00	ppm	0.00
83) Chrysene-d12	15.811	240	1374505	40.00	ppm	0.00
92) Perylene-d12	18.434	264	1427269	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.622	152	293504	40.00	ppm	0.00
104) Acenaphthene-d10a	8.046	164	683301	40.00	ppm	0.00
107) Chrysene-d12a	15.811	240	1374505	40.00	ppm	0.00
110) Phenanthrene-d10a	10.652	188	1201109	40.00	ppm	0.00
112) Naphthalene-d8a	5.733	136	1140546	40.00	ppm	0.00
114) Chrysene-d12b	15.811	240	1374505	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	12.965	57	233906	27.65	ppm	0.00
Spiked Amount 50.000			Recovery = 55.30%			
111) o-terphenyl	11.448	230	436839	25.08	ppm	0.00
Spiked Amount 50.000			Recovery = 50.16%			
Target Compounds						Qvalue
103) Benzaldehyde	4.301	105	173399	23.36	ppm	96
105) 1,2,4,5-Tetrachloroben...	6.774	216	226952	20.68	ppm	97
106) Atrazine	10.257	215	75801	19.88	ppm #	72
108) Benzidine	13.333	184	325544	20.23	ppm	96
113) Hydroquinone	6.246	110	220359	23.93	ppm	93

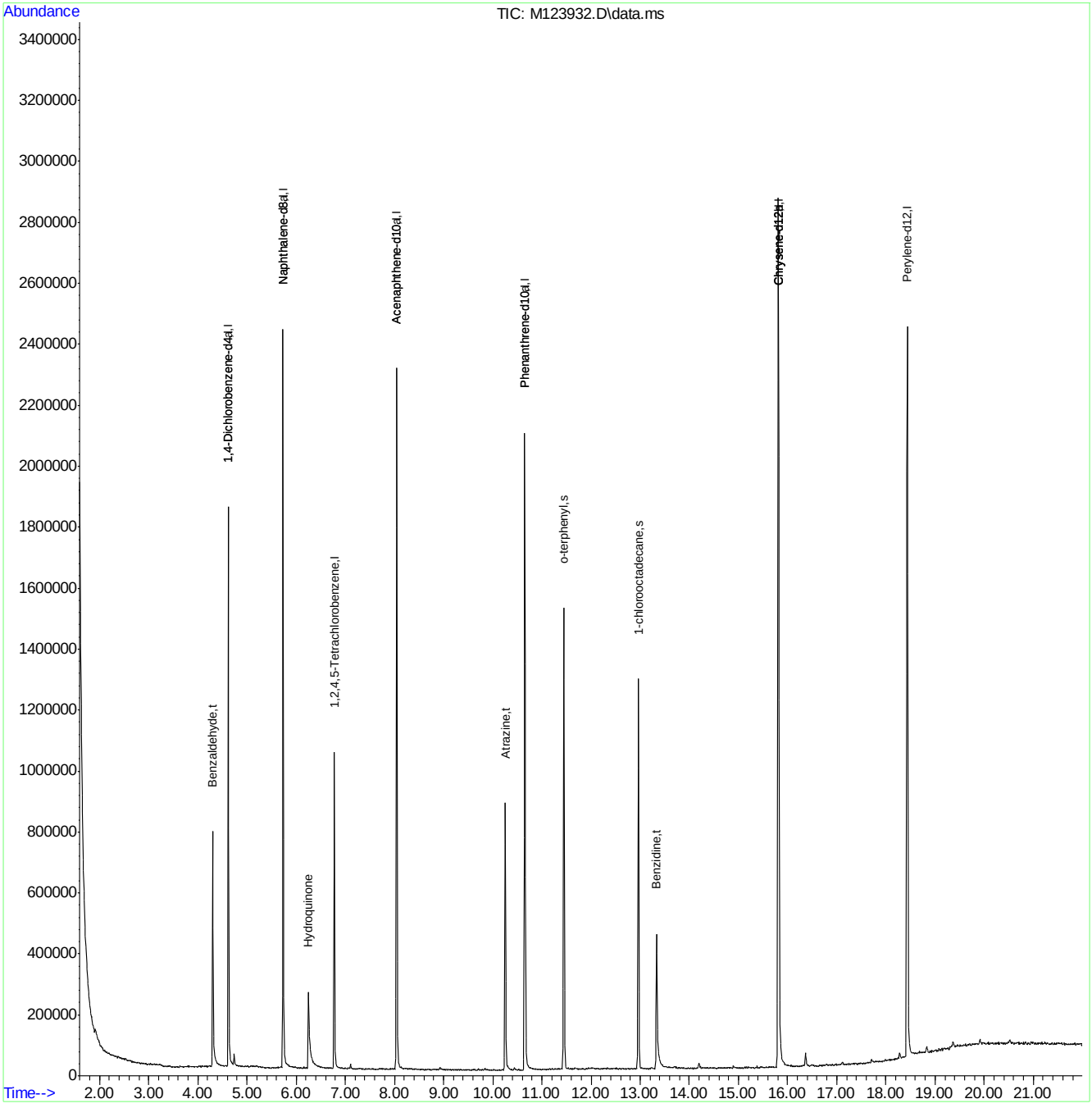
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123932.D
Acq On : 27 Apr 2016 12:50 am
Operator : seanb1
Sample : ic5239-25
Misc : op93324,em5239
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 08:38:45 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123933.D
Acq On : 27 Apr 2016 1:19 am
Operator : seanb1
Sample : ic5239-10
Misc : op93324,em5239
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 08:39:46 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.621	152	307618	40.00	ppm	0.00
24) Naphthalene-d8	5.732	136	1159896	40.00	ppm	0.00
47) Acenaphthene-d10	8.045	164	674353	40.00	ppm	0.00
69) Phenanthrene-d10	10.657	188	1216505	40.00	ppm	0.00
83) Chrysene-d12	15.811	240	1284406	40.00	ppm	0.00
92) Perylene-d12	18.433	264	1342699	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.621	152	307618	40.00	ppm	0.00
104) Acenaphthene-d10a	8.045	164	674353	40.00	ppm	0.00
107) Chrysene-d12a	15.811	240	1284406	40.00	ppm	0.00
110) Phenanthrene-d10a	10.657	188	1216505	40.00	ppm	0.00
112) Naphthalene-d8a	5.732	136	1159896	40.00	ppm	0.00
114) Chrysene-d12b	15.811	240	1284406	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.964	57	93892	11.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	23.76%	
111) o-terphenyl	11.447	230	180128	10.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.42%	
Target Compounds						Qvalue
103) Benzaldehyde	4.306	105	70091	9.01	ppm	95
105) 1,2,4,5-Tetrachloroben...	6.779	216	94496	8.73	ppm	97
106) Atrazine	10.251	215	32101	8.53	ppm #	75
108) Benzidine	13.343	184	113554	7.55	ppm	95
113) Hydroquinone	6.266	110	72353	7.73	ppm	96

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

7.6.86

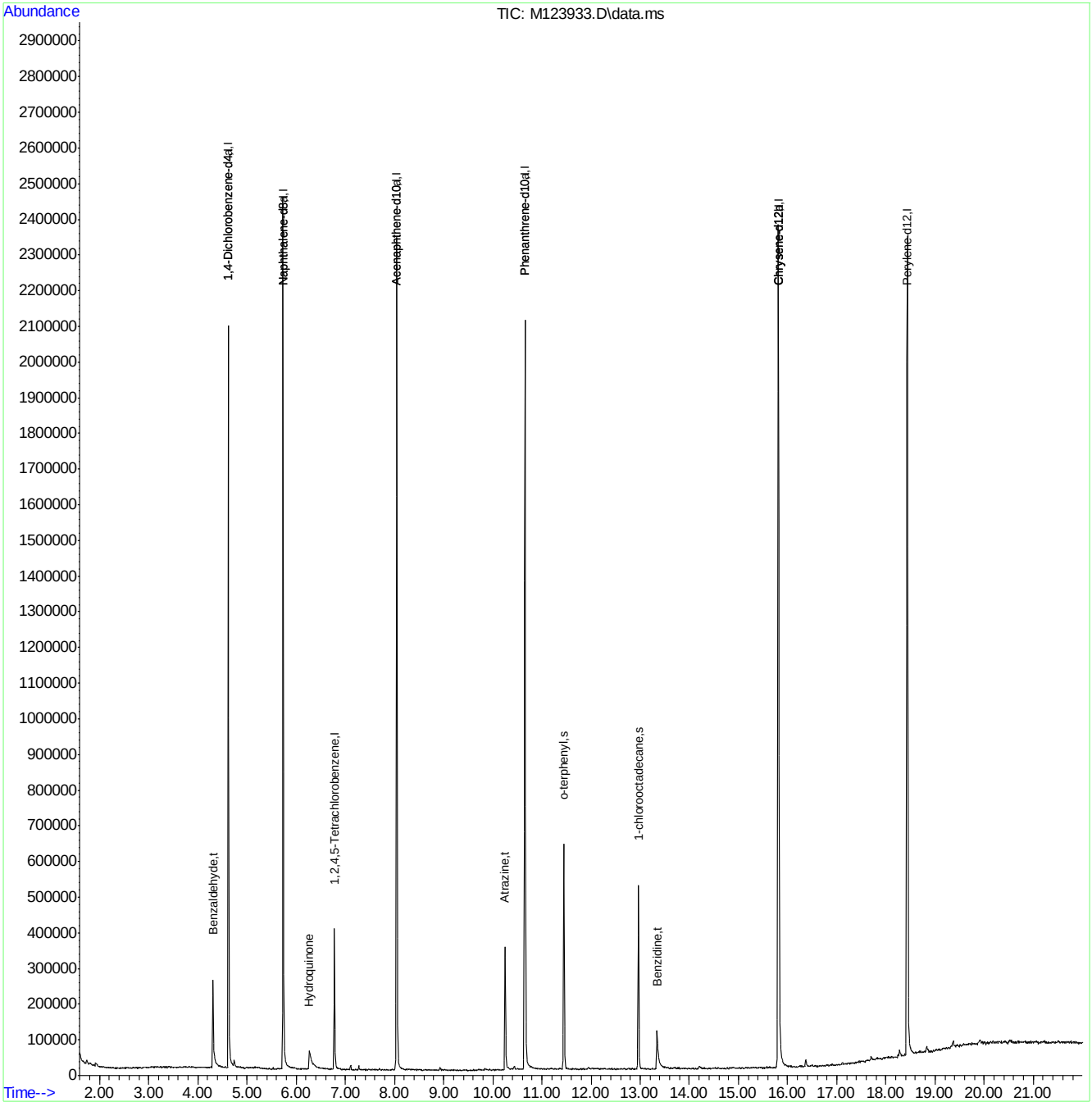
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123933.D
Acq On : 27 Apr 2016 1:19 am
Operator : seanb1
Sample : ic5239-10
Misc : op93324,em5239
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 08:39:46 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123934.D
Acq On : 27 Apr 2016 1:47 am
Operator : seanb1
Sample : ic5239-5
Misc : op93324,em5239
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 08:40:34 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.620	152	351862	40.00	ppm	0.00
24) Naphthalene-d8	5.736	136	1394765	40.00	ppm	0.00
47) Acenaphthene-d10	8.043	164	822997	40.00	ppm	0.00
69) Phenanthrene-d10	10.655	188	1491869	40.00	ppm	0.00
83) Chrysene-d12	15.815	240	1543621	40.00	ppm	0.00
92) Perylene-d12	18.437	264	1611472	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.620	152	351862	40.00	ppm	0.00
104) Acenaphthene-d10a	8.043	164	822997	40.00	ppm	0.00
107) Chrysene-d12a	15.815	240	1543621	40.00	ppm	0.00
110) Phenanthrene-d10a	10.655	188	1491869	40.00	ppm	0.00
112) Naphthalene-d8a	5.736	136	1394765	40.00	ppm	0.00
114) Chrysene-d12b	15.815	240	1543621	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.968	57	49763	5.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.48%	
111) o-terphenyl	11.446	230	100298	4.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.28%	
Target Compounds						Qvalue
103) Benzaldehyde	4.310	105	39359	4.42	ppm	92
105) 1,2,4,5-Tetrachloroben...	6.778	216	53030	4.01	ppm	97
106) Atrazine	10.255	215	17245	3.76	ppm	73
108) Benzidine	13.352	184	52868	2.93	ppm	95
113) Hydroquinone	6.286	110	30300	2.69	ppm	97

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

7.6.87

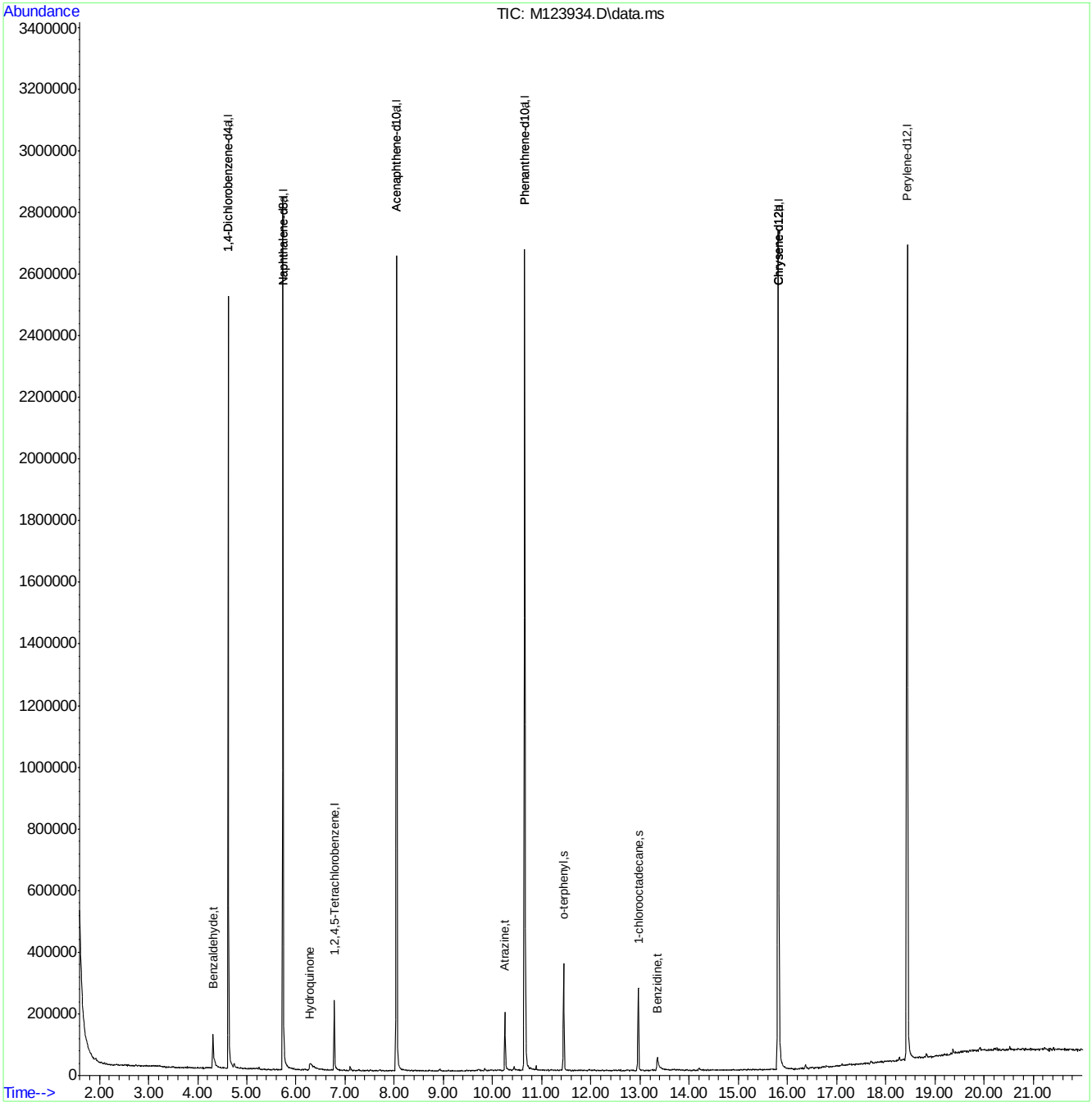
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123934.D
Acq On : 27 Apr 2016 1:47 am
Operator : seanb1
Sample : ic5239-5
Misc : op93324,em5239
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 08:40:34 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123935.D
Acq On : 27 Apr 2016 2:15 am
Operator : seanb1
Sample : ic5239-2
Misc : op93324,em5239
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 27 08:41:25 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	290913	40.00	ppm	0.00
24) Naphthalene-d8	5.735	136	1141300	40.00	ppm	0.00
47) Acenaphthene-d10	8.048	164	684315	40.00	ppm	0.00
69) Phenanthrene-d10	10.655	188	1248971	40.00	ppm	0.00
83) Chrysene-d12	15.814	240	1306157	40.00	ppm	0.00
92) Perylene-d12	18.437	264	1342721	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	290913	40.00	ppm	0.00
104) Acenaphthene-d10a	8.048	164	684315	40.00	ppm	0.00
107) Chrysene-d12a	15.814	240	1306157	40.00	ppm	0.00
110) Phenanthrene-d10a	10.655	188	1248971	40.00	ppm	0.00
112) Naphthalene-d8a	5.735	136	1141300	40.00	ppm	0.00
114) Chrysene-d12b	15.814	240	1306157	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.967	57	17375	2.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.32%	
111) o-terphenyl	11.445	230	32088	1.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.54%	
Target Compounds						Qvalue
103) Benzaldehyde	4.320	105	13377	1.82	ppm	92
105) 1,2,4,5-Tetrachloroben...	6.782	216	17364	1.58	ppm	98
106) Atrazine	10.254	215	5652	1.48	ppm #	70
108) Benzidine	13.373	184	11292	0.74	ppm	85

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

7.6.88

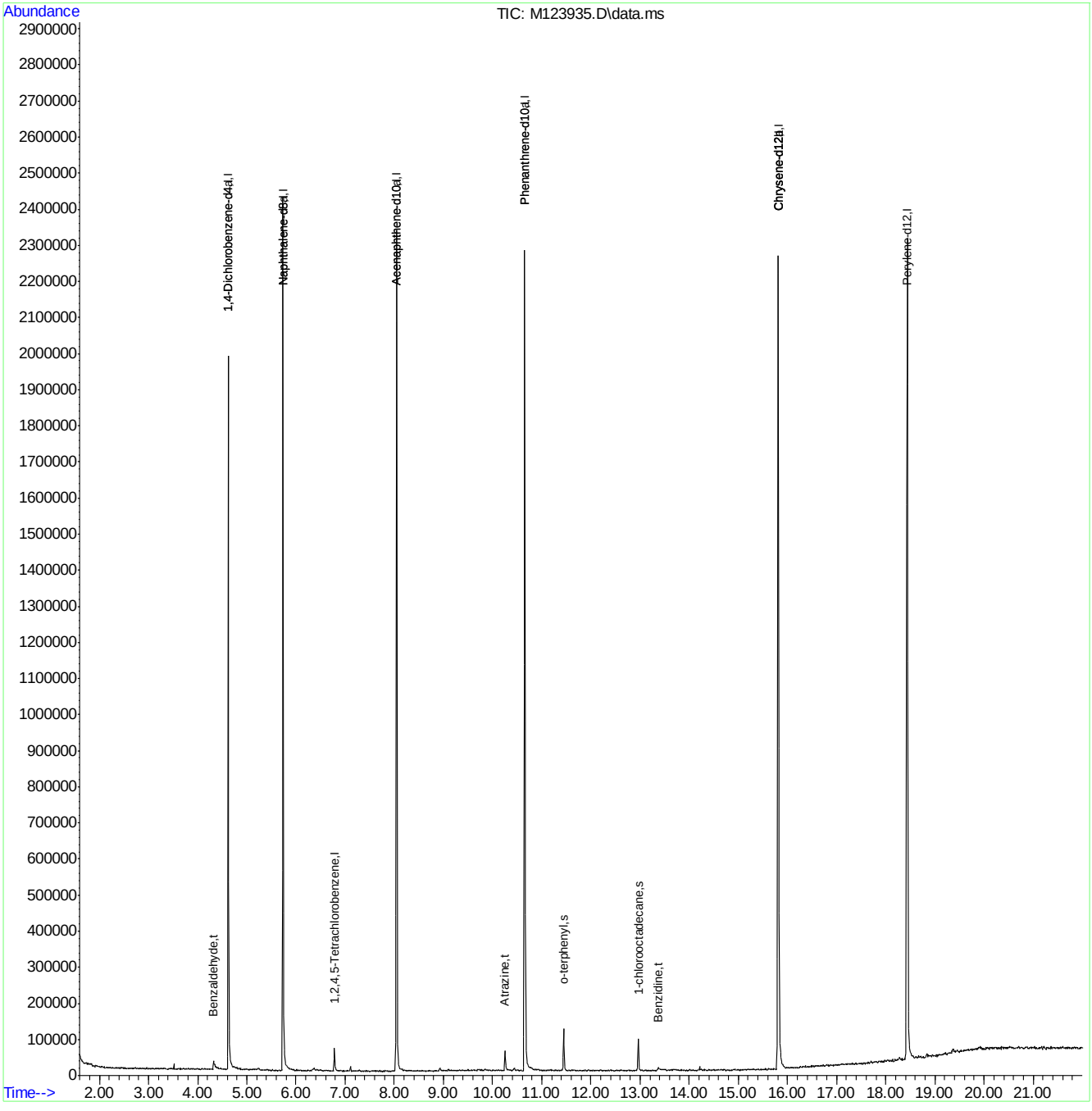
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123935.D
Acq On : 27 Apr 2016 2:15 am
Operator : seanb1
Sample : ic5239-2
Misc : op93324,em5239
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 27 08:41:25 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:41:31 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123936.D
Acq On : 27 Apr 2016 2:44 am
Operator : seanb1
Sample : ic5239-1
Misc : op93324,em5239
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 27 08:42:08 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.621	152	342359	40.00	ppm	0.00
24) Naphthalene-d8	5.732	136	1306774	40.00	ppm	0.00
47) Acenaphthene-d10	8.045	164	784553	40.00	ppm	0.00
69) Phenanthrene-d10	10.656	188	1296280	40.00	ppm	0.00
83) Chrysene-d12	15.811	240	1411881	40.00	ppm	0.00
92) Perylene-d12	18.438	264	1381435	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.621	152	342359	40.00	ppm	0.00
104) Acenaphthene-d10a	8.045	164	784553	40.00	ppm	0.00
107) Chrysene-d12a	15.811	240	1411881	40.00	ppm	0.00
110) Phenanthrene-d10a	10.656	188	1296280	40.00	ppm	0.00
112) Naphthalene-d8a	5.732	136	1306774	40.00	ppm	0.00
114) Chrysene-d12b	15.811	240	1411881	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.964	57	7711	0.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.78%	
111) o-terphenyl	11.447	230	16716	0.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.78%	
Target Compounds						Qvalue
103) Benzaldehyde	4.333	105	5712	0.66	ppm #	73
105) 1,2,4,5-Tetrachloroben...	6.784	216	9560	0.76	ppm	93
106) Atrazine	10.256	215	2591	0.59	ppm #	38

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

7.6.89

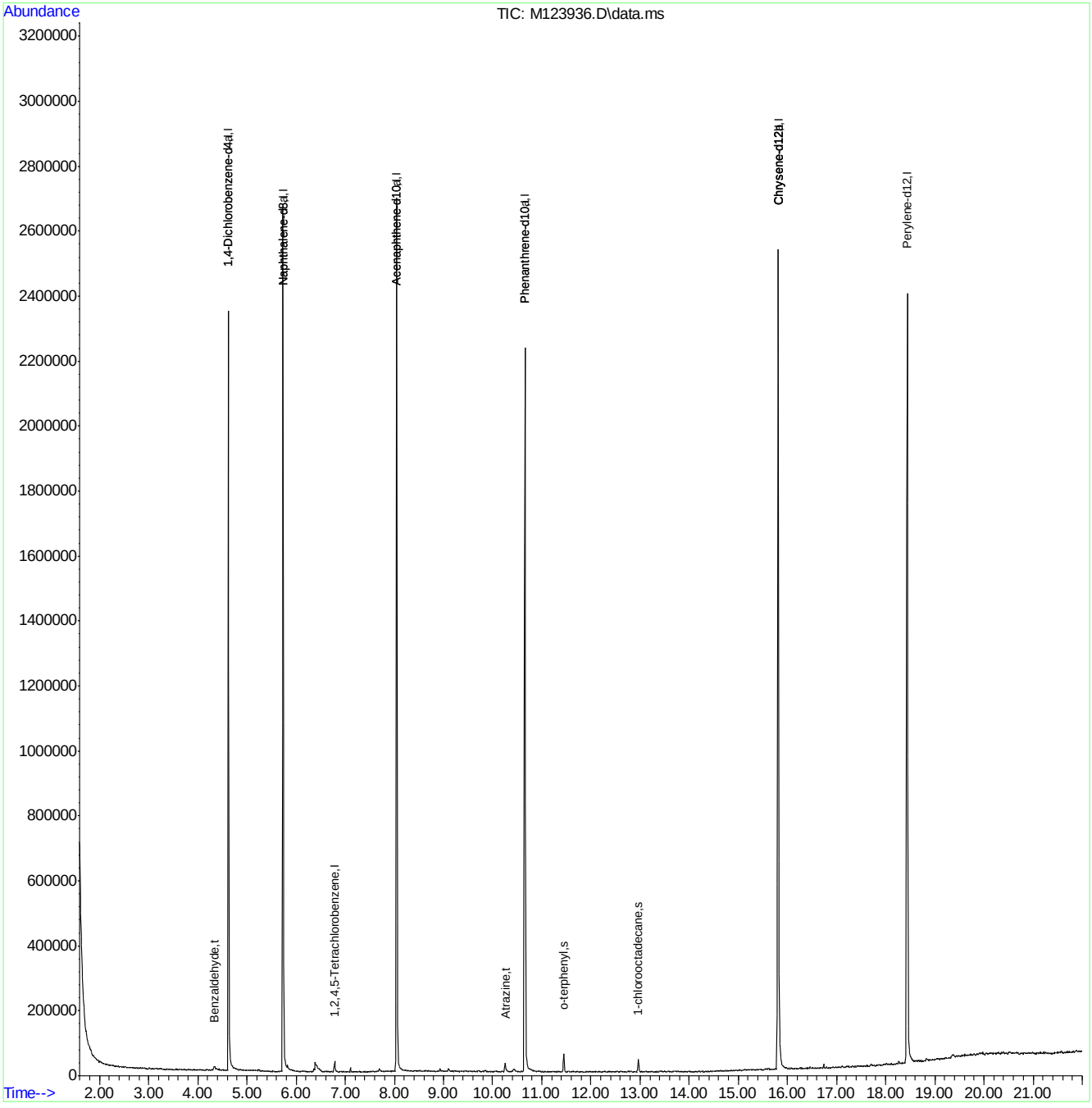
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123936.D
Acq On : 27 Apr 2016 2:44 am
Operator : seanb1
Sample : ic5239-1
Misc : op93324,em5239
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 27 08:42:08 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123937.D
Acq On : 27 Apr 2016 3:12 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 27 14:44:43 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.623	152	295577	40.00	ppm	0.00
24) Naphthalene-d8	5.734	136	1096947	40.00	ppm	0.00
47) Acenaphthene-d10	8.047	164	649801	40.00	ppm	0.00
69) Phenanthrene-d10	10.653	188	1130894	40.00	ppm	0.00
83) Chrysene-d12	15.818	240	1136077	40.00	ppm	0.00
92) Perylene-d12	18.435	264	1107969	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.623	152	295577	40.00	ppm	0.00
104) Acenaphthene-d10a	8.047	164	649801	40.00	ppm	0.00
107) Chrysene-d12a	15.818	240	1136077	40.00	ppm	0.00
110) Phenanthrene-d10a	10.653	188	1130894	40.00	ppm	0.00
112) Naphthalene-d8a	5.734	136	1096947	40.00	ppm	0.00
114) Chrysene-d12b	15.818	240	1136077	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
105) 1,2,4,5-Tetrachloroben...	6.776	216	501830	59.91	ppm	93

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

7.6.90

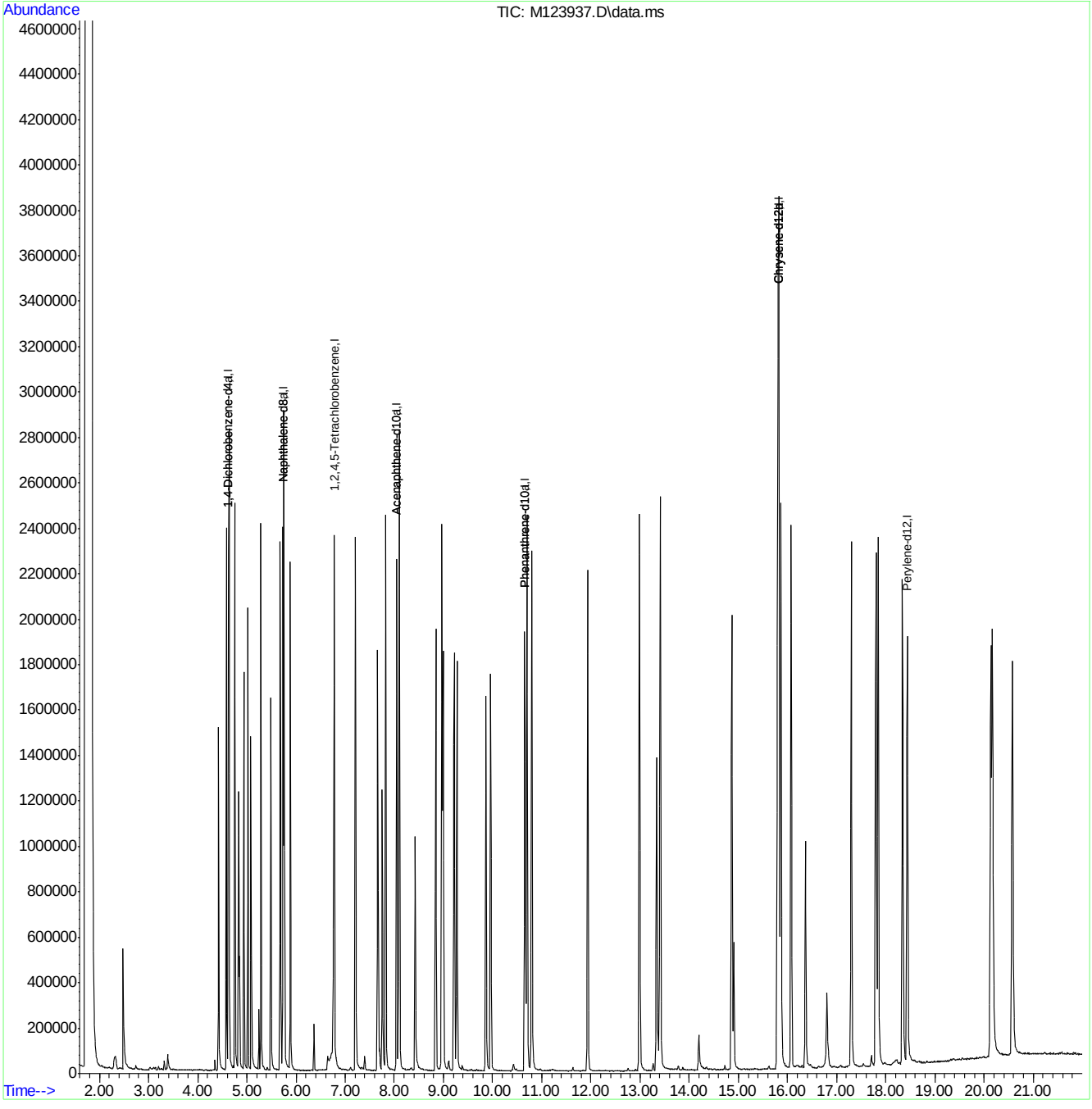
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123937.D
Acq On : 27 Apr 2016 3:12 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 27 14:44:43 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123938.D
Acq On : 27 Apr 2016 3:41 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 08:57:59 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	310317	40.00	ppm	0.00
24) Naphthalene-d8	5.735	136	1192738	40.00	ppm	0.00
47) Acenaphthene-d10	8.048	164	685847	40.00	ppm	0.00
69) Phenanthrene-d10	10.654	188	1103674	40.00	ppm	0.00
83) Chrysene-d12	15.814	240	1245639	40.00	ppm	0.00
92) Perylene-d12	18.436	264	1159384	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	310317	40.00	ppm	0.00
104) Acenaphthene-d10a	8.048	164	685847	40.00	ppm	0.00
107) Chrysene-d12a	15.814	240	1245639	40.00	ppm	0.00
110) Phenanthrene-d10a	10.654	188	1103674	40.00	ppm	0.00
112) Naphthalene-d8a	5.735	136	1192738	40.00	ppm	0.00
114) Chrysene-d12b	15.814	240	1245639	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.298	105	374978	53.46	ppm	# 72
106) Atrazine	10.264	215	151352	52.24	ppm	# 76

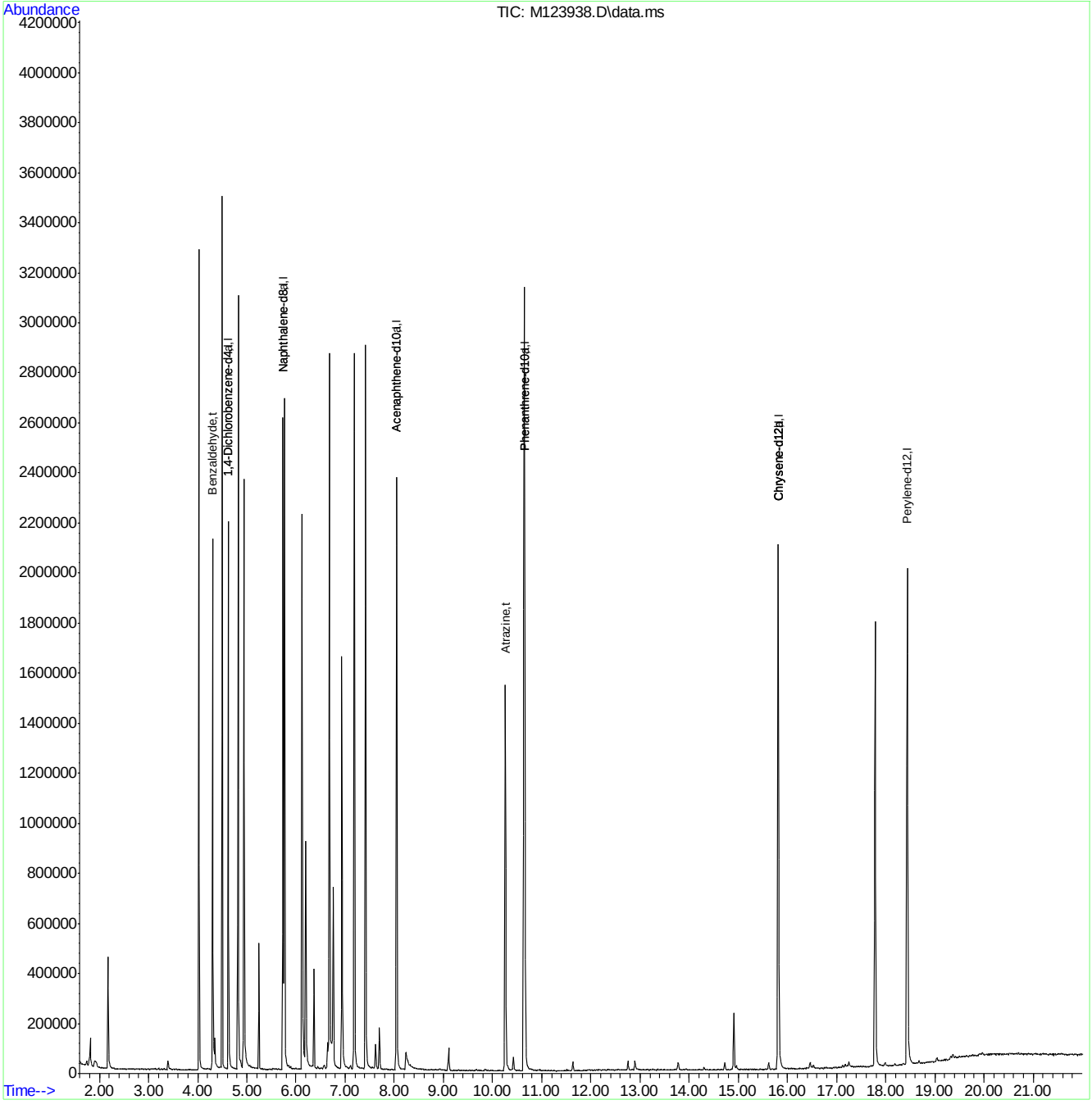
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123938.D
Acq On : 27 Apr 2016 3:41 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 08:57:59 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 14:45:31 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123940.D
Acq On : 27 Apr 2016 4:37 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 27 08:59:30 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	262311	40.00	ppm	0.00
24) Naphthalene-d8	5.735	136	1013507	40.00	ppm	0.00
47) Acenaphthene-d10	8.047	164	587649	40.00	ppm	0.00
69) Phenanthrene-d10	10.654	188	1065344	40.00	ppm	0.00
83) Chrysene-d12	15.813	240	1156208	40.00	ppm	0.00
92) Perylene-d12	18.436	264	1217713	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	262311	40.00	ppm	0.00
104) Acenaphthene-d10a	8.047	164	587649	40.00	ppm	0.00
107) Chrysene-d12a	15.813	240	1156208	40.00	ppm	0.00
110) Phenanthrene-d10a	10.654	188	1065344	40.00	ppm	0.00
112) Naphthalene-d8a	5.735	136	1013507	40.00	ppm	0.00
114) Chrysene-d12b	15.813	240	1156208	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
113) Hydroquinone	6.242	110	413186	52.56	ppm	94

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

7.6.92

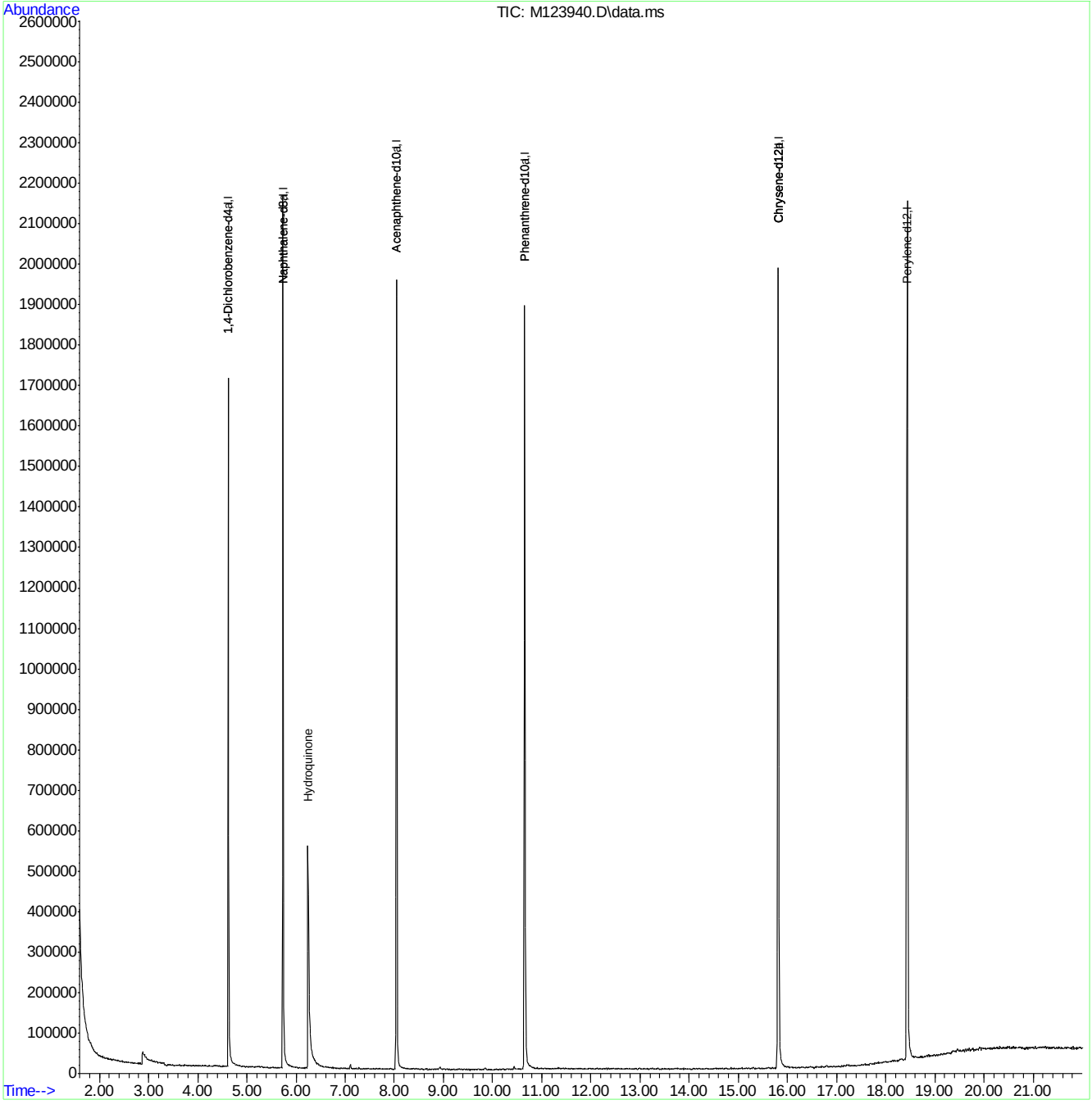
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123940.D
Acq On : 27 Apr 2016 4:37 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 27 08:59:30 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:59:40 2016 MSM

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123945.D
Acq On : 27 Apr 2016 11:18 am
Operator : ashleyd
Sample : icv5239-50
Misc : op93324,em5240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 14:51:19 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 11:42:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.676	152	285841	40.00	ppm	0.05
24) Naphthalene-d8	5.803	136	1154531	40.00	ppm	0.07
47) Acenaphthene-d10	8.131	164	685417	40.00	ppm	0.09
69) Phenanthrene-d10	10.748	188	1174286	40.00	ppm	0.09
83) Chrysene-d12	15.919	240	1313652	40.00	ppm	0.11
92) Perylene-d12	18.552	264	1311680	40.00	ppm	0.12
102) 1,4-Dichlorobenzene-d4a	4.676	152	285841	40.00	ppm	0.05
104) Acenaphthene-d10a	8.131	164	685417	40.00	ppm	0.09
107) Chrysene-d12a	15.919	240	1313652	40.00	ppm	0.11
110) Phenanthrene-d10a	10.748	188	1174286	40.00	ppm	0.09
112) Naphthalene-d8a	5.803	136	1154531	40.00	ppm	0.07
114) Chrysene-d12b	15.919	240	1313652	40.00	ppm	0.11
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
108) Benzidine	13.435	184	959292	63.95	ppm	89

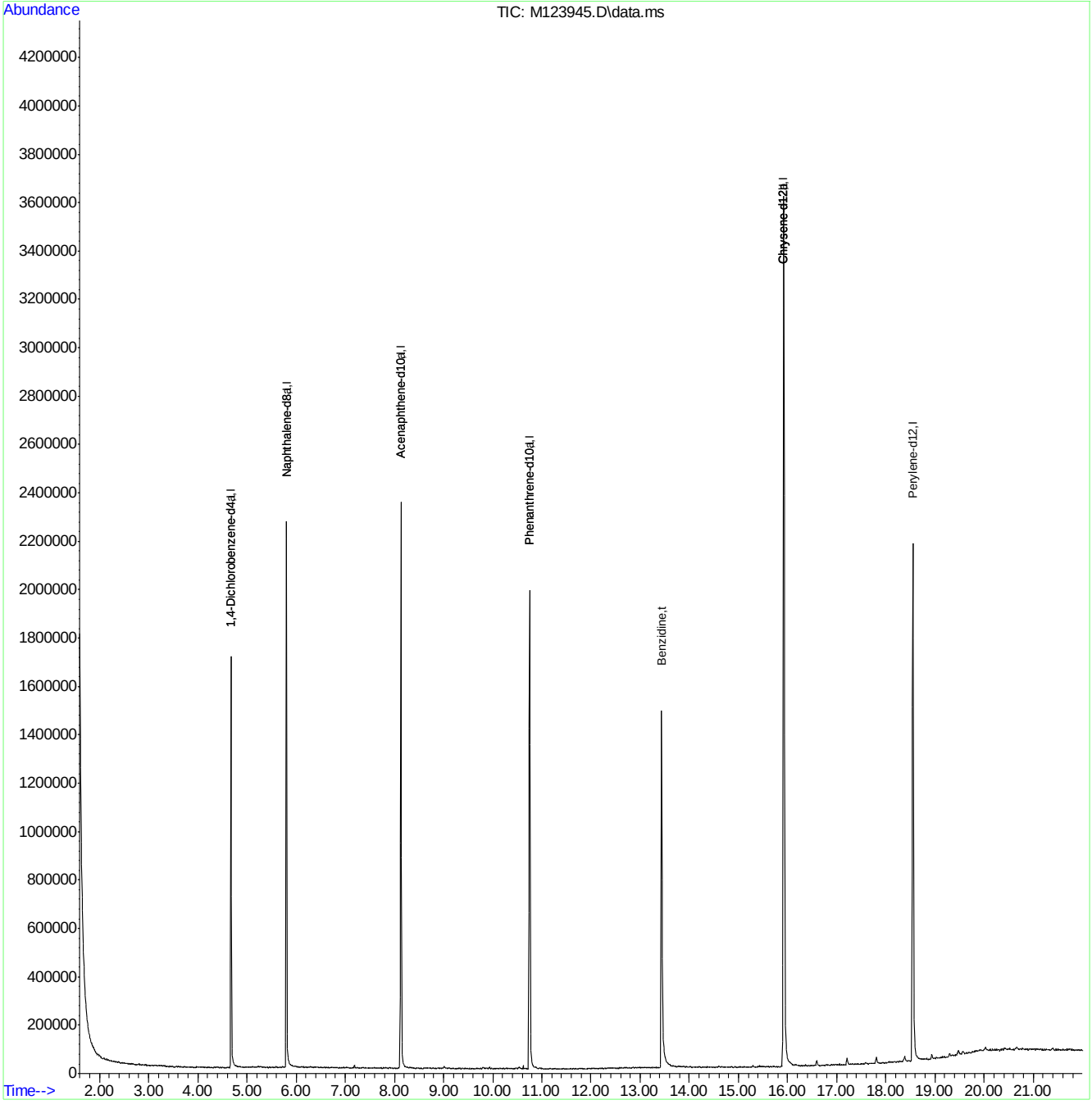
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123945.D
Acq On : 27 Apr 2016 11:18 am
Operator : ashleyd
Sample : icv5239-50
Misc : op93324,em5240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 14:51:19 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 11:42:01 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 14:52:09 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124308.D
Acq On : 10 May 2016 9:41 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5259
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 09:00:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.691	152	345427	40.00	ppm	-0.02
24) Naphthalene-d8	5.829	136	1326041	40.00	ppm	-0.02
47) Acenaphthene-d10	8.163	164	863819	40.00	ppm	-0.03
69) Phenanthrene-d10	10.796	188	1493534	40.00	ppm	-0.03
83) Chrysene-d12	15.982	240	1730770	40.00	ppm	-0.03
92) Perylene-d12	18.615	264	1790494	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.691	152	345427	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.163	164	863819	40.00	ppm	-0.03
107) Chrysene-d12a	15.982	240	1730770	40.00	ppm	-0.03
110) Phenanthrene-d10a	10.796	188	1493534	40.00	ppm	-0.03
112) Naphthalene-d8a	5.829	136	1326041	40.00	ppm	-0.02
114) Chrysene-d12b	15.982	240	1730770	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.756	112	264938	25.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.16%	
8) Phenol-d5	4.467	99	350122	26.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	52.78%	
25) Nitrobenzene-d5	5.150	82	309633	26.26	ppm	-0.02
Spiked Amount 50.000			Recovery	=	52.52%	
51) 2-Fluorobiphenyl	7.153	172	712040	25.10	ppm	-0.01
Spiked Amount 50.000			Recovery	=	50.20%	
73) 2,4,6-Tribromophenol	9.541	330	165206	32.00	ppm	-0.02
Spiked Amount 50.000			Recovery	=	64.00%	
86) Terphenyl-d14	13.958	244	988009	25.45	ppm	-0.04
Spiked Amount 50.000			Recovery	=	50.90%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.256	88	113750	23.75	ppm	90
3) Pyridine	2.613	79	291041	24.96	ppm	94
4) N-Nitrosodimethylamine	2.576	42	156562	30.66	ppm	78
6) Indene	4.894	116	504187	25.66	ppm	98
7) Cumene	4.088	105	691072	26.22	ppm	98
9) Phenol	4.477	94	405113	28.49	ppm	89
10) Aniline	4.456	93	355389	21.49	ppm	74
11) bis(2-Chloroethyl)ether	4.494	93	308805	27.89	ppm	99
12) 2-Chlorophenol	4.558	128	312153	26.36	ppm	97
13) Decane	4.558	43	322365	28.72	ppm	92
14) 1,3-Dichlorobenzene	4.648	146	335689	24.87	ppm	99
15) 1,4-Dichlorobenzene	4.707	146	337706	25.24	ppm	98
16) Benzyl alcohol	4.819	108	183629	26.78	ppm	99
17) 1,2-Dichlorobenzene	4.825	146	323958	25.72	ppm	99
18) Acetophenone	5.022	105	411015	26.14	ppm	97
19) 2-Methylphenol	4.926	108	264851	26.99	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.905	121	99659	27.25	ppm	93

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124308.D
Acq On : 10 May 2016 9:41 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5259
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 09:00:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.054	108	287123	26.71	ppm		95
22) n-Nitroso-di-n-propyla...	5.017	70	222135	26.16	ppm		88
23) Hexachloroethane	5.097	201	126887	25.09	ppm		94
26) Nitrobenzene	5.166	77	319011	26.72	ppm		98
27) Quinoline	6.229	129	634594	25.10	ppm		100
28) Isophorone	5.375	82	579491	27.00	ppm		96
29) 2-Nitrophenol	5.455	139	182064	26.95	ppm		94
30) 2,4-Dimethylphenol	5.514	107	277271	25.08	ppm		99
31) Benzoic acid	5.652	105	201997	27.86	ppm		96
32) bis(2-Chloroethoxy)met...	5.572	93	339094	26.02	ppm		98
33) 2,4-Dichlorophenol	5.722	162	270522	26.76	ppm		98
34) 2,6-Dichlorophenol	5.930	162	260360	25.49	ppm		98
35) 1,3,5-Trichlorobenzene	5.460	180	319587	26.51	ppm		98
36) 1,2,4-Trichlorobenzene	5.770	180	305026	25.73	ppm		99
37) 1,2,3-Trichlorobenzene	6.010	180	290257	25.32	ppm		96
38) Naphthalene	5.850	128	880862	25.36	ppm		100
39) 4-Chloroaniline	5.920	127	350334	23.42	ppm		96
40) 2,3-Dichloroaniline	7.047	161	335875	25.50	ppm		98
41) Caprolactam	6.331	55	148264	27.12	ppm		93
42) Hexachlorobutadiene	5.978	225	185582	27.21	ppm		99
43) 4-Chloro-3-methylphenol	6.528	107	262726	26.01	ppm		96
44) 2-Methylnaphthalene	6.657	141	532935	25.66	ppm		98
45) 1-Methylnaphthalene	6.779	142	610439	25.30	ppm		99
46) Dimethylnaphthalene	7.522	156	577067	25.76	ppm		100
48) Hexachlorocyclopentadiene	6.860	237	212273	40.44	ppm		99
49) 2,4,6-Trichlorophenol	7.068	196	209799	25.45	ppm		99
50) 2,4,5-Trichlorophenol	7.148	196	226288	25.22	ppm		99
52) 2-Chloronaphthalene	7.319	162	596237	23.69	ppm		99
53) Biphenyl	7.292	154	784188	24.40	ppm		100
54) 2-Nitroaniline	7.506	65	183388	25.56	ppm		97
55) Dimethylphthalate	7.773	163	734764	24.98	ppm		99
56) Acenaphthylene	7.938	152	1012702	24.34	ppm		100
57) 2,6-Dinitrotoluene	7.874	165	167870	25.67	ppm		99
58) 3-Nitroaniline	8.157	138	168697	23.31	ppm		94
59) Acenaphthene	8.216	153	604078	24.10	ppm		99
60) 2,4-Dinitrophenol	8.360	184	122799	46.02	ppm		97
61) 4-Nitrophenol	8.638	109	58061	21.94	ppm		96
62) Dibenzofuran	8.510	168	917025	24.60	ppm		99
63) 2,4-Dinitrotoluene	8.553	165	229562	26.76	ppm		95
64) 2,3,4,6-Tetrachlorophenol	8.772	232	195843	28.22	ppm		96
65) Diethylphthalate	8.959	149	736168	25.13	ppm		99
66) Fluorene	9.092	166	766279	25.42	ppm		99
67) 4-Chlorophenyl-phenyle...	9.114	204	372099	25.88	ppm		96
68) 4-Nitroaniline	9.215	138	165778	23.56	ppm		92
70) 4,6-Dinitro-2-methylph...	9.279	198	123249	26.56	ppm	#	67
71) n-Nitrosodiphenylamine	9.343	169	522864	26.06	ppm		99
72) 1,2-Diphenylhydrazine	9.397	77	673886	26.22	ppm		97
74) 4-Bromophenyl-phenylether	9.989	248	263735	28.55	ppm		95
75) Hexachlorobenzene	10.091	284	308899	28.40	ppm		96
76) Pentachlorophenol	10.513	266	289332	61.34	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124308.D
Acq On : 10 May 2016 9:41 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5259
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 09:00:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.839	178	1050308	25.22	ppm	99
78) Anthracene	10.935	178	1096615	25.43	ppm	99
79) Carbazole	11.303	167	1009052	25.41	ppm	100
80) Di-n-butylphthalate	12.062	149	1292851	26.22	ppm	100
81) Fluoranthene	13.135	202	1302984	26.71	ppm	99
82) Octadecane	10.753	57	444005	27.64	ppm	95
84) Pyrene	13.563	202	1345560	23.84	ppm	99
85) Butyl stearate	15.229	56	331533	25.70	ppm	89
87) Butylbenzylphthalate	14.999	149	582964	23.76	ppm	98
88) Benzo[a]anthracene	15.961	228	1308557	24.73	ppm	99
89) 3,3'-Dichlorobenzidine	15.982	252	486774	25.19	ppm	99
90) Chrysene	16.030	228	1235184	24.99	ppm	99
91) bis(2-Ethylhexyl)phtha...	16.206	149	788049	23.82	ppm	98
93) Di-n-octylphthalate	17.430	149	1352868	23.28	ppm	97
94) Benzo[b]fluoranthene	17.974	252	1386471	25.20	ppm	92
95) Benzo[k]fluoranthene	18.017	252	1353701	25.53	ppm	99
96) Benzo[a]pyrene	18.519	252	1291070	25.41	ppm	97
97) Indeno[1,2,3-cd]pyrene	20.362	276	1553039	30.21	ppm	98
98) Dibenz(a,h)acridine	19.977	279	1188602	26.08	ppm	98
99) Dibenz[a,h]anthracene	20.389	278	1322284	25.29	ppm	96
100) 7,12-Dimethylbenz(a)an...	17.953	256	662981	26.78	ppm	98
101) Benzo[g,h,i]perylene	20.826	276	1323333	24.69	ppm	97

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

7.6.94

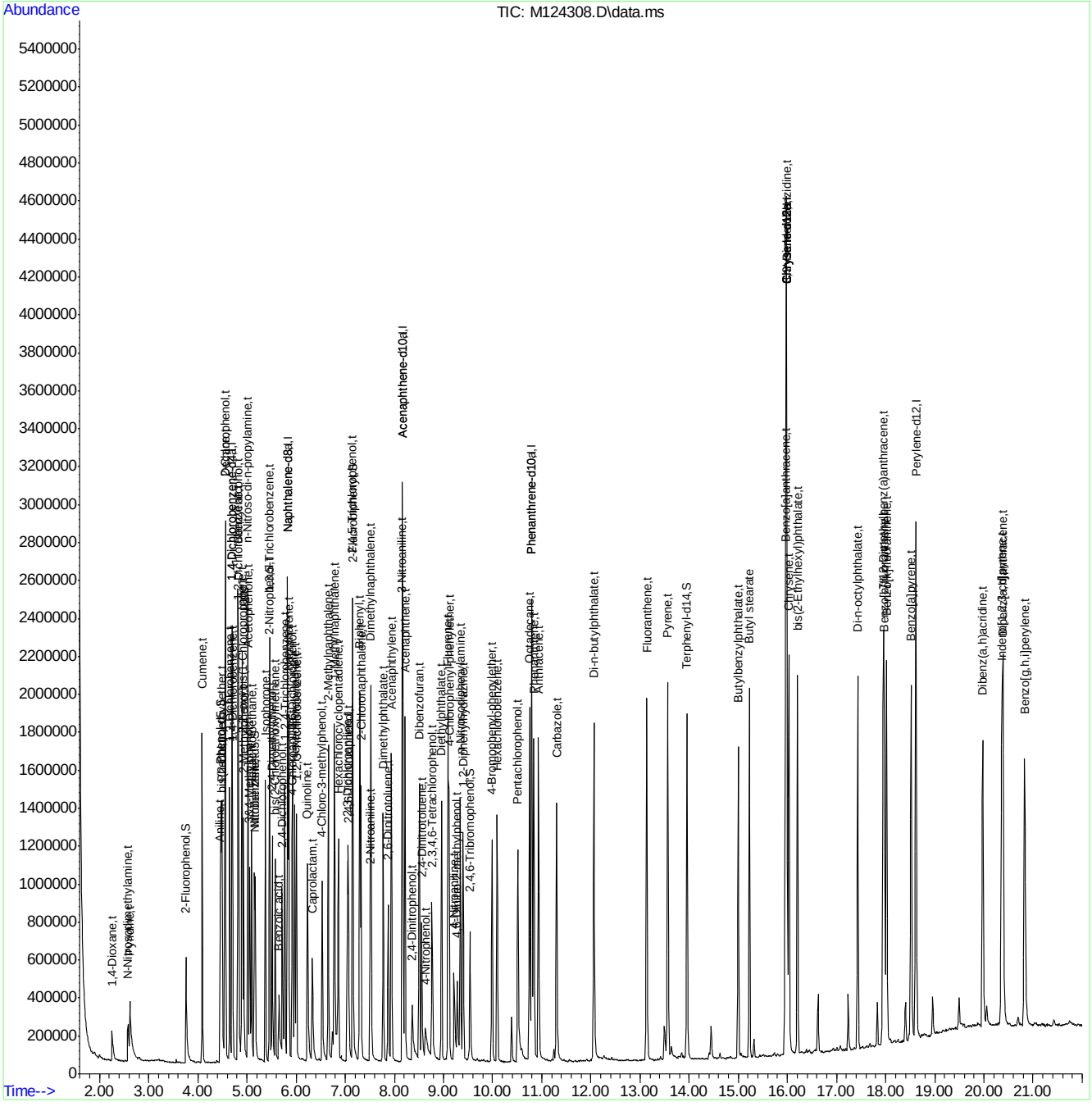
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124308.D
Acq On : 10 May 2016 9:41 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5259
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 09:00:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:00:54 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124309.D
Acq On : 10 May 2016 10:10 pm
Operator : juliusj
Sample : cc5239-25
Misc : op93478,em5259
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 09:01:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.694	152	463931	40.00	ppm	-0.01
24) Naphthalene-d8	5.826	136	1765423	40.00	ppm	-0.02
47) Acenaphthene-d10	8.165	164	1095742	40.00	ppm	-0.02
69) Phenanthrene-d10	10.793	188	2021849	40.00	ppm	-0.03
83) Chrysene-d12	15.974	240	2362584	40.00	ppm	-0.04
92) Perylene-d12	18.612	264	2398280	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.694	152	463931	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.165	164	1095742	40.00	ppm	-0.02
107) Chrysene-d12a	15.974	240	2362584	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.793	188	2021849	40.00	ppm	-0.03
112) Naphthalene-d8a	5.826	136	1765423	40.00	ppm	-0.02
114) Chrysene-d12b	15.974	240	2362584	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.090	57	393888	25.82	ppm	-0.02
Spiked Amount 50.000			Recovery	=	51.64%	
111) o-terphenyl	11.578	230	851335	31.16	ppm	0.06
Spiked Amount 50.000			Recovery	=	62.32%	
Target Compounds						Qvalue
103) Benzaldehyde	4.368	105	274659	26.19	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.878	216	430710	30.49	ppm	95
106) Atrazine	10.392	215	166013	35.86	ppm #	60
108) Benzidine	13.485	184	485357	17.87	ppm	98
113) Hydroquinone	6.371	110	364204	26.60	ppm	99

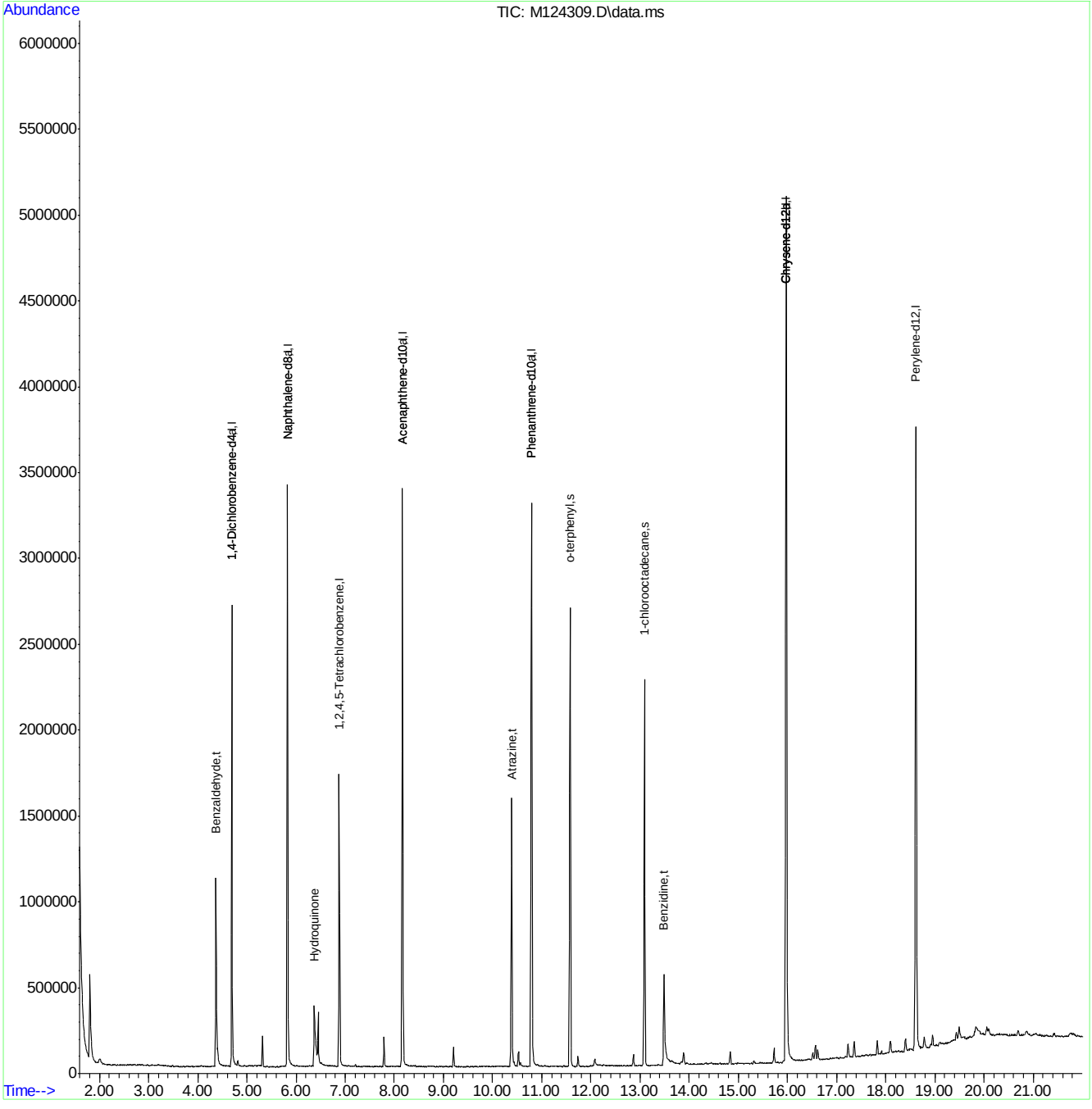
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5259\
Data File : M124309.D
Acq On : 10 May 2016 10:10 pm
Operator : juliusj
Sample : cc5239-25
Misc : op93478,em5259
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 09:01:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue May 10 13:01:37 2016
Response via : Initial Calibration



MM5239.M Wed May 11 09:01:33 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124341.D
Acq On : 11 May 2016 12:23 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5260
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 14:10:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.682	152	282918	40.00	ppm	-0.03
24) Naphthalene-d8	5.814	136	1074469	40.00	ppm	-0.03
47) Acenaphthene-d10	8.148	164	693692	40.00	ppm	-0.04
69) Phenanthrene-d10	10.776	188	1200582	40.00	ppm	-0.05
83) Chrysene-d12	15.957	240	1446209	40.00	ppm	-0.06
92) Perylene-d12	18.590	264	1562777	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4a	4.682	152	282918	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.148	164	693692	40.00	ppm	-0.04
107) Chrysene-d12a	15.957	240	1446209	40.00	ppm	-0.06
110) Phenanthrene-d10a	10.776	188	1200582	40.00	ppm	-0.05
112) Naphthalene-d8a	5.814	136	1074469	40.00	ppm	-0.03
114) Chrysene-d12b	15.957	240	1446209	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.747	112	466163	53.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	107.76%	
8) Phenol-d5	4.452	99	573511	52.78	ppm	-0.01
Spiked Amount 50.000			Recovery	=	105.56%	
25) Nitrobenzene-d5	5.141	82	492473	51.54	ppm	-0.03
Spiked Amount 50.000			Recovery	=	103.08%	
51) 2-Fluorobiphenyl	7.133	172	1132210	49.71	ppm	-0.03
Spiked Amount 50.000			Recovery	=	99.42%	
73) 2,4,6-Tribromophenol	9.521	330	274693	66.19	ppm	-0.04
Spiked Amount 50.000			Recovery	=	132.38%	
86) Terphenyl-d14	13.938	244	1612383	49.70	ppm	-0.06
Spiked Amount 50.000			Recovery	=	99.40%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.241	88	188867	48.15	ppm	95
3) Pyridine	2.604	79	489251	51.23	ppm	89
4) N-Nitrosodimethylamine	2.556	42	258664	61.85	ppm	79
6) Indene	4.885	116	804447	49.99	ppm	100
7) Cumene	4.078	105	1124475	52.09	ppm	99
9) Phenol	4.463	94	659696	56.65	ppm	84
10) Aniline	4.447	93	535546	39.54	ppm	79
11) bis(2-Chloroethyl)ether	4.479	93	556827	61.41	ppm	98
12) 2-Chlorophenol	4.543	128	503895	51.96	ppm	95
13) Decane	4.548	43	505351	54.98	ppm	93
14) 1,3-Dichlorobenzene	4.639	146	543438	49.15	ppm	98
15) 1,4-Dichlorobenzene	4.692	146	545649	49.80	ppm	99
16) Benzyl alcohol	4.810	108	289494	51.54	ppm	93
17) 1,2-Dichlorobenzene	4.815	146	523604	50.76	ppm	97
18) Acetophenone	5.007	105	657483	51.05	ppm	98
19) 2-Methylphenol	4.917	108	421683	52.47	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.895	121	156944	52.39	ppm	95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124341.D
Acq On : 11 May 2016 12:23 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5260
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 14:10:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.040	108	463239	52.61	ppm	89
22) n-Nitroso-di-n-propyla...	5.007	70	353272	50.80	ppm	91
23) Hexachloroethane	5.088	201	207436	50.08	ppm	99
26) Nitrobenzene	5.157	77	506450	52.36	ppm	98
27) Quinoline	6.220	129	1013286	49.47	ppm	100
28) Isophorone	5.365	82	893319	51.38	ppm	95
29) 2-Nitrophenol	5.445	139	295666	54.02	ppm	91
30) 2,4-Dimethylphenol	5.499	107	442493	49.40	ppm	96
31) Benzoic acid	5.659	105	373385	63.55	ppm	98
32) bis(2-Chloroethoxy)met...	5.563	93	537125	50.87	ppm	98
33) 2,4-Dichlorophenol	5.702	162	433140	52.88	ppm	99
34) 2,6-Dichlorophenol	5.915	162	429823	51.94	ppm	100
35) 1,3,5-Trichlorobenzene	5.445	180	516106	52.83	ppm	99
36) 1,2,4-Trichlorobenzene	5.755	180	488613	50.86	ppm	97
37) 1,2,3-Trichlorobenzene	5.996	180	470956	50.70	ppm	97
38) Naphthalene	5.835	128	1400529	49.77	ppm	100
39) 4-Chloroaniline	5.910	127	580544	47.89	ppm	98
40) 2,3-Dichloroaniline	7.026	161	525116	49.21	ppm	100
41) Caprolactam	6.332	55	234152	52.86	ppm	95
42) Hexachlorobutadiene	5.964	225	294942	53.37	ppm	98
43) 4-Chloro-3-methylphenol	6.514	107	416046	50.83	ppm	100
44) 2-Methylnaphthalene	6.642	141	839992	49.91	ppm	98
45) 1-Methylnaphthalene	6.765	142	997928	51.03	ppm	99
46) Dimethylnaphthalene	7.507	156	914368	50.37	ppm	100
48) Hexachlorocyclopentadiene	6.845	237	406827	88.90	ppm	98
49) 2,4,6-Trichlorophenol	7.048	196	329106	49.72	ppm	99
50) 2,4,5-Trichlorophenol	7.133	196	375140	52.07	ppm	98
52) 2-Chloronaphthalene	7.304	162	944557	46.74	ppm	99
53) Biphenyl	7.277	154	1239450	48.01	ppm	100
54) 2-Nitroaniline	7.491	65	295638	51.32	ppm	99
55) Dimethylphthalate	7.758	163	1151205	48.73	ppm	99
56) Acenaphthylene	7.924	152	1569654	46.98	ppm	100
57) 2,6-Dinitrotoluene	7.860	165	271621	51.72	ppm	97
58) 3-Nitroaniline	8.143	138	282210	48.56	ppm	96
59) Acenaphthene	8.201	153	952308	47.32	ppm	100
60) 2,4-Dinitrophenol	8.340	184	305484	120.61	ppm	97
61) 4-Nitrophenol	8.597	109	91161	42.90	ppm	97
62) Dibenzofuran	8.490	168	1441938	48.16	ppm	98
63) 2,4-Dinitrotoluene	8.538	165	368029	53.42	ppm	99
64) 2,3,4,6-Tetrachlorophenol	8.752	232	327362	58.74	ppm	97
65) Diethylphthalate	8.949	149	1139547	48.45	ppm	97
66) Fluorene	9.077	166	1192224	49.26	ppm	100
67) 4-Chlorophenyl-phenyle...	9.099	204	581441	50.36	ppm	96
68) 4-Nitroaniline	9.206	138	290342	51.37	ppm	99
70) 4,6-Dinitro-2-methylph...	9.259	198	230570	57.42	ppm	99
71) n-Nitrosodiphenylamine	9.328	169	806143	49.99	ppm	100
72) 1,2-Diphenylhydrazine	9.382	77	1053882	51.02	ppm	96
74) 4-Bromophenyl-phenylether	9.975	248	410329	55.26	ppm	93
75) Hexachlorobenzene	10.076	284	485121	55.48	ppm	95
76) Pentachlorophenol	10.493	266	519965	131.27	ppm	99

7.6.96

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124341.D
Acq On : 11 May 2016 12:23 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5260
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 14:10:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.819	178	1651922	49.35	ppm	99
78) Anthracene	10.915	178	1754539	50.62	ppm	99
79) Carbazole	11.283	167	1622051	50.80	ppm	99
80) Di-n-butylphthalate	12.042	149	2052488	51.78	ppm	100
81) Fluoranthene	13.115	202	2091708	53.34	ppm	99
82) Octadecane	10.733	57	686193	53.13	ppm	95
84) Pyrene	13.543	202	2101001	44.56	ppm	99
85) Butyl stearate	15.204	56	524632	48.67	ppm	94
87) Butylbenzylphthalate	14.979	149	948642	46.27	ppm	96
88) Benzo[a]anthracene	15.941	228	2121080	47.97	ppm	99
89) 3,3'-Dichlorobenzidine	15.957	252	863140	53.46	ppm	100
90) Chrysene	16.010	228	1995867	48.33	ppm	99
91) bis(2-Ethylhexyl)phtha...	16.181	149	1264527	45.75	ppm	97
93) Di-n-octylphthalate	17.409	149	2261155	44.58	ppm	98
94) Benzo[b]fluoranthene	17.954	252	2330507	48.54	ppm	92
95) Benzo[k]fluoranthene	17.997	252	2269897	49.05	ppm	98
96) Benzo[a]pyrene	18.494	252	2207386	49.78	ppm	98
97) Indeno[1,2,3-cd]pyrene	20.331	276	2692075	60.00	ppm	98
98) Dibenz(a,h)acridine	19.946	279	2075854	52.19	ppm	98
99) Dibenz[a,h]anthracene	20.358	278	2317154	50.78	ppm	98
100) 7,12-Dimethylbenz(a)an...	17.933	256	1142784	52.89	ppm	98
101) Benzo[g,h,i]perylene	20.796	276	2345725	50.15	ppm	97

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

7.6.96

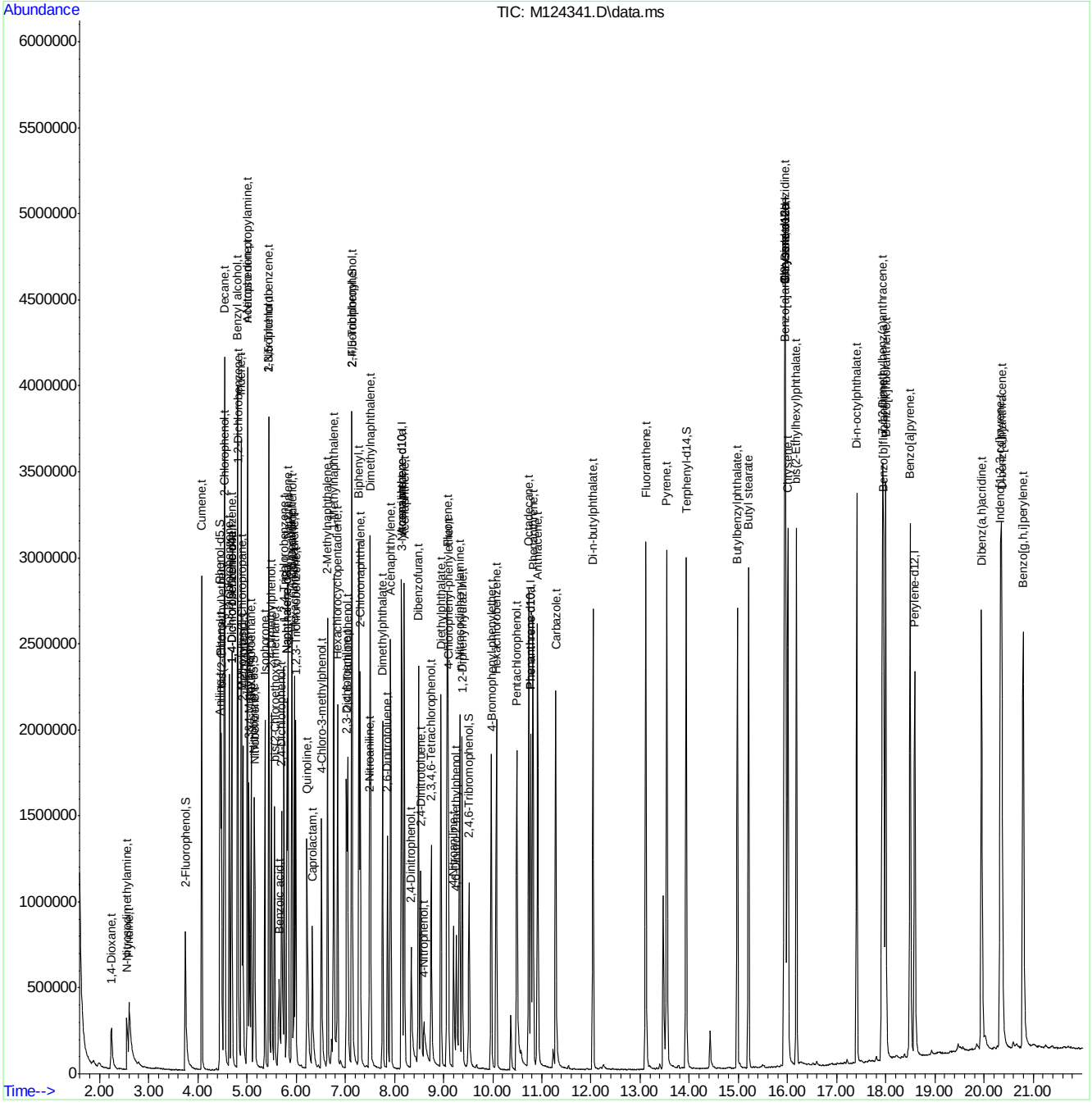
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124341.D
Acq On : 11 May 2016 12:23 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5260
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 11 14:10:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124342.D
Acq On : 11 May 2016 12:52 pm
Operator : ashleyd
Sample : cc5239-50
Misc : op93478,em5260
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 14:16:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.680	152	396913	40.00	ppm	-0.03
24) Naphthalene-d8	5.812	136	1495043	40.00	ppm	-0.03
47) Acenaphthene-d10	8.146	164	913718	40.00	ppm	-0.04
69) Phenanthrene-d10	10.769	188	1710455	40.00	ppm	-0.05
83) Chrysene-d12	15.950	240	2074676	40.00	ppm	-0.06
92) Perylene-d12	18.588	264	2188880	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4a	4.680	152	396913	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.146	164	913718	40.00	ppm	-0.04
107) Chrysene-d12a	15.950	240	2074553	40.00	ppm	-0.06
110) Phenanthrene-d10a	10.769	188	1710455	40.00	ppm	-0.05
112) Naphthalene-d8a	5.812	136	1495043	40.00	ppm	-0.03
114) Chrysene-d12b	15.950	240	2074496	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.071	57	616749	46.05	ppm	-0.04
Spiked Amount 50.000			Recovery	=	92.10%	
111) o-terphenyl	11.559	230	1345619	58.22	ppm	0.04
Spiked Amount 50.000			Recovery	=	116.44%	
Target Compounds						Qvalue
103) Benzaldehyde	4.359	105	368671	41.09	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.864	216	686619	58.29	ppm	96
106) Atrazine	10.374	215	267786	69.37	ppm #	67
108) Benzidine	13.466	184	1152885	46.73	ppm	98
113) Hydroquinone	6.352	110	637163	54.95	ppm	99

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

7.6.97

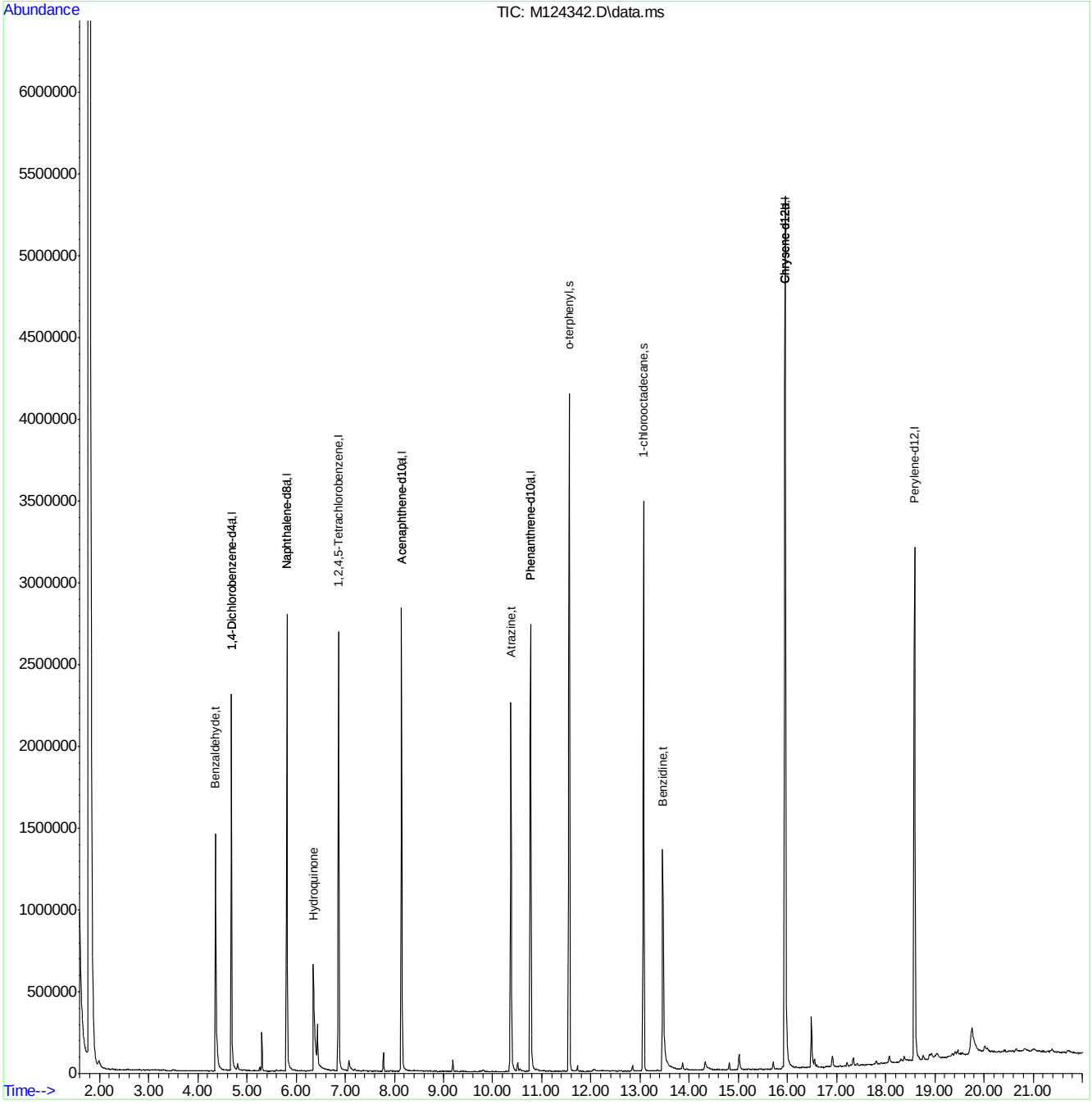
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5260\
Data File : M124342.D
Acq On : 11 May 2016 12:52 pm
Operator : ashleyd
Sample : cc5239-50
Misc : op93478,em5260
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 11 14:16:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed May 11 09:00:08 2016
Response via : Initial Calibration



MM5239.M Wed May 11 14:17:03 2016 MSM

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124421.D
Acq On : 13 May 2016 9:33 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5264
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 14:52:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	423077	40.00	ppm	-0.02
24) Naphthalene-d8	5.776	136	1620992	40.00	ppm	0.00
47) Acenaphthene-d10	8.099	164	1050242	40.00	ppm	-0.02
69) Phenanthrene-d10	10.722	188	1781719	40.00	ppm	-0.02
83) Chrysene-d12	15.903	240	2089429	40.00	ppm	0.00
92) Perylene-d12	18.531	264	2171664	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.649	152	423077	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.099	164	1050242	40.00	ppm	-0.02
107) Chrysene-d12a	15.903	240	2089429	40.00	ppm	0.00
110) Phenanthrene-d10a	10.722	188	1781719	40.00	ppm	-0.02
112) Naphthalene-d8a	5.776	136	1620992	40.00	ppm	0.00
114) Chrysene-d12b	15.903	240	2089429	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.709	112	709598	54.85	ppm	0.00
Spiked Amount 50.000			Recovery	=	109.70%	
8) Phenol-d5	4.425	99	856456	52.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	105.42%	
25) Nitrobenzene-d5	5.109	82	728362	50.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	101.06%	
51) 2-Fluorobiphenyl	7.095	172	1693885	49.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.24%	
73) 2,4,6-Tribromophenol	9.472	330	399572	64.88	ppm	-0.01
Spiked Amount 50.000			Recovery	=	129.76%	
86) Terphenyl-d14	13.884	244	2309470	49.28	ppm	-0.02
Spiked Amount 50.000			Recovery	=	98.56%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.203	88	298150	50.82	ppm	93
3) Pyridine	2.571	79	706368	49.47	ppm	89
4) N-Nitrosodimethylamine	2.523	42	361929	57.87	ppm	85
6) Indene	4.852	116	1189938	49.45	ppm	97
7) Cumene	4.046	105	1698341	52.61	ppm	99
9) Phenol	4.430	94	962488	55.27	ppm	80
10) Aniline	4.420	93	801626	39.58	ppm	87
11) bis(2-Chloroethyl)ether	4.452	93	778981	57.45	ppm	95
12) 2-Chlorophenol	4.510	128	760451	52.44	ppm	96
13) Decane	4.521	43	714808	52.00	ppm	94
14) 1,3-Dichlorobenzene	4.606	146	807697	48.85	ppm	100
15) 1,4-Dichlorobenzene	4.665	146	819585	50.02	ppm	100
16) Benzyl alcohol	4.777	108	434197	51.70	ppm	92
17) 1,2-Dichlorobenzene	4.783	146	766909	49.72	ppm	99
18) Acetophenone	4.980	105	987457	51.27	ppm	97
19) 2-Methylphenol	4.884	108	628339	52.28	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.863	121	231203	51.61	ppm	94

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124421.D
Acq On : 13 May 2016 9:33 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5264
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 14:52:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.007	108	695052	52.79	ppm #	83
22) n-Nitroso-di-n-propyla...	4.980	70	506164	48.67	ppm	94
23) Hexachloroethane	5.055	201	312032	50.38	ppm	96
26) Nitrobenzene	5.125	77	741171	50.79	ppm	99
27) Quinoline	6.187	129	1537925	49.76	ppm	99
28) Isophorone	5.333	82	1328781	50.65	ppm	97
29) 2-Nitrophenol	5.408	139	432260	52.35	ppm	97
30) 2,4-Dimethylphenol	5.466	107	649157	48.03	ppm	95
31) Benzoic acid	5.632	105	584532	65.94	ppm	95
32) bis(2-Chloroethoxy)met...	5.530	93	812322	51.00	ppm	97
33) 2,4-Dichlorophenol	5.664	162	637844	51.62	ppm	100
34) 2,6-Dichlorophenol	5.878	162	642645	51.47	ppm	96
35) 1,3,5-Trichlorobenzene	5.413	180	764178	51.85	ppm	96
36) 1,2,4-Trichlorobenzene	5.723	180	710319	49.01	ppm	97
37) 1,2,3-Trichlorobenzene	5.958	180	696882	49.73	ppm	90
38) Naphthalene	5.798	128	2104219	49.56	ppm	98
39) 4-Chloroaniline	5.872	127	888664	48.59	ppm	99
40) 2,3-Dichloroaniline	6.983	161	809205	50.27	ppm	99
41) Caprolactam	6.300	55	333954	49.98	ppm	98
42) Hexachlorobutadiene	5.926	225	437193	52.44	ppm	99
43) 4-Chloro-3-methylphenol	6.476	107	625929	50.69	ppm	98
44) 2-Methylnaphthalene	6.599	141	1265096	49.83	ppm	96
45) 1-Methylnaphthalene	6.721	142	1541373	52.25	ppm	99
46) Dimethylnaphthalene	7.464	156	1376023	50.24	ppm	97
48) Hexachlorocyclopentadiene	6.802	237	728386	103.61	ppm	98
49) 2,4,6-Trichlorophenol	7.005	196	496459	49.54	ppm	98
50) 2,4,5-Trichlorophenol	7.090	196	560871	51.42	ppm	99
52) 2-Chloronaphthalene	7.261	162	1429314	46.72	ppm	97
53) Biphenyl	7.234	154	1871307	47.88	ppm	98
54) 2-Nitroaniline	7.448	65	422036	48.39	ppm	96
55) Dimethylphthalate	7.715	163	1747356	48.85	ppm	98
56) Acenaphthylene	7.875	152	2319827	45.86	ppm	99
57) 2,6-Dinitrotoluene	7.816	165	412498	51.88	ppm	99
58) 3-Nitroaniline	8.099	138	422445	48.02	ppm	92
59) Acenaphthene	8.153	153	1412233	46.35	ppm	99
60) 2,4-Dinitrophenol	8.292	184	490102	126.76	ppm	94
61) 4-Nitrophenol	8.548	109	134008	41.65	ppm	86
62) Dibenzofuran	8.441	168	2178551	48.06	ppm	99
63) 2,4-Dinitrotoluene	8.495	165	540047	51.78	ppm	99
64) 2,3,4,6-Tetrachlorophenol	8.698	232	491642	58.27	ppm	97
65) Diethylphthalate	8.906	149	1718211	48.25	ppm	99
66) Fluorene	9.024	166	1792618	48.92	ppm	98
67) 4-Chlorophenyl-phenyle...	9.045	204	864873	49.47	ppm	97
68) 4-Nitroaniline	9.157	138	446606	52.20	ppm	98
70) 4,6-Dinitro-2-methylph...	9.216	198	373041	62.07	ppm	95
71) n-Nitrosodiphenylamine	9.280	169	1205199	50.36	ppm	97
72) 1,2-Diphenylhydrazine	9.333	77	1529864	49.91	ppm	92
74) 4-Bromophenyl-phenylether	9.921	248	625192	56.73	ppm	93
75) Hexachlorobenzene	10.022	284	706080	54.41	ppm	95
76) Pentachlorophenol	10.439	266	814071	138.12	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124421.D
Acq On : 13 May 2016 9:33 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5264
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 14:52:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.765	178	2432691	48.97 ppm	100
78) Anthracene	10.866	178	2570869	49.98 ppm	99
79) Carbazole	11.229	167	2354045	49.68 ppm	97
80) Di-n-butylphthalate	11.993	149	2974737	50.57 ppm	99
81) Fluoranthene	13.061	202	3058818	52.56 ppm	98
82) Octadecane	10.685	57	1015474	52.98 ppm	95
84) Pyrene	13.489	202	3047771	44.74 ppm	99
85) Butyl stearate	15.155	56	733877	47.12 ppm	93
87) Butylbenzylphthalate	14.925	149	1331598	44.96 ppm	97
88) Benzo[a]anthracene	15.881	228	3006231	47.06 ppm	99
89) 3,3'-Dichlorobenzidine	15.903	252	1253604	53.74 ppm	98
90) Chrysene	15.951	228	2859384	47.93 ppm	99
91) bis(2-Ethylhexyl)phtha...	16.132	149	1842580	46.14 ppm	96
93) Di-n-octylphthalate	17.361	149	3182236	45.15 ppm	99
94) Benzo[b]fluoranthene	17.900	252	3156515	47.31 ppm	93
95) Benzo[k]fluoranthene	17.943	252	3103447	48.25 ppm	99
96) Benzo[a]pyrene	18.440	252	3015594	48.94 ppm	99
97) Indeno[1,2,3-cd]pyrene	20.266	276	3664038	58.76 ppm	99
98) Dibenz(a,h)acridine	19.887	279	2877902	52.06 ppm	98
99) Dibenz[a,h]anthracene	20.293	278	3220011	50.78 ppm	99
100) 7,12-Dimethylbenz(a)an...	17.874	256	1537027	51.19 ppm	96
101) Benzo[g,h,i]perylene	20.720	276	3207643	49.35 ppm	98

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

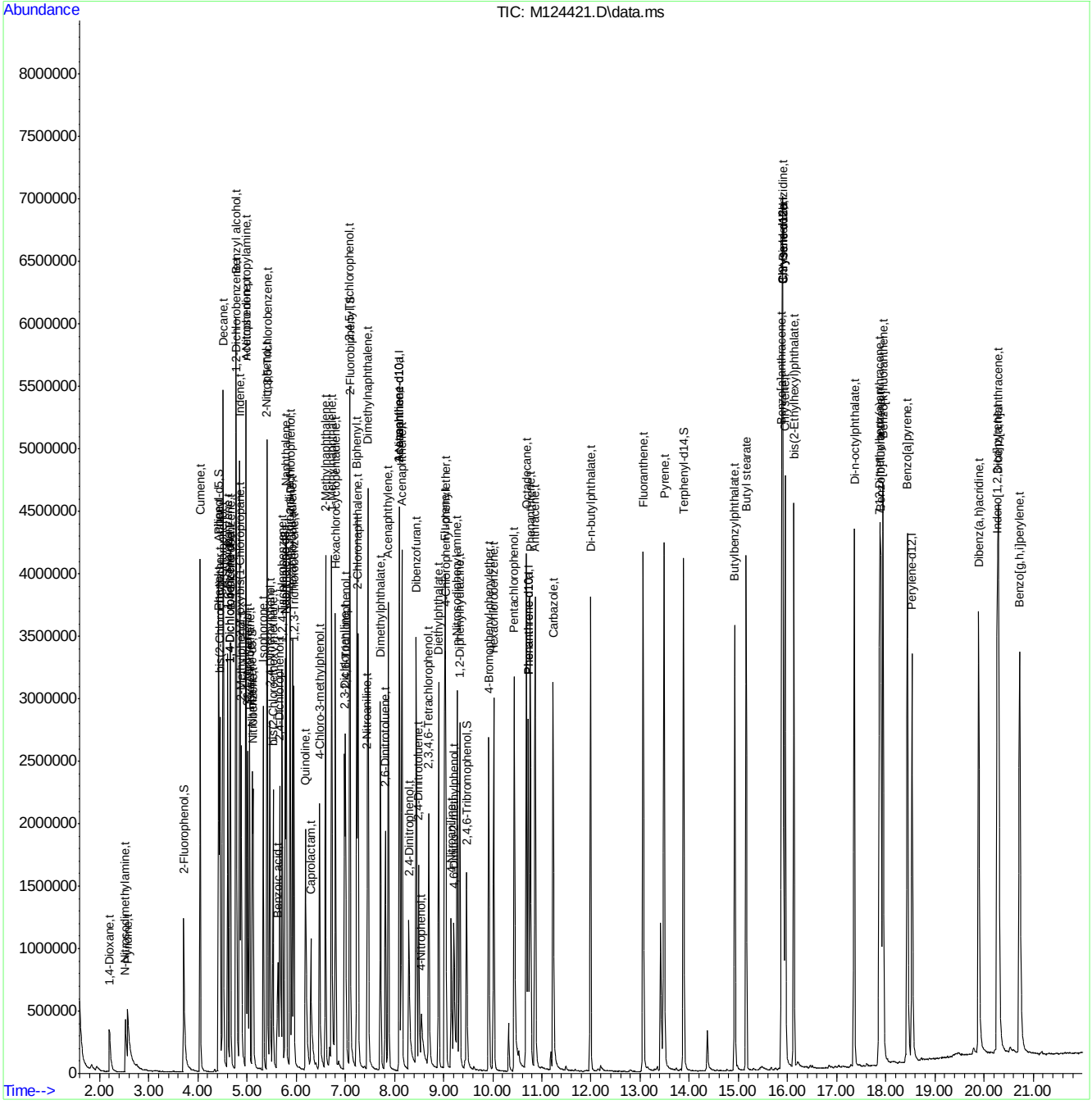
7.6.98

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124421.D
Acq On : 13 May 2016 9:33 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5264
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 14:52:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124422.D
Acq On : 13 May 2016 10:09 am
Operator : ashleyd
Sample : cc5239-50
Misc : op93478,em5264
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 14:52:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.649	152	610687	40.00	ppm	-0.01
24) Naphthalene-d8	5.776	136	2324986	40.00	ppm	0.00
47) Acenaphthene-d10	8.100	164	1388547	40.00	ppm	-0.01
69) Phenanthrene-d10	10.717	188	2565022	40.00	ppm	-0.02
83) Chrysene-d12	15.898	240	3053186	40.00	ppm	-0.01
92) Perylene-d12	18.531	264	3184419	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.649	152	610687	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.100	164	1388547	40.00	ppm	-0.01
107) Chrysene-d12a	15.898	240	3053031	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.717	188	2565022	40.00	ppm	-0.02
112) Naphthalene-d8a	5.776	136	2324986	40.00	ppm	0.00
114) Chrysene-d12b	15.898	240	3053186	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.024	57	925118	46.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.88%	
111) o-terphenyl	11.507	230	2014549	58.13	ppm	0.08
Spiked Amount 50.000			Recovery	=	116.26%	
Target Compounds						Qvalue
103) Benzaldehyde	4.329	105	606137	43.91	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.823	216	1047513	58.52	ppm	94
106) Atrazine	10.332	215	395360	67.40	ppm #	65
108) Benzidine	13.414	184	1801067	49.92	ppm	98
113) Hydroquinone	6.316	110	983778	54.55	ppm	99

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

7.6.99

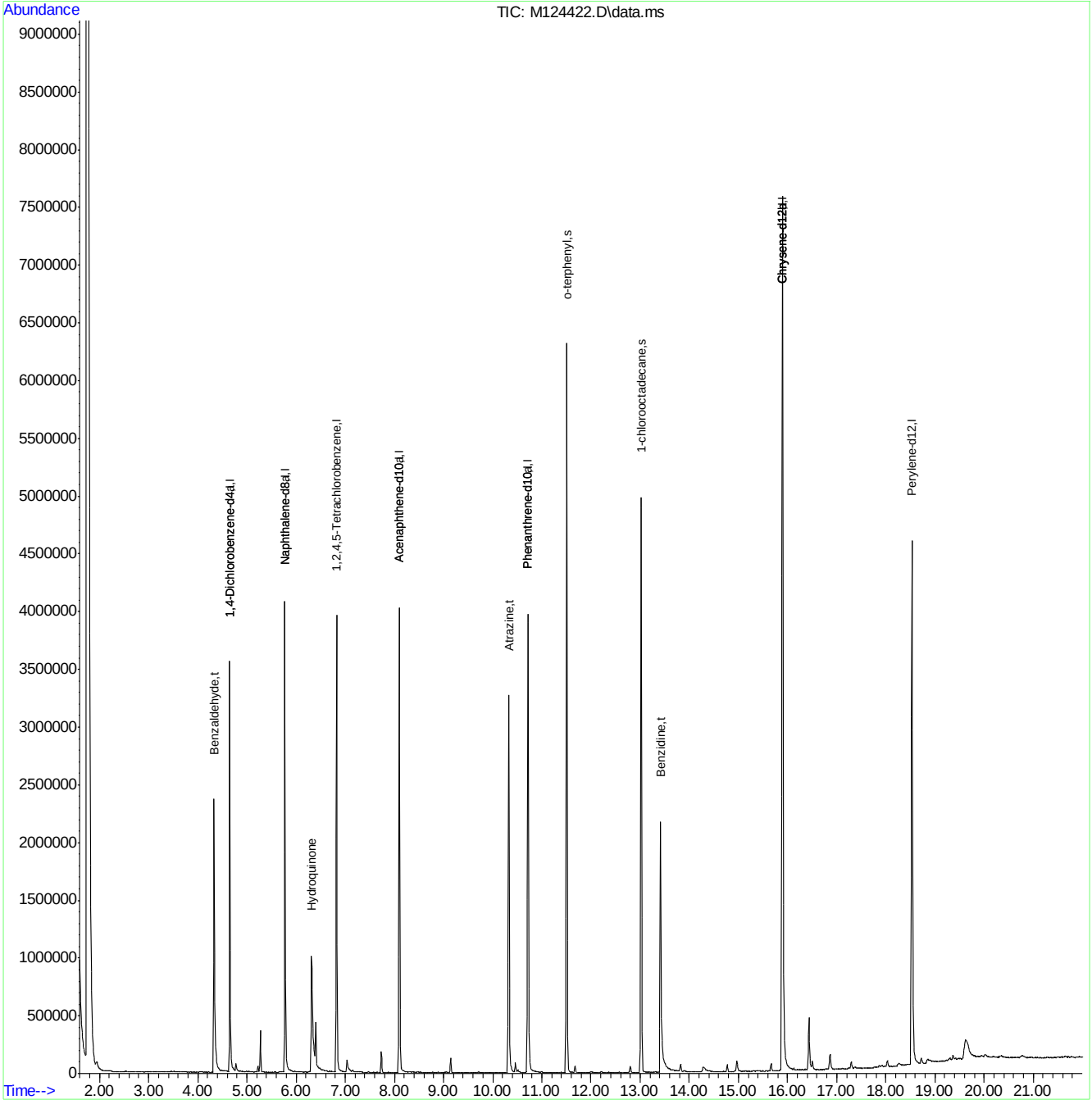
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124422.D
Acq On : 13 May 2016 10:09 am
Operator : ashleyd
Sample : cc5239-50
Misc : op93478,em5264
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 14:52:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu May 12 17:05:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.333	152	286261	40.00	ppm	0.00
24) Naphthalene-d8	5.257	136	1144798	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	617652	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	975213	40.00	ppm	0.00
83) Chrysene-d12	13.217	240	885274	40.00	ppm	0.00
92) Perylene-d12	16.214	264	884518	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.333	152	286261	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	975213	40.00	ppm	0.00
108) Chrysene-d12a	13.217	240	885274	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	617652	40.00	ppm	0.00
112) Naphthalene-d8a	5.257	136	1144798	40.00	ppm	0.00
114) Chrysene-d12b	13.217	240	885274	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.414	112	21197	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
8) Phenol-d5	4.162	99	24198	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
25) Nitrobenzene-d5	4.755	82	20232	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
51) 2-Fluorobiphenyl	6.021	172	42388	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
73) 2,4,6-Tribromophenol	7.351	330	6212	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
86) Terphenyl-d14	11.064	244	42565	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.811	88	10640m	2.89	ppm	
4) N-Nitrosodimethylamine	2.169	74	14977	2.00	ppm	100
6) Indene	4.520	116	41978	2.00	ppm	100
7) Cumene	3.719	105	48964	2.00	ppm	100
9) Phenol	4.167	94	25718	2.00	ppm	100
10) Aniline	4.125	93	30934	2.00	ppm	100
11) bis(2-Chloroethyl)ether	4.151	93	17569	2.00	ppm	100
12) 2-Chlorophenol	4.210	128	25488	2.00	ppm	100
13) Decane	4.194	43	22450	2.01	ppm	99
14) 1,3-Dichlorobenzene	4.290	146	27059	2.00	ppm	100
15) 1,4-Dichlorobenzene	4.344	146	22438	2.00	ppm	100
16) Benzyl alcohol	4.472	108	10226	2.00	ppm	100
17) 1,2-Dichlorobenzene	4.461	146	24838	2.00	ppm	100
18) Acetophenone	4.643	105	29110	2.00	ppm	100
19) 2-Methylphenol	4.584	108	19331	2.03	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.536	121	7208	2.00	ppm	100
21) 3&4-Methylphenol	4.701	108	20762	1.90	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
22) n-Nitroso-di-n-propyla...	4.637	70	15383	2.00	ppm	100
23) Hexachloroethane	4.701	201	6799	2.00	ppm	100
26) Nitrobenzene	4.771	77	22037	2.00	ppm	100
27) Quinoline	5.519	129	47137	2.00	ppm	100
28) Isophorone	4.931	82	34760	2.00	ppm	100
29) 2-Nitrophenol	4.995	139	12532	2.00	ppm	100
30) 2,4-Dimethylphenol	5.059	107	20048	2.00	ppm	100
31) Benzoic Acid	5.150	105	13376	2.00	ppm	100
32) bis(2-Chloroethoxy)met...	5.091	93	21069	2.00	ppm	100
33) 2,4-Dichlorophenol	5.188	162	16347	2.00	ppm	100
34) 2,6-Dichlorophenol	5.337	162	16112	2.00	ppm	100
35) 1,3,5-Trichlorobenzene	4.985	180	19369	2.00	ppm	100
36) 1,2,4-Trichlorobenzene	5.214	180	18522	2.00	ppm	100
37) 1,2,3-Trichlorobenzene	5.375	180	17178	2.00	ppm	100
38) Naphthalene	5.268	128	68942	2.00	ppm	100
39) 4-Chloroaniline	5.343	127	28262	1.96	ppm	99
40) 2,3-Dichloroaniline	5.984	161	22813	2.00	ppm	100
41) Caprolactam	5.583	55	9675	1.72	ppm	90
42) Hexachlorobutadiene	5.353	225	8416	2.00	ppm	100
43) 4-Chloro-3-methylphenol	5.716	107	17465	2.00	ppm	100
44) 2-Methylnaphthalene	5.759	141	36266	2.00	ppm	100
45) 1-Methylnaphthalene	5.829	141	37685	2.00	ppm	100
46) Dimethylnaphthalene	6.208	156	39639	2.00	ppm	100
48) Hexachlorocyclopentadiene	5.866	237	15305	4.00	ppm	100
49) 2,4,6-Trichlorophenol	5.984	196	10613	2.00	ppm	100
50) 2,4,5-Trichlorophenol	6.026	196	13099	2.00	ppm	99
52) 2-Chloronaphthalene	6.106	162	41686	2.00	ppm	100
53) Biphenyl	6.096	154	54722	2.00	ppm	100
54) 2-Nitroaniline	6.224	65	11367	2.00	ppm	100
55) Dimethylphthalate	6.342	163	43560	2.00	ppm	100
56) Acenaphthylene	6.438	152	65346	2.00	ppm	100
57) 2,6-Dinitrotoluene	6.395	165	7690	2.00	ppm	100
58) 3-Nitroaniline	6.571	138	11022	2.00	ppm	100
59) Acenaphthene	6.582	153	40224	2.00	ppm	100
60) 2,4-Dinitrophenol	6.641	184	6002	4.00	ppm	100
61) 4-Nitrophenol	6.806	109	5454	1.68	ppm	95
62) Dibenzofuran	6.742	168	55423	2.00	ppm	100
63) 2,4-Dinitrotoluene	6.753	165	13534	2.00	ppm	100
64) 2,3,4,6-Tetrachlorophenol	6.892	232	9675	2.00	ppm	100
65) Diethylphthalate	6.972	149	45133	2.00	ppm	100
66) Fluorene	7.073	166	45951	2.00	ppm	100
67) 4-Chlorophenyl-phenyle...	7.073	204	19867	2.00	ppm	100
68) 4-Nitroaniline	7.175	138	10404	2.00	ppm	100
70) 4,6-Dinitro-2-methylph...	7.159	198	4297	2.00	ppm	100
71) n-Nitrosodiphenylamine	7.218	169	34126	2.00	ppm	100
72) 1,2-Diphenylhydrazine	7.250	77	36836	1.95	ppm	99
74) 4-Bromophenyl-phenylether	7.629	248	10962	2.00	ppm	100
75) Hexachlorobenzene	7.704	284	11633	2.00	ppm	100
76) Pentachlorophenol	8.014	266	10894	4.00	ppm	100
77) Phenanthrene	8.254	178	59966	2.00	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	8.324	178	64540	2.00	ppm	100
79)	Carbazole	8.628	167	61115	2.00	ppm	100
80)	Di-n-butylphthalate	9.216	149	74944	2.00	ppm	100
81)	Fluoranthene	10.236	202	62248	2.00	ppm	100
82)	Octadecane	8.072	57	28331	2.00	ppm	100
84)	Pyrene	10.658	202	68216	2.00	ppm	100
85)	Butyl stearate	12.400	56	17853	2.00	ppm	100
87)	Butylbenzylphthalate	12.202	149	29961	2.00	ppm	100
88)	Benzo[a]anthracene	13.196	228	57075	2.00	ppm	100
89)	3,3'-Dichlorobenzidine	13.297	252	20108	2.00	ppm	100
90)	Chrysene	13.265	228	60233	2.00	ppm	100
91)	bis(2-Ethylhexyl)phtha...	13.538	149	42974	2.00	ppm	100
93)	Di-n-octylphthalate	14.937	149	70494	2.00	ppm	100
94)	Benzo[b]fluoranthene	15.455	252	58924	1.99	ppm	98
95)	Benzo[k]fluoranthene	15.509	252	54977	2.00	ppm	100
96)	Benzo[a]pyrene	16.086	252	52791	2.00	ppm	100
97)	Indeno[1,2,3-cd]pyrene	18.110	276	53287	2.00	ppm	100
98)	Dibenz(a,h)acridine	17.758	279	53236	2.00	ppm	100
99)	Dibenz[a,h]anthracene	18.169	278	58532	2.02	ppm	98
100)	7,12-Dimethylbenz(a)an...	15.461	256	27728	2.00	ppm	100
101)	Benzo[g,h,i]perylene	18.538	276	59171	2.00	ppm	100

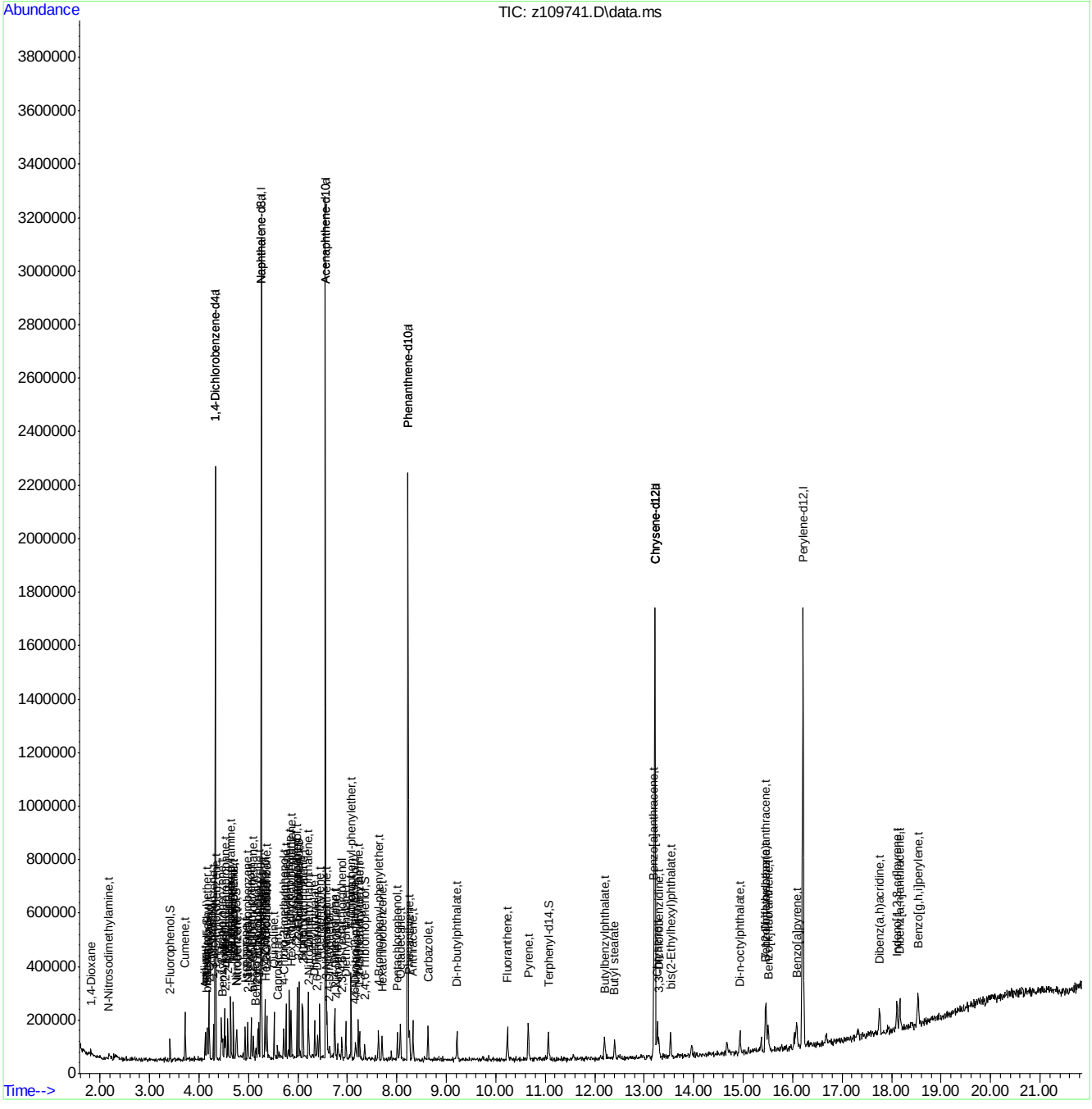
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 08:37:52 2016 RTE

Page: 4

SGS ACCUTEST JC19914

Manual Integration Approval Summary

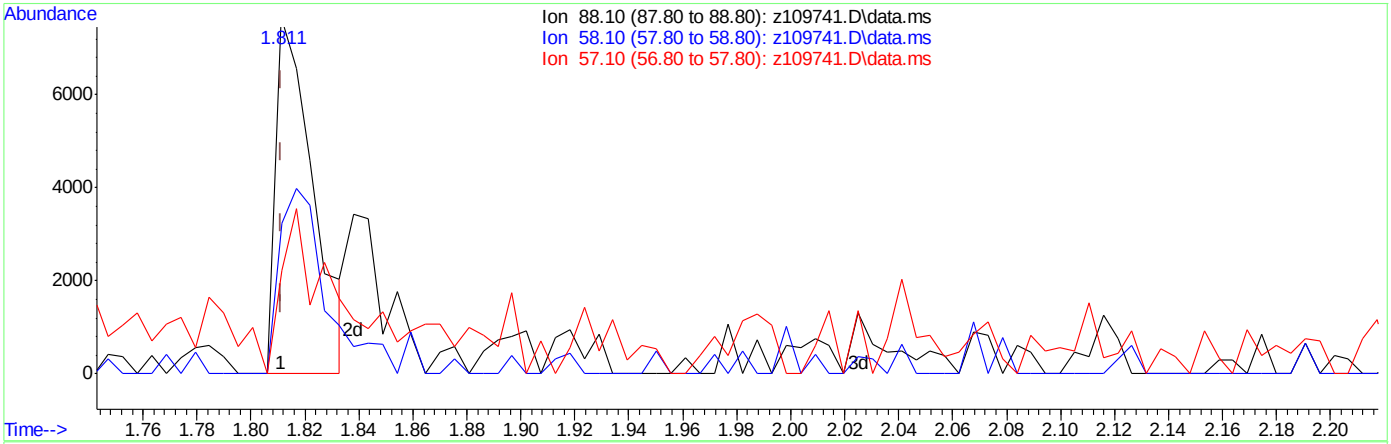
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109741.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 21:35	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

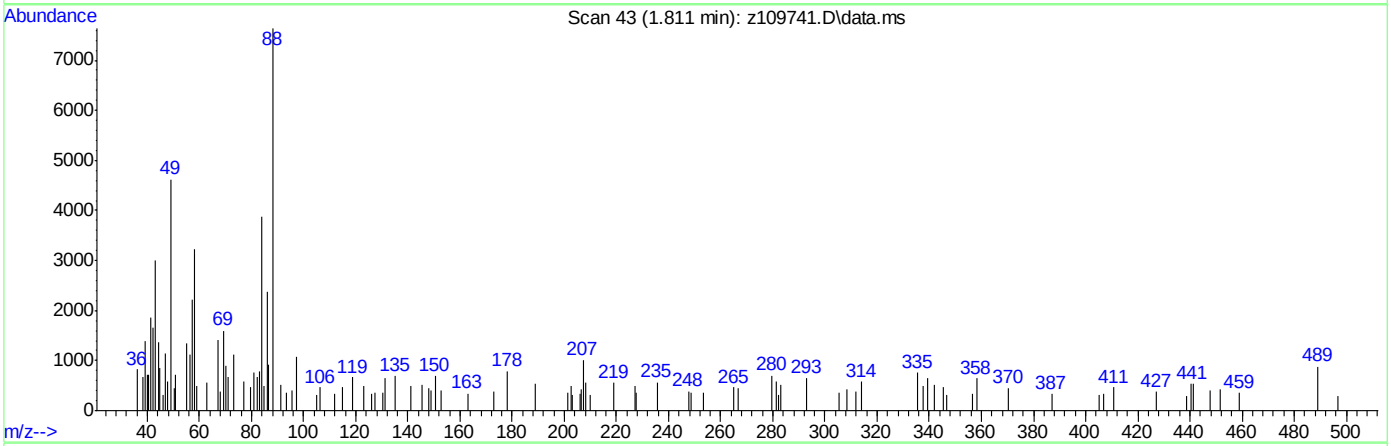
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		1.81	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:35:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration





TIC: z109741.D\data.ms

(2) 1,4-Dioxane

1.811min (0.000) 2.00ppm

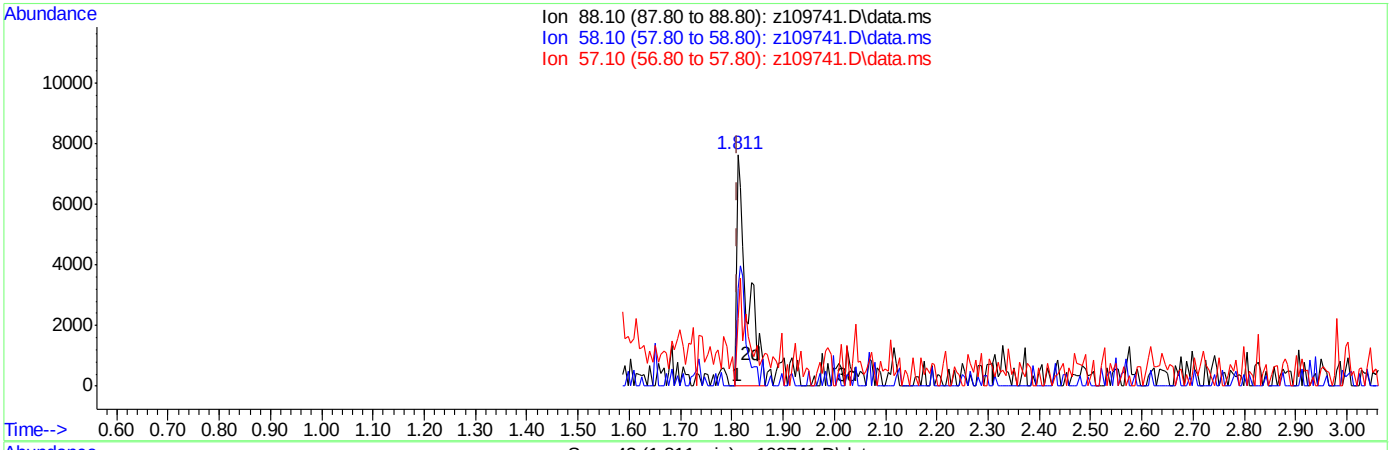
response 7365

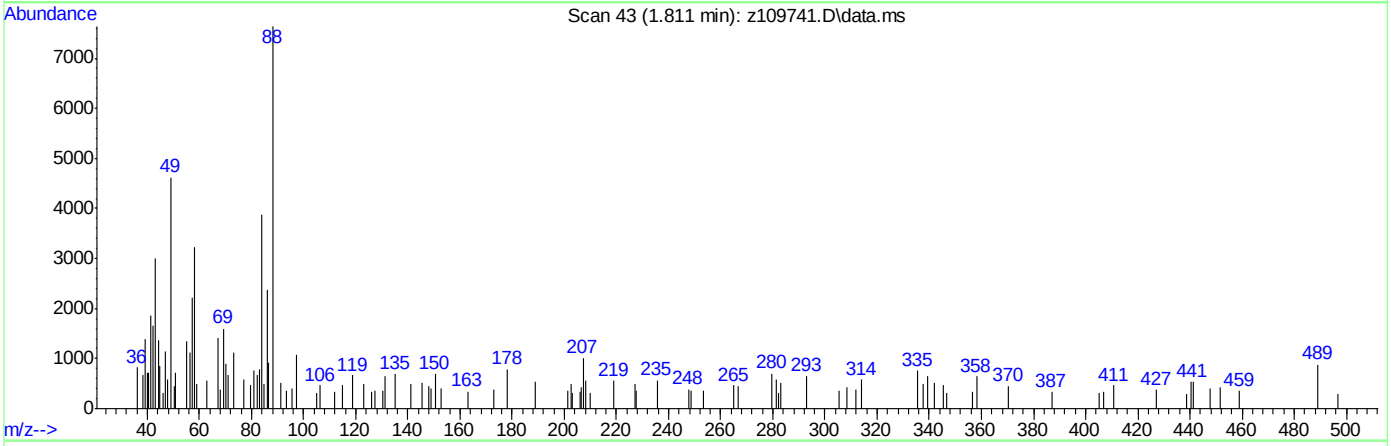
Ion	Exp%	Act%
88.10	100	100
58.10	40.80	40.79
57.10	21.10	21.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration





TIC: z109741.D\data.ms

(2) 1,4-Dioxane

1.811min (0.000) 2.89ppm m

response 10640

Ion	Exp%	Act%
88.10	100	100
58.10	40.80	42.24
57.10	21.10	29.03
0.00	0.00	0.00

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.333	152	262993	40.00	ppm	0.00
24) Naphthalene-d8	5.257	136	1012466	40.00	ppm	0.00
47) Acenaphthene-d10	6.561	164	586535	40.00	ppm	0.00
69) Phenanthrene-d10	8.228	188	925949	40.00	ppm	0.00
83) Chrysene-d12	13.233	240	837089	40.00	ppm	0.00
92) Perylene-d12	16.220	264	848153	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.333	152	262993	40.00	ppm	0.00
104) Phenanthrene-d10a	8.228	188	925949	40.00	ppm	0.00
108) Chrysene-d12a	13.233	240	837089	40.00	ppm	0.00
110) Acenaphthene-d10a	6.561	164	586535	40.00	ppm	0.00
112) Naphthalene-d8a	5.257	136	1012466	40.00	ppm	0.00
114) Chrysene-d12b	13.233	240	837089	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	877711	95.33	ppm	0.00
Spiked Amount 50.000			Recovery	=	190.66%	
8) Phenol-d5	4.162	99	976751	91.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	182.36%	
25) Nitrobenzene-d5	4.760	82	754621	87.11	ppm	0.00
Spiked Amount 50.000			Recovery	=	174.22%	
51) 2-Fluorobiphenyl	6.027	172	1565164	81.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	162.18%	
73) 2,4,6-Tribromophenol	7.362	330	261370	84.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	169.98%	
86) Terphenyl-d14	11.075	244	1627342	88.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	176.16%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.790	88	360049	89.83	ppm	100
3) Pyridine	2.153	79	778261	86.59	ppm	99
4) N-Nitrosodimethylamine	2.121	74	471376	89.74	ppm	100
6) Indene	4.520	116	1461506	83.10	ppm	100
7) Cumene	3.719	105	1927710	88.83	ppm	100
9) Phenol	4.173	94	972145	87.63	ppm	100
10) Aniline	4.119	93	1097036	85.81	ppm	100
11) bis(2-Chloroethyl)ether	4.151	93	666294	86.34	ppm	100
12) 2-Chlorophenol	4.210	128	850131	79.20	ppm	100
13) Decane	4.200	43	757770	76.29	ppm	100
14) 1,3-Dichlorobenzene	4.290	146	947466	84.70	ppm	100
15) 1,4-Dichlorobenzene	4.344	146	921201	88.96	ppm	100
16) Benzyl alcohol	4.477	108	448928	96.41	ppm	100
17) 1,2-Dichlorobenzene	4.461	146	852709	80.28	ppm	100
18) Acetophenone	4.643	105	1054011	89.37	ppm	100
19) 2-Methylphenol	4.590	108	784401	90.09	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.541	121	223879	80.05	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.702	108	757841	84.33	ppm	100
22) n-Nitroso-di-n-propyla...	4.654	70	514729	80.67	ppm	100
23) Hexachloroethane	4.702	201	262273	90.60	ppm	100
26) Nitrobenzene	4.771	77	718859	81.09	ppm	100
27) Quinoline	5.530	129	1788460	88.68	ppm	100
28) Isophorone	4.937	82	1368998	93.07	ppm	100
29) 2-Nitrophenol	5.001	139	481809	90.06	ppm	100
30) 2,4-Dimethylphenol	5.065	107	770835	93.29	ppm	100
31) Benzoic Acid	5.215	105	634926m	103.43	ppm	
32) bis(2-Chloroethoxy)met...	5.097	93	798600	84.63	ppm	100
33) 2,4-Dichlorophenol	5.188	162	680309	97.30	ppm	100
34) 2,6-Dichlorophenol	5.343	162	652097	93.74	ppm	100
35) 1,3,5-Trichlorobenzene	4.985	180	716845	91.17	ppm	100
36) 1,2,4-Trichlorobenzene	5.215	180	657004	86.26	ppm	100
37) 1,2,3-Trichlorobenzene	5.380	180	629870	85.69	ppm	100
38) Naphthalene	5.273	128	2470777	83.60	ppm	100
39) 4-Chloroaniline	5.343	127	923258	78.21	ppm	100
40) 2,3-Dichloroaniline	5.984	161	789941	83.16	ppm	100
41) Caprolactam	5.626	55	355543m	100.75	ppm	
42) Hexachlorobutadiene	5.359	225	310162	95.81	ppm	100
43) 4-Chloro-3-methylphenol	5.722	107	706257	93.17	ppm	100
44) 2-Methylnaphthalene	5.759	141	1383922	90.42	ppm	100
45) 1-Methylnaphthalene	5.829	141	1429739	82.16	ppm	100
46) Dimethylnaphthalene	6.214	156	1474309	89.00	ppm	100
48) Hexachlorocyclopentadiene	5.872	237	736159	208.20	ppm	100
49) 2,4,6-Trichlorophenol	5.989	196	425630	90.67	ppm	100
50) 2,4,5-Trichlorophenol	6.032	196	449458	82.05	ppm	100
52) 2-Chloronaphthalene	6.117	162	1364612	77.11	ppm	100
53) Biphenyl	6.101	154	1949465	79.89	ppm	100
54) 2-Nitroaniline	6.230	65	409245	91.46	ppm	100
55) Dimethylphthalate	6.352	163	1665699	87.43	ppm	100
56) Acenaphthylene	6.443	152	2532751	85.76	ppm	100
57) 2,6-Dinitrotoluene	6.406	165	385466	96.06	ppm	100
58) 3-Nitroaniline	6.577	138	454966	90.61	ppm	100
59) Acenaphthene	6.588	153	1513994	84.45	ppm	100
60) 2,4-Dinitrophenol	6.652	184	457546	246.48	ppm	100
61) 4-Nitrophenol	6.807	109	201033	84.14	ppm	100
62) Dibenzofuran	6.748	168	2083550	83.49	ppm	100
63) 2,4-Dinitrotoluene	6.764	165	502814	94.18	ppm	100
64) 2,3,4,6-Tetrachlorophenol	6.892	232	371290	85.51	ppm	100
65) Diethylphthalate	6.983	149	1634570	80.17	ppm	100
66) Fluorene	7.084	166	1654799	80.70	ppm	100
67) 4-Chlorophenyl-phenyle...	7.079	204	710313	83.93	ppm	100
68) 4-Nitroaniline	7.202	138	480323	102.01	ppm	100
70) 4,6-Dinitro-2-methylph...	7.175	198	320984	122.28	ppm	100
71) n-Nitrosodiphenylamine	7.229	169	1205905	87.30	ppm	100
72) 1,2-Diphenylhydrazine	7.255	77	1412011	85.61	ppm	100
74) 4-Bromophenyl-phenylether	7.640	248	428314	85.37	ppm	100
75) Hexachlorobenzene	7.715	284	472683	83.18	ppm	100
76) Pentachlorophenol	8.019	266	618213	220.50	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.265	178	2377720	86.35	ppm	100
78)	Anthracene	8.340	178	2445080	86.90	ppm	100
79)	Carbazole	8.639	167	2369418	89.40	ppm	100
80)	Di-n-butylphthalate	9.227	149	2986496	91.62	ppm	100
81)	Fluoranthene	10.252	202	2529527	84.76	ppm	100
82)	Octadecane	8.078	57	1004489	84.10	ppm	100
84)	Pyrene	10.674	202	2520664	86.06	ppm	100
85)	Butyl stearate	12.411	56	753115	100.13	ppm	100
87)	Butylbenzylphthalate	12.208	149	1321498	97.84	ppm	100
88)	Benzo[a]anthracene	13.212	228	2280004	89.23	ppm	100
89)	3,3'-Dichlorobenzidine	13.308	252	810906	92.32	ppm	100
90)	Chrysene	13.292	228	2109373	83.45	ppm	100
91)	bis(2-Ethylhexyl)phtha...	13.543	149	1851863	97.72	ppm	100
93)	Di-n-octylphthalate	14.953	149	3244891	102.03	ppm	100
94)	Benzo[b]fluoranthene	15.493	252	2400305	85.43	ppm	100
95)	Benzo[k]fluoranthene	15.552	252	2112038	86.42	ppm	100
96)	Benzo[a]pyrene	16.113	252	2172466	88.10	ppm	100
97)	Indeno[1,2,3-cd]pyrene	18.148	276	2133478	87.17	ppm	100
98)	Dibenz(a,h)acridine	17.785	279	1983581	82.15	ppm	100
99)	Dibenz[a,h]anthracene	18.202	278	2285569	88.52	ppm	100
100)	7,12-Dimethylbenz(a)an...	15.504	256	1079127	82.00	ppm	100
101)	Benzo[g,h,i]perylene	18.581	276	2182260	79.66	ppm	100

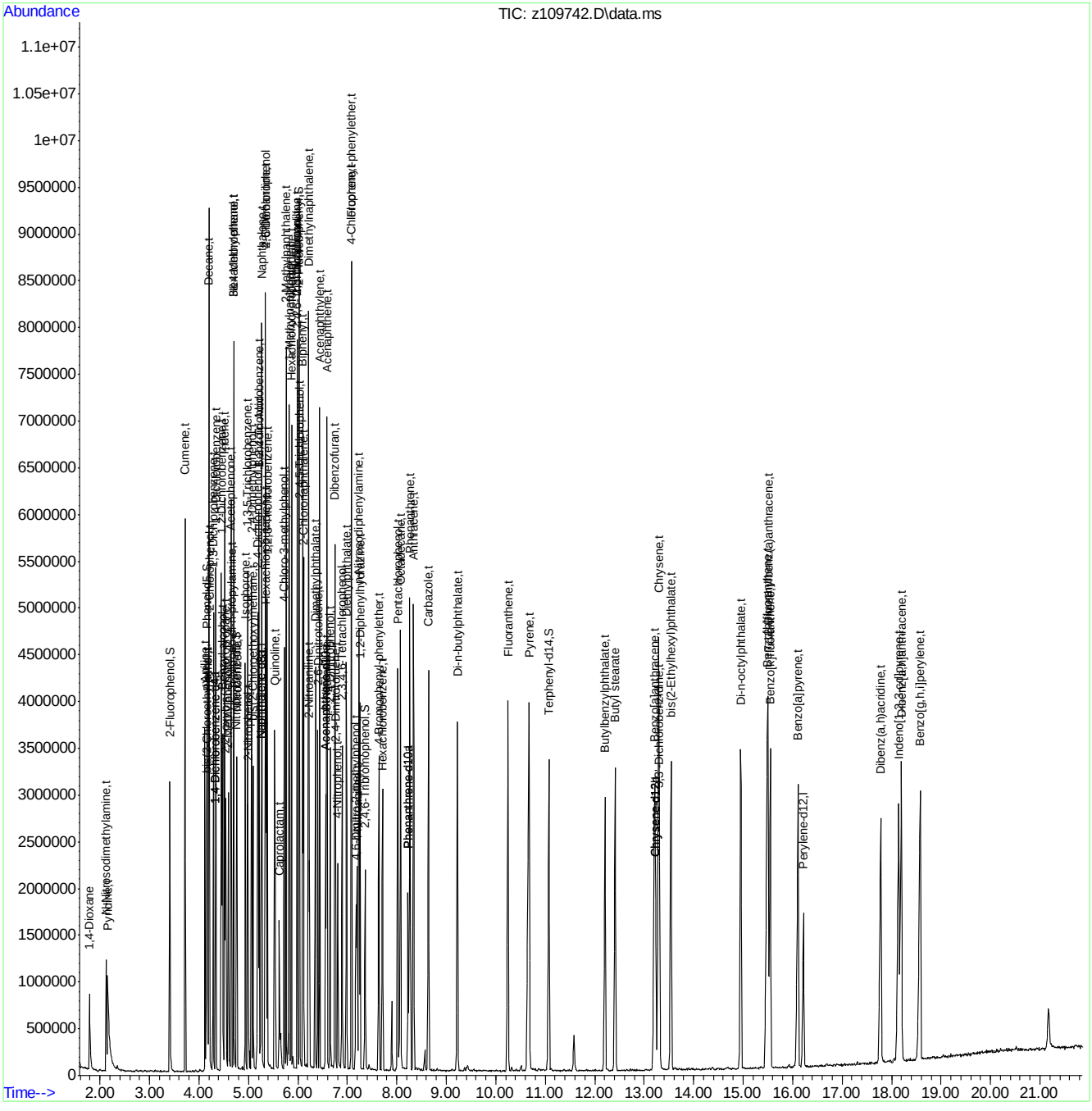
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Manual Integration Approval Summary

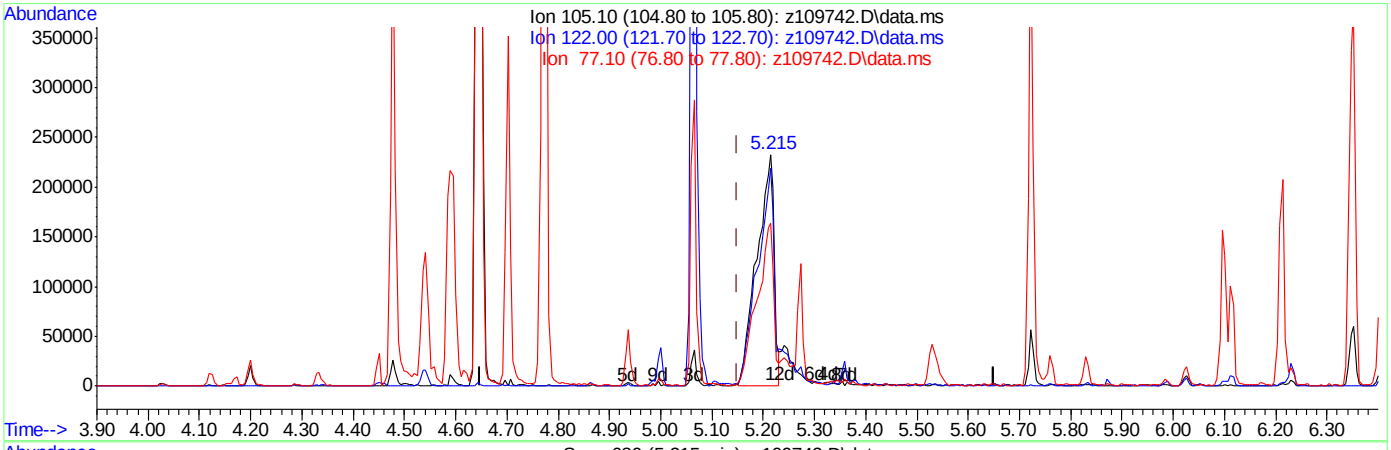
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109742.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 22:06	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

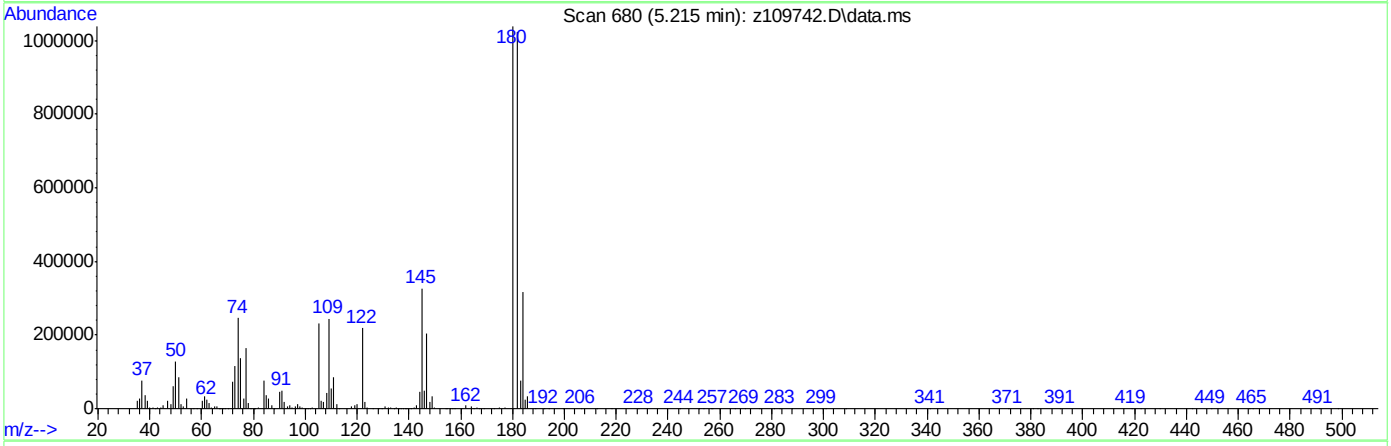
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.21	Poor instrument integration
Caprolactam	105-60-2		5.63	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:51:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:51:08 2016
Response via : Initial Calibration





(31) Benzoic Acid

5.215min (+0.065) 92.20ppm

response 546611

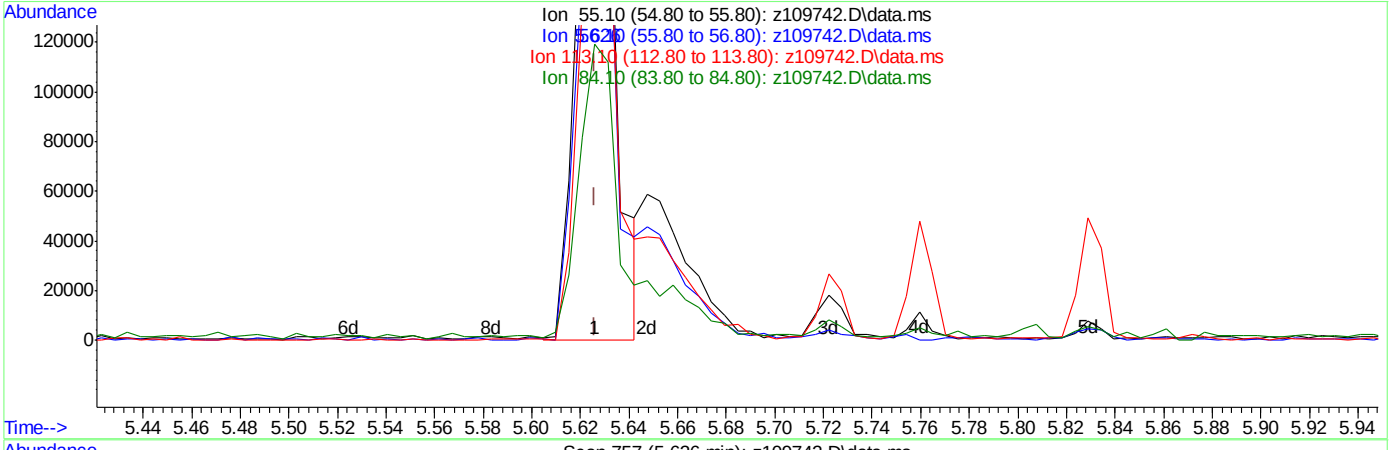
Ion	Exp%	Act%
105.10	100	100
122.00	65.80	92.34#
77.10	70.30	70.25
0.00	0.00	0.00

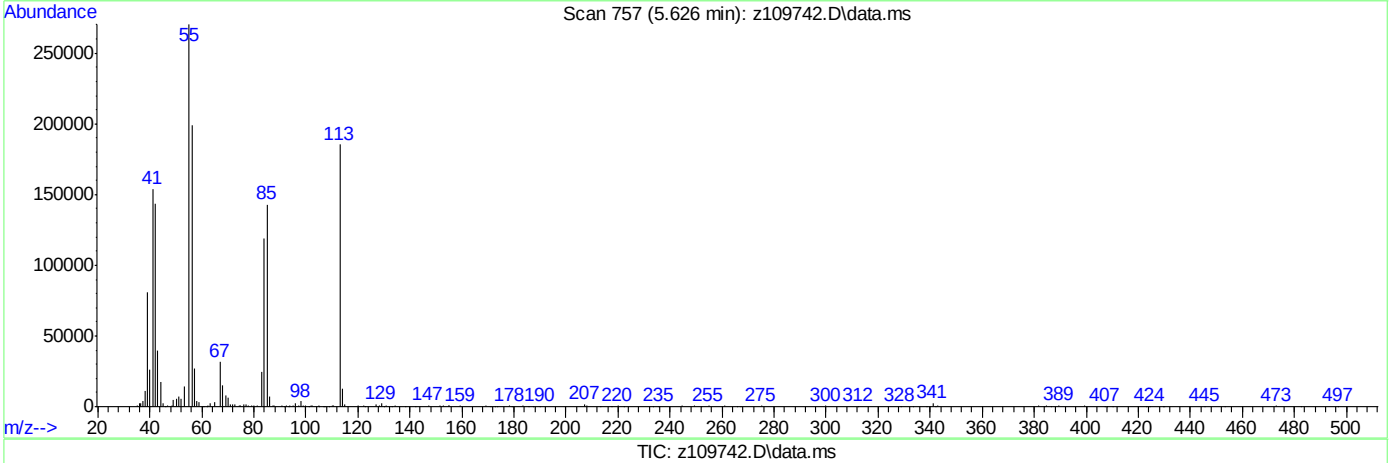
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration





TIC: z109742.D\data.ms

(41) Caprolactam (t)

5.626min (0.000) 77.53ppm

response 273580

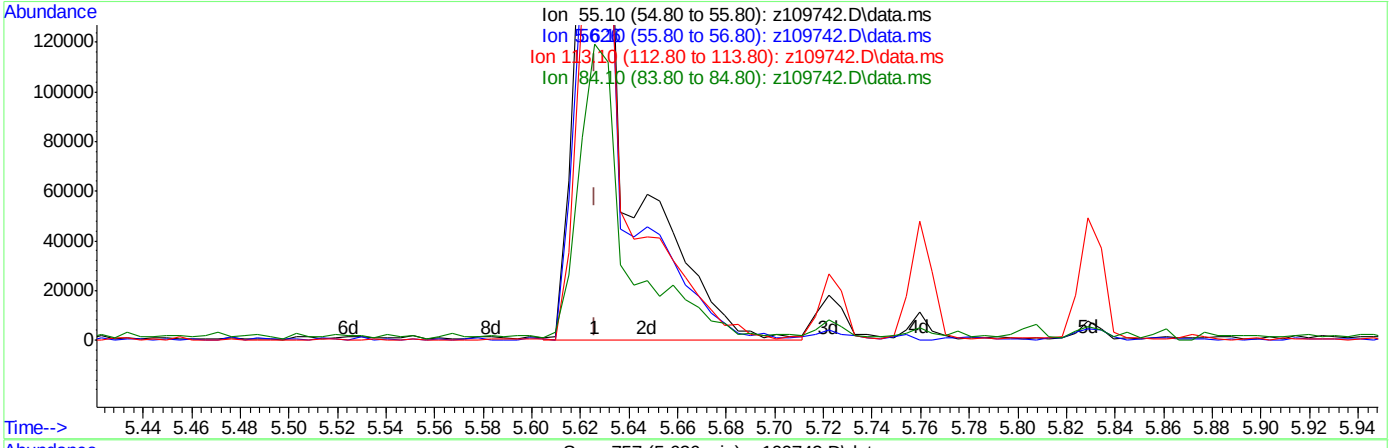
Ion	Exp%	Act%
55.10	100	100
56.10	72.40	72.44
113.10	67.30	67.26
84.10	43.90	43.86

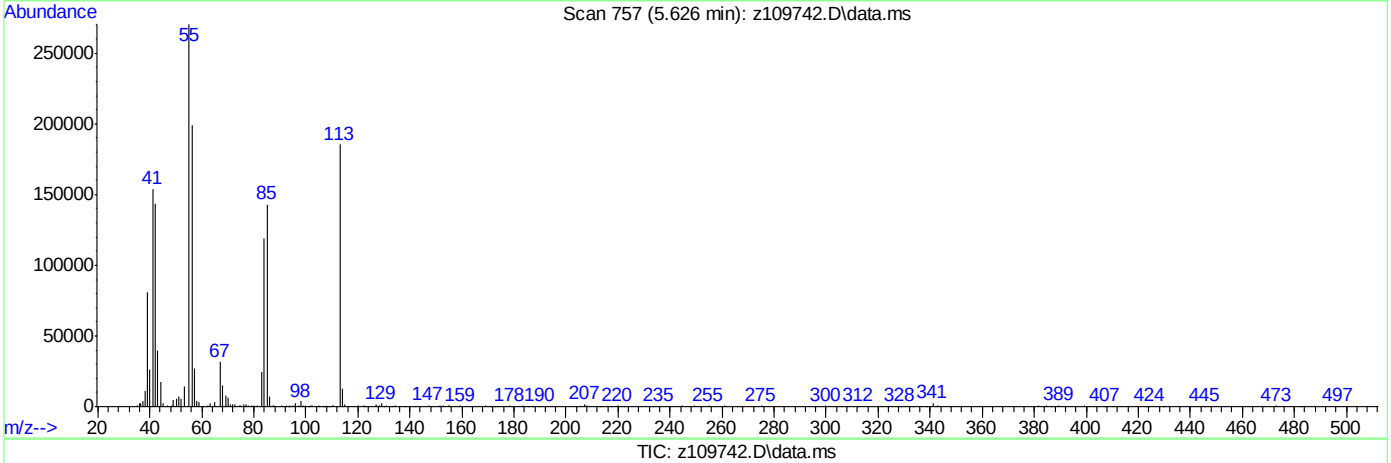
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration





TIC: z109742.D\data.ms

(41) Caprolactam (t)

5.626min (0.000) 100.75ppm m

response 355543

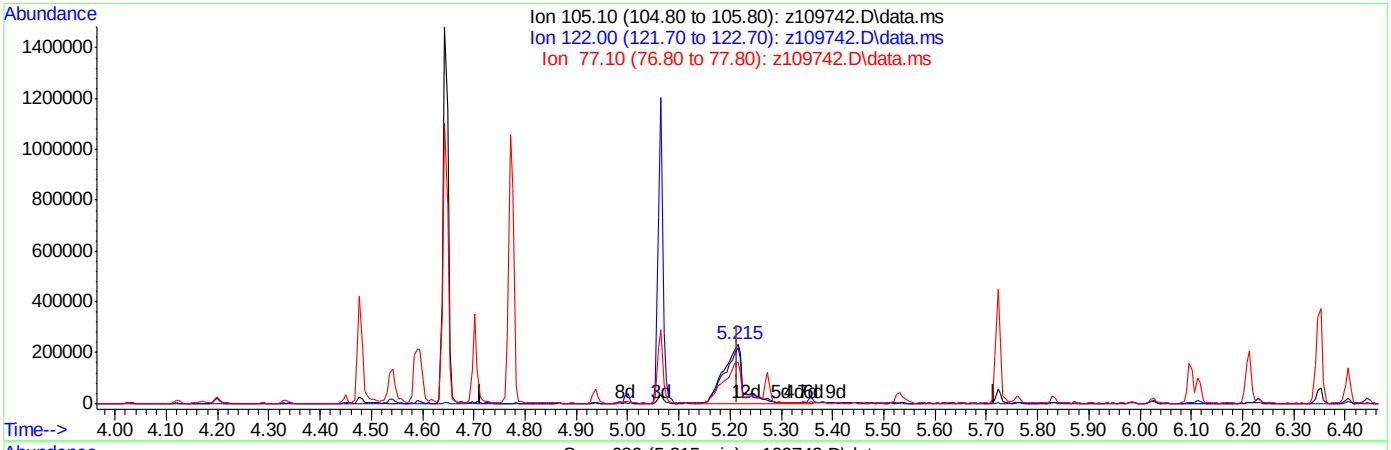
Ion	Exp%	Act%
55.10	100	100
56.10	72.40	73.48
113.10	67.30	68.58
84.10	43.90	44.12

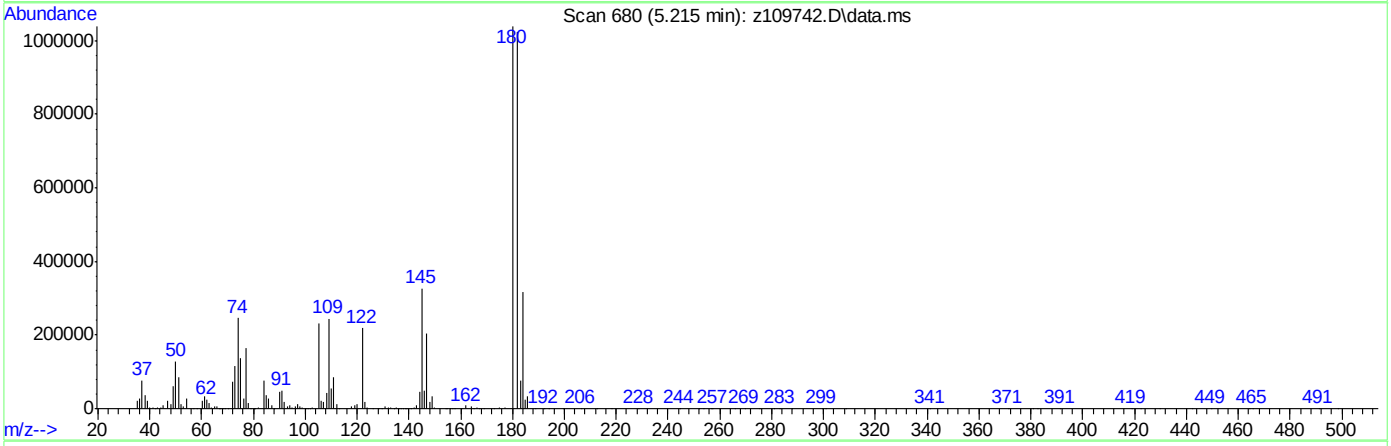
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration





TIC: z109742.D\data.ms

(31) Benzoic Acid

5.215min (0.000) 103.43ppm m

response 634926

Ion	Exp%	Act%
105.10	100	100
122.00	94.00	93.95
77.10	70.50	70.48
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.333	152	258285	40.00	ppm	0.00
24) Naphthalene-d8	5.257	136	1014560	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	565384	40.00	ppm	0.00
69) Phenanthrene-d10	8.227	188	900035	40.00	ppm	0.00
83) Chrysene-d12	13.222	240	805741	40.00	ppm	-0.01
92) Perylene-d12	16.209	264	820789	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.333	152	258285	40.00	ppm	0.00
104) Phenanthrene-d10a	8.227	188	900035	40.00	ppm	0.00
108) Chrysene-d12a	13.222	240	805741	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.555	164	565384	40.00	ppm	0.00
112) Naphthalene-d8a	5.257	136	1014560	40.00	ppm	0.00
114) Chrysene-d12b	13.222	240	805741	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	709376	78.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	156.90%	
8) Phenol-d5	4.157	99	806274	76.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	153.28%	
25) Nitrobenzene-d5	4.755	82	607952	70.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	140.06%	
51) 2-Fluorobiphenyl	6.021	172	1292625	69.47	ppm	0.00
Spiked Amount 50.000			Recovery	=	138.94%	
73) 2,4,6-Tribromophenol	7.357	330	206696	69.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	138.30%	
86) Terphenyl-d14	11.069	244	1290655	72.58	ppm	0.00
Spiked Amount 50.000			Recovery	=	145.16%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.790	88	290060	73.69	ppm	95
3) Pyridine	2.153	79	591571	77.40	ppm	97
4) N-Nitrosodimethylamine	2.121	74	356877	69.18	ppm	99
6) Indene	4.520	116	1212997	70.22	ppm	99
7) Cumene	3.719	105	1586089	74.42	ppm	100
9) Phenol	4.167	94	793059	72.79	ppm	96
10) Aniline	4.119	93	904003	72.00	ppm	100
11) bis(2-Chloroethyl)ether	4.151	93	538931	71.11	ppm	99
12) 2-Chlorophenol	4.210	128	687188	65.19	ppm	94
13) Decane	4.199	43	624374	64.01	ppm	97
14) 1,3-Dichlorobenzene	4.290	146	780253	71.02	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	768325	75.55	ppm	98
16) Benzyl alcohol	4.477	108	383798	83.92	ppm	89
17) 1,2-Dichlorobenzene	4.461	146	711393	68.19	ppm	98
18) Acetophenone	4.643	105	870526	75.16	ppm	96
19) 2-Methylphenol	4.589	108	637963	74.60	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.536	121	183592	66.84	ppm	94

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.702	108	639173	72.42	ppm	95
22) n-Nitroso-di-n-propyla...	4.648	70	414398	66.13	ppm	99
23) Hexachloroethane	4.696	201	220115	77.42	ppm	85
26) Nitrobenzene	4.771	77	583971	65.74	ppm	93
27) Quinoline	5.524	129	1441118	71.31	ppm	98
28) Isophorone	4.931	82	1100242	74.64	ppm	97
29) 2-Nitrophenol	4.995	139	384575	71.74	ppm	81
30) 2,4-Dimethylphenol	5.059	107	619586	74.83	ppm	98
31) Benzoic Acid	5.204	105	518620m	84.40	ppm	
32) bis(2-Chloroethoxy)met...	5.092	93	652548	69.01	ppm	99
33) 2,4-Dichlorophenol	5.188	162	557623	79.59	ppm	97
34) 2,6-Dichlorophenol	5.343	162	531511	76.25	ppm	98
35) 1,3,5-Trichlorobenzene	4.985	180	578470	73.42	ppm	97
36) 1,2,4-Trichlorobenzene	5.214	180	531338	69.62	ppm	99
37) 1,2,3-Trichlorobenzene	5.380	180	512158	69.53	ppm	97
38) Naphthalene	5.273	128	2054161	69.36	ppm	100
39) 4-Chloroaniline	5.343	127	758322	64.11	ppm	96
40) 2,3-Dichloroaniline	5.984	161	635911	66.81	ppm	99
41) Caprolactam	5.620	55	271772m	71.33	ppm	
42) Hexachlorobutadiene	5.359	225	252173	77.74	ppm	97
43) 4-Chloro-3-methylphenol	5.722	107	593128	78.08	ppm	89
44) 2-Methylnaphthalene	5.759	141	1130401	73.70	ppm	97
45) 1-Methylnaphthalene	5.829	141	1164883	66.81	ppm	98
46) Dimethylnaphthalene	6.208	156	1203944	72.53	ppm	100
48) Hexachlorocyclopentadiene	5.866	237	619137	181.65	ppm	96
49) 2,4,6-Trichlorophenol	5.984	196	353907	78.21	ppm	99
50) 2,4,5-Trichlorophenol	6.026	196	361146	68.40	ppm	93
52) 2-Chloronaphthalene	6.112	162	1126830	66.06	ppm	95
53) Biphenyl	6.096	154	1601083	68.07	ppm	98
54) 2-Nitroaniline	6.229	65	339315	78.67	ppm	93
55) Dimethylphthalate	6.347	163	1338542	72.89	ppm	99
56) Acenaphthylene	6.443	152	2101227	73.81	ppm	99
57) 2,6-Dinitrotoluene	6.406	165	305573	79.00	ppm	95
58) 3-Nitroaniline	6.577	138	365741	75.56	ppm	90
59) Acenaphthene	6.587	153	1228182	71.07	ppm	99
60) 2,4-Dinitrophenol	6.646	184	360816	201.64	ppm	98
61) 4-Nitrophenol	6.801	109	166854	72.45	ppm	97
62) Dibenzofuran	6.748	168	1691555	70.32	ppm	99
63) 2,4-Dinitrotoluene	6.758	165	399730	77.67	ppm	98
64) 2,3,4,6-Tetrachlorophenol	6.892	232	298441	71.30	ppm	95
65) Diethylphthalate	6.977	149	1319563	67.14	ppm	99
66) Fluorene	7.079	166	1341353	67.86	ppm	99
67) 4-Chlorophenyl-phenyle...	7.079	204	573029	70.24	ppm	93
68) 4-Nitroaniline	7.191	138	377040	83.07	ppm	91
70) 4,6-Dinitro-2-methylph...	7.170	198	247625	97.05	ppm	88
71) n-Nitrosodiphenylamine	7.223	169	964899	71.87	ppm	99
72) 1,2-Diphenylhydrazine	7.250	77	1147428	71.57	ppm	96
74) 4-Bromophenyl-phenylether	7.634	248	341909	70.11	ppm	97
75) Hexachlorobenzene	7.709	284	380919	68.96	ppm	98
76) Pentachlorophenol	8.014	266	491527	180.37	ppm	99

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.259	178	1924726	71.91	ppm	98
78)	Anthracene	8.334	178	1967060	71.92	ppm	99
79)	Carbazole	8.633	167	1934892	75.11	ppm	99
80)	Di-n-butylphthalate	9.221	149	2402258	75.82	ppm	100
81)	Fluoranthene	10.247	202	1965351	67.75	ppm	97
82)	Octadecane	8.072	57	801617	69.04	ppm	98
84)	Pyrene	10.669	202	2021823	71.71	ppm	98
85)	Butyl stearate	12.405	56	606765	83.81	ppm	98
87)	Butylbenzylphthalate	12.202	149	1060797	81.59	ppm	95
88)	Benzo[a]anthracene	13.201	228	1836324	74.67	ppm	98
89)	3,3'-Dichlorobenzidine	13.303	252	658541	77.89	ppm	94
90)	Chrysene	13.281	228	1711519	70.35	ppm	99
91)	bis(2-Ethylhexyl)phtha...	13.532	149	1485711	81.45	ppm	98
93)	Di-n-octylphthalate	14.943	149	2597489	84.40	ppm	99
94)	Benzo[b]fluoranthene	15.477	252	1963861	72.22	ppm	97
95)	Benzo[k]fluoranthene	15.541	252	1686384	71.30	ppm	100
96)	Benzo[a]pyrene	16.097	252	1731239	72.55	ppm	96
97)	Indeno[1,2,3-cd]pyrene	18.132	276	1722800	72.74	ppm	98
98)	Dibenz(a,h)acridine	17.774	279	1621595	69.40	ppm	99
99)	Dibenz[a,h]anthracene	18.191	278	1838785	73.59	ppm	99
100)	7,12-Dimethylbenz(a)an...	15.488	256	877172	68.88	ppm	96
101)	Benzo[g,h,i]perylene	18.565	276	1789885	67.52	ppm	98

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

7.6.102

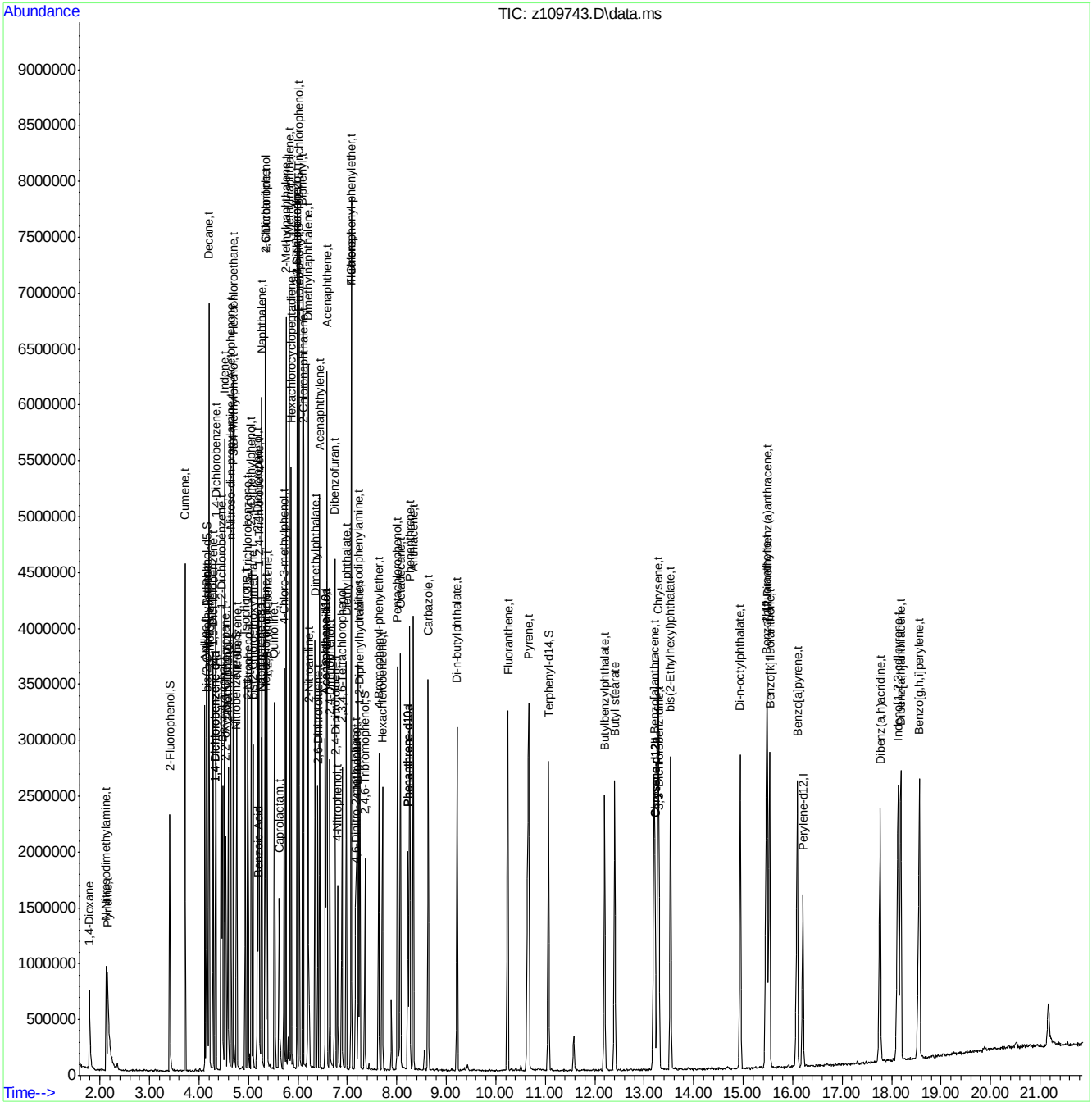
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration



Manual Integration Approval Summary

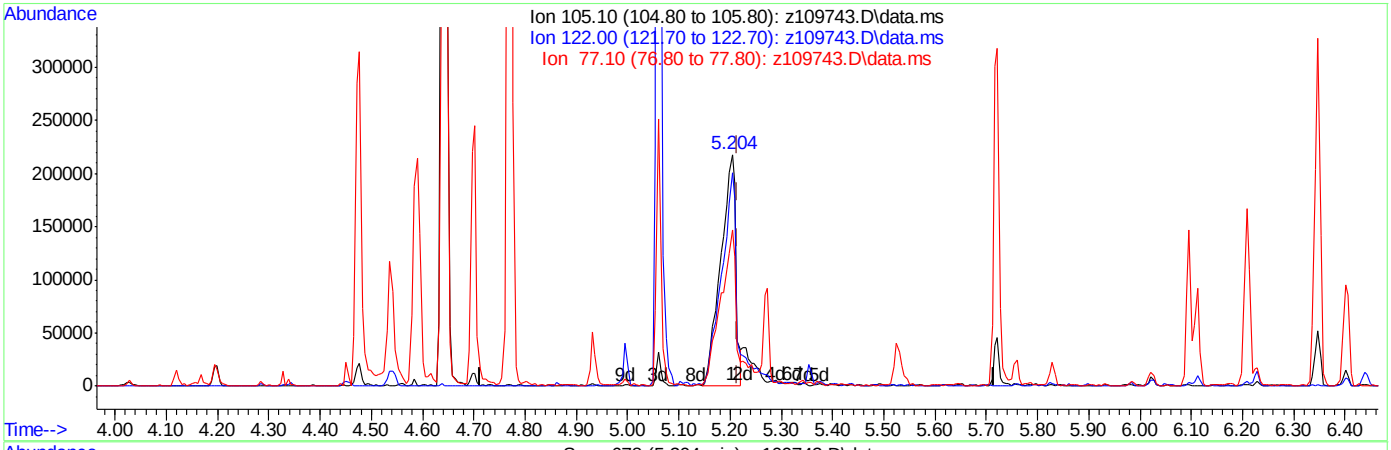
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109743.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 22:38	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

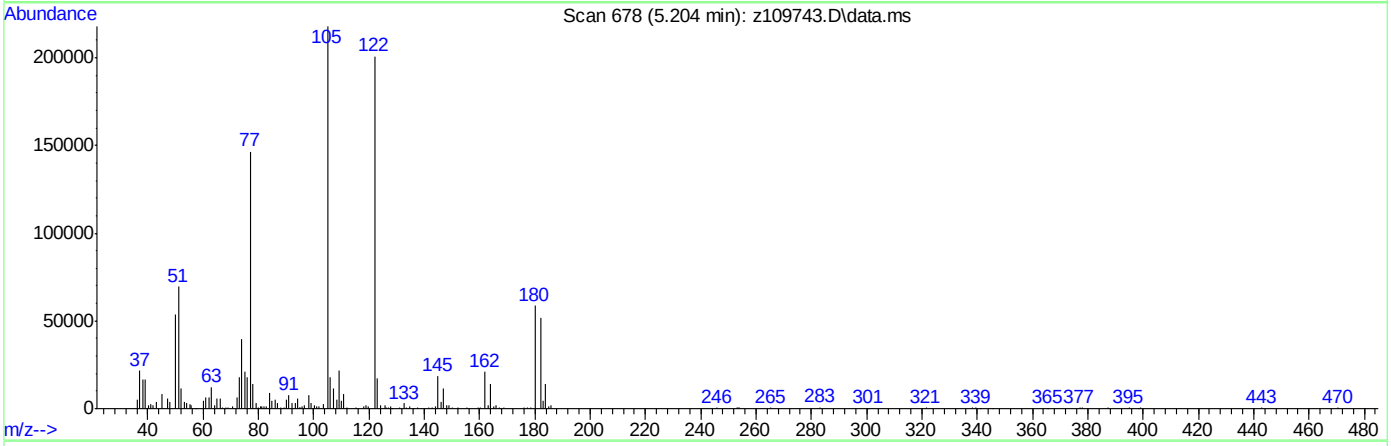
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.20	Poor instrument integration
Caprolactam	105-60-2		5.62	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(31) Benzoic Acid

5.204min (-0.011) 72.83ppm

response 447525

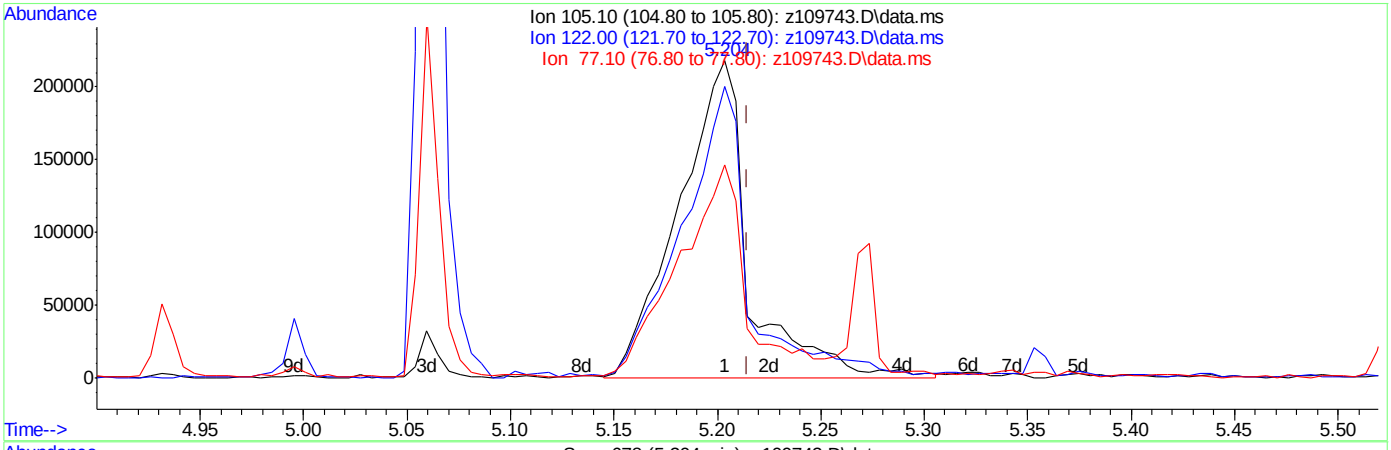
Ion	Exp%	Act%
105.10	100	100
122.00	94.00	92.29
77.10	70.50	67.19
0.00	0.00	0.00

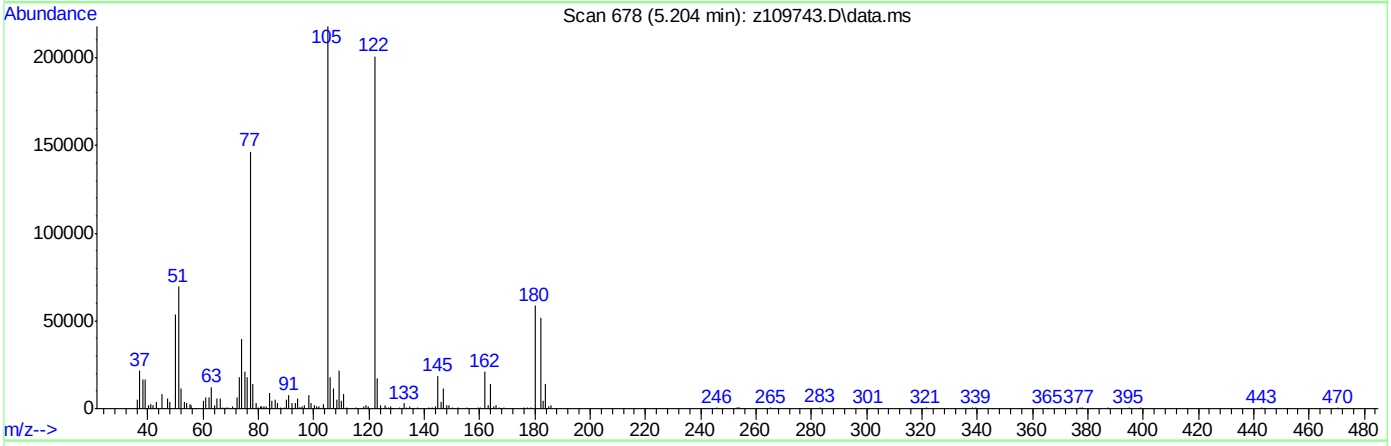
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(31) Benzoic Acid

5.204min (-0.011) 84.40ppm m

response 518620

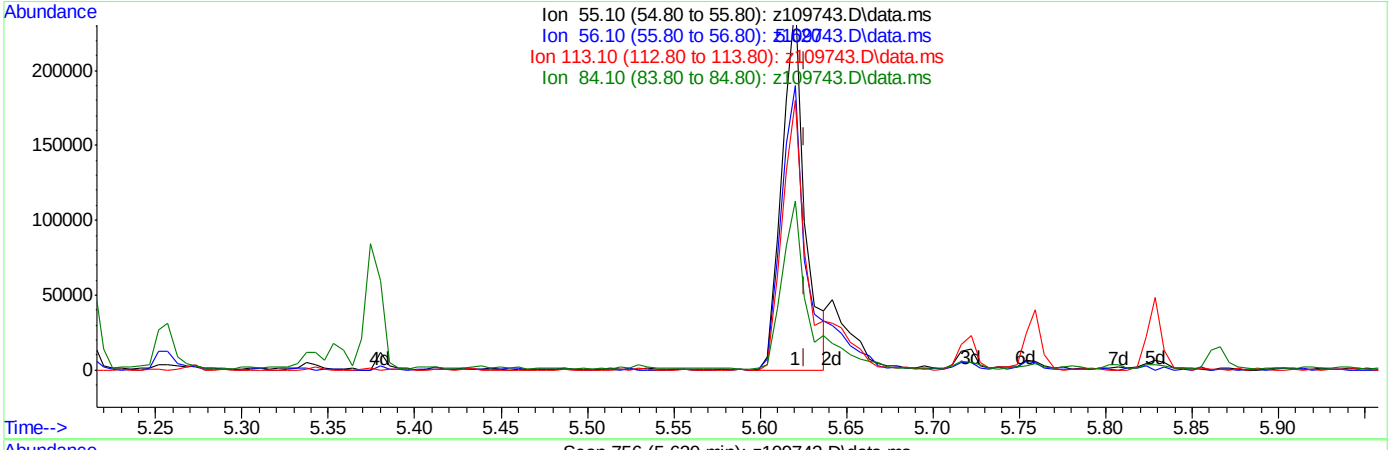
Ion	Exp%	Act%
105.10	100	100
122.00	94.00	92.10
77.10	70.50	67.25
0.00	0.00	0.00

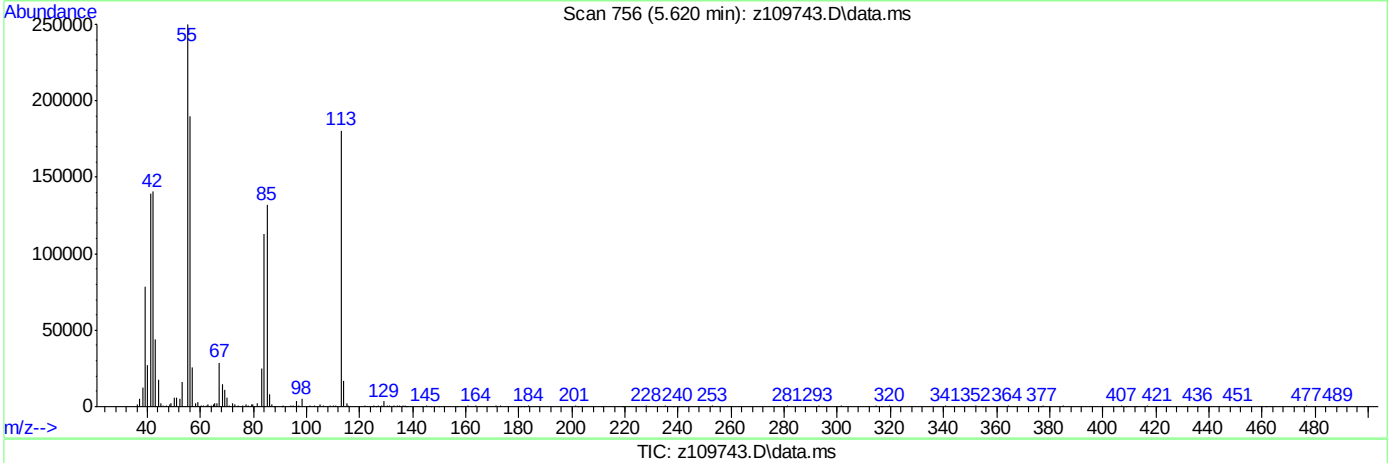
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(41) Caprolactam (t)

5.620min (-0.006) 59.55ppm

response 226878

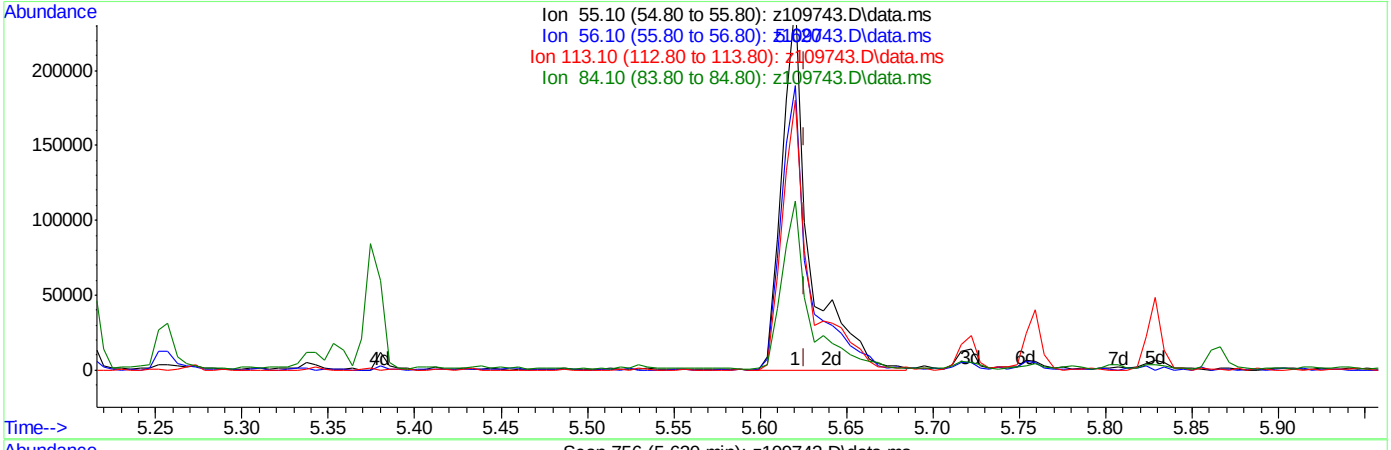
Ion	Exp%	Act%
55.10	100	100
56.10	73.50	75.29
113.10	68.60	71.30
84.10	44.10	43.64

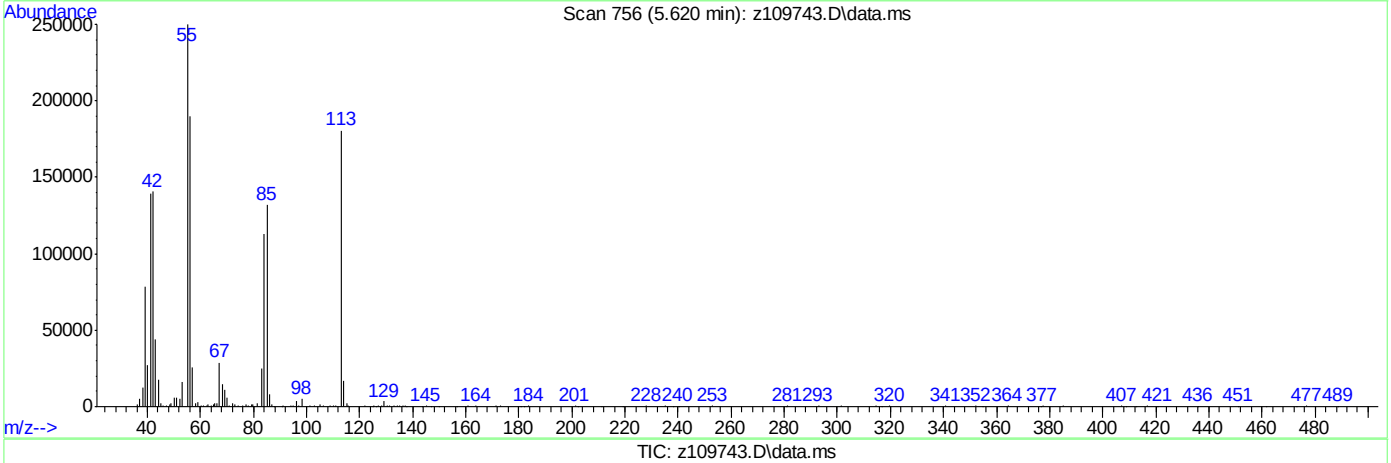
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(41) Caprolactam (t)

5.620min (-0.006) 71.33ppm m

response 271772

Ion	Exp%	Act%
55.10	100	100
56.10	73.50	76.04
113.10	68.60	72.23
84.10	44.10	45.04

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	280948	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1064510	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	592883	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	949333	40.00	ppm	0.00
83) Chrysene-d12	13.217	240	863958	40.00	ppm	0.00
92) Perylene-d12	16.204	264	858833	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	280948	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	949333	40.00	ppm	0.00
108) Chrysene-d12a	13.217	240	863958	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	592883	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1064510	40.00	ppm	0.00
114) Chrysene-d12b	13.217	240	863958	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	228527	23.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	46.70%	
8) Phenol-d5	4.157	99	273897	24.19	ppm	0.00
Spiked Amount 50.000			Recovery	=	48.38%	
25) Nitrobenzene-d5	4.755	82	206136	23.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	46.72%	
51) 2-Fluorobiphenyl	6.021	172	464848	24.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.28%	
73) 2,4,6-Tribromophenol	7.351	330	68260	22.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	44.82%	
86) Terphenyl-d14	11.059	244	423291	22.73	ppm	-0.01
Spiked Amount 50.000			Recovery	=	45.46%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.795	88	95996	22.87	ppm	93
3) Pyridine	2.175	79	180041	22.01	ppm	94
4) N-Nitrosodimethylamine	2.132	74	140193	25.86	ppm	92
6) Indene	4.520	116	423623	23.26	ppm	99
7) Cumene	3.719	105	546041	23.97	ppm	99
9) Phenol	4.162	94	277095	23.92	ppm	95
10) Aniline	4.119	93	329210	24.72	ppm	97
11) bis(2-Chloroethyl)ether	4.151	93	176483	22.02	ppm	97
12) 2-Chlorophenol	4.205	128	239621	21.91	ppm	95
13) Decane	4.194	43	231381	22.95	ppm	98
14) 1,3-Dichlorobenzene	4.285	146	275900	23.75	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	261103	23.94	ppm	99
16) Benzyl alcohol	4.472	108	120344	23.90	ppm	89
17) 1,2-Dichlorobenzene	4.456	146	248316	22.72	ppm	95
18) Acetophenone	4.638	105	294033	23.70	ppm	93
19) 2-Methylphenol	4.584	108	201757	22.06	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.536	121	61040	21.31	ppm	94

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.696	108	218129	23.27	ppm	94
22) n-Nitroso-di-n-propyla...	4.638	70	152235	23.35	ppm	88
23) Hexachloroethane	4.696	201	79170	25.81	ppm	89
26) Nitrobenzene	4.766	77	209537	23.53	ppm	91
27) Quinoline	5.519	129	483781	23.45	ppm	98
28) Isophorone	4.926	82	366401	24.09	ppm	98
29) 2-Nitrophenol	4.995	139	134030	24.46	ppm	89
30) 2,4-Dimethylphenol	5.054	107	209074	24.46	ppm	97
31) Benzoic Acid	5.172	105	155360	23.66	ppm	89
32) bis(2-Chloroethoxy)met...	5.092	93	219992	22.96	ppm	99
33) 2,4-Dichlorophenol	5.188	162	185495	25.26	ppm	96
34) 2,6-Dichlorophenol	5.337	162	180699	25.00	ppm	98
35) 1,3,5-Trichlorobenzene	4.979	180	203664	25.15	ppm	95
36) 1,2,4-Trichlorobenzene	5.209	180	185260	23.91	ppm	96
37) 1,2,3-Trichlorobenzene	5.375	180	183818	24.59	ppm	90
38) Naphthalene	5.268	128	702811	23.40	ppm	99
39) 4-Chloroaniline	5.337	127	274166	23.24	ppm	93
40) 2,3-Dichloroaniline	5.984	161	224718	23.47	ppm	92
41) Caprolactam	5.594	55	89515	23.02	ppm	95
42) Hexachlorobutadiene	5.353	225	88600	26.22	ppm	99
43) 4-Chloro-3-methylphenol	5.711	107	197389	24.91	ppm	83
44) 2-Methylnaphthalene	5.754	141	403413	25.57	ppm	93
45) 1-Methylnaphthalene	5.829	141	422755	24.10	ppm	92
46) Dimethylnaphthalene	6.208	156	406350	23.89	ppm	97
48) Hexachlorocyclopentadiene	5.866	237	208790	56.51	ppm	96
49) 2,4,6-Trichlorophenol	5.984	196	120102	25.45	ppm	91
50) 2,4,5-Trichlorophenol	6.021	196	131136	24.58	ppm	88
52) 2-Chloronaphthalene	6.107	162	393753	23.02	ppm	98
53) Biphenyl	6.091	154	554076	23.33	ppm	98
54) 2-Nitroaniline	6.224	65	114355	25.39	ppm	95
55) Dimethylphthalate	6.342	163	461250	24.50	ppm	99
56) Acenaphthylene	6.438	152	714822	24.42	ppm	99
57) 2,6-Dinitrotoluene	6.395	165	100285	24.80	ppm	80
58) 3-Nitroaniline	6.566	138	124583	24.89	ppm	98
59) Acenaphthene	6.582	153	423635	24.05	ppm	98
60) 2,4-Dinitrophenol	6.641	184	103331	50.67	ppm	97
61) 4-Nitrophenol	6.796	109	52613	22.31	ppm	95
62) Dibenzofuran	6.742	168	583053	23.83	ppm	98
63) 2,4-Dinitrotoluene	6.753	165	134141	25.04	ppm	97
64) 2,3,4,6-Tetrachlorophenol	6.887	232	104650	24.51	ppm	98
65) Diethylphthalate	6.972	149	448588	22.68	ppm	99
66) Fluorene	7.074	166	475126	23.83	ppm	92
67) 4-Chlorophenyl-phenyle...	7.074	204	203013	24.48	ppm	95
68) 4-Nitroaniline	7.175	138	131233	27.31	ppm	94
70) 4,6-Dinitro-2-methylph...	7.159	198	68896	23.90	ppm	96
71) n-Nitrosodiphenylamine	7.218	169	328414	23.79	ppm	96
72) 1,2-Diphenylhydrazine	7.245	77	396607	24.09	ppm	99
74) 4-Bromophenyl-phenylether	7.629	248	118368	23.74	ppm	94
75) Hexachlorobenzene	7.704	284	128352	22.82	ppm	95
76) Pentachlorophenol	8.009	266	146716	49.47	ppm	95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	8.254	178	635376	23.09 ppm	95
78) Anthracene	8.324	178	670345	23.84 ppm	100
79) Carbazole	8.628	167	648697	24.24 ppm	97
80) Di-n-butylphthalate	9.216	149	793411	24.06 ppm	100
81) Fluoranthene	10.236	202	668499	22.72 ppm	97
82) Octadecane	8.073	57	278655	23.56 ppm	98
84) Pyrene	10.653	202	684539	23.25 ppm	97
85) Butyl stearate	12.395	56	193847	24.68 ppm	95
87) Butylbenzylphthalate	12.191	149	341075	24.35 ppm	89
88) Benzo[a]anthracene	13.185	228	602447	23.23 ppm	97
89) 3,3'-Dichlorobenzidine	13.292	252	227032	25.21 ppm	98
90) Chrysene	13.265	228	585842	23.15 ppm	97
91) bis(2-Ethylhexyl)phtha...	13.532	149	475075	24.18 ppm	99
93) Di-n-octylphthalate	14.932	149	849184	26.01 ppm	99
94) Benzo[b]fluoranthene	15.456	252	634827	22.87 ppm	97
95) Benzo[k]fluoranthene	15.509	252	590358	24.52 ppm	98
96) Benzo[a]pyrene	16.075	252	597927	24.52 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.111	276	578561	23.89 ppm	95
98) Dibenz(a,h)acridine	17.753	279	550356	23.28 ppm	99
99) Dibenz[a,h]anthracene	18.164	278	608301	23.74 ppm	96
100) 7,12-Dimethylbenz(a)an...	15.466	256	287021	22.32 ppm	96
101) Benzo[g,h,i]perylene	18.538	276	612804	22.99 ppm	99

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

7.6.103

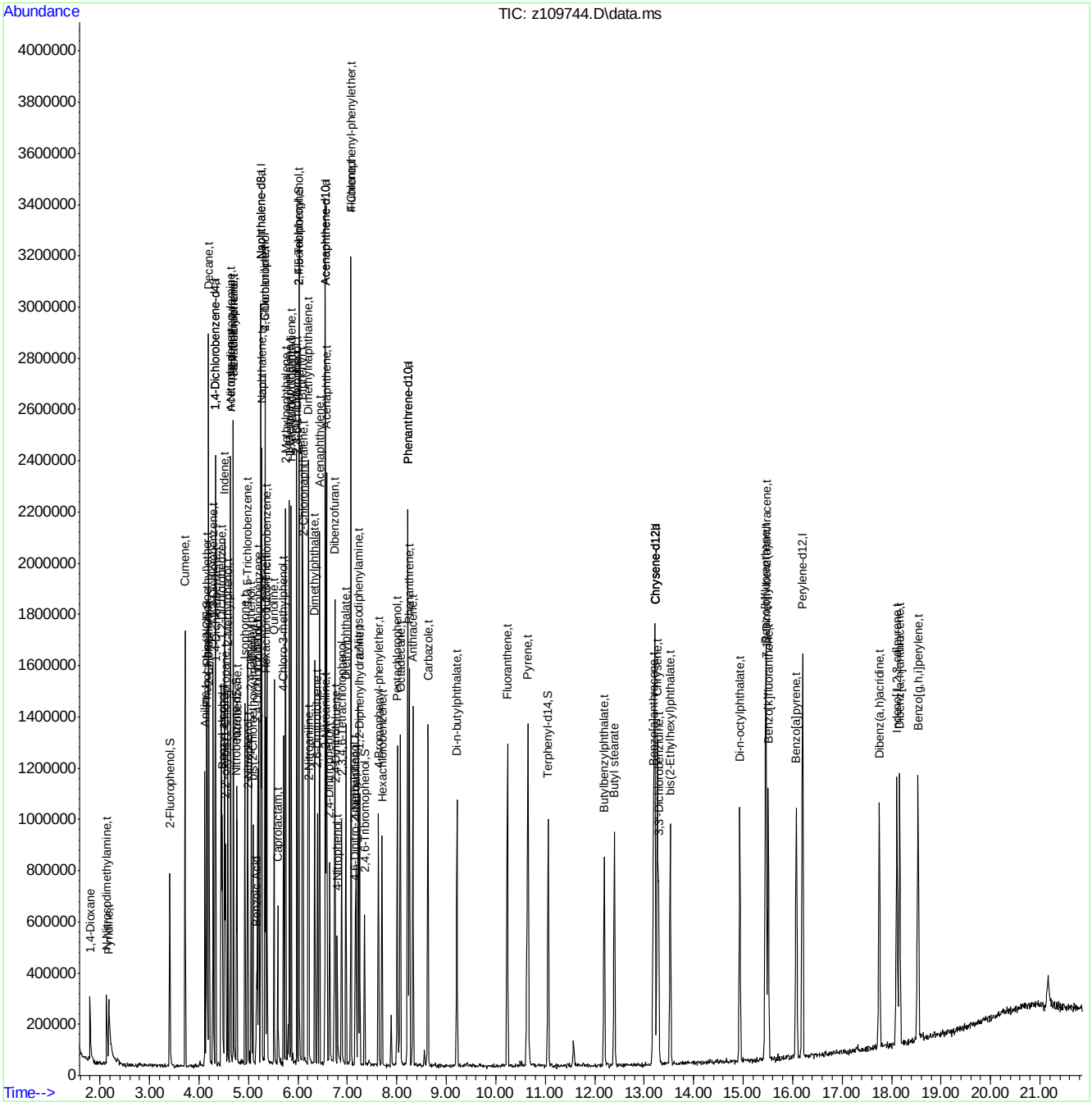
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:06:45 2016 RTE

Page: 4

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	293705	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1115195	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	602060	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	961212	40.00	ppm	0.00
83) Chrysene-d12	13.207	240	884555	40.00	ppm	-0.01
92) Perylene-d12	16.204	264	877332	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	293705	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	961212	40.00	ppm	0.00
108) Chrysene-d12a	13.207	240	884555	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.555	164	602060	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1115195	40.00	ppm	0.00
114) Chrysene-d12b	13.207	240	884555	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	93922	9.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.60%	
8) Phenol-d5	4.157	99	114060	9.70	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.40%	
25) Nitrobenzene-d5	4.755	82	83435	9.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.30%	
51) 2-Fluorobiphenyl	6.021	172	189394	9.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.82%	
73) 2,4,6-Tribromophenol	7.351	330	28009	9.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.54%	
86) Terphenyl-d14	11.054	244	175695	9.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.76%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.801	88	44809	10.39	ppm #	78
3) Pyridine	2.207	79	62011	7.55	ppm	96
4) N-Nitrosodimethylamine	2.148	74	51336	9.00	ppm	78
6) Indene	4.520	116	176002	9.37	ppm	99
7) Cumene	3.719	105	225760	9.56	ppm	98
9) Phenol	4.167	94	111487	9.29	ppm	83
10) Aniline	4.119	93	137896	9.93	ppm	99
11) bis(2-Chloroethyl)ether	4.151	93	78838	9.64	ppm	90
12) 2-Chlorophenol	4.205	128	107560	9.65	ppm	97
13) Decane	4.194	43	95547	9.22	ppm	97
14) 1,3-Dichlorobenzene	4.285	146	113957	9.48	ppm	99
15) 1,4-Dichlorobenzene	4.344	146	110737	9.79	ppm	90
16) Benzyl alcohol	4.472	108	45793	8.78	ppm	98
17) 1,2-Dichlorobenzene	4.456	146	102814	9.17	ppm	94
18) Acetophenone	4.638	105	123497	9.62	ppm	98
19) 2-Methylphenol	4.584	108	88760	9.51	ppm	94
20) 2,2'-oxybis(1-Chloropr...	4.536	121	27072	9.31	ppm #	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.696	108	93553	9.68	ppm		95
22) n-Nitroso-di-n-propyla...	4.638	70	61821	9.19	ppm		92
23) Hexachloroethane	4.696	201	33453	10.36	ppm		96
26) Nitrobenzene	4.766	77	84202	9.13	ppm		93
27) Quinoline	5.514	129	196687	9.22	ppm		98
28) Isophorone	4.926	82	148068	9.36	ppm		98
29) 2-Nitrophenol	4.996	139	52059	9.11	ppm		94
30) 2,4-Dimethylphenol	5.054	107	88278	9.90	ppm		94
31) Benzoic Acid	5.150	105	53056	7.82	ppm		97
32) bis(2-Chloroethoxy)met...	5.086	93	92463	9.37	ppm		99
33) 2,4-Dichlorophenol	5.188	162	79146	10.27	ppm		89
34) 2,6-Dichlorophenol	5.337	162	75224	9.93	ppm		96
35) 1,3,5-Trichlorobenzene	4.979	180	89623	10.55	ppm		95
36) 1,2,4-Trichlorobenzene	5.209	180	83302	10.35	ppm		93
37) 1,2,3-Trichlorobenzene	5.375	180	75509	9.67	ppm		85
38) Naphthalene	5.268	128	287267	9.25	ppm		98
39) 4-Chloroaniline	5.337	127	114653	9.41	ppm		95
40) 2,3-Dichloroaniline	5.979	161	92098	9.29	ppm		91
41) Caprolactam	5.583	55	37173	9.27	ppm		95
42) Hexachlorobutadiene	5.353	225	39183	10.96	ppm		97
43) 4-Chloro-3-methylphenol	5.711	107	76579	9.23	ppm	#	32
44) 2-Methylnaphthalene	5.754	141	171428	10.33	ppm		95
45) 1-Methylnaphthalene	5.824	141	175329	9.61	ppm		99
46) Dimethylnaphthalene	6.208	156	167293	9.47	ppm		96
48) Hexachlorocyclopentadiene	5.866	237	82798	21.51	ppm		97
49) 2,4,6-Trichlorophenol	5.979	196	52662	10.95	ppm		94
50) 2,4,5-Trichlorophenol	6.021	196	51898	9.61	ppm		91
52) 2-Chloronaphthalene	6.107	162	166925	9.76	ppm		97
53) Biphenyl	6.091	154	233260	9.80	ppm		98
54) 2-Nitroaniline	6.219	65	48402	10.55	ppm	#	68
55) Dimethylphthalate	6.342	163	185107	9.72	ppm		99
56) Acenaphthylene	6.438	152	294697	9.96	ppm		99
57) 2,6-Dinitrotoluene	6.395	165	43389	10.58	ppm		90
58) 3-Nitroaniline	6.566	138	50331	9.91	ppm		91
59) Acenaphthene	6.582	153	176954	9.97	ppm		97
60) 2,4-Dinitrophenol	6.641	184	31240	15.04	ppm		80
61) 4-Nitrophenol	6.796	109	23538	10.05	ppm	#	77
62) Dibenzofuran	6.737	168	241479	9.81	ppm		93
63) 2,4-Dinitrotoluene	6.753	165	56943	10.46	ppm		95
64) 2,3,4,6-Tetrachlorophenol	6.887	232	37998	8.80	ppm		85
65) Diethylphthalate	6.967	149	185356	9.40	ppm		96
66) Fluorene	7.074	166	205326	10.24	ppm		92
67) 4-Chlorophenyl-phenyle...	7.074	204	80965	9.65	ppm		92
68) 4-Nitroaniline	7.170	138	52497	10.56	ppm		97
70) 4,6-Dinitro-2-methylph...	7.159	198	26944	9.33	ppm		90
71) n-Nitrosodiphenylamine	7.218	169	142083	10.27	ppm		98
72) 1,2-Diphenylhydrazine	7.245	77	165524	10.00	ppm		95
74) 4-Bromophenyl-phenylether	7.629	248	45787	9.16	ppm		98
75) Hexachlorobenzene	7.699	284	53615	9.58	ppm		87
76) Pentachlorophenol	8.009	266	55326	18.46	ppm		91

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	8.249	178	265865	9.69 ppm	97
78) Anthracene	8.324	178	280527	9.95 ppm	96
79) Carbazole	8.623	167	257259	9.55 ppm	95
80) Di-n-butylphthalate	9.211	149	325473	9.82 ppm	99
81) Fluoranthene	10.231	202	269861	9.23 ppm	97
82) Octadecane	8.067	57	115441	9.75 ppm	95
84) Pyrene	10.648	202	284039	9.56 ppm	92
85) Butyl stearate	12.395	56	74046	9.23 ppm	95
87) Butylbenzylphthalate	12.192	149	133403	9.35 ppm	94
88) Benzo[a]anthracene	13.180	228	237993	9.09 ppm	94
89) 3,3'-Dichlorobenzidine	13.287	252	85636	9.27 ppm	87
90) Chrysene	13.255	228	234303	9.18 ppm	99
91) bis(2-Ethylhexyl)phtha...	13.527	149	183442	9.18 ppm	97
93) Di-n-octylphthalate	14.932	149	320172	9.52 ppm	97
94) Benzo[b]fluoranthene	15.445	252	256650	9.21 ppm	99
95) Benzo[k]fluoranthene	15.498	252	246331	10.05 ppm	98
96) Benzo[a]pyrene	16.070	252	231324	9.32 ppm	92
97) Indeno[1,2,3-cd]pyrene	18.105	276	234325	9.56 ppm	91
98) Dibenz(a,h)acridine	17.747	279	218357	9.17 ppm	90
99) Dibenz[a,h]anthracene	18.159	278	245089	9.46 ppm	92
100) 7,12-Dimethylbenz(a)an...	15.461	256	111687	8.69 ppm	93
101) Benzo[g,h,i]perylene	18.527	276	241668	9.02 ppm	94

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

7.6.104

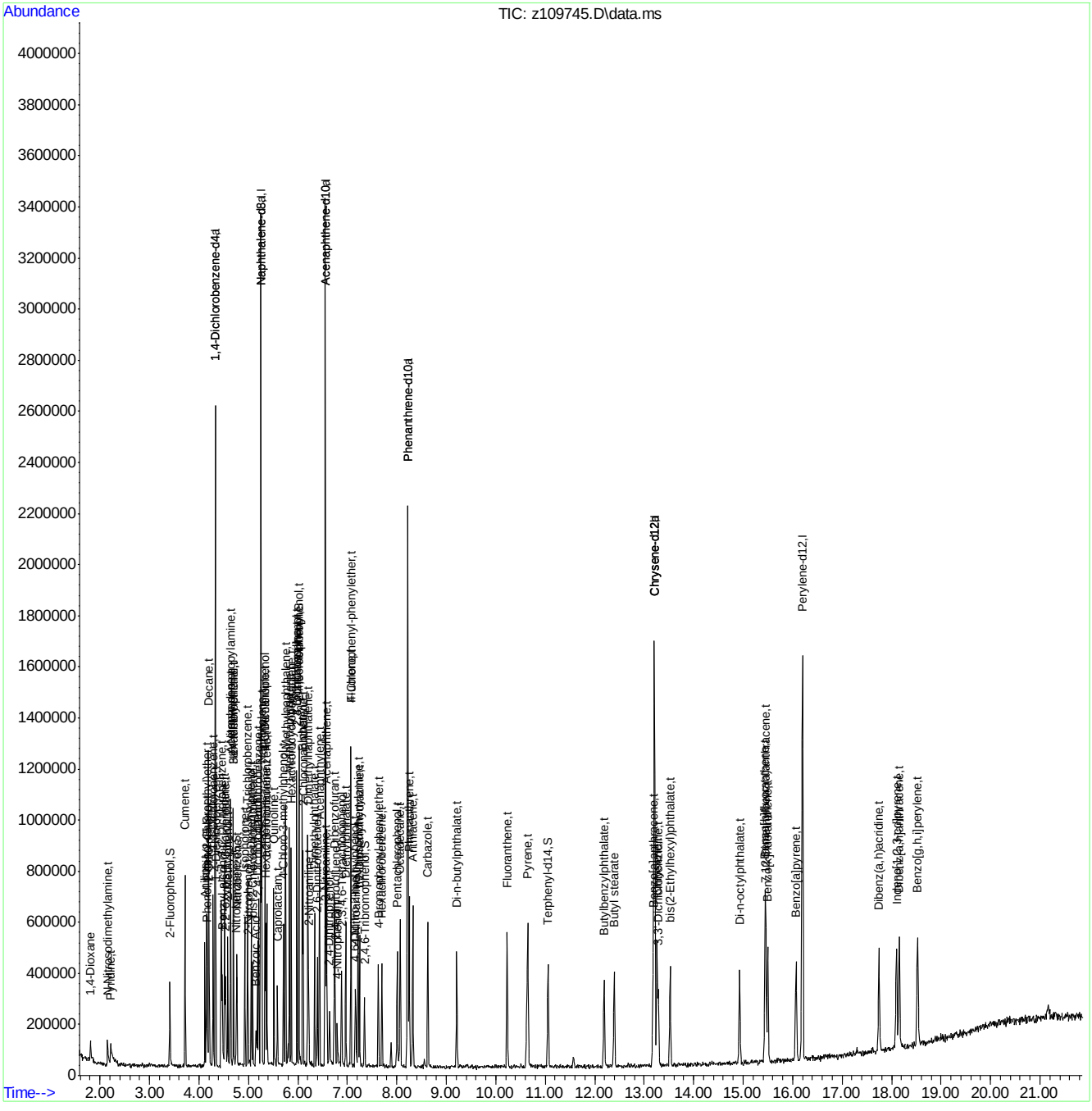
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:12:13 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	284017	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1116459	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	607895	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	975683	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	874619	40.00	ppm	0.00
92) Perylene-d12	16.198	264	881979	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	284017	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	975683	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	874619	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	607895	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1116459	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	874619	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	54296	5.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.26%	
8) Phenol-d5	4.157	99	63351	5.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.20%	
25) Nitrobenzene-d5	4.755	82	47757	5.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.60%	
51) 2-Fluorobiphenyl	6.021	172	113231	5.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.76%	
73) 2,4,6-Tribromophenol	7.346	330	15162	5.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.02%	
86) Terphenyl-d14	11.059	244	97949	5.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.70%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.806	88	22247	5.30	ppm	79
3) Pyridine	2.239	79	17967	2.41	ppm	75
4) N-Nitrosodimethylamine	2.159	74	28640	5.28	ppm #	60
6) Indene	4.520	116	99499	5.54	ppm	93
7) Cumene	3.719	105	129222	5.70	ppm	98
9) Phenol	4.162	94	65725	5.73	ppm	86
10) Aniline	4.119	93	71141	5.30	ppm	91
11) bis(2-Chloroethyl)ether	4.151	93	46362	5.90	ppm	88
12) 2-Chlorophenol	4.205	128	59546	5.56	ppm	94
13) Decane	4.194	43	55356	5.60	ppm	96
14) 1,3-Dichlorobenzene	4.285	146	66904	5.81	ppm	96
15) 1,4-Dichlorobenzene	4.344	146	63795	5.85	ppm	96
16) Benzyl alcohol	4.472	108	22539	4.56	ppm #	79
17) 1,2-Dichlorobenzene	4.461	146	59069	5.52	ppm	92
18) Acetophenone	4.637	105	69088	5.60	ppm	97
19) 2-Methylphenol	4.584	108	52289	5.84	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.536	121	14987	5.39	ppm #	70

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.696	108	54660	5.88	ppm		96
22) n-Nitroso-di-n-propyla...	4.637	70	37157	5.79	ppm		91
23) Hexachloroethane	4.696	201	19557	6.23	ppm		97
26) Nitrobenzene	4.766	77	49322	5.42	ppm		95
27) Quinoline	5.514	129	111484	5.29	ppm		96
28) Isophorone	4.926	82	86627	5.53	ppm		98
29) 2-Nitrophenol	4.995	139	29300	5.20	ppm		95
30) 2,4-Dimethylphenol	5.054	107	45403	5.10	ppm		92
31) Benzoic Acid	5.156	105	28219	4.34	ppm	#	65
32) bis(2-Chloroethoxy)met...	5.086	93	53350	5.46	ppm		96
33) 2,4-Dichlorophenol	5.188	162	42413	5.47	ppm		80
34) 2,6-Dichlorophenol	5.337	162	42574	5.62	ppm		87
35) 1,3,5-Trichlorobenzene	4.979	180	51317	5.98	ppm		90
36) 1,2,4-Trichlorobenzene	5.209	180	45130	5.57	ppm		94
37) 1,2,3-Trichlorobenzene	5.375	180	46698	6.01	ppm		89
38) Naphthalene	5.268	128	164883	5.37	ppm		97
39) 4-Chloroaniline	5.337	127	71708	5.94	ppm		94
40) 2,3-Dichloroaniline	5.978	161	53499	5.46	ppm		98
41) Caprolactam	5.578	55	20860	5.26	ppm		90
42) Hexachlorobutadiene	5.353	225	18446	5.07	ppm		90
43) 4-Chloro-3-methylphenol	5.711	107	45947	5.61	ppm	#	98
44) 2-Methylnaphthalene	5.754	141	99491	5.95	ppm		93
45) 1-Methylnaphthalene	5.823	141	101012	5.57	ppm		99
46) Dimethylnaphthalene	6.208	156	98399	5.61	ppm		94
48) Hexachlorocyclopentadiene	5.866	237	47205	11.99	ppm		97
49) 2,4,6-Trichlorophenol	5.978	196	28599	5.80	ppm		94
50) 2,4,5-Trichlorophenol	6.021	196	31017	5.73	ppm		97
52) 2-Chloronaphthalene	6.107	162	95605	5.56	ppm		98
53) Biphenyl	6.091	154	137244	5.73	ppm		98
54) 2-Nitroaniline	6.219	65	23014	4.92	ppm		88
55) Dimethylphthalate	6.342	163	108091	5.65	ppm		99
56) Acenaphthylene	6.438	152	173156	5.80	ppm		98
57) 2,6-Dinitrotoluene	6.395	165	23361	5.59	ppm		86
58) 3-Nitroaniline	6.566	138	26425	5.16	ppm	#	63
59) Acenaphthene	6.582	153	101294	5.65	ppm		94
60) 2,4-Dinitrophenol	6.641	184	14364	7.20	ppm		71
61) 4-Nitrophenol	6.801	109	12468	5.27	ppm		87
62) Dibenzofuran	6.737	168	140045	5.65	ppm		90
63) 2,4-Dinitrotoluene	6.753	165	26788	4.84	ppm		97
64) 2,3,4,6-Tetrachlorophenol	6.887	232	24451	5.72	ppm		81
65) Diethylphthalate	6.967	149	112027	5.68	ppm		96
66) Fluorene	7.074	166	118471	5.83	ppm		98
67) 4-Chlorophenyl-phenyle...	7.074	204	47232	5.61	ppm		86
68) 4-Nitroaniline	7.164	138	27334	5.40	ppm		90
70) 4,6-Dinitro-2-methylph...	7.159	198	12303	4.26	ppm		84
71) n-Nitrosodiphenylamine	7.212	169	77088	5.46	ppm		96
72) 1,2-Diphenylhydrazine	7.244	77	94137	5.60	ppm		96
74) 4-Bromophenyl-phenylether	7.629	248	28085	5.62	ppm		95
75) Hexachlorobenzene	7.699	284	31020	5.50	ppm		93
76) Pentachlorophenol	8.008	266	29034	9.67	ppm		92

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.249	178	155211	5.60	ppm	99
78) Anthracene	8.324	178	155570	5.44	ppm	93
79) Carbazole	8.623	167	148717	5.48	ppm	92
80) Di-n-butylphthalate	9.210	149	178991	5.34	ppm	97
81) Fluoranthene	10.231	202	149544	5.10	ppm	99
82) Octadecane	8.067	57	68158	5.70	ppm	95
84) Pyrene	10.653	202	168604	5.78	ppm	99
85) Butyl stearate	12.389	56	43458	5.55	ppm	90
87) Butylbenzylphthalate	12.191	149	73068	5.24	ppm	84
88) Benzo[a]anthracene	13.180	228	134944	5.29	ppm	95
89) 3,3'-Dichlorobenzidine	13.287	252	53888	5.97	ppm	77
90) Chrysene	13.255	228	134395	5.40	ppm	98
91) bis(2-Ethylhexyl)phtha...	13.527	149	108596	5.57	ppm	96
93) Di-n-octylphthalate	14.927	149	175392	5.23	ppm	100
94) Benzo[b]fluoranthene	15.445	252	151008	5.46	ppm	97
95) Benzo[k]fluoranthene	15.498	252	141212	5.73	ppm	98
96) Benzo[a]pyrene	16.070	252	132325	5.36	ppm	94
97) Indeno[1,2,3-cd]pyrene	18.100	276	136824	5.59	ppm	93
98) Dibenz(a,h)acridine	17.742	279	118670	5.03	ppm	89
99) Dibenz[a,h]anthracene	18.153	278	144292	5.59	ppm	97
100) 7,12-Dimethylbenz(a)an...	15.456	256	68000	5.38	ppm	94
101) Benzo[g,h,i]perylene	18.527	276	144367	5.45	ppm	94

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

7.6.105

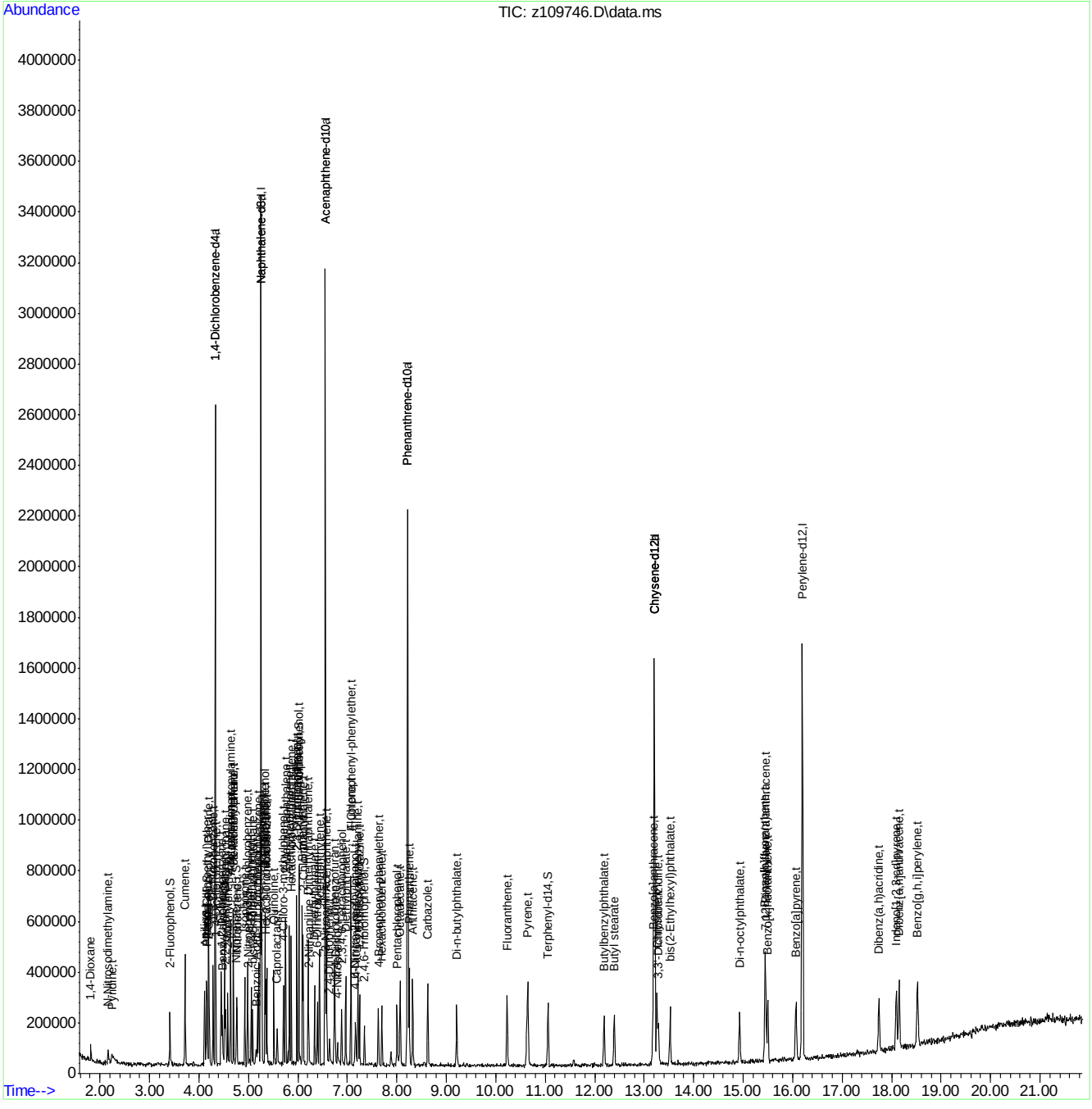
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:15:14 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	297751	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1125663	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	606870	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	963905	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	875954	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	873471	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.328	152	297751	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	963905	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	875954	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.555	164	606870	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1125663	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	875954	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.414	112	10312	0.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.88%	
8) Phenol-d5	4.157	99	12742	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	
25) Nitrobenzene-d5	4.755	82	10558	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
51) 2-Fluorobiphenyl	6.021	172	22896	1.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.20%	
73) 2,4,6-Tribromophenol	7.346	330	3813	1.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.48%	
86) Terphenyl-d14	11.054	244	19910	0.95	ppm	-0.01
Spiked Amount 50.000			Recovery	=	1.90%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.827	88	4004	0.72	ppm	# 65
4) N-Nitrosodimethylamine	2.191	74	4714	0.61	ppm	# 52
6) Indene	4.520	116	21359	0.98	ppm	100
7) Cumene	3.719	105	26419	1.04	ppm	98
9) Phenol	4.167	94	13297	0.99	ppm	91
10) Aniline	4.125	93	14916	0.93	ppm	95
11) bis(2-Chloroethyl)ether	4.157	93	9531	1.04	ppm	82
12) 2-Chlorophenol	4.210	128	13577	1.02	ppm	83
13) Decane	4.194	43	13480	1.15	ppm	83
14) 1,3-Dichlorobenzene	4.285	146	13195	0.94	ppm	# 62
15) 1,4-Dichlorobenzene	4.338	146	13072	1.12	ppm	86
16) Benzyl alcohol	4.477	108	5415	1.02	ppm	# 66
17) 1,2-Dichlorobenzene	4.461	146	13506	1.05	ppm	95
18) Acetophenone	4.643	105	12986	0.86	ppm	86
19) 2-Methylphenol	4.584	108	10640	1.06	ppm	71
20) 2,2'-oxybis(1-Chloropr...	4.541	121	3216	0.86	ppm	# 74
21) 3&4-Methylphenol	4.696	108	11147	1.03	ppm	95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.638	70	7843	0.98	ppm		84
23) Hexachloroethane	4.696	201	3327	0.94	ppm		97
26) Nitrobenzene	4.766	77	10741	0.99	ppm		99
27) Quinoline	5.519	129	24206	1.04	ppm		94
28) Isophorone	4.926	82	16753	0.98	ppm		89
29) 2-Nitrophenol	4.995	139	6325	1.03	ppm		92
30) 2,4-Dimethylphenol	5.060	107	9134	0.93	ppm		85
32) bis(2-Chloroethoxy)met...	5.086	93	12237	1.18	ppm		90
33) 2,4-Dichlorophenol	5.193	162	7721	0.96	ppm		86
34) 2,6-Dichlorophenol	5.337	162	8030	1.01	ppm		64
35) 1,3,5-Trichlorobenzene	4.979	180	8732	0.92	ppm	#	63
36) 1,2,4-Trichlorobenzene	5.209	180	8994	0.99	ppm		80
37) 1,2,3-Trichlorobenzene	5.375	180	9070	1.07	ppm		96
38) Naphthalene	5.268	128	37207	1.10	ppm		75
39) 4-Chloroaniline	5.337	127	15213	1.09	ppm		89
40) 2,3-Dichloroaniline	5.984	161	11685	1.04	ppm		84
41) Caprolactam	5.594	55	3972	0.84	ppm	#	62
42) Hexachlorobutadiene	5.353	225	3211	0.78	ppm	#	57
43) 4-Chloro-3-methylphenol	5.711	107	8846	1.03	ppm		84
44) 2-Methylnaphthalene	5.754	141	17834	1.00	ppm	#	56
45) 1-Methylnaphthalene	5.823	141	23616	1.27	ppm		85
46) Dimethylnaphthalene	6.208	156	19372	0.99	ppm		80
48) Hexachlorocyclopentadiene	5.866	237	6815	1.81	ppm		99
49) 2,4,6-Trichlorophenol	5.984	196	4953	0.95	ppm		93
50) 2,4,5-Trichlorophenol	6.027	196	5917	0.92	ppm		93
52) 2-Chloronaphthalene	6.107	162	20330	0.99	ppm		87
53) Biphenyl	6.091	154	28688	1.07	ppm		96
54) 2-Nitroaniline	6.224	65	4071	0.73	ppm		94
55) Dimethylphthalate	6.342	163	20502	0.96	ppm		76
56) Acenaphthylene	6.433	152	33365	1.04	ppm		84
57) 2,6-Dinitrotoluene	6.395	165	4690	1.24	ppm		76
58) 3-Nitroaniline	6.571	138	5464	1.01	ppm		67
59) Acenaphthene	6.582	153	20219	1.02	ppm		92
61) 4-Nitrophenol	6.812	109	2657	0.99	ppm	#	73
62) Dibenzofuran	6.737	168	28678	1.05	ppm		94
63) 2,4-Dinitrotoluene	6.753	165	4721	0.71	ppm		66
64) 2,3,4,6-Tetrachlorophenol	6.887	232	4883	1.03	ppm		82
65) Diethylphthalate	6.967	149	24202	1.09	ppm		91
66) Fluorene	7.074	166	23953	1.06	ppm		87
67) 4-Chlorophenyl-phenyle...	7.074	204	9161	0.94	ppm		76
68) 4-Nitroaniline	7.170	138	4534	0.89	ppm		88
71) n-Nitrosodiphenylamine	7.212	169	13719	0.81	ppm		83
72) 1,2-Diphenylhydrazine	7.245	77	18604	1.02	ppm		75
74) 4-Bromophenyl-phenylether	7.629	248	5793	1.07	ppm	#	72
75) Hexachlorobenzene	7.699	284	7078	1.23	ppm		67
76) Pentachlorophenol	8.014	266	5692	2.11	ppm		88
77) Phenanthrene	8.249	178	31609	1.07	ppm		97
78) Anthracene	8.318	178	30520	0.96	ppm		99
79) Carbazole	8.623	167	27901	0.92	ppm		72
80) Di-n-butylphthalate	9.210	149	33667	0.91	ppm		95

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
81)	Fluoranthene	10.226	202	36103	1.17	ppm	98
82)	Octadecane	8.067	57	12845	0.92	ppm	90
84)	Pyrene	10.653	202	31822	0.94	ppm	88
85)	Butyl stearate	12.394	56	6899	0.78	ppm	78
87)	Butylbenzylphthalate	12.181	149	13751	0.93	ppm	99
88)	Benzo[a]anthracene	13.180	228	28116	1.00	ppm	74
89)	3,3'-Dichlorobenzidine	13.292	252	9141	0.92	ppm	88
90)	Chrysene	13.255	228	27478	0.92	ppm	84
91)	bis(2-Ethylhexyl)phtha...	13.527	149	18855	0.89	ppm	91
93)	Di-n-octylphthalate	14.927	149	30031	0.86	ppm	85
94)	Benzo[b]fluoranthene	15.445	252	32996	1.13	ppm	71
95)	Benzo[k]fluoranthene	15.498	252	26609	0.98	ppm	67
96)	Benzo[a]pyrene	16.070	252	27746	1.06	ppm	69
97)	Indeno[1,2,3-cd]pyrene	18.095	276	27336	1.04	ppm	65
98)	Dibenz(a,h)acridine	17.747	279	27886	1.06	ppm	88
99)	Dibenz[a,h]anthracene	18.159	278	27334	0.95	ppm	95
100)	7,12-Dimethylbenz(a)an...	15.450	256	15853	1.16	ppm	83
101)	Benzo[g,h,i]perylene	18.527	276	32946	1.13	ppm	74

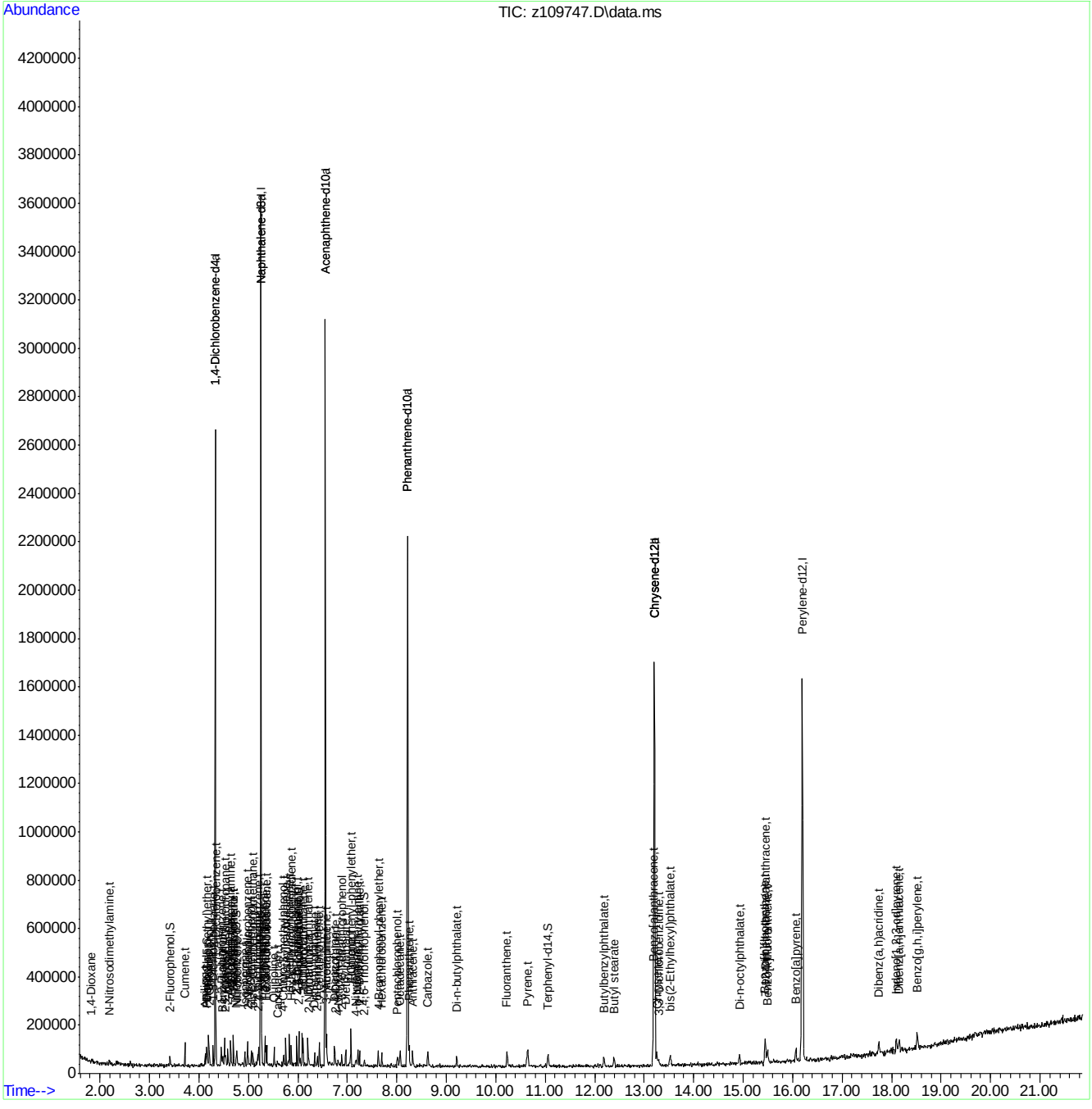
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 08:44:46 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	259405	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1036556	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	583842	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	914506	40.00	ppm	0.00
83) Chrysene-d12	13.212	240	832316	40.00	ppm	0.00
92) Perylene-d12	16.198	264	833372	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	259405	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	914506	40.00	ppm	0.00
108) Chrysene-d12a	13.212	240	832316	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	583842	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1036556	40.00	ppm	0.00
114) Chrysene-d12b	13.212	240	832316	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.404	112	442858	49.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.72%	
8) Phenol-d5	4.157	99	519365	49.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.82%	
25) Nitrobenzene-d5	4.755	82	394934	46.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.68%	
51) 2-Fluorobiphenyl	6.021	172	847432	44.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	89.36%	
73) 2,4,6-Tribromophenol	7.351	330	130600	46.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.00%	
86) Terphenyl-d14	11.064	244	831872	47.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	94.48%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.790	88	186362	48.19	ppm	98
3) Pyridine	2.159	79	291347	47.74	ppm	80
4) N-Nitrosodimethylamine	2.121	74	269489	53.95	ppm	85
6) Indene	4.520	116	763287	45.81	ppm	90
7) Cumene	3.713	105	1020676	48.33	ppm	97
9) Phenol	4.162	94	518347	48.46	ppm	65
10) Aniline	4.119	93	577881	46.76	ppm	92
11) bis(2-Chloroethyl)ether	4.151	93	340911	46.29	ppm	96
12) 2-Chlorophenol	4.205	128	449814	45.23	ppm	97
13) Decane	4.194	43	405555	44.13	ppm	97
14) 1,3-Dichlorobenzene	4.285	146	507118	47.10	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	487715	47.84	ppm	91
16) Benzyl alcohol	4.472	108	238488	53.50	ppm #	80
17) 1,2-Dichlorobenzene	4.456	146	459596	46.35	ppm	97
18) Acetophenone	4.638	105	562912	49.12	ppm	100
19) 2-Methylphenol	4.584	108	400551	47.83	ppm	92
20) 2,2'-oxybis(1-Chloropr...	4.536	121	122301	47.66	ppm #	81

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.696	108	429004	49.29	ppm		93
22) n-Nitroso-di-n-propyla...	4.643	70	268460	44.79	ppm		92
23) Hexachloroethane	4.696	201	142933	48.15	ppm		99
26) Nitrobenzene	4.766	77	380772	44.55	ppm		99
27) Quinoline	5.519	129	938814	47.56	ppm		95
28) Isophorone	4.926	82	704071	47.69	ppm		96
29) 2-Nitrophenol	4.995	139	253181	48.10	ppm		94
30) 2,4-Dimethylphenol	5.060	107	392849	47.35	ppm		89
31) Benzoic Acid	5.188	105	310550	52.63	ppm	#	59
32) bis(2-Chloroethoxy)met...	5.092	93	422405	45.92	ppm		97
33) 2,4-Dichlorophenol	5.188	162	350495	48.06	ppm		94
34) 2,6-Dichlorophenol	5.337	162	335973	46.95	ppm		88
35) 1,3,5-Trichlorobenzene	4.979	180	377990	46.15	ppm		82
36) 1,2,4-Trichlorobenzene	5.215	180	347973	45.51	ppm		95
37) 1,2,3-Trichlorobenzene	5.375	180	342697	46.16	ppm		95
38) Naphthalene	5.268	128	1299196	45.09	ppm		98
39) 4-Chloroaniline	5.337	127	501550	43.56	ppm		93
40) 2,3-Dichloroaniline	5.984	161	417289	45.26	ppm		95
41) Caprolactam	5.604	55	177933	47.97	ppm		89
42) Hexachlorobutadiene	5.353	225	159458	47.14	ppm		93
43) 4-Chloro-3-methylphenol	5.717	107	368999	47.66	ppm		94
44) 2-Methylnaphthalene	5.759	141	758671	47.60	ppm		96
45) 1-Methylnaphthalene	5.829	141	791172	46.21	ppm		96
46) Dimethylnaphthalene	6.208	156	760961	45.96	ppm		90
48) Hexachlorocyclopentadiene	5.866	237	391861	100.79	ppm		95
49) 2,4,6-Trichlorophenol	5.984	196	232819	48.05	ppm		93
50) 2,4,5-Trichlorophenol	6.027	196	230381	43.38	ppm		92
52) 2-Chloronaphthalene	6.107	162	745049	44.40	ppm		96
53) Biphenyl	6.091	154	1054336	44.91	ppm		100
54) 2-Nitroaniline	6.224	65	215988	48.21	ppm		85
55) Dimethylphthalate	6.342	163	877405	46.87	ppm		100
56) Acenaphthylene	6.438	152	1360087	46.37	ppm		98
57) 2,6-Dinitrotoluene	6.401	165	199769	48.94	ppm		98
58) 3-Nitroaniline	6.571	138	239044	48.39	ppm		75
59) Acenaphthene	6.582	153	819091	46.73	ppm		96
60) 2,4-Dinitrophenol	6.641	184	219635	120.31	ppm		94
61) 4-Nitrophenol	6.796	109	104341	45.54	ppm		84
62) Dibenzofuran	6.742	168	1121810	46.29	ppm		96
63) 2,4-Dinitrotoluene	6.753	165	265589	50.17	ppm		91
64) 2,3,4,6-Tetrachlorophenol	6.887	232	192156	45.87	ppm		88
65) Diethylphthalate	6.972	149	871381	45.16	ppm		96
66) Fluorene	7.074	166	909492	45.50	ppm		97
67) 4-Chlorophenyl-phenyle...	7.074	204	380047	46.19	ppm		90
68) 4-Nitroaniline	7.180	138	247482	50.30	ppm		95
70) 4,6-Dinitro-2-methylph...	7.164	198	159486	60.36	ppm		72
71) n-Nitrosodiphenylamine	7.218	169	628575	46.91	ppm		96
72) 1,2-Diphenylhydrazine	7.250	77	752188	46.96	ppm		96
74) 4-Bromophenyl-phenylether	7.629	248	228349	47.87	ppm		89
75) Hexachlorobenzene	7.704	284	251275	46.86	ppm		91
76) Pentachlorophenol	8.008	266	298466	106.55	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.254	178	1222719	46.29	ppm	96
78)	Anthracene	8.329	178	1284080	47.30	ppm	94
79)	Carbazole	8.628	167	1261391	48.93	ppm	93
80)	Di-n-butylphthalate	9.216	149	1548820	48.80	ppm	99
81)	Fluoranthene	10.236	202	1286782	46.71	ppm	96
82)	Octadecane	8.067	57	536072	46.87	ppm	93
84)	Pyrene	10.658	202	1293158	45.56	ppm	94
85)	Butyl stearate	12.400	56	386003	51.00	ppm	96
87)	Butylbenzylphthalate	12.197	149	678128	50.72	ppm	92
88)	Benzo[a]anthracene	13.190	228	1162286	47.52	ppm	99
89)	3,3'-Dichlorobenzidine	13.292	252	422804	47.92	ppm	81
90)	Chrysene	13.271	228	1107093	46.21	ppm	99
91)	bis(2-Ethylhexyl)phtha...	13.527	149	943027	50.03	ppm	91
93)	Di-n-octylphthalate	14.932	149	1684295	52.82	ppm	96
94)	Benzo[b]fluoranthene	15.456	252	1256978	47.48	ppm	97
95)	Benzo[k]fluoranthene	15.520	252	1124283	47.28	ppm	96
96)	Benzo[a]pyrene	16.086	252	1123567	47.71	ppm	97
97)	Indeno[1,2,3-cd]pyrene	18.121	276	1134152	48.24	ppm	94
98)	Dibenz(a,h)acridine	17.758	279	1051782	47.11	ppm	95
99)	Dibenz[a,h]anthracene	18.175	278	1174843	47.37	ppm	96
100)	7,12-Dimethylbenz(a)an...	15.472	256	561714	46.52	ppm	91
101)	Benzo[g,h,i]perylene	18.549	276	1188606	46.88	ppm	96

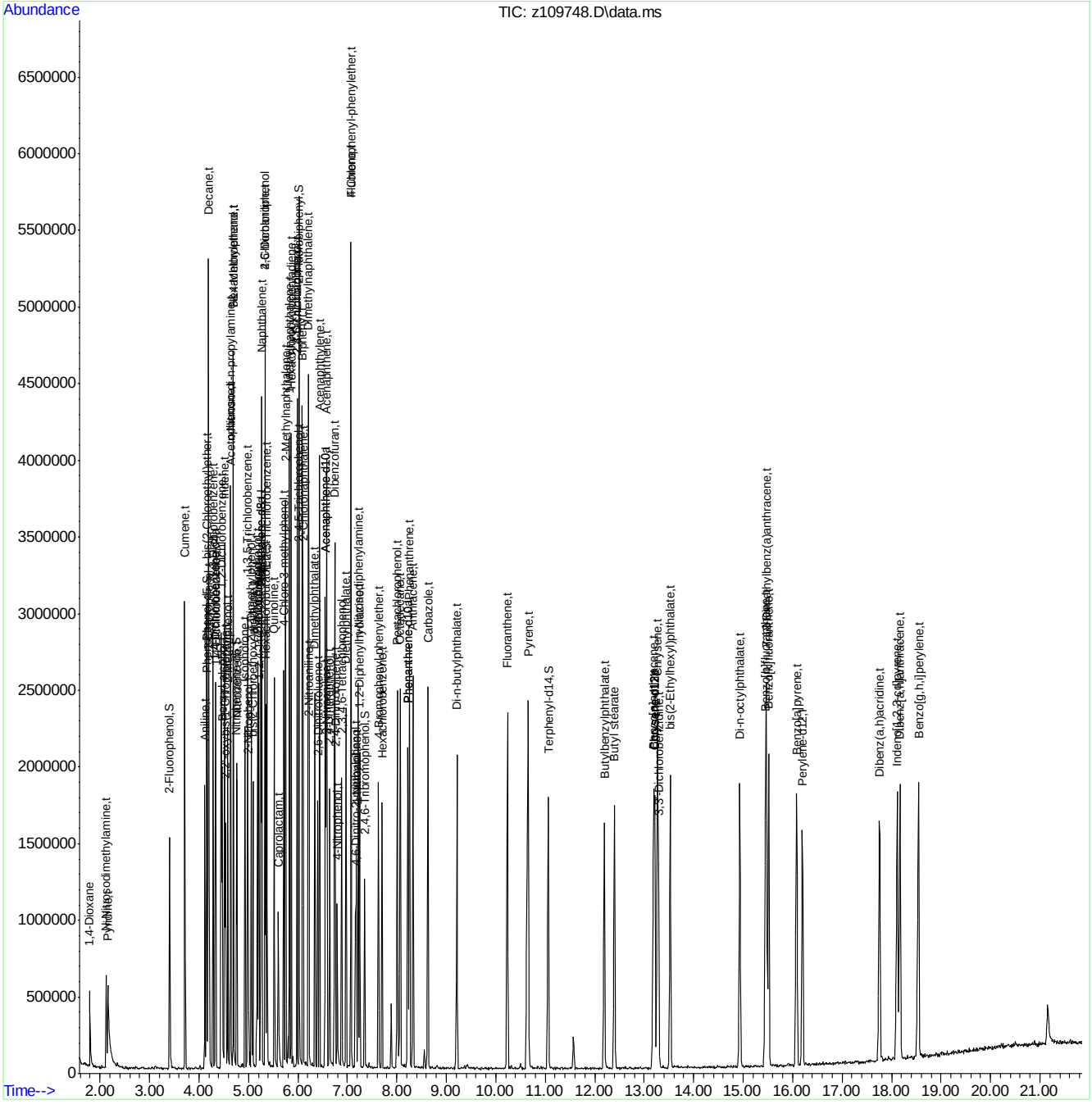
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:25:43 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109750.D
Acq On : 14 Apr 2016 1:54 am
Operator : sarad
Sample : ic5486-100
Misc : op92825,ez5486
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 09:58:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	292127	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1202462	40.00	ppm	0.00
47) Acenaphthene-d10	6.556	164	572164	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	966486	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	914631	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	917348	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	292127	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	966486	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	914631	40.00	ppm	0.00
110) Acenaphthene-d10a	6.556	164	572164	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1202462	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	914631	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.130	57	717247	99.92	ppm	0.00
Spiked Amount 50.000			Recovery = 199.84%			
106) o-terphenyl	8.831	230	1116394	99.92	ppm	0.00
Spiked Amount 50.000			Recovery = 199.84%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	551747	100.28	ppm	100
107) Atrazine	7.896	215	217894	100.01	ppm	100
109) Benzidine	10.632	184	828919	100.76	ppm	100
111) 1,2,4,5-Tetrachloroben...	5.872	216	649070	100.00	ppm	100
113) Hydroquinone	5.642	110	930028	104.50	ppm	100

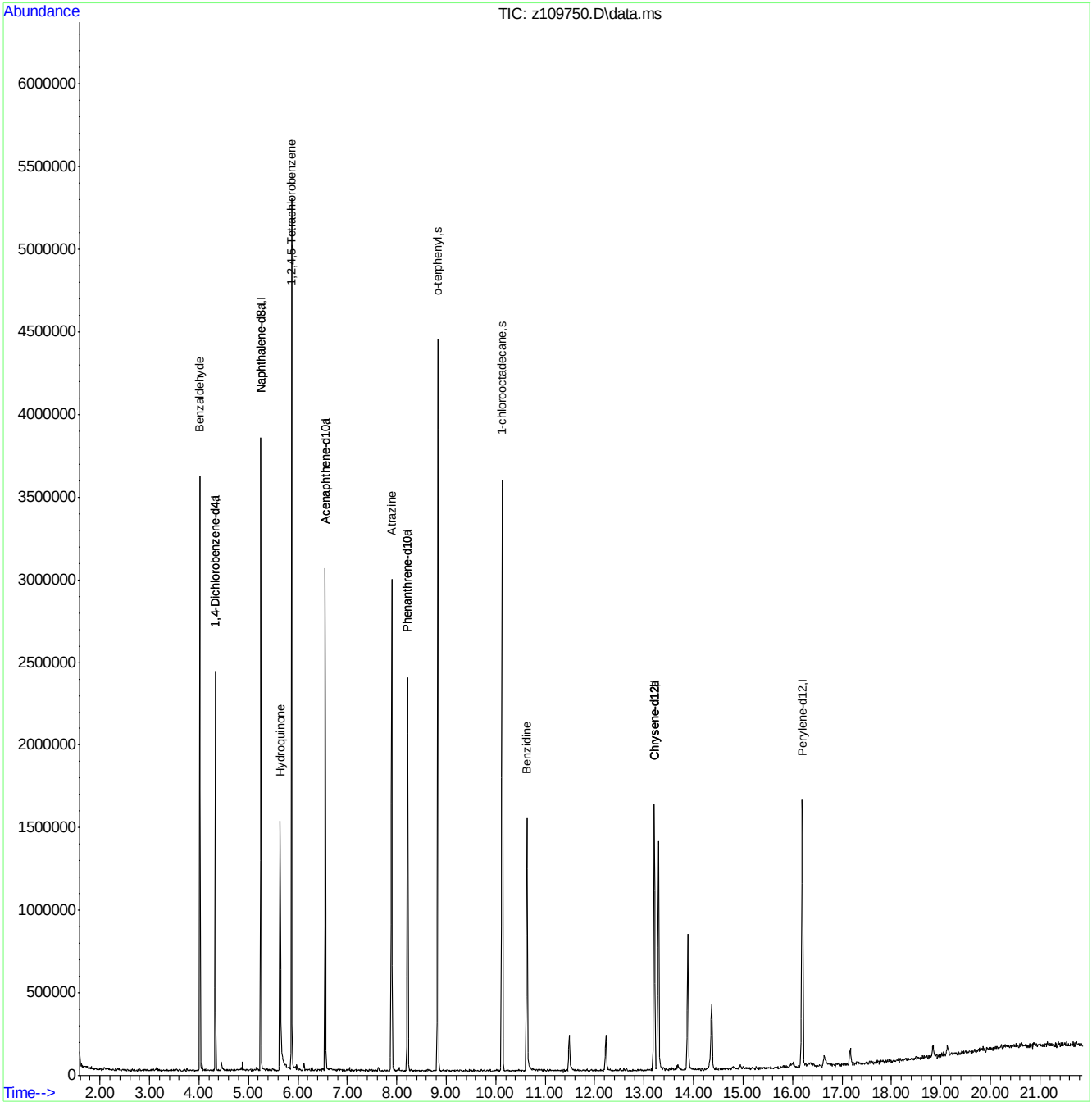
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109750.D
Acq On : 14 Apr 2016 1:54 am
Operator : sarad
Sample : ic5486-100
Misc : op92825,ez5486
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 09:58:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:58:27 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109751.D
Acq On : 14 Apr 2016 2:25 am
Operator : sarad
Sample : ic5486-80
Misc : op92825,ez5486
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 09:59:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

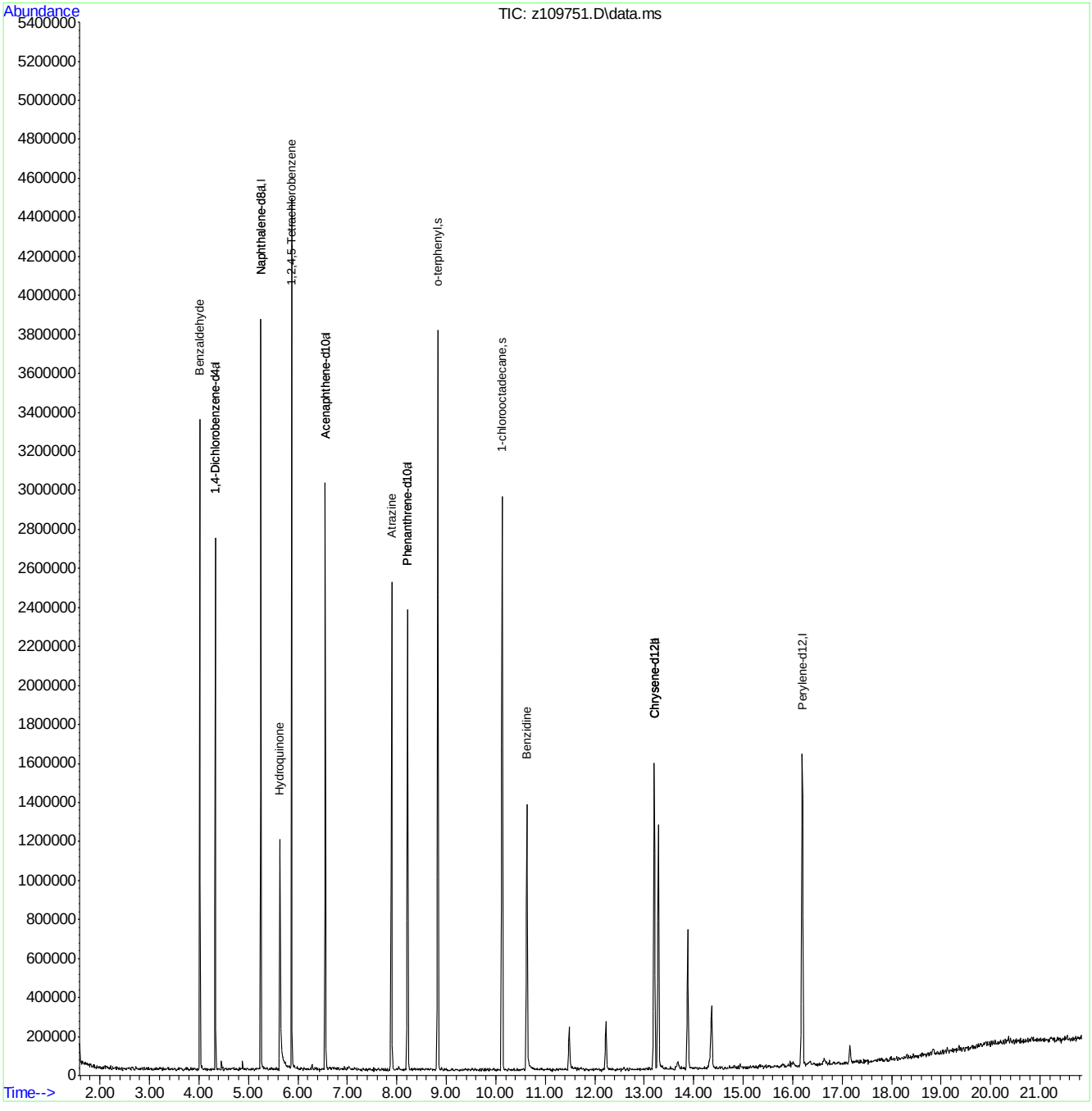
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	301730	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1195479	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	574041	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	972804	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	915412	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	929031	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	301730	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	972804	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	915412	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	574041	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1195479	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	915412	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.129	57	578872	80.12	ppm	0.00
Spiked Amount 50.000			Recovery = 160.24%			
106) o-terphenyl	8.831	230	927608	82.48	ppm	0.00
Spiked Amount 50.000			Recovery = 164.96%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	555248	97.70	ppm	96
107) Atrazine	7.896	215	171883	78.38	ppm	98
109) Benzidine	10.631	184	750698	91.18	ppm	96
111) 1,2,4,5-Tetrachloroben...	5.871	216	528921	81.22	ppm	97
113) Hydroquinone	5.636	110	686435	77.58	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109751.D
Acq On : 14 Apr 2016 2:25 am
Operator : sarad
Sample : ic5486-80
Misc : op92825,ez5486
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 09:59:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109752.D
Acq On : 14 Apr 2016 2:56 am
Operator : sarad
Sample : ic5486-25
Misc : op92825,ez5486
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 10:02:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

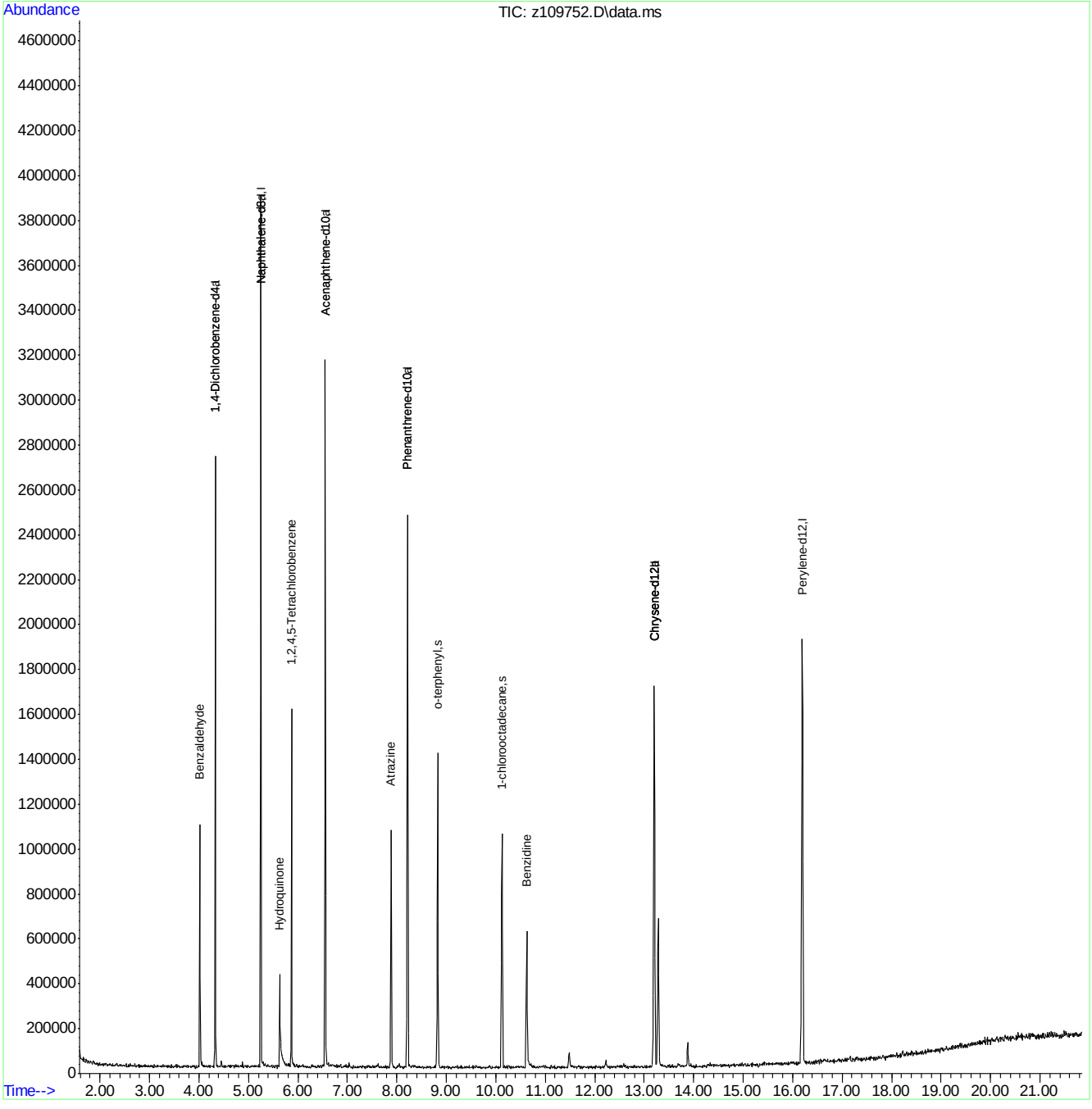
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	300514	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1217462	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	584904	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1037494	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	976728	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1029686	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	300514	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1037494	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	976728	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	584904	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1217462	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	976728	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.124	57	200835	26.06	ppm	0.00
Spiked Amount 50.000			Recovery = 52.12%			
106) o-terphenyl	8.826	230	327305	27.29	ppm	0.00
Spiked Amount 50.000			Recovery = 54.58%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	200118	35.36	ppm	95
107) Atrazine	7.886	215	61261	26.19	ppm	97
109) Benzidine	10.626	184	346987	39.50	ppm	95
111) 1,2,4,5-Tetrachloroben...	5.872	216	187678	28.29	ppm	95
113) Hydroquinone	5.631	110	217914	24.18	ppm	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109752.D
Acq On : 14 Apr 2016 2:56 am
Operator : sarad
Sample : ic5486-25
Misc : op92825,ez5486
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 10:02:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:02:48 2016 RTE

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109753.D
Acq On : 14 Apr 2016 3:27 am
Operator : sarad
Sample : ic5486-10
Misc : op92825,ez5486
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 10:03:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	311373	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1244793	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	608850	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1079818	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	1012103	40.00	ppm	0.00
92) Perylene-d12	16.198	264	1065156	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	311373	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1079818	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	1012103	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	608850	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1244793	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	1012103	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.124	57	81354	10.14	ppm	0.00
Spiked Amount 50.000			Recovery = 20.28%			
106) o-terphenyl	8.826	230	131231	10.51	ppm	0.00
Spiked Amount 50.000			Recovery = 21.02%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	84990	14.49	ppm	96
107) Atrazine	7.880	215	26090	10.72	ppm #	82
109) Benzidine	10.626	184	148724	16.34	ppm	99
111) 1,2,4,5-Tetrachloroben...	5.871	216	72365	10.48	ppm	98
113) Hydroquinone	5.636	110	63097	6.85	ppm	91

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

7.6.111

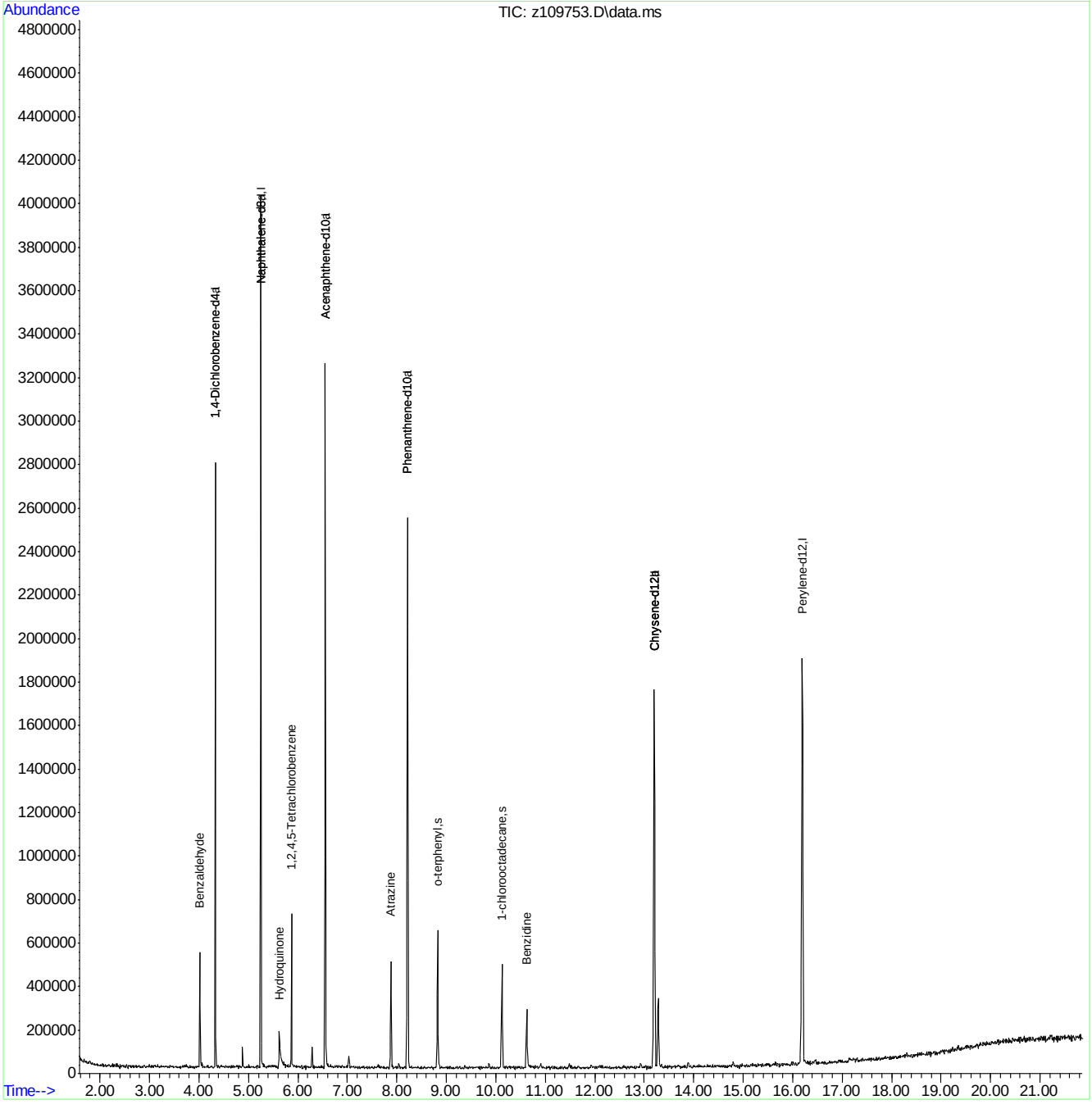
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109753.D
Acq On : 14 Apr 2016 3:27 am
Operator : sarad
Sample : ic5486-10
Misc : op92825,ez5486
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 10:03:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:03:16 2016 RTE Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:11:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	309074	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1221504	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	593546	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1054647	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	1021533	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1036245	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	309074	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1054647	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	1021533	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	593546	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1221504	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	1021533	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.124	57	43727	5.58	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.16%	
106) o-terphenyl	8.826	230	77289	6.34	ppm	0.00
Spiked Amount 50.000			Recovery	=	12.68%	
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	44734	7.68	ppm	89
107) Atrazine	7.880	215	15201	6.39	ppm	92
109) Benzidine	10.626	184	86521	9.42	ppm	98
111) 1,2,4,5-Tetrachloroben...	5.872	216	42787	6.35	ppm	95
113) Hydroquinone	5.647	110	42812m	4.74	ppm	

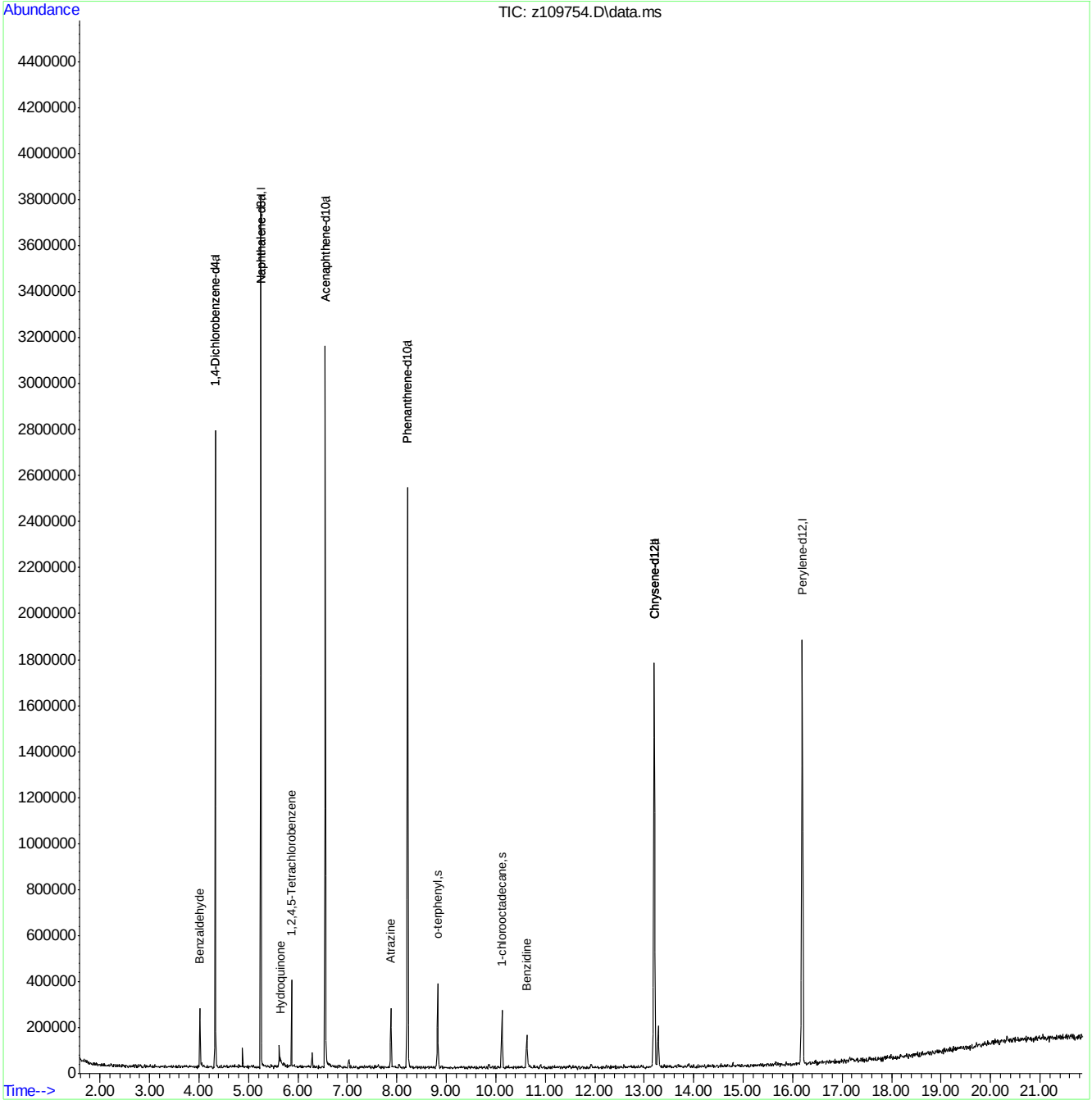
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.112
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:11:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:11:22 2016 RTE

Page: 2

Manual Integration Approval Summary

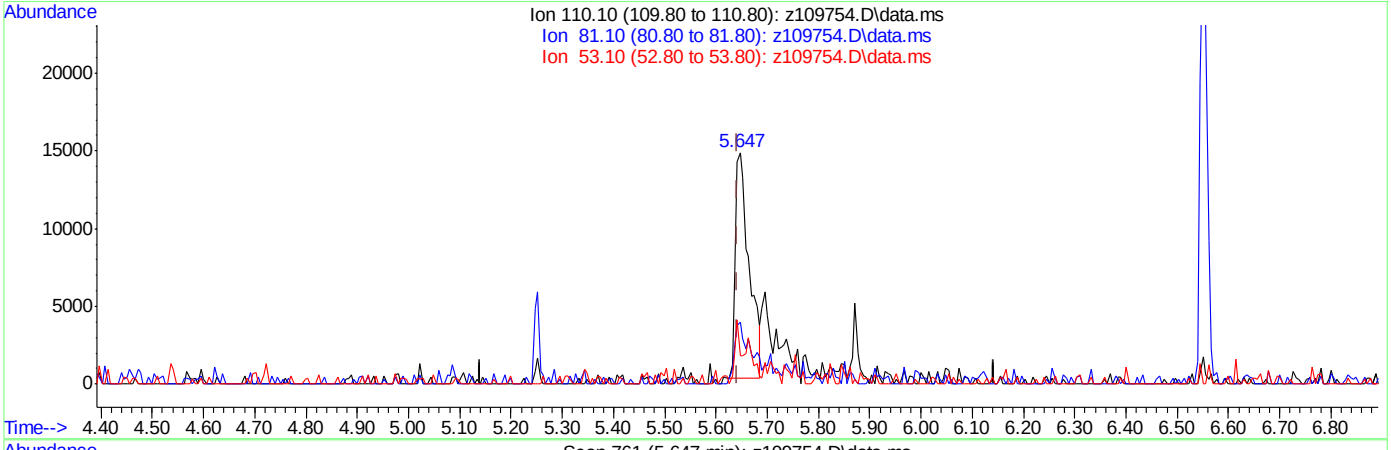
Sample Number:	EZ5486-IC5486	**Method:**	SW846 8270D
Lab FileID:	Z109754.D	**Analyst approved:**	04/14/16 12:00 Arielle Cocozza
Injection Time:	04/14/16 03:58	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

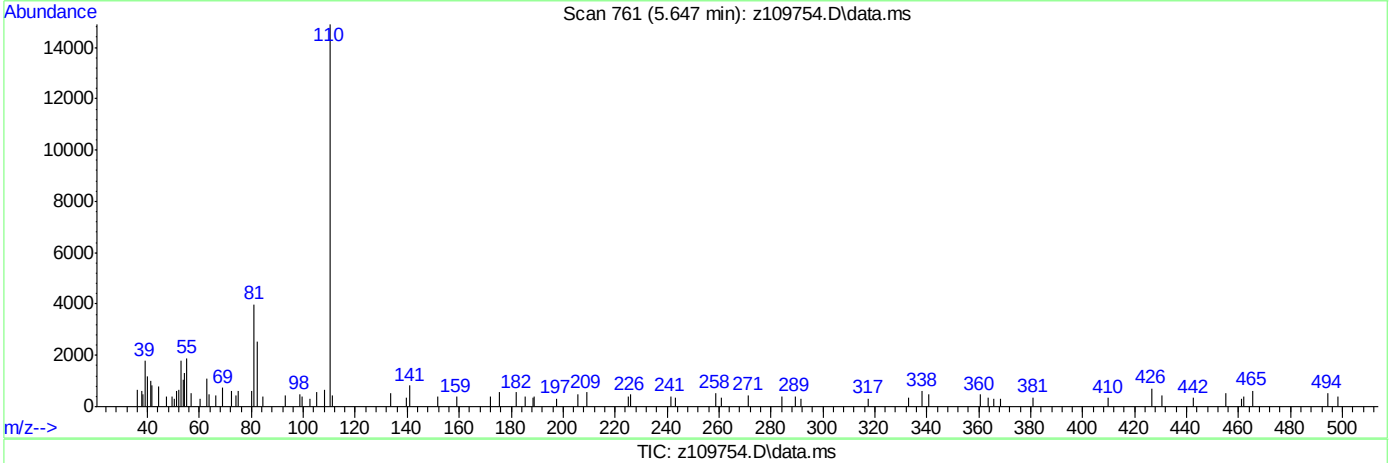
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hydroquinone	123-31-9		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:10:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109754.D\data.ms

(113) Hydroquinone

5.647min (+0.005) 2.98ppm

response 26917

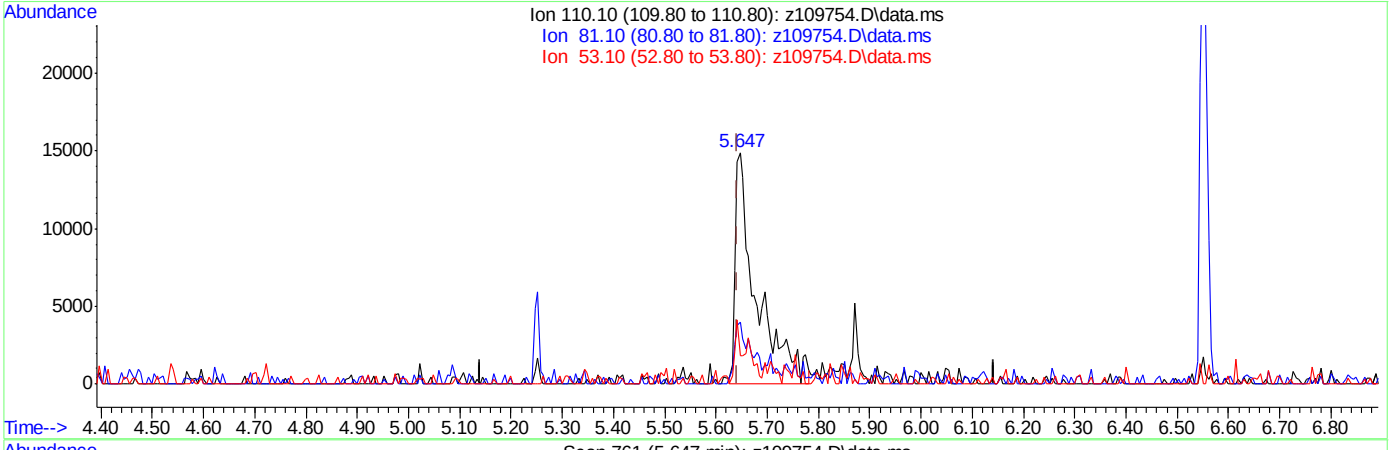
Ion	Exp%	Act%
110.10	100	100
81.10	25.30	22.81
53.10	19.60	20.09
0.00	0.00	0.00

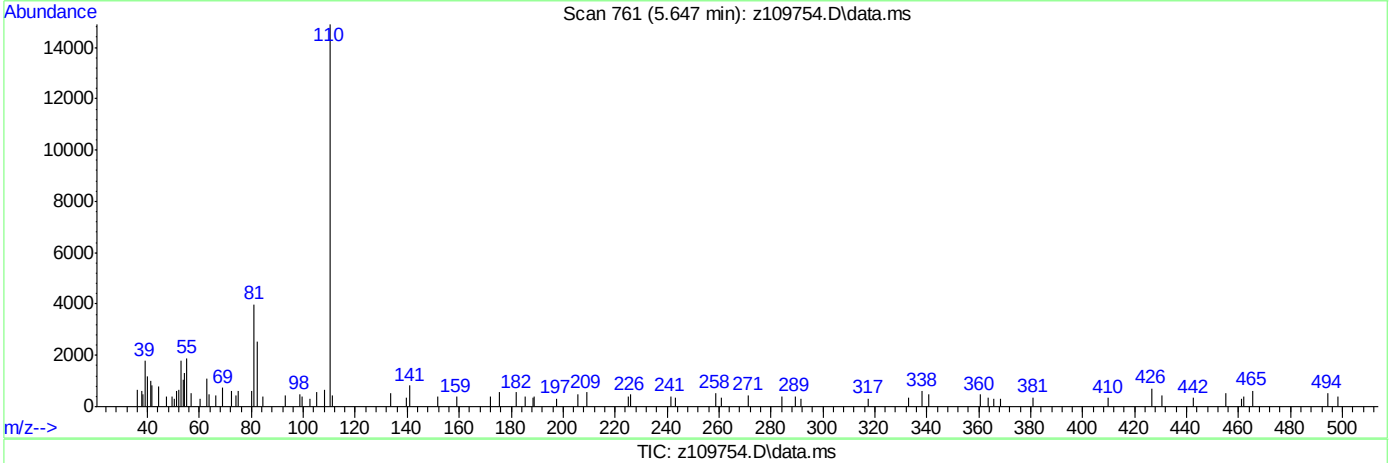
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:10:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109754.D\data.ms

(113) Hydroquinone

5.647min (+0.005) 4.74ppm m

response 42812

Ion	Exp%	Act%
110.10	100	100
81.10	25.30	26.72
53.10	19.60	12.07
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	350607	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1362066	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	655569	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1183994	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	1116785	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1154884	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	350607	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1183994	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	1116785	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	655569	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1362066	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	1116785	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.119	57	19368	2.20	ppm	-0.01
Spiked Amount 50.000			Recovery	=	4.40%	
106) o-terphenyl	8.820	230	32826	2.40	ppm	-0.01
Spiked Amount 50.000			Recovery	=	4.80%	
Target Compounds						Qvalue
103) Benzaldehyde	4.023	105	18342	2.78	ppm	93
107) Atrazine	7.875	215	6144	2.30	ppm #	81
109) Benzidine	10.632	184	33598	3.34	ppm	92
111) 1,2,4,5-Tetrachloroben...	5.872	216	18137	2.44	ppm	93
113) Hydroquinone	5.663	110	11808m	1.17	ppm	

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

7.6.113

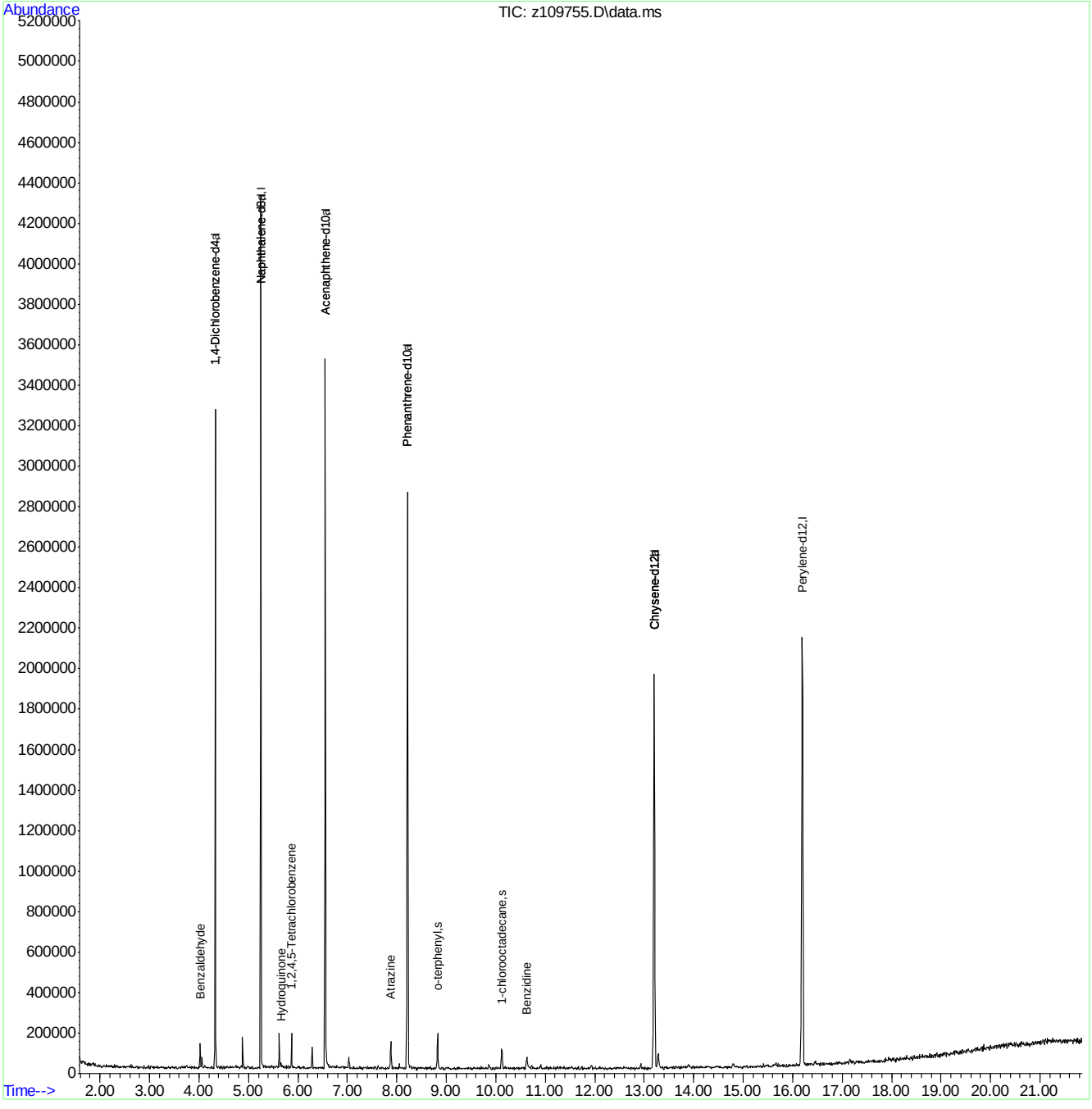
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:12:11 2016 RTE

SGS ACCUTEST JC19914

Manual Integration Approval Summary

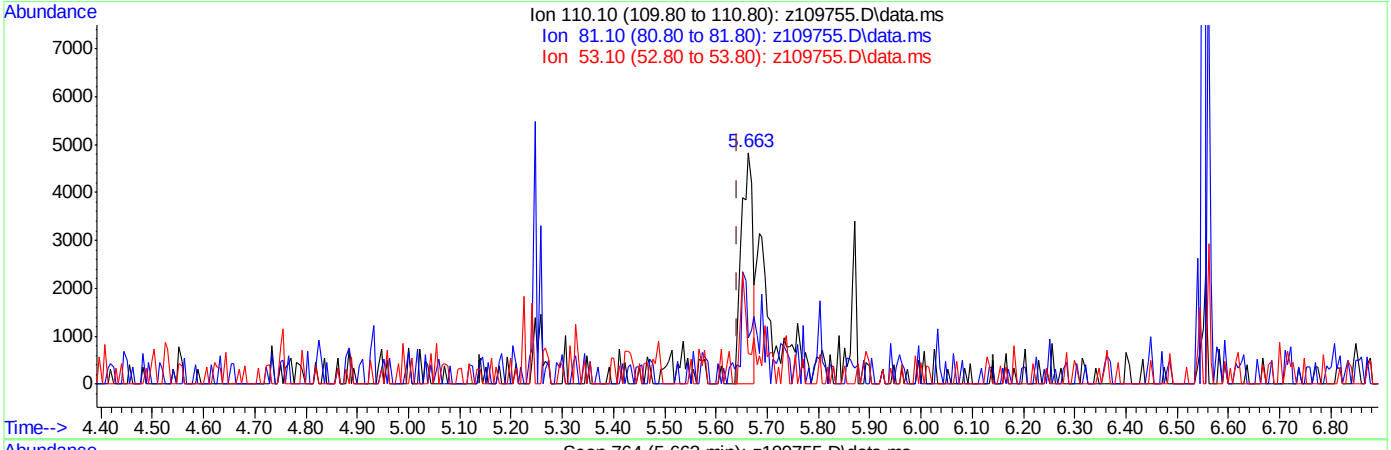
Sample Number:	EZ5486-IC5486	**Method:**	SW846 8270D
Lab FileID:	Z109755.D	**Analyst approved:**	04/14/16 12:00 Arielle Cocozza
Injection Time:	04/14/16 04:29	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

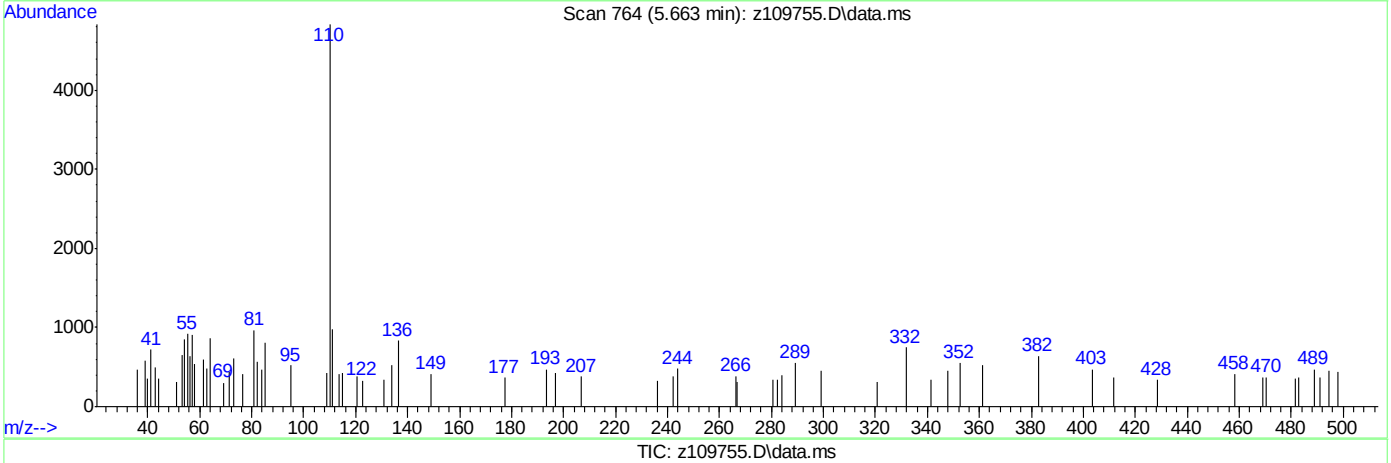
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hydroquinone	123-31-9		5.66	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109755.D\data.ms

(113) Hydroquinone

5.663min (+0.021) 0.72ppm

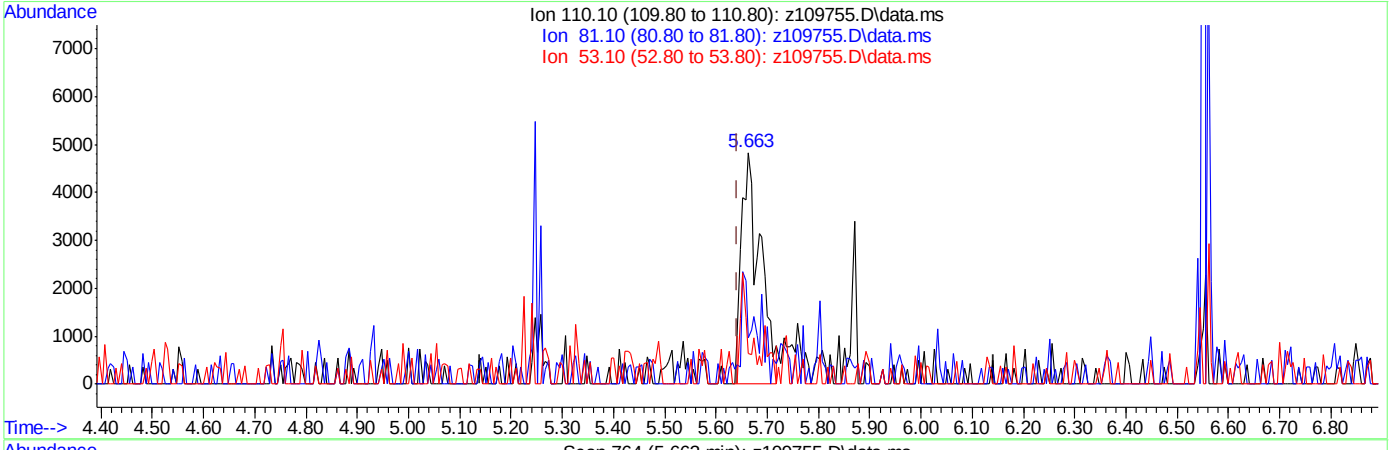
response 7265

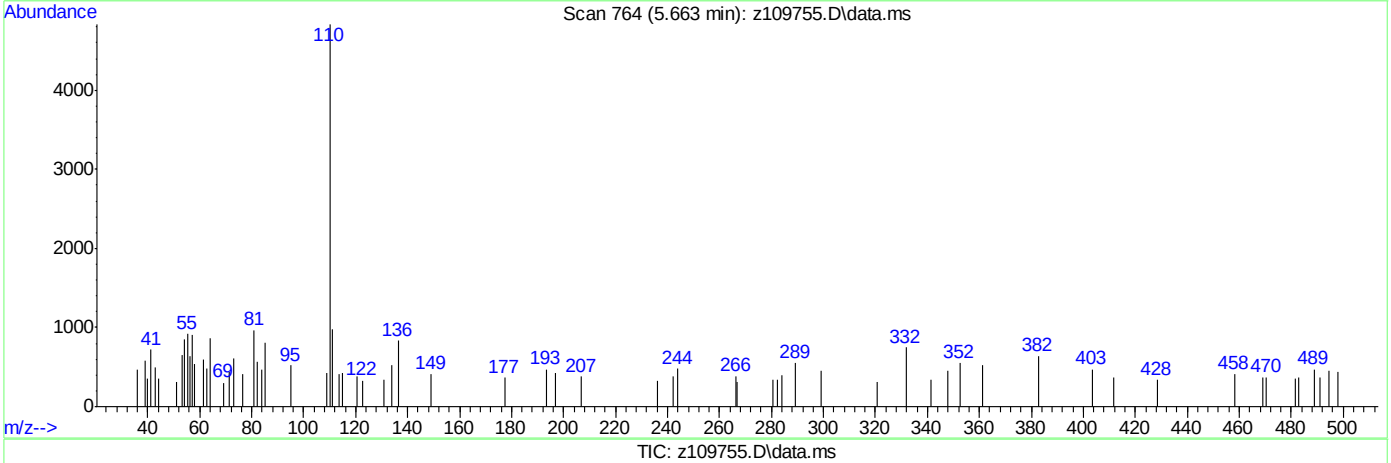
Ion	Exp%	Act%
110.10	100	100
81.10	25.30	2.73
53.10	19.60	4.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109755.D\data.ms

(113) Hydroquinone

5.663min (+0.021) 1.17ppm m

response 11808

Ion	Exp%	Act%
110.10	100	100
81.10	25.30	19.97
53.10	19.60	13.41
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109756.D
Acq On : 14 Apr 2016 5:00 am
Operator : sarad
Sample : ic5486-1
Misc : op92825,ez5486
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 14 10:12:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	323084	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1318642	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	653253	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1130873	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	1036244	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1089065	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	323084	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1130873	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	1036244	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	653253	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1318642	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	1036244	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.124	57	7765	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
106) o-terphenyl	8.820	230	17564	1.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.60%	
Target Compounds						Qvalue
103) Benzaldehyde	4.023	105	11073	1.32	ppm	# 76
107) Atrazine	7.880	215	3337	1.32	ppm	# 40
109) Benzidine	10.637	184	10996	0.76	ppm	89
111) 1,2,4,5-Tetrachloroben...	5.872	216	9368	1.16	ppm	# 69
113) Hydroquinone	5.663	110	9852	1.08	ppm	91

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

7.6.114

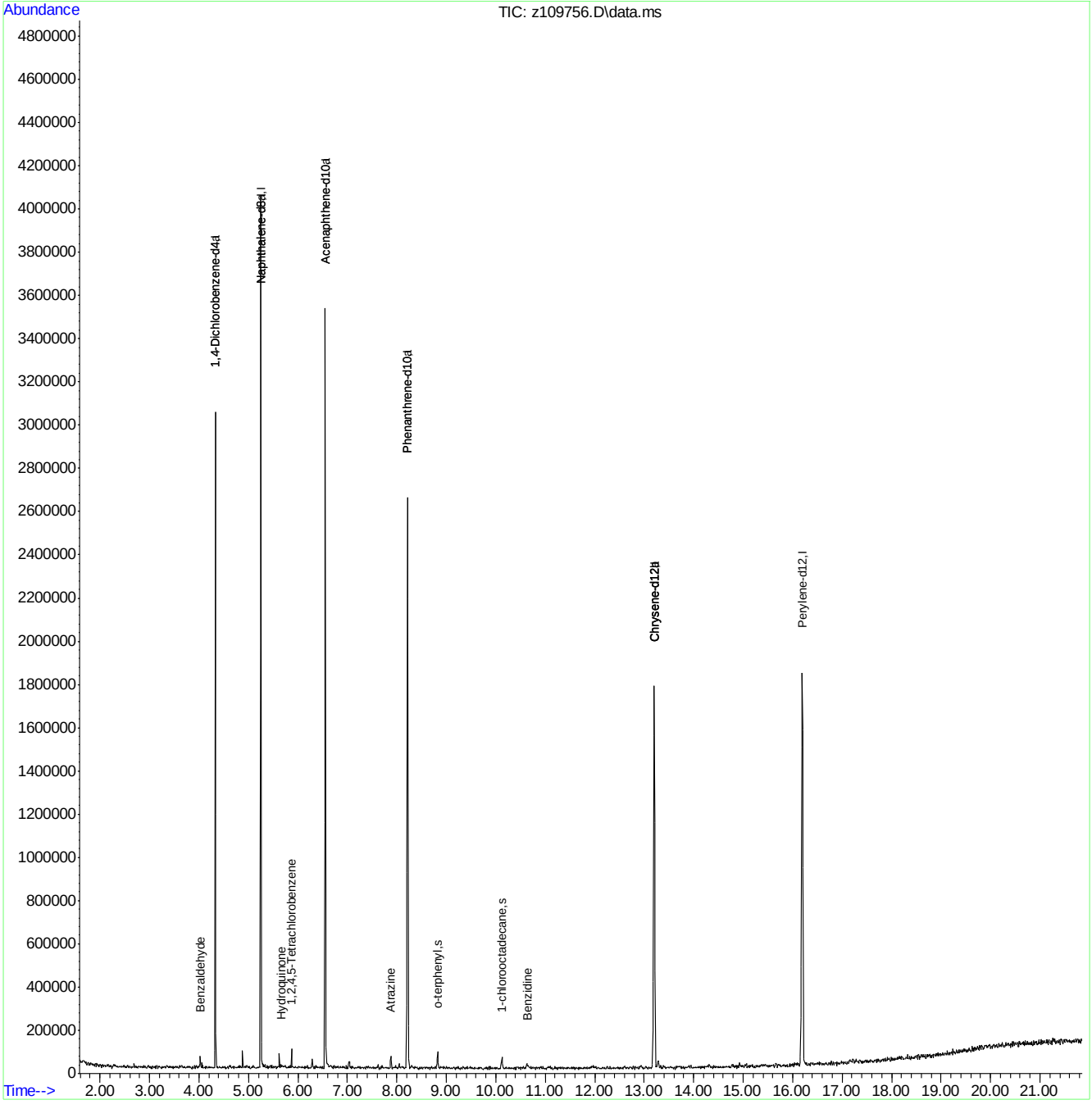
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109756.D
Acq On : 14 Apr 2016 5:00 am
Operator : sarad
Sample : ic5486-1
Misc : op92825,ez5486
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 14 10:12:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109757.D
Acq On : 14 Apr 2016 5:32 am
Operator : sarad
Sample : icc5486-50
Misc : op92825,ez5486
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 14 12:01:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	294519	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1178696	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	561026	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1014892	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	945857	40.00	ppm	-0.02
92) Perylene-d12	16.198	264	991160	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	294519	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1014892	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	945857	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	561026	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1178696	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	945857	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.124	57	361617	47.04	ppm	0.00
Spiked Amount 50.000			Recovery = 94.08%			
106) o-terphenyl	8.826	230	605693	45.81	ppm	0.00
Spiked Amount 50.000			Recovery = 91.62%			
Target Compounds						Qvalue
103) Benzaldehyde	4.012	105	384251	49.42	ppm	96
107) Atrazine	7.891	215	113802	45.07	ppm #	69
109) Benzidine	10.626	184	669691	51.81	ppm	85
111) 1,2,4,5-Tetrachloroben...	5.872	216	347232	48.28	ppm	95
113) Hydroquinone	5.631	110	436289	56.01	ppm	88

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

7.6.115

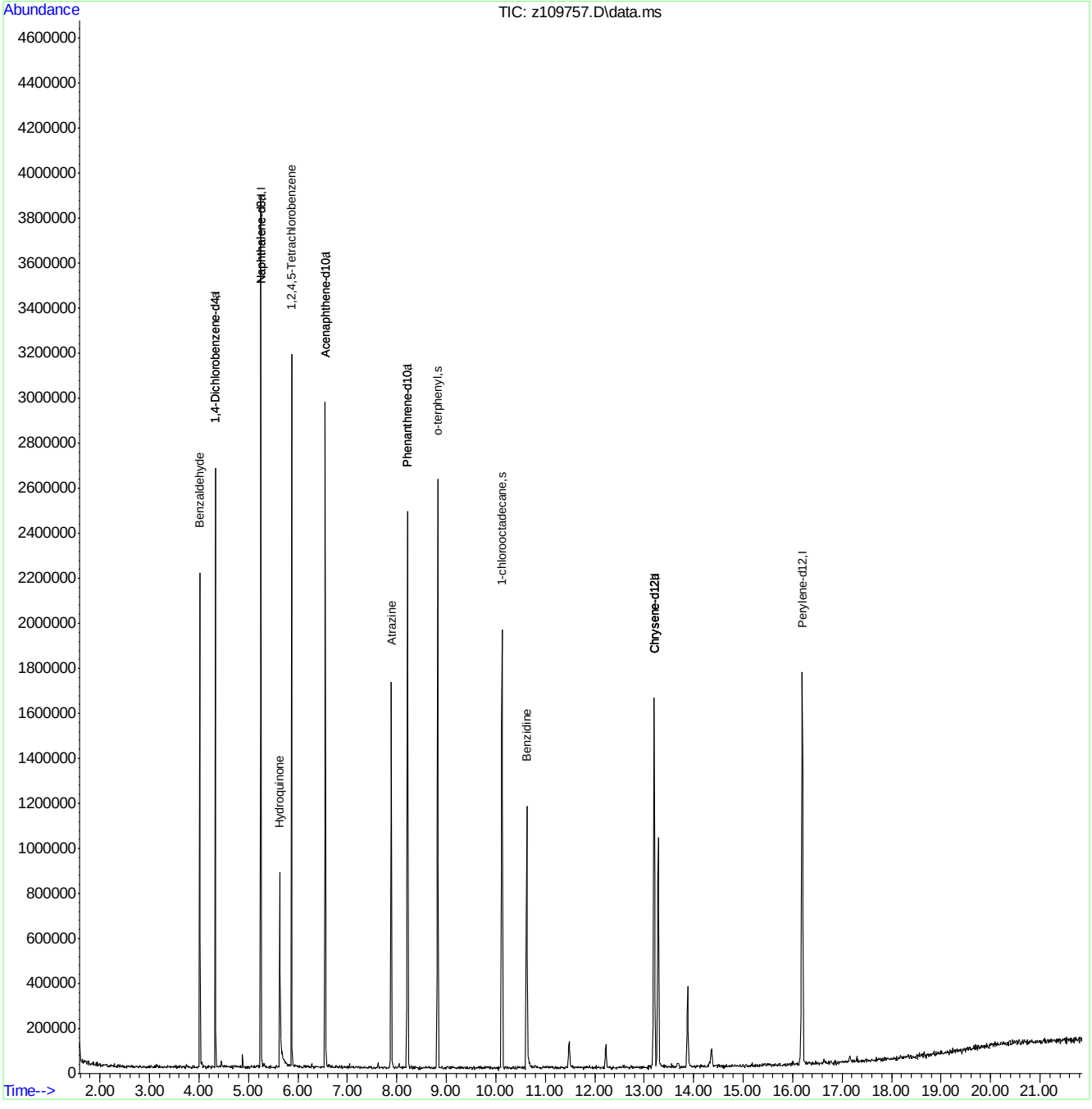
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109757.D
Acq On : 14 Apr 2016 5:32 am
Operator : sarad
Sample : icc5486-50
Misc : op92825,ez5486
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 14 12:01:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109758.D
Acq On : 14 Apr 2016 7:59 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 14 10:33:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	318657	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1212299	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	680138	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	1069173	40.00	ppm	0.00
83) Chrysene-d12	13.207	240	918855	40.00	ppm	0.00
92) Perylene-d12	16.198	264	854540	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	318657	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	1069173	40.00	ppm	0.00
108) Chrysene-d12a	13.207	240	918855	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	680138	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1212299	40.00	ppm	0.00
114) Chrysene-d12b	13.207	240	918855	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.162	94	656907	50.19	ppm	97
12) 2-Chlorophenol	4.205	128	584947	48.46	ppm	97
19) 2-Methylphenol	4.579	108	505129	49.37	ppm	96
21) 3&4-Methylphenol	4.691	108	529822	49.65	ppm	97
29) 2-Nitrophenol	4.996	139	313432	51.16	ppm	93
30) 2,4-Dimethylphenol	5.054	107	490881	50.93	ppm	99
31) Benzoic Acid	5.188	105	334056	48.05	ppm	93
33) 2,4-Dichlorophenol	5.183	162	437893	51.59	ppm	93
34) 2,6-Dichlorophenol	5.337	162	403738	48.61	ppm	98
43) 4-Chloro-3-methylphenol	5.706	107	457266	50.80	ppm	97
49) 2,4,6-Trichlorophenol	5.979	196	286438	51.00	ppm	98
50) 2,4,5-Trichlorophenol	6.016	196	270687	44.49	ppm	94
60) 2,4-Dinitrophenol	6.641	184	111881	46.15	ppm	90
61) 4-Nitrophenol	6.791	109	134422	50.93	ppm	97
64) 2,3,4,6-Tetrachlorophenol	6.887	232	222818	46.14	ppm	96
70) 4,6-Dinitro-2-methylph...	7.159	198	174688	54.92	ppm	97
76) Pentachlorophenol	8.009	266	175431	53.13	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109758.D
Acq On : 14 Apr 2016 7:59 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 14 10:33:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration

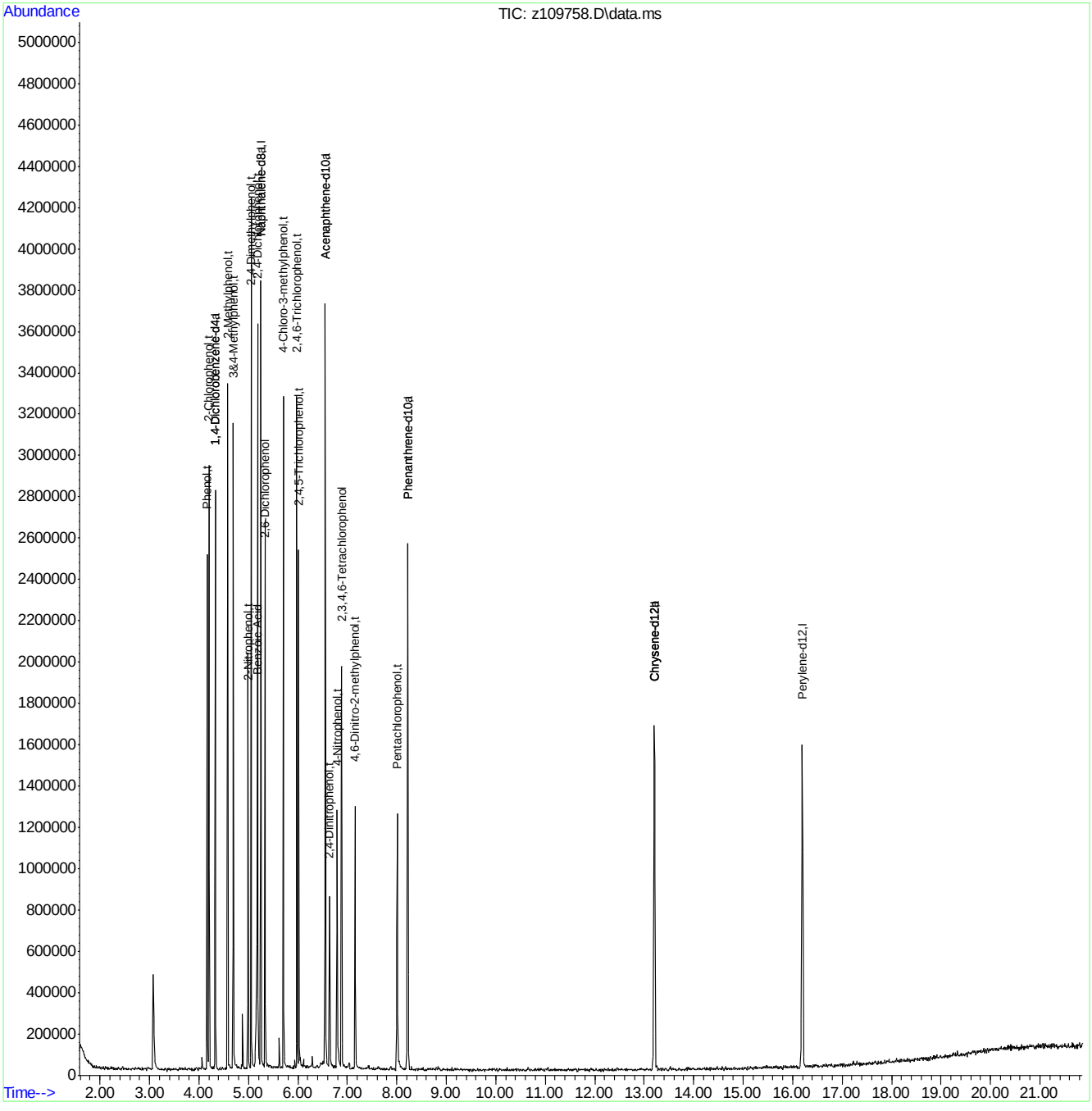
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109758.D
Acq On : 14 Apr 2016 7:59 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 14 10:33:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109759.D
Acq On : 14 Apr 2016 8:30 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 14 10:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	292844	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1189754	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	639312	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1022797	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	877838	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	782708	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	292844	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1022797	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	877838	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	639312	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1189754	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	877838	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
3) Pyridine	2.287	79	486168	71.11	ppm	92
10) Aniline	4.120	93	668714	48.32	ppm	96
16) Benzyl alcohol	4.472	108	292330	57.59	ppm	97
39) 4-Chloroaniline	5.338	127	583975	44.91	ppm	94
44) 2-Methylnaphthalene	5.754	141	841794	46.29	ppm	92
54) 2-Nitroaniline	6.219	65	230099	47.11	ppm #	78
58) 3-Nitroaniline	6.566	138	259911	48.24	ppm	97
62) Dibenzofuran	6.737	168	1235859	47.01	ppm	97
68) 4-Nitroaniline	7.170	138	251673	46.68	ppm	98
79) Carbazole	8.629	167	1365980	47.50	ppm	96

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

7.6.117

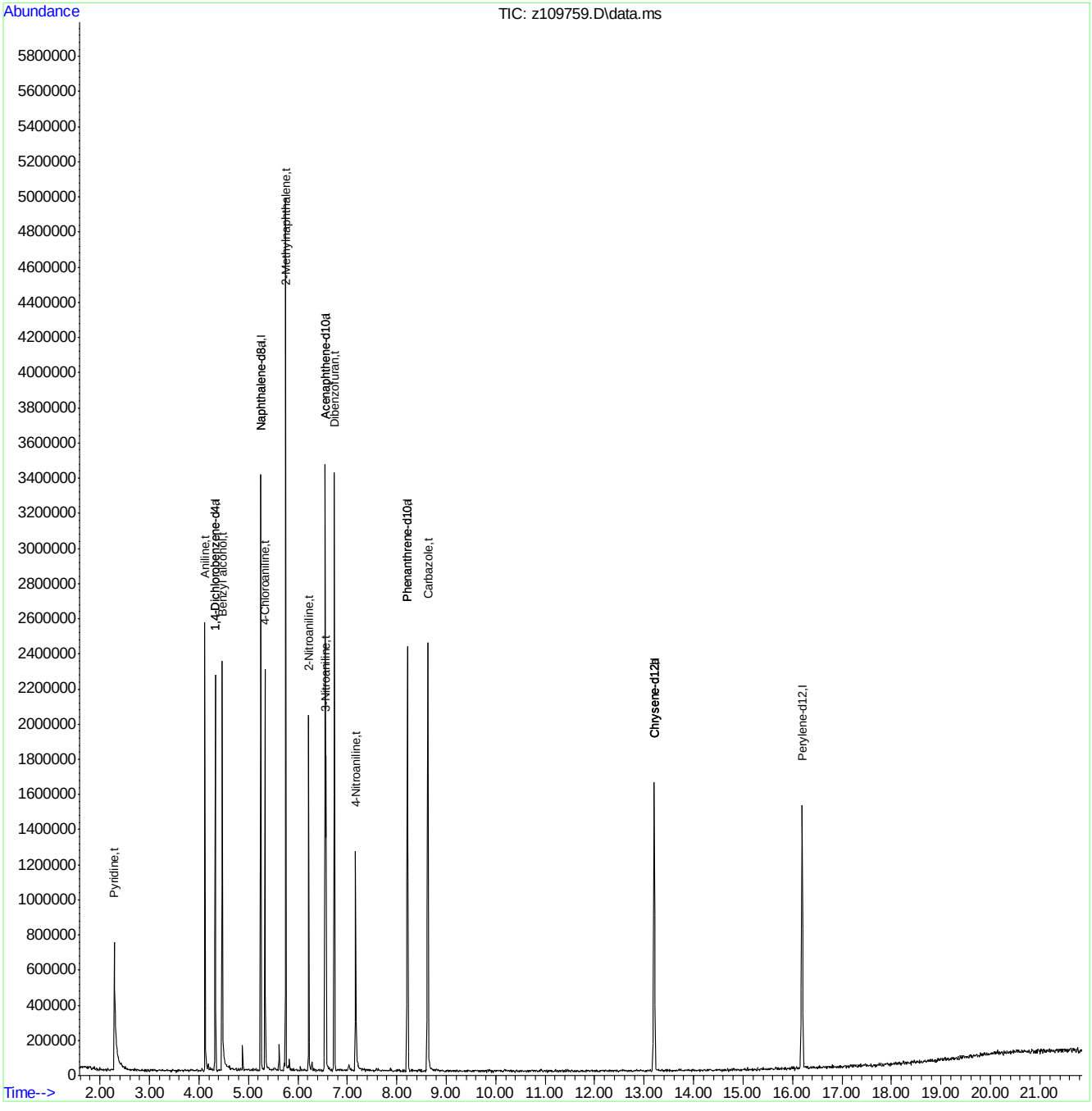
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109759.D
Acq On : 14 Apr 2016 8:30 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 14 10:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:41:03 2016 RTE

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109760.D
Acq On : 14 Apr 2016 9:01 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 14 10:43:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	348705	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1362242	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	729101	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1119541	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	976579	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	878122	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	348705	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1119541	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	976579	40.00	ppm	-0.02
110) Acenaphthene-d10a	6.550	164	729101	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1362242	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	976579	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	626577	52.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.54%	
8) Phenol-d5	4.151	99	726060	52.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.00%	
25) Nitrobenzene-d5	4.750	82	553000	49.62	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.24%	
51) 2-Fluorobiphenyl	6.021	172	1235578	53.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	106.80%	
73) 2,4,6-Tribromophenol	7.346	330	169410	48.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	96.32%	
86) Terphenyl-d14	11.059	244	1104906	53.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	106.90%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

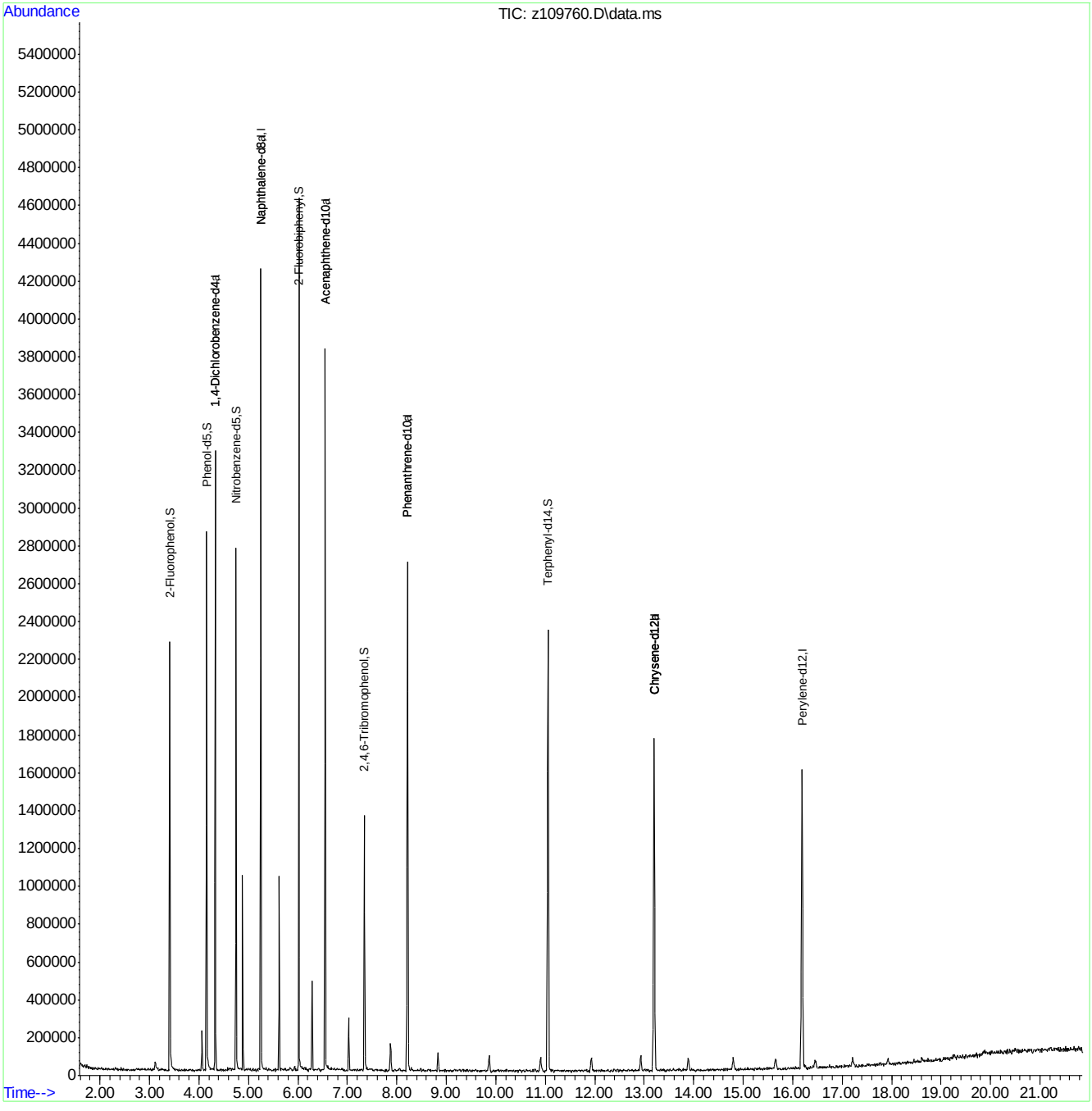
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109760.D
Acq On : 14 Apr 2016 9:01 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 14 10:43:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:29:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	290194	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1105906	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	586675	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	930198	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	757551	40.00	ppm	-0.01
92) Perylene-d12	16.193	264	704226	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	290194	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	930198	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	757551	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	586675	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1105906	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	757551	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.148	74	289584	51.32	ppm	98
11) bis(2-Chloroethyl)ether	4.146	93	446452	54.70	ppm	91
14) 1,3-Dichlorobenzene	4.285	146	596644	49.89	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	579234	51.06	ppm	97
17) 1,2-Dichlorobenzene	4.456	146	562286	51.16	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.536	121	110997	38.89	ppm #	75
22) n-Nitroso-di-n-propyla...	4.637	70	330028	49.87	ppm	84
23) Hexachloroethane	4.696	201	169610	51.31	ppm	95
26) Nitrobenzene	4.766	77	457662	50.88	ppm	95
28) Isophorone	4.921	82	829132	52.94	ppm	98
32) bis(2-Chloroethoxy)met...	5.086	93	503342	51.82	ppm	95
36) 1,2,4-Trichlorobenzene	5.209	180	421762	52.29	ppm	95
38) Naphthalene	5.268	128	1499585	49.39	ppm	99
42) Hexachlorobutadiene	5.353	225	210477	58.74	ppm	96
48) Hexachlorocyclopentadiene	5.866	237	204290	52.24	ppm	97
52) 2-Chloronaphthalene	6.107	162	861266	51.81	ppm	99
55) Dimethylphthalate	6.342	163	964361	51.67	ppm	100

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:29:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	Acenaphthylene	6.438	152	1393030	47.70	ppm	99
57)	2,6-Dinitrotoluene	6.395	165	210947	51.57	ppm	91
59)	Acenaphthene	6.582	153	919620	52.64	ppm	99
63)	2,4-Dinitrotoluene	6.753	165	270101	50.76	ppm	97
65)	Diethylphthalate	6.972	149	973361	50.81	ppm	99
66)	Fluorene	7.073	166	963971	48.54	ppm	95
67)	4-Chlorophenyl-phenyle...	7.073	204	410957	50.19	ppm	96
71)	n-Nitrosodiphenylamine	7.218	169	693275	51.26	ppm	93
72)	1,2-Diphenylhydrazine	7.244	77	813652	50.32	ppm	97
74)	4-Bromophenyl-phenylether	7.629	248	233946	48.47	ppm	91
75)	Hexachlorobenzene	7.699	284	264423	48.86	ppm	93
77)	Phenanthrene	8.249	178	1303444	48.97	ppm	97
78)	Anthracene	8.324	178	1314918	47.94	ppm	99
80)	Di-n-butylphthalate	9.210	149	1656784	51.47	ppm	100
81)	Fluoranthene	10.231	202	1361766	49.00	ppm	97
84)	Pyrene	10.653	202	1375846	53.86	ppm	94
87)	Butylbenzylphthalate	12.191	149	671280	55.06	ppm	90
88)	Benzo[a]anthracene	13.180	228	1140996	51.57	ppm	99
90)	Chrysene	13.260	228	1044259	48.35	ppm	96
91)	bis(2-Ethylhexyl)phtha...	13.527	149	930139	54.21	ppm	99
93)	Di-n-octylphthalate	14.927	149	1599914	58.96	ppm	98
94)	Benzo[b]fluoranthene	15.450	252	1108131	49.85	ppm	93
95)	Benzo[k]fluoranthene	15.504	252	1090917	54.67	ppm	98
96)	Benzo[a]pyrene	16.075	252	1030970	52.11	ppm	97
97)	Indeno[1,2,3-cd]pyrene	18.105	276	1029021	52.02	ppm	92
99)	Dibenz[a,h]anthracene	18.159	278	1041959	50.05	ppm	97
101)	Benzo[g,h,i]perylene	18.538	276	1035212	48.69	ppm	97

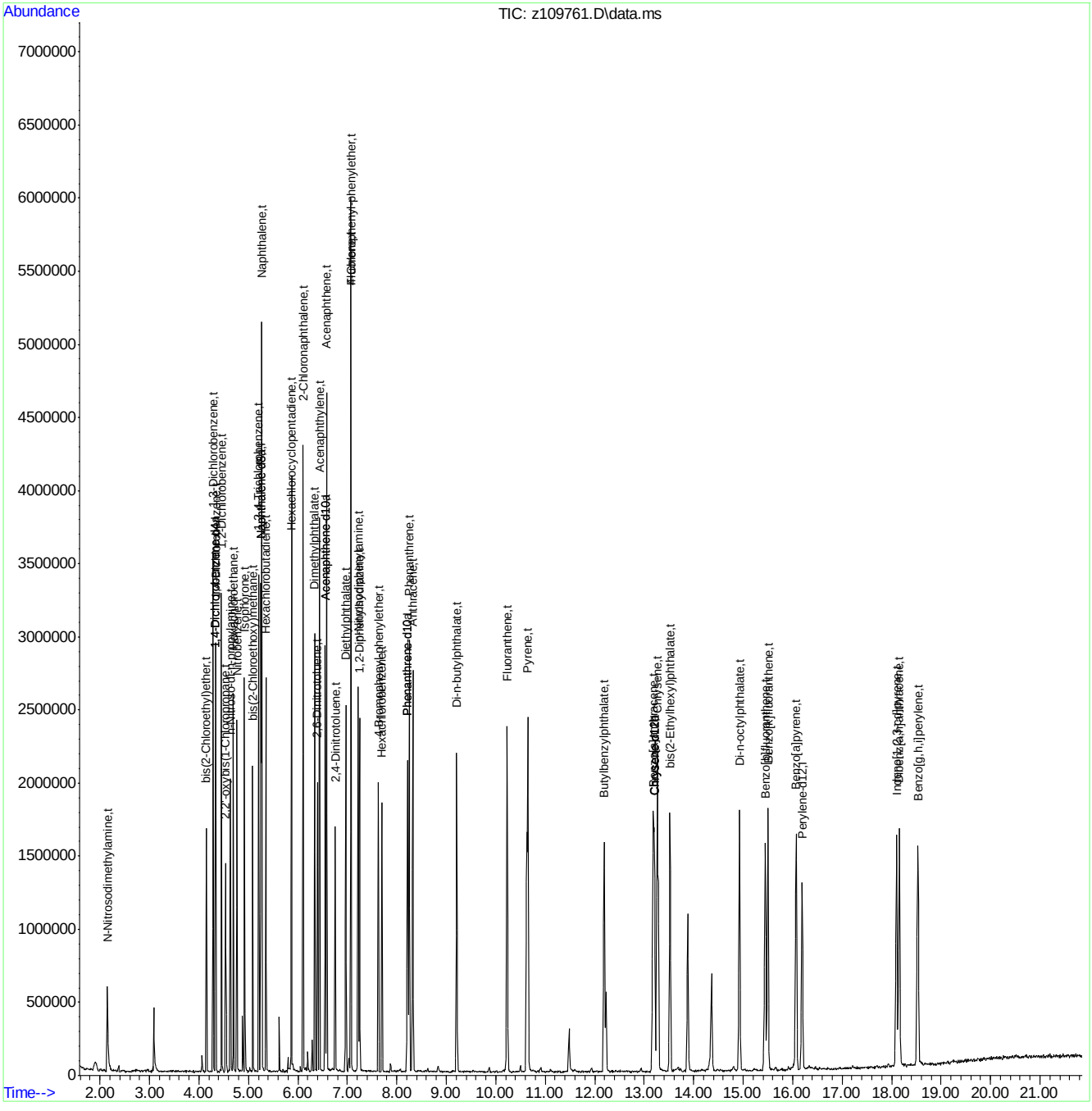
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:29:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761a.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:30:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	290194	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1105906	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	586675	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	930198	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	757551	40.00	ppm	-0.01
92) Perylene-d12	16.193	264	704226	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	290194	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	930198	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	757551	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	586675	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1105906	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	757551	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
109) Benzidine	10.626	184	806234	77.87	ppm	87
111) 1,2,4,5-Tetrachloroben...	5.871	216	382532	50.86	ppm	94

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

7.6.120

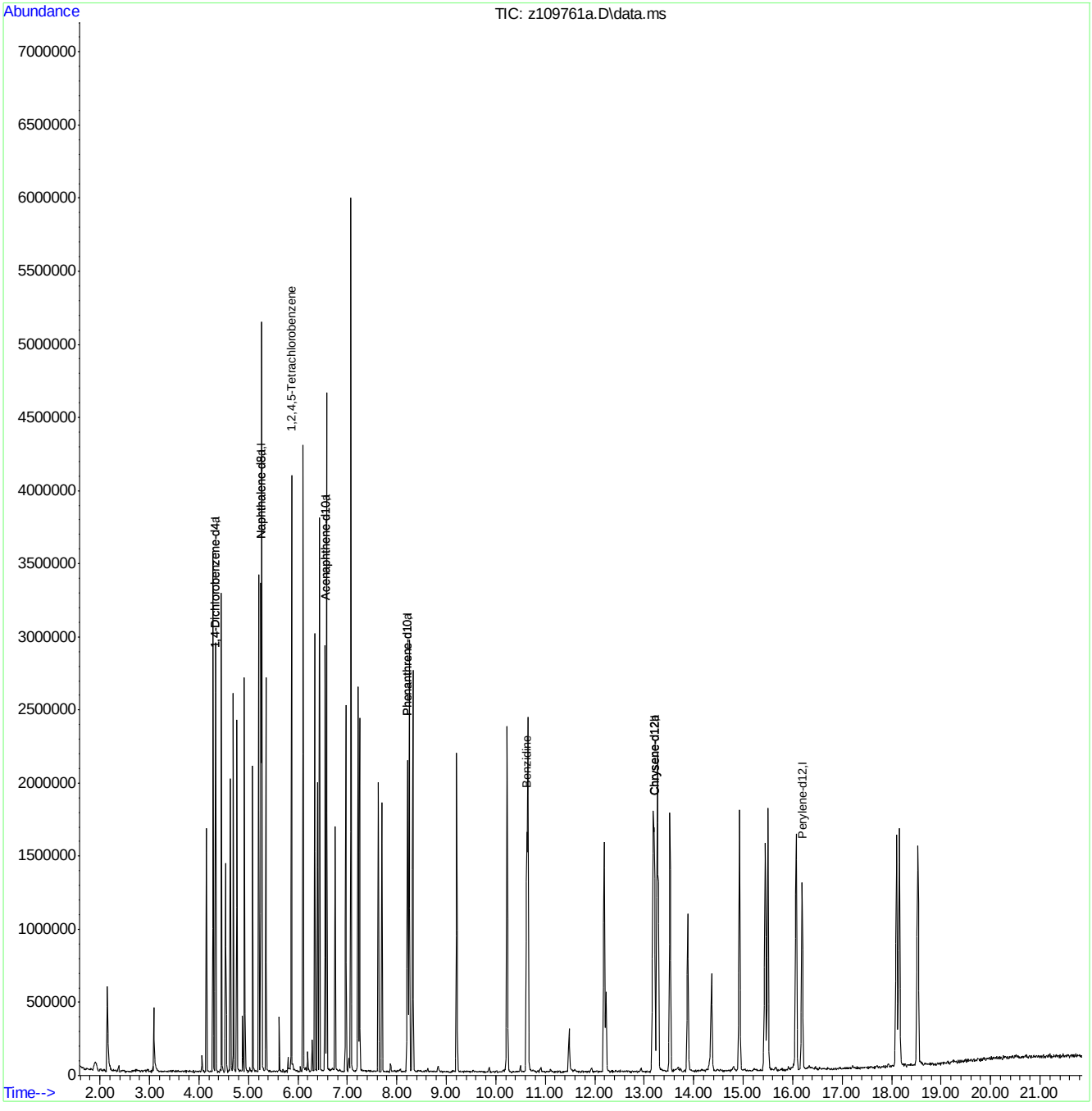
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761a.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:30:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 15:33:25 2016 RTE

Page: 2

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762a.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 13:31:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.327	152	306061	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1176501	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	629319	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	964323	40.00	ppm	0.00
83) Chrysene-d12	13.196	240	834677	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	773212	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.327	152	306061	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	964323	40.00	ppm	0.00
108) Chrysene-d12a	13.196	240	834677	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	629319	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1176501	40.00	ppm	0.00
114) Chrysene-d12b	13.196	240	834677	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	407214	50.40	ppm	94
107) Atrazine	7.891	215	121727	50.73	ppm #	80

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

7.6.121

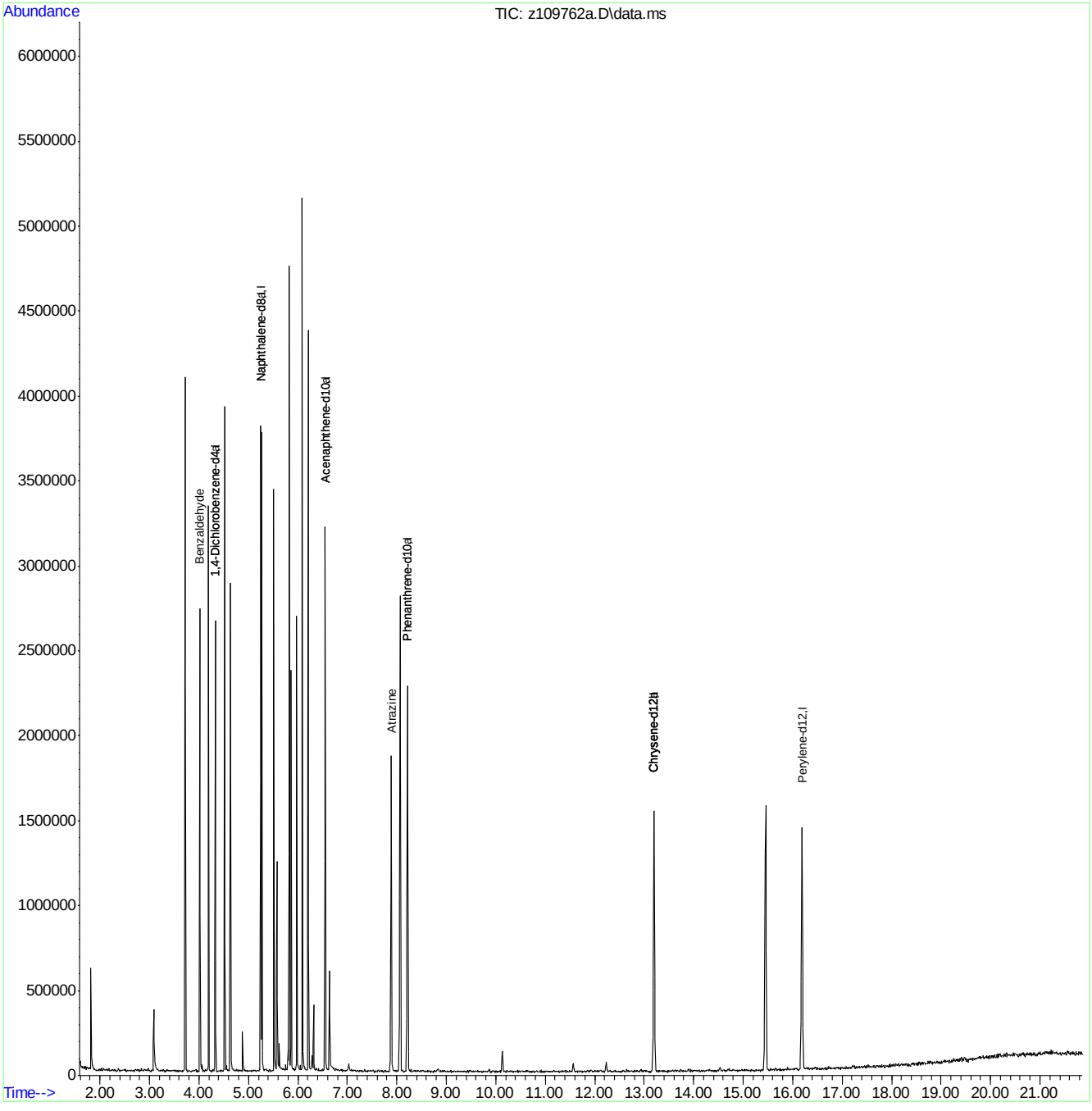
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762a.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 13:31:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 15:33:32 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 10:52:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.327	152	306061	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1176501	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	629319	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	964323	40.00	ppm	0.00
83) Chrysene-d12	13.196	240	834677	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	773212	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.327	152	306061	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	964323	40.00	ppm	0.00
108) Chrysene-d12a	13.196	240	834677	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	629319	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1176501	40.00	ppm	0.00
114) Chrysene-d12b	13.196	240	834677	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.811	88	203465	44.80	ppm	94
6) Indene	4.520	116	929287	47.77	ppm	98
7) Cumene	3.719	105	1148717	46.29	ppm	99
13) Decane	4.194	43	493944	46.24	ppm	98
18) Acetophenone	4.637	105	628668	46.60	ppm	91
27) Quinoline	5.513	129	1034495	46.46	ppm	97
40) 2,3-Dichloroaniline	5.978	161	404434	39.11	ppm	92
41) Caprolactam	5.578	55	171068	40.84	ppm	87
45) 1-Methylnaphthalene	5.823	141	849509	44.14	ppm	98
46) Dimethylnaphthalene	6.208	156	861267	46.30	ppm	98
53) Biphenyl	6.090	154	1135689	45.46	ppm	100
82) Octadecane	8.067	57	579174	48.40	ppm	96
100) 7,12-Dimethylbenz(a)an...	15.455	256	493715	44.46	ppm	92
103) Benzaldehyde	4.018	105	407214	50.40	ppm	94
107) Atrazine	7.891	215	121727	50.73	ppm #	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 10:52:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

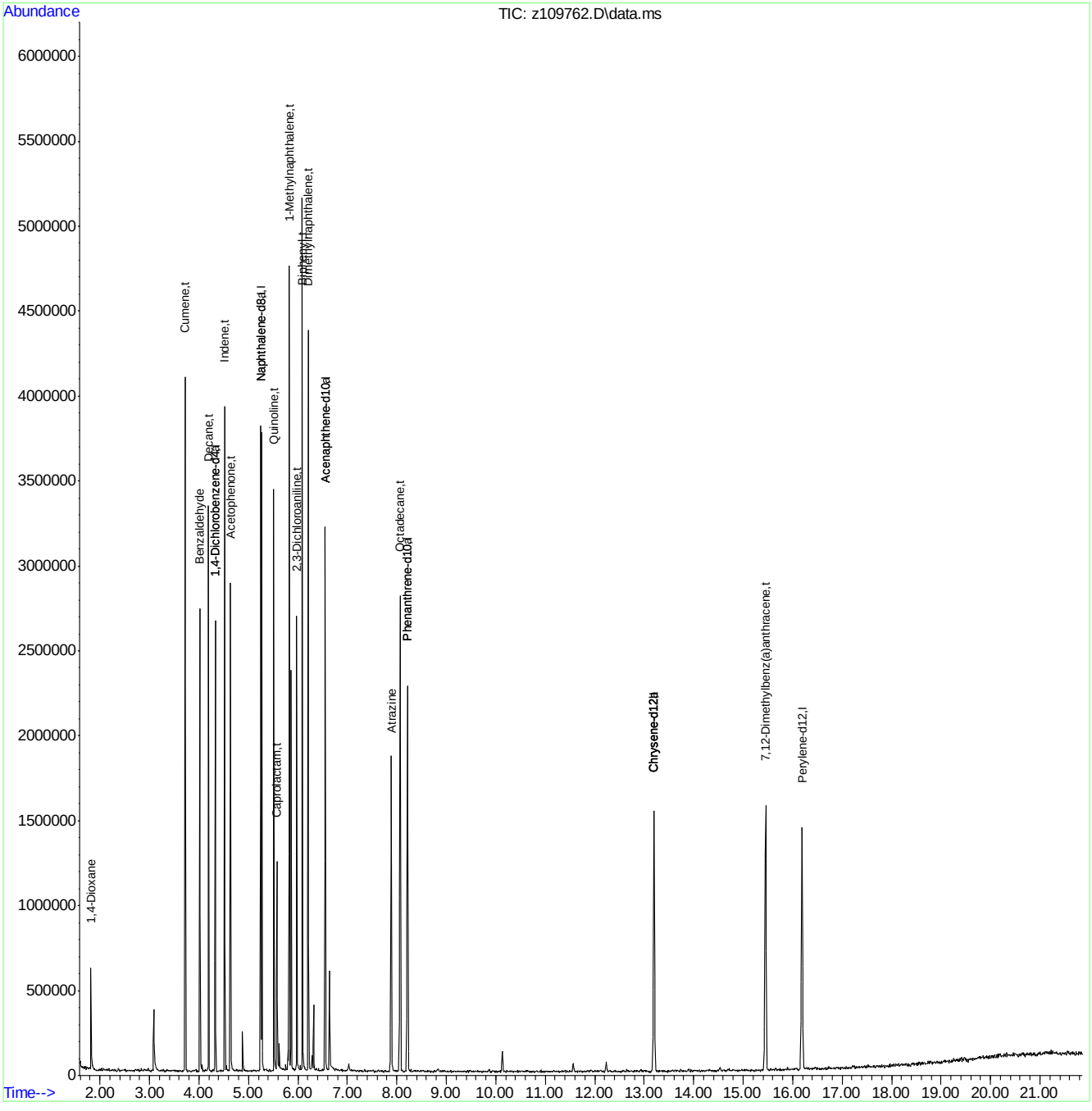
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 10:52:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109763.D
Acq On : 14 Apr 2016 10:35 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 14 11:05:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	289489	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1093473	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	603385	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	932001	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	826872	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	828079	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	289489	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	932001	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	826872	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	603385	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1093473	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	826872	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
113) Hydroquinone	5.631	110	414062	57.30	ppm	89

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

7.6.123

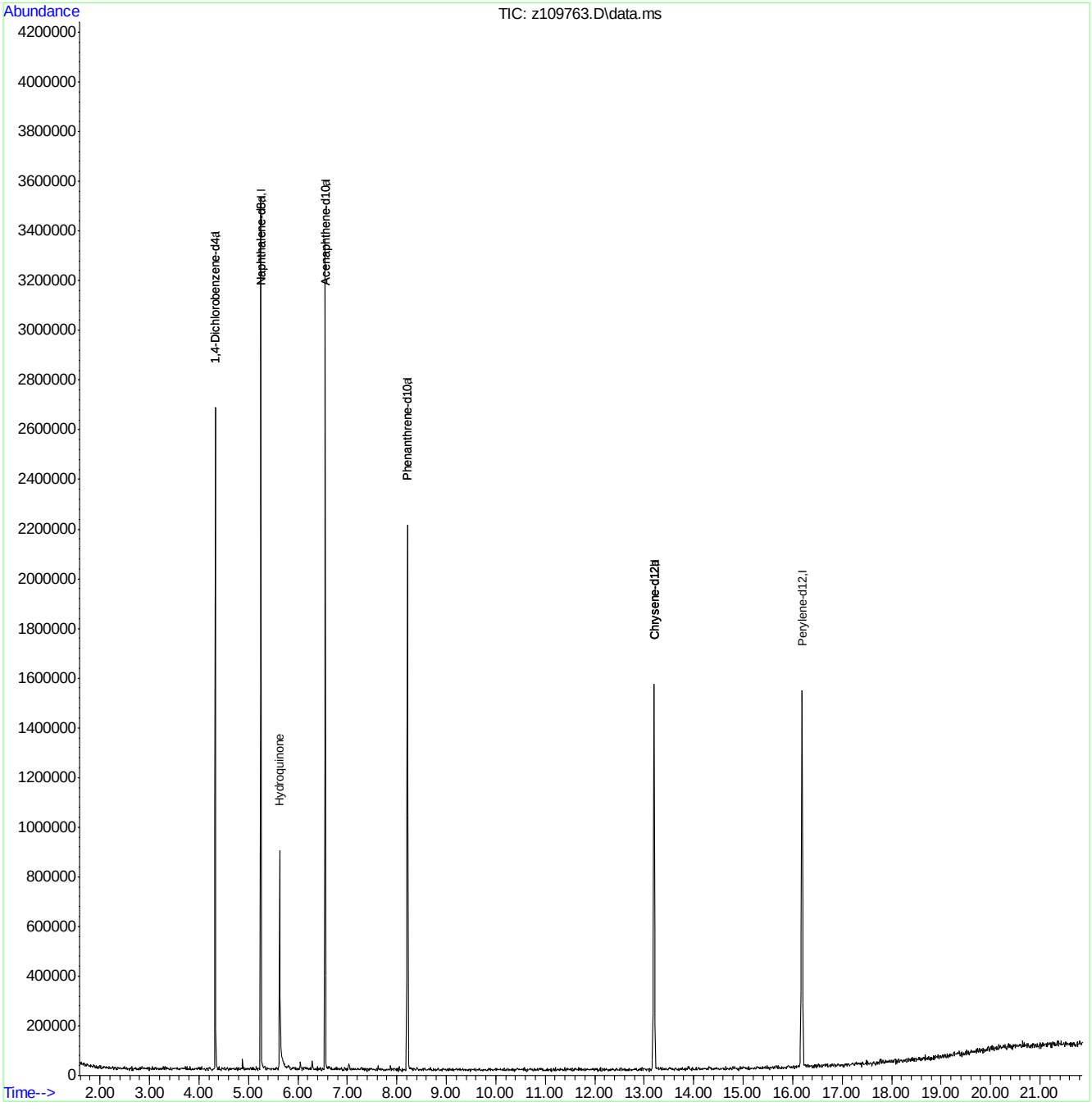
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109763.D
Acq On : 14 Apr 2016 10:35 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 14 11:05:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 11:05:17 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109764.D
Acq On : 14 Apr 2016 11:06 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 14 13:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	278435	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1065389	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	582844	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	954062	40.00	ppm	0.00
83) Chrysene-d12	13.196	240	844027	40.00	ppm	-0.02
92) Perylene-d12	16.187	264	846117	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.328	152	278435	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	954062	40.00	ppm	0.00
108) Chrysene-d12a	13.196	240	844027	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	582844	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1065389	40.00	ppm	0.00
114) Chrysene-d12b	13.196	240	844027	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	13.281	252	426883	47.96	ppm	98

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

7.6.124

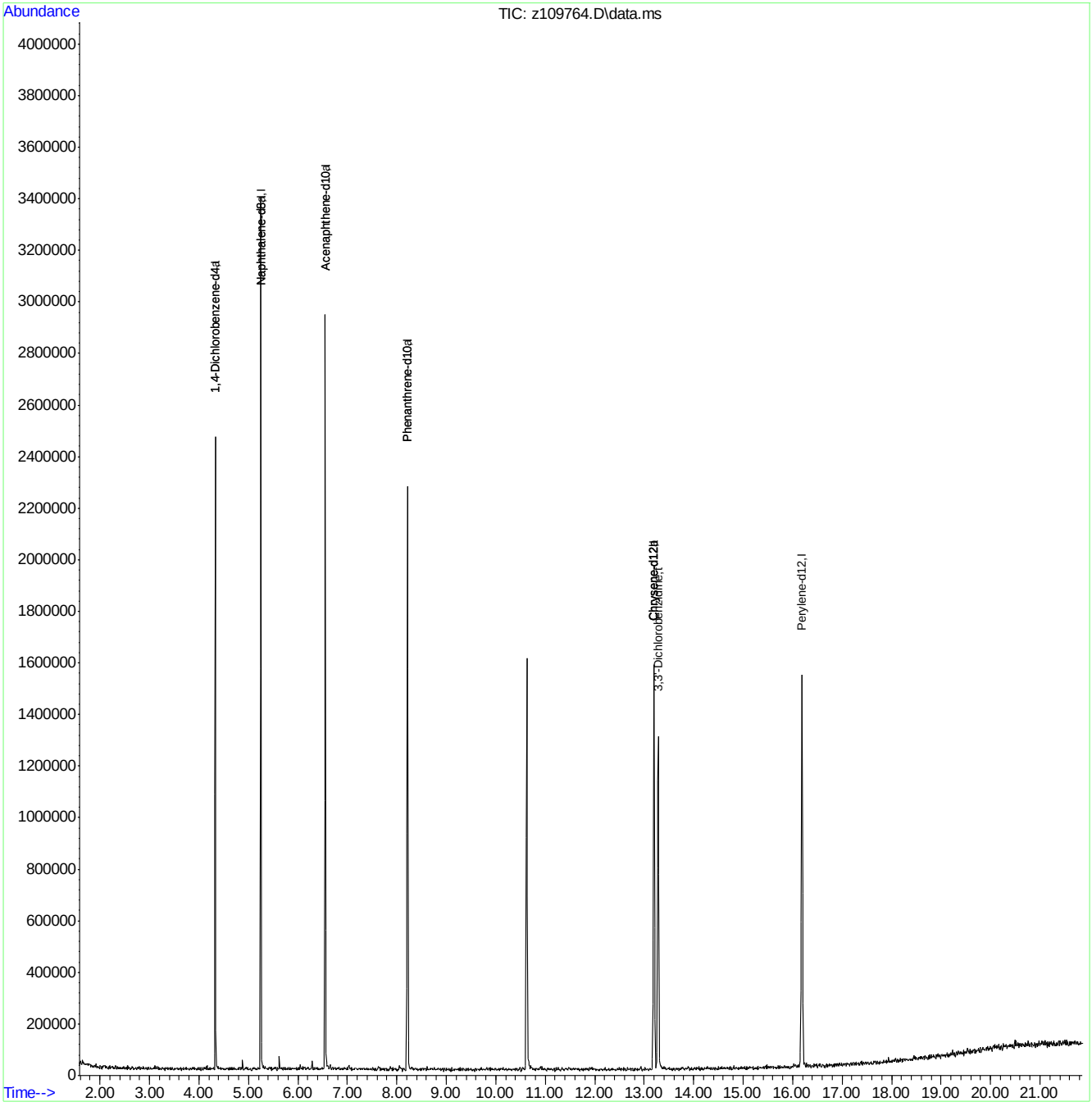
7

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109764.D
Acq On : 14 Apr 2016 11:06 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 14 13:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 13:08:04 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110613.D
Acq On : 12 May 2016 10:16 am
Operator : ariellec
Sample : cc5485-25
Misc : op93793,ez5525
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:27:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 13:11:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.192	152	211716	40.00	ppm	-0.01
24) Naphthalene-d8	5.116	136	822685	40.00	ppm	-0.01
47) Acenaphthene-d10	6.393	164	508733	40.00	ppm	0.00
69) Phenanthrene-d10	7.985	188	867947	40.00	ppm	-0.01
83) Chrysene-d12	12.884	240	936966	40.00	ppm	-0.02
92) Perylene-d12	15.854	264	900377	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.192	152	211716	40.00	ppm	-0.01
104) Phenanthrene-d10a	7.985	188	867947	40.00	ppm	-0.01
106) Chrysene-d12a	12.884	240	936966	40.00	ppm	-0.02
108) Acenaphthene-d10a	6.393	164	508733	40.00	ppm	0.00
110) Naphthalene-d8a	5.116	136	822685	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.284	112	152665	20.88	ppm	0.00
Spiked Amount 50.000			Recovery = 41.76%			
8) Phenol-d5	4.037	99	190104	22.19	ppm	0.00
Spiked Amount 50.000			Recovery = 44.38%			
25) Nitrobenzene-d5	4.625	82	193507	29.15	ppm	0.00
Spiked Amount 50.000			Recovery = 58.30%			
51) 2-Fluorobiphenyl	5.885	172	406394	24.92	ppm	0.00
Spiked Amount 50.000			Recovery = 49.84%			
73) 2,4,6-Tribromophenol	7.151	330	61031	22.88	ppm	0.00
Spiked Amount 50.000			Recovery = 45.76%			
86) Terphenyl-d14	10.747	244	467634	23.75	ppm	0.08
Spiked Amount 50.000			Recovery = 47.50%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.649	88	61714	19.64	ppm	88
3) Pyridine	1.991	79	108807	22.01	ppm	94
4) N-Nitrosodimethylamine	1.970	74	67278	16.34	ppm	95
6) Indene	4.384	116	295171	21.93	ppm	96
7) Cumene	3.578	105	413600	24.10	ppm	93
9) Phenol	4.048	94	192494	22.14	ppm	90
10) Aniline	3.989	93	188050	18.80	ppm	95
11) bis(2-Chloroethyl)ether	4.021	93	164305	27.59	ppm	93
12) 2-Chlorophenol	4.080	128	163911	20.44	ppm	88
13) Decane	4.058	43	157957	21.37	ppm	92
14) 1,3-Dichlorobenzene	4.149	146	201893	23.14	ppm	97
15) 1,4-Dichlorobenzene	4.208	146	201350	24.33	ppm	96
16) Benzyl alcohol	4.347	108	88247	24.05	ppm	94
17) 1,2-Dichlorobenzene	4.325	146	184546	23.02	ppm	97
18) Acetophenone	4.507	105	229520	24.59	ppm	82
19) 2-Methylphenol	4.464	108	152116	22.38	ppm	93
20) 2,2'-oxybis(1-Chloropr...	4.400	121	45345	21.78	ppm	90
21) 3&4-Methylphenol	4.577	108	167485	23.62	ppm	89
22) n-Nitroso-di-n-propyla...	4.507	70	138830	28.76	ppm	87
23) Hexachloroethane	4.561	201	74183	30.76	ppm	88
26) Nitrobenzene	4.635	77	192653	28.79	ppm	94
27) Quinoline	5.383	129	334359	21.47	ppm	94

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110613.D
Acq On : 12 May 2016 10:16 am
Operator : ariellec
Sample : cc5485-25
Misc : op93793,ez5525
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:27:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 13:11:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	4.796	82	308530	26.48	ppm		91
29) 2-Nitrophenol	4.865	139	95405	22.95	ppm	#	58
30) 2,4-Dimethylphenol	4.934	107	158420	24.22	ppm		96
31) Benzoic Acid	5.063	105	93522	19.82	ppm		87
32) bis(2-Chloroethoxy)met...	4.961	93	164262	22.73	ppm		92
33) 2,4-Dichlorophenol	5.063	162	155507	27.00	ppm		95
34) 2,6-Dichlorophenol	5.207	162	155053	27.51	ppm		96
35) 1,3,5-Trichlorobenzene	4.844	180	177056	27.50	ppm		90
36) 1,2,4-Trichlorobenzene	5.079	180	167127	27.85	ppm		98
37) 1,2,3-Trichlorobenzene	5.239	180	161320	27.64	ppm		97
38) Naphthalene	5.132	128	514884	22.79	ppm		99
39) 4-Chloroaniline	5.212	127	206821	23.00	ppm		98
40) 2,3-Dichloroaniline	5.848	161	196449	27.17	ppm		92
41) Caprolactam	5.463	55	62031	21.18	ppm	#	80
42) Hexachlorobutadiene	5.218	225	98978	37.13	ppm		85
43) 4-Chloro-3-methylphenol	5.592	107	175761	28.77	ppm		89
44) 2-Methylnaphthalene	5.618	141	304163	24.19	ppm		95
45) 1-Methylnaphthalene	5.688	141	335892	24.96	ppm		92
46) Dimethylnaphthalene	6.062	156	342328	26.32	ppm		98
48) Hexachlorocyclopentadiene	5.730	237	174707	51.52	ppm		84
49) 2,4,6-Trichlorophenol	5.848	196	117243	27.91	ppm		94
50) 2,4,5-Trichlorophenol	5.896	196	115739	25.43	ppm		95
52) 2-Chloronaphthalene	5.966	162	324910	22.54	ppm		97
53) Biphenyl	5.949	154	422892	20.94	ppm		98
54) 2-Nitroaniline	6.083	65	104737	26.95	ppm		97
55) Dimethylphthalate	6.195	163	423399	26.16	ppm		99
56) Acenaphthylene	6.281	152	579712	22.89	ppm		96
57) 2,6-Dinitrotoluene	6.249	165	92470	26.07	ppm		87
58) 3-Nitroaniline	6.414	138	87144	20.33	ppm		96
59) Acenaphthene	6.414	153	373563	24.66	ppm		98
60) 2,4-Dinitrophenol	6.494	184	60153	34.42	ppm		90
61) 4-Nitrophenol	6.655	109	66332	33.60	ppm		89
62) Dibenzofuran	6.569	168	496560	23.73	ppm		95
63) 2,4-Dinitrotoluene	6.591	165	123326	26.73	ppm		88
64) 2,3,4,6-Tetrachlorophenol	6.713	232	103543	28.66	ppm		89
65) Diethylphthalate	6.788	149	430123	25.89	ppm		98
66) Fluorene	6.884	166	416858	24.20	ppm		96
67) 4-Chlorophenyl-phenyle...	6.884	204	206050	29.02	ppm		98
68) 4-Nitroaniline	6.997	138	91138	21.24	ppm		96
70) 4,6-Dinitro-2-methylph...	6.986	198	64282	24.90	ppm		77
71) n-Nitrosodiphenylamine	7.023	169	282131	22.36	ppm		90
72) 1,2-Diphenylhydrazine	7.050	77	406377	26.94	ppm		96
74) 4-Bromophenyl-phenylether	7.413	248	117233	26.03	ppm		80
75) Hexachlorobenzene	7.488	284	138138	27.36	ppm		94
76) Pentachlorophenol	7.793	266	141413	52.76	ppm		92
77) Phenanthrene	8.017	178	593314	23.89	ppm		99
78) Anthracene	8.086	178	604263	23.61	ppm		98
79) Carbazole	8.386	167	554625	22.73	ppm		97
80) Di-n-butylphthalate	8.941	149	756461	25.19	ppm		98
81) Fluoranthene	9.940	202	667939	25.76	ppm		94

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110613.D
Acq On : 12 May 2016 10:16 am
Operator : ariellec
Sample : cc5485-25
Misc : op93793,ez5525
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:27:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 13:11:04 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Octadecane	7.830	57	217467	20.19	ppm	93
84)	Pyrene	10.352	202	717232	22.70	ppm	92
85)	Butyl stearate	12.056	56	158649	18.57	ppm	92
87)	Butylbenzylphthalate	11.863	149	345354	22.90	ppm	96
88)	Benzo[a]anthracene	12.857	228	652812	23.86	ppm	96
89)	3,3'-Dichlorobenzidine	12.959	252	227551	23.03	ppm	98
90)	Chrysene	12.932	228	645190	24.15	ppm	90
91)	bis(2-Ethylhexyl)phtha...	13.178	149	459339	21.64	ppm	97
93)	Di-n-octylphthalate	14.572	149	814956	23.49	ppm	98
94)	Benzo[b]fluoranthene	15.117	252	691280	24.32	ppm	95
95)	Benzo[k]fluoranthene	15.165	252	630698	24.72	ppm	87
96)	Benzo[a]pyrene	15.736	252	615064	24.31	ppm	98
97)	Indeno[1,2,3-cd]pyrene	17.772	276	572804	22.65	ppm	95
98)	Dibenz(a,h)acridine	17.409	279	531747	22.21	ppm	93
99)	Dibenz[a,h]anthracene	17.815	278	616409	23.16	ppm	97
100)	7,12-Dimethylbenz(a)an...	15.111	256	301559	23.32	ppm	91
101)	Benzo[g,h,i]perylene	18.194	276	629346	23.15	ppm	96

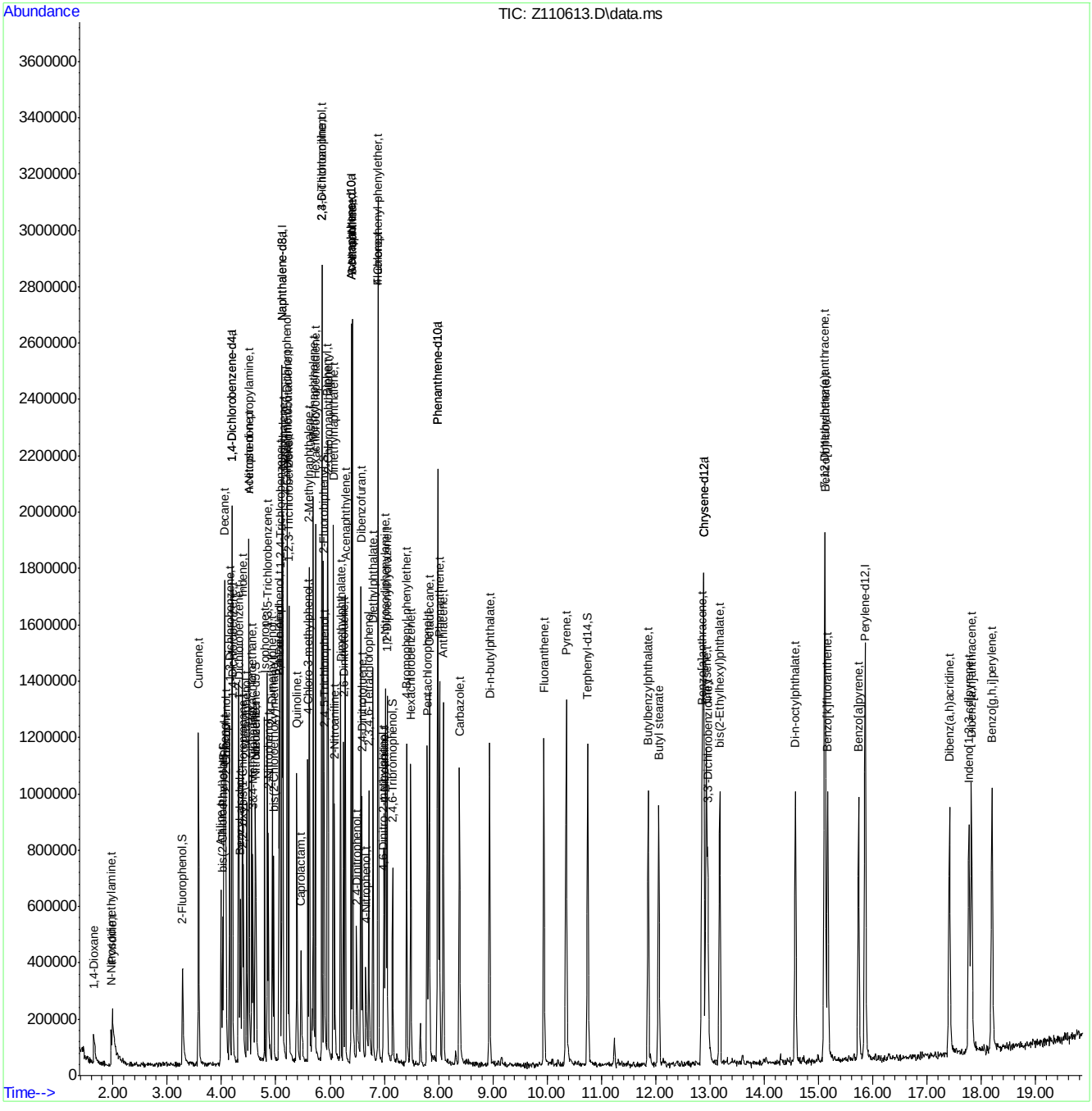
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110613.D
Acq On : 12 May 2016 10:16 am
Operator : ariellec
Sample : cc5485-25
Misc : op93793,ez5525
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:27:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 13:11:04 2016
Response via : Initial Calibration



MZ5485.M Fri May 13 09:27:40 2016 RTE

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110614.D
Acq On : 12 May 2016 10:46 am
Operator : ariellec
Sample : cc5486-25
Misc : op93793,ez5525
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 09:28:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 09:44:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.192	152	193222	40.00	ppm	0.05
24) Naphthalene-d8	5.116	136	783370	40.00	ppm	0.05
47) Acenaphthene-d10	6.387	164	492746	40.00	ppm	0.05
69) Phenanthrene-d10	7.979	188	852506	40.00	ppm	0.08
83) Chrysene-d12	12.873	240	897287	40.00	ppm	0.09
92) Perylene-d12	15.854	264	856434	40.00	ppm	0.10
102) 1,4-Dichlorobenzene-d4a	4.192	152	193222	40.00	ppm	0.05
104) Phenanthrene-d10a	7.979	188	852506	40.00	ppm	0.08
106) Chrysene-d12a	12.873	240	897287	40.00	ppm	0.09
108) Acenaphthene-d10a	6.387	164	492746	40.00	ppm	0.05
110) Naphthalene-d8a	5.116	136	783370	40.00	ppm	0.05
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	3.887	105	105561	20.69	ppm	75
105) Atrazine	7.664	215	66321	31.27	ppm #	72
107) Benzidine	10.335	184	227642	18.56	ppm	95
109) 1,2,4,5-Tetrachloroben...	5.736	216	163613	25.90	ppm	90
111) Hydroquinone	5.522	110	130922	25.29	ppm	71

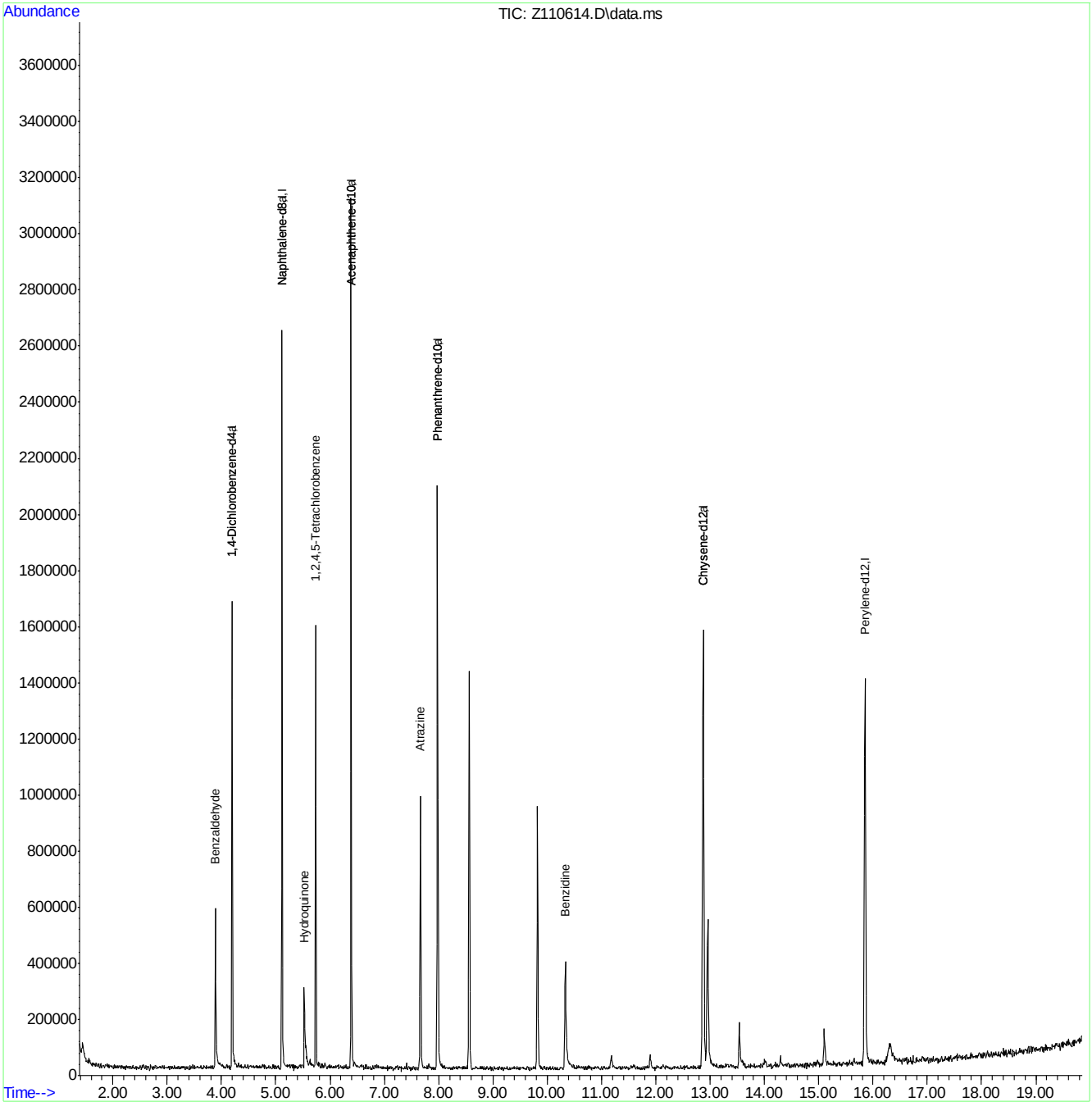
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5525\
Data File : Z110614.D
Acq On : 12 May 2016 10:46 am
Operator : ariellec
Sample : cc5486-25
Misc : op93793,ez5525
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 09:28:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 12 09:44:01 2016
Response via : Initial Calibration



MZ5485.M Fri May 13 09:28:16 2016 RTE

SGS ACCUTEST JC19914

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2855

Date: 4/21/16

Analyst Signature: [illegible]

Columns: Rxi-5SilMS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M8M2855sim

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.
		4/21/16

Standard Data

Lot #	Description	Conc.
SVI51827-68	DFTPP	50ppm
SVI51827-73	SIM Internal	40ppm
159148	Dimethylsulfone	—

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

Supervisor Signature: [illegible]

Date: 4-22-2016

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m60750	Condition			W	100					Condition	
	60755				W	100						
	60760	Condition			W	99						
	60761	DFTPP ~~ICC2855-1.0~~ 4/21/16		4/21/16 ~~BRASIM~~	W	1					not	deg ↑ reinstead
	60762	DFTPP			W	1					OK	1:31pm
	60763A	ICC2855-1.0			W	2					ok	SVI51827-104C non-A fluoranthene method
	60764A	ICC2855-0.5				3					ok	-104D
	60765A	ICC2855-0.2				4					OK	-104E
	60766	ICC2855-0.1				5					ok	-104F
	60767	ICC2855-0.05				6					OK	-104G
	60768	ICC2855-0.02				7					ok	-104H
	60769	ICC2855-0.01				8					ok	-104I
	60770	ICC2855-5.0				9					ok	-104A
	60771	ICC2855-2.5				10					OK	-104B
	60772	ICV2855-1.0		Acid		11					ok	SVI51827-27
	60773	ICV2855-1.0		BN1		12					ok	OP16A12-28
	60774	ICV2855-1.0		BN2		13					ok	SVI51829-85 8:35pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

171

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E3M2879

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 5/11/16

Columns: ZB-5MS 30m x .25mm x .25um

Method: 8270D/625

Initial Cal. Method: M3M2855sim

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM5829-08	DFTPP	50ppm
SM6913-09	SIMSTD	0.5ppm
-7	SIM Internal	40ppm
1602001	DCM-Fisher	—

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

Supervisor Signature: [illegible] Date: 5-17-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m0210	DFTPP			W	1					OK	9.260AM
	61219	CC2855-05		Brom	W	2					OK	Bromo.
	61220	OP93784-mb	937841	BS270	W	3			✓	✓	OK	
	61221	-bs12				4			✓	✓	OK	
	61222	JC19914-4		neat+14dilu		5			✓	✓	OK	
	61223	-5				6			✓	✓	OK	
	61224	-1				7			✓	✓	OK	
	61225	-3				8			✓	✓	OK	
	61226	OP93784-ms		BS270		9			✓	✓	OK	
	61227	-msd				10			✓	✓	OK	
	61228	OP93077-mb	930771	BS270	W	11			✓	✓	OK	
	61229	JC19664-7	937561	14dilu	W	12			✓	✓	OK	
	61230	-8				13			✓	✓	OK	
	61231	op93802mb	938021	BS270	O	14			✓	✓	OK	vf=10mL
	61232	-bs12				15			✓	✓	OK	↓
	61233	-ms				16			✓	✓	OK	
	61234	-msd				17			✓	✓	OK	↓

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

53

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E3M2879

Print Analyst Name: Ashley Dye

Date: 5/11/16

Analyst Signature: AMD

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 53	

Columns: 7B5ms (+) 30m x .25mm x .5µm

Method: 8270D/625

Initial Cal. Method: M3M2855sim

Injection Volume: 1µL

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

Supervisor Signature: [illegible]

Date: 5-17-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3M61235	JC19921-10	93802-1	Bsimpah	O	18			✓	✓	ok	Vf=10mL RR1:10.
	61236	OP93801a-MB1	93801	88270		19			✓	✓	ok	
	61237	-BS2				20			✓	✓	ok	
	61238	-MS				21			✓	✓	ok	
	61239	-MSD				22			✓	✓	ok	
	61240	JC19841-2		Bsim 14Dioxane		23			✓	✓	ok	909PM.
	61241	-4				24					RR	out of 12hrs.

AMD

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

55

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2881

Print Analyst Name: Linsey K.

Analyst Signature: LK

Date: 4/14/16

Columns: RtX-5Sil MS 30m x 0.25mm x 0.25um

Method 8270D/625

Initial Cal. Method M4M2881SIM

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS1829-168	LFMP	50 ppm
SVS1827-103	SIM internal	400 ppm
162342	DCM (Fisher)	—

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

Supervisor Signature: AMB Date: 4/14/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M64719	DFPP			W	1					NG	PCP↑ rerun
	64720	DFPP			W	1					OK	9:05AM
	64721	CC2881-0.5		BNASIM	W	2					not using	
	64722	400 x test				2					not using	test split changed. flow and oven temp
	64723A	IC2881-5		BNASIM	W	2					OK	SVS1827-104D vorran as "A" file no bottle
	64724	IC2881-1.0				3					OK	SVS1827-104C
	64725	IC2881-0.2				4					OK	-104E
	64726	IC2881-0.1				5					OK	-104F
	64727	IC2881-0.05				6					OK	-104G
	64728	IC2881-0.02				7					OK	-104H
	64729	IC2881-0.01				8					OK	-104I
	64730	IC2881-5.0				9					OK	-104A
	64731	IC2881-2.5				10					OK	-104B
	64732	IC2881-1.0		Acids		11					OK	SVS1827-27
	64733	IC2881-1.0		BN1		12					OK	OP157624-73
	64734	IC2881-1.0		BN2		13					OK	SVS1829-85

AMB

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

101

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4M2922

Print Analyst Name: Linsey K

Analyst Signature: [illegible]

Date: 5/17/16

Columns: Rxi-5Sil MS 30m x .25mm x .25µm

Method: 8270D / 1625

Initial Cal. Method: M4M2881Sim

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15B2448	DFTPP	50ppm
SV16A935-9	Sim Std.	0.5ppm
-21	Sim Internal	40ppm
1K0216	DEM-(FSRD)	—

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

Supervisor Signature: [illegible]

Date: 5-18-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M05310	DFTPP			W	1					Passing	8:39AM
	05311	CC2881-0.5		BNAsim	W	2					NR	No bottle
	05312	CC2881-0.5		BNAsim	W	2					NG	low ↑ reinstead
	05313	DFTPP			W	1					OK	9:58AM
	05314	CC2881-0.5		BNAsim	W	2					OK	
	05315	OP93791-MB	93791-1	8270	S	3			/	/	OK	
	05316	TC199H-6		NAP+1,4dioxane		4			/	/	OK	
	05317	→				5			/	/	OK	11:50AM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4P850

Print Analyst Name: Ashley M. Dye

Analyst Signature: AMD

Date: 4/28/2016

Columns: 12V154ms 2B5 31ms 30m x 25mm x 15µm AMD 4/28/16(4)

Method 8270D/625

Initial Cal. Method M4P850sim

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS1829108	DFTPP	50 ppm
SVS1827103	SM internal	400 ppm
148 AMD 4/28/16(4)		
159448	DCM (Fisher)	—

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

Supervisor Signature: [signature] Date: 5-6-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4P16218	DFTPP				1					not using	442T rotune.
	16219	DFTPP				1					OK	404PM.
	16220	ICC850-1.0		BNAsim	W	2					OK	SV16193594
	16221	ICC850-.5				3					OK	↓ B
	16222	-.2				4					OK	SV15182104E
	16223	-.1				5					OK	F
	16224	-.05				6					OK	G
	16225	-.02				7					OK	H
	16226	-.01				8					OK	I
	16227	-5				9					OK	A
	16228	-2.5				10					OK	B
	16229	ICV850-1.0		BSim	W	11					OK	OP15162473
	16230	-1.0		Acid	W	12					RR	SV15182742 92 AMD 4/28/16(4)
	16231	-1.0		BN2	W	13					OK	SV15182985 952PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

87

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4P854

Print Analyst Name: Ashley Moye

Analyst Signature: AMO

Date: 5/9/2016

Columns: Rtx-5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method U4P850.m

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU518248	DFTPP	50ppm
SU518297	Acid 2nd	50ppm
SU619357	SIM internal	400ppm
162917	DCM/Fahed	

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

Supervisor Signature: [illegible] Date: 5-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4P16258	DFTPP				1					OK	456PM.
	16259	ICV850-1.0		Acid.	W	2					OK	520PM

AMO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

97

Form: OR015-07

Rev. Date: 1/19/16

7.7.6

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4P857

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 5/11/16

Columns: Rxi5sil ms 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M4P8508im

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15182-4108	DFTPP	50ppm
SV16193596	Sim STD	0.5ppm
-7	SIM Internal	40ppm
16291A	DCM (Fisher)	—

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

Supervisor Signature: [signature] Date: 5-25-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4P16278	DFTPP				1					OK	3:41pm
	16279	CC850-0.5				2					OK	
	16280	OP93796-MB	93391H	B8270		3			/		OK	instrument Std ran as A file.
	16281	-BS12				4			/	/	OK	
	16282	-MS				5			/	/	OK	
	16283	-MSD				6			/	/	OK	
	16284	JC19914-7		BSim 14Dioxane BSim NAP		7						Did not run
	16285	-6				8						
	16286	-2				9			/	/	OK	inserted in sequence to run after 4P16283.
	16287	SIminternal		SV16193529		10			/	/	OK	Did not run 7:11pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

103

Form: OR015-07
Rev. Date: 1/19/16

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E6P1155

Date: 4/5/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SH151829-108	DFTPP	50 ppm
CM-5732	Internal Std	1000 ppm
162108	DCM (Fisher)	"

Columns: Rx: 5 ms 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method M6P1155 5 SD 4/5/16

Injection Volume: 1 ul

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

Supervisor Signature: AMO. Date: 4/6/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	6P24811	DFTPP			W	1					OK	434 pm
	24812	IC155-2		BNA		2					OK	SH5182760H
	24813	~~IC 3115-1~~ -1				3					OK	I
	24814	-100				4					OK	SH5182760A
	24815	-80				5					OK	B
	24816	-25				6					OK	D
	24817	-10				7					OK	E
	24818	-5				8					OK	G
	24819A	ICC1155-50				9					OK	815PM C Instrument shutdown, RR as A file

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

131

Form: OR015-05
Rev. Date: 1/16/2006

7.7.8

7

SGS ACCUTEST JC19914

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E6P1156

Date: 4/5/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100 ppm
-73B	↓	80
-73C		50
-73D		25
-73E		10
-73G	↓	5

Standard Data

Lot #	Description	Conc.
SV151824-108	DFTPP	50 ppm
SV151827-73H	TCL42	2 ppm
-73I	↓	1 ↓
CM5732	Internal Std	4000 ppm
162108	DCM (Fisher)	—

Columns: Rxi-5 Silms 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method M6P1155

Injection Volume: 1 ul

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

Supervisor Signature: AMO

Date: 4/6/16.

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	6P24820	DFTPP			W	1					NG	68↑, reinject
	24821	DFTPP			W	1					↓	68↑, reinject
	24822	DFTPP			W	1					OK	919PM
	24823	IC1156-100		TCL42		2					OK	
	24824	-80				3					OK	
	24825	IC1156-50				4					OK	
	24826	IC1156-25				5					OK	
	24827	IC1156-10				6					OK	
	24828	-5				7					OK	
	24829	-2				8					OK	
	24830	-1				9					OK	
	24831	ICV1155-50		Acids		10					RR	SV151827-79 #601
	24832	-50		Aniline		11					OK	-78
	24833	-50		ABN surr		12					OK	OP16171233
	24834	-50		BN1		13					OK	SV151827-88
	24835	-50		BN2		14					OK	-80 not DOD for #40
	24836	ICV1156-50		HQ		15					OK	-98C

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

133

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

7.7.9

7

SGS ACCUTEST JC19914

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E6P1156

Date: 4/5/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 133	

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method M6P1155

Injection Volume: 1 ul

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

Supervisor Signature: ANO.

Date: 4/6/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	6P 24837	ICV 1156-50		Benzidine 3rd		16					OK	356am SV151827-38F BZDT

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

ANO

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

135

Form: OR015-05
Rev. Date: 1/16/2006

7.7.9

7

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E6P1157

Date: 4/6/2016

Analyst Signature: AMO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM5187108	DFTPP	50 ppm
CM5732	Internal Std.	4000 ppm
162108	DCM (Fisher)	— "

Columns: RX5ms/MS30mx.5mmx.25µm

Method 8270D/625

Initial Cal. Method M6D1155

Injection Volume: 1µL

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

Supervisor Signature: [signature] Date: 4/6/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	6P24838	DFTPP				1					OK	941AM.
	24839	ICV1155-50		Acid 2nd	W	2					OK	SM5187779. 953AM
												AMO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

137

7.7.10

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E6P1206

Print Analyst Name: Arielle Cocorea

Analyst Signature:

Date: 5/11/16

Columns: Rx-5Sil MS 30m x 25mm x .25um

Method: 8270D/625

Initial Cal. Method: M6P1155

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 151829108	DFTPP	50ppm
SV ~~151827104F~~	~~BNA~~	~~25ppm~~
SV 151827104C	BNA	50ppm
SV 151835 4C	TCL42	
CM5732	Int. Std	4000ppm
16266	PCM (Fisher)	—

Ac 5/11/16

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

Supervisor Signature: AMC

Date: 5/12/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	GP25831	DFTPP			W	501					OK	849AM 15:49AM
	25832A	CL1155-25 50 Ac 5/11/16		BNA	W	502					OK	2,3,4,10 not Ac 5/11/16 | 73(5)? ion 84? (size) RP as "all" wrong compound/halogenated TCL42
	25833A	CL1156-50		TCL42	W	503	Ac				OK	1,2,4,5 TCB 5/11 RP as "all" Bottle concentrated
	25834	BNA ver 1ppm			W	504	5/11/16				OK	SV151827 62F
	25835	OP93781-MB1	93781	8270	W	505			6		NG	Run on 3/2 for verification
	25836	TCL42 ver 1ppm			W	6					OK	SV151827 12F
	25837	JC19442-10A	93695-1	ASTCLP	W	7			/	/	OK	
	25838	11A				8			/	/	OK	
	25839	12A				9			/	/	OK	
	25840	13A				10			/	/	OK	
	25841A	14A				11			/	/	OK	RAN ALS 6P25847 RP 14 "sequence change"
	25842	15A				12			/	/	OK	
	25843	16A				13			/	/	OK	
	25844	17A				14			/	/	OK	
	25845	OP93791-MB1	93791	8270+	S	15			/	/	OK	Reanalyze 6P25840
	25846	BST				16			/	/	OK	
	25847	JC19852-2 RX		ABRPLT		17			/	/	OK	VF=5

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

97

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E6P1206

Print Analyst Name: Angelo Cocozza

Analyst Signature:

Date: 5/11/16

Columns: RX5 [illegible]

Method: 8270D/625

Initial Cal. Method: MC/MS

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See p97	

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

Supervisor Signature: AMB

Date: 5/12/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	6P25848	6P93791-ms	93791	AS 8270	S	18			/		OK	Cal Ver 6P25844
	25849	MSD				19			/		OK	
	25850	JC19914-2		AGSL +~~[illegible]~~ ZnWAP ~~AFRZ [illegible]~~ MWAP		20			/		OK	surr confirm w/ms/msd
	25851	6		ABSL +ZnWAP MWAP		21			/	/	OK	
	25852	7				22			/		OK	2a 1:2
	25853	JC19844-6		AGSL2L20+		23		+	/		OK	~~RR Dilution Phthalate~~ ACS 5/12/16
	25854	7				24		+	/	Pass	OK	
	25855	JC19844-1		ABSPIL BACD AFRZ BNLAC		25			/	/	OK	
	25856	JC19844-2		AGSL2L20+		26			/		RR	Phthalate Butylbenzyl 83 8/1/16 RR 1:10
	25857	5				27			/		not used	outside clock VF=2 9:05pm time

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

99

Form: OR015-07
Rev. Date: 1/19/16

7.7.11

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5217

Print Analyst Name: Sean Black

Analyst Signature: Sean T. Black

Date: 4/12/16

Columns: Rxi-5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.
SV151827-106A	BNA	100 ppm SU
-106B	↓	80
-106C		50
-106D		25
-106E		10
-106G	↓	5

Standard Data

Lot #	Description	Conc.
151824-108	DFTPP	50 ppm
SV151827-106H	BNA	2 ppm
-106I	↓	1 ↓
CM5732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

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

Supervisor Signature: AMO

Date: 4/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123504	DFTPP				1					NG	peak tailing
	123505	DFTPP				1					OK	538am
	123506	ic5217-2		BNA		2					OK	
	123507	-100				3					OK	
	123508	-80				4					OK	
	123509	-25				5					OK	
	123510	-10				6					OK	
	123511	-5				7					OK	
	123512	-1				8					OK	
	123513	ic5217-50				9					OK	926PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5218

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/12/2016

Columns: Rx-5sil ms 30m x .25mm x .25u

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100
-73B	↓	80
-73C		50
-73D		25
-73E		10
-73G	↓	5

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-73H	TCL42	2 ppm
-73I	↓	1 ↓
CM-5732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

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

Supervisor Signature: AWO

Date: 4/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123514	DFTPP			W	1					ok	957PM
	123515	~~CC5217~~ ICC5218-100		TCL42	W	2					OK	
	123516	-80				3					OK	
	123517	ICC5218-50				4					ok	
	123518	IC5218-25				5					ok	
	123519	-10				6					OK	
	123520	-5				7					ok	
	123521	-2				8					OK	
	123522	-1				9					ok	
	123523	ICV5217-50		Acids		10					OK	SV151827-87
	123524	-50		Anilines		11					ok	-94
	123525	-50		ABNsurr		12					RR	OP161711233 Doesn't meet DOD 20%
	123526	-50		BN1		13					ok	SV151827-88
	123527	-50		BN2		14					OK	-95
	123528	ICV5218-50		HQ		15					ok	-98A
	123529	-50		Benzidine Std		16					ok	-38E BZD ↑ cannot report.
												457am. AWO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

183

7.7.13

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EM5219

Print Analyst Name: ASHLEY MDYR

Date: 4/13/2016.

Analyst Signature: ANO

Columns: Rxi 5Si/ms 30m x 0.25mm x 0.25µm

Method: 8270D/625

Initial Cal. Method: MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SUS829102	DFTPP	50ppm
CM5732	Internal Std.	4000ppm
162342	DCM (Fisher)	— "

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

Supervisor Signature: [illegible] Date: 4/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123530	DFTPP				1					not using	ions out range
	123531	DFTPP				1					OK	927am.
	123532	IcuS217-50		ABN Surr		2					OK	OP1617255
												ANO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5239

Print Analyst Name: Sean Black

Analyst Signature: Sean T Black

Date: 4/26/16

Columns: Rtx-5Silms 30m x 25m x .25µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

AMO 4/27/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 157824-108	DFTPP	50 ppm
CW5732	Internal Std.	4000
162418	DCM (Blank)	—

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

Supervisor Signature: AMO

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123916	DFTPP				1					NG	pop ↑, re-inject
	123917	DFTPP				1						pop ↑, re-install
	123918	DFTPP				1						pop ↑, re-inject
	123919	DFTPP				1						pop ↑, re-install
	123920	DFTPP				1						pop out, re-inject
	123921	DFTPP				1						pop still out, re-install
	123922	DFTPP				1						PCP = 3.41 re-inject
	123923	DFTPP				1						PCP = 2.36 re-inject
	123924	DFTPP				1						PCP = 2.11 re-inject
	123925	DFTPP				1						PCP = 2.27 re-inject
	123926	DFTPP				1						PCP = 2.06 re-inject
	4/26/16 (jm) 123927	DFTPP				1						PCP = 2.03 re-inject
	123928	DFTPP				1					OK	11:05
	123929	IC5239-100		TCL42		2					OK	SV161935-3A
	123930	IC5239-80				3					OK	SV161935-3B
	123931	IC5239-50				4					OK	SV161935-4A
	123932	IC5239-25				5					OK	SV161935-3D

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5239

Print Analyst Name: Sean Black

Analyst Signature: Sean T Black

Date: 4/26/16

Columns: Rtx-5Sil MS 30m x 25mm x 25µm

Method 8270D/625

Initial Cal. Method MM5239 AMO 4/27/16

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 53	

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

Supervisor Signature: AMO

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M123933	IC5239-10		TCL42		6					OK	SV161935-3RE SA 4/26/16
	123934	IC5239-5				7					OK	SV161935-3G
	123935	IC5239-2				8					OK	SV161935-3H
	123936	IC5239-1				9					OK	SV161935-3I
	123937	ICV5239-50		BN1		10					OK	SV161935-1 BZD not passing 20%
	123938	ICV5239-50 AMO 4/27/16		BN2		11					OK	SV151827-2
	123939	ICV5239-50		Benzidine 3rd		12					not sing	SV151827-3BB BZDT
	123940	ICV5239-50		HQ		13					OK	SV151827-9BB 437ant.

AMO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5240

Print Analyst Name: Ashley M. Dup

Date: 4/27/16

Analyst Signature: AMD

Columns: Rtx 5Sil MS 30m x 0.25mm x 0.25µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
151029-108	dftpp	50ppm
EM5732	internal std	400ppm
162418	dcm (fisher)	—

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

Supervisor Signature: JR

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M123941	DFTPP				1					not using	plunger error rerun
	123942	DFTPP				1					not using	1014am peak tailing bad
	123943	DFTPP				1					OK	1035am
	123944	ICV5239-50		Benzidine	W	2					not using	wrong concentration
	123945	ICV5239-50		BZD	W	3					OK	SV161935149B. 1118am

AMD

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07

Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EM5259

Print Analyst Name: Julius Johnson

Analyst Signature: JJ

Date: 5/10/16

Columns: Rxi5Silms 30m*.25mm*.25µm

Method: 8270D/625

Initial Cal. Method: MM5239

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151027-91	DFTPP	50ppm
SV161935-19F	BNA	25ppm
SV151027-74N	TCL42	25ppm
CM5772	IS	4000ppm
162661	DCM (fisher)	—

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

Supervisor Signature: [signature] Date: 5/25/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M124307	DFTPP			W	1					OK	Rerun as "A" file, analyst error 9.23pm
	124308	CC5239-25		BNA	W	2					OK	4,97↑
	124309	CC5239-25		TCL42	W	3					OK	108↓, 105, 106↑
	124310	OP93784-mb1	93784	AB8270	W	4			✓	✓	OK	
	124311	OP93782-mb1	93782			5		+	✓	✓	OK	
	124312	-bs1	↓			6			✓	✓	OK	
	124313	OP93784-bs1	93784			7			✓	✓	OK	
	124314	-ms				8			✓	✓	OK	
	124315	-msd				9			✓	✓	OK	
	124316	JC19914-1		ABSL - MNap 2MNap		10			✓	✓	OK	RR 1:100
	124317	-3				11			✓	✓	OK	RR 1:100
	124318	-4				12			✓	✓	OK	
	124319	-5				13			✓	✓	OK	
	124320	JC19909-3	93782	ABSL		14			✓	✓	OK	
	124321	OP93782-ms		AB8270		15			✓	✓	OK	
	124322	-msd				16			✓	✓	OK	
	124323	JC19737-1		Aniline + NBNZ		17			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

123

Form: OR015-07
Rev. Date: 1/19/16

7.7.17

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5259

Print Analyst Name: Sean Blood

Analyst Signature: [signature]

Date: 5/16/16

Columns: Rtx-5Silms 30m x 25mm x 25µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 123	

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

Supervisor Signature: [signature] Date: 5/25/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M124324	JZ19737-2	93782	Aniline, NDNA	W	18			✓	✓	OK	
	124325	-3	↓	↓	↓	19			✓	✓	OK	
	124326	-4				20			✓	✓	OK	RR 1:10/1:1000
	124327	-5				21			✓	✓	OK	RR 1:10/1:500
	124328	-6				22			✓		RR	c/o
	124329	-7				23			✓		RR	c/o
	124330	-8				24			✓	✓	OK	RR 1:10/1:500
	124331	-9	↓	↓	↓	25			✓	✓	OK	903AM
	124332	tc142vef.				26			✓	X	OK	SV15182773H 2ppm
												AMO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

125

Form: OR015-07
Rev. Date: 1/19/16

7.7.17

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5260

Print Analyst Name: Ashley M Dye

Analyst Signature: AMD

Date: 5/11/16

Columns: Rxi5Sil ms30m x 0.25mm x 0.25µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU151829105	DFTPP	50 ppm
SV16M35PE	BNA	50 ppm
SU151277-4	TCL42	50 ppm
CM5732	Internal Std.	4000 ppm
162661	DCM (Fisher)	—

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

Supervisor Signature: [signature] Date: 5/25/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M124333	DFTPP				1					not using	ions at rtenn
	124334	DFTPP				1						ions at retune
	124335	DFTPP				1						
	124336	DFTPP				1						
	124337	DFTPP				1						
	124338	DFTPP				1						
	124339	DFTPP				1						
	124340	DFTPP				1					OK	1211PM.
	124341	CC521750		BNA	W	2					OK	Analyzed
	124342	CC523950		TCL42	W	3					OK	
R2	124343	JC19914-1	937841	ABSL+mnap +2mnap	W	4	100		√	X	OK	
R2	124344	-3				5	100		√	X	OK	
	124345	JC19737-4	937821	Aniline+ nbz	W	6	1000		√	X	OK	
	124346	-5				7	500		√	X	OK	
	124347	-8				8	500		√	X	OK	
	124348	JC19698-4		Pah		9			√	√	OK	
	124349	JC19714-1		ABNSTD19		10		+	√	√	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

127

Form: OR015-07
Rev. Date: 1/19/16

7.7.18

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5260

Print Analyst Name: Ashley Moyer

Analyst Signature: AMO.

Date: 5/11/16.

Columns: Rxi5Sil MS 30m x 0.15 mm x 0.25 µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 127	

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

Supervisor Signature: [signature] Date: 5/25/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M124350	JC19714-2	93782-1	ABNTCN0+	W	11			✓		RR	RR for IS
	124351	-3				12					not ran	vial absent
	124352	JC19744-1		BNTCN0+		13		+	✓	✓	OK	
	124353	JC19745-1				14					not ran	sim only!
	124354	JC1338048		ABTCN0+		15		+	✓	✓	OK	
R	124355	JC19725-12	93680	BN04H		16			✓	✓	OK	Ran after M124342
R	124356	10				17			✓	✓	OK	✓
	124357	JC19575-13	93634	ABN12CN + 12DPH, BN2DNB, NDMA	S	18		+	✓	✓	OK	
	124358	-14	↓	↓	↓	19		+	✓	✓	OK	
	124359	JC19558-7				20		+	✓	✓	OK	RR 1.5
	124360	JC19573-6				21		+	✓	✓	OK	
	124361	-13				22		+	✓	✓	OK	RR 1.5 5:14pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5264

Print Analyst Name: HUC ASIKCYMDYR

Analyst Signature: HUC

Date: 5/13/16

Columns: Rtx5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.
		AMC 5/13/16

Standard Data

Lot #	Description	Conc.
SV15182905	DFTPP	50ppm
SV15935196	BLA	50ppm
SV15182774K	TCL42	50 ppm
CU5732	Internal Std.	4000ppm
162661	DCM (Fisher)	—

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

Supervisor Signature: [signature] Date: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M124416	DFTPP				1					not using	tailing reinject
	124417	DFTPP				1					↓	rest of tailing
	124418	DFTPP				1					↓	↓
	124419	DFTPP				1					not using.	
	124420	DFTPP				1					OK	920AM.
	124421	CC521750		BLA	W	2					OK	
	124422	CC523950		TCL42	W	3					OK	
	124423	op93791-mb1	93791-1	AB8270+	W	4		+	✓	✓	OK	
	124424	JC19914-67		ABSL+ mnap+ 2mnap		5			✓	✓	OK	
	124425	-76	AM 05/13/16			6			✓	✓	OK	
	124426	op93690-mb1	93690-1	AB8270	S	7			✓	✓	OK	
	124427	op93830-mb1	93830-1	AB8270	S	8			✓	✓↑	OK	
	124428	-bs1				9			✓	✓	OK	
R	124429	JC19986-9	93827-1	EPA# nap+2mnap	S	10	5		✓	✓	OK	Vt=2mL
	124430	op93619-mb1	93619-1	AB8270	O	11			✓	✓	OK	Vt=2mL
	124431	JC15426-33		ABSL+HQ		12	2		✓	✓↑	OK	↓ diluted due to matrix.
	124432	op93830-ms	93830-1	AB8270	S	13			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

141

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EMS264

Print Analyst Name: Ashley Moyle

Analyst Signature: AMO

Date: 5/13/16

Columns: RtX5Si/ms30m x .25mm x .25µ

Method 8270D/625

Initial Cal. Method MMS239

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 141	

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

Supervisor Signature: [signature] Date: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M124433	op93830-ms	938301	AB8270	S	14			✓	✓	OK	
	124434	JC19983-15				15			✓		OK	
AMO 5/13/16	124435	JC19996-2		AB8270 mnap 12mnap		16			✓	✓	all	
	124436	JC19558-7	93634-1	AB8270, DRPHNOVA-1		17	5		✓	✓	all	
	124437	JC19573-15		8270		18	5		✓	✓	all	JC19573-13
	124438	JC19714-2	AMO 5/13/16 93782-1	AB8270	W	19			✓	✓	all	
	124439	-3				20			✓	✓	all	
	124440	JC19991-1	938301	Pan	S	21			✓	✓	all	
	124441	JC19984-1				22			✓	✓	all	
	124442	-2				23			✓	✓	all	
	124443	JC19962-2				24			✓	✓	all	
	124444	-3				25			✓	✓	all	
	124445	Acid		SV16193526		26			✓	✓	all	ran after M12443

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EZ5485

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/13/2016

Standard Data

Lot #	Description	Conc.
SV151827-106A	BNA	100 ppm
-106B	↓	80
-106C	↓	50
-106D	↓	25
-106E	↓	10
-106G	↓	5 ↓

Standard Data

Lot #	Description	Conc.
SV151819-108	DFTPP	50 ppm
SV151827-106H	BNA	2 ppm
-106I	↓	1 ↓
CM15732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

Columns: Rx-5Sil ms 30m x .25mm x .25um

Method 8270 D/625 85

Initial Cal. Method MZ5446 SD (2) 4/13/16

Injection Volume: 1 ul

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

Supervisor Signature: AMQ

Date: 4/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	Z109740	DFTPP			W	1					OK	9:20 pm
	109741	ic 5485-2		BNA	W	2					OK	
	109742	-100				3					OK	
	109743	-80				4					OK	
	109744	-25				5					OK	
	109745	-10				6					OK	
	109746	-5				7					OK	
	109747	-1				8					OK	
	109748	icc 5485-50				9					OK	11:54 am

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EZ5486

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/14/2016

Columns: Rxi-5silms 30mx.25mmx.25um

Method: 8270 D/625

Initial Cal. Method: MZ5485

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100
-73B		80
-73C		50
-73D		25
-73E		10
-73G		5

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-73H	TCL42	2 ppm
-73I		1
CM-5732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

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

Supervisor Signature: AMO Date: 4/14/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	Z109749	DFTPP				1					OK	129 um
	109750	TCL5486-100		TCL42		2					OK	
	109751	-80				3					OK	
	109752	-25				4					OK	
	109753	-10				5					OK	
	109754	-5				6					OK	
	109755	-2				7					OK	
	109756	-1				18					OK	
	109757	TCL5486-50				19					OK	
	109758	TCV5485-50		Acids		20					OK	SV151827-87
	109759	-50		Aniline		21					OK	-94
	109760	-50		ABN Surr		22					OK	OP151624 20
	109761	-50		BN1		23					OK	SV151827-113 33 dcsu
	109762	-50		BN2		24					OK	-95
	109763	TCV5486-50		HQ		25					OK	-98A
	109764	-50		Benzidine 3rd		26					OK	-38E 106 ftn

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

21

7.7.21 7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EZ5525

Print Analyst Name: Angelle Cooper

Date: 5/12/16

Analyst Signature:

Columns: Rtx-5Sil MS/Rtx-5Sil MS 25m

Method: 8270D625

Initial Cal. Method: MZ5485

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
S 151824108	DFTPP	50ppm
SV 151824074	BNA	25ppm
1273	TCL42	↓
CW5732	F-5	200ppm
167661	PCM(F5)	

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

Supervisor Signature: [signature] Date: 5/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	110606	DFTPP			W	1					NO	5/13/16 Reinjected
	110607	DFTPP			W	1						RCP1 reinjected
	110608	DFTPP			W	1						4416 reinjected
	110609	DFTPP			W	1						RP1 reinstall
	110610	DFTPP			W	1						4417 4418 Reinjected RC1 not enough
	110611	DFTPP			W	1						4419 return
	110612	DFTPP			W	1					OK	10:01am
	110613	CC5485-25		BNA	W	2					OK	23,24,10,60 Hexachlorobutadiene
	110614	CC5486-25		TCL42	W	3					OK	Benzidine
	110615	BNA 25ppm Ver			W	4					OK	
	110616	op93671-MB1	93671	AG8270A	S	5		+	/	/	OK	
	110617	op93791-MB1	93791	AG8270A	S	6		+	/	/	OK	
	110618	JC19492-25	93671	AG8270A	S	7		+	/	/	OK	
	110619	29				8		+	/	/	OK	
	110620	27				9		+	/	/	OK	
	110621	16				10		+	/	/	OK	
	110622	18				11		+	/	/	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

159

7.7.22

7

6-1737

LOGBOOK ID:

ABN Aqueous Extraction Logbook

Date Started: 5/10/16 3:45pm (KS)
Time Started: 3:45pm
Date Finished: 5/10/16
Time Finished: 8:10pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 93784	RACK#
Extracted by:	KS
Concentrated by:	KS
Vialed by:	KS
Relinquished by:	
Accepted by:	
Supervisor Review:	5/10/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DI H2O	1000	1	5	Clear	1		
BS1			DI H2O	1000	1	5	Yellow	1		
JC19914-1 MS		2	orange	450	1	5	Yellow	1		
MSD		2	orange	450	1	5	Yellow	1		
BS 12 SIM			DI H2O	1000	1	5	Yellow	1		
JC19914-3 MS		2	Orange	460	1	5	Yellow	1		
↓ MSD		2	orange	460	1	5	Yellow	1		
JC19914-1	ABN	1	orange	900	1	5	L. Yellow	1		
-3		1	orange	900	1	5	L. Yellow	1		
-4		2	Yellow	980	1	5	L. Yellow	1		
-5		2	Yellow	1000	1	5	Clear	1		

1dTAT

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments: okay to split MS/MSD & SIM MS/MSD, not enough bottles

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	6/7	73/74	0.5/0.1	74/75	NA
Waterbath Chiller (GPM)	F-2	0	NA	NA	2
NEVAP (32-38°C; LPM)	2	36	0.1	36	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16 1712 ua	50	1

WITNESS SIGN: SPIKE SIGN: KS

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid			Acid: 1
Acid (for SIM)	16 1935 21	50	A(SIM): 0.1
Base #1	16 1935 25	50	1
Base #2	16 1935 22	50	1
Anilines	16 1935 20	50	1
BSIM	16 1712 86	1	1

WITNESS SIGN: ADC SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	6X60

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2661410	Baccch
Sodium Sulfate	157477	Fisher
Glass Wool	02005-2	lab
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

13

6-1737

LOGBOOK ID:

ABN Aqueous Extraction Logbook

Date Started: 5/10/16 3:45pm (KS)
Time Started: 3:45pm
Date Finished: 5/10/16
Time Finished: 8:10pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 93784	RACK#
Extracted by:	KS
Concentrated by:	KS
Vialed by:	KS
Relinquished by:	
Accepted by:	
Supervisor Review:	5/10/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DI H2O	1000	1	5	Clear	1		
BS1			DI H2O	1000	1	5	Yellow	1		
JC19914-1 MS		2	orange	450	1	5	Yellow	1		
MSD		2	orange	450	1	5	Yellow	1		
BS 12 SIM			DI H2O	1000	1	5	Yellow	1		
JC19914-3 MS		2	Orange	460	1	5	Yellow	1		
MSD		2	orange	460	1	5	Yellow	1		
JC19914-1	ABN	1	orange	900	1	5	L. Yellow	1		
-3		1	orange	900	1	5	L. Yellow	1		
-4		2	Yellow	980	1	5	L. Yellow	1		
-5		2	Yellow	1000	1	5	Clear	1		

1dTAT

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	617	73/74	0.5/0.1	74/75	NA
Waterbath Chiller (GPM)	F-2	0	NA	NA	2
NEVAP (32-38°C; LPM)	2	36	0.1	36	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16 A12 ia	50	1

WITNESS SIGN: SPIKE SIGN: KS

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid			Acid: 1
Acid (for SIM)	16 1935 21	50	A(SIM): 0.1
Base #1	16 1935 25	50	1
Base #2	16 1935 22	50	1
Anilines	16 1935 20	50	1
BSIM	16 A12 36	1	1

WITNESS SIGN: ADC SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	6X60

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2661410	Baccch
Sodium Sulfate	157477	Fisher
Glass Wool	02005-2	lab
Filter Paper		
pH strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments: okay to split MS/MSD & SIM MS/MSD, not enough bottles

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

13

ABN Extraction Log - Solids

LOGBOOK ID: 6-1743

Date started: 5/11/16 Time started: 8am

Date finished: 5/11/16 Time finished: 2:45pm

Extract Method (CHECK ONE "√" /DO NOT CIRCLE):

Microwave SW3546 _____ Sonication SW3550C _____

Waste Dil. SW3580A _____ Soxhlet SW3540C _____

BATCH # MS 93791 RACK# B-3

Weighed/Extracted by: AP 10.9

Concentrated by: AP AQ 10.9

Vialed by: AQ

Relinquished by: AQ

Accepted by:

Supervisor Review: 5/11/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Sonication ID	Microwave ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
MB1	ABN		sand	30.0			3		clear	1		
BS1			sand	30.0			3		yellow	1		
JC19914-2 MS		1	clay	30.1		/	3		yellow	1		
MSD		1	clay	31.1		/	3		yellow	1		
BS	12SIM		sand	30.0			3		clear	1		
JC19914-2 MS	A	1	clay	30.3		/	3		L-yellow	1		
MSD	A	1	clay	31.2		/	3		L-yellow	1		
1 JC19914-2	ABN	1	clay	30.1		/	3		L-yellow	1		
2 -6		1	sand	30.8		/	3		L-yellow	1		
3 -7		1	sand	30.6	/		3		L-yellow	1		
4 JC19931-1		1	clay	30.0		/	3		brown	1		
5 JC19852-2 rx		1	paper	5.0		/	3		yellow	5	10	
6 JC19811-2		1	stones	30.9		/	3		yellow	1		
7 -5		1	stones	31.0		/	3		brown	2	5	
8 -6		1	stones	30.0		/	3		L-yellow	1		
9 -7		1	stones	31.2		/	3		L-yellow	1		
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

3day TAT due today

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: lowsur.

Spiking:

Weights/Volumes:

Required MS/MSD: is JC19914-2
SIM is JC19914-2

Final Volume:

Other: please update 'a' batch

Comments:
* Weight of sample reduced because of low density.
Δ Vialed at 5ml due to bad sample matrix
Δ Vialed at 2ml due to bad sample matrix

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	10,9	76.7/71	-0.6/+1.5	76.1/72.5	—
Waterbath Chiller (GPM)	M2/M3	3.2	—	—	1.7, 1.8
NEVAP (32-38°C, LPM)	3				
Balance	BP6	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN SP	16171210	50	1

WITNESS SIGN: AQ SPIKE SIGN: AP

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	1619351	50	Acid: 1ml
Acid (for SIM)			A(SIM): 0.1ml
Base #1 SV	16198525	50	1
Base #2 SV	16198522	50	1
Aniline SV	16198515	50	1
BSIM SP	16171286	1	1

WITNESS SIGN: AQ SPIKE SIGN: AP

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162417 / 158571	Fisher / Fisher	30ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Fisher
SODIUM SULFATE	157477	Fisher
FILTER PAPER	9674927	Fisher

MATRIX	LOT #	BRAND
SAND SGL	5080507	Fisher

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

LOGBOOK ID: 6-1743

ABN Extraction Log - Solids

Date started: 5/11/16 Time started: 8am
Date finished: 5/11/16 Time finished: 2:45pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 _____ Sonication SW3550C _____
Waste Dil. SW3580A _____ Soxhlet SW3540C _____

BATCH # MS 93791 RACK# B-3

Weighed/Extracted by: AQ
Concentrated by: AQ
Vialed by: AQ
Relinquished by: AQ
Accepted by:
Supervisor Review: 5/11/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Sonication ID	Microwave ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
MB1	ABN		sand	30.0			3		clear	1		
BS1			sand	30.0			3		yellow	1		
JC19914-2 MS		1	clay	30.1		/	3		yellow	1		
MSD		1	clay	31.1		/	3		yellow	1		
BS	12SIM		sand	30.0			3		clear	1		
JC19914-2 MS	A	1	clay	30.3		/	3		L-yellow	1		
MSD	A	1	clay	31.2		/	3		L-yellow	1		
1 JC19914-2	ABN	1	clay	30.1		/	3		L-yellow	1		
2 -6		1	sand	30.8		/	3		L-yellow	1		
3 -7		1	sand	30.6	/		3		L-yellow	1		
4 JC19931-1		1	clay	30.0		/	3		brown	1		
5 JC19852-2 rx		1	paper	5.0		/	3		yellow	5	10	
6 JC19811-2		1	stones	30.9		/	3		yellow	1		
7 -5		1	stones	31.0		/	3		brown	2	5	
8 -6		1	stones	30.0		/	3		L-yellow	1		
9 -7		1	stones	31.2		/	3		L-yellow	1		
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: lowsur.

Spiking:

Weights/Volumes:

Required MS/MSD: is JC19914-2
SIM is JC19914-2

Final Volume:

Other: please update 'a' batch

3day TAT due today

Comments:
* Weight of sample reduced because of low density.
Δ Vialed at 5ml due to bad sample matrix
Δ Vialed at 2ml due to bad sample matrix

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	10,9	76.7/71	-0.6/+1.5	76.1/72.5	—
Waterbath Chiller (GPM)	M2,M3	3.2	—	—	1.7, 1.8
NEVAP (32-38°C, LPM)	3				
Balance	BP6	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN SP	16171210	50	1

WITNESS SIGN: AQ SPIKE SIGN: AQ

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	1619351	50	Acid: 1ml
Acid (for SIM)			A(SIM): 0.1ml
Base #1 SV	16198525	50	1
Base #2 SV	16198522	50	1
Aniline SV	16198515	50	1
BSIM SP	16171286	1	1

WITNESS SIGN: AQ SPIKE SIGN: AQ

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162417 / 158571	Fisher / Fisher	30ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Fisher
SODIUM SULFATE	157477	Fisher
FILTER PAPER	9674927	Fisher

MATRIX	LOT #	BRAND
SAND SGL	5080507	Fisher

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-MB2 [a]	GH104971.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	55	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	36	ug/l	
67-63-0	Isopropyl Alcohol	ND	100	68	ug/l	
71-23-8	n-Propyl Alcohol	ND	100	43	ug/l	
71-36-3	n-Butyl Alcohol	ND	100	87	ug/l	
78-92-2	sec-Butyl Alcohol	ND	100	66	ug/l	
67-56-1	Methanol	ND	200	71	ug/l	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	103%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5290-MB2	GH105055.D	1	05/18/16	XPL	n/a	n/a	GGH5290

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-2

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	69	ug/kg	
78-83-1	Isobutyl Alcohol	ND	100	59	ug/kg	
67-63-0	Isopropyl Alcohol	ND	100	57	ug/kg	
71-23-8	n-Propyl Alcohol	ND	100	40	ug/kg	
71-36-3	n-Butyl Alcohol	ND	100	54	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	100	53	ug/kg	
67-56-1	Methanol	ND	200	48	ug/kg	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	87%	52-141%
111-27-3	Hexanol	89%	52-141%

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5292-MB1	GH105099.D	1	05/19/16	XPL	n/a	n/a	GGH5292

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-6, JC19914-7

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	69	ug/kg	
78-83-1	Isobutyl Alcohol	ND	100	59	ug/kg	
67-63-0	Isopropyl Alcohol	ND	100	57	ug/kg	
71-23-8	n-Propyl Alcohol	ND	100	40	ug/kg	
71-36-3	n-Butyl Alcohol	ND	100	54	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	100	53	ug/kg	
67-56-1	Methanol	ND	200	48	ug/kg	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	80%	52-141%
111-27-3	Hexanol	83%	52-141%

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-MB1 [a]	GH104961.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

GGH5285-BS, JC19644-1MS, JC19644-1MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	55	ug/l	
78-83-1	Isobutyl Alcohol	ND	100	36	ug/l	
67-63-0	Isopropyl Alcohol	ND	100	68	ug/l	
71-23-8	n-Propyl Alcohol	ND	100	43	ug/l	
71-36-3	n-Butyl Alcohol	ND	100	87	ug/l	
78-92-2	sec-Butyl Alcohol	ND	100	66	ug/l	
67-56-1	Methanol	ND	200	71	ug/l	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	104%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5290-MB1	GH105050.D	1	05/18/16	XPL	n/a	n/a	GGH5290

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

GGH5290-BS

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	69	ug/kg	
78-83-1	Isobutyl Alcohol	ND	100	59	ug/kg	
67-63-0	Isopropyl Alcohol	ND	100	57	ug/kg	
71-23-8	n-Propyl Alcohol	ND	100	40	ug/kg	
71-36-3	n-Butyl Alcohol	ND	100	54	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	100	53	ug/kg	
67-56-1	Methanol	ND	200	48	ug/kg	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	87%	52-141%
111-27-3	Hexanol	90%	52-141%

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-BS [a]	GH104962.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
64-17-5	Ethanol	5000	5540	111	74-123
78-83-1	Isobutyl Alcohol	5000	6110	122	70-124
67-63-0	Isopropyl Alcohol	5000	8700	174* [b]	76-121
71-23-8	n-Propyl Alcohol	5000	6100	122	73-122
71-36-3	n-Butyl Alcohol	5000	6320	126* [b]	67-116
78-92-2	sec-Butyl Alcohol	5000	5490	110	74-118
67-56-1	Methanol	5000	4810	96	67-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	115%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
(b) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5290-BS	GH105051.D	1	05/18/16	XPL	n/a	n/a	GGH5290

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
64-17-5	Ethanol	5000	4990	100	75-124
78-83-1	Isobutyl Alcohol	5000	4850	97	67-126
67-63-0	Isopropyl Alcohol	5000	5010	100	76-122
71-23-8	n-Propyl Alcohol	5000	5080	102	72-122
71-36-3	n-Butyl Alcohol	5000	4270	85	62-120
78-92-2	sec-Butyl Alcohol	5000	5120	102	73-120
67-56-1	Methanol	5000	4810	96	66-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	95%	52-141%
111-27-3	Hexanol	98%	52-141%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5292-BS	GH105100.D	1	05/19/16	XPL	n/a	n/a	GGH5292

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-6, JC19914-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
64-17-5	Ethanol	5000	4920	98	75-124
78-83-1	Isobutyl Alcohol	5000	4870	97	67-126
67-63-0	Isopropyl Alcohol	5000	4980	100	76-122
71-23-8	n-Propyl Alcohol	5000	5170	103	72-122
71-36-3	n-Butyl Alcohol	5000	4690	94	62-120
78-92-2	sec-Butyl Alcohol	5000	5140	103	73-120
67-56-1	Methanol	5000	4650	93	66-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	91%	52-141%
111-27-3	Hexanol	94%	52-141%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC19644-1MS	GH104964.D	1	05/16/16	XPL	n/a	n/a	GGH5285
JC19644-1MSD	GH104965.D	1	05/16/16	XPL	n/a	n/a	GGH5285
JC19644-1	GH104963.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-1, JC19914-3, JC19914-4, JC19914-5

CAS No.	Compound	JC19644-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		5000	5730	115	5000	5830	117	2	58-145/27
78-83-1	Isobutyl Alcohol	ND		5000	6360	127	5000	6620	132* [a]	4	69-131/25
67-63-0	Isopropyl Alcohol	ND		5000	5180	104	5000	5900	118	13	70-133/28
71-23-8	n-Propyl Alcohol	ND		5000	6240	125	5000	6730	135	8	66-137/29
71-36-3	n-Butyl Alcohol	ND		5000	6710	134* [a]	5000	6890	138* [a]	3	63-131/25
78-92-2	sec-Butyl Alcohol	ND		5000	5780	116	5000	6090	122	5	64-136/25
67-56-1	Methanol	ND		5000	4920	98	5000	4970	99	1	48-148/34

CAS No.	Surrogate Recoveries	MS	MSD	JC19644-1	Limits
111-27-3	Hexanol	111%	113%	104%	56-145%

(a) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC19914-2MS	GH105057.D	1	05/18/16	XPL	n/a	n/a	GGH5290
JC19914-2MSD	GH105058.D	1	05/18/16	XPL	n/a	n/a	GGH5290
JC19914-2	GH105056.D	1	05/18/16	XPL	n/a	n/a	GGH5290

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-2

CAS No.	Compound	JC19914-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		7520	7620	101	7520	7460	99	2	64-132/22
78-83-1	Isobutyl Alcohol	ND		7520	7480	99	7520	7350	98	2	59-141/26
67-63-0	Isopropyl Alcohol	ND		7520	7250	96	7520	7160	95	1	69-131/23
71-23-8	n-Propyl Alcohol	ND		7520	7790	104	7520	7450	99	4	66-135/31
71-36-3	n-Butyl Alcohol	ND		7520	6590	88	7520	6470	86	2	50-140/30
78-92-2	sec-Butyl Alcohol	ND		7520	7730	103	7520	7440	99	4	67-131/30
67-56-1	Methanol	317		7520	6790	86	7520	6840	87	1	58-130/29

CAS No.	Surrogate Recoveries	MS	MSD	JC19914-2	Limits
111-27-3	Hexanol	88%	91%	101%	52-141%
111-27-3	Hexanol	89%	92%	104%	52-141%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC20464-1MS	GH105102.D	1	05/19/16	XPL	n/a	n/a	GGH5292
JC20464-1MSD	GH105103.D	1	05/19/16	XPL	n/a	n/a	GGH5292
JC20464-1	GH105101.D	1	05/19/16	XPL	n/a	n/a	GGH5292

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-6, JC19914-7

CAS No.	Compound	JC20464-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		5290	5430	103	5290	5740	108	6	64-132/22
78-83-1	Isobutyl Alcohol	ND		5290	5350	101	5290	5140	97	4	59-141/26
67-63-0	Isopropyl Alcohol	ND		5290	5300	100	5290	5270	100	1	69-131/23
71-23-8	n-Propyl Alcohol	ND		5290	5430	103	5290	5490	104	1	66-135/31
71-36-3	n-Butyl Alcohol	ND		5290	3980	75	5290	4830	91	19	50-140/30
78-92-2	sec-Butyl Alcohol	ND		5290	5230	99	5290	4970	94	5	67-131/30
67-56-1	Methanol	ND		5290	5030	95	5290	4290	81	16	58-130/29

CAS No.	Surrogate Recoveries	MS	MSD	JC20464-1	Limits
111-27-3	Hexanol	91%	91%	96%	52-141%
111-27-3	Hexanol	94%	94%	99%	52-141%

* = Outside of Control Limits.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5290-CC5288	**Injection Date:**	05/18/16
Lab File ID:	GH105054.D	**Injection Time:**	15:49
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19914-2	**Injection Date:**	05/18/16
Lab File ID:	GH105056.D	**Injection Time:**	16:18
Client ID:	RA-6 (6-7)		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Methanol	1 [a]	1.12	1.12	317		ug/kg	37.6
Methanol	2	0.88	0.90	464		ug/kg	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19914-6	**Injection Date:**	05/19/16
Lab File ID:	GH105106.D	**Injection Time:**	18:42
Client ID:	RA-5 (5.5-6.5)		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Methanol	1 [a]	1.11	1.11	279		ug/kg	6.6
Methanol	2	0.90	0.90	298		ug/kg	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5285-BS	**Injection Date:**	05/16/16
Lab File ID:	GH104962.D	**Injection Time:**	16:28
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5540		ug/l	82.3
Ethanol	2	1.11	1.11	2310		ug/l	
Isobutyl Alcohol	1 [a]	3.36	3.36	6110		ug/l	110.9
Isobutyl Alcohol	2	2.89	2.89	1750		ug/l	
Isopropyl Alcohol	1 [a]	1.80	1.80	8700		ug/l	126.8
Isopropyl Alcohol	2	1.37	1.37	1950		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6100		ug/l	85.7
n-Propyl Alcohol	2	1.94	1.94	2440		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6320		ug/l	87.9
n-Butyl Alcohol	2	3.38	3.38	2460		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5490		ug/l	91.6
sec-Butyl Alcohol	2	2.51	2.51	2040		ug/l	
Methanol	1 [a]	1.15	1.15	4810		ug/l	51.2
Methanol	2	0.86	0.86	2850		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5289-CC5288	**Injection Date:**	05/18/16
Lab File ID:	GH105049.D	**Injection Time:**	14:28
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5290-BS	**Injection Date:**	05/18/16
Lab File ID:	GH105051.D	**Injection Time:**	14:58
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.44	1.44	5250		ug/kg	5.1
Ethanol	2 [a]	1.16	1.15	4990		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	4930		ug/kg	1.6
Isobutyl Alcohol	2 [a]	2.94	2.94	4850		ug/kg	
Isopropyl Alcohol	1	1.74	1.74	5250		ug/kg	4.7
Isopropyl Alcohol	2 [a]	1.41	1.40	5010		ug/kg	
n-Propyl Alcohol	1	2.50	2.50	5310		ug/kg	4.4
n-Propyl Alcohol	2 [a]	2.01	2.00	5080		ug/kg	
n-Butyl Alcohol	1	3.75	3.75	5120		ug/kg	18.1
n-Butyl Alcohol	2 [a]	3.42	3.41	4270		ug/kg	
sec-Butyl Alcohol	1 [a]	2.93	2.93	5120		ug/kg	13.3
sec-Butyl Alcohol	2	2.57	2.57	5850		ug/kg	
Methanol	1	1.11	1.11	4940		ug/kg	2.7
Methanol	2 [a]	0.91	0.89	4810		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5292-BS	**Injection Date:**	05/19/16
Lab File ID:	GH105100.D	**Injection Time:**	17:08
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.44	1.44	4920		ug/kg	5.5
Ethanol	2	1.15	1.15	5200		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	5390		ug/kg	10.1
Isobutyl Alcohol	2 [a]	2.94	2.94	4870		ug/kg	
Isopropyl Alcohol	1 [a]	1.74	1.74	4980		ug/kg	3.6
Isopropyl Alcohol	2	1.41	1.41	5160		ug/kg	
n-Propyl Alcohol	1	2.50	2.50	5340		ug/kg	3.2
n-Propyl Alcohol	2 [a]	2.00	2.00	5170		ug/kg	
n-Butyl Alcohol	1	3.75	3.75	5090		ug/kg	8.2
n-Butyl Alcohol	2 [a]	3.42	3.42	4690		ug/kg	
sec-Butyl Alcohol	1 [a]	2.93	2.93	5140		ug/kg	1.7
sec-Butyl Alcohol	2	2.57	2.57	5230		ug/kg	
Methanol	1 [a]	1.11	1.11	4650		ug/kg	17.1
Methanol	2	0.89	0.90	5520		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19644-1MS	**Injection Date:**	05/16/16
Lab File ID:	GH104964.D	**Injection Time:**	16:57
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5730		ug/l	82.3
Ethanol	2	1.12	1.11	2390		ug/l	
Isobutyl Alcohol	1 [a]	3.35	3.36	6360		ug/l	109.5
Isobutyl Alcohol	2	2.89	2.89	1860		ug/l	
Isopropyl Alcohol	1 [a]	1.79	1.80	5180		ug/l	87.8
Isopropyl Alcohol	2	1.37	1.37	2020		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6240		ug/l	88.9
n-Propyl Alcohol	2	1.95	1.94	2400		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6710		ug/l	104.3
n-Butyl Alcohol	2	3.38	3.38	2110		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5780		ug/l	94.9
sec-Butyl Alcohol	2	2.52	2.51	2060		ug/l	
Methanol	1 [a]	1.15	1.15	4920		ug/l	47.9
Methanol	2	0.86	0.86	3020		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5290-CC5288	**Injection Date:**	05/18/16
Lab File ID:	GH105054.D	**Injection Time:**	15:49
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19914-2MS	**Injection Date:**	05/18/16
Lab File ID:	GH105057.D	**Injection Time:**	16:40
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.42	1.45	7440		ug/kg	2.4
Ethanol	2 [a]	1.15	1.15	7620		ug/kg	
Isobutyl Alcohol	1	3.29	3.30	8040		ug/kg	7.2
Isobutyl Alcohol	2 [a]	2.94	2.94	7480		ug/kg	
Isopropyl Alcohol	1	1.72	1.74	7340		ug/kg	1.2
Isopropyl Alcohol	2 [a]	1.40	1.41	7250		ug/kg	
n-Propyl Alcohol	1	2.48	2.50	7750		ug/kg	0.5
n-Propyl Alcohol	2 [a]	2.00	2.00	7790		ug/kg	
n-Butyl Alcohol	1	3.74	3.75	7340		ug/kg	10.8
n-Butyl Alcohol	2 [a]	3.41	3.42	6590		ug/kg	
sec-Butyl Alcohol	1	2.92	2.93	7490		ug/kg	3.2
sec-Butyl Alcohol	2 [a]	2.57	2.57	7730		ug/kg	
Methanol	1 [a]	1.09	1.12	6790		ug/kg	7.2
Methanol	2	0.89	0.90	7300		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC20464-1MS	**Injection Date:**	05/19/16
Lab File ID:	GH105102.D	**Injection Time:**	17:37
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.44	1.44	5080		ug/kg	6.7
Ethanol	2 [a]	1.15	1.15	5430		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	5700		ug/kg	6.3
Isobutyl Alcohol	2 [a]	2.94	2.94	5350		ug/kg	
Isopropyl Alcohol	1	1.74	1.74	5310		ug/kg	0.2
Isopropyl Alcohol	2 [a]	1.41	1.41	5300		ug/kg	
n-Propyl Alcohol	1	2.49	2.50	5780		ug/kg	6.2
n-Propyl Alcohol	2 [a]	2.00	2.00	5430		ug/kg	
n-Butyl Alcohol	1	3.74	3.75	5310		ug/kg	28.6
n-Butyl Alcohol	2 [a]	3.42	3.42	3980		ug/kg	
sec-Butyl Alcohol	1	2.93	2.93	5420		ug/kg	3.6
sec-Butyl Alcohol	2 [a]	2.57	2.57	5230		ug/kg	
Methanol	1	1.11	1.11	4380		ug/kg	13.8
Methanol	2 [a]	0.90	0.90	5030		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19644-1MSD	**Injection Date:**	05/16/16
Lab File ID:	GH104965.D	**Injection Time:**	17:12
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5830		ug/l	84.0
Ethanol	2	1.11	1.11	2380		ug/l	
Isobutyl Alcohol	1 [a]	3.35	3.36	6620		ug/l	112.3
Isobutyl Alcohol	2	2.89	2.89	1860		ug/l	
Isopropyl Alcohol	1 [a]	1.79	1.80	5900		ug/l	98.0
Isopropyl Alcohol	2	1.36	1.37	2020		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6730		ug/l	107.7
n-Propyl Alcohol	2	1.94	1.94	2020		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6890		ug/l	105.9
n-Butyl Alcohol	2	3.38	3.38	2120		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	6090		ug/l	98.2
sec-Butyl Alcohol	2	2.51	2.51	2080		ug/l	
Methanol	1 [a]	1.15	1.15	4970		ug/l	47.6
Methanol	2	0.86	0.86	3060		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5290-CC5288	**Injection Date:**	05/18/16
Lab File ID:	GH105054.D	**Injection Time:**	15:49
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19914-2MSD	**Injection Date:**	05/18/16
Lab File ID:	GH105058.D	**Injection Time:**	16:54
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.44	1.45	7480		ug/kg	0.3
Ethanol	2 [a]	1.15	1.15	7460		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	7830		ug/kg	6.3
Isobutyl Alcohol	2 [a]	2.94	2.94	7350		ug/kg	
Isopropyl Alcohol	1	1.74	1.74	7560		ug/kg	5.4
Isopropyl Alcohol	2 [a]	1.41	1.41	7160		ug/kg	
n-Propyl Alcohol	1	2.50	2.50	7820		ug/kg	4.8
n-Propyl Alcohol	2 [a]	2.00	2.00	7450		ug/kg	
n-Butyl Alcohol	1	3.75	3.75	7310		ug/kg	12.2
n-Butyl Alcohol	2 [a]	3.42	3.42	6470		ug/kg	
sec-Butyl Alcohol	1	2.93	2.93	7670		ug/kg	3.0
sec-Butyl Alcohol	2 [a]	2.57	2.57	7440		ug/kg	
Methanol	1 [a]	1.11	1.12	6840		ug/kg	15.9
Methanol	2	0.90	0.90	8020		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC20464-1MSD	**Injection Date:**	05/19/16
Lab File ID:	GH105103.D	**Injection Time:**	17:51
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.44	1.44	5410		ug/kg	5.9
Ethanol	2 [a]	1.15	1.15	5740		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	5590		ug/kg	8.4
Isobutyl Alcohol	2 [a]	2.94	2.94	5140		ug/kg	
Isopropyl Alcohol	1	1.74	1.74	5150		ug/kg	2.3
Isopropyl Alcohol	2 [a]	1.41	1.41	5270		ug/kg	
n-Propyl Alcohol	1	2.50	2.50	5330		ug/kg	3.0
n-Propyl Alcohol	2 [a]	2.00	2.00	5490		ug/kg	
n-Butyl Alcohol	1	3.74	3.75	5210		ug/kg	7.6
n-Butyl Alcohol	2 [a]	3.42	3.42	4830		ug/kg	
sec-Butyl Alcohol	1	2.93	2.93	5350		ug/kg	7.4
sec-Butyl Alcohol	2 [a]	2.57	2.57	4970		ug/kg	
Methanol	1	1.11	1.11	4630		ug/kg	7.6
Methanol	2 [a]	0.90	0.90	4290		ug/kg	

(a) QC results reported from this column.

Volatile Surrogate Recovery Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846-8015C (DAI) **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
JC19914-1	GH104976.D	93
JC19914-3	GH104977.D	98
JC19914-4	GH104978.D	97
JC19914-5	GH104979.D	101
GGH5285-BS	GH104962.D	115
GGH5285-MB2	GH104971.D	103
JC19644-1MS	GH104964.D	111
JC19644-1MSD	GH104965.D	113
GGH5285-MB1	GH104961.D	104

Surrogate Compounds	Recovery Limits
S1 = Hexanol	56-145%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846-8015C (DAI) **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
JC19914-2	GH105056.D	101	104
JC19914-6	GH105106.D	105	108
JC19914-7	GH105107.D	99	101
GGH5290-BS	GH105051.D	95	98
GGH5290-MB2	GH105055.D	87	89
GGH5292-BS	GH105100.D	91	94
GGH5292-MB1	GH105099.D	80	83
JC19914-2MS	GH105057.D	88	89
JC19914-2MSD	GH105058.D	91	92
JC20464-1MS	GH105102.D	91	94
JC20464-1MSD	GH105103.D	91	94
GGH5290-MB1	GH105050.D	87	90

Surrogate Compounds	Recovery Limits
S1 = Hexanol	52-141%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

8.5.2

8

GC Surrogate Retention Time Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] **RT**
Check Std	5.60

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GGH5285-MB1	GH104961.D	05/16/16	16:06	5.60
GGH5285-BS	GH104962.D	05/16/16	16:28	5.60
JC19644-1	GH104963.D	05/16/16	16:45	5.60
JC19644-1MS	GH104964.D	05/16/16	16:57	5.60
JC19644-1MSD	GH104965.D	05/16/16	17:12	5.60
ZZZZZZ	GH104966.D	05/16/16	17:30	5.60
ZZZZZZ	GH104967.D	05/16/16	17:45	5.60
ZZZZZZ	GH104968.D	05/16/16	18:07	5.59
ZZZZZZ	GH104969.D	05/16/16	18:21	5.60

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104970.D	**Injection Time:**	18:35
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] **RT**
Check Std	5.60

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GGH5285-MB2	GH104971.D	05/16/16	18:50	5.59
ZZZZZZ	GH104972.D	05/16/16	19:12	5.60
ZZZZZZ	GH104973.D	05/16/16	19:26	5.60
ZZZZZZ	GH104974.D	05/16/16	19:40	5.60
ZZZZZZ	GH104975.D	05/16/16	20:02	5.60
JC19914-1	GH104976.D	05/16/16	20:17	5.60
JC19914-3	GH104977.D	05/16/16	20:31	5.60
JC19914-4	GH104978.D	05/16/16	20:45	5.60
JC19914-5	GH104979.D	05/16/16	21:07	5.60

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5289-CC5288	**Injection Date:**	05/18/16
Lab File ID:	GH105049.D	**Injection Time:**	14:28
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.50	5.56

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5290-MB1	GH105050.D	05/18/16	14:42	5.50	5.56
GGH5290-BS	GH105051.D	05/18/16	14:58	5.50	5.56
ZZZZZZ	GH105052.D	05/18/16	15:13	5.51	5.56
ZZZZZZ	GH105053.D	05/18/16	15:27	5.49	5.56

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5290-CC5288	**Injection Date:**	05/18/16
Lab File ID:	GH105054.D	**Injection Time:**	15:49
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.50	5.56

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5290-MB2	GH105055.D	05/18/16	16:03	5.50	5.56
JC19914-2	GH105056.D	05/18/16	16:18	5.50	5.56
JC19914-2MS	GH105057.D	05/18/16	16:40	5.50	5.56
JC19914-2MSD	GH105058.D	05/18/16	16:54	5.50	5.56
ZZZZZZ	GH105059.D	05/18/16	17:08	5.50	5.56
ZZZZZZ	GH105060.D	05/18/16	17:23	5.50	5.56
ZZZZZZ	GH105061.D	05/18/16	17:44	5.50	5.56
ZZZZZZ	GH105062.D	05/18/16	17:59	5.50	5.56
ZZZZZZ	GH105063.D	05/18/16	18:13	5.50	5.56
ZZZZZZ	GH105064.D	05/18/16	18:35	5.50	5.56

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.50	5.55

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5292-MB1	GH105099.D	05/19/16	16:46	5.50	5.56
GGH5292-BS	GH105100.D	05/19/16	17:08	5.49	5.56
JC20464-1	GH105101.D	05/19/16	17:22	5.50	5.55
JC20464-1MS	GH105102.D	05/19/16	17:37	5.50	5.55
JC20464-1MSD	GH105103.D	05/19/16	17:51	5.50	5.55
ZZZZZZ	GH105105.D	05/19/16	18:27	5.49	5.55
JC19914-6	GH105106.D	05/19/16	18:42	5.50	5.55
JC19914-7	GH105107.D	05/19/16	19:03	5.50	5.55
ZZZZZZ	GH105108.D	05/19/16	19:18	5.50	5.55

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: GGH5269-ICC5269
Lab FileID: GH104677.D

Response Factor Report GCGH

Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 10 11:06:41 2016
Response via : Initial Calibration

Calibration Files
0.5 =GH104675.D 1 =GH104676.D 5 =GH104677.D 10 =GH104678.D
50 =GH104679.D 0.1 =GH104674.D = =

Compound	0.5	1	5	10	50	0.1	Avg	%RSD
1) Methanol	1.593	1.539	1.394	1.397	1.324	1.614	1.477 E1	8.16
2) Ethanol	1.886	1.927	1.846	1.938	1.739	1.891	1.871 E1	3.88
3) Tert-Butyl A	2.841	2.742	2.685	2.870	2.582	2.661	2.730 E1	4.04
4) 1-Propanol	2.460	2.397	2.412	2.420	2.246	1.437	2.229 E1	17.71
5) 2-Propanol	2.027	2.007	1.963	2.223	1.850	2.379	2.075 E1	9.26
6) Isobutanol	3.098	2.831	2.858	2.791	2.576	2.339	2.749 E1	9.48
7) 1-Butanol	1.745	2.588	2.859	2.723	2.489	2.288	2.449 E1	16.19
8) 2-Butanol	2.464	3.139	2.505	2.469	2.291	2.251	2.520 E1	12.72
9) Hexanol	7.782	7.590	7.989	8.011	8.288	6.248	7.651 E1	9.50

Signal #2

1) Methanol	1.288	3.166	1.383	1.032	2.946	2.383	2.033 E1	45.20
2) Ethanol	2.817	4.146	3.410	2.123	3.657	2.911	3.177 E1	22.41
3) Tert-Butyl A	6.834	6.135	8.110	5.969	5.847	6.282	6.529 E1	12.97
4) 1-Propanol	4.091	3.958	7.681	4.455	4.689	4.687	4.927 E1	28.06
5) 2-Propanol	4.552	4.456	4.692	3.160	4.050	4.175	4.181 E1	13.25
6) Isobutanol	9.360	5.533	5.494	4.786	5.166	6.882	6.204 E1	27.41
7) 1-Butanol	5.498	5.794	5.135	4.164	5.031	5.438	5.177 E1	10.93
8) 2-Butanol	4.534	5.210	5.963	4.341	4.794	4.806	4.941 E1	11.74
9) Hexanol	1.693	1.682	1.706	1.575	1.818	1.401	1.646 E2	8.66

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

MGH5269.M Tue May 10 11:10:00 2016 GCGH

Initial Calibration Verification

Job Number: JC19914 **Sample:** GGH5269-ICV5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104683.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH        Vial: 10
Acq On    :  9 May 2016   5:42 pm                   Operator: XULIU
Sample    : ICV5269-5000                            Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104683.D\FID2B.CH        Vial: 10
Acq On    :  9 May 2016   6:04 pm                   Operator: XULIU
Sample    : ICV5269-5000                            Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 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	Methanol	14.769	13.949	5.6	100	0.00	1.11- 1.17
2	Ethanol	18.712	19.655	-5.0	106	0.00	1.44- 1.53
3	Tert-Butyl Alcohol	27.303	28.294	-3.6	105	0.00	2.01- 2.13
4	1-Propanol	22.287	23.452	-5.2	97	0.00	2.50- 2.62
5	2-Propanol	20.750	19.885	4.2	101	0.00	1.75- 1.84
6	Isobutanol	27.487	29.253	-6.4	102	-0.01	3.31- 3.41
7	1-Butanol	24.487	27.754	-13.3	97	0.00	3.80- 3.86
8	2-Butanol	25.198	24.667	2.1	98	0.00	2.93- 3.05
9 S	Hexanol	76.514	69.300	9.4	87	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	18.183	29.885	-64.4#	216#	0.00	0.85- 0.91
2	Ethanol	31.774	39.803	-25.3#	117	-0.01	1.10- 1.16
3	Tert-Butyl Alcohol	65.293	63.130	3.3	78	-0.01	1.59- 1.65
4	1-Propanol	49.271	52.689	-6.9	69	0.00	1.93- 2.00
5	2-Propanol	41.806	43.484	-4.0	93	-0.01	1.35- 1.41
6	Isobutanol	62.036	58.038	6.4	106	0.00	2.87- 2.93
7	1-Butanol	51.767	64.401	-24.4#	125	-0.01	3.35- 3.41
8	2-Butanol	49.414	52.519	-6.3	88	0.00	2.50- 2.56
9 S	Hexanol	164.574	152.865	7.1	90	0.01	5.41- 5.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 10 10:47:36 2016 GCGH

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104960.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH        Vial: 90
Acq On    : 16 May 2016   3:50 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH        Vial: 90
Acq On    : 16 May 2016   4:06 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 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	Methanol	14.769	15.539	-5.2	111	0.00	1.12- 1.18
2	Ethanol	18.712	20.181	-7.9	109	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	27.932	-2.3	104	0.00	2.01- 2.13
4	1-Propanol	22.287	26.640	-19.5	110	0.00	2.50- 2.62
5	2-Propanol	20.750	21.265	-2.5	108	0.00	1.75- 1.84
6	Isobutanol	27.487	29.690	-8.0	104	0.00	3.31- 3.40
7	1-Butanol	24.487	30.580	-24.9#	107	0.00	3.77- 3.83
8	2-Butanol	25.198	26.836	-6.5	107	0.00	2.93- 3.05
9 S	Hexanol	76.514	79.188	-3.5	99	0.00	5.57- 5.63

***** Signal #2 *****

1	Methanol	20.329	12.123	40.4#	88	-0.03	0.83- 0.89
2	Ethanol	31.774	14.023	55.9#	41#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	24.578	62.4#	30#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.818	63.8#	23#	-0.02	1.91- 1.98
5	2-Propanol	41.806	15.827	62.1#	34#	-0.02	1.34- 1.40
6	Isobutanol	62.036	20.449	67.0#	37#	0.00	2.86- 2.92
7	1-Butanol	51.767	20.165	61.0#	39#	-0.01	3.35- 3.41
8	2-Butanol	49.414	18.847	61.9#	32#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	55.647	66.2#	33#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 17 07:43:54 2016 GCGH

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104970.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH        Vial: 95
Acq On    : 16 May 2016   6:35 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH        Vial: 95
Acq On    : 16 May 2016   6:50 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 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	Methanol	14.769	15.639	-5.9	112	0.00	1.11- 1.17
2	Ethanol	18.712	19.990	-6.8	103	0.00	1.44- 1.53
3	Tert-Butyl Alcohol	27.303	29.597	-8.4	103	0.00	2.01- 2.13
4	1-Propanol	22.287	26.594	-19.3	110	0.00	2.50- 2.62
5	2-Propanol	20.750	21.147	-1.9	95	0.00	1.75- 1.84
6	Isobutanol	27.487	30.720	-11.8	110	-0.02	3.31- 3.40
7	1-Butanol	24.487	29.375	-20.0	108	-0.03	3.77- 3.83
8	2-Butanol	25.198	27.070	-7.4	110	0.00	2.93- 3.05
9 S	Hexanol	76.514	68.194	10.9	85	-0.01	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	8.116	60.1#	79	-0.02	0.84- 0.90
2	Ethanol	31.774	8.863	72.1#	42#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	15.588	76.1#	26#	-0.03	1.57- 1.63
4	1-Propanol	49.271	10.781	78.1#	24#	-0.02	1.90- 1.97
5	2-Propanol	41.806	8.923	78.7#	28#	-0.03	1.33- 1.39
6	Isobutanol	62.036	16.062	74.1#	34#	0.00	2.87- 2.93
7	1-Butanol	51.767	15.372	70.3#	37#	0.00	3.36- 3.42
8	2-Butanol	49.414	14.363	70.9#	33#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	39.514	76.0#	25#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104678.D MGH5269.M Tue May 17 08:00:40 2016 GCGH

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104980.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104980.D\FID1A.CH        Vial: 90
Acq On    : 16 May 2016   9:21 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104980.D\FID2B.CH        Vial: 90
Acq On    : 16 May 2016   9:36 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 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	Methanol	14.769	14.527	1.6	104	0.00	1.12- 1.18
2	Ethanol	18.712	19.163	-2.4	104	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	28.737	-5.3	107	0.00	2.01- 2.13
4	1-Propanol	22.287	26.006	-16.7	108	0.00	2.50- 2.62
5	2-Propanol	20.750	20.257	2.4	103	0.00	1.75- 1.84
6	Isobutanol	27.487	30.840	-12.2	108	0.00	3.31- 3.41
7	1-Butanol	24.487	29.313	-19.7	103	0.00	3.77- 3.83
8	2-Butanol	25.198	26.896	-6.7	107	0.00	2.93- 3.05
9 S	Hexanol	76.514	76.705	-0.2	96	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	12.266	39.7#	89	-0.03	0.83- 0.89
2	Ethanol	31.774	13.387	57.9#	39#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	21.949	66.4#	27#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.420	64.6#	23#	-0.02	1.91- 1.98
5	2-Propanol	41.806	15.199	63.6#	32#	-0.03	1.33- 1.39
6	Isobutanol	62.036	19.832	68.0#	36#	0.00	2.86- 2.92
7	1-Butanol	51.767	19.625	62.1#	38#	-0.01	3.35- 3.41
8	2-Butanol	49.414	18.338	62.9#	31#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	53.755	67.3#	32#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 17 08:19:24 2016 GCGH

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: GGH5288-ICC5288
Lab FileID: GH105020.D

Response Factor Report GCGH

Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Wed May 18 08:55:49 2016
Response via : Initial Calibration

Calibration Files
0.5 =GH105018.D 1 =GH105019.D 5 =GH105020.D 10 =GH105021.D
50 =GH105022.D 100 =GH105023.D 0.1 =GH105017.D =

Compound	0.5	1	5	10	50	100	0.1	Avg	%RSD
1) Methanol	1.474	1.617	1.549	1.574	1.441	1.381	1.784	1.546 E1	8.59
2) Ethanol	1.481	1.886	1.989	2.027	1.870	1.914	2.099	1.895 E1	10.57
3) Tert-Butyl A	2.644	2.895	2.860	2.948	2.724	2.958	2.806	2.833 E1	4.12
4) 1-Propanol	2.265	2.525	2.568	2.579	2.395	2.511	2.187	2.433 E1	6.38
5) 2-Propanol	1.765	2.050	2.101	2.139	1.981	2.028	1.888	1.993 E1	6.50
6) Isobutanol	2.804	2.950	2.948	2.988	2.739	2.927	2.784	2.877 E1	3.42
7) 1-Butanol	2.898	2.941	2.862	2.890	2.632	2.755	3.014	2.856 E1	4.42
8) 2-Butanol	2.368	2.558	2.588	2.626	2.424	2.540	2.840	2.563 E1	5.95
9) Hexanol	6.661	6.854	6.904	7.104	6.883		6.152	6.760 E1	4.87

Signal #2

1) Methanol	3.395	2.969	3.474	3.464	3.153	3.141	2.982	3.225 E1	6.76
2) Ethanol	4.063	3.635	4.347	4.327	3.993	4.176	3.361	3.986 E1	9.18
3) Tert-Butyl A	6.528	6.375	6.640	6.640	6.134	6.562	5.629	6.358 E1	5.79
4) 1-Propanol	5.216	5.281	5.494	5.499	5.155	5.488	3.458	5.084 E1	14.38
5) 2-Propanol	4.929	4.342	4.733	4.727	4.363	4.597	4.004	4.528 E1	6.88
6) Isobutanol	6.364	5.960	6.233	6.327	5.766	6.160	6.044	6.122 E1	3.48
7) 1-Butanol	7.458	7.365	6.389	6.043	5.678	5.940	7.445	6.617 E1	11.83
8) 2-Butanol	5.511	5.860	5.620	5.660	5.265	5.573	4.510	5.428 E1	8.15
9) Hexanol	1.546	1.555	1.589	1.628	1.578		1.424	1.553 E2	4.50

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

MGH5288.M Wed May 18 09:03:27 2016 GCGH

8.7.6

8

Initial Calibration Verification

Job Number: JC19914 **Sample:** GGH5288-ICV5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105024.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH        Vial: 9
Acq On    : 17 May 2016   6:02 pm                   Operator: XULIU
Sample    : ICV5288-5000                            Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH        Vial: 9
Acq On    : 17 May 2016   6:24 pm                   Operator: XULIU
Sample    : ICV5288-5000                            Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	13.025	15.7	84	0.00	1.09- 1.15
2	Ethanol	18.950	20.029	-5.7	101	0.00	1.41- 1.50
3	Tert-Butyl Alcohol	28.335	29.971	-5.8	105	0.00	1.96- 2.08
4	1-Propanol	24.326	25.536	-5.0	99	0.00	2.46- 2.58
5	2-Propanol	19.931	21.074	-5.7	100	0.00	1.71- 1.80
6	Isobutanol	28.771	30.222	-5.0	103	0.00	3.27- 3.36
7	1-Butanol	28.561	29.118	-2.0	102	0.00	3.73- 3.79
8	2-Butanol	25.634	26.603	-3.8	103	0.00	2.89- 3.01
9 S	Hexanol	67.597	69.942	-3.5	101	0.00	5.54- 5.60
*****	Signal #2 *****						
1	Methanol	32.254	34.546	-7.1	99	0.00	0.87- 0.93
2	Ethanol	39.861	45.328	-13.7	104	0.00	1.13- 1.19
3	Tert-Butyl Alcohol	63.583	66.584	-4.7	100	0.00	1.63- 1.69
4	1-Propanol	50.842	57.021	-12.2	104	0.01	1.99- 2.06
5	2-Propanol	45.279	47.646	-5.2	101	0.00	1.38- 1.44
6	Isobutanol	61.221	66.607	-8.8	107	0.00	2.91- 2.97
7	1-Butanol	66.170	65.238	1.4	102	0.01	3.39- 3.45
8	2-Butanol	54.284	60.860	-12.1	108	0.00	2.54- 2.60
9 S	Hexanol	155.348	158.160	-1.8	100	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288.M Wed May 18 09:09:59 2016 GCGH

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5289-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105049.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105049.D\FID1A.CH        Vial: 95
Acq On    : 18 May 2016   2:28 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105049.D\FID2B.CH        Vial: 95
Acq On    : 18 May 2016   2:42 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	14.841	4.0	96	0.00	1.08- 1.14
2	Ethanol	18.950	19.343	-2.1	97	0.00	1.40- 1.49
3	Tert-Butyl Alcohol	28.335	31.328	-10.6	110	0.00	1.94- 2.06
4	1-Propanol	24.326	25.618	-5.3	100	0.00	2.44- 2.56
5	2-Propanol	19.931	21.895	-9.9	104	0.00	1.70- 1.79
6	Isobutanol	28.771	29.460	-2.4	100	0.00	3.26- 3.35
7	1-Butanol	28.561	28.242	1.1	99	0.00	3.72- 3.78
8	2-Butanol	25.634	25.922	-1.1	100	0.00	2.87- 2.99
9 S	Hexanol	67.597	67.224	0.6	97	0.00	5.53- 5.59
*****	Signal #2 *****						
1	Methanol	32.254	32.273	-0.1	93	0.00	0.86- 0.92
2	Ethanol	39.861	40.591	-1.8	93	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	65.441	-2.9	99	0.00	1.62- 1.68
4	1-Propanol	50.842	52.989	-4.2	96	0.00	1.96- 2.03
5	2-Propanol	45.279	45.818	-1.2	97	0.00	1.37- 1.43
6	Isobutanol	61.221	58.758	4.0	94	0.00	2.91- 2.97
7	1-Butanol	66.170	58.103	12.2	91	0.00	3.38- 3.44
8	2-Butanol	54.284	55.027	-1.4	98	0.00	2.54- 2.60
9 S	Hexanol	155.348	149.347	3.9	94	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288.M Wed May 18 14:51:45 2016 GCGH

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5290-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105054.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105054.D\FID1A.CH        Vial: 95
Acq On    : 18 May 2016   3:49 pm                   Operator: XULIU
Sample    : CC5288-10000                            Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105054.D\FID2B.CH        Vial: 95
Acq On    : 18 May 2016   4:03 pm                   Operator: XULIU
Sample    : CC5288-10000                            Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	15.574	-0.7	99	0.00	1.09- 1.15
2	Ethanol	18.950	19.698	-3.9	97	0.00	1.40- 1.49
3	Tert-Butyl Alcohol	28.335	28.257	0.3	96	0.00	1.94- 2.06
4	1-Propanol	24.326	24.185	0.6	94	0.00	2.44- 2.56
5	2-Propanol	19.931	20.438	-2.5	96	0.00	1.70- 1.79
6	Isobutanol	28.771	29.902	-3.9	100	0.00	3.26- 3.35
7	1-Butanol	28.561	28.382	0.6	98	0.00	3.72- 3.78
8	2-Butanol	25.634	26.458	-3.2	101	0.00	2.87- 2.99
9 S	Hexanol	67.597	67.624	-0.0	95	0.00	5.53- 5.59
*****	Signal #2 *****						
1	Methanol	32.254	33.991	-5.4	98	0.00	0.87- 0.93
2	Ethanol	39.861	42.049	-5.5	97	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	65.711	-3.3	99	0.00	1.62- 1.68
4	1-Propanol	50.842	54.471	-7.1	99	0.00	1.97- 2.04
5	2-Propanol	45.279	46.412	-2.5	98	0.00	1.38- 1.44
6	Isobutanol	61.221	58.995	3.6	93	0.00	2.91- 2.97
7	1-Butanol	66.170	60.450	8.6	100	0.00	3.39- 3.45
8	2-Butanol	54.284	55.698	-2.6	98	0.00	2.54- 2.60
9 S	Hexanol	155.348	151.109	2.7	93	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105021.D MGH5288.M Thu May 19 08:04:13 2016 GCGH

8.7.9

8

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5290-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105065.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105065.D\FID1A.CH        Vial: 10
Acq On    : 18 May 2016   6:49 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105065.D\FID2B.CH        Vial: 10
Acq On    : 18 May 2016   7:04 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	15.045	2.7	97	0.00	1.08- 1.14
2	Ethanol	18.950	19.460	-2.7	98	0.00	1.40- 1.49
3	Tert-Butyl Alcohol	28.335	28.125	0.7	98	0.00	1.94- 2.06
4	1-Propanol	24.326	25.708	-5.7	100	0.00	2.44- 2.56
5	2-Propanol	19.931	20.519	-3.0	98	0.00	1.69- 1.78
6	Isobutanol	28.771	30.001	-4.3	102	0.00	3.25- 3.35
7	1-Butanol	28.561	28.166	1.4	98	0.00	3.72- 3.78
8	2-Butanol	25.634	26.054	-1.6	101	0.00	2.87- 2.99
9 S	Hexanol	67.597	66.658	1.4	97	0.00	5.53- 5.59
*****	Signal #2 *****						
1	Methanol	32.254	31.744	1.6	91	0.00	0.87- 0.93
2	Ethanol	39.861	40.118	-0.6	92	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	64.820	-1.9	98	0.00	1.62- 1.68
4	1-Propanol	50.842	51.285	-0.9	93	0.00	1.97- 2.04
5	2-Propanol	45.279	45.259	0.0	96	0.00	1.38- 1.44
6	Isobutanol	61.221	55.192	9.8	89	0.00	2.92- 2.98
7	1-Butanol	66.170	57.257	13.5	90	0.00	3.39- 3.45
8	2-Butanol	54.284	55.208	-1.7	98	0.00	2.54- 2.60
9 S	Hexanol	155.348	149.462	3.8	94	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288.M Thu May 19 08:00:56 2016 GCGH

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5291-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105098.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105098.D\FID1A.CH        Vial: 95
Acq On    : 19 May 2016   4:32 pm                   Operator: XULIU
Sample    : CC5288-10000                            Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID2B.CH        Vial: 95
Acq On    : 19 May 2016   4:46 pm                   Operator: XULIU
Sample    : CC5288-10000                            Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	14.950	3.3	95	0.00	1.08- 1.14
2	Ethanol	18.950	18.793	0.8	93	0.00	1.40- 1.49
3	Tert-Butyl Alcohol	28.335	28.819	-1.7	98	0.00	1.94- 2.06
4	1-Propanol	24.326	25.322	-4.1	98	0.00	2.44- 2.56
5	2-Propanol	19.931	19.462	2.4	91	0.00	1.69- 1.78
6	Isobutanol	28.771	29.229	-1.6	98	0.00	3.25- 3.34
7	1-Butanol	28.561	28.021	1.9	97	0.00	3.72- 3.78
8	2-Butanol	25.634	25.618	0.1	98	0.00	2.87- 2.99
9 S	Hexanol	67.597	61.017	9.7	86	0.00	5.52- 5.58
*****	Signal #2 *****						
1	Methanol	32.254	34.021	-5.5	98	0.00	0.87- 0.93
2	Ethanol	39.861	41.706	-4.6	96	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	64.954	-2.2	98	0.00	1.62- 1.68
4	1-Propanol	50.842	53.445	-5.1	97	0.00	1.97- 2.04
5	2-Propanol	45.279	46.153	-1.9	98	0.00	1.38- 1.44
6	Isobutanol	61.221	58.834	3.9	93	0.00	2.91- 2.97
7	1-Butanol	66.170	56.603	14.5	94	0.00	3.39- 3.45
8	2-Butanol	54.284	53.909	0.7	95	0.00	2.54- 2.60
9 S	Hexanol	155.348	134.497	13.4	83	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105021.D MGH5288.M Fri May 20 08:34:31 2016 GCGH

8.7.11
8

Continuing Calibration Summary

Job Number: JC19914 **Sample:** GGH5292-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105109.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105109.D\FID1A.CH        Vial: 90
Acq On    : 19 May 2016   7:32 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105109.D\FID2B.CH        Vial: 90
Acq On    : 19 May 2016   7:46 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	15.126	2.2	98	0.00	1.08- 1.14
2	Ethanol	18.950	19.466	-2.7	98	0.00	1.39- 1.49
3	Tert-Butyl Alcohol	28.335	28.403	-0.2	99	0.00	1.94- 2.06
4	1-Propanol	24.326	25.529	-4.9	99	0.00	2.43- 2.55
5	2-Propanol	19.931	20.536	-3.0	98	0.00	1.69- 1.78
6	Isobutanol	28.771	29.265	-1.7	99	0.00	3.25- 3.34
7	1-Butanol	28.561	27.489	3.8	96	0.00	3.71- 3.77
8	2-Butanol	25.634	25.881	-1.0	100	0.00	2.86- 2.98
9 S	Hexanol	67.597	57.966	14.2	84	0.00	5.52- 5.58
*****	Signal #2 *****						
1	Methanol	32.254	31.293	3.0	90	0.00	0.87- 0.93
2	Ethanol	39.861	40.292	-1.1	93	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	64.281	-1.1	97	0.00	1.62- 1.68
4	1-Propanol	50.842	52.703	-3.7	96	0.00	1.97- 2.04
5	2-Propanol	45.279	45.854	-1.3	97	0.00	1.38- 1.44
6	Isobutanol	61.221	58.208	4.9	93	0.00	2.91- 2.97
7	1-Butanol	66.170	57.279	13.4	90	0.00	3.39- 3.45
8	2-Butanol	54.284	53.810	0.9	96	0.00	2.54- 2.60
9 S	Hexanol	155.348	132.176	14.9	83	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288.M Fri May 20 09:15:21 2016 GCGH

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104976.D\FID1A.CH          Vial: 13
Acq On    : 16 May 2016   8:17 pm                     Operator: XULIU
Sample    : JC19914-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104976.D\FID2B.CH          Vial: 13
Acq On    : 16 May 2016   8:31 pm                     Operator: XULIU
Sample    : JC19914-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:07 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    354867   221291 4637.938  1344.627 #
 Spiked Amount   5000.000                  Recovery     =   92.76%    26.89%

Target Compounds
```

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH104976.D MGH5269.M Tue May 17 08:08:01 2016 GCGH

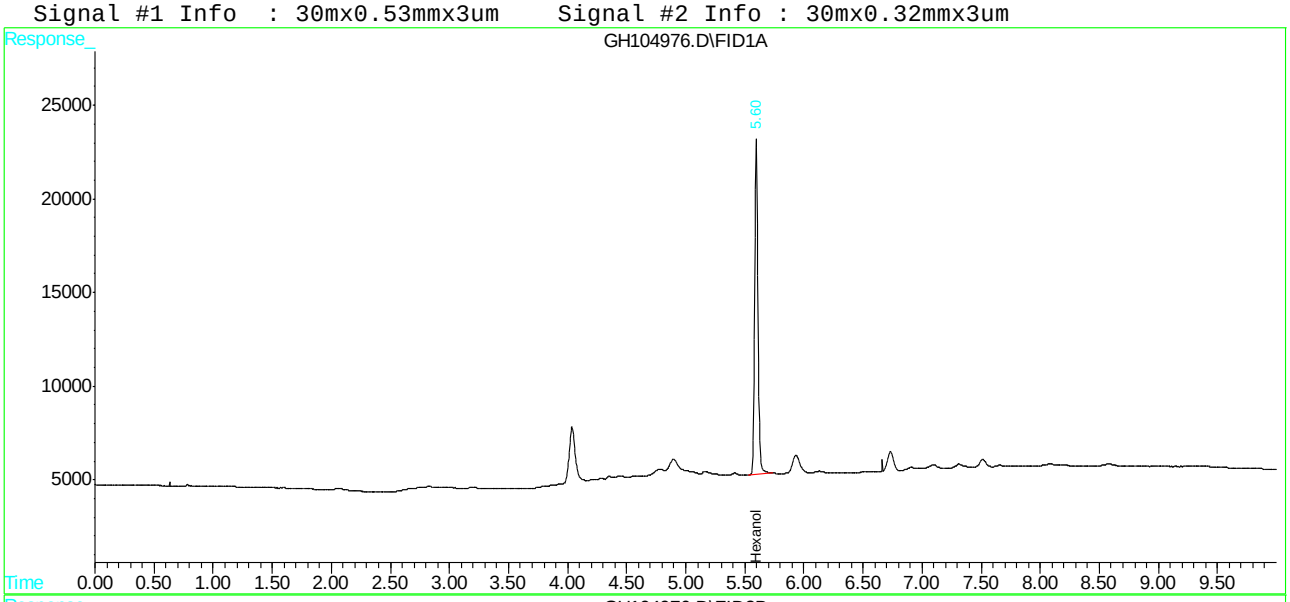
Quantitation Report (QT Reviewed)

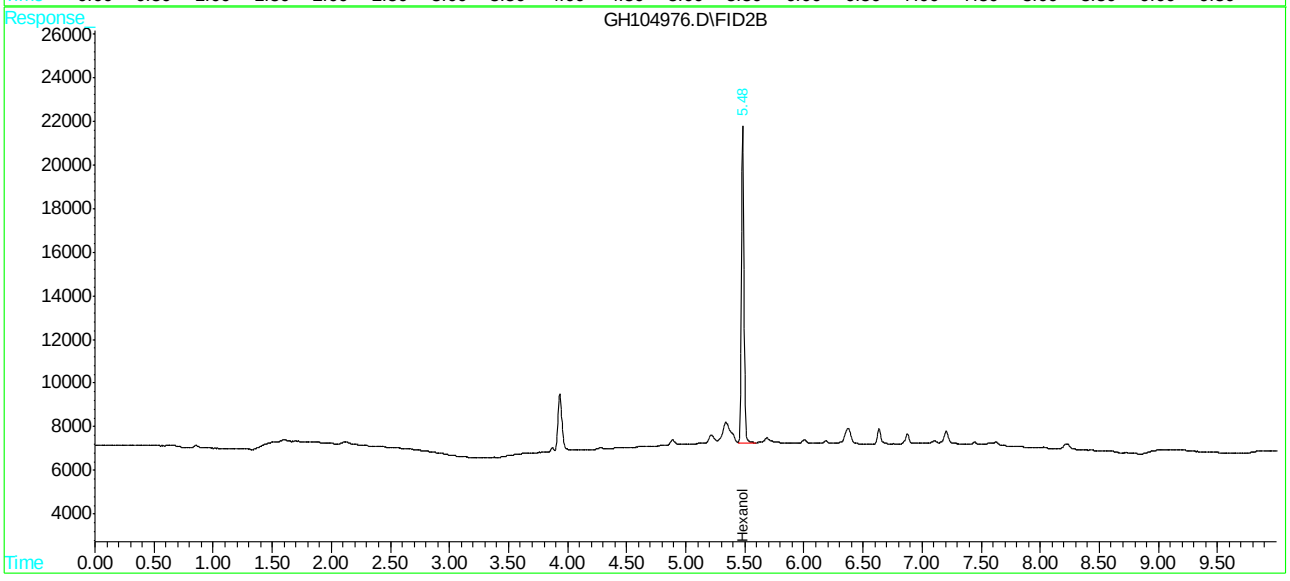
```
Data File : C:\HPCHEM\1\DATA\GH104976.D\FID1A.CH          Vial: 13
Acq On    : 16 May 2016   8:17 pm                     Operator: XULIU
Sample    : JC19914-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104976.D\FID2B.CH          Vial: 13
Acq On    : 16 May 2016   8:31 pm                     Operator: XULIU
Sample    : JC19914-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:07 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105056.D\FID1A.CH          Vial: 1
Acq On    : 18 May 2016   4:18 pm                     Operator: XULIU
Sample    : JC19914-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105056.D\FID2B.CH          Vial: 1
Acq On    : 18 May 2016   4:40 pm                     Operator: XULIU
Sample    : JC19914-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:34 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:34:07 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
-----------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol          5.56   5.50    349959   780963 5177.154  5027.198
 Spiked Amount   5000.000                  Recovery     =  103.54%   100.54%

Target Compounds
1)     Methanol         1.12   0.88      3262     9959  210.985   308.774 #
```

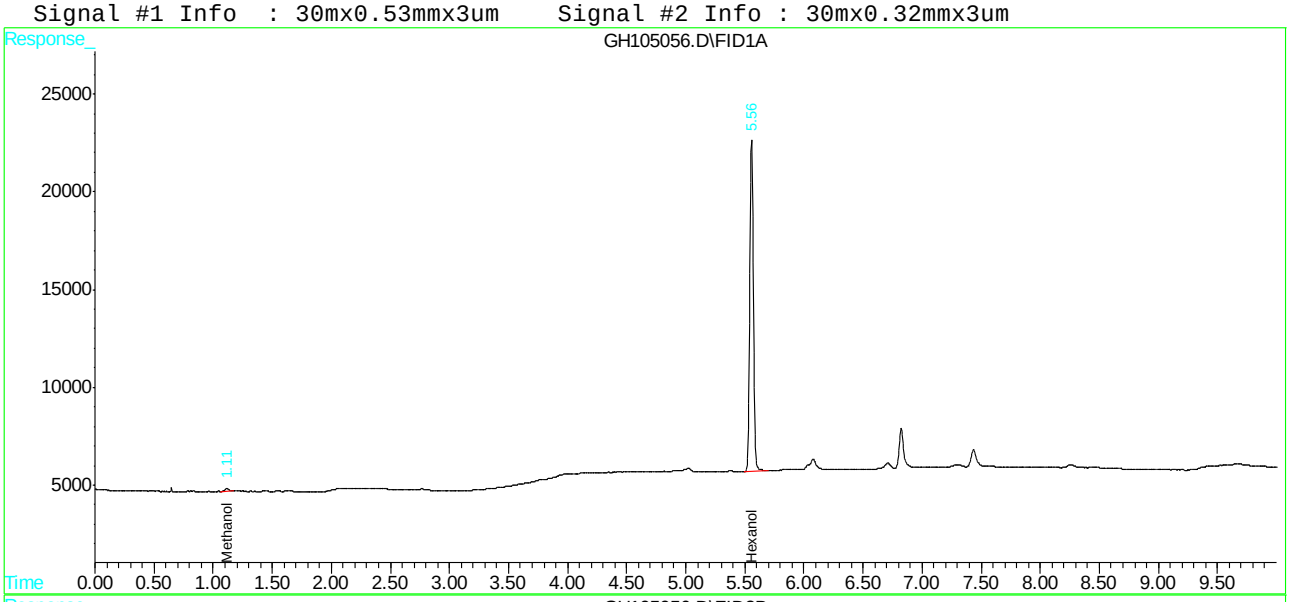
Quantitation Report (QT Reviewed)

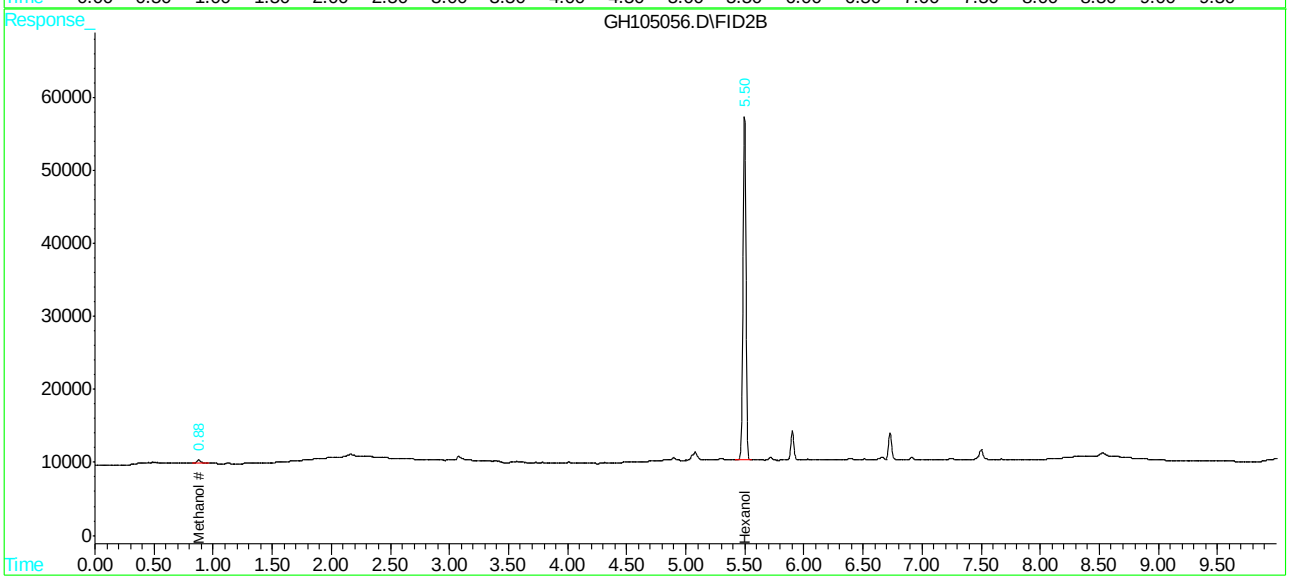
```
Data File : C:\HPCHEM\1\DATA\GH105056.D\FID1A.CH          Vial: 1
Acq On    : 18 May 2016   4:18 pm                     Operator: XULIU
Sample    : JC19914-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105056.D\FID2B.CH          Vial: 1
Acq On    : 18 May 2016   4:40 pm                     Operator: XULIU
Sample    : JC19914-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:34 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:34:07 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104977.D\FID1A.CH          Vial: 14
Acq On    : 16 May 2016   8:31 pm                     Operator: XULIU
Sample    : JC19914-3                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104977.D\FID2B.CH          Vial: 14
Acq On    : 16 May 2016   8:45 pm                     Operator: XULIU
Sample    : JC19914-3                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:04 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    376382   228886 4919.129  1390.780 #
 Spiked Amount   5000.000                  Recovery     =   98.38%    27.82%

Target Compounds
```

9.1.3

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH104977.D  MGH5269.M      Tue May 17 08:08:13 2016      GCGH
```

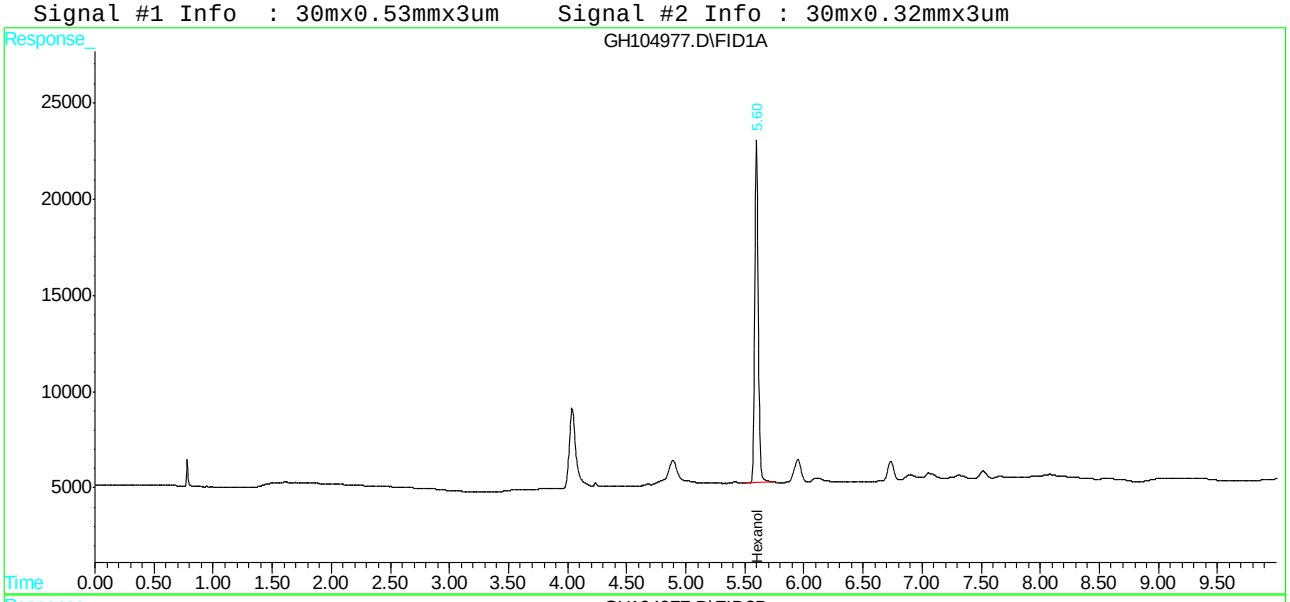
Quantitation Report (QT Reviewed)

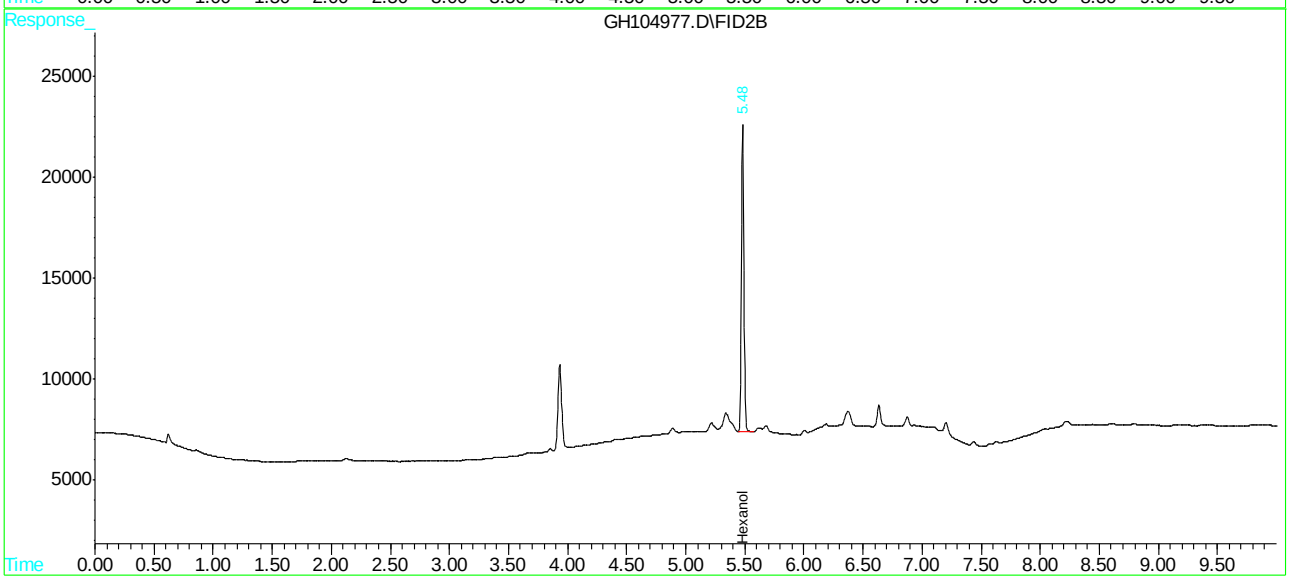
Data File : C:\HPCHEM\1\DATA\GH104977.D\FID1A.CH Vial: 14
Acq On : 16 May 2016 8:31 pm Operator: XULIU
Sample : JC19914-3 Inst : GCGH
Misc : GC48420,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104977.D\FID2B.CH Vial: 14
Acq On : 16 May 2016 8:45 pm Operator: XULIU
Sample : JC19914-3 Inst : GCGH
Misc : GC48420,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 17 8:04 2016 Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104978.D\FID1A.CH          Vial: 15
Acq On    : 16 May 2016   8:45 pm                     Operator: XULIU
Sample    : JC19914-4                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104978.D\FID2B.CH          Vial: 15
Acq On    : 16 May 2016   9:07 pm                     Operator: XULIU
Sample    : JC19914-4                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:08 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.60	5.48	371439	257013	4854.521	1561.691 #
Spiked Amount 5000.000			Recovery	=	97.09%	31.23%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

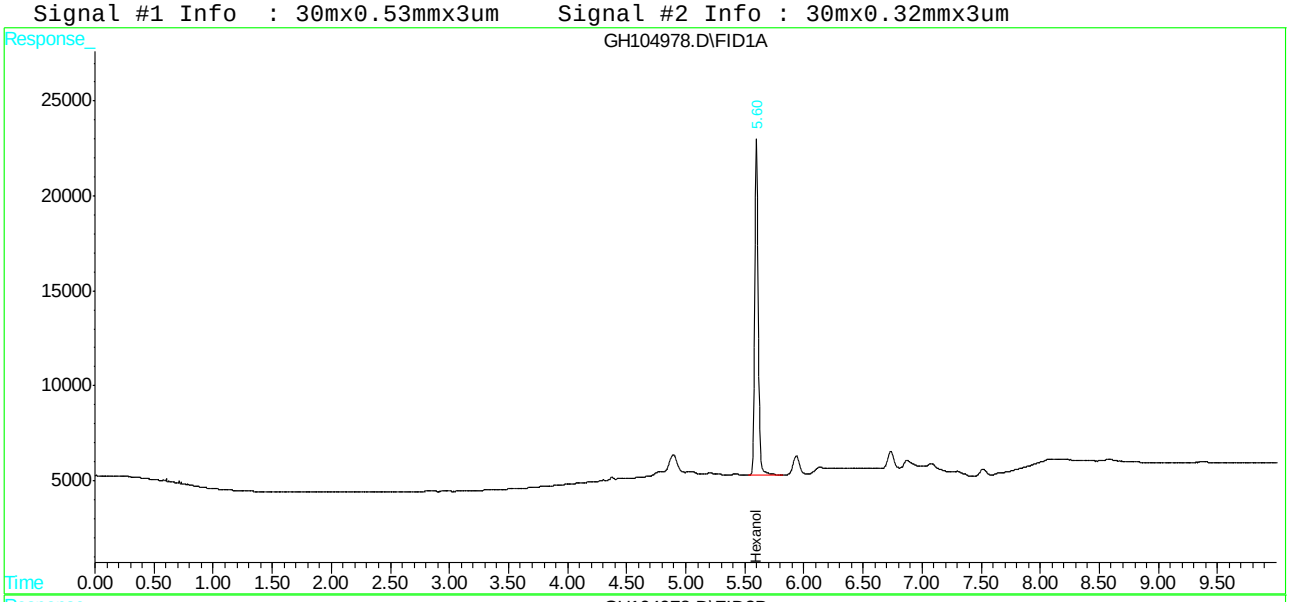
Quantitation Report (QT Reviewed)

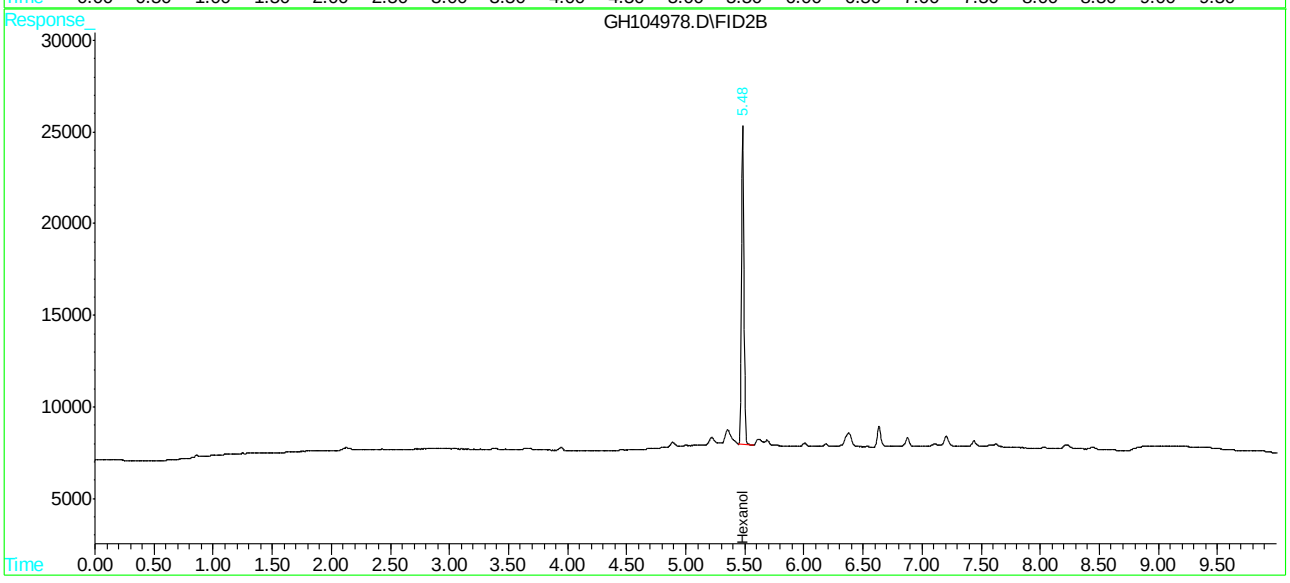
```
Data File : C:\HPCHEM\1\DATA\GH104978.D\FID1A.CH          Vial: 15
Acq On    : 16 May 2016   8:45 pm                     Operator: XULIU
Sample    : JC19914-4                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104978.D\FID2B.CH          Vial: 15
Acq On    : 16 May 2016   9:07 pm                     Operator: XULIU
Sample    : JC19914-4                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:08 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104979.D\FID1A.CH          Vial: 16
Acq On    : 16 May 2016   9:07 pm                     Operator: XULIU
Sample    : JC19914-5                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104979.D\FID2B.CH          Vial: 16
Acq On    : 16 May 2016   9:21 pm                     Operator: XULIU
Sample    : JC19914-5                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:08 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    386364   225989 5049.590  1373.179 #
 Spiked Amount   5000.000                  Recovery     =  100.99%    27.46%

Target Compounds
```

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH104979.D MGH5269.M Tue May 17 08:08:54 2016 GCGH Page 1

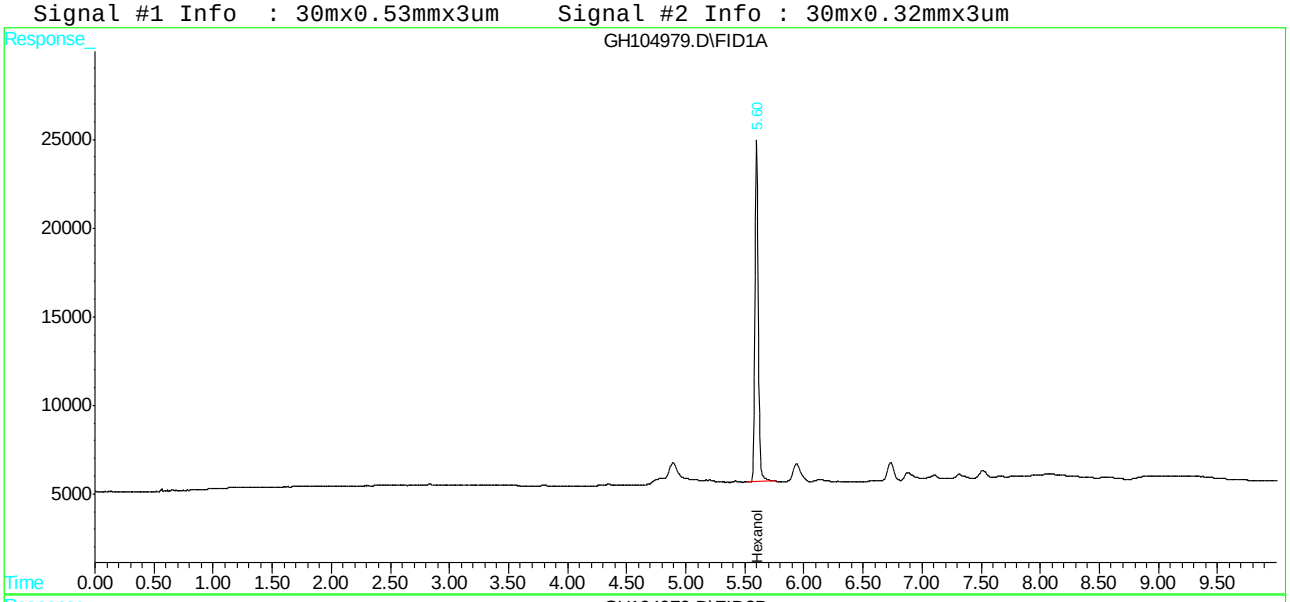
Quantitation Report (QT Reviewed)

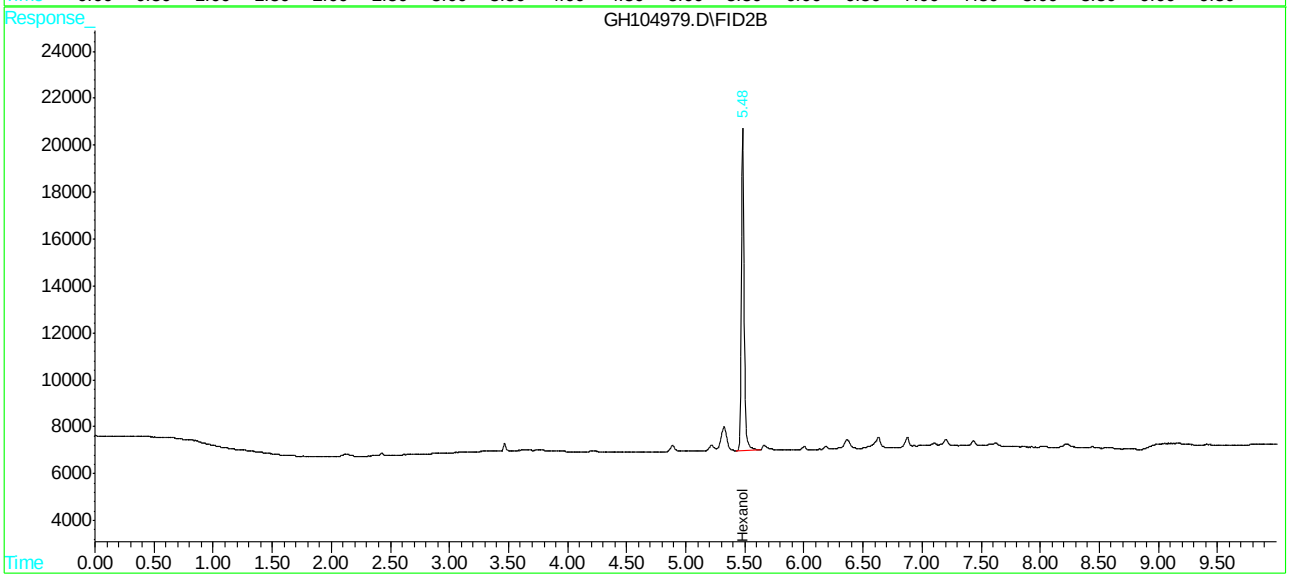
```
Data File : C:\HPCHEM\1\DATA\GH104979.D\FID1A.CH          Vial: 16
Acq On    : 16 May 2016   9:07 pm                     Operator: XULIU
Sample    : JC19914-5                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104979.D\FID2B.CH          Vial: 16
Acq On    : 16 May 2016   9:21 pm                     Operator: XULIU
Sample    : JC19914-5                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:08 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105106.D\FID1A.CH          Vial: 10
Acq On    : 19 May 2016   6:42 pm                     Operator: XULIU
Sample    : JC19914-6                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105106.D\FID2B.CH          Vial: 10
Acq On    : 19 May 2016   7:03 pm                     Operator: XULIU
Sample    : JC19914-6                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:03 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.55	5.50	366101	813051	5415.956	5233.754
Spiked Amount 5000.000			Recovery	=	108.32%	104.68%
Target Compounds						
1) Methanol	1.11	0.90	3513	7845	227.269	243.233

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

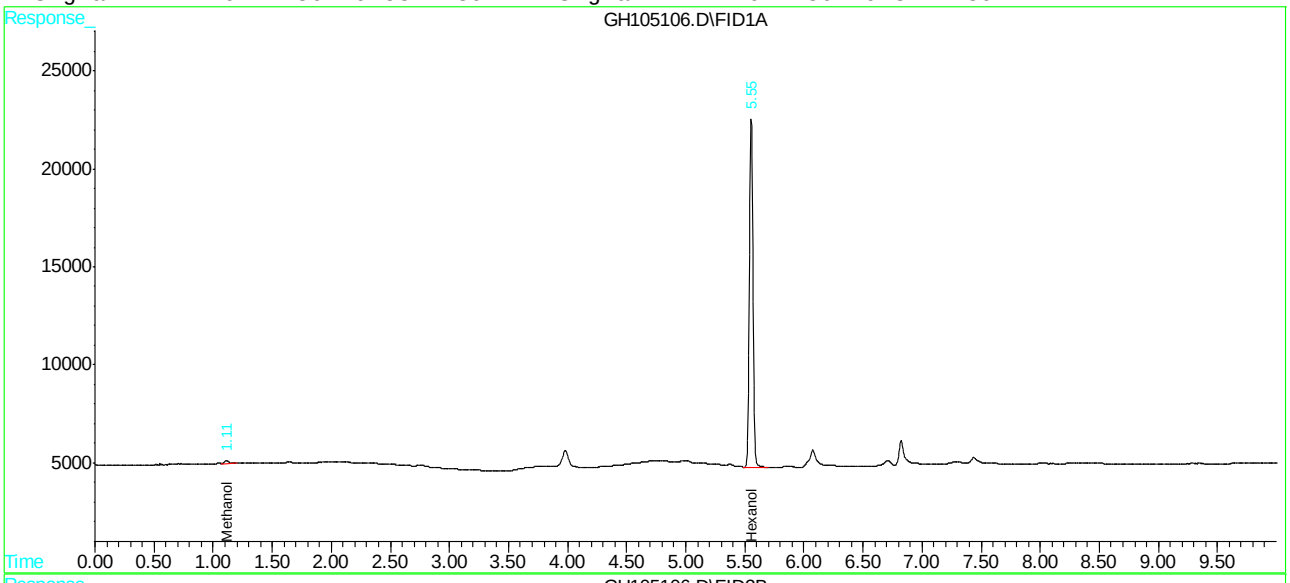
Quantitation Report (QT Reviewed)

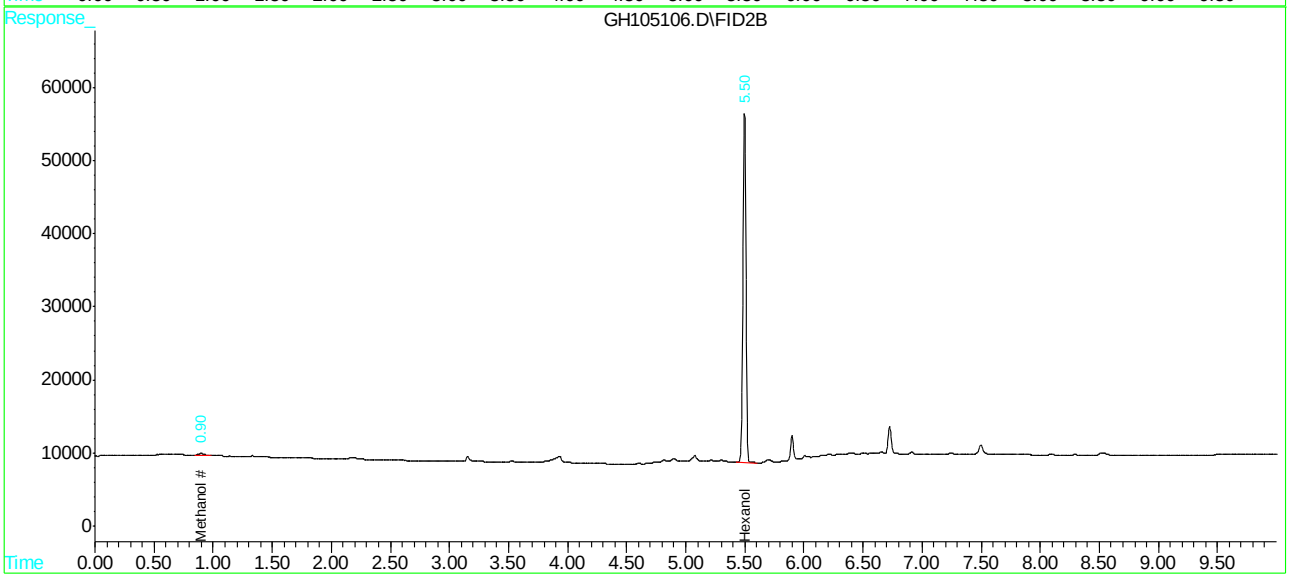
```
Data File : C:\HPCHEM\1\DATA\GH105106.D\FID1A.CH          Vial: 10
Acq On    : 19 May 2016   6:42 pm                     Operator: XULIU
Sample    : JC19914-6                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105106.D\FID2B.CH          Vial: 10
Acq On    : 19 May 2016   7:03 pm                     Operator: XULIU
Sample    : JC19914-6                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:03 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105107.D\FID1A.CH          Vial: 11
Acq On    : 19 May 2016   7:03 pm                     Operator: XULIU
Sample    : JC19914-7                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105107.D\FID2B.CH          Vial: 11
Acq On    : 19 May 2016   7:18 pm                     Operator: XULIU
Sample    : JC19914-7                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:04 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol          5.55   5.50    340851   772377 5042.426  4971.928
 Spiked Amount   5000.000                 Recovery     =  100.85%    99.44%

Target Compounds
```

9.1.7

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105107.D  MGH5288.M      Fri May 20 09:04:16 2016      GCGH
```

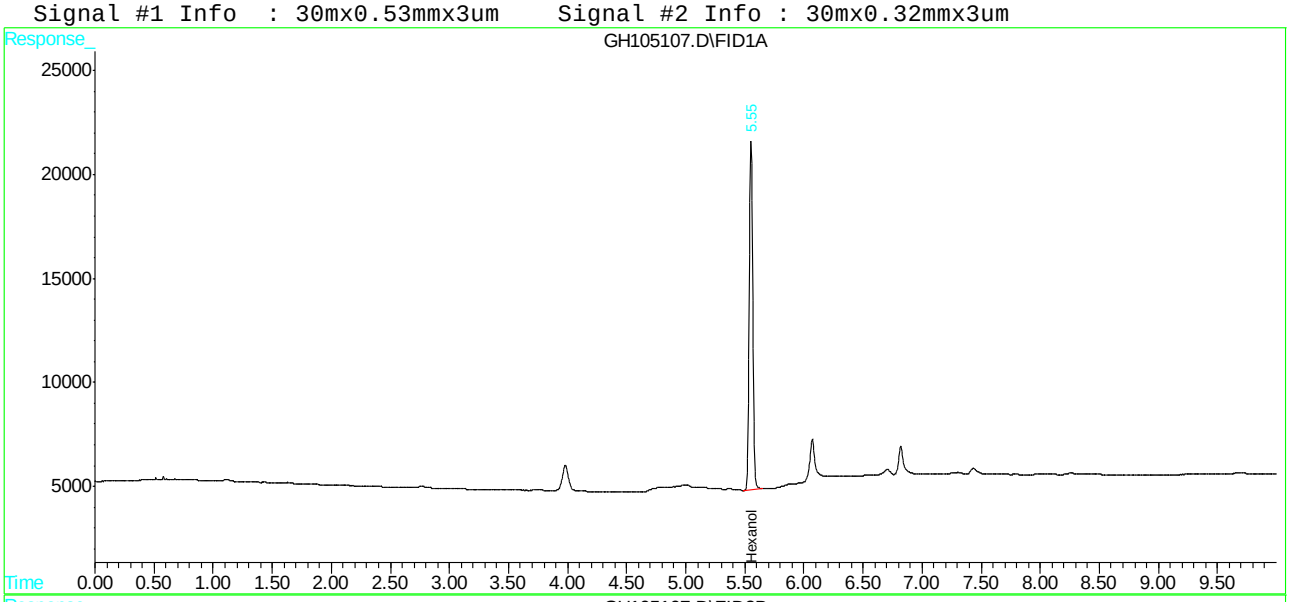
Quantitation Report (QT Reviewed)

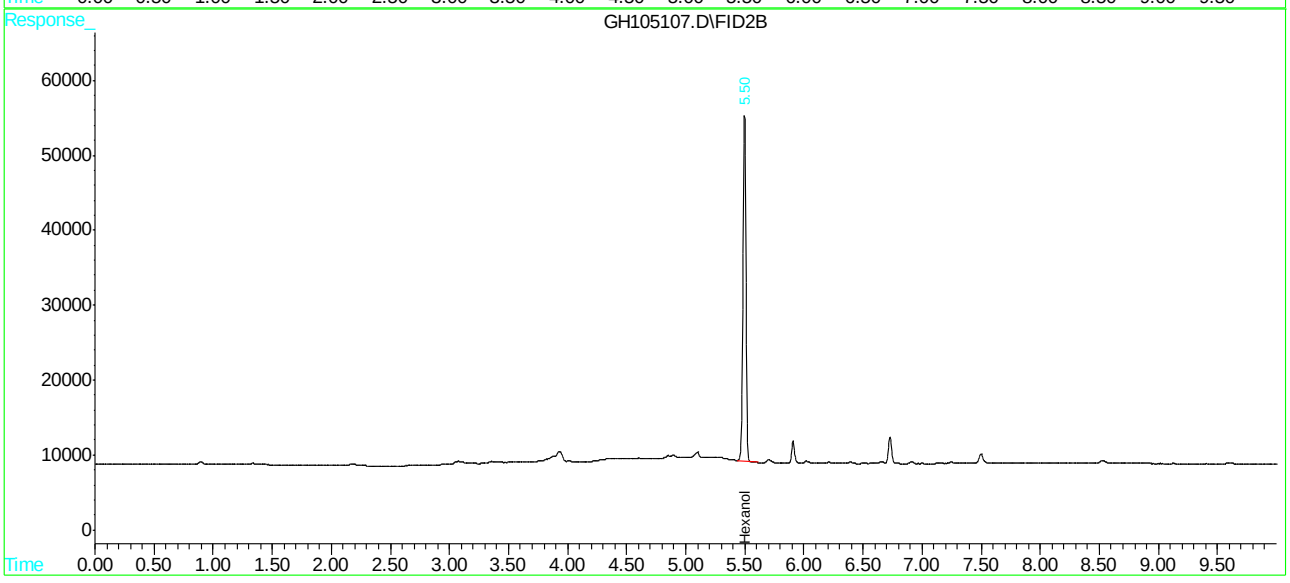
```
Data File : C:\HPCHEM\1\DATA\GH105107.D\FID1A.CH          Vial: 11
Acq On    : 19 May 2016   7:03 pm                     Operator: XULIU
Sample    : JC19914-7                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105107.D\FID2B.CH          Vial: 11
Acq On    : 19 May 2016   7:18 pm                     Operator: XULIU
Sample    : JC19914-7                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:04 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104971.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104971.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   7:12 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:03 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.59   5.48    392417   261236 5128.694  1587.351 #
 Spiked Amount   5000.000                  Recovery     =  102.57%    31.75%

Target Compounds
```

9.2.1

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH104971.D  MGH5269.M      Tue May 17 08:06:21 2016      GCGH
```


SGS ACCUTEST JC19914

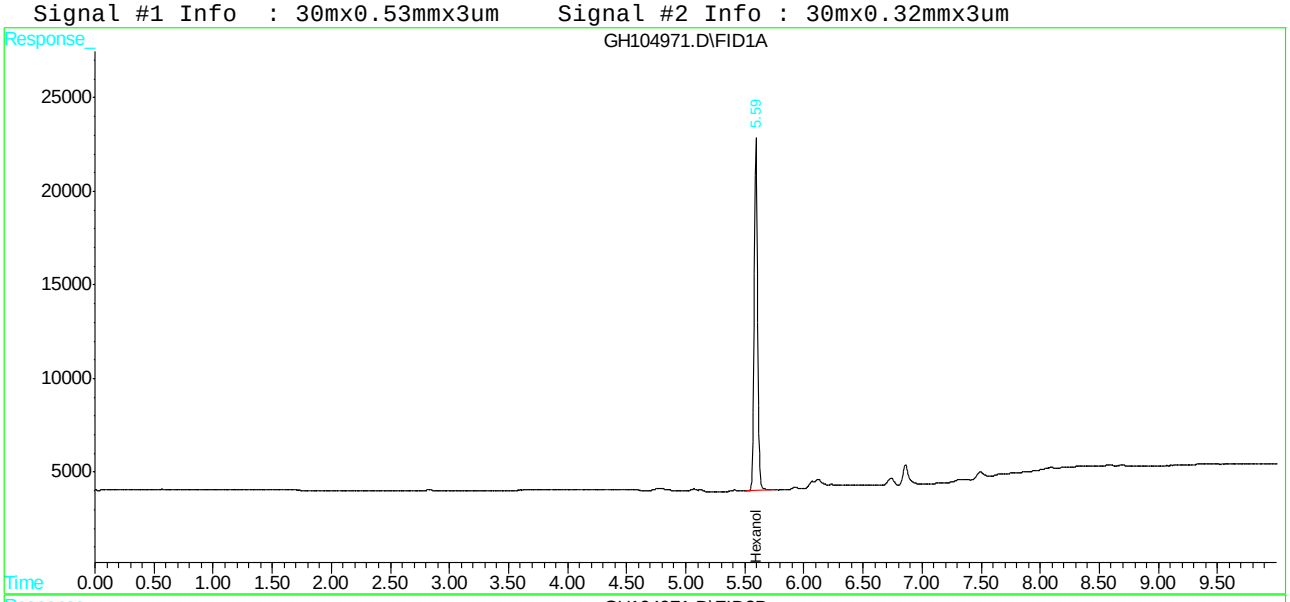
Quantitation Report (QT Reviewed)

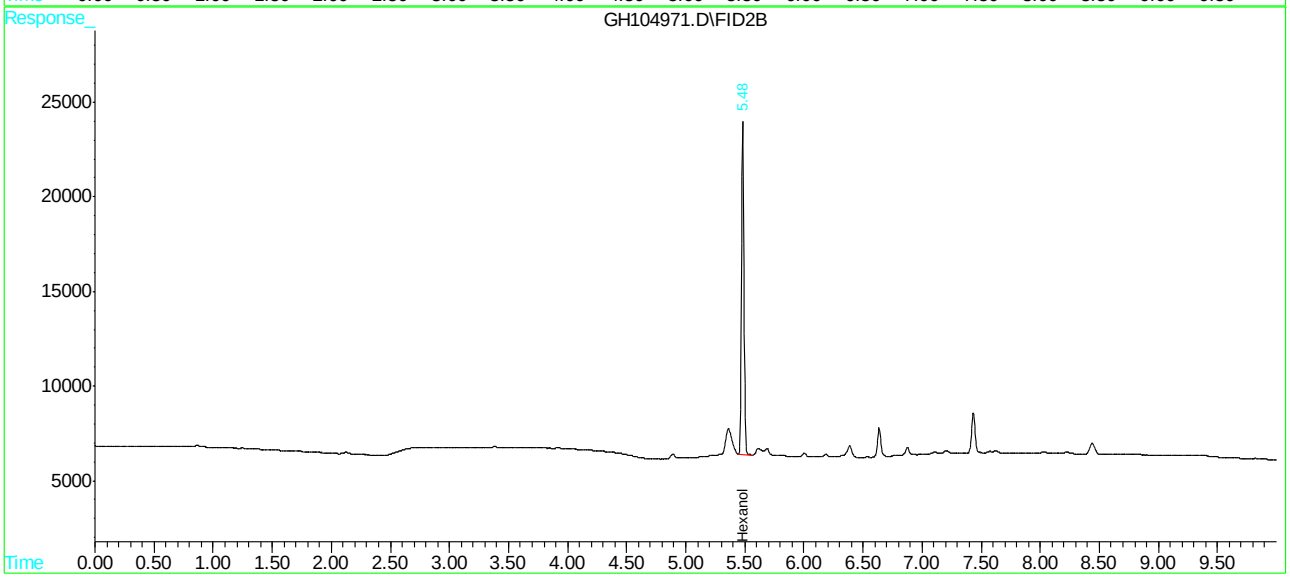
```
Data File : C:\HPCHEM\1\DATA\GH104971.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104971.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   7:12 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:03 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105055.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105055.D\FID2B.CH          Vial: 91
Acq On    : 18 May 2016   4:18 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:16 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol          5.56   5.50    302312   673720 4472.288  4336.857
 Spiked Amount   5000.000                 Recovery     =   89.45%    86.74%

Target Compounds
```

9.2.2

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105055.D  MGH5288.M      Thu May 19 07:31:59 2016      GCGH
```


SGS ACCUTEST JC19914

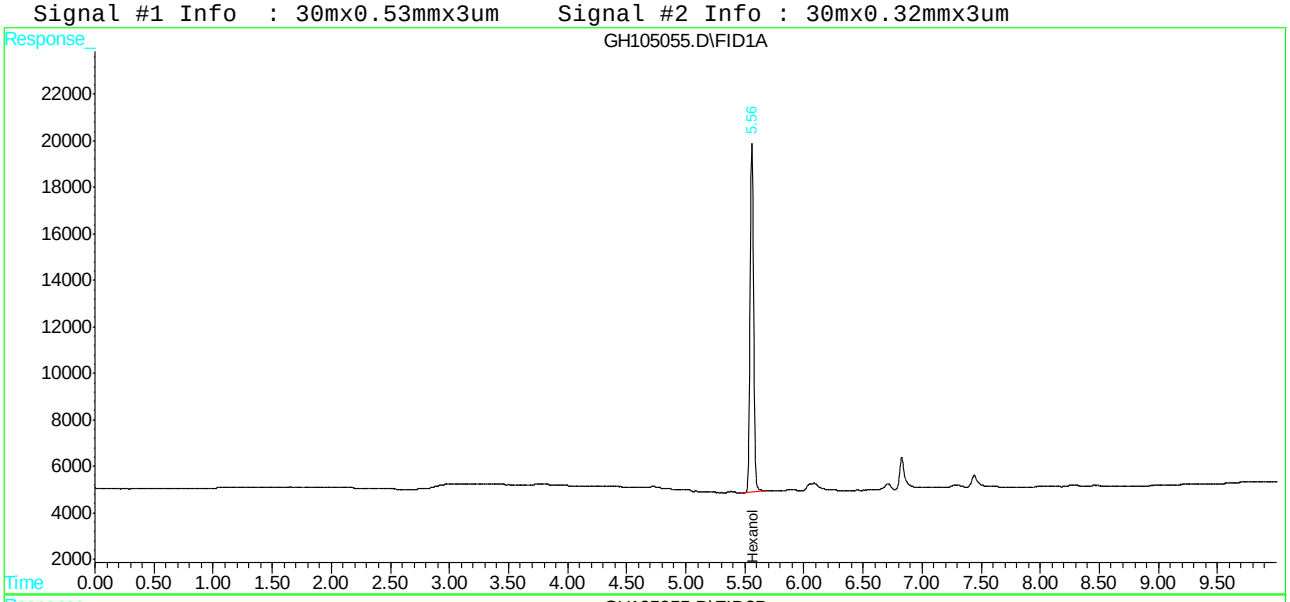
Quantitation Report (QT Reviewed)

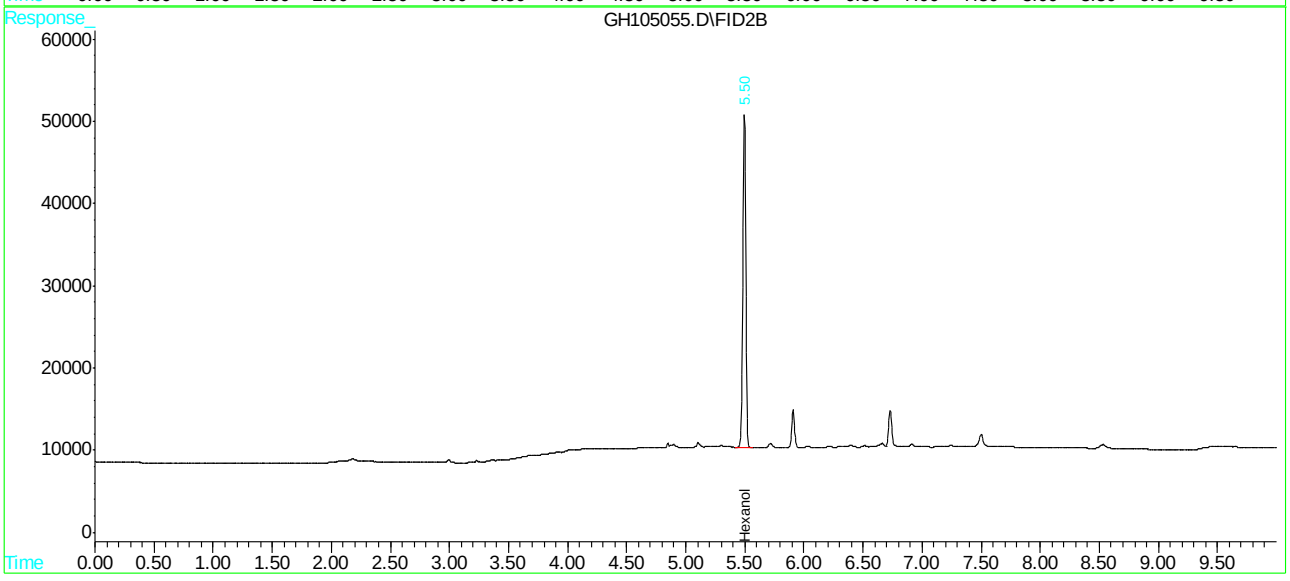
```
Data File : C:\HPCHEM\1\DATA\GH105055.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105055.D\FID2B.CH          Vial: 91
Acq On    : 18 May 2016   4:18 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:16 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105099.D\FID1A.CH          Vial: 91
Acq On    : 19 May 2016   4:46 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105099.D\FID2B.CH          Vial: 91
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.56	5.50	280009	617591	4142.352	3975.545
Spiked Amount 5000.000			Recovery	=	82.85%	79.51%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

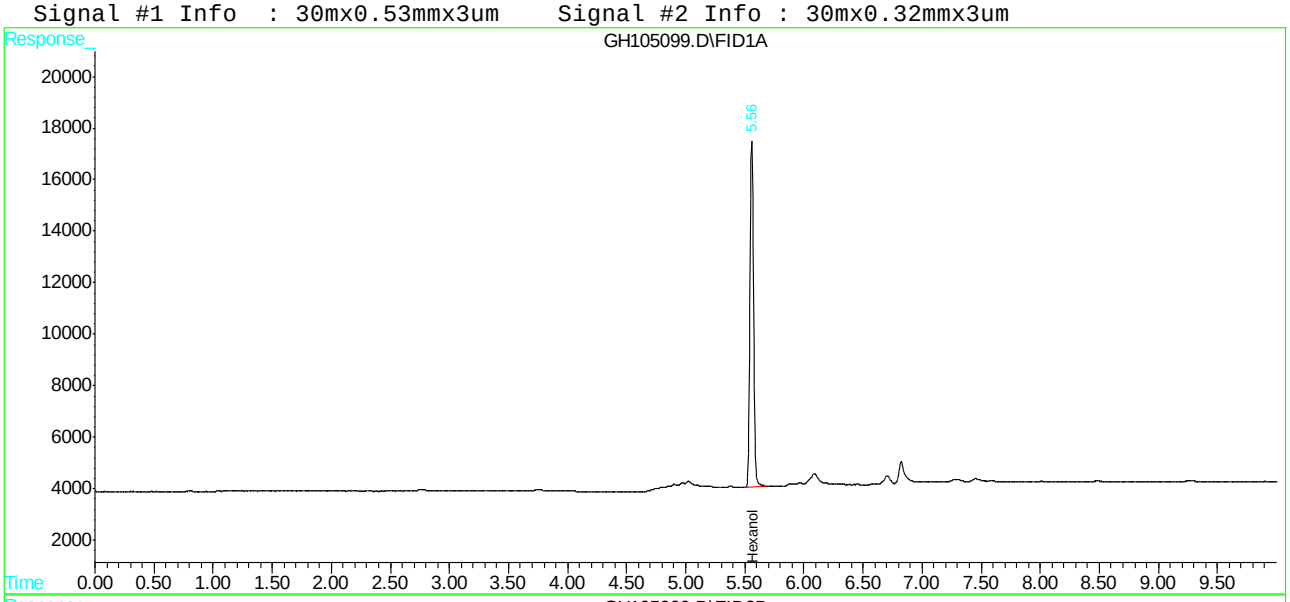
Quantitation Report (QT Reviewed)

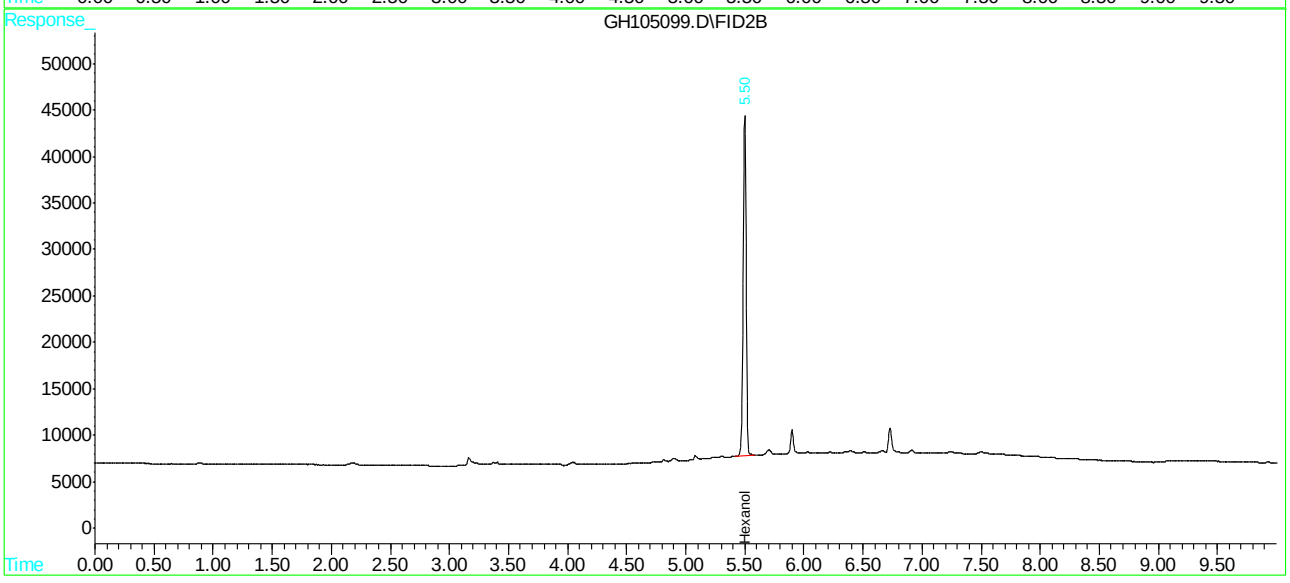
```
Data File : C:\HPCHEM\1\DATA\GH105099.D\FID1A.CH          Vial: 91
Acq On    : 19 May 2016   4:46 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105099.D\FID2B.CH          Vial: 91
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104961.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104961.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:39 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    398117   284089 5203.193  1726.210 #
 Spiked Amount   5000.000                  Recovery     =  104.06%    34.52%

Target Compounds
```

9.2.4

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH104961.D  MGH5269.M      Tue May 17 07:39:40 2016      GCGH
```


SGS ACCUTEST JC19914

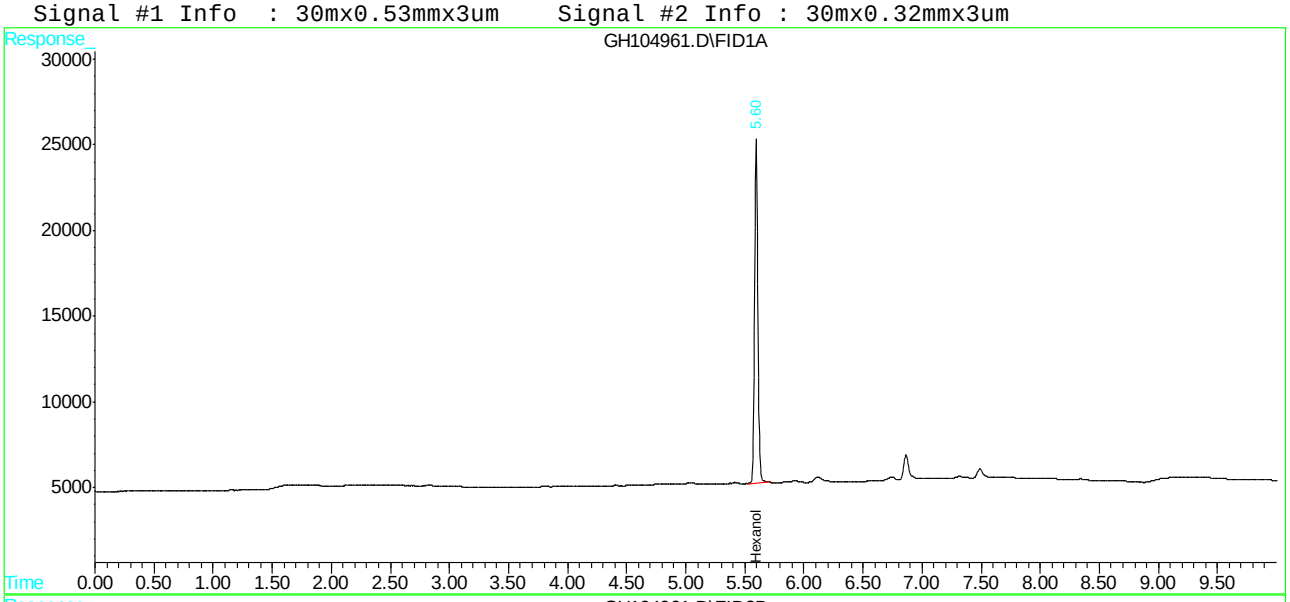
Quantitation Report (QT Reviewed)

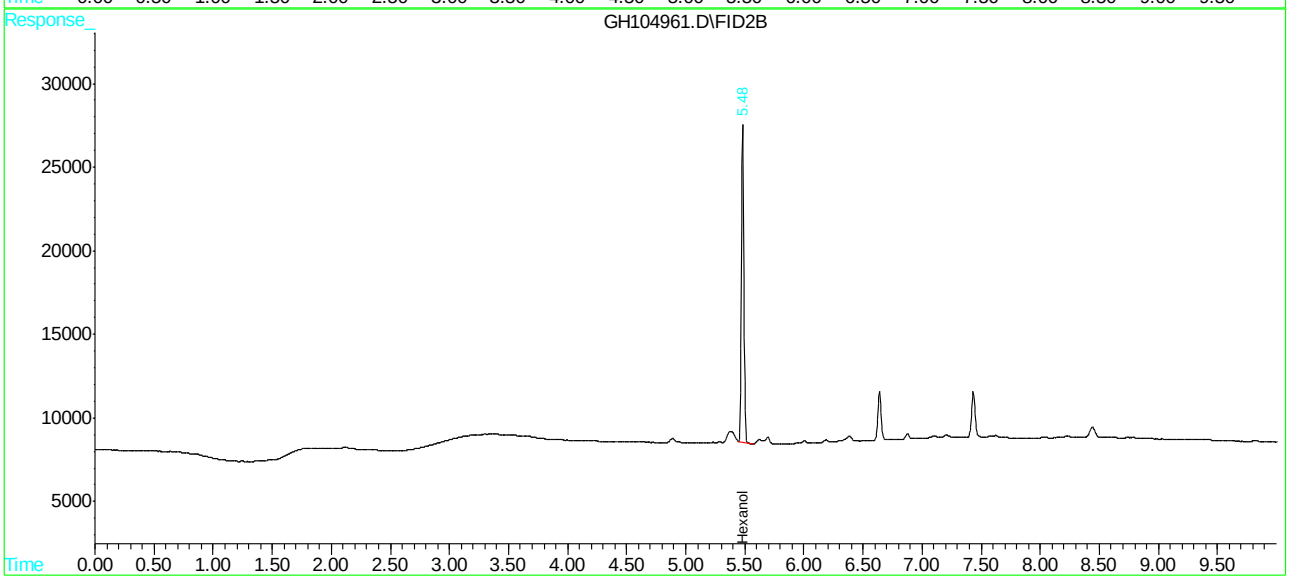
```
Data File : C:\HPCHEM\1\DATA\GH104961.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104961.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:39 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105050.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105050.D\FID2B.CH          Vial: 91
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:16 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.56   5.50    304202   672098 4500.252  4326.419
 Spiked Amount   5000.000                  Recovery     =   90.01%    86.53%

Target Compounds
```

9.2.5

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105050.D  MGH5288.M      Thu May 19 07:30:41 2016      GCGH
```


SGS ACCUTEST JC19914

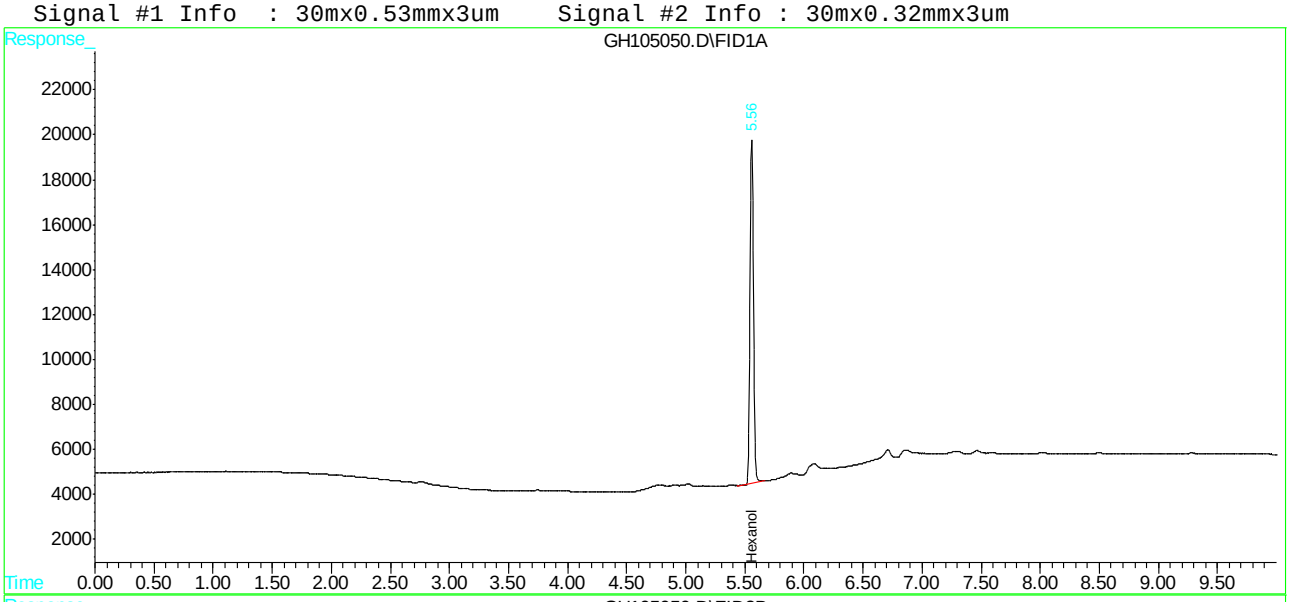
Quantitation Report (QT Reviewed)

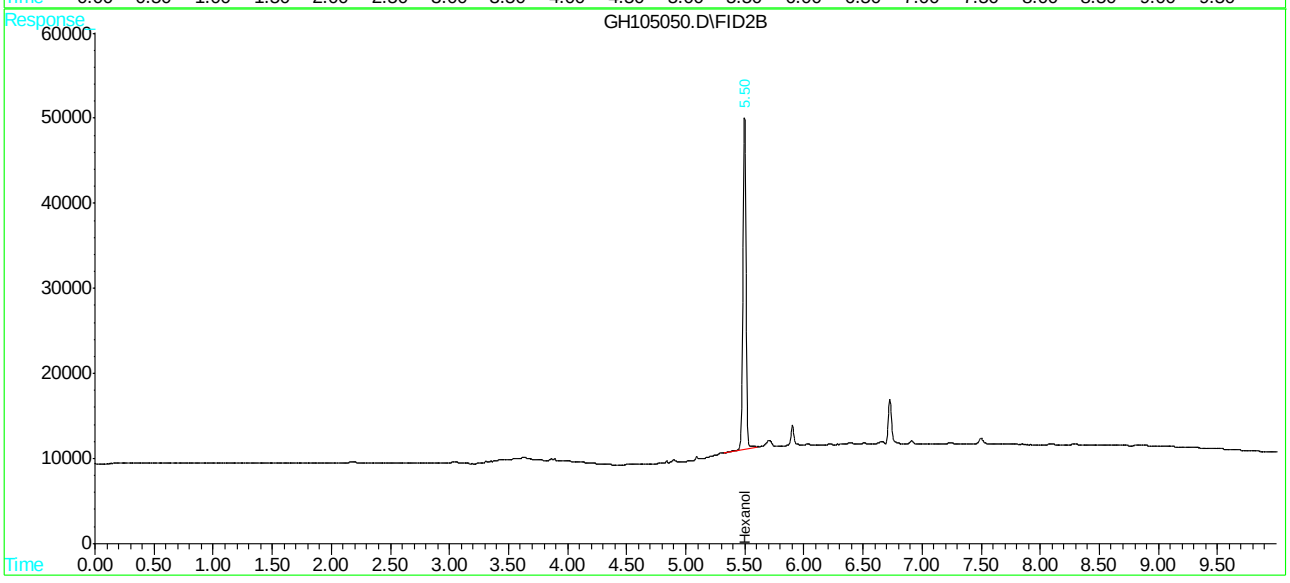
```
Data File : C:\HPCHEM\1\DATA\GH105050.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105050.D\FID2B.CH          Vial: 91
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:16 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104962.D\FID1A.CH          Vial: 92
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104962.D\FID2B.CH          Vial: 92
Acq On    : 16 May 2016   4:45 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:38 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.48	439726	309830	5746.997	1882.618 #
Spiked Amount	5000.000			Recovery	=	114.94%	37.65%
	Target Compounds						
1)	Methanol	1.15	0.86	71026	57960	4809.159	2851.105 #
2)	Ethanol	1.49	1.11	103628	73446	5537.932	2311.507 #
3)	Tert-Butyl Alcoh	2.07	1.60	194353	120481	7118.284	1845.234 #
4)	1-Propanol	2.56	1.94	135960	120368	6100.301	2443.009 #
5)	2-Propanol	1.80	1.37f	180447	81610	8696.137	1952.102 #
6)	Isobutanol	3.36	2.89	167811	108711	6105.202	1752.384 #
7)	1-Butanol	3.80	3.38	154708	127417	6318.080	2461.364 #
8)	2-Butanol	2.99	2.51f	138399	101020	5492.386	2044.341 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

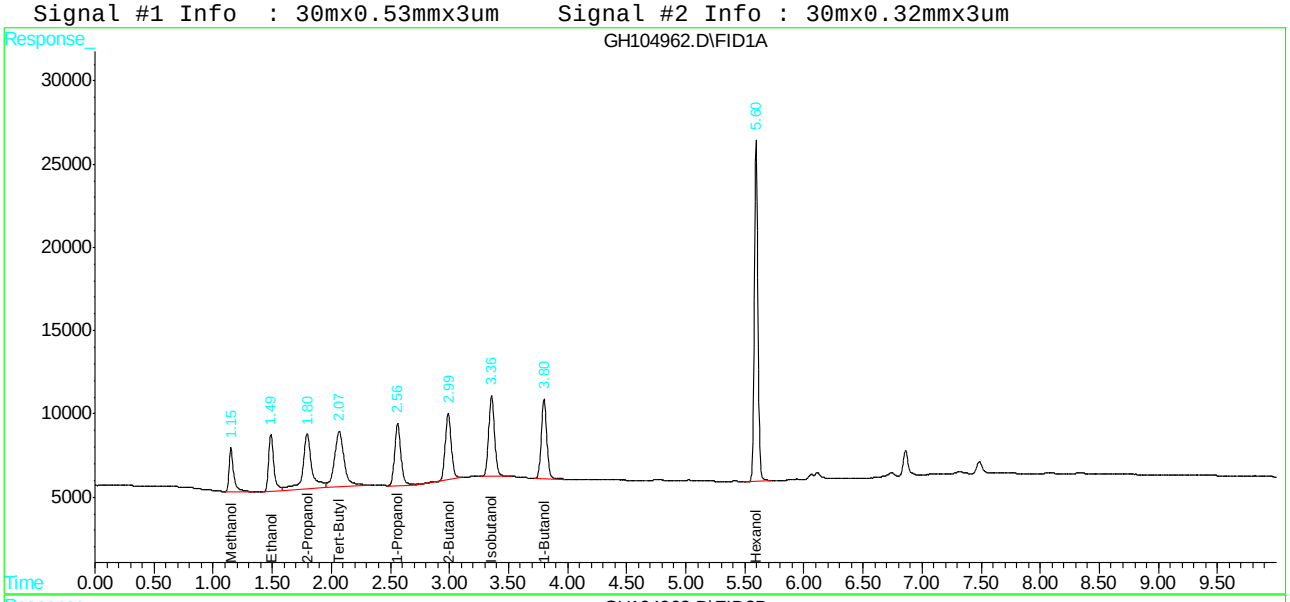
Quantitation Report (QT Reviewed)

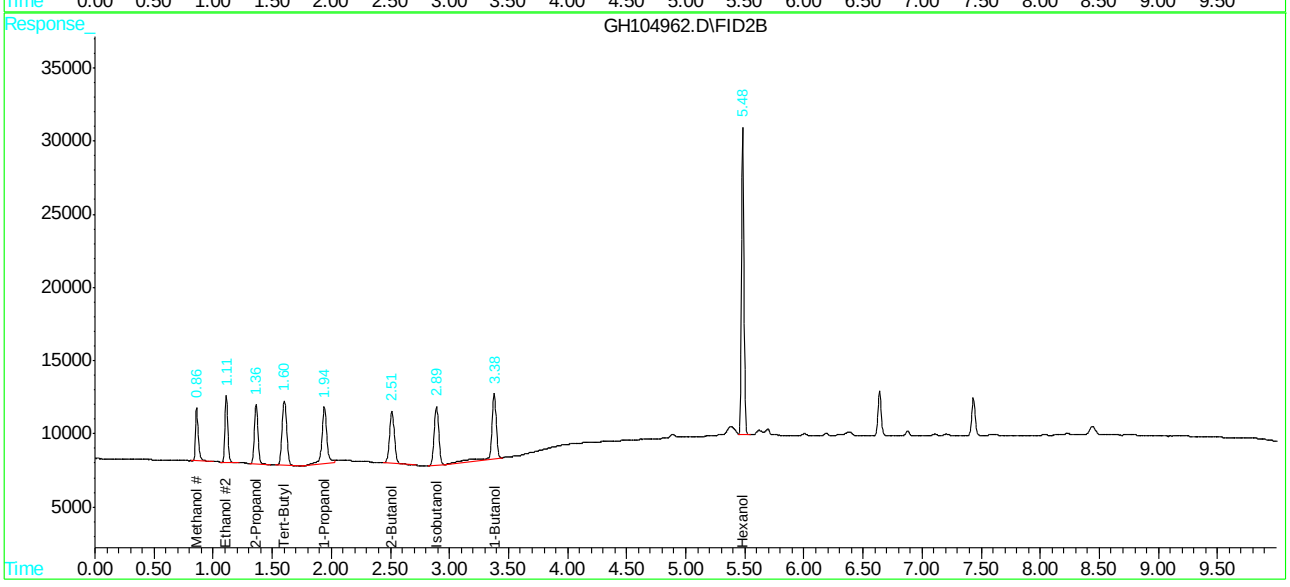
```
Data File : C:\HPCHEM\1\DATA\GH104962.D\FID1A.CH          Vial: 92
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104962.D\FID2B.CH          Vial: 92
Acq On    : 16 May 2016   4:45 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:38 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105051.D\FID1A.CH          Vial: 92
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105051.D\FID2B.CH          Vial: 92
Acq On    : 18 May 2016   3:13 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:18 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	331713	735813	4907.236	4736.560
Spiked Amount	5000.000			Recovery	=	98.14%	94.73%
	Target Compounds						
1)	Methanol	1.11	0.91	76338	155204	4938.195	4811.899
2)	Ethanol	1.44	1.16	99507	198781	5250.978	4986.853
3)	Tert-Butyl Alcoh	2.00	1.65	144637	323706	5104.554	5091.080
4)	1-Propanol	2.50	2.01	129150	258222	5309.109	5078.862
5)	2-Propanol	1.74	1.41	104714	226653	5253.818	5005.689
6)	Isobutanol	3.30	2.94	141712	297186	4925.527	4854.304
7)	1-Butanol	3.75	3.42	146123	282625	5116.251	4271.194
8)	2-Butanol	2.93	2.57	131140	317642	5115.785	5851.450

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

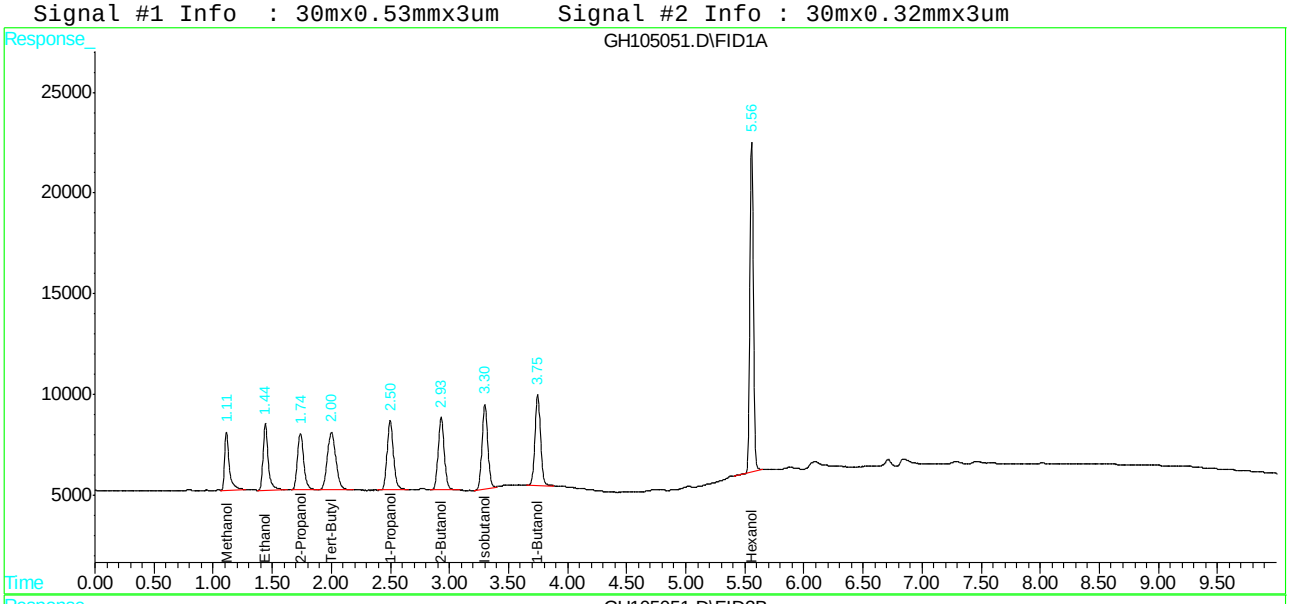
Quantitation Report (QT Reviewed)

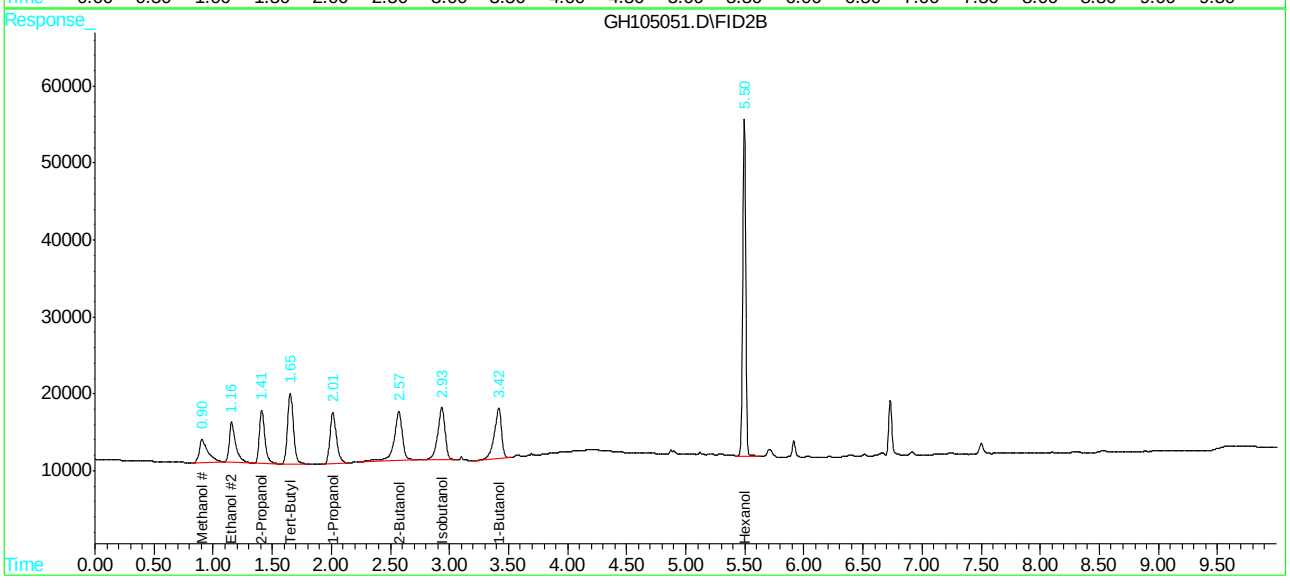
```
Data File : C:\HPCHEM\1\DATA\GH105051.D\FID1A.CH          Vial: 92
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105051.D\FID2B.CH          Vial: 92
Acq On    : 18 May 2016   3:13 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:18 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105100.D\FID1A.CH          Vial: 92
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105100.D\FID2B.CH          Vial: 92
Acq On    : 19 May 2016   5:22 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:46 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:14:57 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.49	319241	705201	4722.736	4539.504
Spiked Amount	5000.000			Recovery	=	94.45%	90.79%
	Target Compounds						
1)	Methanol	1.11	0.89	71908	177919	4651.591	5516.148
2)	Ethanol	1.44	1.15	93264	207313	4921.548	5200.904
3)	Tert-Butyl Alcoh	2.00	1.65	140903	327504	4972.773	5150.821
4)	1-Propanol	2.50	2.00	129946	262646	5341.826	5165.872
5)	2-Propanol	1.74	1.41	99306	233756	4982.461	5162.545
6)	Isobutanol	3.30	2.94	155012	298428	5387.796	4874.582
7)	1-Butanol	3.75	3.42	145478	310284	5093.636	4689.189
8)	2-Butanol	2.93	2.57	131640	284146	5135.270	5234.388

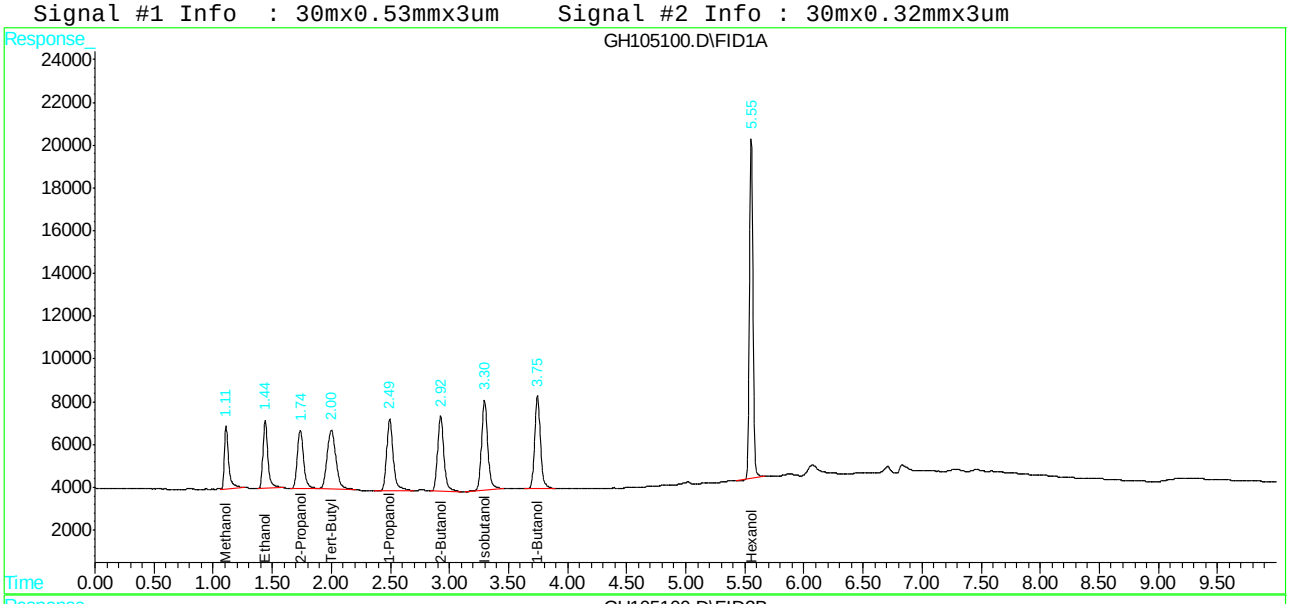
Quantitation Report (QT Reviewed)

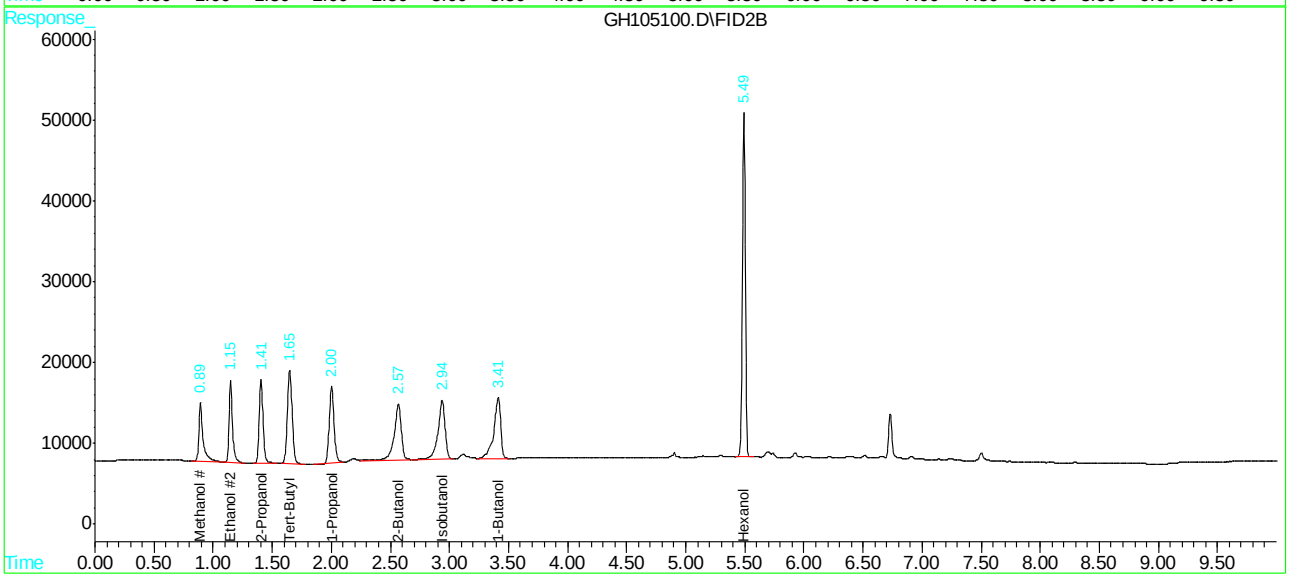
```
Data File : C:\HPCHEM\1\DATA\GH105100.D\FID1A.CH          Vial: 92
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105100.D\FID2B.CH          Vial: 92
Acq On    : 19 May 2016   5:22 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:46 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:14:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104964.D\FID1A.CH          Vial: 2
Acq On    : 16 May 2016   4:57 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104964.D\FID2B.CH          Vial: 2
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:46 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	423617	291848	5536.460	1773.354	#
Spiked Amount	5000.000			Recovery	=	110.73%	35.47%	
	Target Compounds							
1)	Methanol	1.15	0.86	72720	61380	4923.823	3019.335	
2)	Ethanol	1.49	1.12	107138	75953	5725.512	2390.398	#
3)	Tert-Butyl Alcoh	2.07	1.61	171758	124596	6290.720	1908.250	#
4)	1-Propanol	2.56	1.95	138985	118086	6236.037	2396.694	#
5)	2-Propanol	1.79	1.37f	107581	84259	5184.591	2015.454	#
6)	Isobutanol	3.35	2.89	174938	115275	6364.513	1858.191	#
7)	1-Butanol	3.80	3.38	164381	109032	6713.099	2106.225	#
8)	2-Butanol	2.99	2.52	145573	101789	5777.092	2059.904	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

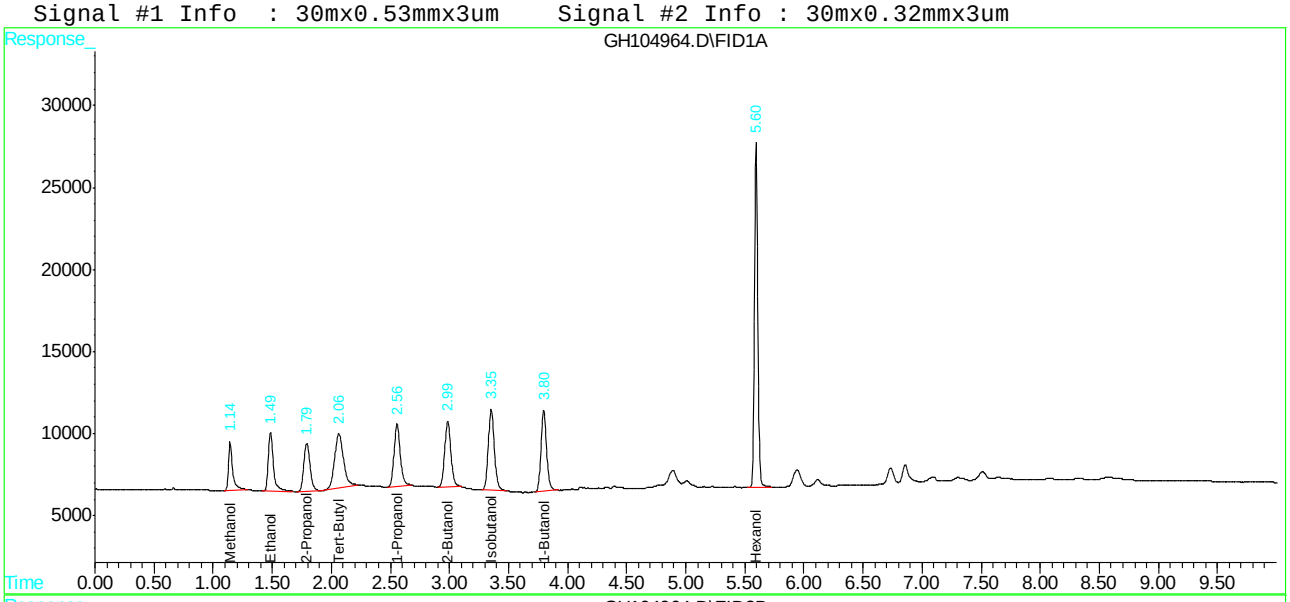
Quantitation Report (QT Reviewed)

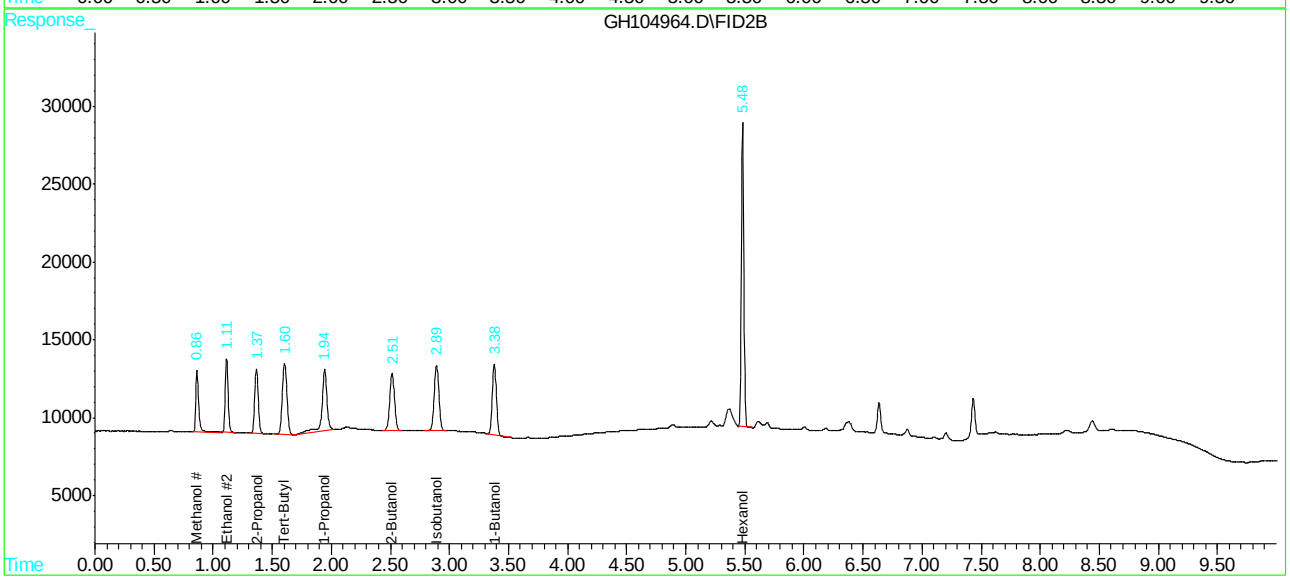
Data File : C:\HPCHEM\1\DATA\GH104964.D\FID1A.CH Vial: 2
Acq On : 16 May 2016 4:57 pm Operator: XULIU
Sample : JC19644-1MS Inst : GCGH
Misc : GC48420,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104964.D\FID2B.CH Vial: 2
Acq On : 16 May 2016 5:12 pm Operator: XULIU
Sample : JC19644-1MS Inst : GCGH
Misc : GC48420,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 17 7:46 2016 Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104965.D\FID1A.CH          Vial: 3
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104965.D\FID2B.CH          Vial: 3
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:47 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	431149	292567	5634.903	1777.727	#
Spiked Amount	5000.000			Recovery	=	112.70%	35.55%	
	Target Compounds							
1)	Methanol	1.15	0.86	73375	62227	4968.163	3061.026	
2)	Ethanol	1.49	1.11	109011	75678	5825.598	2381.731	#
3)	Tert-Butyl Alcoh	2.07	1.60	169876	125262	6221.802	1918.451	#
4)	1-Propanol	2.56	1.94f	150011	99591	6730.745	2021.302	#
5)	2-Propanol	1.79	1.36f	122453	84591	5901.293	2023.395	#
6)	Isobutanol	3.35	2.89	182004	115401	6621.580	1860.232	#
7)	1-Butanol	3.80	3.38	168796	109734	6893.405	2119.783	#
8)	2-Butanol	2.99	2.51f	153419	102611	6088.456	2076.538	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH104965.D MGH5269.M Tue May 17 07:50:34 2016 GCGH

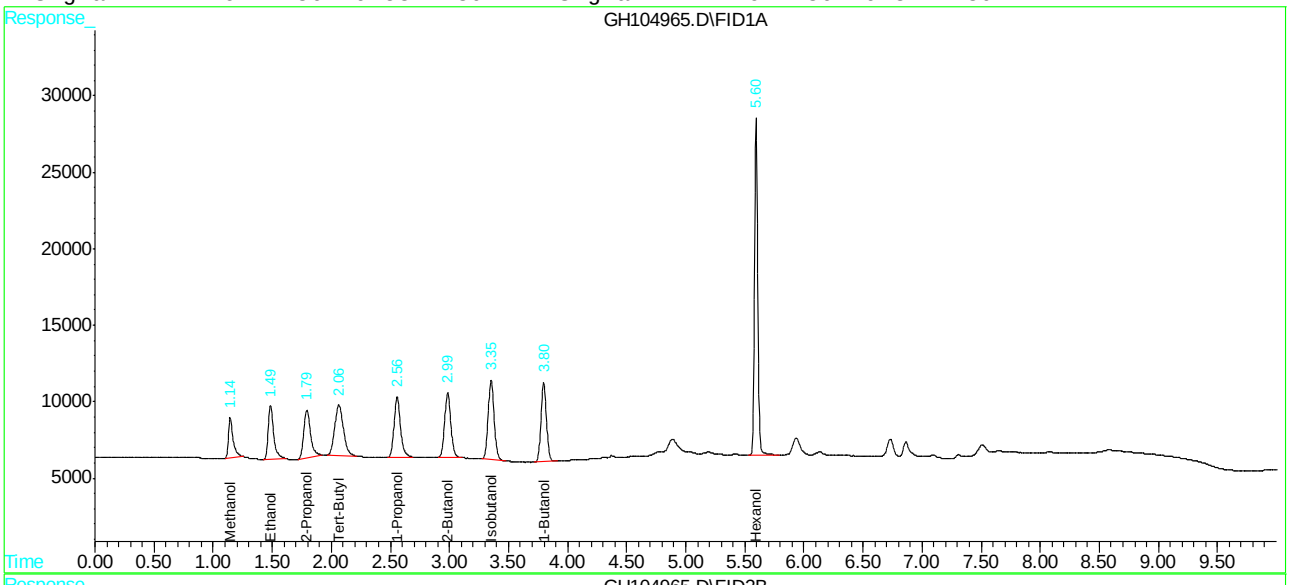
Quantitation Report (QT Reviewed)

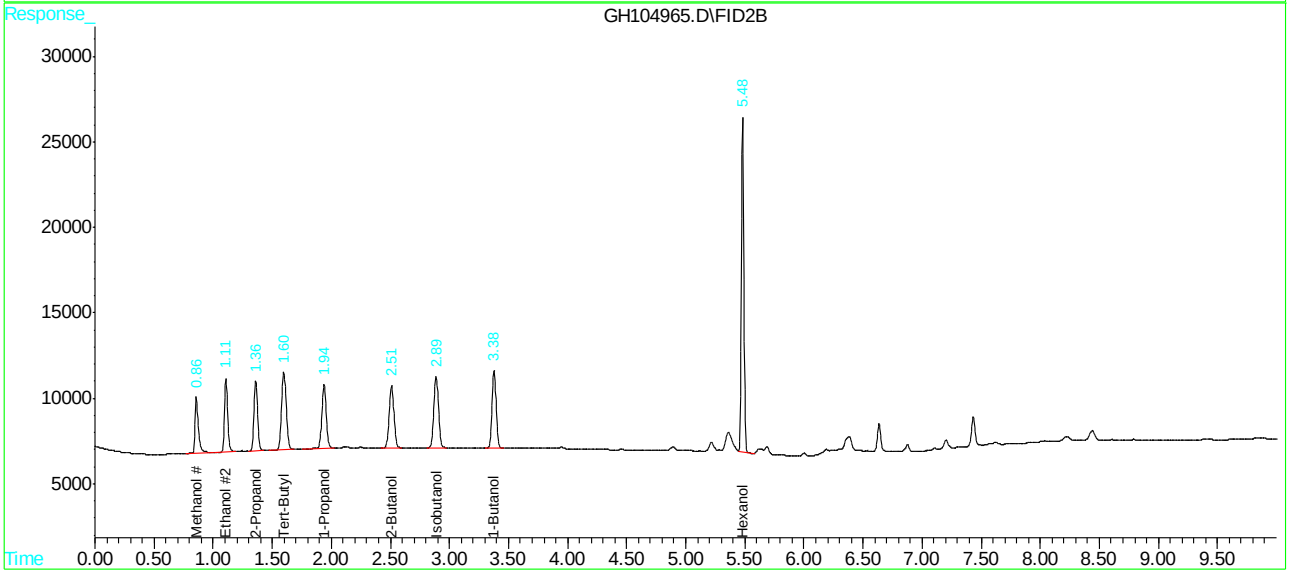
```
Data File : C:\HPCHEM\1\DATA\GH104965.D\FID1A.CH          Vial: 3
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104965.D\FID2B.CH          Vial: 3
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:47 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105057.D\FID1A.CH          Vial: 2
Acq On    : 18 May 2016   4:40 pm                     Operator: XULIU
Sample    : JC19914-2MS                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105057.D\FID2B.CH          Vial: 2
Acq On    : 18 May 2016   4:54 pm                     Operator: XULIU
Sample    : JC19914-2MS                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:23:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	302457	680318	4474.429	4379.330
Spiked Amount	5000.000			Recovery	=	89.49%	87.59%
	Target Compounds						
1)	Methanol	1.09	0.89	69828	156607	4517.047	4855.384
2)	Ethanol	1.42	1.15	93756	202024	4947.473	5068.226
3)	Tert-Butyl Alcoh	1.98	1.65	137454	327161	4851.050	5145.421
4)	1-Propanol	2.48	2.00	125316	263494	5151.500	5182.548
5)	2-Propanol	1.72	1.40	97304	218396	4882.012	4823.334
6)	Isobutanol	3.29	2.94	153867	304710	5347.993	4977.194
7)	1-Butanol	3.74	3.41	139374	289772	4879.922	4379.209
8)	2-Butanol	2.92	2.57	127604	279095	4977.847	5141.355

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

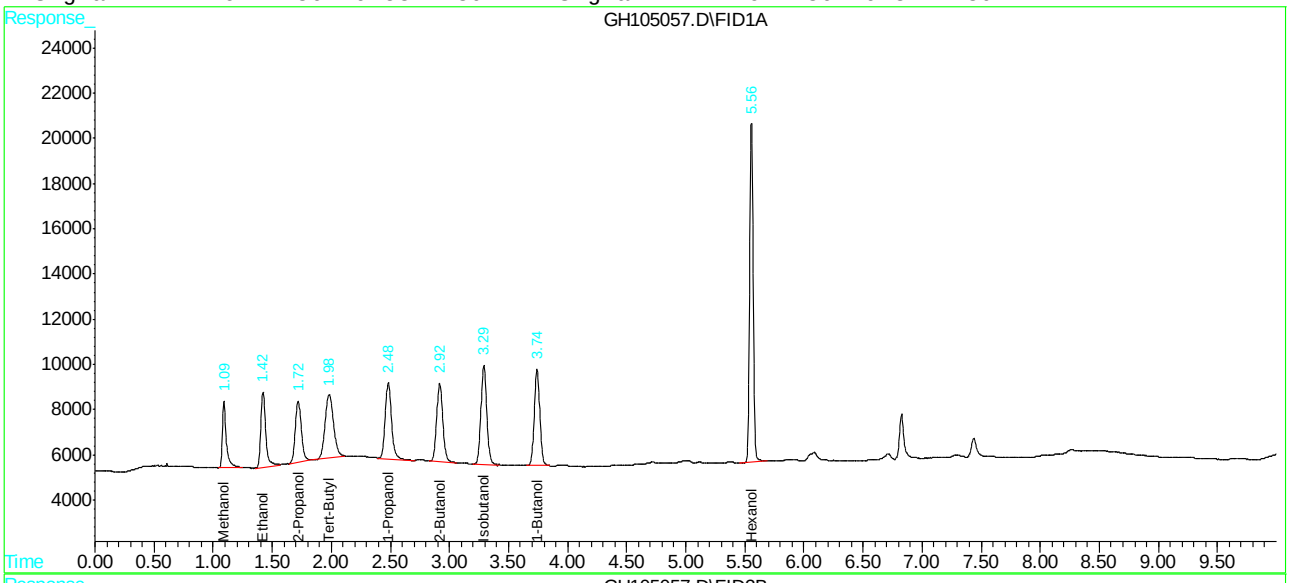
Quantitation Report (QT Reviewed)

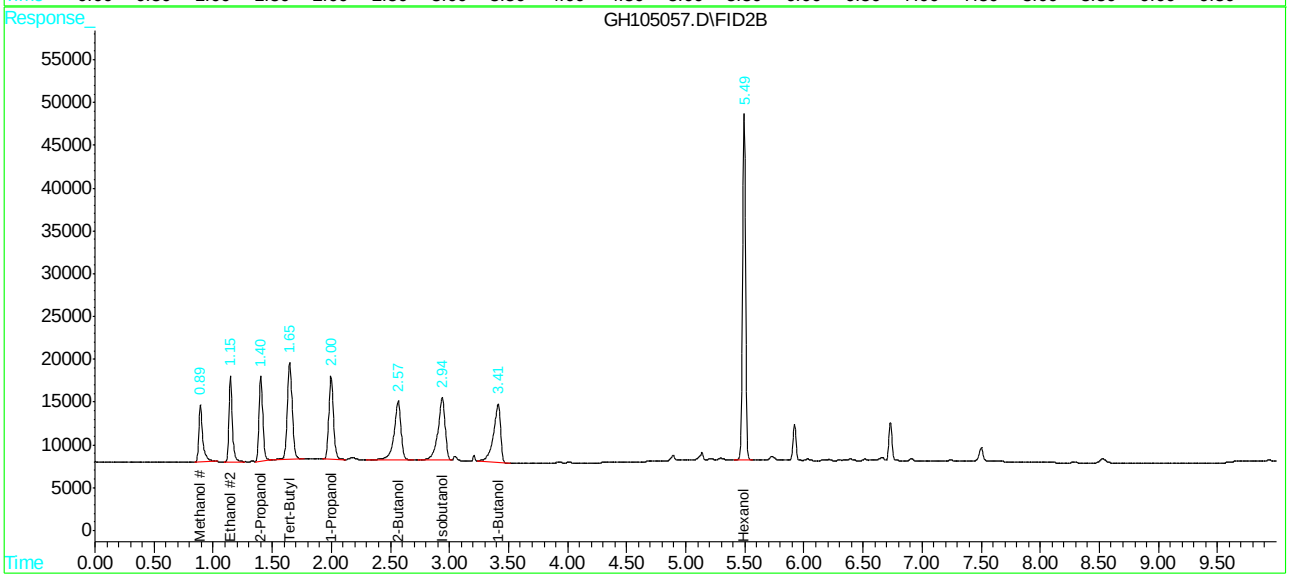
```
Data File : C:\HPCHEM\1\DATA\GH105057.D\FID1A.CH          Vial: 2
Acq On    : 18 May 2016   4:40 pm                     Operator: XULIU
Sample    : JC19914-2MS                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105057.D\FID2B.CH          Vial: 2
Acq On    : 18 May 2016   4:54 pm                     Operator: XULIU
Sample    : JC19914-2MS                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:23:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105058.D\FID1A.CH          Vial: 3
Acq On    : 18 May 2016   4:54 pm                     Operator: XULIU
Sample    : JC19914-2MSD                              Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105058.D\FID2B.CH          Vial: 3
Acq On    : 18 May 2016   5:08 pm                     Operator: XULIU
Sample    : JC19914-2MSD                              Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:23:53 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	312519	705204	4623.287	4539.526
Spiked Amount	5000.000			Recovery	=	92.47%	90.79%
	Target Compounds						
1)	Methanol	1.11	0.90	70280	171919	4546.274	5330.134
2)	Ethanol	1.44	1.15	94288	197666	4975.561	4958.899
3)	Tert-Butyl Alcoh	2.00	1.65	141562	318534	4996.060	5009.744
4)	1-Propanol	2.50	2.00	126495	251812	5199.971	4952.795
5)	2-Propanol	1.74	1.41	100233	215446	5028.978	4758.175
6)	Isobutanol	3.30	2.94	149864	299210	5208.857	4887.365
7)	1-Butanol	3.75	3.42	138845	284857	4861.420	4304.924
8)	2-Butanol	2.93	2.57	130747	268675	5100.438	4949.400

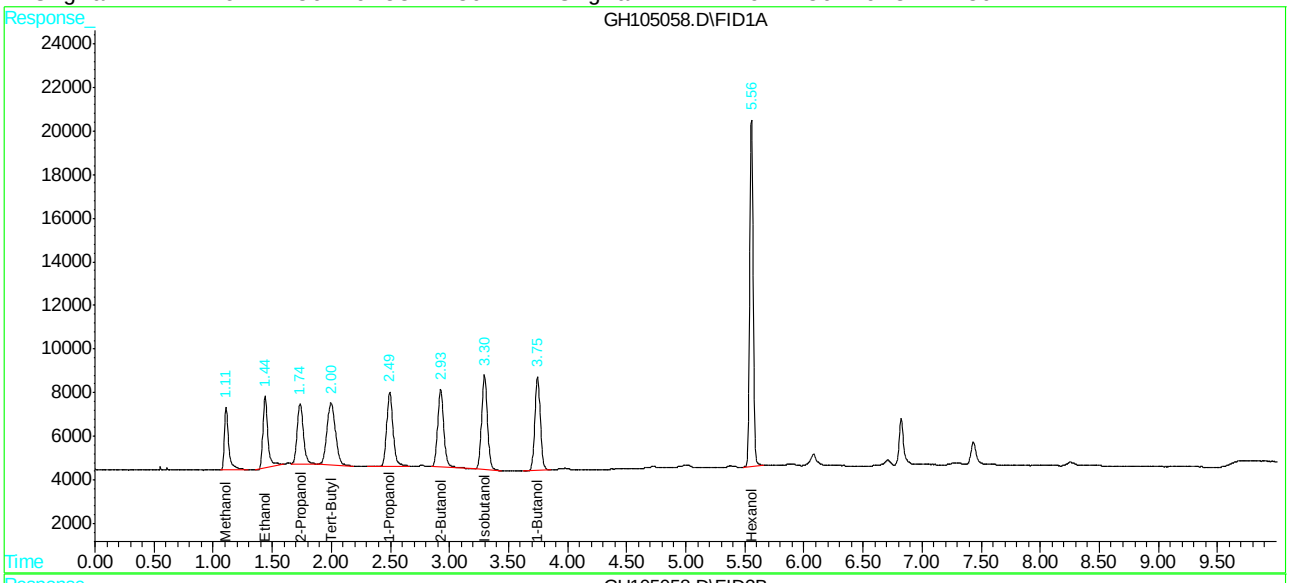
Quantitation Report (QT Reviewed)

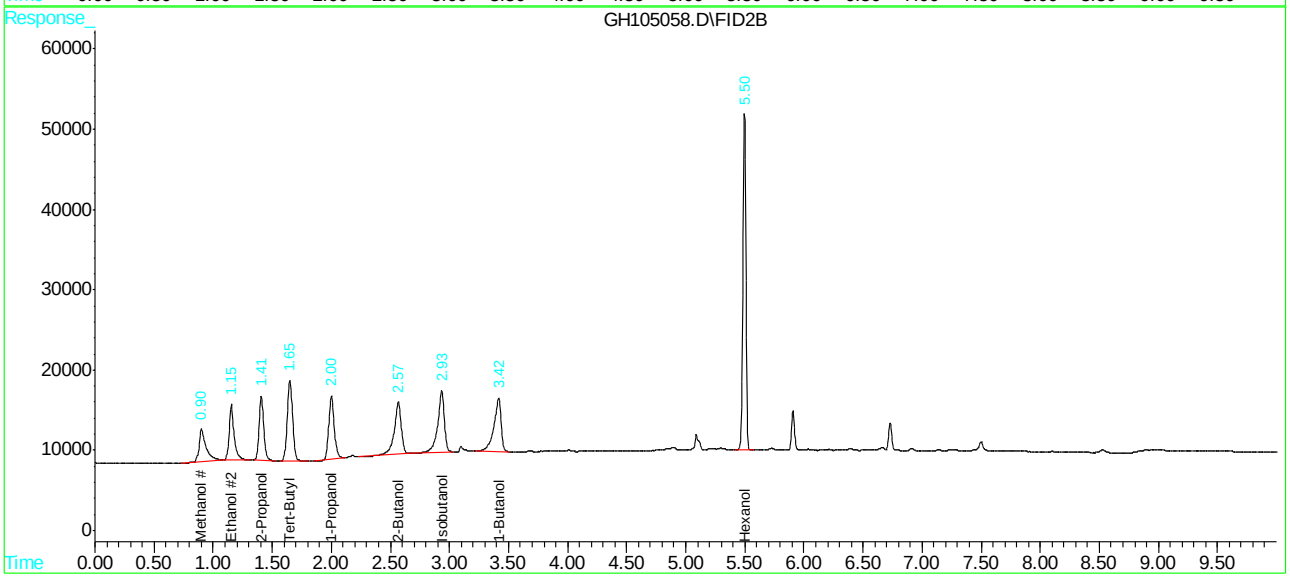
```
Data File : C:\HPCHEM\1\DATA\GH105058.D\FID1A.CH          Vial: 3
Acq On    : 18 May 2016   4:54 pm                     Operator: XULIU
Sample    : JC19914-2MSD                              Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105058.D\FID2B.CH          Vial: 3
Acq On    : 18 May 2016   5:08 pm                     Operator: XULIU
Sample    : JC19914-2MSD                              Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:23:53 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105102.D\FID1A.CH          Vial: 6
Acq On    : 19 May 2016   5:37 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105102.D\FID2B.CH          Vial: 6
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:53 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.55	5.50	317891	704897	4702.764	4537.551
Spiked Amount	5000.000			Recovery	=	94.06%	90.75%
	Target Compounds						
1)	Methanol	1.11	0.90	63948	153278	4136.668	4752.184
2)	Ethanol	1.44	1.15	90928	204536	4798.264	5131.251
3)	Tert-Butyl Alcoh	2.00	1.65	144388	325390	5095.795	5117.570
4)	1-Propanol	2.49	2.00	132970	260653	5466.136	5126.675
5)	2-Propanol	1.74	1.41	100015	226639	5018.076	5005.373
6)	Isobutanol	3.30	2.94	154930	309491	5384.944	5055.294
7)	1-Butanol	3.74	3.42	143340	248740	5018.809	3759.111
8)	2-Butanol	2.93	2.57	131346	268402	5123.826	4944.371

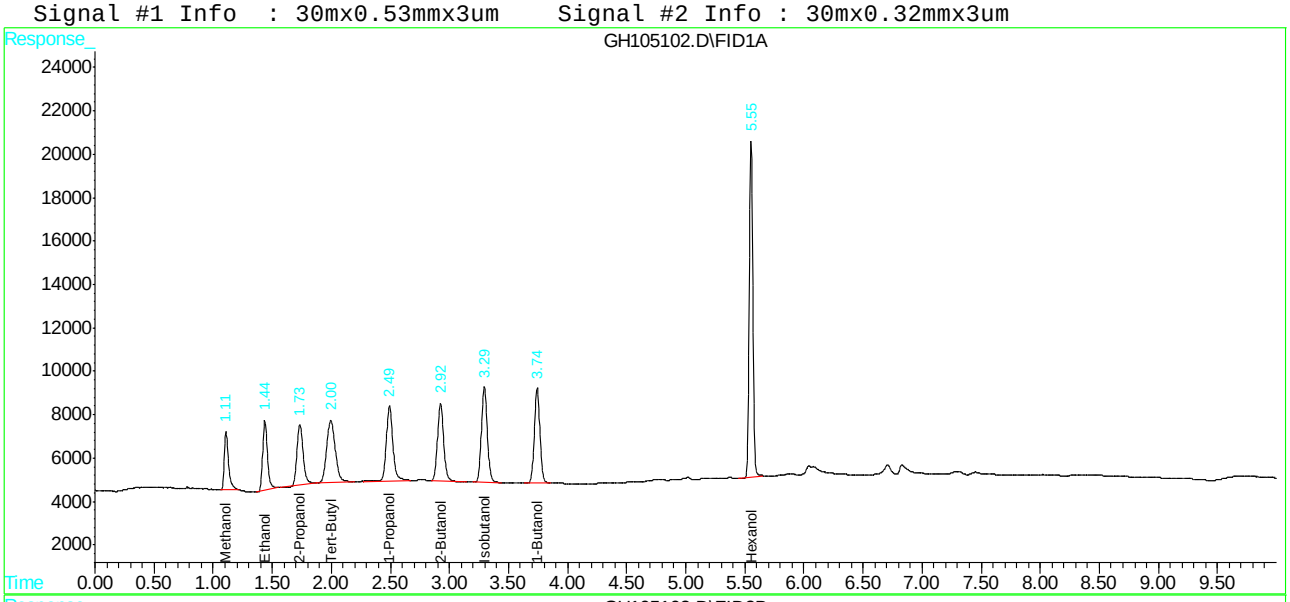
Quantitation Report (QT Reviewed)

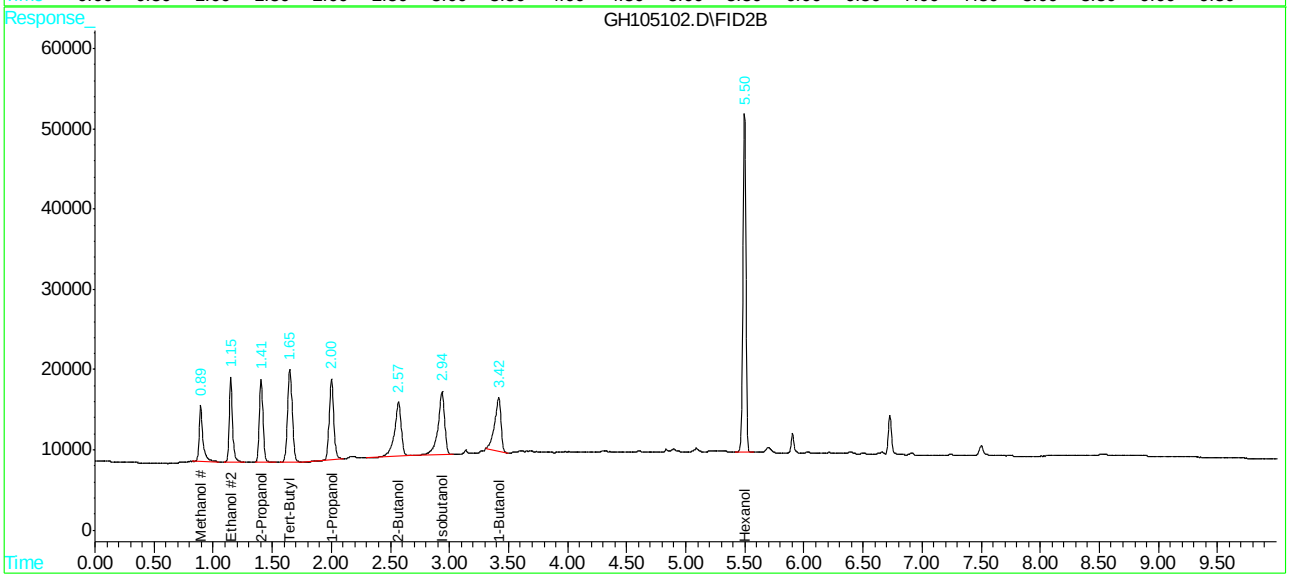
```
Data File : C:\HPCHEM\1\DATA\GH105102.D\FID1A.CH          Vial: 6
Acq On    : 19 May 2016   5:37 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105102.D\FID2B.CH          Vial: 6
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:53 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105103.D\FID1A.CH          Vial: 7
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105103.D\FID2B.CH          Vial: 7
Acq On    : 19 May 2016   6:13 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:54 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.55	5.50	317956	706865	4703.718	4550.218
Spiked Amount	5000.000			Recovery	=	94.07%	91.00%
	Target Compounds						
1)	Methanol	1.11	0.90	67687	130778	4378.579	4054.599
2)	Ethanol	1.44	1.15	96850	216348	5110.763	5427.575
3)	Tert-Butyl Alcoh	2.00	1.65	145749	327715	5143.800	5154.135
4)	1-Propanol	2.50	2.00	122458	263739	5033.996	5187.380
5)	2-Propanol	1.74	1.41	96953	225656	4864.404	4983.670
6)	Isobutanol	3.30	2.94	151881	297607	5278.961	4861.178
7)	1-Butanol	3.74	3.42	140577	302114	4922.052	4565.723
8)	2-Butanol	2.93	2.57	129589	255164	5055.278	4700.497

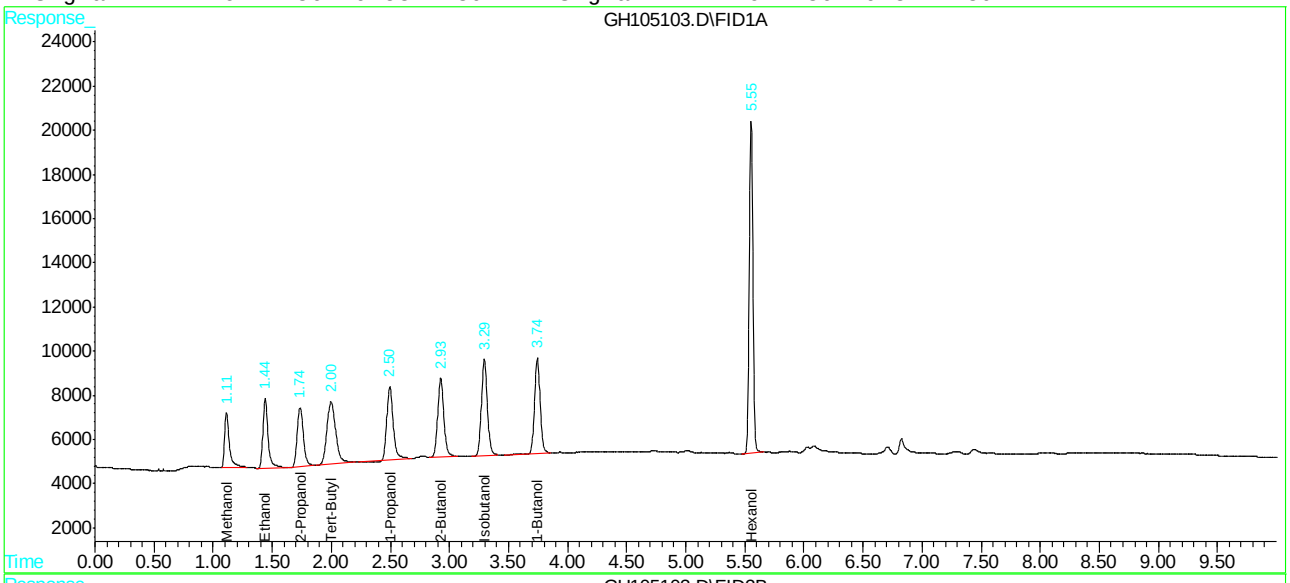
Quantitation Report (QT Reviewed)

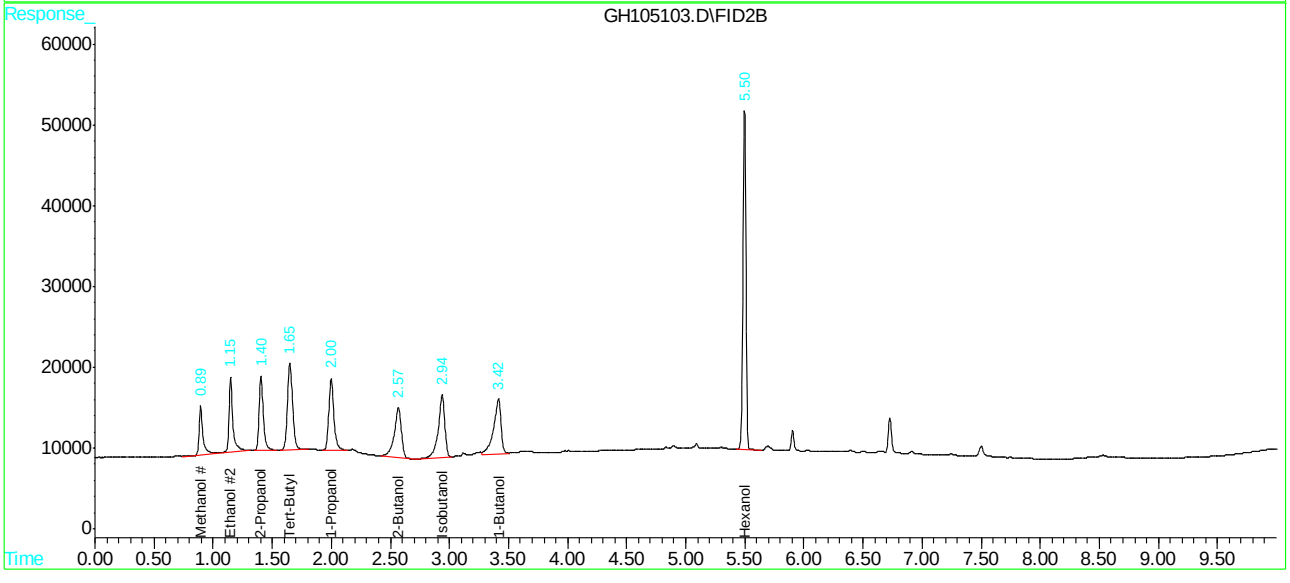
```
Data File : C:\HPCHEM\1\DATA\GH105103.D\FID1A.CH          Vial: 7
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105103.D\FID2B.CH          Vial: 7
Acq On    : 19 May 2016   6:13 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:54 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
05/10/16 12:49

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:29 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:30:14 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.61	5.44	49985	112111	653.275	663.209	
	Spiked Amount 5000.000			Recovery	=	13.07%	13.26%	
	Target Compounds							
1)	Methanol	1.15	0.88	1614	2383	109.284	94.588	
2)	Ethanol	1.50	1.13	1891	2911	101.049	88.894	
3)	Tert-Butyl Alcoh	2.08	1.62	2661	6282	97.471	106.692	
4)	1-Propanol	2.58f	1.96	1437	4687	56.648m	117.370	#
5)	2-Propanol	1.81	1.38	2379	4175	114.673	105.617	
6)	Isobutanol	3.38	2.91	2339	6882	85.109	109.048	
7)	1-Butanol	3.84	3.38	2288	5438	87.938m	102.310	
8)	2-Butanol	3.00	2.53	2251	4806	89.595	104.191	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

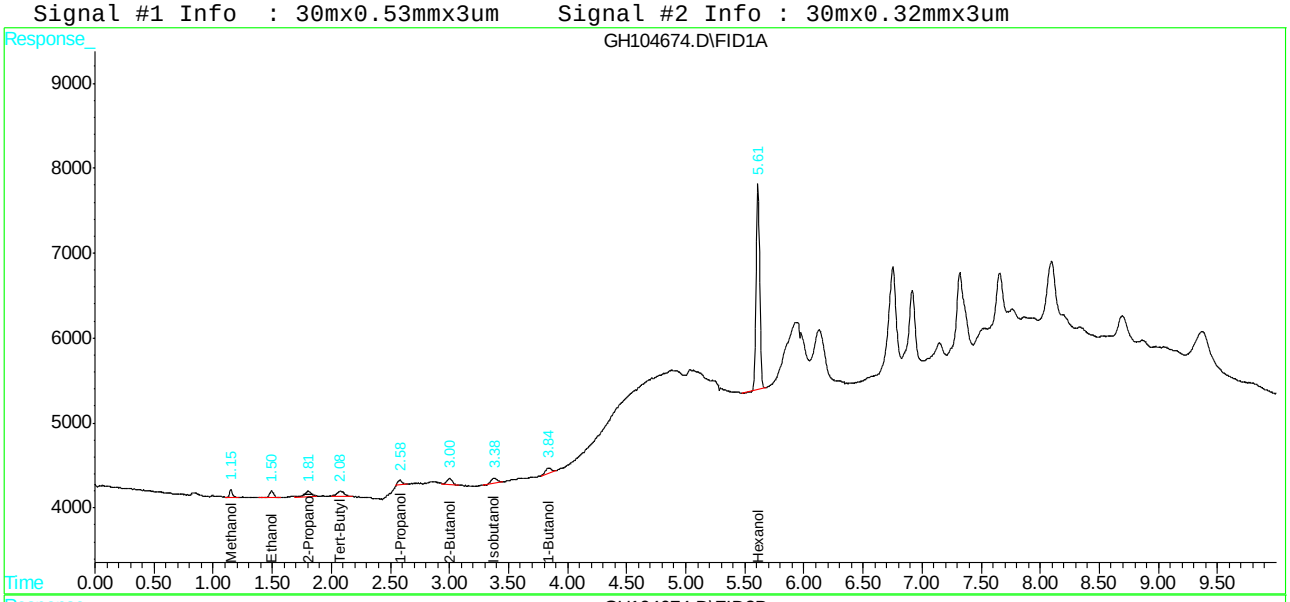
Quantitation Report (QT Reviewed)

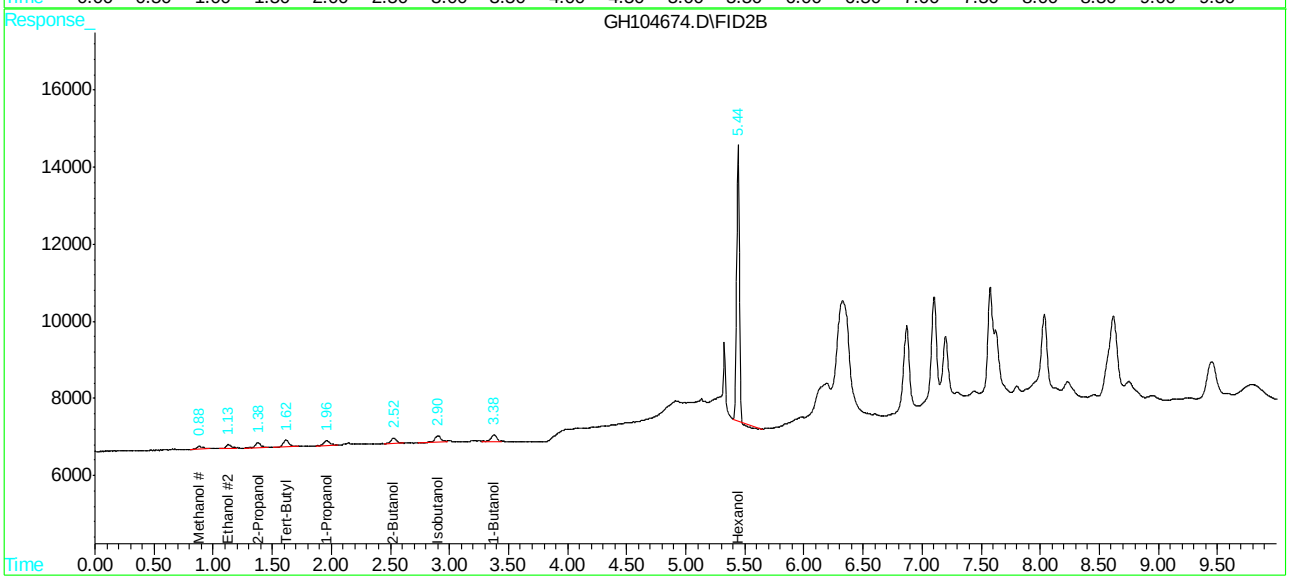
```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                    Operator: XULIU
Sample    : IC5269-100                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                 Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                    Operator: XULIU
Sample    : IC5269-100                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:29 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:30:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Manual Integration Approval Summary

Sample Number:	GGH5269-IC5269	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH104674.D	**Analyst approved:**	05/10/16 10:51 Xu Liu
Injection Time:	05/09/16 13:28	**Supervisor approved:**	05/10/16 12:49 Owen McKenna

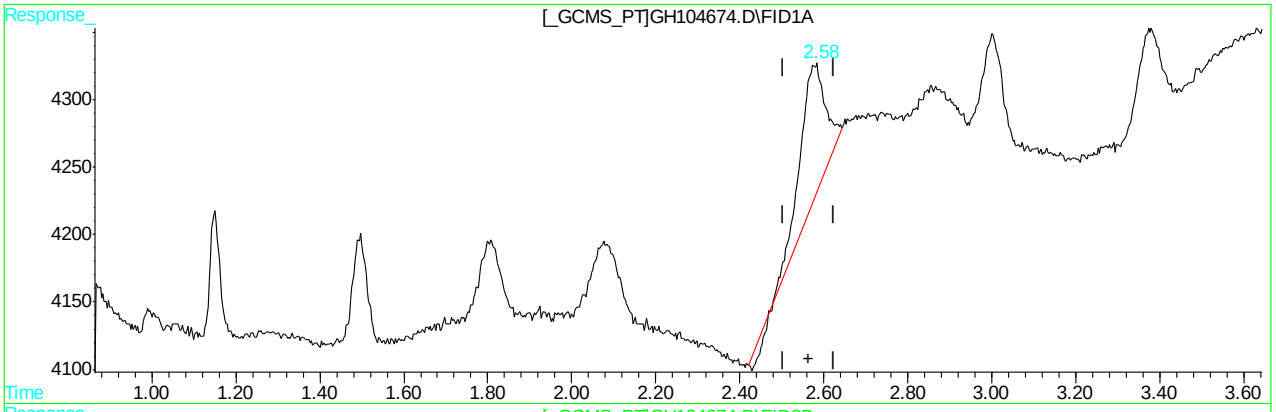
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Propyl Alcohol	71-23-8	1	2.58	Poor instrument integration
n-Butyl Alcohol	71-36-3	1	3.84	Poor instrument integration

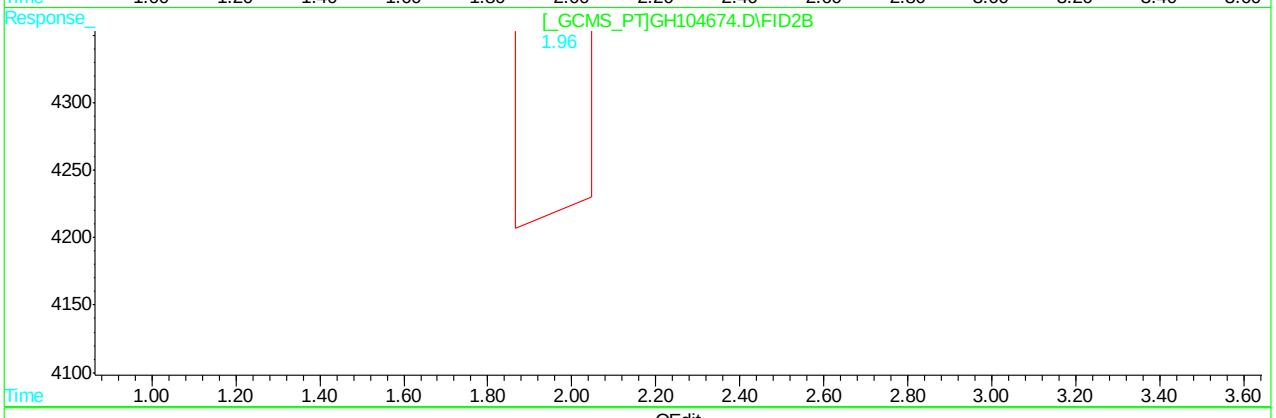
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:41 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:22:20 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.58min 150.557PPB

response 3820

(4) 1-Propanol #2

1.96min 117.370PPB

response 4687

(+) = Expected Retention Time

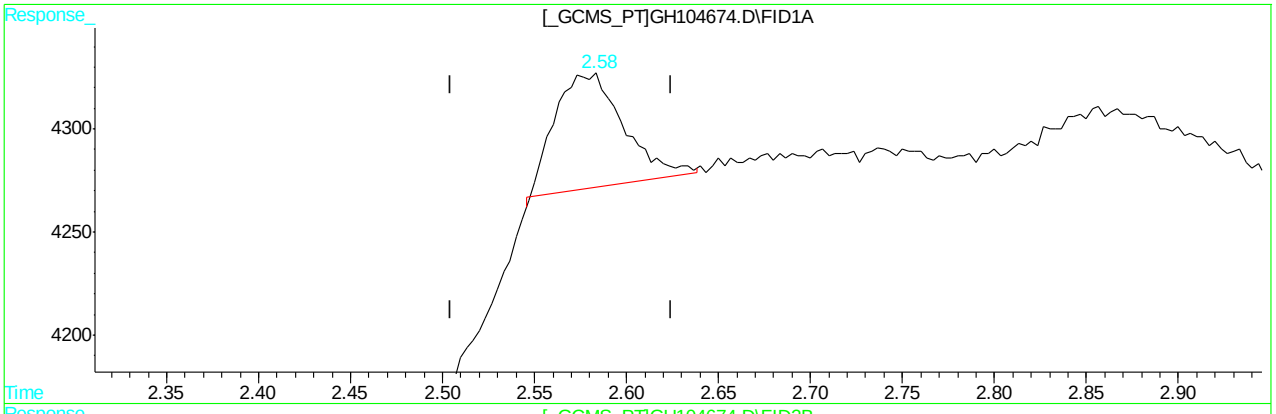
GH104674.D MGH5269.M Tue May 10 10:24:42 2016 GCGH

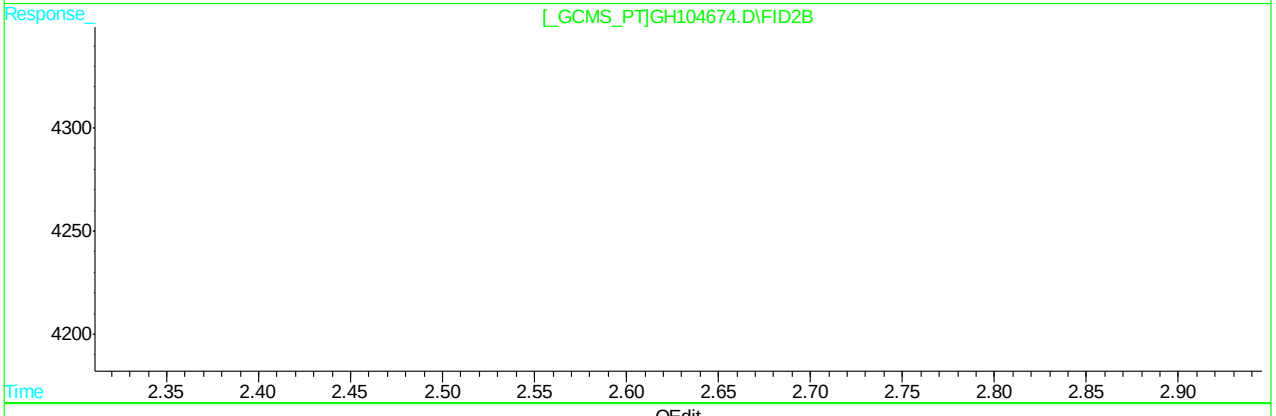
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:41 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:22:20 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.58min 56.648PPB m

response 1437

(4) 1-Propanol #2

1.96min 117.370PPB

response 4687

(+) = Expected Retention Time

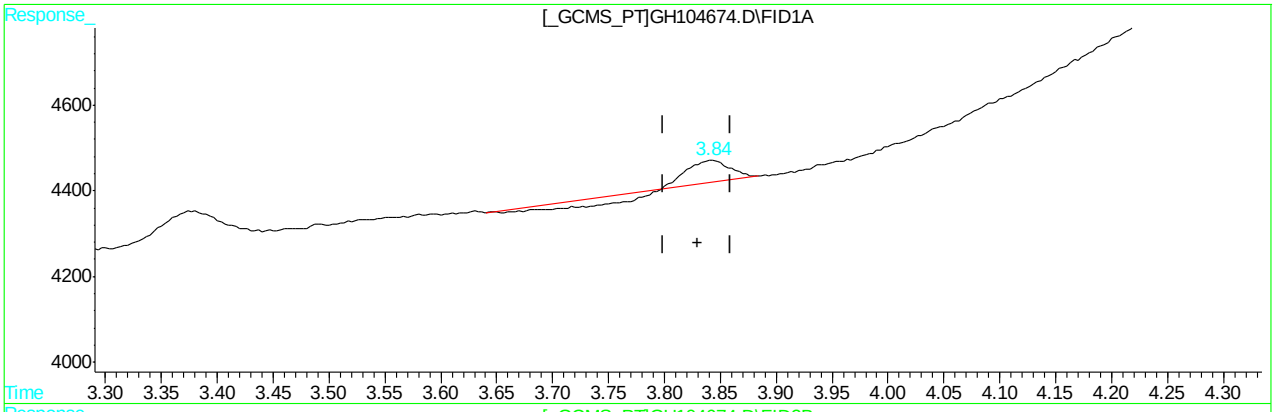
GH104674.D MGH5269.M Tue May 10 10:26:13 2016 GCGH

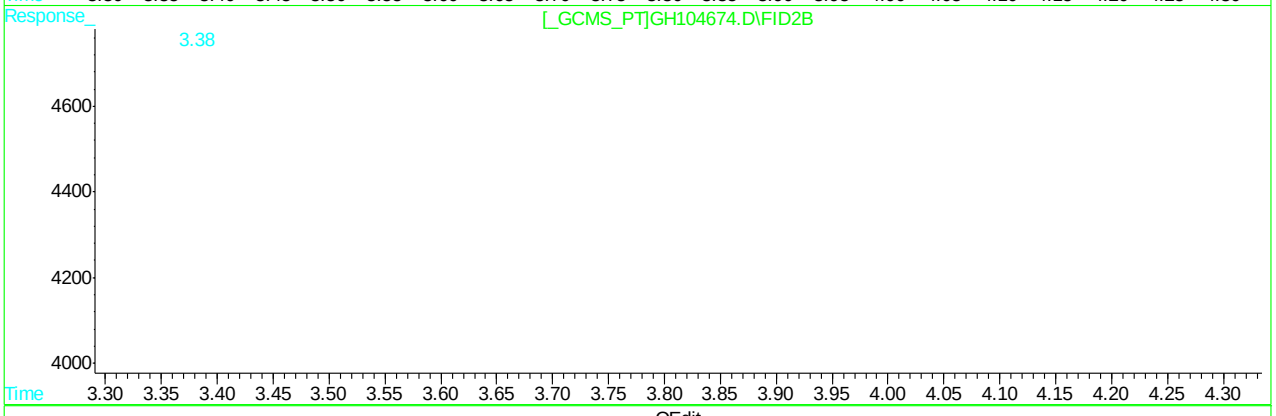
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:25 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:27:58 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.84min 11.608PPB

response 302

(7) 1-Butanol #2

3.38min 102.310PPB

response 5438

(+) = Expected Retention Time

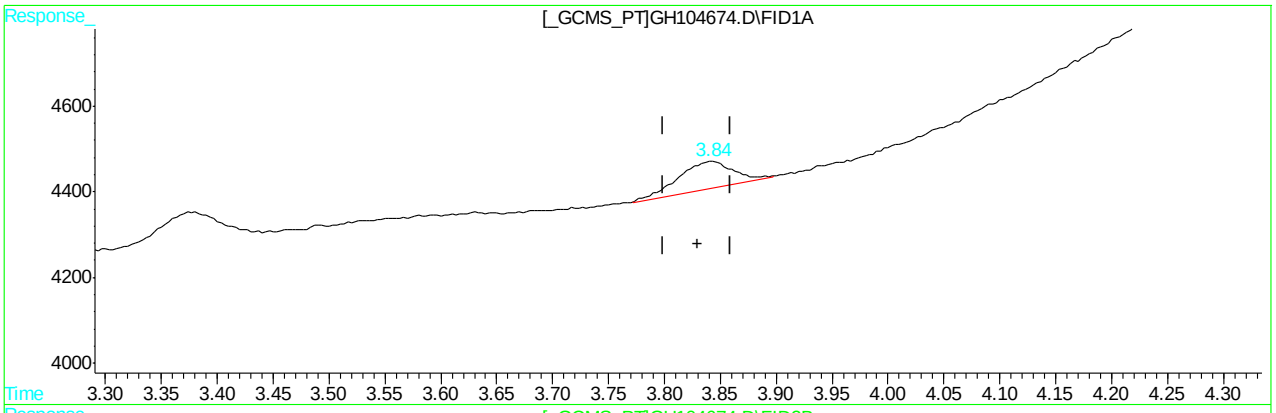
GH104674.D MGH5269.M Tue May 10 10:28:49 2016 GCGH

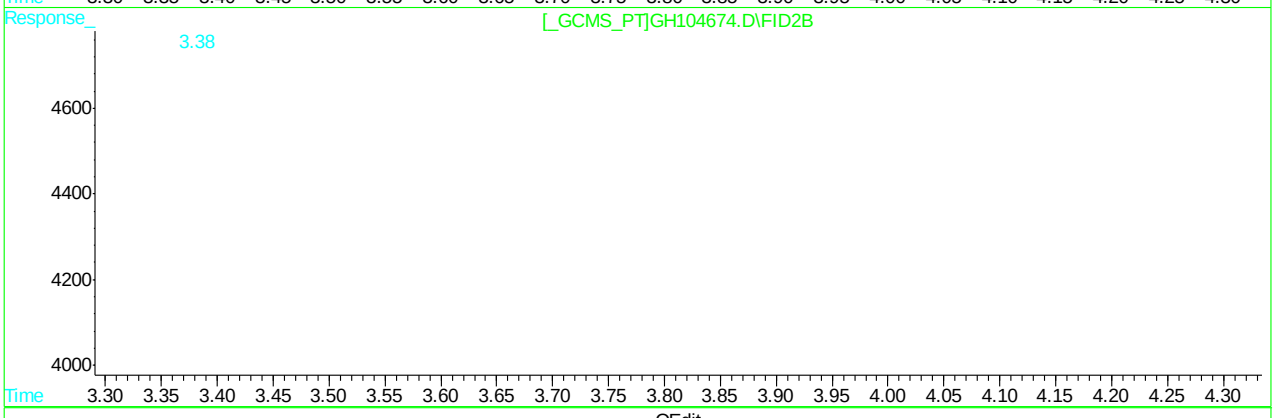
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:25 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:27:58 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.84min 87.938PPB m

response 2288

(7) 1-Butanol #2

3.38min 102.310PPB

response 5438

(+) = Expected Retention Time

GH104674.D MGH5269.M Tue May 10 10:29:46 2016 GCGH

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
05/10/16 12:49

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 11:06 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:54:33 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.45	155641	338544	2034.146	2002.705
	Spiked Amount 5000.000			Recovery	=	40.68%	40.05%
	Target Compounds						
1)	Methanol	1.14	0.95f	7966	6439	539.359	255.524m#
2)	Ethanol	1.49	1.15	9431	14087	503.977	430.233
3)	Tert-Butyl Alcoh	2.08	1.62f	14207	34168	520.325	580.335
4)	1-Propanol	2.57	1.98	12300	20457	484.805	512.230
5)	2-Propanol	1.80	1.39	10136	22758	488.484	575.762
6)	Isobutanol	3.37	2.91	15489	46800	563.522	741.552
7)	1-Butanol	3.83	3.39	8724	27492	335.300	517.205 #
8)	2-Butanol	3.00	2.53	12319	22672	490.327	491.547

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

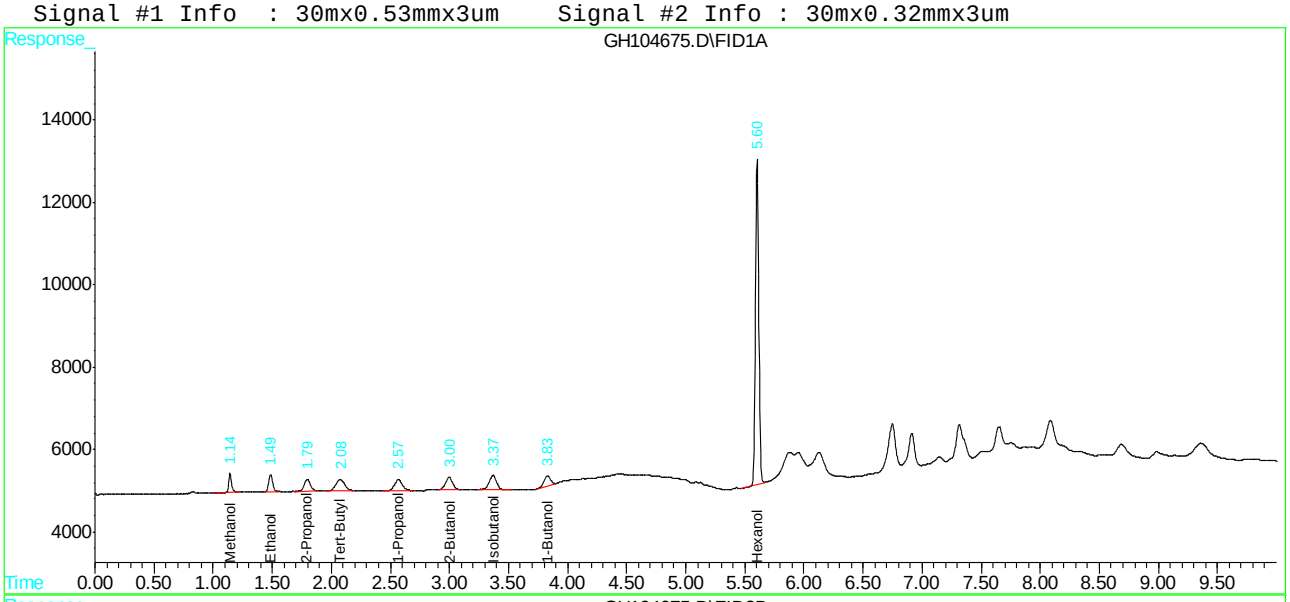
Quantitation Report (QT Reviewed)

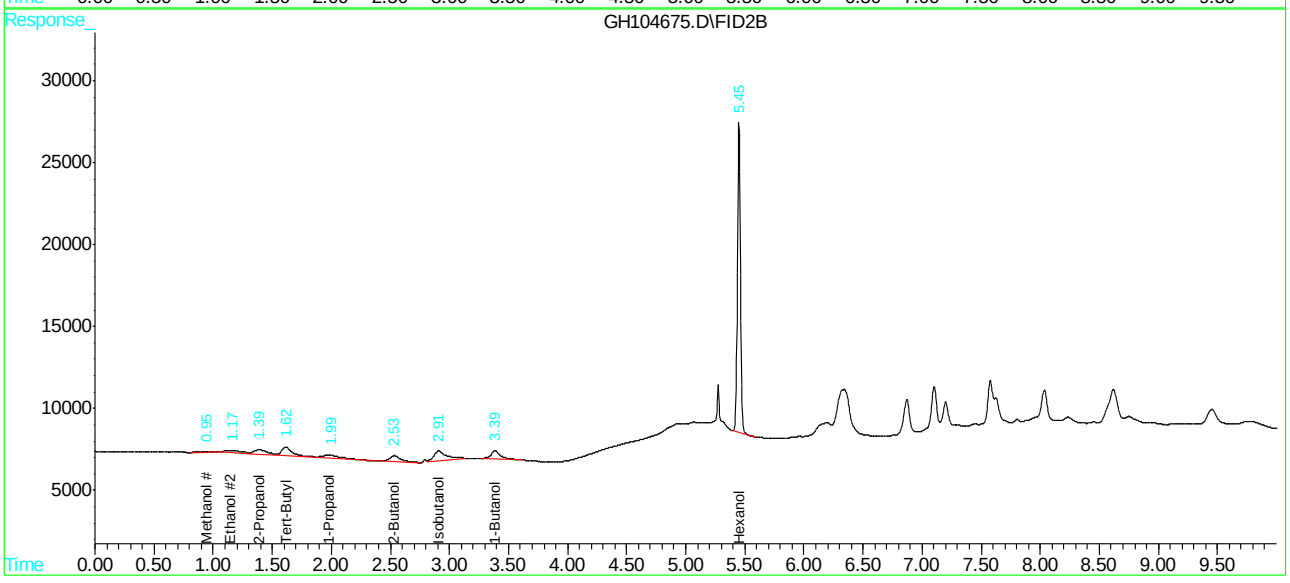
```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 11:06 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:54:33 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	GGH5269-IC5269	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH104675.D	**Analyst approved:**	05/10/16 11:09 Xu Liu
Injection Time:	05/09/16 13:49	**Supervisor approved:**	05/10/16 12:49 Owen McKenna

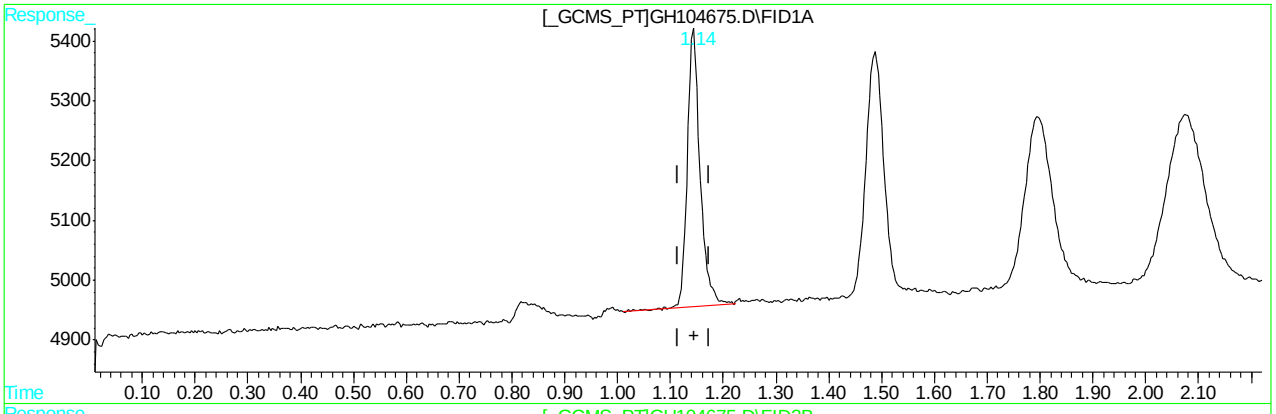
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.95	Missed peak

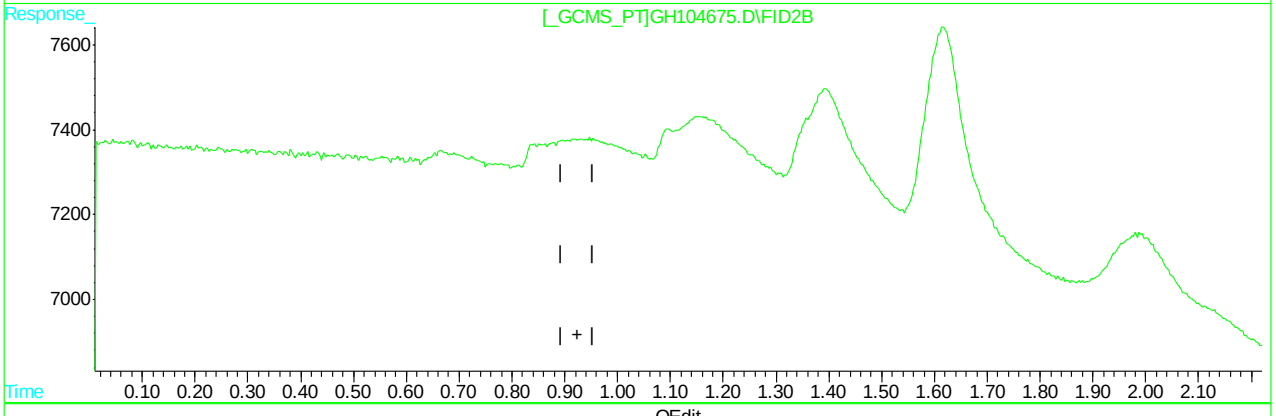
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:57 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.14min 539.359PPB

response 7966

(1) Methanol #2

0.00min 0.000PPB

response 0

(+) = Expected Retention Time

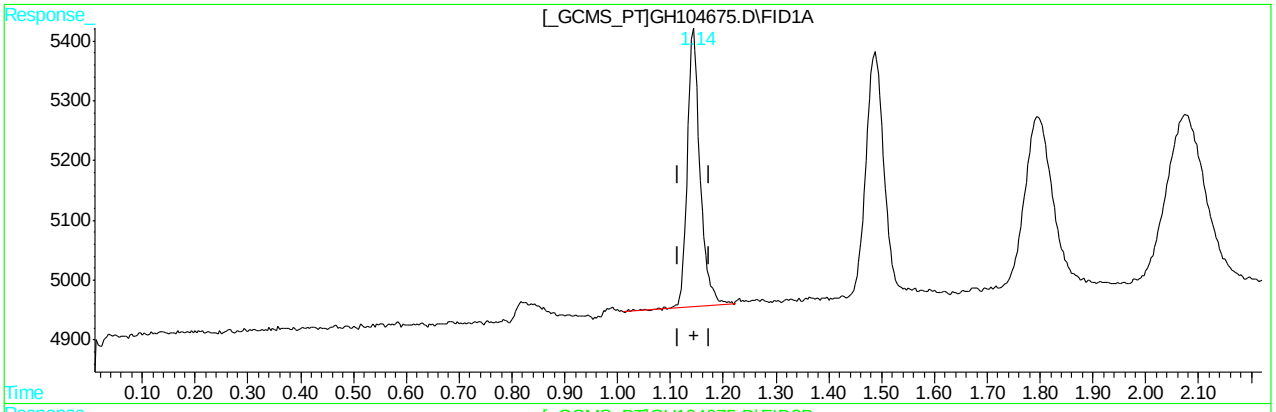
GH104675.D MGH5269.M Tue May 10 11:06:18 2016 GCGH

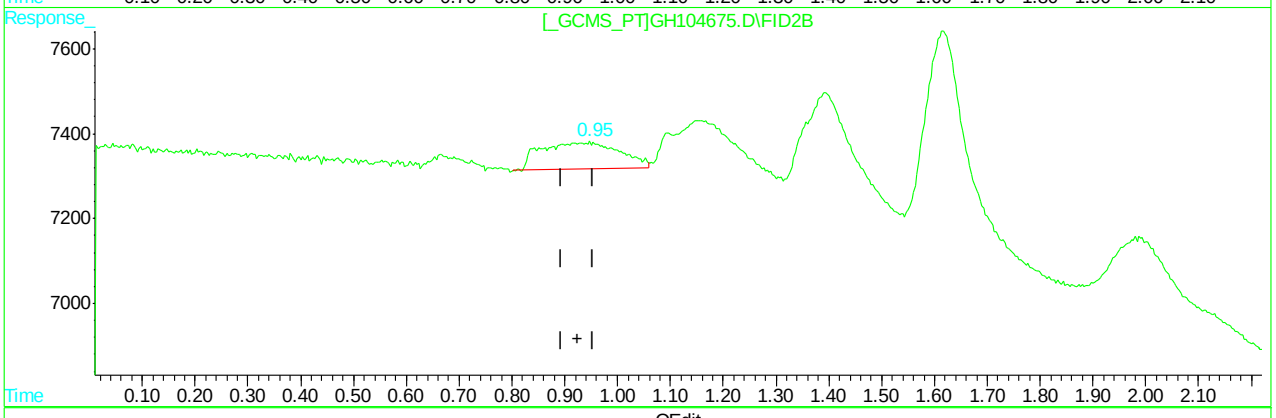
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:57 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.14min 539.359PPB

response 7966

(1) Methanol #2

0.95min 255.524PPB m

response 6439

(+) = Expected Retention Time

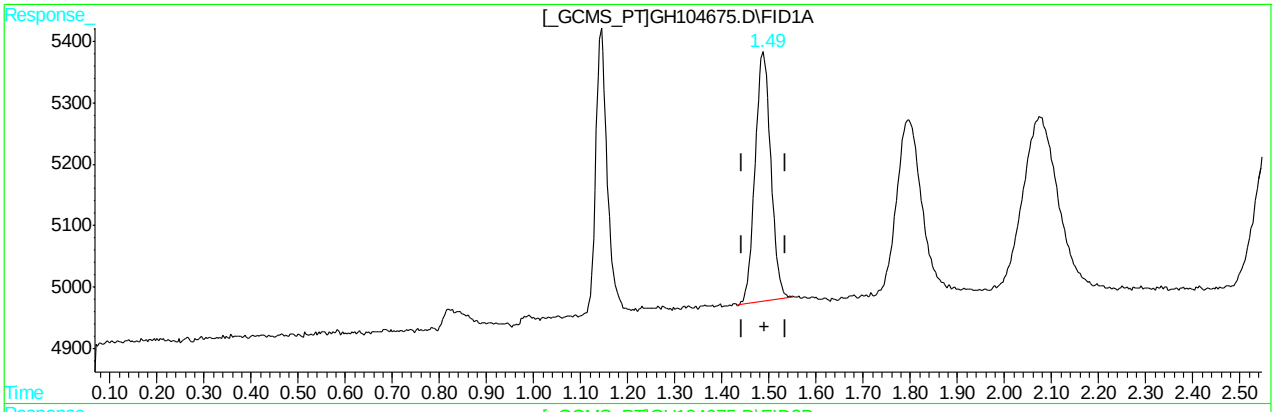
GH104675.D MGH5269.M Tue May 10 11:06:25 2016 GCGH

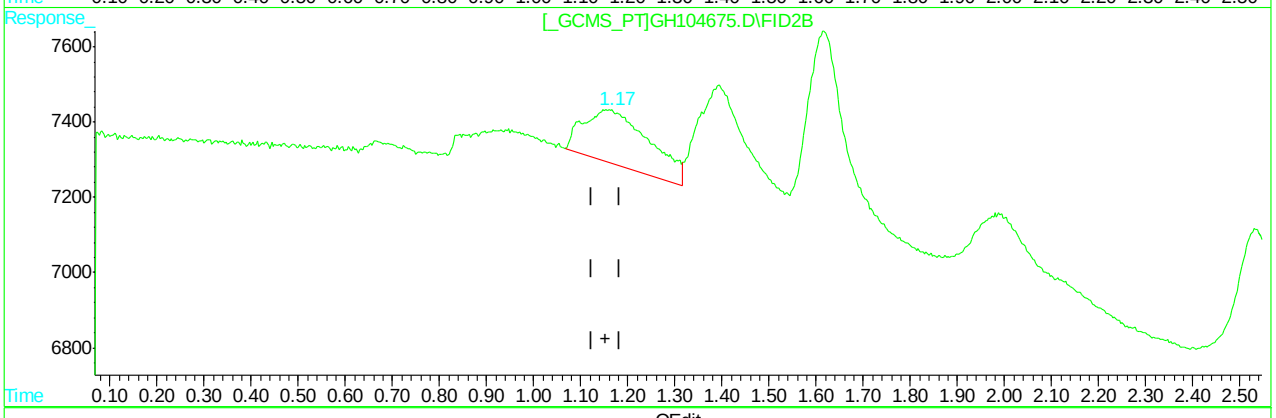
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 11:06 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.49min 503.977PPB

response 9431

(2) Ethanol #2

1.15min 430.233PPB

response 14087

(+) = Expected Retention Time

GH104675.D MGH5269.M Tue May 10 11:24:42 2016 GCGH

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104676.D\FID1A.CH          Vial: 4
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104676.D\FID2B.CH          Vial: 4
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:58 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:57:36 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.44	303591	672843	3967.781	3980.295
	Spiked Amount 5000.000			Recovery	=	79.36%	79.61%
	Target Compounds						
1)	Methanol	1.15	0.90	15388	31657	1041.927	1256.339
2)	Ethanol	1.49	1.14	19273	41463	1029.941	1266.307
3)	Tert-Butyl Alcoh	2.07	1.62f	27422	61351	1004.338	1042.011
4)	1-Propanol	2.56	1.97	23966	39583	944.641	991.147
5)	2-Propanol	1.80	1.39	20074	44557	967.396	1127.272
6)	Isobutanol	3.37	2.91	28308	55331	1029.904	876.740
7)	1-Butanol	3.83	3.39	25885	57940	994.891	1090.021
8)	2-Butanol	3.00	2.53	31386	52105	1249.275	1129.682

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

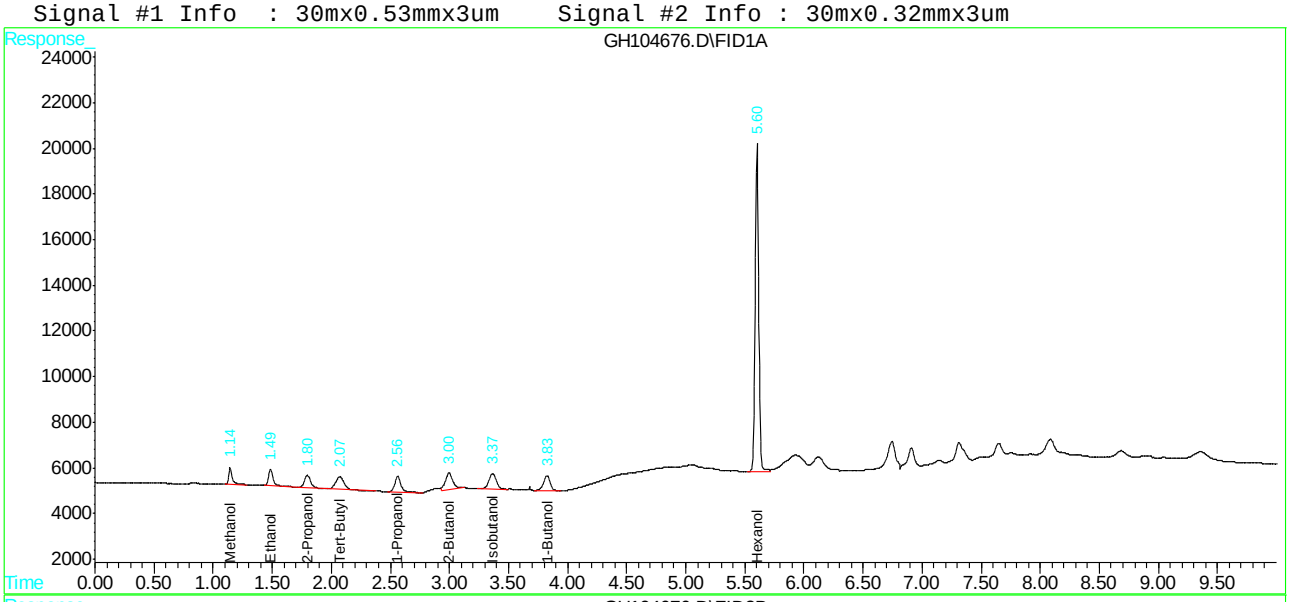
Quantitation Report (QT Reviewed)

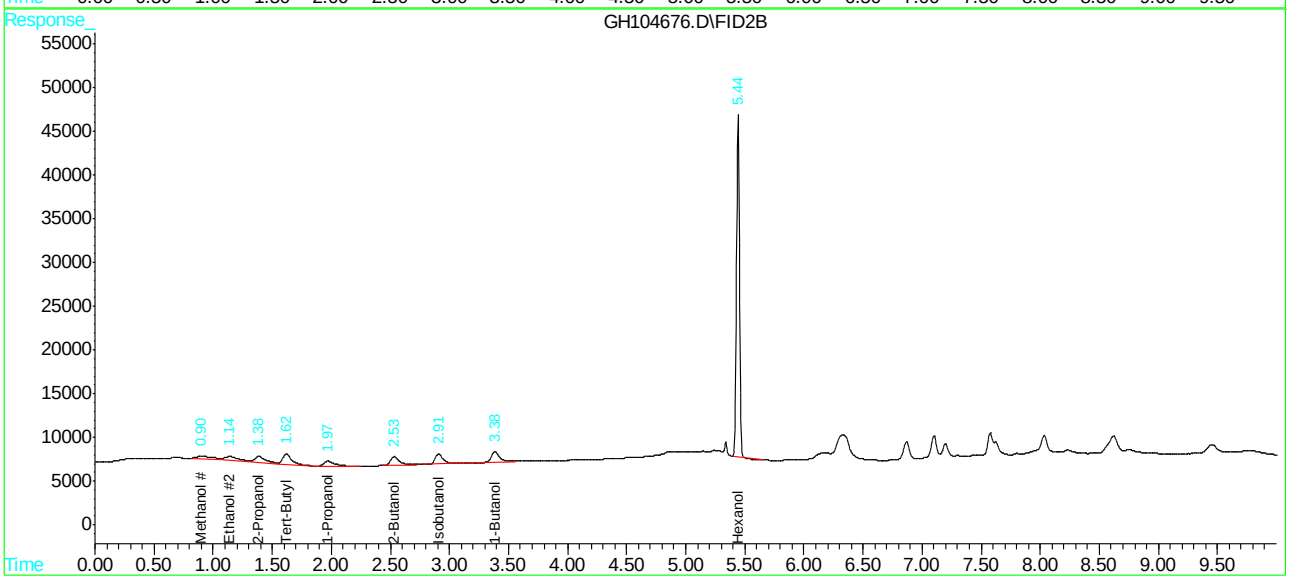
```
Data File : C:\HPCHEM\1\DATA\GH104676.D\FID1A.CH          Vial: 4
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104676.D\FID2B.CH          Vial: 4
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:58 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:57:36 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104677.D\FID1A.CH          Vial: 5
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104677.D\FID2B.CH          Vial: 5
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:53 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:53:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.61	5.45	399452	852765	5220.642	5044.646	
	Spiked Amount 5000.000			Recovery	=	104.41%	100.89%	
	Target Compounds							
1)	Methanol	1.14	0.93	69718	69126	4720.585	2743.319	#
2)	Ethanol	1.49	1.16	92298	170511	4932.446	5207.532	
3)	Tert-Butyl Alcoh	2.07	1.62	134234	405477	4916.384	6886.825	#
4)	1-Propanol	2.57	1.98	120620	384047	4754.340	9616.362	#
5)	2-Propanol	1.80	1.39	98162	234600	4730.664	5935.275	
6)	Isobutanol	3.37	2.90	142882	274685	5198.247	4352.446	
7)	1-Butanol	3.83	3.38	142943	256728	5494.115	4829.771	
8)	2-Butanol	3.00	2.53	125245	298157	4985.133	6464.358	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

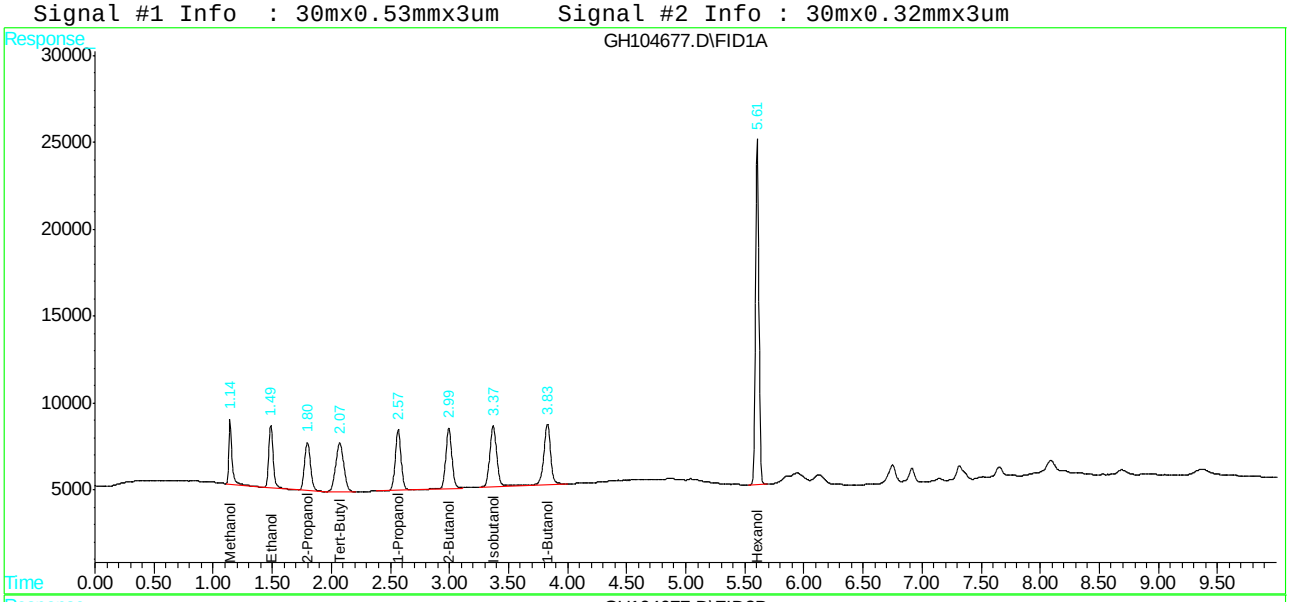
Quantitation Report (QT Reviewed)

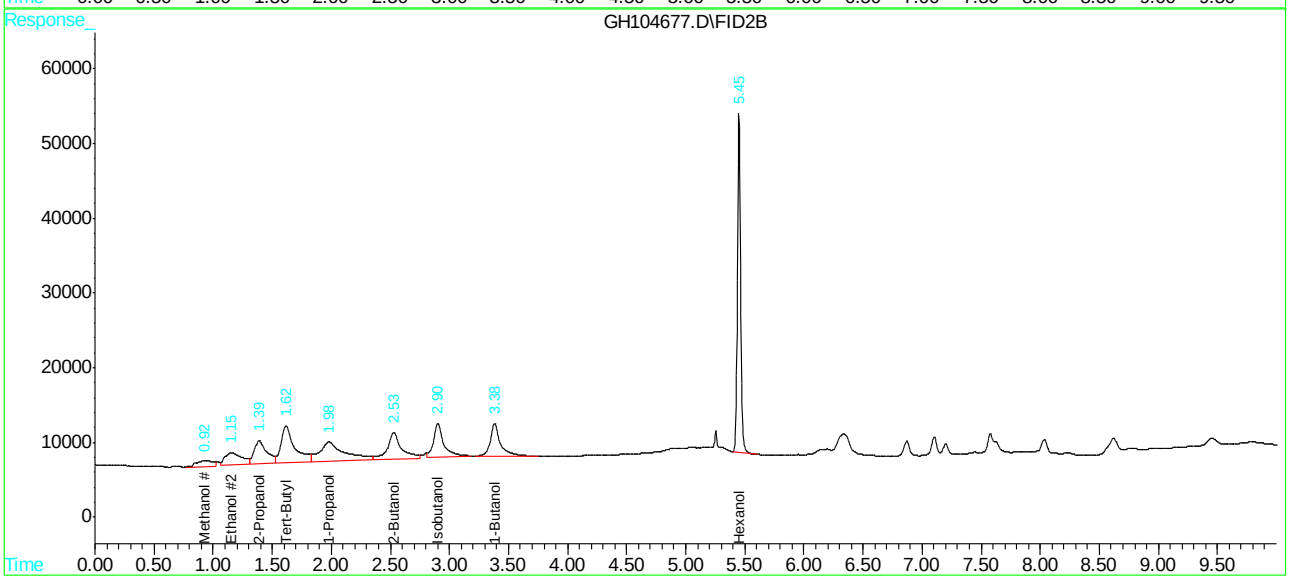
```
Data File : C:\HPCHEM\1\DATA\GH104677.D\FID1A.CH          Vial: 5
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104677.D\FID2B.CH          Vial: 5
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:53 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:53:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104678.D\FID1A.CH          Vial: 6
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104678.D\FID2B.CH          Vial: 6
Acq On    :  9 May 2016   2:54 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:07 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:07:17 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.39	400565	787400	5235.190	4657.969
Spiked Amount	5000.000			Recovery	=	104.70%	93.16%
	Target Compounds						
1)	Methanol	1.15	0.91	139678	103161	9457.541	4094.038 #
2)	Ethanol	1.49	1.17f	193822	212310	10357.983	6484.084
3)	Tert-Butyl Alcoh	2.07	1.67f	287026	596945	10512.470	10138.817
4)	1-Propanol	2.57	2.01f	241983	445497	9537.952	11155.026
5)	2-Propanol	1.80	1.43f	222300	316022	10713.155	7995.202
6)	Isobutanol	3.37	2.95f	279069	478633	10152.927	7584.056
7)	1-Butanol	3.83	3.43f	272252	416396	10464.176	7833.566
8)	2-Butanol	3.00	2.58f	246940	434114	9828.962	9412.052

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

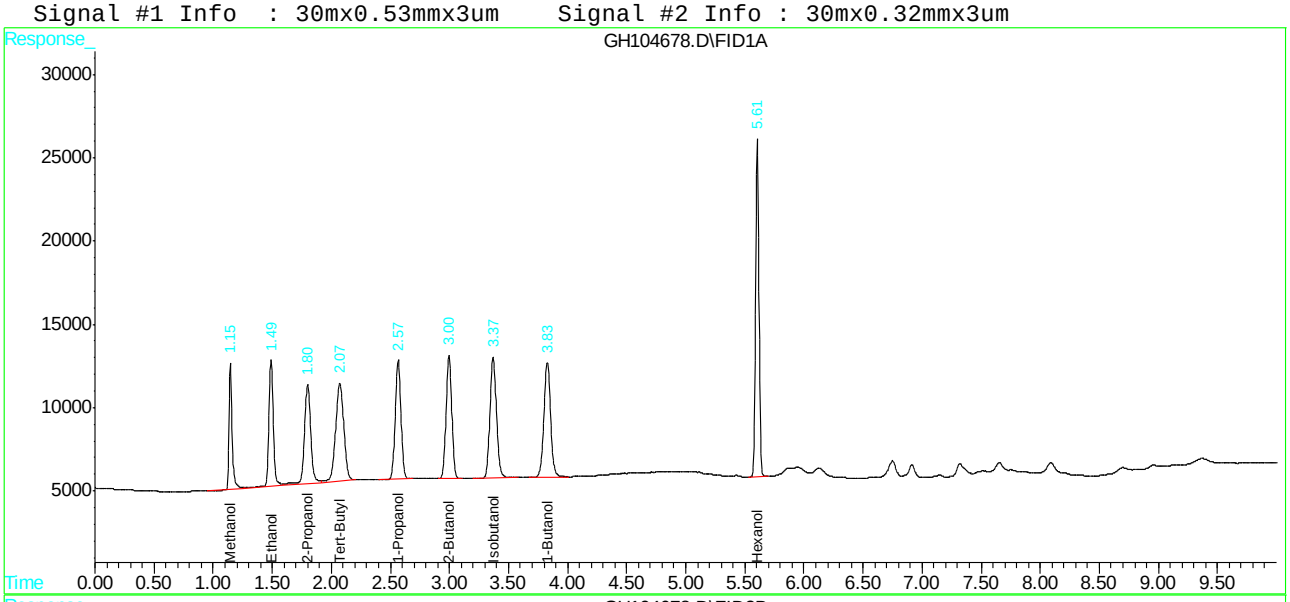
Quantitation Report (QT Reviewed)

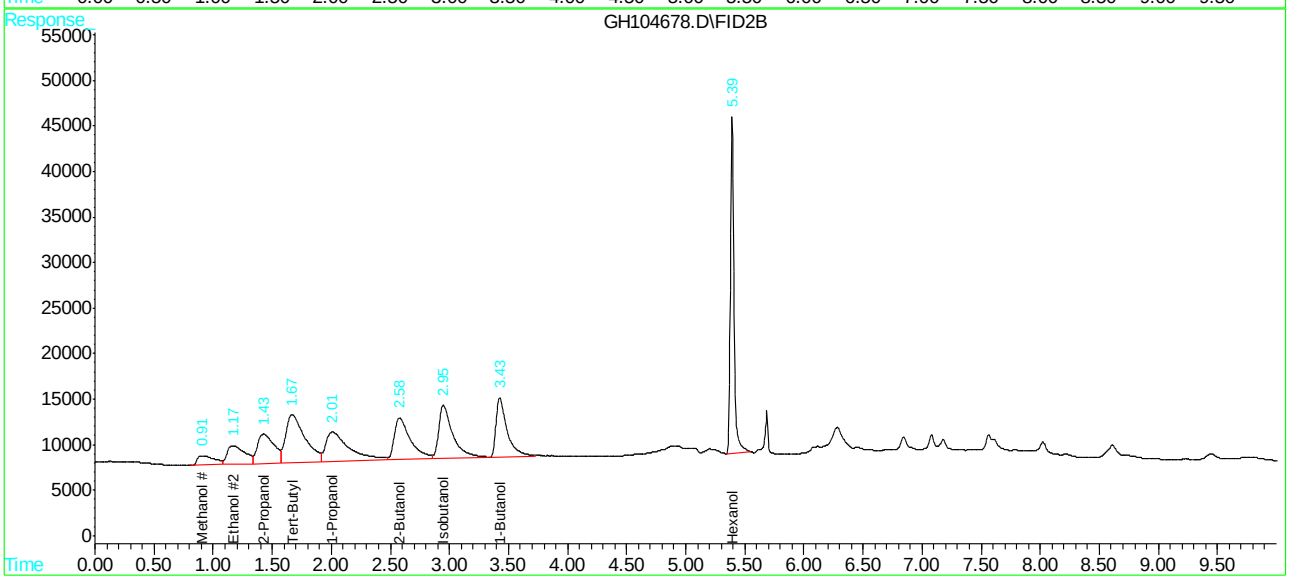
```
Data File : C:\HPCHEM\1\DATA\GH104678.D\FID1A.CH          Vial: 6
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104678.D\FID2B.CH          Vial: 6
Acq On    :  9 May 2016   2:54 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:07 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:07:17 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH104679.D\FID1A.CH Vial: 7
Acq On : 9 May 2016 2:54 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104679.D\FID2B.CH Vial: 7
Acq On : 9 May 2016 3:09 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 10 10:09 2016 Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 10 10:09:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.45f	497290	1090728	6499.330	6452.345
Spiked Amount	5000.000			Recovery	=	129.99%	129.05%
	Target Compounds						
1)	Methanol	1.14	0.87f	662127	1473199	44832.252	58465.418
2)	Ethanol	1.49	1.12f	869497	1828416	46466.502	55841.082
3)	Tert-Butyl Alcoh	2.07	1.62	1291147	2923252	47288.930	49649.987
4)	1-Propanol	2.56	1.96	1123233	2344658	44273.121	58709.139
5)	2-Propanol	1.80	1.38	924902	2024797	44573.192	51226.377
6)	Isobutanol	3.37	2.90	1287768	2583184	46850.874	40931.194
7)	1-Butanol	3.83	3.38	1244720	2515352	47841.645	47320.746
8)	2-Butanol	2.99	2.53	1145678	2396916	45601.457	51967.691

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH104679.D MGH5269.M Tue May 10 10:18:25 2016 GCGH

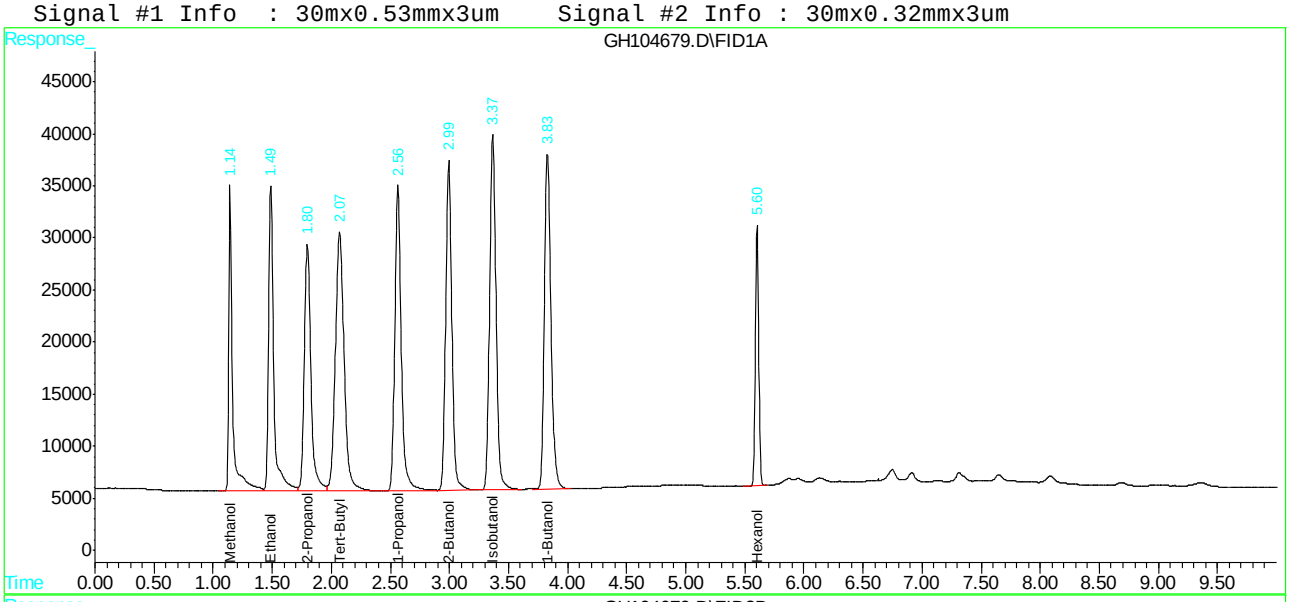
Quantitation Report (QT Reviewed)

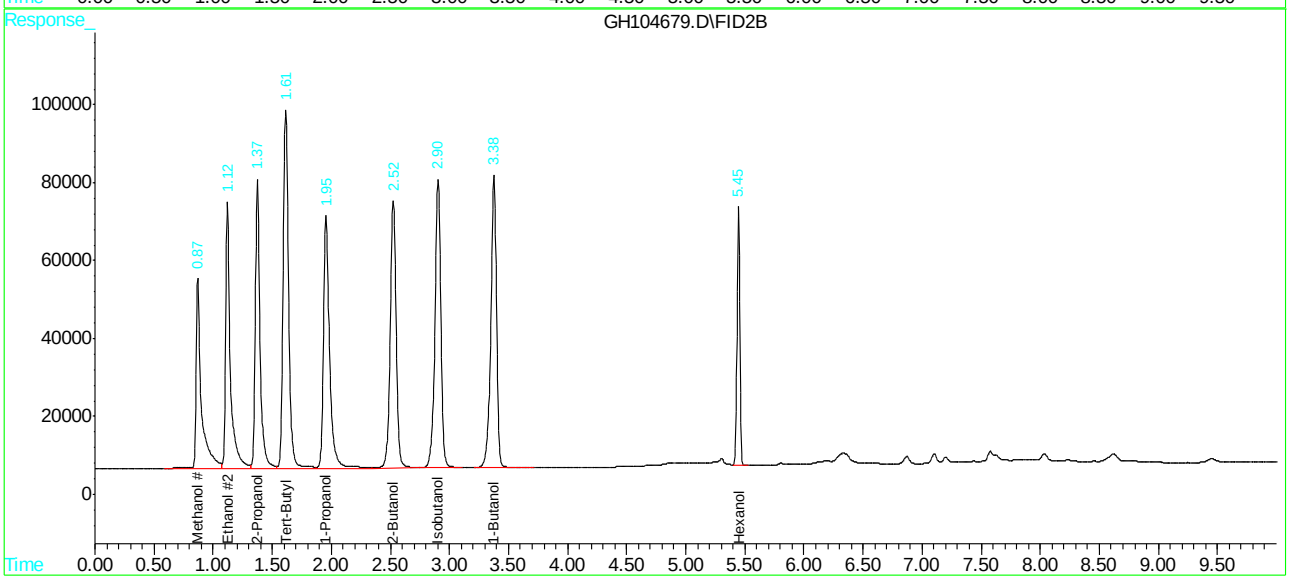
```
Data File : C:\HPCHEM\1\DATA\GH104679.D\FID1A.CH          Vial: 7
Acq On    :  9 May 2016   2:54 pm                     Operator: XULIU
Sample    : IC5269-50000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104679.D\FID2B.CH          Vial: 7
Acq On    :  9 May 2016   3:09 pm                     Operator: XULIU
Sample    : IC5269-50000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:09 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:09:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH          Vial: 10
Acq On    :  9 May 2016   5:42 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104683.D\FID2B.CH          Vial: 10
Acq On    :  9 May 2016   6:04 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:32 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.44	346499	764323	4528.568	4644.253
Spiked Amount	5000.000			Recovery	=	90.57%	92.89%
	Target Compounds						
1)	Methanol	1.14	0.88	69747	149424	4722.538	6848.279 #
2)	Ethanol	1.49	1.13	98274	199013	5251.857	6263.326
3)	Tert-Butyl Alcoh	2.07	1.62	141470	315650	5181.430	4834.343
4)	1-Propanol	2.56	1.96	117258	263447	5261.158	5346.941
5)	2-Propanol	1.79	1.38	99427	217420	4791.629	5200.646
6)	Isobutanol	3.36	2.90	146264	290191	5321.284	4677.799
7)	1-Butanol	3.83	3.38	138769	322004	5667.134	6220.286
8)	2-Butanol	2.99	2.53	123337	262596	4894.660	5314.179

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

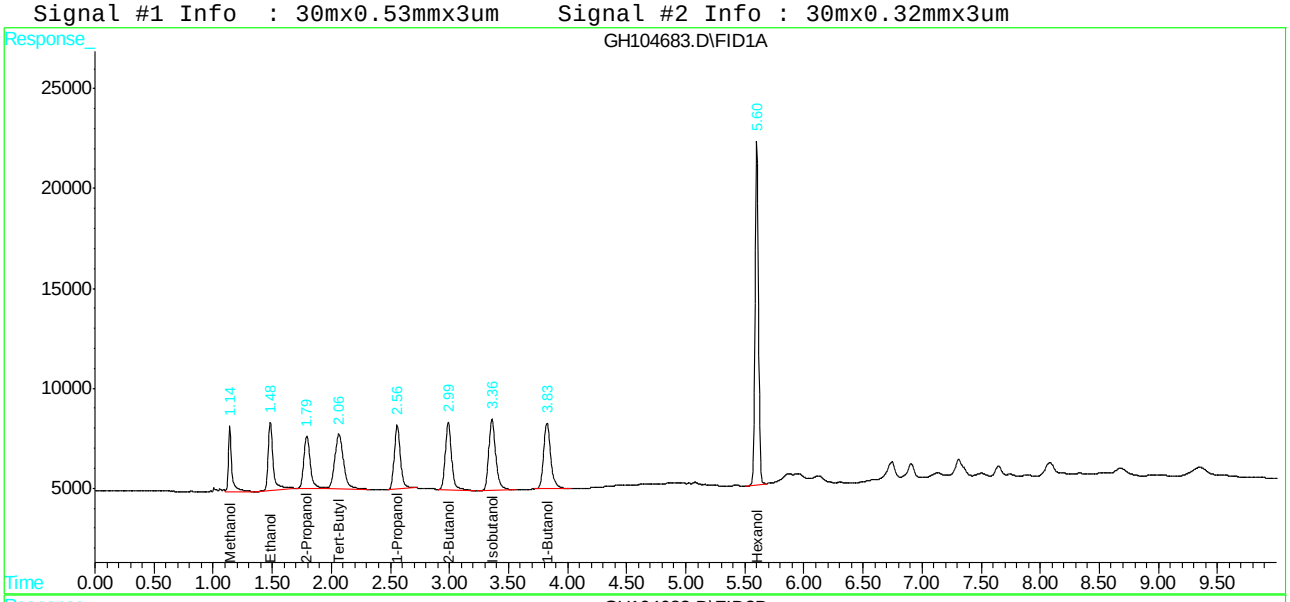
Quantitation Report (QT Reviewed)

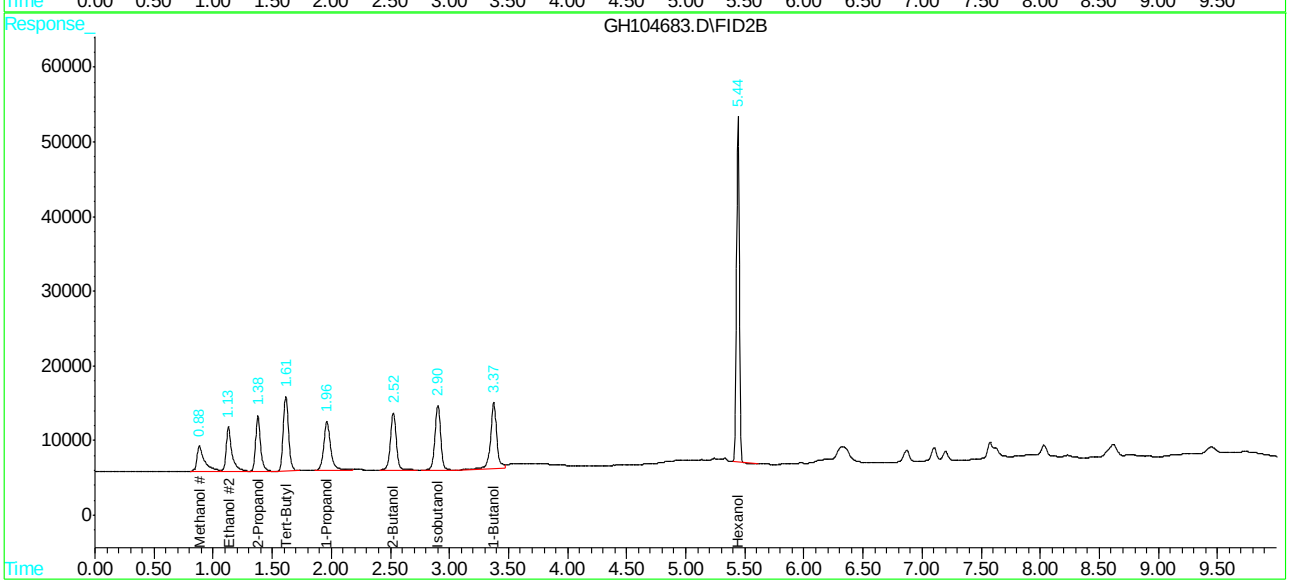
```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH          Vial: 10
Acq On    :  9 May 2016   5:42 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104683.D\FID2B.CH          Vial: 10
Acq On    :  9 May 2016   6:04 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:32 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   3:50 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:37 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	395939	278237	5174.719	1690.654	#
Spiked Amount	5000.000			Recovery	=	103.49%	33.81%	
	Target Compounds							
1)	Methanol	1.15	0.86	77696	60614	5260.772	2981.680	#
2)	Ethanol	1.49	1.11	100907	70117	5392.537	2206.715	#
3)	Tert-Butyl Alcoh	2.07	1.60	139661	122888	5115.166	1882.097	#
4)	1-Propanol	2.56	1.94	133202	89091	5976.549	1808.195	#
5)	2-Propanol	1.80	1.37f	106323	79137	5123.975	1892.937	#
6)	Isobutanol	3.36	2.89	148451	102247	5400.863	1648.192	#
7)	1-Butanol	3.80	3.38	152899	100826	6244.216	1947.702	#
8)	2-Butanol	2.99	2.51f	134178	94233	5324.862	1906.994	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

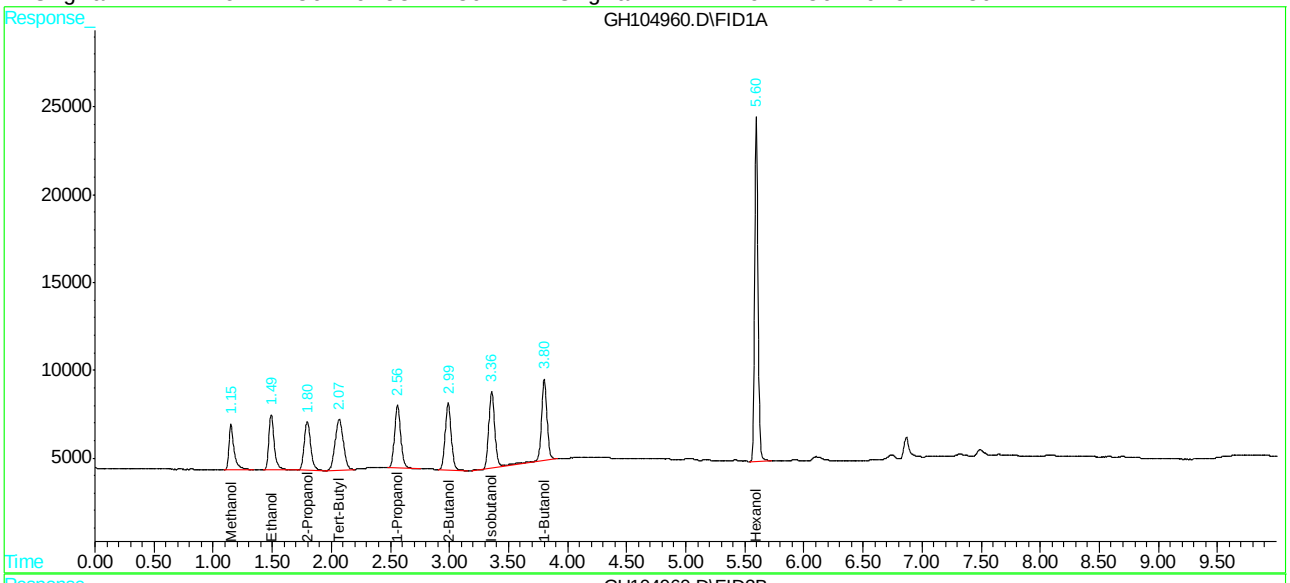
Quantitation Report (QT Reviewed)

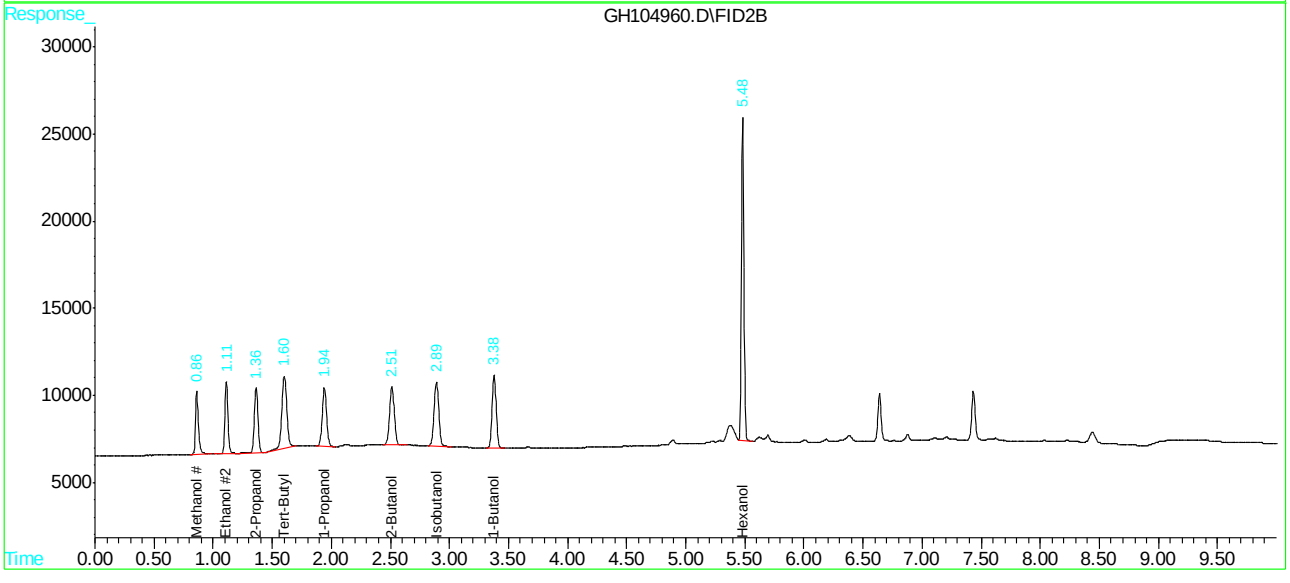
```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   3:50 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:37 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.      : 2ul
Signal #1 Phase  : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info   : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016   6:35 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:48 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.48	340971	197569	4456.325	1200.491 #
	Spiked Amount 5000.000			Recovery	=	89.13%	24.01%
	Target Compounds						
1)	Methanol	1.14	0.87	156388	81158	10588.936	3992.234 #
2)	Ethanol	1.49	1.11	199897	88628	10682.620	2789.292 #
3)	Tert-Butyl Alcoh	2.07	1.60	295973	155882	10840.182	2387.419 #
4)	1-Propanol	2.56	1.94f	265940	107810	11932.315	2188.114 #
5)	2-Propanol	1.79	1.36f	211475	89229	10191.453	2134.344 #
6)	Isobutanol	3.35	2.90	307202	160621	11176.453	2589.156 #
7)	1-Butanol	3.80	3.39f	293749	153724	11996.353	2969.557 #
8)	2-Butanol	2.99	2.51f	270702	143634	10742.841	2906.731 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

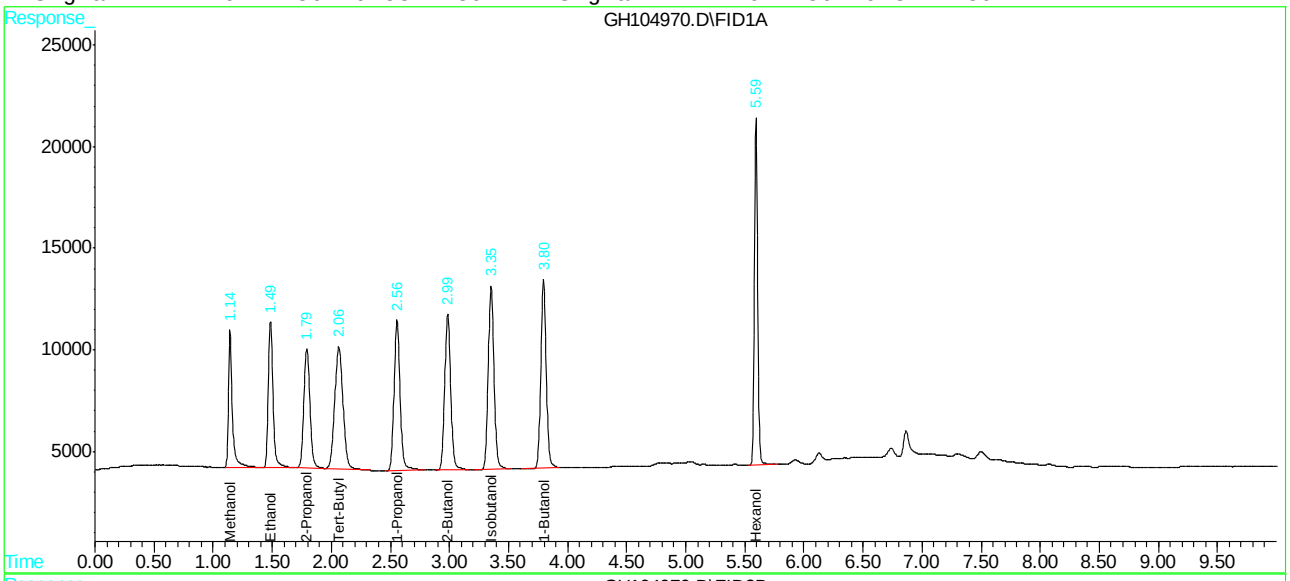
Quantitation Report (QT Reviewed)

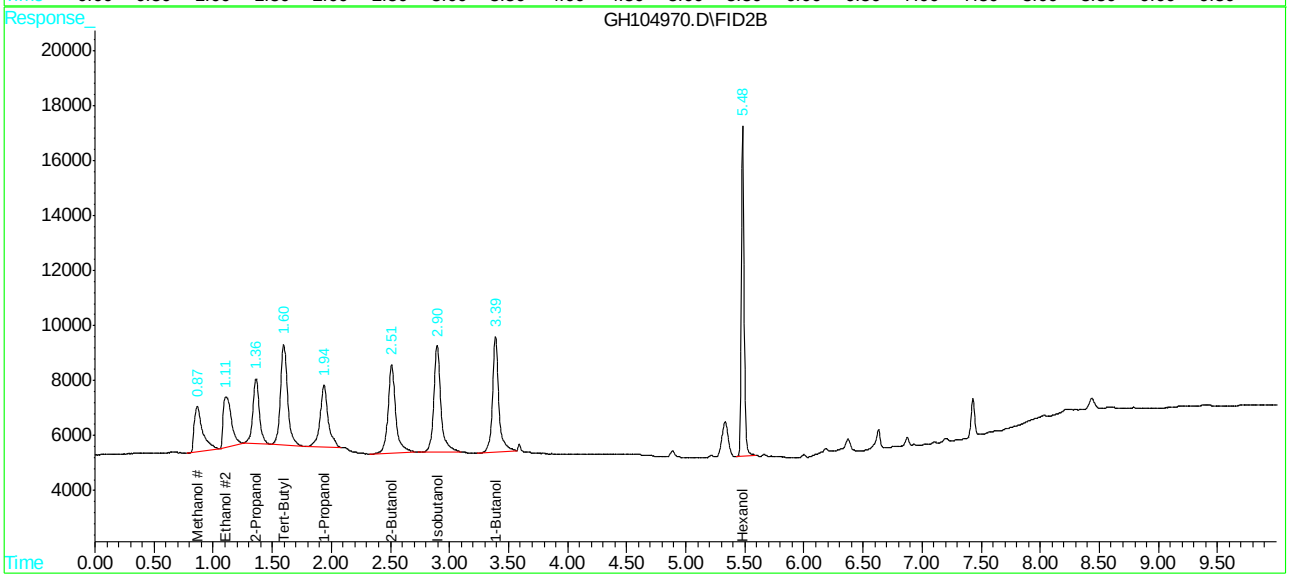
```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016   6:35 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:48 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104980.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   9:21 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104980.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   9:36 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:05 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	383526	268777	5012.497	1633.169	#
Spiked Amount	5000.000			Recovery	=	100.25%	32.66%	
	Target Compounds							
1)	Methanol	1.15	0.86	72636	61331	4918.160	3016.948	
2)	Ethanol	1.49	1.11	95816	66937	5120.455	2106.651	#
3)	Tert-Butyl Alcoh	2.07	1.60	143687	109743	5262.618	1680.774	#
4)	1-Propanol	2.56	1.94f	130028	87098	5834.128	1767.750	#
5)	2-Propanol	1.80	1.36f	101286	75996	4881.219	1817.820	#
6)	Isobutanol	3.36	2.89	154201	99160	5610.062	1598.435	#
7)	1-Butanol	3.80	3.38	146566	98125	5985.585	1895.530	#
8)	2-Butanol	2.99	2.51f	134482	91690	5336.932	1855.530	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

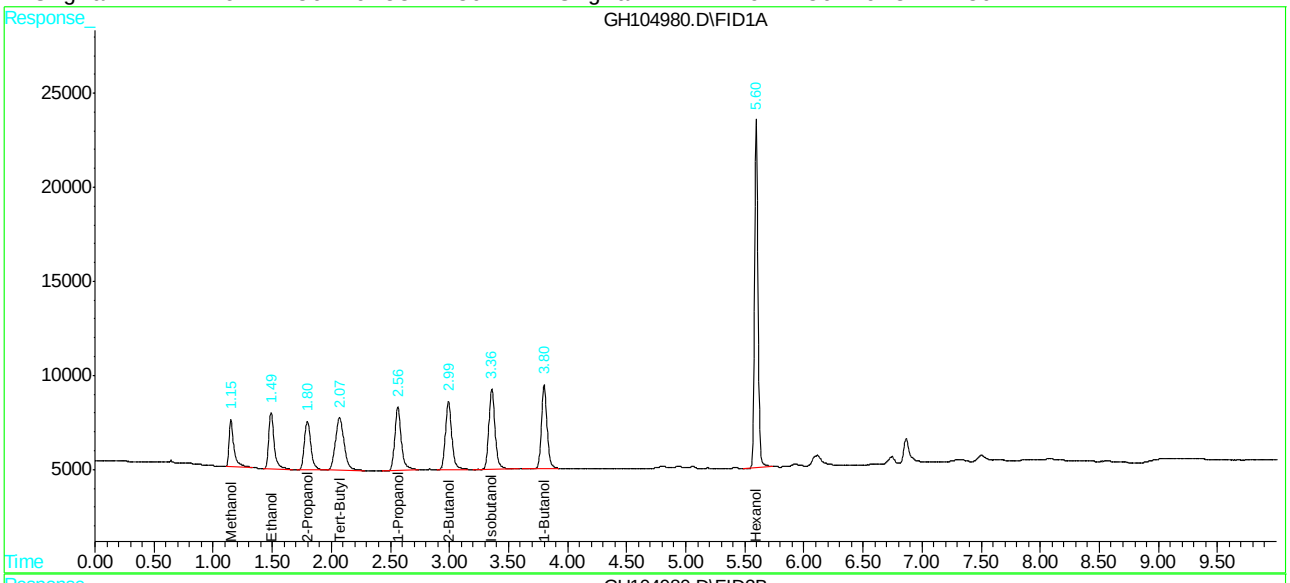
Quantitation Report (QT Reviewed)

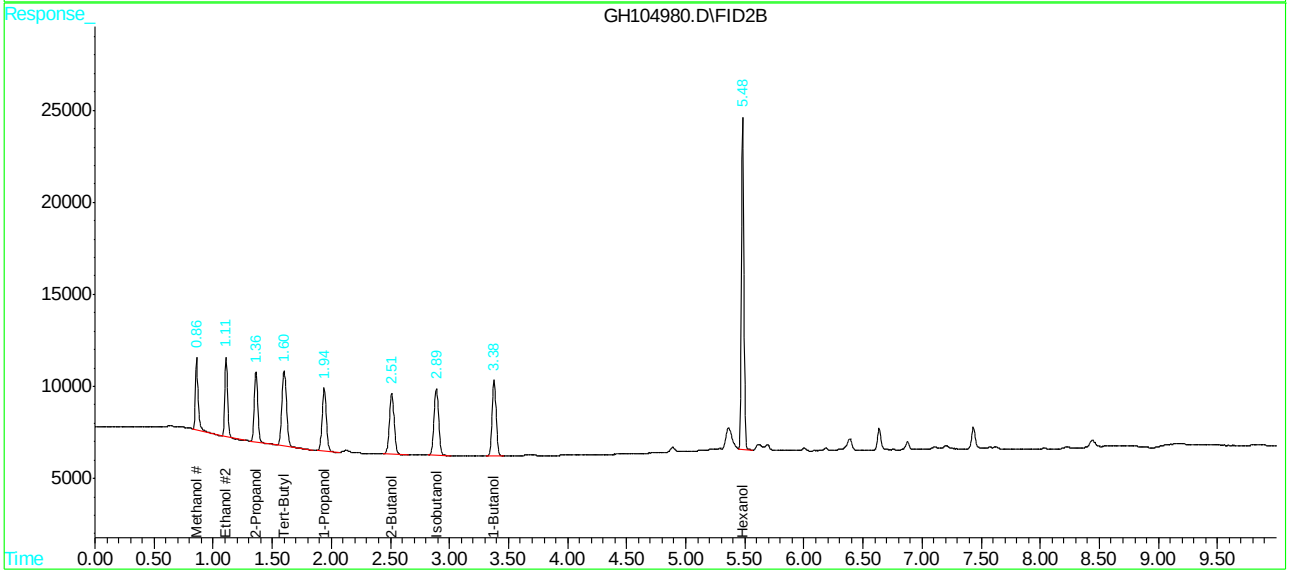
```
Data File : C:\HPCHEM\1\DATA\GH104980.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   9:21 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104980.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   9:36 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:05 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.      : 2ul
Signal #1 Phase  : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info   : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
05/18/16 09:16

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  8:50 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	49213	113892	786.392	792.225
Spiked Amount	5000.000			Recovery	=	15.73%	15.84%
	Target Compounds						
1)	Methanol	1.12	0.89f	1784	2982	115.427	93.713m
2)	Ethanol	1.45	1.15	2099	3361	110.763	84.901m
3)	Tert-Butyl Alcoh	2.01	1.66	2806	5629	99.020	88.524
4)	1-Propanol	2.52	2.03	2187	3458	89.885	69.117m
5)	2-Propanol	1.75	1.41	1888	4004	94.702	88.437
6)	Isobutanol	3.32	2.95f	2784	6044	96.777	98.728
7)	1-Butanol	3.76	3.42	3014	7445	105.546	113.606m
8)	2-Butanol	2.95	2.57	2840	4510	121.739m	83.638m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

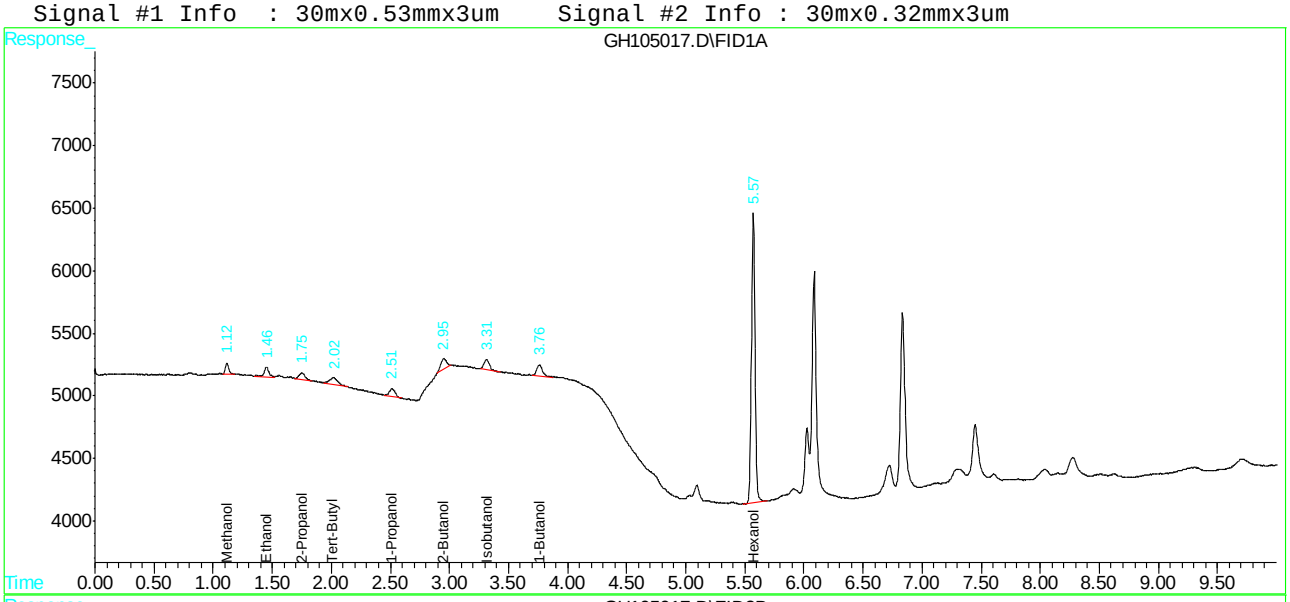
Quantitation Report (QT Reviewed)

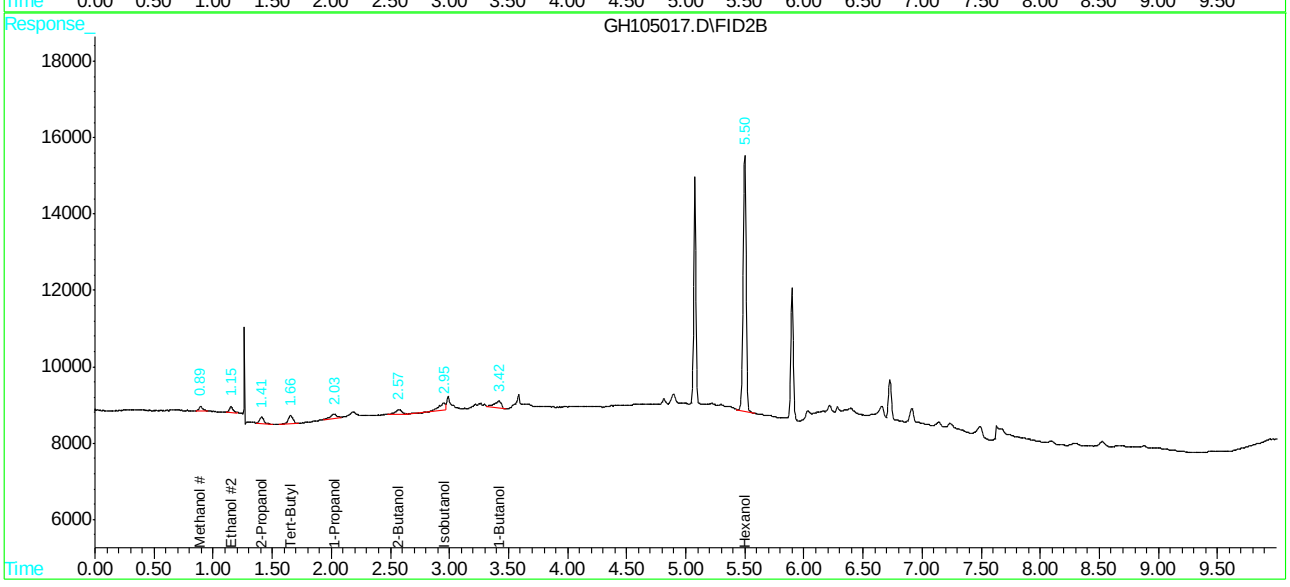
```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  8:50 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	GGH5288-IC5288	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH105017.D	**Analyst approved:**	05/18/16 09:10 Xu Liu
Injection Time:	05/17/16 16:14	**Supervisor approved:**	05/18/16 09:16 Owen McKenna

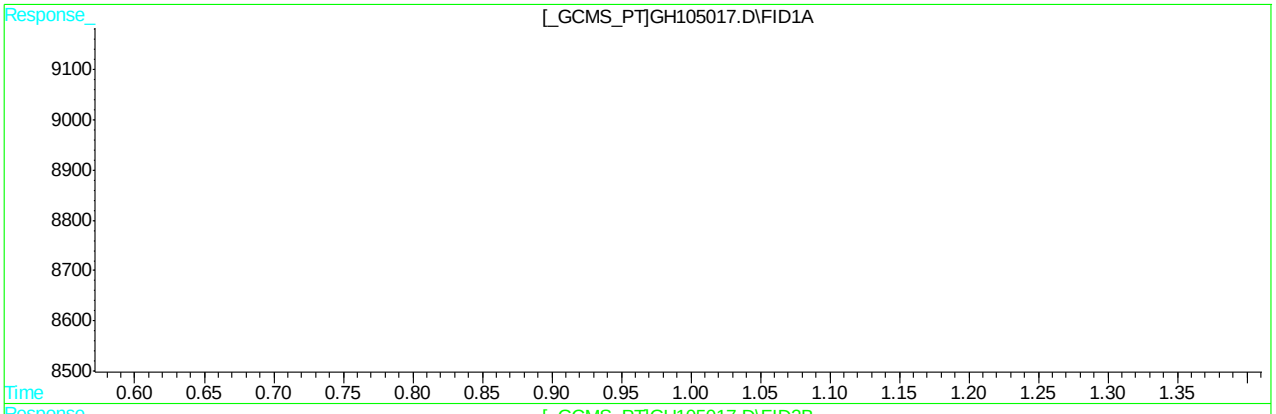
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.89	Poor instrument integration
Ethanol	64-17-5	2	1.15	Poor instrument integration
n-Propyl Alcohol	71-23-8	2	2.03	Poor instrument integration
sec-Butyl Alcohol	78-92-2	2	2.57	Poor instrument integration
sec-Butyl Alcohol	78-92-2	1	2.95	Poor instrument integration
n-Butyl Alcohol	71-36-3	2	3.42	Poor instrument integration

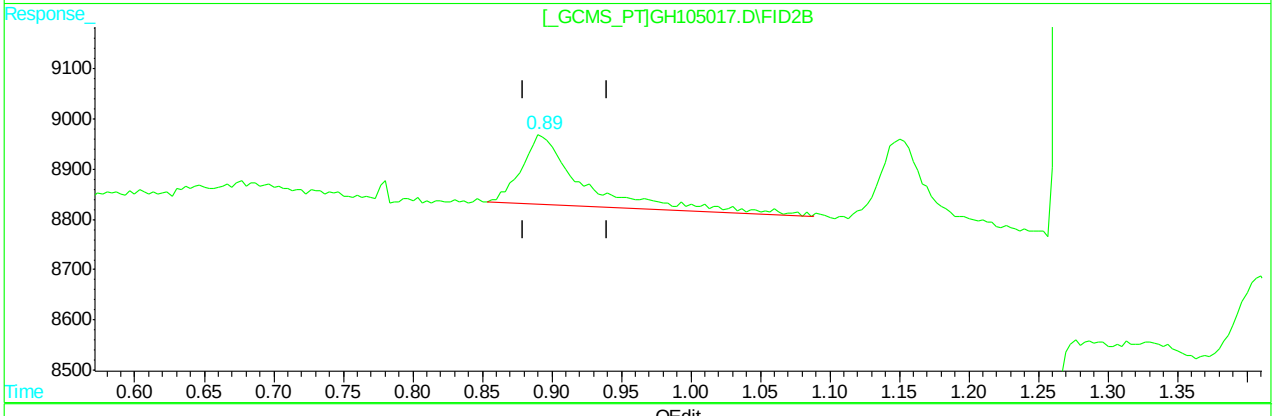
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.12min 115.427PPB

response 1784

(1) Methanol #2

0.89min 132.645PPB

response 4221

(+) = Expected Retention Time

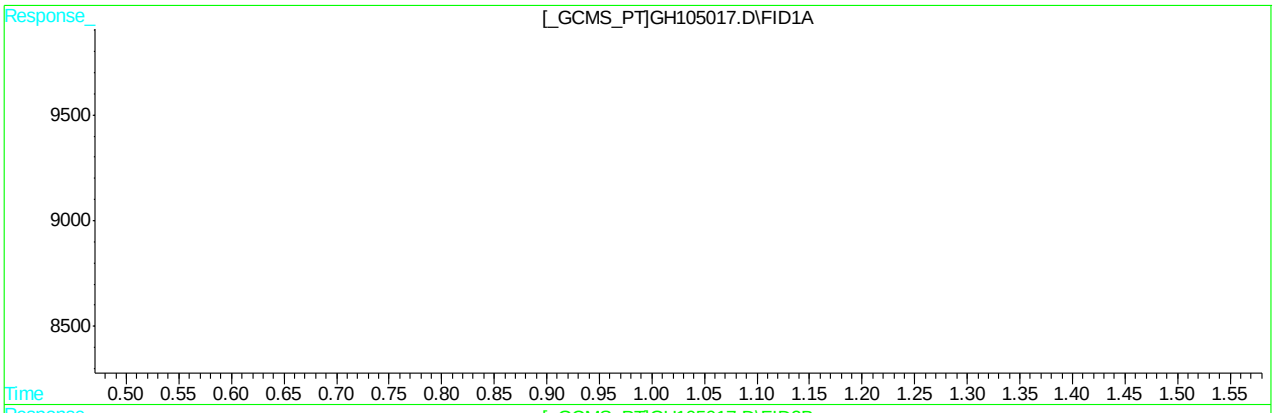
GH105017.D MGH5288.M Wed May 18 08:43:56 2016 GCGH

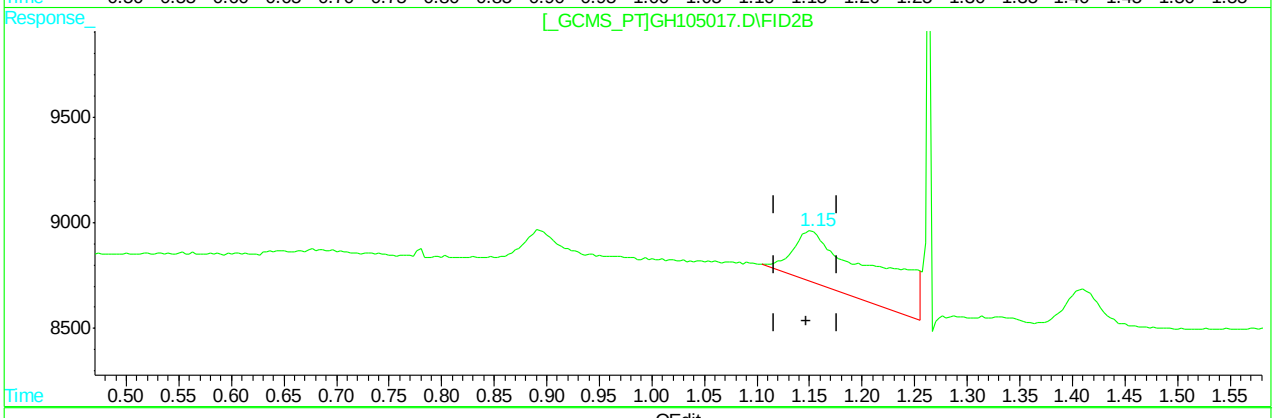
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.45min 110.763PPB

response 2099

(2) Ethanol #2

1.15min 367.751PPB

response 14557

(+) = Expected Retention Time

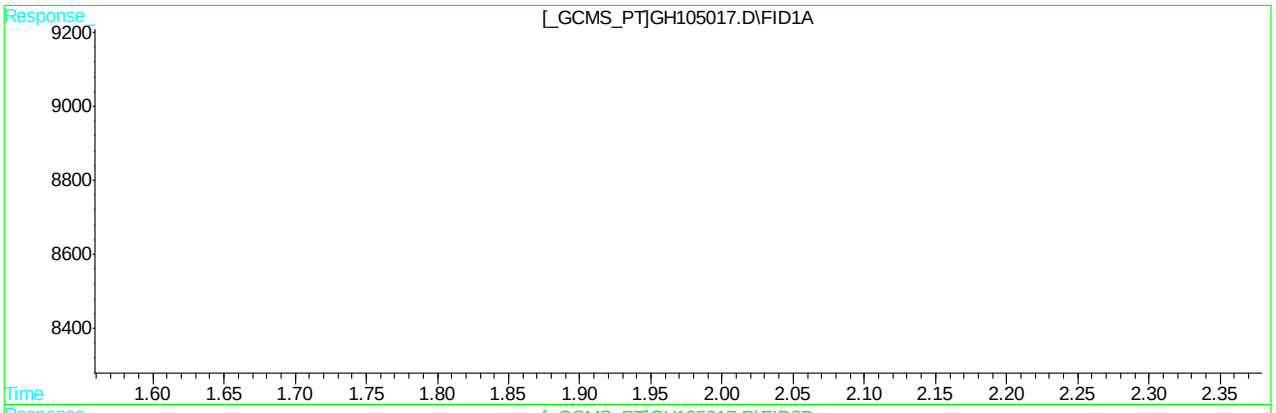
GH105017.D MGH5288.M Wed May 18 08:44:26 2016 GCGH

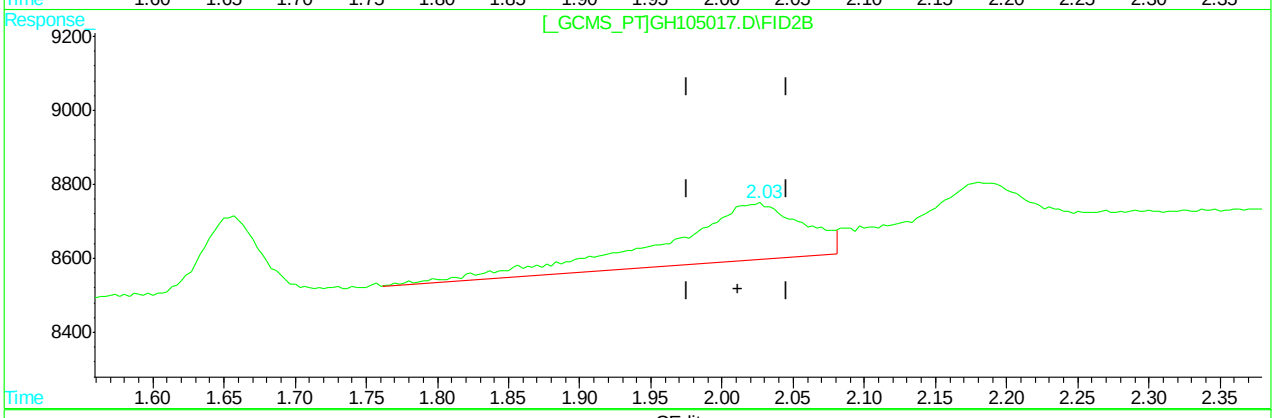
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.52min 89.885PPB

response 2187

(4) 1-Propanol #2

2.03min 209.050PPB

response 10460

(+) = Expected Retention Time

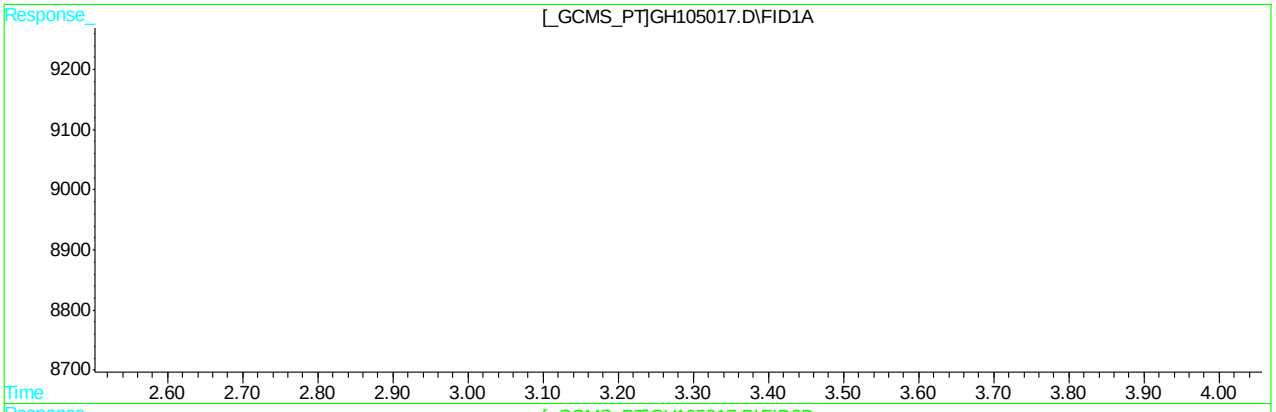
GH105017.D MGH5288.M Wed May 18 08:44:42 2016 GCGH

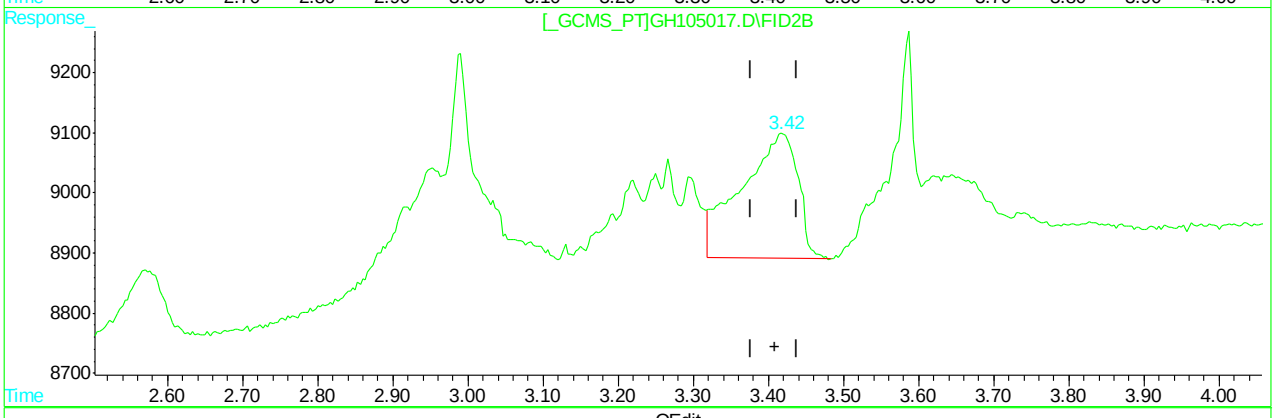
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.76min 105.546PPB

response 3014

(7) 1-Butanol #2

3.42min 167.388PPB

response 10970

(+) = Expected Retention Time

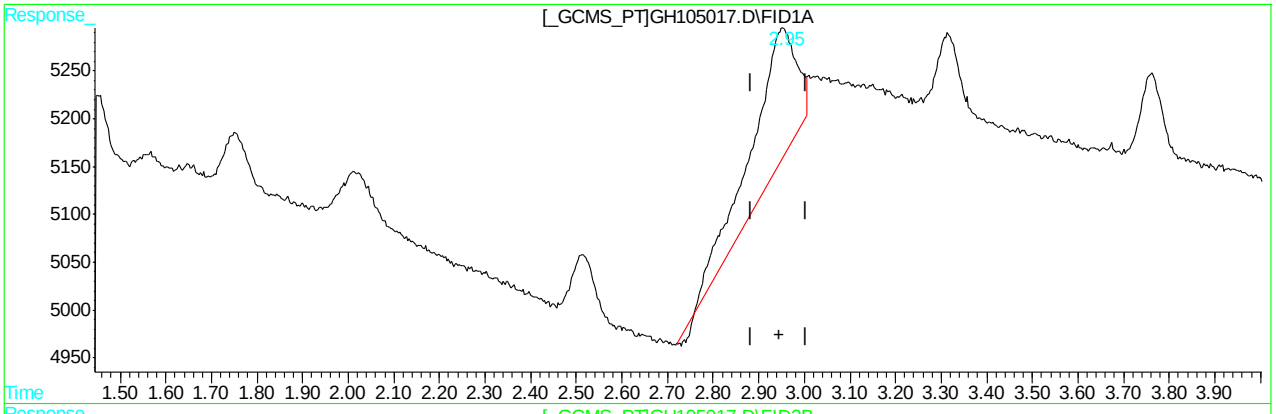
GH105017.D MGH5288.M Wed May 18 08:45:02 2016 GCGH

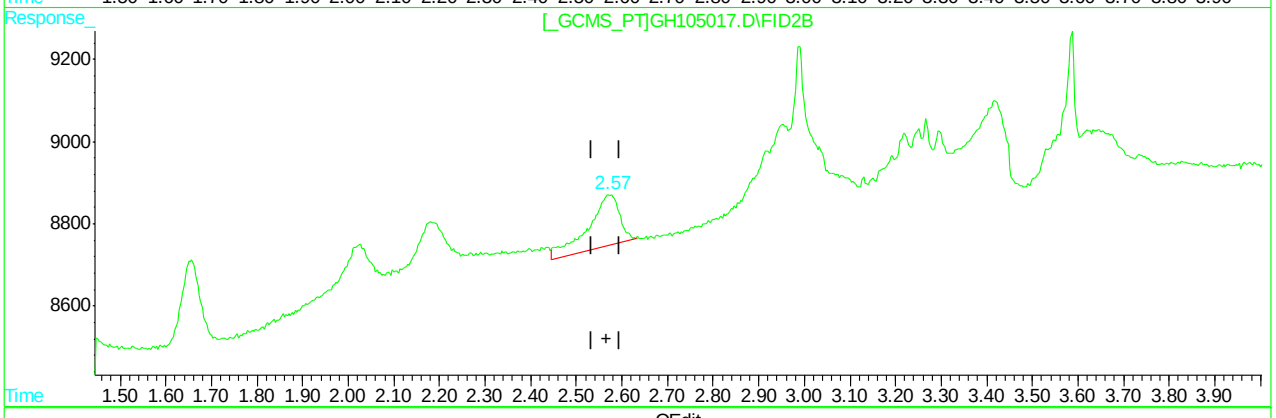
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(8) 2-Butanol

2.95min 395.696PPB

response 9232

(8) 2-Butanol #2

2.57min 109.800PPB

response 5921

(+) = Expected Retention Time

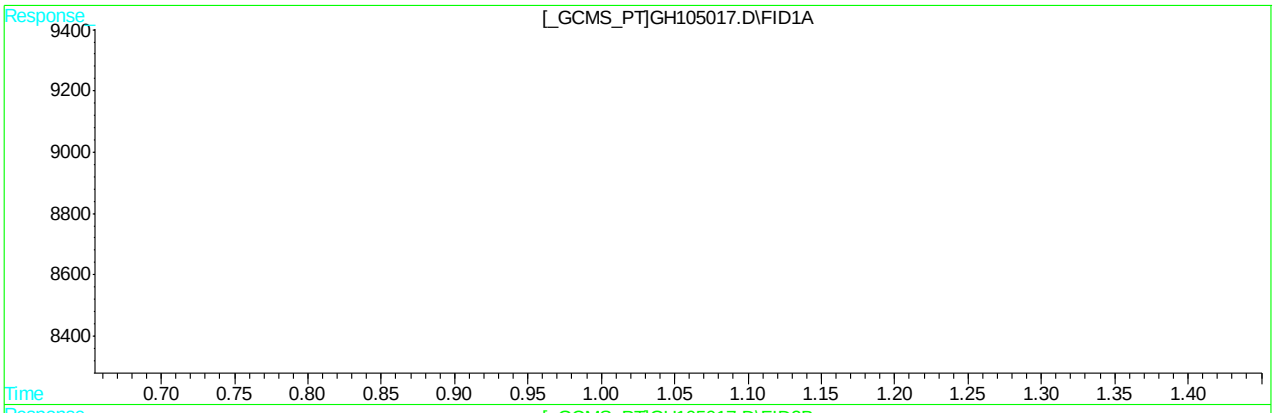
GH105017.D MGH5288.M Wed May 18 08:45:09 2016 GCGH

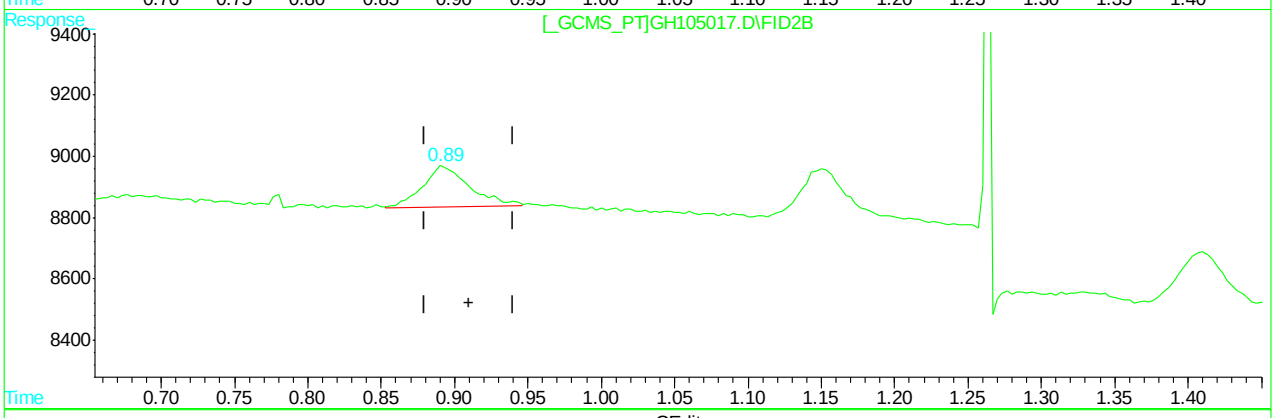
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.12min 115.427PPB

response 1784

(1) Methanol #2

0.89min 93.713PPB m

response 2982

(+) = Expected Retention Time

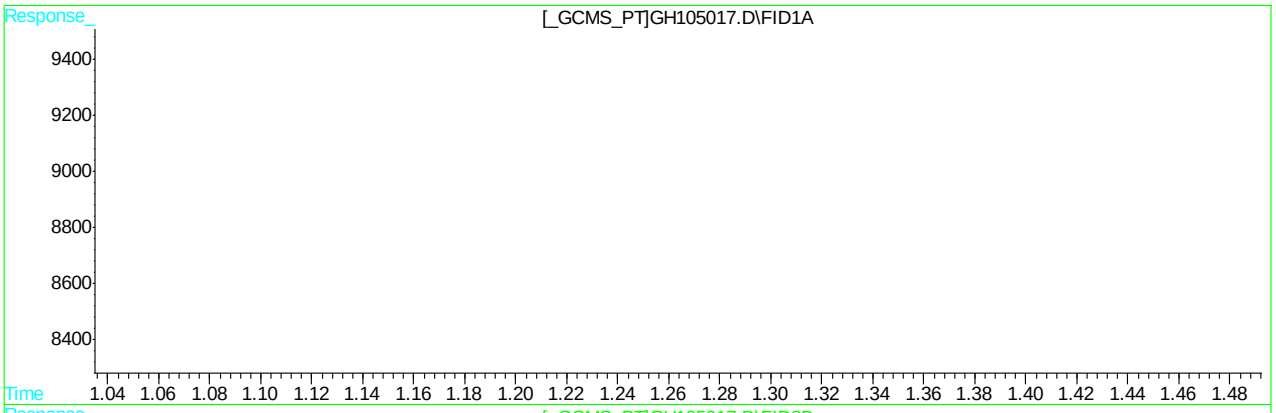
GH105017.D MGH5288.M Wed May 18 08:46:19 2016 GCGH

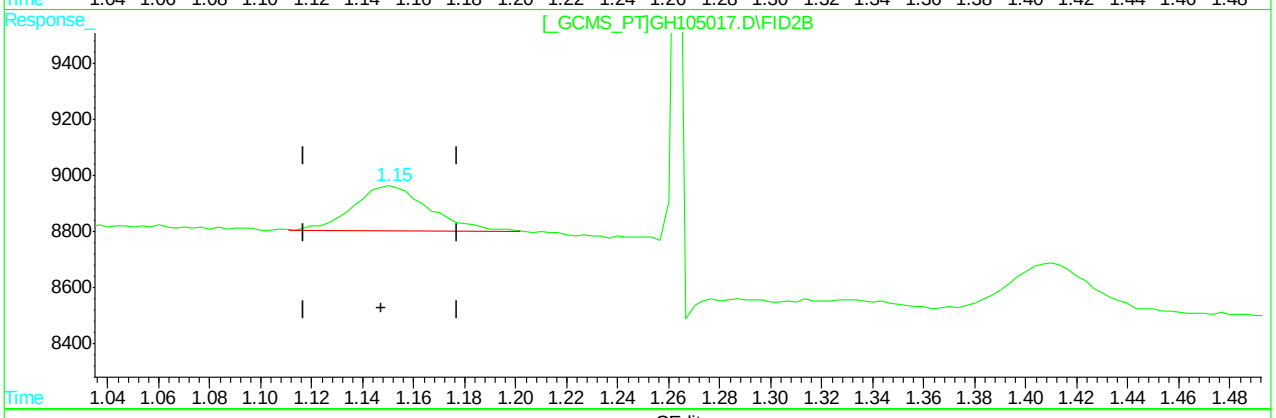
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.45min 110.763PPB

response 2099

(2) Ethanol #2

1.15min 84.901PPB m

response 3361

(+) = Expected Retention Time

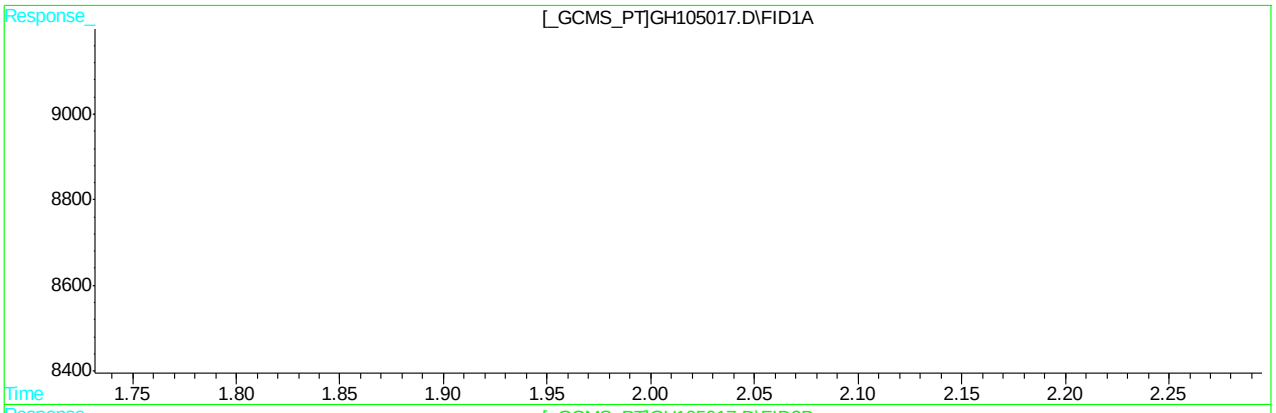
GH105017.D MGH5288.M Wed May 18 08:46:55 2016 GCGH

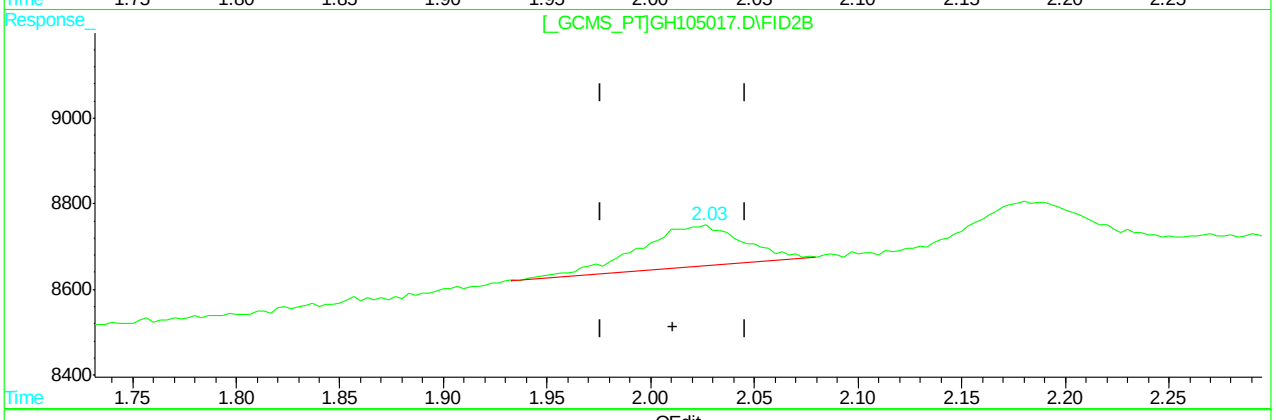
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.52min 89.885PPB

response 2187

(4) 1-Propanol #2

2.03min 69.117PPB m

response 3458

(+) = Expected Retention Time

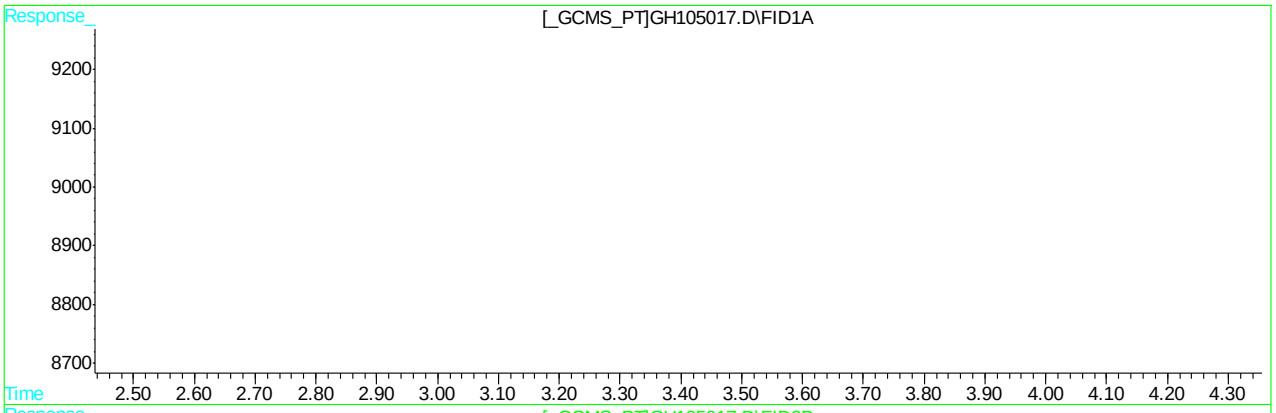
GH105017.D MGH5288.M Wed May 18 08:48:45 2016 GCGH

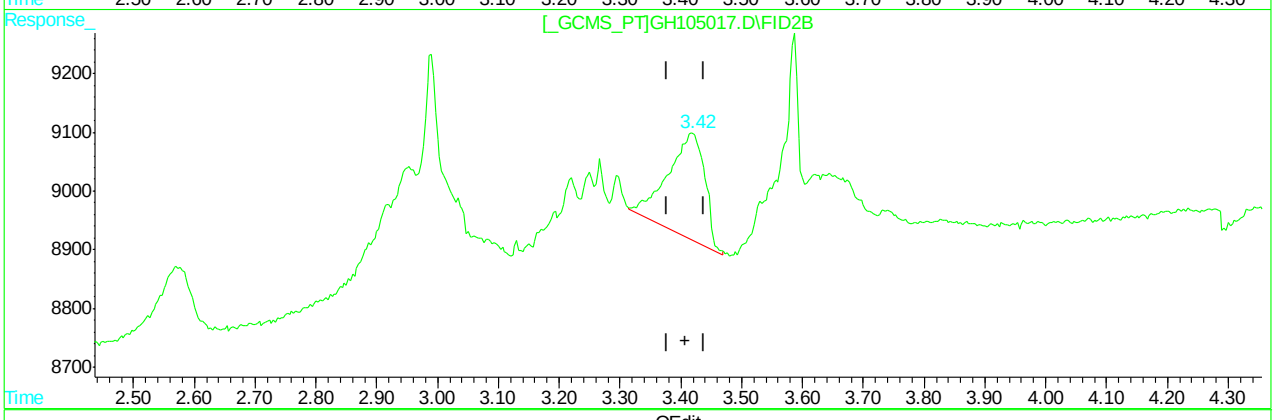
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.76min 105.546PPB

response 3014

(7) 1-Butanol #2

3.42min 113.606PPB m

response 7445

(+) = Expected Retention Time

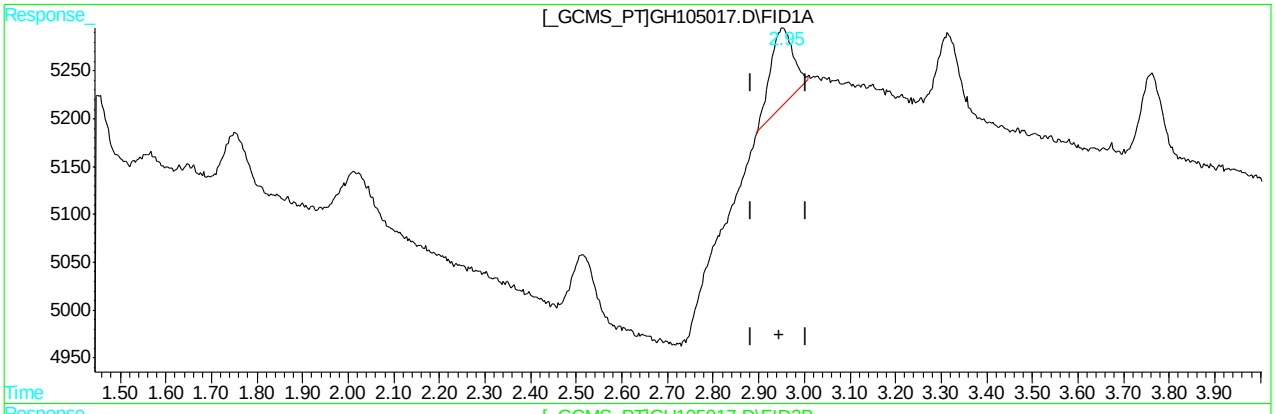
GH105017.D MGH5288.M Wed May 18 08:49:10 2016 GCGH

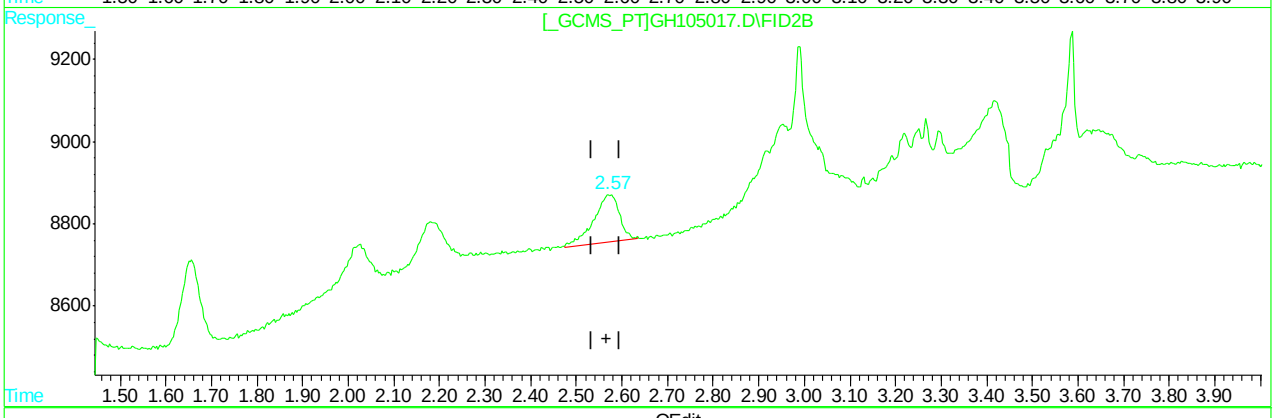
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(8) 2-Butanol

2.95min 121.739PPB m

response 2840

(8) 2-Butanol #2

2.57min 83.638PPB m

response 4510

(+) = Expected Retention Time

GH105017.D MGH5288.M Wed May 18 08:50:46 2016 GCGH

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105018.D\FID2B.CH          Vial: 3
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:56 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	133226	309222	2149.239	2179.587
Spiked Amount	5000.000			Recovery	=	42.98%	43.59%
	Target Compounds						
1)	Methanol	1.12	0.90	7371	16974	487.375	523.867
2)	Ethanol	1.45	1.15	7403	20315	382.175	495.986
3)	Tert-Butyl Alcoh	2.02	1.65	13219	32642	459.462	504.499
4)	1-Propanol	2.52	2.01	11323	26078	450.160	484.442
5)	2-Propanol	1.75	1.41	8826	24643	428.510	541.309
6)	Isobutanol	3.32	2.95f	14018	31821	481.673	522.579
7)	1-Butanol	3.76	3.41	14489	37291	514.513	593.512
8)	2-Butanol	2.95	2.57	11839	27554	464.803	492.431

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

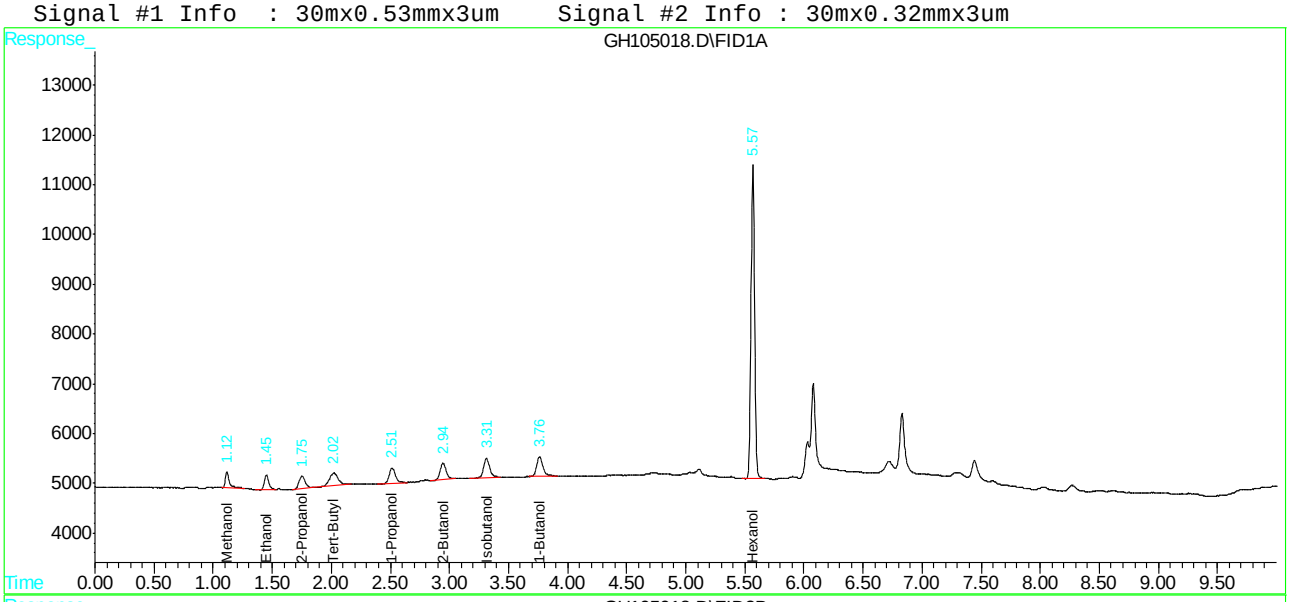
Quantitation Report (QT Reviewed)

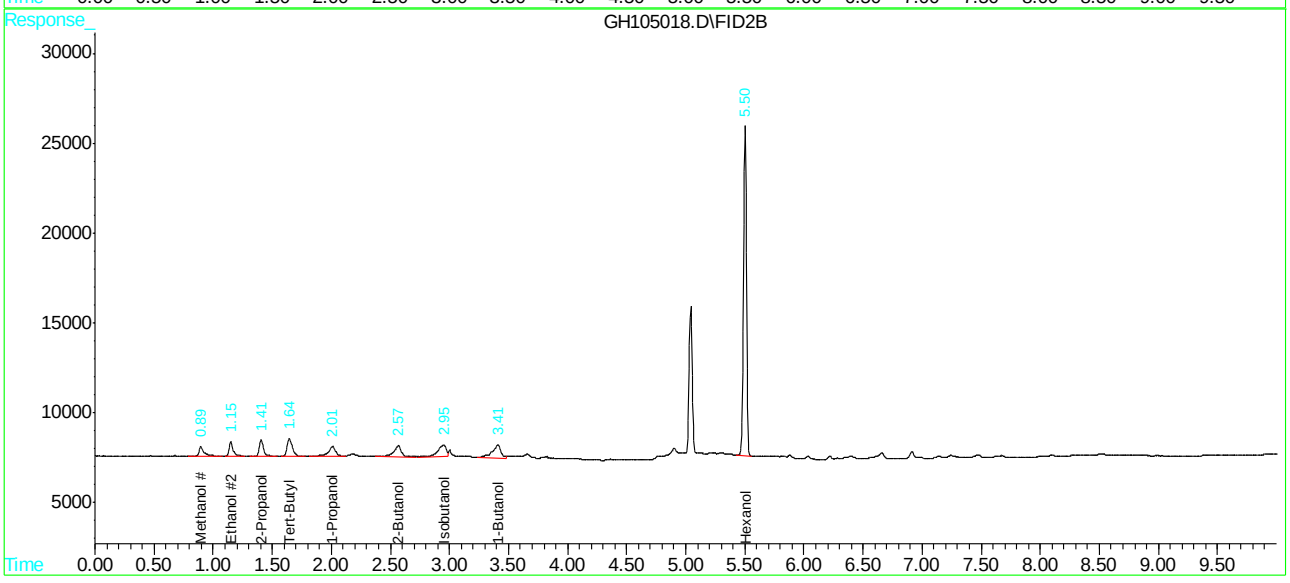
```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105018.D\FID2B.CH          Vial: 3
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:56 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.51	274171	622051	4543.104	4492.586
Spiked Amount	5000.000			Recovery	=	90.86%	89.85%
	Target Compounds						
1)	Methanol	1.12	0.92	16166	29685	1087.516	897.349
2)	Ethanol	1.45	1.17f	18855	36354	966.928	863.337
3)	Tert-Butyl Alcoh	2.01	1.66	28949	63750	1007.774	981.673
4)	1-Propanol	2.51	2.02	25248	52807	1004.669	976.309
5)	2-Propanol	1.75	1.42	20497	43421	993.892	942.889
6)	Isobutanol	3.31	2.94	29498	59602	1017.007	973.641
7)	1-Butanol	3.76	3.42	29408	73648	1055.991	1224.889
8)	2-Butanol	2.94	2.57	25576	58599	1005.126	1059.749

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

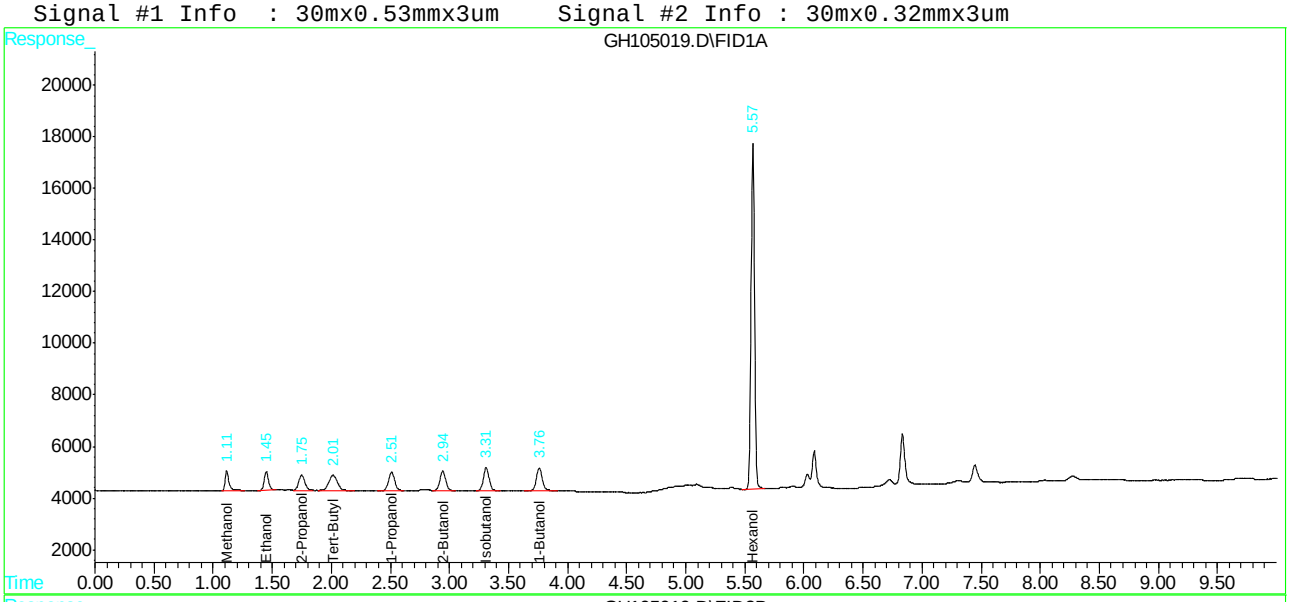
Quantitation Report (QT Reviewed)

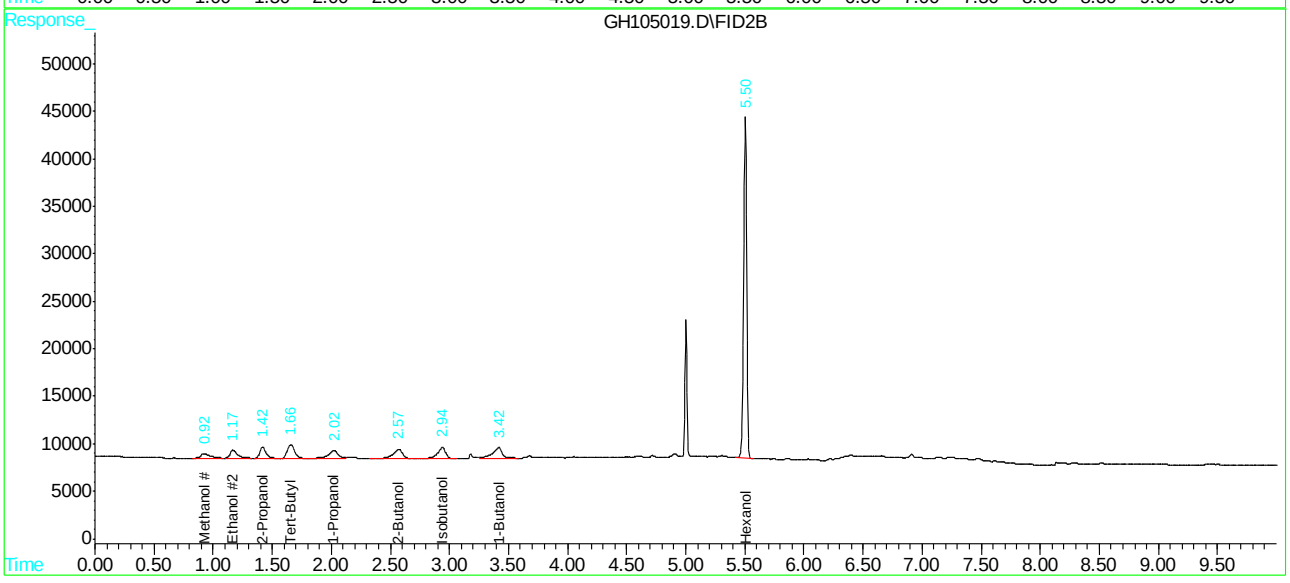
```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105020.D\FID2B.CH          Vial: 5
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	345209	794669	4511.712	4828.644
Spiked Amount	5000.000			Recovery	=	90.23%	96.57%
	Target Compounds						
1)	Methanol	1.12	0.89	77443	173699	5243.603	8544.414 #
2)	Ethanol	1.45	1.15	99445	217347	5314.412	6840.346
3)	Tert-Butyl Alcoh	2.01	1.65	142996	332018	5237.321	5085.028
4)	1-Propanol	2.51	2.01	128385	274702	5760.408	5575.380
5)	2-Propanol	1.75	1.41	105046	236654	5062.425	5660.735
6)	Isobutanol	3.31	2.94	147383	311633	5362.003	5023.429
7)	1-Butanol	3.76	3.42	143097	319465	5843.923	6171.241
8)	2-Butanol	2.94	2.57	129413	280976	5135.753	5686.138

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

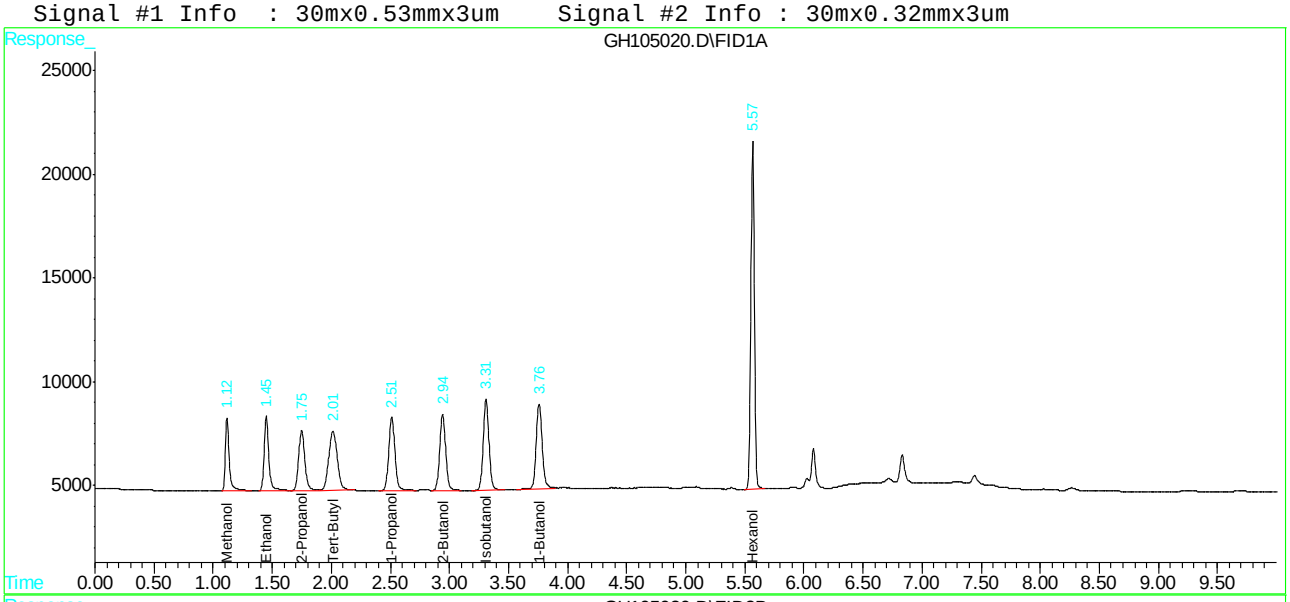
Quantitation Report (QT Reviewed)

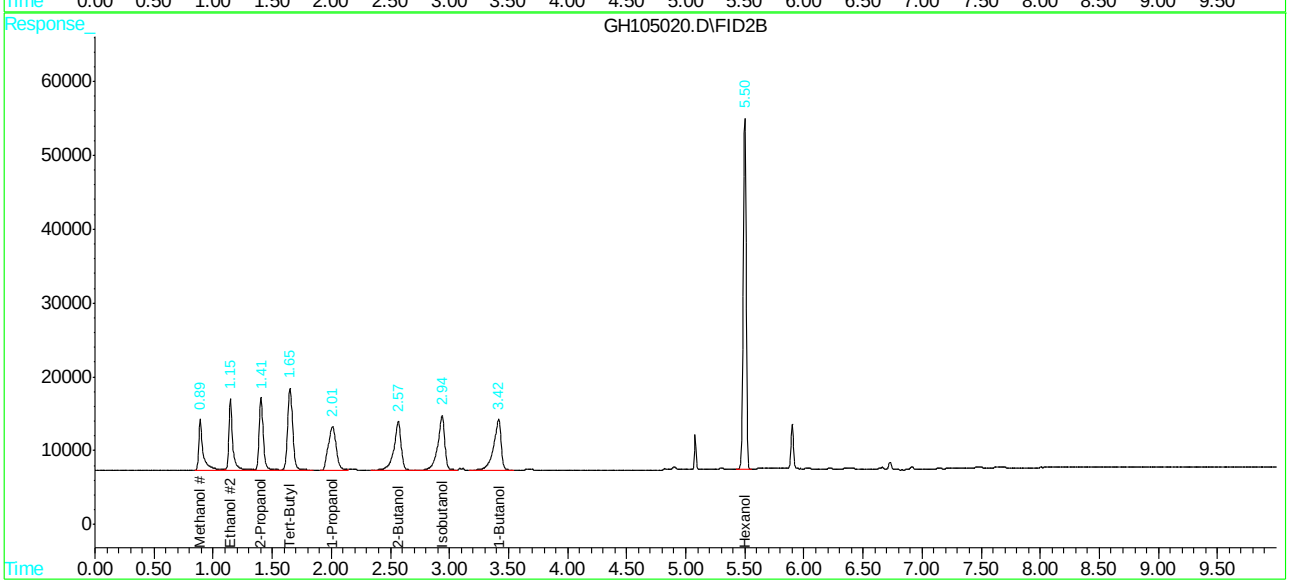
```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105020.D\FID2B.CH          Vial: 5
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105021.D\FID2B.CH          Vial: 6
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	355196	814101	4642.238	4946.724
Spiked Amount	5000.000			Recovery	=	92.84%	98.93%
	Target Compounds						
1)	Methanol	1.12	0.89	157448	346407	10660.697	17040.107 #
2)	Ethanol	1.45	1.15	202728	432745	10833.939	13619.358
3)	Tert-Butyl Alcoh	2.02	1.65	294805	663970	10797.389	10169.042
4)	1-Propanol	2.51	2.02	257894	549862	11571.266	11160.064
5)	2-Propanol	1.75	1.41	213932	472748	10309.866	11308.075
6)	Isobutanol	3.31	2.95	298782	632695	10870.134	10198.859
7)	1-Butanol	3.76	3.41	289038	604299	11803.967	11673.499
8)	2-Butanol	2.94	2.57	262599	566046	10421.277	11455.123

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

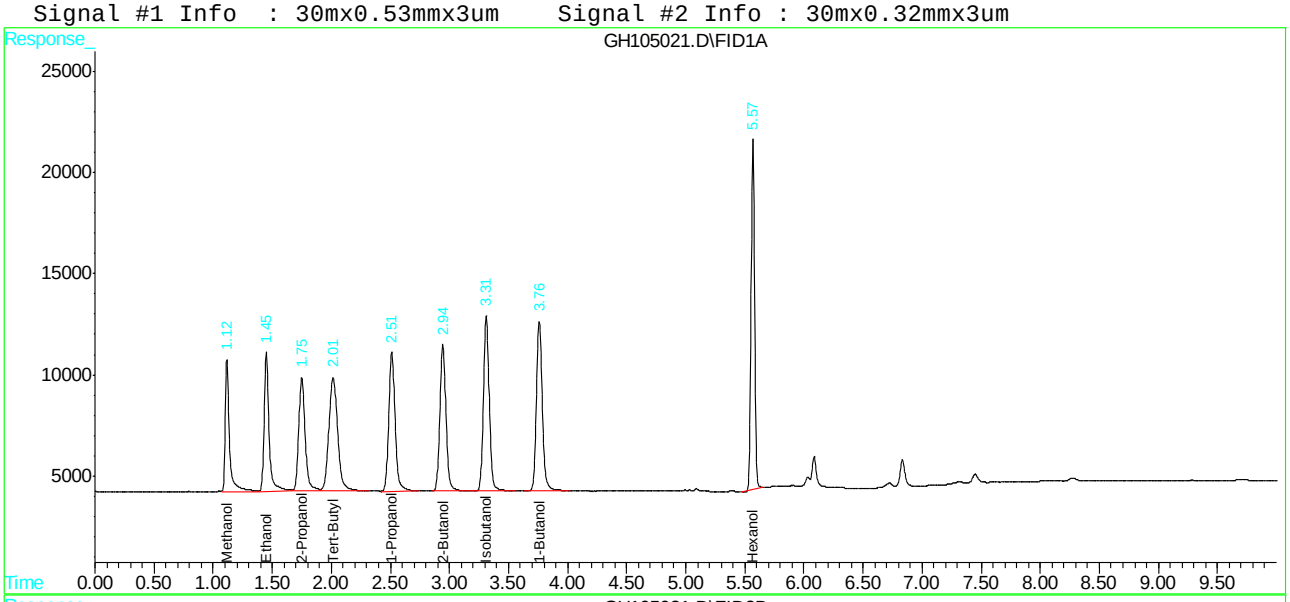
Quantitation Report (QT Reviewed)

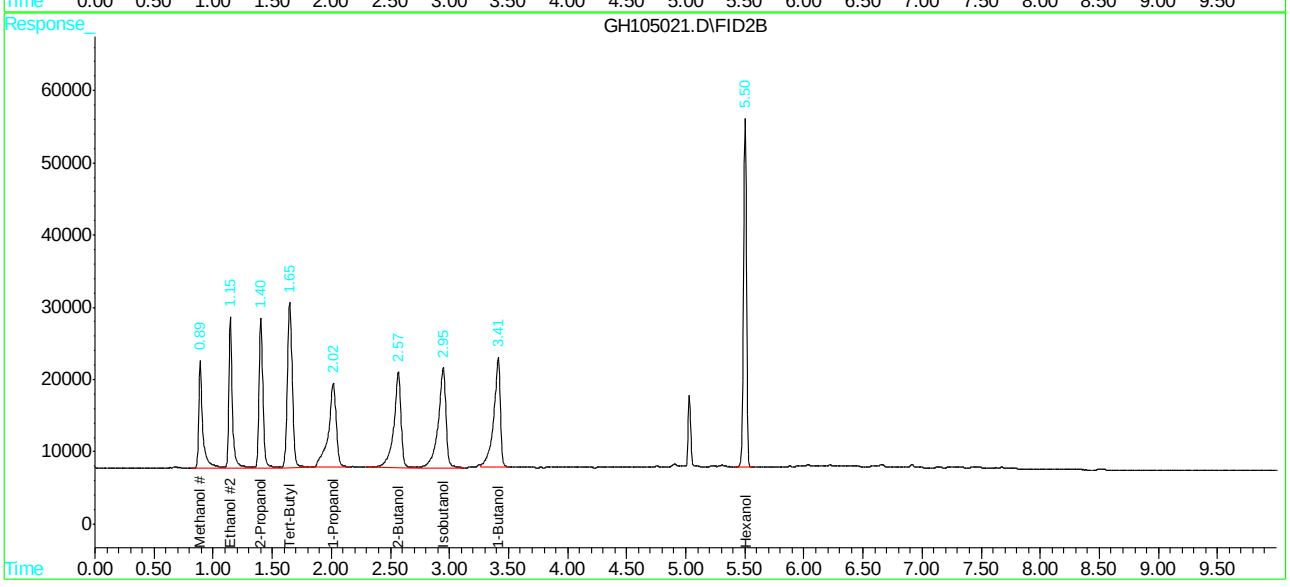
```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105021.D\FID2B.CH          Vial: 6
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105022.D\FID2B.CH          Vial: 7
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	412961	947054	5397.192	5754.582
	Spiked Amount 5000.000			Recovery	=	107.94%	115.09%
	Target Compounds						
1)	Methanol	1.12	0.89	720543	1576706	48787.500	77559.774 #
2)	Ethanol	1.45	1.15	934936	1996365	49963.655	62829.557
3)	Tert-Butyl Alcoh	2.02	1.65	1362114	3066977	49888.133	46972.339
4)	1-Propanol	2.51	2.02	1197382	2577415	53724.608	52311.489
5)	2-Propanol	1.75	1.41	990575	2181490	47738.100	52180.934
6)	Isobutanol	3.31	2.94	1369639	2883211	49829.464	46476.511
7)	1-Butanol	3.76	3.42	1316221	2839006	53752.804	54842.255
8)	2-Butanol	2.94	2.57	1212229	2632402	48107.436	53272.148

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

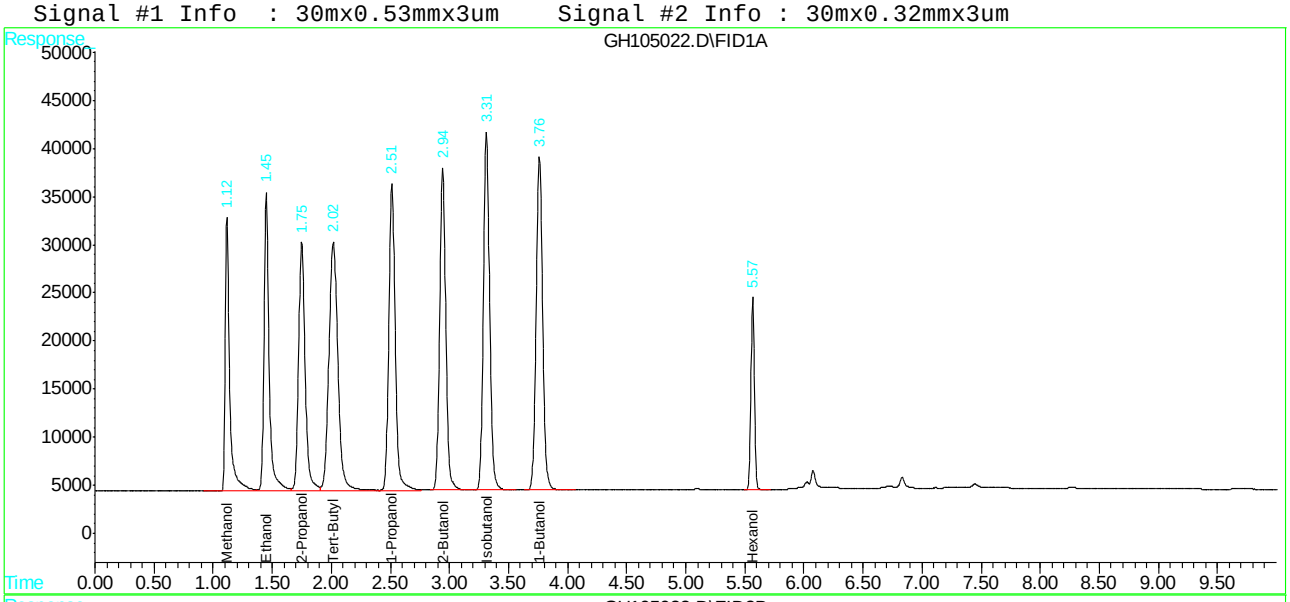
Quantitation Report (QT Reviewed)

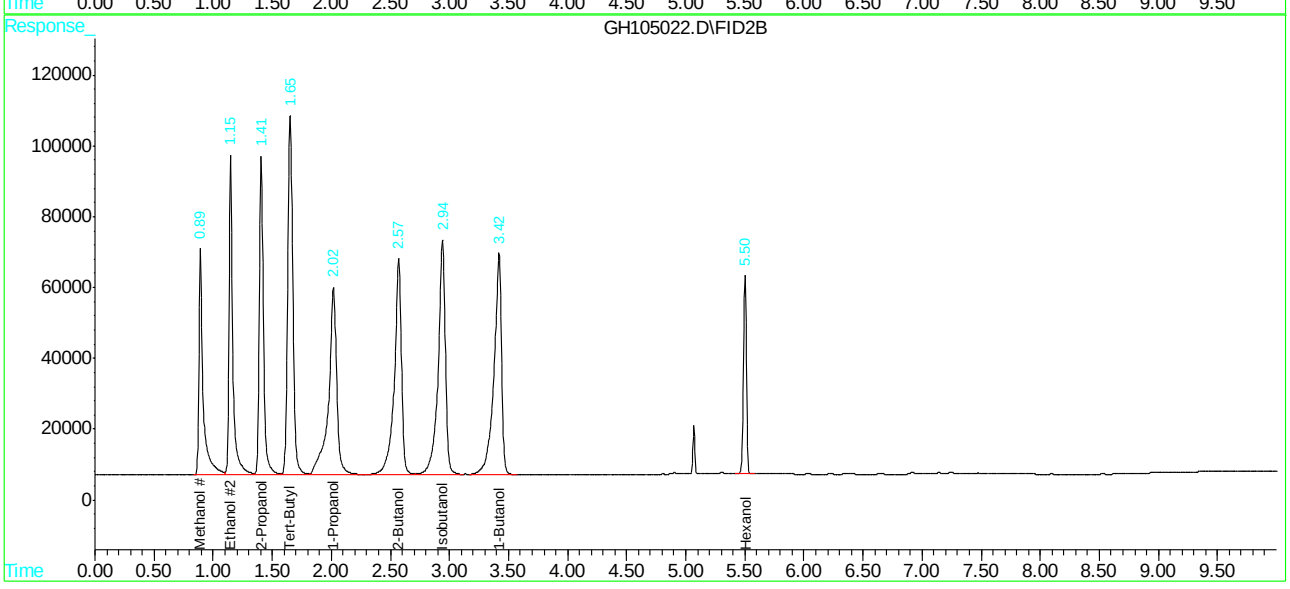
```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105022.D\FID2B.CH          Vial: 7
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH          Vial: 8
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	259897	594005	3396.729	3609.352
	Spiked Amount 5000.000			Recovery	=	67.93%	72.19%
	Target Compounds						
1)	Methanol	1.12	0.89	1381464	3140971	93538.113	154507.580 #
2)	Ethanol	1.45	1.15	1913963	4176473	102283.537	131441.900
3)	Tert-Butyl Alcoh	2.02	1.66	2957875	6562015	108333.721	100500.651
4)	1-Propanol	2.51	2.03	2510870	5487726	112658.677	111379.470
5)	2-Propanol	1.76	1.41	2027830	4596795	97725.857	109954.692
6)	Isobutanol	3.32	2.96f	2927116	6160124	106492.774	99299.394
7)	1-Butanol	3.76	3.42	2754661	5940276	112496.937	114750.761
8)	2-Butanol	2.95	2.57	2539551	5573181	100782.352	112784.937

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

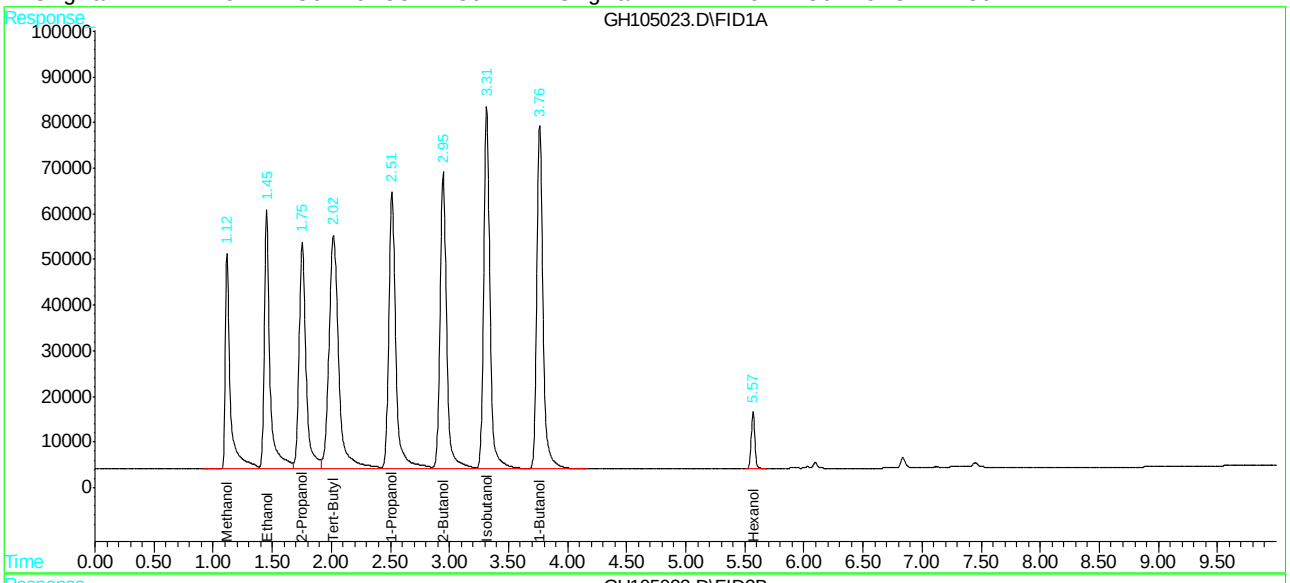
Quantitation Report (QT Reviewed)

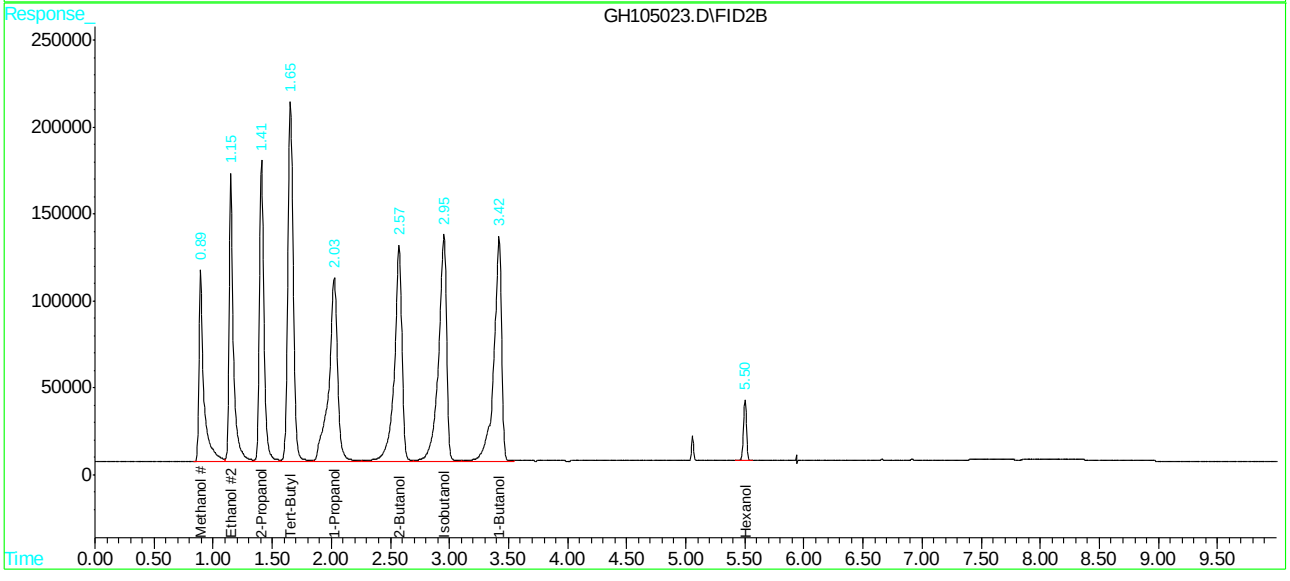
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH Vial: 8
Acq On : 17 May 2016 5:48 pm Operator: XULIU
Sample : IC5288-100000 Inst : GCGH
Misc : GC48422,GGH5288,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH Vial: 8
Acq On : 17 May 2016 6:02 pm Operator: XULIU
Sample : IC5288-100000 Inst : GCGH
Misc : GC48422,GGH5288,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 18 7:10 2016 Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH          Vial: 9
Acq On    : 17 May 2016   6:24 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  9:07 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	349710	790800	5173.481	5090.525
Spiked Amount	5000.000			Recovery	=	103.47%	101.81%
	Target Compounds						
1)	Methanol	1.12	0.90	65127	172731	4212.940	5355.287
2)	Ethanol	1.45	1.16	100143	226641	5284.554	5685.787
3)	Tert-Butyl Alcoh	2.02	1.66	149854	332921	5288.674	5236.015
4)	1-Propanol	2.52	2.02	127682	285106	5248.735	5607.628
5)	2-Propanol	1.75	1.41	105368	238229	5286.625	5261.345
6)	Isobutanol	3.31	2.94	151110	333033	5252.180	5439.828
7)	1-Butanol	3.76	3.42	145592	326188	5097.649	4929.542
8)	2-Butanol	2.95	2.57	133016	304299	5188.956	5605.638

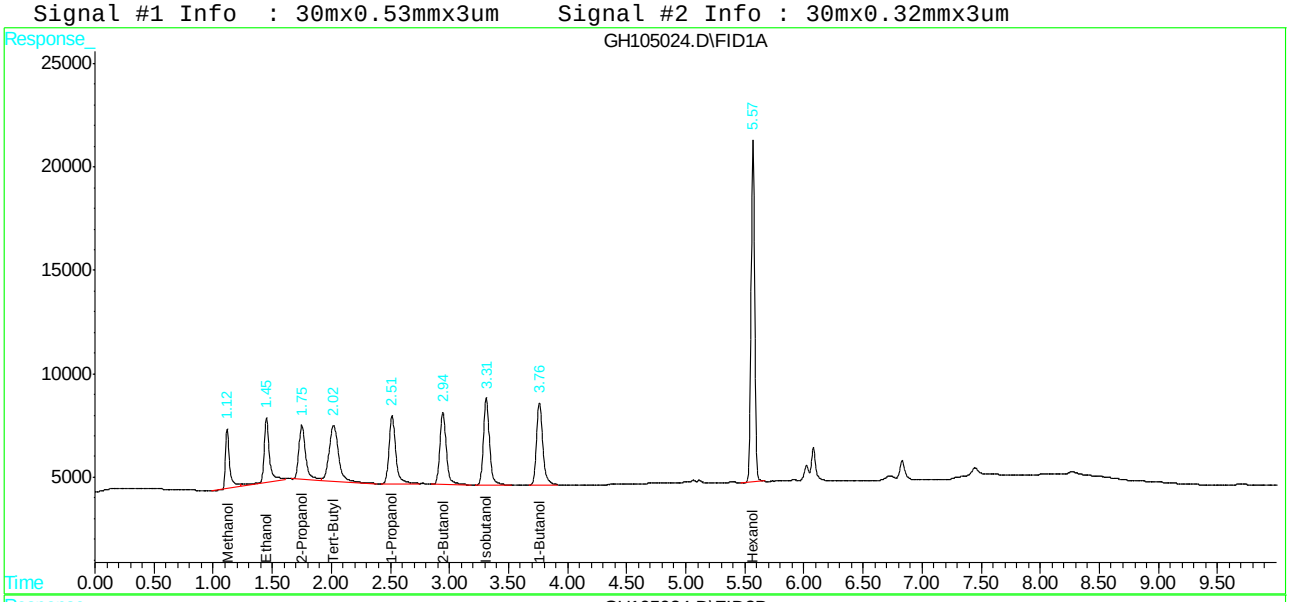
Quantitation Report (QT Reviewed)

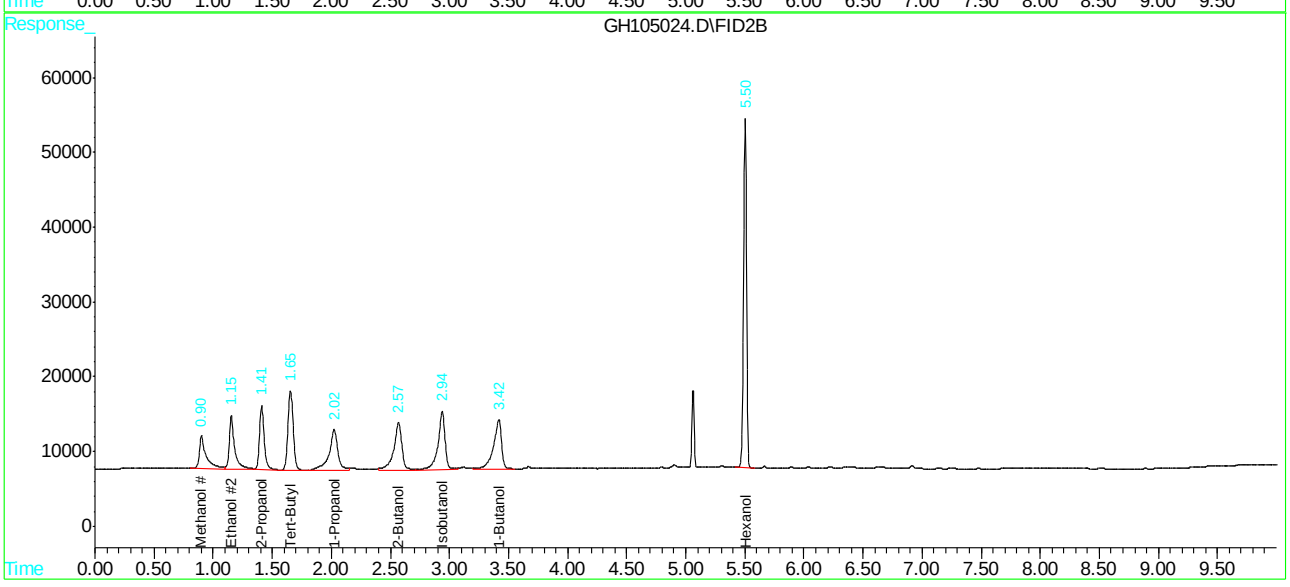
```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH          Vial: 9
Acq On    : 17 May 2016   6:24 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  9:07 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105049.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   2:28 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105049.D\FID2B.CH          Vial: 95
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18 14:49 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.56	5.50	336118	746735	4972.404	4806.868
Spiked Amount 5000.000			Recovery	=	99.45%	96.14%
Target Compounds						
1) Methanol	1.11	0.89	74207	161364	4800.351	5002.873
2) Ethanol	1.44	1.15	96715	202957	5103.662	5091.623
3) Tert-Butyl Alcoh	2.00	1.65	156640	327203	5528.180	5146.089
4) 1-Propanol	2.50	2.00	128090	264945	5265.538	5211.095
5) 2-Propanol	1.74	1.40	109477	229090	5492.814	5059.511
6) Isobutanol	3.30	2.94	147301	293790	5119.766	4798.832
7) 1-Butanol	3.75	3.41	141212	290513	4944.269	4390.406
8) 2-Butanol	2.93	2.57	129610	275133	5056.106	5068.369

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

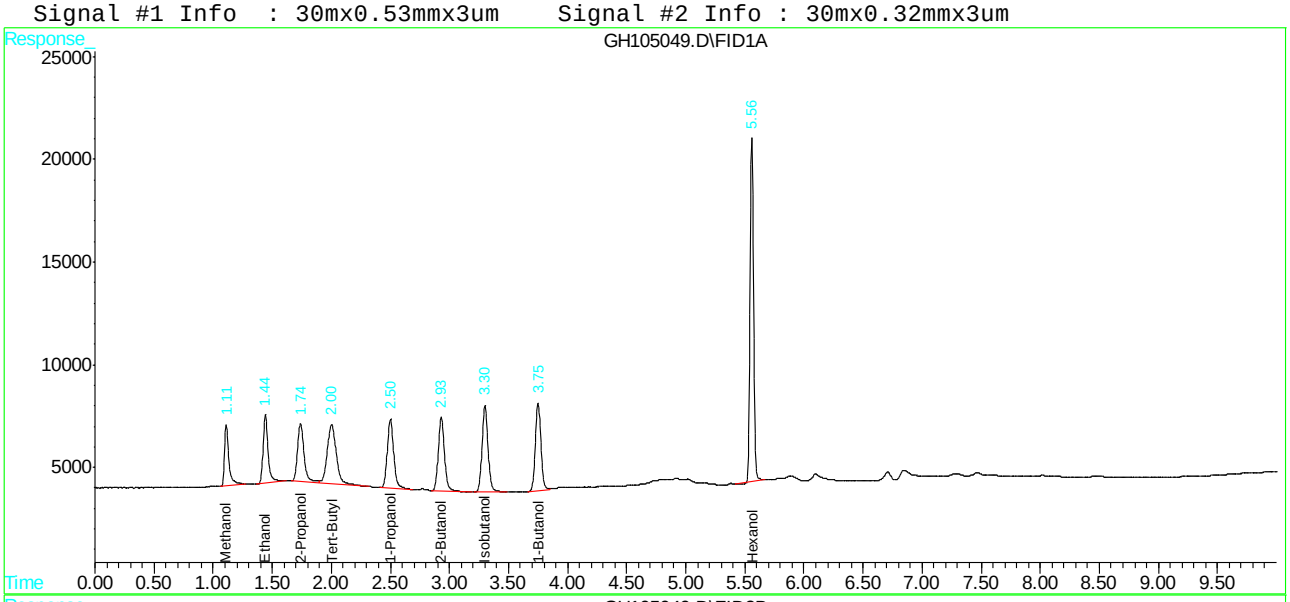
Quantitation Report (QT Reviewed)

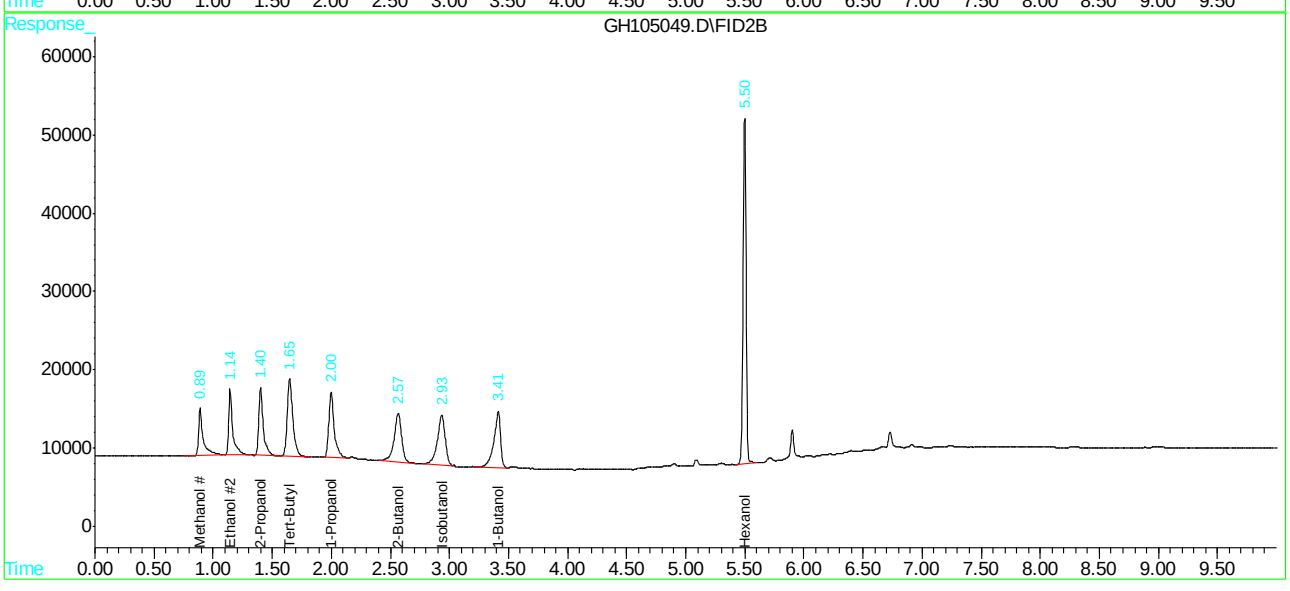
```
Data File : C:\HPCHEM\1\DATA\GH105049.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   2:28 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105049.D\FID2B.CH          Vial: 95
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18 14:49 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105054.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   3:49 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105054.D\FID2B.CH          Vial: 95
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:19 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	338121	755547	5002.038	4863.592
	Spiked Amount 5000.000			Recovery	=	100.04%	97.27%
	Target Compounds						
1)	Methanol	1.12	0.90	155738	339910	10074.450	10538.457
2)	Ethanol	1.45	1.15	196979	420490	10394.572	10548.933
3)	Tert-Butyl Alcoh	2.00	1.65	282574	657111	9972.662	10334.711
4)	1-Propanol	2.50	2.00	241854	544714	9942.144	10713.762
5)	2-Propanol	1.74	1.41	204381	464119	10254.424	10250.174
6)	Isobutanol	3.30	2.94	299019	589948	10393.093	9636.336
7)	1-Butanol	3.75	3.42	283820	604502	9937.443	9135.595
8)	2-Butanol	2.93	2.57	264578	556980	10321.197	10260.406

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

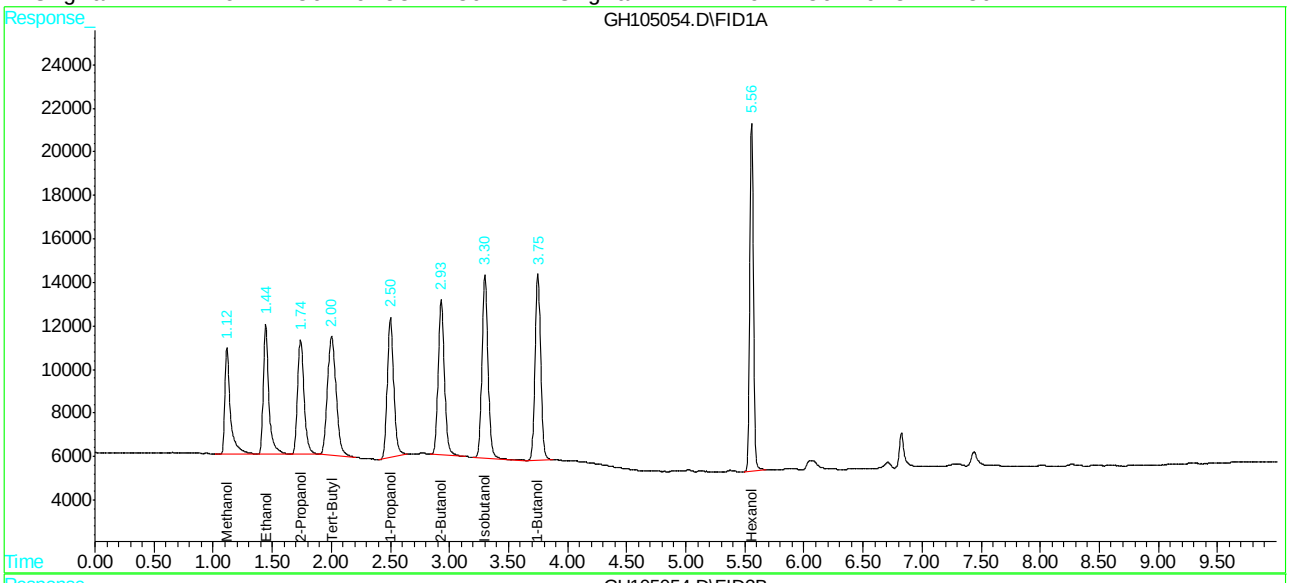
Quantitation Report (QT Reviewed)

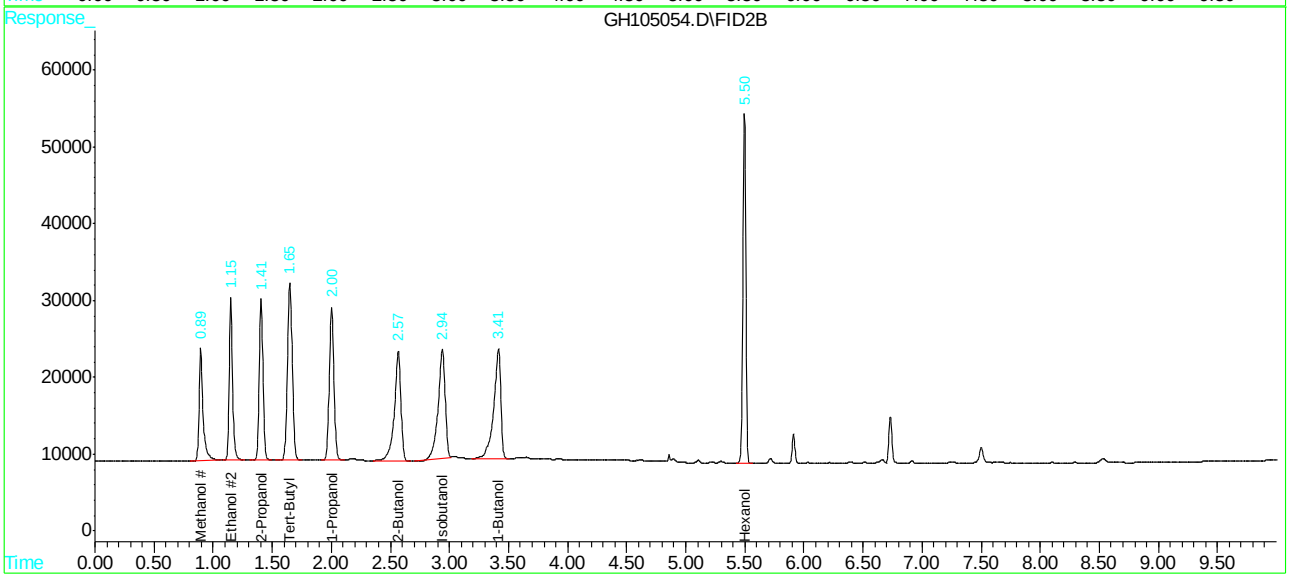
```
Data File : C:\HPCHEM\1\DATA\GH105054.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   3:49 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105054.D\FID2B.CH          Vial: 95
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:19 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105065.D\FID1A.CH Vial: 10
Acq On : 18 May 2016 6:49 pm Operator: XULIU
Sample : CC5288-5000 Inst : GCGH
Misc : GC48426,GGH5290,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105065.D\FID2B.CH Vial: 10
Acq On : 18 May 2016 7:04 pm Operator: XULIU
Sample : CC5288-5000 Inst : GCGH
Misc : GC48426,GGH5290,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 19 7:28 2016 Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Thu May 19 07:23:53 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	333289	747312	4930.546	4810.584
Spiked Amount	5000.000			Recovery	=	98.61%	96.21%
	Target Compounds						
1)	Methanol	1.11	0.90	75224	158718	4866.132	4920.856
2)	Ethanol	1.44	1.15	97300	200591	5134.513	5032.264
3)	Tert-Butyl Alcoh	2.00	1.65	140623	324101	4962.895	5097.291
4)	1-Propanol	2.50	2.01	128538	256427	5283.936	5043.553
5)	2-Propanol	1.74	1.41	102593	226293	5147.386	4997.732
6)	Isobutanol	3.30	2.95	150005	275960	5213.766	4507.587
7)	1-Butanol	3.75	3.42	140831	286285	4930.933	4326.511
8)	2-Butanol	2.93	2.57	130268	276039	5081.741	5085.051

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH105065.D MGH5288.M Thu May 19 07:37:09 2016 GCGH

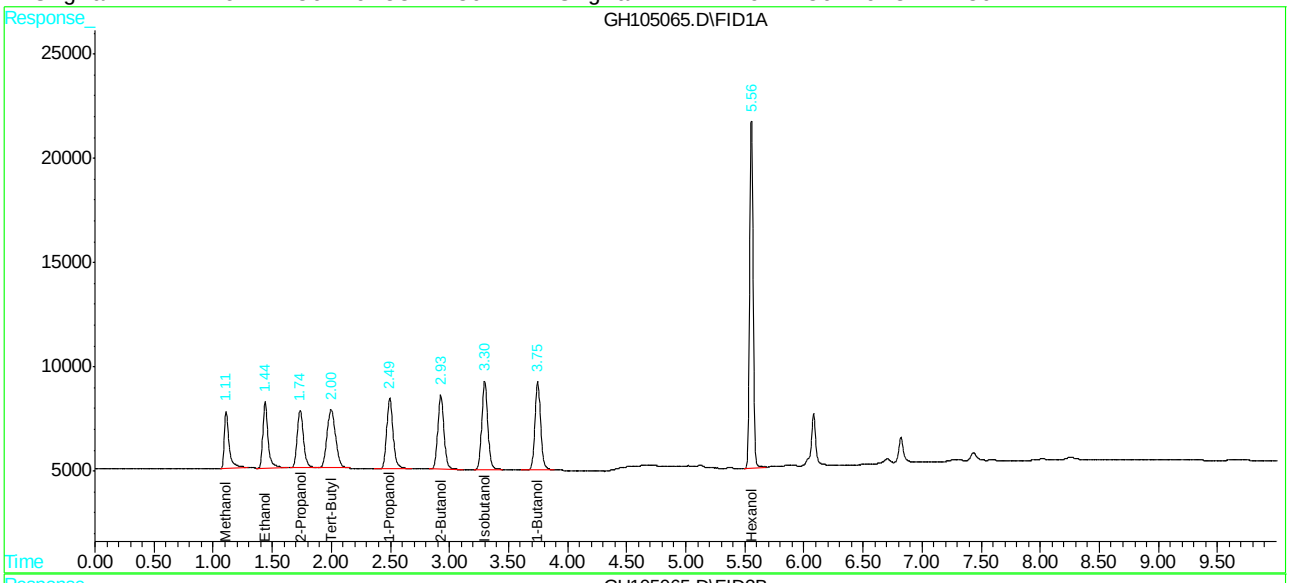
Quantitation Report (QT Reviewed)

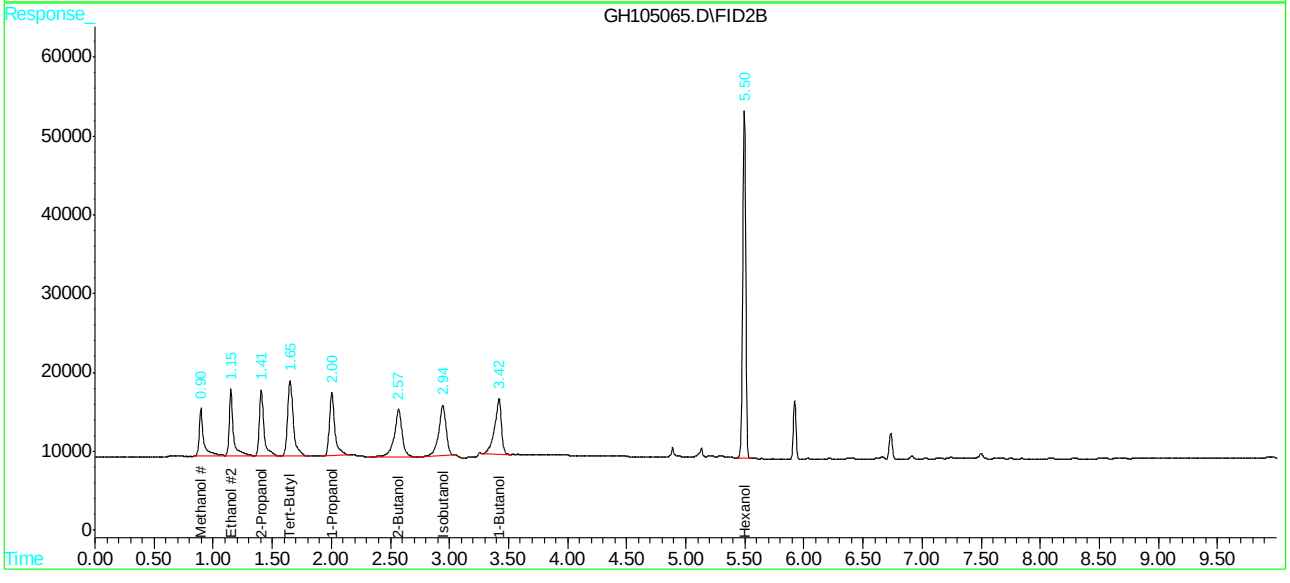
```
Data File : C:\HPCHEM\1\DATA\GH105065.D\FID1A.CH          Vial: 10
Acq On    : 18 May 2016   6:49 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105065.D\FID2B.CH          Vial: 10
Acq On    : 18 May 2016   7:04 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:28 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:23:53 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID1A.CH Vial: 95
Acq On : 19 May 2016 4:32 pm Operator: XULIU
Sample : CC5288-10000 Inst : GCGH
Misc : GC48427,GGH5291,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID2B.CH Vial: 95
Acq On : 19 May 2016 4:46 pm Operator: XULIU
Sample : CC5288-10000 Inst : GCGH
Misc : GC48427,GGH5291,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 20 8:14 2016 Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri May 20 08:13:59 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.55	5.50	305087	672487	4513.346	4328.918
Spiked Amount	5000.000			Recovery	=	90.27%	86.58%
	Target Compounds						
1)	Methanol	1.11	0.90	149502	340212	9671.024	10547.818
2)	Ethanol	1.44	1.15	187929	417060	9916.999	10462.870
3)	Tert-Butyl Alcoh	2.00	1.65	288187	649535	10170.781	10215.564
4)	1-Propanol	2.50	2.00	253221	534452	10409.417	10511.922
5)	2-Propanol	1.74	1.41	194621	461533	9764.702	10193.062
6)	Isobutanol	3.30	2.94	292289	588335	10159.160	9609.996
7)	1-Butanol	3.75	3.42	280209	566028	9811.003	8554.146
8)	2-Butanol	2.93	2.57	256176	539088	9993.441	9930.814

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH105098.D MGH5288.M Fri May 20 08:24:28 2016 GCGH

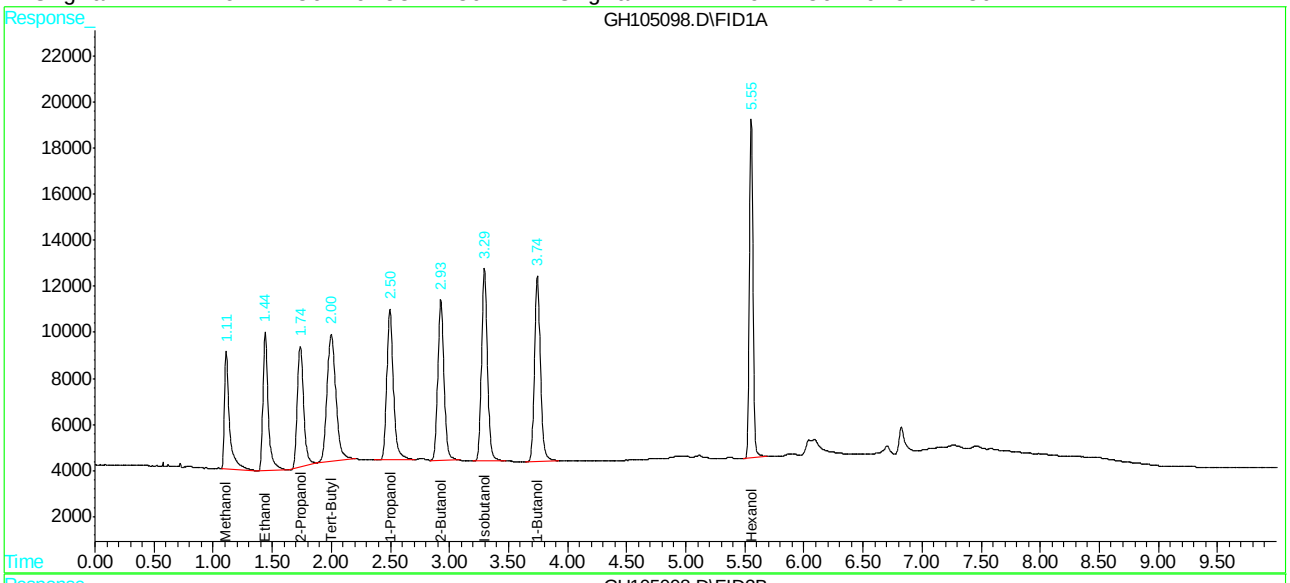
Quantitation Report (QT Reviewed)

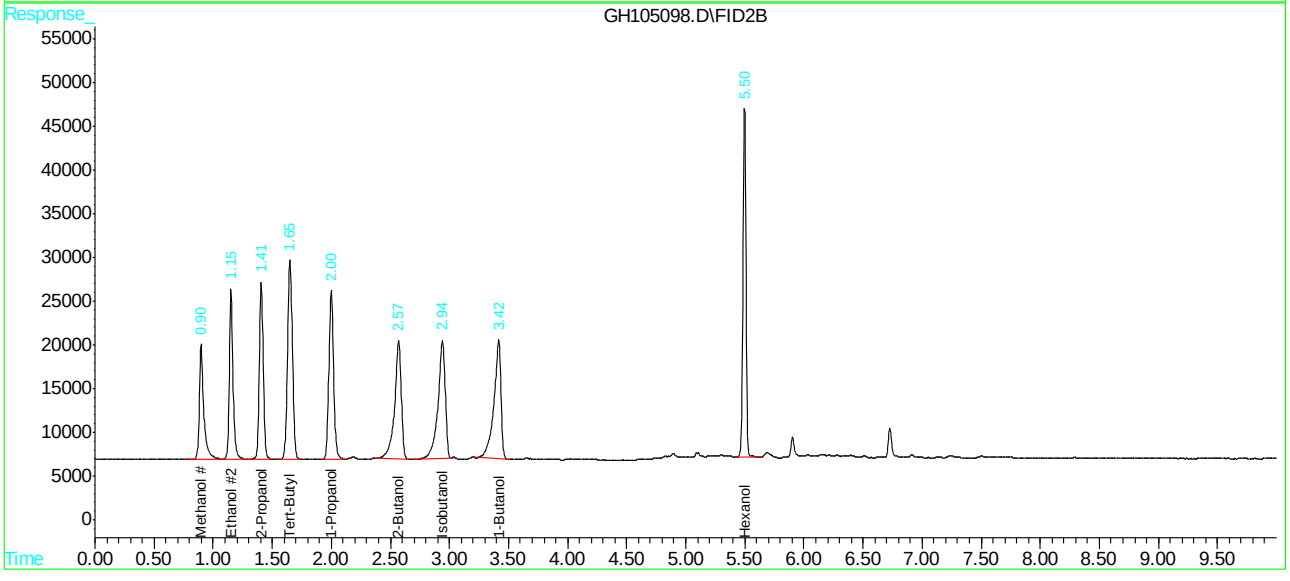
```
Data File : C:\HPCHEM\1\DATA\GH105098.D\FID1A.CH          Vial: 95
Acq On    : 19 May 2016   4:32 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID2B.CH          Vial: 95
Acq On    : 19 May 2016   4:46 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:14 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:13:59 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105109.D\FID1A.CH          Vial: 90
Acq On    : 19 May 2016   7:32 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105109.D\FID2B.CH          Vial: 90
Acq On    : 19 May 2016   7:46 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:00 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 09:00:10 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.55	5.50	289828	660879	4287.602	4254.199
	Spiked Amount 5000.000			Recovery	=	85.75%	85.08%
	Target Compounds						
1)	Methanol	1.11	0.90	75632	156464	4892.523	4850.972
2)	Ethanol	1.44	1.15	97328	201462	5136.011	5054.120
3)	Tert-Butyl Alcoh	2.00	1.65	142014	321407	5011.990	5054.929
4)	1-Propanol	2.49	2.00	127644	263515	5247.177	5182.958
5)	2-Propanol	1.74	1.41	102682	229269	5151.846	5063.466
6)	Isobutanol	3.30	2.94	146327	291041	5085.926	4753.936
7)	1-Butanol	3.74	3.42	137444	286397	4812.347	4328.202
8)	2-Butanol	2.92	2.57	129407	269052	5048.190	4956.344

9.5.23

9

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19914

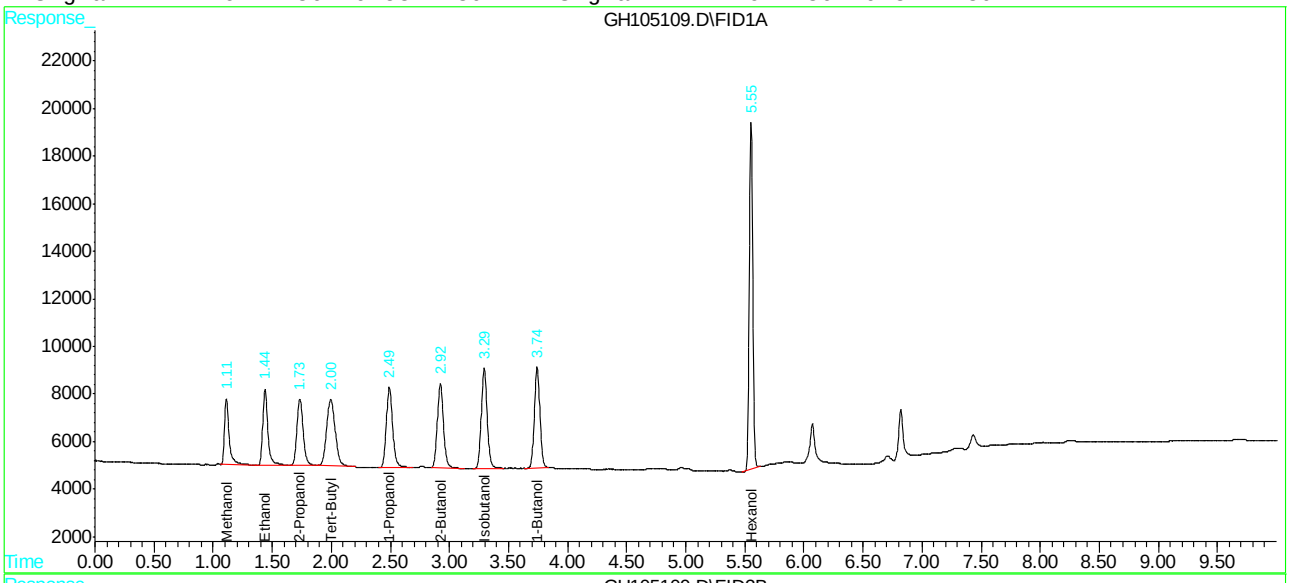
Quantitation Report (QT Reviewed)

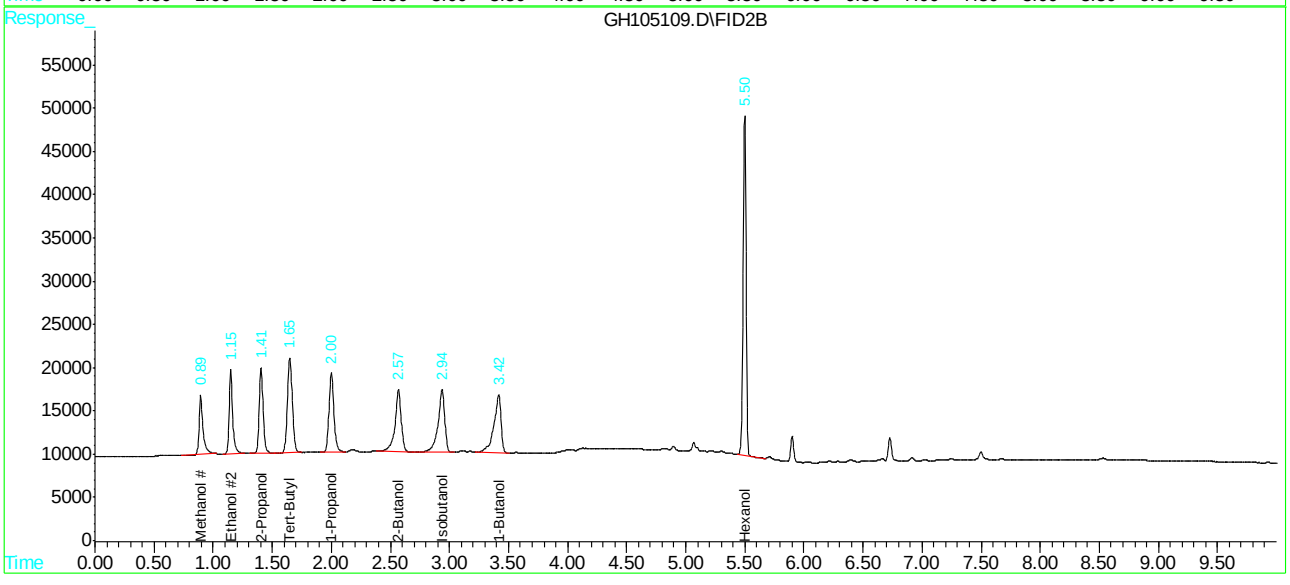
```
Data File : C:\HPCHEM\1\DATA\GH105109.D\FID1A.CH          Vial: 90
Acq On    : 19 May 2016   7:32 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105109.D\FID2B.CH          Vial: 90
Acq On    : 19 May 2016   7:46 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:00 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 09:00:10 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5269

Print Analyst Name: Xielin

Date: 5/9/16

Analyst Signature:

Columns: ZB624 / RTX-1 (30m x 0.25mm x 3um) (30m x 0.32mm x

Method 8015C ALC

Initial Cal. Method MGH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015MX-18	ALL SUR	2000ppm
015MX-19	ALL STD	100ppm
015MX-30	ALL STD(2)	100ppm

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

Supervisor Signature: **Date:** 5/12/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH104669	2B					1						not ul		
	104670	2B					1						not ul		
	104671	2B					1						not ul		
	104672	2B					1						not ul		
	104673	2B					1					✓	ok		
	104674	2G5269-100					1					✓	ok	10ul STD, 4ul sur/10ml 1/20	
	104675	2G5269-500					1					✓	ok	5ul STD, 1ul sur/1ml 1/20	
	104676	2G5269-1000					1					✓	ok	10ul STD, 2ul sur/1ml 1/20	
	104677	2G5269-5000					1					✓	ok	50ul STD, 2.5ul sur/1ml 1/20	
	104678	2G5269-10,000					1					✓	ok	100ul STD, 2.5ul sur/1ml 1/20	
	104679	2G5269-50,000					1					✓	ok	500ul STD, 2ul sur/1ml 1/20	
	104680	2G5269-100,000					1					✓	not need	5/10 2nd signal NG	
	104681	2G5269-100,000					1						NG	1000ul STD, 4ul sur/ml	
	104682	2GH5269-5000					1						NG		
	104683	2GH5269-5000					1					✓	ok	50ul STD(2), 2.5ul sur/1ml 1/20	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5285

Print Analyst Name: [illegible]

Analyst Signature: [illegible]

Date: 5/16/16

Columns: 2B624 / RTX-1 (30m x 0.32mm x 3um) (30m x 0.32mm x 3um)

Method 8015C ALL

Initial Cal. Method MGH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015MX4128	ALL SWF (5/15)	2000 ppm
015MXC19	ALL SWF (5/15)	100 ppm
015MX4130	ALL SWF (5/15)	100 ppm

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

Supervisor Signature: [illegible] **Date:** 5/17/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	GH10459	2B					1					✓	ok		
	10460	CC5269-5000					1					✓	ok	50µl STD/mlw	
	10461	MB1					1					✓	ok		
	10462	BS					1					✓	ok	50µl STD/mlw	
	10463	JC19644-1	48420 CMTX	W	6		1					✓	ok		✓
	10464	JC19644-1MS	✓	W	6		1					✓	ok		✓
	10465	JC19644-1MSD	✓	W	6		1					✓	ok		✓
	10466	JC19644-2	✓	W	5		1					✓	ok		✓
	10467	JC19644-3	✓	W	6		1					✓	ok		✓
	10468	JC19759-1	✓	W	6		1					✓	ok		✓
	10469	JC19759-2	✓	W	6		1					✓	ok		✓
	10470	CC5269-10,000					1					✓	ok		
	10471	MB2					1					✓	ok		
	10472	JC19759-3	✓	W	6		1					✓	ok		✓
	10473	JC19759-4	✓	W	5		1					✓	ok		✓
	10474	JC19759-5	✓	W	6		1					✓	ok		✓
	10475	JC19759-6	✓	W	6		1					✓	ok		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5285

Print Analyst Name: Xi Liu

Analyst Signature:

Date: 5/16/16

Columns: ZB624 / RTX-1 (30m x 0.53mm x 3μm) (30m x 0.25mm x 1μ)

Method 8015CAK

Initial Cal. Method MGH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Pg 153	

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

Supervisor Signature: Date: 5/17/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH104976	JC19914-1	48420 CMB	G W	5		1					✓	ok		✓
	104977	JC19114-2	✓	G W	5		1					✓	ok		✓
	104978	JC19114-4	✓	G W	5		1					✓	ok		✓
	104979	JC19114-5	✓	G W	5		1					✓	ok		✓
	104980	CC5269-5000					1					✓	ok	50ul std/mL	
	104981	MBX3					1					✓	ok		
	104982	JC20098-1	48422 CMB	G W	5		1					✓	ok	JC20098-1	✓
	104983	JC20098-4	✓	G W	5		1					✓	ok	JC20098-4	✓
	104984	JC20098-5	✓	G W	5		1					✓	ok	JC20098-5	✓
	104985	JC20314-2	48423 CMB	G W	4		1					✓	ok		✓
	104986	JC20314-4	✓	G W	2		1					✓	ok		✓
	104987	CC5269-10,000					1					✓	ok	100ul std/mL	
	104988						1								
	104989						1								
													5/16		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH 5288

Print Analyst Name: Xu Gu

Analyst Signature:

Date: 5/17/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015M4128	ALL SUR (5/15)	2000 ppm
015M4510	ALL STD (5/15)	100 ppm
015M4130	ALL SD012 (5/15)	100 ppm

Columns: ZB624 / RTX-1 (30m x0.53mm x3µm) (30m x0.32mm x2µm)

Method 8015C ALL

Initial Cal. Method ccal 5288

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

Supervisor Signature: _____ **Date:** 5/19/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	Ccal105015	ZB					1					✓	not used		
	105016	ZB					1					✓	ok		
	105017	2C5288-100					1					✓	ok	10µl STD, 4µl SUR / 10ml	
	105018	2C5288-500					1					✓	ok	5µl STD, 1µl SUR / 10ml	
	105019	2C5288-1000					1					✓	ok	10µl STD, 2.5µl SUR / 10ml	
	105020	2C5288-5000					1					✓	ok	50µl STD, 2.5µl SUR / 10ml	
	105021	2C5288-10,000					1					✓	ok	100µl STD, 2.5µl SUR / 10ml	
	105022	2C5288-50,000					1					✓	ok	500µl STD, 3µl SUR / 10ml	
	105023	2C5288-100,000					1					✓	ok	1000µl STD, 4µl SUR / 10ml	
	105024	2C5288-5000					1					✓	ok	50µl STD (1:10) 2.5µl SUR / 10ml	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5289

Print Analyst Name: Xulin

Date: 5/18/16

Analyst Signature:

Columns: ZB624 / RTX-1 (30m x0.53mm x3μm) (30m x0.32mm x2μm)

Method 8015C All

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015214128	All Surr (5/15)	2000 ppm
015214129	All SUD (5/15)	100 ppm
015214130	All (5012) (5/15)	100 ppm

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

Supervisor Signature: **Date:** 5/19/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH105025	2B					1						not used		
	105026	2B					1						not used		
	105027	2B					1					✓	OK		
	105028	CC5288-5000					1					✓	OK	5ml/5000/ml dw	
	105029	MB1					1					✓	OK		
	105030	BS					1					✓	OK	5ml/5000/ml dw	
	105031	JCW386-1	484235 LMA	G W	3		1					✓	OK		✓
	105032	JCW386-1MS	✓	G W	3		1					✓	OK	5ml/5000/ml sample	✓
	105033	JCW386-1MSD	✓	G W	3		1					✓	OK	5ml/5000/ml sample	✓
	105034	JC18855-1	484242 LMA	W G	5		1					✓	OK		✓
	105035	JC18855-2	✓	G W	5		1					✓	OK		✓
	105036	JC18950-1	484248 LMA	G W	5		1					✓	OK		✓
	105037	JC18950-3	✓	G W	6		1					✓	OK		✓
	105038	CC5288-10,000					1					✓	OK	10ml/5000/ml dw	
	105039						1								
	105040						1								
	105041						1								

5/18

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5289

Print Analyst Name: Xulici

Date: 5/18/16

Analyst Signature:

Columns: 28620 / RTX-1 (30m x 0.53mm x 3µm) (30m x 0.32mm x 3µ)

Method 8015C ALL

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Pg 165	

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

Supervisor Signature: Date: 5/19/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH105040	MB2					1					✓	ok		
	105041	JC19950-6	48428 CMA	G W	3		1					✓	ok		✓
	105042	JC19950-11	✓	W G	6		1					✓	ok		✓
	105043	JC19961-1	✓	G W	7		1					✓	ok		✓
	105044	JC19961-2	✓	G W	9		1					✓	ok		✓
	105045	JC19961-3	✓	G W	9		1					✓	ok		✓
	105046	JC19961-6	✓	G W	7		1					✓	ok		✓
	105047	JC19961-7	✓	G W	8		1					✓	ok		✓
	105048	JC19961-8	✓	G W	5		1					✓	ok		✓
	105049	CC5288-5000					1					✓	ok	standard/mixture	
												(ux)		5/18	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

167

Form: OR001-10
Rev. Date: 1/19/16

9.6.4

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5290

Print Analyst Name: Xu Liu

Date: 5/18/16

Analyst Signature:

Columns: 2BGX / RTX-1 (30m x 0.53 mm x 3um) (30m x 0.32mm x 2µ)

Method 8015C ALL

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015mix218	ALL SUR (5/15)	2000 ppm
015mix219	ALL STD (5/15)	100 ppm
015mix130	ALL STD (5/15)	100 ppm

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

Supervisor Signature: **Date:** 5/19/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	GH1050 50	MB1										✓	ok		
	1050 51	BS										✓	ok	50µl STD(2) / ml H2O	
	1050 52	JC19644-4	48425 LMA	S	1		5.0/5					✓	ok		
	1050 53	JC19644-5	✓	S	1		5.0/5					✓	ok		
	~~JC19914-~~													(x) 5/18	
	1050 54	CC5288-10,000										✓	ok	10µl STD / ml H2O	
	1050 55	MB2										✓	ok		
	1050 56	JC19914-2	48426 LMA	S	1		5.0/5					✓	ok		
	1050 57	JC19914-2MS	✓	S	1		5.0/5					✓	ok	50µl STD(2) / ml sample	
	1050 58	JC19914-2MSD	✓	S	1		5.0/5					✓	ok	50µl STD(2) / ml sample	
	1050 59	JC ~~19914-6~~ 19492-28	48362 LMA (x) 5/19	S	1		5.0/5			5/19		✓	ok	~~(x) 5/18~~ (x) 5/19	✓ ok
	1050 60	JC ~~19914-7~~ 19492-29	5/19 (x)	S	1		5.0/5					✓	ok	JC19492-29	
	1050 61	JC19996-2	48426 LMA	S	1		4.8/5					✓	ok		
	1050 62	JC20098-2	✓	S	1		5.0/5					✓	ok		
	1050 63	JC20098-3	✓	S	1		5.1/5					✓	ok		
	1050 64	JC20388-2	48436 LMA	S	2		5.0/5					✓	ok		
	1050 65	CC5288-5000										✓	ok	50µl STD / ml H2O	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5291

Print Analyst Name: Xulin

Analyst Signature:

Date: 5/19/16

Columns: ZB624 (30mx0.53mm x 3µm) / RTX-1 (30mx0.32mm x 3)

Method 8015LAIC

Initial Cal. Method MGM5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015W4108	ALK STD (5/15)	2000 ppm
015W4109	ALK STD (5/15)	100 ppm
015W4130	ALK STD(2) (5/15)	100 ppm

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

Supervisor Signature: _____ **Date:** 5/20/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	GM105066	ZB					1					✓	ok		
	105067	CC5288-5000					1					✓	ok	50µl STD/ml H2O	
	105068	MB1					1					✓	ok		
	105069	BS					1					✓	ok	50µl STD(2)/ml H2O	
	105070	JCW466-1	48445 CMA	GW	3		1					✓	ok		✓
	105071	JCW466-2	✓	GW	3		1					✓	ok		✓
	105072	JCW466-3	✓	GW	3		1					✓	ok		✓
	105073	JCW147-13	48429 CMA	GW	13		1					✓	ok		✓
	105074	JCW147-13MS	✓	GW	13		1					✓	ok	50µl STD(2)/ml sample	✓
	105075	JCW147-13MSD	✓	GW	13		1					✓	ok	50µl STD(2)/ml sample	✓
	105076	JCW147-14	✓	GW	8		1					✓	ok		✓
	105077	CC5288-10000					1					✓	ok	100µl STD/ml H2O	
	105078	MB2					1					✓	ok		
	105079	JCW147-16	✓	AQ	7		1					✓	ok		✓
	105080	JC19961-1	48394 CMA	GW	8		1					✓	ok		✓
	105081	JC19961-2	✓	GW	6		1					✓	ok		✓
	105082	JC19961-3	✓	GW	7		1					✓	ok		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

171

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC19914

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5291

Print Analyst Name: Xulin

Analyst Signature: [signature]

Date: 5/19/16

Columns: ZB624 / RTX-1 (30mx0.53mmx3μm) (30mx0.32mmx3μm)

Method 8015C ALL

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Pg 171	

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

Supervisor Signature: [signature] Date: 5/20/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH105083	JC19961-6	48394 EMA	G W	8		1					✓	OK		✓
	105084	JC19961-7	✓	G W	5		1					✓	OK		✓
	105085	JC19961-8	✓	G W	9		1					✓	OK		✓
	105086	JC20048-2	48427 EMA	G W	6		1					✓	OK		
	105087	CC5288-5000					1					✓	OK	50μl 5ml	
	105088	MB3					1					✓	OK		
	105089	JC20048-4	✓	G W	7		1					✓	OK		✓
	105090	JC20057-1	48427 EMA	G W	5		1					✓	OK		✓
	105091	JC20057-3	✓	G W	5		1					✓	OK		✓
	105092	JC20057-4	✓	G W	6		1					✓	OK		✓
	105093	JC20057-5	✓	G W	6		1					✓	OK		✓
	105094	JC20057-6	✓	G W	6		1					✓	OK	2PA	✓
	105095	JC20057-8	✓	G W	8		1					✓	OK		✓
	105096	JC20057-9	✓	W B	7		1					✓	OK		✓
	105097	JC20204-1	48427 EMA SL	2 N	12		1					✓	OK		✓
	105098	CC5288-10,000					1					✓	OK	100μl 5ml	
	99													5/19	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

173

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5292

Print Analyst Name: Xulin

Analyst Signature: [signature]

Date: 5/19/16

Columns: ZB624 / RTX-1 (30mx0.53mmx3μm) (30mx0.32mmx)

Method 8015ACC

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015214K128	ALL SUR (T/15)	2000ppm
015214K129	ALL STD (S/15)	100 ppm
015214K130	ALL STD(2) (T/15)	100 ppm

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

Supervisor Signature: [signature] Date: 5/23/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH105099	MB1										✓	OK		
	105100	BS										✓	OK	50µl STD12/ml H2O	
	105101	JC20464-1	48446 meth	S	3		5.0/5					✓	OK		
	105102	JC20464-1MS	✓	S	3		5.0/5					✓	OK	50µl STD12/ml sample	
	105103	JC20464-1MSD	✓	S	3		5.0/5					✓	OK	50µl STD12/ml sample	
	105104	JC19412-29	48362 meth	S	3		5.0/5					✓	OK		
	105105	JC20468-1	48448 meth	S	6		5.1/5					✓	OK		
	105106	JC19914-6	48426 CMA	S	1		5.0/5					✓	OK	mem	
	105107	JC19914-7	✓	S	1		5.0/5					✓	OK	mem	
	105108	JC20314-1	✓	S	2		5.0/5					✓	OK		
	105109	CC5288-5000										✓	OK	50µl STD/ml H2O	
	105110	MB2										✓	OK		
	105111	JC20314-3	✓	S	2		5.0/5		~~X2~~ 5/19			✓	OK	mem	
	105112	JC20399-1A 5/19	48440 meth	S	3		5.0/5		X2000			✓	OK	Turbidity + resin	
	105113	JC20399-2A	✓	S	3		5.0/5		X2000			✓	OK	✓	
	105114	JC20399-3A	✓	S	3		5.0/5		X2000			✓	OK	✓	
	105115	JC20399-4A	✓	S	3		5.0/5		X2000			✓	OK	✓	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

175

Form: OR001-10
Rev. Date: 1/19/16

9.6.7

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5292

Print Analyst Name: Xuhui

Date: 5/19/16

Analyst Signature:

Columns: ZB624 / RTX-1 (30m x 0.53mm x 3µm) (30m x 0.32mm x 3

Method 8015ACC

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015mx4218	ALL SUR (5/25)	2000 ppm
015mx4218	ALL STD (5/25)	100 ppm
015mx4130	ALL STD (5/25)	100 ppm

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

Supervisor Signature: Date: 5/23/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GGH1051 16	JC20399-5A	8260 Meth	S	3		5.0/5		X2000			✓	ok	Turbidity+resin	
	1051 17	JC20399-6A	✓	S	3		5.0/5		X2000			✓	ok	✓	
	1051 18	JC20399-7A	✓	S	3		5.0/5		X2000			✓	ok	✓	
	1051 19	CLS288-10,000										✓	ok	compound/mixture	

5/19

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

177

9.6.7

9

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93785-MB1	6G34937.D	1	05/11/16	DS	05/10/16	OP93785	G6G1008

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19914-4

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0060	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0060	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0057	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0046	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.010	0.0046	ug/l	
5103-74-2	gamma-Chlordane	ND	0.010	0.0046	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0036	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0038	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0062	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0050	ug/l	
72-20-8	Endrin	ND	0.010	0.0050	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0053	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0051	ug/l	
53494-70-5	Endrin ketone	ND	0.010	0.0051	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0050	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0043	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0038	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0065	ug/l	
72-43-5	Methoxychlor	ND	0.020	0.0057	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.18	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	71%	26-132%
877-09-8	Tetrachloro-m-xylene	71%	26-132%
2051-24-3	Decachlorobiphenyl	79%	10-118%
2051-24-3	Decachlorobiphenyl	89%	10-118%

Method Blank Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93786-MB1	6G34939.D	1	05/11/16	DS	05/10/16	OP93786	G6G1008

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19914-5

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0067	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0067	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0067	0.0038	ug/l	
319-86-8	delta-BHC	ND	0.0067	0.0030	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0067	0.0019	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0067	0.0031	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0067	0.0031	ug/l	
60-57-1	Dieldrin	ND	0.0067	0.0024	ug/l	
72-54-8	4,4'-DDD	ND	0.0067	0.0025	ug/l	
72-55-9	4,4'-DDE	ND	0.0067	0.0041	ug/l	
50-29-3	4,4'-DDT	ND	0.0067	0.0033	ug/l	
72-20-8	Endrin	ND	0.0067	0.0034	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0067	0.0035	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0067	0.0034	ug/l	
53494-70-5	Endrin ketone	ND	0.0067	0.0034	ug/l	
959-98-8	Endosulfan-I	ND	0.0067	0.0033	ug/l	
33213-65-9	Endosulfan-II	ND	0.0067	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.0067	0.0025	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0067	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.013	0.0038	ug/l	
8001-35-2	Toxaphene	ND	0.17	0.12	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	73%	26-132%
877-09-8	Tetrachloro-m-xylene	74%	26-132%
2051-24-3	Decachlorobiphenyl	87%	10-118%
2051-24-3	Decachlorobiphenyl	99%	10-118%

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93785-BS1	6G34938.D	1	05/11/16	DS	05/10/16	OP93785	G6G1008

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19914-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.25	0.19	76	38-138
319-84-6	alpha-BHC	0.25	0.21	84	51-144
319-85-7	beta-BHC	0.25	0.20	80	55-137
319-86-8	delta-BHC	0.25	0.21	84	33-148
58-89-9	gamma-BHC (Lindane)	0.25	0.21	84	53-142
5103-71-9	alpha-Chlordane	0.25	0.21	84	52-137
5103-74-2	gamma-Chlordane	0.25	0.21	84	52-140
60-57-1	Dieldrin	0.25	0.22	88	54-144
72-54-8	4,4'-DDD	0.25	0.20	80	46-151
72-55-9	4,4'-DDE	0.25	0.18	72	51-142
50-29-3	4,4'-DDT	0.25	0.19	76	53-158
72-20-8	Endrin	0.25	0.22	88	53-149
1031-07-8	Endosulfan sulfate	0.25	0.23	92	49-148
7421-93-4	Endrin aldehyde	0.25	0.23	92	45-137
53494-70-5	Endrin ketone	0.25	0.23	92	48-142
959-98-8	Endosulfan-I	0.25	0.21	84	54-139
33213-65-9	Endosulfan-II	0.25	0.21	84	54-142
76-44-8	Heptachlor	0.25	0.19	76	45-137
1024-57-3	Heptachlor epoxide	0.25	0.22	88	54-140
72-43-5	Methoxychlor	0.25	0.20	80	51-157

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	63%	26-132%
877-09-8	Tetrachloro-m-xylene	62%	26-132%
2051-24-3	Decachlorobiphenyl	70%	10-118%
2051-24-3	Decachlorobiphenyl	78%	10-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93786-BS1	6G34940.D	1	05/11/16	DS	05/10/16	OP93786	G6G1008

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19914-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.167	0.14	84	38-138
319-84-6	alpha-BHC	0.167	0.14	84	51-144
319-85-7	beta-BHC	0.167	0.14	84	55-137
319-86-8	delta-BHC	0.167	0.15	90	33-148
58-89-9	gamma-BHC (Lindane)	0.167	0.15	90	53-142
5103-71-9	alpha-Chlordane	0.167	0.15	90	52-137
5103-74-2	gamma-Chlordane	0.167	0.15	90	52-140
60-57-1	Dieldrin	0.167	0.15	90	54-144
72-54-8	4,4'-DDD	0.167	0.15	90	46-151
72-55-9	4,4'-DDE	0.167	0.13	78	51-142
50-29-3	4,4'-DDT	0.167	0.14	84	53-158
72-20-8	Endrin	0.167	0.16	96	53-149
1031-07-8	Endosulfan sulfate	0.167	0.16	96	49-148
7421-93-4	Endrin aldehyde	0.167	0.16	96	45-137
53494-70-5	Endrin ketone	0.167	0.16	96	48-142
959-98-8	Endosulfan-I	0.167	0.15	90	54-139
33213-65-9	Endosulfan-II	0.167	0.15	90	54-142
76-44-8	Heptachlor	0.167	0.14	84	45-137
1024-57-3	Heptachlor epoxide	0.167	0.15	90	54-140
72-43-5	Methoxychlor	0.167	0.14	84	51-157

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	74%	26-132%
877-09-8	Tetrachloro-m-xylene	75%	26-132%
2051-24-3	Decachlorobiphenyl	85%	10-118%
2051-24-3	Decachlorobiphenyl	98%	10-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93785-MS	6G34943.D	1	05/11/16	DS	05/10/16	OP93785	G6G1008
OP93785-MSD	6G34944.D	1	05/11/16	DS	05/10/16	OP93785	G6G1008
JC19914-4	6G34942.D	1	05/11/16	DS	05/10/16	OP93785	G6G1008

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19914-4

CAS No.	Compound	JC19914-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.5	0.41	82	0.5	0.61	122	39	37-159/40
319-84-6	alpha-BHC	ND		0.5	0.43	86	0.5	0.63	126	38* [a]	37-164/37
319-85-7	beta-BHC	ND		0.5	0.44	88	0.5	0.61	122	32	46-151/36
319-86-8	delta-BHC	ND		0.5	0.42	84	0.5	0.64	128	42* [a]	32-168/36
58-89-9	gamma-BHC (Lindane)	ND		0.5	0.43	86	0.5	0.63	126	38* [a]	44-160/37
5103-71-9	alpha-Chlordane	ND		0.5	0.45	90	0.5	0.64	128	35	38-160/35
5103-74-2	gamma-Chlordane	ND		0.5	0.46	92	0.5	0.65	130	34	39-157/37
60-57-1	Dieldrin	ND		0.5	0.46	92	0.5	0.65	130	34	42-161/36
72-54-8	4,4'-DDD	ND		0.5	0.45	90	0.5	0.63	126	33	40-161/36
72-55-9	4,4'-DDE	ND		0.5	0.41	82	0.5	0.58	116	34	34-158/36
50-29-3	4,4'-DDT	ND		0.5	0.38	76	0.5	0.57	114	40* [a]	41-173/33
72-20-8	Endrin	ND		0.5	0.47	94	0.5	0.66	132	34	44-166/35
1031-07-8	Endosulfan sulfate	ND		0.5	0.49	98	0.5	0.68	136	32	46-161/36
7421-93-4	Endrin aldehyde	ND		0.5	0.46	92	0.5	0.68	136	39* [a]	34-149/36
53494-70-5	Endrin ketone	ND		0.5	0.49	98	0.5	0.67	134	31	44-157/36
959-98-8	Endosulfan-I	ND		0.5	0.46	92	0.5	0.65	130	34	43-154/35
33213-65-9	Endosulfan-II	ND		0.5	0.46	92	0.5	0.65	130	34	40-162/35
76-44-8	Heptachlor	ND		0.5	0.41	82	0.5	0.60	120	38* [a]	33-153/37
1024-57-3	Heptachlor epoxide	ND		0.5	0.46	92	0.5	0.65	130	34	45-154/37
72-43-5	Methoxychlor	ND		0.5	0.41	82	0.5	0.58	116	34* [a]	48-169/32
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19914-4	Limits
877-09-8	Tetrachloro-m-xylene	62%	94%	53%	26-132%
877-09-8	Tetrachloro-m-xylene	60%	90%	52%	26-132%
2051-24-3	Decachlorobiphenyl	82%	111%	85%	10-118%
2051-24-3	Decachlorobiphenyl	90%	122%* [a]	93%	10-118%

(a) Outside the QC limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93786-MS	6G34945.D	1	05/11/16	DS	05/10/16	OP93786	G6G1008
OP93786-MSD	6G34946.D	1	05/11/16	DS	05/10/16	OP93786	G6G1008
JC19914-5	6G34941.D	1	05/11/16	DS	05/10/16	OP93786	G6G1008

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19914-5

CAS No.	Compound	JC19914-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.333	0.29	87	0.333	0.31	93	7	37-159/40
319-84-6	alpha-BHC	ND		0.333	0.29	87	0.333	0.31	93	7	37-164/37
319-85-7	beta-BHC	ND		0.333	0.29	87	0.333	0.32	96	10	46-151/36
319-86-8	delta-BHC	ND		0.333	0.30	90	0.333	0.33	99	10	32-168/36
58-89-9	gamma-BHC (Lindane)	ND		0.333	0.29	87	0.333	0.31	93	7	44-160/37
5103-71-9	alpha-Chlordane	ND		0.333	0.30	90	0.333	0.33	99	10	38-160/35
5103-74-2	gamma-Chlordane	ND		0.333	0.30	90	0.333	0.33	99	10	39-157/37
60-57-1	Dieldrin	ND		0.333	0.30	90	0.333	0.33	99	10	42-161/36
72-54-8	4,4'-DDD	ND		0.333	0.30	90	0.333	0.31	93	3	40-161/36
72-55-9	4,4'-DDE	ND		0.333	0.28	84	0.333	0.31	93	10	34-158/36
50-29-3	4,4'-DDT	ND		0.333	0.27	81	0.333	0.29	87	7	41-173/33
72-20-8	Endrin	ND		0.333	0.31	93	0.333	0.34	102	9	44-166/35
1031-07-8	Endosulfan sulfate	ND		0.333	0.33	99	0.333	0.36	108	9	46-161/36
7421-93-4	Endrin aldehyde	ND		0.333	0.32	96	0.333	0.37	111	14	34-149/36
53494-70-5	Endrin ketone	ND		0.333	0.32	96	0.333	0.35	105	9	44-157/36
959-98-8	Endosulfan-I	ND		0.333	0.30	90	0.333	0.33	99	10	43-154/35
33213-65-9	Endosulfan-II	ND		0.333	0.31	93	0.333	0.33	99	6	40-162/35
76-44-8	Heptachlor	ND		0.333	0.29	87	0.333	0.31	93	7	33-153/37
1024-57-3	Heptachlor epoxide	ND		0.333	0.30	90	0.333	0.32	96	6	45-154/37
72-43-5	Methoxychlor	ND		0.333	0.27	81	0.333	0.30	90	11	48-169/32
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19914-5	Limits
877-09-8	Tetrachloro-m-xylene	76%	77%	81%	26-132%
877-09-8	Tetrachloro-m-xylene	73%	74%	80%	26-132%
2051-24-3	Decachlorobiphenyl	66%	65%	37%	10-118%
2051-24-3	Decachlorobiphenyl	72%	71%	41%	10-118%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	51088787	1.57	138746171	1.30
Upper Limit [a]	102177574	2.07	277492342	1.80
Lower Limit [b]	25544394	1.07	69373086	0.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93785-MB1	50509270	1.57	142103186	1.30
OP93785-BS1	52624090	1.57	144699944	1.30
OP93786-MB1	50599515	1.57	143954617	1.30
OP93786-BS1	53749594	1.57	154280230	1.30
JC19914-5	51563870	1.57	145239242	1.30
JC19914-4	53722666	1.57	148842976	1.30
OP93785-MS	53976816	1.57	148039772	1.30
OP93785-MSD	52319683	1.57	144594478	1.30
OP93786-MS	53969794	1.57	147220787	1.30
OP93786-MSD	55629057	1.57	152605955	1.30

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(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.

DDT/Endrin Breakdown Check

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G987-DDT
Lab File ID: 6G34128.D
Instrument ID: GC6G
Injection Date: 04/14/16
Injection Time: 15:16

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1311683	538829
4,4'-DDE	1018177	323855
4,4'-DDT	241695475	69919881
DDT Breakdown [a]	1 %	1.2 %
Endrin aldehyde	837149	354536
Endrin ketone	4035110	1631820
Endrin	120930300	37292116
Endrin Breakdown [b]	3.9 %	5.1 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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
G6G987-IC987	6G34130.D	04/14/16	15:49	00:33	Initial cal 1
G6G987-IC987	6G34131.D	04/14/16	16:05	00:49	Initial cal 2
G6G987-IC987	6G34132.D	04/14/16	16:22	01:06	Initial cal 5
G6G987-IC987	6G34133.D	04/14/16	16:38	01:22	Initial cal 10
G6G987-ICC987	6G34134.D	04/14/16	16:55	01:39	Initial cal 25
G6G987-IC987	6G34135.D	04/14/16	17:11	01:55	Initial cal 50
G6G987-IC987	6G34136.D	04/14/16	17:27	02:11	Initial cal 75
G6G987-IC987	6G34137.D	04/14/16	17:44	02:28	Initial cal 100
G6G987-IC987	6G34138.D	04/14/16	18:00	02:44	Initial cal 500
G6G987-IC987	6G34139.D	04/14/16	18:17	03:01	Initial cal 500
G6G987-ICV987	6G34140.D	04/14/16	18:33	03:17	Initial cal verification 25
G6G987-ICV987	6G34141.D	04/14/16	18:49	03:33	Initial cal verification 25
G6G987-ICV987	6G34142.D	04/14/16	19:06	03:50	Initial cal verification 500
G6G987-ICV987	6G34143.D	04/14/16	19:22	04:06	Initial cal verification 500
G6G988-CC987	6G34144.D	04/14/16	19:39	04:23	Continuing cal 25
OP93053-MB1	6G34149.D	04/14/16	20:12	04:56	Method Blank
OP93053-BS1	6G34150.D	04/14/16	20:28	05:12	Blank Spike
ZZZZZZ	6G34148.D	04/14/16	21:17	06:01	(unrelated sample)
JC18127-1	6G34151.D	04/14/16	21:34	06:18	(used for QC only; not part of job JC19914)
OP93053-MS	6G34152.D	04/14/16	21:50	06:34	Matrix Spike
OP93053-MSD	6G34153.D	04/14/16	22:06	06:50	Matrix Spike Duplicate
ZZZZZZ	6G34154.D	04/14/16	22:23	07:07	(unrelated sample)
ZZZZZZ	6G34155.D	04/14/16	22:39	07:23	(unrelated sample)
ZZZZZZ	6G34156.D	04/14/16	22:56	07:40	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	G6G987-DDT	**Injection Date:**	04/14/16
Lab File ID:	6G34128.D	**Injection Time:**	15:16
Instrument ID:	GC6G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6G34157.D	04/14/16	23:12	07:56	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G1008-DDT
Lab File ID: 6G34927.D
Instrument ID: GC6G
Injection Date: 05/11/16
Injection Time: 09:15

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	873406	961881
4,4'-DDE	570334	253399
4,4'-DDT	236498826	79783428
DDT Breakdown [a]	0.6 %	1.5 %
Endrin aldehyde	1258397	411476
Endrin ketone	5523776	2427174
Endrin	129695724	47376436
Endrin Breakdown [b]	5 %	5.7 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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
G6G1008-CC987	6G34928.D	05/11/16	09:31	00:16	Continuing cal 25
OP93803-MB1	6G34930.D	05/11/16	10:04	00:49	Method Blank
OP93803-BS1	6G34931.D	05/11/16	10:20	01:05	Blank Spike
ZZZZZZ	6G34934.D	05/11/16	11:10	01:55	(unrelated sample)
G6G1008-CC987	6G34935.D	05/11/16	11:37	02:22	Continuing cal 50
OP93785-MB1	6G34937.D	05/11/16	12:10	02:55	Method Blank
OP93785-BS1	6G34938.D	05/11/16	12:26	03:11	Blank Spike
OP93786-MB1	6G34939.D	05/11/16	12:43	03:28	Method Blank
OP93786-BS1	6G34940.D	05/11/16	12:59	03:44	Blank Spike
JC19914-5	6G34941.D	05/11/16	13:15	04:00	S-41SD
JC19914-4	6G34942.D	05/11/16	13:32	04:17	S-41S
OP93785-MS	6G34943.D	05/11/16	13:48	04:33	Matrix Spike
OP93785-MSD	6G34944.D	05/11/16	14:05	04:50	Matrix Spike Duplicate
OP93786-MS	6G34945.D	05/11/16	14:21	05:06	Matrix Spike
OP93786-MSD	6G34946.D	05/11/16	14:37	05:22	Matrix Spike Duplicate

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93785-BS1	**Injection Date:**	05/11/16
Lab File ID:	6G34938.D	**Injection Time:**	12:26
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.67	3.67	0.20		ug/l	5.1
Aldrin	2 [a]	4.69	4.69	0.19		ug/l	
alpha-BHC	1	2.48	2.48	0.22		ug/l	4.7
alpha-BHC	2 [a]	3.16	3.16	0.21		ug/l	
beta-BHC	1	2.88	2.88	0.22		ug/l	9.5
beta-BHC	2 [a]	3.70	3.70	0.20		ug/l	
delta-BHC	1	3.07	3.07	0.22		ug/l	4.7
delta-BHC	2 [a]	4.12	4.12	0.21		ug/l	
gamma-BHC (Lindane)	1	2.80	2.80	0.22		ug/l	4.7
gamma-BHC (Lindane)	2 [a]	3.61	3.61	0.21		ug/l	
alpha-Chlordane	1	4.78	4.78	0.22		ug/l	4.7
alpha-Chlordane	2 [a]	6.12	6.12	0.21		ug/l	
gamma-Chlordane	1	4.59	4.60	0.22		ug/l	4.7
gamma-Chlordane	2 [a]	5.87	5.87	0.21		ug/l	
Dieldrin	1	5.30	5.30	0.23		ug/l	4.4
Dieldrin	2 [a]	6.68	6.69	0.22		ug/l	
4,4'-DDD	1 [a]	5.80	5.80	0.20		ug/l	4.9
4,4'-DDD	2	7.45	7.45	0.21		ug/l	
4,4'-DDE	1	4.91	4.91	0.20		ug/l	10.5
4,4'-DDE	2 [a]	6.42	6.42	0.18		ug/l	
4,4'-DDT	1	6.24	6.24	0.19		ug/l	0.0
4,4'-DDT	2 [a]	8.03	8.03	0.19		ug/l	
Endrin	1	5.64	5.64	0.23		ug/l	4.4
Endrin	2 [a]	7.23	7.23	0.22		ug/l	
Endosulfan sulfate	1	7.39	7.39	0.24		ug/l	4.3
Endosulfan sulfate	2 [a]	8.75	8.75	0.23		ug/l	
Endrin aldehyde	1 [a]	6.65	6.65	0.23		ug/l	0.0
Endrin aldehyde	2	8.24	8.24	0.23		ug/l	
Endrin ketone	1	7.86	7.86	0.24		ug/l	4.3
Endrin ketone	2 [a]	9.80	9.80	0.23		ug/l	
Endosulfan-I	1	4.96	4.96	0.23		ug/l	9.1
Endosulfan-I	2 [a]	6.22	6.22	0.21		ug/l	
Endosulfan-II	1	5.98	5.98	0.22		ug/l	4.7
Endosulfan-II	2 [a]	7.61	7.61	0.21		ug/l	
Heptachlor	1	3.32	3.32	0.20		ug/l	5.1
Heptachlor	2 [a]	4.22	4.22	0.19		ug/l	
Heptachlor epoxide	1	4.42	4.42	0.23		ug/l	4.4
Heptachlor epoxide	2 [a]	5.57	5.57	0.22		ug/l	
Methoxychlor	1	7.11	7.11	0.20		ug/l	0.0
Methoxychlor	2 [a]	9.41	9.40	0.20		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93786-BS1	**Injection Date:**	05/11/16
Lab File ID:	6G34940.D	**Injection Time:**	12:59
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.68	3.67	0.14		ug/l	0.0
Aldrin	2	4.69	4.69	0.14		ug/l	
alpha-BHC	1	2.48	2.48	0.14		ug/l	0.0
alpha-BHC	2 [a]	3.16	3.16	0.14		ug/l	
beta-BHC	1	2.88	2.88	0.15		ug/l	6.9
beta-BHC	2 [a]	3.71	3.70	0.14		ug/l	
delta-BHC	1	3.07	3.07	0.15		ug/l	0.0
delta-BHC	2 [a]	4.12	4.12	0.15		ug/l	
gamma-BHC (Lindane)	1	2.80	2.80	0.15		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	3.61	3.61	0.15		ug/l	
alpha-Chlordane	1	4.78	4.78	0.15		ug/l	0.0
alpha-Chlordane	2 [a]	6.12	6.12	0.15		ug/l	
gamma-Chlordane	1	4.60	4.60	0.15		ug/l	0.0
gamma-Chlordane	2 [a]	5.87	5.87	0.15		ug/l	
Dieldrin	1	5.30	5.30	0.15		ug/l	0.0
Dieldrin	2 [a]	6.68	6.69	0.15		ug/l	
4,4'-DDD	1	5.80	5.80	0.16		ug/l	6.5
4,4'-DDD	2 [a]	7.45	7.45	0.15		ug/l	
4,4'-DDE	1	4.91	4.91	0.14		ug/l	7.4
4,4'-DDE	2 [a]	6.42	6.42	0.13		ug/l	
4,4'-DDT	1 [a]	6.25	6.24	0.14		ug/l	0.0
4,4'-DDT	2	8.03	8.03	0.14		ug/l	
Endrin	1	5.64	5.64	0.16		ug/l	0.0
Endrin	2 [a]	7.23	7.23	0.16		ug/l	
Endosulfan sulfate	1	7.39	7.39	0.17		ug/l	6.1
Endosulfan sulfate	2 [a]	8.75	8.75	0.16		ug/l	
Endrin aldehyde	1	6.65	6.65	0.17		ug/l	6.1
Endrin aldehyde	2 [a]	8.24	8.24	0.16		ug/l	
Endrin ketone	1 [a]	7.86	7.86	0.16		ug/l	0.0
Endrin ketone	2	9.80	9.80	0.16		ug/l	
Endosulfan-I	1	4.96	4.96	0.15		ug/l	0.0
Endosulfan-I	2 [a]	6.22	6.22	0.15		ug/l	
Endosulfan-II	1	5.98	5.98	0.16		ug/l	6.5
Endosulfan-II	2 [a]	7.61	7.61	0.15		ug/l	
Heptachlor	1	3.32	3.32	0.14		ug/l	0.0
Heptachlor	2 [a]	4.22	4.22	0.14		ug/l	
Heptachlor epoxide	1	4.42	4.42	0.15		ug/l	0.0
Heptachlor epoxide	2 [a]	5.57	5.57	0.15		ug/l	
Methoxychlor	1 [a]	7.11	7.11	0.14		ug/l	6.9
Methoxychlor	2	9.40	9.40	0.15		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93785-MS	**Injection Date:**	05/11/16
Lab File ID:	6G34943.D	**Injection Time:**	13:48
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.68	3.67	0.41		ug/l	2.5
Aldrin	2	4.69	4.69	0.40		ug/l	
alpha-BHC	1 [a]	2.49	2.48	0.43		ug/l	4.8
alpha-BHC	2	3.16	3.16	0.41		ug/l	
beta-BHC	1 [a]	2.88	2.88	0.44		ug/l	12.0
beta-BHC	2	3.71	3.70	0.39		ug/l	
delta-BHC	1 [a]	3.08	3.07	0.42		ug/l	4.9
delta-BHC	2	4.12	4.12	0.40		ug/l	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	0.43		ug/l	2.4
gamma-BHC (Lindane)	2	3.61	3.61	0.42		ug/l	
alpha-Chlordane	1 [a]	4.78	4.78	0.45		ug/l	4.5
alpha-Chlordane	2	6.12	6.12	0.43		ug/l	
gamma-Chlordane	1 [a]	4.60	4.60	0.46		ug/l	9.1
gamma-Chlordane	2	5.88	5.87	0.42		ug/l	
Dieldrin	1 [a]	5.30	5.30	0.46		ug/l	6.7
Dieldrin	2	6.68	6.69	0.43		ug/l	
4,4'-DDD	1 [a]	5.80	5.80	0.45		ug/l	4.5
4,4'-DDD	2	7.45	7.45	0.43		ug/l	
4,4'-DDE	1 [a]	4.91	4.91	0.41		ug/l	13.0
4,4'-DDE	2	6.42	6.42	0.36		ug/l	
4,4'-DDT	1 [a]	6.25	6.24	0.38		ug/l	0.0
4,4'-DDT	2	8.03	8.03	0.38		ug/l	
Endrin	1 [a]	5.64	5.64	0.47		ug/l	6.6
Endrin	2	7.23	7.23	0.44		ug/l	
Endosulfan sulfate	1 [a]	7.39	7.39	0.49		ug/l	8.5
Endosulfan sulfate	2	8.75	8.75	0.45		ug/l	
Endrin aldehyde	1 [a]	6.65	6.65	0.46		ug/l	0.0
Endrin aldehyde	2	8.24	8.24	0.46		ug/l	
Endrin ketone	1 [a]	7.86	7.86	0.49		ug/l	6.3
Endrin ketone	2	9.80	9.80	0.46		ug/l	
Endosulfan-I	1 [a]	4.96	4.96	0.46		ug/l	9.1
Endosulfan-I	2	6.22	6.22	0.42		ug/l	
Endosulfan-II	1 [a]	5.98	5.98	0.46		ug/l	9.1
Endosulfan-II	2	7.61	7.61	0.42		ug/l	
Heptachlor	1 [a]	3.32	3.32	0.41		ug/l	7.6
Heptachlor	2	4.22	4.22	0.38		ug/l	
Heptachlor epoxide	1 [a]	4.42	4.42	0.46		ug/l	6.7
Heptachlor epoxide	2	5.57	5.57	0.43		ug/l	
Methoxychlor	1 [a]	7.11	7.11	0.41		ug/l	2.5
Methoxychlor	2	9.41	9.40	0.40		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93786-MS	**Injection Date:**	05/11/16
Lab File ID:	6G34945.D	**Injection Time:**	14:21
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.67	3.67	0.29		ug/l	3.5
Aldrin	2	4.69	4.69	0.28		ug/l	
alpha-BHC	1 [a]	2.48	2.48	0.29		ug/l	7.1
alpha-BHC	2	3.16	3.16	0.27		ug/l	
beta-BHC	1 [a]	2.88	2.88	0.29		ug/l	10.9
beta-BHC	2	3.70	3.70	0.26		ug/l	
delta-BHC	1 [a]	3.07	3.07	0.30		ug/l	6.9
delta-BHC	2	4.12	4.12	0.28		ug/l	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	0.29		ug/l	3.5
gamma-BHC (Lindane)	2	3.61	3.61	0.28		ug/l	
alpha-Chlordane	1 [a]	4.78	4.78	0.30		ug/l	6.9
alpha-Chlordane	2	6.12	6.12	0.28		ug/l	
gamma-Chlordane	1 [a]	4.59	4.60	0.30		ug/l	6.9
gamma-Chlordane	2	5.87	5.87	0.28		ug/l	
Dieldrin	1 [a]	5.30	5.30	0.30		ug/l	6.9
Dieldrin	2	6.68	6.69	0.28		ug/l	
4,4'-DDD	1 [a]	5.80	5.80	0.30		ug/l	3.4
4,4'-DDD	2	7.45	7.45	0.29		ug/l	
4,4'-DDE	1 [a]	4.91	4.91	0.28		ug/l	15.4
4,4'-DDE	2	6.42	6.42	0.24		ug/l	
4,4'-DDT	1 [a]	6.24	6.24	0.27		ug/l	3.8
4,4'-DDT	2	8.03	8.03	0.26		ug/l	
Endrin	1 [a]	5.64	5.64	0.31		ug/l	6.7
Endrin	2	7.23	7.23	0.29		ug/l	
Endosulfan sulfate	1 [a]	7.39	7.39	0.33		ug/l	9.5
Endosulfan sulfate	2	8.75	8.75	0.30		ug/l	
Endrin aldehyde	1 [a]	6.65	6.65	0.32		ug/l	9.8
Endrin aldehyde	2	8.24	8.24	0.29		ug/l	
Endrin ketone	1 [a]	7.86	7.86	0.32		ug/l	3.2
Endrin ketone	2	9.80	9.80	0.31		ug/l	
Endosulfan-I	1 [a]	4.96	4.96	0.30		ug/l	6.9
Endosulfan-I	2	6.22	6.22	0.28		ug/l	
Endosulfan-II	1 [a]	5.98	5.98	0.31		ug/l	10.2
Endosulfan-II	2	7.61	7.61	0.28		ug/l	
Heptachlor	1 [a]	3.32	3.32	0.29		ug/l	10.9
Heptachlor	2	4.22	4.22	0.26		ug/l	
Heptachlor epoxide	1 [a]	4.42	4.42	0.30		ug/l	6.9
Heptachlor epoxide	2	5.57	5.57	0.28		ug/l	
Methoxychlor	1 [a]	7.11	7.11	0.27		ug/l	3.6
Methoxychlor	2	9.40	9.40	0.28		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93785-MSD	**Injection Date:**	05/11/16
Lab File ID:	6G34944.D	**Injection Time:**	14:05
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.67	3.67	0.61		ug/l	5.0
Aldrin	2	4.69	4.69	0.58		ug/l	
alpha-BHC	1 [a]	2.48	2.48	0.63		ug/l	4.9
alpha-BHC	2	3.16	3.16	0.60		ug/l	
beta-BHC	1 [a]	2.88	2.88	0.61		ug/l	8.5
beta-BHC	2	3.71	3.70	0.56		ug/l	
delta-BHC	1 [a]	3.07	3.07	0.64		ug/l	9.8
delta-BHC	2	4.12	4.12	0.58		ug/l	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	0.63		ug/l	4.9
gamma-BHC (Lindane)	2	3.61	3.61	0.60		ug/l	
alpha-Chlordane	1 [a]	4.78	4.78	0.64		ug/l	6.5
alpha-Chlordane	2	6.12	6.12	0.60		ug/l	
gamma-Chlordane	1 [a]	4.60	4.60	0.65		ug/l	6.3
gamma-Chlordane	2	5.87	5.87	0.61		ug/l	
Dieldrin	1 [a]	5.30	5.30	0.65		ug/l	8.0
Dieldrin	2	6.69	6.69	0.60		ug/l	
4,4'-DDD	1 [a]	5.80	5.80	0.63		ug/l	1.6
4,4'-DDD	2	7.45	7.45	0.62		ug/l	
4,4'-DDE	1 [a]	4.91	4.91	0.58		ug/l	14.8
4,4'-DDE	2	6.42	6.42	0.50		ug/l	
4,4'-DDT	1 [a]	6.24	6.24	0.57		ug/l	3.6
4,4'-DDT	2	8.03	8.03	0.55		ug/l	
Endrin	1 [a]	5.64	5.64	0.66		ug/l	6.3
Endrin	2	7.23	7.23	0.62		ug/l	
Endosulfan sulfate	1 [a]	7.39	7.39	0.68		ug/l	7.6
Endosulfan sulfate	2	8.75	8.75	0.63		ug/l	
Endrin aldehyde	1 [a]	6.65	6.65	0.68		ug/l	6.1
Endrin aldehyde	2	8.24	8.24	0.64		ug/l	
Endrin ketone	1 [a]	7.86	7.86	0.67		ug/l	4.6
Endrin ketone	2	9.80	9.80	0.64		ug/l	
Endosulfan-I	1 [a]	4.96	4.96	0.65		ug/l	9.7
Endosulfan-I	2	6.21	6.22	0.59		ug/l	
Endosulfan-II	1 [a]	5.98	5.98	0.65		ug/l	4.7
Endosulfan-II	2	7.61	7.61	0.62		ug/l	
Heptachlor	1 [a]	3.32	3.32	0.60		ug/l	6.9
Heptachlor	2	4.22	4.22	0.56		ug/l	
Heptachlor epoxide	1 [a]	4.42	4.42	0.65		ug/l	8.0
Heptachlor epoxide	2	5.57	5.57	0.60		ug/l	
Methoxychlor	1 [a]	7.11	7.11	0.58		ug/l	3.5
Methoxychlor	2	9.41	9.40	0.56		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93786-MSD	**Injection Date:**	05/11/16
Lab File ID:	6G34946.D	**Injection Time:**	14:37
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.67	3.67	0.31		ug/l	3.3
Aldrin	2	4.69	4.69	0.30		ug/l	
alpha-BHC	1 [a]	2.48	2.48	0.31		ug/l	6.7
alpha-BHC	2	3.16	3.16	0.29		ug/l	
beta-BHC	1 [a]	2.88	2.88	0.32		ug/l	9.8
beta-BHC	2	3.70	3.70	0.29		ug/l	
delta-BHC	1 [a]	3.07	3.07	0.33		ug/l	6.3
delta-BHC	2	4.12	4.12	0.31		ug/l	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	0.31		ug/l	3.3
gamma-BHC (Lindane)	2	3.61	3.61	0.30		ug/l	
alpha-Chlordane	1 [a]	4.78	4.78	0.33		ug/l	6.3
alpha-Chlordane	2	6.12	6.12	0.31		ug/l	
gamma-Chlordane	1 [a]	4.59	4.60	0.33		ug/l	6.3
gamma-Chlordane	2	5.87	5.87	0.31		ug/l	
Dieldrin	1 [a]	5.30	5.30	0.33		ug/l	6.3
Dieldrin	2	6.69	6.69	0.31		ug/l	
4,4'-DDD	1 [a]	5.80	5.80	0.31		ug/l	3.2
4,4'-DDD	2	7.45	7.45	0.32		ug/l	
4,4'-DDE	1 [a]	4.91	4.91	0.31		ug/l	13.8
4,4'-DDE	2	6.42	6.42	0.27		ug/l	
4,4'-DDT	1 [a]	6.24	6.24	0.29		ug/l	0.0
4,4'-DDT	2	8.03	8.03	0.29		ug/l	
Endrin	1 [a]	5.64	5.64	0.34		ug/l	6.1
Endrin	2	7.23	7.23	0.32		ug/l	
Endosulfan sulfate	1 [a]	7.39	7.39	0.36		ug/l	5.7
Endosulfan sulfate	2	8.75	8.75	0.34		ug/l	
Endrin aldehyde	1 [a]	6.65	6.65	0.37		ug/l	11.4
Endrin aldehyde	2	8.24	8.24	0.33		ug/l	
Endrin ketone	1 [a]	7.86	7.86	0.35		ug/l	2.9
Endrin ketone	2	9.80	9.80	0.34		ug/l	
Endosulfan-I	1 [a]	4.96	4.96	0.33		ug/l	9.5
Endosulfan-I	2	6.22	6.22	0.30		ug/l	
Endosulfan-II	1 [a]	5.98	5.98	0.33		ug/l	3.1
Endosulfan-II	2	7.61	7.61	0.32		ug/l	
Heptachlor	1 [a]	3.32	3.32	0.31		ug/l	10.2
Heptachlor	2	4.22	4.22	0.28		ug/l	
Heptachlor epoxide	1 [a]	4.42	4.42	0.32		ug/l	3.2
Heptachlor epoxide	2	5.57	5.57	0.31		ug/l	
Methoxychlor	1 [a]	7.11	7.11	0.30		ug/l	3.3
Methoxychlor	2	9.40	9.40	0.31		ug/l	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8081B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC19914-4	6G34942.D	53	52	85	93
JC19914-5	6G34941.D	81	80	37	41
OP93785-BS1	6G34938.D	63	62	70	78
OP93785-MB1	6G34937.D	71	71	79	89
OP93785-MS	6G34943.D	62	60	82	90
OP93785-MSD	6G34944.D	94	90	111	122* [c]
OP93786-BS1	6G34940.D	74	75	85	98
OP93786-MB1	6G34939.D	73	74	87	99
OP93786-MS	6G34945.D	76	73	66	72
OP93786-MSD	6G34946.D	77	74	65	71

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	26-132%
S2 = Decachlorobiphenyl	10-118%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside the QC limits.

GC Surrogate Retention Time Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1008-CC987	**Injection Date:**	05/11/16
Lab File ID:	6G34935.D	**Injection Time:**	11:37
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.97	2.46	9.89	11.74

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93785-MB1	6G34937.D	05/11/16	12:10	1.97	2.46	9.89	11.74
OP93785-BS1	6G34938.D	05/11/16	12:26	1.97	2.46	9.89	11.74
OP93786-MB1	6G34939.D	05/11/16	12:43	1.97	2.46	9.89	11.74
OP93786-BS1	6G34940.D	05/11/16	12:59	1.97	2.46	9.89	11.74
JC19914-5	6G34941.D	05/11/16	13:15	1.97	2.46	9.89	11.74
JC19914-4	6G34942.D	05/11/16	13:32	1.97	2.46	9.90	11.74
OP93785-MS	6G34943.D	05/11/16	13:48	1.97	2.46	9.90	11.74
OP93785-MSD	6G34944.D	05/11/16	14:05	1.97	2.46	9.89	11.74
OP93786-MS	6G34945.D	05/11/16	14:21	1.97	2.46	9.89	11.74
OP93786-MSD	6G34946.D	05/11/16	14:37	1.97	2.46	9.89	11.74

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICC987
Lab FileID: 6G34134.D

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration

Calibration Files
2 =6g34131.D 5 =6g34132.D 10 =6g34133.D 25 =6g34134.D
50 =6g34135.D 100 =6g34137.D 1 =6g34130.D 75 =6g34136.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.920	0.893	0.885	0.883	0.900	0.945	0.988	0.918	0.916	3.88
3) alpha-BHC	1.041	1.037	1.096	1.173	1.280	1.407	1.071	1.346	1.181	12.28
4) gamma-BHC	1.002	0.996	1.038	1.090	1.166	1.262	1.029	1.217	1.100	9.33
5) Heptachlor	1.052	1.032	1.055	1.077	1.131	1.203	1.115	1.169	1.104	5.51
6) beta-BHC	0.555	0.546	0.532	0.528	0.532	0.540	0.550	0.535	0.540	1.79
7) delta-BHC	0.896	0.903	0.936	1.033	1.124	1.196	0.966	1.148	1.025	11.50
8) Aldrin	0.952	0.928	0.961	0.994	1.057	1.137	1.025	1.103	1.020	7.35
9) Heptachlor E	0.922	0.908	0.919	0.932	0.970	1.018	0.971	0.997	0.955	4.20
10) gamma-Chlord	0.914	0.896	0.917	0.938	0.983	1.040	0.985	1.015	0.961	5.43
11) alpha-Chlord	0.920	0.898	0.915	0.931	0.965	1.015	0.991	0.993	0.954	4.55
12) Endosulfan I	0.926	0.877	0.890	0.913	0.948	1.002	0.991	0.984	0.941	5.04
13) 4,4'-DDE	0.732	0.713	0.722	0.765	0.825	0.896	0.803	0.865	0.790	8.66
14) Dieldrin	0.889	0.851	0.868	0.905	0.956	1.024	0.957	0.998	0.931	6.71
15) Endrin	0.811	0.786	0.801	0.823	0.865	0.916	0.855	0.897	0.844	5.52
16) 4,4'-DDD	0.631	0.601	0.607	0.633	0.698	0.743	0.712	0.720	0.668	8.39
17) Endosulfan I	0.801	0.777	0.772	0.794	0.852	0.892	0.907	0.870	0.833	6.42
18) 4,4'-DDT	0.668	0.653	0.659	0.706	0.746	0.825	0.778	0.779	0.727	8.90
19) Endrin Aldeh	0.645	0.641	0.650	0.655	0.673	0.724	0.753	0.690	0.679	6.00
20) Endosulfan S	0.718	0.683	0.687	0.703	0.726	0.763	0.827	0.747	0.732	6.48
21) Methoxychlor	0.412	0.397	0.403	0.433	0.436	0.441	0.521	0.440	0.436	8.90
22) Mirex	0.766	0.748	0.732	0.730	0.719	0.716	0.838	0.719	0.746	5.48
23) Endrin Keton	0.823	0.800	0.805	0.855	0.892	0.929	0.943	0.913	0.870	6.53
24) Decachlorobi	0.831	0.802	0.796	0.774	0.761	0.757	0.894	0.759	0.797	5.90
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.014				0.014	0.00
27) Toxaphene{B}					0.029				0.029	0.00
28) Toxaphene{C}					0.043				0.043	0.00
29) Toxaphene{D}					0.024				0.024	0.00
30) Toxaphene{E}					0.027				0.027	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.031				0.031	0.00
33) Chlordane {B					0.041				0.041	0.00
34) Chlordane {C					0.131				0.131	0.00
35) Chlordane {D					0.206				0.206	0.00
36) Chlordane {E					0.032				0.032	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.962	0.918	0.884	0.869	0.864	0.884	0.972	0.874	0.903	4.72
3) alpha-BHC	1.139	1.104	1.107	1.136	1.192	1.282	1.217	1.238	1.177	5.54
4) gamma-BHC	1.107	1.056	1.044	1.060	1.100	1.161	1.155	1.132	1.102	4.12

Initial Calibration Summary

Job Number: JC19914 **Sample:** G6G987-ICC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34134.D
Project: BMSMC, Building 5 Area, PR

5)	Heptachlor	1.142	1.066	1.070	1.043	1.075	1.103	1.323	1.088	1.114	8.03
6)	beta-BHC	0.543	0.541	0.528	0.509	0.526	0.522	0.606	0.521	0.537	5.56
7)	delta-BHC	1.023	0.939	0.958	0.987	1.031	1.094	1.114	1.069	1.027	6.16
8)	Aldrin	1.041	1.030	0.993	0.982	0.993	1.035	1.198	1.013	1.036	6.67
9)	Heptachlor E	1.044	0.951	0.948	0.930	0.925	0.945	1.047	0.931	0.965	5.20
10)	gamma-Chlord	1.015	0.931	0.917	0.894	0.901	0.924	1.056	0.910	0.944	6.26
11)	alpha-Chlord	0.972	0.946	0.913	0.892	0.890	0.904	1.087	0.895	0.937	7.17
12)	Endosulfan I	0.942	0.904	0.893	0.857	0.858	0.871	1.096	0.864	0.911	8.81
13)	4,4'-DDE	0.845	0.758	0.727	0.711	0.812	0.821	0.992	0.802	0.808	10.85
14)	Dieldrin	0.988	0.930	0.891	0.872	0.881	0.910	1.076	0.893	0.930	7.47
15)	Endrin	0.903	0.883	0.801	0.787	0.798	0.819	0.963	0.809	0.845	7.50
16)	4,4'-DDD	0.707	0.720	0.707	0.681	0.703	0.708	0.651	0.704	0.698	3.12
17)	Endosulfan I	0.871	0.816	0.790	0.768	0.803	0.815	0.941	0.809	0.827	6.65
18)	4,4'-DDT	0.651	0.601	0.576	0.597	0.625	0.656	0.717	0.642	0.633	6.98
19)	Endrin Aldeh	0.691	0.653	0.648	0.635	0.643	0.648	0.798	0.646	0.670	8.12
20)	Endosulfan S	0.801	0.702	0.706	0.676	0.679	0.686	0.889	0.681	0.727	10.56
21)	Methoxychlor	0.340	0.357	0.338	0.341	0.351	0.359	0.349	0.356	0.349	2.33
22)	Mirex	0.784	0.734	0.702	0.658	0.640	0.626	0.952	0.634	0.716	15.36
23)	Endrin Keton	0.917	0.840	0.803	0.789	0.803	0.828	1.006	0.816	0.850	8.75
24)	Decachlorobi	0.777	0.577	0.680	0.677	0.666	0.657	0.755	0.645	0.679	9.24

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.015	0.015	0.00
27)	Toxaphene{B}	0.026	0.026	0.00
28)	Toxaphene{C}	0.039	0.039	0.00
29)	Toxaphene{D}	0.026	0.026	0.00
30)	Toxaphene{E}	0.022	0.022	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.031	0.031	0.00
33)	Chlordane {B	0.038	0.038	0.00
34)	Chlordane {C	0.113	0.113	0.00
35)	Chlordane {D	0.189	0.189	0.00
36)	Chlordane {E	0.030	0.030	0.00

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

6PST987.M Mon Apr 18 11:29:41 2016

10.9.1 10

Initial Calibration Verification

Job Number: JC19914 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34140.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\987\6g34140.D\ECD1A.CH     Vial: 13
Signal #2 : C:\msdchem\1\DATA\987\6g34140.D\ECD2B.CH
Acq On    : 14 Apr 2016   6:33 pm                    Operator: dharas
Sample    : icv987-25                                Inst    : HP G1530A
Misc      : op92908,g6g987,6.8,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene	0.916	0.874	4.6	98	0.00	1.96- 2.02
3	A	alpha-BHC	1.181	1.114	5.7	94	0.00	2.47- 2.53
4	MA	gamma-BHC	1.100	1.046	4.9	95	0.00	2.79- 2.85
5	MA	Heptachlor	1.104	1.038	6.0	96	0.00	3.31- 3.37
6	B	beta-BHC	0.540	0.507	6.1	95	0.00	2.87- 2.93
7	B	delta-BHC	1.025	1.045	-2.0	101	0.00	3.06- 3.12
8	MB	Aldrin	1.020	0.950	6.9	95	0.00	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.899	5.9	96	0.00	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.924	3.9	98	0.00	4.59- 4.65
11	B	alpha-Chlordane	0.954	0.904	5.2	97	0.00	4.77- 4.83
12	A	Endosulfan I	0.941	0.877	6.8	95	0.00	4.95- 5.01
13	B	4,4'-DDE	0.790	0.718	9.1	93	0.00	4.90- 4.96
14	MA	Dieldrin	0.931	0.881	5.4	97	0.00	5.30- 5.36
15	MA	Endrin	0.844	0.820	2.8	99	-0.01	5.64- 5.70
16	A	4,4'-DDD	0.668	0.637	4.6	100	-0.01	5.79- 5.85
17	B	Endosulfan II	0.833	0.789	5.3	99	0.00	5.98- 6.04
18	MA	4,4'-DDT	0.727	0.694	4.5	98	-0.01	6.24- 6.30
19	B	Endrin Aldehyde	0.679	0.694	-2.2	105	-0.01	6.65- 6.71
20	B	Endosulfan Sulfate	0.732	0.724	1.1	102	-0.01	7.39- 7.45
21	A	Methoxychlor	0.436	0.413	5.3	95	-0.01	7.11- 7.17
22		Mirex		----------NA----------				
23	B	Endrin Ketone	0.870	0.850	2.3	99	-0.01	7.87- 7.93
24	SAB	Decachlorobiphenyl	0.797	0.781	2.0	100	-0.01	9.89- 9.95
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.28- 1.34
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.28- 1.34
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.2 10

Initial Calibration Verification

Job Number: JC19914 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34140.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.865	4.2	99	0.00	2.45- 2.51
3	A	alpha-BHC	1.177	1.083	8.0	95	0.00	3.15- 3.21
4	MA	gamma-BHC	1.102	1.014	8.0	95	0.00	3.61- 3.67
5	MA	Heptachlor	1.114	1.023	8.2	98	0.00	4.21- 4.27
6	B	beta-BHC	0.537	0.489	8.9	96	0.00	3.70- 3.76
7	B	delta-BHC	1.027	0.987	3.9	100	0.00	4.12- 4.18
8	MB	Aldrin	1.036	0.940	9.3	96	0.00	4.69- 4.75
9	B	Heptachlor Epoxide	0.965	0.896	7.2	96	-0.01	5.57- 5.63
10	B	gamma-Chlordane	0.944	0.878	7.0	98	-0.01	5.88- 5.94
11	B	alpha-Chlordane	0.937	0.862	8.0	96	-0.01	6.12- 6.18
12	A	Endosulfan I	0.911	0.822	9.8	96	-0.01	6.22- 6.28
13	B	4,4'-DDE	0.808	0.777	3.8	109	-0.01	6.42- 6.48
14	MA	Dieldrin	0.930	0.848	8.8	97	-0.01	6.69- 6.75
15	MA	Endrin	0.845	0.771	8.8	98	-0.01	7.23- 7.29
16	A	4,4'-DDD	0.698	0.676	3.2	99	-0.01	7.46- 7.52
17	B	Endosulfan II	0.827	0.783	5.3	102	-0.01	7.62- 7.68
18	MA	4,4'-DDT	0.633	0.574	9.3	96	-0.01	8.04- 8.10
19	B	Endrin Aldehyde	0.670	0.646	3.6	101	-0.01	8.25- 8.31
20	B	Endosulfan Sulfate	0.727	0.678	6.7	100	-0.01	8.76- 8.82
21	A	Methoxychlor	0.349	0.337	3.4	99	-0.02	9.41- 9.47
22		Mirex		----------NA----------				
23	B	Endrin Ketone	0.850	0.785	7.6	99	-0.02	9.81- 9.87
24	SAB	Decachlorobiphenyl	0.679	0.707	-4.1	104	-0.01	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.55- 1.61
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.48- 1.68
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Mon Apr 18 12:19:50 2016

10.9.2 10

Initial Calibration Verification

Job Number: JC19914 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34141.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\987\6g34141.D\ECD1A.CH     Vial: 14
Signal #2 : C:\msdchem\1\DATA\987\6g34141.D\ECD2B.CH
Acq On    : 14 Apr 2016   6:49 pm                    Operator: dharas
Sample    : icv987-25                                Inst    : HP G1530A
Misc      : op92908,g6g987,6.8,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex	0.746	0.778	-4.3	103	0.00	7.24- 7.30
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl		----------NA----------				
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.28- 1.34
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.28- 1.34
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Initial Calibration Verification

Job Number: JC19914 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34141.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.56- 1.62
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex	0.716	0.722	-0.8	108	-0.01	9.73- 9.79
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl		----------NA----------				
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.56- 1.62
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.49- 1.69
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Mon Apr 18 12:20:19 2016

10.9.3 10

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICV987
Lab FileID: 6G34142.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\987\6g34142.D\ECD1A.CH     Vial: 15
Signal #2 : C:\msdchem\1\DATA\987\6g34142.D\ECD2B.CH
Acq On    : 14 Apr 2016   7:06 pm                    Operator: dharas
Sample    : icv987-500                               Inst    : HP G1530A
Misc      : op92908,g6g987,6.8,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene	0.916	0.850	7.2	92	0.00	1.96- 2.02
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl	0.797	0.776	2.6	99	-0.01	9.90- 9.96
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.28- 1.34
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.28- 1.34
32		Chlordane {A}	0.031	0.036	-16.1	114	0.00	3.15- 3.35
33		Chlordane {B}	0.041	0.040	2.4	97	0.00	3.75- 3.95
34		Chlordane {C}	0.131	0.129	1.5	96	0.00	4.52- 4.72
35		Chlordane {D}	0.206	0.209	-1.5	100	0.00	4.69- 4.89
36		Chlordane {E}	0.032	0.030	6.3	91	0.00	5.82- 6.02

***** Signal #2 *****

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICV987
Lab FileID: 6G34142.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.804	11.0	93	0.00	2.45- 2.51
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl	0.679	0.672	1.0	101	-0.01	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.55- 1.61
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.48- 1.68
32		Chlordane {A}	0.031	0.035	-12.9	114	0.00	3.93- 4.13
33		Chlordane {B}	0.038	0.038	0.0	102	0.00	4.83- 5.03
34		Chlordane {C}	0.113	0.110	2.7	98	-0.01	5.81- 6.01
35		Chlordane {D}	0.189	0.188	0.5	100	-0.01	6.05- 6.25
36		Chlordane {E}	0.030	0.027	10.0	91	-0.01	7.63- 7.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Mon Apr 18 12:21:19 2016

10.9.4 10

Initial Calibration Verification

Job Number: JC19914 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34143.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\987\6g34143.D\ECD1A.CH     Vial: 16
Signal #2 : C:\msdchem\1\DATA\987\6g34143.D\ECD2B.CH
Acq On    : 14 Apr 2016   7:22 pm                    Operator: dharas
Sample    : icv987-500                               Inst    : HP G1530A
Misc      : op92908,g6g987,6.8,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene	0.916	0.801	12.6	90	0.00	1.96- 2.02
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl	0.797	0.743	6.8	99	-0.01	9.89- 9.95
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.28- 1.34
26	L8	Toxaphene{A}	0.014	0.015	-7.1	108	-0.01	5.24- 5.44
27	L8	Toxaphene{B}	0.029	0.028	3.4	97	0.00	5.63- 5.83
28	L8	Toxaphene{C}	0.043	0.042	2.3	98	-0.01	5.90- 6.10
29	L8	Toxaphene{D}	0.024	0.024	0.0	96	-0.01	6.46- 6.66
30	L8	Toxaphene{E}	0.027	0.025	7.4	92	-0.01	7.16- 7.36
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.28- 1.34
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Initial Calibration Verification

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICV987
Lab FileID: 6G34143.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.823	8.9	93	0.00	2.45- 2.51
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl	0.679	0.680	-0.1	99	-0.01	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.55- 1.61
26	L8	Toxaphene{A}	0.015	0.013	13.3	85	-0.01	6.59- 6.79
27	L8	Toxaphene{B}	0.026	0.025	3.8	92	-0.01	7.52- 7.72
28	L8	Toxaphene{C}	0.039	0.037	5.1	90	-0.01	7.70- 7.90
29	L8	Toxaphene{D}	0.026	0.025	3.8	92	-0.01	8.18- 8.38
30	L8	Toxaphene{E}	0.022	0.024	-9.1	102	-0.01	9.16- 9.36
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.48- 1.68
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Mon Apr 18 12:22:01 2016

10.9.5 10

Continuing Calibration Summary

Job Number: JC19914 **Sample:** G6G1008-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34935.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1008\6g34935.D\ECD1A.CH    Vial: 4
Signal #2 : C:\msdchem\1\DATA\1008\6g34935.D\ECD2B.CH
Acq On    : 11 May 2016  11:37 am                    Operator: dharas
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93803,g6g1008,990,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Sat May 07 14:59:36 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.894	2.4	96	0.00	1.94- 2.00
3	A	alpha-BHC	1.181	1.282	-8.6	97	-0.01	2.45- 2.51
4	MA	gamma-BHC	1.100	1.171	-6.5	98	-0.01	2.77- 2.83
5	MA	Heptachlor	1.104	1.123	-1.7	97	-0.01	3.29- 3.35
6	B	beta-BHC	0.540	0.531	1.7	97	0.00	2.85- 2.91
7	B	delta-BHC	1.025	1.138	-11.0	98	0.00	3.04- 3.10
8	MB	Aldrin	1.020	1.073	-5.2	99	-0.01	3.64- 3.71
9	B	Heptachlor Epoxide	0.955	0.996	-4.3	100	-0.02	4.39- 4.45
10	B	gamma-Chlordane	0.961	0.996	-3.6	99	-0.02	4.57- 4.63
11	B	alpha-Chlordane	0.954	0.975	-2.2	98	-0.02	4.75- 4.81
12	A	Endosulfan I	0.941	0.996	-5.8	102	-0.02	4.93- 4.99
13	B	4,4'-DDE	0.790	0.802	-1.5	95	-0.01	4.88- 4.94
14	MA	Dieldrin	0.931	0.985	-5.8	100	-0.02	5.27- 5.33
15	MA	Endrin	0.844	0.883	-4.6	99	-0.02	5.61- 5.67
16	A	4,4'-DDD	0.668	0.705	-5.5	98	-0.01	5.77- 5.83
17	B	Endosulfan II	0.833	0.879	-5.5	100	-0.02	5.95- 6.01
18	MA	4,4'-DDT	0.727	0.707	2.8	92	-0.02	6.21- 6.27
19	B	Endrin Aldehyde	0.679	0.730	-7.5	105	-0.02	6.62- 6.68
20	B	Endosulfan Sulfate	0.732	0.804	-9.8	108	-0.02	7.36- 7.42
21	A	Methoxychlor	0.436	0.395	9.4	88	-0.01	7.08- 7.14
22		Mirex	0.746	0.739	0.9	100	-0.02	7.21- 7.27
23	B	Endrin Ketone	0.870	0.936	-7.6	102	-0.02	7.83- 7.89
24	SAB	Decachlorobiphenyl	0.797	0.770	3.4	98	-0.02	9.86- 9.92
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.27- 1.33
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.27- 1.33
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.6 10

Continuing Calibration Summary

Job Number: JC19914 **Sample:** G6G1008-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34935.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.54- 1.60
2	SAB	Tetrachloro-m-xylene	0.903	0.854	5.4	108	0.00	2.43- 2.49
3	A	alpha-BHC	1.177	1.200	-2.0	110	0.00	3.13- 3.19
4	MA	gamma-BHC	1.102	1.102	0.0	110	0.00	3.58- 3.64
5	MA	Heptachlor	1.114	1.037	6.9	106	0.00	4.19- 4.25
6	B	beta-BHC	0.537	0.493	8.2	103	0.00	3.67- 3.73
7	B	delta-BHC	1.027	1.024	0.3	109	0.00	4.09- 4.15
8	MB	Aldrin	1.036	1.003	3.2	111	0.00	4.66- 4.72
9	B	Heptachlor Epoxide	0.965	0.924	4.2	109	0.00	5.54- 5.60
10	B	gamma-Chlordane	0.944	0.909	3.7	110	0.00	5.84- 5.90
11	B	alpha-Chlordane	0.937	0.904	3.5	111	0.00	6.09- 6.15
12	A	Endosulfan I	0.911	0.878	3.6	112	0.00	6.19- 6.25
13	B	4,4'-DDE	0.808	0.717	11.3	97	0.00	6.39- 6.45
14	MA	Dieldrin	0.930	0.903	2.9	112	0.00	6.66- 6.72
15	MA	Endrin	0.845	0.797	5.7	109	0.00	7.20- 7.26
16	A	4,4'-DDD	0.698	0.712	-2.0	111	0.00	7.42- 7.48
17	B	Endosulfan II	0.827	0.835	-1.0	114	0.00	7.58- 7.64
18	MA	4,4'-DDT	0.633	0.580	8.4	102	0.00	8.00- 8.06
19	B	Endrin Aldehyde	0.670	0.673	-0.4	115	0.00	8.21- 8.27
20	B	Endosulfan Sulfate	0.727	0.731	-0.6	118	0.00	8.72- 8.78
21	A	Methoxychlor	0.349	0.318	8.9	99	0.00	9.37- 9.43
22		Mirex	0.716	0.698	2.5	119	0.00	9.68- 9.74
23	B	Endrin Ketone	0.850	0.873	-2.7	119	0.00	9.77- 9.83
24	SAB	Decachlorobiphenyl	0.679	0.716	-5.4	118	0.00	11.71-11.77
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.54- 1.60
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.47- 1.67
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Wed May 11 12:02:22 2016

10.9.6 10

Continuing Calibration Summary

Job Number: JC19914 **Sample:** G6G1008-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34948.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1008\6g34948.D\ECD1A.CH    Vial: 2
Signal #2 : C:\msdchem\1\DATA\1008\6g34948.D\ECD2B.CH
Acq On    : 11 May 2016   4:44 pm                    Operator: dharas
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93786,g6g1008,150,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed May 11 16:27:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.897	2.1	100	0.00	1.94- 2.00
3	A	alpha-BHC	1.181	1.193	-1.0	100	0.00	2.45- 2.51
4	MA	gamma-BHC	1.100	1.097	0.3	99	0.00	2.77- 2.83
5	MA	Heptachlor	1.104	1.059	4.1	97	0.00	3.29- 3.35
6	B	beta-BHC	0.540	0.519	3.9	97	0.00	2.85- 2.91
7	B	delta-BHC	1.025	0.978	4.6	93	0.00	3.04- 3.10
8	MB	Aldrin	1.020	0.990	2.9	98	0.00	3.64- 3.71
9	B	Heptachlor Epoxide	0.955	0.920	3.7	97	0.00	4.39- 4.45
10	B	gamma-Chlordane	0.961	0.860	10.5	90	0.00	4.56- 4.62
11	B	alpha-Chlordane	0.954	0.878	8.0	93	0.00	4.75- 4.81
12	A	Endosulfan I	0.941	0.895	4.9	96	0.00	4.93- 4.99
13	B	4,4'-DDE	0.790	0.749	5.2	96	0.00	4.88- 4.94
14	MA	Dieldrin	0.931	0.885	4.9	96	0.00	5.27- 5.33
15	MA	Endrin	0.844	0.807	4.4	96	0.00	5.61- 5.67
16	A	4,4'-DDD	0.668	0.640	4.2	100	0.00	5.76- 5.82
17	B	Endosulfan II	0.833	0.785	5.8	97	0.00	5.95- 6.01
18	MA	4,4'-DDT	0.727	0.606	16.6	84	0.00	6.21- 6.27
19	B	Endrin Aldehyde	0.679	0.649	4.4	98	0.00	6.62- 6.68
20	B	Endosulfan Sulfate	0.732	0.705	3.7	99	0.00	7.36- 7.42
21	A	Methoxychlor	0.436	0.377	13.5	86	0.00	7.08- 7.14
22		Mirex	0.746	0.703	5.8	95	0.00	7.21- 7.27
23	B	Endrin Ketone	0.870	0.847	2.6	97	0.00	7.83- 7.89
24	SAB	Decachlorobiphenyl	0.797	0.739	7.3	94	0.00	9.86- 9.92

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.54- 1.60
2	SAB	Tetrachloro-m-xylene	0.903	0.868	3.9	110	0.00	2.43- 2.49
3	A	alpha-BHC	1.177	1.161	1.4	112	0.00	3.13- 3.19
4	MA	gamma-BHC	1.102	1.062	3.6	110	0.00	3.58- 3.64
5	MA	Heptachlor	1.114	1.005	9.8	106	0.00	4.19- 4.25
6	B	beta-BHC	0.537	0.481	10.4	104	0.00	3.67- 3.73
7	B	delta-BHC	1.027	0.937	8.8	104	0.00	4.09- 4.15
8	MB	Aldrin	1.036	0.971	6.3	109	0.00	4.66- 4.72
9	B	Heptachlor Epoxide	0.965	0.890	7.8	105	0.00	5.54- 5.60
10	B	gamma-Chlordane	0.944	0.873	7.5	107	0.00	5.84- 5.90
11	B	alpha-Chlordane	0.937	0.874	6.7	108	0.00	6.09- 6.15
12	A	Endosulfan I	0.911	0.834	8.5	107	0.00	6.18- 6.24
13	B	4,4'-DDE	0.808	0.748	7.4	116	0.00	6.39- 6.45

Continuing Calibration Summary

Job Number: JC19914 **Sample:** G6G1008-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34948.D
Project: BMSMC, Building 5 Area, PR

14	MA	Dieldrin	0.930	0.863	7.2	109	0.00	6.66- 6.72
15	MA	Endrin	0.845	0.786	7.0	110	0.00	7.20- 7.26
16	A	4,4'-DDD	0.698	0.672	3.7	108	0.00	7.42- 7.48
17	B	Endosulfan II	0.827	0.756	8.6	108	0.00	7.58- 7.64
18	MA	4,4'-DDT	0.633	0.556	12.2	102	0.00	8.00- 8.06
19	B	Endrin Aldehyde	0.670	0.631	5.8	109	0.00	8.21- 8.27
20	B	Endosulfan Sulfate	0.727	0.690	5.1	112	0.00	8.72- 8.78
21	A	Methoxychlor	0.349	0.316	9.5	102	0.00	9.37- 9.43
22		Mirex	0.716	0.660	7.8	110	0.00	9.68- 9.74
23	B	Endrin Ketone	0.850	0.814	4.2	113	0.00	9.77- 9.83
24	SAB	Decachlorobiphenyl	0.679	0.725	-6.8	118	0.00	11.71-11.77

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Thu May 12 11:59:34 2016

10.9.7

10

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 1:32 pm
Operator : dharas
Sample : jc19914-4
Misc : op93785,g6g1008,1000,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:06:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.298	1.568	148.8E6	53722666	50.000	50.000
25) I	1-bromo-2...	1.298	1.568	148.8E6	53722666	50.000	50.000
31) I	1-bromo-2...	1.298	1.568	148.8E6	53722666	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.972	2.460	57535912	20001813	21.089	20.608
Spiked Amount		40.000	Range	30 - 150	Recovery	= 52.72%	51.52%
24) SAB	Decachlor...	9.896	11.739	80778465	27156380	34.051	37.212
Spiked Amount		40.000			Recovery	= 85.13%	93.03%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

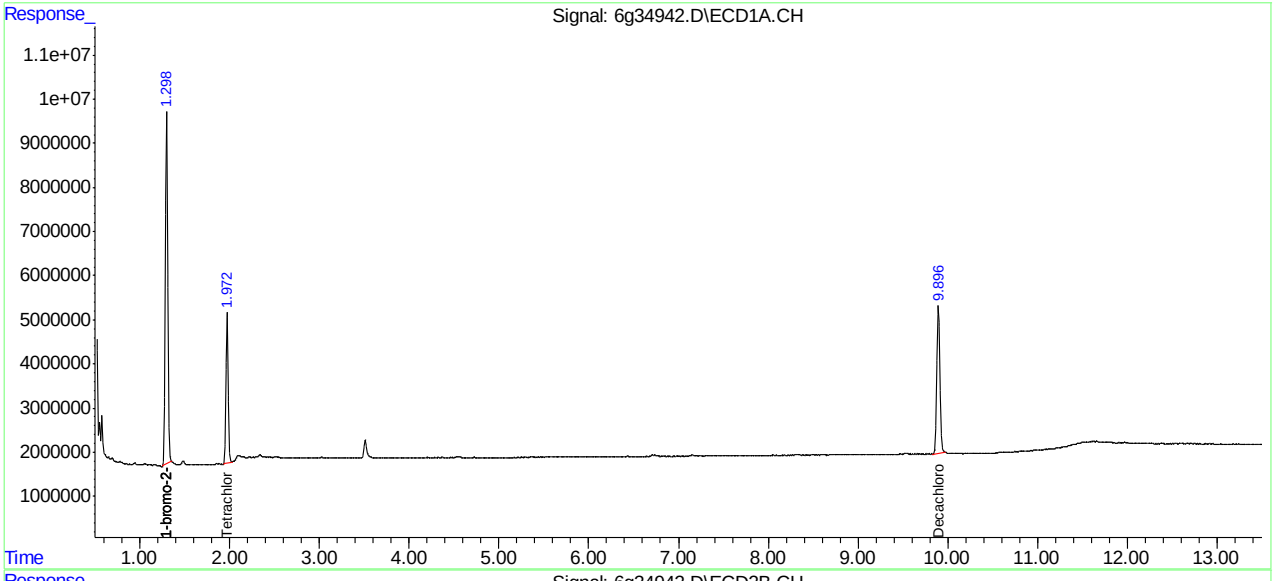
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

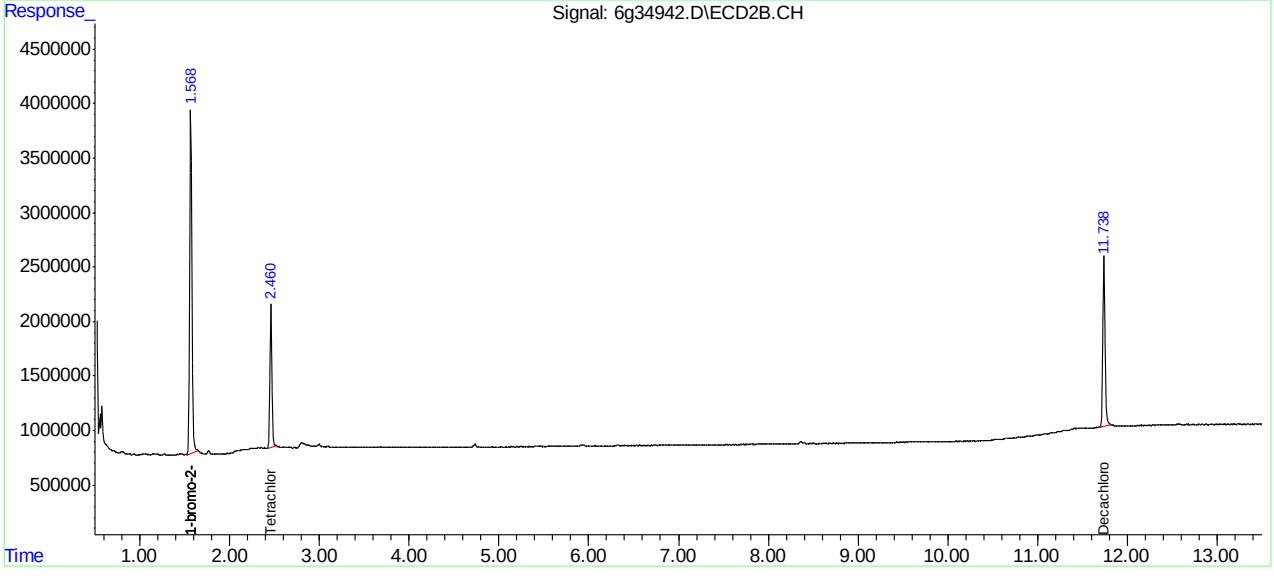
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 1:32 pm
Operator : dharas
Sample : jc19914-4
Misc : op93785,g6g1008,1000,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:06:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 1:15 pm
Operator : dharas
Sample : jc19914-5
Misc : op93786,g6g1008,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:05:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.298	1.568	145.2E6	51563870	50.000	50.000
25) I 1-bromo-2...	1.298	1.568	145.2E6	51563870	50.000	50.000
31) I 1-bromo-2...	1.298	1.568	145.2E6	51563870	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.973	2.461	86106202	29826220	32.345	32.016
Spiked Amount 40.000	Range 30 - 150		Recovery =		80.86%	80.04%
24) SAB Decachlor...	9.892f	11.736	34144253	11592849	14.750	16.551
Spiked Amount 40.000			Recovery =		36.88%	41.38%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

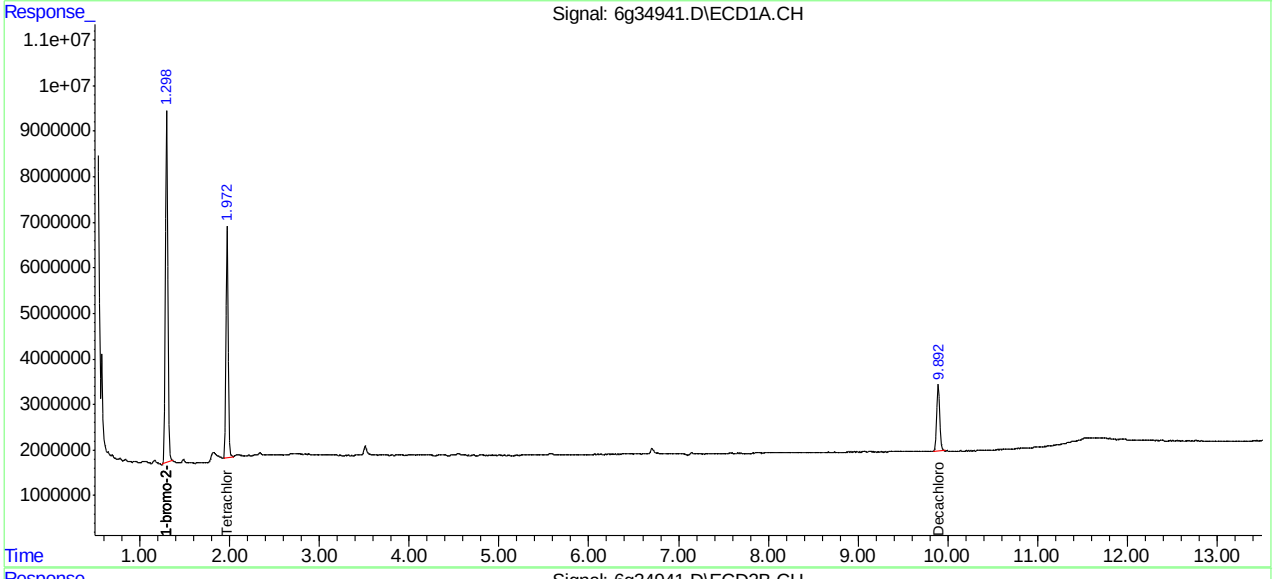
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

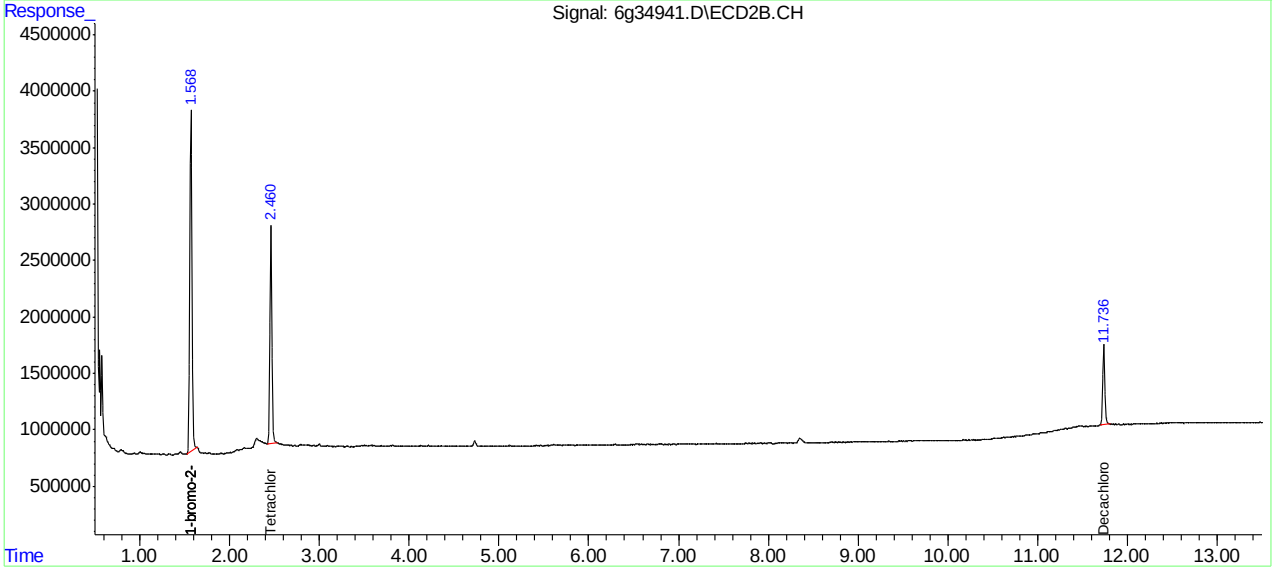
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 1:15 pm
Operator : dharas
Sample : jc19914-5
Misc : op93786,g6g1008,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:05:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:10 pm
Operator : dharas
Sample : op93785-mb1
Misc : op93785,g6g1008,1000,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 12:31:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.297	1.568	142.1E6	50509270	50.000	50.000
25) I	1-bromo-2...	1.297	1.568	142.1E6	50509270	50.000	50.000
31) I	1-bromo-2...	1.297	1.568	142.1E6	50509270	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.972	2.460	74248936	26088581	28.506	28.589
Spiked Amount		40.000	Range	30 - 150	Recovery	= 71.27%	71.47%
24) SAB	Decachlor...	9.894f	11.738	71757640	24497558	31.683	35.704
Spiked Amount		40.000			Recovery	= 79.21%	89.26%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

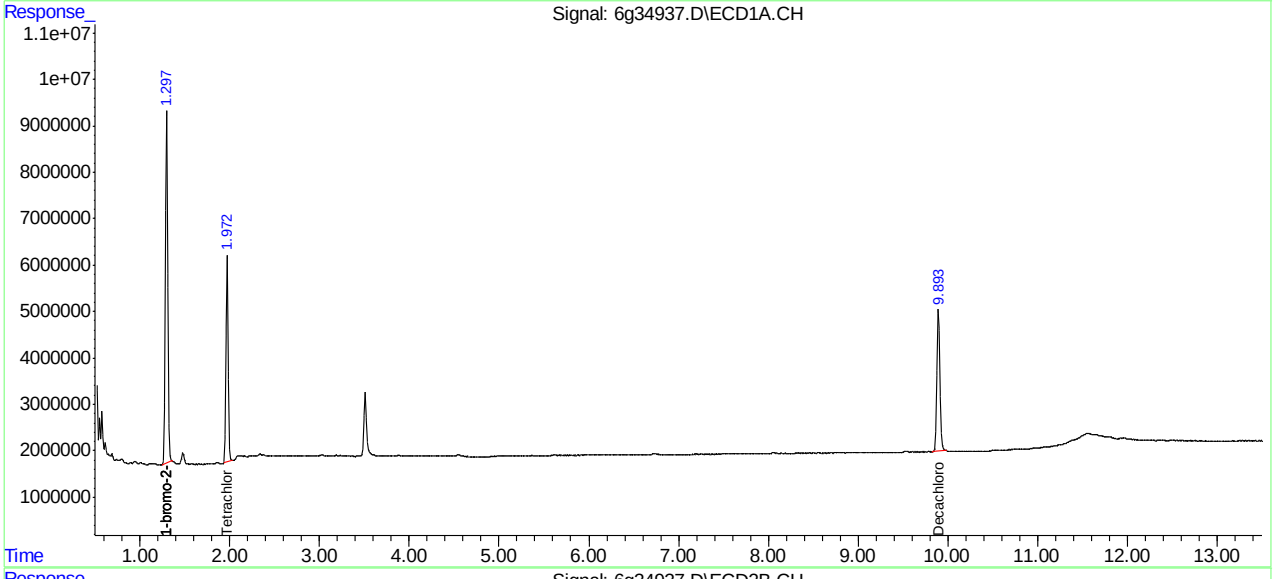
SGS ACCUTEST JC19914

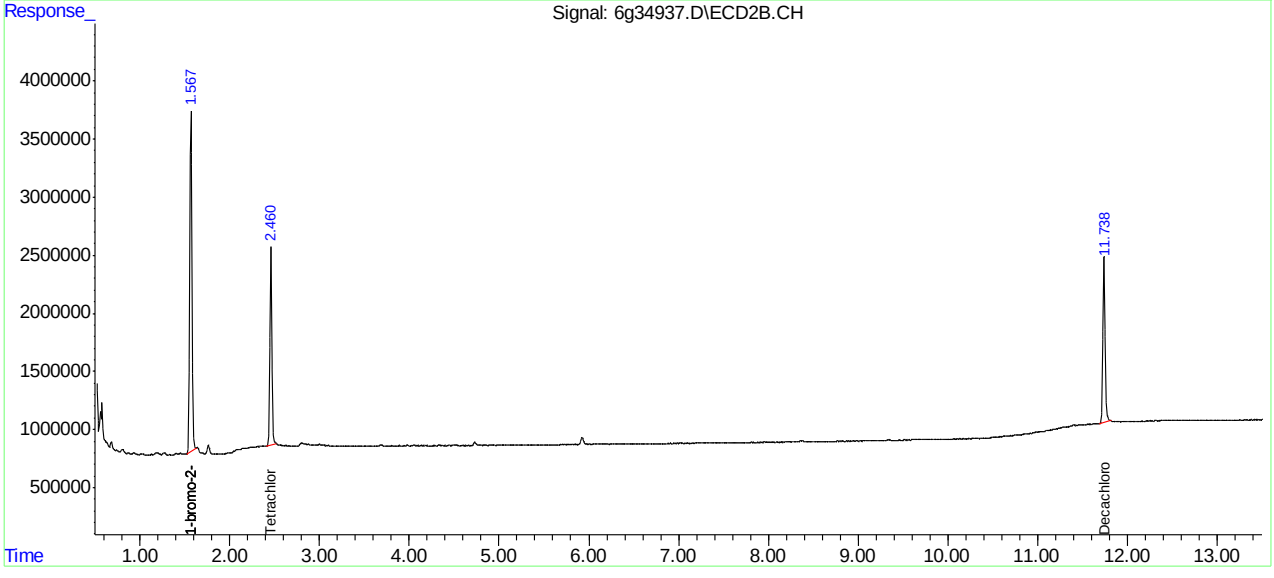
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:10 pm
Operator : dharas
Sample : op93785-mb1
Misc : op93785,g6g1008,1000,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 12:31:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:43 pm
Operator : dharas
Sample : op93786-mb1
Misc : op93786,g6g1008,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 13:01:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.299	1.568	144.0E6	50599515	50.000	50.000
25) I	1-bromo-2...	1.299	1.568	144.0E6	50599515	50.000	50.000
31) I	1-bromo-2...	1.299	1.568	144.0E6	50599515	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.973	2.460	76802888	26980119	29.107	29.513
Spiked Amount		40.000	Range	30 - 150	Recovery	= 72.77%	73.78%
24) SAB	Decachlor...	9.893f	11.737	80111230	27125265	34.916	39.463
Spiked Amount		40.000			Recovery	= 87.29%	98.66%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

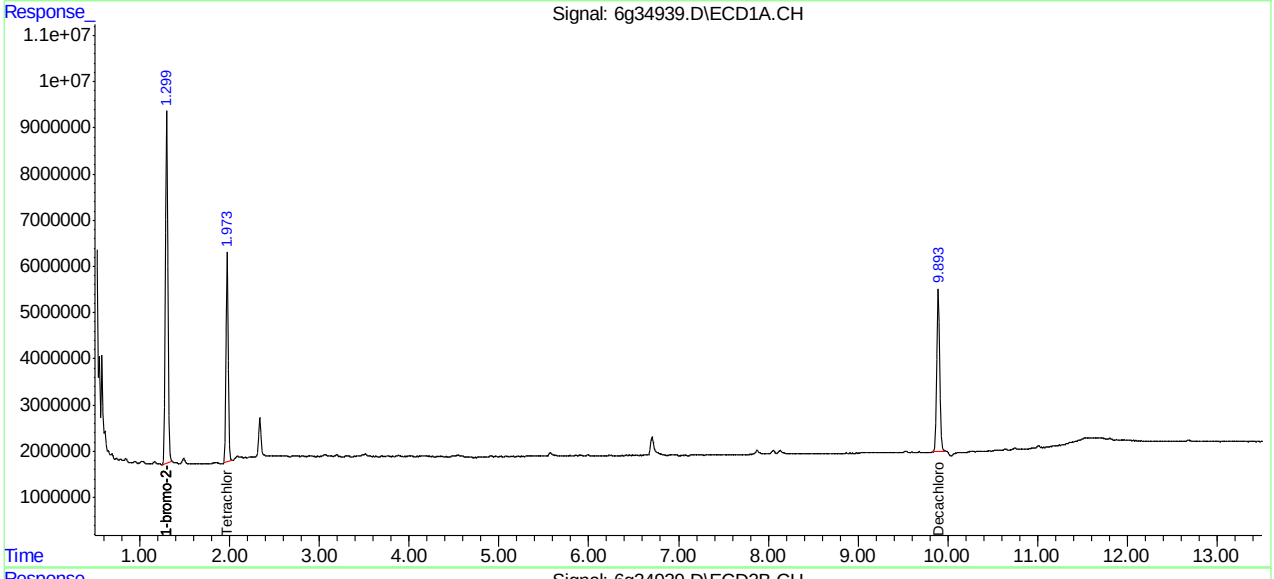
SGS ACCUTEST JC19914

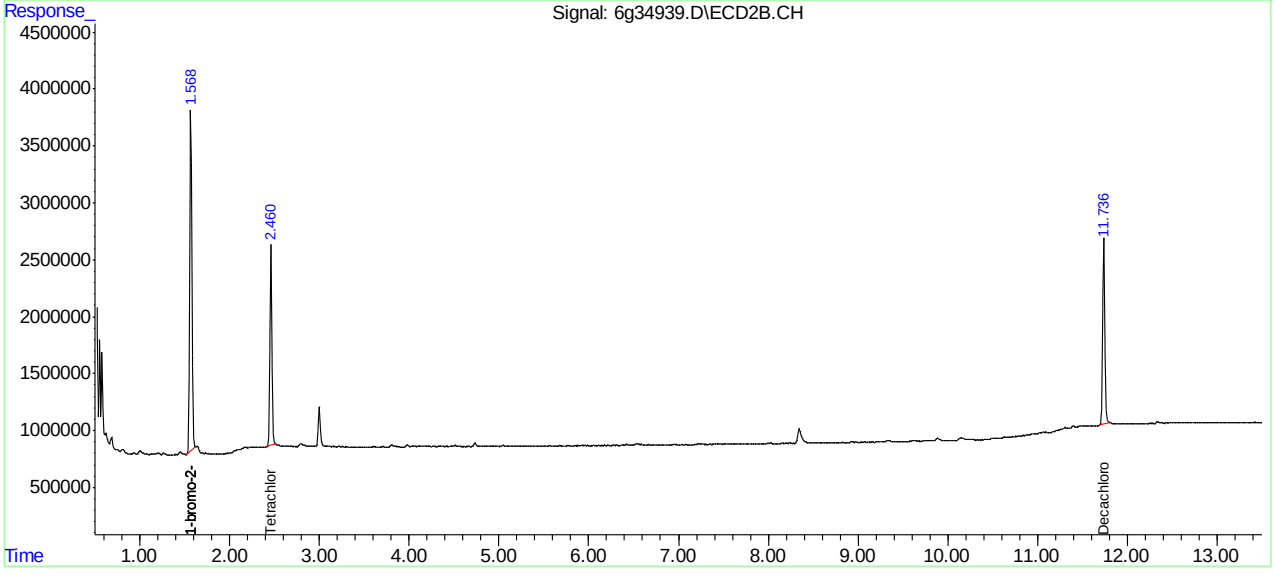
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:43 pm
Operator : dharas
Sample : op93786-mb1
Misc : op93786,g6g1008,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 13:01:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:26 pm
Operator : dharas
Sample : op93785-bs1
Misc : op93785,g6g1008,1000,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 12:51:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.298	1.568	144.7E6	52624090	50.000	50.000
25) I	1-bromo-2...	1.298	1.568	144.7E6	52624090	50.000	50.000
31) I	1-bromo-2...	1.298	1.568	144.7E6	52624090	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.972	2.460	67092847	23596082	25.296	24.818
Spiked Amount		40.000	Range	30 - 150	Recovery	= 63.24%	62.05%
24) SAB	Decachlor...	9.894f	11.739	64493178	22306302	27.964	31.204
Spiked Amount		40.000			Recovery	= 69.91%	78.01%
	Target Compounds						
3) A	alpha-BHC	2.483	3.160	73932412	26025619	21.623	21.011
4) MA	gamma-BHC	2.798	3.611	69822351	24554521	21.935	21.172
5) MA	Heptachlor	3.323	4.216	64651169	22592987	20.233	19.276
6) B	beta-BHC	2.880	3.704	34123828	11295352	21.839	19.990
7) B	delta-BHC	3.073	4.120	64352496	22571349	21.692	20.884
8) MB	Aldrin	3.675	4.690	58600682	20776381	19.857	19.063
9) B	Heptachlo...	4.420f	5.568	62801351	21866919	22.729	21.526
10) B	gamma-Chl...	4.595f	5.873	61772338	20871062	22.216	21.017
11) B	alpha-Chl...	4.776f	6.117	60538846	20984331	21.937	21.270
12) A	Endosulfan I	4.957f	6.215	61736933	20206875	22.661	21.082
13) B	4,4'-DDE	4.909	6.418	44752159	15044264	19.570	17.684
14) MA	Dieldrin	5.300f	6.685	60677655	21111038	22.525	21.563
15) MA	Endrin	5.640f	7.226	56488298	19459166	23.117	21.876
16) A	4,4'-DDD	5.797	7.449	39206716	15704808	20.280	21.390
17) B	Endosulfa...	5.984f	7.609	53364536	18250243	22.134	20.977
18) MA	4,4'-DDT	6.244f	8.028	39885991	12599847	18.968	18.907
19) B	Endrin Al...	6.651f	8.236	45015637	16350658	22.907	23.180
20) B	Endosulfa...	7.388f	8.751	51828993	17661250	24.478	23.069
21) A	Methoxychlor	7.111	9.406	25312477	7268381	20.083	19.795
23) B	Endrin Ke...	7.861f	9.798	59892216	20559757	23.787	22.975

SemiQuant Compounds - Not Calibrated on this Instrument

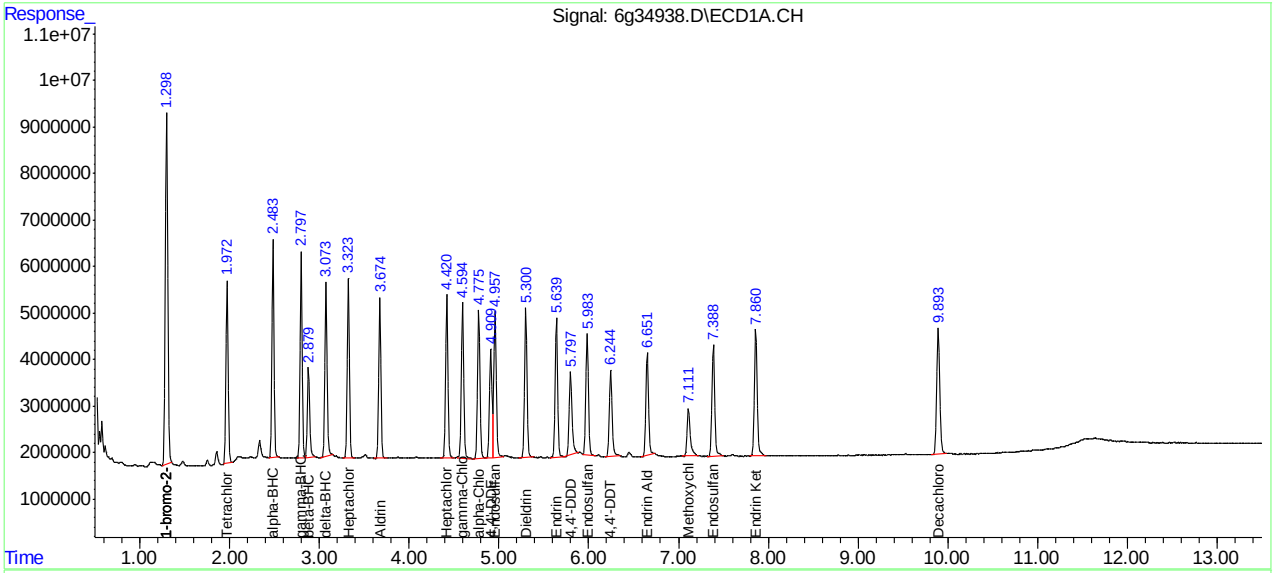
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

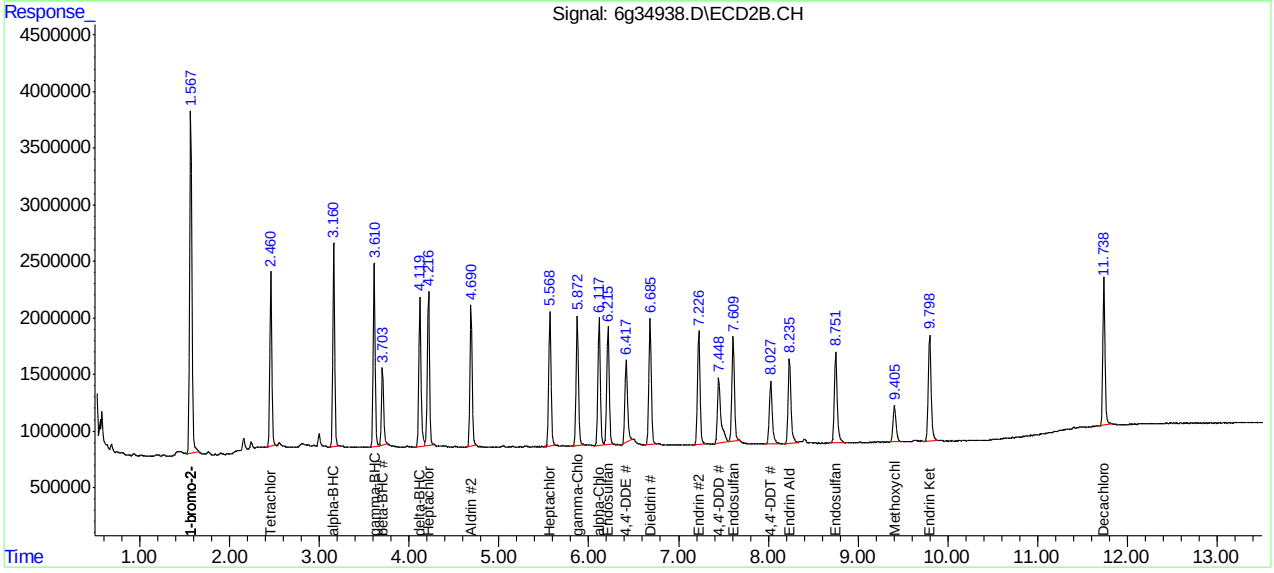
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:26 pm
Operator : dharas
Sample : op93785-bs1
Misc : op93785,g6g1008,1000,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 12:51:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:59 pm
Operator : dharas
Sample : op93786-bs1
Misc : op93786,g6g1008,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:04:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.300	1.569	154.3E6	53749594	50.000	50.000
25) I	1-bromo-2...	1.300	1.569	154.3E6	53749594	50.000	50.000
31) I	1-bromo-2...	1.300	1.569	154.3E6	53749594	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.973	2.461	83480615	29058605	29.521	29.924
Spiked Amount		40.000 Range	30 - 150	Recovery	=	73.80%	74.81%
24) SAB	Decachlor...	9.894f	11.739	83357625	28526925	33.900	39.070
Spiked Amount		40.000		Recovery	=	84.75%	97.67%
	Target Compounds						
3) A	alpha-BHC	2.484	3.162	78505600	27229982	21.535	21.523
4) MA	gamma-BHC	2.799	3.612	74614355	25996348	21.985	21.946
5) MA	Heptachlor	3.325	4.216	72833020	24891777	21.378	20.792
6) B	beta-BHC	2.880	3.705	37263845	12023320	22.367	20.832
7) B	delta-BHC	3.074	4.120	71538520	24487334	22.617	22.182
8) MB	Aldrin	3.675	4.691	67620589	24163821	21.491	21.707
9) B	Heptachlo...	4.421f	5.569	66929232	23418550	22.719	22.571
10) B	gamma-Chl...	4.596f	5.874	68766426	22839090	23.196	22.517
11) B	alpha-Chl...	4.777f	6.118	66624966	22765298	22.644	22.592
12) A	Endosulfan I	4.958f	6.216	66436259	21730862	22.872	22.198
13) B	4,4'-DDE	4.908	6.417	52265085	17263675	21.436	19.868
14) MA	Dieldrin	5.301f	6.684	65960584	22727081	22.966	22.728
15) MA	Endrin	5.642f	7.226	61844224	21234739	23.737	23.372
16) A	4,4'-DDD	5.798	7.448	48674699	17029758	23.614	22.709
17) B	Endosulfa...	5.983f	7.610	60178010	19942600	23.410	22.443
18) MA	4,4'-DDT	6.246	8.027	46647496	14769375	20.805	21.699
19) B	Endrin Al...	6.652f	8.237	54142753	17099499	25.841	23.734
20) B	Endosulfa...	7.389f	8.753	56630463	19043721	25.085	24.353
21) A	Methoxychlor	7.109f	9.404	27940339	8434799	20.792	22.490
23) B	Endrin Ke...	7.862	9.799	65729140	22414226	24.484	24.523

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

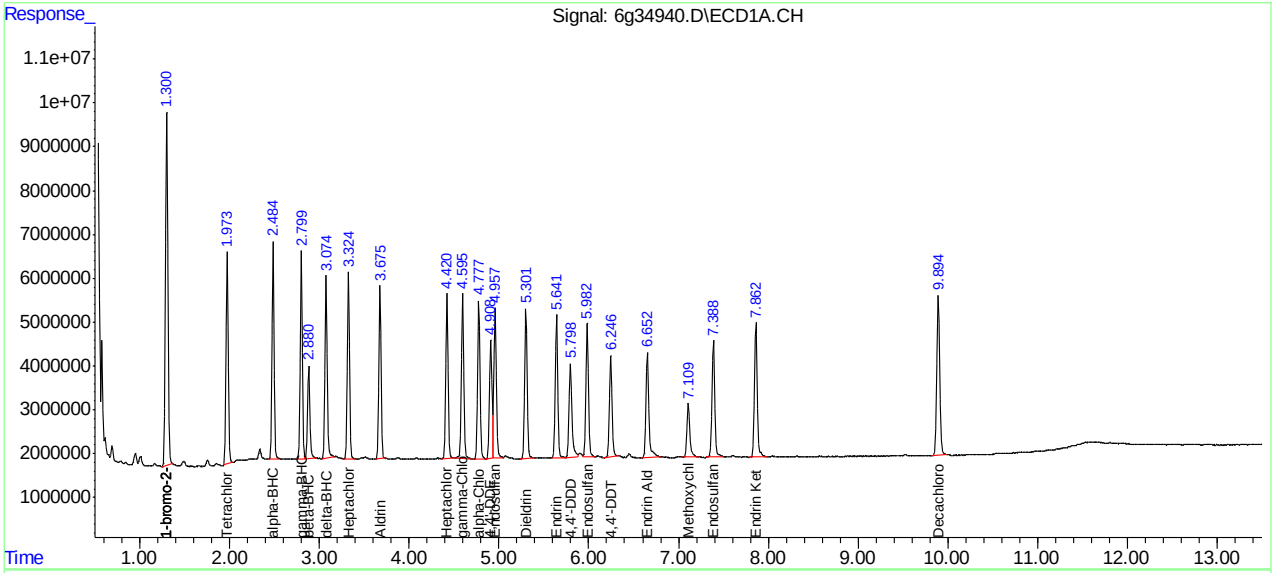
SGS ACCUTEST JC19914

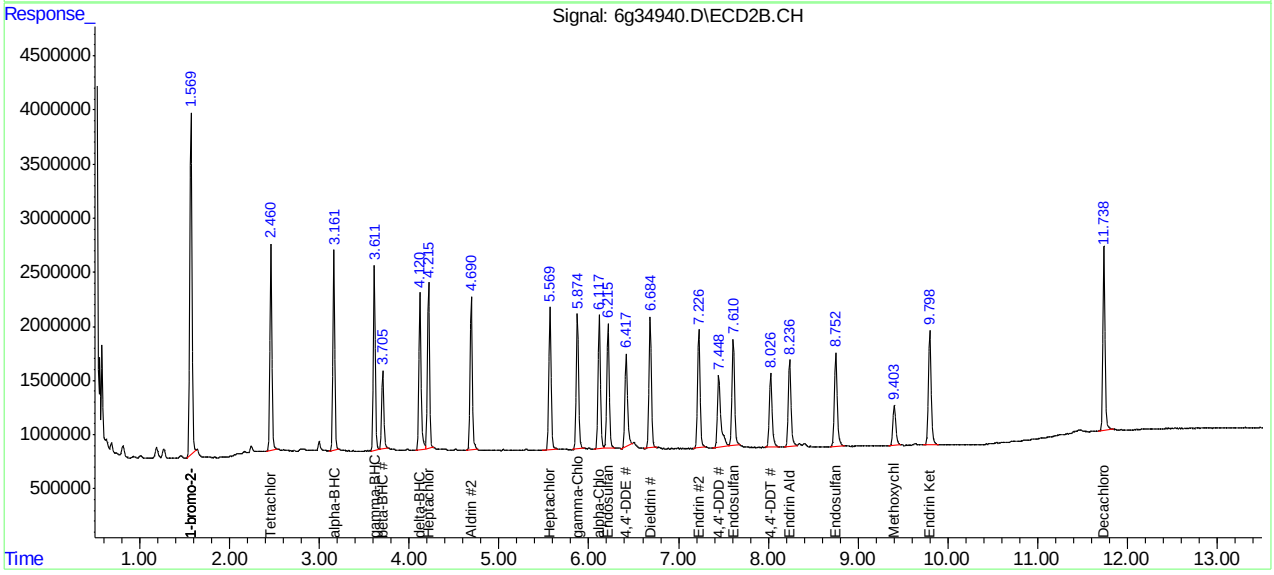
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 12:59 pm
Operator : dharas
Sample : op93786-bs1
Misc : op93786,g6g1008,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:04:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34943.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 1:48 pm
Operator : dharas
Sample : op93785-ms
Misc : op93785,g6g1008,500,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:07:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.300	1.569	148.0E6	53976816	50.000	50.000
25) I	1-bromo-2...	1.300	1.569	148.0E6	53976816	50.000	50.000
31) I	1-bromo-2...	1.300	1.569	148.0E6	53976816	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.973	2.461	66811750	23540489	24.622	24.139
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 61.56%	60.35%
24)	SAB Decachlor...	9.895	11.739	77250138	26269392	32.740	35.827
	Spiked Amount	40.000			Recovery	= 81.85%	89.57%
	Target Compounds						
3) A	alpha-BHC	2.485	3.161	74686946	26324027	21.351	20.719
4) MA	gamma-BHC	2.800	3.612	70426608	24724991	21.625	20.785
5) MA	Heptachlor	3.325	4.216	66393725	22867146	20.309	19.021
6) B	beta-BHC	2.882	3.706	34827240	11400040	21.786	19.669
7) B	delta-BHC	3.076	4.121	63571012	22299983	20.945	20.116
8) MB	Aldrin	3.676	4.692	61559638	22283031	20.389	19.933
9) B	Heptachlo...	4.421f	5.569	64543857	22340833	22.833	21.441
10) B	gamma-Chl...	4.597	5.875	65221850	21592168	22.928	21.198
11) B	alpha-Chl...	4.778f	6.119	63610742	21656539	22.531	21.401
12) A	Endosulfan I	4.960	6.216	64065023	20636030	22.985	20.991
13) B	4,4'-DDE	4.910	6.417	47774497	15694402	20.420	17.986
14) MA	Dieldrin	5.301f	6.685	62859368	21702804	22.809	21.612
15) MA	Endrin	5.643	7.228	58152418	19844520	23.261	21.750
16) A	4,4'-DDD	5.799	7.450	44712581	16067753	22.606	21.336
17) B	Endosulfa...	5.985	7.611	56869065	18601941	23.055	20.846
18) MA	4,4'-DDT	6.247	8.027	40696661	13079111	18.916	19.135
19) B	Endrin Al...	6.654	8.239	46702343	16587305	23.229	22.926
20) B	Endosulfa...	7.390	8.752	53074477	17786543	24.501	22.650
21) A	Methoxychlor	7.112	9.407	26518167	7455429	20.565	19.795
23) B	Endrin Ke...	7.861f	9.798	62718178	21161248	24.347	23.055

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

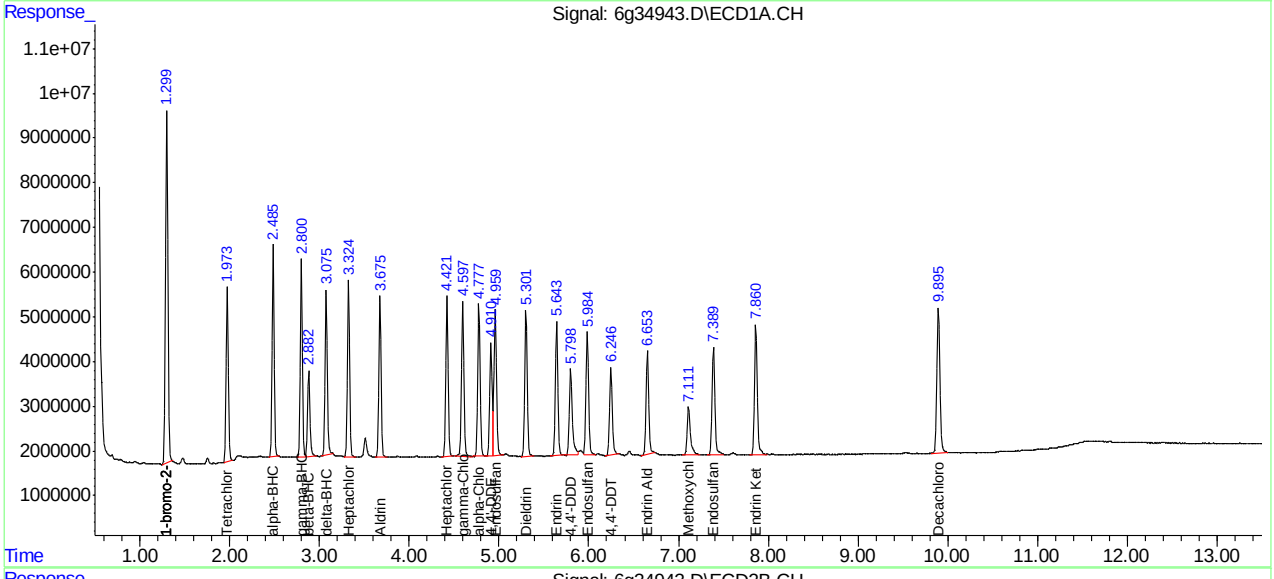
SGS ACCUTEST JC19914

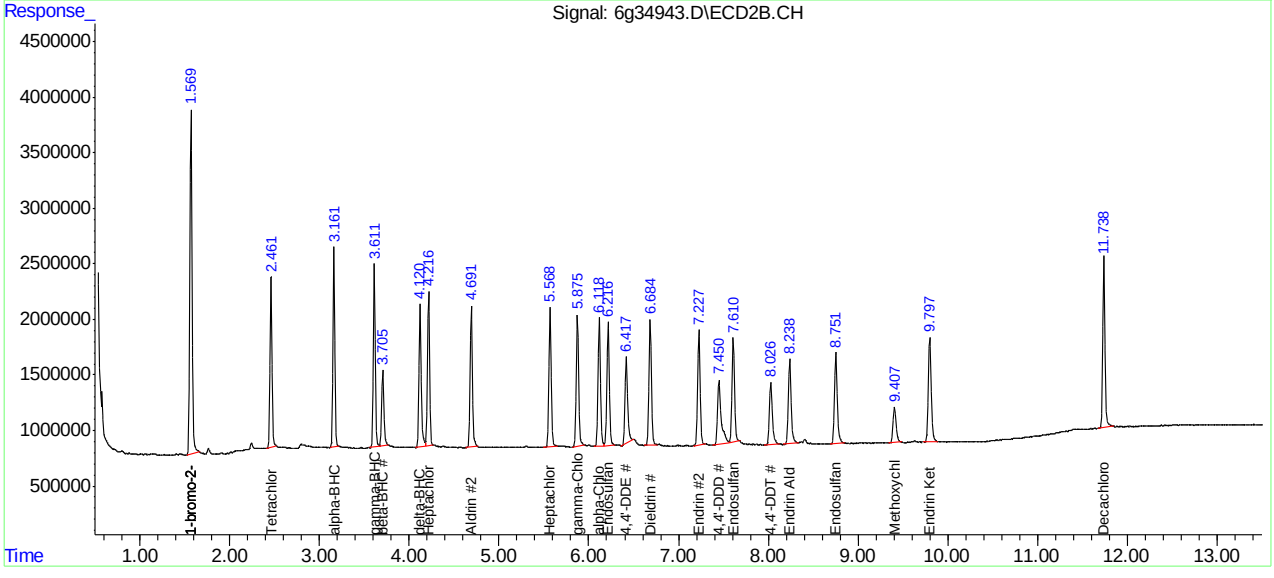
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34943.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 1:48 pm
Operator : dharas
Sample : op93785-ms
Misc : op93785,g6g1008,500,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:07:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34944.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 2:05 pm
Operator : dharas
Sample : op93785-msd
Misc : op93785,g6g1008,500,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.297	1.568	144.6E6	52319683	50.000	50.000
25) I	1-bromo-2...	1.297	1.568	144.6E6	52319683	50.000	50.000
31) I	1-bromo-2...	1.297	1.568	144.6E6	52319683	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.972	2.460	99613616	34143104	37.585	36.120
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	93.96%	90.30%
24)	SAB Decachlor...	9.894f	11.740	102.1E6	34697872	44.292	48.821
	Spiked Amount 40.000			Recovery	=	110.73%	122.05%
	Target Compounds						
3) A	alpha-BHC	2.484	3.161	108.2E6	36989220	31.672	30.036
4) MA	gamma-BHC	2.798	3.612	100.4E6	34370487	31.565	29.808
5) MA	Heptachlor	3.323	4.216	96420134	32423931	30.197	27.824
6) B	beta-BHC	2.879	3.705	47955862	15614952	30.713	27.795
7) B	delta-BHC	3.074	4.121	94579355	31230013	31.904	29.064
8) MB	Aldrin	3.674	4.691	90598315	31409359	30.722	28.986
9) B	Heptachlo...	4.420f	5.569	89625267	30445071	32.461	30.145
10) B	gamma-Chl...	4.595f	5.875	89778720	29991640	32.312	30.377
11) B	alpha-Chl...	4.776f	6.118	87618494	29373998	31.773	29.947
12) A	Endosulfan I	4.957f	6.215	88595794	28103664	32.544	29.492
13) B	4,4'-DDE	4.910	6.418	66483146	21184920	29.094	25.047
14) MA	Dieldrin	5.300f	6.685	87020448	29387708	32.328	30.192
15) MA	Endrin	5.641f	7.227	80791486	27207333	33.086	30.765
16) A	4,4'-DDD	5.797	7.450	61008299	22531986	31.580	30.868
17) B	Endosulfa...	5.983f	7.611	78212590	27022633	32.464	31.241
18) MA	4,4'-DDT	6.245f	8.028	60078310	18234929	28.591	27.523
19) B	Endrin Al...	6.652f	8.238	67220123	22304230	34.231	31.804
20) B	Endosulfa...	7.388f	8.751	72060098	24149658	34.058	31.727
21) A	Methoxychlor	7.112	9.406	36514867	10197551	28.993	27.934
23) B	Endrin Ke...	7.861f	9.799	84548460	28437600	33.603	31.964

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

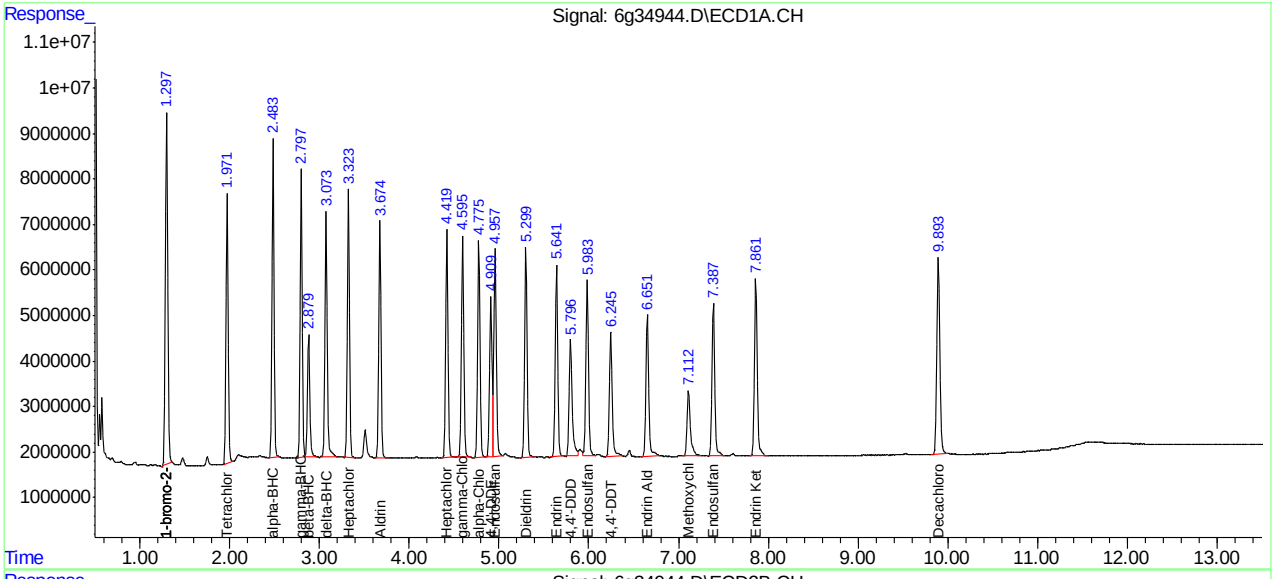
SGS ACCUTEST JC19914

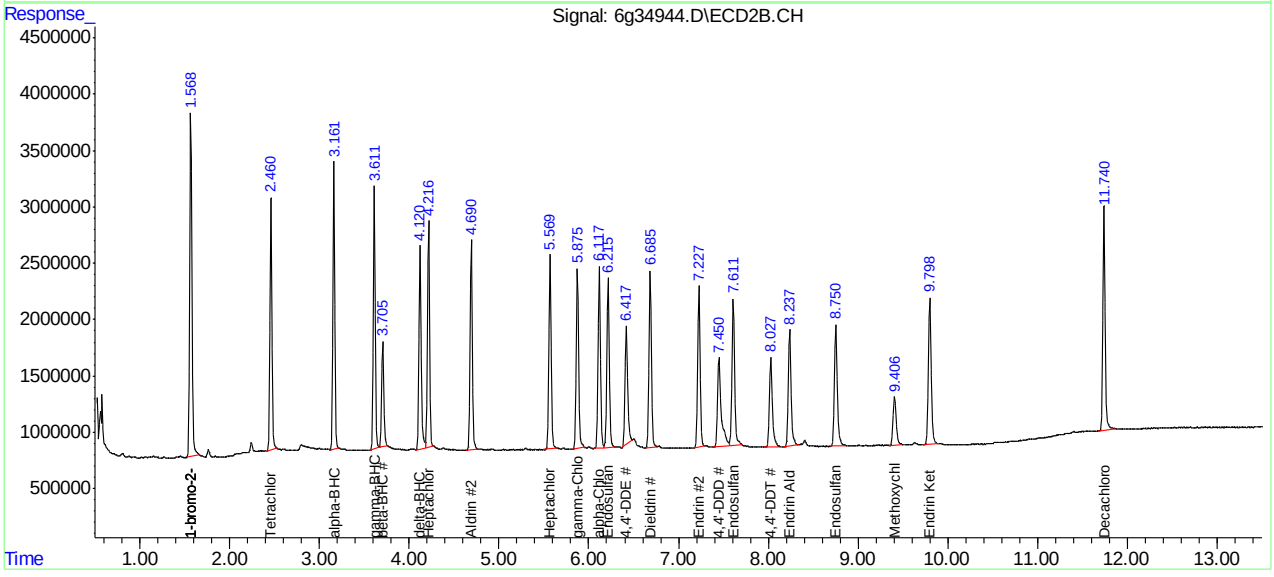
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34944.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 2:05 pm
Operator : dharas
Sample : op93785-msd
Misc : op93785,g6g1008,500,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34945.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 2:21 pm
Operator : dharas
Sample : op93786-ms
Misc : op93786,g6g1008,150,,,2,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:52:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.298	1.567	147.2E6	53969794	50.000	50.000
25) I	1-bromo-2...	1.298	1.567	147.2E6	53969794	50.000	50.000
31) I	1-bromo-2...	1.298	1.567	147.2E6	53969794	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.972	2.460	81720543	28318550	30.284	29.043
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	75.71%	72.61%
24)	SAB Decachlor...	9.894f	11.739	61918904	21003518	26.388	28.649
	Spiked Amount 40.000			Recovery	=	65.97%	71.62%
	Target Compounds						
3) A	alpha-BHC	2.484	3.161	74811978	26159777	21.506	20.593
4) MA	gamma-BHC	2.798	3.611	70867901	24811925	21.882	20.860
5) MA	Heptachlor	3.324	4.216	69847206	23789709	21.485	19.791
6) B	beta-BHC	2.880	3.705	35003411	11433556	22.018	19.730
7) B	delta-BHC	3.073	4.120	68538266	23038081	22.707	20.784
8) MB	Aldrin	3.674	4.690	65170776	23159806	21.705	20.720
9) B	Heptachlo...	4.420f	5.569	63269708	22098276	22.507	21.211
10) B	gamma-Chl...	4.594f	5.874	64669033	21599238	22.860	21.208
11) B	alpha-Chl...	4.776f	6.117	63183863	21524870	22.504	21.274
12) A	Endosulfan I	4.959f	6.216	62823943	20395754	22.665	20.749
13) B	4,4'-DDE	4.908	6.418	48825737	15821603	20.986	18.134
14) MA	Dieldrin	5.300f	6.685	62204689	21365734	22.697	21.279
15) MA	Endrin	5.641f	7.227	58125642	19822089	23.379	21.728
16) A	4,4'-DDD	5.796	7.450	44649747	16157851	22.700	21.459
17) B	Endosulfa...	5.982f	7.610	56525175	18975764	23.043	21.267
18) MA	4,4'-DDT	6.245f	8.027	42525411	13551069	19.876	19.828
19) B	Endrin Al...	6.651f	8.238	47389798	15998635	23.702	22.115
20) B	Endosulfa...	7.388f	8.752	53449864	17945672	24.812	22.856
21) A	Methoxychlor	7.110	9.405	26384326	7885107	20.575	20.939
23) B	Endrin Ke...	7.862	9.798	62374647	21104828	24.348	22.996

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

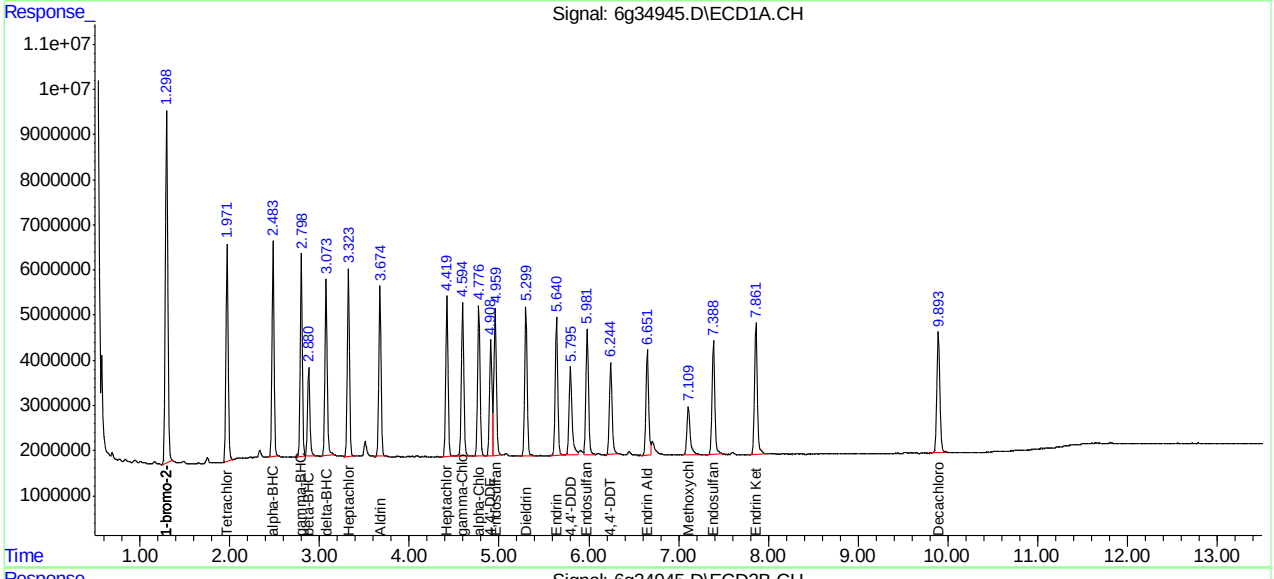
SGS ACCUTEST JC19914

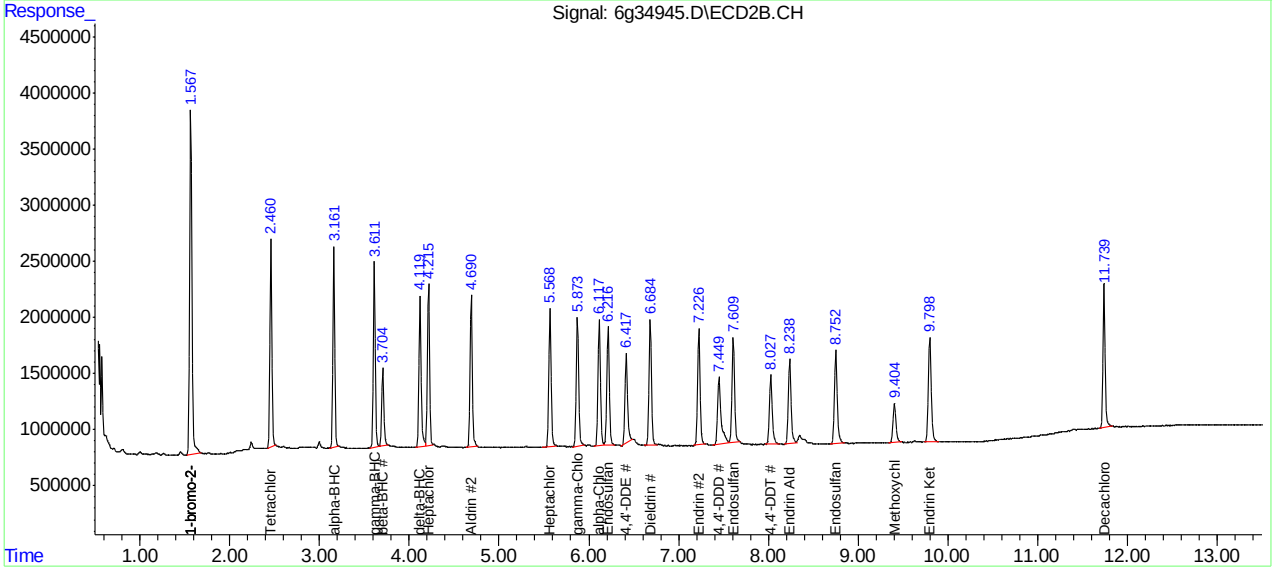
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34945.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 2:21 pm
Operator : dharas
Sample : op93786-ms
Misc : op93786,g6g1008,150,,,2,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:52:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34946.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 2:37 pm
Operator : dharas
Sample : op93786-msd
Misc : op93786,g6g1008,150,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:53:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.298	1.568	152.6E6	55629057	50.000	50.000
25) I	1-bromo-2...	1.298	1.568	152.6E6	55629057	50.000	50.000
31) I	1-bromo-2...	1.298	1.568	152.6E6	55629057	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.972	2.461	86609604	29809552	30.963	29.660
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	77.41%	74.15%
24)	SAB Decachlor...	9.893f	11.741	62771848	21357466	25.808	28.263
	Spiked Amount 40.000			Recovery	=	64.52%	70.66%
	Target Compounds						
3) A	alpha-BHC	2.484	3.161	82666040	28642913	22.925	21.875
4) MA	gamma-BHC	2.798	3.612	78312625	27338075	23.327	22.299
5) MA	Heptachlor	3.323	4.216	77338102	26309850	22.949	21.234
6) B	beta-BHC	2.880	3.705	39515563	12870656	23.979	21.547
7) B	delta-BHC	3.073	4.120	76919605	26192091	24.585	22.925
8) MB	Aldrin	3.675	4.690	72492038	26038019	23.291	22.600
9) B	Heptachlo...	4.419f	5.568	70428720	24692429	24.169	22.994
10) B	gamma-Chl...	4.595f	5.874	73088485	24059952	24.924	22.920
11) B	alpha-Chl...	4.776f	6.117	71125755	24180857	24.439	23.186
12) A	Endosulfan I	4.958f	6.216	70815121	22948179	24.647	22.649
13) B	4,4'-DDE	4.909	6.416	55867187	18221719	23.165	20.262
14) MA	Dieldrin	5.300f	6.685	70439716	24089578	24.794	23.277
15) MA	Endrin	5.641f	7.227	65299280	22378939	25.338	23.799
16) A	4,4'-DDD	5.795	7.450	48044521	18793792	23.564	24.215
17) B	Endosulfa...	5.982f	7.610	62316280	22308810	24.508	24.257
18) MA	4,4'-DDT	6.245f	8.028	48335845	15462533	21.795	21.950
19) B	Endrin Al...	6.653f	8.238	58105713	18406704	28.036	24.685
20) B	Endosulfa...	7.387f	8.752	60483300	20385923	27.086	25.189
21) A	Methoxychlor	7.110	9.403	29544052	8951845	22.227	23.063
23) B	Endrin Ke...	7.861f	9.798	70081592	24005070	26.391	25.376
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

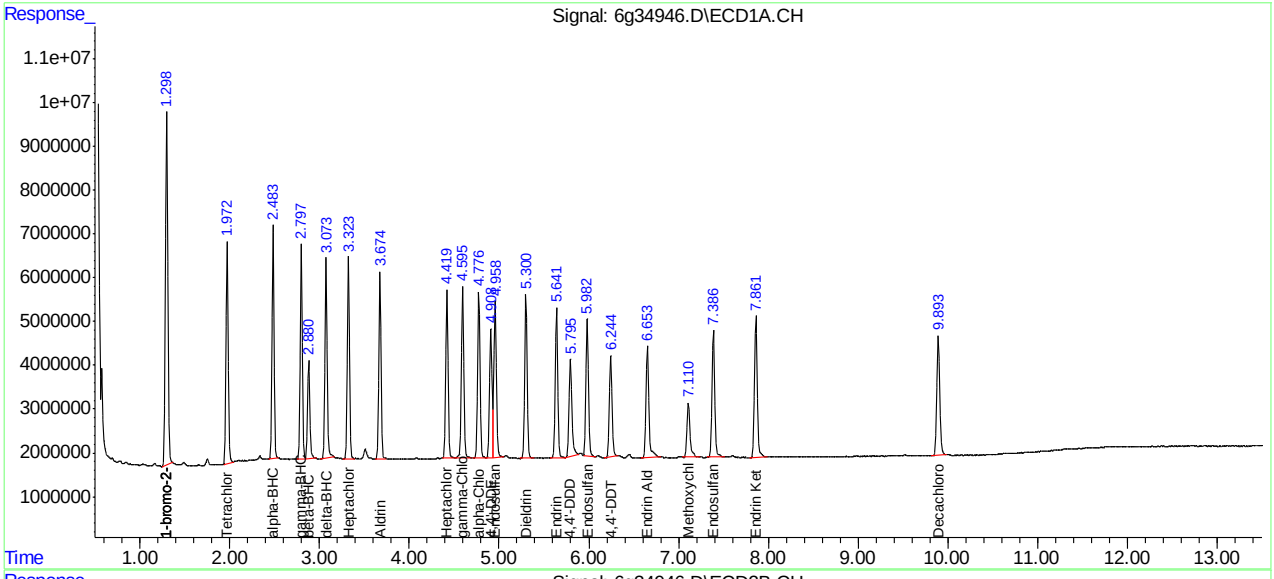
SGS ACCUTEST JC19914

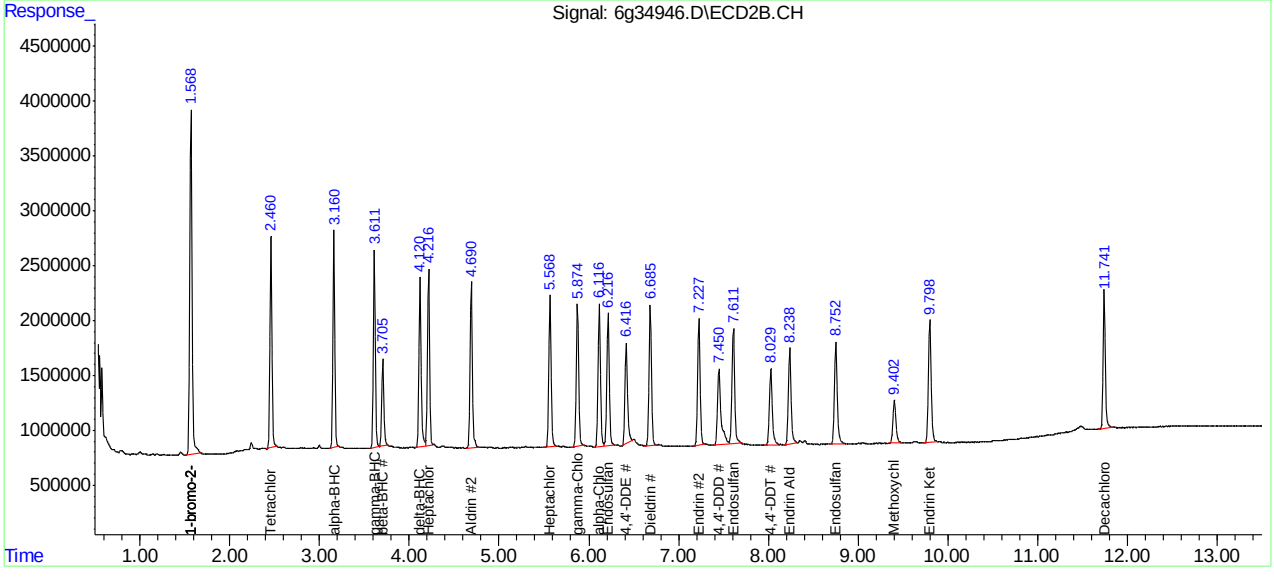
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34946.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 2:37 pm
Operator : dharas
Sample : op93786-msd
Misc : op93786,g6g1008,150,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 14:53:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:42:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.320	1.584	129.3E6	43986456	50.000	50.000
25) I	1-bromo-2...	1.320	1.584	129.3E6	43986456	50.000	50.000
31) I	1-bromo-2...	1.320	1.584	129.3E6	43986456	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.995	2.479	45371018	16357012	19.148	20.583
Spiked Amount		40.000	Range	30 - 150	Recovery	= 47.87%	51.46%
24) SAB	Decachlor...	9.934	11.769	44657093	13929406	21.674	23.312
Spiked Amount		40.000			Recovery	= 54.18%	58.28%
	Target Compounds						
13) B	4,4'-DDE	4.944	6.453	1018177	323855	0.498m	0.455m
15) MA	Endrin	5.682	7.268	120.9E6	37292116	55.394	50.157
16) A	4,4'-DDD	5.833	7.488	1311683	538829	0.759m	0.878m
18) MA	4,4'-DDT	6.281	8.068	241.7E6	69919881	128.653	125.525
19) B	Endrin Al...	6.695	8.285	837149	354536	0.477m	0.601m#
23) B	Endrin Ke...	7.904	9.843	4035110	1631820	1.794	2.182

SemiQuant Compounds - Not Calibrated on this Instrument

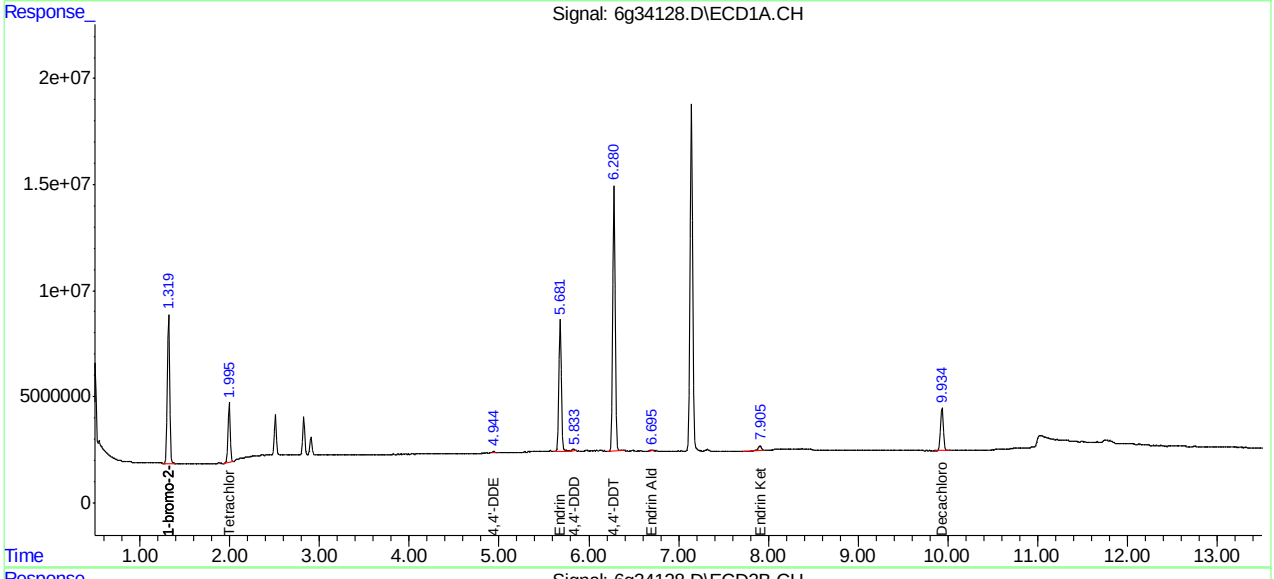
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

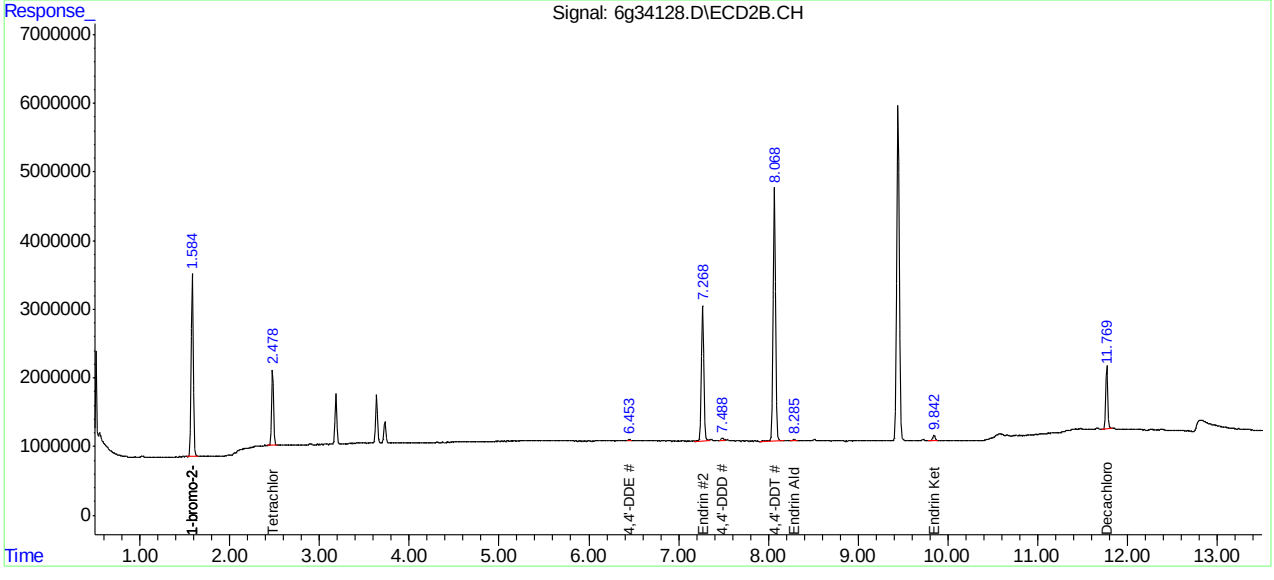
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:42:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	G6G987-DDT	**Method:**	SW846 8081B
Lab FileID:	6G34128.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 15:16	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

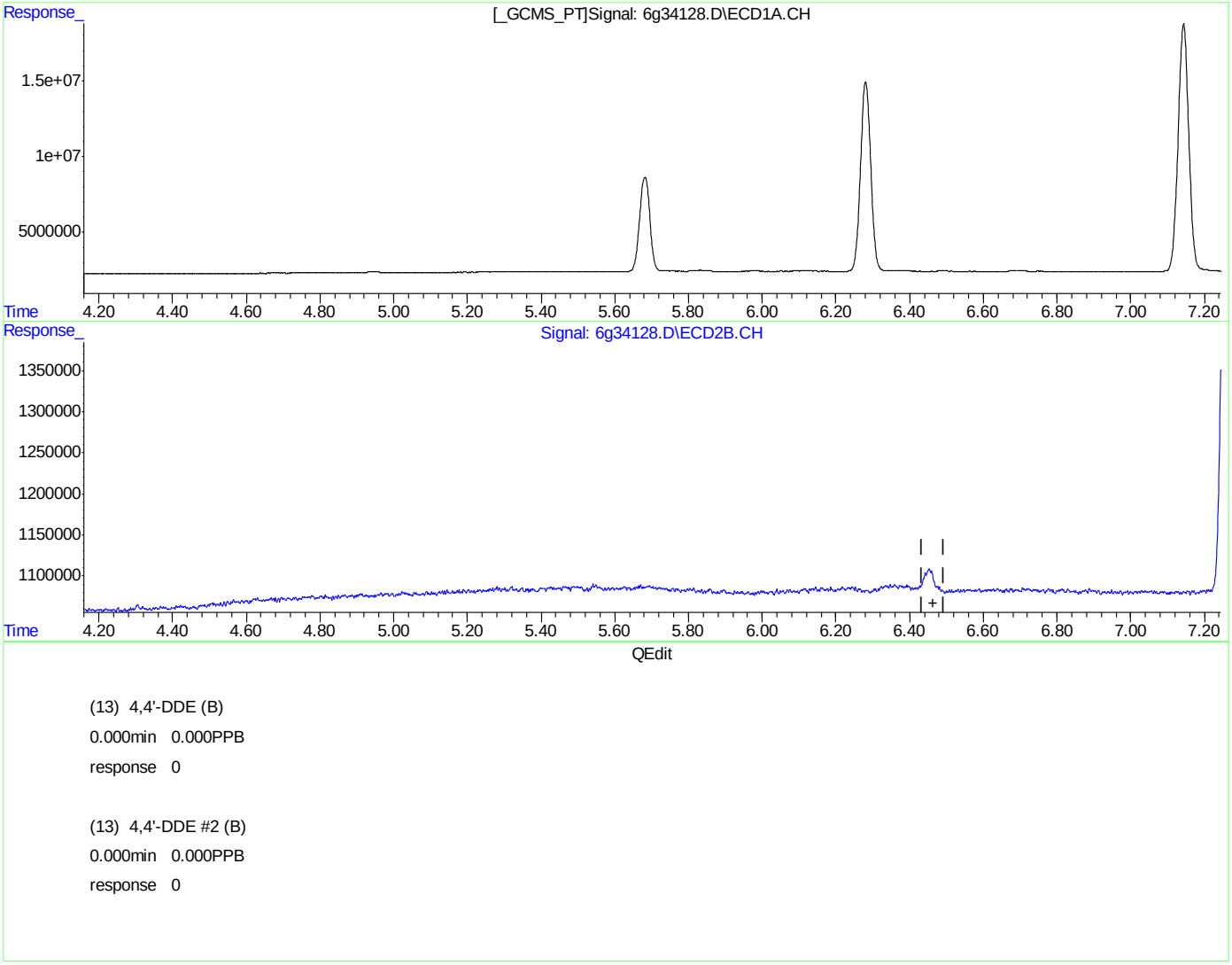
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.83	Poor instrument integration
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.70	Poor instrument integration
4,4'-DDD	72-54-8	2	7.49	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.28	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

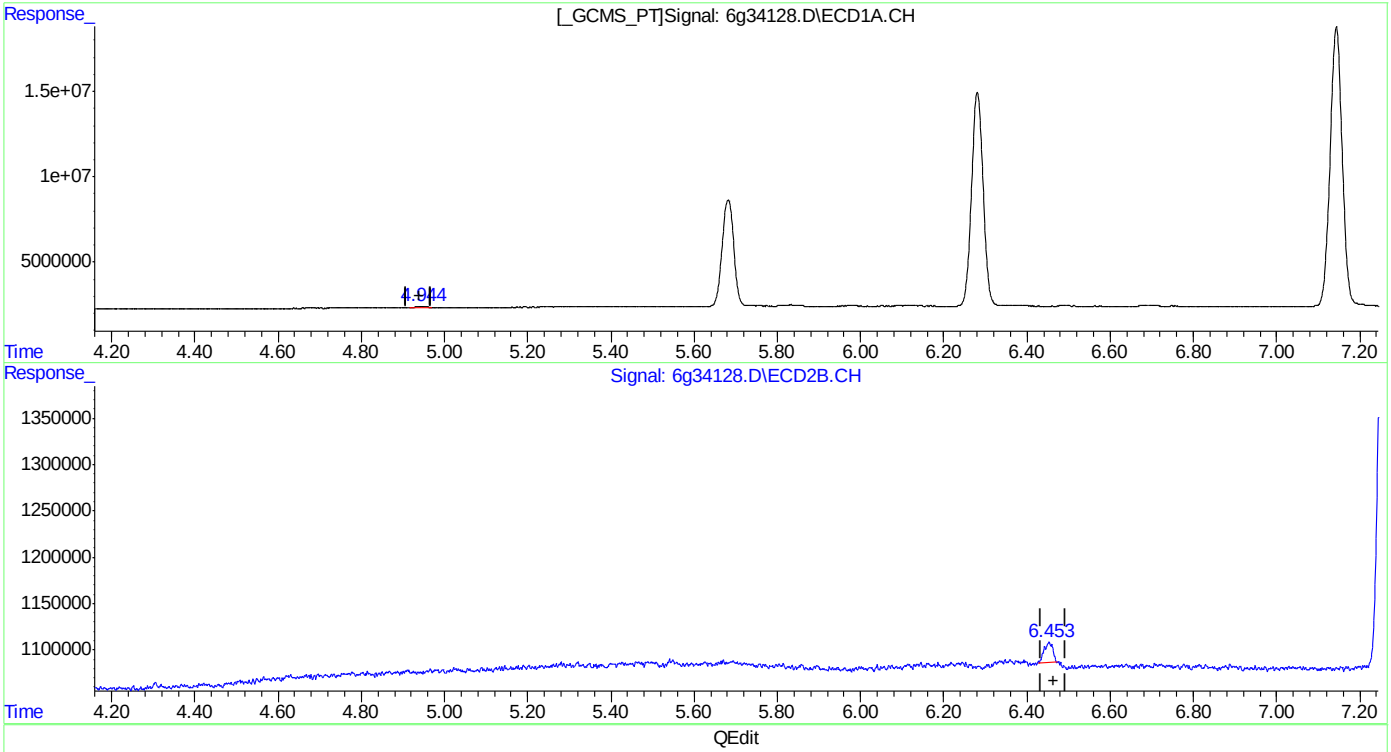
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.944min 0.498PPB m
response 1018177

(13) 4,4'-DDE #2 (B)
6.453min 0.455PPB m
response 323855

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:41:43 2016

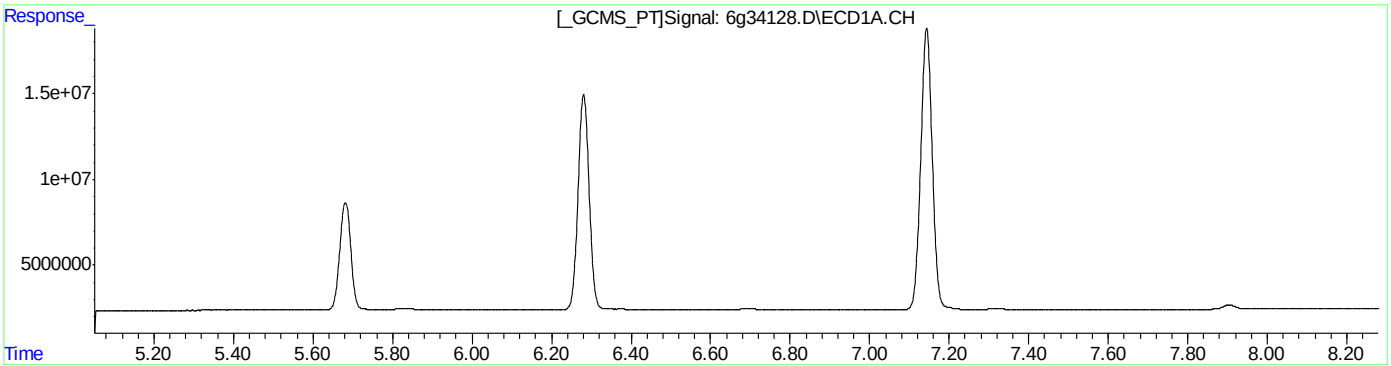
SGS ACCUTEST JC19914

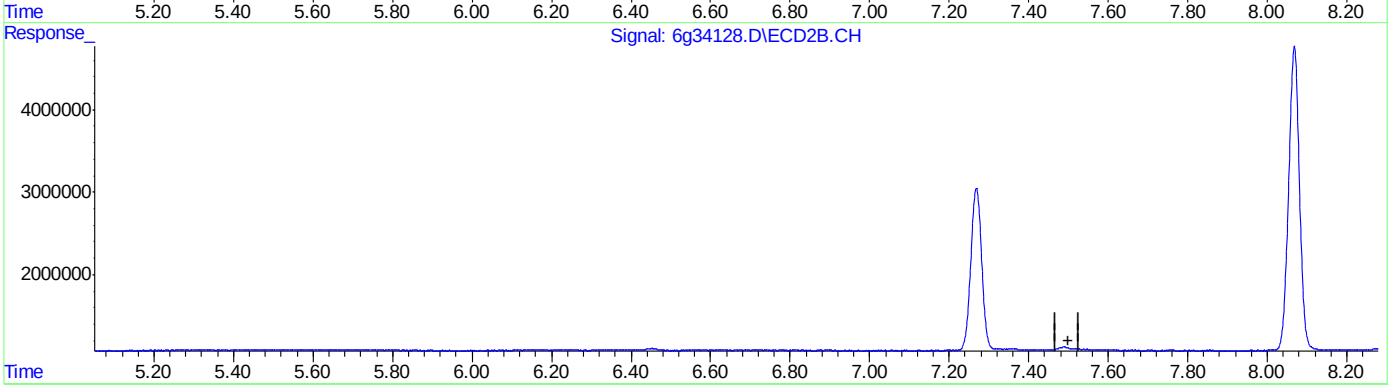
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

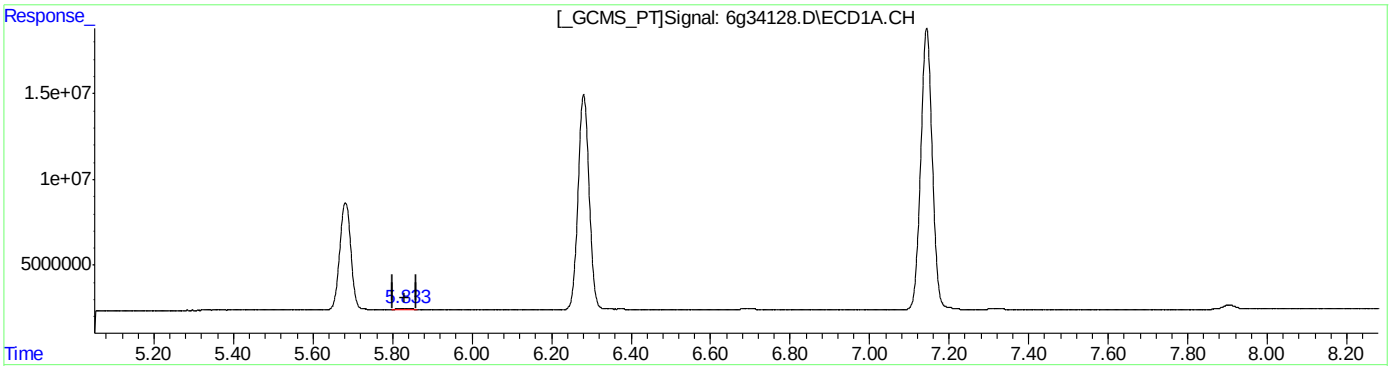
SGS ACCUTEST JC19914

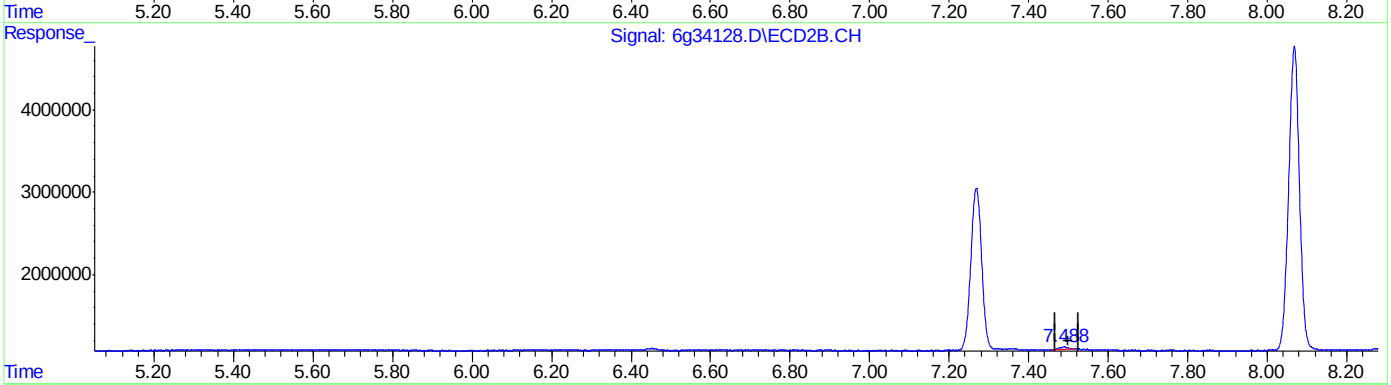
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.833min 0.759PPB m
response 1311683

(16) 4,4'-DDD #2 (A)
7.488min 0.878PPB m
response 538829

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:42:19 2016

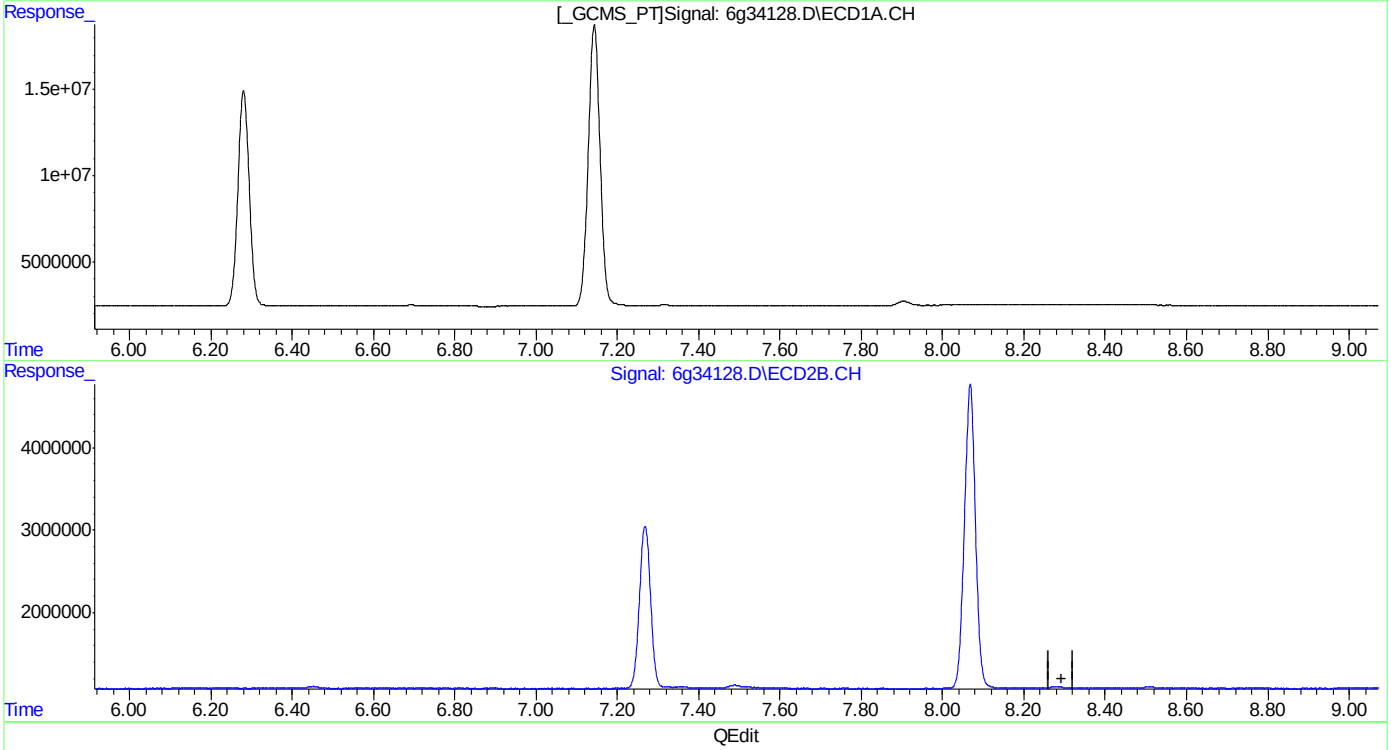
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:42:26 2016

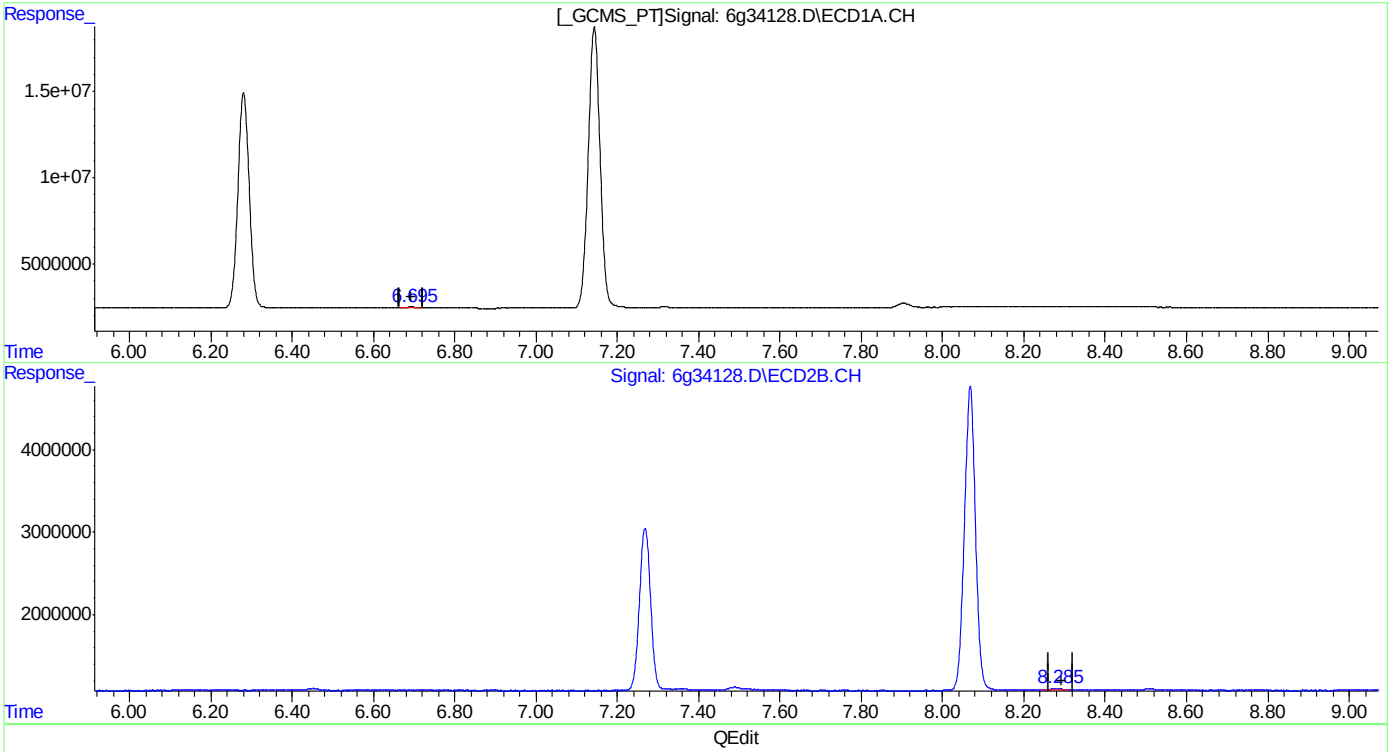
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.695min 0.477PPB m
response 837149

(19) Endrin Aldehyde #2 (B)
8.285min 0.601PPB m
response 354536

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:42:42 2016

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/11/16 10:22

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:10:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.298	1.568	141.6E6	55016185	50.000	50.000
25) I	1-bromo-2...	1.298	1.568	141.6E6	55016185	50.000	50.000
31) I	1-bromo-2...	1.298	1.568	141.6E6	55016185	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.971	2.459	53902850	20808372	20.771	20.934
Spiked Amount		40.000	Range	30 - 150	Recovery	= 51.93%	52.34%
24) SAB	Decachlor...	9.887f	11.735	48989011	17993829	21.710	24.077
Spiked Amount		40.000			Recovery	= 54.28%	60.19%
	Target Compounds						
13) B	4,4'-DDE	4.905f	6.417	570334	253399	0.255m	0.285m
15) MA	Endrin	5.637f	7.225	129.7E6	47376436	54.245	50.945
16) A	4,4'-DDD	5.791f	7.457	873406	961881	0.462m	1.253m#
18) MA	4,4'-DDT	6.239f	8.024	236.5E6	79783428	114.946	114.517
19) B	Endrin Al...	6.644f	8.232	1258397	411476	0.654m	0.558m
23) B	Endrin Ke...	7.858f	9.796	5523776	2427174	2.242	2.594m

SemiQuant Compounds - Not Calibrated on this Instrument

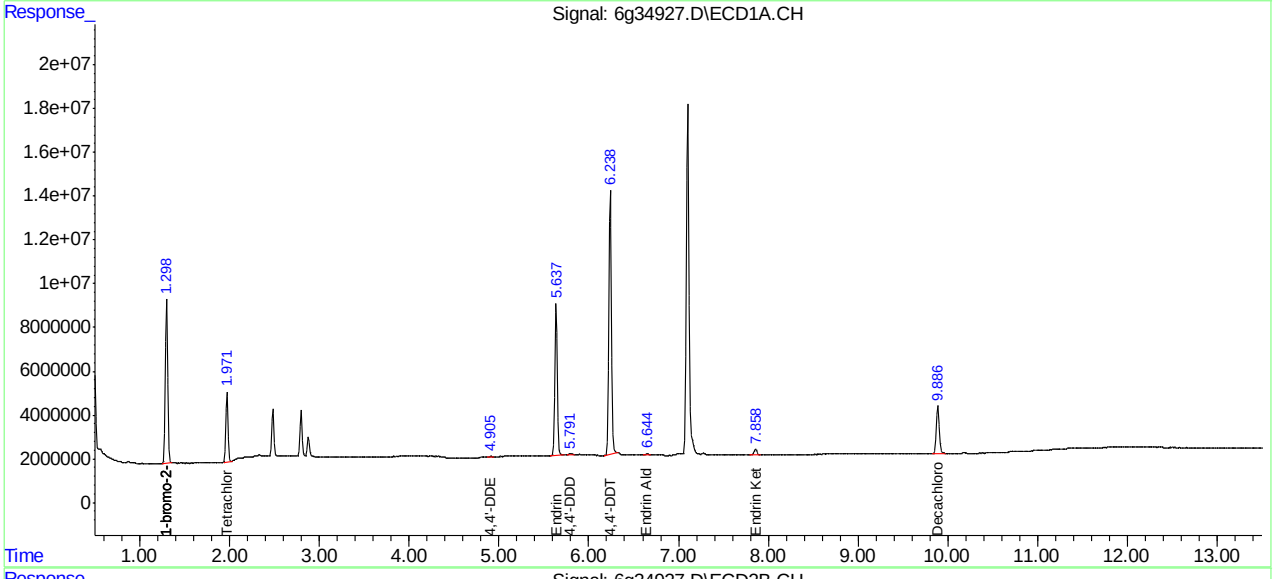
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

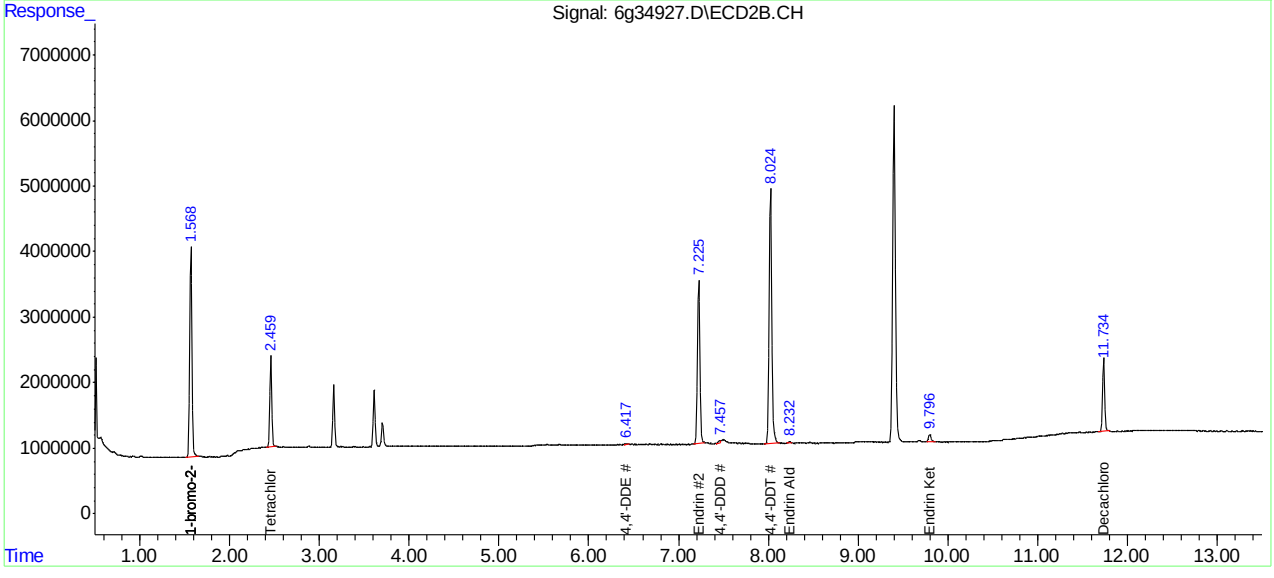
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:10:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	G6G1008-DDT	**Method:**	SW846 8081B
Lab FileID:	6G34927.D	**Analyst approved:**	05/11/16 10:12 Dhara Saparia
Injection Time:	05/11/16 09:15	**Supervisor approved:**	05/11/16 10:22 Gwendolyn Burns

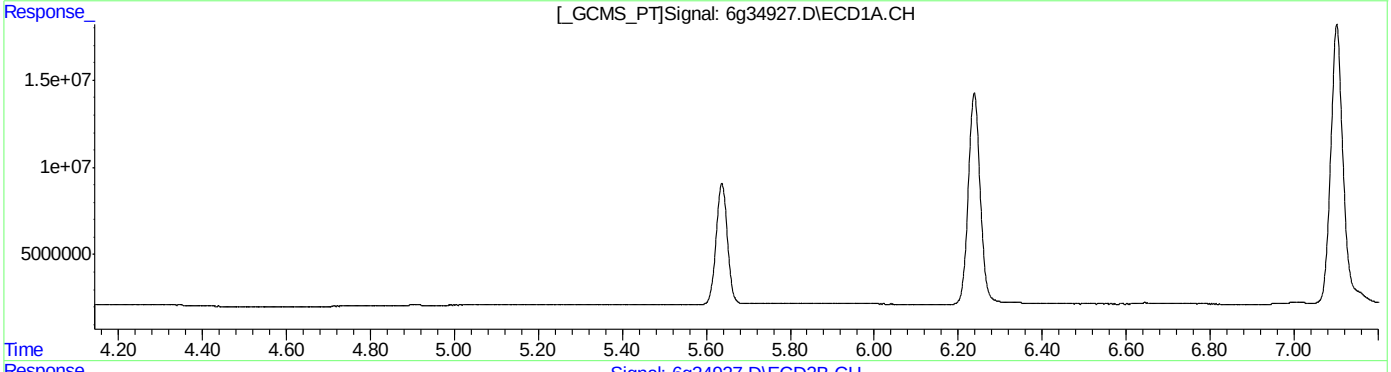
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.91	Poor instrument integration
4,4'-DDD	72-54-8	1	5.79	Poor instrument integration
4,4'-DDE	72-55-9	2	6.42	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.64	Poor instrument integration
4,4'-DDD	72-54-8	2	7.46	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.23	Poor instrument integration
Endrin ketone	53494-70-5	2	9.80	Poor instrument integration

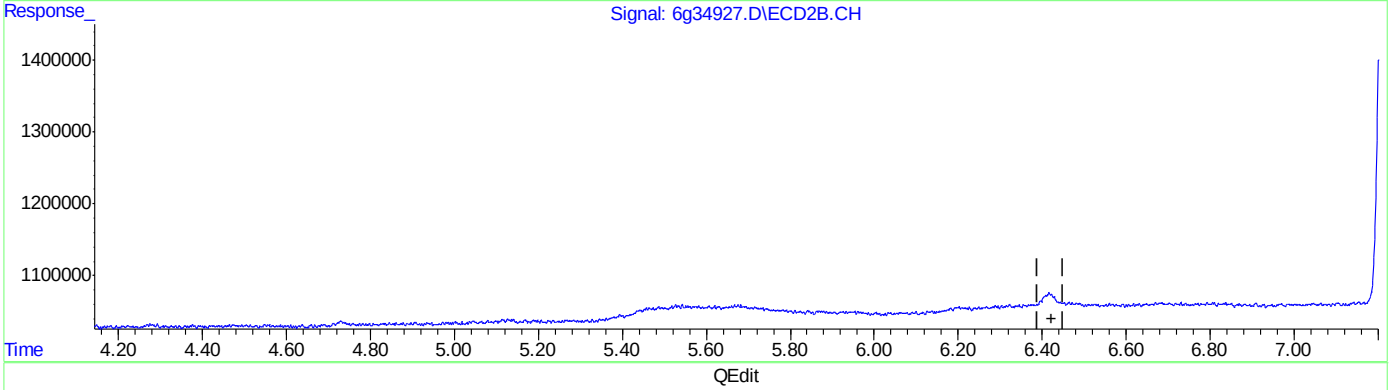
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

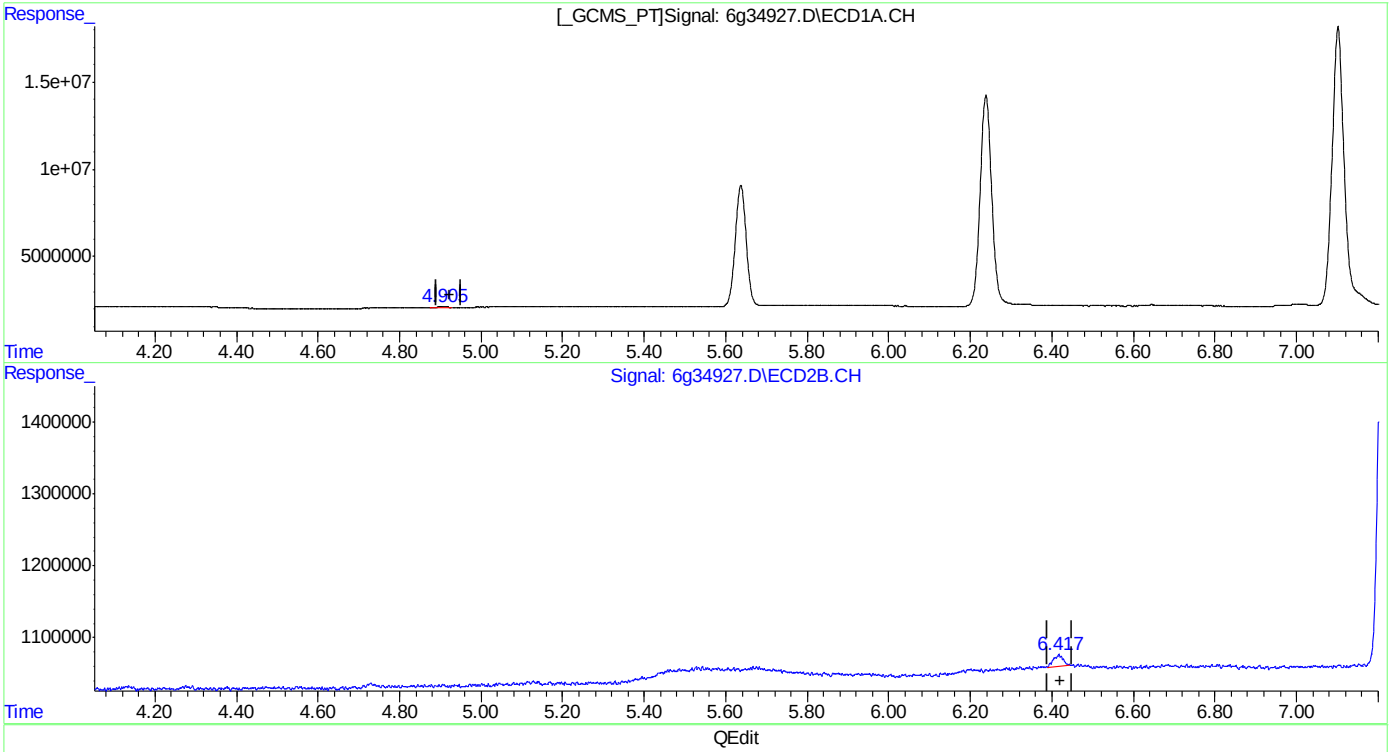
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
4.905min 0.255PPB m
response 570334

(13) 4,4'-DDE #2 (B)
6.417min 0.285PPB m
response 253399

(+) = Expected Retention Time
6PST987.M Wed May 11 10:08:56 2016

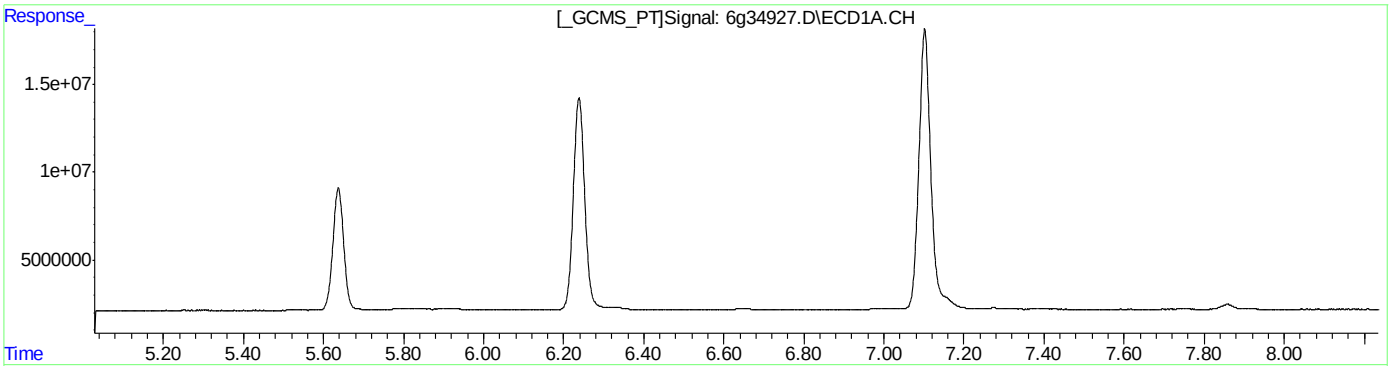
SGS ACCUTEST JC19914

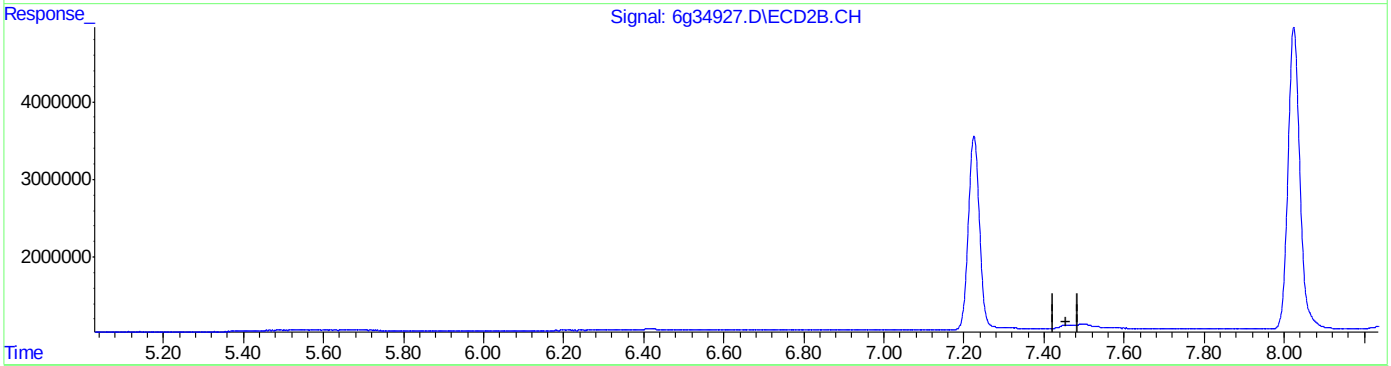
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

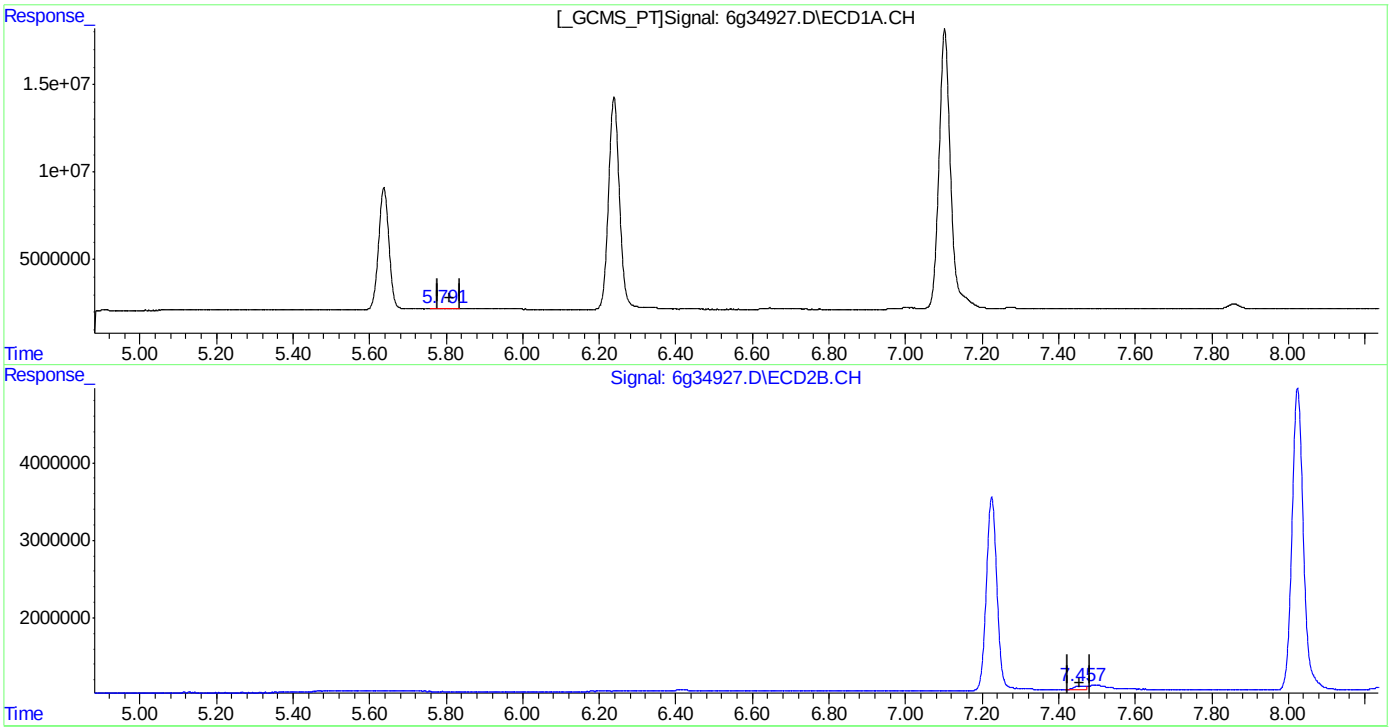
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(16) 4,4'-DDD (A)
5.791min 0.462PPB m
response 873406

(16) 4,4'-DDD #2 (A)
7.457min 1.253PPB m
response 961881

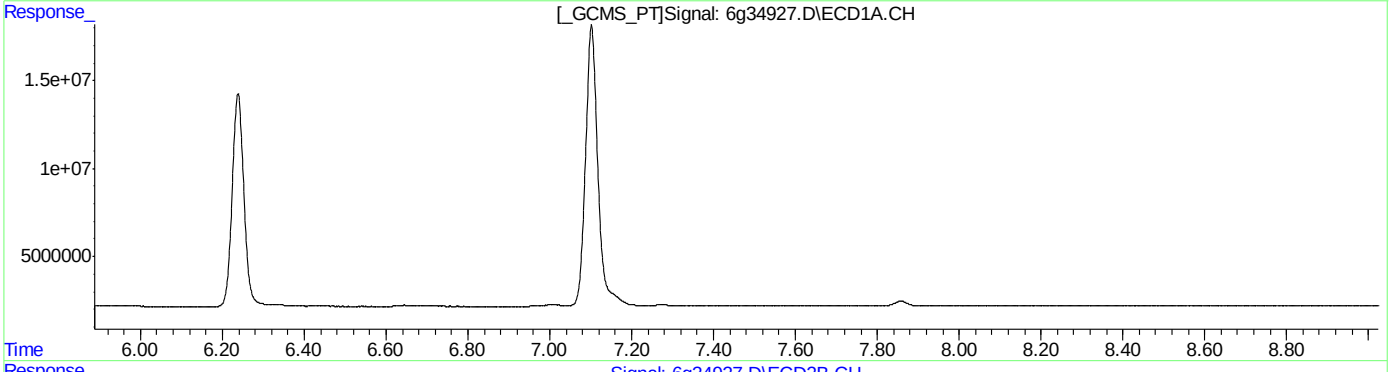
(+) = Expected Retention Time
6PST987.M Wed May 11 10:09:34 2016

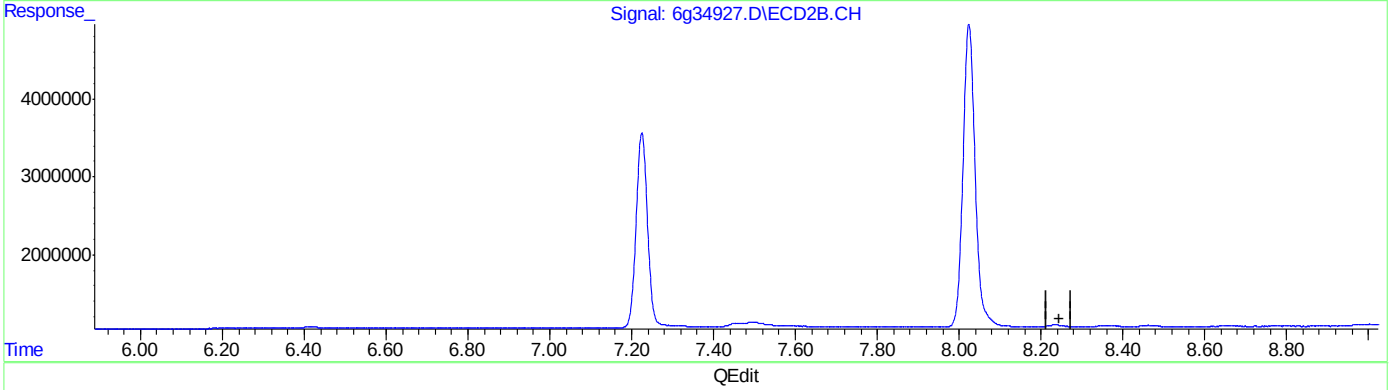
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

6PST987.M Wed May 11 10:09:40 2016

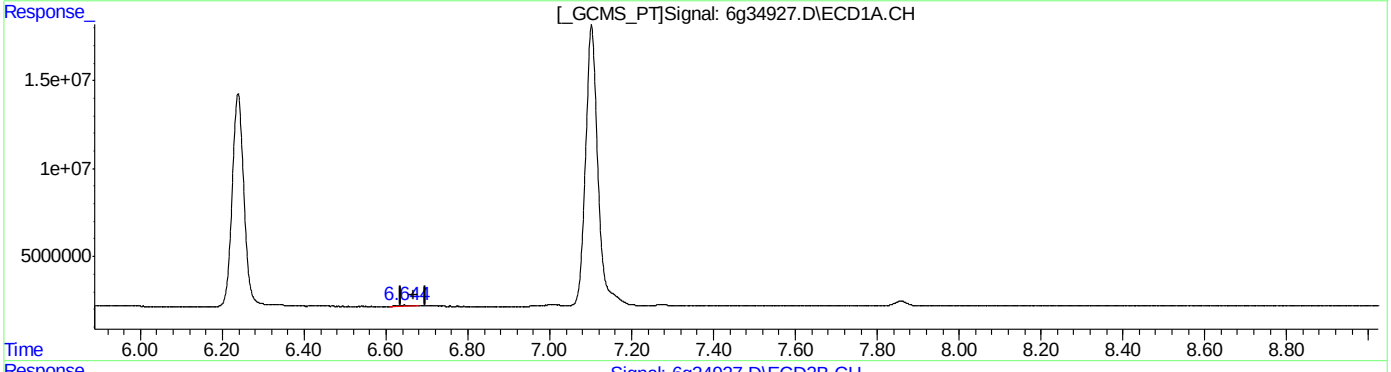
SGS ACCUTEST JC19914

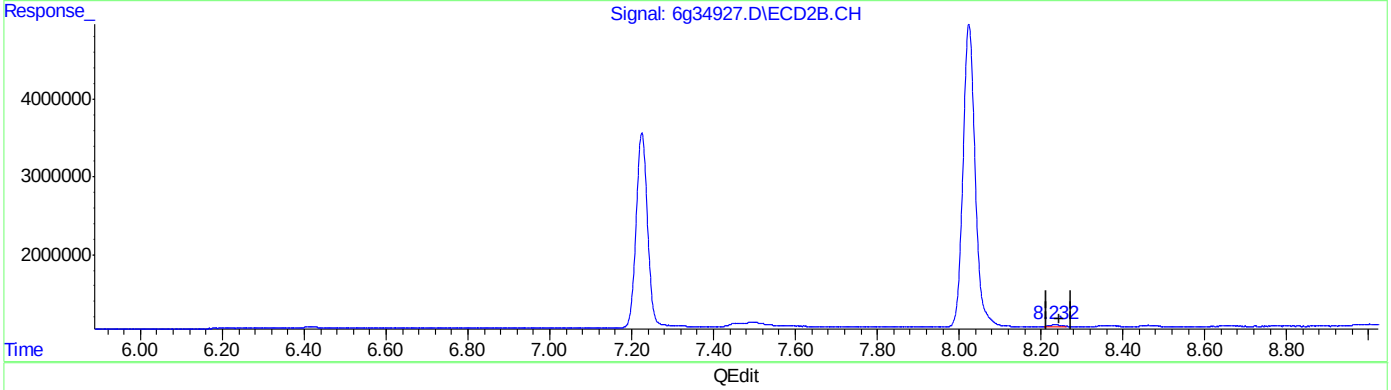
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
6.644min 0.654PPB m
response 1258397

(19) Endrin Aldehyde #2 (B)
8.232min 0.558PPB m
response 411476

(+) = Expected Retention Time
6PST987.M Wed May 11 10:09:58 2016

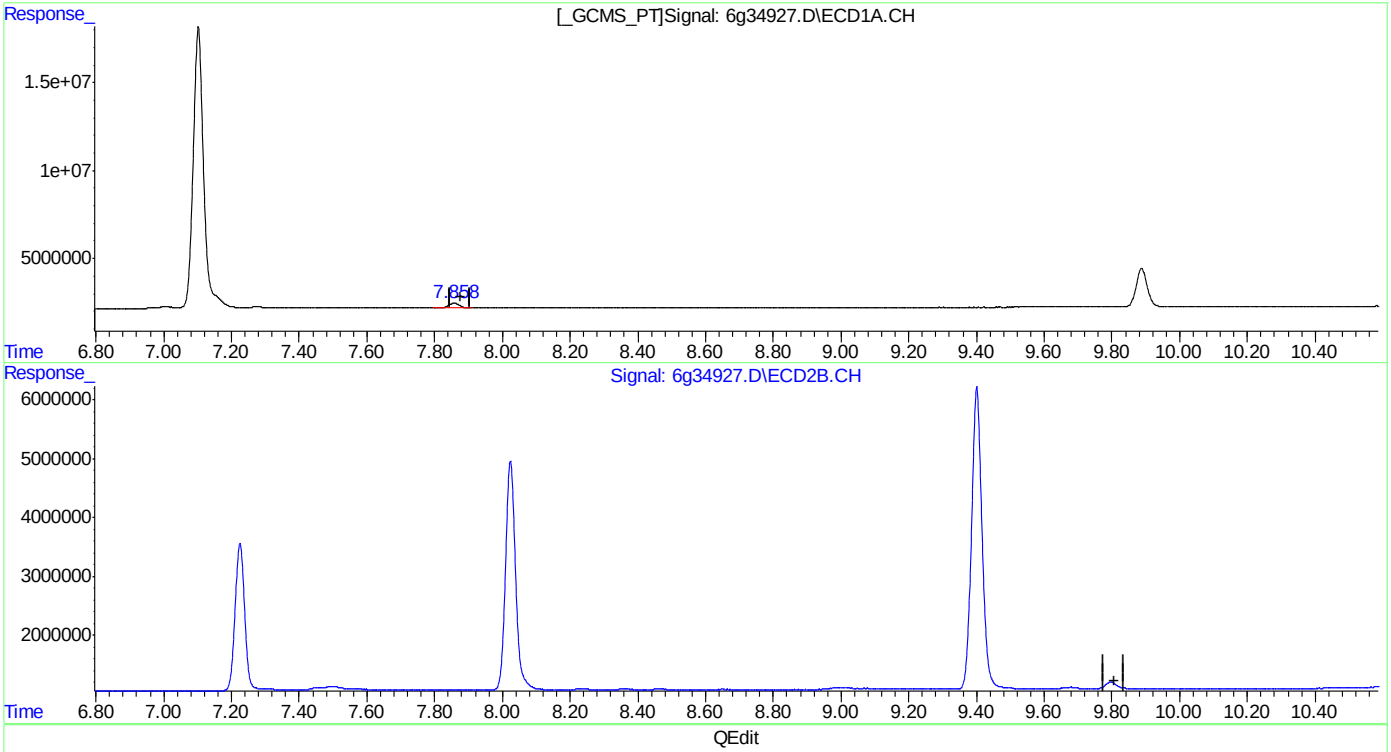
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
7.858min 2.242PPB
response 5523776

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

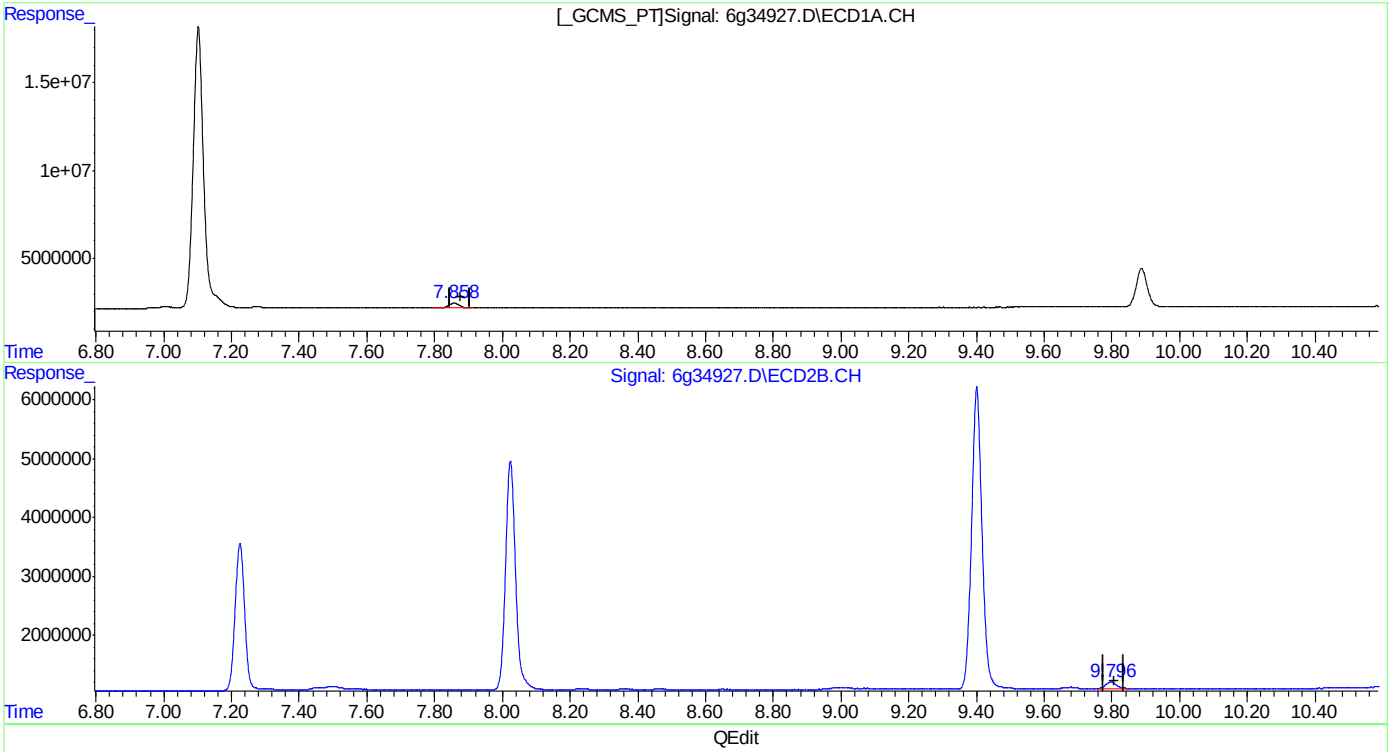
(+) = Expected Retention Time
6PST987.M Wed May 11 10:10:02 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 9:15 am
Operator : dharas
Sample : ddt
Misc : op93749,g6g1008,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 10:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
7.858min 2.242PPB
response 5523776

(23) Endrin Ketone #2 (B)
9.796min 2.594PPB m
response 2427174

(+) = Expected Retention Time
6PST987.M Wed May 11 10:10:10 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:17:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.584	130.4E6	42608349	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.475	2576583	827902	1.118m	1.051m
Spiked Amount		40.000	Range	30 - 150	Recovery	= 2.80%#	2.63%#
24) SAB	Decachlor...	9.925	11.764	2333032	643637	1.134	1.107
Spiked Amount		40.000			Recovery	= 2.83%	2.77%
	Target Compounds						
3) A	alpha-BHC	2.500	3.182	2794596	1037508	0.967m	1.076
4) MA	gamma-BHC	2.816	3.635	2684360	984313	1.002	1.104
5) MA	Heptachlor	3.342	4.243	2907588	1127078	1.109	1.309
6) B	beta-BHC	2.896	3.726	1435856	516127	1.084m	1.168m
7) B	delta-BHC	3.088	4.143	2520045	949446	1.052	1.185
8) MB	Aldrin	3.694	4.720	2673148	1020760	1.081	1.222
9) B	Heptachlo...	4.445	5.602	2533344	891848	1.079	1.139m
10) B	gamma-Chl...	4.619	5.907	2568340	900104	1.066	1.176
11) B	alpha-Chl...	4.801	6.152	2584992	926584	1.092	1.208
12) A	Endosulfan I	4.982	6.251	2584666	934043	1.070	1.250
13) B	4,4'-DDE	4.930	6.450	2093929	845347	1.154	1.227
14) MA	Dieldrin	5.326	6.721	2496162	917148	1.088	1.197
15) MA	Endrin	5.669	7.267	2231160	820226	1.074	1.212
16) A	4,4'-DDD	5.819	7.482f	1856952	554689	1.176	0.878 #
17) B	Endosulfa...	6.009	7.651	2365736	802241	1.136	1.147
18) MA	4,4'-DDT	6.269	8.067	2028872	611344	1.218	1.460
19) B	Endrin Al...	6.683	8.276f	1963656	680376	1.167	1.208
20) B	Endosulfa...	7.419	8.792	2156792	757211	1.204	1.289
21) A	Methoxychlor	7.134f	9.448	1359857	297463	1.439	1.343m
22)	Mirex	7.268	9.753f	2186568	811332	1.112	1.361m
23) B	Endrin Ke...	7.893	9.838f	2459754	857280	1.257	1.365m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

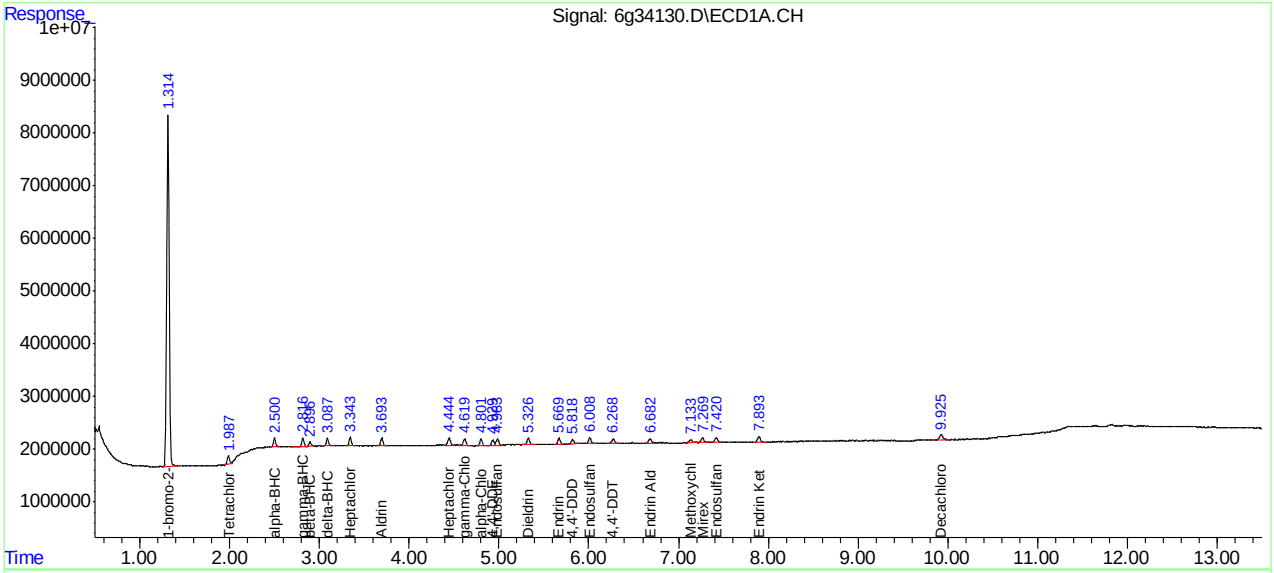
11.6.1 11

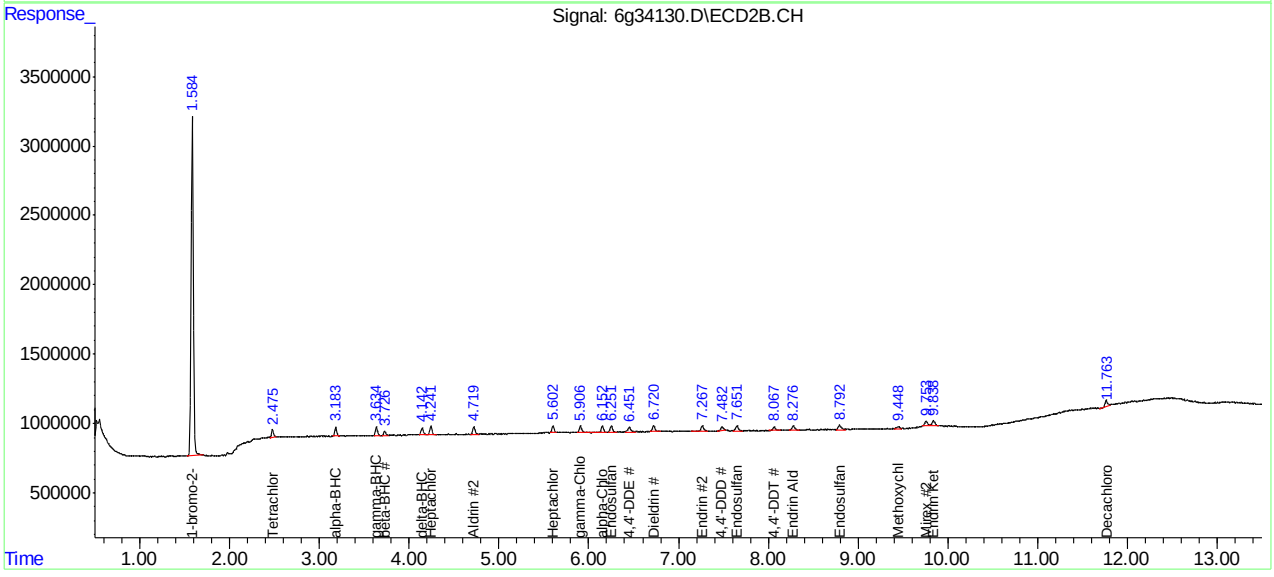
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:17:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34130.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 15:49	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

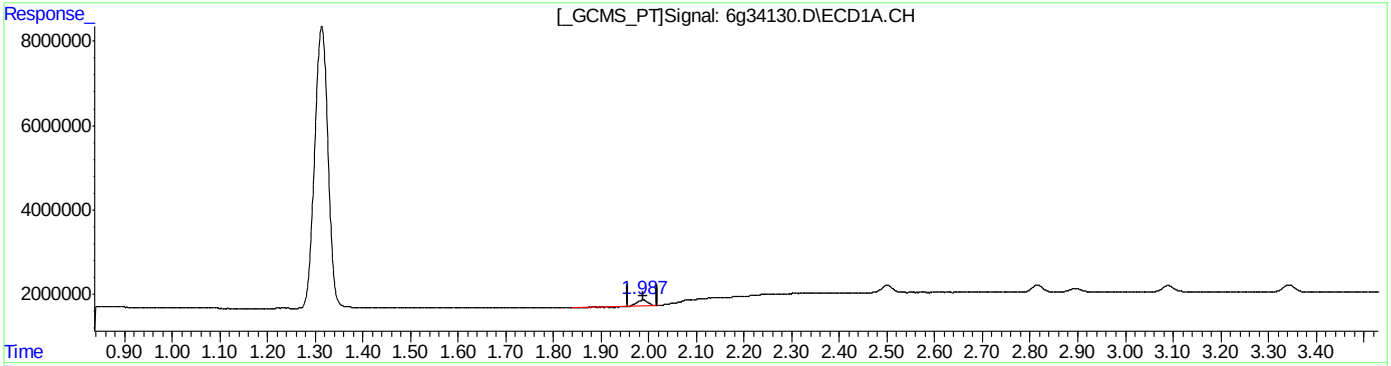
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.99	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.48	Poor instrument integration
alpha-BHC	319-84-6	1	2.50	Poor instrument integration
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Heptachlor epoxide	1024-57-3	2	5.60	Poor instrument integration
Methoxychlor	72-43-5	2	9.45	Poor instrument integration
Mirex	2385-85-5	2	9.75	Poor instrument integration
Endrin ketone	53494-70-5	2	9.84	Poor instrument integration

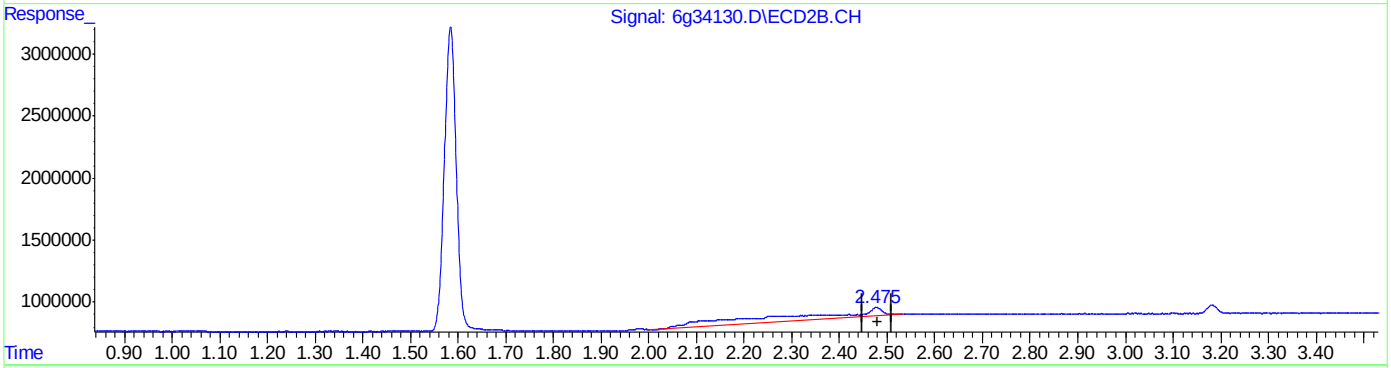
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.987min 0.787PPB
response 1813361

(2) Tetrachloro-m-xylene #2 (SAB)
2.477min 12.157PPB
response 9572770

(+) = Expected Retention Time

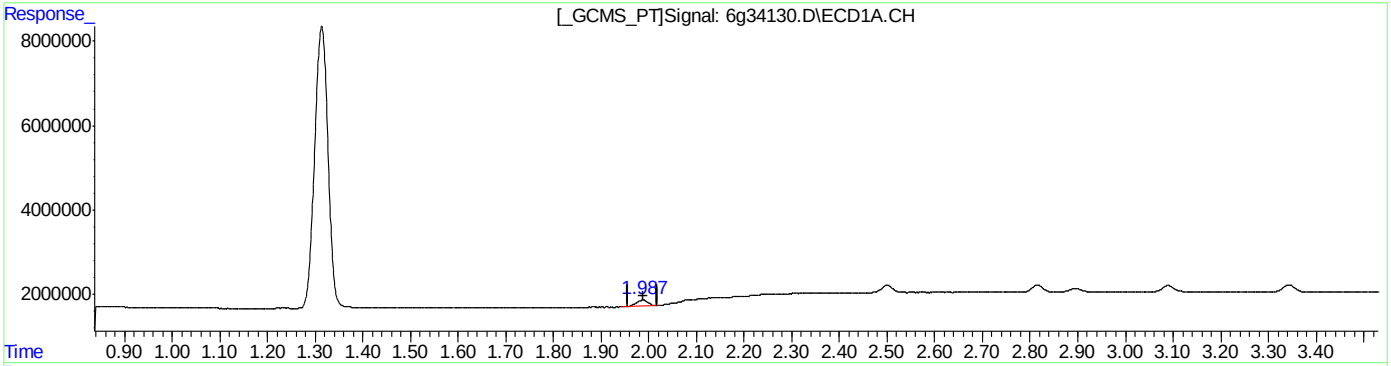
SGS ACCUTEST JC19914

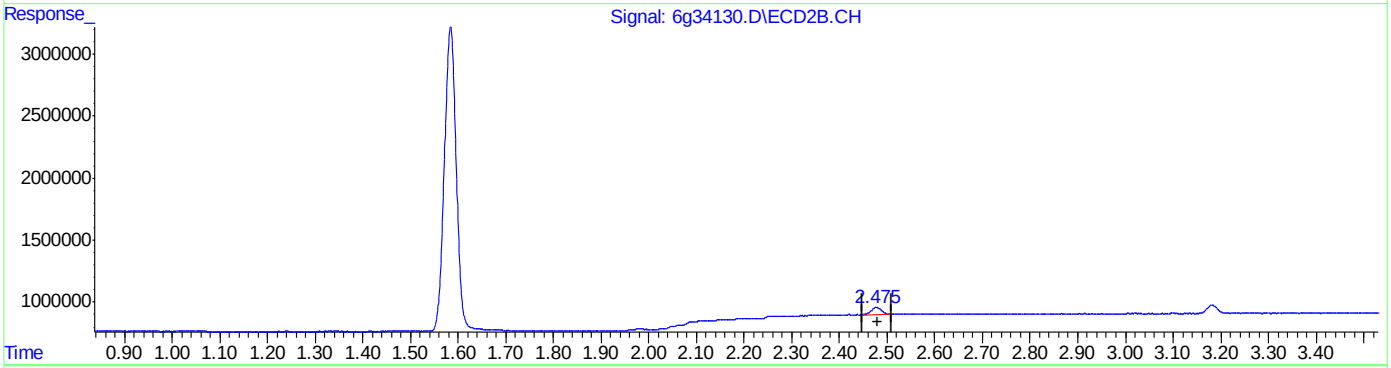
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.987min 1.118PPB m
response 2576583

(2) Tetrachloro-m-xylene #2 (SAB)
2.475min 1.051PPB m
response 827902

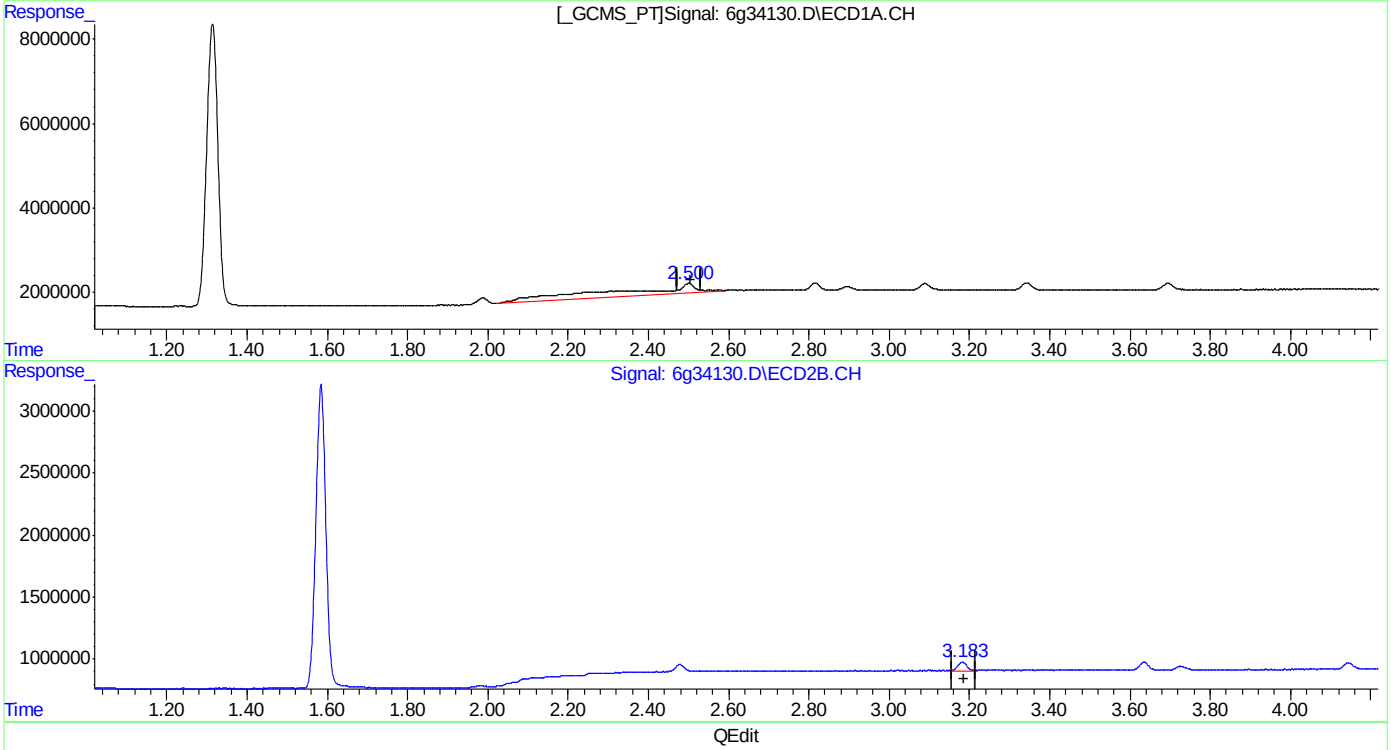
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.501min 11.218PPB
response 32431486

(3) alpha-BHC #2 (A)
3.182min 1.076PPB
response 1037508

(+) = Expected Retention Time

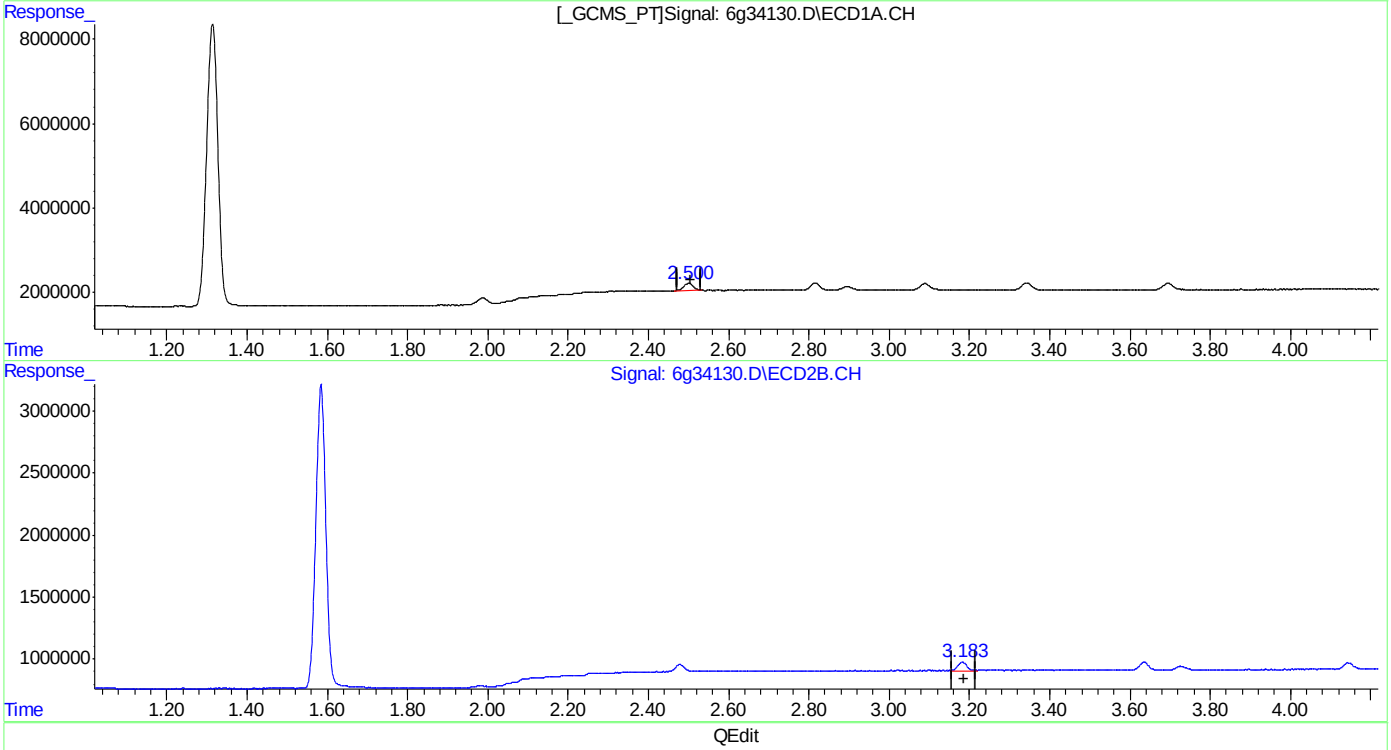
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.500min 0.967PPB m
response 2794596

(3) alpha-BHC #2 (A)
3.182min 1.076PPB
response 1037508

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:43 2016

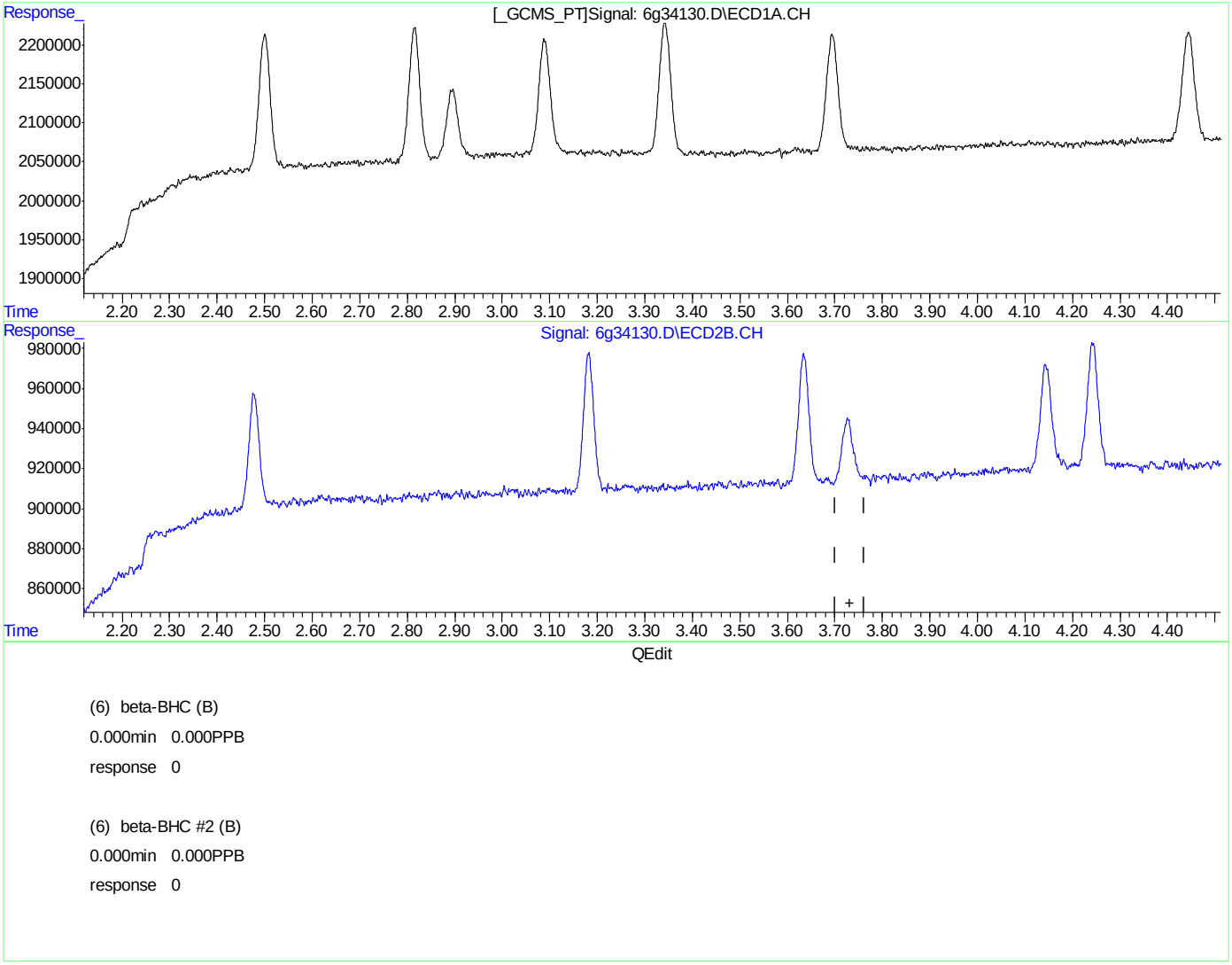
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
0.000min 0.000PPB
response 0

(6) beta-BHC #2 (B)
0.000min 0.000PPB
response 0

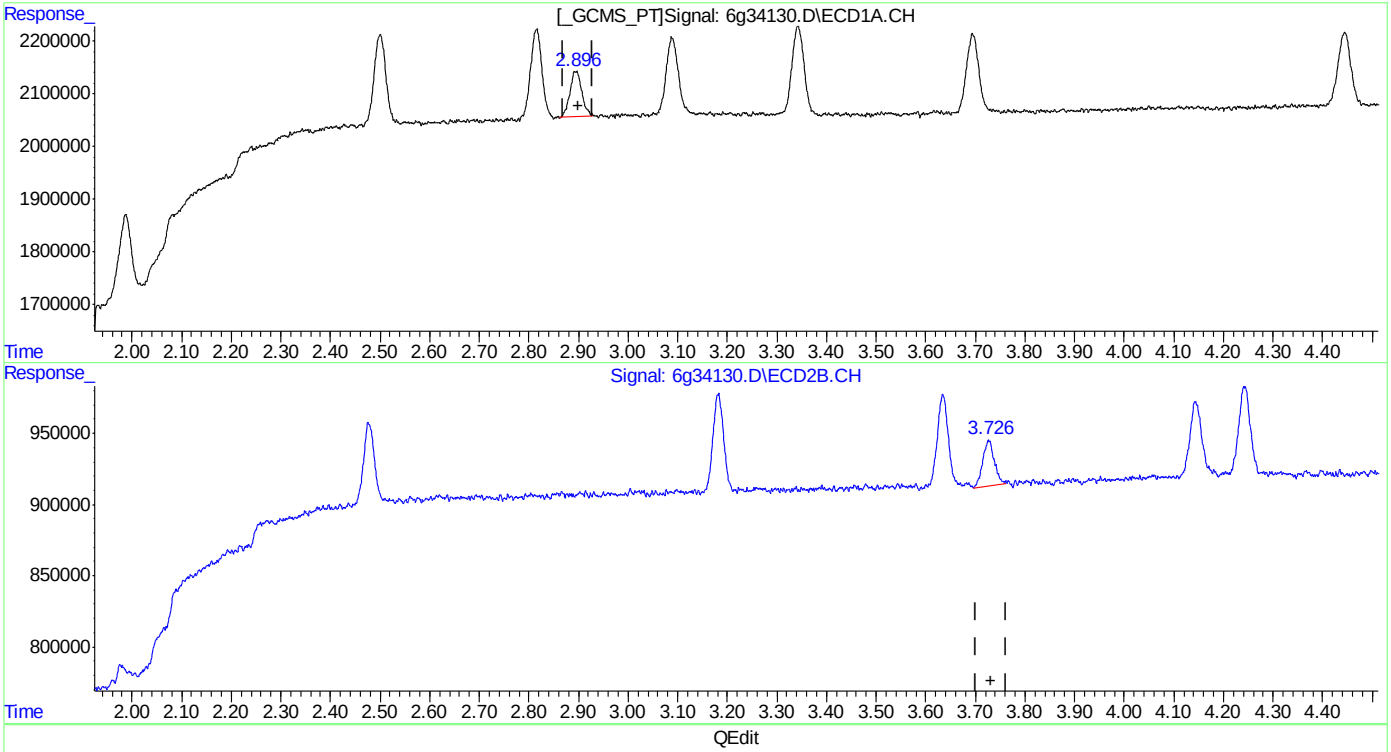
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
2.896min 1.084PPB m
response 1435856

(6) beta-BHC #2 (B)
3.726min 1.168PPB m
response 516127

(+) = Expected Retention Time

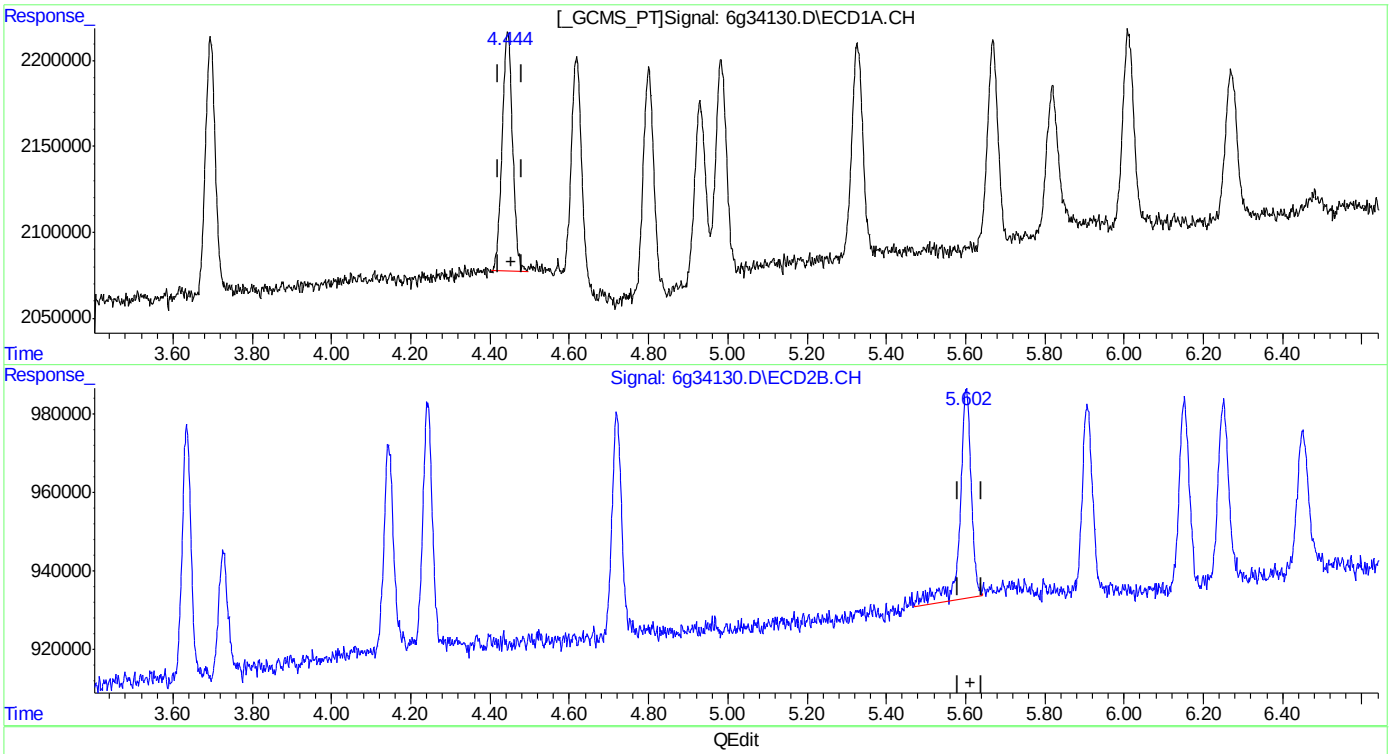
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(9) Heptachlor Epoxide (B)
4.445min 1.079PPB
response 2533344

(9) Heptachlor Epoxide #2 (B)
5.602min 1.388PPB
response 1086853

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:12 2016

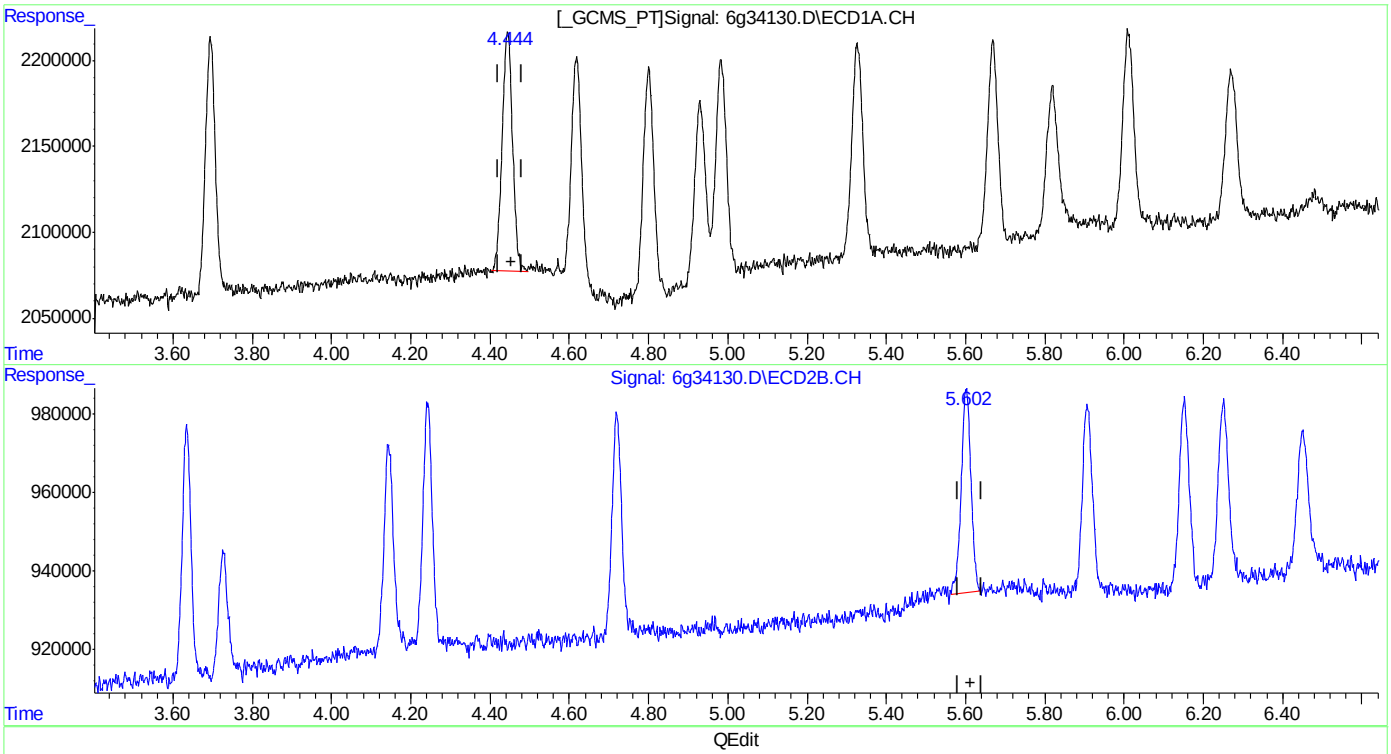
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(9) Heptachlor Epoxide (B)
4.445min 1.079PPB
response 2533344

(9) Heptachlor Epoxide #2 (B)
5.602min 1.139PPB m
response 891848

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:20 2016

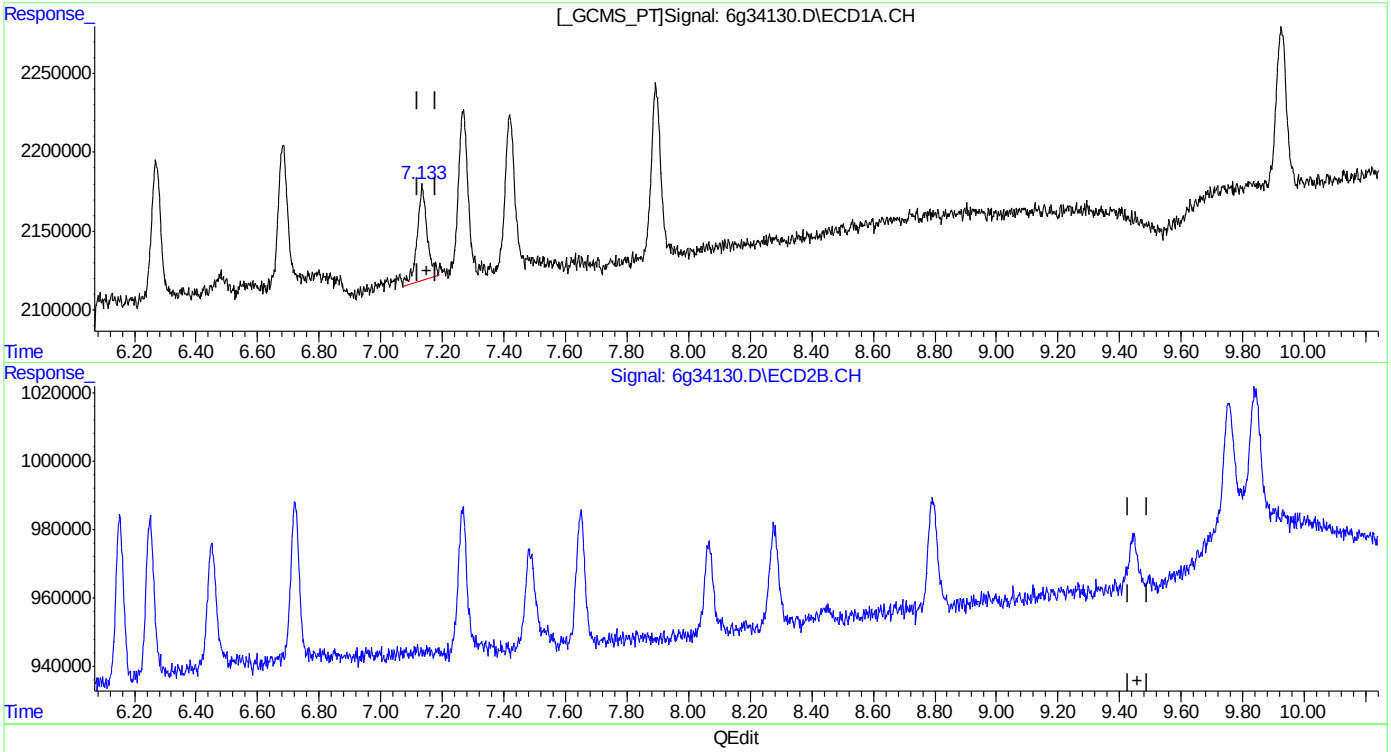
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.134min 1.439PPB
response 1359857

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:36 2016

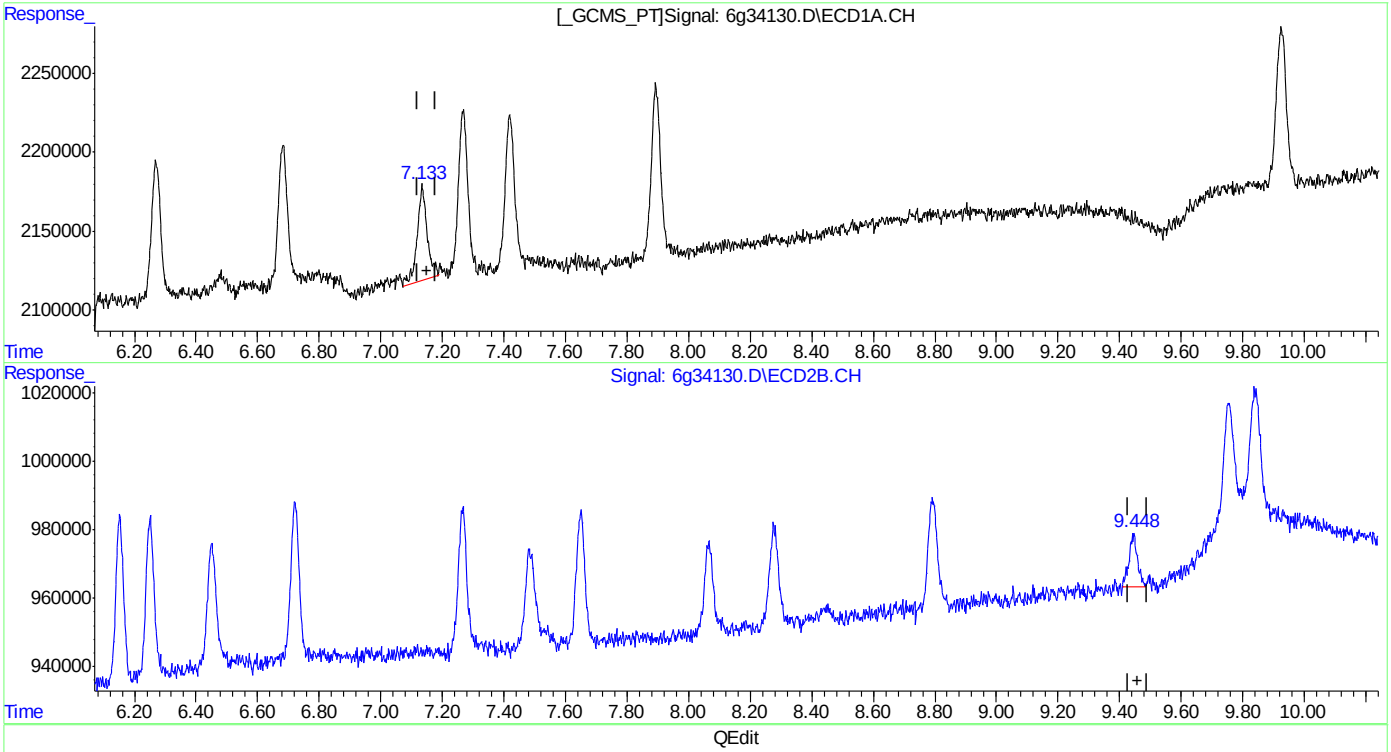
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.134min 1.439PPB
response 1359857

(21) Methoxychlor #2 (A)
9.448min 1.343PPB m
response 297463

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:45 2016

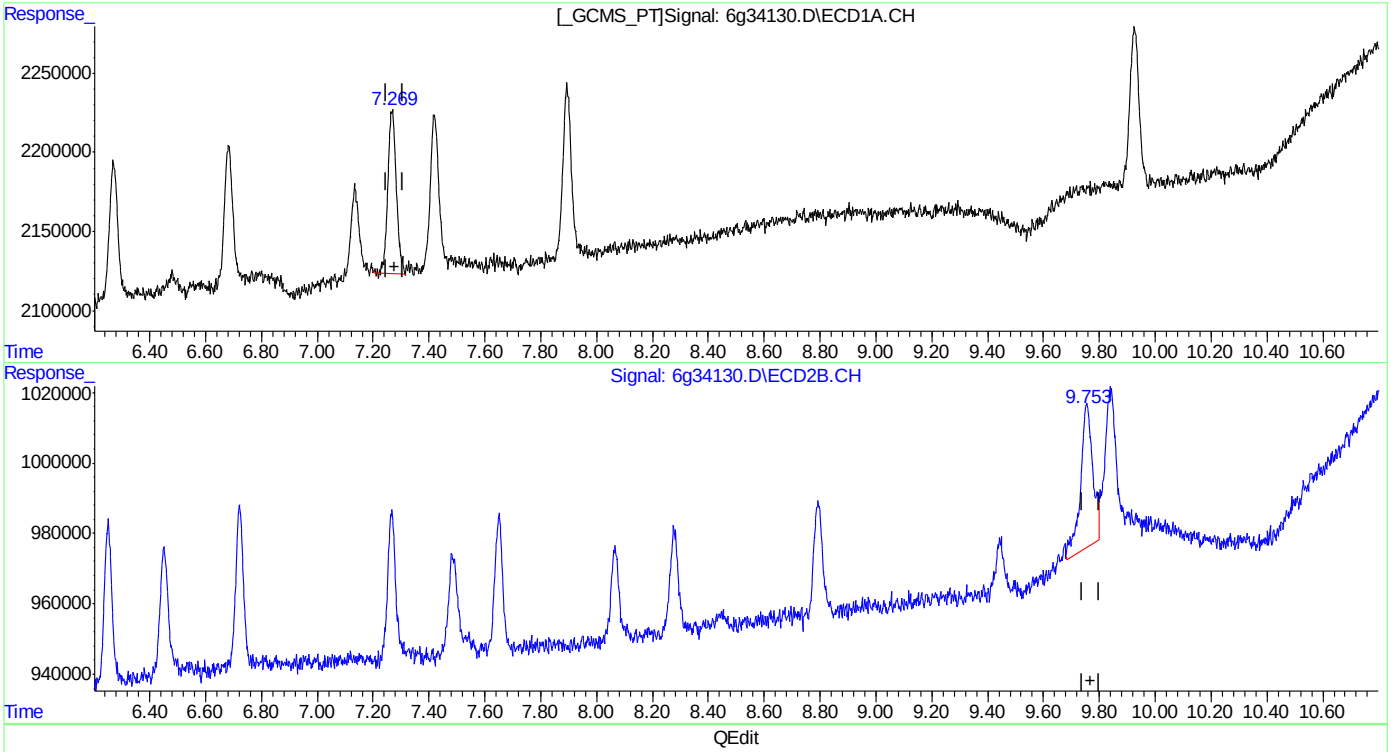
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(22) Mirex
7.268min 1.112PPB
response 2186568

(22) Mirex #2
9.754min 2.103PPB
response 1253259

(+) = Expected Retention Time

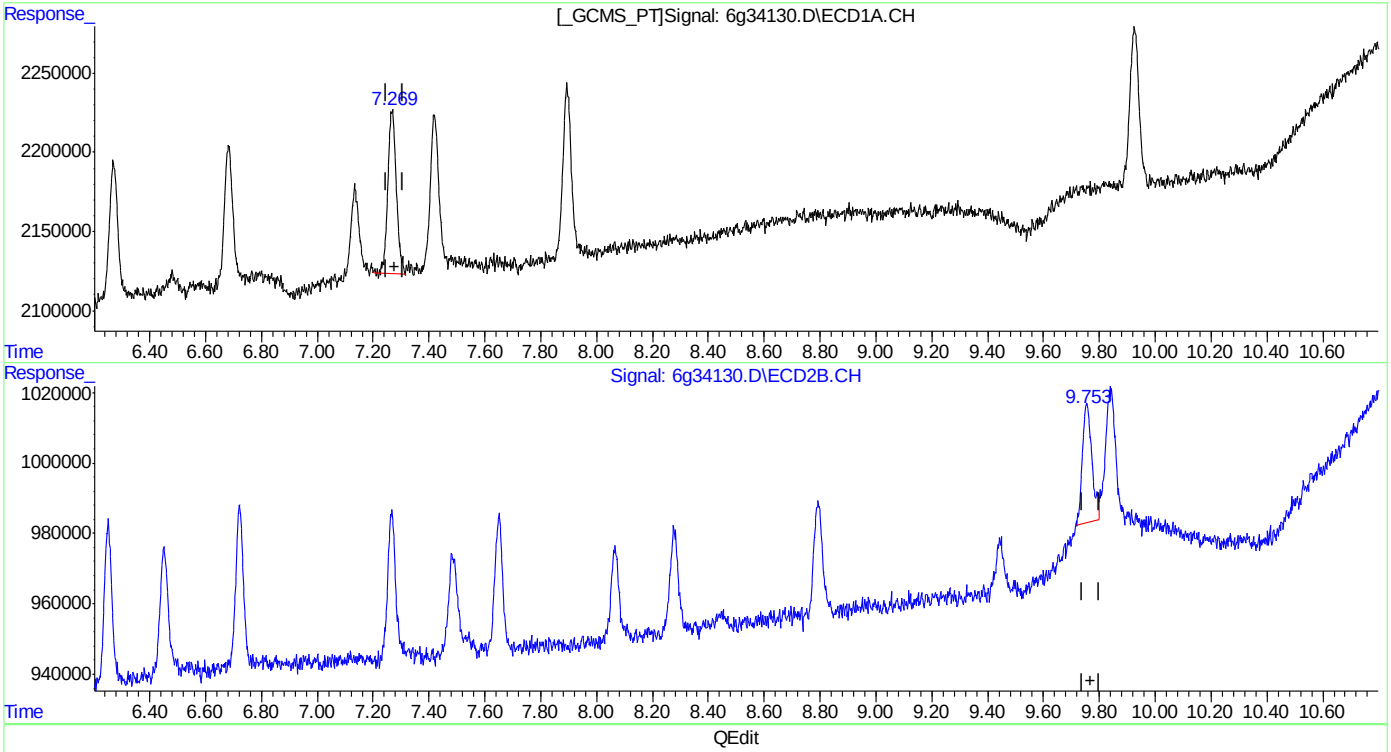
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(22) Mirex
7.268min 1.112PPB
response 2186568

(22) Mirex #2
9.753min 1.361PPB m
response 811332

(+) = Expected Retention Time

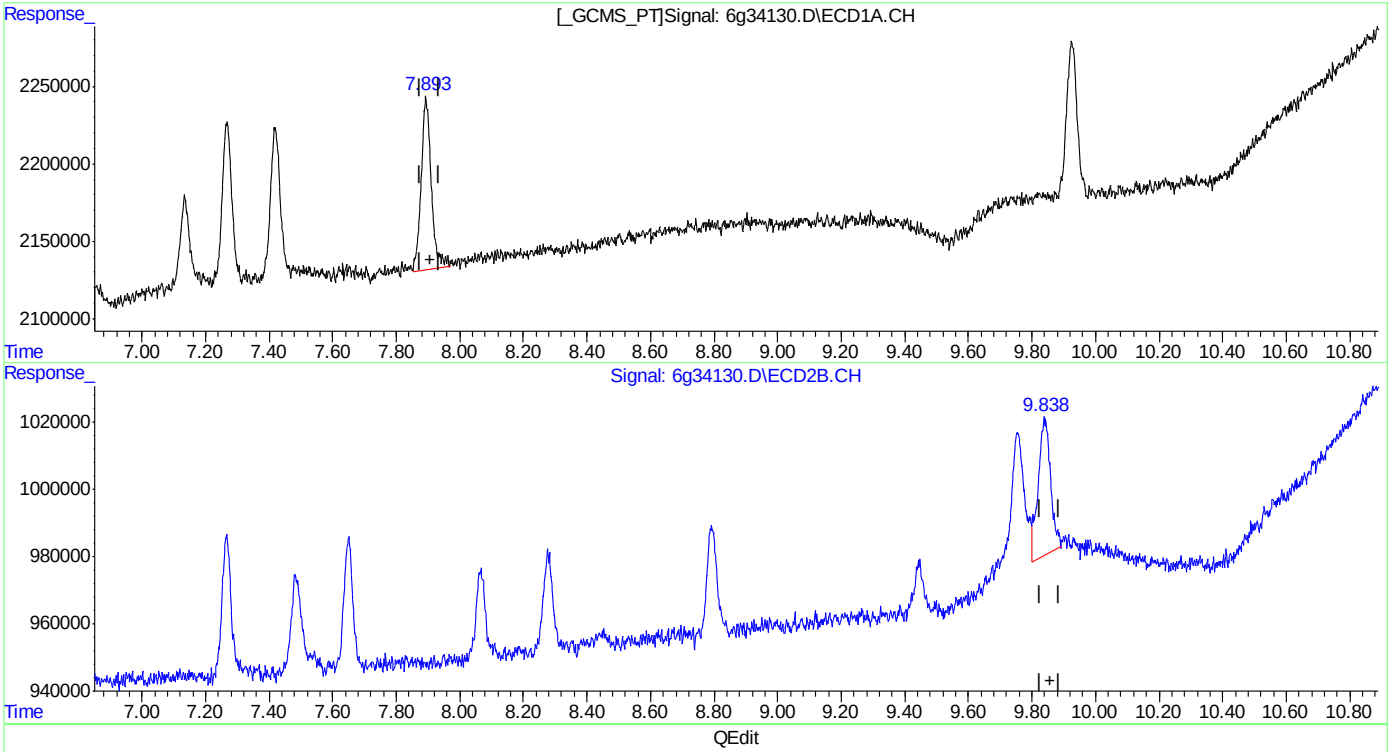
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
7.893min 1.257PPB
response 2459754

(23) Endrin Ketone #2 (B)
9.844min 1.769PPB
response 1111083

(+) = Expected Retention Time

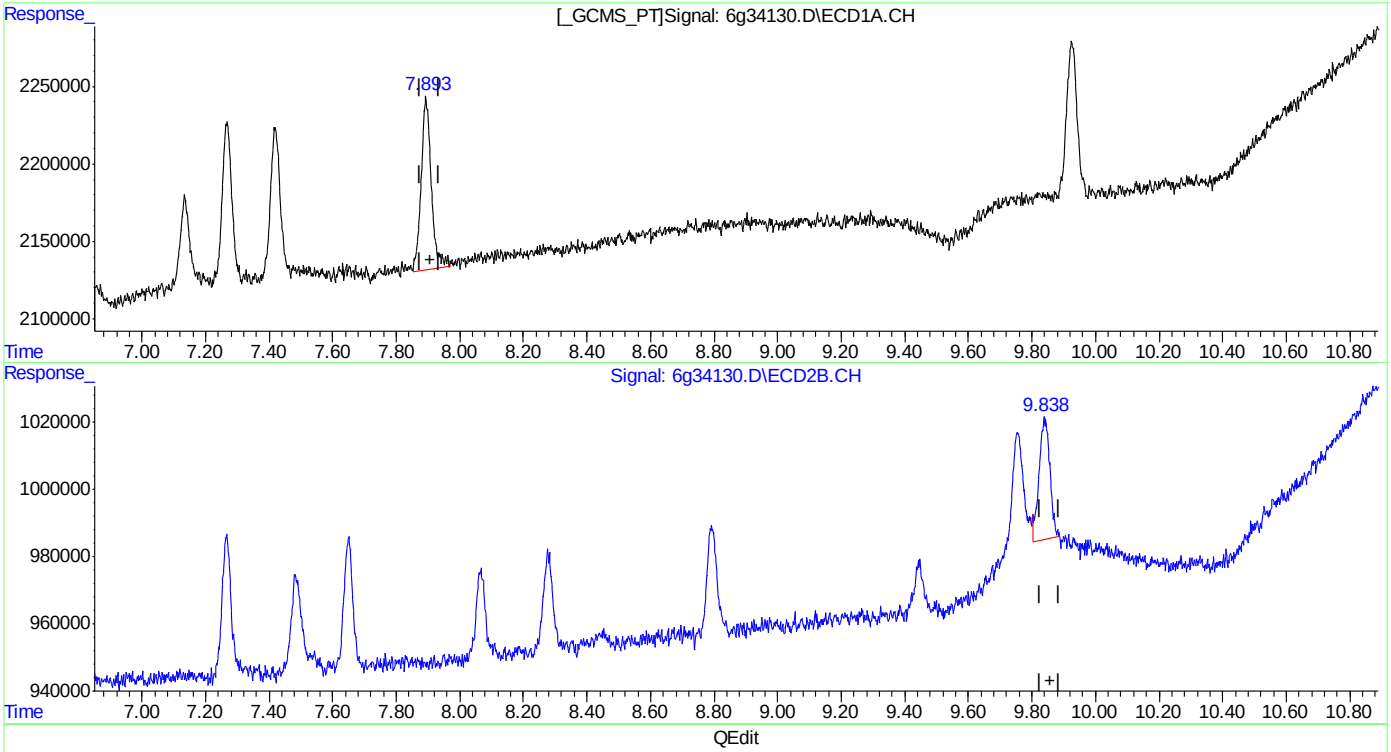
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
7.893min 1.257PPB
response 2459754

(23) Endrin Ketone #2 (B)
9.838min 1.365PPB m
response 857280

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:54:33 2016

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.585	138.6E6	45170280	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.479	5101788	1738576	2.082	2.083
Spiked Amount		40.000	Range	30 - 150	Recovery	= 5.21%#	5.21%#
24) SAB	Decachlor...	9.926	11.763	4607200	1403506	2.107	2.277m
Spiked Amount		40.000			Recovery	= 5.27%	5.69%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	5774894	2058064	1.879	2.013
4) MA	gamma-BHC	2.816	3.636	5554647	1999405	1.950	2.116
5) MA	Heptachlor	3.344	4.243	5832418	2063856	2.092	2.260
6) B	beta-BHC	2.896	3.726	3076723	981586	2.186m	2.096m
7) B	delta-BHC	3.090	4.145	4966804	1849032	1.950	2.177
8) MB	Aldrin	3.695	4.721	5278516	1881659	2.008	2.125
9) B	Heptachlo...	4.445	5.603	5114038	1885907	2.050	2.272
10) B	gamma-Chl...	4.619	5.909	5065834	1833515	1.978	2.260
11) B	alpha-Chl...	4.802	6.153	5102906	1756720	2.028	2.161
12) A	Endosulfan I	4.983	6.253	5137112	1702104	2.001	2.148
13) B	4,4'-DDE	4.931	6.452	4058606	1526131	2.104	2.090
14) MA	Dieldrin	5.327	6.724	4928360	1784737	2.022	2.198
15) MA	Endrin	5.670	7.266	4499665	1631535	2.037	2.274
16) A	4,4'-DDD	5.819	7.486	3497822	1276576	2.084	1.907
17) B	Endosulfa...	6.010	7.650	4442758	1574127	2.007	2.122
18) MA	4,4'-DDT	6.270	8.067	3705960	1175821	2.093	2.648 #
19) B	Endrin Al...	6.683	8.279	3577534	1247912	2.000	2.091
20) B	Endosulfa...	7.423	8.793	3981880	1446528	2.091	2.323
21) A	Methoxychlor	7.137	9.443f	2283360	614080	2.273	2.615m
22)	Mirex	7.269	9.755f	4245275	1416035	2.031	2.241
23) B	Endrin Ke...	7.896	9.843	4563666	1657293	2.194	2.490

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

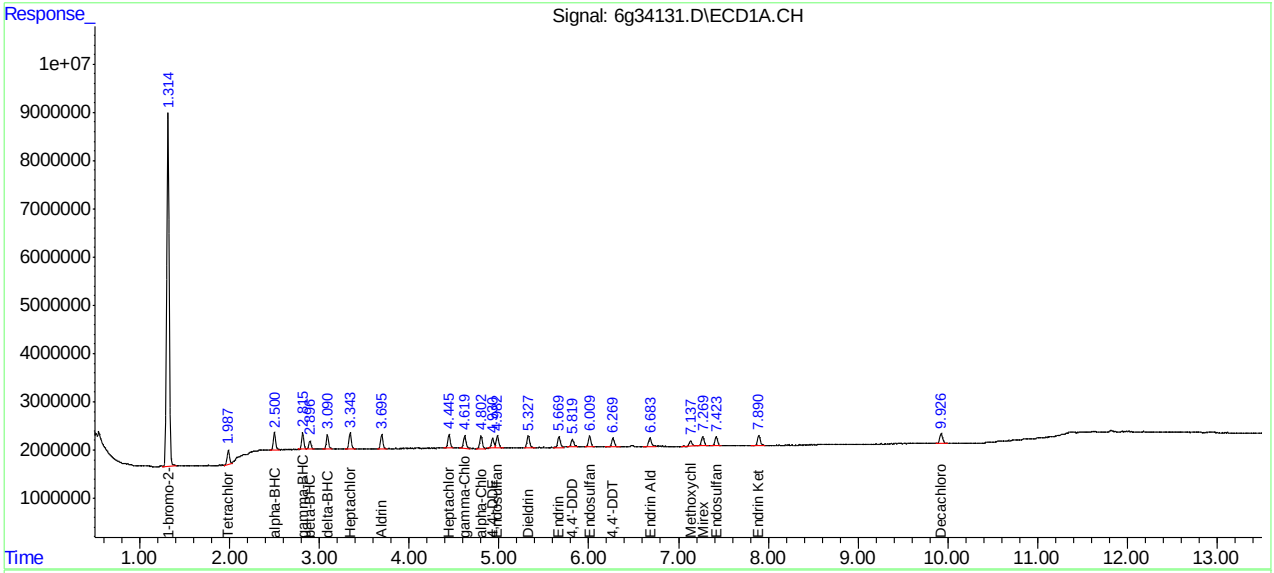
11.6.2 11

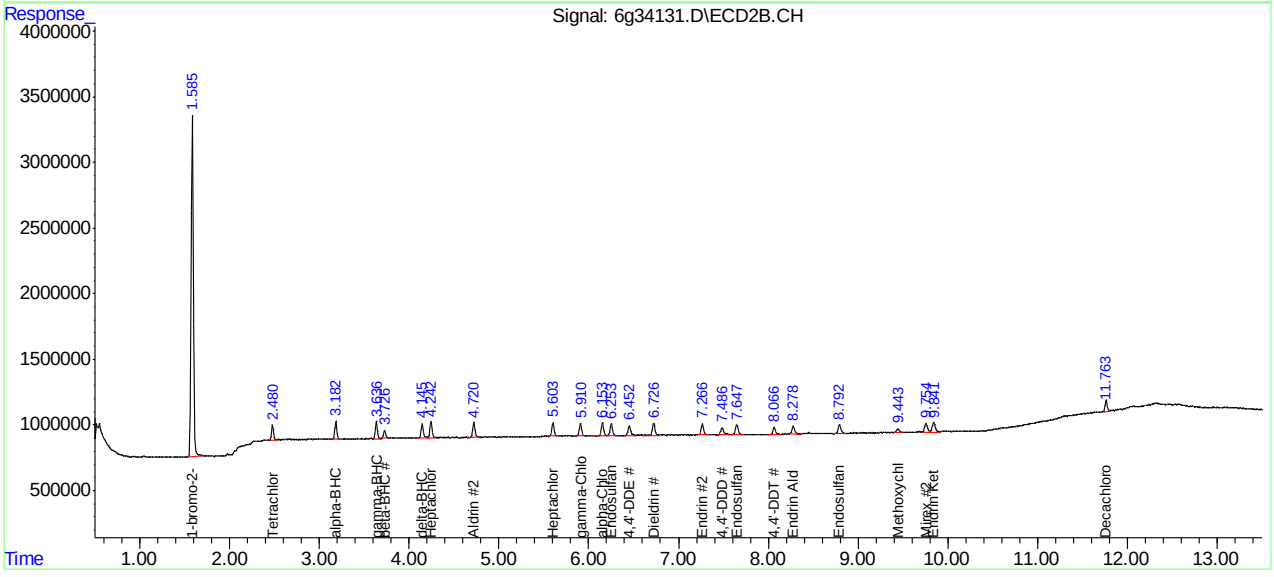
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34131.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 16:05	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

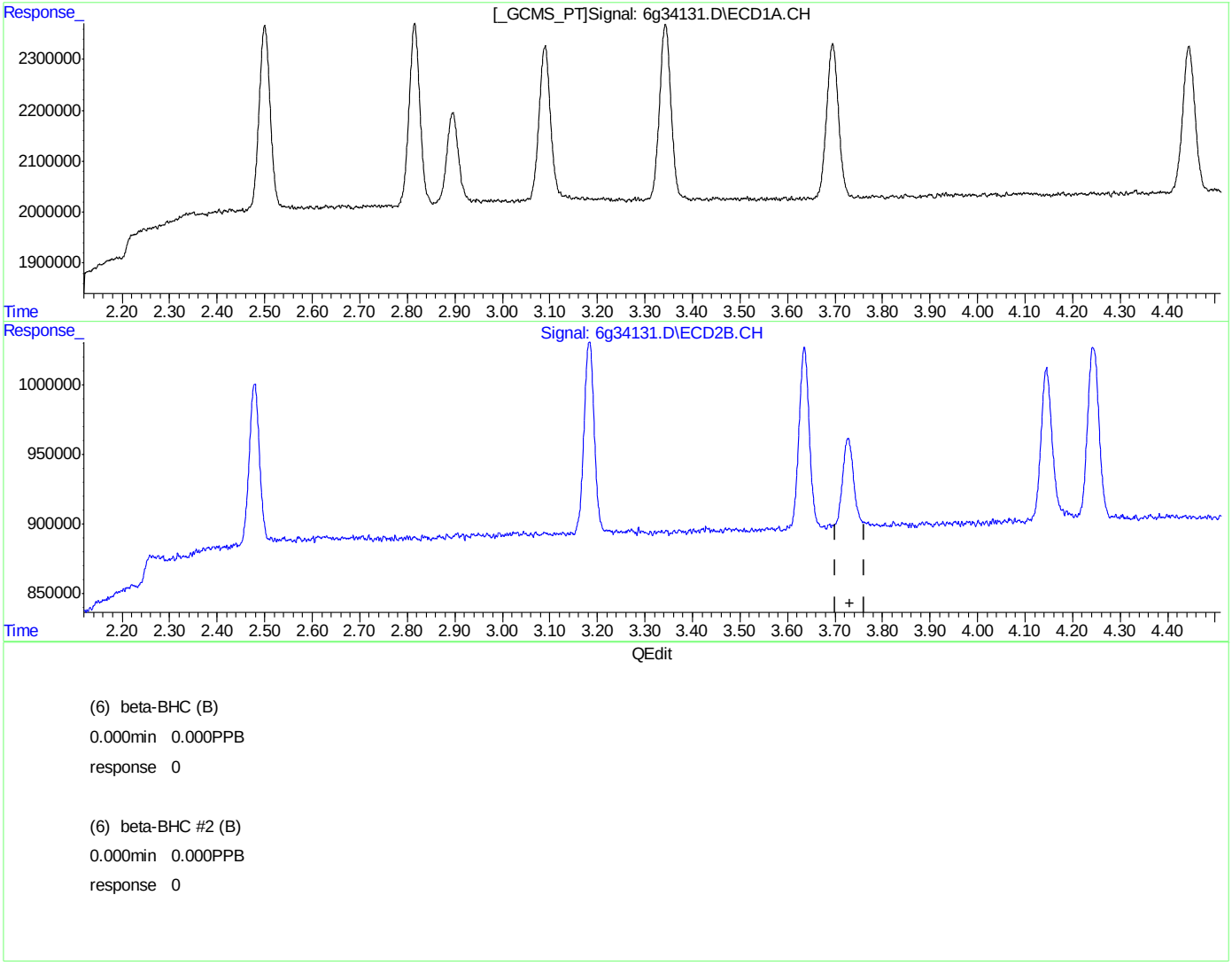
Parameter	CAS	Sig#	R.T. (min.)	Reason
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.76	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
0.000min 0.000PPB
response 0

(6) beta-BHC #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:41:41 2016

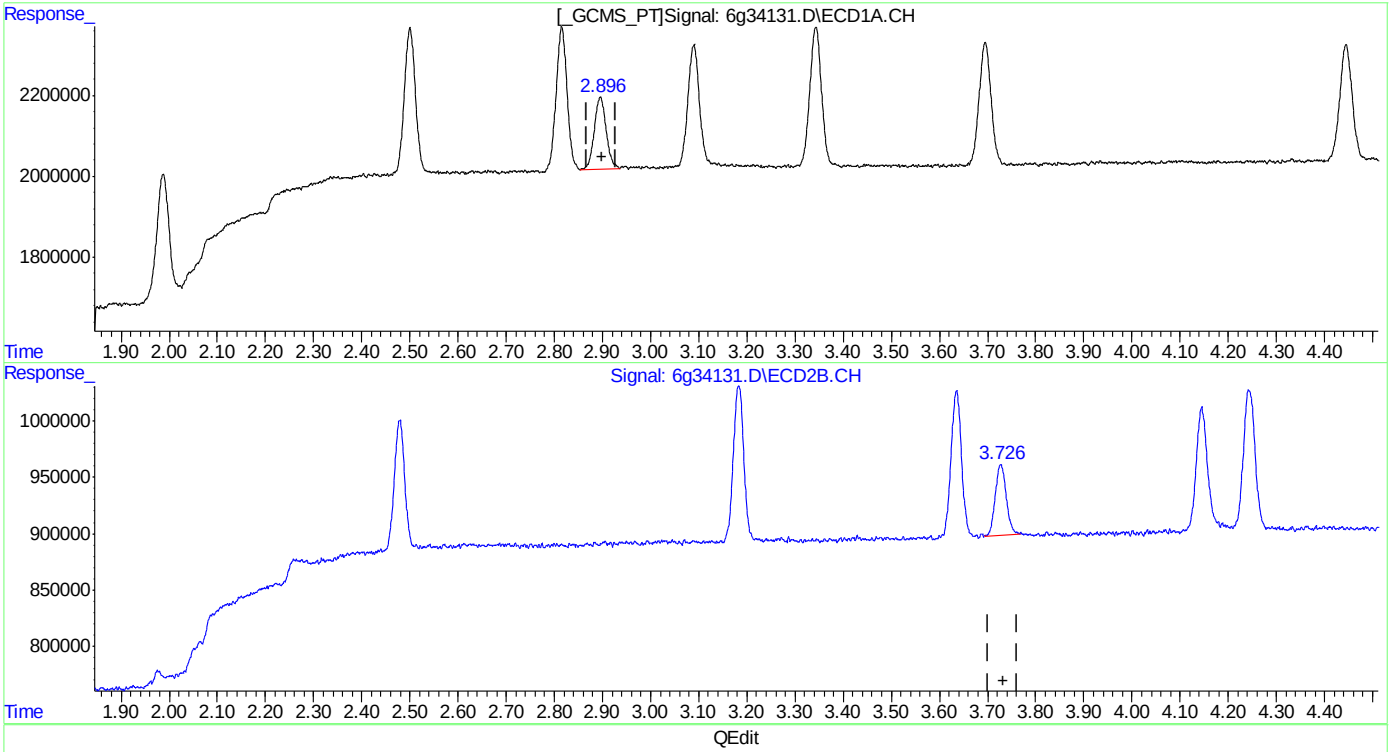
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(6) beta-BHC (B)
2.896min 2.186PPB m
response 3076723

(6) beta-BHC #2 (B)
3.726min 2.096PPB m
response 981586

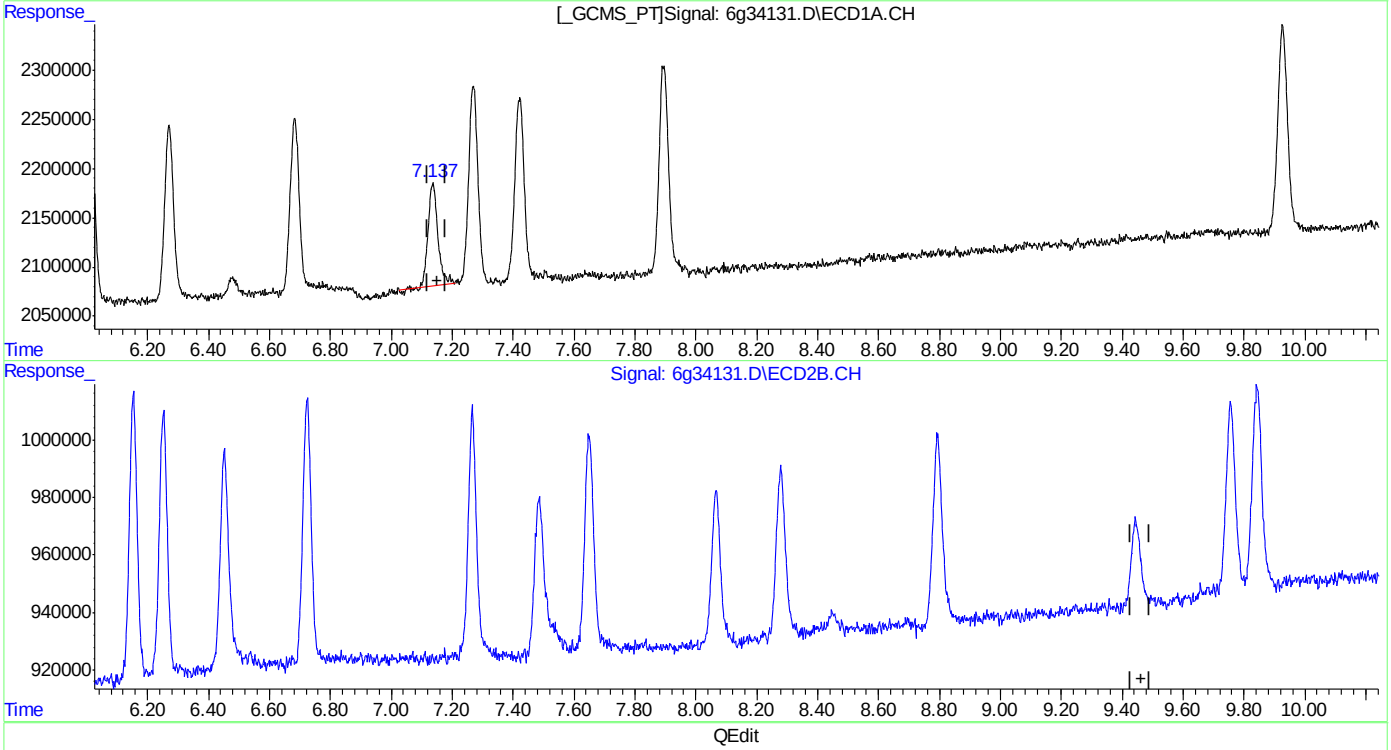
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:41:59 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 2.273PPB
response 2283360

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

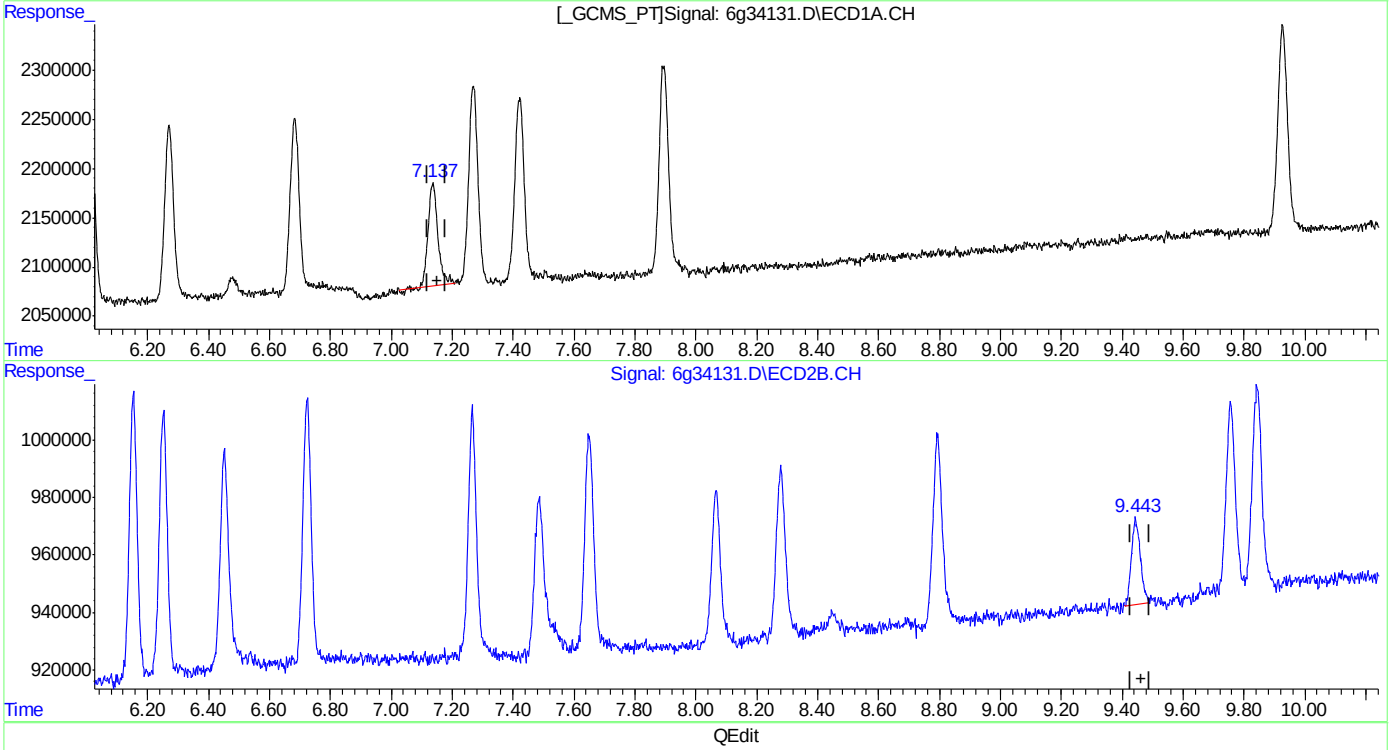
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 2.273PPB
response 2283360

(21) Methoxychlor #2 (A)
9.443min 2.615PPB m
response 614080

(+) = Expected Retention Time

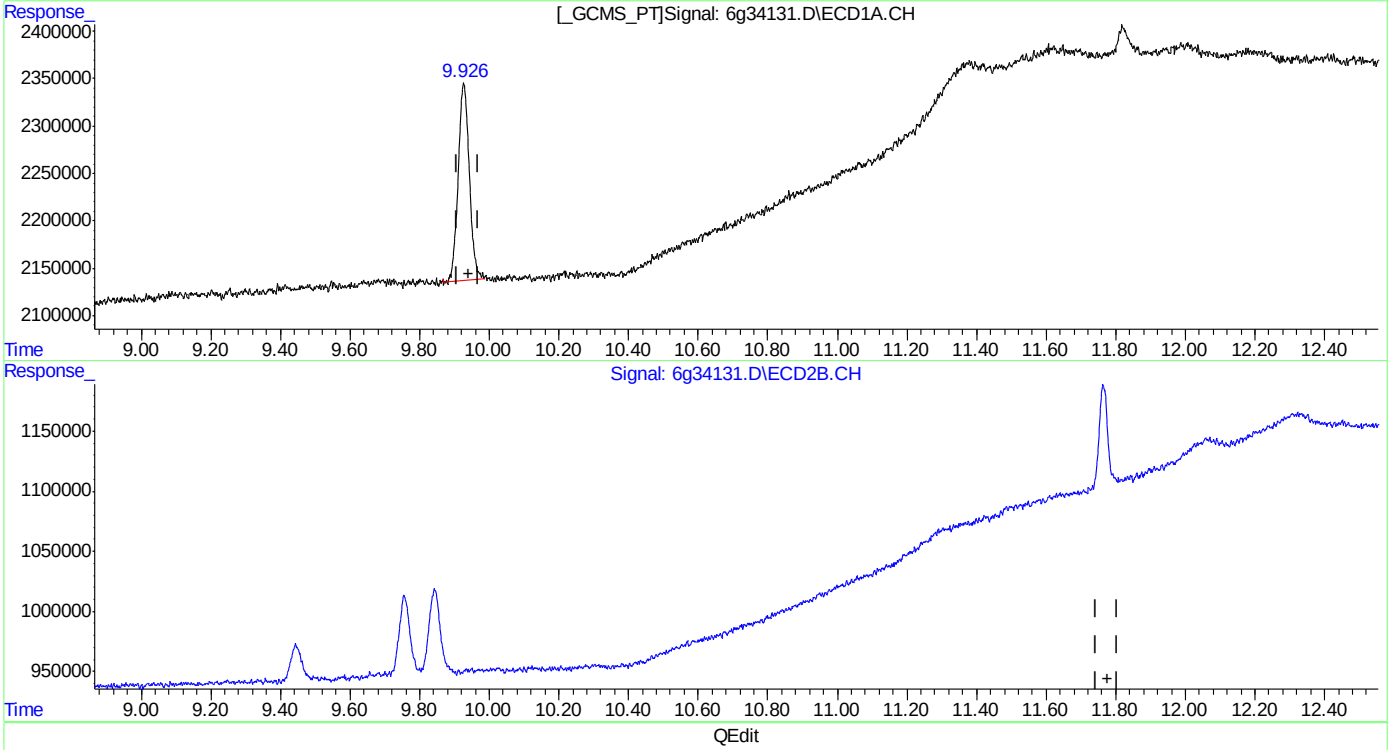
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.926min 2.107PPB
response 4607200

(24) Decachlorobiphenyl #2 (SAB)
0.000min 0.000PPB
response 0

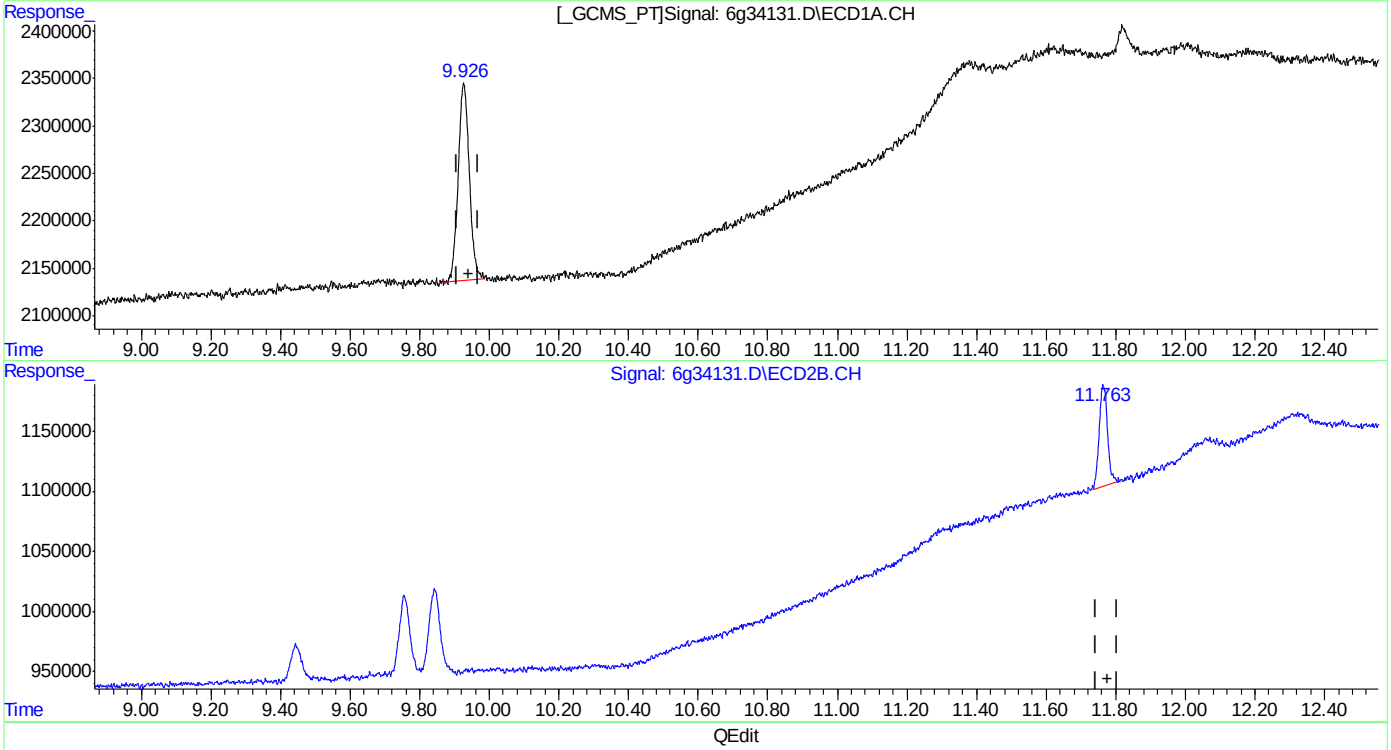
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:42:27 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.926min 2.107PPB
response 4607200

(24) Decachlorobiphenyl #2 (SAB)
11.763min 2.277PPB m
response 1403506

(+) = Expected Retention Time

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.585	141.2E6	45861524	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.478	12604959	4212366	5.051	4.970
Spiked Amount		40.000	Range	30 - 150	Recovery	= 12.63%#	12.43%#
24) SAB	Decachlor...	9.926	11.768	11331892	2647512	5.088	4.230m
Spiked Amount		40.000			Recovery	= 12.72%	10.58%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	14648824	5063872	4.680	4.878
4) MA	gamma-BHC	2.817	3.636	14067221	4844724	4.849	5.049
5) MA	Heptachlor	3.344	4.244	14577088	4888164	5.133	5.273
6) B	beta-BHC	2.896	3.728	7714959	2480528	5.381	5.217
7) B	delta-BHC	3.091	4.146	12751854	4306125	4.916	4.995
8) MB	Aldrin	3.697	4.722	13106990	4722588	4.895	5.254
9) B	Heptachlo...	4.446	5.603	12828644	4363078	5.049	5.176
10) B	gamma-Chl...	4.620	5.909	12654624	4270104	4.851	5.184
11) B	alpha-Chl...	4.802	6.154	12678021	4336659	4.947	5.255
12) A	Endosulfan I	4.985	6.252	12389510	4144533	4.737	5.151
13) B	4,4'-DDE	4.932	6.454	10073925	3476449	5.127	4.690
14) MA	Dieldrin	5.330	6.723	12016085	4266739	4.839	5.175
15) MA	Endrin	5.672	7.267	11105455	4047985	4.936	5.556
16) A	4,4'-DDD	5.820	7.486	8487607	3302013	4.964	4.858
17) B	Endosulfa...	6.012	7.651	10976603	3743835	4.867	4.972
18) MA	4,4'-DDT	6.270	8.066	9215147	2757576	5.110	6.117
19) B	Endrin Al...	6.684	8.279	9058405	2994191	4.970	4.940
20) B	Endosulfa...	7.422	8.795	9637621	3219291	4.970	5.093
21) A	Methoxychlor	7.137	9.445f	5612130	1635835	5.483	6.860m#
22)	Mirex	7.270	9.757	10560608	3364693	4.960	5.244
23) B	Endrin Ke...	7.895	9.840f	11298895	3852585	5.333	5.700

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

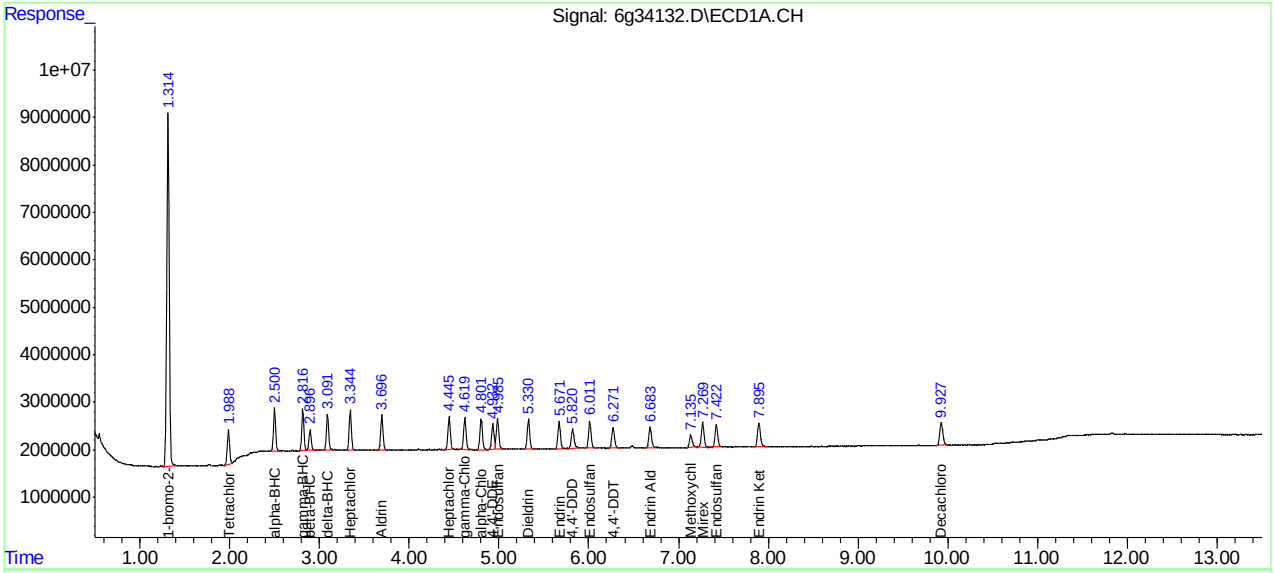
11.6.3 11

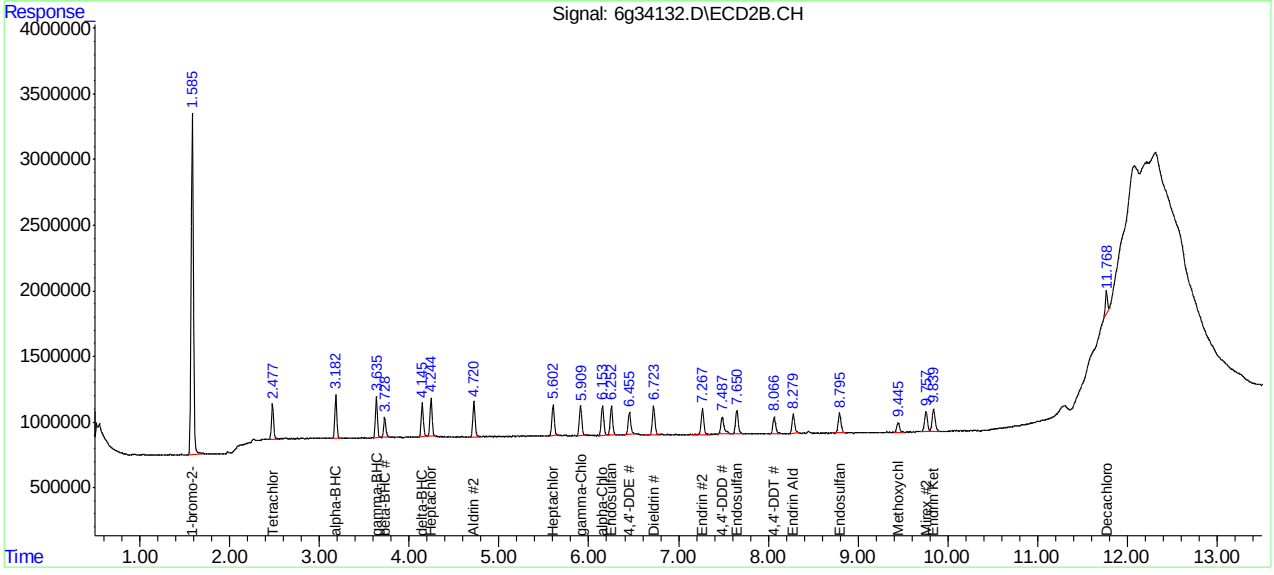
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34132.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 16:22	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

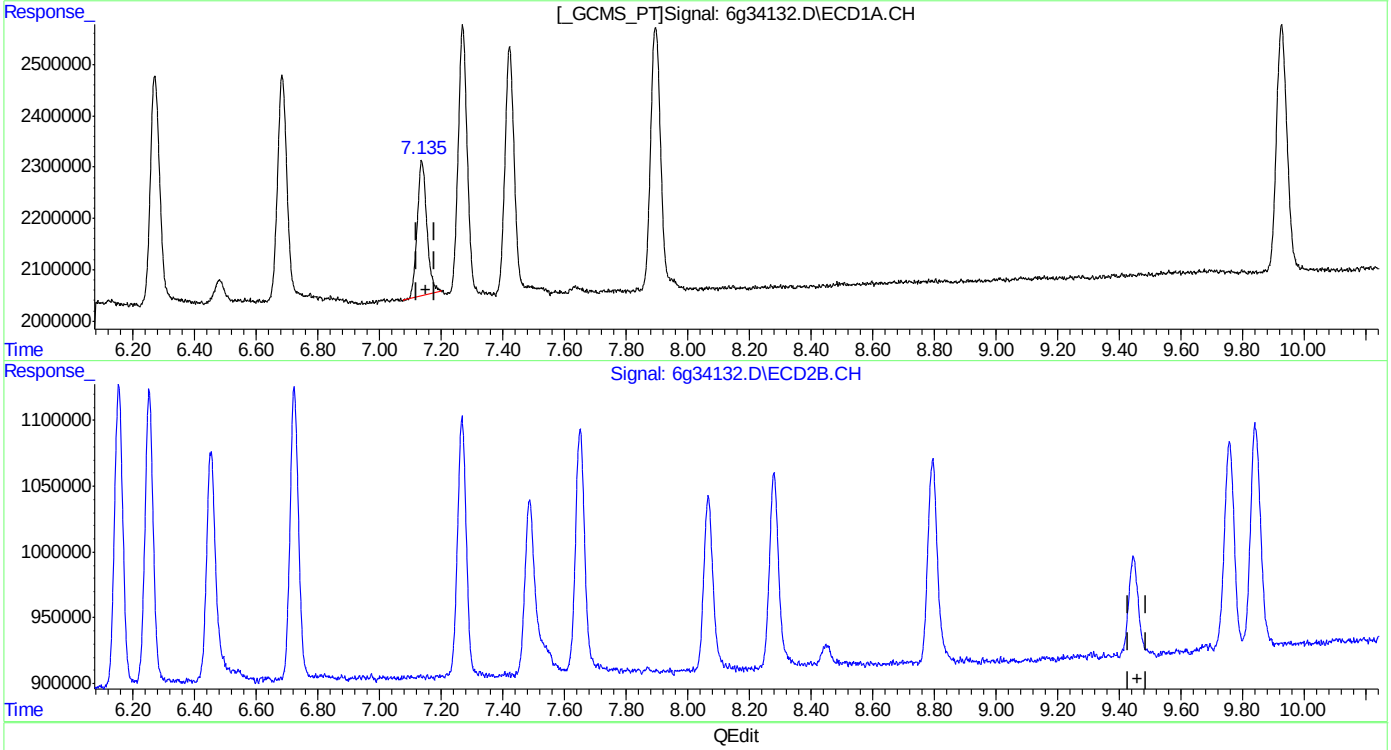
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.77	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 5.483PPB
response 5612130

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

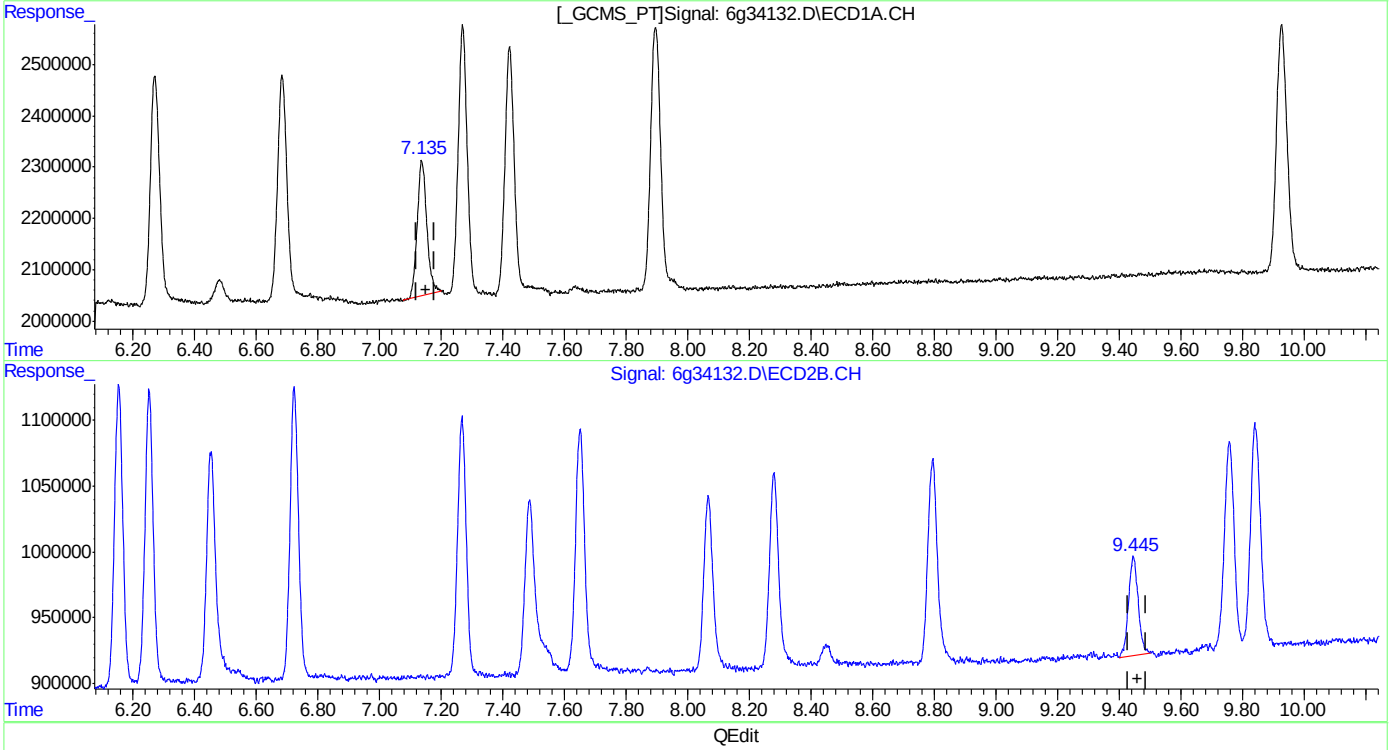
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:36:47 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 5.483PPB
response 5612130

(21) Methoxychlor #2 (A)
9.445min 6.860PPB m
response 1635835

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:36:56 2016

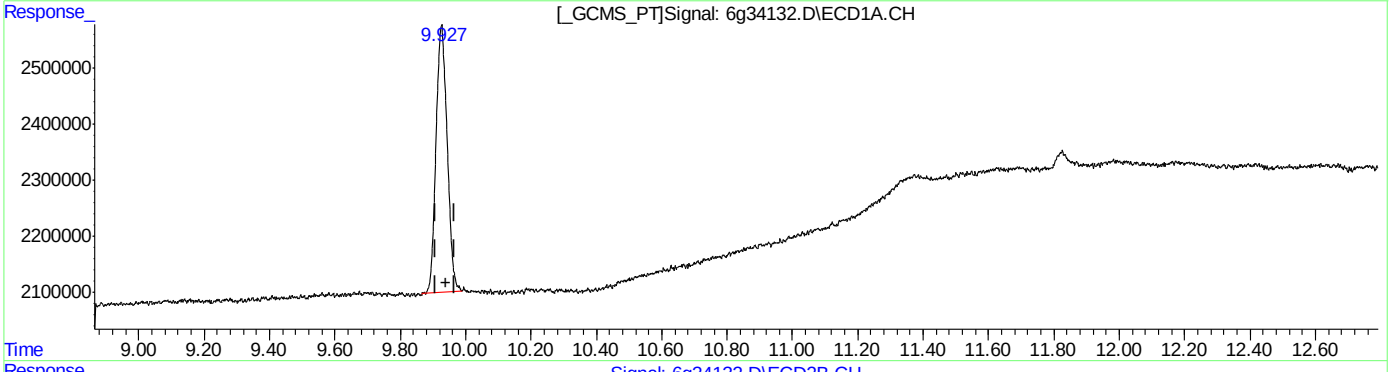
SGS ACCUTEST JC19914

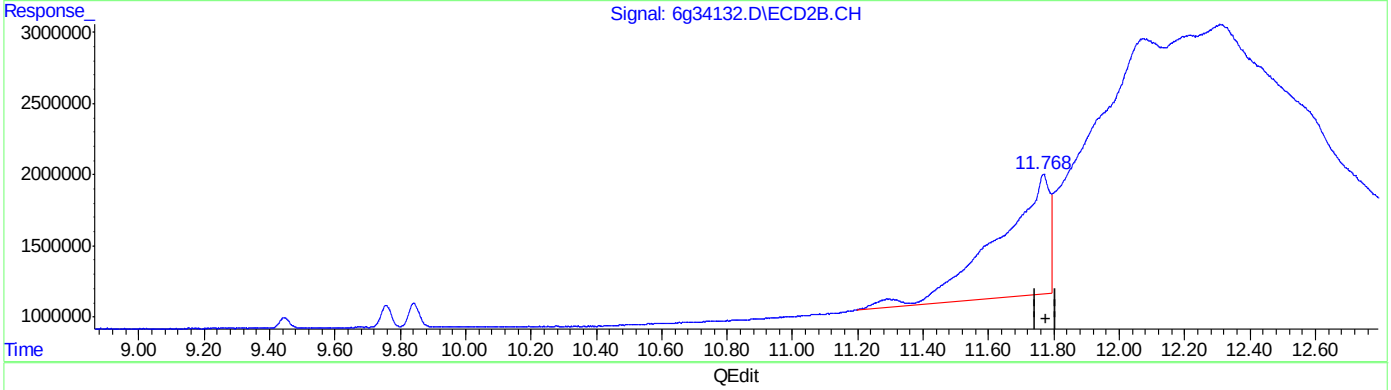
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SAB)
9.926min 5.088PPB
response 11331892

(24) Decachlorobiphenyl #2 (SAB)
11.768min 147.393PPB
response 92250162

(+) = Expected Retention Time

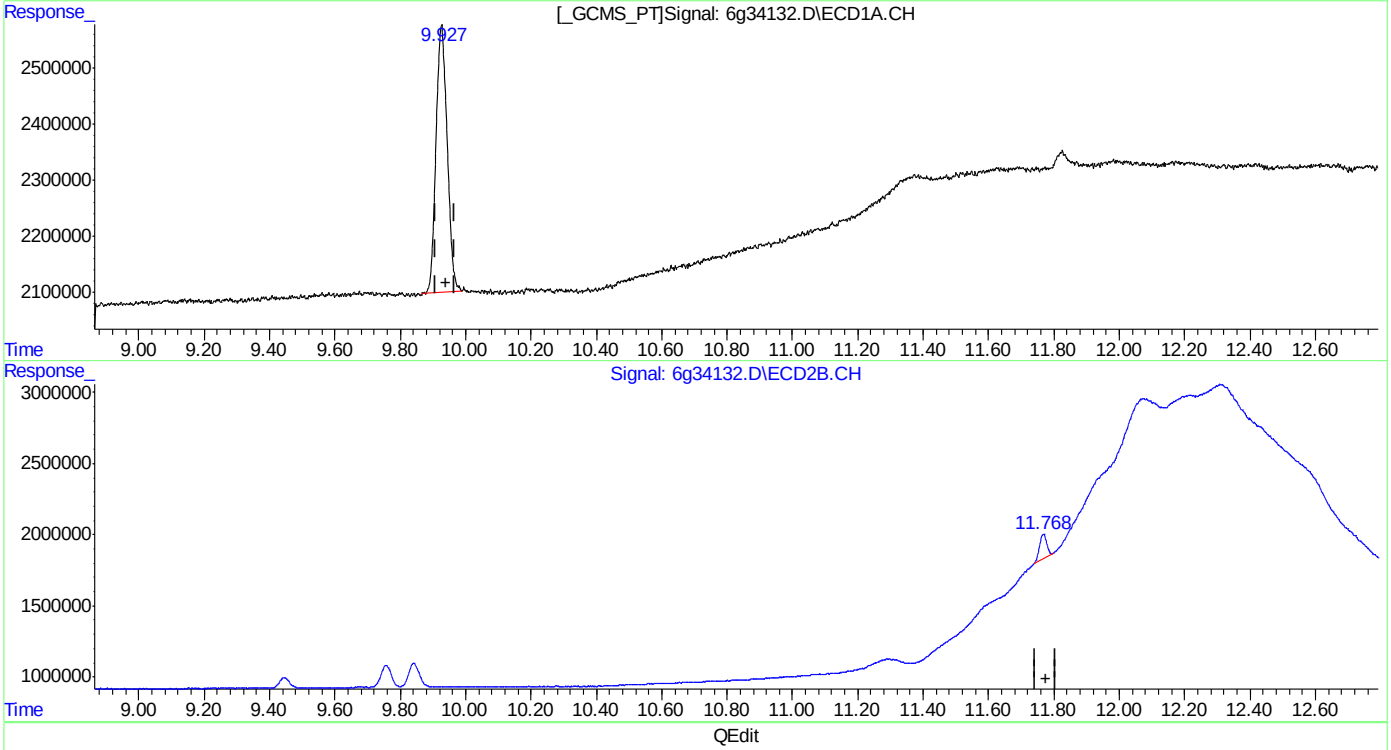
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SAB)
9.926min 5.088PPB
response 11331892

(24) Decachlorobiphenyl #2 (SAB)
11.768min 4.230PPB m
response 2647512

(+) = Expected Retention Time

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34133.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:38 pm
Operator : dharas
Sample : ic987-10
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.313	1.584	140.5E6	45920602	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	24876594	8119893	10.018	9.568
Spiked Amount		40.000	Range	30 - 150	Recovery	= 25.05%#	23.92%#
24) SAB	Decachlor...	9.926	11.765	22366235	6242104	10.092	9.961
Spiked Amount		40.000			Recovery	= 25.23%	24.90%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	30797792	10167663	9.888	9.782
4) MA	gamma-BHC	2.815	3.636	29160536	9589575	10.101	9.982
5) MA	Heptachlor	3.344	4.244	29643582	9822509	10.490	10.581
6) B	beta-BHC	2.896	3.728	14956880	4847980	10.483	10.183
7) B	delta-BHC	3.091	4.146	26291257	8798710	10.186	10.192
8) MB	Aldrin	3.696	4.721	26999664	9116635	10.134	10.130
9) B	Heptachlo...	4.445	5.603	25835552	8709773	10.218	10.320
10) B	gamma-Chl...	4.619	5.910	25772075	8425827	9.929	10.216
11) B	alpha-Chl...	4.802	6.153	25702060	8384411	10.078	10.146
12) A	Endosulfan I	4.985	6.252	25001437	8203458	9.606	10.183
13) B	4,4'-DDE	4.931	6.452	20284722	6680846	10.375	9.001
14) MA	Dieldrin	5.329	6.722	24383700	8179138	9.869	9.907
15) MA	Endrin	5.669	7.268	22499687	7361055	10.050	10.090
16) A	4,4'-DDD	5.819	7.486	17048800	6490184	10.021	9.535
17) B	Endosulfa...	6.012	7.651	21694944	7251064	9.668	9.617
18) MA	4,4'-DDT	6.271	8.067	18518529	5289508	10.320	11.718
19) B	Endrin Al...	6.683	8.278	18265453	5955880	10.072	9.815
20) B	Endosulfa...	7.421	8.794	19301744	6486062	10.002	10.248
21) A	Methoxychlor	7.135	9.446	11312265	3108135	11.108	13.018
22)	Mirex	7.269	9.758	20572192	6449510	9.710	10.039
23) B	Endrin Ke...	7.894	9.842	22629233	7375618	10.733	10.899

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.4 11

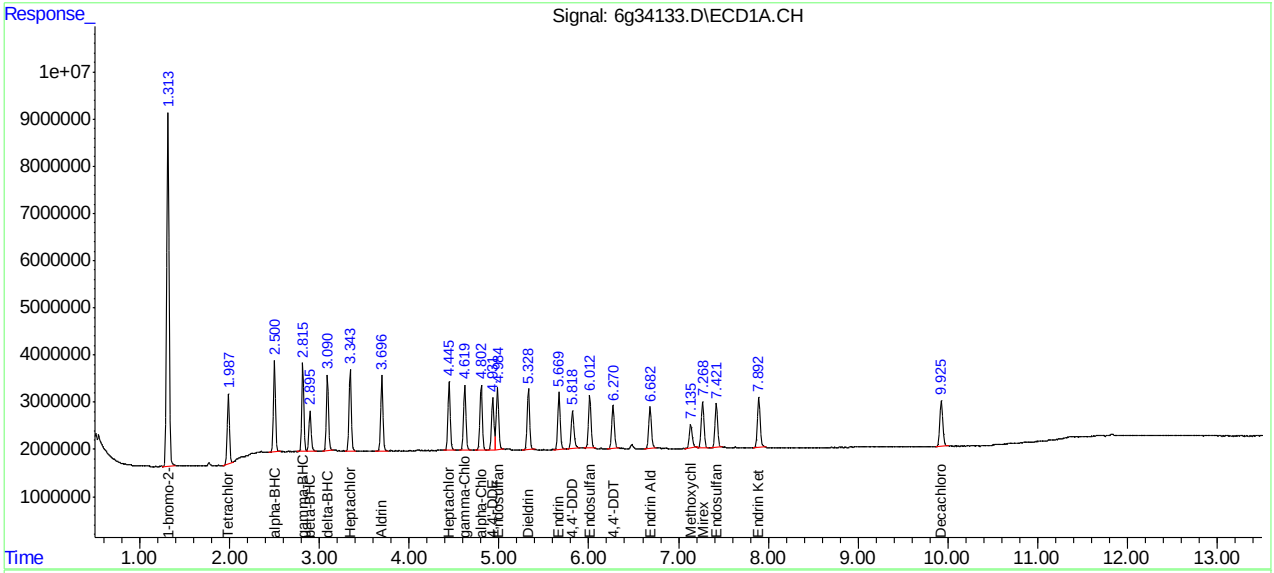
SGS ACCUTEST JC19914

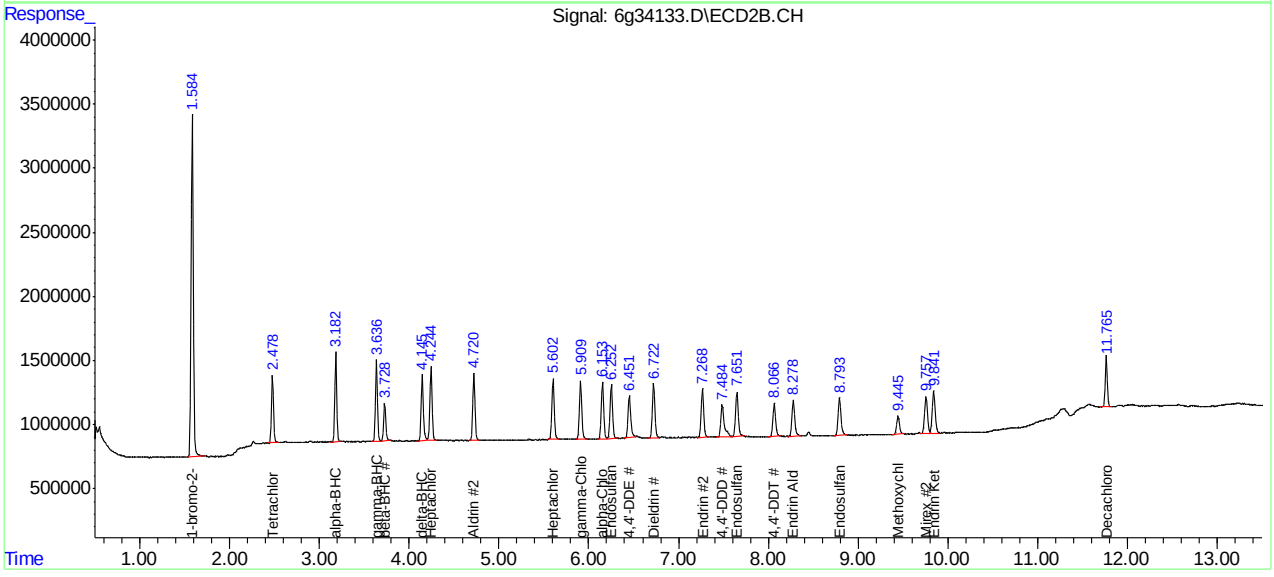
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34133.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:38 pm
Operator : dharas
Sample : ic987-10
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:55 pm
Operator : dharas
Sample : icc987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.315	1.585	144.2E6	47033284	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.479	63645253	20425732	24.970	23.499
Spiked Amount		40.000	Range	30 - 150	Recovery	= 62.42%	58.75%
24) SAB	Decachlor...	9.927	11.764	55812131	15912280	24.536	24.791
Spiked Amount		40.000			Recovery	= 61.34%	61.98%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	84593859	26723168	26.461	25.101
4) MA	gamma-BHC	2.816	3.635	78582131	24936233	26.519	25.343
5) MA	Heptachlor	3.344	4.244	77647336	24523131	26.770	25.793
6) B	beta-BHC	2.895	3.728	38087675	11976851	26.007	24.561
7) B	delta-BHC	3.090	4.145	74464379	23208614	28.106	26.248
8) MB	Aldrin	3.696	4.721	71712233	23088257	26.222	25.047
9) B	Heptachlo...	4.445	5.603	67188984	21873984	25.889	25.305
10) B	gamma-Chl...	4.619	5.909	67637552	21033552	25.387	24.900
11) B	alpha-Chl...	4.801	6.153	67145569	20973298	25.652	24.780
12) A	Endosulfan I	4.984	6.252	65821217	20159813	24.640	24.433
13) B	4,4'-DDE	4.930	6.451	55200055	16712128	27.505	21.983
14) MA	Dieldrin	5.328	6.723	65244285	20507457	25.727	24.253
15) MA	Endrin	5.669	7.266	59357359	18498356	25.831	24.757
16) A	4,4'-DDD	5.819	7.485	45641463	16010720	26.137	22.966
17) B	Endosulfa...	6.010	7.649	57239557	18057776	24.851	23.383
18) MA	4,4'-DDT	6.269	8.066	50891758	14037689	27.629	30.363
19) B	Endrin Al...	6.682	8.279	47230230	14927948	25.373	24.018
20) B	Endosulfa...	7.419	8.793	50672464	15893200	25.582	24.517
21) A	Methoxychlor	7.135f	9.444f	31258519	8030389	29.903	32.838
22)	Mirex	7.268	9.756	52645396	15470703	24.209	23.512
23) B	Endrin Ke...	7.893	9.841f	61681398	18563884	28.503	26.782

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.5 11

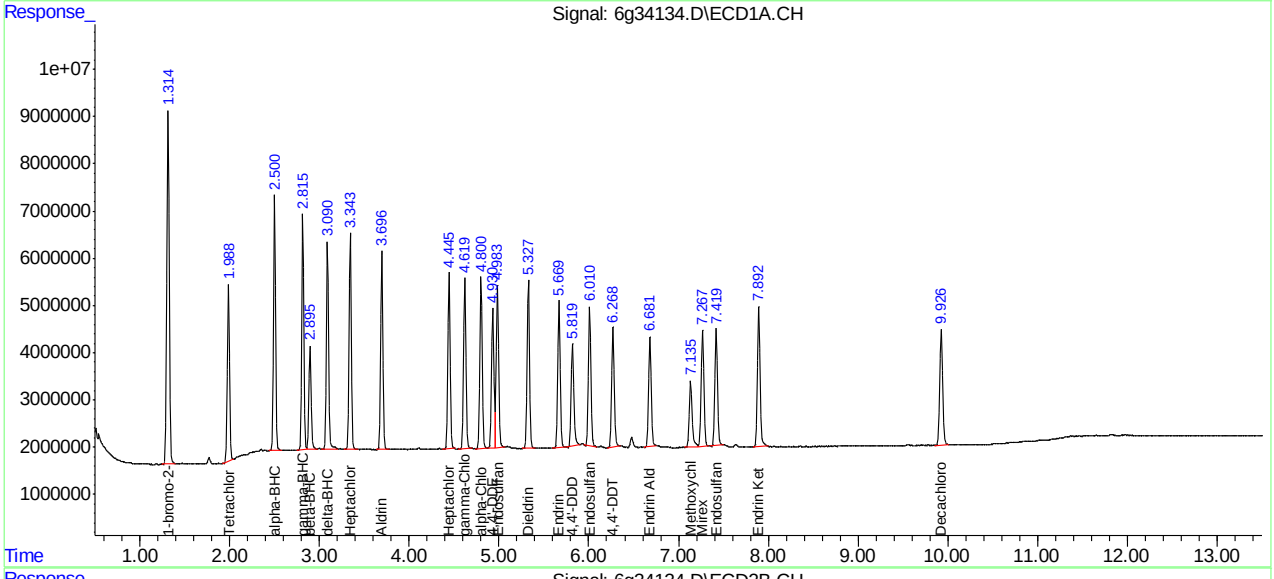
SGS ACCUTEST JC19914

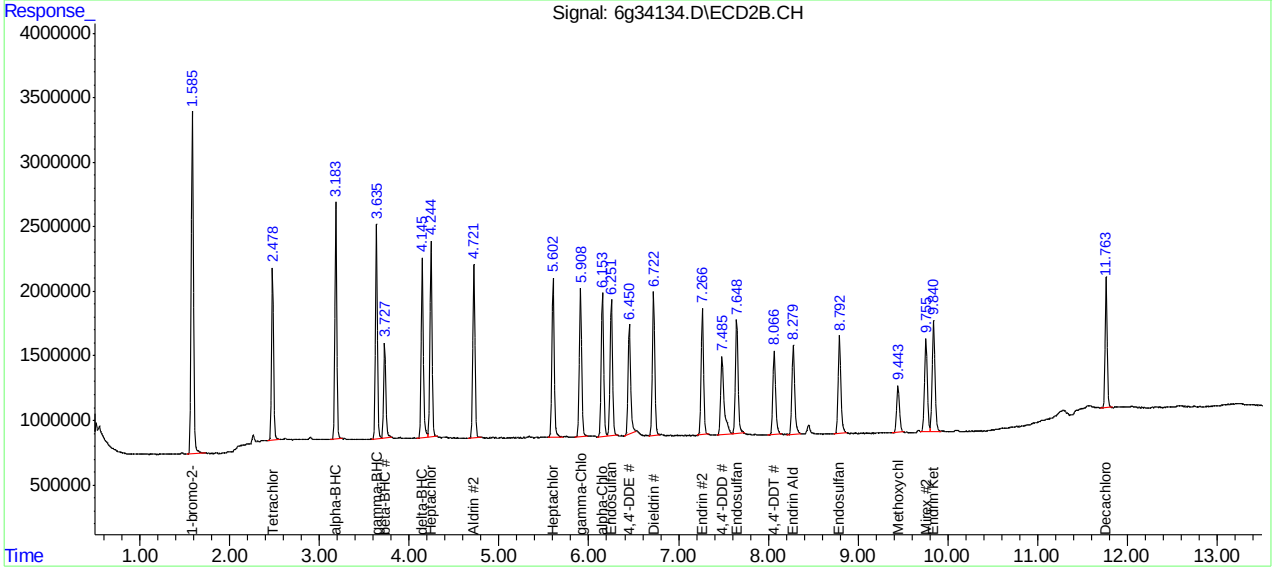
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:55 pm
Operator : dharas
Sample : icc987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34135.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:11 pm
Operator : dharas
Sample : ic987-50
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.585	142.7E6	46649119	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.478	128.5E6	40284945	50.949	46.728
Spiked Amount		40.000	Range	30 - 150	Recovery	= 127.37%	116.82%
24) SAB	Decachlor...	9.925	11.763	108.7E6	31076249	48.273	48.814
Spiked Amount		40.000			Recovery	= 120.68%	122.04%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	182.7E6	55587963	57.741	52.643
4) MA	gamma-BHC	2.816	3.636	166.5E6	51304864	56.774	52.570
5) MA	Heptachlor	3.343	4.244	161.4E6	50151025	56.220	53.182
6) B	beta-BHC	2.895	3.727	75958143	24516481	52.404	50.690
7) B	delta-BHC	3.090	4.145	160.4E6	48099314	61.164	54.847
8) MB	Aldrin	3.696	4.721	150.9E6	46332889	55.762	50.677
9) B	Heptachlo...	4.444	5.602	138.5E6	43160248	53.903	50.341
10) B	gamma-Chl...	4.619	5.909	140.3E6	42029500	53.189	50.166
11) B	alpha-Chl...	4.801	6.153	137.8E6	41514883	53.193	49.455
12) A	Endosulfan I	4.984	6.252	135.3E6	40039193	51.179	48.926
13) B	4,4'-DDE	4.931	6.452	117.7E6	37863127	59.271	50.214
14) MA	Dieldrin	5.328	6.722	136.4E6	41112386	54.346	49.021
15) MA	Endrin	5.669	7.266	123.5E6	37204386	54.308	50.202
16) A	4,4'-DDD	5.817	7.485	99644782	32810805	57.654	47.452
17) B	Endosulfa...	6.011	7.649	121.6E6	37437820	53.336	48.878
18) MA	4,4'-DDT	6.271	8.065	106.4E6	29173841	58.383	63.623
19) B	Endrin Al...	6.682	8.278	96135294	30002664	52.182	48.669
20) B	Endosulfa...	7.420	8.792f	103.7E6	31655587	52.894	49.235
21) A	Methoxychlor	7.134f	9.443f	62221581	16358936	60.141	67.447
22)	Mirex	7.267	9.756	102.6E6	29870142	47.691	45.770
23) B	Endrin Ke...	7.894	9.841f	127.4E6	37439358	59.481	54.458

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.6 11

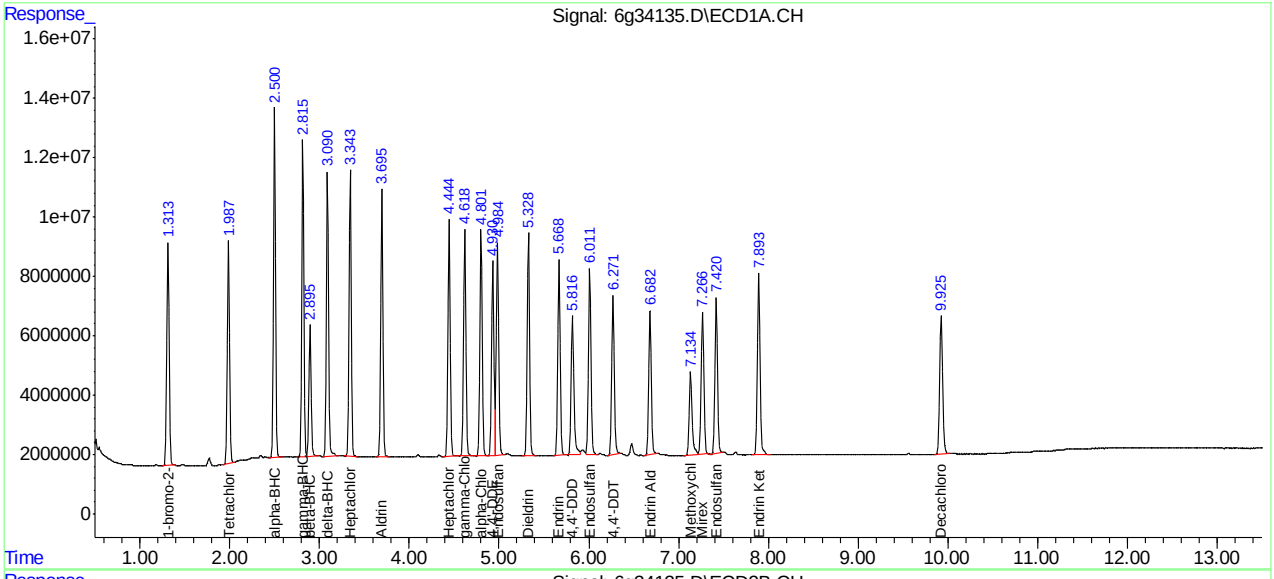
SGS ACCUTEST JC19914

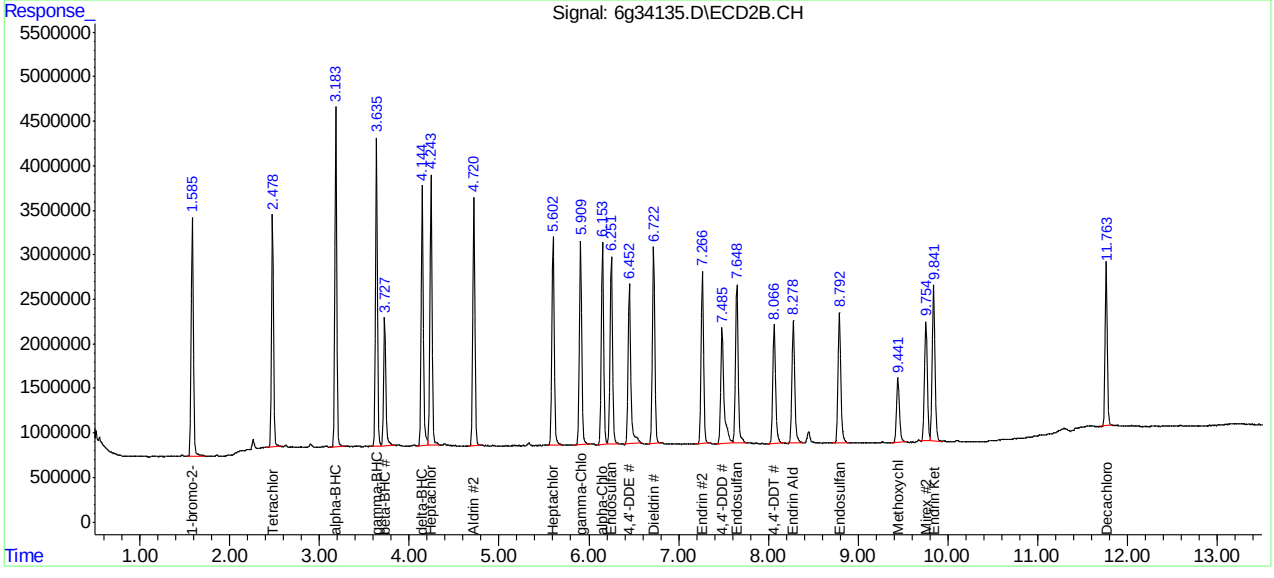
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34135.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:11 pm
Operator : dharas
Sample : ic987-50
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

6G34136.D

Manual Integrations APPROVED (compounds with "m" flag)

Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.313	1.584	142.3E6	46534682	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	196.0E6	61034979	77.960	70.971
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 194.90%#	177.43%#
24) SAB	Decachlor...	9.924	11.764	161.9E6	45025212	72.177	70.899
	Spiked Amount	40.000			Recovery	= 180.44%	177.25%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	287.2E6	86390406	91.093	82.014
4) MA	gamma-BHC	2.816	3.636	259.7E6	79013987	88.861	81.162
5) MA	Heptachlor	3.343	4.244	249.5E6	75927971	87.193	80.715
6) B	beta-BHC	2.895	3.728	114.2E6	36350302	79.034	75.343
7) B	delta-BHC	3.089	4.146	244.9E6	74588741	93.731	85.262
8) MB	Aldrin	3.695	4.721	235.4E6	70722867	87.268	77.544
9) B	Heptachlo...	4.444	5.603	212.7E6	65014462	83.094	76.018
10) B	gamma-Chl...	4.619	5.909	216.5E6	63493244	82.383	75.971
11) B	alpha-Chl...	4.800	6.153	211.9E6	62505590	82.087	74.643
12) A	Endosulfan I	4.984	6.251	210.1E6	60303594	79.727	73.870
13) B	4,4'-DDE	4.931	6.451	184.7E6	55949391	93.299	74.382m
14) MA	Dieldrin	5.327	6.723	212.9E6	62341957	85.094	74.518
15) MA	Endrin	5.669	7.266	191.4E6	56468294	84.449	76.383
16) A	4,4'-DDD	5.818	7.484f	153.6E6	49146684	89.174	71.253
17) B	Endosulfa...	6.011	7.650	185.7E6	56464399	81.741	73.899
18) MA	4,4'-DDT	6.270	8.066	166.3E6	44795721	91.513	97.931
19) B	Endrin Al...	6.682	8.277	147.3E6	45061219	80.230	73.276
20) B	Endosulfa...	7.420	8.793	159.4E6	47550936	81.583	74.139
21) A	Methoxychlor	7.134f	9.445f	93942612	24830275	91.112	102.626
22)	Mirex	7.268	9.756	153.4E6	44250941	71.508	67.973
23) B	Endrin Ke...	7.894	9.841f	194.7E6	56960523	91.227	83.057

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.7

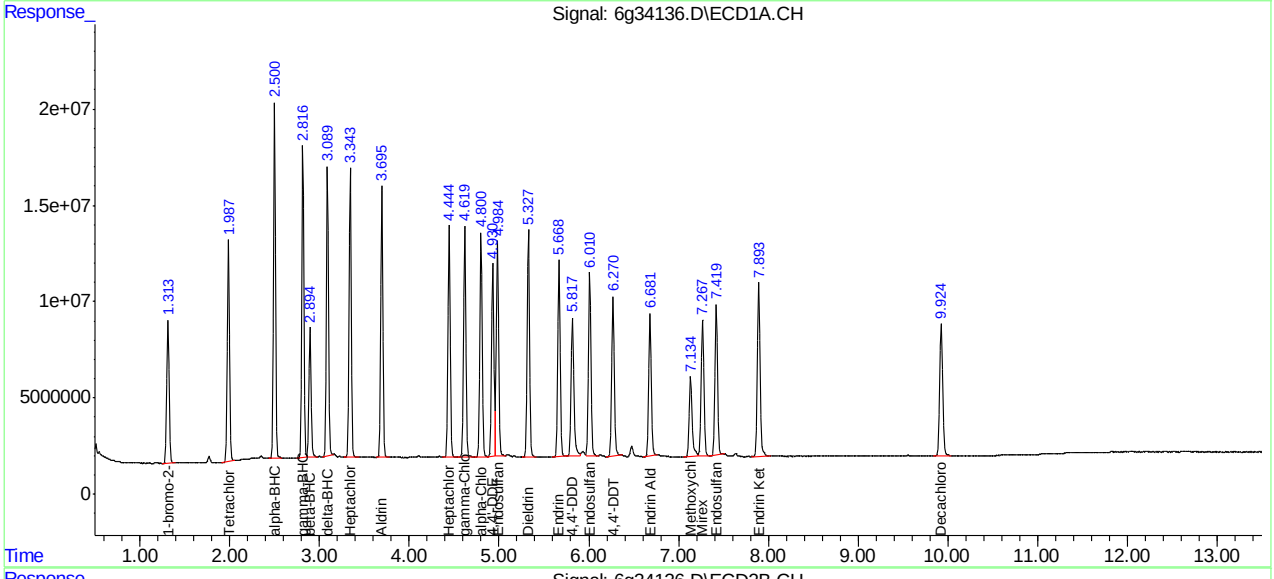
11

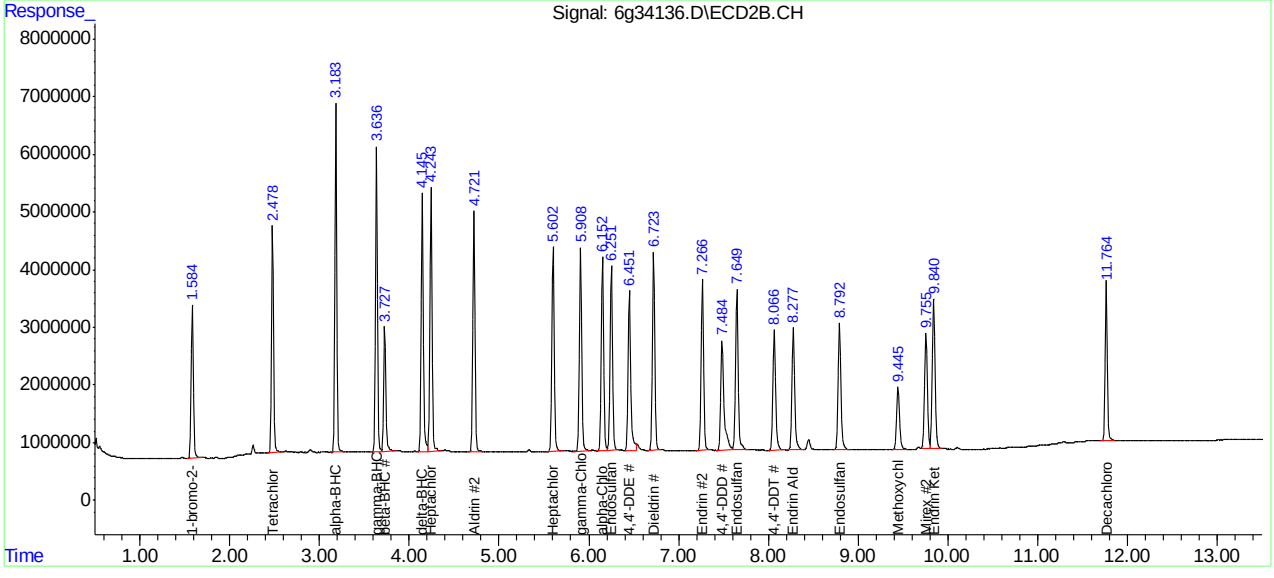
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34136.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 17:27	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

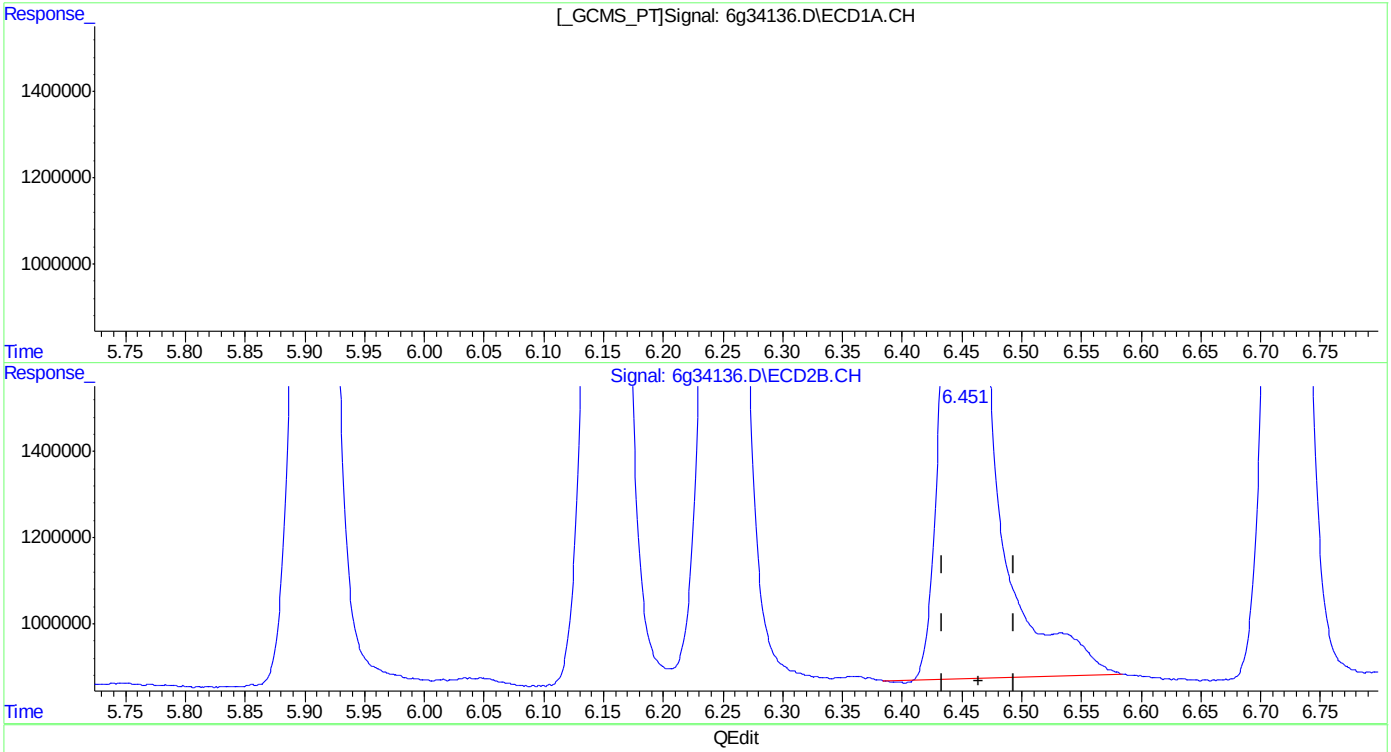
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 76.395PPB
response 57463273

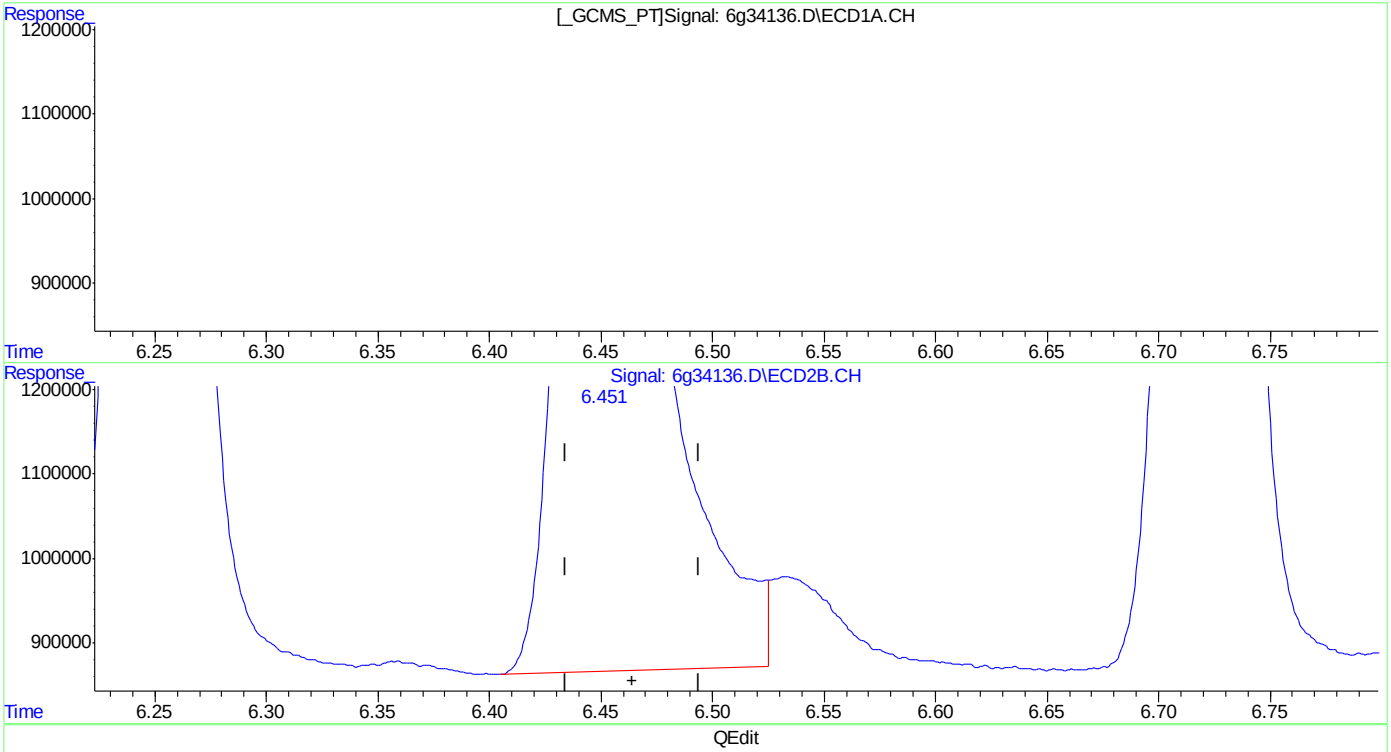
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:25:21 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 74.382PPB m
response 55949391

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.313	1.584	144.2E6	47061020	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	272.5E6	83192568	106.915	95.654
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 267.29%#	239.14%#
24) SAB	Decachlor...	9.925	11.764	218.5E6	61817376	96.056	96.252
	Spiked Amount	40.000			Recovery	= 240.14%	240.63%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	405.7E6	120.6E6	126.925	113.257
4) MA	gamma-BHC	2.814	3.635	363.8E6	109.3E6	122.801	111.008
5) MA	Heptachlor	3.343	4.244	347.0E6	103.8E6	119.655	109.162
6) B	beta-BHC	2.894	3.727	155.8E6	49110274	106.406	100.652
7) B	delta-BHC	3.089	4.145	345.0E6	103.0E6	130.262	116.398
8) MB	Aldrin	3.695	4.721	328.0E6	97370488	119.971	105.568
9) B	Heptachlo...	4.444	5.603	293.6E6	88909536	113.171	102.795
10) B	gamma-Chl...	4.618	5.909	299.9E6	86940726	112.581	102.863
11) B	alpha-Chl...	4.800	6.152	292.8E6	85054640	111.873	100.435
12) A	Endosulfan I	4.983	6.251	288.9E6	81968430	108.152	99.285
13) B	4,4'-DDE	4.931	6.452	258.4E6	77237419	128.766	101.535m
14) MA	Dieldrin	5.328	6.723	295.4E6	85669631	116.508	101.256
15) MA	Endrin	5.667	7.267	264.1E6	77041181	114.962	103.046
16) A	4,4'-DDD	5.818	7.484	214.3E6	66667046	122.739	95.573
17) B	Endosulfa...	6.011	7.649	257.1E6	76718084	111.662	99.284
18) MA	4,4'-DDT	6.270	8.066	237.9E6	61734502	129.179	133.453
19) B	Endrin Al...	6.683	8.277	208.9E6	60964018	112.232	98.027
20) B	Endosulfa...	7.419	8.792f	220.0E6	64603260	111.082	99.599
21) A	Methoxychlor	7.134f	9.444f	127.3E6	33797951	121.808	138.128
22)	Mirex	7.267	9.756	206.5E6	58928864	94.978	89.507
23) B	Endrin Ke...	7.893	9.841f	267.8E6	77889496	123.785	112.304

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.8 11

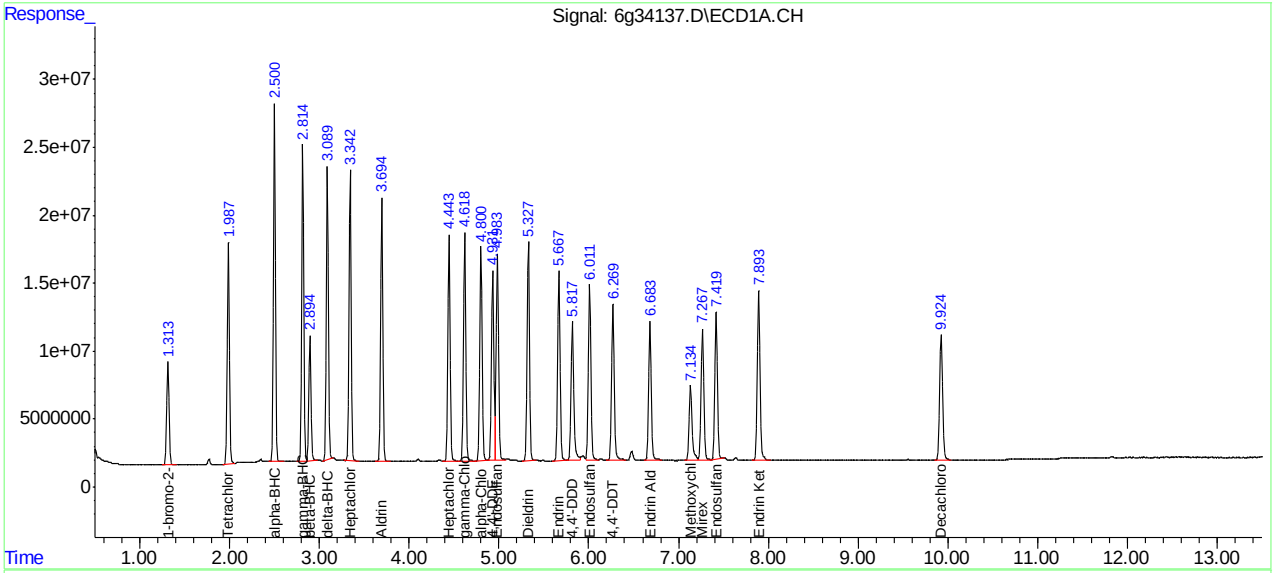
SGS ACCUTEST JC19914

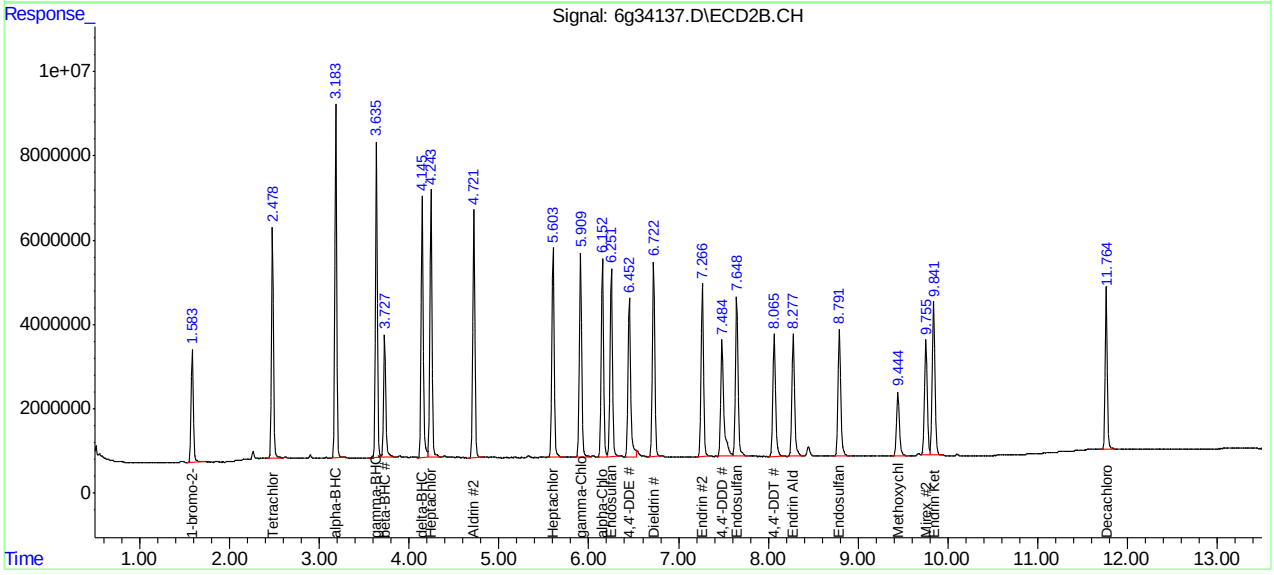
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34137.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 17:44	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

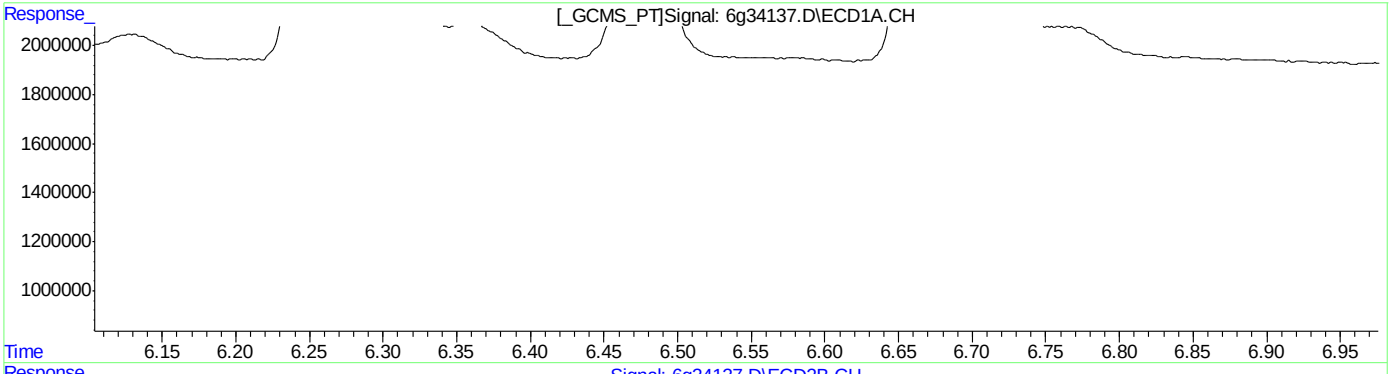
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

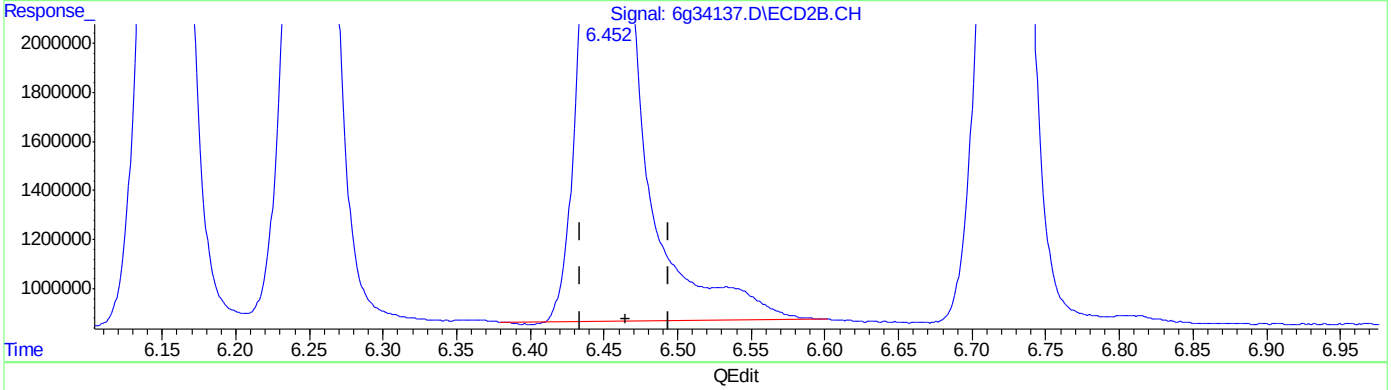
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:25:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
4.931min 128.766PPB
response 258364552

(13) 4,4'-DDE #2 (B)
6.452min 103.914PPB
response 79046664

(+) = Expected Retention Time

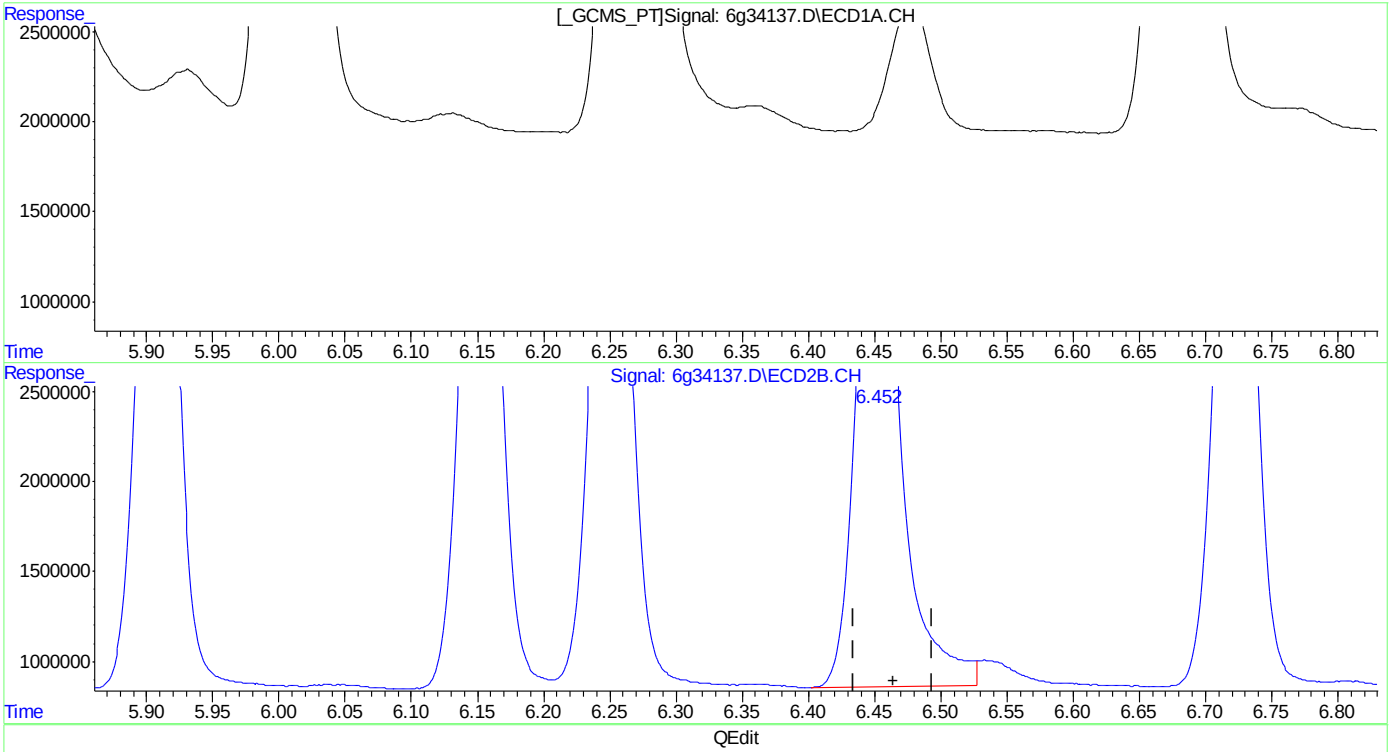
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:25:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
4.931min 128.766PPB
response 258364552

(13) 4,4'-DDE #2 (B)
6.452min 101.535PPB m
response 77237419

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:20:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
31) I	1-bromo-2...	1.313	1.584	141.3E6	46235840	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane...	3.248	4.035	43632507	14394923	536.976	540.471
33)	Chlordane...	3.846	4.933	57942819	17415921	527.490	558.186
34)	Chlordane...	4.619	5.908	185.4E6	52343416	527.100	565.289
35)	Chlordane...	4.793	6.152	290.8E6	87553858	519.746	550.227m
36)	Chlordane...	5.916	7.734	45769339	13981389	536.773	553.249
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.9 11

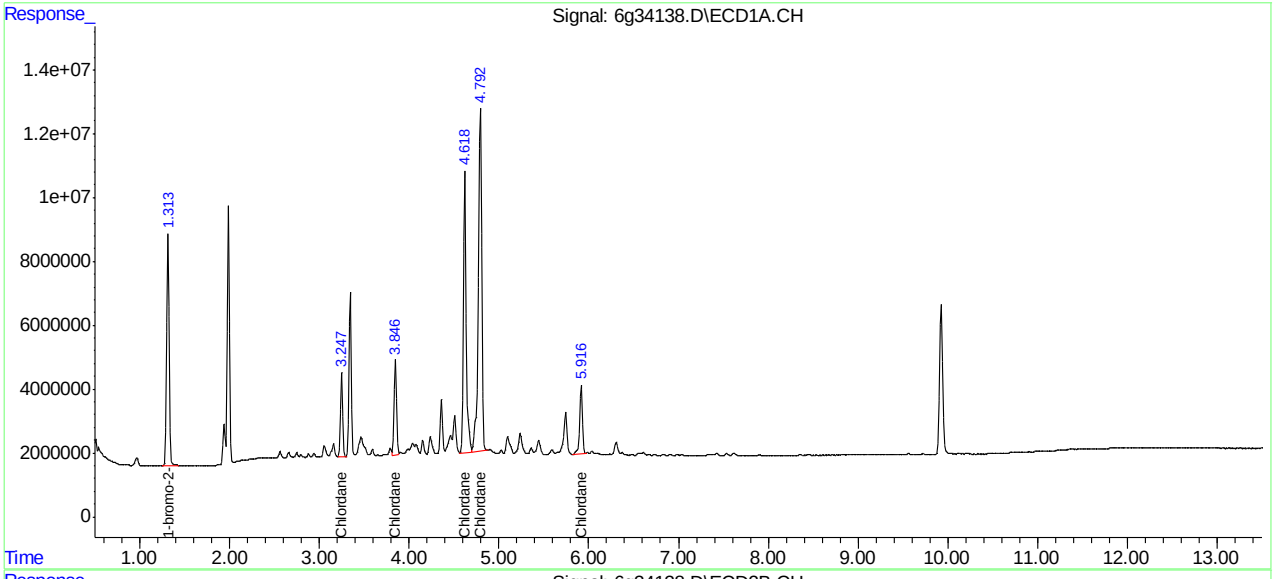
SGS ACCUTEST JC19914

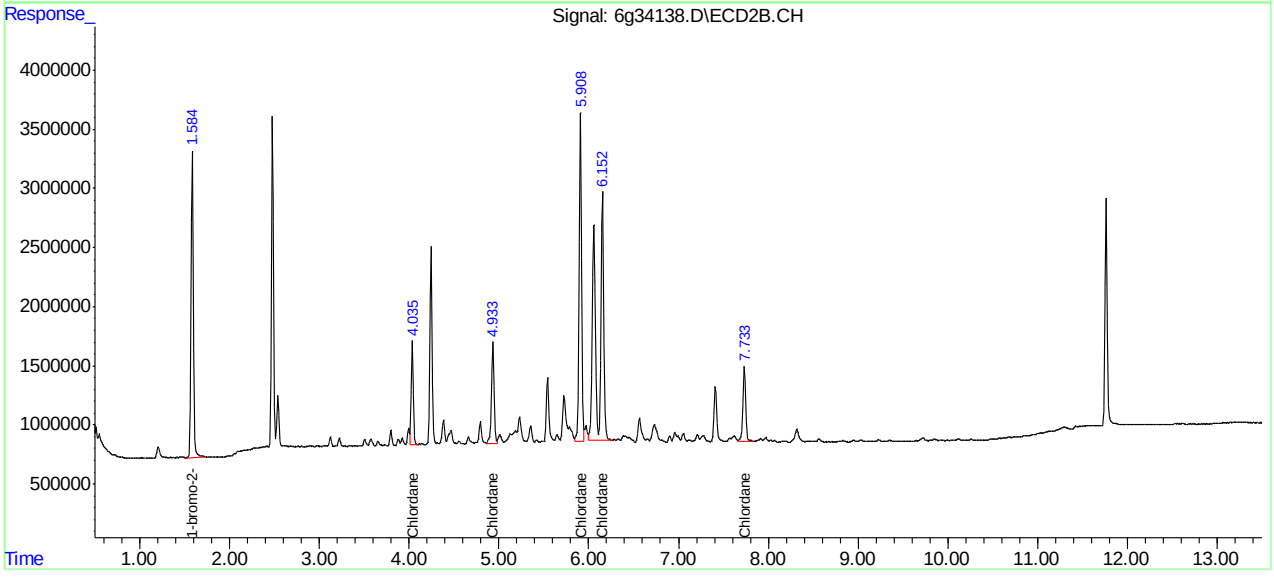
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:20:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34138.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 18:00	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

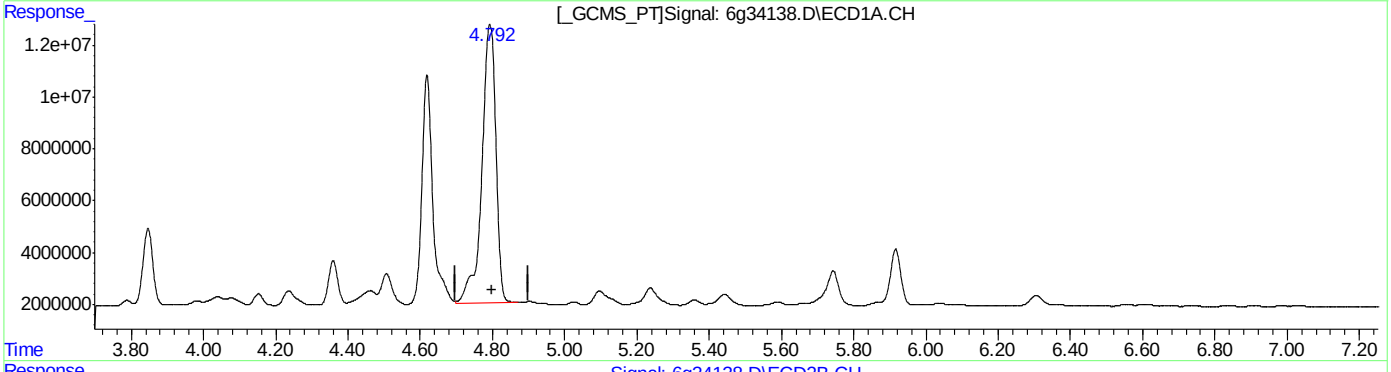
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

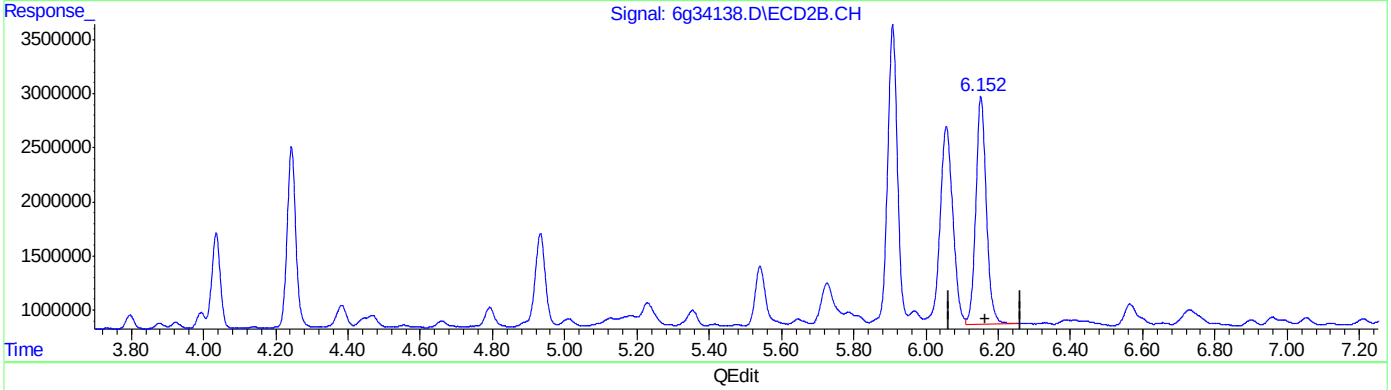
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(35) Chlordane {D}
4.793min 519.746PPB
response 290776008

(35) Chlordane {D} #2
6.152min 267.305PPB
response 42534341

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:58:12 2016

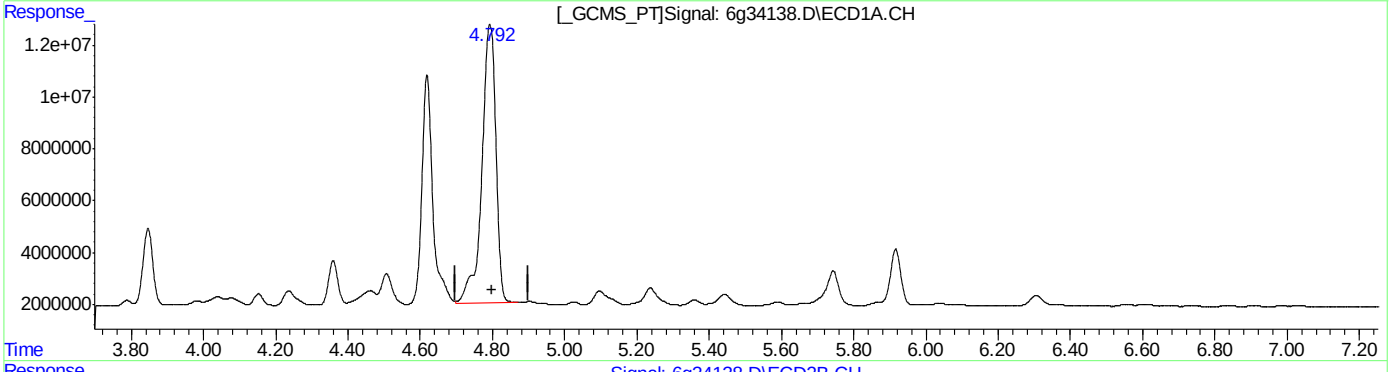
SGS ACCUTEST JC19914

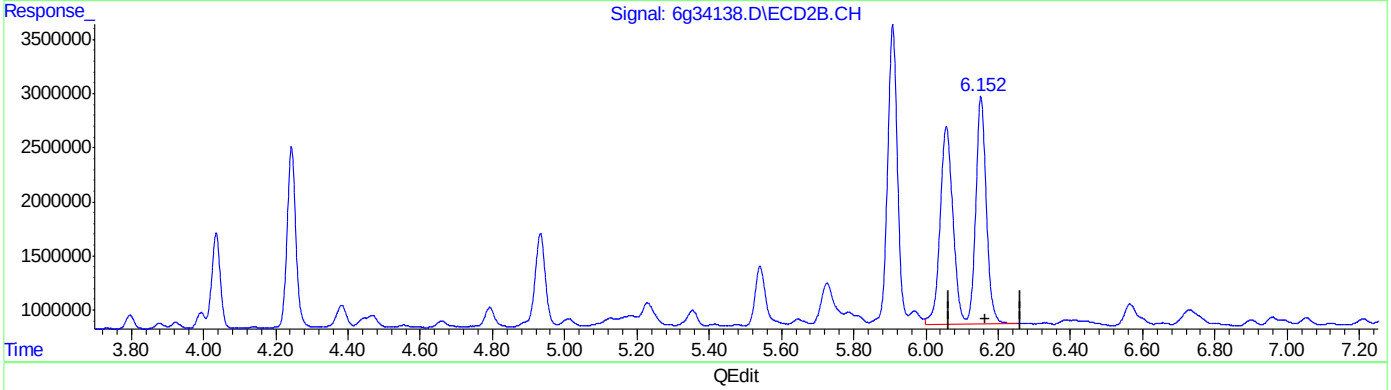
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(35) Chlordane {D}
4.793min 519.746PPB
response 290776008

(35) Chlordane {D} #2
6.152min 550.227PPB m
response 87553858

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:58:50 2016

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34139.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:17 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:21:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
25) I	1-bromo-2...	1.314	1.584	145.3E6	47702945	50.000	50.000	
	System Monitoring Compounds							
	Target Compounds							
26) L8	Toxaphene{A}	5.337	6.690	19675744	6930166	478.099	595.711	
27) L8	Toxaphene{B}	5.731	7.617	41619408	12190780	531.705	784.503	#
28) L8	Toxaphene{C}	5.999	7.796	62803296	18739048	548.104	699.346	#
29) L8	Toxaphene{D}	6.560	8.280	35573856	12374350	424.850	688.687	#
30) L8	Toxaphene{E}	7.255	9.261	39819050	10533999	580.669	507.727	
	SemiQuant Compounds - Not Calibrated on this Instrument							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

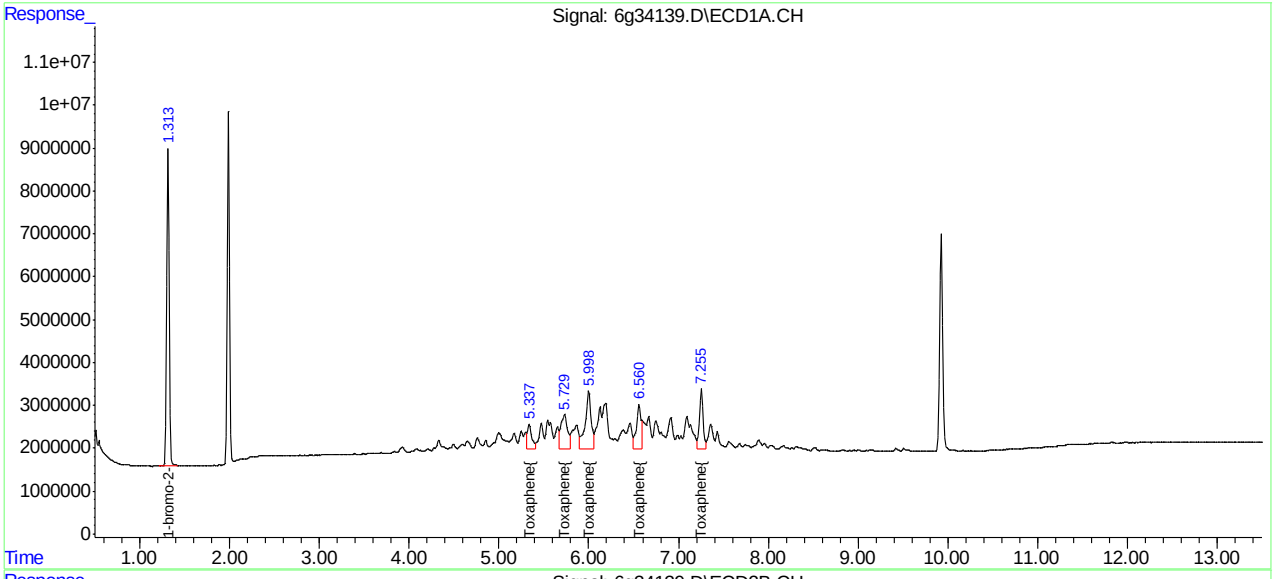
11.6.10 11

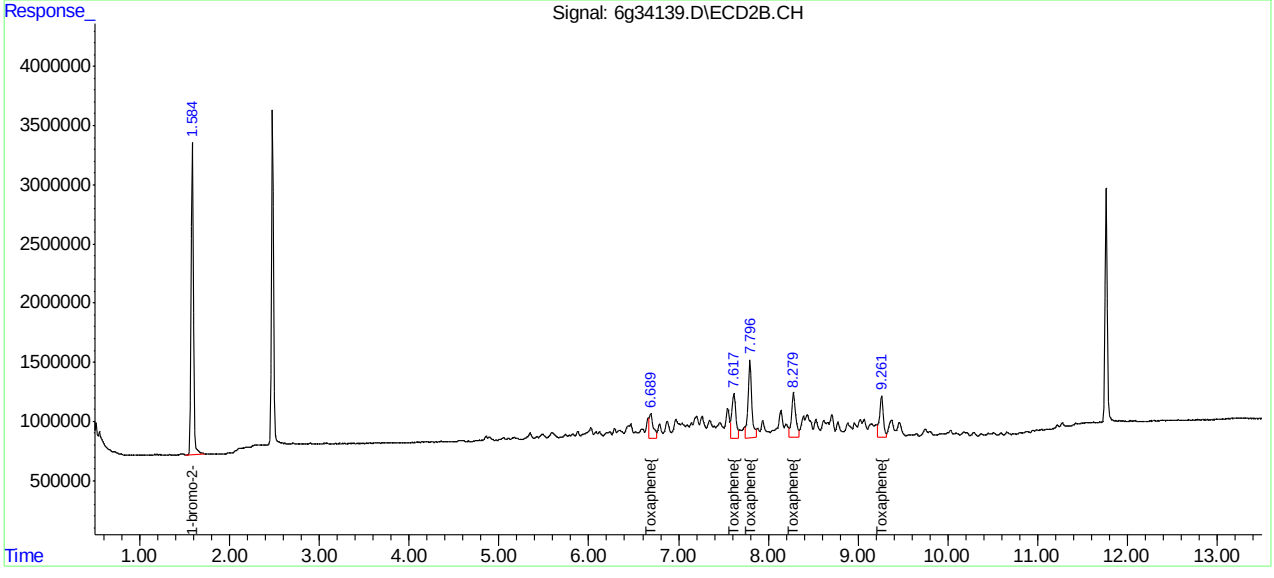
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34139.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:17 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:21:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34140.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:33 pm
Operator : dharas
Sample : icv987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:39:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.585	143.3E6	46907288	50.000	50.000
25) I	1-bromo-2...	1.314	1.585	143.3E6	46907288	50.000	50.000
31) I	1-bromo-2...	1.314	1.585	143.3E6	46907288	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.478	62613270	20284749	23.835	23.936
Spiked Amount		40.000	Range	30 - 150	Recovery	= 59.59%	59.84%
24) SAB	Decachlor...	9.925	11.763	55982390	16579682	24.508	26.020
Spiked Amount		40.000			Recovery	= 61.27%	65.05%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	79807546	25388616	23.566	22.995
4) MA	gamma-BHC	2.815	3.635	74989675	23788475	23.785	23.011
5) MA	Heptachlor	3.343	4.243	74379160	24001192	23.502	22.973
6) B	beta-BHC	2.896	3.727	36353972	11460022	23.490	22.753
7) B	delta-BHC	3.090	4.145	74876837	23152742	25.483	24.033
8) MB	Aldrin	3.695	4.721	68045936	22050506	23.280	22.698
9) B	Heptachlo...	4.444	5.602	64434942	21010231	23.545	23.203
10) B	gamma-Chl...	4.619	5.908	66180386	20595481	24.031	23.267
11) B	alpha-Chl...	4.802	6.152	64799028	20216502	23.708	22.989
12) A	Endosulfan I	4.984	6.251	62820581	19279971	23.281	22.567
13) B	4,4'-DDE	4.932	6.452	51425811	18223836	22.705	24.032
14) MA	Dieldrin	5.328	6.722	63166266	19889363	23.675	22.791
15) MA	Endrin	5.669	7.265	58737946	18090189	24.269	22.816
16) A	4,4'-DDD	5.820	7.486	45643277	15847702	23.837	24.216
17) B	Endosulfa...	6.011	7.649	56551622	18362029	23.682	23.678
18) MA	4,4'-DDT	6.271	8.067	49750841	13465744	23.887	22.669
19) B	Endrin Al...	6.683	8.278	49719390	15149595	25.545	24.095
20) B	Endosulfa...	7.420	8.793	51892156	15897904	24.744	23.296
21) A	Methoxychlor	7.136	9.444f	29611559	7915310	23.721	24.184
23) B	Endrin Ke...	7.895	9.841f	60928331	18412632	24.431	23.084

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.11

11

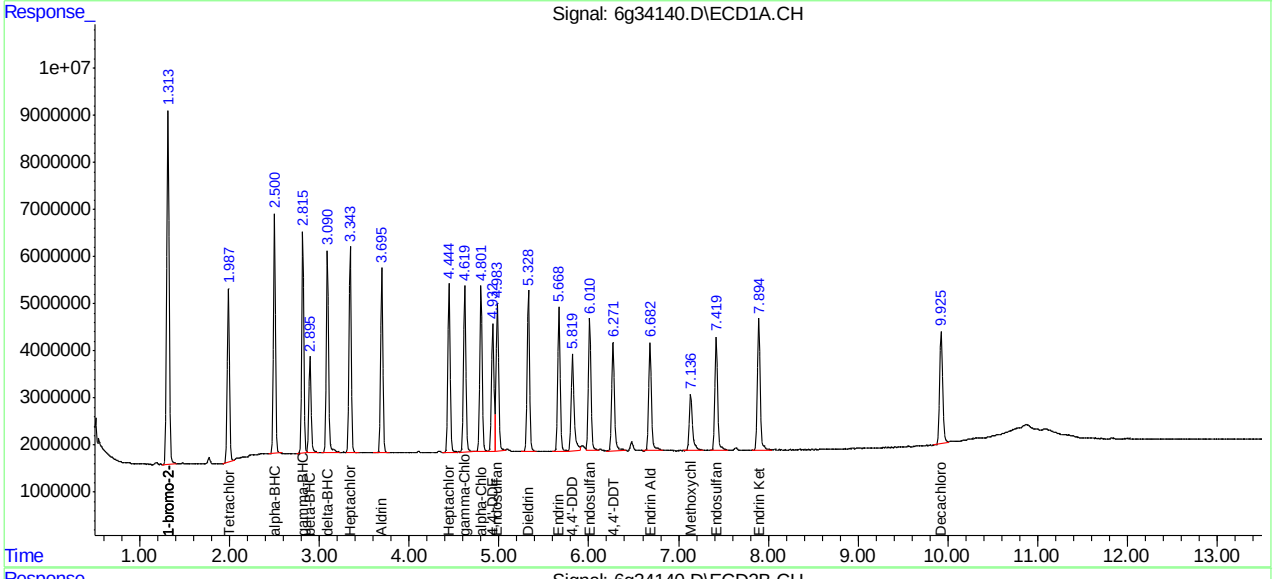
SGS ACCUTEST JC19914

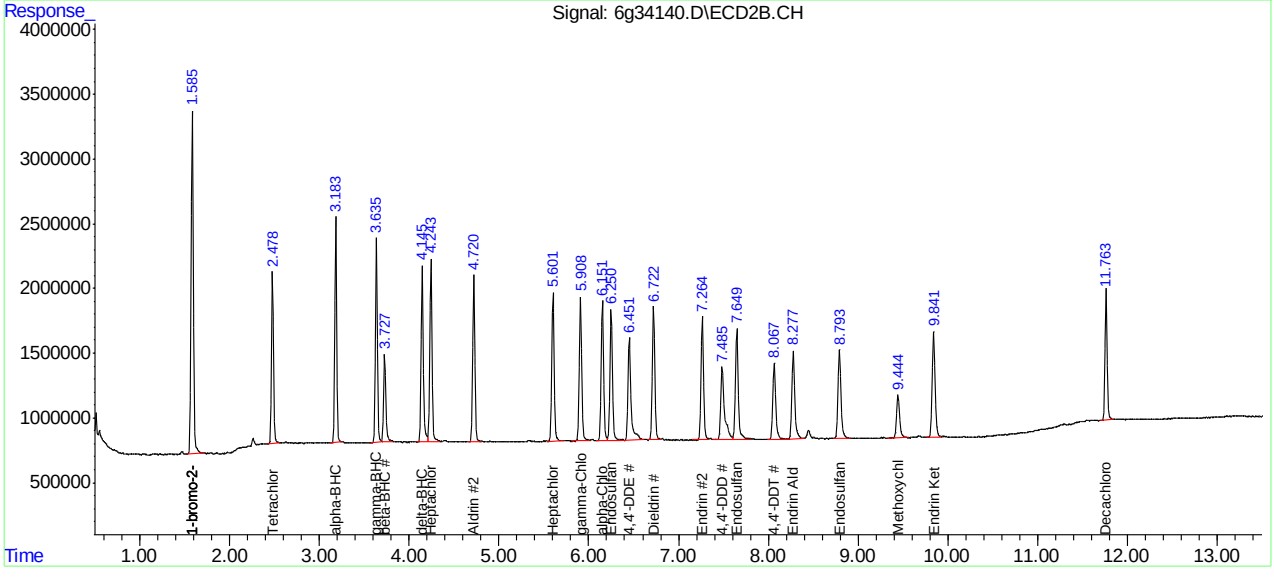
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34140.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:33 pm
Operator : dharas
Sample : icv987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:39:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





11.6.11 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34141.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:49 pm
Operator : dharas
Sample : icv987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.315	1.585	139.1E6	46174224	50.000	50.000
25) I	1-bromo-2...	1.315	1.585	139.1E6	46174224	50.000	50.000
31) I	1-bromo-2...	1.315	1.585	139.1E6	46174224	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	7.268	9.757	54152772	16665136	26.087	25.195
	SemiQuant Compounds - Not Calibrated on this Instrument						

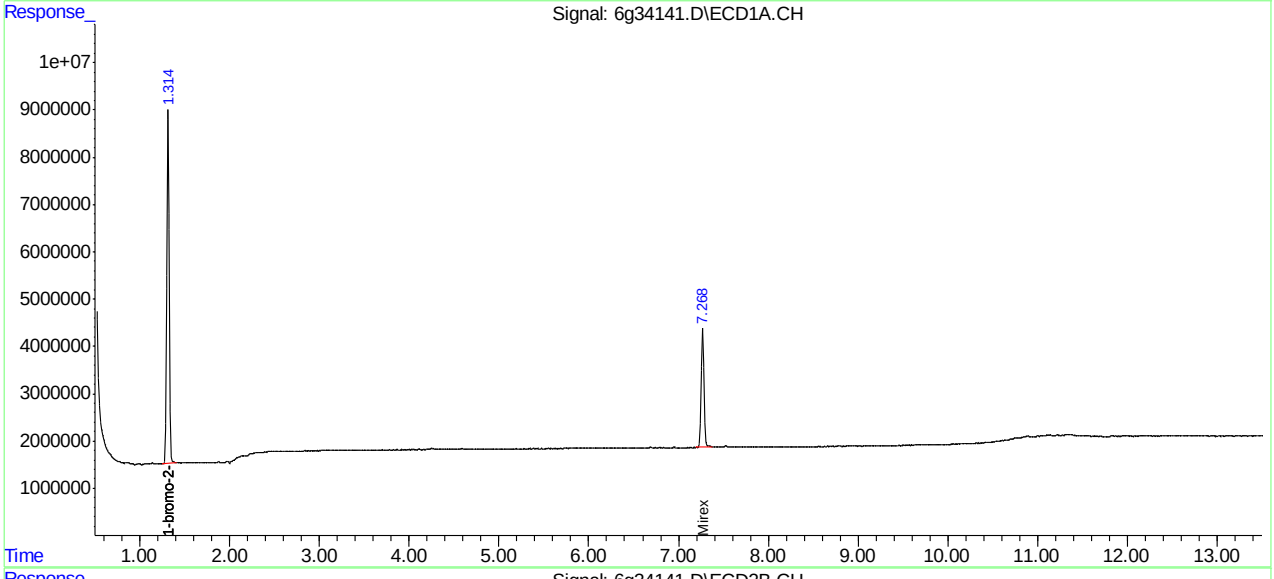
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

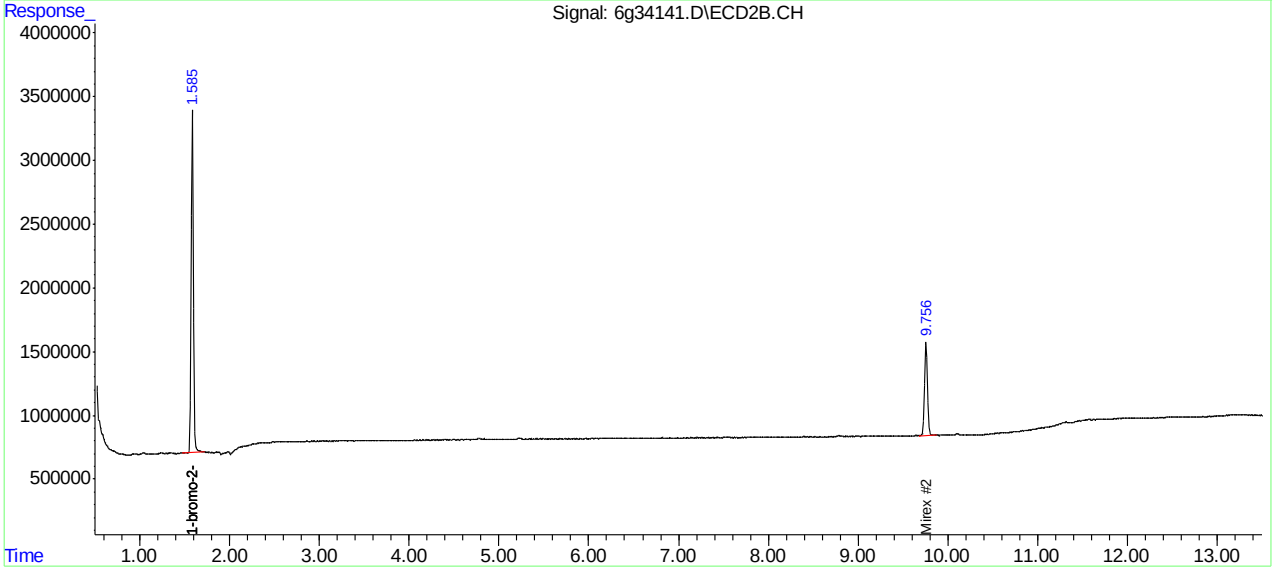
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34141.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:49 pm
Operator : dharas
Sample : icv987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:37:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.584	139.2E6	46593400	50.000	50.000
25) I	1-bromo-2...	1.314	1.584	139.2E6	46593400	50.000	50.000
31) I	1-bromo-2...	1.314	1.584	139.2E6	46593400	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.988	2.478	118.3E6	37474692	46.357	44.517
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 115.89%	111.29%
24)	SAB Decachlor...	9.927	11.763	108.1E6	31302522	48.712	49.456
	Spiked Amount	40.000			Recovery	= 121.78%	123.64%
	Target Compounds						
32)	Chlordane...	3.249	4.035	49568251	16358202	576.655	563.833
33)	Chlordane...	3.847	4.932	55966212	17786680	490.285	506.726
34)	Chlordane...	4.619	5.908	178.9E6	51177548	489.814	485.112
35)	Chlordane...	4.793	6.152	291.0E6	87527557	507.996	496.014m
36)	Chlordane...	5.916	7.734	41796779	12665747	463.544	449.474
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

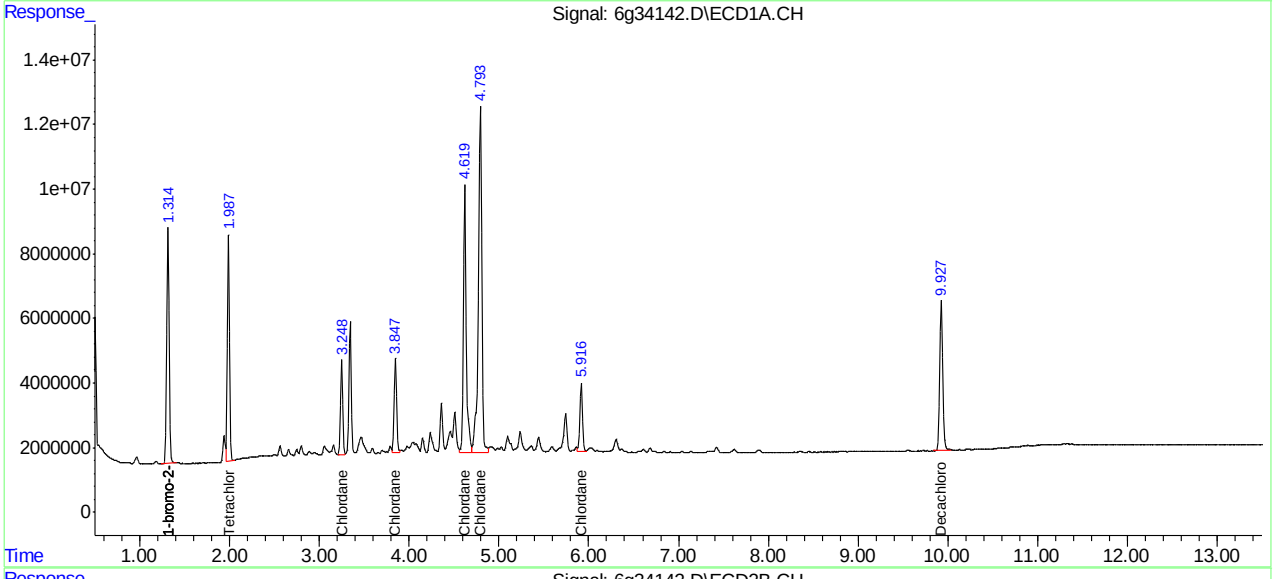
11.6.13 11

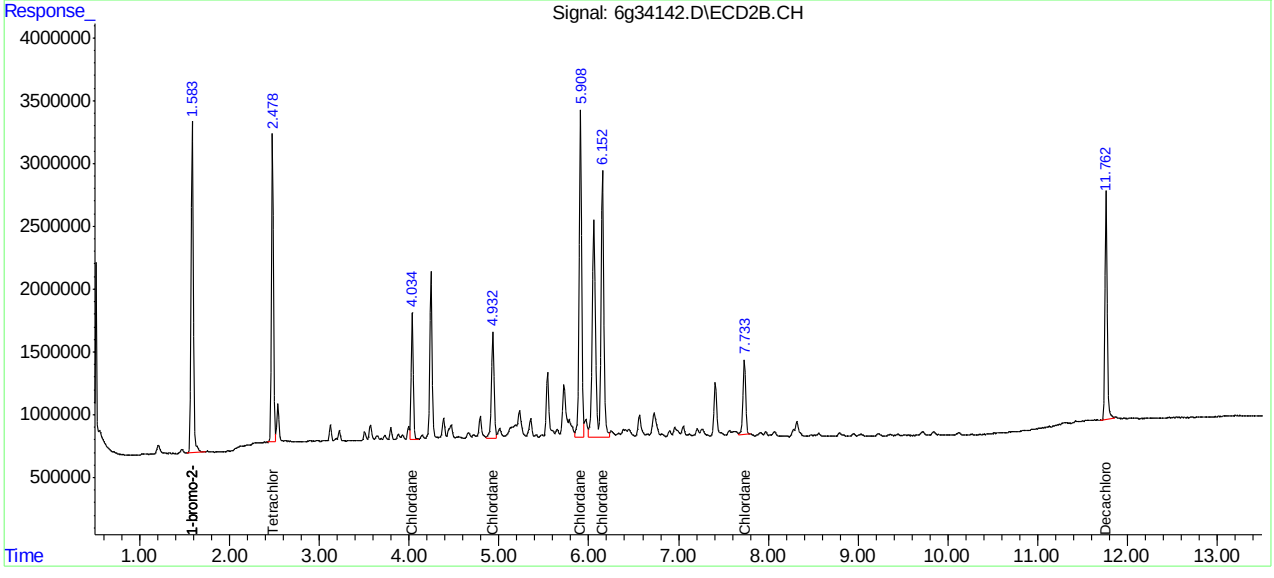
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:37:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	G6G987-ICV987	**Method:**	SW846 8081B
Lab FileID:	6G34142.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 19:06	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

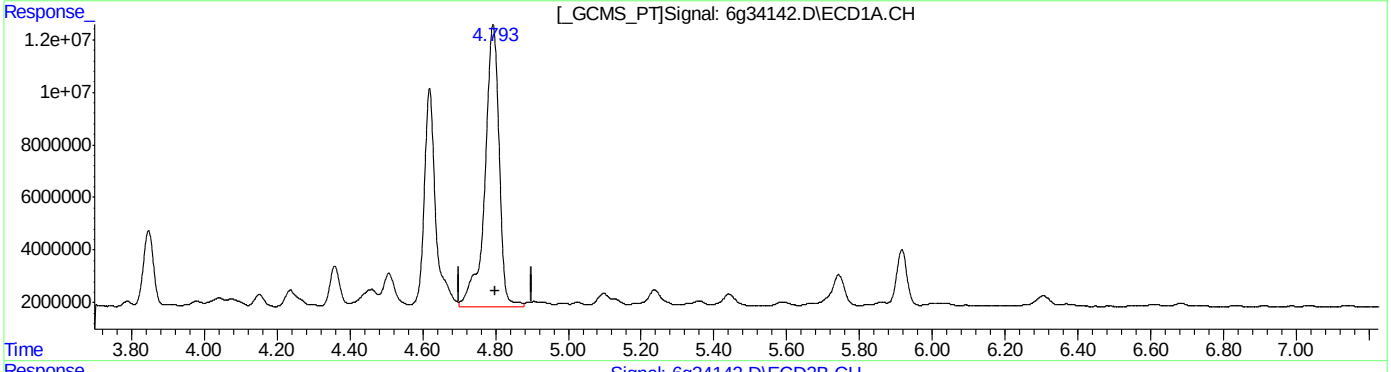
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

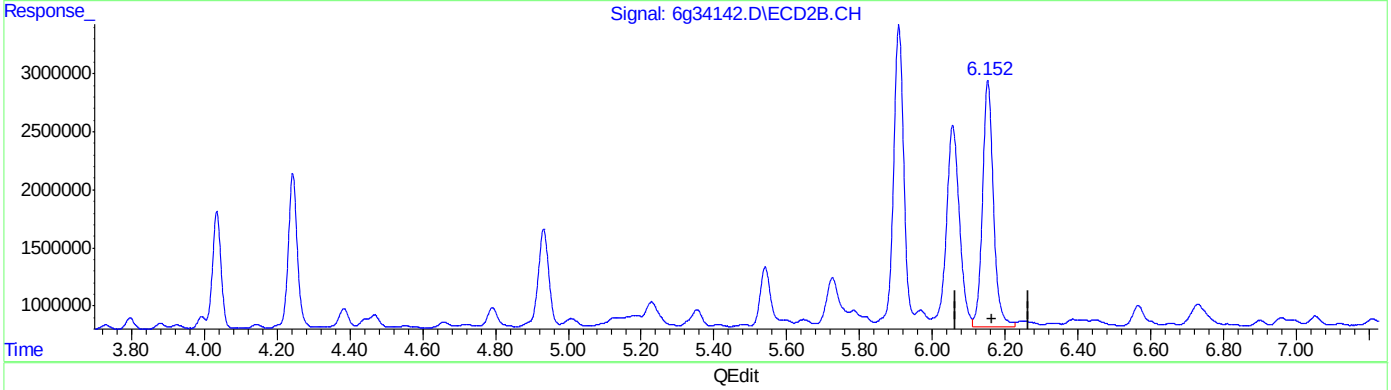
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:36:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(35) Chlordane {D}
4.793min 507.996PPB
response 291002130

(35) Chlordane {D} #2
6.152min 250.802PPB
response 44256937

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:36:53 2016

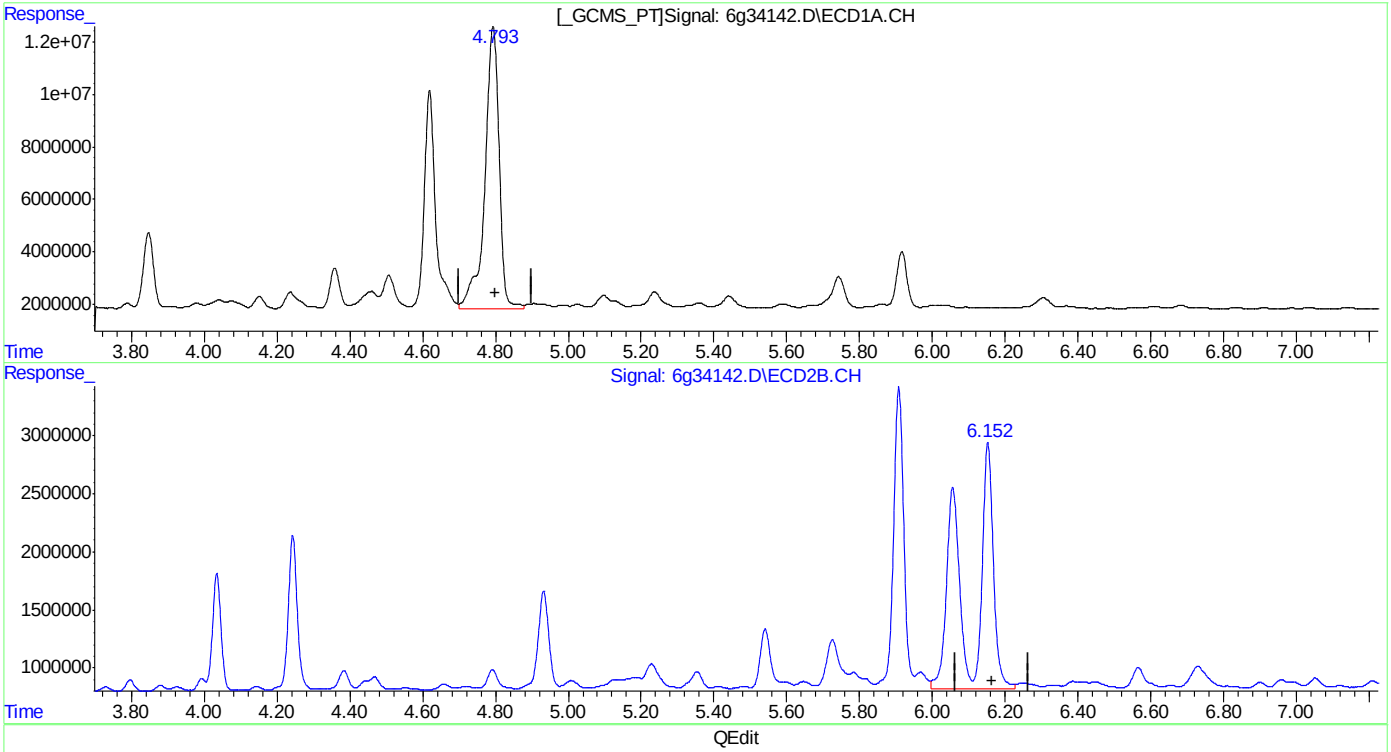
SGS ACCUTEST JC19914

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:36:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
4.793min 507.996PPB
response 291002130

(35) Chlordane {D} #2
6.152min 496.014PPB m
response 87527557

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:37:14 2016

SGS ACCUTEST JC19914

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:22 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:34:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.584	144.8E6	45354922	50.000	50.000
25) I	1-bromo-2...	1.314	1.584	144.8E6	45354922	50.000	50.000
31) I	1-bromo-2...	1.314	1.584	144.8E6	45354922	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	116.0E6	37335435	43.680	45.563
Spiked Amount		40.000	Range	30 - 150	Recovery	= 109.20%	113.91%
24) SAB	Decachlor...	9.925	11.763	107.6E6	30829435	46.615	50.039
Spiked Amount		40.000			Recovery	= 116.54%	125.10%
	Target Compounds						
26) L8	Toxaphene{A}	5.337	6.687	21203662	5887343	540.559	446.752m
27) L8	Toxaphene{B}	5.732	7.618	40544589	11201908	488.653	483.227
28) L8	Toxaphene{C}	5.999	7.796	61413804	16814365	490.509	471.871
29) L8	Toxaphene{D}	6.560	8.279	34302428	11333968	483.679	481.671
30) L8	Toxaphene{E}	7.256	9.263	36744091	10750226	462.871	536.680

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

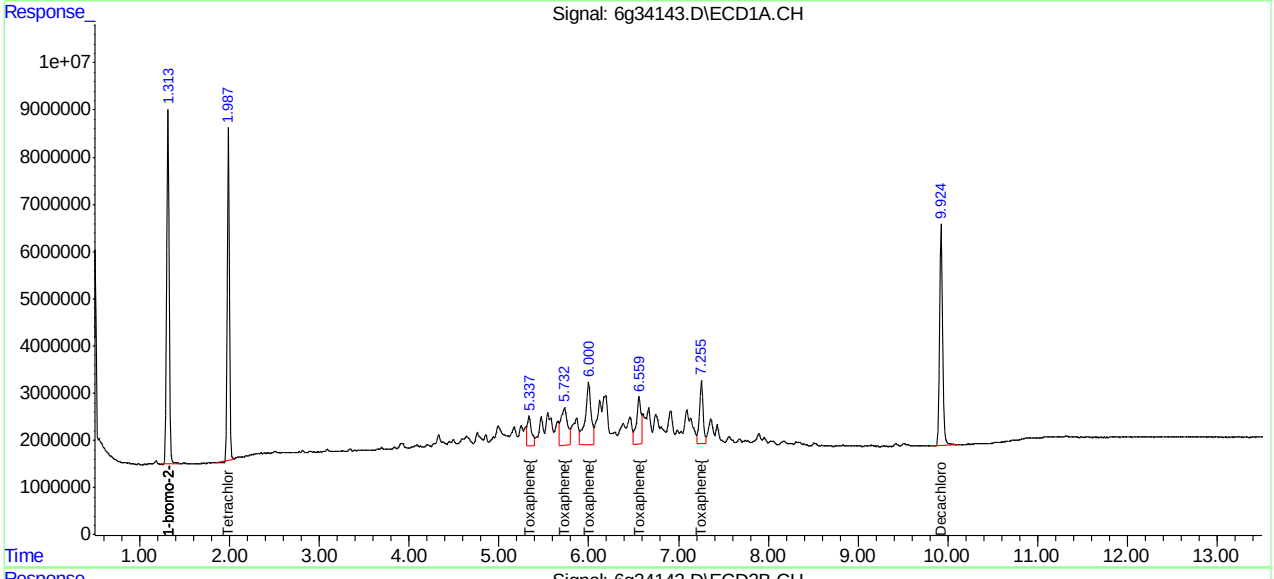
11.6.14 11

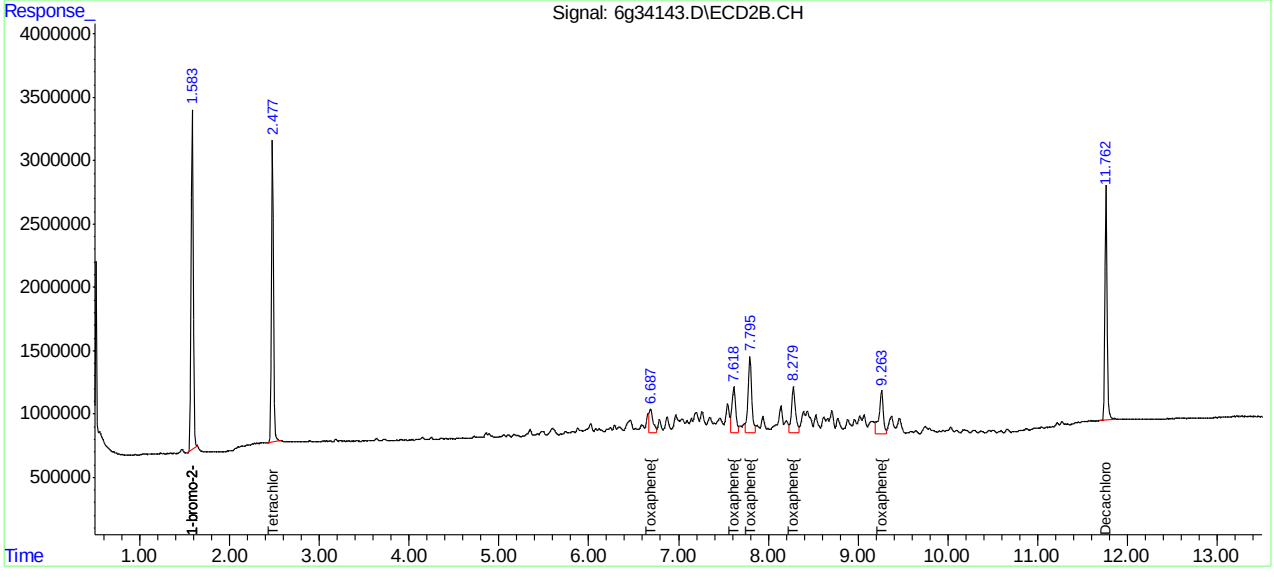
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:22 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:34:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Manual Integration Approval Summary

Sample Number:	G6G987-ICV987	**Method:**	SW846 8081B
Lab FileID:	6G34143.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 19:22	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

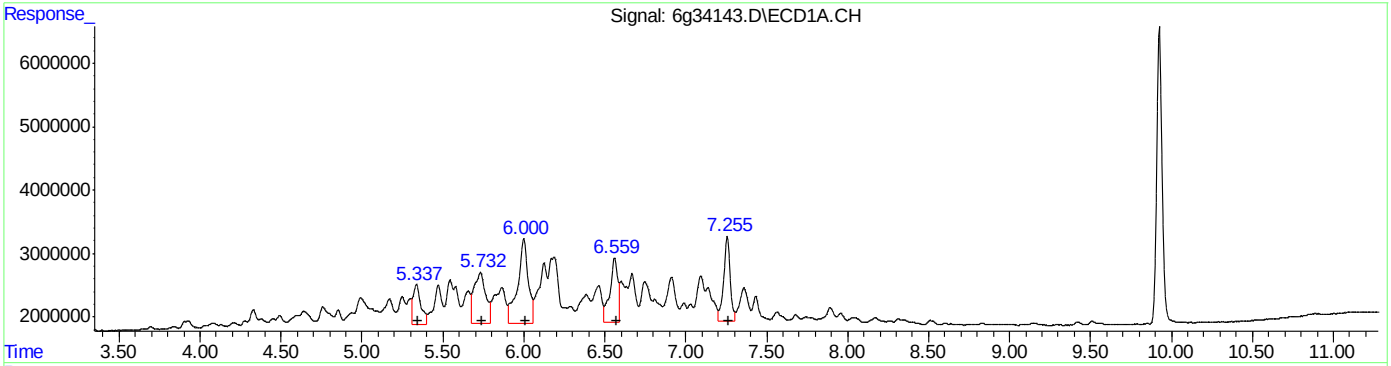
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.69	Poor instrument integration

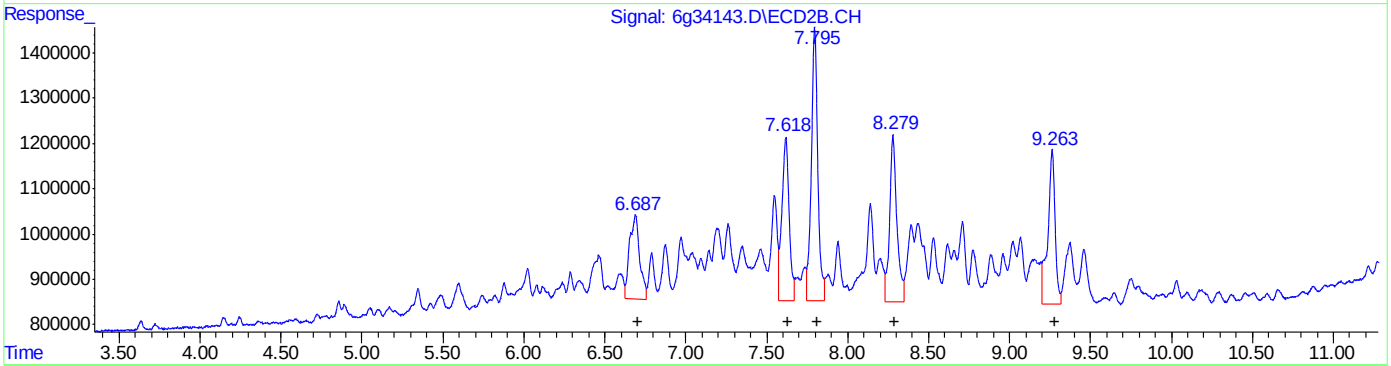
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:22 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:33:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
5.34	21203662	540.56
5.73	40544589	488.65
6.00	61413804	490.51
6.56	34302428	483.68
7.26	36744091	462.87

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.69	8113345	615.67
7.62	11201908	483.23
7.80	16814365	471.87
8.28	11333968	481.67
9.26	10750226	536.68

(+) = Expected Retention Time

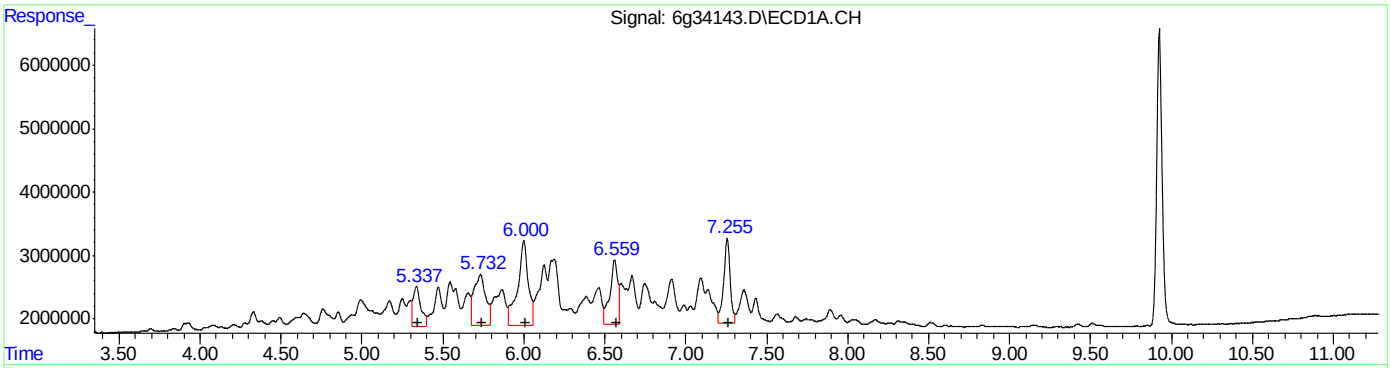
SGS ACCUTEST JC19914

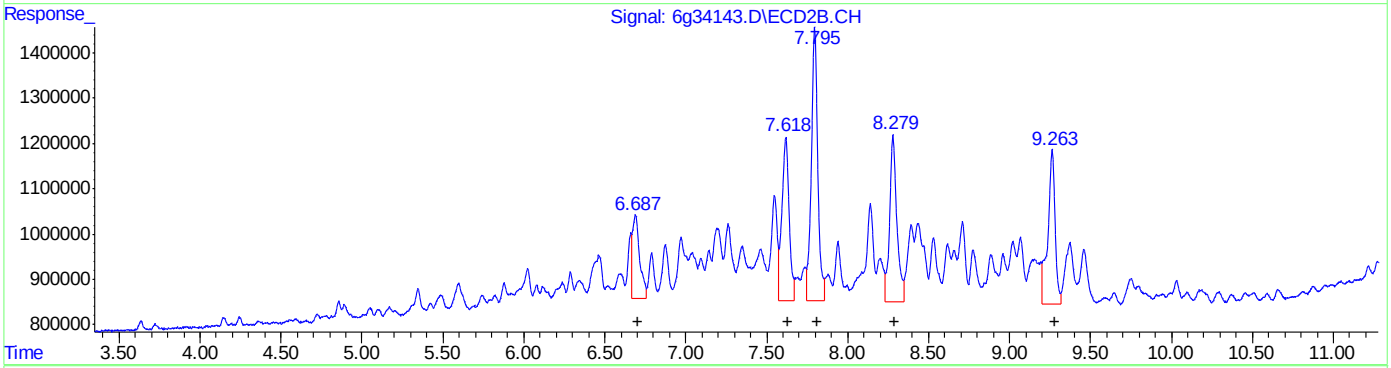
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:22 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:33:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
5.34	21203662	540.56
5.73	40544589	488.65
6.00	61413804	490.51
6.56	34302428	483.68
7.26	36744091	462.87

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.69	5887343	446.75
7.62	11201908	483.23
7.80	16814365	471.87
8.28	11333968	481.67
9.26	10750226	536.68

(+) = Expected Retention Time

SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 11:37 am
Operator : dharas
Sample : cc987-50
Misc : op93803,g6g1008,990,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 11:51:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.298	1.568	138.7E6	51088787	50.000	50.000
25) I	1-bromo-2...	1.298	1.568	138.7E6	51088787	50.000	50.000
31) I	1-bromo-2...	1.298	1.568	138.7E6	51088787	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.972	2.460	124.0E6	43638476	48.756	47.278
	Spiked Amount 40.000 Range 30 - 150 Recovery = 121.89% 118.20%						
24)	SAB Decachlor...	9.894f	11.741	106.8E6	36568264	48.284	52.692
	Spiked Amount 40.000 Recovery = 120.71% 131.73%						
	Target Compounds						
3) A	alpha-BHC	2.484	3.161	177.9E6	61296697	54.256	50.973
4) MA	gamma-BHC	2.798	3.611	162.5E6	56297868	53.243	50.001
5) MA	Heptachlor	3.323	4.216	155.8E6	52967671	50.847	46.549
6) B	beta-BHC	2.880	3.705	73727307	25170219	49.209	45.883
7) B	delta-BHC	3.074	4.120	157.9E6	52319843	55.505	49.864
8) MB	Aldrin	3.674	4.691	148.9E6	51246565	52.621	48.433
9) B	Heptachlo...	4.420f	5.568	138.2E6	47192554	52.173	47.853
10) B	gamma-Chl...	4.595f	5.874	138.2E6	46428653	51.822	48.159
11) B	alpha-Chl...	4.776f	6.117	135.2E6	46160668	51.112	48.195
12) A	Endosulfan I	4.958f	6.215	138.2E6	44836928	52.899	48.185
13) B	4,4'-DDE	4.909	6.418	111.3E6	36632292	50.744	44.353
14) MA	Dieldrin	5.301f	6.685	136.6E6	46127288	52.890	48.532
15) MA	Endrin	5.642f	7.227	122.5E6	40737042	52.264	47.173
16) A	4,4'-DDD	5.797	7.449	97779987	36390815	52.748	51.055
17) B	Endosulfa...	5.983f	7.610	121.9E6	42680685	52.729	50.533
18) MA	4,4'-DDT	6.244f	8.026	98104370	29617560	48.655	45.780
19) B	Endrin Al...	6.652f	8.237	101.3E6	34405257	53.785	50.241
20) B	Endosulfa...	7.388f	8.752	111.5E6	37354871	54.935	50.258
21) A	Methoxychlor	7.111	9.405	54793446	16228195	45.340	45.524
22)	Mirex	7.239f	9.711	102.6E6	35645597	49.552	48.707
23) B	Endrin Ke...	7.860f	9.799	129.9E6	44605014	53.817	51.344

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

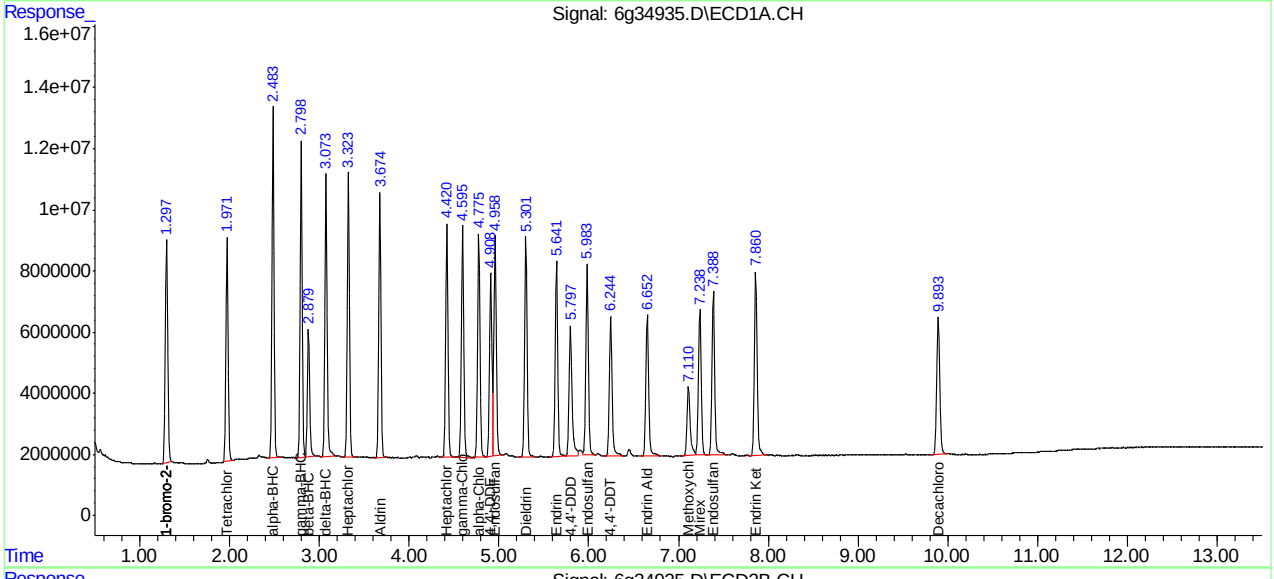
SGS ACCUTEST JC19914

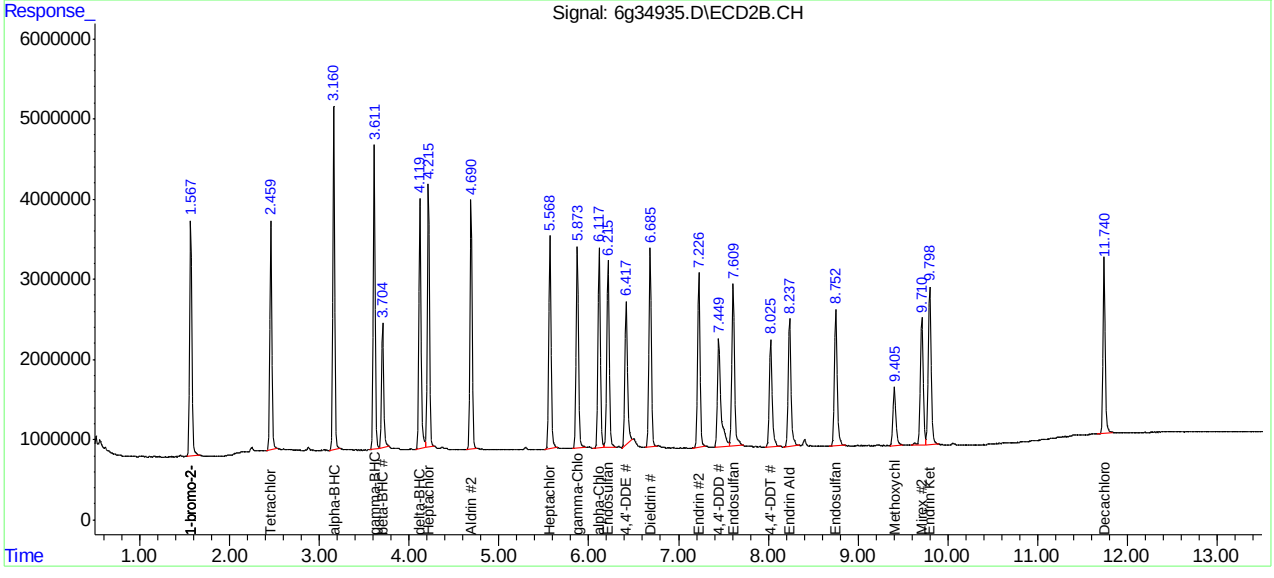
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 11:37 am
Operator : dharas
Sample : cc987-50
Misc : op93803,g6g1008,990,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 11:51:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19914

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34948.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 4:44 pm
Operator : dharas
Sample : cc987-25
Misc : op93786,g6g1008,150,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 16:58:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Wed May 11 16:27:57 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.296	1.567	141.9E6	51637584	50.000	50.000
25) I	1-bromo-2...	1.296	1.567	141.9E6	51637584	50.000	50.000
31) I	1-bromo-2...	1.296	1.567	141.9E6	51637584	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.971	2.459	63662402	22405792	24.471	24.016
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 61.18%	60.04%
24)	SAB Decachlor...	9.893	11.738	52459306	18724718	23.190	26.694
	Spiked Amount	40.000			Recovery	= 57.98%	66.73%
	Target Compounds						
3) A	alpha-BHC	2.483	3.160	84629328	29984770	25.234	24.670
4) MA	gamma-BHC	2.797	3.611	77873792	27430829	24.941	24.104
5) MA	Heptachlor	3.323	4.215	75172587	25959992	23.984	22.571
6) B	beta-BHC	2.879	3.704	36835222	12411144	24.033	22.384
7) B	delta-BHC	3.072	4.119	69403283	24194001	23.850	22.813
8) MB	Aldrin	3.674	4.690	70232526	25075062	24.262	23.446
9) B	Heptachlo...	4.420	5.569	65265606	22966616	24.081	23.041
10) B	gamma-Chl...	4.595	5.873	61011119	22542111	22.370	23.134
11) B	alpha-Chl...	4.776	6.117	62304033	22566240	23.017	23.310
12) A	Endosulfan I	4.957	6.215	63506614	21544399	23.765	22.907
13) B	4,4'-DDE	4.907	6.415	53186354	19316248	23.711	23.139
14) MA	Dieldrin	5.300	6.685	62775036	22294332	23.758	23.207
15) MA	Endrin	5.640	7.227	57271278	20296164	23.894	23.253
16) A	4,4'-DDD	5.793	7.447	45432964	17347864	23.959	24.080
17) B	Endosulfa...	5.982	7.609	55717860	19508784	23.560	22.852
18) MA	4,4'-DDT	6.243	8.025	42976164	14352335	20.835	21.949
19) B	Endrin Al...	6.651	8.237	46072061	16278823	23.901	23.519
20) B	Endosulfa...	7.387	8.752	50005041	17826100	24.077	23.729
21) A	Methoxychlor	7.108	9.404	26758060	8159660	21.644	22.647
22)	Mirex	7.238	9.710	49863736	17050614	23.548	23.051
23) B	Endrin Ke...	7.860	9.797	60097201	21015130	24.333	23.933

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.16 11

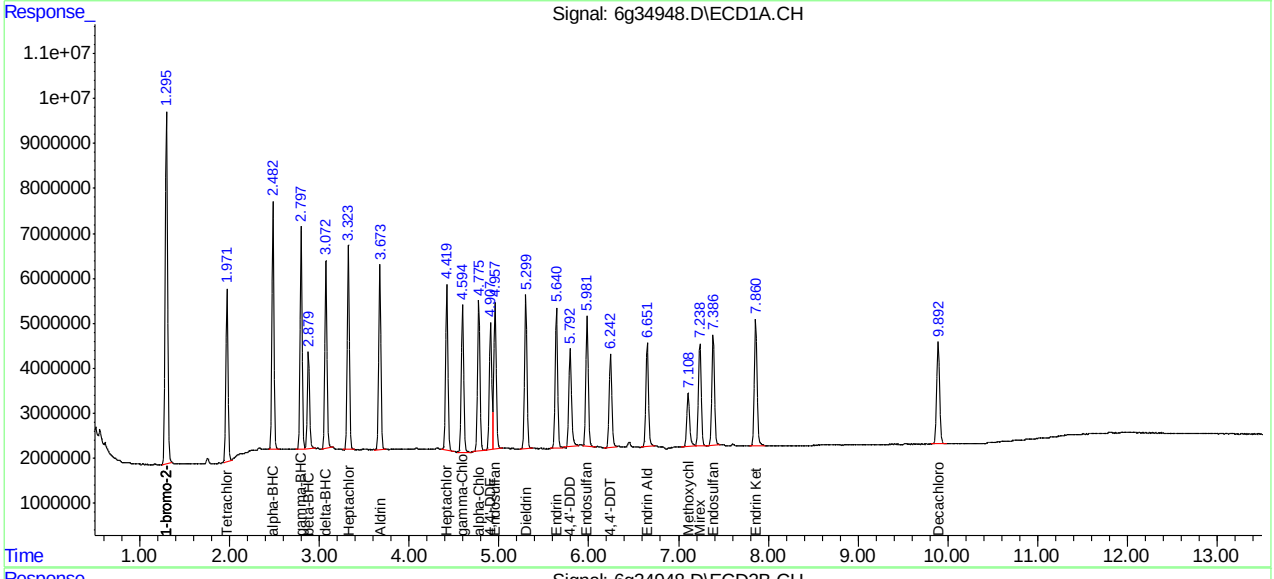
SGS ACCUTEST JC19914

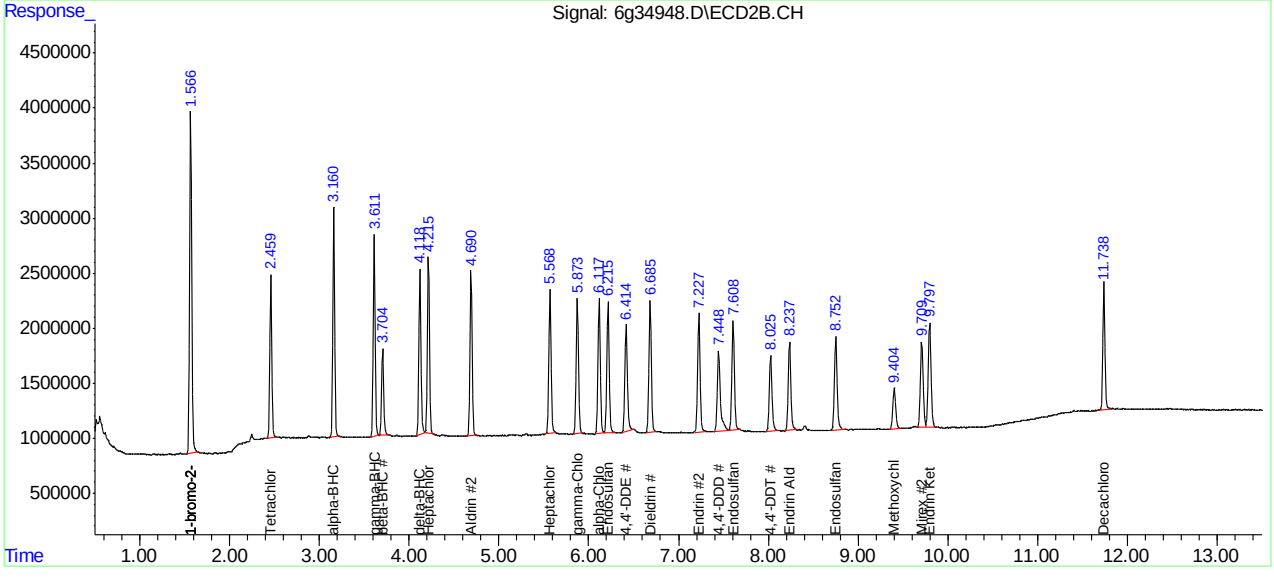
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1008\
Data File : 6g34948.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 May 2016 4:44 pm
Operator : dharas
Sample : cc987-25
Misc : op93786,g6g1008,150,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 11 16:58:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Wed May 11 16:27:57 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1008

Print Analyst Name: Dhara Supari

Date: 5/11/16

Analyst Signature: [illegible]

Columns: 2DCLP I / 2DCLP II

Method 8081, 608

Initial Cal. Method G PST 927

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1018-134-135	Pest IRTD	5 ppm
-74	PCM	200-250 ppm
-1404	Pest mix	25 ppb
-1403	Pest mix	50
1619332-09	DB	20
-20	TBA sur	–
1605G3	Hexane (Fisher)	–

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

Supervisor Signature: [illegible] Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6234927	blk				1				OK	
	928	CC987-25				2				OK	
	929	DB				3				OK	
	930	OP93803-MS1	93803	608 Sh2	W	5				OK	
	931	-MSD1				6				OK	
	932	-MS1	Florisil			7				OK	Had TBA
	933	-MSD1	↓			8				OK	↓
	934	JC19788-1	Florisil			9				OK	
	935	CC987-50				4				OK	
	936	DB				3				OK	
	937	OP93785-MS1	93785	8021 TCL	W	10				OK	
	938	-MSD1				11				OK	
	939	OP93786-MS1	93786	8021 TCL	W	12				OK	
	940	-MSD1				13				OK	
	941	JC19914-5				14				OK	
	942	JC19914-4	93785			15				OK	
	943	OP93785-MS				16				OK	
	944	-MSD				17				OK	
	945	OP93786-MS				18				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

149

Form: OR016-08
Rev. Date: 1/19/16

11.7.1 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G-GC-1008

Print Analyst Name: Dhara Saporia

Date: 5/11/16

Analyst Signature:

Columns: 2DCLPI | 2DCLPII

Method 8081, 608

Initial Cal. Method 6 pt 9pt

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVG16MWDS	Pest IDSTD	5 ppm
-79	PEM	10-250 ppb
-1mA	Pest mix	25 ppb
-1mM	Pest mix	50
161983-09	IB	20
160863	Hexane Cfisher	-

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

Supervisor Signature: Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	623hqm6	OP93786-MSD	93786	8081		19		/	/	OK	
	947	blt				1			/	ok	
	948	CC 987-35				2			/	ok	
	949	IB				3		/	/	ok	
	950	OP93772-MB1	93772	608 PPL	W	5				Not using	RR ECC
	951	-BS1				6				Not using	
	952	~~JC19788-1~~ ~~JC19815-1~~	~~Not using~~ 93803			7				Not using	
	953	~~-2~~ -1A	EH			8				Not using	
	954	JC19815-4	93772			9				Not using	Need TBA
	955	-5				10				Not using	
	956	JC19793-5	93803	SL2		11		/	/	OK	CF
	957	OP93803-MS				12		/	/	OK	
	958	-MSD				13		/	/	OK	
	959	CC 987-50				14		/	/	Not OK	DDT, methoxychlor, Endrin
	960	IB				3		/	/	ok	
	961	JC19815-3	93772	608 PPL	W	14				Not Using	RR BCC Need TBA
	962	OP93772-MS				15				Not Using	
	963	-MSD				16				Not Using	
	964	JC19815-6				17				Not Using	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

151

Form: OR016-08
Rev. Date: 1/19/16

11.7.1 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G-GC-1008

Print Analyst Name: Dhara Saparia

Date: 5/11/16

Analyst Signature:

Columns: 2DCLPI | 2DCLPII

Method 8081, 608

Initial Cal. Method G8S 987

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 161874-135	Pest ISTD	5 ppm
-79	PEM	10-250 ppb
-1mA	Pest mix	25 ppb
-1mB	Pest mix	50
161933-09	IB	20
160863	Methane (Fish)	-

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

Supervisor Signature: [illegible]

Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	0234965	JC19815-7	93772	608 PPL	W	18				Not Using	RR BCC
	966	-8				19				Not Using	
	967	-9				20				Not Using	
	968	-10				21				Not Using	
	969	-11				22				Not Using	
	970	CC 987-25				2			/	NG	DDT, methoxy ↓ both
	971	IB				3		/	/	ok	
	972	JC19788-1A	XH	608		25				ok	Run before seq of 0234967
	973	OP93515-MB1	93515	608 PPL	W	26		/	/	ok	Run before seq 0234950
	974	-DS1				27		/	/	ok	
	975	JC19244-3A				28		/	/	ok	
	976	-4A				29		1st ↗	/	ok	RR 1:5
	977	OP93515-MS				30		1st ↗	/	ok	RR 1:5
	978	-MSD				31		1st ↗	/	ok	RR 1:5
	979	JC19244-5A				32		/	/	ok	
	980	-10A				33		/	/	ok	Rx ↓ surrogate
	981	-11A				34		/	/	ok	
	982	CC987-50				4			/	ok	
	983	IB				3		/	/	ok	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

153

Form: OR016-08
Rev. Date: 1/19/16

11.7.1 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G987

Print Analyst Name: Dhara Sapania

Date: 04/14/16

Analyst Signature: [signature]

Columns: 2BCLPD / 2DCLPD

Method 8081, 608

Initial Cal. Method G6ST987

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.
161574-1147	pest mix 1st	25 PPb
-1148		50
-1149		1
-1150		2
-1151		5
-1152		10
-1153		75
-1154		100

Standard Data

Lot #	Description	Conc.
SV161174-05	Pest IRTD	5 PPm
-79	PCBs	10-250 PPb
-87	IB	20 PPb
-20	Chlordane 1st	10 PPm
-21	Toxaphene 1st	10 PPm
-95	Pest mix 2nd source	250 PPb
-96	Chlordane 2nd	500 PPb
-97	Toxaphene 2nd	500 PPb
157194	Hexane Blk	

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

Supervisor Signature: [signature] Date: 4/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	G234128	blk				1				OK	
	129	IB				2				OK	
	130	IC 987-1	1st source	Pest mix		3				OK	
	131	-2				4				OK	
	132	-5				5				OK	
	133	-10				6				OK	
	134	ICC 987-25				7				OK	
	135	IC 987-50				8				OK	
	136	-75				9				OK	
	137	-100				10				OK	
	138	-500		CHL		11	20			OK	
	139	-500		TOX		12	20			OK	
	140	ICV987-25	Pest			13	10			OK	
	141	-25	mirex			14	10			OK	OP15256437 - 250 PPb (mirex
	142	-500	CHL			15				OK	
	143	-500	TOX			16				OK	

BP 4/17/16

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

LOGBOOK ID: 6-1735

Pest/PCB Extraction Log - Aqueous

Date Started: 5/10/16 Time Started: 1800
Date Finished: 5/10/16 Time Finished: 2130

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # GC 93785 RACK# Pest 25

Extracted by: GM
Concentrated by: ~~GS~~ GM
Vialed by: GM/RF
Relinquished by:
Accepted by:
Supervisor Review: 5/10/16

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	2	65	–	–	OK
Buchi Chiller	B2	11	–	–	OK
Waterbath (70-80°C)	6.7	77.763	-0.516.1	76/76	N/A
Waterbath Chiller (GPM)	F2	3	–	–	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB CP	16171284	400	1

WITNESS SIGN: ADC SPIKE SIGN: GM

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST CP	16171295 A	250 ppb	1
PCB			

WITNESS SIGN: ADC SPIKE SIGN: GM

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	3/60
HEXANE	160863	Fisher	50

REAGENT	LOT #	BRAND
Sodium Sulfate	157477	Fisher
Glass Wool	02205-2	Lab
Filter Paper		
Copper	16 042 66	Alfa Aesar
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Extract Cleanup Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	1000	clear	10		✓			
BS1				DI H2O	1000	clear	10		✓			
JC19914-4 MS		1		yellow	500	clear	10		✓			
MSD		1		yellow	500	clear	10		✓			
BS												
MS												
MSD												
JC19914-4	Pest	3		yellow	1000	clear	10		✓			
~~JC13380-49~~												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

CL 5/10/16

1d TAT

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments: Lines 2-4 written incorrectly
okay to split MS/MSD, not enough bottles

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

LOGBOOK ID: 6-1735

Pest/PCB Extraction Log - Aqueous

Date Started: 5/10/16 Time Started: 1900
Date Finished: 5/10/16 Time Finished: 2130

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # GC 93786	RACK# Pest 25
Extracted by:	RF
Concentrated by:	GM/RF
Vialed by:	RF/GM
Relinquished by:	
Accepted by:	
Supervisor Review:	5/10/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	300	clear	2		–			
BS1	LVI			DI H2O	300	clear	2		–			
JC19914-5 MS		4		1.yellow	150	1.yellow	2		–			
MSD		4		1.yellow	150	1.yellow	2		–			
BS												
MS												
MSD												
JC19914-5	Pest LVI	3		1.yellow	300	1.yellow	2		–			

1dTAT

Comments: okay to split MS/MSD, not enough bottles

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	3	65	–	–	ok
Buchi Chiller	B3	11	–	–	ok
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB op	16171291	400	+0.2

WITNESS SIGN: SD SPIKE SIGN: RF

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST op	16171295A	250ppb	0.2
PCB			

WITNESS SIGN: SD SPIKE SIGN: RF

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	315
HEXANE	168863	Fisher	50

REAGENT	LOT #	BRAND
Sodium Sulfate	157477	Fisher
Glass Wool	82905-2	Lab
Filter Paper		
Copper	16 AH266	Alfa Aesar
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

31

[redacted]

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC19914
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JC19914-2 **Analyzed:** 11-MAY-16 by KP **Method:** SM2540 G-97
ClientID: RA-6 (6-7)

Wet Weight (Total)	29.19	g
Tare Weight	23.63	g
Dry Weight (Total)	27.33	g
Solids, Percent	66.5	%

Sample: JC19914-6 **Analyzed:** 11-MAY-16 by KP **Method:** SM2540 G-97
ClientID: RA-5 (5.5-6.5)

Wet Weight (Total)	30.59	g
Tare Weight	24.69	g
Dry Weight (Total)	29.5	g
Solids, Percent	81.5	%

Sample: JC19914-7 **Analyzed:** 11-MAY-16 by KP **Method:** SM2540 G-97
ClientID: RA-5 (9-10)

Wet Weight (Total)	35.39	g
Tare Weight	27.99	g
Dry Weight (Total)	33.85	g
Solids, Percent	79.2	%